



# HLF1

## High Lumen LED Floodlight

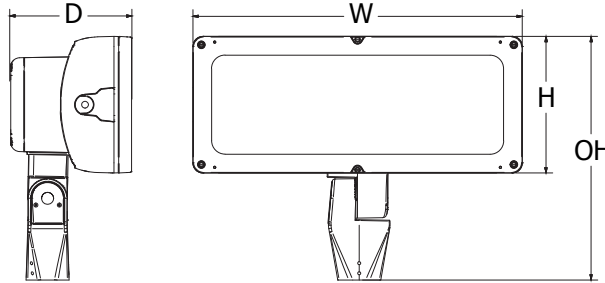


Catalog Number
Notes
Type

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

### Specifications

<b>EPA:</b> (ft <sup>2</sup> @ 45°)	3.5 ft <sup>2</sup> (0.33 m <sup>2</sup> )
<b>Depth:</b>	9.1" (23.1 cm)
<b>Width:</b>	24.5" (62.2 cm)
<b>Height:</b>	10.2" (25.9 cm)
<b>Overall Height:</b>	18.1" (46.0 cm)
<b>Weight:</b> (IS mount)	53 lbs (24.0 kg)



### Introduction

The HLF LED Flood family offers maximum versatility for high output floodlighting design and renovation applications. HLF precision optics offer vast design capabilities while delivering significant energy savings and long life. The HLF1 delivers 25,000 to 50,000 lumens allowing it to replace 400W and 1000W HID floodlights.

The HLF features an adjustable integral slipfitter that allows the luminaire to be mounted on a 2-3/8" OD tenon. Integral cover/wire box serves as an approved splice compartment allowing for fast, easy mounting and wiring without opening the electrical compartment. A steel yoke mount with water-tight SO cord is also available. All configurations are made in North America allowing for quick delivery.

### Ordering Information

**EXAMPLE:** HLF1 LED P5 40K WFL MVOLT IS DDBXD

HLF1 LED					
Series	Performance package	Color temperature	Distribution	Voltage	Mounting
HLF1 LED	P1	30K 3000 K	WFL Wide flood (7x7)	MVOLT <sup>1</sup>	<b>Shipped included</b> IS Integral slipfitter (fits 2-3/8" O.D. tenon) YKC64 Yoke with 4ft, 16-3 SO cord
	P2	40K 4000 K	MFL Medium flood (6x6)	120 <sup>2</sup>	
	P3	50K 5000 K	MNFL Medium narrow flood (68°)	208 <sup>2</sup>	
	P4		NFL Narrow flood (43°)	240 <sup>2</sup>	
	P5		SP Spot (29°)	277 <sup>2</sup>	
			NSP Narrow spot (18°)	347 <sup>2</sup>	
				480 <sup>2</sup>	

Options		Finish (required)
<b>Shipped installed</b> PER7 Seven-wire receptacle only (controls ordered separate) <sup>3,4</sup> SF Single fuse (120, 277, 347V) <sup>2</sup> DF Double fuse (208, 240, 480V) <sup>2</sup> DMG 0-10V lead wires extended (no controls) <sup>5</sup> CCE Coastal Construction	<b>Shipped Separately (requires some field assembly)<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



## Ordering Information

### Accessories

Ordered and shipped separately.

FTS CG6 (FINISH) U	Slipfitter for 2-3/8" to 2-7/8" OD tenons; mates with yoke mount (specify finish)
HLF1WG (FINISH) U	HLF1 wire guard (specify finish) <sup>6</sup>
HLF1FV (FINISH) U	HLF1 full visor (specify finish) <sup>6</sup>
HLF1UBV (FINISH) U	HLF1 upper/bottom visor (specify finish) <sup>6</sup>
HLF1VG (FINISH) U	HLF1 vandal guard (clear polycarbonate, specify finish for mounting brackets) <sup>6</sup>
DSHORT SBK U	Shorting cap <sup>7</sup>
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>7</sup>
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) <sup>7</sup>
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) <sup>7</sup>

