

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: P557515

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-81-94-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: P557515
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-81-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

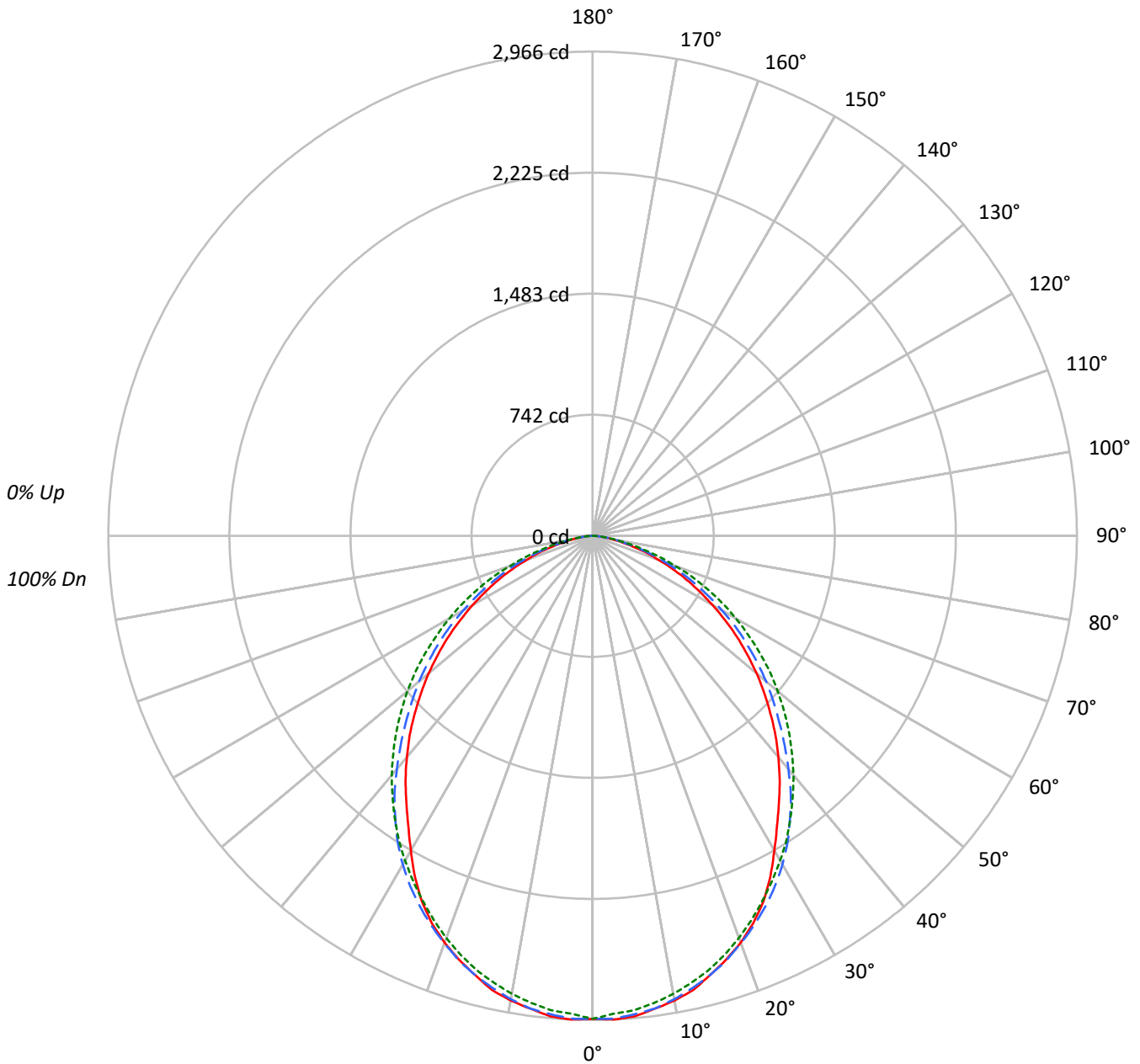
Lumens per Lamp: N/A
Luminaire Lumens: 6841.0 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7962	7962	7962
5°	7982	7949	7881
10°	7898	7876	7786
15°	7758	7758	7669
20°	7594	7603	7506
25°	7343	7434	7316
30°	6915	7226	7138
35°	6534	6926	6937
40°	6217	6552	6724
45°	5861	6155	6471
50°	5486	5800	6195
55°	5060	5396	5860
60°	4557	4924	5450
65°	4024	4378	4958
70°	3353	3729	4212
75°	2636	2978	3297
80°	1884	2097	2325
85°	1229	1229	1158



