

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: P556082

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-80-85-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: P556082  
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-80-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

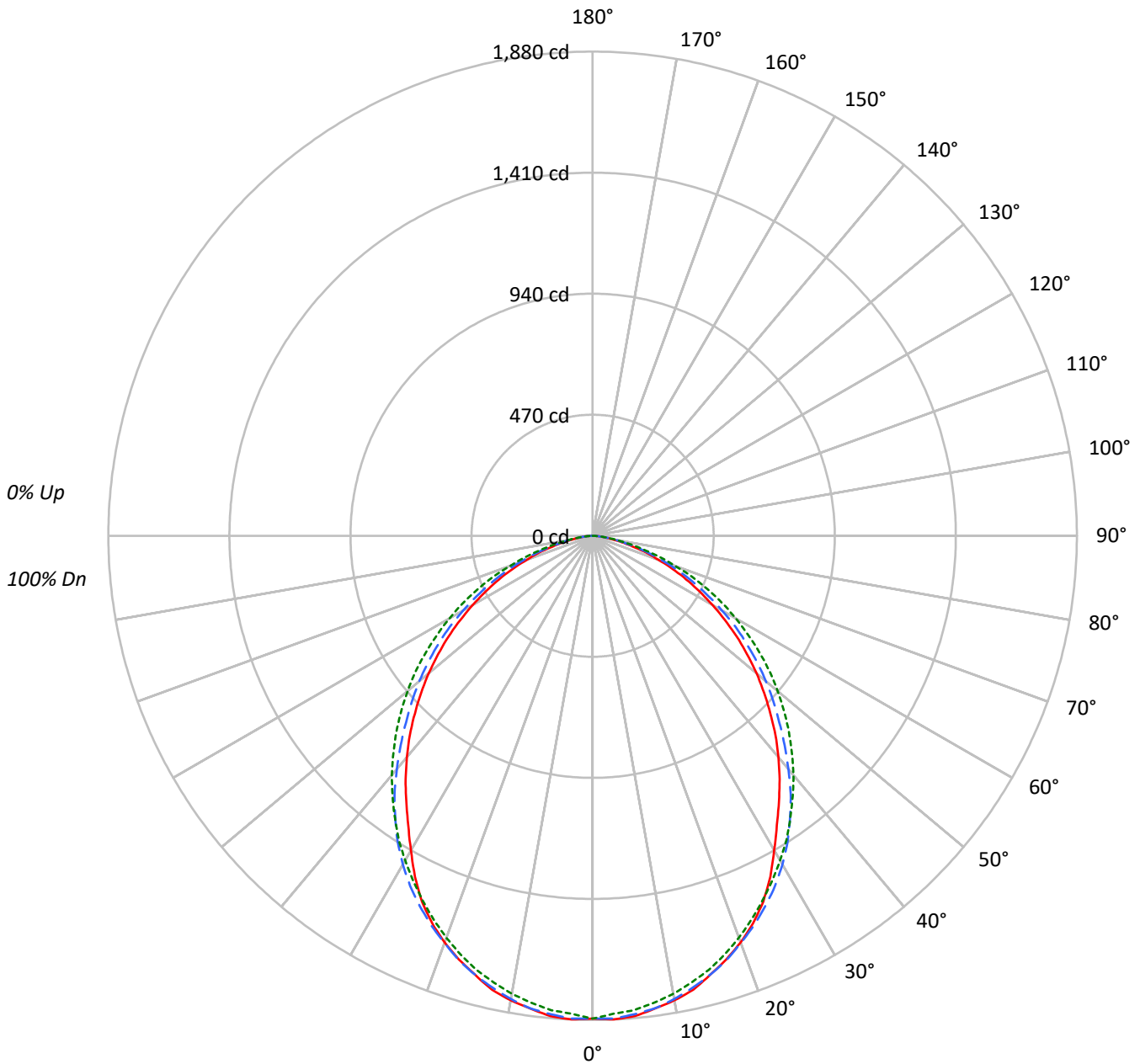
Lumens per Lamp: N/A  
Luminaire Lumens: 4335.0 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (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°	10090	10090	10090
5°	10117	10074	9988
10°	10010	9982	9868
15°	9832	9832	9719
20°	9624	9636	9513
25°	9307	9422	9273
30°	8764	9158	9046
35°	8281	8778	8792
40°	7879	8304	8521
45°	7428	7801	8201
50°	6953	7351	7851
55°	6413	6839	7427
60°	5776	6241	6907
65°	5100	5549	6283
70°	4250	4725	5338
75°	3340	3774	4178
80°	2390	2656	2947
85°	1556	1556	1470



