

# CALUMMA™ XL SC

Featuring an optical design using 121 high efficacy single-chip LEDs and available with optional LED colour variants and various beam angles, the extra large-sized Calumma XL 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 XL 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 121 high-power, singlechip LEDs provides up to 10955 lumen output. Multiple LED colour variants. No light spills. Well homogenised light output with great efficacy up to 59 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 XL 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.

## COLOURS

\* UPON REQUEST



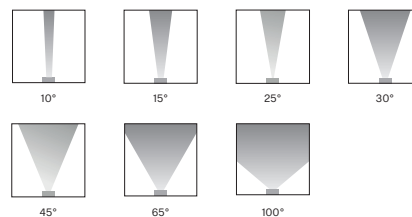
## CONTROL & PROTOCOLS



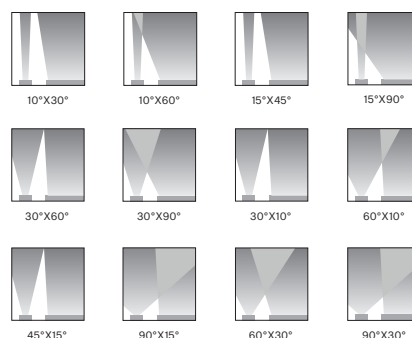
PW & SINGLE COLOUR ONLY

## OPTIC OPTIONS

### SYMMETRICAL

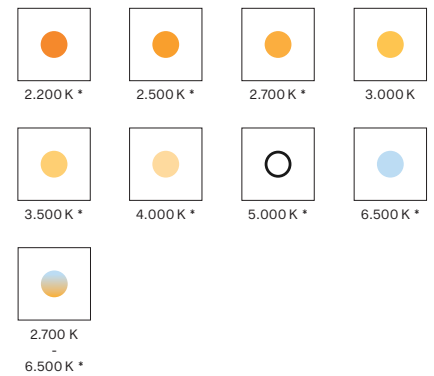


### BI-SYMMETRICAL

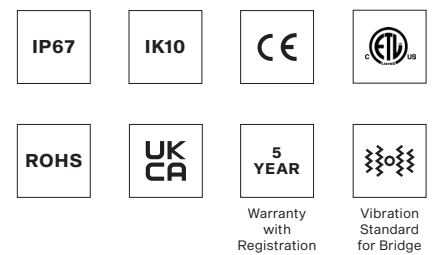


## COLOUR TEMPERATURE

\* UPON REQUEST



## STANDARD & SPECIFICATION



## FINISH OPTIONS

\* CLOSEST RAL TONE  
\* HE = Harsh Environment



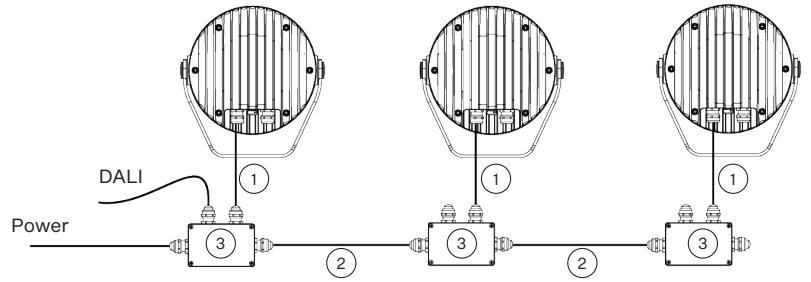
**SPECIFICATION**

<b>ELECTRICAL</b>	Input Voltage	120 - 277 V AC 50/60 Hz (US)	
	Typical Power Consumption	185 W +/-10 %	
<b>OPTICAL</b>	Light Source	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°	
	Lumen Output Delivered	10955 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	
	Width x Height x Depth   Weight	385 x 404 x 120 mm (15.16 x 15.91 x 4.72 in.)   13 kg (28.7 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	
<b>PHYSICAL</b>	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 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)	
	<b>CERTIFICATION</b>	Listings	ETL / cETL, CE, RoHS, UKCA
<b>ACCESSORIES</b>	<b>Not Included Items</b>		
		Junction Box (CE or US)	
		Re-enterable Electrical Insulating Resin	
		Optical Demo Set for Calumma XL (for demo purposes)	
		Outdoor Foil Holder for Calumma XL „OFH“ version only (for permanent installation)	
		Optical Foil Set for Outdoor Foil Holder Calumma XL	
		Land Spike for Calumma XL	
		Top Hat Calumma XL	
		Half Top Hat Calumma XL	
		Tenon Adaptor	
		Floor stand for Calumma L, XL	
		Pole Adaptor (ø 102mm) (Yoke for Pole Adaptor Required)	

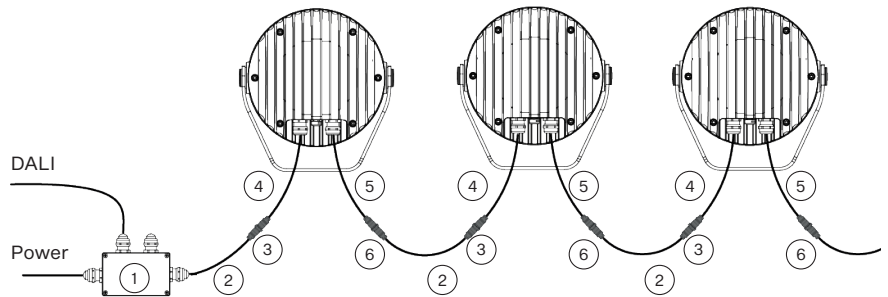
CONTROL AND CONNECTION OPTIONS - CE

DALI

- 1) Hybrid Cable (1305 3693)  
Standard 1 m with bare-end
- 2) Hybrid Cable (1305 3693)  
or Scope of Others
- 3) Junction Box



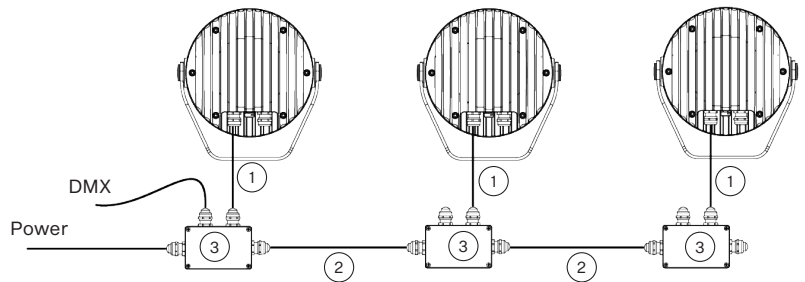
- 1) Junction Box
- 2) Hybrid Cable (1305 3693)
- 3) Field Installable Connector FF DC-05 (13053971)
- 4) Hybrid Cable (1305 3693), Standard 0,5 m with Field Installable Connector MM DC-05 (1305 3972)
- 5) Hybrid Cable (1305 3693), Standard 0,5 m with Field Installable Connector FF DC-05 (1305 3971)
- 6) Field Installable Connector MM DC-05 (1305 3972)



