

# CALUMMA™ M SC

Featuring an optical design using 37 high efficacy single-chip LEDs and available with optional LED colour variants and various beam angles, the medium-sized Calumma M SC luminaire creates powerful and beautiful light output for a spot, accent or flood lighting solution. Its durable housing is built to withstand any exterior conditions, and its special finish for harsh and marine environments provides an exceptional outdoor LED luminaire in an elegant design. Additionally, Calumma M SC can be connected in long In/Out daisy-chains via an E-Box and hybrid Plug & Play connections for almost effortless installation. Complemented by wide range of accessories and control protocols, this luminaire is an effective and versatile unit to get the most out of architectural lighting applications.



## KEY FEATURES

### Lumen output & Light source

Luminaire with 37 high-power, singlechip LEDs provides up to 3478 lumen output. Multiple LED colour variants. No light spills. Well homogenised light output with great efficacy up to 57 lm/w.

### Design & Durability

Compact, durable and stylish housing made of high-pressure die cast aluminium. IP67 and IK10 certification; suitable for marine and traffic applications. Supported with a 5 year warranty.






### Flexibility

Exceptional outdoor or indoor LED luminaire with a wide range of accessories, custom colour finishes, multiple light output variants and beam angles.

### Connectivity








Utilising the innovative E-Box series of power and data interfaces, Calumma M SC can communicate via numerous wired, wireless, and Ethernet based control protocols. Various wiring topologies are supported using hybrid power / data cables with Plug & Play connectors or standard connection options.

## CONTROL & PROTOCOLS













 DMX RDM OPTIONAL	 WIRELESS DMX OPTIONAL	 VIA E-BOX OPTIONAL	 DALI OPTIONAL
 ON OFF PW & SINGLE COLOR ONLY			

## OPTIC OPTIONS



### SYMMETRICAL

 10°	 15°	 25°	 30°
 45°	 65°	 100°	

### BI-SYMMETRICAL










 10°x30°	 10°x60°	 15°x45°	 15°x90°
 30°x60°	 30°x90°	 30°x10°	 60°x10°
 45°x15°	 90°x15°	 60°x30°	 90°x30°

### ASYMMETRICAL

 Asymmetrical Forward	 Asymmetrical Side
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## 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 *			

## COLOURS









\* UPON REQUEST

 RGBW	 RGBA	 Pure White	 Tuneable White *
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## FINISH OPTIONS

 Graphite Black	 Silver	 RAL Custom Paint Colour	 Harsh Environment
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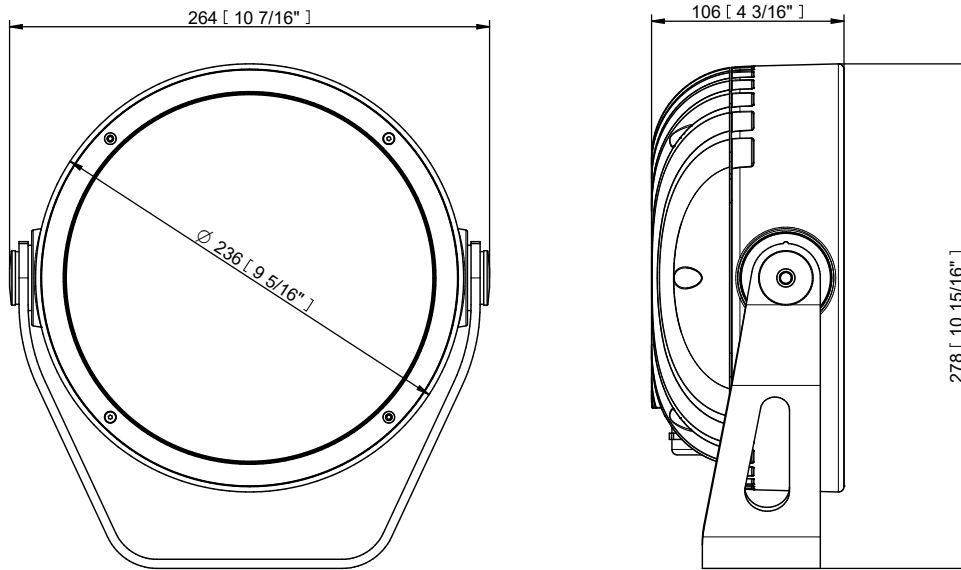
## STANDARD & SPECIFICATION