### NOTES

1. MVOLT driver operates on any line voltage from 120-277V.
2. Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
3. For units with a photocell receptacle, the mounting must be restricted to  $\pm 45^\circ$  from horizontal aim per ANSI C136.10-2010.
4. Compatible with standard twist-lock photocells for dusk to dawn operation or advanced control nodes that provide 0-10V dimming signals. Wire 4/Wire 5 wired to dimming leads on driver. Wire6/Wire7 capped inside luminaire.
5. Not available with option PER7.
6. Can be ordered separately as an accessory. Requires in-field assembly. Guards and visors limited to one accessory type installed on lens frame at any given time.
7. Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

## Mountings/External Shields/Accessories

### Mountings



**IS - Adjustable Slipfitter**  
(fits 2-3/8" O.D. tenon)



**YKC64 - Yoke with 16-3 SO cord, 4ft**



**UBV Visor Top Mounted**



**UBV Visor Bottom Mounted**



**FV - Full Visor**



**VG- Vandal Guard**

### Accessories

## Accessories/Optics

### Accessories



**WG - Wire Guard**



**Yoke with FTS CG6 (Yoke tenon adapter) Accessory**

### Optics



**Internal Reflectors (WFL, MFL)**



**Hybrid silicone optics (MNFL, NFL, SP, NSP)**

## Performance Data

### 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 Temperature		Lumen Multiplier
0°C	32°F	1.05
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

### Reported LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient and hours of LED testing (tested per IESNA LM-80-08 and reported per IESNA M-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the luminaire performance package below. For other lumen maintenance values, contact factory.

Optic Type	Performance Package	TM-21 Percent Lumen Maintenance at 60,000 hrs
WFL, MFL	P1 / P2	90%
	P3	88%
	P4 / P5	86%
MNFL, NFL, SP, NSP	P1	89%
	P2	88%
	P3	85%

### Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	163	1.36	0.79	0.68	0.59	0.47	0.34
P2	203	1.69	0.98	0.85	0.73	0.58	0.42
P3	289	2.41	1.39	1.20	1.04	0.83	0.60
P4	342	2.86	1.65	1.43	1.24	0.99	0.71
P5	368	3.06	1.77	1.53	1.33	1.06	0.77

### EPA Table

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

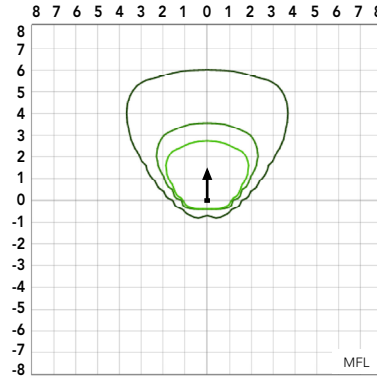
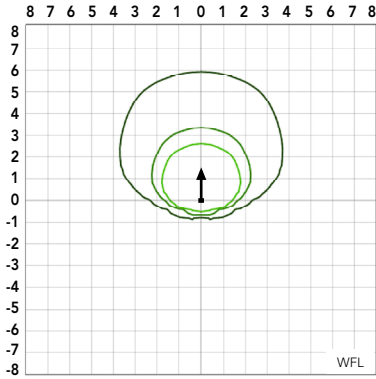
Tilt	EPA (ft <sup>2</sup> )
0°	2.4
15°	2.5
30°	2.8
45°	3.5
60°	3.6
90°	3.6

Isofootcandle plots.

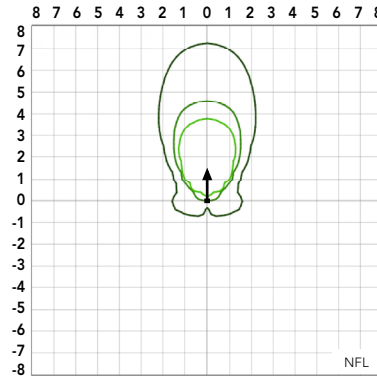
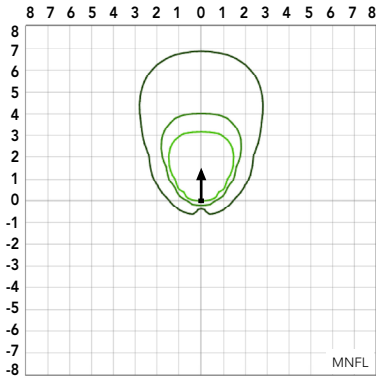
**LEGEND**

