

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: P554728

Luminaire Tested: **FUSL-12-2-LD4-2HI-35-UNV-93-88-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: P554728  
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-LD4-2HI-35-UNV-93-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

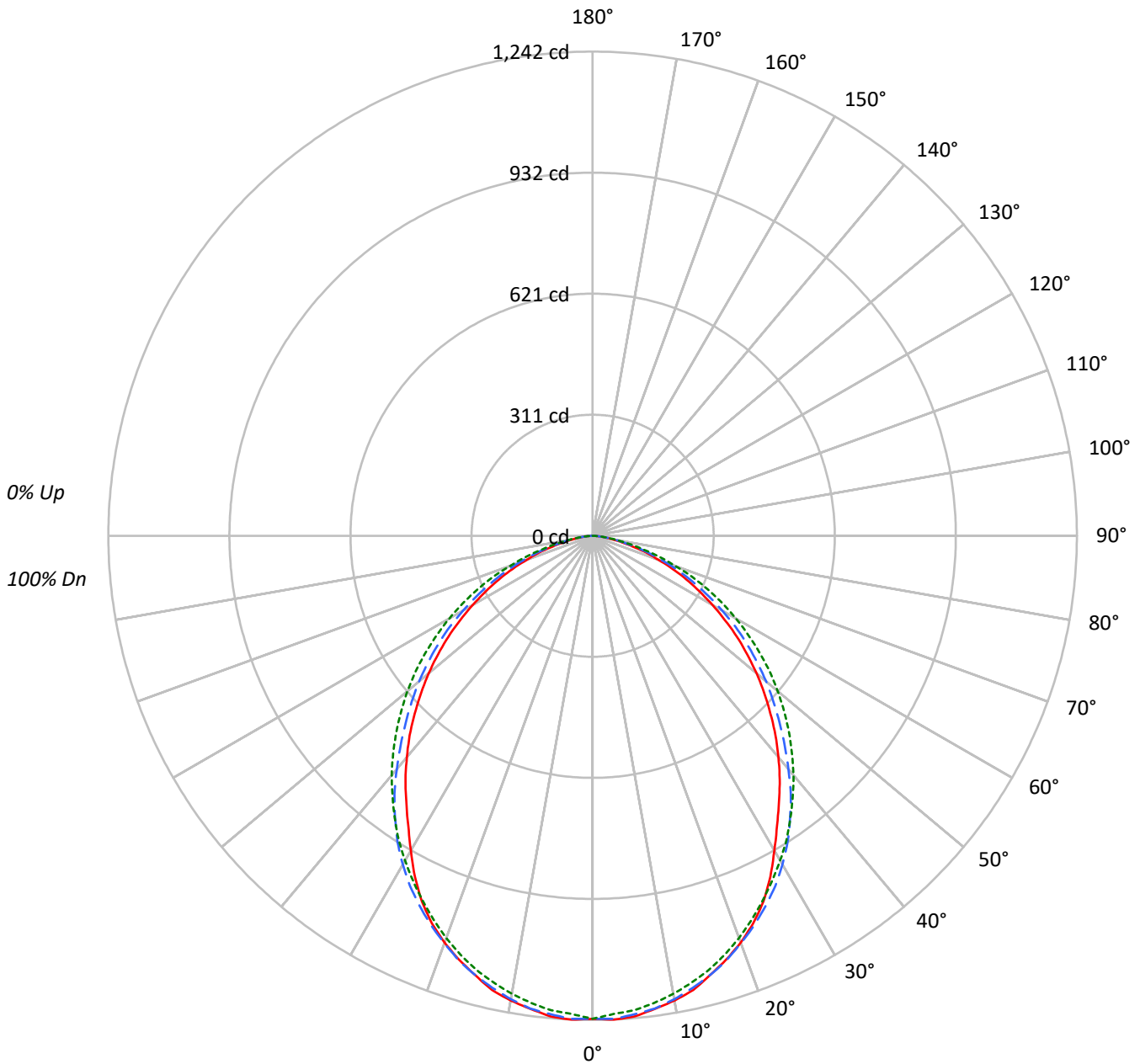
Lumens per Lamp: N/A  
Luminaire Lumens: 2865.0 lumens  
Efficiency: N/A  
Efficacy: 66.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
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°	6668	6668	6668
5°	6686	6658	6601
10°	6615	6597	6521
15°	6498	6498	6424
20°	6360	6368	6287
25°	6151	6227	6128
30°	5792	6052	5978
35°	5473	5801	5811
40°	5207	5488	5632
45°	4909	5156	5420
50°	4595	4858	5189
55°	4238	4520	4908
60°	3817	4125	4565
65°	3371	3668	4153
70°	2809	3124	3528
75°	2206	2495	2761
80°	1578	1754	1946
85°	1031	1031	969



