



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: P212930

Luminaire Tested: **FPS-4-LD4-1STD-30-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: P212930  
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-LD4-1STD-30-OPL  
Description: FPS 4' LED FIXTURE WITH OPAL LENS  
Light Source: (84) EATON 3000K 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: 3264.7 lumens  
Efficiency: N/A  
Efficacy: 97.4 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

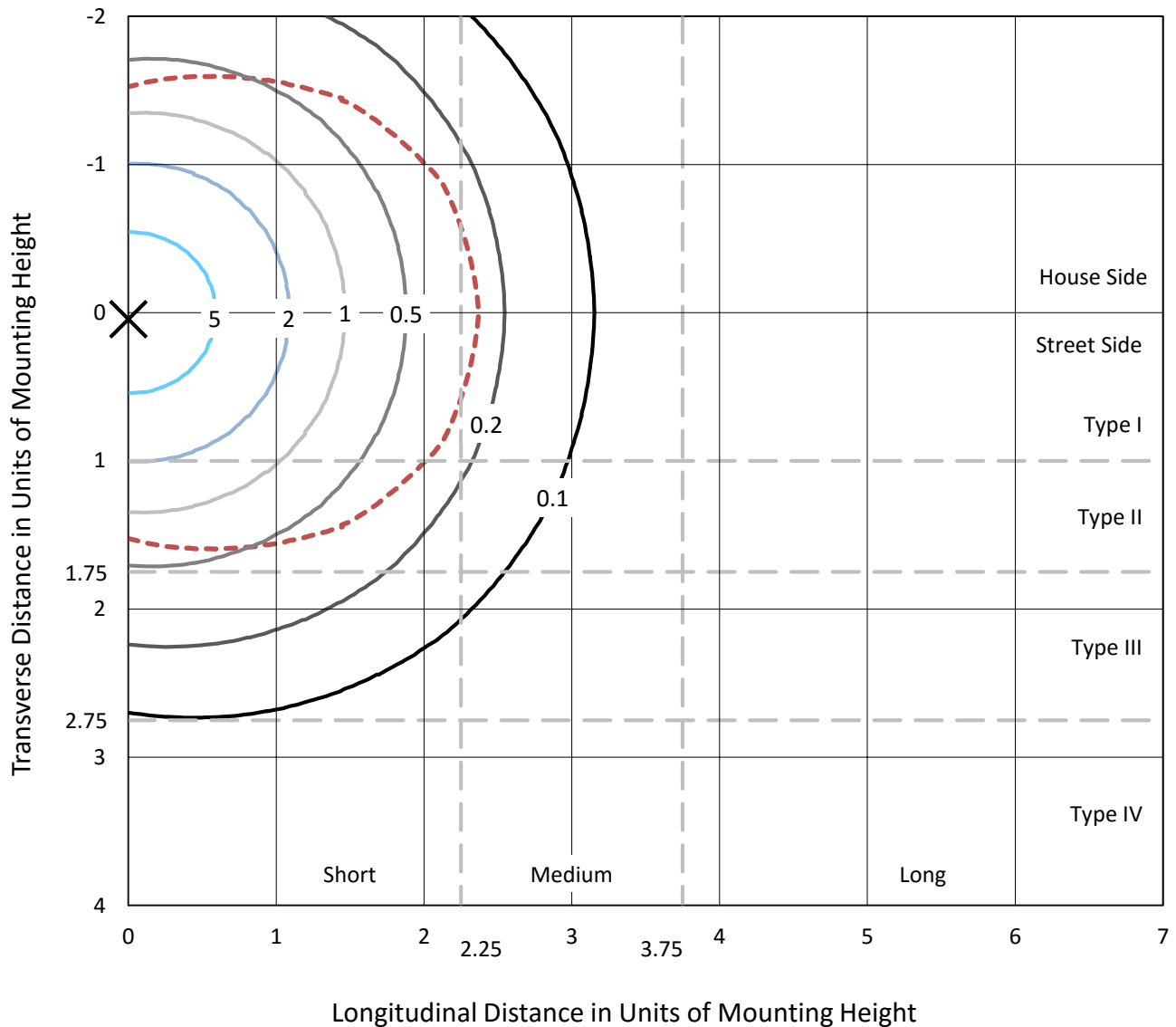
Input Watts (W): 33.51  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

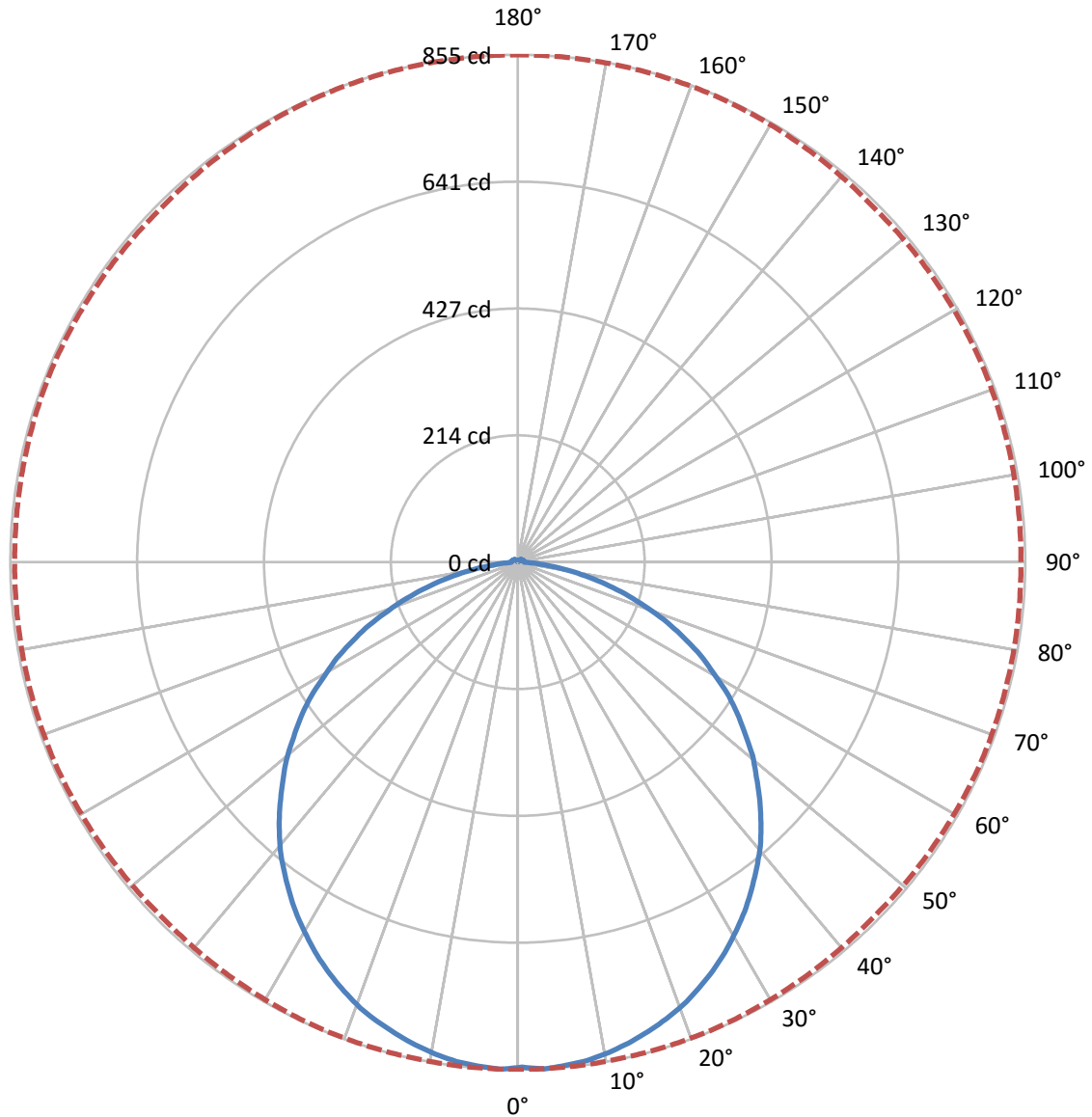


Based on 10 foot mounting height. Maximum calculated value = 8.5 fc  
 Type V - Short - Non-Cutoff



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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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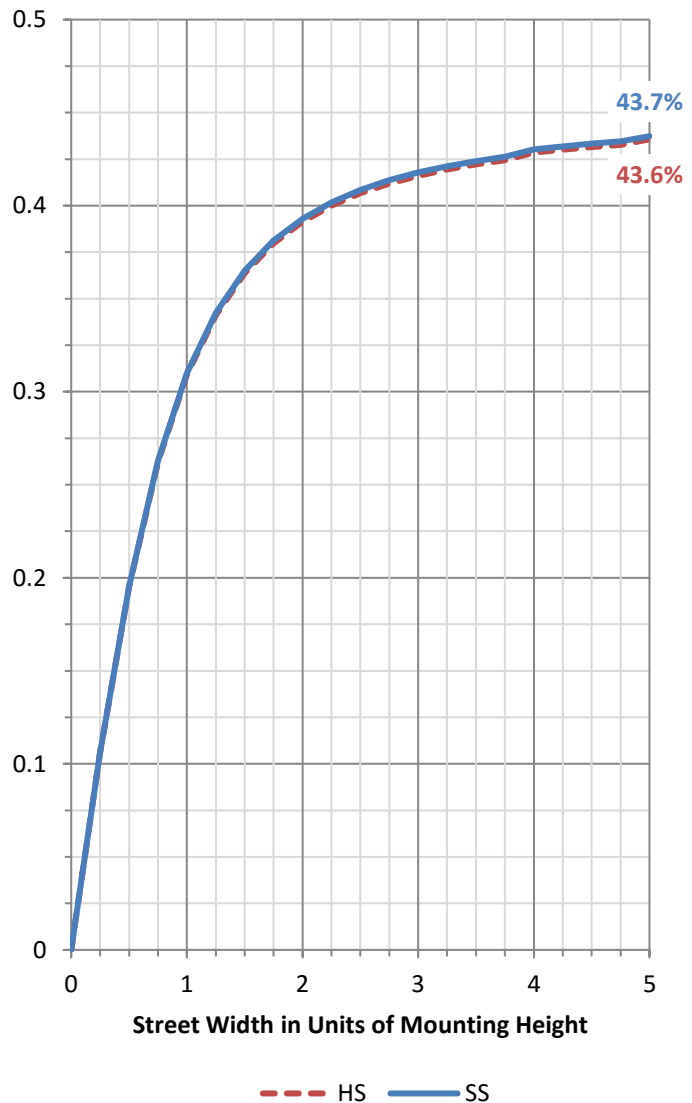
