



# HLF1

## High Lumen LED Flood Luminaire



Catalog  
Number

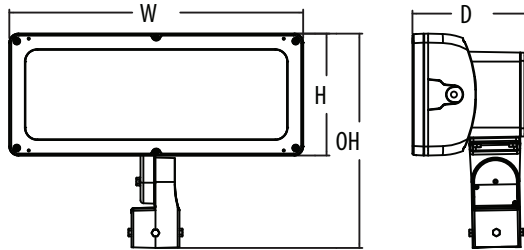
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

### Specifications

<b>EPA:</b>	3.6 ft <sup>2</sup> (0.34 m <sup>2</sup> )
<b>Depth:</b>	10" (25.4 cm)
<b>Width:</b>	25" (63.5 cm)
<b>Height:</b>	10" (25.4 cm)
<b>Overall Height:</b>	19" (48.3 cm)
<b>Weight:</b>	61 lbs (27.6 kg)



### Introduction

The Lithonia High Lumen LED Flood Size 1 (HLF1) is capable of replacing 400W metal halide luminaires while delivering exceptional energy savings. Its long service life of over 100,000 hours or 20+ years of nighttime use makes it ideal for high mounting applications, eliminating expensive lamp changes. The instant-on feature eliminates the long strike and re-strike times associated with HID floods. Available in both yoke and slipfitter mounts, the HLF1 is easy to install on existing poles and brackets.

### Ordering Information

**EXAMPLE:** HLF1 LED P1 40K WFL MVOLT IS DDBXD

HLF1 LED							
Series	Performance package	Color temperature	Distribution	Voltage	Mounting	Options	Finish (required)
HLF1 LED	P1 P2 P3	30K 3000 K 40K 4000 K 50K 5000 K	VNSP Very Narrow Spot <sup>1</sup> NSP Narrow Spot SP Spot NFL Narrow Flood MWL Medium Wide Flood MFL Medium Flood WFL Wide Flood WFR Wide Flood, Rectangular	MVOLT <sup>2</sup> 120 <sup>2</sup> 208 <sup>2</sup> 240 <sup>2</sup> 277 <sup>2</sup> 347 480	<b>Shipped included</b> IS Integral slipfitter (fits 2-3/8" O.D. tenon) YKC62 Yoke with 16-3 SO cord	<b>Shipped installed</b> PER5 NEMA twist-lock receptacle only (no controls) <sup>3,4</sup> SF Single fuse (120, 277, 347V) <sup>5</sup> DF Double fuse (208, 240, 480V) <sup>5</sup> CFB Black faceplate <b>Shipped separately<sup>6</sup></b> UBV Upper/bottom visor (universal) FV Full visor WG Wire guard VG Vandal guard (polycarbonate)	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White

### Accessories

Ordered and shipped separately.

FTS C66 DDBXD U	Slipfitter for 2-3/8" to 2-7/8" O.D. tenons; mates with yoke mount (specify finish)	HLF1UBV DDBXD U	Upper/bottom visor accessory (specify finish)
DSHORT SBK U	Shorting cap <sup>7</sup>	HLF1 FV DDBXD U	Full visor accessory (specify finish)
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>7</sup>	HLF1VG DDBXD U	Vandal guard accessory (specify finish)
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) <sup>7</sup>	HLF1WG U	Wire guard accessory
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) <sup>7</sup>		

For more mounting options, visit our [Floodlighting Accessories](#) pages.  
For more control options, visit [DTL](#) and [ROAM](#) online.

### NOTES

1. VNSP includes an external reflector that ships separately. For installation instructions, refer to the instruction sheet provided with the reflector.
2. MVOLT driver operates on any line voltage from 120-277V. Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options).
3. Specifies a ROAM® enabled luminaire with 0-10V dimming capability. Additional hardware and services required for ROAM® deployment; must be purchased separately. Call 1-800-442-6745 or email: [sales@roamservices.net](mailto:sales@roamservices.net).
4. For units with a photocontrol receptacle, the mounting must be restricted to ± 45° from horizontal aim per ANSI C136.10-2010.
5. Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
6. Also available as separate accessories; see Accessories information at left.
7. Requires luminaire to be specified with PER5 option. Ordered and shipped as a separate line item.



