

**MaxiLED**  
Lighting



MaxiSEAL



Data over Power distribution  
to the fixtures



2 Core  
Data over Power



DMX RGBW  
Controllable

# MaxiDEPTH Series

## 102 / 302 DMX controllable



# MaxiDEPTH Series 102/302

## DMX controllable MaxiDEPTH - Datasheet



### KEY FEATURES

- IP68 (Depth 1 Meter temporary)
- IK10 (Optional)
- 48VAC Data over Power 2 wire system
- 512 DMX RGBW Controllable
- 150/250mm Recessed sleeve available
- 15°/25°/40°/170° (no optic)
- MaxiSEAL (Optional)

### Product Overview

Our IP68 MaxiDEPTH fitting is available in 2 different sizes delivering different light outputs, available in clear lens this makes the MaxiDEPTH series a perfect recessed lighting solution. Manufactured from quality materials with an optional MaxiSEAL finish and incorporating our Patented 2 wire data over power technology giving full DMX 512 control down the 2 power wires making it the simplest to install and most cost effective product of its type in the market place today. MaxiDEPTH has a Drive-Over rating of 5000kg (Optional), IK10 glass lens and an IP68 factory-sealed optical chamber.



MaxiDEPTH 102  
Recessed



MaxiDEPTH 302  
Recessed



UK Designed and  
Manufactured

Specifications	102	302
<b>Dimming</b> DMX512 Dimmable (Data Over power): DMX 512 refresh rate:	YES 44hz	YES 44hz
<b>LED Options</b> (Cree XQE Led's) RGBW: (Cree XQE Led's) RGBWW: Intelligent white 2700k-6000K:	YES YES YES	YES YES YES
<b>Beam Angles</b> 15/25/40/170 (no optic)	YES	YES
<b>Electrical specification</b> Power input: LED Current: Watts per unit: Max. Units per system 14 AWG (1.5mm sq) cable: Max distance from 1st to last unit 14 AWG (1.5mm sq) cable: Lumens RGBW Clear Glass (Full On): Lumens Intelligent white (Full On): Lumen Maintenance 85%:	48VAC Data Over Power MaxiLINK system 200ma 4.8w 50 100m 150 250 90,000Hrs	200ma 14.4w 16 100m 450 750 90,000Hrs
<b>System Cable Distances</b> Max. 14 AWG (1.5mm sq) cable from MaxiLINK to 1st fitting: Max. 10 AWG (2.5mm sq) cable from MaxiLINK to 1st fitting:	15m 75m	15m 75m
<b>Protection</b> IP68 (Depth 1 Meter temporary) Impact Protection (Standard): Drive over 5000Kg (Optional): Thermal Protection cut out at 70°C: Operation Temperature:	YES Pedestrian traffic IK10 YES -25 to +50	YES Pedestrian traffic No YES -25 to +50
<b>Finishes Options</b> MaxiSEAL Black: MaxiSEAL Silver: Black / Silver Anodised: Durable Stainless steel: RAL Powder Coat:	YES YES YES YES YES	YES YES YES YES YES
<b>Fitting Options</b> Recessed Sleeve depth:	150/250mm	150mm
<b>Listings:</b>	UL LISTED, CE, UKCA	
<b>Dimensions &amp; Weights</b> Diameter (mm): Depth (mm): Weight KG:	60 85 0.4KG	125 85 1KG

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This product must be installed by a qualified electrician in accordance with all national and local electrical and construction codes.  
Failure to comply with the installation instructions can result in serious injury or death.



**1 Recessed sleeve**



102 Recessed sleeve  
150mm



102 Recessed sleeve  
250mm



MaxiDEPTH 102

**2 Recessed sleeve**

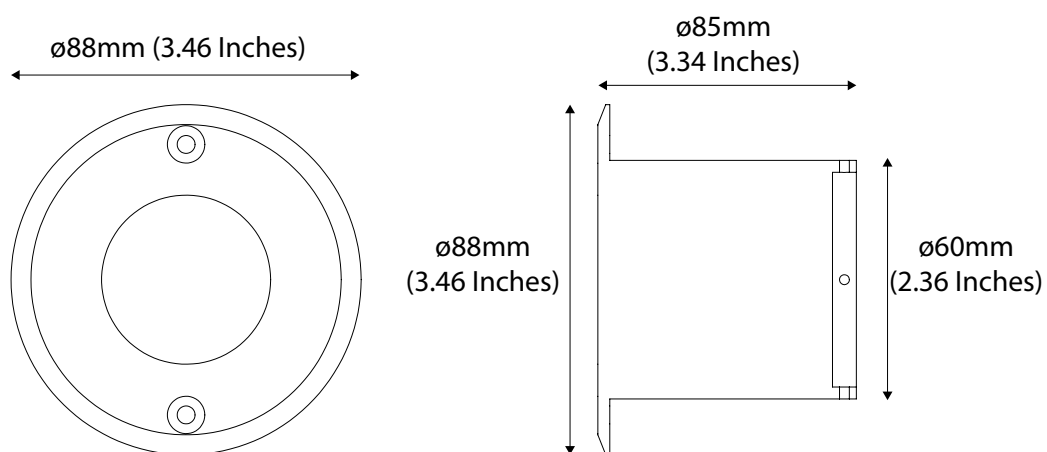


302 Recessed sleeve  
150mm

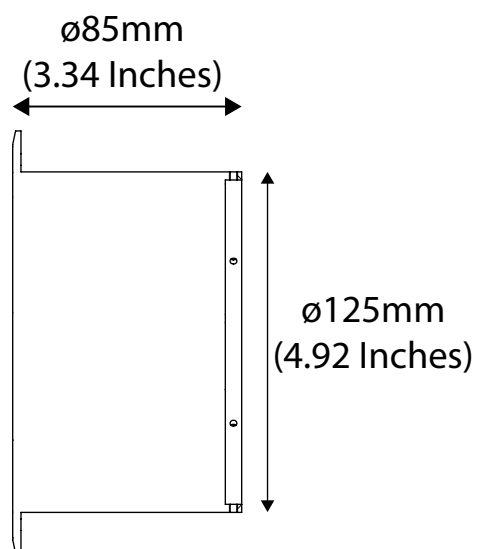
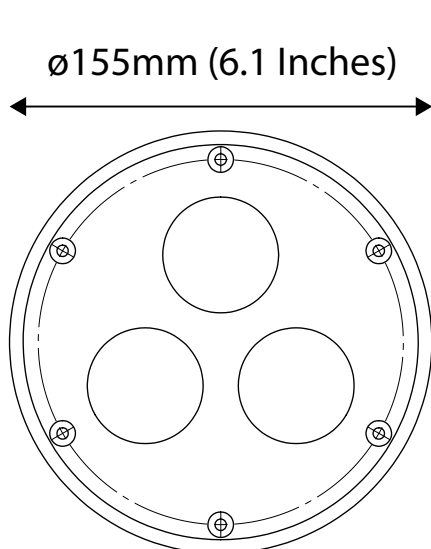


