

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: P558153

Luminaire Tested: **FUSL-12-4-LD4-3LO-50-UNV-81-88-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: P558153
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-50-UNV-81-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

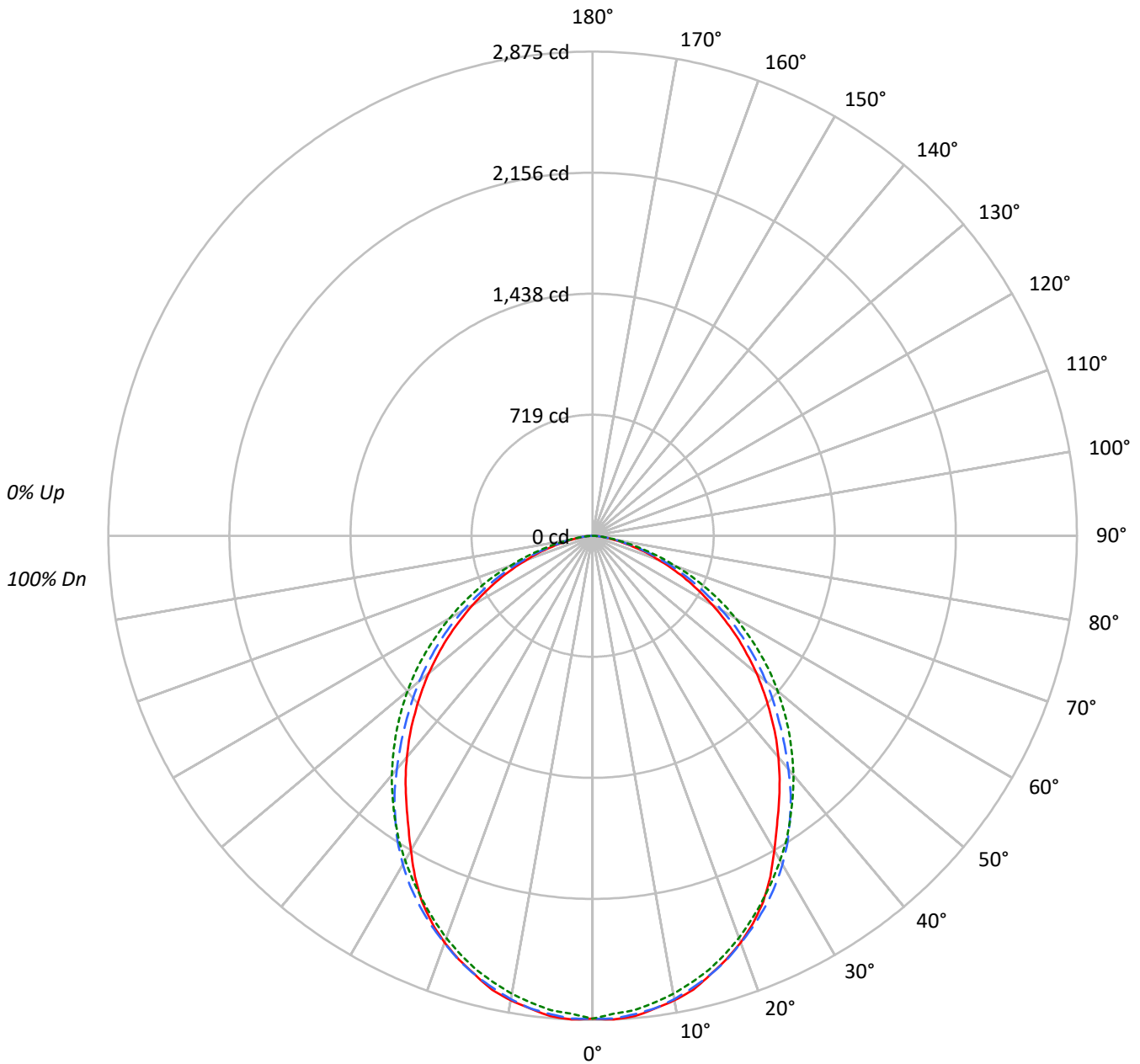
Lumens per Lamp: N/A
Luminaire Lumens: 6630.0 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	7716	7716	7716
5°	7736	7704	7638
10°	7654	7633	7546
15°	7519	7519	7433
20°	7359	7369	7274
25°	7117	7205	7091
30°	6702	7003	6917
35°	6333	6713	6724
40°	6025	6350	6516
45°	5680	5965	6271
50°	5317	5622	6004
55°	4905	5230	5680
60°	4416	4772	5282
65°	3900	4243	4805
70°	3250	3614	4082
75°	2554	2886	3195
80°	1827	2032	2253
85°	1192	1192	1124



