

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: P556130

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-93-85-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: P556130
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-LD4-3STD-50-UNV-93-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

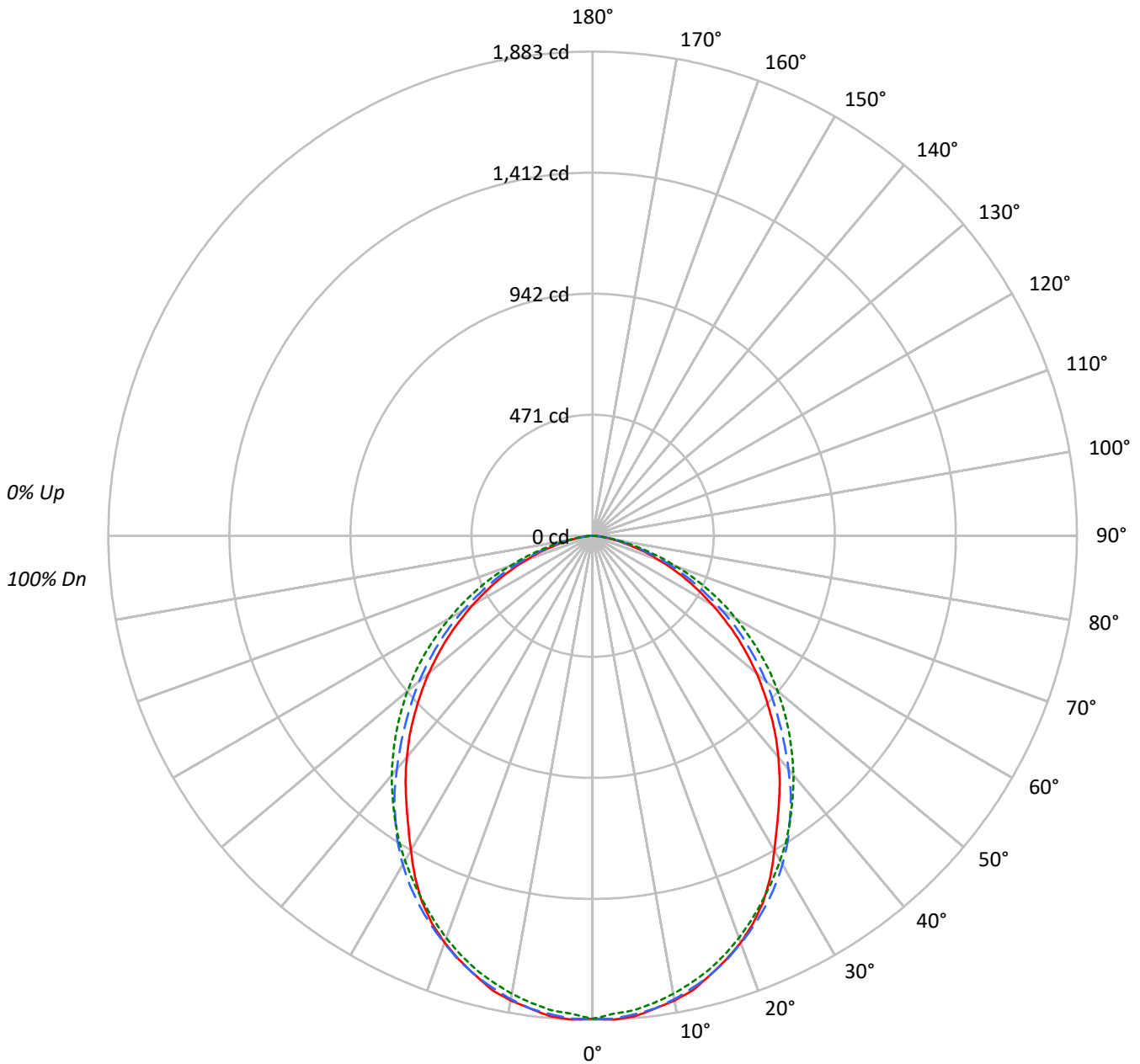
Lumens per Lamp: N/A
Luminaire Lumens: 4343.0 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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°	10108	10108	10108
5°	10136	10092	10007
10°	10028	10000	9886
15°	9850	9850	9737
20°	9641	9654	9530
25°	9324	9440	9290
30°	8780	9175	9063
35°	8296	8794	8809
40°	7893	8319	8537
45°	7442	7815	8216
50°	6966	7365	7866
55°	6426	6852	7441
60°	5787	6253	6920
65°	5109	5559	6295
70°	4258	4735	5349
75°	3346	3780	4186
80°	2393	2662	2951
85°	1562	1562	1470



