

## **ADDENDUM NO. 2**

**DATE:** October 20, 2021  
**TO:** All Potential Proposers  
**FROM:** Taylor Childress, Procurement Specialist, City of Knoxville  
**SUBJECT:** Addendum No. 1 to ITB- High Mast Replacement

**PROPOSALS TO BE OPENED:** November 5, 2021 11:00 AM (Eastern Time)

This addendum is being published to provide clarification regarding the above referenced ITB. This addendum becomes a part of the contract documents and modifies the original specifications as follows:

Items for Clarification:

- 1. Question: Do you have cut sheet on fixtures?**

**Response: Please see below.**

Catalog Number	
Notes	Type

## HMLED3

### LED High Mast Lighting



#### Mechanical

Rugged die cast, low copper content aluminum 380 alloy electrical and optical housing are polyester powder coated with super durable paint for durability and corrosion resistance. Rigorous pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 5,000 hours exposure to salt fog chamber (per ASTM B 117). Four bolt horizontal arm mount with  $\pm 5$  degree vertical adjustment provides 3G vibration rating per ANSI C136. Mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8"). Two captive bolts disengage top electrical cover for easy access to LED drivers, surge protection, and terminal block. IP66 rated LED modules, IP65 electrical assembly per IEC60068-2-3. Luminaire electrical and optical housing ship complete in one carton facilitating installation and minimizing carton disposal at jobsite.

#### Electrical

Quick disconnect connectors for ease of installation and maintenance. Extreme surge protection meets 20KV/1 OKA per ANSI/IEEE C62.41. Driver meets maximum total harmonic distortion (THD) of 20% and is ROHS compliant. A three stage terminal block is standard for ease of installation. Minimum operating temperature is -40C. Electronic driver has an expected life of 100,000 hours at 25C.

#### Optical

PCB mounted LED technology comprised of multi-cluster LED's on single metal core board, Color temperature options of 3000K, 4000K and 5000K with CRI of 70 minimum. Borosilicate prismatic glass optics ensure longevity and minimize dirt depreciation. Zero uplight optics reduce sky glow and meets Dark Sky requirements. Prismatic glass optics provide overlapping pattern on application space eliminating dark spots. Prismatic glass optics minimize direct view of LED, reducing glare. Rotatable optic assembly provides alignment of asymmetric distributions to roadway.

#### Controls (Optional)

Controls options include the PR3 and PR7 locking style photocontrol receptacles. The PR7 receptacle option is factory pre-wired to dimming leads of drivers.

PCSS - Premium solid state locking style photocontrol (10 year rated life)

PCL1 - Extreme long life solid state locking-style photocontrol (20 year rated life)

**Field Adjustable Output (AO) module** — An onboard device that adjusts the light output and input wattage to meet site specific requirements, allowing a single fixture configuration to be flexibly applied in many different applications. The AO module is pre-set at the factory to position number 8.

#### Testing Compliance

See Holophane HMAO-LED Validation Test Specification — Luminaire conforms to the following standards:

- ANSI/IEEE C62.41:2002 - Surge protection.
- ANSI C82.77:2002 - Harmonic distortion.
- ANSI C136.31:2001 - Luminaire vibration.
- ASTM B117:2003 - Salt spray test.
- FCC title 47 CFR Part 18 - Federal Communications Commission.
- IEC 60068 - Environmental testing.
- IEC 60529:1999 - Degrees of protection provided by enclosure (IP) IEC 61000 - Electromagnetic Compatibility testing (EMC).
- IEEE 519 - Harmonic control in Electrical Power systems.
- UL-1598, 40C, Wet Location - Safety listing.
- DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

#### Manufacturing

Manufactured in Crawfordsville, Indiana. ARRA compliant. Test 100% electrical of all luminaires before shipment. No less than five (5) years experience in manufacturing LED-based products.

#### Buy American

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to [www.acuitybrands.com/resources/buy-american](http://www.acuitybrands.com/resources/buy-american) for additional information.

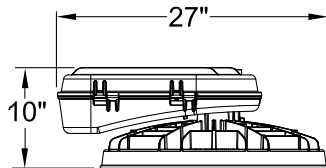
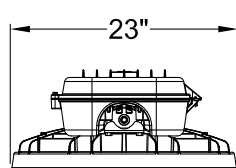
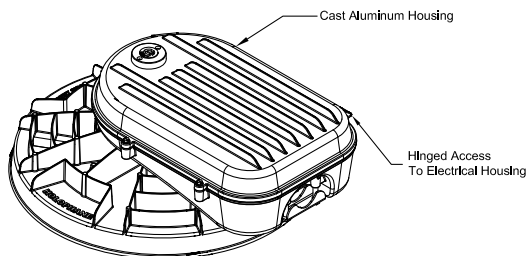
#### Warranty

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/support/customer-support/terms-and-conditions](http://www.acuitybrands.com/support/customer-support/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.



