

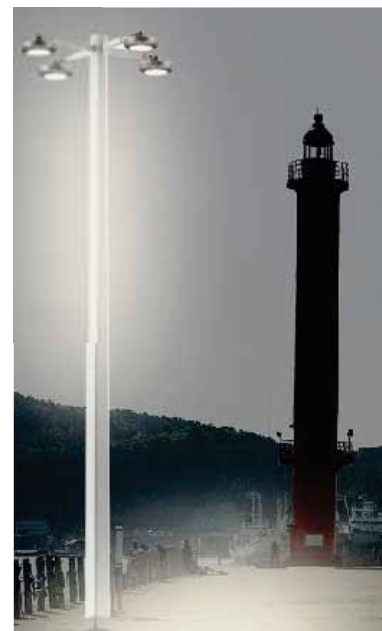
Street Light
Security Light

CD4000S Series

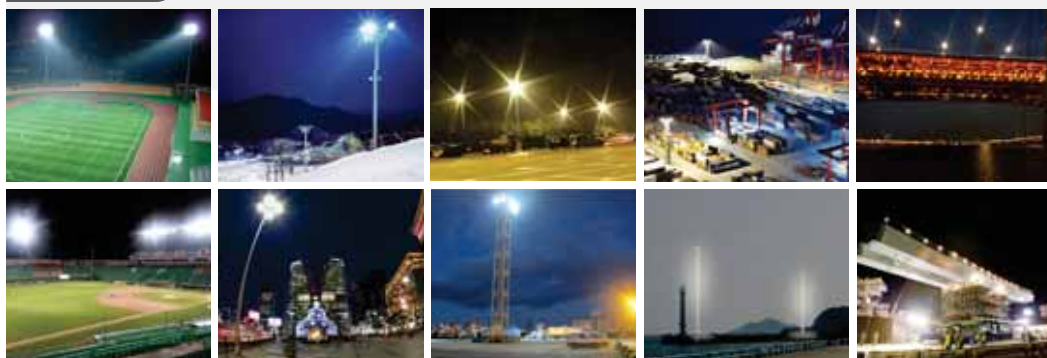


ICEPIPE LED Street Light

- ① Designed to endure strong winds up to 70m/sec
可以经受70m/sec强风
70m/sec의 강풍에도 견딜수 있는 구조
70m/sec의 強風にも耐えられる構造
- ② Adjustable Angle Hinge
角度调节功能
각도조절 기능
角度調節機能
- ③ Blocks Direct Sunlight
拦截直射光线
직사광선 차단 구조
直射日光遮断構造
- ④ Auto Cleansing by Rain
雨水自动清洗
빗물에 의한
자동 청소 기능
雨水による自動ク
ーニング機能
- ⑤ Fundamental Solution or
Light Pollution
完全解决了光污染
빛공해 원천적 해결
光害根本解決



Applications



Stadiums

Street Light

Outdoor Parking Lots

Ports

Construction Sites

CD4000S Specifications

Model	Power	Voltage	Hz	Wattage	Total Lumen	Pupil Lumen	Luminous Efficacy	CCT	CRI	Temperature	IP
CD4000S-P300W	HP2	AC100~240V (AC90~264V)	50~60Hz	300W	29,900lm	55,860Plm	98lm/W	5,700K	83Ra	-40°C~60°C	IP67
CD4000S-P400W		AC120~277V (AC108~305)		400W	38,400lm	72,760Plm	96lm/W	5,700K	83Ra	-40°C~60°C	IP67

※ In this catalogue, default color temperature is 5,700K and when color temperature of 3,000K is applied, total lumen and luminous efficacy decrease by 10%
 ※ Standard Deviation : Electricity Consumption $\pm 7\%$, Total Lumen $\pm 7\%$, Light Efficacy $\pm 7\%$, CCT $\pm 6\%$, CRI $\pm 2\%$ in this catalogue
 ※ Specifications are subject to change without prior notice. Please refer to our website for the newest specifications (www.icepipeLED.com)

※ 1) Pupil Lumen (有效光通量, 가시총광속, 有效全光束) -- Reference p.24(p.24 参照, p.24 참조, p.24 参照)
 Pupil Lumen = Photopic Lumens x S/P Ratio
 ○ Photopic Lumen : 照度計測の値 / 조도계로 측정한 값 / 照度測定器で測定した値
 ○ S/P Ratio : S/P 比率, S/P 비율, S/P 比率

CD4000S Series

Street Light, Security Light

Features(特点, 특징점, 特徴)



Embedded Double Power Supply

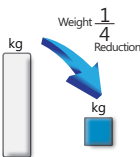
2重電源装置, 내장형 더블전원공급기, 内蔵型ダブル電源

Embedded Double Power Supply with “105℃ 10,000 hours electrolysis capacitor” installed in double row arrangement fundamentally solved lifespan reduction derived by the capacitor's capacity decline to maximize lumen maintenance and overall lifespan.

