

CALUMMA™ CATENARY M MC

Featuring an optical design using 7 high efficacy multi-chip LEDs and available with optional LED colour variants and various beam angles, the medium-sized Calumma Catenary M MC luminaire creates powerful and beautiful light output for a spot 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.



KEY FEATURES

Lumen output & Light source

Luminaire with seven high-power, multi-chip LEDs provides up to 2316 lumen output. Multiple LED colour variants. No light spills. Perfectly homogenised light output with efficacy up to 35 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 custom colour finishes, multiple light output variants and beam angles.

Connectivity

Utilising the innovative E-Box series of power and data interfaces, Calumma Catenary M MC can communicate via numerous control protocols.

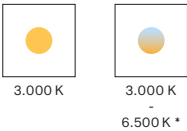
COLOURS

* UPON REQUEST



COLOUR TEMPERATURE

* UPON REQUEST

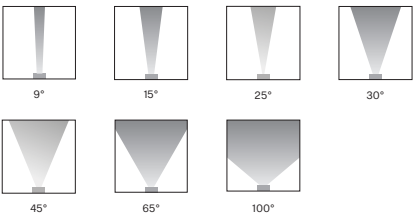


CONTROL & PROTOCOLS

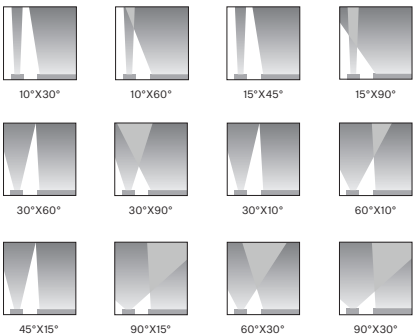


OPTIC OPTIONS

SYMMETRICAL



BI-SYMMETRICAL

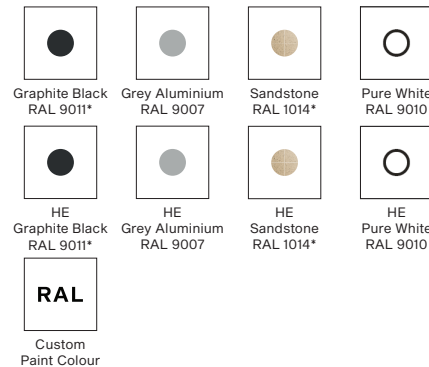


STANDARD & SPECIFICATION



FINISH OPTIONS

* CLOSEST RAL TONE
* HE = Harsh Environment



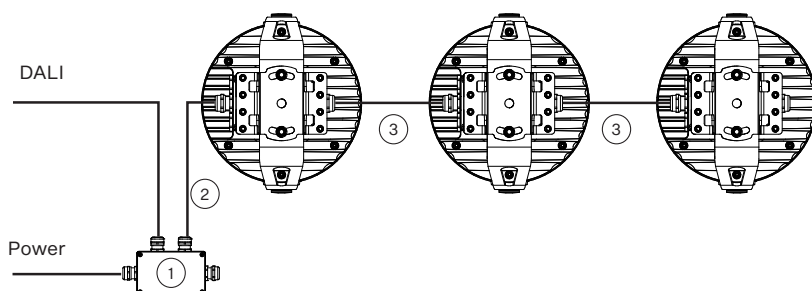
SPECIFICATION

ELECTRICAL	Input Voltage	120–277 V AC 50/60 Hz (US)		
	Typical Power Consumption	65 W +/-10 %		
OPTICAL	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	2316 lm (@9° RGBW)		
	Projected Lumen Maintenance	L90B10 >90.000 hrs, Ta = 25°C / 77°F		
CONTROL	Interface Protocol	Via E-box range, DMX/RDM, DALI 2		
	E-box control protocol	USITT DMX512+RDM, ArtNet, MA Net, MA Net2, sACN, Kling-Net		
