

Astra

For an exceptional visual experience

INDOOR SIGNBOARD



01

Display board

Menu board

Artwork walls

OUTDOOR LANDSCAPE



05

POLA Bollard

Garden

Front porch

Park pathway

Lake side



07

CIELO Balcony

Patio ceiling

Balcony lighting



09

Outdoor billboard

Bridge pier

River dock

Wall

Image wall



Patented optical technology

A leading edge optical design creates the Astra LED projection light.



Superb uniform wallwashing

Sophisticated asymmetric optical design, increases luminous efficiency and achieves ultra-uniform light distribution.



Easy installation

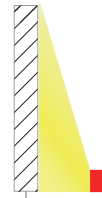
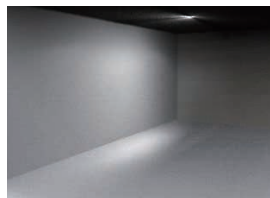
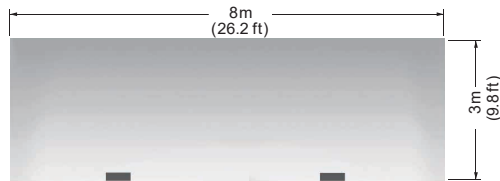
The Astra Series provides uniform wallwashing without additional tilting or further adjustment.

Optical characteristics

Asymmetric lens design for excellent uniformity

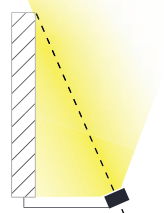
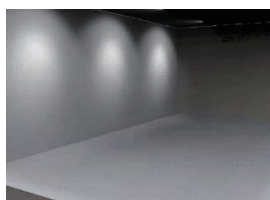
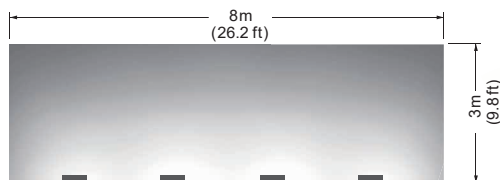
Astra wide-angle light

Shorter installation distance and more uniformity.



General spot light

For optimized uniformity effect, tilting the lamp reduces the light utilization rate.



半珠同道法還十有七載備通釋典利物為心貞觀十九年二月六日奉
以中華之冠質守印度之真文遠涉恆河終期滿字頻登雪嶺更獲
區區幽巖栖息三禪巡遊十地超六塵之境獨步迦維會一乘之旨隨機化物
去時法師者夙懷聰令三志夷間神清氣爽之年體拔浮華之世凝情定室
異流同會於海方已分義摠成手實室與湯武校其優劣堯舜以其聖德者我
威怒滅而遂顯豈謂重昏之夜燭慧炬之光宅朝降法雨之澤於是百川
通神司之川省闕崑崙山出華之翠嶺竊以法性凝祥飛騰心而不通智地無
感怨滅而遂顯豈謂重昏之夜燭慧炬之光宅朝降法雨之澤於是百川
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感怨滅而遂顯豈謂重昏之夜燭慧炬之光宅朝降法雨之澤於是百川

This wall is 5.8m wide, 2.2m high.

Astra Indoor Series

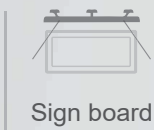
The Astra Series delivers ultra wide angle lighting distribution with its patented asymmetric photometric design. Sophisticated photometrics optimize its efficiency and uniformity, while reducing the number of luminaires required.



