

# EMINERE® SIDE 1 / 2 / 3 / 4

Eminere Side is specifically designed for applications where a low form factor is required whilst keeping installation of the luminaire neat and clean. With only 76 mm in height, it keeps all of the Eminere series strengths. Wide range of optics options, durability, connectivity, application flexibility make this luminaire ideal solution for flood lighting, wall grazing, wall washing and accent lighting.



## KEY FEATURES

### Quick and Easy Installation

Easy and quick installation using click-on connectors overmolded on combo cable (Power + Data).

### Durability

High durability of IK06 in combination of ingress factor IP67.

### Application Flexibility

Complete solution for illuminating buildings, monuments, walls, statues, bridges, covers, arches and much more. With PSU on its side, Eminere Side is only 76 mm in height.

### Optics & Colours

Wide range of optics allows to place product anywhere needed with no limitation. Full spectral LEDs selection with custom option on request. Output up to 1.147 lm (RGBW) or 1.652 lm (PW) per one foot of Eminere.

## COLOURS

\* UPON REQUEST



RGBW



RGBA



Pure White



Tuneable White \*

## CONTROL & PROTOCOLS



OPTIONAL



OPTIONAL



PW & SINGLE COLOR ONLY

## STANDARD & SPECIFICATION



IP67



IK06



CE



ETL



ROHS



UK CA



5 YEAR

Warranty with Registration



VIBRATION STANDARD FOR BRIDGE

Vibration Standard for Bridge

## FINISH OPTIONS

\* CLOSEST RAL TONE  
\* HE = Harsh Environment



Graphite Black RAL 9011\*



Grey Aluminium RAL 9007



Sandstone RAL 1014\*



Pure White RAL 9010



HE Graphite Black RAL 9011\*



HE Grey Aluminium RAL 9007



HE Sandstone RAL 1014\*



HE Pure White RAL 9010



Custom Paint Colour

## COLOUR TEMPERATURE

\* UPON REQUEST



2.200 K \*



2.500 K \*



2.700 K \*



3.000 K



3.500 K \*



4.000 K \*



5.000 K \*



6.500 K \*



2.700 K - 6.500 K \*

## OPTIC OPTIONS

### SYMMETRICAL



9°



15°



30°



50°



65°



100°

### BI-SYMMETRICAL



10°X30°



10°X60°



15°X90°



35°X70°



30°X10°



60°X10°



90°X15°



70°X35°

### ASYMMETRICAL



WIDE WALLWASHER

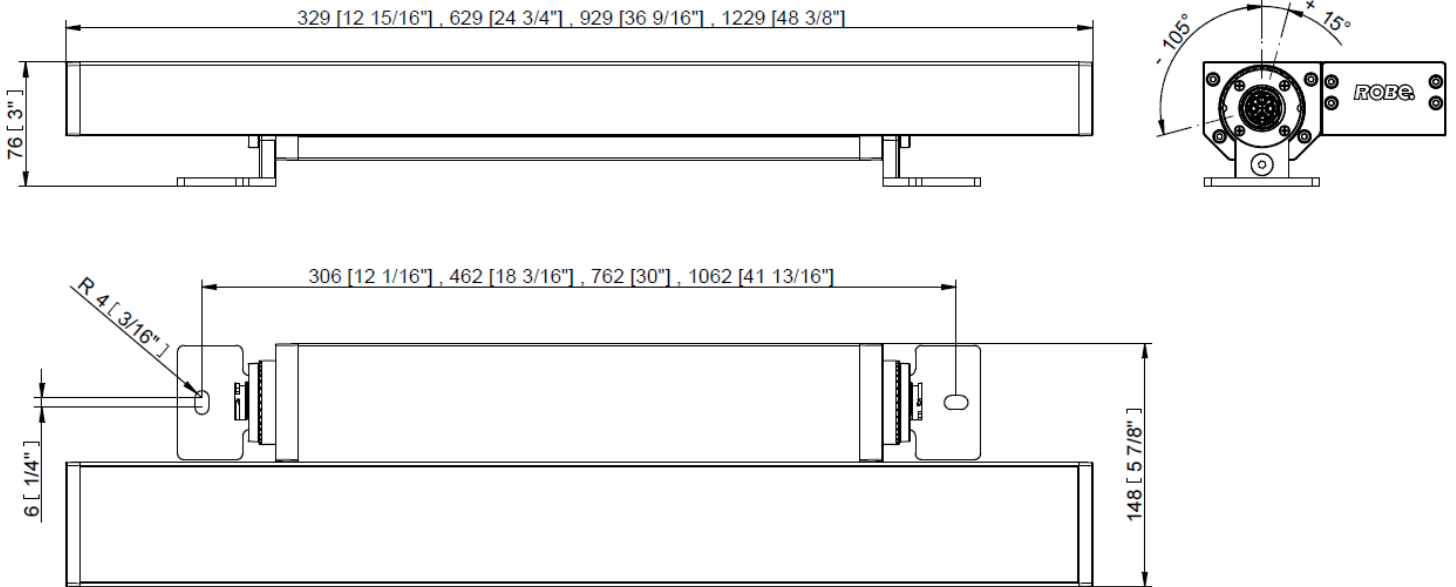


WALLWASHER

**SPECIFICATION**

<b>ELECTRICAL</b>	Input Voltage	120 - 277 V AC 50/60 Hz			
	Typical Power Consumption	<b>Eminere Side 1 / 2 / 3 / 4</b>		25 W / 45W / 65W / 85W	
<b>OPTICAL</b>	Light Source	<b>Eminere Side 1 / 2 / 3 / 4</b>		12, 24, 36, 48 x High Power Single Chip LEDs	
	Colour Variants	RGBW (W - 6.500 K)		RGBA	
		PW (W - 3.000 K)			
	Variants On Request (TW (2700 - 6500 K), 2.200 K   2.500 K   2.700 K   3.500 K   4.000 K   5.000 K   6.500 K)				
	Beam Angle	Symmetrical:	9°   15°   30°   50°   65°   100°		
		Bi-symmetrical:	10° x 30°   30° x 10°   10° x 60°   60° x 10°   35° x 70°   70° x 35°   15° x 90°   90° x 15°		
		Asymmetrical:	Wallwasher   Wide Wallwasher		
Lumen Output Delivered	<b>Eminere Side 1:</b> 1.147 lm, RGBW @ 9°		<b>Eminere Side 3:</b> 3.441 lm, RGBW @ 9°		
	<b>Eminere Side 2:</b> 2.294 lm, RGBW @ 9°		<b>Eminere Side 4:</b> 4.588 lm, RGBW @ 9°		
Projected Lumen Maintenance	L90B10 >90.000 hrs, Ta = 25°C / 77°F				
<b>CONTROL</b>	Interface Protocol	Via E-Box range, Wireless DMX (excluded Eminere Side 1) or ON/OFF (PW & single color only, No dimming)			
	E-Box Control Protocols	USITT DMX512, RDM, ArtNet, MA Net, MA Net2, sACN, Kling-Net			
	Wireless DMX (Option)	Lumen Radio CRMX Technology			
	Operating Modes	Pixel (12 LEDs/300mm) or Fixture mode			
	Setting / Addressing	Via Two Row LCD Display with Control Buttons or RDM communicator			
	Power Supply	Integrated			
	Connectivity	E-box Lite   E-box Daisy	127 of Eminere Side 1 (@ 230 V and 30m cable) via 1 Output		
		E-box Star	127 of Eminere Side 1 (@ 230 V and 30m cable) via 6 Outputs		
Width x Height x Length	<b>1 / 2 / 3 / 4</b>	148 x 76 x 329 / 629 / 929 / 1229 mm   5.82 x 2.99 x 12.95 / 24.76 / 36.57 / 48.38 in.			
Weight	2.95 kg / 6.5 lbs	4.75 kg / 10.47 lbs	7 kg / 15.43 lbs	8.92 kg / 19.67 lbs	
Housing	High Pressure Extruded Aluminium Body   End Caps - Die-Cast Aluminium   Tempered Glass				
Finish Options	Standard Colour	Graphite Black RAL 9011   Grey Aluminium RAL 9007 Pure White RAL 9010   Sandstone RAL 1014			
	Standard Colour Harsh Environment	Graphite Black RAL 9011   Grey Aluminium RAL 9007 Pure White RAL 9010   Sandstone RAL 1014			
	Cost Option	Custom RAL			
<b>PHYSICAL</b>	Cables / Connections	IP67 Hybrid Connection (Power + Data)			
	Mounting Method	Surface Mount With Different Type of Brackets			
	Adjustability	-105° / +15°			
	Protection Factor	IP67 / Suitable For Wet Locations			
	IK Rating	IK06			
	Cooling System	Convection			
	Operating Ambient Temperature	-20 °C / +50 °C (-4 °F / +122 °F)			
	Operating Temperature	+67 °C @ Ambient +50 °C (+153 °F @ Ambient +122 °F)			
	<b>CERTIFICATION</b>	Listings	ETL / cETL, CE, RoHS, UKCA		
		<b>Not Included Items</b>			
<b>ACCESSORIES</b>	Mounting Brackets	Mounting Brackets 50   100   200   300 mm   Custom length			
	Shields	Shield For Eminere Side 1   2   3   4			
	Barndoors	Barndoor (with or without Side Covers) for Eminere Side 1   2   3   4			
	Cables and Connectors	Field Installable Connector FF	Field Installable Connector FM		
		Cable CE WCA	Cable US WCA		
		Waterproof Cover Cap FM ZAHB-0006			
		CE/UL Leader Cables FF for Eminere FF 2   5   10   25   50m			
	CE/UL Jumper Cables FF/FM for Eminere FF/FM 0,25   0,5   1   2   3   5   10m				
Booster Box	Booster Box				

