



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: P212940

Luminaire Tested: **FPS-4-LD4-2LO-50-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: P212940  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35490-R3)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: EATON (FORMERLY COOPER LIGHTING)  
Product Line: FAIL-SAFE  
Catalog Number: FPS-4-LD4-2LO-50-OPL  
Description: FPS 4' LED FIXTURE WITH OPAL LENS  
Light Source: (168) EATON 5000K 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**

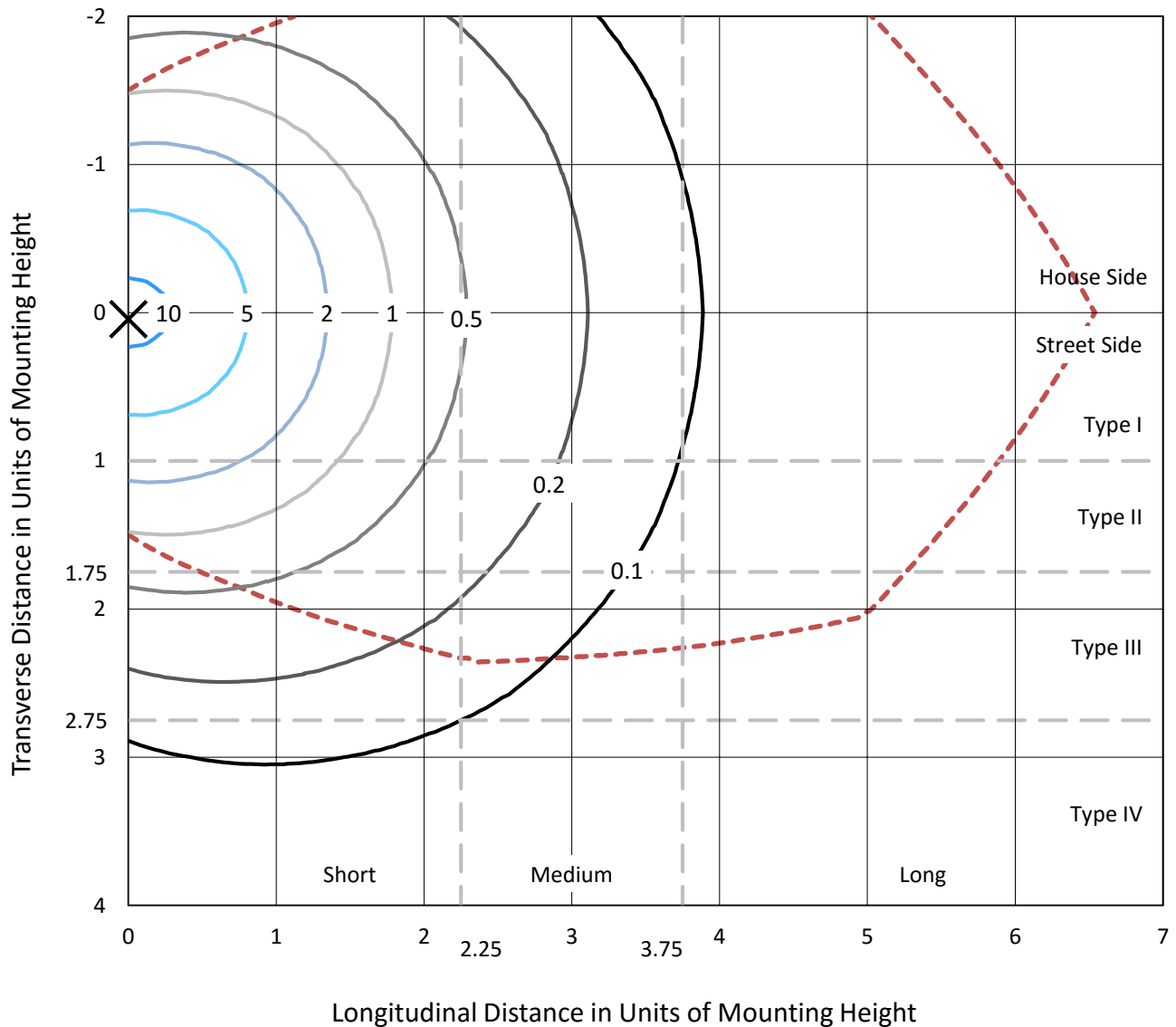
Lumens per Lamp: N/A  
Luminaire Lumens: 5459.3 lumens  
Efficiency: N/A  
Efficacy: 115.8 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.58' x L: 4.1' x H: 0.33')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B2 - U4 - G2  
  
