

your LED partner, **RAAT**

COMMERCIAL LIGHTING MANUFACTURE
VOL.06 NEW CATALOGUE 2015



LED LUMINAIRES

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NEW LED LUMINAIRES 2015
COMMERCIAL LIGHTING MANUFACTURE

VOL. 06



Dongmyung Lighting Co., Ltd is South Korea's flagship commercial lighting company.

Dongmyung was established in 1972. We have manufactured various commercial lightings like down light, accent light, pendant, area light and etc. We conduct eco-friendly management system certifying ISO 9001:2008 quality management system and ISO 14001:2004 environmental management system. Our distinction acquires the overseas' cachet with CE mark. Dongmyung were awarded the first export prize in commercial downlight filed from KITA, Korean International Trade Association. We have made a constant effort to improve our quality and develop our products for customer satisfaction.

Dongmyung is equipped with the latest conveniences and has a pleasant environment.

Our factory is equipped with automation equipment such as a CNC(Computer Numerical Control) auto spinning (Doosan Infracore), CNC punch, CNC folding, press, and programmed NCT equipment (AMADA, Japan). Power Coating & Dry instrument and auto spinning machine are our pride among the rest. Our manufacture apparatus, like CNC cutting (MEP, Italy), banding, shot, and conveyor system, is the newest system. We are proud of working speed and efficiency from the production to packing and shipment. We promise our customer to supply the best product not only quality but also production control.



Dongmyung imported PRO-ENGINEER and Uni-Graphic programs.

Though we need same time and requirement for product design regardless of the size and scope of the project, customer's demand has been changed continuously. So we need more correct and convenient solution for reduction of working hours. Dongmyung has been imported PRO-E and UG-NX, standard of 3D design, and produced design in the best way. PRO-E and UG-NX are the outstanding CAD solution for any size of the project. We can rapidly manufacture high quality product with this programs.

Dongmyung design Reflectors with PHOTOPIA Program.

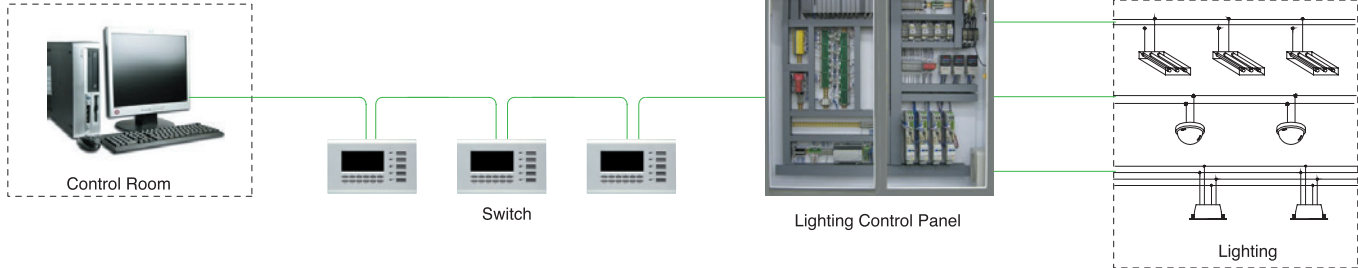
Photopia is a 3D lighting design analysis program. We estimate photometric data and illumination distribution with Photopia to design luminaire.

Dongmyung mass-produce after quality test.

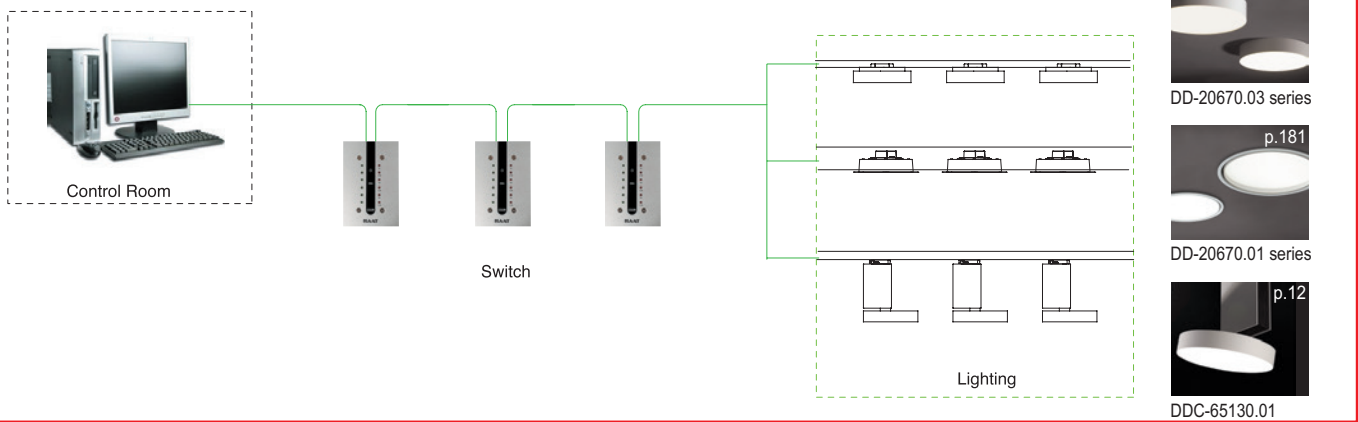
Dongmyung makes a constant effort to design and develop products to be ahead of the times in indoor and outdoor lighting design field. We do our best to improve our product's quality to make more exactitude and optical scientific lighting fixture.

Tunable Color Temperature + Dimming Control System

Basic Lighting Control System



RAAT Control System



LED lighting fixtures of Tunable color temperature and Dimming controlled by Protocol

1. Controlled by protocol (Modbus, RS 485)
2. Each of Abaco lighting has a communication controller which has 16 addresses.
3. Max 1024 addresses (16 addresses x 64 CT Gate)
4. Range of Tunable Color temperature : OFF, 5.5K, 5K, 4K, 3.5K, 3K, 2.7K
Range of Dimming : 20~100%
5. Connected with PC by "USB to 485 Converter"
6. Using open protocol : High compatibility with PLC or general controller
7. No need control devices
8. One switch operates MAX 30pcs Abaco lighting

색온도조정 및 밝기(디밍)를 통신에 의해 선택 및 제어하는 등기구 시스템

1. 프로토콜 방식 (modbus , RS485)에 의해 조명기구를 제어할 수 있다.
2. 조명기구내에 통신컨트롤러를 이용하여 16개의 주소를 갖는다.
3. 각 조명기구는 6가지의 색온도 조정 (OFF, 5.5k , 5K, 4k , 3.5k , 3k , 2.7k) 과 20~100% 의 디밍범위를 조절할 수 있다.
4. 16개의 채널을 64개의 ct_gate 와 연결하여 최대 1024개의 주소번지로 확장하여 사용할 수 있다.
5. PC 와 연결시 별도의 통신 장비가 필요없이 일반적인 USB TO 485 CONVERTER를 사용하여 직접 제어 한다.
6. PLC사용 업체나 일반제어 업체와의 오픈 프로토콜을 사용하므로 호환성이 좋다.
7. 조명제어 설계시 제어 장비를 설치하지 않아도 되며, 이로 인해 경제적 비용을 절약할 수 있는 장점이 있다.
8. LED 모듈 + 2CH 출력 컨버터(안정기)+통신 및 점점입력 컨트롤러를 결합하여 DC 전압과 전류의 양을 분배하여 LED 제품에 기능을 향상하였다.
9. 별도의 통신컨트롤러를 사용하므로 타사 및 타 프로토콜을 탑재할 수 있고, 별도의 컨트롤러 없이 일반 드라이버로 사용할 수 있다.

Abaco Accent Light

Option A : Group Control

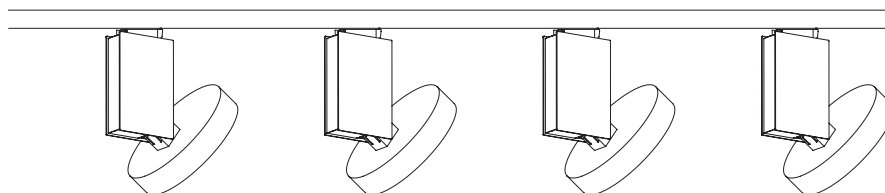
그룹제어 가능



Switch



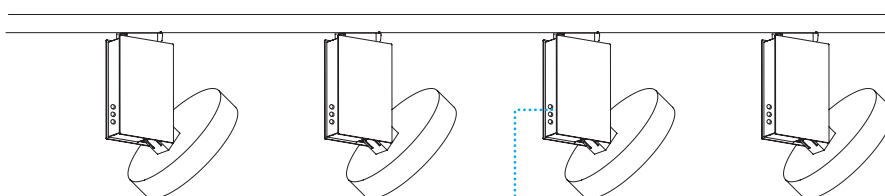
DALI Track



Option B : Individual Control

개별제어 가능

Basic Track



Option B

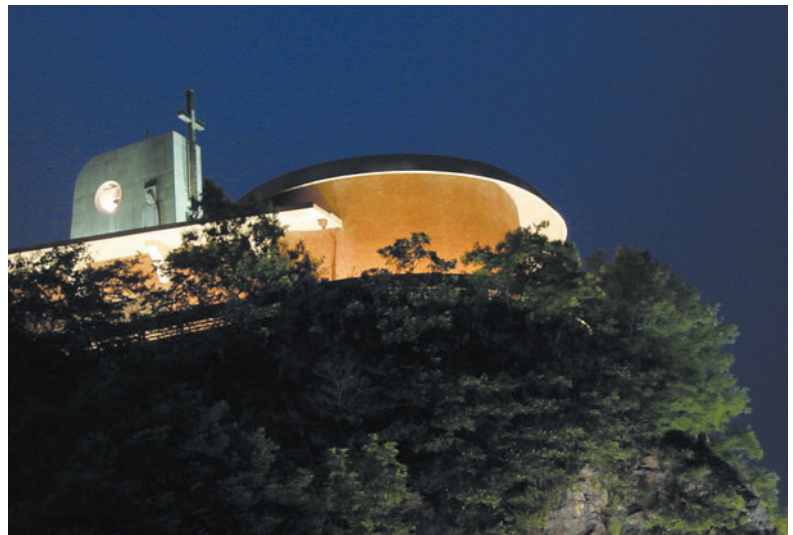
Individual Control

개별제어 가능

- On/Off
- Tunable Color Temperature
- Dimming Up
- Dimming Down



Flood Light & Pole Light



DF-79840 series, DDP-72110 series



DF-79840 (-> p.260)

DF-79860 (-> p.262)

DDP-72110 (-> p.264)

DDP-72120 (-> p.265)

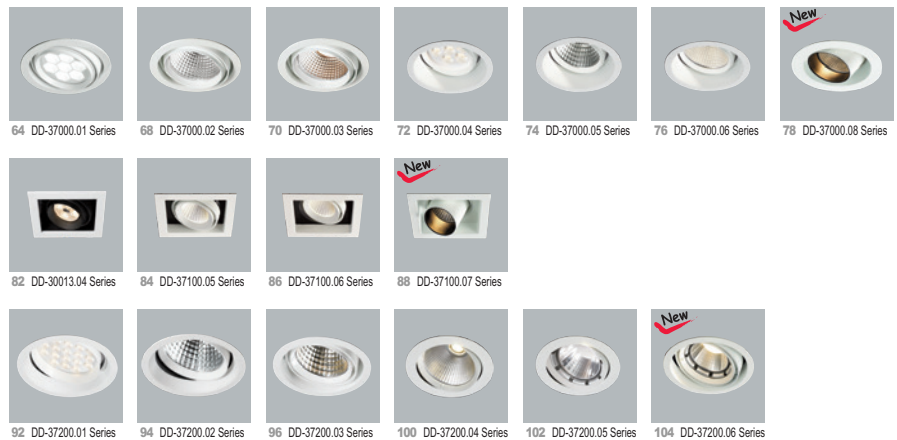
catalogue index

NEW LED LUMINAIRES 2015

ACCENT LIGHTS



MULTI DOWN LIGHTS



INGROUND LIGHT, BOLLARDS



TRACK SYSTEM



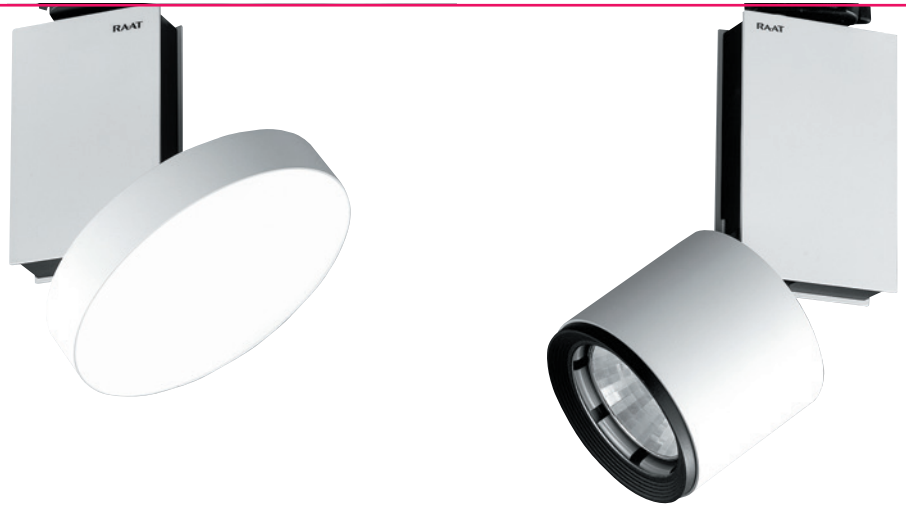
DOWN LIGHTS, WALL & CEILING



PENDANTS







Abaco

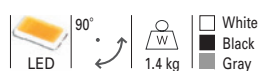


Inspired by lightness, the led is composed by simple elements as if it was made by folded papaer. main shapes that keep their identity without melting together due to the presence of joints.

Tamborini Carlo 



reddot award 2014 winner



DDC-65130.01
Accent Light
Abaco

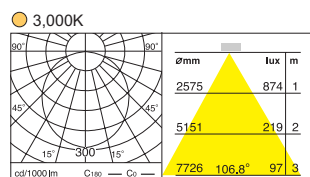
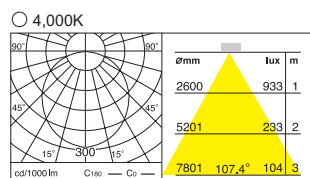
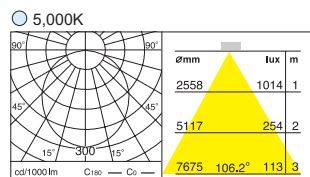
LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 90^\circ$)
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
COVER	PC
INSTALLATION	On 3 circuit track (PC)

LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER (W)	OUTPUT POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	27W	23W	117 lm/W	2,693 lm	33V DC	80
4,000K	27W	23W	110 lm/W	2,513 lm	33V DC	80
3,000K	27W	23W	102 lm/W	2,340 lm	33V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE	<input type="radio"/> 5,000K <input type="radio"/> 4,000K <input checked="" type="radio"/> 3,000K
COLOR RENDERING INDEX_CRI	80, 90



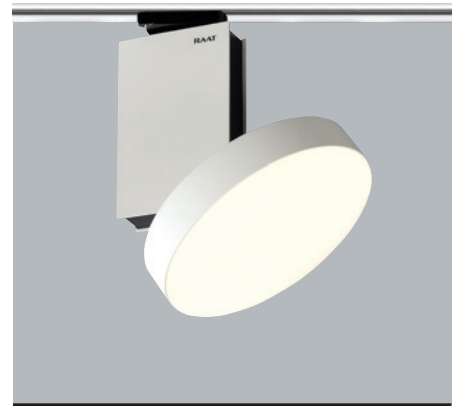
ABACO SERIES Down Lights page.178-183



ABACO SERIES Pendants page.250-251

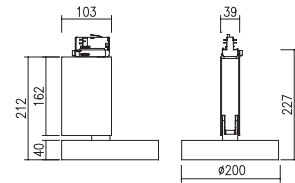


DDC-65130.01-02 Wall Bracket



DDC-65130.01 LED 27W

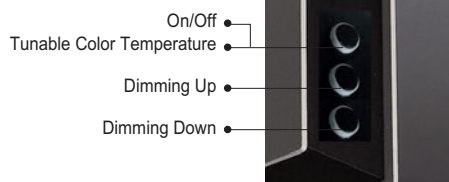
DDC-65131.01 LED 32W (Tunable Color Temperature)



DDC-65131.01
Tunable Color Temperature

INPUT POWER	32W
INPUT VOLTAGE	100-240V AC , 50-60Hz
OUTPUT CURRENT	150mA DC
COLOR TEMPERATURE	2,700K~5,700K
DRIVER	Dimmable Driver

OPTION A Group Control 그룹제어 가능 -DALI Track	OPTION B Individual Control 개별제어 가능 -Basic Track -DALI Track
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DDC-65130.02 SERIES

Track Accent Light

Abaco

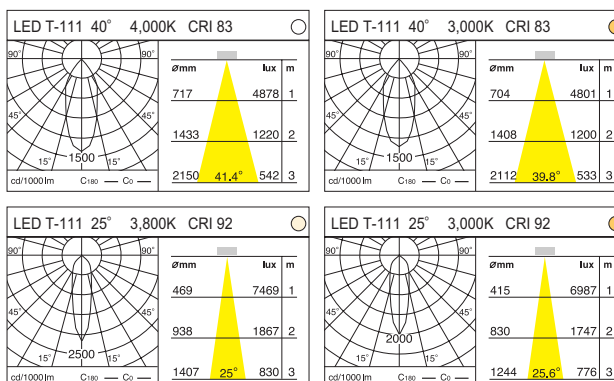


LED HOUSING	AL. Extrude, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 90^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
INSTALLATION	On 3 circuit track (PC)

LIGHT	LED-T111, Coin-AR111
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 110-130V AC , 50-60Hz)

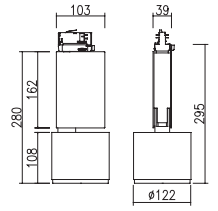
COLOR TEMPERATURE (K)	INPUT POWER	BEAM ANGLE ($^\circ$)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 4,000K	47W	25 $^\circ$, 40 $^\circ$	3,402 lm	34V DC	83
● 3,000K	47W	25 $^\circ$, 40 $^\circ$	3,226 lm	34V DC	83
○ 3,800K	47W	25 $^\circ$	3,107 lm	34V DC	92
● 3,000K	47W	25 $^\circ$	2,951 lm	34V DC	92

LIFETIME	35,000 hours
COLOR TEMPERATURE	○ 4,000K (CRI 83) ○ 3,800K (CRI 92) ● 3,000K (CRI 83,92)

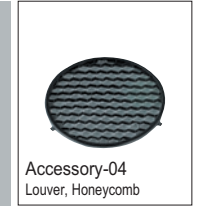
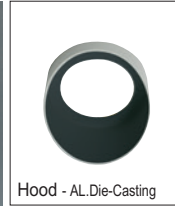




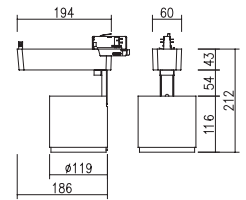
DDC-65130.02 LED-T111



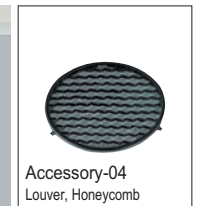
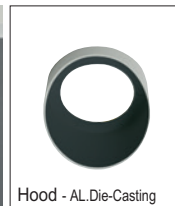
 Weight : 1.4 kg



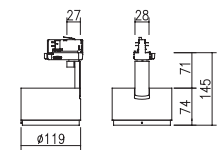
DDC-65130.03 LED-T111



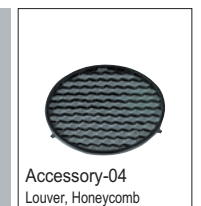
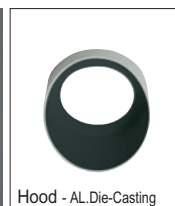
 Weight : 1.4 kg



DDC-65130.04 Coin-AR111 (AC type)

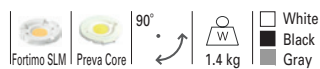


 Weight : 0.6 kg





DDC-65140
Track Accent Light



PHILIPS OSRAM

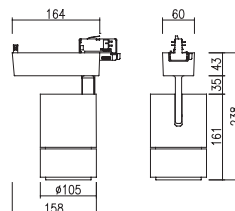
LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 90^\circ$)
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
COVER	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR & LENS	Aluminium & PC
INSTALLATION	On 3 circuit track (PC)

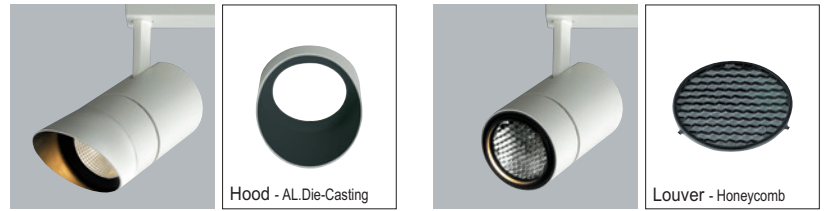
LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX (lm)	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DDC-65140	2000	○ 4,000K	22W	18W	113 lm/W	1,994 lm	80
DDC-65140	2000	● 3,000K	22W	18W	98 lm/W	1,745 lm	80
DDC-65140	2000	● 3,000K	23W	18W	90 lm/W	1,622 lm	>90
DDC-65141	3000	○ 4,000K	30W	24W	106 lm/W	2,577 lm	80
DDC-65141	3000	● 3,000K	29W	24W	106 lm/W	2,570 lm	80
DDC-65141	3000	● 3,000K	30W	25W	94 lm/W	2,329 lm	>90
DDC-65142	4500	○ 4,000K	51W	42W	100 lm/W	4,283 lm	80

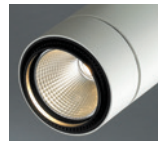
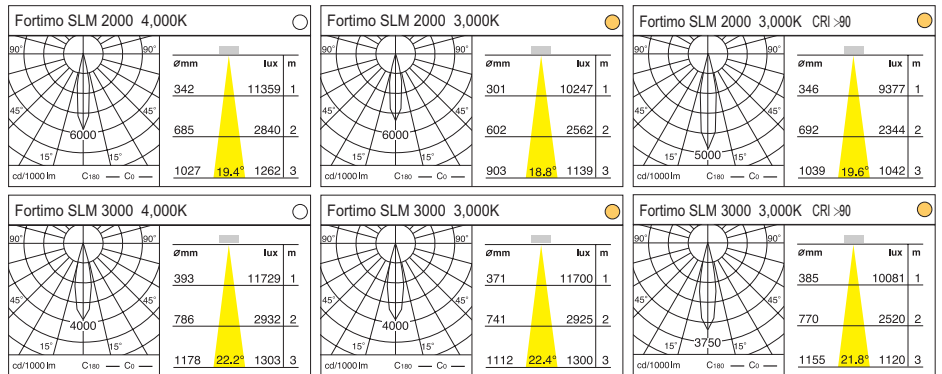
OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

DRAWING

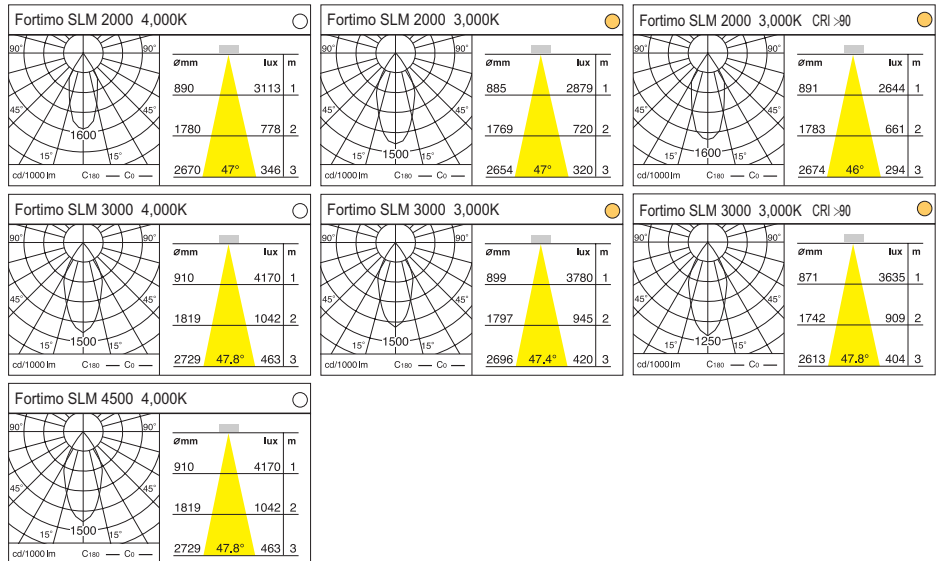




Medium Beam Lens



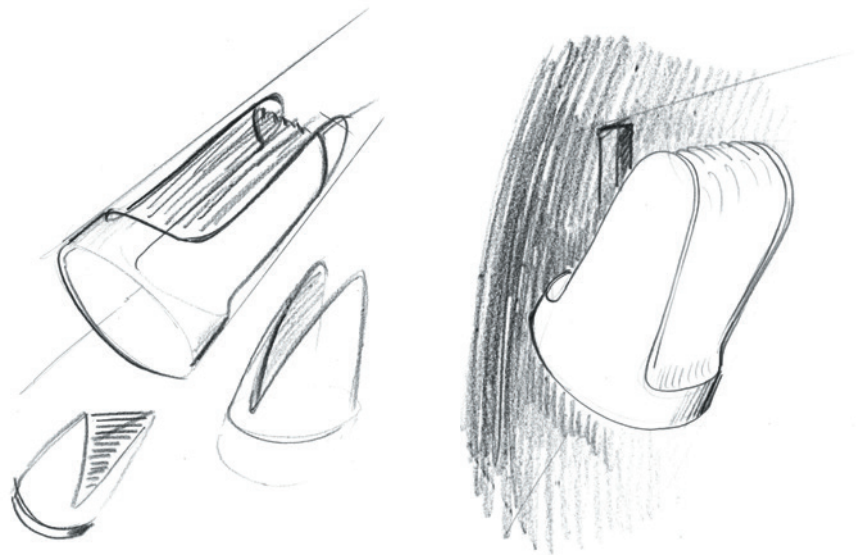
Wide Beam Reflector (AL.)





FORTIMO SLM, PREVA CORE

LED ACCENT LIGHTS



ISSIMO



The ISSIMO spotlight embodies a fine-tuned combination of technology, design and emotion.

It delivers the high quality performance expected of a professional lighting tool.

Its active cooling design boasts an excellent thermal management system and characterises the whole shape of the product by an interesting combination of geometrical shapes.

These stunning features lead us to name this spotlight ISSIMO after the Italian word bellissimo (that means wonderful), ISSIMO for short.

The ISSIMO spotlight is a state of the art professional light providing amazing performance and beauty

Bruno Gecchelin



DDC-65100
Track Accent Light
ISSIMO



PHILIPS OSRAM

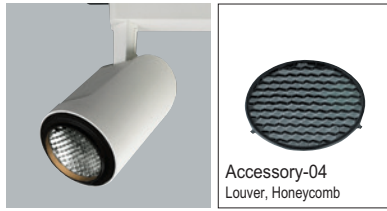
LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Extrude, Electro Deposition Coating
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	AL. Anodized Specular Silver
INSTALLATION	On 3 circuit track (PC)

LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC , 50-60Hz

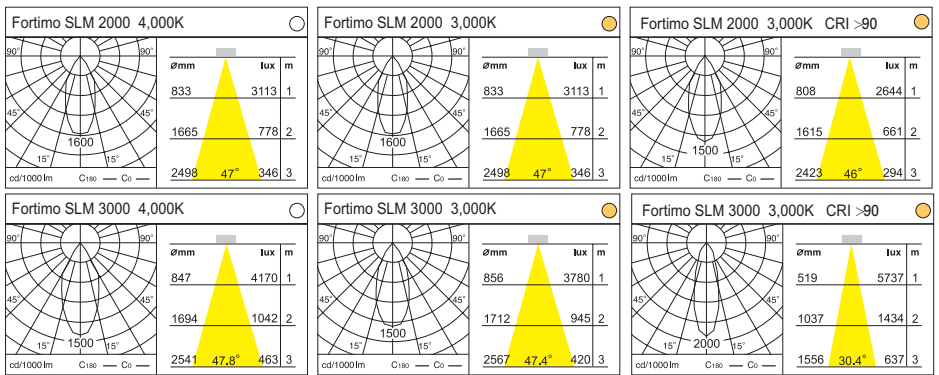
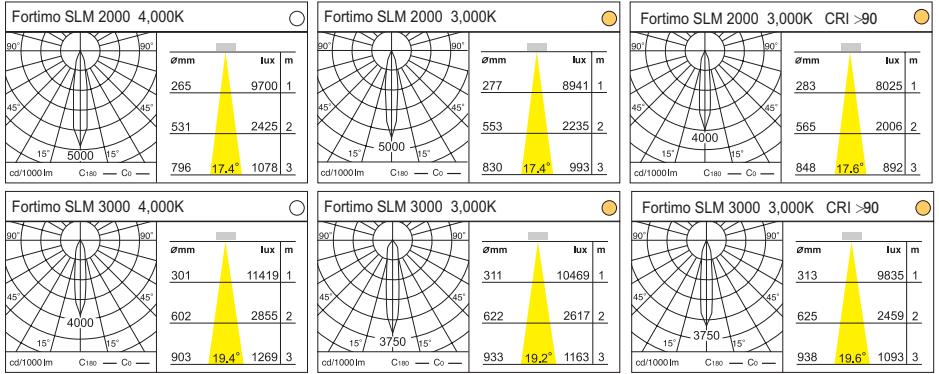
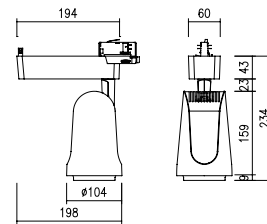
ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER	MODULE POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DDC-65100	2000	○ 4,000K	22W	17W	111 lm/W	1,949 lm	80
DDC-65100	2000	● 3,000K	22W	17W	101 lm/W	1,800 lm	80
DDC-65100	2000	● 3,000K	23W	17W	91 lm/W	1,642 lm	>90
DDC-65101	3000	○ 4,000K	30W	26W	110 lm/W	2,682 lm	80
DDC-65101	3000	● 3,000K	29W	26W	101 lm/W	2,464 lm	80
DDC-65101	3000	● 3,000K	30W	26W	94 lm/W	2,339lm	>90

OPERATING TEMPERATURE RANGE	-20 to +35 °C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE ○ 4,000K ● 3,000K



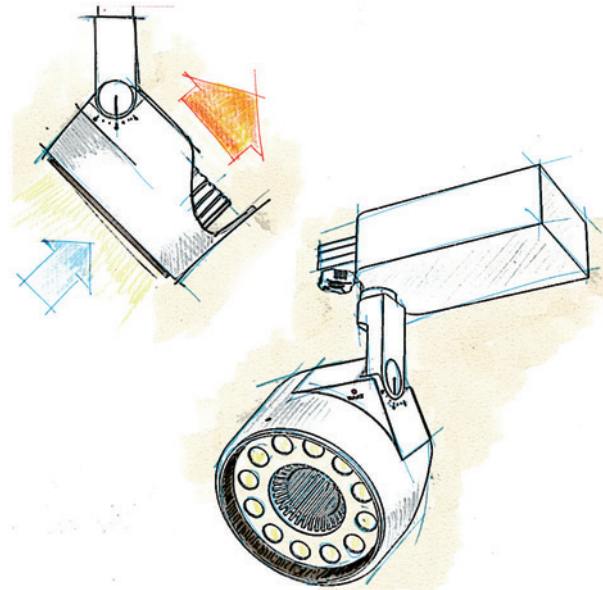
DDC-65100 Fortimo SLM 2000
DDC-65101 Fortimo SLM 3000





POWER LED

LED ACCENT LIGHTS



Kio



Sometimes the design of the technical focus determines what function.

In case the design of KIO overheating of the LED and the use of the heat sink, so the design thereof has a central passage which creates a flow of the air to cool the heat sink and that also confers a different aspect to influence the final design.

The body embraces this fits together and ergonomics of use.

Eduardo Alborn

A handwritten signature in black ink, which appears to read "E. Alborn".



DDC-65120
Track Accent Light
Kio

 90°
 1.4 kg
 White
 Black
 Gray

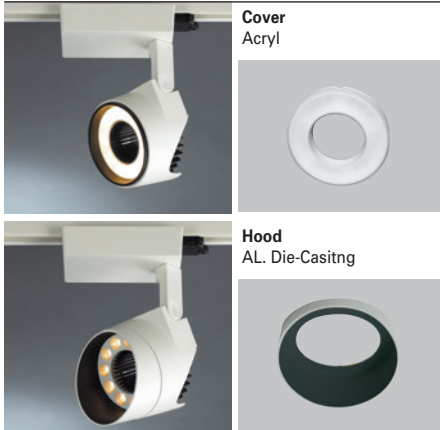
LED HOUSING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 90^\circ$)
MOUNTING RING	PC, Urethane Coating
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Beam angle LENS Type
INSTALLATION	On 3 circuit track (PC)
BEAM ANGLE	15°, 20°, 30°, 40°

LIGHT	Power LED
INPUT VOLTAGE	220-240V AC, 50-60Hz (option : 100-240V AC, 50-60Hz)

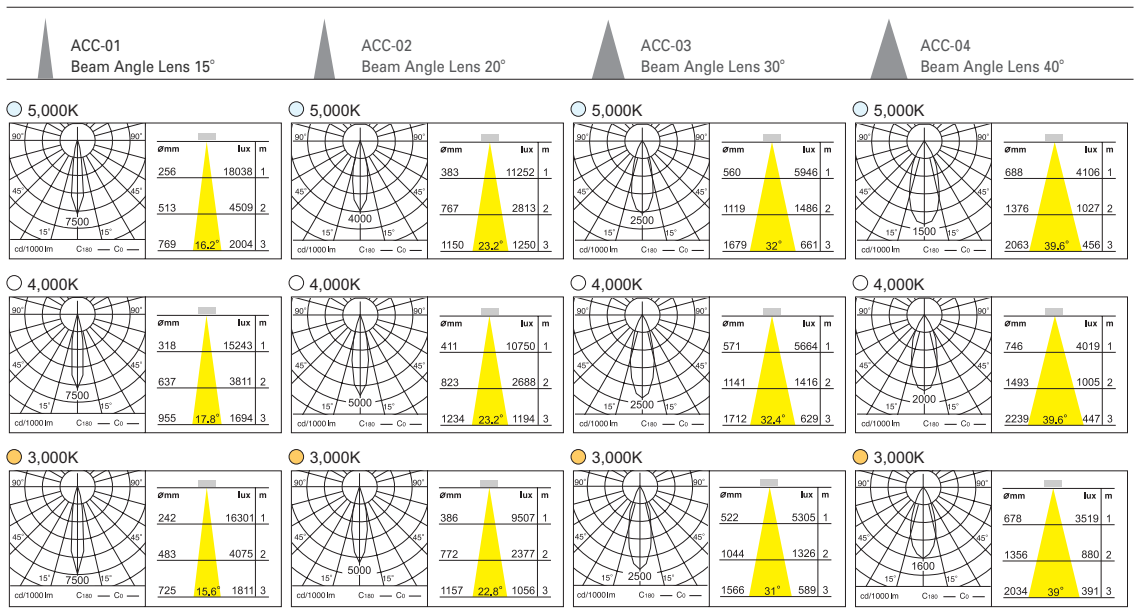
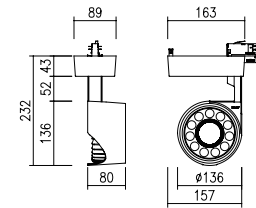
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 5,000K	27W	23W	109 lm/w	2,541 lm	33V DC	75
○ 4,000K	27W	23W	107 lm/w	2,487 lm	33V DC	80
● 3,000K	27W	23W	91 lm/w	2,105 lm	33V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	○ 5,000K ○ 4,000K ● 3,000K

ACCESSORY



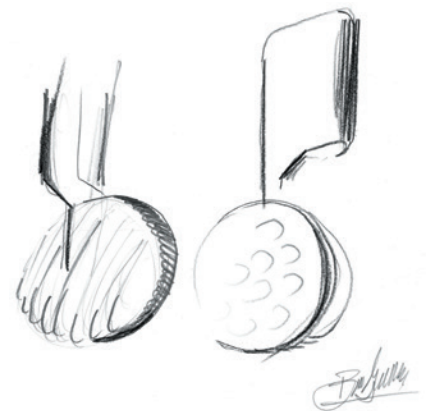
DDC-65120 POWER LED





POWER LED

LED ACCENT LIGHTS



Kiss LED



The ISSIMO spotlight embodies a fine-tuned combination of technology, design and emotion.

It delivers the high quality performance expected of a professional lighting tool.

Its active cooling design boasts an excellent thermal management system and characterises the whole shape of the product by an interesting combination of geometrical shapes.

These stunning features lead us to name this spotlight ISSIMO after the Italian word bellissimo (that means wonderful), ISSIMO for short.

The ISSIMO spotlight is a state of the art professional light providing amazing performance and beauty

Bruno Gecchelin



DDC-65110 Series
Track Accent Light
Kiss LED

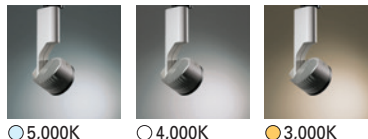


LED HOUSING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 90^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Beam angle LENS Type
INSTALLATION	On 3 circuit track (PC)
BEAM ANGLE	10°, 15°, 20°, 30°, 40°

LIGHT	Power LED
INPUT VOLTAGE	220-240V AC, 50-60Hz (option : 100-240V AC, 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	30W	24W	139 lm/w	3,394 lm	20V DC	75
4,000K	30W	24W	130 lm/w	3,163 lm	20V DC	80
3,000K	30W	24W	100 lm/w	2,443 lm	20V DC	80

OUTPUT CURRENT	1,200mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	



5,000K 4,000K 3,000K



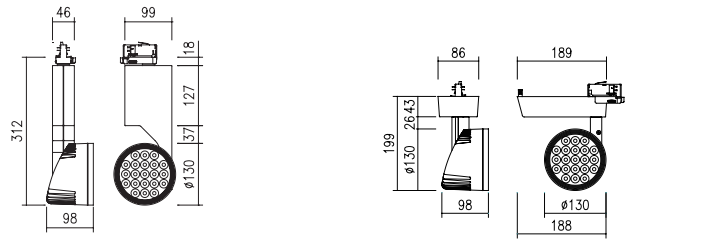
ACCESSORY	Beam angle LENS Type



DDC-65110.01 Power LED



DDC-65110.02 Power LED



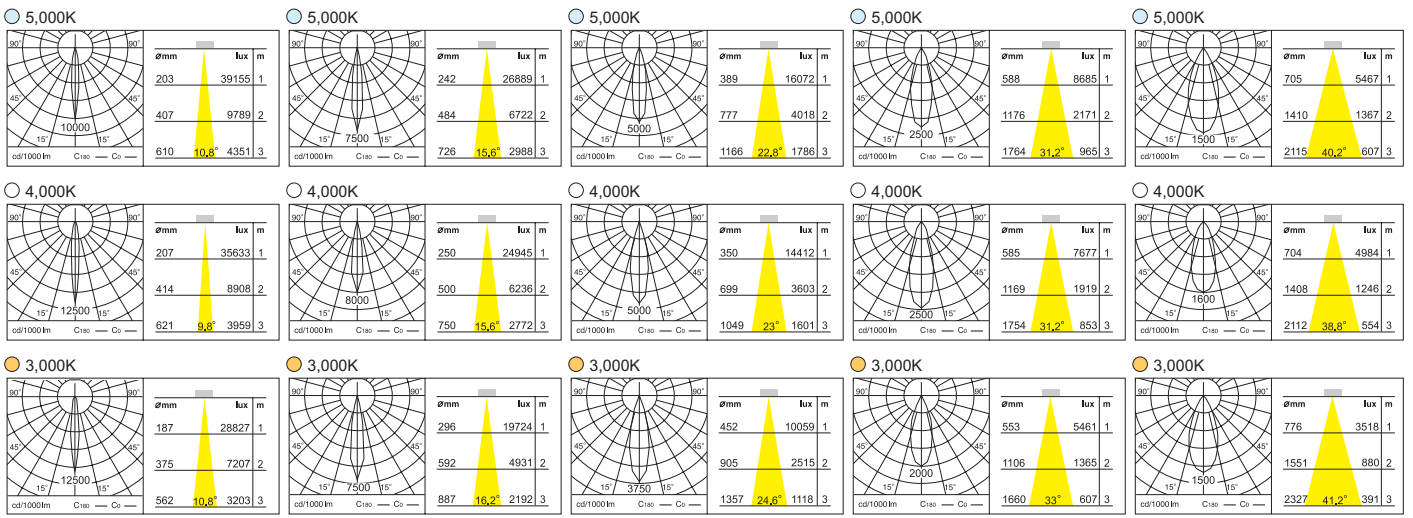
Beam Angle Lens 10°

Beam Angle Lens 15°

Beam Angle Lens 20°

Beam Angle Lens 30°

Beam Angle Lens 40°





DDC-65010.01
Track Accent Light

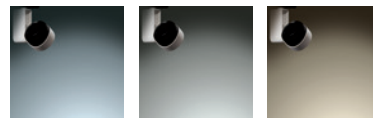
Power LED | 180° | 0.8 kg | White, Black, Gray

LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 180^\circ$)
HEAT SINK	AL. Extrude, Electrostatic Powder Coating (Black only)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating (Black only)
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Beam angle LENS Type
INSTALLATION	On 3 circuit track (PC)
BEAM ANGLE	15°, 20°, 30°, 40°

LIGHT	Power LED
INPUT VOLTAGE	220-240V AC, 50-60Hz (option : 100-240V AC, 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	17W	15W	107 lm/w	1,579 lm	21V DC	75
4,000K	18W	15W	85 lm/w	1,259 lm	21V DC	80
3,000K	17W	15W	75 lm/w	1,100 lm	21V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	

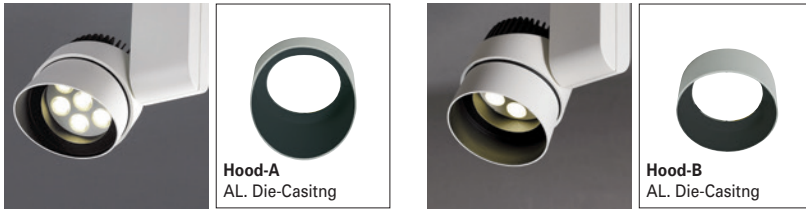


5,000K | 4,000K | 3,000K

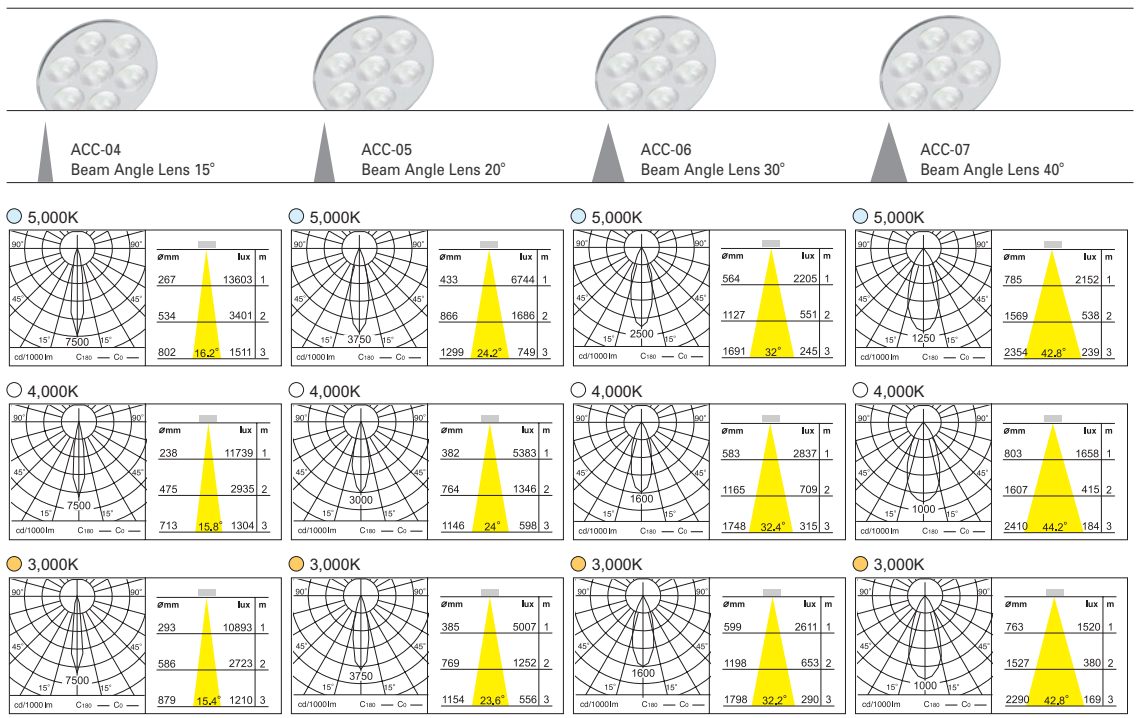
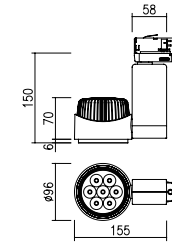
ACCESSORY

Beam angle LENS Type





DDC-65010.01 POWER LED





DDC-65010.02
Track Accent Light

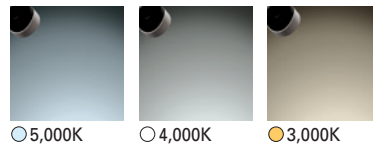


LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 180^\circ$)
HEAT SINK	AL. Extrude, Electrostatic Powder Coating (Black only)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating (Black only)
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Beam angle LENS Type
INSTALLATION	On 3 circuit track (PC)
BEAM ANGLE	15°, 20°, 30°, 40°

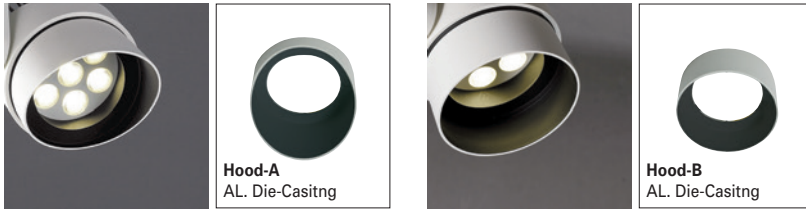
LIGHT	Power LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 5,000K	17W	15W	107 lm/w	1,579 lm	21V DC	75
○ 4,000K	18W	15W	85 lm/w	1,259 lm	21V DC	80
● 3,000K	17W	15W	75 lm/w	1,100 lm	21V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	



ACCESSORY	Beam angle LENS Type

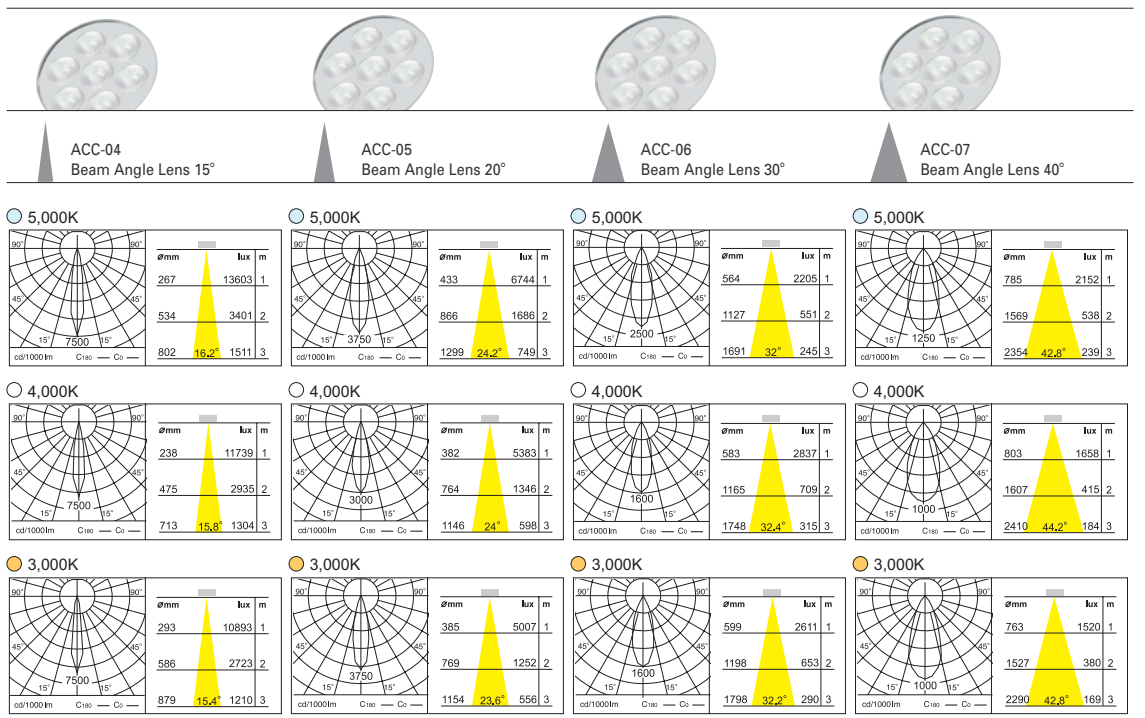
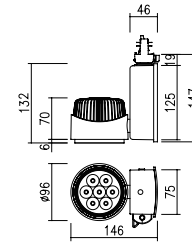
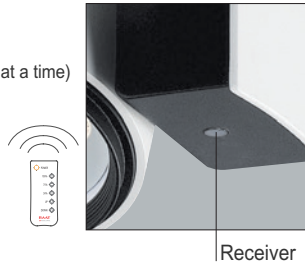


DDC-65010.02 POWER LED

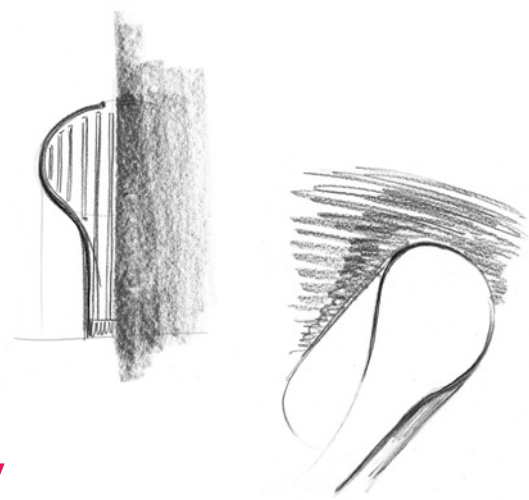
▶ **Option A**
Non-Dimmable Driver

▶ **Option B**
LED Dimmable Driver
- Remote Control
- Individual Control (One at a time)

※ 옵션기능
- 디밍드라이버 가능
- 리모콘을 이용한 디밍







Vanity

The reflector gently touches the gear box, two bodies joining
: a beam of light is born.

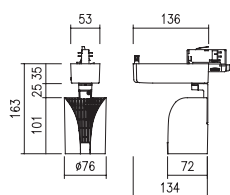
The product is the synthesis between form and function, both meet in a unique smooth and streamlined shape that gives a gentle and feminine character to this spotlight. While the gearbox and the bracket are given volumes - and remain neutral - the optical part attracts the attention for its longitudinal cut that visually connects rear and front part of the product.

Bruno Gecchelin



DDC-65080
Track Accent Light
Vanity

LED ARRAY | 180° | 0.8 kg | White, Black, Gray



LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating (Black only)
MOUNTING RING	PC, Urethane Coating
GEAR BOX	PC, Urethane Coating
REFLECTOR	PC (Vacuum Coating)
INSTALLATION	On 3 circuit track (PC)

LIGHT INPUT VOLTAGE LED ARRAY 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

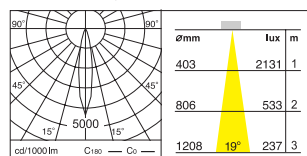
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
3,000K	8W	6W	72 lm/w	451 lm	18V DC	80
3,000K	11W	9W	90 lm/w	808 lm	21V DC	80

OUTPUT CURRENT 350mA DC (constant current)
 OPERATING TEMPERATURE RANGE -20 to +40 °C
 DRIVER Integrated
 MAINTENANCE OF LUMEN -L70 50,000 hours at 25 °C
 DRIVER LIFETIME 50,000 hours
 COLOR TEMPERATURE 3,000K(8W, 11W) 2,700K(8W)

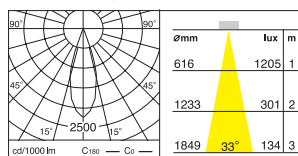
Ref. 01
Beam Angle Ref. 20°

Ref. 02
Beam Angle Ref. 30° -40°

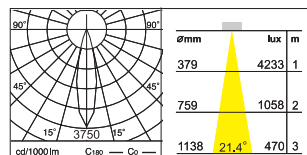
LED 8W / 3,000K



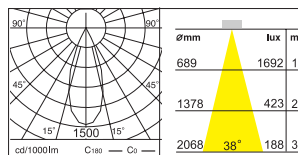
LED 8W / 3,000K



LED 11W / 3,000K



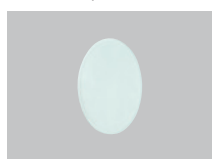
LED 11W / 3,000K



ACCESSORY

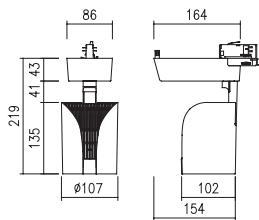


Acrylic Plate
: Frosted Tempered, Reduce Glare





DDC-65090
Track Accent Light
Vanity

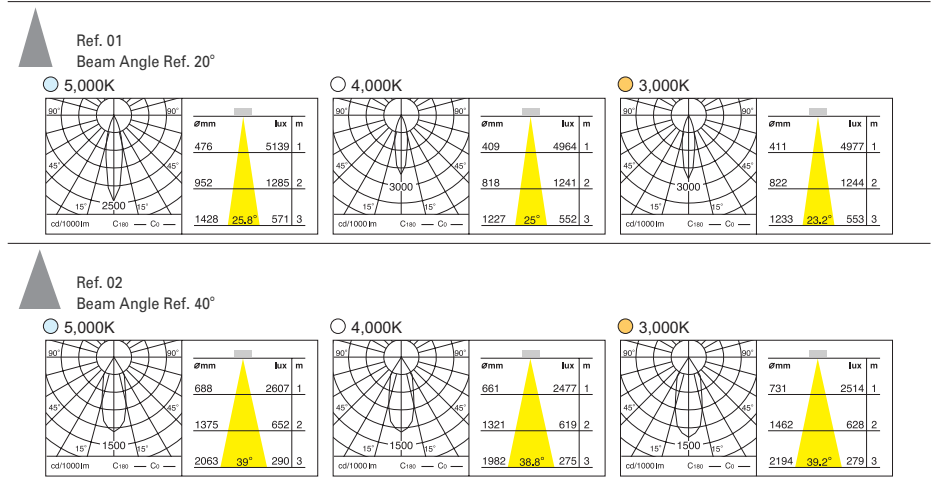


LED HOUSING	PC, Urethane Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating (Black only)
MOUNTING RING	PC, Urethane Coating
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	AL. Anodized Specular Silver
INSTALLATION	On 3 circuit track (PC)

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

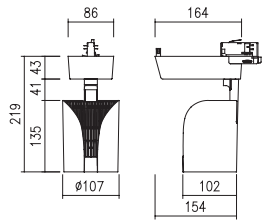
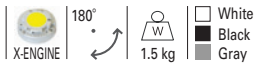
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	21W	16W	101 lm/w	1,611 lm	32V DC	70
4,000K	21W	16W	95 lm/w	1,511 lm	32V DC	80
3,000K	21W	16W	93 lm/w	1,441 lm	31V DC	80

OUTPUT CURRENT	500mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K





DDC-65091
Track Accent Light
Vanity



LED HOUSING	PC, Urethane Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating (Black only)
MOUNTING RING	PC, Urethane Coating
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	AL. Anodized Specular Silver
INSTALLATION	On 3 circuit track (PC)

LIGHT	X-ENGINE
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

MODULE LUMINOUS FLUX	COLOR RENDERING INDEX_CRI	COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	OUTPUT CURRENT
1,300 lm	80	○ 4,000K	15W	12W	110 lm/w	1,334 lm	17V DC	700mA DC
1,300 lm	80	● 3,000K	15W	12W	68 lm/w	1,245 lm	17V DC	700mA DC
1,300 lm	≥95(Artist)	○ 4,000K	20W	16W	88 lm/w	1,430 lm	23V DC	700mA DC
1,300 lm	≥95(Artist)	● 3,000K	20W	16W	79 lm/w	1,276 lm	23V DC	700mA DC
2,000 lm	80	○ 4,000K	24W	20W	105 lm/w	2,078 lm	28V DC	700mA DC
2,000 lm	80	● 3,000K	24W	20W	95 lm/w	1,892 lm	29V DC	700mA DC
2,000 lm	≥95(Artist)	○ 4,000K	31W	26W	84 lm/w	2,139 lm	26V DC	700mA DC
2,000 lm	≥95(Artist)	● 3,000K	31W	25W	77 lm/w	1,934 lm	25V DC	700mA DC

OPERATING TEMPERATURE RANGE	-20 to +40 °C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	○ 4,000K ● 3,000K



X-ENGINE

NO COLOR BIN - Absolutely no 'binning'

- Each color temperatures is targeted exactly on the Black Body Locus for perfectly natural white light.
- Each has a very tight color point conformity, with a 1 x 2 SDCM.
- LED binning becomes a thing of the past.

