

CALUMMA™ L SC

Featuring an optical design using 85 high efficacy single-chip LEDs and available with optional LED colour variants and various beam angles, the large-sized Calumma L 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 L 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 85 high-power, singlechip LEDs provides up to 7900 lumen output. Multiple LED colour variants. No light spills. Well homogenised light output with great efficacy up to 60 lm/w.

Design & Durability

Compact, durable and stylish housing made of high-pressure die cast aluminium. IP67 and IK10 certification; suitable for marine applications (Harsh Environment Finish required) 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 L 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.

STANDARD & SPECIFICATION

IP67	IK10	CE	ETL
ROHS	UK CA	5 YEAR Warranty with Registration	Vibration Standard for Bridge

COLOURS

STANDARD

RGBW (6500 K)	RGBA	PW (3000 K)	TW (2200-3000 K)
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UPON REQUEST

AVAILABLE COLOURS FOR CUSTOM SETUP

RED	GREEN	BLUE	AMBER
2.200 K	2.700 K	3.000 K	4.000 K
6.500 K			

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°

CONTROL & PROTOCOLS

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

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
RAL Custom Paint Colour			

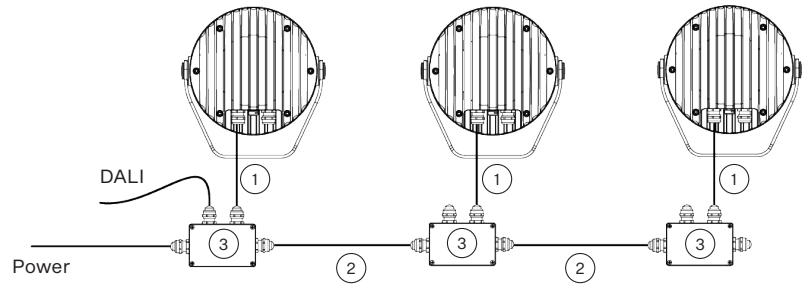
SPECIFICATION

ELECTRICAL	Input Voltage	120–277 V AC 50/60 Hz (US)		
	Typical Power Consumption	130W +/-10 %		
OPTICAL	Light Source	High Power Single Chip LEDs		
	Colour Variants	RGBW (W - 6500 K) RGBA Pure White (W - 3000 K) Tuneable White (2200–3000 K) Custom Setup On Request: Red, Green, Blue, Amber, 2200 K, 2700 K, 3000 K, 4000 K, 6500 K		
	Beam Angle	10° 15° 25° 30° 45° 65° 100° 10°x30° 30°x10° 10°x60° 60°x10° 15°x45° 45°x15° 15°x90° 90°x15° 30°x60° 60°x30° 30°x90° 90°x30°		
	Lumen Output Delivered	7900 lm (@ 10°, RGBW)		
	Projected Lumen Maintenance	L90B10 >90.000 hrs, Ta = 25°C / 77°F		
CONTROL	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		
PHYSICAL	Width x Height x Depth Weight	338 x 360 x 116 mm (13.31 x 14.13 x 4.57 in.) 9.7 kg (21.38 lbs)		
	Housing	High Pressure Die-Cast Aluminium Body 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	
	Cables / Connections	IN/OUT (for E- Box version): - 0,5 m cables with hybrid connectors - Jumper cables	IN (for DMX, DALI, ON / OFF): - 1 m cable with bare-end - Other cable length - custom - Junction box - optional	
	Mounting Method	Yoke or Yoke for Pole Adaptor		
Adjustability	+180° / -180°			
Protection Factor	IP67 / Suitable For Wet Locations			
IK Rating	IK10			
Cooling System	Convection			
Operating Ambient Temperature	-20°C / +50°C (-4°F / +122°F)			
CERTIFICATION	Listings	ETL / cETL, CE, RoHS, UKCA		
ACCESSORIES	Not Included Items			
	Junction Box for Calumma S-XL / Eminere (CE or US)			
	Optical Demo Set for Calumma L (for demo purposes)			
	Outdoor Foil Holder for Calumma L „OFH“ version only (for permanent installation)			
	Optical Foil Set for Outdoor Foil Holder Calumma L			
	Land Spike for Calumma L			
	Top Hat Calumma L			
	Half Top Hat Calumma L			
	Re-enterable Electrical Insulating Resin			
	Floor stand for Calumma L, XL			
	Tenon Adaptor			
Pole Adaptor (ø 102mm) (Yoke for Pole Adaptor Required)				

CONTROL AND CONNECTION OPTIONS - CE

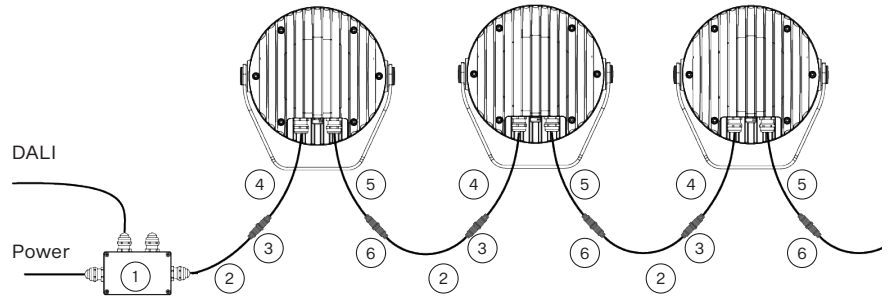
DALI

- 1) Hybrid Cable (13053693) Standard 1 m with bare-end, black or on request Hybrid cable (13053697), 1 m with bare-end, white
- 2) Hybrid Cable (13053693) Standard 1 m with bare-end, black or on request Hybrid cable (13053697), 1 m with bare-end, white or Scope of Others
- 3) Junction Box



- 1) Junction Box
- 2) Hybrid Cable (13053693) Standard 1 m with bare-end, black or on request Hybrid cable (13053697), 1 m with bare-end, white
- 3) Field Installable Connector FF DC-05 (13053971)
- 4) Hybrid Cable (13053693), black, standard 0,5 m with Field Installable Connector MM DC-05 (13053972), black
or on request Hybrid cable (13053697), white, 0,5 m with Field Installable Connector MM DC-05 (13053972), black

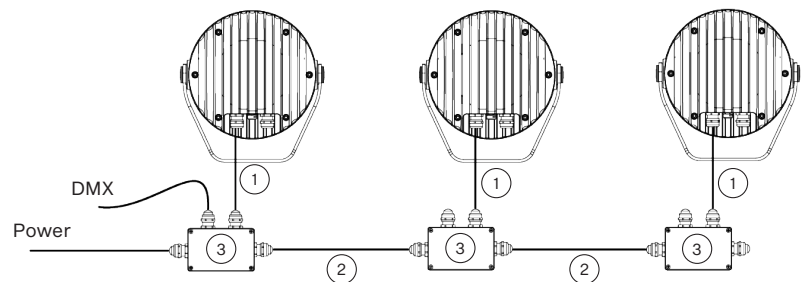
- 5) Hybrid Cable (13053693), black, standard 0,5 m with Field Installable Connector FF DC-05 (13053971), black
or on request Hybrid cable (13053697), white, 0,5 m with Field Installable Connector FF DC-05 (13053971), black
- 6) Field Installable Connector MM DC-05 (13053972)



Note: The last unplugged connector must be fitted with a Waterproof Cap to protect the IP rating.

