



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: 8003.0

Luminaire Tested: **FRS-240-120**

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: 8003.0
Test Lab:
Issue Date: 3/3/2020
Manufacturer: EATON (FORMERLY COOPER LIGHTING)
Product Line: FAIL-SAFE
Catalog Number: FRS-240-120
Description: FAIL-SAFE 4'SURFACE MOUNT LUMINAIRE
WHITE REFL W/ PRISMATIC WRAPAROUND LENS
Light Source: 2/40W T12
WATTS=83
F40T12/WW/RS
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: 3200 (2 lamps)
Luminaire Lumens: 4264.9 lumens
Efficiency: 66.6%
Efficacy: 51.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 3.94' x H: 0.15')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B2 - U3 - G1

Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): 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

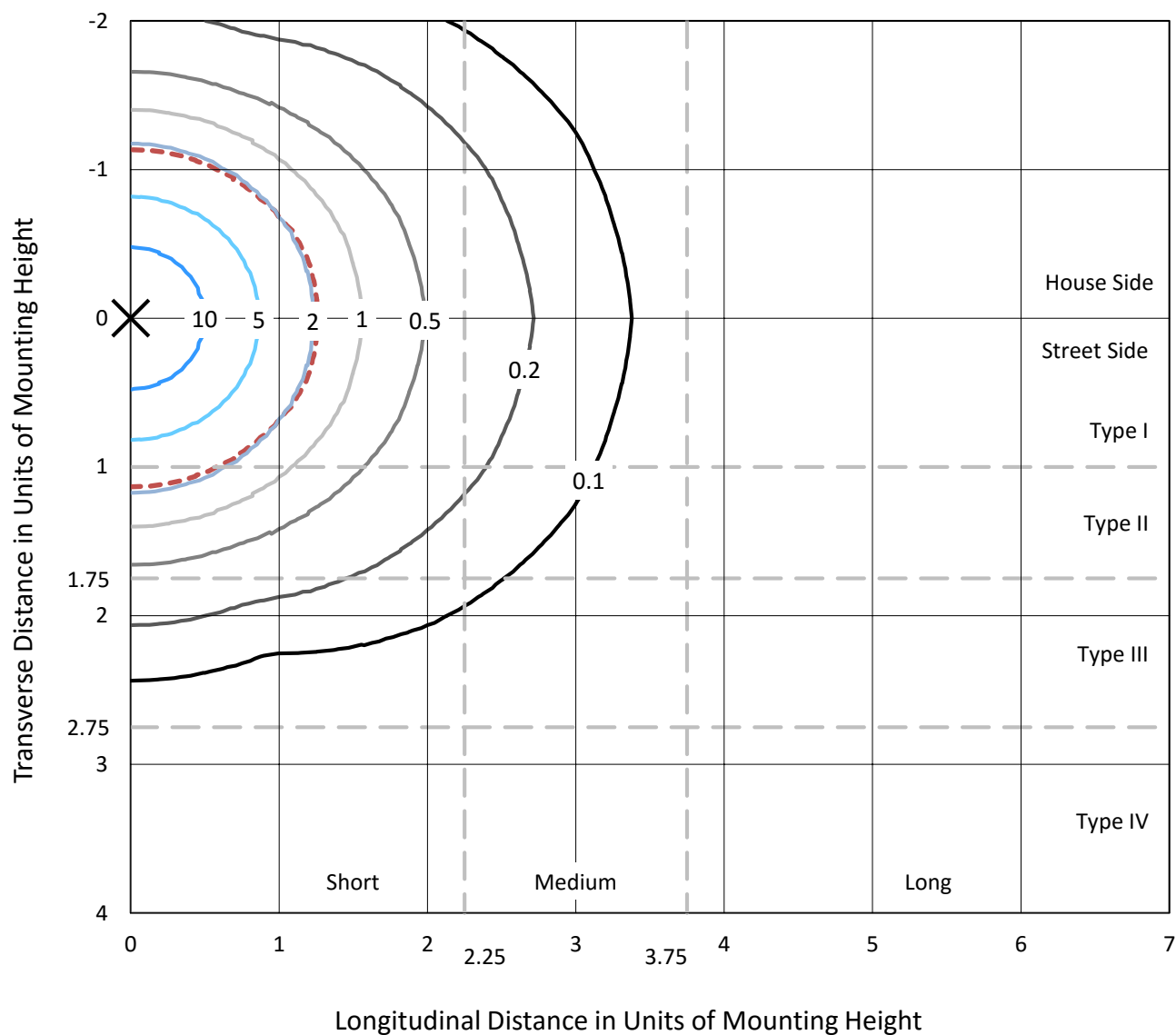


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

