

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: P555986

Luminaire Tested: **FUSL-12-2-LD4-3STD-35-UNV-82-85-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: P555986  
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-82-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

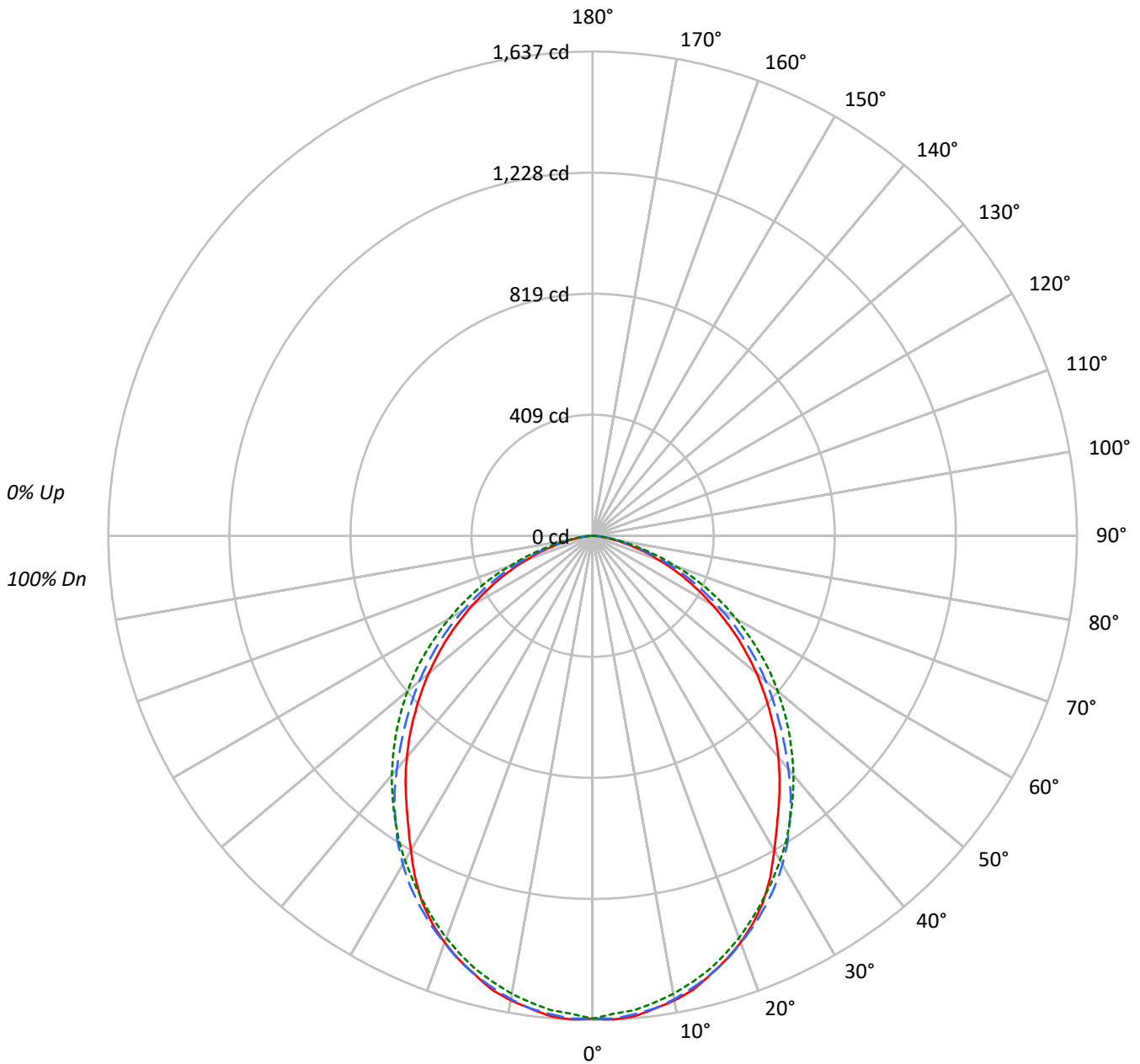
Lumens per Lamp: N/A  
Luminaire Lumens: 3775.0 lumens  
Efficiency: N/A  
Efficacy: 75.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	8787	8787	8787
5°	8810	8773	8698
10°	8717	8693	8593
15°	8562	8562	8464
20°	8380	8391	8283
25°	8105	8205	8075
30°	7631	7975	7878
35°	7211	7644	7656
40°	6861	7231	7420
45°	6468	6793	7142
50°	6055	6402	6837
55°	5585	5955	6468
60°	5030	5435	6015
65°	4441	4833	5471
70°	3701	4115	4648
75°	2909	3288	3639
80°	2080	2312	2566
85°	1359	1359	1278



