

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: P554398

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-82-97-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: P554398  
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-82-97-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375  
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

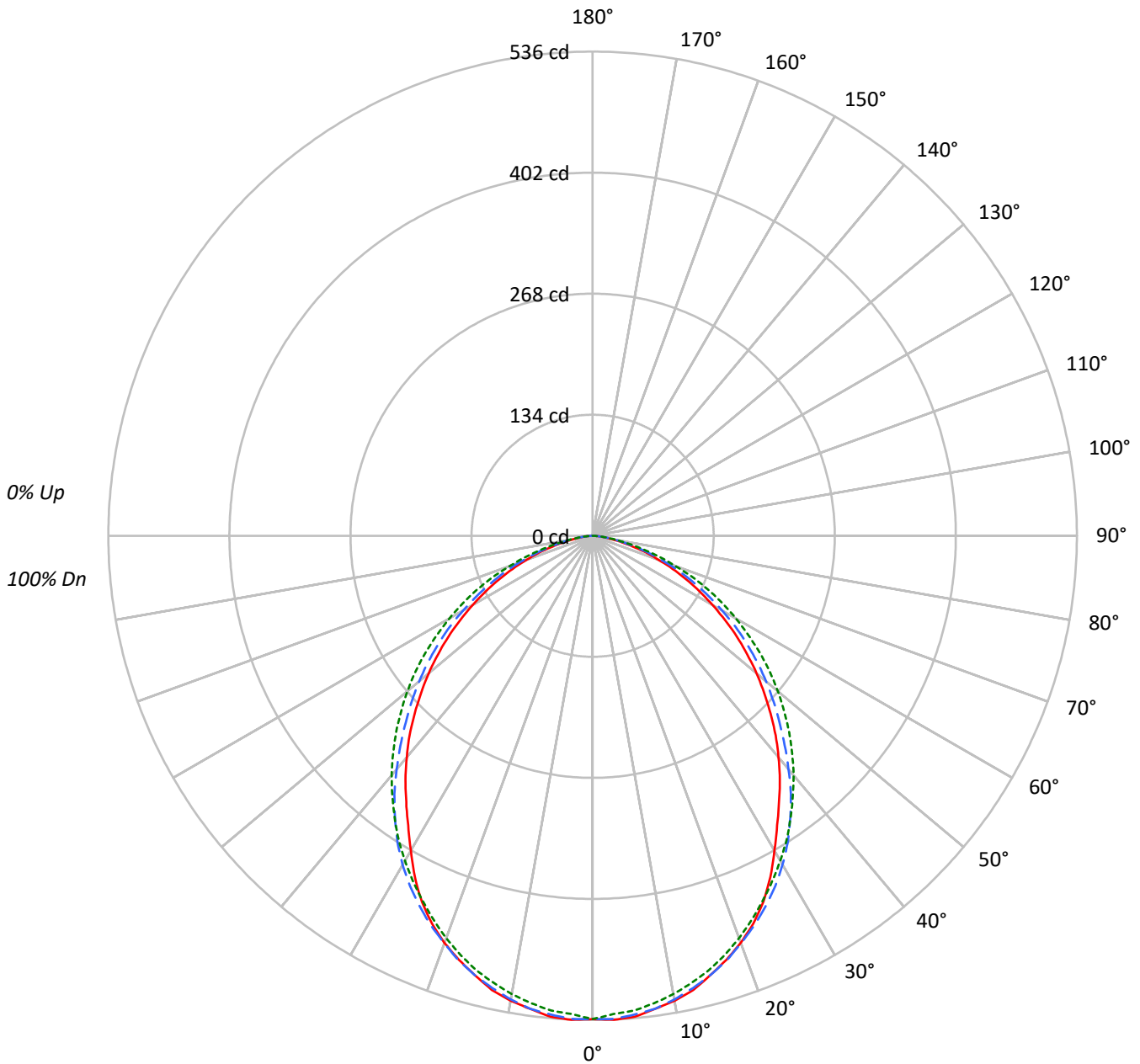
Lumens per Lamp: N/A  
Luminaire Lumens: 1237.0 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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				20				
RC	80				70				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°	2879	2879	2879
5°	2887	2875	2850
10°	2856	2848	2816
15°	2805	2805	2774
20°	2746	2750	2714
25°	2656	2689	2646
30°	2501	2613	2582
35°	2363	2505	2509
40°	2248	2370	2432
45°	2120	2226	2340
50°	1984	2097	2241
55°	1830	1952	2120
60°	1648	1780	1971
65°	1456	1583	1793
70°	1213	1349	1523
75°	952	1077	1192
80°	682	759	840
85°	445	445	420



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.4	4.1
10°-20°	141.5	11.4
20°-30°	206.8	16.7
30°-40°	234.7	19.0
40°-50°	226.6	18.3
50°-60°	186.9	15.1
60°-70°	124.5	10.1
70°-80°	55.7	4.5
80°-90°	10.0	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°	398.6	32.2
0°-40°	633.4	51.2
0°-60°	1046.9	84.6
0°-90°	1237.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1237.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	535	535	535	535	535	
5°	534	534	532	529	528	51
15°	504	505	504	501	498	142
25°	447	451	453	450	446	205
35°	360	365	381	383	382	225
45°	278	283	292	306	308	215
55°	195	198	208	220	226	174
65°	114	117	124	133	141	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°	535.0	535.0	535.0	535.0	535.0
2.5°	536.4	536.6	535.4	532.1	530.0
5°	534.4	534.1	532.1	529.2	527.6
7.5°	528.4	528.8	528.2	524.1	521.8
10°	522.6	522.8	521.2	517.9	515.2
12.5°	515.2	515.0	512.8	511.1	506.8
15°	503.5	504.8	503.5	501.3	497.8
17.5°	492.2	492.2	493.0	489.1	486.5
20°	479.5	480.1	480.1	477.0	473.9
22.5°	464.7	466.5	467.1	463.9	460.2
25°	447.2	450.7	452.8	449.5	445.6
27.5°	426.0	431.4	437.6	435.1	430.8
30°	402.4	410.2	420.5	418.4	415.4
32.5°	380.0	387.8	402.0	401.2	399.5
35°	359.7	364.6	381.2	383.3	381.9
37.5°	340.3	344.9	360.5	365.2	364.0
40°	320.0	324.9	337.3	345.7	346.1
42.5°	299.9	304.6	314.7	326.8	326.8
45°	278.5	283.2	292.5	305.8	307.5
47.5°	257.5	262.5	271.5	284.9	287.5
50°	237.0	241.5	250.5	263.5	267.6
52.5°	215.6	220.5	229.4	241.3	247.2
55°	195.0	198.3	208.0	219.5	225.9
57.5°	173.7	176.7	187.6	197.5	204.1
60°	153.1	157.0	165.4	175.5	183.1
62.5°	133.4	137.5	144.7	153.5	162.2
65°	114.3	117.4	124.3	133.2	140.8
67.5°	95.8	98.4	105.4	111.6	119.6
70°	77.1	80.6	85.7	91.7	96.8
72.5°	62.1	63.5	67.8	72.1	77.5
75°	45.8	48.3	51.8	54.3	57.3
77.5°	32.9	34.3	36.4	38.4	41.3
80°	22.0	22.6	24.5	24.9	27.1
82.5°	13.4	13.8	14.2	14.4	15.2
85°	7.2	7.2	7.2	6.8	6.8
87.5°	4.1	4.1	3.5	2.9	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)