



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: P212948

Luminaire Tested: **FPS-4-LD4-3LO-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: P212948  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35484-R3)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: EATON (FORMERLY COOPER LIGHTING)  
Product Line: FAIL-SAFE  
Catalog Number: FPS-4-LD4-3LO-30-OPL  
Description: FPS 4' LED FIXTURE WITH OPAL LENS  
Light Source: (252) 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: 7373.7 lumens  
Efficiency: N/A  
Efficacy: 104.6 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 - U4 - G3

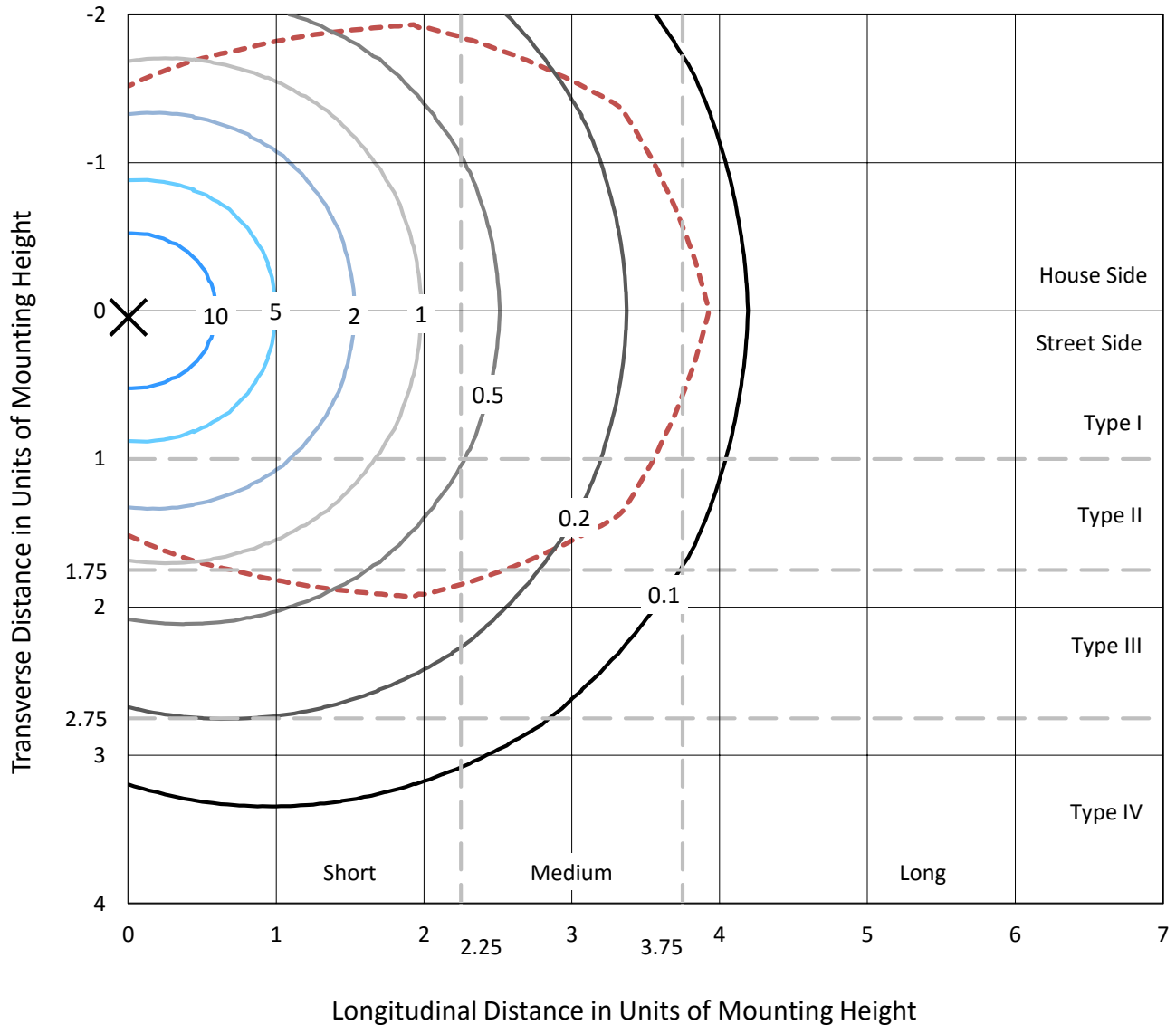
Input Watts (W): 70.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

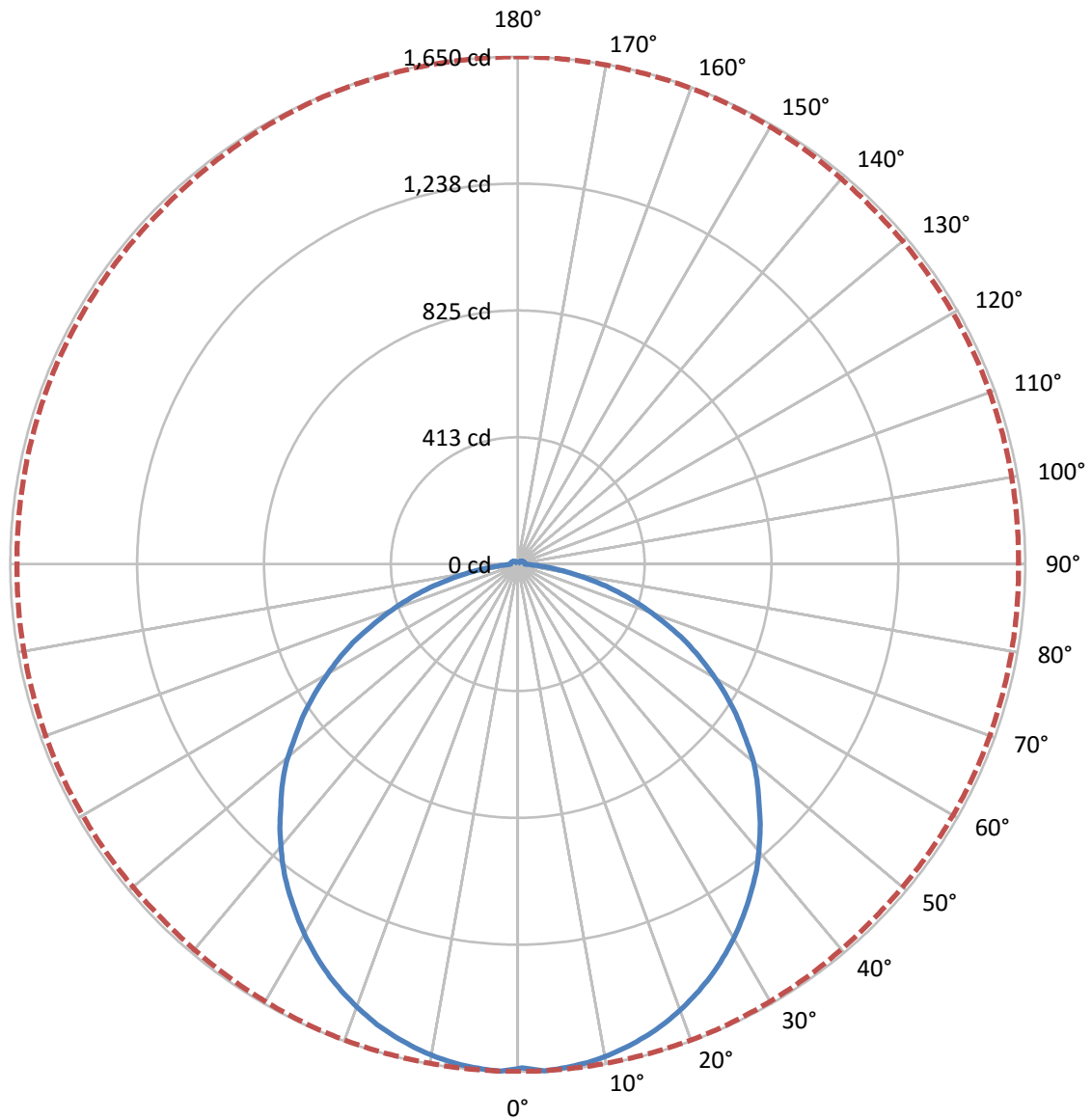


Based on 10 foot mounting height. Maximum calculated value = 16.4 fc  
 Type V - Short - Non-Cutoff



