

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: P555812

Luminaire Tested: **FUSL-12-2-LD4-3LO-40-UNV-93-86-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: P555812  
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-LD4-3LO-40-UNV-93-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE  
AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

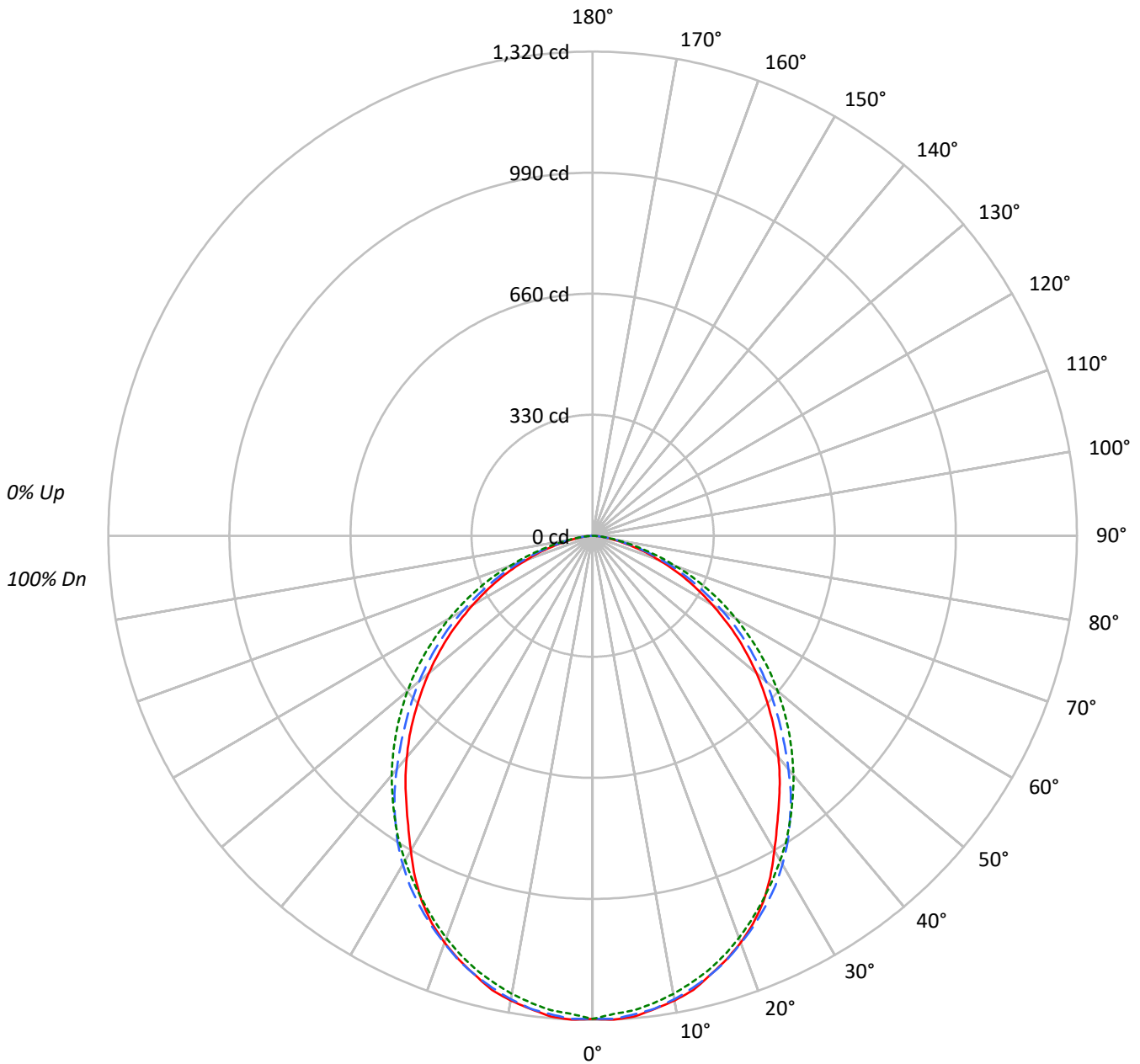
Lumens per Lamp: N/A  
Luminaire Lumens: 3045.0 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
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									
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°	7087	7087	7087
5°	7106	7076	7016
10°	7031	7012	6931
15°	6906	6906	6827
20°	6760	6769	6682
25°	6538	6618	6513
30°	6156	6433	6354
35°	5817	6166	6176
40°	5534	5833	5986
45°	5218	5479	5760
50°	4884	5164	5515
55°	4505	4804	5217
60°	4057	4384	4852
65°	3582	3898	4413
70°	2985	3320	3750
75°	2346	2651	2934
80°	1677	1866	2070
85°	1093	1093	1031



