



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: P212928

Luminaire Tested: **FPS-4-LD4-1LO-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: P212928  
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-LD4-1LO-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: 2461.3 lumens  
Efficiency: N/A  
Efficacy: 104.4 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

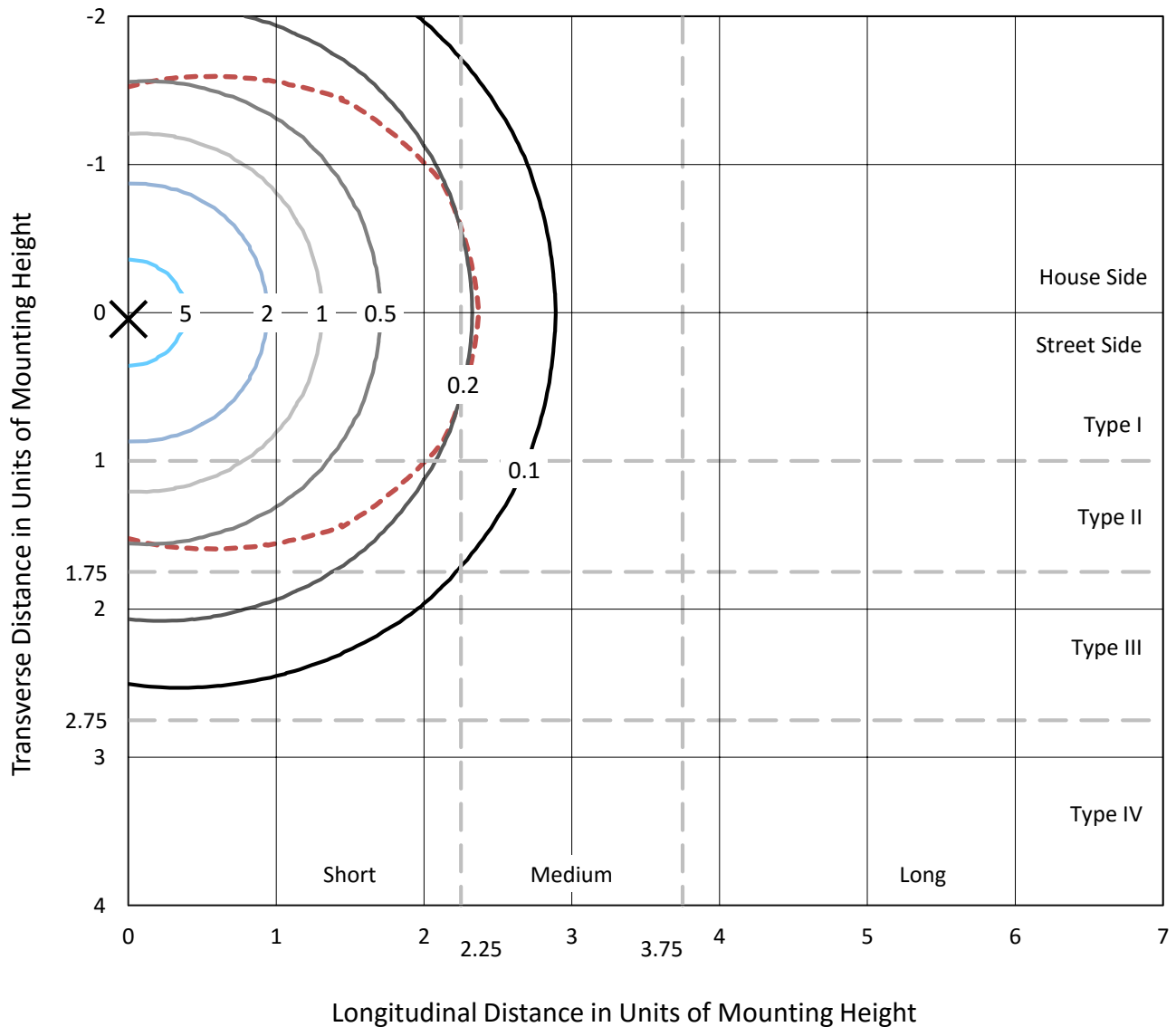
Input Watts (W): 23.57  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

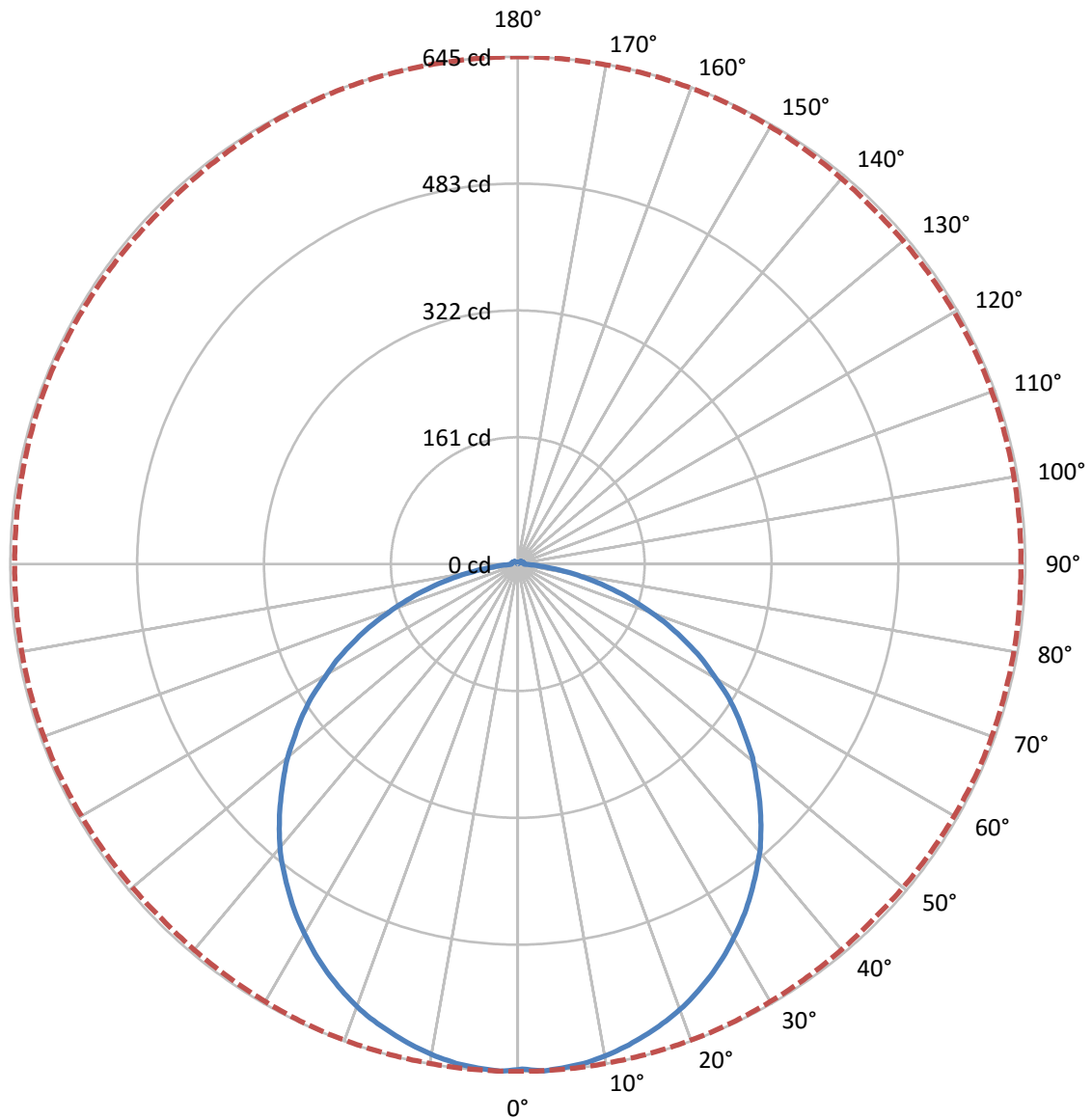


Based on 10 foot mounting height. Maximum calculated value = 6.4 fc  
 Type V - Short - Non-Cutoff



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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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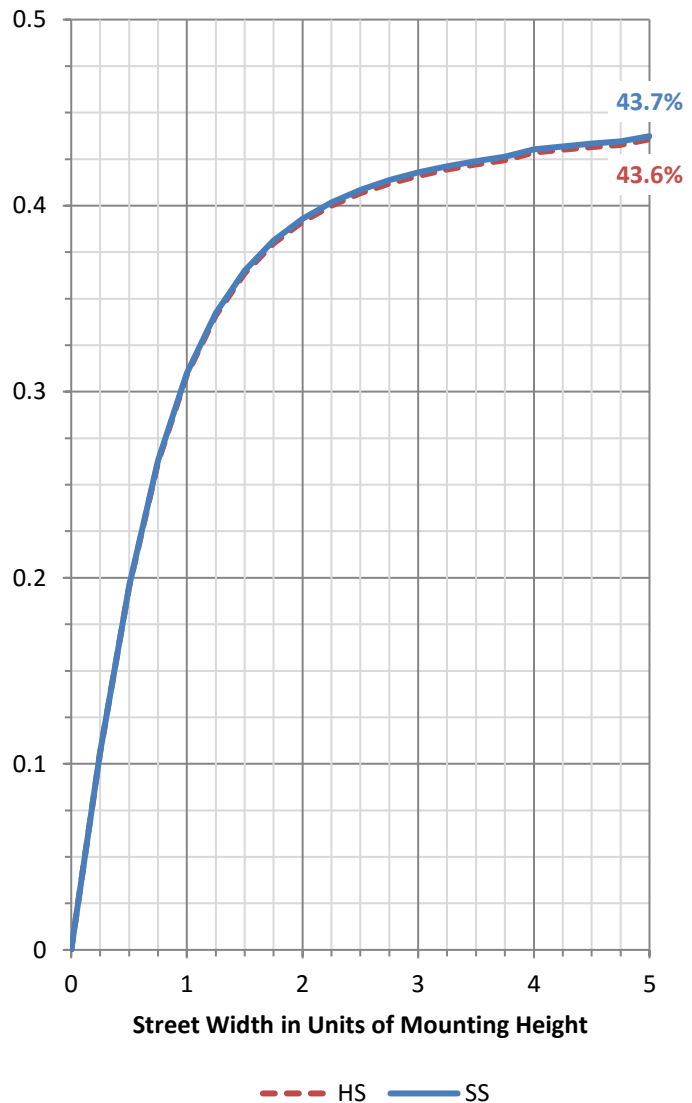