DMX

- 1) Flamar 3x16 AWG + 1x(2x24 AWG) - (13051508), Standard 1 m with bare-end, black or HYB-5731ZH LSZH (13053694), Hybrid Cable, white
- 2) Flamar 3x16 AWG + 1x(2x24 AWG) - (13051508), black or HYB-5731ZH LSZH (13053694), Hybrid Cable, white or Scope of Others
- 3) Junction Box

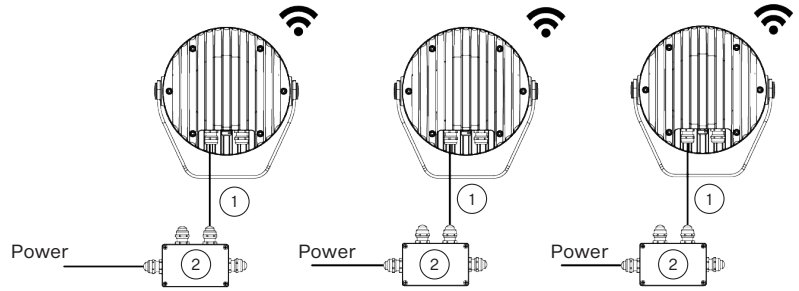


CONTROL AND CONNECTION OPTIONS - CE

WIRELESS DMX

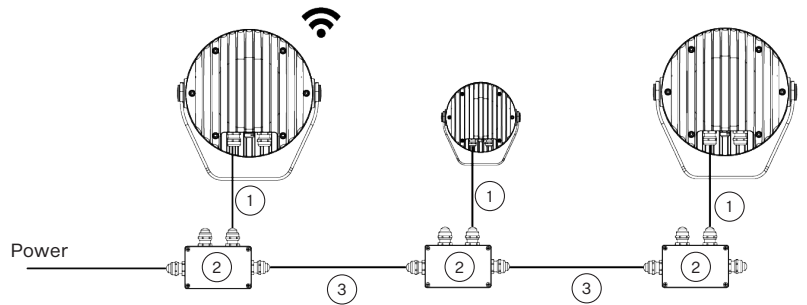
- 1) Flamar 3x16 AWG + 1x(2x24 AWG) - (13051508), Standard 1 m bare-end, black or Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Junction Box

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



- 1) Flamar 3x16 AWG + 1x(2x24 AWG) - (13051508), Standard 1 m bare-end, black or Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Junction Box
- 3) Flamar 3x16 AWG + 1x(2x24 AWG) - (13051508) or HYB-5731ZH LSZH (13053694), Hybrid Cable, white or Scope of Others

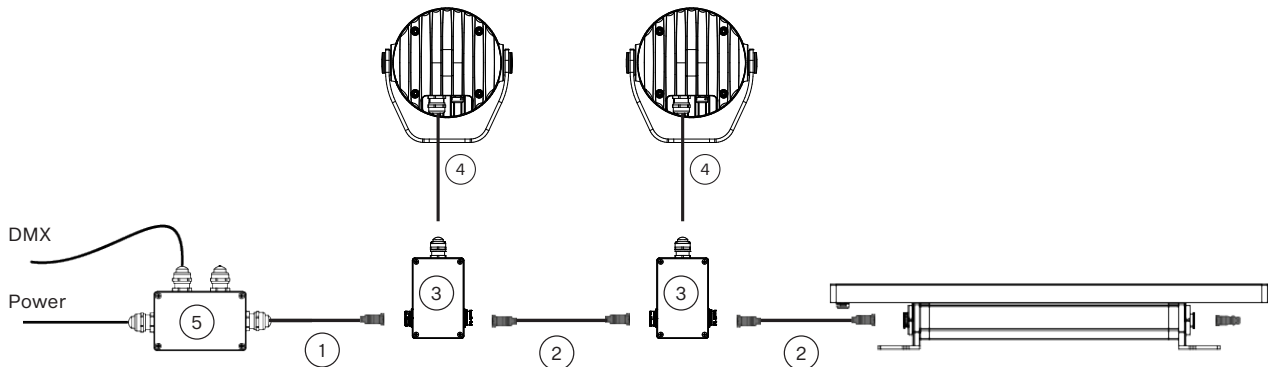
Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.



DMX WITH JUNCTION BOX FOR CALUMMA L / EMINERE (CE)

- 1) Leader Cables FF - 2 | 5 | 10 | 25 | 50 m
- 2) Jumper Cables FF/FM - 0,25 | 0,5 | 1 | 2 | 3 | 5 | 10 m
- 3) Junction Box for Calumma S-XL / Eminere CE (10981268 for RAL9011)
- 4) Flamar 3x16 AWG + 1x(2x24 AWG) - (13051508) Standard 1 m with bare-end, black or HYB-5731ZH LSZH (13053694), Hybrid Cable, white
- 5) Junction Box

Note: The last unplugged connector must be fitted with a Waterproof Cap to protect the IP rating.

