

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: P558073

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-80-88-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: P558073
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-40-UNV-80-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

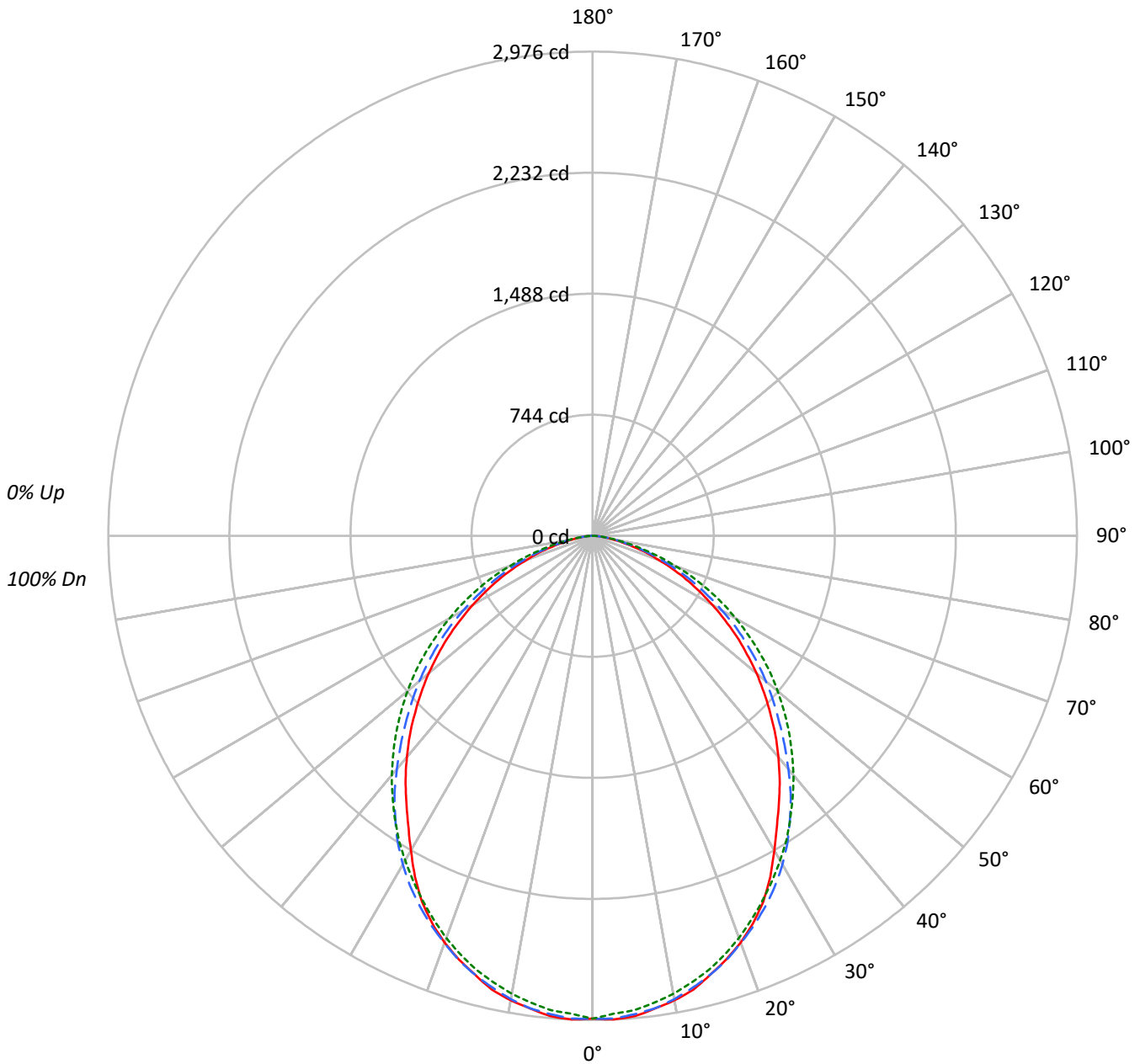
Lumens per Lamp: N/A
Luminaire Lumens: 6863.0 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7987	7987	7987
5°	8008	7974	7907
10°	7923	7902	7811
15°	7783	7783	7694
20°	7618	7628	7530
25°	7367	7459	7340
30°	6937	7249	7160
35°	6555	6949	6960
40°	6237	6573	6745
45°	5880	6175	6492
50°	5504	5819	6215
55°	5077	5414	5879
60°	4572	4940	5468
65°	4037	4393	4974
70°	3364	3741	4226
75°	2644	2987	3307
80°	1891	2103	2332
85°	1232	1232	1161