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1100.9	129.7	1230.7
	% Fixture	44.7	5.3	50.0
<b>Street Side</b>	Lumens	1100.9	129.7	1230.7
	% Fixture	44.7	5.3	50.0
<b>Total</b>	Lumens	2201.9	259.4	2461.3
	% Fixture	89.5	10.5	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.9	2.5
10°-20°	176.6	7.2
20°-30°	273.9	11.1
30°-40°	340.5	13.8
40°-50°	366.5	14.9
50°-60°	351.1	14.3
60°-70°	297.0	12.1
70°-80°	214.2	8.7
80°-90°	121.2	4.9
90°-100°	75.5	3.1
100°-110°	64.2	2.6
110°-120°	51.0	2.1
120°-130°	35.7	1.4
130°-140°	21.0	0.9
140°-150°	9.6	0.4
150°-160°	2.4	0.1
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2201.9	89.5
0°-180°	2461.3	100.0





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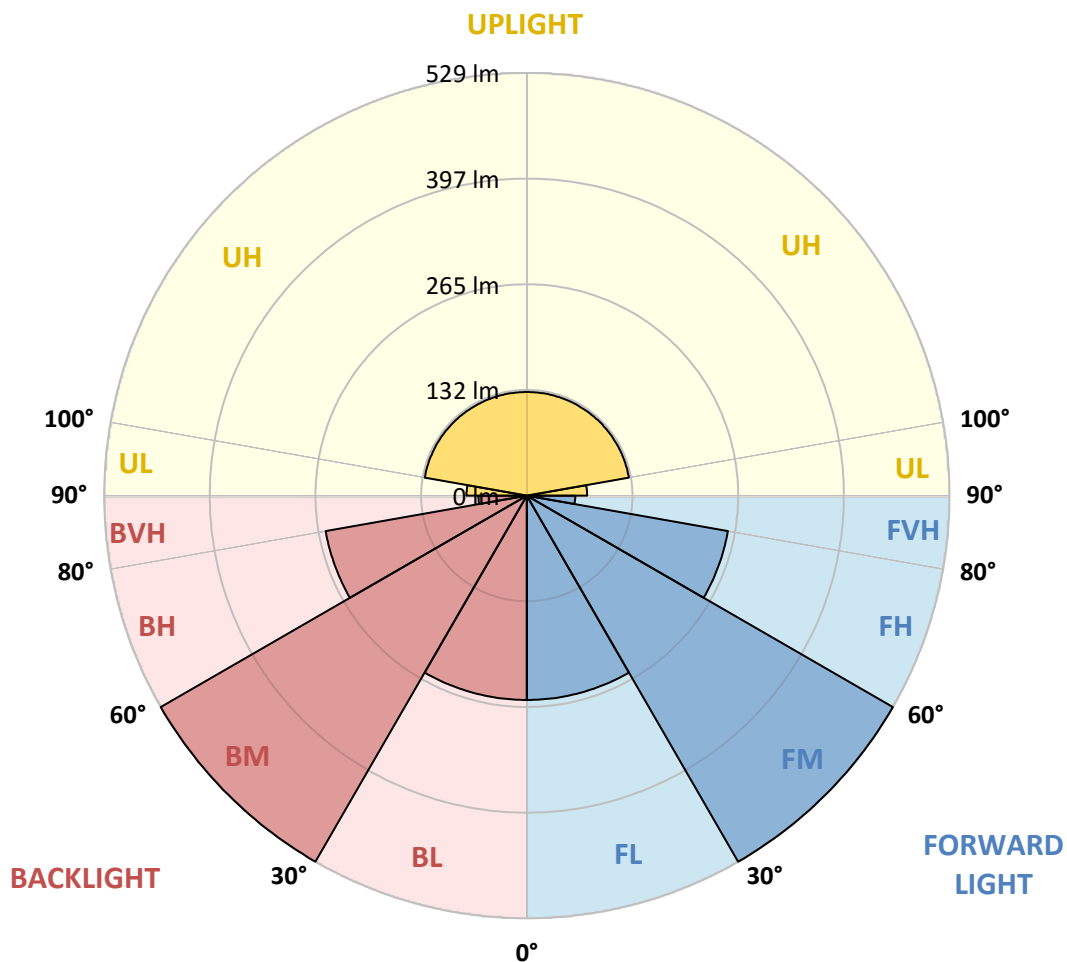
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	255.7	10.4			