## Performance Data

### 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. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Dist. Type	Field Angle		Beam Angle		30K (3000 K, 70 CRI)			40K (4000 K, 70 CRI)			50K (5000 K, 70 CRI)		
			°H	°V	°H	°V	Max Cd	Lumens	LPW	Max Cd	Lumens	LPW	Max Cd	Lumens	LPW
P1	166W	VNSP	30	30	11	10	217,885	15,596	94	225,623	16,150	97	228,686	16,370	99
		NSP	50	49	26	25	63,943	18,059	109	66,214	18,700	113	67,113	18,954	114
		SP	52	51	31	30	59,950	18,756	113	62,079	19,421	117	62,922	19,686	119
		NFL	76	75	49	48	27,704	18,805	113	28,688	19,472	117	29,078	19,737	119
		MWL	92	91	68	67	16,003	18,745	113	16,571	19,410	117	16,796	19,674	119
		WFR	108	56	93	28	17,644	16,998	102	18,271	17,601	106	18,519	17,840	107
		MFL	109	114	84	103	9,070	18,706	113	9,410	19,370	117	7,296	19,633	118
		WFL	124	133	107	113	6,936	18,544	112	7,196	19,203	116	8,533	19,464	117
P2	246W	VNSP	30	30	11	10	302,828	21,677	88	313,583	22,446	91	317,840	22,751	92
		NSP	50	49	26	25	88,871	25,099	102	92,027	25,990	106	93,277	26,344	107
		SP	52	51	31	30	83,322	26,068	106	86,281	26,993	110	87,452	27,360	111
		NFL	76	75	49	48	38,505	26,136	106	39,873	27,064	110	40,414	27,432	112
		MWL	92	91	68	67	22,241	26,053	106	23,031	26,978	110	23,344	27,344	111
		WFR	108	56	93	28	24,523	23,624	96	25,394	24,463	99	25,739	24,795	101
		MFL	101	114	84	103	12,834	26,416	107	13,278	27,354	111	10,294	27,725	113
		WFL	124	133	107	113	9,815	26,187	106	10,154	27,117	110	12,040	27,486	112
P3	295W	VNSP	28	28	10	9	400,242	25,129	85	425,929	26,741	91	427,942	26,868	91
		NSP	45	45	23	23	121,824	28,765	98	129,642	30,611	104	130,255	30,756	104
		SP	49	48	29	29	106,286	29,737	101	113,107	31,644	107	113,642	31,795	108
		NFL	72	71	46	45	48,277	29,491	100	51,375	31,383	106	51,618	31,532	107
		MWL	87	85	64	63	28,665	29,357	100	30,504	31,240	106	30,648	31,388	106
		WFR	108	56	93	28	27,805	26,786	91	29,589	28,504	97	29,729	28,640	97
		MFL	101	114	84	103	12,468	30,670	104	13,278	32,638	111	10,194	32,792	111
		WFL	127	130	112	112	9,535	30,366	103	12,422	32,315	110	11,923	32,467	110

### 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	1.05
10°C	50°F	1.03
20°C	68°F	1.01
25°C	77°F	1
30°C	86°F	0.98
40°C	104°F	0.95

### Projected LED Lumen Maintenance

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	HLF1 LED P1			
	1	0.98	0.96	0.93
	HLF1 LED P2			
	1	0.98	0.96	0.93
1	HLF1 LED P3			
	1	0.93	0.9	0.83

### Electrical Load

Power Package	System Watts	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	166W	1.4	0.8	0.7	0.7	0.5	0.4
P2	246W	2.1	1.2	1.0	0.9	0.7	0.6
P3	295W	2.5	1.4	1.2	1.1	0.9	0.7

## Mounting, Options and Accessories



IS - Integral slipfitter  
(fits 2-3/8" O.D. tenon)



YKC62  
Yoke with 16-3 SO cord



UBV  
Upper/Bottom visor (universal)



FV  
Full visor



VG  
Vandal guard



WG  
Wire guard



CFB  
Black faceplate

## Optics

Depending on the distribution chosen, luminaires are built using internal and external reflectors or hybrid silicone optical technology.