NO COLOR SHIFT - No Red efficiency cliff

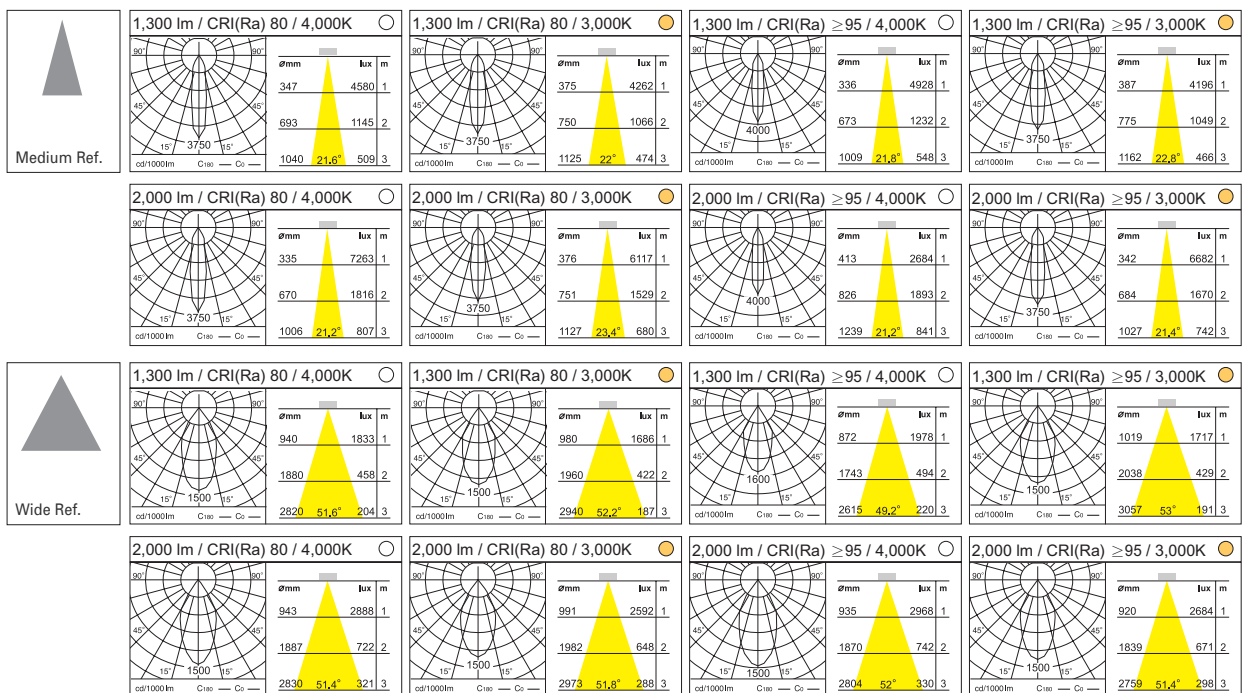
- Phosphor degradation due to heat is primary cause of color -shift over time.
- Corrected Cold Phosphor Technology ensures long term maintenance of the phosphor properties, contrary to phosphor on chip solutions.
- Color consistency maintained within 1 SDCM.

UNIFORM BEAM -Intensity and color

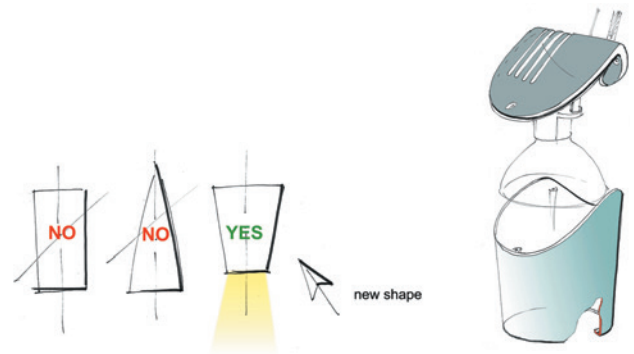
- Temperature & no yellow ring or shadows

FUTURE PROOF - Design for one module, get the rest for free
 New modules are compatible mechanically, thermally, optically and maintaining spec while reducing LED count when LEDs improve with existing luminaires.

WORLDS BEST COLOR RENDERING INDEX (CRI) - "Museum light quality"
 Our industry best light quality specification is (uniquely in the world of LEDs) sustained.







Black Tie

The reflector gently touches the gear box, two bodies joining: a beam of light is born.

Back in the time when the Venetian trader and explorer Marco Polo was travelling to Asian countries the journey lasted years.

Nowadays globalization and the advancement in technology has lead to the development of a flatter world, offering anyone the ability to communicate with the other side of the Globe in a split second.

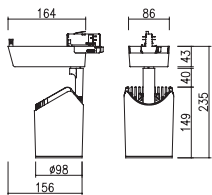
The Raat Company has taken this opportunity to bridge the distance among the Italian and Korean worlds by bringing together the two different cultures aimed at creating new and innovative products. This is one of the advantages of globalization. It allows us to broaden our horizons by learning about different cultures and ideals, to integrate different knowledge with our own and not just in a superficial way.

Facing this project for Raat, I wanted the feeling that the light as a life-bearer required a curvy yet delicate design. The sensual, smoothly carved shape of the reflector meets the sleek and functional volume of the gear or bracket arm. They touch and tilt like a lover in a kiss that connects different materials and advanced technologies.

Bruno Gecchelin



DDC-63731
Track Accent Light
BLACK TIE



LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating (Black only)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating (Black only)
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	AL. Anodized Specular Silver
INSTALLATION	On 3 circuit track (PC)

LIGHT	X-ENGINE
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

MODULE LUMINOUS FLUX	COLOR RENDERING INDEX_CRI	COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	OUTPUT CURRENT
1,300 lm	80	○ 4,000K	15W	12W	110 lm/w	1,334 lm	17V DC	700mA DC
1,300 lm	80	● 3,000K	15W	12W	68 lm/w	1,245 lm	17V DC	700mA DC
1,300 lm	≥95(Artist)	○ 4,000K	20W	16W	88 lm/w	1,430 lm	23V DC	700mA DC
1,300 lm	≥95(Artist)	● 3,000K	20W	16W	79 lm/w	1,276 lm	23V DC	700mA DC
2,000 lm	80	○ 4,000K	24W	20W	105 lm/w	2,078 lm	28V DC	700mA DC
2,000 lm	80	● 3,000K	24W	20W	95 lm/w	1,892 lm	29V DC	700mA DC

OPERATING TEMPERATURE RANGE	-20 to +40 °C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	○ 4,000K ● 3,000K

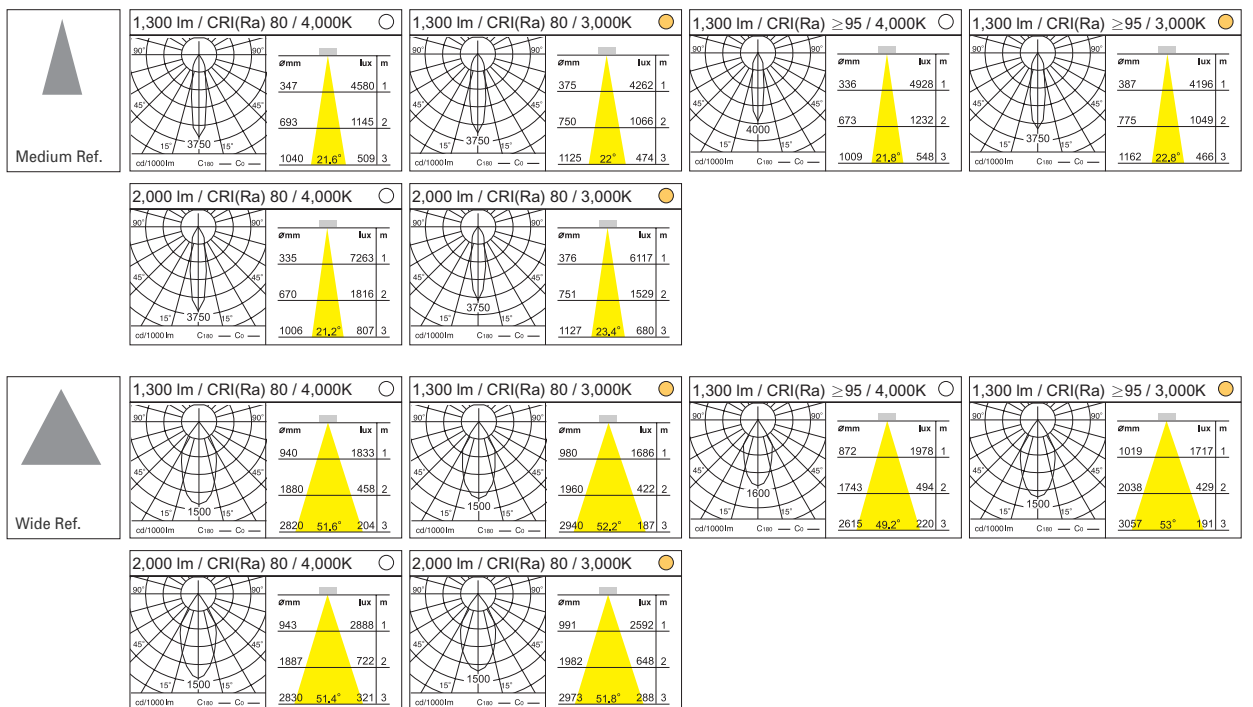
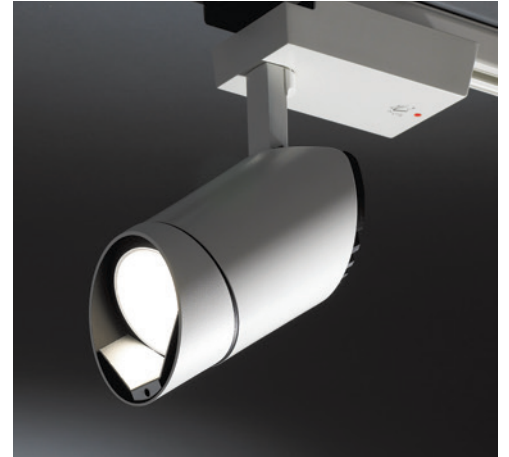
► **Option A**
NON-DIMMABLE DRIVER

► **Option B**
LED DIMMABLE DRIVER
- 디밍드라이버 가능



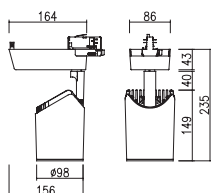
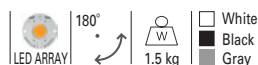
LED Dimming Controller
- Lighting Control

Hood





DDC-63732
Track Accent Light
BLACK TIE

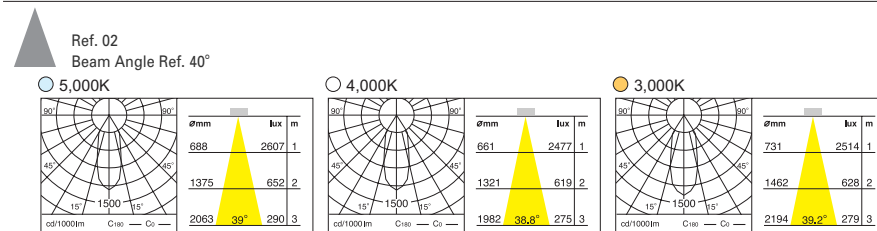
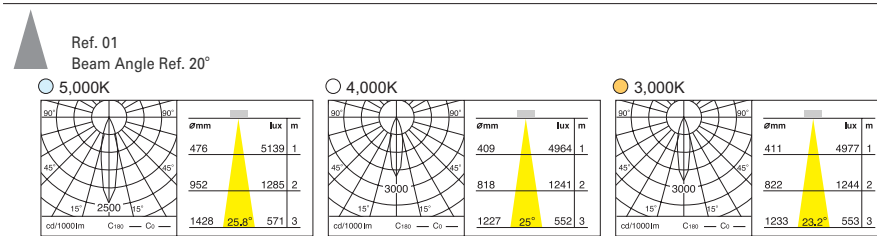


LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating (Black only)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating (Black only)
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	AL. Anodized Specular Silver
INSTALLATION	On 3 circuit track (PC)

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	21W	16W	101 lm/w	1,611 lm	32V DC	70
4,000K	21W	16W	95 lm/w	1,511 lm	32V DC	80
3,000K	21W	16W	93 lm/w	1,441 lm	31V DC	80

OUTPUT CURRENT	500mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K







DDC-65060.01
Track Accent Light

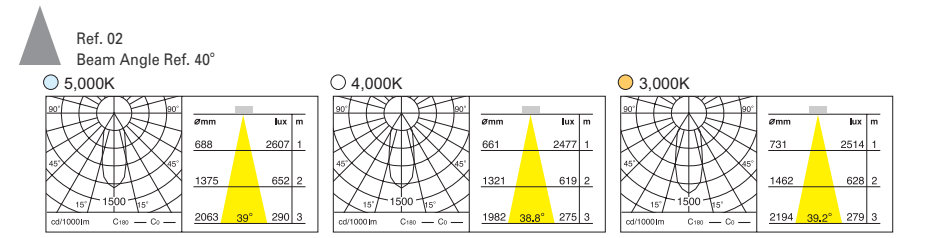
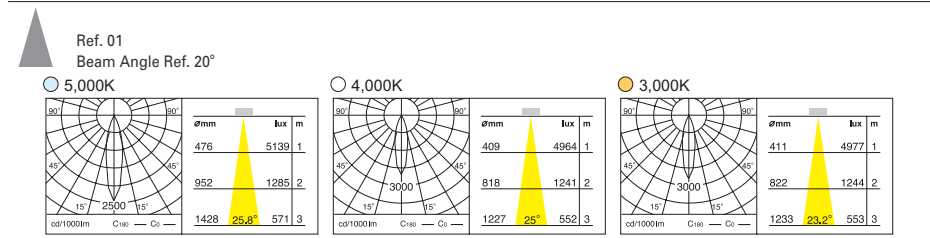


LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Extrude, Electrostatic Powder Coating (Black only)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating (Black only)
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	AL. Anodized Specular Silver Square
INSTALLATION	On 3 circuit track (PC)

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC, 50-60Hz (option : 100-240V AC, 50-60Hz)

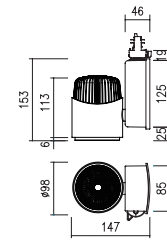
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	21W	16W	101 lm/w	1,611 lm	32V DC	70
4,000K	21W	16W	95 lm/w	1,511 lm	32V DC	80
3,000K	21W	16W	93 lm/w	1,441 lm	31V DC	80

OUTPUT CURRENT	500mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K

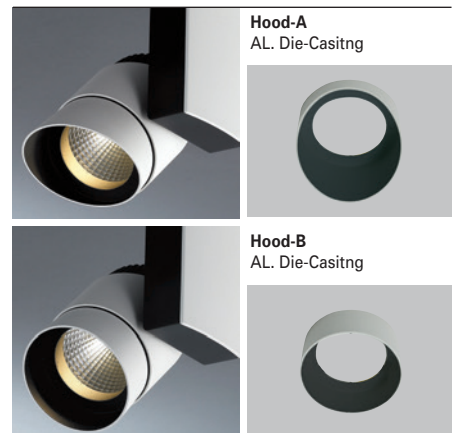




DDC-65060.01 LED ARRAY



ACCESSORY





DDC-65060.02
Track Accent Light



PHILIPS OSRAM

LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Extrude, Electro Deposition Coating
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
GEAR BOX	AL. Extrude, Electrostatic Powder Coating
REFLECTOR	AL. Anodized Specular Silver Square
INSTALLATION	On 3 circuit track (PC)

LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC , 50-60Hz

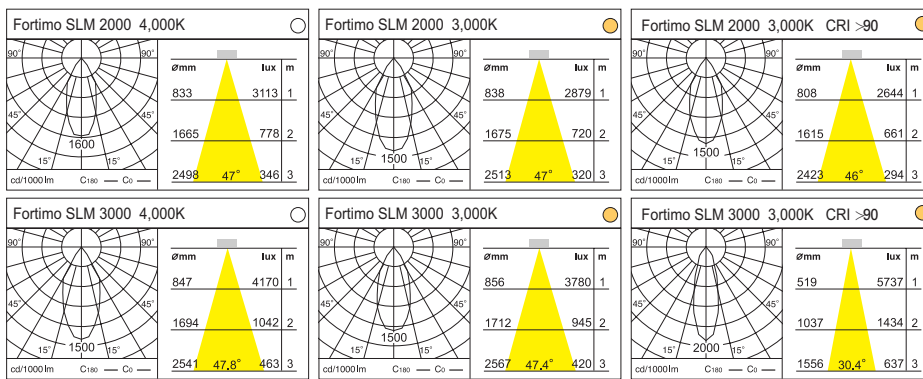
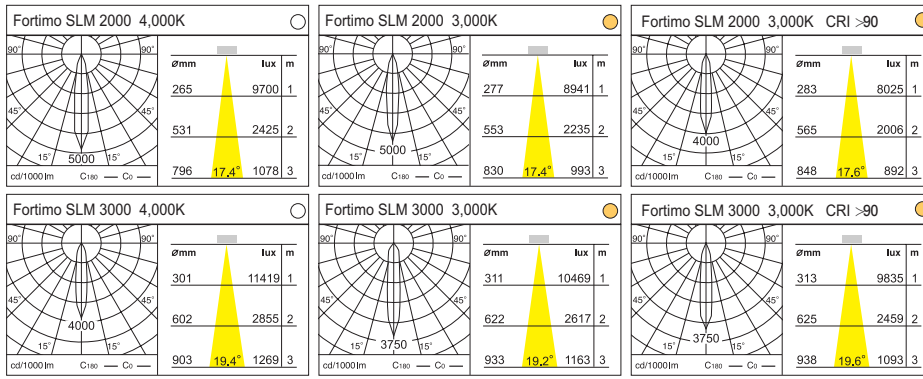
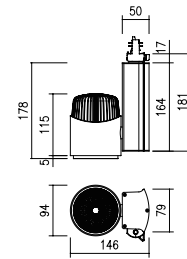
ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER	MODULE POWER	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DDC-65060.02	2000	○ 4,000K	22W	17W	111 lm/W	1,949 lm	80
DDC-65060.02	2000	● 3,000K	22W	17W	101 lm/W	1,800 lm	80
DDC-65060.02	2000	● 3,000K	23W	17W	91 lm/W	1,642 lm	>90
DDC-65061.02	3000	○ 4,000K	30W	26W	110 lm/W	2,682 lm	80
DDC-65061.02	3000	● 3,000K	29W	26W	101 lm/W	2,464 lm	80
DDC-65061.02	3000	● 3,000K	30W	26W	94 lm/W	2,339 lm	>90

OPERATING TEMPERATURE RANGE	-20 to +35°C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

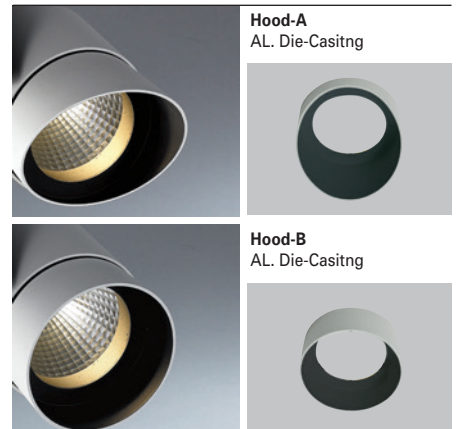
COLOR TEMPERATURE ○ 4,000K ● 3,000K



DDC-65060.02 FORTIMO SLM 2000
DDC-65061.02 FORTIMO SLM 3000



ACCESSORY





DDC-65070.01
Track Accent Light



LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating (Black only)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
GEAR BOX	PC, Urethane Coating
REFLECTOR	PC (Vacuum Coating)
INSTALLATION	On 3 circuit track (PC)

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

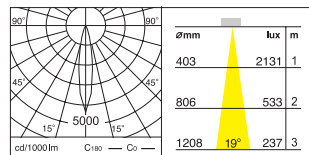
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	8W	6W	72 lm/w	451 lm	18V DC	80
● 3,000K	11W	9W	90 lm/w	808 lm	21V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
OLOR TEMPERATURE	● 3,000K(8W, 11W) ● 2,700K(8W)

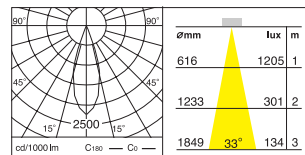
Ref. 01
Beam Angle Ref. 20°

Ref. 02
Beam Angle Ref. 30° ~40°

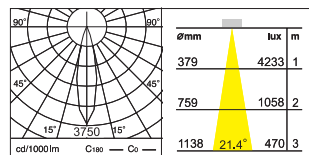
● LED 8W / 3,000K



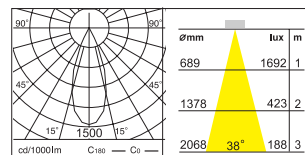
● LED 8W / 3,000K



● LED 11W / 3,000K

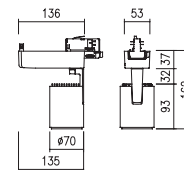


● LED 11W / 3,000K





DDC-65070.01 LED ARRAY 8W, 11W



ACCESSORY

	<p>Diaphragm</p> <p>ACC-01 Control light shape and size</p>
	<p>ACC-02 Control light quantity and size</p>
	<p>Acrylic Plate : Frosted Tempered, Reduce Glare</p>



DDC-65070.02
Track Accent Light

LED ARRAY 180°
1.0 kg
White
Black
Gray

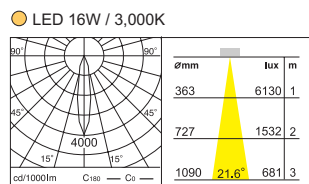
LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt \angle 180°)
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating (Black only)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	PC (Vacuum Coating)
INSTALLATION	On 3 circuit track (PC)

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

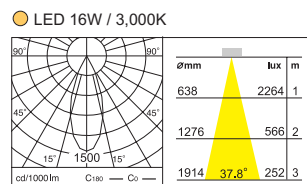
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	16W	13W	89 lm/w	1,194 lm	27V DC	80

OUTPUT CURRENT	500mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 3,000K

Ref. 01
Beam Angle Ref. 20°



Ref. 02
Beam Angle Ref. 30° ~40°



▶ **Option A**
NON-DIMMABLE DRIVER

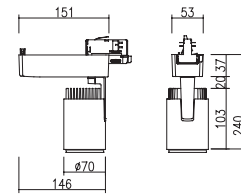
▶ **Option B**
LED DIMMABLE DRIVER - 디밍드라이버 가능



LED Dimming Controller
- Lighting Control



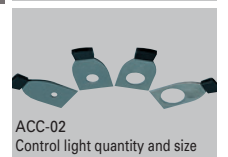
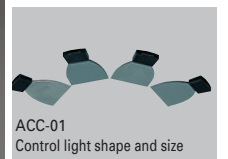
DDC-65070.02 LED ARRAY 16W



ACCESSORY

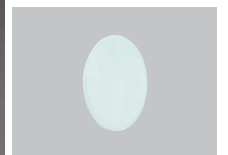


Diaphragm



Acrylic Plate

: Frosted Tempered, Reduce Glare





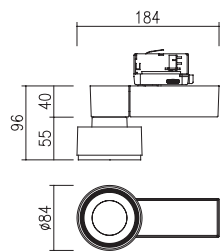


LED ARRAY, LED MR16

DDC-63812 series



DDC-63812
Track Accent Light



LED HOUSING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt \angle 180°)
MOUNTING RING	Aluminium, Electrostatic Powder Coating
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	PC (Vacuum Coating)
INSTALLATION	On 3 circuit track (PC)

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

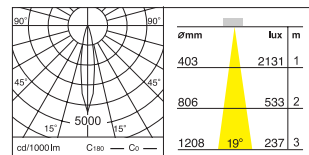
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	8W	6W	72 lm/w	451 lm	18V DC	80
● 3,000K	11W	9W	82 lm/w	733 lm	26V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
DRIVER	Integrated
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
OLOR TEMPERATURE	● 3,000K(8W, 11W) ● 2,700K(8W)

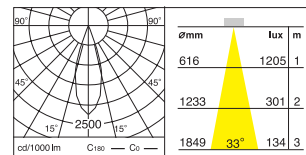
Ref. 01
Beam Angle Ref. 20°

Ref. 02
Beam Angle Ref. 30° ~40°

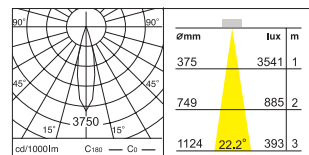
● LED 8W / 3,000K



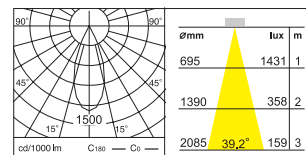
● LED 8W / 3,000K



● LED 11W / 3,000K



● LED 11W / 3,000K

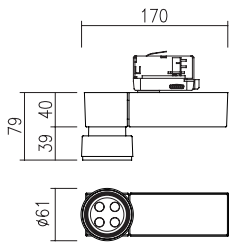


Base plate version
available on request



DDC-63822
Track Accent Light

LED MR16 180° 1.0 kg
 White
 Black
 Gray



LED HOUSING AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 180^\circ$)
MOUNTING RING Aluminium, Electrostatic Powder Coating
GEAR BOX AL. Die-Casting, Electrostatic Powder Coating
INSTALLATION On 3 circuit track (PC)

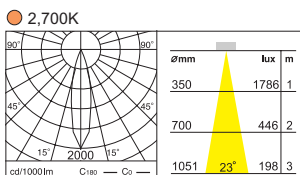
LIGHT LED MR16
INPUT VOLTAGE 220-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER	LUMINOUS FLUX (lm)	LED OUTPUT VOLTAGE	COLOR RENDERING INDEX, CRI
4,000K	9W	480 lm	12V DC	80
3,000K	9W	480 lm	12V DC	80
2,700K	9W	480 lm	12V DC	80

OPERATING TEMPERATURE RANGE -20 to +40 °C
DRIVER Halogen transformer compatible
MAINTENANCE OF LUMEN -L70 25,000 hours at 25 °C
COLOR TEMPERATURE ○ 4,000K ● 3,000K ● 2,700K



Base plate version available on request





DDC-65210
Track Accent Light



PHILIPS

LED HOUSING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 90^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating (Black only)
REFLECTOR	AL. Anodized Specular Silver or AL. Etching
INSTALLATION	On 3 circuit track (PC)

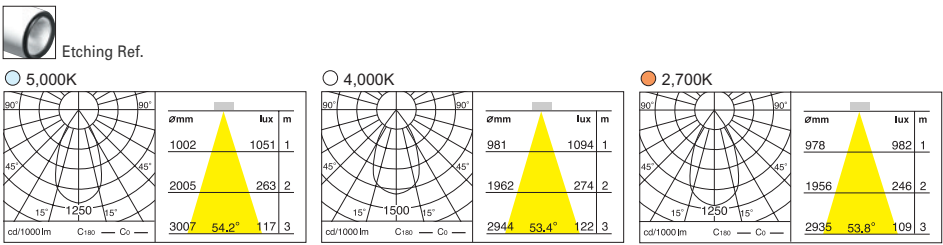
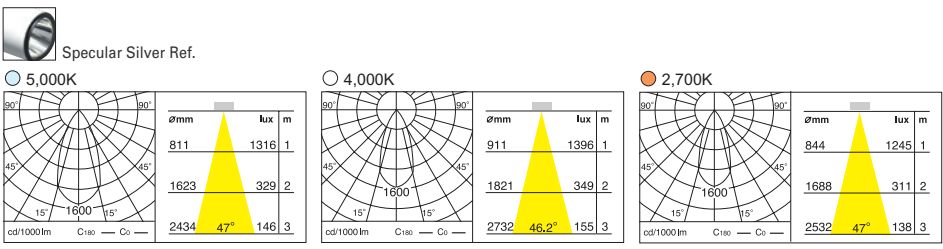
LIGHT	LED DISK (Integrated LED)
INPUT VOLTAGE	220-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER	LUMINOUS FLUX (lm)	SYSTEM EFFICIENCY (lm/W)	COLOR RENDERING INDEX_CRI
5,000K	11W	825 lm	77 lm/W	80
4,000K	11W	859 lm	82 lm/W	80
2,700K	11W	778 lm	72 lm/W	80

OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C

COLOR TEMPERATURE

5,000K 4,000K 2,700K



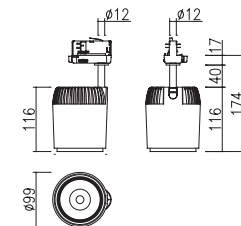


AL. Anodized Specular Silver



AL. Etching

DDC-65210 LED DISK





DDC-65220
Track Accent Light



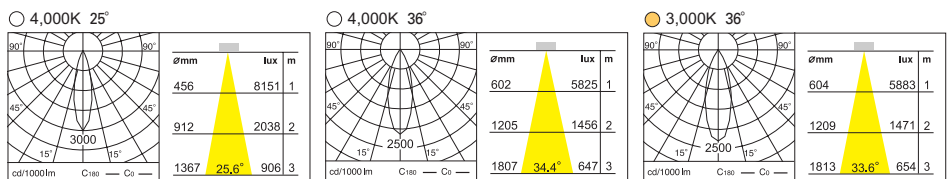
PHILIPS

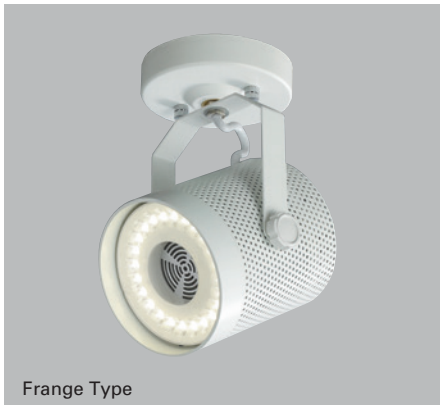
LED HOUSING	Steel, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 90^\circ$)
MOUNTING RING	AL. Extrude, Electrostatic Powder Coating (Black only)
BEAM ANGLE	24°, 36°
INSTALLATION	On 1 circuit track (Option : On 3 circuit track)

LIGHT	CertaFlux SLS
INPUT VOLTAGE	220-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER	BEAM ANGLE	LUMINOUS FLUX (lm)	SYSTEM EFFICIENCY (lm/W)	COLOR RENDERING INDEX_CRI
○ 4,000K	32W	24°, 36°	2,730 lm	85 lm/W	80
● 3,000K	32W	24°, 36°	2,577 lm	81 lm/W	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C
COLOR TEMPERATURE	○ 4,000K ● 3,000K





Frange Type



White

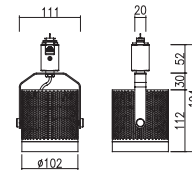


Black

DDC-65220 LED SLS



Hood Type










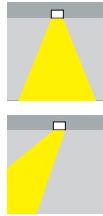


DD-37000 Series

LED DOWN LIGHTS



order no.	DD-37000.01 Series	DD-37000.02 Series	DD-37000.03 Series	DD-37000.04 Series	DD-37000.05 Series	DD-37000.06 Series	DD-37010.08 Series
LED type	POWER LED	LED ARRAY	LED DISK	POWER LED	X-ENGINE	Fortimo SLM Preva Core	Fortimo SLM Preva Core
LED symbol							
	↓	↓	↓	↓	↓	↓	↓
page	p.64	p.68	p.70	p.72	p.74	p.76	p.78



DD-37000.01 series
Recessed Down Light / Accent Light



TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Beam angle LENS Type
BEAM ANGLE	15°, 20°, 30°, 40°

LIGHT	Power LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

INPUT POWER (nominal)	COLOR TEMPERATURE (K)	OUTPUT POWER (nominal)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	OUTPUT CURRENT (constant current)	COLOR RENDERING INDEX_CRI
9W	○ 5,000K	7W	130 lm/w	921 lm	20V DC	350mA DC	75
9W	○ 4,000K	7W	107 lm/w	761 lm	20V DC	350mA DC	80
9W	● 3,000K	7W	100 lm/w	709 lm	20V DC	350mA DC	80
17W	○ 5,000K	15W	107 lm/w	1,579 lm	21V DC	700mA DC	75
18W	○ 4,000K	15W	85 lm/w	1,259 lm	21V DC	700mA DC	80
17W	● 3,000K	15W	75 lm/w	1,100 lm	21V DC	700mA DC	80

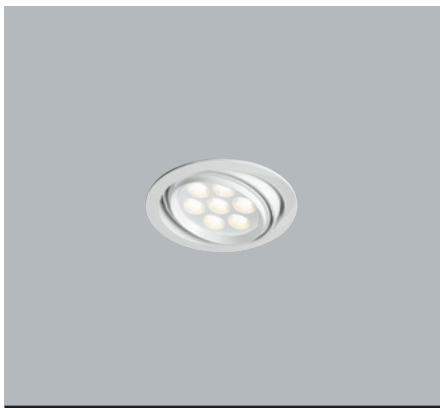
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	○ 5,000K ○ 4,000K ● 3,000K

PHOTOMETRIC DATA  >>> page 66-67

ACCESSORY

Beam angle LENS Type





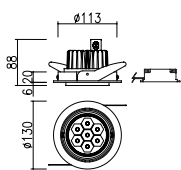
DD-37000.01 LED 9W, 18W x 1



DD-37010.01 LED 9W, 18W x 1

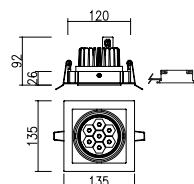


DD-37020.01 LED 9W, 18W x 2



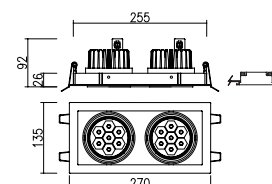
Weight : 0.5kg

∅ 119mm (4 3/8")



Weight : 1.0kg

125 x 125mm (5" x 5")



Weight : 1.6kg

260 x 125mm (10 1/5" x 5")



DD-37000.01 series

POWER LED	9W
INPUT POWER	9W (nominal)
OUTPUT POWER	7W (nominal)
MODULE EFFICIENCY (lm/W)	130 lm/W (5,000K) 107 lm/W (4,000K) 100 lm/W (3,000K)
LUMINOUS FLUX (lm)	921 lm (5,000K) 761 lm (4,000K) 709 lm (3,000K)
OUTPUT VOLTAGE	20V DC (nominal)
OUTPUT CURRENT	350mA DC (constant current)



DD-37000.01 series

POWER LED	18W
INPUT POWER	18W (nominal)
OUTPUT POWER	15W (nominal)
MODULE EFFICIENCY (lm/W)	107 lm/W (5,000K) 85 lm/W (4,000K) 75 lm/W (3,000K)



DD-37000.04 series

LUMINOUS FLUX (lm)	1,579 lm (5,000K) 1,259 lm (4,000K) 1,100 lm (3,000K)
OUTPUT VOLTAGE	21V DC (nominal)
OUTPUT CURRENT	700mA DC (constant current)



ACC-04
Beam Angle Lens 15°



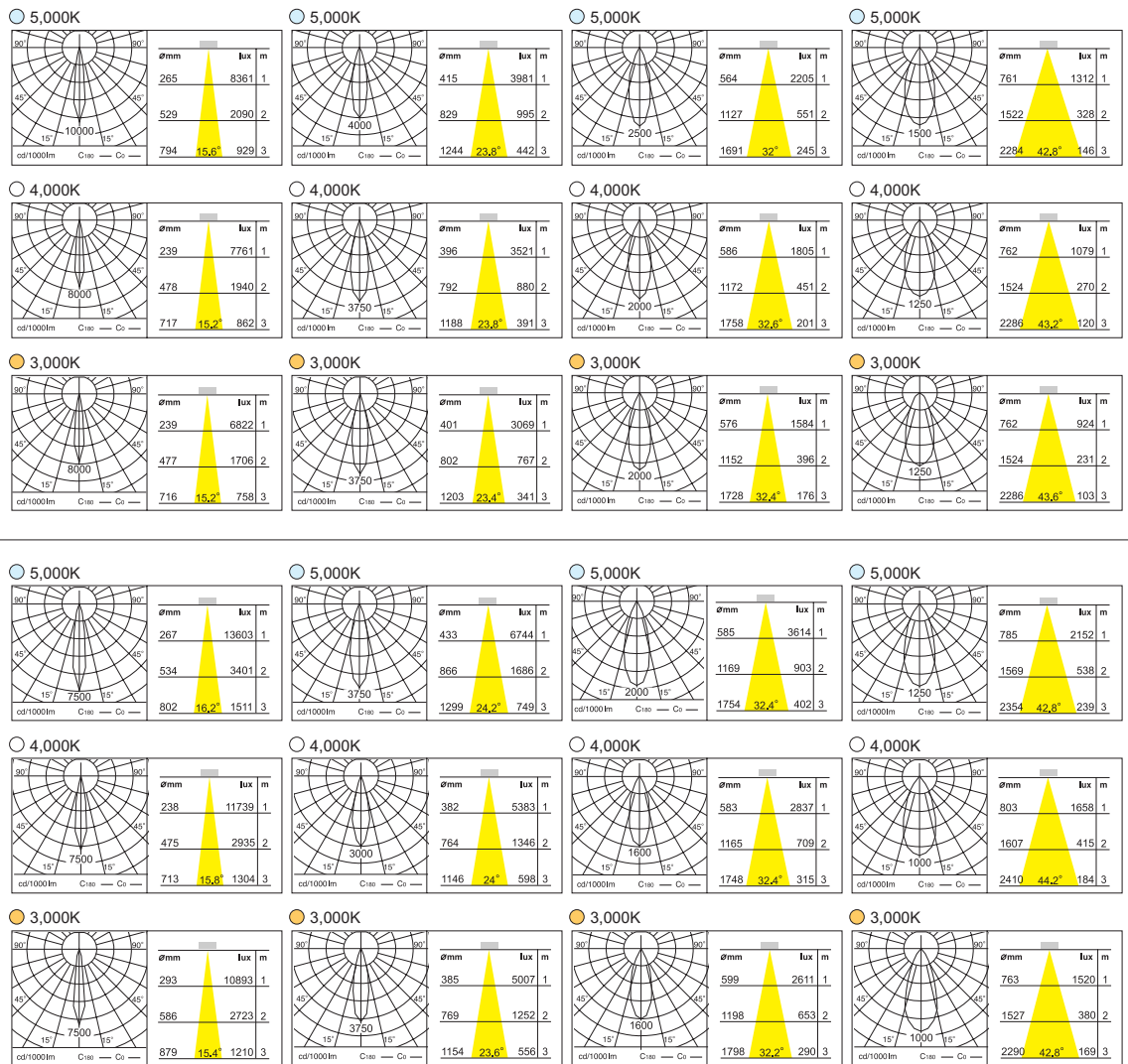
ACC-05
Beam Angle Lens 20°

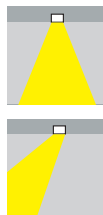


ACC-06
Beam Angle Lens 30°



ACC-07
Beam Angle Lens 40°





DD-37000.02 series
Recessed Down Light / Accent Light

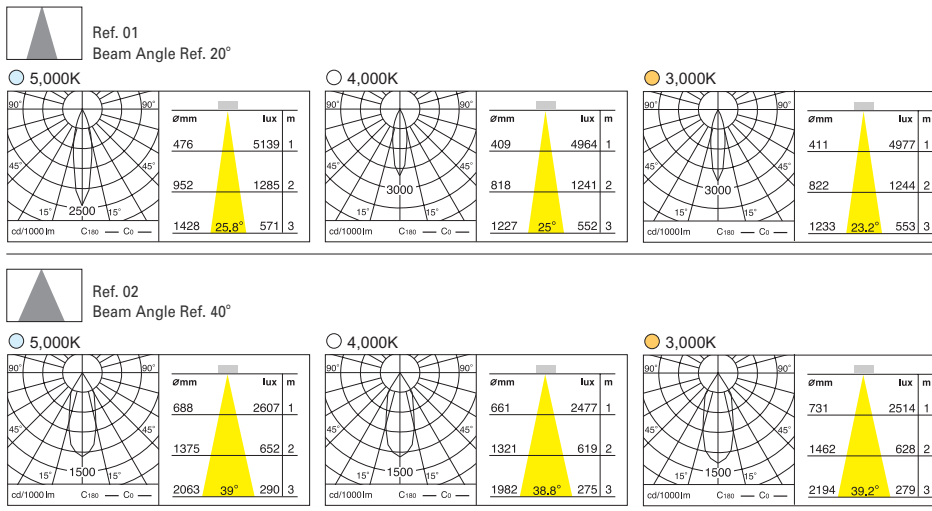


TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
REFLECTOR	AL. Anodized Specular Silver Square
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	21W	16W	95 lm/w	1,510 lm	32V DC	70
4,000K	21W	16W	95 lm/w	1,511 lm	32V DC	80
3,000K	21W	16W	93 lm/w	1,441 lm	31V DC	80

OUTPUT CURRENT	500mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K





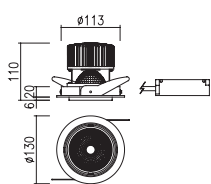
DD-37000.02 LED ARRAY 21W x 1



DD-37010.02 LED ARRAY 21W x 1

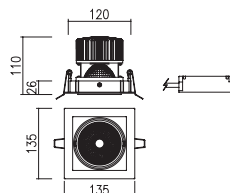


DD-37020.02 LED ARRAY 21W x 2



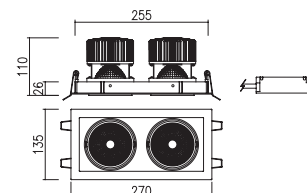
Weight : 0.6 kg

Ø 119mm (4 3/8")



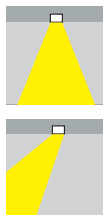
Weight : 1.0kg

125 x 125mm (5" x 5")



Weight : 1.6kg

260 x 125mm (10 1/5" x 5")



DD-37000.03 series
Recessed Down Light / Accent Light



PHILIPS

TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
REFLECTOR	AL. Anodized Specular Silver Square
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating

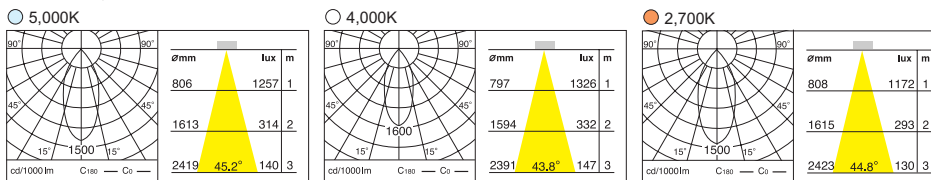
LIGHT	LED DISK (Integrated LED)
INPUT VOLTAGE	220-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER	LUMINOUS FLUX (lm)	SYSTEM EFFICIENCY (lm/w)	COLOR RENDERING INDEX CRI
5,000K	11W	855 lm	80 lm/W	80
4,000K	11W	849 lm	81 lm/W	80
2,700K	11W	775 lm	72 lm/W	80

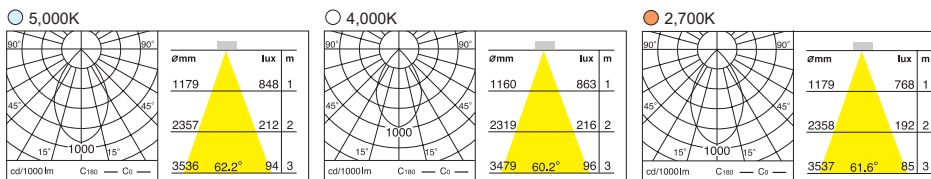
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C
COLOR TEMPERATURE	5,000K 4,000K 2,700K



Specular Silver Ref.



Etching Ref.





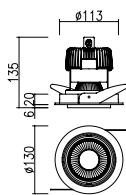
DD-37000.03 LED DISK 11W x 1



DD-37010.03 LED DISK 11W x 1

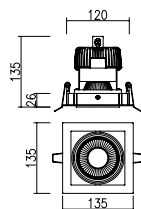


DD-37020.03 LED DISK 11W x 2



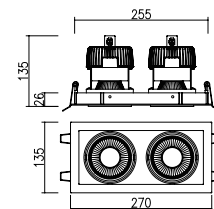
Weight : 0.6 kg

∅ 119mm (4 3/5")



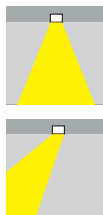
Weight : 1.0 kg

125 x 125mm (5" x 5")



Weight : 1.6 kg

260 x 125mm (10 1/5" x 5")



DD-37000.04 series
Recessed Down Light / Accent Light



TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Beam angle LENS Type
BEAM ANGLE	15°, 20°, 30°, 40° Beam

LIGHT	Power LED
INPUT VOLTAGE	220-240V AC, 50-60Hz (option : 100-240V AC, 50-60Hz)

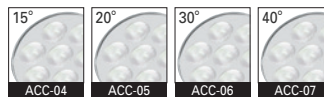
COLOR TEMPERATURE (K)	INPUT POWER (nominal)	OUTPUT POWER (nominal)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	17W	15W	107 lm/w	1,579 lm	21V DC	75
4,000K	18W	15W	85 lm/w	1,259 lm	21V DC	80
3,000K	17W	15W	75 lm/w	1,100 lm	21V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K

PHOTOMETRIC DATA  >>> page 66-67

ACCESSORY

Option-B (Beam angle LENS Type)





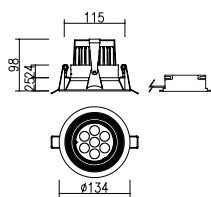
DD-37000.04 LED 18W x 1



DD-37010.04 LED 18W x 1

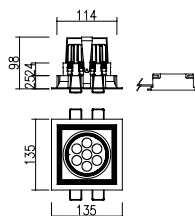


DD-37020.04 LED 18W x 2



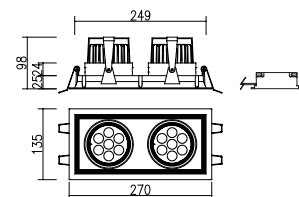
∅ 120mm (4 7/16")

Weight : 0.7 kg



120 x 120mm (4 7/16" x 4 7/16")

Weight : 1.0 kg



255 x 120mm (10" x 4 7/16")

Weight : 1.2 kg



DD-37000.05 series
Recessed Down Light / Accent Light



TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
REFLECTOR	AL. Anodized Specular Silver Square
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
ADJUSTABLE BRACKET	Steel
LIGHT	X-ENGINE
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

MODULE LUMINOUS FLUX	COLOR RENDERING INDEX_CRI	COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	OUTPUT CURRENT
1,300 lm	80	○ 4,000K	15W	12W	110 lm/w	1,334 lm	17V DC	700mA DC
1,300 lm	80	● 3,000K	15W	12W	68 lm/w	1,245 lm	17V DC	700mA DC
1,300 lm	≥ 95 (Artist)	○ 4,000K	20W	16W	88 lm/w	1,430 lm	23V DC	700mA DC
1,300 lm	≥ 95 (Artist)	● 3,000K	20W	16W	79 lm/w	1,276 lm	23V DC	700mA DC
2,000 lm	80	○ 4,000K	24W	20W	105 lm/w	2,078 lm	28V DC	700mA DC
2,000 lm	80	● 3,000K	24W	20W	95 lm/w	1,892 lm	29V DC	700mA DC
2,000 lm	≥ 95 (Artist)	○ 4,000K	31W	26W	84 lm/w	2,139 lm	26V DC	700mA DC
2,000 lm	≥ 95 (Artist)	● 3,000K	31W	25W	77 lm/w	1,934 lm	25V DC	700mA DC
3,000 lm	80	○ 4,000K	33W	30W	97 lm/w	2,878 lm	28V DC	1,050mA DC
3,000 lm	80	● 3,000K	34W	30W	88 lm/w	2,650 lm	29V DC	1,050mA DC

OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	○ 4,000K ● 3,000K





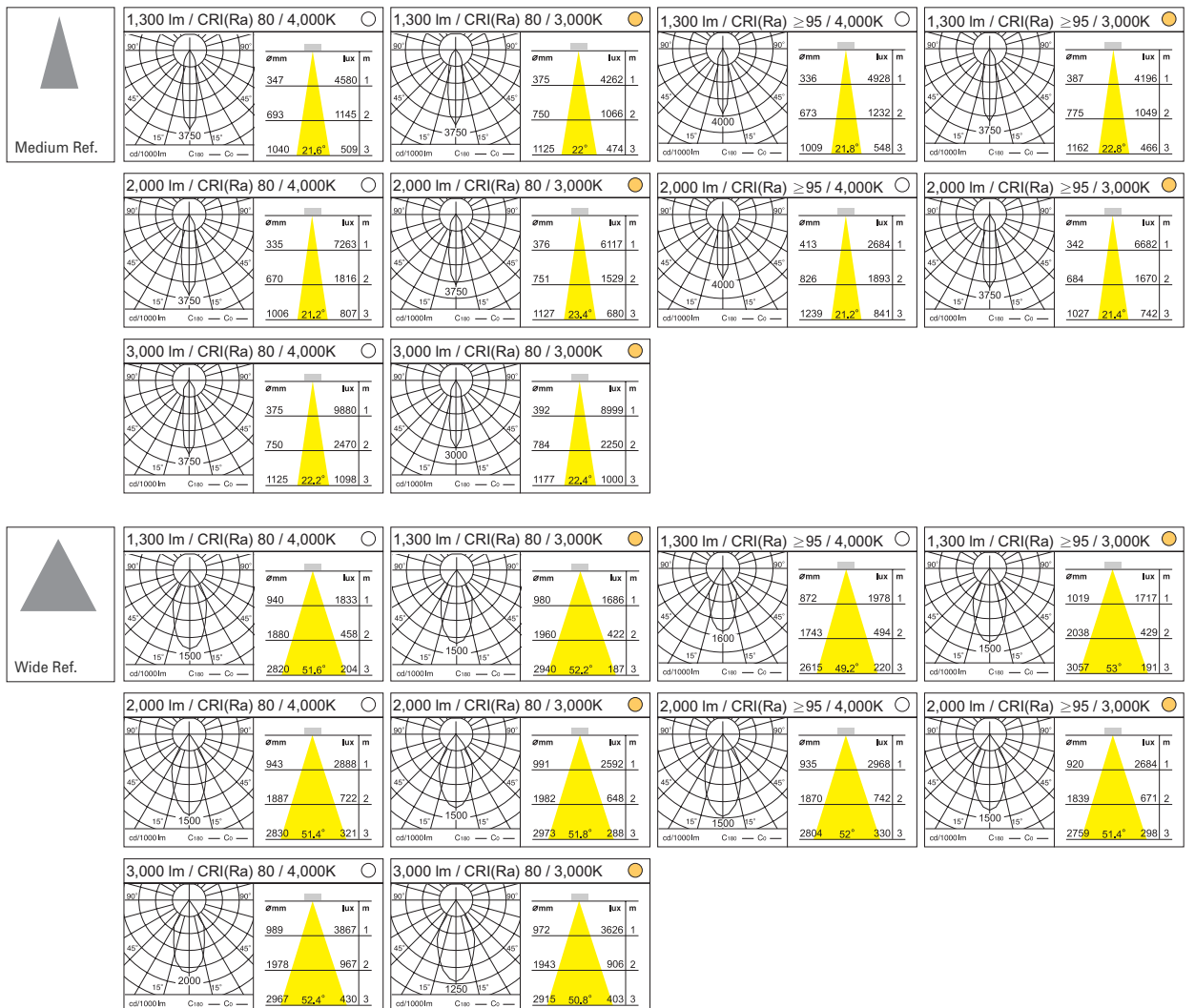
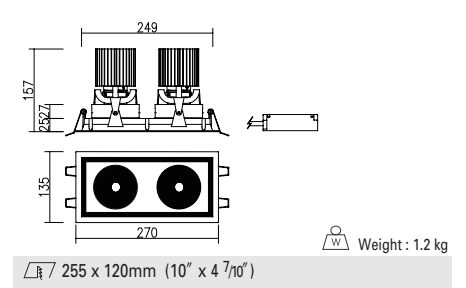
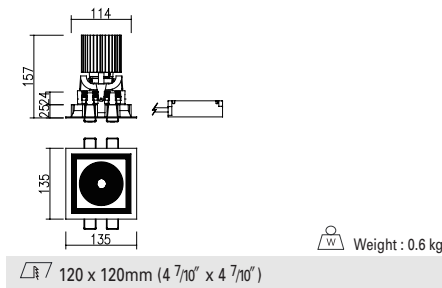
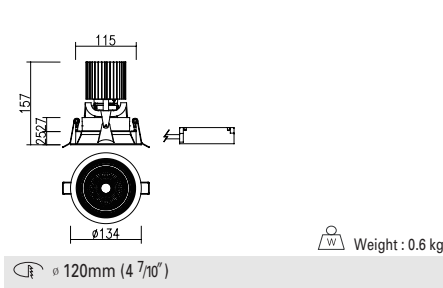
DD-37000.05 X-ENGINE x1

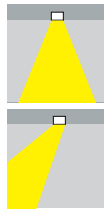


DD-37010.05 X-ENGINE x1

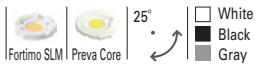


DD-37020.05 X-ENGINE x2





DD-37000.06 series
Recessed Down Light / Accent Light



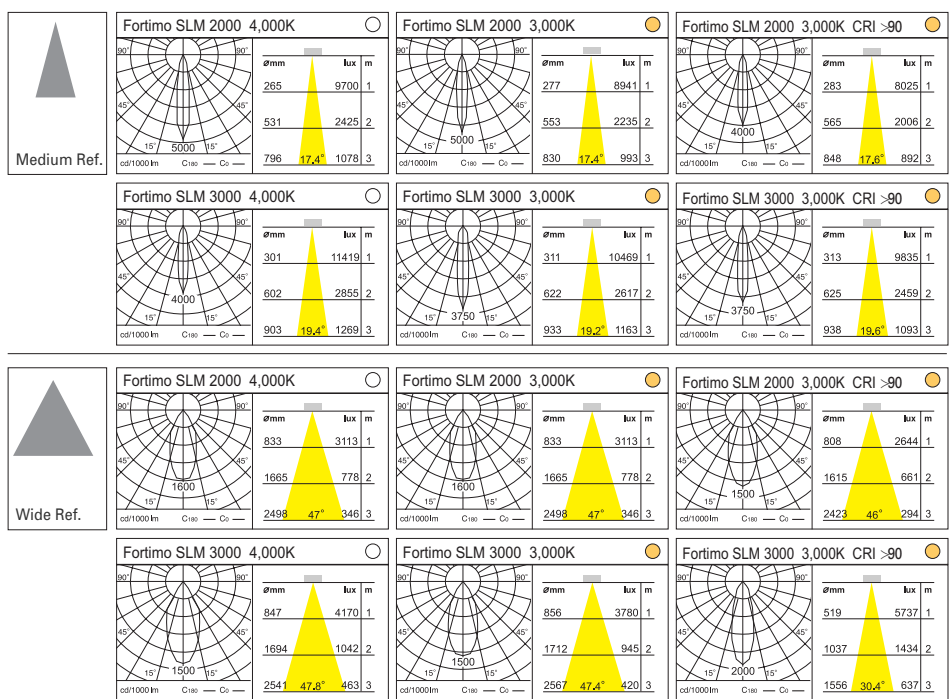
PHILIPS OSRAM

TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver Square with Embossing

LIGHT Fortimo SLM, Preva Core
INPUT VOLTAGE 220-240V AC , 50-60Hz

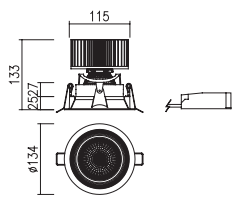
ORDER NO.	MODULE LUMINOUS FLUX(l)	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-37000.06	2000	4,000K	22W	17W	111 lm/W	1,949 lm	80
DD-37000.06	2000	3,000K	22W	17W	101 lm/W	1,800 lm	80
DD-37000.06	2000	3,000K	23W	17W	91 lm/W	1,642 lm	>90
DD-37001.06	3000	4,000K	30W	26W	110 lm/W	2,682 lm	80
DD-37001.06	3000	3,000K	29W	26W	101 lm/W	2,464 lm	80
DD-37001.06	3000	3,000K	30W	26W	94 lm/W	2,339lm	>90

OPERATING TEMPERATURE RANGE -20 to +35 °C
MAINTENANCE OF LUMEN -L70 50,000 hours at 25 °C
DRIVER LIFETIME 50,000 hours





DD-37000.06 Fortimo SLM 2000 x 1
DD-37001.06 Fortimo SLM 3000 x 1

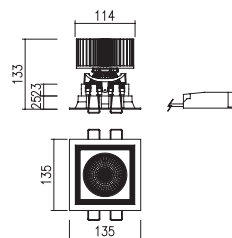


Weight : 0.6 kg

∅ 120mm (4 7/16")



DD-37010.06 Fortimo SLM 2000 x 1
DD-37011.06 Fortimo SLM 3000 x 1

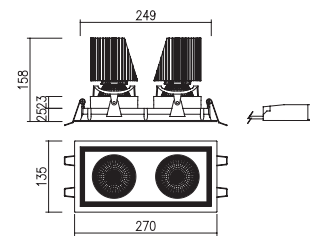


Weight : 0.6 kg

120 x 120mm (4 7/16" x 4 7/16")

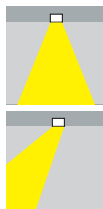


DD-37020.06 Fortimo SLM 2000 x 2
DD-37021.06 Fortimo SLM 3000 x 2



Weight : 1.2 kg

255 x 120mm (10" x 4 7/16")



