

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: P554314

Luminaire Tested: **FUSL-12-2-LD4-1LO-50-UNV-81-94-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: P554314  
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-50-UNV-81-94-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

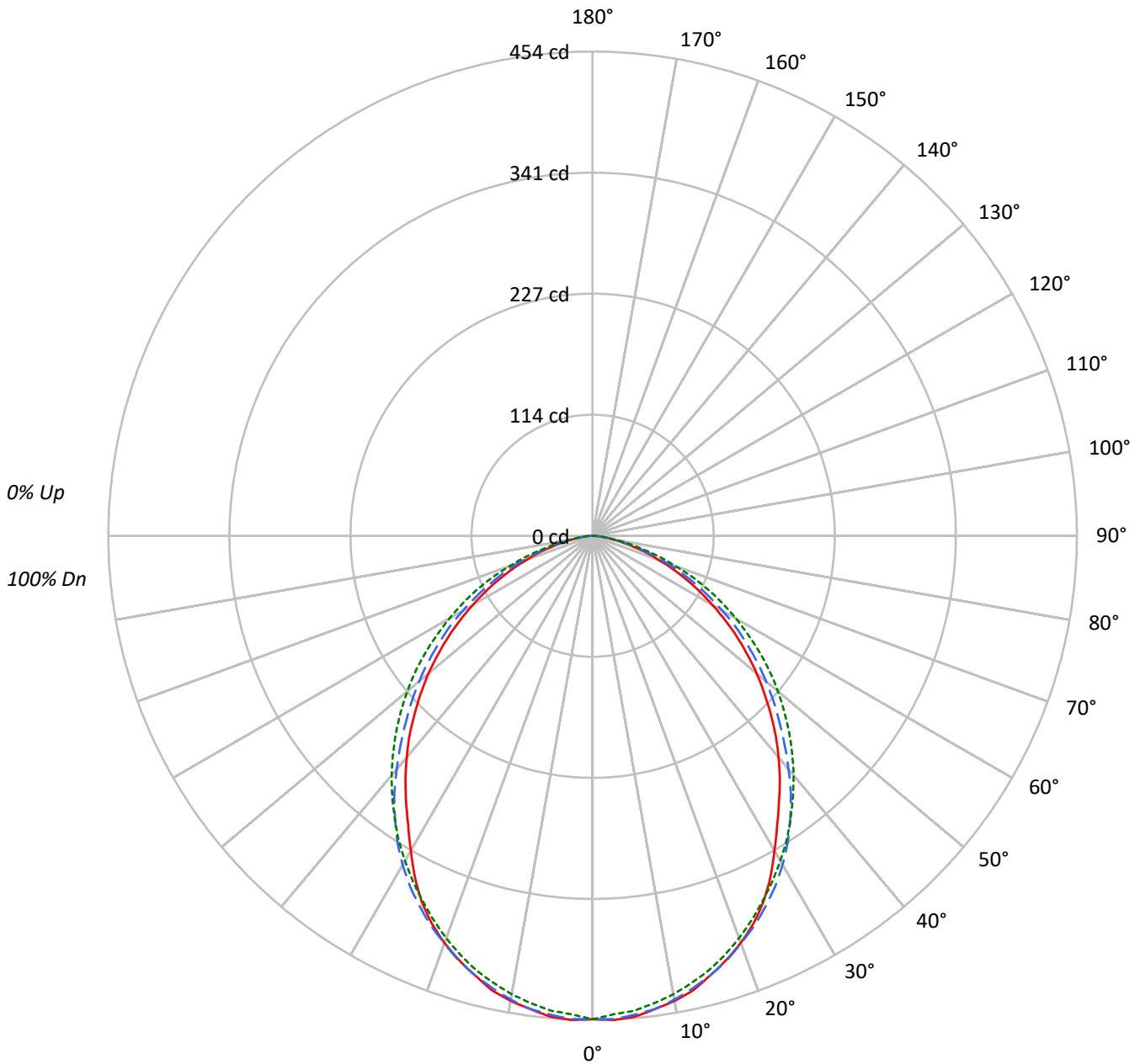
Lumens per Lamp: N/A  
Luminaire Lumens: 1048.0 lumens  
Efficiency: N/A  
Efficacy: 89.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2439	2439	2439
5°	2446	2435	2415
10°	2420	2413	2385
15°	2377	2377	2350
20°	2326	2329	2300
25°	2250	2278	2242
30°	2119	2214	2187
35°	2002	2122	2125
40°	1905	2007	2060
45°	1795	1886	1983
50°	1681	1778	1898
55°	1550	1653	1796
60°	1396	1509	1669
65°	1233	1341	1519
70°	1028	1142	1290
75°	807	913	1011
80°	576	642	713
85°	377	377	352



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.7	4.1
10°-20°	119.9	11.4
20°-30°	175.2	16.7
30°-40°	198.9	19.0
40°-50°	192.0	18.3
50°-60°	158.4	15.1
60°-70°	105.4	10.1
70°-80°	47.2	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°	337.7	32.2
0°-40°	536.6	51.2
0°-60°	886.9	84.6
0°-90°	1048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1048.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	453	453	453	453	453	
5°	453	452	451	448	447	43
15°	427	428	427	425	422	120
25°	379	382	384	381	378	174
35°	305	309	323	325	324	191
45°	236	240	248	259	260	182
55°	165	168	176	186	191	147
65°	97	99	105	113	119	96
75°	39	41	44	46	49	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°	453.2	453.2	453.2	453.2	453.2
2.5°	454.5	454.6	453.6	450.8	449.1
5°	452.7	452.5	450.8	448.4	447.0
7.5°	447.7	448.0	447.5	444.0	442.1
10°	442.8	443.0	441.6	438.8	436.5
12.5°	436.5	436.3	434.4	433.0	429.4
15°	426.6	427.6	426.6	424.7	421.7
17.5°	417.0	417.0	417.7	414.4	412.1
20°	406.2	406.7	406.7	404.1	401.5
22.5°	393.7	395.3	395.8	393.0	389.9
25°	378.9	381.8	383.6	380.8	377.5
27.5°	360.9	365.5	370.7	368.6	365.0
30°	340.9	347.5	356.2	354.5	351.9
32.5°	321.9	328.6	340.6	339.9	338.5
35°	304.7	308.9	323.0	324.7	323.5
37.5°	288.3	292.2	305.4	309.4	308.4
40°	271.1	275.3	285.7	292.9	293.2
42.5°	254.0	258.0	266.6	276.8	276.8
45°	235.9	239.9	247.8	259.1	260.5
47.5°	218.2	222.4	230.0	241.3	243.6
50°	200.8	204.6	212.3	223.2	226.7
52.5°	182.7	186.8	194.3	204.4	209.5
55°	165.2	168.0	176.2	186.0	191.4
57.5°	147.1	149.7	159.0	167.3	172.9
60°	129.7	133.0	140.2	148.7	155.1
62.5°	113.0	116.5	122.6	130.1	137.4
65°	96.8	99.4	105.3	112.8	119.3
67.5°	81.1	83.4	89.3	94.5	101.3
70°	65.3	68.3	72.6	77.7	82.0
72.5°	52.6	53.8	57.5	61.1	65.6
75°	38.8	40.9	43.9	46.0	48.6
77.5°	27.9	29.1	30.8	32.6	35.0
80°	18.6	19.2	20.7	21.1	23.0
82.5°	11.3	11.7	12.0	12.2	12.9
85°	6.1	6.1	6.1	5.7	5.7
87.5°	3.5	3.5	3.0	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)