

# .....Dialight



## Dialight® LED Bulkhead

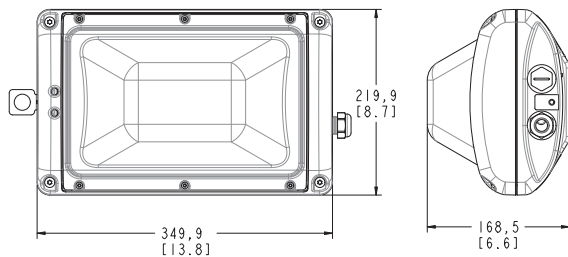
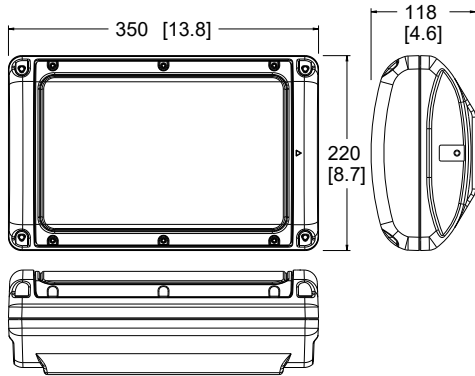
### Technical Specification Sheet - APAC

### Vigilant® LED Bulkhead 100-277 VAC Model



#### Certifications & Ratings

- 10 year warranty
- CE / RCM
- IP66/67
- IK10
- 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:

##### Fixture weights:

Standard models: 6.8 kg (15.0 lb)

Battery backup models: 7.7 kg (17.0 lb)

##### Shipping weights:

Standard models: 7.3 kg (16.1 lb)

Battery backup models: 8.4 kg (18.5 lb)

##### Cable entry:

(2) M20 - optional (4) M20

#### Materials:

##### Housing:

A360 Die-cast aluminium

##### Finish:

Superior dual coat finish  
- Sealed polyester topcoat  
- Epoxy primer

##### Lens:

Polycarbonate clear  
Polycarbonate diffused (optional)  
Polycarbonate domed diffused

##### Hardware:

316 Stainless Steel

#### Electrical Specifications:

##### Operating voltage:

Standard models: 100-277 VAC / 120-250 VDC

Battery backup models: 110/120 VAC, 230/240 VAC

##### Operating temperature:

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)

##### Surge protection:

Tested to IEC 61000-4-5  
6kV/3kA, 1.2/50, 8/20us  
Combination Wave  
Line-line and line-ground

##### THD:

< 18%

##### Power factor:

> 0.9

##### Dimming:

DALI 1.0 and 2.0  
0-10 VDC continuous 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

##### Expected battery life:

4 years

#### Photometric Information:

##### Lumen output\*:

3,000 & 6,500 lm (white light)

##### CRI:

> 80 (white light)

##### CCT:

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-4BN2-3NFN-VGN</b>	3,200	22	149	100-277VAC / 120-250VDC	4000K (neutral white)	Clear Polycarbonate	Circular
<b>BHE-4BN2-6NFN-VGN</b>	6,700	45	149	100-277VAC / 120-250VDC	4000K (neutral white)	Clear Polycarbonate	Circular
BHE-4UN2-3NFN-VGN	3,100	22	144	100-277VAC / 120-250VDC	4000K (neutral white)	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>BHE-4UN2-6NFN-VGN</b>	6,400	45	142	100-277VAC / 120-250VDC	4000K (neutral white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BHE-4BC2-3NFN-VGN	3,200	22	149	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Circular
BHE-4BC2-6NFN-VGN	6,700	45	149	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Circular
BHE-4UC2-3NFN-VGN	3,100	22	144	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BHE-4UC2-6NFN-VGN	6,400	45	142	100-277VAC / 120-250VDC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BHE-4BA2-3NFN-VGN	2,300	24	96	100-277VAC / 120-250VDC	Amber	Clear Polycarbonate	Circular
<b>BHE-4BA2-5NFN-VGN</b>	4,200	46	91	100-277VAC / 120-250VDC	Amber	Clear Polycarbonate	Circular
<b>Battery Backup Models with Flush Bracket</b>							
<b>BHE-4BNG-3NFN-VGF</b>	3,200	25	128	230-240VAC	4000K (neutral white)	Clear Polycarbonate	Circular
<b>BHE-4BNG-6NFN-VGF</b>	6,700	48	140	230-240VAC	4000K (neutral white)	Clear Polycarbonate	Circular
BHE-4UNG-3NFN-VGF	3,100	25	124	230-240VAC	4000K (neutral white)	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>BHE-4UNG-6NFN-VGF</b>	6,400	48	133	230-240VAC	4000K (neutral white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BHE-4BCG-3NFN-VGF	3,200	25	128	230-240VAC	5000K (cool white)	Clear Polycarbonate	Circular
BHE-4BCG-6NFN-VGF	6,700	48	140	230-240VAC	5000K (cool white)	Clear Polycarbonate	Circular
BHE-4UCG-3NFN-VGF	3,100	25	124	230-240VAC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BHE-4UCG-6NFN-VGF	6,400	48	133	230-240VAC	5000K (cool white)	Clear Polycarbonate	Ultra-Wide (Type 1)
BHE-4BAG-3NFN-VGF	2,300	27	85	230-240VAC	Amber	Clear Polycarbonate	Circular
<b>BHE-4BAG-5NFN-VGF</b>	4,200	49	86	230-240VAC	Amber	Clear Polycarbonate	Circular
<b>BHE-6BGG-3NFN-VGG</b>	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 2700k (warm white) CCT, please contact your local representative for more information.

