

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: P558335

Luminaire Tested: **FUSL-12-4-LD4-3STD-40-UNV-80-97-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: P558335
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-40-UNV-80-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

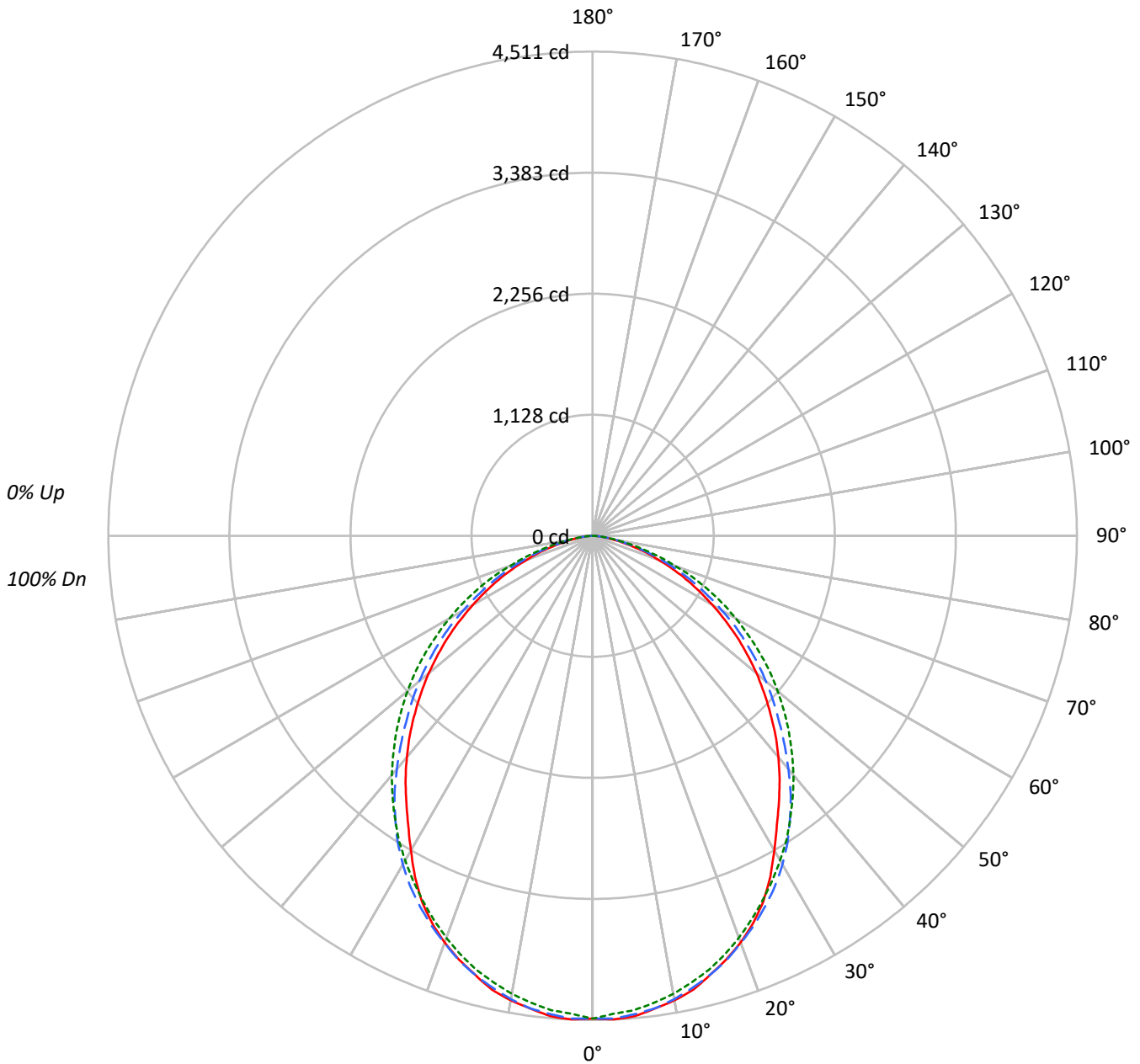
Lumens per Lamp: N/A
Luminaire Lumens: 10402.0 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
Input Current (A_{in}): 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: P558335

