

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: P556092

Luminaire Tested: **FUSL-12-2-LD4-3STD-50-UNV-80-96-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: P556092  
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-80-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND  
5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

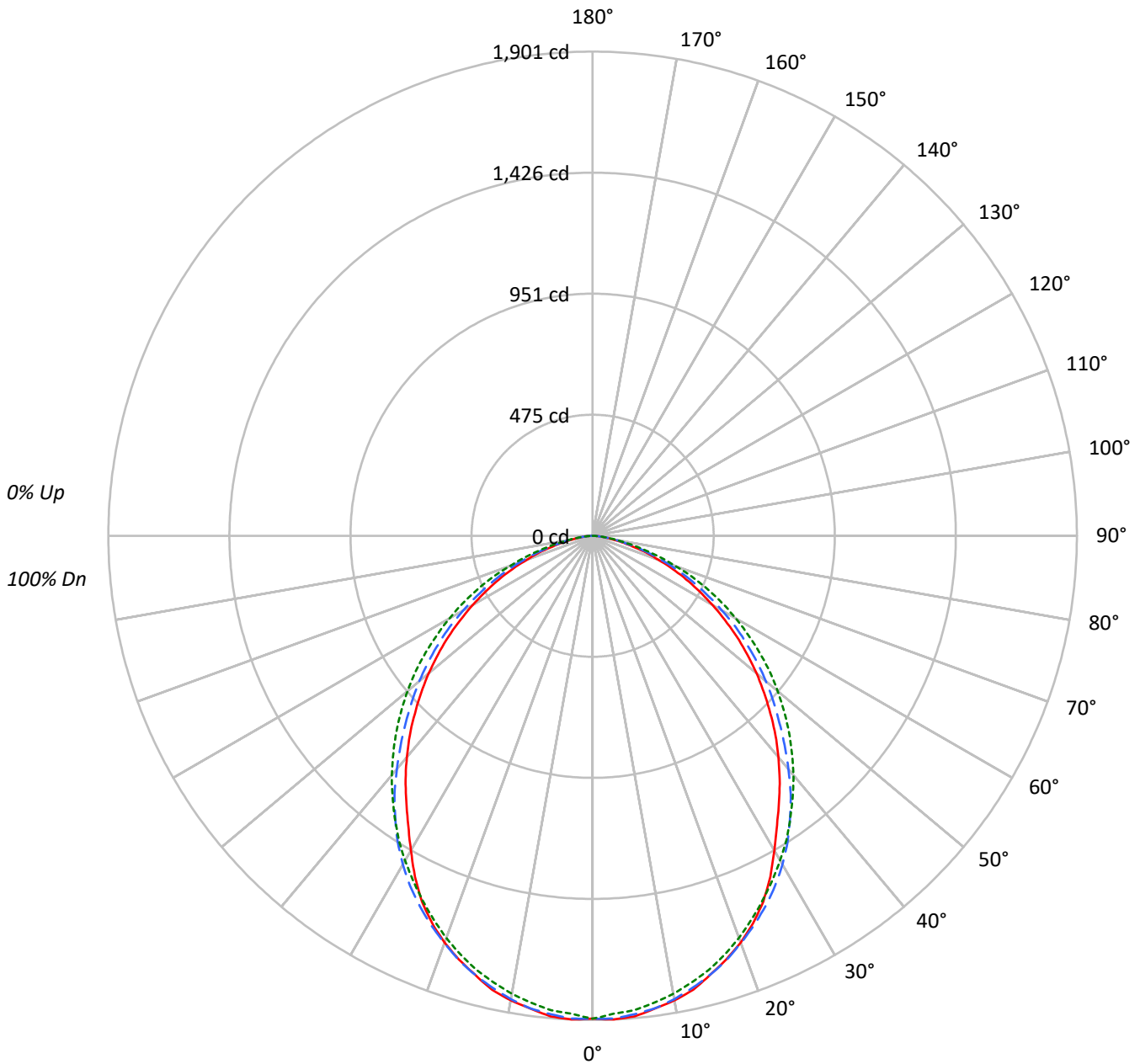
Lumens per Lamp: N/A  
Luminaire Lumens: 4384.0 lumens  
Efficiency: N/A  
Efficacy: 87.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 50  
Input Voltage (V): NR  
Input Current (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					20					
RC	80					70					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	50	30	10	0		
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100		
	1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86	86	86		
	2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73	73	73	73	73	73		
	3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63	63	63	63	63	63		
	4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54	54	54	54	54	54		
	5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47	47	47	47	47	47		
	6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42	42	42	42	42	42		
	7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37	37	37	37	37	37		
	8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34	34	34	34	34	34		
	9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30	30	30	30	30	30		
	10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28	28	28	28	28	28		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10204	10204	10204
5°	10231	10188	10101
10°	10123	10095	9979
15°	9943	9943	9829
20°	9733	9745	9620
25°	9412	9529	9377
30°	8863	9262	9148
35°	8375	8877	8891
40°	7968	8398	8618
45°	7512	7889	8294
50°	7032	7434	7940
55°	6486	6916	7511
60°	5841	6311	6986
65°	5158	5612	6353
70°	4297	4779	5399
75°	3377	3818	4225
80°	2414	2687	2978
85°	1575	1575	1482