AMECO



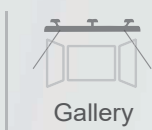
Application areas



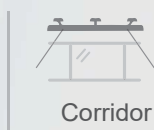
Sign board



Green wall



Gallery

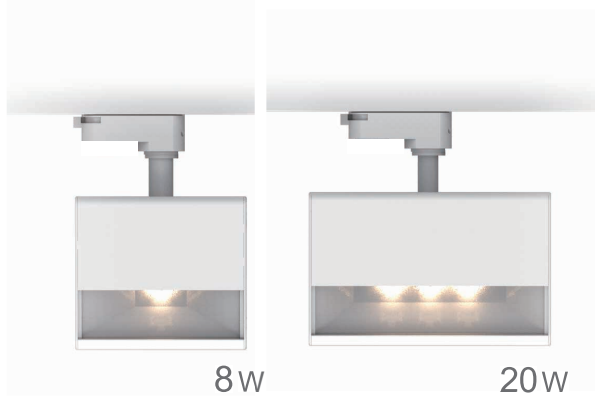


Corridor

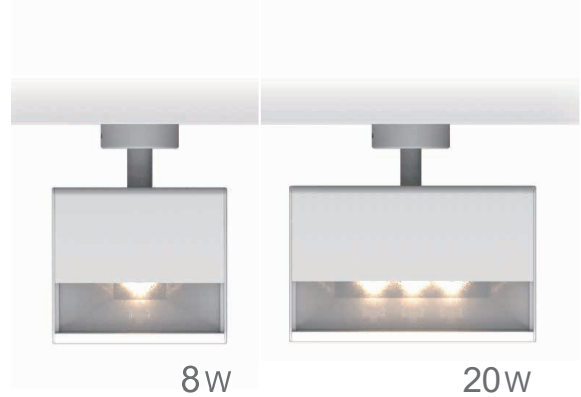


Image wall

Track Light



Ceiling Mounted Light

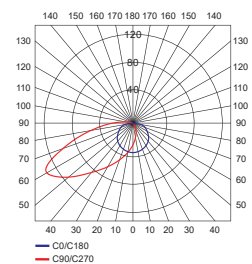
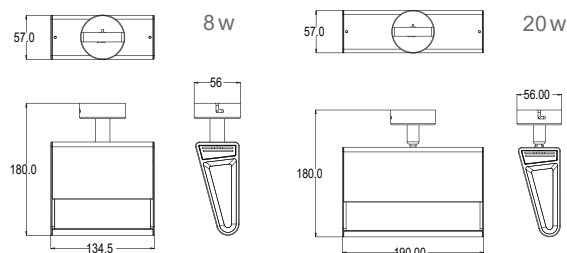


Technical specifications

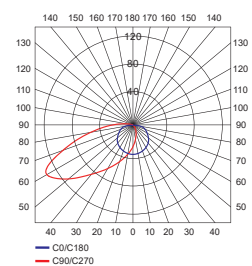
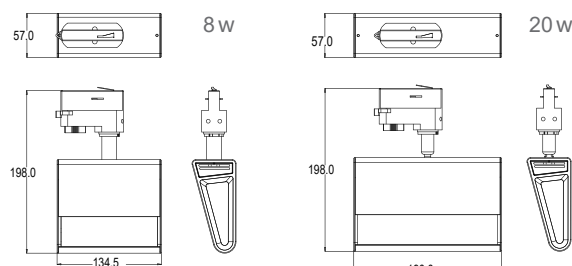
Power consumption	8W	20W
Color temperature	3000K/4000K/5000K	3000K/4000K/5000K
CRI	90	90
Luminous flux (typ.)	340/385/385	1020/1150/1150
Beam angle	95°*135° (Flood light)	95°*135° (Flood light)
Weight (g)	650	920
Operating temperature	-20 ~ +40°C	-20 ~ +40°C
Lamp power factor	> 0.5	> 0.9
Housing material	Aluminun	Aluminun
Finish color	White / Black	White / Black
Cover	glass	glass
Control	on/off	on/off

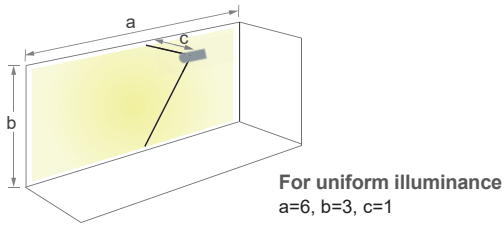
Dimensions & light patterns

Track Light



Ceiling Mounted Light





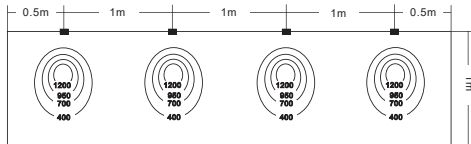
2 pieces are used when environment lux is below

