

# .....Dialight



## Dialight® LED Bulkhead

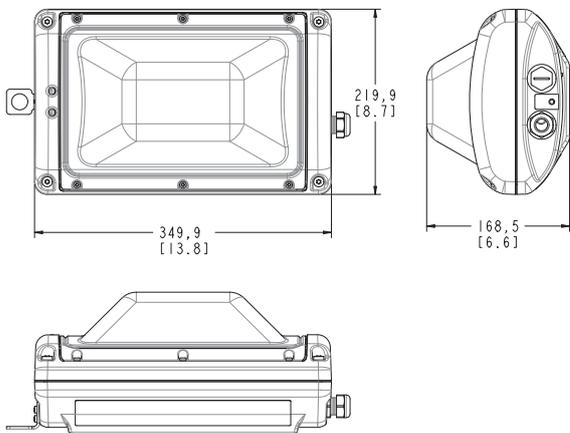
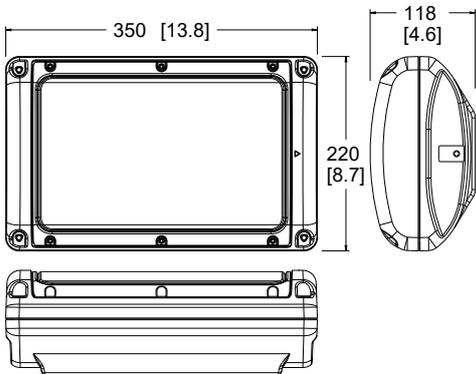
Technical Specification Sheet - EMEA

### Vigilant® LED Bulkhead Standard Model



#### Certifications & Ratings

- 10 year warranty (excluding battery)
- CE / ENEC / UKCA
- IP66/67
- IK10
- DNV TAE00004GZ
- L70 > 150,000 hours @ 65°C (149°F) ambient



Dimensions in mm (inches)

**WARNING - INSTALLATION & SECONDARY RETENTION.** Use of any Dialight products without proper installation (including secondary retention / netting) and periodic inspections could cause severe injury or death. Dialight recommends that all installations should use secondary retention / netting (appropriate to the installation environment) where applicable. It is the exclusive responsibility of the contractor, installer and/or end-user to: (a) determine the suitability of the product for its intended application; and, (b) ensure that the product is safely installed (with secondary retention / netting where appropriate) and in compliance with all applicable laws and regulations. To the extent permissible under applicable laws, Dialight disclaims all liability for personal injury and/or other damage resulting from any dislodgment or other dislocation of its products.

#### Mechanical Information:

<b>Fixture weights:</b>	
Standard models:	6.8 kg (15.0 lb)
Battery backup models:	7.7 kg (17 lb)
<b>Shipping weights:</b>	
Standard models:	7.3 kg (16.1 lb)
Battery backup models:	8.4 kg (18.5 lb)
<b>Cable entry:</b>	(2) M20 - optional (4) M20

#### Materials:

<b>Housing:</b>	A360 Die-cast aluminium
<b>Finish:</b>	Superior dual coat finish - Sealed polyester topcoat - Epoxy primer
<b>Lens:</b>	Polycarbonate clear Polycarbonate diffused (optional) Polycarbonate domed diffused
<b>Hardware:</b>	316 Stainless Steel

#### Electrical Specifications:

<b>Operating voltage:</b>	100-277 VAC / 120-250 VDC 230-240 VAC
<b>Operating temperature:</b>	Standard models: -40°C to +65°C (-40°F to +149°F) Battery backup models: -20°C to +55°C (-4°F to +131°F)
<b>Transient protection:</b>	IEC 61000-4-5 6kV line-line & line-ground
<b>THD:</b>	< 20%
<b>Power factor:</b>	> 0.9
<b>Dimming:</b>	DALI 1.0 and 2.0 compatible 0-10 VDC dimming to 10%

