

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: P554800

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-80-84-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: P554800  
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-LD4-2HI-50-UNV-80-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

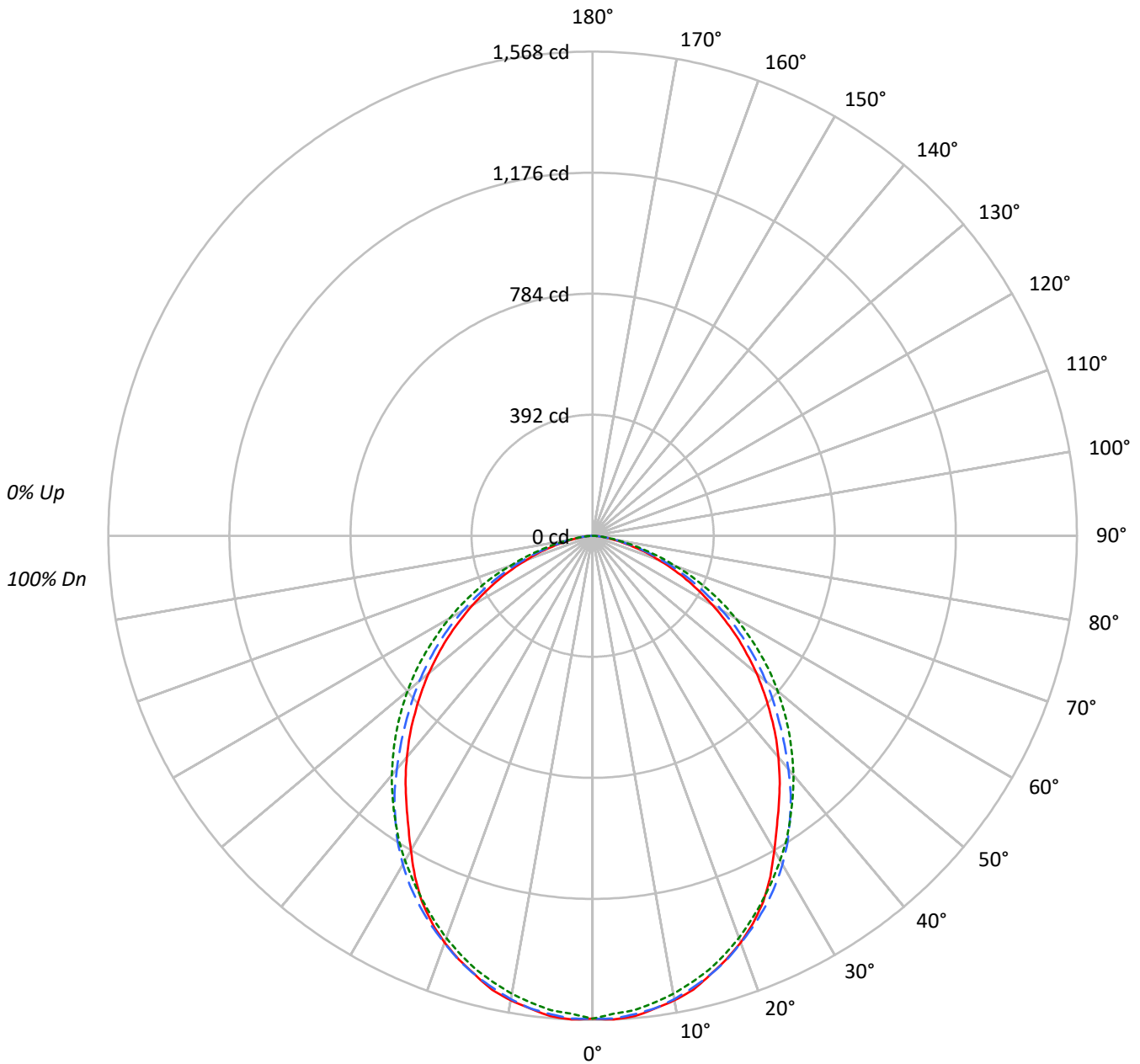
Lumens per Lamp: N/A  
Luminaire Lumens: 3616.0 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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°	8416	8416	8416
5°	8439	8403	8332
10°	8349	8326	8231
15°	8201	8201	8108
20°	8027	8038	7935
25°	7763	7859	7735
30°	7310	7639	7546
35°	6908	7322	7334
40°	6572	6927	7108
45°	6196	6507	6841
50°	5800	6131	6549
55°	5349	5705	6196
60°	4818	5205	5762
65°	4253	4629	5240
70°	3545	3942	4453
75°	2786	3148	3485
80°	1993	2216	2458
85°	1297	1297	1223



