



SeaWorld

Case Study

The Brightest Solutions

Description

We are delighted to introduce one of our most significant projects to date: the illumination of SeaWorld Yas Island, Abu Dhabi, the world's largest indoor marine life theme park. With **6,251 SunLite LEDs**, we have illuminated **183,000 m² (1,969,795.61 sq ft)**, creating a stunning environment for over **100 animal** experiences and presentations. This achievement was made possible by our SunLite LED, a product specifically designed for this installation and developed in collaboration with marine biologists. The Coemar technical team customized both the firmware and hardware to ensure that the light beam generated does not disturb the animals.

The SunLite LED provides lighting with a **CRI** greater than **98** and variable white LEDs (ranging from **2,700K** to **6,500K**), closely mimicking natural sunlight and simulating various times of the day. Extensive research was conducted on the quality of the LED, specifically developed for this product, including the frequency tailored precisely for this purpose. This projector boasts an **IK10 & IP65 ratings**, ensuring durability even in high humidity environments, despite being installed indoors. It is DMX controllable, offering perfect flexibility and usability. Available with various optics that modify the light beam (ultra narrow, narrow, medium, wide and ultra wide). It is also available an accessory such as the honeycomb.

Thanks to these innovations and the simulated sunlight, the animals that live in the park, including tropical fish and rays, dolphins, tropical birds, flamingos, mammals, and more, **thrive without distress**.

SeaWorld Map

ABU DHABI OCEAN

- S-E-A ENROLLMENT** 📄
- THE MANGROVES**
Touch pools with sharks, rays, and invertebrates.
- THE ARABIAN GULF**
Dugong and sea turtle habitat.
- SEA SNAKES HABITAT**
- AL NAHAM THEATER** 🎭
Pearl diving shows.
- SOUK AL-SHEEF** 🛍️
Flagship store and package pick-up collection point.
- HALAWIYAT FATEMA** 🍬
Candy shop.
- SEA PIXELS** 📷
Photo collection.
- DUKKAN AL-TAWASH** 📷
Pearls, jewelry and photo collection.
- MATBAKH UMMI** 🍽️
Cuisine: Arabic
Service: Buffet.
- LUGAIMA** 🍽️
Cuisine: Fried dough and sweets
Service: Grab & go.
- DALLAT AL BAHAR** ☕
Cuisine: Coffee shop
Service: Grab & go.
- SEAFARERS JUGGLERS** 🎪

ONE OCEAN

- ANIMAL CARE CENTER**
Get the up-close and personal experience of how we care for our animals on a daily basis.
- ONE EPIC OCEAN** 🎢
- FROZEN TREATS** 🍦
Cuisine: Ice cream
Service: Grab & go.
- EXPLORER HQ** 📄
Sign up and check in.

ROCKY POINT

- SEA LION AND SEAL HABITAT**
- FEED THE SEA LION** 🦁
- ROCKY POINT AMPITHEATER** 🎭
- PRETZEL POINT** 🍪
Cuisine: Pretzels
Service: Grab & go.

MICROOCEAN

- TURTLE TWIST** 🐢
- OCTOZOOM** 🐙
- JELLY PLUNGE** 🍯
- EEL RACER** 🐟
- KELP CLIMB** 🌿
- EXPLORER'S SEA BASE** 🏠
- KRILL DUDE** 🦐
- JELLIES** 🍯
Kids' apparel and toys.
- BITSY BITES** 🍽️
Cuisine: Fast food
Service: Quick.

ENDLESS OCEAN

- ENDLESS OCEAN AQUARIUM**
The world's largest multi-species marine life aquarium.
- ENDLESS VISTA** 🏠
20m vertical viewing window.
- OCEAN POD** 🏠
- OCEAN SHELF** 🏠
- THE SWIRL** 🌀
- LAUNCH BAY** 🚢
- LAUNCH BAY SUPPLIES & CO.** 🛍️
Apparel and toys.
- FATHOM 11** 🎢
Cuisine: International
Service: Fine Dining.
- S-E-A SNACKS** 🍽️
Cuisine: Waffles and snacks
Service: Grab & go.
- S-E-A MAINTENANCE CREW** 🎵
Pipe Organ Band.

TROPICAL OCEAN

- DOLPHIN HABITAT**
- FLAMINGO POINT**
Flamingo habitat.
- THE RAINFOREST**
Tropical bird habitat.
- RAY REEF**
Ray habitat.
- FEED THE RAYS** 🦐
- TROPICAL AMPITHEATER** 🎭
- MACAW HABITAT**
- CORAL HABITAT**
- MANTA COASTER** 🎢
- MIDWAY GAMES** 🎮
- SHIPWRECK COVE** 🚢
- CANOPY CLIMBERS** 🧗
- SUNKEN TREASURES** 🏴‍☠️
Toys and ride photo collection.
- FLAMINGO POINT** 🏠
Tropical apparel and toys.
- HAMAD'S HIDEAWAY** 🏠
Dolphin apparel and toys.
- CENOTE CAFÉ** 🍽️
Cuisine: Gourmet burgers
Service: Quick.
- SPICE ISLAND** 🍽️
Cuisine: Pan Asian
Service: Buffet.
- BAY VIEW CAFÉ** 🍽️
Cuisine: Deli & ice cream
Service: Quick.
- PRETZEL POINT** 🍪
Cuisine: Pretzels
Service: Grab & go.
- PRETZEL POINT** 🍪
Cuisine: Pretzels
Service: Grab & go.
- BAMBOO BITES** 🍽️
Cuisine: Snacks
Service: Grab & go.
- LOST COVE TREATS SNACKS** 🍽️
Cuisine: Snacks
Service: Grab & go.
- WASI'S MARKET** 🍽️
Cuisine: Sweet snacks
Service: Grab & go.



- WATERSIDE CAFÉ** 🍽️
Cuisine: Tex Mex
Service: Quick service buffet.
- DOLPHIN MEMORIES** 📷
Photo Shop.

POLAR OCEAN

- THE ARMILLARY**
Portal to Arctic and Antarctica.
- THE ARMILLARY COLLECTION** 🛍️
High-end jewelry, art and collectables.

ARCTIC

- WALRUS HABITAT**
- SEA OTTER HABITAT**
- PUFFIN HABITAT**
- HYPERSPHERE 360°** 🎢
- R/V AHMAD IBN MAJID** 🚢
- ARCTIC TRADING POST** 🛍️
Apparel, confectionary, sweet and savoury snacks.