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

DMX

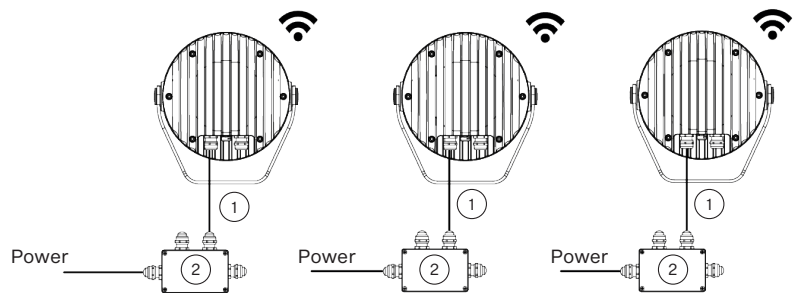
- 1) Flamar 3x AWG 16 + 1x (2x AWG 24)  
Standard 1 m with bare-end, (13051508), black or  
Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Flamar 3x AWG 16 + 1x (2x AWG 24), (13051508), black  
or Hybrid Cable HYB-5731ZH LSZH (13053694) white  
or Scope of Others
- 3) Junction Box



WIRELESS DMX

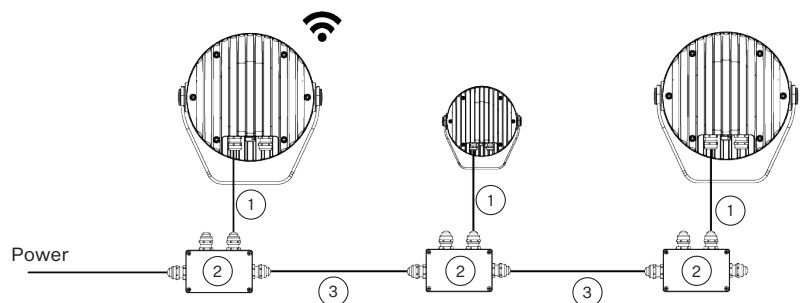
- 1) Flamar 3x AWG 16 + 1x (2x AWG 24),  
(13051508), Standard 1 m bare-end, black or  
Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Junction Box

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



- 1) Flamar 3x AWG 16 + 1x (2x AWG 24)  
(13051508), Standard 1 m bare-end, black or  
Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Junction Box
- 3) Flamar 3x AWG 16 + 1x (2x AWG 24), (13051508) or  
Hybrid Cable HYB-5731ZH LSZH (13053694), white  
or Scope of Others

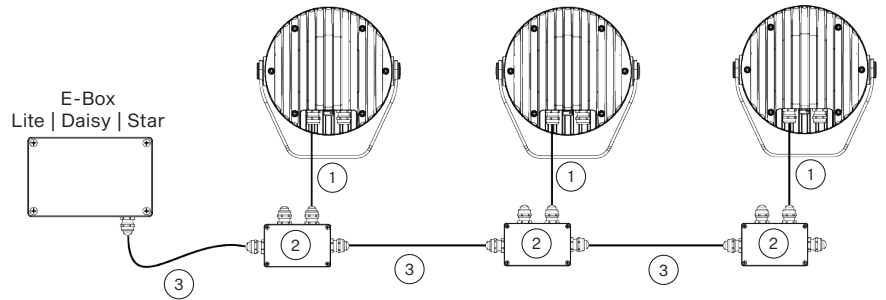
**Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.**



CONTROL AND CONNECTION OPTIONS - CE

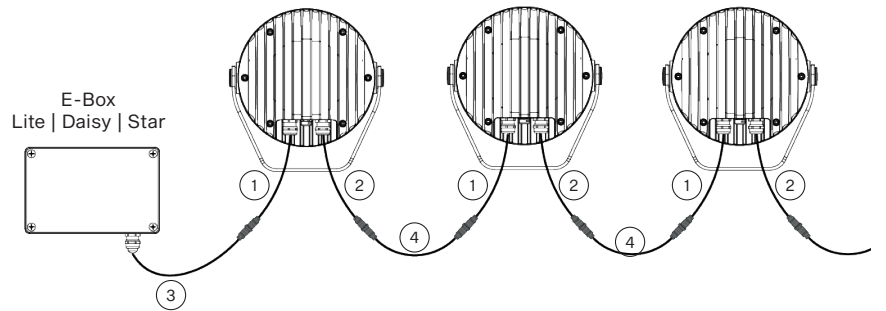
DMX or ETHERNET via E-BOX

- 1) Flamar 3x AWG 16 + 1x (2x AWG 24) (13051508), Standard 1 m with bare-end, black or Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Junction Box
- 3) Flamar 3x AWG 16 + 1x (2x AWG 24), (13051508), black or Hybrid Cable HYB-5731ZH LSZH (13053694) white or Scope of Others



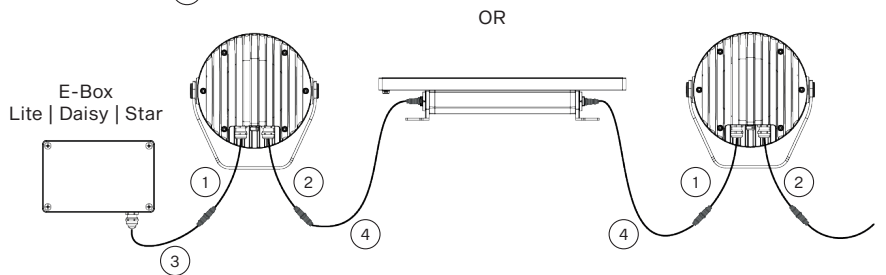
**Note: This type of connection is available for S, M, L, and XL versions. E-Box has to be in Pass Through mode only.**

- 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)



