



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: P212899

Luminaire Tested: **FPS-4-LD4-1LO-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: P212899
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35664)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: EATON (FORMERLY COOPER LIGHTING)
Product Line: FAIL-SAFE
Catalog Number: FPS-4-LD4-1LO-40-CLR
Description: FPS 4' LED FIXTURE WITH CLEAR LENS
Light Source: (84) 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

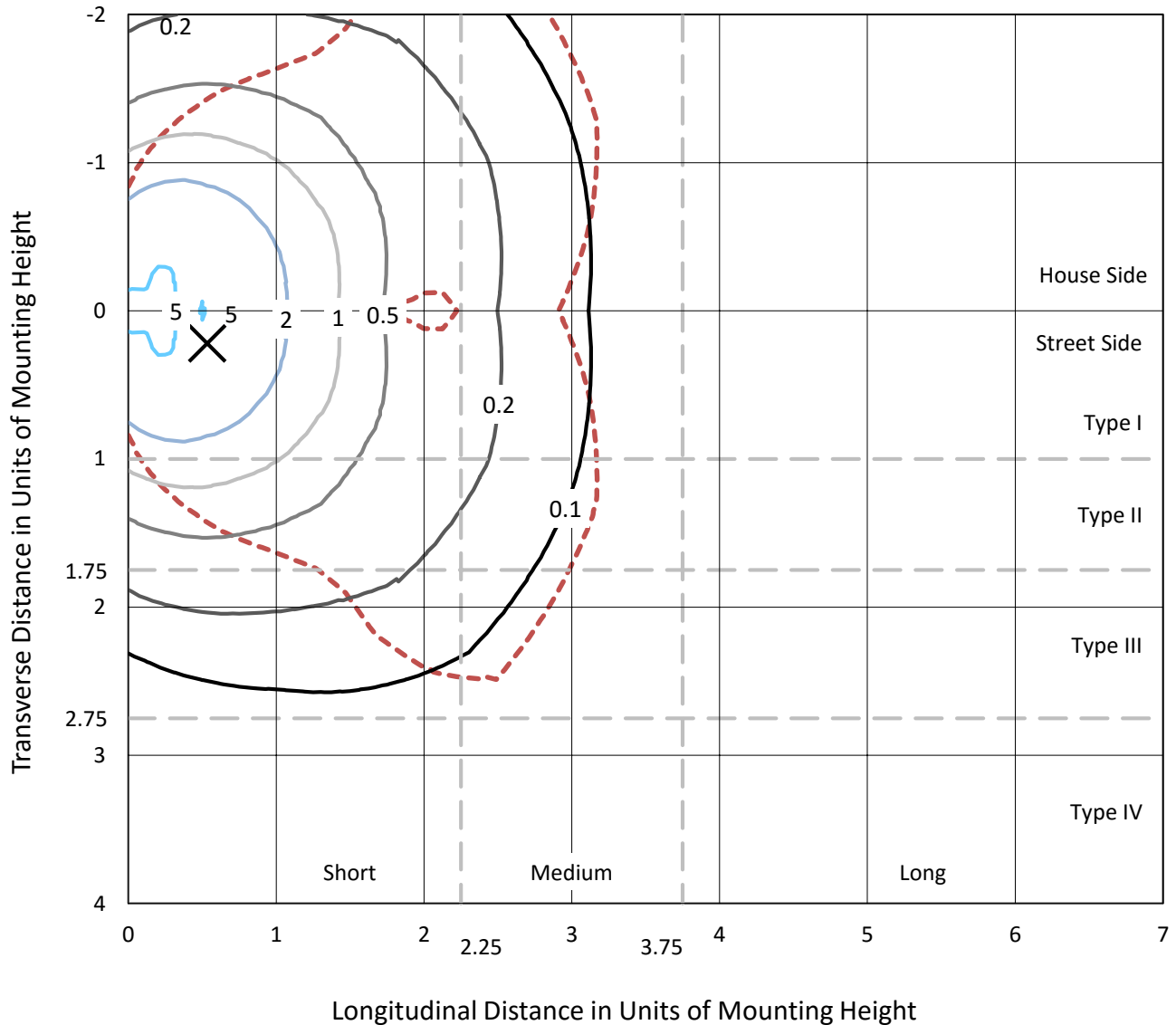
Lumens per Lamp: N/A
Luminaire Lumens: 2810.6 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.58' x L: 4.1' x H: 0.33')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B1 - U3 - G1

