

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: P557616

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-80-84-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: P557616
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-80-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

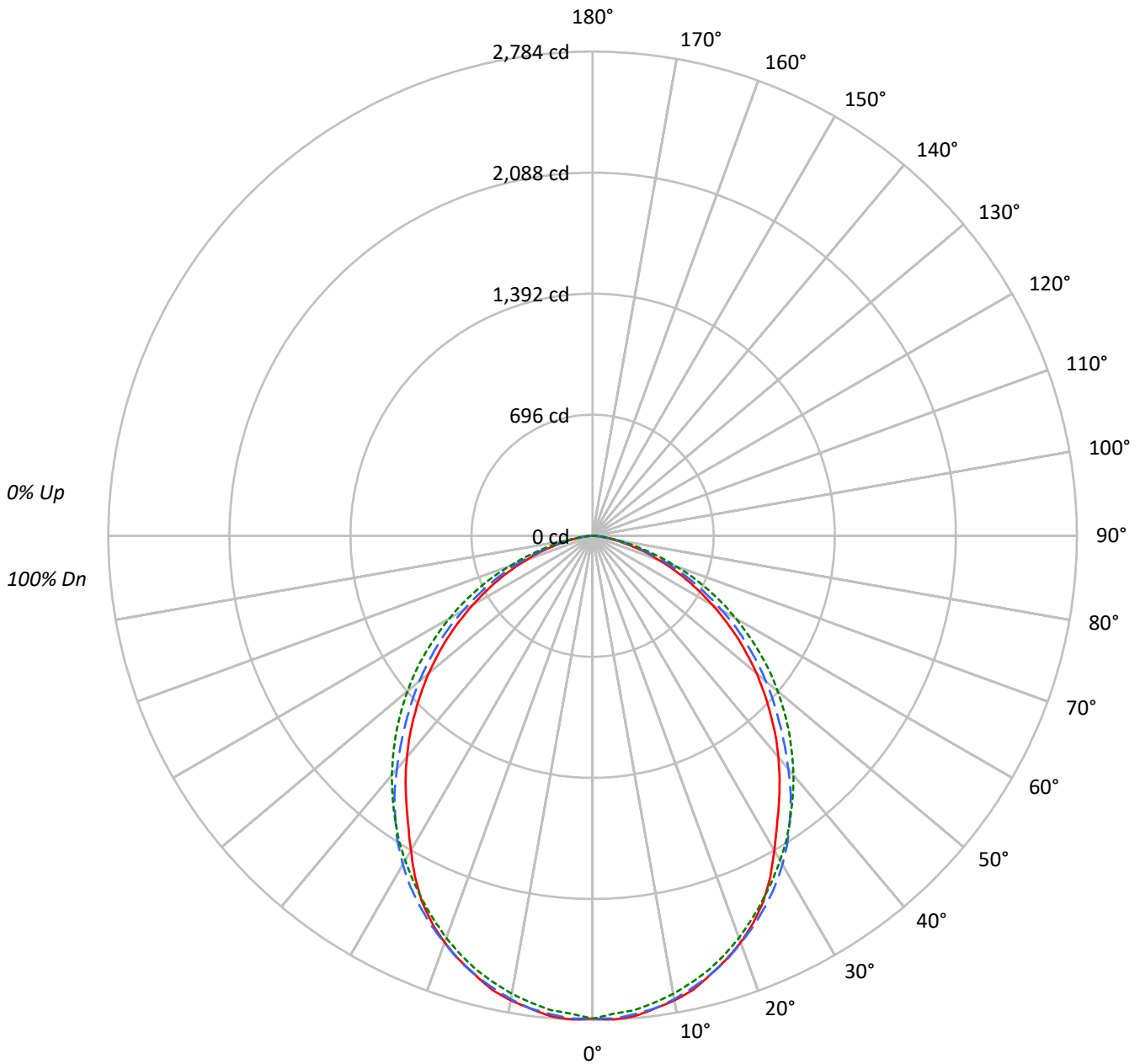
Lumens per Lamp: N/A
Luminaire Lumens: 6420.0 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P557616

