



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: P212944

Luminaire Tested: **FPS-4-LD4-2STD-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: P212944  
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-LD4-2STD-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**

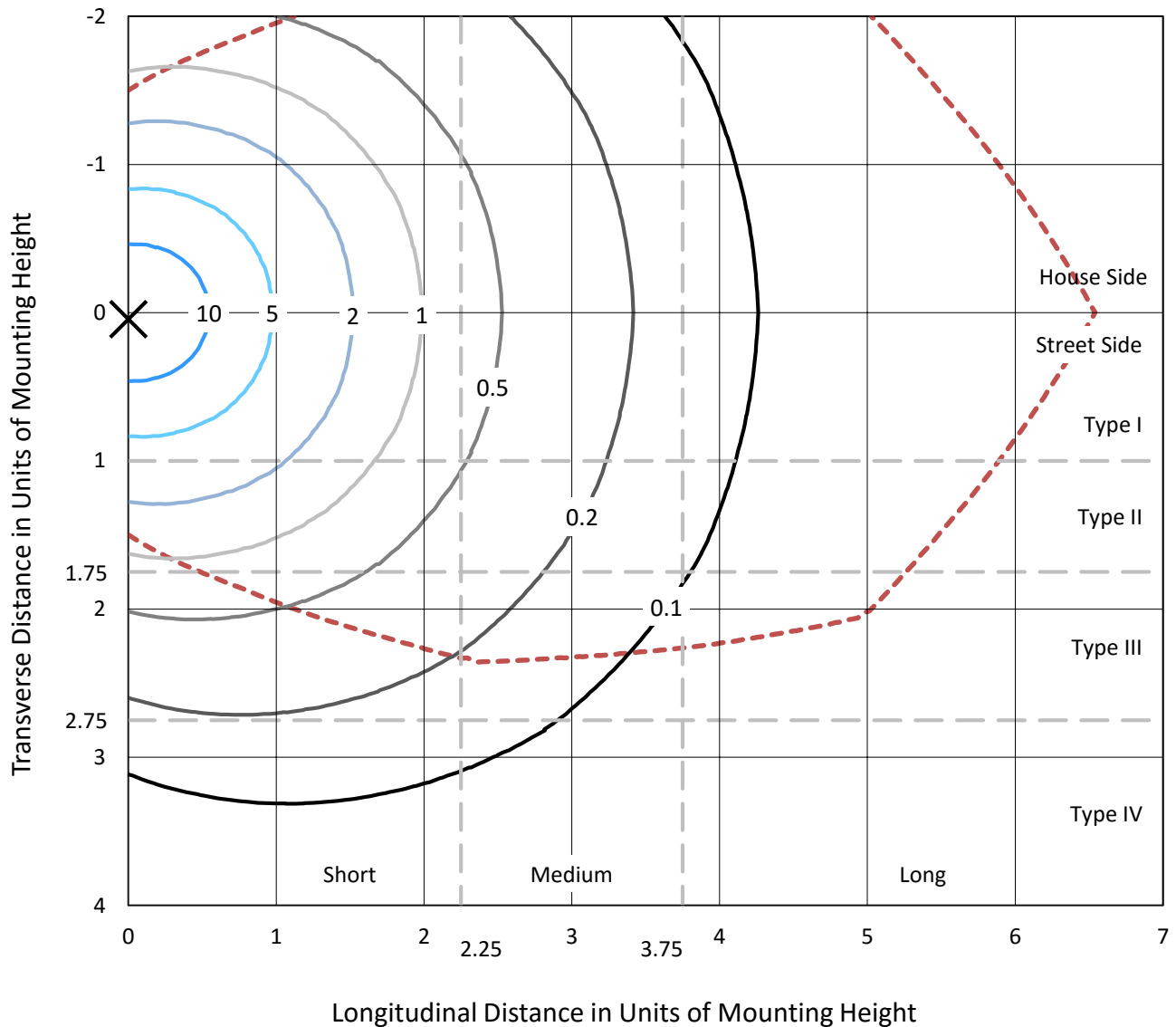
Lumens per Lamp: N/A  
Luminaire Lumens: 7296.7 lumens  
Efficiency: N/A  
Efficacy: 108.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.58' x L: 4.1' x H: 0.33')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B2 - U4 - G3  
  