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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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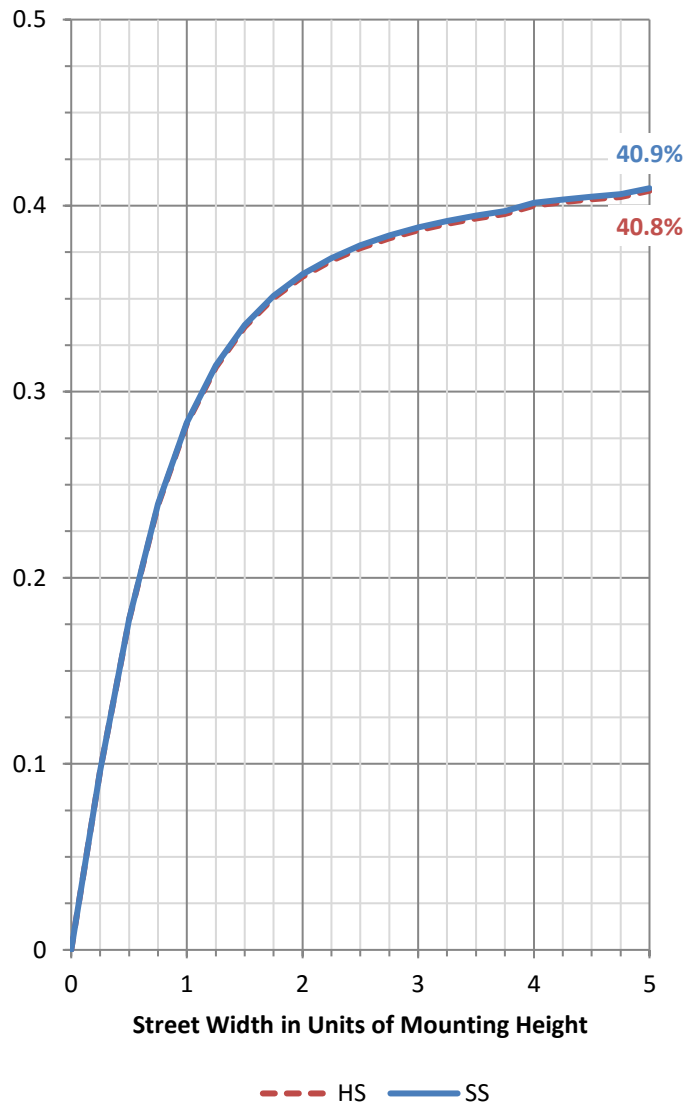
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3115.8	571.0	3686.9
	% Fixture	42.3	7.7	50.0
<b>Street Side</b>	Lumens	3115.8	571.0	3686.9
	% Fixture	42.3	7.7	50.0
<b>Total</b>	Lumens	6231.6	1142.1	7373.7
	% Fixture	84.5	15.5	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.0	2.1
10°-20°	455.8	6.2
20°-30°	715.2	9.7
30°-40°	902.5	12.2
40°-50°	996.4	13.5
50°-60°	989.6	13.4
60°-70°	876.5	11.9
70°-80°	681.5	9.2
80°-90°	458.2	6.2
90°-100°	336.4	4.6
100°-110°	283.6	3.8
110°-120°	222.4	3.0
120°-130°	156.5	2.1
130°-140°	92.3	1.3
140°-150°	41.5	0.6
150°-160°	9.2	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	6231.6	84.5
0°-180°	7373.7	100.0





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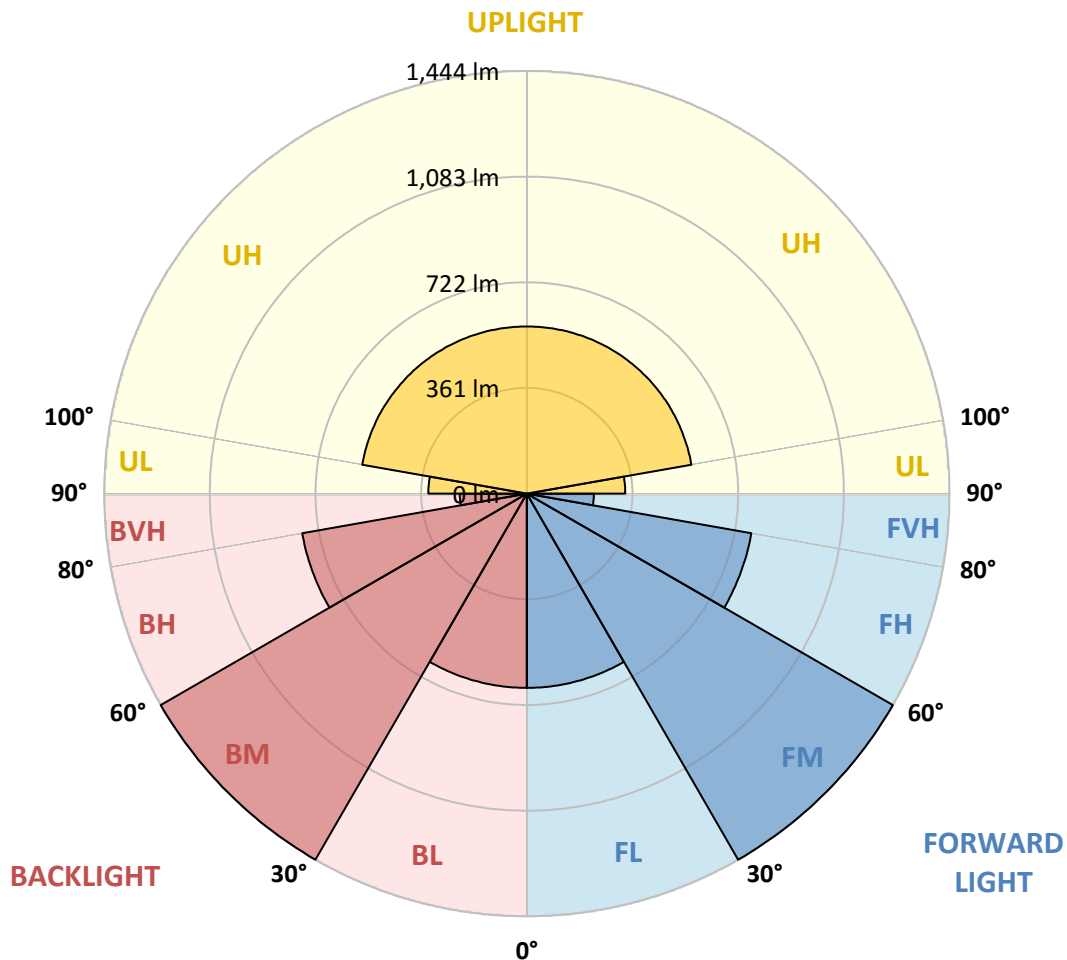
