



PRODUCT CATALOGUE VOL.18



Head office & Factory

Tel: +82-31-322-7200 Fax: +82-31-322-8338

Design Center

Tel: +82-31-322-8500 Fax: +82-31-322-2535

Seoul Office

Tel: +82-2-3401-0300 Fax: +82-2-3401-4786

Email: rayhouse@rayhouse.com



ray///house

Creative Design

레이하우스는 오랜기간 동안 다양한 프로젝트를 통해 축적된 현장경험을 바탕으로 사용이 편리한 소비자 중심의 조명기구를 만들고자 노력해 왔으며, 투광등, 정원등, 가로등에 이어 사용자 중심의 한 차원 높은 LED System 개발을 독자적인 기술력으로 개발완료하여 외부조명에 관련한 토털 솔루션이 가능한 대 고객 종합 서비스를 제공하고 있습니다.

레이하우스가 생산하는 모든 조명기구는 창조적인 디자인, 과학적인 설계와 시험과정을 바탕으로 조명기구 효율을 극대화하여 에너지 절감 및 친 환경조명 구현에 최선의 노력을 경주하여 온 바, 현재 전 세계 30여개국에 저사브랜드 제품을 공급하는 글로벌회사로서의 성장을 거듭하고 있습니다.

레이하우스가 생산하는 제품에 대한 경밀한 데이터들은 이를 사용하는 고객 여러분들에게 만족스런 결과를 제공할 수 있을 것으로 확신하며, 무엇보다 어둠을 밝혀 밝고 아름다운 세상을 만들고자 하는 레이하우스의 소중한 공들이 전 세계 조명디자이너들의 손을 거쳐 구체적으로 실현될 수 있기를 간절히 소원합니다.

감사합니다.

Rayhouse has been striving to manufacture consumer-oriented lighting fixtures easy to use based on accumulated field experiences through various projects for a long time, and provided total customer services available for total solutions for exterior lighting by completing development of operator-friendly advanced LED system following flood lighting, garden lighting and street lighting.

Rayhouse has been doing its best efforts to save energy and realize eco-friendly lighting by maximizing efficiency of the lighting fixtures based on creative design, scientific design and test processes and repeated growth as a global company to supply its own brand products to about 30 countries in the world.

I believe that precise data of the products manufactured by Rayhouse will provide the customers with satisfactory results and among others. I sincerely wish valuable dreams of Rayhouse that wants to light darkness and make bright and beautiful world could be specifically realized through the hands of the lighting designers over the world.

Thank you.

CEO. MoonHo. LEE



신디 시스템
하이퍼 시스템

엘시드 에프
엘시드 엘
네오
테트라
트윙클
갤럭시
레온
리바
하이퍼 엘
로바 엘
시닉 엘
가오스 에프

캠
로바
엠지오
썬타
티온
시닉
엑스비

아이온
텐드
코닉
엘프
마스
제타
아르떼
가오스
엑토
컨템포
리코
루스트
마이다스
샤이닝
캠폴
로바폴

헤일로
반디
레이팻
클링
가이드

LED CONTROLLER

CINDI SYSTEM	11
HYPER SYSTEM	21

LED LIGHTING

ELCID-F	28
ELCID-L	36
NEO	44
TETRA	56
TWINKLE	60
GALAXY	66
LEON	70
LIBAR	74
HYPER-L	80
ROVA-L	84
SCENIC-L	90
GAOS-F	102

FLOOD LIGHTING

CAM	112
ROVA	122
MGO	130
THETA	136
TEEON	140
SCENIC	146
XB	156

POLE & BOLLARD LIGHTING

ION	162
TEND	166
CONIC	170
ELF	174
MAST	178
ZETA	182
ARTE	186
GAOS	190
ACTO	196
CONTEMPO	202
LICO	206
ROOST	210
MIDAS	216
SHINING	220
CAM-POLE	224
ROVA-POLE	230

SOLAR LIGHTING

HALO	240
BANDI	246
RAYPOT	250
CLING	254
GUIDE	258

본 카탈로그는 레이하우스의 모든 조명기구에 대한 상세한 정보와
주문방법이 명시되어 있습니다.

제품의 광원, 전기적 특성, 조명기구의 재질
및 설치관련 데이터를 상세히 설명합니다.

제품의 배광 데이터를 설명합니다. 자세한 사항은
Photometric guide를 참고하시기 바랍니다.

현재 보고 있는 제품의 타입입니다.
원하는 타입별로 해당 제품을 찾을 때
손쉽게 찾을 수 있습니다

해당 제품의 배광 형태를 나타냅니다.
원하는 배광 형태로 해당 제품을 찾을 때 손쉽게
찾을 수 있습니다.



 IP - 제품의 방진, 방수등급을 나타냅니다.
 IK - 제품의 충격에 대한 강도를 나타냅니다.
 CE - 제품의 품질인증 관련 획득 마크를 나타냅니다.
 Class - 제품의 전기안전등급을 나타냅니다.

제품의 크기와 설치 시 고려해야 할 고정용 홀 크기가
설명되어 있습니다. 가로등이나 볼라드 조명의 경우
앵커 플레이트(Anchor plate) 사이즈를 참고 바랍니다.

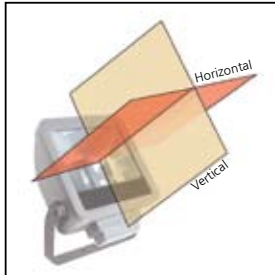
현재 보고 있는 제품의 페이지입니다.
목차에 있는 페이지로 해당 제품을 찾을 때
손쉽게 찾을 수 있습니다.

PHOTOMETRIC GUIDE

To help you use light fixtures more efficiently, this catalogue provides varied information of brightness and light. You can download the information in IES file from website www.rayhouse.com

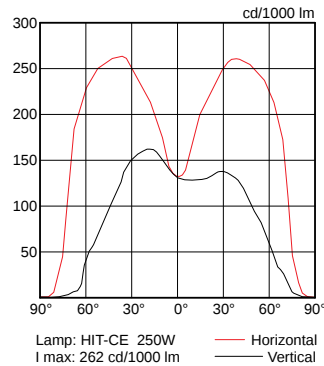
조명기구 활용을 용이하게 하기 위해 본 카탈로그에서는 광도와 조명에대한 다양한 배경데이터를 제공하고 있으며, www.rayhouse.com에서 IES 파일을 다운로드하여 이용하실 수 있습니다.

Horizontal & Vertical

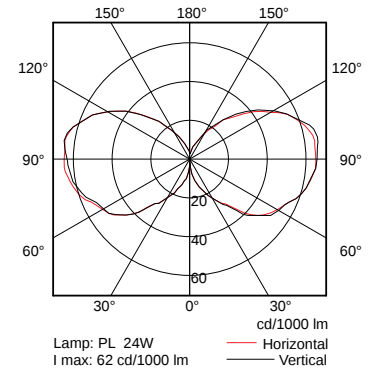


Horizontal Plan: C90-C270
Vertical Plan: C0-C180

Photometric curves for flood type



Photometric curves for post type

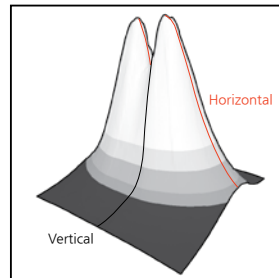


Photometric values

	C0	C90	C180
0°	131	131	131
10°	129	172	150
20°	132	219	163
30°	139	250	152
40°	128	262	118
50°	97	252	79
60°	62	229	44
70°	27	162	6
80°	3	13	1
90°	0	0	0

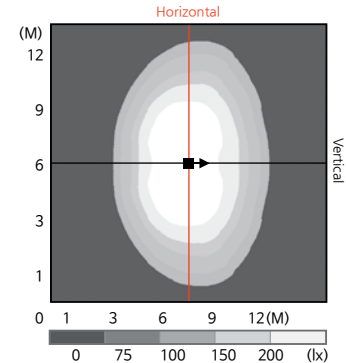
Lamp: HIT-CE 250W / 24500 lm

Illuminance 3D mountain plot



0 75 100 150 200 (lx)
Lamp: HIT-CE 250W / 24500lm / H: 3M

Illuminance pseudo color



SAFETY & QUALITY GUIDE

Insulation Class		Class I Luminaires are electrically insulated and provided with connection with earth. 본 등급의 조명기구는 접지가 반드시 필요한 등급입니다.
		Class II Luminaires are protected against the electrical shock with double insulation. 본 등급의 조명기구는 이중절연된 제품으로 별도의 접지가 필요하지 않습니다.
		Class III Luminaires are suitable for connection to Low-Voltage circuits. (max.50V) 본 등급의 조명기구는 50V이하의 저전압으로 접지가 필요하지 않습니다.
Flammable Surface		Luminaires suitable for mounting on normally flammable surfaces. (ignition temperature : 200℃) 일반적인 가연성 표면에 부착가능한 조명기구입니다.(발화온도 200℃)
		Luminaires not suitable for direct mounting on normally flammable surfaces. 일반적인 가연성 표면에 부착하면 안되는 조명기구입니다.
Mechanical Shock		IK means the level of shock resistant of luminaires. Shock resistance from a hammer of 5kg falling from 40cm (20J) = IK10. IK는 조명기구의 충격에 대한 강도를 나타냅니다. 40cm의 거리에서 5kg의 충격구를 떨어뜨렸을 때 견딜 수 있다면 IK10에 해당됩니다.
Ingress Protection ratings		IP rating (IEC60529) against solids and liquids is stated by two characteristic numbers. 분진과 액체에 대한 IP지수 (IEC60529)는 두 자리 숫자로 정의됩니다.
CE Mark		The CE mark signifies that a product conforms to the requirements of relevant EU(European Union) directives. So this marking assists customs and market inspectors in facilitating the free trading and movement of products within the EEC. CE mark는 제품이 EEC(유럽 경제 공동체) 규정상의 요구사항에 적합하게 만들어졌다는 것을 의미합니다. 따라서 이 마크는 EEC내에서 자유무역과 제품 유통을 쉽게하여 고객과 검수자들의 편리성을 제공합니다.
KS Mark		The KS mark signifies that a product conforms to the requirements of relevant KSA directives. So this marking assists customs and market inspectors in facilitating the free trading and movement of products within the South Korea. KS 마크는 제품이 KSA(한국표준협회)의 요구사항에 적합하게 만들어졌다는 것을 의미합니다. 따라서 이 마크는 한국내에서 제품유통과 거래를 쉽게하여 고객과 검수자들의 편리성을 제공합니다.
UL Mark		The UL mark signifies that a product conforms to the requirements of relevant UL. (Underwriters Laboratories) directives. So this marking assists customs and market inspectors in facilitating the free trading and movement of products in the U.S. UL mark는 제품이 UL 규정상의 요구사항에 적합하게 만들어졌다는 것을 의미합니다. 따라서 이 마크는 미국내에서 자유무역과 제품 유통을 쉽게하여 고객과 검수인들에게 편리성을 제공합니다.

IP Protection rating

IP rating (IEC60529) against solids and liquids is stated by two characteristic numbers.
분진과 액체에 대한 IP지수 (IEC60529)는 두 자리 숫자로 정의됩니다.



First Digit

Protection against ingress of solids

고체에 대한 침투 방지 등급

- | | |
|------|--|
| IP1X | Protected against the entry of solid bodies with dimensions of more than Ø50mm
Ø50mm 이상의 물체에 대한 침투 방지 |
| IP2X | Protected against the entry of solid bodies with dimensions of more than Ø12mm
Ø12mm 이상의 물체에 대한 침투 방지 |
| IP3X | Protected against the entry of solid bodies with dimensions of more than Ø2.5mm
Ø2.5mm 이상의 물체에 대한 침투 방지 |
| IP4X | Protected against the entry of solid bodies with dimensions of more than Ø1mm
Ø1mm 이상의 물체에 대한 침투 방지 |
| IP5X | Protected against the entry of dust
먼지에 대한 침투 방지 |
| IP6X | Totally protected against entry of dust
완전한 방진 |



Second Digit

Protection against ingress of liquids

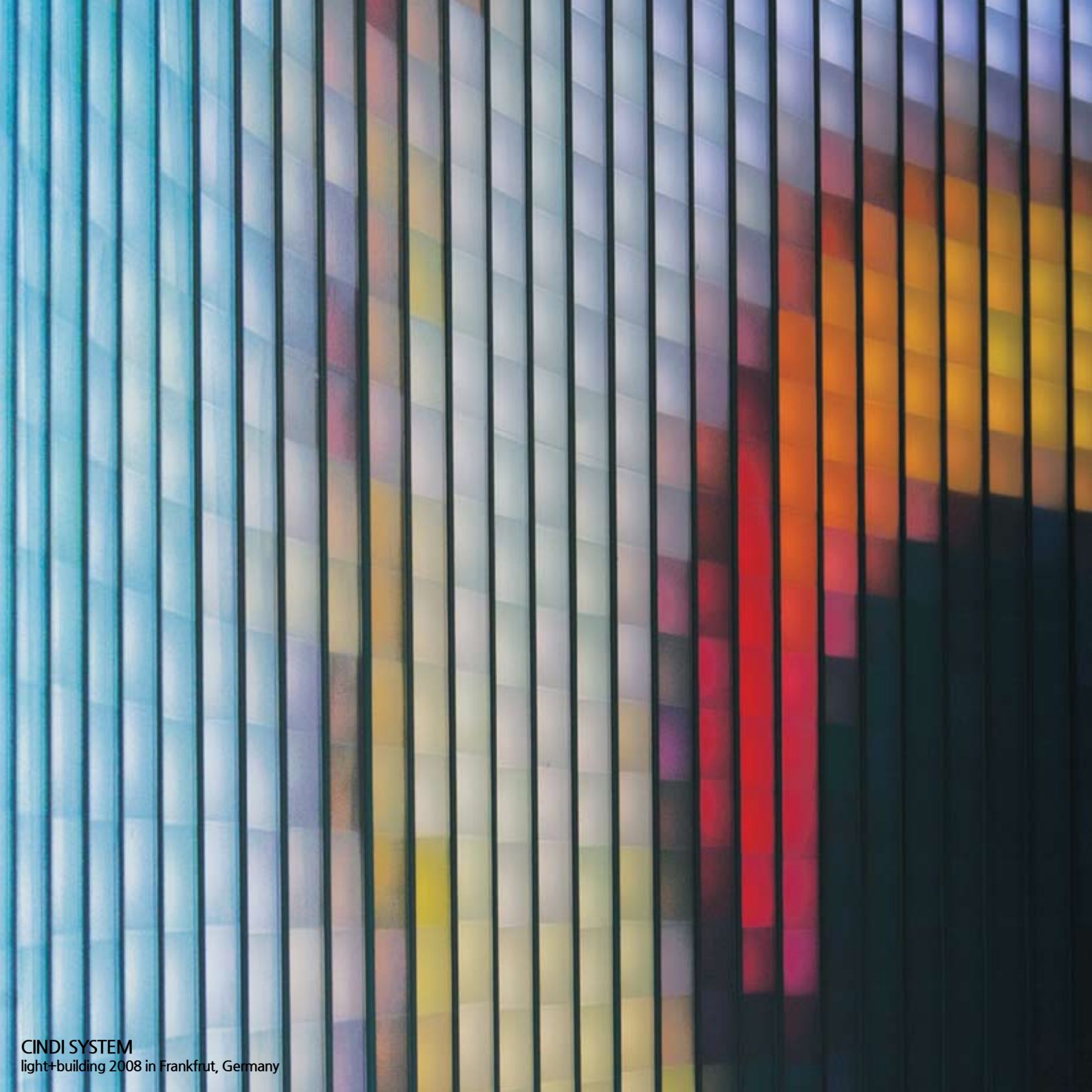
액체에 대한 침투 방지 등급

- | | |
|------|--|
| IPX1 | Protected against the vertical falling of water drops
수직으로 떨어지는 물방울에 대한 보호 |
| IPX2 | Protected against the vertical falling of water from 15°
15 방향으로 떨어지는 물방울에 대한 보호 |
| IPX3 | Protected against Spraying of water from 60°
60 방향으로 분사된 물에 대한 보호 |
| IPX4 | Protected against splashing of water from any angle
모든 방향에서 튀기는 물방울에 대한 보호 |
| IPX5 | Protected against water jets (0.3bar at 3m)
분사로 내뿜어진 물에 대한 보호 |
| IPX6 | Protected against high pressure water jets (1bar at 3m)
강한 분사로 내뿜어진 물에 대한 보호 |
| IPX7 | Protected against immersion in water for 30 minutes (1m)
일시적 침수에 대한 보호 (1m 내에서 30분) |
| IPX8 | Protected against continuous immersion in water (1m)
연속적 침수에 대한 보호 (1m 이상) |

CONTROLLED

LED CONTROLLER

신디 시스템 CINDI SYSTEM
하이퍼 시스템 HYPER SYSTEM





CINDI SYSTEM

신디시스템

LED CONTROLLER



CINDI



CINDI-M



light+building 2008 (Frankfurt, Germany) Hall 5.0D41



light+building 2010 (Frankfurt, Germany) Hall 5.0C76

CINDI CONTROLLER

Cindi was designed to control the LED fixtures that were produced by Rayhouse and directing true color. General LED controllers contain many components such as a master and hubs in accordance with the number of LED lighting instruments. Cindi controller consists of 4 ports and one Cindi

controller can control 8,000 lighting fixtures (2,000 per port) regardless the types of LED or fixtures and the system is simply composed.

Cindi는 레이하우스에서 생산되는 트루칼라(True Color) 연출용 LED 기구의 컨트롤을 위해 제작되었습니다. 일반적인 LED 컨트롤러는 수량의 제약에 따라 마스터(Master) 및 허브(Hub) 등으로 복잡하게 구성되는 경우가 많습니다. Cindi Controller는 4개의 Port로 구성되어 있으며, 한 개의 Controller로 LED의 종류 및 기구 형태에 상관없이 8,000개 (한 개의 Port당 2,000개)의 LED 조명 기구를 컨트롤 할 수 있어 보다 간단하게 시스템을 구성 할 수 있습니다.

CINDI STUDIO

CINDI STUDIO is software to make lighting scenes for CINDI. In most cases, Lighting scenes are produced through professional software in general LED controller. Rayhouse made this program to users have convenience in producing scenes which would be converted into the data for Cindi. Cindi Studio has quick and easy process. Movie's color tones, brightness and saturation would be adjusted by Cindi Studio. And in this program, the number of fixtures could be divided and IP would be automatically addressed to the lighting fixtures according to their positions.

신디 스튜디오는 신디에서 사용 될 연출신 제작을 위해 제작된 소프트웨어 입니다. 일반적인 LED 컨트롤러들은 사용자가 다루기 어려운 소프트웨어를 통해 연출신을 제작하는 경우가 많습니다. 레이하우스는 사용자가 직접 목적에 맞는 연출신을 제작할 수 있도록 하기위해 동영상을 보다 간편하고 신속하게 신디데이터로 변환할 수 있는 소프트웨어를 제작했습니다. 신디스튜디오는 동영상의 색상과 밝기, 채도를 조절할 수 있고, 조명기구의 수량에 맞게 자유롭게 분할하고 조명기구의 배치에 따라 IP를 부여 할 수 있습니다. 또한 연출신을 조합하고 그 사이에 이펙트 효과를 삽입할 수 있는 기능을 제공합니다.

SPECIFICATIONS

Electrical

Input voltage	DC 12V~24V (adapter or SMPS)
Power consumption	5W
Signal	RS-485 correspondance (2P)
Data input	CINDI STUDIO (software)
Protocol	RH-CINDI (self-development)

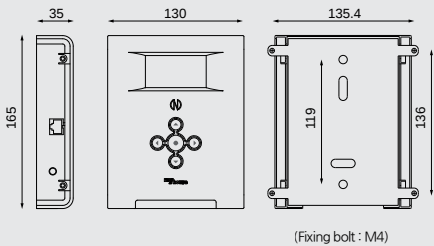
Physical

Size	130mm x 35mm x 165mm
Finish	powder coating
Housing	die cast aluminum
Screen	128 X 64 LCD LED Back light

Installation

Data Input port	UTP cross cable
Data Output port	pluggable screw less terminal block 3P (USL-5FB)
Distance of fixing hole	refer to the drawing
Data out Cable	signal 2P (AWG22)
Recommended cable	Ra-cable (self-development)

CINDI





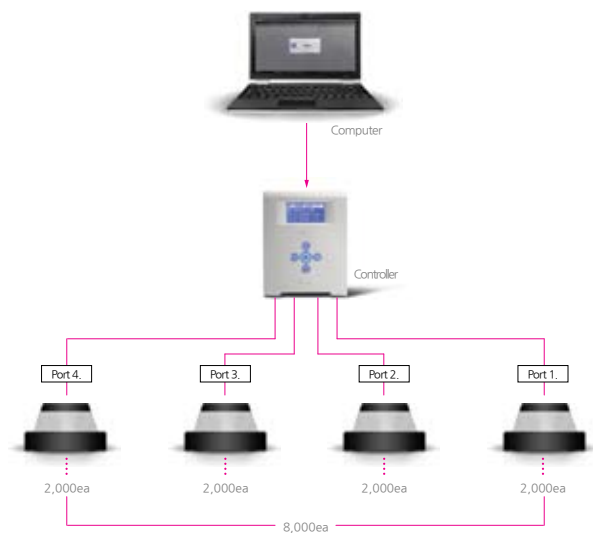
- | | |
|-----------------|-----------------------------|
| 1. 전원입력포트 | 1. Power input port |
| 2. 전원스위치 | 2. Main power switch |
| 3. 출력포트 | 3. CINDI out port |
| 4. 리셋버튼 | 4. Reset button |
| 5. 컴퓨터 연결포트 | 5. Computer connection port |
| 6. 입력포트 | 6. CINDI input port |
| 7. 오디오 입력포트 | 7. Audio input port |
| 8. LCD화면 | 8. LCD screen |
| 9. 기능버튼 | 9. Function button |
| 10. 조명기구 연결포트 1 | 10. Lighting fixture port 1 |
| 11. 조명기구 연결포트 2 | 11. Lighting fixture port 2 |
| 12. 조명기구 연결포트 3 | 12. Lighting fixture port 3 |
| 13. 조명기구 연결포트 4 | 13. Lighting fixture port 4 |

Cindi offers various functions for real users. And Cindi is an economic controller which could reduce installation cost by simply system to control many led lighting fixtures.

- Control 8,000 fixtures per Cindi
- Automatic IP addressing
- By-pass problems of fixtures
- Scan fixtures situation and problems
- Control speed up and down
- Control RGB color
- Plan to play schedule for daily, weekly and monthly
- Synchronize with audio start
- Offer 4 data output ports

CINDI는 실 이용자를 고려한 다양한 기능을 가지고 있습니다. 그리고 다수의 LED 조명기구를 간단한 시스템으로 구성하여 설치 비용을 최소화 할 수 있는 경제적인 컨트롤러 입니다.

- 한 대의 신디 컨트롤러로 조명기구 8,000개 제어
- 자동 IP 지정
- 조명기구 문제 발생시 우회기능(By-pass)
- 조명기구 상태 및 문제 스캔 기능
- 연출 속도 조정 기능
- 연출 색상(RGB) 조정 기능
- 연출 스케줄 기능(일, 주, 월별 연출 계획)
- 음원 동기화 기능
- 4개의 데이터 출력 포트



ORDERING.....CINDI

ITEM	CODE
CINDI controller	CD1



CINDI Package Box
Size : 255 X 217 X 75(mm)
Weight : 1.2kg (included product)

SPECIFICATIONS

Electrical

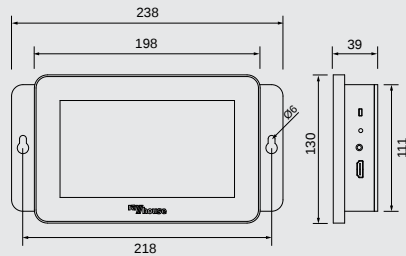
Input voltage	DC 5V Only (adapter or SMPS)
Power consumption	10W
Signal	RS-485 correspondance (2P)
Data input	CINDI STUDIO (software)
Protocol	RH-CINDI (self-development)

Physical

Size	238mm x 130mm x 39mm (included mounting plate)
Finish	powder coating
Housing	stainless steel
Screen	7" TFT LCD LED Back light

Installation

Data Input port	UTP cross cable, SD CARD, USB
Data Output port	pluggable screw less terminal block 3P (USL-5FB)
Distance of fixing hole	refer to the drawing
Data out Cable	signal 2P (AWG22)
Recommended cable	Ra-cable (self-development)



▲ Fixing hole distance : 218mm

CINDI - M



The names and functions of CINDI -M

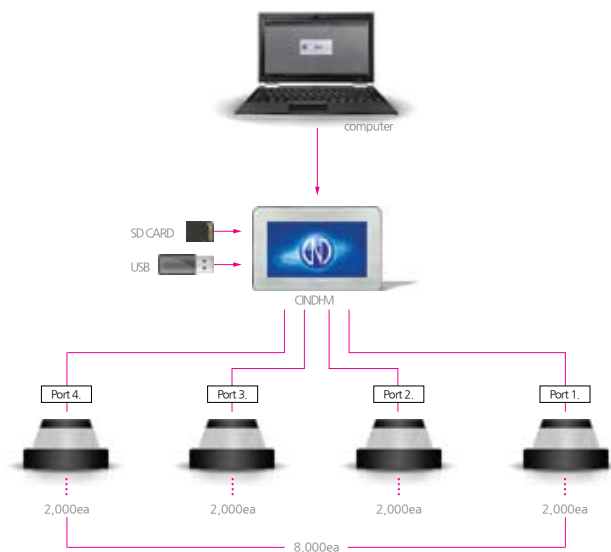


1. 전원 스위치
2. 리셋 버튼
3. 스피커 포트
4. HDMI 포트
5. Micro SD 포트
6. OTG 포트
7. USB 포트
8. LCD 터치 스크린
9. 고정홀

1. Main power switch
2. Reset button
3. Speaker port
4. HDMI port
5. Micro SD CARD port
6. OTG port
7. USB port
8. LCD touch screen
9. Fixing hole

10. 고정대
11. 전원 포트(DC)
12. 오디오, 비디오 포트
13. 카메라 포트
14. 랜 포트
15. 조명기구 연결포트 1
16. 조명기구 연결포트 2
17. 조명기구 연결포트 3
18. 조명기구 연결포트 4

10. Mounting plate
11. Power port(DC)
12. AV port
13. CAM port
14. LAN port
15. Lighting fixture port 1
16. Lighting fixture port 2
17. Lighting fixture port 3
18. Lighting fixture port 4



CINDI-M is more improved than CINDI in multi-media functions. It can be used all functions of CINDI on touch panel easily and quickly. And it offers the remote control function that you can manage LED light shows with computers and Android mobiles far away freely.

1. 8,000 fixtures control per Cindi
2. Automatic IP addressing
3. By-passing problems of fixture
4. Scanning fixtures situation and problems
5. Control speed up and down
6. Control RGB color
7. Scheduling for daily, weekly and monthly
8. Synchronization with audio start
9. 4 data output ports
10. 7" Touch screen interface for easy control
11. Remote control with computers and android mobiles
12. Audio output for sound effect
13. USB and micro SD card ports for data input

CINDI-M은 CINDI보다 멀티미디어 기능이 강화된 제품입니다. 안드로이드 OS와 터치패널 적용으로 CINDI의 모든 기능을 보다 쉽고 편리하게 조작할 수 있습니다. 또한 원격제어 기능으로 현장 방문 없이 연출신을 컴퓨터나 안드로이드 휴대폰을 통해 자유롭게 변경할 수 있습니다.

1. 한 대의 신디 컨트롤러로 조명기구 8,000개 제어
2. 자동 IP 지정
3. 조명기구 문제 발생시 우회기능(By-pass)
4. 조명기구 상태 및 문제 스캔 기능
5. 연출 속도 조정 기능
6. 연출 색상(RGB) 조정 기능
7. 연출 스케줄 기능(일, 주, 월별 연출 계획)
8. 음원 동기화 기능
9. 4개의 데이터 출력 포트
10. 직관적인 7인치 터치스크린 인터페이스
11. 컴퓨터와 안드로이드 폰에 의한 원격제어
12. 음향 효과를 위한 오디오 출력
13. 데이터 입력용 USB 및 Micro SD카드 단자

ORDERINGCINDI-M

ITEM	CODE
CINDI-M	CD2



CINDI-M Package Box
Size : 255 X 217 X 75(mm)
Weight : 1.6kg (included product)

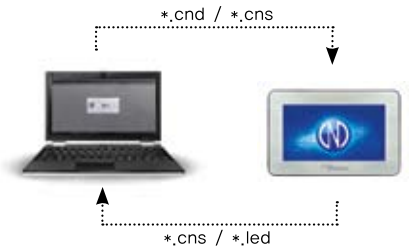
SPECIFICATIONS

CINDI Studio

Contents	Minimum specification	Recommended specification
Operating system	WIN NT 4.0	Beyond WIN XP SP2
CPU	Pentium 2	Beyond Pentium 3
RAM	512MB	1GB
Extra space of HDD	16MB	32MB
Resolution	1280 x 768 Pixel	1280 x 1024 Pixel
시스템 요구사항	최소사양	권장사양
운영체제	WIN NT 4.0	WIN XP SP2 이상
CPU	Pentium 2	Pentium 3 이상
메모리	512MB	1GB
하드디스크 여유공간	16MB	32MB
해상도	1280 x 768 Pixel	1280 x 1024 Pixel

Available file format in CINDI Studio
avi : Video data file (Check codecs)
cnd : Data file which is transmittable into CINDI Controller
cns : Data schedule file made by CND file
led : Data file which is uploaded from CINDI Controller.

CINDI Studio에서 사용 가능한 파일
avi : 동영상파일 (코덱 확인).
cnd : CINDI Controller로 전송 가능한 연출 데이터.
cns : *.cnd 파일로 제작한 연출 스케줄 파일.
led : CINDI Controller에서 다운받은 동영상 파일.



ORDERINGCINDI Studio

ITEM	CODE
CINDI Studio - software	CS1



LED system can be largely divided into controller, fixtures, power supply, data generation S/W. Cindi system allows the user to realize the best effect desired through technical and design harmonization of the configuration. Especially, the technology to configure 8,000 fixtures with one controller may bring about time and economic saves as well as convenient configuration of LED system. In addition, it can connect and control the lighting fixtures applied with even different LEDs such as high power and SMD. For connection cables, we have developed and supply RA Cable that is able to data and power in one line without any noise in order to enable more stable system configuration.

LED 시스템 구성은 크게 컨트롤러, 조명기구, 전원, 데이터 제작 소프트웨어 등으로 나눌 수 있습니다. 신디 시스템은 이들 구성의 기술적, 디자인적 조화를 통해 사용자가 원하는 최상의 효과를 보다 편리하고 쉽게 구현할 수 있도록 했습니다. 특히 한 개의 컨트롤러로 8,000개의 기구를 제어할 수 있는 기술은 LED 시스템 구성의 편리성 뿐만 아니라 기구 설치의 시간적, 경제적 절감 효과를 가져올 수 있습니다. 또한 High power, SMD 등 서로 다른 종류의 LED가 적용된 조명기구에 관계없이 연속적으로 연결 및 제어할 수 있습니다. 연결 케이블은 데이터와 전원을 노이즈없이 하나의 라인으로 전송할 수 있는 RA Cable을 자체 개발 제작해 공급함으로써 보다 안정적인 시스템을 구성할 수 있도록 하였습니다.

Cindi System Configuration



SPECIFICATIONS

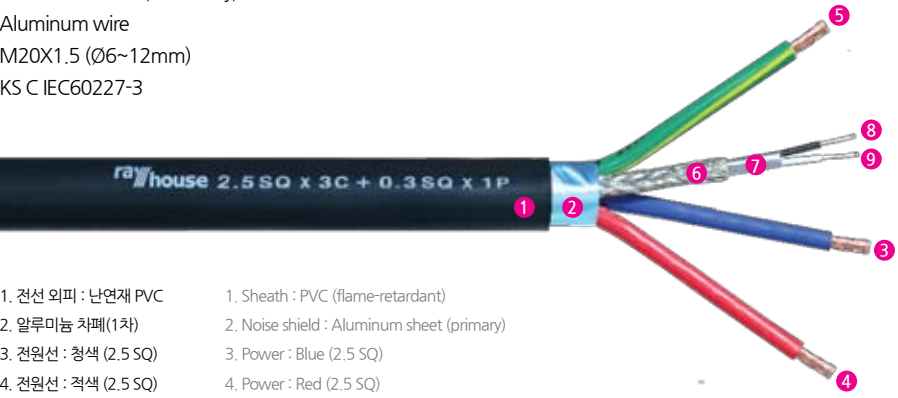
RA-cable

Because LED lighting performance has a lot of data communication on line, there could be occurred an error by some noise. Especially outdoor lighting installed outside could be affected by various noises. Therefore in case of using standard data line, it could make serious problems. Rayhouse made Ra-cable which has triple noise filter to make a safety data communication environment against noise by based various field experiences. Ra-cable is combined data and power lines for easy installation and economical efficiency.

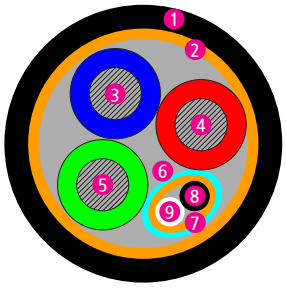
영상 이미지를 연출하는 LED 경관조명은 많은 데이터 전송이 이루어지므로 약간의 노이즈에도 통신 오류를 일으킬 수 있습니다. 특히 외부에 설치되는 경관조명은 다양한 노이즈에 노출되어 일반 통신선을 사용할 경우 연출에 심각한 장애를 일으키는 경우가 많습니다. 레이하우스는 이러한 경험을 토대로 노이즈를 3중 차폐하는 최적의 통신선인 RA-cable을 자체개발하여 노이즈에 영향을 받지않는 안정적인 통신환경을 만들었습니다. 또한 신호선과 전원선을 하나의 전선으로 통합하여 설치의 편리성과 경제성을 극대화하였습니다.

Physical

Use voltage	DC24V or AC200~240V / 50~60Hz
Amount wire	5P (Power 3C + Signal 1P)
Size	Ø10,5mm
Power wire	2.5 SQ 2C (RED, BLUE)
Signal wire	0.3 SQ 1P (Black, White) - 22AWG
Sheath	PVC (flame-retardant)
Noise shield	Aluminum sheet (secondary)
Braid shield	Aluminum wire
Use cable gland	M20X1.5 (Ø6~12mm)
Certification	KS C IEC60227-3



- | | |
|----------------------|--|
| 1. 전선 외피 : 난연재 PVC | 1. Sheath : PVC (flame-retardant) |
| 2. 알루미늄 차폐(1차) | 2. Noise shield : Aluminum sheet (primary) |
| 3. 전원선 : 청색 (2.5 SQ) | 3. Power : Blue (2.5 SQ) |
| 4. 전원선 : 적색 (2.5 SQ) | 4. Power : Red (2.5 SQ) |
| 5. 접지선 : 녹색 (2.5 SQ) | 5. Earth : Green (2.5 SQ) |
| 6. 알루미늄 편조 | 6. Braid shield : Aluminum wire |
| 7. 알루미늄 차폐(2차) | 7. Noise shield : Aluminum sheet (secondary) |
| 8. 신호선 : 흑색 (0.3 SQ) | 8. Signal : Black (0.3 SQ) |
| 9. 신호선 : 백색 (0.3 SQ) | 9. Signal : White (0.3 SQ) |
- 내부전선은 KS 규격 전선을 사용합니다.



RA-cable section view

ORDERINGRA-cable

ITEM	CODE
RA-cable	RC1





HYPER SYSTEM
EVERLAND RESORT Milkyway



HYPER SYSTEM

하이퍼 시스템

LED CONTROLLER



HYPER-S



HYPER-D



HYPER-C



HYPER SYSTEM

Hyper is a high-performance LED control system that can control 480,000 pixels per Hyper. As the media facade system, Hyper has different functions from general media board. Hyper enables to design free layout of LED pixels, such as organic curves. In the remote control function, you can manage contents without a trip. And you can use various media formats (avi, mp4, wmv) directly. Hyper is the most media facade system that you can apply it on various scales lighting performance with easy installation and economical efficiency.

HYPER SYSTEM은 메인 컨트롤러 1대로 480,000 픽셀을 제어할 수 있는 고성능 시스템으로 일반 전광판과는 달리 픽셀을 자유롭게 배치할 수 있어 곡선과 같은 유기적인 형태의 미디어 파사드(Media Facade)를 효과적으로 구현할 수 있습니다. HYPER는 다양한 미디어 파일(avi, mp4, wmv)로 제작된 콘텐츠를 바로 적용할 수 있어 사용자가 보다 쉽게 콘텐츠를 운영할 수 있고, 원격 조정을 통해 현장 방문 없이 연출을 제어할 수 있습니다. 또한 어떠한 환경에도 적용할 수 있는 유연한 시스템 구조로 시공의 편리성과 경제성을 만족시킬 수 있는 미디어 시스템입니다.

HYPER-C Main controller

HYPER-C is a main controller of HYPER system which can control 480,000 pixels by combining HYPER-D and HYPER-S.

HYPER-C는 HYPER SYSTEM의 메인 컨트롤러로 HYPER-D(라인 드라이버)와 HYPER-S(서브컨트롤러)의 조합을 통해 480,000 픽셀 제어가 가능합니다.

HYPER-S Sub controller

HYPER-S is a sub controller of HYPER system. When you need to control over 40,000 pixels, HYPER-S is used with HYPER-C and HYPER-D.

HYPER-S는 HYPER SYSTEM의 서브 컨트롤러로 40,000 픽셀 이상의 제어가 필요한 경우 HYPER-C(메인 컨트롤러), HYPER-D(라인 드라이버)와 조합하여 사용됩니다.

HYPER-D Line driver

HYPER-D is a line driver to amplify and split lighting performance data. It helps flexible layout and easy installation of lighting fixtures.

HYPER-D는 신호의 증폭과 분배를 위해 사용되는 라인 드라이버로, 조명 기구의 유연한 배치와 시공편리성을 위해 사용됩니다.

SPECIFICATIONS

Electrical

Input voltage
Power consumption
Signal
Data input
Protocol

HYPER-C

DC 5V Only (adapter or SMPS)
10W
RS-485 correspondance (2P)
HYPER STUDIO (software)
RH-HYPER (self-development)

Physical

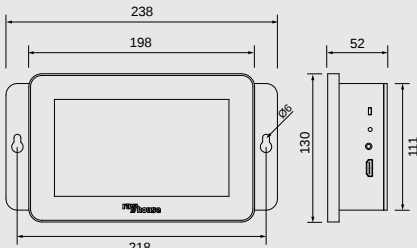
Size
Finish
Housing
Screen
Expansion
Resolution

238mm x 130mm x 52mm (included mounting plate)
powder coating
stainless steel
7" TFT LCD LED Back light
HYPER-S (sub controller) up to 8, HYPER-D (line driver)
480,000 pixel

Installation

Data Input port
Data Output port
Distance of fixing hole
Data out Cable
Expansion cable

UTP cross cable, SD CARD, USB
pluggable screw less terminal block 3P (USL-5FB)
refer to the drawing
signal 2P (AWG22)
UTP direct cable (HYPER-S, HYPER-D)



▲ Fixing hole distance : 218mm





- | | | | |
|-------------------|-----------------------|--------------------|--------------------|
| 1. 전원 스위치 | 1. Main power switch | 10. 전원 포트(DC) | 10. Power port(DC) |
| 2. 리셋 버튼 | 2. Reset button | 11. 오디오, 비디오 포트 | 11. AV port |
| 3. 스피커 포트 | 3. Speaker port | 12. 카메라 포트 | 12. CAM port |
| 4. HDMI 포트 | 4. HDMI port | 13. 랜 포트 | 13. LAN port |
| 5. Micro SD 카드 포트 | 5. Micro SD CARD port | 14. HYPER-D 연결포트 1 | 14. HYPER-D port 1 |
| 6. OTG 포트 | 6. OTG port | 15. HYPER-D 연결포트 2 | 15. HYPER-D port 2 |
| 7. USB 포트 | 7. USB port | 16. HYPER-D 연결포트 3 | 16. HYPER-D port 3 |
| 8. LCD 터치 스크린 | 8. LCD touch screen | 17. HYPER-D 연결포트 4 | 17. HYPER-D port 4 |
| 9. 고정홀 | 9. Fixing hole | 18. HYPER-S 연결포트 | 18. HYPER-S port |

SPECIFICATIONS

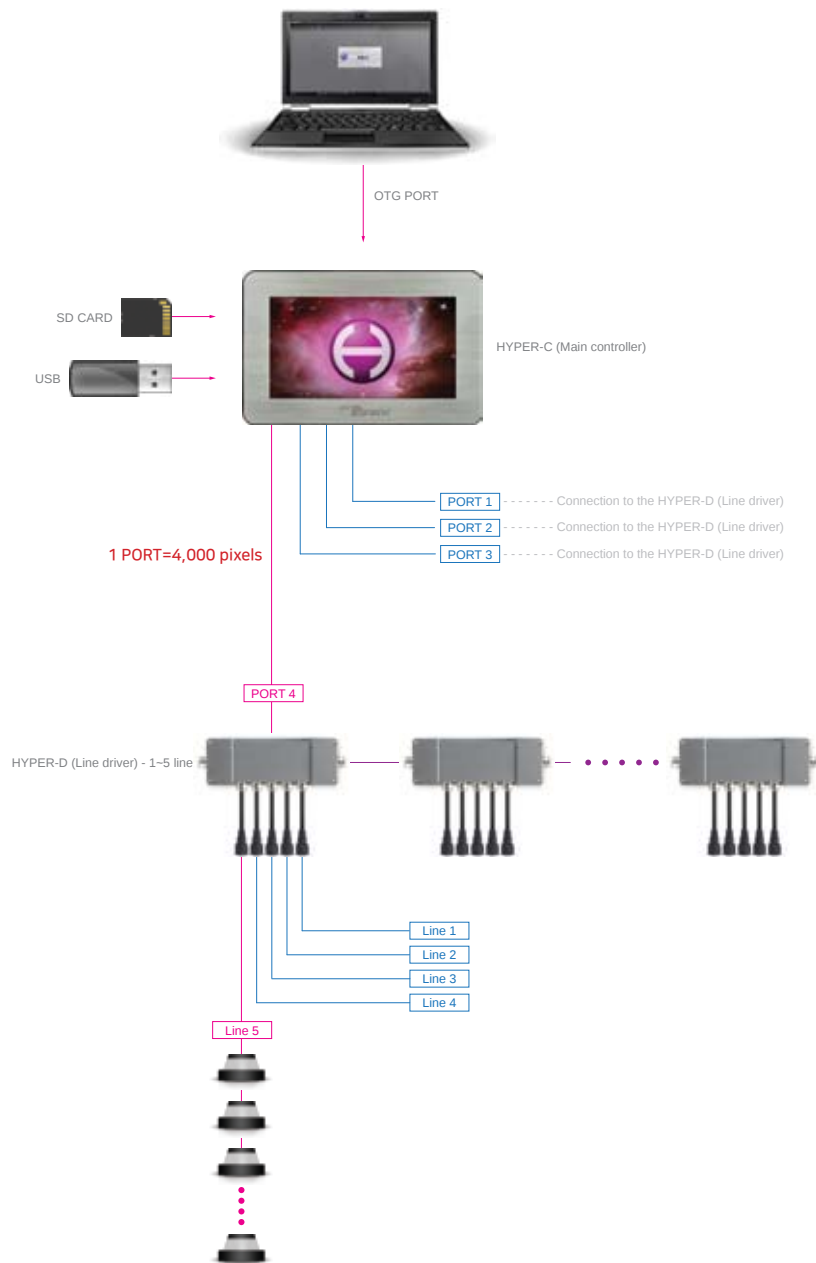
Input voltage	AC 220V Only
Power consumption	20W
Size	410mm x 412mm x 70mm
Finish	powder coating
Housing	stainless steel
Data Input port	UTP direct cable
Expansion cable	UTP direct cable (HYPER-S, HYPER-D)



SPECIFICATIONS

Input voltage	DC 24V Only
Power consumption	10W
Size	250mm x 90mm x 70mm
Finish	powder coating
Housing	die cast aluminum
Data Input port	UTP direct cable
Expansion cable	UTP direct cable (HYPER-D)



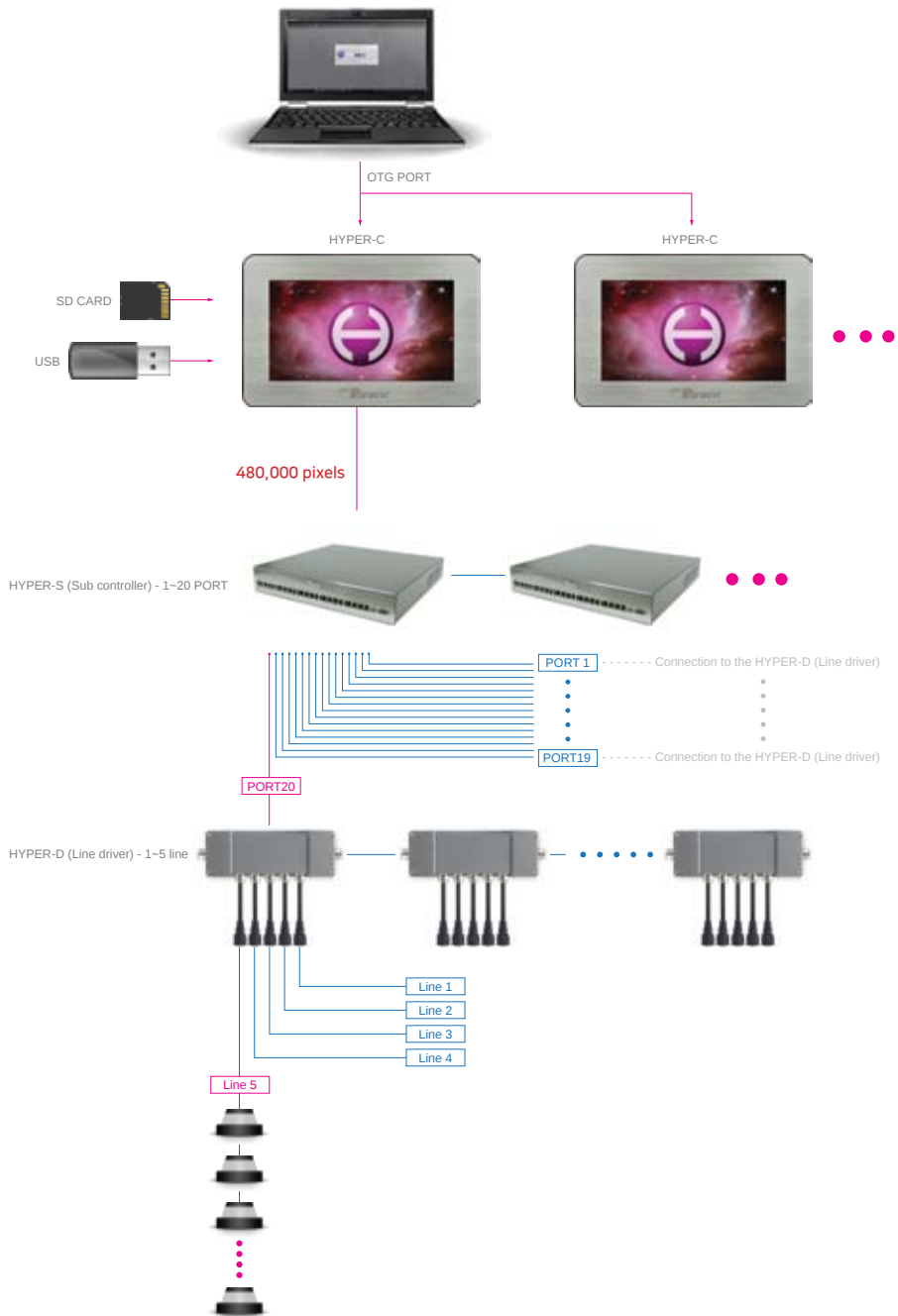


SYSTEM CONFIGURATION



HYPER Package Box
Size : 255 X 217 X 75(mm)
Weight : 1.6kg (included product)

Example of HYPER SYSTEM (more than 16,000 pixels)



ORDERING.....HYPER

ITEM	CODE
HYPER-C (Main controller)	HC 1
HYPER-S (Sub controller)	HS 1
HYPER-D (Line driver)	HD 1

LIGHTING
LED

LED LIGHTING

엘시드 에프	ELCID-F
엘시드 엘	ELCID-L
네오	NEO
테트라	TETRA
트윙클	TWINKLE
갤럭시	GALAXY
레온	LEON
리바	LIBAR
하이퍼 엘	HYPER-L
로바 엘	ROVA-L
시닉 에스엘	SCENIC-SL
시닉 엠엘	SCENIC-ML
시닉 씨엘	SCENIC-CL
가오스 에프	GAOS-F



Elcid-F
Yeosu World EXPO 2012 / ELCID-FH

ELCID-F

엘씨드-에프

LED LIGHTING



ELCID-F40



ELCID-F80



DESIGN FEATURES

Refined curve

The motive of Elcid-F is a refined curve so it has simple image in front side and beautiful wave in back side. It could be looked unfriendly but by using soft curved surface, Elcid-F could be harmonized with the surrounding.

Elcid-F는 세련된 곡선을 기본 모티브로 전면의 심플함과 후면의 아름다운 곡선을 조화시킨 형상으로 디자인 되었습니다. 삭막해 보일 수 있는 디지털적 이미지를 부드러운 곡면을 이용해 순화시킴으로 주변 환경과 자연스럽게 어울릴 수 있도록 하였습니다.

Durability

To maximize the emission of heat which is caused by the light source(POWER LED), Metal PCB was utilized and by sticking to the Heat-sink. By this, longer life span of the light source and durability could be secured.

광원(POWER LED)으로부터 발생하는 열을 최대한 방출하기 위해 Metal PCB와, 후면 Heat-sink와 최대한 밀착 고정하여 광원의 수명은 물론 내구성을 반영하여 설계하였습니다.

Multiple direction - Optic & Color

Elcid-F is designed to utilize various lenses and direct RGB color to the purpose of users. By this design, this lighting fixture enables the more deliberate and extensive lighting direction.

Elcid-F는 다양한 렌즈와 RGB컬러 연출을 통해 빛을 목적에 맞게 사용 할 수 있도록 설계되어 있어 보다 계획적이고 폭넓은 조명연출을 실현시켜 드릴 것입니다.

Convenience

Elcid-F has embedded Constant Current Driver which preserves fixed current so decrease of inrushing current or abnormal voltage could be possible. Therefore the LED and driver could be protected.

Elcid-F는 점등 시 일정한 전류를 유지시켜 주는 정전류회로(Constant Current Driver)를 내장하고 있고, 돌입전류나 이상전압 같은 전기적 충격으로부터 LED 및 Driver를 보호 할 수 있도록 서지보호설계(Surge protection design)가 적용되었습니다.



