

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: P556031

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-80-97-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: P556031  
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-80-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

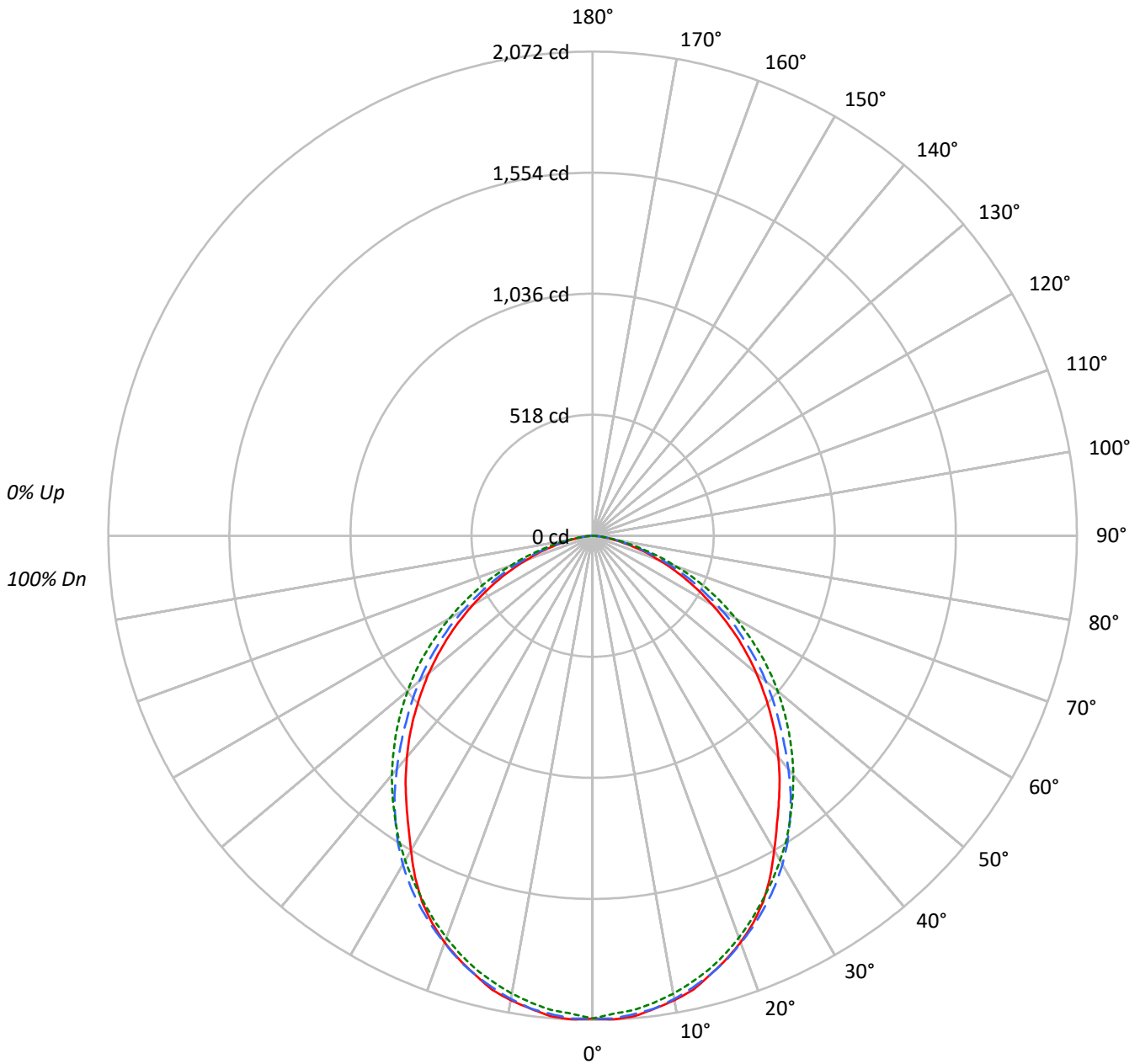
Lumens per Lamp: N/A  
Luminaire Lumens: 4777.0 lumens  
Efficiency: N/A  
Efficacy: 95.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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					
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°	11119	11119	11119
5°	11148	11101	11007
10°	11030	11000	10874
15°	10834	10834	10711
20°	10605	10619	10482
25°	10256	10383	10218
30°	9657	10092	9968
35°	9125	9673	9688
40°	8682	9150	9390
45°	8185	8596	9037
50°	7662	8101	8652
55°	7067	7537	8184
60°	6365	6877	7612
65°	5620	6115	6924
70°	4683	5209	5882
75°	3681	4159	4604
80°	2631	2926	3248
85°	1717	1717	1618



