

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: P556010

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-93-94-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: P556010
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-35-UNV-93-94-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

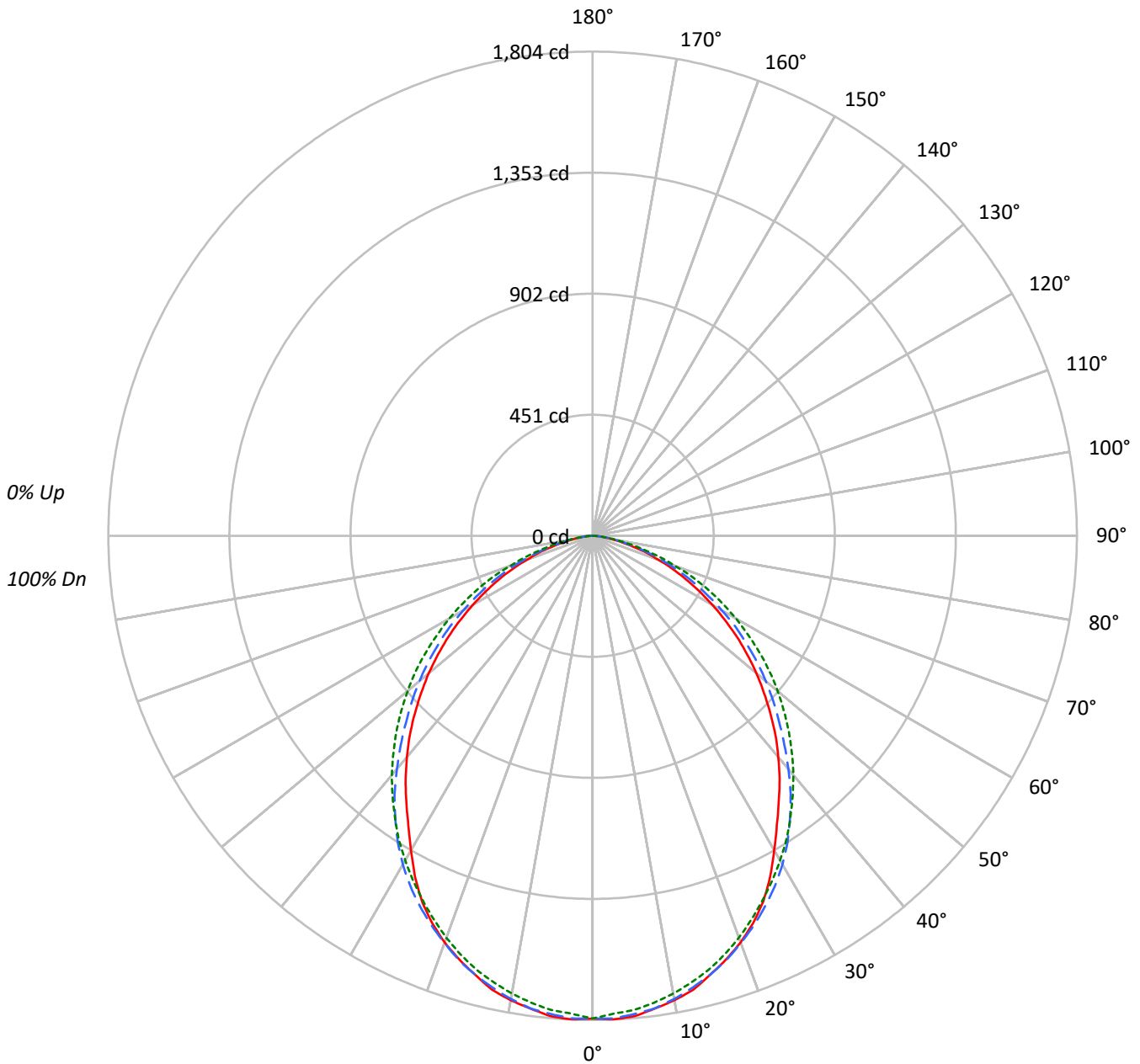
Lumens per Lamp: N/A
Luminaire Lumens: 4159.0 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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									
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°	9681	9681	9681
5°	9706	9665	9583
10°	9603	9577	9467
15°	9433	9433	9325
20°	9233	9245	9126
25°	8929	9040	8896
30°	8408	8786	8679
35°	7945	8422	8435
40°	7559	7966	8175
45°	7126	7484	7868
50°	6671	7052	7533
55°	6153	6562	7126
60°	5541	5988	6627
65°	4893	5324	6027
70°	4077	4533	5122
75°	3204	3620	4009
80°	2290	2548	2827
85°	1494	1494	1408



