

CALUMMA™ 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 M 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 M 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 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 wide range of accessories, custom colour finishes, multiple light output variants and beam angles.

Connectivity

Utilising the innovative E-Box series of power and data interfaces, Calumma M 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.

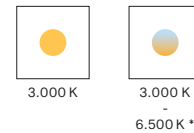
COLOURS

* UPON REQUEST



COLOUR TEMPERATURE

* UPON REQUEST

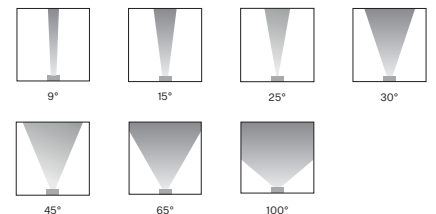


CONTROL & PROTOCOLS

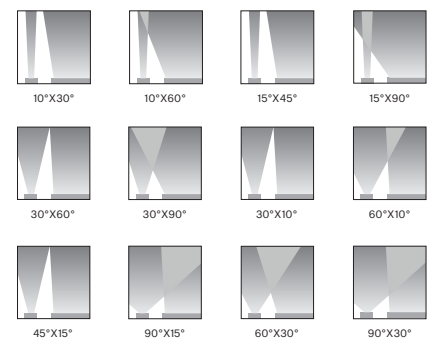


OPTIC OPTIONS

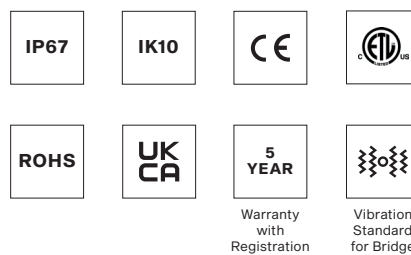
SYMMETRICAL



BI-SYMMETRICAL



STANDARD & SPECIFICATION



FINISH OPTIONS



CALUMMA M MC SPECIFICATION

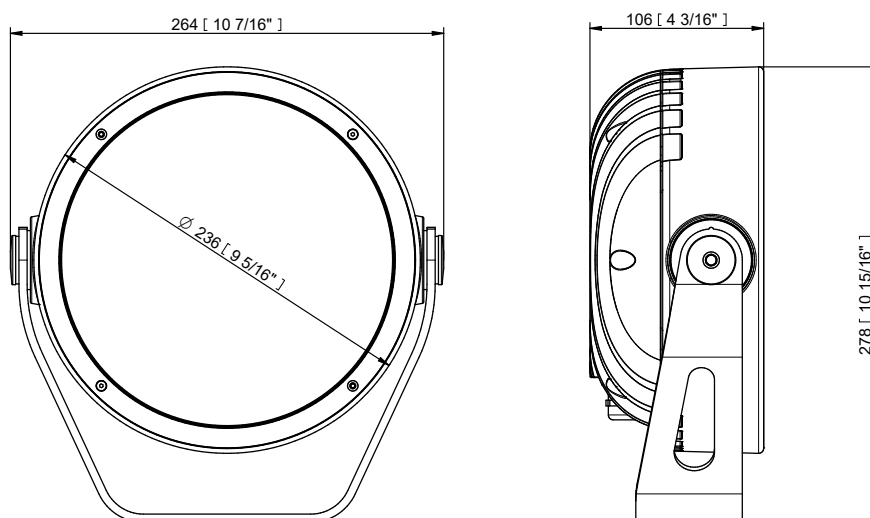
| | | | |
|-------------------------------|-----------------------------------|---|---|
| ELECTRICAL | Input Voltage | 120 - 277 V AC 50/60 Hz (US) | |
| | Typical Power Consumption | 65 W +/-10 % | |
| OPTICAL | Light Source | High Power Multichip LEDs | |
| | Colour Variants | RGBW (W - 6500 K) RGBA 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, 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 | |
| PHYSICAL | Width x Height x Depth | 264 x 278 x 106 mm (10.4 x 10.94 x 4.17 in.) | |
| | Weight | 5.77 kg 12.72 lbs | |
| | Housing | High Pressure Die-Cast Aluminium Body Tempered Glass | |
| | Finish Options | Standard Colour - Graphite Black (RAL 9011), Silver (RAL 9006) Cost Option - Custom RAL Harsh Environment (RAL 9016, RAL 9011) | |
| | Cables / Connections | IN/OUT (for E-Box version): - 0,5 m cables with hybrid connectors - Jumper cables | IN (for DMX, DALI): - 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 | |
| | | Optical Demo Set for Calumma M | |
| | | Top Hat Calumma M | |
| | | Half Top Hat Calumma M | |
| | | Tenon Adaptor for Calumma M | |
| | | Floor Stand for Calumma S, M Pole Adaptor (ø 102mm) (Yoke for Pole Adaptor Required) | |