采用105℃ 1万小时的电解电容2重并列设计的2重电源装置・解决了因电容容量的减少导致使用寿命缩短的现象

105℃ 1만시간 전해캐패시터를 2중병렬로 설치한 내장형 더블전원공급기를 사용하여 캐패시터의 용량감소로 인한 수명저하를 근본적으로 해결하였으며, LED의 광유지율을 높이고, 수명을 크게 늘렸습니다.

105℃1万時間電解コンデンサを2重並列に搭載した内蔵型ダブル電源を使用してキャパシタの容量減少による寿命低下を根本的に解決し、LEDの光維持率を高め、寿命を大幅に増やしました



Ultra Small & Light simplifies Installation, Increases Safety

通过Ultra Small & Light使安装简单化、安全最大化, Ultra Small & Light로 설치 용이, 안전증대, Ultra Small & Lightで 設置容易, 安全確保

ICEPIPE heatsink reduced LED chip temperature and weight of the product significantly. It simplifies installation steps and increases safety

通过使用ICEPIPE的散热技术降低了LED灯珠的温度同时产品重量减轻达到安装简便、提高安全性的目的

ICEPIPE 히트싱크를 적용하여 LED Chip의 온도를 낮추면서 제품의 무게는대폭 줄였습니다. 설치 및 시공이 용이하고 안전이 증대됩니다

ICEPIPEヒートシンクの装着によりLED Chipの温度を下げた同時、製品の重量を軽く、設置が容易で安全性が向上しました



Strong against Corrosion

防腐蚀性, 부식에 강함, 腐食に強い

Strong against corrosion as its heat sink is made of copper, and stainless-steel and polycarbonate for the other parts

所有部件由铜、不锈钢、聚碳酸酯组成防腐蚀性能十分优秀

방열 히트싱크를 세계최초로 구리를 사용하여 제작하고, 기타부품을 스텐레스와 폴리카보네이트를 사용하여 제작하였기 때문에 부식에 강합니다

銅材質のヒートシンクとステンレス鋼、ポリカーボネートの組合で腐食に強いです



Embedded Protection Circuit

内置安全保护回路, 안전보호회로 내장, 安全保護回路内蔵

An automatic power shutdown and returning circuit, which incorporates a sensor switch that turns off power in case of a fire, abnormal high temperature, overcurrent or overvoltage, is added. It prevents secondary fire and self-damage to the product

自动切断电源的传感器在遇到火灾、异常高温、过电流、过电压等现象时会自动切断・接通电源・从而避免二次火灾及对产品本身的损伤

화재, 이상고온, 과전류, 과전압 발생시 전원을 차단하는 센서스위치를 이용한 전원 자동 차단 및 자동 복귀 회로를 추가하였습니다. 제품에 의한 2차 화재발생 및 제품의 자체 손상을 방지합니다

電源遮断スイッチが搭載され、火災、異常高温、過電流などの現象が発生した場合、電源自動遮断、復帰回路を追加により、2次災害や製品の損傷を防止します

IP67



Ingress Protection Rating IP67

防水等级IP67, 방수등급 IP67, 防水等級IP67

By simplifying waterproof construction and equipping silicone waterproof sealing, it achieved ingress protection rating IP67 Fully protected from dust and usable in water to 1 meter depth for 30 minutes

通过改善防水构造及安装构造・将防水等级提高到IP67・不仅完全防止灰尘进入而且能够在1m水下30分钟不进水

방수구조를 단순화하고, 실리콘 방수 씰링을 이용하여 IP67을 구현하였습니다 먼지로부터 완벽하게 보호, 1m이하 물 속에 잠겨서 30분간 사용 가능합니다

