



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: P212934

Luminaire Tested: **FPS-4-LD4-2HI-35-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: P212934  
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-LD4-2HI-35-OPL  
Description: FPS 4' LED FIXTURE WITH OPAL LENS  
Light Source: (168) EATON 3500K 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: 8173.8 lumens  
Efficiency: N/A  
Efficacy: 91.6 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 - U5 - G3

Input Watts (W): 89.2  
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

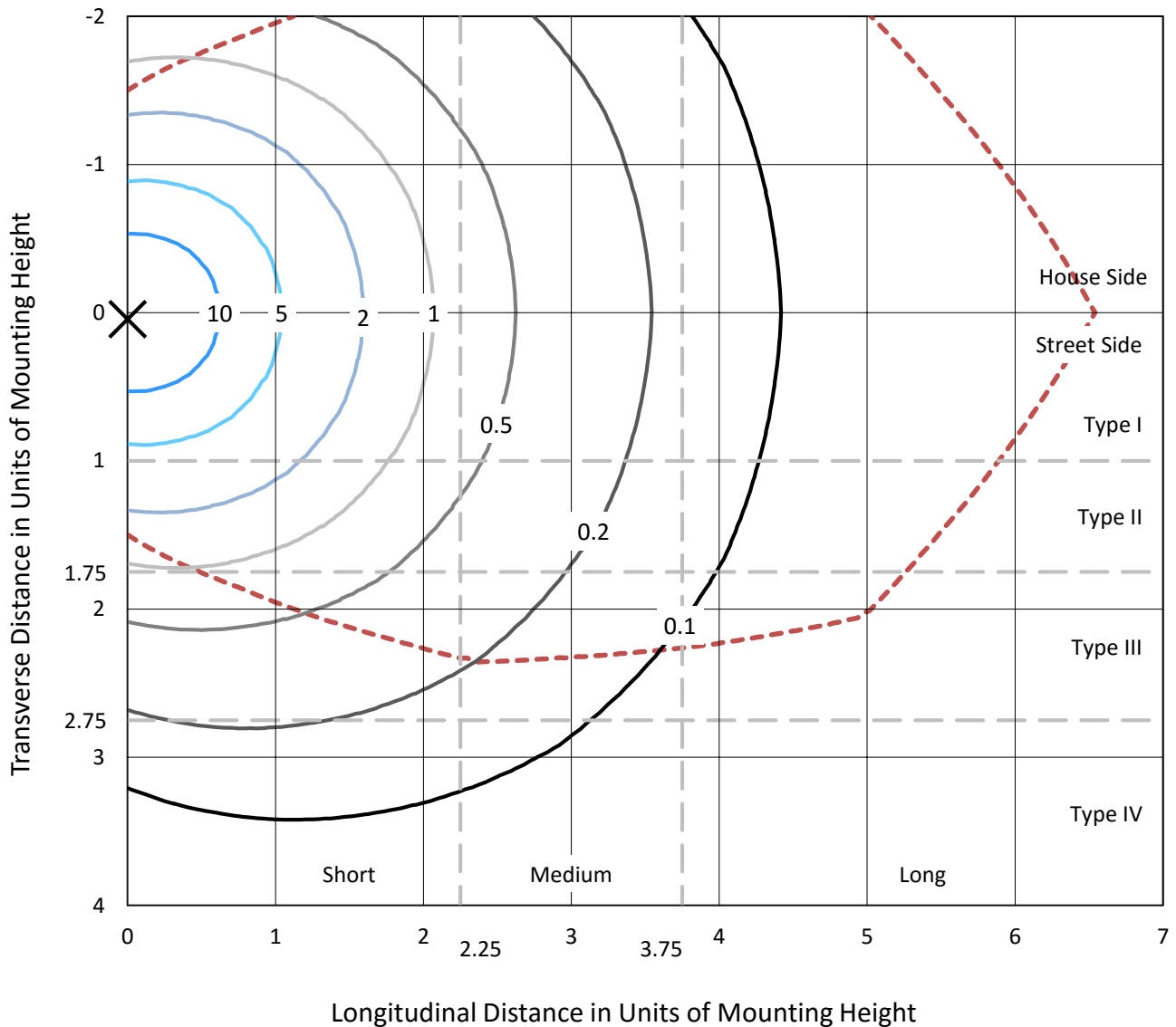


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

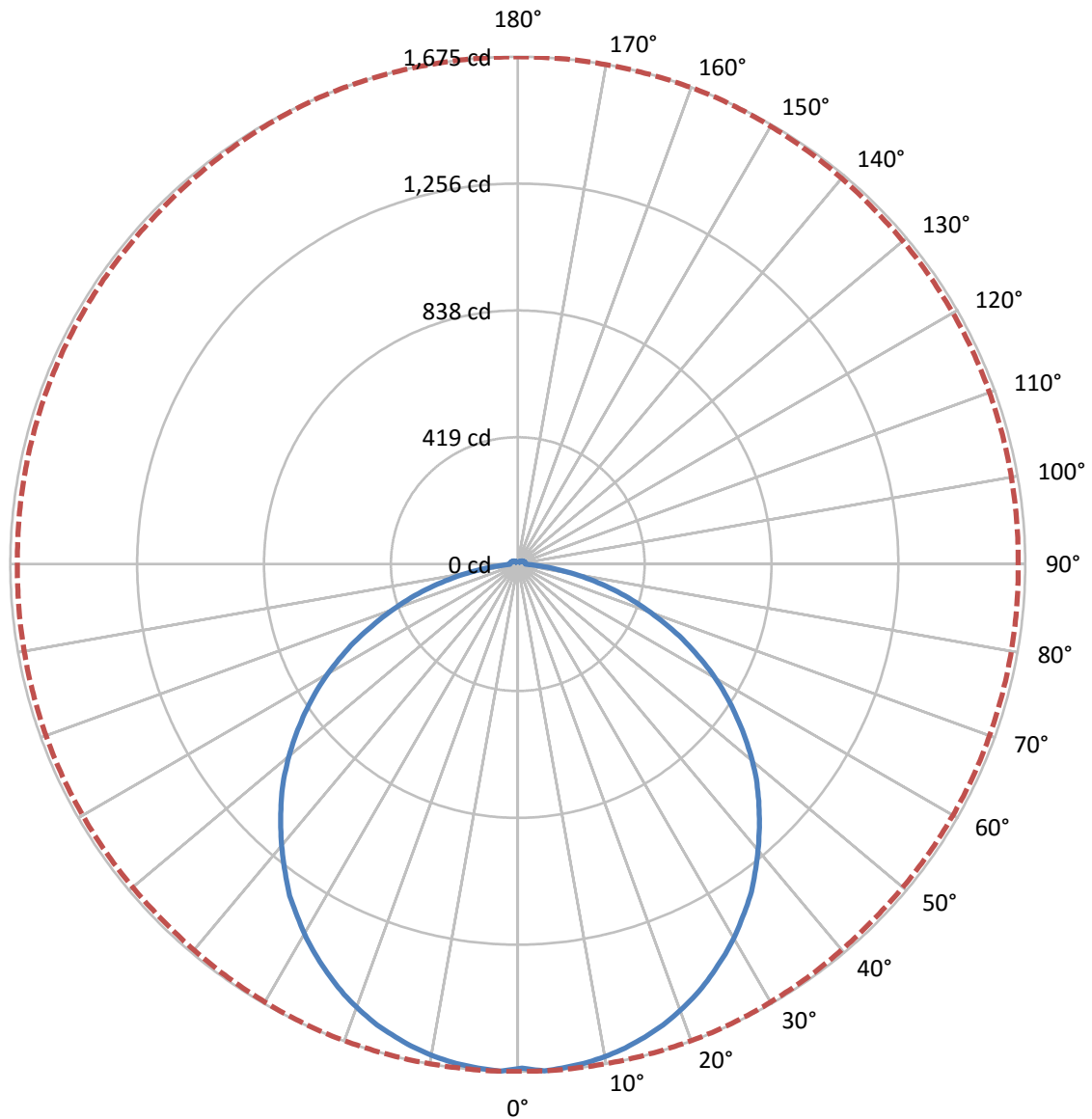


Based on 10 foot mounting height. Maximum calculated value = 16.6 fc  
 Type V - Short - Non-Cutoff



