

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: P557565

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-80-96-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: P557565  
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-LD4-2STD-40-UNV-80-96-EDD  
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

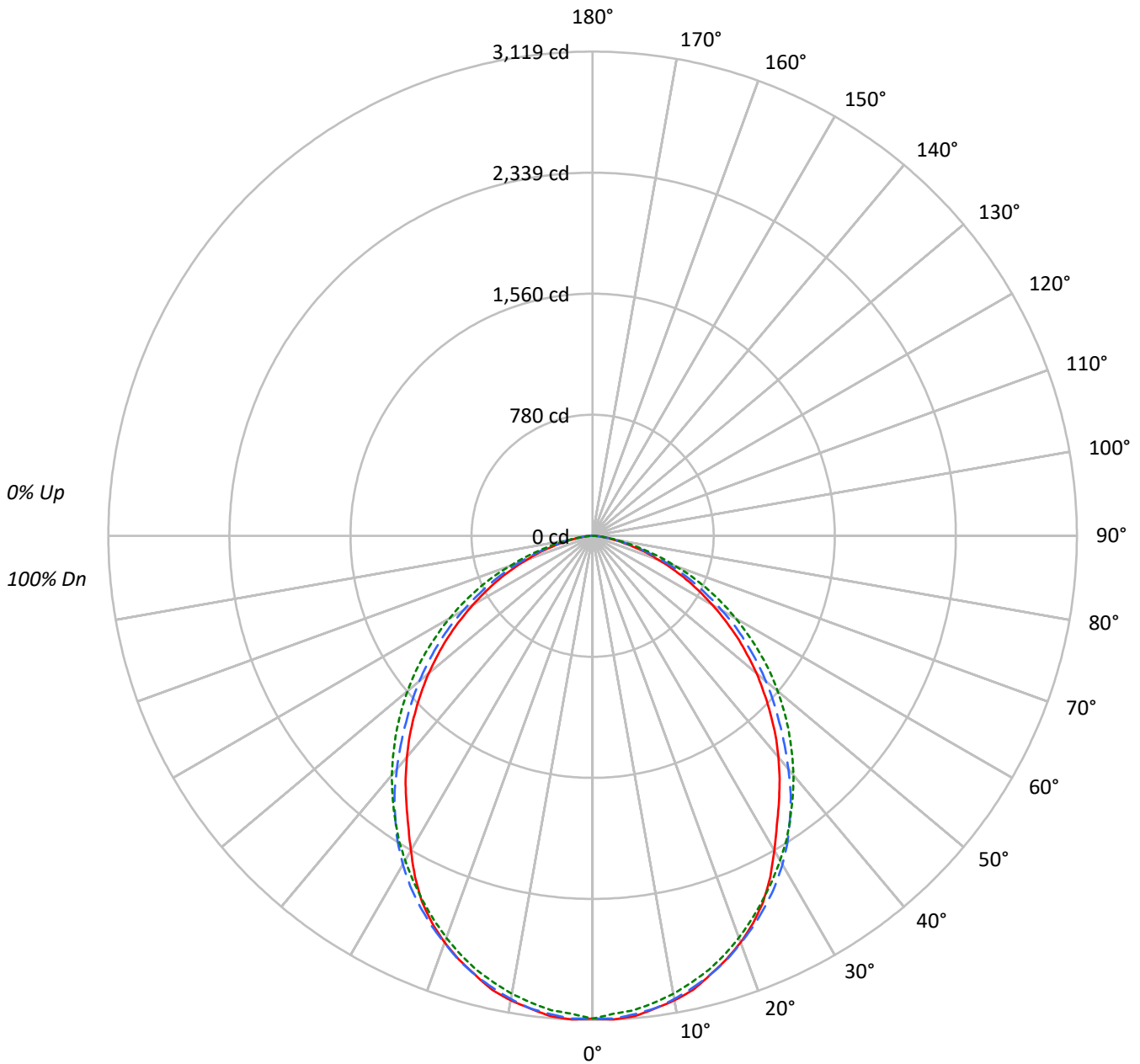
Lumens per Lamp: N/A  
Luminaire Lumens: 7192.0 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 66.6  
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

