



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: P212901

Luminaire Tested: **FPS-4-LD4-2LO-30-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: P212901  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35662)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: EATON (FORMERLY COOPER LIGHTING)  
Product Line: FAIL-SAFE  
Catalog Number: FPS-4-LD4-2LO-30-CLR  
Description: FPS 4' LED FIXTURE WITH CLEAR LENS  
Light Source: (168) 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: 5571 lumens  
Efficiency: N/A  
Efficacy: 118.1 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 - U3 - G3

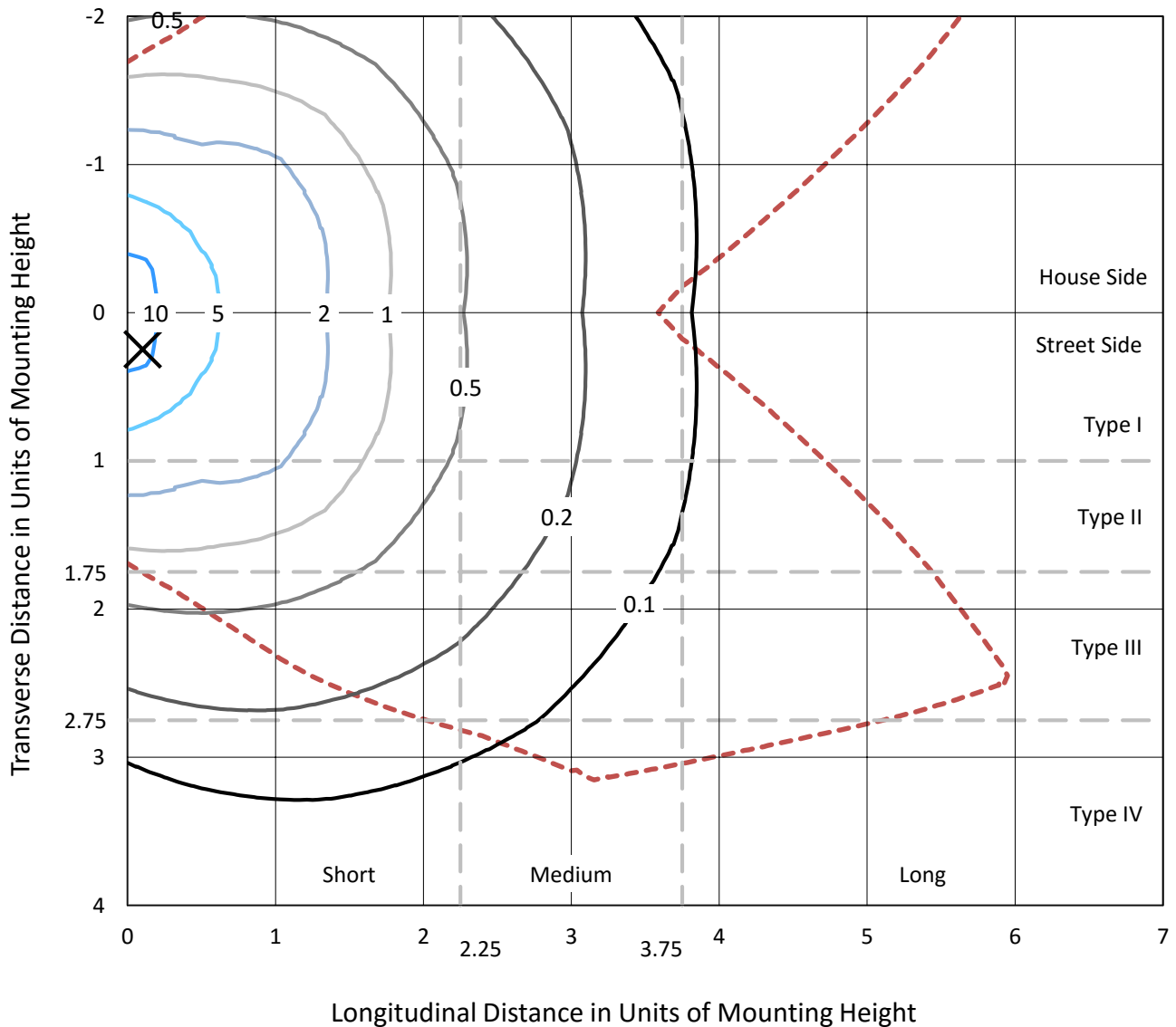
Input Watts (W): 47.16  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

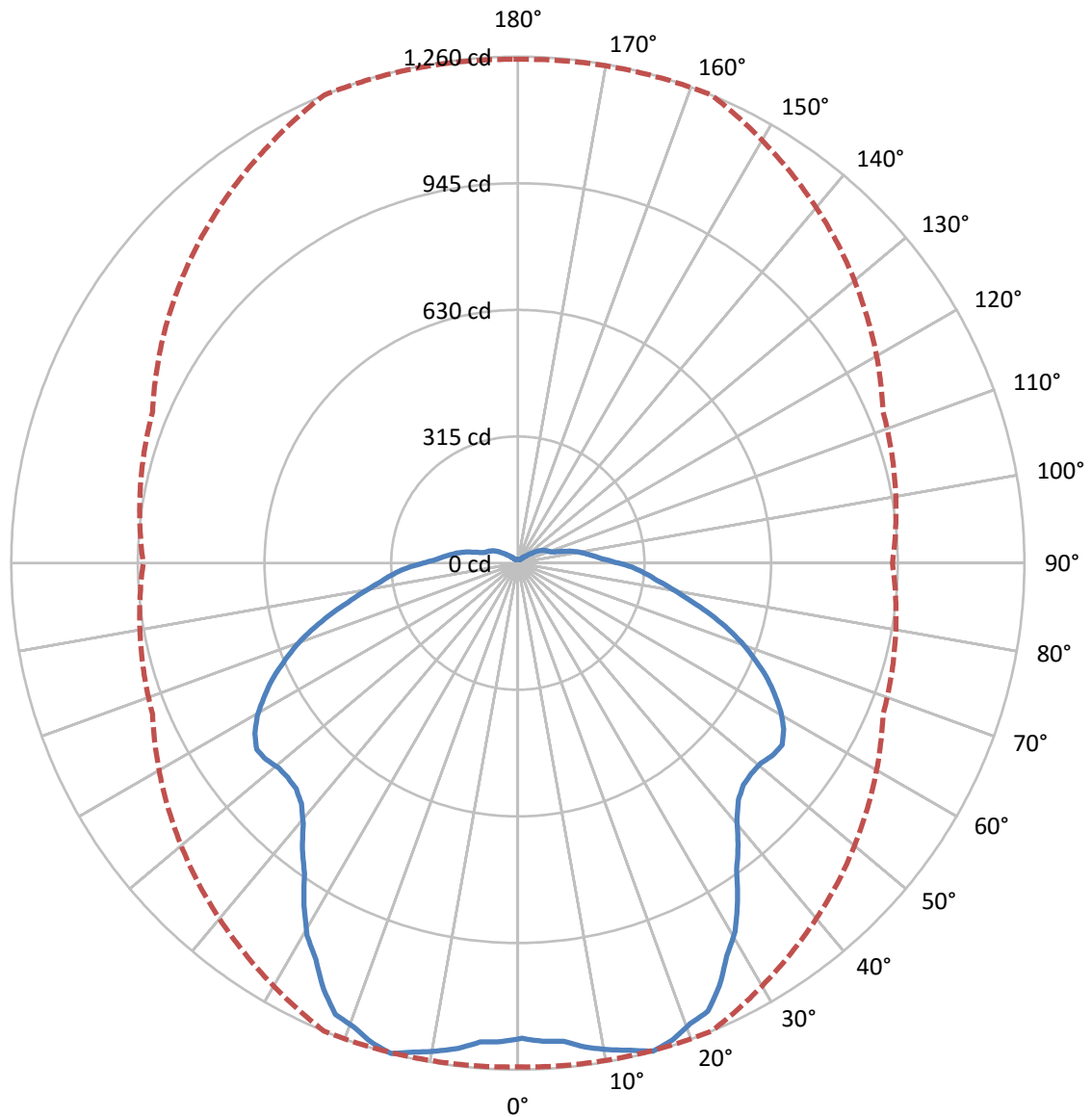
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.8 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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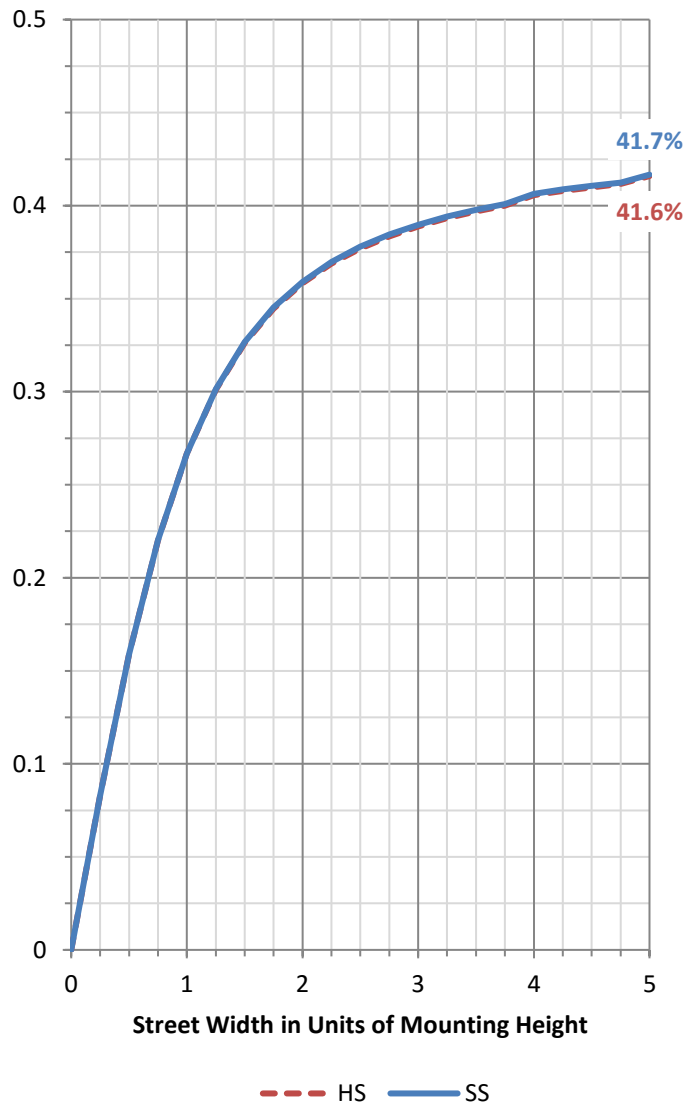