 IP67	 IK10	 CE	 ETL <sup>®</sup>
 ROHS	 UK CA	 5 YEAR Warranty with Registration	 Vibration Standard for Bridge

**CALUMMA M SC SPECIFICATION**

<b>ELECTRICAL</b>	Input Voltage	120 - 277 V AC 50/60 Hz (US)	
	Typical Power Consumption	60 W +/-10 %	
<b>OPTICAL</b>	Light Source	37x High Power Single Chip LEDs	
	Colour Variants	RGBW (W - 6500 K)   RGBA   PW (W - 3000 K)	
		Other Variants On Request (TW (2700 - 6500 K), 2200 K, 2500 K, 2700 K, 3500 K, 4000 K, 5000 K, 6500 K)	
	Beam Angle	10°   15°   25°   30°   45°   65°   100°	
		10°x30°   30°x10°   10°x60°   60°x10°   15°x45°   45°x 15° 15°x90°   90°x15°   30°x60°   60°x30°   30°x90°   90°x30°	
		Asymmetrical Side   Asymmetrical Forward	
Lumen Output Delivered	3478 lm (@10° RGBW)		
Projected Lumen Maintenance	L90B10 >90.000 hrs, Ta = 25°C / 77°F		
<b>CONTROL</b>	Interface Protocol	Via E-box range, DMX/RDM, wireless DMX, DALI 2 or ON/OFF (PW & single color only)	
	E-box control protocol	USITT DMX512+RDM, ArtNet, MA Net, MA Net2, sACN, Kling-Net	
	DALI 2 Device Type	DT 8	
	Wireless DMX (Option)	Lumen Radio CRMX Technology	
	Control System	Third Party DMX Controllers or third party DALI 2 controllers, Ethernet	
	Operating Modes	DMX, Stand-alone	
	Settings / Addressing	E-Box, RDM communicator	
	Power Supply	Integrated	
	<b>PHYSICAL</b>	Width x Height x Depth	264 x 278 x 106 mm (10.4 x 10.94 x 4.17 in.)
Weight		5.9 kg   13 lbs	
Housing		High Pressure Die-Cast Aluminium Body	
		Tempered Glass	
Finish Options		Standard Colour - Graphite Black (RAL 9011)   Silver (RAL 9006)	
		Cost Option - Custom RAL   Harsh Environment (RAL 9016, RAL 9011)	
Cables / Connections		<b>IN/OUT (for E- Box version):</b> - 0,5 m cables with hybrid connectors - Jumper cables	<b>IN (for DMX, DALI, ON/OFF):</b> - 1 m cable with bare end - Other cable length - custom - Junction box - optional
Mounting Method		Yoke	
Adjustability		+180° / -180°	
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	
<b>ACCESSORIES</b>		Junction Box for Calumma	
		Optical Demo Set for Calumma M	
		Top Hat Calumma M	
		Half Top Hat Calumma M	
		Tenon Adaptor for Calumma M	
		Floor Stand for Calumma S, M	
	Pole Adaptor (ø 102mm)		