Input Watts (W): 23.57
Input Voltage (V): 120
Input Current (A_{in}): 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

REPORT NUMBER: P212899
 CATALOG NUMBER: FPS-4-LD4-1LO-40-CLR

Iso-Footcandle Lines of Horizontal Illumination

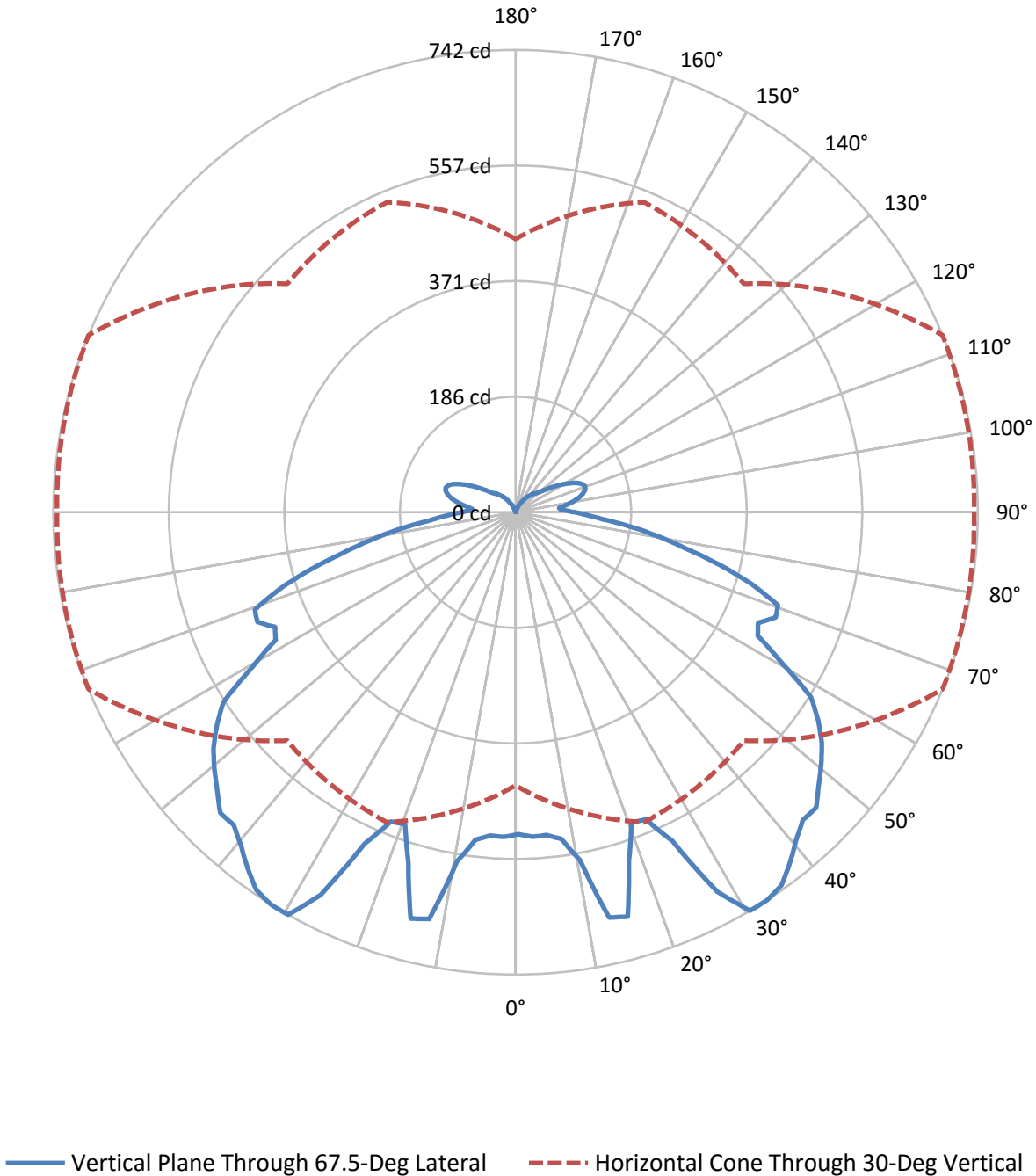
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 fc
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P212899
CATALOG NUMBER: FPS-4-LD4-1LO-40-CLR