DD-37000.08 series
Recessed Down Light / Accent Light



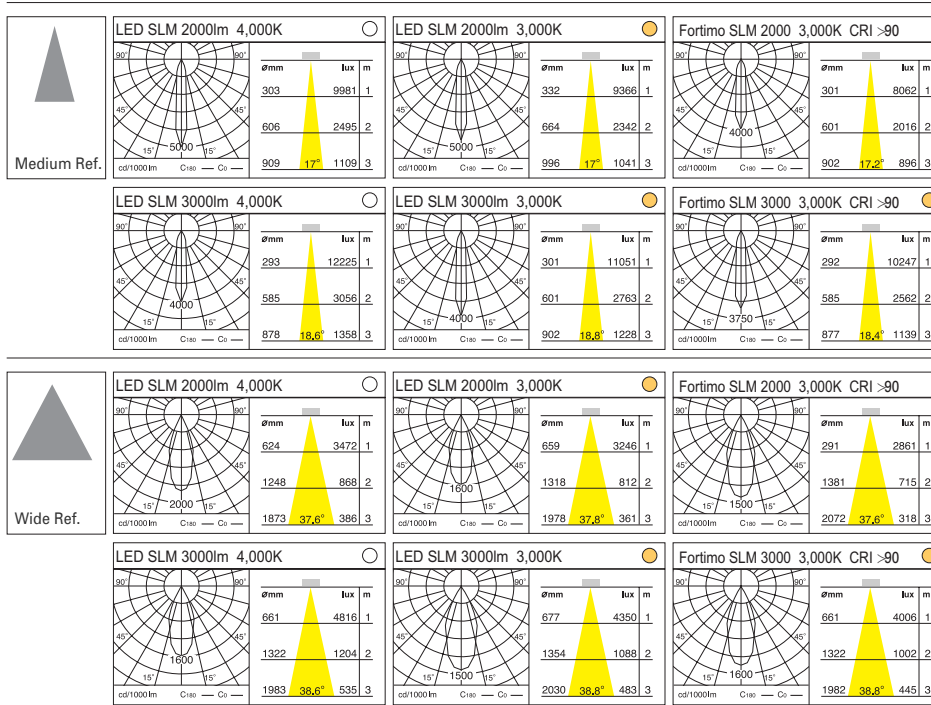
PHILIPS OSRAM

TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 28^\circ$)
MOUNTING RING	AL. Extrude, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver Square with Embossing

LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC, 50-60Hz

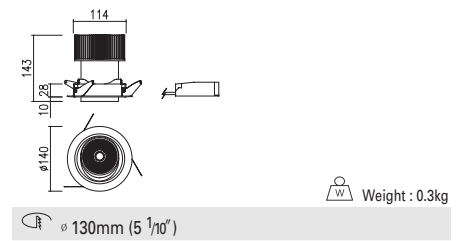
ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER	MODULE POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX CRI
DD-37000.08	2000	○ 4,000K	22W	18W	93 lm/W	1,630 lm	80
DD-37000.08	2000	● 3,000K	22W	18W	85 lm/W	1,527 lm	80
DD-37000.08	2000	● 3,000K	23W	18W	74 lm/W	1,340 lm	>90
DD-37001.08	3000	○ 4,000K	30W	24W	93 lm/W	2,269 lm	80
DD-37001.08	3000	● 3,000K	29W	24W	84 lm/W	2,052 lm	80
DD-37001.08	3000	● 3,000K	29W	25W	76 lm/W	1,880 lm	>90

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours





DD-37000.08 Fortimo SLM 2000 x 1
 DD-37001.08 Fortimo SLM 3000 x 1



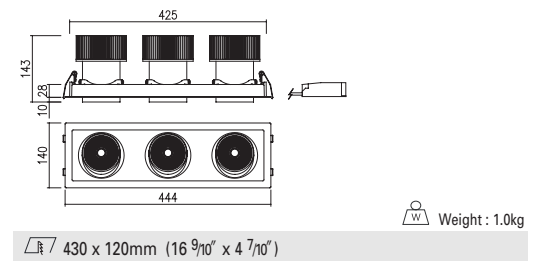
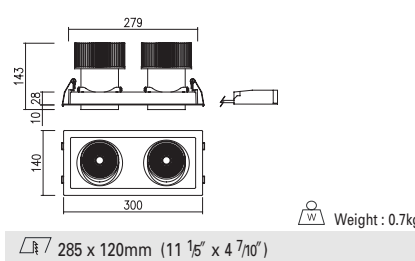
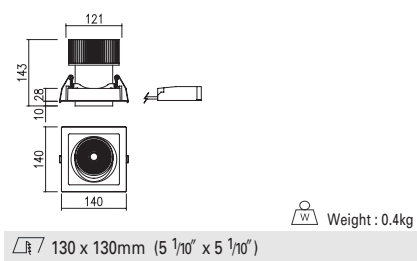
DD-37010.08 Fortimo SLM 2000 x 1
 DD-37011.08 Fortimo SLM 3000 x 1



DD-37020.08 Fortimo SLM 2000 x 2
 DD-37021.08 Fortimo SLM 3000 x 2



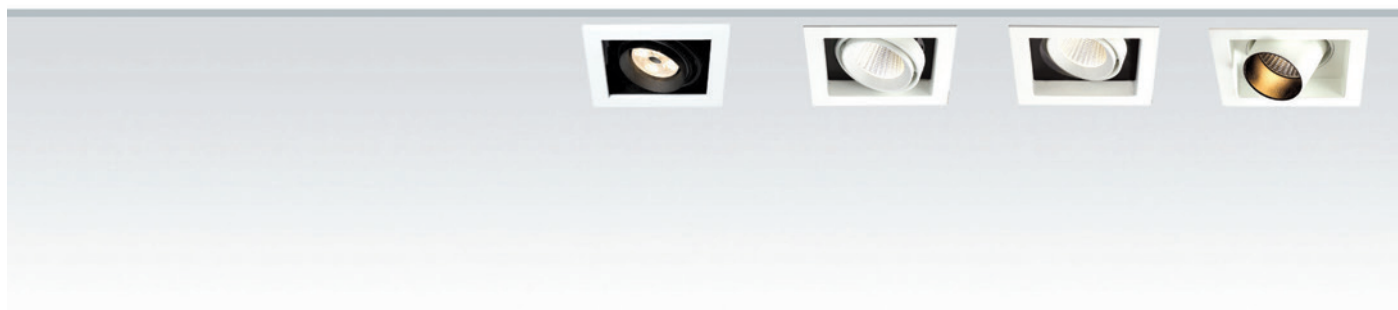
DD-37030.08 Fortimo SLM 2000 x 3
 DD-37031.08 Fortimo SLM 3000 x 3









DD-37100 Series

LED DOWN LIGHTS



order no.	DD-30013.04 Series	DD-37100.05 Series	DD-37110.06 Series	DD-37100.07 Series
LED type	MASTER LED MR16	LED ARRAY	LED ARRAY	LED ARRAY
LED symbol				
	↓	↓	↓	↓
page	p.82	p.84	p.86	p.88



DD-30013.04 series
Recessed Down Light / Accent Light



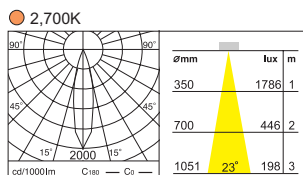
TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
MOUNTING RING	AL. Die-Casting, Electro Deposition Coating
HOUSING	Steel

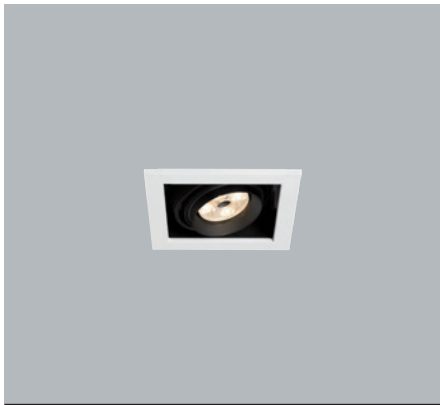
LIGHT	Master LED MR16
BEAM ANGLE	24°
INPUT VOLTAGE	220-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER	LUMINOUS FLUX (lm)	LED OUTPUT VOLTAGE	COLOR RENDERING INDEX_CRI
○ 4,000K	7W	400 lm	12V DC	80
● 3,000K	7W	380 lm	12V DC	80
● 2,700K	7W	380 lm	12V DC	80

OPERATING TEMPERATURE RANGE	-20 to +40 °C
DRIVER	Halogen transformer compatible
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C
COLOR TEMPERATURE	○ 4,000K ● 3,000K ● 2,700K

TRIM APPLICATION

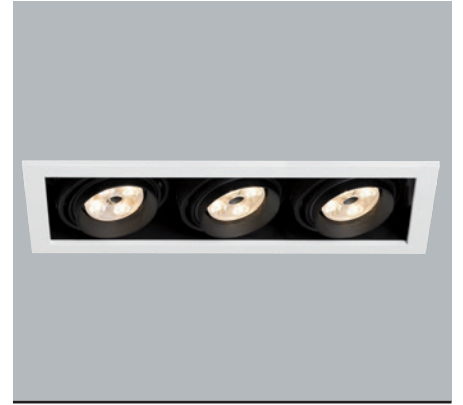




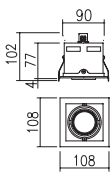
DD-30013.04 LED MR16 7W x 1



DD-30023.04 LED MR16 7W x 2

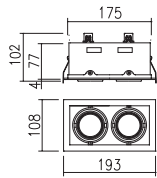


DD-30033.04 LED MR16 7W x 3



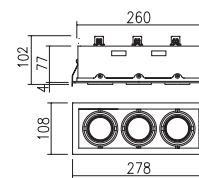
Weight : 0.4kg

△ / 96 x 96mm (3 4/5" x 3 4/5")



Weight : 0.7kg

△ / 179 x 96mm (7" x 3 4/5")



Weight : 1.0kg

△ / 264 x 96mm (10 2/5" x 3 4/5")





DD-37100.05 series
Recessed Down Light / Accent Light



TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
REFLECTOR	PC (Vacuum Coating)
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

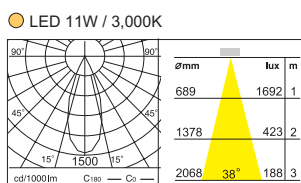
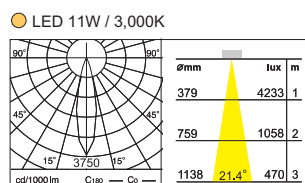
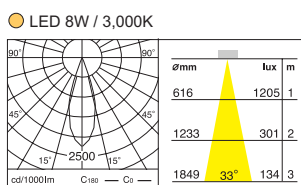
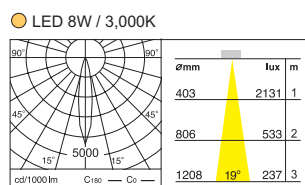
LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	8W	6W	72 lm/w	451 lm	18V DC	80
● 3,000K	11W	9W	90 lm/w	808 lm	21V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 3,000K(8W, 11W) ● 2,700K(8W)

Ref. 01
Beam Angle Ref. 20°

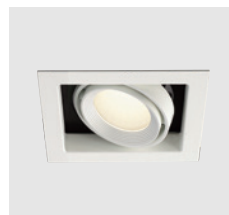
Ref. 02
Beam Angle Ref. 40°



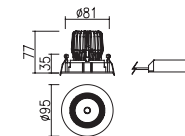
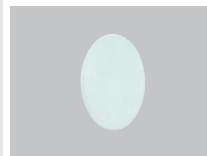


DD-37100.05 LED ARRAY 11W, 8W x 1

ACCESSORY

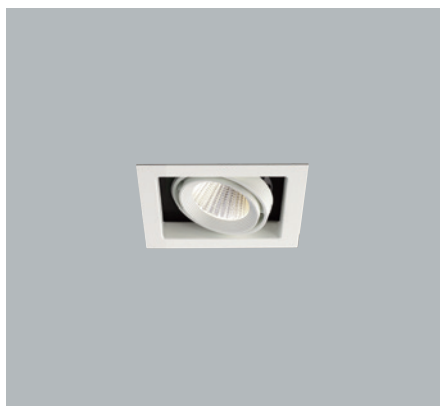


Acrylic Plate
: Frosted Tempered, Reduce Glare



Weight : 0.3kg

∅ 85 mm (3 3/10")



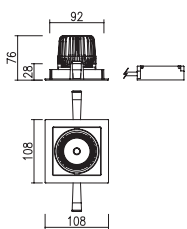
DD-37110.05 LED ARRAY 11W, 8W x 1



DD-37120.05 LED ARRAY 11W x 2, 8W x 2

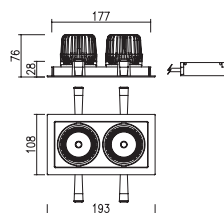


DD-37130.05 LED ARRAY 11W x 3, 8W x 3



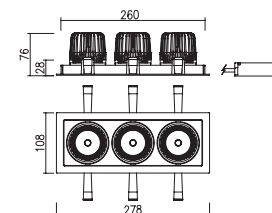
Weight : 0.4kg

100 x 100mm (3 9/10" x 3 9/10")



Weight : 0.7kg

180 x 100mm (7 1/10" x 3 9/10")



Weight : 1.0kg

265 x 100mm (10 2/5" x 3 9/10")



DD-37110.06 series
Recessed Down Light / Accent Light



TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
REFLECTOR	PC (Vacuum Coating)
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

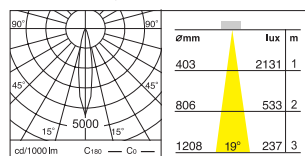
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	8W	6W	72 lm/w	451 lm	18V DC	80
● 3,000K	11W	9W	90 lm/w	808 lm	21V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 3,000K(8W, 11W) ● 2,700K(8W)

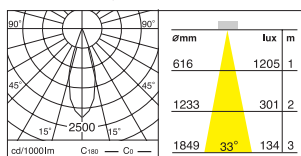
Ref. 01
Beam Angle Ref. 20°

Ref. 02
Beam Angle Ref. 40°

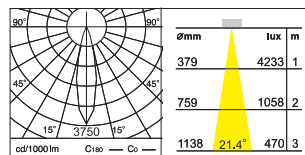
● LED 8W / 3,000K



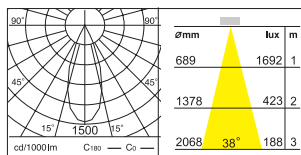
● LED 8W / 3,000K



● LED 11W / 3,000K



● LED 11W / 3,000K





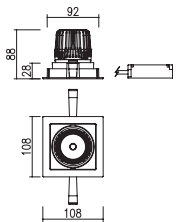
DD-37110.06 LED ARRAY 11W x 1, 8W x 1



DD-37120.06 LED ARRAY 11W x 2, 8W x 2

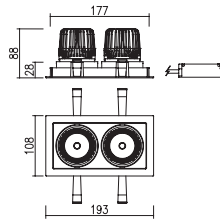


DD-37130.06 LED ARRAY 11W x 3, 8W x 3



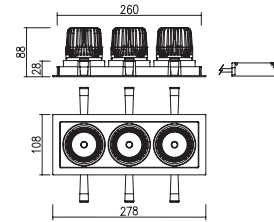
Weight : 0.5 kg

△_R / 100 x 100mm (3 9/10" x 3 9/10")



Weight : 0.8 kg

△_R / 180 x 100mm (7 1/10" x 3 9/10")



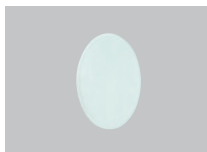
Weight : 1.0 kg

△_R / 265 x 100mm (10 2/5" x 3 9/10")

ACCESSORY



Acrylic Plate
: Frosted Tempered, Reduce Glare





DD-37100.07 series
Recessed Down Light / Accent Light



TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
REFLECTOR	PC (Vacuum Coating)
HEAT SINK	AL. Extude, Electro Deposition Coating

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

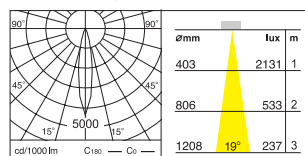
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	8W	6W	72 lm/w	451 lm	18V DC	80
● 3,000K	11W	9W	57 lm/w	526 lm	26V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 3,000K(8W, 11W) ● 2,700K(8W)

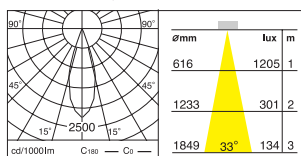
Ref. 01
Beam Angle Ref. 20°

Ref. 02
Beam Angle Ref. 40°

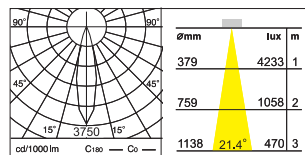
● LED 8W / 3,000K



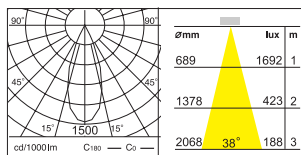
● LED 8W / 3,000K

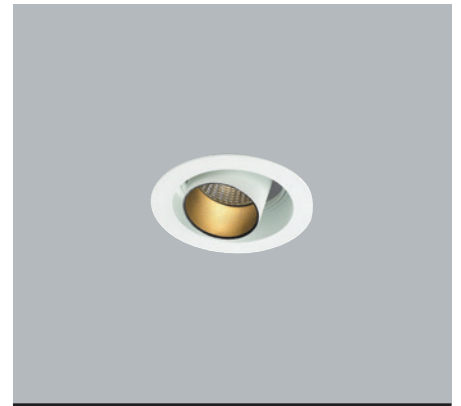


● LED 11W / 3,000K

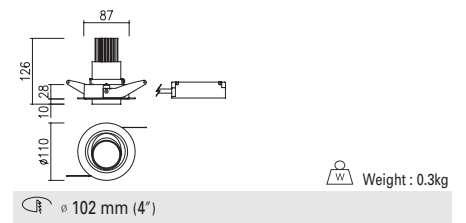


● LED 11W / 3,000K





DD-37100.07 LED ARRAY 11W, 8W



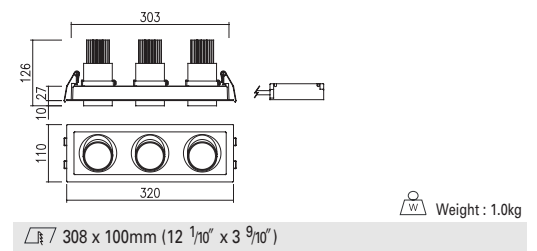
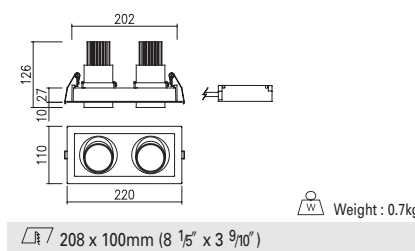
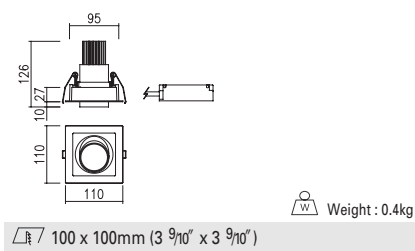
DD-37110.07 LED ARRAY 11W, 8W



DD-37120.07 LED ARRAY 11W x 2, 8W x 2



DD-37130.07 LED ARRAY 11W x 3, 8W x 3











DD-37200 Series

LED DOWN LIGHTS



order no.	DD-37200.01 Series	DD-37200.02 Series	DD-37200.03 Series	DD-37200.04 Series	DD-37200.05 Series	DD-37200.06 Series
LED type	POWER LED	Fortimo SLM Preva Core	Fortimo SLM Preva Core	Fortimo SLM Preva Core	LED-T111 Coinlight AR111	LED-T111
LED symbol						
page	p.92	p.94	p.96	p.100	p.102	p.104



DD-37200.01 series
Recessed Down Light / Accent Light

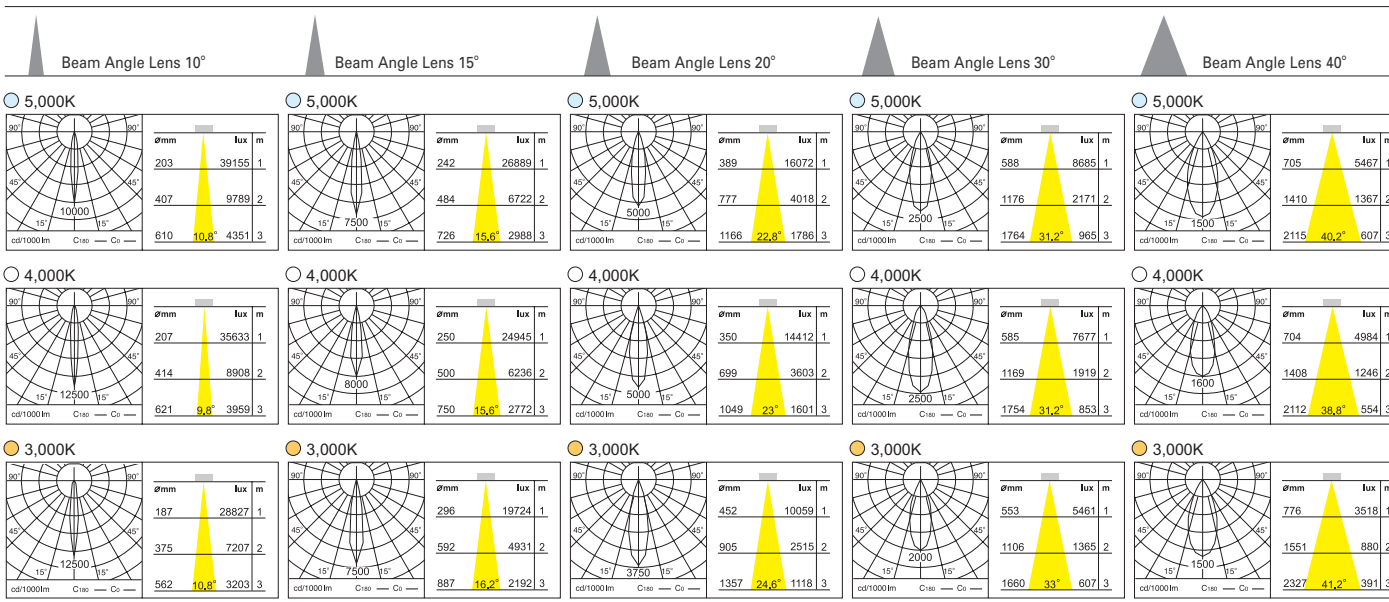


TRIM	PC, Urethane Coating
ADJUSTABLE RING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
ROTATE RING	PC, Urethane Coating Adjustable Angle (Rotate $\angle 350^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Beam angle LENS Type
BEAM ANGLE	10°, 15°, 20°, 30°, 40°

LIGHT	Power LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	30W	24W	139 lm/w	3,394 lm	20V DC	75
4,000K	30W	24W	130 lm/w	3,163 lm	20V DC	80
3,000K	30W	24W	100 lm/w	2,443 lm	20V DC	80

OUTPUT CURRENT	1,200mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K





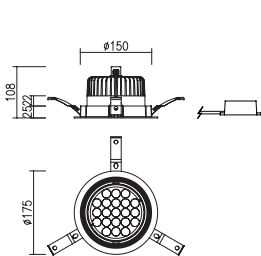
DD-37200.01 LED 30W x 1



DD-37210.01 LED 30W x 1

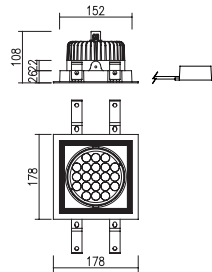


DD-37220.01 LED 30W x 2



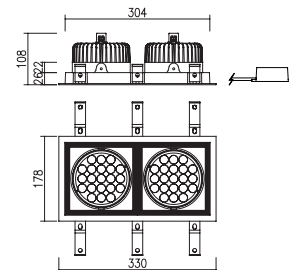
Weight : 0.9 kg

∅ 165mm (6 1/2")



Weight : 0.9 kg

165 x 165mm (6 1/2" x 6 1/2")



Weight : 1.5kg

310 x 165mm (12 1/8" x 6 1/2")





DD-37200.02 series
Recessed Down Light / Accent Light



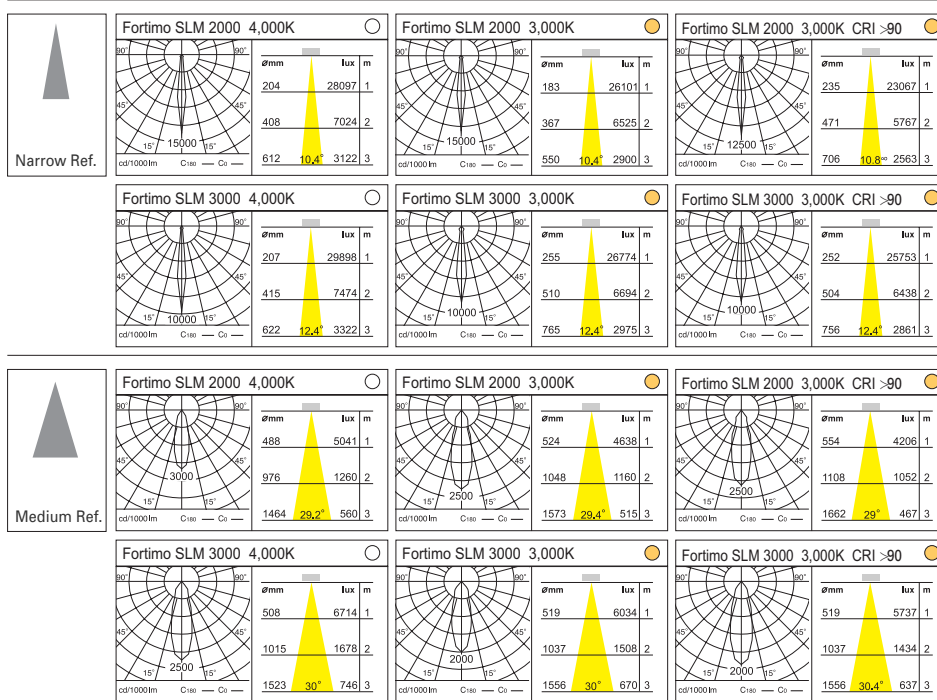
PHILIPS OSRAM

TRIM	PC, Urethane Coating
ADJUSTABLE RING & HEAT SINK	AL, Die-Casting, Electrostatic Powder Coating. Adjustable Angle (Tilt $\angle 25^\circ$)
ROTATE RING	PC, Adjustable Angle (Rotate $\angle 350^\circ$)
MOUNTING RING	AL, Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL, Extrude, Electro Deposition Coating
REFLECTOR	AL, Anodized Specular Silver Square with Embossing

LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC, 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX _l	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-37200.02	2000	○ 4,000K	22W	17W	126 lm/W	2,208 lm	80
DD-37200.02	2000	● 3,000K	22W	17W	112 lm/W	2,012 lm	80
DD-37200.02	2000	● 3,000K	23W	17W	102 lm/W	1,848 lm	>90
DD-37201.02	3000	○ 4,000K	30W	26W	120 lm/W	2,934 lm	80
DD-37201.02	3000	● 3,000K	29W	26W	107 lm/W	2,604 lm	80
DD-37201.02	3000	● 3,000K	30W	26W	102 lm/W	2,535 lm	>90

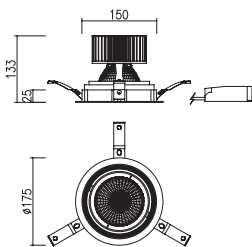
OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours





DD-37200.02 Fortimo SLM 2000 x 1

DD-37201.02 Fortimo SLM 3000 x 1



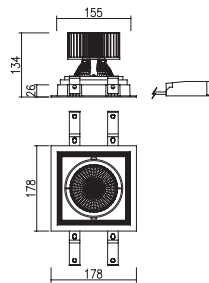
Weight : 1.0 kg

∅ 165mm (6 1/2")



DD-37210.02 Fortimo SLM 2000 x 1

DD-37211.02 Fortimo SLM 3000 x 1



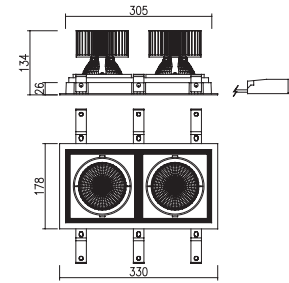
Weight : 1.0 kg

□ 165 x 165mm (6 1/2" x 6 1/2")



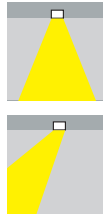
DD-37220.02 Fortimo SLM 2000 x 2

DD-37221.02 Fortimo SLM 3000 x 2

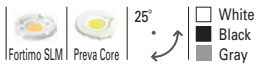


Weight : 1.6 kg

□ 310 x 165mm (12 1/5" x 6 1/2")



DD-37200.03 series
Recessed Down Light / Accent Light



PHILIPS OSRAM

TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
ROTATE RING	PC, Urethane Coating. Adjustable Angle (Rotate $\angle 350^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver Square with Embossing

LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX(l)	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-37200.03	2000	○ 4,000K	22W	17W	126 lm/W	2,208 lm	80
DD-37200.03	2000	● 3,000K	22W	17W	112 lm/W	2,012 lm	80
DD-37200.03	2000	● 3,000K	23W	17W	102 lm/W	1,848 lm	>90
DD-37201.03	3000	○ 4,000K	30W	26W	120 lm/W	2,934 lm	80
DD-37201.03	3000	● 3,000K	29W	26W	107 lm/W	2,604 lm	80
DD-37201.03	3000	● 3,000K	30W	26W	102 lm/W	2,535 lm	>90
DD-37202.03	4500	○ 4,000K	46W	42W	105 lm/W	4,418 lm	80
DD-37202.03	4500	● 3,000K	47W	42W	95 lm/W	4,065 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours



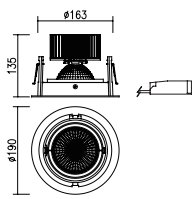
DD-37200.03 Fortimo SLM 2000 x 1
 DD-37201.03 Fortimo SLM 3000 x 1
 DD-37202.03 Fortimo SLM 4500 x 1



DD-37210.03 Fortimo SLM 2000 x 1
 DD-37211.03 Fortimo SLM 3000 x 1
 DD-37212.03 Fortimo SLM 4500 x 1

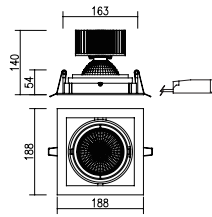


DD-37220.03 Fortimo SLM 2000 x 2
 DD-37221.03 Fortimo SLM 3000 x 2
 DD-37222.03 Fortimo SLM 4500 x 2



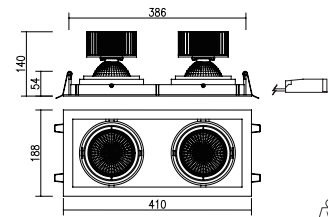
Weight : 1.1kg

∅ 166mm (6 1/2")



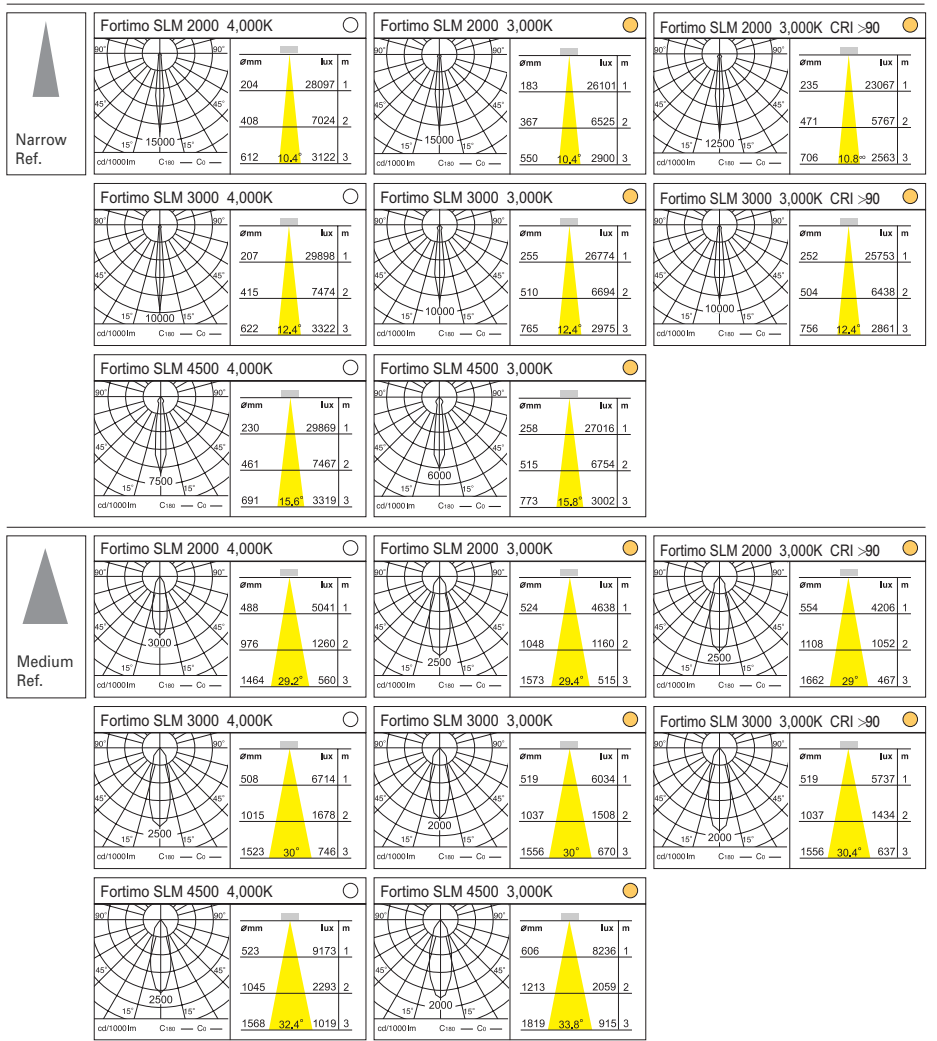
Weight : 1.5kg

170 x 170mm (6 7/16" x 6 7/16")



Weight : 2.0kg

390 x 170mm (15 2/5" x 6 7/16")



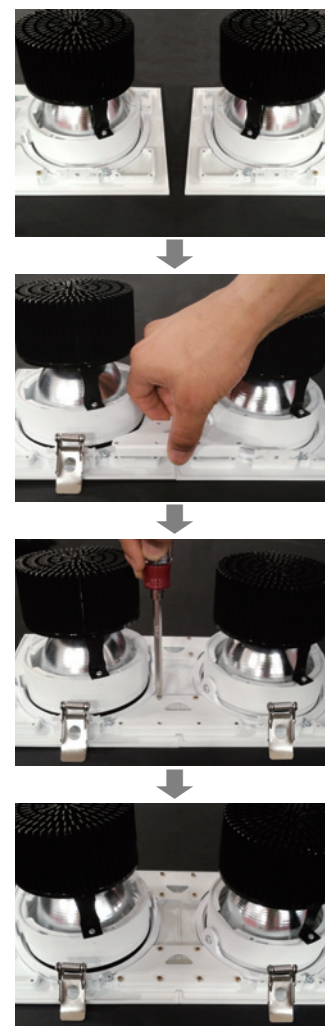
System Multi Down Lights

Using connection bracket, system multi down light comes in a variety of lengths.

사각 1등을 기본으로 연결브라켓을 이용하여 다양한 길이로 연출할 수 있는 시스템 멀티 다운라이트입니다.

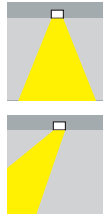
DD-37200.04 series





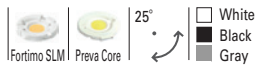
DD-37200.05 series





DD-37200.04 series

Recessed Down Light / Accent Light



PHILIPS OSRAM

TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
ROTATE RING	PC, Urethane Coating. Adjustable Angle (Rotate $\angle 350^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver Square with Embossing

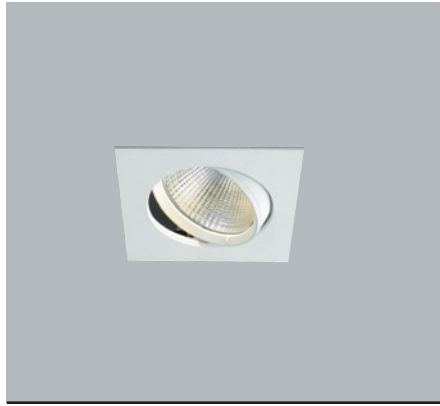
LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX(l)	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-37200.04	2000	○ 4,000K	22W	17W	126 lm/W	2,208 lm	80
DD-37200.04	2000	● 3,000K	22W	17W	112 lm/W	2,012 lm	80
DD-37200.04	2000	● 3,000K	23W	17W	102 lm/W	1,848 lm	>90
DD-37201.04	3000	○ 4,000K	30W	26W	120 lm/W	2,934 lm	80
DD-37201.04	3000	● 3,000K	29W	26W	107 lm/W	2,604 lm	80
DD-37201.04	3000	● 3,000K	30W	26W	102 lm/W	2,535 lm	>90
DD-37202.04	4500	○ 4,000K	46W	42W	105 lm/W	4,418 lm	80
DD-37202.04	4500	● 3,000K	47W	42W	95 lm/W	4,065 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours



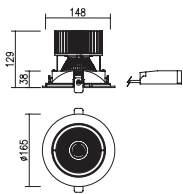
DD-37200.04 Fortimo SLM 2000 x 1
 DD-37201.04 Fortimo SLM 3000 x 1
 DD-37202.04 Fortimo SLM 4500 x 1



DD-37210.04 Fortimo SLM 2000 x 1
 DD-37211.04 Fortimo SLM 3000 x 1
 DD-37212.04 Fortimo SLM 4500 x 1

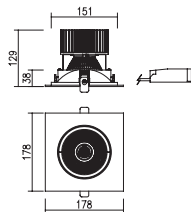


DD-37220.04 Fortimo LED SLM 2000 x 2
 DD-37221.04 Fortimo LED SLM 3000 x 2
 DD-37222.04 Fortimo LED SLM 4500 x 2



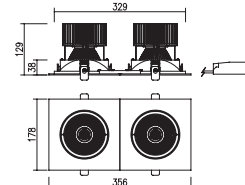
Weight : 0.8 kg

∅ 155mm (6 1/10")



Weight : 1.0 kg

165 x 165mm (6 1/2" x 6 1/2")

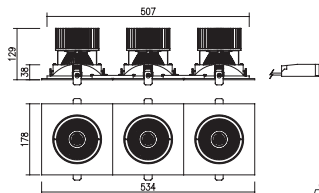


Weight : 2.0 kg

335 x 165mm (13 1/5" x 6 1/2")

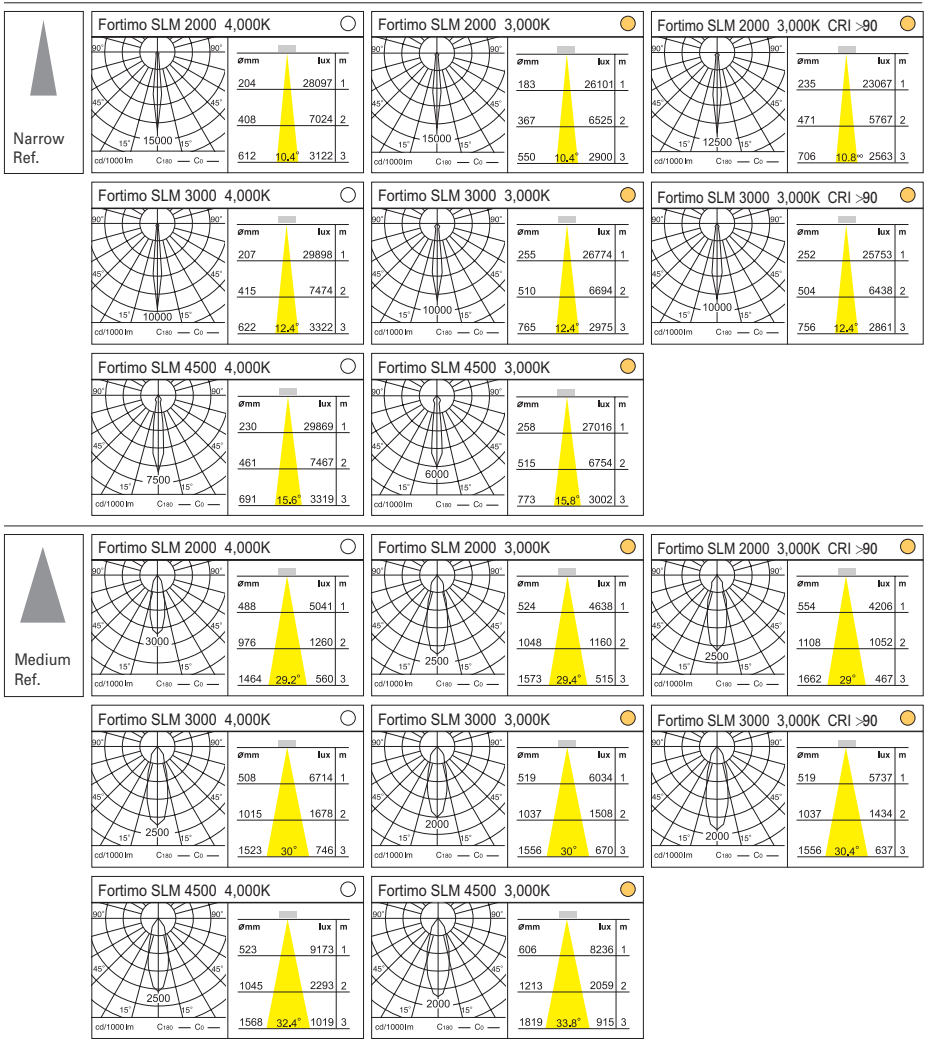


DD-37230.04 Fortimo LED SLM 2000 x 3
 DD-37231.04 Fortimo LED SLM 3000 x 3
 DD-37232.04 Fortimo LED SLM 4500 x 3



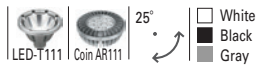
Weight : 3.0 kg

515 x 165mm (20 3/10" x 6 1/2")





DD-37200.05 series
Recessed Down Light / Accent Light



TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
ROTATE RING	PC, Urethane Coating. Adjustable Angle (Rotate $\angle 350^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating

LIGHT	LED-T111, Coin AR111
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 110-130V AC , 50-60Hz)

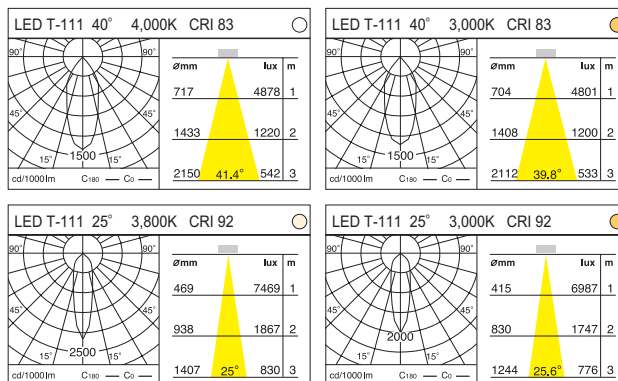
COLOR TEMPERATURE (K)	INPUT POWER	BEAM ANGLE (°)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 4,000K	47W	25°, 40°	3,402 lm	34V DC	83
● 3,000K	47W	25°, 40°	3,226 lm	34V DC	83
○ 3,800K	47W	25°	3,107 lm	34V DC	92
● 3,000K	47W	25°	2,951 lm	34V DC	92

LIFETIME	35,000 hours
COLOR TEMPERATURE	○ 4,000K (CRI 83) ● 3,800K (CRI 92) ● 3,000K (CRI 83,92)

B TYPE OSRAM Coin AR111

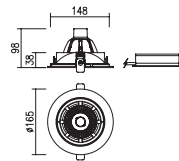


C TYPE LG LED T-111





DD-37200.05 LED T-111 x 1
DD-37201.05 Coin AR111 x 1

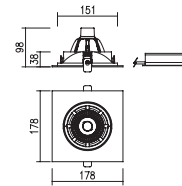


Weight : 0.8 kg

∅ 155mm (6 1/10")



DD-37210.05 LED T-111 x 1
DD-37211.05 Coin AR111 x 1

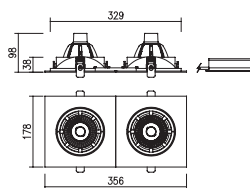


Weight : 1.0 kg

165 x 165mm (6 1/2" x 6 1/2")



DD-37220.05 LED T-111 x 2
DD-37221.05 Coin AR111 x 2

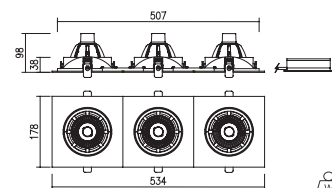


Weight : 2.0 kg

335 x 165mm (13 1/5" x 6 1/2")



DD-37230.05 LED T-111 x 3
DD-37231.05 Coin AR111 x 3

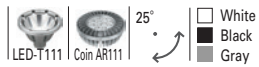


Weight : 3.0 kg

515 x 165mm (20 3/10" x 6 1/2")



DD-37200.06 series
Recessed Down Light / Accent Light

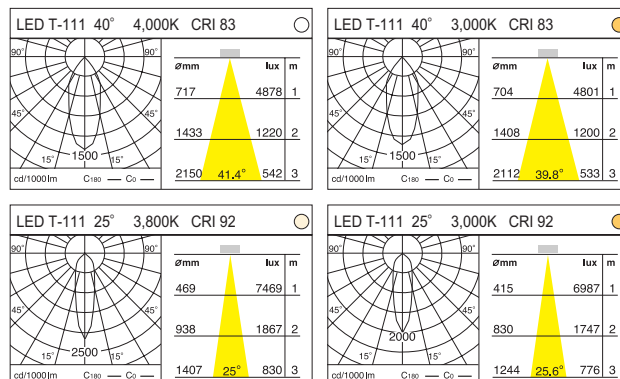


TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
ROTATE RING	PC, Urethane Coating. Adjustable Angle (Rotate $\angle 350^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating

LIGHT	LED-T111, Coin AR111
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 110-130V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	BEAM ANGLE (°)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 4,000K	47W	25°, 40°	3,402 lm	34V DC	83
● 3,000K	47W	25°, 40°	3,226 lm	34V DC	83
○ 3,800K	47W	25°	3,107 lm	34V DC	92
● 3,000K	47W	25°	2,951 lm	34V DC	92

LIFETIME	35,000 hours
COLOR TEMPERATURE	○ 4,000K (CRI 83) ● 3,800K (CRI 92) ● 3,000K (CRI 83,92)





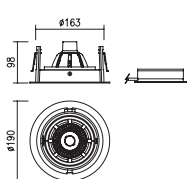
DD-37200.06 LED T-111 x 1
DD-37201.06 Coin AR111 x 1



DD-37210.06 LED T-111 x 1
DD-37211.06 Coin AR111 x 1

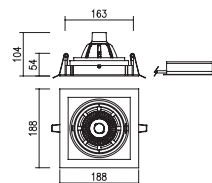


DD-37220.06 LED T-111 x 2
DD-37221.06 Coin AR111 x 2



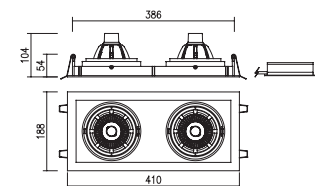
Weight : 1.1kg

⌀ 170mm (6 7/10")



Weight : 1.5kg

180 x 180mm (7 1/10" x 7 1/10")



Weight : 2.0kg










400 x 170mm (15 7/10" x 6 7/10")



DD-12010 Series

LED COMPACT DOWN LIGHTS



order no.	DD-12010 Series	DD-12020 Series	DD-12030 Series	DD-12040 Series	DD-12050 Series	DD-12060	DD-12070	DD-12080 Series	DD-10271 Series
LED type	LED DISK	LED ARRAY	LED ARRAY	LED ARRAY	LED ARRAY	LED ARRAY	LED ARRAY	LED ARRAY	LED MR16
LED symbol									
page	p.109	p.111	p.112	p.114	p.116	p.118	p.119	p.120	p.122





DD-12010
Recessed Down Light

-  LED DISK
-  0.5 kg
- White
- Black
- Gray

PHILIPS

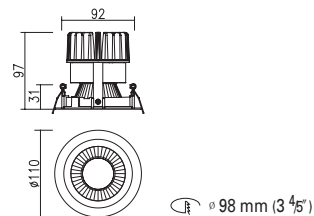
TRIM	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	Ref. A : AL. Anodized Specular Silver Ref. B : AL. Anodized Sanding
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	LED DISK (Integrated LED)
INPUT VOLTAGE	220-240V AC , 50-60Hz

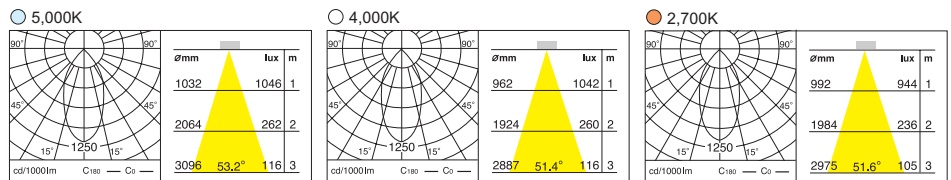
COLOR TEMPERATURE (K)	INPUT POWER	LUMINOUS FLUX (lm)	SYSTEM EFFICIENCY (lm/w)	COLOR RENDERING INDEX, CRI
5,000K	11W	923 lm	86 lm/W	80
4,000K	11W	875 lm	83 lm/W	80
2,700K	11W	801 lm	74 lm/W	80

OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C
COLOR TEMPERATURE	5,000K 4,000K 2,700K

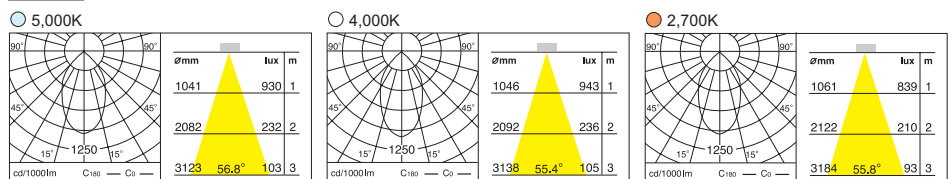
DRAWING



Ref. 01

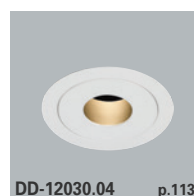
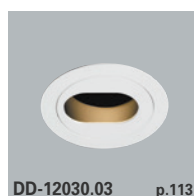


Ref. 02

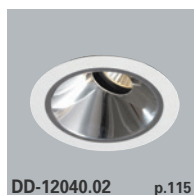
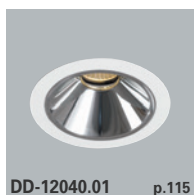


Compact Down Light

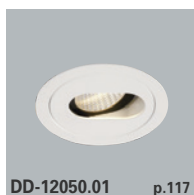
∅ 75 mm



∅ 100 mm



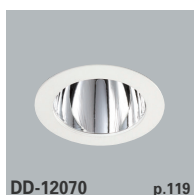
∅ 98 mm

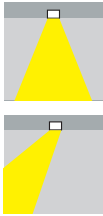


∅ 93 mm



∅ 90 mm





DD-12020
Recessed Down Light / Accent Light

LED ARRAY | 25° | 0.3 kg | White
 Black
 Gray

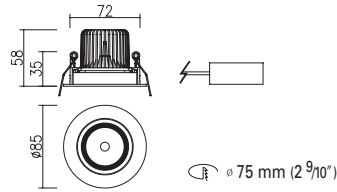
TRIM	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	PC (Vacuum Coating)
LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

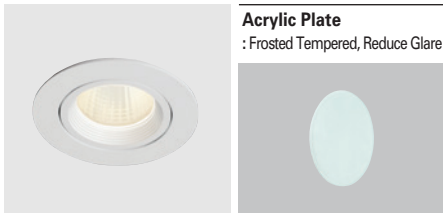
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	8W	6W	73 lm/w	451 lm	18V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 3,000K ● 2,700K

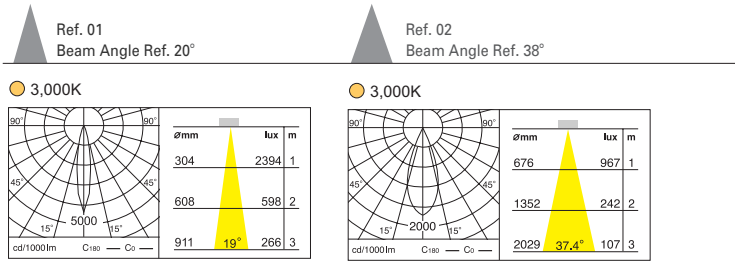
DRAWING

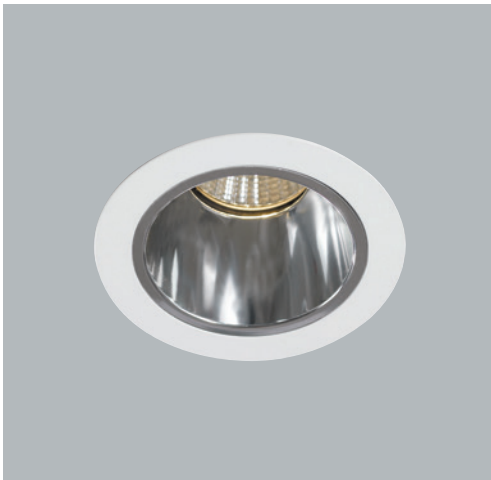


ACCESSORY



Acrylic Plate
 : Frosted Tempered, Reduce Glare





DD-12030 series
Recessed Down Light



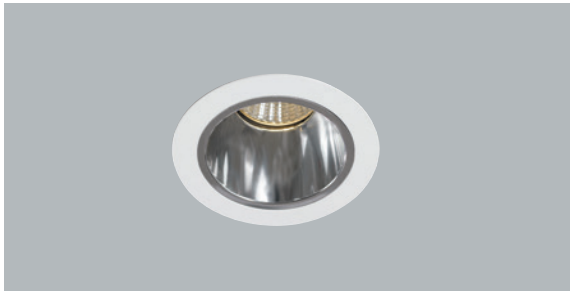
TRIM	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	INNER : PC (Vacuum Coating), OUTER : AL. Anodized Specular Silver
LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	LED ARRAY or X-ENGINE
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

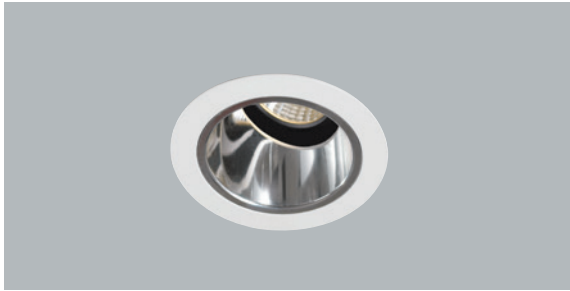
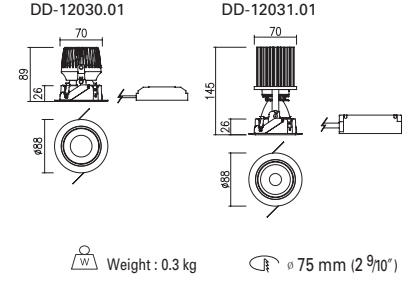
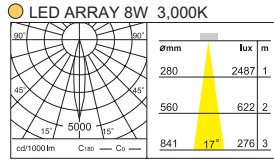
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
3,000K	8W	6W	53 lm/w	328 lm	18V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	3,000K 2,700K

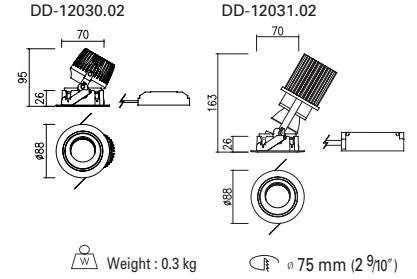
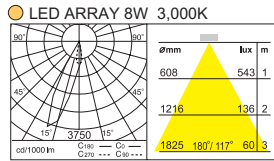




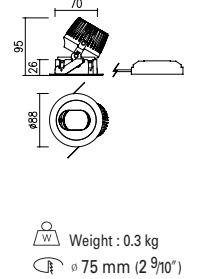
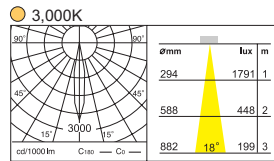
DD-12030.01 LED ARRAY 8W
DD-12031.01 X-ENGINE 15W



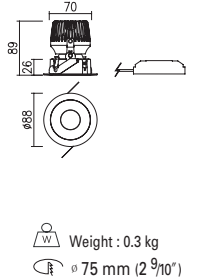
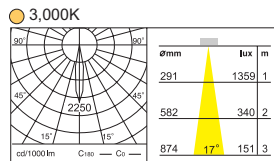
DD-12030.02 LED ARRAY 8W
DD-12031.02 X-ENGINE 15W



DD-12030.03 LED ARRAY 8W

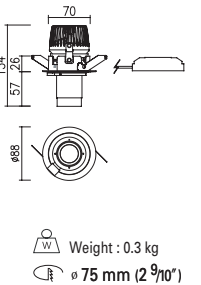
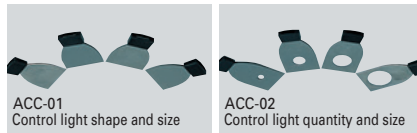


