

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: P558050

Luminaire Tested: **FUSL-12-4-LD4-3LO-35-UNV-93-85-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: P558050
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-LD4-3LO-35-UNV-93-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

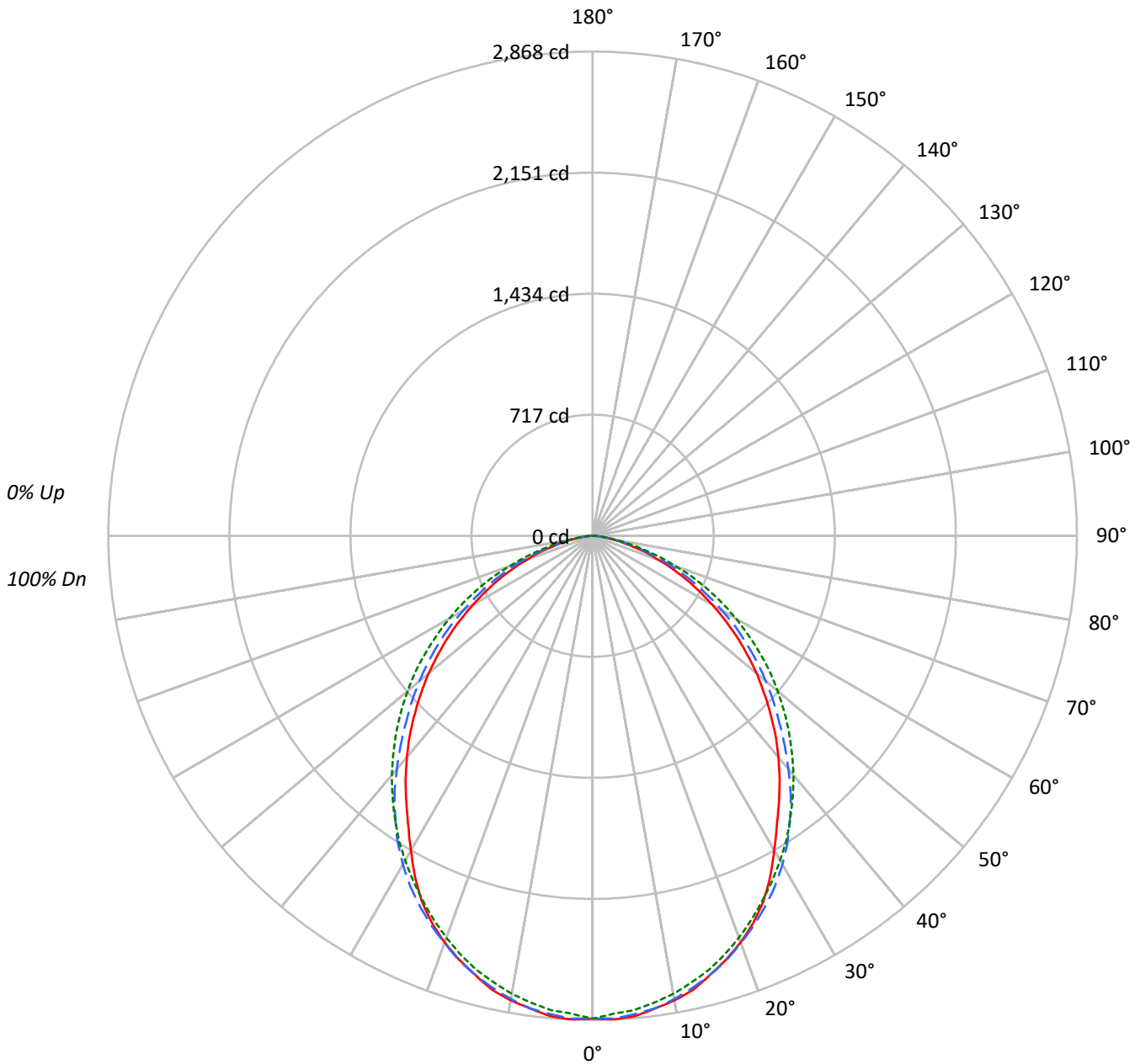
Lumens per Lamp: N/A
Luminaire Lumens: 6613.0 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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: P558050

