



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: P212921

Luminaire Tested: **FPS-4-LD4-3STD-40-CLR**

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: P212921  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35459-R3)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: EATON (FORMERLY COOPER LIGHTING)  
Product Line: FAIL-SAFE  
Catalog Number: FPS-4-LD4-3STD-40-CLR  
Description: FPS 4' LED FIXTURE WITH CLEAR LENS  
Light Source: (252) 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: 11248.2 lumens  
Efficiency: N/A  
Efficacy: 111.6 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: B3 - U4 - G3

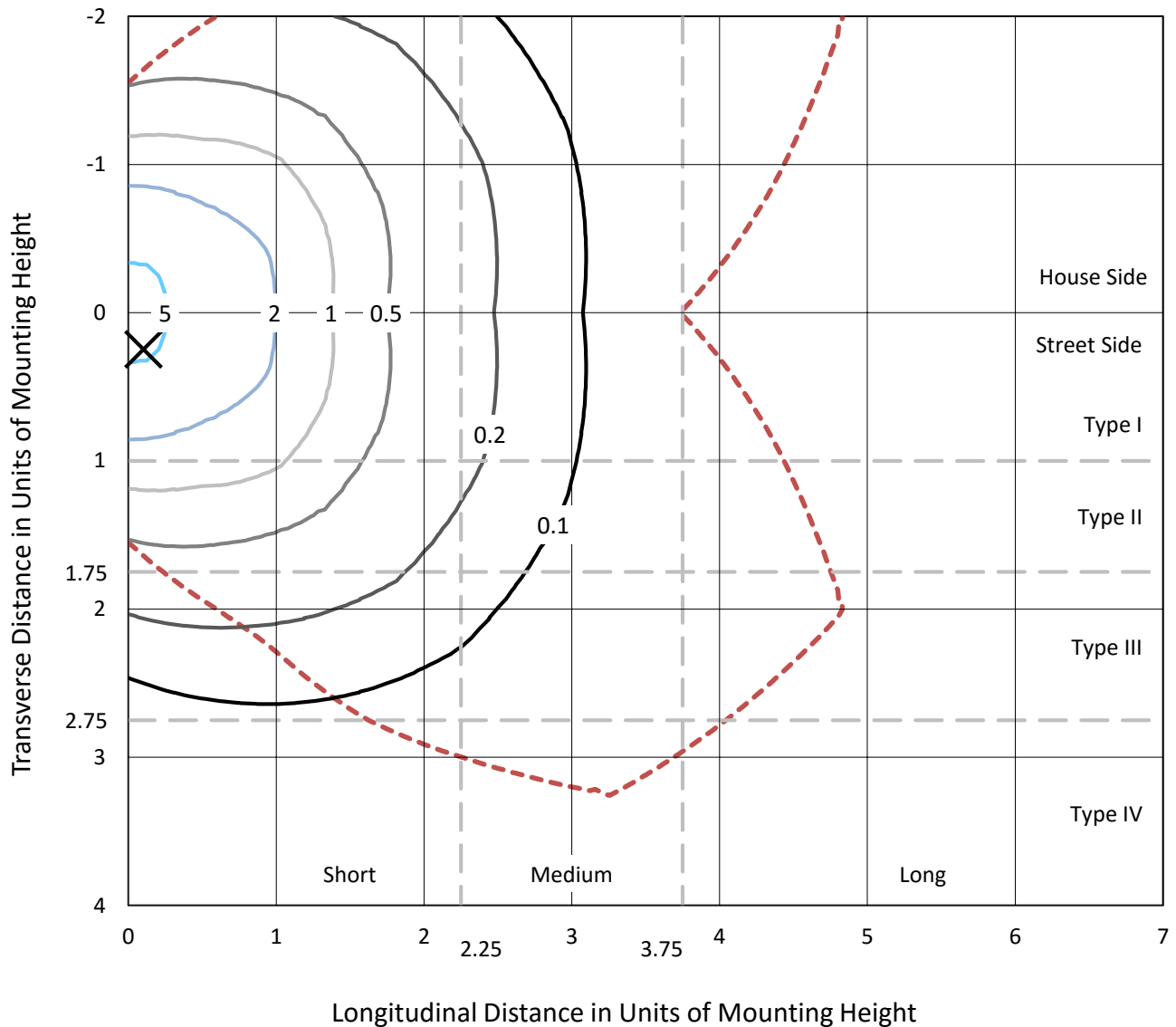
Input Watts (W): 100.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