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2429.2	356.2	2785.5
	% Fixture	43.6	6.4	50.0
<b>Street Side</b>	Lumens	2429.2	356.2	2785.5
	% Fixture	43.6	6.4	50.0
<b>Total</b>	Lumens	4858.5	712.5	5571.0
	% Fixture	87.2	12.8	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.6	2.0
10°-20°	314.2	5.6
20°-30°	459.0	8.2
30°-40°	566.8	10.2
40°-50°	724.4	13.0
50°-60°	840.5	15.1
60°-70°	770.5	13.8
70°-80°	614.9	11.0
80°-90°	454.6	8.2
90°-100°	302.2	5.4
100°-110°	190.2	3.4
110°-120°	101.1	1.8
120°-130°	59.9	1.1
130°-140°	31.6	0.6
140°-150°	17.9	0.3
150°-160°	7.7	0.1
160°-170°	1.6	0.0
170°-180°	0.4	0.0
0°-90°	4858.5	87.2
0°-180°	5571.0	100.0





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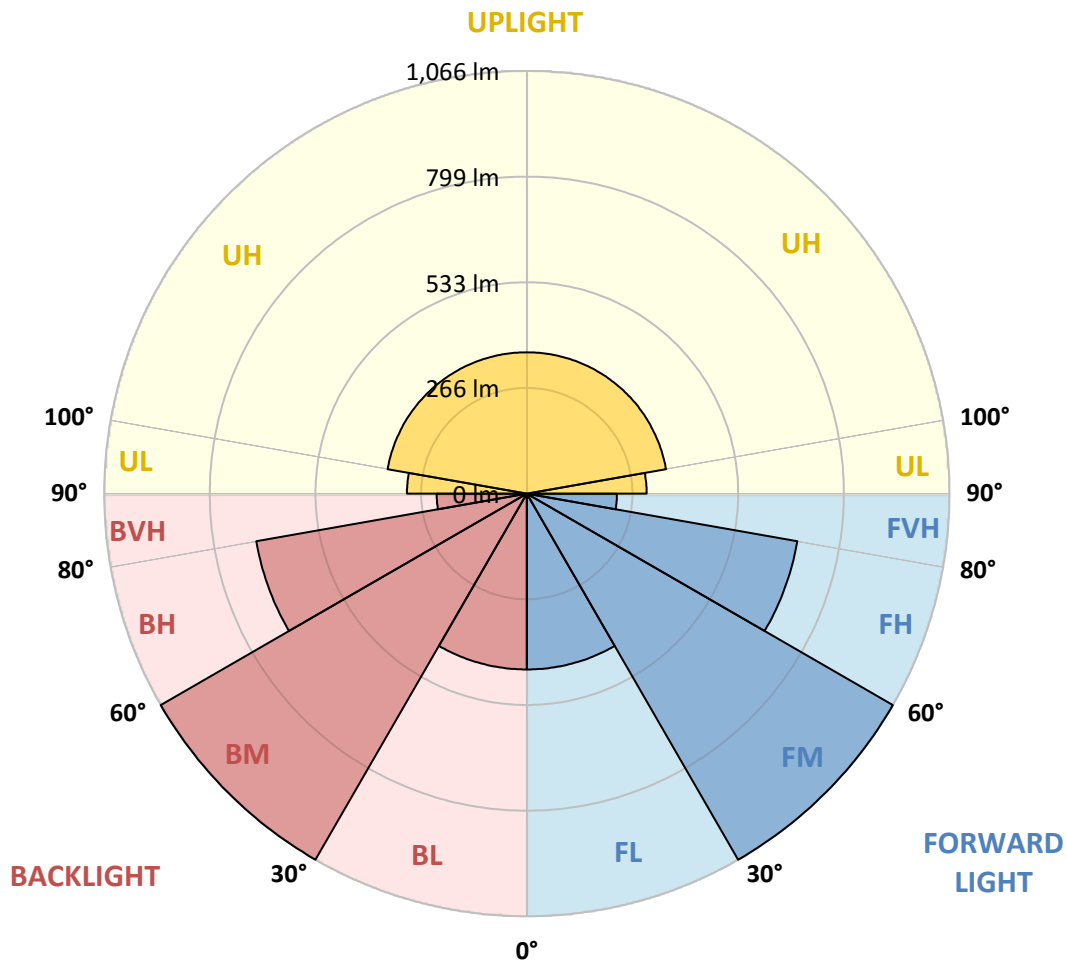
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	443.4	8.0			
FM (30°-60°)	1065.9	19.1			
FH (60°-80°)	692.7	12.4			G1/1800
