

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: P554615

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-80-87-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: P554615  
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-30-UNV-80-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

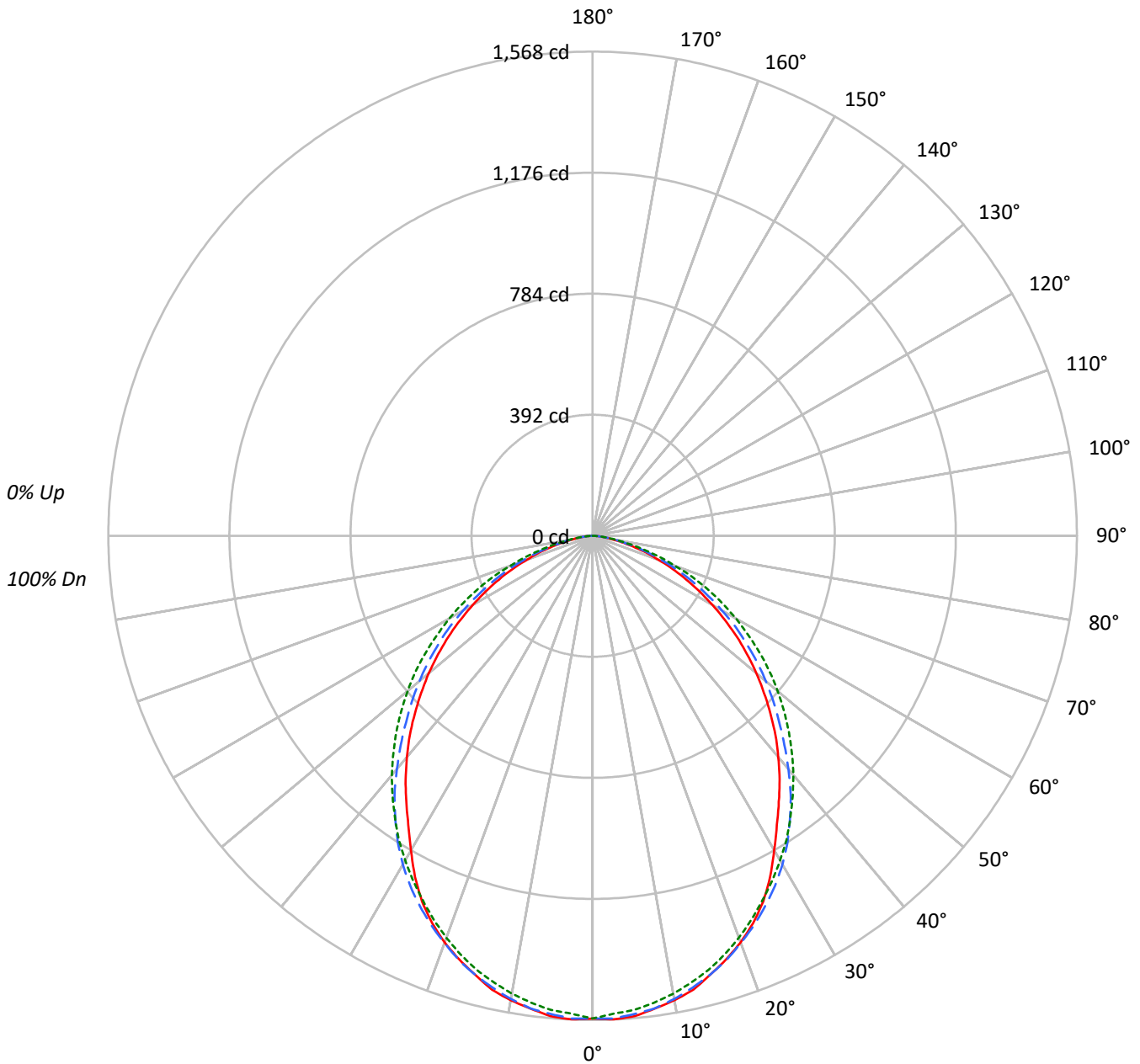
Lumens per Lamp: N/A  
Luminaire Lumens: 3615.0 lumens  
Efficiency: N/A  
Efficacy: 83.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	8414	8414	8414
5°	8437	8401	8330
10°	8347	8324	8229
15°	8199	8199	8105
20°	8025	8035	7932
25°	7761	7857	7732
30°	7308	7637	7543
35°	6906	7320	7332
40°	6570	6924	7106
45°	6194	6505	6839
50°	5798	6130	6548
55°	5348	5703	6194
60°	4817	5204	5760
65°	4252	4628	5239
70°	3544	3942	4452
75°	2784	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°	413.5	11.4
20°-30°	604.3	16.7
30°-40°	685.9	19.0
40°-50°	662.2	18.3
50°-60°	546.2	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°	1165.0	32.2
0°-40°	1850.9	51.2
0°-60°	3059.3	84.6
0°-90°	3615.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3615.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1563	1563	1563	1563	1563	
5°	1562	1561	1555	1547	1542	148
15°	1472	1475	1472	1465	1455	415
25°	1307	1317	1323	1314	1302	599
35°	1051	1066	1114	1120	1116	659
45°	814	828	855	894	898	628
55°	570	580	608	642	660	509
65°	334	343	363	389	411	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°	1563.4	1563.4	1563.4	1563.4	1563.4
2.5°	1567.6	1568.2	1564.6	1555.0	1549.0
5°	1561.6	1561.0	1555.0	1546.6	1541.8
7.5°	1544.2	1545.4	1543.6	1531.6	1525.0
10°	1527.4	1528.0	1523.2	1513.5	1505.7
12.5°	1505.7	1505.1	1498.5	1493.7	1481.1
15°	1471.5	1475.1	1471.5	1464.9	1454.7
17.5°	1438.5	1438.5	1440.9	1429.5	1421.6
20°	1401.2	1403.0	1403.0	1394.0	1385.0
22.5°	1358.0	1363.4	1365.2	1355.6	1344.8
25°	1306.9	1317.1	1323.1	1313.5	1302.1
27.5°	1245.1	1260.7	1278.7	1271.5	1258.9
30°	1176.0	1198.8	1228.9	1222.8	1213.8
32.5°	1110.5	1133.4	1174.8	1172.4	1167.6
35°	1051.1	1065.5	1114.1	1120.1	1115.9
37.5°	994.6	1007.8	1053.5	1067.3	1063.7
40°	935.2	949.6	985.6	1010.2	1011.4
42.5°	876.3	890.1	919.5	955.0	955.0
45°	813.8	827.6	854.7	893.7	898.5
47.5°	752.6	767.0	793.4	832.4	840.3
50°	692.5	705.7	732.1	770.0	782.0
52.5°	630.0	644.5	670.3	705.1	722.5
55°	570.0	579.6	607.8	641.5	660.1
57.5°	507.5	516.5	548.4	577.2	596.4
60°	447.5	458.9	483.5	512.9	535.1
62.5°	389.8	401.8	422.8	448.7	473.9
65°	333.9	342.9	363.4	389.2	411.4
67.5°	279.9	287.7	308.1	326.1	349.6
70°	225.2	235.4	250.5	267.9	282.9
72.5°	181.4	185.6	198.2	210.8	226.4
75°	133.9	141.1	151.4	158.6	167.6
77.5°	96.1	100.3	106.3	112.3	120.7
80°	64.3	66.1	71.5	72.7	79.3
82.5°	39.0	40.2	41.4	42.0	44.4
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)