

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: P557621

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-80-86-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: P557621
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-50-UNV-80-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

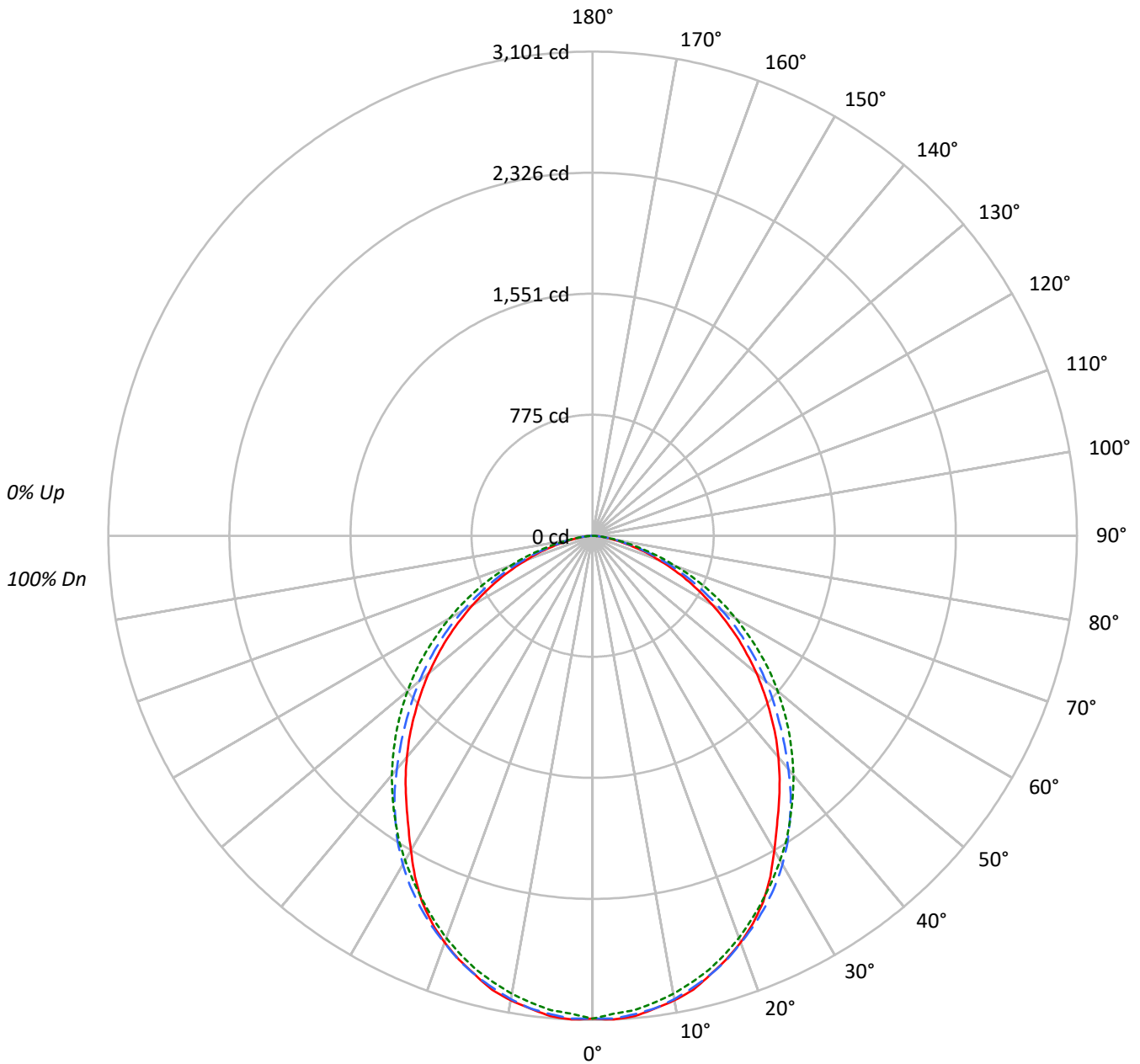
Lumens per Lamp: N/A
Luminaire Lumens: 7151.0 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8322	8322	8322
5°	8344	8309	8239
10°	8256	8233	8139
15°	8109	8109	8017
20°	7938	7948	7846
25°	7676	7771	7648
30°	7228	7553	7461
35°	6830	7240	7252
40°	6498	6849	7028
45°	6127	6434	6764
50°	5735	6063	6476
55°	5290	5641	6126
60°	4764	5147	5697
65°	4206	4577	5182
70°	3505	3898	4403
75°	2754	3113	3447
80°	1970	2191	2430
85°	1284	1284	1210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.2	4.1
10°-20°	818.0	11.4
20°-30°	1195.4	16.7
30°-40°	1356.9	19.0
40°-50°	1309.9	18.3
50°-60°	1080.5	15.1
60°-70°	719.5	10.1
70°-80°	322.0	4.5
80°-90°	57.6	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°	2304.6	32.2
0°-40°	3661.5	51.2
0°-60°	6051.9	84.6
0°-90°	7151.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7151.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3093	3093	3093	3093	3093	
5°	3089	3088	3076	3059	3050	292
15°	2911	2918	2911	2898	2878	821
25°	2585	2606	2617	2598	2576	1184
35°	2079	2108	2204	2216	2208	1303
45°	1610	1637	1691	1768	1777	1242
55°	1128	1146	1202	1269	1306	1006
65°	661	678	719	770	814	655
75°	265	279	299	314	332	290