Input Watts (W): 67.3  
Input Voltage (V): 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

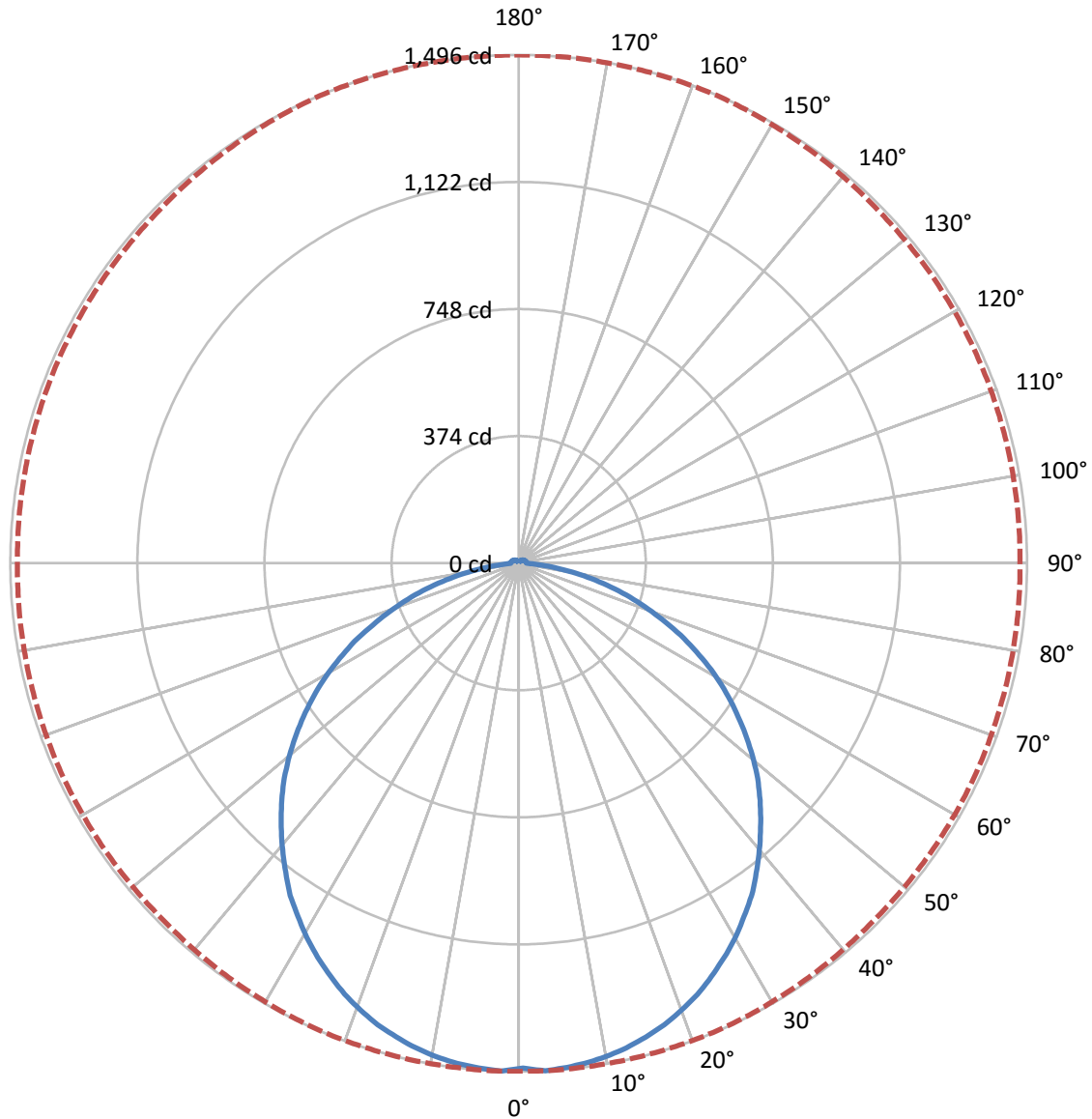


Based on 10 foot mounting height. Maximum calculated value = 14.9 fc  
 Type V - Short - Non-Cutoff