#### Battery Backup Models: (integral battery)

##### Battery duration\* (circular optic, clear lens):

6.5k lumen outputs:	180 mins ~ 900 lm 90 mins ~ 1100 lm 60 mins ~ 1140 lm
3k lumen outputs:	180 mins ~ 800 lm 90 mins ~ 1100 lm 60 mins ~ 1140 lm

#### Photometric Information:

<b>Lumen output*:</b>	3,000 & 6,500 lm (white light)
<b>CRI:</b>	> 80 (white light)
<b>CCT:</b>	5000K (cool white) 4000K (neutral white) 2700K (warm white) Amber Green

All values typical unless otherwise stated (tolerance +/- 10%)  
\* @ 25°C ambient

## Ordering Information

### Vigilant® LED Bulkhead



Part Number	Fixture Lumens	Wattage	lm/W	Voltage	CCT	Lens	Beam Distribution
<b>Standard Models with Flush Bracket</b>							
<b>BHE-4BC2-3NFN-VGN</b>	3,200	22	149	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Circular
<b>BHE-4BC2-6NFN-VGN</b>	6,700	45	149	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Circular
<b>BHE-4UC2-3NFN-VGN</b>	3,100	22	144	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>BHE-4UC2-6NFN-VGN</b>	6,400	45	142	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>Battery Backup Models with Flush Bracket</b>							
<b>BHE-4BCG-3NFN-VGG</b>	3,200	25	128	230-240VAC	5000K (cool white)	Clear Polycarbonate	Circular
BHE-4BCG-6NFN-VGG	6,700	48	140	230-240VAC	5000K (cool white)	Clear Polycarbonate	Circular
<b>BHE-4UCG-3NFN-VGG</b>	3,100	25	124	230-240VAC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BHE-4UCG-6NFN-VGG	6,400	48	133	230-240VAC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BHE-6BGG-3NFN-VGG	2,600	33	79	230-240VAC	Green	Domed Diffused	Circular

All values typical unless otherwise stated (tolerance +/- 10%).  
 Part numbers listed in **bold** are typically available in stock.  
 For 4000K (neutral white), 2700K (warm white) or amber CCT, please contact your local representative for more information.

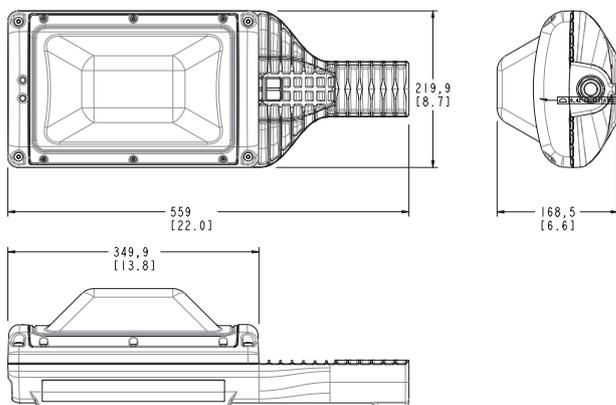
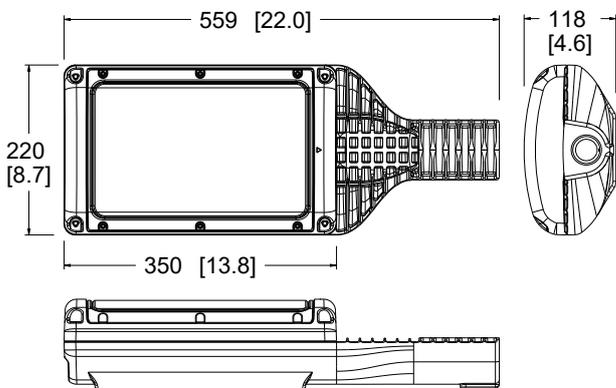
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### Vigilant® LED Bulkhead Pole Mount Model



#### Certifications & Ratings

- 10 year warranty (excluding battery)
- CE / ENEC / UKCA
- IP66/67
- IK10
- DNV TAE00004GZ
- L70 > 150,000 hours @ 65°C (149°F) ambient



Dimensions in mm (inches)