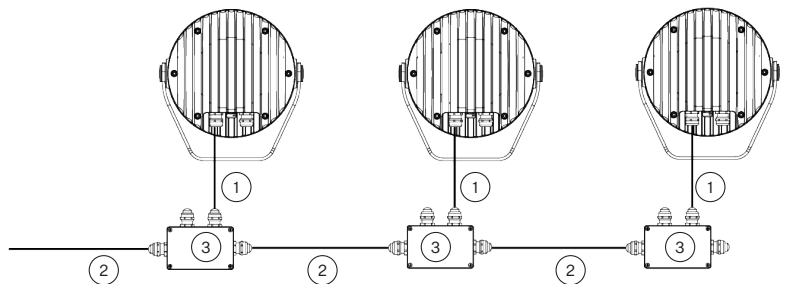
- 4) Jumper Cable FF/FM 0,25 m (13053422)  
Jumper Cable FF/FM 0,5 m (13053423)  
Jumper Cable FF/FM 1 m (13053425)  
Jumper Cable FF/FM 2 m (13053427)  
Jumper Cable FF/FM 3 m (13053428)  
Jumper Cable FF/FM 5 m (13053430)  
Jumper Cable FF/FM 10 m (13053424)

**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) 3-cored cable H07BB-F 3G 1.5 (1305 1443), Standard 1 m with bare-end, black
- 2) 3-cored cable H07BB-F 3G 1.5 (1305 1443), Standard 1 m with bare-end, black or Scope of Others
- 3) Junction Box or Scope of Others

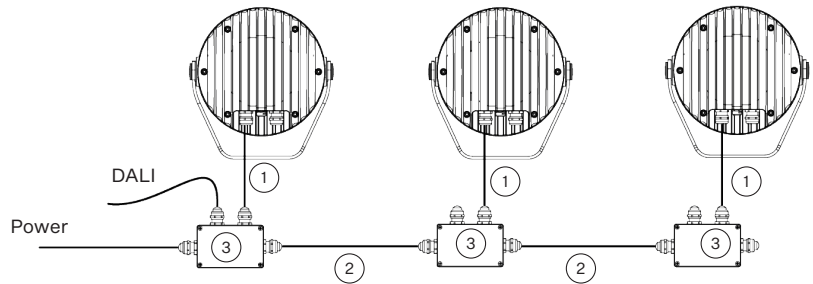


**Note: This type of connection is available for Pure White and single color version only. Non dimmable.**

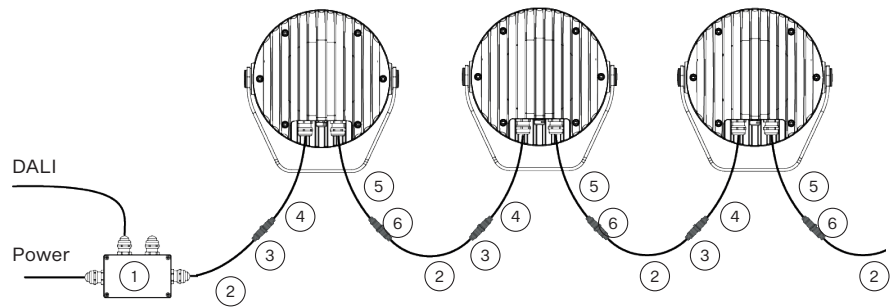
CONTROL AND CONNECTION OPTIONS - US

DALI

- 1) SJTW 5x 14AWG (13053336), Standard 1 m with bare-end, black  
or  
Cable SJTW 5x 14AWG (13053697), white
- 2) SJTW 5x 14AWG (13053336), black  
or  
Cable SJTW 5x 14AWG (13053697), white  
or  
Scope of Others
- 3) Junction Box



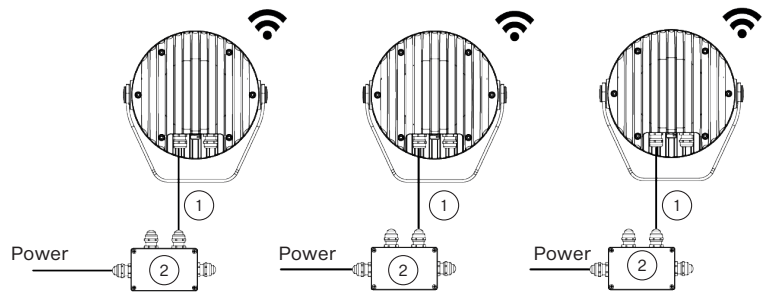
- 1) Junction Box
- 2) SJTW 5x 14AWG (13053336), Standard with bare-end, black,  
or On request Cable SJTW 5x 14AWG (13053697), with bare-end, white
- 3) Field Installable Connector FF DC-05 (1305 3971)
- 4) Hybrid Cable (1305 3693), Standard 0,5 m with Field Installable Connector MM DC-05 (1305 3972)
- 5) Hybrid Cable (1305 3693), Standard 0,5 m with Field Installable Connector FF DC-05 (1305 3971)
- 6) Installable Connector MM DC-05 (1305 3972)



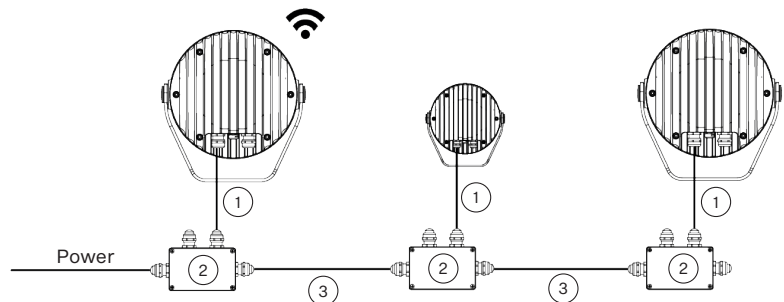
**Note: The last unplugged connector must be fitted with a Waterproof Cap to protect the IP rating.**

WIRELESS DMX

- 1) SJTW 6x 14AWG (13053480), Standard 1 m with bare-end, black  
or  
Cable SJTW 6x 14AWG (13053695), white
- 2) Junction Box



- 1) SJTW 6x 14AWG (13053480), Standard 1 m with bare-end, black  
or  
Cable SJTW 6x 14AWG (13053695), white
- 2) Junction Box
- 3) SJTW 6x 14AWG (13053480), black  
or  
Cable SJTW 6x 14AWG (13053695), white  
or  
Scope of Others

