



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Eaton Lighting Division  
(formerly Cooper Lighting)

Brand: FAIL-SAFE

Report Number: P212924

Luminaire Tested: **FPS-4-LD4-1HI-40-OPL**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Eaton or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P212924  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35494-R3)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: EATON (FORMERLY COOPER LIGHTING)  
Product Line: FAIL-SAFE  
Catalog Number: FPS-4-LD4-1HI-40-OPL  
Description: FPS 4' LED FIXTURE WITH OPAL LENS  
Light Source: (84) EATON 4000K CCT, 85 CRI LEDS  
Ballast/Driver: -

Luminaire Equipment:	<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
	a	good	reflector
	b	good	lens
	c	good	housing
	d	good	cord

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4043.2 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.58' x L: 4.1' x H: 0.33')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B1 - U3 - G1

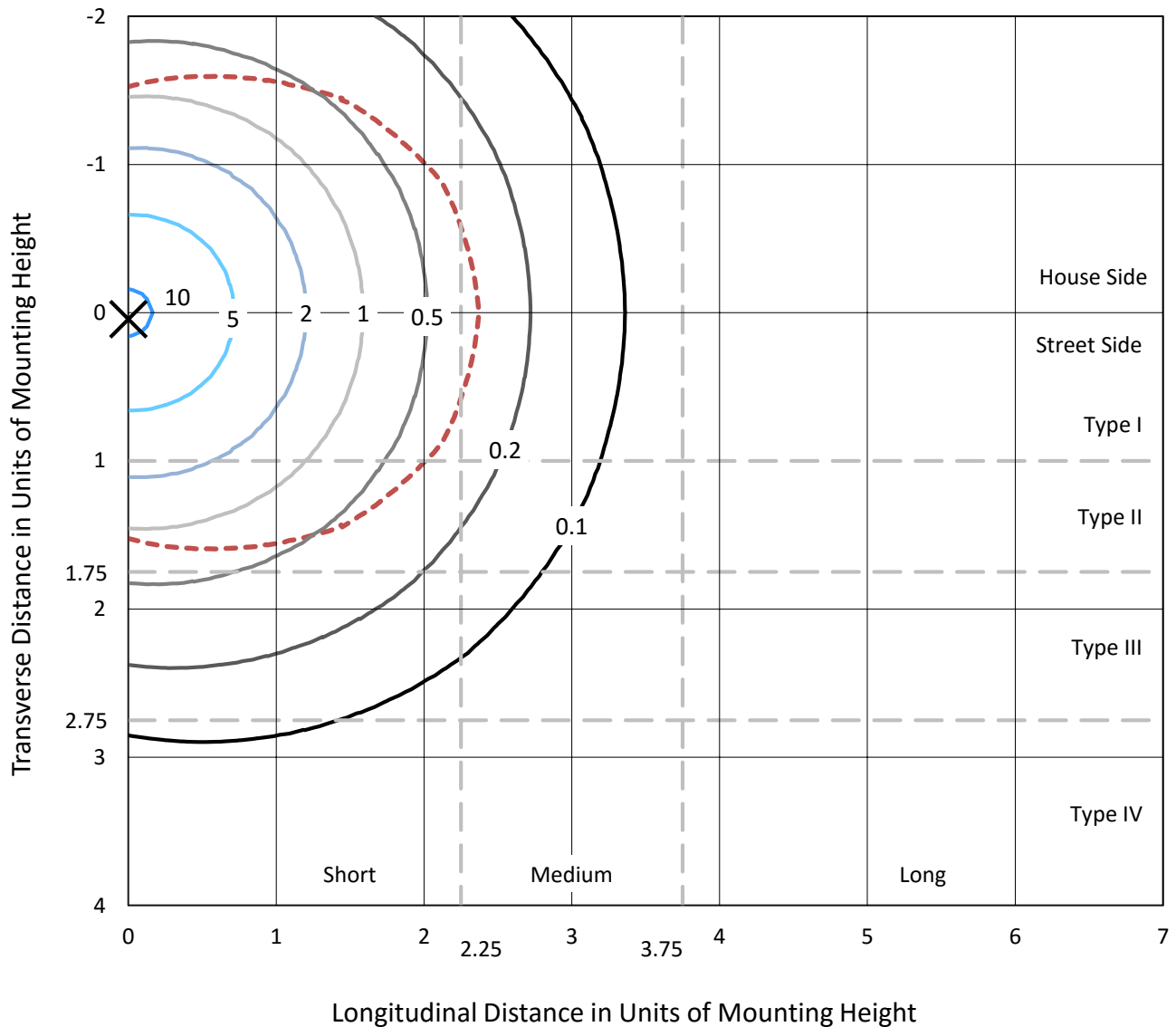
Input Watts (W): 44.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

