

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: P556000

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-93-84-EDD-90**

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: P556000  
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-35-UNV-93-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

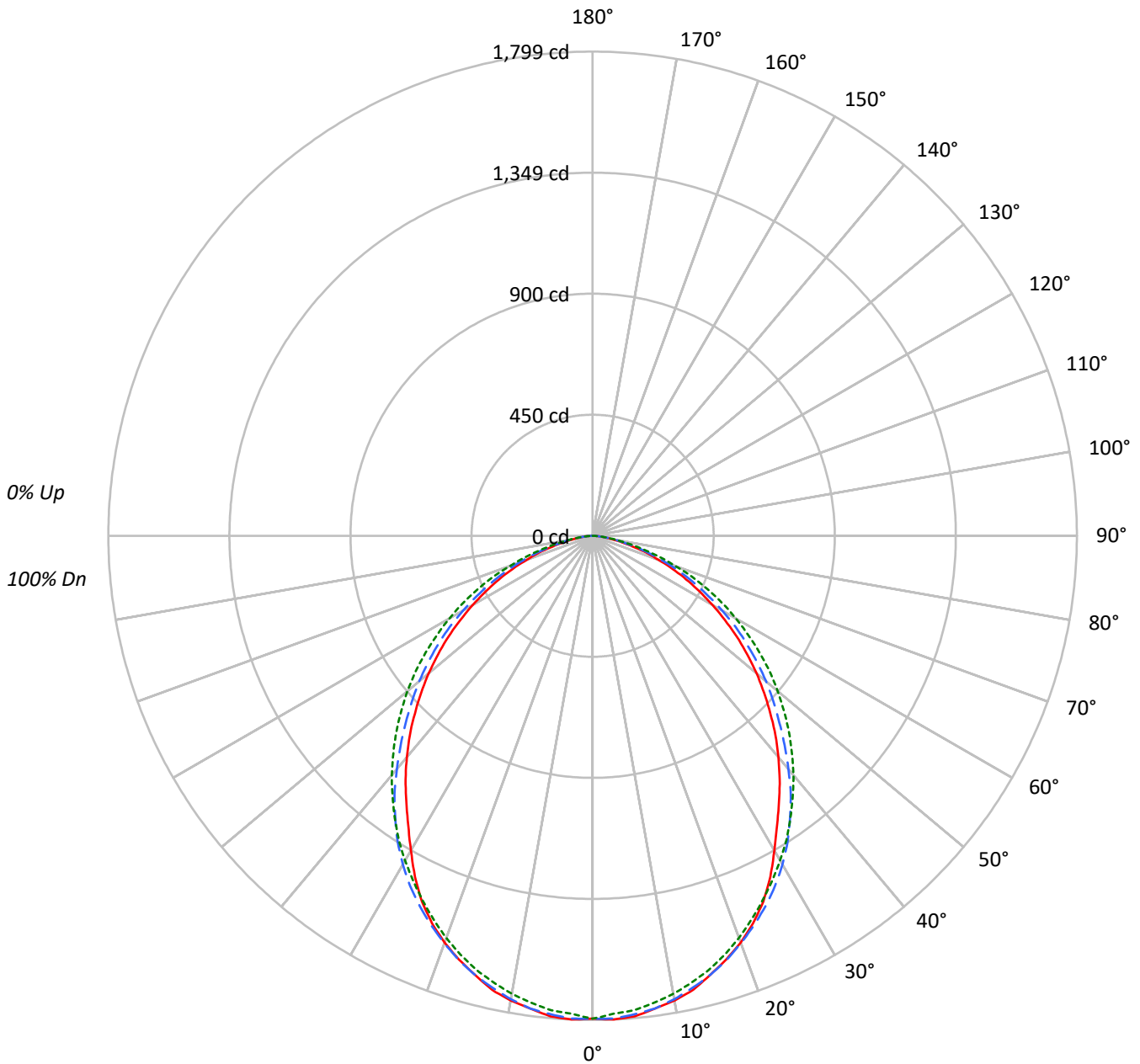
Lumens per Lamp: N/A  
Luminaire Lumens: 4149.0 lumens  
Efficiency: N/A  
Efficacy: 83.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	9657	9657	9657
5°	9683	9642	9560
10°	9580	9554	9445
15°	9410	9410	9303
20°	9211	9223	9104
25°	8907	9018	8875
30°	8388	8765	8657
35°	7926	8401	8415
40°	7541	7947	8155
45°	7109	7466	7849
50°	6655	7036	7515
55°	6138	6546	7109
60°	5528	5973	6611
65°	4881	5310	6013
70°	4068	4524	5109
75°	3196	3612	3999
80°	2287	2541	2820
85°	1488	1488	1402



