



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: 8061.0

Luminaire Tested: **FRS-340-120**

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: 8061.0  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: EATON (FORMERLY COOPER LIGHTING)  
Product Line: FAIL-SAFE  
Catalog Number: FRS-340-120  
Description: FAIL-SAFE 4'SURFACE MOUNT LUMINAIRE  
WHITE REFL W/ PRISMATIC WRAP-AROUND LENS  
Light Source: 3/40W T12 3200 LUMENS  
WATTS=132  
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 (3 lamps)  
Luminaire Lumens: 5053.4 lumens  
Efficiency: 52.6%  
Efficacy: 38.3 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 3.96' x H: 0.14')  
IES Classification: Type V - Short - Cutoff  
BUG Rating: B2 - U3 - G1

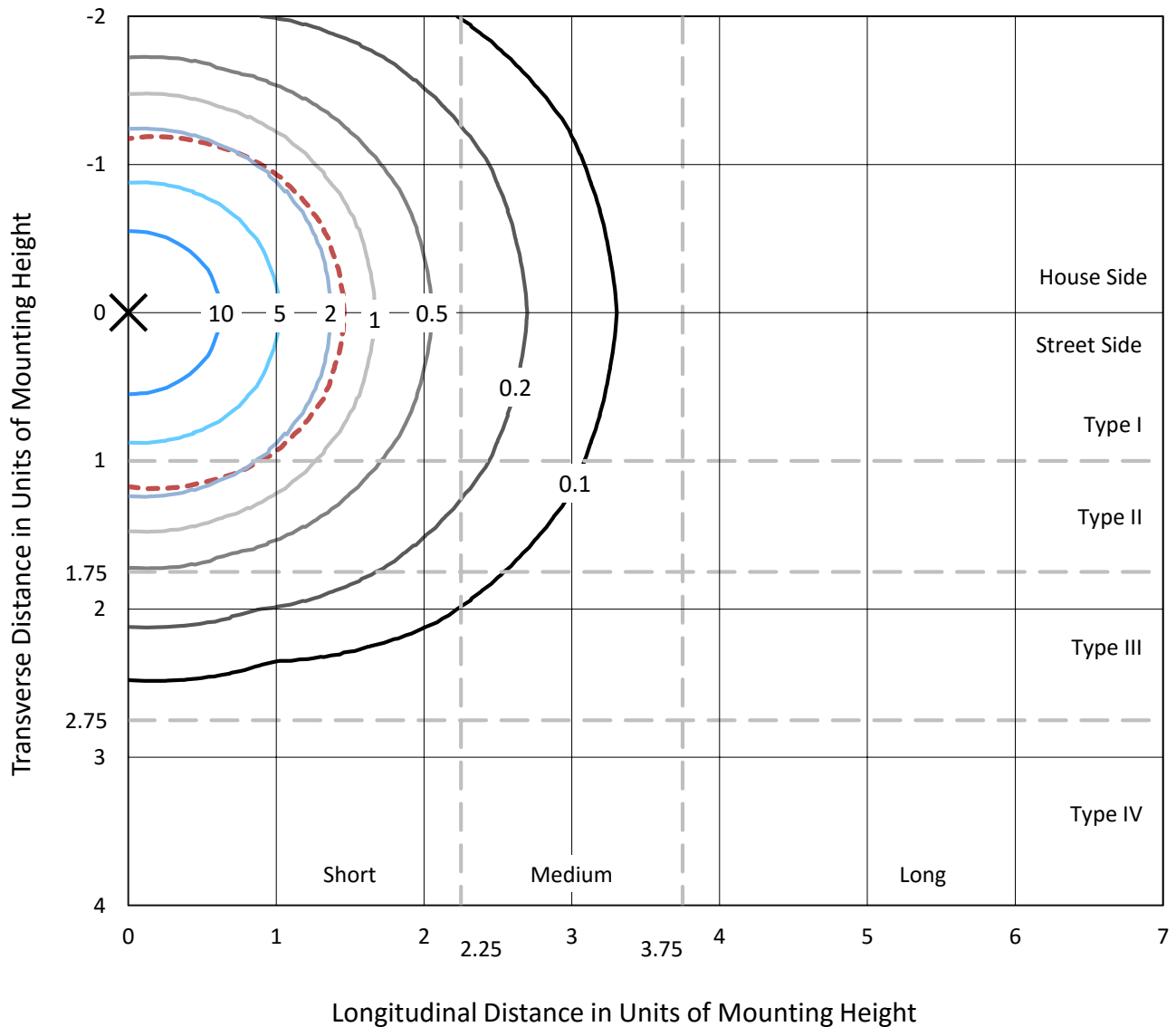
Input Watts (W): 132  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

