

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: P557445

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-UNV-81-86-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: P557445
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-30-UNV-81-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

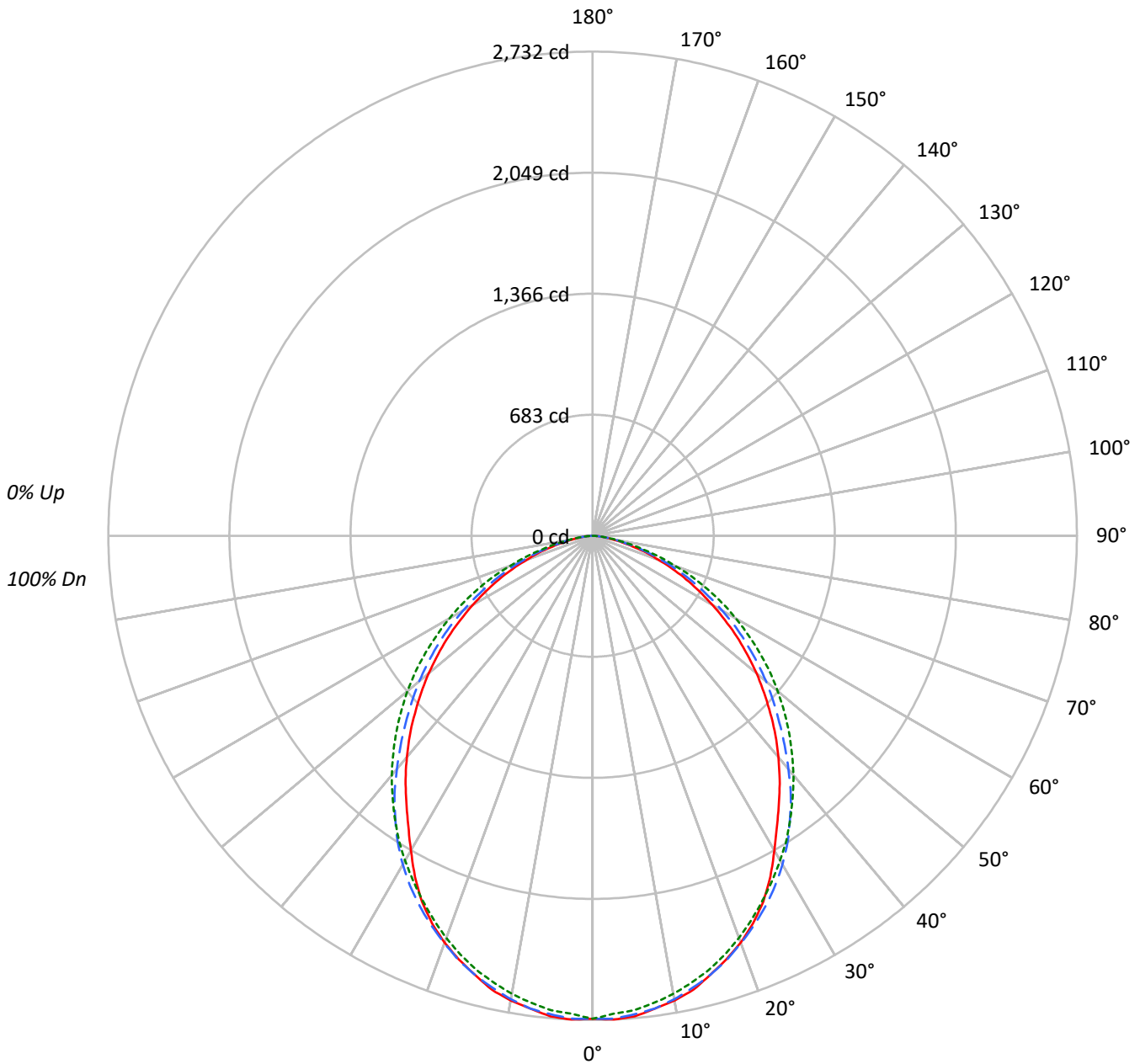
Lumens per Lamp: N/A
Luminaire Lumens: 6301.0 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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°	7333	7333	7333
5°	7353	7321	7259
10°	7274	7254	7171
15°	7145	7145	7064
20°	6994	7003	6913
25°	6764	6848	6739
30°	6369	6655	6574
35°	6018	6380	6390
40°	5726	6035	6193
45°	5398	5669	5960
50°	5053	5342	5706
55°	4661	4970	5398
60°	4197	4535	5020
65°	3706	4033	4566
70°	3089	3434	3880
75°	2428	2743	3037
80°	1736	1931	2142
85°	1130	1130	1065