MaxiDEPTH 302

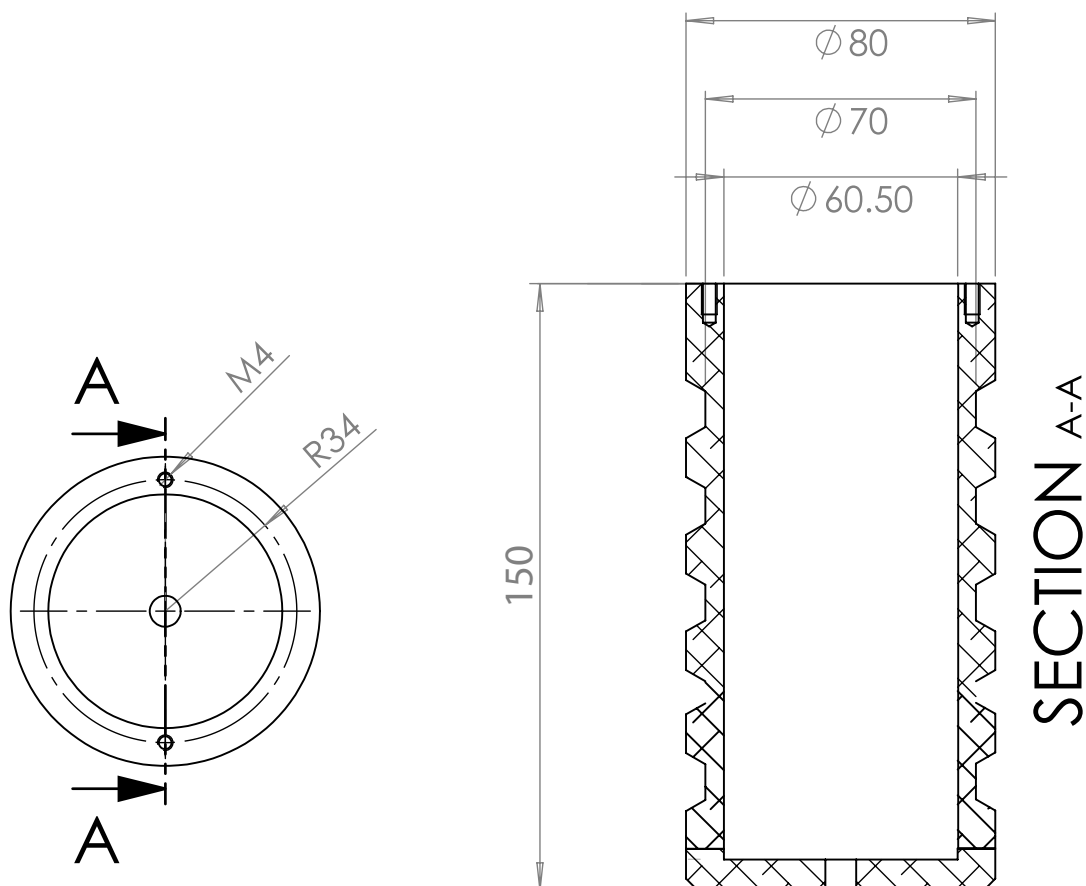
MM (INCHES)



MM (INCHES)