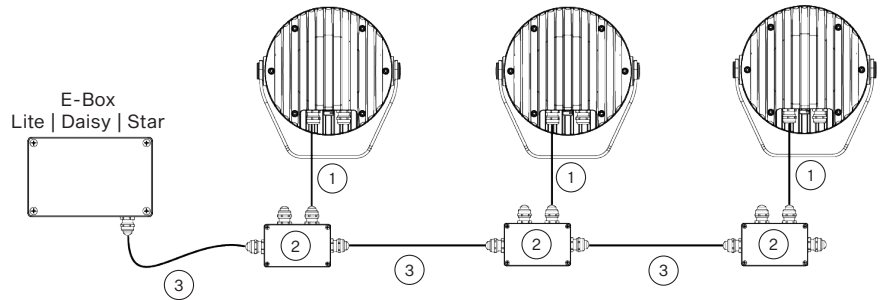


CONTROL AND CONNECTION OPTIONS - CE

DMX or ETHERNET via E-BOX

- 1) Flamar 3x16 AWG + 1x(2x24 AWG) - (13051508), Standard 1 m with bare-end, black or HYB-5731ZH LSZH (13053694), Hybrid cable, white
- 2) Junction Box
- 3) Flamar 3x16 AWG + 1x(2x24 AWG) - (13051508), black or HYB-5731ZH LSZH (13053694), Hybrid cable, white or Scope of Others

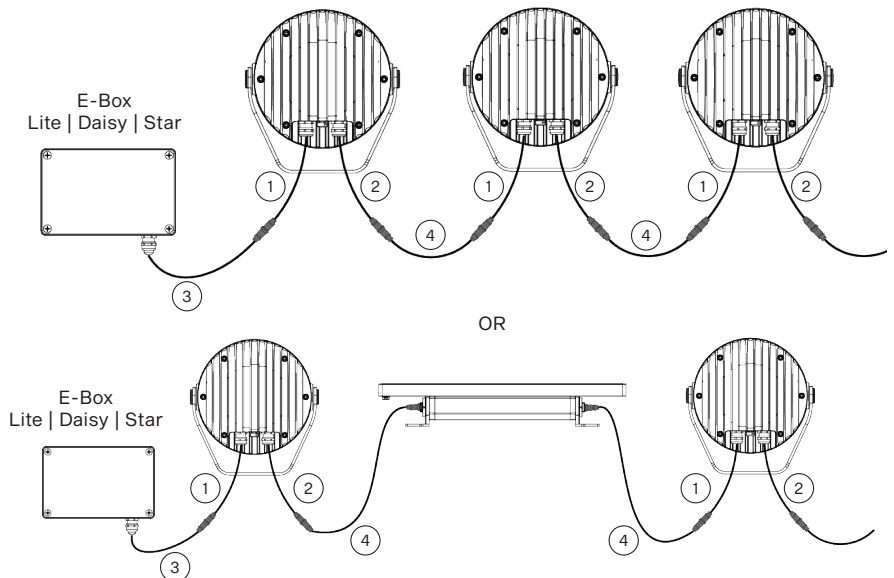
Note: This type of connection is available for S, M, L, and XL versions. E-Box has to be in Pass Through mode only.



- 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)

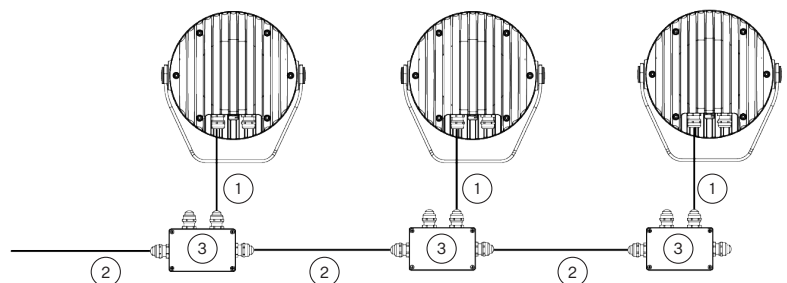
Note: With this type of connection is possible to connect Calumma (M, L, XL) and Eminere (Eminere, Eminere Side) luminaires in a row.



ON/OFF

- 1) H07BB-F 3G 1.5 (13050919), 3-cored cable, Standard 1 m with bare-end, black
- 2) H07BB-F 3G 1.5 (13050919), 3-cored cable, Standard 1 m with bare-end, black or Scope of Others
- 3) Junction Box or Scope of Others

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

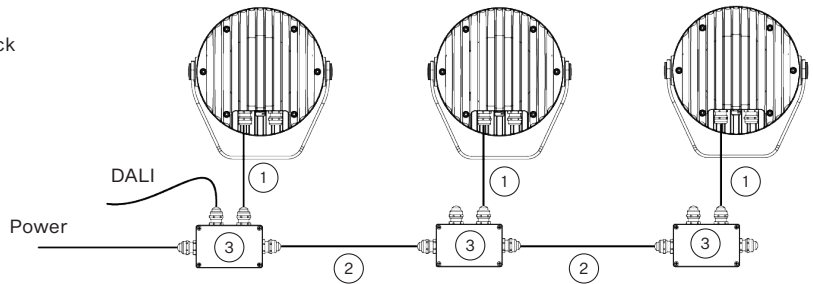


CONTROL AND CONNECTION OPTIONS - US

DALI

- 1) SJTW 5x14 AWG (13053693), Standard 1 m with bare-end, black or Cable SJTW 5x14 AWG (13053697), white
- 2) SJTW 5x14 AWG (13053693), black or Cable SJTW 5x14 AWG (13053697), white or Scope of Others
- 3) Junction Box

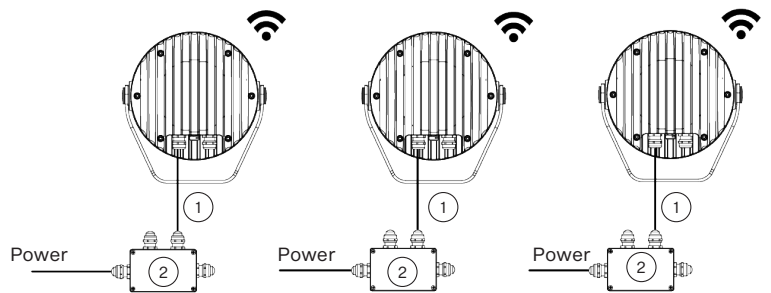
Note: The last unplugged connector must be fitted with a Waterproof Cap to protect the IP rating.