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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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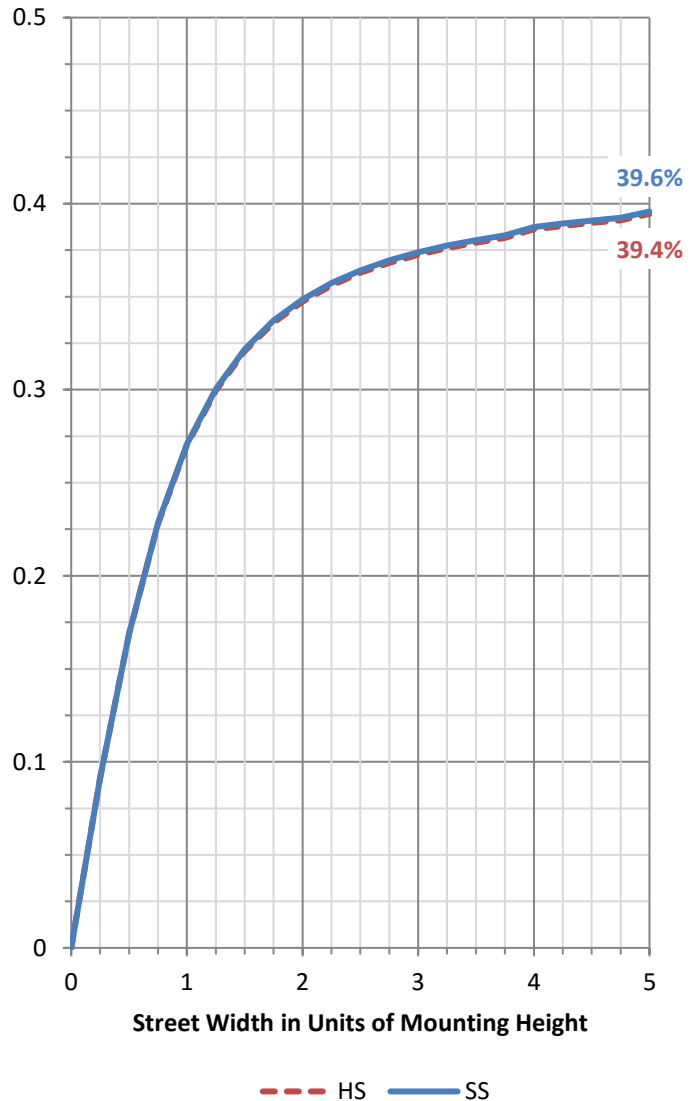
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3355.5	731.4	4086.9
	% Fixture	41.1	8.9	50.0
<b>Street Side</b>	Lumens	3355.5	731.4	4086.9
	% Fixture	41.1	8.9	50.0
<b>Total</b>	Lumens	6710.9	1462.9	8173.8
	% Fixture	82.1	17.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.7	1.9
10°-20°	465.8	5.7
20°-30°	735.9	9.0
30°-40°	936.8	11.5
40°-50°	1050.0	12.8
50°-60°	1064.0	13.0
60°-70°	964.0	11.8
70°-80°	776.5	9.5
80°-90°	559.2	6.8
90°-100°	432.3	5.3
100°-110°	363.5	4.4
110°-120°	284.2	3.5
120°-130°	200.3	2.5
130°-140°	118.4	1.4
140°-150°	52.6	0.6
150°-160°	11.4	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	6710.9	82.1
0°-180°	8173.8	100.0