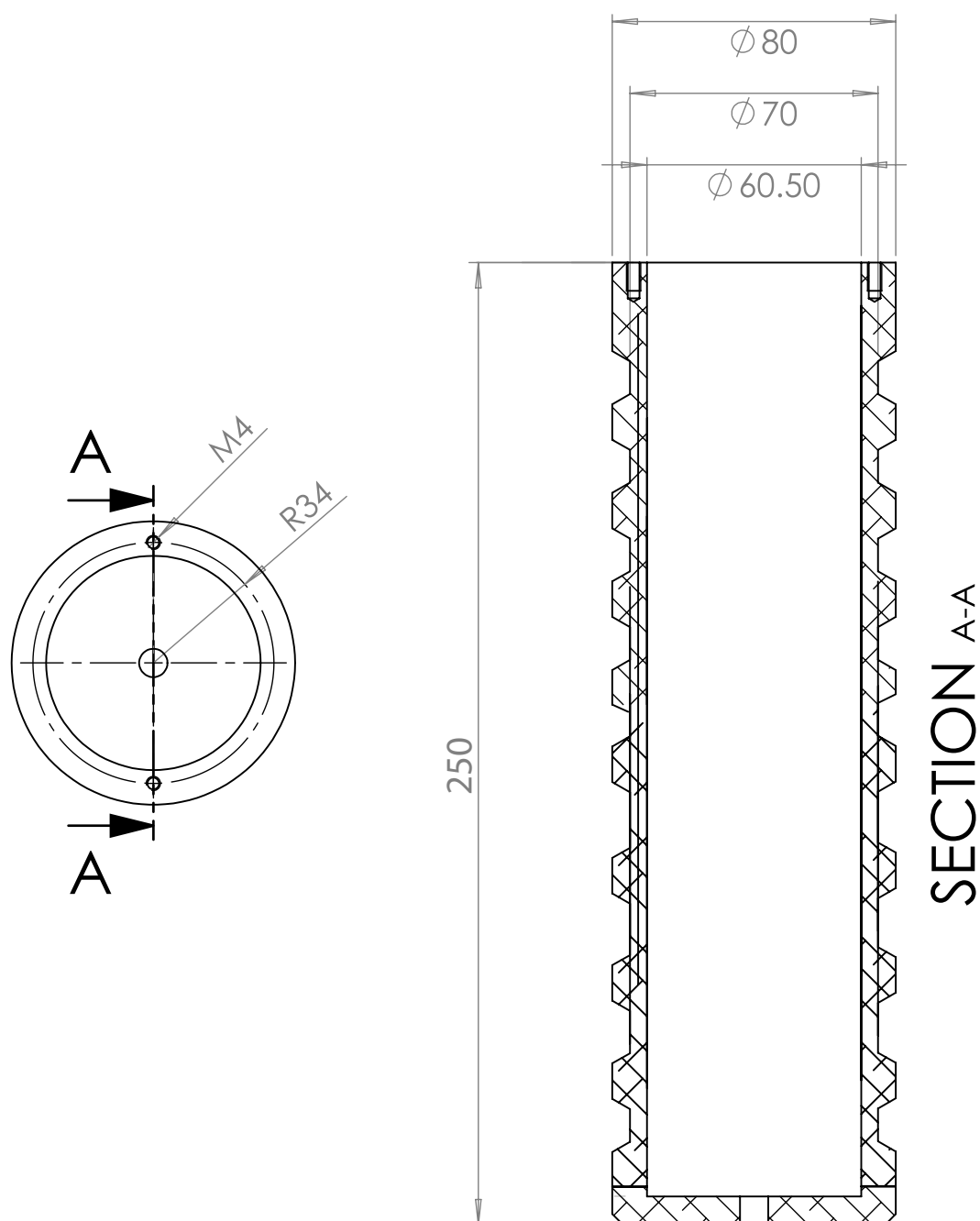


Measurements in MM

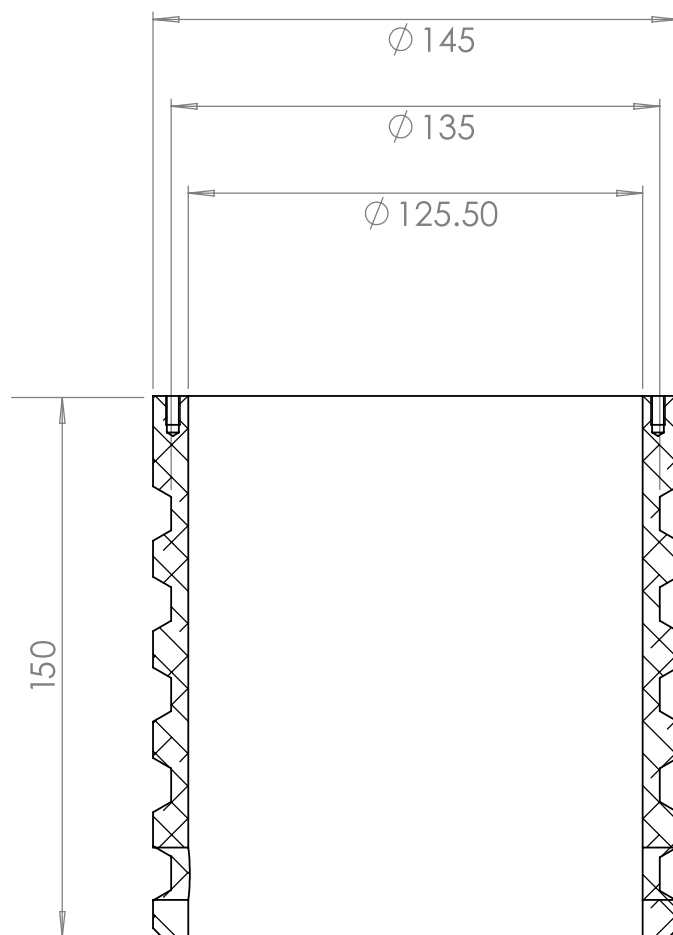
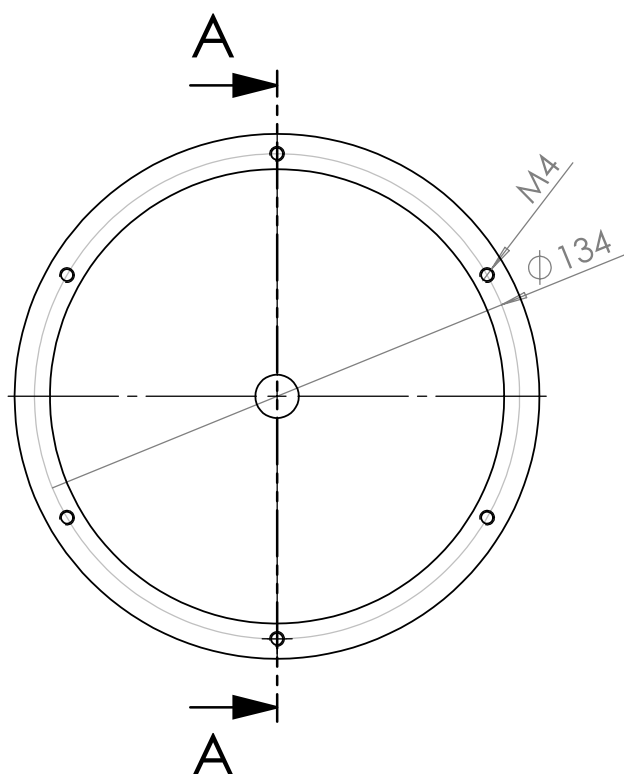




Measurements in MM



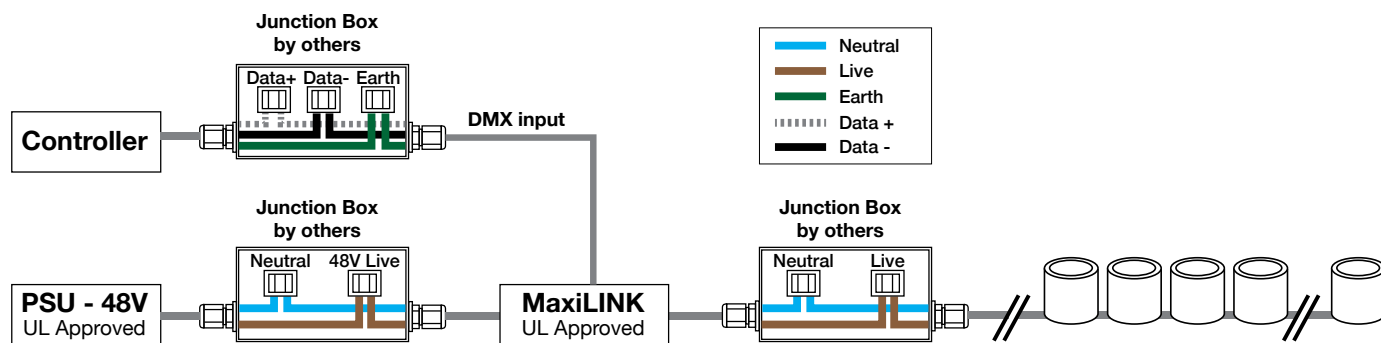
Measurements in MM



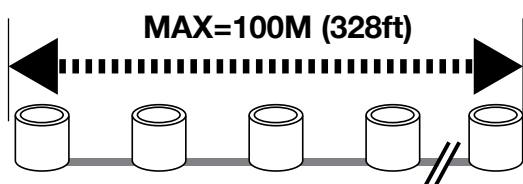




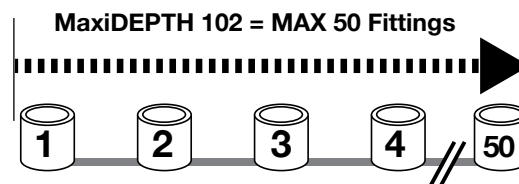
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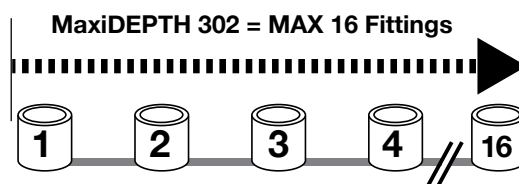
### MaxiDEPTH 102 / 302 Maximum run distance