ANTARCTICA

- PENGUIN HABITAT**
- UMBERTO'S** 🎢
Cuisine: Italian
Service: Buffet.
- THE CATCH** 🍽️
Cuisine: Fish & Chips
Service: Quick.
- POLAR PIER** 🚢
Coldwear and toys.
- PENGUIN PLAY** 🎪

LEGEND

- 🛍️ Shopping
- 🎢 SeaWorld Expeditions
- 🎭 Animal Presentations
- 💳 Extra Charge
- 🍽️ Dining
- 🎮 Interactive Experiences & Rides
- 🦁 Live Characters & Performances
- 🎪 Play Area

SERVICES

- 🚻 Restrooms
- 🧳 Luggage Storage
- 🔇 Quiet Room
- 👤 Guest Services
- ♿ Wheelchair & Stroller Rental
- 👶 Mother's Lounge
- 🏠 First Aid
- 👁️ Viewing Area
- 🚪 Elevator
- 🕌 Prayer Room
- 📁 Lost & Found
- 🔒 Lockers

Theme Parks



SeaWorld

Location	Abu Dhabi, UAE
Products	SunLite LED



Theme Parks



SeaWorld

Location	Abu Dhabi, UAE
Products	SunLite LED

Theme Parks



SeaWorld

Location	Abu Dhabi, UAE
Products	SunLite LED



Our technicians on-site during the installation & construction works

Theme Parks



SeaWorld

Location	Abu Dhabi, UAE
Products	SunLite LED

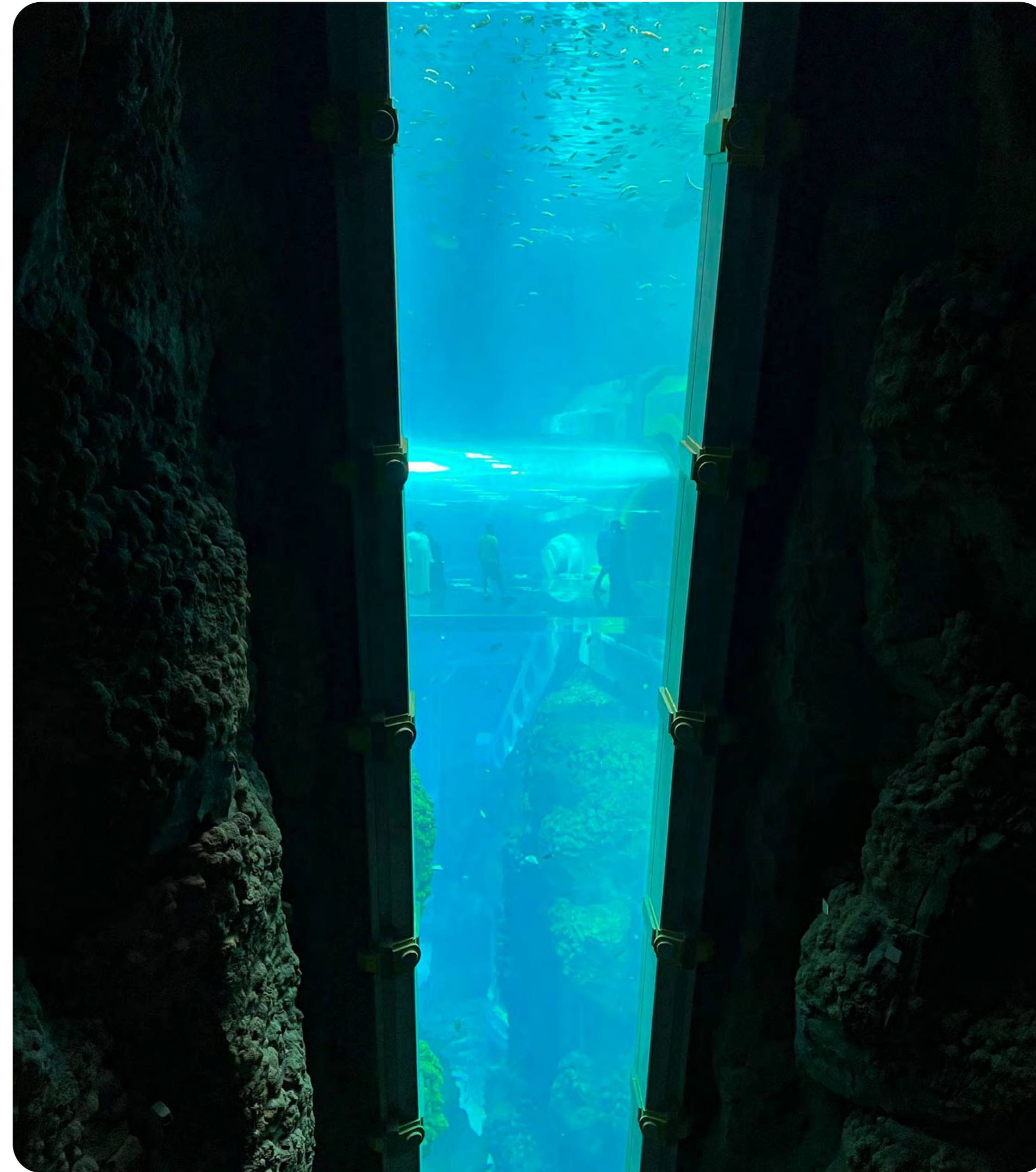
Theme Parks



SeaWorld

Location	Abu Dhabi, UAE
Products	SunLite LED

Theme Parks

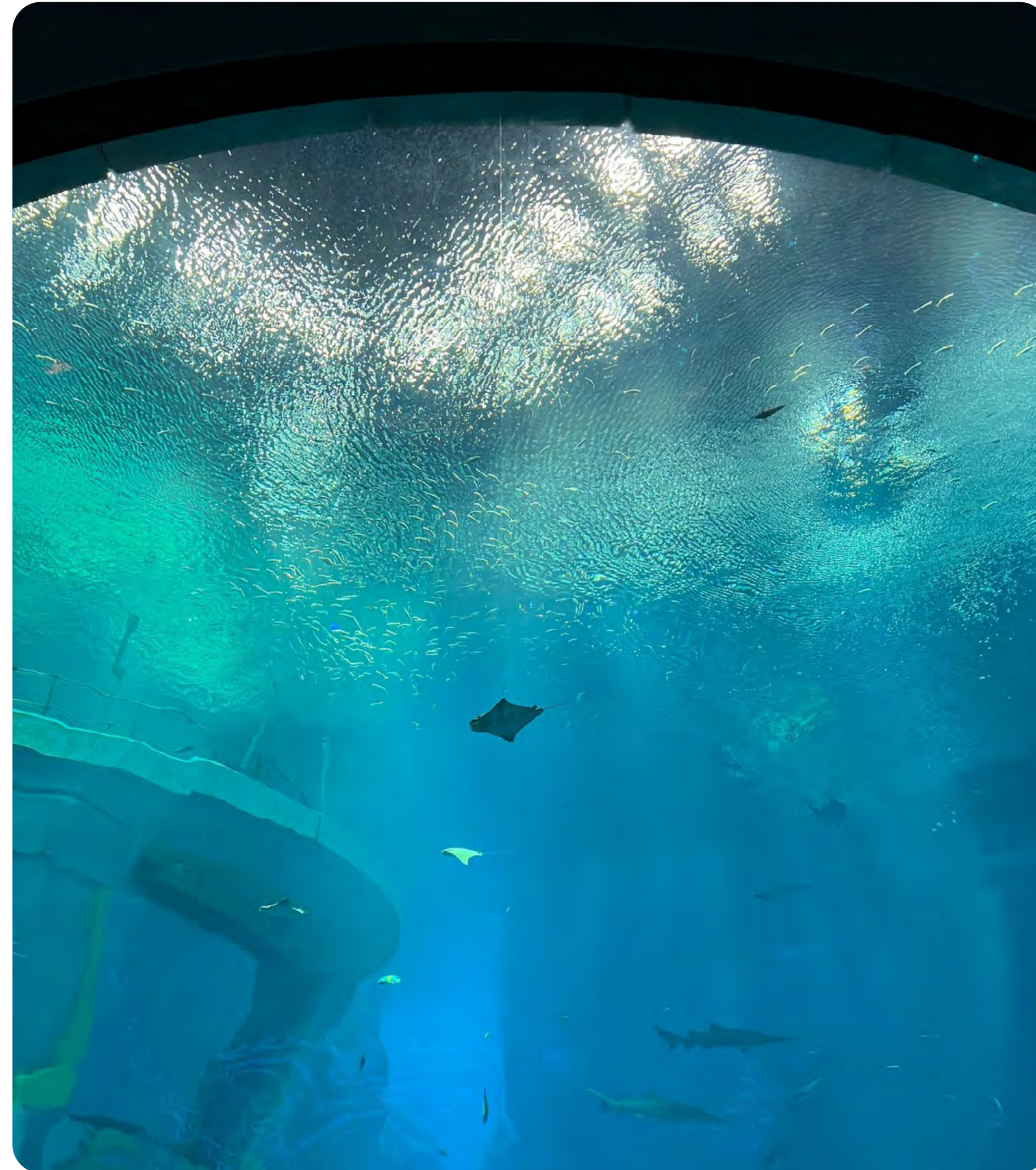


SeaWorld

Location Abu Dhabi, UAE

Products SunLite LED

Theme Parks

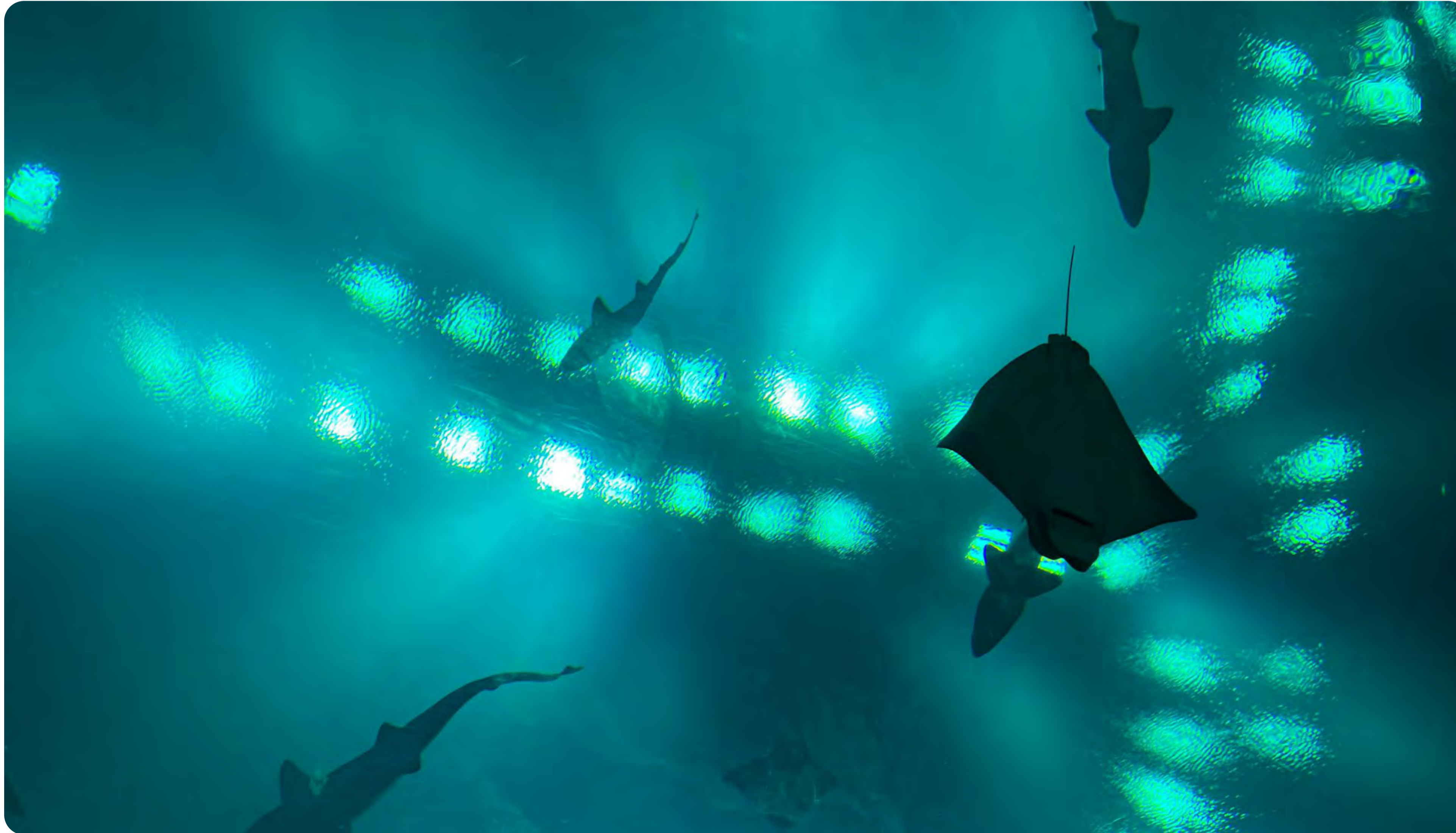


SeaWorld

