

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: P554352

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-80-84-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: P554352  
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-30-UNV-80-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC 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**

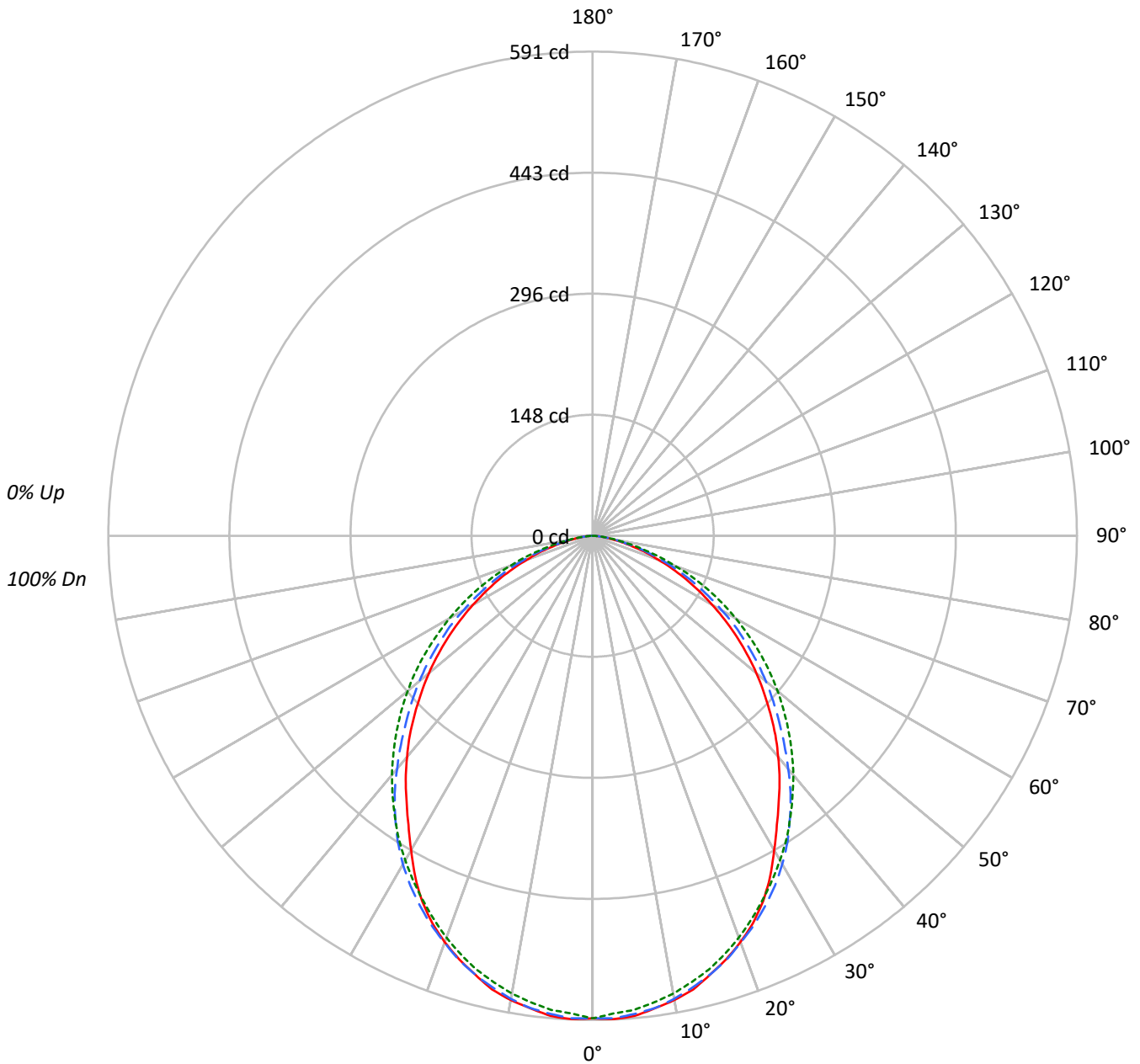
Lumens per Lamp: N/A  
Luminaire Lumens: 1362.0 lumens  
Efficiency: N/A  
Efficacy: 82.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	3170	3170	3170
5°	3179	3165	3138
10°	3145	3136	3100
15°	3089	3089	3054
20°	3023	3027	2989
25°	2924	2960	2913
30°	2754	2877	2842
35°	2602	2758	2762
40°	2475	2609	2677
45°	2334	2451	2576
50°	2184	2309	2467
55°	2015	2149	2334
60°	1815	1961	2170
65°	1602	1743	1974
70°	1336	1485	1677
75°	1050	1185	1312
80°	750	834	927
85°	488	488	463



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.5	4.1
10°-20°	155.8	11.4
20°-30°	227.7	16.7
30°-40°	258.4	19.0
40°-50°	249.5	18.3
50°-60°	205.8	15.1
60°-70°	137.1	10.1
70°-80°	61.3	4.5
80°-90°	11.0	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°	438.9	32.2
0°-40°	697.4	51.2
0°-60°	1152.7	84.6
0°-90°	1362.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1362.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	588	588	586	583	581	56
15°	554	556	554	552	548	156
25°	492	496	498	495	491	225
35°	396	401	420	422	420	248
45°	307	312	322	337	338	237
55°	215	218	229	242	249	192
65°	126	129	137	147	155	125
75°	50	53	57	60	63	55
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	589.0	589.0	589.0	589.0	589.0
2.5°	590.6	590.8	589.5	585.9	583.6
5°	588.4	588.1	585.9	582.7	580.9
7.5°	581.8	582.2	581.6	577.0	574.5
10°	575.5	575.7	573.9	570.2	567.3
12.5°	567.3	567.1	564.6	562.8	558.0
15°	554.4	555.8	554.4	551.9	548.1
17.5°	542.0	542.0	542.9	538.6	535.6
20°	527.9	528.6	528.6	525.2	521.8
22.5°	511.6	513.7	514.4	510.7	506.7
25°	492.4	496.3	498.5	494.9	490.6
27.5°	469.1	475.0	481.8	479.1	474.3
30°	443.1	451.7	463.0	460.7	457.3
32.5°	418.4	427.0	442.6	441.7	439.9
35°	396.0	401.4	419.8	422.0	420.4
37.5°	374.7	379.7	396.9	402.1	400.8
40°	352.3	357.8	371.3	380.6	381.1
42.5°	330.2	335.4	346.4	359.8	359.8
45°	306.6	311.8	322.0	336.7	338.5
47.5°	283.5	289.0	298.9	313.6	316.6
50°	260.9	265.9	275.8	290.1	294.6
52.5°	237.4	242.8	252.5	265.7	272.2
55°	214.7	218.4	229.0	241.7	248.7
57.5°	191.2	194.6	206.6	217.5	224.7
60°	168.6	172.9	182.2	193.3	201.6
62.5°	146.9	151.4	159.3	169.0	178.5
65°	125.8	129.2	136.9	146.6	155.0
67.5°	105.5	108.4	116.1	122.9	131.7
70°	84.9	88.7	94.4	100.9	106.6
72.5°	68.3	69.9	74.7	79.4	85.3
75°	50.5	53.2	57.0	59.7	63.1
77.5°	36.2	37.8	40.1	42.3	45.5
80°	24.2	24.9	26.9	27.4	29.9
82.5°	14.7	15.2	15.6	15.8	16.7
85°	7.9	7.9	7.9	7.5	7.5
87.5°	4.5	4.5	3.8	3.2	2.3
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)