

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: P555429

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-UNV-93-86-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: P555429  
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-30-UNV-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

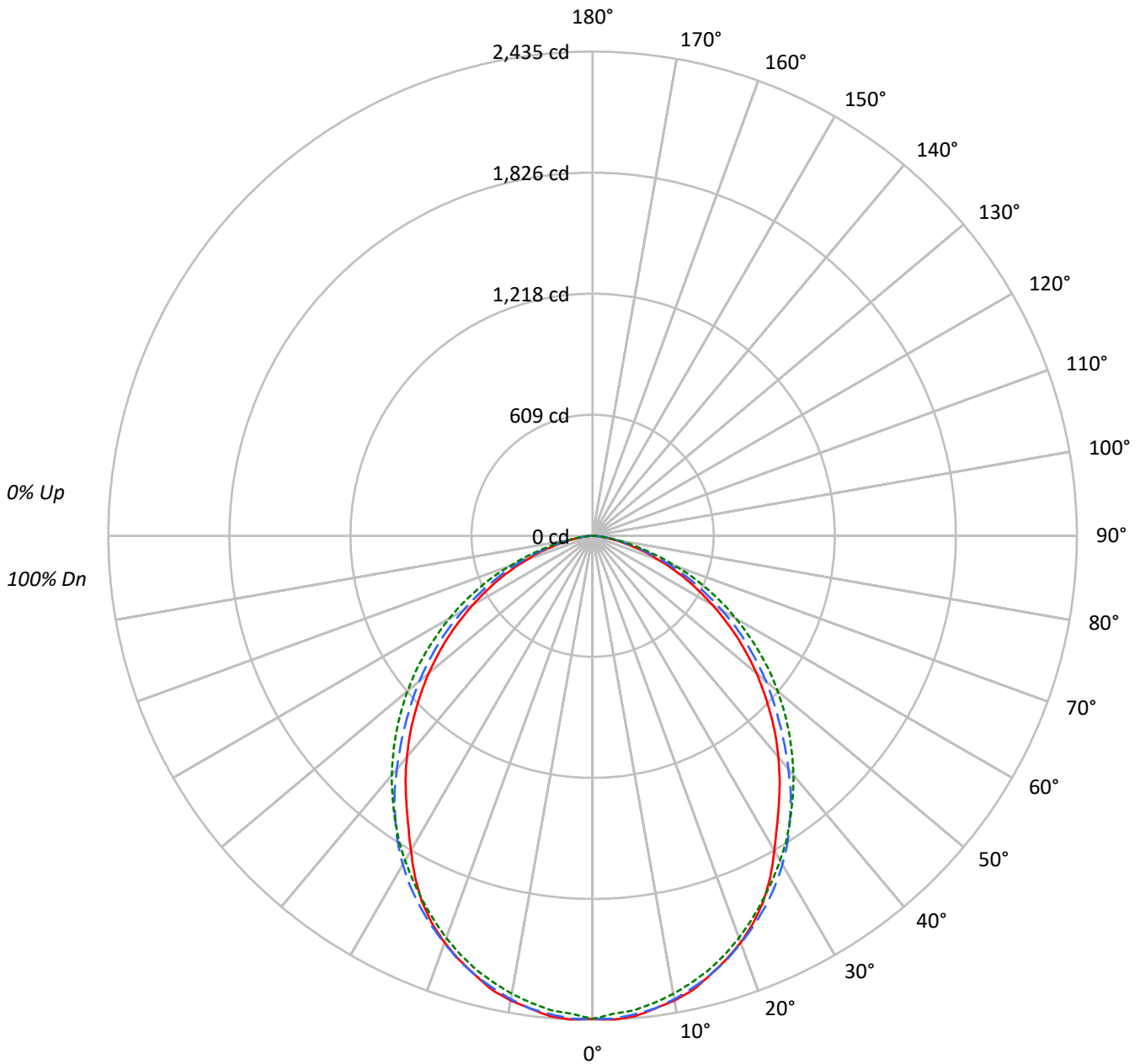
Lumens per Lamp: N/A  
Luminaire Lumens: 5616.0 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	13072	13072	13072
5°	13107	13051	12940
10°	12967	12932	12784
15°	12737	12737	12592
20°	12467	12483	12324
25°	12057	12206	12013
30°	11353	11864	11719
35°	10728	11372	11390
40°	10207	10758	11039
45°	9623	10106	10625
50°	9008	9523	10172
55°	8309	8861	9621
60°	7482	8085	8949
65°	6607	7189	8140
70°	5506	6123	6916
75°	4327	4889	5413
80°	3093	3440	3818
85°	2019	2019	1902