WIRELESS DMX

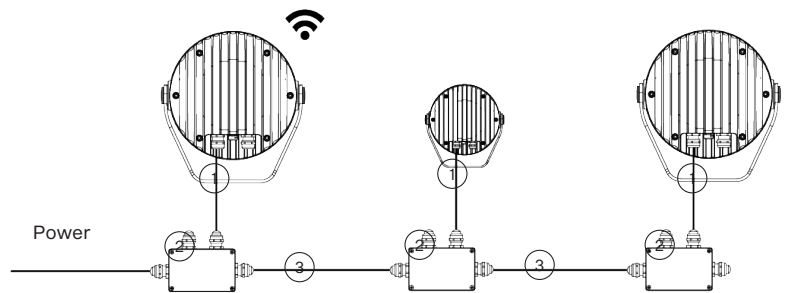
- 1) SJTW 6x14 AWG (13053480), Standard 1 m with bare-end, black or Cable SJTW 6x14 AWG (13053695), white
- 2) Junction Box

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



- 1) SJTW 6x14 AWG (13053480), Standard 1 m with bare-end, black or Cable SJTW 6x14 AWG (13053695), white
- 2) Junction Box
- 3) SJTW 6x14 AWG (13053480), black or Cable SJTW 6x14 AWG (13053695), white or Scope of Others

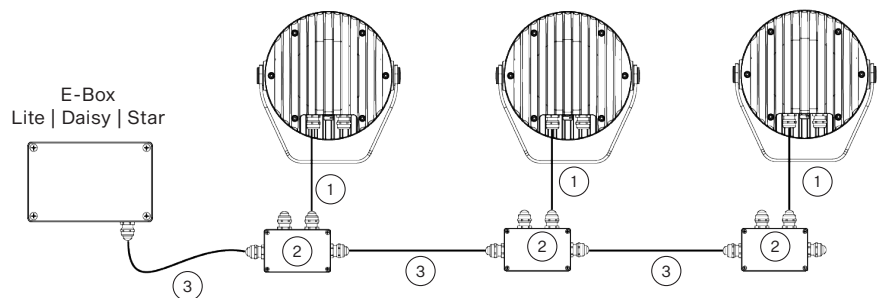
Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.



DMX or ETHERNET via E-BOX

- 1) SJTW 6x14 AWG (13053480) Standard 1 m with bare-end, black or Cable SJTW 6x14 AWG (13053695), white
- 2) Junction Box
- 3) SJTW 6x14 AWG (13053480), black or Cable SJTW 6x14 AWG (13053695), white 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.

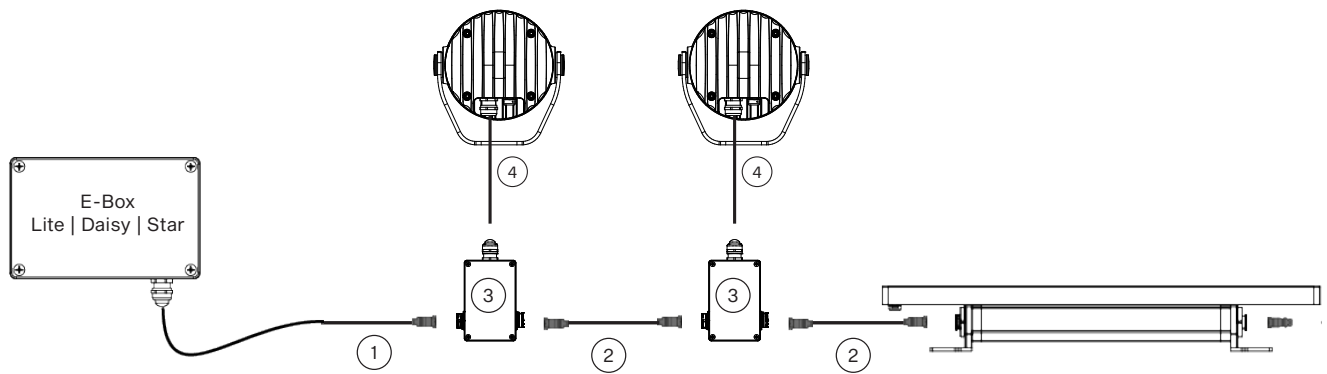


CONTROL AND CONNECTION OPTIONS - US

DMX WITH JUNCTION BOX FOR CALUMMA L / EMINERE (US)

- 1) Leader Cables FF - 2 | 5 | 10 | 25 | 50 m
- 2) Jumper Cables FF/FM - 0,25 | 0,5 | 1 | 2 | 3 | 5 | 10 m
- 3) Junction Box for Calumma S-XL / Eminere US (10981269 for RAL9011)
- 4) SJTW 6x14 AWG (13053480) Standard 1 m with bare-end, black or Cable SJTW 6x14 AWG (13053695), white

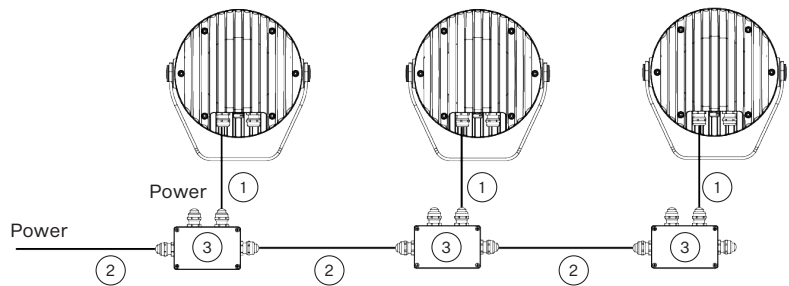
Note: The last unplugged connector must be fitted with a Waterproof Cap to protect the IP rating.



ON/OFF

- 1) SEOOW power 3x16 AWG (13051558-01), 3-cored cable, Standard 1 m with bare-end, black
- 2) SEOOW power 3x16 AWG (13051558-01), 3-cored cable, Standard 1 m with bare-end, black or Scope of Others
- 3) Junction Box or Scope of Others

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



CONNECTIVITY

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

STANDARD MODE	Cable length (m)	Voltage (V)			
		120	190	230	277
CALUMMA L SC	10	17	26	32	38
	20	17	26	32	38
	30	12	26	32	38
	50	7	18	26	37
	70	5	13	18	27
	100	3	9	13	19
	200	3	4	6	9
	500	1	2	3	4

PASS-THROUGH MODE	Cable length (m)	Voltage (V)			
		120	190	230	277
CALUMMA L SC	10	17	26	32	32
	20	17	26	32	32
	30	12	26	32	32
	50	7	18	26	32
	70	5	13	18	27
	100	3	9	13	19

PROJECTED AREA

	Front (rear) - m ²	Front (rear) ft ²	Side - m ²	Side - ft ²	Top - m ²	Top - ft ²
Calumma L	0,080	0,861	0,037	0,398	0,035	0,373
with Top Hat	0,080	0,861	0,087	0,936	0,085	0,911
with Half Top Hat	0,080	0,861	0,059	0,635	0,082	0,882