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#### Mechanical Information:

<b>Fixture weights:</b>	
Standard models:	7.9 kg (17.4 lb)
Battery backup models:	8.8 kg (19.4 lb)
<b>Shipping weights:</b>	
Standard models:	8.4 kg (18.5 lb)
Battery backup models:	9.3 kg (20.5 lb)
<b>Cable entry:</b>	(1) M25
<b>Spigot entry size:</b>	44mm ID optional 35mm ID

#### Materials:

<b>Housing:</b>	A360 Die-cast aluminium
<b>Finish:</b>	Superior dual coat finish - Sealed polyester topcoat - Epoxy primer
<b>Lens:</b>	Polycarbonate clear Polycarbonate diffused (optional) Polycarbonate domed diffused
<b>Hardware:</b>	316 Stainless Steel

#### Electrical Specifications:

<b>Operating voltage:</b>	100-277 VAC / 120-250 VDC 230-240 VAC
<b>Operating temperature:</b>	Standard models: -40°C to +65°C (-40°F to +149°F) Battery backup models: -20°C to +55°C (-4°F to +131°F)
<b>Transient protection:</b>	IEC 61000-4-5 6kV line-line & line-ground
<b>THD:</b>	< 20%
<b>Power factor:</b>	> 0.9
<b>Dimming:</b>	DALI 1.0 and 2.0 compatible 0-10 VDC dimming to 10%

#### Battery Backup Models: (integral battery)

<b>Battery duration* (circular optic, clear lens):</b>	
6.5k lumen outputs:	180 mins ~ 900 lm 90 mins ~ 1100 lm 60 mins ~ 1140 lm
3k lumen outputs:	180 mins ~ 800 lm 90 mins ~ 1100 lm 60 mins ~ 1140 lm

#### Photometric Information:

<b>Lumen output*:</b>	3,000 & 6,500 lm (white light)
<b>CRI:</b>	> 80 (white light)
<b>CCT:</b>	5000K (cool white) 4000K (neutral white) 2700K (warm white) Amber Green

All values typical unless otherwise stated (tolerance +/- 10%)  
\* @ 25°C ambient

## Ordering Information

### Vigilant® LED Bulkhead



### Pole Mount

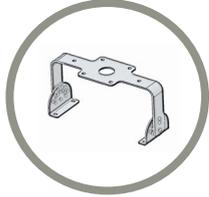
Part Number	Fixture Lumens	Wattage	lm/W	Voltage	CCT	Lens	Beam Distribution
<b>Pole Mount Models</b>							
BZE-4BC2-3NNN-VGN	3,200	22	149	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Circular
BZE-4BC2-6NNN-VGN	6,700	45	149	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Circular
BZE-4UC2-3NNN-VGN	3,100	22	144	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BZE-4UC2-6NNN-VGN	6,400	45	142	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>Pole Mount Battery Backup Models</b>							
BZE-4BCG-3NNN-VGG	3,200	25	128	230-240VAC	5000K (cool white)	Clear Polycarbonate	Circular
BZE-4BCG-6NNN-VGG	6,700	48	140	230-240VAC	5000K (cool white)	Clear Polycarbonate	Circular
BZE-4UCG-3NNN-VGG	3,100	25	124	230-240VAC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BZE-4UCG-6NNN-VGG	6,400	48	133	230-240VAC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BZE-6BGG-3NNN-VGG	2,600	33	79	230-240VAC	Green	Domed Diffused	Circular

All values typical unless otherwise stated (tolerance +/- 10%).  
 Part numbers listed in **bold** are typically available in stock.  
 For 4000K (neutral white), 2700k (warm white) or amber CCT, please contact your local representative for more information.  
 35mm spigot entry model available.

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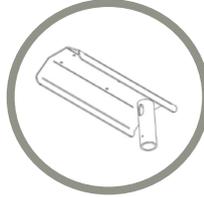
## Accessories

Please consult local Dialight sales office for availability.