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1460.3	172.1	1632.3
	% Fixture	44.7	5.3	50.0
<b>Street Side</b>	Lumens	1460.3	172.1	1632.3
	% Fixture	44.7	5.3	50.0
<b>Total</b>	Lumens	2920.5	344.2	3264.7
	% Fixture	89.5	10.5	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.8	2.5
10°-20°	234.2	7.2
20°-30°	363.3	11.1
30°-40°	451.6	13.8
40°-50°	486.1	14.9
50°-60°	465.7	14.3
60°-70°	393.9	12.1
70°-80°	284.1	8.7
80°-90°	160.8	4.9
90°-100°	100.1	3.1
100°-110°	85.1	2.6
110°-120°	67.6	2.1
120°-130°	47.3	1.5
130°-140°	27.9	0.9
140°-150°	12.8	0.4
150°-160°	3.2	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	2920.5	89.5
0°-180°	3264.7	100.0





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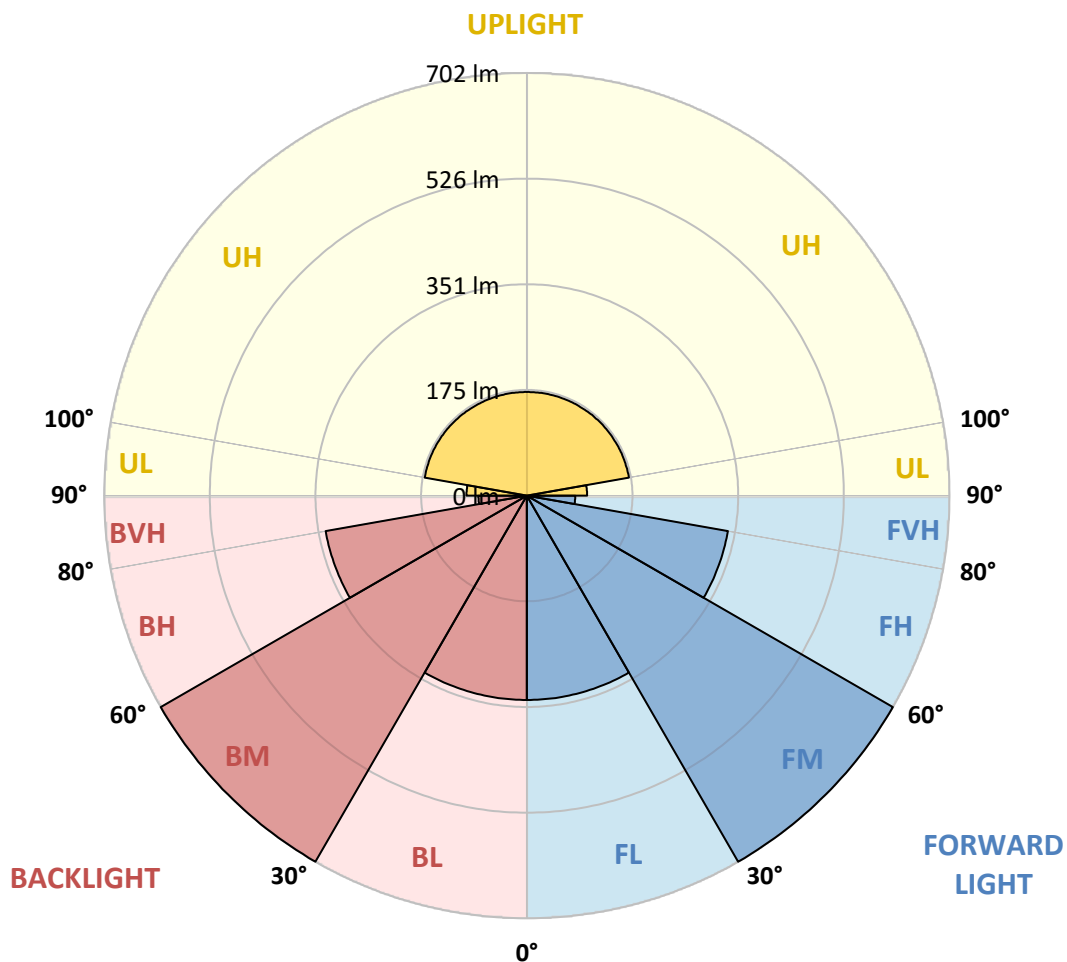