	DALI 2 Device Type	DT 8		
	Control System	Third Party DMX Controllers		
	Operating Modes	DMX, Stand-alone		
	Settings / Addressing	E-box, RDM communicator		
	Power Supply	Integrated		
PHYSICAL	Width x Height x Depth Weight	264 x 238 x 236 mm (10.4 x 9.37 x 9.3 in.) 7.4 kg (16.31 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 (for DMX, DALI): - 1 m cable with bare end - Other cable length - custom - Junction box - optional		
	Mounting Method	Catenary Mounting		
	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 CE or US		
		Optical Demo Set for Calumma M (for demo purposes)		
		Outdoor Foil Holder for Calumma M „OFH“ version only (for permanent installation)		
		Optical Foil Set for Outdoor Foil Holder Calumma M		
		Cable hybrid 3xAWG 16 + 1x (2xAWG 24) (CE, black) - for DMX or E-Box versions		
		Cable HYB-5731ZH LSZH (CE), white - for DMX or E-Box versions		
		Cable SJTW 6x14 AWG (US), black - for E-Box versions		
		Cable SJTW 6x14 AWG (US), white - for E-Box versions		
	Re-enterable Electrical Insulating Resin			

CONTROL AND CONNECTION OPTIONS - CE

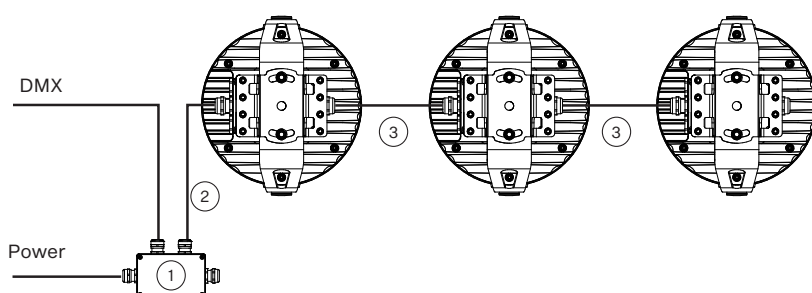
DALI

- 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) 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



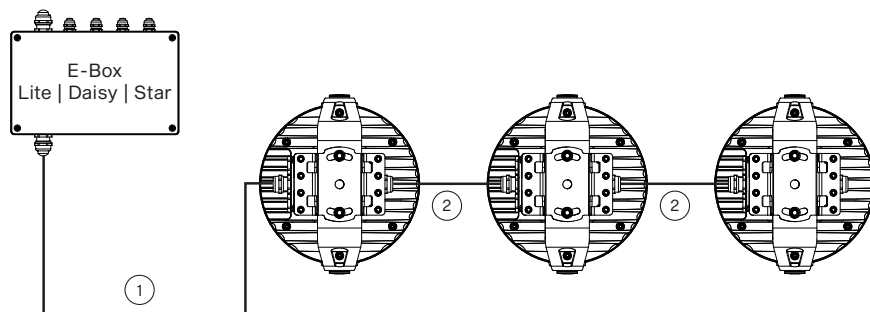
DMX

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



DMX or ETHERNET via E-BOX

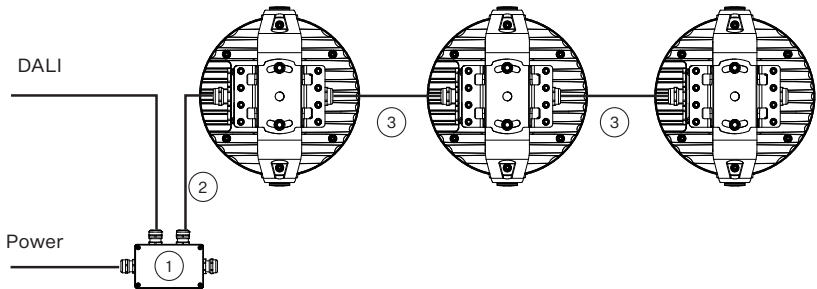
- 1) Flamar 3x16 AWG + 1x(2x24 AWG) Standard 1 m with bare-end, (13051508), black or Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Flamar 3x16 AWG + 1x(2x24 AWG), (13051508), black or Hybrid Cable HYB-5731ZH LSZH (13053694), white or Scope of Others



