

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: P554573

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-81-96-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: P554573  
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-50-UNV-81-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

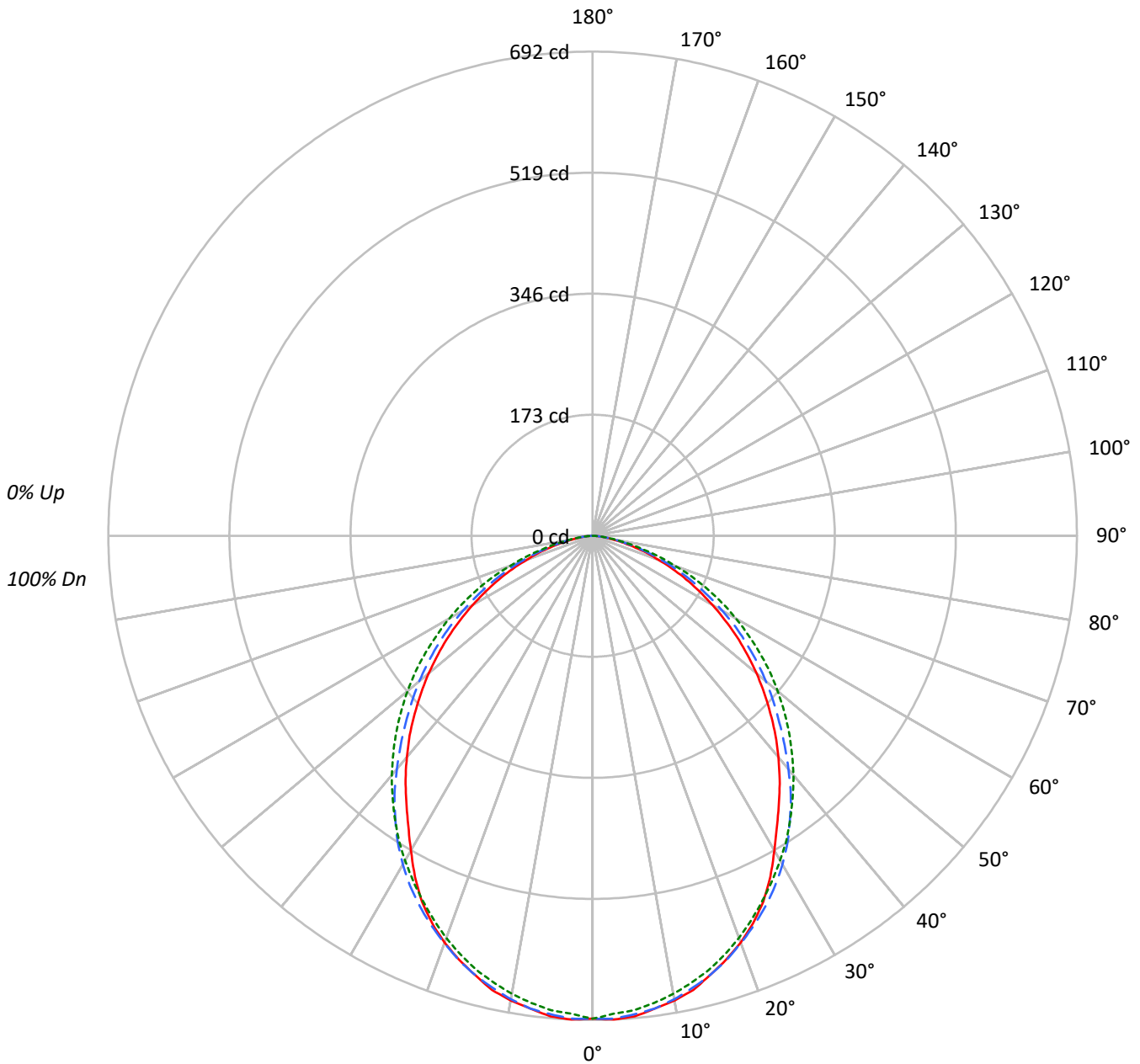
Lumens per Lamp: N/A  
Luminaire Lumens: 1596.0 lumens  
Efficiency: N/A  
Efficacy: 96.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (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°	3715	3715	3715
5°	3724	3709	3677
10°	3685	3675	3633
15°	3620	3620	3578
20°	3543	3548	3502
25°	3426	3469	3414
30°	3227	3371	3330
35°	3049	3232	3237
40°	2901	3057	3137
45°	2735	2872	3019
50°	2560	2706	2890
55°	2361	2518	2734
60°	2126	2298	2544
65°	1877	2043	2313
70°	1564	1740	1965
75°	1229	1389	1539
80°	880	979	1085
85°	574	574	543



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.0	4.1
10°-20°	182.6	11.4
20°-30°	266.8	16.7
30°-40°	302.8	19.0
40°-50°	292.3	18.3
50°-60°	241.2	15.1
60°-70°	160.6	10.1
70°-80°	71.9	4.5
80°-90°	12.9	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°	514.3	32.2
0°-40°	817.2	51.2
0°-60°	1350.7	84.6
0°-90°	1596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1596.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	690	690	690	690	690	
5°	689	689	686	683	681	65
15°	650	651	650	647	642	183
25°	577	582	584	580	575	264
35°	464	470	492	494	493	291
45°	359	365	377	395	397	277
55°	252	256	268	283	291	225
65°	147	151	160	172	182	146
75°	59	62	67	70	74	65
85°	9	9	9	9	9	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	690.2	690.2	690.2	690.2	690.2
2.5°	692.1	692.4	690.8	686.5	683.9
5°	689.4	689.2	686.5	682.8	680.7
7.5°	681.7	682.3	681.5	676.2	673.3
10°	674.3	674.6	672.5	668.2	664.8
12.5°	664.8	664.5	661.6	659.5	653.9
15°	649.7	651.2	649.7	646.7	642.2
17.5°	635.1	635.1	636.1	631.1	627.6
20°	618.6	619.4	619.4	615.5	611.5
22.5°	599.5	601.9	602.7	598.5	593.7
25°	577.0	581.5	584.2	579.9	574.9
27.5°	549.7	556.6	564.5	561.4	555.8
30°	519.2	529.3	542.5	539.9	535.9
32.5°	490.3	500.4	518.7	517.6	515.5
35°	464.0	470.4	491.9	494.5	492.7
37.5°	439.1	444.9	465.1	471.2	469.6
40°	412.9	419.2	435.1	446.0	446.5
42.5°	386.9	393.0	406.0	421.6	421.6
45°	359.3	365.4	377.3	394.6	396.7
47.5°	332.3	338.6	350.3	367.5	371.0
50°	305.7	311.6	323.2	339.9	345.2
52.5°	278.2	284.5	295.9	311.3	319.0
55°	251.6	255.9	268.3	283.2	291.4
57.5°	224.1	228.0	242.1	254.8	263.3
60°	197.5	202.6	213.5	226.5	236.3
62.5°	172.1	177.4	186.7	198.1	209.2
65°	147.4	151.4	160.4	171.8	181.6
67.5°	123.6	127.0	136.0	144.0	154.3
70°	99.4	103.9	110.6	118.3	124.9
72.5°	80.1	81.9	87.5	93.1	100.0
75°	59.1	62.3	66.8	70.0	74.0
77.5°	42.4	44.3	46.9	49.6	53.3
80°	28.4	29.2	31.6	32.1	35.0
82.5°	17.2	17.8	18.3	18.6	19.6
85°	9.3	9.3	9.3	8.8	8.8
87.5°	5.3	5.3	4.5	3.7	2.7
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)