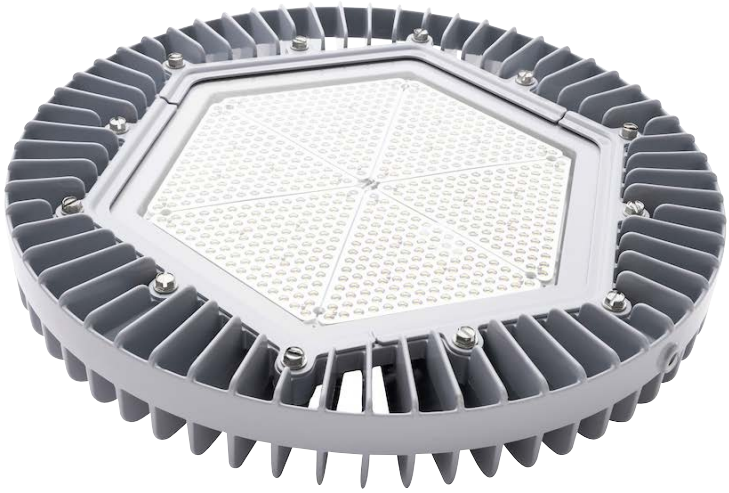
Dialight



Vigilant® Ultra-Efficient LED High Bay

Technical Specification Sheet - CE

CE

DECEMBER 2021

Vigilant® Ultra-Efficient LED High Bay - CE

Technical Information

CE

Corded Model

Mechanical Information:

Fixture weight:
8.2 kg (18 lbs)

Shipping weight:
10.9 kg (24 lbs)

Mounting:
Stainless Steel Hook

Power Cord:
3 meters, H07RN-F or H07BN4-F Heavy Duty

Prefix: VEE

Integrated Wiring Box

Mechanical Information:

Fixture weight:
9.1 kg (20 lbs)

Shipping weight:
11.8 kg (26 lbs)

Mounting:
Various Kits (see page 9)

Wiring Box Cable Entries:
M25 x 3

Terminals:
0.5-4mm^2 x 5

Prefix: VWE

Comparison		
	Warranty	**L70**
Dialight LED High Bay	10yr	>150,000
Metal Halide	1	15,000
High Pressure Sodium	1	20,000

Certifications & Ratings:

EN 60598-1:2015,
IEC 60598-1:2014

EN 60598-2-1:1989,
IEC 60598-2-1:2020

IEC60068
Salt spray testing - severity 1

IP66 to EN 60529

IK10 to EN 50102
(Polycarbonate lens)

IK06 to EN 50102 (Acrylic lens)

IK05 to EN 50102 (Glass lens)

D-Marking to EN 60598 2-24
L70 >150,000 hours @ 25°C ambient

Variable Dimming as Standard:

Variable Dimming Control: DALI enabled
0-10 VDC

Dimming Range: 10 VDC = 100% light output
0 VDC = <10% light output

Electrical Specifications:

Operating Voltage: 100-277 VAC
120-250 VDC

Total system power consumption: See table

Operating Temp: -40°C to +65°C

Harmonics: IEC 61000-3-2

Noise requirement /EMC: EN 61547: 2009
Radiated and Conducted Emissions: EN 55015

EMC Immunity: EN 61547: 2009

Transient protection: 100-277 VAC models tested to withstand up to 8kV/4kA per IEEE C62.41.
347-480 VAC models tested to withstand up to 6kV/3kA per IEEE C62.41

THD: < 20%

Power Factor: > 0.9

Construction:

Housing: Copper-free aluminium

Finish: Superior dual coat finish
-Sealed polyester topcoat
-Chemical-resistant epoxy primer

Lens: See table

Screws: Stainless steel 316

Photometric Information:

CRI: 80, 70

CCT: 5000K (cool white)
4000K (neutral white)