Lighting effect & simulation

Menu board W4m x H1m

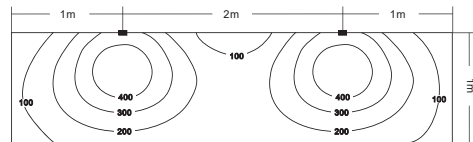
Install 50cm to the menu board

Regular LED MR16 10W x 4pcs



CCT: 3000 K
Avg: 337 lux
Min: 10 lux
Max: 1980 lux
Uniformity: 0.03

Astra track light 8W * 2pcs

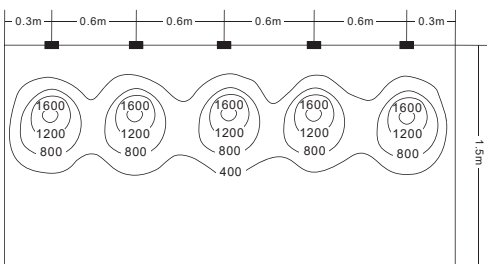


CCT: 3000 K
Avg: 227 lux
Min: 88 lux
Max: 495 lux
Uniformity: 0.3

Wall washing W3m x H 1.5m

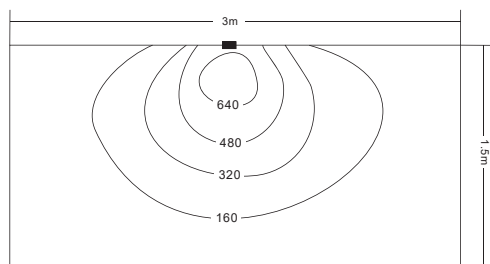
Install 0.7m to the wall

Regular 12W x 5pcs



CCT: 4000 K
Avg: 367 lux
Min: 34 lux
Max: 1654 lux
Uniformity: 0.103

Astra track light 20W x 1pc



CCT: 4000 K
Avg: 210 lux
Min: 352 lux
Max: 772 lux
Uniformity: 0.261



Astra Pola

LED Bollard Light

POLA bollard adopts patented Astra optics technique to cast an wide coverage and everlasting light fixture for outdoor walkway.

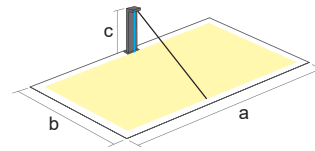
The unique forward throw asymmetric light distribution enables deeper and wider illumination on the ground, reducing the number of fixture required and build up a light pathway.

No glare to pedestrian view sight with low and shield light aperture.

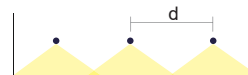


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Astra Pola



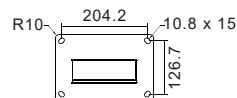
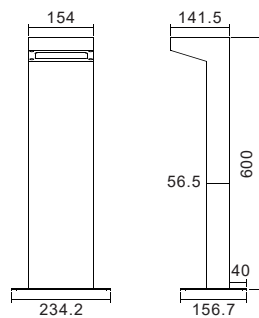
C=0.6m , a=3.6m, b=1.8m



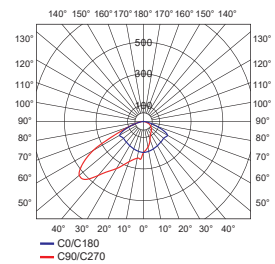
Technical specifications

Power	11 W
CCT	3000K
CRI	> 80
Efficacy	550 lm
Optics	120° / 105°
Weight	6 kg
Operating temp.	-20 ~+40°C
Lamp power factor	> 0.8
Instant light	< 1s instant full light
Material	Stainless
Control	on/off
Protection	IP65, IK10
Life time	5 years

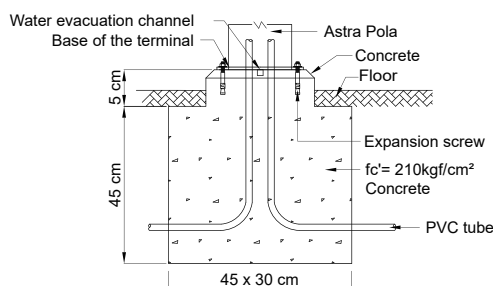
Dimensions & light patterns



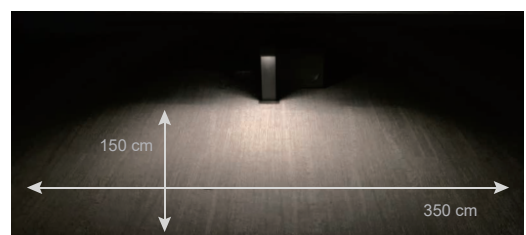
Dimensions in mm



Installation



Light width

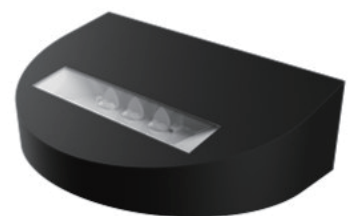




Astra Cielo

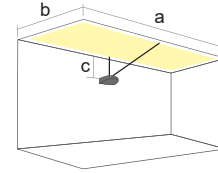
LED Wall Light

Cielo up light adopts patented Astra optics technique to cast an wide coverage and everlasting light fixture. The unique forward throw asymmetric light distribution enables a wider illumination to ceiling for dark balcony.



