

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: P555477

Luminaire Tested: **FUSL-12-2-LD4-3HI-35-UNV-82-86-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: P555477  
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-35-UNV-82-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

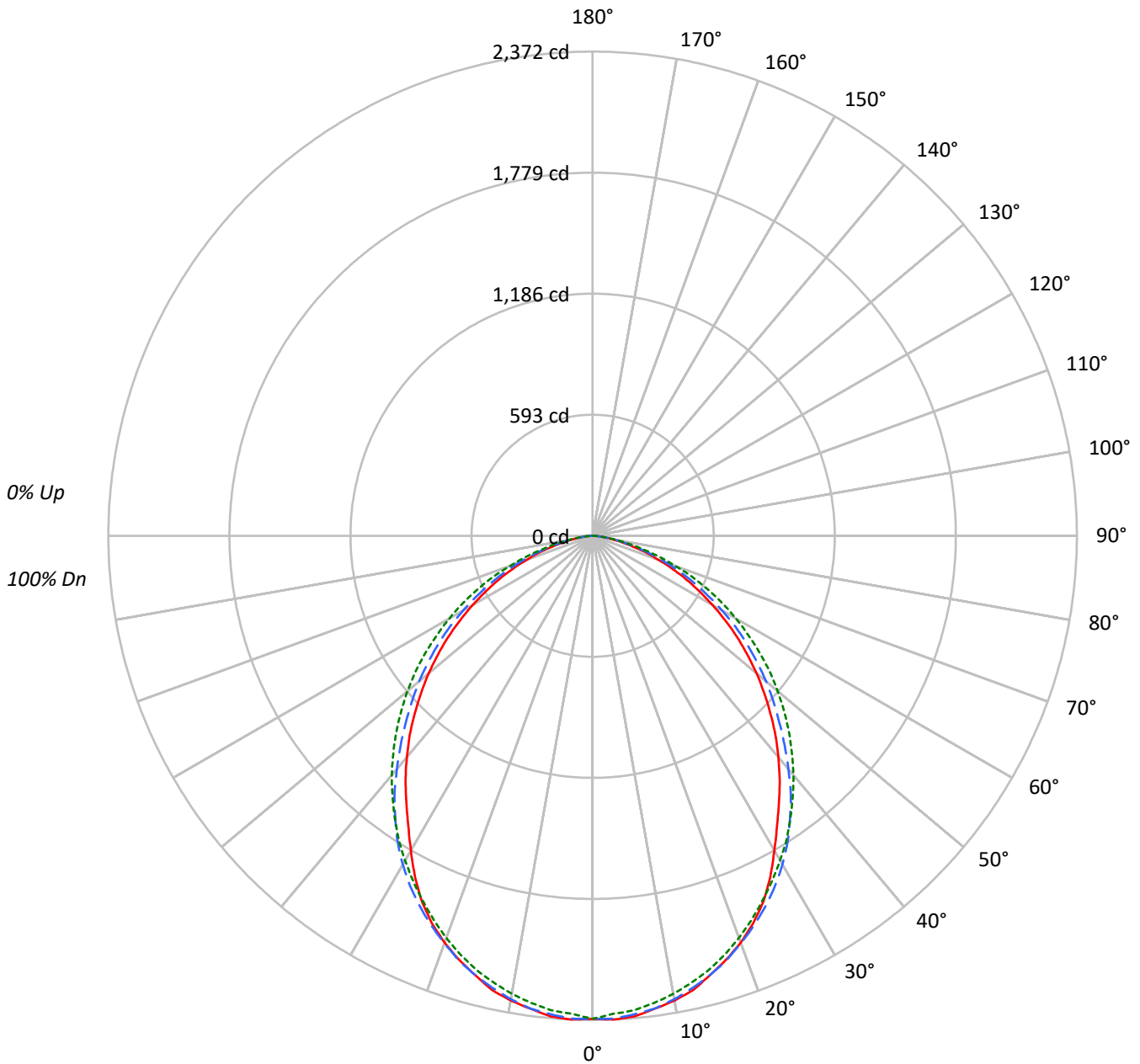
Lumens per Lamp: N/A  
Luminaire Lumens: 5471.0 lumens  
Efficiency: N/A  
Efficacy: 84.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (Ain): 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°	12734	12734	12734
5°	12768	12714	12606
10°	12632	12598	12454
15°	12408	12408	12266
20°	12145	12161	12005
25°	11745	11892	11703
30°	11061	11558	11416
35°	10451	11079	11096
40°	9943	10479	10754
45°	9375	9845	10350
50°	8776	9277	9909
55°	8094	8632	9374
60°	7289	7876	8718
65°	6436	7003	7929
70°	5364	5964	6736
75°	4215	4764	5273
80°	3016	3353	3719
85°	1964	1964	1853



