

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: P557511

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-81-87-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: P557511
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-12-4-LD4-2STD-35-UNV-81-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

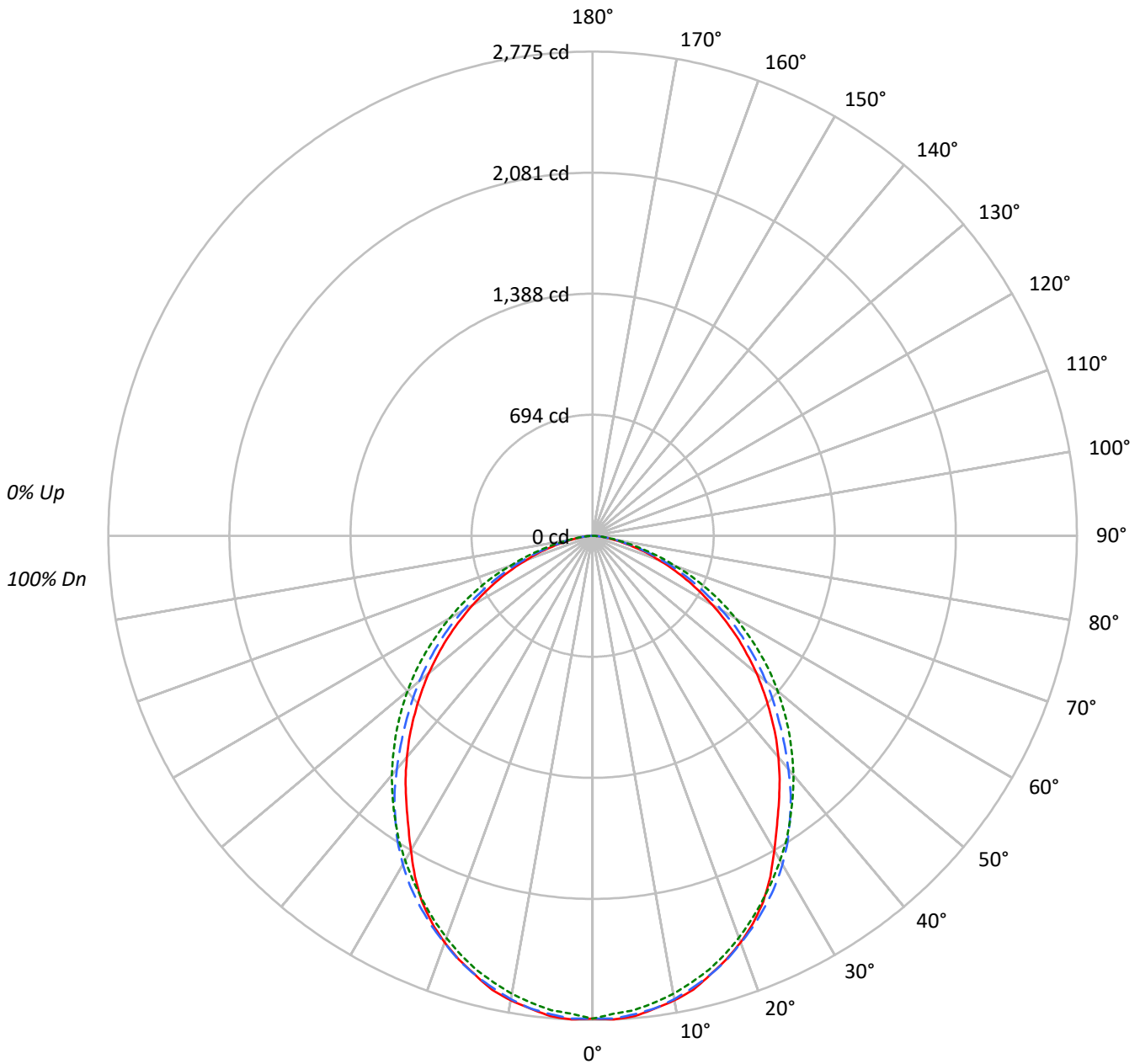
Lumens per Lamp: N/A
Luminaire Lumens: 6399.0 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (Ain): 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°	7447	7447	7447
5°	7467	7435	7372
10°	7388	7367	7283
15°	7256	7256	7174
20°	7103	7112	7021
25°	6869	6954	6844
30°	6468	6759	6676
35°	6112	6479	6489
40°	5815	6128	6289
45°	5482	5758	6053
50°	5132	5426	5795
55°	4733	5048	5482
60°	4263	4606	5098
65°	3764	4096	4637
70°	3137	3488	3939
75°	2465	2785	3084
80°	1764	1960	2174
85°	1149	1149	1084