**DIMENSIONS**



**PROJECTED AREA**

	Front (rear) - m <sup>2</sup>	Front (rear) ft <sup>2</sup>	Side - m <sup>2</sup>	Side - ft <sup>2</sup>	Top - m <sup>2</sup>	Top - ft <sup>2</sup>
<b>Eminere Side 1</b>   with Shield	<b>0,024</b>   0,041	<b>0,258</b>   0,441	<b>0,007</b>   -	<b>0,075</b>   -	<b>0,050</b>   0,051	<b>0,538</b>   0,549
<b>Eminere Side 2</b>   with Shield	<b>0,041</b>   0,074	<b>0,441</b>   0,796	<b>0,007</b>   -	<b>0,075</b>   -	<b>0,084</b>   0,085	<b>0,904</b>   0,914
<b>Eminere Side 3</b>   with Shield	<b>0,063</b>   0,111	<b>0,678</b>   1,194	<b>0,007</b>   -	<b>0,075</b>   -	<b>0,129</b>   0,131	<b>1,388</b>   1,409
<b>Eminere Side 4</b>   with Shield	<b>0,115</b>   0,150	<b>0,925</b>   1,614	<b>0,007</b>   -	<b>0,075</b>   -	<b>0,173</b>   0,175	<b>1,861</b>   1,883

**PHOTOMETRIC OVERVIEW**

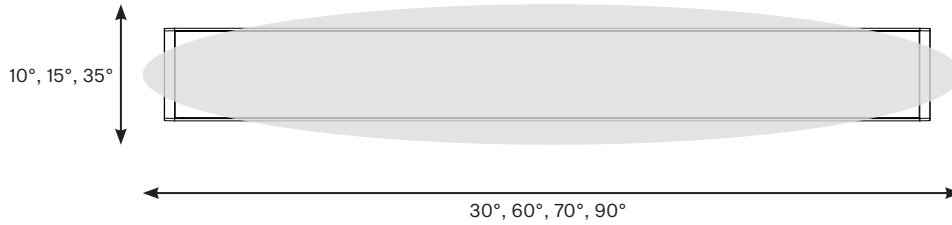
Based on RGBW version, all leds @ full

Lumen Output (lm)

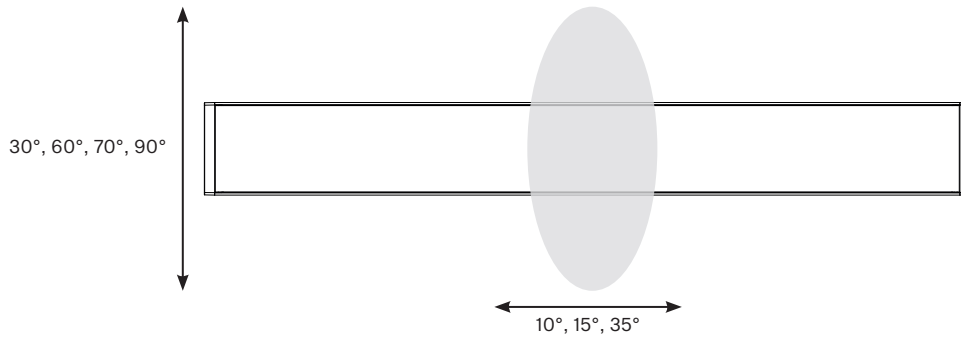
	EMINERE SIDE 1	EMINERE SIDE 2	EMINERE SIDE 3	EMINERE SIDE 4
<b>9°</b>	1147	2 294	3 441	4 588
<b>15°</b>	978	1 956	2 910	3 912
<b>30°</b>	1 046	2 092	3 138	4 184
<b>50°</b>	1 039	2 078	3 117	4 156
<b>65°</b>	1 040	2 080	3 120	4 160
<b>100°</b>	996	1 992	2 988	3 984
<b>10° x 30°</b>	1 032	2 064	3 096	4 128
<b>10° x 60°</b>	1 051	1 874	2 811	3 748
<b>15° x 90°</b>	970	1 940	2 934	3 880
<b>35° x 70°</b>	1 040	2 080	3 120	4 160
<b>WallWasher</b>	952	1 904	2 856	3 806
<b>Wide WallWasher</b>	854	1 708	2 562	3 416

**BI-SYMMETRICAL BEAM ANGLES**

Bi-symmetrical: 10°x30°, 10°x60°, 35°x70°, 15°x90°



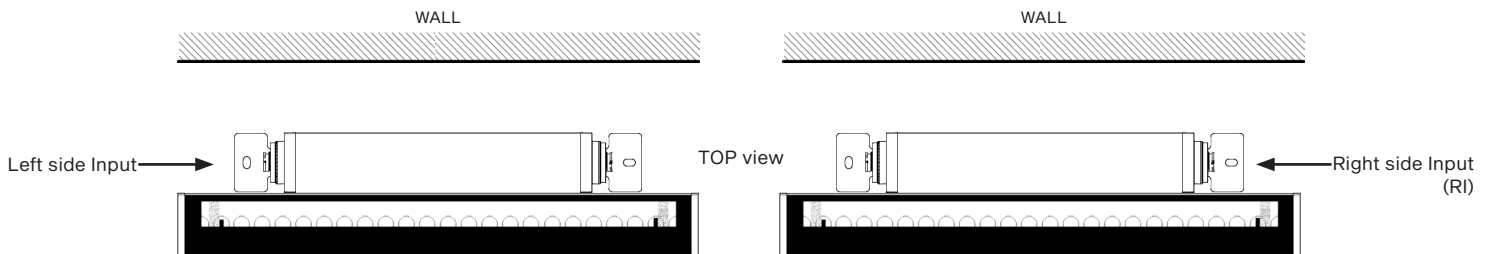
Bi-symmetrical: 30°x10°, 60°x10°, 70°x35°, 90°x15°



**EMINERE SIDE INPUT OPTIONS**

STANDARD

UPON REQUEST

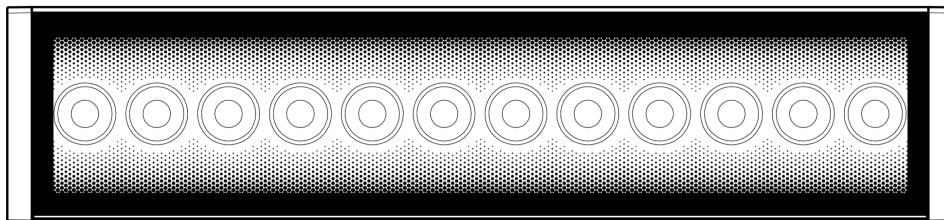


**Note: Applies for all optic versions.**

COLOUR MIXING PRINTS

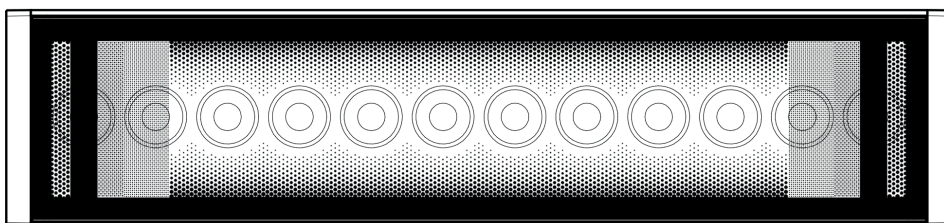
**STAND ALONE** Specially designed glass printing to achieve optimal colour mixing and intensity distribution.

