

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: P554475

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-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: P554475  
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-35-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  
3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

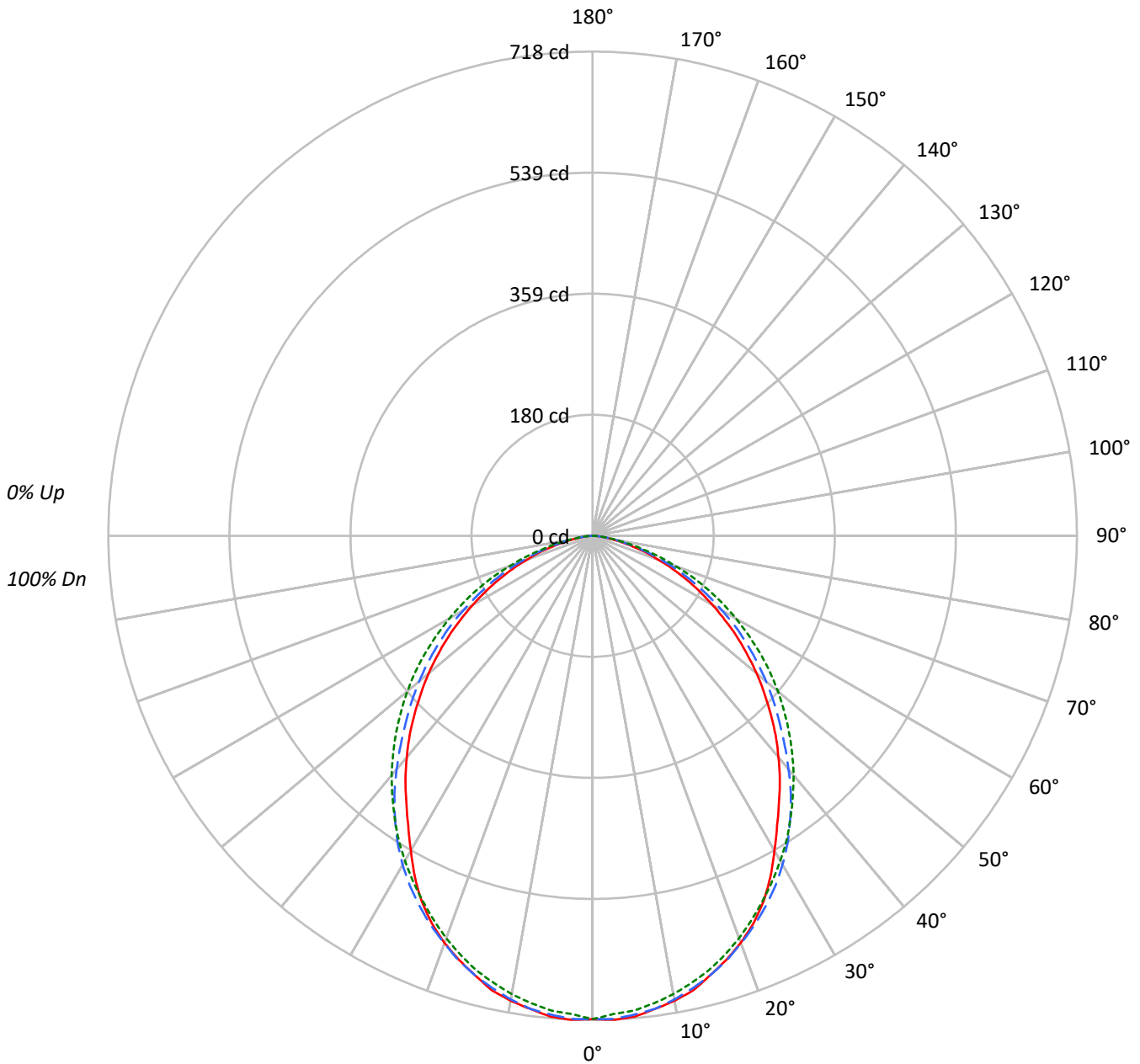
Lumens per Lamp: N/A  
Luminaire Lumens: 1657.0 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	3857	3857	3857
5°	3867	3851	3818
10°	3826	3816	3772
15°	3758	3758	3715
20°	3679	3683	3636
25°	3558	3602	3545
30°	3350	3501	3458
35°	3166	3355	3361
40°	3011	3174	3257
45°	2839	2982	3135
50°	2658	2810	3001
55°	2452	2614	2839
60°	2208	2385	2640
65°	1950	2122	2402
70°	1624	1806	2041
75°	1277	1443	1597
80°	914	1017	1125
85°	593	593	562



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.5	4.1
10°-20°	189.5	11.4
20°-30°	277.0	16.7
30°-40°	314.4	19.0
40°-50°	303.5	18.3
50°-60°	250.4	15.1
60°-70°	166.7	10.1
70°-80°	74.6	4.5
80°-90°	13.4	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°	534.0	32.2
0°-40°	848.4	51.2
0°-60°	1402.3	84.6
0°-90°	1657.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1657.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	717	717	717	717	717	
5°	716	716	713	709	707	68
15°	674	676	674	672	667	190
25°	599	604	606	602	597	274
35°	482	488	511	513	512	302
45°	373	379	392	410	412	288
55°	261	266	279	294	303	233
65°	153	157	167	178	189	152
75°	61	65	69	73	77	67
85°	10	10	10	9	9	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	716.6	716.6	716.6	716.6	716.6
2.5°	718.5	718.8	717.2	712.8	710.0
5°	715.8	715.5	712.8	708.9	706.7
7.5°	707.8	708.4	707.5	702.0	699.0
10°	700.1	700.4	698.2	693.8	690.2
12.5°	690.2	689.9	686.9	684.7	678.9
15°	674.5	676.1	674.5	671.5	666.8
17.5°	659.3	659.3	660.4	655.2	651.6
20°	642.3	643.1	643.1	639.0	634.8
22.5°	622.5	624.9	625.8	621.4	616.4
25°	599.1	603.7	606.5	602.1	596.9
27.5°	570.7	577.9	586.1	582.8	577.0
30°	539.0	549.5	563.3	560.5	556.4
32.5°	509.0	519.5	538.5	537.4	535.2
35°	481.8	488.4	510.7	513.4	511.5
37.5°	455.9	462.0	482.9	489.2	487.6
40°	428.6	435.3	451.8	463.1	463.6
42.5°	401.7	408.0	421.5	437.7	437.7
45°	373.0	379.4	391.8	409.6	411.9
47.5°	345.0	351.6	363.7	381.6	385.1
50°	317.4	323.5	335.6	352.9	358.4
52.5°	288.8	295.4	307.2	323.2	331.2
55°	261.3	265.7	278.6	294.0	302.6
57.5°	232.6	236.8	251.4	264.6	273.4
60°	205.1	210.3	221.6	235.1	245.3
62.5°	178.7	184.2	193.8	205.7	217.2
65°	153.1	157.2	166.6	178.4	188.6
67.5°	128.3	131.9	141.2	149.5	160.2
70°	103.2	107.9	114.8	122.8	129.7
72.5°	83.1	85.1	90.8	96.6	103.8
75°	61.4	64.7	69.4	72.7	76.8
77.5°	44.0	46.0	48.7	51.5	55.3
80°	29.5	30.3	32.8	33.3	36.3
82.5°	17.9	18.4	19.0	19.3	20.4
85°	9.6	9.6	9.6	9.1	9.1
87.5°	5.5	5.5	4.7	3.9	2.8
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)