PROJECTED AREA

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

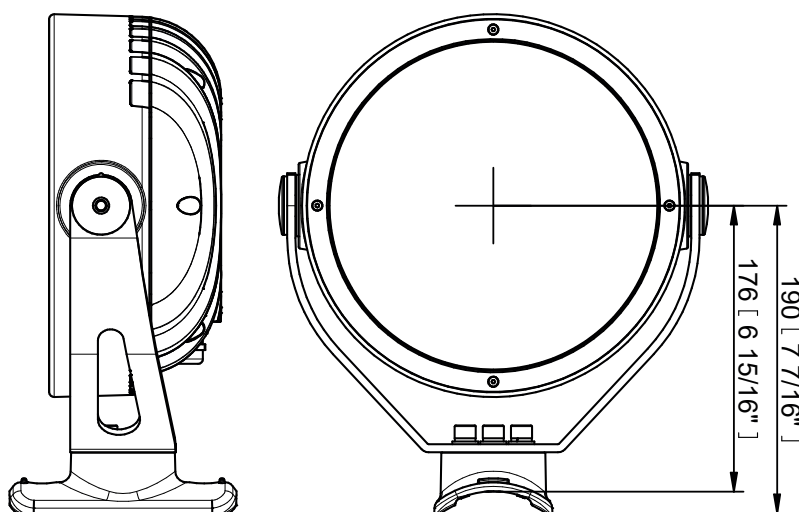
DIMENSIONS

Standard Yoke



Yoke for Pole Adaptor (with Pole Adaptor / PA)

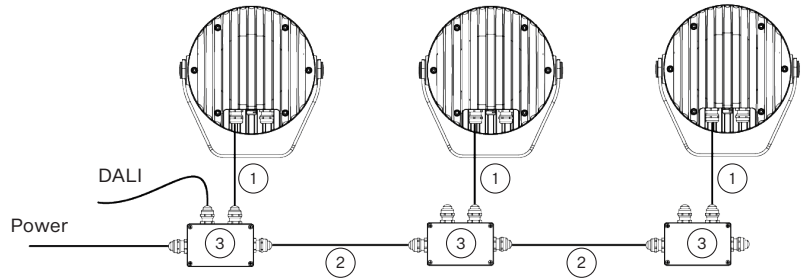
Example of ordering code: Calumma M MC RGBCW 15° PA