**HEAD2HEAD** Fixtures without special end glass print installed right next to each other create absolutely perfect colour and intensity overlap.

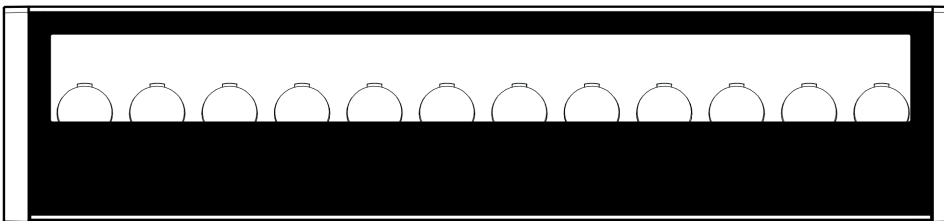


HEAD2HEAD

SYMMETRICAL

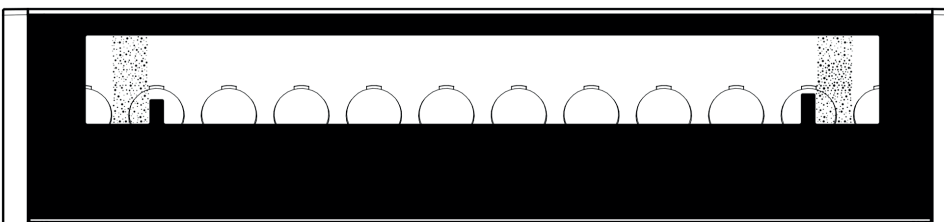


STAND ALONE



HEAD2HEAD

WALLWASHER



STAND ALONE

**Note: Applies for RGBW, RGBA versions. Pure white and Tunable white versions are always without the end print (no matter on their position to other fixture).**

## E-BOX SPECIFICATION

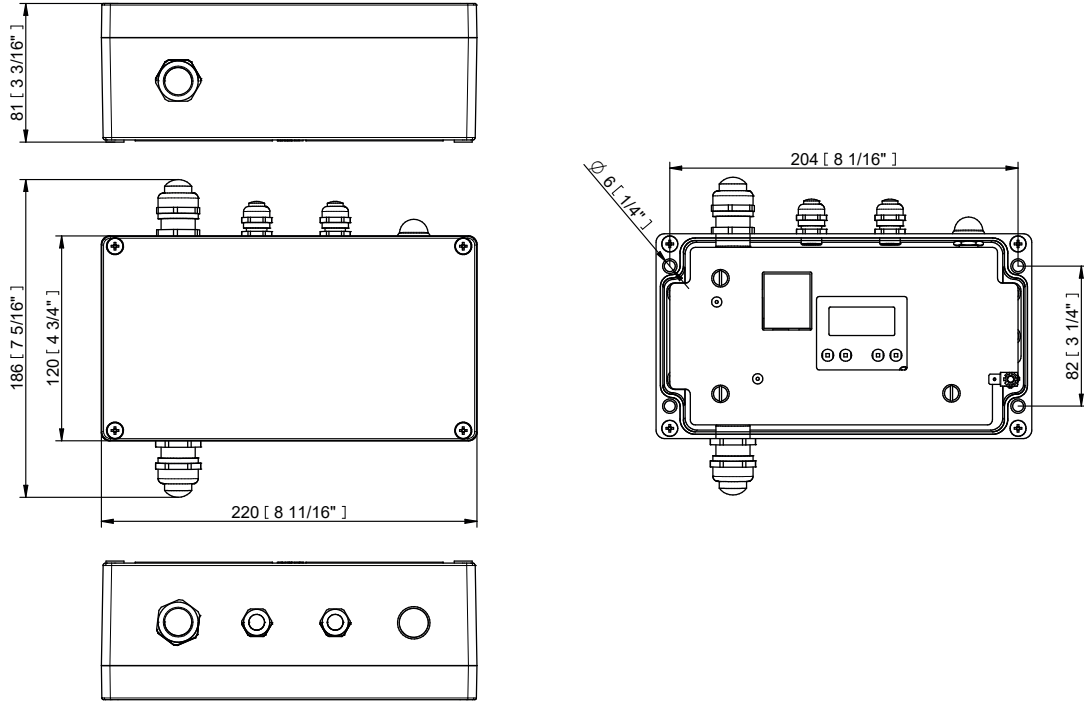
<b>ELECTRICAL</b>	Input Voltage	120 – 277 V AC 50/60 Hz		
	Wireless DMX (Option)	Lumen Radio CRMX Technology		
	Interface Protocol	<b>E-box Lite:</b> USITT DMX512, RDM		
		<b>E-box Daisy / Star:</b> USITT DMX512, RDM, ArtNet, MA Net, MA Net2, sACN, Kling-Net		
Operating Modes	<b>E-box Lite / Daisy:</b> Fixture Mode, Pixel Mode, Output Mode			
	<b>E-Box Star:</b> Total Mode, Fixture Mode, Pixel Mode, Output Mode			
<b>CONTROL</b>	Display	Via Two Row LCD Display with Control Buttons or RDM communicator		
	Control System	E-box With Self Addressing Feature or Custom Setting Via LCD Display/RDM		
	Power Supply	Integrated		
	Connectivity	<b>E-box Lite</b>	127 of Eminere Side 1 (@ 230 V and 30m cable) via 1 Output	
		<b>E-box Daisy</b>	127 of Eminere Side 1 (@ 230 V and 30m cable) via 1 Output	
		<b>E-box Star</b>	127 of Eminere Side 1 (@ 230 V and 30m cable) via 6 Outputs	
	Length x Width x Height	<b>E-box Lite</b>	220 x 120 x 81 mm (8.66 x 4.72 x 3.18 in.)	
		<b>E-box Daisy</b>	260 x 160 x 91 mm (10.24 x 6.30 x 3.58 in.)	
		<b>E-box Star</b>	280 x 230 x 111 mm (11.02 x 9.06 x 4.37 in.)	
	Weight	1.67 kg   3.85 lbs	2.78 kg   6.13 lbs	4.4 kg   9.7 lbs
Housing	Die-Cast Aluminium Case			
Finish Options	Standard Colour - Graphite Black (RAL 9011)   Silver (RAL 9006)			
	Cost Option - Custom RAL   Harsh Environment (RAL 9016, RAL 9011)			
Cables / Connections	Cable Grommet (stainless steel)			
Mounting Method	Surface Mount , 4 Mounting Holes			
Protection Factor	IP67 / Suitable For Wet Locations			
IK Rating	IK10			
Cooling System	Convection			
Operating Ambient Temperature	-20 °C / +40 °C (-4 °F / +104 °F)			
<b>CERTIFICATION</b>	Listings	ETL / cETL, CE, RoHS, UKCA		

