

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_  
 TYPE: \_\_\_\_\_ PROJECT: \_\_\_\_\_  
 CATALOG #: \_\_\_\_\_

**FEATURES**

- Reliable, uniform, glare free illumination
- Type 1, 2, 3, 4W, 5Q, and 5W distributions
- 3000K, 4000K, 5000K CCT
- 0-10V dimming ready
- Integral surge suppression
- 15 standard powder coat finishes
- Upgrade Kits



**SPECIFICATIONS**

**CONSTRUCTION**

- All internal and external hardware is stainless steel
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- Optical bezel finish to match the luminaire housing

**LED/OPTICS**

- Optical cartridge system consisting of a die cast heat sink, LED engine, TIR optics, gasket and bezel plate.
- Cartridge is easily disassembled to replace components. Optics are held in place without the use of adhesives.
- Molded silicone gasket ensures a weather-proof seal around each individual LED.
- Features revolutionary individual LED optical control based on high performance TIR optical designs.

**LED/OPTICS (CONTINUED)**

- House Side Shield is available on Standard and Clear Lens options except any Type 5 distribution. House Side Shield is not available for any distribution using a Diffused Lens.

**INSTALLATION**

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

**ELECTRICAL**

- Luminaires have integral surge protection, UL recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J
- Drivers are UL recognized with an inrush current maximum of <20.0 Amps maximum at 230VAC
- Drivers are not be compatible with current sourcing dimmers, consult factory for current list of known compatible dimming systems, approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV

**FLEX®**



Flex

**CONTROLS**

Photocell is factory installed on top of the arm casting, features a stem and swivel mounting for aiming, will provide dusk-to-dawn lighting control. For multiple fixture mountings, each fixture is supplied with an individual photocell

**CERTIFICATIONS**

- ETL listed under UL 1598 and CSA C22.2 No. 250.0-08 for wet locations
- IDA approved, 3000K and warmer CCTs only

**WARRANTY**

- 5 year warranty

**HOUSING**

FLEX2-LK														
Housing	Engine	CCT/CRI		Distribution		Options		Finish		Arm Type		Voltage		
FLEX2-LK Flex 2.0 upgrade kit	72L-300	450mA Microcore Crossover	AMB	Amber-595nm Peak <sup>1</sup>	1	Type I	SF	Single Fuse (120, 277, 347)	BLS	Black Gloss Smooth	PT	Post Top Arm - All Arms	UNV	120-277V
	72L-385	9,600lm	3K7	3000K, 70 CRI	2	Type II	DF	Double Fuse (208, 240, 480)	BLT	Black Matte Textured	WS	Wall Mount Short Curved/ Straight Arm	347	347V
	72L-495	700mA Microcore Crossover	4K7	4000K, 70 CRI	3	Type III	HS	House Side Shield <sup>3</sup>	DBS	Dark Bronze Gloss Smooth	WL	Wall Mount Long Curved/ Straight Arm	480	480V
	72L-600	15,000lm	5K7	5000K, 70 CRI	4W	Type IV Wide			DBT	Dark Bronze Matte Textured	WV	Wall Mount Very Short Straight Arm		
	72L-700	17,600lm			5Q	Type V Square			GTT	Graphite Matte Textured	FA	Fixed Arm		
					5W	Type V Wide			LGS	Light Grey Gloss Smooth				
									PSS	Platinum Silver Smooth				
									VGT	Verde Green Textured				
									WHS	White Gloss Smooth				
									WHT	White Matte Textured				
									CC	Custom Color <sup>2</sup>				

Notes:

- 1 Wild life friendly      2 Consult factory for custom color, marine and corrosive finish options      3 House side Shield not available for 5Q and 5W distributions

