

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: P554279

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-UNV-93-87-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: P554279  
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-93-87-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

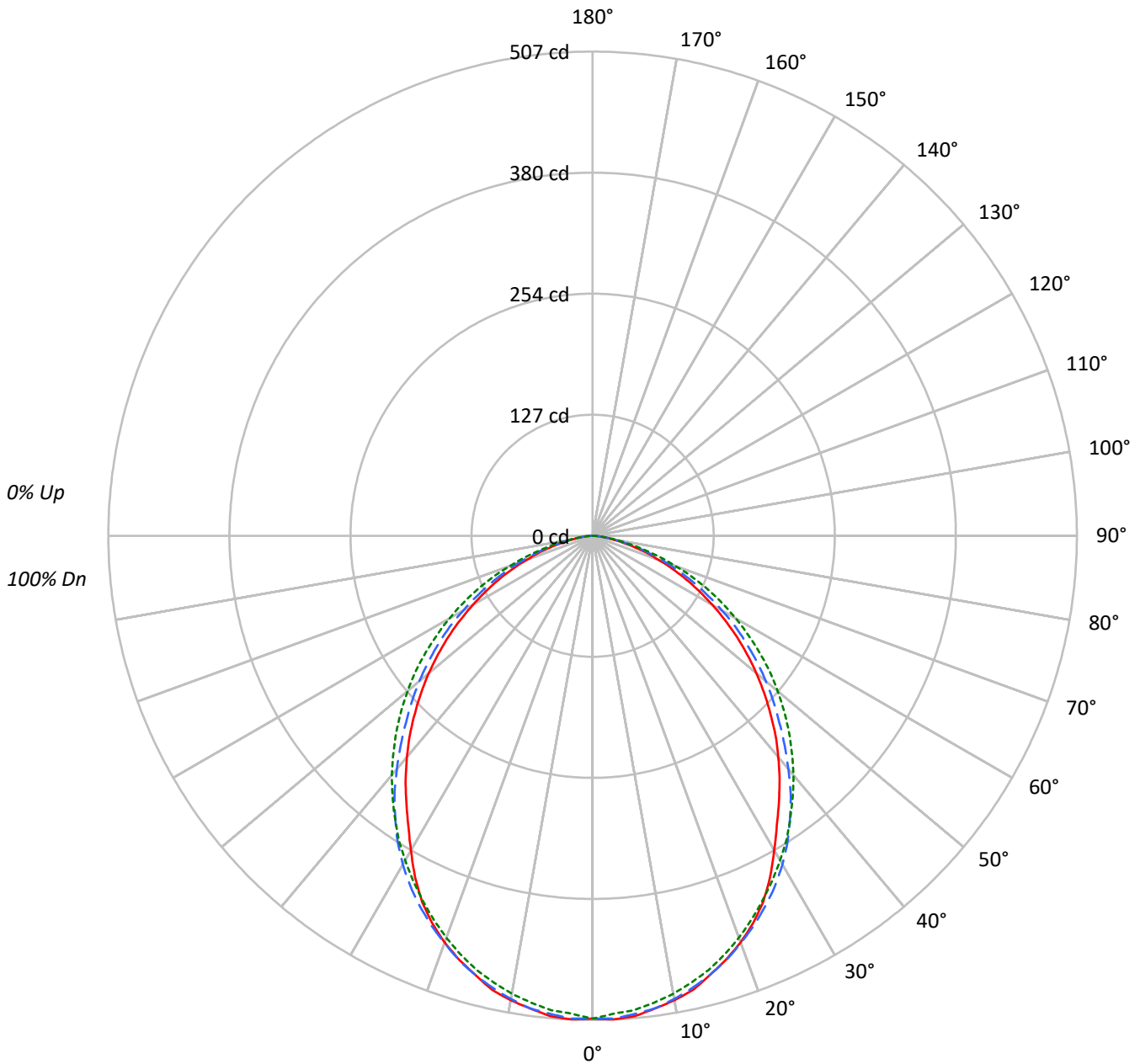
Lumens per Lamp: N/A  
Luminaire Lumens: 1169.0 lumens  
Efficiency: N/A  
Efficacy: 99.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2721	2721	2721
5°	2728	2716	2694
10°	2699	2692	2661
15°	2651	2651	2621
20°	2595	2599	2565
25°	2510	2541	2501
30°	2363	2470	2439
35°	2233	2367	2371
40°	2125	2239	2298
45°	2003	2104	2212
50°	1875	1983	2117
55°	1729	1845	2003
60°	1558	1682	1863
65°	1375	1496	1694
70°	1146	1275	1440
75°	900	1017	1127
80°	645	716	793
85°	420	420	395



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.6	4.1
10°-20°	133.7	11.4
20°-30°	195.4	16.7
30°-40°	221.8	19.0
40°-50°	214.1	18.3
50°-60°	176.6	15.1
60°-70°	117.6	10.1
70°-80°	52.6	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°	376.7	32.2
0°-40°	598.6	51.2
0°-60°	989.3	84.6
0°-90°	1169.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1169.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	506	506	506	506	506	
5°	505	505	503	500	499	48
15°	476	477	476	474	470	134
25°	423	426	428	425	421	194
35°	340	345	360	362	361	213
45°	263	268	276	289	291	203
55°	184	187	197	207	214	164
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°	505.6	505.6	505.6	505.6	505.6
2.5°	506.9	507.1	506.0	502.8	500.9
5°	505.0	504.8	502.8	500.1	498.6
7.5°	499.3	499.7	499.2	495.3	493.1
10°	493.9	494.1	492.5	489.4	486.9
12.5°	486.9	486.7	484.6	483.0	479.0
15°	475.8	477.0	475.8	473.7	470.4
17.5°	465.2	465.2	465.9	462.3	459.7
20°	453.1	453.7	453.7	450.8	447.9
22.5°	439.1	440.9	441.5	438.4	434.9
25°	422.6	425.9	427.9	424.8	421.1
27.5°	402.6	407.7	413.5	411.2	407.1
30°	380.3	387.7	397.4	395.4	392.5
32.5°	359.1	366.5	379.9	379.1	377.6
35°	339.9	344.6	360.3	362.2	360.9
37.5°	321.6	325.9	340.7	345.1	344.0
40°	302.4	307.1	318.7	326.7	327.1
42.5°	283.4	287.8	297.4	308.8	308.8
45°	263.2	267.6	276.4	289.0	290.6
47.5°	243.4	248.0	256.6	269.2	271.7
50°	223.9	228.2	236.8	249.0	252.9
52.5°	203.7	208.4	216.8	228.0	233.7
55°	184.3	187.4	196.6	207.4	213.5
57.5°	164.1	167.0	177.3	186.6	192.9
60°	144.7	148.4	156.3	165.9	173.1
62.5°	126.1	129.9	136.7	145.1	153.2
65°	108.0	110.9	117.5	125.9	133.0
67.5°	90.5	93.0	99.6	105.5	113.0
70°	72.8	76.1	81.0	86.6	91.5
72.5°	58.7	60.0	64.1	68.2	73.2
75°	43.3	45.6	48.9	51.3	54.2
77.5°	31.1	32.4	34.4	36.3	39.0
80°	20.8	21.4	23.1	23.5	25.6
82.5°	12.6	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)