

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: P555919

Luminaire Tested: **FUSL-12-2-LD4-3STD-30-UNV-81-97-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: P555919  
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-30-UNV-81-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

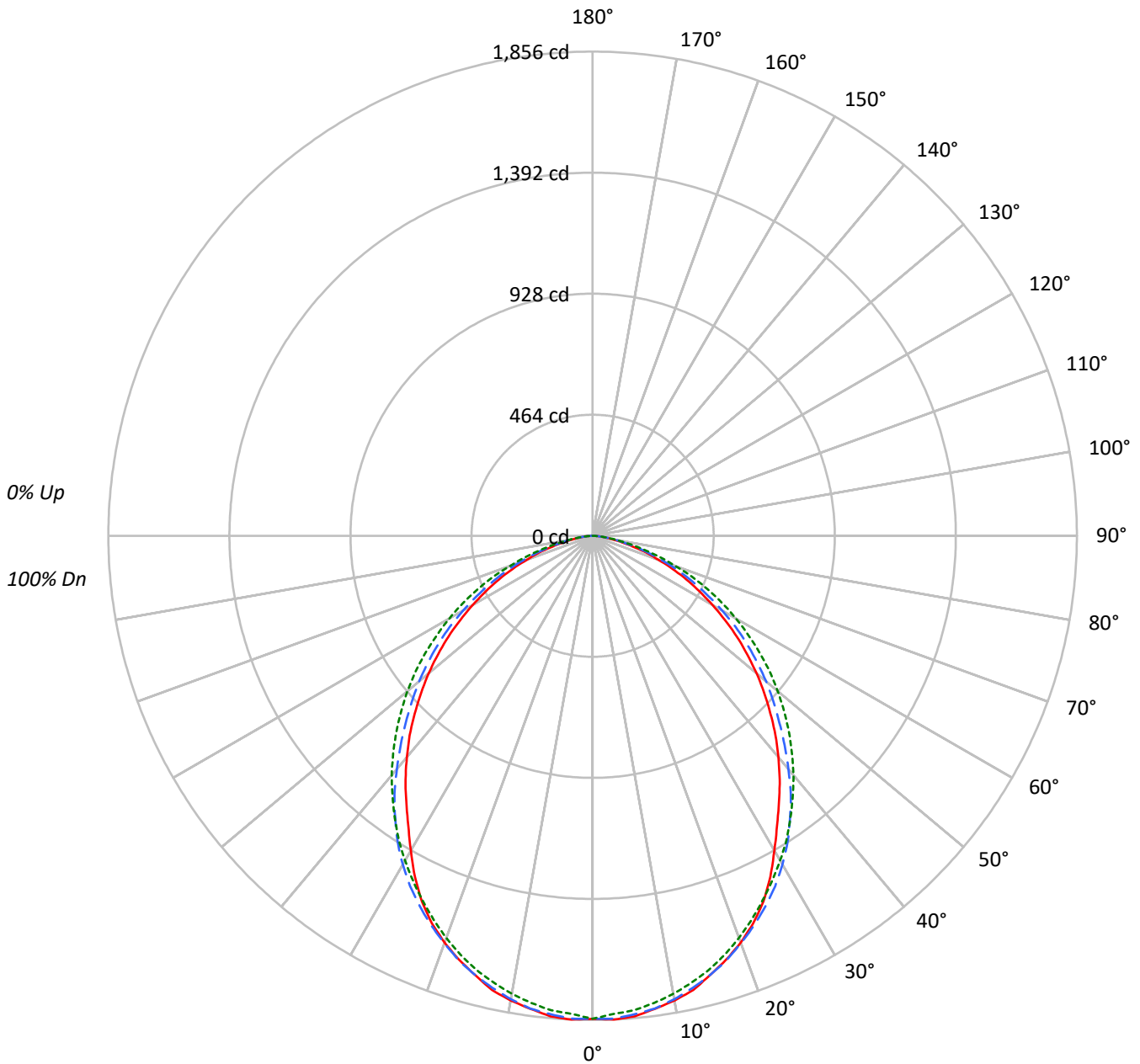
Lumens per Lamp: N/A  
Luminaire Lumens: 4281.0 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	9964	9964	9964
5°	9991	9949	9864
10°	9885	9858	9745
15°	9709	9709	9599
20°	9504	9516	9394
25°	9191	9305	9157
30°	8655	9043	8933
35°	8178	8669	8682
40°	7780	8200	8415
45°	7336	7703	8099
50°	6867	7259	7754
55°	6334	6754	7335
60°	5704	6163	6821
65°	5037	5480	6204
70°	4197	4667	5271
75°	3298	3726	4126
80°	2359	2622	2910
85°	1538	1538	1451