**DIMENSIONS**

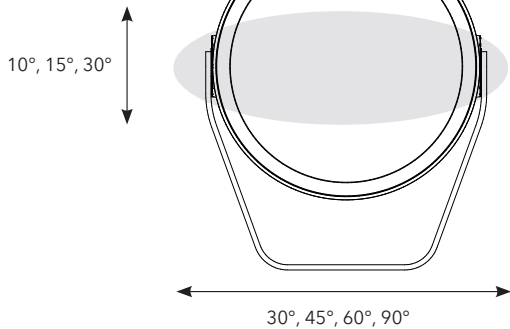


**PROJECTED AREA**

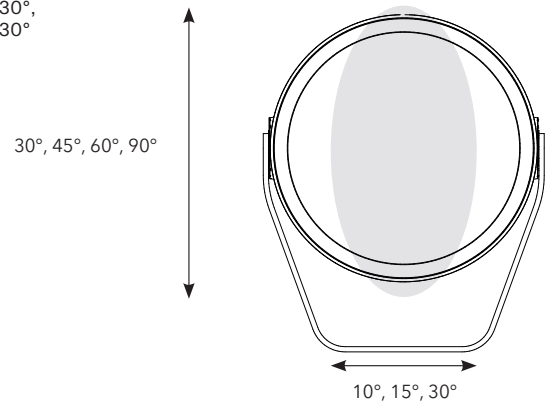
	Front (rear) - m <sup>2</sup>	Front (rear) ft <sup>2</sup>	Side - m <sup>2</sup>	Side - ft <sup>2</sup>	Top - m <sup>2</sup>	Top - ft <sup>2</sup>
<b>Calumma M</b>	0,047	0,500	0,026	0,280	0,024	0,258
<b>with Top Hat</b>	0,047	0,500	0,054	0,581	0,052	0,559
<b>with Half Top Hat</b>	0,047	0,500	0,037	0,398	0,052	0,559

**BI-SYMMETRICAL BEAM ANGLES**

Bi-symmetrical:  
10°x30°,  
10°x60°,  
15°x45°,  
15°x90°,  
30°x60°,  
30°x90°



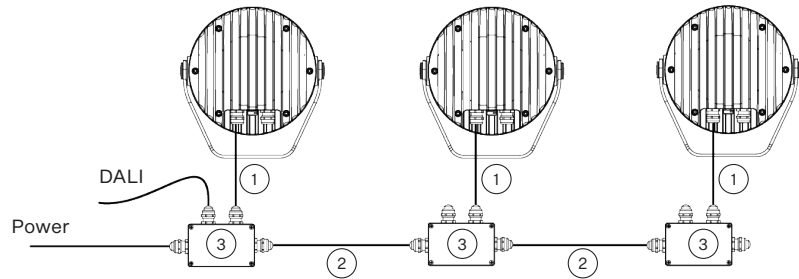
Bi-symmetrical:  
30°x10°,  
60°x10°,  
45°x15°,  
90°x15°,  
60°x30°,  
90°x30°



CONTROL AND CONNECTION OPTIONS - CE

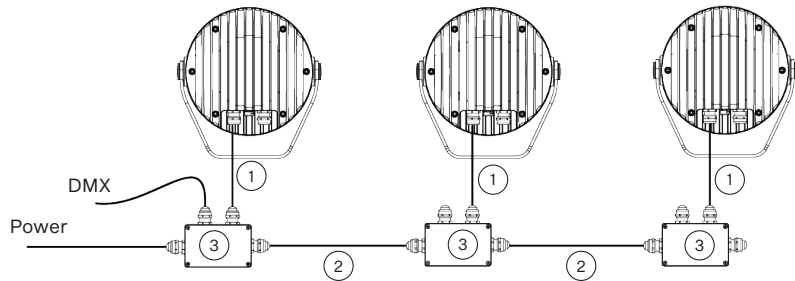
**DALI**

- 1) SJTW 5x 14AWG (13053336)  
Standard 1 m with bare-end
- 2) SJTW 5x 14AWG (13053336)  
or Scope of Others
- 3) Junction Box for Calumma



