

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: P557633

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-81-84-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: P557633
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-81-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

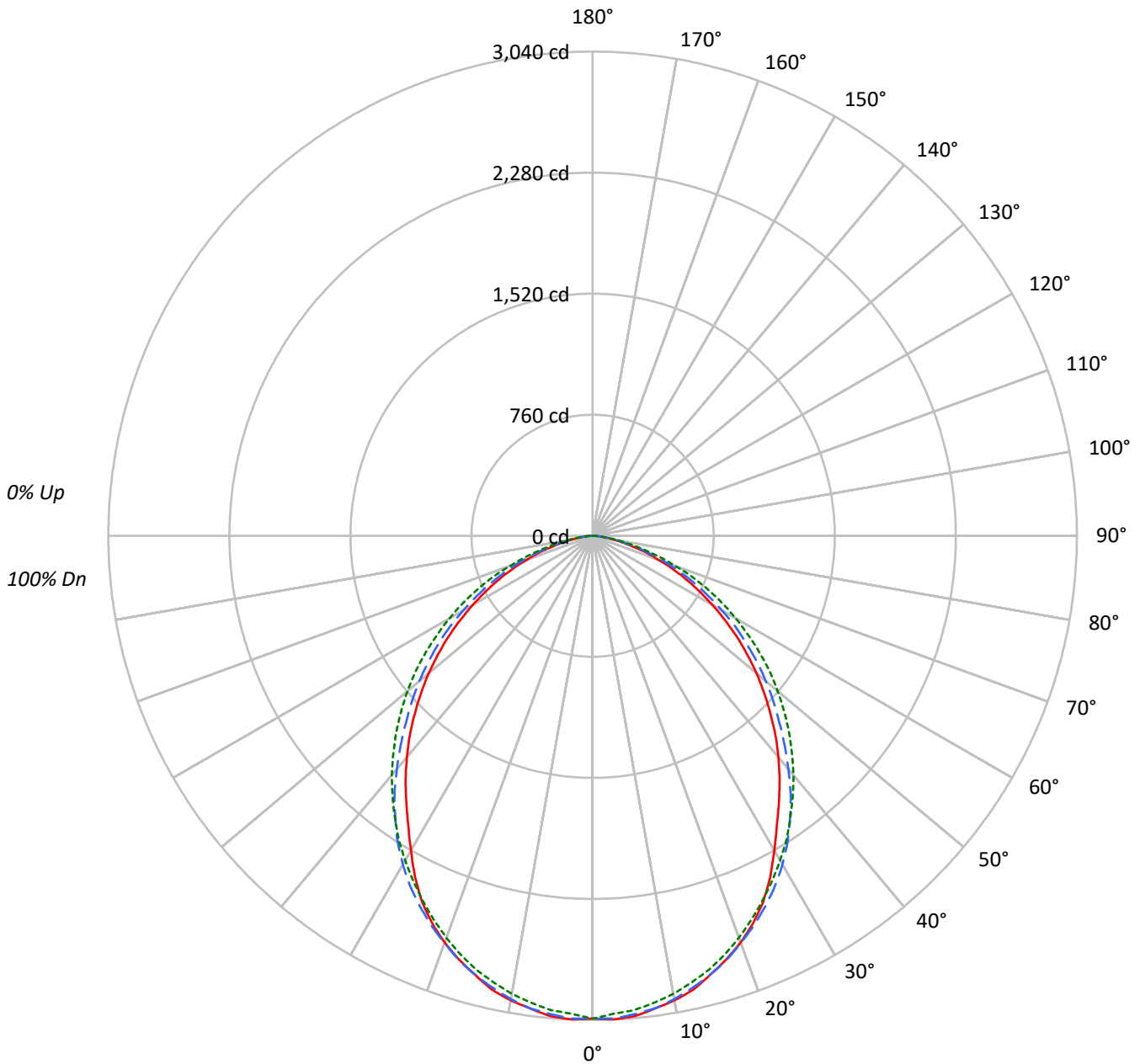
Lumens per Lamp: N/A
Luminaire Lumens: 7010.0 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8158	8158	8158
5°	8180	8145	8076
10°	8093	8071	7978
15°	7949	7949	7858
20°	7781	7791	7691
25°	7525	7618	7497
30°	7086	7404	7314
35°	6696	7097	7109
40°	6370	6714	6890
45°	6006	6307	6631
50°	5622	5943	6348
55°	5186	5529	6005
60°	4670	5046	5585
65°	4124	4486	5080
70°	3437	3821	4316
75°	2700	3052	3378
80°	1931	2148	2382
85°	1260	1260	1186