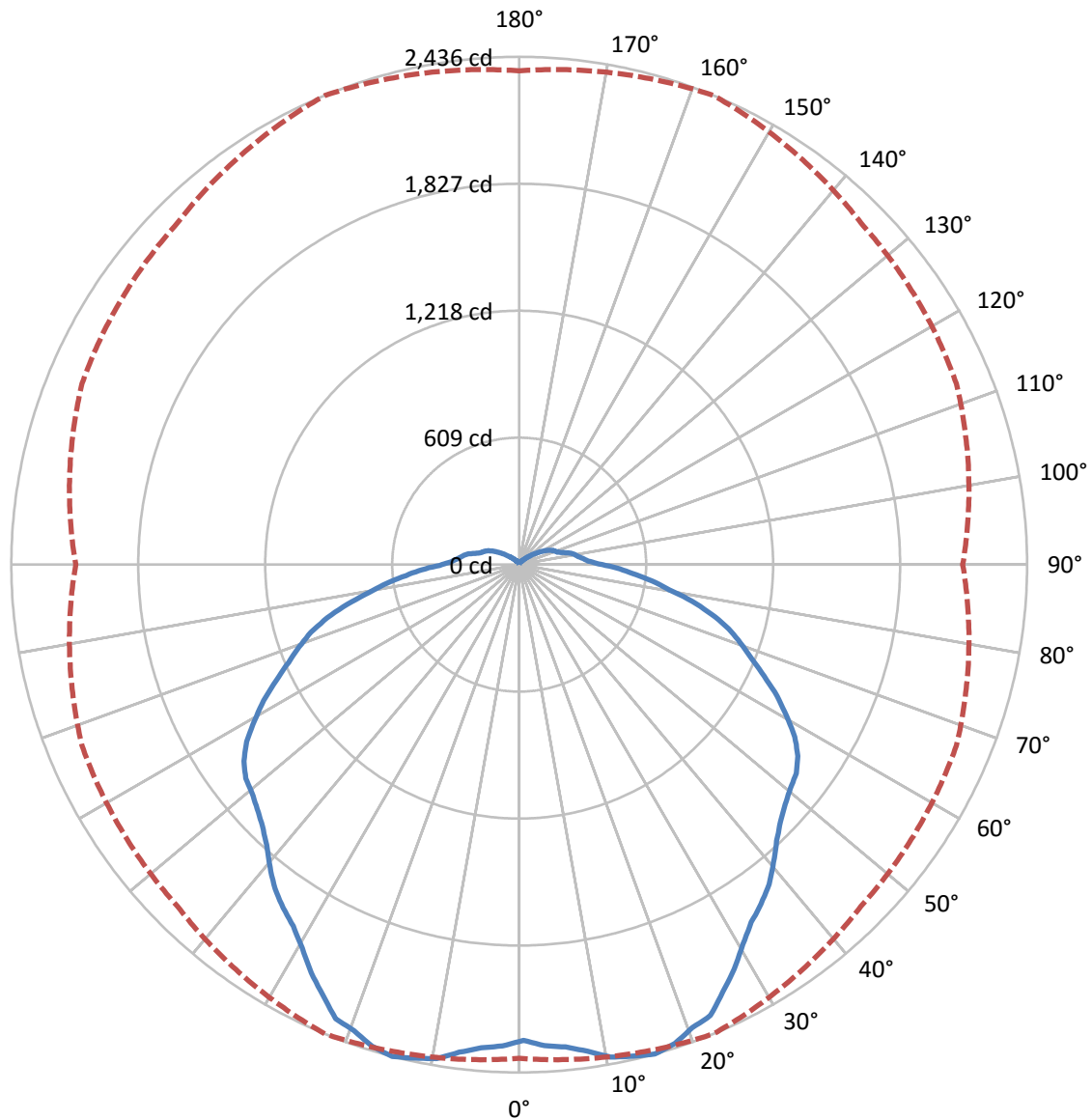


Based on 20 foot mounting height. Maximum calculated value = 5.7 fc  
 Type V - Short - Non-Cutoff