**DELIVERED LUMENS**

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

LED #	Drive Current	Lumen Package	Lens	Distribution	3000K 70CRI				4000K 70CRI				5000K 70CRI							
					Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	
72	300	Microcore Crossover	None	1	8327	1	0	1	126.2	8470	1	0	1	128.3	9128	1	0	1	138.3	
				2	7692	1	0	2	116.6	7824	1	0	2	118.6	8432	1	0	2	127.8	
				3	8031	1	0	2	121.7	8169	1	0	2	123.8	8804	1	0	2	133.4	
				4W	7790	1	0	3	118.0	7924	1	0	3	120.1	8539	1	0	3	129.4	
				1-HS	5036	0	0	0	76.3	5123	0	0	0	77.6	5521	0	0	0	83.7	
				2-HS	4359	0	0	1	66.0	4434	0	0	1	67.2	4778	0	0	1	72.4	
				3-HS	4268	0	0	1	64.7	4341	0	0	1	65.8	4678	0	0	1	70.9	
				4W-HS	4389	0	0	2	66.5	4465	0	0	2	67.6	4812	0	0	2	72.9	
				5Q	8137	3	0	1	123.3	8277	3	0	1	125.4	8920	3	0	1	135.2	
				5W	7929	3	0	2	120.1	8065	3	0	2	122.2	8692	3	0	2	131.7	
				Clear	1-CL	7352	1	0	1	111.4	7478	1	0	1	113.3	8059	1	0	1	122.1
					2-CL	6792	1	0	2	102.9	6908	1	0	2	104.7	7445	1	0	2	112.8
					3-CL	7091	1	0	2	107.4	7213	1	0	2	109.3	7773	1	0	2	117.8
					4W-CL	6878	1	0	3	104.2	6996	1	0	3	106.0	7539	1	0	3	114.2
					1-CL-HS	4447	0	0	0	67.4	4523	0	0	0	68.5	4875	0	0	0	73.9
			2-CL-HS		3849	0	0	1	58.3	3915	0	0	1	59.3	4219	0	0	1	63.9	
			3-CL-HS		3768	0	0	1	57.1	3833	0	0	1	58.1	4130	0	0	1	62.6	
			4W-CL-HS		3875	0	0	1	58.7	3942	0	0	2	59.7	4248	0	0	2	64.4	
			5Q-CL		7184	3	0	1	108.9	7308	3	0	1	110.7	7875	3	0	1	119.3	
			5W-CL		7000	3	0	2	106.1	7121	3	0	2	107.9	7674	3	0	2	116.3	
			Diffused	3-DL	5811	1	0	1	88.1	5911	2	0	1	89.6	6370	2	0	2	96.5	
				5W-DL	5737	2	0	1	86.9	5836	2	0	1	88.4	6289	2	0	1	95.3	
				None	1	10521	1	0	1	122.9	10701	1	0	1	125.1	11533	1	0	1	134.8
					2	9719	2	0	2	113.6	9886	2	0	2	115.5	10654	2	0	2	124.5
					3	10147	1	0	3	118.6	10322	1	0	3	120.6	11124	2	0	2	130.0
			4W		9842	1	0	3	115.0	10011	1	0	3	117.0	10789	1	0	3	126.1	
			1-HS		6363	0	0	0	74.4	6473	0	0	0	75.6	6976	0	0	0	81.5	
			2-HS		5507	0	0	1	64.4	5602	0	0	1	65.5	6037	0	0	1	70.6	
			3-HS		5392	0	0	2	63.0	5484	0	0	2	64.1	5911	0	0	2	69.1	
			4W-HS		5546	0	0	2	64.8	5641	0	0	2	65.9	6079	0	0	2	71.0	
5Q	10281	3	0		1	120.1	10457	3	0	1	122.2	11270	3	0	1	131.7				
5W	10018	4	0		2	117.1	10190	4	0	2	119.1	10982	4	0	2	128.3				
Clear	1-CL	9289	1		0	1	108.5	9448	1	0	1	110.4	10182	1	0	1	119.0			
	2-CL	8581	1		0	2	100.2	8728	1	0	2	102.0	9406	1	0	2	109.9			
	3-CL	8959	1		0	2	104.7	9113	1	0	2	106.5	9821	1	0	2	115.0			
	4W-CL	8690	1		0	3	101.5	8839	1	0	3	103.3	9526	1	0	3	111.3			
	1-CL-HS	5618	0		0	0	65.6	5715	0	0	0	66.8	6159	0	0	0	71.9			
	2-CL-HS	4863	0	0	1	56.8	4946	0	0	1	57.8	5330	0	0	1	62.3				
	3-CL-HS	4761	0	0	1	55.6	4842	0	0	1	56.6	5218	0	0	2	61.0				
	4W-CL-HS	4897	0	0	2	57.2	4981	0	0	2	58.2	5368	0	0	2	62.7				
	5Q-CL	9077	3	0	1	106.0	9233	3	0	1	107.9	9950	3	0	1	116.2				
	5W-CL	8845	3	0	2	103.3	8997	3	0	2	105.1	9696	4	0	2	113.3				
Diffused	3-DL	7287	2	0	2	85.1	7412	2	0	2	86.6	7988	2	0	2	93.7				
	5W-DL	7303	2	0	1	85.3	7429	2	0	1	86.8	8006	3	0	1	94.0				