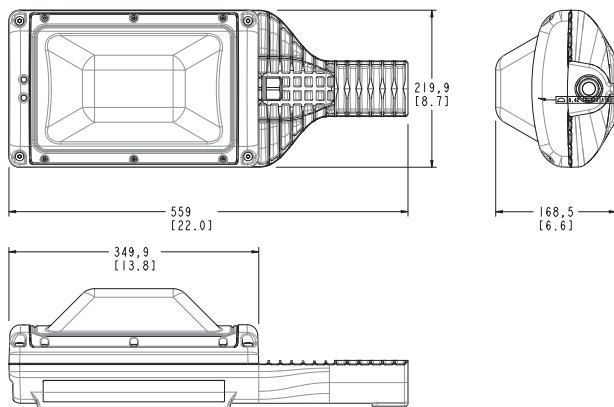
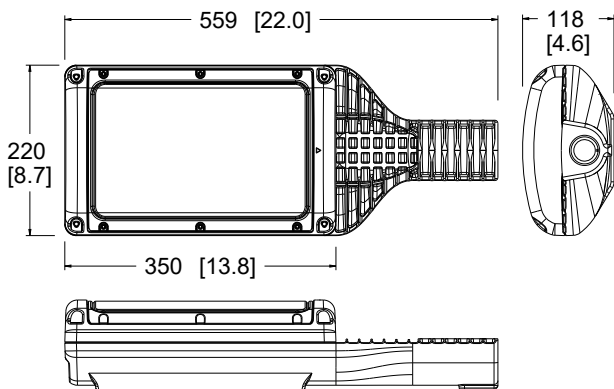
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### Vigilant® LED Bulkhead Pole Mount Model



#### Certifications & Ratings

- 10 year warranty
- CE / RCM
- IP66/67
- IK10
- L70 > 150,000 hours @ 65°C (149°F) ambient



Dimensions in mm (inches)

#### 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>	35mm ID optional 44mm 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>	
Standard models:	100-277 VAC / 120-250 VDC
Battery backup models:	110/120 VAC, 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>Surge protection:</b>	Tested to IEC 61000-4-5 6kV/3kA, 1.2/50, 8/20us Combination Wave Line-line and line-ground
<b>THD:</b>	< 18%
<b>Power factor:</b>	> 0.9
<b>Dimming:</b>	DALI 1.0 and 2.0 0-10 VDC continuous 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