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.5	4.1
10°-20°	546.4	11.4
20°-30°	798.5	16.7
30°-40°	906.4	19.0
40°-50°	875.0	18.3
50°-60°	721.8	15.1
60°-70°	480.7	10.1
70°-80°	215.1	4.5
80°-90°	38.5	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°	1539.5	32.2
0°-40°	2445.9	51.2
0°-60°	4042.7	84.6
0°-90°	4777.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4777.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2066	2066	2066	2066	2066	
5°	2064	2063	2055	2044	2037	195
15°	1944	1949	1944	1936	1922	548
25°	1727	1740	1748	1736	1721	791
35°	1389	1408	1472	1480	1475	870
45°	1075	1094	1129	1181	1187	830
55°	753	766	803	848	872	672
65°	441	453	480	514	544	438
75°	177	186	200	210	221	194
85°	28	28	28	26	26	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2065.9	2065.9	2065.9	2065.9	2065.9
2.5°	2071.5	2072.3	2067.5	2054.8	2046.9
5°	2063.5	2062.8	2054.8	2043.7	2037.4
7.5°	2040.5	2042.1	2039.7	2023.9	2015.1
10°	2018.3	2019.1	2012.8	2000.1	1989.7
12.5°	1989.7	1988.9	1980.2	1973.9	1957.2
15°	1944.5	1949.3	1944.5	1935.8	1922.3
17.5°	1900.8	1900.8	1904.0	1888.9	1878.6
20°	1851.6	1854.0	1854.0	1842.1	1830.2
22.5°	1794.5	1801.6	1804.0	1791.3	1777.0
25°	1727.0	1740.5	1748.5	1735.8	1720.7
27.5°	1645.3	1665.9	1689.7	1680.2	1663.5
30°	1554.0	1584.2	1623.9	1615.9	1604.0
32.5°	1467.5	1497.7	1552.4	1549.2	1542.9
35°	1388.9	1408.0	1472.3	1480.2	1474.6
37.5°	1314.3	1331.8	1392.1	1410.4	1405.6
40°	1235.7	1254.8	1302.4	1335.0	1336.5
42.5°	1158.0	1176.2	1215.1	1261.9	1261.9
45°	1075.4	1093.7	1129.4	1181.0	1187.3
47.5°	994.5	1013.5	1048.4	1100.0	1110.3
50°	915.1	932.6	967.5	1017.5	1033.4
52.5°	832.6	851.6	885.7	931.8	954.8
55°	753.2	765.9	803.2	847.6	872.2
57.5°	670.7	682.6	724.6	762.7	788.1
60°	591.3	606.4	638.9	677.8	707.2
62.5°	515.1	531.0	558.7	592.9	626.2
65°	441.3	453.2	480.2	514.3	543.7
67.5°	369.9	380.2	407.2	431.0	461.9
70°	297.6	311.1	331.0	354.0	373.8
72.5°	239.7	245.2	261.9	278.6	299.2
75°	177.0	186.5	200.0	209.5	221.4
77.5°	127.0	132.5	140.5	148.4	159.5
80°	84.9	87.3	94.4	96.0	104.8
82.5°	51.6	53.2	54.8	55.6	58.7
85°	27.8	27.8	27.8	26.2	26.2
87.5°	15.9	15.9	13.5	11.1	7.9
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)