Internal reflectors  
MFL, WFL



Hybrid silicone optics  
NSP, SP, NFL, MWL, WFR



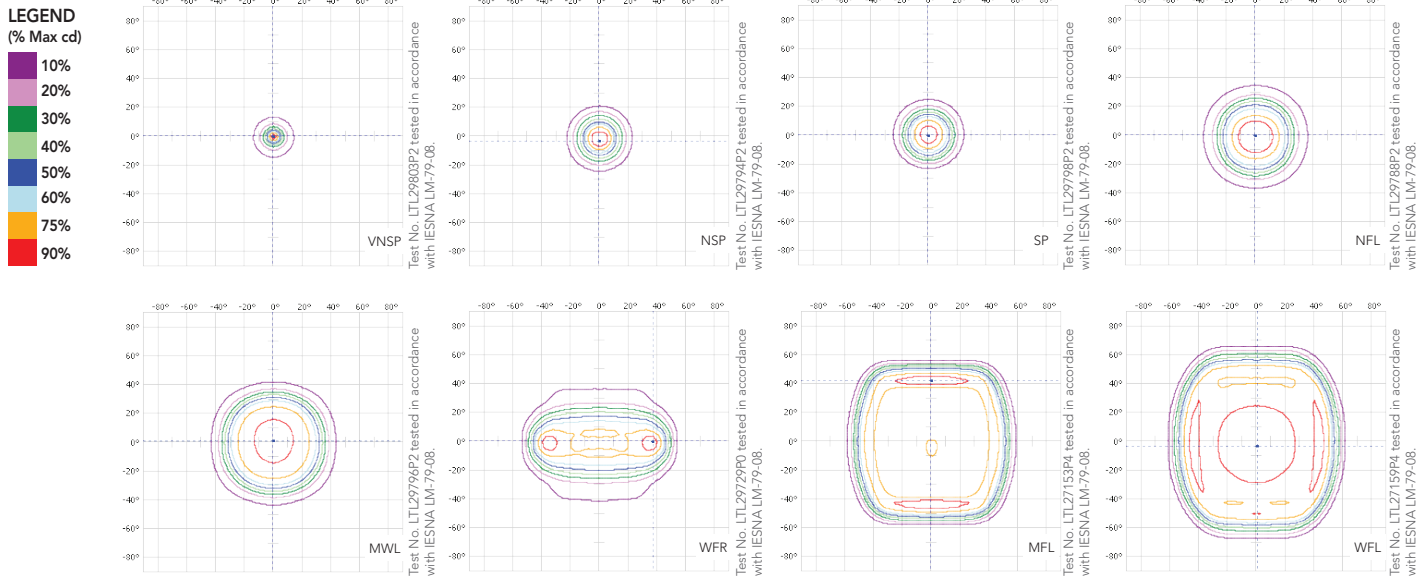
Internal and external reflectors  
VNSP



## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [HLF Size 1 homepage](#).

Isofootcandle plots for the HLF1 LED P3 40K. Distances are in units of mount height (20ft).



## Mounting Bracket Summary

The following is a list of approved mounting brackets for use with the HLF1. These are rated for use in up to 90mph wind zones. Mounting brackets are ordered separate from the luminaires.

*Aluminum Bullhorns	Catalog Number	Weight (lbs.)	Max Luminaire Weight/Arm (lbs.)	Bracket EPA ft <sup>2</sup> (m <sup>2</sup> )	Bracket Configuration	Weight of Luminaires (lbs.)	Luminaire Tilt	Luminaire EPA ft <sup>2</sup> (m <sup>2</sup> )	Total EPA ft <sup>2</sup> (m <sup>2</sup> )
<p>RBA28</p>	*RBA28	8.4	100	1.3 (0.12)	2 @ 180°	2 x 61 = 122	0°	2.4 (0.22)	6.1 (0.57)
							15°	2.5 (0.23)	6.3 (0.59)
							30°	2.8 (0.26)	6.9 (0.64)
							45°	3.5 (0.33)	8.3 (0.77)
							60°	3.6 (0.34)	8.5 (0.79)
							90°	3.6 (0.34)	8.5 (0.79)
<p>RBA32</p>	*RBA32	14.3	100	1.7 (0.15)	3 @ 120°	3 x 61 = 183	0°	2.4 (0.22)	8.9 (0.83)
							15°	2.5 (0.23)	9.2 (0.85)
							30°	2.8 (0.26)	10.1 (0.94)
							45°	3.5 (0.33)	12.2 (1.13)
							60°	3.6 (0.34)	12.5 (1.16)
							90°	3.6 (0.34)	12.5 (1.16)
<p>RBA38</p>	*RBA38	12.5	100	2.0 (0.18)	3 @ 180°	3 x 61 = 183	0°	2.4 (0.22)	9.2 (0.85)
							15°	2.5 (0.23)	9.5 (0.88)
							30°	2.8 (0.26)	10.4 (0.97)
							45°	3.5 (0.33)	12.5 (1.16)
							60°	3.6 (0.34)	12.8 (1.19)
							90°	3.6 (0.34)	12.8 (1.19)
<p>RBA49</p>	*RBA49	17.5	100	2.2 (0.20)	4 @ 180°	4 x 61 = 244	0°	2.4 (0.22)	11.8 (1.10)
							15°	2.5 (0.23)	12.2 (1.13)
							30°	2.8 (0.26)	13.4 (1.24)
							45°	3.5 (0.33)	16.2 (1.51)
							60°	3.6 (0.34)	16.6 (1.54)
							90°	3.6 (0.34)	16.6 (1.54)