CRI LUMEN MULTIPLIER		
CCT	80 CRI	90 CRI
3000K	0.9119	0.7033
4000K	0.8941	N/A

AMBER	
CCT	MULTIPLIER
5000K	1
AM	0.1727

2700K MULTIPLIER	
CCT	MULTIPLIER
5000K	1
2700K	0.897

**DELIVERED LUMENS (CONTINUED)**

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

LED #	Drive Current	Lumen Package	Lens	Distribution	3000K 70CRI				4000K 70CRI				5000K 70CRI							
					Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	
72	495	12000	None	1	13519	1	0	1	121.2	13751	1	0	1	123.3	14820	1	0	1	132.9	
				2	12489	2	0	2	112.0	12703	2	0	2	113.9	13690	2	0	2	122.7	
				3	13039	2	0	3	116.9	13263	2	0	3	118.9	14294	2	0	3	128.1	
				4W	12647	2	0	3	113.4	12864	2	0	3	115.3	13864	2	0	3	124.3	
				1-HS	8177	0	0	0	73.3	8317	0	0	0	74.6	8964	0	0	1	80.4	
				2-HS	7077	0	0	1	63.4	7198	0	0	1	64.5	7758	0	0	2	69.5	
				3-HS	6929	0	0	2	62.1	7047	0	0	2	63.2	7595	1	0	2	68.1	
				4W-HS	7126	1	0	2	63.9	7249	1	0	2	65.0	7812	1	0	2	70.0	
				5Q	13211	3	0	2	118.4	13438	3	0	2	120.5	14482	3	0	2	129.8	
			5W	12873	4	0	2	115.4	13094	4	0	2	117.4	14111	4	0	2	126.5		
			Clear	1-CL	11936	1	0	1	107.0	12141	1	0	1	108.8	13084	1	0	1	117.2	
				2-CL	11026	2	0	2	98.8	11216	2	0	2	100.5	12087	2	0	2	108.3	
				3-CL	11512	2	0	3	103.2	11710	2	0	3	104.9	12620	2	0	3	113.1	
				4W-CL	11166	1	0	3	100.1	11358	1	0	3	101.8	12240	2	0	3	109.7	
				1-CL-HS	7219	0	0	0	64.7	7343	0	0	0	65.8	7914	0	0	0	70.9	
	2-CL-HS	6248		0	0	1	56.0	6356	0	0	1	56.9	6849	0	0	1	61.4			
	3-CL-HS	6117		0	0	2	54.8	6222	0	0	2	55.8	6706	0	0	2	60.1			
	4W-CL-HS	6292		0	0	2	56.4	6400	0	0	2	57.3	6897	1	0	2	61.8			
	5Q-CL	11664		3	0	1	104.5	11864	3	0	1	106.3	12786	3	0	2	114.6			
	5W-CL	11365	4	0	2	101.8	11561	4	0	2	103.6	12459	4	0	2	111.6				
	Diffused	3-DL	9435	2	0	2	84.5	9597	2	0	2	86.0	10343	2	0	2	92.7			
		5W-DL	9315	3	0	2	83.5	9474	3	0	2	84.9	10211	3	0	2	91.5			
	600	15000		None	1	14822	1	0	1	113.2	15076	1	0	1	115.2	16248	1	0	2	124.1
					2	13692	2	0	2	104.6	13927	2	0	2	106.4	15009	2	0	2	114.7
					3	14296	2	0	3	109.2	14541	2	0	3	111.1	15671	2	0	3	119.7
					4W	13866	2	0	3	105.9	14104	2	0	3	107.7	15200	2	0	4	116.1
					1-HS	8965	0	0	1	68.5	9119	0	0	1	69.7	9827	0	0	1	75.1
					2-HS	7759	0	0	2	59.3	7892	0	0	2	60.3	8505	0	0	2	65.0
					3-HS	7596	1	0	2	58.0	7727	1	0	2	59.0	8327	1	0	2	63.6
					4W-HS	7813	1	0	2	59.7	7947	1	0	2	60.7	8565	1	0	2	65.4
5Q					14484	3	0	2	110.6	14733	3	0	2	112.5	15877	4	0	2	121.3	
5W				14113	4	0	2	107.8	14356	4	0	2	109.7	15471	4	0	2	118.2		
Clear				1-CL	13086	1	0	1	100.0	13311	1	0	1	101.7	14345	1	0	1	109.6	
				2-CL	12089	2	0	2	92.3	12296	2	0	2	93.9	13252	2	0	2	101.2	
				3-CL	12622	2	0	3	96.4	12838	2	0	3	98.1	13836	2	0	2	105.7	
				4W-CL	12242	2	0	3	93.5	12452	2	0	3	95.1	13420	2	0	3	102.5	
				1-CL-HS	7915	0	0	0	60.5	8051	0	0	0	61.5	8677	0	0	1	66.3	
		2-CL-HS	6850	0	0	1	52.3	6968	0	0	1	53.2	7509	0	0	1	57.4			
		3-CL-HS	6707	0	0	2	51.2	6822	0	0	2	52.1	7352	0	0	2	56.2			
		4W-CL-HS	6898	1	0	2	52.7	7017	1	0	2	53.6	7562	1	0	2	57.8			
		5Q-CL	12788	3	0	2	97.7	13008	3	0	2	99.4	14018	3	0	2	107.1			
5W-CL		12461	4	0	2	95.2	12675	4	0	2	96.8	13659	4	0	2	104.3				
Diffused		3-DL	10266	2	0	2	78.4	10442	2	0	2	79.8	11254	2	0	2	86.0			
		5W-DL	10289	3	0	2	78.6	10466	3	0	2	80.0	11279	3	0	2	86.2			

