

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: P554040

Luminaire Tested: **FUSL-12-2-LD4-1HI-50-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: P554040  
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-LD4-1HI-50-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 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

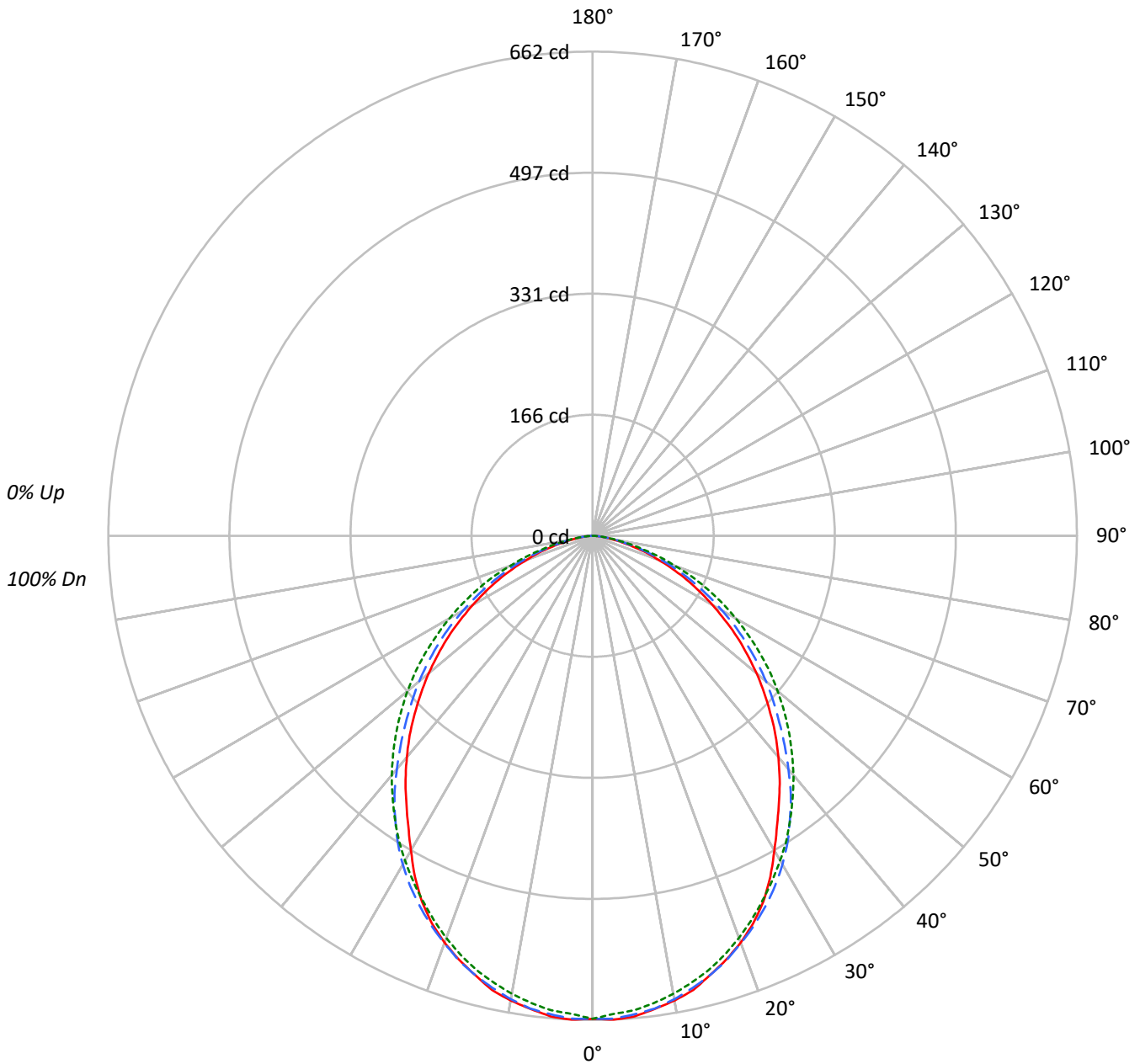
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1527.0 lumens  
Efficiency: N/A  
Efficacy: 70.7 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): 21.6  
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°	3554	3554	3554
5°	3563	3548	3519
10°	3526	3516	3476
15°	3463	3463	3424
20°	3390	3394	3351
25°	3279	3319	3266
30°	3087	3226	3186
35°	2917	3092	3097
40°	2775	2925	3001
45°	2617	2748	2888
50°	2449	2590	2766
55°	2259	2409	2616
60°	2034	2198	2433
65°	1797	1955	2213
70°	1496	1665	1880
75°	1177	1329	1472
80°	840	936	1038
85°	550	550	519



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.2	4.1
10°-20°	174.7	11.4
20°-30°	255.3	16.7
30°-40°	289.7	19.0
40°-50°	279.7	18.3
50°-60°	230.7	15.1
60°-70°	153.7	10.1
70°-80°	68.8	4.5
80°-90°	12.3	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°	492.1	32.2
0°-40°	781.8	51.2
0°-60°	1292.3	84.6
0°-90°	1527.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1527.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	660	660	660	660	660	
5°	660	659	657	653	651	62
15°	622	623	622	619	614	175
25°	552	556	559	555	550	253
35°	444	450	471	473	471	278
45°	344	350	361	378	380	265
55°	241	245	257	271	279	215
65°	141	145	154	164	174	140
75°	57	60	64	67	71	62
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	660.4	660.4	660.4	660.4	660.4
2.5°	662.2	662.4	660.9	656.8	654.3
5°	659.6	659.4	656.8	653.3	651.3
7.5°	652.3	652.8	652.0	646.9	644.2
10°	645.2	645.4	643.4	639.3	636.0
12.5°	636.0	635.8	633.0	631.0	625.6
15°	621.6	623.1	621.6	618.8	614.5
17.5°	607.6	607.6	608.6	603.8	600.5
20°	591.9	592.6	592.6	588.8	585.0
22.5°	573.6	575.9	576.7	572.6	568.0
25°	552.1	556.4	558.9	554.8	550.0
27.5°	525.9	532.5	540.1	537.1	531.8
30°	496.7	506.4	519.1	516.5	512.7
32.5°	469.1	478.7	496.2	495.2	493.2
35°	444.0	450.1	470.6	473.2	471.4
37.5°	420.1	425.7	445.0	450.8	449.3
40°	395.0	401.1	416.3	426.7	427.2
42.5°	370.2	376.0	388.4	403.4	403.4
45°	343.8	349.6	361.0	377.5	379.5
47.5°	317.9	324.0	335.1	351.6	354.9
50°	292.5	298.1	309.3	325.2	330.3
52.5°	266.1	272.2	283.1	297.8	305.2
55°	240.8	244.8	256.7	271.0	278.8
57.5°	214.4	218.2	231.6	243.8	251.9
60°	189.0	193.8	204.2	216.7	226.0
62.5°	164.7	169.7	178.6	189.5	200.2
65°	141.1	144.9	153.5	164.4	173.8
67.5°	118.2	121.5	130.1	137.8	147.7
70°	95.1	99.5	105.8	113.2	119.5
72.5°	76.6	78.4	83.7	89.0	95.6
75°	56.6	59.6	63.9	67.0	70.8
77.5°	40.6	42.4	44.9	47.4	51.0
80°	27.1	27.9	30.2	30.7	33.5
82.5°	16.5	17.0	17.5	17.8	18.8
85°	8.9	8.9	8.9	8.4	8.4
87.5°	5.1	5.1	4.3	3.6	2.5
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)