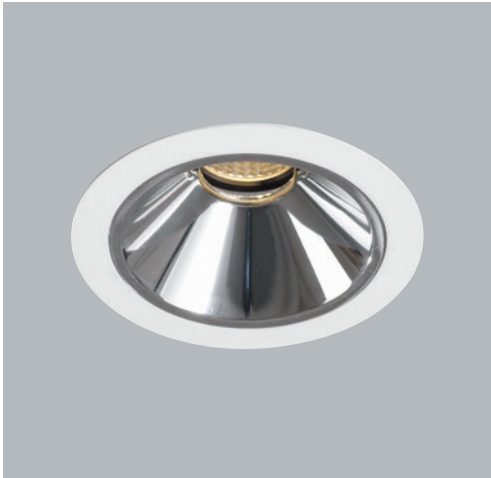
DD-12030.04 LED ARRAY 8W



DD-12030.05 LED ARRAY 8W

Diaphragm





DD-12040 series
Recessed Down Light



TRIM	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	INNER : PC (Vacuum Coating), OUTER : AL. Anodized Specular Silver
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	LED ARRAY or X-ENGINE
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

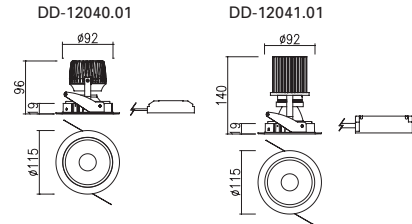
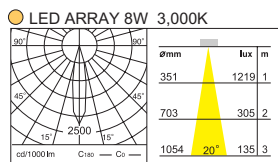
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	8W	6W	29 lm/w	178 lm	18V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 3,000K ● 2,700K





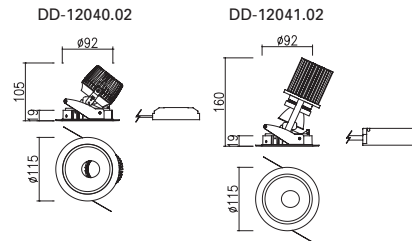
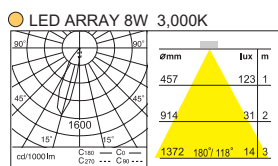
DD-12040.01 LED ARRAY 8W
DD-12041.01 X-ENGINE 15W



Weight : 0.4 kg \varnothing 100 mm (3 9/10")



DD-12040.02 LED ARRAY 8W
DD-12041.02 X-ENGINE 15W



Weight : 0.4 kg \varnothing 100 mm (3 9/10")



DD-12050 series
Recessed Down Light



TRIM	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	PC (Vacuum Coating)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	LED ARRAY
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

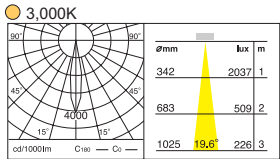
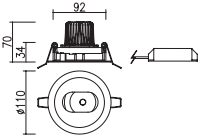
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	8W	6W	56 lm/w	334 lm	18V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40℃
MAINTENANCE OF LUMEN -L70	50,000 hours at 25℃
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 3,000K ● 2,700K





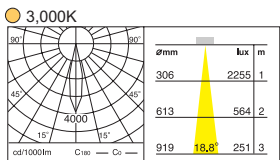
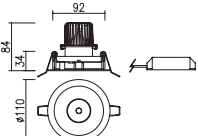
DD-12050.01 LED ARRAY 8W



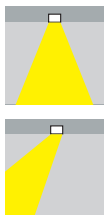
Weight : 0.4 kg
Ø 98 mm (3 4/5")



DD-12050.02 LED ARRAY 8W



Weight : 0.4 kg
Ø 98 mm (3 4/5")



DD-12060
Recessed Down Light / Accent Light

LED ARRAY | 25° | 0.3 kg | White
 Black
 Gray

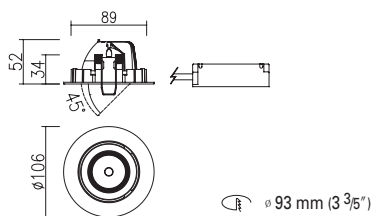
TRIM AL. Die-Casting, Electrostatic Powder Coating
 REFLECTOR PC (Vacuum Coating)
 LED HOUSING & HEAT SINK AL. Die-Casting, Electrostatic Powder Coating
 Adjustable Angle (Tilt \angle 45°)

LIGHT LED ARRAY
 INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

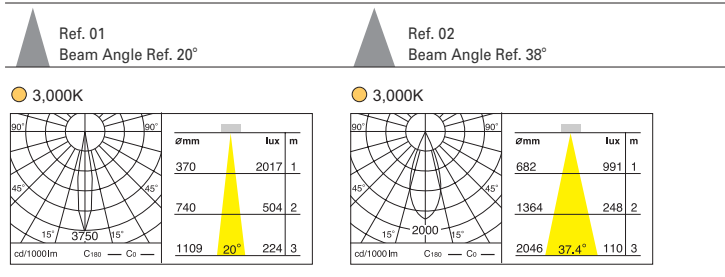
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX, CRI
● 3,000K	8W	6W	70 lm/w	447 lm	18V DC	80

OUTPUT CURRENT 350mA DC (constant current)
 OPERATING TEMPERATURE RANGE -20 to +40 °C
 MAINTENANCE OF LUMEN -L70 50,000 hours at 25 °C
 DRIVER LIFETIME 50,000 hours
 COLOR TEMPERATURE ● 3,000K ● 2,700K

DRAWING



ACCESSORY





DD-12070
Recessed Down Light

LED ARRAY 25° 0.3 kg
 White
 Black
 Gray

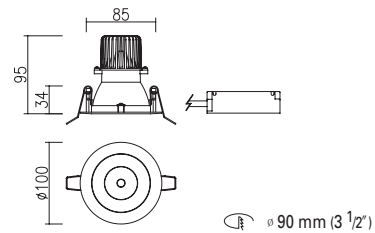
TRIM AL. Die-Casting, Electrostatic Powder Coating
 REFLECTOR INNER : PC (Vacuum Coating), OUTER : ABS, Electro Plating
 HEAT SINK AL. Die-Casting, Electro Deposition Coating

LIGHT LED ARRAY
 INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 3,000K	8W	6W	73 lm/w	451 lm	18V DC	80

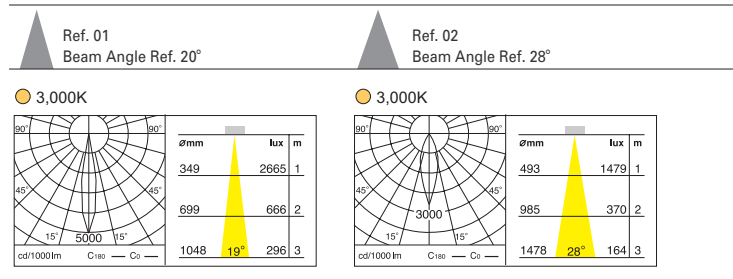
OUTPUT CURRENT 350mA DC (constant current)
 OPERATING TEMPERATURE RANGE -20 to +40 °C
 MAINTENANCE OF LUMEN -L70 50,000 hours at 25 °C
 DRIVER LIFETIME 50,000 hours
 COLOR TEMPERATURE ● 3,000K ● 2,700K

DRAWING



ACCESSORY

Acrylic Plate
: Frosted Tempered, Reduce Glare

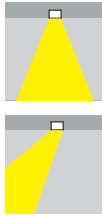




DD-12080.03 Trimless Down Light

DD-12080.03 INSTALLATION INSTRUCTION

<p>1</p> <p>Check the aperture size of the lighting fixture. Need exact cutting on the surface.</p>	<p>2</p>	<p>3</p> <p>Fix the installation bracket on the ceiling by screw.</p>
<p>4</p> <p>Finish interior plasterwork. Paint ceiling before lamp housing installation.</p>	<p>5</p> <p>Fix the ring by rotate it clockwise.</p>	<p>6</p> <p>Finish.</p>



DD-12080 SERIES
Recessed Down Light / Down Spot Light

LED ARRAY 38°
0.8 kg
White
Black
Gray

TRIM AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR PC (Vacuum Coating)
LED HOUSING AL. Extrude, Electrostatic Powder Coating
Adjustable Angle (Tilt $\angle 38^\circ$)
MOUNTING RING AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK AL. Die-Casting, Electro Deposition Coating

LIGHT LED ARRAY
INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

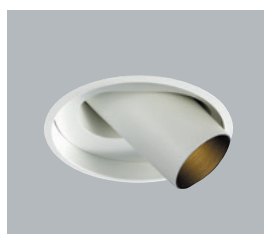
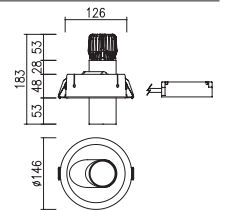
COLOR TEMPERATURE (K)	INPUT POWER (W)	OUTPUT POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX CRI
3,000K	11W	9W	63 lm/W	575 lm	26V DC	80

OUTPUT CURRENT 350mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40°C
MAINTENANCE OF LUMEN -L70 50,000 hours at 25°C
DRIVER LIFETIME 50,000 hours
COLOR TEMPERATURE 3,000K 2,700K



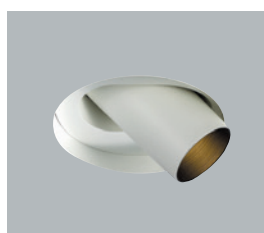
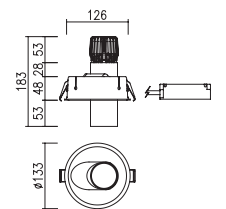
DD-12080.01
Trim : 14mm

Ø 132mm (5 1/8")



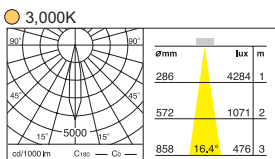
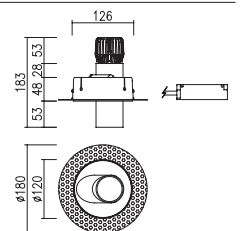
DD-12080.02
Trim : 7mm

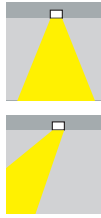
Ø 129mm (5 ")



DD-12080.03
Trimless Down Light
* INSTALLATION INSTRUCTION (page.120)

Ø 130mm (5 1/16")





DD-10271 series
Recessed Down Light / Accent Light



TRIM AL. Die-Casting, Electrostatic Powder Coating
LED HOUSING AL. Die-Casting, Electrostatic Powder Coating
Adjustable Angle (Tilt \angle 25°)

LIGHT Master LED MR16
BEAM ANGLE 15°, 24°, 36°
INPUT VOLTAGE 220-240V AC , 50-60Hz

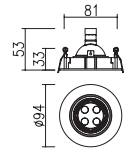
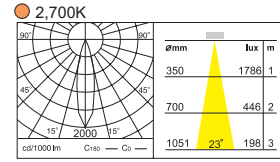
COLOR TEMPERATURE (K)	INPUT POWER	LUMINOUS FLUX (lm)	LED OUTPUT VOLTAGE	COLOR RENDERING INDEX_CRI
○ 4,000K	7W	400 lm	12V DC	80
● 3,000K	7W	380 lm	12V DC	80
● 2,700K	7W	380 lm	12V DC	80

OPERATING TEMPERATURE RANGE -20 to +40°C
DRIVER Halogen transformer compatible
MAINTENANCE OF LUMEN -L70 25,000 hours at 25°C
COLOR TEMPERATURE ○ 4,000K ● 3,000K ● 2,700K



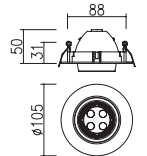
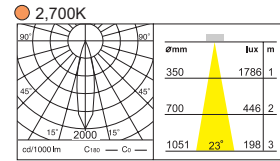
DD-10271 LED MR16 7W

Weight : 0.2 kg
 ∅ 85 mm (3 3/10")



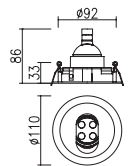
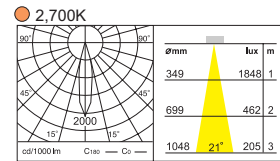
DD-10291 LED MR16 7W

Weight : 0.2kg
 ∅ 93 mm (3 4/5")



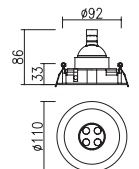
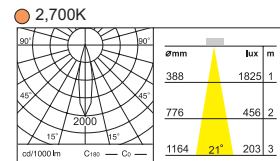
DD-10301 LED MR16 7W

Weight : 0.2kg
 ∅ 98 mm (3 4/5")



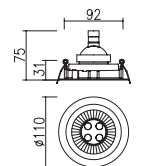
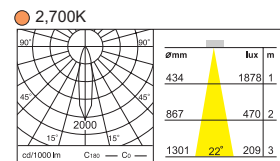
DD-10311 LED MR16 7W

Weight : 0.2kg
 ∅ 98 mm (3 4/5")



DD-10321 LED MR16 7W







Weight : 0.2kg
 ∅ 98 mm (3 4/5")



DD-12100 Series

LED DOWN LIGHTS



order no.	DD-12100	DD-12160	DD-12170	DD-12180	DD-12200.01	DD-12200.02
LED type	Power LED	Power LED	Power LED	Power LED	Power LED	Fortimo SLM Preva Core
LED symbol						
	↓	↓	↓	↓	↓	↓
page	p.126	p.127	p.128	p.130	p.133	p.134



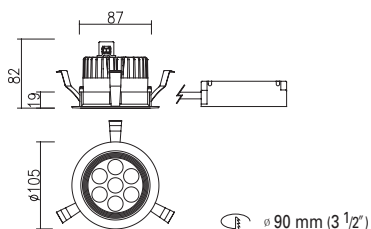


DD-12100
Recessed Down Light



9W 7 LED

- Power LED
- 0.7 kg
- White
- Black
- Gray

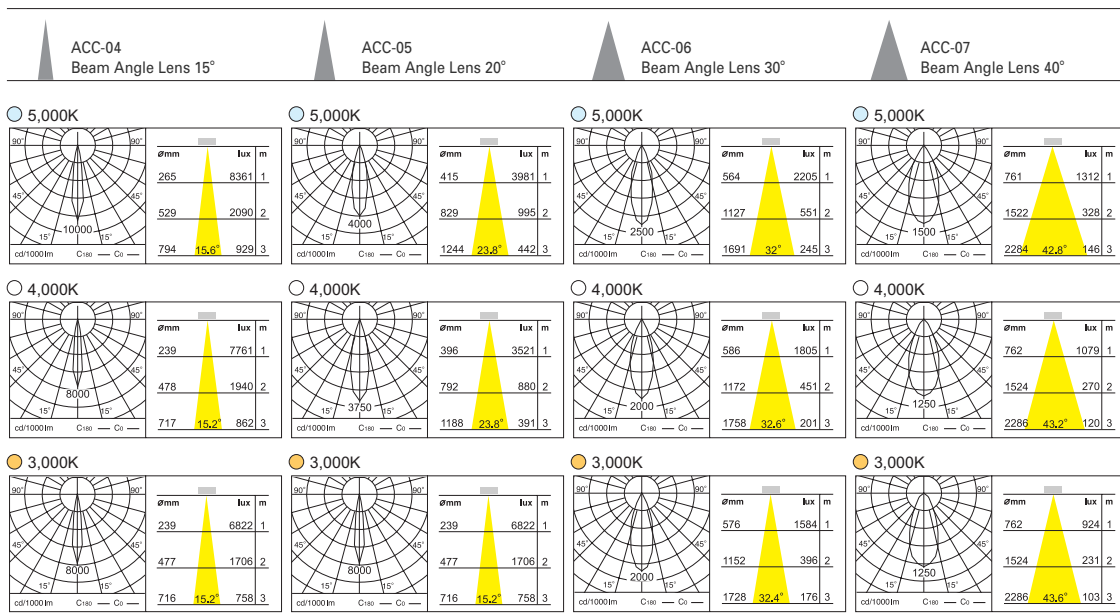


TRIM PC, Urethane Coating
 HEAT SINK AL, Die-Casting, Electro Deposition Coating
 ACCESSORY Beam angle LENS Type
 BEAM ANGLE 15°, 20°, 30°, 40°

LIGHT Power LED
 INPUT VOLTAGE 220-240V AC, 50-60Hz (option : 100-240V AC, 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	9W	7W	130 lm/w	921 lm	20V DC	75
4,000K	9W	7W	107 lm/w	761 lm	20V DC	80
3,000K	9W	7W	100 lm/w	709 lm	20V DC	80

OUTPUT CURRENT 350mA DC (constant current)
 OPERATING TEMPERATURE RANGE -20 to +40 °C
 MAINTENANCE OF LUMEN -L70 50,000 hours at 25 °C
 DRIVER LIFETIME 50,000 hours
 COLOR TEMPERATURE 5,000K 4,000K 3,000K



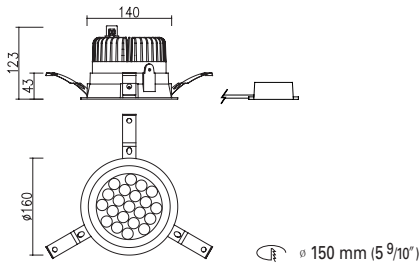


DD-12160
Recessed Down Light



30W 21 LED

- Power LED
- 1.0 kg
- White
- Black
- Gray

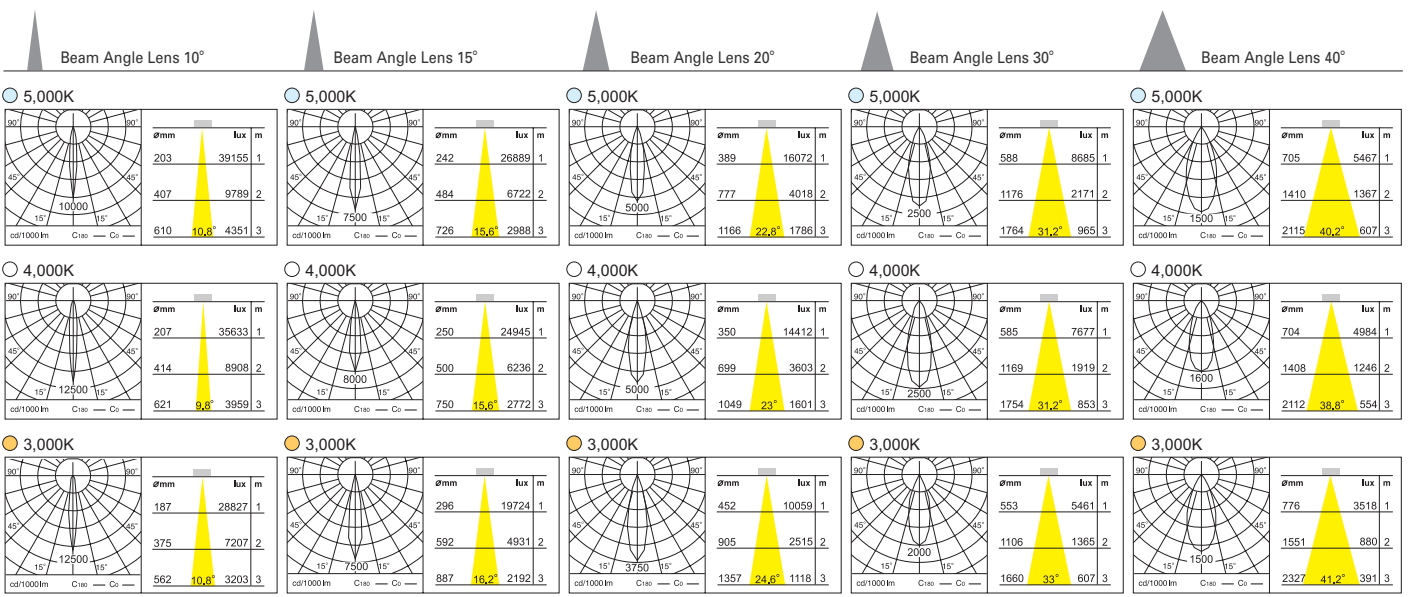


TRIM AL. Die-Casting, Electrostatic Powder Coating
 HEAT SINK AL. Die-Casting, Electro Deposition Coating
 ACCESSORY Beam angle LENS Type
 BEAM ANGLE 10°, 15°, 20°, 30°, 40°

LIGHT Power LED
 INPUT VOLTAGE 220-240V AC, 50-60Hz (option : 100-240V AC, 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	30W	24W	139 lm/w	3,394 lm	20V DC	75
4,000K	30W	24W	130 lm/w	3,163 lm	20V DC	80
3,000K	30W	24W	100 lm/w	2,443 lm	20V DC	80

OUTPUT CURRENT 1,200mA DC (constant current)
 OPERATING TEMPERATURE RANGE -20 to +40°C
 MAINTENANCE OF LUMEN -L70 50,000 hours at 25°C
 DRIVER LIFETIME 50,000 hours
 COLOR TEMPERATURE 5,000K 4,000K 3,000K





DD-12170
Recessed Down Light



46W 14 LED

-  Power LED
-  1.0 kg
- White
- Black
- Gray

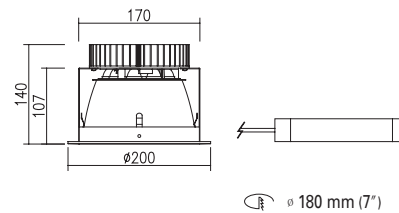
TRIM	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
ACCESSORY	Beam angle LENS Type
BEAM ANGLE	15°, 20°, 30°, 40°
REFLECTOR	AL. Anodized Specular Silver

LIGHT	Power LED
INPUT VOLTAGE	220-240V AC , 50-60Hz

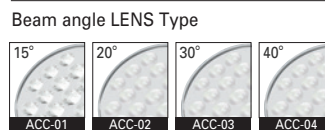
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 5,000K	46W	31W	110 lm/w	3,414 lm	44V DC	75
○ 4,000K	46W	31W	101 lm/w	3,091 lm	44V DC	75
● 3,000K	46W	31W	102 lm/w	3,135 lm	44V DC	80

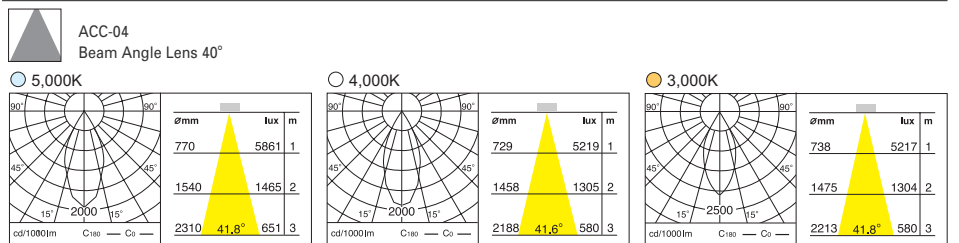
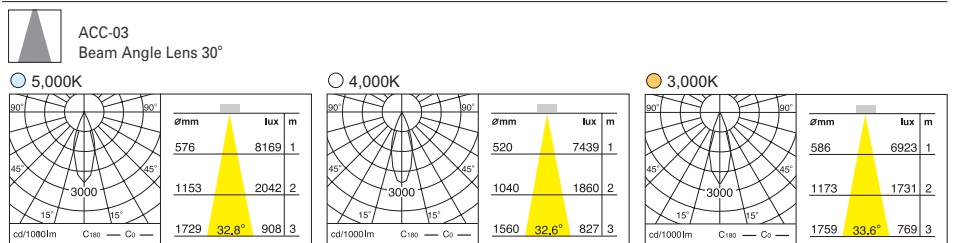
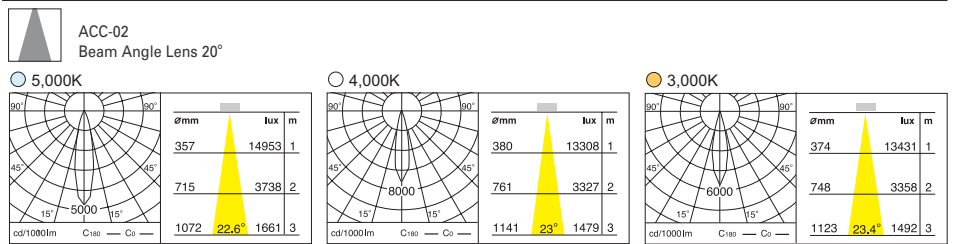
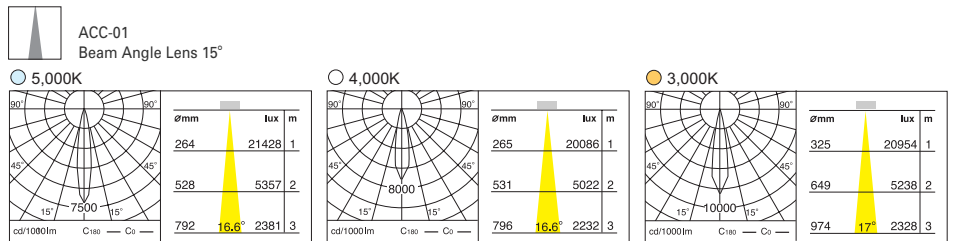
OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40℃
MAINTENANCE OF LUMEN -L70	50,000 hours at 25℃
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 5,000K ○ 4,000K ● 3,000K

DRAWING



ACCESSORY





Option

DALI Dimmable Driver

- DALI 디밍드라이버 가능
- DRIVER ELECTRIC DIAGRAM (LED DALI Dimmable Driver : 50W)



DD-12180
Recessed Down Light



92W 28 LED

- Power LED
- 2.9 kg
- White
- Black
- Gray

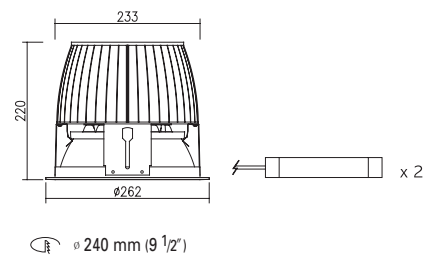
TRIM	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Plate, Electrostatic Powder Coating
ACCESSORY	Beam angle LENS Type
BEAM ANGLE	15°, 20°, 30°, 40°
REFLECTOR	AL. Anodized Specular Silver

LIGHT	Power LED
INPUT VOLTAGE	220-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 5,000K	92W	62W	111 lm/w	6,848 lm	89V DC	75
○ 4,000K	92W	62W	100 lm/w	6,149 lm	89V DC	75
● 3,000K	92W	62W	103 lm/w	6,396 lm	89V DC	80

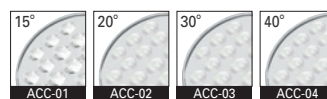
OUTPUT CURRENT	700mA DC x 2 (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	○ 5,000K ○ 4,000K ● 3,000K

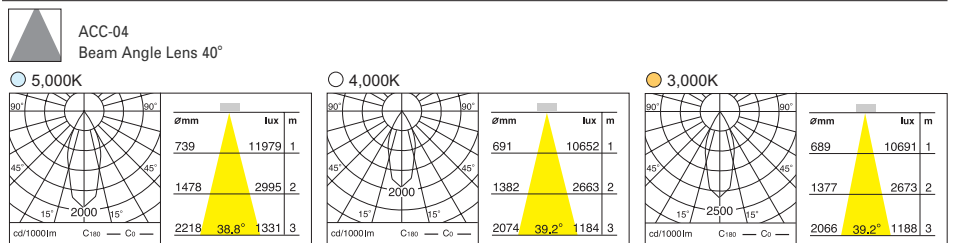
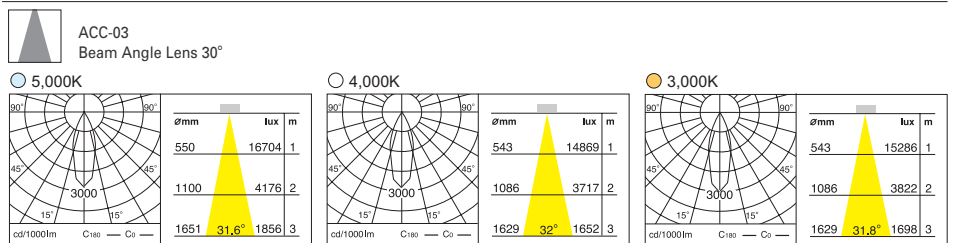
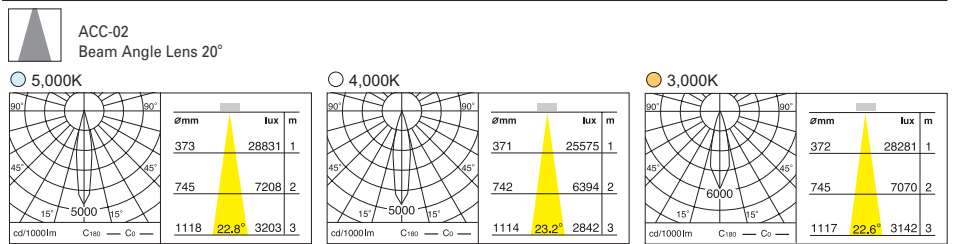
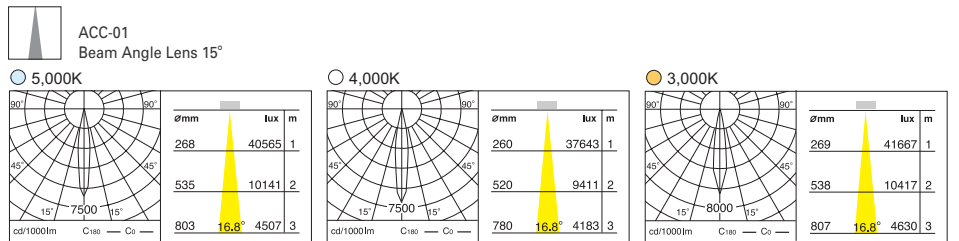
DRAWING



ACCESSORY

Beam angle LENS Type





Option

DALI Dimmable Driver

- DALI 디밍드라이버 가능
- DRIVER ELECTRIC DIAGRAM (LED DALI Dimmable Driver : 50W)

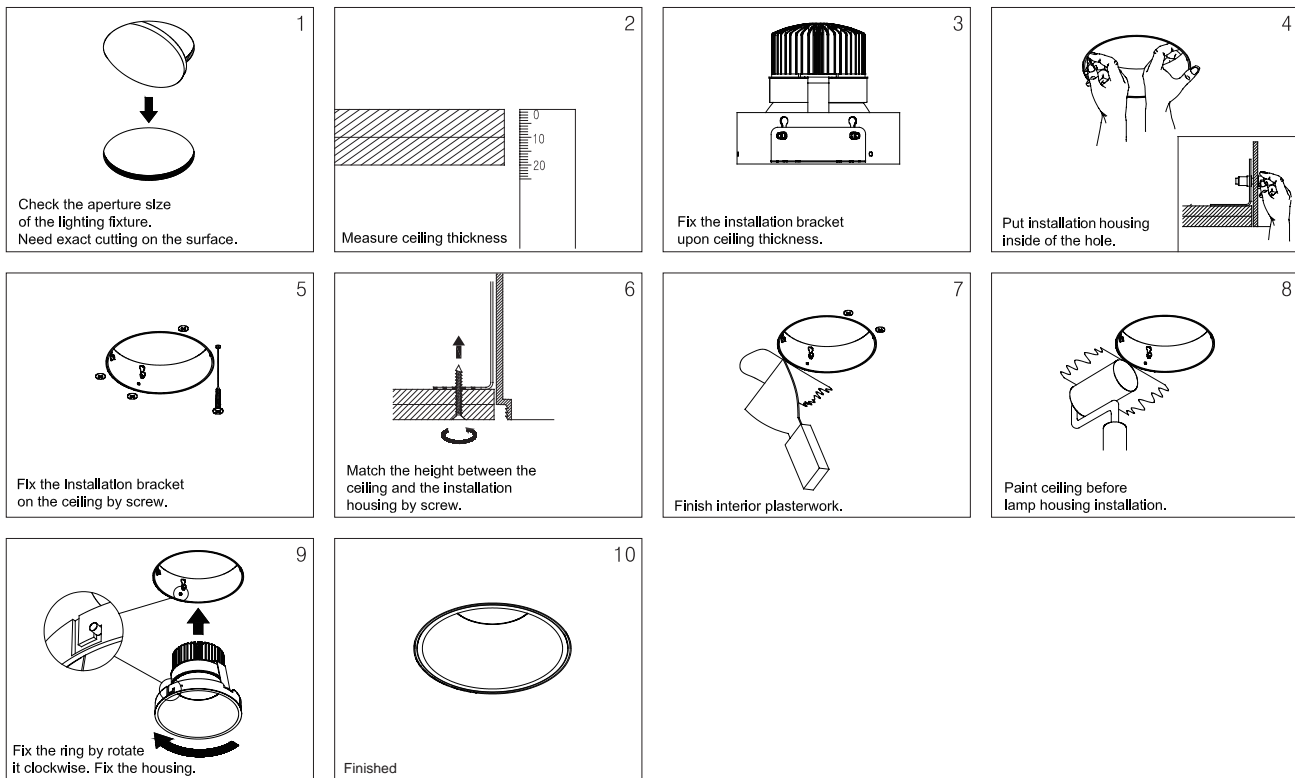
TRIMLESS DOWN LIGHT



DD-12200.01



DD-12200.02





DD-12200.01

Recessed Trimless Down Light / Accent Light



17W 7 LED

- Power LED
- 0.8 kg
- White
- Black
- Gray

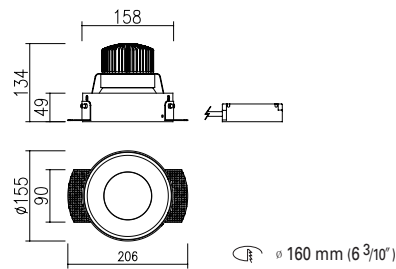
TRIM & HOSING	AL. Extrude, Electro Deposition Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
REFLECTOR	Steel, Electrostatic Powder Coating
COVER	PC

LIGHT	Power LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	17W	15W	67 lm/w	992 lm	21V DC	75
4,000K	17W	15W	56 lm/w	826 lm	21V DC	80
3,000K	17W	15W	50 lm/w	730 lm	21V DC	80

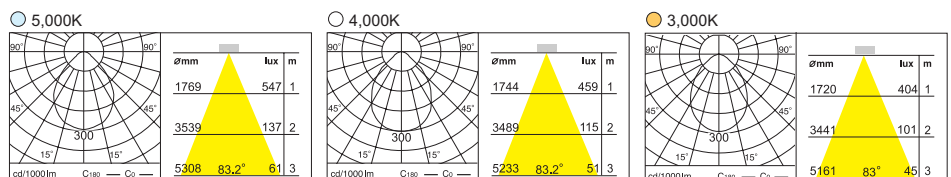
OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K

DRAWING



INSTALLATION INSTRUCTION

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DD-12200.02

Recessed Trimless Down Light / Accent Light



PHILIPS OSRAM

TRIM & HOSING	AL. Extrude, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 25^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver

LIGHT Fortimo SLM, Preva Core

INPUT VOLTAGE 220-240V AC, 50-60Hz

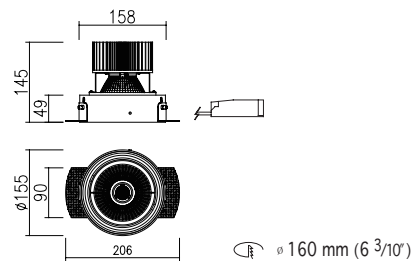
ORDER NO.	MODULE LUMINOUS FLUX (lm)	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-12200.02	2000	○ 4,000K	22W	17W	126 lm/W	2,208 lm	80
DD-12200.02	2000	● 3,000K	22W	17W	112 lm/W	2,012 lm	80
DD-12200.02	2000	● 3,000K	23W	17W	102 lm/W	1,848 lm	>90
DD-12201.02	3000	○ 4,000K	30W	26W	120 lm/W	2,934 lm	80
DD-12201.02	3000	● 3,000K	29W	26W	107 lm/W	2,604 lm	80
DD-12201.02	3000	● 3,000K	30W	26W	102 lm/W	2,535 lm	>90

OPERATING TEMPERATURE RANGE -20 to +35 °C

MAINTENANCE OF LUMEN -L70 50,000 hours at 25 °C

DRIVER LIFETIME 50,000 hours


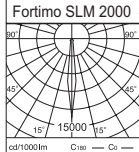
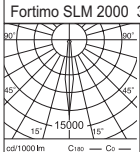
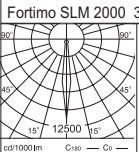
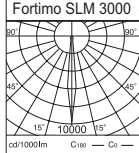
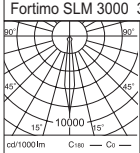
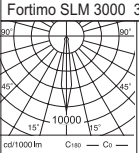

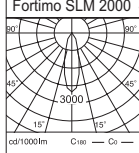
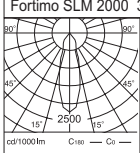
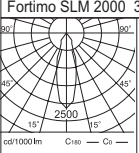
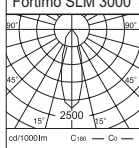
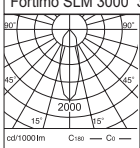
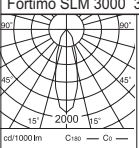
DRAWING



INSTALLATION INSTRUCTION -> 132

TRIMLESS DOWN LIGHT



 Medium Ref.	Fortimo SLM 2000 4,000K  Ømm lux m 204 28097 1 408 7024 2 612 10,4° 3122 3	Fortimo SLM 2000 3,000K  Ømm lux m 183 26101 1 367 6525 2 550 10,4° 2900 3	Fortimo SLM 2000 3,000K CRI :90  Ømm lux m 235 23067 1 471 5767 2 706 10,8° 2563 3
	Fortimo SLM 3000 4,000K  Ømm lux m 207 29898 1 415 7474 2 622 12,4° 3322 3	Fortimo SLM 3000 3,000K  Ømm lux m 255 26774 1 510 6684 2 765 12,4° 2975 3	Fortimo SLM 3000 3,000K CRI :90  Ømm lux m 252 25753 1 504 6438 2 756 12,4° 2861 3
 Wide Ref.	Fortimo SLM 2000 4,000K  Ømm lux m 488 5041 1 976 1260 2 1464 29,2° 560 3	Fortimo SLM 2000 3,000K  Ømm lux m 524 4638 1 1048 1160 2 1573 29,4° 515 3	Fortimo SLM 2000 3,000K CRI :90  Ømm lux m 554 4206 1 1108 1052 2 1662 29° 467 3
	Fortimo SLM 3000 4,000K  Ømm lux m 508 6714 1 1015 1678 2 1523 30° 746 3	Fortimo SLM 3000 3,000K  Ømm lux m 519 6034 1 1037 1508 2 1556 30° 670 3	Fortimo SLM 3000 3,000K CRI :90  Ømm lux m 519 5737 1 1037 1434 2 1556 30,4° 637 3



DD-12210 series

Recessed Down Light / Moistureproof Down Light

This new LED Downlight system is all in one lighting fixture which is combined fitting and heat sink and also consists of very simple and sturdy design.

- **Moistureproof available**



PHILIPS OSRAM

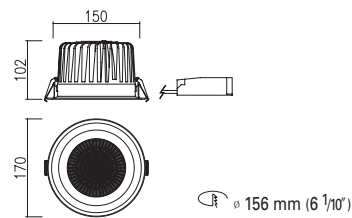
TRIM	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	PC (Vacumm Coating)
COVER	Clear Tempered Glass

LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC , 50-60Hz


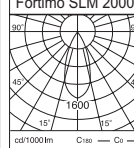
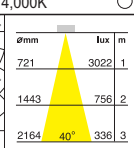
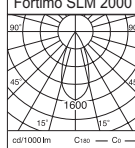
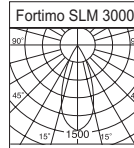
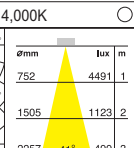
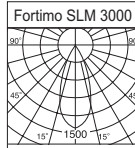

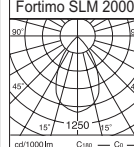
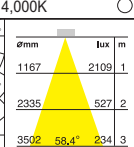
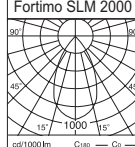
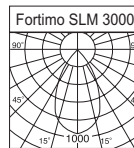
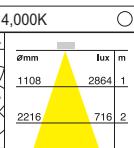
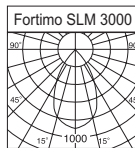
ORDER NO.	MODULE LUMINOUS FLUXI	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-12210	2000	○ 4,000K	22W	18W	101 lm/W	1,783 lm	80
DD-12210	2000	● 3,000K	22W	18W	95 lm/W	1,705 lm	80
DD-12210	2000	● 3,000K	23W	18W	87 lm/W	1,573 lm	>90
DD-12211	3000	○ 4,000K	30W	24W	102 lm/W	2,497 lm	80
DD-12211	3000	● 3,000K	29W	24W	100 lm/W	2,440 lm	80
DD-12211	3000	● 3,000K	30W	25W	92 lm/W	2,244 lm	>90

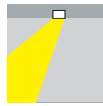
OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

DRAWING





 <p>Medium Ref.</p>	<p>Fortimo SLM 2000 4,000K ○</p>  <p>Ømm lux m 721 3022 1 1443 756 2 2164 40° 336 3</p>	<p>Fortimo SLM 2000 3,000K ●</p>  <p>Ømm lux m 731 3165 1 1463 791 2 2194 40,8° 352 3</p>	<p>Fortimo SLM 2000 3,000K CRI >90 ●</p>  <p>Ømm lux m 772 2893 1 1545 723 2 2317 41° 321 3</p>
	<p>Fortimo SLM 3000 4,000K ○</p>  <p>Ømm lux m 752 4491 1 1505 1123 2 2257 41° 499 3</p>	<p>Fortimo SLM 3000 3,000K ●</p>  <p>Ømm lux m 720 4397 1 1441 1099 2 2161 41° 489 3</p>	<p>Fortimo SLM 3000 3,000K CRI >90 ●</p>  <p>Ømm lux m 770 3993 1 1539 998 2 2309 41,6° 444 3</p>
 <p>Wide Ref.</p>	<p>Fortimo SLM 2000 4,000K ○</p>  <p>Ømm lux m 1167 2109 1 2335 527 2 3502 58,4° 234 3</p>	<p>Fortimo SLM 2000 3,000K ●</p>  <p>Ømm lux m 1148 1957 1 2296 489 2 3443 57° 217 3</p>	<p>Fortimo SLM 2000 3,000K CRI >90 ●</p>  <p>Ømm lux m 1059 1808 1 2118 452 2 3177 58,6° 201 3</p>
	<p>Fortimo SLM 3000 4,000K ○</p>  <p>Ømm lux m 1108 2864 1 2216 716 2 3324 60° 318 3</p>	<p>Fortimo SLM 3000 3,000K ●</p>  <p>Ømm lux m 1174 2765 1 2348 691 2 3522 59,2° 307 3</p>	<p>Fortimo SLM 3000 3,000K CRI >90 ●</p>  <p>Ømm lux m 1129 2565 1 2258 641 2 3387 60,2° 285 3</p>



DDS-27500 series
Recessed Down Light / Down Spot Light

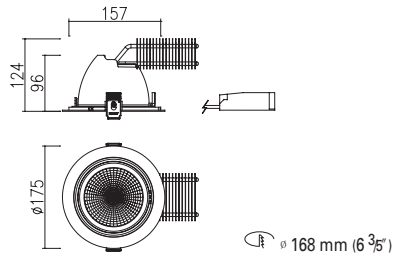


PHILIPS OSRAM

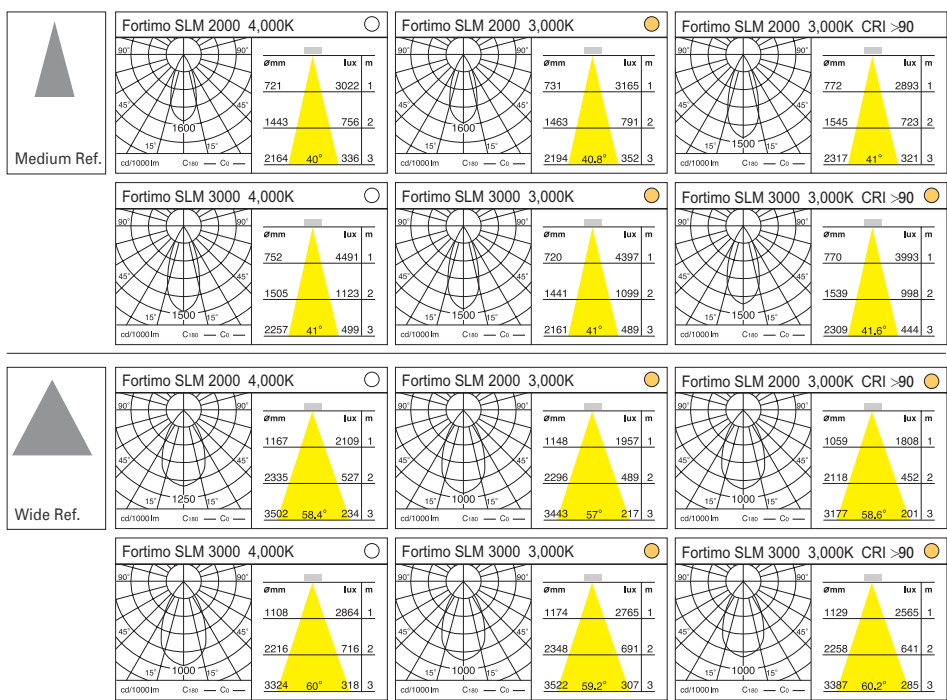
TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 30^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Plate & Heat Pipe
REFLECTOR	PC (Vacumm Coating)

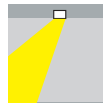
LIGHT Fortimo SLM, Preva Core
 INPUT VOLTAGE 220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX CRI
DDS-27500	2000	○ 4,000K	22W	18W	101 lm/W	1,783 lm	80
DDS-27500	2000	● 3,000K	22W	18W	95 lm/W	1,705 lm	80
DDS-27500	2000	● 3,000K	23W	18W	87 lm/W	1,573 lm	>90
DDS-27501	3000	○ 4,000K	30W	24W	102 lm/W	2,497 lm	80
DDS-27501	3000	● 3,000K	29W	24W	100 lm/W	2,440 lm	80
DDS-27501	3000	● 3,000K	30W	25W	92 lm/W	2,244 lm	>90



OPERATING TEMPERATURE RANGE -20 to +35 °C
 MAINTENANCE OF LUMEN -L70 50,000 hours at 25 °C
 DRIVER LIFETIME 50,000 hours
 COLOR TEMPERATURE 4,000K / 3,000K





DDS-27510

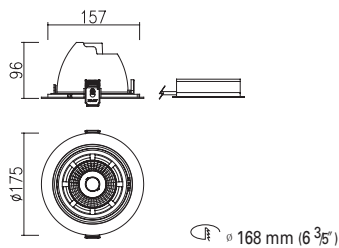
Recessed Down Light / Down Spot Light



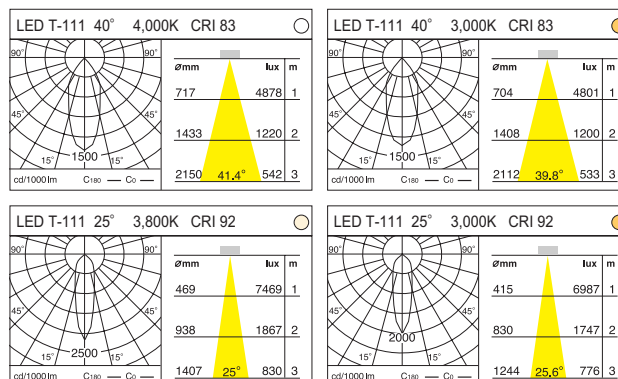
TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 30^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating

LIGHT	LED-T111
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 110-130V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	BEAM ANGLE (°)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 4,000K	47W	25°, 40°	3,402 lm	34V DC	83
● 3,000K	47W	25°, 40°	3,226 lm	34V DC	83
○ 3,800K	47W	25°	3,170 lm	34V DC	92
● 3,000K	47W	25°	2,951 lm	34V DC	92



LIFETIME	35,000 hours
COLOR TEMPERATURE	○ 4,000K (CRI 83) ○ 3,800K (CRI 92) ● 3,000K (CRI 83,92)





DD-20010 Series

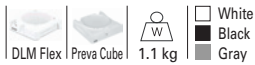
LED DOWN LIGHTS



order no.	DD-20010 Series	DD-20020 Series	DD-20030	DD-20040 Series	DD-20050 Series	DD-20060 Series	DD-20070 Series
LED type	Fortimo DLM Flex Preva Cube	Fortimo DLM Flex Preva Cube	LED DISK	Fortimo DLM Flex Preva Cube	Fortimo DLM Flex Preva Cube	Fortimo DLM Flex Preva Cube	Fortimo SLM Preva Core
LED symbol							
page	p.142	p.144	p.146	p.147	p.148	p.149	p.150



DD-20010 series
Recessed Down Light



PHILIPS OSRAM

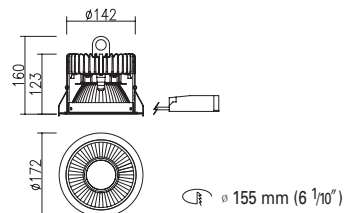
TRIM	AL. Die-Casting, Electrostatic Powder Coating
FRAME	Steel
REFLECTOR	Medium Reflector _ AL. Anodized Specular Silver Valley Wide Reflector _ AL. Anodized Specular Silver Square with Embossing
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	Fortimo DLM Flex, Preva Cube
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-20010	2000	5,000K	21W	16.5W	106 lm/w	1,839 lm	80
DD-20010	2000	4,000K	21W	16.5W	108 lm/w	1,874 lm	80
DD-20010	2000	3,000K	22W	18.1W	99 lm/w	1,898 lm	80
DD-20012	3000	5,000K	31W	24.6W	108 lm/w	2,792 lm	80
DD-20012	3000	4,000K	29W	24.7W	109 lm/w	2,810 lm	80
DD-20012	3000	3,000K	32W	27W	100 lm/w	2,707 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

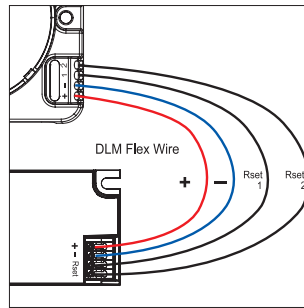
DRAWING







* Caution : Please be aware that it could not be worked properly in condition of ambient temperature over 35degree.



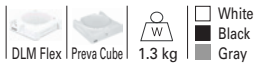
DRIVER ELECTRIC DIAGRAM



	5,000K	4,000K	3,000K																																																																																																																																																												
DD-20010 Series																																																																																																																																																															
 Medium Ref.	<table border="1"> <tr><th colspan="4">Fortimo DLM Flex 2000 (5,000K)</th></tr> <tr><td>90°</td><td>30°</td><td>15°</td><td>0°</td></tr> <tr><td>45°</td><td>15°</td><td>7.5°</td><td>0°</td></tr> <tr><td>15°</td><td>7.5°</td><td>3.75°</td><td>0°</td></tr> <tr><td>0°</td><td>0°</td><td>0°</td><td>0°</td></tr> <tr><td>15°</td><td>7.5°</td><td>3.75°</td><td>0°</td></tr> <tr><td>45°</td><td>15°</td><td>7.5°</td><td>0°</td></tr> <tr><td>90°</td><td>30°</td><td>15°</td><td>0°</td></tr> <tr><td>cd/1000lm</td><td>C180</td><td>C0</td><td></td></tr> <tr><td>∅mm</td><td>lux</td><td>m</td><td></td></tr> <tr><td>641</td><td>3055</td><td>1</td><td></td></tr> <tr><td>1282</td><td>764</td><td>2</td><td></td></tr> <tr><td>1923</td><td>37°</td><td>339</td><td>3</td></tr> </table>	Fortimo DLM Flex 2000 (5,000K)				90°	30°	15°	0°	45°	15°	7.5°	0°	15°	7.5°	3.75°	0°	0°	0°	0°	0°	15°	7.5°	3.75°	0°	45°	15°	7.5°	0°	90°	30°	15°	0°	cd/1000lm	C180	C0		∅mm	lux	m		641	3055	1		1282	764	2		1923	37°	339	3	<table border="1"> <tr><th colspan="4">Fortimo DLM Flex 2000 (4,000K)</th></tr> <tr><td>90°</td><td>30°</td><td>15°</td><td>0°</td></tr> <tr><td>45°</td><td>15°</td><td>7.5°</td><td>0°</td></tr> <tr><td>15°</td><td>7.5°</td><td>3.75°</td><td>0°</td></tr> <tr><td>0°</td><td>0°</td><td>0°</td><td>0°</td></tr> <tr><td>15°</td><td>7.5°</td><td>3.75°</td><td>0°</td></tr> <tr><td>45°</td><td>15°</td><td>7.5°</td><td>0°</td></tr> <tr><td>90°</td><td>30°</td><td>15°</td><td>0°</td></tr> <tr><td>cd/1000lm</td><td>C180</td><td>C0</td><td></td></tr> <tr><td>∅mm</td><td>lux</td><td>m</td><td></td></tr> <tr><td>682</td><td>3142</td><td>1</td><td></td></tr> <tr><td>1365</td><td>786</td><td>2</td><td></td></tr> <tr><td>2047</td><td>37°</td><td>349</td><td>3</td></tr> </table>	Fortimo DLM Flex 2000 (4,000K)				90°	30°	15°	0°	45°	15°	7.5°	0°	15°	7.5°	3.75°	0°	0°	0°	0°	0°	15°	7.5°	3.75°	0°	45°	15°	7.5°	0°	90°	30°	15°	0°	cd/1000lm	C180	C0		∅mm	lux	m		682	3142	1		1365	786	2		2047	37°	349	3	<table border="1"> <tr><th colspan="4">Fortimo DLM Flex 2000 (3,000K)</th></tr> <tr><td>90°</td><td>30°</td><td>15°</td><td>0°</td></tr> <tr><td>45°</td><td>15°</td><td>7.5°</td><td>0°</td></tr> <tr><td>15°</td><td>7.5°</td><td>3.75°</td><td>0°</td></tr> <tr><td>0°</td><td>0°</td><td>0°</td><td>0°</td></tr> <tr><td>15°</td><td>7.5°</td><td>3.75°</td><td>0°</td></tr> <tr><td>45°</td><td>15°</td><td>7.5°</td><td>0°</td></tr> <tr><td>90°</td><td>30°</td><td>15°</td><td>0°</td></tr> <tr><td>cd/1000lm</td><td>C180</td><td>C0</td><td></td></tr> <tr><td>∅mm</td><td>lux</td><td>m</td><td></td></tr> <tr><td>685</td><td>3061</td><td>1</td><td></td></tr> <tr><td>1370</td><td>765</td><td>2</td><td></td></tr> <tr><td>2056</td><td>37.4°</td><td>340</td><td>3</td></tr> </table>	Fortimo DLM Flex 2000 (3,000K)				90°	30°	15°	0°	45°	15°	7.5°	0°	15°	7.5°	3.75°	0°	0°	0°	0°	0°	15°	7.5°	3.75°	0°	45°	15°	7.5°	0°	90°	30°	15°	0°	cd/1000lm	C180	C0		∅mm	lux	m		685	3061	1		1370	765	2		2056	37.4°	340	3
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DD-20020 series
Recessed Down Light



PHILIPS OSRAM

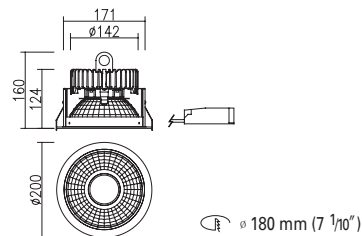
TRIM	AL. Die-Casting, Electrostatic Powder Coating
FRAME	Steel
REFLECTOR	Medium Reflector _ AL. Anodized Specular Silver Valley Wide Reflector _ AL. Anodized Specular Silver Square with Embossing
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	Fortimo DLM Flex, Preva Cube
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-20020	2000	5,000K	21W	16.5W	107 lm/w	1,864 lm	80
DD-20020	2000	4,000K	21W	16.5W	113 lm/w	1,966 lm	80
DD-20020	2000	3,000K	22W	18.1W	100 lm/w	1,916 lm	80
DD-20022	3000	5,000K	31W	24.6W	111 lm/w	2,862 lm	80
DD-20022	3000	4,000K	29W	24.7W	112 lm/w	2,887 lm	80
DD-20022	3000	3,000K	32W	27W	103 lm/w	2,841 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

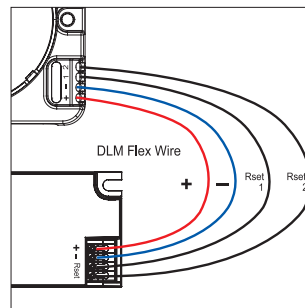
DRAWING







* Caution : Please be aware that it could not be worked properly in condition of ambient temperature over 35degree.



