

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: P554592

Luminaire Tested: **FUSL-12-2-LD4-1STD-50-UNV-93-84-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: P554592  
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-50-UNV-93-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

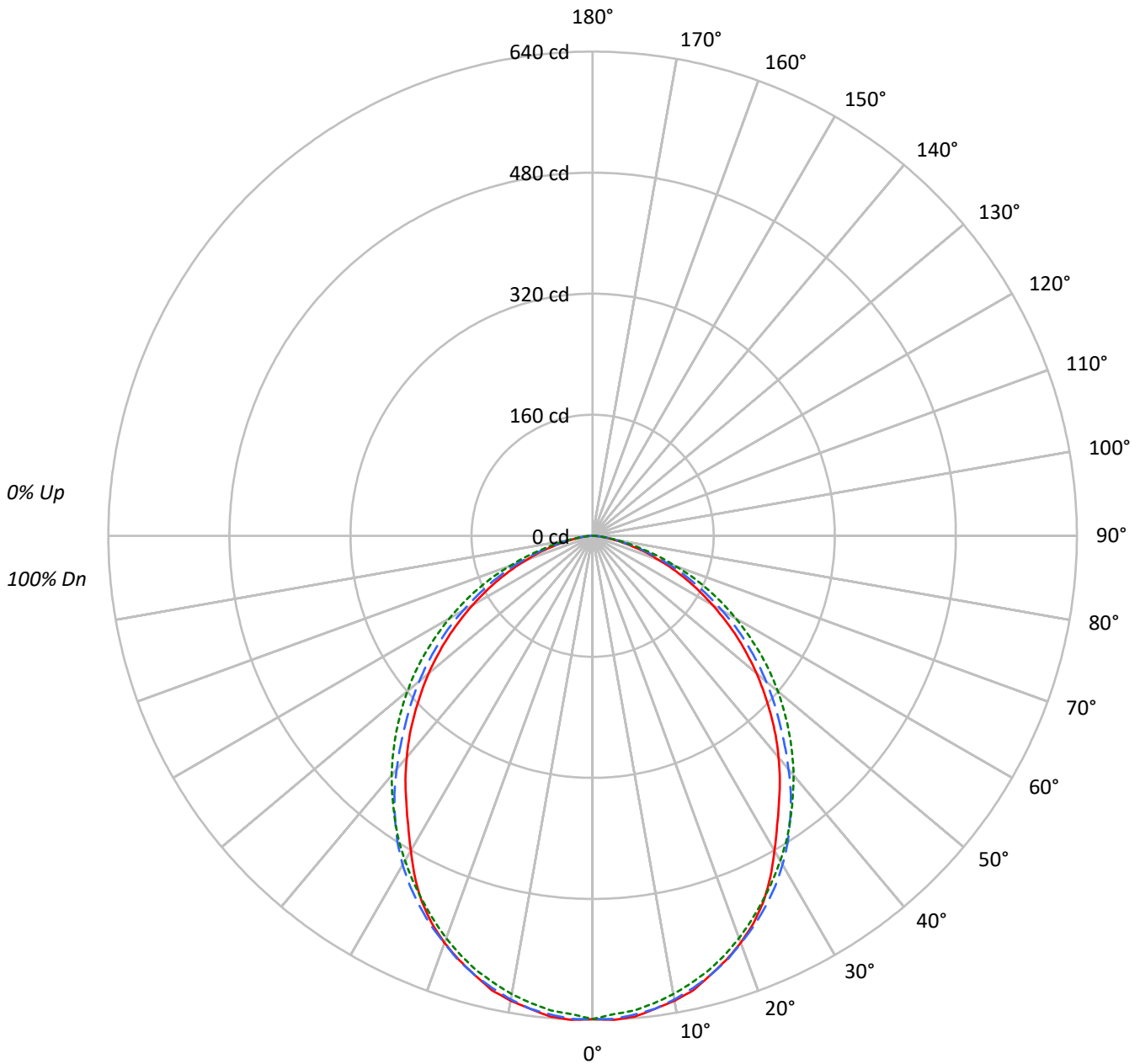
Lumens per Lamp: N/A  
Luminaire Lumens: 1477.0 lumens  
Efficiency: N/A  
Efficacy: 89.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	3438	3438	3438
5°	3447	3432	3403
10°	3410	3401	3362
15°	3350	3350	3311
20°	3279	3283	3241
25°	3171	3210	3159
30°	2986	3120	3082
35°	2821	2991	2995
40°	2684	2829	2903
45°	2531	2658	2794
50°	2369	2504	2675
55°	2185	2330	2531
60°	1968	2126	2353
65°	1737	1891	2141
70°	1448	1610	1819
75°	1137	1285	1424
80°	815	905	1004
85°	531	531	500



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	4.1
10°-20°	169.0	11.4
20°-30°	246.9	16.7
30°-40°	280.3	19.0
40°-50°	270.5	18.3
50°-60°	223.2	15.1
60°-70°	148.6	10.1
70°-80°	66.5	4.5
80°-90°	11.9	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°	476.0	32.2
0°-40°	756.2	51.2
0°-60°	1250.0	84.6
0°-90°	1477.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1477.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	639	639	639	639	639	
5°	638	638	635	632	630	60
15°	601	603	601	598	594	169
25°	534	538	541	537	532	245
35°	429	435	455	458	456	269
45°	332	338	349	365	367	257
55°	233	237	248	262	270	208
65°	136	140	148	159	168	135
75°	55	58	62	65	68	60
85°	9	9	9	8	8	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	638.8	638.8	638.8	638.8	638.8
2.5°	640.5	640.7	639.3	635.3	632.9
5°	638.0	637.8	635.3	631.9	629.9
7.5°	630.9	631.4	630.7	625.8	623.1
10°	624.0	624.3	622.3	618.4	615.2
12.5°	615.2	615.0	612.3	610.3	605.1
15°	601.2	602.7	601.2	598.5	594.3
17.5°	587.7	587.7	588.7	584.0	580.9
20°	572.5	573.2	573.2	569.6	565.9
22.5°	554.8	557.0	557.8	553.9	549.4
25°	534.0	538.2	540.6	536.7	532.0
27.5°	508.7	515.1	522.4	519.5	514.3
30°	480.5	489.8	502.1	499.6	495.9
32.5°	453.7	463.1	480.0	479.0	477.0
35°	429.4	435.3	455.2	457.7	455.9
37.5°	406.4	411.8	430.4	436.1	434.6
40°	382.1	388.0	402.7	412.8	413.2
42.5°	358.0	363.7	375.7	390.2	390.2
45°	332.5	338.2	349.2	365.1	367.1
47.5°	307.5	313.4	324.2	340.1	343.3
50°	282.9	288.3	299.1	314.6	319.5
52.5°	257.4	263.3	273.9	288.1	295.2
55°	232.9	236.8	248.3	262.1	269.7
57.5°	207.4	211.0	224.0	235.8	243.7
60°	182.8	187.5	197.5	209.6	218.6
62.5°	159.3	164.2	172.8	183.3	193.6
65°	136.4	140.1	148.5	159.0	168.1
67.5°	114.4	117.5	125.9	133.2	142.8
70°	92.0	96.2	102.3	109.4	115.6
72.5°	74.1	75.8	81.0	86.1	92.5
75°	54.7	57.7	61.8	64.8	68.5
77.5°	39.3	41.0	43.4	45.9	49.3
80°	26.3	27.0	29.2	29.7	32.4
82.5°	16.0	16.4	16.9	17.2	18.2
85°	8.6	8.6	8.6	8.1	8.1
87.5°	4.9	4.9	4.2	3.4	2.5
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)