- 0.1 fc
- 0.5 fc
- 1.0 fc

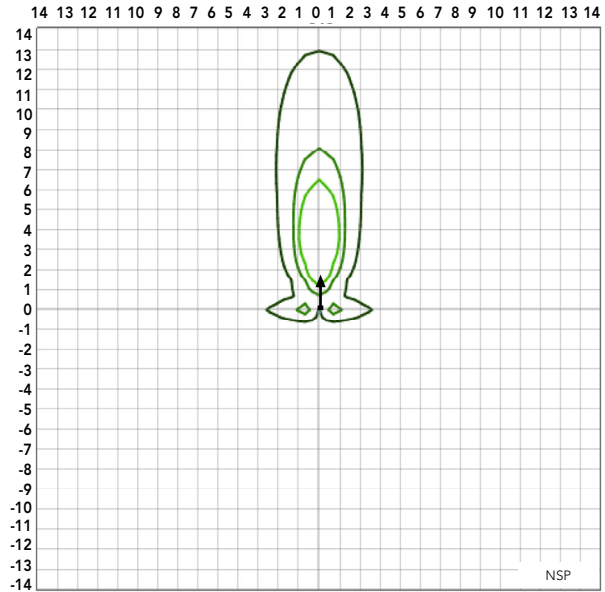
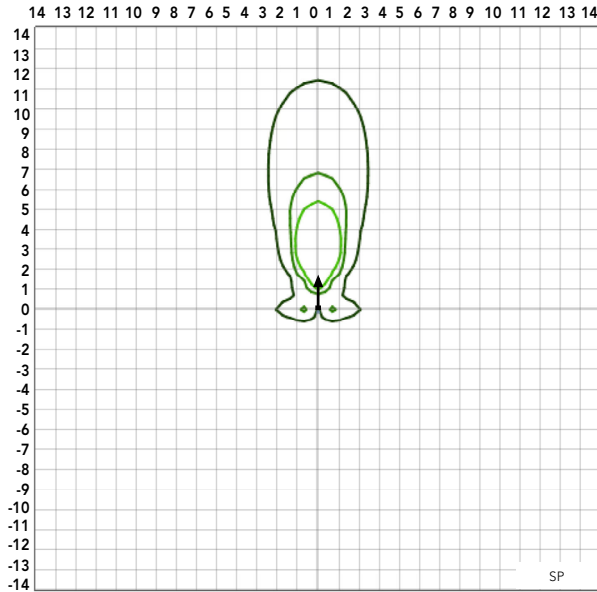
HLF1 LED P5 50K - Luminaires tilted at 45° at 30ft mounting height