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	339.2	10.4			
FM (30°-60°)	701.7	21.5			
FH (60°-80°)	339.0	10.4			G0/660
FVH (80°-90°)	80.4	2.5			G1/100
BL (0°-30°)	339.2	10.4	B1/500		
BM (30°-60°)	701.7	21.5	B1/1000		
BH (60°-80°)	339.0	10.4	B1/500		G0/660
BVH (80°-90°)	80.4	2.5			G1/100
UL (90°-100°)	100.1	3.1		U3/500	
UH (100°-180°)	172.1	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°	850.8	850.8	850.8	850.8	850.8
2.5°	854.8	853.2	846.7	849.9	847.5
5°	851.6	850.8	845.9	849.1	847.5
7.5°	847.5	846.7	842.6	846.7	845.9
10°	840.2	841.0	838.5	845.1	844.2
12.5°	831.2	833.6	833.6	841.0	841.8
15°	820.6	824.7	827.1	835.3	835.3
17.5°	809.2	814.1	819.8	828.8	829.6
20°	796.2	801.9	809.2	820.6	823.9
22.5°	779.9	788.0	797.8	812.5	818.2
25°	762.8	773.3	785.6	805.1	812.5
27.5°	744.0	756.2	772.5	795.3	801.9
30°	722.8	737.5	757.9	782.3	788.0
32.5°	701.6	717.9	742.4	766.0	771.7
