

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: P556114

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-82-85-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: P556114
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-82-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 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

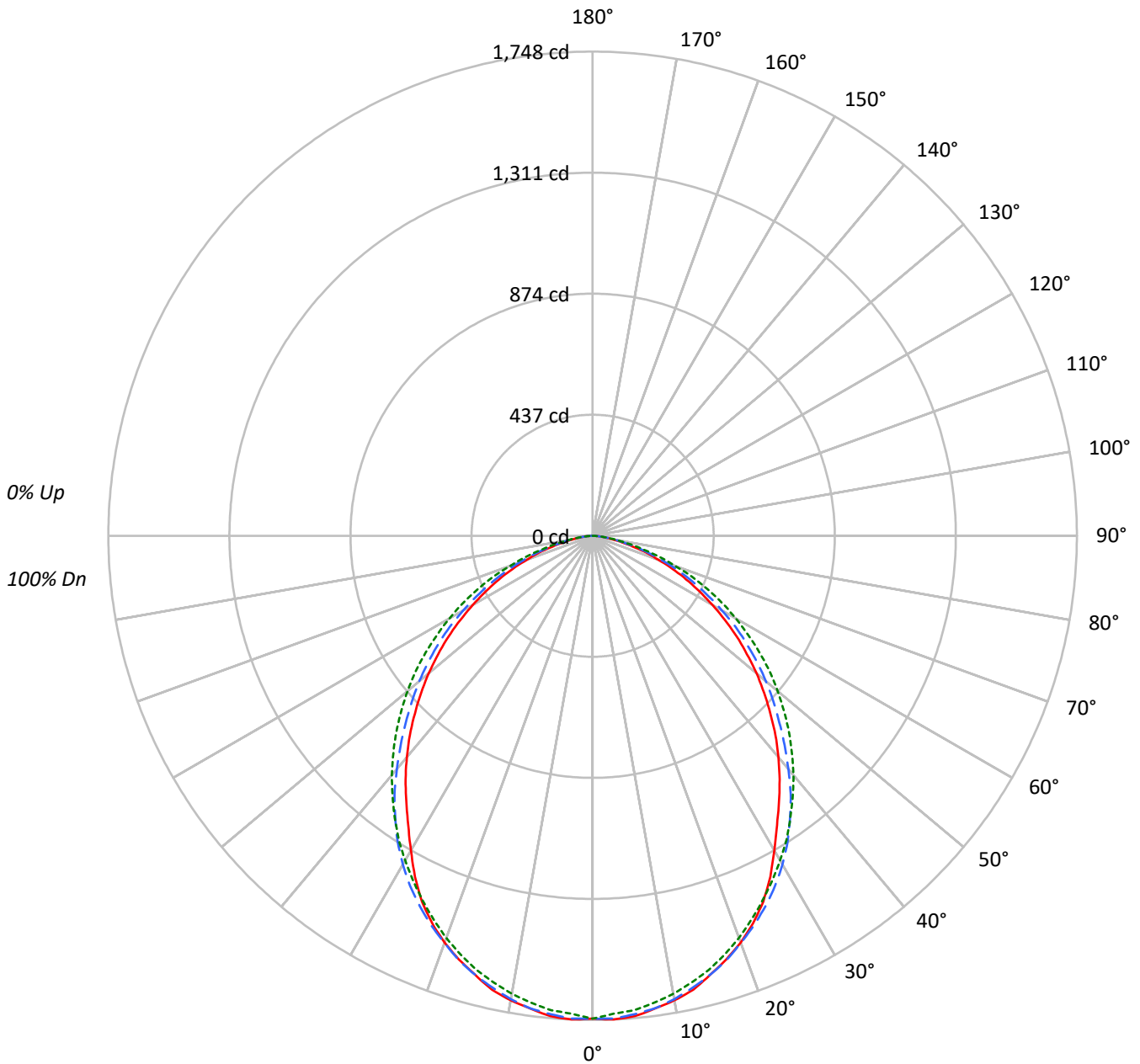
Lumens per Lamp: N/A
Luminaire Lumens: 4031.0 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
Input Voltage (V): NR
Input Current (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°	9382	9382	9382
5°	9407	9367	9288
10°	9307	9282	9176
15°	9142	9142	9038
20°	8949	8960	8845
25°	8654	8761	8622
30°	8149	8516	8411
35°	7700	8162	8176
40°	7326	7721	7924
45°	6907	7254	7626
50°	6466	6836	7301
55°	5964	6360	6906
60°	5370	5803	6423
65°	4742	5160	5843
70°	3951	4395	4963
75°	3105	3510	3886
80°	2222	2470	2740
85°	1445	1445	1365



