

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: P556067

Luminaire Tested: **FUSL-12-2-LD4-3STD-40-UNV-93-85-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: P556067  
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-93-85-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

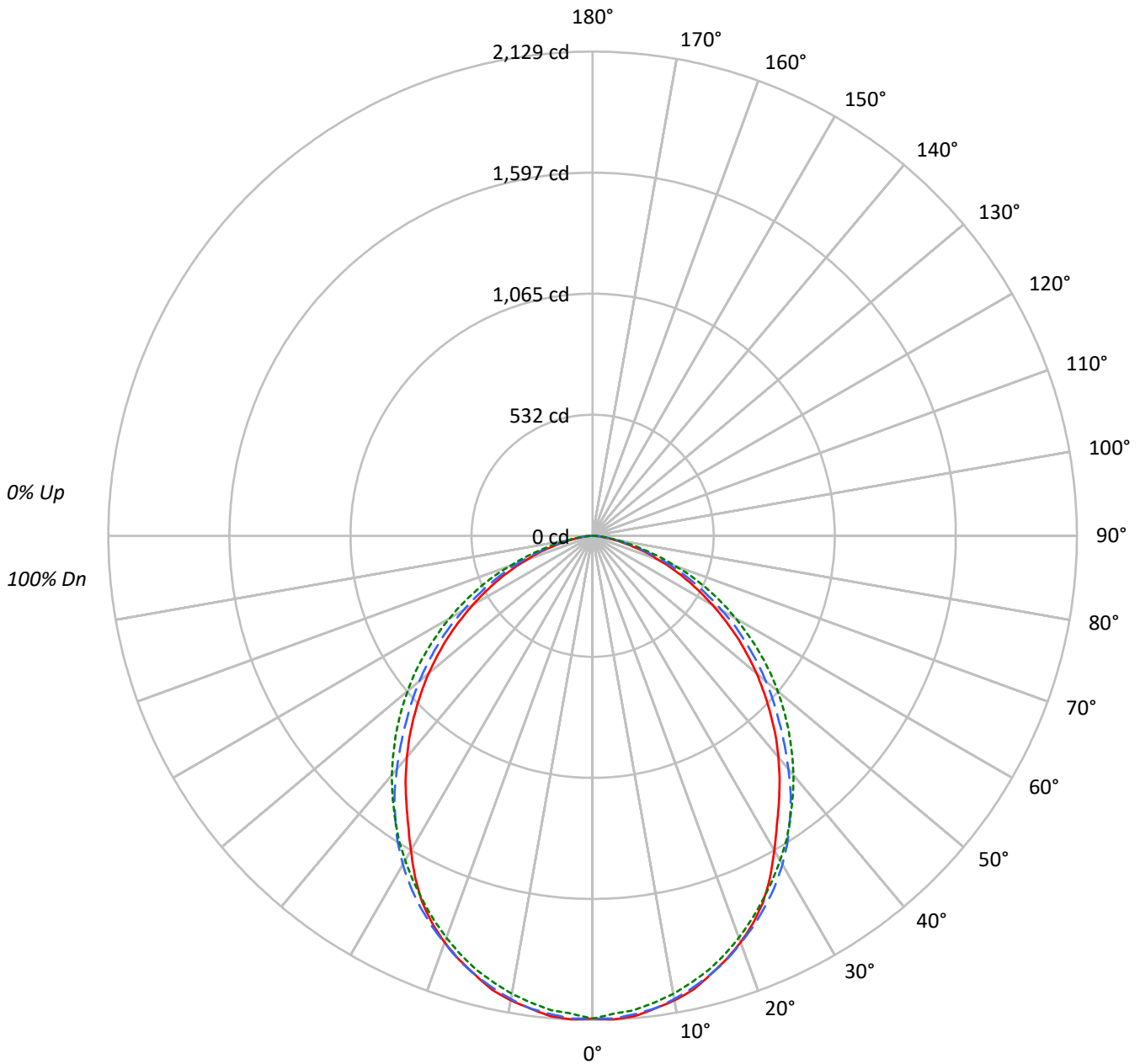
Lumens per Lamp: N/A  
Luminaire Lumens: 4909.0 lumens  
Efficiency: N/A  
Efficacy: 98.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	11426	11426	11426
5°	11457	11408	11311
10°	11335	11304	11174
15°	11134	11134	11007
20°	10898	10912	10772
25°	10539	10670	10500
30°	9925	10370	10243
35°	9378	9940	9956
40°	8922	9403	9650
45°	8411	8834	9286
50°	7874	8324	8891
55°	7263	7745	8410
60°	6540	7068	7822
65°	5775	6283	7115
70°	4814	5352	6044
75°	3782	4273	4733
80°	2706	3009	3338
85°	1760	1760	1661