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### Luminous Intensity Polar Plot



— Vertical Plane Through 22.5-Deg Lateral    - - - Horizontal Cone Through 15-Deg Vertical



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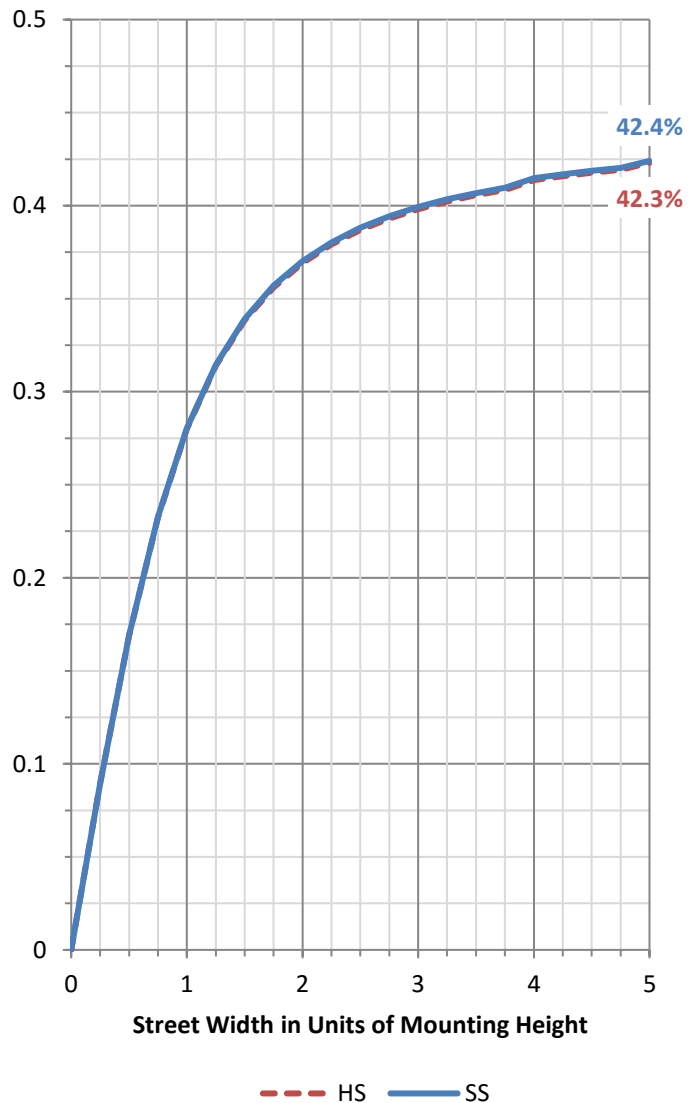
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4949.5	674.6	5624.1
	% Fixture	44.0	6.0	50.0
<b>Street Side</b>	Lumens	4949.5	674.6	5624.1
	% Fixture	44.0	6.0	50.0
<b>Total</b>	Lumens	9898.9	1349.3	11248.2
	% Fixture	88.0	12.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	223.1	2.0
10°-20°	647.4	5.8
20°-30°	975.5	8.7
30°-40°	1276.3	11.3
40°-50°	1575.3	14.0
50°-60°	1700.2	15.1
60°-70°	1515.0	13.5
70°-80°	1203.3	10.7
80°-90°	782.9	7.0
90°-100°	494.3	4.4
100°-110°	365.9	3.3
110°-120°	233.0	2.1
120°-130°	133.8	1.2
130°-140°	69.8	0.6
140°-150°	37.1	0.3
150°-160°	14.8	0.1
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-90°	9898.9	88.0
0°-180°	11248.2	100.0