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	663.5	9.0			
FM (30°-60°)	1444.3	19.6			
FH (60°-80°)	779.0	10.6			G1/1800
FVH (80°-90°)	229.1	3.1			G3/500
BL (0°-30°)	663.5	9.0	B2/1000		
BM (30°-60°)	1444.3	19.6	B2/2500		
BH (60°-80°)	779.0	10.6	B2/1000		G1/1800
BVH (80°-90°)	229.1	3.1			G3/500
UL (90°-100°)	336.4	4.6		U3/500	
UH (100°-180°)	571.0	7.7		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°	1638.5	1638.5	1638.5	1638.5	1638.5
2.5°	1650.3	1646.6	1633.6	1634.2	1628.7
5°	1644.7	1642.9	1632.4	1636.1	1631.1
7.5°	1636.7	1635.4	1629.9	1636.7	1633.0
10°	1624.3	1626.2	1625.6	1636.7	1634.2
12.5°	1607.7	1613.8	1619.4	1633.6	1633.6
15°	1588.5	1598.4	1610.1	1629.3	1631.7
17.5°	1565.7	1579.3	1599.0	1624.3	1629.3
20°	1537.9	1556.4	1584.8	1617.5	1625.6
22.5°	1507.7	1532.4	1570.0	1610.8	1620.6
25°	1474.4	1504.0	1551.5	1600.3	1612.6
27.5°	1436.7	1474.4	1531.1	1586.1	1600.3
30°	1397.2	1440.4	1508.9	1568.2	1581.1
32.5°	1352.8	1404.6	1483.0	1545.3	1562.0
