

Areamaster™ LED Flood/High Bay Luminaires

For Hazardous Locations. 250 W, 400 W, 750 W, 1000 W HID Light Level Equivalent

NEC/CEC:
Class I, Division 2, Groups A,
B, C, D
Class I, Zone 2 Group IIC
Class II, Division 1, Groups
E, F, G

NEC/CEC:
Class II Division 2, Groups F, G
Class III
Simultaneous Exposure
Type 3R, 4, 4X
IP66/67

NEC:
Marine Outside Type
(Salt Water)
Wet Locations

ATEX/IECEX:
Zones 2 and 22
II 3 GD
EPL Gc and Dc
Ex nA IIC; Ex tc IIIC
IP66, IK08

ATEX/IECEX:
Zone 21
II 2 D
EPL Db
Ex tb IIIC
IK08

Applications

- Typical applications include:
 - Pulp and paper mills
 - Processing plants
 - Chemical plants
 - Oil refineries
 - Foundries
 - Food processing plants
 - Storage areas
 - Waste and sewage treatment
 - Parking garages
 - Other areas where water, dirt and rough usage are a problem

Features

- Compact in size, attractively styled contemporary design, rugged and dependable.
- Easy to install and service.
- One-piece housing.
- One-piece lens in hinged cover. Secured by four M6 captive stainless steel slotted hex-head bolts.
- Thermal shock- and impact-resistant glass lens standard.
- Diffused polycarbonate lens available as an option.
- Heavy duty, high temperature silicone rubber gasket, mechanically secured.
- Universal design for flood and high bay mounting.
- Floodlight Mounting:
 - Yoke mount, zinc plated steel yoke with architectural bronze polyester finish.
- High Bay Mounting:
 - (1) Conduit entry on back of luminaire with locking set screw.
 - Rotate yoke up or remove.
- Chain Mounting:
 - Mounts via eyebolts threaded into the corners of the fixture.
 - Available with chain mounting, or as an accessory.
 - Rotate yoke up or remove.
- Cool operating temperatures translate into long luminaire life.
- NEC/CEC versions available with a total of three (3) 3/4" NPT entries with integral bushings.
- ATEX/IECEX version provided with one (1) 3/4" NPT/M20 adapter and two (2) close up plugs.
- Two (2) 3/4" NPT aluminum close up plugs provided.
- Electrical:
 - NEC/CEC/ATEX/IECEX: 120-277 Vac, 50/60 Hz
 - NEC/CEC: 347-480 Vac, 50/60 Hz.; 250 Vdc available on AMLED77YBC.
 - ATEX/IECEX: 220-240 Vac, 50/60 Hz.
 - Surge Protection Common/Differential Mode: 4KV
- Terminal block (screw type for secure connection) can accept UL/CSA 24-10AWG and IEC 0.2 - 4 mm².

Standard Materials

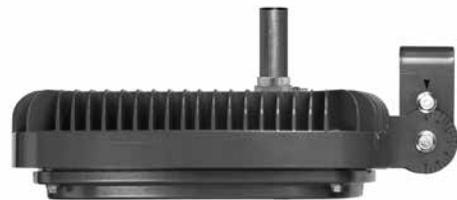
- Housing and lens door: copperfree (4/10 of 1% max.) aluminum
- Gasket: silicone rubber
- Reflector: metallized high reflectance finish
- Yoke mount: zinc plated steel
- Bolts: stainless steel
- Close up plugs: (2) aluminum provided

Standard Finishes

- Housing, lens cover and yoke mount: architectural bronze polyester



Floodlight



High Bay

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EPL Db
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NEC/CEC Certifications and Compliances

- UL Standard: UL 1598, UL 1598A, UL 8750, UL 844
- CSA Standards: C22.2 No. 250.0, C22.2 No. 137
- Ambient Temperature: AMLED67 and AMLED77 -40 °C to +65 °C (-40 °F to +149 °F); AMLED87 -40 °C to +55 °C (-40 °F to +131 °F); AMLED92 40 °C to +55 °C (-40 °F to +131 °F)
- The Class II, Division 1 & 2, Class III & Simultaneous Exposure Restrictions for models except AMLED92YBU1:
 - The luminaire may be rotated a maximum of 30 degrees from the vertical plane such that the lens will be facing down (see 30° rotation picture).
 - The luminaire must not be rotated such that the lens will be facing up at any angle. Also, for fixtures with glass lens only and not for chain-mounted or pendant-mounted fixtures.
- The Class II, Division 1 & 2, Class III & Simultaneous Exposure restrictions for model AMLED92YBU1 are:
 - The luminaire may be rotated a maximum of 90 degrees from the vertical plane such that the lens will be facing down (see 90° rotation picture).
 - The luminaire must not be rotated such that the lens will be facing up at any angle. Also, for glass lens only.



