

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: P554553

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-80-88-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: P554553  
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-80-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

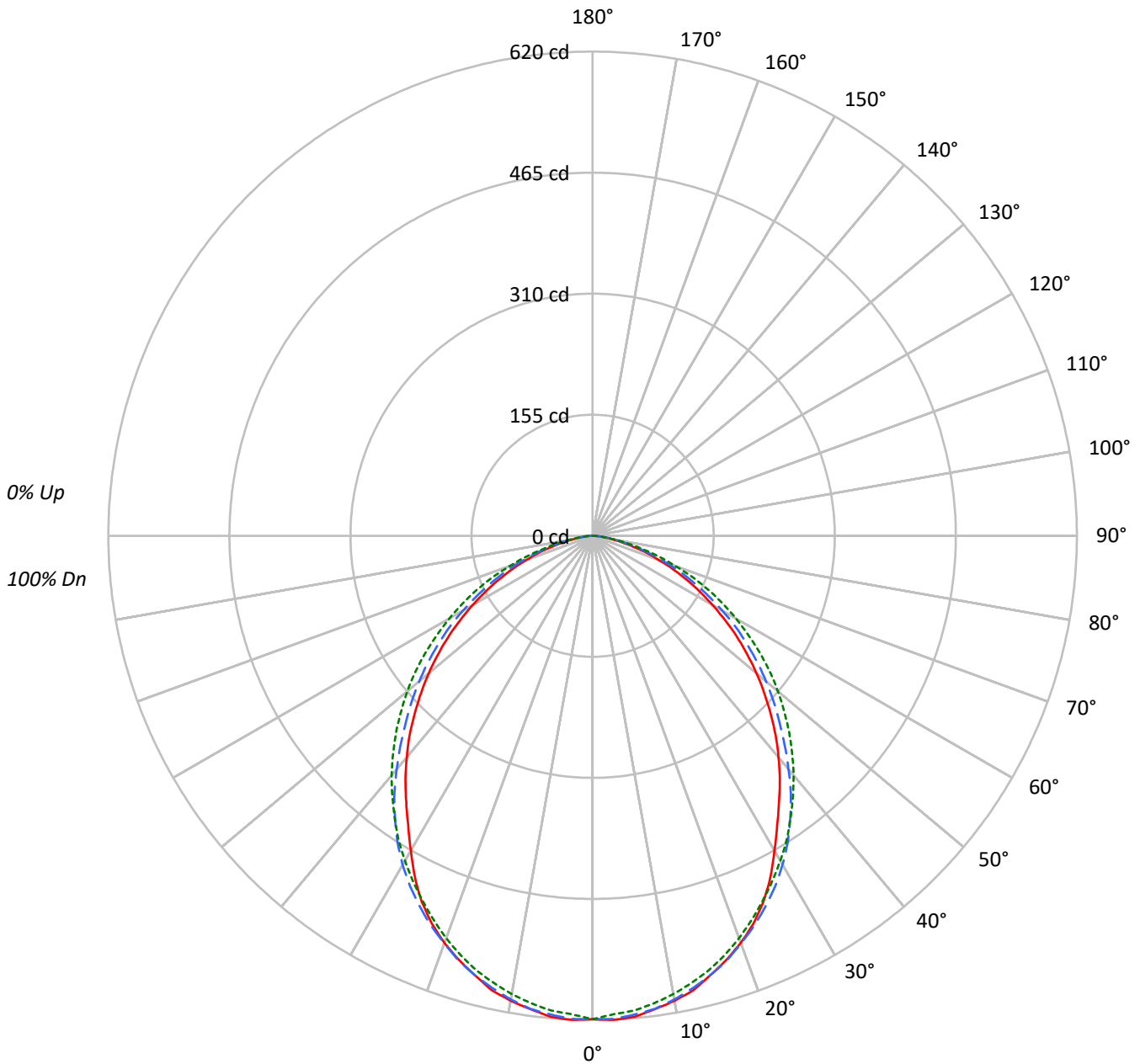
Lumens per Lamp: N/A  
Luminaire Lumens: 1431.0 lumens  
Efficiency: N/A  
Efficacy: 86.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3331	3331	3331
5°	3340	3325	3297
10°	3304	3295	3257
15°	3246	3246	3208
20°	3177	3181	3140
25°	3072	3110	3061
30°	2893	3023	2986
35°	2734	2897	2902
40°	2601	2741	2813
45°	2452	2575	2707
50°	2295	2426	2592
55°	2117	2258	2452
60°	1906	2060	2280
65°	1684	1831	2074
70°	1404	1559	1762
75°	1102	1246	1379
80°	787	877	973
85°	513	513	482



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.3	4.1
10°-20°	163.7	11.4
20°-30°	239.2	16.7
30°-40°	271.5	19.0
40°-50°	262.1	18.3
50°-60°	216.2	15.1
60°-70°	144.0	10.1
70°-80°	64.4	4.5
80°-90°	11.5	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°	461.2	32.2
0°-40°	732.7	51.2
0°-60°	1211.0	84.6
0°-90°	1431.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1431.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	619	619	619	619	619	
5°	618	618	616	612	610	59
15°	582	584	582	580	576	164
25°	517	521	524	520	515	237
35°	416	422	441	443	442	261
45°	322	328	338	354	356	249
55°	226	229	241	254	261	201
65°	132	136	144	154	163	131
75°	53	56	60	63	66	58
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°	618.9	618.9	618.9	618.9	618.9
2.5°	620.5	620.8	619.3	615.5	613.2
5°	618.2	617.9	615.5	612.2	610.3
7.5°	611.3	611.7	611.0	606.3	603.7
10°	604.6	604.8	602.9	599.1	596.0
12.5°	596.0	595.8	593.2	591.3	586.3
15°	582.5	583.9	582.5	579.9	575.8
17.5°	569.4	569.4	570.4	565.9	562.8
20°	554.7	555.4	555.4	551.8	548.3
22.5°	537.6	539.7	540.4	536.6	532.3
25°	517.4	521.4	523.8	520.0	515.4
27.5°	492.9	499.0	506.2	503.3	498.3
30°	465.5	474.6	486.4	484.1	480.5
32.5°	439.6	448.6	465.0	464.1	462.2
35°	416.1	421.8	441.0	443.4	441.7
37.5°	393.7	398.9	417.0	422.5	421.1
40°	370.2	375.9	390.2	399.9	400.4
42.5°	346.9	352.3	364.0	378.0	378.0
45°	322.2	327.6	338.3	353.8	355.7
47.5°	297.9	303.6	314.1	329.5	332.6
50°	274.1	279.4	289.8	304.8	309.6
52.5°	249.4	255.1	265.3	279.1	286.0
55°	225.6	229.4	240.6	253.9	261.3
57.5°	200.9	204.5	217.1	228.5	236.1
60°	177.1	181.6	191.4	203.0	211.8
62.5°	154.3	159.1	167.4	177.6	187.6
65°	132.2	135.8	143.8	154.1	162.9
67.5°	110.8	113.9	122.0	129.1	138.4
70°	89.2	93.2	99.1	106.0	112.0
72.5°	71.8	73.5	78.5	83.5	89.6
75°	53.0	55.9	59.9	62.8	66.3
77.5°	38.0	39.7	42.1	44.5	47.8
80°	25.4	26.2	28.3	28.8	31.4
82.5°	15.5	15.9	16.4	16.6	17.6
85°	8.3	8.3	8.3	7.8	7.8
87.5°	4.8	4.8	4.0	3.3	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)