

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: P554145

Luminaire Tested: **FUSL-12-2-LD4-1LO-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: P554145  
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-LD4-1LO-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**

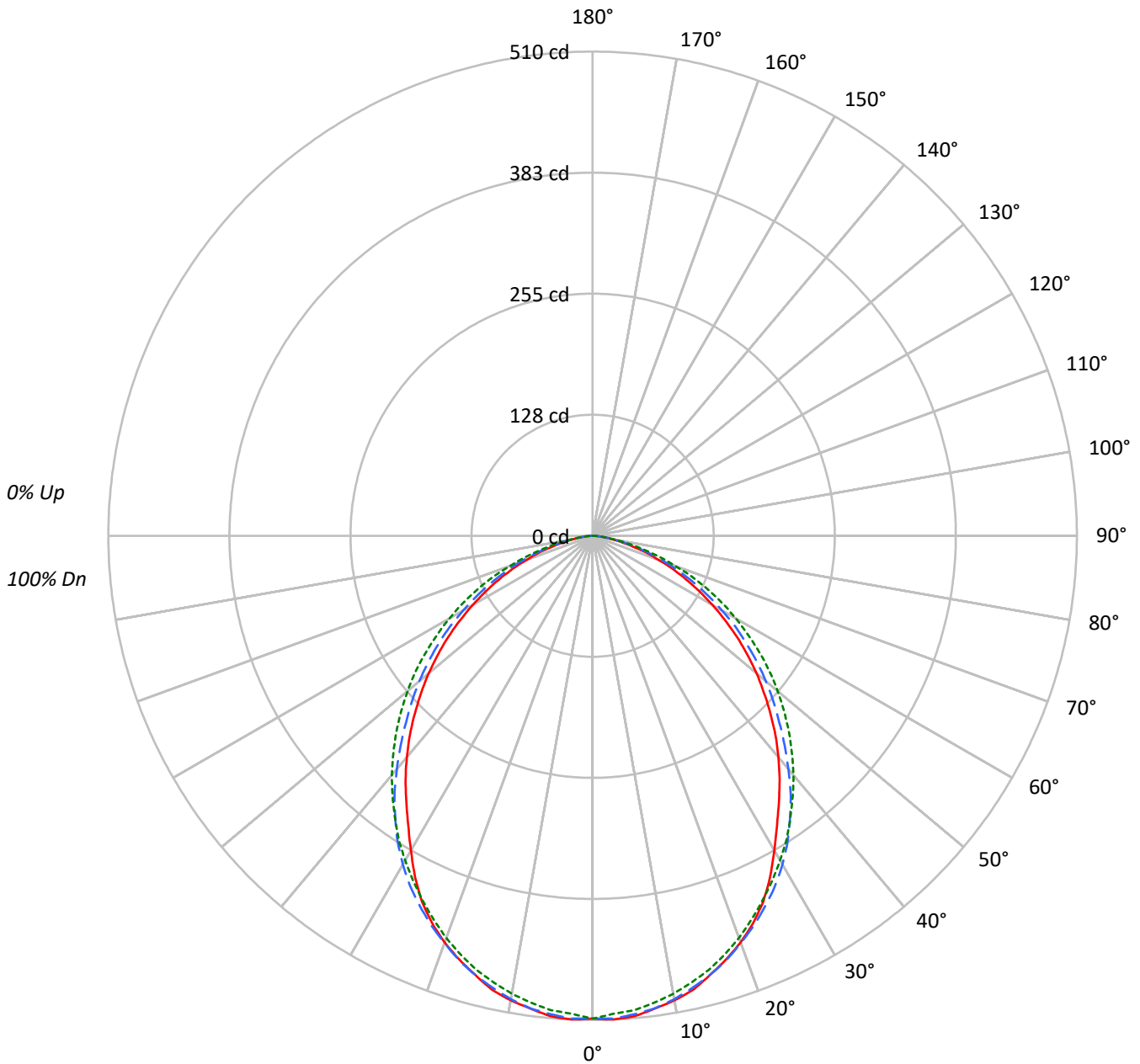
Lumens per Lamp: N/A  
Luminaire Lumens: 1176.0 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
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°	2737	2737	2737
5°	2744	2733	2710
10°	2716	2708	2677
15°	2667	2667	2637
20°	2611	2614	2581
25°	2525	2556	2515
30°	2378	2485	2454
35°	2246	2381	2385
40°	2137	2252	2311
45°	2015	2116	2225
50°	1886	1994	2130
55°	1740	1855	2015
60°	1567	1693	1874
65°	1383	1505	1704
70°	1153	1282	1448
75°	907	1023	1133
80°	648	722	800
85°	420	420	395



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.9	4.1
10°-20°	134.5	11.4
20°-30°	196.6	16.7
30°-40°	223.1	19.0
40°-50°	215.4	18.3
50°-60°	177.7	15.1
60°-70°	118.3	10.1
70°-80°	53.0	4.5
80°-90°	9.5	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°	379.0	32.2
0°-40°	602.1	51.2
0°-60°	995.2	84.6
0°-90°	1176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1176.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	509	509	509	509	509	
5°	508	508	506	503	502	48
15°	479	480	479	476	473	135
25°	425	428	430	427	424	195
35°	342	347	362	364	363	214
45°	265	269	278	291	292	204
55°	185	188	198	209	215	166
65°	109	112	118	127	134	108
75°	44	46	49	52	54	48
85°	7	7	7	6	6	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	508.6	508.6	508.6	508.6	508.6
2.5°	510.0	510.2	509.0	505.9	503.9
5°	508.0	507.8	505.9	503.1	501.6
7.5°	502.3	502.7	502.1	498.2	496.1
10°	496.9	497.1	495.5	492.4	489.8
12.5°	489.8	489.6	487.5	485.9	481.8
15°	478.7	479.9	478.7	476.5	473.2
17.5°	467.9	467.9	468.7	465.0	462.5
20°	455.8	456.4	456.4	453.5	450.6
22.5°	441.8	443.5	444.1	441.0	437.5
25°	425.2	428.5	430.4	427.3	423.6
27.5°	405.0	410.1	416.0	413.6	409.5
30°	382.6	390.0	399.8	397.8	394.9
32.5°	361.3	368.7	382.2	381.4	379.8
35°	341.9	346.6	362.4	364.4	363.0
37.5°	323.6	327.9	342.7	347.2	346.0
40°	304.2	308.9	320.6	328.6	329.0
42.5°	285.1	289.6	299.1	310.7	310.7
45°	264.7	269.2	278.0	290.7	292.3
47.5°	244.8	249.5	258.1	270.8	273.3
50°	225.3	229.6	238.2	250.5	254.4
52.5°	205.0	209.6	218.1	229.4	235.0
55°	185.4	188.5	197.7	208.7	214.7
57.5°	165.1	168.0	178.4	187.8	194.0
60°	145.6	149.3	157.3	166.9	174.1
62.5°	126.8	130.7	137.6	146.0	154.2
65°	108.6	111.6	118.2	126.6	133.8
67.5°	91.0	93.6	100.2	106.1	113.7
70°	73.3	76.6	81.5	87.1	92.0
72.5°	59.0	60.4	64.5	68.6	73.7
75°	43.6	45.9	49.2	51.6	54.5
77.5°	31.3	32.6	34.6	36.5	39.3
80°	20.9	21.5	23.3	23.6	25.8
82.5°	12.7	13.1	13.5	13.7	14.5
85°	6.8	6.8	6.8	6.4	6.4
87.5°	3.9	3.9	3.3	2.7	2.0
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)