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	4.1
10°-20°	496.8	11.4
20°-30°	726.0	16.7
30°-40°	824.1	19.0
40°-50°	795.5	18.3
50°-60°	656.2	15.1
60°-70°	437.0	10.1
70°-80°	195.6	4.5
80°-90°	35.0	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°	1399.6	32.2
0°-40°	2223.7	51.2
0°-60°	3675.4	84.6
0°-90°	4343.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4343.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1878	1878	1878	1878	1878	
5°	1876	1875	1868	1858	1852	178
15°	1768	1772	1768	1760	1748	498
25°	1570	1582	1590	1578	1564	719
35°	1263	1280	1338	1346	1341	791
45°	978	994	1027	1074	1080	754
55°	685	696	730	771	793	611
65°	401	412	436	468	494	398
75°	161	170	182	190	201	176
85°	25	25	25	24	24	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1878.2	1878.2	1878.2	1878.2	1878.2
2.5°	1883.3	1884.0	1879.7	1868.1	1860.9
5°	1876.1	1875.3	1868.1	1858.0	1852.3
7.5°	1855.1	1856.6	1854.4	1840.0	1832.1
10°	1834.9	1835.7	1829.9	1818.3	1809.0
12.5°	1809.0	1808.2	1800.3	1794.5	1779.4
15°	1767.8	1772.2	1767.8	1759.9	1747.6
17.5°	1728.1	1728.1	1731.0	1717.3	1707.9
20°	1683.4	1685.6	1685.6	1674.8	1663.9
22.5°	1631.5	1638.0	1640.1	1628.6	1615.6
25°	1570.1	1582.4	1589.6	1578.1	1564.4
27.5°	1495.8	1514.6	1536.2	1527.6	1512.4
30°	1412.8	1440.2	1476.3	1469.1	1458.3
32.5°	1334.2	1361.6	1411.4	1408.5	1402.7
35°	1262.7	1280.1	1338.5	1345.7	1340.7
37.5°	1194.9	1210.8	1265.6	1282.2	1277.9
40°	1123.5	1140.8	1184.1	1213.7	1215.1
42.5°	1052.8	1069.4	1104.7	1147.3	1147.3
45°	977.7	994.3	1026.8	1073.7	1079.5
47.5°	904.1	921.4	953.2	1000.1	1009.5
50°	832.0	847.8	879.6	925.0	939.5
52.5°	756.9	774.2	805.3	847.1	868.0
55°	684.8	696.3	730.2	770.6	793.0
57.5°	609.7	620.5	658.8	693.4	716.5
60°	537.6	551.3	580.9	616.2	642.9
62.5°	468.3	482.7	508.0	539.0	569.3
65°	401.2	412.0	436.5	467.6	494.3
67.5°	336.2	345.6	370.2	391.8	420.0
70°	270.6	282.9	300.9	321.8	339.9
72.5°	217.9	223.0	238.1	253.3	272.0
75°	160.9	169.6	181.8	190.5	201.3
77.5°	115.5	120.5	127.7	134.9	145.0
80°	77.2	79.4	85.9	87.3	95.2
82.5°	46.9	48.3	49.8	50.5	53.4
85°	25.3	25.3	25.3	23.8	23.8
87.5°	14.4	14.4	12.3	10.1	7.2
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)