CONTROL AND CONNECTION OPTIONS - US

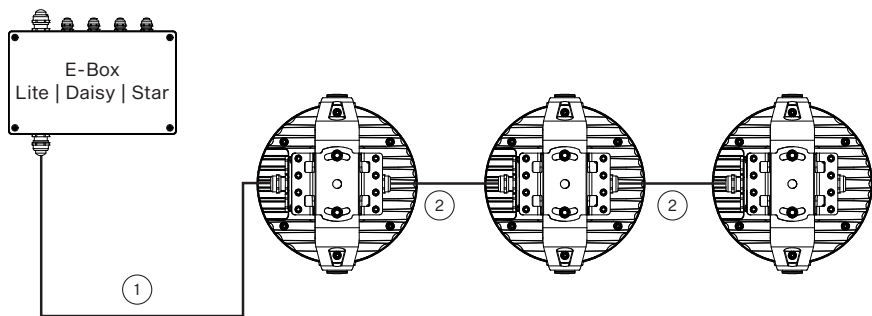
DALI

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



DMX or ETHERNET via E-BOX

- 1) SJTW 6x14 AWG (13053480), black or Cable SJTW 6x14 AWG (13053695), white or Scope of Others
- 2) SJTW 6x14 AWG (13053480), bare-end, black or Cable SJTW 6x14 AWG (13053695), white