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

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

Vigilant® Ultra-Efficient LED High Bay - CE

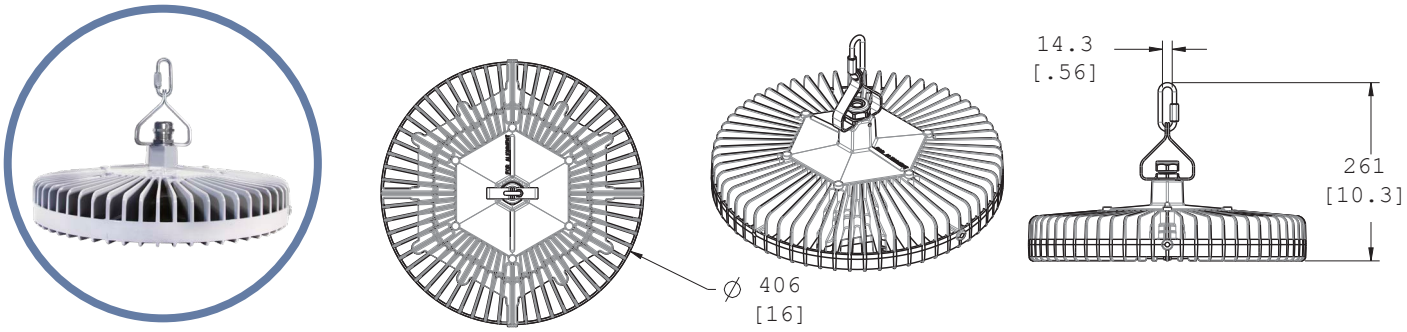
Ordering Information

Standard Model with 3 Meter Cable & Hook Mount								
Part Number	**Lumens**	**Wattage**	**lm/W**	**CCT**	**CRI**	**Lens**	**Beam Distribution**	**Controls**
VEE-7WC2-JNHW-NGN	38,200	230	166	5000K	80	Glass	Wide	
VEE-7MC2-JNHW-NGN	37,400	230	163	5000K	80	Glass	Medium	
VEE-7WC2-HNHW-NGN	33,000	195	169	5000K	80	Glass	Wide	
VEE-7MC2-HNHW-NGN	32,300	195	166	5000K	80	Glass	Medium	
VEE-7WC2-FNHW-NGN	28,600	165	173	5000K	80	Glass	Wide	
VEE-7MC2-FNHW-NGN	28,000	165	170	5000K	80	Glass	Medium	
Integrated Wiring Box - Standard with HBXW3 Bracket								
VWE-7WC2-JAAW-NGN	38,200	230	166	5000K	80	Glass	Wide	DALI
VWE-7MC2-JAAW-NGN	37,400	230	163	5000K	80	Glass	Medium	DALI
VWE7-WC2-HAAW-NGN	33,000	195	169	5000K	80	Glass	Wide	DALI
VWE-7MC2-HAAW-NGN	32,300	195	166	5000K	80	Glass	Medium	DALI
VWE-7WC2-FAAW-NGN	28,600	165	173	5000K	80	Glass	Wide	DALI
VWE-7MC2-FAAW-NGN	28,000	165	170	5000K	80	Glass	Medium	DALI

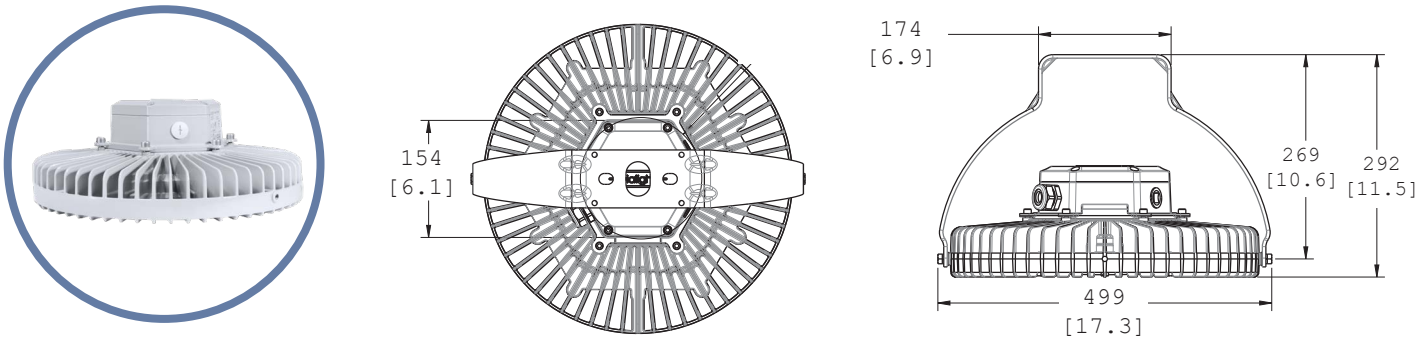
All values typical unless otherwise stated (tolerance +/- 10%)