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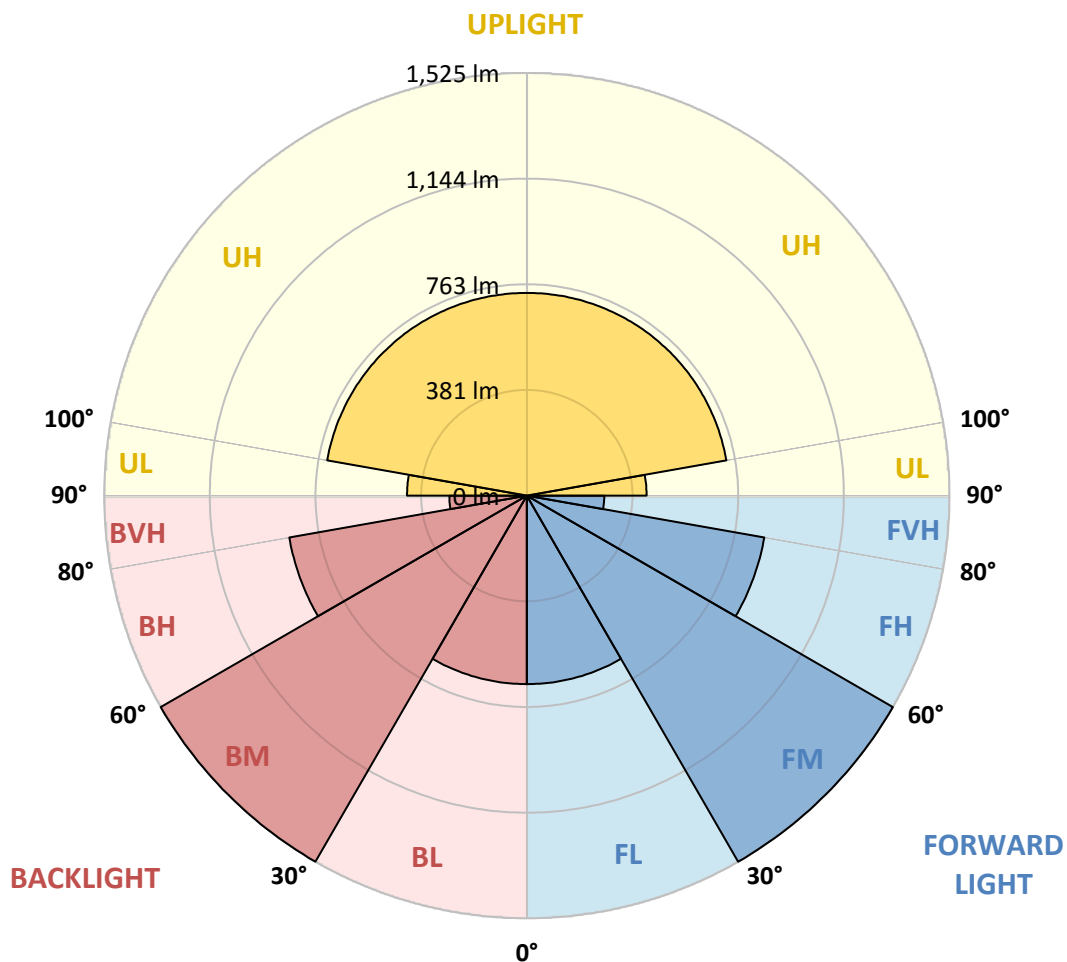
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	680.2	8.3			
FM (30°-60°)	1525.4	18.7			
FH (60°-80°)	870.3	10.6			G1/1800
FVH (80°-90°)	279.6	3.4			G3/500
BL (0°-30°)	680.2	8.3	B2/1000		
BM (30°-60°)	1525.4	18.7	B2/2500		
BH (60°-80°)	870.3	10.6	B2/1000		G1/1800
BVH (80°-90°)	279.6	3.4			G3/500
UL (90°-100°)	432.3	5.3		U3/500	
UH (100°-180°)	731.4	8.9		U4/1000	