HLF1 LED P3 50K - Luminaires tilted at 60° at 30ft mounting height



HLF1 LED P3 50K - Luminaires tilted at 80° at 30ft mounting height



## Performance Data

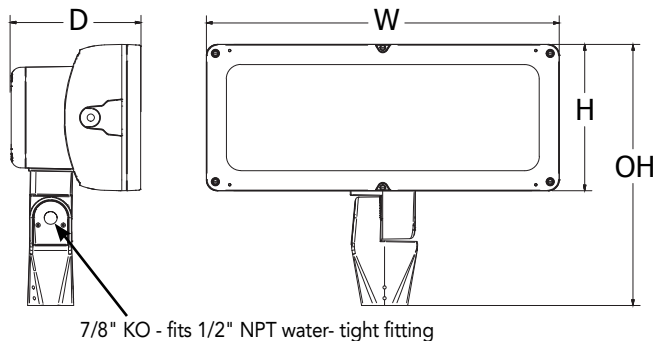
### Lumen Output

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

Performance Package	System Watts	Distribution Type	NEMA Type	Field Angle		Beam Angle		30K (3000K, 70 CRI)			40K (4000K, 70 CRI)			50K (5000K, 70 CRI)		
				°H	°V	°H	°V	Lumens	LPW	Max Cd	Lumens	LPW	Max Cd	Lumens	LPW	Max Cd
P1	163	WFL	7 X 7	145	135	106	105	23,431	143	9,010	23,867	146	9,178	24,300	149	9,345
		MFL	6 X 6	116	124	95	100	24,342	149	10,073	24,795	152	10,261	25,245	154	10,447
		MNFL	5 X 5	93	91	67	68	23,603	145	19,663	24,040	148	20,027	24,477	151	20,392
		NFL	4 X 4	65	61	43	37	24,022	148	47,978	24,467	151	48,867	24,912	153	49,756
		SP	4 X 4	49	47	29	28	23,769	146	85,251	24,210	149	86,830	24,650	152	88,410
		NSP	3 X 3	38	38	19	18	23,637	146	148,604	24,075	148	151,357	24,513	151	154,111
P2	203	WFL	7 X 7	145	135	106	105	28,300	139	10,883	28,827	142	11,086	29,350	145	11,287
		MFL	6 X 6	116	124	95	100	29,400	145	12,166	29,948	148	12,393	30,491	150	12,618
		MNFL	5 X 5	93	91	67	68	28,317	140	23,591	28,842	143	24,028	29,366	145	24,465
		NFL	4 X 4	65	61	43	37	28,820	143	57,562	29,354	145	58,628	29,888	148	59,695
		SP	4 X 4	49	47	29	28	28,517	141	102,280	29,046	144	104,175	29,574	146	106,070
		NSP	3 X 3	38	38	19	18	28,359	140	178,287	28,884	143	181,591	29,410	145	184,894
P3	289	WFL	7 X 7	145	135	106	105	37,237	129	14,320	37,931	131	14,587	38,619	134	14,851
		MFL	6 X 6	116	124	95	100	38,685	134	16,009	39,406	137	16,307	40,121	139	16,603
		MNFL	5 X 5	93	91	67	68	37,172	129	30,968	37,861	131	31,542	38,550	134	32,115
		NFL	4 X 4	65	61	43	37	37,833	131	75,562	38,534	134	76,962	39,235	136	78,362
		SP	4 X 4	49	47	29	28	37,435	130	134,264	38,129	132	136,752	38,822	135	139,239
		NSP	3 X 3	38	38	19	18	37,227	129	234,040	37,917	132	238,377	38,606	134	242,713
P4	342	WFL	7 X 7	145	135	106	105	42,205	123	16,230	42,991	126	16,533	43,771	128	16,833
		MFL	6 X 6	116	124	95	100	43,846	128	18,144	44,663	130	18,482	45,473	133	18,818
P5	368	WFL	7 X 7	145	135	106	105	48,285	131	18,569	49,185	134	18,914	50,077	136	19,258
		MFL	6 X 6	116	124	95	100	50,162	136	20,758	51,097	139	21,145	52,024	141	21,529

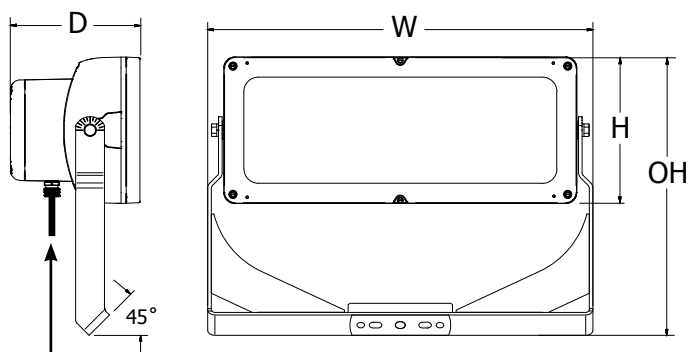
## Dimensions

### HLF1 with Adjustable Slipfitter (IS)



Width: 24.5" (62.2 cm)  
 Depth: 9.1" (23.1 cm)  
 Height: 10.2" (25.9 cm) main body  
 Overall: 18.1" (46.0 cm) with arm  
 Weight: 53 lbs (24.0 kg)

### HLF1 with Yoke (YKC64)



Note: Standard cord is 16-3 wire, 4 ft cord. Other lengths can be specified.