CONTROL AND CONNECTION OPTIONS - CE

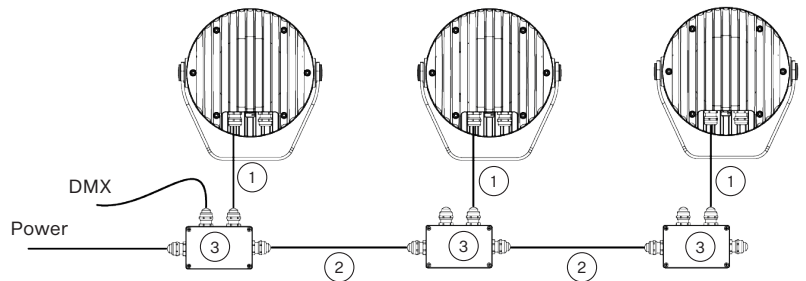
DALI

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



DMX

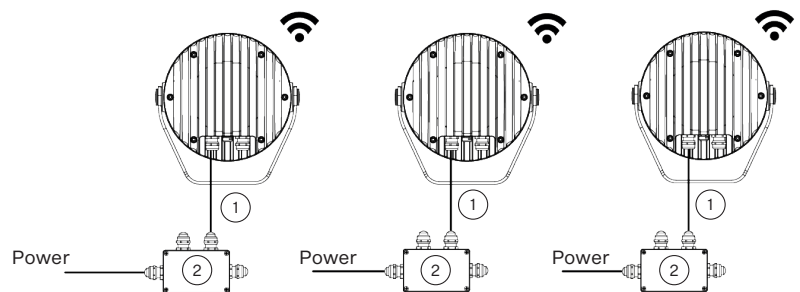
- 1) Flamar 3x AWG 16 + 1 x (2x AWG 24)
Standard 1 m with bare-end, (13051508), black
or
Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Flamar 3x AWG 16 + 1 x (2x AWG 24), (13051508), black
or
Hybrid Cable HYB-5731ZH LSZH (13053694) white
or
Scope of Others
- 3) Junction Box for Calumma



WIRELESS DMX

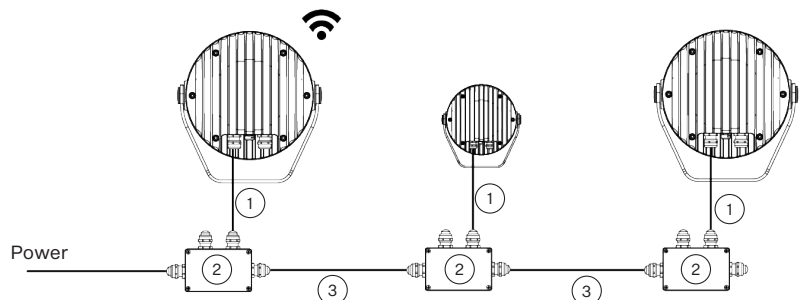
- 1) Flamar 3x AWG 16 + 1x (2x AWG 24),
(13051508), Standard 1 m bare-end, black
or
Hybrid Cable HYB-5731ZH LSZH (13053694), white
- 2) Junction Box for Calumma

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 for Calumma
- 3) Flamar 3x AWG 16 + 1 x (2x AWG 24), (13051508)
or
Hybrid Cable HYB-5731ZH LSZH (13053694), white
or
Scope of Others

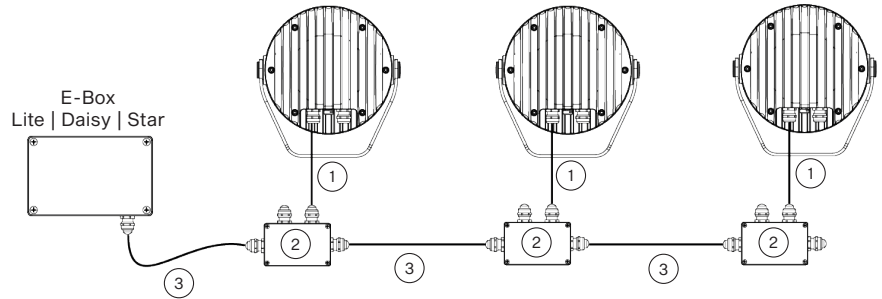
Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.



CONTROL AND CONNECTION OPTIONS - CE

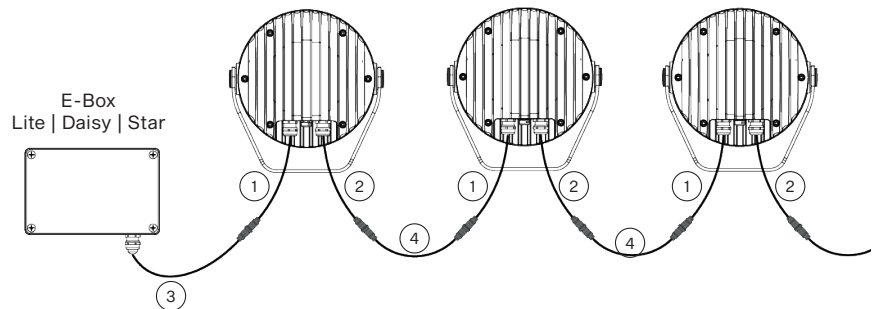
DMX or ETHERNET via E-BOX

- 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 for Calumma
- 3) Flamar 3x AWG 16 + 1x (2x AWG 24), (13051508), black or Hybrid Cable HYB-5731ZH LSZH (13053694) white or Scope of Others

