

# CALUMMA™ L MC

Featuring an optical design using twelve high efficacy multichip LEDs and available with optional LED colour variants and various beam angles, the large-sized Calumma L MC 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 MC 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 twelve high-power, multi-chip LEDs provides up to 3970 lumen output. Multiple LED colour variants. No light spills. Perfectly homogenised light output with efficacy up to 36 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 MC 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.

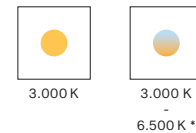
## COLOURS

\* UPON REQUEST



## COLOUR TEMPERATURE

\* UPON REQUEST

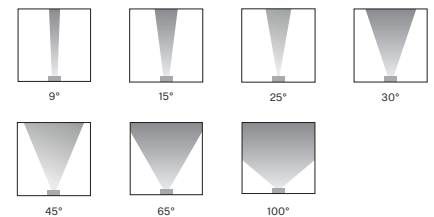


## CONTROL & PROTOCOLS

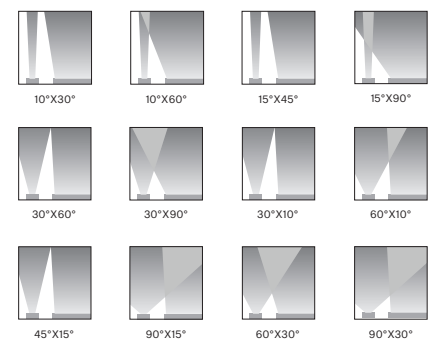


## OPTIC OPTIONS

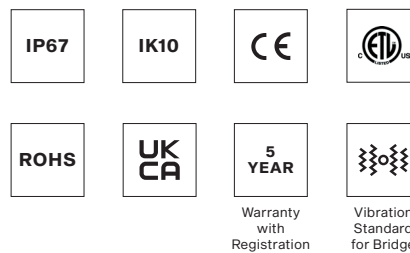
### SYMMETRICAL



### BI-SYMMETRICAL



## STANDARD & SPECIFICATION



## FINISH OPTIONS

\* CLOSEST RAL TONE  
\* HE = Harsh Environment



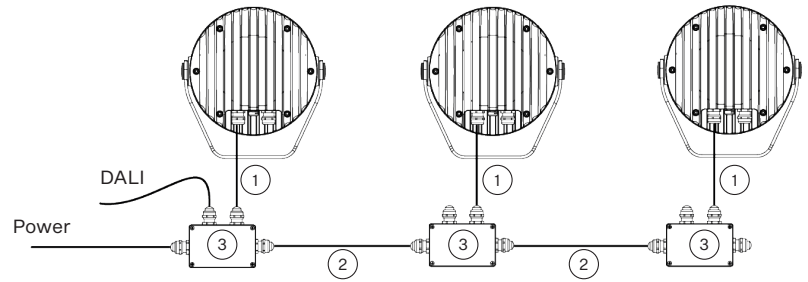
**SPECIFICATION**

<b>ELECTRICAL</b>	Input Voltage	120 - 277 V AC 50/60 Hz (US)		
	Typical Power Consumption	110 W +/-10 %		
<b>OPTICAL</b>	Light Source	High Power Multichip LEDs		
	Colour Variants	RGBW (W - 6500 K)   RGBA   PW (W - 3000 K)		
		Other Variants On Request (TW 3000 - 6500 K)		
	Beam Angle	9°   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	3970 lm (@9° 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		
	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		
	Operating Modes	DMX, Stand-alone		
	Settings / Addressing	E-box, RDM communicator		
	Power Supply	Integrated		
<b>PHYSICAL</b>	Width x Height x Depth   Weight	338 x 360 x 116 mm (13.31 x 14.13 x 4.57 in.)   9.43 kg (20.79 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	<b>IN/OUT (for E- Box version):</b> - 0,5 m cables with hybrid connectors - Jumper cables	<b>IN (for DMX, DALI):</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)			
	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)				