FVH (80°-90°)	227.3	4.1			G3/500
BL (0°-30°)	443.4	8.0	B1/500		
BM (30°-60°)	1065.9	19.1	B2/2500		
BH (60°-80°)	692.7	12.4	B2/1000		G1/1800
BVH (80°-90°)	227.3	4.1			G3/500
UL (90°-100°)	302.2	5.4		U3/500	
UH (100°-180°)	356.2	6.4		U3/500	

**BUG Rating: B2-U3-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1182.5	1182.5	1182.5	1182.5	1182.5
2.5°	1196.0	1191.5	1176.5	1181.8	1178.0
5°	1201.2	1195.2	1198.2	1190.8	1175.8
7.5°	1211.7	1216.2	1202.0	1181.8	1154.1
10°	1232.6	1231.1	1187.0	1140.6	1095.0
12.5°	1247.6	1243.9	1173.6	1060.6	1009.8
15°	1253.6	1260.3	1124.9	983.6	932.0
17.5°	1257.3	1246.9	1056.1	943.2	885.6
20°	1255.1	1223.7	1009.0	908.0	853.4
22.5°	1249.1	1211.0	972.4	875.1	836.2
25°	1215.4	1165.3	935.0	856.4	817.5
27.5°	1193.0	1107.0	913.3	843.7	805.6
30°	1156.4	1064.4	886.3	836.2	801.1
32.5°	1126.4	1003.8	869.1	831.7	811.5
35°	1096.5	937.2	838.5	848.2	848.9
37.5°	1045.7	890.1	828.0	881.8	860.2
40°	1000.0	839.2	819.8	896.8	891.6
