

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: P556129

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-93-84-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: P556129  
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-93-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

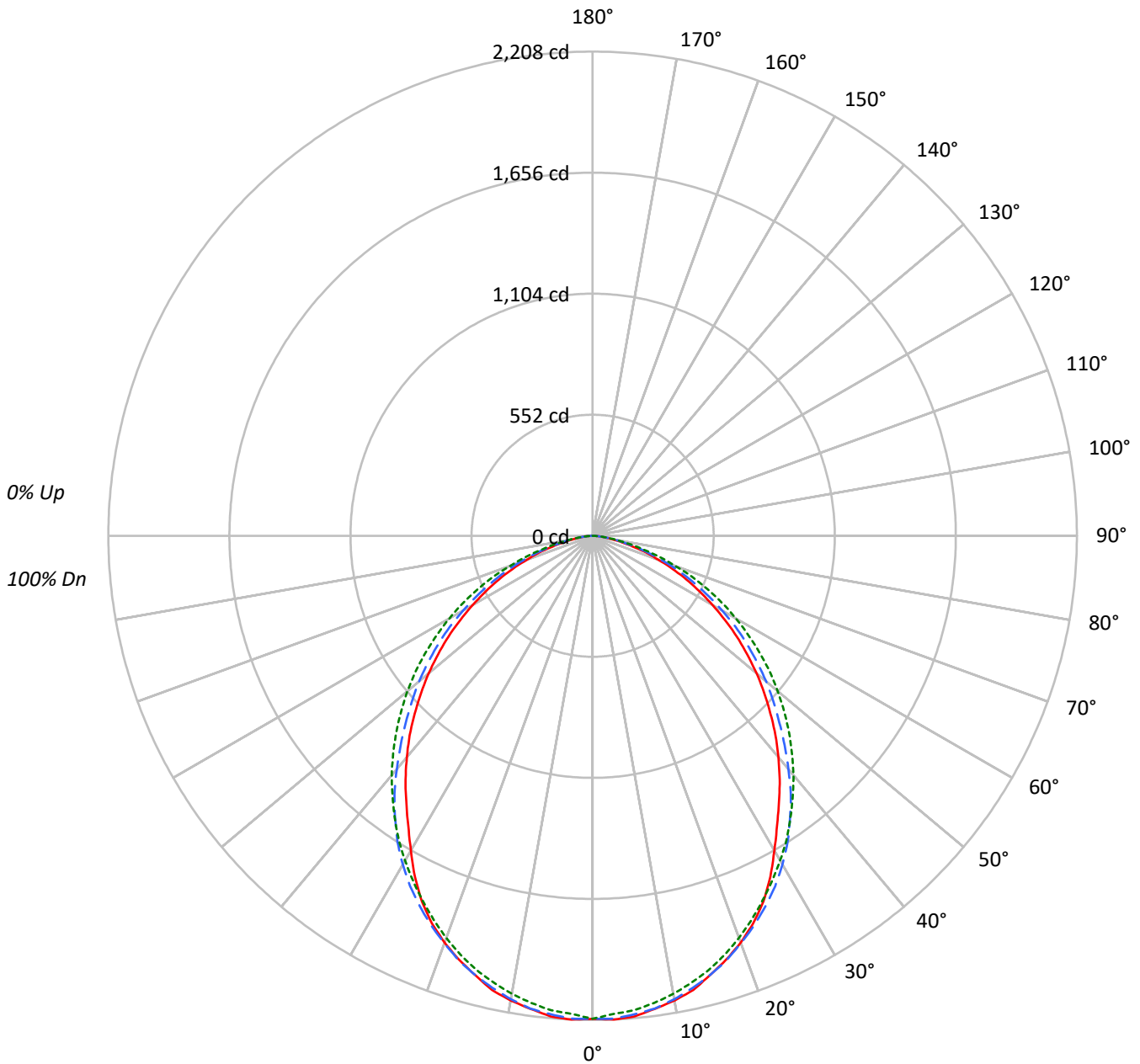
Lumens per Lamp: N/A  
Luminaire Lumens: 5093.0 lumens  
Efficiency: N/A  
Efficacy: 101.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	11854	11854	11854
5°	11886	11835	11735
10°	11760	11727	11593
15°	11551	11551	11419
20°	11306	11321	11176
25°	10934	11070	10894
30°	10296	10759	10628
35°	9729	10313	10330
40°	9256	9756	10012
45°	8727	9165	9635
50°	8169	8637	9224
55°	7535	8035	8725
60°	6786	7332	8115
65°	5992	6519	7381
70°	4993	5553	6271
75°	3924	4433	4910
80°	2805	3121	3462
85°	1828	1828	1723