CATALOG NUMBER: FUSL-12-4-LD4-2STD-50-UNV-80-84-EDD-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7472	7472	7472
5°	7491	7460	7396
10°	7412	7391	7307
15°	7280	7280	7197
20°	7126	7135	7044
25°	6891	6977	6866
30°	6490	6781	6698
35°	6132	6500	6510
40°	5834	6149	6310
45°	5500	5776	6073
50°	5148	5443	5814
55°	4749	5064	5499
60°	4277	4621	5115
65°	3777	4109	4653
70°	3147	3500	3953
75°	2473	2795	3094
80°	1768	1967	2182
85°	1152	1152	1087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.4	4.1
10°-20°	734.4	11.4
20°-30°	1073.2	16.7
30°-40°	1218.2	19.0
40°-50°	1176.0	18.3
50°-60°	970.1	15.1
60°-70°	646.0	10.1
70°-80°	289.1	4.5
80°-90°	51.7	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°	2069.0	32.2
0°-40°	3287.2	51.2
0°-60°	5433.2	84.6
0°-90°	6420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6420.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2776	2776	2776	2776	2776	
5°	2773	2772	2762	2747	2738	262
15°	2613	2620	2613	2602	2583	737
25°	2321	2339	2350	2333	2312	1063
35°	1867	1892	1979	1989	1982	1170
45°	1445	1470	1518	1587	1596	1115
55°	1012	1029	1079	1139	1172	903
65°	593	609	645	691	731	588
75°	238	251	269	282	298	260
85°	37	37	37	35	35	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2776.5	2776.5	2776.5	2776.5	2776.5
2.5°	2784.0	2785.0	2778.6	2761.6	2750.9
5°	2773.3	2772.2	2761.6	2746.6	2738.1
7.5°	2742.4	2744.5	2741.3	2720.0	2708.2
10°	2712.5	2713.6	2705.0	2688.0	2674.1
12.5°	2674.1	2673.0	2661.3	2652.8	2630.4
15°	2613.3	2619.7	2613.3	2601.6	2583.4
17.5°	2554.6	2554.6	2558.9	2538.6	2524.8
20°	2488.5	2491.7	2491.7	2475.7	2459.7
22.5°	2411.7	2421.3	2424.5	2407.4	2388.2
25°	2321.0	2339.2	2349.8	2332.8	2312.5
27.5°	2211.2	2238.9	2270.9	2258.1	2235.7
30°	2088.5	2129.0	2182.4	2171.7	2155.7
32.5°	1972.2	2012.8	2086.4	2082.1	2073.6
35°	1866.6	1892.2	1978.6	1989.3	1981.8
37.5°	1766.4	1789.8	1870.9	1895.4	1889.0
40°	1660.8	1686.4	1750.4	1794.1	1796.2
42.5°	1556.2	1580.8	1633.0	1696.0	1696.0
45°	1445.3	1469.8	1517.8	1587.2	1595.7
47.5°	1336.5	1362.1	1409.0	1478.4	1492.2
50°	1229.8	1253.3	1300.2	1367.4	1388.8
52.5°	1118.9	1144.5	1190.4	1252.2	1283.2
55°	1012.2	1029.3	1079.4	1139.2	1172.2
57.5°	901.3	917.3	973.8	1025.0	1059.2
60°	794.7	814.9	858.7	910.9	950.4
62.5°	692.3	713.6	750.9	796.8	841.6
65°	593.1	609.1	645.3	691.2	730.7
67.5°	497.1	510.9	547.2	579.2	620.8
70°	400.0	418.1	444.8	475.7	502.4
72.5°	322.1	329.6	352.0	374.4	402.1
75°	237.9	250.7	268.8	281.6	297.6
77.5°	170.7	178.1	188.8	199.5	214.4
80°	114.1	117.3	126.9	129.1	140.8
82.5°	69.3	71.5	73.6	74.7	78.9
85°	37.3	37.3	37.3	35.2	35.2
87.5°	21.3	21.3	18.1	14.9	10.7
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)