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.6	4.1
10°-20°	782.5	11.4
20°-30°	1143.6	16.7
30°-40°	1298.1	19.0
40°-50°	1253.1	18.3
50°-60°	1033.7	15.1
60°-70°	688.4	10.1
70°-80°	308.0	4.5
80°-90°	55.1	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°	2204.7	32.2
0°-40°	3502.7	51.2
0°-60°	5789.5	84.6
0°-90°	6841.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6841.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2959	2959	2959	2959	2959	
5°	2955	2954	2943	2927	2918	280
15°	2785	2792	2785	2772	2753	785
25°	2473	2493	2504	2486	2464	1133
35°	1989	2016	2108	2120	2112	1246
45°	1540	1566	1617	1691	1700	1188
55°	1079	1097	1150	1214	1249	963
65°	632	649	688	736	779	627
75°	254	267	286	300	317	277
85°	40	40	40	38	38	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2958.6	2958.6	2958.6	2958.6	2958.6
2.5°	2966.5	2967.6	2960.8	2942.6	2931.3
5°	2955.1	2954.0	2942.6	2926.7	2917.6
7.5°	2922.2	2924.5	2921.0	2898.3	2885.8
10°	2890.4	2891.5	2882.4	2864.2	2849.4
12.5°	2849.4	2848.3	2835.8	2826.7	2802.8
15°	2784.7	2791.5	2784.7	2772.2	2752.8
17.5°	2722.1	2722.1	2726.7	2705.1	2690.3
20°	2651.7	2655.1	2655.1	2638.0	2621.0
22.5°	2569.8	2580.1	2583.5	2565.3	2544.8
25°	2473.2	2492.6	2503.9	2485.7	2464.1
27.5°	2356.2	2385.7	2419.8	2406.2	2382.3
30°	2225.5	2268.6	2325.5	2314.1	2297.1
32.5°	2101.6	2144.8	2223.2	2218.6	2209.5
35°	1989.0	2016.3	2108.4	2119.7	2111.8
37.5°	1882.2	1907.2	1993.6	2019.7	2012.9
40°	1769.7	1797.0	1865.2	1911.8	1914.0
42.5°	1658.3	1684.4	1740.1	1807.2	1807.2
45°	1540.1	1566.2	1617.4	1691.3	1700.3
47.5°	1424.2	1451.4	1501.4	1575.3	1590.1
50°	1310.5	1335.5	1385.5	1457.1	1479.8
52.5°	1192.3	1219.6	1268.4	1334.4	1367.3
55°	1078.6	1096.8	1150.2	1213.9	1249.1
57.5°	960.4	977.5	1037.7	1092.3	1128.6
60°	846.8	868.4	915.0	970.7	1012.7
62.5°	737.6	760.4	800.2	849.0	896.8
65°	631.9	649.0	687.6	736.5	778.6
67.5°	529.7	544.4	583.1	617.2	661.5
70°	426.2	445.5	474.0	506.9	535.3
72.5°	343.3	351.2	375.1	398.9	428.5
75°	253.5	267.1	286.4	300.1	317.1
77.5°	181.9	189.8	201.2	212.5	228.5
80°	121.6	125.0	135.3	137.5	150.0
82.5°	73.9	76.2	78.4	79.6	84.1
85°	39.8	39.8	39.8	37.5	37.5
87.5°	22.7	22.7	19.3	15.9	11.4
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)