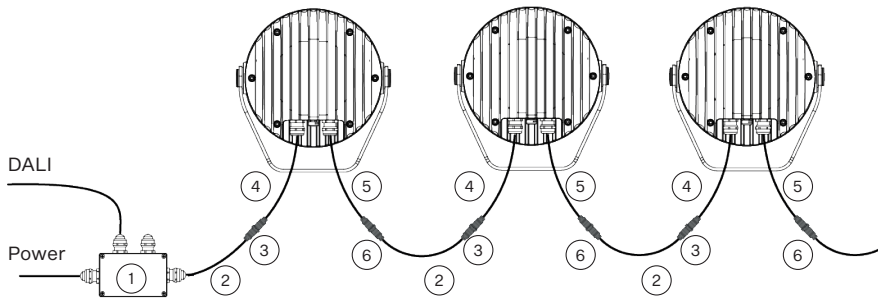
CONTROL AND CONNECTION OPTIONS - CE

DALI

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



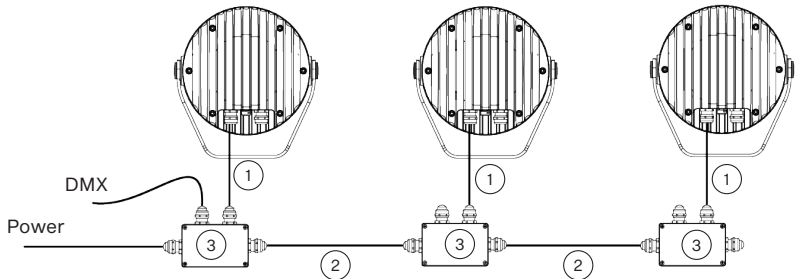
- 1) Junction Box
- 2) Hybrid Cable (1305 3693)
- 3) Field Installable Connector FF DC-05 (13053971)
- 4) Hybrid Cable (1305 3693), Standard 0,5 m with Field Installable Connector MM DC-05 (1305 3972)
- 5) Hybrid Cable (1305 3693), Standard 0,5 m with Field Installable Connector FF DC-05 (1305 3971)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

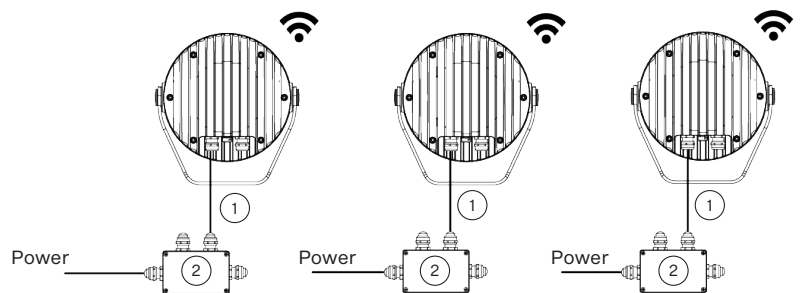
- 1) Flamar 3x AWG 16 + 1 x (2x AWG 24) Standard 1 m with bare-end, (13051508), black or Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Flamar 3x AWG 16 + 1 x (2x AWG 24), (13051508), black or Hybrid Cable HYB-5731ZH LSZH (13053694) white or Scope of Others
- 3) Junction Box



WIRELESS DMX

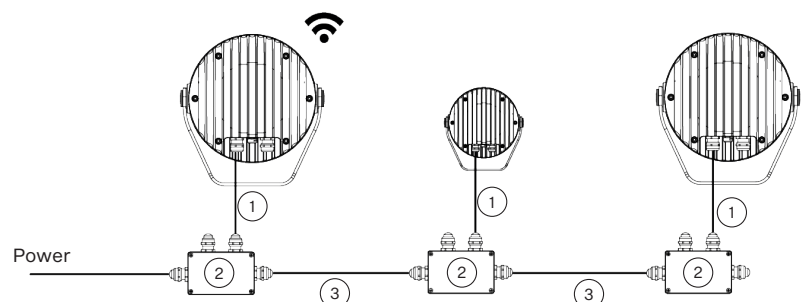
- 1) Flamar 3x AWG 16 + 1x (2x AWG 24), (13051508), Standard 1 m bare-end, black or Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Junction Box

**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 + 1 x (2x AWG 24), (13051508) or Hybrid Cable HYB-5731ZH LSZH (13053694), white or Scope of Others

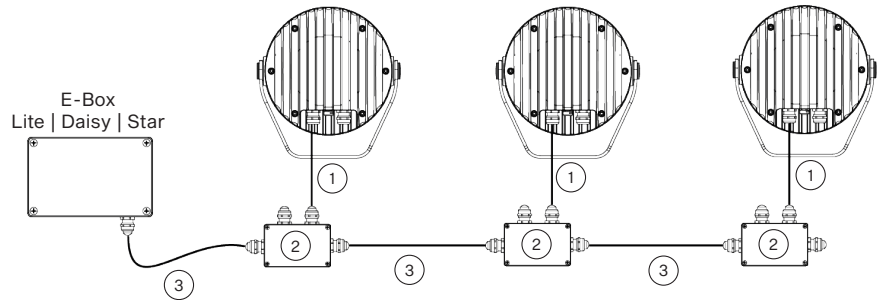
**Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.**



CONTROL AND CONNECTION OPTIONS - CE

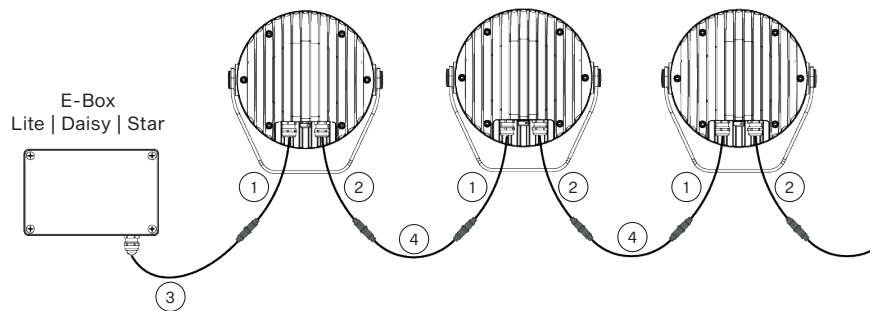
DMX or ETHERNET via E-BOX

- 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

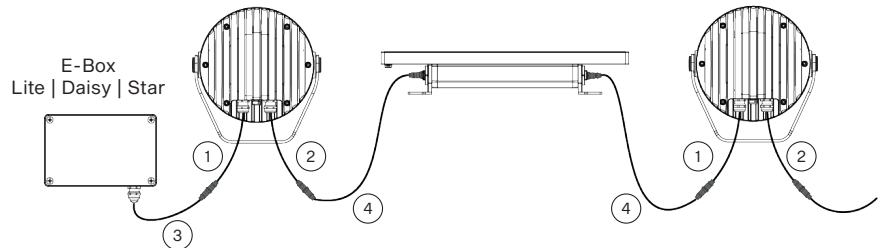


**Note: This type of connection is available for S, M, L, and XL versions. E-Box has to be in Pass Through mode only.**

- 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)