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.7	4.1
10°-20°	327.7	11.4
20°-30°	478.9	16.7
30°-40°	543.6	19.0
40°-50°	524.8	18.3
50°-60°	432.9	15.1
60°-70°	288.3	10.1
70°-80°	129.0	4.5
80°-90°	23.1	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°	923.3	32.2
0°-40°	1466.9	51.2
0°-60°	2424.6	84.6
0°-90°	2865.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2865.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1239	1239	1239	1239	1239	
5°	1238	1237	1232	1226	1222	117
15°	1166	1169	1166	1161	1153	329
25°	1036	1044	1049	1041	1032	474
35°	833	844	883	888	884	522
45°	645	656	677	708	712	498
55°	452	459	482	508	523	403
65°	265	272	288	308	326	262
75°	106	112	120	126	133	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°	1239.0	1239.0	1239.0	1239.0	1239.0
2.5°	1242.4	1242.8	1240.0	1232.4	1227.6
5°	1237.6	1237.1	1232.4	1225.7	1221.9
7.5°	1223.8	1224.8	1223.3	1213.8	1208.6
10°	1210.5	1211.0	1207.1	1199.5	1193.3
12.5°	1193.3	1192.9	1187.6	1183.8	1173.8
15°	1166.2	1169.1	1166.2	1161.0	1152.9
17.5°	1140.0	1140.0	1141.9	1132.9	1126.7
20°	1110.5	1111.9	1111.9	1104.8	1097.7
22.5°	1076.2	1080.5	1082.0	1074.3	1065.8
25°	1035.8	1043.9	1048.6	1041.0	1032.0
27.5°	986.8	999.1	1013.4	1007.7	997.7
30°	932.0	950.1	973.9	969.1	962.0
32.5°	880.1	898.2	931.1	929.2	925.4
35°	833.0	844.4	883.0	887.7	884.4
37.5°	788.3	798.7	834.9	845.9	843.0
40°	741.1	752.6	781.1	800.6	801.6
42.5°	694.5	705.4	728.8	756.8	756.8
45°	645.0	655.9	677.4	708.3	712.1
47.5°	596.4	607.9	628.8	659.7	665.9
50°	548.8	559.3	580.2	610.2	619.8
52.5°	499.3	510.8	531.2	558.8	572.6
55°	451.7	459.3	481.7	508.4	523.1
57.5°	402.2	409.4	434.6	457.4	472.7
60°	354.6	363.7	383.2	406.5	424.1
62.5°	308.9	318.4	335.1	355.6	375.6
65°	264.7	271.8	288.0	308.5	326.1
67.5°	221.8	228.0	244.2	258.5	277.0
70°	178.5	186.6	198.5	212.3	224.2
72.5°	143.8	147.1	157.1	167.1	179.5
75°	106.1	111.9	120.0	125.7	132.8
77.5°	76.2	79.5	84.3	89.0	95.7
80°	50.9	52.4	56.6	57.6	62.8
82.5°	30.9	31.9	32.8	33.3	35.2
85°	16.7	16.7	16.7	15.7	15.7
87.5°	9.5	9.5	8.1	6.7	4.8
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)