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.9	4.1
10°-20°	474.6	11.4
20°-30°	693.6	16.7
30°-40°	787.3	19.0
40°-50°	760.0	18.3
50°-60°	626.9	15.1
60°-70°	417.5	10.1
70°-80°	186.8	4.5
80°-90°	33.4	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°	1337.1	32.2
0°-40°	2124.4	51.2
0°-60°	3511.3	84.6
0°-90°	4149.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4149.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1794	1794	1794	1794	1794	
5°	1792	1792	1785	1775	1770	170
15°	1689	1693	1689	1681	1670	476
25°	1500	1512	1519	1508	1494	687
35°	1206	1223	1279	1286	1281	756
45°	934	950	981	1026	1031	721
55°	654	665	698	736	758	584
65°	383	394	417	447	472	380
75°	154	162	174	182	192	168
85°	24	24	24	23	23	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1794.3	1794.3	1794.3	1794.3	1794.3
2.5°	1799.2	1799.9	1795.7	1784.7	1777.8
5°	1792.3	1791.6	1784.7	1775.0	1769.5
7.5°	1772.3	1773.7	1771.6	1757.8	1750.2
10°	1753.0	1753.7	1748.2	1737.1	1728.2
12.5°	1728.2	1727.5	1719.9	1714.4	1699.9
15°	1688.9	1693.0	1688.9	1681.3	1669.6
17.5°	1651.0	1651.0	1653.7	1640.6	1631.7
20°	1608.2	1610.3	1610.3	1599.9	1589.6
22.5°	1558.6	1564.8	1566.9	1555.8	1543.4
25°	1500.0	1511.7	1518.6	1507.6	1494.5
27.5°	1429.0	1446.9	1467.6	1459.3	1444.8
30°	1349.7	1375.9	1410.4	1403.5	1393.1
32.5°	1274.6	1300.8	1348.3	1345.6	1340.1
35°	1206.3	1222.9	1278.7	1285.6	1280.8
37.5°	1141.5	1156.7	1209.1	1224.9	1220.8
40°	1073.3	1089.8	1131.2	1159.5	1160.8
42.5°	1005.7	1021.6	1055.4	1096.0	1096.0
45°	934.0	949.9	980.9	1025.7	1031.2
47.5°	863.7	880.3	910.6	955.4	964.4
50°	794.8	810.0	840.3	883.7	897.5
52.5°	723.1	739.7	769.3	809.3	829.3
55°	654.2	665.2	697.6	736.2	757.6
57.5°	582.5	592.8	629.4	662.4	684.5
60°	513.6	526.7	554.9	588.7	614.2
62.5°	447.4	461.2	485.3	514.9	543.9
65°	383.3	393.6	417.0	446.7	472.2
67.5°	321.2	330.2	353.6	374.3	401.2
70°	258.5	270.2	287.5	307.4	324.7
72.5°	208.2	213.0	227.5	242.0	259.9
75°	153.7	162.0	173.7	182.0	192.3
77.5°	110.3	115.1	122.0	128.9	138.6
80°	73.8	75.8	82.0	83.4	91.0
82.5°	44.8	46.2	47.6	48.3	51.0
85°	24.1	24.1	24.1	22.7	22.7
87.5°	13.8	13.8	11.7	9.7	6.9
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)