DRIVER ELECTRIC DIAGRAM



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15°	7.5°	3.75°																																																																																																																																					
45°	15°	7.5°																																																																																																																																					
90°	30°	15°																																																																																																																																					
∅mm	lux	m																																																																																																																																					
1086	2602	1																																																																																																																																					
2172	650	2																																																																																																																																					
3258	289	3																																																																																																																																					
3258	59,4°	289	3																																																																																																																																				
cd/1000lm	C180	C0																																																																																																																																					



DD-20030
Recessed Down Light

LED DISK | 0,5 kg

White
 Black
 Gray

PHILIPS

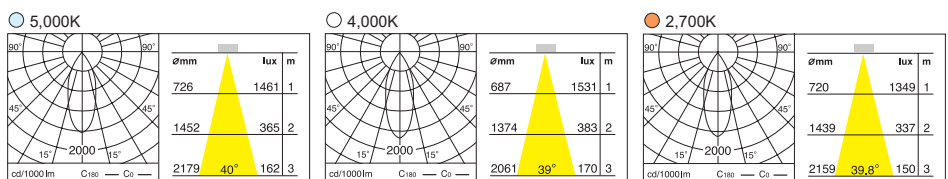
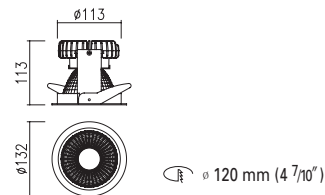
TRIM	AL. Die-Casting, Electrostatic Powder Coating
FRAME	Steel
REFLECTOR	AL. Anodized Specular Silver Square with Embossing
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT LED DISK (Integrated LED)
 INPUT VOLTAGE 220-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER	LUMINOUS FLUX (lm)	SYSTEM EFFICIENCY (lm/w)	COLOR RENDERING INDEX_CRI
5,000K	11W	804 lm	75 lm/W	80
4,000K	11W	811 lm	77 lm/W	80
2,700K	11W	798 lm	68 lm/W	80

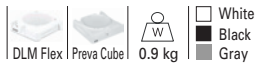
OPERATING TEMPERATURE RANGE -20 to +40 °C
 MAINTENANCE OF LUMEN -L70 25,000 hours at 25 °C
 COLOR TEMPERATURE 5,000K 4,000K 2,700K

DRAWING





DD-20040 series
Recessed Down Light



PHILIPS OSRAM

TRIM	AL. Die-Casting, Electrostatic Powder Coating
FRAME	Steel
REFLECTOR	AL. Anodized Specular
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

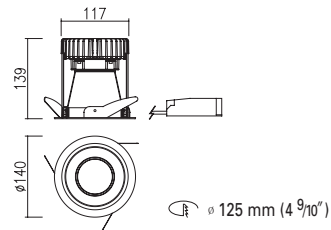
LIGHT Fortimo DLM Flex, Preva Cube

INPUT VOLTAGE 220-240V AC , 50-60Hz

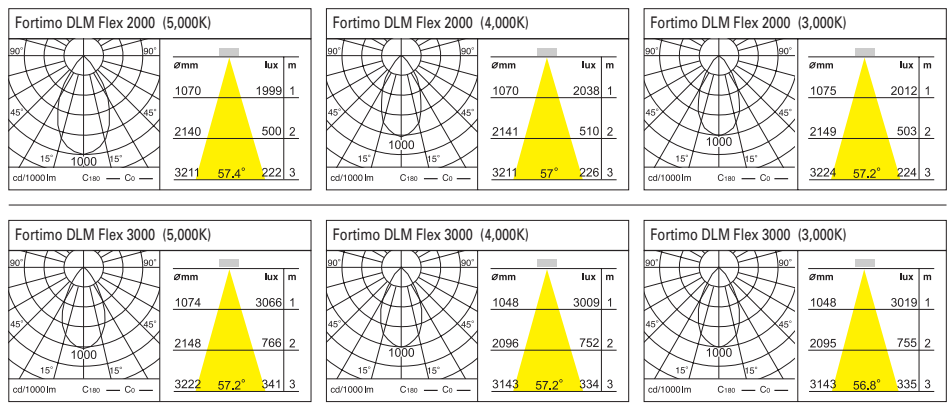
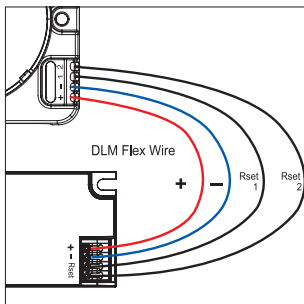
ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX CRI
DD-20040	2000	5,000K	21W	16.5W	103 lm/w	1,787 lm	80
DD-20040	2000	4,000K	21W	16.5W	104 lm/w	1,814 lm	80
DD-20040	2000	3,000K	22W	18.1W	97 lm/w	1,797 lm	80
DD-20042	3000	5,000K	31W	24.6W	105 lm/w	2,741 lm	80
DD-20042	3000	4,000K	29W	24.7W	104 lm/w	2,681 lm	80
DD-20042	3000	3,000K	32W	27W	98 lm/w	2,882 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

DRAWING

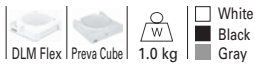


DRIVER ELECTRIC DIAGRAM





DD-20050 series
Recessed Down Light



PHILIPS OSRAM

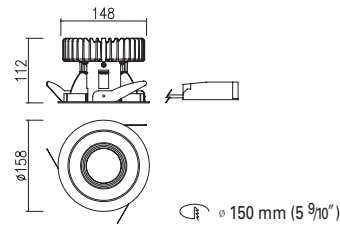
TRIM	AL. Die-Casting, Electrostatic Powder Coating
FRAME	Steel
REFLECTOR	AL. Anodized Specular Silver & PC
HEAT SINK	AL. Die-Casting, Electro Deposition Coating
LOUVER	ABS

LIGHT	Fortimo DLM Flex, Preva Cube
INPUT VOLTAGE	220-240V AC , 50-60Hz

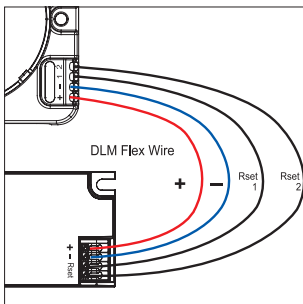
ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-20050	2000	5,000K	21W	16.5W	104 lm/w	1,805 lm	80
DD-20050	2000	4,000K	21W	16.5W	106 lm/w	1,835 lm	80
DD-20050	2000	3,000K	22W	18.1W	96 lm/w	1,841 lm	80
DD-20052	3000	5,000K	31W	24.6W	105 lm/w	2,707 lm	80
DD-20052	3000	4,000K	29W	24.7W	104 lm/w	2,689 lm	80
DD-20052	3000	3,000K	32W	27W	98 lm/w	2,725 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

DRAWING



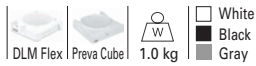
DRIVER ELECTRIC DIAGRAM



Model	Beam Diameter (mm)	Beam Angle (°)	Beam Diameter (mm)	Beam Angle (°)	Beam Diameter (mm)	Beam Angle (°)
Fortimo DLM Flex 2000 (5,000K)	1362	67.2°	2724	67.2°	4086	67.2°
	1362	67.2°	2724	67.2°	4086	67.2°
	1362	67.2°	2724	67.2°	4086	67.2°
Fortimo DLM Flex 2000 (4,000K)	1373	66.6°	2747	66.6°	4120	66.6°
	1373	66.6°	2747	66.6°	4120	66.6°
	1373	66.6°	2747	66.6°	4120	66.6°
Fortimo DLM Flex 2000 (3,000K)	1255	66.6°	2509	66.6°	3764	66.6°
	1255	66.6°	2509	66.6°	3764	66.6°
	1255	66.6°	2509	66.6°	3764	66.6°
Fortimo DLM Flex 3000 (5,000K)	1250	65.2°	2500	65.2°	3750	65.2°
	1250	65.2°	2500	65.2°	3750	65.2°
	1250	65.2°	2500	65.2°	3750	65.2°
Fortimo DLM Flex 3000 (4,000K)	1354	66.4°	2709	66.4°	4063	66.4°
	1354	66.4°	2709	66.4°	4063	66.4°
	1354	66.4°	2709	66.4°	4063	66.4°
Fortimo DLM Flex 3000 (3,000K)	1300	65.4°	2601	65.4°	3901	65.4°
	1300	65.4°	2601	65.4°	3901	65.4°
	1300	65.4°	2601	65.4°	3901	65.4°



DD-20060 series
Recessed Down Light



PHILIPS OSRAM

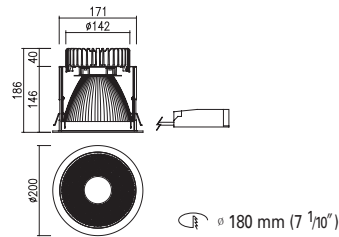
TRIM	AL. Die-Casting, Electrostatic Powder Coating
FRAME	Steel
REFLECTOR	AL. Anodized Valley with Embossing
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	Fortimo DLM Flex, Preva Cube
INPUT VOLTAGE	220-240V AC , 50-60Hz

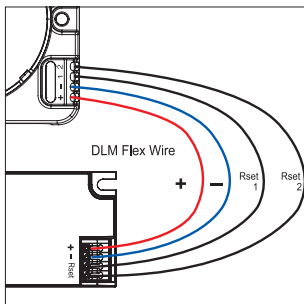
ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX CRI
DD-20060	2000	5,000K	21W	16.5W	104 lm/w	1,802 lm	80
DD-20060	2000	4,000K	21W	16.5W	108 lm/w	1,883 lm	80
DD-20060	2000	3,000K	22W	18.1W	96 lm/w	1,833 lm	80
DD-20062	3000	5,000K	31W	24.6W	106 lm/w	2,742 lm	80
DD-20062	3000	4,000K	29W	24.7W	105 lm/w	2,712 lm	80
DD-20062	3000	3,000K	32W	27W	99 lm/w	2,732 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

DRAWING



DRIVER ELECTRIC DIAGRAM



Fortimo DLM Flex 2000 (5,000K)	Fortimo DLM Flex 2000 (4,000K)	Fortimo DLM Flex 2000 (3,000K)																																				
<table border="1"> <tr><th>Ømm</th><th>lux</th><th>m</th></tr> <tr><td>682</td><td>3652</td><td>1</td></tr> <tr><td>1364</td><td>913</td><td>2</td></tr> <tr><td>2046</td><td>406</td><td>3</td></tr> </table>	Ømm	lux	m	682	3652	1	1364	913	2	2046	406	3	<table border="1"> <tr><th>Ømm</th><th>lux</th><th>m</th></tr> <tr><td>721</td><td>3820</td><td>1</td></tr> <tr><td>1442</td><td>955</td><td>2</td></tr> <tr><td>2164</td><td>424</td><td>3</td></tr> </table>	Ømm	lux	m	721	3820	1	1442	955	2	2164	424	3	<table border="1"> <tr><th>Ømm</th><th>lux</th><th>m</th></tr> <tr><td>724</td><td>3713</td><td>1</td></tr> <tr><td>1448</td><td>928</td><td>2</td></tr> <tr><td>2173</td><td>413</td><td>3</td></tr> </table>	Ømm	lux	m	724	3713	1	1448	928	2	2173	413	3
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Fortimo DLM Flex 3000 (5,000K)	Fortimo DLM Flex 3000 (4,000K)	Fortimo DLM Flex 3000 (3,000K)																																				
<table border="1"> <tr><th>Ømm</th><th>lux</th><th>m</th></tr> <tr><td>733</td><td>5508</td><td>1</td></tr> <tr><td>1466</td><td>1377</td><td>2</td></tr> <tr><td>2199</td><td>612</td><td>3</td></tr> </table>	Ømm	lux	m	733	5508	1	1466	1377	2	2199	612	3	<table border="1"> <tr><th>Ømm</th><th>lux</th><th>m</th></tr> <tr><td>650</td><td>5481</td><td>1</td></tr> <tr><td>1300</td><td>1370</td><td>2</td></tr> <tr><td>1950</td><td>609</td><td>3</td></tr> </table>	Ømm	lux	m	650	5481	1	1300	1370	2	1950	609	3	<table border="1"> <tr><th>Ømm</th><th>lux</th><th>m</th></tr> <tr><td>686</td><td>5530</td><td>1</td></tr> <tr><td>1373</td><td>1382</td><td>2</td></tr> <tr><td>2059</td><td>614</td><td>3</td></tr> </table>	Ømm	lux	m	686	5530	1	1373	1382	2	2059	614	3
Ømm	lux	m																																				
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Ømm	lux	m																																				
686	5530	1																																				
1373	1382	2																																				
2059	614	3																																				



DD-20070 series
Recessed Down Light



PHILIPS OSRAM

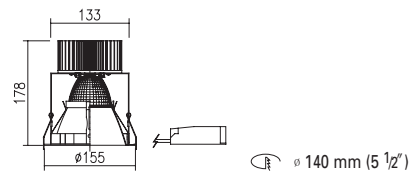
TRIM	AL. Die-Casting, Electrostatic Powder Coating
FRAME	Steel
HEAT SINK	AL. Extrude, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver / or Dark Reflector

LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-20070	2000	○ 4,000K	22W	17W	108 lm/W	1,896 lm	80
DD-20070	2000	● 3,000K	22W	17W	102 lm/W	1,826 lm	80
DD-20070	2000	● 3,000K	22W	17W	87 lm/W	1,582 lm	>90
DD-20071	3000	○ 4,000K	30W	26W	103 lm/W	2,490 lm	80
DD-20071	3000	● 3,000K	29W	26W	102 lm/W	2,474 lm	80
DD-20071	3000	● 3,000K	30W	26W	90 lm/W	2,234 lm	>90

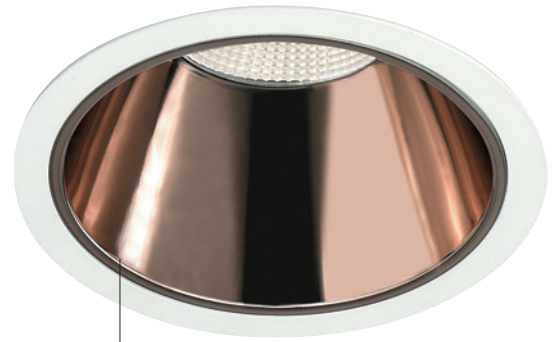
OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	4,000K / 3,000K

DRAWING

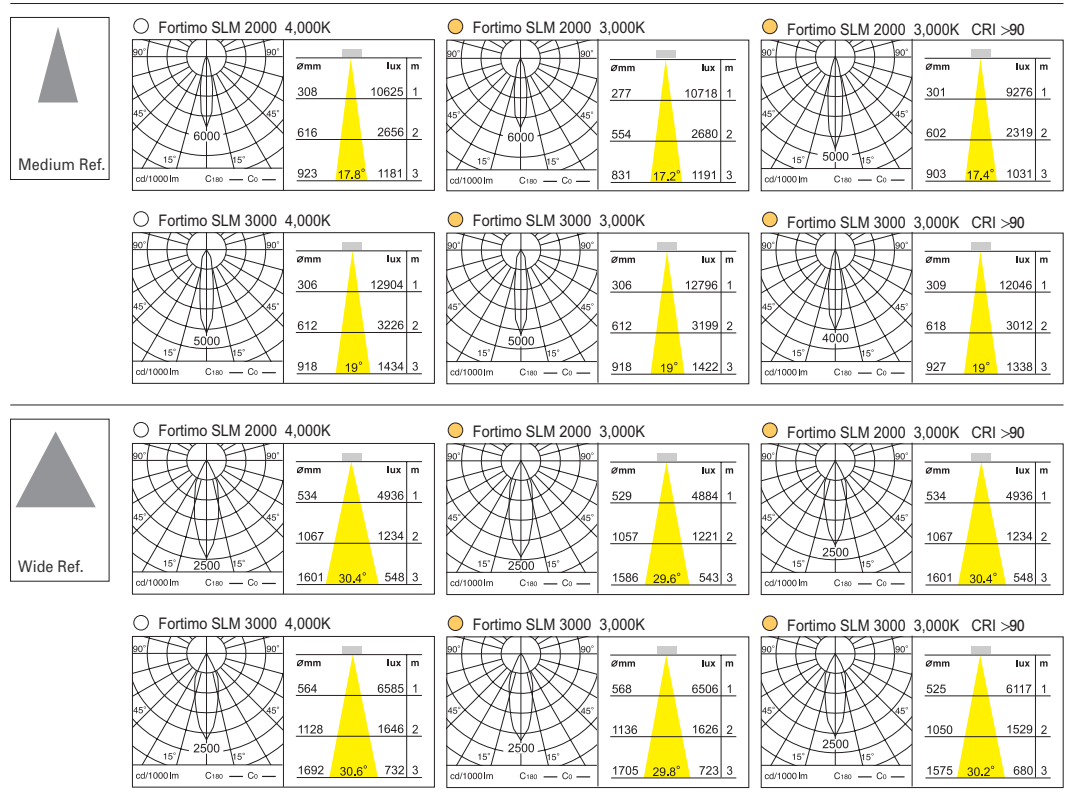


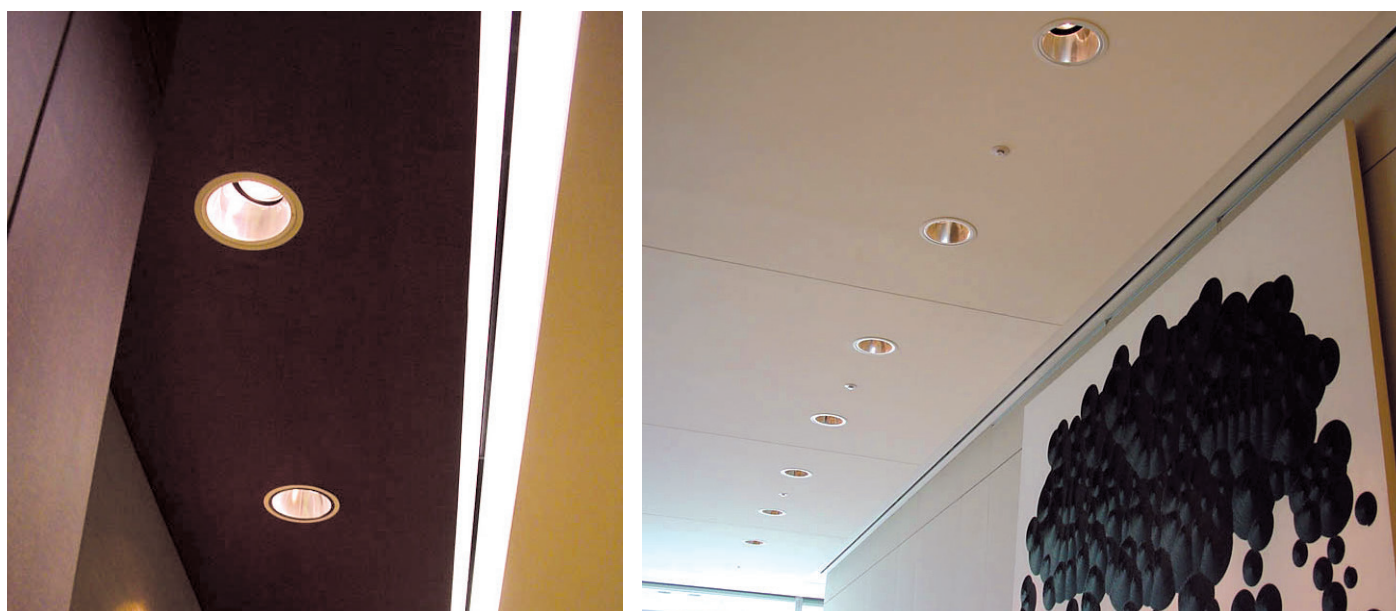
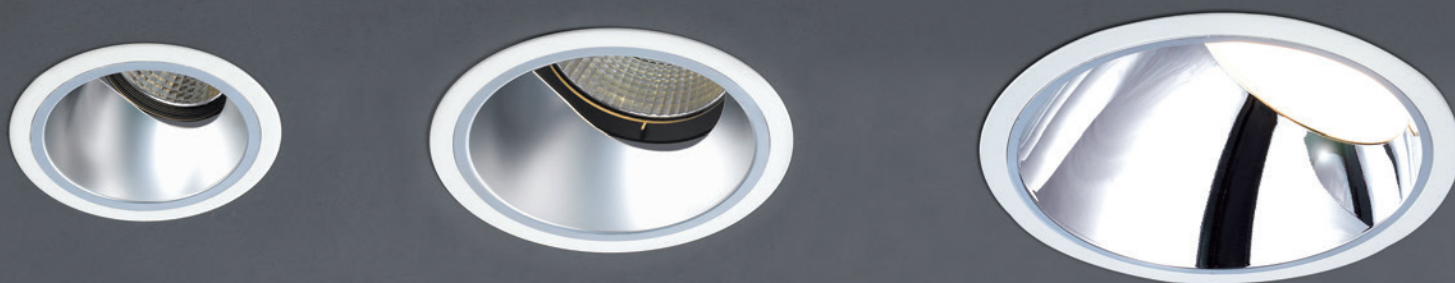
Reflector

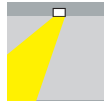




Dark Reflector Down Light
Non Glear Reflector





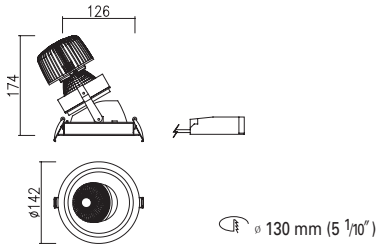


DD-26500 series
Recessed Down Light / Wall Washer Down Light

TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 30^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver

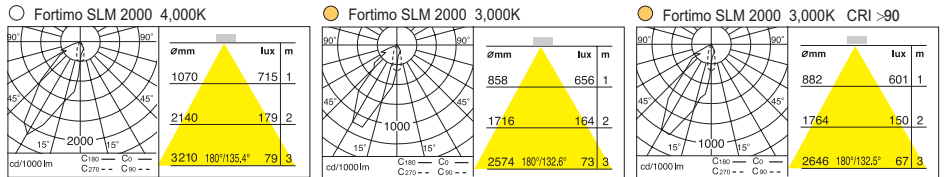


PHILIPS OSRAM



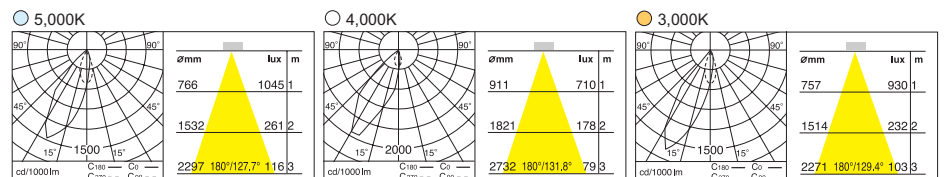
DD-26500.01						
LIGHT		Fortimo SLM , Preva Core				
INPUT VOLTAGE		220-240V AC , 50-60Hz				
MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
2000	4,000K	22W	18W	89 lm/W	1,605 lm	80
2000	3,000K	22W	18W	87 lm/W	1,559 lm	80
2000	3,000K	23W	18W	74 lm/W	1,320 lm	>90

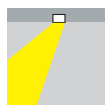
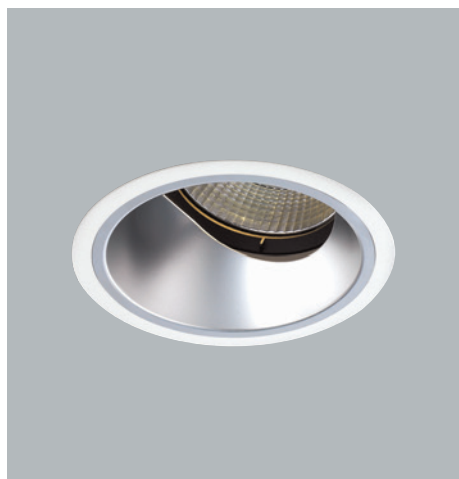
OPERATING TEMPERATURE RANGE	-20 to +35°C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	4,000K / 3,000K



DD-26500.02						
LIGHT		LED ARRAY				
INPUT VOLTAGE		220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)				
COLOR TEMPERATURE (K)	INPUT POWER (W)	OUTPUT POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	21W	16W	71 lm/W	1,134 lm	32V DC	78
4,000K	21W	16W	66 lm/W	1,060 lm	32V DC	80
3,000K	21W	16W	64 lm/W	1,031 lm	31V DC	80

OUTPUT CURRENT	500mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

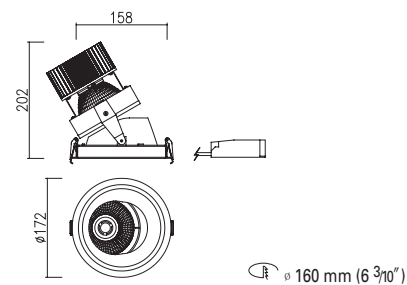




DD-26510 series
Recessed Down Light / Wall Washer Down Light



PHILIPS OSRAM

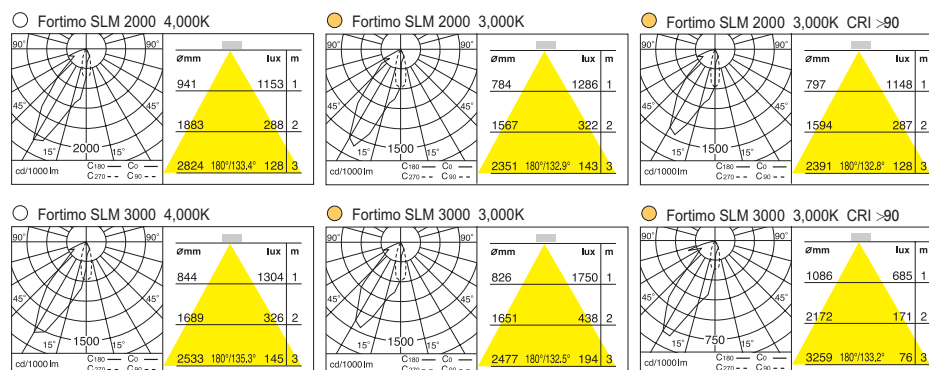


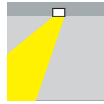
TRIM	AL. Die-Casting, Electrostatic Powder Coating
ADJUSTABLE RING	AL. Die-Casting, Electrostatic Powder Coating Adjustable Angle (Tilt $\angle 30^\circ$)
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver

LIGHT Fortimo SLM, Preva Core
 INPUT VOLTAGE 220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX CRI
DD-26510	2000	4,000K	22W	18W	99 lm/W	1,779 lm	80
DD-26510	2000	3,000K	22W	18W	93 lm/W	1,671 lm	80
DD-26510	2000	3,000K	22W	18W	80 lm/W	1,427 lm	>90
DD-26511	3000	4,000K	29W	24W	96 lm/W	2,341 lm	80
DD-26511	3000	3,000K	29W	24W	93 lm/W	2,271 lm	80
DD-26511	3000	3,000K	29W	25W	93 lm/W	2,259 lm	>90

OPERATING TEMPERATURE RANGE -20 to +35 °C
 MAINTENANCE OF LUMEN -L70 50,000 hours at 25 °C
 DRIVER LIFETIME 50,000 hours
 COLOR TEMPERATURE 4,000K / 3,000K

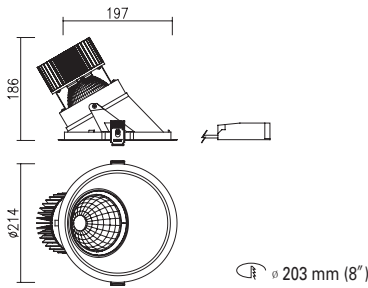




DD-26520 series
Recessed Down Light / Wall Washer Down Light



PHILIPS OSRAM

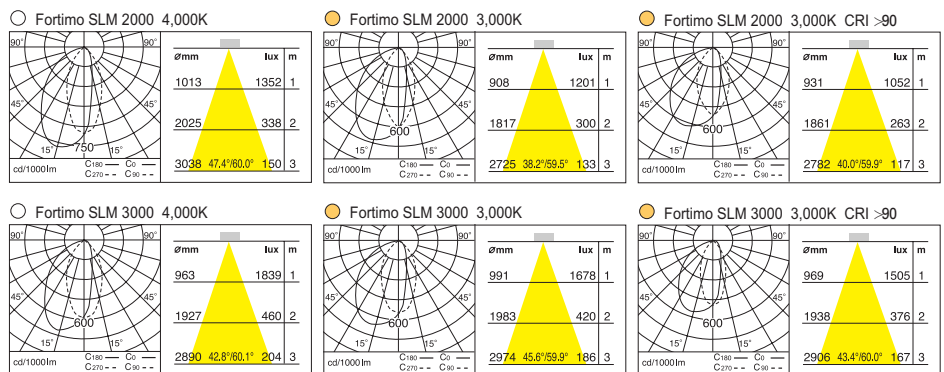


TRIM	AL. Die-Casting, Electrostatic Powder Coating
MOUNTING RING	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Extrude, Electro Deposition Coating
COVER	PC
REFLECTOR	PC, Vacuum Coating

LIGHT	Fortimo SLM , Preva Core
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-26520	2000	○ 4,000K	22W	18W	94 lm/W	1,648 lm	80
DD-26520	2000	● 3,000K	22W	18W	85 lm/W	1,528 lm	80
DD-26520	2000	● 3,000K	23W	18W	74 lm/W	1,344 lm	>90
DD-26521	3000	○ 4,000K	30W	24W	93 lm/W	2,273 lm	80
DD-26521	3000	● 3,000K	29W	24W	85 lm/W	2,076 lm	80
DD-26521	3000	● 3,000K	30W	25W	75 lm/W	1,878 lm	>90







OPERATING TEMPERATURE RANGE	-20 to +35°C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	4,000K / 3,000K



DD-20520 Series

LED DOWN LIGHTS



order no.	DD-20520	DD-20530	DD-20540	DD-20560 Series	DD-20600 Series	DD-20630 Series
LED type	SMD	LED DISK	SMD	SMD	SMD	SMD
LED symbol						
	↓	↓	↓	↓	↓	↓
page	p.157	p.158	p.159	p.162	p.167	p.172



DD-20520
Recessed Down Light



8W 36 LED

- LED
- 0.5 kg
- White
- Black
- Gray

TRIM	AL. Die-Casting, Electrostatic Powder Coating
LED HOUSING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating
COVER	PC

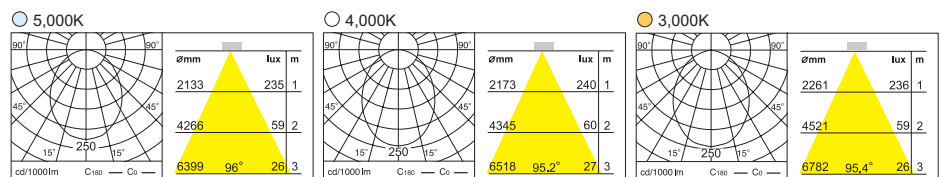
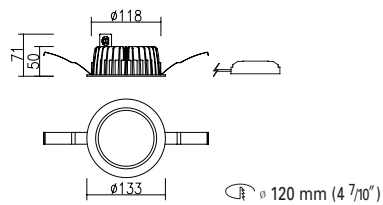
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

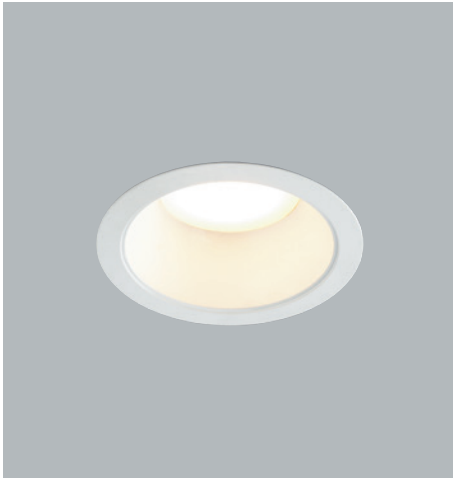
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 5,000K	8W	6W	90 lm/w	551 lm	18V DC	80
○ 4,000K	8W	6W	94 lm/w	554 lm	17V DC	80
● 3,000K	8W	6W	93 lm/w	548 lm	17V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE ○ 5,000K ○ 4,000K ● 3,000K

DRAWING





DD-20530
Recessed Down Light

- LED DISK | 0.4 kg
- White
- Black
- Gray



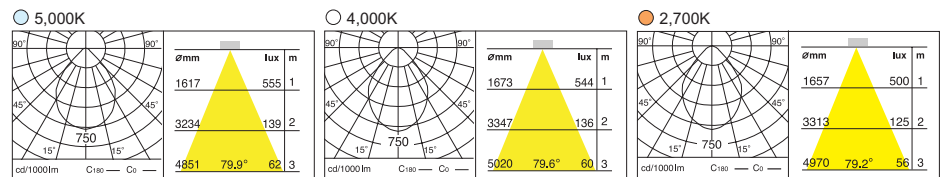
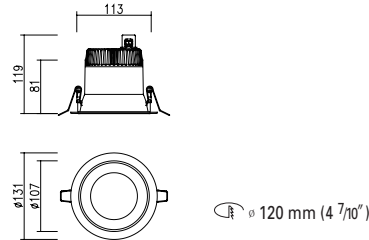
TRIM & HOUSING	PC, Urethane Coating
HEAT SINK	AL, Die-Casting, Electrostatic Powder Coating
COVER	PC

LIGHT	LED DISK (Integrated LED)
INPUT VOLTAGE	220-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER	SYSTEM EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
5,000K	11W	79 lm/W	845 lm	80
4,000K	11W	78 lm/W	818 lm	80
2,700K	11W	69 lm/W	751 lm	80

OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C
COLOR TEMPERATURE	5,000K 4,000K 2,700K

DRAWING





DD-20540
Recessed Down Light



18W 21 LED

- LED
- 0.5 kg
- White
- Black
- Gray

TRIM	PC, Urethane Coating
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating
COVER	PC

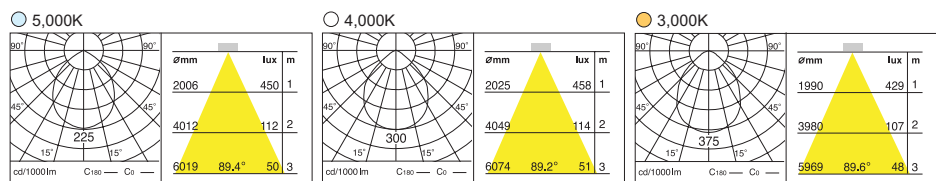
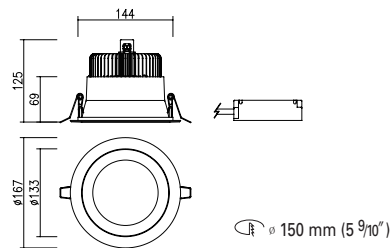
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

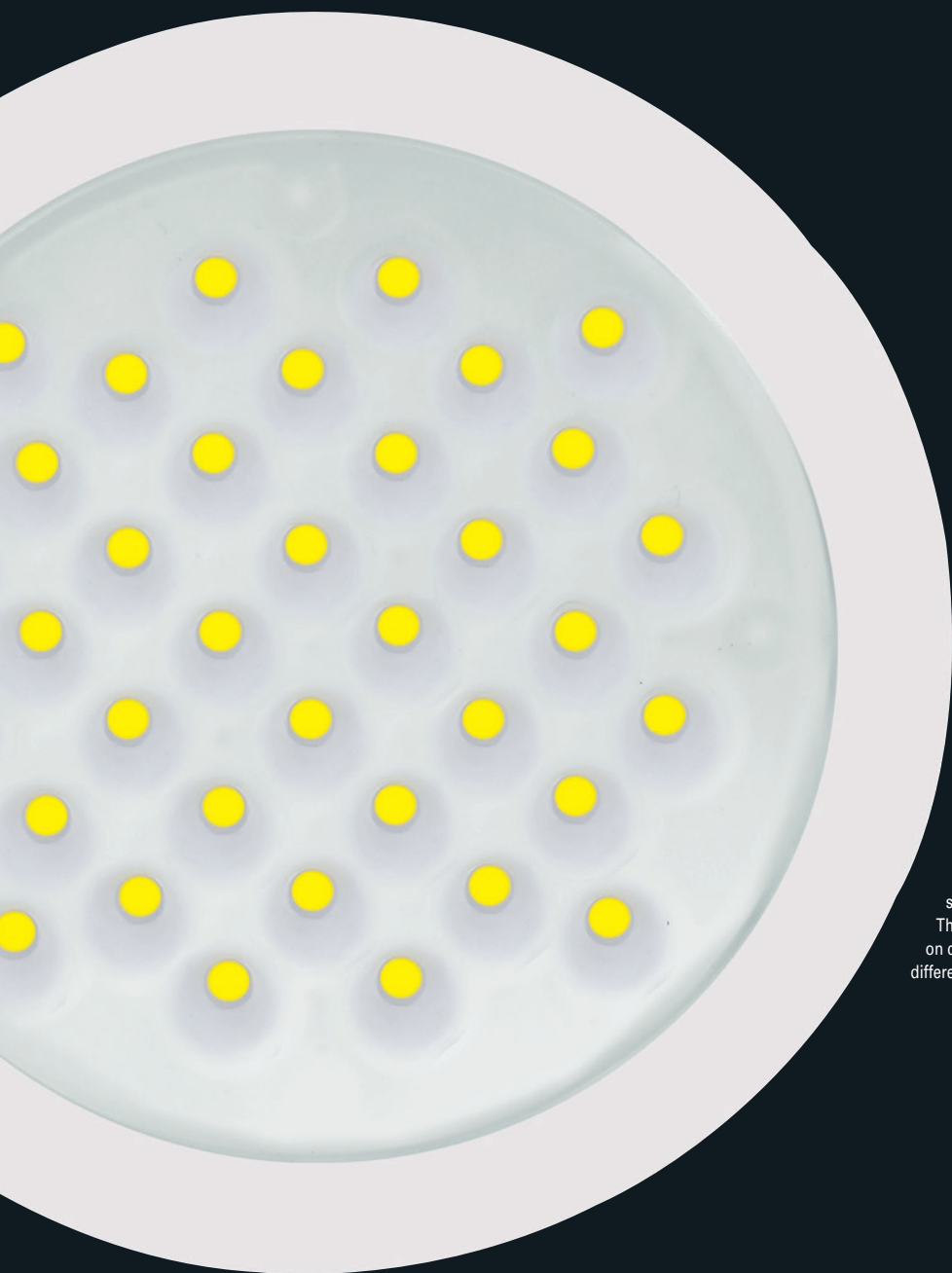
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	18W	15W	60 lm/w	901 lm	43V DC	80
4,000K	17W	14W	65 lm/w	915 lm	40V DC	80
3,000K	18W	15W	56 lm/w	858 lm	44V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING



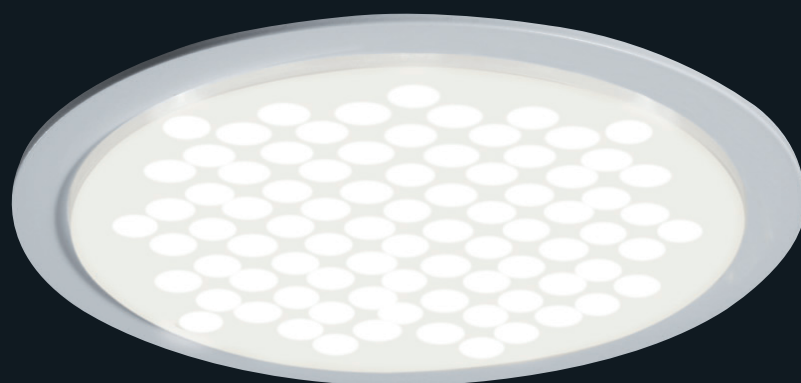
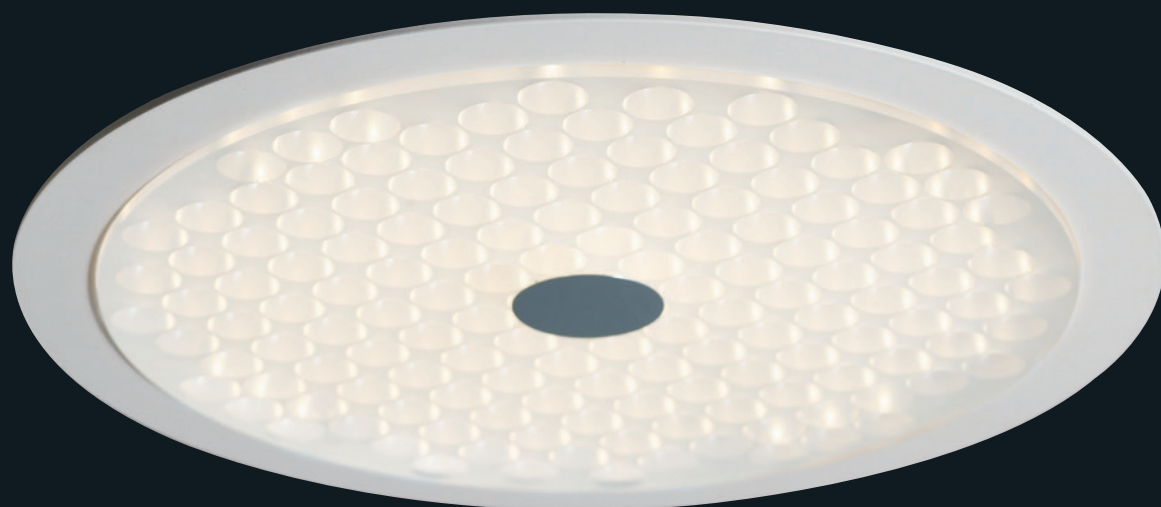


PRODUCT PROFILE

Designed to reduce glare using translucent acrylic and effect smooth and homogenous lighting performance.

Maximize of heat conduction and compact structure of fitting. Simple structure cause easy assembling and maintenance.

There are three types of color temperature 3000K, 4000K, and 5000K. Based on customers requirement, it can be used various lighting applications for different atmosphere of commercial area.





DD-20560
Recessed Down Light



5W 24 LED

- LED
- 0.3 kg
- White
- Black
- Gray

TRIM & LED HOUSING & HEAT SINK COVER AL. Die-Casting, Electrostatic Powder Coating
Housing Cover _ PC

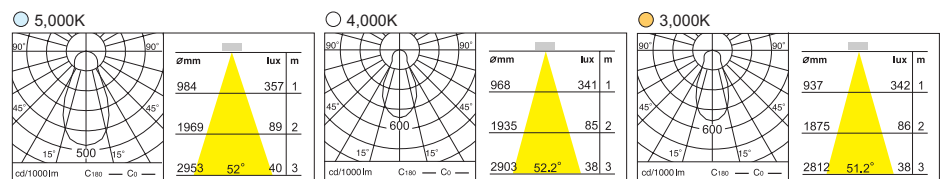
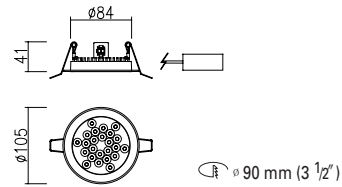
LIGHT LED
INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	5W	4W	98 lm/w	400 lm	12V DC	80
4,000K	5W	4W	104 lm/w	405 lm	11V DC	80
3,000K	5W	4W	100 lm/w	398 lm	11V DC	80

OUTPUT CURRENT 350mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40°C
MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
DRIVER LIFETIME 50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20570
Recessed Down Light



8W 36 LED

- LED
- 0.4 kg
- White
- Black
- Gray

TRIM & LED HOUSING & HEAT SINK COVER AL. Die-Casting, Electrostatic Powder Coating
Housing Cover _ PC

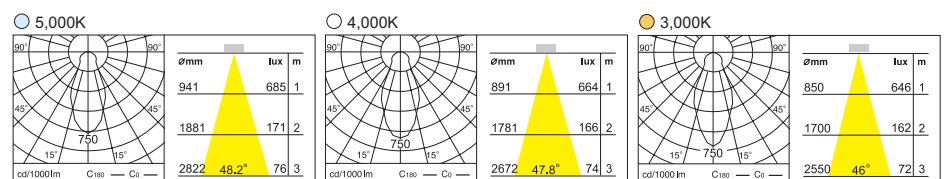
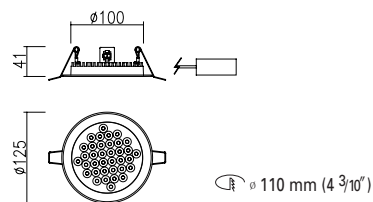
LIGHT LED
INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	8W	6W	103 lm/w	629 lm	18V DC	80
4,000K	8W	6W	109 lm/w	640 lm	17V DC	80
3,000K	8W	6W	107 lm/w	629 lm	17V DC	80

OUTPUT CURRENT 350mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40 °C
MAINTENANCE OF LUMEN -L70 40,000 hours at 25 °C
DRIVER LIFETIME 50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20580
Recessed Down Light



18W 84 LED

- LED
- 0.8 kg
- White
- Black
- Gray

TRIM & LED HOUSING & HEAT SINK COVER AL. Die-Casting, Electrostatic Powder Coating
Housing Cover _ PC

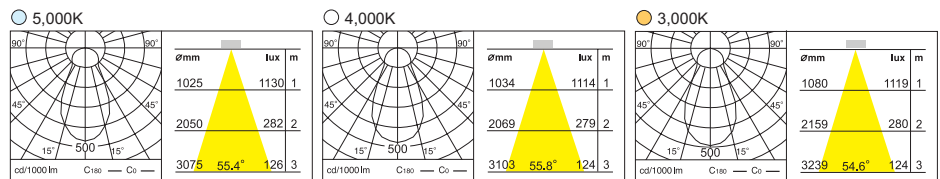
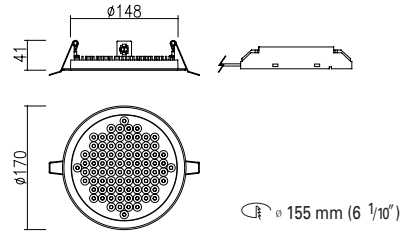
LIGHT LED
INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX CRI
5,000K	18W	14W	108 lm/w	1,521 lm	41V DC	80
4,000K	17W	14W	109 lm/w	1,498 lm	40V DC	80
3,000K	17W	14W	106 lm/w	1,455 lm	40V DC	80

OUTPUT CURRENT 350mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40°C
MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
DRIVER LIFETIME 50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20590
Recessed Down Light



29W 144 LED

- LED
- 1.5 kg
- White
 - Black
 - Gray

TRIM & LED HOUSING & HEAT SINK COVER AL. Die-Casting, Electrostatic Powder Coating
Housing Cover _ PC

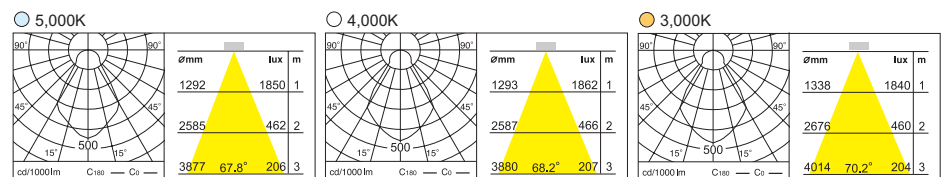
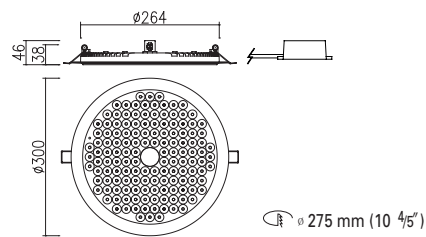
LIGHT LED
INPUT VOLTAGE 100-240V AC , 50-60Hz

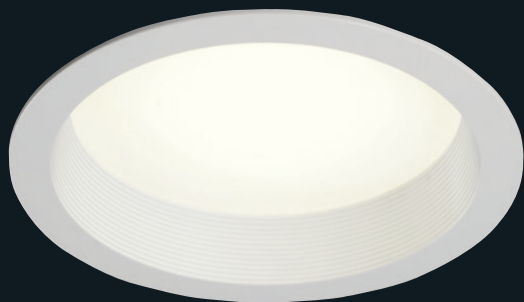
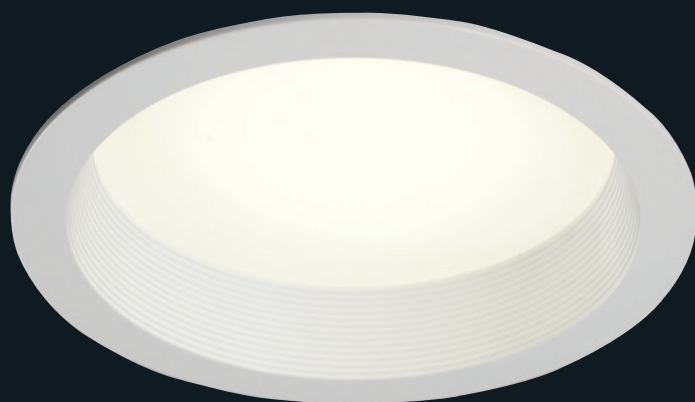
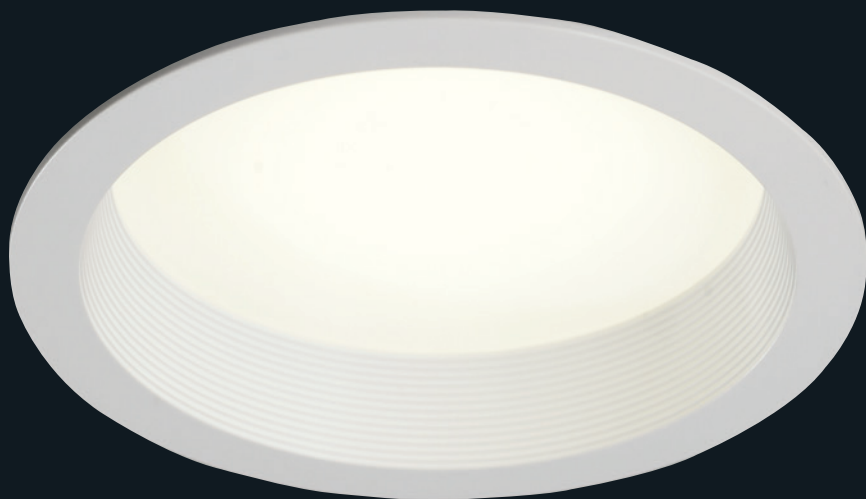
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	29W	24W	115 lm/w	2,738 lm	23V DC	80
4,000K	28W	24W	116 lm/w	2,748 lm	23V DC	80
3,000K	28W	24W	114 lm/w	2,724 lm	23V DC	80

OUTPUT CURRENT 1,050 mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40 °C
MAINTENANCE OF LUMEN -L70 40,000 hours at 25 °C
DRIVER LIFETIME 50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





PRODUCT PROFILE

Designed to reduce glare with using translucent acrylic and effect smooth and homogenous lighting performance.

There are three types of color temperature 3000K, 4000K, and 5000K. Based on customers requirement, it can be used various lighting applications for different atmosphere of commercial area.

- Polycarbonate cover
- Color Temperature (5,000K / 4,000K / 3,000K)

* Average life time 40,000 hours
(Life time could be flexible depends on environmental situation.)





DD-20600
Recessed Down Light



13W 66 LED

- LED
- 0.4 kg
- White
 - Black
 - Gray

TRIM	PC, Urethane Coating
LED HOUSING	Steel
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating
COVER	PC

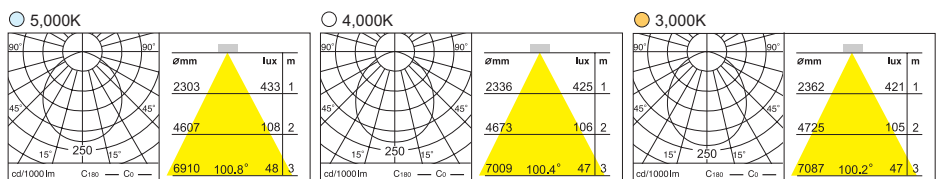
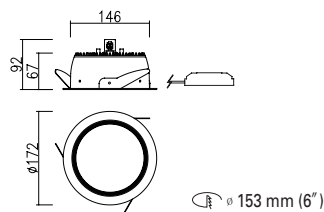
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	13W	11W	97 lm/w	1,060 lm	31V DC	80
4,000K	13W	11W	95 lm/w	1,036 lm	31V DC	80
3,000K	13W	11W	97 lm/w	1,024 lm	30V DC	80

OUTPUT CURRENT	350 mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20610
Recessed Down Light



17W 84 LED

- LED
- 0.5 kg
- White
- Black
- Gray

TRIM	PC, Urethane Coating
LED HOUSING	Steel
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating
COVER	PC

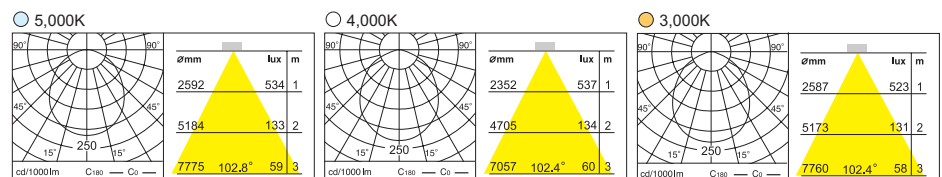
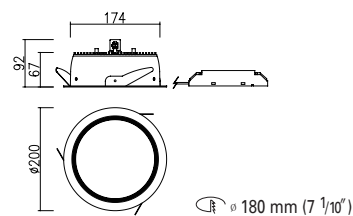
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	17W	14W	95 lm/w	1,342 lm	41V DC	80
4,000K	17W	14W	98 lm/w	1,348 lm	40V DC	80
3,000K	17W	14W	95 lm/w	1,315 lm	40V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20620
Recessed Down Light



19W 88 LED

- LED
- 0.6 kg
- White
- Black
- Gray

TRIM	PC, Urethane Coating
LED HOUSING	Steel
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating
COVER	PC

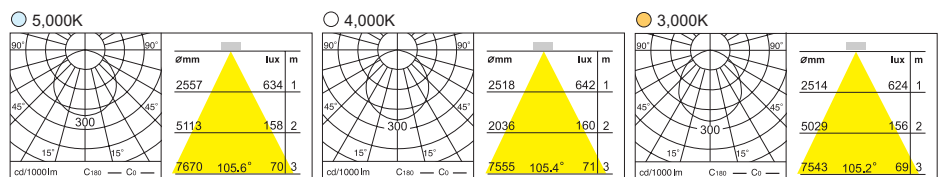
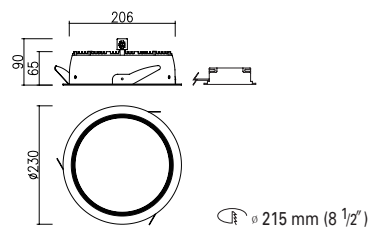
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

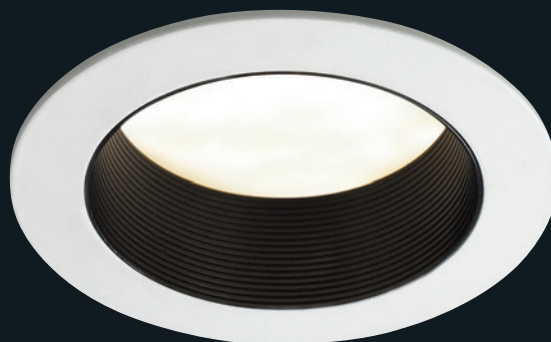
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	19W	16W	102 lm/w	1,649 lm	23V DC	80
4,000K	19W	16W	105 lm/w	1,673 lm	23V DC	80
3,000K	19W	16W	100 lm/w	1,615 lm	23V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





PRODUCT PROFILE

Designed to reduce glare using translucent acrylic and effect smooth and homogenous lighting performance. Maximize of heat conduction and compact structure of fitting. Simple structure cause easy assembling and maintenance. There are three types of color temperature 3000K, 4000K, and 5000K. Based on customers requirement, it can be used various lighting applications for different atmosphere of commercial area.







DD-20630.01
Recessed Down Light / Moistureproof Down Light

This new LED Downlight system is all in one lighting fixture which is combined fitting and heat sink and also consists of very simple and sturdy design.

- **Moistureproof available**
- Polycarbonate cover



11W 12 LED

LED | IP 44 | 0.3 kg | White Black Gray

TRIM & HOUSING	Aluminium. Electrostatic Powder Coating
HEAT SINK	Aluminium. Electrostatic Powder Coating
COVER	PC

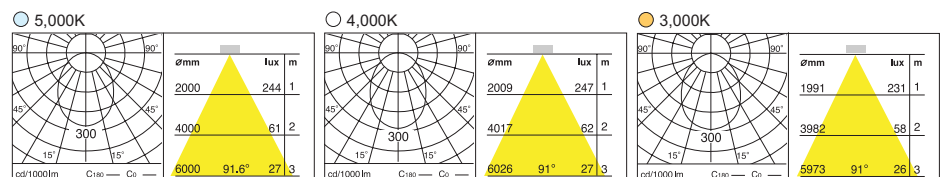
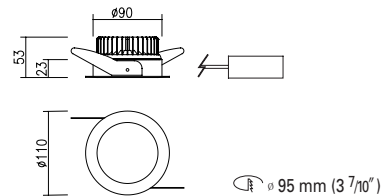
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX CRI
5,000K	10W	9W	64 lm/w	552 lm	25V DC	80
4,000K	9W	8W	69 lm/w	557 lm	23V DC	80
3,000K	11W	9W	59 lm/w	518 lm	25V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20630.02
Recessed Down Light / Moistureproof Down Light

This new LED Downlight system is all in one lighting fixture which is combined fitting and heat sink and also consists of very simple and sturdy design.

- Moistureproof available
- Polycarbonate cover



11W 12 LED

- LED
- IP 44
- 0.3 kg
- White
- Black
- Gray

TRIM & HOUSING	Aluminium. Electrostatic Powder Coating
HEAT SINK	Aluminium. Electrostatic Powder Coating
COVER	PC

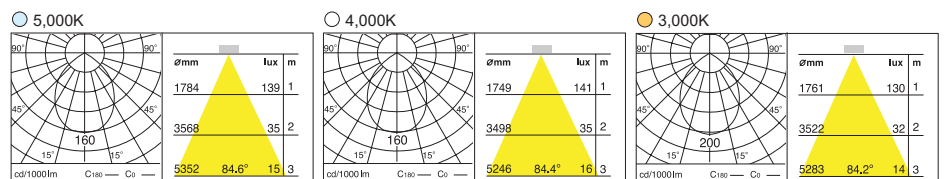
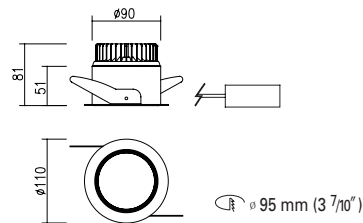
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX CRI
5,000K	10W	9W	28 lm/w	246 lm	25V DC	80
4,000K	9W	8W	31 lm/w	248 lm	23V DC	80
3,000K	11W	9W	26 lm/w	228 lm	25V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20640

Recessed Down Light / Moistureproof Down Light

This new LED Downlight system is all in one lighting fixture which is combined fitting and heat sink and also consists of very simple and sturdy design.