Luminous Intensity Polar Plot





REPORT NUMBER: P212899

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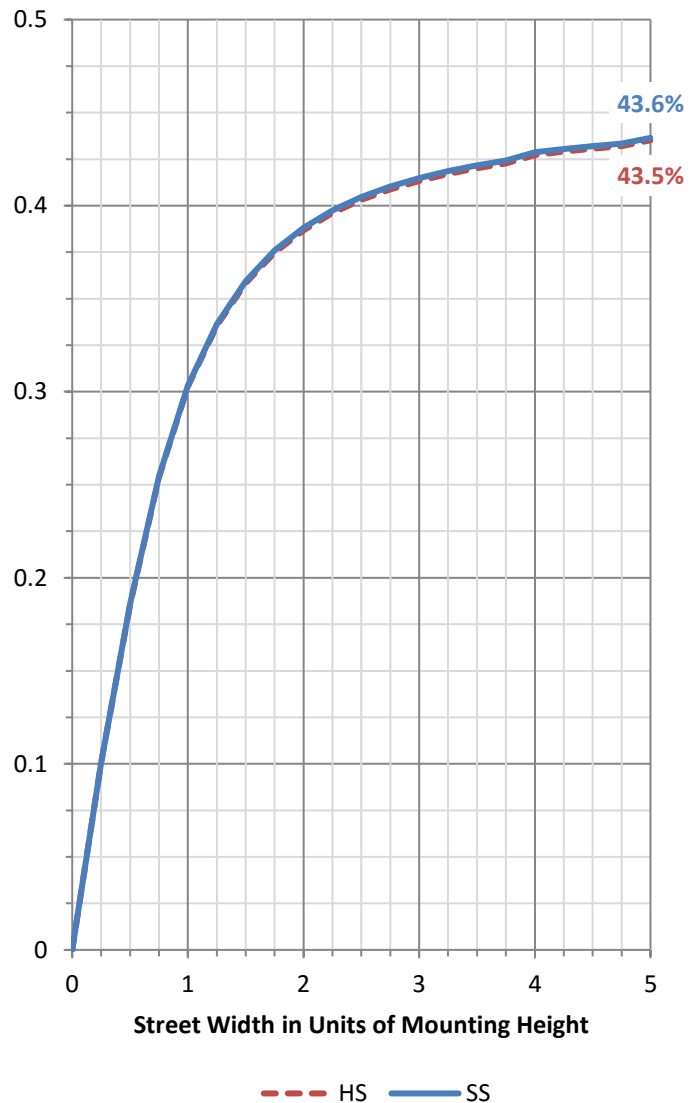
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1253.9	151.4	1405.3
	% Fixture	44.6	5.4	50.0
Street Side	Lumens	1253.9	151.4	1405.3
	% Fixture	44.6	5.4	50.0
Total	Lumens	2507.9	302.8	2810.6
	% Fixture	89.2	10.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.3	1.8
10°-20°	162.8	5.8
20°-30°	261.6	9.3
30°-40°	382.2	13.6
40°-50°	444.2	15.8
50°-60°	422.8	15.0
60°-70°	358.3	12.7
70°-80°	291.9	10.4
80°-90°	133.6	4.8
90°-100°	64.1	2.3
100°-110°	84.7	3.0
110°-120°	75.0	2.7
120°-130°	42.2	1.5
130°-140°	21.5	0.8
140°-150°	10.3	0.4
150°-160°	3.8	0.1
160°-170°	0.9	0.0
170°-180°	0.2	0.0
0°-90°	2507.9	89.2
0°-180°	2810.6	100.0