OR

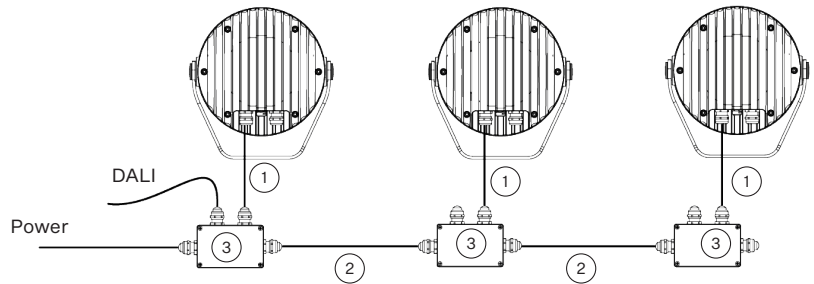


**Note: With this type of connection is possible to connect Calumma (M, L, XL) and Eminere (Eminere, Eminere Side) luminaires in a row.**

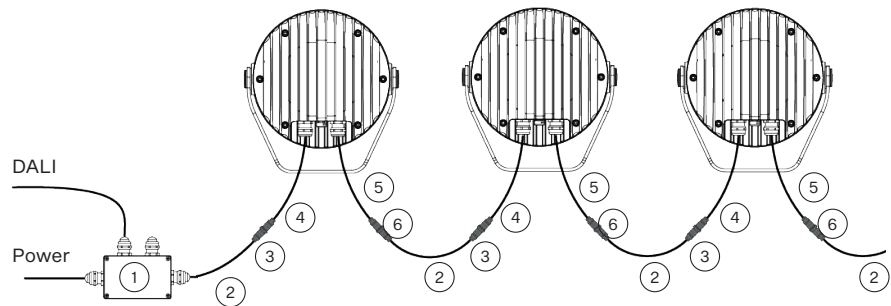
CONTROL AND CONNECTION OPTIONS - US

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)

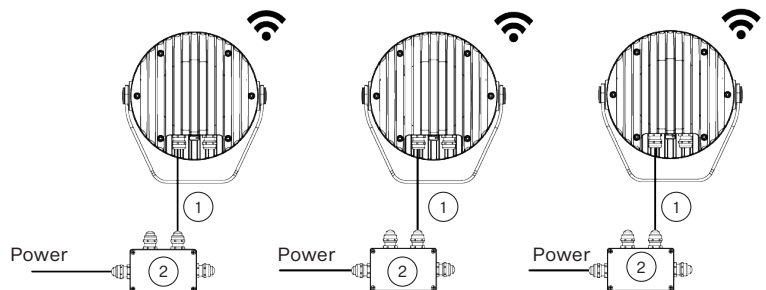


**Note: The last unplugged connector must be fitted with a Waterproof Cap to protect the IP rating.**

WIRELESS DMX

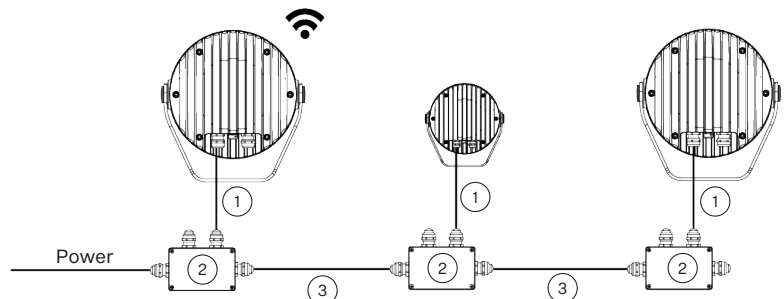
- 1) SJTW 6x 14AWG (13053480), Standard 1 m with bare-end, black or Cable SJTW 6x 14AWG (13053695), white
- 2) Junction Box

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



- 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

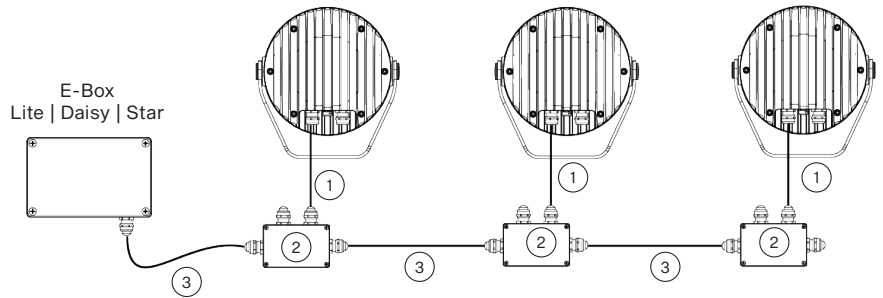
**Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.**