Location Abu Dhabi, UAE

Products SunLite LED

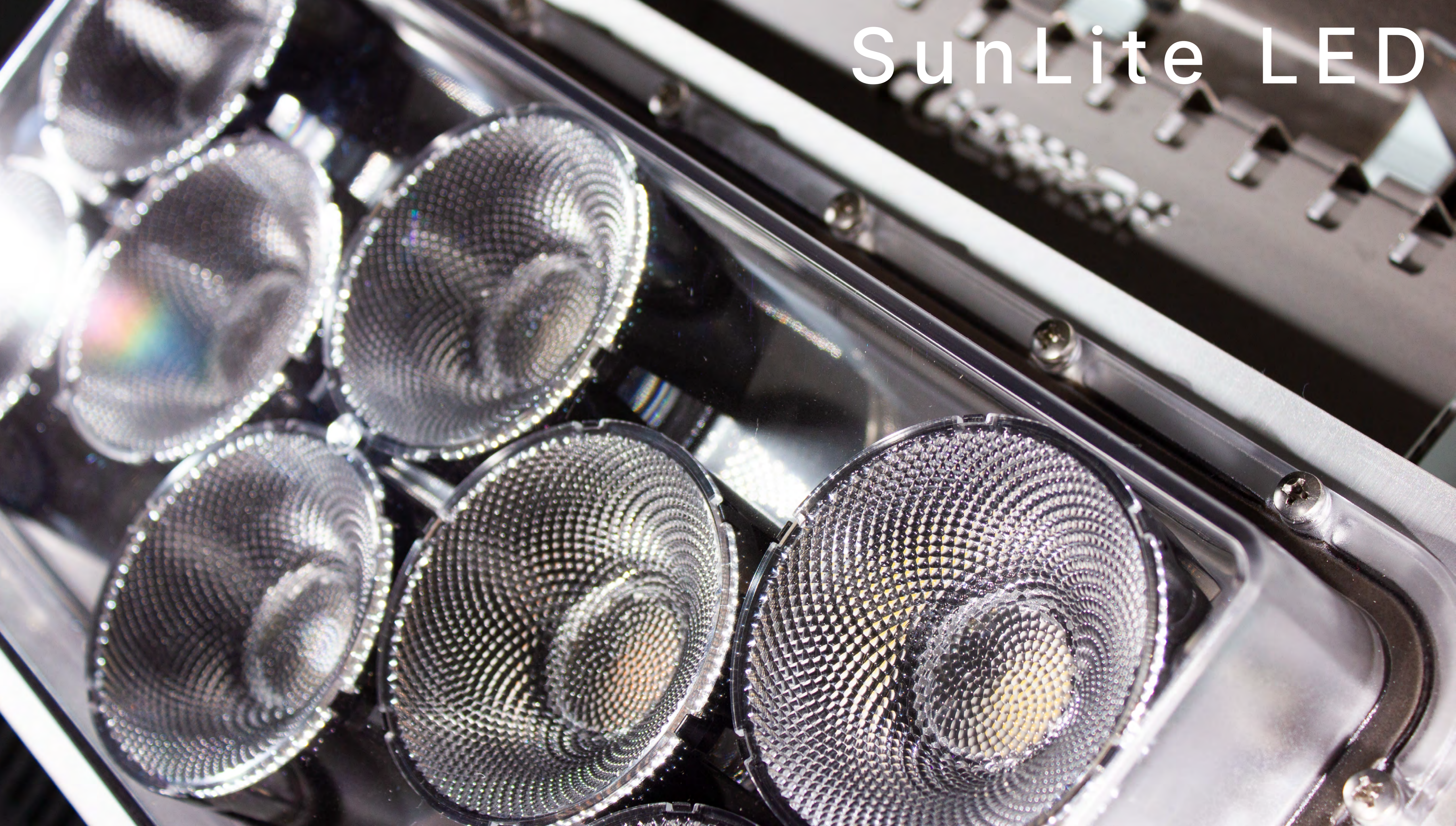
Theme Parks



SeaWorld

Location	Abu Dhabi, UAE
Products	SunLite LED

SunLite LED



Datasheet



Introducing

● **SunLite LED** is the Coemar family of products specifically developed and designed around the specifications of Miral & SeaWorld for the, world first entirely indoor, SeaWorld Abu Dhabi and recognises the stringent requirements dictated for ensuring animal welfare. This product is suitable for use as work-light in **theaters**, as **industrial lighting** as well as small/medium **sports fields**.

SunLite LED is a very bright, tunable fixture thanks to its truly high quality LED source, developed to specifically deliver a genuine and realistic sunlike spectrum with extremely high color rendition across the entire CCT range. Its air convection cooled design allows a **superior cooling** to reduce and dissipate the heat rapidly.

This ensures an excellent performance without prejudice for the lifespan of the LED source. The finishing of the housing is ideal for harsh climate conditions and highly **corrosive ambient** with a high **IP65** as well as an up to **IK10** rating. The SunLite LED may be hung to project downwards or sideways.

Key Features