**Expected battery life:** 4 years

#### 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

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# Ordering Information

## Vigilant® LED Bulkhead - Pole Mount Model



Part Number	Fixture Lumens	Wattage	lm/W	Voltage	CCT	Lens	Beam Distribution
<b>Pole Mount Models</b>							
BPE-4BN2-3NNN-VGN	3,200	22	149	100-277VAC / 120-250VDC	4000K	Clear Polycarbonate	Circular
BPE-4BN2-6NNN-VGN	6,700	45	149	100-277VAC / 120-250VDC	4000K	Clear Polycarbonate	Circular
<b>BPE-4UN2-3NNN-VGN</b>	3,100	22	144	100-277VAC / 120-250VDC	4000K	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>BPE-4UN2-6NNN-VGN</b>	6,400	45	142	100-277VAC / 120-250VDC	4000K	Clear Polycarbonate	Ultra-Wide (Type 1)
BPE-4BC2-3NNN-VGN	3,200	22	149	100-277VAC / 120-250VDC	5000K	Clear Polycarbonate	Circular
BPE-4BC2-6NNN-VGN	6,700	45	149	100-277VAC / 120-250VDC	5000K	Clear Polycarbonate	Circular
BPE-4UC2-3NNN-VGN	3,100	22	144	100-277VAC / 120-250VDC	5000K	Clear Polycarbonate	Ultra-Wide (Type 1)
BPE-4UC2-6NNN-VGN	6,400	45	142	100-277VAC / 120-250VDC	5000K	Clear Polycarbonate	Ultra-Wide (Type 1)
BPE-4BA2-3NNN-VGN	2,300	24	96	100-277VAC / 120-250VDC	Amber	Clear Polycarbonate	Circular
BPE-4BA2-5NNN-VGN	4,200	46	91	100-277VAC / 120-250VDC	Amber	Clear Polycarbonate	Circular
BPE-4UA2-3NNN-VGN	2,100	24	88	100-277VAC / 120-250VDC	Amber	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>BPE-4UA2-5NNN-VGN</b>	3,900	46	85	100-277VAC / 120-250VDC	Amber	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>Pole Mount Battery Backup Models</b>							
<b>BPE-4BNG-3NNN-VGF</b>	3,200	25	128	230-240VAC	4000K	Clear Polycarbonate	Circular
BPE-4BNG-6NNN-VGF	6,700	48	140	230-240VAC	4000K	Clear Polycarbonate	Circular
BPE-4UNG-3NNN-VGF	3,100	25	124	230-240VAC	4000K	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>BPE-4UNG-6NNN-VGF</b>	6,400	48	133	230-240VAC	4000K	Clear Polycarbonate	Ultra-Wide (Type 1)
BPE-4BCG-3NNN-VGF	3,200	25	128	230-240VAC	5000K	Clear Polycarbonate	Circular
BPE-4BCG-6NNN-VGF	6,700	48	140	230-240VAC	5000K	Clear Polycarbonate	Circular
BPE-4UCG-3NNN-VGF	3,100	25	124	230-240VAC	5000K	Clear Polycarbonate	Ultra-Wide (Type 1)
BPE-4UCG-6NNN-VGF	6,400	48	133	230-240VAC	5000K	Clear Polycarbonate	Ultra-Wide (Type 1)
BPE-4BAG-3NNN-VGF	2,300	27	85	230-240VAC	Amber	Clear Polycarbonate	Circular
BPE-4BAG-5NNN-VGF	4,200	49	86	230-240VAC	Amber	Clear Polycarbonate	Circular
BPE-4UAG-3NNN-VGF	2,100	27	78	230-240VAC	Amber	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>BPE-4UAG-5NNN-VGF</b>	3,900	49	80	230-240VAC	Amber	Clear Polycarbonate	Ultra-Wide (Type 1)
<b>BPE-6BGG-3NNN-VGG</b>	2,600	33	79	230-240VAC	Green	Domed Diffused	Circular

All values typical unless otherwise stated (tolerance +/- 10%).

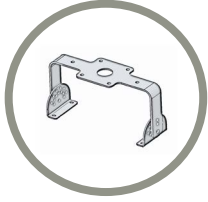
Part numbers listed in bold are typically available in stock.

For 2700k (warm white) CCT, please contact your local representative for more information.

44mm spigot entry models available.

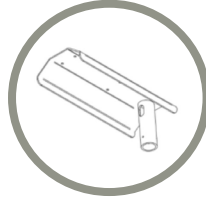
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## Accessories