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.6	4.1
10°-20°	720.8	11.4
20°-30°	1053.3	16.7
30°-40°	1195.6	19.0
40°-50°	1154.2	18.3
50°-60°	952.1	15.1
60°-70°	634.0	10.1
70°-80°	283.7	4.5
80°-90°	50.7	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°	2030.6	32.2
0°-40°	3226.2	51.2
0°-60°	5332.5	84.6
0°-90°	6301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6301.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2725	2725	2725	2725	2725	
5°	2722	2721	2710	2696	2687	258
15°	2565	2571	2565	2553	2536	723
25°	2278	2296	2306	2290	2270	1043
35°	1832	1857	1942	1952	1945	1148
45°	1418	1443	1490	1558	1566	1094
55°	994	1010	1059	1118	1150	887
65°	582	598	633	678	717	577
75°	234	246	264	276	292	255
85°	37	37	37	34	34	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2725.0	2725.0	2725.0	2725.0	2725.0
2.5°	2732.3	2733.4	2727.1	2710.4	2699.9
5°	2721.9	2720.8	2710.4	2695.7	2687.3
7.5°	2691.5	2693.6	2690.5	2669.5	2658.0
10°	2662.2	2663.3	2654.9	2638.1	2624.5
12.5°	2624.5	2623.5	2612.0	2603.6	2581.6
15°	2564.8	2571.1	2564.8	2553.3	2535.5
17.5°	2507.3	2507.3	2511.5	2491.6	2478.0
20°	2442.4	2445.5	2445.5	2429.8	2414.1
22.5°	2367.0	2376.4	2379.6	2362.8	2344.0
25°	2278.0	2295.8	2306.3	2289.5	2269.6
27.5°	2170.2	2197.4	2228.8	2216.2	2194.3
30°	2049.8	2089.6	2141.9	2131.4	2115.7
32.5°	1935.7	1975.5	2047.7	2043.5	2035.1
35°	1832.0	1857.2	1942.0	1952.4	1945.1
37.5°	1733.6	1756.7	1836.2	1860.3	1854.0
40°	1630.0	1655.1	1717.9	1760.8	1762.9
42.5°	1527.4	1551.5	1602.8	1664.5	1664.5
45°	1418.5	1442.6	1489.7	1557.8	1566.1
47.5°	1311.7	1336.9	1382.9	1451.0	1464.6
50°	1207.0	1230.1	1276.1	1342.1	1363.0
52.5°	1098.2	1123.3	1168.3	1229.0	1259.4
55°	993.5	1010.2	1059.4	1118.1	1150.5
57.5°	884.6	900.3	955.8	1006.0	1039.5
60°	779.9	799.8	842.7	894.0	932.8
62.5°	679.4	700.4	737.0	782.0	826.0
65°	582.1	597.8	633.4	678.4	717.1
67.5°	487.8	501.5	537.0	568.5	609.3
70°	392.6	410.4	436.5	466.9	493.1
72.5°	316.2	323.5	345.5	367.5	394.7
75°	233.5	246.0	263.8	276.4	292.1
77.5°	167.5	174.8	185.3	195.8	210.4
80°	112.0	115.2	124.6	126.7	138.2
82.5°	68.0	70.1	72.2	73.3	77.5
85°	36.6	36.6	36.6	34.5	34.5
87.5°	20.9	20.9	17.8	14.7	10.5
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)