- VariWhite LEDs
- Fixed White LEDs
- CRI > 96.8, TLCI 100
- 2.700 K - 6.500 K (VariWhite version)
- 3.200 K or 5.600 K (Fixed White version)
- IP65 - IK10
- Interchangeable lenses: Ultra Narrow 12°, Narrow 21°, Medium 25°, Wide 34°, Ultra Wide 54°, Mega Wide 65°
- Passive cooling and fan-free
- Custom color on request (optional)
- CE Compliant
- RoHS Directive
- IK10 rating
- Conforms to EN 62722-2-1 (Particular requirements for LED luminaires performance)

General

- LED Source VariWhite, Tungsten or Daylight (8 Bridgelux COB LEDs Thrive Series)
- CCT Range
 - 2.700 K → 6.500 K (VariWhite version)
 - 3.200 (Tungsten version) or 5.600 K (Daylight version)
- Color Rendition Average CRI > 96.8, TLCI 100
- Light efficiency (VariWhite version)
 - Narrow: 20.212 lm, 89 lm/W
 - Medium: 18.798 lm, 83 lm/W
 - Wide: 19.036 lm, 85 lm/W
 - Ultra Wide: 17.696 lm, 79 lm/W
- Dimming 8 or 16 bit, 5 selectable curves: Exponential, Logarithmic, Linear, Halo and Standard
- Dimming Smooth Selection Fast, Slow and Very Slow
- Strobe Synchronized, random or pulse electronic strobe
- Lens Ultra Narrow 12°, Narrow 21°, Medium 25°, Wide 34°, Ultra Wide 54°, Mega Wide 65° (each value of degrees refers to 1/2 peak angle)
- L80 Rating (hours to 80% output) 50.000 Hours

