

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

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P553967

Luminaire Tested: **FUSL-12-2-LD4-1HI-35-UNV-93-97-EDD**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P553967  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/16/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FUSL-12-2-LD4-1HI-35-UNV-93-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

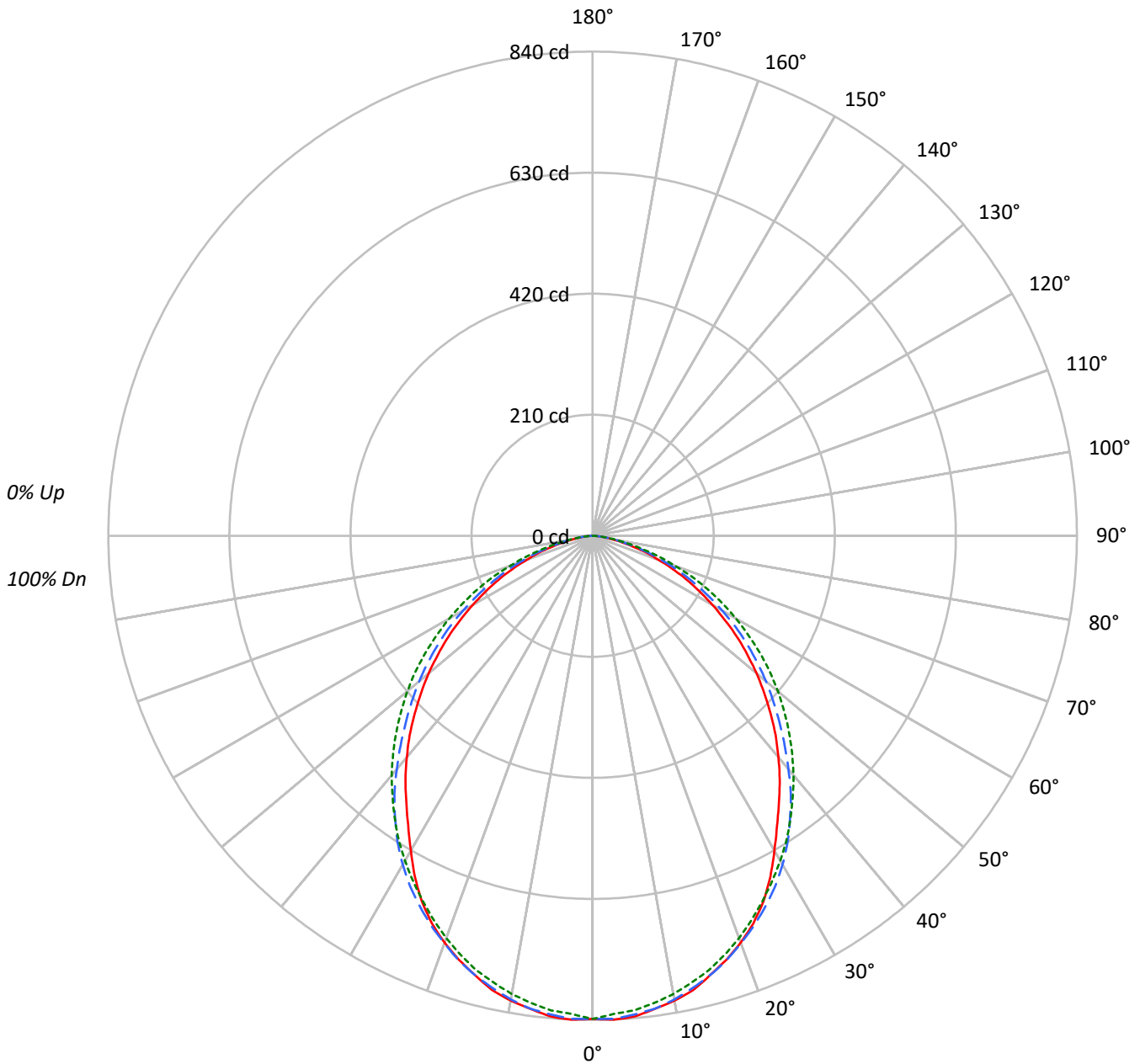
Lumens per Lamp: N/A  
Luminaire Lumens: 1938.0 lumens  
Efficiency: N/A  
Efficacy: 89.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.6  
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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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4511	4511	4511
5°	4523	4504	4465
10°	4475	4463	4411
15°	4396	4396	4345
20°	4302	4308	4253
25°	4160	4212	4146
30°	3918	4094	4044
35°	3702	3924	3931
40°	3522	3712	3809
45°	3321	3487	3666
50°	3109	3286	3510
55°	2867	3058	3321
60°	2582	2790	3088
65°	2280	2481	2809
70°	1899	2113	2387
75°	1493	1686	1867
80°	1069	1187	1317
85°	698	698	655