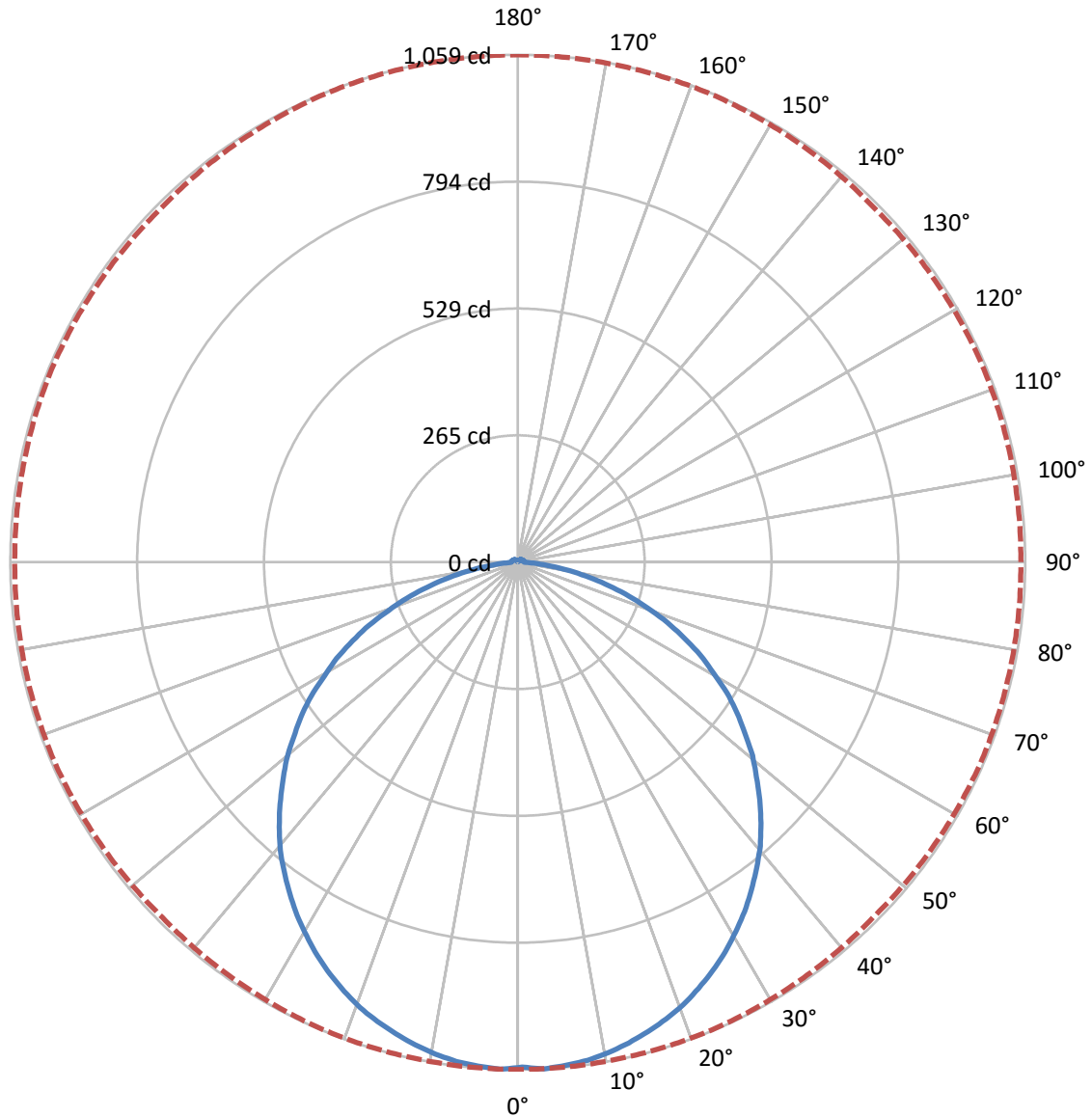


Based on 10 foot mounting height. Maximum calculated value = 10.5 fc  
 Type V - Short - Non-Cutoff



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### Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral      - - - Horizontal Cone Through 2.5-Deg Vertical



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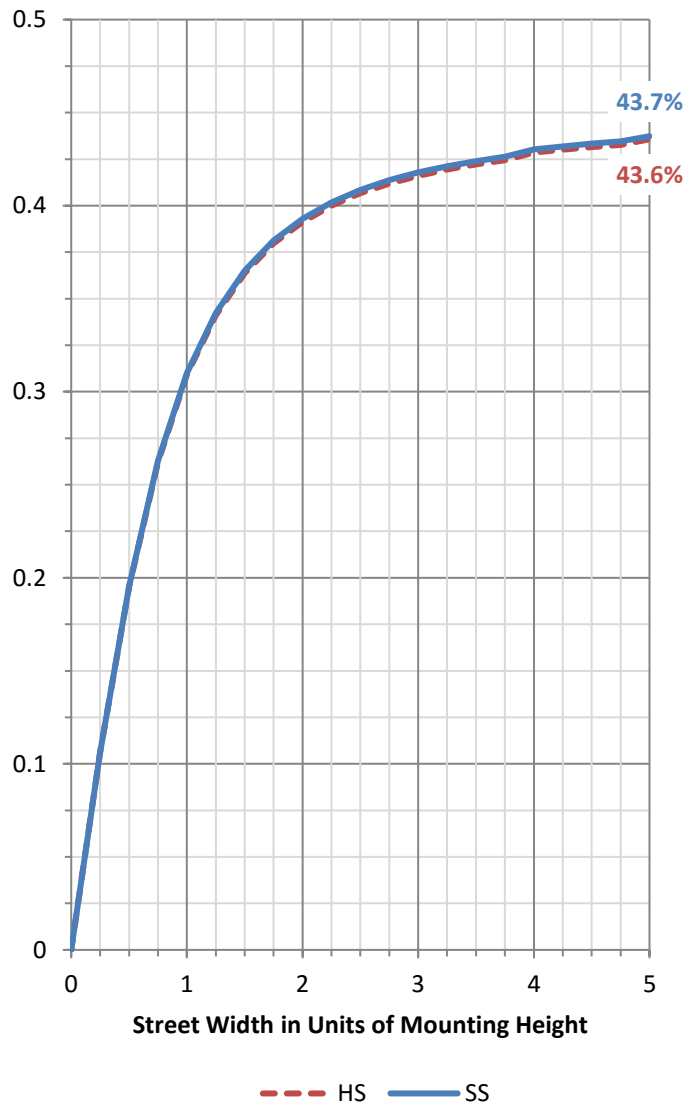
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1808.5	213.1	2021.6
	% Fixture	44.7	5.3	50.0
<b>Street Side</b>	Lumens	1808.5	213.1	2021.6
	% Fixture	44.7	5.3	50.0
<b>Total</b>	Lumens	3617.0	426.2	4043.2
	% Fixture	89.5	10.5	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.1	2.5
10°-20°	290.1	7.2
20°-30°	450.0	11.1
30°-40°	559.3	13.8
40°-50°	602.0	14.9
50°-60°	576.7	14.3
60°-70°	487.8	12.1
70°-80°	351.9	8.7
80°-90°	199.1	4.9
90°-100°	124.0	3.1
100°-110°	105.4	2.6
110°-120°	83.8	2.1
120°-130°	58.6	1.5
130°-140°	34.5	0.9
140°-150°	15.8	0.4
150°-160°	4.0	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	3617.0	89.5
0°-180°	4043.2	100.0





