

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: P555939

Luminaire Tested: **FUSL-12-2-LD4-3STD-30-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: P555939  
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-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 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

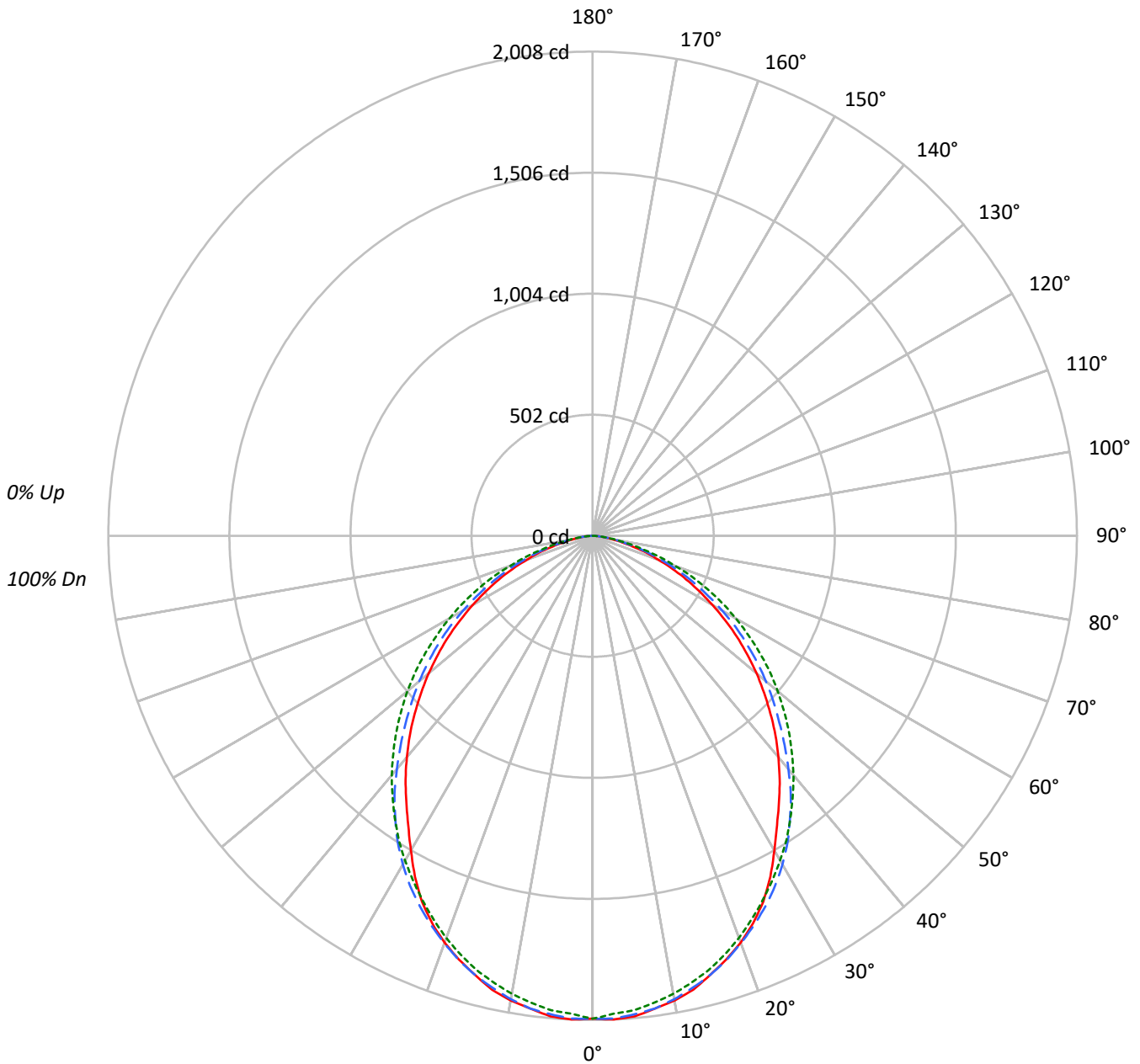
Lumens per Lamp: N/A  
Luminaire Lumens: 4631.0 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	10779	10779	10779
5°	10808	10762	10671
10°	10693	10663	10541
15°	10503	10503	10383
20°	10281	10294	10162
25°	9942	10065	9906
30°	9362	9783	9664
35°	8847	9378	9393
40°	8417	8871	9103
45°	7935	8334	8761
50°	7428	7853	8388
55°	6852	7306	7934
60°	6170	6667	7379
65°	5448	5928	6711
70°	4540	5048	5703
75°	3568	4032	4465
80°	2551	2839	3149
85°	1661	1661	1568



