

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: P556096

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-81-84-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: P556096
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-81-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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

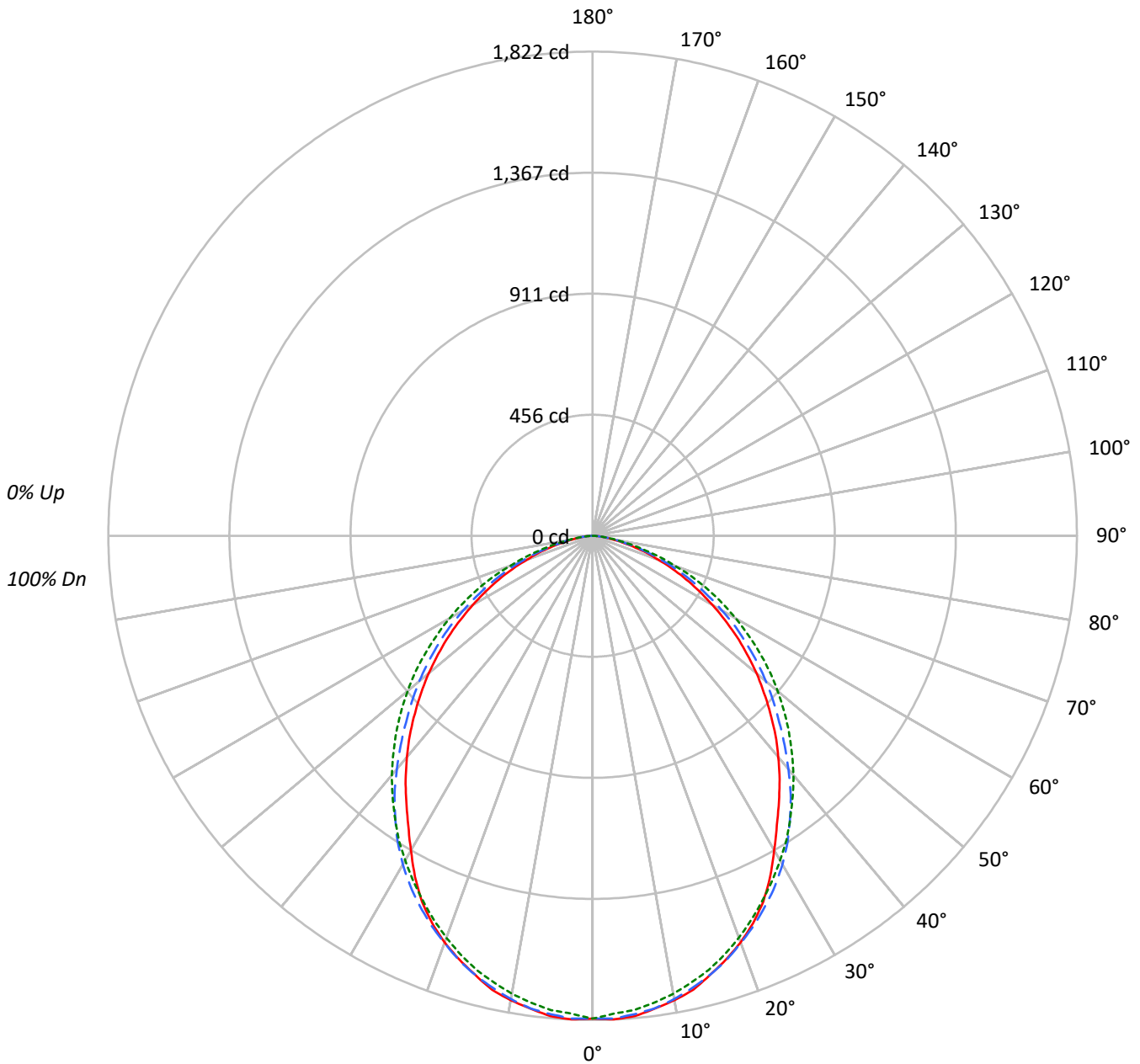
Lumens per Lamp: N/A
Luminaire Lumens: 4201.0 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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									
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°	9778	9778	9778
5°	9804	9763	9680
10°	9700	9674	9563
15°	9528	9528	9419
20°	9326	9338	9218
25°	9019	9131	8986
30°	8493	8875	8766
35°	8025	8506	8520
40°	7635	8047	8258
45°	7199	7559	7948
50°	6738	7124	7609
55°	6215	6627	7198
60°	5597	6048	6694
65°	4942	5378	6089
70°	4118	4581	5172
75°	3236	3658	4049
80°	2315	2576	2854
85°	1507	1507	1420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.1	4.1
10°-20°	480.6	11.4
20°-30°	702.3	16.7
30°-40°	797.1	19.0
40°-50°	769.5	18.3
50°-60°	634.8	15.1
60°-70°	422.7	10.1
70°-80°	189.2	4.5
80°-90°	33.9	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°	1353.9	32.2
0°-40°	2151.0	51.2
0°-60°	3555.3	84.6
0°-90°	4201.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4201.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1817	1817	1817	1817	1817	
5°	1815	1814	1807	1797	1792	172
15°	1710	1714	1710	1702	1690	482
25°	1519	1531	1538	1526	1513	696
35°	1222	1238	1295	1302	1297	765