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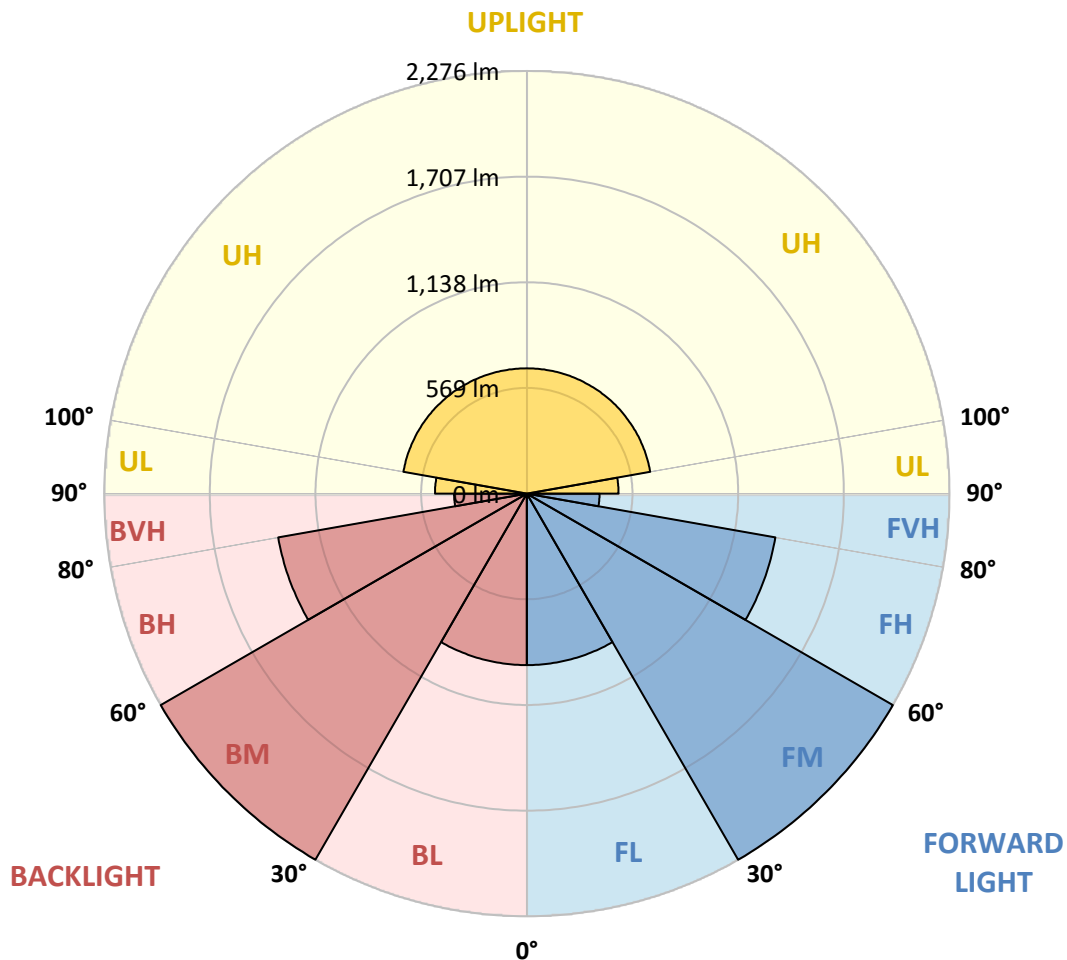
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	923.0	8.2			
FM (30°-60°)	2275.9	20.2			
FH (60°-80°)	1359.1	12.1			G1/1800
FVH (80°-90°)	391.5	3.5			G3/500
BL (0°-30°)	923.0	8.2	B2/1000		
BM (30°-60°)	2275.9	20.2	B2/2500		
BH (60°-80°)	1359.1	12.1	B3/2500		G1/1800
BVH (80°-90°)	391.5	3.5			G3/500
UL (90°-100°)	494.3	4.4		U3/500	
UH (100°-180°)	674.6	6.0		U4/1000	