AMECO

Astra Cielo

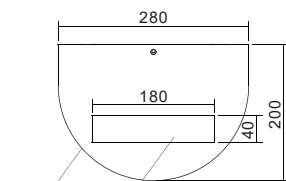


C=0.6m , a=3.6m, b=1.8m

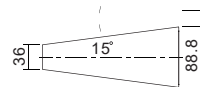
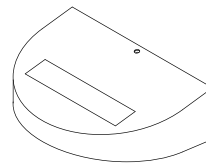
Technical specifications

Power	20 W
CCT	3000K
CRI	> 80
Efficacy	1000 lm
Optics	120° / 105°
Weight	3 kg
Operating temp.	-20 ~+40°C
Lamp power factor	> 0.5
Instant light	< 1s instant full light
Material	Stainless
Control	on/off
Protection	IP65, IK10
Life time	5 years

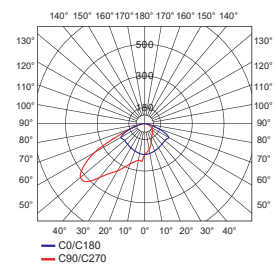
Dimensions & light patterns



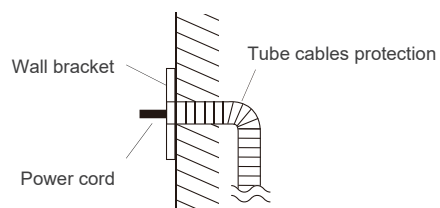
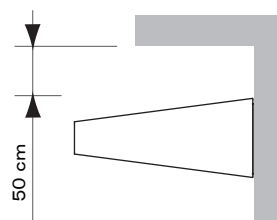
R40- Acrylic



Dimensions in mm



Installation





Astra Outdoor Series

The Astra Outdoor Series is designed to meet the needs of the billboard/signboard and architectural lighting market. Its sophisticated asymmetric optics provide superb uniform illumination.

The Astra Outdoor Series illuminates areas up to 3 times as wide as regular flood lights and provides exceptionally uniform illumination while saving energy and reducing installation cost.



