

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: P556123

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-82-94-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: P556123  
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-50-UNV-82-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

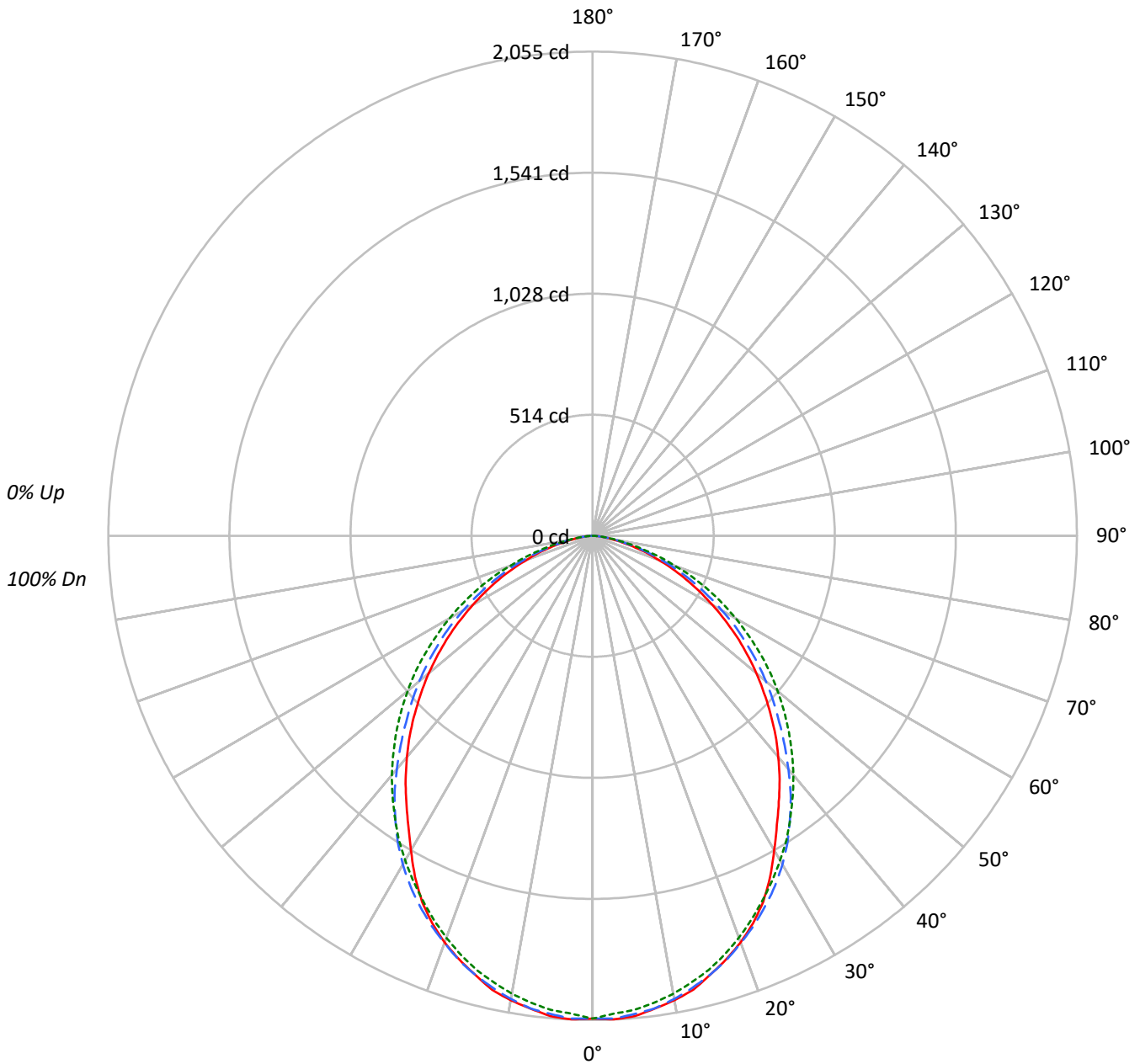
Lumens per Lamp: N/A  
Luminaire Lumens: 4738.0 lumens  
Efficiency: N/A  
Efficacy: 94.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	11028	11028	11028
5°	11057	11010	10917
10°	10940	10910	10785
15°	10746	10746	10623
20°	10518	10532	10397
25°	10172	10298	10134
30°	9578	10009	9887
35°	9051	9594	9610
40°	8611	9076	9313
45°	8118	8526	8963
50°	7599	8035	8581
55°	7009	7475	8117
60°	6313	6821	7550
65°	5574	6066	6867
70°	4645	5166	5835
75°	3649	4126	4566
80°	2610	2904	3220
85°	1704	1704	1606