防水構造を単純化させてシリコン防水リングでIP67を実現しました。粉塵が内部に侵入しないし、水深1mに30分間没する事が可能です

Composition(内部构造, 내부구조, 内部構造)

Aluminum + Corrosion-proof painting, 알루미늄 + 부식 방지 페인팅, 알루미늄+腐食防止ペイント

Rotational Bracket

可转动支架, 회전브라켓, 回転ブラケット

Pivots up to 200° and rotates 360°
上下可转动 200° 左右可转动360°

상하 200°로 움직임이 가능하며 전체적으로 좌우 360°회전 가능함
上下200°動きが可能で、全体的に左右360°回転可能である

Copper, 铜, 구리, 銅

Thermal Base

导热板, 서멀베이스, 放熱ベース

ICEPIPE is welded to Copper thermal base and is excellent for heat transfer(The World's First)

ICEPIPE直接焊接在铝板上的缘故传导性能非常卓越(世界首创)

구리 서멀베이스에 ICEPIPE가 금속 용접되어 열전달 우수(세계최초)

銅放熱ベースにICEPIPEが溶接され熱の伝導が優れてます(世界最初)

Embedded Double Power Supply

2重电源装置, 내장형 더블전원 공급기, 内蔵型ダブル電源

HP2

By applying the power correction circuit and stabilizing DC output, respectively, the power factor is increased to 0.93 and flickering (voltage fluctuation under 0.2%) is prevented. 105°C 10,000-hour electrolysis-capacitor is arranged in a double row to fundamentally solve the problem of fall in lifespan due to capacity reduction of the capacitor

采用功率因数补偿电路·使直流输出电压的变化小于0.2%防止了闪烁现象·功率因数提高到0.93
为了提高电源的寿命通过采用105°C·1万小时的电解电容2重并列设计·解决了因电容容量的减少导致使用寿命缩短现象

역률보상회로를 적용하여 역률을 0.93으로 높이고, 플리커가 없도록 DC출력을 일정(전압변동 0.2% 이하)하게 하였습니다. 파워의 수명을 대폭 증가시키기 위하여 105°C 1만시간 전해개패시터를 2중 병렬로 설치하여 캐패시터의 용량감소로 인한 수명저하를 근본적으로 해결하였습니다

力率補正回路を適用し、力率を0.93に高め、FlickerがないようにDC出力を安定させました(電圧変動0.2%以下) 電源の寿命を長くするために105°C1万時間の電解コンデンサを2重並列に搭載してキャパシタの容量減少による寿命の短縮を根本的に解決しました

Silicone, 有机硅塑料, 실리콘, シリコン

Waterproof Sealing

防水密封圈, 방수씰링, 防水リング

Corrosion proof painting
防腐蚀性涂层, 防腐蚀性涂层,
부식 방지 페인팅,
腐食防止ペイント

Upper Cover

(顶盖, 상커버, 上部カバー)

Copper, 铜, 구리, 銅

ICEPIPE Heatsink

- The World's First FDP(Fluid Dynamic Pressure) Technology
- 200 Times Faster Heat Transfer Rate than Aluminum(Al)
- Maximization of Air Flow through Aerodynamic Design
- Maximization of Heat Dissipation Surface
- Value of Thermal resistance Weight Multiplier 0.32

使用了世界最新开发出的FDP(Fluid Dynamic Pressure)技术
比铝(Al)制散热槽散热速度快200倍
通过空气动力学设计使空气流动最大化
散热面积最大化
热阻重量乘数值0.32

세계최초로 개발된 FDP(Fluid Dynamic Pressure) 기술 적용
알루미늄(Al)보다 열전도가 200배 빠른
공기 역학적 설계로 공기흐름 최대
방열면적 최대
열저항 중량 승수값 0.32

世界最初に開発された FDP(Fluid Dynamic Pressure)技術採用
アルミに比べて熱伝導率が200倍早いです
空気力学的な設計
放熱面積拡大
熱抵抗重量乗数値 0.32

※ A Value of Thermal resistance Weight Multiplier that is less than "1" indicates a high-efficiency heatsink

热阻重量乘数值小于《1》可称之为高效的散热器

열저항 중량 승수값이 "1"미만이면 고효율 히트싱크입니다

熱抵抗重量乗数値が1未満の高効率ヒートシンク搭載

Tempered Glass, 钢化玻璃, 강화유리, 強化ガラス

Diffuser Plate

散光板, 확산판, 乳白色板

Glare Prevention Diffuser Plate (Optional)