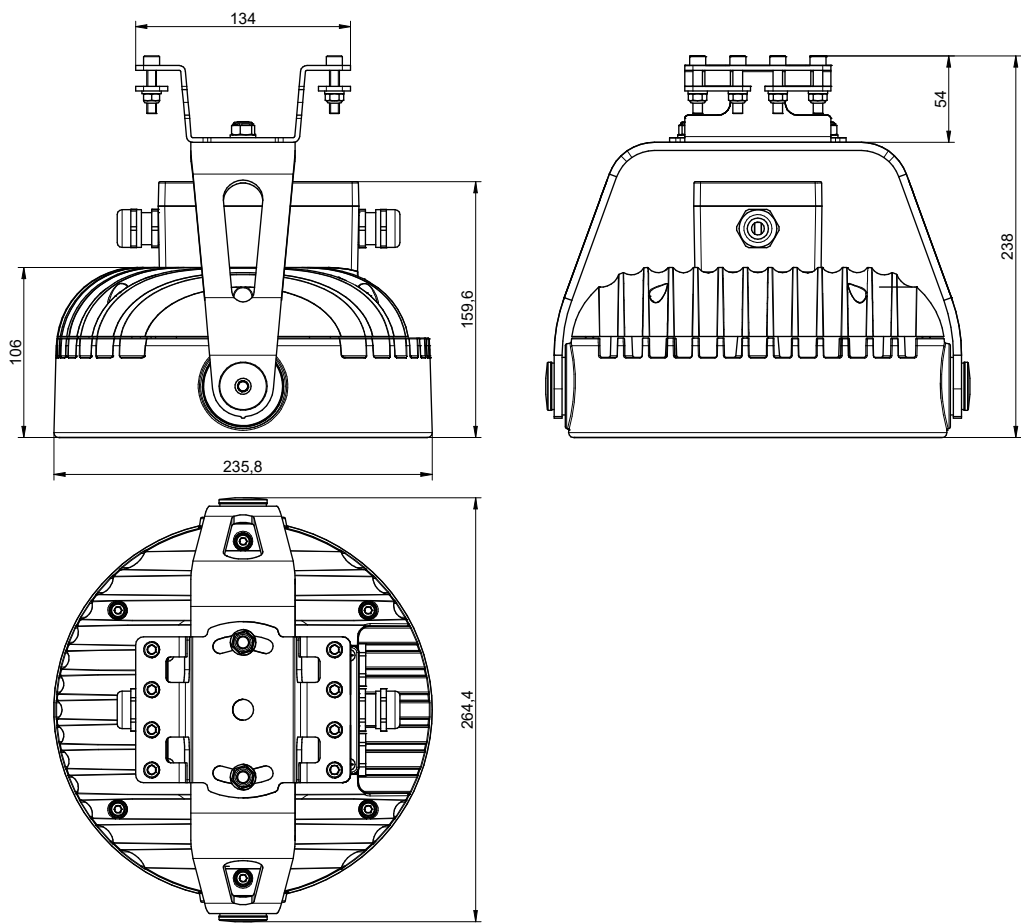
CONNECTIVITY

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

STANDARD MODE	Cable length (m)	Voltage (V)			
		120	190	230	277
CALUMMA M MC	10	28	44	54	65
	20	28	44	54	65
	30	20	44	54	65
	50	12	30	43	63
	70	8	21	31	45
	100	6	15	22	32
	200	3	7	11	16
	500	1	3	4	6

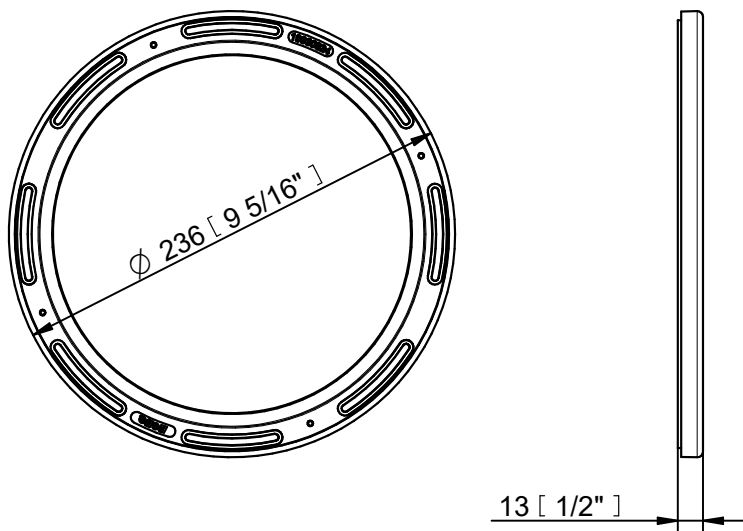
PASS-THROUGH MODE	Cable length (m)	Voltage (V)			
		120	190	230	277
CALUMMA M MC	10	28	32	32	32
	20	28	32	32	32
	30	20	32	32	32
	50	12	30	32	32
	70	8	21	31	32
	100	6	15	22	32

DIMENSIONS



DIMENSIONS

Outdoor Foil Holder for Calumma M
Outdoor Foil Holder for Calumma M „OFH“ version only (for permanent installation). **Example of ordering code:** Calumma M MC CE RGBCW 9° RAL9007 OFH