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.1	4.1
10°-20°	461.1	11.4
20°-30°	673.8	16.7
30°-40°	764.9	19.0
40°-50°	738.4	18.3
50°-60°	609.1	15.1
60°-70°	405.6	10.1
70°-80°	181.5	4.5
80°-90°	32.5	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°	1299.1	32.2
0°-40°	2063.9	51.2
0°-60°	3411.4	84.6
0°-90°	4031.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4031.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1743	1743	1743	1743	1743	
5°	1741	1741	1734	1725	1719	165
15°	1641	1645	1641	1634	1622	463
25°	1457	1469	1475	1465	1452	667
35°	1172	1188	1242	1249	1244	734
45°	908	923	953	997	1002	700
55°	636	646	678	715	736	567
65°	372	382	405	434	459	369
75°	149	157	169	177	187	163
85°	23	23	23	22	22	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1743.3	1743.3	1743.3	1743.3	1743.3
2.5°	1748.0	1748.7	1744.6	1733.9	1727.2
5°	1741.3	1740.6	1733.9	1724.6	1719.2
7.5°	1721.9	1723.2	1721.2	1707.8	1700.4
10°	1703.1	1703.8	1698.4	1687.7	1679.0
12.5°	1679.0	1678.3	1671.0	1665.6	1651.6
15°	1640.8	1644.9	1640.8	1633.5	1622.1
17.5°	1604.0	1604.0	1606.7	1594.0	1585.2
20°	1562.5	1564.5	1564.5	1554.4	1544.4
22.5°	1514.3	1520.3	1522.3	1511.6	1499.5
25°	1457.3	1468.7	1475.4	1464.7	1452.0
27.5°	1388.3	1405.8	1425.9	1417.8	1403.8
30°	1311.3	1336.8	1370.3	1363.6	1353.5
32.5°	1238.3	1263.8	1310.0	1307.3	1302.0
35°	1172.0	1188.1	1242.3	1249.0	1244.4
37.5°	1109.1	1123.8	1174.7	1190.1	1186.1
40°	1042.8	1058.8	1099.0	1126.5	1127.8
42.5°	977.1	992.5	1025.4	1064.9	1064.9
45°	907.5	922.9	953.0	996.6	1001.9
47.5°	839.2	855.2	884.7	928.2	937.0
50°	772.2	786.9	816.4	858.6	872.0
52.5°	702.5	718.6	747.4	786.3	805.7
55°	635.6	646.3	677.8	715.3	736.0
57.5°	565.9	576.0	611.5	643.6	665.0
60°	498.9	511.7	539.1	571.9	596.7
62.5°	434.7	448.0	471.5	500.3	528.4
65°	372.4	382.4	405.2	434.0	458.8
67.5°	312.1	320.8	343.6	363.7	389.8
70°	251.1	262.5	279.3	298.7	315.4
72.5°	202.3	206.9	221.0	235.1	252.5
75°	149.3	157.4	168.8	176.8	186.9
77.5°	107.2	111.8	118.5	125.2	134.6
80°	71.7	73.7	79.7	81.0	88.4
82.5°	43.5	44.9	46.2	46.9	49.6
85°	23.4	23.4	23.4	22.1	22.1
87.5°	13.4	13.4	11.4	9.4	6.7
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)