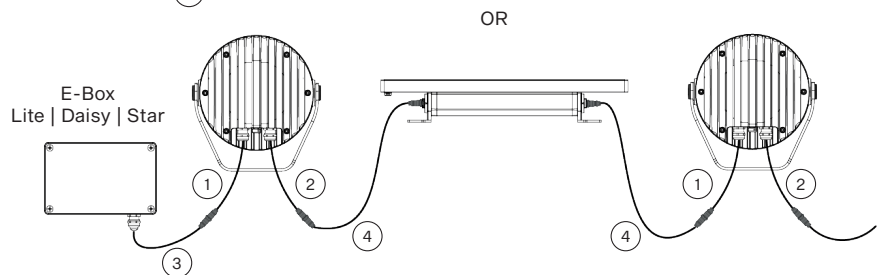


Note: This type of connection is available for S, M, L, and XL versions. E-Box has to be in Pass Through mode only.

- 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)

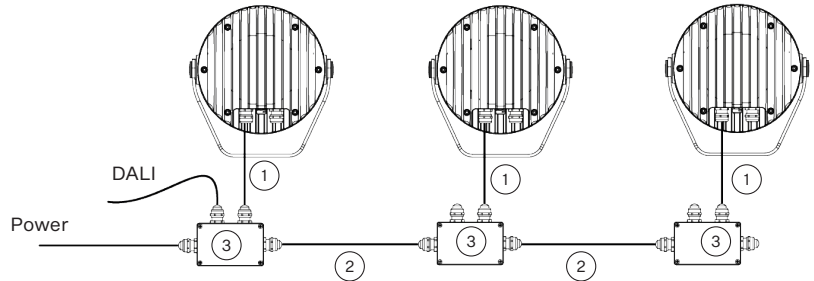


Note: With this type of connection is possible to connect Calumma (M, L, XL) and Eminere (Eminere, Eminere Side) luminaires in a row.

CONTROL AND CONNECTION OPTIONS - US

DALI

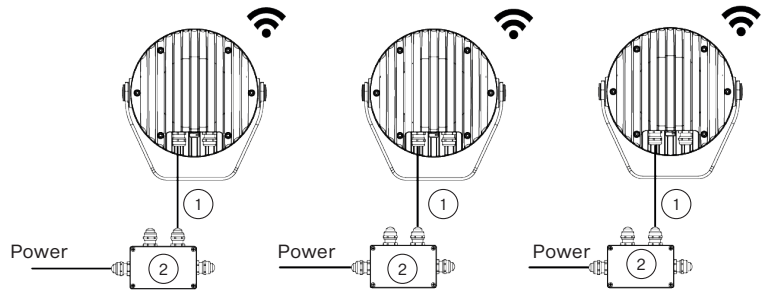
- 1) SJTW 5x 14AWG (13053336), Standard 1 m with bare-end, black
or
Cable SJTW 5x 14AWG (13053697), white
- 2) SJTW 5x 14AWG (13053336), black
or
Cable SJTW 5x 14AWG (13053697), white
or
Scope of Others
- 3) Junction Box for Calumma