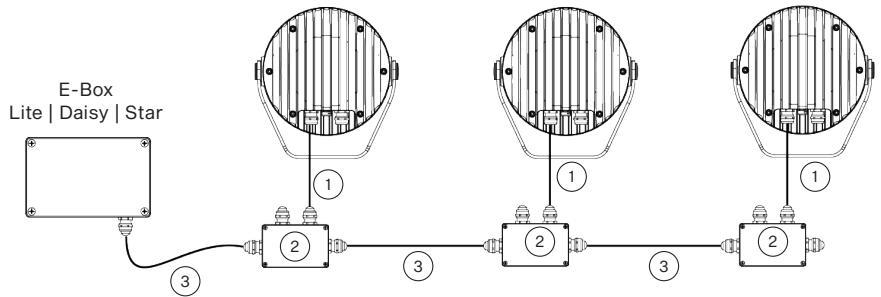


**Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.**

**CONTROL AND CONNECTION OPTIONS - US**

**DMX or ETHERNET via E-BOX**

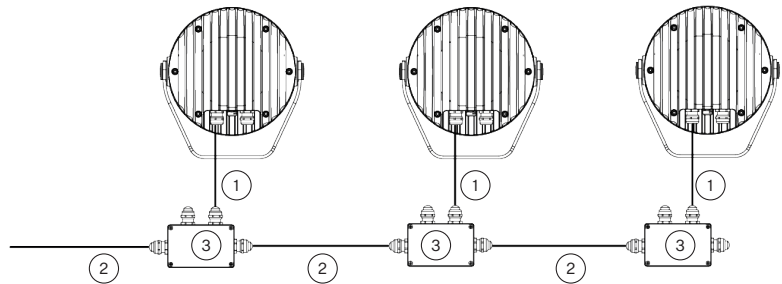
- 1) SJTW 6x 14AWG (13053480)  
Standard 1 m with bare-end, black  
or  
Cable SJTW 6x 14AWG (13053695), white
- 2) Junction Box
- 3) SJTW 6x 14AWG (13053480), black  
or  
Cable SJTW 6x 14AWG (13053695), white  
or  
Scope of Others



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

**ON/OFF**

- 1) 3-cored cable SEOOW power 3x16 AWG (13051558-01), Standard 1 m with bare-end, black
- 2) 3-cored cable SEOOW power 3x16 AWG (13051558-01), 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 XL SC in a row with respect of cable length.

STANDARD MODE	Cable length (m)	Voltage (V)			
		120	190	230	277
CALUMMA XL SC	10	10	16	19	23
	20	10	16	19	23
	30	7	16	19	23
	50	4	10	15	22
	70	3	7	11	16
	100	2	5	8	11
	200	1	3	4	6
	500	0	1	2	2

PASS-THROUGH MODE	Cable length (m)	Voltage (V)			
		120	190	230	277
CALUMMA XL SC	10	10	16	19	23
	20	10	16	19	23
	30	7	16	19	23
	50	4	10	15	22
	70	3	7	11	16
	100	2	5	8	11

BOOSTER BOX POSITIONS

Cable length (m)	Max. number of Calummas XL SC= 191 (in Standard mode)			
	120 V	190 V	230 V	277 V
<b>CALUMMA XL SC</b> 10 m	10, 20	16	19	23
20 m	10, 20, 30, 40, 50	16, 32, 48	19, 38	23, 46
30 m	7, 14, 21, 28, 35, 42, 49, 56, 64...	16, 32, 48, 64	19, 38, 57, 76	23, 46, 69
50 m	4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84...	10, 20, 30, 40, 50, 60, 70, 80, 90, 100...	15, 30, 45, 60, 75, 90, 105..	22, 44, 66, 88, 110...
70 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...	11, 22, 33, 44, 55, 66, 77, 88, 99, 110, 121...	16, 32, 48, 64, 80, 96, 112...
100 m	2, 4, 6, 8, 10, 12, 14, 16, 18, 20...	5, 10, 15, 20, 25, 30, 35, 40, 45...	8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96...	11, 22, 33, 44, 55, 66, 77, 88, 99, 110, 121...
200 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, 51, 54, 57, 60, 63, 66, 69, 72, 75, 78, 81...	4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84...	6, 12, 18, 24, 30, 36...
500 m	-	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11....	2, 4, 6, 8, 10, 12, 14, 16, 18, 20...	2, 4, 6, 8, 10, 12, 14, 16, 18, 20...

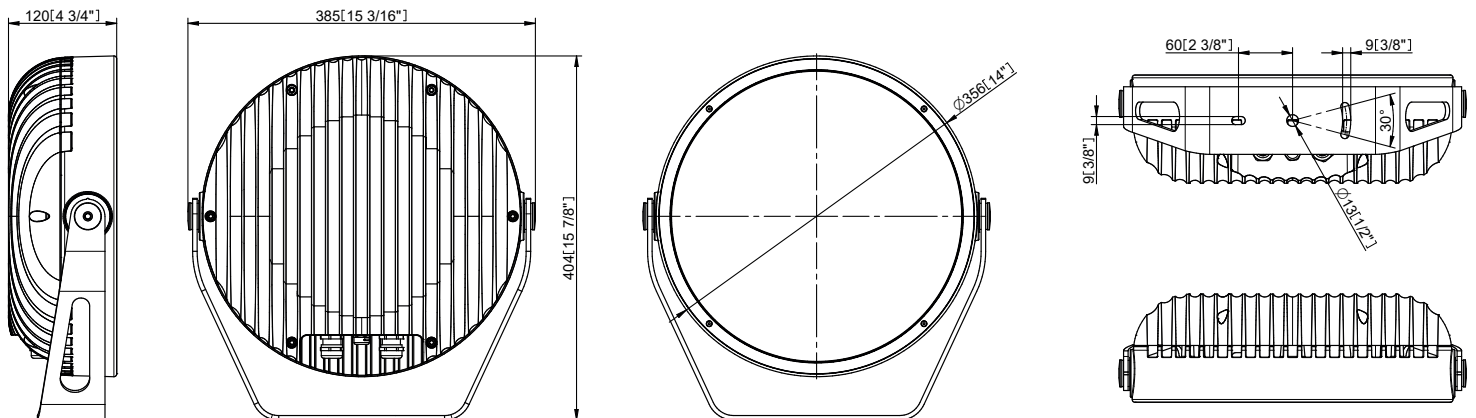
NOTE: For more detail see the User manual.