AMECO

Application areas



145 W



40 W



20 W



Astra Ultra Wide Angle Outdoor Projector Light



20W



40W



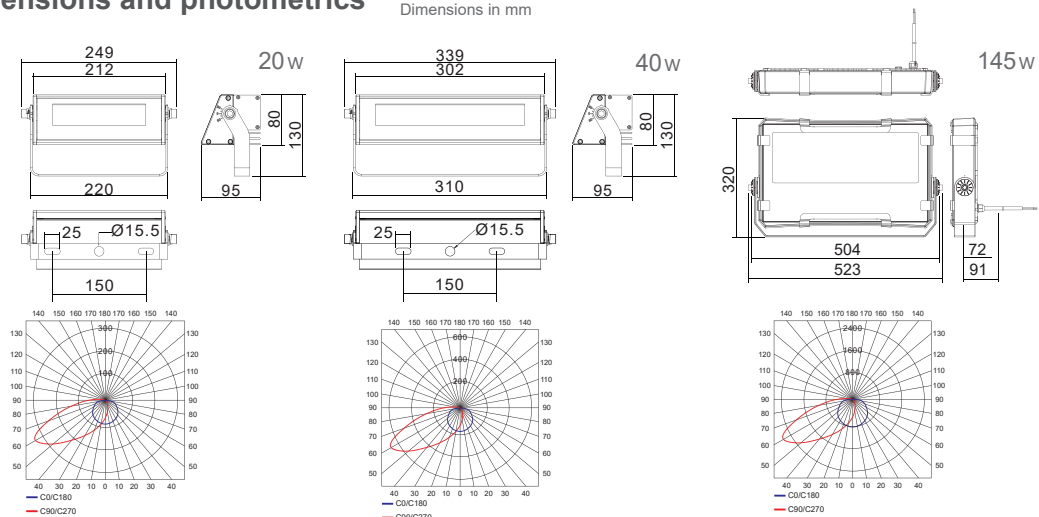
145W

Specifications and parameters

	20W	40W	145W
Color temp. Nominal light flux	3000K : 1080 lm	3000K : 2180 lm	3000K : 9200 lm
	4000K : 1200 lm	4000K : 2400 lm	4000K : 9200 lm
	5000K : 1200 lm	5000K : 2400 lm	5000K : 10000 lm
CRI	>80	>80	>80
Weight	1.9kg/4.19lbs	2.4kg/5.29lbs	11.5kg/25.35lbs
Light angle	120°/105°	120°/105°	120°/105°
DC watt.	18W	40W	130W
Consumption	21W	45W	145W
Input voltage	100 ~ 240V, 50/60Hz	120 ~ 240V, 50/60Hz	120 ~ 277V, 50/60Hz
Power factor	>90%	>90%	>95%
THD	<20%	<20%	<20%
Housing material	Housing: Aluminim	Housing: Aluminim	Housing: Aluminim
Cover	PC, Tempered glass	PC, Tempered glass	PC, Tempered glass
LED	CREE	CREE	CREE
Surface treatment	Anti-UV powder painting, color available with RAL# (optional)		
Color	Black	Black	Black
Protection grade	IP66	IP66	IP66
Working temp.	-40 ~ +45°C	-40 ~ +45°C	-40 ~ +45°C
Surge protection	1Kv	1Kv	IEC 61643 5kA

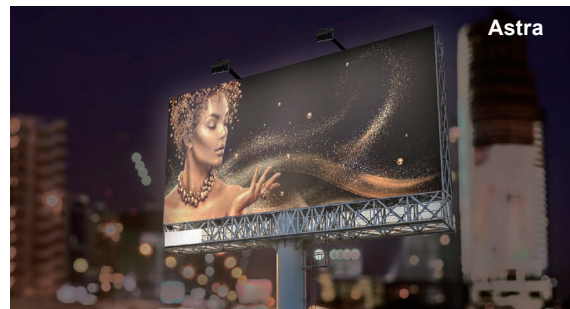
Dimensions and photometrics

Dimensions in mm





Low uniformity and obvious dark zones, and the central illuminance is high.

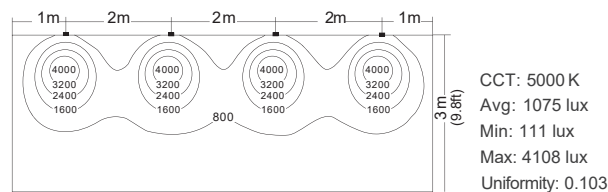
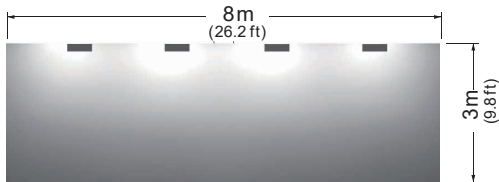


Ultra wide angle, illuminance is even.

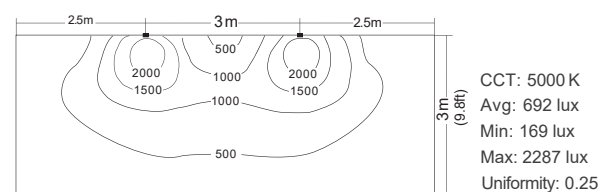
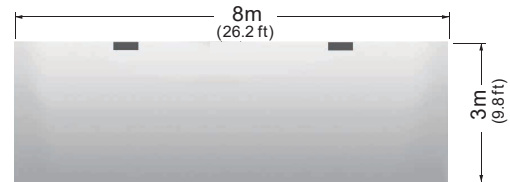
Outdoor billboard board - Big W 8m x H 3m

Install 1m (3.3ft) to the billboard

Regular projector light 120W x 4pcs



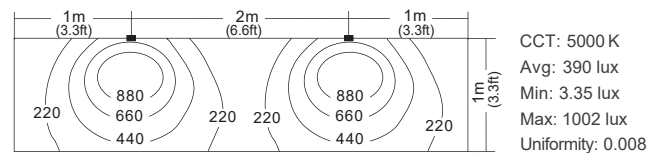
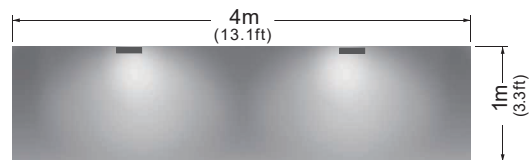
Astra projector light 145W x 2pcs