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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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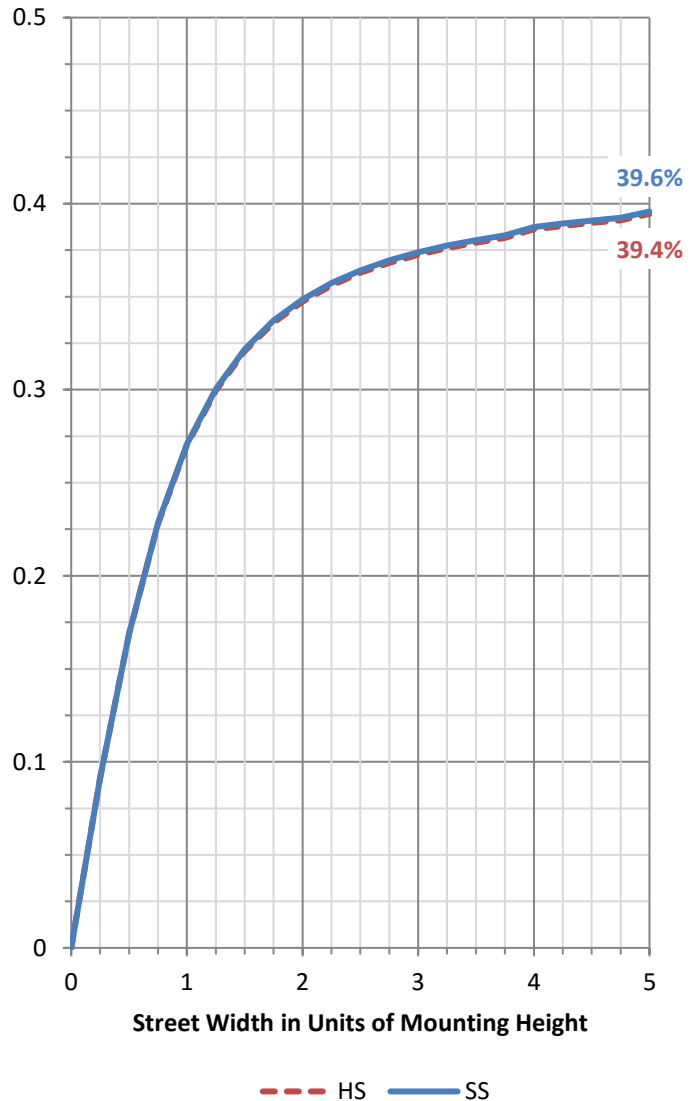
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2995.4	652.9	3648.3
	% Fixture	41.1	8.9	50.0
<b>Street Side</b>	Lumens	2995.4	652.9	3648.3
	% Fixture	41.1	8.9	50.0
<b>Total</b>	Lumens	5990.8	1305.9	7296.7
	% Fixture	82.1	17.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.7	1.9
10°-20°	415.8	5.7
20°-30°	657.0	9.0
30°-40°	836.3	11.5
40°-50°	937.3	12.8
50°-60°	949.8	13.0
60°-70°	860.5	11.8
70°-80°	693.2	9.5
80°-90°	499.2	6.8
90°-100°	385.9	5.3
100°-110°	324.5	4.4
110°-120°	253.7	3.5
120°-130°	178.8	2.5
130°-140°	105.7	1.4
140°-150°	47.0	0.6
150°-160°	10.2	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	5990.8	82.1
0°-180°	7296.7	100.0





