

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: P554253

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-UNV-81-96-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: P554253  
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-40-UNV-81-96-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

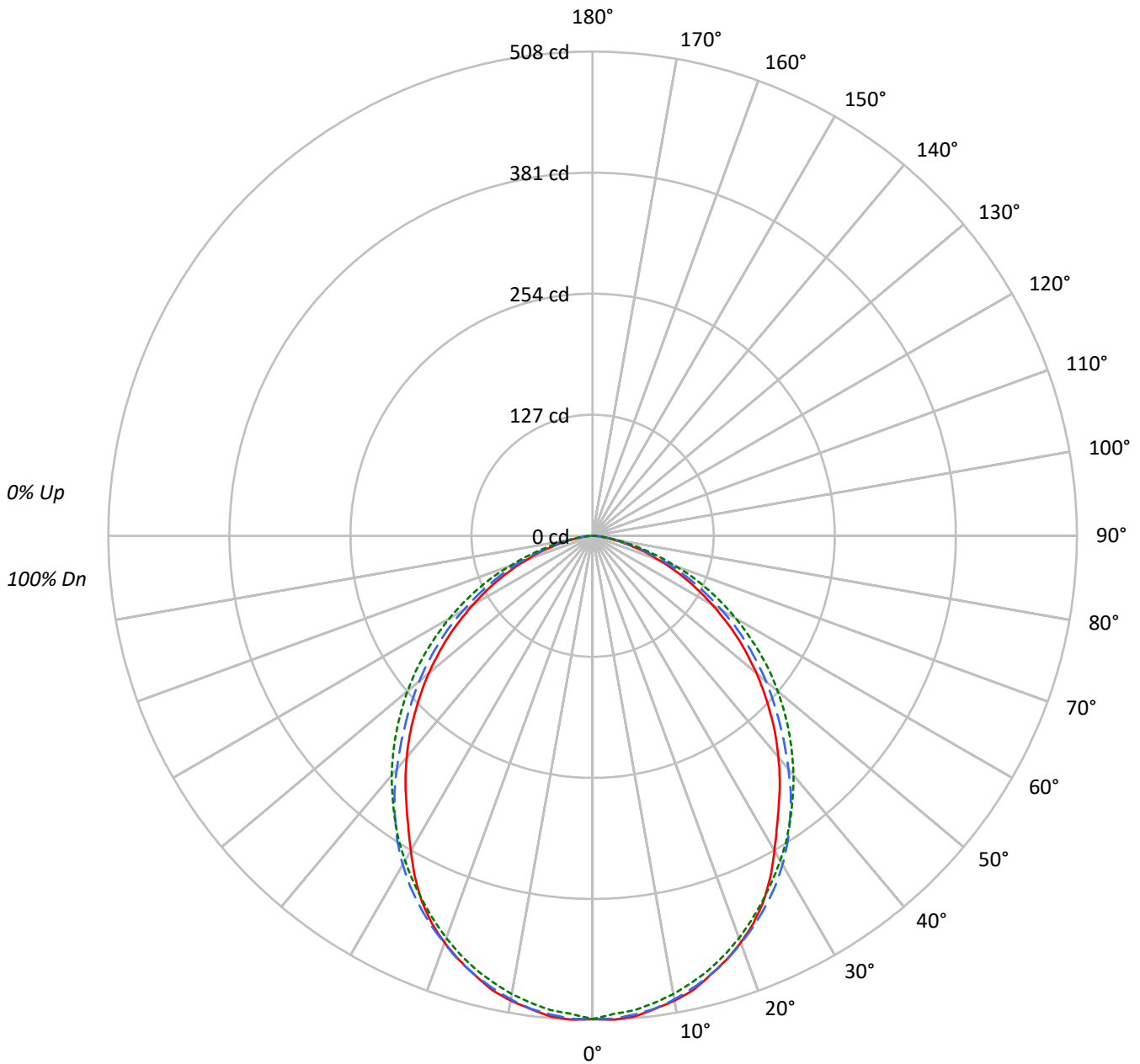
Lumens per Lamp: N/A  
Luminaire Lumens: 1172.0 lumens  
Efficiency: N/A  
Efficacy: 100.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2728	2728	2728
5°	2735	2723	2700
10°	2706	2699	2668
15°	2658	2658	2628
20°	2602	2605	2572
25°	2516	2548	2507
30°	2370	2476	2445
35°	2239	2373	2377
40°	2130	2245	2304
45°	2008	2109	2217
50°	1880	1988	2123
55°	1734	1849	2008
60°	1562	1688	1868
65°	1379	1500	1699
70°	1149	1278	1443
75°	902	1021	1129
80°	645	719	797
85°	420	420	395



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.7	4.1
10°-20°	134.1	11.4
20°-30°	195.9	16.7
30°-40°	222.4	19.0
40°-50°	214.7	18.3
50°-60°	177.1	15.1
60°-70°	117.9	10.1
70°-80°	52.8	4.5
80°-90°	9.4	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°	377.7	32.2
0°-40°	600.1	51.2
0°-60°	991.9	84.6
0°-90°	1172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1172.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	507	507	507	507	507	
5°	506	506	504	501	500	48
15°	477	478	477	475	472	134
25°	424	427	429	426	422	194
35°	341	345	361	363	362	214
45°	264	268	277	290	291	204
55°	185	188	197	208	214	165
65°	108	111	118	126	133	107
75°	43	46	49	51	54	47
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°	506.9	506.9	506.9	506.9	506.9
2.5°	508.2	508.4	507.2	504.1	502.2
5°	506.3	506.1	504.1	501.4	499.8
7.5°	500.6	501.0	500.4	496.5	494.4
10°	495.2	495.4	493.8	490.7	488.2
12.5°	488.2	488.0	485.8	484.3	480.2
15°	477.1	478.2	477.1	474.9	471.6
17.5°	466.4	466.4	467.1	463.4	460.9
20°	454.3	454.9	454.9	451.9	449.0
22.5°	440.3	442.0	442.6	439.5	436.0
25°	423.7	427.0	429.0	425.9	422.2
27.5°	403.7	408.7	414.6	412.2	408.1
30°	381.3	388.7	398.4	396.5	393.5
32.5°	360.0	367.4	380.9	380.1	378.5
35°	340.8	345.4	361.2	363.2	361.8
37.5°	322.5	326.7	341.5	346.0	344.9
40°	303.2	307.9	319.5	327.5	327.9
42.5°	284.1	288.6	298.1	309.6	309.6
45°	263.8	268.3	277.1	289.7	291.3
47.5°	244.0	248.7	257.2	269.9	272.4
50°	224.5	228.8	237.4	249.6	253.5
52.5°	204.3	208.9	217.3	228.6	234.2
55°	184.8	187.9	197.1	208.0	214.0
57.5°	164.5	167.5	177.8	187.1	193.4
60°	145.1	148.8	156.8	166.3	173.5
62.5°	126.4	130.3	137.1	145.5	153.6
65°	108.3	111.2	117.8	126.2	133.4
67.5°	90.7	93.3	99.9	105.7	113.3
70°	73.0	76.3	81.2	86.8	91.7
72.5°	58.8	60.2	64.3	68.3	73.4
75°	43.4	45.8	49.1	51.4	54.3
77.5°	31.2	32.5	34.5	36.4	39.1
80°	20.8	21.4	23.2	23.6	25.7
82.5°	12.7	13.0	13.4	13.6	14.4
85°	6.8	6.8	6.8	6.4	6.4
87.5°	3.9	3.9	3.3	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)