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>
Calumma XL	0,105	1,130	0,044	0,469	0,042	0,446
with Top Hat	0,105	1,130	0,107	1,151	0,105	1,130
with Half Top Hat	0,105	1,130	0,064	0,684	0,105	1,130

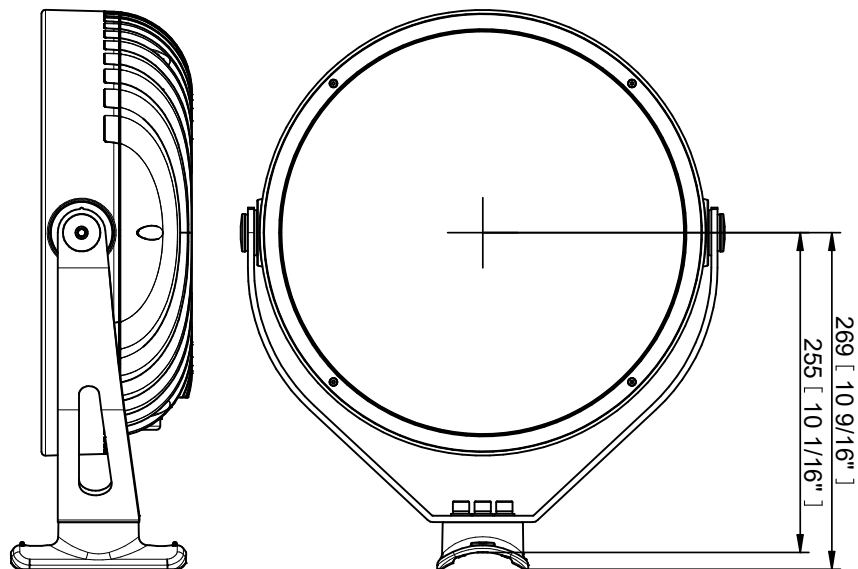
DIMENSIONS

Standard Yoke



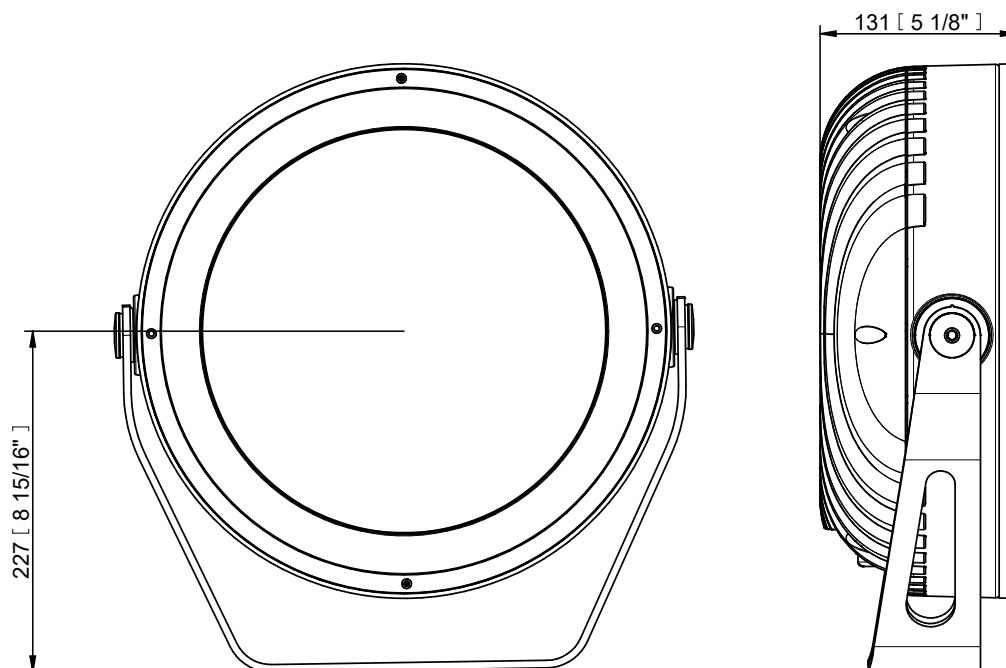
Yoke for Pole Adaptor (with Pole Adaptor / PA)

**Example of ordering code:** Calumma XL SC RGBCW 15° PA



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

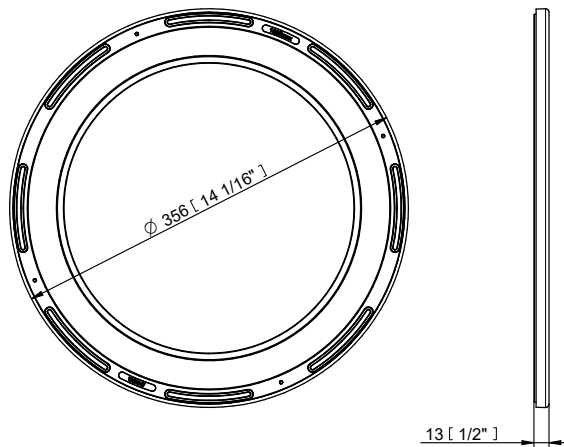
**Example of ordering code:** Calumma XL SC CE RGBCW 10° RAL9007 OFH



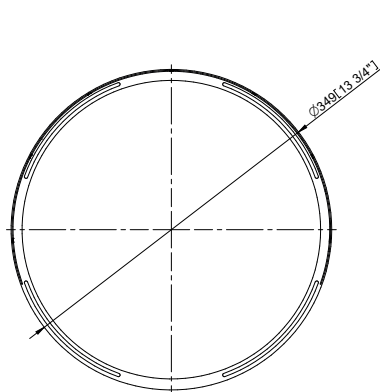


**ACCESSORIES**

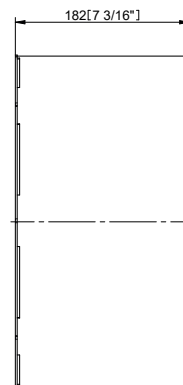
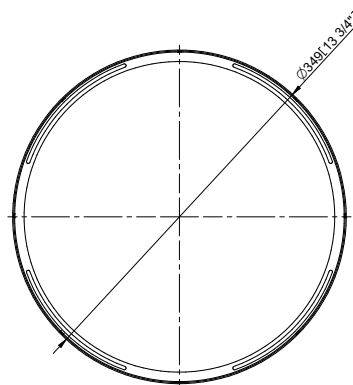
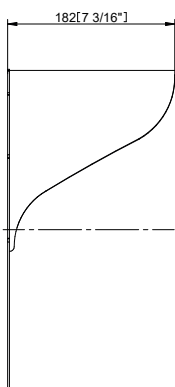
Outdoor Foil Holder for Calumma XL