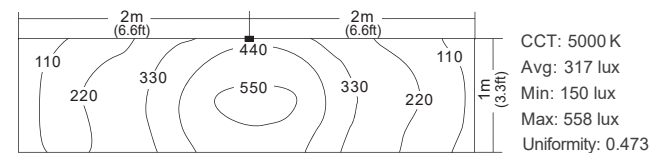
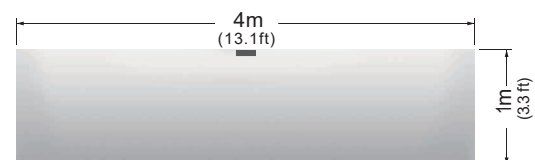
Outdoor billboard/signage board - Small W 4m x H 1m

Install 1m (3.3ft) to the billboard

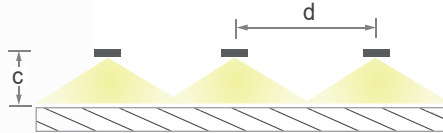
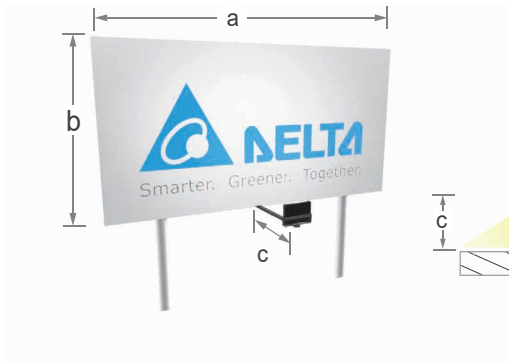
Regular projector light 30W x 2pcs



Astra projector light 40W x 1pcs



Lamp location recommendation

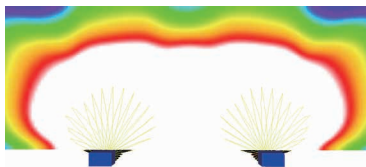


Distance from luminaire to the object
 $a=6, b=3, c=1$

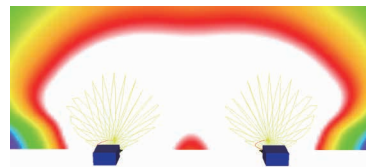
Distance from luminaire to luminaire
 $d \leq 6c$

Installation options

Luminaire installed in parallel to signboard obtains the optimized uniformity

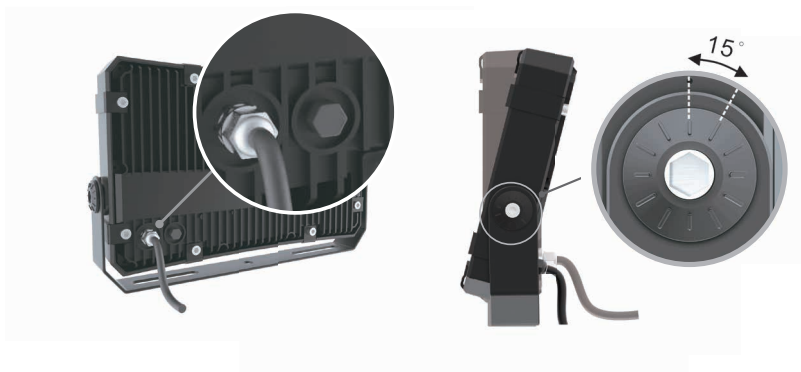


Luminaire tilts angle 0-15° for different light distribution on signboard



NOTE: The illumination area is kept from dust accumulation because of the vertical installation, which supports lower maintenance.

Luminaire mechanical design



- Protection grade IP66
- Impact protection grade IK08
- EC 61643 5kA Surge protection
- Waterproof exhaust valve

Exhaust valve pushes out the humidity brought by the heat from lamp ignition. It prevents the dust from entering, which enhances reliability.

Success case



Success case aquarium in Taiwan
 Signboard is 14.5m wide, 2.5m high, bracket arm is 1m for 40w Astra.

Delta global operations



169 Global sales offices

38 Global plant sites

64 Global R&D centers



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