

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: P554217

Luminaire Tested: **FUSL-12-2-LD4-1LO-35-UNV-93-88-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: P554217  
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-35-UNV-93-88-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

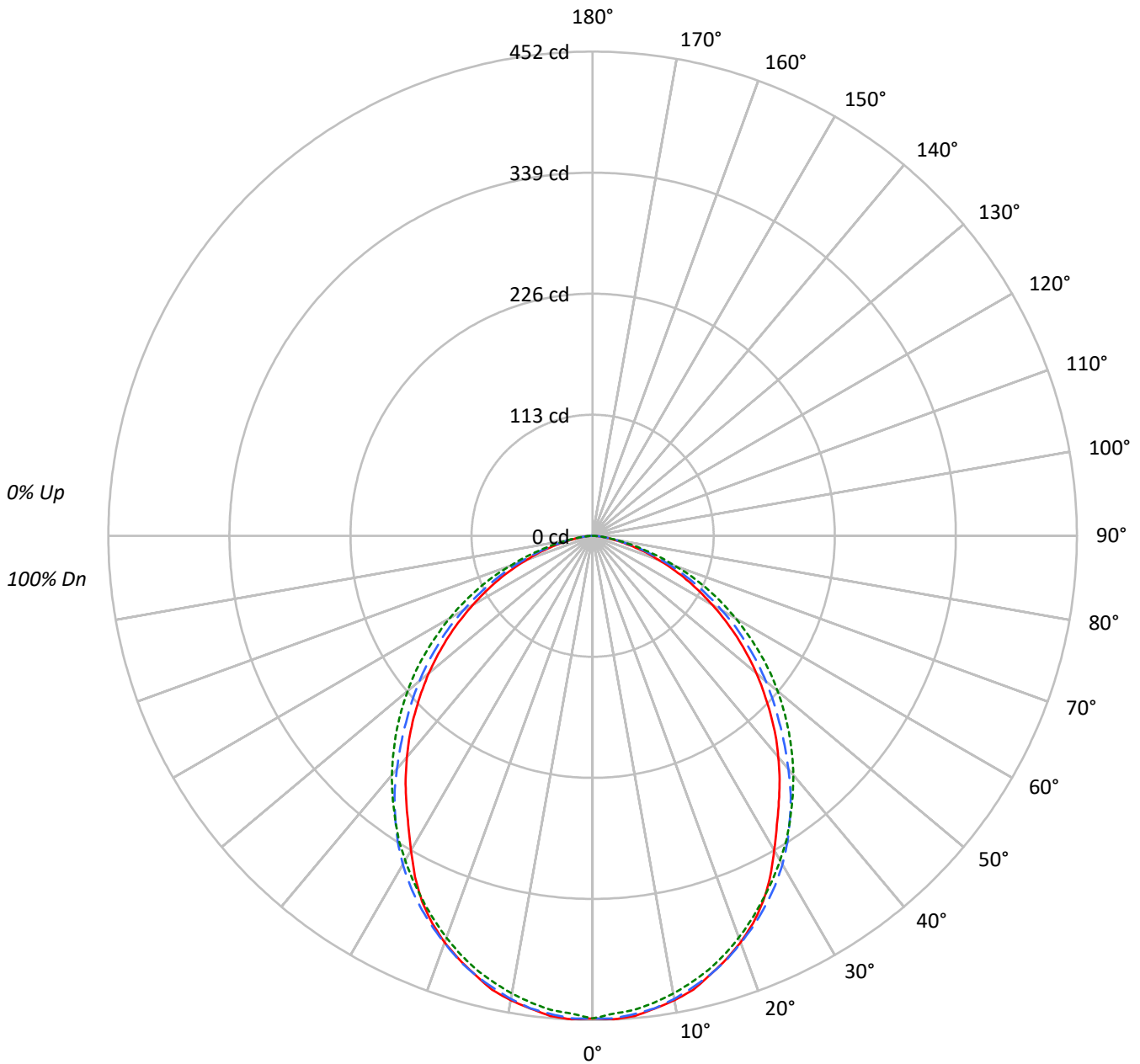
Lumens per Lamp: N/A  
Luminaire Lumens: 1042.0 lumens  
Efficiency: N/A  
Efficacy: 89.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (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°	2425	2425	2425
5°	2432	2421	2401
10°	2406	2399	2372
15°	2364	2364	2336
20°	2313	2316	2286
25°	2237	2265	2229
30°	2107	2201	2174
35°	1991	2110	2114
40°	1894	1996	2048
45°	1786	1875	1971
50°	1671	1767	1887
55°	1542	1644	1786
60°	1389	1500	1661
65°	1226	1333	1510
70°	1021	1136	1282
75°	803	907	1004
80°	573	638	710
85°	377	377	352



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.4	4.1
10°-20°	119.2	11.4
20°-30°	174.2	16.7
30°-40°	197.7	19.0
40°-50°	190.9	18.3
50°-60°	157.5	15.1
60°-70°	104.9	10.1
70°-80°	46.9	4.5
80°-90°	8.4	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°	335.8	32.2
0°-40°	533.5	51.2
0°-60°	881.9	84.6
0°-90°	1042.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1042.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	451	451	451	451	451	
5°	450	450	448	446	444	43
15°	424	425	424	422	419	120
25°	377	380	381	379	375	173
35°	303	307	321	323	322	190
45°	235	239	246	258	259	181
55°	164	167	175	185	190	147
65°	96	99	105	112	119	95
75°	39	41	44	46	48	42
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°	450.6	450.6	450.6	450.6	450.6
2.5°	451.8	452.0	451.0	448.2	446.5
5°	450.1	449.9	448.2	445.8	444.4
7.5°	445.1	445.4	444.9	441.5	439.6
10°	440.3	440.4	439.0	436.3	434.0
12.5°	434.0	433.8	431.9	430.6	426.9
15°	424.2	425.2	424.2	422.2	419.3
17.5°	414.6	414.6	415.3	412.0	409.8
20°	403.9	404.4	404.4	401.8	399.2
22.5°	391.4	393.0	393.5	390.7	387.6
25°	376.7	379.7	381.4	378.6	375.3
27.5°	358.9	363.4	368.6	366.5	362.9
30°	339.0	345.6	354.2	352.5	349.9
32.5°	320.1	326.7	338.6	337.9	336.6
35°	303.0	307.1	321.1	322.9	321.7
37.5°	286.7	290.5	303.7	307.6	306.6
40°	269.6	273.7	284.1	291.2	291.5
42.5°	252.6	256.6	265.1	275.3	275.3
45°	234.6	238.6	246.4	257.6	259.0
47.5°	216.9	221.1	228.7	239.9	242.2
50°	199.6	203.4	211.0	221.9	225.4
52.5°	181.6	185.8	193.2	203.2	208.3
55°	164.3	167.1	175.2	184.9	190.3
57.5°	146.3	148.9	158.1	166.4	171.9
60°	129.0	132.3	139.4	147.8	154.3
62.5°	112.4	115.8	121.9	129.3	136.6
65°	96.3	98.9	104.7	112.2	118.6
67.5°	80.7	82.9	88.8	94.0	100.8
70°	64.9	67.9	72.2	77.2	81.5
72.5°	52.3	53.5	57.1	60.8	65.3
75°	38.6	40.7	43.6	45.7	48.3
77.5°	27.7	28.9	30.6	32.4	34.8
80°	18.5	19.0	20.6	20.9	22.9
82.5°	11.3	11.6	11.9	12.1	12.8
85°	6.1	6.1	6.1	5.7	5.7
87.5°	3.5	3.5	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)