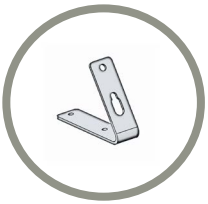
### BH-BRKT-SS-ADJ

- 316 stainless steel adjustable bracket kit



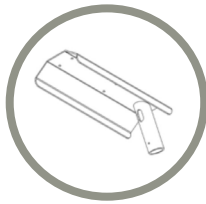
### BH-STMB-05-10-HD

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



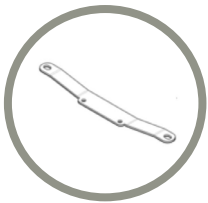
### BH-BRKT-A-KIT

- 316 stainless steel wall/ceiling flush mount bracket kit



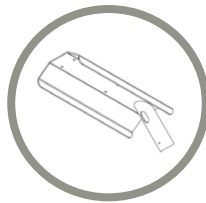
### BH-STMB-25-10-HD

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



### BH-BRKT-F-KIT

- 316 stainless steel wall/ceiling flush mount bracket kit



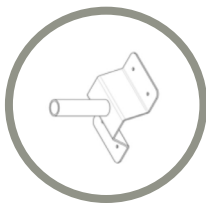
### BH-STMB-45-10-HD

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



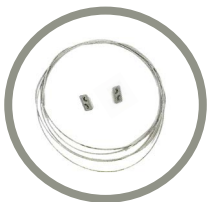
### BH-BRKT-LG-PF

- Aluminium pipe mount bracket kit - 50mm



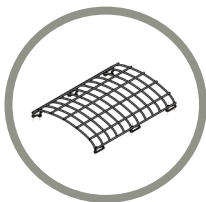
