



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: P212938

Luminaire Tested: **FPS-4-LD4-2LO-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: P212938
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-LD4-2LO-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: 4947.9 lumens
Efficiency: N/A
Efficacy: 104.9 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 - G2

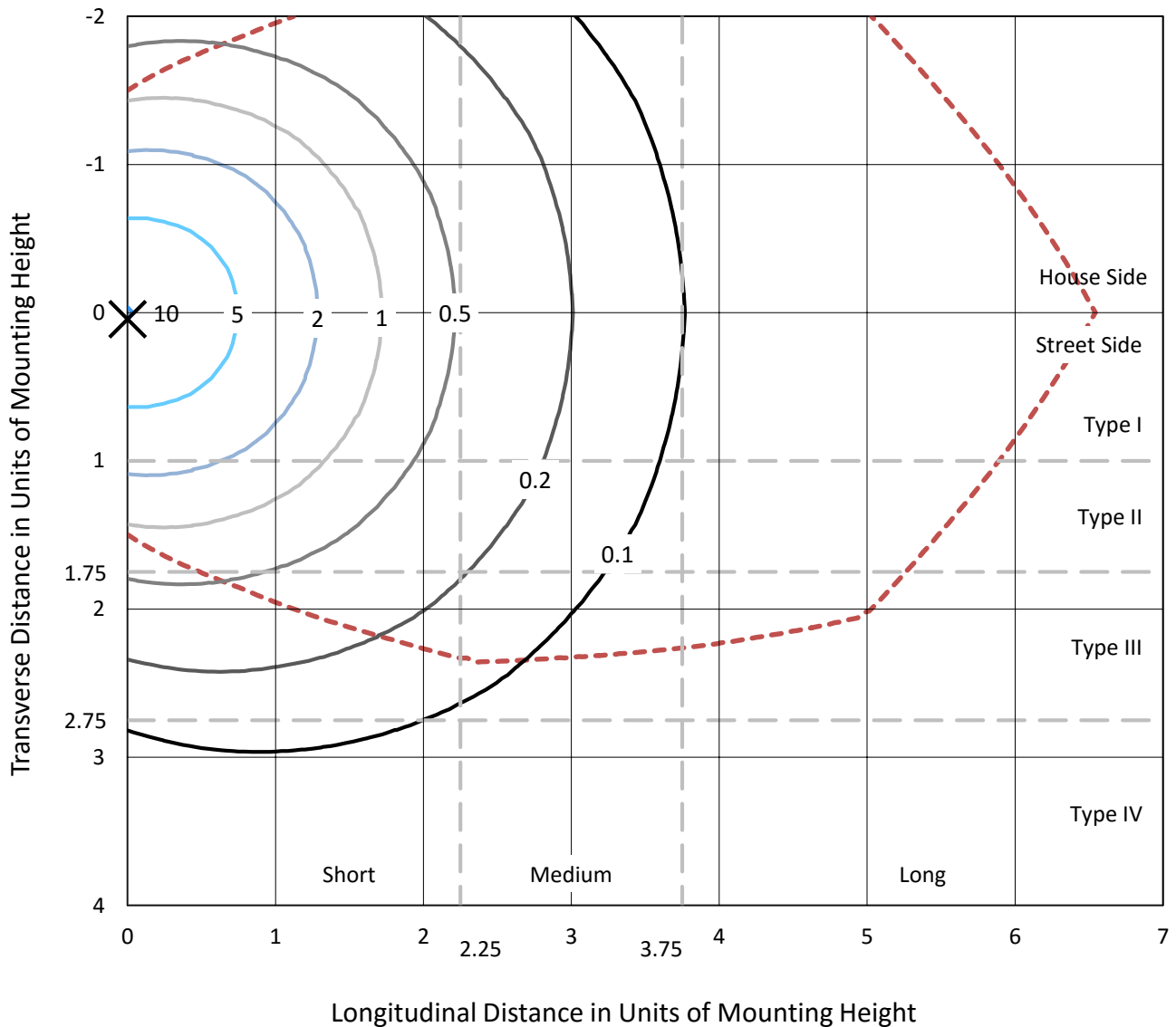
Input Watts (W): 47.16
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

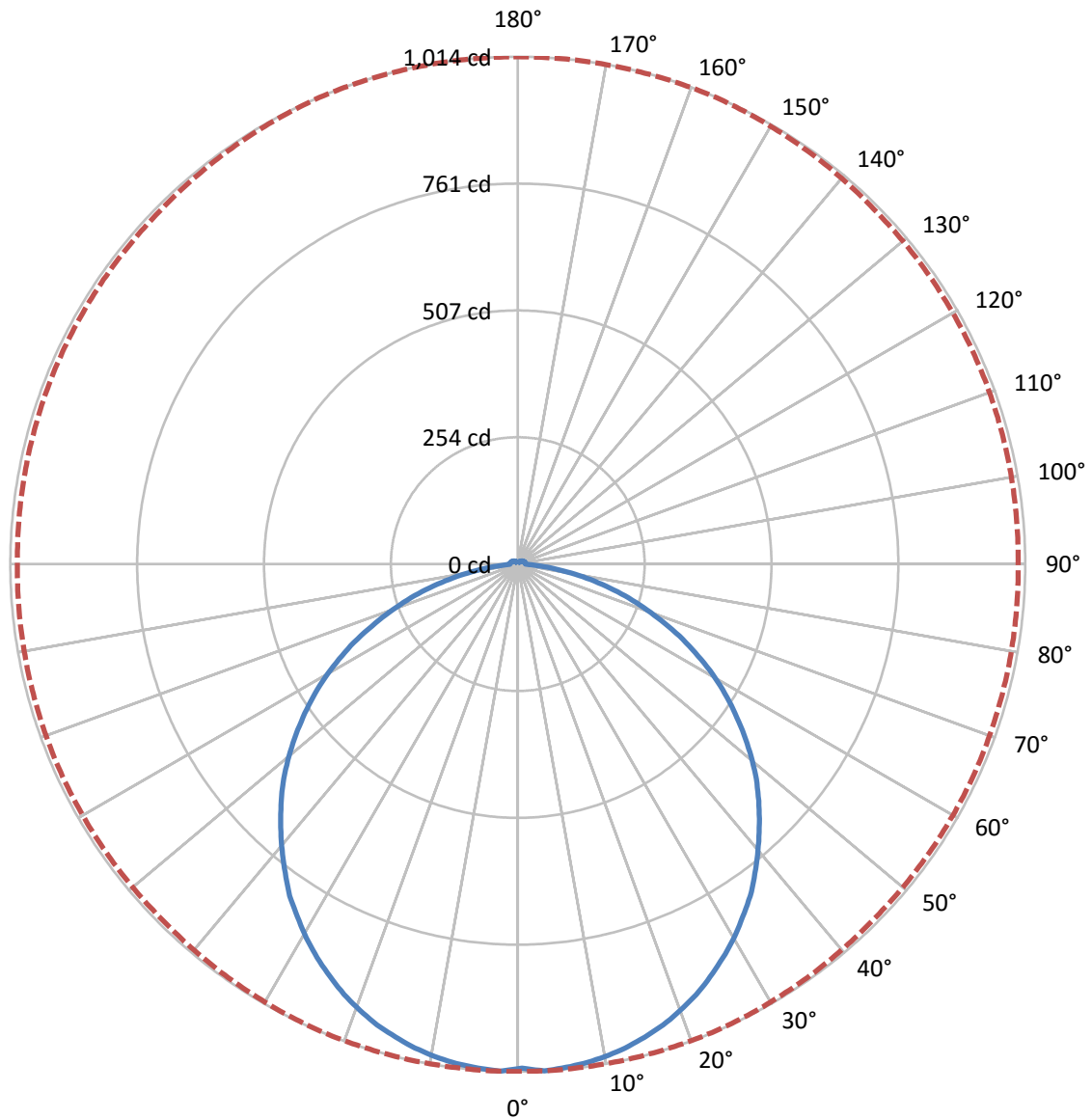


Based on 10 foot mounting height. Maximum calculated value = 10.1 fc
 Type V - Short - Non-Cutoff



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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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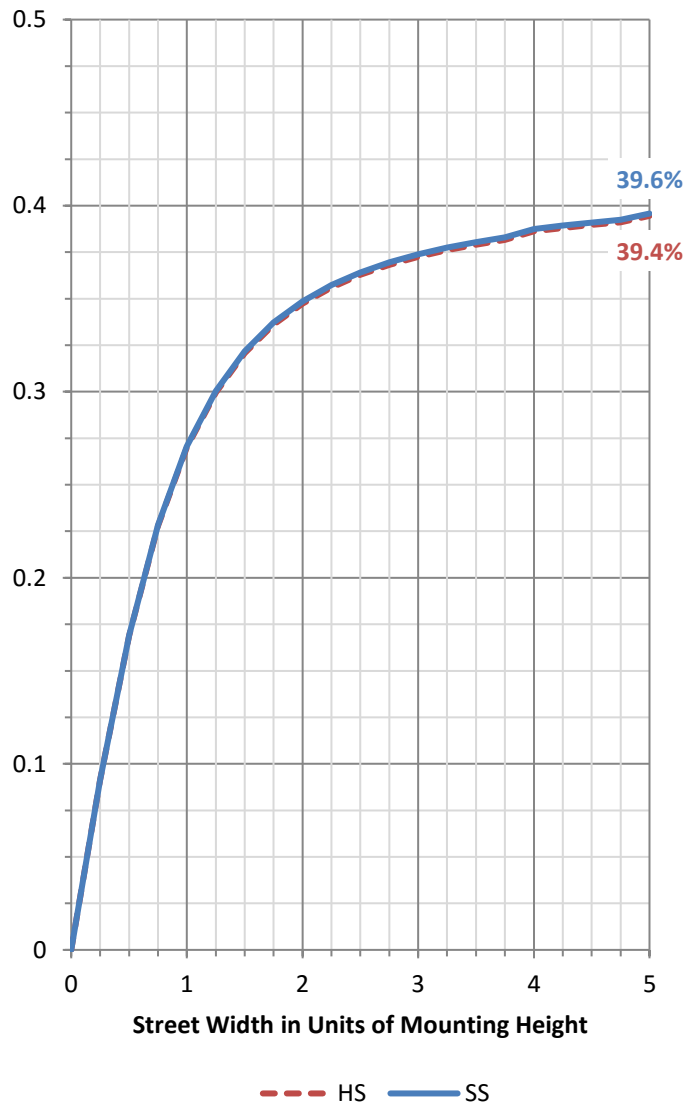