WIRELESS DMX

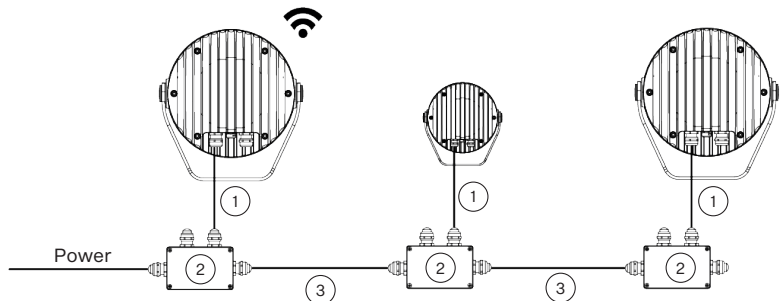
- 1) SJTW 6x 14AWG (13053480), Standard 1 m with bare-end, black
or
Cable SJTW 6x 14AWG (13053695), white
- 2) Junction Box for Calumma

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



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

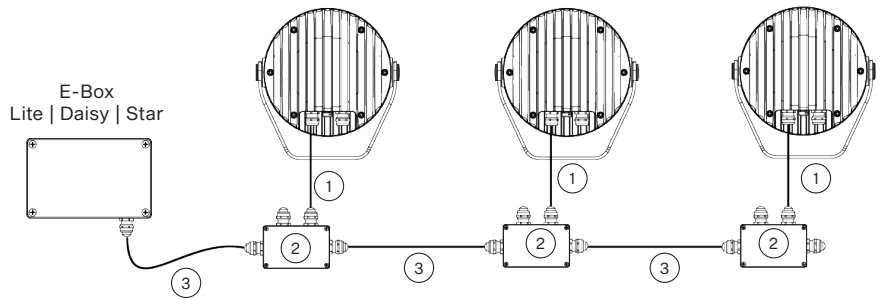
Note: This type of connection must have M, L or XL versions as the first luminaire. Next luminaires in a row could be chosen from S, M, L or XL versions.



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 for Calumma
- 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 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 |

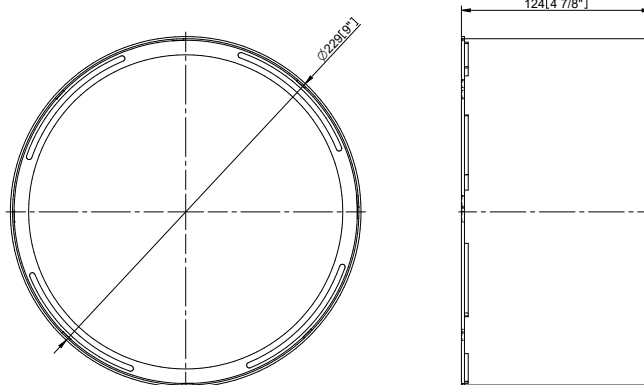
BOOSTER BOX POSITIONS

| | Cable length (m) | Max. number of Calummas M MC= 191 (in Standard mode) | | | |
|--------------|------------------|--|--|--|--|
| | | 120 V | 190 V | 230 V | 277 V |
| CALUMMA M MC | 10 m | 28 | - | - | - |
| | 20 m | 28, 56 | 44 | 54 | 65 |
| | 30 m | 20, 40, 60, 80, 100 | 44, 88 | 54, 108 | 65 |
| | 50 m | 12, 24, 48, 56, 64, 76, 88, 100.. | 30, 60, 90, 120, 150, 180 | 43, 86, 129, 172 | 63, 126 |
| | 70 m | 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, 96.... | 21, 42, 63, 84, 105, 126... | 31, 62, 93, 124, 155, 176... | 45, 90, 135, 180, 225... |
| | 100 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, 154... | 32, 64, 96, 128, 160, 192 |
| | 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... | 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... | 16, 32, 48, 64, 80, 96, 112, 128, 144... |
| | 500 m | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11... | 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63, 66... | 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80.... | 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84, 90, 96... |

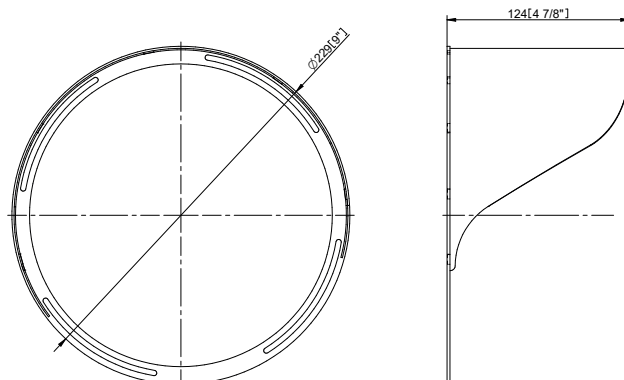
NOTE: For more detail see the User manual.