Input Watts (W): 47.16  
Input Voltage (V): 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

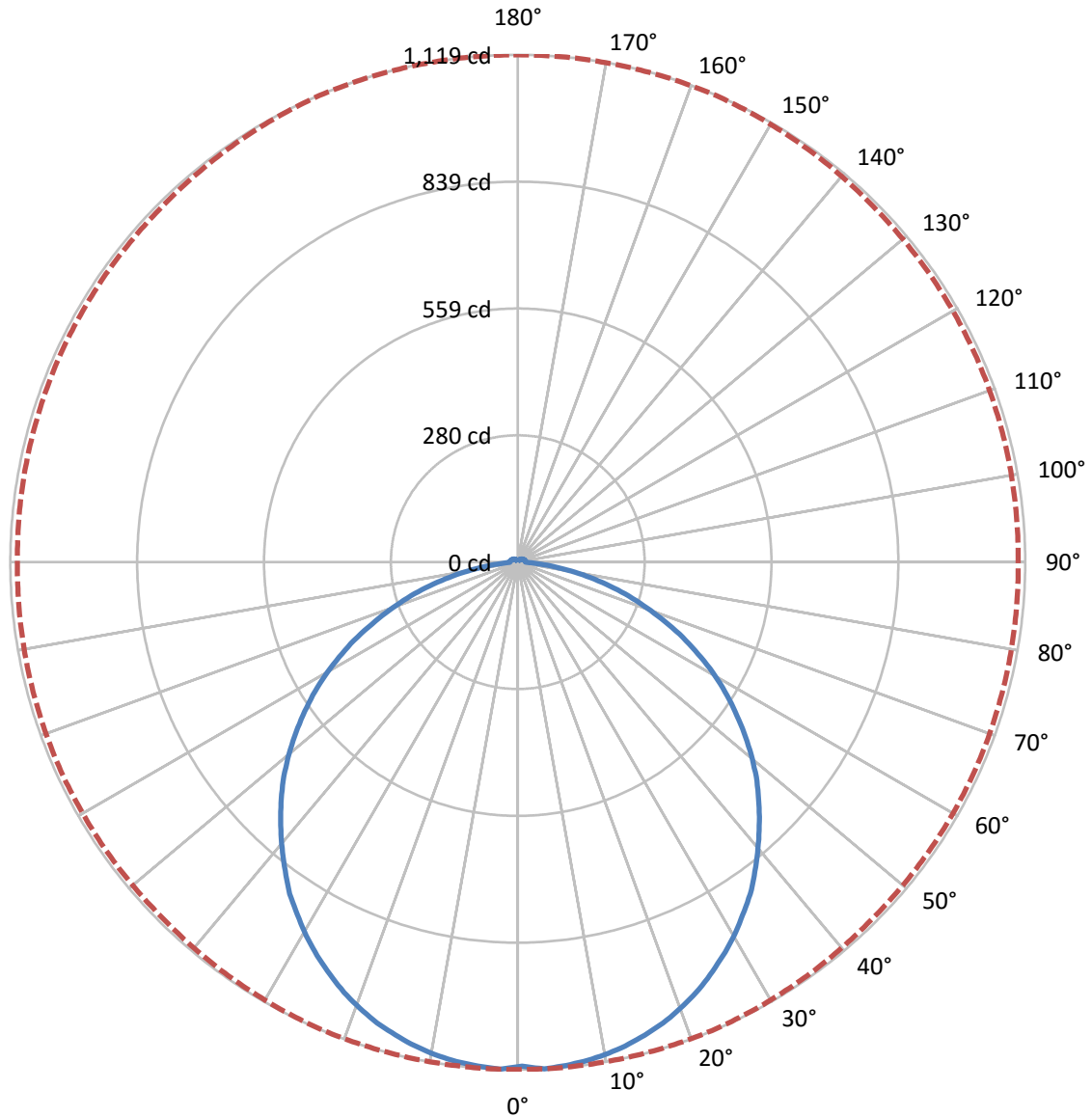


Based on 10 foot mounting height. Maximum calculated value = 11.1 fc  
 Type V - Short - Non-Cutoff



