

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: P558142

Luminaire Tested: **FUSL-12-4-LD4-3LO-50-UNV-80-97-EDD-90**

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: P558142
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-80-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

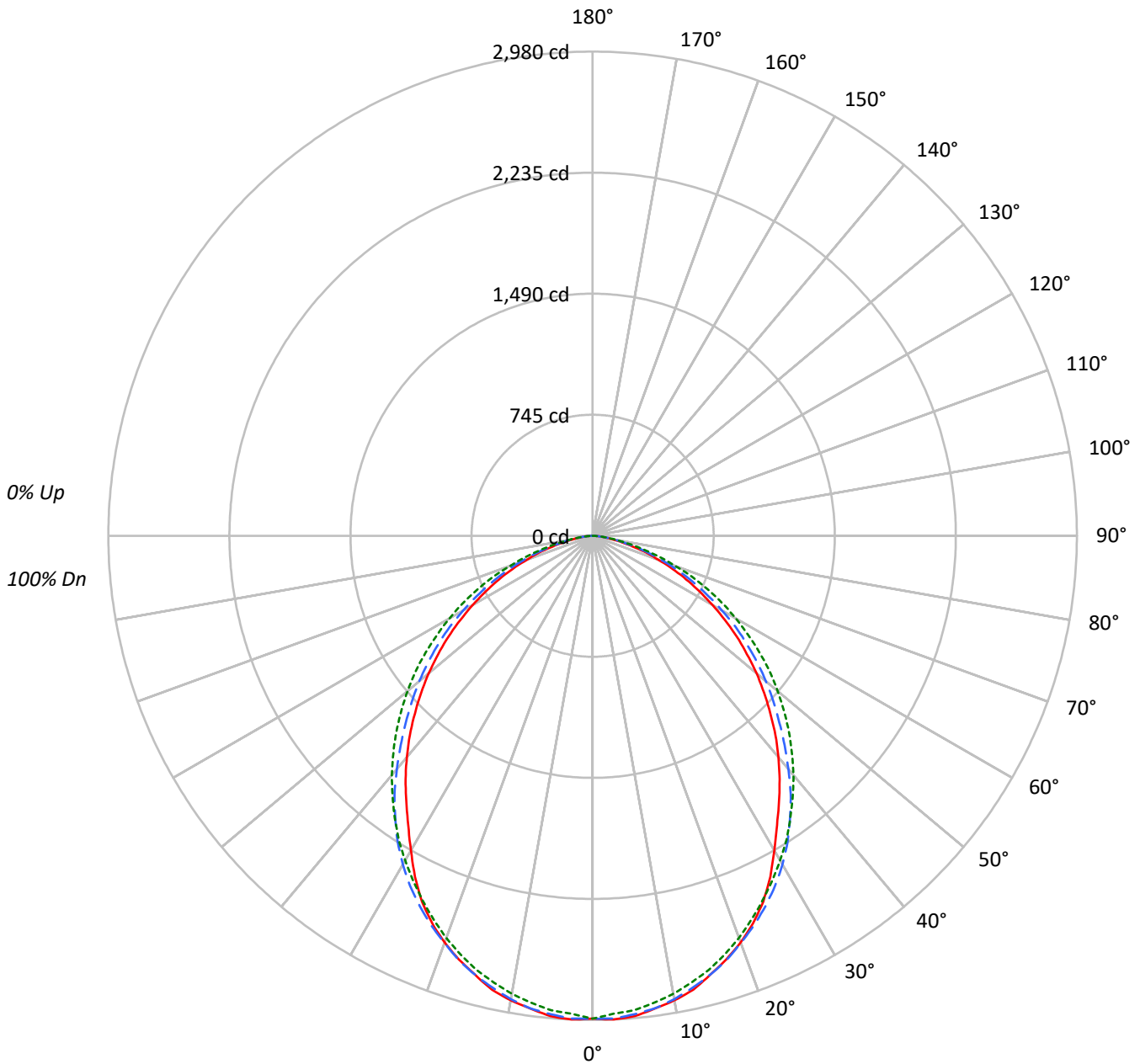
Lumens per Lamp: N/A
Luminaire Lumens: 6872.0 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
Input Voltage (V): NR
Input Current (A_{in}): 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