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.7	4.1
10°-20°	431.8	11.4
20°-30°	631.0	16.7
30°-40°	716.3	19.0
40°-50°	691.5	18.3
50°-60°	570.4	15.1
60°-70°	379.8	10.1
70°-80°	170.0	4.5
80°-90°	30.4	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°	1216.6	32.2
0°-40°	1932.9	51.2
0°-60°	3194.7	84.6
0°-90°	3775.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3775.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1633	1633	1633	1633	1633	
5°	1631	1630	1624	1615	1610	154
15°	1537	1540	1537	1530	1519	433
25°	1365	1375	1382	1372	1360	625
35°	1098	1113	1163	1170	1165	688
45°	850	864	892	933	938	656
55°	595	605	635	670	689	531
65°	349	358	380	406	430	346
75°	140	147	158	166	175	153
85°	22	22	22	21	21	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1632.6	1632.6	1632.6	1632.6	1632.6
2.5°	1637.0	1637.6	1633.8	1623.8	1617.5
5°	1630.7	1630.1	1623.8	1615.0	1610.0
7.5°	1612.5	1613.8	1611.9	1599.3	1592.4
10°	1595.0	1595.6	1590.6	1580.5	1572.4
12.5°	1572.4	1571.8	1564.9	1559.8	1546.7
15°	1536.6	1540.4	1536.6	1529.7	1519.1
17.5°	1502.1	1502.1	1504.6	1492.7	1484.6
20°	1463.2	1465.1	1465.1	1455.7	1446.3
22.5°	1418.1	1423.7	1425.6	1415.6	1404.3
25°	1364.8	1375.4	1381.7	1371.7	1359.8
27.5°	1300.2	1316.5	1335.3	1327.8	1314.6
30°	1228.0	1251.9	1283.2	1277.0	1267.6
32.5°	1159.7	1183.5	1226.8	1224.3	1219.3
35°	1097.6	1112.6	1163.4	1169.7	1165.3
37.5°	1038.6	1052.4	1100.1	1114.5	1110.8
40°	976.5	991.6	1029.2	1054.9	1056.2
42.5°	915.1	929.5	960.2	997.2	997.2
45°	849.8	864.3	892.5	933.3	938.3
47.5°	785.9	800.9	828.5	869.3	877.4
50°	723.2	737.0	764.6	804.1	816.6
52.5°	657.9	673.0	700.0	736.3	754.5
55°	595.2	605.2	634.7	669.8	689.3
57.5°	530.0	539.4	572.6	602.7	622.8
60°	467.3	479.2	504.9	535.6	558.8
62.5°	407.0	419.6	441.5	468.5	494.9
65°	348.7	358.1	379.5	406.4	429.6
67.5°	292.3	300.4	321.8	340.6	365.0
70°	235.2	245.9	261.5	279.7	295.4
72.5°	189.4	193.8	207.0	220.1	236.5
75°	139.9	147.4	158.1	165.6	175.0
77.5°	100.4	104.7	111.0	117.3	126.1
80°	67.1	69.0	74.6	75.9	82.8
82.5°	40.8	42.0	43.3	43.9	46.4
85°	22.0	22.0	22.0	20.7	20.7
87.5°	12.5	12.5	10.7	8.8	6.3
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)