

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: P555623

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-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: P555623  
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-50-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 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

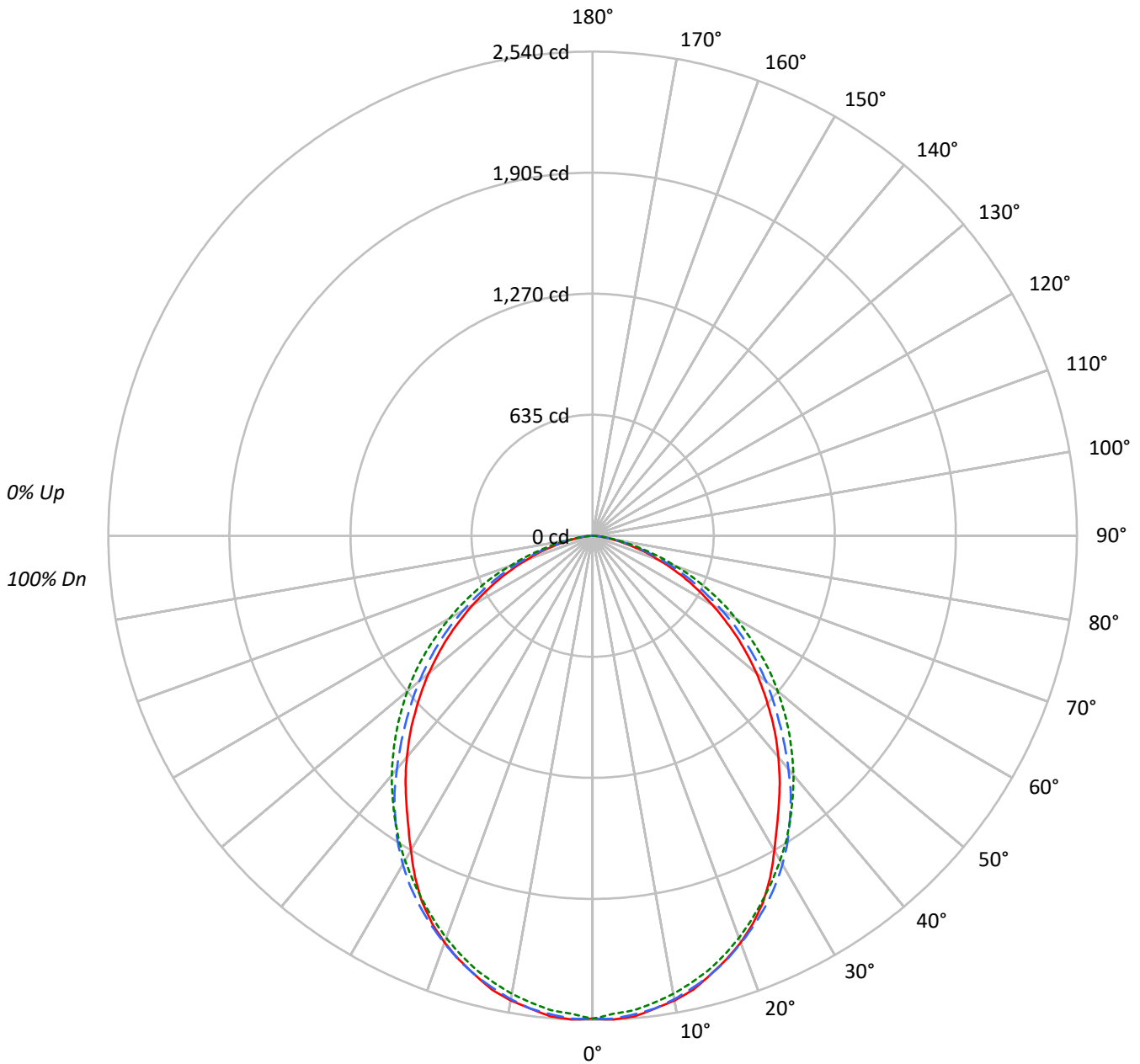
Lumens per Lamp: N/A  
Luminaire Lumens: 5858.0 lumens  
Efficiency: N/A  
Efficacy: 90.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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					20					
RC	80					70					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°	13635	13635	13635
5°	13671	13613	13498
10°	13526	13489	13335
15°	13286	13286	13134
20°	13005	13022	12854
25°	12576	12732	12530
30°	11843	12375	12224
35°	11190	11862	11881
40°	10647	11221	11515
45°	10038	10542	11082
50°	9396	9934	10610
55°	8666	9242	10036
60°	7805	8434	9334
65°	6891	7498	8490
70°	5744	6387	7213
75°	4512	5101	5646
80°	3226	3589	3983
85°	2106	2106	1982