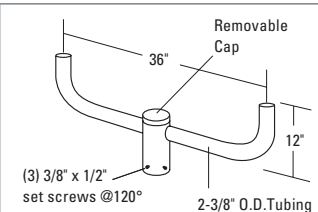
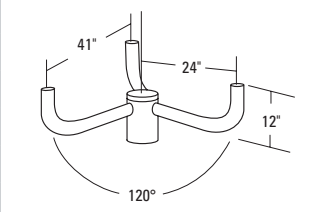
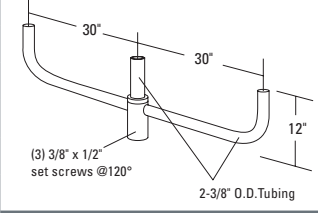
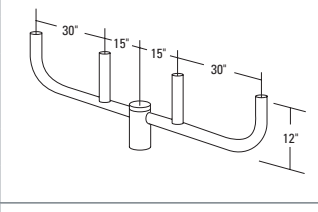
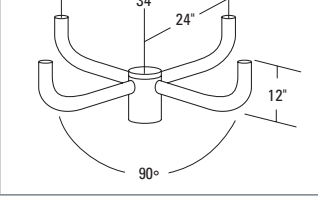
\* This can only be used with 4.0" OD tenon/pole tops



## Mounting Bracket Summary

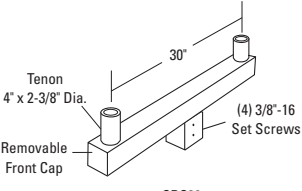
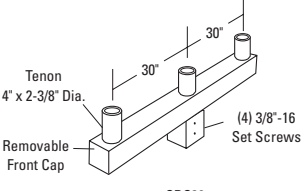
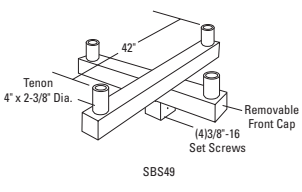
The following is a list of approved mounting brackets for use with the HLF1. These are rated for use in up to 90mph wind zones. Mounting brackets are ordered separate from the luminaires.

### Steel Bullhorns

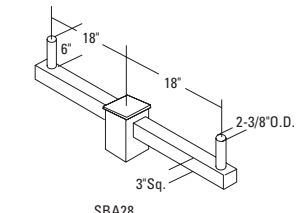
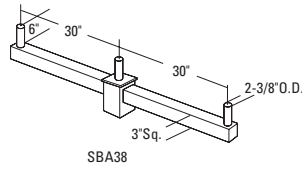
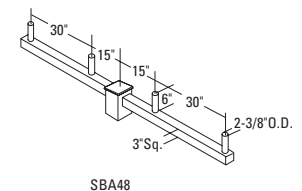
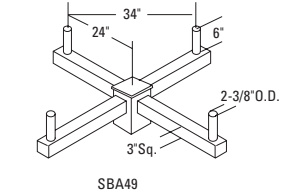
	Catalog Number	Weight (lbs.)	Max Luminaire Weight/Arm (lbs.)	Bracket EPA ft <sup>2</sup> (m <sup>2</sup> )	Bracket Configuration	Weight of Luminaires (lbs.)	Luminaire Tilt	Luminaire EPA ft <sup>2</sup> (m <sup>2</sup> )	Total EPA ft <sup>2</sup> (m <sup>2</sup> )
	B528	21	150	1.0 (0.09)	2 @ 180°	2 x 61 = 122	0°	2.4 (0.22)	5.8 (0.54)
							15°	2.5 (0.23)	6.0 (0.56)
							30°	2.8 (0.26)	6.6 (0.61)
							45°	3.5 (0.33)	8.0 (0.74)
							60°	3.6 (0.34)	8.2 (0.76)
							90°	3.6 (0.34)	8.2 (0.76)
	B532	34	150	1.3 (0.12)	3 @ 120°	3 x 61 = 183	0°	2.4 (0.22)	8.5 (0.79)
							15°	2.5 (0.23)	8.8 (0.82)
							30°	2.8 (0.26)	9.7 (0.90)
							45°	3.5 (0.33)	11.8 (1.10)
							60°	3.6 (0.34)	12.1 (1.12)
							90°	3.6 (0.34)	12.1 (1.12)
	B538	32	150	1.6 (0.14)	3 @ 180°	3 x 61 = 183	0°	2.4 (0.22)	8.8 (0.82)
							15°	2.5 (0.23)	9.1 (0.85)
							30°	2.8 (0.26)	10.0 (0.93)
							45°	3.5 (0.33)	12.1 (1.12)
							60°	3.6 (0.34)	12.4 (1.15)
							90°	3.6 (0.34)	12.4 (1.15)
	B548	44	125	2.3 (0.21)	4 @ 180°	4 x 61 = 244	0°	2.4 (0.22)	11.9 (1.11)
							15°	2.5 (0.23)	12.3 (1.14)
							30°	2.8 (0.26)	13.5 (1.25)
							45°	3.5 (0.33)	16.3 (1.51)
							60°	3.6 (0.34)	16.7 (1.55)
							90°	3.6 (0.34)	16.7 (1.55)
	B549	44	150	1.6 (0.14)	4 @ 90°	4 x 61 = 244	0°	2.4 (0.22)	11.2 (1.04)
							15°	2.5 (0.23)	11.6 (1.08)
							30°	2.8 (0.26)	12.8 (1.19)
							45°	3.5 (0.33)	15.6 (1.45)
							60°	3.6 (0.34)	16.0 (1.49)
							90°	3.6 (0.34)	16.0 (1.49)

