

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: P558070

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-80-87-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: P558070
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-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

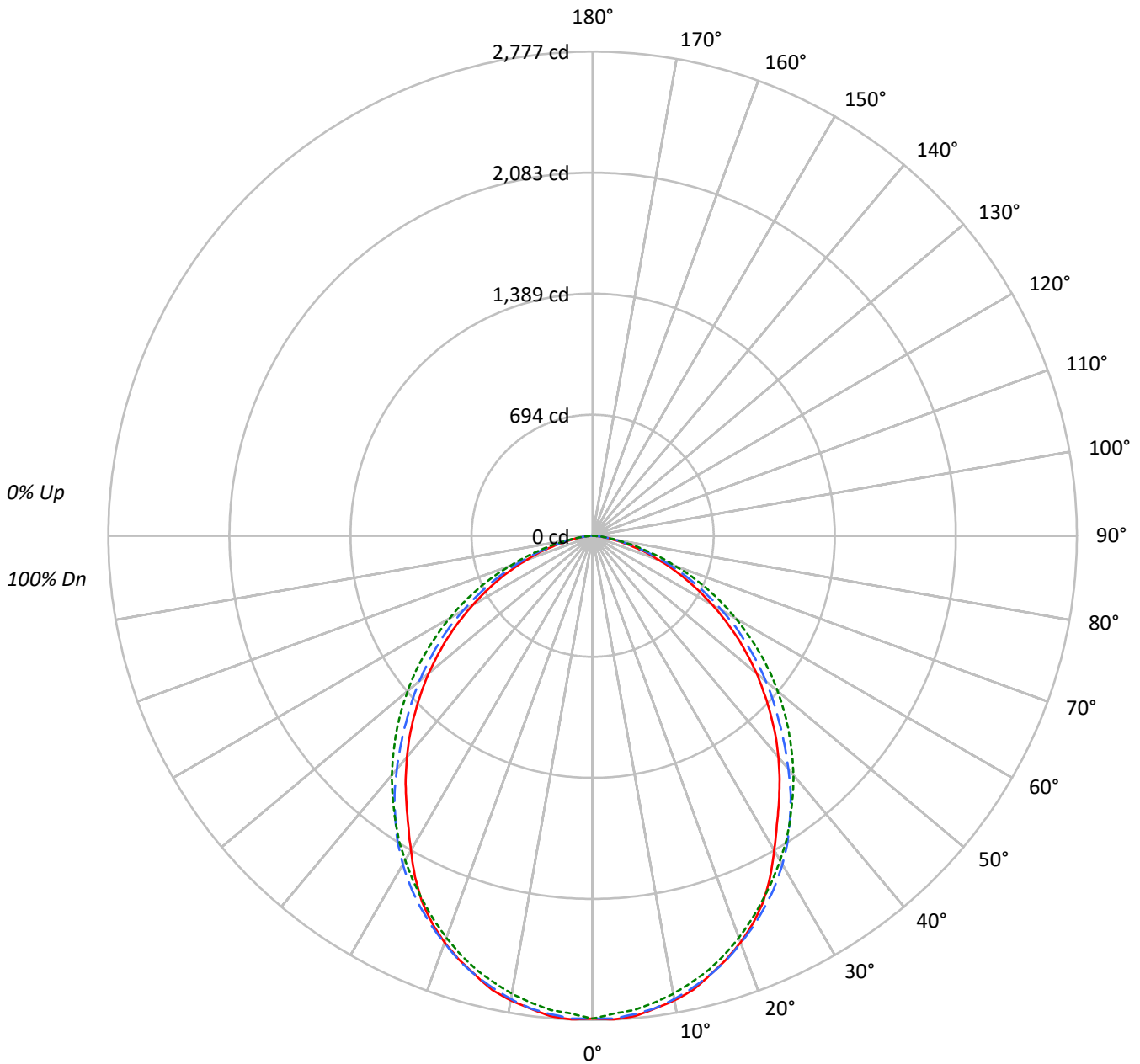
Lumens per Lamp: N/A
Luminaire Lumens: 6403.0 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P558070

CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-80-87-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558070

CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-80-87-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°	7452	7452	7452
5°	7471	7440	7377
10°	7392	7372	7288
15°	7261	7261	7178
20°	7107	7117	7025
25°	6873	6959	6848
30°	6472	6763	6681
35°	6116	6483	6493
40°	5819	6132	6293
45°	5486	5761	6057
50°	5135	5429	5799
55°	4737	5051	5485
60°	4265	4609	5102
65°	3766	4098	4640
70°	3139	3490	3943
75°	2466	2787	3086
80°	1764	1962	2176
85°	1149	1149	1084



TEST NUMBER: P558070

CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-80-87-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.7	4.1
10°-20°	732.4	11.4
20°-30°	1070.3	16.7
30°-40°	1214.9	19.0
40°-50°	1172.9	18.3
50°-60°	967.5	15.1
60°-70°	644.3	10.1
70°-80°	288.3	4.5
80°-90°	51.6	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°	2063.5	32.2
0°-40°	3278.5	51.2
0°-60°	5418.8	84.6
0°-90°	6403.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6403.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2769	2769	2769	2769	2769	
5°	2766	2765	2754	2739	2731	262
15°	2606	2613	2606	2595	2577	735
25°	2315	2333	2344	2327	2306	1060
35°	1862	1887	1973	1984	1977	1166
45°	1442	1466	1514	1583	1592	1112
55°	1010	1027	1077	1136	1169	901
65°	592	607	644	689	729	586
75°	237	250	268	281	297	259
85°	37	37	37	35	35	50
90°	0	0	0	0	0	



TEST NUMBER: P558070

CATALOG NUMBER: FUSL-12-4-LD4-3LO-40-UNV-80-87-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2769.1	2769.1	2769.1	2769.1	2769.1
2.5°	2776.6	2777.6	2771.3	2754.2	2743.6
5°	2765.9	2764.9	2754.2	2739.3	2730.8
7.5°	2735.1	2737.2	2734.0	2712.7	2701.0
10°	2705.3	2706.4	2697.9	2680.8	2667.0
12.5°	2667.0	2665.9	2654.2	2645.7	2623.4
15°	2606.4	2612.8	2606.4	2594.7	2576.6
17.5°	2547.9	2547.9	2552.1	2531.9	2518.1
20°	2481.9	2485.1	2485.1	2469.1	2453.2
22.5°	2405.3	2414.9	2418.1	2401.0	2381.9
25°	2314.9	2333.0	2343.6	2326.6	2306.4
27.5°	2205.3	2233.0	2264.9	2252.1	2229.8
30°	2083.0	2123.4	2176.6	2165.9	2150.0
32.5°	1967.0	2007.4	2080.8	2076.6	2068.1
35°	1861.7	1887.2	1973.4	1984.0	1976.6
37.5°	1761.7	1785.1	1865.9	1890.4	1884.0
40°	1656.4	1681.9	1745.7	1789.4	1791.5
42.5°	1552.1	1576.6	1628.7	1691.5	1691.5
45°	1441.5	1465.9	1513.8	1583.0	1591.5
47.5°	1333.0	1358.5	1405.3	1474.5	1488.3
50°	1226.6	1250.0	1296.8	1363.8	1385.1
52.5°	1116.0	1141.5	1187.2	1248.9	1279.8
55°	1009.6	1026.6	1076.6	1136.2	1169.1
57.5°	898.9	914.9	971.3	1022.3	1056.4
60°	792.5	812.8	856.4	908.5	947.9
62.5°	690.4	711.7	748.9	794.7	839.4
65°	591.5	607.4	643.6	689.4	728.7
67.5°	495.7	509.6	545.7	577.7	619.1
70°	398.9	417.0	443.6	474.5	501.1
72.5°	321.3	328.7	351.1	373.4	401.1
75°	237.2	250.0	268.1	280.8	296.8
77.5°	170.2	177.7	188.3	198.9	213.8
80°	113.8	117.0	126.6	128.7	140.4
82.5°	69.1	71.3	73.4	74.5	78.7
85°	37.2	37.2	37.2	35.1	35.1
87.5°	21.3	21.3	18.1	14.9	10.6
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)