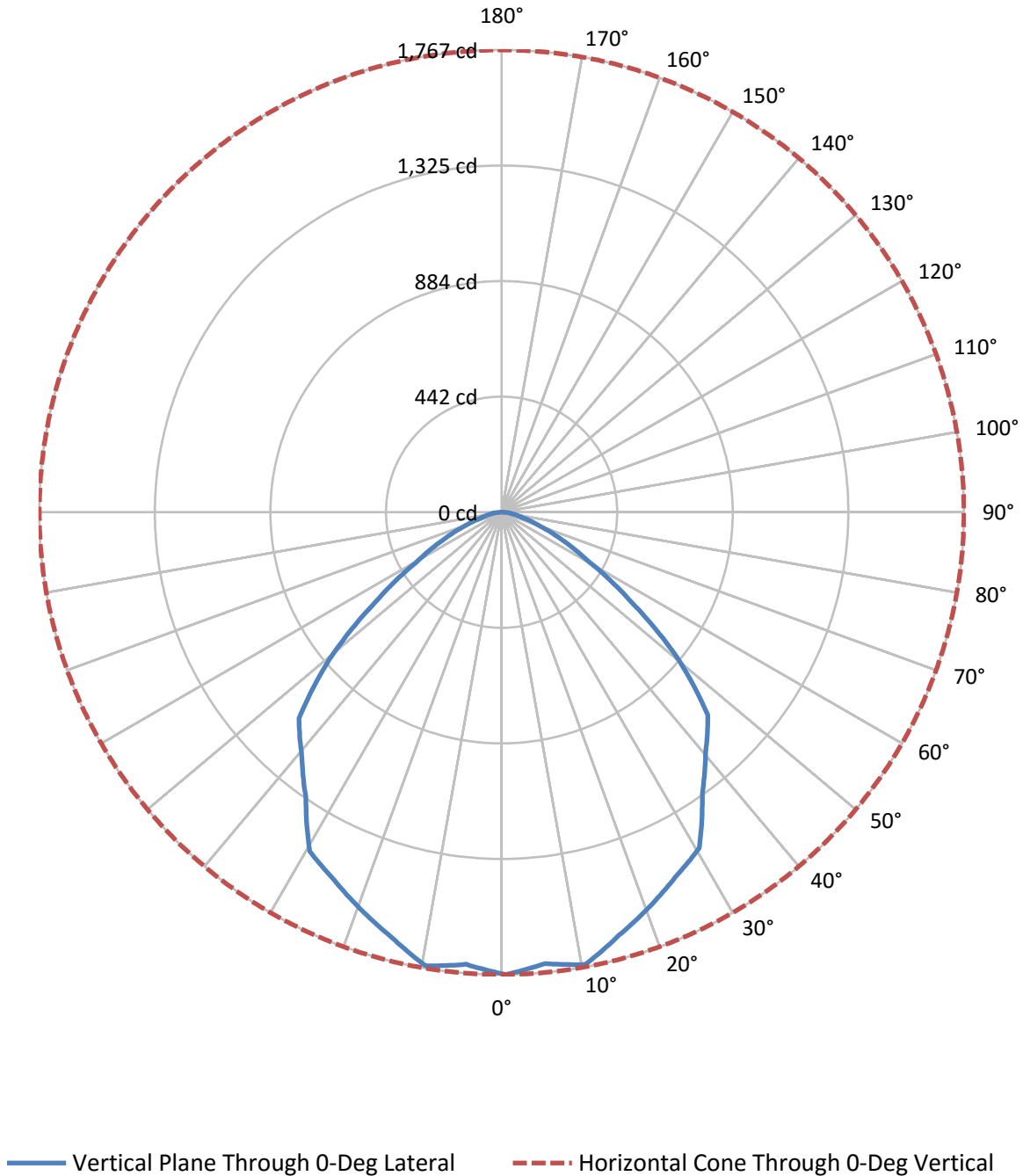


Based on 10 foot mounting height. Maximum calculated value = 17.7 fc  
 Type V - Short - Cutoff



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### Luminous Intensity Polar Plot