防止耀眼的散光板(可选择), 눈부심방지 확산판(선택가능),
眩し防止乳白色板(選択可能)

Standard - Tempered Glass(钢化玻璃, 강화유리, 強化ガラス)

Option - Glass Diffuser(散光玻璃, 확산유리, 乳白色ガラス)

* While the diffuser plate prevents glare, total lumen will also drop for 5% compared to the clear glass or the clear PC
虽然使用散光板可以防止耀眼·但是与透明玻璃和透明PC相比光通量会减少10%

확산판을 사용하면 눈부심이 방지되지만 총광량이 투명유리 및 투명PC에 비해 약 10%정도 저하됩니다

乳白色板で眩しは軽減されますが、全光束が透明ガラス及び透明PCに比べ約10%低下する

Polycarbonate/ABS, 聚碳酸酯/ABS
폴리카보네이트/ABS, 폴리카보네이트/ABS

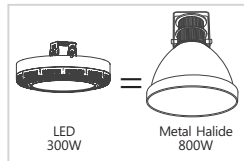
Cover(盖子, 커버, カバー)

CD4000S Series

Street Light, Security Light

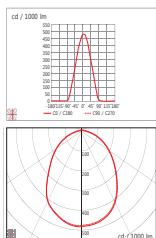
CD4000S-P300W

Replacement for Metal Halide 800W, 可代替 800W金属卤化物灯, 메탈할라이드 800W 대체가능, メタルハライド 800W 相当



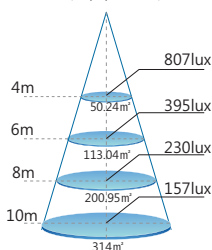
Light Distribution Curve

配光曲线, 배광곡선, 配光曲線



Illumination Intensity

照度示意图, 직하조도표, 直下照度



Applications(适用范围, 용도, 適用範圍)

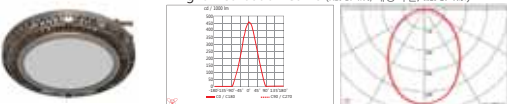
- Street Light(路灯, 가로등, 街路灯)
- Security Light(保安灯, 보안등, 防犯灯)

Specifications(参数, 사양, 仕様)

1. Input Voltage(输入电压, 입력전압, 入力電圧): AC100~240V (AC90~264V), AC120~277V (AC108~305V)
2. Installation(安装, 설치, 設置): Rotational Bracket
3. Wattage(消耗功率, 소비전력, 消費電力): 300W
4. Total Lumen(光通量, 총광량, 全光束): 29,400lm (26,460lm)
5. Luminous Efficacy(光效, 광효율, 光効率): 98lm/W (88lm/W)
6. Pupil Lumens(有效光通量, 가시총광속, 有効全光束): 55,860Plm (50,274Plm)
7. CCT(色温, 색온도, 色温度): 5,700K (3000K)
8. CRI(显色性, 연색성, 演色性): 83Ra
9. Beam Angle(照射角度, 조사각도, 빔-มุม): 80°x 150°
10. IP Rating(防水等级, 방수등급, 防水等級): IP67

Option : Diffuser Plate Applied (采用散光罩时, 확산판 적용, 拡散カバー付)

- Light Distribution Curve (配光曲线, 배광곡선, 配光曲線)



※ Compared to Clear Plate, Transmittance Rate Decreases 9%
与透明罩相比透光率减少约9%, Clear Plate 적용시 보다 광투과율이 약 9% 감소. 透明カバーより透過率が約9%減少

-Please visit our website and check the Illumination Intensity
在公司网页(www.icepipeLED.com)上可以看到照度示意图
당사 홈페이지 (www.icepipeLED.com) 를 방문하시면 직하조도표를 보실수 있습니다.
当社のホームページ(www.icepipeLED.com) で取付け直下照度をご覧いただけます