Electrical

- Voltage Input 100-277 V, 50-60 Hz, auto-sensing
- Power Consumption 225 W @ Full, 1.0 A at 230 V, 2.0 A at 115 V
- Power Connection 0.3 m (1,18 in) integral power supply cable with bare ends
- Data Connection In and Out DMX 5 pin locking XLR connectors

Thermal

- Ambient Operating Temperature -40°C - +40°C (-40°F - 104°F)
- Cooling Passive cooling and fan-free

Control

- Protocols DMX-512, RDM (Remote Device Management), Wireless (optional by LumenRadio)
- RDM configuratons Yes
- DMX Channels 5 / 2 / 1 / Sunrise mode / Raw mode (VariWhite version) 5 / 1 (Fixed White version)
- Firmware upgrade Through DMX with RDM Upgrade USB interface (code AC10011A001)

Physical

- Yoke Single yoke suitable for safe hanging
- Materials Heatsink: Extruded hard anodized aluminum, Electronic box: Die-Casting aluminum with Anti-Corrosion treatment for marine ambient and electrostatic powder-coated, Frontal Cover: PC (Polycarbonate)
- Gasket Material Polyurethane foam
- Hardware Material Stainless steel AISI304
- Lens Material PMMA Polymethyl methacrylate
- Weight 10.5 Kg / 23.14 lbs
- Height 116 mm / 4.56 in - With brackets: 306 mm / 12.04 in
- Width 410 mm / 16.14 in
- IP/IK Rating IP65 - IK10
- Color options Silver or Black (standard), custom color on request (optional)

General accessories

- RCN72 Power Junction Connector for AC
- RCN 73 DMX Signal Junction Connector
- RME 34/2 DMX Signal Connector XLR5 Female (OUT)
- RME 35/2 DMX Signal Connector XLR5 Male (IN)
- RME 641/1 CEE 16A Power AC Plug
- O336.045 Honeycomb

SunLite LED VariWhite Version

- F073G001H Narrow Lenses, Black
- F073G001I Medium Lenses, Black
- F073G001L Wide Lenses, Black
- F073G001O Ultra Wide Lenses, Black
- F073G101H Narrow Lenses, Silver
- F073G101I Medium Lenses, Silver
- F073G101L Wide Lenses, Silver
- F073G101O Ultra Wide Lenses, Silver

Datasheet



SunLite LED white body (optional)

DMX Charts - VW version

5 Channels

- 01 → Master Dimmer
- 02 → Dimmer Fine
- 03 → White Tone
- 04 → Strobe Effect
- 05 → Special Functions

2 Channels

- 01 → Master Dimmer
- 02 → White Tone

1 Channel

- 01 → Master Dimer

Sunrise mode

- 01 → Master Dimmer
- 02 → Dimmer Fine
- 03 → Proportional CCT
- 04 → Step CCT
- 05 → Special Functions

Raw mode

- 01 → Warm White LED
- 02 → Warm White LED Fine
- 03 → Cold White LED
- 04 → Cold White LED Fine

