

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: P556009

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-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: P556009
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-93-88-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

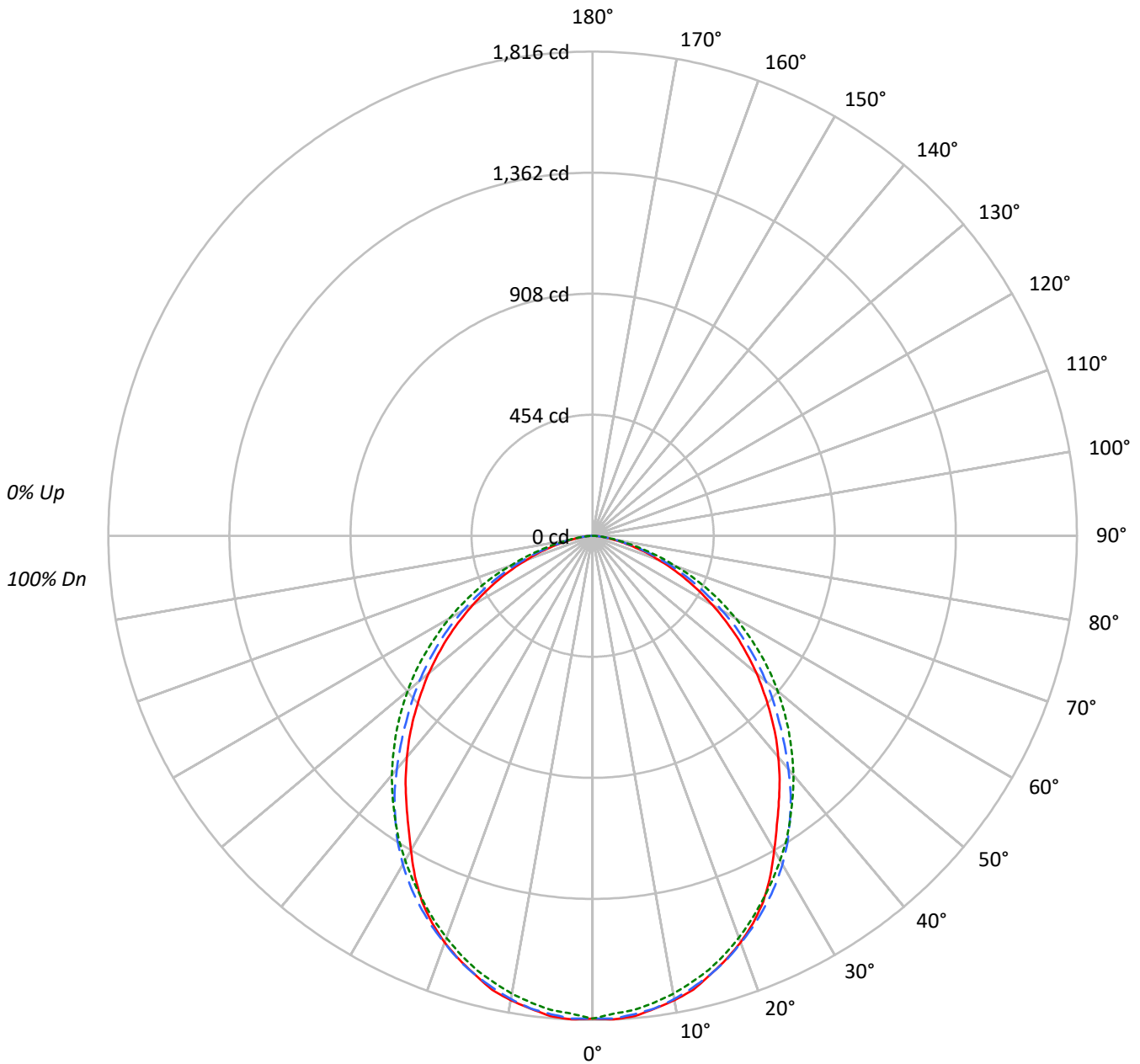
Lumens per Lamp: N/A
Luminaire Lumens: 4187.0 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	9746	9746	9746
5°	9772	9730	9647
10°	9668	9641	9531
15°	9496	9496	9388
20°	9295	9307	9188
25°	8989	9100	8956
30°	8465	8845	8737
35°	7999	8478	8492
40°	7609	8020	8231
45°	7174	7534	7921
50°	6716	7100	7583
55°	6195	6606	7173
60°	5579	6028	6671
65°	4926	5360	6068
70°	4105	4565	5155
75°	3225	3645	4036
80°	2306	2566	2845
85°	1501	1501	1420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.5	4.1
10°-20°	479.0	11.4
20°-30°	699.9	16.7
30°-40°	794.5	19.0
40°-50°	766.9	18.3
50°-60°	632.7	15.1
60°-70°	421.3	10.1
70°-80°	188.5	4.5
80°-90°	33.7	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°	1349.4	32.2
0°-40°	2143.8	51.2
0°-60°	3543.4	84.6
0°-90°	4187.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4187.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1811	1811	1811	1811	1811	
5°	1809	1808	1801	1791	1786	171
15°	1704	1708	1704	1697	1685	480
25°	1514	1526	1532	1521	1508	693
35°	1217	1234	1290	1297	1292	763
45°	943	959	990	1035	1041	727
55°	660	671	704	743	764	589
65°	387	397	421	451	476	384