Goyang bus terminal / ELCID-FL

SPECIFICATIONS

Light Source

Lamp	power LED
Beam angle	10° / 30° / 60° / 140° X 60°
Color	RGB / Red / Green / Blue / Cool white / Warm white

Electrical

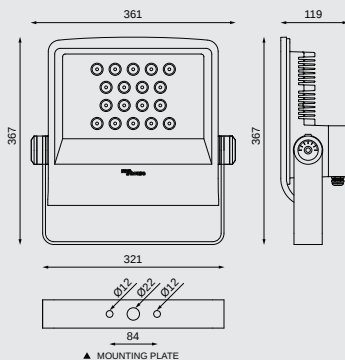
Input voltage	AC200~240V / 50~60Hz (enable DC24V)
Power consumption	50W (included converter)
Converter	fixtures with built-in AC-DC converter

Physical

Size	361mm x 367mm x 119mm
Weight	6.6kg (included converter)
Finish	powder coating (dark gray + black)
Housing	die cast aluminum
Front glass	toughened glass (THK 5mm)
Mounting plate	aluminum (THK 5mm)
Gasket	silicone
Lens	optical grade PMMA or PC
Bolt	stainless steel

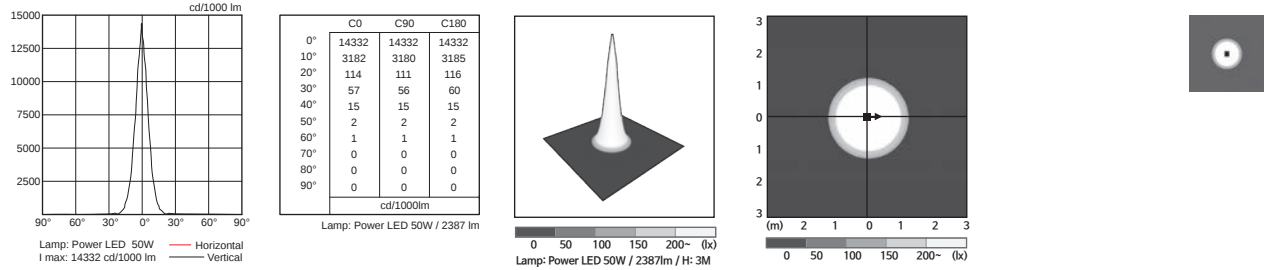
Installation

Input / Output	cable gland M20X1.5 (Ø6~12mm)
Cable	RA cable - 5P (refer to the page 18)

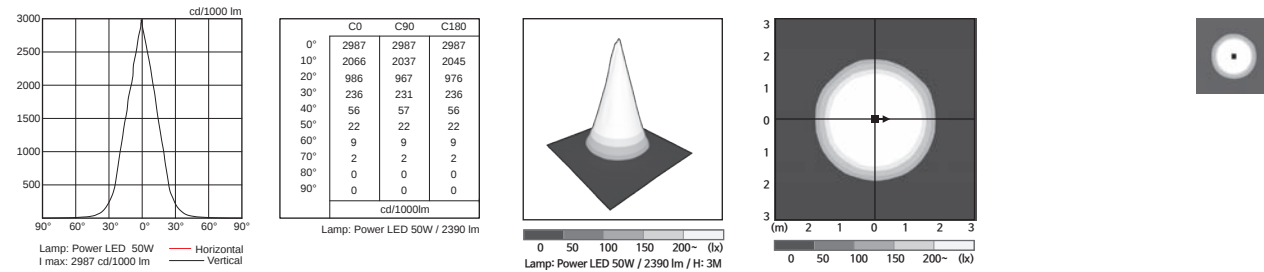


PHOTOMETRIC DATA

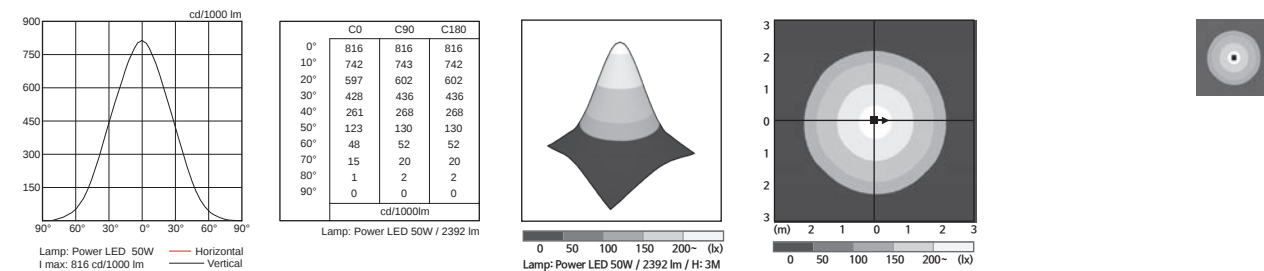
Elcid-FL (10°)



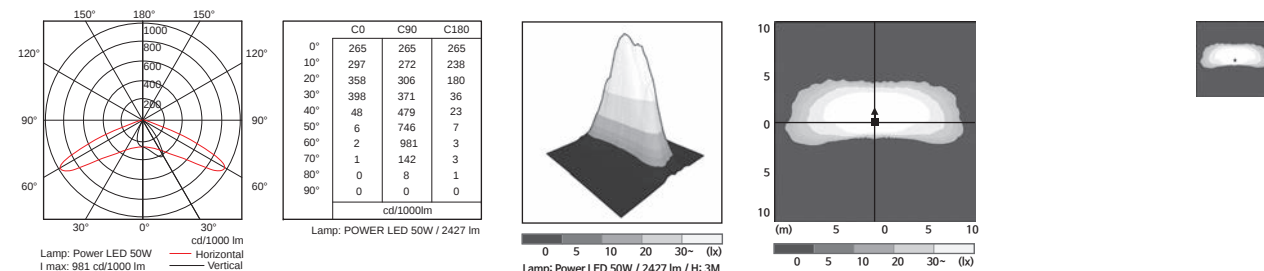
Elcid-FL (30°)



Elcid-FL (60°)



Elcid-FL (140° X 60°)



SPECIFICATIONS

Light Source

Lamp	power LED
Beam angle	10° / 30° / 60° / 140° X 60°
Color	RGB / Red / Green / Blue / Cool white / Warm white

Electrical

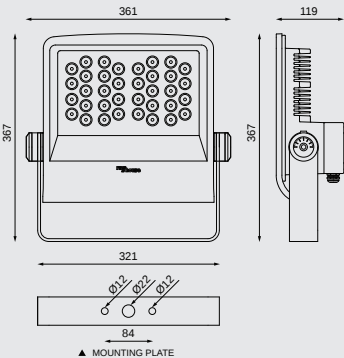
Input voltage	AC200~240V / 50~60Hz (enable DC24V)
Power consumption	100W (included converter)
Converter	fixtures with built-in AC-DC converter

Physical

Size	361mm x 367mm x 119mm
Weight	6.6kg (included converter)
Finish	powder coating (dark gray + black)
Housing	die cast aluminum
Front glass	toughened glass (THK 5mm)
Mounting plate	aluminum (THK 5mm)
Gasket	silicone
Lens	optical grade PMMA or PC
Bolt	stainless steel

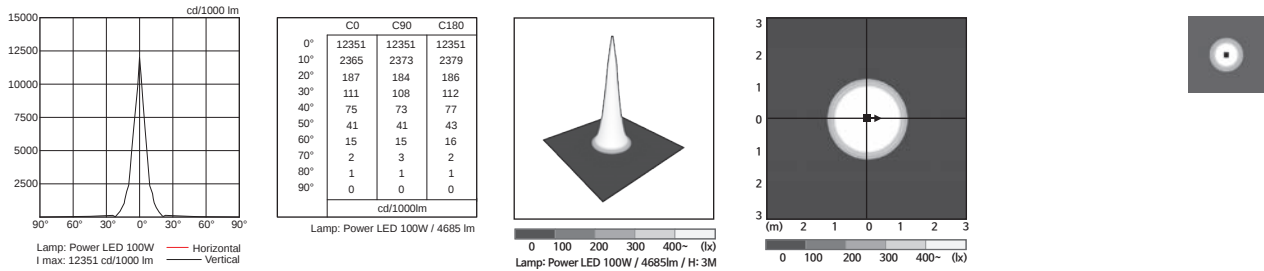
Installation

Input / Output	cable gland M20X1.5 (Ø6~12mm)
Cable	RA cable - 5P (refer to the page 18)

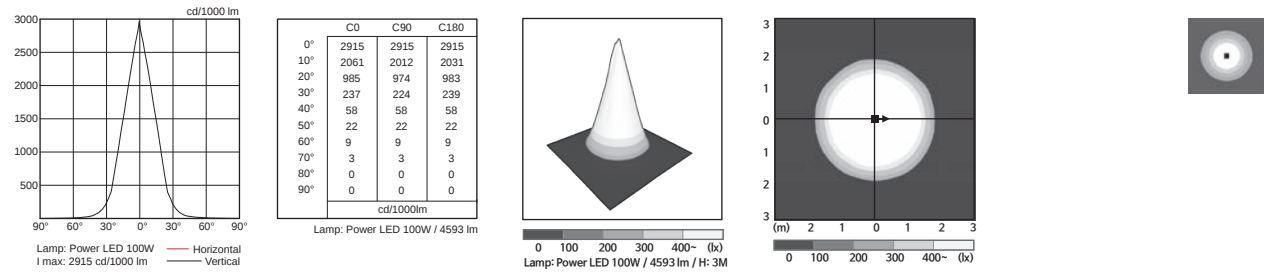


PHOTOMETRIC DATA

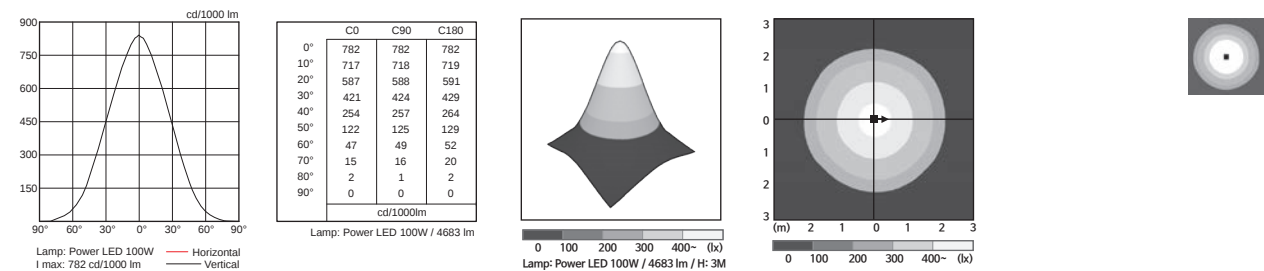
Elcid-FH (10°)



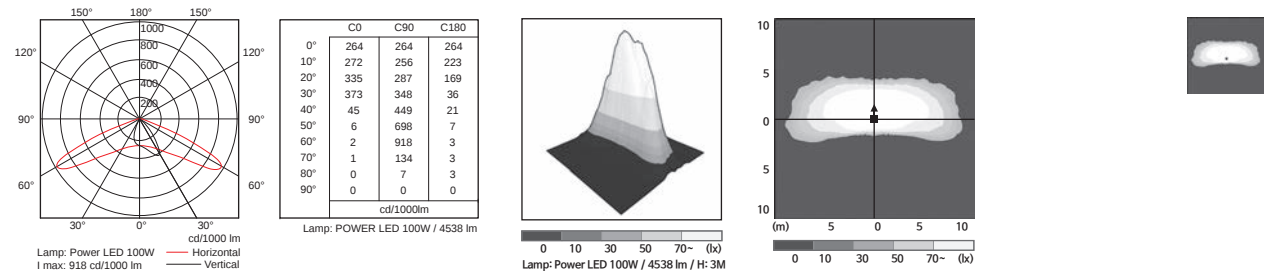
Elcid-FH (30°)



Elcid-FH (60°)

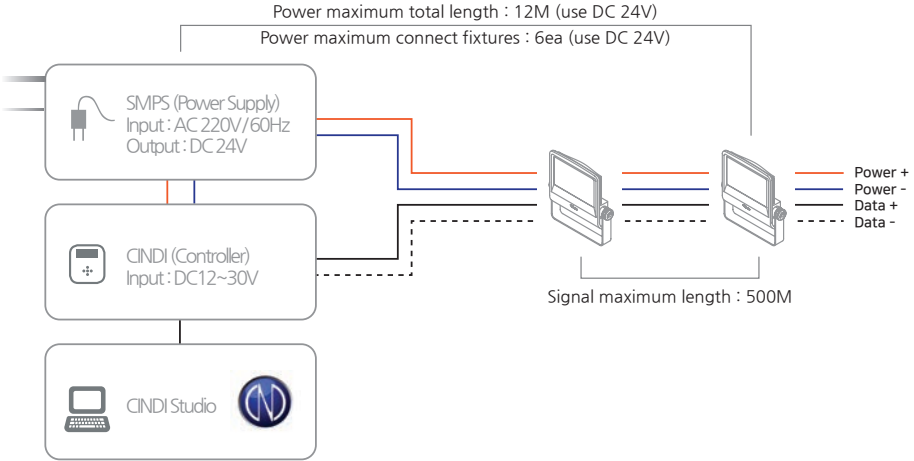


Elcid-FH (140° X 60°)

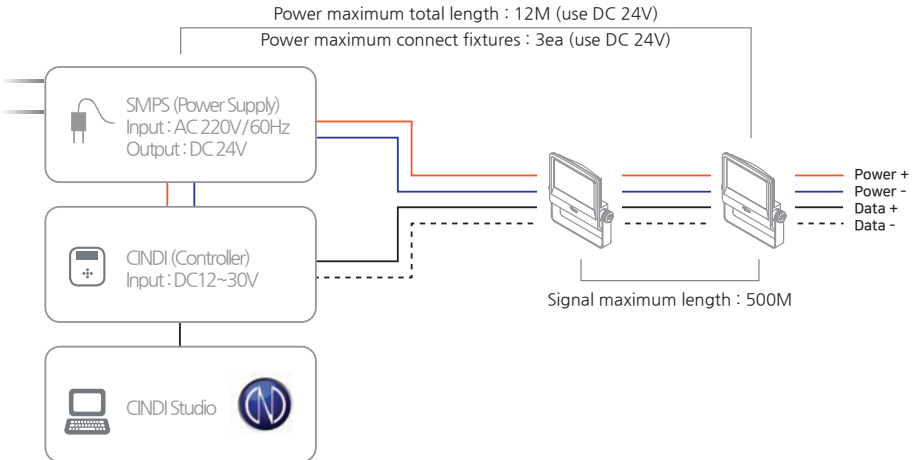


SYSTEM CONFIGURATION

Elcid-FL (DC24V)



Elcid-FH
(DC24V)



ORDERING CODE



ELCID-F Package Box

Size : 385 X 330 X 182(mm)

Weight : 7.6kg (included Lighting fixtures)

Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 3 blanks with product code.
If you select optional items, please add ' - ' after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 3가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 3가지 항목 뒤에 ' - ' 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) EF1 - KA - B10

STEP 1.....Light fixtures

ITEM	CODE
Elcid-F40 (DC 50W)	EF1
Elcid-F40(AC 50W)	EF2
Elcid-F80 (DC 100W)	EF3
Elcid-F80 (AC 100W)	EF4

STEP 3.....Beam angle

ITEM	CODE
10 degrees	B10
30 degrees	B30
60 degrees	B60
140X60 degrees	B40

STEP 2.....Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5



Elcid-L
Bulgaria Biovet / ELCID-L 50

ELCID-L

엘씨드-엘

LED LIGHTING



DESIGN FEATURES



Global Fair & Festival 2009 Incheon / ELCID-L 50

Urban & Aiming

Elcid-L is designed with concise straight lines and curves to create polished image. The structure which was attached stirrup is different from the existing line type of LED lighting fixture and it enables the suitable directions of space.

Elcid-L은 간결한 직선과 세련된 곡선으로 디자인된 도시적 이미지의 조명기구이며 기존 라인타입 LED조명기구와 달리 스트럽(stirrup)이 부착된 구조로 되어 있어 원하는 공간에 다양한 연출이 가능하도록 되어 있습니다.

Multiple direction - Lens & Choice

For securing various lenses, more deliberate and extensive lighting direction could be realized.

다양한 렌즈의 선택으로 목적에 맞는 빛을 연출할 수 있어 보다 계획적이고 폭 넓은 조명 연출을 실현시켜 드릴 것입니다.

Multiple color

Elcid-L is designed to mix manifold colors that are chosen by users. And with this directing method, users are able to create various and beautiful place that they wanted to.

Elcid-L은 사용자가 선택할 수 있는 다양한 컬러 조합을 통해 원하는 분위기를 연출할 수 있도록 설계 되었으며, 이러한 연출 방법으로 차별화된 아름다운 공간을 만들어 드릴 것입니다.

Convenience

For a terminal case is attached at the lighting fixtures lower part, users can settle the fixture conveniently.

조명기구 하부에 단자함(Terminal case)이 부착되어 있어 설치나 유지 보수 작업 시 사용자가 편리하게 사용할 수 있도록 제작되었습니다.

SPECIFICATIONS

ELCID-L 30

Light Source

Lamp	power LED
Beam angle	10° / 30° / 60° / 140° X 60°
Color	RGB / Red / Green / Blue / Cool white / Warm white

Electrical

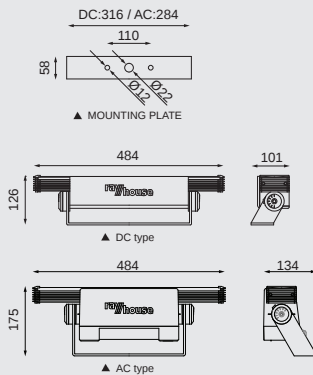
Input voltage	AC200~240V / 50~60Hz (enable DC24V)
Power consumption	50W (included converter)
Converter	fixtures with built-in AC-DC converter

Physical

Size	DC type : 484mm x 101mm x 126mm AC type : 484mm x 134mm x 175mm
Weight	DC type : 4kg / AC type : 5kg (included converter)
Finish	powder coating (dark gray + black)
Housing	die cast aluminum
Front glass	toughened glass (THK 5mm)
Mounting plate	aluminum (THK 5mm)
Gasket	silicone
Lens	optical grade PMMA or PC
Bolt	stainless steel

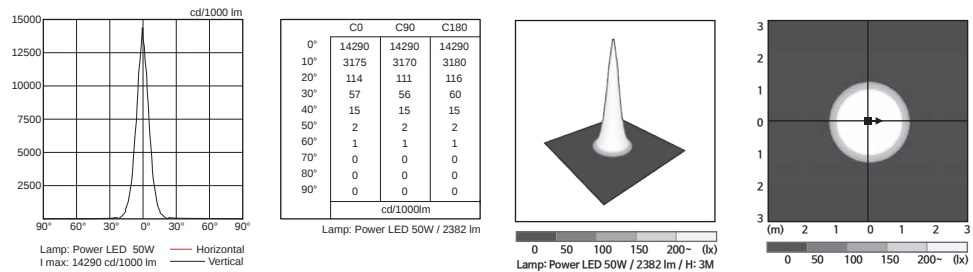
Installation

Input / Output Cable	cable gland M20X1.5 (Ø6~12mm) RA cable - 5P (refer to the page 18)
-------------------------	---

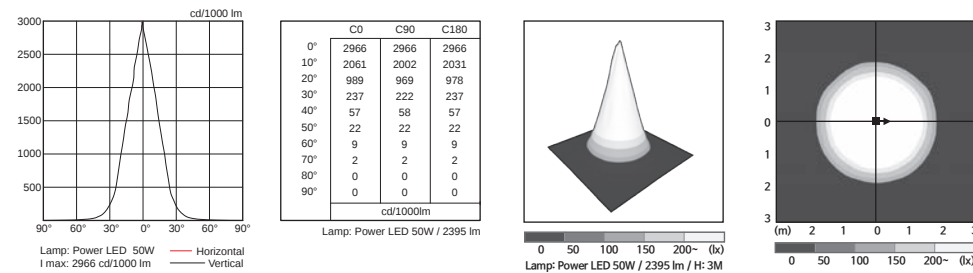


PHOTOMETRIC DATA

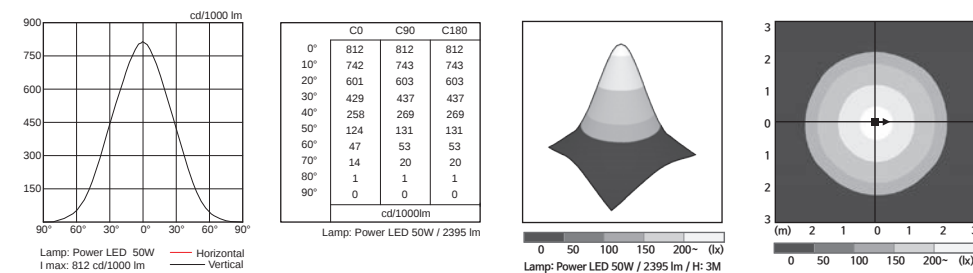
ELCID-L 30 (10°)



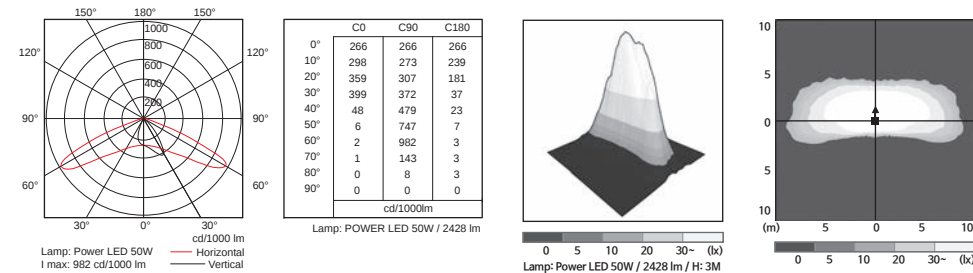
ELCID-L 30 (30°)



ELCID-L 30 (60°)



ELCID-L 30 (140° X 60°)



SPECIFICATIONS

ELCID-L 50

Light Source

Lamp	power LED
Beam angle	10° / 30° / 60° / 140° X 60°
Color	RGB / Red / Green / Blue / Cool white / Warm white

Electrical

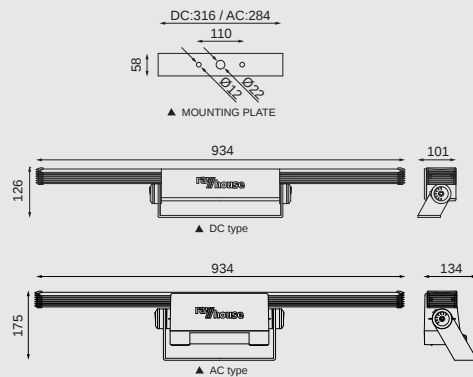
Input voltage	AC200~240V / 50~60Hz (enable DC24V)
Power consumption	100W (included converter)
Converter	fixtures with built-in AC-DC converter

Physical

Size	DC type : 934mm x 101mm x 126mm AC type : 934mm x 134mm x 175mm
Weight	DC type : 5kg / AC type : 6kg (included converter)
Finish	powder coating (dark gray + black)
Housing	die cast aluminum
Front glass	toughened glass (THK 5mm)
Mounting plate	aluminum (THK 5mm)
Gasket	silicone
Lens	optical grade PMMA or PC
Bolt	stainless steel

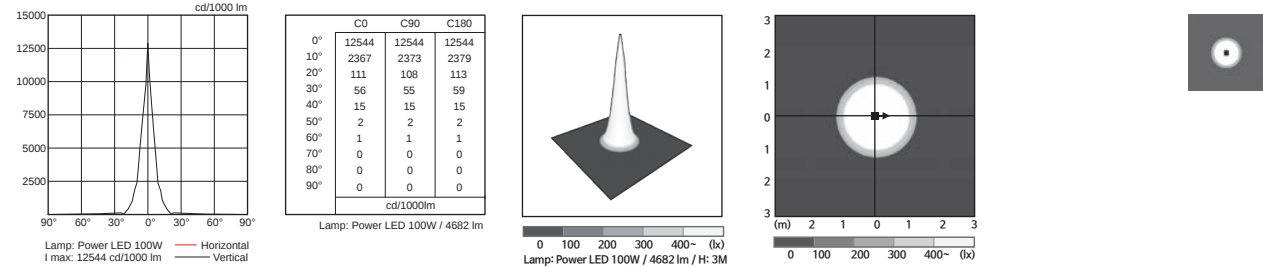
Installation

Input / Output	cable gland M20X1.5 (Ø6~12mm)
Cable	RA cable - 5P (refer to the page 18)

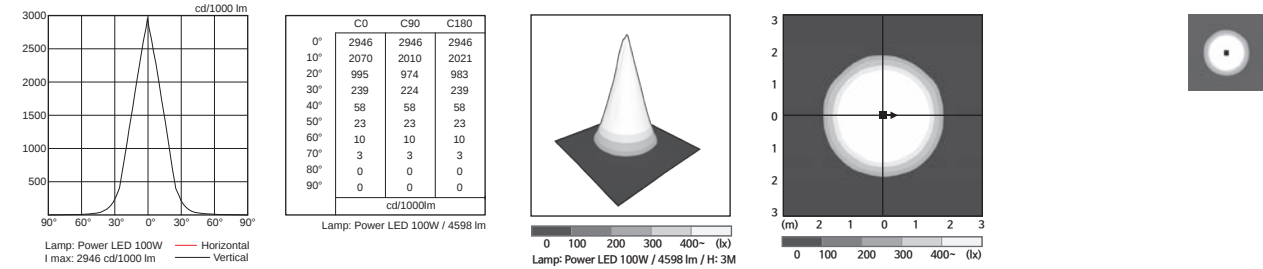


PHOTOMETRIC DATA

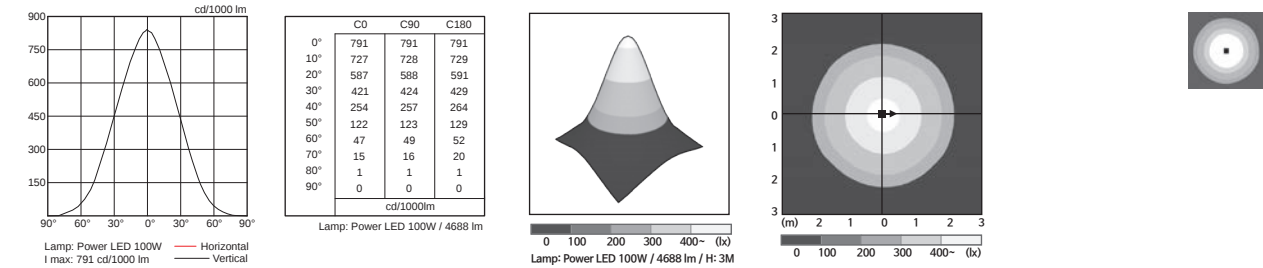
ELCID-L 50 (10°)



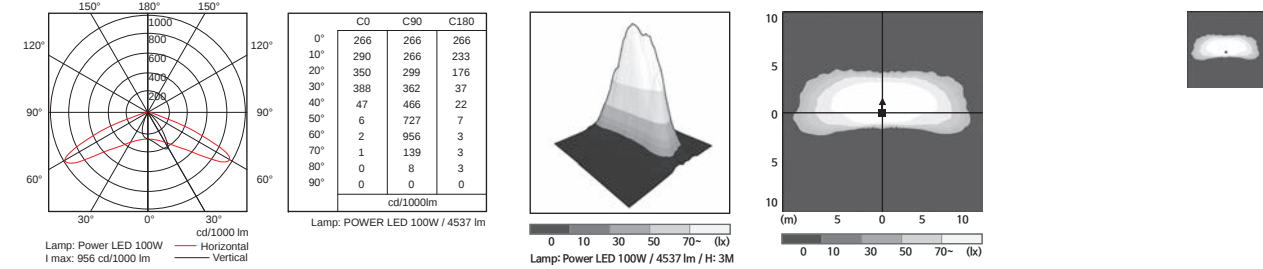
ELCID-L 50 (30°)



ELCID-L 50 (60°)

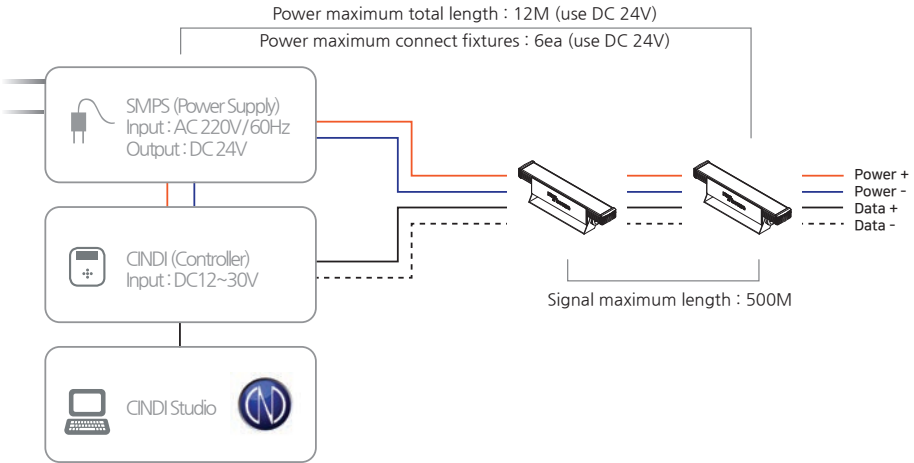


ELCID-L 50 (140° X 60°)

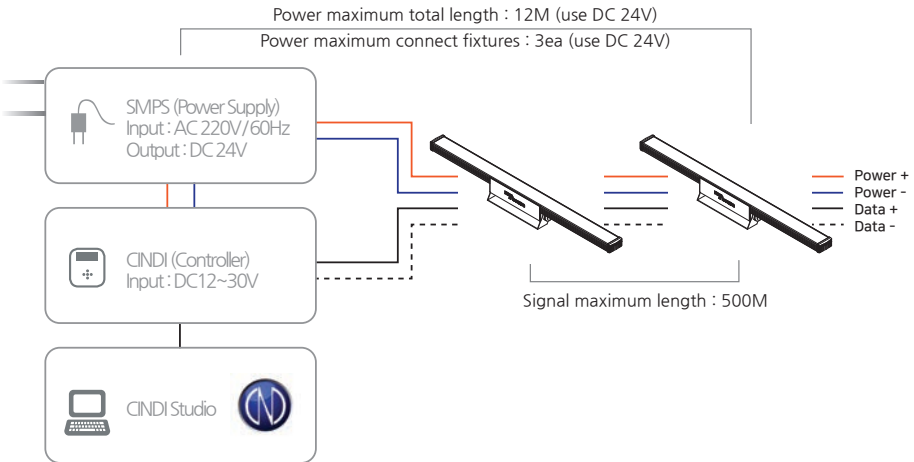


SYSTEM CONFIGURATION

ELCID-L 30
(DC24V)



ELCID-L 50
(DC24V)



ORDERING CODE



ELCID-L 30 (AC or DC) Package Box

Size : 520 X 135 X 102(mm)

Weight : 4.5kg (included Lighting fixtures)



ELCID-L 50 (DC) Package Box

Size : 970 X 135 X 102(mm)

Weight : 6kg (included Lighting fixtures)



ELCID-L 50 (AC) Package Box

Size : 980 X 248 X 140(mm)

Weight : 8.5kg (included Lighting fixtures)

Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 3 blanks with product code.
If you select optional items, please add' - 'after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 3가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 3가지 항목 뒤에 ' - '표시 후 기입해 주시기 바랍니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) **EL1** - **KA** - **B10**

STEP 1.....Light fixtures

ITEM	CODE
ELCID-L 30 (DC 40W)	EL1
ELCID-L 30 (AC 50W)	EL2
ELCID-L 50 (DC 80W)	EL3
ELCID-L 50 (AC 100W)	EL4

STEP 3.....Beam angle

ITEM	CODE
10 degrees	B10
30 degrees	B30
60 degrees	B60
140X60 degrees	B40

STEP 2.....Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5



NEO

네오

LED LIGHTING



NEO-P



NEO-S



NEO-F

DESIGN FEATURES

Design Motive - Perfect cube

NEO was applied with practical design preferentially in the functional sense of perfect cube. The part combined with recessing box was beautified with engraved pattern, and the simple design using the repeated linear pattern was pursued by forming a heat-sink structure on the body slope so that the radiation of heat could be maximized.

Durability

NEO was developed with a view to use lighting fixtures installed under ground with more than IP67, and designed with the emphasis of durability. The upper plate situated at the ground surface was finished with SUS Plate (3mm) and 8mm thick tempered glass with strong durability, and for the distribution of load the reinforcing Plate(3mm) was applied. Besides, in order to prevent the dew condensation fatal to LED fixtures it was a more strengthened product in the property of shock and water-proofing by forming a resin layer at the bottom of tempered glass.

Variety

NEO is a lighting fixtures with expanded applied scope when designing the lighting by expanding the width of option of light source(LED) suitable for the used purpose. It was designed so that it could be used by combining the stirrup with the body when in floodlighting purpose, and so that it could be used by assembling with the recessing box when in applying it to stairs, wall or ground surface.

Efficiency

In order to prevent the problem due to lowered voltage of LED lighting fixtures NEO does not require the separate power equipment as it is equipped with AC-DC Power converter, and was designed lest should require the separate processing amplifier due to the application of CINDI Driver. As it is composed of the most stable system for the optimum efficiency the lighting space with the high execution will be provided.

네오(NEO)는 경육면체의 완벽함에서 기능적인 측면을 우선으로 실용적인 디자인을 적용하였습니다. 거푸집과 결합되는 부분을 음각 패턴으로 미화 시켰고, 방열을 극대화하기 위해 몸체 사면에 Heat-sink 구조를 형성하여 직선의 반복 패턴을 활용한 심플한 디자인을 추구하였습니다.

네오(NEO)는 IP67이상의 자중등 사용을 목적으로 개발되어 내구성 중심으로 설계되었습니다. 지면에 위치하는 상부 Plate는 내구성에 강한 SUS Plate와 8mm 두께의 강화유리로 마감되었으며, 하중 분배를 위해 보강 Plate가 적용되어 있습니다. 또한, LED기구에 치명적인 결로 방지를 위해 강화유리 밑면에 수지층(Resin)을 형성하여 충격과 방수를 보다 강화한 제품입니다.

네오(NEO)는 사용 목적에 맞는 광원(LED)선택의 폭을 넓혀 조명 설계 시 적용 범위를 확대한 조명기구입니다. 투광을 목적으로 할 시에는 몸체에 고정대를 결합시켜 사용하고, 계단이나 벽면 또는 지면에 매입 적용할 시에는 거푸집과 조립하여 사용할 수 있도록 디자인되었습니다.

LED조명기구의 전압저하로 인한 문제를 방지하기 위해 네오(NEO)는 AC-DC Power converter를 내장하고 있어 별도의 전원장치가 필요없고, CINDI Driver의 적용으로 별도의 신호증폭기도 필요없게 설계되었습니다. 최적의 효율을 위해 최대한 안정된 시스템으로 구성되어 있어 완성도 높은 조명공간을 제공할 수 있습니다.



Paju English village / NEO-P

SPECIFICATIONS

Light Source

Lamp

Beam angle

Color

NEO-F

power LED

10° / 30° / 60° / 140° X 60°

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

Power consumption

Converter

AC200~240V / 50~60Hz (enable DC24V)

20W (included converter)

fixtures with built-in AC-DC converter

Physical

Size

Weight

Finish

Housing

Front glass

Mounting plate

Gasket

Lens

Bolt

144mm x 120mm x 197mm

2.8kg (included converter)

powder coating (dark gray + black)

chromate treatment

die cast aluminum

toughened glass (THK 5mm)

aluminum (THK 5mm)

silicone

optical grade PMMA or PC

stainless steel

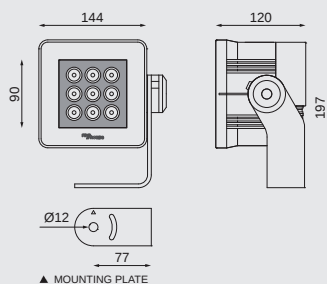
Installation

Input / Output

Cable

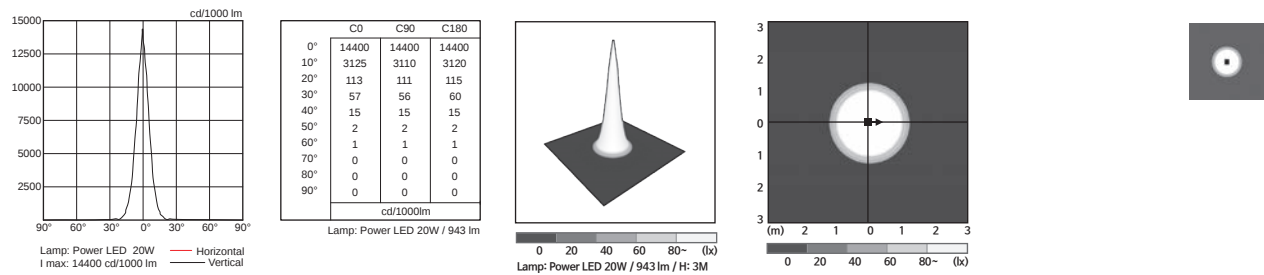
cable gland M20X1.5 (Ø6~12mm)

RA cable - 5P (refer to the page 18)

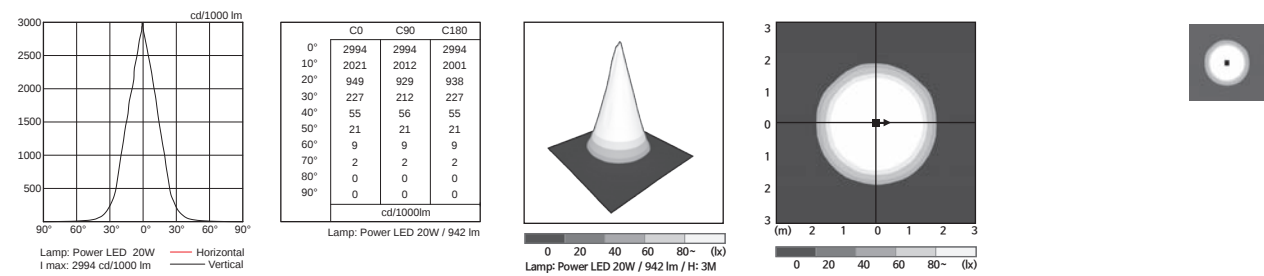


PHOTOMETRIC DATA

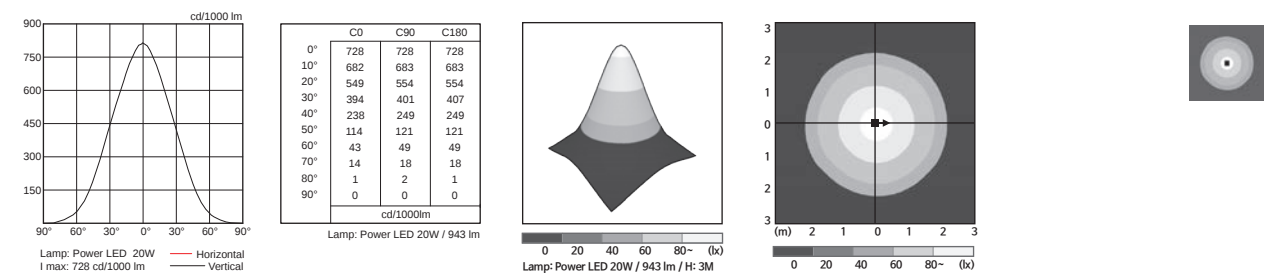
NEO-F (10 °)



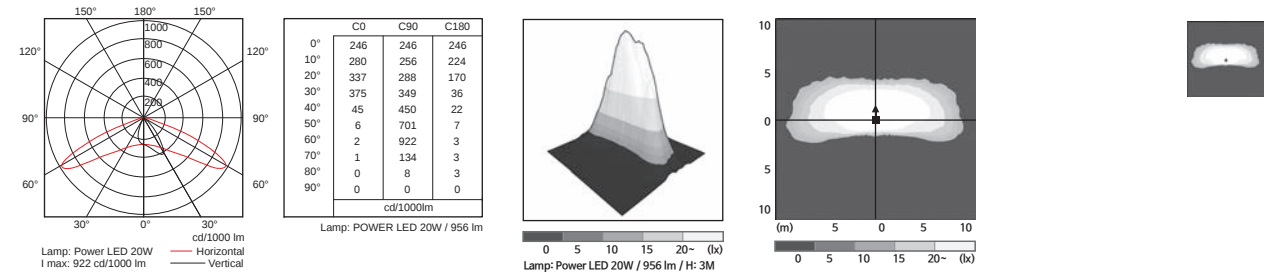
NEO-F (30 °)



NEO-F (60 °)



NEO-F (140 ° X 60 °)



SPECIFICATIONS

Light Source

Lamp

Color

NEO-S

SMD LED 20ea

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

Power consumption

Converter

AC200~240V / 50~60Hz (enable DC24V)

8W (included converter)

fixtures with built-in AC-DC converter

Physical

Size

Weight

Finish

Housing

Recessing box

Front glass

Gasket

Bolt

164mm x 164mm x 153mm

3kg (included converter)

powder coating (dark gray)

chromate treatment

die cast aluminum

polycarbonate (black)

sandblasted toughened glass (THK 8mm)

silicone

stainless steel

Installation

Input / Output

Cable

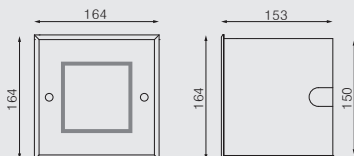
cable gland M20X1.5 (Ø6~12mm)

RA cable - 5P (refer to the page 18)



DC

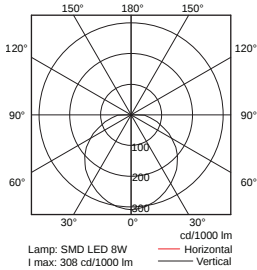
AC



PHOTOMETRIC DATA

NEO-S

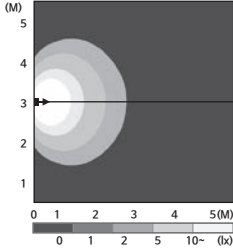
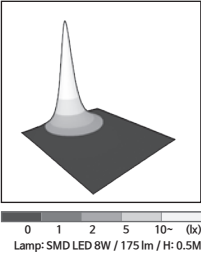
LED LIGHTING



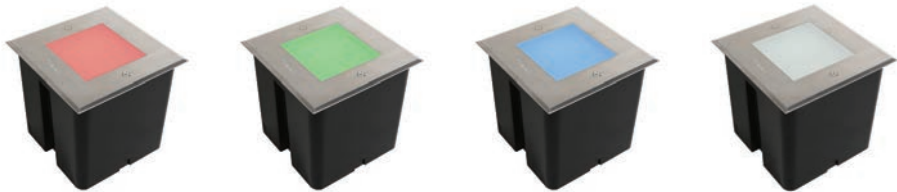
	C0	C90	C180
0°	308	308	308
10°	303	301	301
20°	284	283	283
30°	260	259	259
40°	233	232	232
50°	199	197	197
60°	156	155	155
70°	108	108	108
80°	70	70	70
90°	34	34	34

cd/1000lm

Lamp: SMD LED 8W / 175 lm



COLOR APPLICATION



SPECIFICATIONS

Light Source

Lamp

Beam angle

Color

NEO-P

power LED 9ea

10° / 30° / 60° / 140° X 60°

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

Power consumption

Converter

AC200~240V / 50~60Hz (enable DC24V)

20W (included converter)

fixtures with built-in AC-DC converter

Physical

Size

Weight

Finish

Housing

Recessing box

Front glass

Gasket

Lens

Bolt

164mm x 164mm x 153mm

3kg (included converter)

powder coating (dark gray)

chromate treatment

die cast aluminum

polycarbonate (black)

toughened glass (THK 8mm)

silicone

optical grade PMMA or PC

stainless steel

Installation

Input / Output

Cable

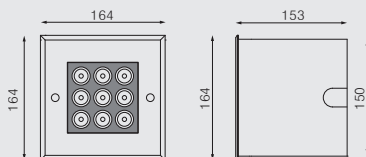
cable gland M20X1.5 (Ø6~12mm)

RA cable - 5P (refer to the page 18)



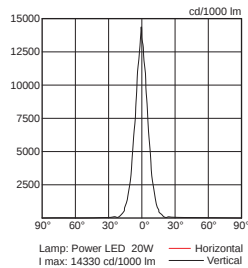
DC

AC



PHOTOMETRIC DATA

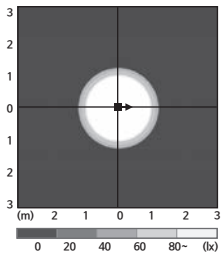
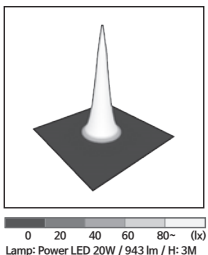
NEO-P (10°)



	C0	C90	C180
0°	14330	14330	14330
10°	3112	3102	3109
20°	108	109	108
30°	52	53	58
40°	14	14	14
50°	2	2	2
60°	1	1	1
70°	0	0	0
80°	0	0	0
90°	0	0	0

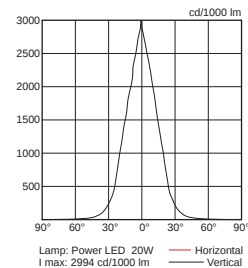
cd/1000lm

Lamp: Power LED 20W / 943 lm



LED LIGHTING

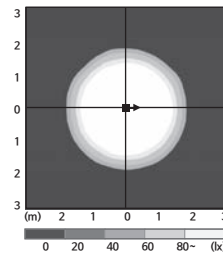
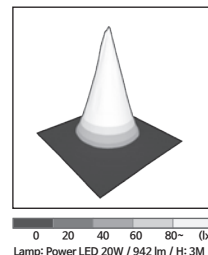
NEO-P (30°)



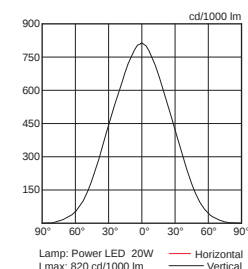
	C0	C90	C180
0°	2994	2994	2994
10°	2020	2010	2011
20°	950	928	939
30°	228	215	225
40°	54	56	54
50°	21	21	20
60°	9	9	9
70°	2	2	2
80°	0	0	0
90°	0	0	0

cd/1000lm

Lamp: Power LED 20W / 942 lm



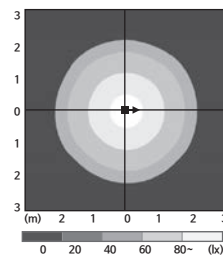
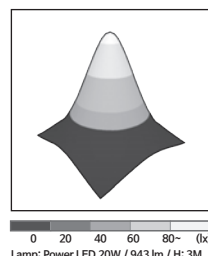
NEO-P (60°)



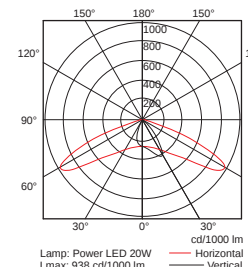
	C0	C90	C180
0°	820	820	820
10°	692	693	691
20°	552	551	550
30°	390	391	397
40°	238	239	239
50°	115	120	121
60°	43	48	48
70°	14	17	17
80°	1	2	1
90°	0	0	0

cd/1000lm

Lamp: Power LED 20W / 943 lm



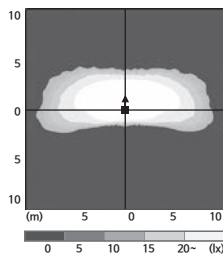
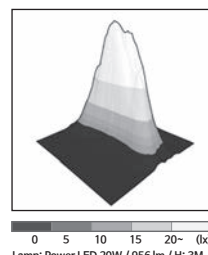
NEO-P (140° X 60°)



	C0	C90	C180
0°	268	268	269
10°	288	266	234
20°	347	298	180
30°	379	355	38
40°	48	460	22
50°	7	711	7
60°	2	938	3
70°	1	142	3
80°	0	8	3
90°	0	0	0

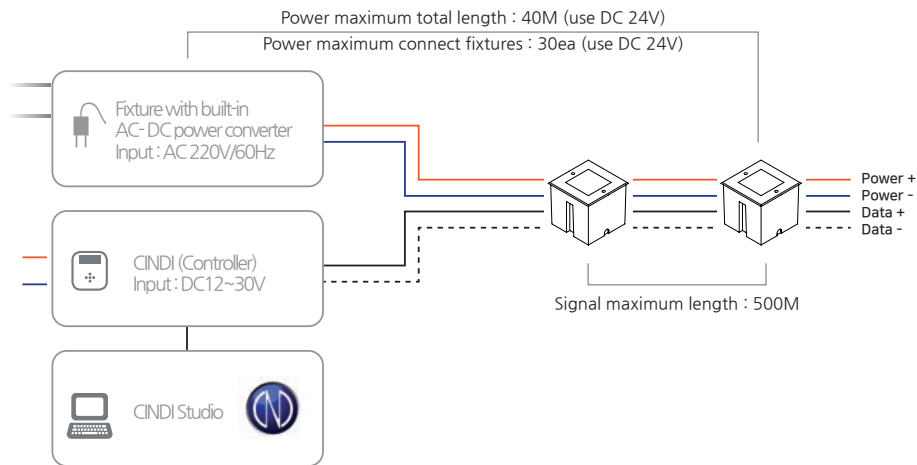
cd/1000lm

Lamp: POWER LED 20W / 956 lm

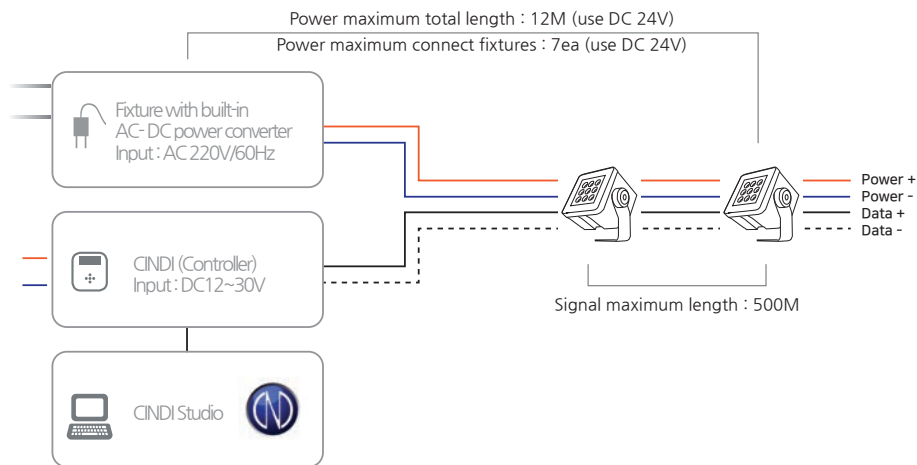


SYSTEM CONFIGURATION

NEO-S (DC24V)



NEO-F / NEO-P (DC24V)



ORDERING CODE



NEO Package Box

Size : 196 X 175 X 165 (mm)

Weight : 3.4kg (included Lighting fixtures)

Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 3 blanks with product code.
If you select optional items, please add '-' after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 3가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 3가지 항목 뒤에 '-' 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) **NE1** - **KA** - **B10**

STEP 1Light fixtures

ITEM	CODE
NEO-F (DC 20W)	NE1
NEO-F (AC 20W)	NE2
NEO-S (DC 8W)	NE3
NEO-S (AC 8W)	NE4
NEO-P (DC 20W)	NE5
NEO-P (AC 20W)	NE6

STEP 3Beam angle

ITEM	CODE
10 degrees	B10
30 degrees	B30
60 degrees	B60
140X60 degrees	B40

STEP 2Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5



TETRA
Overpass Bridge in BULGARIA / TETRA & LIBAR C (RGB)

TETRA

테트라

LED LIGHTING



DESIGN FEATURES



ALPENIA SKI JUMPING TOWER / CINDI SYSTEM

Design Motive

'TETRA's motive is steeply rising sensation. This lighting fixture matches with surrounding and by settling TETRA in group at upper part of buildings or surface of walls, direction of spaces could be varied and also unique.