DMX Charts - T/D version

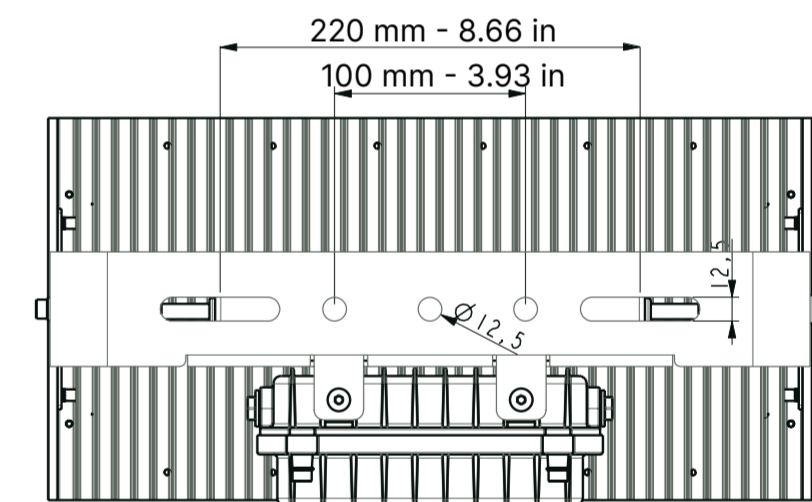
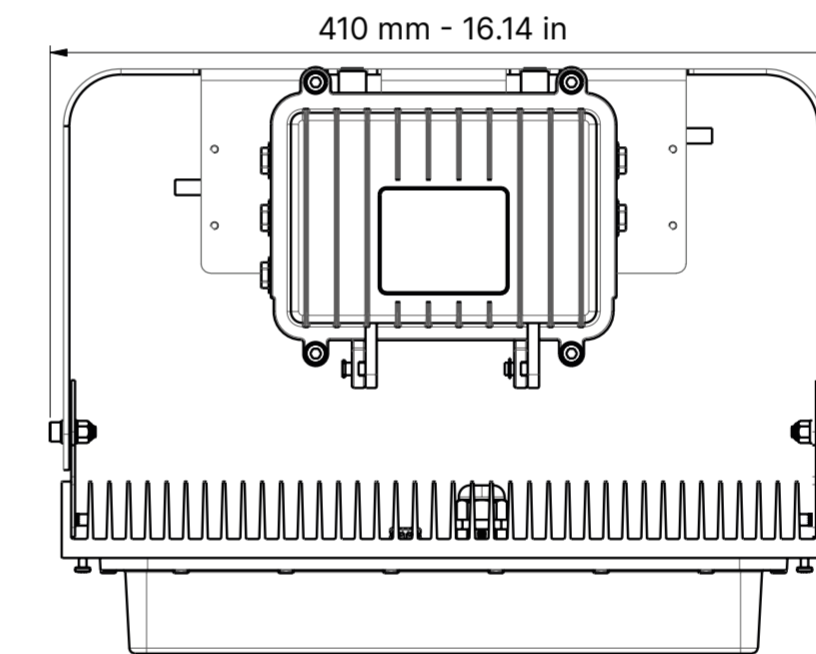
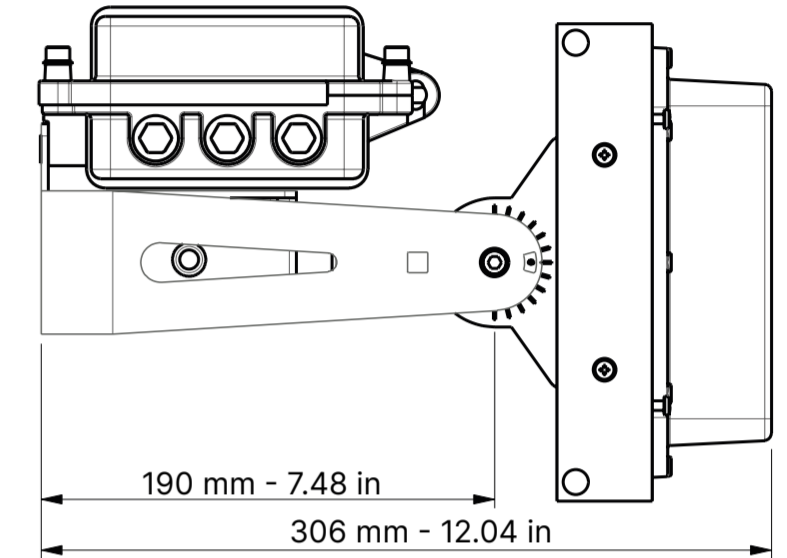
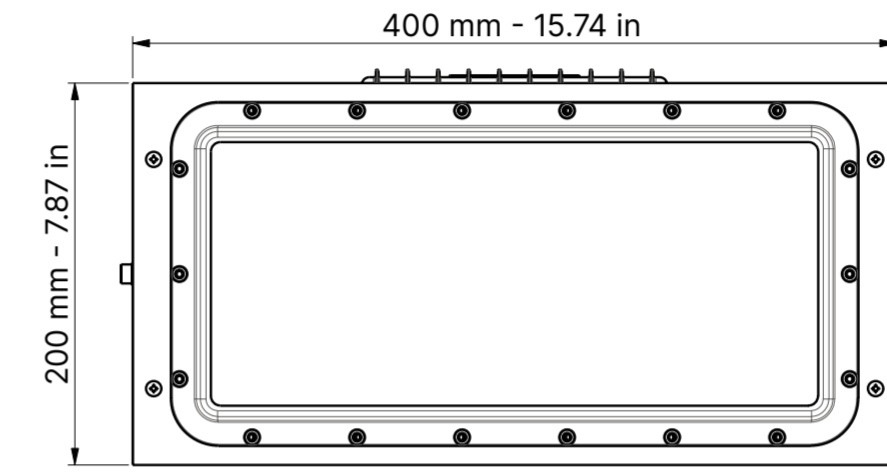
5 Channels

- 01 → Master Dimmer
- 02 → Spare Channel
- 03 → Dimmer Fine
- 04 → Strobe
- 05 → Special Functions

1 Channel

- 01 → Master Dimmer

Drawing Size



Datasheet

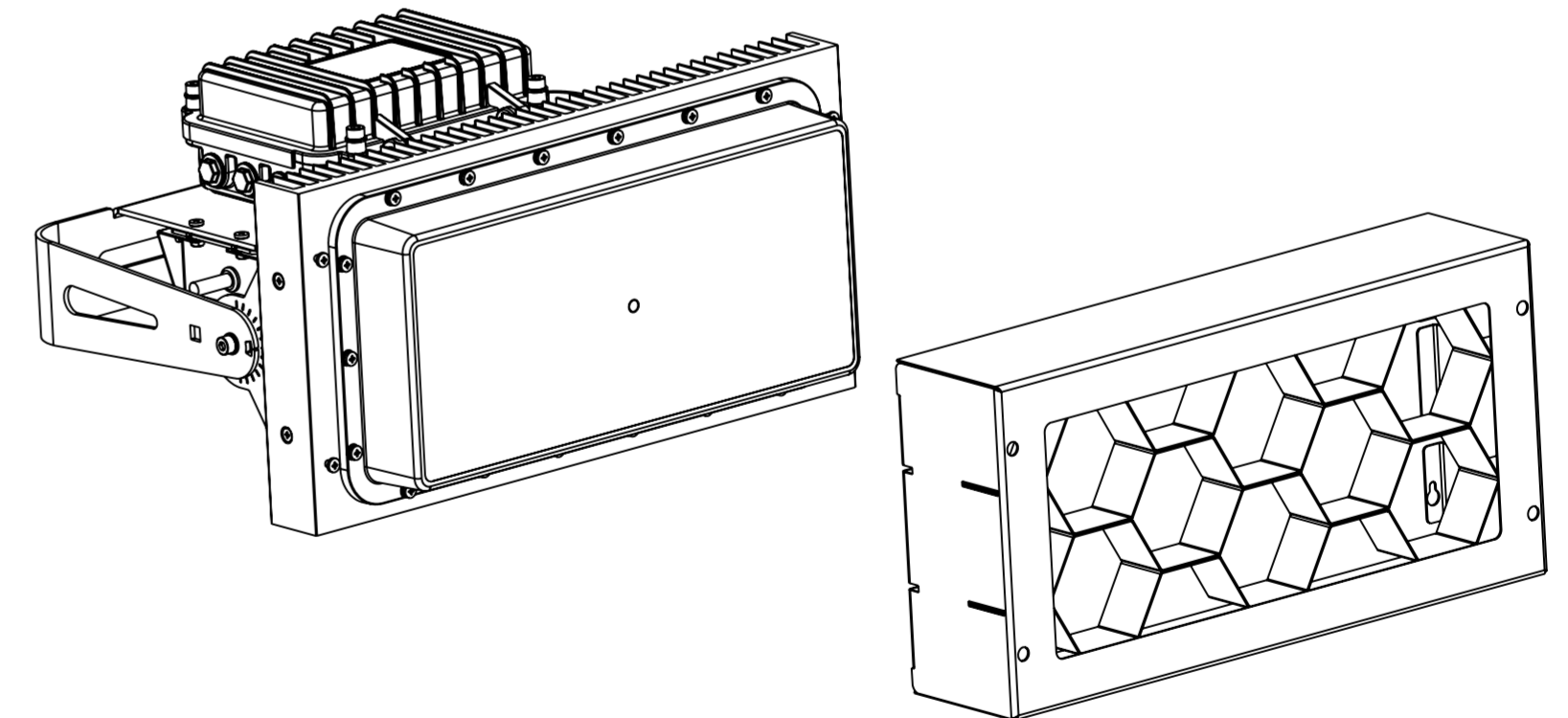
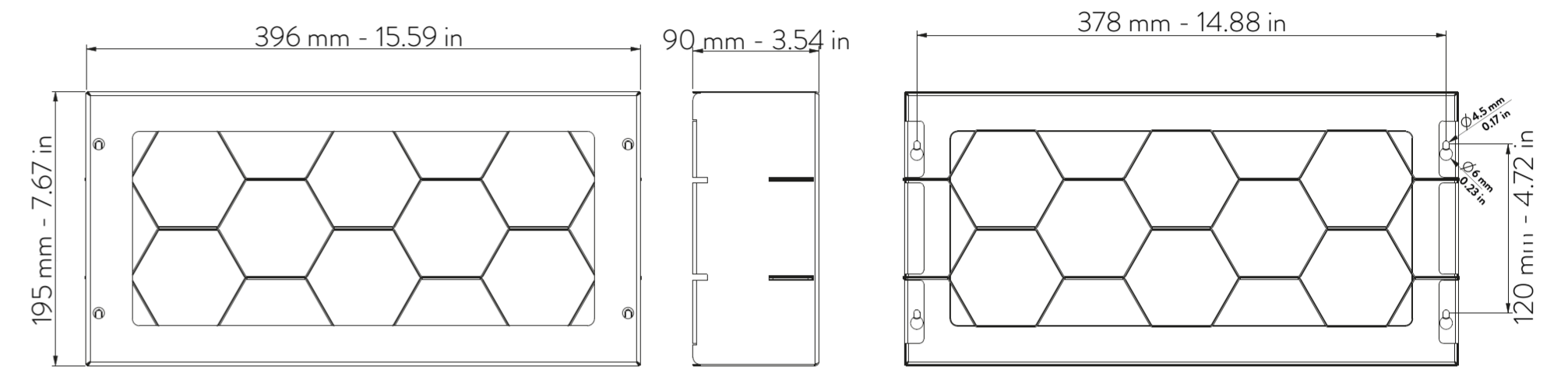