**BUG Rating: B3-U4-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2281.8	2281.8	2281.8	2281.8	2281.8
2.5°	2307.0	2310.1	2297.0	2299.0	2294.9
5°	2315.1	2324.2	2342.4	2353.5	2343.4
7.5°	2327.2	2356.5	2375.7	2343.4	2322.2
10°	2355.5	2401.9	2358.5	2299.0	2279.8
12.5°	2361.5	2420.1	2347.4	2282.8	2314.1
15°	2368.6	2436.2	2318.1	2269.7	2127.4
17.5°	2364.6	2415.0	2337.3	2071.9	1958.9
20°	2355.5	2371.6	2266.7	1948.8	1892.3
22.5°	2315.1	2349.4	2144.6	1943.7	1935.7
25°	2256.6	2269.7	2022.4	2001.3	1994.2
27.5°	2207.1	2197.0	1923.5	2055.8	2068.9
30°	2143.6	2113.3	1924.6	2110.2	2055.8
32.5°	2078.0	2044.7	1913.5	2110.2	2075.9
35°	2005.3	1998.2	1944.7	2133.5	2137.5
37.5°	1915.5	1946.8	1949.8	2183.9	2125.4
40°	1841.8	1879.1	1971.0	2157.7	2155.7
42.5°	1755.0	1810.5	2037.6	2259.6	2225.3
45°	1670.2	1757.0	2105.2	2368.6	2229.3
47.5°	1587.5	1717.7	2202.1	2401.9	2150.6
50°	1478.5	1685.4	2298.0	2378.7	2056.8
52.5°	1386.6	1664.2	2285.9	2297.0	2000.2
55°	1291.8	1621.8	2234.4	2208.1	1923.5
57.5°	1191.9	1559.2	2136.5	2119.3	1762.1
60°	1097.0	1472.4	1999.2	1970.0	1625.8
62.5°	988.0	1388.7	1891.3	1861.0	1561.2
65°	873.0	1290.8	1767.1	1808.5	1532.0
67.5°	769.0	1202.0	1691.4	1775.2	1530.0
70°	657.0	1126.3	1616.7	1692.4	1463.3
72.5°	557.1	1050.6	1497.7	1542.1	1319.0
75°	455.2	954.7	1352.3	1408.9	1206.0
77.5°	360.3	847.7	1218.1	1286.7	1111.1
80°	271.5	730.7	1096.0	1167.7	998.1
82.5°	192.8	641.9	992.0	1053.6	903.2
85°	132.2	545.0	878.0	964.8	802.3
87.5°	80.7	467.3	775.1	861.9	718.6
90°	52.5	380.5	667.1	760.9	646.9
92.5°	49.5	331.0	582.3	686.3	577.3
95°	50.5	306.8	541.9	627.7	525.8
97.5°	51.5	284.6	512.7	603.5	502.6
100°	50.5	269.5	499.6	585.3	487.4
102.5°	49.5	248.3	482.4	550.0	456.2
105°	47.4	216.0	447.1	502.6	412.8
107.5°	45.4	193.8	392.6	441.0	367.4
110°	43.4	184.7	349.2	382.5	325.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	42.4	174.6	322.9	350.2	298.7
115°	40.4	160.5	298.7	324.0	276.5
117.5°	37.3	143.3	270.5	294.7	252.3
120°	33.3	124.1	243.2	267.4	230.1
122.5°	30.3	106.0	214.0	237.2	207.9
125°	27.2	88.8	185.7	205.9	183.7
127.5°	25.2	71.7	162.5	178.6	163.5
130°	23.2	59.5	142.3	157.4	146.3
132.5°	22.2	50.5	124.1	142.3	134.2
135°	20.2	41.4	108.0	132.2	126.2
137.5°	19.2	34.3	93.9	121.1	118.1
140°	18.2	28.3	81.7	112.0	111.0
142.5°	18.2	22.2	70.6	103.9	103.9
145°	17.2	20.2	61.6	94.9	95.9
147.5°	17.2	19.2	53.5	85.8	87.8
150°	16.1	18.2	44.4	73.7	77.7
152.5°	16.1	18.2	35.3	61.6	65.6
155°	15.1	17.2	25.2	48.4	53.5
157.5°	15.1	16.1	15.1	34.3	38.3
160°	14.1	16.1	11.1	18.2	21.2
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)