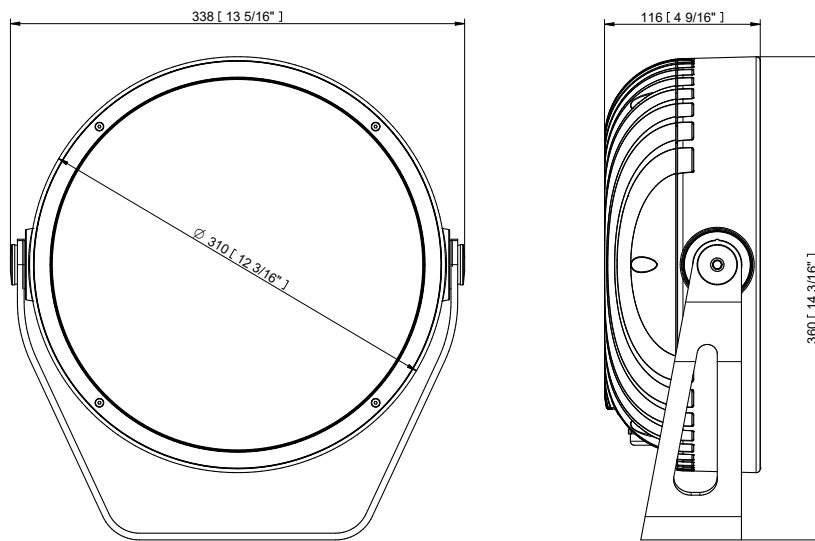
BOOSTER BOX POSITIONS

Cable length (m)	Max. number of Calummas L MC= 191 (in Standard mode)			
	120 V	190 V	230 V	277 V
10 m	14, 28	22	27	-
20 m	14, 28, 42, 54	22, 44	27, 54	32
30 m	10, 20, 30, 40, 50, 60, 70, 80	22,44,66	27,54,81	32,64
50 m	6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102....	15, 30, 45, 60, 75, 90, 105, 120, 135..	22, 44, 66, 88, 110, 132...	32, 64, 96, 128...
70 m	4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84....	11, 22, 33, 44, 55, 66, 77, 88, 99, 110...	16, 32, 48, 64, 80, 96, 112, 128, 144...	23, 46, 69, 92, 115, 138, 161, ...
100 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...	7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84, 91, 98, 105...	11, 22, 33, 44, 55, 66, 77, 88, 99, 110, 121, 132...	16, 32, 48, 64, 80, 96, 112, 128, 144, 160
200 m	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11....	4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84...	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75...	8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96...
500 m	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11....	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11....	2, 4, 6, 8, 10, 12, 14, 16, 18, 20...	3, 6, 9, 12, 15, 18, 21....

NOTE: For more detail see the User manual.

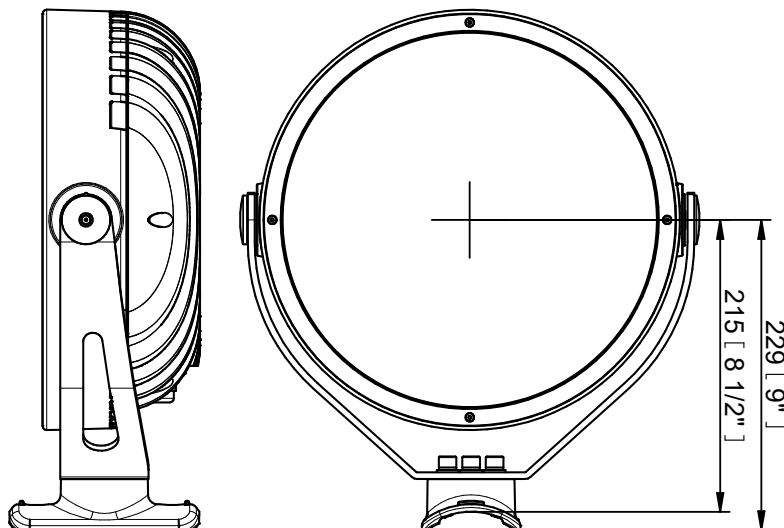
DIMENSIONS

Standard Yoke



Yoke for Pole Adaptor (with Pole Adaptor / PA)

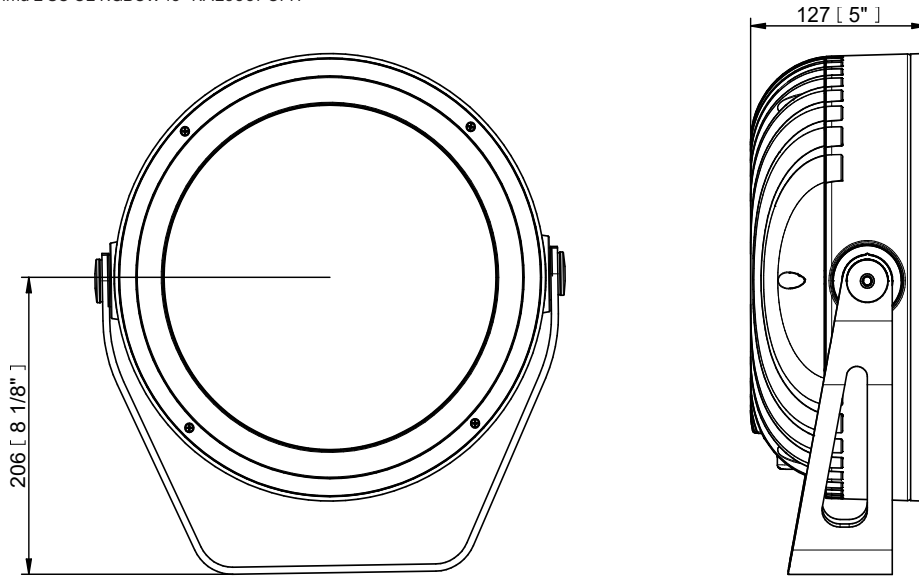
Example of ordering code: Calumma L SC RGCW 15° PA



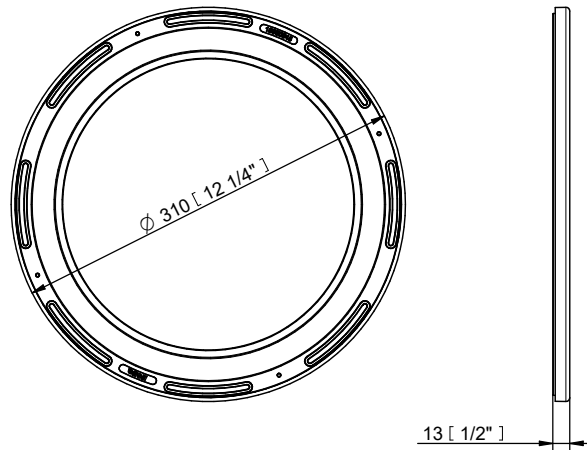
ACCESSORIES

Outdoor Foil Holder for Calumma L „OFH“ version only (for permanent installation)

