

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: P555621

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-UNV-93-86-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: P555621  
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-50-UNV-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

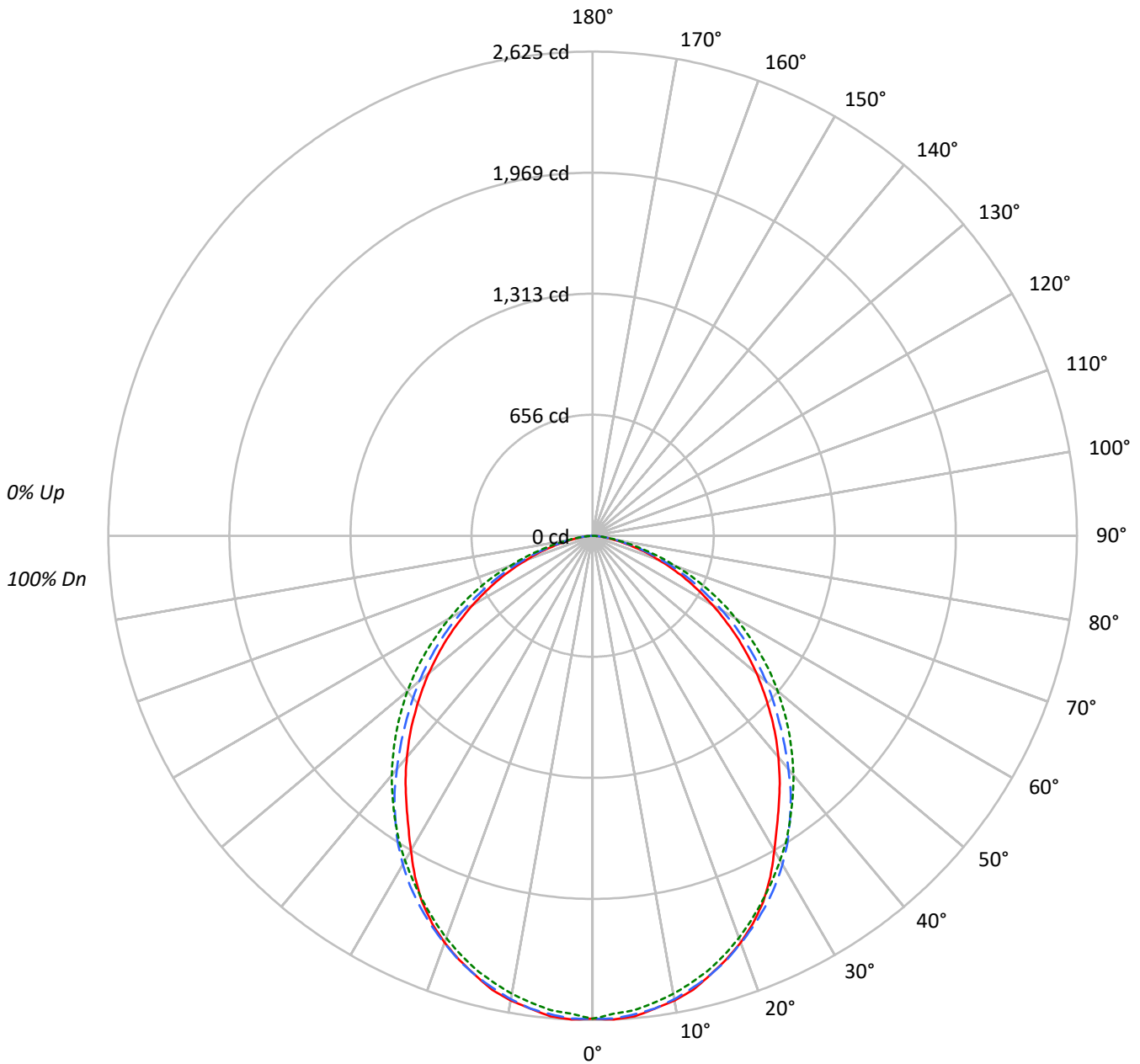
Lumens per Lamp: N/A  
Luminaire Lumens: 6054.0 lumens  
Efficiency: N/A  
Efficacy: 93.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 64.8  
Input Voltage (V): NR  
Input Current (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°	14091	14091	14091
5°	14129	14069	13949
10°	13978	13940	13781
15°	13731	13731	13573
20°	13440	13457	13285
25°	12997	13159	12950
30°	12239	12789	12633
35°	11565	12259	12278
40°	11003	11597	11900
45°	10373	10894	11453
50°	9710	10266	10965
55°	8956	9551	10372
60°	8065	8716	9647
65°	7121	7749	8774
70°	5936	6600	7456
75°	4664	5271	5835
80°	3335	3710	4116
85°	2174	2174	2050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	246.5	4.1
10°-20°	692.5	11.4
20°-30°	1012.0	16.7
30°-40°	1148.7	19.0
40°-50°	1108.9	18.3
50°-60°	914.8	15.1
60°-70°	609.2	10.1
70°-80°	272.6	4.5
80°-90°	48.8	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°	1951.0	32.2
0°-40°	3099.8	51.2
0°-60°	5123.5	84.6
0°-90°	6054.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6054.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2618	2618	2618	2618	2618	
5°	2615	2614	2604	2590	2582	248
15°	2464	2470	2464	2453	2436	695
25°	2189	2206	2216	2200	2181	1002
35°	1760	1784	1866	1876	1869	1103
45°	1363	1386	1431	1497	1505	1052