- Moistureproof available
- Polycarbonate cover



12W 15 LED

LED | IP 44 | 0.4 kg | White Black Gray

TRIM & HOUSING	Aluminium. Electrostatic Powder Coating
HEAT SINK	Aluminium. Electrostatic Powder Coating
COVER	PC

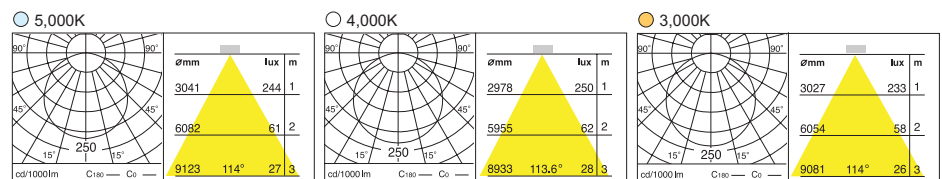
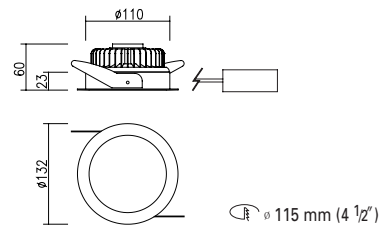
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	12W	11W	65 lm/w	707 lm	31V DC	80
4,000K	11W	10W	71 lm/w	725 lm	29V DC	80
3,000K	12W	11W	61 lm/w	677 lm	31V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20650
Recessed Down Light / Moistureproof Down Light

This new LED Downlight system is all in one lighting fixture which is combined fitting and heat sink and also consists of very simple and sturdy design.

- Moistureproof available
- Polycarbonate cover



18W 21 LED

LED | IP 44 | 0.5 kg | White Black Gray

TRIM & HOUSING	Aluminium. Electrostatic Powder Coating
HEAT SINK	Aluminium. Electrostatic Powder Coating
COVER	PC

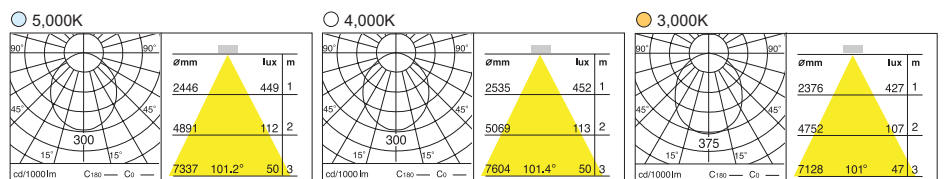
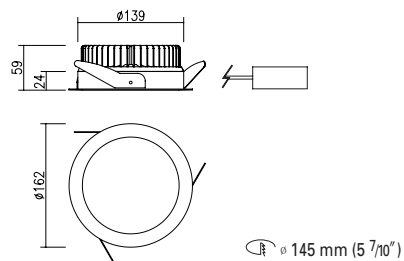
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	18W	15W	76 lm/w	1,144 lm	43V DC	80
4,000K	17W	14W	81 lm/w	1,145 lm	40V DC	80
3,000K	18W	15W	71 lm/w	1,081 lm	44V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING









DD-20660 SERIES
Recessed Down Light

Abaco



13W 66 LED

- LED
- 0.4 kg
- White
- Black
- Gray

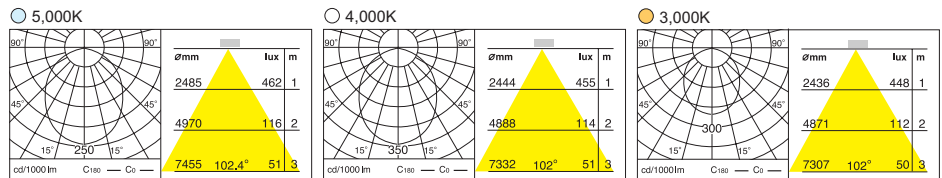
TRIM & LED HOUSING COVER	AL. Die-Casting, Electrostatic Powder Coating PC
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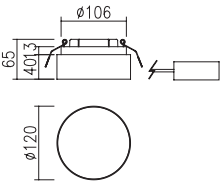
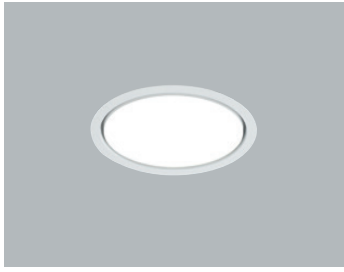
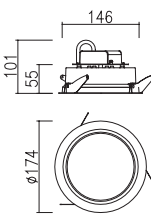
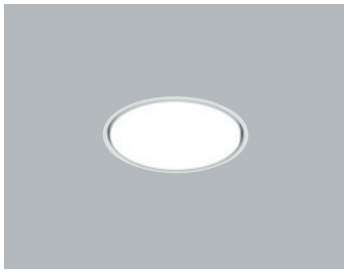
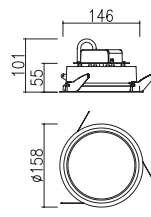
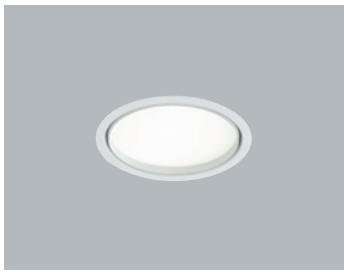
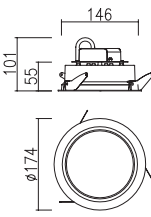

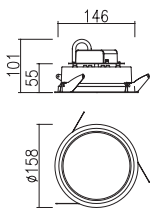
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER (W)	OUTPUT POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 5,000K	13W	11W	108 lm/W	1,177 lm	31V DC	80
○ 4,000K	13W	11W	106 lm/W	1,152 lm	31V DC	80
● 3,000K	13W	11W	107 lm/W	1,135 lm	30V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE ● 5,000K ○ 4,000K ● 3,000K



	<p>DD-20660.01 LED 13W</p>	
<p>⌀ 112mm (4 3/8")</p>		
	<p>DD-20660.03 LED 13W</p>	
<p>⌀ 151mm (5 9/16")</p>		
	<p>DD-20660.04 LED 13W</p>	
<p>⌀ 151mm (5 9/16")</p>		
	<p>DD-20660.05 LED 13W</p>	
<p>⌀ 151mm (5 9/16")</p>		
	<p>DD-20660.06 LED 13W</p>	
<p>⌀ 151mm (5 9/16")</p>		



DD-20670 SERIES
Recessed Down Light

Abaco



27W 66 LED

- LED
- 1.1 kg
- White
- Black
- Gray

TRIM & LED HOUSING AL. Die-Casting, Electrostatic Powder Coating
COVER PC

LIGHT LED
INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER (W)	OUTPUT POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 5,000K	27W	23W	117 lm/W	2,693 lm	33V DC	80
○ 4,000K	27W	23W	110 lm/W	2,513 lm	33V DC	80
● 3,000K	27W	23W	102 lm/W	2,340 lm	33V DC	80

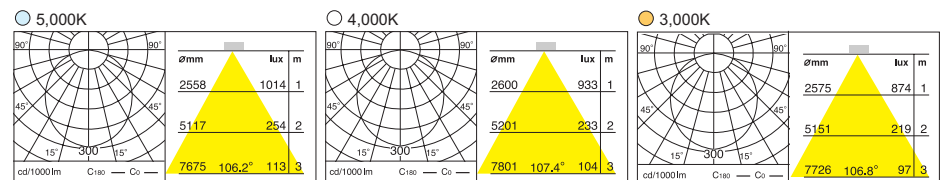
OUTPUT CURRENT 700mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40°C
MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
DRIVER LIFETIME 50,000 hours


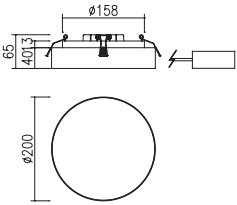

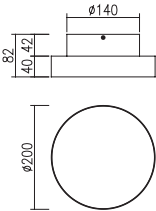

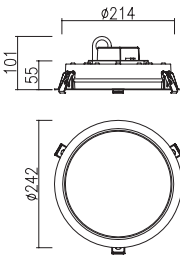

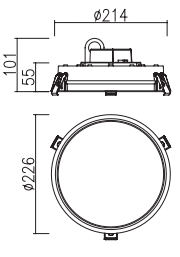

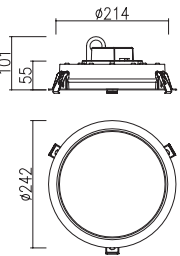

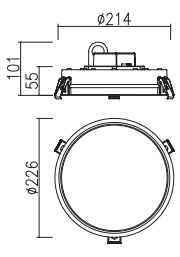
COLOR TEMPERATURE ○ 5,000K ○ 4,000K ● 3,000K
COLOR RENDERING INDEX_CRI 80, 90

DD-20671 SERIES

▶ OPTION ◀
Tunabel Color Temperature

INPUT POWER 32W
INPUT VOLTAGE 100-240V AC , 50-60Hz
OUTPUT CURRENT 150mA DC
COLOR TEMPERATURE 2,700K~5,700K
DRIVER Dimmable Driver
SYSTEM REFERENCE -> page. 4



	<p>DD-20670.01 LED 27W DD-20671.01 LED 32W (Tunable Color Temperature)</p>		
<p>⌀ 164mm (6 1/2")</p>		<p>DD-20670.02 LED 27W DD-20671.02 LED 32W (Tunable Color Temperature)</p>	
<p>⌀ 219mm (8 3/5")</p>		<p>DD-20670.03 LED 27W DD-20671.03 LED 32W (Tunable Color Temperature)</p>	
<p>⌀ 219mm (8 3/5")</p>		<p>DD-20670.04 LED 27W DD-20671.04 LED 32W (Tunable Color Temperature)</p>	
<p>⌀ 219mm (8 3/5")</p>		<p>DD-20670.05 LED 27W DD-20671.05 LED 32W (Tunable Color Temperature)</p>	
<p>⌀ 219mm (8 3/5")</p>		<p>DD-20670.06 LED 27W DD-20671.06 LED 32W (Tunable Color Temperature)</p>	
<p>⌀ 219mm (8 3/5")</p>			



DD-20680 SERIES
Recessed Down Light

Abaco



33W 144 LED

- LED
- 1.5 kg
- White
- Black
- Gray

TRIM & LED HOUSING

AL. Die-Casting, Electrostatic Powder Coating

COVER

PC

LIGHT

LED

INPUT VOLTAGE

220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER (W)	OUTPUT POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	33W	28W	117 lm/W	3,264 lm	23V DC	80
4,000K	32W	27W	112 lm/W	3,021 lm	23V DC	80
3,000K	31W	27W	109 lm/W	2,932 lm	23V DC	80

OUTPUT CURRENT

1,200mA DC (constant current)

OPERATING TEMPERATURE RANGE

-20 to +40°C

MAINTENANCE OF LUMEN -L70

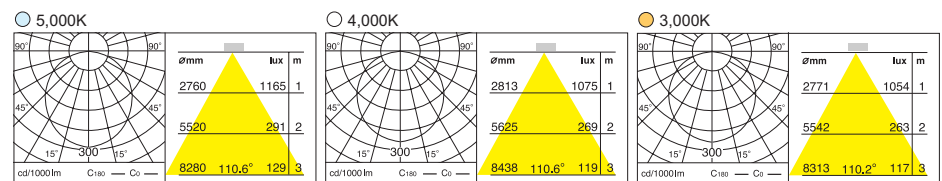
40,000 hours at 25°C

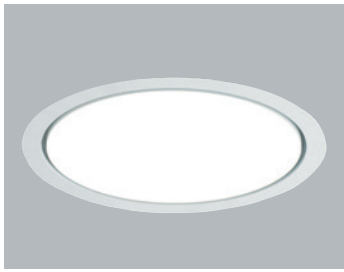
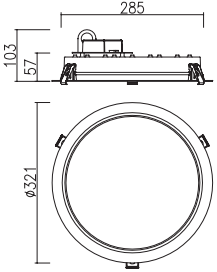
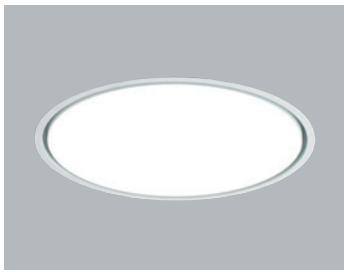
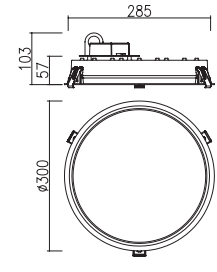

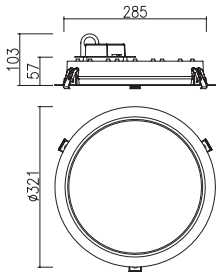

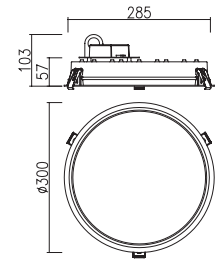
DRIVER LIFETIME

50,000 hours

COLOR TEMPERATURE

5,000K 4,000K 3,000K



	<p>DD-20680.03 LED 33W</p>	
	<p>DD-20680.04 LED 33W</p>	
	<p>DD-20680.05 LED 33W</p>	
	<p>DD-20680.06 LED 33W</p>	

⌀ 296 mm (11 7/10")

⌀ 296 mm (11 7/10")






⌀ 296 mm (11 7/10")

⌀ 296 mm (11 7/10")

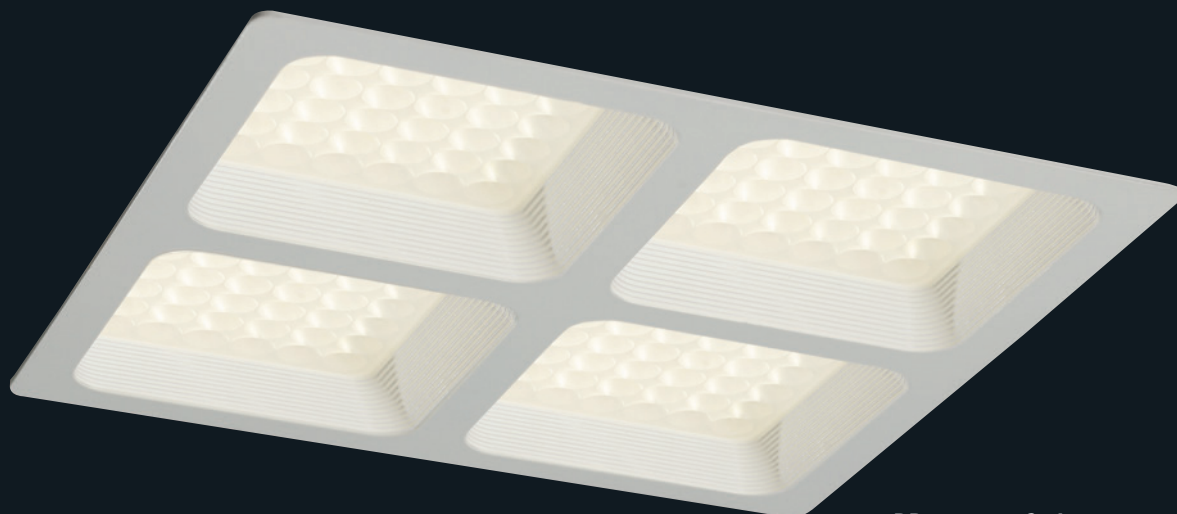
DD-20710 Series

LED DOWN LIGHTS

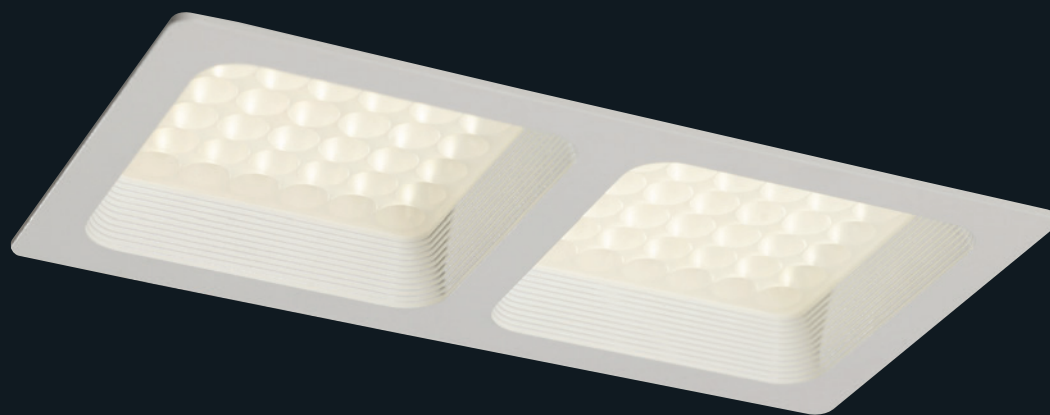


order no.	DD-20710.01 Series	DD-20710.02 Series	DD-20750 Series	DD-20790 Series	DD-20860 Series
LED type	SMD	SMD	SMD	SMD	SMD
LED symbol					
	↓	↓	↓	↓	↓
page	p.188	p.190	p.194	p.200	p.204





DD-20710.01 Series

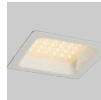


DD-20710.02 Series





DD-20710.01 series
Recessed Down Light



8W 36 LED

- LED
- White
- Black
- Gray

TRIM PC, Urethane Coating
 LED HOUSING & HEAT SINK AL. Die-Casting, Electrostatic Powder Coating
 COVER Housing Cover _ PC

LIGHT LED
 INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

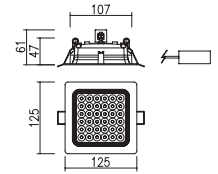
ORDER No.	COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DD-20710.01	5,000K	8W	6W	104 lm/w	635 lm	18V DC	80
DD-20710.01	4,000K	8W	6W	110 lm/w	646 lm	17V DC	80
DD-20710.01	3,000K	8W	6W	107 lm/w	630 lm	17V DC	80
DD-20720.01	5,000K	8W x 2	6W x 2	102 lm/w	1,239 lm	18V DC x 2	80
DD-20720.01	4,000K	8W x 2	6W x 2	106 lm/w	1,256 lm	17V DC x 2	80
DD-20720.01	3,000K	8W x 2	6W x 2	104 lm/w	1,227 lm	17V DC x 2	80
DD-20740.01	5,000K	8W x 4	6W x 4	102 lm/w	2,458 lm	17V DC x 4	80
DD-20740.01	4,000K	8W x 4	6W x 4	102 lm/w	2,472 lm	17V DC x 4	80
DD-20740.01	3,000K	8W x 4	6W x 4	98 lm/w	2,368 lm	17V DC x 4	80

OUTPUT CURRENT 350mA DC (constant current) x 1, 2, 4
 OPERATING TEMPERATURE RANGE -20 to +40°C
 MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
 DRIVER LIFETIME 50,000 hours

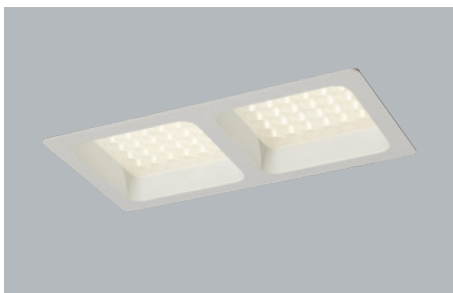
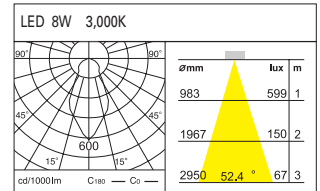
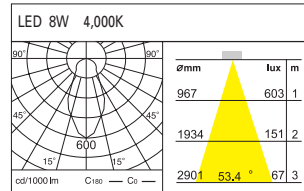
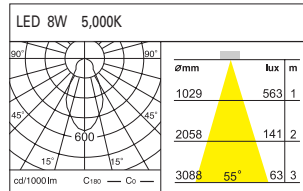
COLOR TEMPERATURE 5,000K 4,000K 3,000K



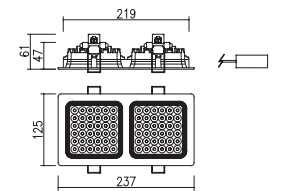
DD-20710.01 LED 8W



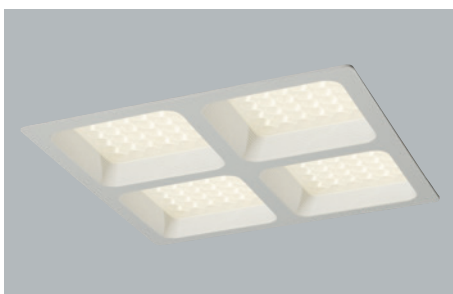
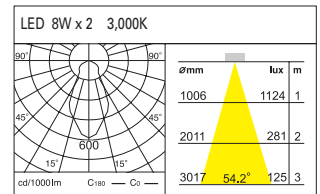
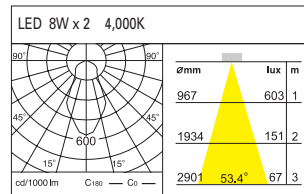
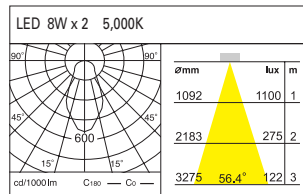
Weight : 0.5kg
 / 114 x 114mm (4 1/2" x 4 1/2")



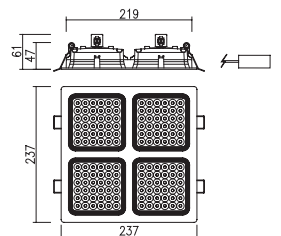
DD-20720.01 LED 8W x 2



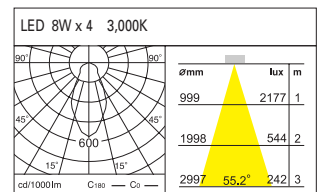
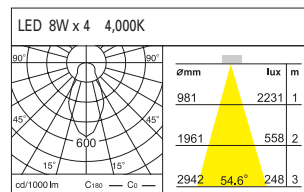
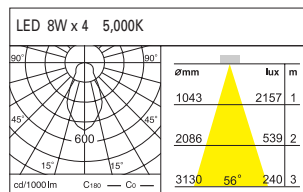
Weight : 1.0kg
 / 226 x 114mm (8 9/10" x 4 1/2")

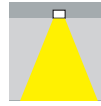


DD-20740.01 LED 8W x 4



Weight : 2.0 kg
 / 226 x 226mm (8 9/10" x 8 9/10")





DD-20710.02 series
Recessed Down Light



10W 48 LED

- LED
- White
- Black
- Gray

TRIM AL. Die-Casting, Electrostatic Powder Coating
 LED HOUSING & HEAT SINK AL. Die-Casting, Electrostatic Powder Coating
 COVER Housing Cover _ PC

LIGHT LED
 INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

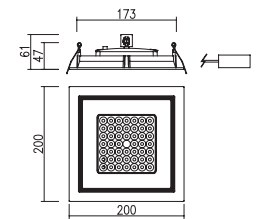
ORDER No.	COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DD-20710.02	5,000K	10W	8W	127 lm/w	1,007 lm	23V DC	80
DD-20710.02	4,000K	10W	8W	114 lm/w	898 lm	23V DC	80
DD-20710.02	3,000K	10W	8W	108 lm/w	852 lm	23V DC	80
DD-20720.02	5,000K	10W x 2	8W x 2	118 lm/w	1,883 lm	23V DC x 2	80
DD-20720.02	4,000K	10W x 2	8W x 2	114 lm/w	1,810 lm	23V DC x 2	80
DD-20720.02	3,000K	10W x 2	8W x 2	108 lm/w	1,722 lm	23V DC x 2	80

OUTPUT CURRENT 350mA DC (constant current) x 1, 2
 OPERATING TEMPERATURE RANGE -20 to +40°C
 MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
 DRIVER LIFETIME 50,000 hours

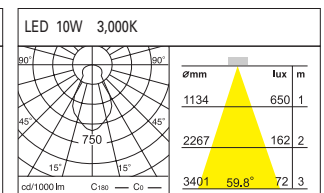
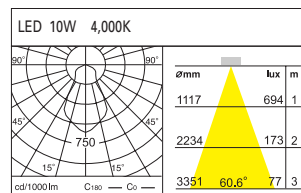
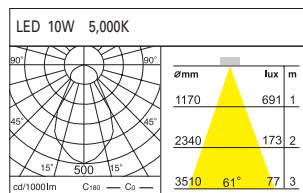
COLOR TEMPERATURE 5,000K 4,000K 3,000K



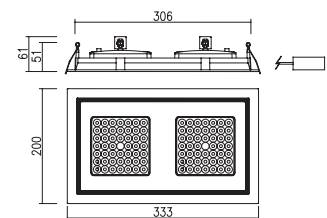
DD-20710.02 LED 10W



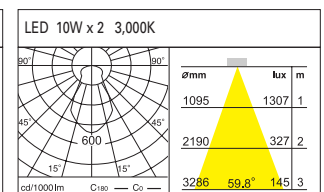
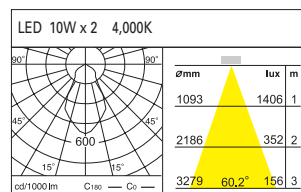
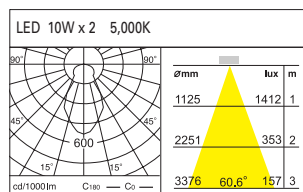
Weight : 1.0kg
 180 x 180mm (7 1/10" x 7 1/10")

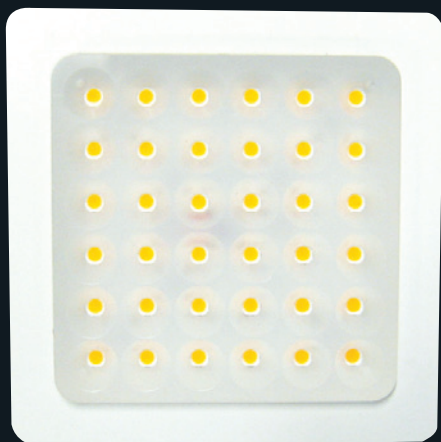


DD-20720.02 LED 10W x 2



Weight : 2.0kg
 310 x 180mm (12 1/5" x 7 1/10")





PRODUCT PROFILE

This new LED Downlight system is all in one lighting fixture which is combined fitting and heat sink and also consists of very simple and sturdy design.

- Polycarbonate cover
- Color Temperature (5,000K / 4,000K / 3,000K)

* Average life time 40,000 hours
(Life time could be flexible depends on environmental situation.)





DD-20750
Recessed Down Light



6W 24 LED

- LED
- 0.2 kg
- White
- Black
- Gray

TRIM & LED HOUSING & HEAT SINK AL. Die-Casting, Electrostatic Powder Coating
COVER Housing Cover _ PC

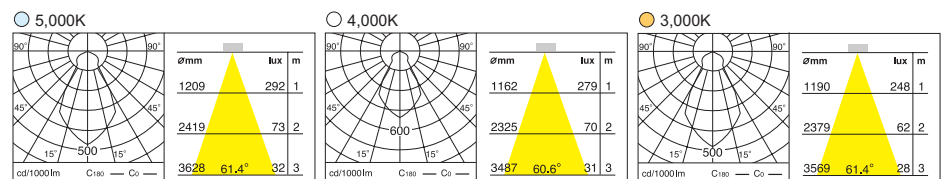
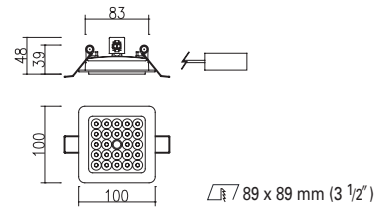
LIGHT LED
INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 5,000K	6W	4W	94 lm/w	403 lm	12V DC	78
○ 4,000K	6W	4W	89 lm/w	376 lm	12V DC	80
● 3,000K	6W	4W	79 lm/w	335 lm	12V DC	80

OUTPUT CURRENT 350mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40°C
MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
DRIVER LIFETIME 50,000 hours

COLOR TEMPERATURE ● 5,000K ○ 4,000K ● 3,000K

DRAWING





DD-20760
Recessed Down Light



8W 36 LED

- LED
- 0.3 kg
- White
- Black
- Gray

TRIM & LED HOUSING & HEAT SINK AL. Die-Casting, Electrostatic Powder Coating
COVER Housing Cover _ PC

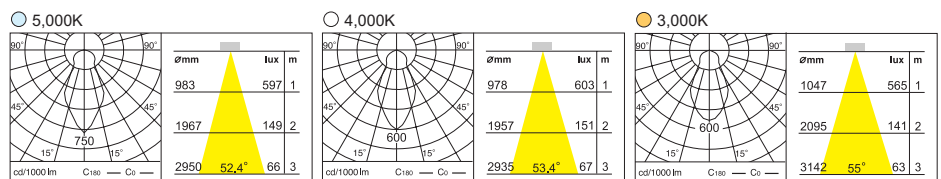
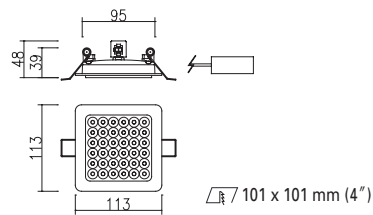
LIGHT LED
INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 5,000K	8W	6W	104 lm/w	635 lm	18V DC	80
○ 4,000K	8W	6W	110 lm/w	646 lm	17V DC	80
● 3,000K	8W	6W	107 lm/w	630 lm	17V DC	80

OUTPUT CURRENT 350mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40°C
MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
DRIVER LIFETIME 50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20770
Recessed Down Light



10W 48 LED

- LED
- 0.4 kg
- White
- Black
- Gray

TRIM & LED HOUSING & HEAT SINK AL. Die-Casting, Electrostatic Powder Coating
COVER Housing Cover _ PC

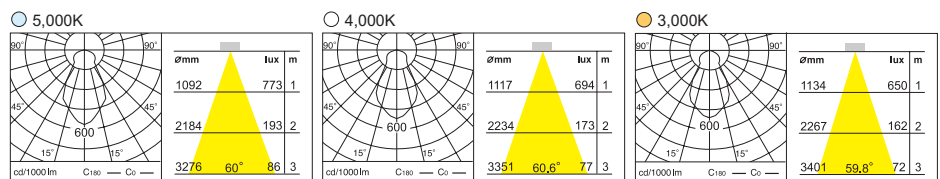
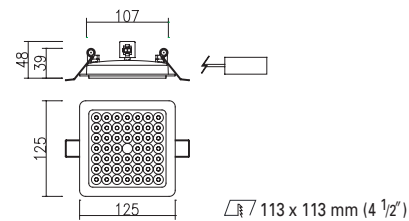
LIGHT LED
INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 5,000K	10W	8W	128 lm/w	1,007 lm	23V DC	80
○ 4,000K	10W	8W	114 lm/w	898 lm	23V DC	80
● 3,000K	10W	8W	108 lm/w	852 lm	23V DC	80

OUTPUT CURRENT 350mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40°C
MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
DRIVER LIFETIME 50,000 hours

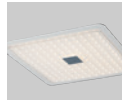
COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20780
Recessed Down Light



28W 144 LED

- LED
- 1.4 kg
- White
 - Black
 - Gray

TRIM & LED HOUSING & HEAT SINK AL. Die-Casting, Electrostatic Powder Coating
COVER Housing Cover _ PC

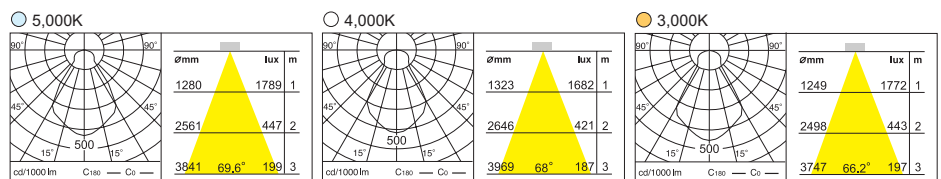
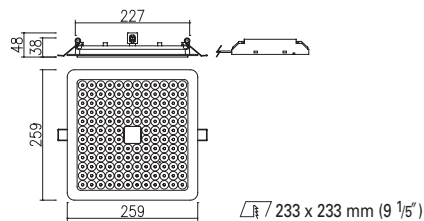
LIGHT LED
INPUT VOLTAGE 220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 5,000K	28W	23W	122 lm/w	2,750 lm	23V DC	80
○ 4,000K	28W	23W	113 lm/w	2,547 lm	23V DC	80
● 3,000K	28W	23W	108 lm/w	2,584 lm	23V DC	80

OUTPUT CURRENT 1,000mA DC (constant current)
OPERATING TEMPERATURE RANGE -20 to +40°C
MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
DRIVER LIFETIME 50,000 hours

COLOR TEMPERATURE ● 5,000K ○ 4,000K ● 3,000K

DRAWING







PC Cover Type LED DOWN Light
300mm



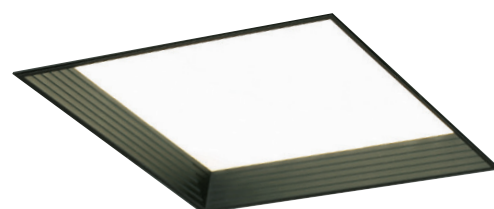
PC Cover Type LED DOWN Light
220mm



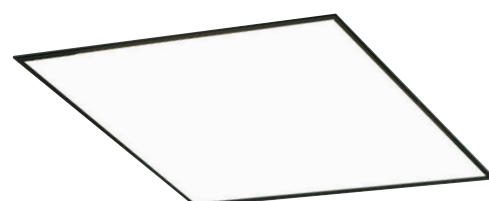
PC Cover Type LED DOWN Light
200mm



PC Cover Type LED DOWN Light
157mm



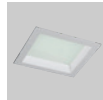
PC Cover LED TRIMLESS DOWN Light
210mm



PC Cover LED TRIMLESS DOWN Light
210mm



DD-20790
Recessed Down Light



12W 66 LED

- LED
- 0.6 kg
- White
- Black
- Gray

TRIM	PC, Urethane Coating
HOUSING	Steel
ACCESSORY	Housing Cover _ Square PC Plate
HEAT SINK	AL. Die-Casting

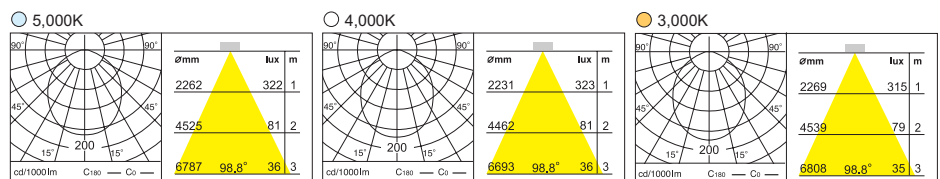
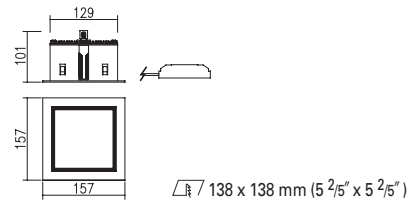
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	12W	11W	72 lm/w	777 lm	31V DC	80
4,000K	12W	11W	72 lm/w	775 lm	31V DC	80
3,000K	12W	11W	70 lm/w	757 lm	31V DC	80

OUTPUT CURRENT	350mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20800
Recessed Down Light



17W 77 LED

- LED
- 1.0 kg
- White
- Black
- Gray

TRIM	PC, Urethane Coating
HOUSING	Steel
ACCESSORY	Housing Cover _ Square PC Plate
HEAT SINK	AL. Die-Casting

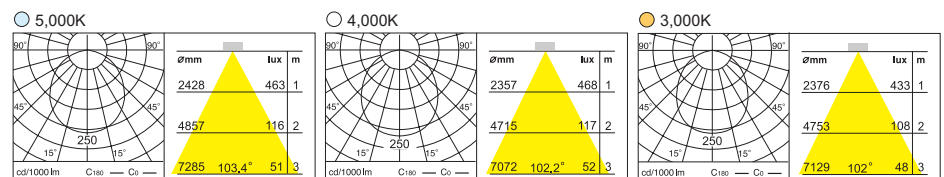
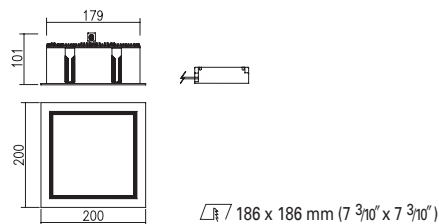
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

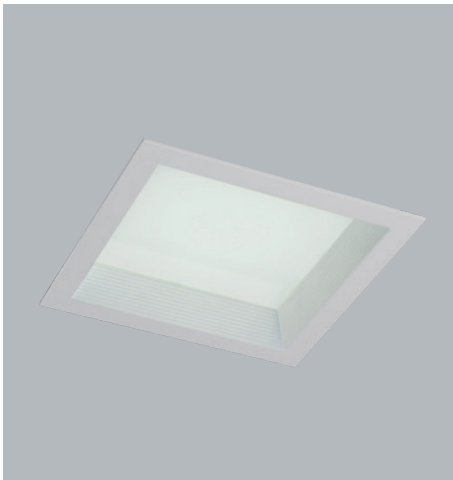
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	17W	14W	85 lm/w	1,192 lm	20V DC	80
4,000K	16W	14W	84 lm/w	1,173 lm	20V DC	80
3,000K	17W	14W	76 lm/w	1,088 lm	21V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

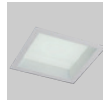
COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20810
Recessed Down Light



19W 88 LED

- LED
- 1.3 kg
- White
- Black
- Gray

TRIM	PC, Urethane Coating
HOUSING	Steel
ACCESSORY	Housing Cover _ Square PC Plate
HEAT SINK	AL. Die-Casting

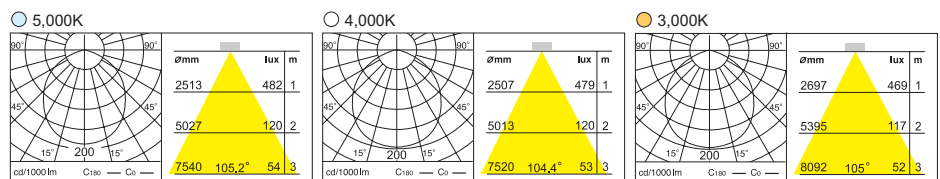
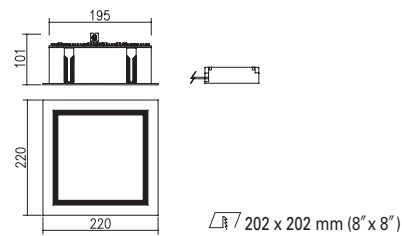
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

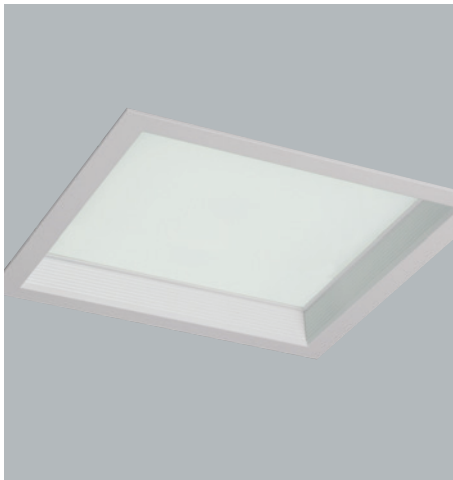
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 5,000K	19W	16W	77 lm/w	1,251 lm	23V DC	80
○ 4,000K	19W	16W	78 lm/w	1,224 lm	23V DC	80
● 3,000K	19W	16W	76 lm/w	1,213 lm	23V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

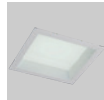
COLOR TEMPERATURE ● 5,000K ○ 4,000K ● 3,000K

DRAWING





DD-20820
Recessed Down Light



27W 120 LED

- LED
- 2.2 kg
- White
- Black
- Gray

TRIM	PC, Urethane Coating
HOUSING	Steel
ACCESSORY	Housing Cover _ Square PC Plate
HEAT SINK	AL. Die-Casting

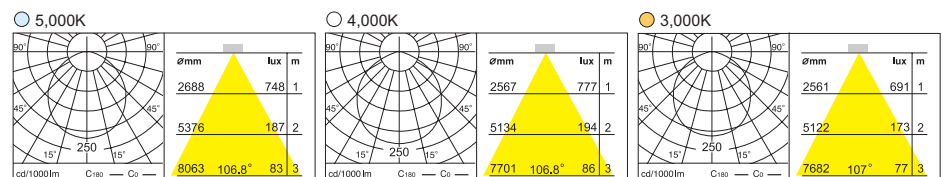
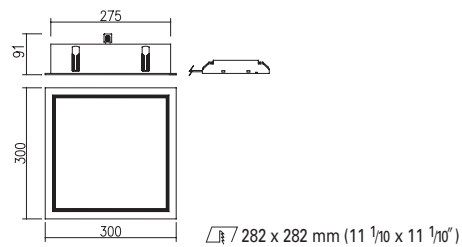
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

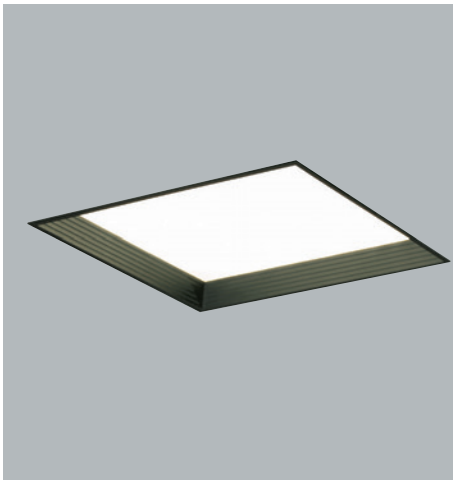
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX CRI
5,000K	27W	21W	94 lm/w	1,985 lm	18V DC	80
4,000K	26W	21W	99 lm/w	2,068 lm	17V DC	80
4,000K	27W	22W	84 lm/w	1,836 lm	18V DC	80

OUTPUT CURRENT	1,200mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

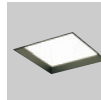
COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20860
Recessed Trimless Down Light



19W 88 LED

- LED
- 0.5 kg
- White
- Black
- Gray

TRIMLESS KIT	Aluminium, Electrostatic Powder Coating & Steel
HOUSING	Steel
ACCESSORY	Housing Cover _ Square PC Plate

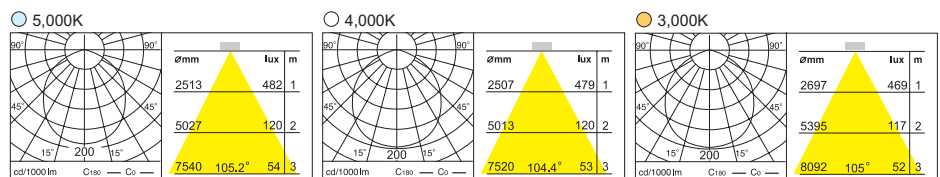
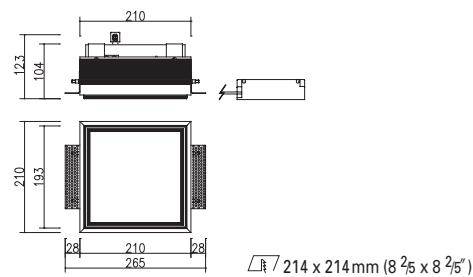
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

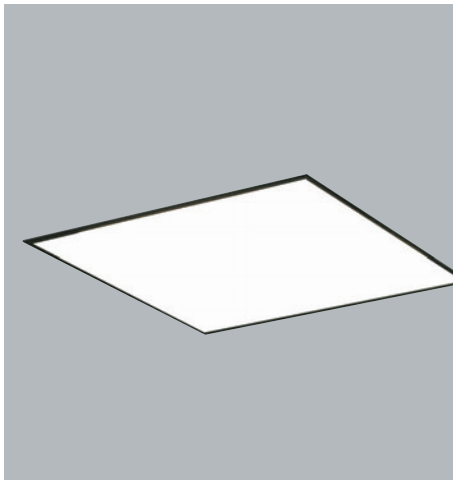
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
<input type="radio"/> 5,000K	19W	16W	77 lm/w	1,251 lm	23V DC	80
<input type="radio"/> 4,000K	19W	16W	78 lm/w	1,224 lm	23V DC	80
<input checked="" type="radio"/> 3,000K	19W	16W	76 lm/w	1,213 lm	23V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

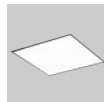
COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING





DD-20870
Recessed Trimless Down Light



19W 88 LED

- LED
- 0.5 kg
- White
- Black
- Gray

TRIMLESS KIT	Aluminium, Electrostatic Powder Coating & Steel
HOUSING	Steel
ACCESSORY	Housing Cover _ Square PC Plate

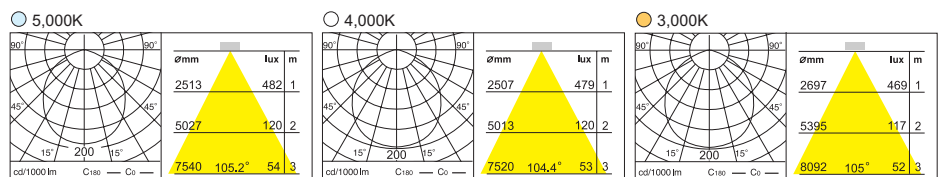
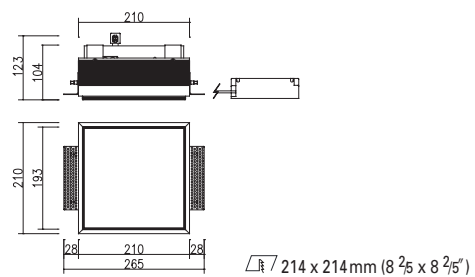
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
<input type="radio"/> 5,000K	19W	16W	77 lm/w	1,251 lm	23V DC	80
<input type="radio"/> 4,000K	19W	16W	78 lm/w	1,224 lm	23V DC	80
<input checked="" type="radio"/> 3,000K	19W	16W	76 lm/w	1,213 lm	23V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours

COLOR TEMPERATURE 5,000K 4,000K 3,000K

DRAWING







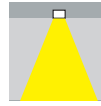
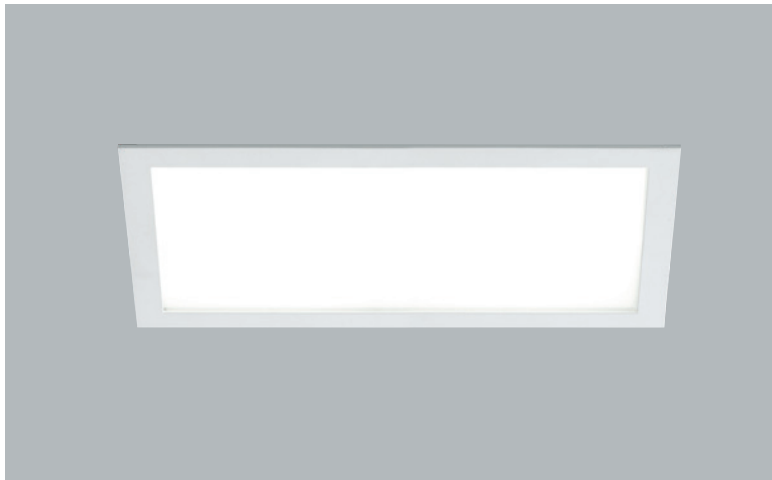


DD-20830 Series

LED DOWN LIGHTS



order no.	DD-20830.01 Series	DD-20830.02 Series	DD-20830.03 Series	DD-20830.04 Series
LED type	SMD	SMD	SMD	SMD
LED symbol				
	↓	↓	↓	↓
page	p.208	p.210	p.212	p.214



DD-20830.01 series
Recessed Down Light



14W 30 LED x 1, 2
19W 56 LED x 1, 2

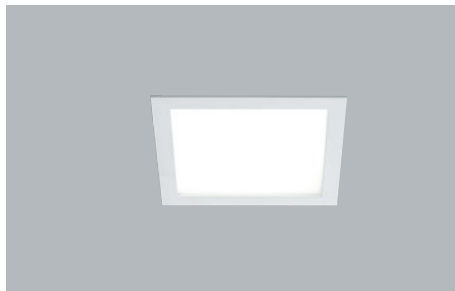


TRIM	AL. Die-Casting, Electrostatic Powder Coating
LED HOUSING	Steel
COVER	Housing Cover _ PC

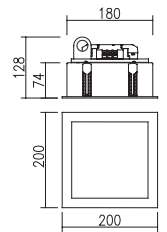
LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

ORDER No.	COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DD-20830.01	5,000K	14W	10W	88 lm/w	931 lm	30V DC	80
DD-20830.01	4,000K	14W	10W	84 lm/w	892 lm	30V DC	80
DD-20830.01	3,000K	14W	10W	84 lm/w	877 lm	30V DC	80
DD-20831.01	5,000K	19W	16W	87 lm/w	1,429 lm	24V DC	80
DD-20831.01	4,000K	19W	16W	83 lm/w	1,371 lm	24V DC	80
DD-20831.01	3,000K	19W	16W	81 lm/w	1,324 lm	24V DC	80
DD-20840.01	5,000K	14W x 2	10W x 2	96 lm/w	2,003 lm	30V DC x 2	80
DD-20840.01	4,000K	14W x 2	10W x 2	90 lm/w	1,915 lm	30V DC x 2	80
DD-20840.01	3,000K	14W x 2	10W x 2	88 lm/w	1,888 lm	30V DC x 2	80
DD-20841.01	5,000K	19W x 2	16W x 2	87 lm/w	2,865 lm	24V DC x 2	80
DD-20841.01	4,000K	19W x 2	16W x 2	83 lm/w	2,751 lm	24V DC x 2	80
DD-20841.01	3,000K	19W x 2	16W x 2	81 lm/w	2,653 lm	24V DC x 2	80

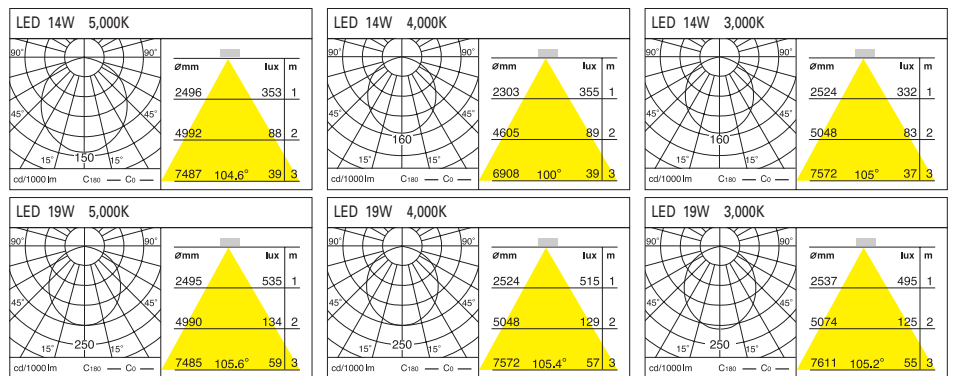
OUTPUT CURRENT	350mA DC (constant current) x 1, 2 / 700mA DC (constant current) x 1, 2
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K



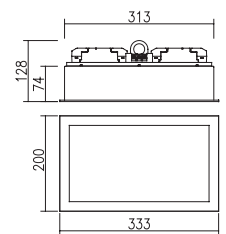
DD-20830.01 LED 14W
 DD-20831.01 LED 19W



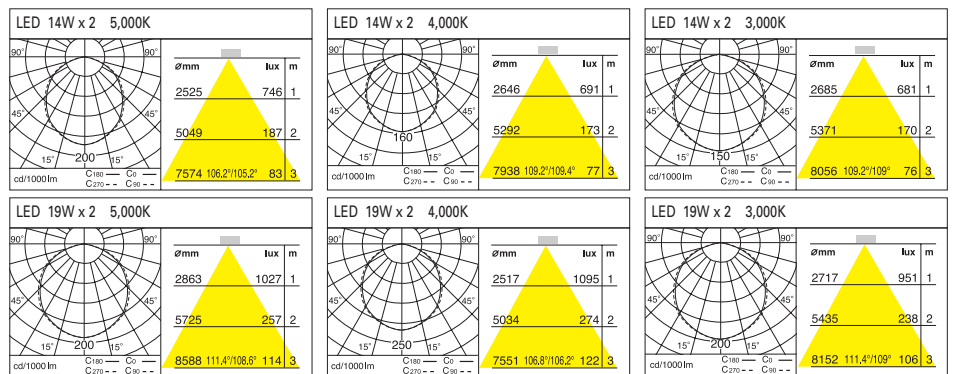
Weight : 1.1kg
 185 x 185mm (7 3/10 x 7 3/10")

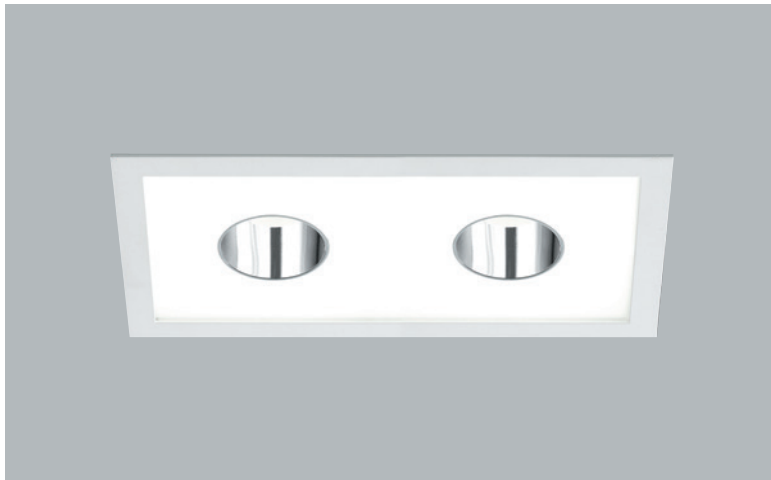


DD-20840.01 LED 14W x 2
 DD-20841.01 LED 19W x 2



Weight : 1.7kg
 320 x 185mm (12 1/10 x 7 3/10")





DD-20830.02 series
Recessed Down Light



14W 30 LED x 1, 2
19W 56 LED x 1, 2

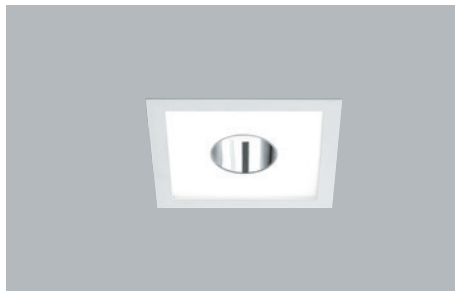
- White
- Black
- Gray

TRIM	AL. Die-Casting, Electrostatic Powder Coating
LED HOUSING	Steel
COVER	Housing Cover _ PC
REFLECTOR	PC

LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

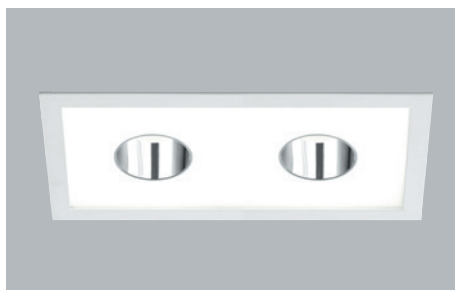
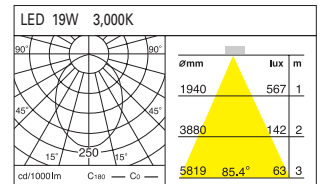
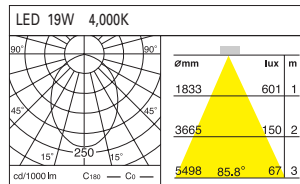
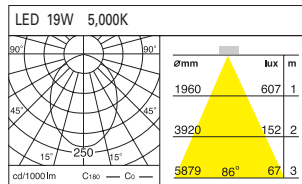
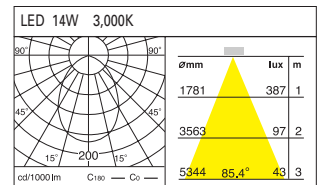
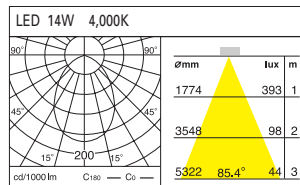
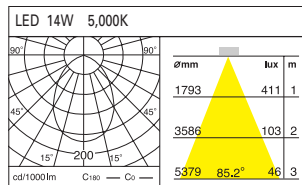
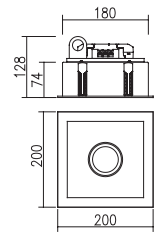
ORDER No.	COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DD-20830.02	5,000K	14W	10W	80 lm/w	852 lm	30V DC	80
DD-20830.02	4,000K	14W	10W	77 lm/w	819 lm	30V DC	80
DD-20830.02	3,000K	14W	10W	78 lm/w	806 lm	30V DC	80
DD-20831.02	5,000K	19W	16W	78 lm/w	1,283 lm	24V DC	80
DD-20831.02	4,000K	19W	16W	77 lm/w	1,266 lm	24V DC	80
DD-20831.02	3,000K	19W	16W	72 lm/w	1,185 lm	24V DC	80
DD-20840.02	5,000K	14W x 2	10W x 2	89 lm/w	1,845 lm	30V DC x 2	80
DD-20840.02	4,000K	14W x 2	10W x 2	85 lm/w	1,812 lm	30V DC x 2	80
DD-20840.02	3,000K	14W x 2	10W x 2	82 lm/w	1,750 lm	30V DC x 2	80
DD-20841.02	5,000K	19W x 2	16W x 2	83 lm/w	2,732 lm	24V DC x 2	80
DD-20841.02	4,000K	19W x 2	16W x 2	80 lm/w	2,632 lm	24V DC x 2	80
DD-20841.02	3,000K	19W x 2	16W x 2	80 lm/w	2,537 lm	24V DC x 2	80

