

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: P556073

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-93-88-EDD**

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: P556073
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-40-UNV-93-88-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

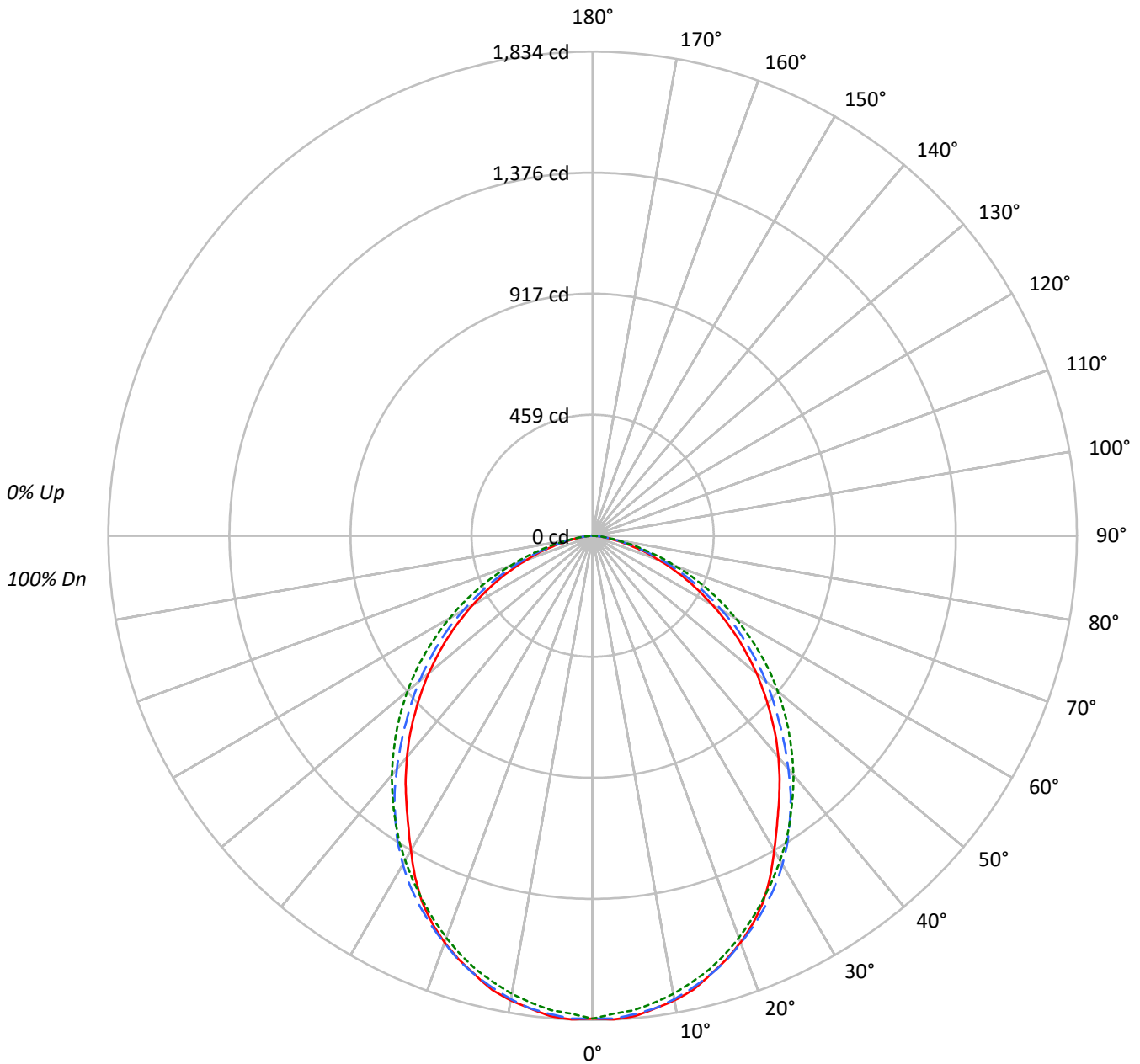
Lumens per Lamp: N/A
Luminaire Lumens: 4229.0 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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					
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								
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°	9843	9843	9843
5°	9869	9828	9744
10°	9765	9738	9627
15°	9591	9591	9482
20°	9388	9400	9280
25°	9079	9192	9046
30°	8549	8934	8825
35°	8079	8564	8577
40°	7686	8101	8313
45°	7247	7610	8000
50°	6783	7171	7659
55°	6257	6672	7246
60°	5635	6088	6738
65°	4975	5414	6129
70°	4146	4611	5207
75°	3258	3683	4076
80°	2331	2591	2873
85°	1519	1519	1433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.2	4.1
10°-20°	483.8	11.4
20°-30°	706.9	16.7
30°-40°	802.4	19.0
40°-50°	774.6	18.3
50°-60°	639.0	15.1
60°-70°	425.5	10.1
70°-80°	190.4	4.5
80°-90°	34.1	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°	1362.9	32.2
0°-40°	2165.3	51.2
0°-60°	3579.0	84.6
0°-90°	4229.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4229.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1829	1829	1829	1829	1829	
5°	1827	1826	1819	1809	1804	173
15°	1721	1726	1721	1714	1702	485
25°	1529	1541	1548	1537	1523	700
35°	1230	1246	1303	1310	1306	770