55°	954	971	1018	1074	1105	852
65°	559	574	608	652	689	555
75°	224	236	254	266	281	245
85°	35	35	35	33	33	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2618.2	2618.2	2618.2	2618.2	2618.2
2.5°	2625.2	2626.2	2620.2	2604.1	2594.1
5°	2615.2	2614.2	2604.1	2590.0	2582.0
7.5°	2586.0	2588.0	2585.0	2564.9	2553.8
10°	2557.8	2558.9	2550.8	2534.7	2521.6
12.5°	2521.6	2520.6	2509.6	2501.5	2480.4
15°	2464.3	2470.3	2464.3	2453.2	2436.1
17.5°	2409.0	2409.0	2413.0	2393.9	2380.8
20°	2346.6	2349.6	2349.6	2334.6	2319.5
22.5°	2274.2	2283.3	2286.3	2270.2	2252.1
25°	2188.7	2205.8	2215.9	2199.8	2180.7
27.5°	2085.1	2111.3	2141.4	2129.4	2108.2
30°	1969.4	2007.7	2057.9	2047.9	2032.8
32.5°	1859.8	1898.0	1967.4	1963.4	1955.4
35°	1760.2	1784.4	1865.8	1875.9	1868.8
37.5°	1665.7	1687.8	1764.2	1787.4	1781.3
40°	1566.1	1590.2	1650.6	1691.8	1693.8
42.5°	1467.5	1490.7	1539.9	1599.3	1599.3
45°	1362.9	1386.0	1431.3	1496.7	1504.7
47.5°	1260.3	1284.5	1328.7	1394.1	1407.2
50°	1159.7	1181.9	1226.1	1289.5	1309.6
52.5°	1055.1	1079.3	1122.5	1180.9	1210.0
55°	954.5	970.6	1017.9	1074.2	1105.4
57.5°	849.9	865.0	918.3	966.6	998.8
60°	749.3	768.5	809.7	859.0	896.2
62.5°	652.8	672.9	708.1	751.4	793.6
65°	559.2	574.3	608.5	651.8	689.0
67.5°	468.7	481.8	516.0	546.2	585.4
70°	377.2	394.3	419.4	448.6	473.8
72.5°	303.8	310.8	331.9	353.0	379.2
75°	224.3	236.4	253.5	265.5	280.6
77.5°	160.9	168.0	178.0	188.1	202.2
80°	107.6	110.6	119.7	121.7	132.8
82.5°	65.4	67.4	69.4	70.4	74.4
85°	35.2	35.2	35.2	33.2	33.2
87.5°	20.1	20.1	17.1	14.1	10.1
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)