**DELIVERED LUMENS (CONTINUED)**

The table below shows the delivered lumens for the various lumen outputs and beam distributions. Use this chart in connection with the lumen factor (LF) capability to deliver any output required.

LED #	Drive Current	Lumen Package	Lens	Distribution	3000K 70CRI				4000K 70CRI				5000K 70CRI						
					Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)	Lumen	Bug Rating			Efficacy (Lm/W)
72	700	17600	None	1	17693	1	0	2	113.7	17997	1	0	2	115.6	19395	1	0	2	123.7
				2	16345	2	0	2	105.0	16625	2	0	2	106.8	17917	2	0	3	114.4
				3	17065	2	0	3	109.3	17358	2	0	3	111.6	18707	2	0	4	122.4
				4W	16552	2	0	4	106.4	16836	2	0	4	108.2	18144	2	0	4	115.9
				1-HS	10701	0	0	1	68.8	10885	0	0	1	69.9	11731	0	0	1	75.4
				2-HS	9262	0	0	2	59.5	9421	0	0	2	60.5	10153	1	0	2	65.2
				3-HS	9068	1	0	2	58.3	9223	1	0	2	59.3	9940	1	0	2	63.9
				4W-HS	9327	1	0	2	59.9	9487	1	0	2	61.0	10224	1	0	2	65.7
				5Q	17290	4	0	2	111.1	17587	4	0	2	113.0	18953	4	0	2	121.0
5W	16847	4	0	2	108.3	17137	4	0	2	110.1	18468	4	0	2	117.7				