Simulation Example

1. Model(型号名称, 모델명, モデル) : CD4000S-P300W
2. Maintenance Factor : 75%
光维持率, 보수율, 保守率



3. Efficacy relative to installation conditions :
(On 4 lane road, installed along both sides)

安装条件: 4车道2列安装

설치 조건별 성능: (4차선 도로, 2열 설치),
設置条件: 4車線2列設置

Interval 등간격 照明間隔	Light Installation Height : 12m 灯杆安装高度, 등설치 높이, 設置高さ		Light Installation Height : 15m 灯杆安装高度, 등설치 높이, 設置高さ	
	Average Floor Illuminance 地面平均照度 바닥평균조도 床平均照度	Uniformity 均匀度 균제도 均齊度	Average Floor Illuminance 地面平均照度 바닥평균조도 床平均照度	Uniformity 均匀度 균제도 均齊度
20m	84.7lux	U0=0.68, U1=0.77	74.1lux	U0=0.74, U1=0.86
30m	56.5lux	U0=0.58, U1=0.57	49.4lux	U0=0.64, U1=0.66

※ Clients can find simulation data for evaluation with installation dimensions, interval, and height.

客户提供相关安装参数时, 本公司可提供照度模拟计算服务

조사면적, 등간격, 설치높이를 알려주시면 당사에서 시뮬레이션 해드립니다

照射面積は、照明の間隔、設置高さ情報をいただければ、当社でシミュレーションして致します

Weight and Dimensions

1. Weight(重量, 무게, 重量) : 8.5Kg
2. Dimensions : Φ500mm X 255mm(H)
产品尺寸, 제품사이즈, 製品サイズ
3. Packaging Size : 550mm(W) X 550mm(L) X 310mm(H)
单个产品包装, 개별박스포장, 小箱梱包

Installation Conditions(使用条件, 사용조건, 使用条件)

1. Outdoors
室外, 실외, 屋外
2. Operation Temperature(使用温度, 사용온도, 使用温度) : -40°C ~ 60°C
3. Permitted Installation Angle: Rotates 360°, Pivots up to 200°
适用安装角度: 上下200°, 全方向360°, 설치허용각도: 상하200°, 전방향360°,
設置許容角度: 上下200°, 全方向360°

Dimming(调光, 조광, 調光)

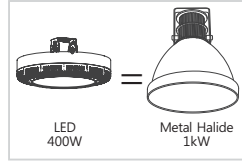
1. Dimmer Incompatible(禁止使用调光器, 디머 사용불가, 調光器使用不可)



※ In this catalogue, default color temperature is 5,700K and when color temperature of 3,000K is applied, total lumen and luminous efficacy decrease by 10%
※ Standard Deviation : Electricity Consumption ±7%, Total Lumen ±7%, Light Efficacy ±7%, CCT ±6%, CRI ±2% in this catalogue
※ Specifications are subject to change without prior notice. Please refer to our website for the newest specifications (www.icepipeLED.com)

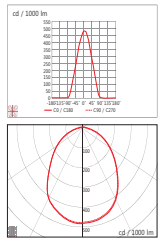
CD4000S-P400W

Replacement for Metal Halide 1KW, 可代替 1KW金属卤化物灯, 메탈할라이드 1KW 대체가능, メタルハライド 1KW 相当



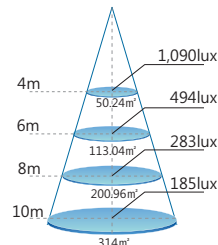
Light Distribution Curve

配光曲线, 배광곡선, 配光曲線



Illumination Intensity

照度示意图, 직하조도표, 直下照度



Applications(适用范围, 용도, 適用範圍)

- Street Light(路灯, 가로등, 街路灯)
- Security Light(保安灯, 보안등, 防犯灯)

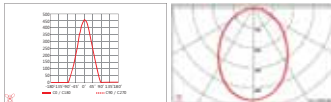
Specifications(参数, 사양, 仕様)

1. Input Voltage(输入电压, 입력전압, 入力電圧) : AC100~240V (AC90~264V), AC120~277V (AC108~305V)
2. Installation(安装, 설치, 設置) : Rotational Bracket
3. Wattage(消耗功率, 소비전력, 消費電力) : 400W
4. Total Lumen(光通量, 총광량, 全光束) : 38,400lm (34,560lm)
5. Luminous Efficacy(光效, 광효율, 光効率) : 96lm/W (86lm/W)
6. Pupil Lumens(有效光通量, 가시총광속, 有効全光束) : 72,960Plm (65,664Plm)
7. CCT(色温, 색온도, 色温度) : 5,700K (3000K)
8. CRI(显色性, 연색성, 演色性) : 83Ra
9. Beam Angle(照射角度, 조사각도, 빔มุม角) : 80°x 150°
10. IP Rating(防水等级, 방수등급, 防水等級) : IP67