### 102 Maximum Run length



### 302 Maximum Run length

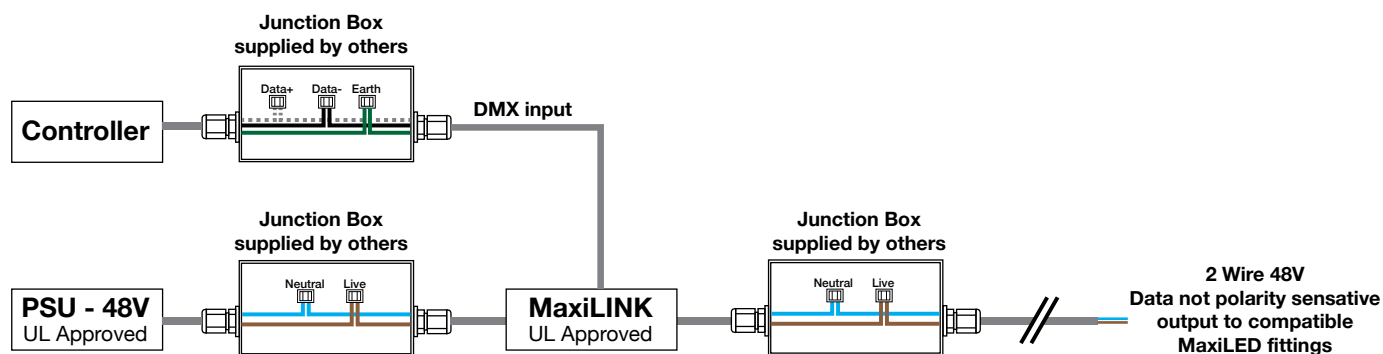




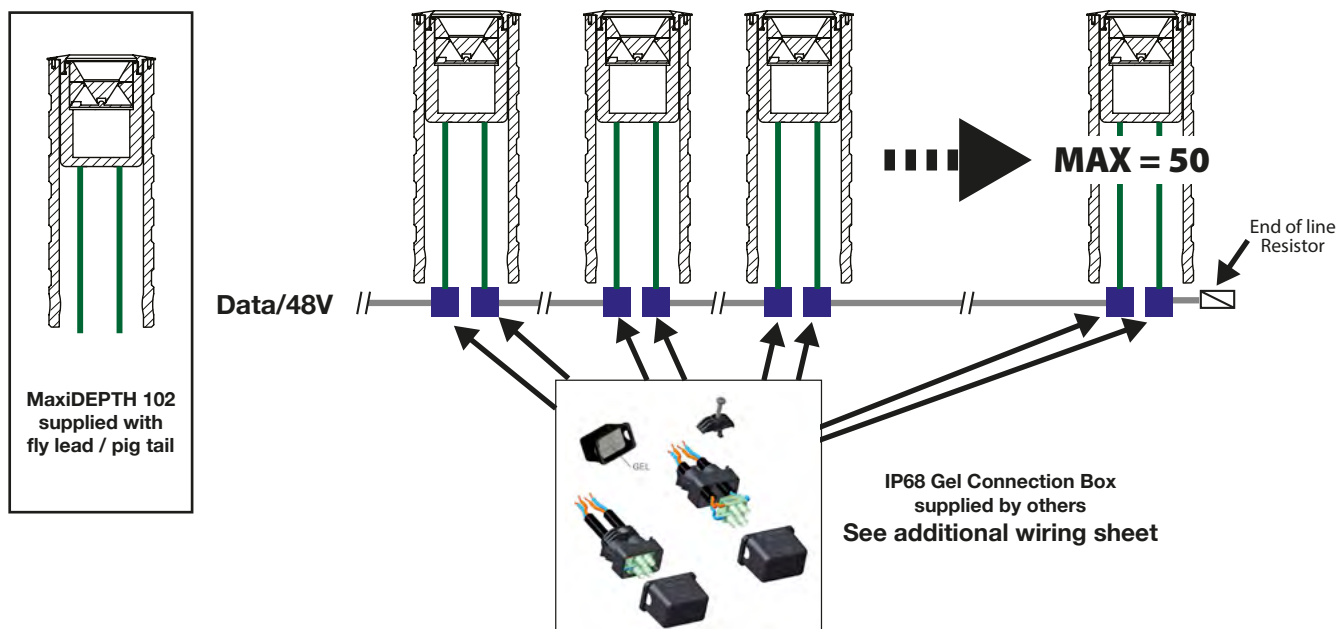
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## 1 Basic Wiring layout to MaxiLED fittings



## Wiring IP68 Gel connectors. Maximum 50 fittings per power supply



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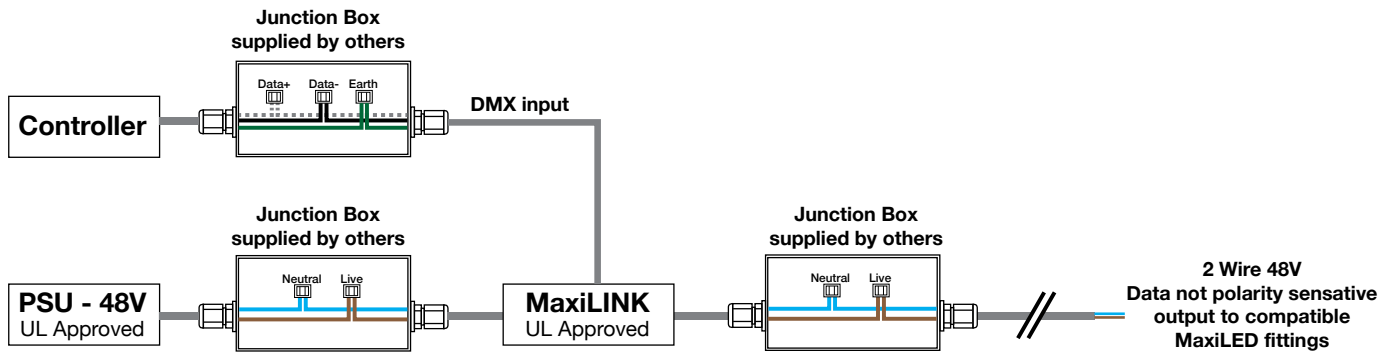
E: [sales@maxiledlighting.com](mailto:sales@maxiledlighting.com) Web: [www.maxiledlighting.com](http://www.maxiledlighting.com)



