

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: P555559

Luminaire Tested: **FUSL-12-2-LD4-3HI-40-UNV-93-87-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: P555559  
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-LD4-3HI-40-UNV-93-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

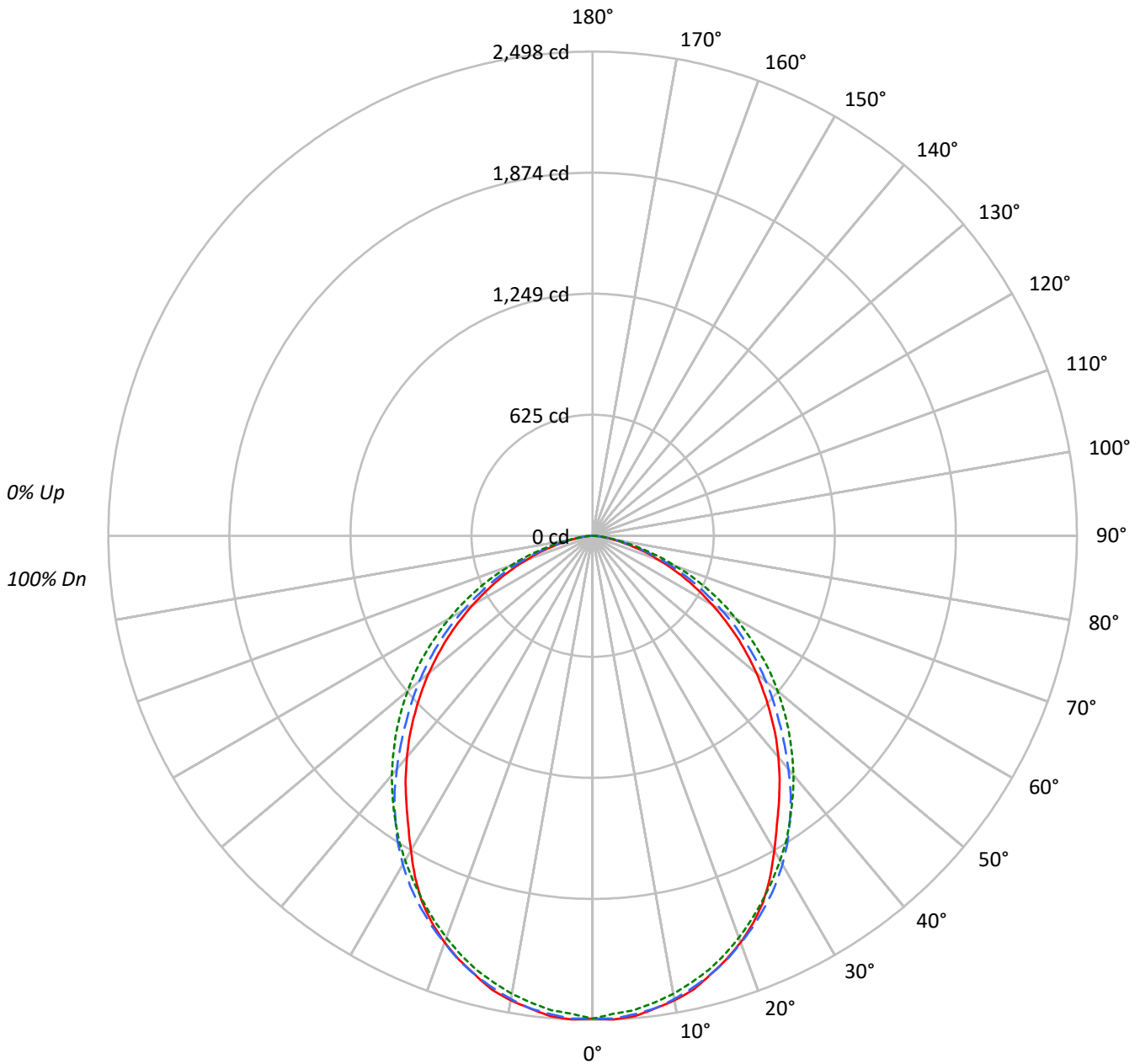
Lumens per Lamp: N/A  
Luminaire Lumens: 5760.0 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
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°	13407	13407	13407
5°	13443	13386	13272
10°	13300	13263	13112
15°	13064	13064	12914
20°	12787	12804	12639
25°	12366	12520	12321
30°	11645	12168	12020
35°	11003	11663	11682
40°	10468	11033	11323
45°	9869	10365	10897
50°	9239	9768	10433
55°	8522	9088	9868
60°	7675	8293	9178
65°	6776	7373	8348
70°	5648	6280	7092
75°	4438	5016	5552
80°	3174	3530	3914
85°	2069	2069	1951