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.6	4.1
10°-20°	732.0	11.4
20°-30°	1069.7	16.7
30°-40°	1214.2	19.0
40°-50°	1172.1	18.3
50°-60°	966.9	15.1
60°-70°	643.9	10.1
70°-80°	288.1	4.5
80°-90°	51.5	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°	2062.2	32.2
0°-40°	3276.4	51.2
0°-60°	5415.4	84.6
0°-90°	6399.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6399.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2767	2767	2767	2767	2767	
5°	2764	2763	2752	2738	2729	262
15°	2605	2611	2605	2593	2575	734
25°	2313	2332	2342	2325	2305	1059
35°	1860	1886	1972	1983	1975	1166
45°	1441	1465	1513	1582	1590	1111
55°	1009	1026	1076	1136	1168	901
65°	591	607	643	689	728	586
75°	237	250	268	281	297	259
85°	37	37	37	35	35	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2767.4	2767.4	2767.4	2767.4	2767.4
2.5°	2774.8	2775.9	2769.5	2752.5	2741.9
5°	2764.2	2763.1	2752.5	2737.6	2729.1
7.5°	2733.4	2735.5	2732.3	2711.1	2699.4
10°	2703.6	2704.7	2696.2	2679.2	2665.3
12.5°	2665.3	2664.3	2652.6	2644.1	2621.7
15°	2604.7	2611.1	2604.7	2593.0	2575.0
17.5°	2546.3	2546.3	2550.5	2530.3	2516.5
20°	2480.3	2483.5	2483.5	2467.6	2451.6
22.5°	2403.8	2413.4	2416.6	2399.5	2380.4
25°	2313.4	2331.5	2342.1	2325.1	2304.9
27.5°	2203.9	2231.6	2263.5	2250.7	2228.4
30°	2081.7	2122.1	2175.2	2164.6	2148.6
32.5°	1965.8	2006.2	2079.5	2075.3	2066.8
35°	1860.5	1886.0	1972.2	1982.8	1975.3
37.5°	1760.6	1784.0	1864.8	1889.2	1882.9
40°	1655.3	1680.9	1744.6	1788.2	1790.4
42.5°	1551.1	1575.6	1627.7	1690.4	1690.4
45°	1440.6	1465.0	1512.9	1582.0	1590.5
47.5°	1332.1	1357.7	1404.4	1473.5	1487.4
50°	1225.8	1249.2	1296.0	1363.0	1384.2
52.5°	1115.3	1140.8	1186.5	1248.1	1279.0
55°	1008.9	1025.9	1075.9	1135.5	1168.4
57.5°	898.4	914.3	970.7	1021.7	1055.7
60°	792.1	812.3	855.8	907.9	947.3
62.5°	690.0	711.3	748.5	794.2	838.8
65°	591.1	607.1	643.2	688.9	728.3
67.5°	495.4	509.3	545.4	577.3	618.8
70°	398.7	416.8	443.3	474.2	500.7
72.5°	321.1	328.5	350.8	373.2	400.8
75°	237.1	249.8	267.9	280.7	296.6
77.5°	170.1	177.5	188.2	198.8	213.7
80°	113.8	116.9	126.5	128.6	140.3
82.5°	69.1	71.2	73.4	74.4	78.7
85°	37.2	37.2	37.2	35.1	35.1
87.5°	21.3	21.3	18.1	14.9	10.6
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)