Dimensional Drawings

Corded Model with Hook Mount



Integrated Wiring Box

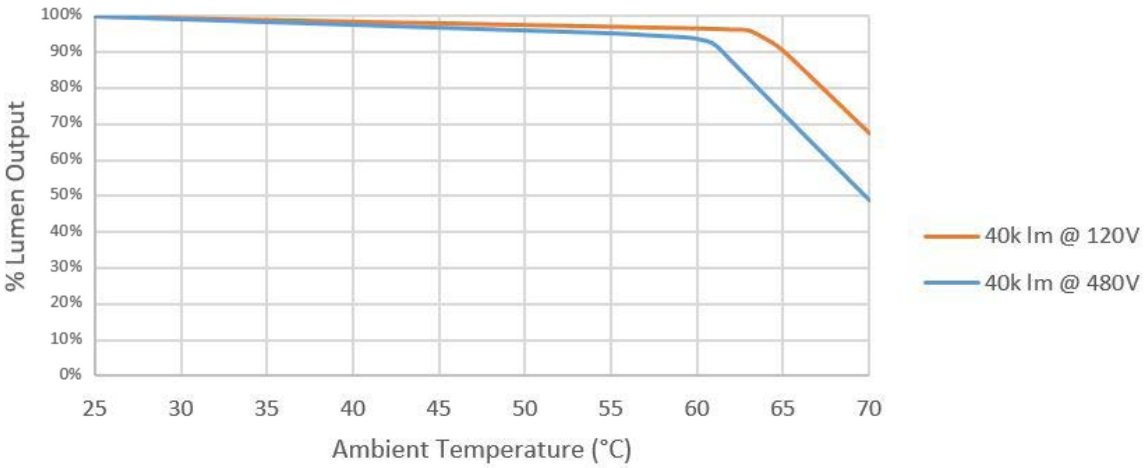


Lumen Tables

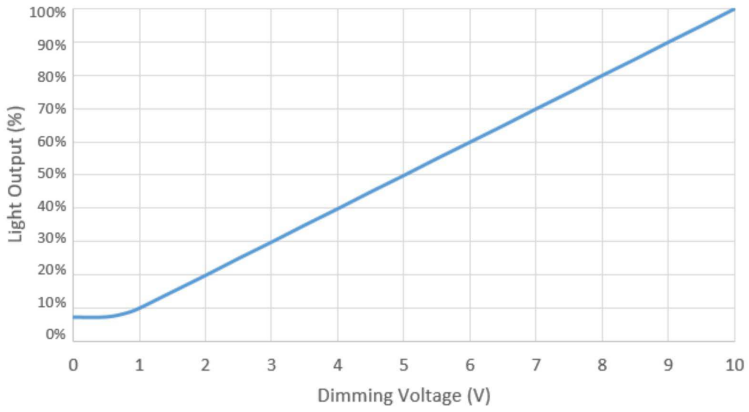
Vigilant High Bay 100-277 VAC, 120-250 VDC and 347-480 VAC					
Output	Wattage	Optic	Lens Material	70 CRI, 5000K / 4000K CCT	
				Lumen Output	lm/W
J	230	High Efficacy Round	Glass	41,300	180
H	195			35,700	183
F	165			30,900	187
E	140			26,300	188
C	96			19,100	200
B	80			15,000	188
A	65			12,100	186

Variable	Type	Scale Factor
Lens	Glass - Clear	100%
	Acrylic - Clear	100%
	Polycarbonate - Clear	99%
	Polycarbonate - Dome Diffused	98%
Optic	Round	100%
	Narrow	97%
	Medium	95%
	Aisle	92%
CCT & CRI	CW 70 CRI	100%
	NW 70 CRI	100%
	CW 80 CRI	96%
	NW 80 CRI	96%

