

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: P554280

Luminaire Tested: **FUSL-12-2-LD4-1LO-40-UNV-93-88-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: P554280  
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-40-UNV-93-88-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

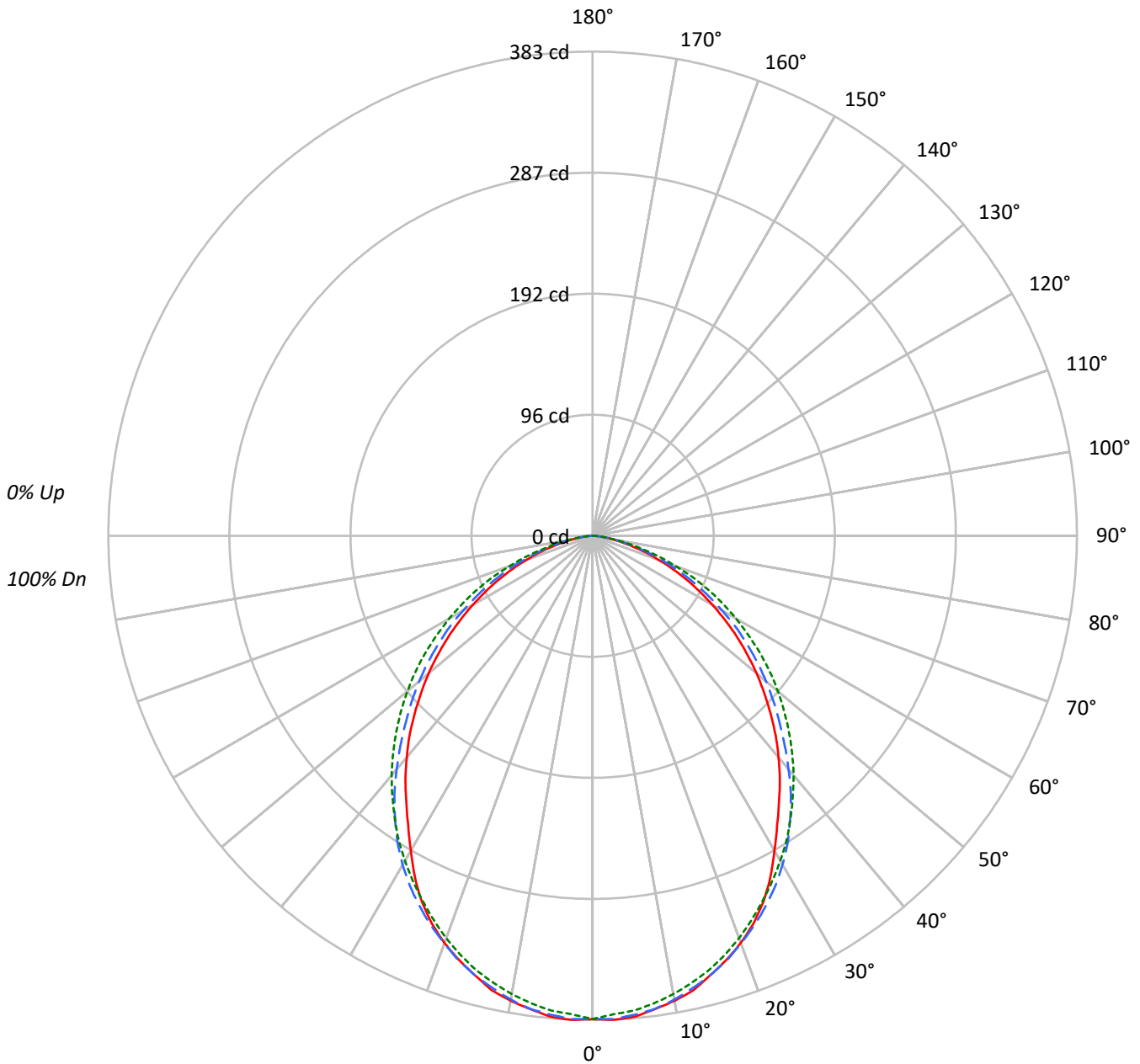
Lumens per Lamp: N/A  
Luminaire Lumens: 884.0 lumens  
Efficiency: N/A  
Efficacy: 75.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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°	2058	2058	2058
5°	2063	2055	2037
10°	2041	2036	2012
15°	2005	2005	1982
20°	1963	1965	1940
25°	1898	1922	1891
30°	1787	1867	1844
35°	1689	1790	1793
40°	1607	1693	1737
45°	1515	1591	1672
50°	1418	1499	1601
55°	1308	1394	1514
60°	1178	1272	1409
65°	1040	1132	1281
70°	867	963	1089
75°	682	769	853
80°	487	542	601
85°	315	315	296



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.0	4.1
10°-20°	101.1	11.4
20°-30°	147.8	16.7
30°-40°	167.7	19.0
40°-50°	161.9	18.3
50°-60°	133.6	15.1
60°-70°	89.0	10.1
70°-80°	39.8	4.5
80°-90°	7.1	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°	284.9	32.2
0°-40°	452.6	51.2
0°-60°	748.1	84.6
0°-90°	884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	884.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	382	382	382	382	382	
5°	382	382	380	378	377	36
15°	360	361	360	358	356	101
25°	320	322	324	321	318	146
35°	257	261	272	274	273	161
45°	199	202	209	218	220	154
55°	139	142	149	157	161	124
65°	82	84	89	95	101	81
75°	33	34	37	39	41	36
85°	5	5	5	5	5	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	382.3	382.3	382.3	382.3	382.3
2.5°	383.3	383.5	382.6	380.3	378.8
5°	381.9	381.7	380.3	378.2	377.0
7.5°	377.6	377.9	377.5	374.5	372.9
10°	373.5	373.6	372.5	370.1	368.2
12.5°	368.2	368.1	366.4	365.3	362.2
15°	359.8	360.7	359.8	358.2	355.7
17.5°	351.8	351.8	352.3	349.6	347.6
20°	342.7	343.1	343.1	340.9	338.7
22.5°	332.1	333.4	333.8	331.5	328.8
25°	319.6	322.1	323.6	321.2	318.4
27.5°	304.5	308.3	312.7	310.9	307.8
30°	287.6	293.2	300.5	299.0	296.8
32.5°	271.6	277.1	287.3	286.7	285.5
35°	257.0	260.6	272.4	273.9	272.9
37.5°	243.2	246.5	257.6	261.0	260.1
40°	228.7	232.2	241.0	247.0	247.3
42.5°	214.3	217.7	224.9	233.5	233.5
45°	199.0	202.4	209.0	218.5	219.7
47.5°	184.0	187.6	194.0	203.6	205.5
50°	169.3	172.6	179.0	188.3	191.2
52.5°	154.1	157.6	163.9	172.4	176.7
55°	139.4	141.7	148.6	156.9	161.4
57.5°	124.1	126.3	134.1	141.1	145.8
60°	109.4	112.2	118.2	125.4	130.9
62.5°	95.3	98.3	103.4	109.7	115.9
65°	81.7	83.9	88.9	95.2	100.6
67.5°	68.4	70.4	75.3	79.8	85.5
70°	55.1	57.6	61.2	65.5	69.2
72.5°	44.4	45.4	48.5	51.6	55.4
75°	32.8	34.5	37.0	38.8	41.0
77.5°	23.5	24.5	26.0	27.5	29.5
80°	15.7	16.2	17.5	17.8	19.4
82.5°	9.5	9.8	10.1	10.3	10.9
85°	5.1	5.1	5.1	4.8	4.8
87.5°	2.9	2.9	2.5	2.1	1.5
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)