**BUG Rating: B2-U5-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1664.2	1664.2	1664.2	1664.2	1664.2
2.5°	1675.3	1674.3	1660.1	1658.1	1652.1
5°	1669.2	1670.2	1660.1	1661.1	1656.1
7.5°	1661.1	1664.2	1660.1	1665.2	1661.1
10°	1649.0	1655.1	1658.1	1668.2	1665.2
12.5°	1632.9	1644.0	1653.1	1667.2	1668.2
15°	1612.7	1628.9	1646.0	1667.2	1670.2
17.5°	1590.5	1611.7	1636.9	1668.2	1674.3
20°	1562.2	1589.5	1626.8	1667.2	1675.3
22.5°	1532.0	1565.3	1615.7	1663.2	1673.3
25°	1495.6	1540.0	1600.6	1656.1	1669.2
27.5°	1458.3	1507.8	1583.4	1645.0	1661.1
30°	1417.9	1475.5	1564.3	1630.9	1648.0
32.5°	1372.5	1440.1	1541.1	1613.7	1631.9
35°	1329.1	1399.8	1513.8	1594.5	1617.8
37.5°	1275.6	1363.4	1485.5	1573.3	1594.5
40°	1223.2	1319.0	1455.3	1547.1	1571.3
42.5°	1169.7	1277.7	1425.0	1520.9	1543.1
45°	1115.2	1233.2	1391.7	1492.6	1516.8
47.5°	1059.7	1186.8	1361.4	1466.4	1489.6
50°	998.1	1138.4	1326.1	1435.1	1455.3
52.5°	935.5	1090.9	1285.7	1397.7	1422.0
55°	870.9	1037.5	1238.3	1356.4	1380.6
57.5°	806.4	982.0	1192.9	1313.0	1337.2
60°	739.7	923.4	1136.4	1264.5	1294.8
62.5°	668.1	863.9	1084.9	1217.1	1246.4
65°	599.5	803.3	1031.4	1167.6	1195.9
67.5°	522.8	740.8	974.9	1110.1	1143.4
70°	453.1	678.2	914.3	1054.6	1089.9
72.5°	383.5	616.6	856.8	999.1	1034.4
75°	314.9	554.1	796.3	941.6	980.9
77.5°	245.2	491.5	738.7	885.1	922.4
80°	178.6	429.9	680.2	824.5	865.9
82.5°	117.1	370.4	620.7	771.0	811.4
85°	69.6	317.9	565.2	719.6	761.9
87.5°	37.3	271.5	525.8	684.2	725.6
90°	26.2	240.2	490.5	647.9	690.3
92.5°	25.2	224.0	457.2	611.6	654.0
95°	25.2	217.0	443.0	584.3	623.7
97.5°	25.2	207.9	430.9	571.2	610.6
100°	24.2	197.8	418.8	555.1	595.4
102.5°	24.2	187.7	403.7	537.9	577.3
105°	23.2	176.6	388.5	519.7	558.1
107.5°	23.2	166.5	371.4	499.6	538.9
110°	22.2	156.4	354.2	479.4	518.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	21.2	144.3	339.1	460.2	498.5
115°	21.2	133.2	321.9	440.0	477.4
117.5°	20.2	122.1	304.8	419.8	456.2
120°	19.2	110.0	287.6	399.6	435.0
122.5°	18.2	95.9	269.5	377.4	412.8
125°	18.2	81.7	250.3	355.2	390.6
127.5°	17.2	68.6	231.1	332.0	365.3
130°	16.1	56.5	208.9	308.8	341.1
132.5°	15.1	44.4	185.7	284.6	314.9
135°	14.1	33.3	162.5	259.4	290.7
137.5°	13.1	23.2	139.3	235.1	261.4
140°	12.1	15.1	117.1	208.9	235.1
142.5°	11.1	9.1	94.9	181.7	205.9
145°	10.1	7.1	74.7	153.4	176.6
147.5°	9.1	6.1	54.5	125.1	147.3
150°	8.1	5.0	36.3	96.9	119.1
152.5°	7.1	5.0	19.2	68.6	88.8
155°	6.1	3.0	5.0	42.4	60.6
157.5°	6.1	2.0	0.0	19.2	34.3
160°	5.0	2.0	0.0	2.0	7.1
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)