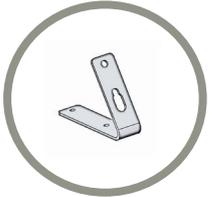
### BH-BRKT-SS-ADJ

- 316 stainless steel adjustable bracket kit



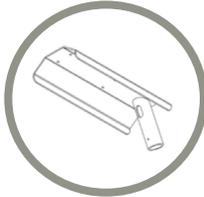
### BH-STMB-05-10-HD

- Aluminium stanchion mount, 5° up-tilt - 50mm pole



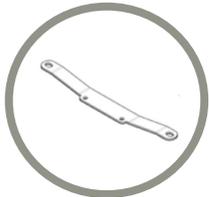
### BH-BRKT-A-KIT

- 316 stainless steel wall/ceiling flush mount bracket kit



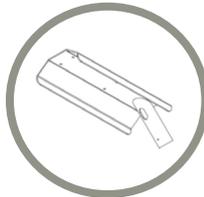
### BH-STMB-25-10-HD

- Aluminium stanchion mount, 25° up-tilt - 50mm pole



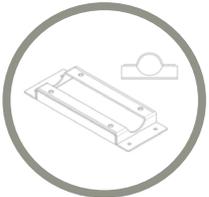
### BH-BRKT-F-KIT

- 316 stainless steel wall/ceiling flush mount bracket kit



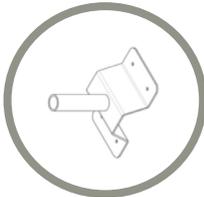
### BH-STMB-45-10-HD

- Aluminium stanchion mount, 45° up-tilt - 50mm pole



### BH-BRKT-LG-PF

- Aluminium pipe mount bracket kit - 50mm



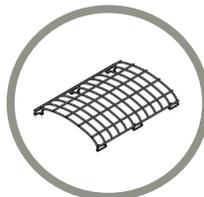
### HZX-SPIGOT-34

- Aluminium wall mount spigot plate - 34mm



### H6XCAB72

- 72" stainless steel safety rope



### BH-WG-KIT

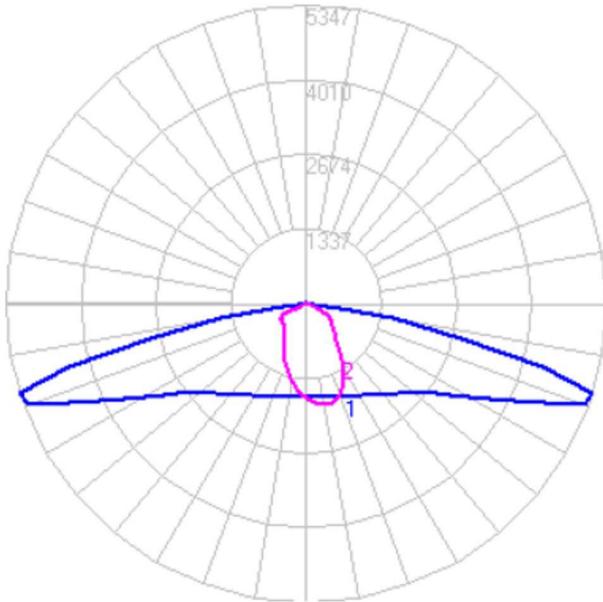
- Stainless steel wire guard kit

Vigilant Replacement Parts	
Part Number	Description
BHPSEG3BN	Driver Replacement Kit 230VAC 350mA Battery Backup (3,000lm) - White LED Models
BHPSEG6BN	Driver Replacement Kit 230VAC 750mA Battery Backup (6,500lm) - White LED Models
