

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: P557517

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-81-96-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: P557517
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-81-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

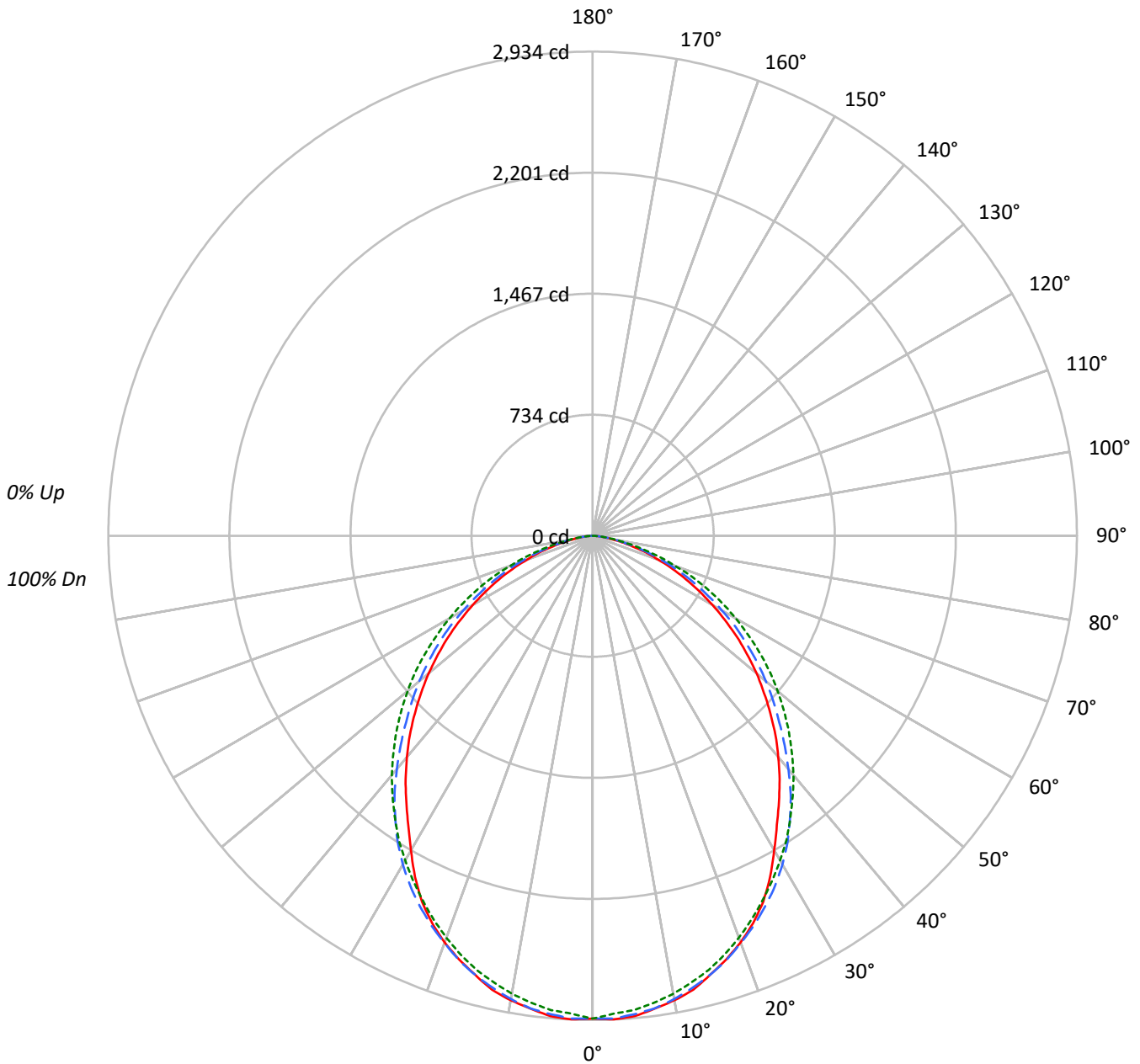
Lumens per Lamp: N/A
Luminaire Lumens: 6765.0 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (A_{in}): 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°	7873	7873	7873
5°	7894	7861	7794
10°	7810	7789	7700
15°	7672	7672	7584
20°	7509	7519	7422
25°	7262	7352	7235
30°	6838	7145	7058
35°	6461	6849	6860
40°	6147	6479	6649
45°	5796	6087	6399
50°	5425	5736	6126
55°	5004	5337	5795
60°	4507	4870	5390
65°	3979	4330	4902
70°	3316	3688	4165
75°	2606	2944	3261
80°	1864	2073	2300
85°	1213	1213	1145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.5	4.1
10°-20°	773.9	11.4
20°-30°	1130.9	16.7
30°-40°	1283.6	19.0
40°-50°	1239.2	18.3
50°-60°	1022.2	15.1
60°-70°	680.7	10.1
70°-80°	304.6	4.5
80°-90°	54.5	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°	2180.2	32.2
0°-40°	3463.8	51.2
0°-60°	5725.2	84.6
0°-90°	6765.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6765.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2926	2926	2926	2926	2926	
5°	2922	2921	2910	2894	2885	277
15°	2754	2760	2754	2741	2722	776
25°	2446	2465	2476	2458	2437	1120
35°	1967	1994	2085	2096	2088	1232
45°	1523	1549	1599	1672	1682	1175
55°	1067	1085	1138	1200	1235	952
65°	625	642	680	728	770	620
