

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: P554401

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-93-84-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: P554401  
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-93-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

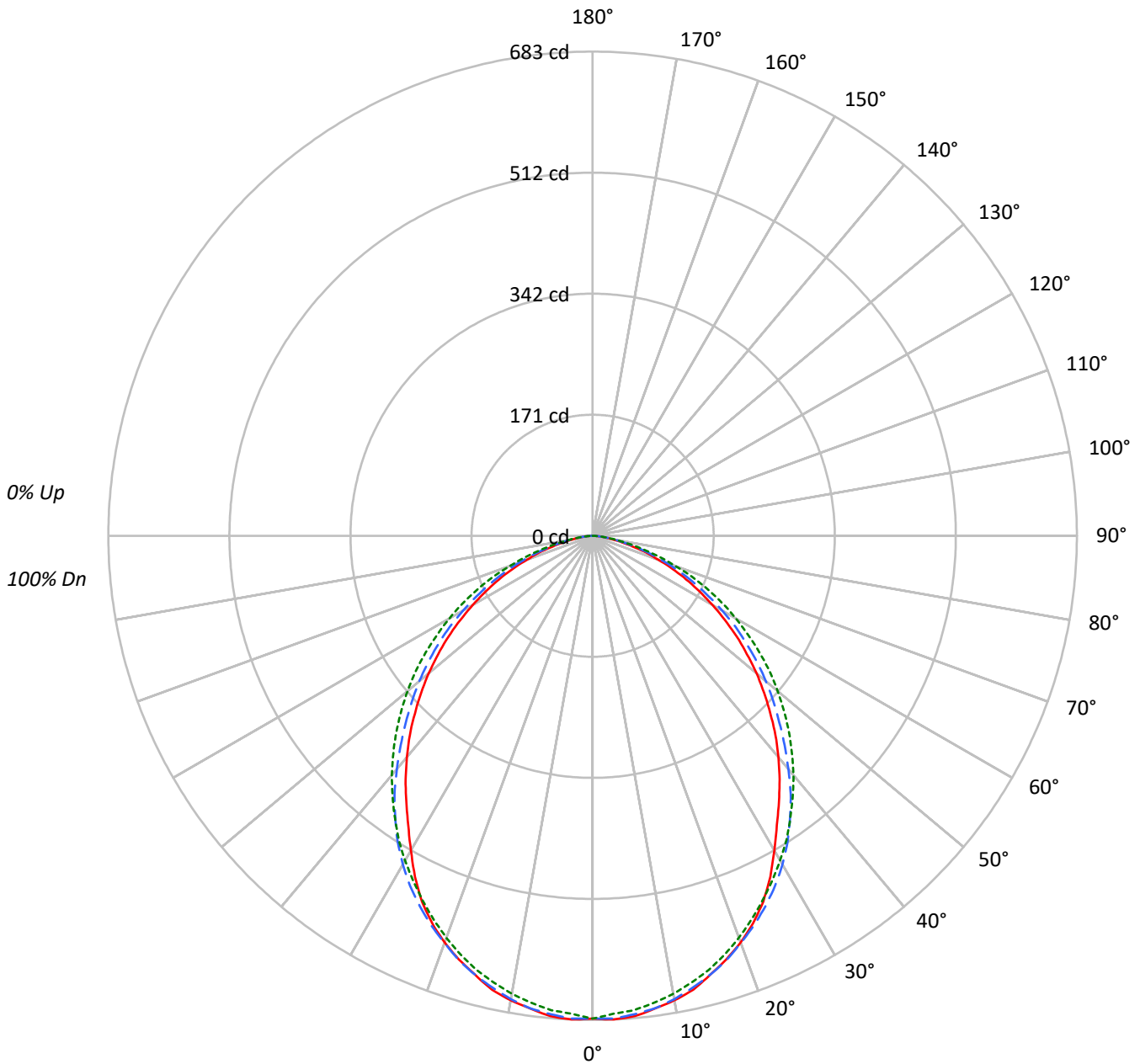
Lumens per Lamp: N/A  
Luminaire Lumens: 1575.0 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	3666	3666	3666
5°	3676	3660	3629
10°	3636	3627	3585
15°	3572	3572	3531
20°	3497	3501	3456
25°	3381	3423	3369
30°	3184	3327	3287
35°	3008	3189	3194
40°	2862	3017	3096
45°	2699	2834	2980
50°	2526	2671	2853
55°	2330	2485	2699
60°	2098	2268	2510
65°	1853	2016	2282
70°	1544	1717	1940
75°	1214	1370	1518
80°	868	964	1069
85°	568	568	531



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.1	4.1
10°-20°	180.2	11.4
20°-30°	263.3	16.7
30°-40°	298.8	19.0
40°-50°	288.5	18.3
50°-60°	238.0	15.1
60°-70°	158.5	10.1
70°-80°	70.9	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°	507.6	32.2
0°-40°	806.4	51.2
0°-60°	1332.9	84.6
0°-90°	1575.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1575.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	681	681	681	681	681	
5°	680	680	678	674	672	64
15°	641	643	641	638	634	181
25°	569	574	576	572	567	261
35°	458	464	485	488	486	287
45°	355	361	372	389	392	274
55°	248	252	265	280	288	222
65°	146	149	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°	681.1	681.1	681.1	681.1	681.1
2.5°	683.0	683.2	681.7	677.5	674.9
5°	680.4	680.1	677.5	673.8	671.7
7.5°	672.8	673.3	672.5	667.3	664.4
10°	665.4	665.7	663.6	659.4	656.0
12.5°	656.0	655.8	652.9	650.8	645.3
15°	641.1	642.7	641.1	638.2	633.8
17.5°	626.7	626.7	627.8	622.8	619.4
20°	610.5	611.3	611.3	607.4	603.4
22.5°	591.7	594.0	594.8	590.6	585.9
25°	569.4	573.9	576.5	572.3	567.3
27.5°	542.5	549.3	557.1	554.0	548.5
30°	512.4	522.3	535.4	532.8	528.9
32.5°	483.8	493.8	511.8	510.8	508.7
35°	457.9	464.2	485.4	488.0	486.2
37.5°	433.3	439.1	459.0	465.0	463.4
40°	407.4	413.7	429.4	440.1	440.7
42.5°	381.8	387.8	400.6	416.1	416.1
45°	354.6	360.6	372.4	389.4	391.5
47.5°	327.9	334.2	345.7	362.7	366.1
50°	301.7	307.5	319.0	335.5	340.7
52.5°	274.5	280.8	292.0	307.2	314.8
55°	248.3	252.5	264.8	279.5	287.6
57.5°	221.1	225.0	238.9	251.5	259.8
60°	194.9	199.9	210.7	223.5	233.2
62.5°	169.8	175.1	184.2	195.5	206.5
65°	145.5	149.4	158.3	169.6	179.2
67.5°	121.9	125.3	134.2	142.1	152.3
70°	98.1	102.6	109.1	116.7	123.3
72.5°	79.0	80.9	86.4	91.8	98.7
75°	58.4	61.5	65.9	69.1	73.0
77.5°	41.9	43.7	46.3	48.9	52.6
80°	28.0	28.8	31.1	31.7	34.5
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	4.4	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)