42.5°	956.6	804.8	857.2	963.4	1049.4
45°	906.5	786.9	916.3	1124.2	1008.3
47.5°	872.1	782.4	1001.5	1130.9	964.9
50°	817.5	783.1	1101.8	1125.7	946.9
52.5°	769.7	794.3	1157.8	1095.8	923.7
55°	718.8	798.1	1120.5	1051.6	901.3
57.5°	664.9	780.1	1076.3	1025.5	870.6
60°	615.6	752.5	1018.0	979.8	828.0
62.5°	552.7	716.5	956.6	946.2	794.3
65°	491.4	679.2	891.6	915.5	778.6
67.5°	429.3	634.3	837.7	868.4	745.0
70°	366.5	590.1	780.1	816.0	707.6
72.5°	309.7	540.0	724.0	771.9	664.2
75°	252.1	486.9	666.4	718.8	615.6
77.5°	200.5	433.8	624.5	682.9	584.9
80°	152.6	388.9	581.9	647.0	555.7
82.5°	110.7	348.6	552.0	605.9	516.8
85°	76.3	316.4	513.1	569.9	477.2
87.5°	50.1	284.2	472.7	514.6	436.1
90°	29.2	242.3	421.1	470.5	395.7
92.5°	25.4	208.7	378.5	427.1	355.3
95°	24.7	188.5	344.1	385.2	321.6
97.5°	23.9	169.8	312.6	356.8	297.7
100°	23.9	152.6	286.5	332.8	274.5
102.5°	23.2	132.4	263.3	306.7	249.8
105°	22.4	107.0	233.4	267.0	214.7