BHPSE23NN	Driver Replacement Kit 100-277VAC 350mA (3,000lm) - White LED Models
BHPSE26NN	Driver Replacement Kit 100-277VAC 750mA (6,500lm) - White LED Models
BHPSEG3BNA	Driver Replacement Kit 230VAC 430mA Battery Backup (3,000lm) - Amber LED Models
BHPSEG5BNA	Driver Replacement Kit 230VAC 860mA Battery Backup (5,000lm) - Amber LED Models
BHPSE23NNA	Driver Replacement Kit 100-277VAC 430mA (3,000lm) - Amber LED Models
BHPSE25NNA	Driver Replacement Kit 100-277VAC 860mA (5,500lm) - Amber LED Models
BHPSEG3BNG	Driver Replacement Kit 100-277VAC 430mA (2,600lm) - Green LED Models
BHBATTKIT	Battery Replacement Kit (Vigilant & SafeSite)
BHLENSCLR	Lens Kit Clear Polycarbonate
BHLENSDIFF	Lens Kit Diffused Polycarbonate
BHLENSDD	Lens Kit Domed Diffused Polycarbonate

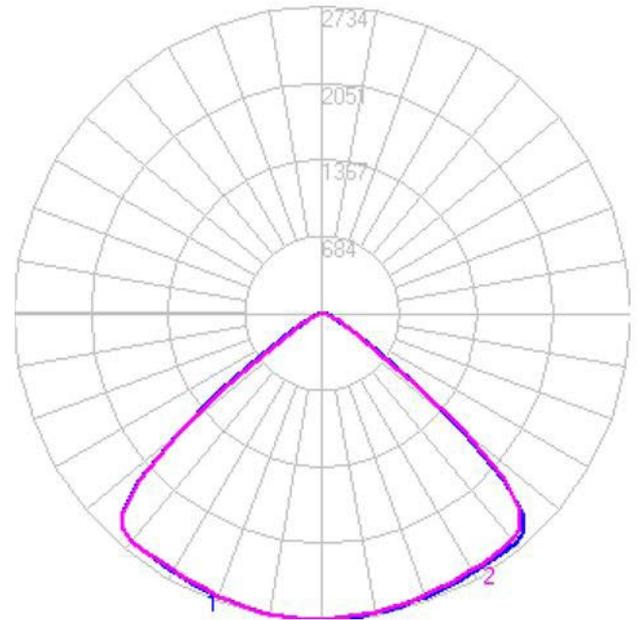
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# Beam Distribution

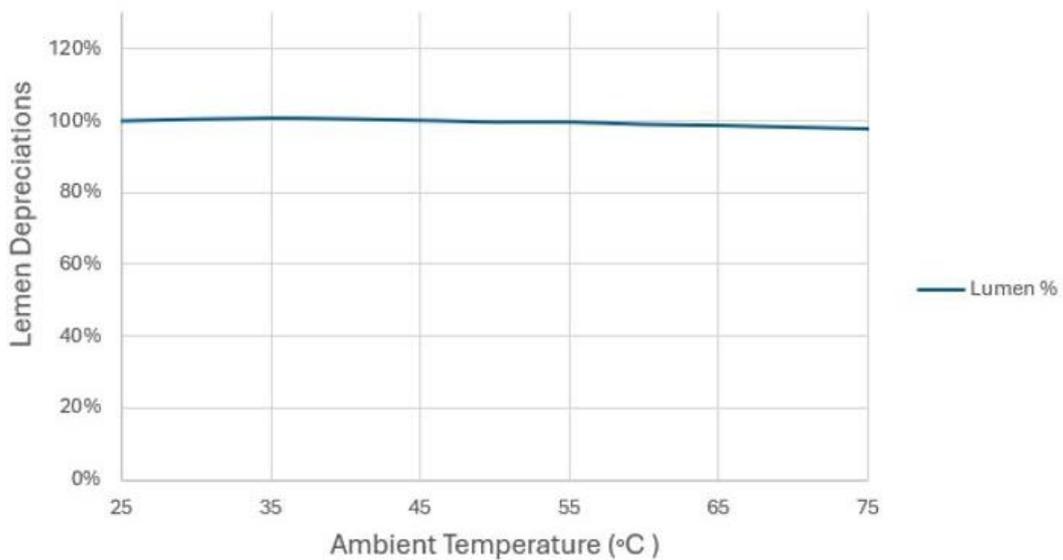
Ultra-Wide Walkway (Type 1) - Clear



Circular - Clear



# Thermal Roll-Off



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# Inrush Current

Inrush Current						
Duration (T50), 0.4ms						
Supply Voltage (VAC)		100	120	230	240	277
Peak Inrush Current (A <sub>pk</sub> )		6.40	7.70	14.80	15.40	17.80