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.5	4.1
10°-20°	501.5	11.4
20°-30°	732.8	16.7
30°-40°	831.9	19.0
40°-50°	803.0	18.3
50°-60°	662.4	15.1
60°-70°	441.1	10.1
70°-80°	197.4	4.5
80°-90°	35.3	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°	1412.8	32.2
0°-40°	2244.7	51.2
0°-60°	3710.1	84.6
0°-90°	4384.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4384.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1896	1896	1896	1896	1896	
5°	1894	1893	1886	1876	1870	179
15°	1784	1789	1784	1776	1764	503
25°	1585	1597	1605	1593	1579	726
35°	1275	1292	1351	1358	1353	799
45°	987	1004	1036	1084	1090	762
55°	691	703	737	778	800	617
65°	405	416	441	472	499	402
75°	162	171	184	192	203	178
85°	26	26	26	24	24	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1896.0	1896.0	1896.0	1896.0	1896.0
2.5°	1901.1	1901.8	1897.4	1885.8	1878.5
5°	1893.8	1893.1	1885.8	1875.6	1869.7
7.5°	1872.7	1874.1	1871.9	1857.4	1849.4
10°	1852.3	1853.0	1847.2	1835.5	1826.0
12.5°	1826.0	1825.3	1817.3	1811.5	1796.2
15°	1784.5	1788.9	1784.5	1776.5	1764.1
17.5°	1744.5	1744.5	1747.4	1733.5	1724.1
20°	1699.3	1701.5	1701.5	1690.6	1679.6
22.5°	1646.9	1653.4	1655.6	1643.9	1630.8
25°	1584.9	1597.3	1604.6	1593.0	1579.1
27.5°	1509.9	1528.9	1550.7	1542.0	1526.7
30°	1426.2	1453.8	1490.3	1483.0	1472.1
32.5°	1346.8	1374.4	1424.7	1421.8	1416.0
35°	1274.7	1292.1	1351.1	1358.4	1353.3
37.5°	1206.2	1222.2	1277.6	1294.3	1290.0
40°	1134.1	1151.6	1195.3	1225.1	1226.6
42.5°	1062.7	1079.5	1115.1	1158.1	1158.1
45°	987.0	1003.7	1036.5	1083.8	1089.7
47.5°	912.7	930.1	962.2	1009.5	1019.0
50°	839.8	855.8	887.9	933.8	948.3
52.5°	764.1	781.5	812.9	855.1	876.2
55°	691.2	702.9	737.1	777.9	800.5
57.5°	615.5	626.4	665.0	700.0	723.3
60°	542.6	556.5	586.3	622.0	649.0
62.5°	472.7	487.3	512.8	544.1	574.7
65°	405.0	415.9	440.7	472.0	498.9
67.5°	339.4	348.9	373.7	395.5	423.9
70°	273.1	285.5	303.7	324.9	343.1
72.5°	220.0	225.1	240.4	255.7	274.6
75°	162.4	171.2	183.6	192.3	203.2
77.5°	116.5	121.6	128.9	136.2	146.4
80°	77.9	80.1	86.7	88.1	96.1
82.5°	47.3	48.8	50.3	51.0	53.9
85°	25.5	25.5	25.5	24.0	24.0
87.5°	14.6	14.6	12.4	10.2	7.3
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)