

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: P555433

Luminaire Tested: **FUSL-12-2-LD4-3HI-30-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: P555433  
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-LD4-3HI-30-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 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

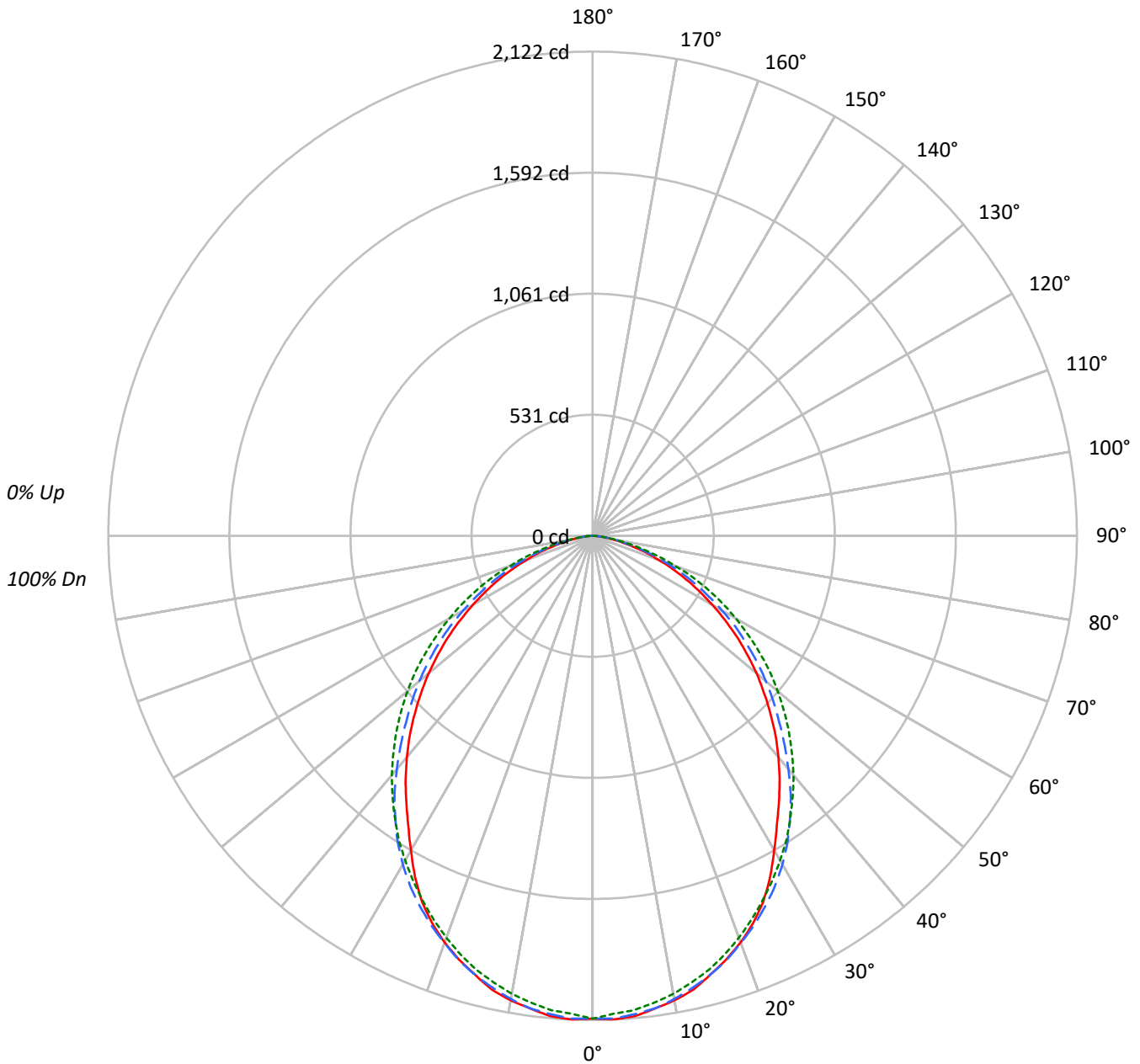
Lumens per Lamp: N/A  
Luminaire Lumens: 4893.0 lumens  
Efficiency: N/A  
Efficacy: 75.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
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°	11389	11389	11389
5°	11419	11371	11274
10°	11298	11267	11138
15°	11097	11097	10971
20°	10863	10876	10737
25°	10505	10635	10466
30°	9892	10337	10211
35°	9347	9908	9924
40°	8893	9372	9618
45°	8384	8805	9257
50°	7848	8297	8863
55°	7239	7720	8383
60°	6519	7044	7796
65°	5756	6263	7092
70°	4798	5334	6025
75°	3770	4261	4716
80°	2696	2997	3326
85°	1760	1760	1655