### HZX-SPIGOT-34

- Aluminium wall mount spigot plate - 34mm



### H6XCAB72

- 72" stainless steel safety rope



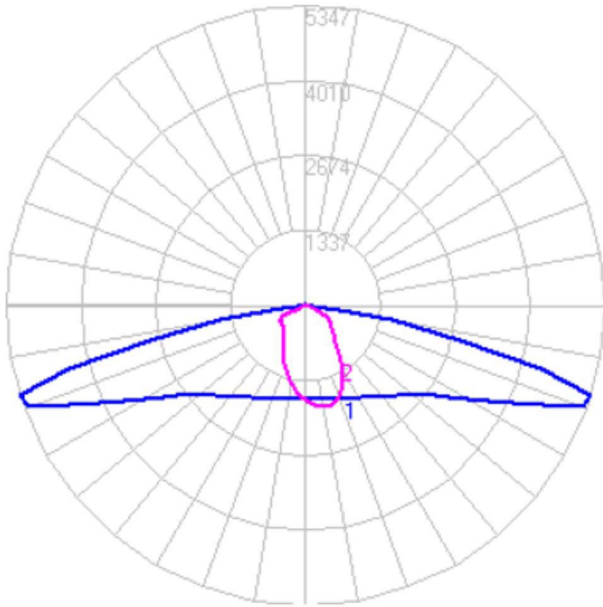
### BH-WG-KIT

- Stainless steel wire guard kit

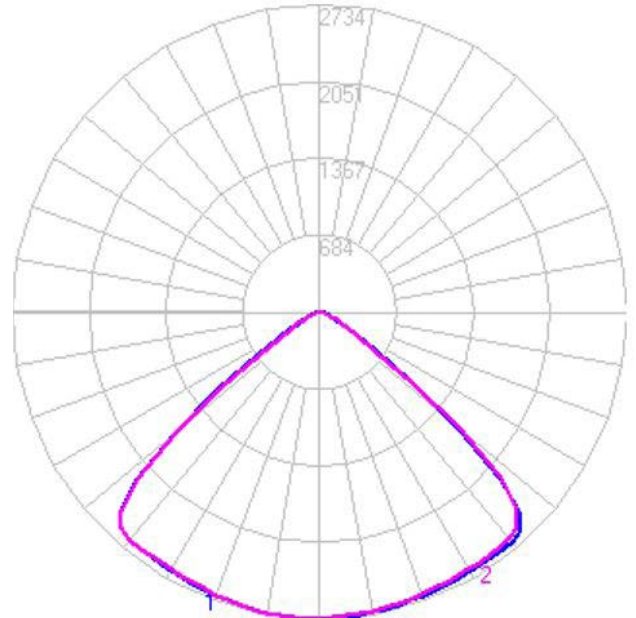


# Beam Distribution

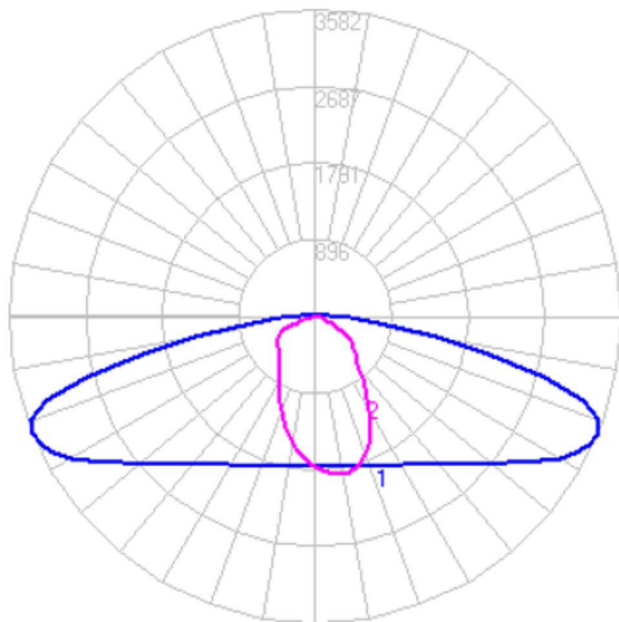
Ultra-Wide Walkway (Type 1) - Clear



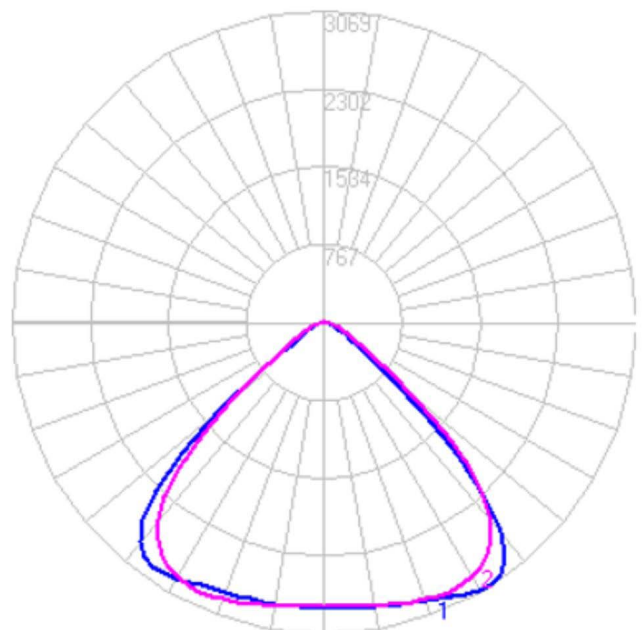
Circular - Clear



Ultra-Wide Walkway (Type 1) - Diffused

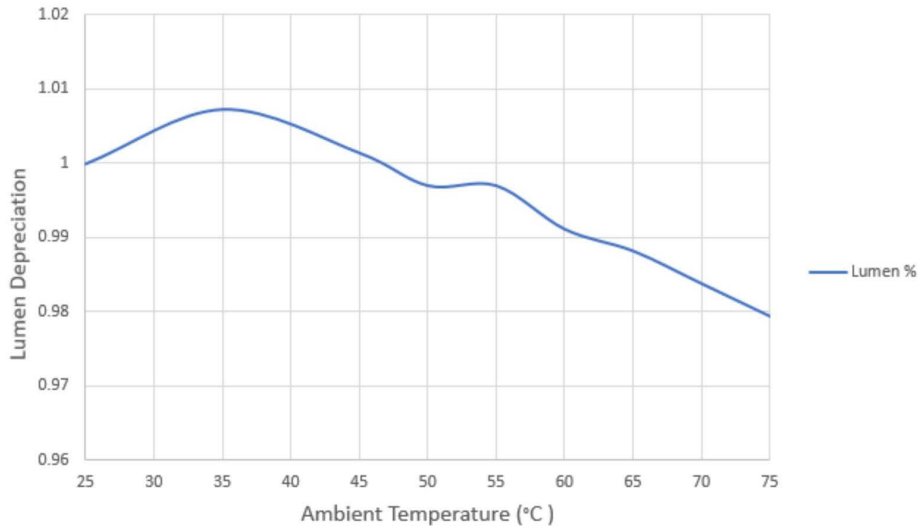


Circular - Diffused



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## Thermal Roll-Off



## Inrush Current / Circuit Breakers

Output	In rush (A) current @ input voltage							
	100 VAC	Duration (MS)	120 VAC	Duration (MS)	230 VAC	Duration (MS)	277 VAC	Duration (MS)
6,500	6	0.6	8	0.6	15	0.6	18	0.6
3,000	6	0.6	8	0.6	15	0.6	18	0.6