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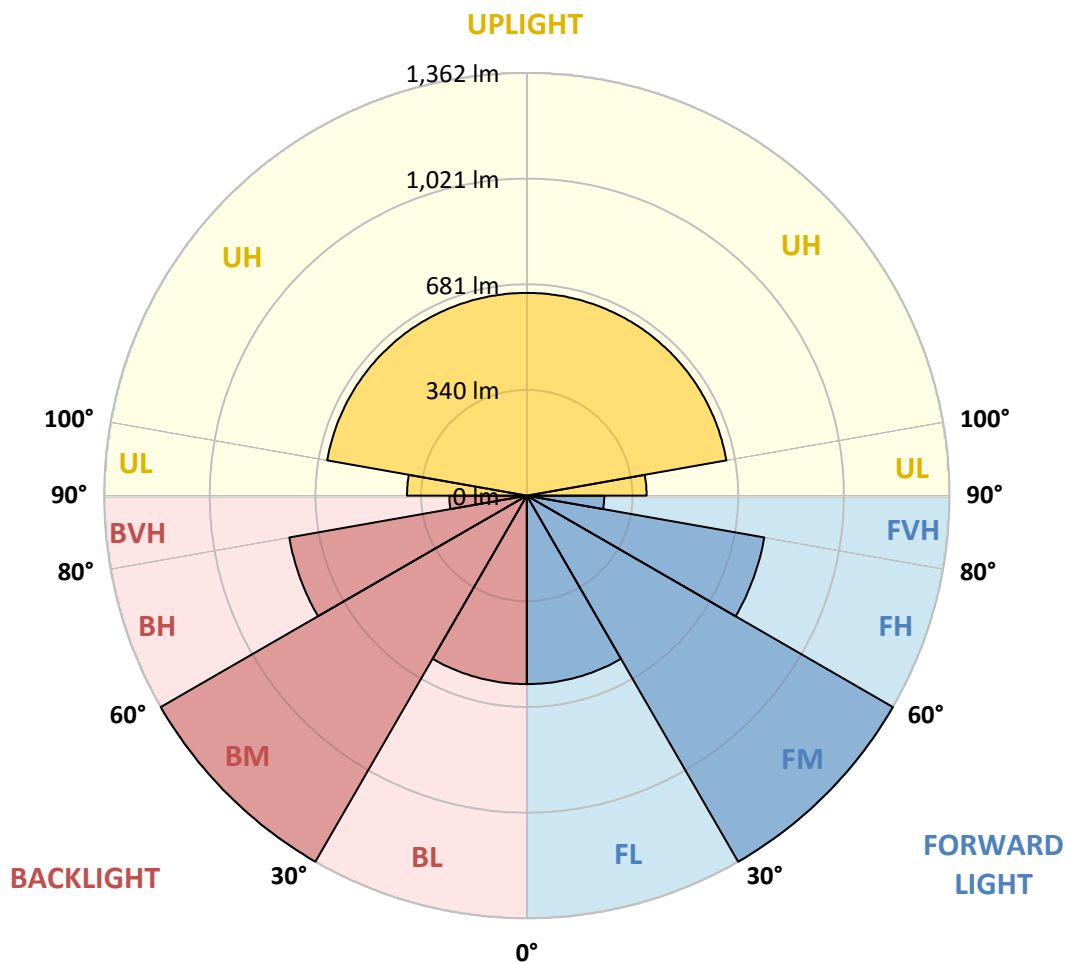
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	607.2	8.3			
FM (30°-60°)	1361.7	18.7			
FH (60°-80°)	776.9	10.6			G1/1800
FVH (80°-90°)	249.6	3.4			G3/500
BL (0°-30°)	607.2	8.3	B2/1000		
BM (30°-60°)	1361.7	18.7	B2/2500		
BH (60°-80°)	776.9	10.6	B2/1000		G1/1800
BVH (80°-90°)	249.6	3.4			G3/500
UL (90°-100°)	385.9	5.3		U3/500	
UH (100°-180°)	652.9	8.9		U4/1000	

