

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: P557500

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-80-96-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: P557500
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-35-UNV-80-96-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

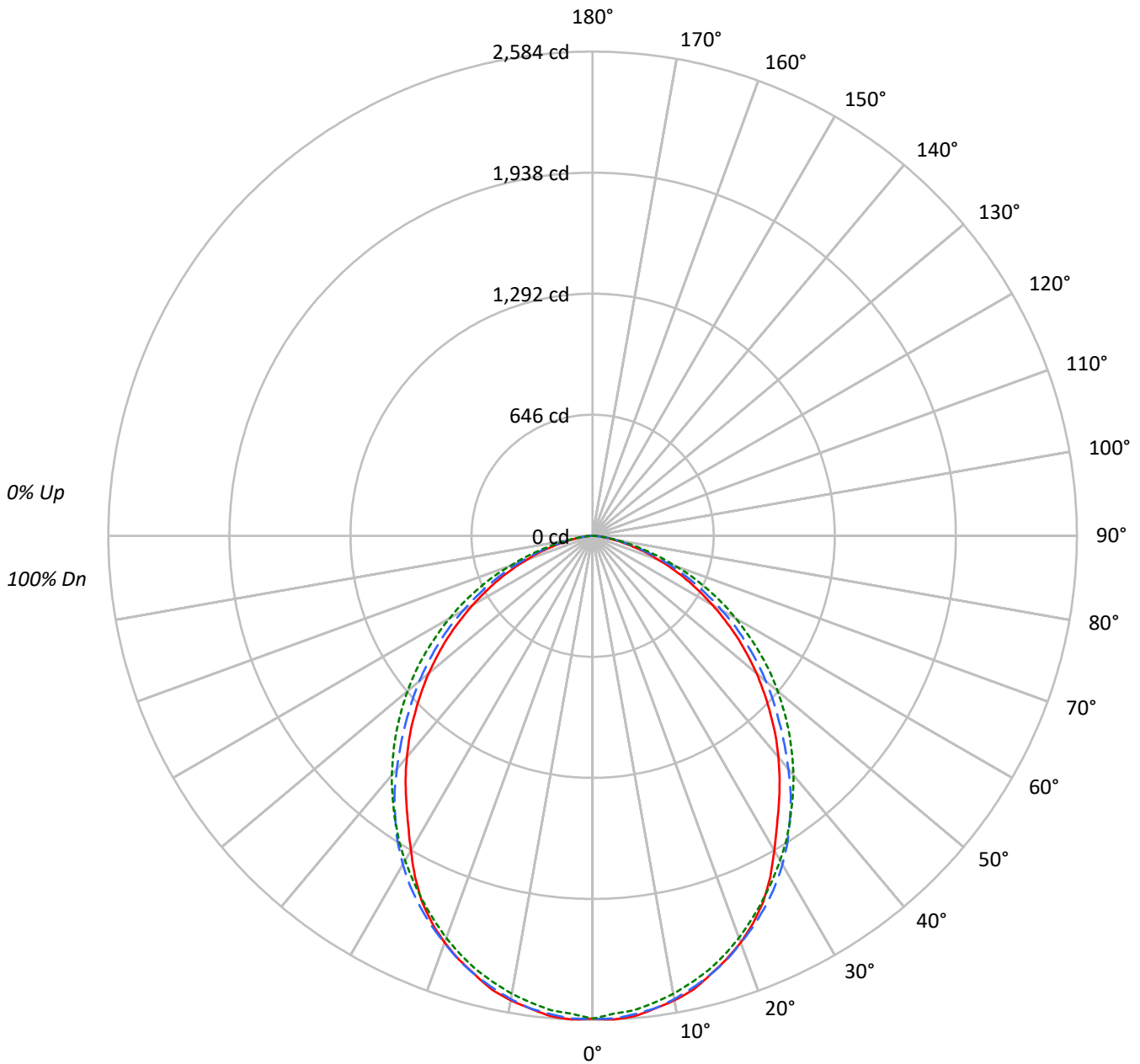
Lumens per Lamp: N/A
Luminaire Lumens: 5959.0 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (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

