

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: P558155

Luminaire Tested: **FUSL-12-4-LD4-3LO-50-UNV-81-94-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: P558155
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-50-UNV-81-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

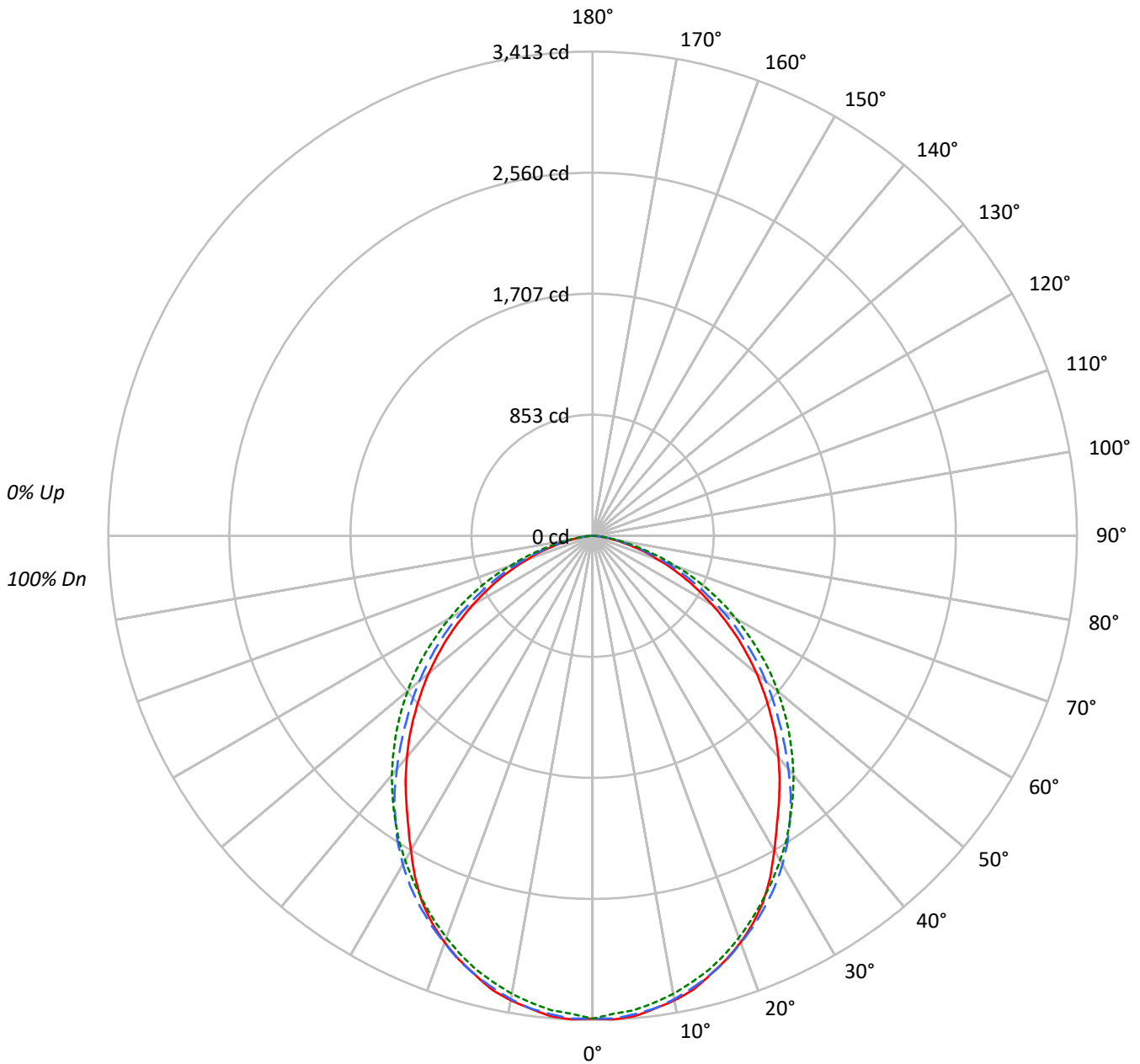
Lumens per Lamp: N/A
Luminaire Lumens: 7870.0 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P558155

CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-81-94-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558155

CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-81-94-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°	9159	9159	9159
5°	9183	9145	9067
10°	9086	9061	8957
15°	8925	8925	8823
20°	8736	8747	8635
25°	8448	8553	8417
30°	7955	8313	8211
35°	7517	7968	7981
40°	7152	7537	7735
45°	6742	7081	7444
50°	6311	6673	7127
55°	5822	6208	6742
60°	5243	5665	6270
65°	4629	5037	5703
70°	3858	4290	4846
75°	3032	3426	3793
80°	2168	2411	2675
85°	1414	1414	1331



TEST NUMBER: P558155

CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-81-94-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.5	4.1
10°-20°	900.3	11.4
20°-30°	1315.6	16.7
30°-40°	1493.3	19.0
40°-50°	1441.6	18.3
50°-60°	1189.2	15.1
60°-70°	791.9	10.1
70°-80°	354.4	4.5
80°-90°	63.4	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°	2536.3	32.2
0°-40°	4029.6	51.2
0°-60°	6660.3	84.6
0°-90°	7870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7870.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3404	3404	3404	3404	3404	
5°	3400	3398	3385	3367	3356	322
15°	3204	3211	3204	3189	3167	903
25°	2845	2868	2880	2860	2835	1303
35°	2288	2320	2426	2439	2429	1434
45°	1772	1802	1861	1946	1956	1367
55°	1241	1262	1323	1396	1437	1108
65°	727	747	791	847	896	721
75°	292	307	330	345	365	319
85°	46	46	46	43	43	62
90°	0	0	0	0	0	



TEST NUMBER: P558155

CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-81-94-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3403.6	3403.6	3403.6	3403.6	3403.6
2.5°	3412.7	3414.0	3406.2	3385.3	3372.2
5°	3399.6	3398.3	3385.3	3367.0	3356.5
7.5°	3361.7	3364.3	3360.4	3334.3	3319.9
10°	3325.1	3326.4	3316.0	3295.0	3278.0
12.5°	3278.0	3276.7	3262.4	3251.9	3224.4
15°	3203.5	3211.4	3203.5	3189.1	3166.9
17.5°	3131.6	3131.6	3136.8	3112.0	3095.0
20°	3050.5	3054.5	3054.5	3034.8	3015.2
22.5°	2956.4	2968.2	2972.1	2951.2	2927.6
25°	2845.2	2867.5	2880.5	2859.6	2834.8
27.5°	2710.6	2744.6	2783.8	2768.1	2740.6
30°	2560.2	2609.9	2675.3	2662.2	2642.6
32.5°	2417.7	2467.4	2557.6	2552.4	2541.9
35°	2288.2	2319.6	2425.5	2438.6	2429.4
37.5°	2165.3	2194.1	2293.5	2323.5	2315.7
40°	2035.9	2067.2	2145.7	2199.3	2201.9
42.5°	1907.7	1937.8	2001.9	2079.0	2079.0
45°	1771.7	1801.8	1860.7	1945.6	1956.1
47.5°	1638.4	1669.8	1727.3	1812.3	1829.3
50°	1507.6	1536.4	1593.9	1676.3	1702.4
52.5°	1371.6	1403.0	1459.2	1535.1	1573.0
55°	1240.9	1261.8	1323.2	1396.5	1437.0
57.5°	1104.9	1124.5	1193.8	1256.6	1298.4
60°	974.1	999.0	1052.6	1116.7	1165.0
62.5°	848.6	874.8	920.5	976.7	1031.7
65°	727.0	746.6	791.1	847.3	895.7
67.5°	609.3	626.3	670.8	710.0	761.0
70°	490.3	512.6	545.3	583.2	615.9
72.5°	394.9	404.0	431.5	459.0	492.9
75°	291.6	307.3	329.5	345.2	364.8
77.5°	209.2	218.4	231.4	244.5	262.8
80°	139.9	143.8	155.6	158.2	172.6
82.5°	85.0	87.6	90.2	91.5	96.8
85°	45.8	45.8	45.8	43.1	43.1
87.5°	26.2	26.2	22.2	18.3	13.1
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)