

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: P554341

Luminaire Tested: **FUSL-12-2-LD4-1LO-50-UNV-93-86-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: P554341  
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-93-86-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

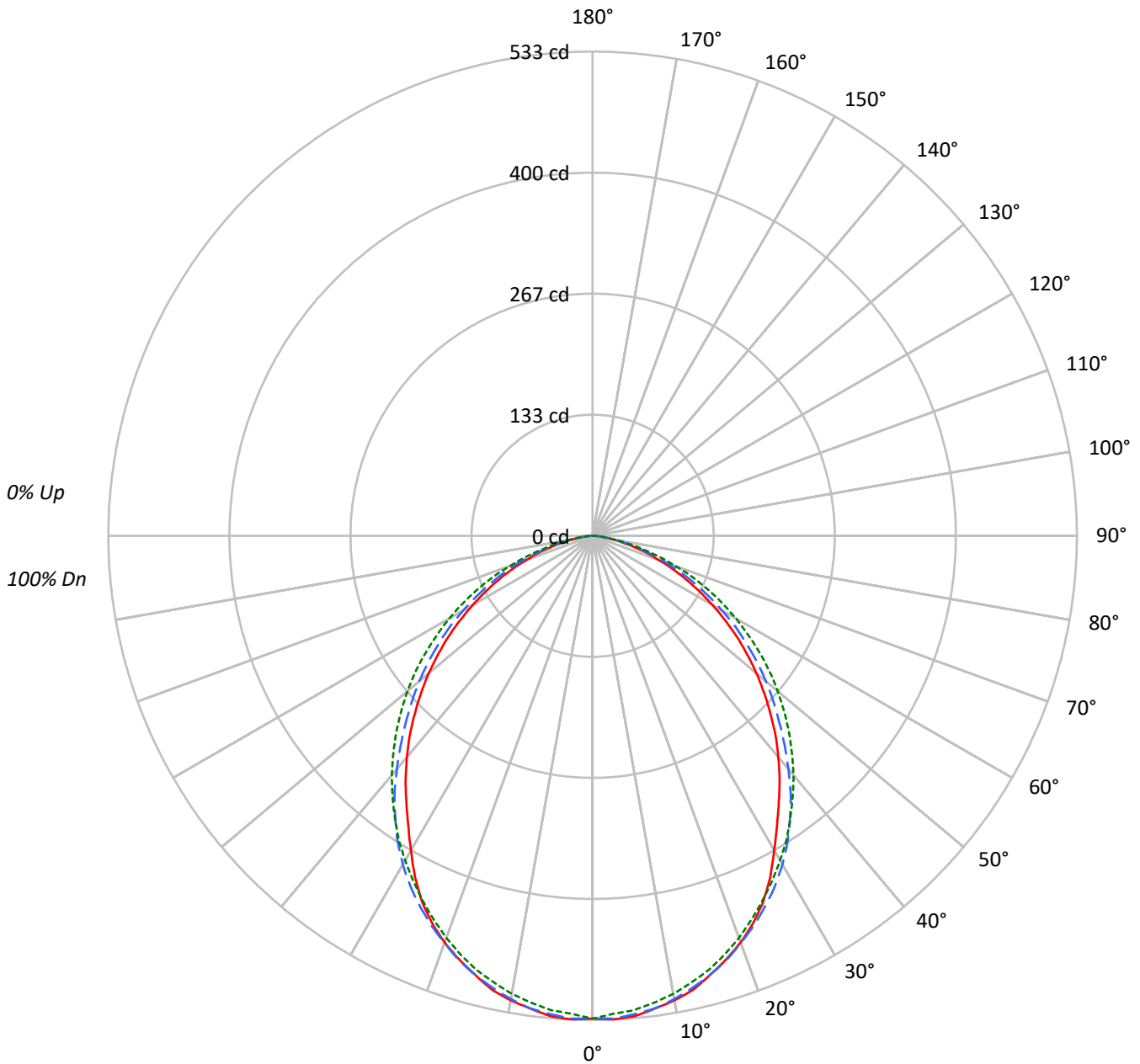
Lumens per Lamp: N/A  
Luminaire Lumens: 1229.0 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	2861	2861	2861
5°	2868	2856	2832
10°	2838	2830	2798
15°	2788	2788	2756
20°	2729	2732	2697
25°	2638	2671	2629
30°	2485	2596	2565
35°	2348	2489	2493
40°	2233	2354	2416
45°	2106	2212	2325
50°	1971	2084	2226
55°	1818	1939	2106
60°	1637	1770	1958
65°	1445	1573	1782
70°	1205	1339	1514
75°	946	1071	1185
80°	676	753	837
85°	438	438	414



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.0	4.1
10°-20°	140.6	11.4
20°-30°	205.4	16.7
30°-40°	233.2	19.0
40°-50°	225.1	18.3
50°-60°	185.7	15.1
60°-70°	123.7	10.1
70°-80°	55.3	4.5
80°-90°	9.9	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°	396.1	32.2
0°-40°	629.3	51.2
0°-60°	1040.1	84.6
0°-90°	1229.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1229.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	532	532	532	532	532	
5°	531	531	529	526	524	50
15°	500	502	500	498	495	141
25°	444	448	450	447	443	203
35°	357	362	379	381	379	224
45°	277	281	291	304	306	213
55°	194	197	207	218	224	173
65°	114	117	124	132	140	113
75°	46	48	52	54	57	50
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	531.5	531.5	531.5	531.5	531.5
2.5°	532.9	533.1	531.9	528.7	526.6
5°	530.9	530.7	528.7	525.8	524.2
7.5°	525.0	525.4	524.8	520.7	518.4
10°	519.3	519.5	517.8	514.6	511.9
12.5°	511.9	511.7	509.5	507.8	503.5
15°	500.3	501.5	500.3	498.0	494.6
17.5°	489.0	489.0	489.9	486.0	483.3
20°	476.4	477.0	477.0	473.9	470.9
22.5°	461.7	463.5	464.1	460.9	457.2
25°	444.3	447.8	449.8	446.6	442.7
27.5°	423.3	428.6	434.7	432.3	428.0
30°	399.8	407.6	417.8	415.7	412.7
32.5°	377.6	385.3	399.4	398.6	396.9
35°	357.3	362.2	378.8	380.8	379.4
37.5°	338.1	342.6	358.2	362.8	361.6
40°	317.9	322.8	335.1	343.5	343.9
42.5°	297.9	302.6	312.6	324.7	324.7
45°	276.7	281.4	290.6	303.8	305.5
47.5°	255.9	260.8	269.7	283.0	285.7
50°	235.4	239.9	248.9	261.8	265.9
52.5°	214.2	219.1	227.9	239.7	245.6
55°	193.8	197.0	206.6	218.1	224.4
57.5°	172.5	175.6	186.4	196.2	202.8
60°	152.1	156.0	164.4	174.4	181.9
62.5°	132.5	136.6	143.8	152.5	161.1
65°	113.5	116.6	123.5	132.3	139.9
67.5°	95.2	97.8	104.8	110.9	118.8
70°	76.6	80.0	85.1	91.1	96.2
72.5°	61.7	63.1	67.4	71.7	77.0
75°	45.5	48.0	51.5	53.9	57.0
77.5°	32.7	34.1	36.1	38.2	41.0
80°	21.8	22.5	24.3	24.7	27.0
82.5°	13.3	13.7	14.1	14.3	15.1
85°	7.1	7.1	7.1	6.7	6.7
87.5°	4.1	4.1	3.5	2.9	2.0
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)