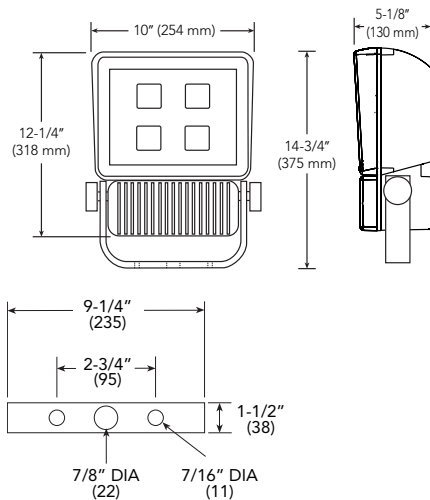




Specifications

EPA:	0.96 ft ² 0.089 m ²
Width:	10"
Depth:	254 mm
Height:	5-1/8"
	130 mm
Height:	14-3/4"
	375 mm
Height:	12-1/4"
	318 mm
Weight:	24.1lbs

DIMENSIONS



YOKE FOOT PRINT

8100HL LED FLOOD

Hazardous Location

163W; 18,000 Lumens; Yoke Mount

HIGHLIGHTS

- COB technology with a precision optical system creating beam uniformity and superior glare control
- Expected service life of over 100,000 hours
- Corrosion resistant, zinc-infused, durable TGIC thermoset powder coat finish
- Copper free aluminum housing
- IP67 rated
- 3G rated

5
YEAR
warranty



IP67



LUMEN PACKAGES

	NFL	MFL	FL	WFL	HFL	VFL
Delivered Lumens	15,140	11,960	11,835	12,095	13,735	13,735
Watts	129	129	129	129	129	129
LPW	117	94	92	95	107	107
Peak Candela	57,145	16,310	10,022	8,085	17,644	17,644

Note: Information based on 4000K @ P3 PerformancePackage

ORDERING INFORMATION

EXAMPLE: 8100HL LED P4 40K MVOLT MFL YM SMSA18 LPI BL

Series		Performance Package		Color Temperature		Voltage		Distribution		Mounting	
8100HL LED		P1	100 Watt	30K	3000K CCT	MVOLT	(120-277 V)	NFL	Narrow	YM	Yoke Mount
		P2	110 Watt	40K	4000K CCT			MFL	Medium		
		P3	129 Watt	50K	5000K CCT			FL	Flood		
		P4	163 Watt					WFL	Wide		
								HFL	Horizontal		
VFL	Vertical										
Mounting Accessories (shipped separately)											
Accessories						Finish					
EWM_	Ext. Wall Mount Available 12"- 48" in 6" increments	PATS_/_ ¹	Pole Arm Twin Square 4", 5", or 6" Pole 12", 18", or 24" length (i.e. PATS6/12)	External ² (shipped separately)		BL	Black	SND	Sand		
PAR_/_	Pole Arm Round 4", 5", or 6" Pole 12", 18", or 24" length (i.e. PAR5/18)	PMSA_	Pole Mount Splice Access	BD	Barn Doors	BZ	Bronze	STG	Steel Gray		
PAS_/_	Pole Arm Square 4", 5", or 6" Pole 12", 18", or 24" length (i.e. PAS4/24)	PMT	Pole Mount Tee	FGS	Full Glare Shield	DDB	Dark Bronze	TVG	Terra Verde Green		
PATR_/_ ¹	Pole Arm Twin Round 4", 5", or 6" Pole 12", 18", or 24" length (i.e. PATR6/12)	PSSA	Ped. Stanchion Splice Access	HGS	Half Glare Shield	DNA	Natural Aluminum	WH	White		
		SMSA_	Stan. Mt Splice Access available 12"-48" in 6" increments	WRG	Wire Rock Guard	GN	Green	CF	Custom		
		SMT ¹	Stanchion Mount Tee	Options (shipped installed)		GR	Gray	_Z ⁵	Zinc Undercoat (i.e. BLZ)		
		Notes: Mounting Accessories are for fixture mounting only. All electrical connections must be made in an approved hazardous location J-Box									

ELECTRICAL LOAD

Light Engines	Drive Current (mA)	System Watts	Current (A)			
			120	208	240	277
P1	600mA	100W	0.83	0.48	0.42	0.36
P2	750mA	110W	0.92	0.53	0.46	0.40
P3	830mA	129W	1.08	0.62	0.54	0.47
P4	1000mA	163W	1.36	0.78	0.68	0.59

PROJECTED LED LUMEN MAINTENANCE

Data references the extrapolated performance projections for the Fixture platform in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	P1			
	1.00	0.94	0.90	0.84
	P2			
	1.00	0.93	0.90	0.83
	P3			
	1.00	0.93	0.90	0.83
	P4			
	1.00	0.93	0.90	0.83