FM (30°-60°)	529.0	21.5			
FH (60°-80°)	255.6	10.4			G0/660
FVH (80°-90°)	60.6	2.5			G1/100
BL (0°-30°)	255.7	10.4	B1/500		
BM (30°-60°)	529.0	21.5	B1/1000		
BH (60°-80°)	255.6	10.4	B1/500		G0/660
BVH (80°-90°)	60.6	2.5			G1/100
UL (90°-100°)	75.5	3.1		U3/500	
UH (100°-180°)	129.7	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°	641.4	641.4	641.4	641.4	641.4
2.5°	644.5	643.3	638.3	640.8	639.0
5°	642.0	641.4	637.7	640.2	639.0
7.5°	639.0	638.3	635.3	638.3	637.7
10°	633.4	634.0	632.2	637.1	636.5
12.5°	626.7	628.5	628.5	634.0	634.7
15°	618.7	621.7	623.6	629.7	629.7
17.5°	610.1	613.8	618.1	624.8	625.4
20°	600.2	604.5	610.1	618.7	621.1
22.5°	588.0	594.1	601.5	612.5	616.8
25°	575.1	583.0	592.3	607.0	612.5
27.5°	560.9	570.1	582.4	599.6	604.5
30°	545.0	556.0	571.4	589.8	594.1
32.5°	529.0	541.3	559.7	577.5	581.8
35°	511.2	525.9	547.4	564.6	567.1
