

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: P554492

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-80-96-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: P554492  
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-40-UNV-80-96-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

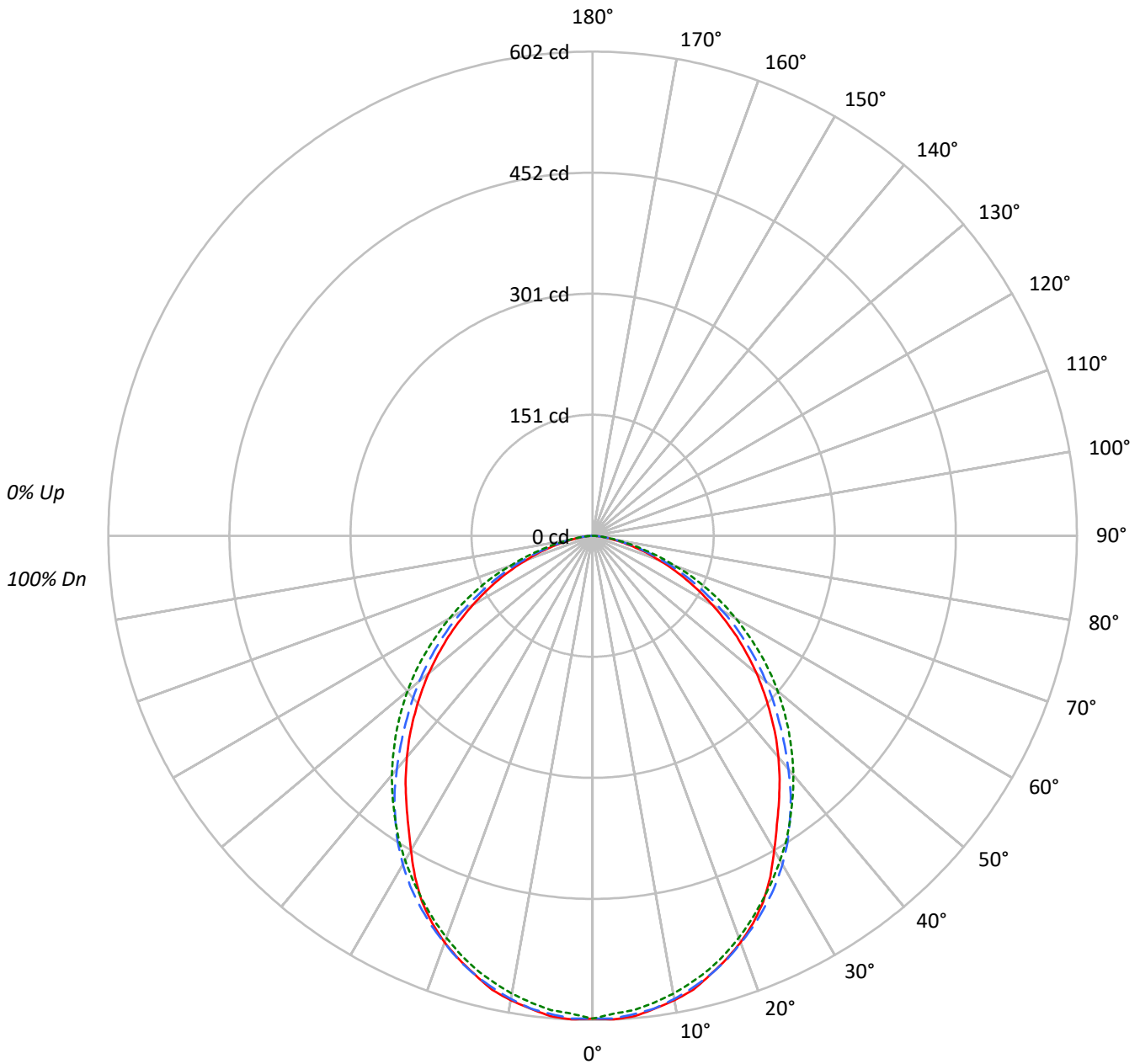
Lumens per Lamp: N/A  
Luminaire Lumens: 1388.0 lumens  
Efficiency: N/A  
Efficacy: 83.6 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 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°	3231	3231	3231
5°	3239	3225	3198
10°	3205	3196	3159
15°	3148	3148	3112
20°	3081	3085	3046
25°	2980	3017	2969
30°	2806	2932	2897
35°	2652	2811	2815
40°	2523	2659	2728
45°	2379	2498	2626
50°	2226	2354	2514
55°	2053	2190	2378
60°	1849	1998	2212
65°	1633	1777	2012
70°	1361	1514	1709
75°	1069	1208	1337
80°	766	849	942
85°	500	500	469



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.5	4.1
10°-20°	158.8	11.4
20°-30°	232.0	16.7
30°-40°	263.4	19.0
40°-50°	254.2	18.3
50°-60°	209.7	15.1
60°-70°	139.7	10.1
70°-80°	62.5	4.5
80°-90°	11.2	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°	447.3	32.2
0°-40°	710.7	51.2
0°-60°	1174.7	84.6
0°-90°	1388.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1388.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	600	600	600	600	600	
5°	600	599	597	594	592	57
15°	565	566	565	562	558	159
25°	502	506	508	504	500	230
35°	404	409	428	430	428	253
45°	312	318	328	343	345	241
55°	219	222	233	246	253	195
65°	128	132	140	149	158	127
75°	51	54	58	61	64	56
85°	8	8	8	8	8	11
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	600.3	600.3	600.3	600.3	600.3
2.5°	601.9	602.1	600.7	597.0	594.7
5°	599.6	599.4	597.0	593.8	592.0
7.5°	592.9	593.4	592.7	588.1	585.5
10°	586.4	586.7	584.8	581.1	578.1
12.5°	578.1	577.9	575.4	573.5	568.7
15°	565.0	566.4	565.0	562.5	558.5
17.5°	552.3	552.3	553.2	548.8	545.9
20°	538.0	538.7	538.7	535.2	531.8
22.5°	521.4	523.5	524.2	520.5	516.3
25°	501.8	505.7	508.0	504.3	500.0
27.5°	478.1	484.0	491.0	488.2	483.4
30°	451.5	460.3	471.8	469.5	466.1
32.5°	426.4	435.2	451.1	450.1	448.3
35°	403.6	409.1	427.8	430.1	428.5
37.5°	381.9	387.0	404.5	409.8	408.4
40°	359.1	364.6	378.4	387.9	388.3
42.5°	336.5	341.8	353.1	366.7	366.7
45°	312.5	317.8	328.2	343.1	345.0
47.5°	289.0	294.5	304.6	319.6	322.6
50°	265.9	271.0	281.1	295.6	300.3
52.5°	241.9	247.4	257.4	270.7	277.4
55°	218.8	222.5	233.4	246.3	253.4
57.5°	194.9	198.3	210.5	221.6	229.0
60°	171.8	176.2	185.6	196.9	205.5
62.5°	149.7	154.3	162.3	172.3	182.0
65°	128.2	131.7	139.5	149.4	158.0
67.5°	107.5	110.5	118.3	125.2	134.2
70°	86.5	90.4	96.2	102.9	108.6
72.5°	69.6	71.3	76.1	80.9	86.9
75°	51.4	54.2	58.1	60.9	64.3
77.5°	36.9	38.5	40.8	43.1	46.4
80°	24.7	25.4	27.4	27.9	30.4
82.5°	15.0	15.5	15.9	16.1	17.1
85°	8.1	8.1	8.1	7.6	7.6
87.5°	4.6	4.6	3.9	3.2	2.3
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)