30° Rotation

ATEX/IECEx Certifications and Compliances

- Certification Type AMLED
 - Gas: Zone 2
 - Conforming to ATEX 94/9/EC: ⊕ II 3 G
 - Protection Level: EPL Gc
 - Type of Protection: Ex nA IIC
 - Temperature class: See Table on following page
 - Dust: Zones 21 and 22
 - Conforming to ATEX 94/9/EC: ⊕ II 2 D and II 3 D
 - Protection Level: EPL Db and Dc
 - Type of Protection: Ex tb IIIC and Ex tc IIIC
 - Temperature class: See Table on following page
- EC Declaration of Conformity: 50307
- ATEX Certificate: LCIE 14 ATEX 1016X (Zone 2/22), LCIE 14 ATEX 3049X (Zone 21)
- IECEx Certificate: IECEx LCIE 14.0030X
- Ambient Temperature: -40 °C to +55 °C (-40 °F to +131 °F)
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK08



90° Rotation

EURASEC Certification

- EURASEC N° TC RU C-FR.1605.B.00912

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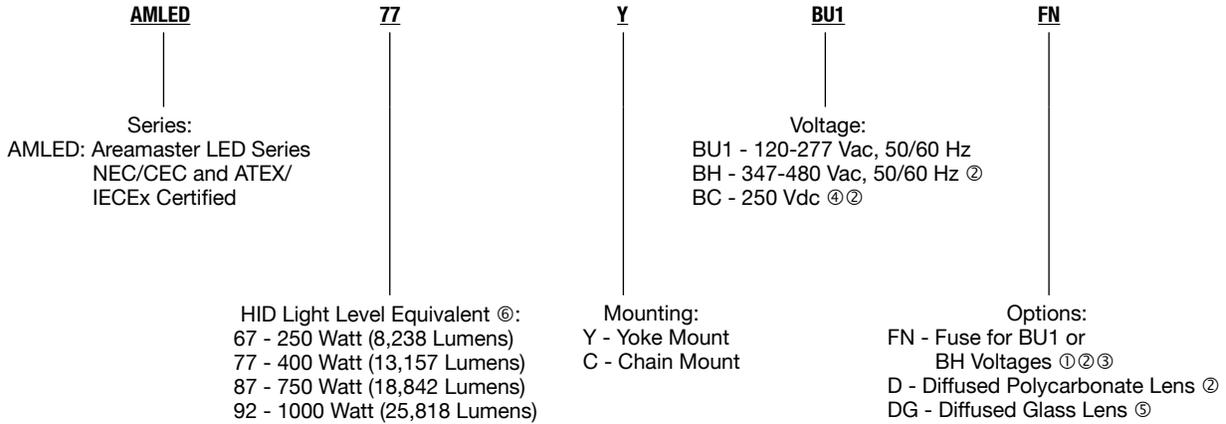
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Order using catalog numbering guide below or select catalog number from tables on following pages.

Catalog Numbering Guide – NEC/CEC and ATEX/IECEX Certified Areamaster LED



- ① Not available for use on the 750 and 1000 Watt equivalent.
- ② Not available for use on the ATEX/IECEX certified fixtures.
- ③ Canadian Electrical Code does NOT allow fusing in hazardous locations. Fuse not CEC rated.
- ④ Not available for use on the 250, 750 and 1000 Watt equivalent.
- ⑤ For ATEX/IECEX versions.
- ⑥ All lumen values are typical tolerance +/- 10% for glass lens only.