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.9	4.1
10°-20°	561.5	11.4
20°-30°	820.6	16.7
30°-40°	931.5	19.0
40°-50°	899.2	18.3
50°-60°	741.8	15.1
60°-70°	494.0	10.1
70°-80°	221.0	4.5
80°-90°	39.5	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°	1582.0	32.2
0°-40°	2513.5	51.2
0°-60°	4154.4	84.6
0°-90°	4909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4909.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2123	2123	2123	2123	2123	
5°	2121	2120	2112	2100	2094	201
15°	1998	2003	1998	1989	1975	563
25°	1775	1789	1797	1784	1768	813
35°	1427	1447	1513	1521	1515	894
45°	1105	1124	1161	1214	1220	853
55°	774	787	825	871	896	691
65°	454	466	493	528	559	450
75°	182	192	206	215	228	199
85°	28	28	28	27	27	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2123.0	2123.0	2123.0	2123.0	2123.0
2.5°	2128.7	2129.5	2124.6	2111.6	2103.4
5°	2120.6	2119.8	2111.6	2100.2	2093.7
7.5°	2096.9	2098.5	2096.1	2079.8	2070.8
10°	2074.1	2074.9	2068.4	2055.3	2044.7
12.5°	2044.7	2043.9	2034.9	2028.4	2011.3
15°	1998.2	2003.1	1998.2	1989.3	1975.4
17.5°	1953.4	1953.4	1956.6	1941.1	1930.5
20°	1902.8	1905.2	1905.2	1893.0	1880.8
22.5°	1844.1	1851.4	1853.9	1840.8	1826.1
25°	1774.8	1788.6	1796.8	1783.7	1768.2
27.5°	1690.7	1712.0	1736.4	1726.6	1709.5
30°	1597.0	1627.9	1668.7	1660.6	1648.3
32.5°	1508.1	1539.0	1595.3	1592.1	1585.5
35°	1427.3	1446.9	1512.9	1521.1	1515.4
37.5°	1350.6	1368.6	1430.6	1449.3	1444.4
40°	1269.9	1289.5	1338.4	1371.8	1373.5
42.5°	1190.0	1208.7	1248.7	1296.8	1296.8
45°	1105.1	1123.9	1160.6	1213.6	1220.1
47.5°	1022.0	1041.5	1077.4	1130.4	1141.0
50°	940.4	958.3	994.2	1045.6	1061.9
52.5°	855.6	875.1	910.2	957.5	981.2
55°	774.0	787.1	825.4	871.1	896.3
57.5°	689.2	701.4	744.6	783.8	809.9
60°	607.6	623.1	656.6	696.5	726.7
62.5°	529.3	545.6	574.2	609.3	643.5
65°	453.5	465.7	493.4	528.5	558.7
67.5°	380.1	390.7	418.4	442.9	474.7
70°	305.9	319.7	340.1	363.8	384.1
72.5°	246.3	252.0	269.1	286.3	307.5
75°	181.9	191.7	205.5	215.3	227.6
77.5°	130.5	136.2	144.4	152.5	163.9
80°	87.3	89.7	97.1	98.7	107.7
82.5°	53.0	54.6	56.3	57.1	60.4
85°	28.5	28.5	28.5	26.9	26.9
87.5°	16.3	16.3	13.9	11.4	8.2
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)