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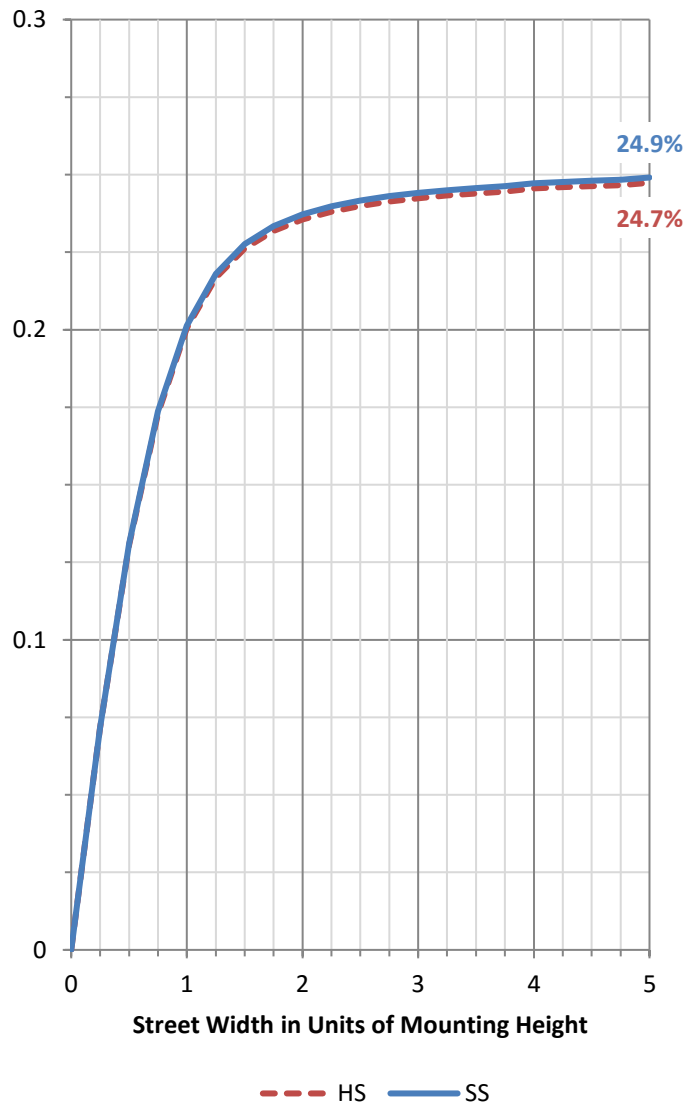
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2415.3	111.4	2526.7
	% Lamp	25.2	1.2	26.3
<b>Street Side</b>	Lumens	2415.3	111.4	2526.7
	% Lamp	25.2	1.2	26.3
<b>Total</b>	Lumens	4830.6	222.8	5053.4
	% Lamp	50.3	2.3	52.6

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture	% Lamp
0°-10°	166.6	3.3	1.7
10°-20°	480.8	9.5	5.0
20°-30°	748.3	14.8	7.8
30°-40°	920.5	18.2	9.6
40°-50°	984.1	19.5	10.3
50°-60°	708.7	14.0	7.4
60°-70°	415.4	8.2	4.3
70°-80°	253.6	5.0	2.6
80°-90°	152.5	3.0	1.6
90°-100°	84.3	1.7	0.9
100°-110°	49.8	1.0	0.5
110°-120°	31.9	0.6	0.3
120°-130°	20.8	0.4	0.2
130°-140°	14.0	0.3	0.1
140°-150°	10.4	0.2	0.1
150°-160°	7.1	0.1	0.1
160°-170°	4.1	0.1	0.0
170°-180°	0.5	0.0	0.0
0°-90°	4830.6	95.6	50.3
0°-180°	5053.4	100.0	52.6



