

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: P554149

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-93-86-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: P554149  
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-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

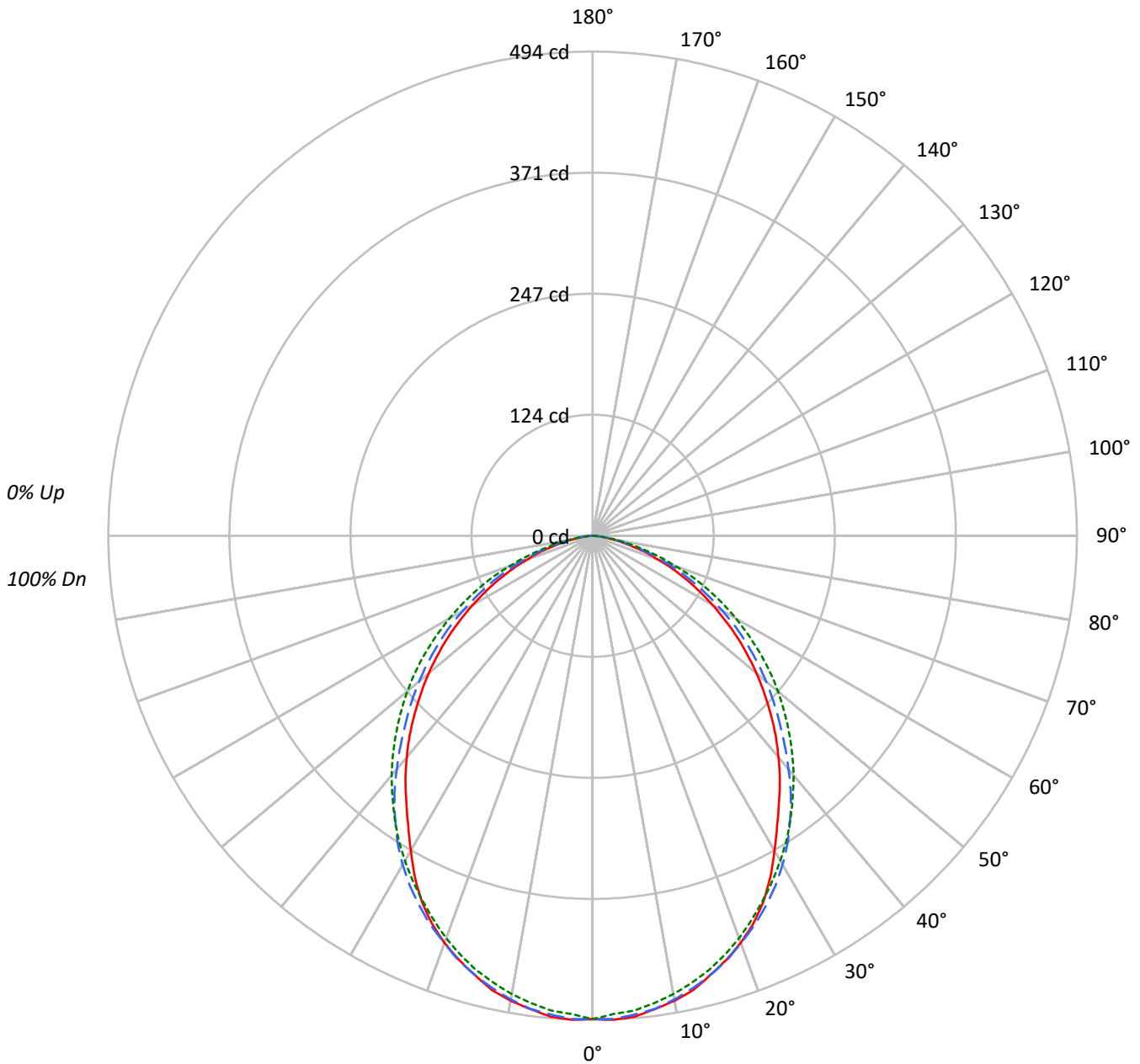
Lumens per Lamp: N/A  
Luminaire Lumens: 1140.0 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2653	2653	2653
5°	2661	2649	2627
10°	2632	2625	2595
15°	2585	2585	2556
20°	2531	2534	2502
25°	2447	2478	2438
30°	2305	2408	2379
35°	2178	2308	2312
40°	2072	2184	2241
45°	1953	2051	2156
50°	1829	1933	2065
55°	1686	1799	1954
60°	1519	1641	1817
65°	1341	1459	1652
70°	1117	1243	1404
75°	878	992	1098
80°	629	697	775
85°	408	408	389



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.4	4.1
10°-20°	130.4	11.4
20°-30°	190.6	16.7
30°-40°	216.3	19.0
40°-50°	208.8	18.3
50°-60°	172.3	15.1
60°-70°	114.7	10.1
70°-80°	51.3	4.5
80°-90°	9.2	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°	367.4	32.2
0°-40°	583.7	51.2
0°-60°	964.8	84.6
0°-90°	1140.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1140.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	493	493	493	493	493	
5°	492	492	490	488	486	47
15°	464	465	464	462	459	131
25°	412	415	417	414	411	189
35°	332	336	351	353	352	208
45°	257	261	270	282	283	198
55°	180	183	192	202	208	160
65°	105	108	115	123	130	104
75°	42	44	48	50	53	46
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°	493.0	493.0	493.0	493.0	493.0
2.5°	494.3	494.5	493.4	490.4	488.5
5°	492.5	492.3	490.4	487.7	486.2
7.5°	487.0	487.3	486.8	483.0	480.9
10°	481.7	481.8	480.3	477.3	474.8
12.5°	474.8	474.6	472.6	471.0	467.1
15°	464.0	465.2	464.0	462.0	458.7
17.5°	453.6	453.6	454.4	450.8	448.3
20°	441.9	442.4	442.4	439.6	436.8
22.5°	428.2	429.9	430.5	427.5	424.1
25°	412.1	415.4	417.3	414.2	410.6
27.5°	392.6	397.6	403.2	401.0	397.0
30°	370.9	378.1	387.5	385.6	382.8
32.5°	350.2	357.4	370.5	369.7	368.2
35°	331.5	336.0	351.3	353.2	351.9
37.5°	313.7	317.8	332.2	336.6	335.4
40°	294.9	299.4	310.8	318.6	319.0
42.5°	276.3	280.7	290.0	301.2	301.2
45°	256.6	261.0	269.5	281.8	283.3
47.5°	237.3	241.9	250.2	262.5	265.0
50°	218.4	222.6	230.9	242.8	246.6
52.5°	198.7	203.2	211.4	222.4	227.9
55°	179.7	182.8	191.7	202.3	208.2
57.5°	160.0	162.9	172.9	182.0	188.1
60°	141.1	144.7	152.5	161.8	168.8
62.5°	122.9	126.7	133.3	141.5	149.4
65°	105.3	108.2	114.6	122.7	129.7
67.5°	88.3	90.7	97.2	102.8	110.2
70°	71.0	74.2	79.0	84.5	89.2
72.5°	57.2	58.5	62.5	66.5	71.4
75°	42.2	44.5	47.7	50.0	52.8
77.5°	30.3	31.6	33.5	35.4	38.1
80°	20.3	20.8	22.5	22.9	25.0
82.5°	12.3	12.7	13.1	13.3	14.0
85°	6.6	6.6	6.6	6.3	6.3
87.5°	3.8	3.8	3.2	2.7	1.9
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)