

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: P555593

Luminaire Tested: **FUSL-12-2-LD4-3HI-50-UNV-81-88-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: P555593  
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-81-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

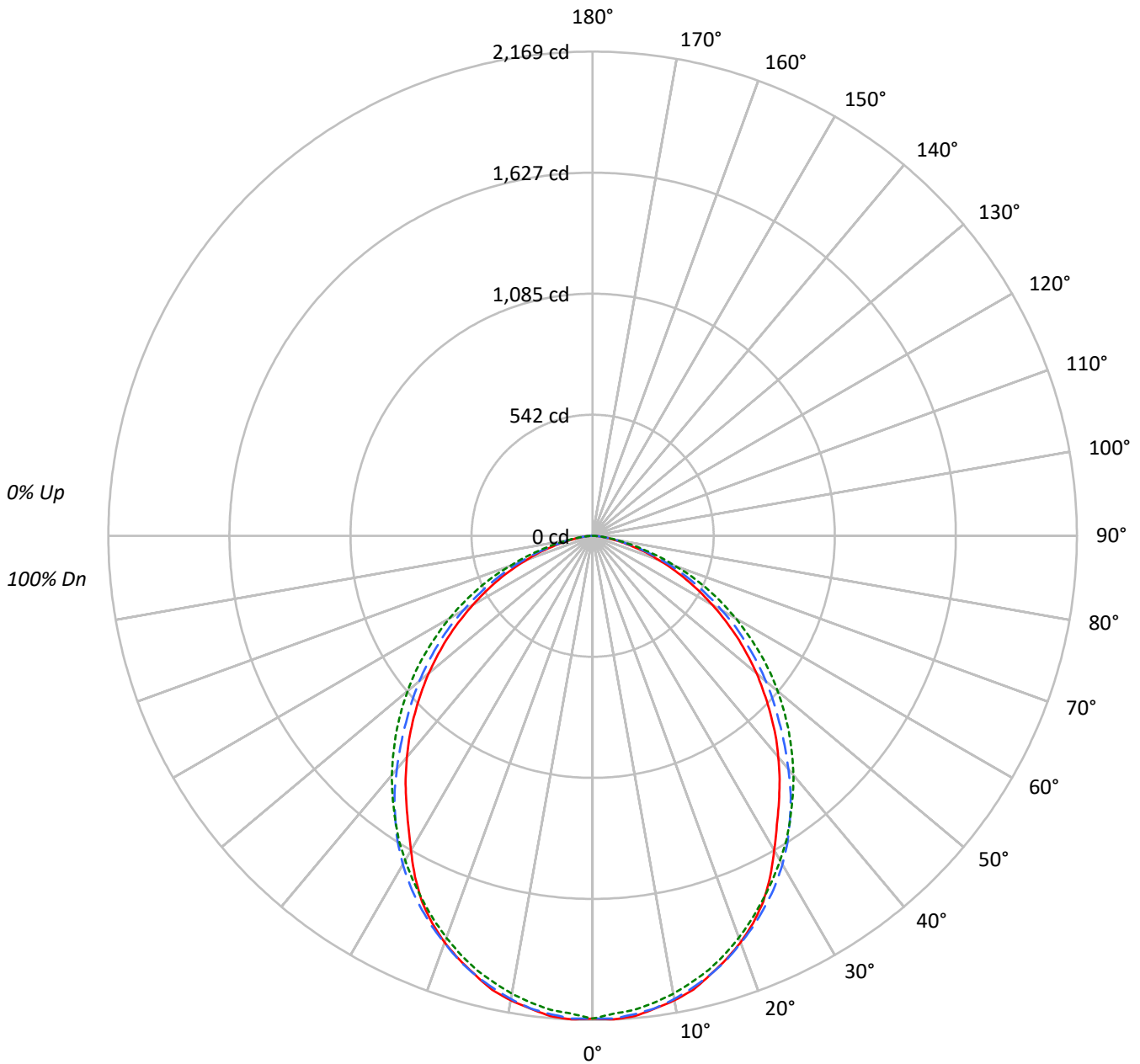
Lumens per Lamp: N/A  
Luminaire Lumens: 5001.0 lumens  
Efficiency: N/A  
Efficacy: 77.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	11640	11640	11640
5°	11671	11622	11523
10°	11548	11515	11384
15°	11343	11343	11213
20°	11102	11117	10974
25°	10737	10870	10697
30°	10110	10565	10435
35°	9554	10127	10143
40°	9089	9579	9830
45°	8569	9000	9461
50°	8021	8481	9058
55°	7399	7890	8568
60°	6663	7200	7969
65°	5883	6402	7249
70°	4903	5452	6157
75°	3853	4354	4820
80°	2755	3065	3400
85°	1797	1797	1692