37.5°	492.7	508.1	532.7	549.9	552.9
40°	474.3	490.3	517.3	533.3	537.6
42.5°	452.8	471.2	500.1	516.7	519.8
45°	430.7	451.6	481.7	498.3	502.6
47.5°	407.9	432.5	463.2	479.8	484.1
50°	386.4	410.4	443.0	461.4	466.3
52.5°	361.3	388.9	422.7	441.7	446.7
55°	337.9	366.8	401.8	420.8	426.4
57.5°	313.3	343.4	380.3	399.3	404.9
60°	285.1	319.5	357.6	376.6	380.9
62.5°	260.5	293.7	333.6	355.1	359.4
65°	232.2	269.1	310.9	333.0	338.5
67.5°	205.2	244.5	288.8	312.1	317.6
70°	175.1	219.9	266.0	290.0	294.3
72.5°	148.1	195.4	242.1	266.0	271.6
75°	119.8	170.8	215.6	240.8	246.4
77.5°	93.4	146.2	191.1	215.6	222.4
80°	67.0	121.0	166.5	192.3	197.8
82.5°	43.6	97.7	141.9	167.7	173.3
85°	25.2	76.2	119.2	145.0	153.0
87.5°	12.3	57.1	103.8	130.9	138.8
90°	8.0	45.5	90.3	118.0	125.3
92.5°	8.0	40.5	78.6	104.4	113.7
95°	8.0	39.3	76.2	97.7	103.8
97.5°	8.0	38.1	74.3	96.5	102.6