OUTPUT CURRENT	350mA DC (constant current) x 1, 2 / 700mA DC (constant current) x 1, 2
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K



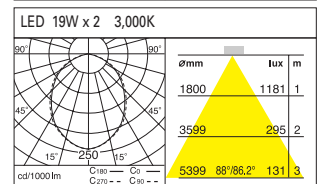
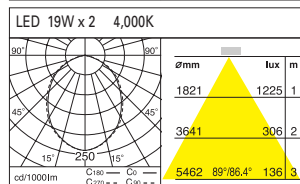
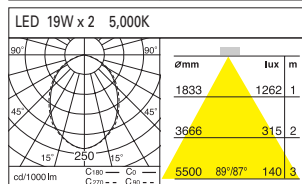
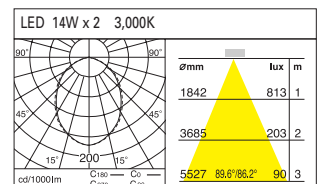
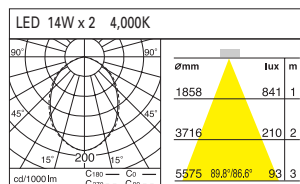
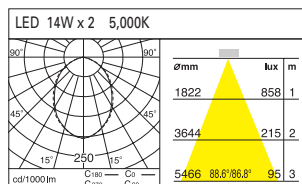
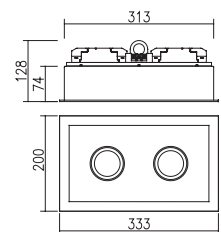
DD-20830.02 LED 14W
DD-20831.02 LED 19W

Weight : 1.1kg
185 x 185mm (7 3/10 x 7 3/10")



DD-20840.02 LED 14W x 2
DD-20841.02 LED 19W x 2

Weight : 1.7kg
320 x 185mm (12 1/10 x 7 3/10")





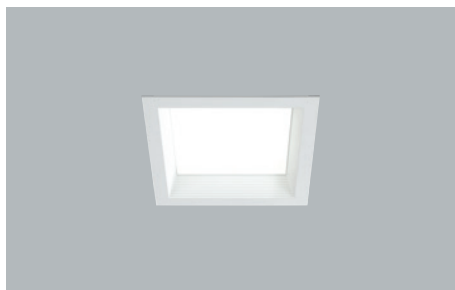
DD-20830.03 series
Recessed Down Light



14W 30 LED x 1, 2
19W 56 LED x 1, 2

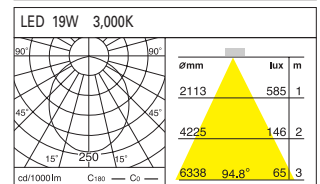
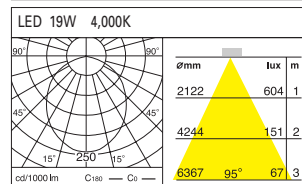
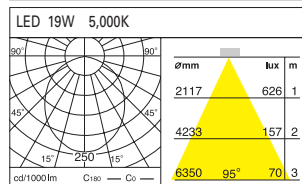
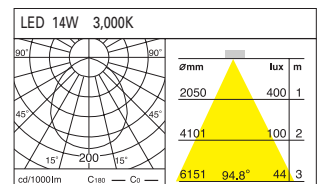
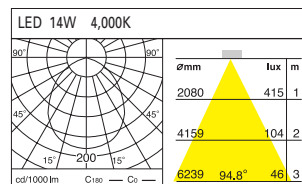
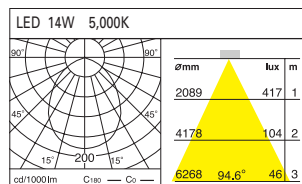
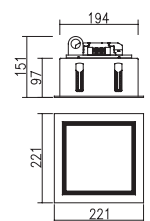
- LED
- White
- Black
- Gray

TRIM	AL. Die-Casting, Electrostatic Powder Coating						
LED HOUSING	Steel						
COVER	Housing Cover _ PC						
LIGHT	LED						
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)						
ORDER No.	COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DD-20830.03	○ 5,000K	14W	10W	90 lm/w	954 lm	30V DC	80
DD-20830.03	○ 4,000K	14W	10W	90 lm/w	950 lm	30V DC	80
DD-20830.03	● 3,000K	14W	10W	88 lm/w	916 lm	30V DC	80
DD-20831.03	○ 5,000K	19W	16W	88 lm/w	1,440 lm	24V DC	80
DD-20831.03	○ 4,000K	19W	16W	84 lm/w	1,384 lm	24V DC	80
DD-20831.03	● 3,000K	19W	16W	82 lm/w	1,335 lm	24V DC	80
DD-20840.03	○ 5,000K	14W x 2	10W x 2	85 lm/w	1,772 lm	30V DC x 2	80
DD-20840.03	○ 4,000K	14W x 2	10W x 2	82 lm/w	1,735 lm	30V DC x 2	80
DD-20840.03	● 3,000K	14W x 2	10W x 2	81 lm/w	1,734 lm	30V DC x 2	80
DD-20841.03	○ 5,000K	19W x 2	16W x 2	82 lm/w	2,702 lm	24V DC x 2	80
DD-20841.03	○ 4,000K	19W x 2	16W x 2	79 lm/w	2,593 lm	24V DC x 2	80
DD-20841.03	● 3,000K	19W x 2	16W x 2	76 lm/w	2,482 lm	24V DC x 2	80
OUTPUT CURRENT	350mA DC (constant current) x 1, 2 / 700mA DC (constant current) x 1, 2						
OPERATING TEMPERATURE RANGE	-20 to +40°C						
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C						
DRIVER LIFETIME	50,000 hours						
COLOR TEMPERATURE	○ 5,000K ○ 4,000K ● 3,000K						



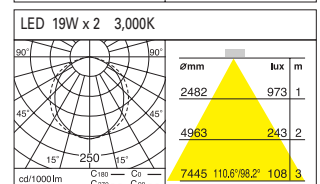
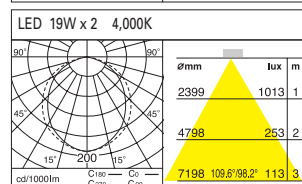
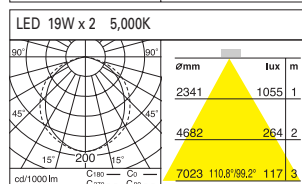
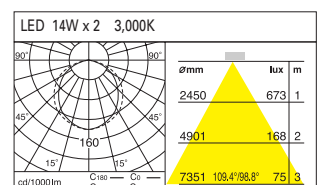
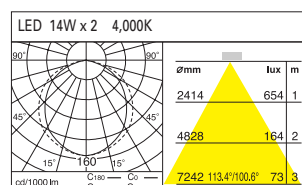
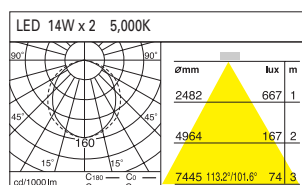
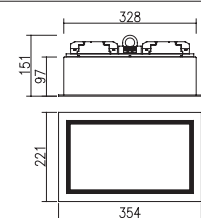
DD-20830.03 LED 14W
DD-20831.03 LED 19W

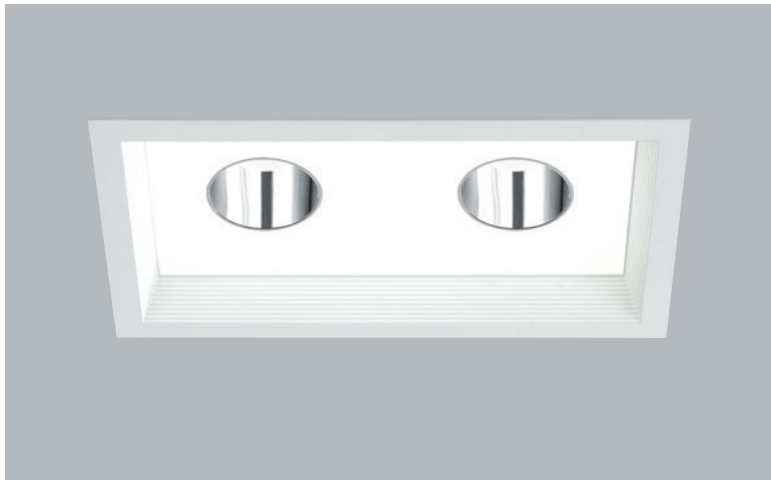
Weight : 1.3kg
Size / 200 x 200mm (7 7/8 x 7 7/8")



DD-20840.03 LED 14W x 2
DD-20841.03 LED 19W x 2

Weight : 1.7kg
Size / 335 x 200 mm (13 1/5 x 7 7/8")





DD-20830.04 series
Recessed Down Light



14W 30 LED x 1, 2
19W 56 LED x 1, 2

- LED
- White
- Black
- Gray

TRIM	AL. Die-Casting, Electrostatic Powder Coating
LED HOUSING	Steel
COVER	Housing Cover _ PC
REFLECTOR	PC

LIGHT	LED
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)

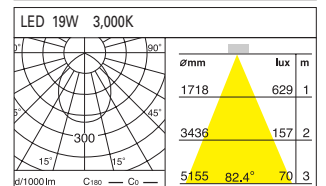
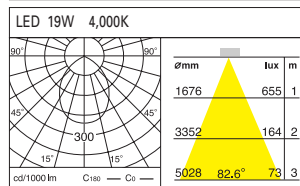
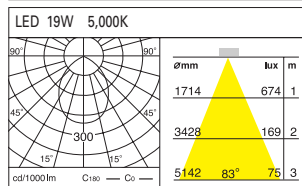
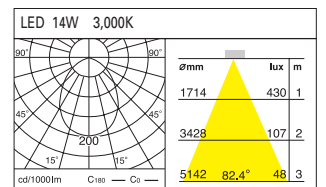
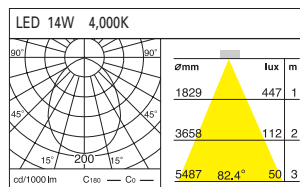
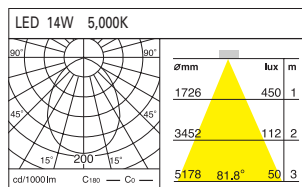
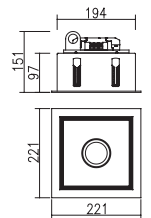
ORDER No.	COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DD-20830.04	5,000K	14W	10W	82lm/w	872 lm	30V DC	80
DD-20830.04	4,000K	14W	10W	82 lm/w	866 lm	30V DC	80
DD-20830.04	3,000K	14W	10W	80 lm/w	836 lm	30V DC	80
DD-20831.04	5,000K	19W	16W	81 lm/w	1,324 lm	24V DC	80
DD-20831.04	4,000K	19W	16W	78 lm/w	1,279 lm	24V DC	80
DD-20831.04	3,000K	19W	16W	75 lm/w	1,224 lm	24V DC	80
DD-20840.04	5,000K	14W x 2	10W x 2	81 lm/w	1,684 lm	30V DC x 2	80
DD-20840.04	4,000K	14W x 2	10W x 2	78 lm/w	1,650 lm	30V DC x 2	80
DD-20840.04	3,000K	14W x 2	10W x 2	75 lm/w	1,609 lm	30V DC x 2	80
DD-20841.04	5,000K	19W x 2	16W x 2	76 lm/w	2,486 lm	24V DC x 2	80
DD-20841.04	4,000K	19W x 2	16W x 2	72 lm/w	2,391 lm	24V DC x 2	80
DD-20841.04	3,000K	19W x 2	16W x 2	71 lm/w	2,298 lm	24V DC x 2	80

OUTPUT CURRENT	350mA DC (constant current) x 1, 2 / 700mA DC (constant current) x 1, 2
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	40,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K



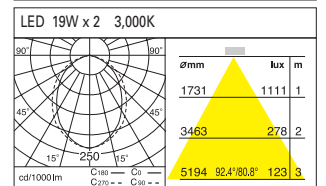
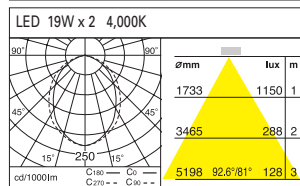
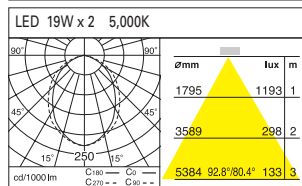
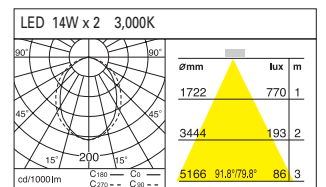
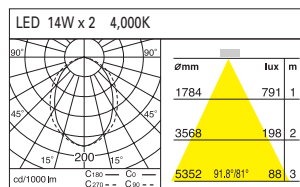
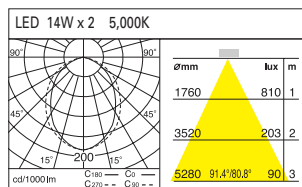
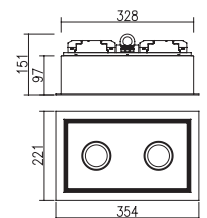
DD-20830.04 LED 14W
DD-20831.04 LED 19W

Weight : 1.3kg
200 x 200mm (7 7/8 x 7 7/8")



DD-20840.04 LED 14W x 2
DD-20841.04 LED 19W x 2

Weight : 1.7kg
335 x 200 mm (13 1/5 x 7 7/8")







DD-20910.02 Series

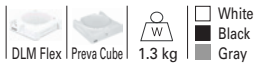
LED DOWN LIGHTS



order no.	DD-20910.02 Series	DD-20960 Series
LED type	Fortimo DLM Flex Preva Cube	Fortimo DLM Flex Preva Cube
LED symbol		
	↓	↓
page	p.218	p.220



DD-20910.02
Recessed Down Light



PHILIPS OSRAM

TRIM	AL. Die-Casting, Electrostatic Powder Coating
LED HOUSING	Steel
REFLECTOR	AL. Sanding
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

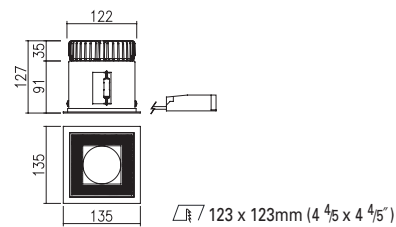
LIGHT Fortimo DLM Flex, Preva Cube

INPUT VOLTAGE 220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-20910.02	2000	5,000K	21W	16.5W	96 lm/w	1,678 lm	80
DD-20910.02	2000	4,000K	21W	16.5W	97 lm/w	1,692 lm	80
DD-20910.02	2000	3,000K	22W	18.1W	89 lm/w	1,703 lm	80
DD-20912.02	3000	5,000K	31W	24.6W	99 lm/w	2,560 lm	80
DD-20912.02	3000	4,000K	30W	24.7W	97 lm/w	2,511 lm	80
DD-20912.02	3000	3,000K	32W	27W	92 lm/w	2,546 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

DRAWING



* Caution : Please be aware that it could not be worked properly in condition of ambient temperature over 35degree.



	4,000K	4,000K	3,000K																																				
DD-20910.02 Series	<p>Fortimo DLM Flex 2000 (5,000K)</p> <table border="1"> <thead> <tr> <th>ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1472</td> <td>1118</td> <td>1</td> </tr> <tr> <td>2945</td> <td>280</td> <td>2</td> </tr> <tr> <td>4417</td> <td>124</td> <td>3</td> </tr> </tbody> </table>	ømm	lux	m	1472	1118	1	2945	280	2	4417	124	3	<p>Fortimo DLM Flex 2000 (4,000K)</p> <table border="1"> <thead> <tr> <th>ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1497</td> <td>1146</td> <td>1</td> </tr> <tr> <td>2994</td> <td>286</td> <td>2</td> </tr> <tr> <td>4490</td> <td>127</td> <td>3</td> </tr> </tbody> </table>	ømm	lux	m	1497	1146	1	2994	286	2	4490	127	3	<p>Fortimo DLM Flex 2000 (3,000K)</p> <table border="1"> <thead> <tr> <th>ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1376</td> <td>1149</td> <td>1</td> </tr> <tr> <td>2753</td> <td>287</td> <td>2</td> </tr> <tr> <td>4129</td> <td>126</td> <td>3</td> </tr> </tbody> </table>	ømm	lux	m	1376	1149	1	2753	287	2	4129	126	3
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DD-20912.02 Series	<p>Fortimo DLM Flex 3000 (5,000K)</p> <table border="1"> <thead> <tr> <th>ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1493</td> <td>1717</td> <td>1</td> </tr> <tr> <td>2986</td> <td>429</td> <td>2</td> </tr> <tr> <td>4478</td> <td>191</td> <td>3</td> </tr> </tbody> </table>	ømm	lux	m	1493	1717	1	2986	429	2	4478	191	3	<p>Fortimo DLM Flex 3000 (4,000K)</p> <table border="1"> <thead> <tr> <th>ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1498</td> <td>1681</td> <td>1</td> </tr> <tr> <td>2996</td> <td>420</td> <td>2</td> </tr> <tr> <td>4494</td> <td>187</td> <td>3</td> </tr> </tbody> </table>	ømm	lux	m	1498	1681	1	2996	420	2	4494	187	3	<p>Fortimo DLM Flex 3000 (3,000K)</p> <table border="1"> <thead> <tr> <th>ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1465</td> <td>1711</td> <td>1</td> </tr> <tr> <td>2929</td> <td>428</td> <td>2</td> </tr> <tr> <td>4394</td> <td>190</td> <td>3</td> </tr> </tbody> </table>	ømm	lux	m	1465	1711	1	2929	428	2	4394	190	3
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DD-20960 series
Recessed Down Light



PHILIPS OSRAM

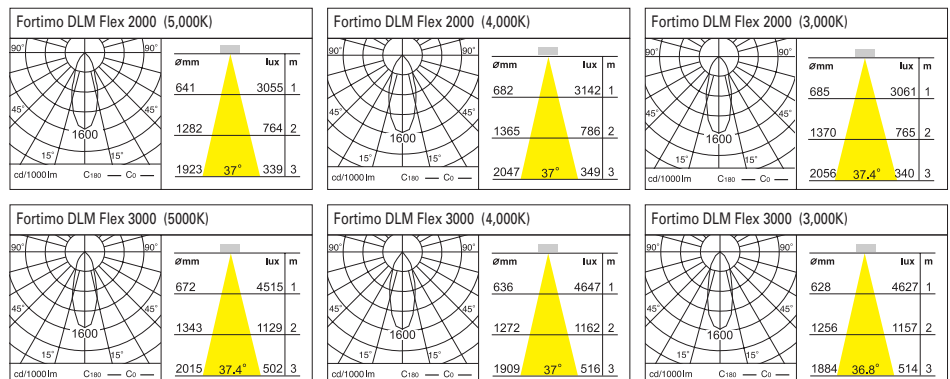
TRIM	AL. Die-Casting, Electrostatic Powder Coating
LED HOUSING	Steel
REFLECTOR	AL. Anodized Specular Silver
HEAT SINK	AL. Die-Casting, Electro Deposition Coating

LIGHT	Fortimo DLM Flex, Preva Cube
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DD-20960	2000	5,000K	21W	16.5W	105 lm/w	1,832 lm	80
DD-20960	2000	4,000K	21W	16.5W	108 lm/w	1,874 lm	80
DD-20960	2000	3,000K	22W	18.1W	96 lm/w	1,847 lm	80
DD-20962	3000	5,000K	31W	24.6W	107 lm/w	2,759 lm	80
DD-20962	3000	4,000K	30W	24.7W	109 lm/w	2,810 lm	80
DD-20962	3000	3,000K	32W	27W	100 lm/w	2,777 lm	80

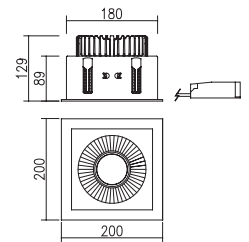
OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

* Caution : Please be aware that it could not be worked properly in condition of ambient temperature over 35degree.





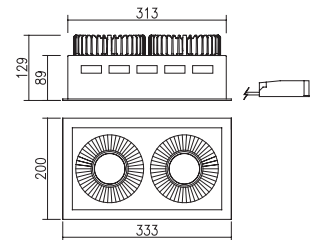
DD-20960 Fortimo DLM Flex 2000
 DD-20962 Fortimo DLM Flex 3000



Weight : 1.3kg
 185 x 185 mm (7 3/10" x 7 3/10")



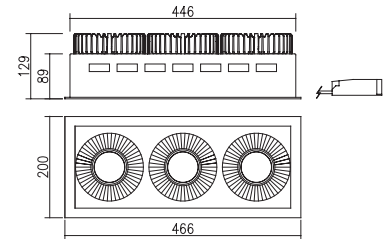
DD-20970 Fortimo DLM Flex 2000 x 2
 DD-20972 Fortimo DLM Flex 3000 x 2



Weight : 2.2kg
 320 x 185 mm (12 3/5" x 7 3/10")



DD-20980 Fortimo DLM Flex 2000 x 3
 DD-20982 Fortimo DLM Flex 3000 x 3

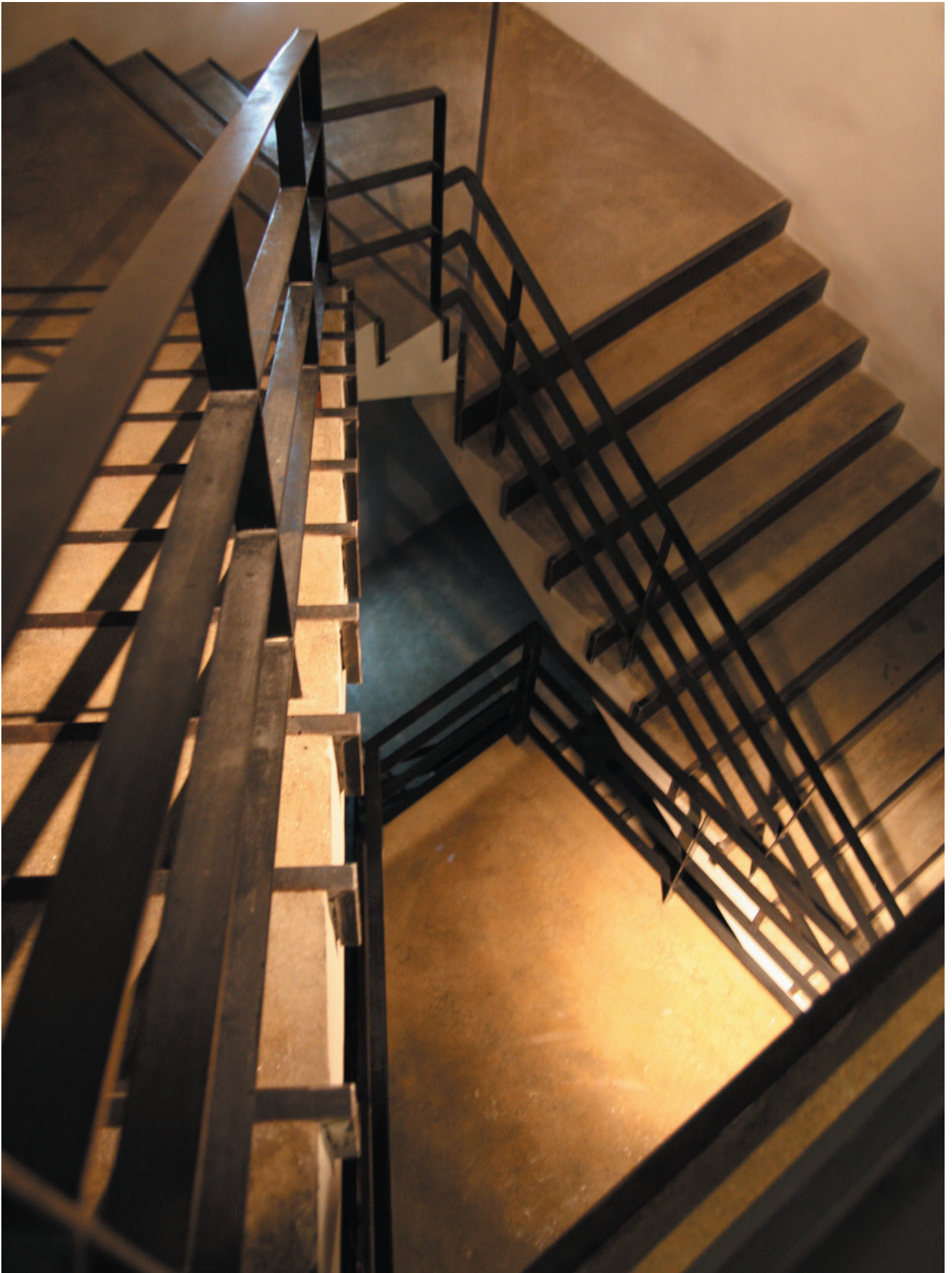


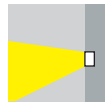
Weight : 3.2kg
 455 x 185 mm (18" x 7 3/10")

DD-38040 Series

LED WALL & CEILING LIGHTS



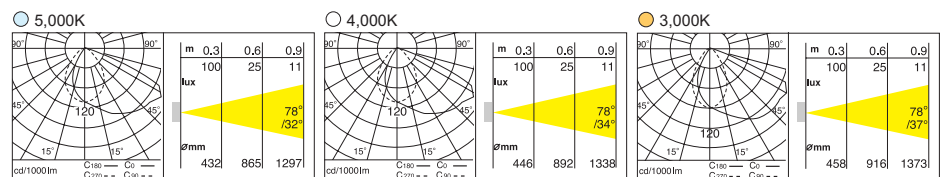


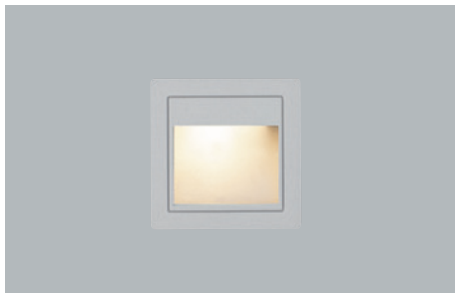


DD-38040 SERIES
Wall & Ceiling Light

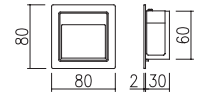
-  LED
-  0.2 kg
- 
 - White
 - Black
 - Gray

HOUSING	PC. Urethane Coating
REFLECTOR	AL. Plate
LIGHT	LED
INPUT VOLTAGE	200-240V AC , 50-60Hz
INPUT POWER	2W (nominal)
OUTPUT POWER	1W (nominal)
LUMINOUS FLUX (lm)	22 lm (5,000K) / 23 lm (4,000K) / 23 lm (3,000K)
OUTPUT VOLTAGE	3V DC (nominal)
OUTPUT CURRENT	350mA DC (constant current)
COLOR RENDERING INDEX _CRI	78 (5,000K) / 80 (4,000K) / 80 (3,000K)
OPERATING TEMPERATURE RANGE	-20 to +40°C
MAINTENANCE OF LUMEN -L70	25,000 hours at 25°C
DRIVER LIFETIME	25,000 hours
COLOR TEMPERATURE	<input type="radio"/> 5,000K <input type="radio"/> 4,000K <input checked="" type="radio"/> 3,000K





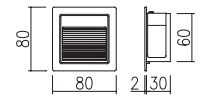
DD-38040 LED



△ 68 x 68mm (2 7/10" x 2 7/10")



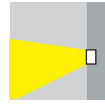
DD-38050 LED



△ 68 x 68mm (2 7/10" x 2 7/10")

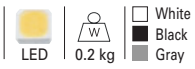




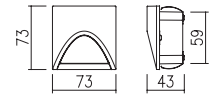


DD-38170 SERIES
Wall & Ceiling Light

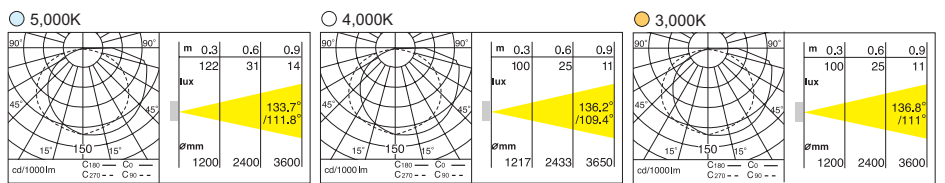
HOUSING COVER	AL. Die-Casting, Electrostatic Powder Coating Housing Cover _ PC
LIGHT	LED
INPUT VOLTAGE	200-240V AC , 50-60Hz
INPUT POWER	2W (nominal)
OUTPUT POWER	1W (nominal)
LUMINOUS FLUX (lm)	31 lm (5,000K) / 30 lm (4,000K) / 31 lm (3,000K)
OUTPUT VOLTAGE	3V DC (nominal)
OUTPUT CURRENT	350mA DC (constant current)
COLOR RENDERING INDEX _CRI	78 (5,000K) / 80 (4,000K) / 80 (3,000K)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C
DRIVER LIFETIME	25,000 hours
COLOR TEMPERATURE	● 5,000K ○ 4,000K ● 3,000K



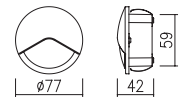
DD-38170 LED



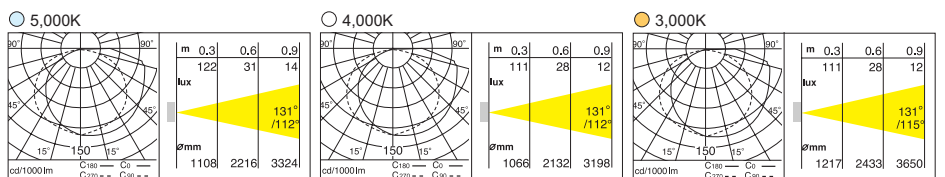
Ø 65mm (2 3/5")

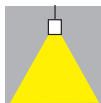


DD-38190 LED



Ø 65mm (2 3/5")





DP-51010.02
Direct Light Pendant

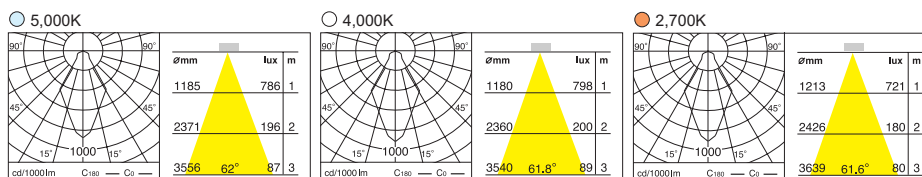
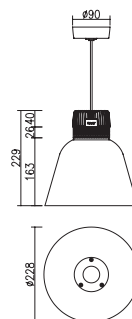
- LED DISK
- 0.8 kg
- White
- Black
- Gray

PHILIPS

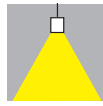
HOUSING	AL. Spinning Processing, Electrostatic Powder Coating Reflector - AL. Anodized Etching (inner)			
HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating			
LIGHT	LED DISK (Integrated LED)			
INPUT VOLTAGE	220-240V AC , 50-60Hz			
COLOR TEMPERATURE (K)	INPUT POWER	LUMINOUS FLUX (lm)	SYSTEM EFFICIENCY (lm/w)	COLOR RENDERING INDEX_CRI
○ 5,000K	11W	761 lm	71 lm/W	80
○ 4,000K	11W	763 lm	73 lm/W	80
● 2,700K	11W	690 lm	64 lm/W	80

OPERATING TEMPERATURE RANGE -20 to +40 °C
MAINTENANCE OF LUMEN -L70 25,000 hours at 25 °C
COLOR TEMPERATURE ○ 5,000K ○ 4,000K ● 2,700K

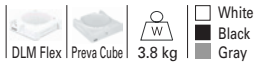
DRAWING







DP-51020.01 series
Direct Light Pendant



PHILIPS OSRAM

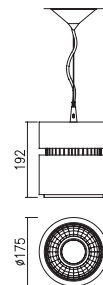
HOUSING	AL. Extrude, Electrostatic Powder Coating
FRONT COVER	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Die-Casting, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver Square
WIRE	STS

LIGHT	Fortimo DLM Flex, Preva Cube
INPUT VOLTAGE	220-240V AC , 50-60Hz

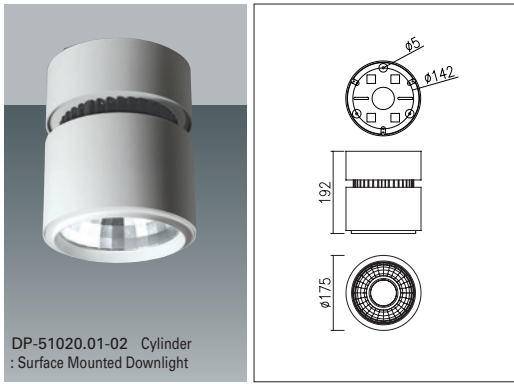
ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DP-51020.01	2000	5,000K	21W	16.5W	108 lm/w	1,883 lm	80
DP-51020.01	2000	4,000K	21W	16.5W	111 lm/w	1,927 lm	80
DP-51020.01	2000	3,000K	22W	18.1W	99 lm/w	1,909 lm	80
DP-51022.01	3000	5,000K	31W	24.6W	109 lm/w	2,825 lm	80
DP-51022.01	3000	4,000K	29W	24.7W	109 lm/w	2,821 lm	80
DP-51022.01	3000	3,000K	32W	27W	103 lm/w	2,853 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

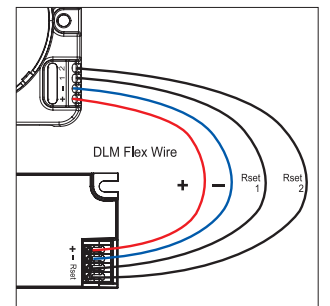
DRAWING



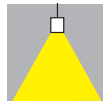
* Caution : Please be aware that it could not be worked properly in condition of ambient temperature over 35degree.



DRIVER ELECTRIC DIAGRAM



DP-51020.01 Series	<p>Fortimo DLM Flex 2000 (5,000K)</p> <table border="1"> <thead> <tr> <th>Ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1115</td> <td>2075</td> <td>1</td> </tr> <tr> <td>2229</td> <td>519</td> <td>2</td> </tr> <tr> <td>3344</td> <td>56,2"</td> <td>3</td> </tr> </tbody> </table>	Ømm	lux	m	1115	2075	1	2229	519	2	3344	56,2"	3	<p>Fortimo DLM Flex 2000 (4,000K)</p> <table border="1"> <thead> <tr> <th>Ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1013</td> <td>2125</td> <td>1</td> </tr> <tr> <td>2025</td> <td>531</td> <td>2</td> </tr> <tr> <td>3038</td> <td>56,2"</td> <td>3</td> </tr> </tbody> </table>	Ømm	lux	m	1013	2125	1	2025	531	2	3038	56,2"	3	<p>Fortimo DLM Flex 2000 (3,000K)</p> <table border="1"> <thead> <tr> <th>Ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1066</td> <td>2100</td> <td>1</td> </tr> <tr> <td>2131</td> <td>525</td> <td>2</td> </tr> <tr> <td>3197</td> <td>56,4"</td> <td>3</td> </tr> </tbody> </table>	Ømm	lux	m	1066	2100	1	2131	525	2	3197	56,4"	3
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DP-51022.01 Series	<p>Fortimo DLM Flex 3000 (5,000K)</p> <table border="1"> <thead> <tr> <th>Ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1050</td> <td>3118</td> <td>1</td> </tr> <tr> <td>2101</td> <td>780</td> <td>2</td> </tr> <tr> <td>3151</td> <td>56,2"</td> <td>3</td> </tr> </tbody> </table>	Ømm	lux	m	1050	3118	1	2101	780	2	3151	56,2"	3	<p>Fortimo DLM Flex 3000 (4,000K)</p> <table border="1"> <thead> <tr> <th>Ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1128</td> <td>3117</td> <td>1</td> </tr> <tr> <td>2256</td> <td>779</td> <td>2</td> </tr> <tr> <td>3384</td> <td>56,2"</td> <td>3</td> </tr> </tbody> </table>	Ømm	lux	m	1128	3117	1	2256	779	2	3384	56,2"	3	<p>Fortimo DLM Flex 3000 (3,000K)</p> <table border="1"> <thead> <tr> <th>Ømm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1118</td> <td>3143</td> <td>1</td> </tr> <tr> <td>2235</td> <td>786</td> <td>2</td> </tr> <tr> <td>3353</td> <td>56,2"</td> <td>3</td> </tr> </tbody> </table>	Ømm	lux	m	1118	3143	1	2235	786	2	3353	56,2"	3
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Ømm	lux	m																																					
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2235	786	2																																					
3353	56,2"	3																																					



DP-51020.02 series
Direct Light Pendant



PHILIPS OSRAM

HOUSING	AL. Extrude, Electrostatic Powder Coating
FRONT COVER	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Die-Casting, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver Square
WIRE	STS

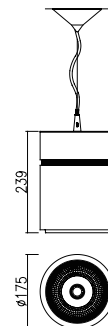
LIGHT	Fortimo SLM, Preva Core
INPUT VOLTAGE	220-240V AC , 50-60Hz

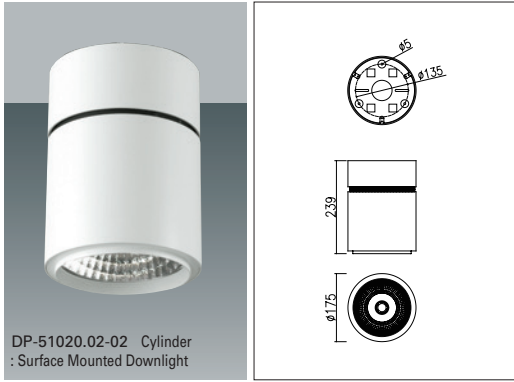
ORDER NO.	MODULE LUMINOUS FLUXI	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DP-51020.02	2000	○ 4,000K	22W	17W	111 lm/W	1,951 lm	80
DP-51020.02	2000	● 3,000K	22W	17W	100 lm/W	1,795 lm	80
DP-51020.02	2000	● 3,000K	23W	17W	91 lm/W	1,641 lm	>90
DP-51021.02	3000	○ 4,000K	30W	26W	111 lm/W	2,696 lm	80
DP-51021.02	3000	● 3,000K	29W	26W	99 lm/W	2,411 lm	80
DP-51021.02	3000	● 3,000K	30W	26W	93 lm/W	2,322 lm	>90

OPERATING TEMPERATURE RANGE	-20 to +35°C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours

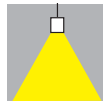
COLOR TEMPERATURE ○ 4,000K ● 3,000K

DRAWING





<p>DP-51020.02 Series</p>	<p>Fortimo SLM 2000 4,000K</p> <p>1437 1801 1 2874 450 2 4312 71.6° 200 3</p>	<p>Fortimo SLM 2000 3,000K</p> <p>1429 1862 1 2858 416 2 4288 71.4° 185 3</p>	<p>Fortimo SLM 2000 3,000K CRI >90</p> <p>1433 1496 1 2866 374 2 4299 72.2° 166 3</p>	
	<p>DP-51021.02 Series</p>	<p>Fortimo SLM 3000 4,000K</p> <p>1437 2373 1 2875 593 2 4312 72.6° 264 3</p>	<p>Fortimo SLM 3000 3,000K</p> <p>1439 2163 1 2879 541 2 4318 72.2° 240 3</p>	<p>Fortimo SLM 3000 3,000K CRI >90</p> <p>1453 2057 1 2906 514 2 4359 72.2° 229 3</p>



DP-51030 Series
Direct Light Pendant



PHILIPS OSRAM

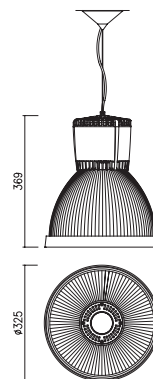
SHADE	PC
TRIM RING	AL. Spinning Processing, Electrostatic Powder Coating
GEAR BOX & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating
WIRE	STS

LIGHT	Fortimo DLM Flex, Preva Cube
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DP-51030	2000	5,000K	21W	16.5W	105 lm/w	1,826 lm	80
DP-51030	2000	4,000K	21W	16.5W	106 lm/w	1,848 lm	80
DP-51030	2000	3,000K	22W	18.1W	96 lm/w	1,835 lm	80
DP-51032	3000	5,000K	31W	24.6W	105 lm/w	2,714 lm	80
DP-51032	3000	4,000K	30W	24.7W	106 lm/w	2,726 lm	80
DP-51032	3000	3,000K	32W	27W	100 lm/w	2,763 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

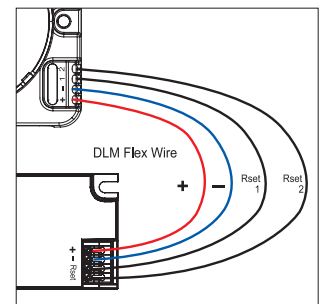
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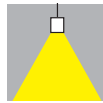
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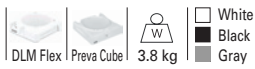
DRIVER ELECTRIC DIAGRAM



DP-51030 Series	<p>Fortimo DLM Flex 2000 (5,000K)</p> <table border="1"> <thead> <tr> <th>∅mm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1305</td> <td>1764</td> <td>1</td> </tr> <tr> <td>2611</td> <td>441</td> <td>2</td> </tr> <tr> <td>3916</td> <td>196</td> <td>3</td> </tr> </tbody> </table>	∅mm	lux	m	1305	1764	1	2611	441	2	3916	196	3	<p>Fortimo DLM Flex 2000 (4,000K)</p> <table border="1"> <thead> <tr> <th>∅mm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1311</td> <td>1860</td> <td>1</td> </tr> <tr> <td>2623</td> <td>465</td> <td>2</td> </tr> <tr> <td>3934</td> <td>207</td> <td>3</td> </tr> </tbody> </table>	∅mm	lux	m	1311	1860	1	2623	465	2	3934	207	3	<p>Fortimo DLM Flex 2000 (3,000K)</p> <table border="1"> <thead> <tr> <th>∅mm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1297</td> <td>1766</td> <td>1</td> </tr> <tr> <td>2594</td> <td>442</td> <td>2</td> </tr> <tr> <td>3891</td> <td>196</td> <td>3</td> </tr> </tbody> </table>	∅mm	lux	m	1297	1766	1	2594	442	2	3891	196	3
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DP-51040 Series
Direct Light Pendant



PHILIPS OSRAM

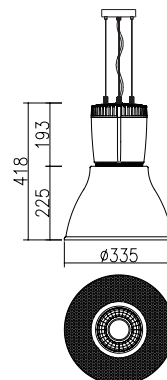
SHADE	AL. Spinning Processing, Electrostatic Powder Coating
HOUSING COVER	Punched Steel Plate, Electrostatic Powder Coating
GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
HEAT SINK	AL. Die-Casting, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver Square
WIRE	STS

LIGHT	Fortimo DLM Flex, Preva Cube
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DP-51040	2000	5,000K	21W	16.5W	107 lm/w	1,857 lm	80
DP-51040	2000	4,000K	21W	16.5W	110 lm/w	1,912 lm	80
DP-51040	2000	3,000K	22W	18.1W	98 lm/w	1,879 lm	80
DP-51042	3000	5,000K	31W	24.6W	109 lm/w	2,813 lm	80
DP-51042	3000	4,000K	30W	24.7W	111 lm/w	2,853 lm	80
DP-51042	3000	3,000K	32W	27W	102 lm/w	2,813 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

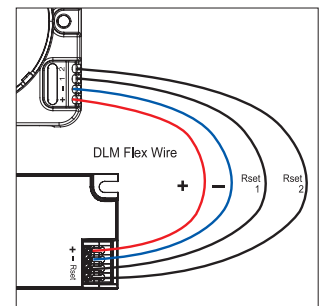
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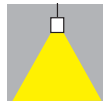
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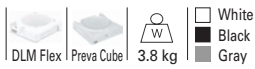
DRIVER ELECTRIC DIAGRAM



DP-51042 Series	<p>Fortimo DLM Flex 2000 (5,000K)</p> <table border="1"> <thead> <tr> <th>∅mm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1261</td> <td>1678</td> <td>1</td> </tr> <tr> <td>2521</td> <td>420</td> <td>2</td> </tr> <tr> <td>3782</td> <td>65,8°</td> <td>186</td> </tr> </tbody> </table>	∅mm	lux	m	1261	1678	1	2521	420	2	3782	65,8°	186	<p>Fortimo DLM Flex 2000 (4,000K)</p> <table border="1"> <thead> <tr> <th>∅mm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1244</td> <td>1776</td> <td>1</td> </tr> <tr> <td>2489</td> <td>444</td> <td>2</td> </tr> <tr> <td>3733</td> <td>64°</td> <td>197</td> </tr> </tbody> </table>	∅mm	lux	m	1244	1776	1	2489	444	2	3733	64°	197	<p>Fortimo DLM Flex 2000 (3,000K)</p> <table border="1"> <thead> <tr> <th>∅mm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1207</td> <td>1821</td> <td>1</td> </tr> <tr> <td>2415</td> <td>455</td> <td>2</td> </tr> <tr> <td>3622</td> <td>62,2°</td> <td>202</td> </tr> </tbody> </table>	∅mm	lux	m	1207	1821	1	2415	455	2	3622	62,2°	202
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DP-51050 Series
Direct Light Pendant



PHILIPS OSRAM

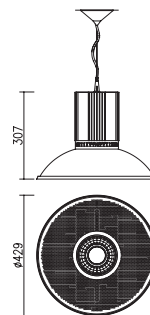
SHADE	AL. Spinning Processing, Electrostatic Powder Coating
HOUSING COVER	Punched Steel Plate, Electrostatic Powder Coating
GEAR BOX	AL. Extrude, Electrostatic Powder Coating
HEAT SINK	AL. Die-Casting, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver Square
WIRE	STS

LIGHT	Fortimo LED DLM
INPUT VOLTAGE	220-240V AC , 50-60Hz

ORDER NO.	MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
DP-51050	2000	5,000K	21W	16.5W	107 lm/w	1,857 lm	80
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DP-51050	2000	3,000K	22W	18.1W	98 lm/w	1,879 lm	80
DP-51052	3000	5,000K	31W	24.6W	109 lm/w	2,813 lm	80
DP-51052	3000	4,000K	30W	24.7W	111 lm/w	2,853 lm	80
DP-51052	3000	3,000K	32W	27W	102 lm/w	2,813 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K

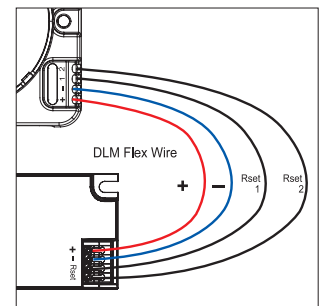
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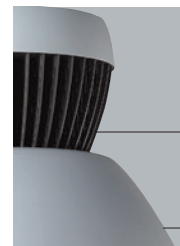
DRIVER ELECTRIC DIAGRAM



DP-51050 Series	<p>Fortimo DLM Flex 2000 (5,000K)</p> <table border="1"> <thead> <tr> <th>∅mm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1261</td> <td>1678</td> <td>1</td> </tr> <tr> <td>2521</td> <td>420</td> <td>2</td> </tr> <tr> <td>3782</td> <td>186</td> <td>3</td> </tr> </tbody> </table>	∅mm	lux	m	1261	1678	1	2521	420	2	3782	186	3	<p>Fortimo DLM Flex 2000 (4,000K)</p> <table border="1"> <thead> <tr> <th>∅mm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1244</td> <td>1776</td> <td>1</td> </tr> <tr> <td>2489</td> <td>444</td> <td>2</td> </tr> <tr> <td>3733</td> <td>197</td> <td>3</td> </tr> </tbody> </table>	∅mm	lux	m	1244	1776	1	2489	444	2	3733	197	3	<p>Fortimo DLM Flex 2000 (3,000K)</p> <table border="1"> <thead> <tr> <th>∅mm</th> <th>lux</th> <th>m</th> </tr> </thead> <tbody> <tr> <td>1207</td> <td>1821</td> <td>1</td> </tr> <tr> <td>2415</td> <td>455</td> <td>2</td> </tr> <tr> <td>3622</td> <td>202</td> <td>3</td> </tr> </tbody> </table>	∅mm	lux	m	1207	1821	1	2415	455	2	3622	202	3
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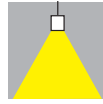


COLOR



HEAT SINK
-White, Light Gray, Dark Gray

HOUSING & GEAR BOX
-White, Light Gray, Dark Gray



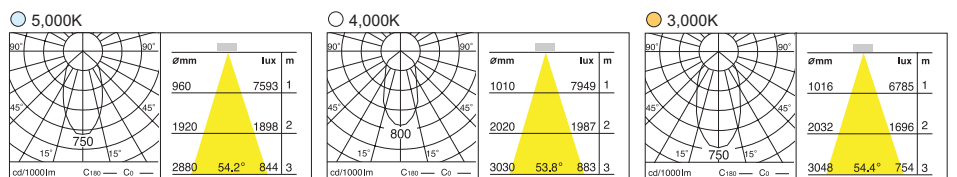
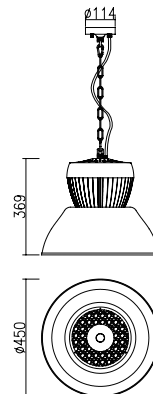
DP-51060.02 Series
Direct Light Pendant

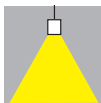


SHADE	AL. Spinning Processing, Electrostatic Powder Coating					
GEAR BOX	AL. Plate, Electro Deposition Coating					
HEAT SINK	AL. Plate, Electro Deposition Coating					
REFLECTOR	AL. Anodized Specular Silver Square					
WIRE	STEEL					
LIGHT	LED ARRAY					
INPUT VOLTAGE	100-240V AC , 50-60Hz					
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 5,000K	91W	83W	99 lm/w	8,181 lm	38V DC	70
○ 4,000K	90W	83W	103 lm/w	8,513 lm	37V DC	80
● 3,000K	91W	83W	89 lm/w	7,346 lm	40V DC	80

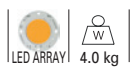
OUTPUT CURRENT	2,100mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 5,000K ○ 4,000K ● 3,000K

DRAWING





DP-51070.02 Series
Direct Light Pendant



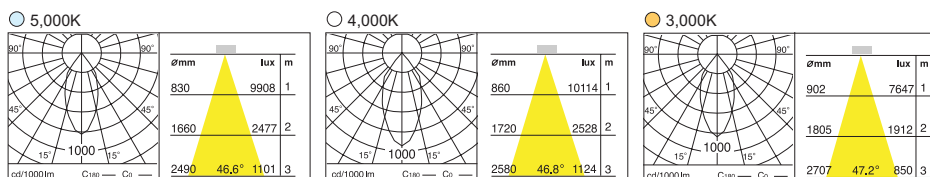
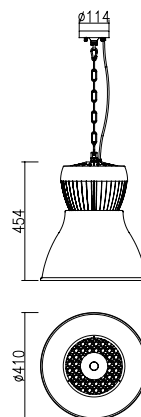
SHADE	AL. Spinning Processing, Electrostatic Powder Coating
GEAR BOX	AL. Plate, Electro Deposition Coating
HEAT SINK	AL. Plate, Electro Deposition Coating
REFLECTOR	AL. Anodized Specular Silver Square
WIRE	STEEL

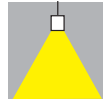
LIGHT	LED ARRAY
INPUT VOLTAGE	100-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	91W	83W	87 lm/w	7,150 lm	38V DC	70
4,000K	90W	83W	89 lm/w	7,332 lm	37V DC	80
3,000K	91W	83W	68 lm/w	5,593 lm	40V DC	80

OUTPUT CURRENT	2,100mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K 4,000K 3,000K

DRAWING





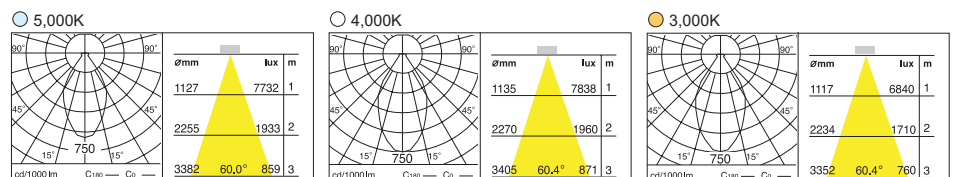
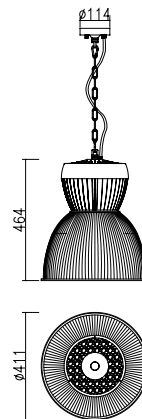
DP-51080.02 Series
Direct Light Pendant

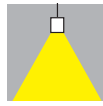


SHADE	PC					
GEAR BOX	AL. Plate, Electro Deposition Coating					
HEAT SINK	AL. Plate, Electro Deposition Coating					
REFLECTOR	AL. Anodized Specular Silver					
WIRE	STEEL					
LIGHT	LED ARRAY					
INPUT VOLTAGE	100-240V AC , 50-60Hz					
COLOR TEMPERATURE (K)	INPUT POWER	OUTPUT POWER	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
● 5,000K	91W	83W	86 lm/w	7,141 lm	38V DC	70
○ 4,000K	90W	83W	88 lm/w	7,280 lm	37V DC	80
● 3,000K	91W	83W	78 lm/w	6,409 lm	40V DC	80

OUTPUT CURRENT	2,100mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 5,000K ○ 4,000K ● 3,000K

DRAWING

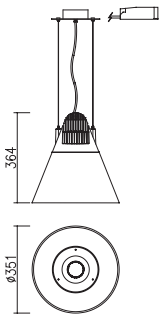




DP-51100.01
Direct Light Pendant



PHILIPS



►OPTION

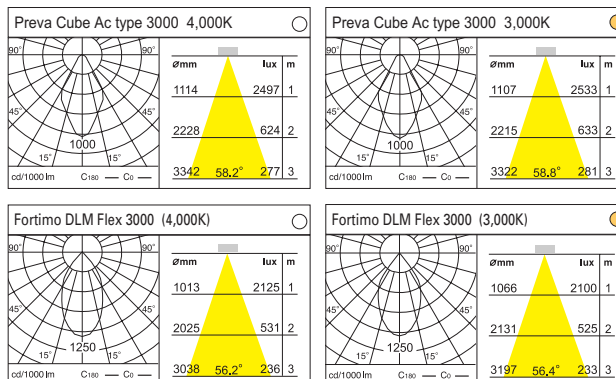
*LED : Preva Cube - AC type

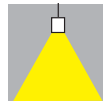
SHADE	AL. Spinning Processing, Electrostatic Powder Coating
GEAR BOX	AL. Die-Casting, Electro Powder Coating
REFLECTOR	AL. Anodized Specular Silver
WIRE	STS

LIGHT	Fortimo DLM Flex, Preva Cube
INPUT VOLTAGE	220-240V AC , 50-60Hz

MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
3000	○ 4,000K	29W	26W	98 lm/w	2,515 lm	80
3000	● 3,000K	32W	26W	93 lm/w	2,565 lm	80

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K



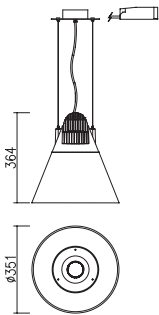


DP-51100.02 / DP-51100.03
Direct Light Pendant

SHADE	AL. Spinning Processing, Electrostatic Powder Coating
GEAR BOX	AL. Die-Casting, Electro Powder Coating
REFLECTOR	AL. Anodized Specular Silver
WIRE	STS



OSRAM

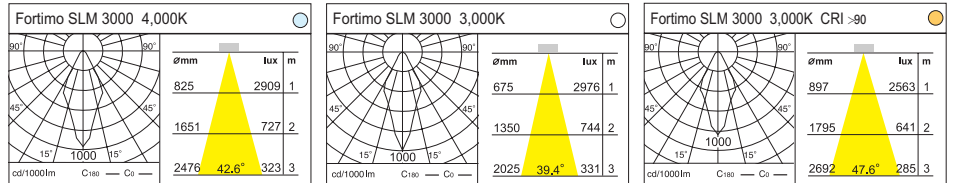


OPTION

*LED : Preva Core - AC type

DP-51100.02						
LIGHT		Fortimo SLM, Preva Core				
INPUT VOLTAGE		220-240V AC , 50-60Hz				
MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
3000	4,000K	30W	26W	84 lm/W	2,030 lm	80
3000	3,000K	29W	26W	82 lm/W	2,000 lm	80
3000	3,000K	30W	26W	74 lm/W	1,837 lm	>90

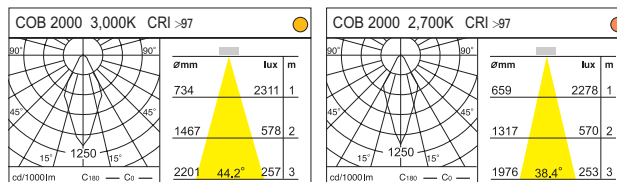
OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	5,000K / 4,000K / 3,000K



**CRI >97
COB type**

DP-51100.03						
LIGHT		COB				
INPUT VOLTAGE		220-240V AC , 50-60Hz				
MODULE LUMINOUS FLUX	COLOR TEMPERATURE (K)	INPUT POWER (W)	MODULE POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	COLOR RENDERING INDEX_CRI
2000	3,000K	31W	28W	58 lm/W	1,605 lm	>97
2000	2,700K	31W	28W	55 lm/W	1,513 lm	>97

OPERATING TEMPERATURE RANGE	-20 to +35 °C
MAINTENANCE OF LUMEN -L70	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	3,000K / 2,700K



DP-51110 Series

LED PENDANTS



Tondo

The aim of this product was to create a simple luminaire element that can also be used in a modular way.

