

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: P554144

Luminaire Tested: **FUSL-12-2-LD4-1LO-30-UNV-93-84-EDD-90**

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: P554144  
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-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

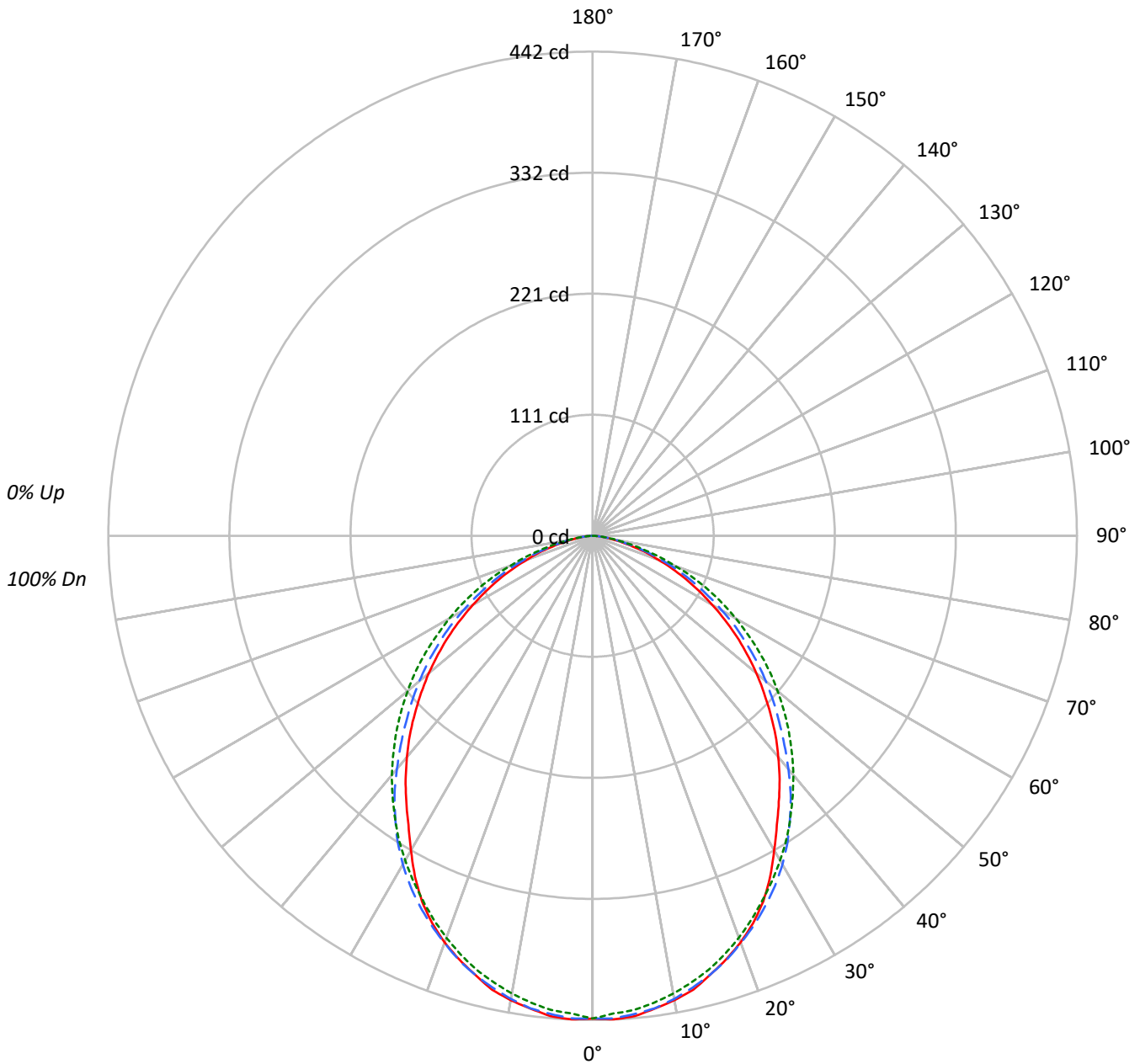
Lumens per Lamp: N/A  
Luminaire Lumens: 1019.0 lumens  
Efficiency: N/A  
Efficacy: 87.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				20				
RC	80				70				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			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°	2372	2372	2372
5°	2378	2368	2348
10°	2353	2346	2319
15°	2311	2311	2284
20°	2262	2265	2236
25°	2188	2215	2179
30°	2060	2153	2127
35°	1947	2064	2067
40°	1852	1952	2003
45°	1746	1834	1928
50°	1634	1728	1845
55°	1508	1607	1746
60°	1357	1467	1623
65°	1198	1304	1477
70°	999	1111	1254
75°	786	888	981
80°	561	623	691
85°	364	364	346