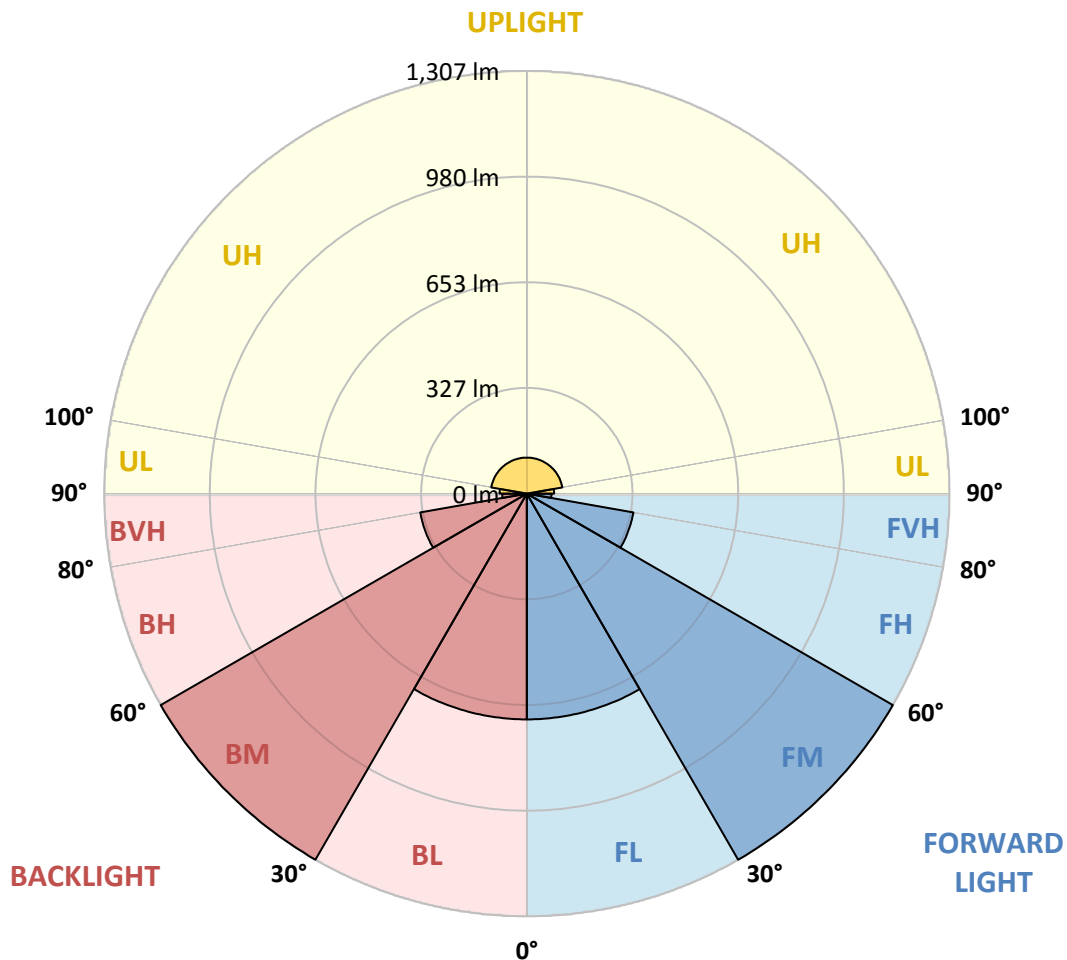


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	697.9	7.3			
FM	(30°-60°)	1306.7	13.6			
FH	(60°-80°)	334.5	3.5			G0/660
FVH	(80°-90°)	76.2	0.8			G1/100
BL	(0°-30°)	697.9	7.3	B2/1000		
BM	(30°-60°)	1306.7	13.6	B2/2500		
BH	(60°-80°)	334.5	3.5	B1/500		G0/660
BVH	(80°-90°)	76.2	0.8			G1/100
UL	(90°-100°)	84.3	0.9		U3/500	
UH	(100°-180°)	111.4	1.2		U3/500	
Trapped Light		4546.6	47.4			

**BUG Rating: B2-U3-G1**  
 Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1767	1767	1767	1767	1767
5°	1733	1727	1736	1729	1735
10°	1758	1752	1760	1760	1757
15°	1678	1674	1689	1711	1726
20°	1611	1622	1653	1689	1706
25°	1544	1569	1616	1666	1686
30°	1489	1508	1584	1662	1683
35°	1321	1366	1455	1547	1584
40°	1201	1264	1389	1496	1530
45°	1105	1191	1343	1462	1502
50°	865	954	1087	1188	1222
55°	594	673	809	891	900
60°	381	430	563	662	690
65°	251	280	417	537	572
70°	151	174	320	431	468
75°	83	106	251	348	377
80°	47	70	203	285	311
85°	28	43	153	221	247
90°	0	20	112	167	184
95°	0	12	87	134	147
100°	0	10	66	101	110
105°	0	8	51	81	89
110°	0	7	40	66	75
115°	0	8	34	55	61
120°	0	8	28	46	51
125°	0	10	24	37	42
130°	0	11	20	30	34
135°	0	12	19	26	29
140°	0	12	19	24	25
145°	0	14	19	23	24
150°	0	14	17	20	21
155°	0	15	17	20	20
160°	0	15	16	19	19
165°	0	15	16	18	18
170°	0	15	15	16	16
175°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)