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.5	4.1
10°-20°	785.1	11.4
20°-30°	1147.2	16.7
30°-40°	1302.2	19.0
40°-50°	1257.1	18.3
50°-60°	1037.0	15.1
60°-70°	690.6	10.1
70°-80°	309.0	4.5
80°-90°	55.3	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°	2211.7	32.2
0°-40°	3514.0	51.2
0°-60°	5808.1	84.6
0°-90°	6863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6863.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2968	2968	2968	2968	2968	
5°	2965	2964	2952	2936	2927	281
15°	2794	2800	2794	2781	2762	788
25°	2481	2501	2512	2494	2472	1136
35°	1995	2023	2115	2127	2119	1250
45°	1545	1571	1623	1697	1706	1192
55°	1082	1100	1154	1218	1253	966
65°	634	651	690	739	781	629
75°	254	268	287	301	318	278
85°	40	40	40	38	38	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2968.1	2968.1	2968.1	2968.1	2968.1
2.5°	2976.1	2977.2	2970.4	2952.1	2940.7
5°	2964.6	2963.5	2952.1	2936.1	2927.0
7.5°	2931.6	2933.9	2930.4	2907.6	2895.1
10°	2899.7	2900.8	2891.7	2873.4	2858.6
12.5°	2858.6	2857.5	2844.9	2835.8	2811.9
15°	2793.6	2800.5	2793.6	2781.1	2761.7
17.5°	2730.9	2730.9	2735.5	2713.8	2699.0
20°	2660.2	2663.6	2663.6	2646.5	2629.4
22.5°	2578.1	2588.4	2591.8	2573.5	2553.0
25°	2481.2	2500.6	2512.0	2493.7	2472.1
27.5°	2363.7	2393.4	2427.6	2413.9	2390.0
30°	2232.6	2275.9	2333.0	2321.5	2304.4
32.5°	2108.3	2151.7	2230.3	2225.8	2216.6
35°	1995.4	2022.8	2115.2	2126.6	2118.6
37.5°	1888.3	1913.3	2000.0	2026.2	2019.4
40°	1775.4	1802.7	1871.1	1917.9	1920.2
42.5°	1663.6	1689.9	1745.7	1813.0	1813.0
45°	1545.0	1571.3	1622.6	1696.7	1705.8
47.5°	1428.7	1456.1	1506.3	1580.4	1595.2
50°	1314.7	1339.8	1390.0	1461.8	1484.6
52.5°	1196.1	1223.5	1272.5	1338.7	1371.7
55°	1082.1	1100.3	1153.9	1217.8	1253.1
57.5°	963.5	980.6	1041.0	1095.8	1132.3
60°	849.5	871.2	917.9	973.8	1016.0
62.5°	740.0	762.8	802.7	851.8	899.7
65°	634.0	651.1	689.9	738.9	781.1
67.5°	531.4	546.2	584.9	619.2	663.6
70°	427.6	447.0	475.5	508.6	537.1
72.5°	344.4	352.3	376.3	400.2	429.9
75°	254.3	268.0	287.3	301.0	318.1
77.5°	182.4	190.4	201.8	213.2	229.2
80°	122.0	125.4	135.7	138.0	150.5
82.5°	74.1	76.4	78.7	79.8	84.4
85°	39.9	39.9	39.9	37.6	37.6
87.5°	22.8	22.8	19.4	16.0	11.4
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)