ACCESSORIES

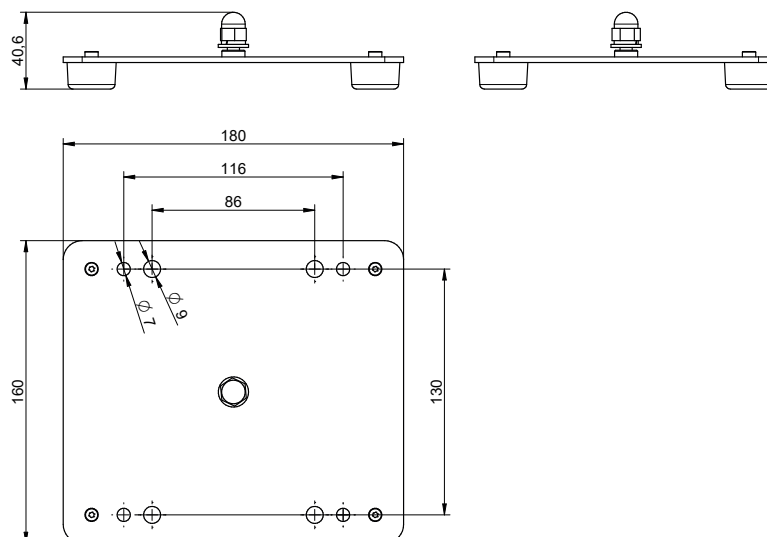
Top Hat



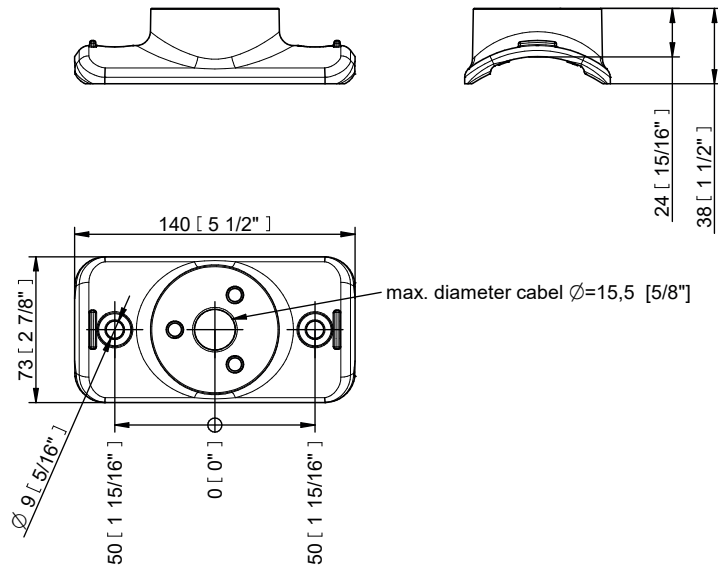
Half Top Hat



Floor Stand



Pole Adaptor



PHOTOMETRIC OVERVIEW

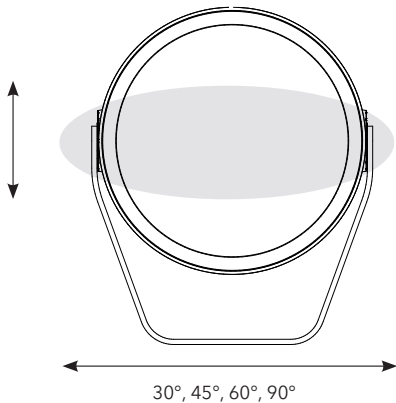
Lumen Output (lm)

| | 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°

10°, 15°, 30°



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

30°, 45°, 60°, 90°