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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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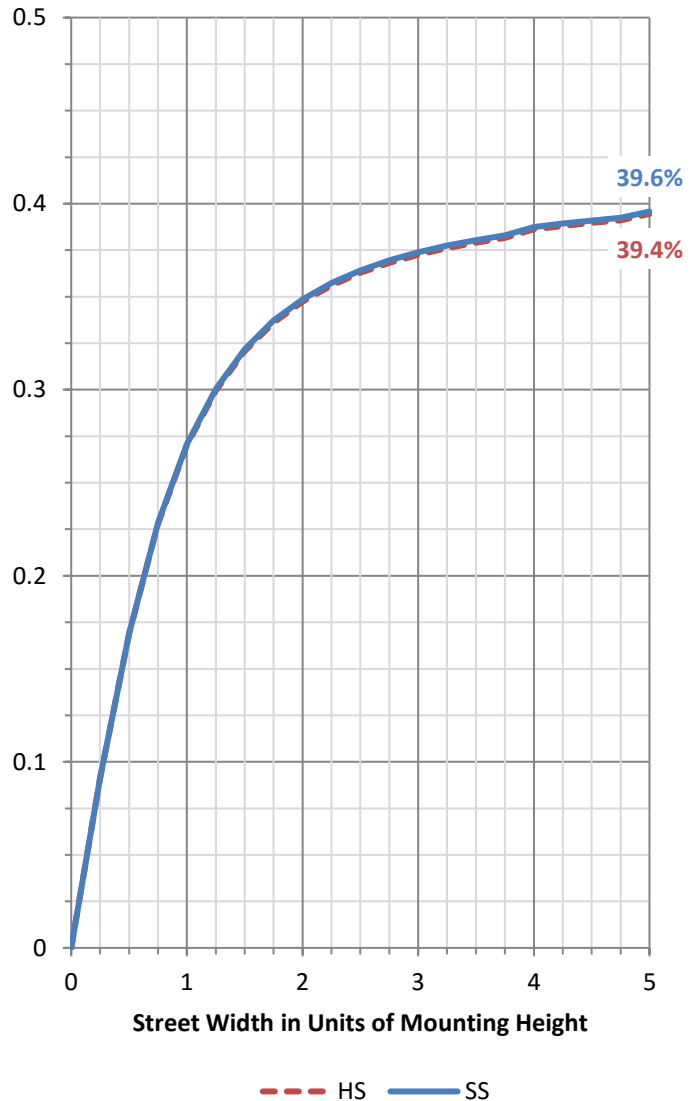
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2241.1	488.5	2729.6
	% Fixture	41.1	8.9	50.0
<b>Street Side</b>	Lumens	2241.1	488.5	2729.6
	% Fixture	41.1	8.9	50.0
<b>Total</b>	Lumens	4482.2	977.1	5459.3
	% Fixture	82.1	17.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.0	1.9
10°-20°	311.1	5.7
20°-30°	491.5	9.0
30°-40°	625.7	11.5
40°-50°	701.3	12.8
50°-60°	710.6	13.0
60°-70°	643.8	11.8
70°-80°	518.6	9.5
80°-90°	373.5	6.8
90°-100°	288.7	5.3
100°-110°	242.8	4.4
110°-120°	189.8	3.5
120°-130°	133.8	2.5
130°-140°	79.1	1.4
140°-150°	35.1	0.6
150°-160°	7.6	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	4482.2	82.1
0°-180°	5459.3	100.0





