

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: P555151

Luminaire Tested: **FUSL-12-2-LD4-2STD-30-UNV-81-97-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: P555151  
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-LD4-2STD-30-UNV-81-97-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

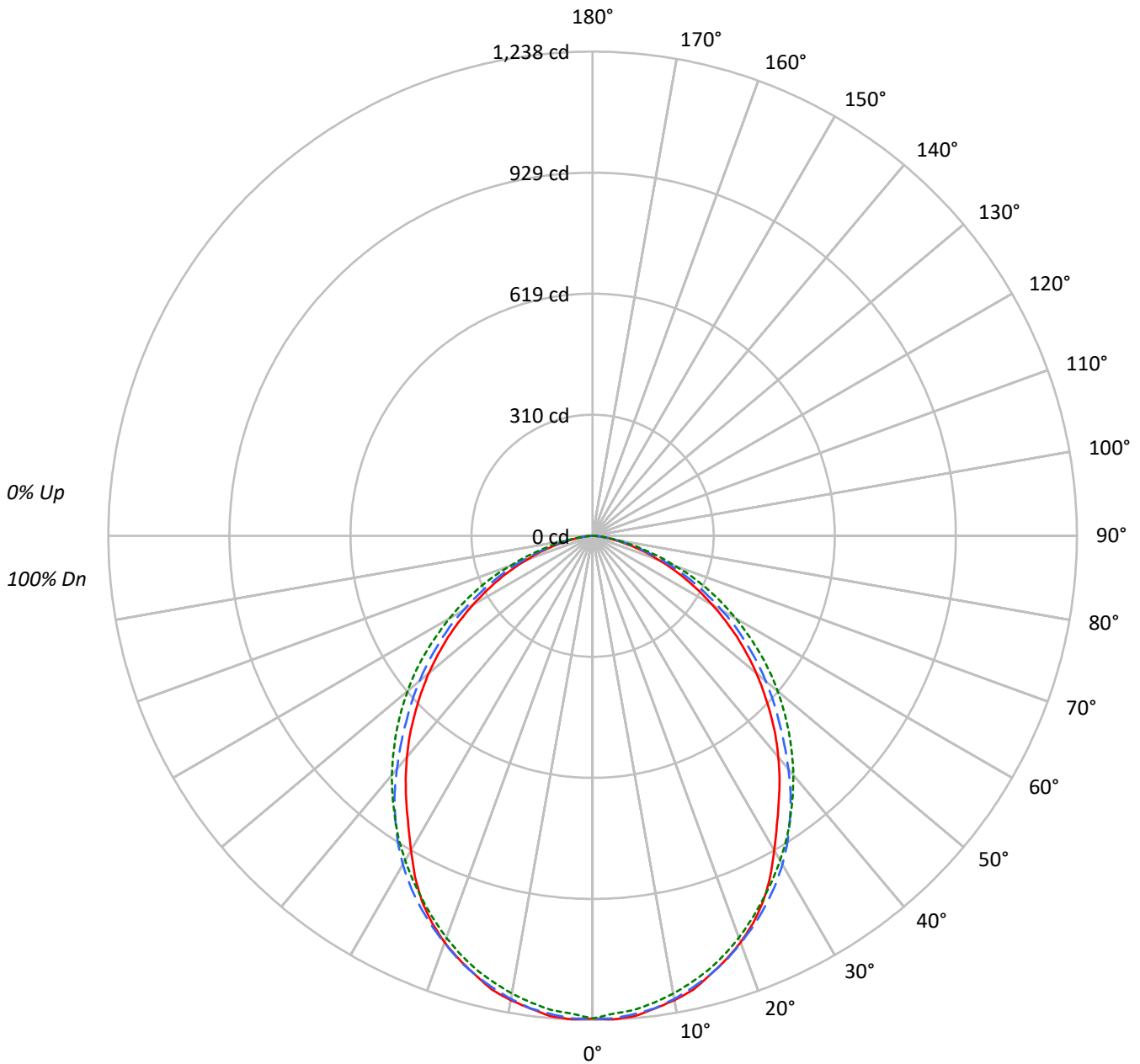
Lumens per Lamp: N/A  
Luminaire Lumens: 2854.0 lumens  
Efficiency: N/A  
Efficacy: 85.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
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				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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

