

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: P558265

Luminaire Tested: **FUSL-12-4-LD4-3STD-35-UNV-80-88-EDD**

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: P558265  
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-12-4-LD4-3STD-35-UNV-80-88-EDD  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND  
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

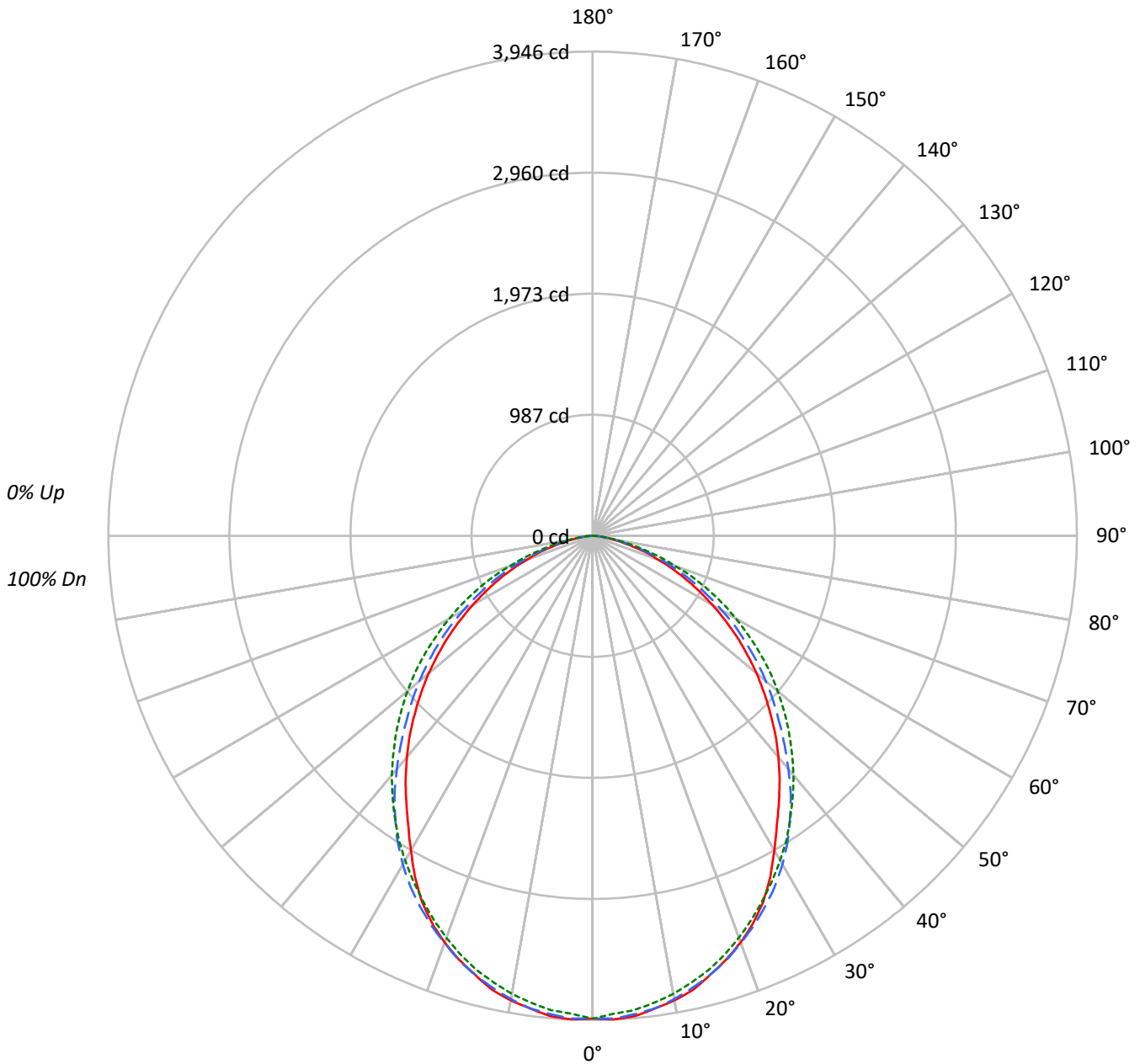
Lumens per Lamp: N/A  
Luminaire Lumens: 9099.0 lumens  
Efficiency: N/A  
Efficacy: 91.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 99.9  
Input Voltage (V): NR  
Input Current (Ain): 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°	10589	10589	10589
5°	10617	10572	10483
10°	10505	10476	10356
15°	10318	10318	10201
20°	10100	10113	9983
25°	9767	9889	9731
30°	9198	9611	9493
35°	8691	9212	9227
40°	8268	8715	8943
45°	7795	8187	8607
50°	7297	7715	8240
55°	6731	7178	7795
60°	6062	6550	7249
65°	5352	5824	6593
70°	4460	4960	5602
75°	3505	3961	4386
80°	2507	2788	3093
85°	1633	1633	1541