Ground Leakage						
Supply Voltage (VAC)		100	120	230	240	277
Ground Leakage Current (mA)		0.40	0.50	0.80	0.83	1.00

# Lumen Maintenance Factor

Vigilant Bulkhead 6,500lm								
Ambient Temperature	Hours							
	0	15000	30000	45000	60000	75000	90000	100000
25°C	100%	98%	96%	95%	93%	92%	90%	90%
30°C	100%	98%	96%	95%	93%	92%	90%	90%
35°C	100%	98%	96%	95%	93%	92%	90%	90%
40°C	100%	98%	96%	95%	93%	92%	90%	90%
45°C	100%	98%	96%	95%	93%	92%	90%	90%
50°C	100%	97%	96%	95%	93%	92%	90%	89%
55°C	100%	97%	96%	95%	93%	92%	90%	89%
60°C	99%	97%	95%	94%	93%	91%	90%	89%
65°C	99%	97%	95%	94%	92%	91%	89%	89%

Based on 9,000 hour LM80 data

Vigilant Bulkhead 3,000lm								
Ambient Temperature	Hours							
	0	15000	30000	45000	60000	75000	90000	100000
25°C	100%	98%	96%	95%	93%	92%	90%	90%
30°C	100%	98%	96%	95%	93%	92%	90%	90%
35°C	100%	98%	96%	95%	93%	92%	90%	90%
40°C	100%	98%	96%	95%	93%	92%	90%	90%
45°C	100%	98%	96%	95%	93%	92%	90%	90%
50°C	100%	97%	96%	95%	93%	92%	90%	89%
55°C	100%	97%	96%	95%	93%	92%	90%	89%
60°C	99%	97%	95%	94%	93%	91%	90%	89%
65°C	99%	97%	95%	94%	92%	91%	89%	89%

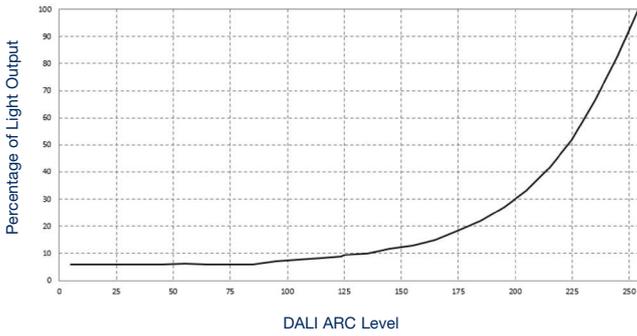
Based on 9,000 hour LM80 data

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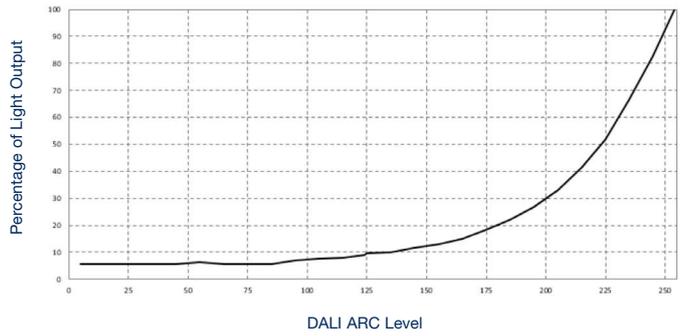
# Dimming Curves