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Technical Data – NEC/CEC – Ambient Temperature Ta °C (°F)

Lamp	Line Voltage	Type	Ambient Temperature °C (°F)	Supply Wire Temperature °C (°F)	Gas		Dust Class II, Division 1 Groups E,F,G	Catalog Number	
					Class I, Division 2 ①	Groups			
120-277 Vac	LED		40 (104)	75 (167)	T4	A,B,C,D	T6	AMLED67YBU1	
			55 (131)	90 (194)	T3C	A,B,C,D	T6		
			65 (149)	90 (194)	T3C	A,B,C,D	T5		
347-480 Vac	LED		40 (104)	75 (167)	T4	A,B,C,D	T6	AMLED67YBH	
			55 (131)	75 (167)	T3C	A,B,C,D	—		
120-277 Vac	LED		40 (104)	75 (167)	T4	A,B,C,D	T6	AMLED77YBU1	
			55 (131)	90 (194)	T3C	A,B,C,D	T5		
			65 (149)	105 (221)	T3C	A,B,C,D	T4A		
347-480 Vac	LED		40 (104)	75 (167)	T4	A,B,C,D	T6	AMLED77YBH	
			250 Vdc	LED	40 (104)	75 (167)	T4A		A,B,C,D
120-277 Vac	LED		40 (104)	75 (167)	T3C	A,B,C,D	T3	T4A	AMLED87YBU1
			55 (131)	90 (194)	T3A	A,B,C,D	T3	T5	
347-480 Vac	LED		40 (104)	75 (167)	T3	A,B,C,D	—	T5	AMLED87YBH
120-277 Vac	LED		40 (104)	75 (167)	T3B	A,B,C,D	—	T5	AMLED92YBU1
347-480 Vac	LED		55 (131)	90 (194)	T3A	A,B,C,D	—	—	
347-480 Vac	LED		40 (104)	75 (167)	T3C	A,B,C,D	—	T5	AMLED92YBH

Technical Data – ATEX/IECEX – Ambient Temperature Ta °C (°F)

GAS (Zone 2) ①						DUST (Zones 21–22) ②						Catalog Number
40 (104)	55 (131)	40 (104)	55 (131)	40 (104)	55 (131)	40 (104)	55 (131)	40 (104)	55 (131)	40 (104)	55 (131)	
Downward		Wall Mounting		Upward		Downward		Wall Mounting		Upward		
T4 114 (237)	T4 129 (264)	T4 109 (228)	T4 124 (255)	T4 117 (243)	T3 132 (270)	68 (154)	83 (181)	67 (153)	82 (180)	70 (158)	85 (185)	AMLED67YBU1
T3 144 (291)	T3 159 (318)	T3 146 (295)	T3 161 (322)	T3 150 (302)	T3 165 (329)	75 (167)	90 (194)	74 (165)	89 (192)	77 (171)	92 (198)	AMLED77YBU1
T3 178 (352)	T3 193 (379)	T3 176 (349)	T3 191 (376)	T3 183 (361)	T2 198 (388)	83 (181)	98 (208)	82 (180)	97 (207)	87 (198)	102 (216)	AMLED87YBU1

“T” Numbers Represent the Maximum Internal Temperature ① or Maximum Surface Temperature ②

“T” #	NEC/CEC															
	T1	350	325	T2	T2A	T2B	T2C	T2D	T3	T3A	T3B	T3C	T4	T4A	T5	T6
Temp. Range °C (°F)	351-450 (664-842)	326-350 (619-662)	301-325 (574-617)	281-300 (538-572)	261-280 (502-536)	231-260 (448-500)	216-230 (421-446)	201-215 (394-419)	181-200 (358-392)	166-180 (331-356)	161-165 (322-329)	136-160 (277-320)	121-135 (250-275)	101-120 (214-248)	86-100 (187-212)	85 (185)
“T” #	ATEX/IECEX															
	T1		T2				T3			T4		T5	T6			
Temp. Range °C (°F)	301-450 (547-842)		201-300 (394-572)				136-200 (277-392)			101-135 (214-275)		86-100 (187-212)	85 (185)			

① T numbers represent the maximum internal temperature for Class I, Division 2 and Class I, Zone 2 locations designated by the NEC and ATEX/IECEX.

② T numbers represent the maximum surface temperature under a dust blanket for Class II, Division 1 and 2 as designated by the NEC or Zone 2 (Gas) and 22 (Dust) locations as designated by the IEC.