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	222.8	4.1
10°-20°	625.8	11.4
20°-30°	914.5	16.7
30°-40°	1038.1	19.0
40°-50°	1002.1	18.3
50°-60°	826.7	15.1
60°-70°	550.5	10.1
70°-80°	246.4	4.5
80°-90°	44.1	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°	1763.1	32.2
0°-40°	2801.3	51.2
0°-60°	4630.1	84.6
0°-90°	5471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5471.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2366	2366	2366	2366	2366	
5°	2363	2362	2353	2341	2333	224
15°	2227	2232	2227	2217	2202	628
25°	1978	1993	2002	1988	1971	906
35°	1591	1612	1686	1695	1689	997
45°	1232	1253	1294	1353	1360	950
55°	863	877	920	971	999	770
65°	505	519	550	589	623	501
75°	203	214	229	240	254	222
85°	32	32	32	30	30	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2366.1	2366.1	2366.1	2366.1	2366.1
2.5°	2372.4	2373.3	2367.9	2353.3	2344.3
5°	2363.3	2362.4	2353.3	2340.6	2333.3
7.5°	2337.0	2338.8	2336.1	2317.9	2307.9
10°	2311.5	2312.4	2305.2	2290.6	2278.8
12.5°	2278.8	2277.9	2267.9	2260.6	2241.5
15°	2227.0	2232.4	2227.0	2217.0	2201.5
17.5°	2177.0	2177.0	2180.6	2163.4	2151.5
20°	2120.6	2123.4	2123.4	2109.7	2096.1
22.5°	2055.2	2063.4	2066.1	2051.6	2035.2
25°	1977.9	1993.4	2002.5	1987.9	1970.7
27.5°	1884.3	1907.9	1935.2	1924.3	1905.2
30°	1779.8	1814.3	1859.8	1850.7	1837.0
32.5°	1680.7	1715.2	1778.0	1774.3	1767.1
35°	1590.7	1612.5	1686.2	1695.2	1688.9
37.5°	1505.3	1525.3	1594.3	1615.3	1609.8
40°	1415.3	1437.1	1491.6	1528.9	1530.7
42.5°	1326.2	1347.1	1391.6	1445.3	1445.3
45°	1231.7	1252.6	1293.5	1352.6	1359.8
47.5°	1138.9	1160.8	1200.8	1259.8	1271.7
50°	1048.1	1068.0	1108.0	1165.3	1183.5
52.5°	953.5	975.3	1014.4	1067.1	1093.5
55°	862.6	877.2	919.9	970.8	999.0
57.5°	768.1	781.7	829.9	873.5	902.6
60°	677.2	694.5	731.7	776.3	809.9
62.5°	589.9	608.1	639.9	679.0	717.2
65°	505.4	519.0	549.9	589.0	622.6
67.5°	423.6	435.4	466.3	493.6	529.0
70°	340.9	356.3	379.0	405.4	428.1
72.5°	274.5	280.9	300.0	319.1	342.7
75°	202.7	213.6	229.1	240.0	253.6
77.5°	145.4	151.8	160.9	170.0	182.7
80°	97.3	100.0	108.2	110.0	120.0
82.5°	59.1	60.9	62.7	63.6	67.3
85°	31.8	31.8	31.8	30.0	30.0
87.5°	18.2	18.2	15.5	12.7	9.1
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)