## COMPARISON

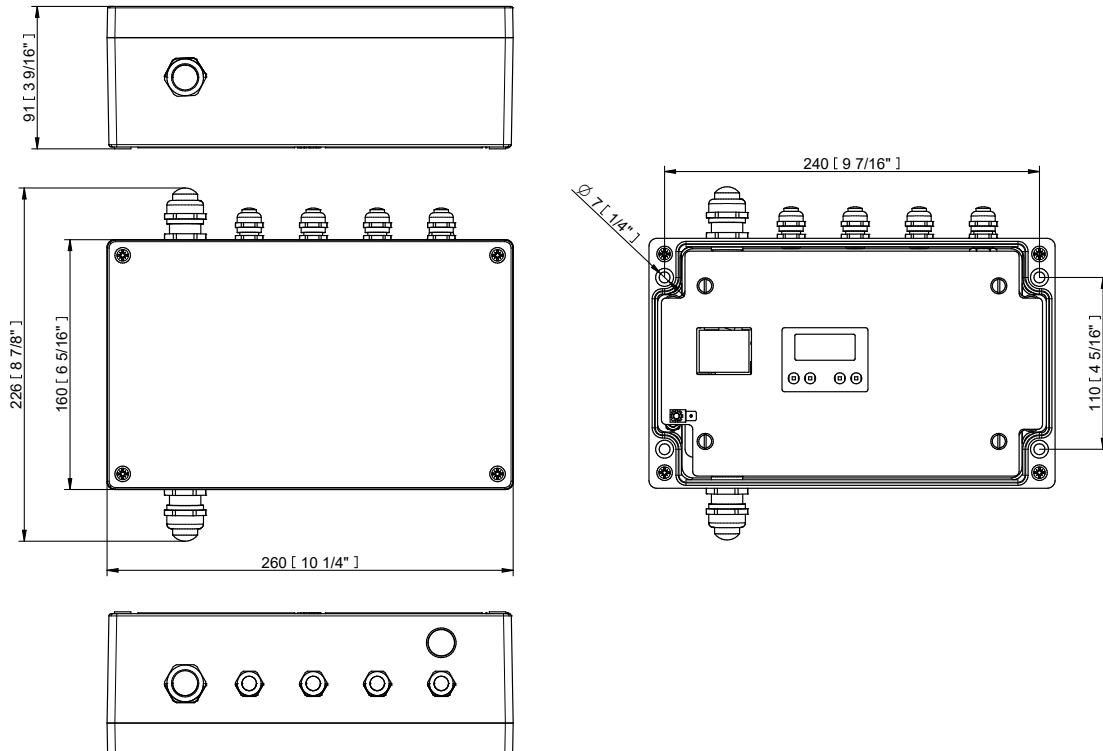
	<b>E-BOX LITE</b>	<b>E-BOX DAISY</b>	<b>E-BOX STAR</b>
<b>Power input</b>	1	1	1
<b>Fixture Output</b>	1	1	6
<b>Total load (current)</b>	16A	16A	16A
<b>DMX control</b>	YES	YES	YES
<b>RDM</b>	YES	YES	YES
<b>Art-Net</b>	NO	YES	YES
<b>Ethernet switch</b>	NO	YES	YES
<b>Kling-Net</b>	NO	YES	YES
<b>sACN</b>	NO	YES	YES
<b>MA Net, MA Net2</b>	NO	YES	YES

E-BOX DIMENSIONS

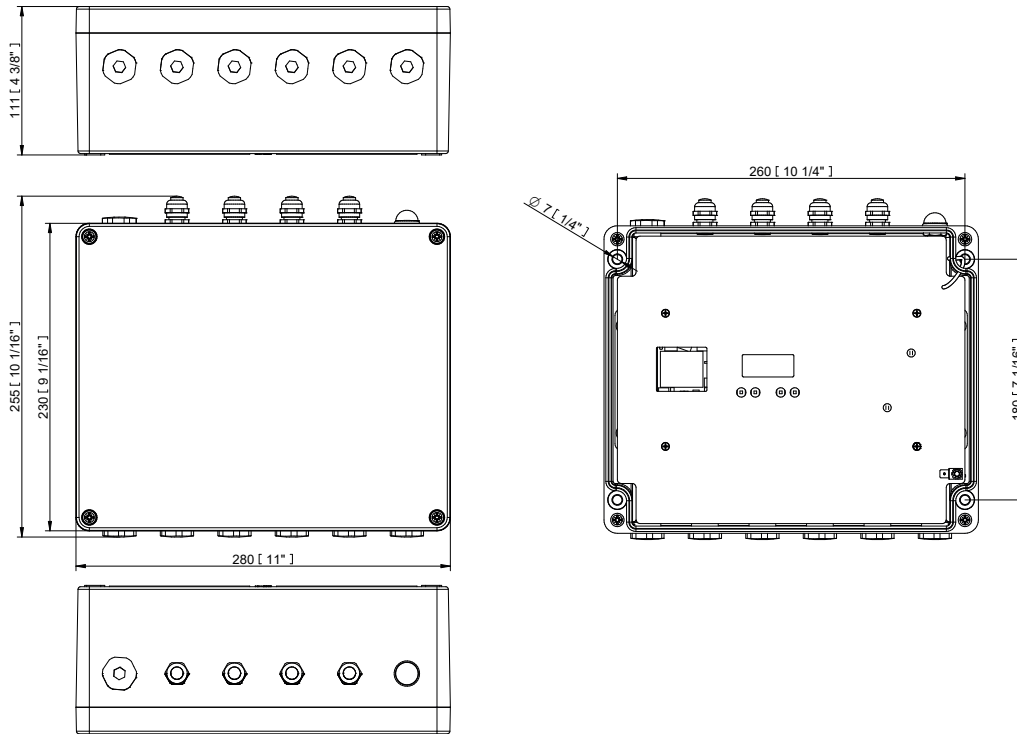
E-BOX LITE



E-BOX DAISY



E-BOX STAR

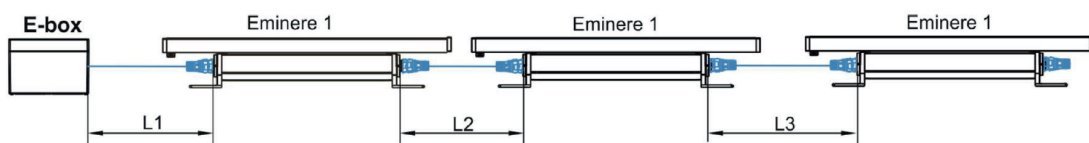


CONNECTIVITY

The tables below state max. theoretical number of Emineres connected to the one LED output of the E-box without using Booster boxes.

	Cable length (m)	Voltage (V)			
		120	190	230	277
EMINERE 1	10	66	104	127	152
	20	66	104	127	152
	30	46	104	127	152
	50	28	70	102	148
	70	20	50	73	106
	100	13	35	51	74
	200	7	17	25	37
EMINERE 2	10	36	56	69	83
	20	36	56	69	83
	30	24	56	69	83
	50	15	38	56	80
	70	10	27	40	57
	100	9	18	28	40
	200	3	9	16	20

	Cable length (m)	Voltage (V)			
		120	190	230	277
EMINERE 3	10	25	40	48	59
	20	25	40	48	59
	30	17	40	48	59
	50	11	26	39	57
	70	7	19	28	40
	100	5	13	19	28
	200	2	6	10	14
EMINERE 4	10	19	31	37	45
	20	19	31	37	45
	30	14	31	37	45
	50	8	20	30	44
	70	5	15	21	35
	100	3	10	15	21
	200	1	4	7	11

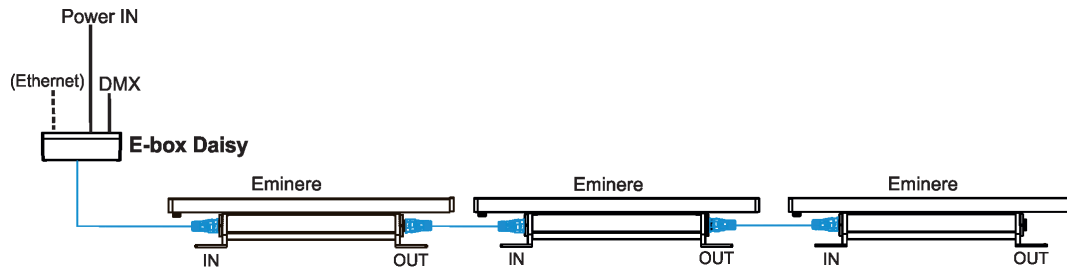


**Note:** Cable length is a total cable length between E-box and last connected Eminere. Example: Total cable length=L1+L2+L3.  
For more information see User Manual.