**PHOTOMETRY**

**FH2-72L-700-4K7-1**

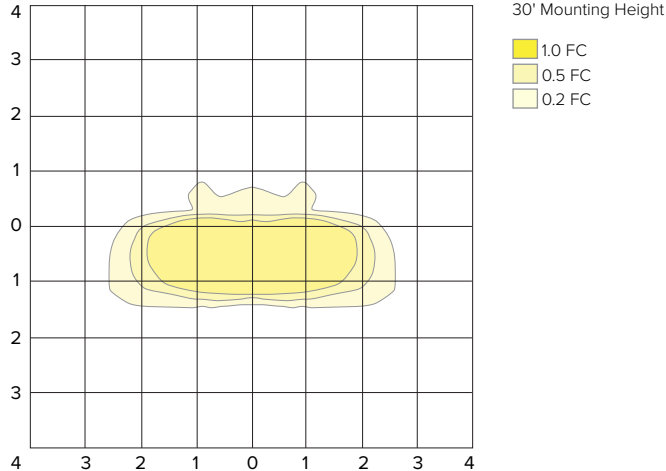
**LUMINAIRE DATA**

Description	<b>4000 Kelvin, 70CRI</b>
Delivered Lumens	<b>17997</b>
Watts	<b>155.6</b>
Efficacy	<b>115.7</b>
IES Type	<b>I</b>
BUG Rating	<b>B1-U0-G2</b>
Mounting Height	<b>30 ft</b>
Grid Scale	<b>30 ft</b>

**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
Downward Street Side	16515	91.8%
Downward House Side	1482	8.2%
Downward Total	17997	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	17997	100%

**ISOFOOT CANDLE PLOT**



**FH2-72L-700-4K7-2**

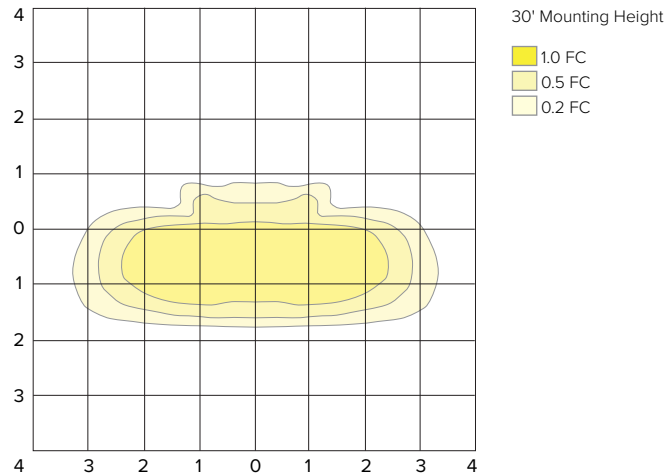
**LUMINAIRE DATA**

Description	<b>4000 Kelvin, 70CRI</b>
Delivered Lumens	<b>16625</b>
Watts	<b>155.6</b>
Efficacy	<b>106.8</b>
IES Type	<b>II</b>
BUG Rating	<b>B2-U0-G2</b>
Mounting Height	<b>30 ft</b>
Grid Scale	<b>30 ft</b>

**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
Downward Street Side	13986	84.1%
Downward House Side	2639	15.9%
Downward Total	16625	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	16625	100%

**ISOFOOT CANDLE PLOT**



**FH2-72L-700-4K7-3**

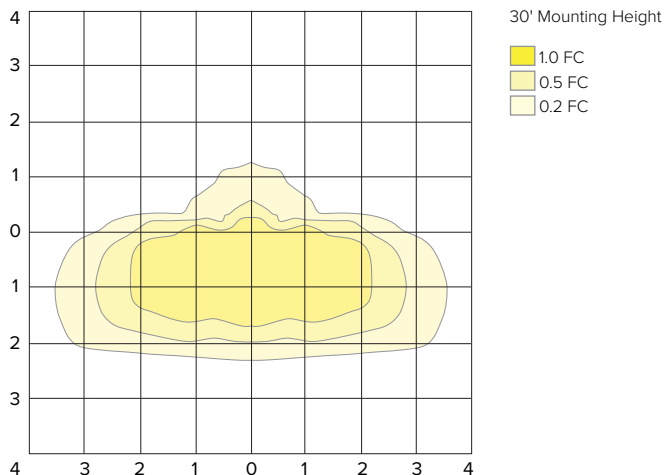
**LUMINAIRE DATA**

Description	<b>4000 Kelvin, 70CRI</b>
Delivered Lumens	<b>17358</b>
Watts	<b>155.56</b>
Efficacy	<b>111.6</b>
IES Type	<b>III</b>
BUG Rating	<b>B2-U0-G3</b>
Mounting Height	<b>30 ft</b>
Grid Scale	<b>30 ft</b>