**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.**

**CONNECTIVITY**

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

STANDARD MODE	Cable length (m)	Voltage (V)			
		120	190	230	277
CALUMMA L MC	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 MC	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

**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	17	26	-	-
20 m	17, 34, 51	26, 32	32	38
30 m	12, 24, 36, 48, 60, 71, 84	26, 52, 78	32, 64	38, 76
50 m	7, 14, 21, 28, 35, 42, 49, 56, 63...	18, 32, 54, 72, 90...	26, 52, 78, 104...	37, 74, 111....
70 m	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80...	13, 26, 39, 52, 65, 78, 91, 104, 117...	18, 36, 54, 72, 90 108...	27, 54, 81, 108, 135...
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...	9, 18, 27, 36, 45, 54, 72, 81, 90, 99, 108, ...	13, 26, 39, 52, 65, 78, 91, 104...	19, 38, 57, 76, 95, 114...
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...	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, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96, 102....	9, 18, 27, 36, 45, 54, 63, 81, 90, 99, 108, 117....
500 m	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11....	2, 4, 6, 8, 10, 12, 14, 16, 18....	3, 6, 9, 12, 15, 18, 21....	4, 8, 12, 16, 20, 24, 28....

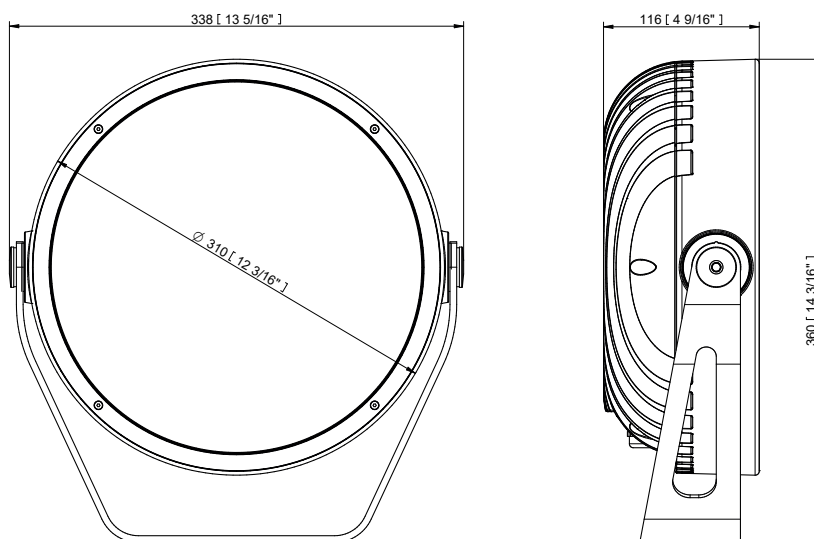
**NOTE: For more detail see the User manual.**

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>
<b>Calumma L</b>	0,080	0,861	0,037	0,398	0,035	0,373
<b>with Top Hat</b>	0,080	0,861	0,087	0,936	0,085	0,911
<b>with Half Top Hat</b>	0,080	0,861	0,059	0,635	0,082	0,882

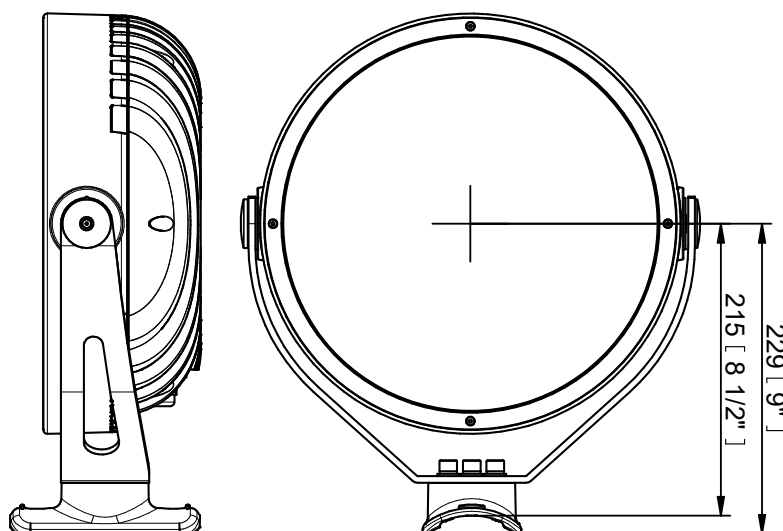
DIMENSIONS

Standard Yoke



Yoke for Pole Adaptor (with Pole Adaptor / PA)