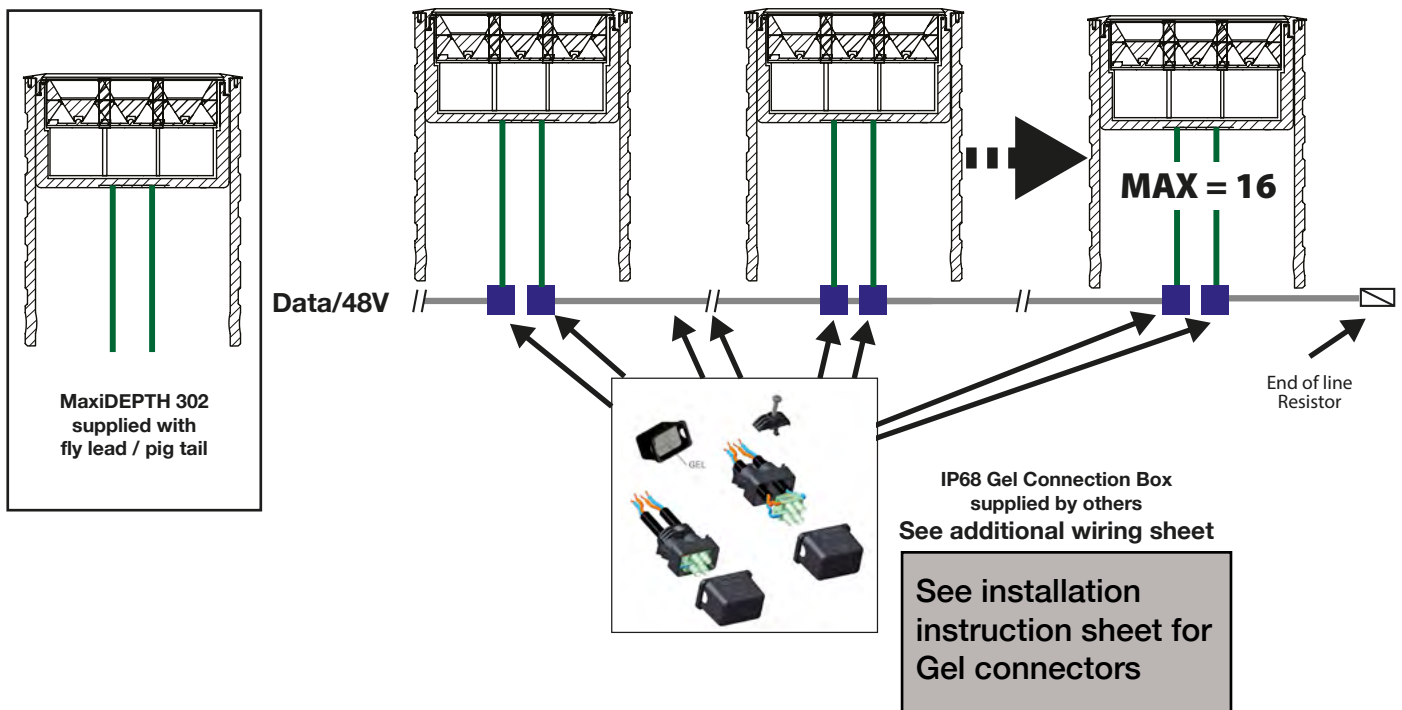
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### 1 Basic Wiring layout to MaxiLED fittings



### Wiring IP68 Gel connectors. Maximum 16 fittings per power supply



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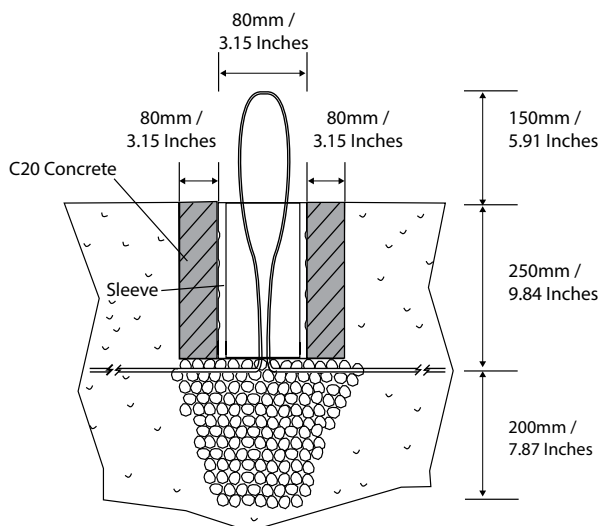
## WARNING: ONLY 48V / DATA MAXILINK ONLY



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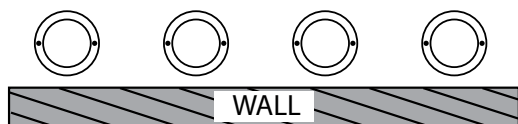
### 1 Preparing Ground Work for 250mm inground sleeve



- Prepare ground work.  
Trench minimum 450mm / 17.8 Inches deep.
- Fill lower half with pea gravel for drainage.
- Place In ground sleeve flush with ground.
- Add C20 Concrete.

For proper drainage a 30-minute test with the proper quantity of water (Equivalent of the inground sleeve), should be performed upon initial installation of the sleeve. If not find a further drainage solution.

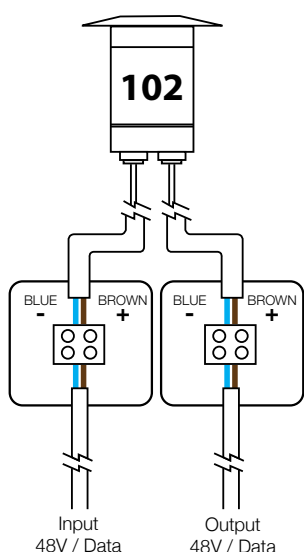
### 2 Sleeve Orientation



#### NOTE:

- Make sure sleeve holes are all aligned so that the fittings will be uniform after final installation.  
(Illustration for MaxiDEPTH and Marker Effect 102)

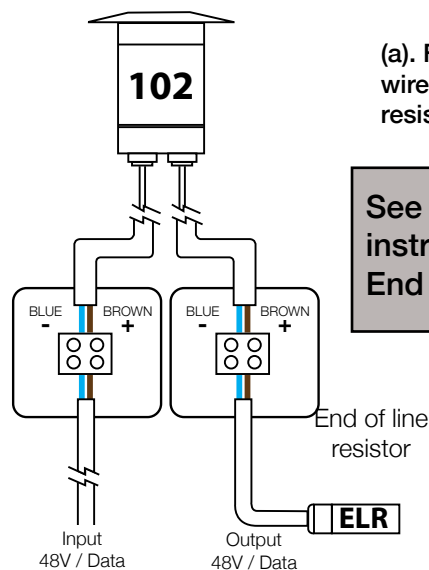
### 3 Make connections using IP68 gel connectors



- Using a minimum IP68 submersible joint inline with local authority regulations
- Make connection.  
(As illustrated)
- Cable type must be 1.5mm sq with a overall diameter of 6-8mm

See installation instruction sheet for Gel connectors

### 4 Final fitting



- Final fitting must be wired to the End of line resistor (ELR)

See installation instruction sheet for End of line resistors

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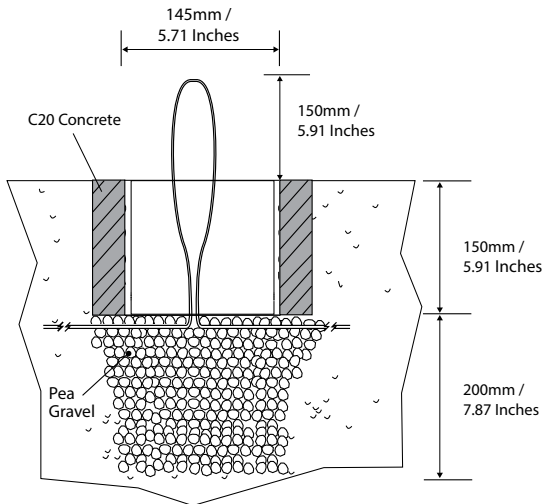


## WARNING: ONLY 48V / DATA MAXILINK ONLY



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Failure to comply with the installation instructions can result in serious injury or death.