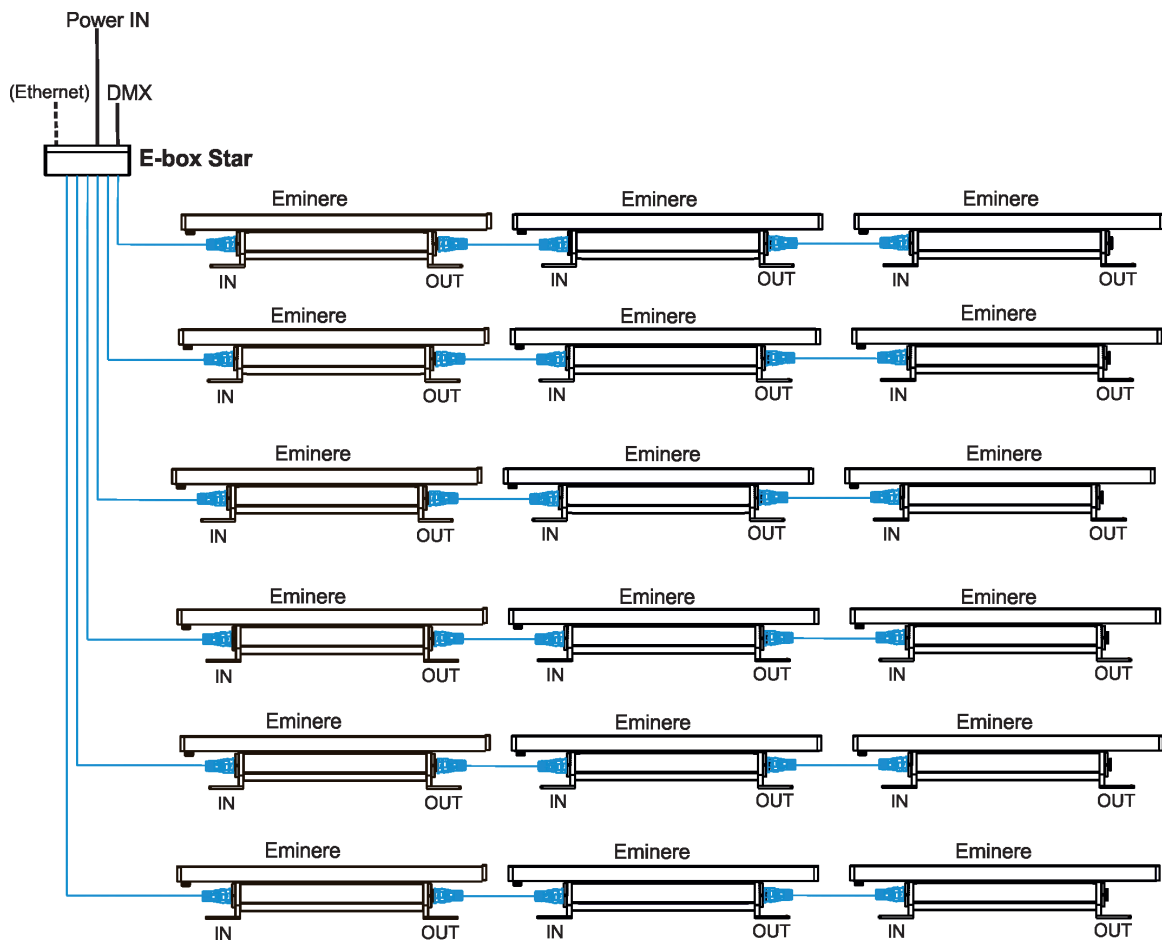


CONNECTION

E-BOX LITE / DAISY



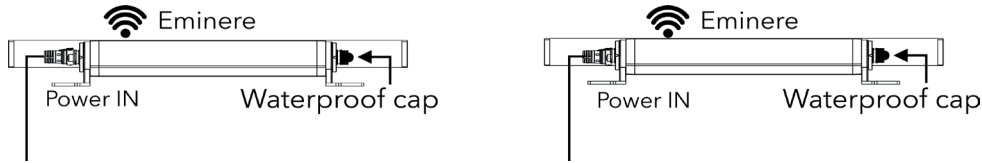
E-BOX STAR



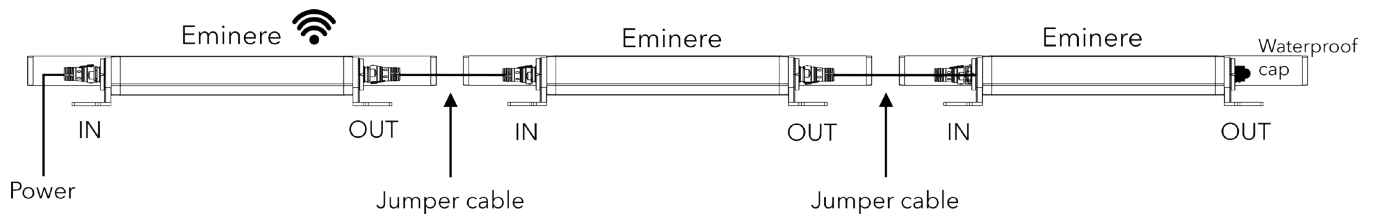
**CONNECTION - WIRELESS VERSION**

Connection setup, where every Eminere is independently accepting data from WIFI.

**A**



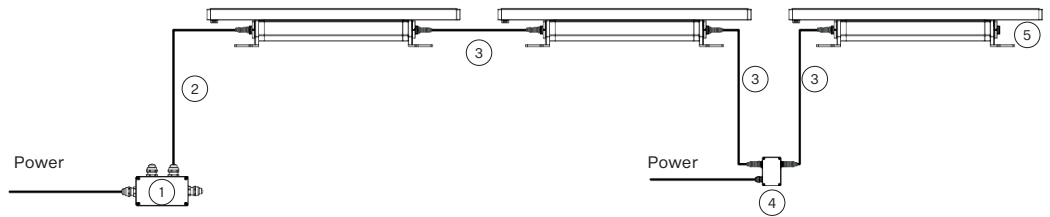
**B**



**CONNECTION - ON / OFF VERSION**

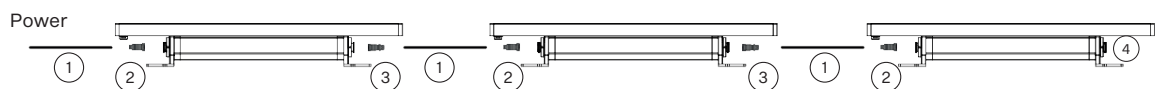
**A**

- 1) Junction Box for Calumma or by Others
- 2) CE/UL Leader Cables FF for Eminere FF  
2 | 5 | 10 | 25 | 50 m
- 3) CE/UL Jumper Cables FF/FM for Eminere FF/FM  
0,25 | 0,5 | 1 | 2 | 3 | 5 | 10 m
- 4) Booster Box
- 5) Waterproof Cap



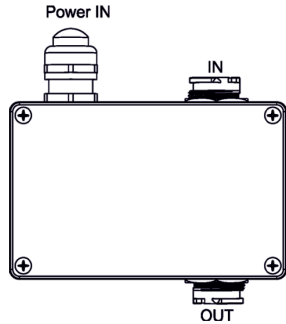
**B**

- 1) Power Cable (by Others)
- 2) Field Installable Connector FF (13053003)
- 3) Field Installable Connector FM (13053004)
- 4) Waterproof Cap