45°	952	968	1000	1046	1051	735
55°	667	678	711	750	772	595
65°	391	401	425	455	481	387
75°	157	165	177	186	196	171
85°	25	25	25	23	23	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1828.9	1828.9	1828.9	1828.9	1828.9
2.5°	1833.9	1834.6	1830.3	1819.1	1812.1
5°	1826.8	1826.1	1819.1	1809.3	1803.6
7.5°	1806.4	1807.9	1805.7	1791.7	1784.0
10°	1786.8	1787.5	1781.9	1770.6	1761.5
12.5°	1761.5	1760.8	1753.0	1747.4	1732.7
15°	1721.4	1725.6	1721.4	1713.7	1701.8
17.5°	1682.8	1682.8	1685.6	1672.2	1663.1
20°	1639.2	1641.3	1641.3	1630.8	1620.3
22.5°	1588.6	1595.0	1597.1	1585.8	1573.2
25°	1528.9	1540.9	1547.9	1536.6	1523.3
27.5°	1456.5	1474.8	1495.9	1487.5	1472.7
30°	1375.7	1402.4	1437.6	1430.5	1420.0
32.5°	1299.2	1325.9	1374.3	1371.5	1365.9
35°	1229.6	1246.5	1303.4	1310.4	1305.5
37.5°	1163.5	1179.0	1232.4	1248.6	1244.3
40°	1094.0	1110.9	1153.0	1181.8	1183.2
42.5°	1025.1	1041.3	1075.7	1117.2	1117.2
45°	952.1	968.2	999.8	1045.5	1051.1
47.5°	880.4	897.3	928.2	973.8	983.0
50°	810.1	825.6	856.5	900.8	914.8
52.5°	737.1	753.9	784.1	824.9	845.3
55°	666.8	678.0	711.1	750.4	772.2
57.5°	593.7	604.3	641.5	675.2	697.7
60°	523.5	536.8	565.6	600.0	626.0
62.5°	456.0	470.1	494.6	524.9	554.4
65°	390.7	401.2	425.1	455.3	481.3
67.5°	327.4	336.6	360.4	381.5	408.9
70°	263.5	275.4	293.0	313.4	330.9
72.5°	212.2	217.1	231.9	246.6	264.9
75°	156.7	165.1	177.1	185.5	196.0
77.5°	112.4	117.3	124.4	131.4	141.2
80°	75.2	77.3	83.6	85.0	92.7
82.5°	45.7	47.1	48.5	49.2	52.0
85°	24.6	24.6	24.6	23.2	23.2
87.5°	14.1	14.1	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)