

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: P554424

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-80-88-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: P554424  
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-LD4-1STD-35-UNV-80-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

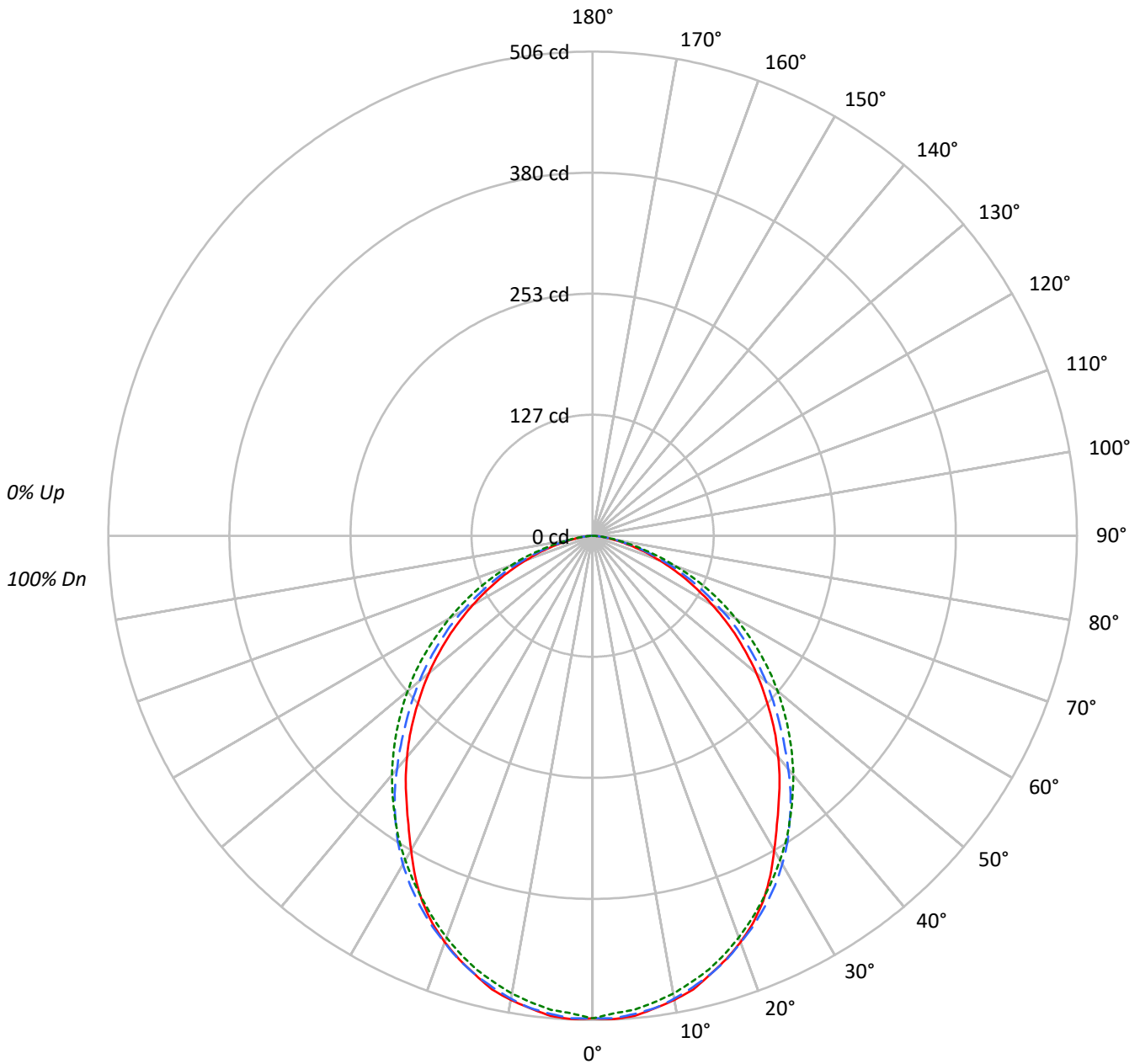
Lumens per Lamp: N/A  
Luminaire Lumens: 1166.0 lumens  
Efficiency: N/A  
Efficacy: 70.2 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (Ain): 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				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				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2714	2714	2714
5°	2721	2710	2687
10°	2692	2685	2654
15°	2644	2644	2614
20°	2589	2592	2558
25°	2503	2534	2494
30°	2357	2463	2433
35°	2227	2361	2365
40°	2119	2233	2292
45°	1998	2098	2206
50°	1870	1978	2112
55°	1725	1839	1998
60°	1553	1678	1858
65°	1372	1493	1690
70°	1142	1271	1435
75°	898	1015	1123
80°	642	716	793
85°	420	420	395



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.5	4.1
10°-20°	133.4	11.4
20°-30°	194.9	16.7
30°-40°	221.2	19.0
40°-50°	213.6	18.3
50°-60°	176.2	15.1
60°-70°	117.3	10.1
70°-80°	52.5	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°	375.8	32.2
0°-40°	597.0	51.2
0°-60°	986.8	84.6
0°-90°	1166.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1166.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	504	504	504	504	504	
5°	504	504	502	499	497	48
15°	475	476	475	472	469	134
25°	422	425	427	424	420	193
35°	339	344	359	361	360	212
45°	262	267	276	288	290	203
55°	184	187	196	207	213	164
65°	108	111	117	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°	504.3	504.3	504.3	504.3	504.3
2.5°	505.6	505.8	504.7	501.6	499.6
5°	503.7	503.5	501.6	498.8	497.3
7.5°	498.1	498.5	497.9	494.0	491.9
10°	492.6	492.8	491.3	488.2	485.7
12.5°	485.7	485.5	483.3	481.8	477.7
15°	474.6	475.8	474.6	472.5	469.2
17.5°	464.0	464.0	464.7	461.1	458.5
20°	452.0	452.5	452.5	449.6	446.7
22.5°	438.0	439.8	440.3	437.2	433.7
25°	421.5	424.8	426.8	423.7	420.0
27.5°	401.6	406.6	412.4	410.1	406.0
30°	379.3	386.7	396.4	394.4	391.5
32.5°	358.2	365.6	378.9	378.2	376.6
35°	339.0	343.7	359.4	361.3	359.9
37.5°	320.8	325.1	339.8	344.2	343.1
40°	301.6	306.3	317.9	325.8	326.2
42.5°	282.6	287.1	296.6	308.0	308.0
45°	262.5	267.0	275.7	288.3	289.8
47.5°	242.7	247.4	255.9	268.5	271.0
50°	223.4	227.6	236.2	248.4	252.2
52.5°	203.2	207.9	216.2	227.4	233.1
55°	183.8	186.9	196.0	206.9	212.9
57.5°	163.7	166.6	176.9	186.2	192.4
60°	144.3	148.0	155.9	165.4	172.6
62.5°	125.7	129.6	136.4	144.7	152.8
65°	107.7	110.6	117.2	125.5	132.7
67.5°	90.3	92.8	99.4	105.2	112.7
70°	72.6	75.9	80.8	86.4	91.2
72.5°	58.5	59.9	63.9	68.0	73.0
75°	43.2	45.5	48.8	51.1	54.0
77.5°	31.0	32.4	34.3	36.2	38.9
80°	20.7	21.3	23.1	23.4	25.6
82.5°	12.6	13.0	13.4	13.6	14.3
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)