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.5	4.1
10°-20°	495.9	11.4
20°-30°	724.7	16.7
30°-40°	822.6	19.0
40°-50°	794.0	18.3
50°-60°	655.0	15.1
60°-70°	436.2	10.1
70°-80°	195.2	4.5
80°-90°	34.9	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°	1397.1	32.2
0°-40°	2219.6	51.2
0°-60°	3668.7	84.6
0°-90°	4335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4335.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1875	1875	1875	1875	1875	
5°	1873	1872	1865	1855	1849	177
15°	1765	1769	1765	1757	1744	497
25°	1567	1580	1587	1575	1562	718
35°	1260	1278	1336	1343	1338	790
45°	976	992	1025	1072	1078	753
55°	684	695	729	769	792	610
65°	400	411	436	467	493	397
75°	161	169	182	190	201	176
85°	25	25	25	24	24	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1874.8	1874.8	1874.8	1874.8	1874.8
2.5°	1879.8	1880.5	1876.2	1864.7	1857.5
5°	1872.6	1871.9	1864.7	1854.6	1848.8
7.5°	1851.7	1853.2	1851.0	1836.6	1828.7
10°	1831.6	1832.3	1826.5	1815.0	1805.6
12.5°	1805.6	1804.9	1797.0	1791.2	1776.1
15°	1764.6	1768.9	1764.6	1756.7	1744.4
17.5°	1725.0	1725.0	1727.8	1714.2	1704.8
20°	1680.3	1682.5	1682.5	1671.7	1660.9
22.5°	1628.5	1634.9	1637.1	1625.6	1612.6
25°	1567.2	1579.5	1586.7	1575.2	1561.5
27.5°	1493.1	1511.8	1533.4	1524.7	1509.6
30°	1410.2	1437.6	1473.6	1466.4	1455.6
32.5°	1331.7	1359.1	1408.8	1405.9	1400.1
35°	1260.4	1277.7	1336.0	1343.2	1338.2
37.5°	1192.7	1208.6	1263.3	1279.9	1275.5
40°	1121.4	1138.7	1181.9	1211.4	1212.9
42.5°	1050.8	1067.4	1102.7	1145.2	1145.2
45°	975.9	992.5	1024.9	1071.7	1077.5
47.5°	902.5	919.7	951.4	998.2	1007.6
50°	830.4	846.3	878.0	923.3	937.7
52.5°	755.5	772.8	803.8	845.6	866.4
55°	683.5	695.0	728.9	769.2	791.5
57.5°	608.6	619.4	657.6	692.1	715.2
60°	536.6	550.3	579.8	615.1	641.7
62.5°	467.4	481.8	507.0	538.0	568.3
65°	400.5	411.3	435.7	466.7	493.4
67.5°	335.6	345.0	369.5	391.1	419.2
70°	270.1	282.3	300.3	321.2	339.2
72.5°	217.5	222.6	237.7	252.8	271.5
75°	160.6	169.3	181.5	190.1	200.9
77.5°	115.2	120.3	127.5	134.7	144.8
80°	77.1	79.2	85.7	87.1	95.1
82.5°	46.8	48.3	49.7	50.4	53.3
85°	25.2	25.2	25.2	23.8	23.8
87.5°	14.4	14.4	12.2	10.1	7.2
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)