

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: P555689

Luminaire Tested: **FUSL-12-2-LD4-3LO-30-UNV-93-88-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: P555689  
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-30-UNV-93-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

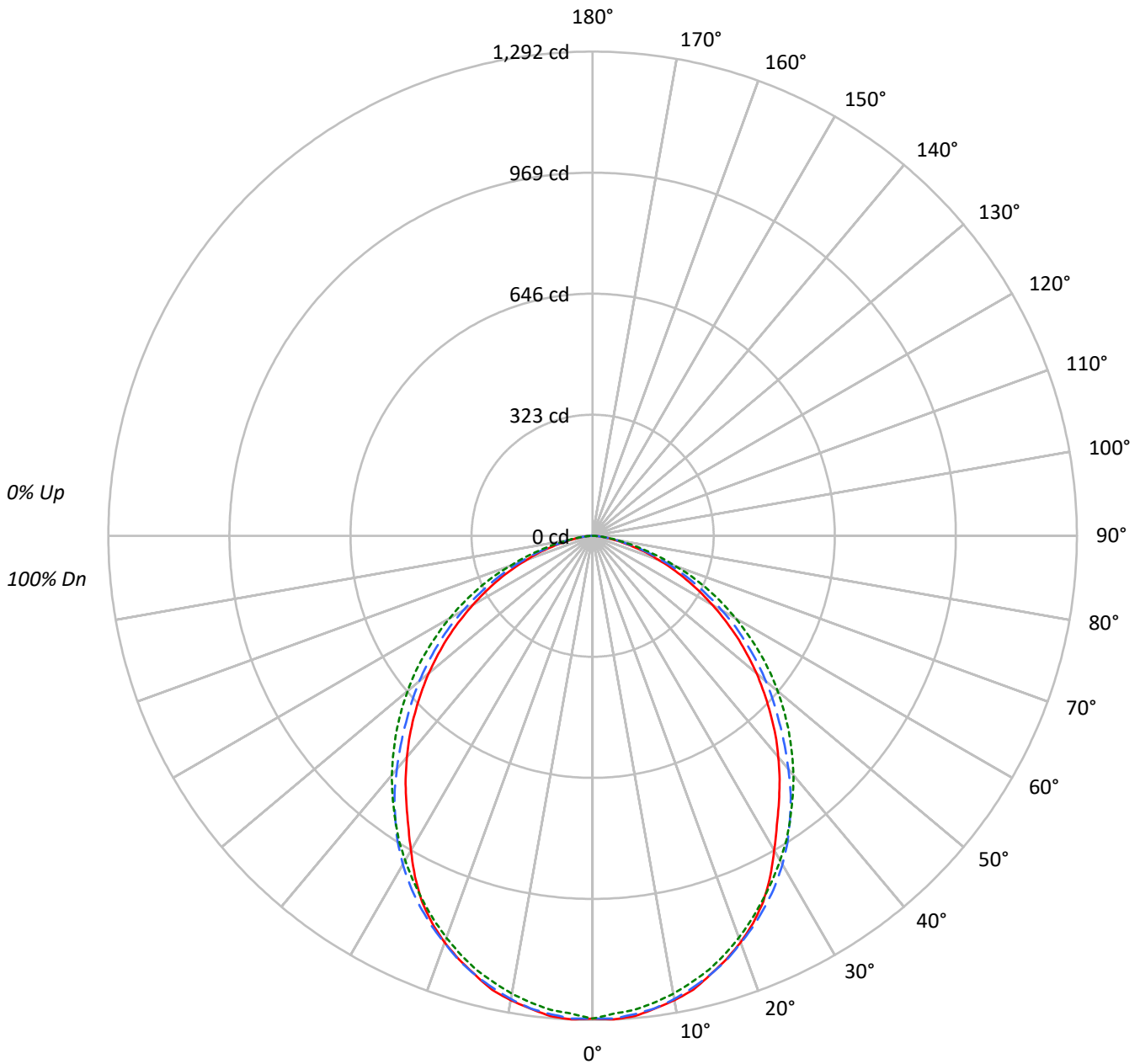
Lumens per Lamp: N/A  
Luminaire Lumens: 2979.0 lumens  
Efficiency: N/A  
Efficacy: 84.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	6934	6934	6934
5°	6952	6923	6864
10°	6878	6860	6781
15°	6756	6756	6679
20°	6613	6622	6537
25°	6396	6475	6372
30°	6023	6293	6216
35°	5691	6032	6042
40°	5414	5706	5856
45°	5104	5361	5635
50°	4778	5051	5395
55°	4407	4700	5103
60°	3969	4288	4747
65°	3505	3813	4317
70°	2921	3248	3668
75°	2296	2593	2872
80°	1643	1826	2024
85°	1068	1068	1007