TEST NUMBER: P558142

CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-80-97-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558142

CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-80-97-EDD-90

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°	7998	7998	7998
5°	8019	7985	7917
10°	7934	7912	7821
15°	7793	7793	7704
20°	7628	7638	7540
25°	7377	7468	7350
30°	6946	7259	7170
35°	6564	6957	6969
40°	6245	6582	6754
45°	5888	6183	6500
50°	5511	5827	6224
55°	5083	5421	5887
60°	4578	4947	5475
65°	4042	4399	4980
70°	3369	3746	4231
75°	2647	2991	3311
80°	1894	2106	2335
85°	1235	1235	1164



TEST NUMBER: P558142

CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-80-97-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.8	4.1
10°-20°	786.1	11.4
20°-30°	1148.7	16.7
30°-40°	1303.9	19.0
40°-50°	1258.8	18.3
50°-60°	1038.4	15.1
60°-70°	691.5	10.1
70°-80°	309.4	4.5
80°-90°	55.4	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°	2214.7	32.2
0°-40°	3518.6	51.2
0°-60°	5815.7	84.6
0°-90°	6872.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6872.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2972	2972	2972	2972	2972	
5°	2968	2967	2956	2940	2931	281
15°	2797	2804	2797	2785	2765	789
25°	2484	2504	2515	2497	2475	1138
35°	1998	2026	2118	2129	2121	1252
45°	1547	1573	1625	1699	1708	1194
55°	1084	1102	1155	1219	1255	967
65°	635	652	691	740	782	629
75°	255	268	288	301	318	278
85°	40	40	40	38	38	54
90°	0	0	0	0	0	



TEST NUMBER: P558142

CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-80-97-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2972.0	2972.0	2972.0	2972.0	2972.0
2.5°	2980.0	2981.1	2974.2	2956.0	2944.6
5°	2968.5	2967.4	2956.0	2940.0	2930.9
7.5°	2935.4	2937.7	2934.3	2911.5	2898.9
10°	2903.5	2904.6	2895.5	2877.2	2862.4
12.5°	2862.4	2861.2	2848.7	2839.5	2815.5
15°	2797.3	2804.1	2797.3	2784.7	2765.3
17.5°	2734.5	2734.5	2739.0	2717.4	2702.5
20°	2663.7	2667.1	2667.1	2650.0	2632.9
22.5°	2581.5	2591.8	2595.2	2576.9	2556.4
25°	2484.4	2503.8	2515.3	2497.0	2475.3
27.5°	2366.8	2396.5	2430.8	2417.1	2393.1
30°	2235.5	2278.9	2336.0	2324.6	2307.5
32.5°	2111.1	2154.5	2233.3	2228.7	2219.6
35°	1998.1	2025.5	2117.9	2129.4	2121.4
37.5°	1890.7	1915.8	2002.6	2028.9	2022.0
40°	1777.7	1805.1	1873.6	1920.4	1922.7
42.5°	1665.8	1692.1	1748.0	1815.4	1815.4
45°	1547.1	1573.3	1624.7	1698.9	1708.1
47.5°	1430.6	1458.0	1508.2	1582.5	1597.3
50°	1316.4	1341.6	1391.8	1463.7	1486.6
52.5°	1197.7	1225.1	1274.2	1340.4	1373.5
55°	1083.5	1101.8	1155.4	1219.4	1254.8
57.5°	964.8	981.9	1042.4	1097.2	1133.8
60°	850.6	872.3	919.1	975.1	1017.3
62.5°	741.0	763.8	803.8	852.9	900.8
65°	634.8	651.9	690.8	739.9	782.1
67.5°	532.1	546.9	585.7	620.0	664.5
70°	428.2	447.6	476.1	509.2	537.8
72.5°	344.8	352.8	376.8	400.8	430.4
75°	254.6	268.3	287.7	301.4	318.5
77.5°	182.7	190.7	202.1	213.5	229.5
80°	122.2	125.6	135.9	138.2	150.7
82.5°	74.2	76.5	78.8	79.9	84.5
85°	40.0	40.0	40.0	37.7	37.7
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)