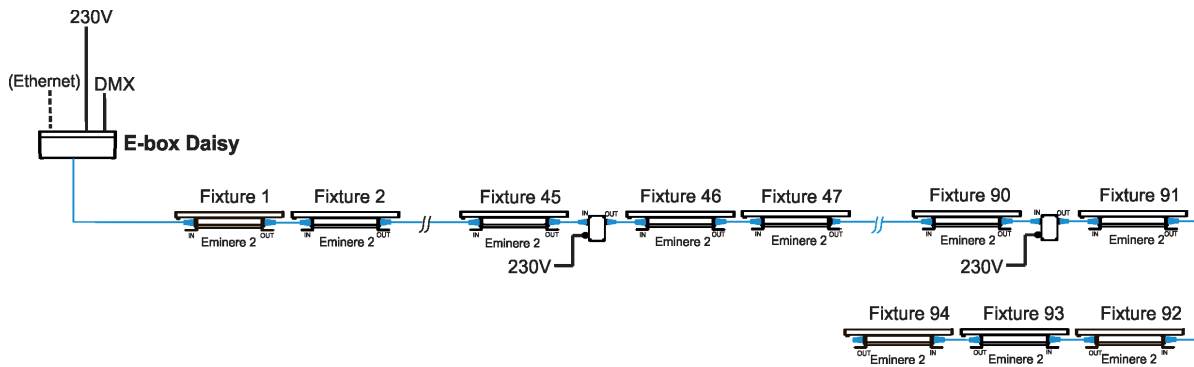


**THE BOOSTER BOX**

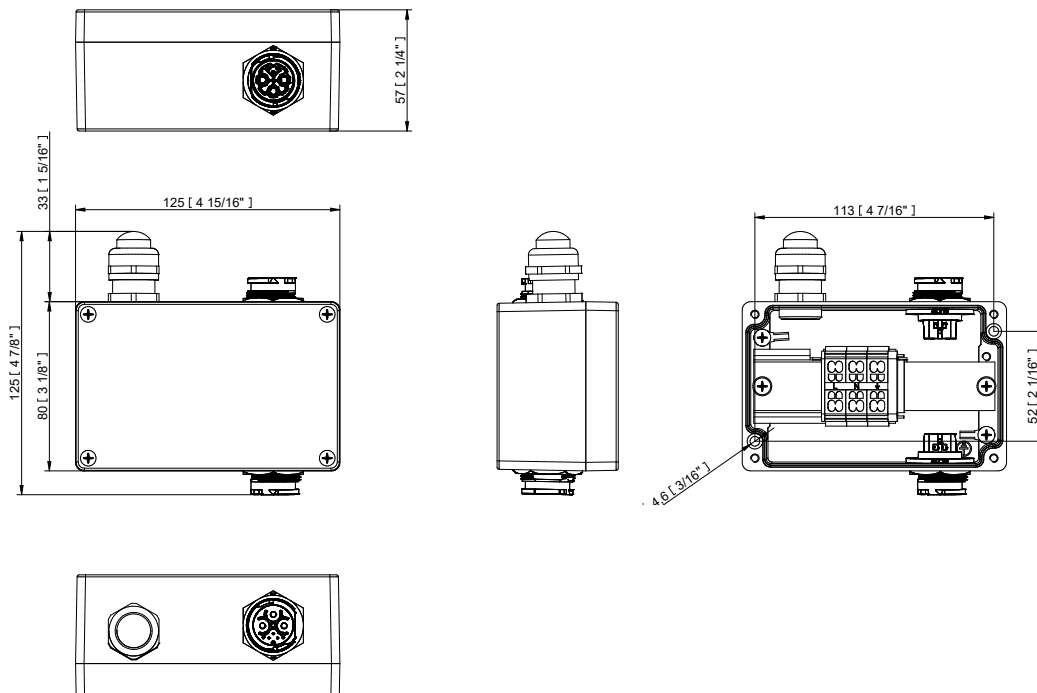
To compensate a voltage drop in a large installation, the Booster boxes have to be connected in the chain of Eminere modules.



Example: E-box Daisy, Power supply= 230V, Cable length=70m, fixture=Eminere 2.  
The Booster box has to be connected after every 45th Eminere 2 (fixture 45 and fixture 90) from 94 fixtures.



**DIMENSIONS**



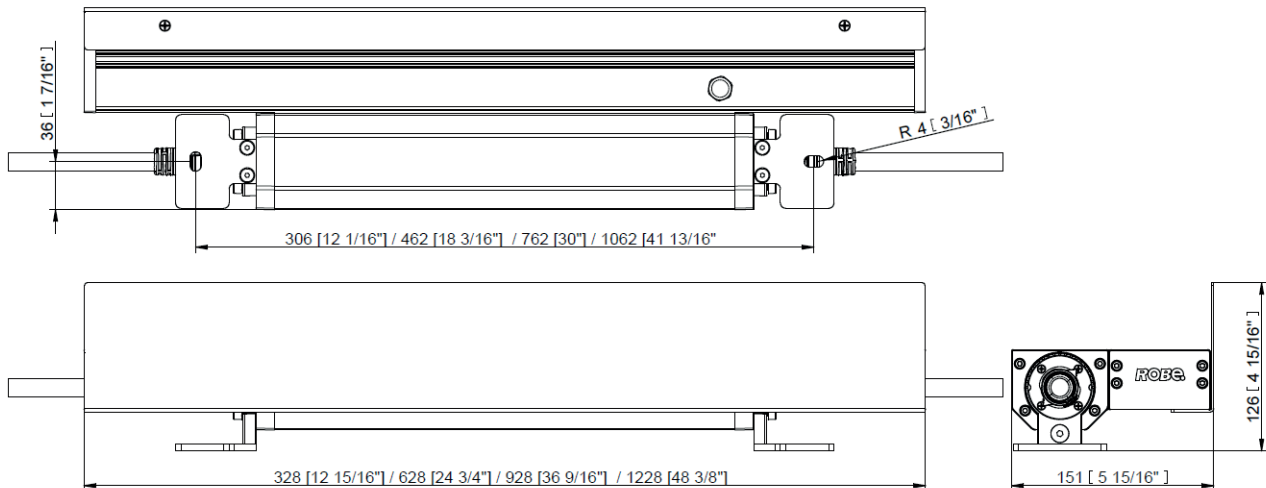
**BOOSTER BOX POSITIONS**

	Cable length (m)	Max. number of Emineres 1 = 191 (in Standard mode)			
		120 V	190 V	230 V	277 V
<b>EMINERE 1</b>	10 m	66,132	104	127	-
	20 m	66,132	104	127	-
	30 m	46,92,138	104	127	-
	50 m	28,56,84,112,140	70,140	102	148
	70 m	20,40,60,80,100,120,140	50,100,150	73,146	106
	100 m	13,26,39,52,65,78,91,104,117,130,143	35,70,105,140	51,102	74,148
	200 m	7,14,21,28,35,42,49,56,63,70,77,84,91,98,105,112, 119,126,133,140,147	17,34,51,68,85,102,119,136	25,50,75,100,125,150	37,74,111,148

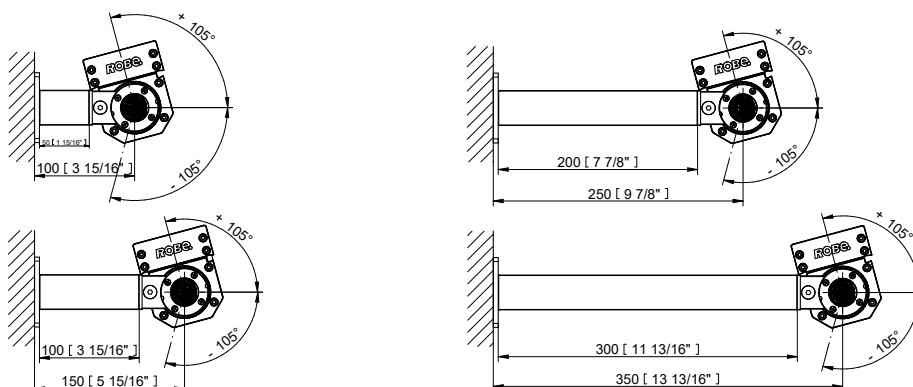
**Note:** For more detail see the User manual.