35°	1307.7	1366.4	1454.6	1521.9	1536.7
37.5°	1261.5	1325.6	1423.1	1494.1	1509.5
40°	1209.0	1283.1	1390.4	1462.0	1479.3
42.5°	1156.5	1236.1	1354.0	1429.3	1448.4
45°	1099.1	1189.2	1317.6	1394.1	1411.4
47.5°	1046.7	1141.7	1279.4	1360.8	1378.1
50°	989.3	1091.7	1239.2	1323.2	1340.4
52.5°	920.8	1042.4	1193.6	1281.2	1298.5
55°	860.9	989.3	1144.8	1236.1	1259.0
57.5°	795.5	930.7	1095.4	1188.0	1207.8
60°	727.6	874.5	1040.5	1138.0	1158.4
62.5°	661.6	812.8	985.6	1085.6	1109.0
65°	594.9	751.1	931.3	1033.7	1058.4
67.5°	519.6	691.8	872.6	978.8	1006.0
70°	449.3	628.9	816.5	925.1	950.4
72.5°	378.3	564.7	757.2	867.7	892.4
75°	309.8	504.2	694.9	806.6	835.6
77.5°	238.2	443.7	635.0	751.1	778.2
80°	174.0	380.2	573.9	689.4	717.7
82.5°	115.4	321.5	515.9	630.7	661.6
85°	66.0	267.8	460.4	578.9	611.0
87.5°	34.6	220.9	420.9	542.5	576.4
90°	23.5	191.9	386.3	509.8	543.1
92.5°	23.5	175.9	354.2	473.4	507.3
95°	23.5	169.7	343.1	450.5	480.8
