

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: P555358

Luminaire Tested: **FUSL-12-2-LD4-2STD-50-UNV-82-97-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: P555358  
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-82-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

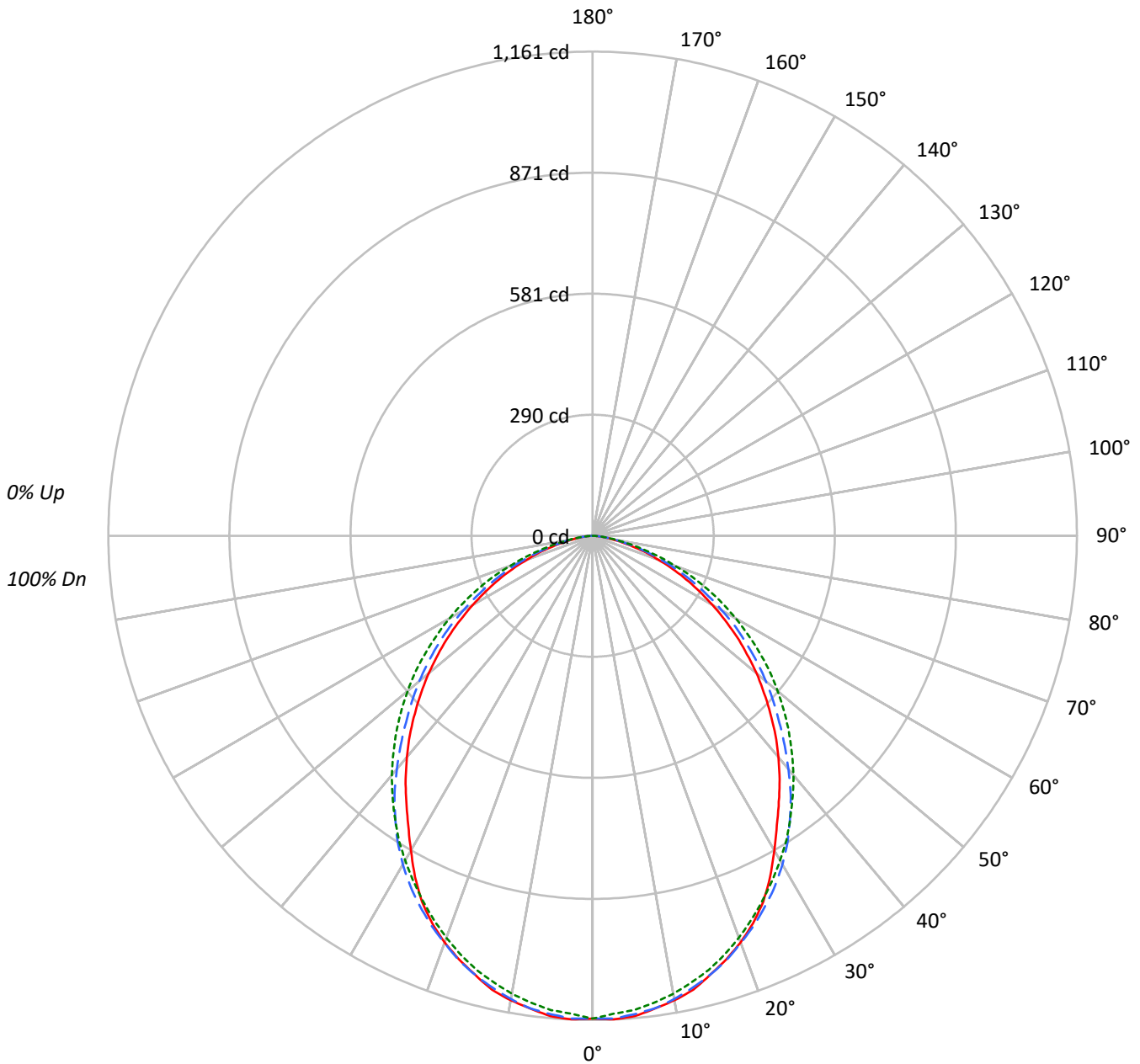
Lumens per Lamp: N/A  
Luminaire Lumens: 2677.0 lumens  
Efficiency: N/A  
Efficacy: 80.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	6231	6231	6231
5°	6247	6221	6168
10°	6181	6164	6093
15°	6072	6072	6002
20°	5943	5951	5874
25°	5747	5818	5726
30°	5412	5655	5586
35°	5114	5420	5430
40°	4865	5128	5262
45°	4587	4817	5065
50°	4294	4540	4849
55°	3961	4223	4586
60°	3567	3853	4266
65°	3149	3427	3880
70°	2625	2919	3297
75°	2063	2331	2581
80°	1475	1640	1819
85°	963	963	908