‘작고 빛나는 열대어’라는 의미의 TETRA는 곡선의 심플함과 수직적 상승감을 모티브로 디자인되어 주변환경과 잘 어울리는 형상이며 건물 상부나 벽면에 군집으로 설치하여 다양하고 특화된 공간 연출을 구성해 드릴 것 입니다.

Efficiency

Through three dimensional design of LED Board, the intensity of radiation, which is the general weak point of LED lighting fixtures, could be maximized, and views of various angle could be satisfied with the intensity of radiation.

LED Board의 입체적 설계를 통해 LED 조명기구의 단점인 빔각을 최대화시켰고, 다양한 각도의 시점을 만족시켜 줄 수 있도록 설계되었습니다.

Convenience

LED can cause the serious glare for its property of going straight ahead, but by using prismatic lens, more pleasant and comfortable lighting environment could be furnished without any glare.

LED는 빛의 직진성으로 심각한 눈부심(Glare) 현상을 초래할 수 있습니다. TETRA는 그러한 현상을 미연에 방지하고 보다 쾌적하고 편안한 조명환경을 제공할 수 있도록 프리즈메틱 렌즈를 적용하였습니다.

SPECIFICATIONS

Light Source

Lamp

Color

Tetra

SMD RGB LED

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

Power consumption

Converter

AC200~240V / 50~60Hz (enable DC24V)

16W (included converter)

fixtures with built-in AC-DC converter

Physical

Size

Weight

Finish

Housing

Diffuser

Gasket

Bolt

Ø223mm x 126mm

1.7kg (included converter)

powder coating (dark gray)

die cast aluminum

prismatic lens (polycarbonate)

silicone

stainless steel

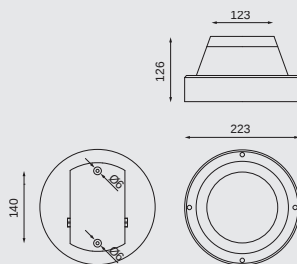
Installation

Input / Output

Cable

cable gland M20X1.5 (Ø6~12mm)

RA cable - 5P (refer to the page 18)



▲ MOUNTING PLATE



TETRA Package Box

Size : 245 X 255 X 160(mm)

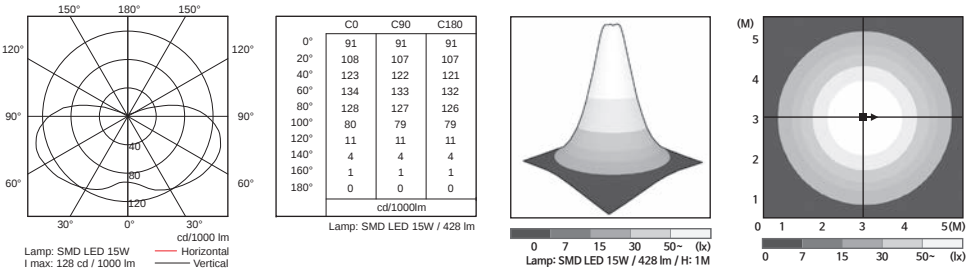
Weight : 2.3kg (included Lighting fixtures)



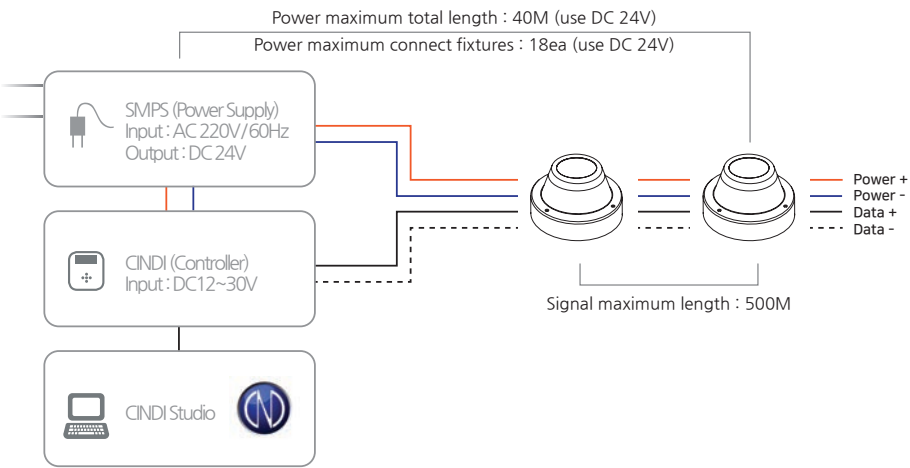
PHOTOMETRIC DATA

Tetra

LED LIGHTING



SYSTEM CONFIGURATION



ORDERING CODE

ex) TR1 - KA

STEP 1Light fixtures

ITEM	CODE
Tetra (DC 16W)	TR1
Tetra (AC 16W)	TR2

STEP 2Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5



TWINKLE

트윙클

LED LIGHTING



TWINKLE-S



TWINKLE-M3



TWINKLE-M5

DESIGN FEATURES

Nature & Soft Light

It is designed to have nature friendly shape through organic design using curve and to emit soft light without glaring by sanding inside of acryl to evenly distribute light inside surface.

곡선을 이용한 유기적 디자인을 통한 자연친화적 형상으로 디자인 되었으며, 아크릴 내부를 샌딩 처리하여 내면에 빛을 균일하게 분포시킴으로써 눈부심이 없는 부드러운 빛을 자연스럽게 발광하도록 디자인되었습니다.

Effect

It is designed for the users to present desired presentation scent more diversely through CINDI system. Change of brightness and various colors of light will present your space to be more exciting and beautiful.

신디 시스템(CINDI system)을 통해 원하는 공간을 보다 다양하게 연출할 수 있도록 설계되었습니다. 빛의 밝기 변화와 다양한 색상의 변화는 여러분의 공간을 더욱 흥미롭고 아름답게 연출해 드릴 것 입니다.

Flexible Post

It is designed to move naturally against the wind with strong restoration and elasticity using reinforced fiber plastic pipe and to be safe and beautiful with permanent anticorrosion without rust, thermal resistance and electric insulation safer.

강화 섬유 플라스틱 파이프를 사용하여 강한 복원성과 탄성으로 바람에 자연스럽게 움직이며, 또한 녹슬지 않는 영구적인 내식성과 내열성 그리고 전기 절연력으로 보다 안전하고 미려하게 디자인되었습니다.

Convenience

As it is designed with shape of broad bottom and narrow top, it emphasizes balance and stability. As it is fabricated with upper side (base top, head, post) and lower side of base at the center of base, it allows the user to easily carry and install it.

하부가 넓고 상부가 좁은 형태로 디자인되어 균형감과 안정감을 부각시키며, 베이스를 중심으로 베이스 상부 (베이스 상부, 헤드, 포스트)와 베이스 하부로 제작되어 조립기구 운반, 설치 시 사용자가 편리하게 사용할 수 있도록 제작되었습니다.



SPECIFICATIONS

Light Source

Lamp
Color

Twinkle - S

SMD LED
RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage
Power consumption

DC24V (using SMPS apart)
1W (LED module only)

Physical

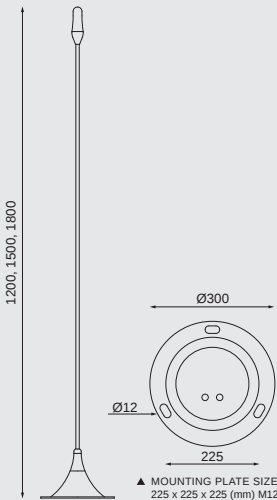
Size
Head
Post
Housing
Mounting plate
Bolt

D : 46mm / H : 1200mm, 1500mm, 1800mm
die cast milky PMMA
reinforced fiber plastic
die cast aluminum (base)
refer to the drawing
stainless steel

Installation

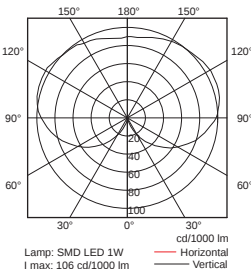
Input / Output
Cable

cable gland M20X1.5 (Ø6~12mm)
RA cable - 5P (refer to the page 18)



PHOTOMETRIC DATA

Twinkle-S

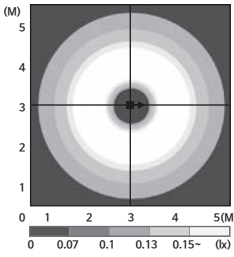


	C0	C90	C180
0°	0	0	0
20°	9	8	8
40°	37	36	36
60°	64	63	63
80°	88	87	86
100°	103	102	101
120°	106	105	104
140°	101	100	99
160°	94	93	93
180°	90	90	90

Lamp: SMD LED 1W / 23 lm



Lamp: SMD LED 1W / 23 lm / H: 1M



SPECIFICATIONS

Light Source

Lamp

Color

Twinkle - M3

SMD LED

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

AC200~240V / 50~60Hz (enable DC24V)

Power consumption

4W (included converter)

Converter

fixtures with built-in AC-DC converter

Physical

Size

D : 46mm / H : 1600mm

Head

die cast milky PMMA

Post

reinforced fiber plastic

Housing

die cast aluminum (base)

Mounting plate

refer to the drawing

Bolt

stainless steel

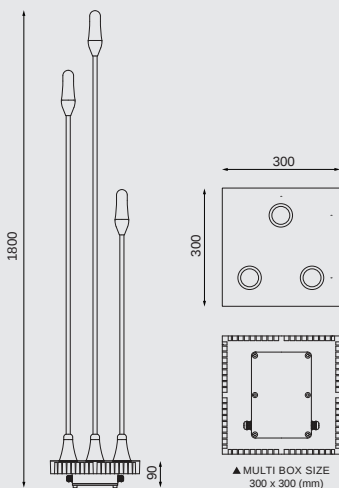
Installation

Input / Output

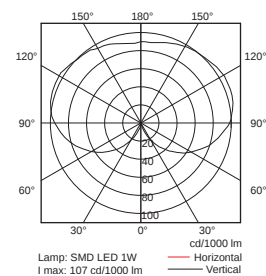
cable gland M20X1.5 (Ø6~12mm)

Cable

RA cable - 5P (refer to the page 18)

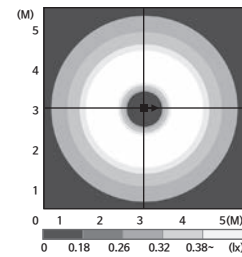


PHOTOMETRIC DATA



	C0	C90	C180
0°	0	0	0
20°	8	8	8
40°	37	36	37
60°	64	65	63
80°	88	86	86
100°	101	102	101
120°	107	106	107
140°	101	100	99
160°	94	93	95
180°	91	90	90

Lamp: SMD LED 3W / 71 lm



Twinkle-M3

SPECIFICATIONS

Light Source

Lamp
Color

Twinkle - M5

SMD LED
RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage
Power consumption
Converter

AC200~240V / 50~60Hz (enable DC24V)
6W (included converter)
fixtures with built-in AC-DC converter

Physical

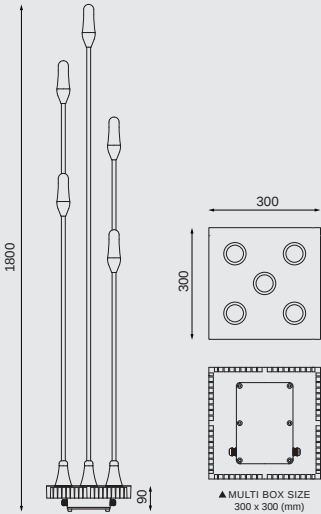
Size
Head
Post
Housing
Mounting plate
Bolt

D : 46mm / H : 1800mm
die cast milky PMMA
reinforced fiber plastic
die cast aluminum (base)
refer to the drawing
stainless steel

Installation

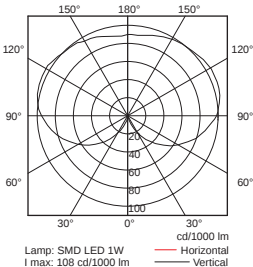
Input / Output
Cable

cable gland M20X1.5 (Ø6~12mm)
RA cable - 5P (refer to the page 18)



PHOTOMETRIC DATA

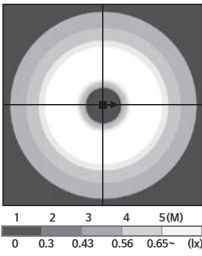
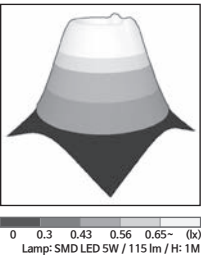
Twinkle-M5



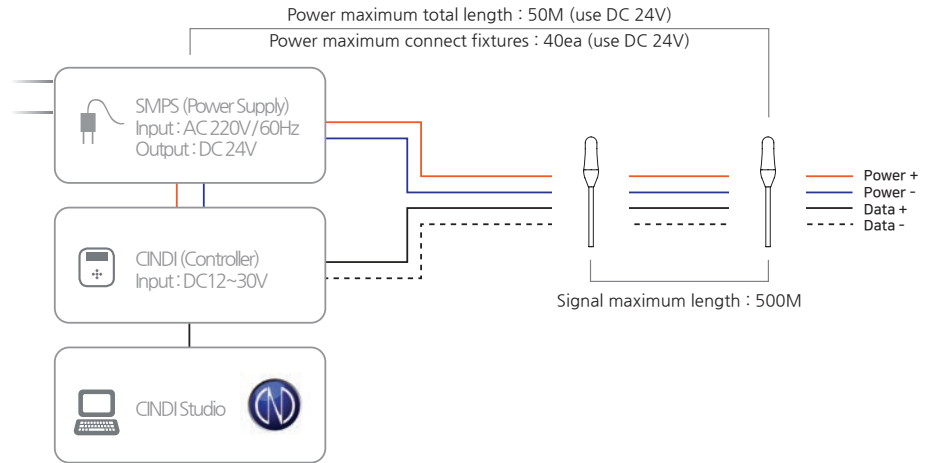
	C0	C90	C180
0°	0	0	0
20°	8	9	8
40°	37	38	37
60°	64	65	63
80°	86	86	86
100°	101	102	101
120°	107	108	107
140°	101	102	99
160°	94	94	95
180°	91	92	90

cd/1000lm

Lamp: SMD LED 5W / 115 lm



SYSTEM CONFIGURATION



Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 3 blanks with product code.
If you select optional items, please add' - 'after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

ORDERING CODE



Twinkle-S / M3 & M5 Package Box
Box Size : 1960 X 330 X 182(mm)

Weight (included Lighting fixtures 5ea)
Twinkle-S : 16kg (included base part)
Twinkle-M3 : 8.6kg (excluded base part)
Twinkle-M5 : 9.2kg (excluded base part)



Twinkle-M3 & M5 Base part Package Box
Box Size : 318 X 335 X 136(mm)

Weight (included Base part)
Twinkle-M3 : 9.2kg
Twinkle-M5 : 9.2kg

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 3가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 3가지 항목 뒤에 '-' 표시 후 기입해 주시기 바랍니다.
아래 예시처럼 가능한 정확한 양식에 맞추어 주문해 주시기 바랍니다.

ex) **TK1** - **KA**

STEP 1Light fixtures

ITEM	CODE
Twinkle-S 1.2M (DC 1W)	TK1
Twinkle-S 1.5M (DC 1W)	TK2
Twinkle-S 1.8M (DC 1W)	TK3
Twinkle-M3 (DC 4W)	TK4
Twinkle-M3 (AC 4W)	TK5
Twinkle-M5 (DC 6W)	TK6
Twinkle-M5 (AC 6W)	TK7

STEP 2Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5





DESIGN FEATURES

Visible Angle

The limited visible angle of general lighting fixtures diminishes effect of lighting direction for viewers. To make up for this weak point, streamlined design of fixture and optical prismatic design were applied to Galaxy.

일반적인 조명기구의 제한된 가시각도는 조명자의 위치에 따라 연출효과를 감소시킵니다. 갤럭시는 이러한 단점 보완을 위해 다양한 각도에서 보다 많은 휘도를 발산할 수 있는 유선형 기구 디자인과 광학적 프리즈메틱(Prismatic) 설계를 적용했습니다.

Surge Protection

The electric circuits of LED modules in general lighting fixtures are very weak to surges, but in Galaxy, anti-surge design was applied to protect the LED modules from surges that could be originated in a moment.

일반적인 조명기구의 LED 모듈 회로는 전기적 충격(Surge)에 매우 취약합니다. 갤럭시는 순간적으로 발생할 수 있는 전기적 충격으로부터 LED 모듈을 보호하도록 서지(Surge) 보호 설계가 적용되었습니다.

Vibration Protection

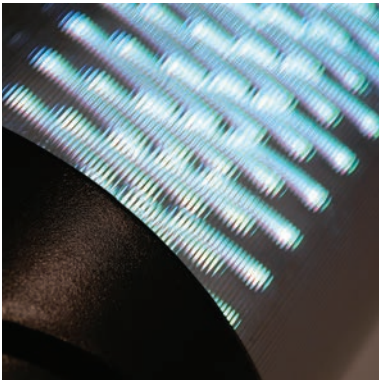
When the vibration, which is caused by external factors such as wind and impact etc. was delivered to PCB of LED, it can cause crack of soldering part of PCB and occurrence of malfunctions. To supplement this problem, in Galaxy, anti-vibration was utilized between lighting fixtures and PCB of LED.

충격, 바람 등의 외부적 요인에 의해 조명기구에 가해지는 진동이 LED PCB에 전해질 때 PCB 납땜 부위의 균열로 이어져 불량을 발생시킬 수 있습니다. 갤럭시는 조명기구와 LED PCB 사이에 방진 장치를 적용함으로써 이러한 문제를 보완했습니다.

Dynamic True Color Performance

Galaxy is able to direct more than 16,777,216 (24bit) colors through combining with Cindi in various ways. Also direction could be easily done through Cindi Studio which produces directing scenes, and the directing scenes can be modified easily after storing data in Cindi controller.

갤럭시는 신디(Cindi)와의 조합을 통해 16,777,216 (24bit)칼라 이상의 색상을 다양하게 연출할 수 있습니다. 또한 연출 신 제작 소프트웨어 신디 스튜디오(Cindi Studio)를 통해 연출 신을 매우 쉽게 제작할 수 있고, 제작된 연출 신은 신디 컨트롤러(Cindi controller)에 저장 후 쉽게 변경할 수 있습니다.



SPECIFICATIONS

Light Source

Lamp

Color

Galaxy

SMD LED

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

Power consumption

Converter

AC 200~240V / 50~60Hz (enable DC24V)

20W (included converter)

fixtures with built-in AC-DC converter

Physical

Size

Weight

Finish

Housing

Diffuser

Mounting plate

Gasket

Bolt

445mm x 133mm x 178mm

3Kg (included converter)

powder coating (dark gray + black)

die cast aluminum

prismatic polycarbonate

stainless steel

silicone

stainless steel

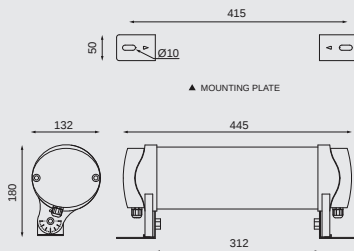
Installation

Input / Output

Cable

cable gland M20X1.5 (Ø6~12mm)

RA cable - 5P (refer to the page 18)



GALAXY Package Box

Size : 478 X 205 X 150(mm)

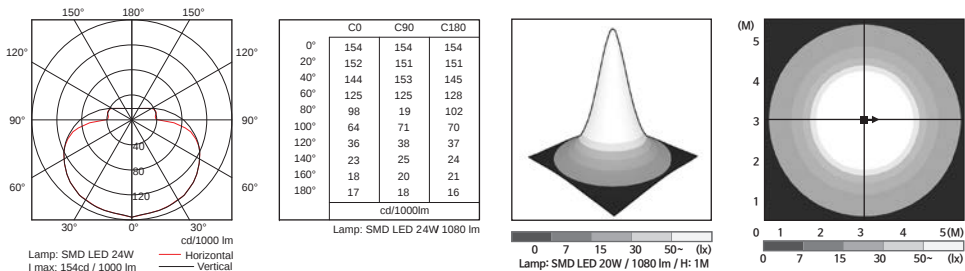
Weight : 3.7kg (included Lighting fixtures)



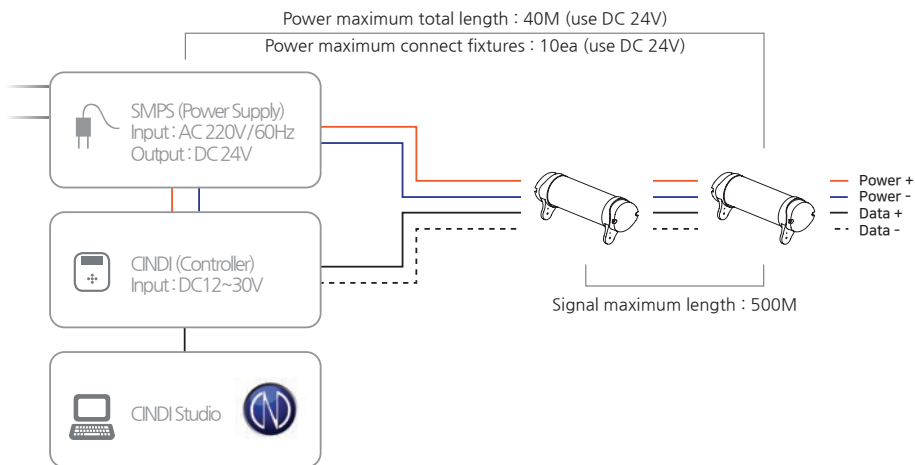
PHOTOMETRIC DATA

Galaxy

LED LIGHTING



SYSTEM CONFIGURATION



ORDERING CODE

ex) GL1 - KA

STEP 1Light fixtures

ITEM	CODE
GALAXY (DC 16W)	GL1
GALAXY (AC 20W)	GL2

STEP 2Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White (3000~4000K)	K3
White (4000~5000K)	K4
White (5000~6000K)	K5



LEON

레온

LED LIGHTING



DESIGN FEATURES

Design

Through light diffusing layer, the distance between LED light source and glass was minimized. And by designing the fixture to distribute the light flatly to the front side, more slender design and more clean face lighting could be realized. And also Leon is designed to maximize the LED's life span through heat sink system.

레온은 광확산층을 통해 유리 and LED 광원의 간격을 최소화 하면서 빛을 전면 에 균일하게 분포시키도록 디자인함으로써 보다 슬림한 디자인과 깨끗한 면 조명을 구현했습니다. 또한 방열 구조를 통해 LED의 수명을 극대화하도록 설계되었습니다.

Surge Protection

The electric circuits of LED modules in general lighting fixtures are very weak to surges, but in Leon, anti-surge design was applied to protect the LED modules from surges that could be originated in a moment.

일반적인 조명기구의 LED 모듈 회로는 전기적 충격(Surge)에 매우 취약합니다. 레온은 순간적으로 발생할 수 있는 전기적 충격으로부터 LED 모듈을 보호 하도록 서지(Surge) 보호설계가 적용되었습니다.

Durability

Most block shaped lighting fixtures are placed on the floor so their durability is very important. Leon has resin layer which upholds toughened glass (THK 15mm) to intensify durability and waterproof system. Also the toughened glass won't be scattered when it was broken.

블록 조명 기구는 바닥에 놓이는 경우가 대부분이므로 내구성이 고려된 설계가 매우 중요합니다. 레온은 15mm 강화유리 하부에 수지(Resin)층을 등으로써 충격과 방수를 보다 강화하였고, 강화유리 파손 시에도 유리조각의 분산을 방지 할 수 있도록 설계되었습니다.

Maintenance

Most block shaped lighting fixtures has the problem that it is not easy to part PCB of LED from the fixtures. Therefore should fixtures are inferior goods or damaged, the entire lighting fixtures are replaced in most cases, and this causes the increase of cost for maintenance. To make up for this weak point Leon is designed to be able to be apart PCB of LED from the lighting fixtures easily.

일반적인 블록 조명은 기구와 LED PCB의 분리가 어려워 불량 또는 파손 시 조 명기구 전체를 교체하는 경우가 대부분이고, 이에 따라 유지보수 비용도 증가 됩니다. 레온은 이러한 단점을 보완하기 위해 조명 기구와 LED PCB를 분리 가 능 하도록 디자인 하였습니다.



Doseon park in Seongdong-gu/LEON

SPECIFICATIONS

Light Source

Lamp

Color

Leon

SMD RGB LED

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

Power consumption

Converter

AC 200~240V / 50~60Hz (enable DC24V)

20W (included converter)

fixtures with built-in AC-DC converter

Physical

Size

Weight

Finish

Housing

Front glass

Recessing box

Gasket

Bolt

300mm x 300mm x 101mm

6Kg (included converter)

powder coating (dark gray)

chromate treatment

die cast aluminum

sandblasted toughened glass (THK 15mm)

extruded aluminum

silicone

stainless steel

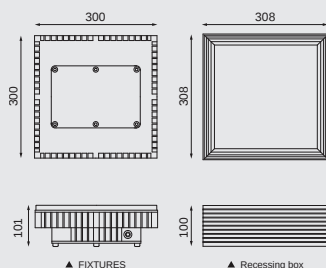
Installation

Input / Output

Cable

cable gland M20X1.5 (Ø6~12mm)

RA cable - 5P (refer to the page 18)



LEON Package Box

Size : 318 X 335 X 136(mm)

Weight : 7kg (included Lighting fixtures)



LEON recessing box

Size : 308 X 308 X 100(mm)

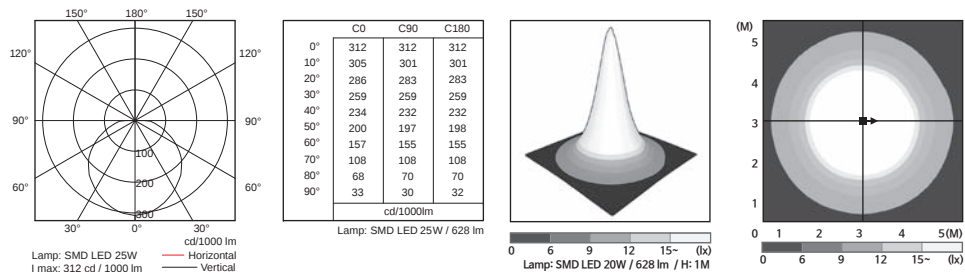
Extrude aluminum



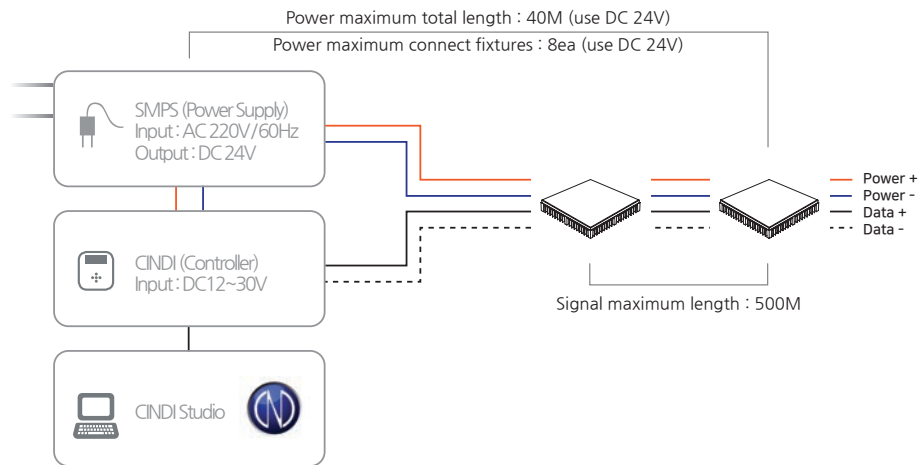
PHOTOMETRIC DATA

Leon

LED LIGHTING



SYSTEM CONFIGURATION



ORDERING CODE

ex) LN1 - KA

STEP 1 Light fixtures

ITEM	CODE
LEON (DC 16W)	LN1
LEON (AC 20W)	LN2

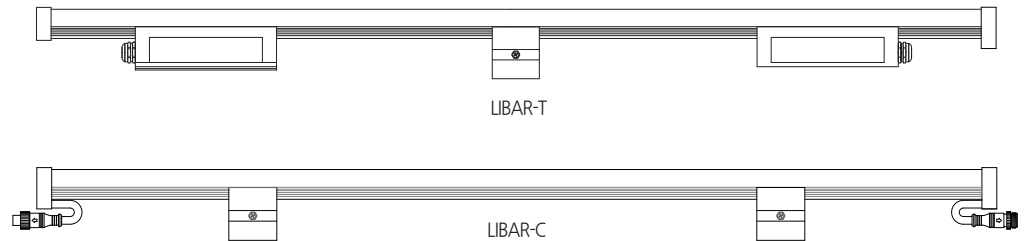
STEP 2 Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White (3000~4000K)	K3
White (4000~5000K)	K4
White (5000~6000K)	K5



LIBAR

ULLEUNG PASSENGER SHIP TERMINAL / LIBAR C CINDI-SYSTEM



DESIGN FEATURES

Prismatic Structure

Lighting fixtures has been designed to present more luminance from various angles by applying optical prismatic structure inside of luminary, ensure safety from external impact during installation and transportation and maximize its endurance by reinforcing round structure of PC-Pipe with protrusions inside.

발광부 내면에 광학적 프리즈메틱 (Prismatic) 구조를 적용하여 다양한 각도에서 휘도를 연출할 수 있도록 설계하였고, 내부 돌기가 PC-Pipe 곡면구조를 보강시켜 설치 및 운반작업 시 외부충격으로부터 안전한 동시에 조명 기구의 내구성을 최대화 시켰습니다.

Inside electric wire

Since the electric wires may enter into inside of PC-Pipe during assembly of the fixtures, environmental problem from exposed wires after field installation has been improved. Wire connection with terminal block within the terminal boxes of both sides during installation of fixture allows more stable and convenient installation.

기구조립 시 PC-Pipe 안쪽으로 전선을 인입할 수 있어 현장시공 후 전선 노출로 인한 환경적 문제점을 개선하였고, 기구설치 시 양쪽 단자함(Terminal box) 내 단자대를 이용한 결선 방식으로 보다 안정적이며 편리하게 시공할 수 있습니다.

Fixation Bolt for safety

While fixation method of the existing linear lighting fixtures fixes PC pipe with tensile strength of stirrup which may be weak gainst external forces such as strong wind, Libar stirrup can be more solidly fixed using fixation bolts at the center of stirrup as well as tensile strength.

기존 Linear lighting 조명 기구의 고정 방식은 stirrup 자체 장력으로만 PC pipe를 고정하고 있어 강한 바람 등의 외부요인에 취약할 수 있는데 비해 Libar의 스트럽은 장력을 최대한 활용하는 것은 물론 스트럽 중심부에 고정 볼트를 사용하여 더욱 견고하게 고정할 수 있습니다.



OCEAN BRIDGE / LIBAR-T

SPECIFICATIONS

Libar-T

Light Source

Lamp	SMD RGB LED
Color	RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage	DC24V (using converter apart)
Power consumption	12W (LED module only)

Physical

Size	1000mm x 69mm x 76mm
Weight	1.3Kg
Finish	powder coating (dark gray)
Housing	die cast aluminum
Diffuser	prismatic structure (polycarbonate)
Mounting plate	extruded aluminum
Gasket	silicone
Bolt	stainless steel

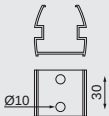
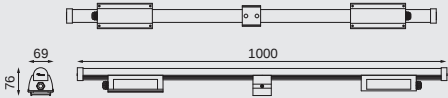
Installation

Input / Output	cable gland M20X1.5 (Ø6~12mm)
Cable	RA cable - 5P (refer to the page 18)



DC

AC



▲ MOUNTING PLATE



SPECIFICATIONS

Libar- C

Light Source

Lamp

SMD RGB LED

Color

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

DC24V (using converter apart)

Power consumption

12W (LED module only)

Physical

Size

1000mm x 56mm x 76mm

Weight

0.6Kg

Finish

powder coating (dark gray)

Housing

extruded polycarbonate

Diffuser

prismatic structure (polycarbonate)

Mounting plate

extruded aluminum

Mounting Bolt

stainless steel

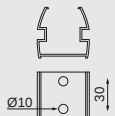
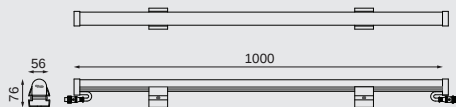
Installation

Input / Output

power 2C (DC24V only), signal 2C (+,-)

Cable

waterproof cable connector (4C / IP68)

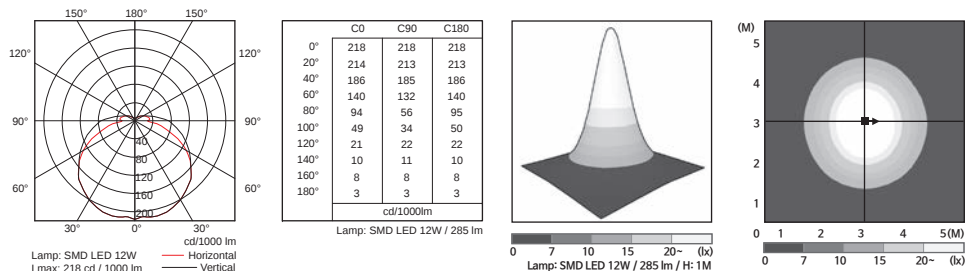


▲ MOUNTING PLATE

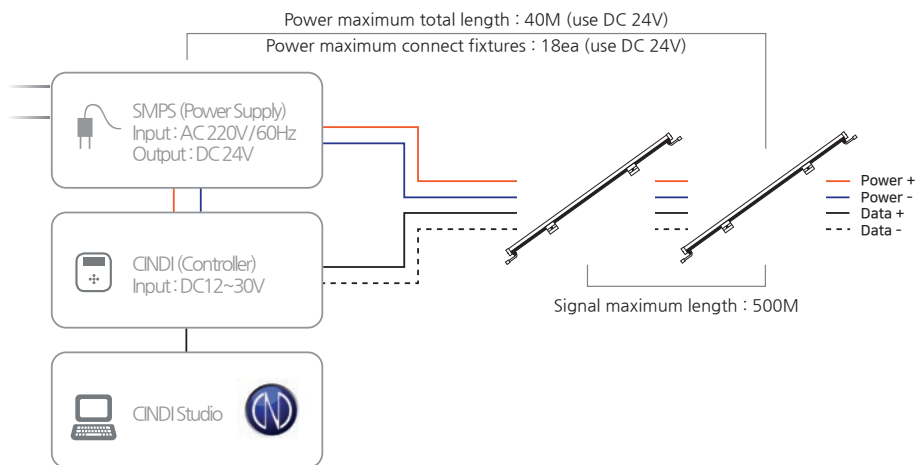


PHOTOMETRIC DATA

Libar



SYSTEM CONFIGURATION



ORDERING CODE



LIBAR Package Box
Box Size : 1050 X 390 X 85(mm)

Weight (included Lighting fixtures 5ea)
Libar 100 : 8.1kg (included base part)
Libar C : 4.3kg (excluded base part)

ex) **LB2** - **KA**

STEP 1Light fixtures

ITEM	CODE
Libar-T (DC 12W)	LB1
Libar-C (DC 12W)	LB2

STEP 2Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White (3000~4000K)	K3
White (4000~5000K)	K4
White (5000~6000K)	K5





HYPER
HONG-JAE IC BRIDGE IN GANGNEUNG 2013 / HYPER-L RGB

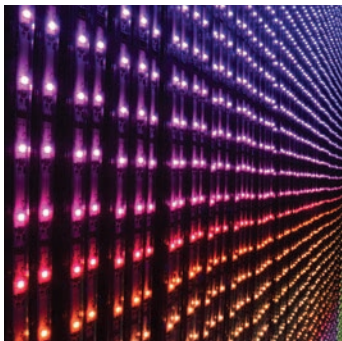
HYPER-L

하이퍼-엘

LED LIGHTING



DESIGN FEATURES



Hyper-L is a slim linear lighting fixture for multimedia performance using Hyper system. When Hyper-L is installed on buildings or structures, the 20mm slim design can make harmony with them.

By controlling each RGB SMD LED, user can make the best lighting performance for various video types (avi, mp4, wmv) and express clear and deep colors with 24bit true color (16,777,216).

Flexible installation methods offers free layout unlike regular electrical boards and it offers you can make organic media façade like curves.

IP68 tight connectors and stainless fixing clips offer easy installation and it reduces installation cost. Tightness of polycarbonate body reduces maintenance cost.

하이퍼-엘은 하이퍼 시스템을 사용한 멀티미디어 슬림 라인 조명으로 20mm의 매우 슬림한 디자인은 기구 설치 시 건축물 또는 기타 구조물에 조화롭게 설치될 수 있습니다.

각각의 RGB SMD LED 연출을 통해 다양한 해상도의 동영상(avi, mp4, wmv)을 효과적으로 연출 할 수 있고, 24비트 트루컬라(16,777,216)의 깊고 풍부한 색상을 부드럽게 연출합니다.

일반 전광판의 규격화된 프레임과는 달리 픽셀을 자유롭게 배치할 수 있고, 곡선과 같은 유기적인 형태의 미디어 파사드(Media Facade)를 효과적으로 구현할 수 있습니다.

IP68의 견고한 커넥터와 스테인리스 고정 클립은 간편한 시공 성을 제공하여 초기 설치비용을 최소화하고, 폴리카보네이트 몸체의 견고성은 유지보수 비용을 절감해 드릴 것 입니다.

SPECIFICATIONS

HYPER-L

Light Source

Lamp
Color

SMD RGB LED
RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage
Power consumption
Signal input
Ststem configuration

DC24V (using SMPS apart)
8W (LED module only)
HYPER (main controller), HYPER-S (sub controller), HYPER-D (line driver)
refer to the HYPER (page 20~25)

Physical

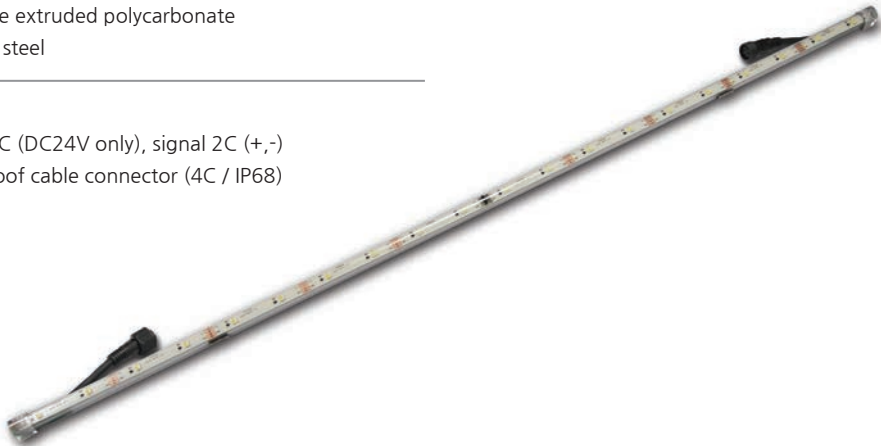
Size
Weight
Diffuser
Mounting plate

1000mm x 18mm x 20mm
0.2Kg
clear type extruded polycarbonate
stainless steel

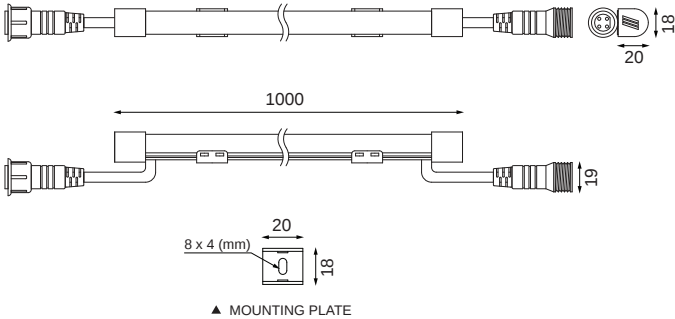
Installation

Input / Output
Cable

power 2C (DC24V only), signal 2C (+,-)
waterproof cable connector (4C / IP68)



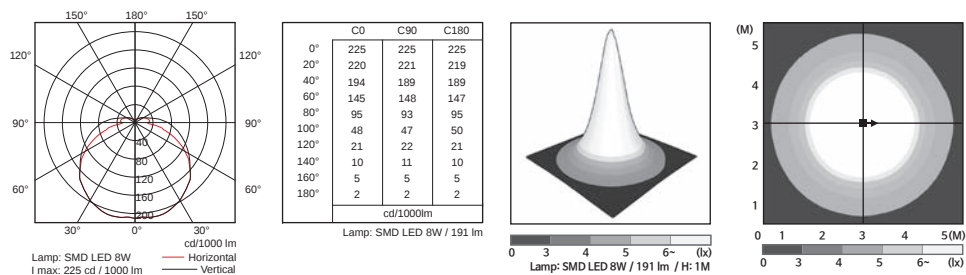
HYPER-L Package Box
Box Size : 1050 X 390 X 85(mm)
Weight:6.5kg (included Lighting fixtures 20ea)



PHOTOMETRIC DATA

HYPER-L

LED LIGHTING



ORDERING CODE

ex) HL1 - KA

STEP 1Light fixtures

ITEM	CODE
HYPER-L (1M-DC 8W)	HL1
HYPER-L (2M-DC 16W)	HL2

STEP 2Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White (3000~4000K)	K3
White (4000~5000K)	K4
White (5000~6000K)	K5





ROVA-L
T-EXPRESS in Everland Resort / ROVA-L Warm white

ROVA-L

로바엘

LED LIGHTING



DESIGN FEATURES



Samsung Raemian apartment / ROVA-L Cool white

Rova-L is a high-performance LED product that can play deep and clear 24bit colors with Cindi controller. And the white series offers various color temperature. Four photo metrics 10°, 30°, 50° and 140°X60° are offered for using suitable light on a design concept.

Rova-L was designed as very durable structure considered various damages in rough conditions. And a grip on the back side top offers a function to carry easily.

As the photoluminescence mark is attached on the angle marker, aiming is very easy at night. And marking the aimed angle offers accurate restoration without additional aiming after maintenance.

ROVA-L은 CINDI 컨트롤러와 연동하여 풍부하고 선명한 24bit색상을 연출하거나, 백색 투광조명을 할 수 있는 HI-POWER LED 제품입니다. 빛을 설계 목적에 맞게 효과적으로 사용할 수 있도록 4가지(10°, 30°, 50°, 140°X60°) 배광을 제공합니다.

내구성이 강한 디자인으로 거친 설치 환경에서도 파손의 위험이 적고, 운반 시 사용자가 편리성을 고려해 조명기구 후면에 손잡이가 적용되었습니다.

축광 표시가 부착되어 야간에도 각도조정(Aiming)을 편리하게 할 수 있고, 각도 조정이 완료된 후 조정된 각도 값을 표시 함으로써 유지보수 후 추가적인 각도조정 작업 없이 원래의 각도로 정확히 복원할 수 있습니다.

SPECIFICATIONS

Light Source

Lamp	power LED
Beam angle	19°
Color	RGB / Red / Green / Blue / Cool white / Warm white

Electrical

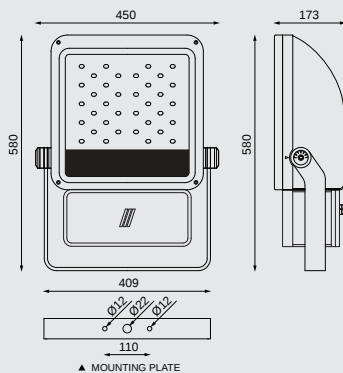
Input voltage	AC200~240V / 50~60Hz (enable DC24V)
Power consumption	100W (included converter)
Converter	fixtures with built-in AC-DC converter

Physical

Size	450mm x 580mm x 173mm
Weight	10kg
Finish	powder coating (dark gray + black)
Housing	die cast aluminum
Front glass	toughened glass (THK 5mm)
Mounting plate	aluminum (THK 8mm)
Gasket	silicone
Lens	optical grade PMMA or PC
Bolt	stainless steel

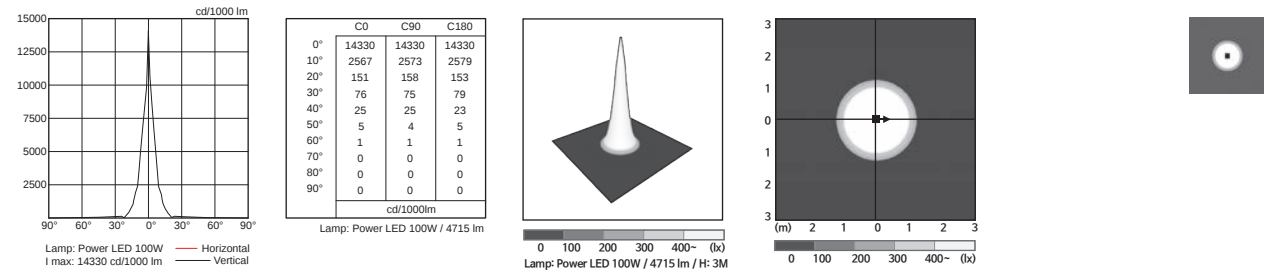
Installation

Input / Output	cable gland M20X1.5 (Ø6~12mm)
Cable	RA cable - 5P (refer to the page 18)

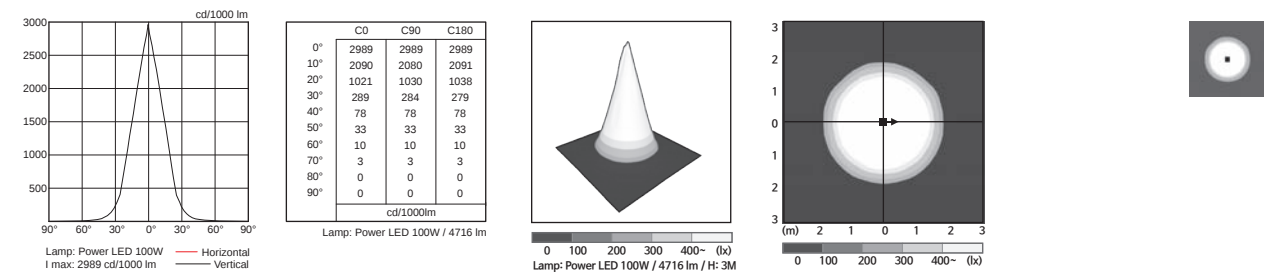


PHOTOMETRIC DATA

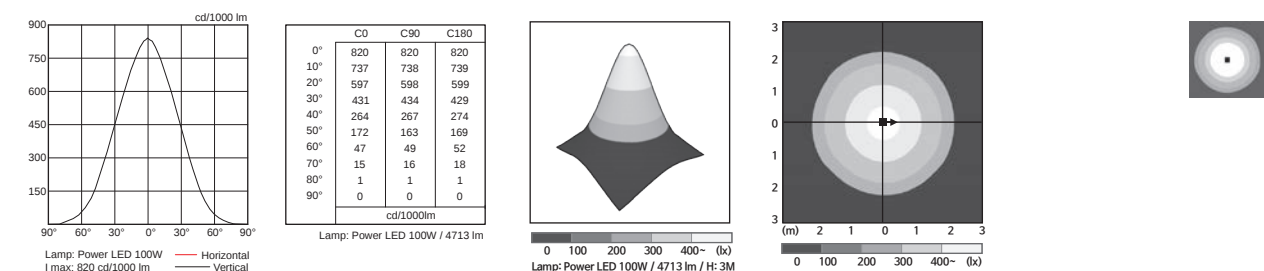
Rova-L (10°)



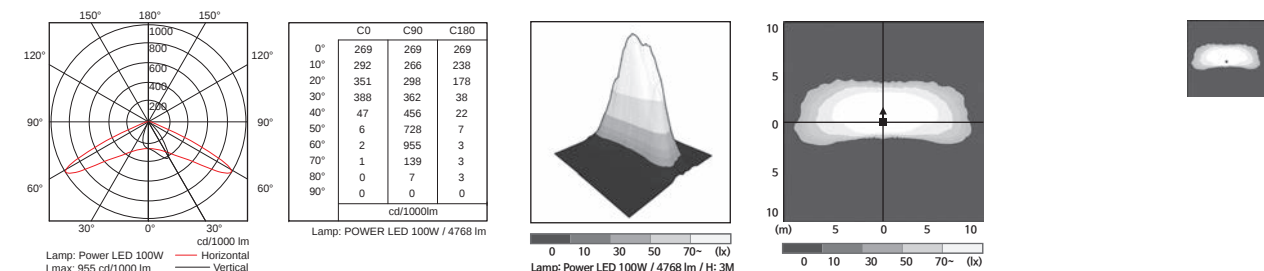
Rova-L (30°)

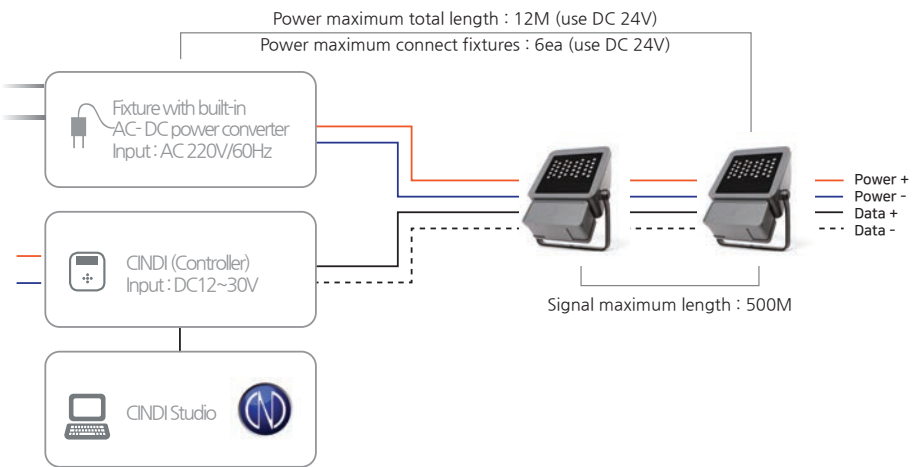


Rova-L (60°)



Rova-L (140° X 60°)





Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 3 blanks with product code.
If you select optional items, please add ' - ' after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

ORDERING CODE



ROVA-L Package Box
Size : 575 X 495 X 215(mm)
Weight : 13kg (included Lighting fixtures)

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 3가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 3가지 항목 뒤에 ' - ' 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) **RL1** - **KA** - **B10**

STEP 1Light fixtures

ITEM	CODE
ROVA-L (DC 100W)	RL1
ROVA-L (AC 100W)	RL2

STEP 2Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 3Beam angle

ITEM	CODE
10 degrees	B10
30 degrees	B30
60 degrees	B60
140X60 degrees	B40





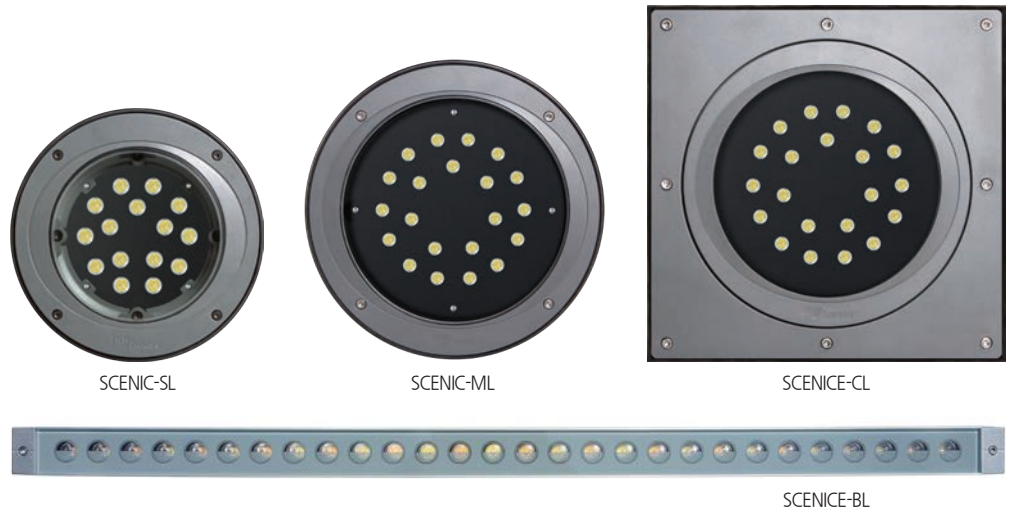
SCENIC-LED

Gangneung Imyeonggwangniji Dongheon / SCENIC-LM Warm white / Asymmetric wide

SCENIC-L

씨닉-엘

LED LIGHTING



DESIGN FEATURES

Scenic-L is a high-performance LED underground lighting fixture that can play deep and clear 24bit colors with Cindi controller. And the white series offers various color temperature. Four photo metrics 10°, 30°, 50° and 140°X60° are offered for using suitable light on a design concept. Especially 140°X60° photometric is efficient at lighting wide surfaces without dark zone by using fewer fixtures.