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.2	4.1
10°-20°	559.7	11.4
20°-30°	817.9	16.7
30°-40°	928.4	19.0
40°-50°	896.3	18.3
50°-60°	739.3	15.1
60°-70°	492.3	10.1
70°-80°	220.3	4.5
80°-90°	39.4	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°	1576.9	32.2
0°-40°	2505.3	51.2
0°-60°	4140.9	84.6
0°-90°	4893.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4893.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2116	2116	2116	2116	2116	
5°	2114	2113	2105	2093	2087	200
15°	1992	1997	1992	1983	1969	561
25°	1769	1783	1791	1778	1762	810
35°	1423	1442	1508	1516	1510	891
45°	1102	1120	1157	1210	1216	850
55°	772	784	823	868	893	689
65°	452	464	492	527	557	448
75°	181	191	205	215	227	198
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°	2116.1	2116.1	2116.1	2116.1	2116.1
2.5°	2121.8	2122.6	2117.7	2104.7	2096.6
5°	2113.7	2112.8	2104.7	2093.3	2086.8
7.5°	2090.1	2091.7	2089.3	2073.0	2064.1
10°	2067.3	2068.1	2061.6	2048.6	2038.1
12.5°	2038.1	2037.2	2028.3	2021.8	2004.7
15°	1991.7	1996.6	1991.7	1982.8	1969.0
17.5°	1947.0	1947.0	1950.3	1934.8	1924.2
20°	1896.6	1899.0	1899.0	1886.8	1874.7
22.5°	1838.1	1845.4	1847.8	1834.8	1820.2
25°	1769.0	1782.8	1790.9	1777.9	1762.5
27.5°	1685.2	1706.4	1730.8	1721.0	1703.9
30°	1591.7	1622.6	1663.3	1655.2	1643.0
32.5°	1503.1	1534.0	1590.1	1586.9	1580.4
35°	1422.7	1442.2	1508.0	1516.1	1510.5
37.5°	1346.2	1364.1	1425.9	1444.6	1439.7
40°	1265.8	1285.3	1334.0	1367.4	1369.0
42.5°	1186.1	1204.8	1244.6	1292.6	1292.6
45°	1101.5	1120.2	1156.8	1209.7	1216.2
47.5°	1018.6	1038.1	1073.9	1126.7	1137.3
50°	937.3	955.2	991.0	1042.2	1058.5
52.5°	852.8	872.3	907.2	954.4	978.0
55°	771.5	784.5	822.7	868.2	893.4
57.5°	686.9	699.1	742.2	781.2	807.3
60°	605.6	621.1	654.4	694.3	724.3
62.5°	527.6	543.9	572.3	607.3	641.4
65°	452.0	464.2	491.8	526.8	556.9
67.5°	378.8	389.4	417.0	441.4	473.1
70°	304.9	318.7	339.0	362.6	382.9
72.5°	245.5	251.2	268.3	285.3	306.5
75°	181.3	191.0	204.9	214.6	226.8
77.5°	130.1	135.8	143.9	152.0	163.4
80°	87.0	89.4	96.7	98.4	107.3
82.5°	52.8	54.5	56.1	56.9	60.2
85°	28.5	28.5	28.5	26.8	26.8
87.5°	16.3	16.3	13.8	11.4	8.1
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)