REPORT NUMBER: P212899

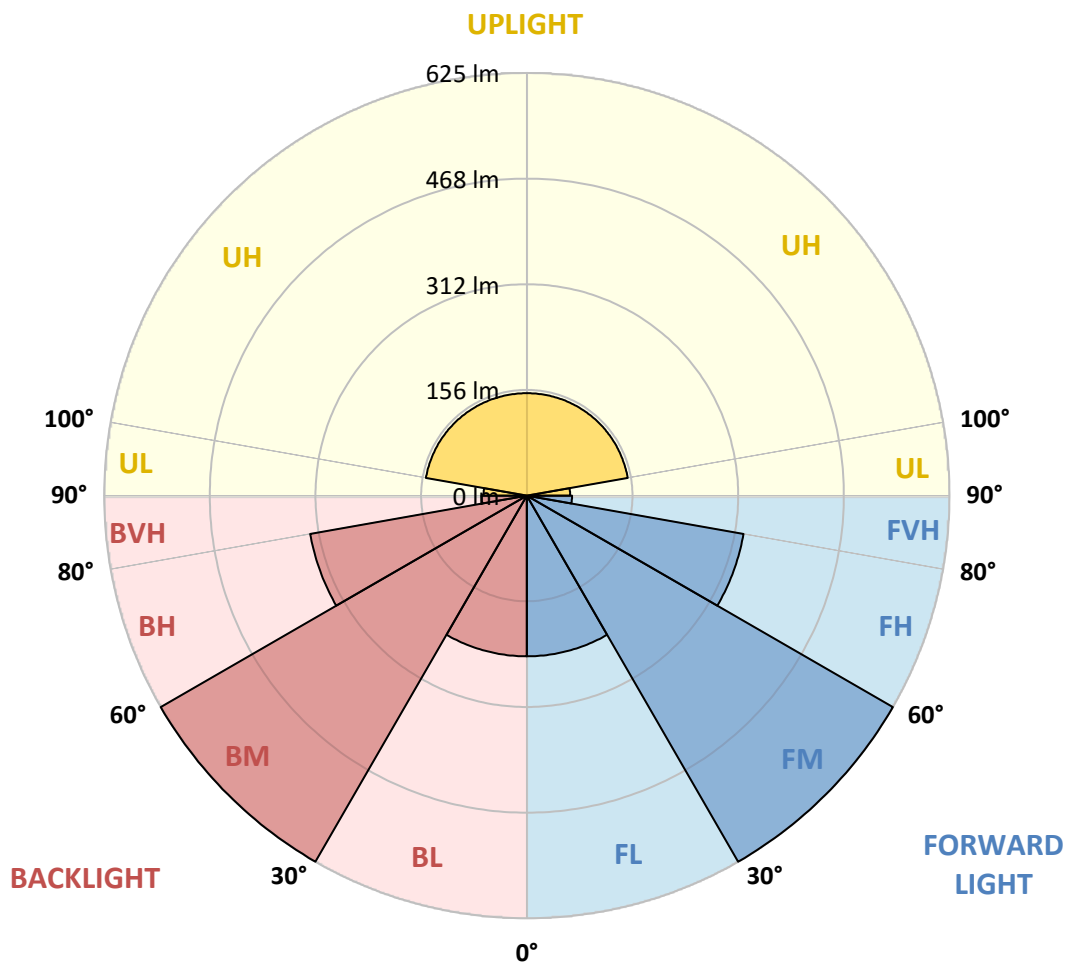
CATALOG NUMBER: FPS-4-LD4-1LO-40-CLR

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	237.4	8.4			
FM	(30°-60°)	624.6	22.2			
FH	(60°-80°)	325.1	11.6			G0/660
FVH	(80°-90°)	66.8	2.4			G1/100
BL	(0°-30°)	237.4	8.4	B1/500		
BM	(30°-60°)	624.6	22.2	B1/1000		
BH	(60°-80°)	325.1	11.6	B1/500		G0/660
BVH	(80°-90°)	66.8	2.4			G1/100
UL	(90°-100°)	64.1	2.3		U3/500	
UH	(100°-180°)	151.4	5.4		U3/500	