Elliptical lines on the front face are expressed beautiful curves. The tempered glass of front side makes Scenic-L more durability and safety. The inside of fixture is treated moisture-proof for protecting control gear with special resin.

SCENIC-L은 CINDI 컨트롤러와 연동하여 풍부하고 선명한 24bit 투루 컬러를 연출하거나, 백색 투광 조명을 할 수 있는 HI-POWER LED 지중등입니다. 빛을 설계 목적에 맞게 효과적으로 사용할 수 있도록 10°, 30°, 50°, 140°X60°의 4가지 배광을 제공합니다. 특히 140°X 60° 배광은 넓은 면을 적은 수의 조명기구로 음영없이 보다 효과적으로 조명할 수 있는 장점을 제공합니다.

조명기구 전면부에 입체적 타원을 형상화하여 곡선의 아름다움을 구현한 제품으로 강화유리를 적용하여 내구성을 강화하였습니다.

또한 부품을 습기로부터 완벽하게 보호 하기 위해 특수 수지로 내부가 방습처리 되어 있습니다.



SPECIFICATIONS

Light Source

Lamp	power LED
Beam angle	10° / 30° / 60° / 140° X 60°
Color	RGB / Red / Green / Blue / Cool white / Warm white

Electrical

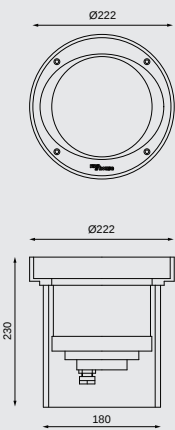
Input voltage	AC200~240V / 50~60Hz (enable DC24V)
Power consumption	30W (included converter)
Converter	fixtures with built-in AC-DC converter

Physical

Size	Ø222mm x 230mm (included recessing box)
Weight	4.7kg (included converter)
Finish	powder coating (dark gray) / chromate treatment
Body	die cast aluminum
Recessing box	die cast polycarbonate
Front glass	toughened glass (THK 15mm)
Gasket	silicone
Lens	optical grade PMMA or PC
Bolt	stainless steel

Installation

Input / Output	cable gland M20X1.5 (Ø6~12mm)
Cable	RA cable - 5P (refer to the page 18)

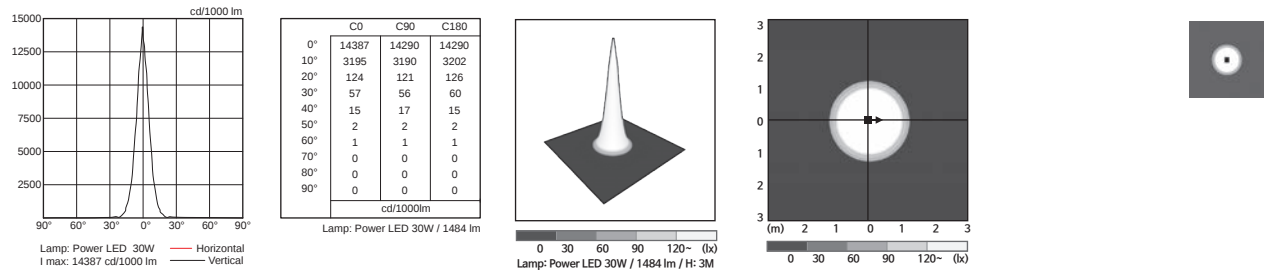


SCENIC-SL

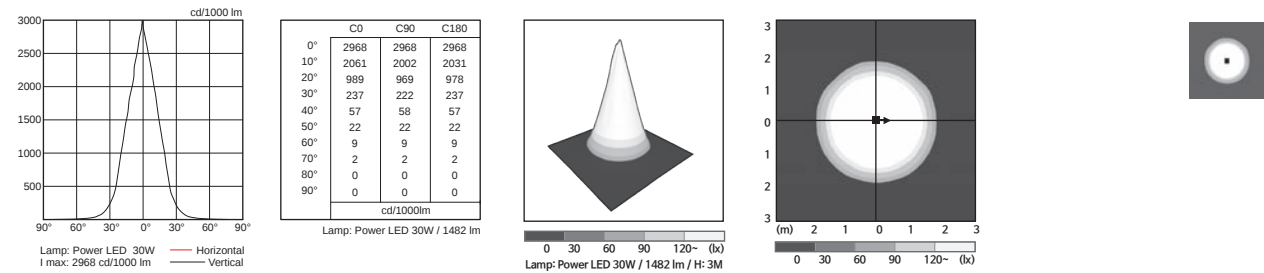


PHOTOMETRIC DATA

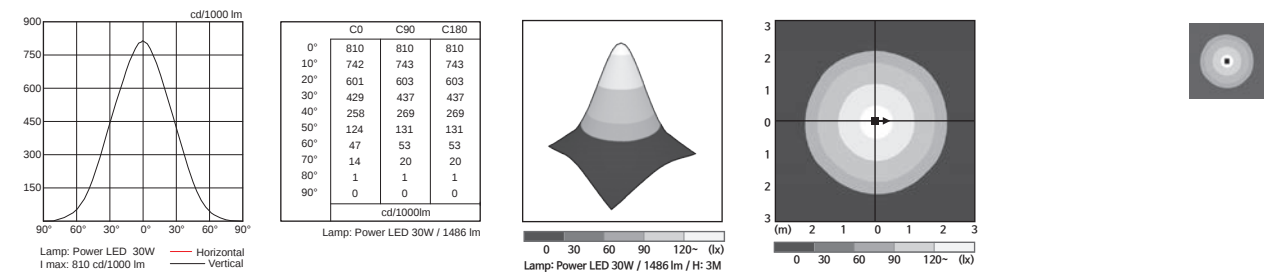
SCENIC-LS (10°)



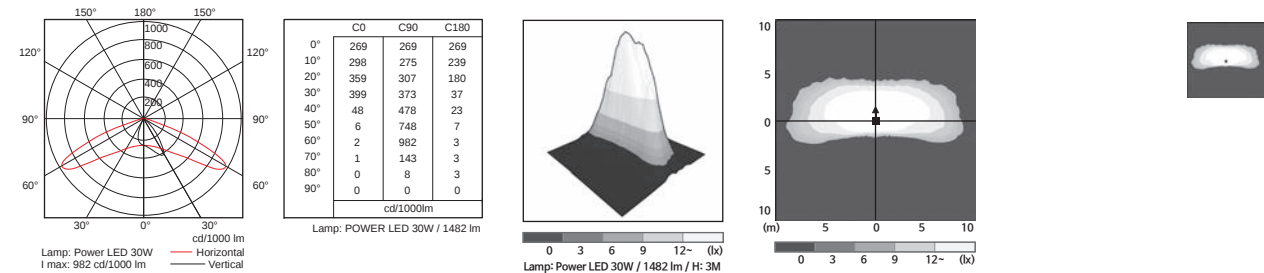
SCENIC-LS (30°)



SCENIC-LS (60°)



SCENIC-LS (140° X 60°)



SPECIFICATIONS

Light Source

Lamp

Beam angle

Color

SCENIC-ML

power LED

10° / 30° / 60° / 140° X 60°

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

Power consumption

Converter

AC200~240V / 50~60Hz (enable DC24V)

50W (included converter)

fixtures with built-in AC-DC converter

Physical

Size

Weight

Finish

Body

Recessing box

Front glass

Gasket

Lens

Bolt

Ø300mm x 395mm (included recessing box)

13kg (included converter)

powder coating (dark gray) / chromate treatment

die cast aluminum

die cast polycarbonate

toughened glass (THK 15mm)

silicone

optical grade PMMA or PC

stainless steel

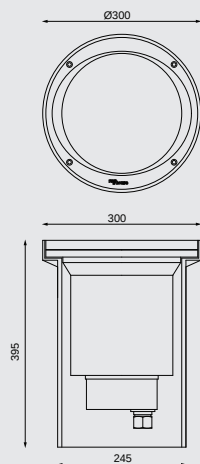
Installation

Input / Output

Cable

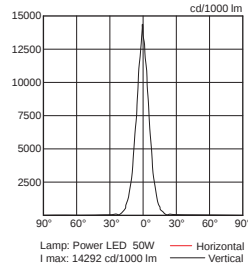
cable gland M22X1.5

RA cable - 5P (refer to the page 18)



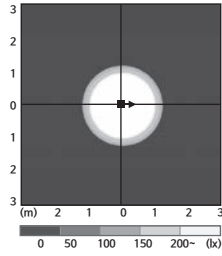
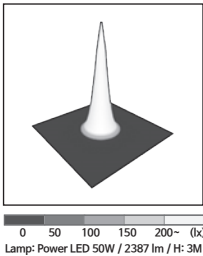
PHOTOMETRIC DATA

SCENIC-LM (10°)



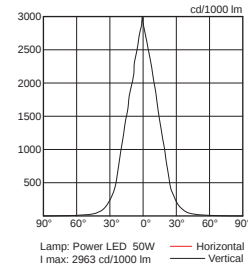
	C0	C90	C180
0°	14292	14292	14292
10°	3175	3170	3180
20°	114	111	116
30°	57	56	60
40°	15	15	15
50°	2	2	2
60°	1	1	1
70°	0	0	0
80°	0	0	0
90°	0	0	0

Lamp: Power LED 50W / 2387 lm



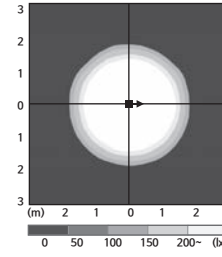
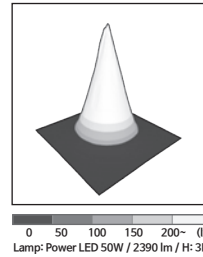
LED LIGHTING

SCENIC-LM (30°)

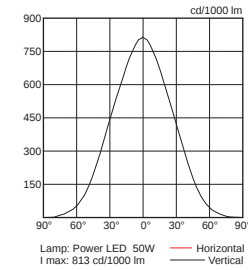


	C0	C90	C180
0°	2963	2963	2963
10°	2061	2022	2031
20°	989	969	978
30°	237	222	237
40°	57	58	57
50°	22	22	22
60°	9	9	9
70°	2	2	2
80°	0	0	0
90°	0	0	0

Lamp: Power LED 50W / 2390 lm

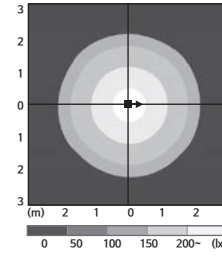
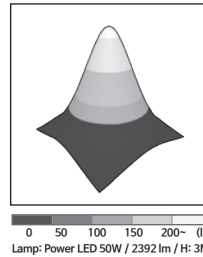


SCENIC-LM (60°)

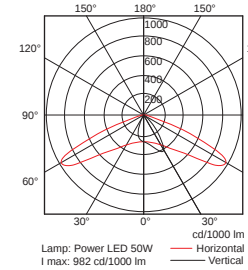


	C0	C90	C180
0°	813	813	813
10°	742	743	743
20°	601	603	603
30°	429	437	437
40°	258	269	269
50°	124	131	131
60°	47	53	53
70°	14	20	20
80°	1	1	1
90°	0	0	0

Lamp: Power LED 50W / 2392 lm

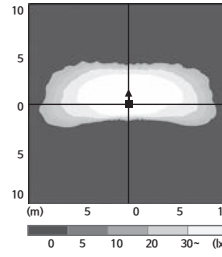


SCENIC-LM (140° X 60°)



	C0	C90	C180
0°	268	268	268
10°	298	273	239
20°	359	307	181
30°	399	372	37
40°	48	479	23
50°	6	747	7
60°	2	982	3
70°	1	143	3
80°	0	8	3
90°	0	0	0

Lamp: POWER LED 50W / 2428 lm



SPECIFICATIONS

Light Source

Lamp

Beam angle

Color

SCENIC-CL

power LED

10° / 30° / 60° / 140° X 60°

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

Power consumption

Converter

AC200~240V / 50~60Hz (enable DC24V)

50W (included converter)

fixtures with built-in AC-DC converter

Physical

Size

Weight

Finish

Body

Recessing box

Front glass

Gasket

Lens

Bolt

310mm x 310mm x 315mm (included recessing box)

8.6kg (included converter)

powder coating (dark gray) / chromate treatment

die cast aluminum

die cast polypropylene

toughened glass (THK 15mm)

silicone

optical grade PMMA or PC

stainless steel

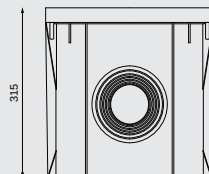
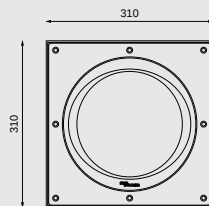
Installation

Input / Output

Cable

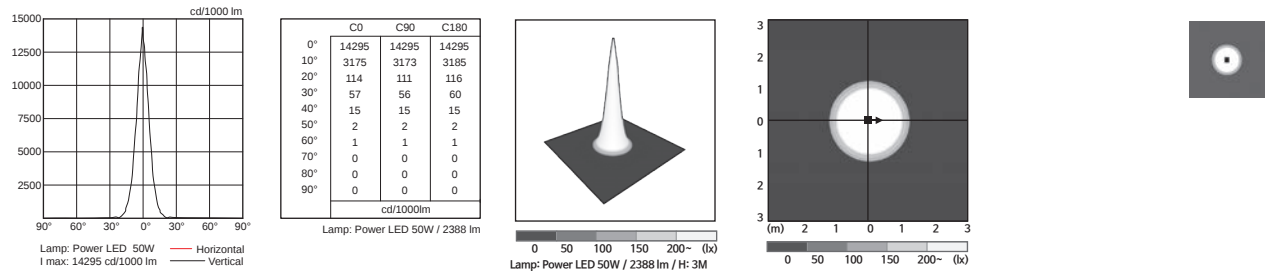
cable gland M22X1.5

RA cable - 5P (refer to the page 18)

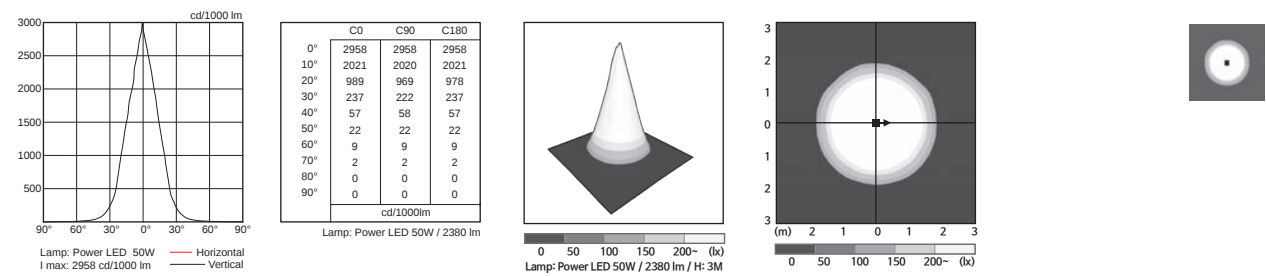


PHOTOMETRIC DATA

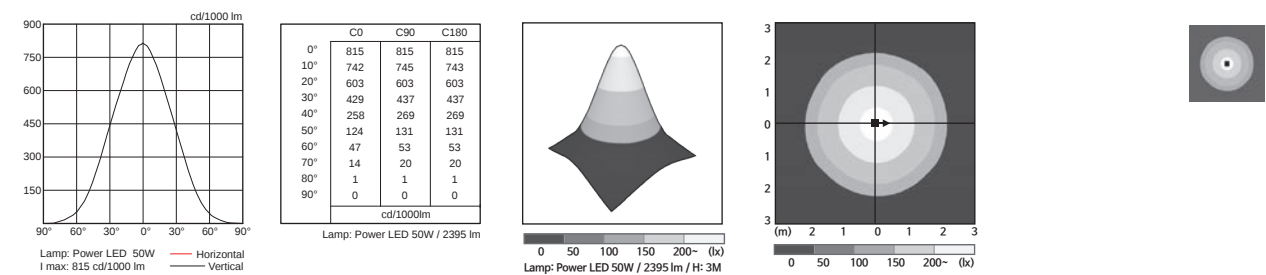
SCENIC-LC (10°)



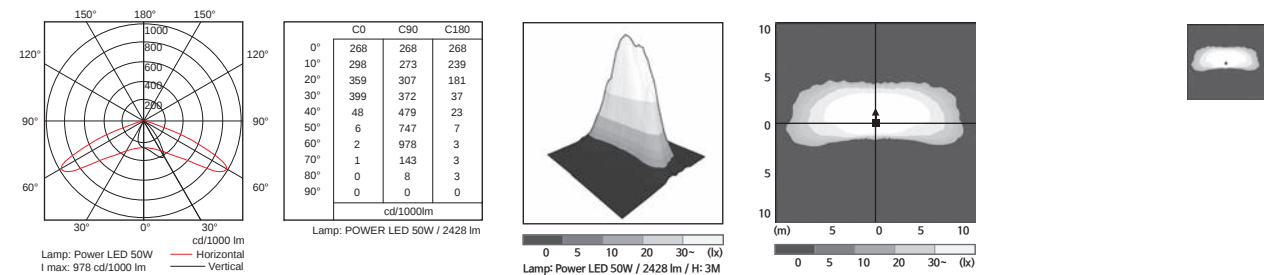
SCENIC-LC (30°)



SCENIC-LC (60°)



SCENIC-LC (140° X 60°)



SPECIFICATIONS

Light Source

Lamp	power LED
Beam angle	10° / 30° / 60° / 140° X 60° / Asymmetric 30°
Color	RGB / Red / Green / Blue / Cool white / Warm white

Electrical

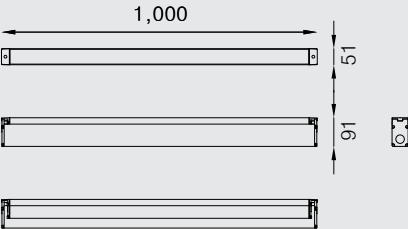
Input voltage	DC24V (using converter apart)
Power consumption	18W (LED module only)

Physical

Size	1000mm x 51mm x 91mm (included recessing box)
Weight	2.8kg
Finish	powder coating (light gray) / chromate treatment
Body	die cast aluminum
Recessing box	die cast aluminum
Front glass	toughened glass (THK 6mm)
Gasket	silicone
Lens	optical grade PMMA or PC
Bolt	stainless steel

Installation

Input / Output	cable gland M20X1.5 (Ø6~12mm)
Cable	RA cable - 5P (refer to the page 18)

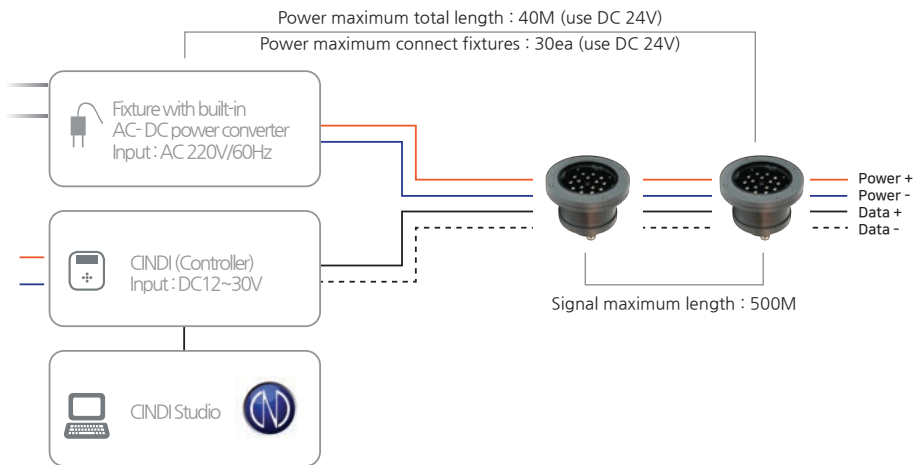


SCENIC-BL

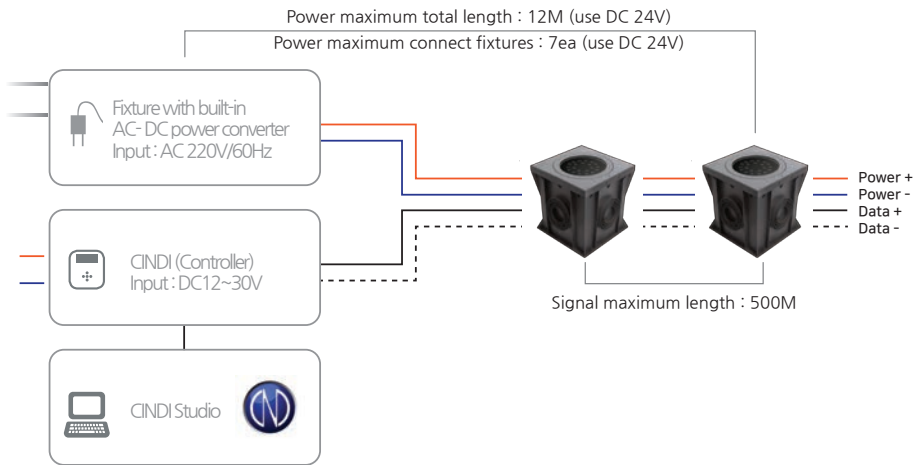


SYSTEM CONFIGURATION

SCENIC-SL



SCENIC-ML, CL



ORDERING CODE



SCENIC-LS Package Box
Size : 133 X 138 X 335(mm)
Weight : 5.4kg (included Lighting fixtures)



SCENIC-LM Package Box
Size : 333 X 330 X 433(mm)
Weight : 14kg (included Lighting fixtures)



SCENIC-LC Package Box
Size : 323 X 330 X 348(mm)
Weight : 9.7kg (included Lighting fixtures)

Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 3 blanks with product code.
If you select optional items, please add '-' after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 3가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 3가지 항목 뒤에 '-' 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) SL1 - KA - B10

STEP 1Light fixtures

ITEM	CODE
SCENIC-SL (DC 30W)	SL1
SCENIC-SL (AC 30W)	SL2
SCENIC-ML (DC 50W)	ML1
SCENIC-ML (AC 50W)	ML2
SCENIC-CL (DC 50W)	CL1
SCENIC-CL (AC 50W)	CL2
SCENIC-BL (DC 18W)	BL1

STEP 3Beam angle

ITEM	CODE
10 degrees	B10
30 degrees	B30
60 degrees	B60
140X60 degrees	B40
asymmetric 30 degrees	A30

STEP 2Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5



SCENIC-BL

Jung-gu, Seoul Deoksugung Stonewall Walkway / Cool & Warm white - Asymmetric 30°



GAOS-F
Jeonju incineration plants / GAOS-F5 Blue

GAOS-F

가오스-에프

LED LIGHTING



GAOS-F4

GAOS-F5

DESIGN FEATURES

Gaos-F is a high-wattage LED product that can play deep and clear 24bit colors with Cindi controller. And the white series offers various color temperature. Four photo metrics 10°, 30°, 50° and 140°X60° was offered for using suitable light on a design concept.

Gaos-F is designed in heat sink module structure which helps to emit heat by air flow of open space between modules. And it keeps high lumen and long life.

GAOS-F은 고용량 LED 투광등으로 CINDI 컨트롤러와 연동하여 풍부하고 선명한 24bit색상을 연출하거나, 백색 투광조명을 할 수 있습니다. 빛을 설계 목적에 맞게 효과적으로 사용할 수 있도록 4가지(10°, 30°, 50°, 140°X60°) 배광을 제공합니다.

GAOS-F는 히트싱크 모듈구조로 설계되어 LED수명은 물론 최적의 광효율을 유지 시킬 수 있으며, LED 모듈 사이에 열린공간을 구성하여 활발한 공기의 대류를 통해 열을 효과적으로 방출할 수 있도록 설계되었습니다.



Jeonju incineration plants / GAOS-F5 BLUE

SPECIFICATIONS

Light Source

Lamp

Beam angle

Color

GAOS-F4

power LED

10° / 30° / 60° / 140° X 60°

RGB / Red / Green / Blue / Cool white / Warm white

Electrical

Input voltage

Power consumption

Converter

AC200~240V / 50~60Hz (enable DC24V)

160W (included converter)

fixtures with built-in AC-DC converter

Physical

Size

Weight

Finish

Module

Housing

Diffuser

Mounting plate

Gasket

Lens

Bolt

368mm x 711mm x 140mm

10.5kg

powder coating (dark gray + black)

die cast aluminum & extruded aluminum

die cast aluminum

extruded polycarbonate (clear type)

aluminum (THK 8mm)

silicone

optical grade PMMA or PC

stainless steel

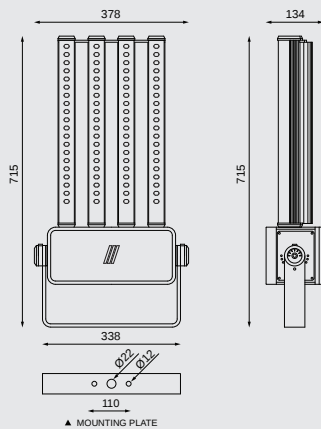
Installation

Input / Output

Cable

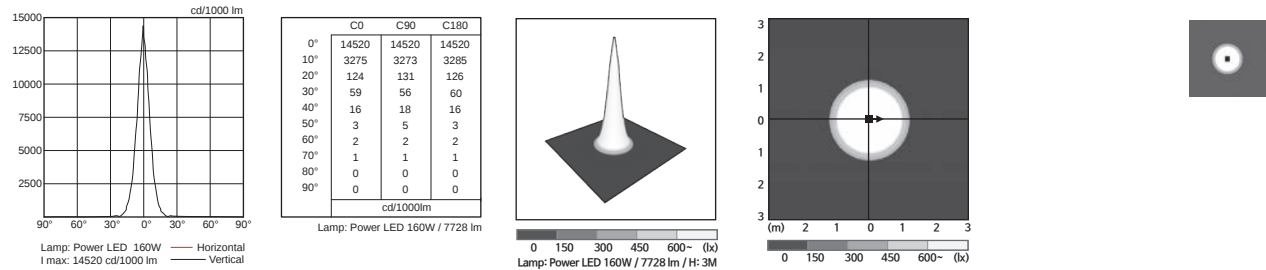
cable gland M20X1.5 (Ø6~12mm)

RA cable - 5P (refer to the page 18)



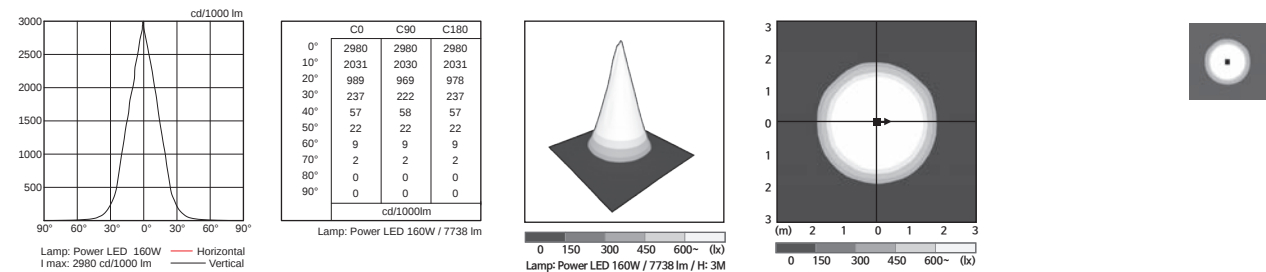
PHOTOMETRIC DATA

Gaos-F4 (10°)

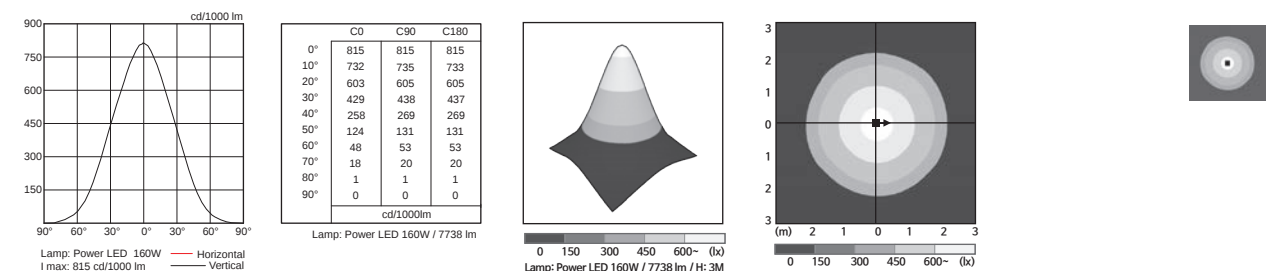


LED LIGHTING

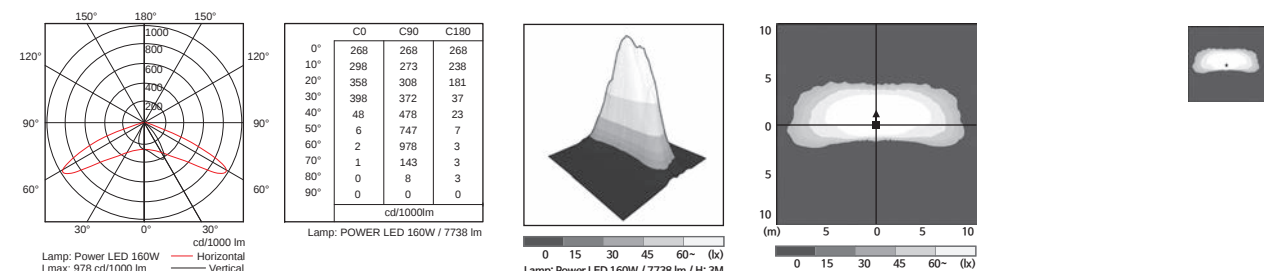
Gaos-F4 (30°)



Gaos-F4 (50°)



Gaos-F4 (140° X 60°)



SPECIFICATIONS

Light Source

Lamp	power LED
Beam angle	10° / 30° / 60° / 140° X 60°
Color	RGB / Red / Green / Blue / Cool white / Warm white

Electrical

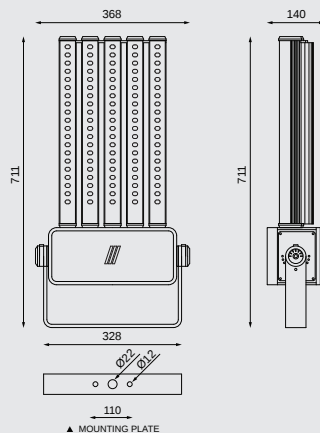
Input voltage	AC200~240V / 50~60Hz (enable DC24V)
Power consumption	200W (included converter)
Converter	fixtures with built-in AC-DC converter

Physical

Size	368mm x 711mm x 140mm
Weight	10.5kg
Finish	powder coating (dark gray + black)
Module	die cast aluminum & extruded aluminum
Housing	die cast aluminum
Diffuser	extruded polycarbonate (clear type)
Mounting plate	aluminum (THK 8mm)
Gasket	silicone
Lens	optical grade PMMA or PC
Bolt	stainless steel

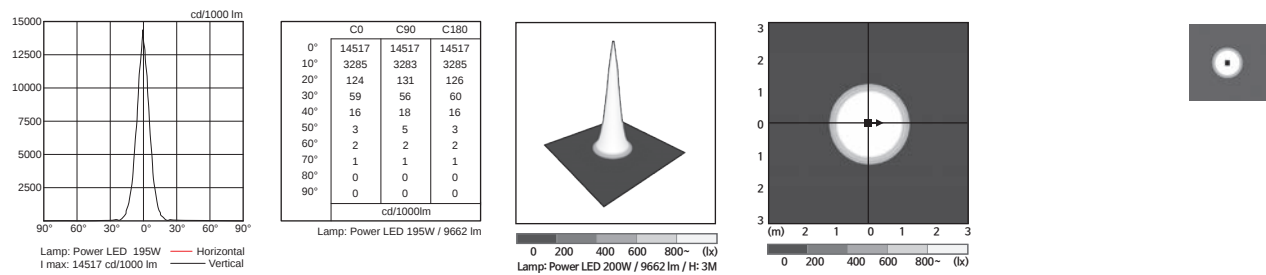
Installation

Input / Output	cable gland M20X1.5 (Ø6~12mm)
Cable	RA cable - 5P (refer to the page 18)

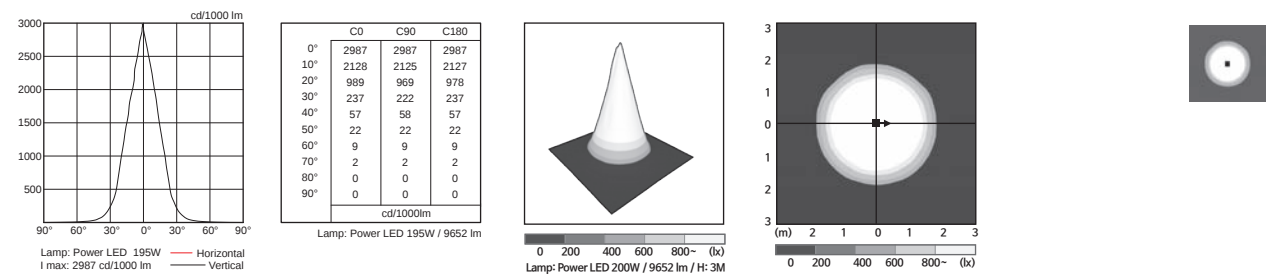


PHOTOMETRIC DATA

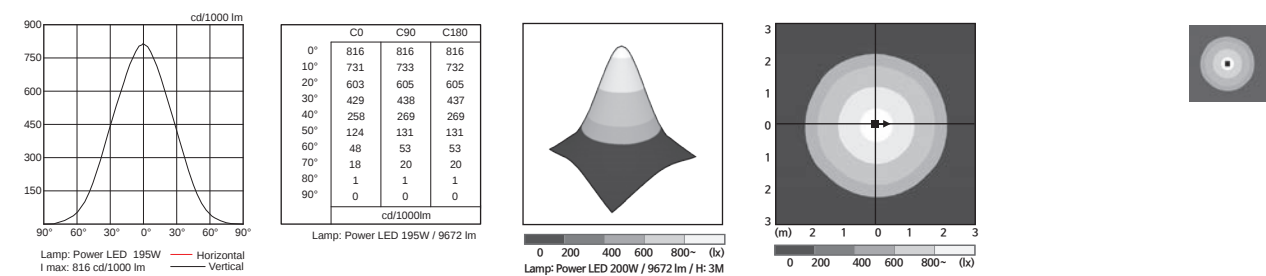
Gaos-F5 (10°)



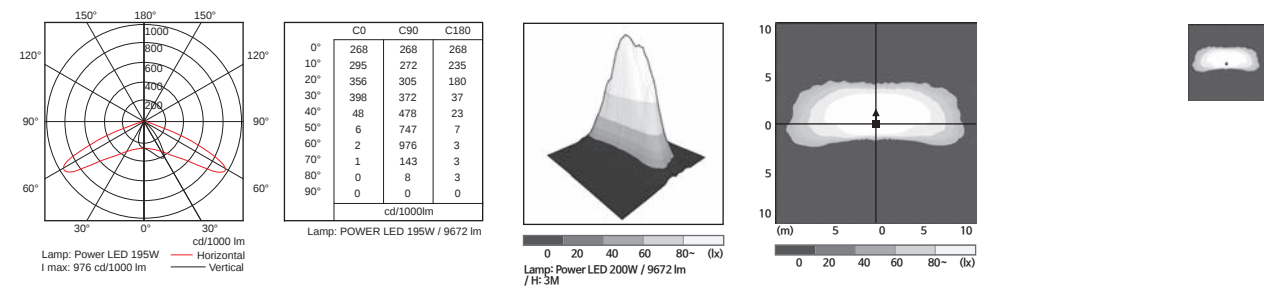
Gaos-F5 (30°)

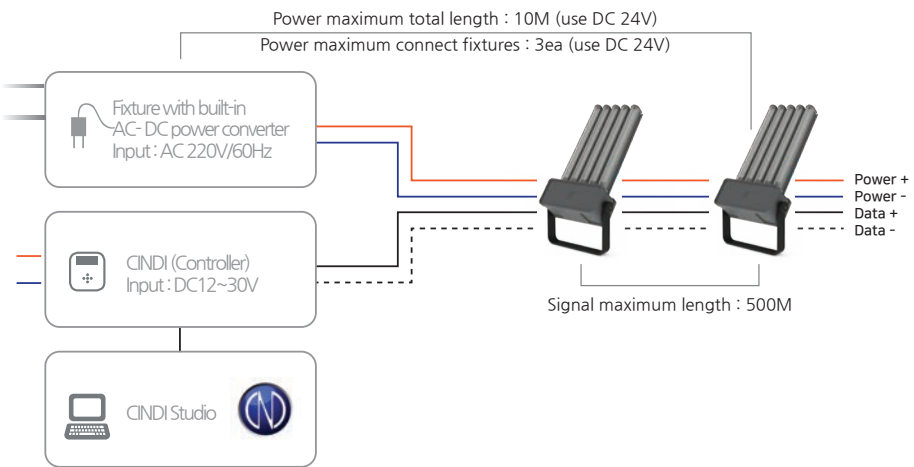


Gaos-F5 (60°)



Gaos-F5 (140° X 60°)





Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 3 blanks with product code.
If you select optional items, please add ' - ' after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

ORDERING CODE



GAOS-F Package Box
Size : 360 X 740 X 215(mm)
Weight : 13kg (included Lighting fixtures)

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 3가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 3가지 항목 뒤에 ' - ' 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) RL1 - KA - B10

STEP 1Light fixtures

ITEM	CODE
GAOS-F4 (DC 160W)	RL1
GAOS-F4 (AC 160W)	RL2
GAOS-F5 (DC 200W)	RL3
GAOS-F5 (AC 200W)	RL4

STEP 2Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 3Beam angle

ITEM	CODE
10 degrees	B10
30 degrees	B30
60 degrees	B60
140X60 degrees	B40



Memorial monument in Gyeongang park Gwangju-si, Gyeonggi-do / GAOS-F5 COOL WHITE

GAOS

FLOOD
FIGHTING

FLOOD LIGHTING

캠	CAM
로바	ROVA
엠지오	MGO
썬타	THETA
티온	TEEON
시닉	SCENIC
엑스비	XB



CAM

Gyeongsan Gymnasium 2009 / Cam-R

CAM

캠

FLOOD LIGHTING



CAM-PAR

CAM-HIPAR

CAM-R

CINDI-C

CINDI CONTROLLER

Modern & Compact

CAM design, which is based on geometrical shape, is modern and simple. Especially, by using CAM separately without its ballast, more simplified space could be created.

Stability & Utility

The heat which is originated from the lamp, has a great effect on the ballast. And especially condensers and igniters are very sensitive so CAM is divided into 2 parts, the lamp part and the control gear part. Therefore it ensures stabilized operation of each part.

Installation

There's separated part for connecting wires at each part, and by this, users easily can connect electricity into the fixture and also possible of inferior settlement could be diminished. In case of using mounting plate, partial settlement is feasible and for its fine view, it is designed not to catch people's sight at mounting plate.

Aiming

CAM is able to settle its angle in vertical and horizontality. And fixed at angle of 10 degrees angle marker enables users to easier aiming process. And the adjusted angle would not be changed by using anti-slippery system.

캠(CAM)은 기하학적 형태를 바탕으로 모던하고 컴팩트하게 디자인 되었습니다. 특히 안정기함을 분리해 사용할 경우 보다 심플한 공간을 연출해 드릴 것입니다.

램프에서 발생하는 열은 컨트를 기어 파트에 큰 영향을 줍니다. 특히, 컨덴서와 이그나이터는 열에 매우 민감합니다. 캠은 램프파트와 컨트를 기어파트를 분리함으로써 각 파트가 안정적으로 작동할 수 있습니다.

결선을 위한 부분이 컨트를 기어파트와 분리되어 결선작업이 용이하고, 불필요한 설치에 의한 하자요인을 줄일 수 있도록 설계되었습니다. 고정대(Mounting Plate) 설치 시 기구와 분리 설치 가능하도록 하였고, 미관을 고려해 고정대가 외부에 노출되지 않도록 디자인되었습니다.

캠은 수직, 수평으로 자유롭게 각도 조정이 가능하고, 10, 단위의 앵글마커는 각도조정(Aiming)을 더욱 정확하게 할 수 있는 도움을 줄 것입니다. 그리고 고정된 각도는 미끄럼 방지 설계로 사용자가 선택한 각도를 지속적으로 유지 시켜 드릴 것입니다.



SPECIFICATIONS

Light Source

Lamp

HALOPAR20 / 50W

HALOPAR30 / 75W

Lamp holder

E27

Beam angle

10° or 30°

Electrical

Input voltage

AC 220V

Power consumption

50W, 75W

Physical

Size

140mm x 201.5mm x 190mm

Weight

2kg

Finish

powder coating (dark gray + black)

Housing

die cast aluminum

Front glass

toughened glass (THK 5mm)

Mounting plate

die cast aluminum

Gasket

silicone

Bolt

stainless steel

Installation

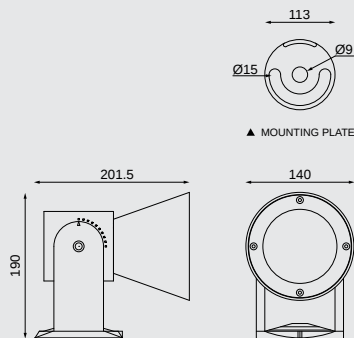
Input wire

cabl gland M18X1.5

(electric wire : Ø8~11mm)

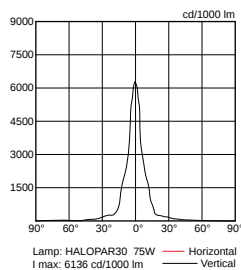
Cable

3P (included ground wire)



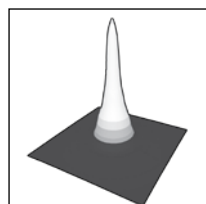
PHOTOMETRIC DATA

Cam-Par (75W / 10°)

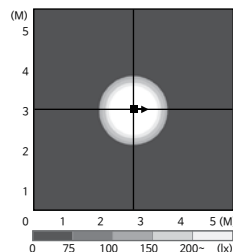


	C0	C90	C180
0°	6136	6136	6136
10°	2009	2014	2018
20°	265	260	273
30°	163	160	170
40°	74	72	75
50°	25	25	26
60°	12	11	12
70°	4	4	4
80°	2	1	2
90°	0	0	0

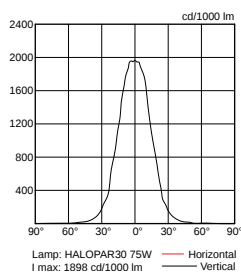
Lamp: HALOPAR30 75W / 1100 lm



Lamp: HALOPAR30 75W / 1100 lm / H: 3M

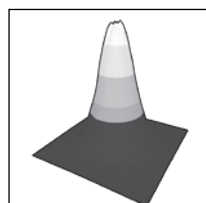


Cam-Par (75W / 30°)

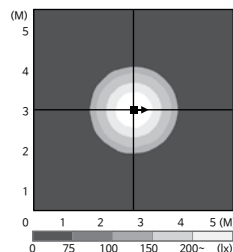


	C0	C90	C180
0°	1898	1898	1898
10°	1622	1576	1599
20°	728	713	719
30°	175	164	175
40°	42	43	42
50°	16	16	16
60°	6	7	7
70°	2	2	2
80°	0	0	0
90°	0	0	0

Lamp: HALOPAR30 75W / 1100 lm



Lamp: HALOPAR30 75W / 1100 lm / H: 3M



ACCESSORIES



Anti glare grill



Cut off visor



Anti glare hood



Ground spike



Color filter (R, G, B, Y)

SPECIFICATIONS

Light Source

Lamp

HI-PAR30 / 35W

HI-PAR30 / 70W

Lamp holder

E27

Beam angle

35W (10° or 30°) or 70W (10° or 40°)

Electrical

Input voltage

AC 220V

Power consumption

35W, 70W

Control gear

magnetic ballast

(lower ballast case could be installed separately)

Physical

Size

140mm x 225mm x 275mm

Weight

35W (4.5kg), 70W (5.1kg) - (included control gear)

Finish

powder coating (dark gray + black)

Housing

die cast aluminum

Front glass

toughened glass (THK 5mm)

Mounting plate

aluminum

Gasket

silicone

Bolt

stainless steel

Installation

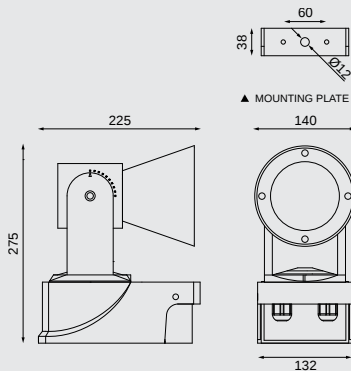
Input wire

cablE gland M18X1.5

(electric wire : Ø8~11mm)

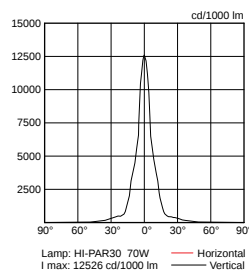
3P (included ground wire)

Cable



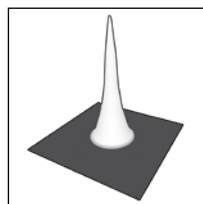
PHOTOMETRIC DATA

Cam-Hipar (70W / 10 °)

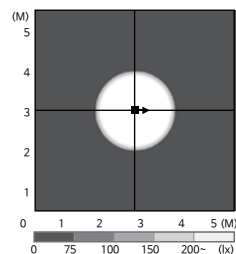


	C0	C90	C180
0°	12526	12526	12526
10°	2734	2740	2746
20°	60	59	62
30°	37	36	39
40°	17	16	17
50°	6	6	6
60°	3	3	3
70°	1	1	1
80°	0	0	0
90°	0	0	0

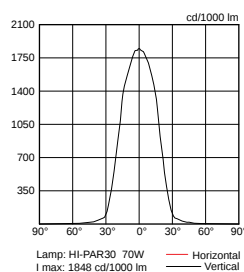
Lamp: HI-PAR30 70W / 4850 lm



0 75 100 150 200~ (lx)
Lamp: HI-PAR30 70W / 4850lm / H: 3M

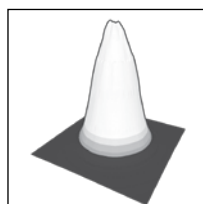


Cam-Hipar (70W / 40 °)

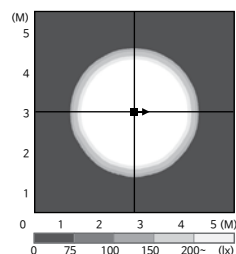


	C0	C90	C180
0°	1848	1848	1848
10°	1644	1598	1620
20°	865	847	854
30°	115	112	115
40°	33	33	33
50°	13	14	14
60°	6	6	5
70°	1	1	1
80°	0	0	0
90°	0	0	0

Lamp: HI-PAR30 70W / 4850 lm



0 75 100 150 200~ (lx)
Lamp: HI-PAR30 70W / 4850lm / H: 3M



ACCESSORIES



Anti glare grill



Cut off visor



Anti glare hood



Ground spike



Color filter (R, G, B, Y)

SPECIFICATIONS

Light Source

Lamp

Cam-R

HIT 70W, 150W
HIT-CE 70W or 150W (ceramic)
G12

Electrical

Input voltage
Power consumption
Control gear

AC 220V
70W, 150W
magnetic ballast
(lower ballast case could be installed separately)

Physical

Size
Weight
Finish
Housing
Front glass
Reflector
Mounting plate
Gasket
Bolt

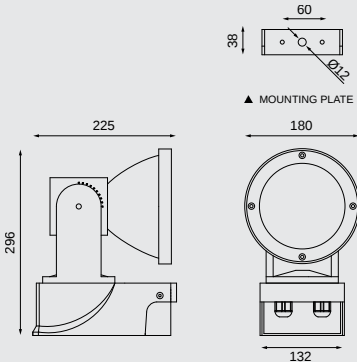
182mm x 225mm x 296mm
70W (5.2kg), 150W (5.9kg) - (included control gear)
powder coating (dark gray + black)
die cast aluminum
toughened glass (THK 5mm)
99.9% aluminum
aluminum
silicone
stainless steel

Installation

Input wire

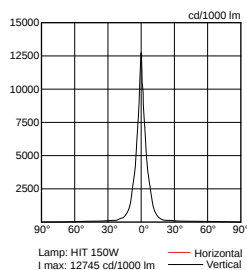
cable gland M18X1.5
(electric wire : Ø8~11mm)
3P (included ground wire)

Cable



PHOTOMETRIC DATA

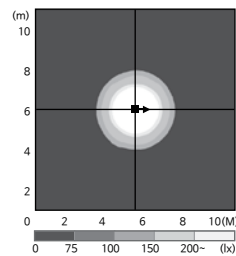
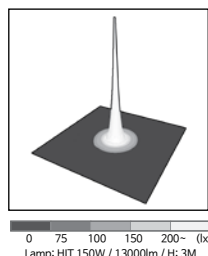
Cam-RS



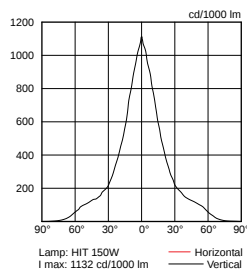
	C0	C90	C180
0°	12745	12745	12745
10°	1648	1608	1534
20°	200	201	202
30°	104	106	104
40°	71	74	69
50°	42	43	44
60°	18	19	18
70°	3	2	2
80°	0	0	0
90°	0	0	0

cd/1000lm

Lamp: HIT 150W / 13000 lm



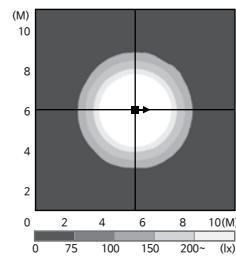
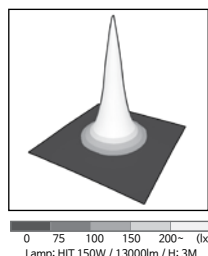
Cam-RW



	C0	C90	C180
0°	1132	1132	1132
10°	815	821	808
20°	446	434	437
30°	228	233	227
40°	148	149	145
50°	112	117	110
60°	59	58	59
70°	14	15	14
80°	3	3	3
90°	0	0	0

cd/1000lm

Lamp: HIT 150W / 13000 lm



ACCESSORIES



Cut off visor



Anti glare hood



Ground spike



Color filter (R, G, B, Y)

SPECIFICATIONS

Light Source

Lamp	HIT-DE 70W or 150W
	HIT-DE 70W or 150W (ceramic)
Lamp holder	Rx7s

Electrical

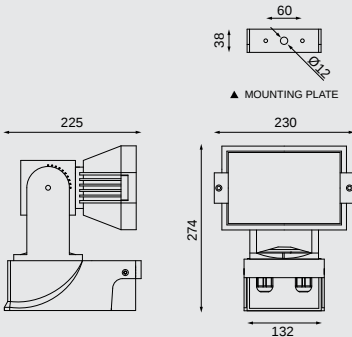
Input voltage	AC 220V
Power consumption	70W, 150W
Control gear	magnetic ballast
	(lower ballast case could be installed separately)

Physical

Size	230mm x 225mm x 274mm
Weight	6.2kg (included control gear)
Finish	powder coating (dark gray + black)
Housing	die cast aluminum
Front glass	toughened glass (THK 5mm)
Reflector	99.9% aluminum
Mounting plate	aluminum
Gasket	silicone
Bolt	stainless steel

Installation

Input wire	cable gland M18X1.5
	(electric wire : Ø8~11mm)
Cable	3P (included ground wire)

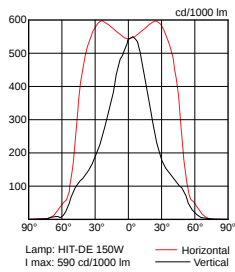




ALPENIA CLUB HOUSE / Cam-
RAR HIT 75W

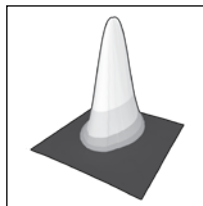
PHOTOMETRIC DATA

Cam-C

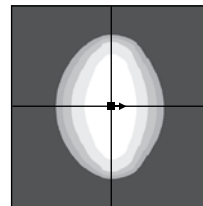


	C0	C90	C180
0°	543	543	543
10°	514	562	458
20°	327	590	306
30°	180	582	195
40°	126	485	131
50°	85	177	85
60°	20	47	10
70°	4	6	7
80°	1	1	1
90°	0	0	0

Lamp: HIT-DE 150W / 13000 lm



Lamp: HIT-DE 150W / 13000lm / H: 3M



Lamp: HIT-DE 150W / 13000lm / H: 3M



ACCESSORIES



Anti glare grill



Cut off visor



Ground spike



Color filter (R, G, B, Y)

ORDERING CODE



CAM-PAR package box
size : 285 x 245 x 158 (mm)
weight : 2.7kg (included product)



CAM-HIPAR package box
size : 285 x 245 x 158 (mm)
weight : 35W - 5.2kg (included product)
70W - 5.8kg (included product)



CAM-R package box
size : 295 x 235 x 200 (mm)
weight : 70W - 5.9kg (included product)
150W - 6.6kg (included product)



CAM-C package box
size : 238 x 253 x 290 (mm)
weight : 7kg (included product)

Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 5 blanks with product code.
If you select optional items, please add after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 5가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 5가지 항목 뒤야 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) CM2 - R37 - K3 - B30 - CM12

STEP 1Light fixtures

ITEM	CODE
CAM-PAR (E26)	CM1
CAM-PAR (E27)	CM2
CAM-HIPAR (E26)	CM3
CAM-HIPAR (E27)	CM4
CAM-RS (G12)	CM5
CAM-RW (G12)	CM6
CAM-C (Rx7s)	CM7

STEP 2Lighting source

ITEM	CODE
HALOPAR20 50W	R25
HALOPAR30 75W	R37
HI-PAR30 35W	H35
HI-PAR30 70W	H70
HIT 70W	M70
HIT 150W	M15
HIT-CE Ceramic 70W	C70
HIT-CE Ceramic 150W	C15
HIT-DE 70W	D70
HIT-DE 150W	D15
HIT-DE Ceramic 70W	S70
HIT-DE Ceramic 150W	S15

STEP 3Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

ORDERING CODE

STEP 4.....Beam angle

ITEM	CODE
HALOPAR20 10°	B10
HALOPAR20 30°	B20
HALOPAR30 10°	B30
HALOPAR30 30°	B40
HI-PAR 35W 10°	B50
HI-PAR 35W 30°	B60
HI-PAR 70W 10°	B70
HI-PAR 70W 40°	B80

STEP 5.....Option

ITEM	CODE
CAM-PAR / HIPAR Cut off visor	CM11
CAM-PAR / HIPAR Anti glare grill	CM12
CAM-PAR / HIPAR Anti glare hood	CM13
CAM-PAR / HIPAR Color filter (Red)	CM14
CAM-PAR / HIPAR Color filter (Green)	CM15
CAM-PAR / HIPAR Color filter (Blue)	CM16
CAM-PAR / HIPAR Color filter (Yellow)	CM17
CAM-R Cut off visor	CM18
CAM-R Anti glare hood	CM19
CAM-R Color filter (Red)	CM20
CAM-R Color filter (Green)	CM21
CAM-R Color filter (Blue)	CM22
CAM-R Color filter (Yellow)	CM23
CAM-C Cut off visor	CM24
CAM-C Anti glare grill	CM25
CAM-C Color filter (Red)	CM26
CAM-C Color filter (Green)	CM27
CAM-C Color filter (Blue)	CM28
CAM-C Color filter (Yellow)	CM29
CAM-PAR Ground spike	CM30
CAM-HIPAR / R / C Ground spike	CM31



ROVA
DAEGU CITY TRAIN / ROVA-RS 4200K



ROVA-W

ROVA-R

ROVA-A

ROVA-S

ROVA-M

DESIGN FEATURES



Reflector System

Through designing method of high-tech reflector which utilized simulation, various reflector could be designed. Thus right illumination could be utilized to the purposes and more deliberate and wider lighting direction could be realized.