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.4	4.1
10°-20°	801.9	11.4
20°-30°	1171.8	16.7
30°-40°	1330.1	19.0
40°-50°	1284.0	18.3
50°-60°	1059.2	15.1
60°-70°	705.4	10.1
70°-80°	315.6	4.5
80°-90°	56.5	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°	2259.1	32.2
0°-40°	3589.2	51.2
0°-60°	5932.5	84.6
0°-90°	7010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3032	3032	3032	3032	3032	
5°	3028	3027	3015	2999	2990	287
15°	2853	2860	2853	2841	2821	804
25°	2534	2554	2566	2547	2525	1161
35°	2038	2066	2160	2172	2164	1277
45°	1578	1605	1657	1733	1742	1218
55°	1105	1124	1179	1244	1280	986
65°	648	665	705	755	798	642
75°	260	274	294	308	325	284
85°	41	41	41	38	38	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3031.6	3031.6	3031.6	3031.6	3031.6
2.5°	3039.8	3041.0	3034.0	3015.3	3003.7
5°	3028.1	3027.0	3015.3	2999.0	2989.7
7.5°	2994.4	2996.7	2993.2	2969.9	2957.1
10°	2961.8	2962.9	2953.6	2935.0	2919.8
12.5°	2919.8	2918.7	2905.9	2896.5	2872.1
15°	2853.4	2860.4	2853.4	2840.6	2820.8
17.5°	2789.4	2789.4	2794.1	2771.9	2756.8
20°	2717.2	2720.7	2720.7	2703.2	2685.7
22.5°	2633.3	2643.8	2647.3	2628.7	2607.7
25°	2534.3	2554.1	2565.8	2547.1	2525.0
27.5°	2414.4	2444.6	2479.6	2465.6	2441.2
30°	2280.4	2324.7	2382.9	2371.3	2353.8
32.5°	2153.5	2197.7	2278.1	2273.4	2264.1
35°	2038.2	2066.1	2160.5	2172.1	2164.0
37.5°	1928.7	1954.3	2042.8	2069.6	2062.6
40°	1813.4	1841.3	1911.2	1959.0	1961.3
42.5°	1699.3	1726.0	1783.1	1851.8	1851.8
45°	1578.1	1604.9	1657.3	1733.0	1742.4
47.5°	1459.3	1487.3	1538.5	1614.2	1629.4
50°	1342.9	1368.5	1419.7	1493.1	1516.4
52.5°	1221.7	1249.7	1299.8	1367.3	1401.1
55°	1105.3	1123.9	1178.6	1243.9	1280.0
57.5°	984.1	1001.6	1063.3	1119.3	1156.5
60°	867.7	889.8	937.6	994.6	1037.7
62.5°	755.9	779.2	819.9	870.0	918.9
65°	647.6	665.0	704.6	754.7	797.8
67.5°	542.7	557.9	597.5	632.4	677.8
70°	436.8	456.6	485.7	519.4	548.6
72.5°	351.7	359.9	384.3	408.8	439.1
75°	259.7	273.7	293.5	307.5	324.9
77.5°	186.3	194.5	206.1	217.8	234.1
80°	124.6	128.1	138.6	140.9	153.7
82.5°	75.7	78.0	80.4	81.5	86.2
85°	40.8	40.8	40.8	38.4	38.4
87.5°	23.3	23.3	19.8	16.3	11.6
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)