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2031.2	442.8	2474.0
	% Fixture	41.1	8.9	50.0
Street Side	Lumens	2031.2	442.8	2474.0
	% Fixture	41.1	8.9	50.0
Total	Lumens	4062.4	885.6	4947.9
	% Fixture	82.1	17.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.1	1.9
10°-20°	282.0	5.7
20°-30°	445.5	9.0
30°-40°	567.1	11.5
40°-50°	635.6	12.8
50°-60°	644.1	13.0
60°-70°	583.5	11.8
70°-80°	470.1	9.5
80°-90°	338.5	6.8
90°-100°	261.7	5.3
100°-110°	220.1	4.4
110°-120°	172.0	3.5
120°-130°	121.2	2.5
130°-140°	71.7	1.4
140°-150°	31.9	0.6
150°-160°	6.9	0.1
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	4062.4	82.1
0°-180°	4947.9	100.0





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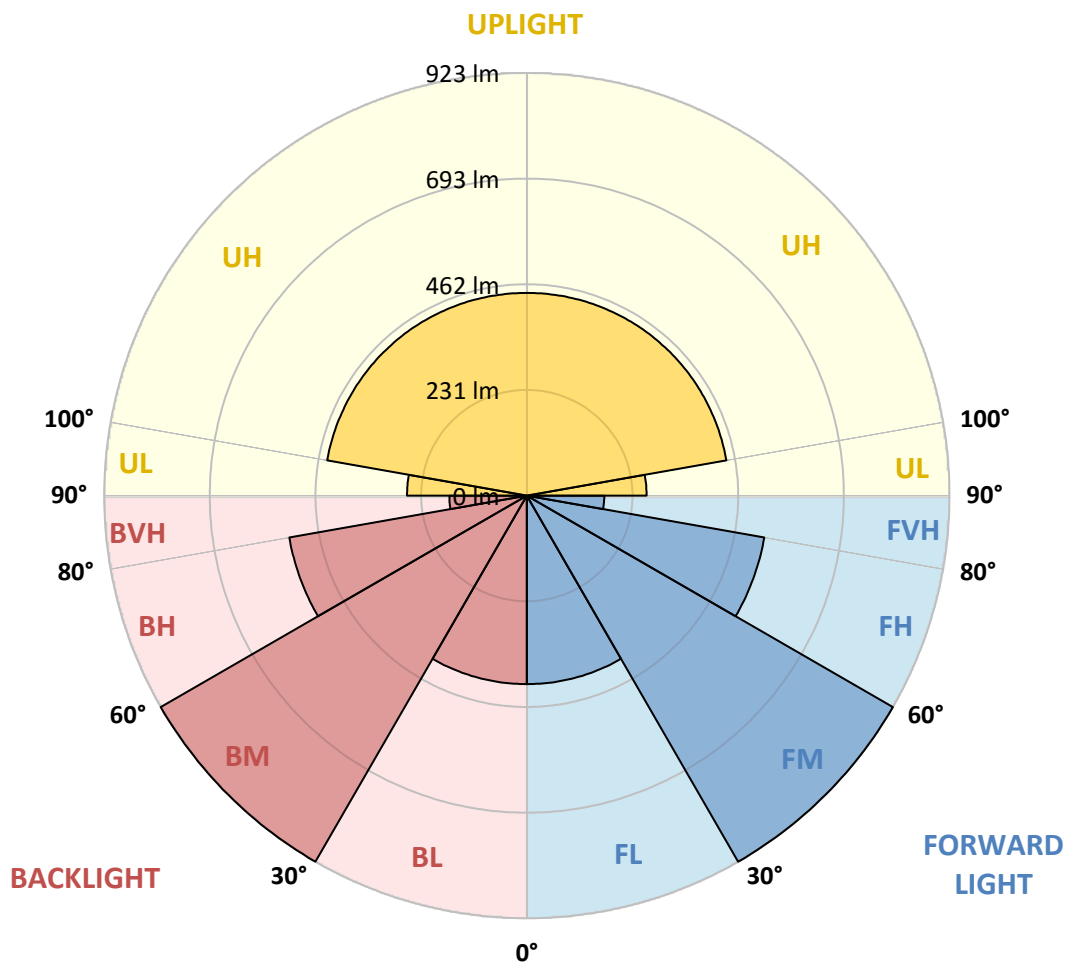
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	411.8	8.3			
FM	(30°-60°)	923.4	18.7			
FH	(60°-80°)	526.8	10.6			G0/660
FVH	(80°-90°)	169.3	3.4			G2/225