75°	251	264	283	297	314	274
85°	39	39	39	37	37	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2925.7	2925.7	2925.7	2925.7	2925.7
2.5°	2933.6	2934.7	2927.9	2910.0	2898.7
5°	2922.3	2921.2	2910.0	2894.2	2885.2
7.5°	2889.7	2892.0	2888.6	2866.1	2853.8
10°	2858.2	2859.4	2850.4	2832.4	2817.8
12.5°	2817.8	2816.7	2804.3	2795.3	2771.7
15°	2753.7	2760.5	2753.7	2741.4	2722.2
17.5°	2691.9	2691.9	2696.4	2675.0	2660.4
20°	2622.2	2625.6	2625.6	2608.7	2591.9
22.5°	2541.3	2551.4	2554.8	2536.8	2516.6
25°	2445.8	2464.9	2476.1	2458.1	2436.8
27.5°	2330.0	2359.2	2392.9	2379.4	2355.8
30°	2200.7	2243.4	2299.6	2288.4	2271.5
32.5°	2078.2	2120.9	2198.5	2194.0	2185.0
35°	1966.9	1993.9	2085.0	2096.2	2088.3
37.5°	1861.3	1886.0	1971.4	1997.3	1990.5
40°	1750.0	1777.0	1844.4	1890.5	1892.8
42.5°	1639.9	1665.7	1720.8	1787.1	1787.1
45°	1523.0	1548.8	1599.4	1672.5	1681.5
47.5°	1408.3	1435.3	1484.8	1557.8	1572.4
50°	1295.9	1320.7	1370.1	1440.9	1463.4
52.5°	1179.0	1206.0	1254.3	1319.5	1352.1
55°	1066.6	1084.6	1137.5	1200.4	1235.2
57.5°	949.8	966.6	1026.2	1080.1	1116.1
60°	837.4	858.7	904.8	959.9	1001.5
62.5°	729.5	751.9	791.3	839.6	886.8
65°	624.9	641.8	680.0	728.3	769.9
67.5°	523.8	538.4	576.6	610.3	654.1
70°	421.5	440.6	468.7	501.3	529.4
72.5°	339.4	347.3	370.9	394.5	423.7
75°	250.6	264.1	283.2	296.7	313.6
77.5°	179.8	187.7	198.9	210.2	225.9
80°	120.3	123.6	133.8	136.0	148.4
82.5°	73.1	75.3	77.6	78.7	83.2
85°	39.3	39.3	39.3	37.1	37.1
87.5°	22.5	22.5	19.1	15.7	11.2
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)