97.5°	22.8	163.5	334.5	441.3	471.5
100°	22.8	156.1	325.2	430.2	460.4
102.5°	22.2	148.1	314.1	417.2	446.2
105°	21.6	139.5	301.8	403.6	433.2
107.5°	21.0	131.5	290.1	389.4	418.4
110°	20.4	123.4	277.1	373.4	403.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	19.7	114.8	264.8	358.6	388.2
115°	18.5	106.1	251.8	343.1	372.1
117.5°	17.9	97.5	238.2	327.1	355.5
120°	17.3	86.4	224.6	311.0	338.2
122.5°	16.7	77.1	210.4	293.8	320.9
125°	16.0	66.7	196.3	275.9	301.8
127.5°	15.4	56.2	179.6	258.0	282.0
130°	14.2	46.3	162.9	238.8	262.9
132.5°	13.6	37.6	145.0	219.7	243.2
135°	13.0	28.4	125.9	200.6	223.4
137.5°	11.7	20.4	108.6	181.4	202.4
140°	11.1	13.0	92.0	161.1	180.2
142.5°	9.9	8.0	75.3	141.9	160.5
145°	9.3	6.8	59.2	120.3	137.6
147.5°	8.0	5.6	43.8	98.7	114.8
150°	7.4	4.9	29.0	75.9	92.6
152.5°	6.8	4.3	16.7	54.3	69.7
155°	5.6	3.1	4.9	33.9	48.1
157.5°	4.9	1.9	0.0	16.0	26.5
160°	3.7	1.2	0.0	2.5	6.2
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)