## DALI Dimming

6,500lm

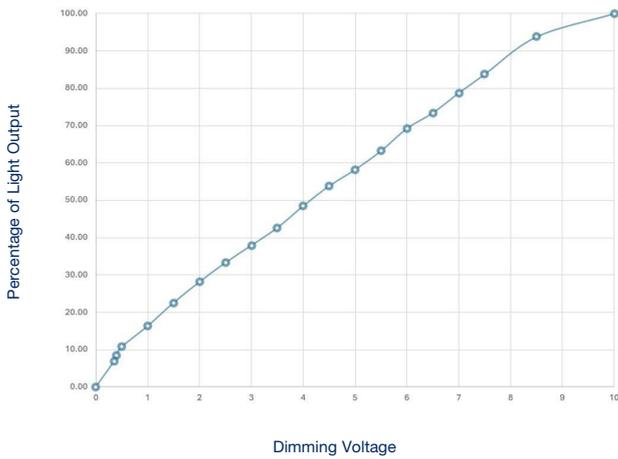


3,000lm

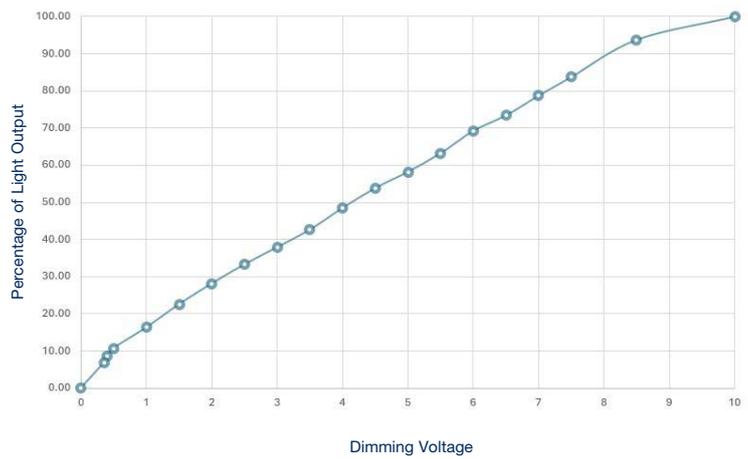


## 0-10V Dimming

6,500lm



3,000lm



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## Dialight Europe Ltd

Highdown House, Yeoman Way,  
Worthing, England BN99 3HH

Tel: +44 (0) 203 058 3540

Customer Service: +44 (0) 163 866 6541

sales-emea@dialight.com

### WARNING / DISCLAIMERS:

**Installation & secondary retention.** The use of this product without proper installation (including secondary retention / netting) and periodic inspections, could cause severe injury or death. Dialight recommends that all installations should use secondary retention / netting (appropriate to the installation environment) as applicable. Dialight products are intended for ultimate purchase, installation and operation by knowledgeable persons trained in the functional assessment, installation, use and maintenance of such products and all customers (including but not limited to end customers) are responsible for assessing the suitability of Dialight products for any given installation requirement. It is the exclusive responsibility of the contractor, installer and/or end-user to: (a) determine the suitability of the product for its intended application; and, (b) ensure that the product is safely installed (with secondary retention / netting as appropriate) and in compliance with all applicable laws and regulations.

**Product specifications & warranties.** All product information provided is, to the best of Dialight's knowledge, accurate as of the date of publication. All values and performance data herein are design or typical values when measured under laboratory conditions. The information herein is subject to change without notice. The products / software detailed herein are subject to applicable warranties and terms and conditions of use/purchase. Unless agreed otherwise in writing by an authorized representative of Dialight, Dialight does not represent that its products are fit for any particular purpose and accepts no liability for the installation and/or unauthorised use of its products. When ordering, refer to [www.dialight.com](http://www.dialight.com) for current versions of: (a) relevant product documentation (including relevant product data sheets); (b) Dialight terms and conditions of sale; and, (c) the relevant product warranties. To the extent that any contract is deemed formed between Dialight and the purchaser of Dialight products and/or an end-user, versions of documents available at [www.dialight.com](http://www.dialight.com) as at the date of sale shall be the versions incorporated therein. In the event of any discrepancy between this document and information provided at [www.dialight.com](http://www.dialight.com), the latter shall prevail.

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