

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: P555617

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-UNV-93-84-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: P555617  
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-12-2-LD4-3HI-50-UNV-93-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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**

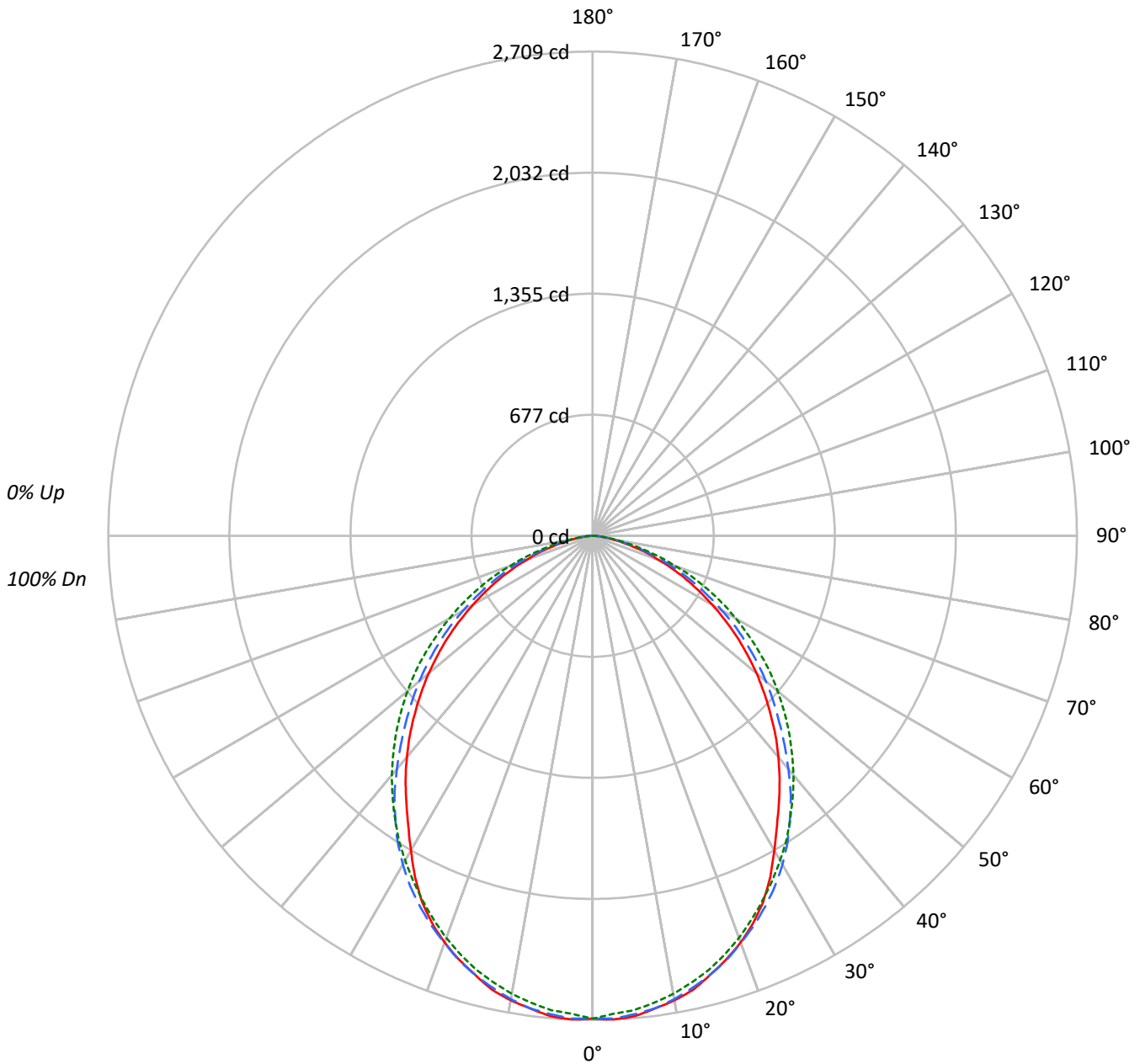
Lumens per Lamp: N/A  
Luminaire Lumens: 6247.0 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P555617

CATALOG NUMBER: FUSL-12-2-LD4-3HI-50-UNV-93-84-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P555617

