

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: P555236

Luminaire Tested: **FUSL-12-2-LD4-2STD-35-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: P555236  
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-35-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 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

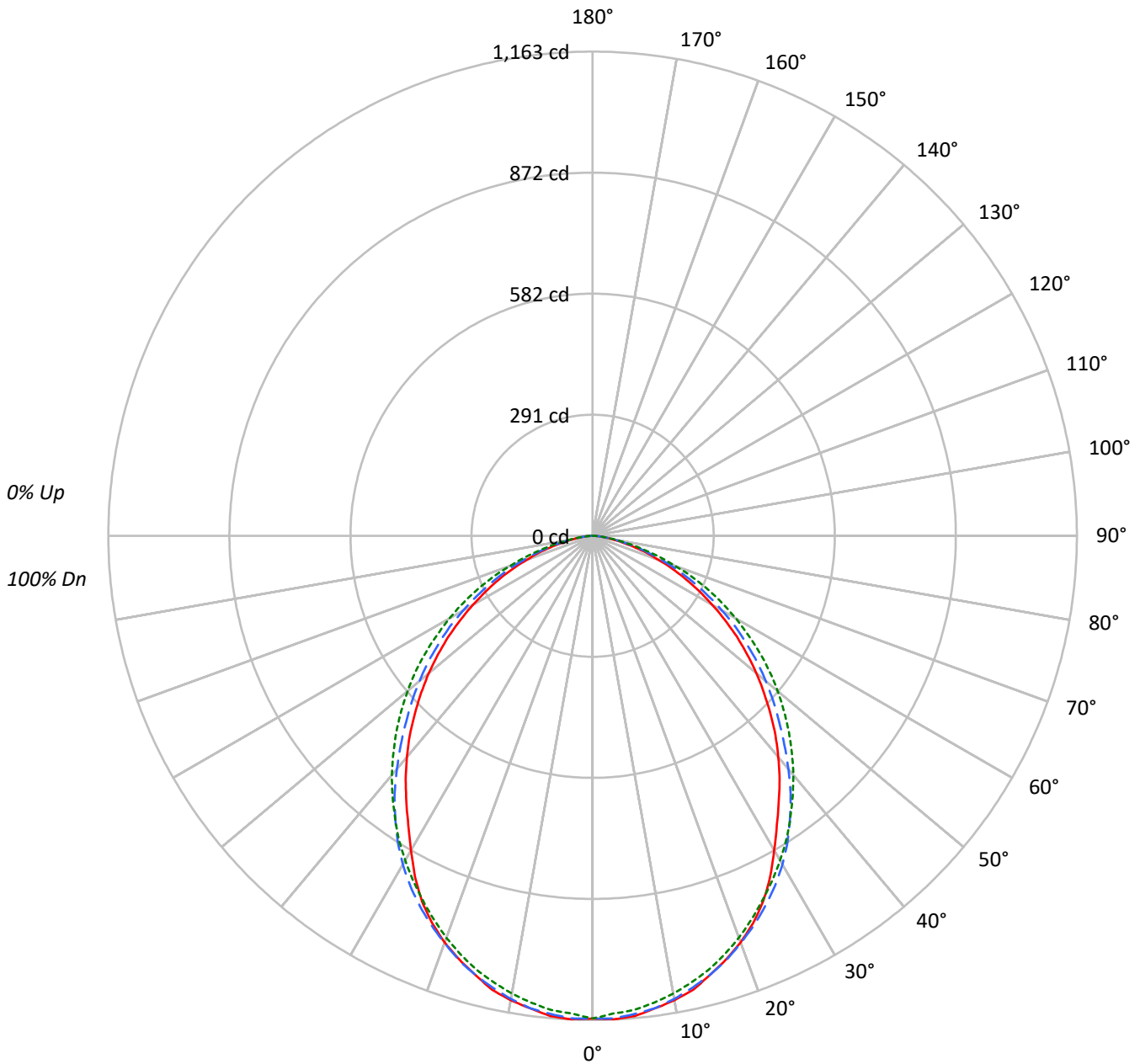
Lumens per Lamp: N/A  
Luminaire Lumens: 2681.0 lumens  
Efficiency: N/A  
Efficacy: 80.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	
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	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°	6240	6240	6240
5°	6257	6230	6177
10°	6190	6173	6103
15°	6081	6081	6011
20°	5952	5959	5883
25°	5756	5827	5735
30°	5420	5664	5594
35°	5121	5429	5437
40°	4872	5136	5270
45°	4594	4825	5072
50°	4300	4546	4856
55°	3966	4230	4593
60°	3571	3860	4272
65°	3154	3432	3885
70°	2628	2922	3301
75°	2065	2333	2585
80°	1478	1643	1822
85°	963	963	908