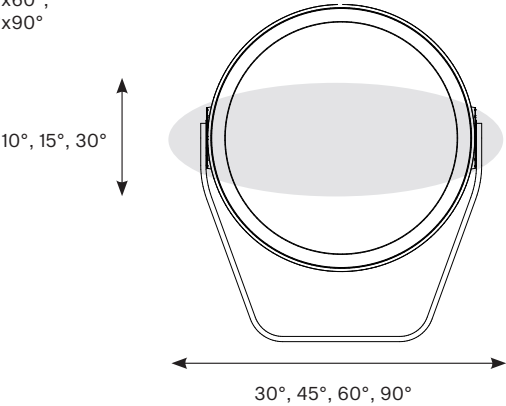


PHOTOMETRIC OVERVIEW

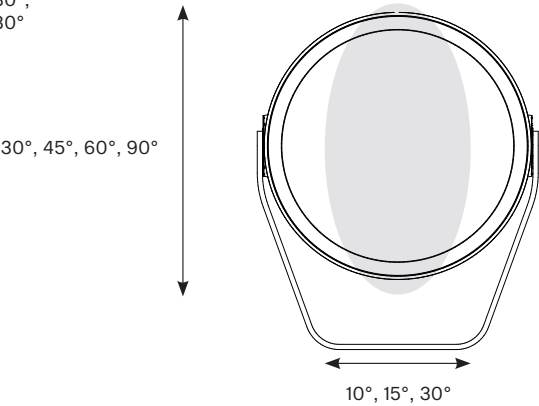
	Lumen Output (lm)		
	RGBCW (W 6500 K)	RGBA	WW (W 3000 K)
9°	2316	1986	1975
15°	1792	1537	1528
25°	1779	1526	1517
30°	1752	1502	1494
45°	1775	1522	1513
65°	1776	1523	1514
100°	1757	1507	1498
10° x 30°, 30° x 10°	1681	1442	1433
10° x 60°, 60° x 10°	1867	1601	1592
15° x 45°, 45° x 15°	1902	1631	1622
30° x 60°, 60° x 30°	1766	1514	1506
30° x 90°, 90° x 30°	1905	1634	1624
15° x 90°, 90° x 15°	2109	1809	1795

BI-SYMMETRICAL BEAM ANGLES

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

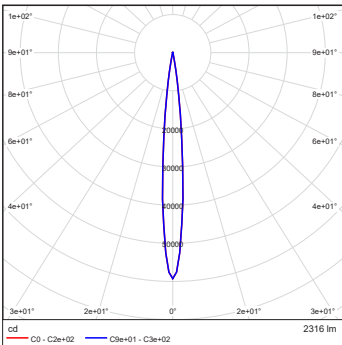


Bi-symmetrical:
30°x10°,
60°x10°,
45°x15°,
90°x15°,
60°x30°,
90°x30°

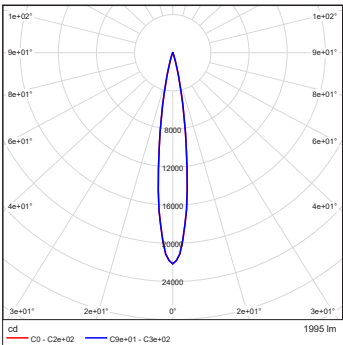


PHOTOMETRIC DATA

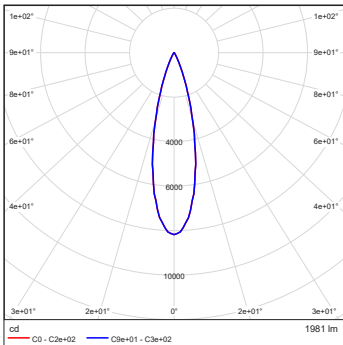
Calumma M MC RGBW 6500K 10dg



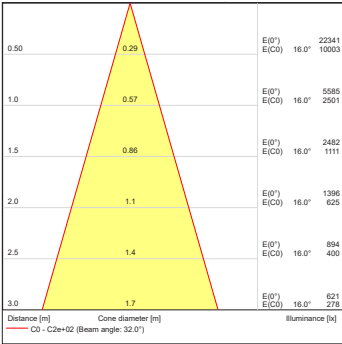
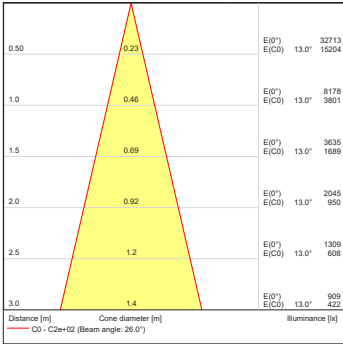
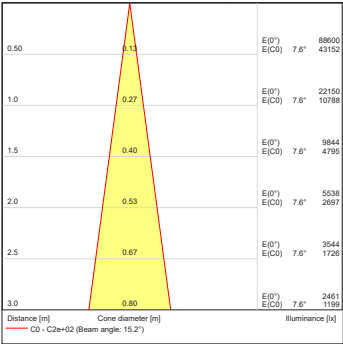
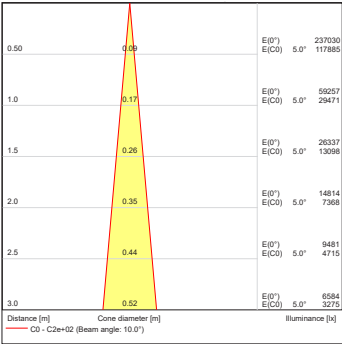
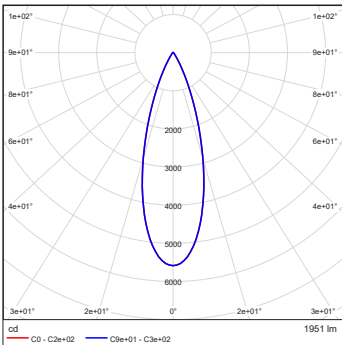
Calumma M MC RGBW 6500K 15dg