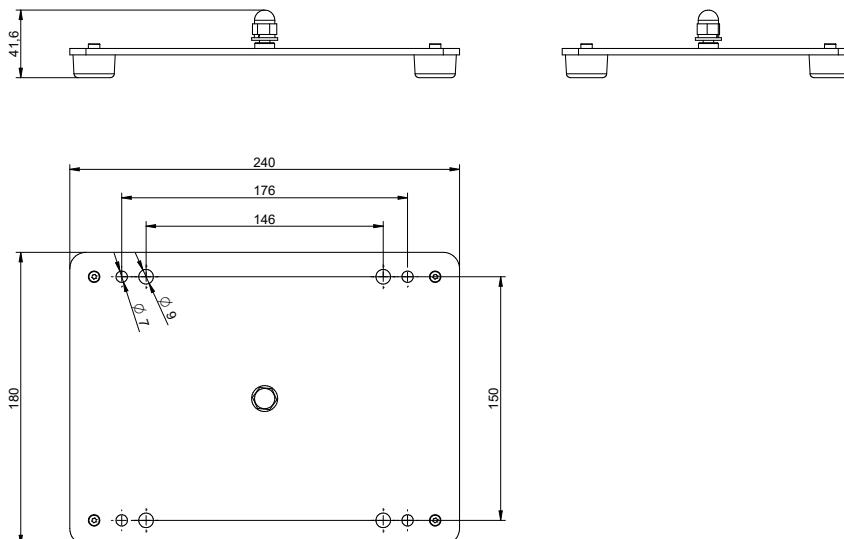
Half Top Hat



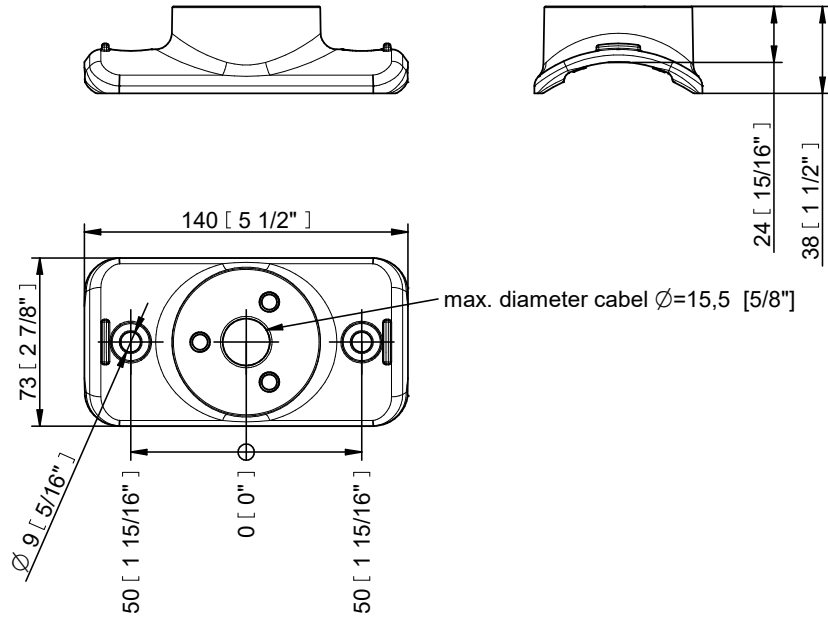
Top Hat



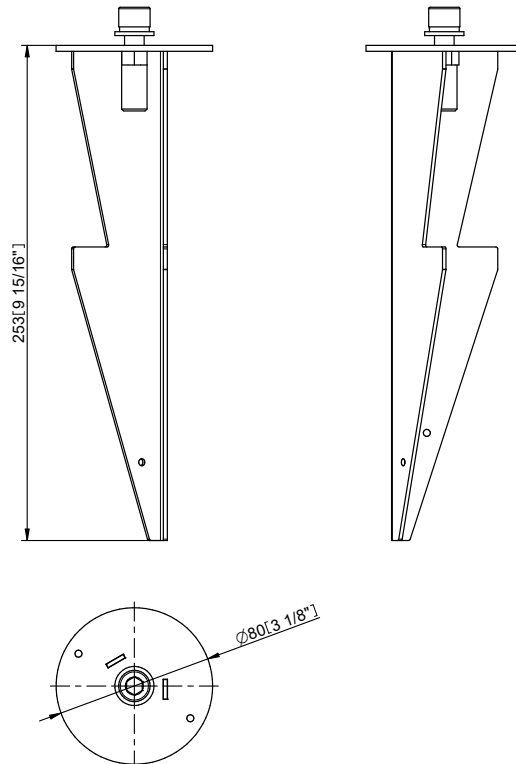
Floor Stand



Pole Adaptor



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



PHOTOMETRIC OVERVIEW

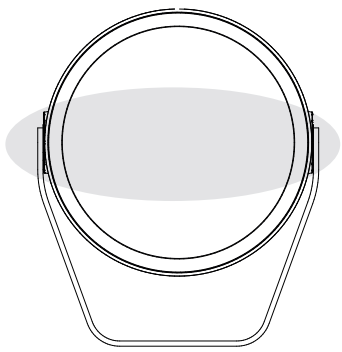
	Lumen Output (lm)		
	RGBCW (W 6500 K)	RGBA	WW (W 3000 K)
10°	10955	7682	13561
15°	9982	6999	12356
25°	9755	6840	12075
30°	9575	6714	11853
45°	9777	6856	12103
65°	9585	6721	11865
100°	9704	6804	12012
10° x 30°, 30° x 10°	9638	6758	11931
10° x 60°, 60° x 10°	9591	6725	11872
15° x 45°, 45° x 15°	10007	7017	12387
30° x 60°, 60° x 30°	9534	6685	11802
30° x 90°, 90° x 30°	8986	6301	11124
15° x 90°, 90° x 15°	9437	6617	11682

BI-SYMMETRICAL BEAM ANGLES

Bi-symmetrical:

10°x30°,  
10°x60°,  
15°x45°,  
15°x90°,  
30°x60°,  
30°x90°

10°, 15°, 30°

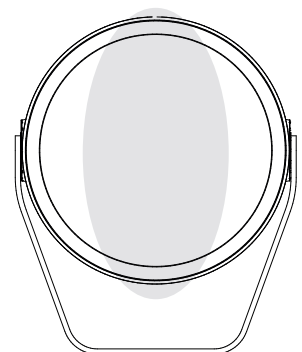


30°, 45°, 60°, 90°

Bi-symmetrical:

30°x10°,  
60°x10°,  
45°x15°,  
90°x15°,  
60°x30°,  
90°x30°

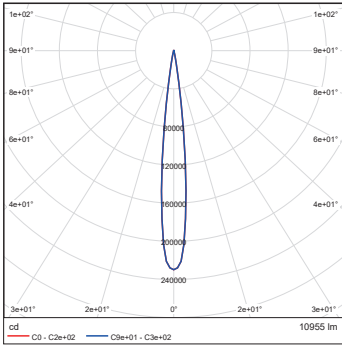
30°, 45°, 60°, 90°



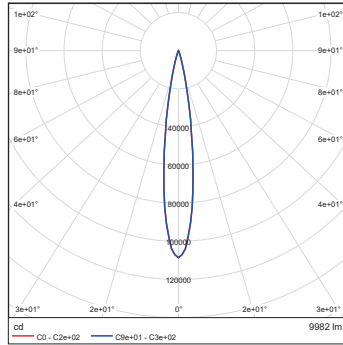
10°, 15°, 30°

PHOTOMETRIC DATA

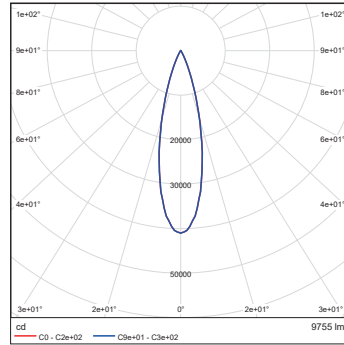
Calumma XL SC RGBW 6500K 10dg



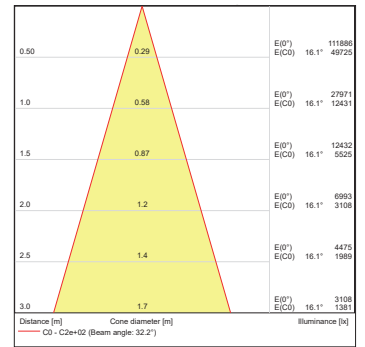
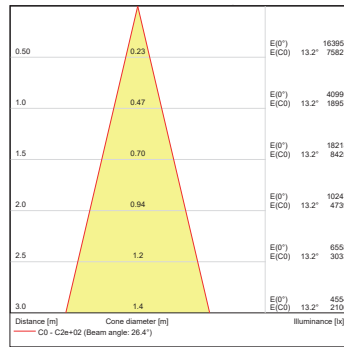
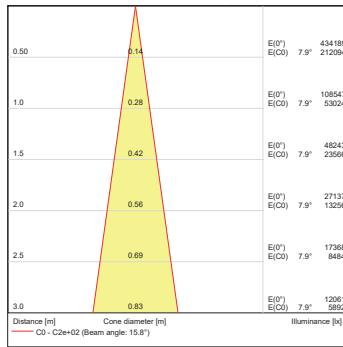
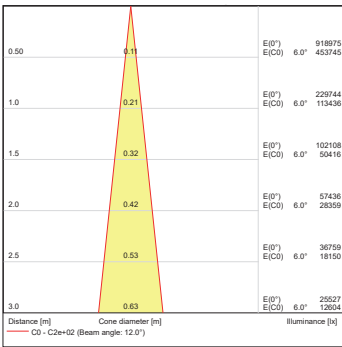
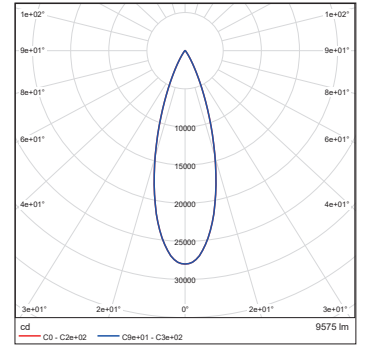
Calumma XL SC RGBW 6500K 15dg



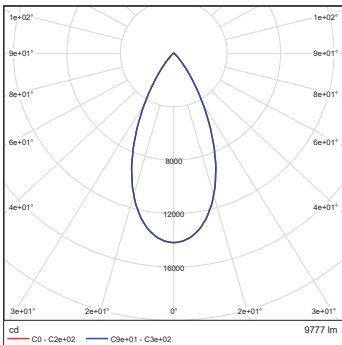
Calumma XL SC RGBW 6500K 25dg



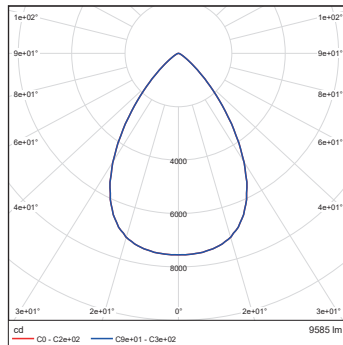
Calumma XL SC RGBW 6500K 30dg



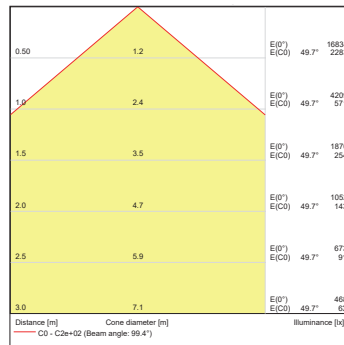
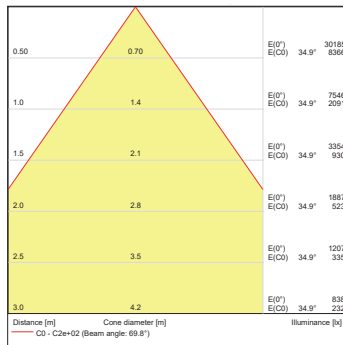
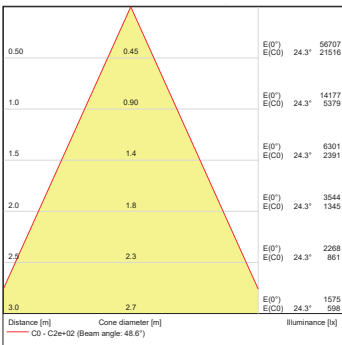
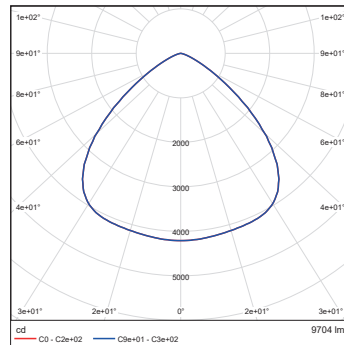
Calumma XL SC RGBW 6500K 45dg



