

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: P554380

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-81-96-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: P554380  
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-81-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDES  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

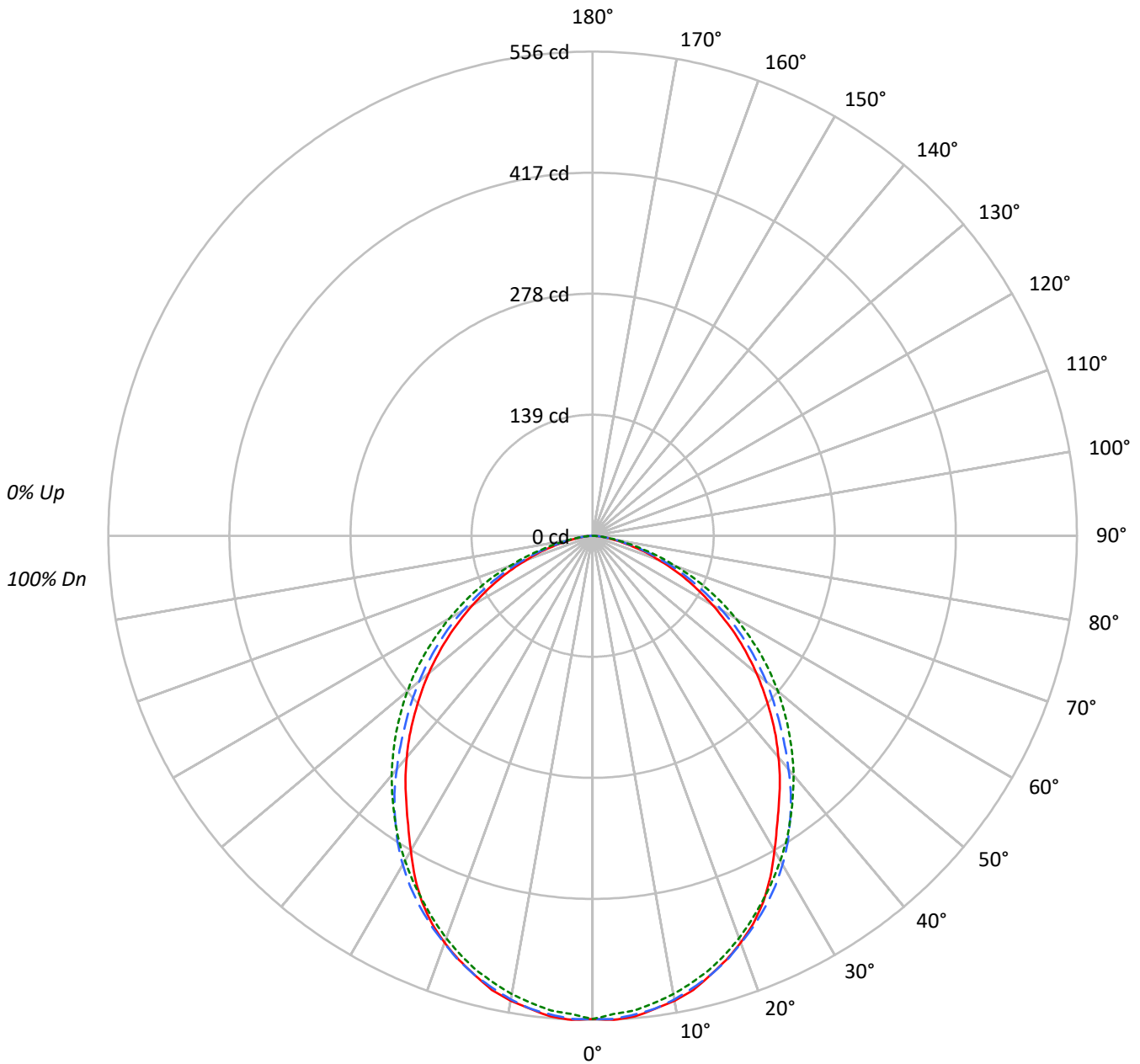
Lumens per Lamp: N/A  
Luminaire Lumens: 1283.0 lumens  
Efficiency: N/A  
Efficacy: 77.3 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.6  
Input Voltage (V): NR  
Input Current (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°	2986	2986	2986
5°	2994	2982	2956
10°	2963	2954	2920
15°	2910	2910	2877
20°	2848	2852	2816
25°	2754	2789	2744
30°	2594	2710	2677
35°	2451	2598	2602
40°	2332	2458	2522
45°	2198	2308	2427
50°	2058	2175	2323
55°	1898	2024	2198
60°	1709	1847	2044
65°	1509	1643	1859
70°	1257	1399	1580
75°	988	1117	1237
80°	707	787	871
85°	463	463	432



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.2	4.1
10°-20°	146.8	11.4
20°-30°	214.5	16.7
30°-40°	243.4	19.0
40°-50°	235.0	18.3
50°-60°	193.9	15.1
60°-70°	129.1	10.1
70°-80°	57.8	4.5
80°-90°	10.3	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°	413.5	32.2
0°-40°	656.9	51.2
0°-60°	1085.8	84.6
0°-90°	1283.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1283.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	555	555	555	555	555	
5°	554	554	552	549	547	52
15°	522	524	522	520	516	147
25°	464	468	470	466	462	212
35°	373	378	395	398	396	234
45°	289	294	303	317	319	223
55°	202	206	216	228	234	181
65°	118	122	129	138	146	117
75°	48	50	54	56	60	52
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	554.9	554.9	554.9	554.9	554.9
2.5°	556.4	556.6	555.3	551.9	549.7
5°	554.2	554.0	551.9	548.9	547.2
7.5°	548.0	548.5	547.8	543.6	541.2
10°	542.1	542.3	540.6	537.2	534.4
12.5°	534.4	534.2	531.8	530.1	525.7
15°	522.3	523.5	522.3	519.9	516.3
17.5°	510.5	510.5	511.4	507.3	504.6
20°	497.3	497.9	497.9	494.8	491.6
22.5°	482.0	483.9	484.5	481.1	477.3
25°	463.8	467.5	469.6	466.2	462.1
27.5°	441.9	447.4	453.8	451.3	446.8
30°	417.4	425.5	436.1	434.0	430.8
32.5°	394.1	402.2	416.9	416.1	414.4
35°	373.0	378.2	395.4	397.5	396.1
37.5°	353.0	357.7	373.9	378.8	377.5
40°	331.9	337.0	349.8	358.5	359.0
42.5°	311.0	315.9	326.4	338.9	338.9
45°	288.8	293.7	303.3	317.2	318.9
47.5°	267.1	272.2	281.6	295.4	298.2
50°	245.8	250.5	259.8	273.3	277.5
52.5°	223.6	228.7	237.9	250.3	256.4
55°	202.3	205.7	215.7	227.7	234.3
57.5°	180.1	183.3	194.6	204.9	211.7
60°	158.8	162.9	171.6	182.0	189.9
62.5°	138.3	142.6	150.1	159.2	168.2
65°	118.5	121.7	129.0	138.1	146.0
67.5°	99.3	102.1	109.4	115.7	124.1
70°	79.9	83.6	88.9	95.1	100.4
72.5°	64.4	65.9	70.3	74.8	80.4
75°	47.5	50.1	53.7	56.3	59.5
77.5°	34.1	35.6	37.7	39.9	42.8
80°	22.8	23.4	25.4	25.8	28.1
82.5°	13.9	14.3	14.7	14.9	15.8
85°	7.5	7.5	7.5	7.0	7.0
87.5°	4.3	4.3	3.6	3.0	2.1
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)