Anti-Glare System

To minimize the glaringness, which was created by lighting fixtures' lamp, ROVA was designed to be applied to various anti-glare system. And to prevent impurity of fixture's surface, the lighting fixtures was designed to place anti-glare implements inside of the fixture.

Angle Marker

For photoluminescence mark is attached on the angle marker, aiming could be done easily during the night. And also the restoration of the angle could be done easily after maintenances because the angle marker is fixed at the settled adjusted angle.

Convenience

To make easier to carry or installation of Rova, a grip is placed on the back at upper part.

사물레이선에 의한 하이테크 반사판 설계기법을 통해 빛을 목적에 맞게 사용할 수 있도록 다양한 형태의 반사판이 디자인되어 보다 계획적이고 폭넓은 조명연출을 실현시켜 드릴 것 입니다.

조명기구의 램프로 인해 발생하는 눈부심(Glare)을 최소화 할 수 있는 다양한 시스템 적용이 가능하도록 제작되었으며, 조명기구 표면의 오염을 방지하기 위해 눈부심 방지 장치가 조명기구 내부에 설치하도록 디자인 되었습니다.

측광표식이 부착되어 있어 야간에도 각도조정(Aiming)을 편리하게 할 수 있고, 각도 조정이 완료된 후 조정된 각도값을 영구 보존함으로써 유지보수 후에도 원래의 각도 값을 정확히 복원할 수 있습니다.

조명기구 설치, 운반 시 사용자가 편리하게 사용할 수 있도록 조명기구 후면 상부에 손잡이 디자인을 적용하였습니다.

SPECIFICATIONS

Light Source

Lamp
Lamp holder

Rova-R

HIT-CE 250W (ceramic)
G12

Electrical

Input voltage
Power consumption
Control gear

AC 220V
250W
magnetic ballast (fixtures with built-in ballast)

Physical

Size
Weight
Finish
Housing
Front glass
Reflector
Mounting plate
Gasket
Bolt

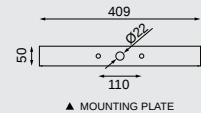
450mm x 173mm x 535mm
13kg (included control gear)
powder coating (dark gray + black)
die cast aluminum
toughened glass (THK 5mm)
99.9% aluminum
aluminum (THK 8mm)
silicone
stainless steel

Installation

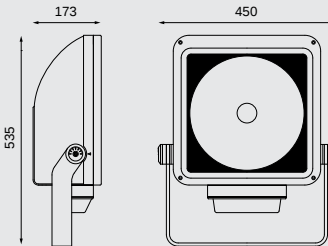
Input wire

cable gland M20X1.5
(electric wire : Ø9~13mm)
3P (included ground wire)

Cable



▲ MOUNTING PLATE



ACCESSORIES



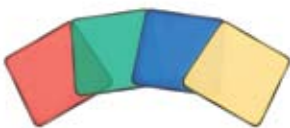
Anti-glare cap



Cut-off visor (small)



Cut-off visor (large)



Color filter (R, G, B, Y)

SPECIFICATIONS

Light Source

Lamp

Lamp holder

Rova-W

HIT-CE 250W (ceramic)

G12

Electrical

Input voltage

Power consumption

Control gear

AC 220V

250W

magnetic ballast (fixtures with built-in ballast)

Physical

Size

Weight

Finish

Housing

Front glass

Reflector

Mounting plate

Gasket

Bolt

450mm x 173mm x 535mm

12.5kg (included control gear)

powder coating (dark gray + black)

die cast aluminum

toughened glass (THK 5mm)

99.9% aluminum

aluminum (THK 8mm)

silicone

stainless steel

Installation

Input wire

Cable

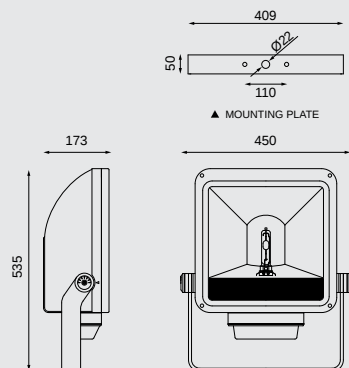
cable gland M20X1.5

(electric wire : Ø9~13mm)

3P (included ground wire)



ACCESSORIES



Anti-glare grill



Cut-off visor (small)



Cut-off visor (large)



Color filter (R, G, B, Y)

SPECIFICATIONS

Light Source

Lamp

Rova-A

HIT 250W, 400W
HPS-T 250W, 400W
E40

Lamp holder

Electrical

Input voltage

AC 220V

Power consumption

250W, 400W

Control gear

magnetic ballast
(lower ballast case could be installed separately)

Physical

Size

445mm x 173mm x 580mm

Weight (included control gear)

HIT 250W (15.5kg) / 400W (16kg)
HPS-T 250W (16.5kg) / 400W (18kg)

Finish

powder coating (dark gray + black)

Housing

die cast aluminum

Front glass

toughened glass (THK 5mm)

Reflector

99.9% aluminum

Mounting plate

aluminum (THK 8mm)

Gasket

silicone

Bolt

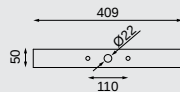
stainless steel

Installation

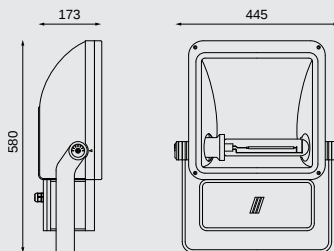
Input wire

cabl gland M20X1.5
(electric wire : Ø9~13mm)
3P (included ground wire)

Cable



▲ MOUNTING PLATE



ACCESSORIES



Anti-glare grill



Cut-off visor(small)



Cut-off visor(large)



Color filter (R, G, B, Y)

SPECIFICATIONS

Rova-S

Light Source

Lamp

HIT 250W, 400W
HPS-T 250W, 400W
E40

Lamp holder

Electrical

Input voltage

AC 220V

Power consumption

250W, 400W

Control gear

magnetic ballast
(lower ballast case could be installed separately)

Physical

Size

450mm x 173mm x 580mm

Weight (included control gear)

HIT 250W (15.5kg), 400W (16kg)
HPS-T 250W (16.5kg), 400W (18kg)

Finish

powder coating (dark gray + black)

Housing

die cast aluminum

Front glass

toughened glass (THK 5mm)

Reflector

99.9% aluminum

Mounting plate

aluminum (THK 8mm)

Gasket

silicone

Bolt

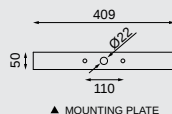
stainless steel

Installation

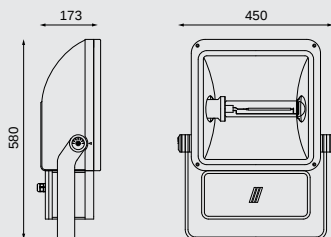
Input wire

cable gland M20X1.5
(electric wire : Ø9~13mm)
3P (included ground wire)

Cable



▲ MOUNTING PLATE



ACCESSORIES



Anti-glare grill



Cut-off visor(small)



Cut-off visor(large)



Color filter (R, G, B, Y)

SPECIFICATIONS

Light Source

Lamp
Lamp holder

Rova-M

HIT-DE 1500W
Rx7s

Electrical

Input voltage
Power consumption
Control gear

AC 380V
1500W
magnetic ballast (for external ballast case : XB)
aluminum ballast case IP65 rated
fixtures with built-in igniter

Physical

Size
Weight
Finish
Housing
Front glass

464mm x 173mm x 535mm
10.5kg (excluded ballast)
powder coating (dark gray + black)
die cast aluminum
down lighting - toughened glass (THK 5mm)
up lighting - ceramics glass (THK 5mm)
99.9% aluminum
aluminum (THK 8mm)
silicone
stainless steel

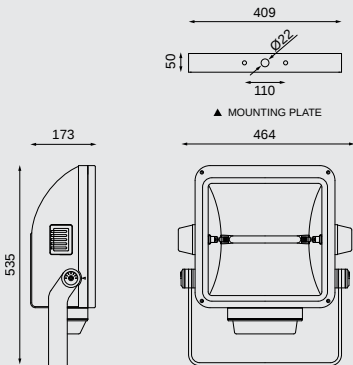
Reflector
Mounting plate
Gasket
Bolt

Installation

Input wire

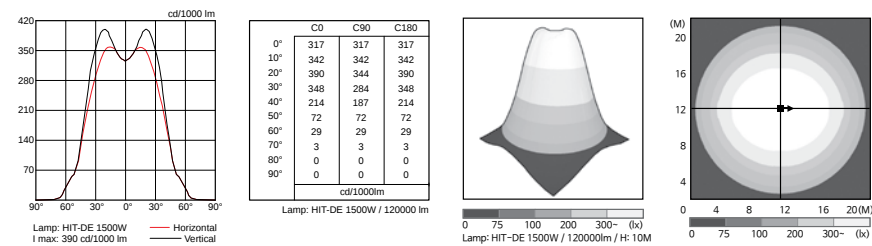
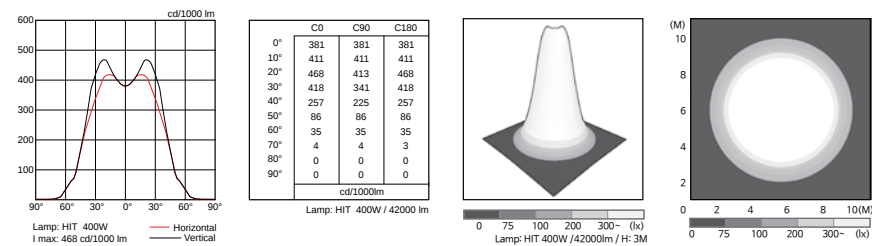
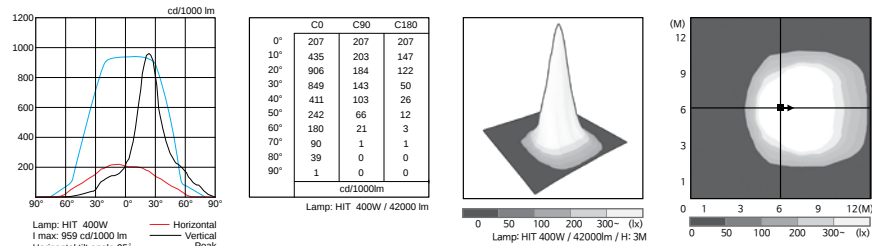
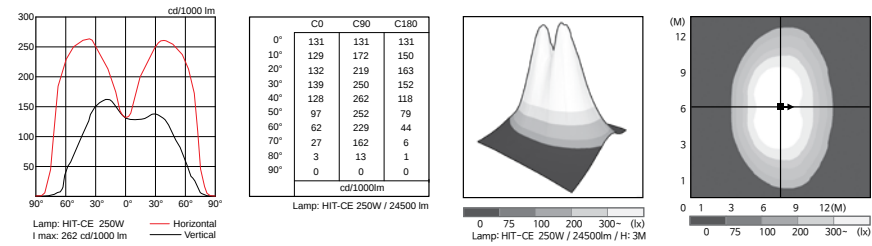
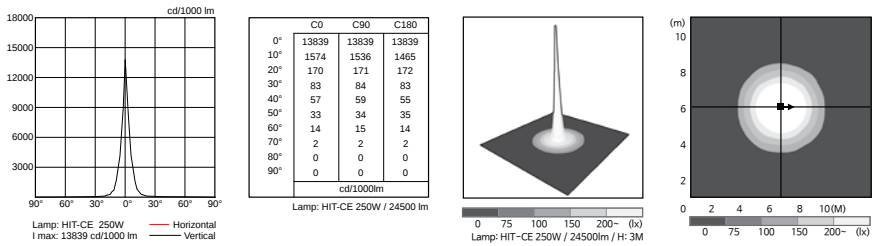
cable gland M20X1.5
(electric wire : Ø9~13mm)
3P (included ground wire)

Cable



ACCESSORIES





ORDERING CODE



ROVA package box
size : 575 x 498 x 215 (mm)

weight (included product)
ROVA-R : 15.6kg
ROVA-W : 15.0kg
ROVA-S & A (HIT) : 18.5kg
ROVA-S & A (HPS) : 20.5kg
ROVA-M : 13kg

Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 4 blanks with product code.
If you select optional items, please add after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 4가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 4가지 항목 뒤에 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) RV1 - C25 - K3 - RV11

STEP 1Light fixtures

ITEM	CODE
Rova-RS (G12)	RV1
Rova-RW (G12)	RV2
Rova-W (G12)	RV3
Rova-S (E39)	RV4
Rova-S (E40)	RV5
Rova-A (E39)	RV6
Rova-A (E40)	RV7
Rova-M (Rx7s)	RV8

STEP 3Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 2Light source

ITEM	CODE
HIT-CE 250W	C25
HIT 250W	M25
HIT 400W	M40
HPS-T 250W	N25
HPS-T 400W	N40
HIT-DE 1500W	W15

ORDERING CODE

STEP 4.....Option

ITEM	CODE
Rova-R Anti glare cap	RV11
Rova-R Color filter (Red)	RV12
Rova-R Color filter (Green)	RV13
Rova-R Color filter (Blue)	RV14
Rova-R Color filter (Yellow)	RV15
Rova-W Anti glare grill	RV16
Rova-W Color filter (Red)	RV17
Rova-W Color filter (Green)	RV18
Rova-W Color filter (Blue)	RV19
Rova-W Color filter (Yellow)	RV20
Rova-S/A Anti glare grill	RV21
Rova-S/A/M Color filter (Red)	RV22
Rova-S/A/M Color filter (Green)	RV23
Rova-S/A/M Color filter (Blue)	RV24
Rova-S/A/M Color filter (Yellow)	RV25
Rova-M Anti glare cap	RV26
Rova-M Ceramics glass (Uplight type)	RV27
Rova Cut off visor (Small)	RV28
Rova Cut off visor (Large)	RV29
Rova-M Control gear box - XB (Empty)	XB1
Rova-M Control gear box - XB (1500W)	XB4



MGO

엠지오

FLOOD LIGHTING



DESIGN FEATURES

Compact Design

MGO's design is very compact for a 1000W lighting fixtures. Though it is compact, its radiation of heat system would guarantee the longer life span of the lamp.

엠지오(MGO)는 1000W의 조명기구로는 매우 컴팩트한 크기로 디자인되었습니다. 작은 크기에도 불구하고 디자인에 반영된 방열 구조는 램프의 수명을 보다 안정적으로 보장해 드릴 것입니다.

Lens

The optical lens of MGO offers more accurate optic angle and minimizes the variation of lighting fixture's optic angle. MGO has 5 different types of lens which would be adjusted to the purposes of users, and by replace one with another type, the optic angle would be easily modified.

엠지오(MGO)는 1000W의 조명기구로는 매우 컴팩트한 크기로 디자인되었습니다. 작은 크기에도 불구하고 디자인에 반영된 방열 구조는 램프의 수명을 보다 안정적으로 보장해 드릴 것입니다.

XB

In case of setting the ballast at the outside of the fixture separately, XB is available and this would offer more practical and harmonious constitution.

엠지오(MGO)의 안정기를 외부에 별도로 설치할 경우 XB를 사용함으로써 보다 조화 있고 실용적인 구성을 제공해 드릴 것입니다.

XB

In case of setting the ballast at the outside of the fixture separately, XB is available and this would offer more practical and harmonious constitution.

엠지오(MGO)의 안정기를 외부에 별도로 설치할 경우 XB를 사용함으로써 보다 조화 있고 실용적인 구성을 제공해 드릴 것입니다.

SPECIFICATIONS

MGO

Light Source

Lamp
Lamp holder

PAR64 575W (6000K)
G38

Electrical

Input voltage
Power consumption
Control gear

AC 220V
575W
magnetic ballast (for external ballast case : XB)
aluminum ballast case IP65 rated
fixtures with built-in igniter

Physical

Size
Weight
Finish
Housing
Front glass
Mounting plate
Gasket
Bolt

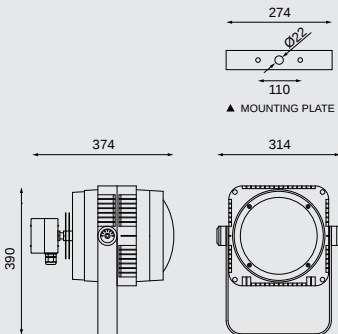
314mm x 374mm x 390mm
9.2kg (excluded ballast)
powder coating (dark gray + black)
die cast aluminum
optical lens (5 type)
galvanized steel (THK 5mm)
silicone
stainless steel

Installation

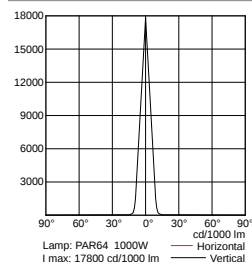
Input wire

cable gland M20X1.5
(electric wire : Ø9~13mm)
3P (included ground wire)

Cable

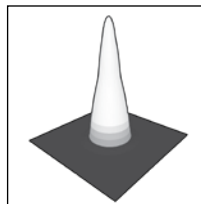


PHOTOMETRIC DATA

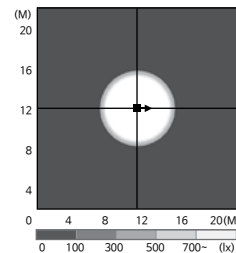


	C0	C90	C180
0°	17800	17800	17800
10°	1415	1406	1406
20°	0	0	0
30°	0	0	0
40°	0	0	0
50°	0	0	0
60°	0	0	0
70°	0	0	0
80°	0	0	0
90°	0	0	0

Lamp: PAR64 1000W / 78000 lm



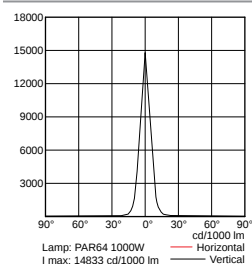
Lamp: PAR64 575W / 46000lm / H: 20M



MGO Lens M1

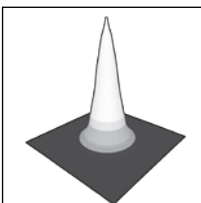


MGO-M2

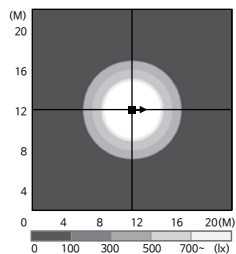


	C0	C90	C180
0°	14833	14833	14833
10°	1714	1799	1714
20°	111	107	111
30°	39	37	39
40°	15	14	15
50°	0	0	0
60°	0	0	0
70°	0	0	0
80°	0	0	0
90°	0	0	0

Lamp: PAR64 1000W / 78000 lm



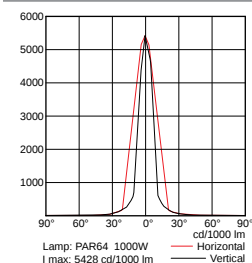
Lamp: PAR64 575W / 46000lm / H: 20M



MGO Lens M2

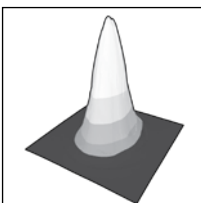


MGO-M3

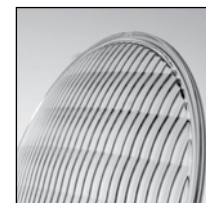
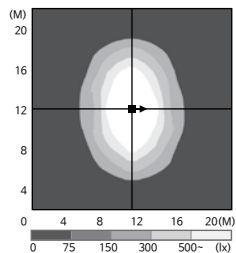


	C0	C90	C180
0°	5428	5428	5428
10°	1146	3446	1011
20°	224	338	208
30°	75	69	76
40°	39	30	36
50°	13	16	11
60°	1	1	1
70°	0	0	0
80°	0	0	0
90°	0	0	0

Lamp: PAR64 1000W / 78000 lm



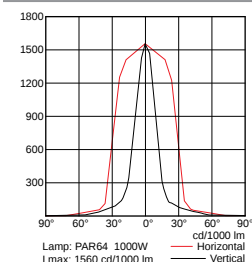
Lamp: PAR64 575W / 46000lm / H: 20M



MGO Lens M3

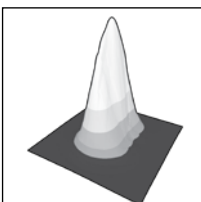


MGO-M4

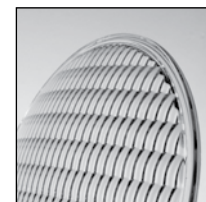
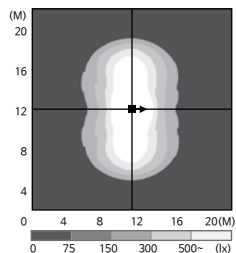


	C0	C90	C180
0°	1560	1560	1560
10°	902	1489	837
20°	158	1369	172
30°	83	687	79
40°	52	73	44
50°	29	40	23
60°	6	26	7
70°	2	6	2
80°	0	0	0
90°	0	0	0

Lamp: PAR64 1000W / 78000 lm



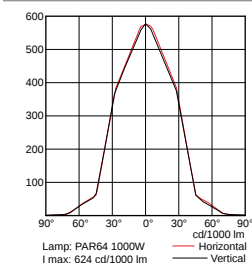
Lamp: PAR64 575W / 46000lm / H: 10M



MGO Lens M4

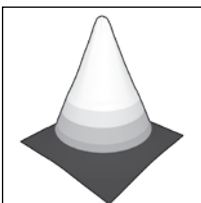


MGO-M5

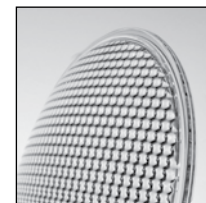
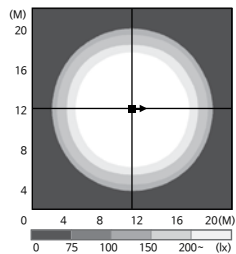


	C0	C90	C180
0°	624	624	624
10°	563	577	559
20°	477	490	474
30°	380	381	377
40°	165	175	164
50°	53	56	52
60°	33	33	32
70°	7	5	7
80°	1	1	1
90°	0	0	0

Lamp: PAR64 1000W / 78000 lm



Lamp: PAR64 1m / H: 10M



MGO Lens M5



ORDERING CODE

ex) MG2 - MG11 - XB2

STEP 1Light fixtures by Photometric

ITEM	CODE
MGO-M1 (G38)	MG1
MGO-M2 (G38)	MG2
MGO-M3 (G38)	MG3
MGO-M4 (G38)	MG4
MGO-M5 (G38)	MG5

STEP 3Control gear box

ITEM	CODE
MGO Control gear box - XB (Empty)	XB1
MGO Control gear box - XB (575W)	XB2

STEP 2Option

ITEM	CODE
MGO Anti-glare hood	
MGO Color filter (Red)	
MGO Color filter (Green)	
MGO Color filter (Blue)	
MGO Color filter (Yellow)	

ACCESSORIES & PACKAGE BOX



Anti-glare hood



XB (ballast case)



Color filter (R, G, B, Y)



MGO Package box
size : 423 x 335 x 295(mm)
weight : 10.8kg





THETA
HONGCHEON VIVALDI PARK / THETA 2KW

THETA

세타

FLOOD LIGHTING



DESIGN FEATURES

Durability

The internal structure of THETA consists of dual structure which could protect the reflector from the outer impact, and this structure offers excellent durability.

Convenience

To make easier to carry and installation of THETA, a grip is placed at upper part and the rear opening system would furnish the convenience of replacing lamps.

Safety System

THETA's design is based on the anthropocentric, so THETA took a serious view of convenience and safety. When the rear part is opened, safety system cuts the power supply. Therefore there is no danger of electric shocks. And also the air valve is utilized in this fixture to prevent dangerous incidents such as breakage of the glass.

Angle Marker

For photoluminescence mark is attached on the angle marker, aiming could be done easily during the night. And also the restoration of the angle could be done exactly same with former angle after maintenances because the angle marker is fixed at the adjusted angle.

THETA의 내부 구조는 현장 특성을 고려한 설계로 구조적으로 약한 반사판을 외부 충격으로부터 보호할 수 있는 이중구조로 형성되어 있어 뛰어난 내구성을 제공합니다.

조명기구 설치, 운반 시 사용자가 편리하게 사용할 수 있도록 조명기구 상부에 손잡이 형태를 제공하였으며, 기구 후면 개방 방식을 적용하여 램프 교환 작업 시 사용자의 편의를 고려하였습니다.

THETA는 인간 중심적인 디자인을 기본으로 사용자의 편의는 물론 안전성을 중시하였습니다. 후면 개방시 전원이 차단 되는 기능을 사용하여 감전사고의 근본적 요소를 배제시켰고, 기구 내부와 외부의 공기압을 조절 할 수 있는 에어밸브를 적용하여 유리파손 등의 안전사고를 미연에 방지 할 수 있습니다.

앵글 마커에 축광 표시가 부착되어 있어 야간에도 각도 조정(Aiming)을 편리하게 할 수 있고, 각도조정이 완료된 후 조정된 각도값을 영구 보존함으로써 유지보수 후에도 원래의 각도값을 정확히 복원할 수 있습니다.



SPECIFICATIONS

Light Source

Lamp
Lamp holder

THE TA

HIT-DE 1KW, 2KW
Cable

Electrical

Input voltage
Power consumption
Control gear

1KW (AC 200V~230V), 2KW (AC 380V)
1KW, 2KW
magnetic ballast (for external ballast case : XB)
fixtures with built-in igniter

Physical

Size
Weight
Finish
Housing
Front glass

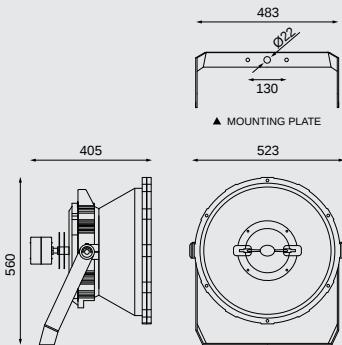
523mm x 405mm x 560mm
13kg (excluded ballast)
powder coating (dark gray + black)
die cast aluminum
down lighting - toughened glass (THK 5mm)
up lighting - ceramics glass (THK 5mm)
aluminum (THK 8mm)
99.9% aluminum
silicone
stainless steel

Mounting plate
Reflector
Gasket
Bolt

Installation

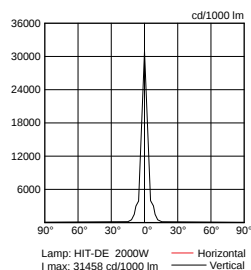
Input wire

cable gland M20X1.5
(electric wire : Ø9~13mm)
3P (included ground wire)



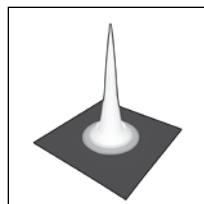
PHOTOMETRIC DATA

THETA-T1



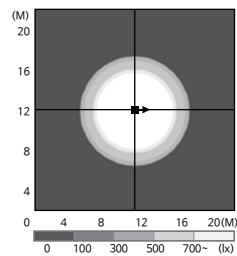
	C0	C90	C180
0°	31458	31458	31458
10°	1518	1507	1500
20°	133	132	132
30°	98	97	97
40°	62	62	61
50°	33	33	33
60°	1	1	1
70°	0	0	0
80°	0	0	0
90°	0	0	0

Lamp: HIT-DE 2000W / 180000 lm

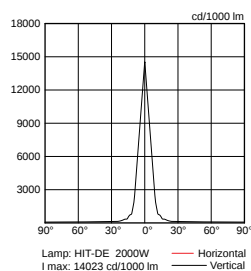


0 100 300 500 700~ (lx)

Lamp: HIT-DE 2000W / 180000lm / H: 20M

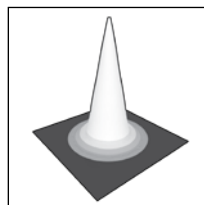


THETA-T2



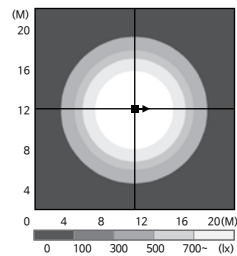
	C0	C90	C180
0°	14023	14023	14023
10°	1922	1908	1922
20°	181	183	181
30°	0	0	0
40°	0	0	0
50°	0	0	0
60°	0	0	0
70°	0	0	0
80°	0	0	0
90°	0	0	0

Lamp: HIT-DE 2000W / 180000 lm

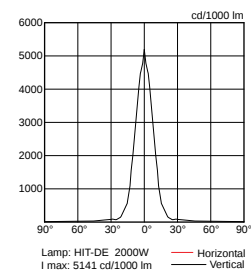


0 100 300 500 700~ (lx)

Lamp: HIT-DE 2000W / 180000lm / H: 20M

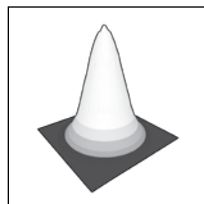


THETA-T3



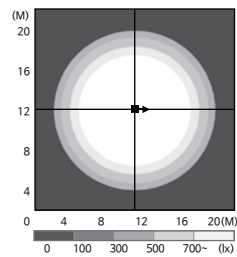
	C0	C90	C180
0°	5141	5141	5141
10°	2951	2882	2951
20°	394	362	394
30°	0	0	0
40°	0	0	0
50°	0	0	0
60°	0	0	0
70°	0	0	0
80°	0	0	0
90°	0	0	0

Lamp: HIT-DE 2000W / 180000 lm

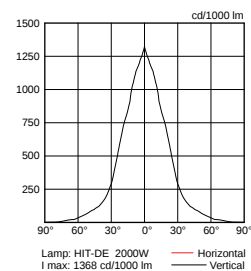


0 100 300 500 700~ (lx)

Lamp: HIT-DE 2000W / 180000lm / H: 20M

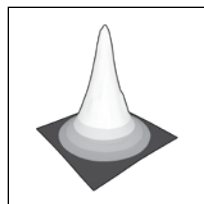


THETA-T4



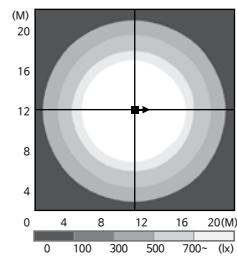
	C0	C90	C180
0°	1368	1368	1368
10°	958	959	1017
20°	601	587	647
30°	265	274	304
40°	119	118	118
50°	46	44	46
60°	16	17	16
70°	5	5	5
80°	1	0	1
90°	0	0	0

Lamp: HIT-DE 2000W / 180000 lm



0 100 300 500 700~ (lx)

Lamp: HIT-DE 2000W / 180000lm / H: 20M



ORDERING CODE

ex) TA2 - W20 - K5 - TA11 - XB5

STEP 1.....Light fixtures

ITEM	CODE
THETA-T1 (Cable)	TA1
THETA-T2 (Cable)	TA2
THETA-T3 (Cable)	TA3
THETA-T4 (Cable)	TA4

STEP 2.....Light source

ITEM	CODE
HIT-DE 1000W	W10
HIT-DE 2000W	W20

STEP 3.....Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5
White 6000~7000 K	K6

STEP 5.....Control gear box

ITEM	CODE
Control gear box - XB (Empty)	XB1
Control gear box - XB (1000W)	XB3
Control gear box - XB (2000W)	XB5

STEP 4.....Option

ITEM	CODE
THETA Deflector	TA11
THETA Anti glare hood	TA12
THETA Cut off visor	TA13
THETA Color filter (Red)	TA14
THETA Color filter (Green)	TA15
THETA Color filter (Blue)	TA16
THETA Color filter (Yellow)	TA17
THETA Ceramics glass	TA18

ACCESSORIES & PACKAGE BOX



Hood



Visor



XB (ballast case)



Color filter (R, G, B, Y)



THETA Package box
size : 575 x 555 x 470(mm)
weight : 16.5kg







TEEON 21 (T5 21W / L : 975mm)



TEEON 28 or 54 (T5 28W or 54W / L : 1275mm)

DESIGN FEATURES



Reflector

Alanod Miro reflector was used for high-efficiency and anti-glare

Purity of aluminum : 99.9%

Reflexibility : 95%

Diffusing reflexivity : less than 5%

고효율과 눈부심 방지를 위한 Alanod Miro 반사판 적용

알루미늄 순도 : 99.9%

반사율 : 95%

확산 반사율 : 5% 미만

Lamp Position

By optimizing the lamp position, there is no glaringness further than a certain distance (about 1.5m).

램프의 위치를 최적화함으로써 일정거리 이상에서는 (약 1.5m) 램프로 인한 눈부심이 발생하지 않도록 설계되었습니다.

Installation

TEEON could be settled without any separation of stirrup and if settlement of the angle is not necessary, the lighting fixtures could be directly placed.

고정대(Stirrup)분리 없이 조명기구를 설치할 수 있고, 각도 조정이 필요없는 경우에는 고정대 없이 조명기구를 바로 취부면에 부착할 수 있습니다.

Angle Marker

For photoluminescence mark is attached on the angle marker, aiming could be done easily during the night. And also the restoration of the angle could be done easily after maintenances because the angle marker stores the adjusted angle permanently.

앵글마커에는 축광표식이 부착되어 야간에도 각도 조정(Aiming)을 편리하게 할 수 있고, 조정이 완료된 후 각도값을 영구적으로 보존함으로써 유지보수 후에도 별도의 각도조정(Aiming)없이 각도값을 정확히 복원할 수 있습니다.

SPECIFICATIONS

TEEON 21

Light Source

Lamp
Lamp holder

T5 21W
G5

Electrical

Input voltage
Power consumption
Control gear

AC 220V
21W
electronic ballast (fixtures with built-in ballast)

Physical

Size

Weight (included ballast)
Finish
Housing
Front glass
Mounting plate
Reflector
Gasket
Bolt

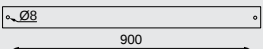
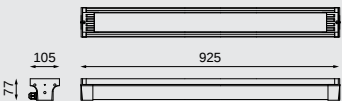
925mm x 105mm x 77mm (none mounting plate)
975mm x 105mm x 112mm (mounting plate)
3.8kg (none mounting plate), 4.2kg (mounting plate)
powder coating (dark gray + black)
die cast extruded aluminum
toughened glass (THK 5mm)
stainless steel
99.9% aluminum
silicone
stainless steel

Installation

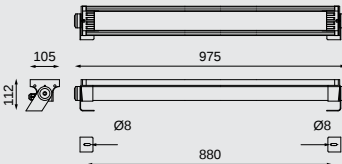
Input wire

cable gland M18X1.5
(electric wire : Ø8~11mm)
3P (included ground wire)

Cable



▲ None mounting plate type



▲ Mounting plate type



ACCESSORIES



Anti glare grill



Cut off visor

SPECIFICATIONS

TEEON 28/54

Light Source

Lamp

T5 28W / 54W

Lamp holder

G5

Electrical

Input voltage

AC 220V

Power consumption

28W / 54W

Control gear

electronic ballast (fixtures with built-in ballast)

Physical

Size

1225mm x 105mm x 77mm (none mounting plate)

1275mm x 105mm x 112mm (mounting plate)

Weight (included ballast)

5.1kg (none mounting plate), 5.5kg (mounting plate)

Finish

powder coating (dark gray + black)

Housing

die cast extruded aluminum

Front glass

toughened glass (THK 5mm)

Mounting plate

stainless steel

Reflector

99.9% aluminum

Gasket

silicone

Bolt

stainless steel

Installation

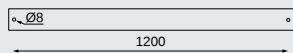
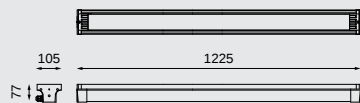
Input wire

cable gland M18X1.5

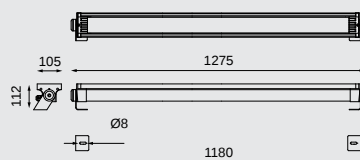
(electric wire : Ø8~11mm)

3P (included ground wire)

Cable



▲ None mounting plate type



▲ Mounting plate type



ACCESSORIES



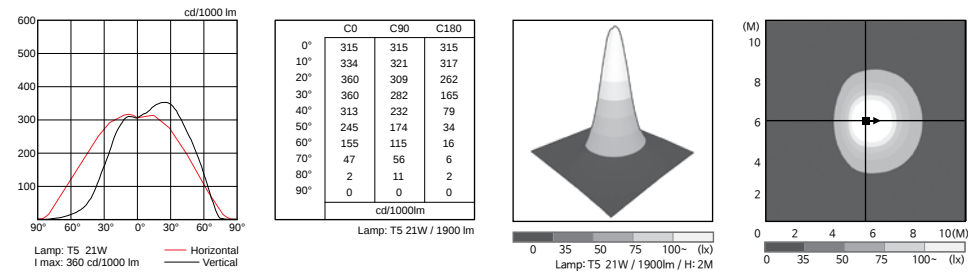
Anti glare grill



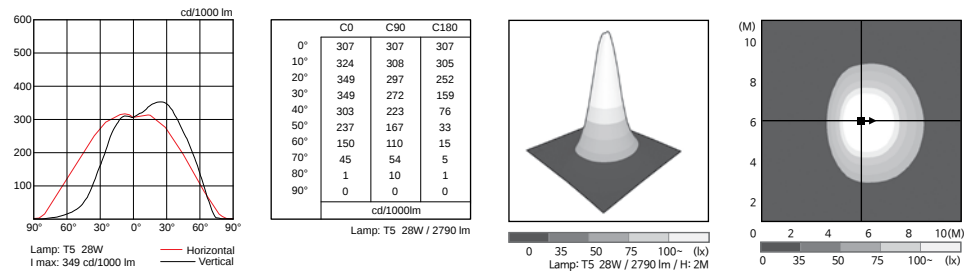
Cut off visor

PHOTOMETRIC DATA

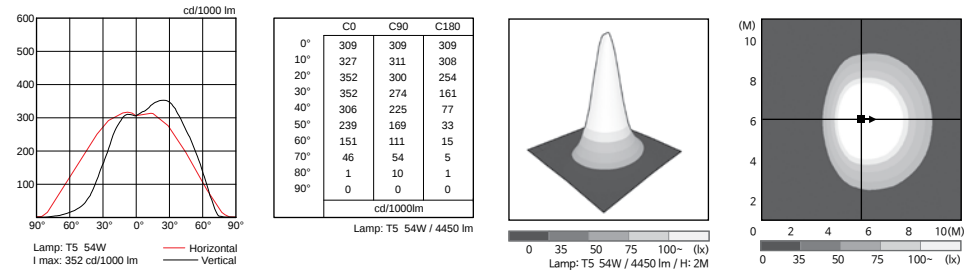
TEEON 21



TEEON 28



TEEON 54



ORDERING CODE



TEEON 21 package box
size: 1006x173x93 (mm)
weight: 5.0kg (included product)



TEEON 28 & 54 package box
size: 11308x173x93 (mm)
weight: 6.5kg (included product)

Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 4 blanks with product code.
If you select optional items, please add after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 4가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 4가지 항목 뒤에 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) **TE2** - **T28** - **K3** - **TE14**

STEP 1Light fixtures

ITEM	CODE
Teeon21 (G5)	TE1
Teeon28 (G5)	TE2
Teeon54 (G5)	TE3

STEP 2Light source

ITEM	CODE
T5 21W	T21
T5 28W	T28
T5 54W	T54

STEP 4Option

ITEM	CODE
Teeon21 Cut off visor	TE11
Teeon21 Anti glare grill	TE12
Teeon28/54 Cut off visor	TE13
Teeon28/54 Anti glare grill	TE14

STEP 3Color temperature

ITEM	CODE
White 2000~3000 K	K2
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5
White 6000~7000 K	K6



SCENIC

Statue of King Sejong the great in Gwanghwamun /

SCENIC-C HIT-DE 150W

SCENIC

FLOOD LIGHTING

씨닉



SCENIC-S



SCENIC-M



SCENIC-C

DESIGN FEATURES



Design Motive

SCENIC has unique appearance because of its three-dimensional oval shape at the Lighting fixtures a front face. And by the lighting fixture's slant, which was caused by the oval shape, dust on the lighting fixtures could be minimized.

Durability

For 15mm toughened glass is used in SCENIC, its durability and safety could be improved. And to secure the convenience of settlement and maintenance, it was designed to be able to utilize recessing box and detailed design for water proof offers excellent durability (IP67 rated).

Anti-Glare Grill

To minimize the glare, which was created by lighting fixture's lamp, SCENIC was designed to be applied to various anti-glare system. And to prevent impurity of fixture's surface, the lighting fixtures was designed to place anti-glare implements inside of the fixture.

조명기구 전면부에 입체적 타원을 형상화하여 점등되지 않은 때의 모습은 물론, 그로 인해 형성되는 기울기로 조명기구 상부에 쌓이는 이물질을 최소화시킬 수 있는 형태입니다.

SCENIC은 두께 15mm의 강화유리를 사용하여 내구성은 물론 안전성을 고려하였고, 설치 및 유지보수 작업 시 사용자의 편의를 위해 거푸집을 적용할 수 있게 하였고, 세밀한 방수설계로 IP67의 뛰어난 내구성을 제공합니다.

램프로 인해 발생되는 눈부심(glare)현상을 최소화 할 수 있는 다양한 형태의 Accessory(Grill)설치가 가능하도록 제작되었으며, 조명기구 표면의 오염을 방지하기 위해 조명기구 내부에 설치하도록 하였습니다.

SPECIFICATIONS

Light Source

Lamp

Lamp holder

SCENIC-S

HALOPAR30 75W
HI-PAR30 35W / 70W
E27

Electrical

Input voltage

Power consumption

Control gear

AC 220V
35W / 70W / 75W
magnetic ballast
(fixtures with built-in ballast / HALOPAR30 not use)

Physical

Size

Weight

Finish

Body

Recessing box

Front glass

Gasket

Bolt

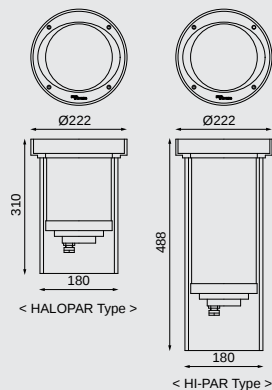
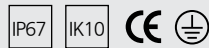
Ø222mm x 310mm (HALOPAR type)
Ø222mm x 488mm (HI-PAR type)
5kg (included control gear)
powder coating (dark gray)
chromate treatment
die cast aluminum
die cast polycarbonate
toughened glass (THK 15mm)
silicone
stainless steel

Installation

Input wire

Cable

cable gland M22X1.5
3P (included ground wire)



ACCESSORIES



Anti-glare grill 45./90.



Sandblasted glass



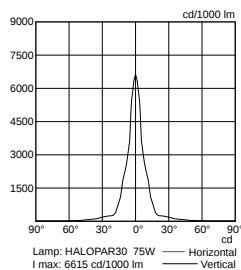
Sus ring version



Color filter (R, G, B, Y)

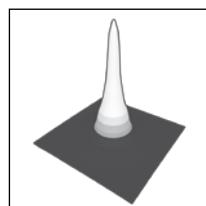
PHOTOMETRIC DATA

SCENIC-S (HALOPAR 30 / 10 °)



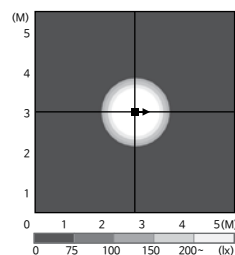
	C0	C90	C180
0°	6615	6615	6615
10°	2165	2170	2176
20°	285	280	294
30°	175	172	183
40°	79	77	80
50°	26	26	28
60°	12	11	12
70°	3	3	3
80°	1	0	1
90°	0	0	0

Lamp: HALOPAR30 75W / 1100 lm

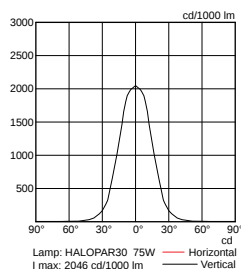


0 75 100 150 200~ (lx)

Lamp: HALOPAR30 75W / 1100 lm / H: 3M

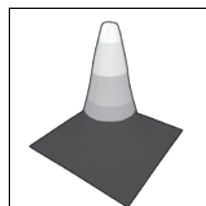


SCENIC-S (HALOPAR 30 / 30 °)



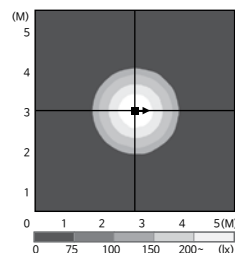
	C0	C90	C180
0°	2046	2046	2046
10°	1748	1698	1723
20°	784	768	775
30°	188	176	188
40°	45	46	45
50°	17	17	17
60°	6	7	7
70°	1	1	1
80°	0	0	0
90°	0	0	0

Lamp: HALOPAR30 75W / 1100 lm

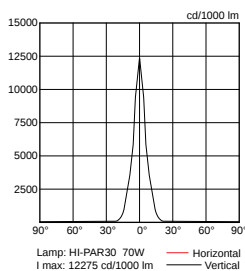


0 75 100 150 200~ (lx)

Lamp: HALOPAR30 75W / 1100 lm / H: 3M

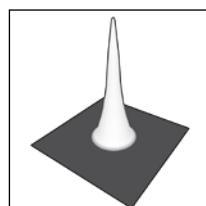


SCENIC-S (HI-PAR30 / 10 °)



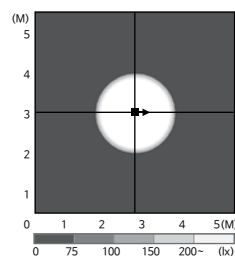
	C0	C90	C180
0°	12275	12275	12275
10°	2679	2685	2691
20°	59	58	61
30°	36	36	38
40°	16	16	17
50°	5	5	6
60°	3	2	3
70°	1	1	1
80°	0	0	0
90°	0	0	0

Lamp: HI-PAR30 70W / 4850 lm

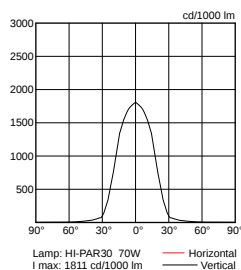


0 75 100 150 200~ (lx)

Lamp: HI-PAR30 70W / 4850 lm / H: 3M

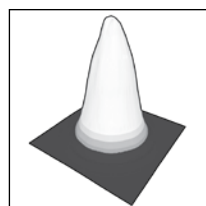


SCENIC-S (HI-PAR30 / 40 °)



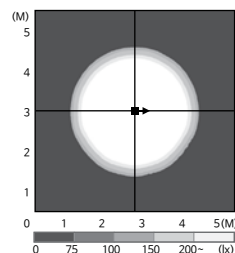
	C0	C90	C180
0°	1811	1811	1811
10°	1611	1566	1588
20°	847	830	837
30°	113	109	113
40°	32	32	33
50°	13	14	14
60°	6	5	5
70°	1	0	0
80°	0	0	0
90°	0	0	0

Lamp: HI-PAR30 70W / 4850 lm



0 75 100 150 200~ (lx)

Lamp: HI-PAR30 70W / 4850 lm / H: 3M



SPECIFICATIONS

Light Source

Lamp

HIT-DE 70W / 150W

HIT 70W / 150W

Lamp holder

Rx7s (HIT-DE) / G12 (HIT)

Electrical

Input voltage

AC 220V

Power consumption

70W / 150W

Control gear

magnetic ballast (fixtures with built-in ballast)

Physical

Size

Ø300mm x 395mm

Weight

8kg (included control gear)

Finish

powder coating (dark gray)

chromate treatment

Body

die cast aluminum

Recessing box

die cast polycarbonate

Front glass

toughened glass (THK 15mm)

Reflector

aluminum 99.9%

Gasket

silicone

Bolt

stainless steel

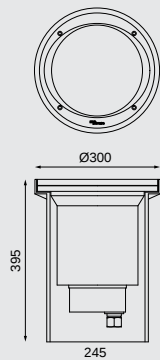
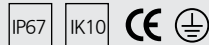
Installation

Input wire

cablE gland M22X1.5

Cable

3P (included ground wire)



SCENIC-M



ACCESSORIES



Anti-glare grill 45/90.



