

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: P554535

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-93-87-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: P554535  
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-LD4-1STD-40-UNV-93-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

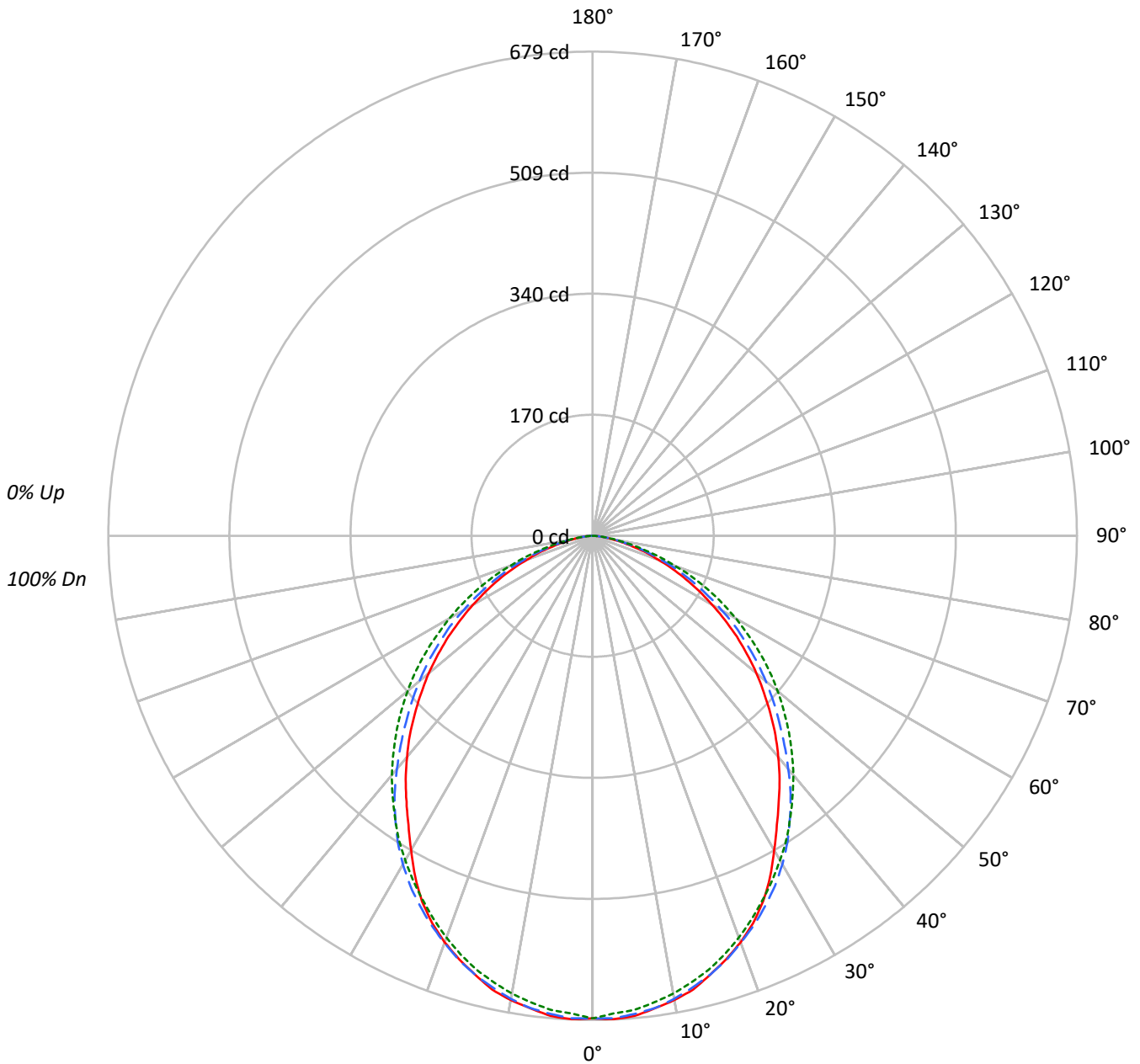
Lumens per Lamp: N/A  
Luminaire Lumens: 1565.0 lumens  
Efficiency: N/A  
Efficacy: 94.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
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°	3643	3643	3643
5°	3652	3637	3606
10°	3613	3604	3563
15°	3549	3549	3509
20°	3474	3479	3434
25°	3360	3401	3347
30°	3164	3306	3266
35°	2989	3169	3174
40°	2844	2998	3077
45°	2681	2816	2961
50°	2510	2654	2834
55°	2316	2469	2682
60°	2085	2253	2494
65°	1841	2003	2268
70°	1534	1706	1928
75°	1206	1362	1508
80°	862	958	1063
85°	562	562	531



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.7	4.1
10°-20°	179.0	11.4
20°-30°	261.6	16.7
30°-40°	297.0	19.0
40°-50°	286.7	18.3
50°-60°	236.5	15.1
60°-70°	157.5	10.1
70°-80°	70.5	4.5
80°-90°	12.6	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°	504.4	32.2
0°-40°	801.3	51.2
0°-60°	1324.5	84.6
0°-90°	1565.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1565.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	677	677	677	677	677	
5°	676	676	673	670	668	64
15°	637	639	637	634	630	180
25°	566	570	573	569	564	259
35°	455	461	482	485	483	285
45°	352	358	370	387	389	272
55°	247	251	263	278	286	220
65°	145	148	157	168	178	143
75°	58	61	66	69	72	63
85°	9	9	9	9	9	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	676.8	676.8	676.8	676.8	676.8
2.5°	678.6	678.9	677.3	673.2	670.6
5°	676.0	675.8	673.2	669.5	667.5
7.5°	668.5	669.0	668.2	663.0	660.2
10°	661.2	661.5	659.4	655.2	651.9
12.5°	651.9	651.6	648.7	646.7	641.2
15°	637.0	638.6	637.0	634.2	629.8
17.5°	622.7	622.7	623.8	618.8	615.5
20°	606.6	607.4	607.4	603.5	599.6
22.5°	587.9	590.2	591.0	586.9	582.2
25°	565.8	570.2	572.8	568.7	563.7
27.5°	539.0	545.8	553.6	550.5	545.0
30°	509.1	519.0	532.0	529.4	525.5
32.5°	480.8	490.7	508.6	507.6	505.5
35°	455.0	461.3	482.3	484.9	483.1
37.5°	430.6	436.3	456.1	462.0	460.5
40°	404.8	411.1	426.7	437.3	437.9
42.5°	379.4	385.3	398.1	413.4	413.4
45°	352.3	358.3	370.0	386.9	389.0
47.5°	325.8	332.0	343.5	360.4	363.8
50°	299.8	305.5	317.0	333.3	338.5
52.5°	272.8	279.0	290.2	305.3	312.8
55°	246.8	250.9	263.1	277.7	285.8
57.5°	219.7	223.6	237.4	249.9	258.2
60°	193.7	198.7	209.3	222.1	231.7
62.5°	168.8	174.0	183.1	194.2	205.2
65°	144.6	148.5	157.3	168.5	178.1
67.5°	121.2	124.5	133.4	141.2	151.3
70°	97.5	101.9	108.4	116.0	122.5
72.5°	78.5	80.3	85.8	91.3	98.0
75°	58.0	61.1	65.5	68.6	72.5
77.5°	41.6	43.4	46.0	48.6	52.3
80°	27.8	28.6	30.9	31.5	34.3
82.5°	16.9	17.4	17.9	18.2	19.2
85°	9.1	9.1	9.1	8.6	8.6
87.5°	5.2	5.2	4.4	3.6	2.6
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)