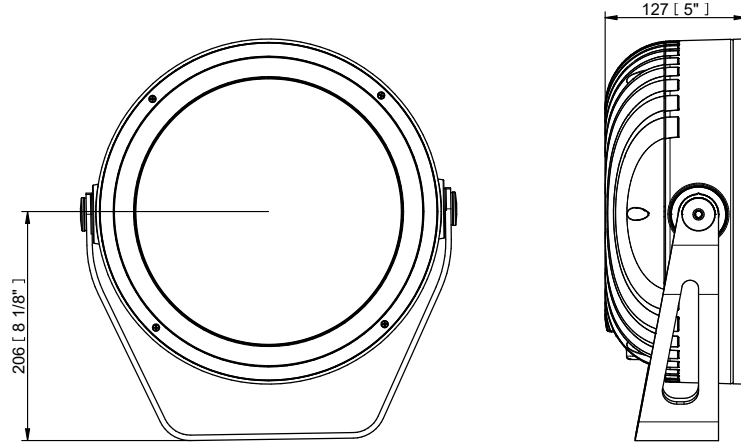
**Example of ordering code:** Calumma L MC RGBCW 15° PA



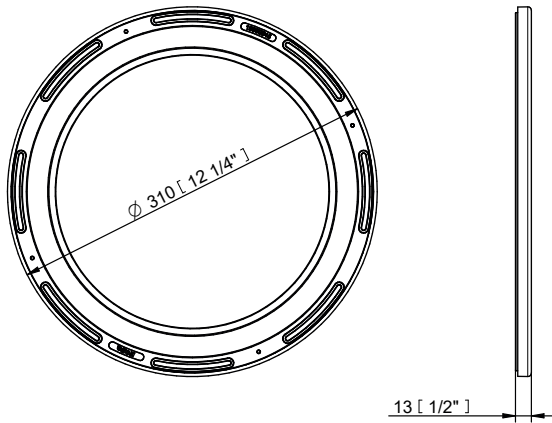
ACCESSORIES

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

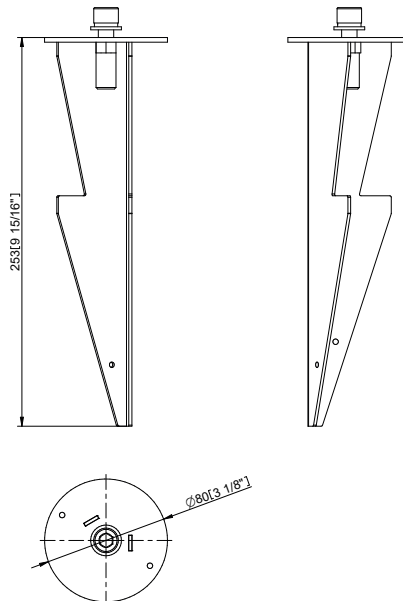
Example of ordering code: Calumma L MC CE RGBCW 9° RAL9007 OFH



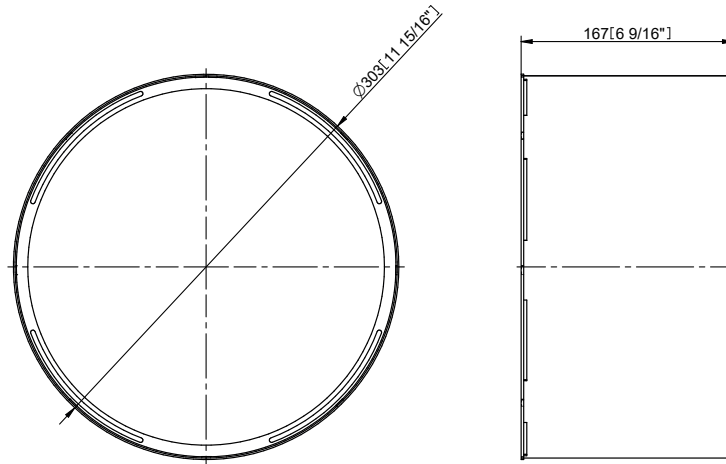
Outdoor Foil Holder for Calumma L



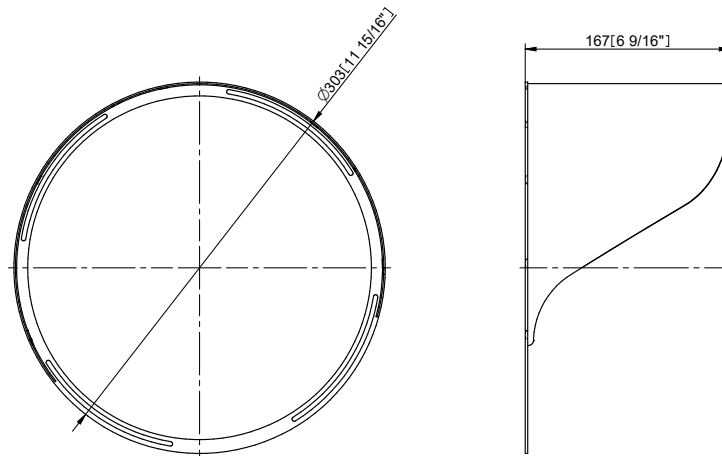
Land Spike for Calumma (S, M, L, XL)