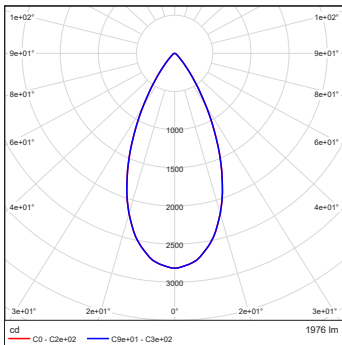
Calumma M MC RGBW 6500K 25dg



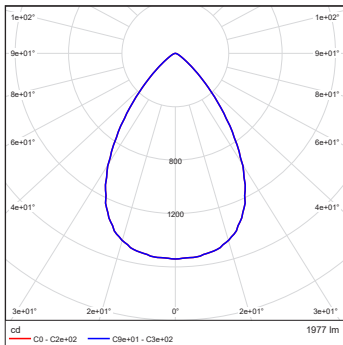
Calumma M MC RGBW 6500K 30dg



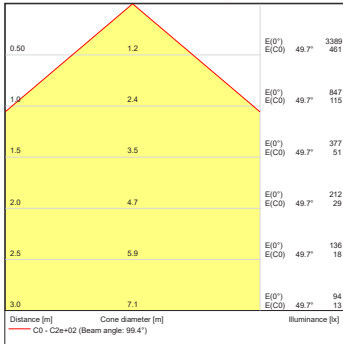
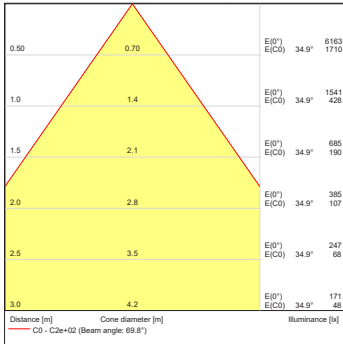
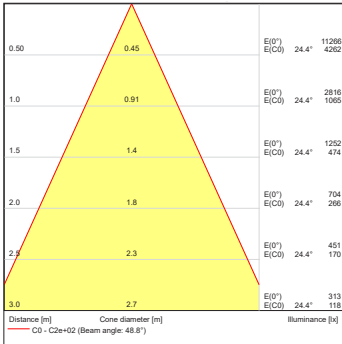
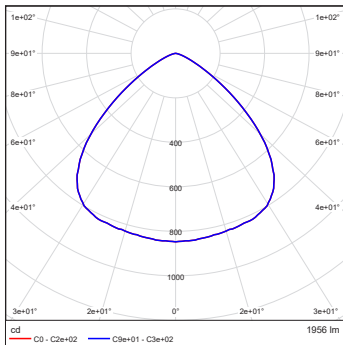
Calumma M MC RGBW 6500K 45dg



Calumma M MC RGBW 6500K 65dg

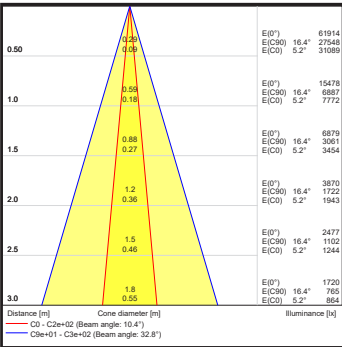
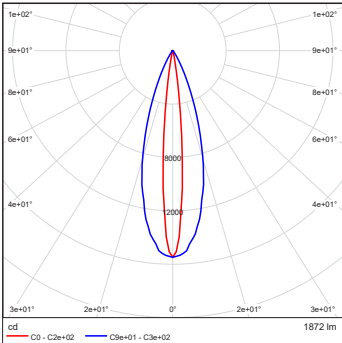