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.3	4.1
10°-20°	340.8	11.4
20°-30°	498.0	16.7
30°-40°	565.3	19.0
40°-50°	545.7	18.3
50°-60°	450.1	15.1
60°-70°	299.7	10.1
70°-80°	134.1	4.5
80°-90°	24.0	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°	960.0	32.2
0°-40°	1525.3	51.2
0°-60°	2521.1	84.6
0°-90°	2979.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2979.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1288	1288	1288	1288	1288	
5°	1287	1286	1281	1274	1270	122
15°	1213	1216	1213	1207	1199	342
25°	1077	1085	1090	1082	1073	493
35°	866	878	918	923	920	543
45°	671	682	704	736	740	517
55°	470	478	501	529	544	419
65°	275	283	299	321	339	273
75°	110	116	125	131	138	121
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1288.3	1288.3	1288.3	1288.3	1288.3
2.5°	1291.8	1292.3	1289.3	1281.4	1276.5
5°	1286.9	1286.4	1281.4	1274.5	1270.5
7.5°	1272.5	1273.5	1272.0	1262.1	1256.7
10°	1258.6	1259.1	1255.2	1247.3	1240.8
12.5°	1240.8	1240.3	1234.9	1230.9	1220.5
15°	1212.6	1215.6	1212.6	1207.2	1198.8
17.5°	1185.4	1185.4	1187.4	1178.0	1171.5
20°	1154.7	1156.2	1156.2	1148.8	1141.3
22.5°	1119.1	1123.5	1125.0	1117.1	1108.2
25°	1077.0	1085.4	1090.4	1082.4	1073.0
27.5°	1026.0	1038.9	1053.7	1047.8	1037.4
30°	969.1	987.9	1012.7	1007.7	1000.3
32.5°	915.2	934.0	968.1	966.1	962.2
35°	866.2	878.0	918.1	923.1	919.6
37.5°	819.6	830.5	868.1	879.5	876.5
40°	770.6	782.5	812.2	832.5	833.5
42.5°	722.1	733.5	757.8	787.0	787.0
45°	670.6	682.0	704.3	736.5	740.4
47.5°	620.2	632.0	653.8	686.0	692.4
50°	570.7	581.6	603.3	634.5	644.4
52.5°	519.2	531.1	552.4	581.1	595.4
55°	469.7	477.6	500.9	528.6	543.9
57.5°	418.2	425.7	451.9	475.6	491.5
60°	368.7	378.1	398.4	422.7	441.0
62.5°	321.2	331.1	348.4	369.7	390.5
65°	275.2	282.6	299.4	320.7	339.0
67.5°	230.6	237.1	253.9	268.8	288.1
70°	185.6	194.0	206.4	220.7	233.1
72.5°	149.5	152.9	163.3	173.7	186.6
75°	110.4	116.3	124.7	130.7	138.1
77.5°	79.2	82.7	87.6	92.6	99.5
80°	53.0	54.4	58.9	59.9	65.3
82.5°	32.2	33.2	34.2	34.6	36.6
85°	17.3	17.3	17.3	16.3	16.3
87.5°	9.9	9.9	8.4	6.9	4.9
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)