

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: P554360

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-80-88-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: P554360  
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-30-UNV-80-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

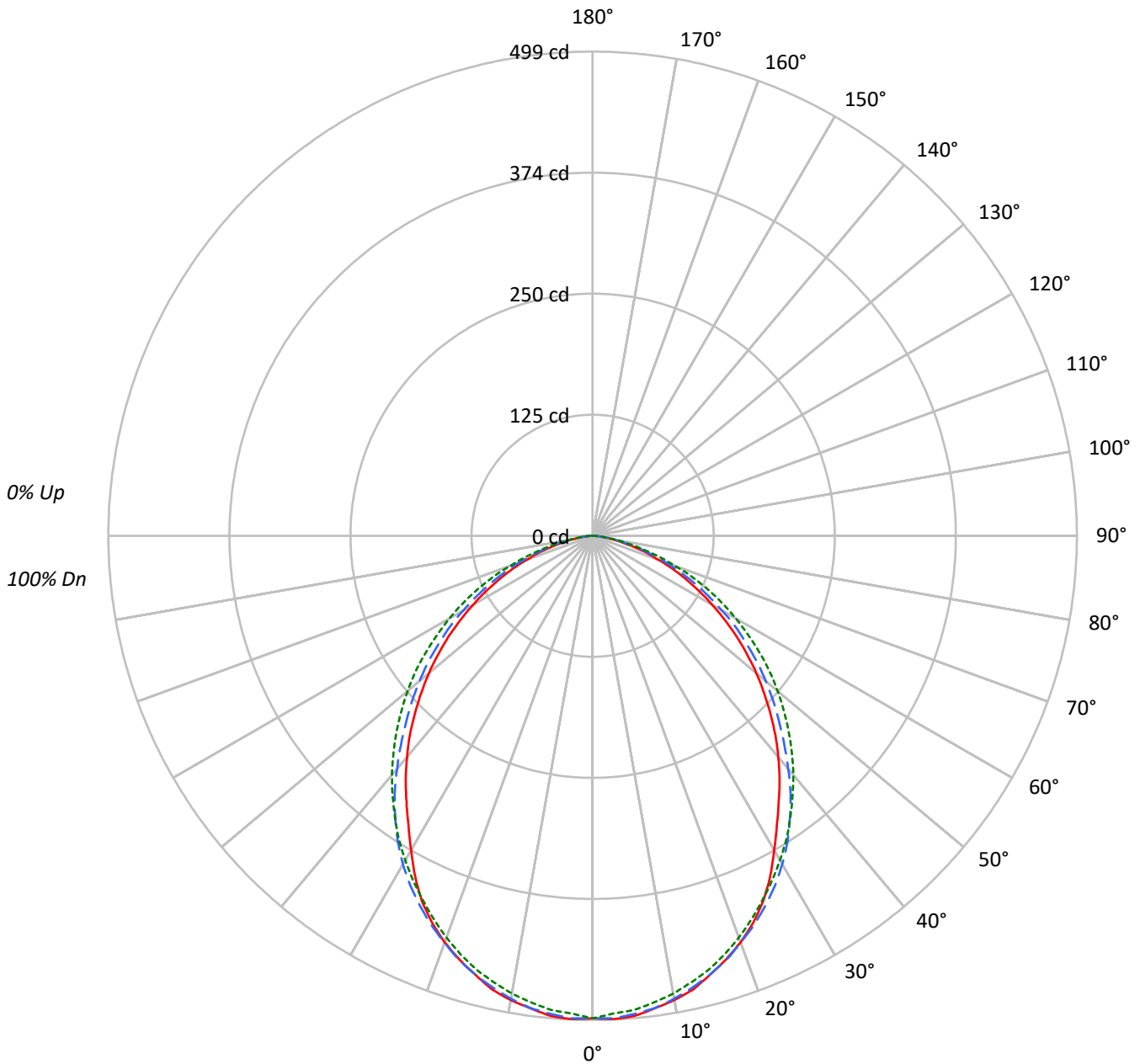
Lumens per Lamp: N/A  
Luminaire Lumens: 1150.0 lumens  
Efficiency: N/A  
Efficacy: 69.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2676	2676	2676
5°	2684	2673	2650
10°	2655	2648	2618
15°	2608	2608	2579
20°	2553	2556	2523
25°	2469	2499	2460
30°	2325	2429	2399
35°	2197	2328	2332
40°	2090	2203	2261
45°	1971	2069	2175
50°	1845	1950	2083
55°	1701	1815	1970
60°	1532	1655	1832
65°	1352	1472	1667
70°	1127	1254	1416
75°	886	1000	1108
80°	632	704	781
85°	414	414	389



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.8	4.1
10°-20°	131.5	11.4
20°-30°	192.2	16.7
30°-40°	218.2	19.0
40°-50°	210.6	18.3
50°-60°	173.8	15.1
60°-70°	115.7	10.1
70°-80°	51.8	4.5
80°-90°	9.3	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°	370.6	32.2
0°-40°	588.8	51.2
0°-60°	973.2	84.6
0°-90°	1150.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1150.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	497	497	497	497	497	
5°	497	497	495	492	490	47
15°	468	469	468	466	463	132
25°	416	419	421	418	414	190
35°	334	339	354	356	355	210
45°	259	263	272	284	286	200
55°	181	184	193	204	210	162
65°	106	109	116	124	131	105
75°	43	45	48	50	53	47
85°	7	7	7	6	6	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	497.3	497.3	497.3	497.3	497.3
2.5°	498.7	498.9	497.7	494.7	492.8
5°	496.8	496.6	494.7	492.0	490.5
7.5°	491.2	491.6	491.0	487.2	485.1
10°	485.9	486.1	484.5	481.5	479.0
12.5°	479.0	478.8	476.7	475.2	471.2
15°	468.1	469.3	468.1	466.0	462.8
17.5°	457.6	457.6	458.4	454.7	452.3
20°	445.8	446.3	446.3	443.5	440.6
22.5°	432.0	433.7	434.3	431.2	427.8
25°	415.8	419.0	420.9	417.9	414.2
27.5°	396.1	401.0	406.8	404.5	400.5
30°	374.1	381.4	390.9	389.0	386.1
32.5°	353.3	360.5	373.7	373.0	371.4
35°	334.4	339.0	354.4	356.3	355.0
37.5°	316.4	320.6	335.1	339.5	338.4
40°	297.5	302.1	313.5	321.4	321.8
42.5°	278.8	283.2	292.5	303.8	303.8
45°	258.9	263.3	271.9	284.3	285.8
47.5°	239.4	244.0	252.4	264.8	267.3
50°	220.3	224.5	232.9	244.9	248.8
52.5°	200.4	205.0	213.2	224.3	229.9
55°	181.3	184.4	193.4	204.1	210.0
57.5°	161.5	164.3	174.4	183.6	189.7
60°	142.3	146.0	153.8	163.2	170.2
62.5°	124.0	127.8	134.5	142.7	150.8
65°	106.2	109.1	115.6	123.8	130.9
67.5°	89.0	91.5	98.0	103.7	111.2
70°	71.6	74.9	79.7	85.2	90.0
72.5°	57.7	59.0	63.1	67.1	72.0
75°	42.6	44.9	48.1	50.4	53.3
77.5°	30.6	31.9	33.8	35.7	38.4
80°	20.4	21.0	22.7	23.1	25.2
82.5°	12.4	12.8	13.2	13.4	14.1
85°	6.7	6.7	6.7	6.3	6.3
87.5°	3.8	3.8	3.2	2.7	1.9
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)