Sandblasted glass



Sus ring version



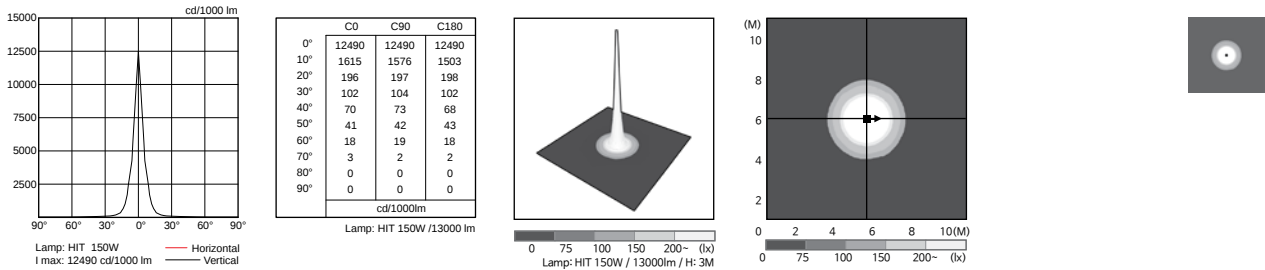
Color filter (R, G, B, Y)



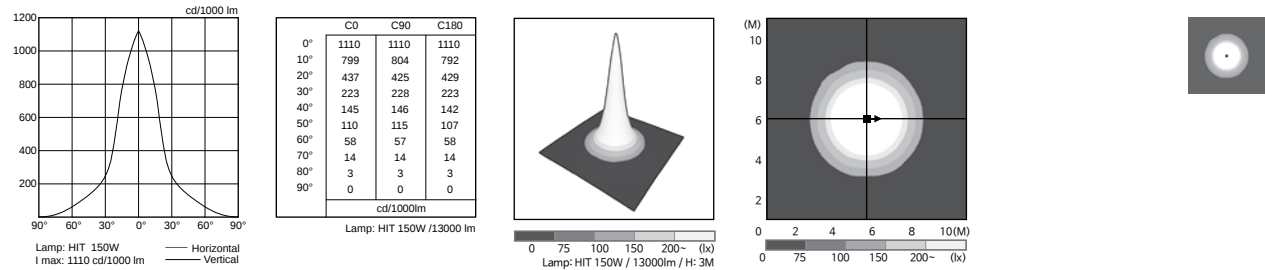
Hwaseong Haengguug / SCENIC-M

PHOTOMETRIC DATA

SCENIC-MS (Spot)



SCENIC-MW (Wide)



SPECIFICATIONS

Light Source

Lamp
Lamp holder

SCENIC-C

HIT-DE 150W, 250W
Rx7s (150W) / Fc2 (250W)

Electrical

Input voltage
Power consumption
Control gear

AC 220V
150W / 250W
magnetic ballast (fixtures with built-in ballast)

Physical

Size
Weight
Finish

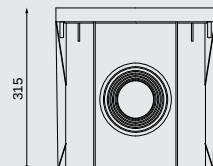
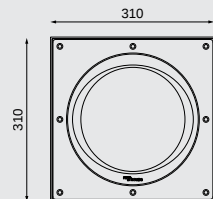
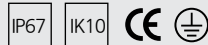
Body
Recessing box
Front glass
Reflector
Gasket
Bolt

310mm x 310mm x 315mm
8.5kg (included control gear)
powder coating (dark gray)
chromate treatment
die cast aluminum
die cast polypropylene
toughened glass (THK 15mm)
aluminum 99.9%
silicone
stainless steel

Installation

Input wire
Cable

cable gland M28X1.5
3P (included ground wire)



ACCESSORIES



Anti-glare grill 45/90.



Sandblasted glass



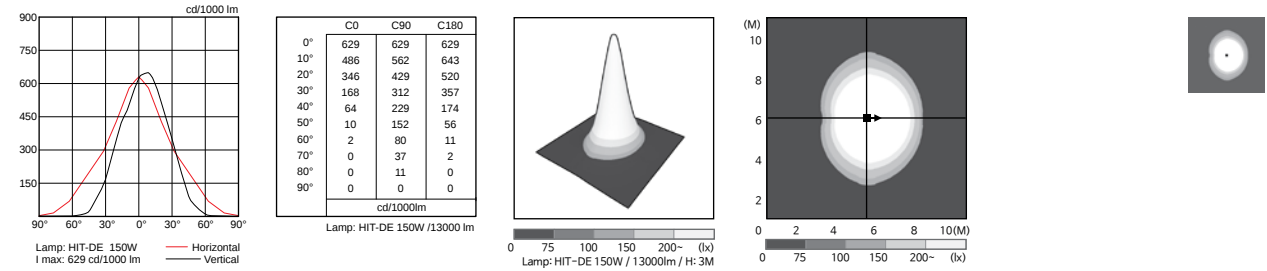
Color filter (R, G, B, Y)



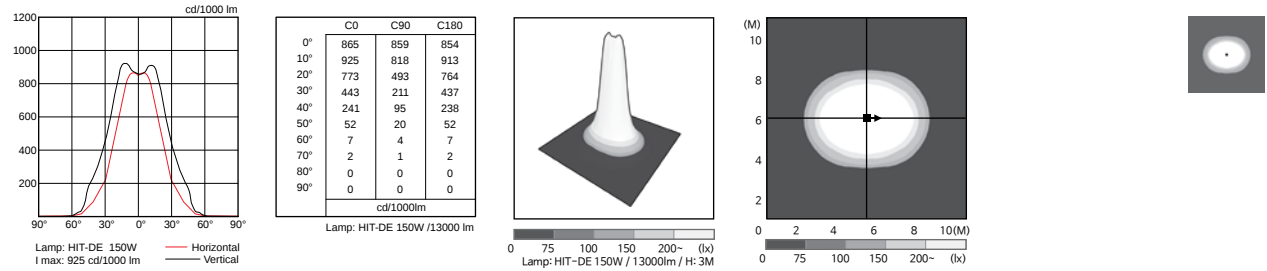
SEOUL DONGNIMMUN / SCENIC-C

PHOTOMETRIC DATA

SCENIC-CA (Asymmetric)



SCENIC-CS (Symmetric)



ORDERING CODE



SCENIC-S (HALOPAR) package box
size : 133 x 138 x 335 (mm)
weight : 5.7kg (included product)



SCENIC-S (HI-PAR) package box
size : 133 x 138 x 438 (mm)
weight : 5.8kg (included product)



SCENIC-C package box
size : 325 x 330 x 348 (mm)
weight : 9.6kg (included product)



SCENIC-M package box
size : 330 x 333 x 433 (mm)
weight : 9.0kg (included product)

Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 5 blanks with product code.
If you select optional items, please add after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 5가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 5가지 항목 뒤에 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) SS2 - H70 - K3 - B70 - SS12

STEP 1.....Light fixtures

ITEM	CODE
SCENIC-S (E26)	SS1
SCENIC-S (E27)	SS2
SCENIC-CA (Rx7s)	SC1
SCENIC-CS (Rx7s)	SC2
SCENIC-CA (Fc2)	SC3
SCENIC-CS (Fc2)	SC4
SCENIC-MS (Rx7s)	SM1
SCENIC-MW (Rx7s)	SM2
SCENIC-MS (G12)	SM3
SCENIC-MW (G12)	SM4

STEP 3.....Color temperature

ITEM	CODE
White 2000~3000 K	K2
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 2.....Light source

ITEM	CODE
HALOPAR30 75W	R37
HI-PAR30 35W	H35
HI-PAR30 70W	H70
HIT 70W	M70
HIT 150W	M15
HIT-DE 70W	D70
HIT-DE 150W	D15
HIT-DE 250W	D25

ORDERING CODE

STEP 4.....Beam angle

ITEM	CODE
HALOPAR30 10°	B30
HALOPAR30 30°	B40
HI-PAR 35W 10°	B50
HI-PAR 35W 30°	B60
HI-PAR 70W 10°	B70
HI-PAR 70W 40°	B80

STEP 5.....Option

ITEM	CODE
SCENIC-S Anti-glare grill 45°	SS11
SCENIC-S Anti-glare grill 90°	SS12
SCENIC-S Sandblasted glass	SS13
SCENIC-S SUS ring version	SS14
SCENIC-S Color filter (Red)	SS15
SCENIC-S Color filter (Green)	SS16
SCENIC-S Color filter (Blue)	SS17
SCENIC-S Color filter (Yellow)	SS18
SCENIC-C Anti-glare grill 45°	SC11
SCENIC-C Anti-glare grill 90°	SC12
SCENIC-C Sandblasted glass	SC13
SCENIC-C Color filter (Red)	SC14
SCENIC-C Color filter (Green)	SC15
SCENIC-C Color filter (Blue)	SC16
SCENIC-C Color filter (Yellow)	SC17
SCENIC-M Anti-glare grill 45°	SM11
SCENIC-M Anti-glare grill 90°	SM12
SCENIC-M Sandblasted glass	SM13
SCENIC-M SUS ring version	SM14
SCENIC-M Color filter (Red)	SM15
SCENIC-M Color filter (Green)	SM16
SCENIC-M Color filter (Blue)	SM17
SCENIC-M Color filter (Yellow)	SM18

XB
XB is similar to alphabet "X"





DESIGN FEATURES

Straight Line & Simplicity

The designing concept of XB is "X". This motive is based on the concise combination of straight lines. XB is a case of a ballast which protects the ballast from the external surroundings. XB is designed to be settled apart from its lighting fixtures. For this, convenience and safety could be secured during the setting work and maintenance.

엑스비는 알파벳 "X" 형상을 모티브로 간결한 직선의 조합을 기본으로 하는 "직선의 단순화"를 컨셉으로 디자인하였고, 외부 환경으로부터 안정기를 보호하는 동시에 등기구와 별도로 설치할 수 있도록 설계하여 작업의 편의성과 안전성을 중점으로 제작되었습니다.

Heat-sink Structure

There are fixed curves in every surface to maximize the area that is exposed to air. Also making space which is disjointed between main body and stirrup incites flows of air to maximize the radiation of heat.

상하, 전후면에 일정한 굴곡을 주어 공기와 닿는 면적을 최대한 넓히며 본체와 스트럽 사이에 떨어진 공간을 형성하여 공기의 흐름을 유도하여 방열기능을 극대화한 형상으로 디자인되었습니다.

Convenience

XB is designed to be easily carried and settled for the stirrups which enable to users to grip them at front and back side.

전, 후면에 손으로 잡을 수 있는 스트럽 구조를 마련하여 운반, 설치 작업 시 사용자가 편리하게 사용할 수 있도록 제작되었습니다.

SPECIFICATIONS

XB

Light Source

Ballast 575W, 1000W, 1500W, 2000W

Electrical

Control gear 575W, 1000W (AC 220~230V)
1500W, 2000W (AC 380V)

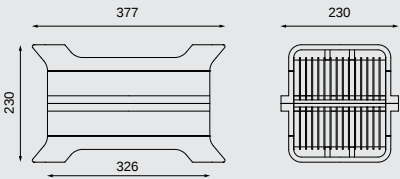
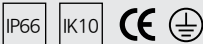
Power consumption 575W~2000W

Physical

Size 230mm x 377mm x 230mm
Weight 5.5kg (excluded Ballast)
Finish powder coating (dark gray)
Housing die cast aluminum
Gasket silicone
Bolt stainless steel

Installation

Input wire cable gland M22X1.5
(electric wire : Ø13.5~15mm)
Cable 3P (included ground wire)



ORDERING CODE

Please refer to the order codes when you place an order.
 Please follow the steps below and fill in the 1 blanks with product code.
 If you select optional items, please add after product code and enter the optional items.
 Please refer to the sample order form below and enter order information accurately in your order form.



XB package box
 size : 400 x 245 x 268 (mm)
 weight : 5.5kg (Empty type)

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
 반드시 아래와 같은 단계로 1가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
 만약 Option을 추가할 시에는 1가지 항목 뒤야표시 후 기입해 주시면 됩니다.
 아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

STEP 1Fixtures

ex) XB1

ITEM	CODE
XB (Empty)	XB1
XB (575W)	XB2
XB (1000W)	XB3
XB (1500W)	XB4
XB (2000W)	XB5



LIGHTING
BOLLARD
& POLE

POLE & BOLLARD LIGHTING

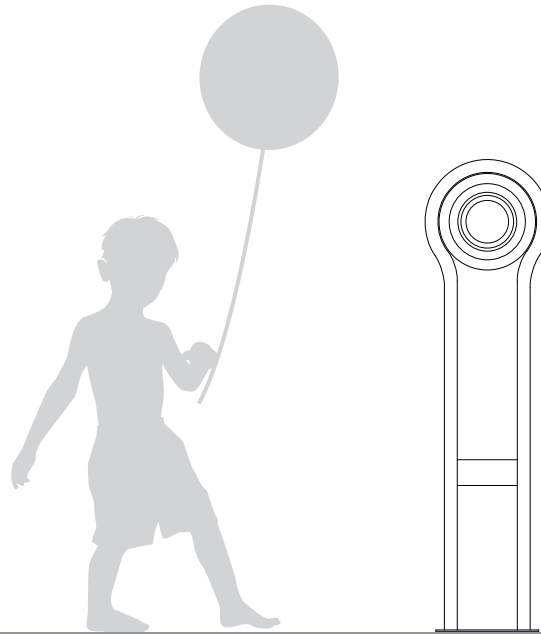
아이온	ION
텐드	TEND
코닉	CONIC
엘프	ELF
마스	MAST
제타	ZETA
아르떼	ARTE
가오스	GAOS
엑토	ACTO
컨템포	CONTEMPO
리코	LICO
루스트	ROOST
마이다스	MIDAS
샤이닝	SHINING
캠폴	CAM-POLE
로바폴	ROVA-POLE



ION

아이온

POLE & BOLLARD



DESIGN FEATURES

Design Motive

Ion was designed so that the image at the same height as a child could be deemed to be friendly by the young children by making the image of the alphabet "i" as a basic motive, and reinterpreting the meaning of pronunciation "a" as a Korean "Ahi(child)" while during the nighttime it was designed so that it could convey the meaning, "It can enlighten dreams and hopes of children with the meaning of "i" + "on" to children"

Safety & Comfortable

It was manufactured so that the more pleasant and comfortable lighting environment could be provided by overcoming the problem causing the severe glare phenomena due to the similarity of source location of general Bollard lighting apparatus and eye height of child resulting from diminishing the glare of LED together with naturally diffusing through the application of prismatic lens.

아이온(Ion)은 알파벳 'i' 형상을 기본 모티브로 하며, 발음에서 나타나는 "아이(a)hi" 의미를 한국어 아이(child)로 재해석하여, 주간에는 어린 아이들에게 친근하게 여겨질 수 있도록 디자인 되었으며 야간에는 "i+on"의 의미로 아이들에게 꿈과 희망의 빛을 선물한다는 의미로 디자인되었습니다.

일반적인 볼라드(Bollard) 조명기구의 광원 위치와 어린아이의 눈높이가 유사하여 심각한 눈부심(Glare) 현상을 초래할 수 있는 문제점을 프리즈메틱 렌즈를 적용하여 광원(LED)의 눈부심을 감소시키는 동시에 자연스럽게 확산시켜 보다 쾌적하고 편안한 조명환경을 제공할 수 있도록 제작하였습니다.

SPECIFICATIONS

Light Source

Lamp
Color

ION

SMD LED
White

Electrical

Input voltage
Power consumption

AC 200~240V / 50~60Hz
16W (fixtures with built-in AC-DC converter)

Physical

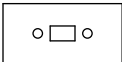
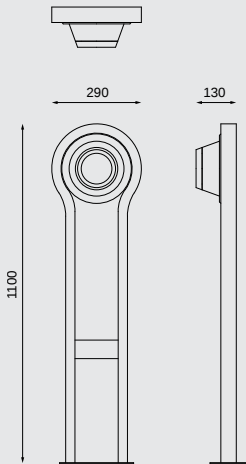
Size
Finish
Post
Head
Diffuser
Gasket
Bolt

290mm x 130mm x 1100mm
powder coating (dark gray)
stainless steel
die cast aluminum
prismatic lens (polycarbonate)
silicone
stainless steel

Installation

Cable

3P (included ground wire)

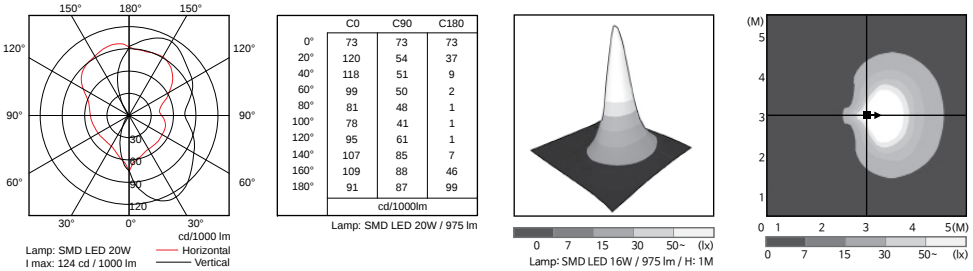


Anchor plate : 300 x 120(mm)
Anchor size : 250(mm) / M10



PHOTOMETRIC DATA

ION



ORDERING CODE

ex) IN1 - K3 - INA2 - NT12

STEP 1Bollard

ITEM	CODE
ION Bollard (AC 16W)	IN1

STEP 2Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 3Anchor & Anchor bolt cap nut

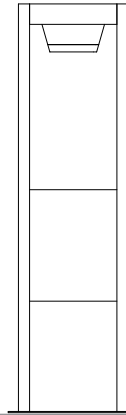
ITEM	CODE
Anchor (stainless steel)	EPA1
Anchor (galvanized steel)	EPA2
Anchor bolt cap nut	NT12



TEND

텐드

POLE & BOLLARD



DESIGN FEATURES

Design motive

Tend is designed to provide a pedestrian with more light without glare, so the pedestrian can walk by more safely. And it is attached with an indirect reflection plate by which quantity of light is increased, so the pedestrian can walk by safely at night.

Application

It is designed to make recycling of light possible by using the front face of a junction box at the center of Tend as an indirect reflective surface, and it can provide promotional effects by transmitting varied images and information according to users needs.

Tend는 눈부심(Glare)없이 더 많은 밝은 빛을 보행자에게 제공하여 안전하게 걸을 수 있는 공간을 만드는 것이 디자인의 목적이며 이를 위해 간접반사판을 설치하여 빛의 양을 증대시켜 야간의 보행자를 빛으로 안전하게 돌볼 수 있다는 것이 텐드 (Tend)의 디자인 의도입니다.

Tend 하부에 위치한 점검함(junction box)의 상부 전면을 간접 반사면으로 활용하여 빛의 재활용을 가능하도록 디자인하였고, 사용자의 용도에 맞는 다양한 이미지나 정보전달의 사인을 통해 특화구간의 연출이나 다양한 홍보효과를 제공해 드릴 것입니다.

SPECIFICATIONS

Light Source

Lamp

Color

TEND

SMD LED

White

Electrical

Input voltage

Power consumption

AC 200~240V / 50~60Hz

16W (fixtures with built-in AC-DC converter)

Physical

Size

Finish

Post

Head

Diffuser

Gasket

Bolt

295mm x 235mm x 1100mm

powder coating (dark gray)

stainless steel

die cast aluminum

prismatic lens (polycarbonate)

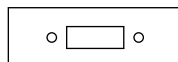
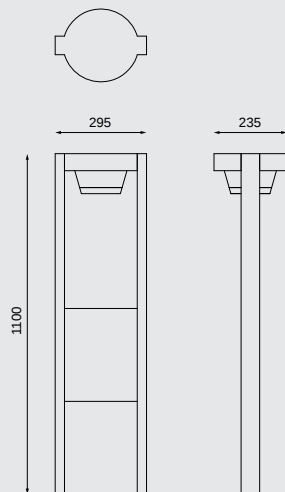
silicone

stainless steel

Installation

Cable

3P (included ground wire)

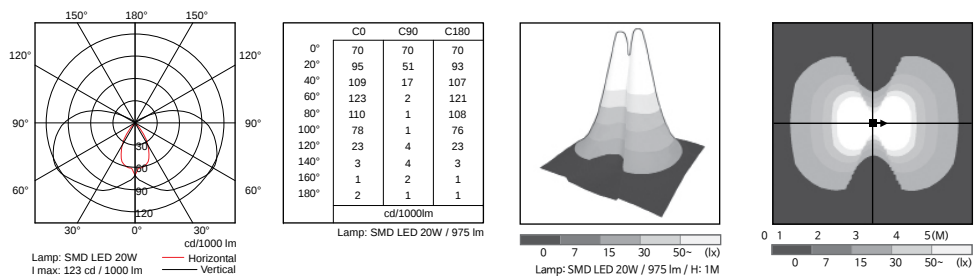


Anchor plate : 350 x 120(mm)
Anchor size : 175(mm) / M10



PHOTOMETRIC DATA

TEND



ORDERING CODE

ex) TD1 - K3 - TDA2 - NT13

STEP 1Bollard

ITEM	CODE
Tend Bollard (AC 16W)	TD1

STEP 2Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 3Anchor & Anchor bolt cap nut

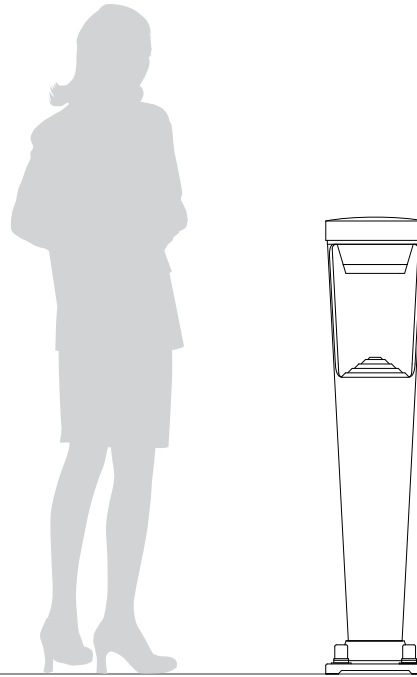
ITEM	CODE
Anchor (stainless steel)	TDA1
Anchor (galvanized steel)	TDA2
Anchor bolt cap nut	NT13



CONIC

코닉

POLE & BOLLARD



DESIGN FEATURES

Design Motive

Conic is designed to be used in open areas and therefore, is ideal for such place as a park. It is composed of 2 conical shapes with different size, which gives feeling of freedom and balance and approachability at the same time.

Safety & Comfortable

LED Bollard light which has strong rectilinear propagation may cause severe glare against eyes. Conic is designed to solve such a problem. It reduces glare and provides pleasant and comfortable illumination by making light irradiated downward and propagated naturally.

코닉(Conic)은 상부와 하부의 크기가 다른 원뿔 형상을 모티브로 형태상에서 느껴지는 자유로움과 균형감을 동시에 보여주며, 기댈 수 있는 친근한 디자인으로 공원 같은 열린 공간에 사용될 경우 매우 이상적인 조명공간을 제공 할 수 있도록 디자인하였습니다.

빛의 직진성이 강한 LED 볼라드(Bollard) 조명의 경우 심각한 눈부심(Glare) 현상을 초래할 수 있습니다. 코닉(Conic)은 이러한 문제점을 해결하고자 하향조사 방식을 적용하였고 눈부심을 감소시키는 동시에 자연스럽게 빛을 확산시켜 보다 쾌적하고 편안한 조명 환경을 제공할 수 있도록 제작하였습니다.

SPECIFICATIONS

Light Source

Lamp

Color

CONIC

SMD LED

White

Electrical

Input voltage

Power consumption

AC 200~240V / 50~60Hz

16W (fixtures with built-in AC-DC converter)

Physical

Size

Finish

Post

Head

Diffuser

Gasket

Anchor plate

Bolt

227mm x 227mm x 980mm

powder coating (dark gray)

stainless steel

die cast aluminum

prismatic lens (polycarbonate)

silicone

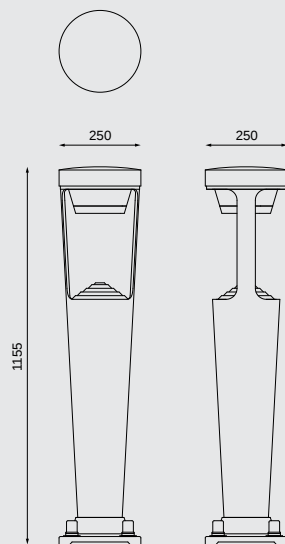
cast aluminum

stainless steel

Installation

Cable

3P (included ground wire)

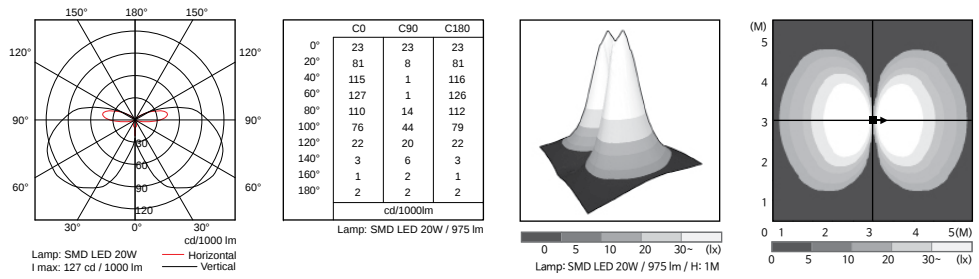


Anchor plate : Ø227(mm)
Anchor size : 160 x 160(mm) / M10



PHOTOMETRIC DATA

CONIC



ORDERING CODE

ex) CN - K3 - CNA2 - NT11

STEP 1Bollard

ITEM	CODE
Conic Bollard (AC 16W)	CN1

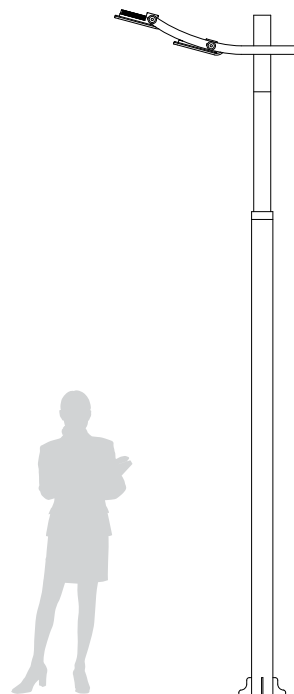
STEP 2Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 3Anchor & Anchor bolt cap nut

ITEM	CODE
Anchor (stainless steel)	CNA1
Anchor (galvanized steel)	CNA2
Anchor bolt cap nut	NT11





DESIGN FEATURES

Design Motive - Polished curve

ELF was designed so that the urban and sophisticated feeling can be stressed and matched well with the surrounding environment by imaging the soft curve of ELCID-F side wall, the applied lighting apparatus.

Functionality

The light distribution of LED streetlight with a lighting fixtures can not but be not only limited, but also its applied location tends to be limited. On the other hand ELF using two lighting apparatus with different heights will not only realize the lighting suitable for the used purpose of designer by utilizing various types of light distribution but also provide the wanted lighting space in various spaces by expanding the applied scope.

엘프(ELF)는 적용 조명기구인 엘시드-에프(ELCID-F) 측면의 부드러운 곡선을 형상화하여 도시적이며 세련된 느낌을 강조하는 동시에 주변 환경과 잘 어울릴 수 있도록 디자인되었습니다.

조명기구가 하나인 일반적인 LED가로등의 배광은 한정 될 수 밖에 없을 뿐 아니라 적용 장소도 제한되기 쉽습니다. 반면 서로 다른 높이를 가진 두 개의 조명기구를 사용하는 엘프(ELF)는 여러 형태의 배광을 활용하여 설계자의 사용 목적에 알맞은 조명을 실현 시켜주는 것은 물론 적용범위의 확대로 다양한 공간에서 원하는 조명공간을 제공해 드릴 것 입니다.

SPECIFICATIONS

Light Source

Lamp
Beam angle
Color

ELF

refer to Elcid-F series
refer to Elcid-F series
refer to Elcid-F series

Electrical

Input voltage
Power consumption

AC 200~240V / 50~60Hz
refer to Elcid-F series

Physical

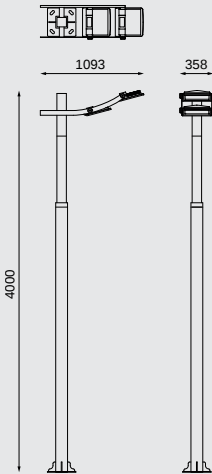
Size
Finish
Post
Head
Front glass
Lens
Anchor plate
Anchor bolt cap
Gasket
Bolt

1093mm x 358mm x 4000mm
powder coating (dark gray)
galvanized steel
die cast aluminum
toughened glass (THK 5mm)
optical grade PMMA or PC
galvanized steel
die cast aluminum
silicone
stainless steel

Installation

Cable

3P (included ground wire)



Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19



ORDERING CODE

ex) EP1 - EF3K5B60 - EF3KAB60 - EPA2 - NT11

STEP 1 Pole

ITEM	CODE
ELF Pole	EP1

STEP 2 Elcid-F series of head part

ITEM	CODE
Top Fixture	Elcid-F series
Bottom Fixture	Elcid-F series

STEP 3 Anchor & Anchor bolt cap nut

ITEM	CODE
Anchor (stainless steel)	EPA1
Anchor (galvanized steel)	EPA2
Anchor bolt cap nut	NT11

Elcid-F ORDERING CODE

ex) EF3 KA B60

STEP 1 Light fixtures

ITEM	CODE
Elcid-FL (DC 50W)	EF1
Elcid-FH (DC 100W)	EF3

STEP 2 Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 3 Beam angle

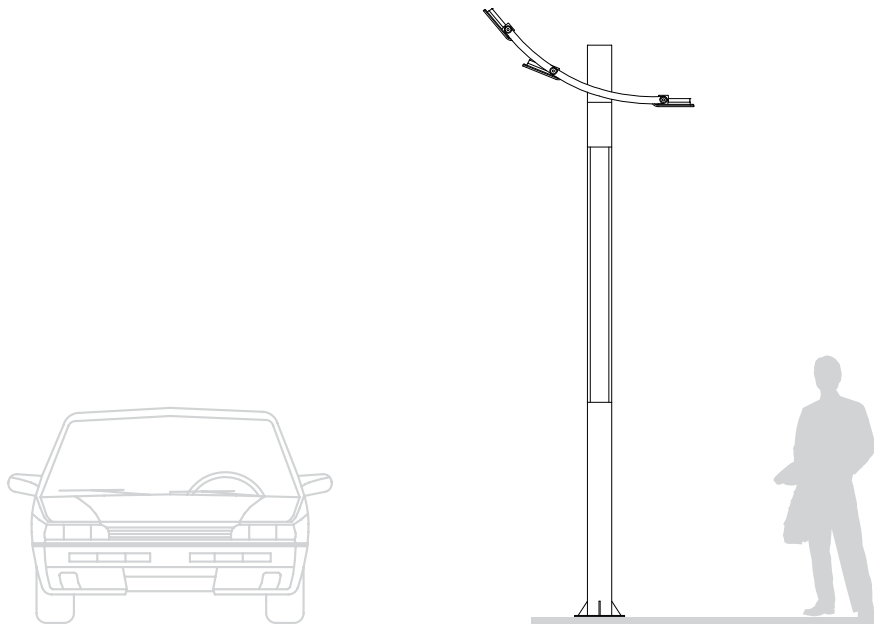
ITEM	CODE
10 degrees	B10
30 degrees	B30
60 degrees	B60
140X60 degrees	B40



MAST

마스트

POLE & BOLLARD



DESIGN FEATURES

Design Motive - Soaring curve

ELCO directs the vibrant leaping atmosphere by imaging the curvaceousness to fly into the sky, and the different lighting space directed by lighting apparatus with different heights can be felt.

Functionality

It is ideal to install ELCO at the location with street and sidewalk, which is a product for its composition in a differentiated area to be made by use of LED lighting directed from the center of Post. In the direction of street two lighting apparatus are installed leading to the lighting being possible suitable for the width of street, and in the direction of sidewalk the lighting apparatus are also installed considering the safety of pedestrians passing by.

엘코(ELCO)는 하늘로 비상하는 곡선미를 형상화하여 도약하는 활기찬 분위기를 연출하고 있으며, 서로 다른 높이의 조명기구에서 연출되는 색다른 조명공간을 느끼실 수 있을 것입니다.

엘코(ELCO)는 차도와 보도가 공존하는 장소에 설치하는 것이 이상적이며, Post 중앙에서 연출되는 LED조명을 이용해 특화구간 구성이 가능한 제품입니다. 차도 방향으로 두 개의 조명기구가 설치되어 차선 폭에 맞는 조명이 가능하고, 보행로 방향으로 도 조명기구가 설치되어 있어 지나가는 보행자의 안전을 고려한 LED가로등입니다.



SPECIFICATIONS

Light Source

Lamp
Beam angle
Color

ELCO

refer to Elcid-F series
refer to Elcid-F series
refer to Elcid-F series
Prismatic Pipe : White / RGB / Red / Green / Blue

Electrical

Input voltage
Power consumption

AC 200~240V / 50~60Hz
refer to Elcid-F series
Prismatic Pipe : 15W

Physical

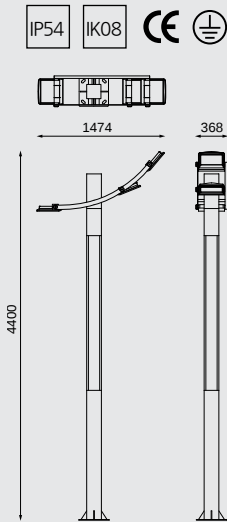
Size
Finish
Post
Head
Front glass
Prismatic pipe
Anchor plate
Anchor bolt cap
Gasket
Bolt

1474mm x 368mm x 4400mm
powder coating (dark gray)
stainless steel
die cast aluminum
toughened glass (THK 5mm)
polycarbonate
stainless steel
die cast aluminum
silicone
stainless steel

Installation

Cable

3P (included ground wire)



Anchor plate : 350 x 350(mm)
Anchor size : 250 x 250(mm) / M19



ex) EC1 - EF3K5B60 - EF1KAB60 - EF3KAB30 - ECA2 - NT11

STEP 1 Pole

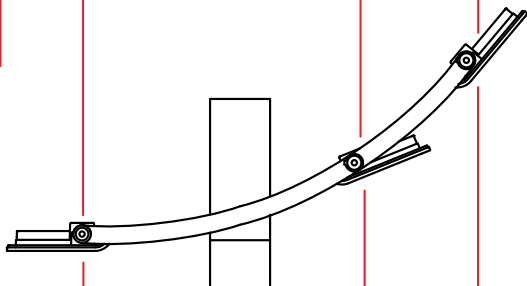
ITEM	CODE
ELCO Pole (Prismatic Pipe Light: White)	EC1
ELCO Pole (Prismatic Pipe Light: RGB)	EC2
ELCO Pole (Prismatic Pipe Light: Red)	EC3
ELCO Pole (Prismatic Pipe Light: Green)	EC4
ELCO Pole (Prismatic Pipe Light: Blue)	EC5

STEP 2 Elcid-F series of head part

ITEM	CODE
Bottom Fixture	Elcid-F series
Middle Fixture	Elcid-F series
Top Fixture	Elcid-F series

STEP 3 Anchor & Anchor bolt cap nut

ITEM	CODE
Anchor (stainless steel)	ECA1
Anchor (galvanized steel)	ECA2
Anchor bolt cap nut	NT11



Elcid-F ORDERING CODE

STEP 1 Light fixtures

ITEM	CODE
Elcid-FL (DC 50W)	EF1
Elcid-FH (DC 100W)	EF3

STEP 2 Color temperature

ITEM	CODE
RGB	KA
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

ex) EF1 KA B40

STEP 3 Beam angle

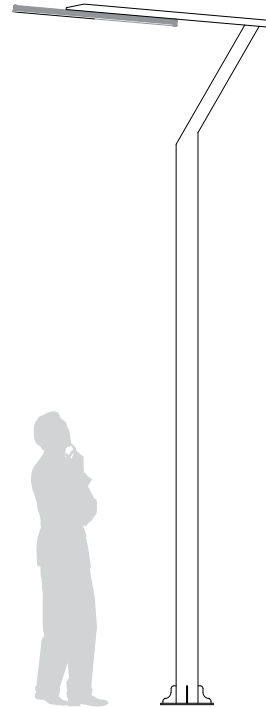
ITEM	CODE
10 degrees	B10
30 degrees	B30
50 degrees	B60
140X60 degrees	B40



ZETA

제타

POLE & BOLLARD



DESIGN FEATURES

Design Motive

Zeta was designed so that it can be friendly with the surrounding natural environment by making the free image in the toughness to feel from the image of sixth letter ("ζ") of the Greek alphabet the basic motive.

Lens & Choice

As the various types of lenses are prepared so that the head applied lighting fixtures, ELCID-L50 can be applied suited to the used purpose the more planned and wide lighting direction can be realized.

Efficiency

It was designed so that it can provide the functionality of lighting by securing the required sufficient intensity of lamination with the application of LED apparatus by the optical design when installing it at wayside in the urban center, the plaza or park by use of LED with strong straightness of light.

Convenience

As the post and head are separated and assembled for the sake of damaged parts and easy movement when installing and conveying the apparatus it was manufactured so that the user could safely and conveniently use it.

Zeta는 그리스어 알파벳의 여섯째 문자 ("ζ")형상에서 느껴 질 수 있는 강인함 속의 자유로운 형상을 기본 모티브로 하여 주변 자연환경과 친화 될 수 있게 디자인 되었습니다.

헤드(Head)에 적용된 조명기구(ELCID-L50)는 사용목적에 맞게 적용할 수 있도록 다양한 형태의 렌즈가 준비되어 있어 보다 계획적이고 폭 넓은 조명연출을 실현시켜 드릴 것 입니다

도로변이나 광장 및 공원 설치 시, 사용목적에 맞는 광학설계를 토대로 충분한 필요조도를 확보하여 조명으로의 기능성을 제공할 수 있도록 디자인 하였습니다.

기구 설치 또는 운반작업 시 부품 파손 방지 및 이동용이성을 위하여 등주(Post)와 헤드(Head)가 분리, 조립되는 구조로 이루어져 있어 사용자가 안전하고, 편리하게 사용 할 수 있도록 제작되었습니다



SPECIFICATIONS

Light Source

Lamp	power LED
Beam angle	asymmetric wide beam (140°x 60°)
Color	White

Electrical

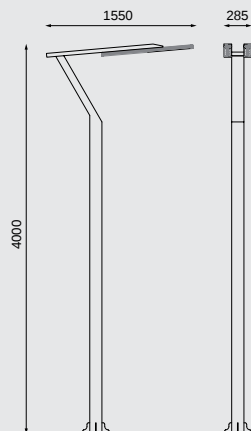
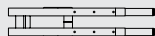
Input voltage	AC 200~240V / 50~60Hz
Power consumption	200W (included converter)

Physical

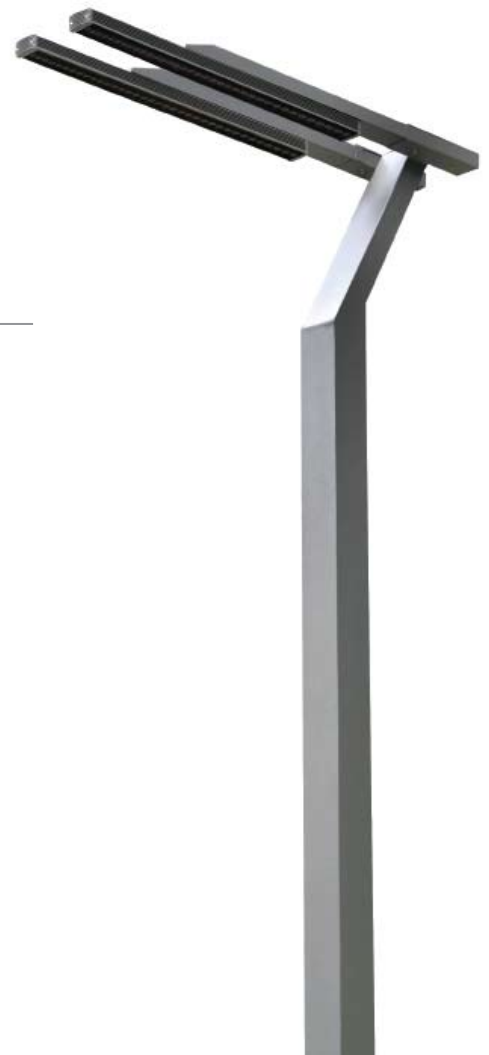
Size	1550mm x 285mm x 4000mm
Finish	powder coating (dark gray)
Post	galvanized steel
Head	die cast aluminum
Front glass	toughened glass (THK 5mm)
Lens	optical grade PMMA or PC
Anchor plate	galvanized steel
Anchor bolt cap	die cast aluminum
Gasket	silicone
Bolt	stainless steel

Installation

Cable	3P (included ground wire)
-------	---------------------------



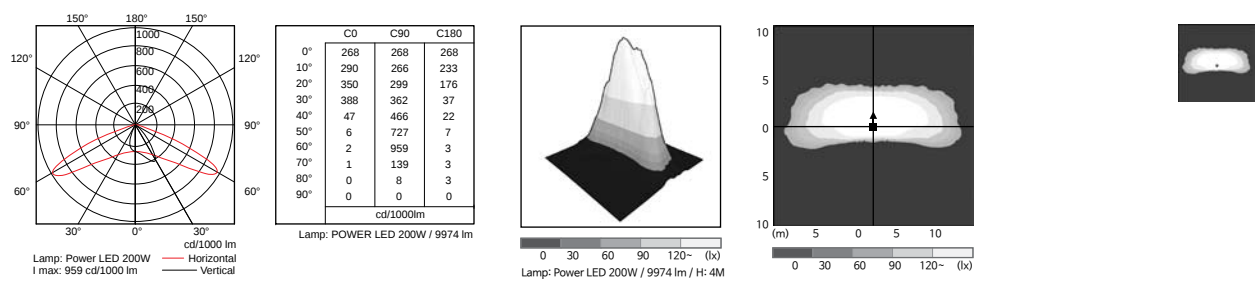
ZETA



Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19

APPLICATION FIXTURES PHOTOMETRIC DATA

Zeta 200W (140° X 60°)



ORDERING CODE

ex) ZT1 - K5 - ZTA2 - NT11

STEP 1 Pole

ITEM	CODE
Zeta (AC 200W)	ZT1

STEP2 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP3 Anchor & Anchor bolt cap nut

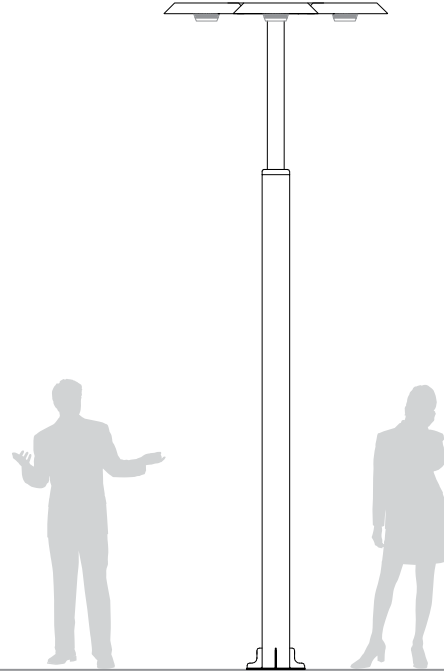
ITEM	CODE
Anchor (stainless steel)	ZTA1
Anchor (galvanized steel)	ZTA2
Anchor bolt cap nut	NT11



ARTE

아르떼

POLE & BOLLARD



DESIGN FEATURES

Design Motive

Arte is designed on the basis of reinterpretation of moon halo into image of light. Smooth light from 3 circular light emitting units will remind you of moon halo and provide you with new meaning of light.

Indirect illumination system

A head, with a slanted structure of indirect reflective plate around the source of light, is composed of 3 light emitting units which are arranged at 120° and propagates light to the bottom evenly and minimizes glare against eyes of pedestrians.

Convenience & durability

Its post and head are separated, so a user can install and move it more safely and conveniently. It is designed to provide higher brightness from different angles by applying optical prismatic structure to inside of the light emitting part. And maximum safety during installation and transport and high durability are guaranteed by reinforcing the internal structure of the light emitting part of PC by internal projections.

아르떼(Arte)는 달을 중심으로 둘러싼 빛의 띠인 달무리 형상을 빛의 이미지로 재해석하여 디자인되었고, 반복적으로 이루어진 세 개의 원형 발광부로부터 연출되는 은은한 빛은 조망자에게 달무리를 유추할 수 있도록 해주는 동시에 빛의 또 다른 의미를 전해 줄 수 있을 것입니다.

광원을 중심으로 둘러싼 사선의 원형 간접 반사판의 구조를 가진 헤드는 일정한 각도(120도 배치된 세 개의 발광부로 이루어져 있어 바닥면에 균일하게 빛을 확산시키는 역할을 하는 동시에 보행자의 눈부심 현상을 최소화시킬 수 있도록 디자인되어 있습니다.

등주(Post)와 헤드(Hard)가 분리, 조립되는 구조로 되어있어 사용자가 안전하고 편리하게 설치 및 운반 할 수 있도록 제작되었고, 발광부 내면에 광학적 프리즈메틱 구조를 적용하여 다양한 각도에서 보다 많은 휘도를 연출할 수 있도록 설계되었고, 내부 돌기가 PC 발광부 내면구조를 보강시켜 설치 및 운반 작업 시 외부 충격으로부터 안전한 동시에 조명기구의 내구성을 최대화시켰습니다.



SPECIFICATIONS

Light Source

Lamp
Color

Arte

SMD LED x 3 head
White

Electrical

Input voltage
Power consumption

AC 200~240V / 50~60Hz
60W (fixtures with built-in AC-DC converter)

Physical

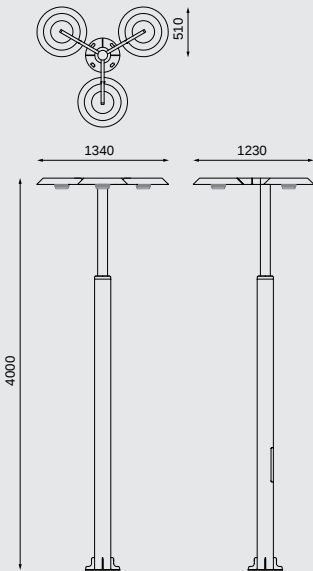
Size
Finish
Post
Head
Diffuser
Anchor plate
Anchor bolt cap
Gasket
Bolt

1340mm x 1230mm x 4000mm
powder coating (drak gray)
stainless steel
die cast aluminum (inside white color)
prismatic lens (polycarbonate)
stainless steel
die cast aluminum
silicone
stainless steel

Installation

Cable

3P (included ground wire)

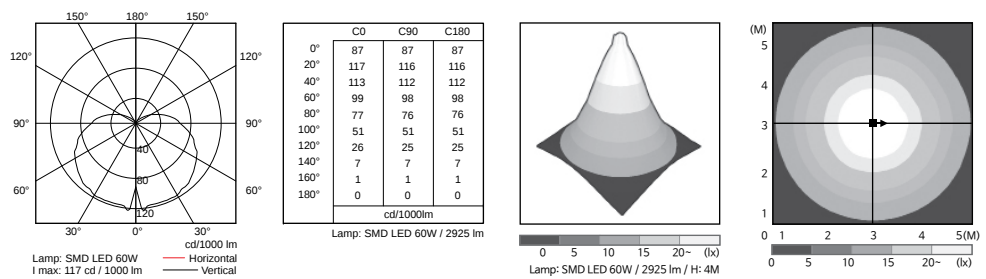


Anchor plate : Ø350(mm)
Anchor size : 200 x 200(mm) / M19



PHOTOMETRIC DATA

Arte



ORDERING CODE

ex) AT1 - ATF1 - K5 - ATA2 - NT11

STEP 1 Pole

ITEM	CODE
Arte	AT1

STEP 2 Head part

ITEM	CODE
Arte (AC 60W)	ATF1

STEP 3 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 4 Anchor & Anchor bolt cap nut

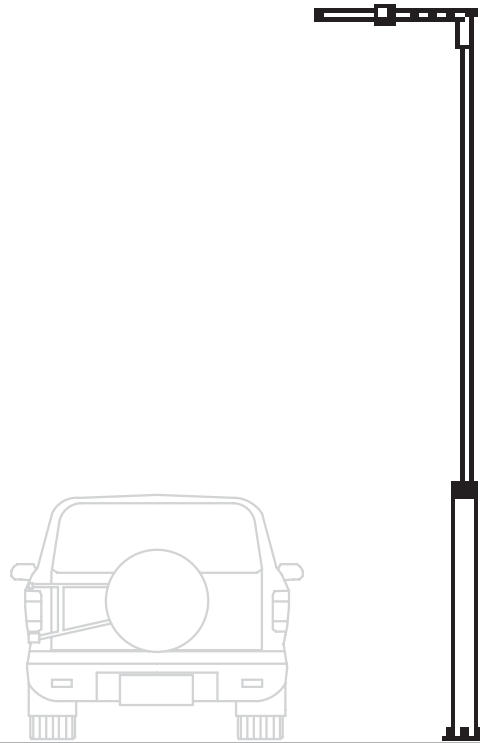
ITEM	CODE
Anchor (stainless steel)	ATA1
Anchor (galvanized steel)	ATA2
Anchor bolt cap nut	NT11



GAOS

가오스

POLE & BOLLARD



DESIGN FEATURES

Design Motive

Gaos is a compound meaning "Guardian Angel on Street" which is a design for entire unification by composing the repeated pattern based on the concise line at the heat releasing part. It is an LED street light of which function is more emphasized than beauty in consideration that the place is related to safety of drivers.