### 1 Preparing Ground Work



- Prepare ground work.  
Trench minimum 350mm / 14 Inches deep.
- Fill lower half with pea gravel for drainage.
- Place In ground sleeve flush with ground.
- Add C20 Concrete.

For proper drainage a 30-minute test with the proper quantity of water (Equivalent of the inground sleeve), should be performed upon initial installation of the sleeve. If not find a further drainage solution.

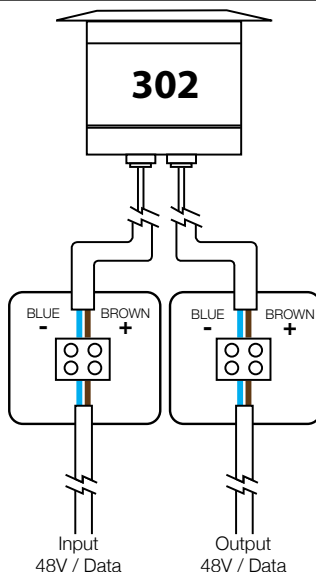
### 2 Sleeve Orientation



#### NOTE:

- Make sure sleeve holes are all aligned so that the fittings will be uniform after final installation.  
(Illustration for MaxiDEPTH 302)

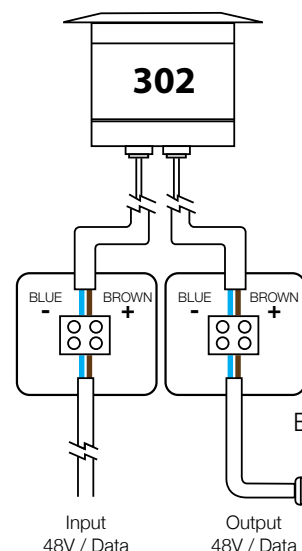
### 3 Make connections using IP68 Gel connection box



- Using a IP68 gel joint recommended by
- Make connection.  
(As illustrated)
- Cable type must be 1.5mm sq with a overall diameter of 6-8mm

See installation instruction sheet for Gel connectors

### 4 Final fitting



- Final fitting must be wired to the End of line resistor (ELR)

See installation instruction sheet for End of line resistors

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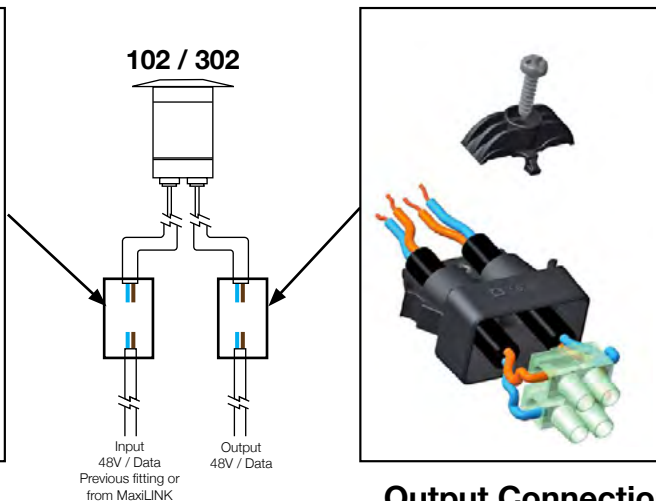
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## 1 Wiring

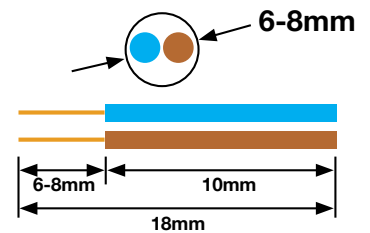
**NOTE: Cable must be 1.5mm sq with an overall diameter of 6-8mm**



**Input Connection**



**Output Connection**



- (a). Cable must be 1.5mm sq with an overall diameter of 6-8mm
- (b). Cut cable to sizes above
- (c). Connect wiring to terminal block

## 2 Apply Gel cover



- (a). Each packet is supplied with a Gel filled cover.
- (b). Check all wires are tight and in correct locations in the terminal block



- (c). Push the terminal block into the housing.
- (d). Confirm the outer sheath of cable is within the housing. Secure the Cable using the clamp with the screw provided.
- (e). Push the gel filled cover over the housing. Confirm the cover has clicked in place on both sides of the housing.
- (f). Repeat the process for the output connection.



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## 1 Connect the End of Line Resistor



(a). Connect the End of Line Resistor Cable (Supplied Separately.) to the end of the 48V Data line after the last fitting.

**NOTE: On the final lamp fitting an End of Line Connector MUST be Connected to allow the DMX data to 'Communicate.'**  
**Without the End of Line Resistor the lamps will show DATA DISRUPTION**  
**Connection is NOT Polarity Sensitive.**

## 2 Data Disruption



(a). Once the system is powered up and the DMX 512 data transmission is available the end of line units will need setting.  
Only perform this operation if the installation is flickering and not responding to the 512 DMX data transmission correctly.  
Remove the Black Cap.

## 3 Fine Tuning 512 DMX data



(a). Using a Flat screw driver, turn the adjuster fully clockwise. The lights will begin to randomly flicker.

(b). Turn the adjuster anticlockwise until the installation responds correctly, once it responds correctly continue to turn the adjuster until the installation starts to flicker again when it does stop, turn the adjuster clockwise slightly.

(c). The adjuster is now set.

## 4 Check list



(a). Once the lights are tuned and correct, replace the End of Line Resistor Black cap. Ensure a tight fit for a waterproof seal.

**(SEE INSTALLATION INSTRUCTIONS FOR POWER SUPPLY OPTIONS.)**

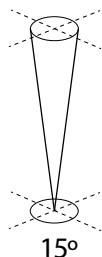
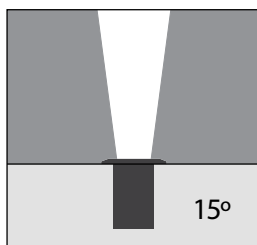




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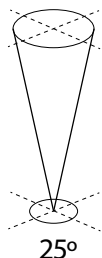
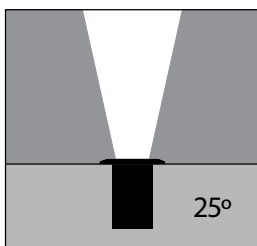
15° Narrow Beam



**15° Narrow Spot**

To highlight a small statue, signs or garden features.