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	238.5	4.1
10°-20°	670.1	11.4
20°-30°	979.2	16.7
30°-40°	1111.5	19.0
40°-50°	1073.0	18.3
50°-60°	885.2	15.1
60°-70°	589.4	10.1
70°-80°	263.8	4.5
80°-90°	47.2	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°	1887.9	32.2
0°-40°	2999.4	51.2
0°-60°	4957.6	84.6
0°-90°	5858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5858.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2533	2533	2533	2533	2533	
5°	2530	2530	2520	2506	2498	240
15°	2384	2390	2384	2374	2357	672
25°	2118	2134	2144	2129	2110	970
35°	1703	1727	1805	1815	1808	1067
45°	1319	1341	1385	1448	1456	1018
55°	924	939	985	1040	1070	824
65°	541	556	589	631	667	537
75°	217	229	245	257	272	237
85°	34	34	34	32	32	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2533.4	2533.4	2533.4	2533.4	2533.4
2.5°	2540.2	2541.2	2535.4	2519.8	2510.1
5°	2530.5	2529.5	2519.8	2506.2	2498.4
7.5°	2502.3	2504.2	2501.3	2481.9	2471.1
10°	2475.0	2476.0	2468.2	2452.7	2440.0
12.5°	2440.0	2439.0	2428.3	2420.5	2400.1
15°	2384.5	2390.4	2384.5	2373.8	2357.3
17.5°	2331.0	2331.0	2334.9	2316.4	2303.7
20°	2270.6	2273.6	2273.6	2259.0	2244.4
22.5°	2200.6	2209.3	2212.3	2196.7	2179.2
25°	2117.8	2134.4	2144.1	2128.6	2110.1
27.5°	2017.6	2042.9	2072.1	2060.4	2040.0
30°	1905.7	1942.7	1991.3	1981.6	1967.0
32.5°	1799.6	1836.6	1903.7	1899.8	1892.0
35°	1703.2	1726.6	1805.4	1815.2	1808.3
37.5°	1611.7	1633.2	1707.1	1729.5	1723.7
40°	1515.4	1538.7	1597.1	1637.0	1639.0
42.5°	1420.0	1442.4	1490.1	1547.5	1547.5
45°	1318.8	1341.2	1385.0	1448.2	1456.0
47.5°	1219.5	1242.9	1285.7	1349.0	1361.6
50°	1122.2	1143.6	1186.4	1247.7	1267.2
52.5°	1021.0	1044.3	1086.2	1142.6	1170.8
55°	923.6	939.2	985.0	1039.5	1069.6
57.5°	822.4	837.0	888.6	935.3	966.5
60°	725.1	743.6	783.5	831.2	867.2
62.5°	631.7	651.1	685.2	727.0	767.9
65°	541.1	555.7	588.8	630.7	666.7
67.5°	453.5	466.2	499.3	528.5	566.4
70°	365.0	381.5	405.9	434.1	458.4
72.5°	293.9	300.7	321.2	341.6	366.9
75°	217.0	228.7	245.3	256.9	271.5
77.5°	155.7	162.5	172.3	182.0	195.6
80°	104.1	107.1	115.8	117.8	128.5
82.5°	63.3	65.2	67.2	68.1	72.0
85°	34.1	34.1	34.1	32.1	32.1
87.5°	19.5	19.5	16.5	13.6	9.7
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)