75°	155	164	175	184	194	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°	1810.8	1810.8	1810.8	1810.8	1810.8
2.5°	1815.6	1816.3	1812.2	1801.0	1794.1
5°	1808.7	1808.0	1801.0	1791.3	1785.7
7.5°	1788.5	1789.9	1787.8	1773.9	1766.2
10°	1769.0	1769.7	1764.2	1753.0	1744.0
12.5°	1744.0	1743.3	1735.6	1730.1	1715.5
15°	1704.3	1708.5	1704.3	1696.7	1684.9
17.5°	1666.1	1666.1	1668.9	1655.6	1646.6
20°	1622.9	1625.0	1625.0	1614.6	1604.2
22.5°	1572.9	1579.1	1581.2	1570.1	1557.6
25°	1513.7	1525.6	1532.5	1521.4	1508.2
27.5°	1442.1	1460.2	1481.0	1472.7	1458.1
30°	1362.1	1388.5	1423.3	1416.3	1405.9
32.5°	1286.3	1312.7	1360.7	1357.9	1352.3
35°	1217.4	1234.1	1290.4	1297.4	1292.5
37.5°	1152.0	1167.3	1220.2	1236.2	1232.0
40°	1083.1	1099.8	1141.6	1170.1	1171.5
42.5°	1014.9	1030.9	1065.0	1106.1	1106.1
45°	942.6	958.6	989.9	1035.1	1040.7
47.5°	871.6	888.3	918.9	964.2	973.2
50°	802.1	817.4	848.0	891.8	905.7
52.5°	729.7	746.4	776.3	816.7	836.9
55°	660.2	671.3	704.0	743.0	764.5
57.5°	587.8	598.3	635.1	668.5	690.8
60°	518.3	531.5	560.0	594.1	619.8
62.5°	451.5	465.4	489.7	519.6	548.9
65°	386.8	397.2	420.9	450.8	476.5
67.5°	324.2	333.2	356.9	377.7	404.9
70°	260.9	272.7	290.1	310.3	327.6
72.5°	210.1	215.0	229.6	244.2	262.3
75°	155.1	163.5	175.3	183.7	194.1
77.5°	111.3	116.2	123.1	130.1	139.8
80°	74.4	76.5	82.8	84.2	91.8
82.5°	45.2	46.6	48.0	48.7	51.5
85°	24.3	24.3	24.3	23.0	23.0
87.5°	13.9	13.9	11.8	9.7	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)