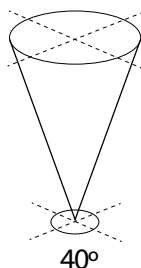
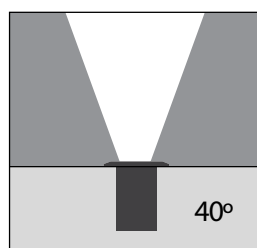
25° Narrow Beam



**25° Narrow Beam**

Broad range of applications,  
Trees and wall details and highlights.

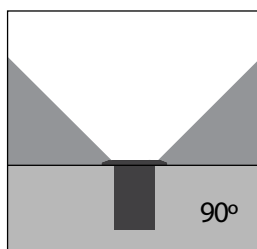
40° Wide Beam



**40° Flood Beam**

This true "floodlight" has wide variety of applications

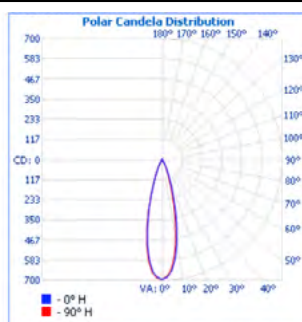
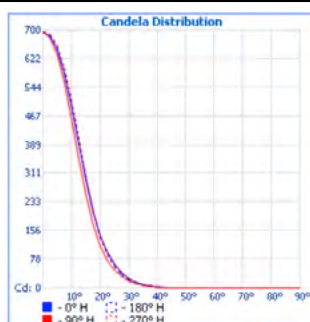
90° Flood



**90° Wide Flood Beam**

This wide "floodlight" has wide variety of applications

#### RGBW 40° - Test performed on a single MaxiDEPTH 102 with clear lens and full RGBW on

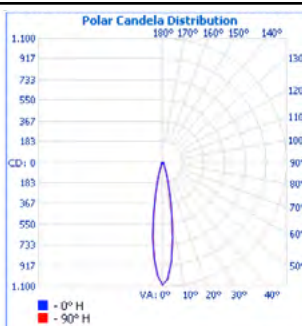
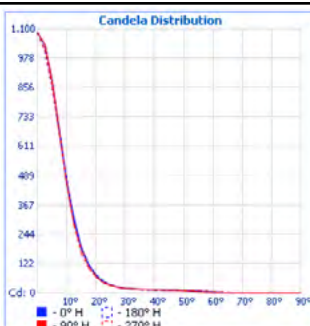


**Illuminance at a Distance**

Center Beam LUX	Beam Width
1.0M: 694.7 LUX	0.5 M 0.5 M
2.0M: 173.7 LUX	1.0 M 0.9 M
3.0M: 77.2 LUX	1.5 M 1.4 M
4.0M: 43.4 LUX	1.9 M 1.9 M
5.0M: 27.8 LUX	2.4 M 2.4 M
6.0M: 19.3 LUX	2.9 M 2.8 M

■ Vert. Spread: 27.4°  
■ Horiz. Spread: 26.6°

#### RGBW 25° - Test performed on a single MaxiDEPTH 102 with clear lens and full RGBW on

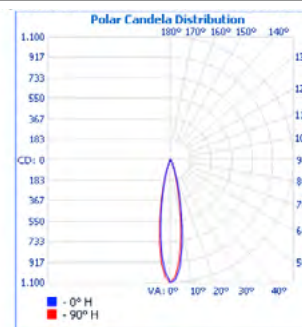
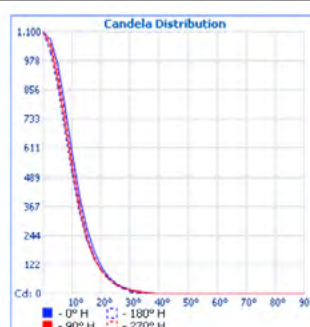


**Illuminance at a Distance**

Center Beam LUX	Beam Width
1.0M: 1,084.6 LUX	0.3 M 0.3 M
2.0M: 271.2 LUX	0.6 M 0.6 M
3.0M: 120.5 LUX	1.0 M 0.9 M
4.0M: 67.8 LUX	1.3 M 1.3 M
5.0M: 43.4 LUX	1.6 M 1.6 M
6.0M: 30.1 LUX	1.9 M 1.9 M

■ Vert. Spread: 18.1°  
■ Horiz. Spread: 17.9°

#### RGBW 15° - Test performed on a single MaxiDEPTH 102 with clear lens and full RGBW on

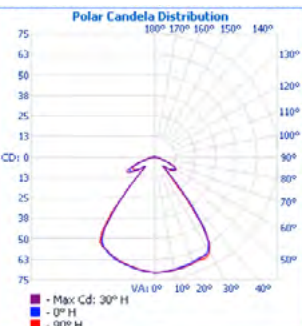
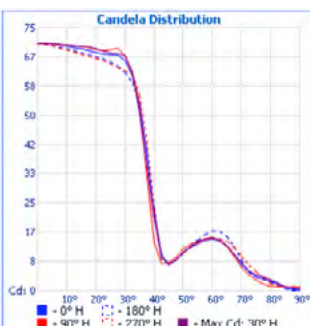


**Illuminance at a Distance**

Center Beam LUX	Beam Width
1.0M: 1,099.7 LUX	0.4 M 0.3 M
2.0M: 274.9 LUX	0.7 M 0.7 M
3.0M: 122.2 LUX	1.1 M 1.0 M
4.0M: 68.7 LUX	1.4 M 1.4 M
5.0M: 44.0 LUX	1.8 M 1.7 M
6.0M: 30.5 LUX	2.1 M 2.1 M

■ Vert. Spread: 19.9°  
■ Horiz. Spread: 19.7°

#### RGBW No optics - Test performed on a single MaxiDEPTH 102 with clear lens and full RGBW on

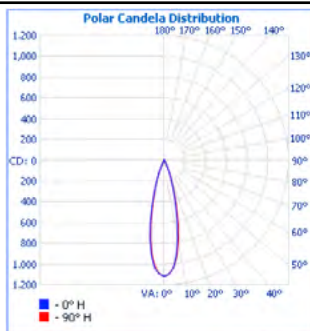
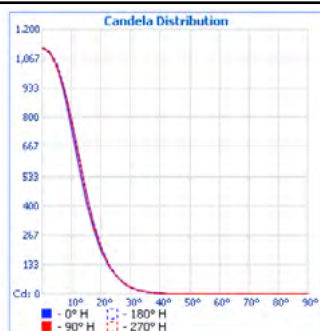


**Illuminance at a Distance**

Center Beam LUX	Beam Width
1.0M: 70.51 LUX	1.6 M 1.5 M
2.0M: 17.63 LUX	3.1 M 3.1 M
3.0M: 7.83 LUX	4.7 M 4.6 M
4.0M: 4.41 LUX	6.3 M 6.2 M
5.0M: 2.82 LUX	7.8 M 7.7 M
6.0M: 1.96 LUX	9.4 M 9.3 M