100°	8.0	36.2	72.5	94.6	100.8
102.5°	7.4	35.0	70.7	92.2	98.9
105°	7.4	33.2	68.2	89.7	96.5
107.5°	7.4	31.3	65.7	87.2	93.4
110°	6.8	29.5	63.3	84.2	90.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	6.8	27.6	60.8	81.1	87.2
115°	6.1	25.8	57.8	77.4	83.6
117.5°	6.1	23.3	54.1	73.7	79.9
120°	5.5	21.5	51.0	70.0	75.6
122.5°	5.5	19.0	47.9	65.7	71.3
125°	5.5	17.2	44.2	61.4	67.0
127.5°	4.9	14.7	40.5	57.1	62.7
130°	4.9	12.3	36.9	52.8	57.8
132.5°	4.3	10.4	32.6	48.5	53.5
135°	4.3	8.0	28.9	44.2	48.5
137.5°	3.7	6.1	25.2	39.9	44.2
140°	3.7	4.3	20.9	35.6	39.9
142.5°	3.1	3.1	17.8	31.3	35.6
145°	3.1	2.5	14.1	27.0	30.1
147.5°	2.5	1.8	11.1	22.1	25.8
150°	2.5	1.8	8.0	17.8	20.9
152.5°	1.8	1.2	4.9	13.5	16.6
155°	1.8	1.2	1.8	9.2	12.3
157.5°	1.8	0.6	0.0	4.9	7.4
160°	1.2	0.6	0.0	1.2	3.1
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)