

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: P554411

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-93-94-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: P554411  
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-93-94-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE  
AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND  
3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

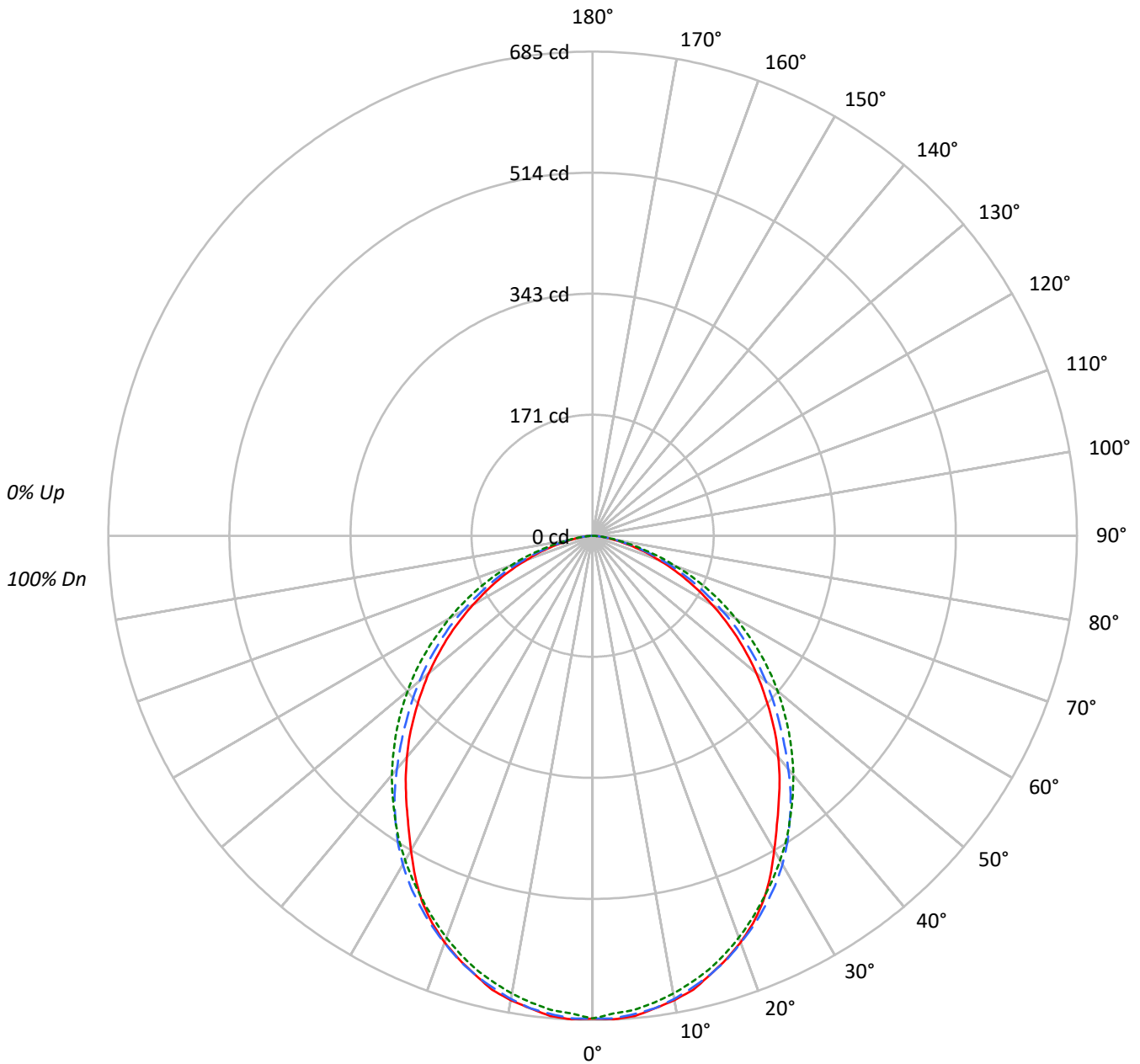
Lumens per Lamp: N/A  
Luminaire Lumens: 1579.0 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3675	3675	3675
5°	3685	3669	3638
10°	3646	3636	3594
15°	3581	3581	3540
20°	3505	3510	3465
25°	3390	3432	3378
30°	3192	3336	3295
35°	3016	3197	3202
40°	2870	3025	3104
45°	2706	2841	2987
50°	2533	2678	2860
55°	2336	2491	2705
60°	2103	2273	2516
65°	1858	2021	2288
70°	1548	1721	1945
75°	1216	1375	1522
80°	871	967	1072
85°	568	568	537



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.3	4.1
10°-20°	180.6	11.4
20°-30°	263.9	16.7
30°-40°	299.6	19.0
40°-50°	289.2	18.3
50°-60°	238.6	15.1
60°-70°	158.9	10.1
70°-80°	71.1	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°	508.9	32.2
0°-40°	808.5	51.2
0°-60°	1336.3	84.6
0°-90°	1579.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1579.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	683	683	683	683	683	
5°	682	682	679	676	673	65
15°	643	644	643	640	635	181
25°	571	575	578	574	569	261
35°	459	465	487	489	487	288
45°	356	362	373	390	392	274
55°	249	253	266	280	288	222
65°	146	150	159	170	180	145
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°	682.9	682.9	682.9	682.9	682.9
2.5°	684.7	685.0	683.4	679.2	676.6
5°	682.1	681.8	679.2	675.5	673.4
7.5°	674.5	675.0	674.2	669.0	666.1
10°	667.1	667.4	665.3	661.1	657.7
12.5°	657.7	657.4	654.5	652.4	646.9
15°	642.7	644.3	642.7	639.9	635.4
17.5°	628.3	628.3	629.4	624.4	621.0
20°	612.0	612.8	612.8	608.9	605.0
22.5°	593.2	595.5	596.3	592.1	587.4
25°	570.9	575.3	577.9	573.7	568.8
27.5°	543.8	550.7	558.5	555.4	549.9
30°	513.7	523.6	536.8	534.1	530.2
32.5°	485.1	495.0	513.1	512.1	510.0
35°	459.1	465.4	486.6	489.3	487.4
37.5°	434.4	440.2	460.1	466.2	464.6
40°	408.5	414.8	430.5	441.3	441.8
42.5°	382.8	388.8	401.6	417.1	417.1
45°	355.5	361.5	373.3	390.4	392.5
47.5°	328.7	335.0	346.6	363.6	367.0
50°	302.5	308.3	319.8	336.3	341.6
52.5°	275.2	281.5	292.8	308.0	315.6
55°	249.0	253.2	265.5	280.2	288.3
57.5°	221.7	225.6	239.5	252.1	260.5
60°	195.4	200.4	211.2	224.0	233.7
62.5°	170.3	175.5	184.7	196.0	207.0
65°	145.9	149.8	158.7	170.0	179.7
67.5°	122.3	125.7	134.6	142.5	152.7
70°	98.4	102.8	109.4	117.0	123.6
72.5°	79.2	81.1	86.6	92.1	98.9
75°	58.5	61.7	66.1	69.3	73.2
77.5°	42.0	43.8	46.4	49.1	52.7
80°	28.1	28.9	31.2	31.7	34.6
82.5°	17.1	17.6	18.1	18.4	19.4
85°	9.2	9.2	9.2	8.7	8.7
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)