Notes:

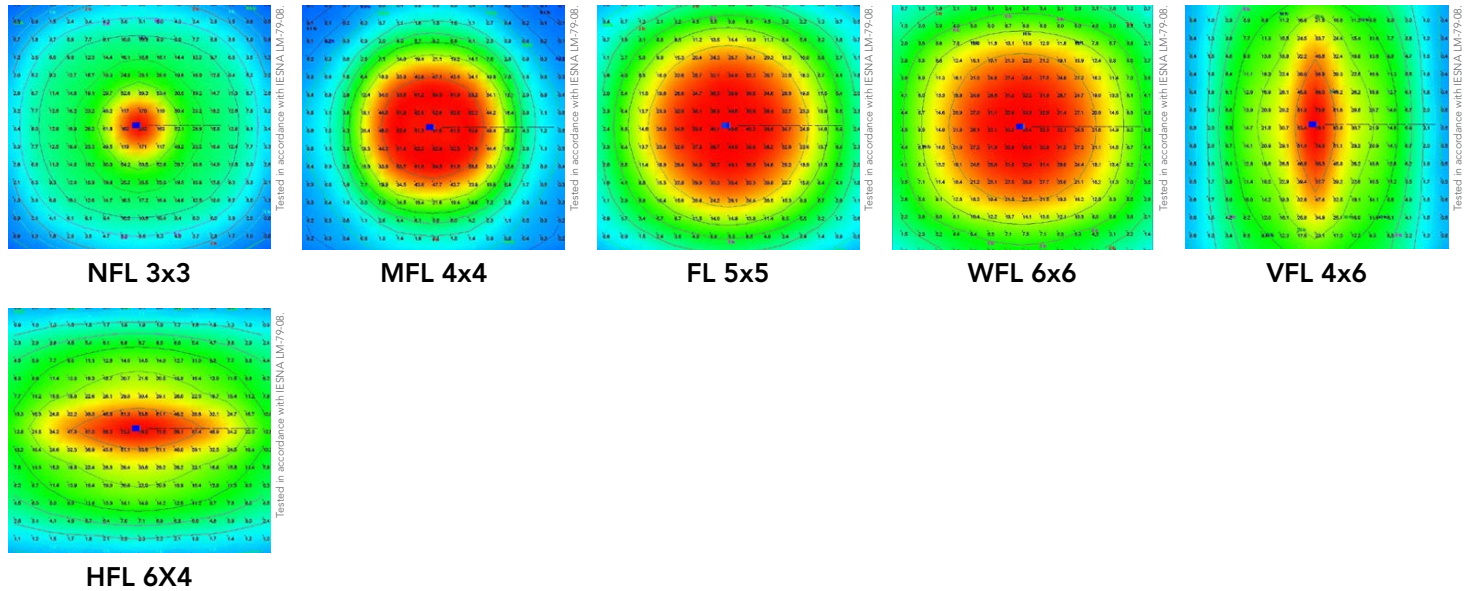
- These mounting accessories are dual mounts and come with 2 heads for each mounting.
- Options are mutually exclusive.
- For use with 120 volt trailing edge dimmers.
- IDIM not available with P4 performance package.
- Zinc undercoat for harsh environments.

LUMEN AMBIENT TEMPERATURE (LAT) MULTIPLIERS

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C	32°F
10°C	50°F
20°C	68°F
25°C	77°F
30°C	86°F
40°C	104°F
	1.02
	1.01
	1.00
	1.00
	1.00
	0.99

PERFORMANCE DATA



To see complete photometric reports or download .ies files for this product, visit www.hydrel.com