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.3	4.1
10°-20°	475.7	11.4
20°-30°	695.2	16.7
30°-40°	789.2	19.0
40°-50°	761.8	18.3
50°-60°	628.4	15.1
60°-70°	418.5	10.1
70°-80°	187.3	4.5
80°-90°	33.5	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°	1340.3	32.2
0°-40°	2129.5	51.2
0°-60°	3519.7	84.6
0°-90°	4159.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4159.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1799	1799	1799	1799	1799	
5°	1797	1796	1789	1779	1774	170
15°	1693	1697	1693	1685	1674	477
25°	1504	1515	1522	1511	1498	689
35°	1209	1226	1282	1289	1284	758
45°	936	952	983	1028	1034	722
55°	656	667	699	738	759	585
65°	384	395	418	448	473	381
75°	154	162	174	182	193	169
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°	1798.7	1798.7	1798.7	1798.7	1798.7
2.5°	1803.5	1804.2	1800.0	1789.0	1782.1
5°	1796.6	1795.9	1789.0	1779.3	1773.8
7.5°	1776.5	1777.9	1775.9	1762.0	1754.4
10°	1757.2	1757.9	1752.4	1741.3	1732.3
12.5°	1732.3	1731.6	1724.0	1718.5	1704.0
15°	1692.9	1697.1	1692.9	1685.3	1673.6
17.5°	1654.9	1654.9	1657.7	1644.6	1635.6
20°	1612.1	1614.2	1614.2	1603.8	1593.4
22.5°	1562.3	1568.6	1570.6	1559.6	1547.1
25°	1503.6	1515.4	1522.3	1511.2	1498.1
27.5°	1432.4	1450.4	1471.1	1462.8	1448.3
30°	1353.0	1379.2	1413.8	1406.9	1396.5
32.5°	1277.6	1303.9	1351.6	1348.8	1343.3
35°	1209.2	1225.8	1281.8	1288.7	1283.9
37.5°	1144.3	1159.5	1212.0	1227.9	1223.8
40°	1075.9	1092.5	1133.9	1162.3	1163.6
42.5°	1008.2	1024.1	1057.9	1098.7	1098.7
45°	936.3	952.2	983.3	1028.2	1033.7
47.5°	865.8	882.4	912.8	957.7	966.7
50°	796.7	811.9	842.3	885.9	899.7
52.5°	724.9	741.4	771.2	811.2	831.3
55°	655.8	666.8	699.3	738.0	759.4
57.5°	583.9	594.3	630.9	664.0	686.2
60°	514.8	527.9	556.3	590.1	615.7
62.5°	448.5	462.3	486.5	516.2	545.2
65°	384.2	394.6	418.1	447.8	473.3
67.5°	322.0	331.0	354.5	375.2	402.2
70°	259.1	270.9	288.1	308.2	325.5
72.5°	208.7	213.5	228.0	242.5	260.5
75°	154.1	162.4	174.1	182.4	192.8
77.5°	110.6	115.4	122.3	129.2	138.9
80°	73.9	76.0	82.2	83.6	91.2
82.5°	44.9	46.3	47.7	48.4	51.1
85°	24.2	24.2	24.2	22.8	22.8
87.5°	13.8	13.8	11.7	9.7	6.9
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)