**DMX**

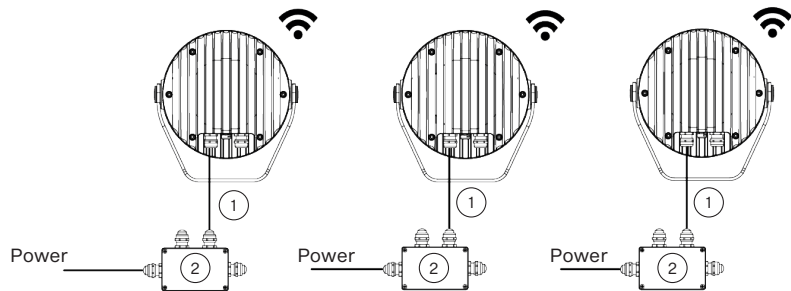
- 1) Flamar 3x AWG 16 + 1 x (2x AWG 24)  
Standard 1 m with bare-end  
(13051508)
- 2) Flamar 3x AWG 16 + 1 x (2x AWG 24)  
(13051508)  
or Scope of Others
- 3) Junction Box for Calumma



**WIRELESS DMX**

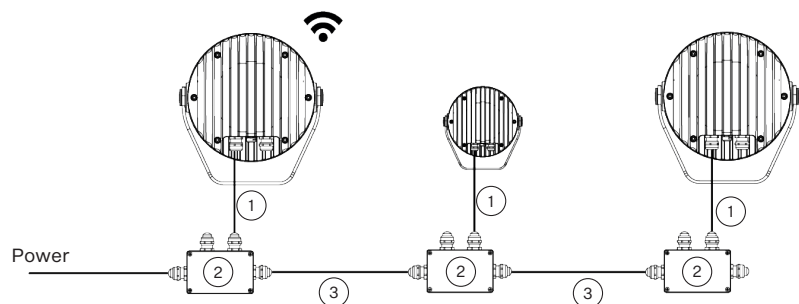
- 1) Flamar 3x AWG 16 + 1 x (2x AWG 24)  
(13051508), Standard 1 m bare-end
- 2) Junction Box for Calumma

**Note: This type of connection is available for M, L, XL versions.**



- 1) Flamar 3x AWG 16 + 1 x (2x AWG 24)  
(13051508), Standard 1 m bare-end
- 2) Junction Box for Calumma
- 3) Flamar 3x AWG 16 + 1 x (2x AWG 24)  
(13051508)  
or Scope of Others

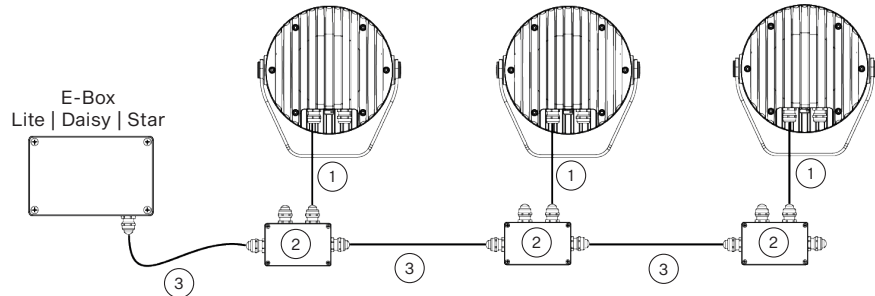
**Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.**



