

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: P558029

Luminaire Tested: **FUSL-12-4-LD4-3LO-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: P558029
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-LD4-3LO-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 LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

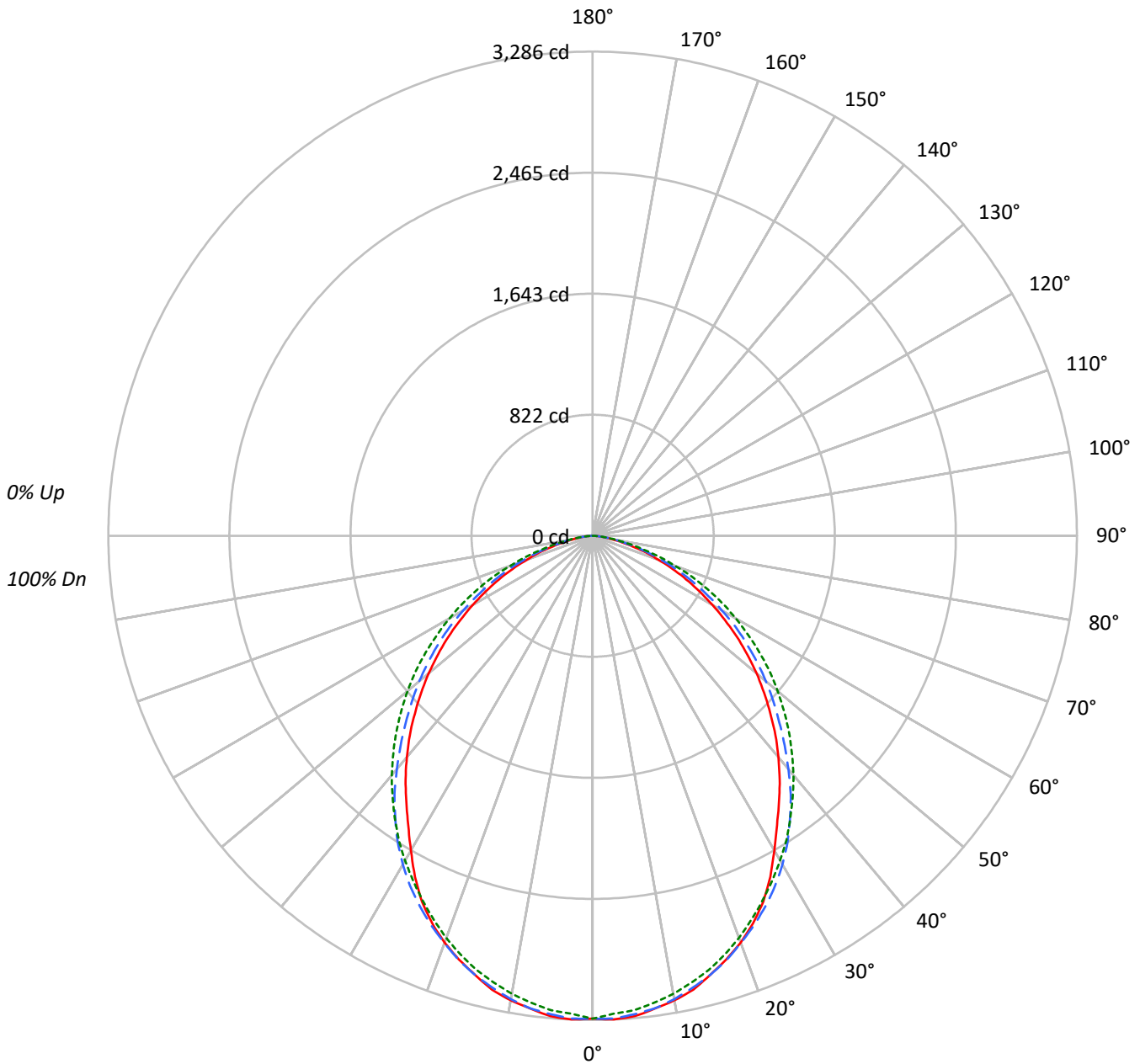
Lumens per Lamp: N/A
Luminaire Lumens: 7578.0 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	8819	8819	8819
5°	8843	8805	8730
10°	8749	8725	8625
15°	8594	8594	8495
20°	8411	8422	8314
25°	8135	8236	8105
30°	7660	8004	7906
35°	7238	7672	7685
40°	6886	7258	7448
45°	6492	6818	7168
50°	6077	6425	6863
55°	5605	5978	6492
60°	5048	5455	6037
65°	4457	4850	5491
70°	3714	4131	4666
75°	2920	3299	3653
80°	2087	2321	2576
85°	1362	1362	1281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.6	4.1
10°-20°	866.8	11.4
20°-30°	1266.8	16.7
30°-40°	1437.9	19.0
40°-50°	1388.1	18.3
50°-60°	1145.1	15.1
60°-70°	762.5	10.1
70°-80°	341.2	4.5
80°-90°	61.0	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°	2442.2	32.2
0°-40°	3880.1	51.2
0°-60°	6413.2	84.6
0°-90°	7578.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7578.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3277	3277	3277	3277	3277	
5°	3274	3272	3260	3242	3232	310
15°	3085	3092	3085	3071	3049	870
25°	2740	2761	2774	2754	2730	1255
35°	2203	2234	2336	2348	2339	1381
45°	1706	1735	1792	1874	1884	1316
55°	1195	1215	1274	1345	1384	1066
65°	700	719	762	816	862	694