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.0	4.1
10°-20°	306.2	11.4
20°-30°	447.5	16.7
30°-40°	508.0	19.0
40°-50°	490.3	18.3
50°-60°	404.5	15.1
60°-70°	269.4	10.1
70°-80°	120.5	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°	862.7	32.2
0°-40°	1370.7	51.2
0°-60°	2265.5	84.6
0°-90°	2677.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2677.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1156	1156	1152	1145	1142	109
15°	1090	1092	1090	1085	1077	307
25°	968	975	980	973	964	443
35°	778	789	825	830	826	488
45°	603	613	633	662	665	465
55°	422	429	450	475	489	377
65°	247	254	269	288	305	245
75°	99	104	112	117	124	108
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°	1157.7	1157.7	1157.7	1157.7	1157.7
2.5°	1160.8	1161.3	1158.6	1151.5	1147.1
5°	1156.4	1156.0	1151.5	1145.3	1141.7
7.5°	1143.5	1144.4	1143.1	1134.2	1129.3
10°	1131.0	1131.5	1127.9	1120.8	1115.0
12.5°	1115.0	1114.6	1109.7	1106.1	1096.8
15°	1089.7	1092.4	1089.7	1084.8	1077.2
17.5°	1065.2	1065.2	1067.0	1058.5	1052.8
20°	1037.6	1039.0	1039.0	1032.3	1025.6
22.5°	1005.6	1009.6	1011.0	1003.8	995.8
25°	967.8	975.4	979.8	972.7	964.3
27.5°	922.0	933.6	946.9	941.6	932.2
30°	870.9	887.8	910.0	905.5	898.9
32.5°	822.4	839.3	870.0	868.2	864.6
35°	778.3	789.0	825.0	829.5	826.4
37.5°	736.5	746.3	780.1	790.4	787.7
40°	692.5	703.2	729.9	748.1	749.0
42.5°	648.9	659.1	680.9	707.2	707.2
45°	602.7	612.9	632.9	661.8	665.4
47.5°	557.3	568.0	587.5	616.4	622.2
50°	512.8	522.6	542.2	570.2	579.1
52.5°	466.6	477.2	496.4	522.2	535.1
55°	422.1	429.2	450.1	475.0	488.8
57.5°	375.8	382.5	406.1	427.4	441.7
60°	331.4	339.8	358.0	379.8	396.3
62.5°	288.7	297.6	313.1	332.2	350.9
65°	247.3	254.0	269.1	288.2	304.7
67.5°	207.3	213.0	228.2	241.5	258.9
70°	166.8	174.3	185.5	198.4	209.5
72.5°	134.3	137.4	146.8	156.1	167.7
75°	99.2	104.5	112.1	117.4	124.1
77.5°	71.2	74.3	78.7	83.2	89.4
80°	47.6	48.9	52.9	53.8	58.7
82.5°	28.9	29.8	30.7	31.1	32.9
85°	15.6	15.6	15.6	14.7	14.7
87.5°	8.9	8.9	7.6	6.2	4.4
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)