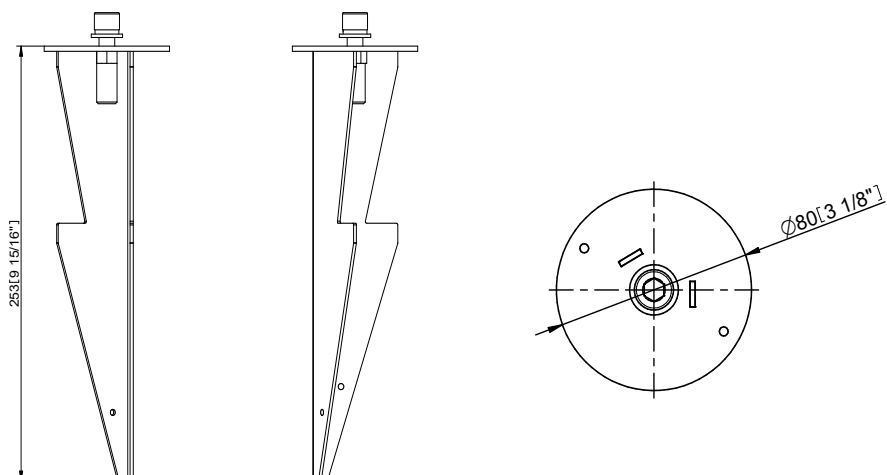
Example of ordering code: Calumma L SC CE RGBCW 10° RAL9007 OFH



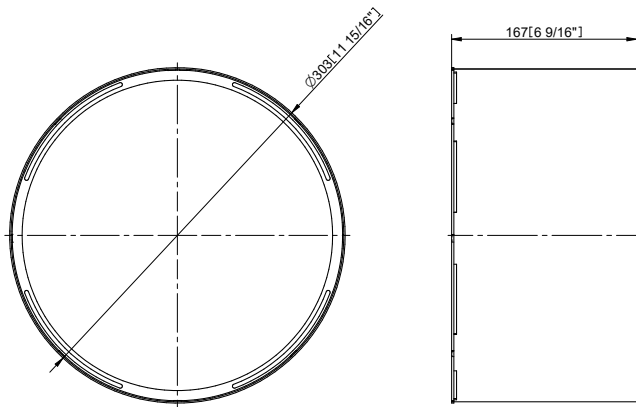
Outdoor Foil Holder for Calumma L



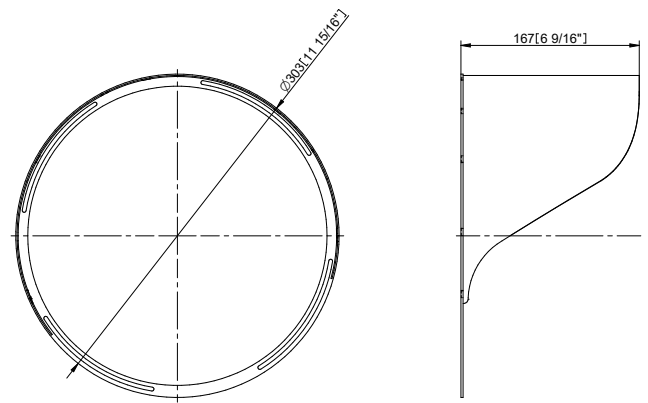
Land Spike for Calumma (S, M, L, XL)