75°	281	296	317	332	351	307
85°	44	44	44	42	42	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3277.3	3277.3	3277.3	3277.3	3277.3
2.5°	3286.1	3287.4	3279.8	3259.7	3247.1
5°	3273.5	3272.3	3259.7	3242.0	3232.0
7.5°	3237.0	3239.5	3235.7	3210.6	3196.7
10°	3201.7	3203.0	3192.9	3172.8	3156.4
12.5°	3156.4	3155.2	3141.3	3131.2	3104.8
15°	3084.7	3092.2	3084.7	3070.8	3049.4
17.5°	3015.4	3015.4	3020.4	2996.5	2980.2
20°	2937.3	2941.1	2941.1	2922.2	2903.4
22.5°	2846.7	2858.0	2861.8	2841.7	2819.0
25°	2739.7	2761.1	2773.7	2753.5	2729.6
27.5°	2610.0	2642.7	2680.5	2665.4	2639.0
30°	2465.2	2513.1	2576.0	2563.4	2544.5
32.5°	2328.0	2375.8	2462.7	2457.7	2447.6
35°	2203.3	2233.5	2335.5	2348.1	2339.3
37.5°	2085.0	2112.7	2208.4	2237.3	2229.8
40°	1960.3	1990.5	2066.1	2117.7	2120.2
42.5°	1836.9	1865.9	1927.6	2001.9	2001.9
45°	1706.0	1735.0	1791.6	1873.5	1883.5
47.5°	1577.6	1607.8	1663.2	1745.0	1761.4
50°	1451.7	1479.4	1534.8	1614.1	1639.3
52.5°	1320.7	1351.0	1405.1	1478.1	1514.6
55°	1194.8	1215.0	1274.2	1344.7	1383.7
57.5°	1063.9	1082.8	1149.5	1209.9	1250.2
60°	938.0	961.9	1013.5	1075.2	1121.8
62.5°	817.1	842.3	886.4	940.5	993.4
65°	700.0	718.9	761.7	815.9	862.4
67.5°	586.7	603.1	645.9	683.7	732.8
70°	472.1	493.5	525.0	561.5	593.0
72.5°	380.2	389.0	415.5	441.9	474.7
75°	280.8	295.9	317.3	332.4	351.3
77.5°	201.4	210.3	222.9	235.4	253.1
80°	134.7	138.5	149.8	152.3	166.2
82.5°	81.8	84.4	86.9	88.1	93.2
85°	44.1	44.1	44.1	41.5	41.5
87.5°	25.2	25.2	21.4	17.6	12.6
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)