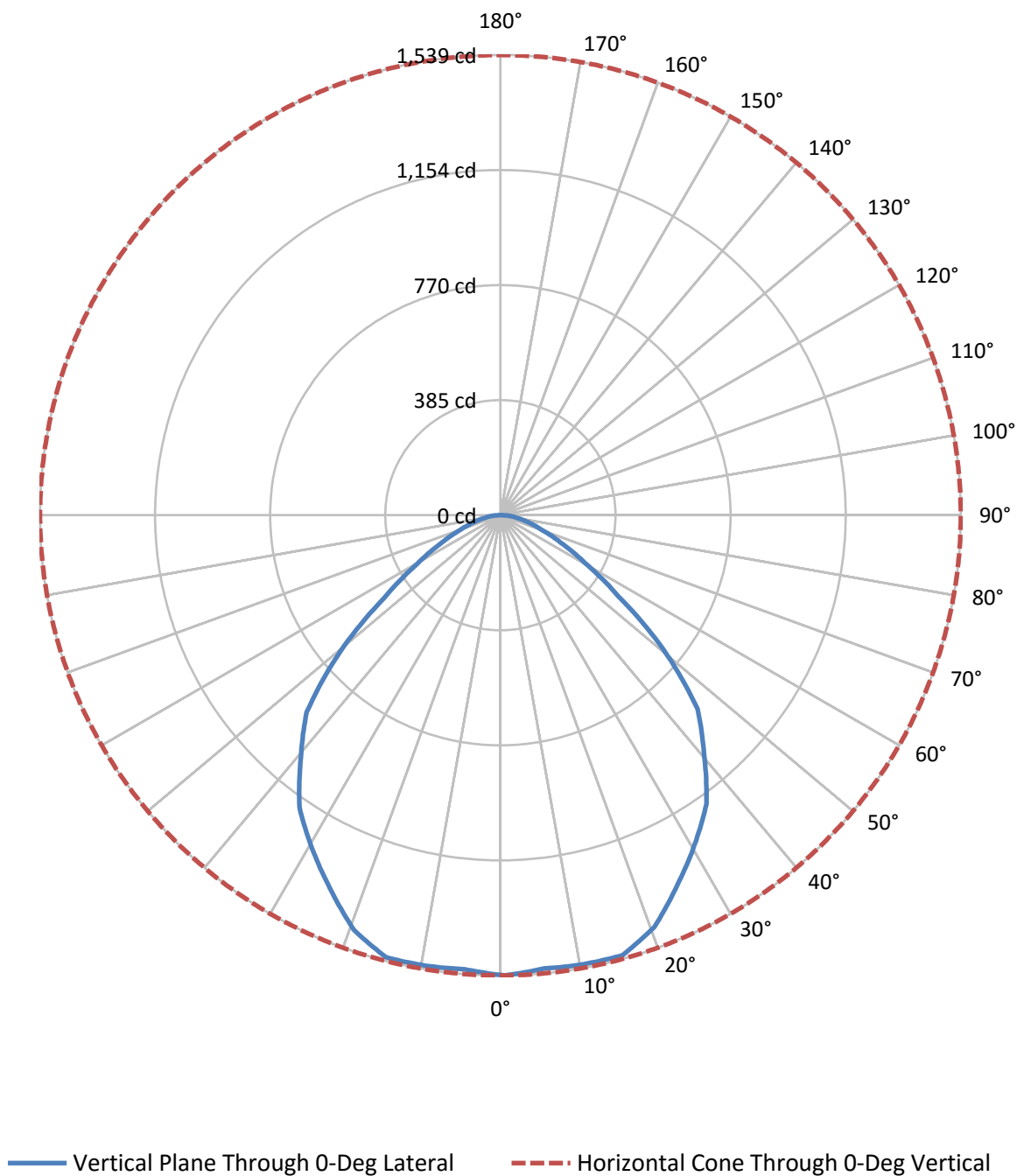
--- 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.4 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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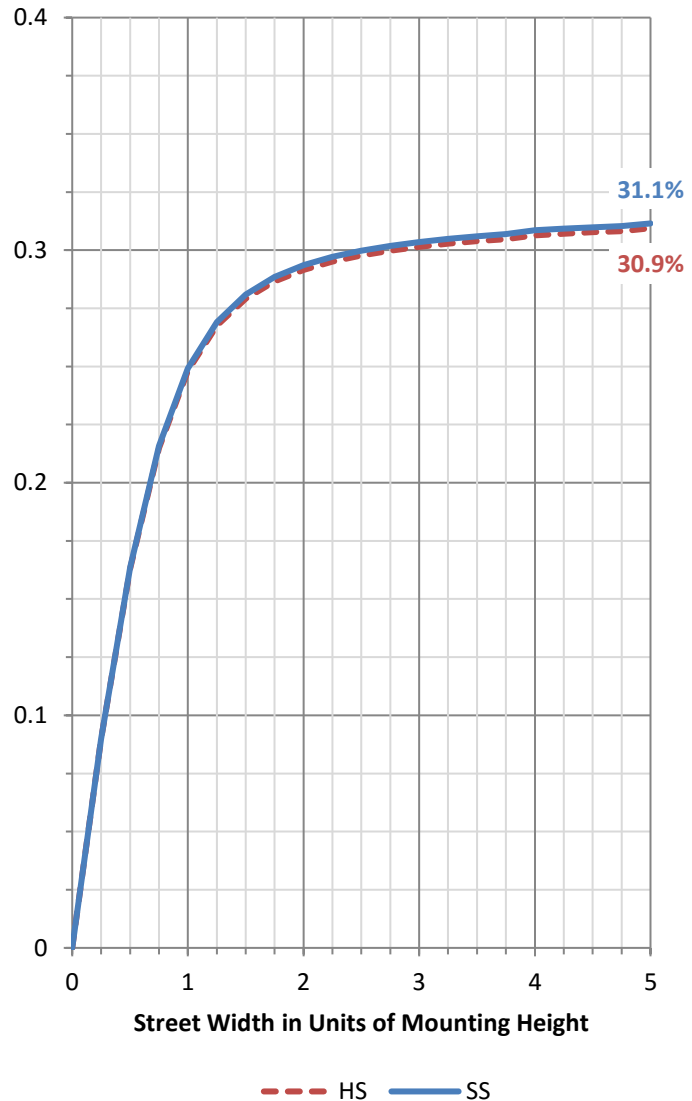
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2021.7	110.7	2132.4
	% Lamp	31.6	1.7	33.3
Street Side	Lumens	2021.7	110.7	2132.4
	% Lamp	31.6	1.7	33.3
Total	Lumens	4043.4	221.5	4264.9
	% Lamp	63.2	3.5	66.6