**BUG Rating: B2-U4-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1485.6	1485.6	1485.6	1485.6	1485.6
2.5°	1495.5	1494.6	1482.0	1480.2	1474.8
5°	1490.1	1491.0	1482.0	1482.9	1478.4
7.5°	1482.9	1485.6	1482.0	1486.5	1482.9
10°	1472.1	1477.5	1480.2	1489.2	1486.5
12.5°	1457.7	1467.6	1475.7	1488.3	1489.2
15°	1439.6	1454.1	1469.4	1488.3	1491.0
17.5°	1419.8	1438.7	1461.3	1489.2	1494.6
20°	1394.6	1418.9	1452.3	1488.3	1495.5
22.5°	1367.6	1397.3	1442.3	1484.7	1493.7
25°	1335.1	1374.8	1428.8	1478.4	1490.1
27.5°	1301.8	1346.0	1413.5	1468.5	1482.9
30°	1265.8	1317.1	1396.4	1455.9	1471.2
32.5°	1225.2	1285.6	1375.7	1440.5	1456.8
35°	1186.5	1249.6	1351.4	1423.4	1444.1
37.5°	1138.7	1217.1	1326.1	1404.5	1423.4
40°	1091.9	1177.5	1299.1	1381.1	1402.7
42.5°	1044.1	1140.5	1272.1	1357.7	1377.5
45°	995.5	1100.9	1242.3	1332.4	1354.1
47.5°	945.9	1059.5	1215.3	1309.0	1329.7
50°	891.0	1016.2	1183.8	1281.1	1299.1
52.5°	835.1	973.9	1147.8	1247.8	1269.4
55°	777.5	926.1	1105.4	1210.8	1232.4
57.5°	719.8	876.6	1064.9	1172.1	1193.7
60°	660.4	824.3	1014.4	1128.8	1155.9
62.5°	596.4	771.2	968.5	1086.5	1112.6
65°	535.1	717.1	920.7	1042.3	1067.6
67.5°	466.7	661.3	870.3	991.0	1020.7
70°	404.5	605.4	816.2	941.4	973.0
72.5°	342.3	550.5	764.9	891.9	923.4
75°	281.1	494.6	710.8	840.5	875.7
77.5°	218.9	438.7	659.5	790.1	823.4
80°	159.5	383.8	607.2	736.0	773.0
82.5°	104.5	330.6	554.1	688.3	724.3
85°	62.2	283.8	504.5	642.3	680.2
87.5°	33.3	242.3	469.4	610.8	647.8
90°	23.4	214.4	437.8	578.4	616.2
92.5°	22.5	200.0	408.1	545.9	583.8
95°	22.5	193.7	395.5	521.6	556.8
97.5°	22.5	185.6	384.7	509.9	545.0
100°	21.6	176.6	373.9	495.5	531.5
102.5°	21.6	167.6	360.4	480.2	515.3
105°	20.7	157.7	346.8	464.0	498.2
107.5°	20.7	148.6	331.5	445.9	481.1
110°	19.8	139.6	316.2	427.9	463.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	18.9	128.8	302.7	410.8	445.0
115°	18.9	118.9	287.4	392.8	426.1
117.5°	18.0	109.0	272.1	374.8	407.2
120°	17.1	98.2	256.8	356.8	388.3
122.5°	16.2	85.6	240.5	336.9	368.5
125°	16.2	73.0	223.4	317.1	348.6
127.5°	15.3	61.3	206.3	296.4	326.1
130°	14.4	50.5	186.5	275.7	304.5
132.5°	13.5	39.6	165.8	254.1	281.1
135°	12.6	29.7	145.0	231.5	259.5
137.5°	11.7	20.7	124.3	209.9	233.3
140°	10.8	13.5	104.5	186.5	209.9
142.5°	9.9	8.1	84.7	162.2	183.8
145°	9.0	6.3	66.7	136.9	157.7
147.5°	8.1	5.4	48.6	111.7	131.5
150°	7.2	4.5	32.4	86.5	106.3
152.5°	6.3	4.5	17.1	61.3	79.3
155°	5.4	2.7	4.5	37.8	54.1
157.5°	5.4	1.8	0.0	17.1	30.6
160°	4.5	1.8	0.0	1.8	6.3
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)