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	370.5	4.1
10°-20°	1040.8	11.4
20°-30°	1521.0	16.7
30°-40°	1726.5	19.0
40°-50°	1666.7	18.3
50°-60°	1374.9	15.1
60°-70°	915.6	10.1
70°-80°	409.7	4.5
80°-90°	73.3	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°	2932.4	32.2
0°-40°	4658.9	51.2
0°-60°	7700.4	84.6
0°-90°	9099.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9099.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3935	3935	3935	3935	3935	
5°	3930	3929	3914	3893	3881	372
15°	3704	3713	3704	3687	3662	1044
25°	3290	3315	3330	3306	3278	1506
35°	2646	2682	2804	2819	2809	1658
45°	2048	2083	2151	2250	2262	1580
55°	1435	1459	1530	1614	1661	1280
65°	840	863	915	980	1036	833
75°	337	355	381	399	422	369
85°	53	53	53	50	50	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3935.1	3935.1	3935.1	3935.1	3935.1
2.5°	3945.7	3947.2	3938.1	3913.9	3898.8
5°	3930.5	3929.0	3913.9	3892.8	3880.7
7.5°	3886.7	3889.7	3885.2	3855.0	3838.3
10°	3844.4	3845.9	3833.8	3809.6	3790.0
12.5°	3790.0	3788.4	3771.8	3759.7	3728.0
15°	3703.8	3712.9	3703.8	3687.2	3661.5
17.5°	3620.6	3620.6	3626.7	3598.0	3578.3
20°	3526.9	3531.4	3531.4	3508.8	3486.1
22.5°	3418.1	3431.7	3436.2	3412.0	3384.8
25°	3289.6	3315.3	3330.4	3306.2	3277.5
27.5°	3133.9	3173.2	3218.5	3200.4	3168.6
30°	2960.0	3017.5	3093.0	3077.9	3055.2
32.5°	2795.2	2852.7	2957.0	2950.9	2938.8
35°	2645.6	2681.8	2804.3	2819.4	2808.8
37.5°	2503.5	2536.7	2651.6	2686.4	2677.3
40°	2353.8	2390.1	2480.8	2542.8	2545.8
42.5°	2205.6	2240.4	2314.5	2403.7	2403.7
45°	2048.4	2083.2	2151.2	2249.5	2261.6
47.5°	1894.2	1930.5	1997.0	2095.3	2114.9
50°	1743.0	1776.3	1842.8	1938.1	1968.3
52.5°	1585.8	1622.1	1687.1	1774.8	1818.6
55°	1434.6	1458.8	1529.9	1614.5	1661.4
57.5°	1277.4	1300.1	1380.2	1452.8	1501.2
60°	1126.3	1155.0	1217.0	1291.0	1347.0
62.5°	981.1	1011.4	1064.3	1129.3	1192.8
65°	840.5	863.2	914.6	979.6	1035.5
67.5°	704.5	724.1	775.5	820.9	879.8
70°	566.9	592.6	630.4	674.2	712.0
72.5°	456.5	467.1	498.9	530.6	569.9
75°	337.1	355.3	381.0	399.1	421.8
77.5°	241.9	252.5	267.6	282.7	303.9
80°	161.8	166.3	179.9	182.9	199.6
82.5°	98.3	101.3	104.3	105.8	111.9
85°	52.9	52.9	52.9	49.9	49.9
87.5°	30.2	30.2	25.7	21.2	15.1
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)