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.9	4.1
10°-20°	221.7	11.4
20°-30°	324.0	16.7
30°-40°	367.7	19.0
40°-50°	355.0	18.3
50°-60°	292.8	15.1
60°-70°	195.0	10.1
70°-80°	87.3	4.5
80°-90°	15.6	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	624.6	32.2
0°-40°	992.3	51.2
0°-60°	1640.1	84.6
0°-90°	1938.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1938.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	837	837	834	829	826	79
15°	789	791	789	785	780	222
25°	701	706	709	704	698	321
35°	564	571	597	600	598	353
45°	436	444	458	479	482	337
55°	306	311	326	344	354	273
65°	179	184	195	209	221	177
75°	72	76	81	85	90	78
85°	11	11	11	11	11	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	838.1	838.1	838.1	838.1	838.1
2.5°	840.4	840.7	838.8	833.6	830.4
5°	837.2	836.8	833.6	829.1	826.5
7.5°	827.8	828.5	827.5	821.1	817.5
10°	818.8	819.1	816.6	811.4	807.2
12.5°	807.2	806.9	803.4	800.8	794.0
15°	788.9	790.8	788.9	785.3	779.9
17.5°	771.2	771.2	772.4	766.3	762.1
20°	751.2	752.2	752.2	747.3	742.5
22.5°	728.0	730.9	731.9	726.7	720.9
25°	700.6	706.1	709.3	704.2	698.1
27.5°	667.5	675.9	685.5	681.6	674.9
30°	630.5	642.7	658.8	655.6	650.7
32.5°	595.4	607.6	629.8	628.5	625.9
35°	563.5	571.2	597.3	600.5	598.3
37.5°	533.2	540.3	564.8	572.2	570.2
40°	501.3	509.1	528.4	541.6	542.2
42.5°	469.8	477.2	493.0	512.0	512.0
45°	436.3	443.7	458.2	479.1	481.7
47.5°	403.5	411.2	425.3	446.3	450.5
50°	371.3	378.3	392.5	412.8	419.2
52.5°	337.8	345.5	359.3	378.0	387.4
55°	305.6	310.7	325.9	343.9	353.9
57.5°	272.1	276.9	294.0	309.4	319.7
60°	239.9	246.0	259.2	275.0	286.9
62.5°	209.0	215.4	226.7	240.5	254.0
65°	179.0	183.9	194.8	208.6	220.6
67.5°	150.0	154.2	165.2	174.8	187.4
70°	120.7	126.2	134.3	143.6	151.7
72.5°	97.2	99.5	106.3	113.0	121.4
75°	71.8	75.7	81.1	85.0	89.8
77.5°	51.5	53.8	57.0	60.2	64.7
80°	34.5	35.4	38.3	39.0	42.5
82.5°	20.9	21.6	22.2	22.5	23.8
85°	11.3	11.3	11.3	10.6	10.6
87.5°	6.4	6.4	5.5	4.5	3.2
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)