## Mounting Bracket Summary

The following is a list of approved mounting brackets for use with the HLF1. These are rated for use in up to 90mph wind zones. Mounting brackets are ordered separate from the luminaires.

*Steel Cross Arms (Square Poles only)	Catalog Number	Weight (lbs.)	Max Luminaire Weight/Arm (lbs.)	Bracket EPA ft <sup>2</sup> (m <sup>2</sup> )	Bracket Configuration	Weight of Luminaires (lbs.)	Luminaire Tilt	Luminaire EPA ft <sup>2</sup> (m <sup>2</sup> )	Total EPA ft <sup>2</sup> (m <sup>2</sup> )
 <p>SBS28</p>	SBS28*	30	250	1.1 (0.10)	2 @ 180°	2 x 61 = 122	0°	2.4 (0.22)	5.9 (0.55)
							15°	2.5 (0.23)	6.1 (0.57)
							30°	2.8 (0.26)	6.7 (0.62)
							45°	3.5 (0.33)	8.1 (0.75)
							60°	3.6 (0.34)	8.3 (0.77)
							90°	3.6 (0.34)	8.3 (0.77)
 <p>SBS38</p>	SBS38*	42	150	1.7 (0.15)	3 @ 180°	3 x 61 = 183	0°	2.4 (0.22)	8.9 (0.83)
							15°	2.5 (0.23)	9.2 (0.85)
							30°	2.8 (0.26)	10.1 (0.94)
							45°	3.5 (0.33)	12.2 (1.13)
							60°	3.6 (0.34)	12.5 (1.16)
							90°	3.6 (0.34)	12.5 (1.16)
 <p>SBS49</p>	SBS49*	45	150	2.1 (0.20)	4 @ 90°	4 x 61 = 244	0°	2.4 (0.22)	11.7 (1.09)
							15°	2.5 (0.23)	12.1 (1.12)
							30°	2.8 (0.26)	13.3 (1.24)
							45°	3.5 (0.33)	16.1 (1.50)
							60°	3.6 (0.34)	16.5 (1.53)
							90°	3.6 (0.34)	16.5 (1.53)

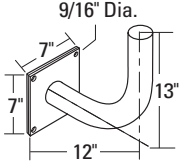
\*Requires T20 (2-3/8" max OD) tenon on pole for mounting