TEST NUMBER: P557565

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-80-96-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P557565

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-80-96-EDD

**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°	8370	8370	8370
5°	8392	8357	8286
10°	8303	8280	8185
15°	8156	8156	8063
20°	7983	7993	7891
25°	7720	7816	7692
30°	7270	7597	7504
35°	6869	7282	7293
40°	6536	6888	7069
45°	6162	6471	6803
50°	5768	6098	6513
55°	5320	5674	6161
60°	4791	5177	5730
65°	4230	4603	5212
70°	3526	3921	4428
75°	2771	3131	3466
80°	1982	2204	2444
85°	1291	1291	1216



TEST NUMBER: P557565

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-80-96-EDD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	292.8	4.1
10°-20°	822.7	11.4
20°-30°	1202.2	16.7
30°-40°	1364.7	19.0
40°-50°	1317.4	18.3
50°-60°	1086.7	15.1
60°-70°	723.7	10.1
70°-80°	323.8	4.5
80°-90°	57.9	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°	2317.8	32.2
0°-40°	3682.4	51.2
0°-60°	6086.5	84.6
0°-90°	7192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7192.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3110	3110	3110	3110	3110	
5°	3107	3106	3094	3077	3067	294
15°	2928	2935	2928	2914	2894	825
25°	2600	2620	2632	2613	2591	1191
35°	2091	2120	2217	2228	2220	1310
45°	1619	1647	1700	1778	1788	1249
55°	1134	1153	1209	1276	1313	1012
65°	664	682	723	774	818	659
75°	266	281	301	316	333	291
85°	42	42	42	39	39	56
90°	0	0	0	0	0	



TEST NUMBER: P557565

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-80-96-EDD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3110.4	3110.4	3110.4	3110.4	3110.4
2.5°	3118.7	3119.9	3112.7	3093.6	3081.7
5°	3106.8	3105.6	3093.6	3076.9	3067.3
7.5°	3072.1	3074.5	3070.9	3047.0	3033.9
10°	3038.7	3039.9	3030.3	3011.2	2995.6
12.5°	2995.6	2994.4	2981.3	2971.7	2946.7
15°	2927.5	2934.7	2927.5	2914.4	2894.1
17.5°	2861.8	2861.8	2866.6	2843.9	2828.4
20°	2787.7	2791.3	2791.3	2773.4	2755.5
22.5°	2701.7	2712.4	2716.0	2696.9	2675.4
25°	2600.1	2620.4	2632.4	2613.3	2590.6
27.5°	2477.1	2508.1	2544.0	2529.6	2504.5
30°	2339.6	2385.0	2444.8	2432.8	2414.9
32.5°	2209.4	2254.8	2337.2	2332.5	2322.9
35°	2091.1	2119.8	2216.6	2228.5	2220.1
37.5°	1978.8	2005.1	2095.9	2123.4	2116.2
40°	1860.5	1889.2	1960.8	2009.8	2012.2
42.5°	1743.4	1770.9	1829.4	1899.9	1899.9
45°	1619.1	1646.6	1700.4	1778.0	1787.6
47.5°	1497.2	1525.9	1578.5	1656.1	1671.7
50°	1377.7	1404.0	1456.6	1531.9	1555.8
52.5°	1253.5	1282.1	1333.5	1402.8	1437.5
55°	1134.0	1153.1	1209.3	1276.2	1313.2
57.5°	1009.7	1027.6	1091.0	1148.3	1186.5
60°	890.2	912.9	961.9	1020.5	1064.7
62.5°	775.5	799.4	841.2	892.6	942.8
65°	664.4	682.3	722.9	774.3	818.5
67.5°	556.8	572.4	613.0	648.8	695.4
70°	448.1	468.4	498.3	532.9	562.8
72.5°	360.9	369.2	394.3	419.4	450.5
75°	266.5	280.8	301.1	315.5	333.4
77.5°	191.2	199.6	211.5	223.4	240.2
80°	127.9	131.4	142.2	144.6	157.7
82.5°	77.7	80.1	82.4	83.6	88.4
85°	41.8	41.8	41.8	39.4	39.4
87.5°	23.9	23.9	20.3	16.7	11.9
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)