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	228.7	4.1
10°-20°	642.4	11.4
20°-30°	938.8	16.7
30°-40°	1065.6	19.0
40°-50°	1028.7	18.3
50°-60°	848.6	15.1
60°-70°	565.1	10.1
70°-80°	252.9	4.5
80°-90°	45.2	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°	1809.9	32.2
0°-40°	2875.5	51.2
0°-60°	4752.8	84.6
0°-90°	5616.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5616.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2429	2429	2429	2429	2429	
5°	2426	2425	2416	2403	2395	230
15°	2286	2292	2286	2276	2260	644
25°	2030	2046	2056	2041	2023	930
35°	1633	1655	1731	1740	1734	1023
45°	1264	1286	1328	1388	1396	975
55°	886	900	944	996	1025	790
65°	519	533	564	605	639	514
75°	208	219	235	246	260	228
85°	33	33	33	31	31	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2428.8	2428.8	2428.8	2428.8	2428.8
2.5°	2435.3	2436.2	2430.6	2415.7	2406.4
5°	2426.0	2425.0	2415.7	2402.6	2395.2
7.5°	2398.9	2400.8	2398.0	2379.3	2369.1
10°	2372.8	2373.7	2366.3	2351.3	2339.2
12.5°	2339.2	2338.3	2328.0	2320.5	2300.9
15°	2286.0	2291.6	2286.0	2275.8	2259.9
17.5°	2234.7	2234.7	2238.4	2220.7	2208.6
20°	2176.8	2179.6	2179.6	2165.6	2151.7
22.5°	2109.7	2118.1	2120.9	2105.9	2089.1
25°	2030.4	2046.2	2055.5	2040.6	2022.9
27.5°	1934.2	1958.5	1986.5	1975.3	1955.7
30°	1826.9	1862.4	1909.1	1899.7	1885.7
32.5°	1725.2	1760.7	1825.1	1821.3	1813.9
35°	1632.9	1655.3	1730.8	1740.2	1733.6
37.5°	1545.2	1565.7	1636.6	1658.1	1652.5
40°	1452.8	1475.2	1531.2	1569.4	1571.3
42.5°	1361.3	1382.8	1428.5	1483.6	1483.6
45°	1264.3	1285.8	1327.8	1388.4	1395.9
47.5°	1169.1	1191.5	1232.6	1293.2	1305.4
50°	1075.8	1096.4	1137.4	1196.2	1214.9
52.5°	978.8	1001.2	1041.3	1095.4	1122.5
55°	885.5	900.4	944.3	996.5	1025.4
57.5°	788.4	802.4	851.9	896.7	926.5
60°	695.1	712.9	751.1	796.8	831.4
62.5°	605.6	624.2	656.9	697.0	736.2
65°	518.8	532.8	564.5	604.6	639.2
67.5°	434.8	446.9	478.7	506.7	543.0
70°	349.9	365.8	389.1	416.1	439.5
72.5°	281.8	288.3	307.9	327.5	351.8
75°	208.1	219.3	235.1	246.3	260.3
77.5°	149.3	155.8	165.2	174.5	187.5
80°	99.8	102.6	111.0	112.9	123.2
82.5°	60.6	62.5	64.4	65.3	69.0
85°	32.7	32.7	32.7	30.8	30.8
87.5°	18.7	18.7	15.9	13.1	9.3
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)