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.3	4.1
10°-20°	489.7	11.4
20°-30°	715.6	16.7
30°-40°	812.3	19.0
40°-50°	784.2	18.3
50°-60°	646.9	15.1
60°-70°	430.8	10.1
70°-80°	192.8	4.5
80°-90°	34.5	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°	1379.6	32.2
0°-40°	2191.9	51.2
0°-60°	3623.0	84.6
0°-90°	4281.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4281.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1851	1851	1851	1851	1851	
5°	1849	1849	1842	1832	1826	175
15°	1743	1747	1743	1735	1723	491
25°	1548	1560	1567	1556	1542	709
35°	1245	1262	1319	1326	1322	780
45°	964	980	1012	1058	1064	744
55°	675	686	720	760	782	602
65°	396	406	430	461	487	392
75°	159	167	179	188	198	173
85°	25	25	25	24	24	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1851.4	1851.4	1851.4	1851.4	1851.4
2.5°	1856.4	1857.1	1852.8	1841.5	1834.4
5°	1849.3	1848.6	1841.5	1831.5	1825.8
7.5°	1828.7	1830.1	1828.0	1813.7	1805.9
10°	1808.7	1809.5	1803.8	1792.4	1783.1
12.5°	1783.1	1782.4	1774.6	1768.9	1754.0
15°	1742.6	1746.9	1742.6	1734.8	1722.7
17.5°	1703.5	1703.5	1706.3	1692.8	1683.6
20°	1659.4	1661.5	1661.5	1650.8	1640.2
22.5°	1608.2	1614.6	1616.7	1605.3	1592.5
25°	1547.7	1559.8	1566.9	1555.5	1542.0
27.5°	1474.5	1492.9	1514.3	1505.7	1490.8
30°	1392.7	1419.7	1455.2	1448.1	1437.5
32.5°	1315.1	1342.2	1391.2	1388.4	1382.7
35°	1244.7	1261.8	1319.4	1326.5	1321.5
37.5°	1177.9	1193.5	1247.6	1263.9	1259.6
40°	1107.4	1124.5	1167.2	1196.3	1197.8
42.5°	1037.7	1054.1	1088.9	1130.9	1130.9
45°	963.8	980.1	1012.1	1058.4	1064.1
47.5°	891.2	908.3	939.6	985.8	995.1
50°	820.1	835.7	867.0	911.8	926.1
52.5°	746.1	763.2	793.8	835.0	855.7
55°	675.0	686.4	719.8	759.6	781.7
57.5°	601.0	611.7	649.4	683.5	706.3
60°	529.9	543.4	572.6	607.4	633.7
62.5°	461.6	475.8	500.7	531.3	561.2
65°	395.5	406.1	430.3	460.9	487.2
67.5°	331.4	340.7	364.9	386.2	414.0
70°	266.7	278.8	296.6	317.2	335.0
72.5°	214.8	219.8	234.7	249.7	268.1
75°	158.6	167.1	179.2	187.8	198.4
77.5°	113.8	118.8	125.9	133.0	143.0
80°	76.1	78.2	84.6	86.1	93.9
82.5°	46.2	47.7	49.1	49.8	52.6
85°	24.9	24.9	24.9	23.5	23.5
87.5°	14.2	14.2	12.1	10.0	7.1
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)