Aluminum Cross Arms (Square Poles only)	Catalog Number	Weight (lbs.)	Max Luminaire Weight/Arm (lbs.)	Bracket EPA ft <sup>2</sup> (m <sup>2</sup> )	Bracket Configuration	Weight of Luminaires (lbs.)	Luminaire Tilt	Luminaire EPA ft <sup>2</sup> (m <sup>2</sup> )	Total EPA ft <sup>2</sup> (m <sup>2</sup> )
 <p>SBA28</p>	SBA28-4	12	100	0.9 (0.08)	2 @ 180°	2 x 61 = 122	0°	2.4 (0.22)	5.7 (0.53)
							15°	2.5 (0.23)	5.9 (0.55)
							30°	2.8 (0.26)	6.5 (0.60)
							45°	3.5 (0.33)	7.9 (0.73)
							60°	3.6 (0.34)	8.1 (0.75)
							90°	3.6 (0.34)	8.1 (0.75)
 <p>SBA38</p>	SBA38-4	17	100	1.5 (0.13)	3 @ 180°	3 x 61 = 183	0°	2.4 (0.22)	8.7 (0.81)
							15°	2.5 (0.23)	9.0 (0.84)
							30°	2.8 (0.26)	9.9 (0.92)
							45°	3.5 (0.33)	12.0 (1.11)
							60°	3.6 (0.34)	12.3 (1.14)
							90°	3.6 (0.34)	12.3 (1.14)
 <p>SBA48</p>	SBA48-4	22	75	2.3 (0.21)	4 @ 180°	4 x 61 = 244	0°	2.4 (0.22)	11.9 (1.11)
							15°	2.5 (0.23)	12.3 (1.14)
							30°	2.8 (0.26)	13.5 (1.25)
							45°	3.5 (0.33)	16.3 (1.51)
							60°	3.6 (0.34)	16.7 (1.55)
							90°	3.6 (0.34)	16.7 (1.55)
 <p>SBA49</p>	SBA49-4	22	100	1.7 (0.15)	4 @ 90°	4 x 61 = 244	0°	2.4 (0.22)	11.3 (1.05)
							15°	2.5 (0.23)	11.7 (1.09)
							30°	2.8 (0.26)	12.9 (1.20)
							45°	3.5 (0.33)	15.7 (1.46)
							60°	3.6 (0.34)	16.1 (1.50)
							90°	3.6 (0.34)	16.1 (1.50)

## Mounting Bracket Summary

The following is a list of approved mounting brackets for use with the HLF1. These are rated for use in up to 90mph wind zones. Mounting brackets are ordered separate from the luminaires.

### Wall Mount Brackets

	Catalog Number	Weight (lbs.)	Max Luminaire Weight/Arm (lbs.)	Bracket EPA ft <sup>2</sup> (m <sup>2</sup> )	Bracket Configuration	Weight of Luminaires (lbs.)	Luminaire Tilt	Luminaire EPA ft <sup>2</sup> (m <sup>2</sup> )	Total EPA ft <sup>2</sup> (m <sup>2</sup> )
	FRWB	12	80	N/A	1	1 x 61 = 61	0°	2.4 (0.22)	N/A
							15°	2.5 (0.23)	
							30°	2.8 (0.26)	
							45°	3.5 (0.33)	
							60°	3.6 (0.34)	
							90°	3.6 (0.34)	

## FEATURES & SPECIFICATIONS

### INTENDED USE

The contemporary design of the High Lumen LED Flood reflects its embedded high performance LED technology and its versatility. It is ideal for large signage, retail, sports fields, truck yards, and many commercial applications.

### CONSTRUCTION

The High Lumen LED Flood's die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environment contaminants (IP66). Low EPA 3.6 ft<sup>2</sup> (0.34 m<sup>2</sup>) for optimized wind loading.

### 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 climate changes without cracking or peeling.

### OPTICS

Specular reflectors are engineered for superior field-to-beam ratios, uniformity, and spacing. Light engines are available in 3000 K (70 CRI min.), 4000 K (70 CRI min.) and 5000 K (70 CRI min.) configurations. Optional visors minimize uplight and reduce light trespass.

### ELECTRICAL

Light engines consist of chip-on-board (COB) LEDs directly coupled to the housing to maximize heat dissipation and promote long life (100,000 hrs at 25°C, L83). Class 1 electronic driver has a power factor >90%, THD <20%, 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.

### INSTALLATION

Integral adjustable slipfitter or yoke mounting assemblies facilitate quick and easy installation with a variety of mounting accessories. This secure connection enables the High Lumen LED Flood to withstand up to a 1.5 G vibration load rating per ANSI/IEEE C136.31.

### LISTINGS

CSA certified to U.S. and Canadian standards. IP 66 rated for outdoor applications. Rated for -40°C minimum ambient conditions. 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](http://www.designlights.org) to confirm which versions are qualified.

### WARRANTY

Five year limited warranty. Full warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx).

**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.