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.5	4.1
10°-20°	116.6	11.4
20°-30°	170.3	16.7
30°-40°	193.4	19.0
40°-50°	186.7	18.3
50°-60°	154.0	15.1
60°-70°	102.5	10.1
70°-80°	45.9	4.5
80°-90°	8.2	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°	328.4	32.2
0°-40°	521.8	51.2
0°-60°	862.4	84.6
0°-90°	1019.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1019.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	441	441	441	441	441	
5°	440	440	438	436	435	42
15°	415	416	415	413	410	117
25°	368	371	373	370	367	169
35°	296	300	314	316	315	186
45°	229	233	241	252	253	177
55°	161	163	171	181	186	143
65°	94	97	102	110	116	93
75°	38	40	43	45	47	41
85°	6	6	6	6	6	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	440.7	440.7	440.7	440.7	440.7
2.5°	441.9	442.0	441.0	438.3	436.6
5°	440.2	440.0	438.3	436.0	434.6
7.5°	435.3	435.6	435.1	431.7	429.9
10°	430.5	430.7	429.3	426.6	424.4
12.5°	424.4	424.3	422.4	421.1	417.5
15°	414.8	415.8	414.8	412.9	410.0
17.5°	405.5	405.5	406.2	402.9	400.7
20°	395.0	395.5	395.5	392.9	390.4
22.5°	382.8	384.3	384.8	382.1	379.1
25°	368.4	371.3	373.0	370.3	367.0
27.5°	351.0	355.4	360.4	358.4	354.9
30°	331.5	337.9	346.4	344.7	342.2
32.5°	313.0	319.5	331.2	330.5	329.1
35°	296.3	300.3	314.1	315.7	314.6
37.5°	280.4	284.1	297.0	300.8	299.8
40°	263.6	267.7	277.8	284.8	285.1
42.5°	247.0	250.9	259.2	269.2	269.2
45°	229.4	233.3	240.9	251.9	253.3
47.5°	212.1	216.2	223.6	234.7	236.9
50°	195.2	198.9	206.4	217.0	220.4
52.5°	177.6	181.7	188.9	198.8	203.7
55°	160.7	163.4	171.3	180.8	186.1
57.5°	143.1	145.6	154.6	162.7	168.1
60°	126.1	129.3	136.3	144.6	150.8
62.5°	109.9	113.3	119.2	126.5	133.6
65°	94.1	96.7	102.4	109.7	116.0
67.5°	78.9	81.1	86.9	91.9	98.5
70°	63.5	66.4	70.6	75.5	79.7
72.5°	51.1	52.3	55.9	59.4	63.8
75°	37.8	39.8	42.7	44.7	47.2
77.5°	27.1	28.3	30.0	31.7	34.0
80°	18.1	18.6	20.1	20.5	22.3
82.5°	11.0	11.3	11.7	11.9	12.5
85°	5.9	5.9	5.9	5.6	5.6
87.5°	3.4	3.4	2.9	2.4	1.7
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)