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.0	4.1
10°-20°	348.3	11.4
20°-30°	509.0	16.7
30°-40°	577.8	19.0
40°-50°	557.7	18.3
50°-60°	460.1	15.1
60°-70°	306.4	10.1
70°-80°	137.1	4.5
80°-90°	24.5	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°	981.3	32.2
0°-40°	1559.1	51.2
0°-60°	2577.0	84.6
0°-90°	3045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3045.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1317	1317	1317	1317	1317	
5°	1315	1315	1310	1303	1299	124
15°	1240	1242	1240	1234	1225	349
25°	1101	1110	1114	1106	1097	504
35°	885	898	938	944	940	555
45°	686	697	720	753	757	529
55°	480	488	512	540	556	429
65°	281	289	306	328	346	279
75°	113	119	128	134	141	123
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1316.9	1316.9	1316.9	1316.9	1316.9
2.5°	1320.4	1320.9	1317.9	1309.8	1304.7
5°	1315.4	1314.9	1309.8	1302.7	1298.7
7.5°	1300.7	1301.7	1300.2	1290.1	1284.5
10°	1286.5	1287.0	1283.0	1274.9	1268.3
12.5°	1268.3	1267.8	1262.2	1258.2	1247.6
15°	1239.5	1242.5	1239.5	1233.9	1225.3
17.5°	1211.7	1211.7	1213.7	1204.1	1197.5
20°	1180.3	1181.8	1181.8	1174.2	1166.6
22.5°	1143.9	1148.4	1149.9	1141.8	1132.7
25°	1100.9	1109.5	1114.5	1106.4	1096.8
27.5°	1048.8	1061.9	1077.1	1071.0	1060.4
30°	990.6	1009.8	1035.1	1030.0	1022.4
32.5°	935.4	954.7	989.6	987.5	983.5
35°	885.3	897.5	938.5	943.5	940.0
37.5°	837.8	848.9	887.4	899.0	896.0
40°	787.7	799.8	830.2	850.9	852.0
42.5°	738.1	749.8	774.5	804.4	804.4
45°	685.5	697.1	719.9	752.8	756.8
47.5°	633.9	646.0	668.3	701.2	707.8
50°	583.3	594.4	616.7	648.6	658.7
52.5°	530.7	542.8	564.6	593.9	608.6
55°	480.1	488.2	512.0	540.3	556.0
57.5°	427.5	435.1	461.9	486.2	502.4
60°	376.9	386.5	407.3	432.0	450.8
62.5°	328.3	338.5	356.2	377.9	399.2
65°	281.3	288.9	306.1	327.8	346.5
67.5°	235.8	242.3	259.5	274.7	294.4
70°	189.7	198.3	211.0	225.6	238.3
72.5°	152.8	156.3	167.0	177.6	190.7
75°	112.8	118.9	127.5	133.6	141.1
77.5°	80.9	84.5	89.5	94.6	101.7
80°	54.1	55.7	60.2	61.2	66.8
82.5°	32.9	33.9	34.9	35.4	37.4
85°	17.7	17.7	17.7	16.7	16.7
87.5°	10.1	10.1	8.6	7.1	5.1
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)