Option : Diffuser Plate Applied (采用散光罩时, 확산판 적용, 拡散カバー付)



- Light Distribution Curve (配光曲线, 배광곡선, 配光曲線)



※ Compared to Clear Plate, Transmittance Rate Decreases 9%
与透明罩相比透光率减少约9%, Clear Plate 적용시 보다 광투과율이 약 9% 감소, 透明カバーより透過率が約9%減少

- Please visit our website and check the Illumination Intensity

在公司网页(www.icepipeLED.com)上可以看到照度示意图照度表,
당사 홈페이지 (www.icepipeLED.com) 를 방문하시면 직하조도표를 보실수 있습니다.
当社のホームページ(www.icepipeLED.com) で取付け直下照度をご覧いただけます

Simulation Example

1. Model(型号名称, 모델명, モデル) : CD4000S-P400W
2. Maintenance Factor : 75%
光维持率, 보수율, 保守率



3. Efficacy relative to installation conditions :
(On 4 lane road, installed along both sides)

安装条件: 4车道2列安装
설치 조건별 상등: (4차선 도로, 2열 설치),
設置条件: 4車線2列設置

Interval 灯間距 등간격 照明間隔	Light Installation Height : 12m 灯杆安装高度, 등설치 높이, 設置高さ		Light Installation Height : 15m 灯杆安装高度, 등설치 높이, 設置高さ	
	Average Floor Illuminance 地面平均照度 바닥평균조도 床平均照度	Uniformity 均匀度 균제도 均齊度	Average Floor Illuminance 地面平均照度 바닥평균조도 床平均照度	Uniformity 均匀度 균제도 均齊度
20m	111lux	U0=0.68, U1=0.77	96.8lux	U0=0.74, U1=0.86
30m	73.8lux	U0=0.58, U1=0.57	64.6lux	U0=0.64, U1=0.66

※ Clients can find simulation data for evaluation with installation dimensions, interval, and height.

客户提供相关安装参数时, 本公司可提供照度模拟计算服务

조사면적, 등간격, 설치높이를 알려주시면 당사에서 시뮬레이션 해드립니다

照射面積は、照明の間隔、設置高さ情報をいただければ、当社でシミュレーションして致します

Weight and Dimensions

1. Weight(重量, 무게, 重量) : 8.5Kg
2. Dimensions : $\Phi 500\text{mm} \times 255\text{mm(H)}$
产品尺寸, 제품사이즈, 製品サイズ
3. Packaging Size : 550mm(W) X 550mm(L) X 310mm(H)
单个产品包装, 개별박스포장, 小箱梱包

Installation Conditions(使用条件, 사용조건, 使用条件)

1. Outdoors
室外, 실외, 屋外
2. Operation Temperature(使用温度, 사용온도, 使用温度) : -40°C ~ 60°C
3. Permitted Installation Angle: Rotates 360°, Pivots up to 200°
适用安装角度: 上下200° · 全方向360°, 설치허용각도: 상하200°, 전방향360°,
設置許可角度: 上下200°, 全方向360°

Dimming(调光, 조광, 調光)

1. Dimmer Incompatible(禁止使用调光器, 디머 사용불가, 調光器使用不可)



※ In this catalogue, default color temperature is 5,700K and when color temperature of 3,000K is applied, total lumen and luminous efficacy decrease by 10%