Calumma XL SC RGBW 6500K 65dg

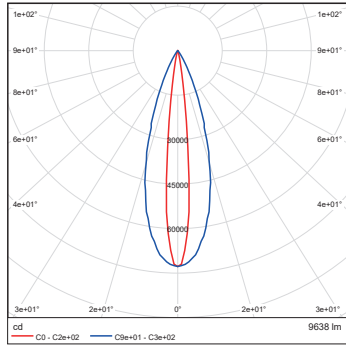


Calumma XL SC RGBW 6500K 100dg



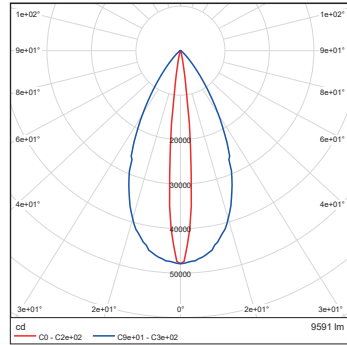
PHOTOMETRIC DATA

Calumma XL SC RGBW 6500K  
10x30dg



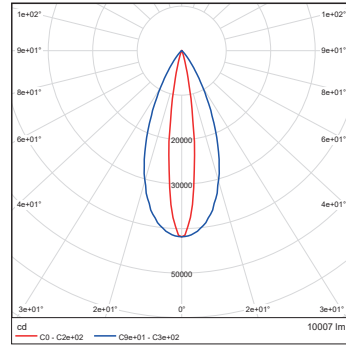
Distance [m]	Cone diameter [m]	Beam angle	E(0°)	E(C90)	E(C0)	Illuminance [lx]
0.50	0.30	33.4°	291087	16.7° 128524	5.6° 145913	
1.0	0.60	33.4°	72772	16.7° 32131	5.6° 36403	
1.5	0.90	33.4°	32243	16.7° 14280	5.6° 16179	
2.0	1.2	33.4°	18103	16.7° 8033	5.6° 9101	
2.5	1.5	33.4°	11643	16.7° 5141	5.6° 5825	
3.0	1.8	33.4°	8086	16.7° 3370	5.6° 4045	

Calumma XL SC RGBW 6500K  
10x60dg



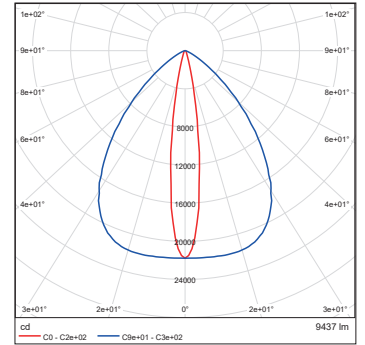
Distance [m]	Cone diameter [m]	Beam angle	E(0°)	E(C90)	E(C0)	Illuminance [lx]
0.50	0.50	62.8°	191509	26.3° 69229	5.6° 94603	
1.0	1.00	62.8°	47877	26.3° 17315	5.6° 23701	
1.5	1.50	62.8°	21279	26.3° 7695	5.6° 10534	
2.0	2.00	62.8°	11869	26.3° 4129	5.6° 5925	
2.5	2.50	62.8°	7660	26.3° 2770	5.6° 3792	
3.0	3.00	62.8°	5220	26.3° 1924	5.6° 2633	

Calumma XL SC RGBW 6500K  
15x45dg



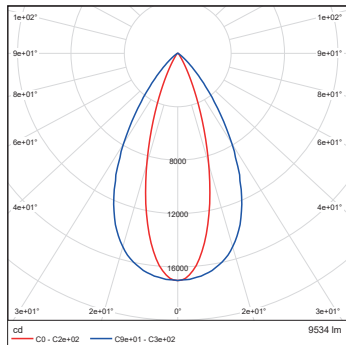
Distance [m]	Cone diameter [m]	Beam angle	E(0°)	E(C90)	E(C0)	Illuminance [lx]
0.50	0.40	44.0°	167337	22.0° 67077	7.8° 92534	
1.0	0.81	44.0°	41834	22.0° 18769	7.8° 20631	
1.5	1.2	44.0°	18563	22.0° 7453	7.8° 9169	
2.0	1.6	44.0°	10459	22.0° 4192	7.8° 5158	
2.5	2.0	44.0°	6693	22.0° 2663	7.8° 3301	
3.0	2.4	44.0°	4648	22.0° 1863	7.8° 2292	

Calumma XL SC RGBW 6500K  
15x90dg



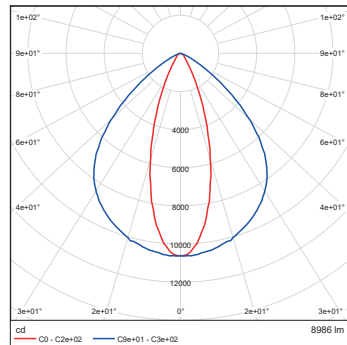
Distance [m]	Cone diameter [m]	Beam angle	E(0°)	E(C90)	E(C0)	Illuminance [lx]
0.50	0.50	82.6°	87077	41.3° 19600	7.8° 42585	
1.0	1.0	82.6°	21769	41.3° 4650	7.8° 10646	
1.5	1.5	82.6°	9875	41.3° 2067	7.8° 4732	
2.0	2.0	82.6°	5442	41.3° 1162	7.8° 2662	
2.5	2.5	82.6°	3483	41.3° 744	7.8° 1703	
3.0	3.0	82.6°	2419	41.3° 517	7.8° 1183	

Calumma XL SC RGBW 6500K  
30x60dg



Distance [m]	Cone diameter [m]	Beam angle	E(0°)	E(C90)	E(C0)	Illuminance [lx]
0.50	0.50	31.4°	68077	29.9° 22232	15.7° 30629	
1.0	1.0	31.4°	17019	29.9° 9599	15.7° 7832	
1.5	1.5	31.4°	7564	29.9° 4470	15.7° 3392	
2.0	2.0	31.4°	4255	29.9° 1908	15.7° 1908	
2.5	2.5	31.4°	2723	29.9° 818	15.7° 1221	
3.0	3.0	31.4°	1891	29.9° 463	15.7° 845	

Calumma XL SC RGBW 6500K  
30x90dg



Distance [m]	Cone diameter [m]	Beam angle	E(0°)	E(C90)	E(C0)	Illuminance [lx]
0.50	0.50	34.0°	42461	45.3° 7414	17.0° 18613	
1.0	1.0	34.0°	10615	45.3° 1854	17.0° 4653	
1.5	1.5	34.0°	4719	45.3° 824	17.0° 2068	
2.0	2.0	34.0°	2654	45.3° 463	17.0° 1163	
2.5	2.5	34.0°	1698	45.3° 297	17.0° 745	
3.0	3.0	34.0°	1179	45.3° 206	17.0° 517	