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Electrical Specifications – Flood Mount

Voltage Range	Frequency (Hz)	Watts Input Power (Nom.)	Input Amps (Max.)	Total Harmonic Distortion	Power Factor	CRI	Color Temp CCT	Catalog Number
120-277 Vac	50/60	86/85	0.72 - 0.35	0.5	> 0.98	70	5650K	AMLED67YBU1
347-480 Vac	50/60	88/90	0.27 - 0.22	0.5	> 0.95	70	5650K	AMLED67YBH
120-277 Vac	50/60	125/121	1.10 - 0.47	0.5	> 0.98	70	5650K	AMLED77YBU1
347-480 Vac	50/60	124/125	0.37 - 0.29	0.5	> 0.95	70	5650K	AMLED77YBH
250 Vdc	—	118	0.47	0.5	> 0.98	70	5650K	AMLED77YBC
120-277 Vac	50/60	174/169	1.60 - 0.70	0.5	> 0.98	70	5700K	AMLED87YBU1
347-480 Vac	50/60	176/175	0.52 - 0.39	0.5	> 0.95	70	5700K	AMLED87YBH
120-277 Vac	50/60	194/188	1.60 - 0.70	0.5	> 0.99	70	5500K	AMLED92YBU1
347-480 Vac	50/60	200/199	0.58 - 0.44	0.5	> 0.98	70	5500K	AMLED92YBH

Line Voltage	Catalog Number	
	NEC/CEC	ATEX/IECEX
120-277 Vac, 50/60 Hz	AMLED67YBU1	AMLED67YBU1
120-277 Vac, 50/60 Hz	AMLED77YBU1	AMLED77YBU1
120-277 Vac, 50/60 Hz	AMLED87YBU1	AMLED87YBU1
347-480 Vac, 50/60 Hz	AMLED67YBH	—
347-480 Vac, 50/60 Hz	AMLED77YBH	—
250 Vdc	AMLED77YBC	—
347-480 Vac, 50/60 Hz	AMLED87YBH	—
120-277 Vac, 50/60 Hz	AMLED92YBU1	—
347-480 Vac, 50/60 Hz	AMLED92YBH	—