LUMEN OUTPUT

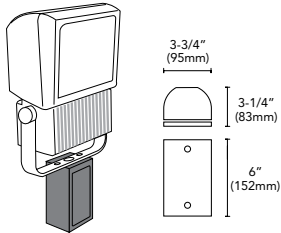
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Distribution Type	Field Angle		Beam Angle		30K (3000K, 70CRI)			40K (4000K, 70CRI)			50K (5000K, 70CRI)		
			°H	°V	°H	°V	Max Cd	Lumens	LPW	Max Cd	Lumens	LPW	Max Cd	Lumens	LPW
P1	100W	NFL	50	54	21	22	38,708	10,249	102	39,110	10,362	104	32,422	9,749	97
		MFL	66	64	54	46	11,796	8,620	86	11,163	8,185	82	11,806	8,355	84
		FL	84	87	61	70	6,704	7,853	79	6,859	8,100	81	6,776	7,737	77
		WFL	98	101	73	73	5,335	8,052	81	5,533	8,278	83	5,290	7,888	79
		HFL	106	72	82	22	11,736	9,188	92	12,076	9,400	94	10,911	9,058	91
		VFL	72	106	22	82	11,736	9,188	92	12,076	9,400	94	10,911	9,058	91
P2	110W	NFL	50	54	21	22	44,397	11,755	107	44,859	11,885	108	37,188	11,182	102
		MFL	66	64	54	46	13,529	9,887	90	12,803	9,389	85	13,541	9,583	87
		FL	84	87	61	70	7,689	9,008	82	7,867	9,290	84	7,772	8,874	81
		WFL	98	101	73	73	6,119	9,236	84	6,347	9,495	86	6,067	9,047	82
		HFL	106	72	82	22	13,461	10,539	96	13,851	10,782	98	12,515	10,389	94
		VFL	72	106	22	82	13,461	10,539	96	13,851	10,782	98	12,515	10,389	94
P3	129W	NFL	50	54	21	22	56,557	14,975	116	57,145	15,140	117	47,373	14,245	111
		MFL	66	64	54	46	17,235	12,595	98	16,310	11,960	94	17,250	12,208	95
		FL	84	87	61	70	9,795	11,475	89	10,022	11,835	92	9,901	11,305	88
		WFL	98	101	73	73	7,795	11,765	91	8,085	12,095	95	7,729	11,525	90
		HFL	106	72	82	22	17,148	13,425	104	17,644	13,735	107	15,943	13,235	103
		VFL	72	106	22	82	17,148	13,425	104	17,644	13,735	107	15,943	13,235	103
P4	163W	NFL	50	54	21	22	69,226	18,329	112	69,945	18,531	114	57,985	17,436	107
		MFL	66	64	54	46	21,096	15,416	95	19,963	14,639	90	21,114	14,943	92
		FL	84	87	61	70	11,989	14,045	86	12,267	14,486	89	12,119	13,837	85
		WFL	98	101	73	73	9,541	14,400	88	9,896	14,804	91	9,460	14,107	87
		HFL	106	72	82	22	20,989	16,432	101	21,596	16,812	103	19,514	16,200	99
		VFL	72	106	22	82	20,989	16,432	101	21,596	16,812	103	19,514	16,200	99

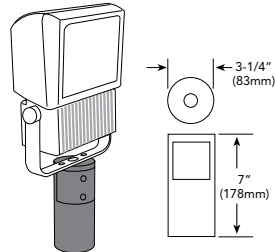
OPERATING TEMPERATURE: -30°C through 50°C (P1 & P2) -30°C through 40°C (P3 & P4).

MOUNTING OPTIONS

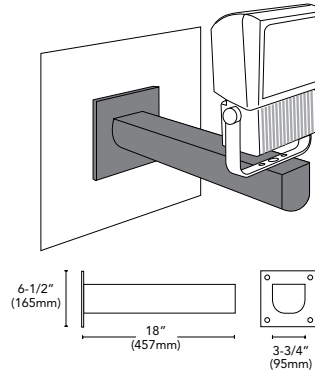
ARJB
ARCHITECTURAL JUNCTION BOX



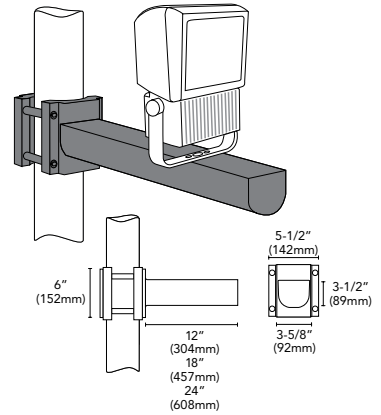
PMSA
7" POLE MOUNT
WITH SPLICE ACCESS
EPA: 0.13



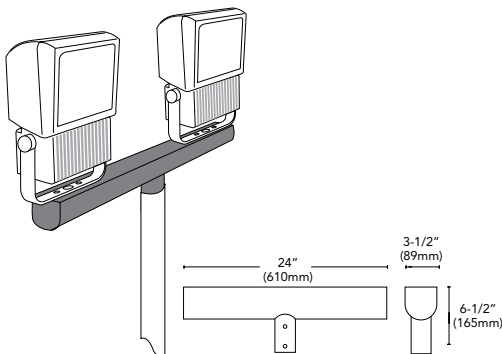
EWM
EXTENDED WALL MOUNT
18" - 36" LENGTHS



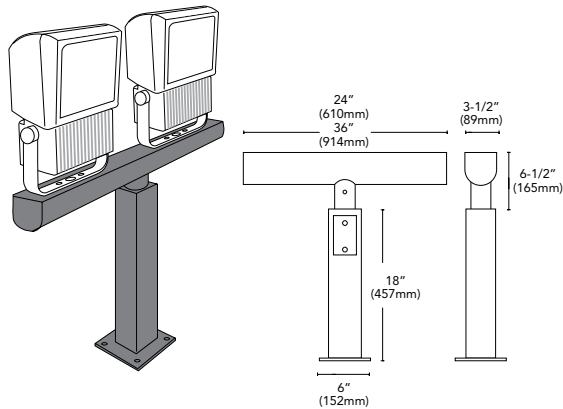
PAR/PAS & PATR/PATS (TWIN ARM)
POLE ARM ROUND/SQUARE
12" - 24" LENGTH AVAILABLE
EPA: 0.52 per 18" arm