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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°	6935	6935	6935
5°	6953	6924	6865
10°	6880	6861	6782
15°	6757	6757	6680
20°	6615	6623	6538
25°	6397	6476	6373
30°	6023	6294	6217
35°	5692	6033	6043
40°	5415	5707	5857
45°	5105	5361	5637
50°	4779	5053	5397
55°	4408	4700	5105
60°	3970	4289	4747
65°	3505	3814	4318
70°	2921	3249	3669
75°	2296	2594	2872
80°	1641	1826	2025
85°	1071	1071	1010



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.6	4.1
10°-20°	681.7	11.4
20°-30°	996.1	16.7
30°-40°	1130.7	19.0
40°-50°	1091.5	18.3
50°-60°	900.4	15.1
60°-70°	599.6	10.1
70°-80°	268.3	4.5
80°-90°	48.0	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°	1920.4	32.2
0°-40°	3051.1	51.2
0°-60°	5043.1	84.6
0°-90°	5959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5959.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2577	2577	2577	2577	2577	
5°	2574	2573	2563	2549	2542	244
15°	2426	2432	2426	2415	2398	684
25°	2154	2171	2181	2165	2146	987
35°	1733	1756	1837	1846	1840	1086
45°	1342	1364	1409	1473	1481	1035
55°	940	955	1002	1057	1088	839
65°	550	565	599	642	678	546
75°	221	233	250	261	276	241
85°	35	35	35	33	33	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2577.1	2577.1	2577.1	2577.1	2577.1
2.5°	2584.0	2585.0	2579.1	2563.3	2553.4
5°	2574.1	2573.2	2563.3	2549.4	2541.5
7.5°	2545.4	2547.4	2544.4	2524.6	2513.8
10°	2517.7	2518.7	2510.8	2494.9	2482.1
12.5°	2482.1	2481.1	2470.2	2462.3	2441.5
15°	2425.6	2431.6	2425.6	2414.7	2397.9
17.5°	2371.2	2371.2	2375.1	2356.3	2343.5
20°	2309.8	2312.8	2312.8	2297.9	2283.1
22.5°	2238.5	2247.4	2250.4	2234.6	2216.7
25°	2154.4	2171.2	2181.1	2165.3	2146.4
27.5°	2052.4	2078.1	2107.8	2095.9	2075.2
30°	1938.5	1976.2	2025.7	2015.8	2000.9
32.5°	1830.6	1868.2	1936.5	1932.6	1924.7
35°	1732.6	1756.4	1836.6	1846.5	1839.5
37.5°	1639.5	1661.3	1736.6	1759.3	1753.4
40°	1541.5	1565.3	1624.7	1665.3	1667.3
42.5°	1444.5	1467.3	1515.8	1574.2	1574.2
45°	1341.5	1364.3	1408.8	1473.2	1481.1
47.5°	1240.5	1264.3	1307.9	1372.2	1385.1
50°	1141.5	1163.3	1206.9	1269.3	1289.1
52.5°	1038.6	1062.3	1104.9	1162.3	1191.0
55°	939.6	955.4	1001.9	1057.4	1088.1
57.5°	836.6	851.4	903.9	951.4	983.1
60°	737.6	756.4	797.0	845.5	882.1
62.5°	642.5	662.3	697.0	739.6	781.2
65°	550.5	565.3	599.0	641.6	678.2
67.5°	461.4	474.2	507.9	537.6	576.2
70°	371.3	388.1	412.9	441.6	466.3
72.5°	299.0	305.9	326.7	347.5	373.3
75°	220.8	232.7	249.5	261.4	276.2
77.5°	158.4	165.3	175.2	185.1	199.0
80°	105.9	108.9	117.8	119.8	130.7
82.5°	64.4	66.3	68.3	69.3	73.3
85°	34.7	34.7	34.7	32.7	32.7
87.5°	19.8	19.8	16.8	13.9	9.9
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)