**ACCESSORIES**

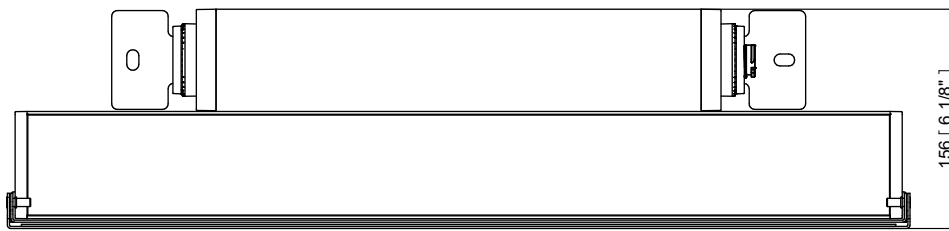
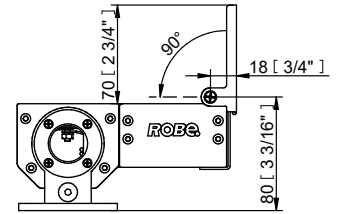
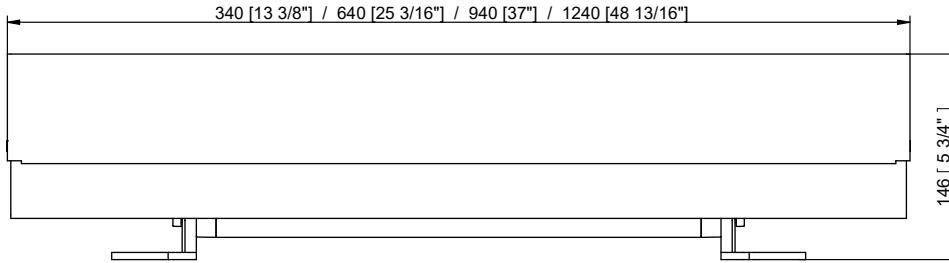
Shield for Eminere side



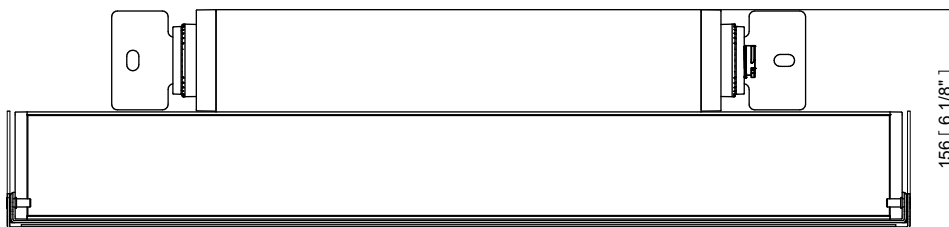
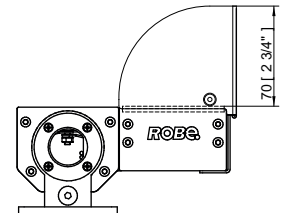
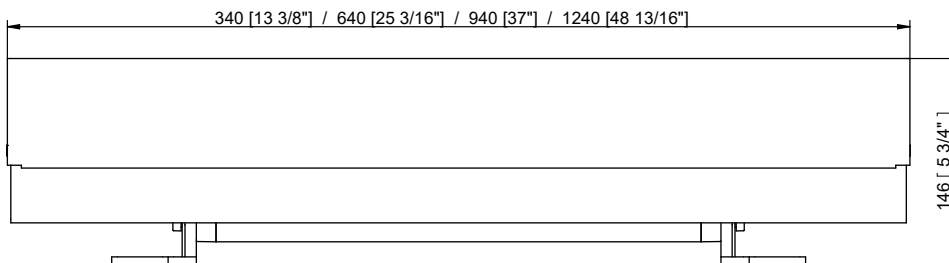
Mounting Brackets for Eminere Side



Barndoor without side cover



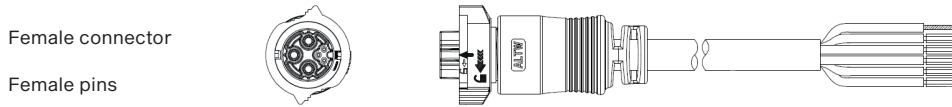
Barndoor without side cover



**CABLES**

**Leader Cable**

For connecting E-Box with first Eminere. Comes with Waterproof End Cap which has to be installed to the last Eminere's output connector.



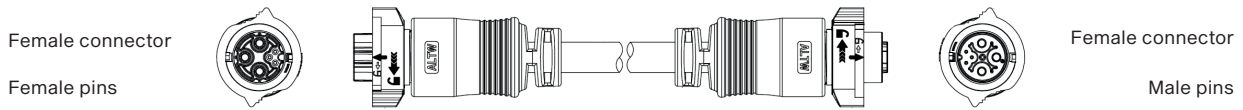
Female connector

Female pins

**Jumper Cable**

For connection between two Emineres.

NOTE: Custom length of Jumper cable depends on the distance between two Eminere luminaires (length includes cable and connectors).



Female connector

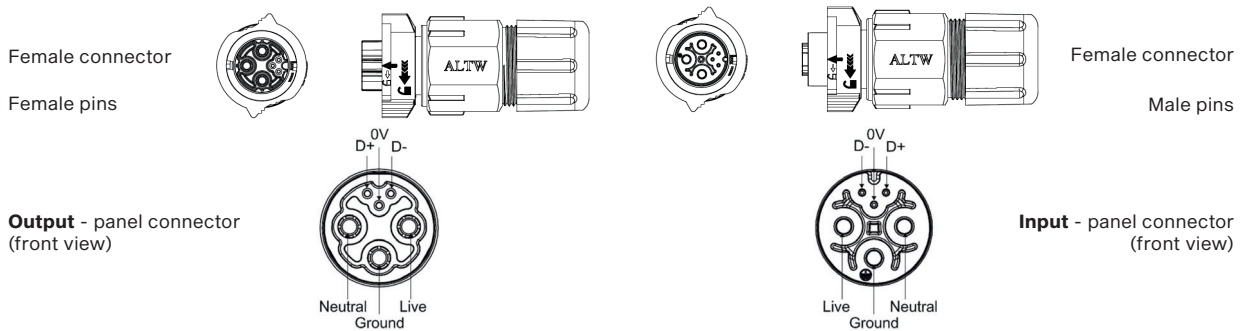
Female pins

Female connector

Male pins

**Field installable connector**

For special cases, where Jumper Cable can't be used. Then use Leader Cable with Field installable connector to make a connection between Emineres.



Female connector

Female pins

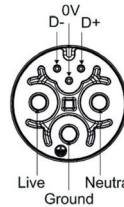
Female connector

Male pins

**Output** - panel connector  
(front view)

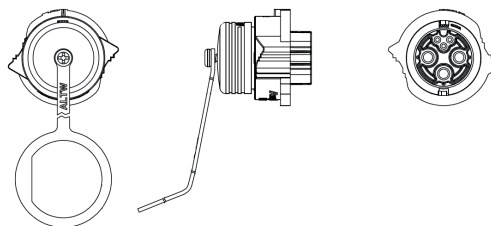


**Input** - panel connector  
(front view)



**Waterproof End Cap**

Install at the end of line to the last Emineres output connector.



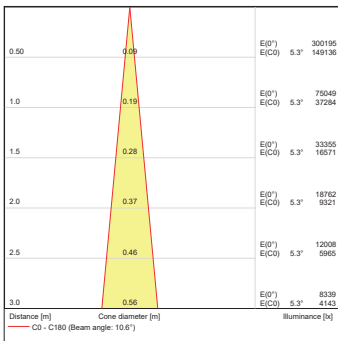
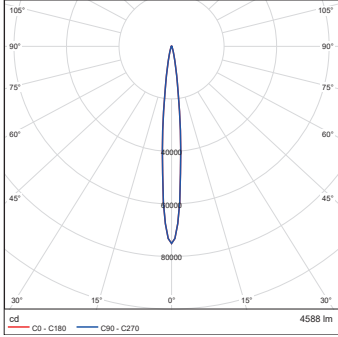
**Cable lengths available**

IN METRES	LEADER CABLE	JUMPER CABLE
0,25	-	YES
0,5	-	YES
1	-	YES
2	YES	YES
3	-	YES

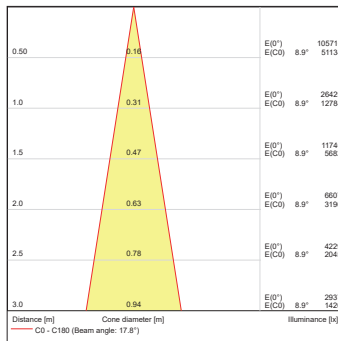
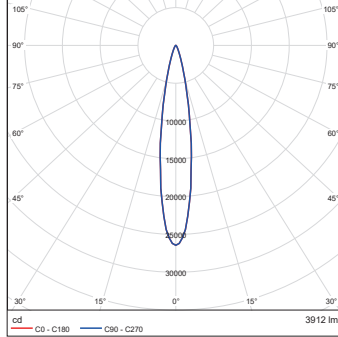
IN METRES	LEADER CABLE	JUMPER CABLE
5	YES	YES
10	YES	YES
25	YES	-
50	YES	-
<b>Other lengths</b>	On Request	

