

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: P555321

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-80-88-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: P555321  
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-50-UNV-80-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

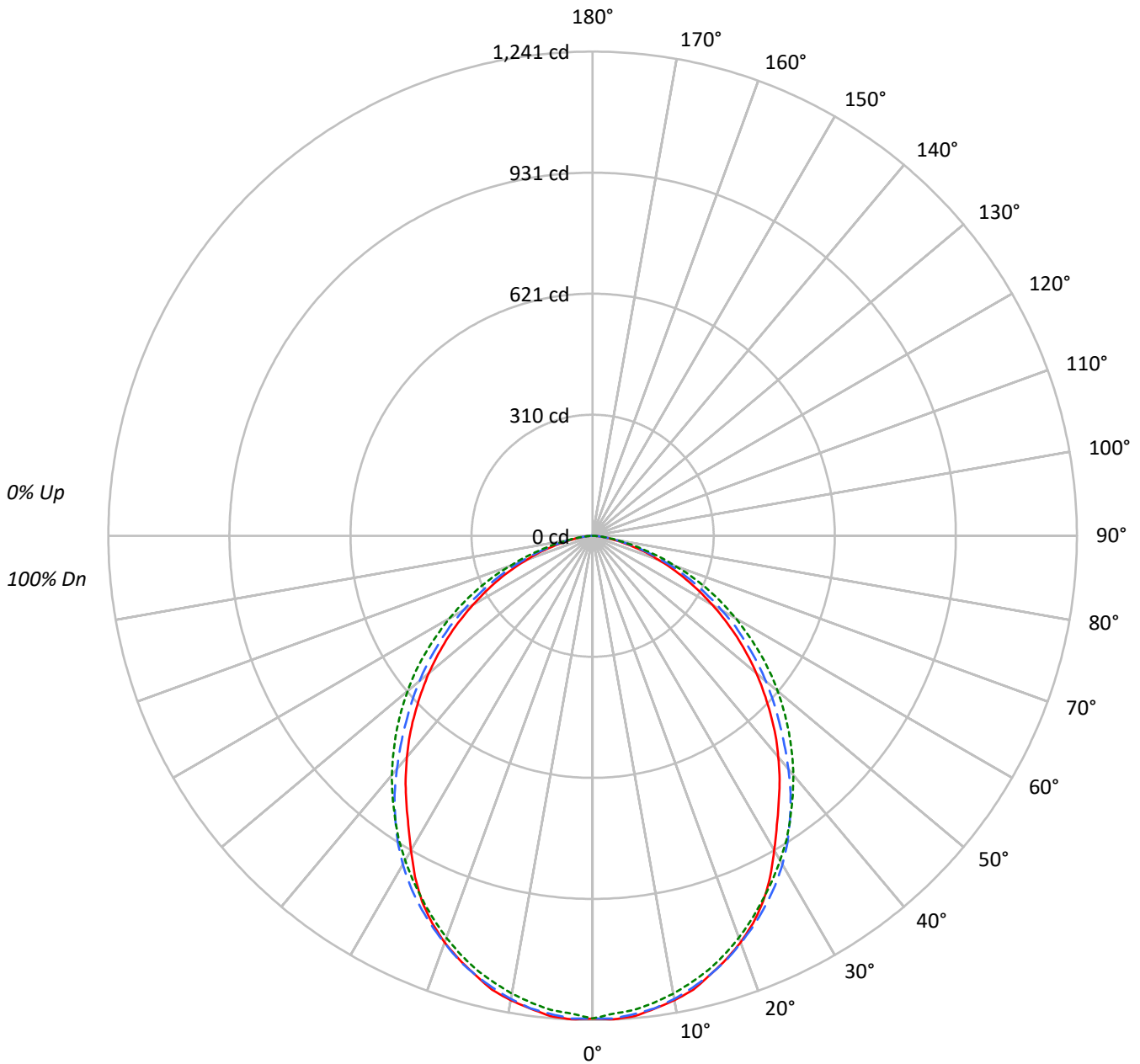
Lumens per Lamp: N/A  
Luminaire Lumens: 2861.0 lumens  
Efficiency: N/A  
Efficacy: 85.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 33.3  
Input Voltage (V): NR  
Input Current (Ain): 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°	6659	6659	6659
5°	6677	6649	6592
10°	6606	6588	6513
15°	6489	6489	6415
20°	6352	6360	6278
25°	6142	6219	6119
30°	5784	6044	5970
35°	5465	5794	5803
40°	5200	5480	5624
45°	4902	5148	5412
50°	4589	4851	5182
55°	4233	4513	4902
60°	3812	4118	4559
65°	3366	3663	4146
70°	2806	3119	3523
75°	2204	2491	2757
80°	1578	1754	1943
85°	1025	1025	969



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.5	4.1
10°-20°	327.3	11.4
20°-30°	478.2	16.7
30°-40°	542.9	19.0
40°-50°	524.0	18.3
50°-60°	432.3	15.1
60°-70°	287.9	10.1
70°-80°	128.8	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°	922.0	32.2
0°-40°	1464.9	51.2
0°-60°	2421.2	84.6
0°-90°	2861.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2861.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1237	1237	1237	1237	1237	
5°	1236	1235	1231	1224	1220	117
15°	1165	1167	1165	1159	1151	328
25°	1034	1042	1047	1040	1030	474
35°	832	843	882	886	883	521
45°	644	655	676	707	711	497
55°	451	459	481	508	522	403
65°	264	271	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°	1237.3	1237.3	1237.3	1237.3	1237.3
2.5°	1240.6	1241.1	1238.3	1230.7	1225.9
5°	1235.9	1235.4	1230.7	1224.0	1220.2
7.5°	1222.1	1223.0	1221.6	1212.1	1206.9
10°	1208.8	1209.3	1205.5	1197.9	1191.7
12.5°	1191.7	1191.2	1186.0	1182.2	1172.2
15°	1164.6	1167.4	1164.6	1159.4	1151.3
17.5°	1138.4	1138.4	1140.3	1131.3	1125.1
20°	1109.0	1110.4	1110.4	1103.3	1096.1
22.5°	1074.7	1079.0	1080.4	1072.8	1064.3
25°	1034.3	1042.4	1047.2	1039.6	1030.5
27.5°	985.4	997.7	1012.0	1006.3	996.3
30°	930.7	948.8	972.5	967.8	960.7
32.5°	878.9	897.0	929.8	927.9	924.1
35°	831.8	843.3	881.8	886.5	883.2
37.5°	787.2	797.6	833.7	844.7	841.8
40°	740.1	751.5	780.0	799.5	800.5
42.5°	693.5	704.5	727.7	755.8	755.8
45°	644.1	655.0	676.4	707.3	711.1
47.5°	595.6	607.0	627.9	658.8	665.0
50°	548.1	558.5	579.4	609.4	618.9
52.5°	498.6	510.0	530.5	558.0	571.8
55°	451.1	458.7	481.0	507.7	522.4
57.5°	401.7	408.8	434.0	456.8	472.0
60°	354.1	363.2	382.6	405.9	423.5
62.5°	308.5	318.0	334.6	355.1	375.0
65°	264.3	271.4	287.6	308.0	325.6
67.5°	221.5	227.7	243.8	258.1	276.6
70°	178.3	186.3	198.2	212.0	223.9
72.5°	143.6	146.9	156.9	166.8	179.2
75°	106.0	111.7	119.8	125.5	132.6
77.5°	76.1	79.4	84.1	88.9	95.5
80°	50.9	52.3	56.6	57.5	62.7
82.5°	30.9	31.8	32.8	33.3	35.2
85°	16.6	16.6	16.6	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)