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.9	4.1
10°-20°	542.0	11.4
20°-30°	792.0	16.7
30°-40°	899.0	19.0
40°-50°	867.9	18.3
50°-60°	715.9	15.1
60°-70°	476.8	10.1
70°-80°	213.3	4.5
80°-90°	38.2	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°	1526.9	32.2
0°-40°	2425.9	51.2
0°-60°	4009.7	84.6
0°-90°	4738.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4738.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	2047	2046	2038	2027	2021	194
15°	1929	1933	1929	1920	1907	544
25°	1713	1726	1734	1722	1707	784
35°	1378	1396	1460	1468	1463	863
45°	1067	1085	1120	1171	1178	823
55°	747	760	797	841	865	667
65°	438	450	476	510	539	434
75°	176	185	198	208	220	192
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°	2049.1	2049.1	2049.1	2049.1	2049.1
2.5°	2054.6	2055.4	2050.6	2038.0	2030.2
5°	2046.7	2045.9	2038.0	2027.0	2020.7
7.5°	2023.9	2025.4	2023.1	2007.3	1998.7
10°	2001.8	2002.6	1996.3	1983.7	1973.5
12.5°	1973.5	1972.7	1964.0	1957.7	1941.2
15°	1928.6	1933.3	1928.6	1920.0	1906.6
17.5°	1885.3	1885.3	1888.5	1873.5	1863.3
20°	1836.5	1838.9	1838.9	1827.1	1815.3
22.5°	1779.8	1786.9	1789.3	1776.7	1762.5
25°	1712.9	1726.3	1734.2	1721.6	1706.6
27.5°	1631.9	1652.3	1675.9	1666.5	1650.0
30°	1541.3	1571.2	1610.6	1602.7	1590.9
32.5°	1455.5	1485.4	1539.7	1536.6	1530.3
35°	1377.6	1396.5	1460.2	1468.1	1462.6
37.5°	1303.6	1320.9	1380.7	1398.8	1394.1
40°	1225.7	1244.6	1291.8	1324.1	1325.6
42.5°	1148.5	1166.6	1205.2	1251.6	1251.6
45°	1066.6	1084.8	1120.2	1171.3	1177.6
47.5°	986.4	1005.2	1039.9	1091.0	1101.3
50°	907.6	925.0	959.6	1009.2	1024.9
52.5°	825.8	844.7	878.5	924.2	947.0
55°	747.0	759.6	796.6	840.7	865.1
57.5°	665.2	677.0	718.7	756.5	781.7
60°	586.5	601.4	633.7	672.3	701.4
62.5°	510.9	526.6	554.2	588.0	621.1
65°	437.7	449.5	476.3	510.1	539.2
67.5°	366.8	377.1	403.8	427.4	458.1
70°	295.2	308.6	328.3	351.1	370.8
72.5°	237.7	243.2	259.8	276.3	296.8
75°	175.5	185.0	198.4	207.8	219.6
77.5°	126.0	131.5	139.3	147.2	158.2
80°	84.2	86.6	93.7	95.3	103.9
82.5°	51.2	52.7	54.3	55.1	58.3
85°	27.6	27.6	27.6	26.0	26.0
87.5°	15.7	15.7	13.4	11.0	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)