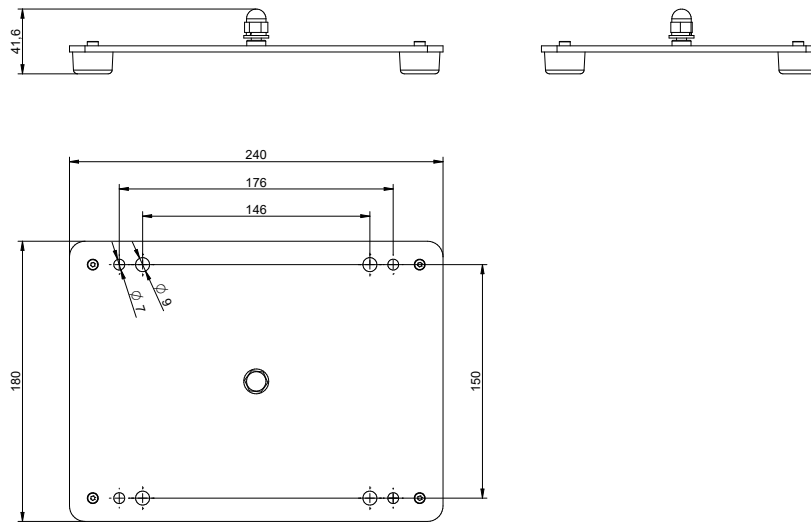
Top Hat



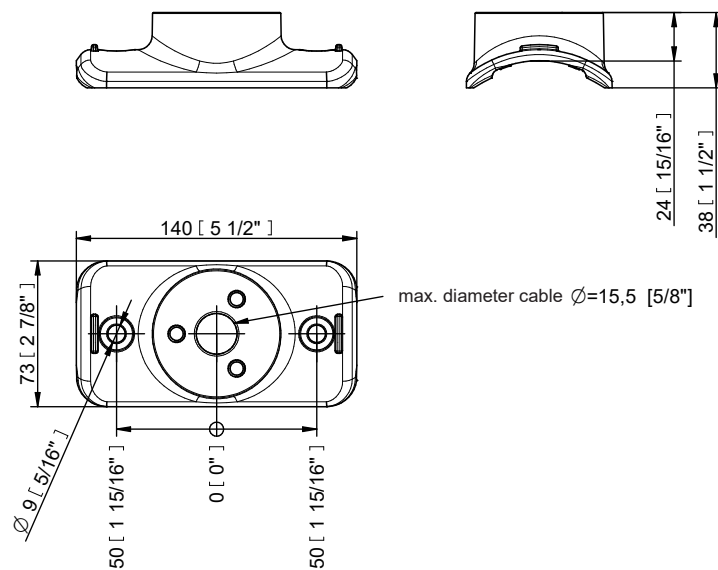
Half Top Hat



Floor Stand



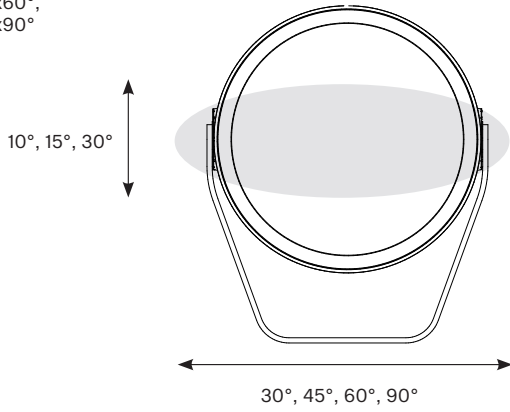
Pole Adaptor



BI-SYMMETRICAL BEAM ANGLES

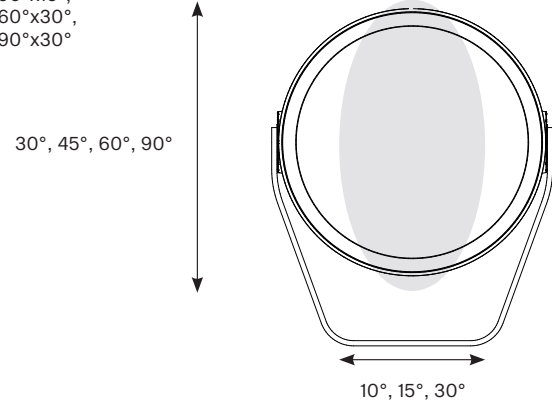
Bi-symmetrical:

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°



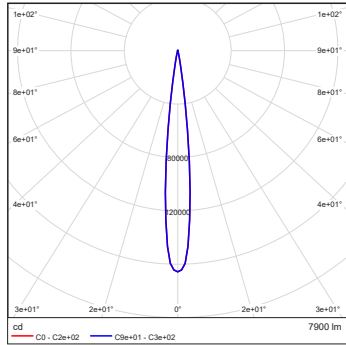
PHOTOMETRIC OVERVIEW

Lumen Output (lm)

	RGBCW (W 6500 K)	RGBA	WW (W 3000 K)
10°	7900	5526	9756
15°	7198	5028	8876
25°	7035	4932	8706
30°	6905	4843	8550
45°	7051	4941	8723
65°	6912	4845	8553
100°	6998	4902	8654
10°x30°, 30°x10°	6951	4864	8586
10°x60°, 60°x10°	6917	4852	8565
15°x45°, 45°x15°	7216	5059	8931
30°x60°, 60°x30°	6876	4824	8517
30°x90°, 90°x30°	6481	4544	8023
15°x90°, 90°x15°	6805	4770	8421

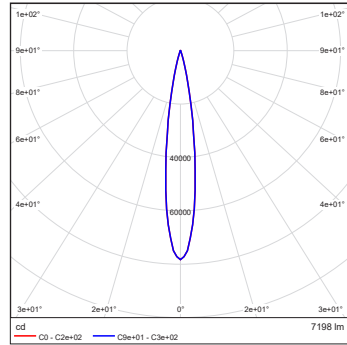
PHOTOMETRIC DATA

Calumma L SC RGBW 6500K 10dg



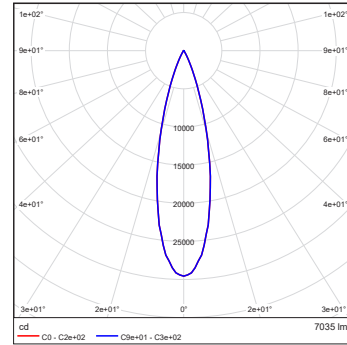
Distance [m]	Cone diameter [m]	E(0°) E(C0)	E(0°) E(C0)	Illuminance [lx]
0.50	0.11	662703	6.0° 327210	
1.0	0.21	168676	6.0° 81862	
1.5	0.32	73834	6.0° 36357	
2.0	0.42	41419	6.0° 20451	
2.5	0.53	28508	6.0° 19088	
3.0	0.63	18498	6.0° 3089	

Calumma L SC RGBW 6500K 15dg



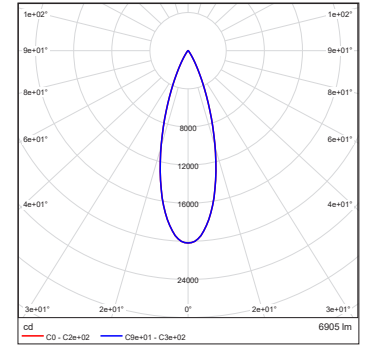
Distance [m]	Cone diameter [m]	E(0°) E(C0)	E(0°) E(C0)	Illuminance [lx]
0.50	0.14	313093	7.9° 152941	
1.0	0.28	78273	7.9° 38235	
1.5	0.42	34788	7.9° 16993	
2.0	0.56	19688	7.9° 9599	
2.5	0.69	12504	7.9° 6118	
3.0	0.83	8097	7.9° 4548	

Calumma L SC RGBW 6500K 25dg



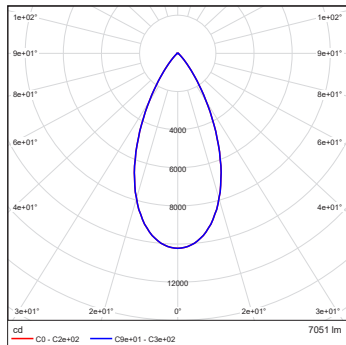
Distance [m]	Cone diameter [m]	E(0°) E(C0)	E(0°) E(C0)	Illuminance [lx]
0.50	0.23	118241	13.2° 54684	
1.0	0.47	29560	13.2° 13671	
1.5	0.70	13138	13.2° 6076	
2.0	0.94	7390	13.2° 3418	
2.5	1.2	4730	13.2° 2187	
3.0	1.4	3284	13.2° 1518	

Calumma L SC RGBW 6500K 30dg



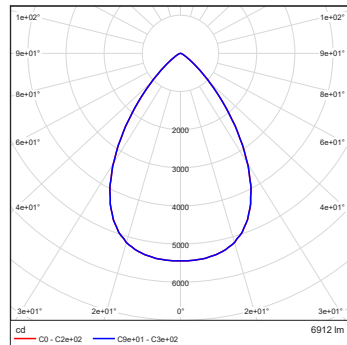
Distance [m]	Cone diameter [m]	E(0°) E(C0)	E(0°) E(C0)	Illuminance [lx]
0.50	0.29	80886	16.1° 38859	
1.0	0.58	20172	16.1° 8965	
1.5	0.87	8965	16.1° 3984	
2.0	1.2	5043	16.1° 2241	
2.5	1.4	3227	16.1° 1434	
3.0	1.7	2241	16.1° 966	