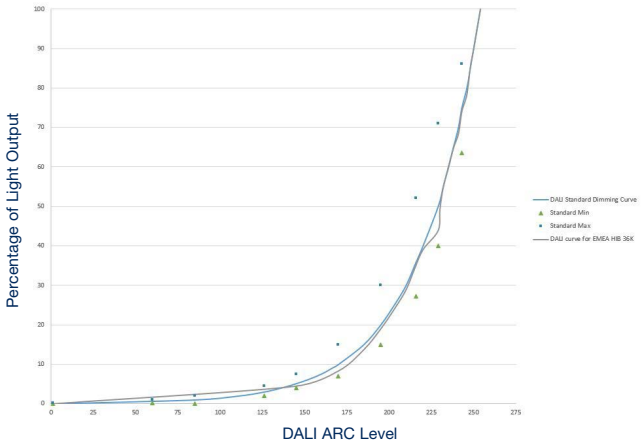
Thermal Roll-Off



Dimming Characterization 0-10V

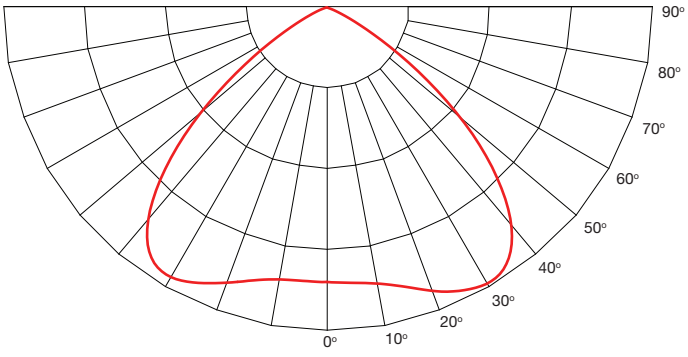


DALI Dimming

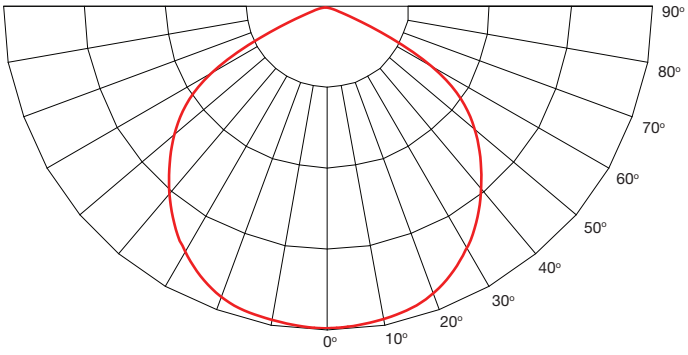


Beam Distribution

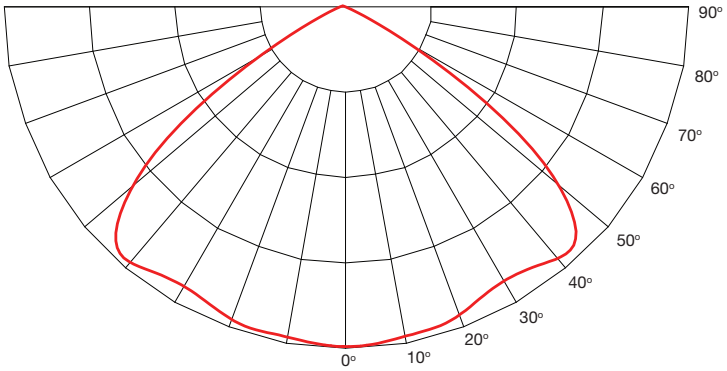
Medium



Round



Wide



Lumen Maintenance Factor

% Lumen Output (40k lm @ 120V)									
Ambient Temp (°C)	Hours								
	0	15000	30000	45000	60000	75000	90000	100000	150000
25	100%	96%	93%	90%	87%	84%	91%	80%	71%
30	100%	96%	93%	90%	87%	84%	91%	79%	71%
35	99%	95%	92%	89%	86%	84%	90%	79%	71%
40	99%	95%	92%	89%	86%	83%	90%	79%	70%
45	98%	94%	91%	88%	85%	82%	80%	78%	69%
50	98%	94%	91%	87%	84%	82%	79%	77%	69%
55	97%	93%	90%	87%	84%	81%	78%	76%	68%
60	97%	93%	89%	86%	83%	80%	77%	75%	67%
65	90%	87%	84%	80%	78%	75%	72%	70%	62%