BUG Rating: B1-U3-G1

Type V Short





REPORT NUMBER: P212899

CATALOG NUMBER: FPS-4-LD4-1LO-40-CLR

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	517.1	517.1	517.1	517.1	517.1
2.5°	521.6	520.8	520.1	521.6	520.1
5°	520.8	524.6	521.6	520.8	517.8
7.5°	516.3	523.8	520.1	529.9	531.4
10°	516.3	523.1	529.9	568.3	593.2
12.5°	511.8	517.1	553.2	667.8	679.9
15°	504.2	512.5	619.6	673.8	626.3
17.5°	499.0	513.3	672.3	588.7	535.9
20°	492.2	514.0	660.3	531.4	525.3
22.5°	480.9	515.5	602.2	535.9	563.8
25°	467.3	517.8	540.4	584.9	668.5
27.5°	453.7	526.1	518.6	689.7	737.1
30°	438.7	538.9	518.6	742.4	736.4
32.5°	422.1	557.0	536.6	742.4	733.4
35°	407.8	569.8	575.8	735.6	713.0
37.5°	388.2	569.8	625.6	715.3	697.9
40°	368.6	566.8	657.2	693.4	704.7
42.5°	349.0	545.7	648.2	676.1	683.6
45°	331.6	514.8	631.6	676.8	658.0
47.5°	310.5	484.6	611.3	655.0	606.7
50°	293.2	456.0	578.9	636.1	586.4
52.5°	271.3	428.9	555.5	615.8	551.0
55°	250.2	400.2	531.4	589.4	522.3
57.5°	229.1	374.6	506.5	559.3	456.0
60°	209.5	346.0	472.6	491.4	380.6
62.5°	190.7	315.8	447.0	436.4	356.5
65°	171.1	289.4	421.3	428.1	358.8
67.5°	152.3	266.1	418.3	450.7	390.4
70°	134.2	254.0	428.1	447.0	386.7
72.5°	115.3	248.0	404.0	398.0	343.7
75°	96.5	236.7	350.5	339.2	292.4
77.5°	79.1	206.5	296.2	278.9	243.5
80°	60.3	169.6	243.5	229.9	199.7
82.5°	45.2	133.4	199.7	183.2	161.3
85°	28.6	101.0	149.2	139.4	123.6
87.5°	17.3	70.8	114.6	112.3	99.5
90°	9.0	47.5	84.4	90.4	79.9
92.5°	10.6	38.4	63.3	73.9	67.1
95°	12.1	39.9	64.1	70.1	64.1
97.5°	13.6	43.7	73.1	81.4	73.1
100°	13.6	49.0	85.2	93.5	82.9
102.5°	13.6	53.5	95.0	104.8	92.0
105°	13.6	56.5	102.5	112.3	99.5
107.5°	12.8	57.3	107.0	117.6	104.0
110°	12.1	55.8	107.0	119.1	105.5



REPORT NUMBER: P212899

CATALOG NUMBER: FPS-4-LD4-1LO-40-CLR

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	11.3	52.8	103.3	116.1	102.5
115°	10.6	48.2	96.5	109.3	95.7
117.5°	9.8	42.2	87.4	99.5	87.4
120°	9.0	36.2	76.9	88.2	78.4
122.5°	8.3	30.9	67.1	77.6	69.3
125°	7.5	25.6	58.0	66.3	60.3
127.5°	6.8	21.1	50.5	57.3	53.5
130°	6.0	17.3	44.5	49.0	46.7
132.5°	6.0	14.3	39.9	44.5	42.2
135°	5.3	11.3	33.9	42.2	40.7
137.5°	5.3	9.8	27.9	37.7	38.4
140°	5.3	7.5	23.4	33.2	34.7
142.5°	4.5	6.0	19.6	30.9	31.7
145°	4.5	5.3	16.6	26.4	27.9
147.5°	4.5	5.3	13.6	21.9	24.1
150°	4.5	4.5	11.3	18.1	20.4
152.5°	4.5	4.5	9.0	15.1	17.3
155°	4.5	4.5	6.8	12.1	14.3
157.5°	3.8	4.5	4.5	8.3	10.6
160°	3.8	4.5	3.8	5.3	7.5
162.5°	3.8	3.8	3.0	2.3	3.0
165°	3.8	3.8	3.0	1.5	0.8
167.5°	3.8	3.8	3.0	1.5	0.0
170°	3.8	3.8	3.0	1.5	0.0
172.5°	3.8	3.8	3.0	1.5	0.0
175°	3.8	3.8	3.0	0.8	0.0
177.5°	3.8	3.8	3.0	0.8	0.0
180°	2.3	2.3	2.3	2.3	2.3

(END OF REPORT)