

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: P556098

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-81-85-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: P556098
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-81-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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

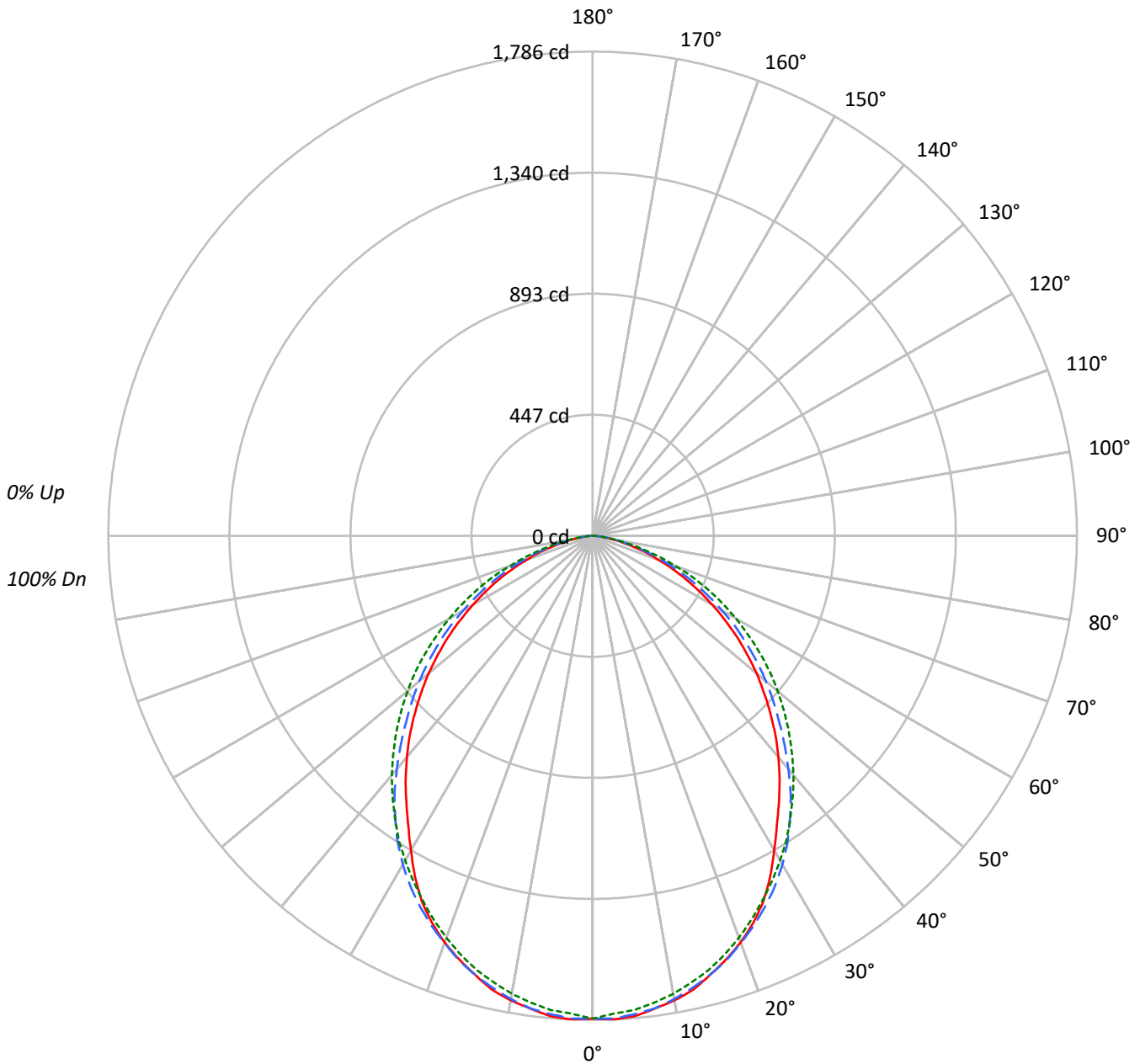
Lumens per Lamp: N/A
Luminaire Lumens: 4118.0 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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