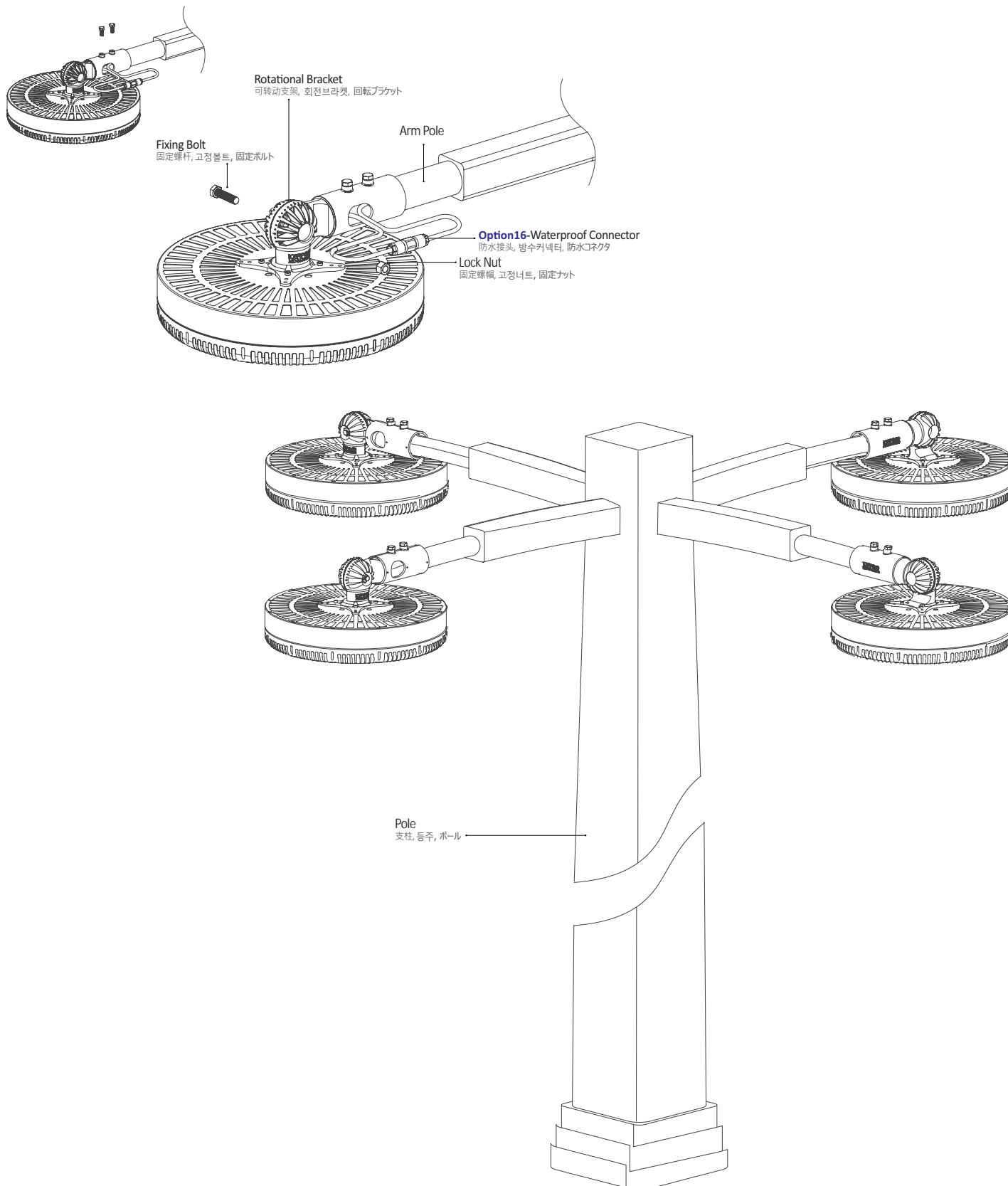
※ Standard Deviation : Electricity Consumption $\pm 7\%$, Total Lumen $\pm 7\%$, Light Efficacy $\pm 7\%$, CCT $\pm 6\%$, CRI $\pm 2\%$ in this catalogue

※ Specifications are subject to change without prior notice. Please refer to our website for the newest specifications (www.icepipeLED.com)

CD400S Series Installation Types(安装形式, 설치타입, 設置タイプ)

Street Light

Install 1 CD400S



CD4000S Series Options

CR2000	CH2000	CH2500	CD800	CD1500	CD3000	CD4000	CT2000	CT2500	CT3000	CT5000	CT8000	OB8 Sheet	CD800S	CD1500S	CD3000S	CD4000S	Omni LED Bulb	POP LED
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Memo

- CR2000
- CH2000
- CH2500
- CD800
- CD1500
- CD3000
- CD4000
- CT2000
- CT2500
- CT3000
- CT5000
- CT8000
- OBB Street
- CD800S
- CD1500S
- CD3000S
- CD4000S**
- Omni LED Bulb
- POP LED