85°	42	42	42	39	39	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3092.6	3092.6	3092.6	3092.6	3092.6
2.5°	3100.9	3102.1	3095.0	3076.0	3064.1
5°	3089.1	3087.9	3076.0	3059.4	3049.9
7.5°	3054.6	3057.0	3053.4	3029.7	3016.6
10°	3021.3	3022.5	3013.0	2994.0	2978.6
12.5°	2978.6	2977.4	2964.3	2954.8	2929.9
15°	2910.8	2918.0	2910.8	2897.8	2877.6
17.5°	2845.5	2845.5	2850.3	2827.7	2812.2
20°	2771.8	2775.4	2775.4	2757.6	2739.8
22.5°	2686.3	2697.0	2700.6	2681.5	2660.2
25°	2585.3	2605.5	2617.4	2598.4	2575.8
27.5°	2462.9	2493.8	2529.5	2515.2	2490.3
30°	2326.3	2371.4	2430.9	2419.0	2401.1
32.5°	2196.8	2241.9	2323.9	2319.2	2309.7
35°	2079.2	2107.7	2203.9	2215.8	2207.5
37.5°	1967.5	1993.6	2083.9	2111.3	2104.1
40°	1849.9	1878.4	1949.7	1998.4	2000.8
42.5°	1733.4	1760.8	1819.0	1889.1	1889.1
45°	1609.9	1637.2	1690.7	1767.9	1777.4
47.5°	1488.7	1517.2	1569.5	1646.7	1662.2
50°	1369.9	1396.0	1448.3	1523.1	1546.9
52.5°	1246.3	1274.8	1325.9	1394.8	1429.3
55°	1127.5	1146.5	1202.4	1268.9	1305.7
57.5°	1003.9	1021.8	1084.7	1141.8	1179.8
60°	885.1	907.7	956.4	1014.6	1058.6
62.5°	771.1	794.8	836.4	887.5	937.4
65°	660.6	678.4	718.8	769.9	813.8
67.5°	553.7	569.1	609.5	645.1	691.5
70°	445.5	465.7	495.4	529.9	559.6
72.5°	358.8	367.1	392.1	417.0	447.9
75°	264.9	279.2	299.4	313.7	331.5
77.5°	190.1	198.4	210.3	222.2	238.8
80°	127.1	130.7	141.4	143.8	156.8
82.5°	77.2	79.6	82.0	83.2	87.9
85°	41.6	41.6	41.6	39.2	39.2
87.5°	23.8	23.8	20.2	16.6	11.9
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)