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.2	4.1
10°-20°	306.7	11.4
20°-30°	448.2	16.7
30°-40°	508.7	19.0
40°-50°	491.1	18.3
50°-60°	405.1	15.1
60°-70°	269.8	10.1
70°-80°	120.7	4.5
80°-90°	21.6	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°	864.0	32.2
0°-40°	1372.7	51.2
0°-60°	2268.9	84.6
0°-90°	2681.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2681.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1160	1160	1160	1160	1160	
5°	1158	1158	1153	1147	1143	110
15°	1091	1094	1091	1086	1079	308
25°	969	977	981	974	966	444
35°	780	790	826	831	828	488
45°	604	614	634	663	666	466
55°	423	430	451	476	490	377
65°	248	254	270	289	305	246
75°	99	105	112	118	124	109
85°	16	16	16	15	15	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1159.5	1159.5	1159.5	1159.5	1159.5
2.5°	1162.6	1163.0	1160.4	1153.2	1148.8
5°	1158.1	1157.7	1153.2	1147.0	1143.4
7.5°	1145.2	1146.1	1144.8	1135.9	1131.0
10°	1132.7	1133.2	1129.6	1122.5	1116.7
12.5°	1116.7	1116.3	1111.4	1107.8	1098.4
15°	1091.3	1094.0	1091.3	1086.4	1078.8
17.5°	1066.8	1066.8	1068.6	1060.1	1054.3
20°	1039.2	1040.5	1040.5	1033.9	1027.2
22.5°	1007.1	1011.1	1012.5	1005.3	997.3
25°	969.3	976.8	981.3	974.2	965.7
27.5°	923.4	935.0	948.3	943.0	933.6
30°	872.2	889.1	911.4	906.9	900.2
32.5°	823.6	840.5	871.3	869.5	865.9
35°	779.5	790.2	826.3	830.7	827.6
37.5°	737.6	747.4	781.3	791.5	788.9
40°	693.5	704.2	731.0	749.2	750.1
42.5°	649.9	660.1	682.0	708.2	708.2
45°	603.6	613.8	633.9	662.8	666.4
47.5°	558.1	568.8	588.4	617.4	623.2
50°	513.6	523.4	543.0	571.0	580.0
52.5°	467.3	478.0	497.1	522.9	535.9
55°	422.7	429.8	450.8	475.7	489.5
57.5°	376.4	383.1	406.7	428.1	442.3
60°	331.8	340.3	358.6	380.4	396.9
62.5°	289.1	298.0	313.6	332.7	351.4
65°	247.7	254.3	269.5	288.6	305.1
67.5°	207.6	213.4	228.5	241.9	259.2
70°	167.0	174.6	185.7	198.7	209.8
72.5°	134.5	137.6	147.0	156.3	167.9
75°	99.3	104.7	112.2	117.6	124.3
77.5°	71.3	74.4	78.8	83.3	89.5
80°	47.7	49.0	53.0	53.9	58.8
82.5°	29.0	29.8	30.7	31.2	33.0
85°	15.6	15.6	15.6	14.7	14.7
87.5°	8.9	8.9	7.6	6.2	4.5
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)