Safety & Convenience

Street lights should be designed carefully because they are directly related to safety of drivers. Gaos employs cut-off reflection system to minimize glare against eyes of drivers and also employs 6 signal lights which indicate fog or accident and other emergency situation, and therefore Gaos can be said to be an intelligent street light with functions of street light and transfer of information.

가오스(Gaos)는 도로 위의 수호천사(Guardian Angel on Street)라는 의미를 가진 합성어로 직선의 간결함을 기본으로 반복적인 패턴을 방열부에 구성하여 전체적 통일감을 추구한 디자인입니다. 적용하는 장소가 운전자의 안전과 직결되어있는 점을 고려하여 미적 형상보다는 기능에 충실한 형상에 중점을 두고 설계한 LED 도로 조명기구입니다.

도로조명은 운전자의 안전과 직접적인 연계가 되어있어 세심하고 신중한 설계가 필요합니다. 가오스(Gaos)는 운전자의 눈부심 현상을 최소화 하기 위해 Cut-off reflection system을 적용하였고, 6개의 신호조명(Signal light)을 통해 안개출몰이나 사고 발생 시 돌발상황을 사전에 알려주는 시스템을 적용하여 조명본질의 기능은 물론 정보전달 기능도 수행할 수 있는 지능형 가로등입니다.



SPECIFICATIONS

Light Source

Lamp

Color

Gaos-S

Main : power LED

Signal : SMD LED

Main : White

Signal : White / RGB / Red / Green / Blue / Yellow

Electrical

Input voltage

Power consumption

AC 200~240V / 50~60Hz (post with built-in SMPS)
160W

Physical

Size

Finish

Post

Head

Head cover

Reflector

Anchor plate

Anchor bolt cap

Gasket

Bolt

1308mm x 314mm x 6000mm
powder coating (dark gray)
galvanized steel
die cast & extruded aluminum
extruded polycarbonate (clear type)
99.9% aluminum
galvanized steel
die cast aluminum
silicone
stainless steel

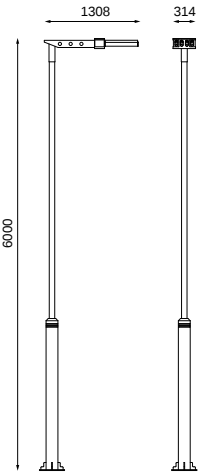
Installation

Cable

3P (included ground wire)



Anchor plate : 350 x 350(mm)
Anchor size : 250 x 250(mm) / M19



SPECIFICATIONS

Light Source

Lamp

Color

Gaos-T (Tunnel lighting)

Main : power LED

Signal : SMD LED

Main : White

Signal : White / RGB / Red / Green / Blue / Yellow

Electrical

Input voltage

Power consumption

AC 200~240V / 50~60Hz

160W

Physical

Size

Finish

Head

Head cover

Reflector

Mounting plate

Gasket

Bolt

374mm x 611mm x 248mm

powder coating (dark gray)

die cast & extruded aluminum

extruded polycarbonate (clear type)

99.9% aluminum

galvanized steel

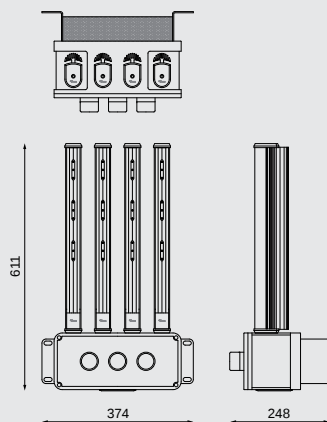
silicone

stainless steel

Installation

Cable

3P (included ground wire)



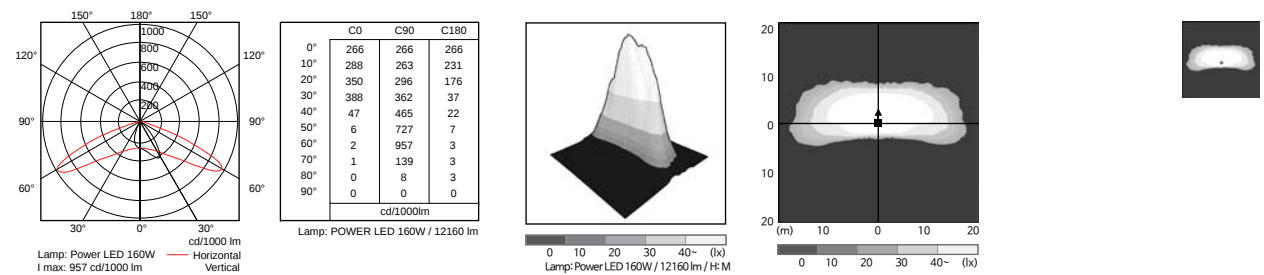
Mounting plate : 374 x 110(mm)

Mounting size : 344 x 90(mm) / M19

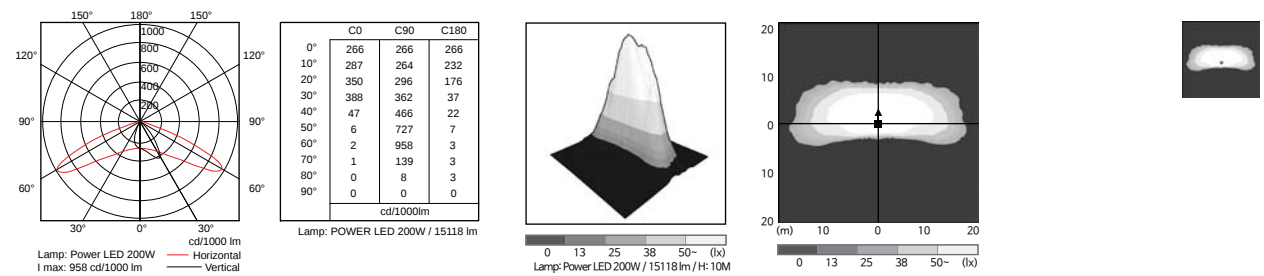


PHOTOMETRIC DATA

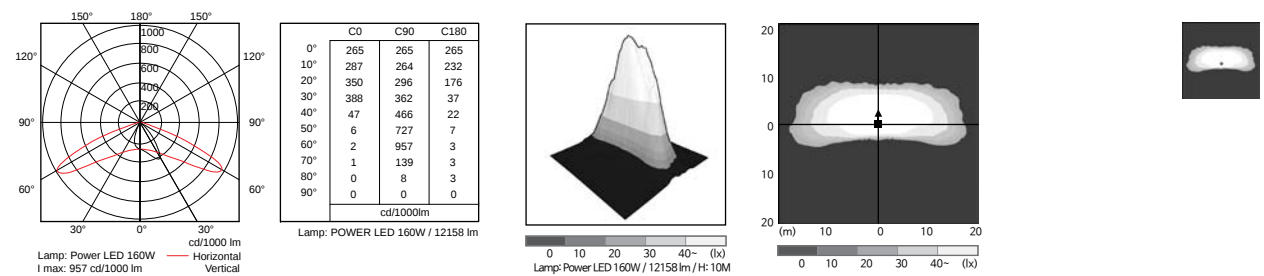
Gaos - S 160W (140° X 60°)



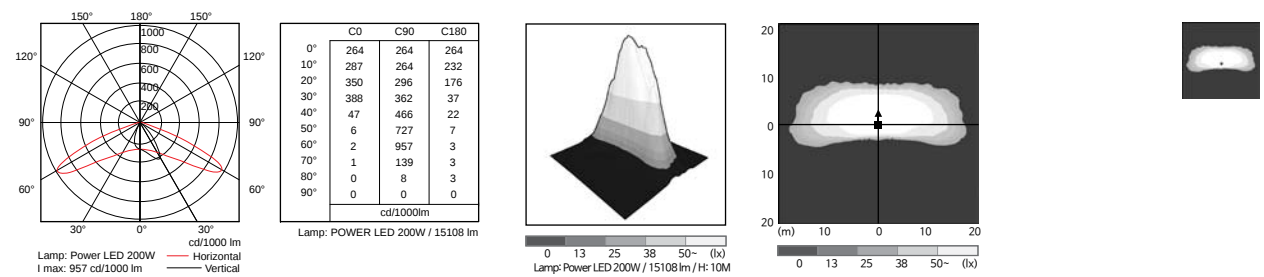
Gaos - S 200W (140° X 60°)



Gaos - T 160W (140° X 60°)



Gaos - T 200W (140° X 60°)



ex) GS1 - GSF2 - K5 - GSS1 - GSA2 - NT11

STEP 1 Pole & Tunnel lighting

ITEM	CODE
Gaos-S (6M)	GS1
Gaos-S (10M)	GS2
Gaos-T	GT1

STEP 2 Head part

ITEM	CODE
Gaos-S (AC 160W)	GSF1
Gaos-S (AC 200W)	GSF2
Gaos-T (AC 160W)	GTF1
Gaos-T (AC 200W)	GSF2

STEP 3 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 4 Signal color

ITEM	CODE
Signal light color (RGB)	GSS1
Signal light color (White)	GSS2
Signal light color (Red)	GSS3
Signal light color (Green)	GSS4
Signal light color (Blue)	GSS5
Signal light color (Yellow)	GSS6

STEP 5 Anchor & Anchor bolt cap nut

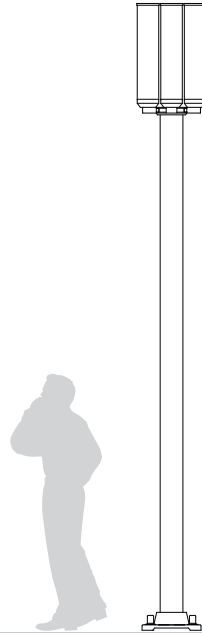
ITEM	CODE
Anchor (stainless steel)	GSA1
Anchor (galvanized steel)	GSA2
Anchor bolt cap nut	NT11



ACTO

엑토

POLE & BOLLARD



DESIGN FEATURES

Modern & Compact

ACTO has modern design which is able to minimize the fatigue of people's eyes and lead pedestrians effectively.

엑토는 보행자의 효과적 동선유도와 눈의 피로도를 최소화한 현대적 감각의 가로 등입니다.

Stability & Utility

The lamps, whose purpose is securing intensity of illumination for a wide extent, are likely to make people dazzled. To settle this problem, ACTO has the light source which is divided into 4 to scatter the glare and it is much comfortable to eyes.

넓은 범위의 조도 확보를 위해 사용되는 광원은 눈부심을 유발할 가능성이 많습니다. 엑토는 이러한 문제해결을 위해 광원을 4개로 나누어 눈부심을 분산시키고, 눈부심이 작은 광원을 사용했습니다.

Anti-glare system

And by using prismatic polycarbonate pipe as a diffuser to make the light to be emitted equally, pedestrians' glare could be minimized.

엑토는 균일한 빛의 확산을 위해 프리즈메틱 폴리카보네이트 (Prismatic polycarbonate) 파이프를 디퓨저로 사용하여 보행자의 눈부심을 최소화 하였습니다.

Pleasant lighting

ACTO will supply pleasant lighting environment on the place where pedestrians pass frequently such as parks, squares, apartments, and hospitals etc.

엑토는 공원, 광장, 아파트, 병원등과 같이 통행이 빈번한 장소에 시각적 불쾌감이 없는 쾌적한 조명 환경을 제공해 드릴것 입니다.

SPECIFICATIONS

Light Source

Lamp
Lamp holder

Acto pole

PL 55W x 4 head
2G11

Electrical

Input voltage
Power consumption

AC 220V
220W (post with built-in ballast)

Physical

Size
Finish
Post
Head
Diffuser
Anchor plate
Anchor bolt cap
Bolt

388mm x 388mm x 3500mm
powder coating (light gray or dark gray)
aluminum
cast aluminum
prismatic polycarbonate
cast aluminum
die cast aluminum
stainless steel

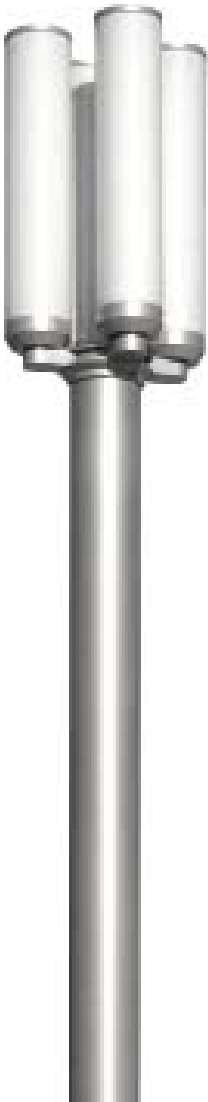
Installation

Cable

3P (included ground wire)



Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19



SPECIFICATIONS

Light Source

Lamp

Lamp holder

Acto bollard

EL 23W or LED 8W

E27(EL, LED)

Electrical

Input voltage

Ballast

AC 220V

ballast (post with built-in ballast or converter)

Physical

Size

Finish

Post

Head

Diffuser

Anchor plate

Bolt

Ø127mm x 938mm (EL 23W, LED 8W)

powder coating (light gray or dark gray)

aluminum

cast aluminum

inside - milky acrylic

outside - prismatic polycarbonate

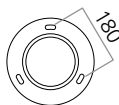
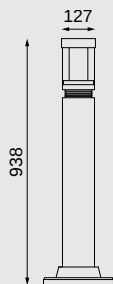
cast aluminum

stainless steel

Installation

Cable

3P (included ground wire)



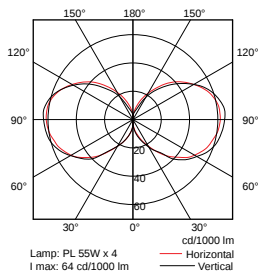
Anchor plate : Ø262 (mm)

Anchor size : 180 x 180 x 180 (mm) / M9



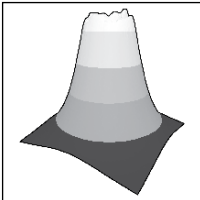
PHOTOMETRIC DATA

Acto pole

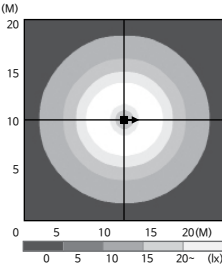


	C0	C90	C180
0°	0	0	0
20°	15	13	15
40°	31	32	30
60°	52	50	51
80°	62	60	61
100°	64	61	62
120°	50	50	48
140°	29	32	28
160°	9	13	8
180°	4	3	3

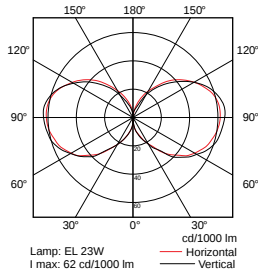
Lamp: PL 55W x 4 / 19200 lm



Lamp: PL 55W x 4 / 19200 lm / H: 3.5M

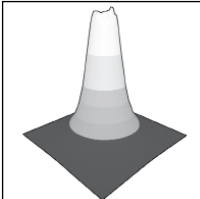


Acto bollard - EL 23W

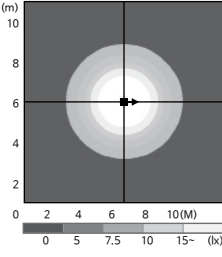


	C0	C90	C180
0°	0	0	0
20°	15	13	14
40°	30	31	30
60°	50	49	49
80°	61	58	60
100°	62	59	61
120°	48	48	47
140°	28	31	27
160°	9	13	8
180°	3	3	3

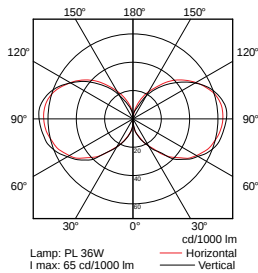
Lamp: EL 23W / 1500 lm



Lamp: EL 23W / 1500 lm / H: 1M

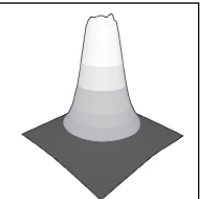


Acto bollard - LED 8W

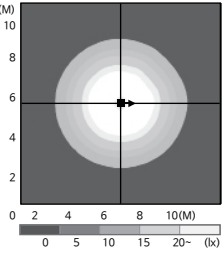


	C0	C90	C180
0°	0	0	0
20°	16	14	15
40°	32	32	31
60°	53	51	52
80°	64	61	62
100°	65	62	63
120°	51	50	49
140°	29	32	29
160°	9	14	8
180°	4	3	3

Lamp: PL 36W / 2900 lm



Lamp: LED 8W / 1500 lm / H: 1M



ORDERING CODE

ex) AC1 - ACF1 - K5 - ACA2 - NT11

STEP 1 Pole & Bollard

ITEM	CODE
Acto pole	AC1
Acto bollard	AC2

STEP 2 Head part

ITEM	CODE
Acto Pole (AC 220W)	ACF1
Acto Bollard (PL 23W)	ACF2
Acto Bollard (LED 8W)	ACF3

STEP 3 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 4 Anchor & Anchor bolt cap nut

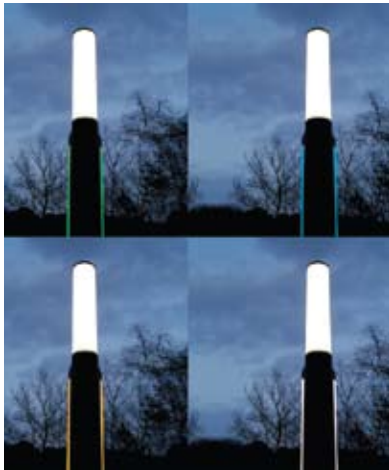
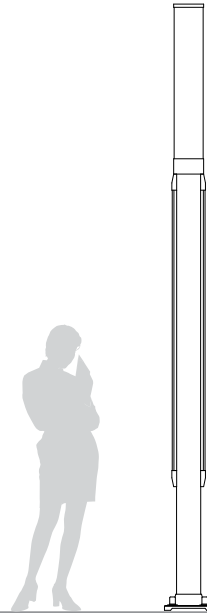
ITEM	CODE
Pole anchor (stainless steel)	ACA1
Pole anchor (galvanized steel)	ACA2
Bollard anchor (stainless steel)	ACA3
Bollard anchor (galvanized steel)	ACA4
Pole anchor bolt cap nut	NT11
Bollard anchor bolt cap nut	NT14



CONTEMPO

컨템포

POLE & BOLLARD



DESIGN FEATURES

Vertical image is emphasized in Contempo which is expressed the modern style sensuously. The upper main lighting, which is connected to post, emphasizes its vertical round shaped column and the flanks' diffusive lighting enables pedestrians to recognize things in wide space without any glare.

The vertical line of LED is optional with users to choose among the Red (splendid impression), Blue (sensation of refinement), Green (eco-friendly sentiment), Yellow (comfort feeling) and White (sensation of refreshment).

Contempo is suitable to be used in symbolic space such as squares of apartments, parks and business sections. And especially, it is expected to achieve the ultimate object to arrange Contempo as colonnade lighting at approaches.

컨템포는 수직적 이미지를 강조한 현대적 감각의 가로등입니다. 상부의 주 조명은 포스트와 연결된 수직 원형 기둥의 이미지를 부각시키고, 확산된 빛은 넓은 부분에서 보행자가 눈부심 없이 사물을 인지할 수 있도록 디자인되었습니다.

LED 수직 라인은 사용자의 선택에 따라 Red의 화려함, Green의 자연 친화적 느낌, Blue의 사이버적 느낌, Yellow의 안락함과 White의 청량감을 연출할 수 있습니다.

컨템포는 도심 및 아파트 광장, 공원, 상업 공간등의 상징적 공간에 사용할 수 있고, 특히 진입로의 열주 조명으로 사용할 경우 이상적인 연출 효과를 기대할 수 있습니다.

SPECIFICATIONS

Light Source

Lamp

Lamp color

Lamp holder

Contempo

Top : T5 21W x 4 ea or LED 60W
Side line : LED bar 16W X (2 line)
Top : White
Side line : Red / Green / Blue / Yellow / White
G5

Electrical

Input voltage
Power consumption

AC 220V
T5 type (116W), LED type (76W)

Physical

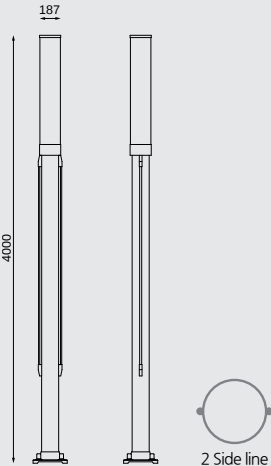
Size
Finish
Post
Head
Upper part diffuser
Anchor plate
Anchor bolt cap
Bolt

Ø187mm x 4000mm
powder coating (light gray or dark gray)
aluminum
cast aluminum
milky acrylic
cast aluminum
die cast aluminum
stainless steel

Installation

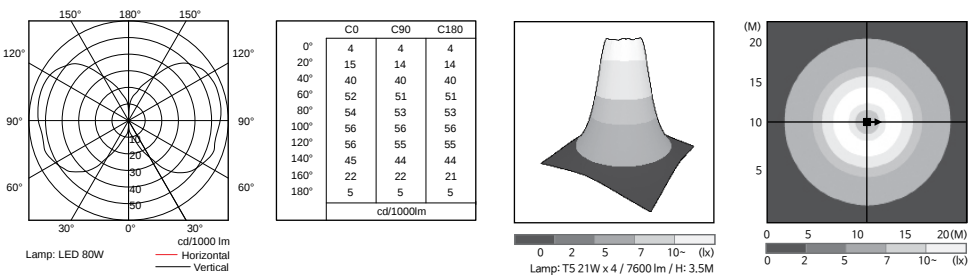
Cable

3P (included ground wire)



Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19





ORDERING CODE

ex) CT1 - CTF1 - K3 - CTA2 - NT11

STEP 1 Pole

ITEM	CODE
2 Side line color (White)	CT1
2 Side line color (Red)	CT2
2 Side line color (Green)	CT3
2 Side line color (Blue)	CT4
2 Side line color (Yellow)	CT5

STEP 2 Head part

ITEM	CODE
Contempo Pole (T5 116W)	CTF1
Contempo Pole (LED 76W)	CTF2

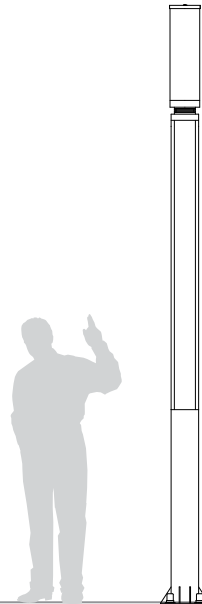
STEP 3 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 4 Anchor & Anchor bolt cap nut

ITEM	CODE
Anchor (stainless steel)	CTA1
Anchor (galvanized steel)	CTA2
Anchor bolt cap nut	NT11





DESIGN FEATURES

LICO is designed with combination of circles and quadrangles to direct geometric lighting column.

The glare of LICO's upper part's lighting was minimized by using T5 light source and the milky acrylic pipe. And by using a prismatic polycarbonate pipe at LICO's lower part's lighting, flat light-diffusion could be realized without any glare.

There's an option of choosing prismatic polycarbonate pipe in clear type or milky type. Clear prismatic type would direct mystic atmosphere through soft emission of light and milky prismatic one would present pure and simple image.

리코는 기하학적 빛의 기둥(Geometric Lighting Column) 이미지를 연출하기 위해 원기둥과 사각기둥의 형상을 기본 모티브로 디자인 하였습니다.

상부 조명은 T5 광원과 유백색 아크릴 파이프를 사용해 눈부심을 최소화하였고, 허부 조명은 프리즈메틱 (Prismatic) 폴리카보네이트 파이프를 사용해 빛을 파이프 내면에 균일하게 분포시킴으로써 눈부심없는 부드러운 확산광이 방사되도록 하였습니다.

프리즈메틱 폴리카보네이트 파이프는 투명과 유백색을 사용자가 선택할 수 있습니다. 투명 프리즈메틱 (Clear Prismatic) 타입은 부드럽게 방사되는 빛을 통해 신비로운 이미지를, 유백 프리즈메틱 (Milky Prismatic) 타입은 깨끗하고 간결한 이미지를 연출해 드릴 것 입니다.

SPECIFICATIONS

Light Source

Lamp

Lamp holder

Lico

Top : T5 14W x 4ea or LED 75W
Prismatic pipe : HI-PAR30 70W 10° or LED 15W
T5 (G5), HI-PAR 30 (E27)

Electrical

Input voltage

Power consumption

AC 220V
T5 type (126W), LED type (90W)
(post with built-in ballast or converter)

Physical

Size

Finish

Post

Head

Upper part diffuser

Lower part diffuser

Anchor plate

Anchor bolt cap

Bolt

Ø190mm x 3700mm
powder coating (light gray or dark gray)
stainless steel
cast aluminum
milky acrylic
prismatic polycarbonate
stainless steel
die cast aluminum
stainless steel

Installation

Cable

3P (included ground wire)



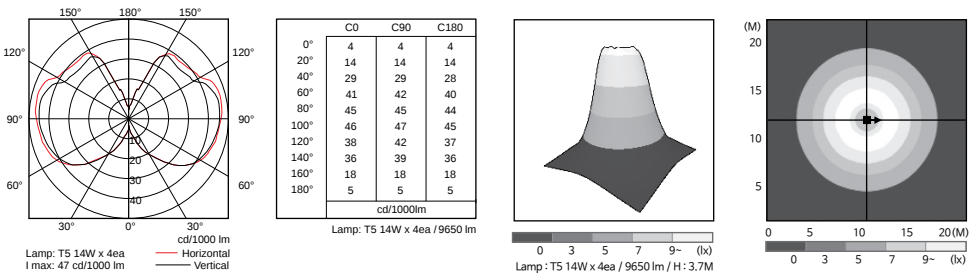
Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19



PHOTOMETRIC DATA

Lico

POLE & BOLLARD



ORDERING CODE

ex) LC5 - LCF1 - K3 - LCA2 - NT11

STEP 1.....Pole

ITEM	CODE
RGB	LC1
Red	LC2
Green	LC3
Blue	LC4
White 3000~4000 K	LC5
White 4000~5000 K	LC6
White 5000~6000 K	LC7

STEP 2.....Head part

ITEM	CODE
Lico (T5 126W)	LCF1
Lico (LED 95W)	LCF2

STEP 3.....Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 4.....Anchor & Anchor bolt cap nut

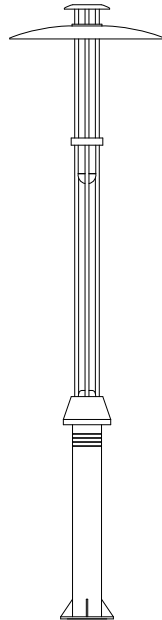
ITEM	CODE
Anchor (stainless steel)	LCA1
Anchor (galvanized steel)	LCA2
Anchor bolt cap nut	NT11



ROOST

루스트

POLE & BOLLARD



GOOD DESIGN

GOOD DESIGN

환경디자인부문 우수상
디자인진흥원장상 수상

Received Excellent Award,
Award of President of Korea Institute of
Design Promotion, Good Design on Envi-
ronmental Design Area.



DESIGN FEATURES

Upside direction system

Utilizing light which flows out from the center of the shade offers an attraction to the viewers whose location is higher than lighting fixtures. And by using color filter, various effects could be realized and this enables locally specialized direction at the same time.

Indirect illumination system

To minimize the glare, which is caused by lighting fixtures, direct light, indirect illumination system was induced in Roost. And by this system, discomfort of the residents in low-rises, could be improved.

Design Cap

Our designed cap considers users'safety, prevention of corrosion and harmonization with its pole. And at upside of our designed cap, there is photoluminescence mark to lead pedestrians to the right direction after lights-out for a certain time.

상부 갓 중심으로 나오는 빛을 이용하여 높은 위치의 조망자에게 불거리를 제공하는 동시에 갈라 필터를 이용한 다양한 효과로 특화 지역 연출이 가능한 시스템입니다.

램프의 직접적인 빛에 의한 눈부심 현상(Glare)을 최소화시키는 간접 조명 방식으로 설계하여 광공해로 인한 저층 세대의 시각적 불편을 줄일 수 있도록 디자인되었습니다.

기존의 캡너트나 양카베이스 커버의 획일적 디자인에서 탈피해 폴과 조화된 디자인으로 사용자의 안전과 볼트의 부식 방지 뿐 아니라 폴의 디자인 구성 요소로서의 의미를 부여했습니다. 또한 캡상부의 촉광 표시는 소등 후에도 일정 시간 동안 동선을 유도할 수 있도록 디자인되었습니다.

SPECIFICATIONS

Light Source

Lamp

Roost Pole

HI-PAR30 70W 40° (upper part)

EL 23W or LED12W (lower part)

Lamp holder

E27

Electrical

Input voltage

AC 220V

Power consumption

93W (post with built-in ballast) or 82W(LED)

Physical

Size

Ø880mm x 3700mm

Finish

powder coating (light gray)

Post

stainless steel

Housing

die cast aluminum

Upper part glass

toughened glass (THK 5mm)

Lower part of emitting light

toughened glass (clear lens)

Anchor plate

cast aluminum

Anchor bolt cap

die cast aluminum

Gasket

silicone

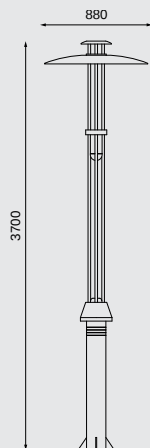
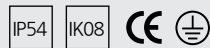
Bolt

stainless steel

Installation

Cable

3P (included ground wire)



Anchor plate : 300 x 300(mm)

Anchor size : 200 x 200(mm) / M19



SPECIFICATIONS

Light Source

Lamp
Lamp holder

Roost Bollard

EL 23W or LED 12W
E27

Electrical

Input voltage
Power consumption

AC 220V
23W(EL) or 12W(LED)

Physical

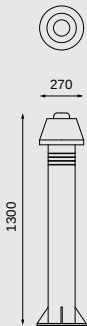
Size
Finish
Post
Housing
Part of emitting light
Anchor plate
Anchor bolt cap
Gasket
Bolt

Ø270mm x 1300mm
powder coating (light gray)
stainless steel
die cast aluminum
toughened glass (clear lens)
cast aluminum
die cast aluminum
silicone
stainless steel

Installation

Cable

3P (included ground wire)

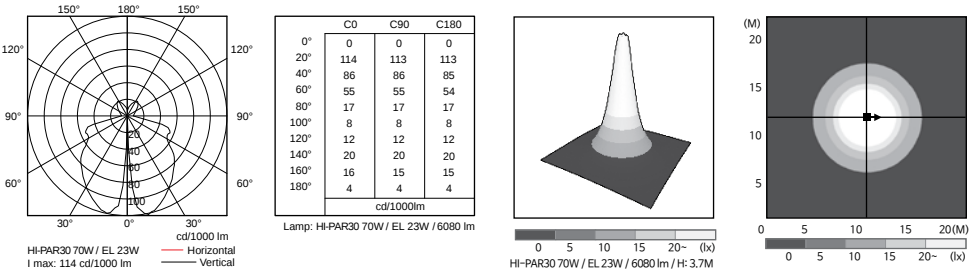


Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19

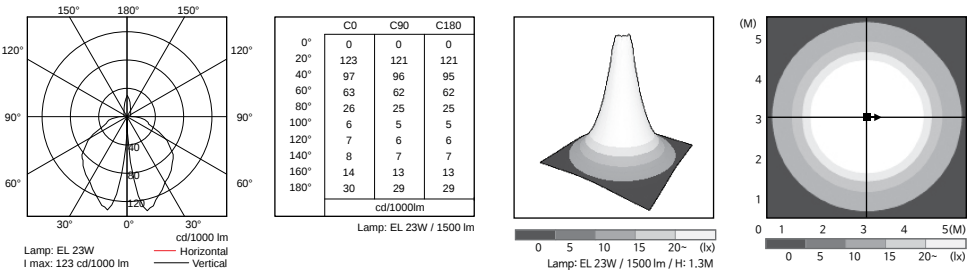


PHOTOMETRIC DATA

Roost pole

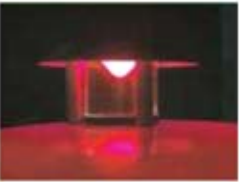


Roost bollard

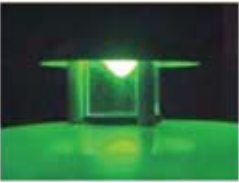


ACCESSORY

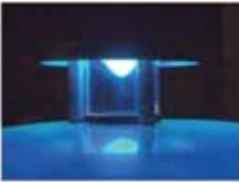
Top color filter



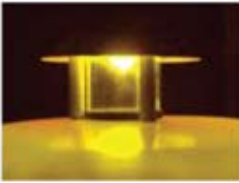
Red



Green



Blue



Yellow

ORDERING CODE

ex) RS1 - K3 - RSC - RSR1 - RSA2 - NT11

STEP 1 Pole & Bollard

ITEM	CODE
Roost Pole (AC 93W)	RS1
Roost Bollard (AC 23W)	RS2

STEP 2 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	
White 5000~6000 K	K5

STEP 3 Top color

ITEM	CODE
Top color (Clear)	RSC
Top color (Red)	RSR
Top color (Green)	RSG
Top color (Blue)	RSB
Top color (Yellow)	RSY

STEP 4 Reflector

ITEM	CODE
Circular Reflector	RSR1

STEP 5 Anchor & Anchor bolt cap nut

ITEM	CODE
Anchor (stainless steel)	RSA1
Anchor (galvanized steel)	RSA2
Anchor bolt cap nut	NT11



경기도농수산진흥원
2003년
도농교류사업

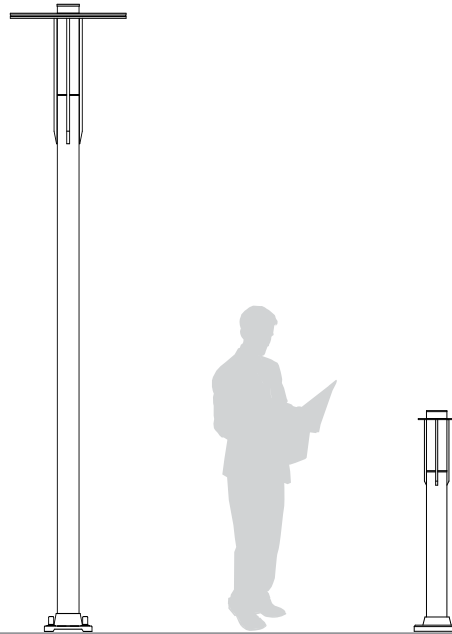
경기도농수산진흥원
새롭게 도약하는 미래농업
조

함께하는 영복원

MIDAS

마이다스

POLE & BOLLARD



DESIGN FEATURES

The design motive of MIDAS is circle and its geometrically simple design would make your place to be looked better, not the lighting fixtures itself. The upper circle reflector was designed to show various oval images to the changes of view-positions.

Especially when MIDAS was seen at the position which is higher than itself, its upper circle reflector would make your place to be looked more abundantly without any glare, like a full moon.

This lighting fixture will present you the ideal place, when used nearby modern-looking buildings and also residential areas, by providing more comfortable space than ever.

마이다스는 원(Circle)을 모티브로 디자인된 현대적 이미지의 가로등입니다. 원형의 포스트와 상부 원형 반사판 등 기하학적 형상의 간결한(Simple) 디자인은 조명기구 자체의 이미지 보다는 사용 공간의 이미지를 더욱 돋보이게 할 것 입니다.

마이다스의 상부 원형 반사판은 조망자의 시점 변화에 따라 다양한 타원의 이미지로 연출될 수 있도록 디자인되었습니다. 특히 가로등 보다 높은 시점에서 보여질 경우 눈부심이 없는 부드러운 보름달과 같은 원형 이미지로 보다 풍요로운 공간을 연출해 드릴 것 입니다.

마이다스는 현대적 건축물에 사용될 경우 매우 이상적이며 특히 아파트나 빌라와 같은 주거공간에 사용될 경우 더욱 쾌적한 공간을 제공해 드릴 것 입니다.

SPECIFICATIONS

Light Source

Lamp
Lamp holder

Midas pole

PL 55W x 4ea or LED 75W
PL (2G11)

Electrical

Input voltage
Power consumption

AC 220V
PL type (220W), LED type (75W)

Physical

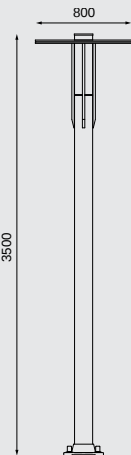
Size
Finish
Post
Head
Diffuser
Anchor plate
Anchor bolt cap
Bolt

Ø800mm x 3500mm
powder coating (light gray or dark gray)
aluminum
aluminum
milky acrylic
cast aluminum
die cast aluminum
stainless steel

Installation

Cable

3P (included ground wire)



Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19



SPECIFICATIONS

Light Source

Lamp

Lamp holder

Midas bollard

PL 24W or LED 12W

PL (2G11) or LED(E27)

Electrical

Input voltage

AC 220V

Power consumption

PL type (24W), LED type (12W)

Physical

Size

Ø200mm x 1080mm

Finish

powder coating (light gray or dark gray)

Post

aluminum

Head

aluminum

Diffuser

milky acrylic

Anchor plate

cast aluminum

Anchor bolt cap

die cast aluminum

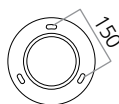
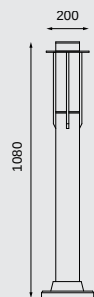
Bolt

stainless steel

Installation

Cable

3P (included ground wire)



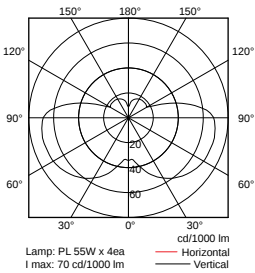
Anchor plate : Ø220(mm)

Anchor size : 150 x 150 x 150(mm) / M10



PHOTOMETRIC DATA

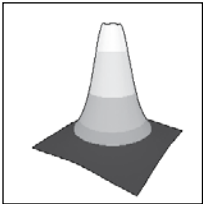
Midas pole



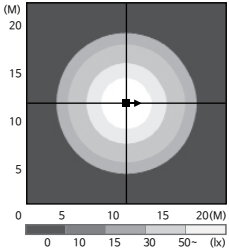
	C0	C90	C180
0°	34	34	34
20°	47	47	47
40°	62	62	62
60°	69	69	69
80°	70	70	70
100°	55	55	55
120°	17	17	17
140°	18	18	18
160°	16	16	16
180°	8	8	8

cd/1000lm

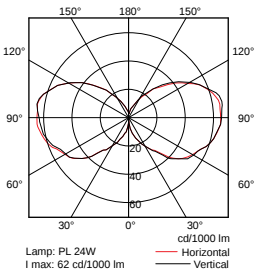
Lamp: PL 55W x 4ea / 19200 lm



Lamp: PL 55W x 4ea / 19200 lm / H: 3.5M



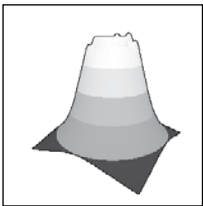
Midas bollard



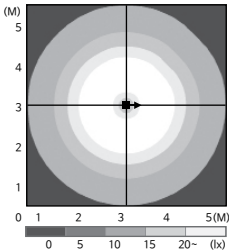
	C0	C90	C180
0°	0	0	0
20°	15	14	14
40°	30	29	29
60°	49	48	48
80°	58	58	57
100°	62	60	61
120°	46	45	46
140°	24	24	24
160°	9	8	8
180°	3	3	3

cd/1000lm

Lamp: PL 24W / 1800 lm



Lamp: PL 24W / 1800 lm / H: 1M



ACCESSORY

Top line color



White



Red



Green



Blue



Yellow

ORDERING CODE

ex) MD1 - K3 - MDW - MDA2 - NT11

STEP 1 Pole & Bollard

ITEM	CODE
Midas Pole (PL 220W)	MD1
Midas Pole (LED 75W)	MD2
Midas Bollard (PL 24W)	MD3
Midas Bollard (LED 12W)	MD4

STEP 2 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 3 Top line color

ITEM	CODE
Top line color (White)	MDW
Top line color (Red)	MDR
Top line color (Green)	MDG
Top line color (Blue)	MDB
Top line color (Yellow)	MDY

STEP 4 Anchor & Anchor bolt cap nut

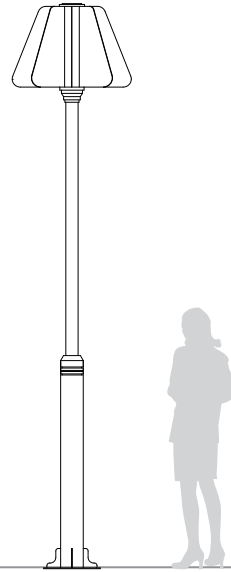
ITEM	CODE
Pole anchor (stainless steel)	MDA1
Pole anchor (galvanized steel)	MDA2
Bollard anchor (stainless steel)	MDA3
Bollard anchor (galvanized steel)	MDA4
Pole anchor bolt cap nut	NT11
Bollard anchor bolt cap nut	NT15



SHINING

샤이닝

POLE & BOLLARD



DESIGN FEATURES

Shining' composition is repetition of one molding unit, and that composition constitutes three dimension form. And also various shape of the unit could be made, so it could realize differentiation to the others and direct original image.

Shining is suitable for parks, residential areas and squares etc, which requires low luminance lighting and the whole direction forwarding diffusion of light. Especially the prismatic polycarbonate pipe, which utilizes refraction of light and enables flat diffusion of light, was designed to diminish the glare. And also as each unit divides emitting light part, visual comfort probability(VCP) was maximized.

Prismatic polycarbonate has two different type, and users are allowed to select between them, milky and clear. The clear type would present mystic images and milky type would express pure and soft image.

샤이닝은 하나의 조형적 유니트를 반복 조합하여 입체적인 형상을 구성한 디자인으로 기존의 가로등과 차별화된 감성조명 제품입니다. 또한 다양한 형태의 유니트 디자인은 공간 특성에 어우러진 독창적 이미지를 연출할 수 있습니다.

샤이닝은 전반확산의 저휘도 조명이 필요한 공원, 주거단지, 광장 등에 적합한 제품입니다. 특히 프리즈메틱 폴리카보네이트 파이프는 빛의 굴절을 활용한 광학적 솔루션을 통해 빛을 균일하게 확산시켜 줄 뿐 아니라 눈부심을 최대한 감소시키도록 설계되었습니다. 또한 각각의 유니트는 발광부의 휘도면을 분할함으로써 시각적 편의성(VCP)을 극대화했습니다.

프리즈메틱 폴리카보네이트 파이프는 투명과 유백색을 사용자가 선택할 수 있습니다. 투명프리즈메틱(Clear Prismatic) 타입은 부드럽게 방사되는 빛을 통해 신비로운 이미지를, 유백프리즈메틱(Milky Prismatic) 타입은 깨끗하고 온유한 이미지를 연출해 드릴 것 입니다.



SPECIFICATIONS

Light Source

Lamp
Lamp holder

Shining

PL 55W x 3ea or LED 75W
PL (2G11)

Electrical

Input voltage
Power consumption

AC 220V
PL type (165W), LED type (75W)

Physical

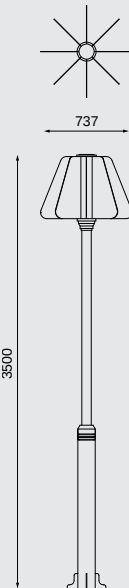
Size
Finish
Post
Head
Diffuser
Anchor plate
Anchor bolt cap
Bolt

Ø737mm x 3500mm
powder coating
galvanized steel
cast aluminum
prismatic polycarbonate
galvanized steel
die cast aluminum
stainless steel

Installation

Cable

3P (included ground wire)

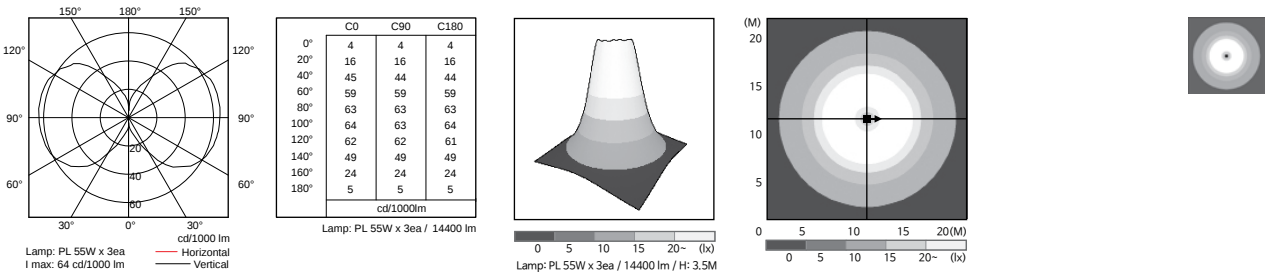


Anchor plate : Ø350(mm)
Anchor size : 200 x 200(mm) / M19



PHOTOMETRIC DATA

Shining



ORDERING CODE

ex) SH1 - SHF1 - K5 - SHA2 - NT11

STEP 1 Pole

ITEM	CODE
Shining	SH1

STEP 2 Head part

ITEM	CODE
Shining (PL 165W)	SHF1
Shining (LED 75W)	SHF2

STEP 3 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 4 Anchor & Anchor bolt cap nut

ITEM	CODE
Anchor (stainless steel)	SHA1
Anchor (galvanized steel)	SHA2
Anchor bolt cap nut	NT11



CAM-POLE

캠폴

POLE & BOLLARD



DESIGN FEATURES

Cam-Pole is designed to utilize the CAM series more variously.

Cam-PR

Cam-PR offers well balanced light which is extensive and comfortable without any glare. This lighting fixture has merits such as new design which was mixed 2 types of indirect circle reflector, multiplicity of shape which could be done through adjusting the angle of reflector and free modulation of light reflecting angle.

Cam-PT

Cam-PT was put the accent on function which has simple design. This lighting fixture can be used diversely as a floodlighting street-light or a walking roadlamp both.

캠폴(Cam-Pole)은 캠 시리즈를 다양하게 활용할 수 있도록 디자인된 가로등입니다.

Cam-PR은 간접 조명방식에 의해 눈부심이 없고 균제도가 높은 편안한 빛을 제공합니다. 상부 원형 간접 반사판의 2가지 재질 조합을 통한 새로운 디자인과 반사판의 각도 조절을 통한 형태의 다양성, 자유로운 빛의 반사 각도 조절이 Cam-PR의 장점입니다.

Cam-PT는 기능성에 중점을 둔 심플한 디자인의 가로등입니다. 캠 시리즈가 제공하는 다양한 광각 또는 형태를 선택해 투광용 가로등 또는 보행용 가로등으로 다양하게 활용할 수 있습니다..

SPECIFICATIONS

Light Source

Lamp
Lamp holder

Cam-PR

HIT 70W or HIT 150W
G12

Electrical

Input voltage
Ballast

AC 220V
magnetic ballast (post with built-in ballast)

Physical

Size
Finish
Post
Head
Head reflector
Indirect reflector

1680mm x 700mm x 4000mm
powder coating (dark gray)
galvanized steel
die cast aluminum
99.9% aluminum
center : stainless steel
outside : aluminum

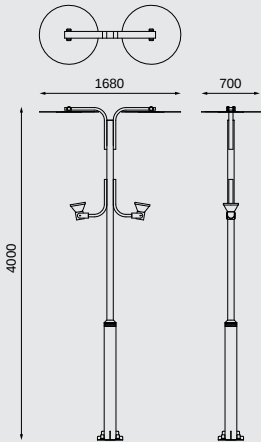
Head glass
Gasket
Anchor plate
Anchor bolt cap
Bolt

toughened glass (THK 5mm)
silicone
galvanized steel
die cast aluminum
stainless steel

Installation

Cable

3P (included ground wire)



Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19



SPECIFICATIONS

Light Source

Lamp

Lamp holder

Cam-PT

refer to CAM-RS, CAM-RW or CAM-C
CAM-R (G12), CAM-C (Rx7s)

Electrical

Input voltage

Ballast

AC 220V

magnetic ballast (post with built-in ballast)

Physical

Size

Finish

Post

Head

Head reflector

Head glass

Gasket

Anchor plate

Anchor bolt cap

Bolt

1000mm x 180mm x 3500mm

powder coating (dark gray)

galvanized steel

die cast aluminum

99.9% aluminum

toughened glass (THK 5mm)

silicone

galvanized steel

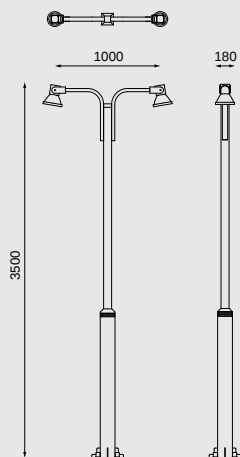
die cast aluminum

stainless steel

Installation

Cable

3P (included ground wire)

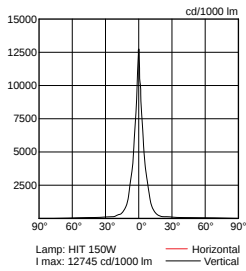


Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19



APPLICATION FIXTURES PHOTOMETRIC DATA

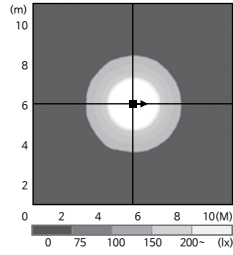
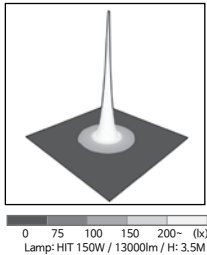
Cam-RS



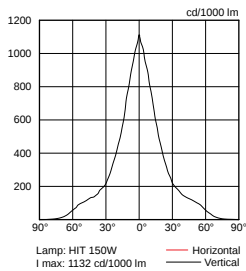
	C0	C90	C180
0°	12745	12745	12745
10°	1648	1608	1534
20°	200	201	202
30°	104	106	104
40°	71	74	69
50°	42	43	44
60°	18	19	18
70°	3	2	2
80°	0	0	0
90°	0	0	0

cd/1000lm

Lamp: HIT 150W / 13000 lm



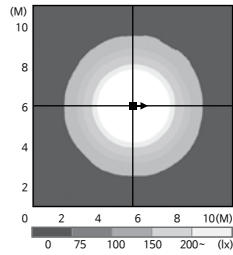
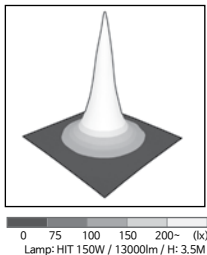
Cam-RW



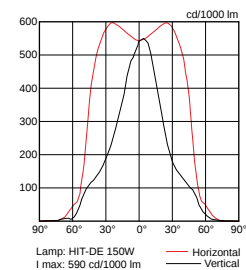
	C0	C90	C180
0°	1132	1132	1132
10°	815	821	808
20°	446	434	437
30°	228	233	227
40°	148	149	145
50°	112	117	110
60°	59	58	59
70°	14	15	14
80°	3	3	3
90°	0	0	0

cd/1000lm

Lamp: HIT 150W / 13000 lm



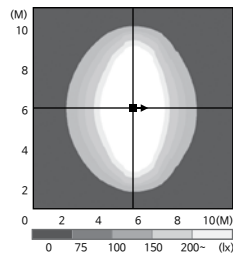
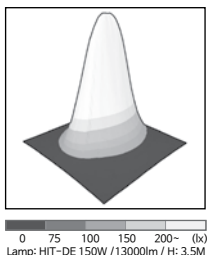
Cam-C



	C0	C90	C180
0°	543	543	543
10°	514	562	458
20°	327	590	306
30°	180	582	195
40°	126	485	131
50°	85	177	85
60°	20	47	10
70°	4	6	7
80°	1	1	1
90°	0	0	0

cd/1000lm

Lamp: HIT-DE 150W / 13000 lm



ex) CP1 - CM5M15K4 - CM5M15K3 - CPR1 - CPA2 - NT11

STEP 1 Pole

ITEM	CODE
CAM-PR	CP1
CAM-PT	CP2

STEP 2 CAM series of head part

ITEM	CODE
Fixture 1	CAM series
Fixture 2	CAM series

STEP 3 Reflector

ITEM	CODE
Circular reflector	CPR1

STEP 4 Anchor & Anchor bolt cap nut

ITEM	CODE
Anchor (stainless steel)	CPA1
Anchor (galvanized steel)	CPA2
Anchor bolt cap nut	NT11

CAM SERIES ORDERING CODE

STEP 1 Light fixtures

ITEM	CODE
CAM-RS (G12)	CM5
CAM-RW (G12)	CM6
CAM-C (Rx7s)	CM7

STEP 2 Lighting source

ITEM	CODE
HIT 70W	M70
HIT 150W	M15
HIT-CE Ceramic 70W	C70
HIT-CE Ceramic 150W	C15
HIT-DE 70W	D70
HIT-DE 150W	D15
HIT-DE Ceramic 70W	S70
HIT-DE Ceramic 150W	S15

ex) CM5 M15 K3

STEP 3 Color temperature

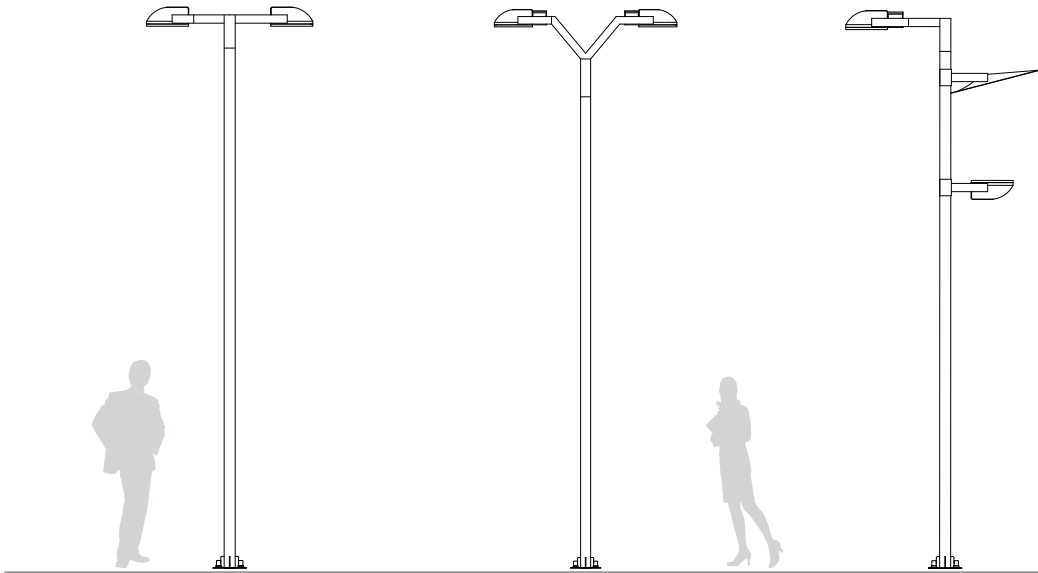
ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4



ROVA-POLE

로바폴

POLE & BOLLARD



DESIGN FEATURES

Rova-PY

The motif of Rova-PY is the letter "Y". Its design is emphasized on opened feeling and simplicity. It is designed to be faithful to its purposing functions and senses of beauty at the same time. Rova-PY utilizes various optic angles so it can be used diversely for floodlighting or walking streetlights.