Calumma M MC RGBW 6500K 100dg

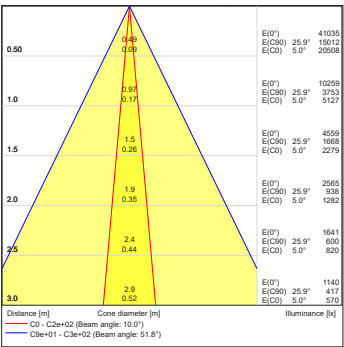
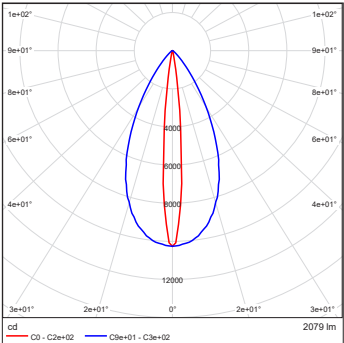


PHOTOMETRIC DATA

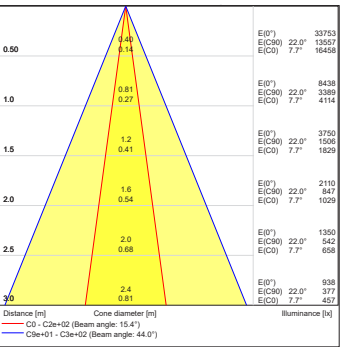
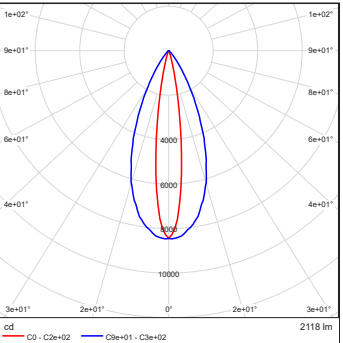
Calumma M MC RGBW 6500K
10x30dg



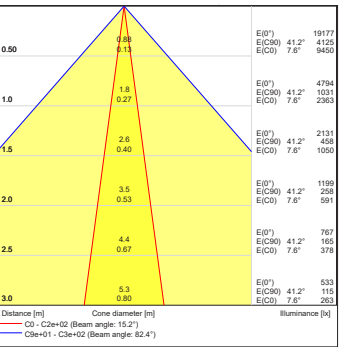
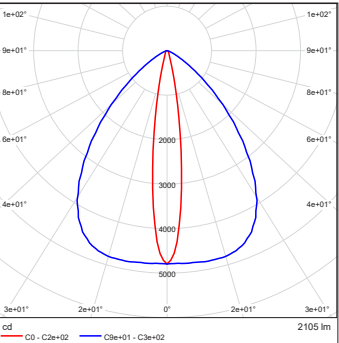
Calumma M MC RGBW 6500K
10x60dg



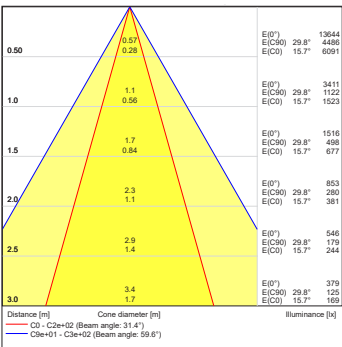
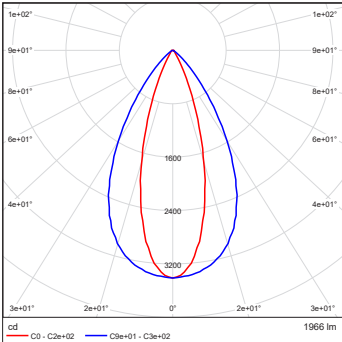
Calumma M MC RGBW 6500K
15x45dg



Calumma M MC RGBW 6500K
15x90dg



Calumma M MC RGBW 6500K
30x60dg



Calumma M MC RGBW 6500K
30x90dg