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.2	4.1
10°-20°	413.6	11.4
20°-30°	604.5	16.7
30°-40°	686.1	19.0
40°-50°	662.4	18.3
50°-60°	546.4	15.1
60°-70°	363.8	10.1
70°-80°	162.8	4.5
80°-90°	29.1	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°	1165.3	32.2
0°-40°	1851.5	51.2
0°-60°	3060.2	84.6
0°-90°	3616.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3616.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1564	1564	1564	1564	1564	
5°	1562	1561	1555	1547	1542	148
15°	1472	1476	1472	1465	1455	415
25°	1307	1318	1324	1314	1302	599
35°	1051	1066	1114	1120	1116	659
45°	814	828	855	894	899	628
55°	570	580	608	642	660	509
65°	334	343	364	389	412	331
75°	134	141	151	159	168	146
85°	21	21	21	20	20	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1563.8	1563.8	1563.8	1563.8	1563.8
2.5°	1568.0	1568.6	1565.0	1555.4	1549.4
5°	1562.0	1561.4	1555.4	1547.0	1542.2
7.5°	1544.6	1545.8	1544.0	1532.0	1525.4
10°	1527.8	1528.4	1523.6	1514.0	1506.2
12.5°	1506.2	1505.6	1498.9	1494.1	1481.5
15°	1471.9	1475.5	1471.9	1465.3	1455.1
17.5°	1438.9	1438.9	1441.3	1429.9	1422.0
20°	1401.6	1403.4	1403.4	1394.4	1385.4
22.5°	1358.4	1363.8	1365.6	1356.0	1345.1
25°	1307.3	1317.5	1323.5	1313.9	1302.5
27.5°	1245.4	1261.0	1279.1	1271.8	1259.2
30°	1176.3	1199.2	1229.2	1223.2	1214.2
32.5°	1110.8	1133.7	1175.1	1172.7	1167.9
35°	1051.4	1065.8	1114.4	1120.5	1116.2
37.5°	994.9	1008.1	1053.8	1067.6	1064.0
40°	935.4	949.8	985.9	1010.5	1011.7
42.5°	876.5	890.4	919.8	955.2	955.2
45°	814.1	827.9	854.9	894.0	898.8
47.5°	752.8	767.2	793.6	832.7	840.5
50°	692.7	705.9	732.3	770.2	782.2
52.5°	630.2	644.6	670.5	705.3	722.7
55°	570.1	579.8	608.0	641.6	660.3
57.5°	507.7	516.7	548.5	577.3	596.6
60°	447.6	459.0	483.6	513.1	535.3
62.5°	389.9	401.9	422.9	448.8	474.0
65°	334.0	343.0	363.5	389.3	411.5
67.5°	280.0	287.8	308.2	326.2	349.7
70°	225.3	235.5	250.5	267.9	283.0
72.5°	181.4	185.6	198.3	210.9	226.5
75°	134.0	141.2	151.4	158.6	167.6
77.5°	96.1	100.3	106.3	112.3	120.8
80°	64.3	66.1	71.5	72.7	79.3
82.5°	39.1	40.3	41.5	42.1	44.5
85°	21.0	21.0	21.0	19.8	19.8
87.5°	12.0	12.0	10.2	8.4	6.0
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)