35°	678.0	697.6	726.1	748.9	752.2
37.5°	653.6	673.9	706.5	729.3	733.4
40°	629.1	650.3	686.2	707.3	713.0
42.5°	600.6	625.0	663.3	685.3	689.4
45°	571.2	599.0	638.9	660.9	666.6
47.5°	541.1	573.7	614.4	636.4	642.1
50°	512.6	544.4	587.5	612.0	618.5
52.5°	479.2	515.8	560.7	585.9	592.4
55°	448.2	486.5	532.9	558.2	565.5
57.5°	415.6	455.5	504.4	529.7	537.0
60°	378.1	423.8	474.3	499.5	505.2
62.5°	345.5	389.5	442.5	471.0	476.7
65°	308.0	356.9	412.3	441.7	449.0
67.5°	272.2	324.3	383.0	414.0	421.3
70°	232.2	291.7	352.9	384.6	390.3
72.5°	196.4	259.1	321.1	352.9	360.2
75°	158.9	226.5	286.0	319.4	326.8
77.5°	123.9	193.9	253.4	286.0	295.0
80°	88.8	160.5	220.8	255.1	262.4
82.5°	57.9	129.6	188.2	222.5	229.8
85°	33.4	101.0	158.1	192.3	202.9
87.5°	16.3	75.8	137.7	173.6	184.2
90°	10.6	60.3	119.8	156.5	166.2
92.5°	10.6	53.8	104.3	138.5	150.8
95°	10.6	52.2	101.0	129.6	137.7