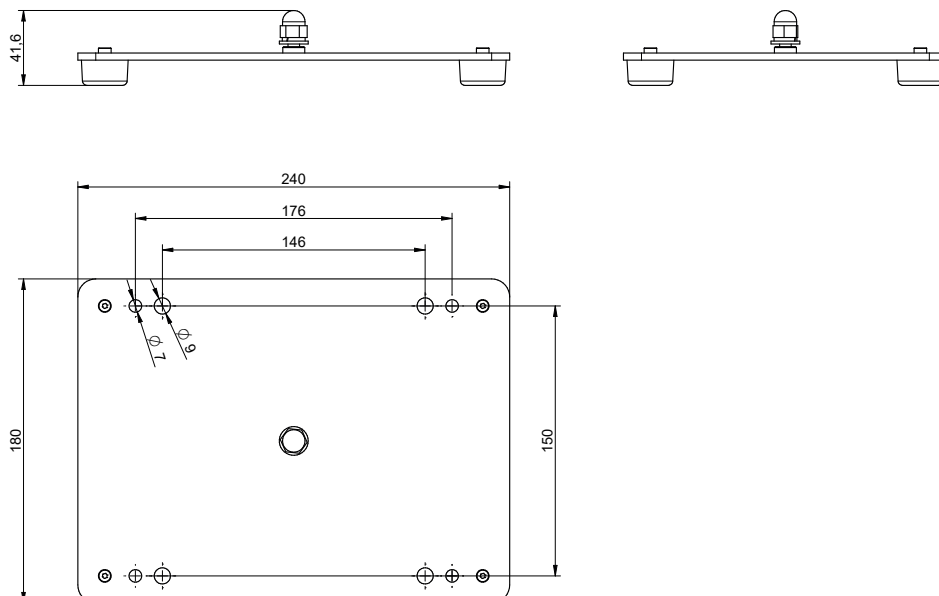




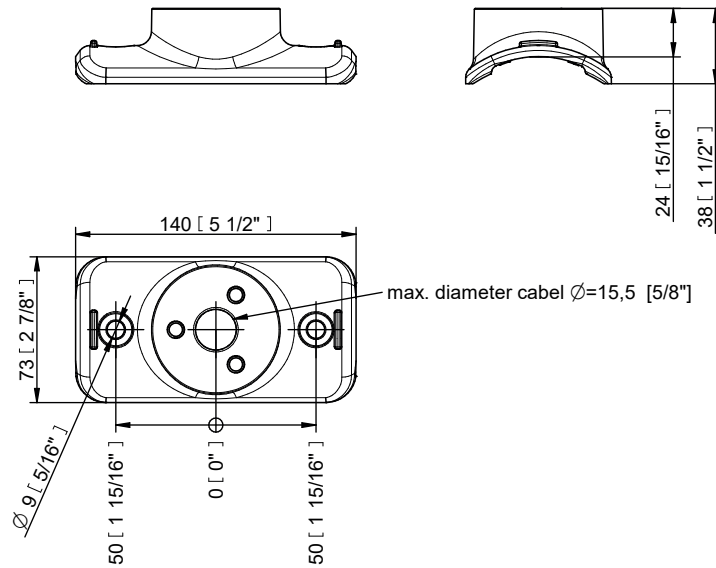
Half Top Hat



Floor Stand



Pole Adaptor



**PHOTOMETRIC OVERVIEW**

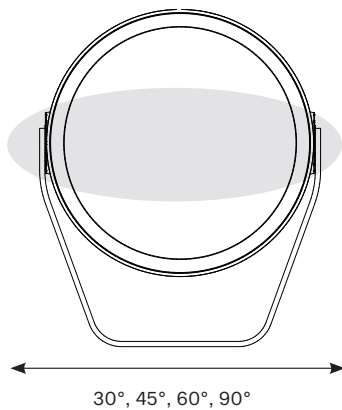
Lumen Output (lm)

	RGBCW (W 6500 K)	RGBA	WW (W 3000 K)
9°	3970	3404	3385
15°	3072	2634	2619
25°	3050	2615	2600
30°	3003	2575	2560
45°	3043	2609	2594
65°	3045	2611	2596
100°	3012	2583	2568
10° x 30°, 30° x 10°	2882	2471	2457
10° x 60°, 60° x 10°	3201	2745	2729
15° x 45°, 45° x 15°	3261	2796	2780
30° x 60°, 60° x 30°	3027	2596	2581
30° x 90°, 90° x 30°	3266	2801	2784
15° x 90°, 90° x 15°	3615	3100	3082

**BI-SYMMETRICAL BEAM ANGLES**

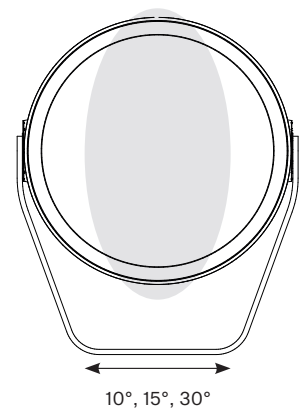
Bi-symmetrical:  
10°x30°,  
10°x60°,  
15°x45°,  
15°x90°,  
30°x60°,  
30°x90°