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	145.8	3.4	2.3
10°-20°	429.4	10.1	6.7
20°-30°	642.8	15.1	10.0
30°-40°	764.8	17.9	11.9
40°-50°	740.3	17.4	11.6
50°-60°	527.7	12.4	8.2
60°-70°	359.0	8.4	5.6
70°-80°	263.1	6.2	4.1
80°-90°	170.4	4.0	2.7
90°-100°	84.1	2.0	1.3
100°-110°	48.1	1.1	0.8
110°-120°	30.5	0.7	0.5
120°-130°	21.6	0.5	0.3
130°-140°	15.1	0.4	0.2
140°-150°	11.0	0.3	0.2
150°-160°	6.8	0.2	0.1
160°-170°	3.4	0.1	0.1
170°-180°	0.8	0.0	0.0
0°-90°	4043.4	94.8	63.2
0°-180°	4264.9	100.0	66.6



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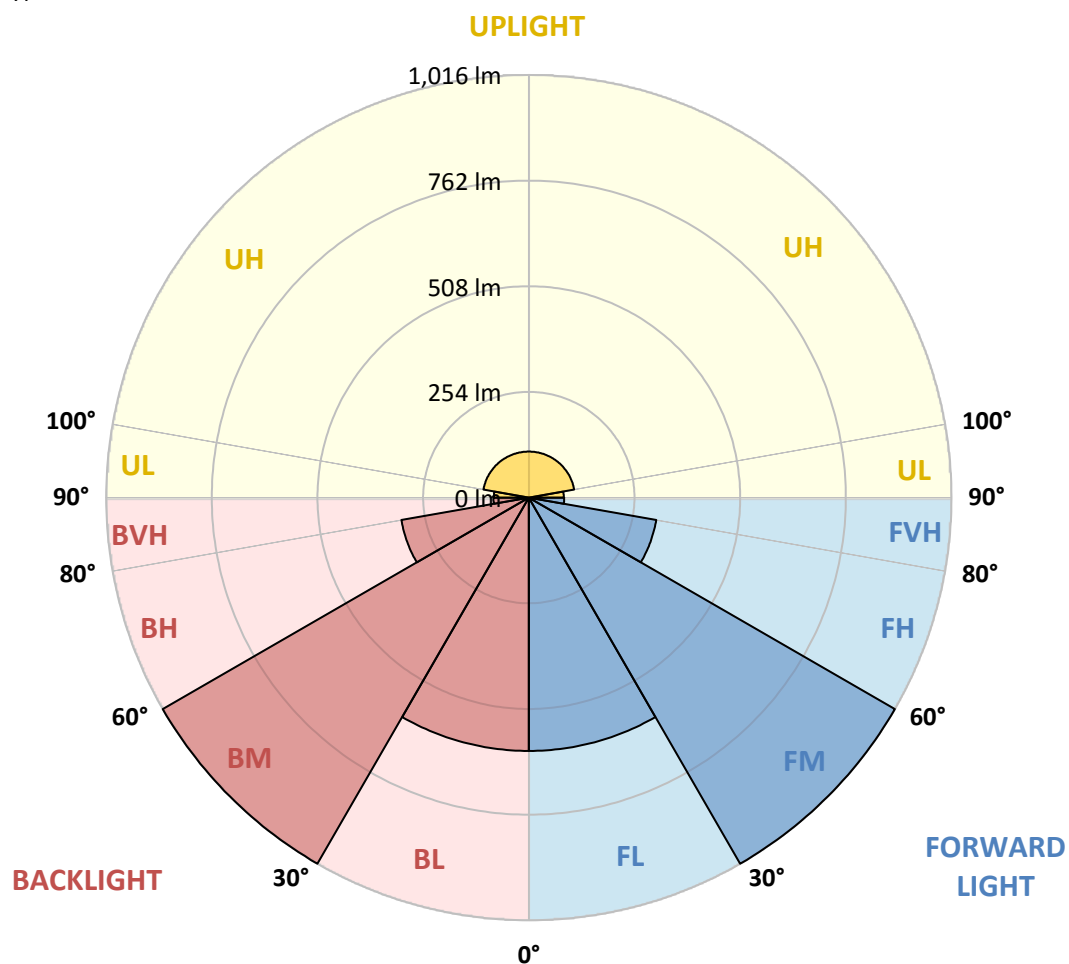
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	609.0	9.5			
FM	(30°-60°)	1016.4	15.9			
FH	(60°-80°)	311.1	4.9			G0/660
FVH	(80°-90°)	85.2	1.3			G1/100
BL	(0°-30°)	609.0	9.5	B2/1000		
BM	(30°-60°)	1016.4	15.9	B2/2500		
BH	(60°-80°)	311.1	4.9	B1/500		G0/660
BVH	(80°-90°)	85.2	1.3			G1/100
UL	(90°-100°)	84.1	1.3		U3/500	
UH	(100°-180°)	110.7	1.7		U3/500	
Trapped Light		2135.1	33.4			

BUG Rating: B2-U3-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1539	1539	1539	1539	1539
5°	1523	1520	1527	1520	1532
10°	1527	1522	1534	1530	1536
15°	1527	1520	1526	1527	1539
20°	1470	1472	1488	1496	1495
25°	1372	1374	1381	1403	1416
30°	1279	1277	1309	1341	1351
35°	1186	1188	1233	1264	1289
40°	1048	1066	1103	1157	1183
45°	924	941	986	1026	1040
50°	707	720	752	811	816
55°	477	504	576	659	673
60°	325	338	441	544	583
65°	222	222	353	470	532
70°	147	149	294	421	482
75°	97	107	253	374	418
80°	59	78	212	325	356
85°	31	52	166	256	283
90°	0	23	114	180	198
95°	0	15	83	126	143
100°	0	14	66	94	104
105°	0	12	53	74	81
110°	0	11	40	59	63
115°	0	11	33	50	54
120°	0	11	29	43	49
125°	0	12	25	38	42
130°	0	12	22	33	36
135°	0	12	21	29	31
140°	0	12	19	26	28
145°	0	14	19	25	28
150°	0	12	18	22	23
155°	0	12	16	21	22
160°	0	11	14	18	18
165°	0	11	13	16	16
170°	0	11	12	14	12
175°	0	11	11	11	11
180°	0	0	0	0	0

(END OF REPORT)