Calumma L SC RGBW 6500K 45dg



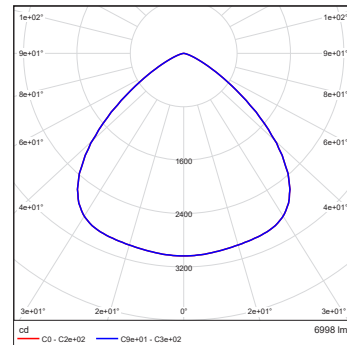
Distance [m]	Cone diameter [m]	E(0°) E(C0)	E(0°) E(C0)	Illuminance [lx]
0.50	0.45	40896	24.3° 15517	
1.0	0.90	10234	24.3° 3879	
1.5	1.4	4544	24.3° 1754	
2.0	1.8	2556	24.3° 970	
2.5	2.3	1638	24.3° 621	
3.0	2.7	1136	24.3° 431	

Calumma L SC RGBW 6500K 65dg



Distance [m]	Cone diameter [m]	E(0°) E(C0)	E(0°) E(C0)	Illuminance [lx]
0.50	0.70	21767	34.9° 6033	
1.0	1.4	5442	34.9° 1508	
1.5	2.1	2619	34.9° 670	
2.0	2.8	1360	34.9° 377	
2.5	3.5	871	34.9° 241	
3.0	4.2	605	34.9° 168	

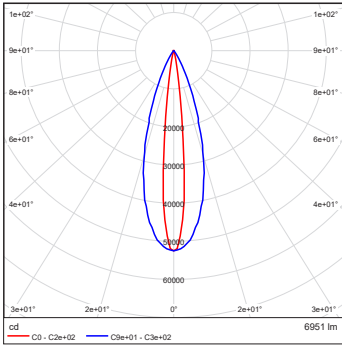
Calumma L SC RGBW 6500K 100dg



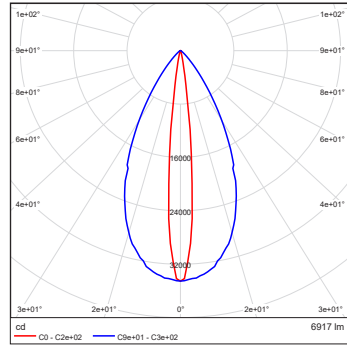
Distance [m]	Cone diameter [m]	E(0°) E(C0)	E(0°) E(C0)	Illuminance [lx]
0.50	1.2	12140	49.7° 1646	
1.0	2.4	3035	49.7° 412	
1.5	3.5	1369	49.7° 163	
2.0	4.7	759	49.7° 103	
2.5	5.9	486	49.7° 66	
3.0	7.1	337	49.7° 46	

PHOTOMETRIC DATA

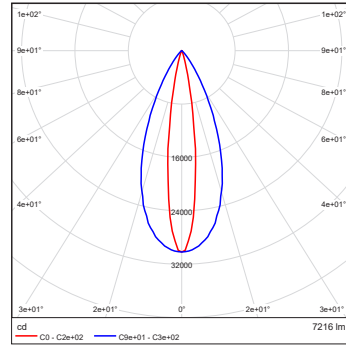
Calumma L SC RGBW 6500K 10x30dg



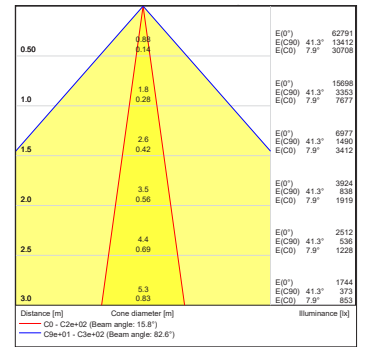
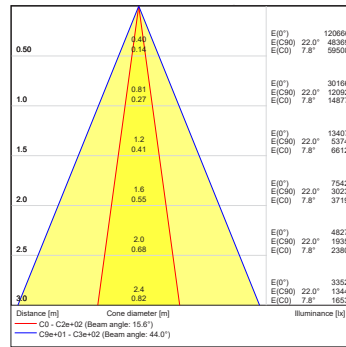
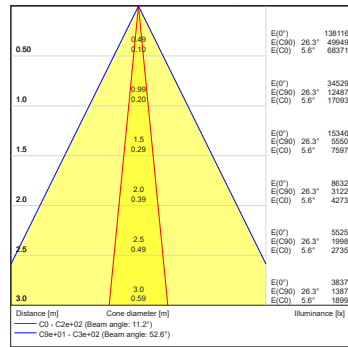
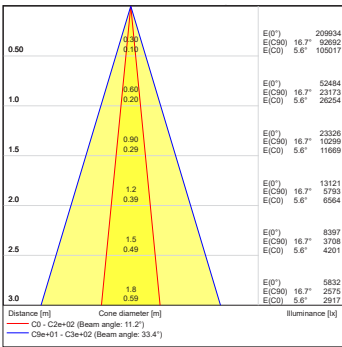
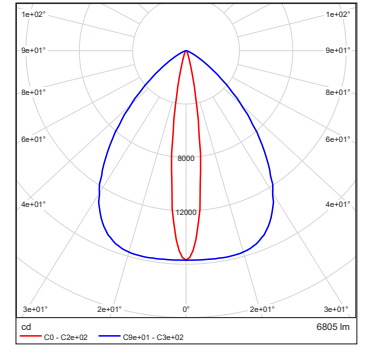
Calumma L SC RGBW 6500K 10x60dg



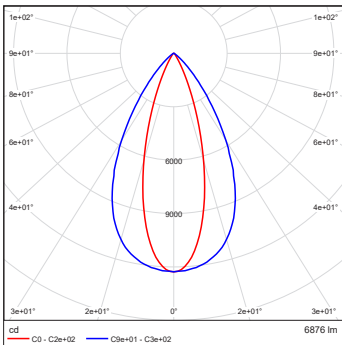
Calumma L SC RGBW 6500K 15x45dg



Calumma L SC RGBW 6500K 15x90dg



Calumma L SC RGBW 6500K 30x60dg



Calumma L SC RGBW 6500K 30x90dg