**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
Downward Street Side	14996	86.4%
Downward House Side	2362	13.6%
Downward Total	17358	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	17358	100%

**ISOFOOT CANDLE PLOT**



**PHOTOMETRY**

**FH2-72L-700-4K7-4W**

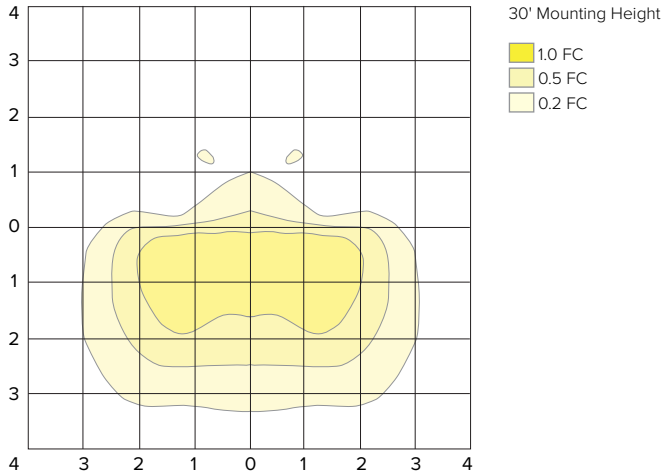
**LUMINAIRE DATA**

Description	4000 Kelvin, 70CRI
Delivered Lumens	16836
Watts	155.6
Efficacy	108.2
IES Type	IV
BUG Rating	B2-U0-G4
Mounting Height	30 ft
Grid Scale	30 ft

**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
Downward Street Side	15017	89.2%
Downward House Side	1819	10.8%
Downward Total	16836	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	16836	100%

**ISOFOOT CANDLE PLOT**



**FH2-72L-700-4K7-5Q**

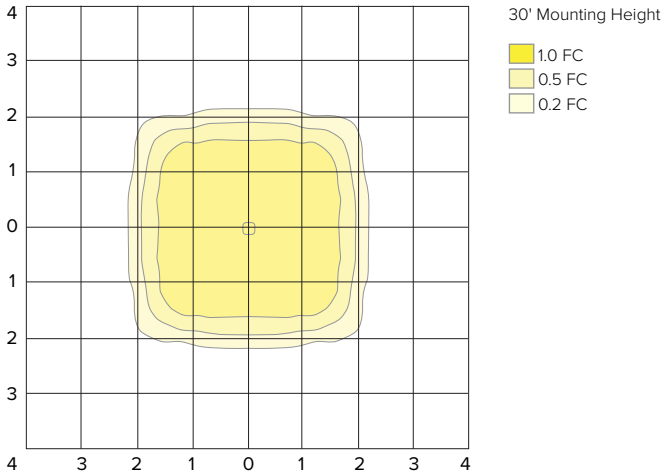
**LUMINAIRE DATA**

Description	4000 Kelvin, 70CRI
Delivered Lumens	17587
Watts	155.6
Efficacy	113.0
IES Type	VS
BUG Rating	B4-U0-G2
Mounting Height	30 ft
Grid Scale	30 ft

**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Luminaire
Downward Street Side	8794	50.0%
Downward House Side	8794	50.0%
Downward Total	17587	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	17587	100%