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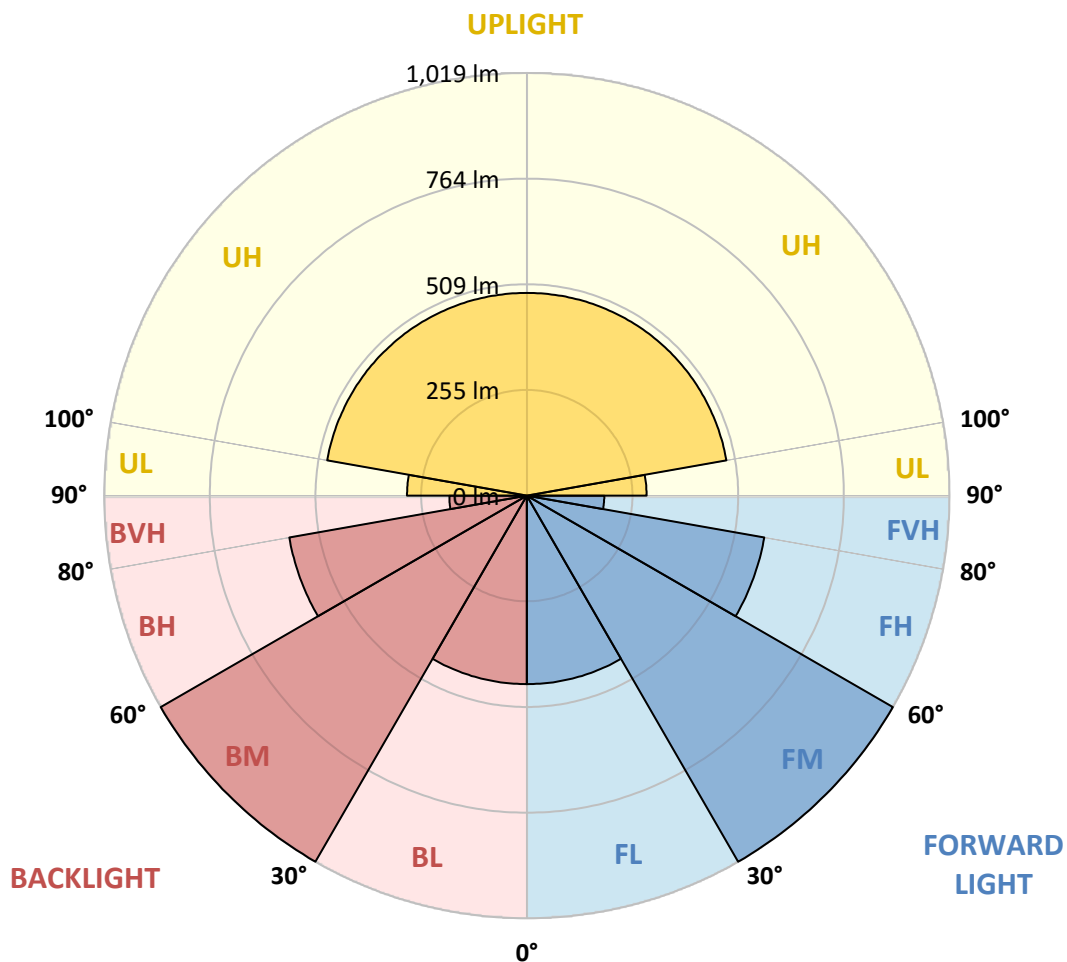
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	454.3	8.3			
FM	(30°-60°)	1018.8	18.7			
FH	(60°-80°)	581.2	10.6			G0/660
FVH	(80°-90°)	186.8	3.4			G2/225
BL	(0°-30°)	454.3	8.3	B1/500		
BM	(30°-60°)	1018.8	18.7	B2/2500		
BH	(60°-80°)	581.2	10.6	B2/1000		G0/660
BVH	(80°-90°)	186.8	3.4			G2/225
UL	(90°-100°)	288.7	5.3		U3/500	
UH	(100°-180°)	488.5	8.9		U3/500	

