

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: P554356

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-80-86-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: P554356  
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-80-86-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

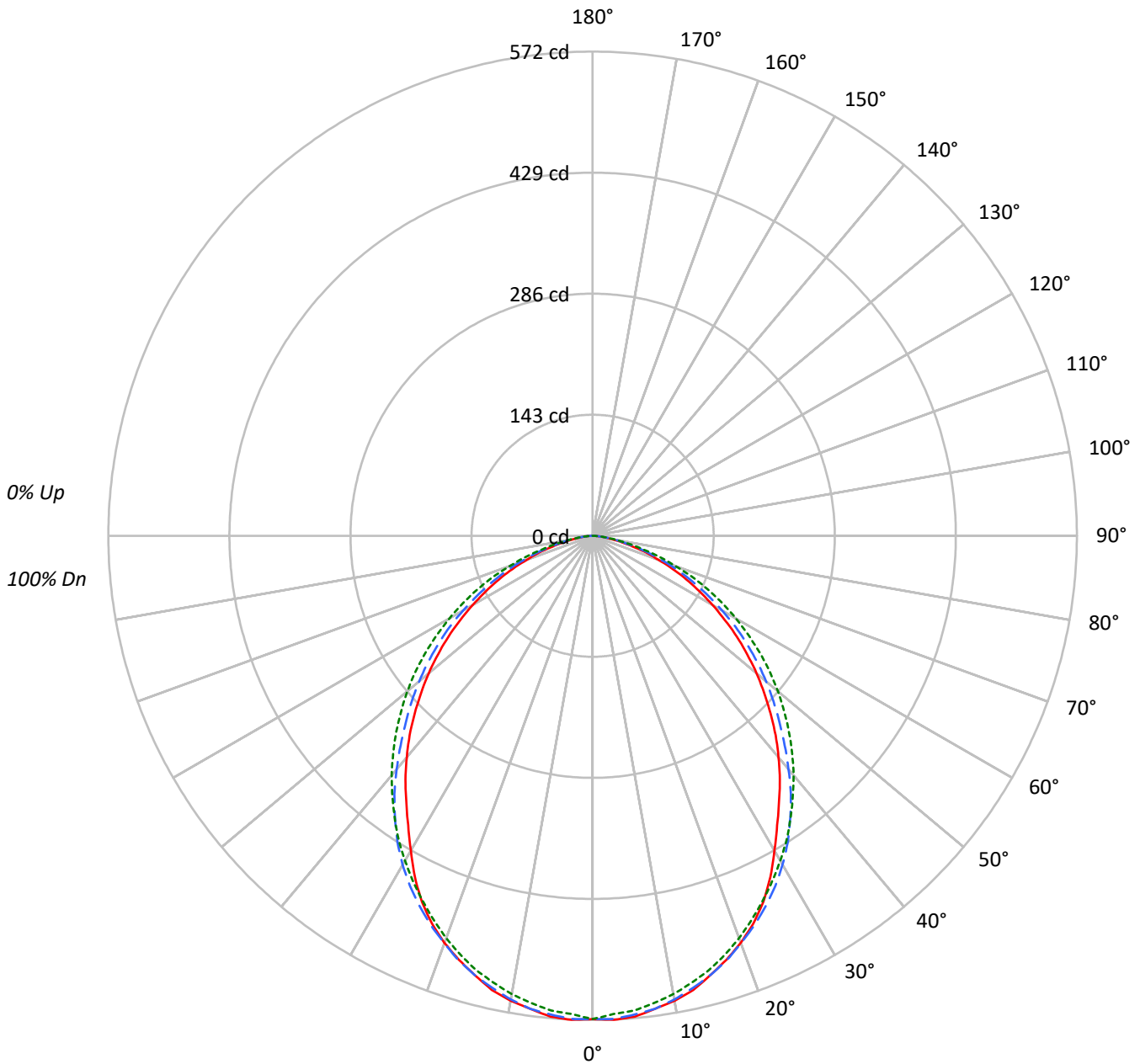
Lumens per Lamp: N/A  
Luminaire Lumens: 1320.0 lumens  
Efficiency: N/A  
Efficacy: 79.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

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									
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°	3073	3073	3073
5°	3081	3068	3042
10°	3048	3040	3005
15°	2994	2994	2960
20°	2931	2934	2896
25°	2834	2869	2824
30°	2669	2788	2754
35°	2522	2673	2677
40°	2399	2529	2595
45°	2262	2375	2497
50°	2117	2238	2390
55°	1953	2082	2261
60°	1759	1900	2103
65°	1552	1690	1913
70°	1293	1440	1626
75°	1017	1150	1273
80°	728	809	896
85°	475	475	445



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.7	4.1
10°-20°	151.0	11.4
20°-30°	220.6	16.7
30°-40°	250.5	19.0
40°-50°	241.8	18.3
50°-60°	199.5	15.1
60°-70°	132.8	10.1
70°-80°	59.4	4.5
80°-90°	10.6	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°	425.4	32.2
0°-40°	675.9	51.2
0°-60°	1117.1	84.6
0°-90°	1320.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1320.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	571	571	571	571	571	
5°	570	570	568	565	563	54
15°	537	539	537	535	531	151
25°	477	481	483	480	476	219
35°	384	389	407	409	408	240
45°	297	302	312	326	328	229
55°	208	212	222	234	241	186
65°	122	125	133	142	150	121
75°	49	52	55	58	61	53
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°	570.9	570.9	570.9	570.9	570.9
2.5°	572.4	572.6	571.3	567.8	565.6
5°	570.2	570.0	567.8	564.7	563.0
7.5°	563.8	564.3	563.6	559.2	556.8
10°	557.7	557.9	556.2	552.7	549.8
12.5°	549.8	549.6	547.2	545.4	540.8
15°	537.3	538.6	537.3	534.9	531.2
17.5°	525.2	525.2	526.1	522.0	519.1
20°	511.7	512.3	512.3	509.0	505.7
22.5°	495.9	497.8	498.5	495.0	491.0
25°	477.2	480.9	483.1	479.6	475.5
27.5°	454.6	460.3	466.9	464.3	459.7
30°	429.4	437.7	448.7	446.5	443.2
32.5°	405.5	413.8	429.0	428.1	426.3
35°	383.8	389.1	406.8	409.0	407.5
37.5°	363.2	368.0	384.7	389.7	388.4
40°	341.5	346.7	359.9	368.9	369.3
42.5°	320.0	325.0	335.8	348.7	348.7
45°	297.2	302.2	312.1	326.3	328.1
47.5°	274.8	280.1	289.7	304.0	306.8
50°	252.9	257.7	267.3	281.2	285.5
52.5°	230.1	235.3	244.8	257.5	263.8
55°	208.1	211.6	221.9	234.2	241.0
57.5°	185.3	188.6	200.2	210.8	217.8
60°	163.4	167.6	176.5	187.3	195.4
62.5°	142.3	146.7	154.4	163.8	173.0
65°	121.9	125.2	132.7	142.1	150.2
67.5°	102.2	105.0	112.5	119.1	127.6
70°	82.2	86.0	91.5	97.8	103.3
72.5°	66.2	67.8	72.4	77.0	82.7
75°	48.9	51.5	55.3	57.9	61.2
77.5°	35.1	36.6	38.8	41.0	44.1
80°	23.5	24.1	26.1	26.5	28.9
82.5°	14.3	14.7	15.1	15.4	16.2
85°	7.7	7.7	7.7	7.2	7.2
87.5°	4.4	4.4	3.7	3.1	2.2
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)