PHOTOMETRIC DATA

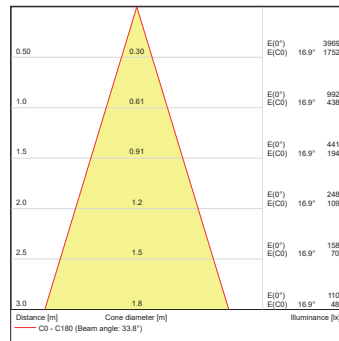
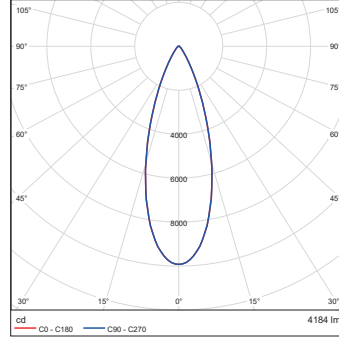
Eminere Side 4 RGBCW 9dg



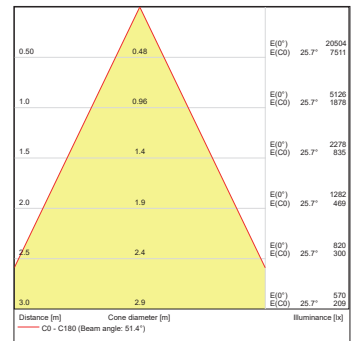
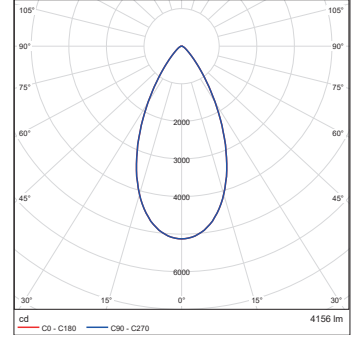
Eminere Side 4 RGBCW 15dg



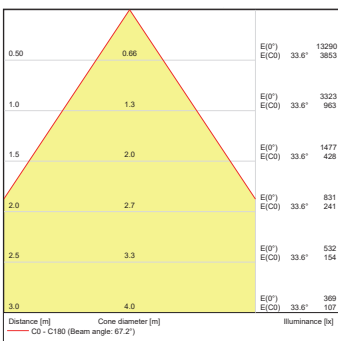
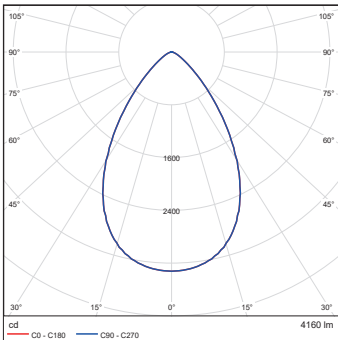
Eminere Side 4 RGBCW 30dg



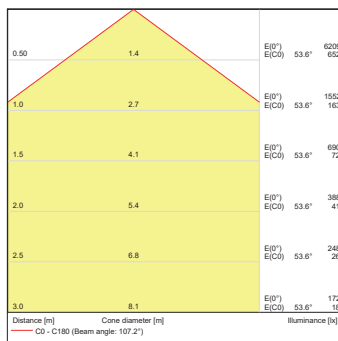
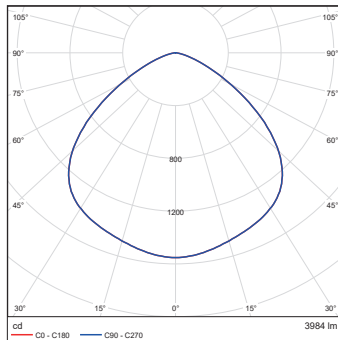
Eminere Side 4 RGBCW 50dg



Eminere Side 4 RGBCW 65dg

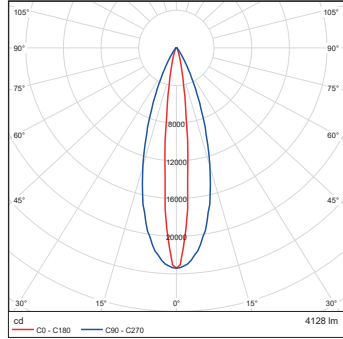


Eminere Side 4 RGBCW 100dg

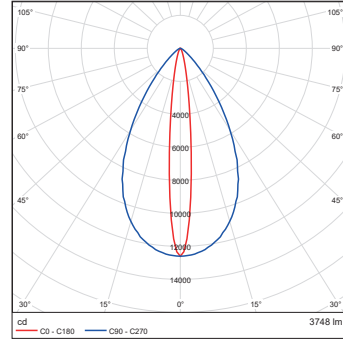


PHOTOMETRIC DATA

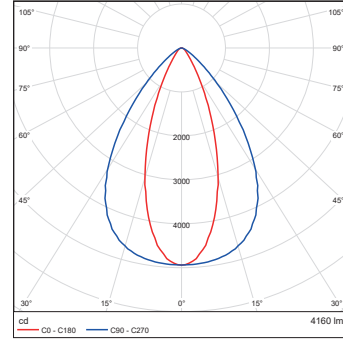
Eminere Side 4 RGBCW 10dg x 30 dg



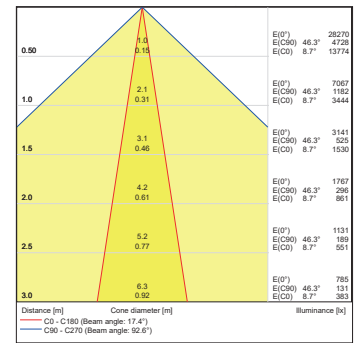
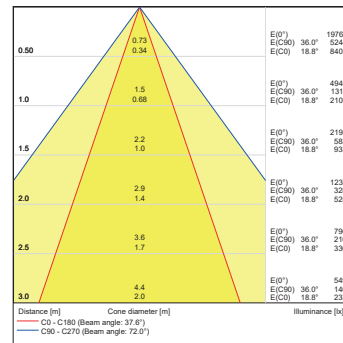
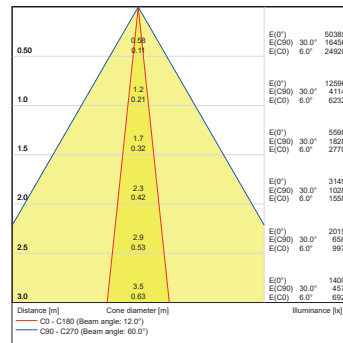
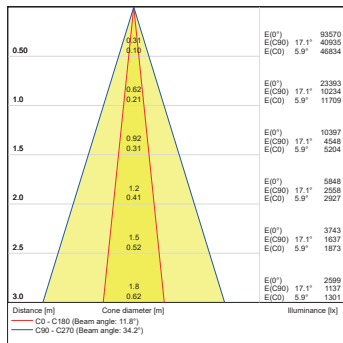
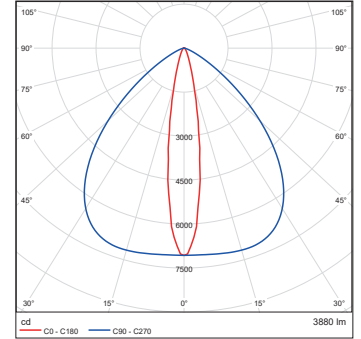
Eminere Side 4 RGBCW 10dg x 60 dg



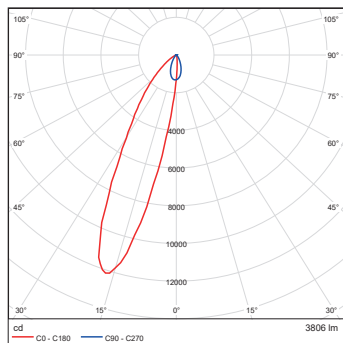
Eminere Side 4 RGBCW 35dg x 70dg



Eminere Side 4 RGBCW 15dg x 90dg



Eminere Side 4 RGBCW WallWasher



Eminere Side 4 RGBCW Wide WallWasher