107.5°	21.7	89.0	193.0	216.9	174.3
110°	20.9	83.0	158.6	172.0	140.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	20.9	78.5	139.9	148.1	121.2
115°	20.2	73.3	129.4	134.6	111.4
117.5°	19.4	67.3	118.9	123.4	101.7
120°	18.0	59.8	107.7	112.9	94.2
122.5°	15.7	50.9	96.5	101.7	86.8
125°	14.2	41.9	84.5	89.8	78.5
127.5°	13.5	35.9	73.3	79.3	70.3
130°	12.7	29.2	63.6	70.3	63.6
132.5°	11.2	24.7	55.3	63.6	58.3
135°	10.5	20.9	48.6	58.3	53.9
137.5°	10.5	18.0	42.6	53.9	50.1
140°	9.7	15.0	38.1	50.1	47.9
142.5°	9.7	12.7	34.4	47.9	44.9
145°	9.7	11.2	30.7	44.9	42.6
147.5°	9.0	11.2	27.7	41.1	40.4
150°	9.0	10.5	23.9	36.7	36.7
152.5°	9.0	10.5	18.7	30.7	31.4
155°	8.2	9.7	13.5	24.7	25.4
157.5°	8.2	9.7	9.0	17.2	18.0
160°	7.5	9.7	6.0	9.0	9.7
162.5°	7.5	9.0	6.7	2.2	2.2
165°	7.5	9.0	6.0	0.0	0.0
167.5°	6.7	9.0	6.0	0.0	0.0
170°	7.5	9.0	6.0	0.0	0.0
172.5°	6.7	9.0	6.0	0.0	0.0
175°	6.7	9.0	6.0	0.0	0.0
177.5°	6.7	9.0	5.2	0.0	0.0
180°	4.5	4.5	4.5	4.5	4.5

(END OF REPORT)