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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°	9585	9585	9585
5°	9611	9570	9488
10°	9509	9482	9374
15°	9339	9339	9233
20°	9142	9154	9036
25°	8841	8951	8808
30°	8325	8699	8593
35°	7866	8339	8352
40°	7484	7888	8095
45°	7056	7410	7790
50°	6605	6983	7459
55°	6092	6497	7055
60°	5486	5929	6562
65°	4844	5271	5969
70°	4038	4489	5072
75°	3173	3585	3970
80°	2269	2523	2799
85°	1476	1476	1396



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.7	4.1
10°-20°	471.1	11.4
20°-30°	688.4	16.7
30°-40°	781.4	19.0
40°-50°	754.3	18.3
50°-60°	622.2	15.1
60°-70°	414.4	10.1
70°-80°	185.4	4.5
80°-90°	33.2	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°	1327.1	32.2
0°-40°	2108.5	51.2
0°-60°	3485.0	84.6
0°-90°	4118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4118.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1781	1781	1781	1781	1781	
5°	1779	1778	1771	1762	1756	168
15°	1676	1680	1676	1669	1657	473
25°	1489	1500	1507	1496	1483	682
35°	1197	1214	1269	1276	1271	750
45°	927	943	974	1018	1024	715
55°	649	660	692	731	752	580
65°	380	391	414	443	469	377
75°	153	161	172	181	191	167
85°	24	24	24	23	23	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1780.9	1780.9	1780.9	1780.9	1780.9
2.5°	1785.7	1786.4	1782.3	1771.4	1764.5
5°	1778.9	1778.2	1771.4	1761.8	1756.3
7.5°	1759.0	1760.4	1758.4	1744.7	1737.1
10°	1739.9	1740.6	1735.1	1724.1	1715.2
12.5°	1715.2	1714.6	1707.0	1701.6	1687.2
15°	1676.2	1680.4	1676.2	1668.7	1657.1
17.5°	1638.6	1638.6	1641.4	1628.4	1619.5
20°	1596.2	1598.3	1598.3	1588.0	1577.7
22.5°	1546.9	1553.1	1555.1	1544.2	1531.9
25°	1488.8	1500.4	1507.3	1496.3	1483.3
27.5°	1418.3	1436.1	1456.6	1448.4	1434.0
30°	1339.6	1365.6	1399.8	1393.0	1382.7
32.5°	1265.1	1291.1	1338.3	1335.5	1330.1
35°	1197.3	1213.7	1269.2	1276.0	1271.2
37.5°	1133.0	1148.1	1200.1	1215.8	1211.7
40°	1065.3	1081.7	1122.7	1150.8	1152.2
42.5°	998.2	1014.0	1047.5	1087.9	1087.9
45°	927.1	942.8	973.6	1018.1	1023.5
47.5°	857.3	873.7	903.8	948.3	957.2
50°	788.9	803.9	834.0	877.1	890.8
52.5°	717.7	734.1	763.5	803.2	823.1
55°	649.3	660.2	692.4	730.7	751.9
57.5°	578.1	588.4	624.7	657.5	679.4
60°	509.7	522.7	550.8	584.3	609.6
62.5°	444.0	457.7	481.7	511.1	539.8
65°	380.4	390.7	413.9	443.4	468.7
67.5°	318.8	327.7	351.0	371.5	398.2
70°	256.6	268.2	285.3	305.1	322.3
72.5°	206.6	211.4	225.8	240.1	257.9
75°	152.6	160.8	172.4	180.6	190.9
77.5°	109.5	114.3	121.1	127.9	137.5
80°	73.2	75.3	81.4	82.8	90.3
82.5°	44.5	45.8	47.2	47.9	50.6
85°	23.9	23.9	23.9	22.6	22.6
87.5°	13.7	13.7	11.6	9.6	6.8
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)