BL	(0°-30°)	411.8	8.3	B1/500		
BM	(30°-60°)	923.4	18.7	B1/1000		
BH	(60°-80°)	526.8	10.6	B2/1000		G0/660
BVH	(80°-90°)	169.3	3.4			G2/225
UL	(90°-100°)	261.7	5.3		U3/500	
UH	(100°-180°)	442.8	8.9		U3/500	

BUG Rating: B2-U4-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1007.4	1007.4	1007.4	1007.4	1007.4
2.5°	1014.1	1013.5	1004.9	1003.7	1000.1
5°	1010.4	1011.1	1004.9	1005.6	1002.5
7.5°	1005.6	1007.4	1004.9	1008.0	1005.6
10°	998.2	1001.9	1003.7	1009.8	1008.0
12.5°	988.5	995.2	1000.7	1009.2	1009.8
15°	976.2	986.0	996.4	1009.2	1011.1
17.5°	962.8	975.6	990.9	1009.8	1013.5
20°	945.7	962.2	984.8	1009.2	1014.1
22.5°	927.4	947.5	978.1	1006.8	1012.9
25°	905.4	932.3	968.9	1002.5	1010.4
27.5°	882.8	912.7	958.5	995.8	1005.6
30°	858.3	893.2	946.9	987.2	997.6
32.5°	830.8	871.8	932.9	976.8	987.8
35°	804.6	847.3	916.4	965.2	979.3
37.5°	772.2	825.3	899.3	952.4	965.2