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.4	4.1
10°-20°	582.6	11.4
20°-30°	851.4	16.7
30°-40°	966.4	19.0
40°-50°	932.9	18.3
50°-60°	769.6	15.1
60°-70°	512.5	10.1
70°-80°	229.3	4.5
80°-90°	41.0	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°	1641.3	32.2
0°-40°	2607.7	51.2
0°-60°	4310.2	84.6
0°-90°	5093.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5093.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2203	2203	2203	2203	2203	
5°	2200	2199	2191	2179	2172	208
15°	2073	2078	2073	2064	2049	584
25°	1841	1856	1864	1851	1834	843
35°	1481	1501	1570	1578	1572	928
45°	1147	1166	1204	1259	1266	885
55°	803	817	856	904	930	717
65°	470	483	512	548	580	467
75°	189	199	213	223	236	206
85°	30	30	30	28	28	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2202.6	2202.6	2202.6	2202.6	2202.6
2.5°	2208.5	2209.4	2204.3	2190.7	2182.3
5°	2200.1	2199.2	2190.7	2178.9	2172.1
7.5°	2175.5	2177.2	2174.7	2157.7	2148.4
10°	2151.8	2152.7	2145.9	2132.4	2121.4
12.5°	2121.4	2120.5	2111.2	2104.4	2086.7
15°	2073.1	2078.2	2073.1	2063.8	2049.4
17.5°	2026.6	2026.6	2030.0	2013.9	2002.9
20°	1974.1	1976.7	1976.7	1964.0	1951.3
22.5°	1913.2	1920.8	1923.4	1909.8	1894.6
25°	1841.3	1855.7	1864.1	1850.6	1834.5
27.5°	1754.1	1776.1	1801.5	1791.4	1773.6
30°	1656.8	1689.0	1731.3	1722.8	1710.1
32.5°	1564.6	1596.7	1655.1	1651.7	1645.0
35°	1480.8	1501.1	1569.7	1578.1	1572.2
37.5°	1401.3	1419.9	1484.2	1503.7	1498.6
40°	1317.5	1337.8	1388.6	1423.3	1425.0
42.5°	1234.6	1254.0	1295.5	1345.4	1345.4
45°	1146.6	1166.0	1204.1	1259.1	1265.9
47.5°	1060.3	1080.6	1117.8	1172.8	1183.8
50°	975.6	994.3	1031.5	1084.8	1101.7
52.5°	887.6	907.9	944.3	993.4	1017.9
55°	803.0	816.6	856.3	903.7	929.9
57.5°	715.0	727.7	772.6	813.2	840.3
60°	630.4	646.5	681.2	722.6	753.9
62.5°	549.2	566.1	595.7	632.1	667.6
65°	470.5	483.2	511.9	548.3	579.6
67.5°	394.3	405.3	434.1	459.5	492.5
70°	317.3	331.7	352.9	377.4	398.5
72.5°	255.5	261.5	279.2	297.0	319.0
75°	188.7	198.9	213.2	223.4	236.1
77.5°	135.4	141.3	149.8	158.2	170.1
80°	90.5	93.1	100.7	102.4	111.7
82.5°	55.0	56.7	58.4	59.2	62.6
85°	29.6	29.6	29.6	27.9	27.9
87.5°	16.9	16.9	14.4	11.8	8.5
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)