% Lumen Output (26k lm @ 120V)									
Ambient Temp (°C)	Hours								
	0	15000	30000	45000	60000	75000	90000	100000	150000
25	100%	97%	95%	92%	90%	88%	86%	84%	77%
30	99%	97%	94%	92%	90%	87%	85%	84%	77%
35	99%	96%	94%	91%	89%	87%	85%	83%	76%
40	98%	96%	93%	91%	89%	86%	84%	83%	76%
45	98%	95%	93%	90%	88%	86%	84%	82%	75%
50	97%	94%	92%	90%	87%	85%	83%	81%	75%
55	97%	94%	91%	89%	87%	84%	82%	81%	74%
60	96%	93%	91%	88%	86%	84%	81%	80%	73%
65	96%	93%	90%	88%	85%	83%	81%	79%	72%

In-rush Current

100-277 VAC Models

Product	Output	Max Wattage	Inrush Current @ Input Voltage				Approximate Time Duration (T50) of Inrush Current			
			100VAC	120VAC	230VAC	277VAC	100VAC	120VAC	230VAC	277VAC
High Bay	11k	73	6.4	7.7	14.8	17.8	1.5ms	1.5ms	1.5ms	1.5ms
	14k	90	6.4	7.7	14.8	17.8	1.5ms	1.5ms	1.5ms	1.5ms
	18k	111	6.4	7.7	14.8	17.8	1.5ms	1.5ms	1.5ms	1.5ms
	26k	161	6.4	7.7	14.8	17.8	1.5ms	1.5ms	1.5ms	1.5ms
	30k	190	6.4	7.7	14.8	17.8	1.5ms	1.5ms	1.5ms	1.5ms
	35k	225	6.4	7.7	14.8	17.8	1.5ms	1.5ms	1.5ms	1.5ms
	40k	261	6.4	7.7	14.8	17.8	1.5ms	1.5ms	1.5ms	1.5ms

Circuit Breakers

100-277 VAC Models

Output	Max Wattage	Maximum # of Lights per Breaker @100VAC			Maximum # of Lights per Breaker @120VAC			Maximum # of Lights per Breaker @230VAC			Maximum # of Lights per Breaker @277VAC		
		C10	B16	C16	C10	B16	C16	C10	B16	C16	C10	B16	C16
11k	73	10	16	16	12	19	19	23	37	37	27	43	43
14k	90	8	13	13	10	16	16	19	30	30	22	36	36
18k	111	6	10	10	8	13	13	15	24	24	17	28	28
26k	161	4	7	7	5	9	9	11	17	17	12	19	19
30k	190	4	6	6	5	7	7	9	14	14	10	17	17
35k	225	3	5	5	4	6	6	8	12	12	9	14	14
40k	261	3	4	4	3	5	5	7	10	10	8	12	12

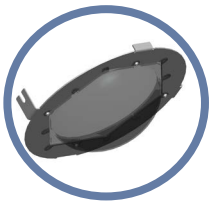
Earth Leakage

Voltage	Typical Measurements			
	Normal (mA)	Live to Neutral or L1 to L2 Reversed (mA)	Neutral or L2 Open (mA)	Neutral or L2 Open Reversed (mA)
120V/60Hz	0.27	0.25	0.46	0.45
230V/50Hz	0.41	0.40	0.78	0.77
277V/60Hz	0.56	0.56	1.05	1.03
347V/60Hz	0.28	0.28	0.39	0.40
415V/50Hz	0.26	0.26	0.40	0.40
480V/60Hz	0.36	0.36	0.54	0.53

Accessories

HBXW3-SSL-316M
- 316 stainless steel bracket

HBXCAB48
- 48” long stainless steel safety rope (for use with safety bracket)
- Includes 2 cables