CONTROL AND CONNECTION OPTIONS - CE

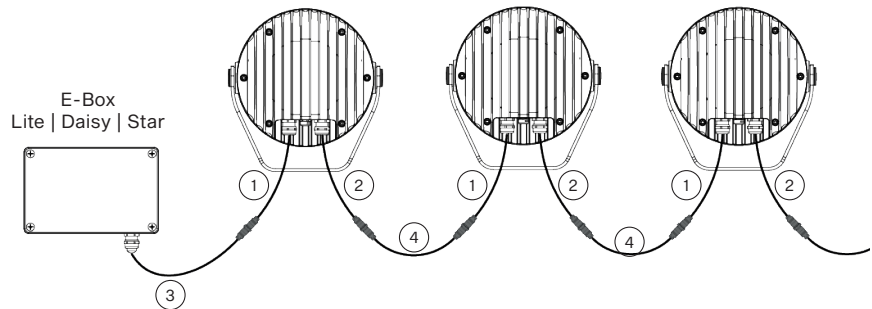
DMX or ETHERNET via E-BOX

- 1) Flamar 3x AWG 16 + 1x (2x AWG 24) (13051508), Standard 1 m with bare-end
- 2) Junction Box for Calumma
- 3) Flamar 3x AWG 16 + 1x (2x AWG 24) (13051508) or Scope of Others

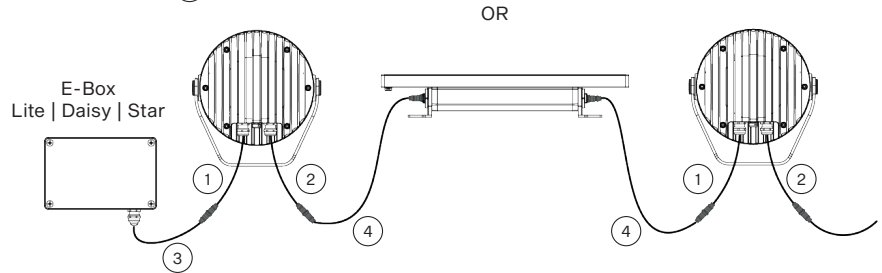


**Note: This type of connection is available for S, M, L, and XL versions. E-Box has to be in Pass Through mode only.**

- 1) Leader Cable MM (13053493) Standard 0,5 m with hybrid connector
- 2) Leader Cable MF (13053494) Standard 0,5 m with hybrid connector
- 3) Leader Cable FF 2 m (13053438)  
Leader Cable FF 5 m (13053440)  
Leader Cable FF 10 m (13053436)  
Leader Cable FF 25 m (13053437)  
Leader Cable FF 50 m (13053439)



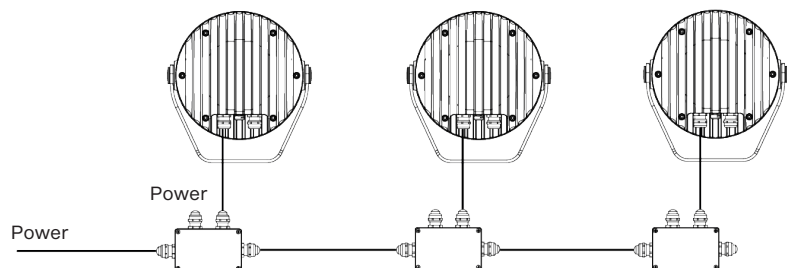
- 4) Jumper Cable FF/FM 0,25 m (13053422)  
Jumper Cable FF/FM 0,5 m (13053423)  
Jumper Cable FF/FM 1 m (13053425)  
Jumper Cable FF/FM 2 m (13053427)  
Jumper Cable FF/FM 3 m (13053428)  
Jumper Cable FF/FM 5 m (13053430)  
Jumper Cable FF/FM 10 m (13053424)



**Note: With this type of connection is possible to connect Calumma (M, L, XL) and Eminere (Eminere, Eminere Side) luminaires in a row.**

ON/OFF

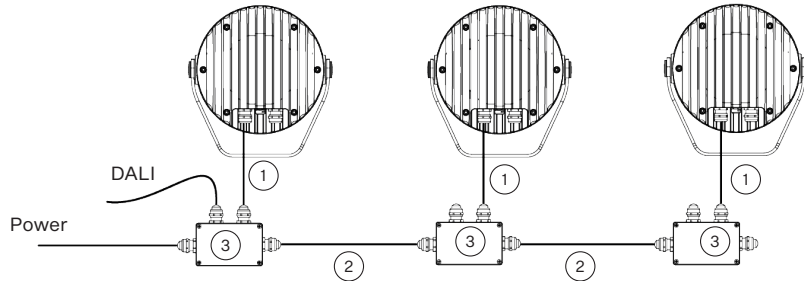
**Note: This type of connection is available for Pure White and single color version only. Non dimmable.**