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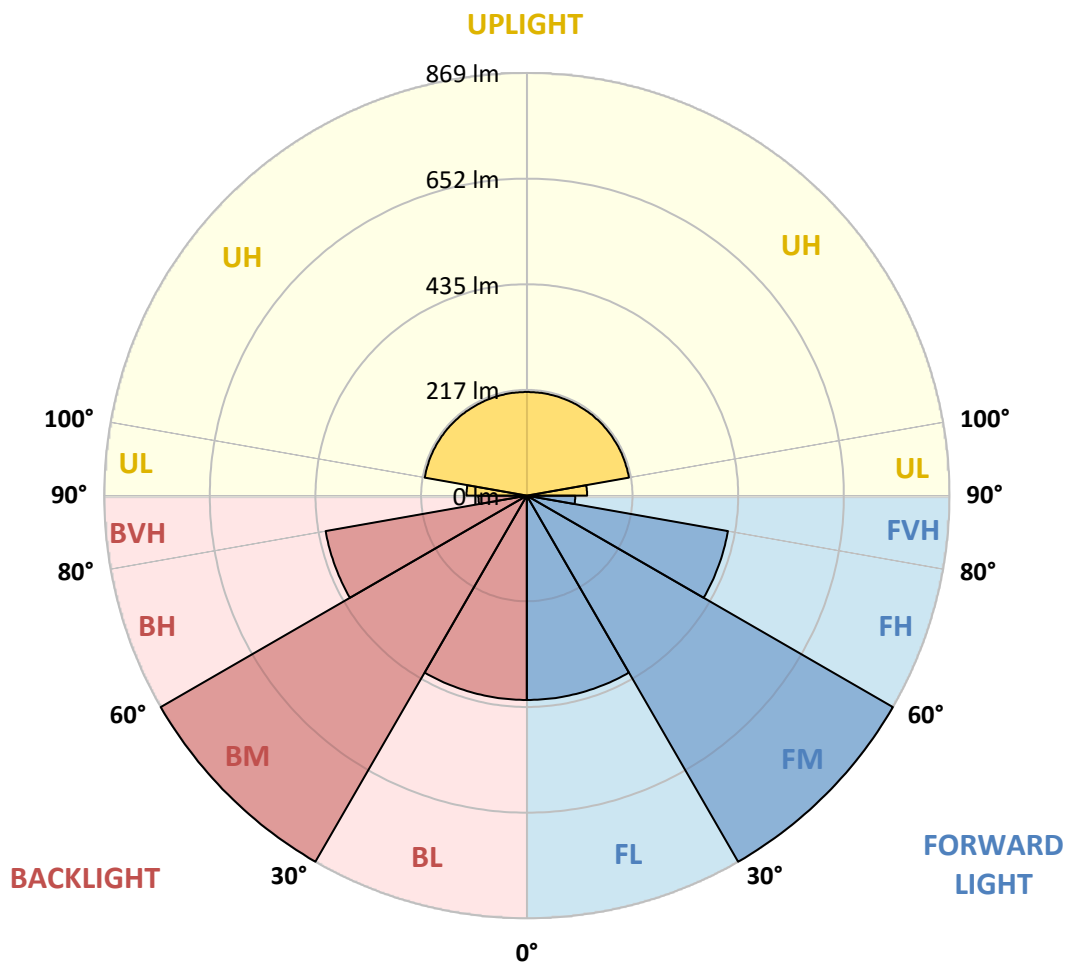
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	420.0	10.4			
FM (30°-60°)	869.0	21.5			
FH (60°-80°)	419.9	10.4			G0/660
FVH (80°-90°)	99.6	2.5			G1/100
BL (0°-30°)	420.0	10.4	B1/500		
BM (30°-60°)	869.0	21.5	B1/1000		
BH (60°-80°)	419.9	10.4	B1/500		G0/660
BVH (80°-90°)	99.6	2.5			G1/100
UL (90°-100°)	124.0	3.1		U3/500	
UH (100°-180°)	213.1	5.3		U3/500	