Honeycomb

Physical

● Materials	Stainless steel AISI304 Body
● Length	396 mm / 15.59 in
● Weight	1.6 kg / 3.53 lbs
● Height	195 mm / 7.67 in
● Width	90 mm / 3.54 in
● Color options	Matt Black
● Safety Accessories	Stainless steel AISI304 Safety chain

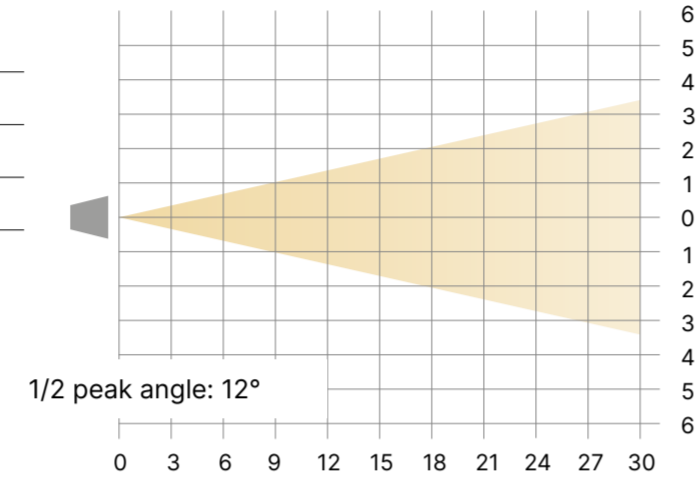
Drawing Size



Photometrical Data

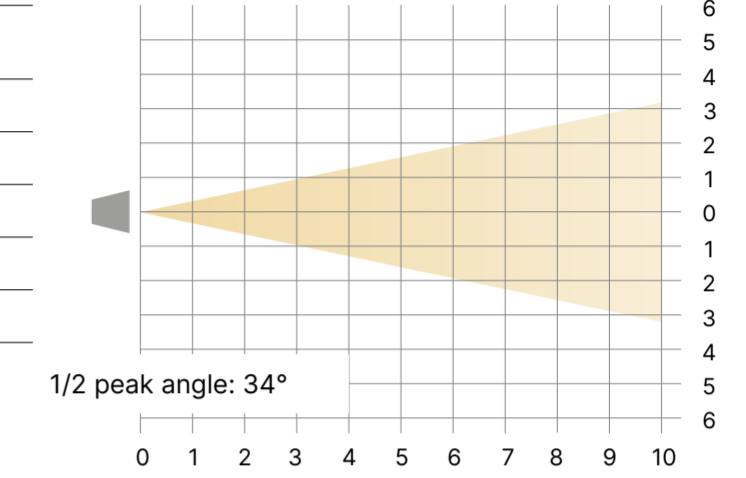
Optic: Ultra Narrow Beam - 1/2 Peak Angle 12°

Distance(m)		3	6	9	12	15	18	21	24	27	30
lux	FULL	24.182	6.046	2.687	1.511	967	672	494	678	299	242
1/2 P.A. 12° Ø (m)		0,63	1,26	1,89	2,52	3,15	3,78	4,41	5,05	5,68	6,31



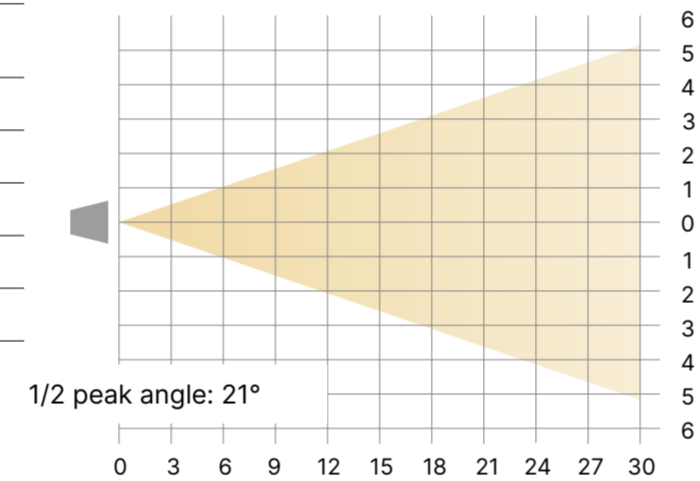
Optic: Wide Beam - 1/2 Peak Angle 34°

Distance(m)		1	2	3	4	5	6	7	8	9	10
lux	2.700K	11322	2831	1258	708	453	315	231	177	140	113
	6.500K	42228	10557	4692	2639	1689	1173	862	660	521	422
	FULL	52722	13181	5858	3295	2109	1465	1076	824	651	527
1/2 P.A. 34° Ø (m)		0.61	1.22	1.83	2.45	3.06	3.67	4.28	4.89	5.50	6.11