40°	740.4	798.5	880.9	936.5	951.2
42.5°	708.0	773.4	862.6	920.6	934.1
45°	675.1	746.5	842.4	903.5	918.2
47.5°	641.5	718.4	824.1	887.7	901.7
50°	604.2	689.1	802.7	868.7	880.9
52.5°	566.3	660.4	778.3	846.1	860.8
55°	527.2	628.0	749.6	821.1	835.7
57.5°	488.1	594.4	722.1	794.8	809.5
60°	447.8	559.0	687.9	765.5	783.8
62.5°	404.4	522.9	656.7	736.8	754.5
65°	362.9	486.3	624.4	706.8	723.9
67.5°	316.5	448.4	590.1	672.0	692.2
70°	274.3	410.5	553.5	638.4	659.8
72.5°	232.1	373.3	518.7	604.8	626.2
75°	190.6	335.4	482.0	570.0	593.8
77.5°	148.5	297.5	447.2	535.8	558.4
80°	108.1	260.2	411.8	499.1	524.2
82.5°	70.9	224.2	375.7	466.7	491.2
85°	42.2	192.4	342.1	435.6	461.2
87.5°	22.6	164.3	318.3	414.2	439.2
90°	15.9	145.4	296.9	392.2	417.9
92.5°	15.3	135.6	276.7	370.2	395.9
95°	15.3	131.3	268.2	353.7	377.5
97.5°	15.3	125.8	260.9	345.8	369.6
100°	14.7	119.7	253.5	336.0	360.4
