

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: P554546

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-80-85-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: P554546  
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-80-85-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

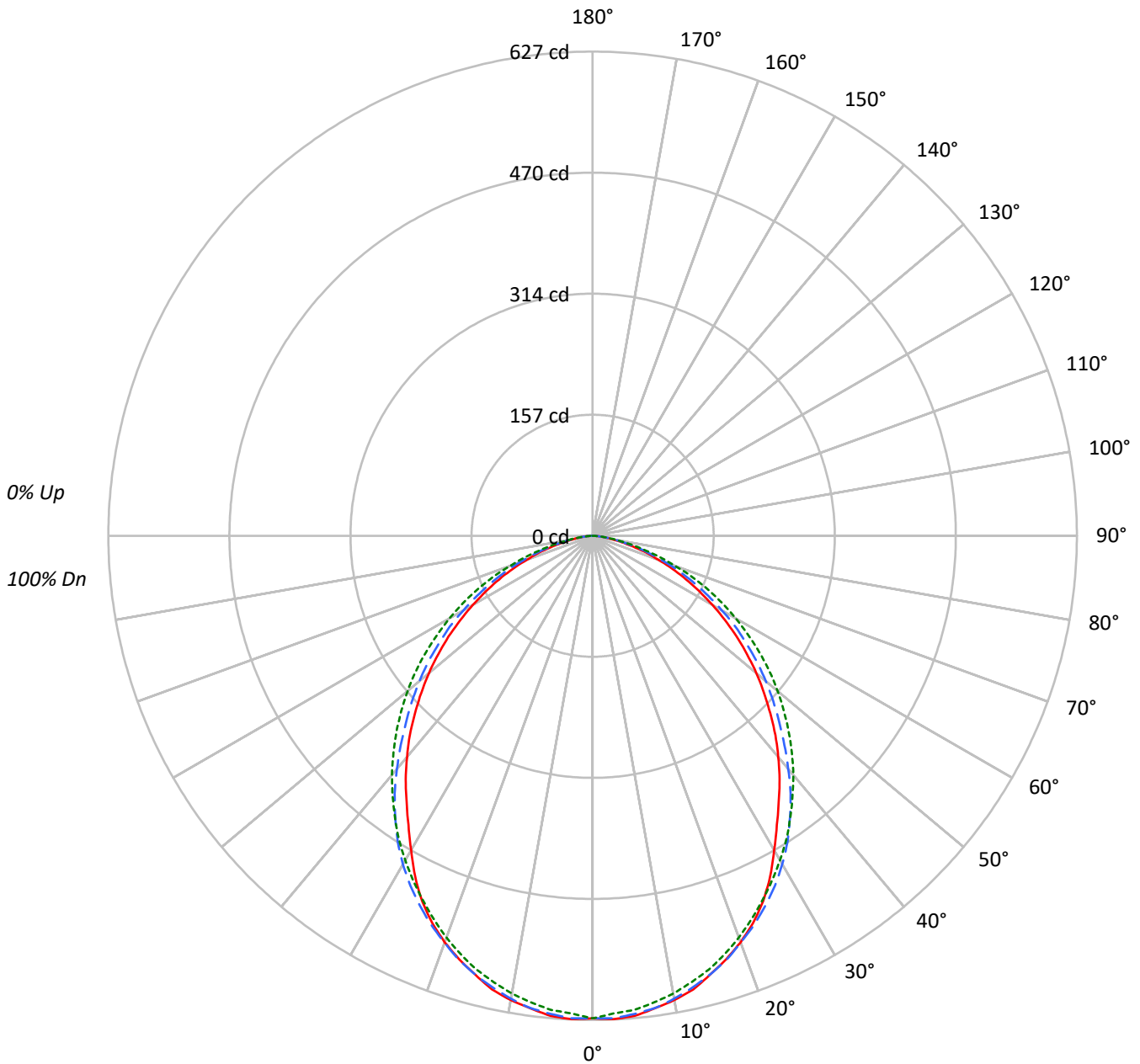
Lumens per Lamp: N/A  
Luminaire Lumens: 1445.0 lumens  
Efficiency: N/A  
Efficacy: 87.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3363	3363	3363
5°	3372	3358	3330
10°	3336	3327	3289
15°	3277	3277	3240
20°	3208	3212	3171
25°	3102	3141	3091
30°	2921	3053	3015
35°	2760	2926	2931
40°	2626	2768	2840
45°	2476	2600	2734
50°	2318	2451	2617
55°	2137	2280	2475
60°	1926	2081	2302
65°	1700	1849	2095
70°	1416	1575	1780
75°	1112	1258	1393
80°	797	886	982
85°	519	519	488



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.8	4.1
10°-20°	165.3	11.4
20°-30°	241.5	16.7
30°-40°	274.2	19.0
40°-50°	264.7	18.3
50°-60°	218.4	15.1
60°-70°	145.4	10.1
70°-80°	65.1	4.5
80°-90°	11.6	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°	465.7	32.2
0°-40°	739.9	51.2
0°-60°	1222.9	84.6
0°-90°	1445.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1445.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	625	625	625	625	625	
5°	624	624	622	618	616	59
15°	588	590	588	586	582	166
25°	522	526	529	525	520	239
35°	420	426	445	448	446	263
45°	325	331	342	357	359	251
55°	228	232	243	256	264	203
65°	134	137	145	156	164	132
75°	54	56	60	63	67	59
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°	624.9	624.9	624.9	624.9	624.9
2.5°	626.6	626.8	625.4	621.6	619.2
5°	624.2	624.0	621.6	618.2	616.3
7.5°	617.2	617.7	617.0	612.2	609.6
10°	610.5	610.8	608.8	605.0	601.9
12.5°	601.9	601.6	599.0	597.1	592.0
15°	588.2	589.6	588.2	585.6	581.5
17.5°	575.0	575.0	575.9	571.4	568.3
20°	560.1	560.8	560.8	557.2	553.6
22.5°	542.8	545.0	545.7	541.9	537.5
25°	522.4	526.5	528.9	525.1	520.5
27.5°	497.7	503.9	511.1	508.2	503.2
30°	470.1	479.2	491.2	488.8	485.2
32.5°	443.9	453.0	469.6	468.6	466.7
35°	420.1	425.9	445.3	447.7	446.1
37.5°	397.6	402.9	421.1	426.6	425.2
40°	373.8	379.6	394.0	403.8	404.3
42.5°	350.3	355.8	367.6	381.7	381.7
45°	325.3	330.8	341.6	357.2	359.2
47.5°	300.8	306.6	317.1	332.7	335.9
50°	276.8	282.1	292.7	307.8	312.6
52.5°	251.8	257.6	267.9	281.9	288.8
55°	227.8	231.7	243.0	256.4	263.8
57.5°	202.9	206.5	219.2	230.7	238.4
60°	178.9	183.4	193.3	205.0	213.9
62.5°	155.8	160.6	169.0	179.3	189.4
65°	133.5	137.1	145.2	155.6	164.5
67.5°	111.9	115.0	123.2	130.4	139.7
70°	90.0	94.1	100.1	107.1	113.1
72.5°	72.5	74.2	79.2	84.3	90.5
75°	53.5	56.4	60.5	63.4	67.0
77.5°	38.4	40.1	42.5	44.9	48.3
80°	25.7	26.4	28.6	29.0	31.7
82.5°	15.6	16.1	16.6	16.8	17.8
85°	8.4	8.4	8.4	7.9	7.9
87.5°	4.8	4.8	4.1	3.4	2.4
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)