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.6	4.1
10°-20°	572.1	11.4
20°-30°	836.0	16.7
30°-40°	948.9	19.0
40°-50°	916.0	18.3
50°-60°	755.7	15.1
60°-70°	503.2	10.1
70°-80°	225.2	4.5
80°-90°	40.3	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°	1611.7	32.2
0°-40°	2560.6	51.2
0°-60°	4232.3	84.6
0°-90°	5001.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5001.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2163	2163	2163	2163	2163	
5°	2160	2160	2151	2140	2133	204
15°	2036	2041	2036	2026	2012	574
25°	1808	1822	1830	1817	1801	828
35°	1454	1474	1541	1550	1544	911
45°	1126	1145	1182	1236	1243	869
55°	788	802	841	887	913	704
65°	462	474	503	538	569	458
75°	185	195	209	219	232	203
85°	29	29	29	27	27	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2162.8	2162.8	2162.8	2162.8	2162.8
2.5°	2168.6	2169.5	2164.5	2151.2	2142.9
5°	2160.3	2159.5	2151.2	2139.5	2132.9
7.5°	2136.2	2137.9	2135.4	2118.8	2109.6
10°	2113.0	2113.8	2107.1	2093.8	2083.0
12.5°	2083.0	2082.2	2073.1	2066.4	2049.0
15°	2035.7	2040.7	2035.7	2026.5	2012.4
17.5°	1990.0	1990.0	1993.3	1977.5	1966.7
20°	1938.5	1941.0	1941.0	1928.5	1916.0
22.5°	1878.6	1886.1	1888.6	1875.3	1860.4
25°	1808.0	1822.1	1830.4	1817.2	1801.4
27.5°	1722.4	1744.0	1769.0	1759.0	1741.5
30°	1626.9	1658.5	1700.0	1691.7	1679.2
32.5°	1536.3	1567.9	1625.2	1621.9	1615.2
35°	1454.1	1474.0	1541.3	1549.6	1543.8
37.5°	1376.0	1394.2	1457.4	1476.5	1471.5
40°	1293.7	1313.6	1363.5	1397.6	1399.2
42.5°	1212.3	1231.4	1272.1	1321.1	1321.1
45°	1125.9	1145.0	1182.4	1236.4	1243.0
47.5°	1041.1	1061.0	1097.6	1151.6	1162.4
50°	958.0	976.3	1012.9	1065.2	1081.8
52.5°	871.6	891.5	927.3	975.5	999.6
55°	788.5	801.8	840.9	887.4	913.1
57.5°	702.1	714.6	758.6	798.5	825.1
60°	619.0	634.8	668.9	709.6	740.3
62.5°	539.2	555.9	584.9	620.7	655.6
65°	462.0	474.4	502.7	538.4	569.2
67.5°	387.2	398.0	426.2	451.2	483.6
70°	311.6	325.7	346.5	370.6	391.3
72.5°	250.9	256.7	274.2	291.6	313.2
75°	185.3	195.3	209.4	219.4	231.8
77.5°	132.9	138.8	147.1	155.4	167.0
80°	88.9	91.4	98.9	100.5	109.7
82.5°	54.0	55.7	57.3	58.2	61.5
85°	29.1	29.1	29.1	27.4	27.4
87.5°	16.6	16.6	14.1	11.6	8.3
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)