**BUG Rating: B2-U4-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1111.5	1111.5	1111.5	1111.5	1111.5
2.5°	1118.9	1118.2	1108.8	1107.5	1103.4
5°	1114.9	1115.5	1108.8	1109.5	1106.1
7.5°	1109.5	1111.5	1108.8	1112.2	1109.5
10°	1101.4	1105.4	1107.5	1114.2	1112.2
12.5°	1090.6	1098.0	1104.1	1113.5	1114.2
15°	1077.1	1087.9	1099.4	1113.5	1115.5
17.5°	1062.3	1076.4	1093.3	1114.2	1118.2
20°	1043.4	1061.6	1086.6	1113.5	1118.9
22.5°	1023.2	1045.4	1079.1	1110.8	1117.6
25°	998.9	1028.6	1069.0	1106.1	1114.9
27.5°	974.0	1007.0	1057.6	1098.7	1109.5
30°	947.0	985.5	1044.8	1089.3	1100.7
32.5°	916.7	961.9	1029.3	1077.8	1089.9
35°	887.7	934.9	1011.1	1065.0	1080.5
37.5°	852.0	910.6	992.2	1050.8	1065.0
40°	816.9	881.0	972.0	1033.3	1049.5
42.5°	781.2	853.3	951.8	1015.8	1030.6
45°	744.8	823.7	929.5	996.9	1013.1
47.5°	707.7	792.7	909.3	979.4	994.9
50°	666.6	760.3	885.7	958.5	972.0
52.5°	624.8	728.6	858.7	933.6	949.7
55°	581.7	692.9	827.1	905.9	922.1
57.5°	538.6	655.8	796.7	876.9	893.1
60°	494.1	616.8	759.0	844.6	864.8
62.5°	446.2	577.0	724.6	812.9	832.4
65°	400.4	536.5	688.9	779.9	798.7
67.5°	349.2	494.7	651.1	741.4	763.7
70°	302.6	453.0	610.7	704.4	728.0
72.5°	256.1	411.8	572.3	667.3	690.9
75°	210.3	370.1	531.8	628.9	655.2
77.5°	163.8	328.3	493.4	591.1	616.1
80°	119.3	287.1	454.3	550.7	578.3
82.5°	78.2	247.4	414.5	515.0	541.9
85°	46.5	212.3	377.5	480.6	508.9
87.5°	24.9	181.3	351.2	457.0	484.6
90°	17.5	160.4	327.6	432.7	461.0
92.5°	16.9	149.6	305.3	408.5	436.8
95°	16.9	144.9	295.9	390.3	416.6
97.5°	16.9	138.9	287.8	381.5	407.8
100°	16.2	132.1	279.7	370.7	397.7
102.5°	16.2	125.4	269.6	359.3	385.6
105°	15.5	118.0	259.5	347.1	372.7
107.5°	15.5	111.2	248.0	333.7	359.9
110°	14.8	104.5	236.6	320.2	346.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	14.2	96.4	226.5	307.4	333.0
115°	14.2	89.0	215.0	293.9	318.8
117.5°	13.5	81.6	203.6	280.4	304.7
120°	12.8	73.5	192.1	266.9	290.5
122.5°	12.1	64.0	180.0	252.1	275.7
125°	12.1	54.6	167.2	237.3	260.9
127.5°	11.5	45.8	154.4	221.8	244.0
130°	10.8	37.7	139.5	206.3	227.8
132.5°	10.1	29.7	124.0	190.1	210.3
135°	9.4	22.2	108.5	173.2	194.1
137.5°	8.8	15.5	93.0	157.1	174.6
140°	8.1	10.1	78.2	139.5	157.1
142.5°	7.4	6.1	63.4	121.3	137.5
145°	6.7	4.7	49.9	102.5	118.0
147.5°	6.1	4.0	36.4	83.6	98.4
150°	5.4	3.4	24.3	64.7	79.5
152.5°	4.7	3.4	12.8	45.8	59.3
155°	4.0	2.0	3.4	28.3	40.4
157.5°	4.0	1.3	0.0	12.8	22.9
160°	3.4	1.3	0.0	1.3	4.7
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)