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-97-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558335

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-97-EDD

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°	12106	12106	12106
5°	12138	12087	11984
10°	12009	11976	11839
15°	11796	11796	11661
20°	11546	11561	11413
25°	11166	11305	11125
30°	10515	10987	10853
35°	9935	10532	10549
40°	9453	9962	10223
45°	8912	9359	9839
50°	8342	8820	9420
55°	7695	8206	8911
60°	6929	7487	8288
65°	6118	6658	7538
70°	5099	5670	6404
75°	4007	4528	5014
80°	2865	3188	3535
85°	1868	1868	1760



TEST NUMBER: P558335

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-97-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	423.6	4.1
10°-20°	1189.9	11.4
20°-30°	1738.8	16.7
30°-40°	1973.8	19.0
40°-50°	1905.3	18.3
50°-60°	1571.8	15.1
60°-70°	1046.7	10.1
70°-80°	468.4	4.5
80°-90°	83.8	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°	3352.3	32.2
0°-40°	5326.0	51.2
0°-60°	8803.2	84.6
0°-90°	10402.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10402.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4499	4499	4499	4499	4499	
5°	4493	4492	4474	4450	4436	425
15°	4234	4244	4234	4215	4186	1194
25°	3761	3790	3807	3780	3747	1722
35°	3024	3066	3206	3223	3211	1895
45°	2342	2382	2459	2572	2585	1807
55°	1640	1668	1749	1846	1899	1464
65°	961	987	1046	1120	1184	953
75°	385	406	436	456	482	421
85°	60	60	60	57	57	82
90°	0	0	0	0	0	



TEST NUMBER: P558335

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-97-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4498.6	4498.6	4498.6	4498.6	4498.6
2.5°	4510.7	4512.4	4502.1	4474.4	4457.1
5°	4493.4	4491.7	4474.4	4450.2	4436.4
7.5°	4443.3	4446.7	4441.6	4407.0	4388.0
10°	4394.9	4396.6	4382.8	4355.2	4332.7
12.5°	4332.7	4331.0	4311.9	4298.1	4261.8
15°	4234.2	4244.5	4234.2	4215.2	4185.8
17.5°	4139.1	4139.1	4146.0	4113.2	4090.7
20°	4032.0	4037.2	4037.2	4011.2	3985.3
22.5°	3907.5	3923.1	3928.3	3900.6	3869.5
25°	3760.6	3790.0	3807.3	3779.7	3746.8
27.5°	3582.6	3627.6	3679.4	3658.7	3622.4
30°	3383.9	3449.6	3536.0	3518.7	3492.8
32.5°	3195.5	3261.2	3380.4	3373.5	3359.7
35°	3024.4	3065.9	3205.9	3223.2	3211.1
37.5°	2862.0	2900.0	3031.3	3071.1	3060.7
40°	2690.9	2732.3	2836.0	2906.9	2910.3
42.5°	2521.5	2561.2	2645.9	2747.9	2747.9
45°	2341.8	2381.5	2459.3	2571.6	2585.4
47.5°	2165.5	2207.0	2283.0	2395.3	2417.8
50°	1992.7	2030.7	2106.7	2215.6	2250.2
52.5°	1812.9	1854.4	1928.7	2028.9	2079.1
55°	1640.1	1667.7	1749.0	1845.8	1899.3
57.5°	1460.4	1486.3	1577.9	1660.8	1716.1
60°	1287.5	1320.4	1391.2	1475.9	1539.9
62.5°	1121.6	1156.2	1216.7	1291.0	1363.6
65°	960.9	986.8	1045.6	1119.9	1183.8
67.5°	805.4	827.8	886.6	938.4	1005.8
70°	648.1	677.5	720.7	770.8	814.0
72.5°	521.9	534.0	570.3	606.6	651.5
75°	385.4	406.1	435.5	456.3	482.2
77.5°	276.5	288.6	305.9	323.2	347.4
80°	184.9	190.1	205.7	209.1	228.1
82.5°	112.3	115.8	119.2	121.0	127.9
85°	60.5	60.5	60.5	57.0	57.0
87.5°	34.6	34.6	29.4	24.2	17.3
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)