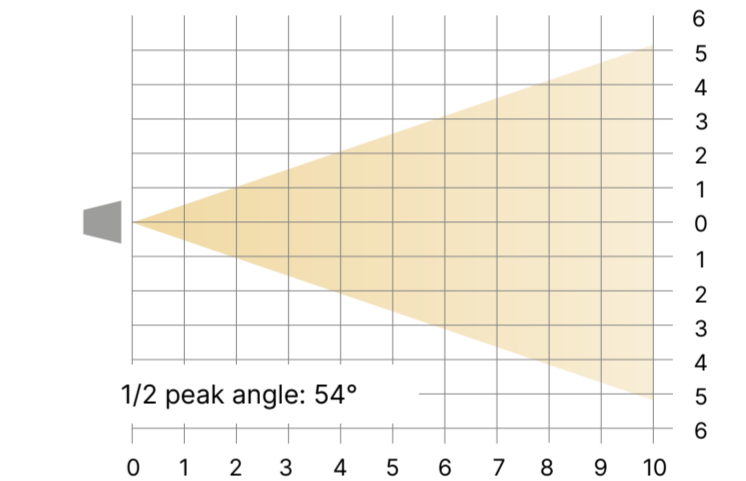
Optic: Narrow Beam - 1/2 Peak Angle 21°

Distance(m)		3	6	9	12	15	18	21	24	27	30
lux	2.700K	3.198	800	355	200	128	89	65	50	39	32
	6.500K	11.440	2.860	1.271	715	458	318	233	233	141	114
	FULL	14.355	3.589	1.595	897	574	399	293	293	177	144
1/2 P.A. 21° Ø (m)		1,11	2,22	3,34	3,45	5,56	6,67	7,78	8,90	10,01	11,12



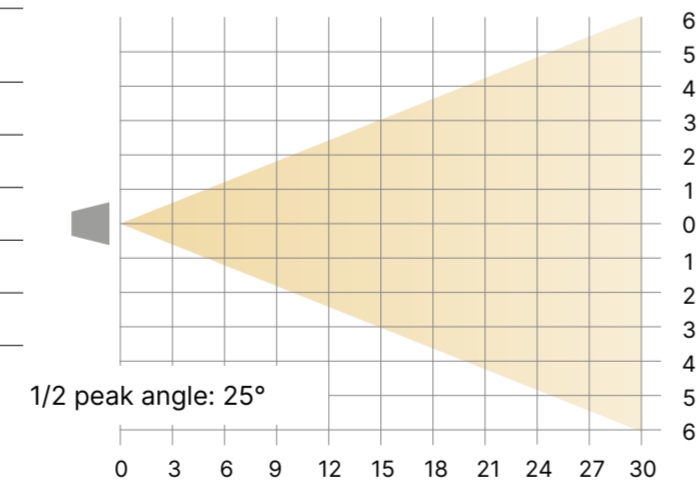
Optic: Ultra Wide Beam - 1/2 Peak Angle 54°

Distance (m)		1	2	3	4	5	6	7	8	9	10
lux	2.700K	4608	1152	512	288	184	128	94	72	57	46
	6.500K	16983	4246	1887	1061	679	472	347	265	210	170
	FULL	21537	5384	2393	1346	861	598	440	37	266	215
1/2 P.A. 54° Ø (m)		1.02	2.04	3.06	4.08	5.10	6.11	7.13	8.15	9.17	10.19



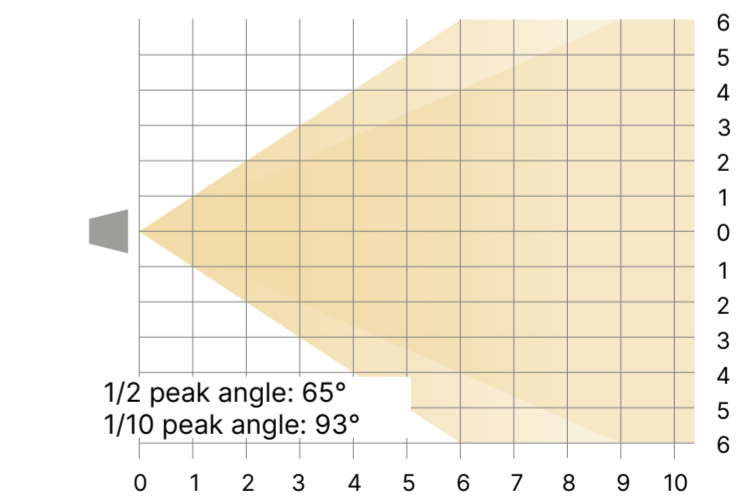
Optic: Medium Beam - 1/2 Peak Angle 25°

Distance(m)		3	6	9	12	15	18	21	24	27	30
lux	2.700K	2.035	509	226	127	81	57	42	32	25	20
	6.500K	7.364	1.841	818	460	295	205	150	115	91	74
	FULL	9.283	2.321	1.031	580	371	258	189	145	115	93
1/2 P.A. 25° Ø (m)		1,33	2,66	3,99	5,32	6,65	7,98	9,31	10,64	11,97	13,30



Optic: Mega Wide Beam - 1/2 Peak Angle 65°

Distance (m)		1	2	3	4	5	6	7	8	9	10
lux	3.200 K	3834	959	426	240	153	107	78	60	47	38
	5.600 K	10486	2622	1165	655	419	291	214	164	129	105
1/2 P.A. Ø (m)		1.27	2.55	3.82	5.10	6.37	7.64	8.92	10.19	11.47	12.74
1/10 P.A. Ø (m)		2.11	4.22	6.32	8.43	10.54	12.65	14.75	16.86	18.97	21.08



Contact Us

Coemar Lighting S.r.l.

Via Carpenedolo, 90
46043, Castiglione delle Stiviere (MN) – Italy

P. +39 0376 1514412
M1. info@coemar.com
M2. service@coemar.com
W. coemar.com

P.iva – C.f. 02415330204