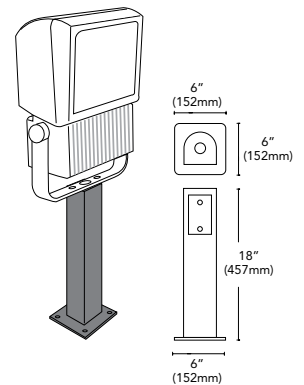
PMT
POLE MOUNT TEE
EPA: 0.70



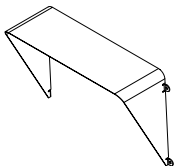
SMT
STANCHION MOUNT TEE



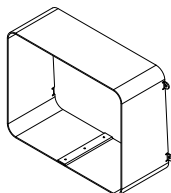
SMSA/PSSA
SMSA STANCHION AVAILABLE IN 12" - 48"
HEIGHTS (example: SMSA18, SMSA24)
PSSA Pedestal Stanchion - 7" HEIGHT



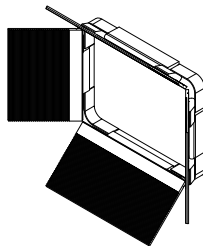
EXTERNAL ACCESSORIES



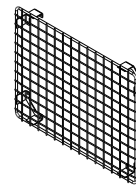
HGS - Half Glare Shield



FGS - Full Glare Shield



BD - Barn Doors



MRG - Wire Rock Guard

HAZARDOUS AREAS

Class 1	Flammable gases or vapors, are present in the air in quantities sufficient to produce explosive or ignitable mixtures.
Division	Division 2: Substance present in abnormal conditions, such as container failure or system breakdown
Group (meets A - D)	Group A: Acetylene Group B: Hydrogen, fuel or combustible gases with more than 30% Hydrogen, or gases of equivalent hazard such as butadiene, ethylene, oxide, propylene oxide and acrolein Group C: Carbon monoxide, ether, hydrogen sulfide, morphine, cyclopropane, ethyl, ethylene, or gases or equivalent hazard Group D: Gasoline, acetone, ammonia, benzene, butane, cyclopropane, ethanol, hexane, methanol, methane, vinyl chloride, natural gas, naphtha, propane or gases of equivalent hazard
Class 2	Dusts
Division	Division 2: Dust not normally suspended in an ignitable concentration (but may accidentally exist). Dust layers are present.
Group (meets F - G)	Group F: Carbon dusts (some are conductive,*and all are explosive) Group G: Flour, starch, grain, combustible plastic or chemical dust (explosive)
Class 3	Fibers and Flyings
Division	Division 2: Stored or handled in storage (exclusive of manufacturing)
Group	Textiles, wood-working, etc. (easily ignitable, but not likely to be explosive)

Note: The specific hazardous materials within each group and their automatic ignition temperatures can be found in Article 500 of the National Electrical Code

SPECIFICATIONS AND FEATURES

CONSTRUCTION: Die cast copper-free aluminum (A360) housing & doors with separate optical and driver compartments to ensure thermal isolation of the electronic drivers.

LED: Chip on board COB, correlated color temperatures (CCT) of 3000K, 4000K, or 5000K (>70 CRI).

OPTICS: NEMA flood (3x3 through 6x6), horizontal flood (6x4), vertical flood (4x6).

LENS: Tempered borosilicate glass for maximum resistance to impact and thermal shock.

MOUNTING: Aluminum yoke & stainless steel locking hardware with infinite aiming adjustment capabilities and a wide array of mounting accessories. The 8100 series can withstand up to a 3G vibration load rating per ANSI/IEEE C136.31. Luminaires are provided with 3' of mineral cable.

GLARE CONTROL: External glare control options include barn doors, full glare shields and half glare shields.

ELECTRICAL: MVOLT (120-277) LED power supply. 100-163 watts, minimum of L83 at 100,000 hours at 25°C. Class 1 electronic driver has a power factor >90%, THD<10%, and has an expected life of 100,000 hours with <1% failure rate. 10kV surge protection meets a minimum Category C low operation per ANSI/IEEE C62.41.2.

FINISH: Exterior parts are protected by a zinc-infused super durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climates without cracking or peeling.

LISTING: IP67, CSA, CSA_{US}

GOVERNMENT PROCUREMENT

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to 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

Consult factory for details.

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. Specifications subject to change without notice.