■ Vert. Spread: 76.1°  
■ Horiz. Spread: 75.5°

#### Intelligent white 40° - Test performed on a single MaxiDEPTH 102 with clear lens and full LED on

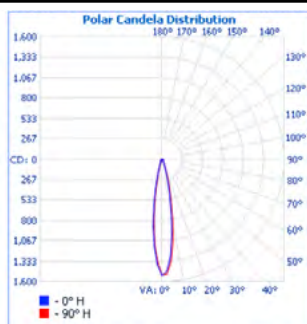
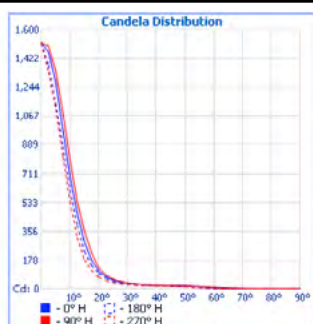


**Illuminance at a Distance**

	Center Beam LUX	Beam Width	
1.0M	1,116.6 LUX	0.5 M	0.5 M
2.0M	279.2 LUX	0.9 M	0.9 M
3.0M	124.1 LUX	1.4 M	1.4 M
4.0M	69.8 LUX	1.9 M	1.9 M
5.0M	44.7 LUX	2.3 M	2.3 M
6.0M	31.0 LUX	2.8 M	2.8 M

Vert. Spread: 26.1°  
Horiz. Spread: 26.4°

#### Intelligent white 25° - Test performed on a single MaxiDEPTH 102 with clear lens and full LED on

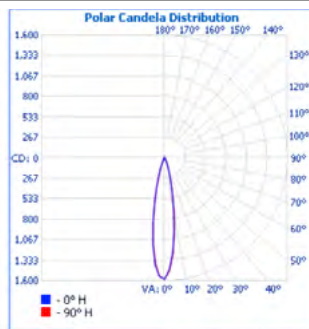
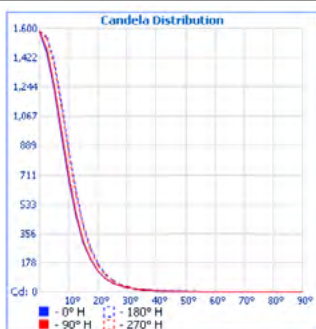


**Illuminance at a Distance**

	Center Beam LUX	Beam Width	
1.0M	1,518.9 LUX	0.3 M	0.3 M
2.0M	379.7 LUX	0.6 M	0.6 M
3.0M	168.8 LUX	1.0 M	1.0 M
4.0M	94.9 LUX	1.3 M	1.3 M
5.0M	60.8 LUX	1.6 M	1.6 M
6.0M	42.2 LUX	1.9 M	1.9 M

Vert. Spread: 18.1°  
Horiz. Spread: 18.4°

#### Intelligent white 15° - Test performed on a single MaxiDEPTH 102 with clear lens and full LED on

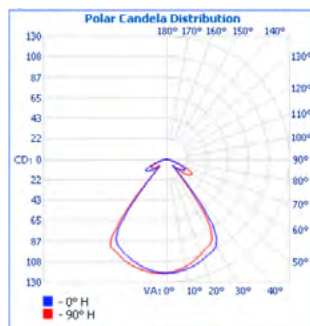
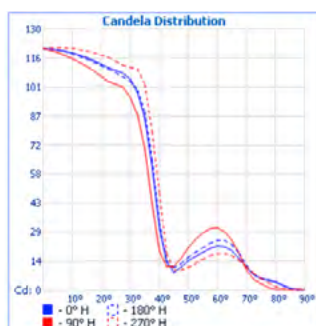


**Illuminance at a Distance**

	Center Beam LUX	Beam Width	
1.0M	1,583.9 LUX	0.3 M	0.3 M
2.0M	396.0 LUX	0.7 M	0.7 M
3.0M	176.0 LUX	1.0 M	1.0 M
4.0M	99.0 LUX	1.4 M	1.4 M
5.0M	63.4 LUX	1.7 M	1.7 M
6.0M	44.0 LUX	2.1 M	2.1 M

Vert. Spread: 19.7°  
Horiz. Spread: 19.7°

#### Intelligent white No optics - Test performed on a single MaxiDEPTH 102 with clear lens and full LED on



**Illuminance at a Distance**

	Center Beam LUX	Beam Width	
1.0M	120.29 LUX	1.5 M	1.5 M
2.0M	30.07 LUX	3.1 M	3.1 M
3.0M	13.37 LUX	4.6 M	4.6 M
4.0M	7.52 LUX	6.2 M	6.1 M
5.0M	4.81 LUX	7.7 M	7.7 M
6.0M	3.34 LUX	9.3 M	9.2 M

Vert. Spread: 75.3°  
Horiz. Spread: 74.9°

### MaxiDEPTH Series 102 Order codes

Product	LED	Optic	Housing	Finish	IKRating	Other
MaxiDEPTH 102 <b>MD102</b>	<b>RGBWW(2700K)</b>	15° <b>15</b>	Adjustable wall bracket <b>AWB</b>	MaxiSEAL Black <b>MSB</b>	Pedestrian Traffic <b>PT</b>	End of line resistor <b>ELR</b>
	<b>RGBCW(6500K)</b>	25° <b>25</b>	Flush mounting plate <b>FMP</b>	MaxiSEAL Silver <b>MSS</b>	Drive over IK10 <b>IK10</b>	
	<b>IW</b>	40° <b>40</b>	150mm Recessed sleeve <b>RS150</b>			
	<b>2700</b>	170° <b>170</b>	250mm Recessed sleeve <b>RS250</b>			
	<b>3500</b>					
	<b>6500</b>					
<b>EXAMPLE:</b>	<b>MD102</b>	<b>3500</b>	<b>40</b>	<b>RS250</b>	<b>MSS</b>	<b>IK10</b> <b>ELR</b>

### MaxiDEPTH Series 302 Order codes

Product	LED	Optic	Housing	Finish	IKRating	Other
MaxiDEPTH 302 <b>MD302</b>	<b>RGBWW(2700K)</b>	15° <b>15</b>	Adjustable wall bracket <b>AWB</b>	MaxiSEAL Black <b>MSB</b>	Pedestrian Traffic <b>PT</b>	End of line resistor <b>ELR</b>
	<b>RGBCW(6500K)</b>	25° <b>25</b>	Flush mounting plate <b>FMP</b>	MaxiSEAL Silver <b>MSS</b>		
	<b>IW</b>	40° <b>40</b>	150mm Recessed sleeve <b>RS150</b>			
	<b>2700</b>	170° <b>170</b>				
	<b>3500</b>					
	<b>6500</b>					
<b>EXAMPLE:</b>	<b>MD302</b>	<b>3500</b>	<b>40</b>	<b>RS150</b>	<b>MSS</b>	<b>PT</b> <b>ELR</b>