97.5°	10.6	50.5	98.6	127.9	136.1
100°	10.6	48.1	96.2	125.5	133.6
102.5°	9.8	46.4	93.7	122.2	131.2
105°	9.8	44.0	90.5	119.0	127.9
107.5°	9.8	41.6	87.2	115.7	123.9
110°	9.0	39.1	83.9	111.6	119.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	9.0	36.7	80.7	107.6	115.7
115°	8.1	34.2	76.6	102.7	110.8
117.5°	8.1	31.0	71.7	97.8	105.9
120°	7.3	28.5	67.6	92.9	100.2
122.5°	7.3	25.3	63.6	87.2	94.5
125°	7.3	22.8	58.7	81.5	88.8
127.5°	6.5	19.6	53.8	75.8	83.1
130°	6.5	16.3	48.9	70.1	76.6
132.5°	5.7	13.9	43.2	64.4	70.9
135°	5.7	10.6	38.3	58.7	64.4
137.5°	4.9	8.1	33.4	53.0	58.7
140°	4.9	5.7	27.7	47.3	53.0
142.5°	4.1	4.1	23.6	41.6	47.3
145°	4.1	3.3	18.7	35.9	39.9
147.5°	3.3	2.4	14.7	29.3	34.2
150°	3.3	2.4	10.6	23.6	27.7
152.5°	2.4	1.6	6.5	17.9	22.0
155°	2.4	1.6	2.4	12.2	16.3
157.5°	2.4	0.8	0.0	6.5	9.8
160°	1.6	0.8	0.0	1.6	4.1
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)