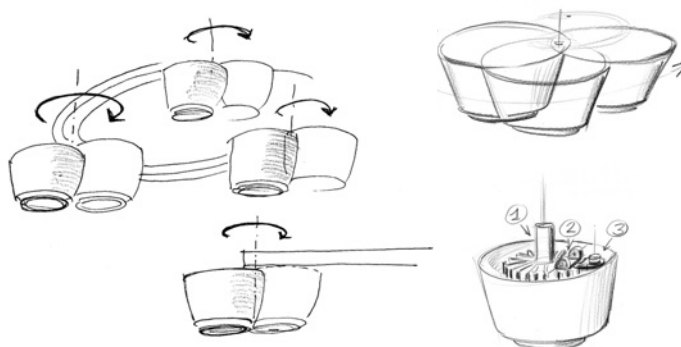
"Tondo" houses the LED technology in a pleasant and harmonious volume without losing its professional quality.

The single module is equipped with different type of couplings.

The central one is used in the single pendant configuration while the rotating one allows to change luminaire's size and appearance.

As a contemporary chandelier the aggregation of multiple modules creates different and more powerful products.

Bruno Gecchelin







DP-51110 SERIES
Direct Light Pendant & Surface Mounted DownLight



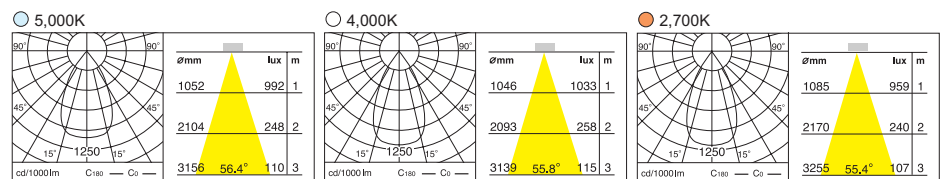
PHILIPS

HOUSING	PC, Urethane Coating
HEAT SINK	AL. Die-Casting, Electro Deposition Coating
REFLECTOR	AL. Anodized Etching
WIRE	STS

LIGHT	LED DISK (Integrated LED)
INPUT VOLTAGE	220-240V AC , 50-60Hz

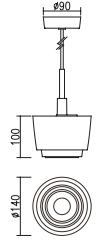
COLOR TEMPERATURE (K)	INPUT POWER	LUMINOUS FLUX (lm)	SYSTEM EFFICIENCY (lm/w)	COLOR RENDERING INDEX_CRI
○ 5,000K	11W	812 lm	76 lm/W	80
○ 4,000K	11W	833 lm	79 lm/W	80
● 2,700K	11W	755 lm	70 lm/W	80

OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C
COLOR TEMPERATURE	○ 5,000K ○ 4,000K ● 2,700K





DP-51110 LED DISK 11W



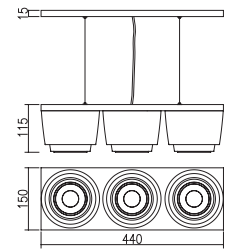
Weight : 0.7 kg



DP-51120 LED DISK 11W x 3



DP-51120-02 Cylinder
: Surface Mounted DownLight



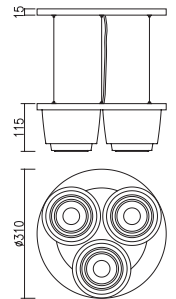
Weight : 2.5 kg



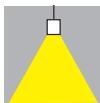
DP-51130 LED DISK 11W x 3



DP-51130-02 Cylinder
: Surface Mounted DownLight



Weight : 3.0 kg



DP-51160, DP-51170 SERIES

Direct Light Pendant

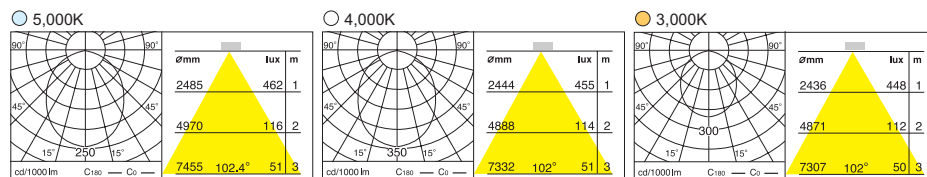
Abaco

FLANGE & LED HOUSING AL. Die-Casting, Electrostatic Powder Coating
 COVER PC
 WIRE Teflon

DP-51160

LIGHT	LED					
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)					
COLOR TEMPERATURE (K)	INPUT POWER (W)	OUTPUT POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	13W	11W	108 lm/W	1,177 lm	31V DC	80
4,000K	13W	11W	106 lm/W	1,152 lm	31V DC	80
3,000K	13W	11W	107 lm/W	1,135 lm	30V DC	80

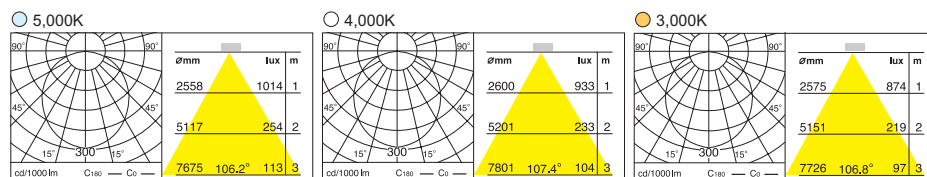
OUTPUT CURRENT 350mA DC (constant current)
 OPERATING TEMPERATURE RANGE -20 to +40°C
 MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
 DRIVER LIFETIME 50,000 hours
 COLOR TEMPERATURE 5,000K 4,000K 3,000K



DP-51170

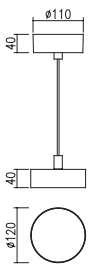
LIGHT	LED					
INPUT VOLTAGE	220-240V AC , 50-60Hz (option : 100-240V AC , 50-60Hz)					
COLOR TEMPERATURE (K)	INPUT POWER (W)	OUTPUT POWER (W)	MODULE EFFICIENCY (lm/W)	LUMINOUS FLUX (lm)	OUTPUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
5,000K	27W	23W	117 lm/W	2,693 lm	33V DC	80
4,000K	27W	23W	110 lm/W	2,513 lm	33V DC	80
3,000K	27W	23W	102 lm/W	2,340 lm	33V DC	80

OUTPUT CURRENT 700mA DC (constant current)
 OPERATING TEMPERATURE RANGE -20 to +40°C
 MAINTENANCE OF LUMEN -L70 40,000 hours at 25°C
 DRIVER LIFETIME 50,000 hours
 COLOR TEMPERATURE 5,000K 4,000K 3,000K
 COLOR RENDERING INDEX_CRI 80, 90

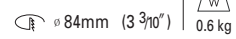
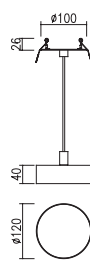




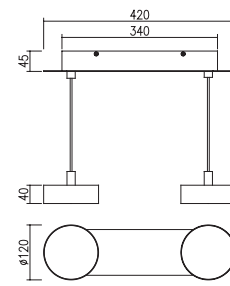
DP-51160.01 LED 13W



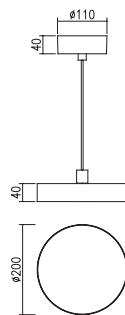
DP-51160.02 LED 13W



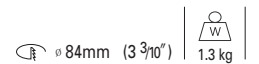
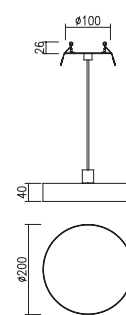
DP-51160.03 LED 13W x 2



DP-51170.01 LED 27W

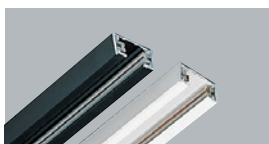


DP-51170.02 LED 27W

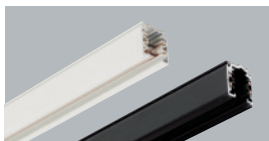


LIGHTING TRACK

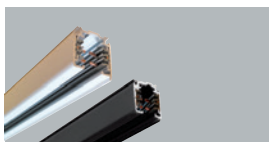
1-Circuit Track System

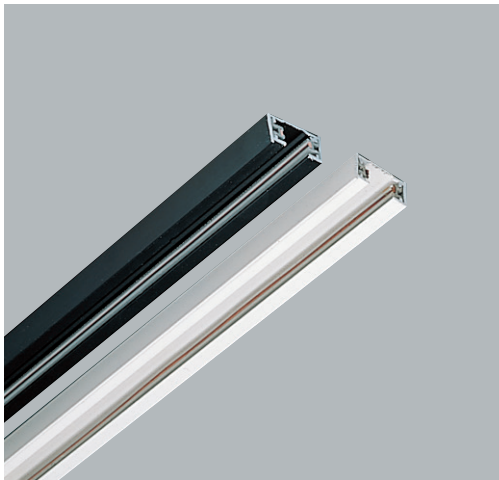


3-Circuit Track System

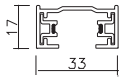


DAIL Track System

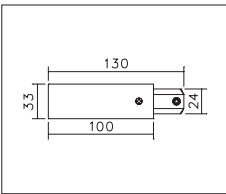




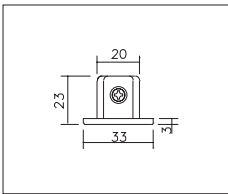
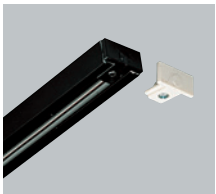
DR-101, 102, 103
1-Circuit Track System



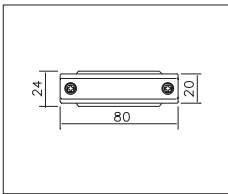
Track	Aluminum, Electrostatic Powder Coating (White, Black)
Spec	Single Circuit 2 Copper conductors (12A) Standard Length : 1m, 2m, 3m
DR-101	1m
DR-102	2m
DR-103	3m



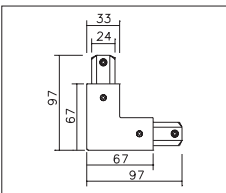
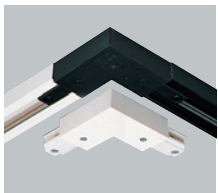
DR-105
Feed-in Cap / White, Black



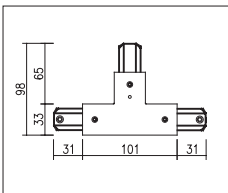
DR-106
End Cap / White, Black



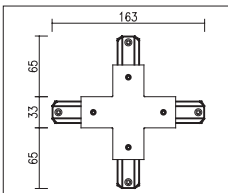
DR-107
Straight Connector / White, Black



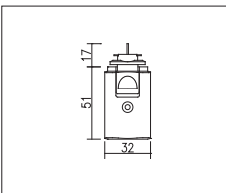
DR-108
L Connector / White, Black



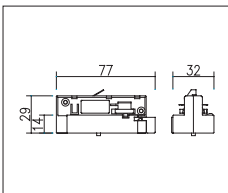
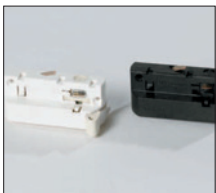
DR-110
T Connector / White, Black



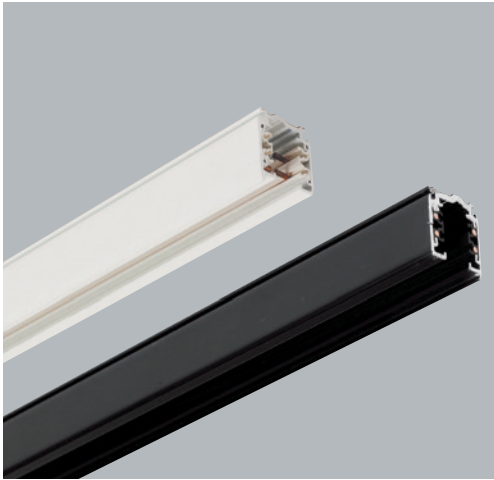
DR-111
X Connector / White, Black



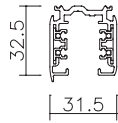
DR-152
Adapter / White, Black



DR-153
Adapter / White, Black



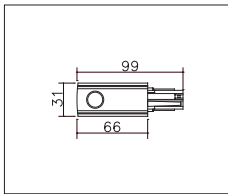
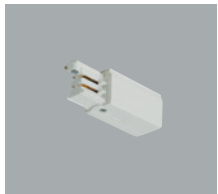
DR-301, 302, 303
3-Circuit Track System



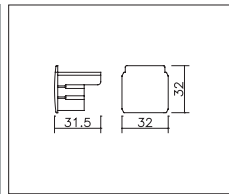
Track Aluminum, Electrostatic Powder Coating (White, Black)

Spec Three Circuit
4 Copper conductors (12A)
Standard Length : 1m, 2m, 3m

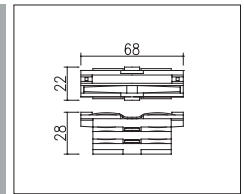
DR-301 1m
DR-302 2m
DR-303 3m



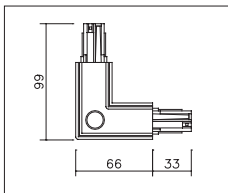
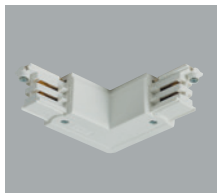
DR-305
Feed-in Cap / White, Black



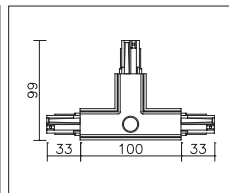
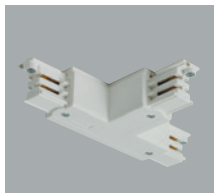
DR-306
End Cap / White, Black



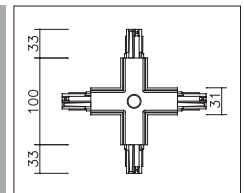
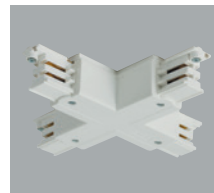
DR-307
Straight Connector / White, Black



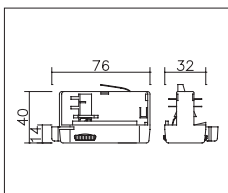
DR-308
L Connector / White, Black



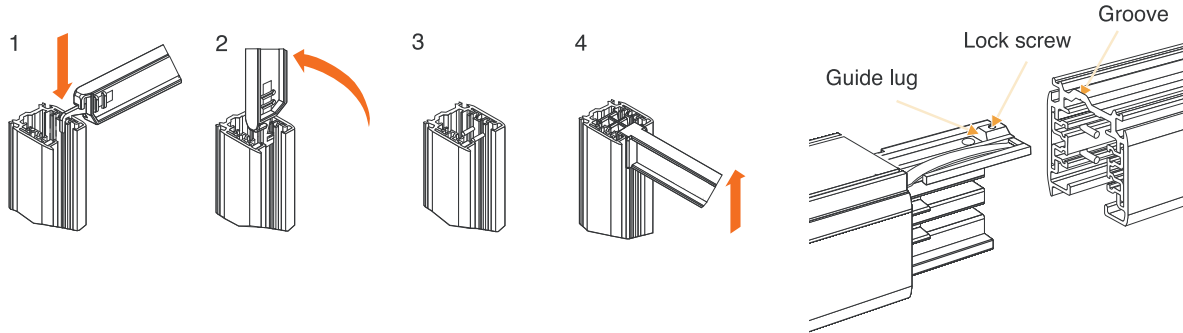
DR-310
T Connector / White, Black



DR-311
X Connector / White, Black



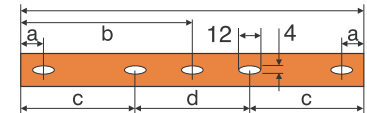
DR-351
Adapter / White, Black



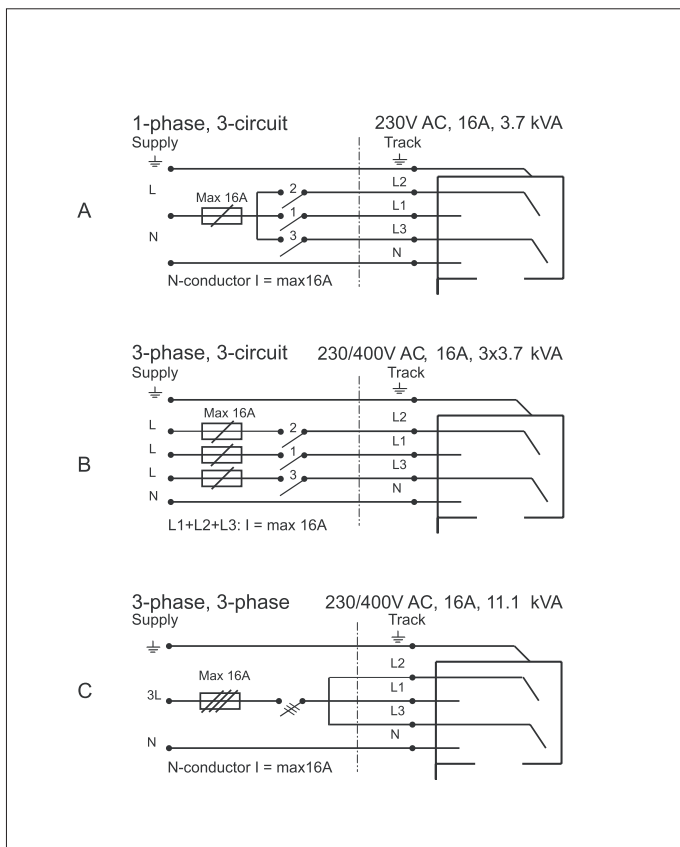
Distances of the fastening holes

L mm	a mm	b mm	c mm	d mm
1000	250			
2000	250	1000		
3000	250		1000	1000

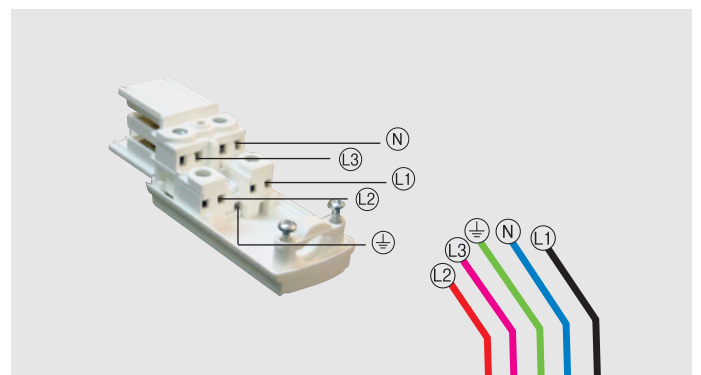
L = track length



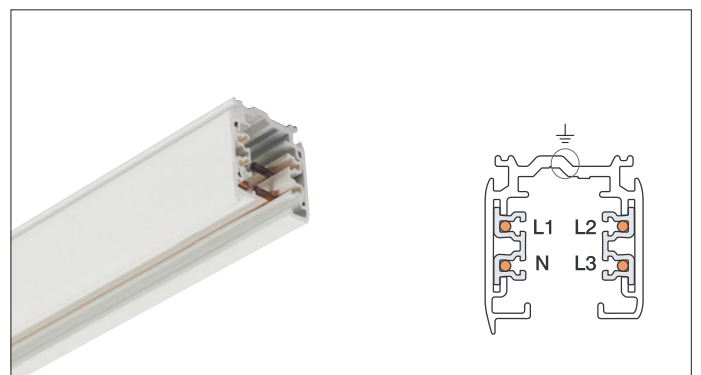
SCHEMATIC _ 회로도

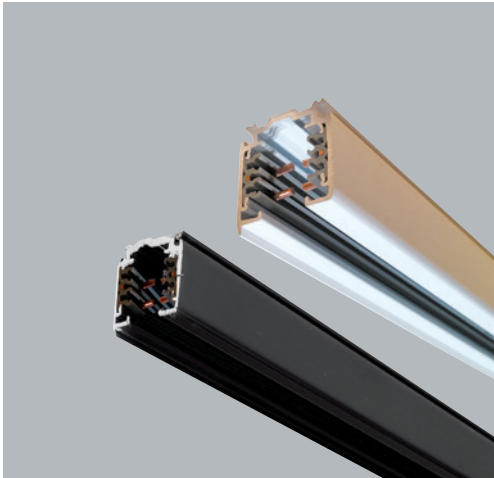


POWER GROUND CONNECTIONS _ 전원 접지 연결 시키는 법

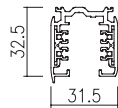


POWER GROUND CONNECTIONS _ 전원 접지 연결 시키는 법

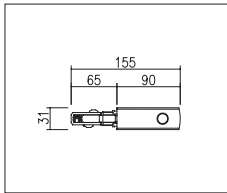




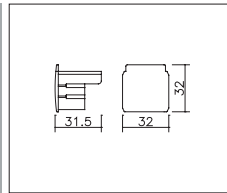
DR-401, 402, 403
DALI Track System



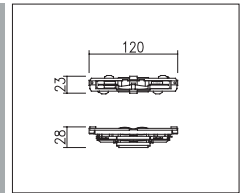
Track	Aluminum, Electrostatic Powder Coating (White, Black)
Spec	Three Circuit 6 Copper conductors (12A) Standard Length : 1m, 2m, 3m
DR-401	1m
DR-402	2m
DR-403	3m



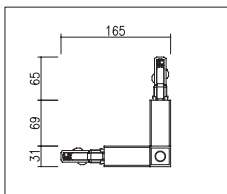
DR-405
Feed-in Cap / White, Black



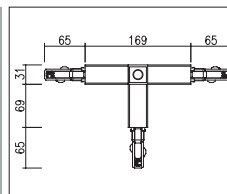
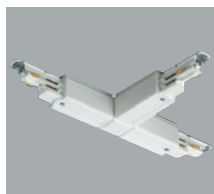
DR-406
End Cap / White, Black



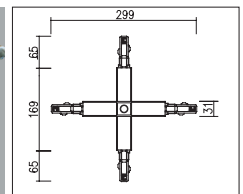
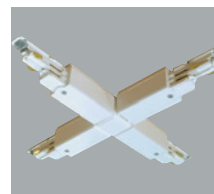
DR-407
Straight Connector / White, Black



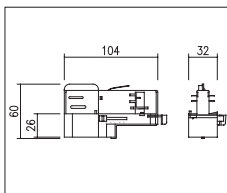
DR-408
L Connector / White, Black



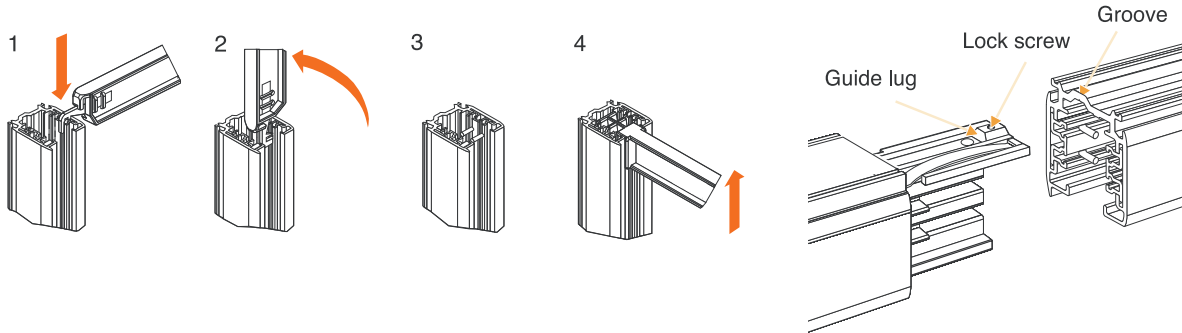
DR-410
T Connector / White, Black



DR-411
X Connector / White, Black



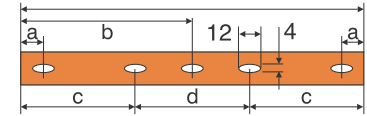
DR-451
Adapter / White, Black



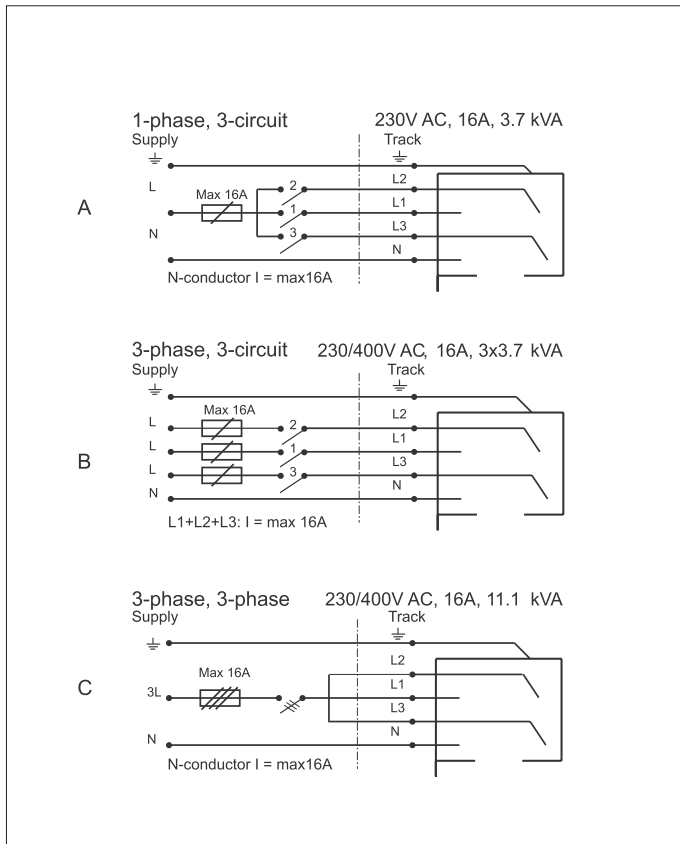
Distances of the fastening holes

L mm	a mm	b mm	c mm	d mm
1000	250			
2000	250	1000		
3000	250		1000	1000

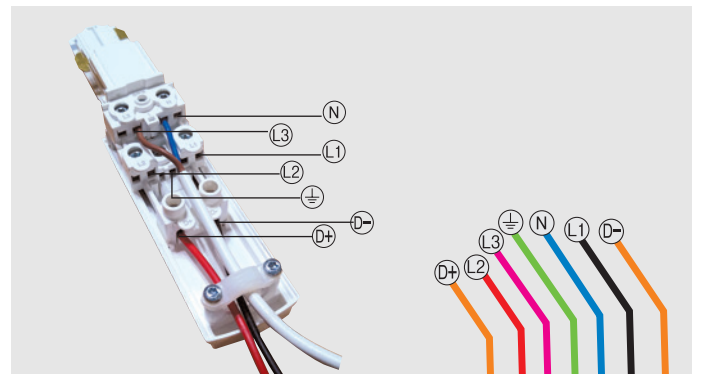
L = track length



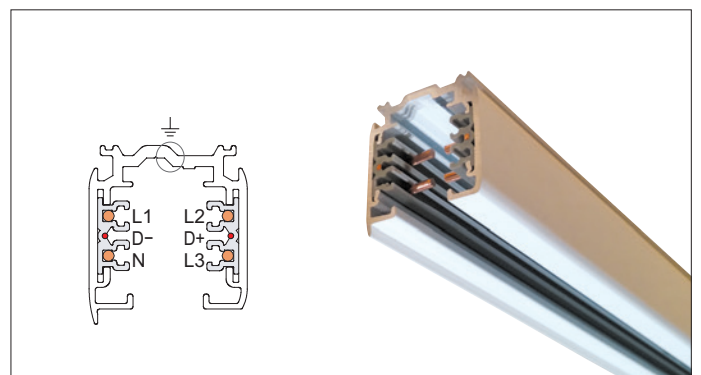
SCHEMATIC _ 회로도



POWER GROUND CONNECTIONS _ 전원 접지 연결 시키는 법



POWER GROUND CONNECTIONS _ 전원 접지 연결 시키는 법



DF-79840 Series / DDP-72110 Series

LED FLOOD LIGHTS & POLE LIGHTS



DF-79840 series, **DDP-72110** series

These fixtures are square shape garden light. Easy installation and convenient maintenance. Simple and solid, AL. Die-casting body is light and has great durability.





OSRAM

HOUSING & GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
ANCHOR BASE	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Fixed Hood : Steel (Light Gray, Black, Dark Gray)
Mounting Option	Wall/ Vertical Surface Mounting Concrete Base Mounting Stanchion Mounting Pole Mounting
BEAM ANGLE	60°

LIGHT	HPML
INPUT VOLTAGE	100-277V AC , 50-60Hz

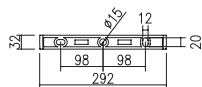
ORDER NO.	COLOR TEMPERATURE (K)	INPUT POWER (nominal)	MODULE POWER (nominal)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DF-79840	6,500K	63W	30W x2	102 lm/w	5,837 lm	82V DC	70
DF-79840	3,000K	64W	30W x2	79 lm/w	4,508 lm	82V DC	80
DF-79841	6,500K	92W	30W + 60W	112 lm/w	9,433 lm	121V DC	70
DF-79841	3,000K	92W	30W + 60W	79 lm/w	6,711 lm	121V DC	80
DF-79842	6,500K	123W	60W x 2	121 lm/w	13,582 lm	160V DC	70
DF-79842	4,000K	124W	60W x 2	102 lm/w	11,590 lm	162V DC	70
DF-79842	3,000K	122W	60W x 2	78 lm/w	8,705 lm	160V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
LIGHT LIFETIME	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	6,500K 4,000K 3,000K

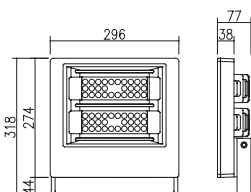
Notes

- We provide the mounting accessories only shown by component.
- For special orders, please make inquiries us.
- Led : IP 66

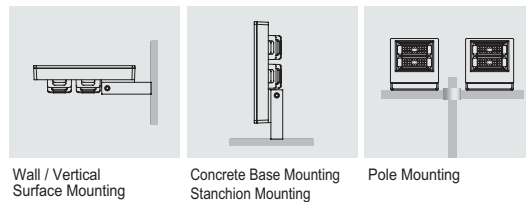
Anchor Base



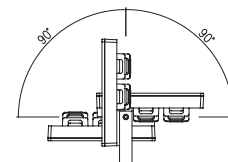
Drawing



Examples



Adjustment Possibilities



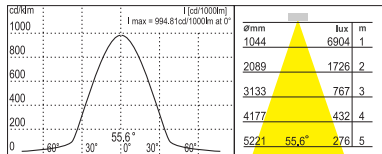
Accessories



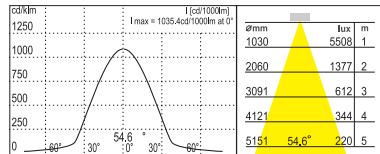
Hood
- Steel
- Light Gray, Black, Dark Gray



DF-79840 HPML 30W x2 6,500K

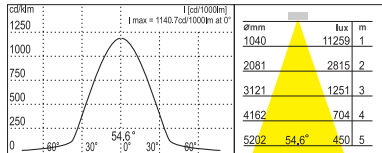


HPML 30W x2 3,000K

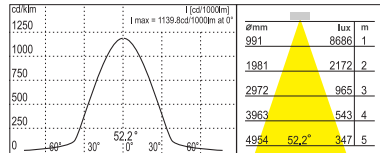


c180—c0

DF-79841 HPML 30W + 60W 6,500K

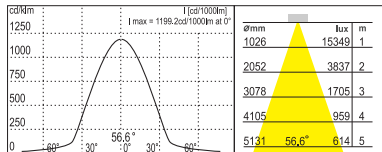


HPML 30W + 60W 3,000K

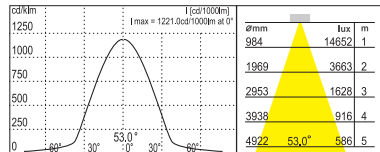


c180—c0

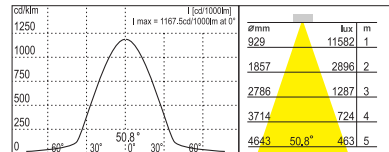
DF-79842 HPML 60W x2 6,500K



HPML 60W x2 4,000K



HPML 60W x2 3,000K



c180—c0



OSRAM

HOUSING & GEAR BOX	AL. Die-Casting, Electrostatic Powder Coating
ANCHOR BASE	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Fixed Hood : Steel (Light Gray, Black, Dark Gray)
Mounting Option	Wall/ Vertical Surface Mounting Concrete Base Mounting Stanchion Mounting Pole Mounting

BEAM ANGLE 60°

LIGHT HPML

INPUT VOLTAGE 100-277V AC , 50-60Hz

ORDER NO.	COLOR TEMPERATURE (K)	INPUT POWER (nominal)	MODULE POWER (nominal)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DF-79860	6,500K	96W	30W x3	104 lm/w	8,863 lm	122V DC	70
DF-79860	3,000K	96W	30W x3	79 lm/w	6,748 lm	122V DC	80
DF-79861	6,500K	123W	30W x2 + 60W	110 lm/w	12,398 lm	161V DC	70
DF-79861	3,000K	123W	30W x2 + 60W	79 lm/w	8,884 lm	161V DC	80
DF-79862	6,500K	151W	30W+ 60W x2	117 lm/w	16,332 lm	200V DC	70
DF-79862	3,000K	152W	30W+ 60W x2	77 lm/w	10,658 lm	200V DC	80

OUTPUT CURRENT 700mA DC (constant current)

OPERATING TEMPERATURE RANGE -20 to +40 °C

LIGHT LIFETIME 50,000 hours at 25 °C

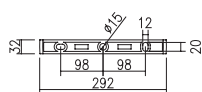
DRIVER LIFETIME 50,000 hours

COLOR TEMPERATURE 6,500K 3,000K

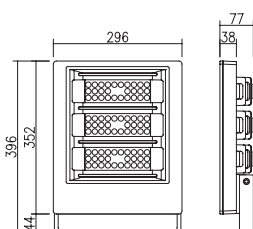
Notes

- We provide the mounting accessories only shown by component.
- For special orders, please make inquiries us.
- Led : IP 66

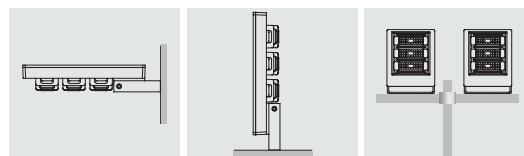
Anchor Base



Drawing



Examples

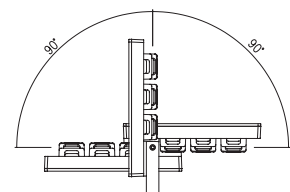


Wall / Vertical Surface Mounting

Concrete Base Mounting
Stanchion Mounting

Pole Mounting

Adjustment Possibilities



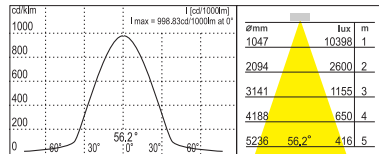
Accessories



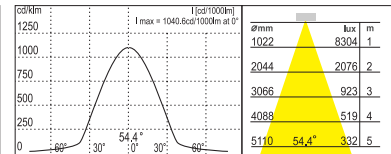
Hood
- Steel
- Light Gray, Black, Dark Gray



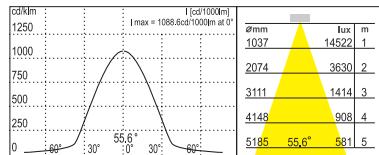
DF-79860 HPML 30W x3 6,500K



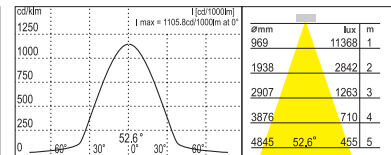
HPML 30W x3 3,000K



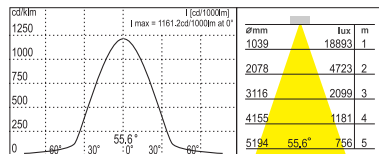
DF-79861 HPML 30W x2 + 60W 6,500K



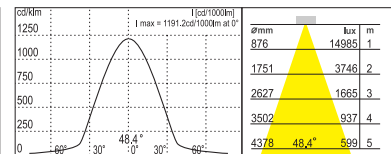
HPML 30W x2 + 60W 3,000K



DF-79862 HPML 30W + 60W x2 6,500K



HPML 30W + 60W x2 3,000K





DDP-72110
Pole Light

HEAD & ARM	AL. Die-Casting, Electrostatic Powder Coating
ANCHOR BASE	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Fixed Hood : Steel (Light Gray, Black, Dark Gray)
POLE	Steel, Electrostatic Powder Coating
BEAM ANGLE	150°

LIGHT	HPML
INPUT VOLTAGE	100-277V AC , 50-60Hz

ORDER NO.	COLOR TEMPERATURE (K)	INPUT POWER (nominal)	MODULE POWER (nominal)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DDP-72110	○ 4,000K	64W	30W x2	97 lm/w	5,552 lm	82V DC	70
DDP-72111	○ 4,000K	93W	30W + 60W	99 lm/w	8,422 lm	121V DC	70
DDP-72112	○ 4,000K	123W	60W x2	102 lm/w	11,455 lm	160V DC	70

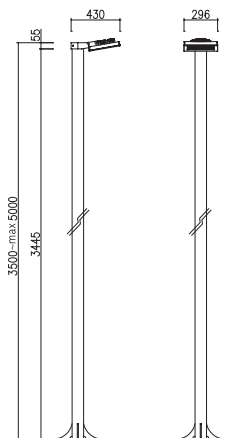


OSRAM

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-30 to +100°C
LIGHT LIFETIME	50,000 hours at 25°C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	● 6,500K ○ 4,000K

Notes

- For special orders, please make inquires us.
- Led : IP 66

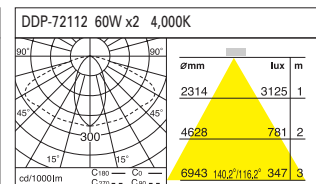
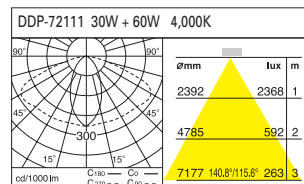
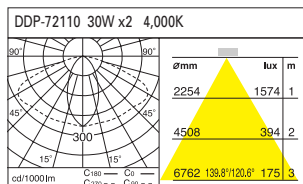
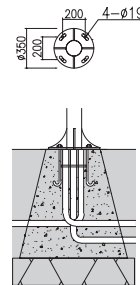


Accessories



Hood
- Steel
- Light Gray, Black, Dark Gray

Anchor Bolt Base





DDP-72120
Pole Light

HEAD & ARM	AL. Die-Casting, Electrostatic Powder Coating
ANCHOR BASE	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Fixed Hood : Steel (Light Gray, Black, Dark Gray)
POLE	Steel, Electrostatic Powder Coating
BEAM ANGLE	150°

LIGHT	HPML
INPUT VOLTAGE	100-277V AC , 50-60Hz

ORDER NO.	COLOR TEMPERATURE (K)	INPUT POWER (nominal)	MODULE POWER (nominal)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
DDP-72120	○ 4,000K	94W	30W x3	97 lm/w	8,373 lm	124V DC	70
DDP-72121	○ 4,000K	124W	30Wx2 + 60W	101 lm/w	11,416 lm	162V DC	70
DDP-72122	○ 4,000K	153W	30W + 60Wx2	103 lm/w	14,408 lm	200V DC	70

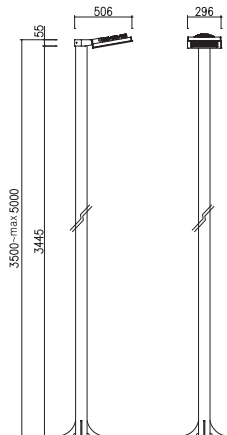


OSRAM

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
LIGHT LIFETIME	50,000 hours at 25 °C
DRIVER LIFETIME	50,000 hours
COLOR TEMPERATURE	○ 6,500K ○ 4,000K

Notes

- For special orders, please make inquires us.
- Led : IP 66

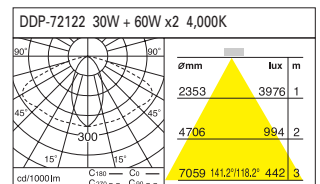
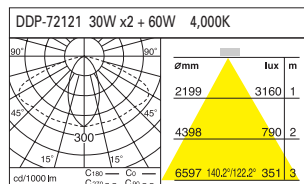
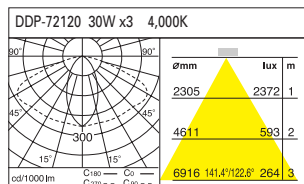
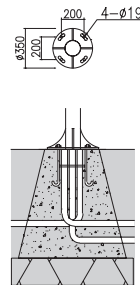


Accessories



Hood
- Steel
- Light Gray, Black, Dark Gray

Anchor Bolt Base



DD-48161 / DF-79011 Series

LED FLOOD LIGHTS



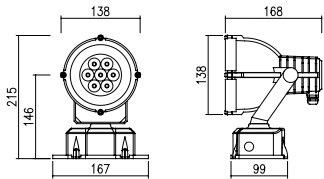
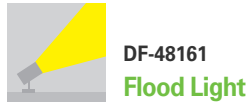
DF-48161 series

These fixtures are round shape garden light. Easy installation and convenient maintenance. Simple and solid, AL. Die-casting body is light and has great durability.

DF-79011 Series

These fixtures are round shape flood light. Easy installation and convenient maintenance. Simple and solid, AL. Die-casting body is light and has great durability. These series have an angle sign to easy to show tilt angle and assembling projection on the covers to attach accessories.





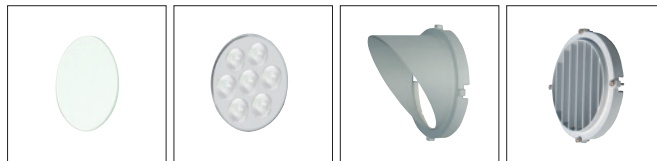
HOUSING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating
DRIVER CASE	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Inner Accessory : Beam angle LENS Type Outer Accessory : Clear Tempered Glass Fixed Hood : AL. Die-Casting
COMPONENT	Peg : AL. Die-Casting (Light Gray, Black, Dark Gray)
Mounting Option	Wall/ Vertical Surface Mounting Surface Mounting Peg Mounting
BEAM ANGLE	20° , 40°

LIGHT	Power LED
INPUT VOLTAGE	100-240V AC , 50-60Hz

COLOR TEMPERATURE (K)	INPUT POWER (nominal)	OUTPUT POWER (nominal)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 4,000K	18W	15W	80 lm/w	1,215 lm	22V DC	75
● 3,000K	18W	15W	79 lm/w	1,190 lm	22V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40℃
MAINTENANCE OF LUMEN -L70	25,000 hours at 25℃
DRIVER LIFETIME	25,000 hours
COLOR TEMPERATURE	○ 4,000K ● 3,000K

Accessories



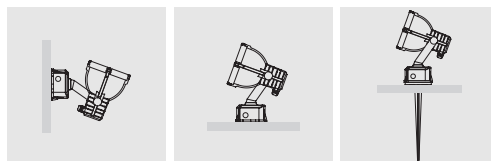
Glass Lens - Clear Tempered Glass	Beam Angle Lens - Inner Accessory (20°, 40°)	Fixed Hood - AL. Die-Casting - Light Gray, Black, Dark Gray	Louver - AL. Die-Casting - Light Gray, Black, Dark Gray
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Component

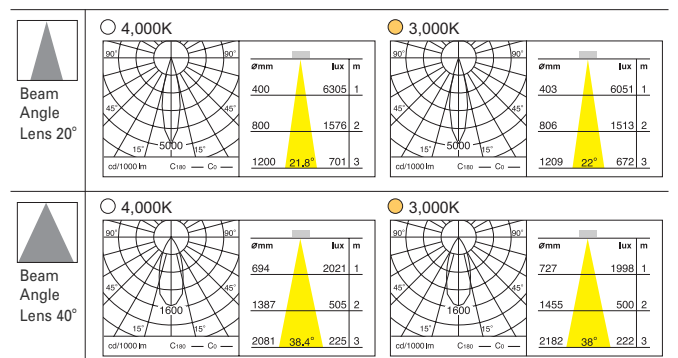
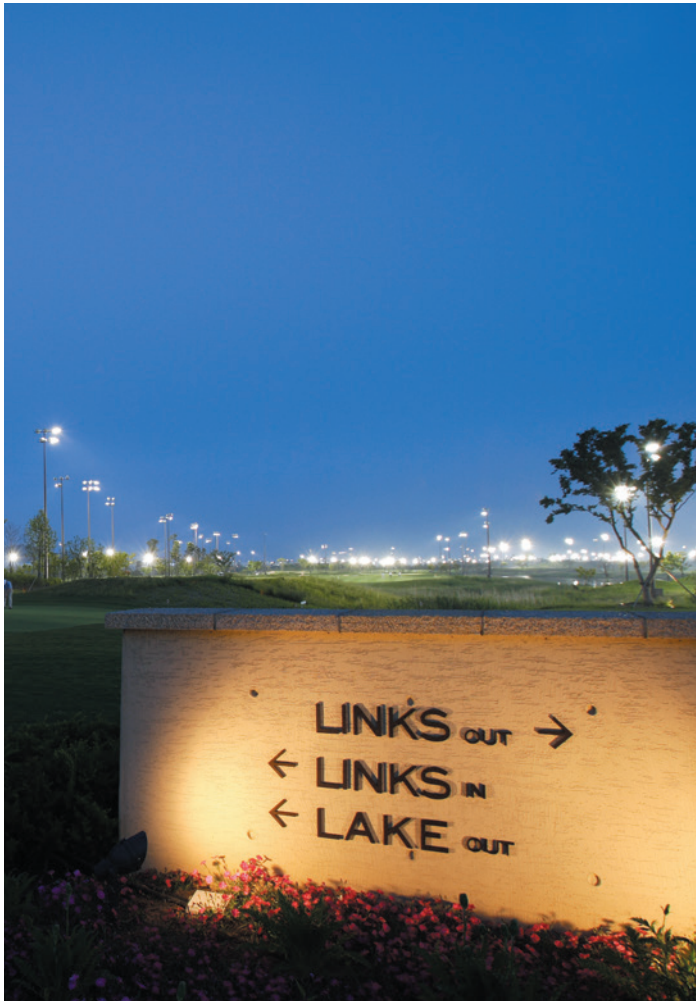


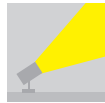
Peg
- AL. Die-Casting
- Light Gray, Black, Dark Gray

Examples

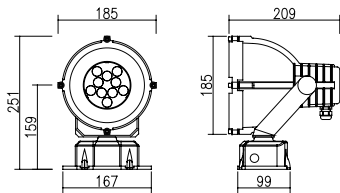


DF-48161-02 Wall / Vertical Surface Mounting	DF-48161-03 Surface Mounting	DF-48161-05 Peg Mounting
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DF-79011
Flood Light



HOUSING & HEAT SINK	AL. Die-Casting, Electrostatic Powder Coating
DRIVER CASE	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Inner Accessory : Beam angle LENS Type Outer Accessory : Clear Tempered Glass Fixed Hood : AL. Die-Casting
COMPONENT	Peg : AL. Die-Casting (Light Gray, Black, Dark Gray)
Mounting Option	Wall/ Vertical Surface Mounting Surface Mounting Peg Mounting
BEAM ANGLE	20° , 40°

LIGHT	Power LED
INPUT VOLTAGE	100-240V AC , 50-60Hz

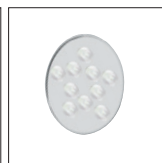
COLOR TEMPERATURE (K)	INPUT POWER (nominal)	OUTPUT POWER (nominal)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 4,000K	26W	22W	73 lm/w	1,606 lm	31V DC	75
● 3,000K	26W	22W	65 lm/w	1,432 lm	31V DC	80

OUTPUT CURRENT	700mA DC (constant current)
OPERATING TEMPERATURE RANGE	-20 to +40℃
MAINTENANCE OF LUMEN -L70	25,000 hours at 25℃
DRIVER LIFETIME	25,000 hours
COLOR TEMPERATURE	○ 4,000K ● 3,000K

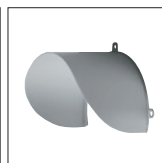
Accessories



Glass Lens
- Clear Tempered Glass



Beam Angle Lens
- Inner Accessory (20° , 40°)



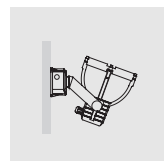
Fixed Hood
- Aluminium
- Light Gray, Black, Dark Gray

Component

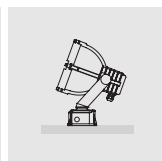


Peg
- AL. Die-Casting
- Light Gray, Black, Dark Gray

Examples



DF-79011-02
Wall / Vertical Surface Mounting



DF-79011-03
Surface Mounting



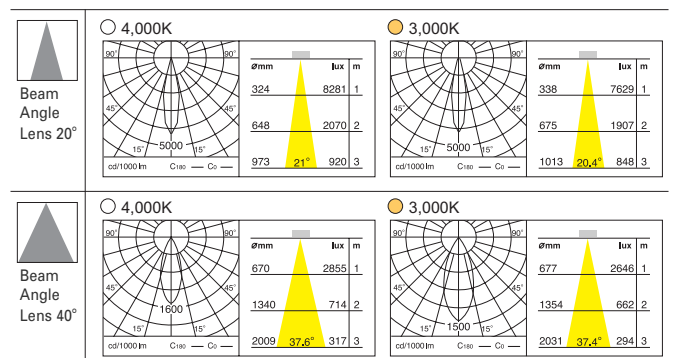
DF-79011-05
Peg Mounting

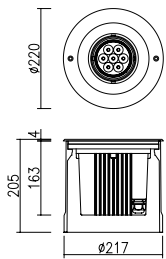
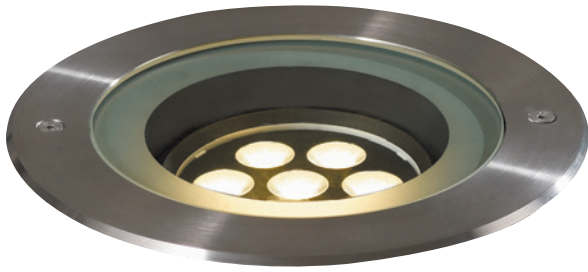


The Angle Adustment
 - Locking teeth providing 10° adjustment intervals
 - Angle lock is available

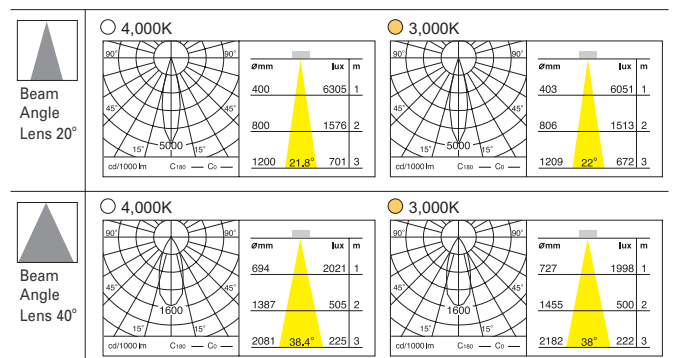
Hood Type
 - Reduce Glare
 - Giving direction

Lens
 - 20, 40 Beam Angles





HOUSING	Inner Housing : AL. Die-Casting Outer Housing : PVC					
FRAME RING	Stainless Steel					
LED HOUSING	AL. Die-Casting, Electrostatic Powder Coating					
ACCESSORY	Inner Accessory : Beam angle LENS Type Outer Accessory : Clear Tempered Glass					
BEAM ANGLE	20° , 40°					
LIGHT	Power LED					
INPUT VOLTAGE	100-240V AC , 50-60Hz					
COLOR TEMPERATURE (K)	INPUT POWER (nominal)	OUTPUT POWER (nominal)	MODULE EFFICIENCY (lm/w)	LUMINOUS FLUX (lm)	OUT VOLTAGE (nominal)	COLOR RENDERING INDEX_CRI
○ 4,000K	18W	15W	80 lm/w	1,215 lm	22V DC	75
● 3,000K	18W	15W	79 lm/w	1,190 lm	22V DC	80
OUTPUT CURRENT	700mA DC (constant current)					
OPERATING TEMPERATURE RANGE	-20 to +40 °C					
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C					
DRIVER LIFETIME	25,000 hours					
COLOR TEMPERATURE	○ 4,000K ● 3,000K					



DBO-75142 Series

LED BOLLARDS



SMD

DBO-75142, DBO-75162 series
DBO-75230, DBO-75240 series





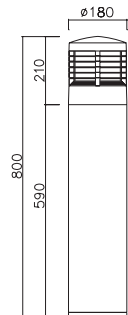
DBO-75142, DBO-75162 Series

POLE AL. Extrude, Electrostatic Powder Coating
 HEAD AL. Die-Casting, Electrostatic Powder Coating
 ANCHOR BASE AL. Die-Casting, Electrostatic Powder Coating
 ACCESSORY Diffuser_PC(sanding)

LIGHT 10W 48LED
 INPUT VOLTAGE 100-240V AC , 50-60Hz
 OUTPUT VOLTAGE 24V DC (nominal)
 OUTPUT CURRENT 350mA DC (constant current)
 COLOR RENDERING INDEX _CRI 78 (5,000K) / 80 (4,000K) / 80 (3,000K)
 OPERATING TEMPERATURE RANGE -20 to +40 °C
 MAINTENANCE OF LUMEN -L70 25,000 hours at 25 °C
 DRIVER LIFETIME 25,000 hours
 COLOR TEMPERATURE ○ 4,000K ● 3,000K



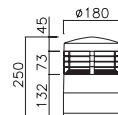
DBO-75142-01



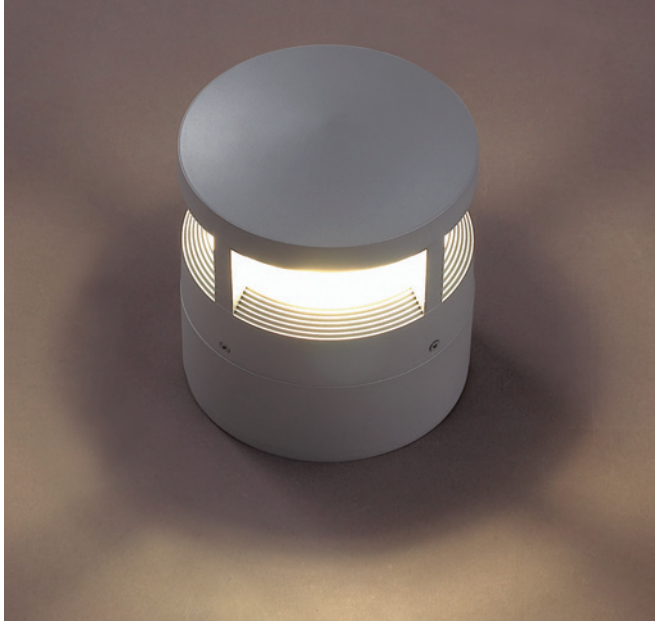
Weight : 6.6 kg



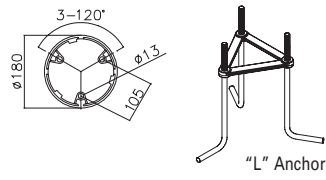
DBO-75142-02



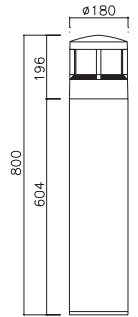
Weight : 3.5 kg



Anchor Base



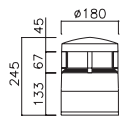
DBO-75162-01



Weight : 6.6 kg



DBO-75162-02



Weight : 3.5 kg



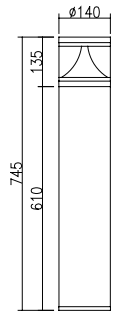
DBO-75230, DBO-75240 Series

POLE	AL. Extrude, Electrostatic Powder Coating
HEAD	AL. Die-Casting, Electrostatic Powder Coating
REFLECTOR	AL. Spinning Processing, Electrostatic Powder Coating
ANCHOR BASE	AL. Die-Casting, Electrostatic Powder Coating
ACCESSORY	Diffuser_PC(sanding)

LIGHT	11W 40LED
INPUT VOLTAGE	100-240V AC , 50-60Hz
OUTPUT VOLTAGE	25V DC (nominal)
OUTPUT CURRENT	350mA DC (constant current)
COLOR RENDERING INDEX _CRI	80 (3,000K)
OPERATING TEMPERATURE RANGE	-20 to +40 °C
MAINTENANCE OF LUMEN -L70	25,000 hours at 25 °C
DRIVER LIFETIME	□,000 hours ●
COLOR TEMPERATURE	4,000K 3,000K



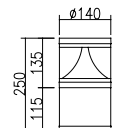
DBO-75230-01



Weight : 3.7 kg



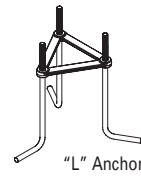
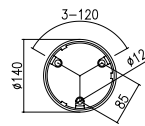
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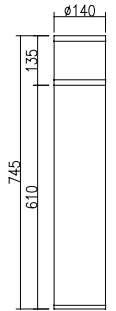
Weight : 1.2 kg



Anchor Base



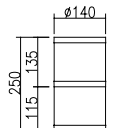
DBO-75240-01



 Weight : 3.7 kg



DBO-75240-02



 Weight : 1.2 kg



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