Output	GND Leakage (mA) input voltage			
	100 VAC	120 VAC	230 VAC	277 VAC
6,500	0.5	0.5	0.8	1.0
3,000	0.5	0.5	0.8	1.0

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# 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%

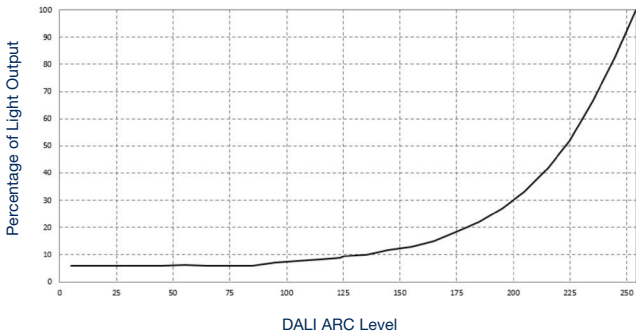
Based on 9,000 hour LM80 data

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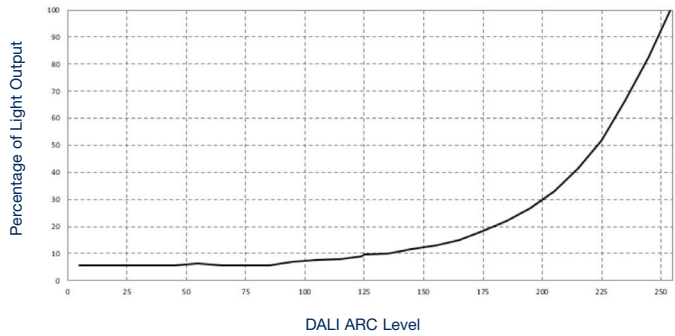
# Dimming Curves

## DALI Dimming

6,500lm

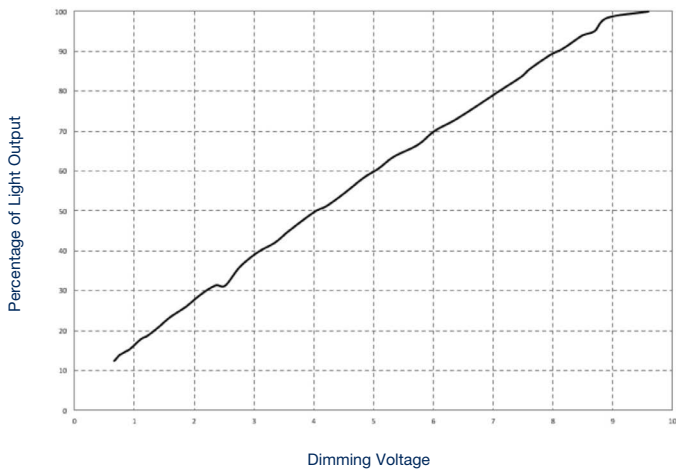


3,000lm

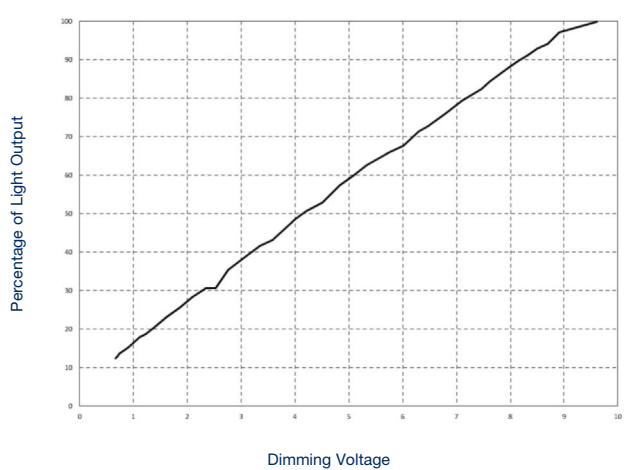


## 0-10V Dimming

6,500lm



3,000lm



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## Australia

108 Howe Street  
Osborne Park, WA 6017  
Tel: +61 (0) 8 9244 7600  
Fax: +61 (0) 8 9244 7601  
info@dialight.com.au

## Southeast Asia

33 Ubi Avenue 3  
#07-72 Vertex (Tower A)  
Singapore 408868  
Tel: +65 6578 7157  
Fax: +65 6578 7150  
enquiry@dialight.com.sg

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