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.0	4.1
10°-20°	758.4	11.4
20°-30°	1108.3	16.7
30°-40°	1258.0	19.0
40°-50°	1214.4	18.3
50°-60°	1001.8	15.1
60°-70°	667.1	10.1
70°-80°	298.5	4.5
80°-90°	53.4	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°	2136.7	32.2
0°-40°	3394.7	51.2
0°-60°	5610.9	84.6
0°-90°	6630.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6630.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2867	2867	2867	2867	2867	
5°	2864	2863	2852	2836	2828	271
15°	2699	2705	2699	2687	2668	761
25°	2397	2416	2427	2409	2388	1098
35°	1928	1954	2043	2054	2047	1208
45°	1493	1518	1568	1639	1648	1152
55°	1045	1063	1115	1176	1211	933
65°	612	629	666	714	755	607
75°	246	259	278	291	307	269
85°	39	39	39	36	36	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2867.3	2867.3	2867.3	2867.3	2867.3
2.5°	2875.0	2876.1	2869.5	2851.9	2840.9
5°	2864.0	2862.9	2851.9	2836.5	2827.6
7.5°	2832.1	2834.3	2831.0	2808.9	2796.8
10°	2801.2	2802.3	2793.5	2775.9	2761.6
12.5°	2761.6	2760.5	2748.3	2739.5	2716.4
15°	2698.8	2705.4	2698.8	2686.7	2667.9
17.5°	2638.2	2638.2	2642.6	2621.7	2607.3
20°	2569.9	2573.2	2573.2	2556.7	2540.1
22.5°	2490.6	2500.5	2503.8	2486.2	2466.3
25°	2396.9	2415.7	2426.7	2409.1	2388.1
27.5°	2283.5	2312.1	2345.2	2332.0	2308.8
30°	2156.8	2198.7	2253.7	2242.7	2226.2
32.5°	2036.7	2078.6	2154.6	2150.2	2141.4
35°	1927.7	1954.1	2043.4	2054.4	2046.7
37.5°	1824.1	1848.4	1932.1	1957.4	1950.8
40°	1715.1	1741.5	1807.6	1852.8	1855.0
42.5°	1607.1	1632.5	1686.5	1751.4	1751.4
45°	1492.6	1517.9	1567.5	1639.1	1647.9
47.5°	1380.2	1406.7	1455.1	1526.7	1541.1
50°	1270.1	1294.3	1342.8	1412.2	1434.2
52.5°	1155.5	1182.0	1229.3	1293.2	1325.2
55°	1045.4	1063.0	1114.8	1176.4	1210.6
57.5°	930.8	947.3	1005.7	1058.6	1093.8
60°	820.6	841.6	886.7	940.7	981.5
62.5°	714.9	736.9	775.5	822.8	869.1
65°	612.5	629.0	666.4	713.8	754.6
67.5°	513.3	527.6	565.1	598.1	641.1
70°	413.1	431.8	459.3	491.3	518.8
72.5°	332.7	340.4	363.5	386.6	415.3
75°	245.6	258.9	277.6	290.8	307.3
77.5°	176.2	184.0	195.0	206.0	221.4
80°	117.9	121.2	131.1	133.3	145.4
82.5°	71.6	73.8	76.0	77.1	81.5
85°	38.6	38.6	38.6	36.4	36.4
87.5°	22.0	22.0	18.7	15.4	11.0
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)