CATALOG NUMBER: FUSL-12-2-LD4-3HI-50-UNV-93-84-EDD

**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°	14540	14540	14540
5°	14579	14517	14394
10°	14424	14384	14220
15°	14169	14169	14006
20°	13868	13886	13708
25°	13412	13578	13362
30°	12629	13197	13036
35°	11933	12650	12670
40°	11353	11966	12279
45°	10704	11241	11818
50°	10020	10593	11315
55°	9242	9856	10703
60°	8323	8993	9954
65°	7349	7996	9054
70°	6124	6810	7693
75°	4814	5440	6022
80°	3443	3828	4246
85°	2242	2242	2118



TEST NUMBER: P555617

CATALOG NUMBER: FUSL-12-2-LD4-3HI-50-UNV-93-84-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	254.4	4.1
10°-20°	714.6	11.4
20°-30°	1044.3	16.7
30°-40°	1185.4	19.0
40°-50°	1144.3	18.3
50°-60°	944.0	15.1
60°-70°	628.6	10.1
70°-80°	281.3	4.5
80°-90°	50.3	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°	2013.2	32.2
0°-40°	3198.6	51.2
0°-60°	5286.8	84.6
0°-90°	6247.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6247.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2702	2702	2702	2702	2702	
5°	2699	2698	2687	2673	2664	255
15°	2543	2549	2543	2531	2514	717
25°	2258	2276	2286	2270	2250	1034
35°	1816	1841	1925	1936	1928	1138
45°	1406	1430	1477	1544	1553	1085
55°	985	1002	1050	1108	1141	879
65°	577	593	628	673	711	572
75°	232	244	262	274	290	253
85°	36	36	36	34	34	49
90°	0	0	0	0	0	



TEST NUMBER: P555617

CATALOG NUMBER: FUSL-12-2-LD4-3HI-50-UNV-93-84-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2701.7	2701.7	2701.7	2701.7	2701.7
2.5°	2708.9	2710.0	2703.7	2687.1	2676.8
5°	2698.6	2697.5	2687.1	2672.6	2664.3
7.5°	2668.5	2670.5	2667.4	2646.7	2635.2
10°	2639.4	2640.4	2632.1	2615.5	2602.0
12.5°	2602.0	2601.0	2589.6	2581.3	2559.5
15°	2542.9	2549.1	2542.9	2531.4	2513.8
17.5°	2485.8	2485.8	2489.9	2470.2	2456.7
20°	2421.4	2424.5	2424.5	2409.0	2393.4
22.5°	2346.7	2356.0	2359.2	2342.6	2323.9
25°	2258.5	2276.1	2286.5	2269.9	2250.2
27.5°	2151.6	2178.6	2209.7	2197.2	2175.4
30°	2032.2	2071.7	2123.6	2113.2	2097.6
32.5°	1919.1	1958.5	2030.1	2026.0	2017.7
35°	1816.3	1841.2	1925.3	1935.7	1928.4
37.5°	1718.8	1741.6	1820.5	1844.4	1838.1
40°	1616.0	1640.9	1703.2	1745.8	1747.8
42.5°	1514.3	1538.2	1589.0	1650.3	1650.3
45°	1406.4	1430.2	1476.9	1544.4	1552.7
47.5°	1300.5	1325.4	1371.1	1438.5	1452.0
50°	1196.7	1219.5	1265.2	1330.6	1351.4
52.5°	1088.8	1113.7	1158.3	1218.5	1248.6
55°	985.0	1001.6	1050.4	1108.5	1140.7
57.5°	877.0	892.6	947.6	997.4	1030.6
60°	773.2	793.0	835.5	886.4	924.8
62.5°	673.6	694.4	730.7	775.3	818.9
65°	577.1	592.6	627.9	672.6	711.0
67.5°	483.7	497.2	532.4	563.6	604.1
70°	389.2	406.9	432.8	462.9	488.9
72.5°	313.4	320.7	342.5	364.3	391.3
75°	231.5	243.9	261.6	274.0	289.6
77.5°	166.1	173.3	183.7	194.1	208.6
80°	111.1	114.2	123.5	125.6	137.0
82.5°	67.5	69.5	71.6	72.7	76.8
85°	36.3	36.3	36.3	34.3	34.3
87.5°	20.8	20.8	17.6	14.5	10.4
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)