**BUG Rating: B1-U3-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1053.6	1053.6	1053.6	1053.6	1053.6
2.5°	1058.7	1056.6	1048.6	1052.6	1049.6
5°	1054.6	1053.6	1047.6	1051.6	1049.6
7.5°	1049.6	1048.6	1043.5	1048.6	1047.6
10°	1040.5	1041.5	1038.5	1046.6	1045.5
12.5°	1029.4	1032.4	1032.4	1041.5	1042.5
15°	1016.3	1021.3	1024.3	1034.4	1034.4
17.5°	1002.1	1008.2	1015.3	1026.4	1027.4
20°	986.0	993.1	1002.1	1016.3	1020.3
22.5°	965.8	975.9	988.0	1006.2	1013.2
25°	944.6	957.7	972.9	997.1	1006.2
27.5°	921.4	936.5	956.7	985.0	993.1
30°	895.2	913.3	938.6	968.8	975.9
32.5°	868.9	889.1	919.4	948.7	955.7
35°	839.7	863.9	899.2	927.5	931.5
37.5°	809.4	834.6	875.0	903.2	908.3
40°	779.1	805.4	849.8	876.0	883.1
42.5°	743.8	774.1	821.5	848.7	853.8
45°	707.5	741.8	791.2	818.5	825.5
47.5°	670.1	710.5	760.9	788.2	795.3
50°	634.8	674.2	727.6	757.9	766.0
52.5°	593.4	638.8	694.3	725.6	733.7
55°	555.1	602.5	660.0	691.3	700.4
57.5°	514.7	564.1	624.7	656.0	665.1
60°	468.3	524.8	587.4	618.6	625.7
62.5°	427.9	482.4	548.0	583.3	590.4
65°	381.5	442.0	510.7	547.0	556.1
67.5°	337.1	401.7	474.3	512.7	521.8
70°	287.6	361.3	437.0	476.3	483.4
72.5°	243.2	320.9	397.6	437.0	446.1
75°	196.8	280.6	354.2	395.6	404.7
77.5°	153.4	240.2	313.9	354.2	365.3
80°	110.0	198.8	273.5	315.9	325.0
82.5°	71.7	160.5	233.1	275.5	284.6
85°	41.4	125.1	195.8	238.2	251.3
87.5°	20.2	93.9	170.6	215.0	228.1
90°	13.1	74.7	148.4	193.8	205.9
92.5°	13.1	66.6	129.2	171.6	186.7
95°	13.1	64.6	125.1	160.5	170.6
97.5°	13.1	62.6	122.1	158.4	168.5
100°	13.1	59.5	119.1	155.4	165.5
102.5°	12.1	57.5	116.1	151.4	162.5
105°	12.1	54.5	112.0	147.3	158.4
107.5°	12.1	51.5	108.0	143.3	153.4
110°	11.1	48.4	103.9	138.3	148.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	11.1	45.4	99.9	133.2	143.3
115°	10.1	42.4	94.9	127.2	137.3
117.5°	10.1	38.4	88.8	121.1	131.2
120°	9.1	35.3	83.8	115.1	124.1
122.5°	9.1	31.3	78.7	108.0	117.1
125°	9.1	28.3	72.7	100.9	110.0
127.5°	8.1	24.2	66.6	93.9	102.9
130°	8.1	20.2	60.6	86.8	94.9
132.5°	7.1	17.2	53.5	79.7	87.8
135°	7.1	13.1	47.4	72.7	79.7
137.5°	6.1	10.1	41.4	65.6	72.7
140°	6.1	7.1	34.3	58.5	65.6
142.5°	5.0	5.0	29.3	51.5	58.5
145°	5.0	4.0	23.2	44.4	49.5
147.5°	4.0	3.0	18.2	36.3	42.4
150°	4.0	3.0	13.1	29.3	34.3
152.5°	3.0	2.0	8.1	22.2	27.2
155°	3.0	2.0	3.0	15.1	20.2
157.5°	3.0	1.0	0.0	8.1	12.1
160°	2.0	1.0	0.0	2.0	5.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)