

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: P554550

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-80-87-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: P554550  
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-80-87-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

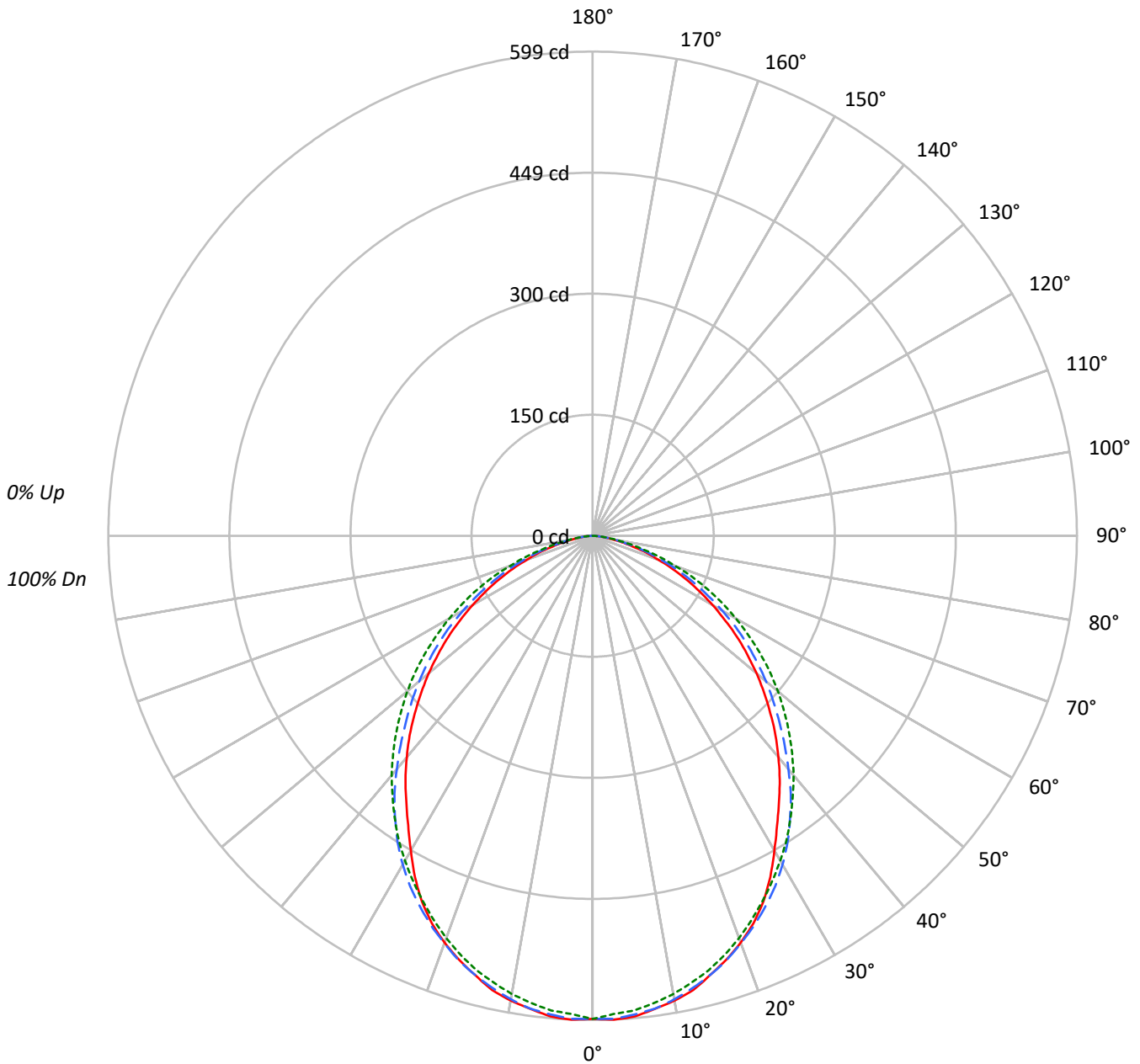
Lumens per Lamp: N/A  
Luminaire Lumens: 1382.0 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3217	3217	3217
5°	3225	3212	3184
10°	3191	3182	3146
15°	3134	3134	3098
20°	3068	3072	3033
25°	2967	3004	2956
30°	2794	2920	2884
35°	2640	2798	2803
40°	2512	2647	2717
45°	2368	2487	2614
50°	2216	2344	2503
55°	2045	2181	2367
60°	1842	1989	2202
65°	1626	1769	2003
70°	1355	1506	1701
75°	1065	1204	1333
80°	762	846	939
85°	494	494	469



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.3	4.1
10°-20°	158.1	11.4
20°-30°	231.0	16.7
30°-40°	262.2	19.0
40°-50°	253.1	18.3
50°-60°	208.8	15.1
60°-70°	139.1	10.1
70°-80°	62.2	4.5
80°-90°	11.1	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°	445.4	32.2
0°-40°	707.6	51.2
0°-60°	1169.6	84.6
0°-90°	1382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1382.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	597	597	594	591	589	57
15°	562	564	562	560	556	159
25°	500	504	506	502	498	229
35°	402	407	426	428	427	252
45°	311	316	327	342	344	240
55°	218	222	232	245	252	194
65°	128	131	139	149	157	127
75°	51	54	58	61	64	56
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	597.7	597.7	597.7	597.7	597.7
2.5°	599.3	599.5	598.1	594.5	592.2
5°	597.0	596.8	594.5	591.3	589.4
7.5°	590.3	590.8	590.1	585.5	583.0
10°	583.9	584.1	582.3	578.6	575.6
12.5°	575.6	575.4	572.9	571.0	566.2
15°	562.5	563.9	562.5	560.0	556.1
17.5°	549.9	549.9	550.8	546.5	543.5
20°	535.7	536.4	536.4	532.9	529.5
22.5°	519.2	521.2	521.9	518.2	514.1
25°	499.6	503.5	505.8	502.2	497.8
27.5°	476.0	482.0	488.8	486.1	481.3
30°	449.6	458.3	469.8	467.5	464.0
32.5°	424.6	433.3	449.1	448.2	446.4
35°	401.8	407.3	425.9	428.2	426.6
37.5°	380.2	385.3	402.7	408.0	406.6
40°	357.5	363.0	376.8	386.2	386.7
42.5°	335.0	340.3	351.5	365.1	365.1
45°	311.1	316.4	326.7	341.7	343.5
47.5°	287.7	293.2	303.3	318.2	321.2
50°	264.7	269.8	279.9	294.4	299.0
52.5°	240.9	246.4	256.2	269.6	276.2
55°	217.9	221.6	232.4	245.2	252.3
57.5°	194.0	197.5	209.6	220.7	228.0
60°	171.1	175.4	184.8	196.1	204.6
62.5°	149.0	153.6	161.6	171.5	181.2
65°	127.7	131.1	138.9	148.8	157.3
67.5°	107.0	110.0	117.8	124.7	133.6
70°	86.1	90.0	95.7	102.4	108.1
72.5°	69.3	71.0	75.8	80.6	86.6
75°	51.2	54.0	57.9	60.6	64.1
77.5°	36.7	38.3	40.6	42.9	46.2
80°	24.6	25.3	27.3	27.8	30.3
82.5°	14.9	15.4	15.8	16.1	17.0
85°	8.0	8.0	8.0	7.6	7.6
87.5°	4.6	4.6	3.9	3.2	2.3
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)