CONTROL AND CONNECTION OPTIONS - US

DALI

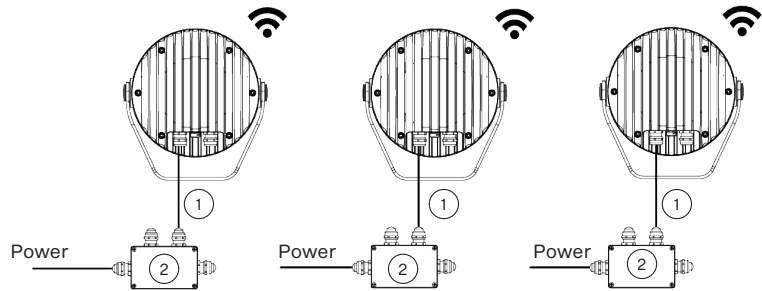
- 1) SJTW 5x 14AWG (13053336)  
Standard 1 m with bare-end
- 2) SJTW 5x 14AWG (13053336)  
or Scope of Others
- 3) Junction Box for Calumma



WIRELESS DMX

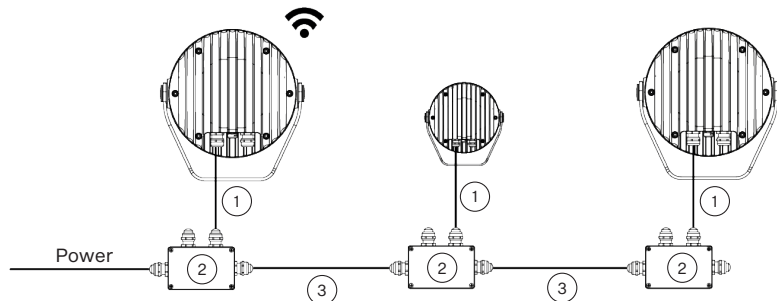
- 1) SJTW 6x 14AWG (13053480),  
Standard 1 m with bare-end
- 2) Junction Box for Calumma

**Note: This type of connection is available for M, L, XL versions**



- 1) SJTW 6x 14AWG (13053480)  
Standard 1 m with bare-end
- 2) Junction Box for Calumma
- 3) SJTW 6x 14AWG (13053480)  
or Scope of Others

**Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.**

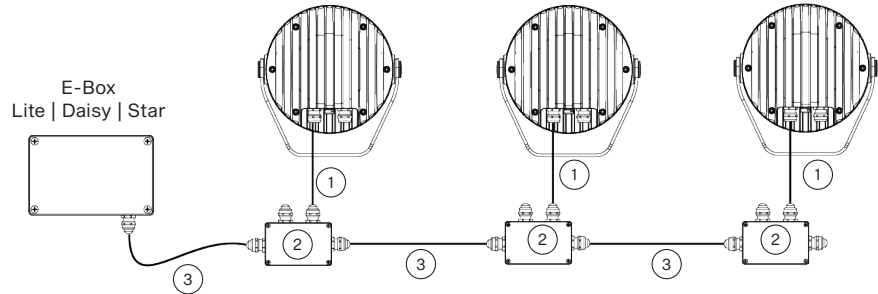


CONTROL AND CONNECTION OPTIONS - US

DMX or ETHERNET via E-BOX

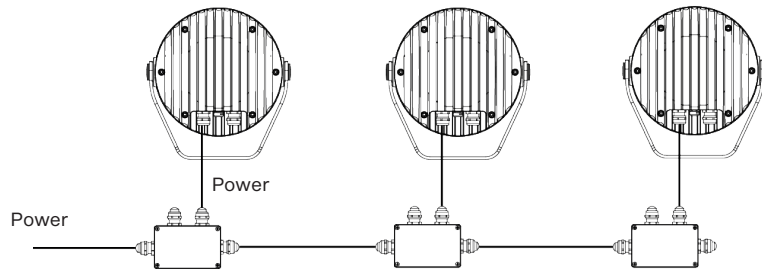
- 1) SJTW 6x 14AWG (13053480)  
Standard 1 m with bare-end
- 2) Junction Box for Calumma
- 3) SJTW 6x 14AWG (13053480)  
or Scope of Others

**Note: This type of connection is available for S, M, L, and XL versions. E-Box has to be in Pass Through mode only.**



ON/OFF

**Note: This type of connection is available for Pure White and single color version only. Non dimmable.**



CONNECTIVITY

Following table shows maximum connected Calummas M SC in a row with respect of cable length.

STANDARD MODE	Cable length (m)	Voltage (V)			
		120	190	230	277
CALUMMA M MC	10	30	48	58	70
	20	30	48	58	70
	30	21	48	58	70
	50	13	32	47	68
	70	9	23	34	49
	100	6	16	24	34
	200	3	8	12	17
	500	1	3	5	7

PASS-THROUGH MODE	Cable length (m)	Voltage (V)			
		120	190	230	277
CALUMMA M MC	10	30	32	32	32
	20	30	32	32	32
	30	21	32	32	32
	50	13	32	32	32
	70	9	23	32	32
	100	6	16	24	32
	200	3	8	12	17
	500	1	3	5	7

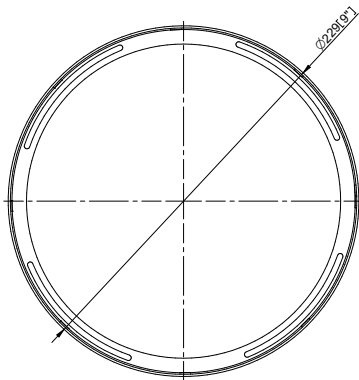
**BOOSTER BOX POSITIONS**

Cable length (m)		Max. number of Calummas M SC= 191 (in Standard mode)			
		120 V	190 V	230 V	277 V
CALUMMA M SC	10 m	30	-	-	-
	20 m	30, 60	48	58	70
	30 m	21, 42, 63, 84, 105, ...	48, 96	58	70
	50 m	13, 26, 39, 52, 65, 78, 91...	32, 64, 96, 128, 158, 180...	47, 94, 141, 188...	68, 136
	70 m	9, 18, 27, 36, 45, 54, 63....	23, 46, 69, 92, 115...	34, 68, 102, 136...	49, 98, 147, 196..
	100 m	16, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102....	16, 32, 48, 64, 80, 96, 112, 128, 144...	24, 48, 72, 96, 120...	34, 68, 102, 136...
	200 m	3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63, 66, 69, 72, 75, 78, 81...	8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96....	12, 24, 48, 56, 64, 76, 88, 100...	17, 34, 51, 68, 85, 102
	500 m	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11....	3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48....	5, 10, 15, 20, 25, 30, 35, 40...	7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77...

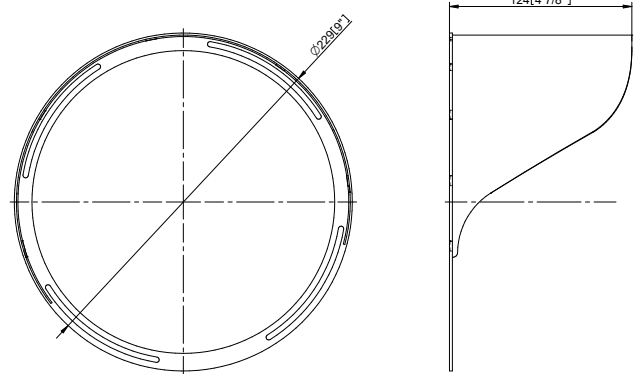
**NOTE:** For more detail see the User manual.