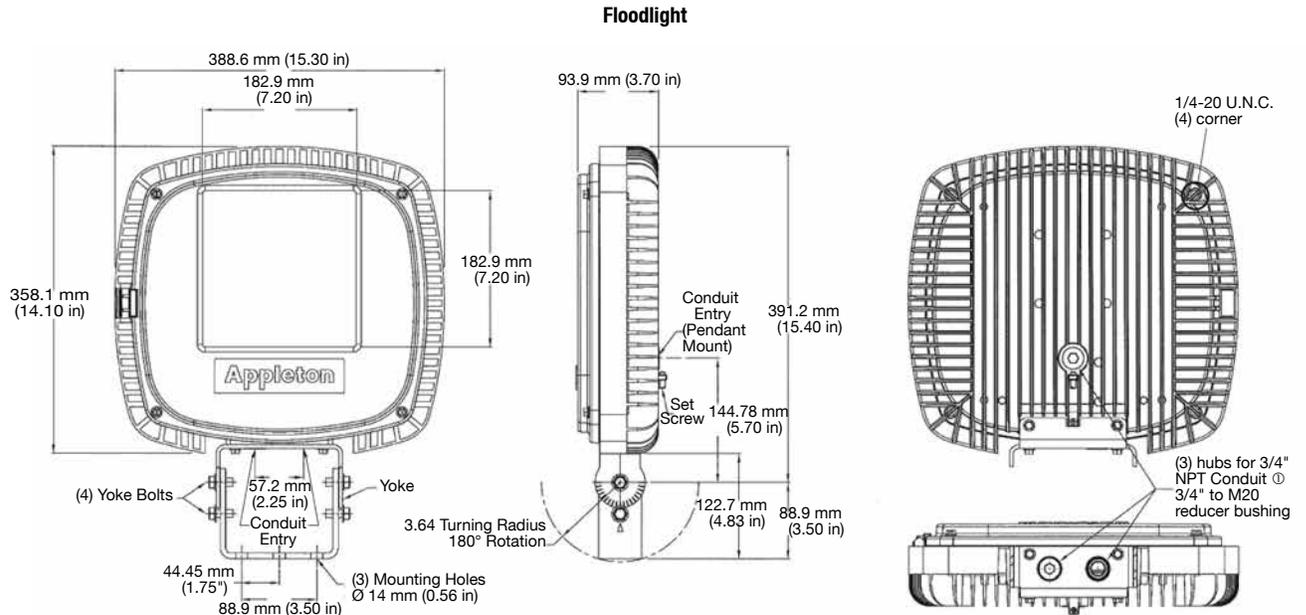
LIGHTING/LED/FLOODLIGHTS: NEC/CEC, ATEX/IECEX ENCLOSED AND GASKETED

Appleton

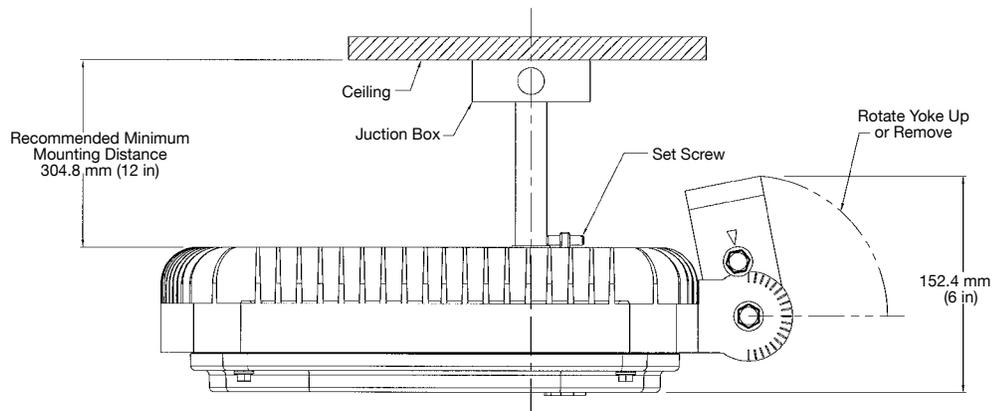
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Dimensions in Millimeters (Inches)



High Bay Pendant Mount



① 3/4" NPT/M20 adapter supplied for ATEX version.

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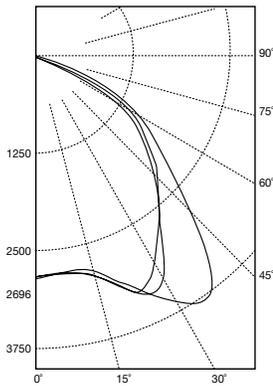
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REPORT NUMBER: **AMLED67YBU1_FLOOD**

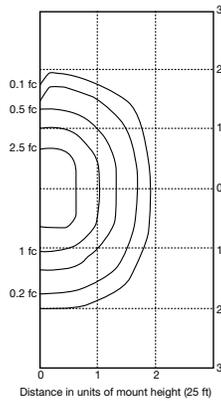
Lamps: Areamaster, High Bay Mount, LED Board 39 LEDs, Specular Reflector 6–1/2 X 6–1/2 Tapered To 3–1/2 X 3–1/2, Lens Clear

Luminaire Lumens 8238

POLAR CANDELA DISTRIBUTION



ISOCANDELA CURVES



Zonal Lumen and Percentage at 25 °C (77 °F)

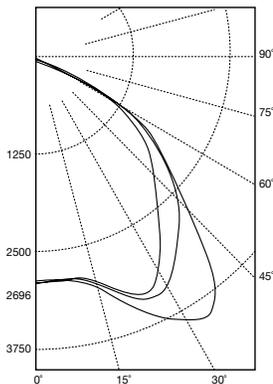
Zone	Lumens	% Lamp	% Fixture
0-10	245.6	N.A.	3.0
10-20	771.8	N.A.	9.4
20-30	1431	N.A.	17.4
30-40	1842	N.A.	22.4
40-50	1785	N.A.	21.7
50-60	1448	N.A.	17.6
60-70	667.1	N.A.	8.1
70-80	43.8	N.A.	0.5
80-90	4.5	N.A.	0.1

REPORT NUMBER: **AMLED67YBU1_Highbay**

Lamps: Areamaster, High Bay Mount, LED Board 39 LEDs, Specular Reflector 6–1/2 X 6–1/2 Tapered To 3–1/2 X 3–1/2, Lens Clear

Luminaire Lumens 8333

POLAR CANDELA DISTRIBUTION



Zonal Lumen Summary and Percentage at 25 °C (77 °F)

Zone	Lumens	% Lamp	% Fixture
0-30	2434	N.A.	29.2
0-40	4283	N.A.	51.6
0-60	7553	N.A.	90.6
60-90	780	N.A.	9.4
0-90	8333	N.A.	100.0
90-180	0	N.A.	0
0-180	8333	N.A.	100.0

Zonal Lumen and Percentage at 25 °C (77 °F)

Zone	Lumens	% Lamp	% Fixture
0-10	244.8	N.A.	2.9
10-20	764.2	N.A.	9.2
20-30	1425	N.A.	17.1
30-40	1849	N.A.	22.2
40-50	1787	N.A.	21.4
50-60	1483	N.A.	17.8
60-70	731.0	N.A.	8.8
70-80	46.7	N.A.	0.6
80-90	2.4	N.A.	0.0