**ISOFOOT CANDLE PLOT**



**FH2-72L-700-4K7-5W**

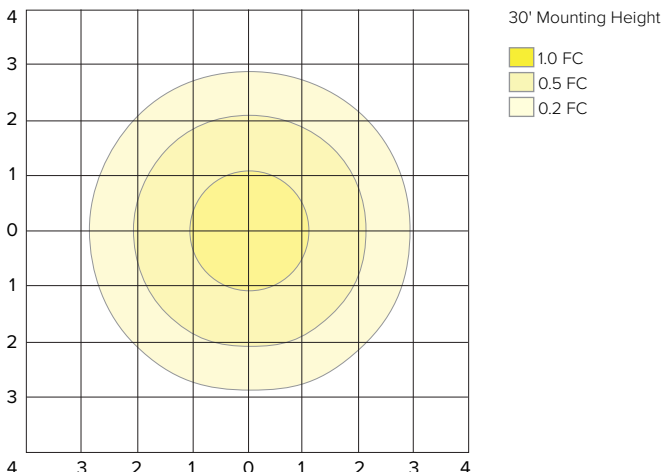
**LUMINAIRE DATA**

Description	4000 Kelvin, 70CRI
Delivered Lumens	17137
Watts	155.6
Efficacy	110.1
IES Type	VS
BUG Rating	B4-U0-G2
Mounting Height	30 ft
Grid Scale	30 ft

**ZONAL LUMEN SUMMARY**

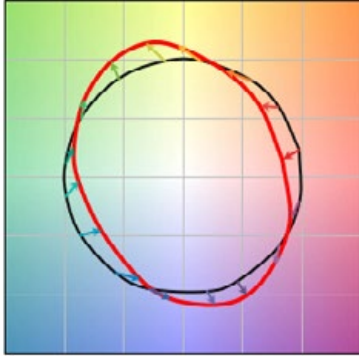
Zone	Lumens	% Luminaire
Downward Street Side	8569	50.0%
Downward House Side	8569	50.0%
Downward Total	17137	100%
Upward Street Side	0	0%
Upward House Side	0	0%
Upward Total	0	0%
Total Flux	17137	100%

**ISOFOOT CANDLE PLOT**



**TM-30 DATA**

**COLOR VECTOR GRAPHIC**

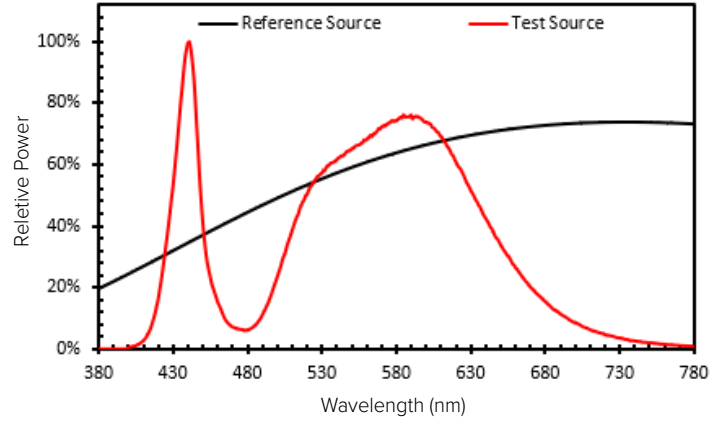


— Reference Illuminant — Test Source

**TEST SOURCE**

MBM TEST RESULTS	
CCT (K)	3947
CIE Ra	72
Duv	0.0004
x	0.3831
y	0.3793
Rf	68
Rg	99

**SPECTRAL POWER DISTRIBUTION COMPARISON**



**ELECTRICAL DATA**

System Current	System Watts	Line Voltage		Amps AC						Min. Power Factor	Max THD (%)	Dimming Range	Dimming			
													Source current out of 0-10V		Absolute voltage range on 0-10V (+)	
		VAC	HZ	120	208	240	277	347	480				Min	Max	Min	Max
300 mA	66.0	120-277	50/60	0.55	0.32	0.28	0.24	0.19	0.14	>0.9	20	10% to 100%	0mA	1mA	0V	10V
385 mA	85.6			0.71	0.41	0.36	0.31	0.25	0.18							
495 mA	111.6			0.93	0.54	0.47	0.40	0.32	0.23							
600 mA	130.9			1.09	0.63	0.55	0.47	0.38	0.27							
700 mA	156.0			1.30	0.75	0.65	0.56	0.45	0.33							