Ex: YKC64

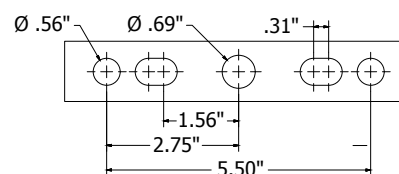
YK = Yoke Mount

C6 = 16 gage, 3 wire cord

4 = 4 feet (5 = 5ft, 6 = 6ft, etc.)

Width: 26.8" (68.1 cm)  
 Depth: 9.1" (23.1 cm)  
 Height: 10.2" (25.9 cm) main body  
 Overall: 19.3" (49.0 cm) with arm  
 Weight: 60 lbs (27.2 kg)

### Yoke (YK) Mounting Detail



Accessories including bullhorns, cross arms and other adapters are available on pages 5-7. For the complete line of accessories available, visit the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

### FEATURES & SPECIFICATIONS

#### INTENDED USE

The contemporary design of the HLF LED High Lumen Floodlight embodies high performance LED technology with precision optics offering maximum versatility in designing for high output lighting applications. The HLF1 delivers 25,000 to 50,000 lumens. It is ideal for commercial applications including new construction or replacing 400W to 1000W HID floodlights. HLF may be used for lighting large signage, monuments, large building facades large yards, recreational sports fields and many other commercial applications.

#### CONSTRUCTION

The HLF LED floodlight features rugged die-cast aluminum construction with integral heat sink fins that optimize thermal management through conductive and convective cooling. A die-cast isolated driver compartment protects LED drivers that are mounted in direct contact with the casting away from the LED heat source, to promote low operating temperature and long life. Integral adjustable slipfitter mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box for easy installation. The heat sink, housing, lens frame and driver compartment are sealed against moisture and environmental contaminants to IP66. HLF1 is 1.5G vibration rated per ANSI C136.31.

#### 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 superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

#### COASTAL CONSTRUCTION (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

#### OPTICS

HLF features both specular aluminum and silicone based "hybrid" type optics that are engineered for superior field-to-beam ratios, uniformity, and spacing. Seven photometric distributions are available including wide pattern distributions Wide Flood, Medium Flood, and narrow pattern distributions Medium Narrow Flood, Narrow Flood, Spot and Narrow Spot. 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. LED lumen maintenance is >L86/60,000 hours for WFL/MFL optics and >L85/60,000 hours for Hybrid optics. CCT's of 3000K, 4000K, and 5000K (minimum 70 CRI) are available. Class 1, continuous dimming 0-10V drivers. 90% and THD <20%. Serviceable 10kV surge protection device meets a minimum Category C low operation (per ANSI/IEEE C62.41.2).

#### CONTROLS

HLF features an optional NEMA twist-lock 7-pin photocell receptacle that is compatible with standard twist-lock photocells for dusk to dawn operation or advanced control nodes that provide 0-10V dimming signals. Standard wiring will be per following: Wire 1/2/3 as normal (hot input, switch leg and neutral). Wire 4/Wire 5 wired to dimming leads on driver. Wire 6/Wire 7 capped inside luminaire.

#### INSTALLATION

The die-cast integral "IS" mount features an adjustable slipfitter that mounts on a 2 3/8" OD tenon and features a 0° to 185° full range tilt adjustment in 5° increments. The slipfitter has an integral junction box and offers easy installation, wiring and precision distribution pattern aiming. A steel yoke "YK" mount (die-formed 1/4" thick plate steel) is available and includes a water tight cord grip and cord. HLF features a glass lens enclosure that is protected to IP66 and is rated for lighting aimed up above 90°. Suitable for mounting within 4 feet of ground.

#### LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. 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.

#### WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/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. Specifications subject to change without notice.