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

	0°	45°	90°
0°	6643	6643	6643
5°	6661	6632	6576
10°	6590	6572	6497
15°	6473	6473	6399
20°	6336	6344	6263
25°	6127	6203	6105
30°	5770	6029	5955
35°	5452	5779	5788
40°	5187	5467	5610
45°	4890	5136	5399
50°	4577	4840	5169
55°	4222	4503	4890
60°	3803	4109	4548
65°	3357	3654	4136
70°	2798	3111	3514
75°	2198	2485	2751
80°	1571	1748	1940
85°	1025	1025	963



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.2	4.1
10°-20°	326.5	11.4
20°-30°	477.1	16.7
30°-40°	541.5	19.0
40°-50°	522.8	18.3
50°-60°	431.3	15.1
60°-70°	287.2	10.1
70°-80°	128.5	4.5
80°-90°	23.0	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°	919.8	32.2
0°-40°	1461.3	51.2
0°-60°	2415.3	84.6
0°-90°	2854.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2854.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1234	1234	1234	1234	1234	
5°	1233	1232	1228	1221	1217	117
15°	1162	1165	1162	1156	1148	328
25°	1032	1040	1045	1037	1028	473
35°	830	841	880	884	881	520
45°	642	653	675	706	709	496
55°	450	458	480	506	521	402
65°	264	271	287	307	325	261
75°	106	111	120	125	132	116
85°	17	17	17	16	16	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1234.3	1234.3	1234.3	1234.3	1234.3
2.5°	1237.6	1238.1	1235.2	1227.6	1222.9
5°	1232.9	1232.4	1227.6	1221.0	1217.2
7.5°	1219.1	1220.1	1218.6	1209.1	1203.9
10°	1205.8	1206.3	1202.5	1194.9	1188.8
12.5°	1188.8	1188.3	1183.1	1179.3	1169.3
15°	1161.7	1164.6	1161.7	1156.5	1148.5
17.5°	1135.7	1135.7	1137.5	1128.5	1122.4
20°	1106.3	1107.7	1107.7	1100.6	1093.5
22.5°	1072.1	1076.4	1077.8	1070.2	1061.7
25°	1031.8	1039.9	1044.6	1037.0	1028.0
27.5°	983.0	995.3	1009.5	1003.8	993.9
30°	928.4	946.5	970.2	965.4	958.3
32.5°	876.8	894.8	927.5	925.6	921.8
35°	829.8	841.2	879.6	884.3	881.0
37.5°	785.2	795.7	831.7	842.6	839.8
40°	738.3	749.7	778.1	797.6	798.5
42.5°	691.8	702.7	726.0	753.9	753.9
45°	642.5	653.4	674.8	705.6	709.4
47.5°	594.1	605.5	626.4	657.2	663.4
50°	546.7	557.2	578.0	607.9	617.4
52.5°	497.4	508.8	529.2	556.7	570.4
55°	450.0	457.6	479.9	506.4	521.1
57.5°	400.7	407.8	432.9	455.7	470.9
60°	353.3	362.3	381.7	404.9	422.5
62.5°	307.7	317.2	333.8	354.2	374.1
65°	263.6	270.8	286.9	307.3	324.8
67.5°	221.0	227.1	243.3	257.5	276.0
70°	177.8	185.9	197.7	211.5	223.3
72.5°	143.2	146.5	156.5	166.4	178.8
75°	105.7	111.4	119.5	125.2	132.3
77.5°	75.9	79.2	83.9	88.7	95.3
80°	50.7	52.2	56.4	57.4	62.6
82.5°	30.8	31.8	32.7	33.2	35.1
85°	16.6	16.6	16.6	15.6	15.6
87.5°	9.5	9.5	8.1	6.6	4.7
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)