45°	946	962	993	1039	1044	730
55°	662	674	706	745	767	591
65°	388	398	422	452	478	385
75°	156	164	176	184	195	170
85°	24	24	24	23	23	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1816.8	1816.8	1816.8	1816.8	1816.8
2.5°	1821.7	1822.4	1818.2	1807.1	1800.1
5°	1814.7	1814.0	1807.1	1797.3	1791.7
7.5°	1794.5	1795.9	1793.8	1779.8	1772.2
10°	1774.9	1775.6	1770.1	1758.9	1749.8
12.5°	1749.8	1749.1	1741.4	1735.9	1721.2
15°	1710.0	1714.2	1710.0	1702.4	1690.5
17.5°	1671.6	1671.6	1674.4	1661.2	1652.1
20°	1628.4	1630.5	1630.5	1620.0	1609.5
22.5°	1578.1	1584.4	1586.5	1575.3	1562.8
25°	1518.8	1530.7	1537.6	1526.5	1513.2
27.5°	1446.9	1465.0	1486.0	1477.6	1463.0
30°	1366.6	1393.2	1428.1	1421.1	1410.6
32.5°	1290.6	1317.1	1365.2	1362.4	1356.9
35°	1221.5	1238.2	1294.7	1301.7	1296.8
37.5°	1155.8	1171.2	1224.2	1240.3	1236.1
40°	1086.7	1103.5	1145.4	1174.0	1175.4
42.5°	1018.3	1034.4	1068.6	1109.8	1109.8
45°	945.8	961.8	993.2	1038.6	1044.2
47.5°	874.6	891.3	922.0	967.4	976.5
50°	804.8	820.1	850.8	894.8	908.8
52.5°	732.2	748.9	778.9	819.4	839.7
55°	662.4	673.5	706.3	745.4	767.1
57.5°	589.8	600.3	637.2	670.8	693.1
60°	520.0	533.3	561.9	596.1	621.9
62.5°	453.0	466.9	491.4	521.4	550.7
65°	388.1	398.5	422.3	452.3	478.1
67.5°	325.3	334.3	358.1	379.0	406.2
70°	261.7	273.6	291.1	311.3	328.7
72.5°	210.8	215.7	230.3	245.0	263.1
75°	155.6	164.0	175.9	184.3	194.7
77.5°	111.7	116.6	123.5	130.5	140.3
80°	74.7	76.8	83.1	84.5	92.1
82.5°	45.4	46.8	48.2	48.9	51.7
85°	24.4	24.4	24.4	23.0	23.0
87.5°	14.0	14.0	11.9	9.8	7.0
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)