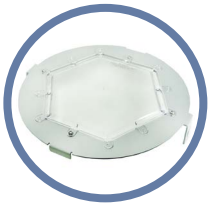


HBXSBDK
- Sand blast kit (dome lens)

HBXSBDL
- Sacrificial dome lens

HBXW3-SSL-316FTM
- 316 stainless steel forward throw bracket

HBXSB
- Safety tabs
- 316 stainless steel
- Includes 4 tabs

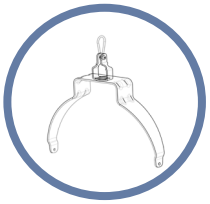


HBXSBK
- Sand blast kit (flat lens)

HBXSBL
- Sacrificial flat lens

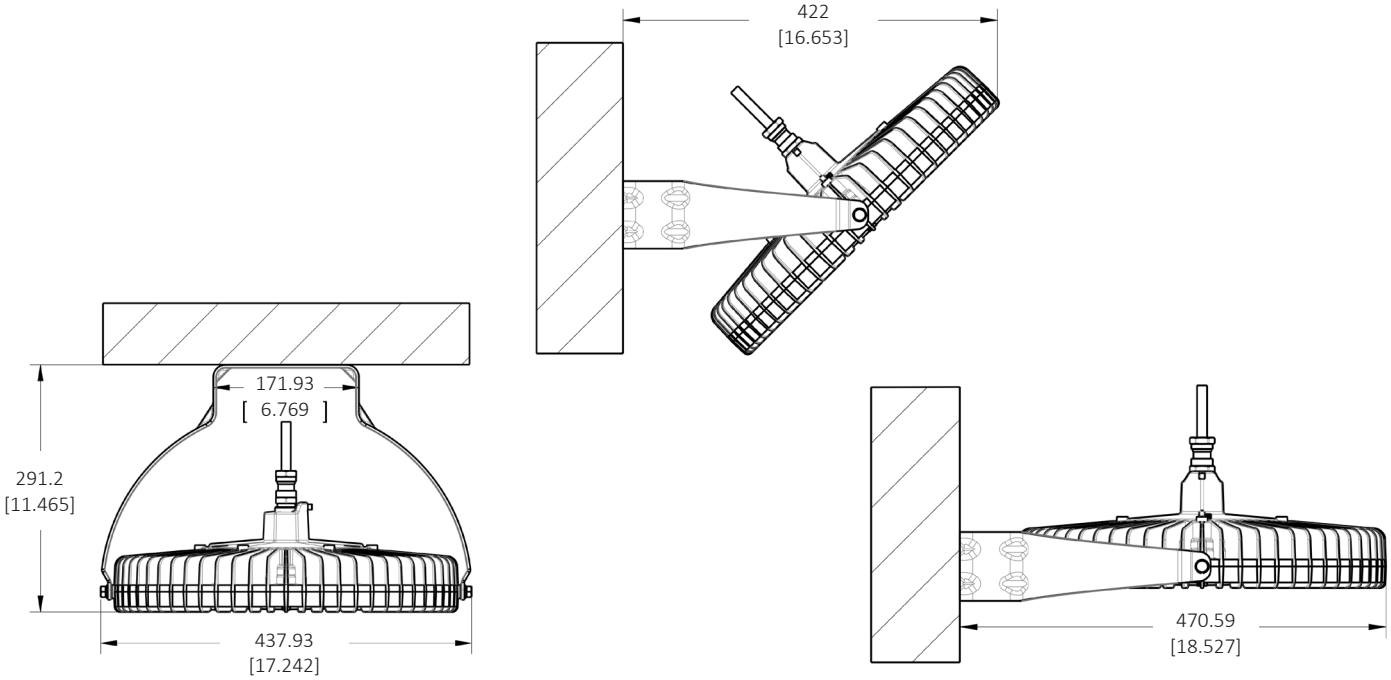
HBXW3
- Powder-coated aluminium swivel bracket

HBXGS
- Glare shield (internal use only, for use with flat lens)



HBXW3EUHOOK
- Swivel bracket with hanging hook

HBXW3 - Swivel Bracket



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