

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: P554577

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-82-84-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: P554577  
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-82-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

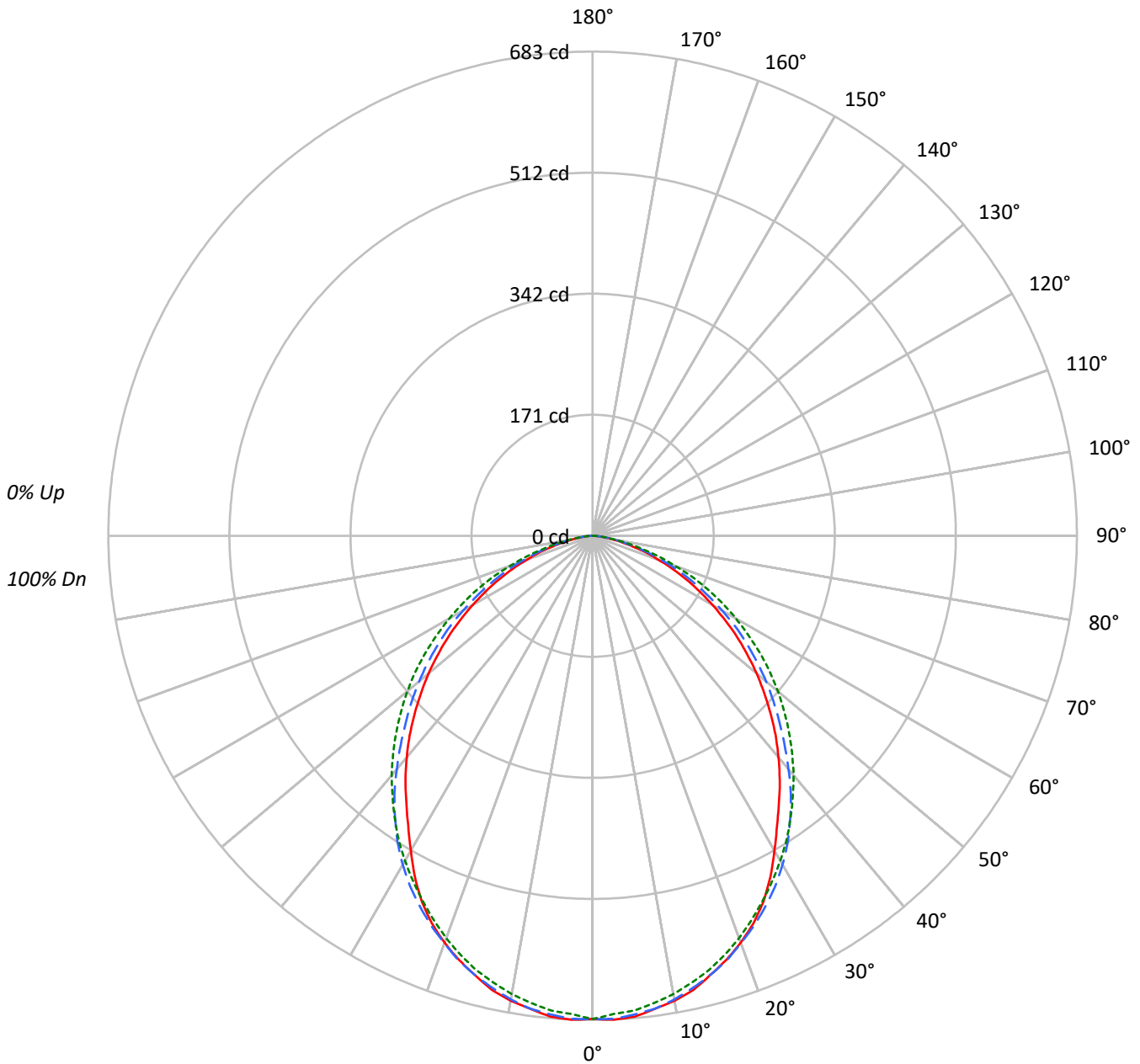
Lumens per Lamp: N/A  
Luminaire Lumens: 1576.0 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3668	3668	3668
5°	3678	3662	3632
10°	3639	3629	3587
15°	3574	3574	3534
20°	3499	3503	3458
25°	3384	3425	3371
30°	3186	3329	3289
35°	3010	3191	3196
40°	2864	3019	3098
45°	2700	2836	2981
50°	2528	2673	2854
55°	2332	2487	2700
60°	2100	2269	2511
65°	1854	2017	2285
70°	1545	1718	1940
75°	1214	1372	1520
80°	868	967	1072
85°	568	568	531



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.2	4.1
10°-20°	180.3	11.4
20°-30°	263.4	16.7
30°-40°	299.0	19.0
40°-50°	288.7	18.3
50°-60°	238.1	15.1
60°-70°	158.6	10.1
70°-80°	71.0	4.5
80°-90°	12.7	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°	507.9	32.2
0°-40°	806.9	51.2
0°-60°	1333.8	84.6
0°-90°	1576.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1576.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	682	682	682	682	682	
5°	681	680	678	674	672	64
15°	642	643	642	639	634	181
25°	570	574	577	573	568	261
35°	458	464	486	488	486	287
45°	355	361	373	390	392	274
55°	248	253	265	280	288	222
65°	146	150	158	170	179	144
75°	58	62	66	69	73	64
85°	9	9	9	9	9	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	681.6	681.6	681.6	681.6	681.6
2.5°	683.4	683.7	682.1	677.9	675.3
5°	680.8	680.5	677.9	674.2	672.2
7.5°	673.2	673.7	672.9	667.7	664.8
10°	665.9	666.1	664.0	659.8	656.4
12.5°	656.4	656.2	653.3	651.2	645.7
15°	641.5	643.1	641.5	638.6	634.2
17.5°	627.1	627.1	628.2	623.2	619.8
20°	610.9	611.7	611.7	607.7	603.8
22.5°	592.0	594.4	595.2	591.0	586.3
25°	569.8	574.2	576.8	572.7	567.7
27.5°	542.8	549.6	557.5	554.3	548.8
30°	512.7	522.6	535.7	533.1	529.2
32.5°	484.1	494.1	512.2	511.1	509.0
35°	458.2	464.5	485.7	488.3	486.5
37.5°	433.6	439.4	459.3	465.3	463.7
40°	407.7	414.0	429.7	440.4	440.9
42.5°	382.0	388.1	400.9	416.3	416.3
45°	354.8	360.8	372.6	389.6	391.7
47.5°	328.1	334.4	345.9	362.9	366.3
50°	301.9	307.7	319.2	335.7	340.9
52.5°	274.7	281.0	292.2	307.4	315.0
55°	248.5	252.7	265.0	279.6	287.8
57.5°	221.3	225.2	239.1	251.6	260.0
60°	195.1	200.0	210.8	223.6	233.3
62.5°	169.9	175.2	184.3	195.6	206.6
65°	145.6	149.5	158.4	169.7	179.4
67.5°	122.0	125.4	134.3	142.2	152.4
70°	98.2	102.6	109.2	116.8	123.3
72.5°	79.1	80.9	86.4	91.9	98.7
75°	58.4	61.5	66.0	69.1	73.1
77.5°	41.9	43.7	46.3	49.0	52.6
80°	28.0	28.8	31.2	31.7	34.6
82.5°	17.0	17.5	18.1	18.3	19.4
85°	9.2	9.2	9.2	8.6	8.6
87.5°	5.2	5.2	4.5	3.7	2.6
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)