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	234.5	4.1
10°-20°	658.9	11.4
20°-30°	962.9	16.7
30°-40°	1092.9	19.0
40°-50°	1055.1	18.3
50°-60°	870.4	15.1
60°-70°	579.6	10.1
70°-80°	259.4	4.5
80°-90°	46.4	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°	1856.3	32.2
0°-40°	2949.2	51.2
0°-60°	4874.7	84.6
0°-90°	5760.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5760.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2491	2491	2491	2491	2491	
5°	2488	2487	2478	2464	2457	236
15°	2345	2350	2345	2334	2318	661
25°	2082	2099	2108	2093	2075	954
35°	1675	1698	1775	1785	1778	1049
45°	1297	1319	1362	1424	1432	1000
55°	908	924	968	1022	1052	811
65°	532	546	579	620	656	528
75°	213	225	241	253	267	233
85°	34	34	34	32	32	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2491.1	2491.1	2491.1	2491.1	2491.1
2.5°	2497.8	2498.7	2493.0	2477.7	2468.1
5°	2488.2	2487.2	2477.7	2464.3	2456.6
7.5°	2460.4	2462.3	2459.5	2440.3	2429.8
10°	2433.6	2434.6	2426.9	2411.6	2399.2
12.5°	2399.2	2398.2	2387.7	2380.0	2359.9
15°	2344.6	2350.4	2344.6	2334.1	2317.8
17.5°	2292.0	2292.0	2295.8	2277.6	2265.2
20°	2232.7	2235.5	2235.5	2221.2	2206.8
22.5°	2163.8	2172.4	2175.2	2159.9	2142.7
25°	2082.4	2098.7	2108.3	2092.9	2074.8
27.5°	1983.8	2008.7	2037.4	2026.0	2005.9
30°	1873.8	1910.2	1958.0	1948.4	1934.1
32.5°	1769.5	1805.8	1871.9	1868.0	1860.4
35°	1674.7	1697.7	1775.2	1784.8	1778.1
37.5°	1584.8	1605.8	1678.6	1700.6	1694.8
40°	1490.0	1513.0	1570.4	1609.7	1611.6
42.5°	1396.3	1418.3	1465.2	1521.6	1521.6
45°	1296.7	1318.7	1361.8	1424.0	1431.7
47.5°	1199.1	1222.1	1264.2	1326.4	1338.8
50°	1103.4	1124.5	1166.6	1226.9	1246.0
52.5°	1003.9	1026.9	1068.0	1123.5	1151.3
55°	908.2	923.5	968.5	1022.1	1051.7
57.5°	808.7	823.0	873.7	919.7	950.3
60°	713.0	731.1	770.4	817.3	852.7
62.5°	621.1	640.2	673.7	714.9	755.1
65°	532.1	546.4	579.0	620.1	655.5
67.5°	446.0	458.4	490.9	519.6	557.0
70°	358.9	375.1	399.1	426.8	450.7
72.5°	289.0	295.7	315.8	335.9	360.8
75°	213.4	224.9	241.2	252.6	267.0
77.5°	153.1	159.8	169.4	179.0	192.4
80°	102.4	105.3	113.9	115.8	126.3
82.5°	62.2	64.1	66.0	67.0	70.8
85°	33.5	33.5	33.5	31.6	31.6
87.5°	19.1	19.1	16.3	13.4	9.6
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)