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.6	4.1
10°-20°	529.7	11.4
20°-30°	774.1	16.7
30°-40°	878.7	19.0
40°-50°	848.3	18.3
50°-60°	699.8	15.1
60°-70°	466.0	10.1
70°-80°	208.5	4.5
80°-90°	37.3	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°	1492.4	32.2
0°-40°	2371.2	51.2
0°-60°	3919.2	84.6
0°-90°	4631.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4631.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2003	2003	2003	2003	2003	
5°	2000	2000	1992	1981	1975	189
15°	1885	1890	1885	1877	1864	531
25°	1674	1687	1695	1683	1668	767
35°	1346	1365	1427	1435	1430	844
45°	1043	1060	1095	1145	1151	804
55°	730	742	779	822	846	652
65°	428	439	466	499	527	424
75°	172	181	194	203	215	188
85°	27	27	27	25	25	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2002.8	2002.8	2002.8	2002.8	2002.8
2.5°	2008.2	2008.9	2004.3	1992.0	1984.3
5°	2000.5	1999.7	1992.0	1981.2	1975.1
7.5°	1978.2	1979.7	1977.4	1962.0	1953.5
10°	1956.6	1957.4	1951.2	1938.9	1928.9
12.5°	1928.9	1928.2	1919.7	1913.5	1897.4
15°	1885.1	1889.7	1885.1	1876.6	1863.5
17.5°	1842.7	1842.7	1845.8	1831.2	1821.2
20°	1795.0	1797.4	1797.4	1785.8	1774.3
22.5°	1739.6	1746.6	1748.9	1736.6	1722.7
25°	1674.2	1687.3	1695.0	1682.7	1668.1
27.5°	1595.0	1615.0	1638.1	1628.9	1612.7
30°	1506.5	1535.8	1574.2	1566.5	1555.0
32.5°	1422.6	1451.9	1505.0	1501.9	1495.7
35°	1346.5	1364.9	1427.3	1435.0	1429.6
37.5°	1274.2	1291.1	1349.6	1367.3	1362.6
40°	1198.0	1216.4	1262.6	1294.2	1295.7
42.5°	1122.6	1140.3	1178.0	1223.4	1223.4
45°	1042.6	1060.3	1094.9	1144.9	1151.0
47.5°	964.1	982.5	1016.4	1066.4	1076.4
50°	887.1	904.1	937.9	986.4	1001.8
52.5°	807.1	825.6	858.7	903.3	925.6
55°	730.2	742.5	778.6	821.7	845.6
57.5°	650.2	661.7	702.5	739.4	764.0
60°	573.2	587.8	619.4	657.1	685.5
62.5°	499.4	514.7	541.7	574.8	607.1
65°	427.8	439.3	465.5	498.6	527.0
67.5°	358.5	368.5	394.7	417.8	447.8
70°	288.5	301.6	320.8	343.2	362.4
72.5°	232.4	237.7	253.9	270.1	290.1
75°	171.6	180.8	193.9	203.1	214.7
77.5°	123.1	128.5	136.2	143.9	154.7
80°	82.3	84.6	91.6	93.1	101.6
82.5°	50.0	51.6	53.1	53.9	56.9
85°	26.9	26.9	26.9	25.4	25.4
87.5°	15.4	15.4	13.1	10.8	7.7
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)