Rova-PY는 Y자 형상을 모티브로 심플함과 개방감을 강조한 형상으로 미적 형태는 물론 기능성에 충실하도록 설계한 가로등입니다. 로바시리즈가 제공하는 다양한 광각을 통해 투광용 가로등 또는 보행용 가로등으로 다양하게 활용할 수 있습니다.

Rova-PT

The designing concept of Rova-PT is the letter "T". Straight lines' simplicity and regular shaped image was emphasized and this lighting fixture would match with any environment because of its simple design. Rova-PT maximizes the efficiency of lighting and also it can be linked up to 4 lighting fixtures.

Rova-PT는 T자 형상을 모티브로 하여 직선의 간결함과 정형적 이미지를 강조하였고, 어느 장소라도 잘 어울릴 수 있도록 심플하게 디자인한 가로등입니다. 조명 원래의 기능을 중점으로 양쪽 각기 다른 위치에 조명기구를 설치하여 조명의 효율성을 증대시키는 동시에 조명기구 1개부터 4개까지의 다양한 연계 가능성을 고려한 가로등입니다.

Rova-PR

Rova-PR minimized glare by using indirect lighting method. And adjustable angle of reflectors furnishes various form of lighting and enables to realize more deliberate lighting space. As using direct and indirect lighting methods at the same time, which are for floodlighting and walking, more effective lighting direction could be realized in dualistic space.

Rova-PR은 간접조명 방식의 사용으로 눈부심(Glare)현상을 최소화하고, 반사판 각도조절을 통해 다양한 형태를 제공함은 물론 더욱 계획된 조명공간을 구성할 수 있도록 설계되었습니다. 특히, 이원화된 공간(차도와 보도가 공존하는)에서 투광용 직접조명방식과 보행용 간접조명방식의 적절한 활용으로 보다 효과적인 조명연출을 도모드릴 것입니다.



SPECIFICATIONS

Light Source

Lamp & holder

Rova-PY

refer to the Rova series

Electrical

Input voltage

AC 220V

Ballast

refer to the Rova series

Physical

Size

1820mm x 949mm x 5500mm

Finish

powder coating (dark gray)

Post

galvanized steel

Head

die cast aluminum

Head reflector

99.9% aluminum

Upper part glass

toughened glass (THK 5mm)

Gasket

silicone

Anchor plate

galvanized steel

Anchor bolt cap

die cast aluminum

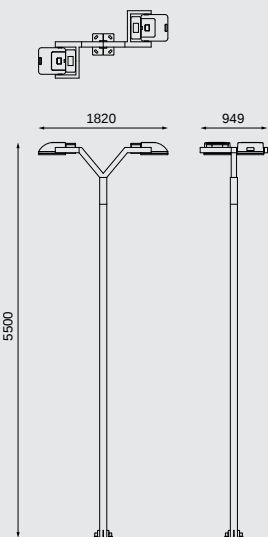
Bolt

stainless steel

Installation

Cable

3P (included ground wire)



Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19



SPECIFICATIONS

Light Source

Lamp & holder

Rova-PT

refer to the Rova series

Electrical

Input voltage

AC 220V

Ballast

refer to the Rova series

Physical

Size

1510mm x 949mm x 5000mm

Finish

powder coating (dark gray)

Post

galvanized steel

Head

die cast aluminum

Head reflector

99.9% aluminum

Head glass

toughened glass (THK 5mm)

Gasket

silicone

Anchor plate

galvanized steel

Anchor bolt cap

die cast aluminum

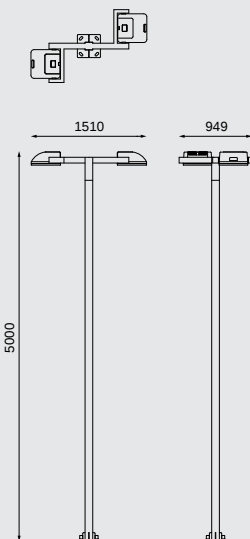
Bolt

stainless steel

Installation

Cable

3P (included ground wire)



Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19



SPECIFICATIONS

Light Source

Lamp & holder

Rova-PR

refer to the Rova series

Electrical

Input voltage

AC 220V

Ballast

refer to the Rova series

Physical

Size

1844mm x 1092mm x 5000mm

Finish

powder coating (dark gray)

Post

galvanized steel

Head

die cast aluminum

Head reflector

99.9% aluminum

Indirect reflector

stainless steel (white)

Head glass

toughened glass (THK 5mm)

Gasket

silicone

Anchor plate

galvanized steel

Anchor bolt cap

die cast aluminum

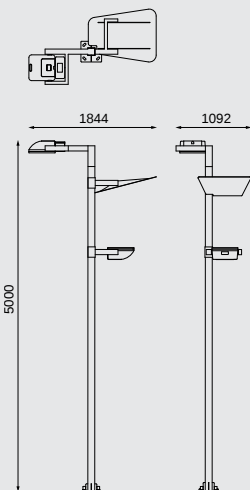
Bolt

stainless steel

Installation

Cable

3P (included ground wire)

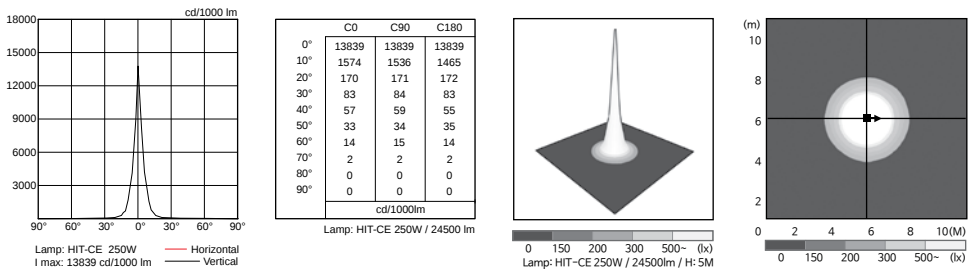


Anchor plate : 300 x 300(mm)
Anchor size : 200 x 200(mm) / M19

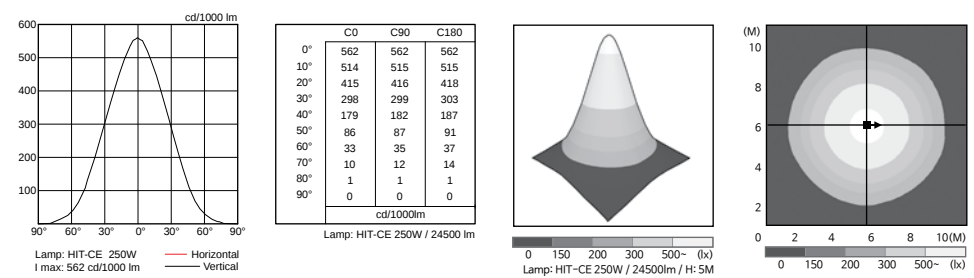


APPLICATION FIXTURES PHOTOMETRIC DATA

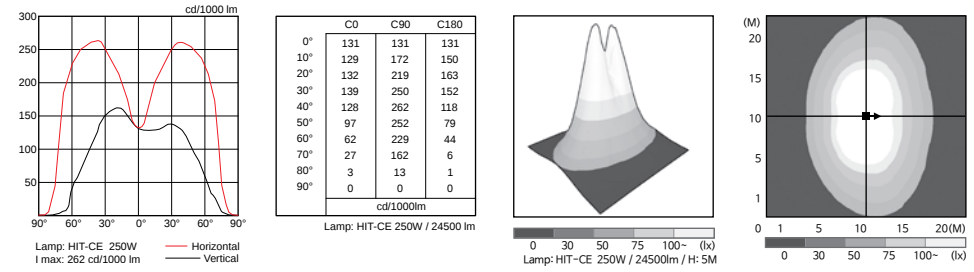
Rova-RS



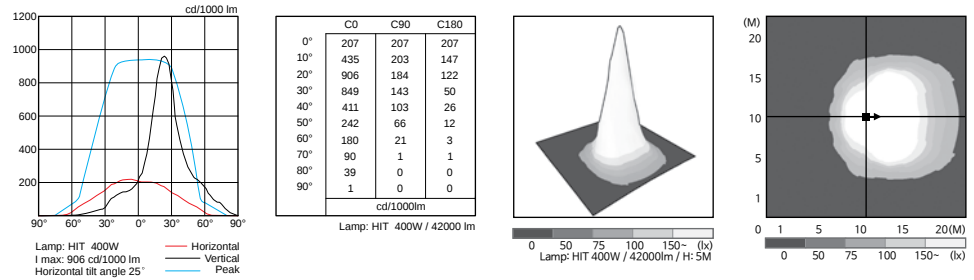
Rova-RW



Rova-W



Rova-A



ORDERING CODE

ex) PR1 - RV1C25K4RV11 - RL2K3B10 - PRR1 - PRA2 - NT11

STEP 1 Pole

ITEM	CODE
Rova-PR	PR1
Rova-PT	PT1
Rova-PY	PY1

STEP 2 ROVA series of head part

ITEM	CODE
Fuxture 1	ROVA series
Fuxture 2 (PR-indirect)	ROVA series

STEP 3 Reflector

ITEM	CODE
Reflector	PRR1

STEP 4 Anchor & Anchor bolt cap nut

ITEM	CODE
Anchor (stainless steel)	PRA1
Anchor (galvanized steel)	PRA2
Anchor bolt cap nut	NT11

ROVA SERIES ORDERING CODE

ex) RV1 C25 K4 RV11

LED) RL2 K3 B10

STEP Light fixtures

ITEM	CODE
Rova-RS (G12)	RV1
Rova-RW (G12)	RV2
Rova-W (G12)	RV3
Rova-S (E39)	RV4
Rova-S (E40)	RV5
Rova-A (E39)	RV6
Rova-A (E40)	RV7

STEP 2 Light source

ITEM	CODE
HIT-CE 250W	C25
HIT 250W	M25
HIT 400W	M40
HPS-T 250W	N25
HPS-T 400W	N40

STEP 4 Option

ITEM	CODE
Rova-R Anti glare cap	RV11
Rova-W Anti glare grill	RV16
Rova-S/A Anti glare grill	RV21

STEP 3 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP Light fixtures

ITEM	CODE
ROVA-L (AC)	RL2

STEP 2 Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 3 Beam angle

ITEM	CODE
10 degrees	B10
30 degrees	B30
50 degrees	B50
140X60 degrees	B60



LIGHTING
SOLAR

SOLAR LIGHTING

헤일로	HALO
반디	BANDI
레이팟	RAYPOT
클링	CLING
가이드	GUIDE



TN

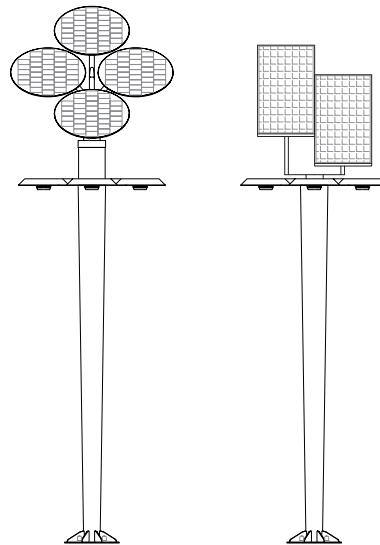
IBK 기업은행
YTN

2019
KIN
KIN
KIN

HALO

헤일로

SOLAR LIGHTING



DESIGN FEATURES

Design Motive

Halo-R was motivated from blooming flower to reduce the psychological pressure from the portliness of upper solar modules and provide balanced and stable forms. Its design concept helped to solve the problem of solar powered street lamps with nature-friendly design to fit with surrounding environment.

Halo-R은 상부 태양광 집광판 (Solar module)의 비대함을 만개하는 꽃잎의 형상을 연상케 하여 심리적 압박감을 감소시키는 동시에 균형적이며 안정적으로 느낄 수 있는 형태로 기존 태양광가로등이 가지고 있는 고민을 자연친화적 디자인으로 해결하여 주변환경과 쉽게 어울릴 수 있게 디자인 하였습니다.

Indirect illumination system & Aiming

Heads are surrounding the light source and consist of diagonal circular indirect reflectors. The heads also include three light emitting parts at 120° intervals and diffuse the light evenly. And various lighting presentations are available.

광원을 중심으로 둘러싼 사선의 원형 간접 반사판의 구조를 가진 헤드는 일정한 120°간격으로 세 개의 발광부로 이루어져 있어 빛을 바닥면에 균일하게 확산하며 다양한 빛의 연출이 가능하도록 되어 있습니다.

Durability & Maintenance

The shape of battery enclosure, located under the Halo-C solar module, looks like alphabet "E" to tightly fix the solar module. The knockdown method is used for easy battery change, post, and air circulation and it gives the open space for waterproof, long battery life and safety.

Halo-C 집광판 아래에 위치한 축전지 외함은 집광판을 견고하게 고정할 수 있는 "E"자 구조로 되어있으며, 유지 보수 작업 시 축전지의 교체가 용이하고, 포스트와 공기 순환이 가능한 넒다운 방식으로 되어 있어 방수와 더불어 축전지의 수명과 안전성을 확보하기 위한 열린 공간을 제공합니다.



SPECIFICATIONS

Light Source

Lamp
Color

Halo-R

SMD LED 48W (16W x 3ea)
White

Electrical

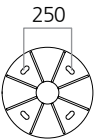
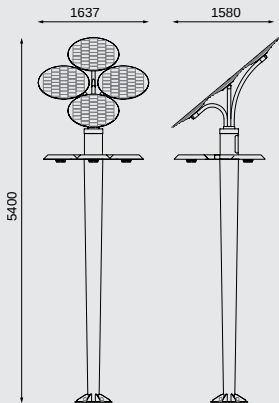
System
Input voltage
Load voltage
Solar module power
Battery power

stand-alone photovoltaic
DC 24V (using battery apart)
DC 24V (LED module)
monocrystal 200W / DC 24V (50W / 24V x 4ea)
storage battery 90Ah / DC 24V (30Ah / 12V x 6ea)
post with built-in battery
8 hour (during 4 straight cloudy days)
post with built-in controller

Physical

Size
Finish
Post
Head
Anchor plate
Anchor bolt cap
Bolt

1637mm x 1580mm x 5400mm
powder coating (dark gray)
stainless steel
aluminum (inside white color)
stainless steel
die cast aluminum
stainless steel



Anchor plate : Ø550 (mm)
Anchor size : 250 x 250 (mm) / M19



SPECIFICATIONS

Light Source

Lamp

Color

Halo-C

SMD LED 48W (16W x 3ea)

White

Electrical

System

Input voltage

Load voltage

Solar module power

Battery power

Lighting hour

Controller

stand-alone photovoltaic

DC 24V (using battery apart)

DC 24V (LED module)

monocrystal 200W / DC 24V (100W / 24V x 2ea)

storage battery 80Ah / DC 24V (40Ah / 12V x 4ea)

post with built-in battery

8 hour (during 4 straight cloudy days)

fixtures with built-in controller

Physical

Size

Finish

Post

Head

Anchor plate

Anchor bolt cap

Bolt

1479mm x 1400mm x 5000mm

powder coating (dark gray)

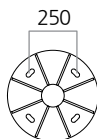
stainless steel

aluminum (inside white color)

stainless steel

die cast aluminum

stainless steel

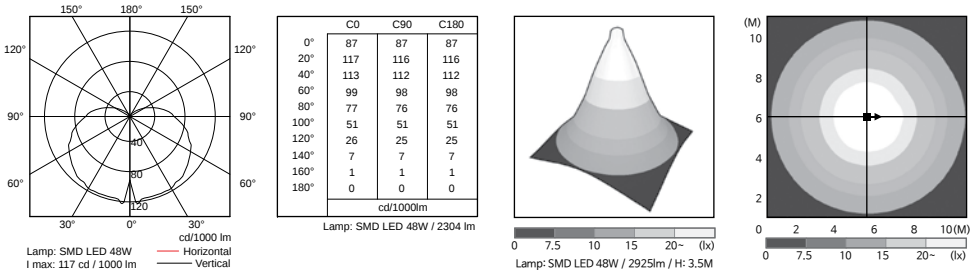


Anchor plate : Ø500 (mm)
Anchor size : 250 x 250 (mm) / M19



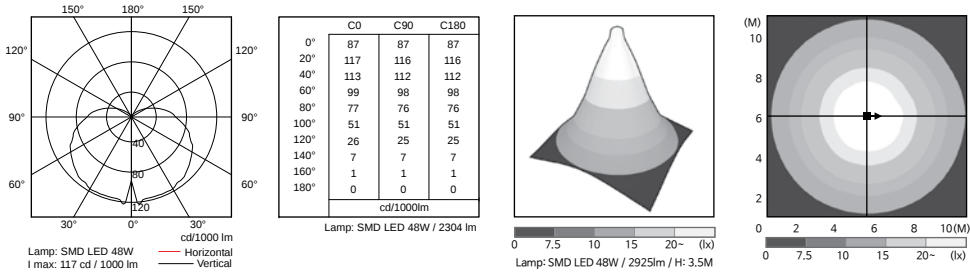
PHOTOMETRIC DATA

HALO-R

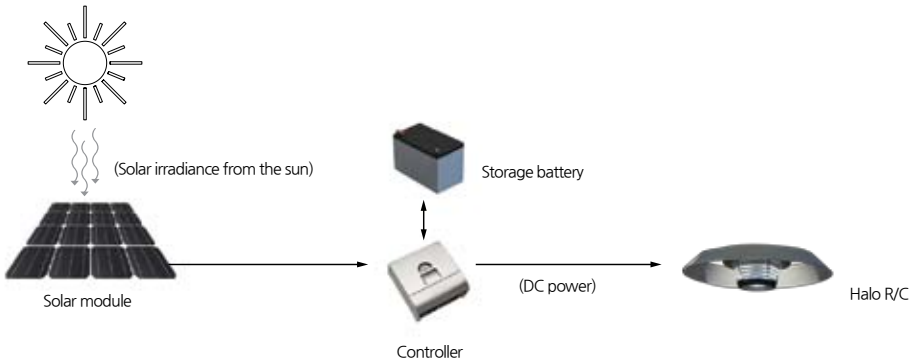


PHOTOMETRIC DATA

HALO-C



SYSTEM CONFIGURATION



ORDERING CODE

Please refer to the order codes when you place an order.
Please follow the steps below and fill in the 3 blanks with product code.
If you select optional items, please add after product code and enter the optional items.
Please refer to the sample order form below and enter order information accurately in your order form.

아래와 같은 주문 코드표를 참고하여 원하시는 제품을 주문해 주시기 바랍니다.
반드시 아래와 같은 단계로 3가지 항목에 해당코드를 선택하여 기입해 주시기 바랍니다.
만약 Option을 추가할 시에는 3가지 항목 뒤에 표시 후 기입해 주시면 됩니다.
아래 예시처럼 가능한 정확히 양식에 맞추어 주문해 주시면 고맙겠습니다.

ex) HA1 - K4

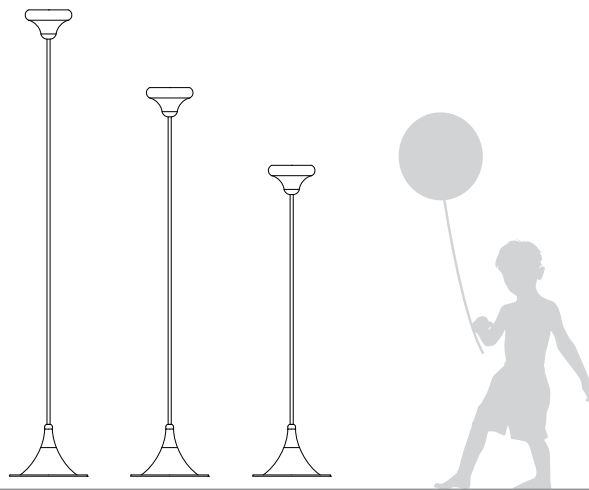
STEP 1Light fixtures

ITEM	CODE
HALO-C (48W)	HA1
HALO-R (48W)	HA2

STEP 2Color temperature

ITEM	CODE
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5





DESIGN FEATURES

Design motive - Familiarity

Bandi is a solar LED lighting apparatus for the light-emitting shape of firefly living in the clean region only to be reinterpreted by the direction of glittering light. The shape of softly curved light-emitting part and the lower base was designed with a friendly image agreeable with any location.

The post supporting the upper light-emitting part is made of flexible material(FRP) which is robust against wind and impact. And it is swayed by wind, so it can create a unique atmosphere are night.

반디(Bandi)는 청정지역에서만 살고 있는 반딧불이의 발광모습을 유기적인 형태 안에서 반짝이는 빛의 연출로 재해석한 Solar LED 조명기구입니다.

부드러운 곡선의 발광부와 하부 베이스의 형상은 어느 장소나 어울릴 수 있는 친근한 이미지로 디자인되었습니다. 상부 발광부를 지탱하는 포스트는 유연한 재질(FRP)로 제작되어 바람이나 충격 같은 외부 환경적 요인에 잘 견딜 수 있도록 설계되었고, 야간 점등 시 바람에 흔들리는 모습으로 색다른 조명 공간을 연출할 수 있도록 디자인되었습니다.

Eco-friendly light

Bandi is a highly environmental system which uses eco-friendly LED and takes advantage of clean solar energy.

반디(Bandi)는 친환경적 광원인 LED의 사용은 물론, 무한 청정에너지인 솔라에너지를 활용한 시스템으로 환경과 건강을 생각한 친환경적 조명입니다.

Safety design

If the upper light-emitting part is severely swayed, it may damage the device and may be dangerous to pedestrians. Therefore, each side of light-emitting part is attached with silicone safety guard to protect the device and pedestrians.

상부 발광부의 흔들림으로 기구가 파손되거나 보행자의 안전을 위협할 수 있기 때문에 발광부 측면에 실리콘 재질의 안전가드(Silicone safety guard)를 결합하여 기구 보호는 물론 보행자의 안전을 우선으로 제작되었습니다.



SPECIFICATIONS

Light Source

Lamp

Color

Bandi

SMD LED 0.25W

Red / Green / Blue / Yellow / White

Electrical

System

Battery

stand-alone photovoltaic

quick storage system (super capacitor DC 4.6V, 440F)
(fixture with built-in super capacitor)

Solar module

monocrystal / DC 5.0V

Lighting hour

8 hour (during 3 straight cloudy days)

Physical

Size

Finish

Post

Head

Base

Bolt

D : Ø180mm, H : 1200mm, 1500mm, 1800mm

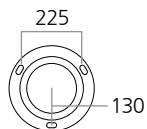
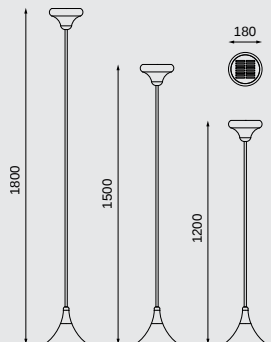
powder coating

reinforced fiber plastic

die cast polycarbonate

die cast aluminum

stainless steel



Mounting plate : Ø300 (mm)

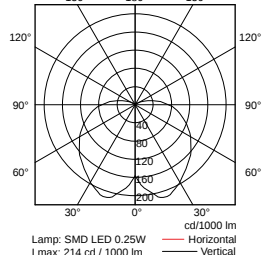
Mounting size : Ø260 (225 x 225 x 225) (mm) / M12



Bandi

PHOTOMETRIC

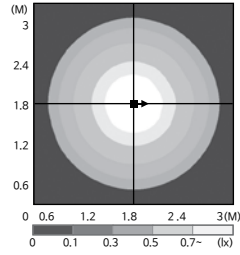
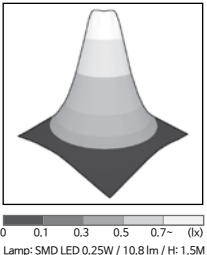
DATA



	C0	C90	C180
0°	158	158	158
20°	214	214	214
40°	178	178	178
60°	141	141	141
80°	96	96	96
100°	45	45	45
120°	3	3	3
140°	0	0	0
160°	0	0	0
180°	0	0	0

cd/1000lm

Lamp: SMD LED 0.25W / 10.8 lm



ORDERING

CODE

ex) **BD1** - **KY** - **BD14**

STEP 1Light fixtures

ITEM	CODE
Bandi (0.25W)	BD1

STEP 2Color temperature

ITEM	CODE
Red	KR
Green	KG
Blue	KB
Yellow	KY
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

STEP 3Option

ITEM	CODE
Bandi Head color (Gray)	BD11
Bandi Head color (Green)	BD12
Bandi Head color (Blue)	BD13
Bandi Head color (Yellow)	BD14
Dimming direction	BD15
Bandi ground spike	BD16

ACCESSORY

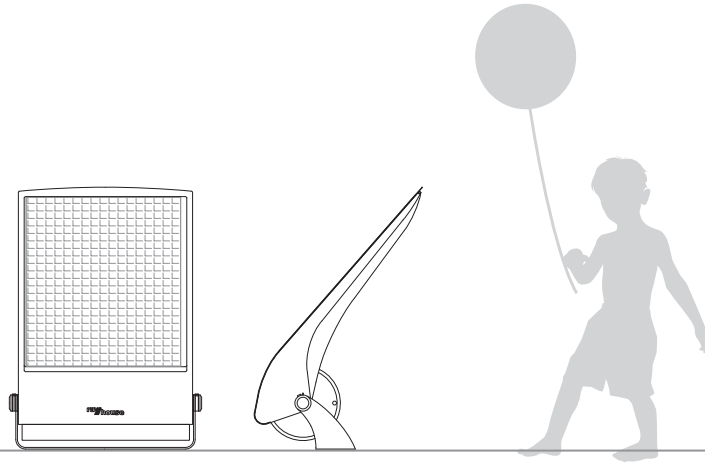




RAYPOT

레이팟

SOLAR LIGHTING



DESIGN FEATURES

Solar wind

Raypot is designed in the shape of wind blown from the sun. A solar cell module is embraced by curved lines which gives organic atmosphere to a mechanical device and makes it harmonize with natural ambience.

Multiple direction - Tilt angle

The solar cell module is designed to adjust angles according to local daylight conditions to collect quality sunlight, and the values of adjusted angles can be permanently saved and retrieved accurately even after repair and maintenance.

Convenience & Safety

The solar cell module and the exterior housing of battery are designed to be attached/detached to facilitate installation and transport and also to prevent them from damage in installation and transport.

레이팟(Raypot)은 태양으로부터 불어오는 바람의 형상을 모티브로 하여 태양광 집광판 (Solar module)을 세련되고 자유로운 곡선으로 감싸는 형상으로 사뭇 기계적으로 보일 수 있는 기구를 유기적 디자인으로 해결하여 주변자연 환경과 친화 될 수 있게 디자인 되었습니다.

태양광 집광판(Solar module)은 양질의 태양광을 집광할 수 있도록 지역의 일광조건에 맞게 각도조정이 가능한 구조로 되어있으며, Angle Marker가 적용 되어 있어 각도조정이 완료된 후 조정된 각도 값을 영구 보존함으로써 유지보수 후에도 원래의 각도 값을 정확히 복원 할 수 있습니다

가구 설치 및 운반 시 제품을 보호하고 원활한 이동성을 위하여 태양광 집광판(Solar module)과 축전지 외함이 분리 또는 조립 되는 구조로 이루어져 있어 사용자가 안전하고, 편리하게 사용 할 수 있도록 제작되었습니다.



SPECIFICATIONS

Light Source

Lamp
Color

Raypot

SMD LED 16W (Tetra)
Red / Green / Blue / White

Electrical

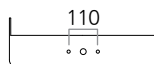
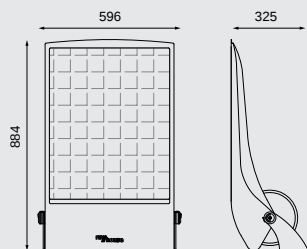
System
Input voltage
Load voltage
Solar module power
Battery power
Lighting hour
Controller

stand-alone photovoltaic
DC 24V (using battery apart)
DC 24V (LED module)
monocrystal 50W / DC 24V
storage battery 30Ah / DC 24V (30Ah / 12V x 2ea)
8 hour (during 4 straight cloudy days)
fixture with built-in controller

Physical

Size
Finish
Housing
Stirrup
Gasket
Bolt

596mm x 305mm x 884mm
powder coating (dark gray)
stainless steel
aluminum (THK 5mm)
silicone
stainless steel

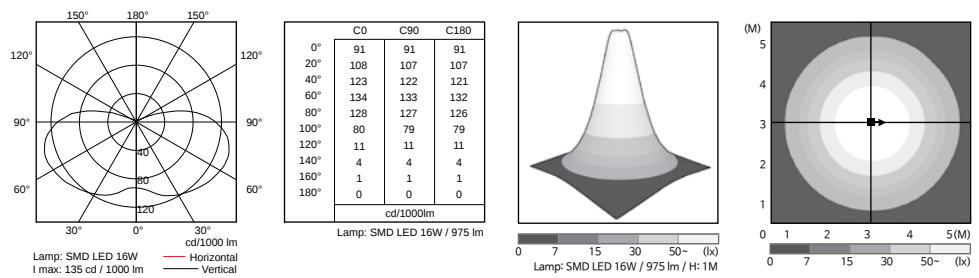


Mounting plate : 556 x 122 (mm)
Mounting hole : Ø22 (mm) / M19

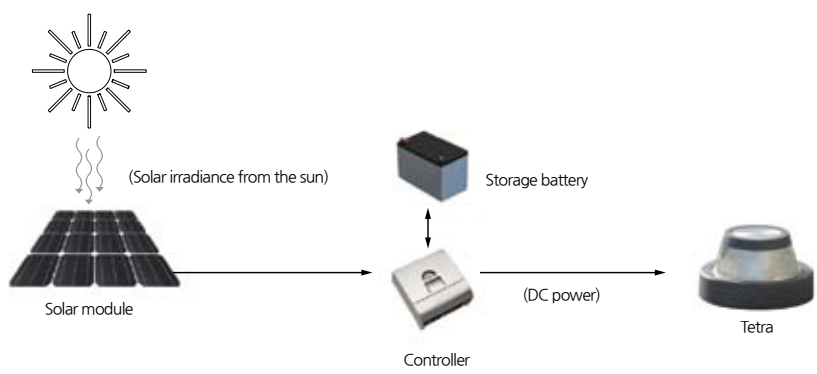


PHOTOMETRIC DATA

Raypot



SYSTEM CONFIGURATION



ORDERING CODE

ex) RP1 - K4

STEP 1Light fixtures

ITEM	CODE
Raypot-Tetra (16W)	RP1

STEP 2Color temperature

ITEM	CODE
Red	KR
Green	KG
Blue	KB
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

CLING

클링

rayhouse

CLING

클링

SOLAR LIGHTING



DESIGN FEATURES

Design Motive

Cling is a solar lighting system for guardrails. General solar lighting systems don't match guardrails because they protrude from top and side of guardrails. But Cling was designed to match any guardrails so it helps guardrails' beauty enhance. And Cling is designed to protect accident by wide diffuser can be easily seen.

Diffuser lighting & Comfortable

General solar lighting systems use direct light of LEDs for complement lack lumen and it make uncomfortable with glare. Cling was designed to provide comfortable lighting environment to reduce glare of LEDs and diffuse soft light by a wide diffusing light system. Therefore Cling offers the effective line of flow and makes beautiful nightscape by wide diffusing light system.

클링(CLING)은 난간 상부에 설치하는 태양광 조명제품으로 지주상부나 전면에 돌출되는 기존 제품들과 달리 지주에 보다 일체감 있게 설치되어 가드레일의 조형성을 높일 수 있고, 보다 쉽게 인지될 수 있는 넓은 발광면을 통해 보행자의 안전사고를 방지할 수 있도록 디자인 되었습니다.

기존 태양광 난간조명 제품들은 부족한 광량을 보완하기 위해 광원(LED)의 직진성을 활용한 직접 조명방식을 사용하므로 이는 보행자에게 눈부심 현상(Glare)을 초래해 불편감을 줄 수 있습니다. 클링(CLING)은 전반확산되는 간접 조명방식을 적용하여 광원(LED)의 눈부심을 감소시키는 동시에 은은하고 자연스러운 빛을 확산시켜 보다 쾌적하고 편안한 조명 환경을 제공할 수 있도록 제작하였습니다. 또한 보행자의 동선을 유도하는 기본목적에 충실함은 물론, 원거리 조망 시 넓은 발광면에 의한 조명연출 효과를 극대화 할 수 있습니다.

SPECIFICATIONS

Light Source

Lamp

Color

CLING

SMD LED 0.1W

Red / Green / Blue / Yellow / White

Electrical

System

Battery power

Solar module power

Lighting hour

stand-alone photovoltaic

quick storage system (Hybrid capacitor DC 2.8V / 1,000F)
(fixture with built-in Hybrid capacitor)

monocrystal / DC 4.0V

8 hour (during 2.5 straight cloudy days)

Physical

Size

Finish

Housing

Stirrup

Gasket

Bolt

108mm x 121mm x 166mm

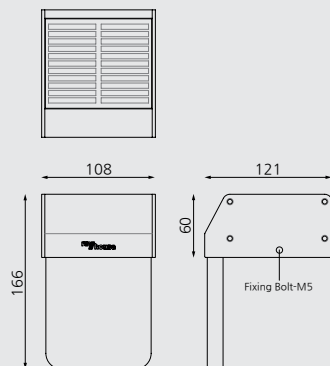
anodizing & Polyester powder coating

reinforced acrylic

extruded aluminum

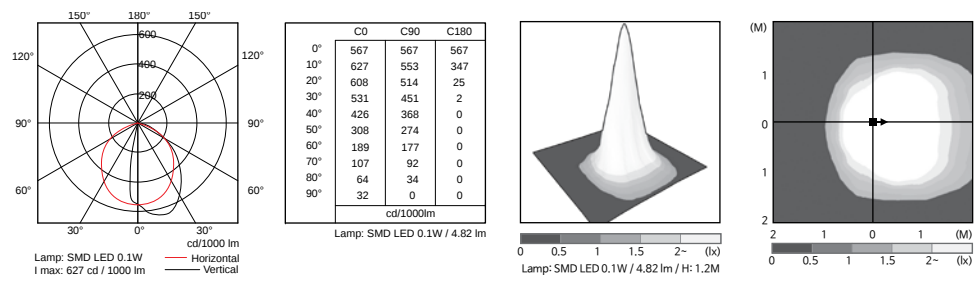
stainless steel

stainless steel

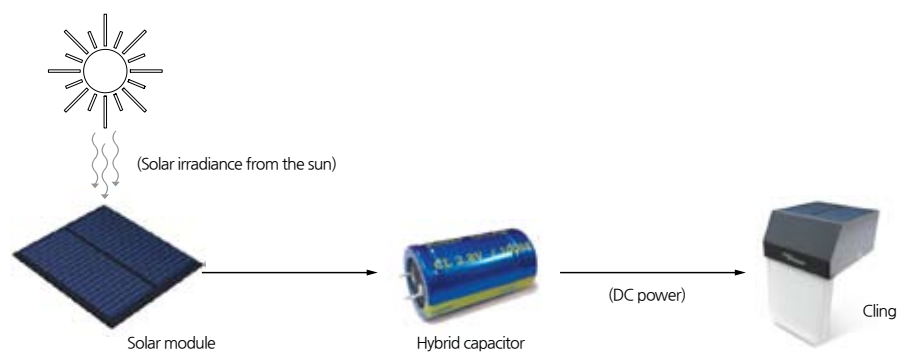


PHOTOMETRIC DATA

CLING



SYSTEM CONFIGURATION



ORDERING CODE

ex) CL1 - KY

STEP 1Light fixtures

ITEM	CODE
CLING (0.1W)	CL1

STEP 2Color temperature

ITEM	CODE
Red	KR
Green	KG
Blue	KB
Yellow	KY
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

GUIDE

가이드

GUIDE

가이드

SOLAR LIGHTING



DESIGN FEATURES

Design Motive

Recently, general solar guardrail lightings tend to provide decorative and cognitive function instead of brightness of floor for walking. So sometimes it makes walkers interrupt walking. To complement those disadvantages, Guide was designed to reduce glare and spread light to floor by installing low part of guardrails. Guide was designed to be installed without protruding from guardrail for safety and beauty. Guide can provide more comfortable light environment than other solar guardrail lightings.

기존의 태양광(Solar) 난간 조명들은 보행을 위한 바닥 면의 밝기 보다는 발광 위주의 조명으로 장식적이거나 동선 인지의 역할에 그치는 경우가 대부분이고, 간혹 눈부심 유발로 인해 오히려 보행을 저해하는 요인이 되기도 합니다. 가이드(GUIDE)는 기존 태양광 난간조명의 단점을 보완하기 위해 난간 하부에 설치되어 바닥 면에 빛이 분포될 수 있도록 하고, 눈부심을 최소화 하도록 설계되었습니다. 또한 미관과 안전을 고려하여 난간에서의 돌출 없이 설치되도록 디자인되었습니다. 가이드는 기존의 태양광 난간 조명의 단점을 보완한 제품으로 보행자에게 보다 안전하고 쾌적한 조명환경을 제공해 드릴 것입니다.

Functional Hybrid system

Guide was designed to be installed easy on low part of various guardrails and to be aimed to walking floor by adjusted LEDs. The storage system used Guide is hybrid capacity so it ensures a lasting life with a solar panel. The hybrid capacity can keep longer brightness than general capacities though it is cloudy day

가이드는 다양한 디자인의 난간 하부에 쉽게 설치할 수 있도록 디자인 되었고, 보행로 바닥에 빛을 집중하기 위해 LED가 적합한 각도로 조정되어 있습니다. 가이드에 사용된 축전 시스템은 하이브리드 캐패시티로 솔라 패널과 더불어 반영구적인 수명을 보장하고, 일반 캐패시티 보다 많은 축전량을 제공해 흐린 날에도 더욱 오래 동안 밝기를 유지할 수 있습니다.



SPECIFICATIONS

Light Source

Lamp

Color

Electrical

System

Battery power

Solar module power

Lighting hour

Physical

Size

Finish

Diffuser

Body

Side cover

Bolt



GUIDE

SMD LED 0.2W

Red / Green / Blue / Yellow / White

stand-alone photovoltaic

quick storage system (Hybrid capacitor DC 2.8V / 1,000F X 2ea)

(fixture with built-in Hybrid capacitor)

monocrystal / DC 4.0V

8 hour (during 3 straight cloudy days)

170mm x 20mm x 56mm

anodizing & Polyester powder coating

reinforced acrylic or reinforced glass

extruded aluminum

stainless steel

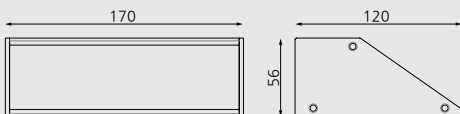
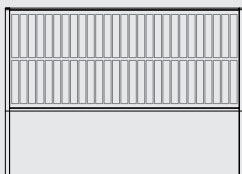
stainless steel



Back view (solar module)

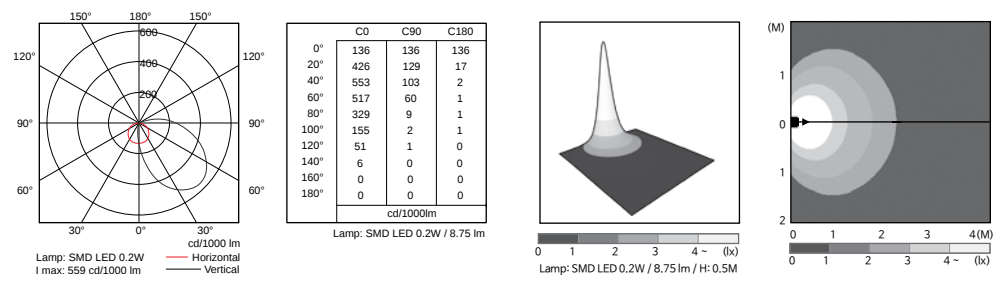


Front view

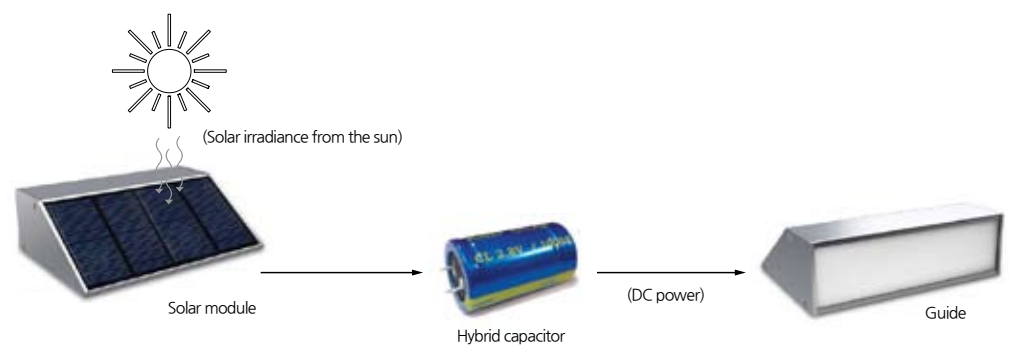


PHOTOMETRIC DATA

GUIDE



SYSTEM CONFIGURATION



ORDERING CODE

ex) GU1 - KY

STEP 1Light fixtures

ITEM	CODE
GUIDE (0.2W)	GU1

STEP 2Color temperature

ITEM	CODE
Red	KR
Green	KG
Blue	KB
Yellow	KY
White 3000~4000 K	K3
White 4000~5000 K	K4
White 5000~6000 K	K5

LAMP GUIDE

	Code	Rayhouse Designation	Socket	Wattage (w)	Color Temperature (k)	Color Rendering Group (ra)	Lumens (lm)	Peak Intensity (cd)
Fluorescent lamps					Other color temperatures available			
	E11	TC-EL	E27	11	2700...4000	80...89	660	-
	E15	TC-EL	E27	15	2700...4000	80...89	900	-
	E20	TC-EL	E27	20	2700...4000	80...89	1230	-
	E23	TC-EL	E27	23	2700...4000	80...89	1500	-
	P18	TC-L	2G11	18	2700...4000	80...89	1200	-
	P24	TC-L	2G11	24	2700...4000	80...89	1800	-
	P36	TC-L	2G11	36	2700...6500	80...89	2600...2900	-
	P55	TC-L	2G11	55	2700...6500	80...89	4100...4800	-
	T14	T5	G5	14	2700...6500	80...89	1000...1200	-
	T21	T5	G5	21	2700...6500	80...89	1700...1900	-
	T28	T5	G5	28	2700...6500	80...89	2400...2600	-
	T54	T5	G5	54	2700...6500	80...89	4000...4500	-
Reflector halogen lamps(HALOPAR)								
	R25	HALOPAR20/10°	E27	50	2900	100	-	2500...3200
	R25	HALOPAR20/30°	E27	50	2900	100	-	850...1100
	R37	HALOPAR30/10°	E27	75	2900	100	-	5500...7500
	R37	HALOPAR30/30°	E27	75	2900	100	-	1700...2400
	R31	HALOPAR30/10°	E27	100	2900	100	-	9000
	R32	HALOPAR30/30°	E27	100	2900	100	-	3000
Double ended halogen lamps								
	G15	QT-DE 12	R7s	150	3000	100	2250...2500	-
	G30	QT-DE 12	R7s	300	3000	100	5200...5600	-
	G50	QT-DE 12	R7s	500	3000	100	9500...9900	-
	K10	QT-DE 12	R7s	1000	3000	100	21000...24200	-
	K15	QT-DE 12	R7s	1500	3000	100	33000...36300	-
Reflector metal halide discharge lamps - ceramic								
	H23	HI-PAR20/10°	E27	35	3000...4200	80...89	-	21500...23000
	H23	HI-PAR20/30°	E27	35	3000...4200	80...89	-	5000...5500
	H35	HI-PAR30/10°	E27	35	3000...4200	80...89	-	44000...56000
	H35	HI-PAR30/30°	E27	35	3000...4200	80...89	-	7400...8500
	H70	HI-PAR30/10°	E27	70	3000...4200	80...89	-	63000...68000
	H70	HI-PAR30/40°	E27	70	3000...4200	80...89	-	9000...10000

	Code	Rayhouse Designation	Socket	Wattage (w)	Color Temperature (k)	Color Rendering Group (ra)	Lumens (lm)	Peak Intensity (cd)
Double ended compact lamps				Other color temperatures available				
	D70	HIT-DE	RX7s	70	3000...5200	70...89	5100...5700	-
	D15	HIT-DE	RX7s	150	3000...5200	70...89	11700...12000	-
	D25	HIT-DE	Fc2	250	3000...5100	85...95	20000...22000	-
	D40	HIT-DE	Fc2	400	4200...5600	90...95	31000...37000	-
Double ended compact lamps - ceramic								
	S70	HIT-DE(ceramic)	RX7s	70	3000...5200	70...89	6000...7000	-
	S15	HIT-DE(ceramic)	RX7s	150	3000...5200	70...89	13000...15000	-
	S25	HIT-DE(ceramic)	Fc2	250	3200...5100	80...95	23000...25000	-
Single ended compact lamps								
	M70	HIT	G12	70	3000...4200	80...89	5000...6000	-
	M15	HIT	G12	150	3000...4200	80...89	13000	-
Single ended compact lamps - ceramic								
	C35	HIT-CE	G12	35	3000...4200	85...90	3300...3600	-
	C70	HIT-CE	G12	70	3000...4200	90...95	6500...7000	-
	C15	HIT-CE	G12	150	3000...4200	90...95	14000...16000	-
	C25	HIT-CE	G12	250	3000...4200	90...98	25000...26000	-
Tubular clear lamps								
	M25	HIT	E40	250	4500...5200	90	20000...25000	-
	M40	HIT	E40	400	5200...5900	90	35000...42000	-
	Q10	HIT	E40	1000	7250	90	85000...110000	-
	Q20	HIT	E40	2000	7250	90	180000...240000	-
Double ended - high wattage lamps								
	W10	HIT-DE	Cable	1000	4400...5900	80...90	90000	-
	W20	HIT-DE	Cable	2000	4400...5800	80...90	200000...230000	-
	W15	HIT-DE	RX7s	1500	5200	80...90	120000	-
Reflector metal halide lamps								
	U57	PAR64	G38	575	6000	80...90	-	2000000
	U10	PAR64	G38	1000	4000	80...90	76000	-
High pressure sodium discharge lamps								
	N25	HPS-T	E40	250	2000	25	28000	-
	N40	HPS-T	E40	400	2000	25	48000	-
	A10	HPS-T	E40	1000	2000	25	130000	-

상기 **Lamp guide** 자료는 일반적인 램프 기준으로 작성하였습니다.
본 램프 자료는 제조사에 따라 다소 차이가 있을 수 있습니다.

The above **Lamp guide** data was written based on the typical lamp.
Depending on the manufacturer, this material may be somewhat different.



PRODUCT CATALOGUE VOL.18

발 행 처 | (주)레이하우스

퍼 낸 곳 | 레이하우스 조명디자인 연구소

초판발행 | 2010년 8월 1일 초판 1쇄 발행

주 소 | 경기도 용인시 처인구 양지면 도창로 32번길 43

전 화 | +82-31-322-7200

팩 스 | +82-31-322-8338

이 메 일 | rayhouse@rayhouse.com

홈페이지 | <http://www.rayhouse.com>

이 책은 저작권법에 따라 보호받는 저작물이므로 무단전재와 무단복제를 금지하며,
본 내용의 전부 또는 일부를 이용하려면 반드시 저작권자의 서면동의를 받아야 합니다.

This book is protected by copyright Act and unauthorized copying or reprint is absolutely prohibited.
If you want to use some or all of the contents of this book, you must obtain the written consent
from the copyright holder.

www.rayhouse.com

Rayhouse co.,ltd
618-4, Pyeongchang-ri, Yangji-myeon, Cheoin-gu,
Yongin-si, Gyeonggi-do, (SEOUL 449-821 KOREA)

(주)레이하우스
경기도 용인시 처인구 양지면 평창리 618-4 (449-821)

Head office	Projects team
TEL: +82-31-322-7200	TEL: +82-2-3401-0300
FAX: +82-31-322-8338	FAX: +82-2-3401-4786

Email: rayhouse@rayhouse.com