10°, 15°, 30°



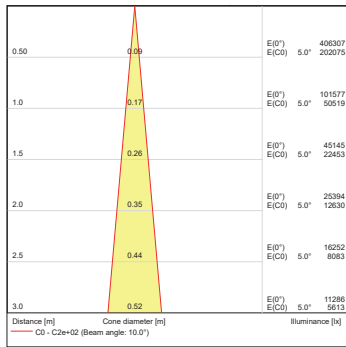
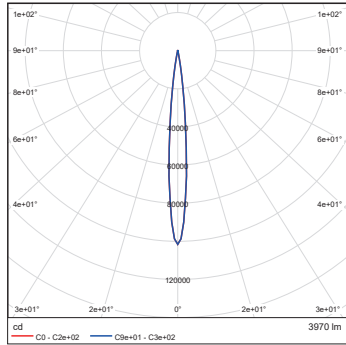
Bi-symmetrical:  
30°x10°,  
60°x10°,  
45°x15°,  
90°x15°,  
60°x30°,  
90°x30°

30°, 45°, 60°, 90°

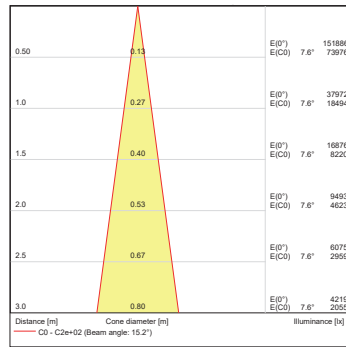
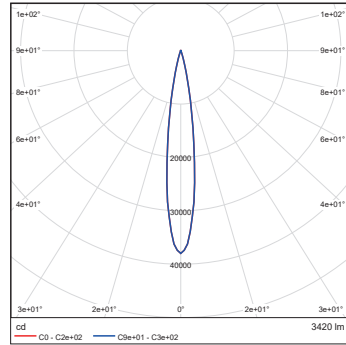


PHOTOMETRIC DATA

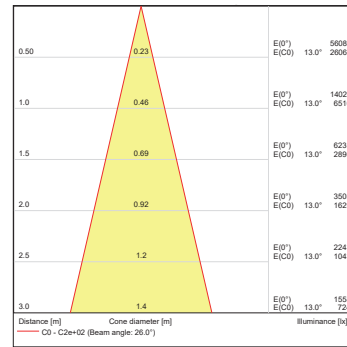
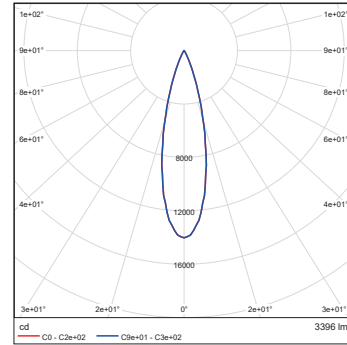
Calumma L MC RGBW 6500K 10dg



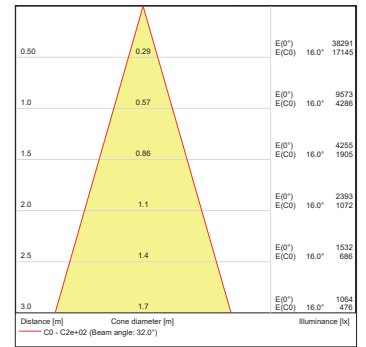
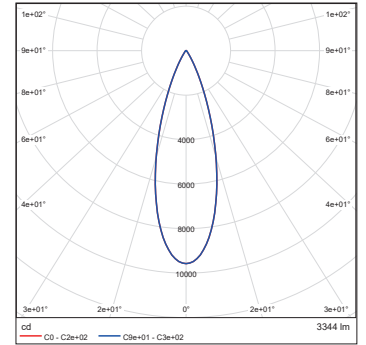
Calumma L MC RGBW 6500K 15dg



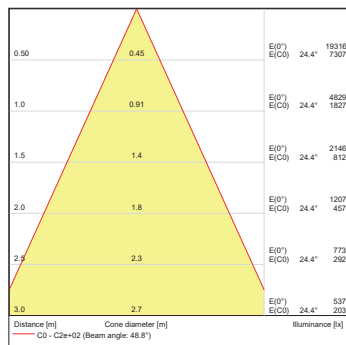
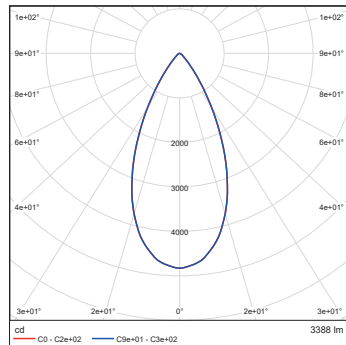
Calumma L MC RGBW 6500K 25dg