**ACCESSORIES**

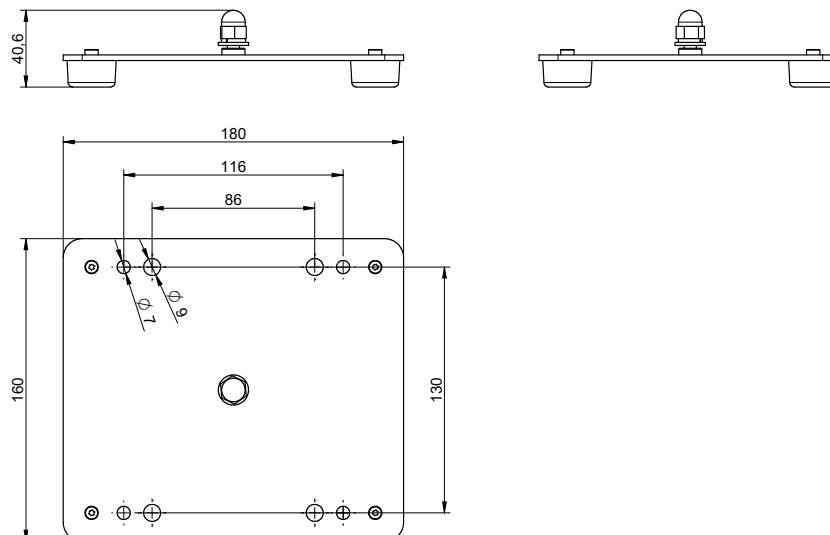
Top Hat



Half Top Hat

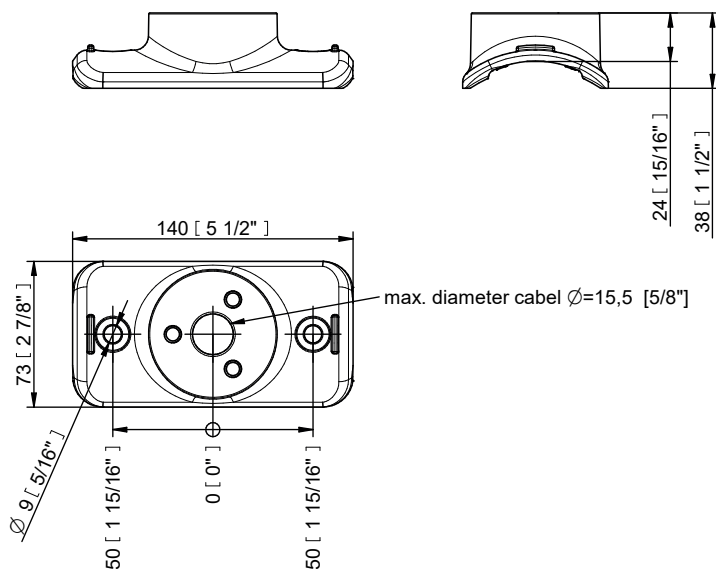


Floor Stand





Pole Adaptor (ø 102mm)



## PHOTOMETRIC OVERVIEW

Lumen Output (lm)

	RGBCW (W 6500 K)	RGBA	WW (W 3000 K)
10°	3478	2439	4305
15°	3169	2222	3923
25°	3097	2172	3834
30°	3040	2132	3763
45°	3104	2177	3842
65°	3043	2134	3767
100°	3081	2160	3814
10° x 30°, 30° x 10°	3060	2146	3788
10° x 60°, 60° x 10°	3045	2135	3769
15° x 45°, 45° x 15°	3177	2228	3933
30° x 60°, 60° x 30°	3027	2123	3747
30° x 90°, 90° x 30°	2853	2001	3532
15° x 90°, 90° x 15°	2996	2101	3709