102.5°	14.7	113.6	244.4	325.6	349.4
105°	14.1	106.9	235.2	314.6	337.8
107.5°	14.1	100.8	224.8	302.4	326.2
110°	13.4	94.7	214.4	290.2	314.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	12.8	87.4	205.3	278.6	301.8
115°	12.8	80.6	194.9	266.4	289.0
117.5°	12.2	73.9	184.5	254.1	276.1
120°	11.6	66.6	174.1	241.9	263.3
122.5°	11.0	58.0	163.1	228.5	249.9
125°	11.0	49.5	151.5	215.0	236.4
127.5°	10.4	41.5	139.9	201.0	221.1
130°	9.8	34.2	126.5	186.9	206.5
132.5°	9.2	26.9	112.4	172.3	190.6
135°	8.6	20.2	98.4	157.0	175.9
137.5°	7.9	14.1	84.3	142.3	158.2
140°	7.3	9.2	70.9	126.5	142.3
142.5°	6.7	5.5	57.4	110.0	124.6
145°	6.1	4.3	45.2	92.9	106.9
147.5°	5.5	3.7	33.0	75.8	89.2
150°	4.9	3.1	22.0	58.6	72.1
152.5°	4.3	3.1	11.6	41.5	53.8
155°	3.7	1.8	3.1	25.7	36.7
157.5°	3.7	1.2	0.0	11.6	20.8
160°	3.1	1.2	0.0	1.2	4.3
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)