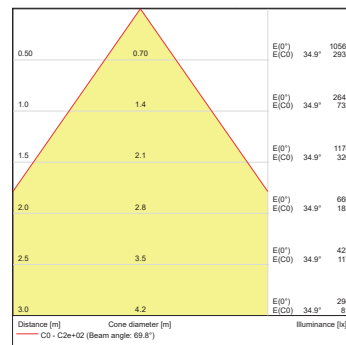
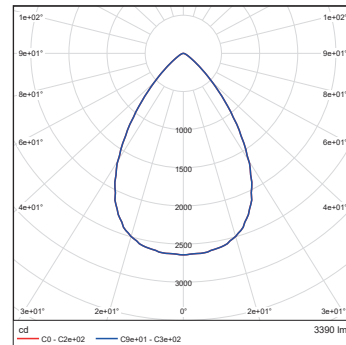
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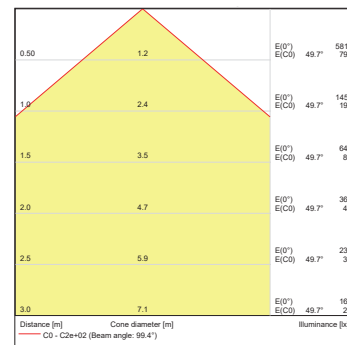
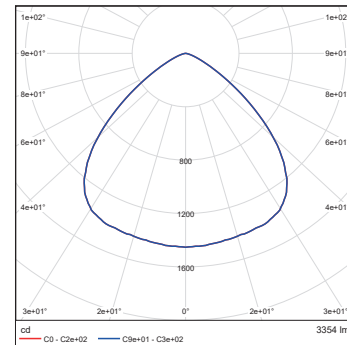
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Calumma L MC RGBW 6500K 65dg

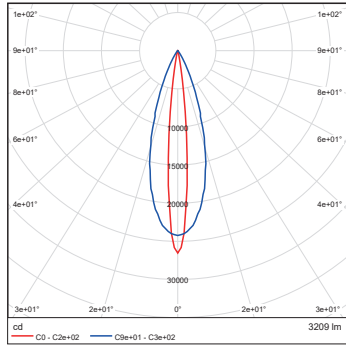


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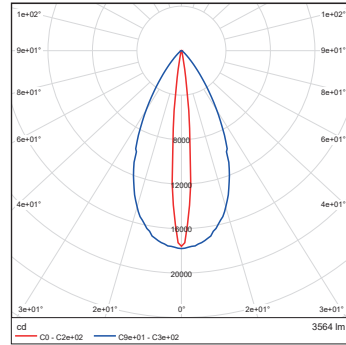


PHOTOMETRIC DATA

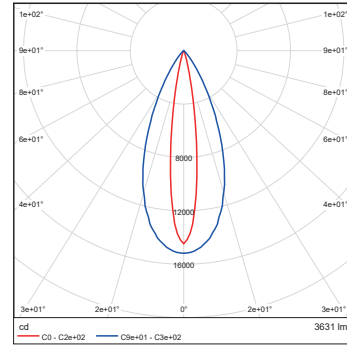
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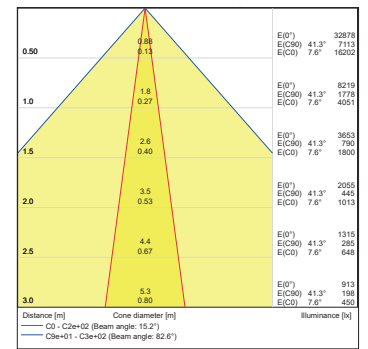
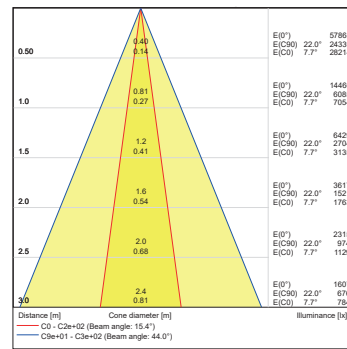
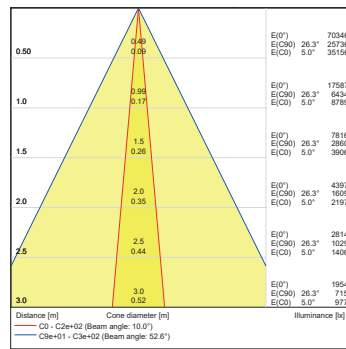
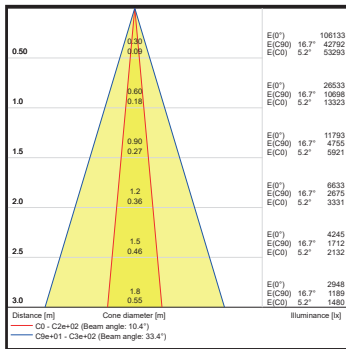
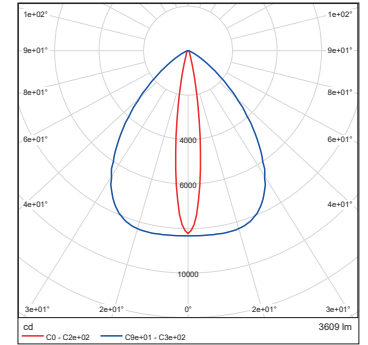
Calumma L MC RGBW 6500K  
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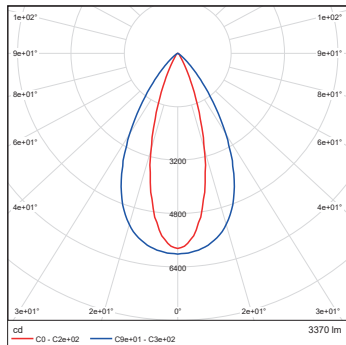
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15x45dg



Calumma L MC RGBW 6500K  
15x90dg



Calumma L MC RGBW 6500K  
30x60dg



Calumma L MC RGBW 6500K  
30x90dg