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-93-85-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558050

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-93-85-EDD-90

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°	7696	7696	7696
5°	7717	7684	7619
10°	7635	7614	7527
15°	7499	7499	7414
20°	7340	7350	7255
25°	7099	7187	7073
30°	6685	6985	6900
35°	6316	6695	6706
40°	6009	6334	6499
45°	5666	5950	6255
50°	5303	5607	5989
55°	4892	5217	5665
60°	4405	4760	5269
65°	3890	4232	4792
70°	3242	3605	4072
75°	2547	2879	3187
80°	1822	2025	2247
85°	1189	1189	1121



TEST NUMBER: P558050

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-93-85-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.3	4.1
10°-20°	756.5	11.4
20°-30°	1105.4	16.7
30°-40°	1254.8	19.0
40°-50°	1211.3	18.3
50°-60°	999.3	15.1
60°-70°	665.4	10.1
70°-80°	297.8	4.5
80°-90°	53.3	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°	2131.2	32.2
0°-40°	3386.0	51.2
0°-60°	5596.6	84.6
0°-90°	6613.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6613.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2860	2860	2860	2860	2860	
5°	2857	2856	2845	2829	2820	270
15°	2692	2698	2692	2680	2661	759
25°	2391	2410	2420	2403	2382	1095
35°	1923	1949	2038	2049	2041	1205
45°	1489	1514	1564	1635	1644	1149
55°	1043	1060	1112	1173	1208	931
65°	611	627	665	712	753	606
75°	245	258	277	290	306	268
85°	38	38	38	36	36	52
90°	0	0	0	0	0	



TEST NUMBER: P558050

CATALOG NUMBER: FUSL-12-4-LD4-3LO-35-UNV-93-85-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2860.0	2860.0	2860.0	2860.0	2860.0
2.5°	2867.6	2868.7	2862.1	2844.6	2833.6
5°	2856.7	2855.6	2844.6	2829.2	2820.4
7.5°	2824.8	2827.0	2823.7	2801.7	2789.6
10°	2794.0	2795.1	2786.3	2768.8	2754.5
12.5°	2754.5	2753.4	2741.3	2732.5	2709.4
15°	2691.8	2698.4	2691.8	2679.8	2661.1
17.5°	2631.4	2631.4	2635.8	2614.9	2600.7
20°	2563.3	2566.6	2566.6	2550.1	2533.6
22.5°	2484.2	2494.1	2497.4	2479.8	2460.0
25°	2390.8	2409.5	2420.5	2402.9	2382.0
27.5°	2277.6	2306.2	2339.2	2326.0	2302.9
30°	2151.3	2193.0	2248.0	2237.0	2220.5
32.5°	2031.5	2073.3	2149.1	2144.7	2135.9
35°	1922.7	1949.1	2038.1	2049.1	2041.4
37.5°	1819.5	1843.6	1927.1	1952.4	1945.8
40°	1710.7	1737.1	1803.0	1848.0	1850.2
42.5°	1603.0	1628.3	1682.1	1747.0	1747.0
45°	1488.8	1514.0	1563.5	1634.9	1643.7
47.5°	1376.7	1403.1	1451.4	1522.8	1537.1
50°	1266.8	1291.0	1339.3	1408.6	1430.5
52.5°	1152.6	1178.9	1226.2	1289.9	1321.8
55°	1042.7	1060.3	1111.9	1173.4	1207.5
57.5°	928.4	944.9	1003.1	1055.9	1091.0
60°	818.5	839.4	884.5	938.3	979.0
62.5°	713.1	735.0	773.5	820.7	866.9
65°	610.9	627.4	664.7	712.0	752.6
67.5°	512.0	526.3	563.6	596.6	639.5
70°	412.0	430.7	458.2	490.0	517.5
72.5°	331.8	339.5	362.6	385.6	414.2
75°	245.0	258.2	276.9	290.1	306.5
77.5°	175.8	183.5	194.5	205.5	220.8
80°	117.6	120.9	130.7	132.9	145.0
82.5°	71.4	73.6	75.8	76.9	81.3
85°	38.5	38.5	38.5	36.3	36.3
87.5°	22.0	22.0	18.7	15.4	11.0
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)