## DIMENSIONAL DATA



Weight = 52 lbs. max (See Table on Page 6 for Details)  
EPA = 1.30 sq. ft  
UL1598, 40°C, Wet location PK2, PK3, PK4  
UL1598, 50°C, Wet location PK1

# HMLED3

LED High Mast Luminaire



## ORDERING INFORMATION

**Example:** HMLED3 PK4 40K HVOLT DGRA AW PR7

Series	Performance Package	Color temperature	Voltage	Housing Color	Optical	Options
HMLED3	PK1 31,000 Lumens	30K 3000K CCT	MVOLT Auto-Sensing Voltage (120 - 277 V)	CTBS As Specified	LN Long and Narrow	A0 Field Adjustable Output
	PK2 42,000 Lumens	40K 4000K CCT	HVOLT Auto-Sensing Voltage (347 - 480 V)	DGRA Gray	MAS Medium, Asymmetric	FD1 Single Fuse Disconnect
	PK3 63,000 Lumens	50K 5000K CCT		DGHA Graphite	NAS Narrow, Asymmetric	FD2 Double Fuse Disconnect
	PK4 85,000 Lumens			DBKA Black	FAS Forward Throw, Asymmetric	PR3 3 Pin NEMA Receptacle
				DBZA Bronze	AN Area Narrow	PR7 7 Pin NEMA Receptacle
				DWHA White	AW Area Wide	PCSS DTL Solid-State Lighting Photocontrol 120-277V
						PCL1 DTL DLL Photocontrol for 120-277V
						PCL3 DTL Twist-off Photocontrol for 347V
						PCL4 DTL Twist-off Photocontrol for 480V
						SH Shorting Cap
						50C PK2/PK3 Only. Drive current reduced to provide 95% light output with surge rating 10 kV/5kA for this option only.

Accessories: Order as separate catalog number.	
HMLED3FUS10R	Single Fuse Accessory
HMLED3FUS20R	Double Fuse Accessory
HMLED3D90	90 Degree Shield
HMLED3D120	120 Degree Shield
HMLED3D180	180 Degree Shield

# HMLED3

## LED High Mast Luminaire

PERFORMANCE PACKAGE	DISTRIBUTION	SYSTEM WATTS	3000K		4000K		5000K	
			LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
PK1	LN	209	31,178	149	32,718	157	34,065	163
	NAS		28,697	137	30,114	144	31,354	150
	MAS		28,679	137	30,095	144	31,335	150
	FAS		25,861	124	27,138	130	28,255	135
	AN		31,291	150	32,836	157	34,188	164
	AW		30,208	145	31,700	152	33,005	158
PK2	LN	319	44,169	138	46,349	145	48,258	151
	NAS		40,654	127	42,662	134	44,418	139
	MAS		40,628	127	42,635	134	44,390	139
	FAS		36,636	115	38,445	121	40,028	125
	AN		44,328	139	46,517	146	48,433	152
	AW		42,795	134	44,908	141	46,757	147
PK3	LN	475	63,676	134	66,820	141	69,572	146
	NAS		58,609	123	61,503	129	64,036	135
	MAS		58,572	123	61,464	129	63,995	135
	FAS		52,816	111	55,424	117	57,706	121
	AN		63,906	135	67,061	141	69,823	147
	AW		61,695	130	64,741	136	67,407	142
PK4	LN	627	81,801	130	85,840	137	89,375	143
	NAS		75,292	120	79,010	126	82,263	131
	MAS		75,245	120	78,960	126	82,212	131
	FAS		67,850	108	71,200	114	74,132	118
	AN		82,097	131	86,150	137	89,698	143
	AW		79,256	126	83,170	133	86,595	138

	Input Operating Amps					
	120V	208V	240V	277V	347V	480V
PK1	1.77	1.01	0.90	0.79	0.62	0.45
PK2	2.69	1.54	1.34	1.13	0.94	0.68
PK3	3.99	2.28	1.99	1.73	1.40	1.01
PK4	5.29	3.05	2.62	2.29	1.85	1.33

Luminaire Ambient Temperature (LAT) Factor				
0C	15C	25C	35C	40C
1.05	1.02	1.00	0.98	0.97

Adjustable Output Reponse (AO)		
AO Position	% Lumen Output	% Wattage
1	41%	34%
2	57%	49%
3	67%	61%
4	80%	75%
5	88%	85%
6	100%	100%
7	100%	100%
8	100%	100%

Lumen Package	LLD			
	25,000 hours	50,000 hours	75,000 hours	100,000 hours
PK1	0.96	0.93	0.90	0.87
PK2	0.95	0.91	0.87	0.83
PK3	0.95	0.90	0.85	0.80
PK4	0.94	0.89	0.84	0.80

**End of Addendum. 2**