

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: P557610

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-93-94-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: P557610
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-93-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

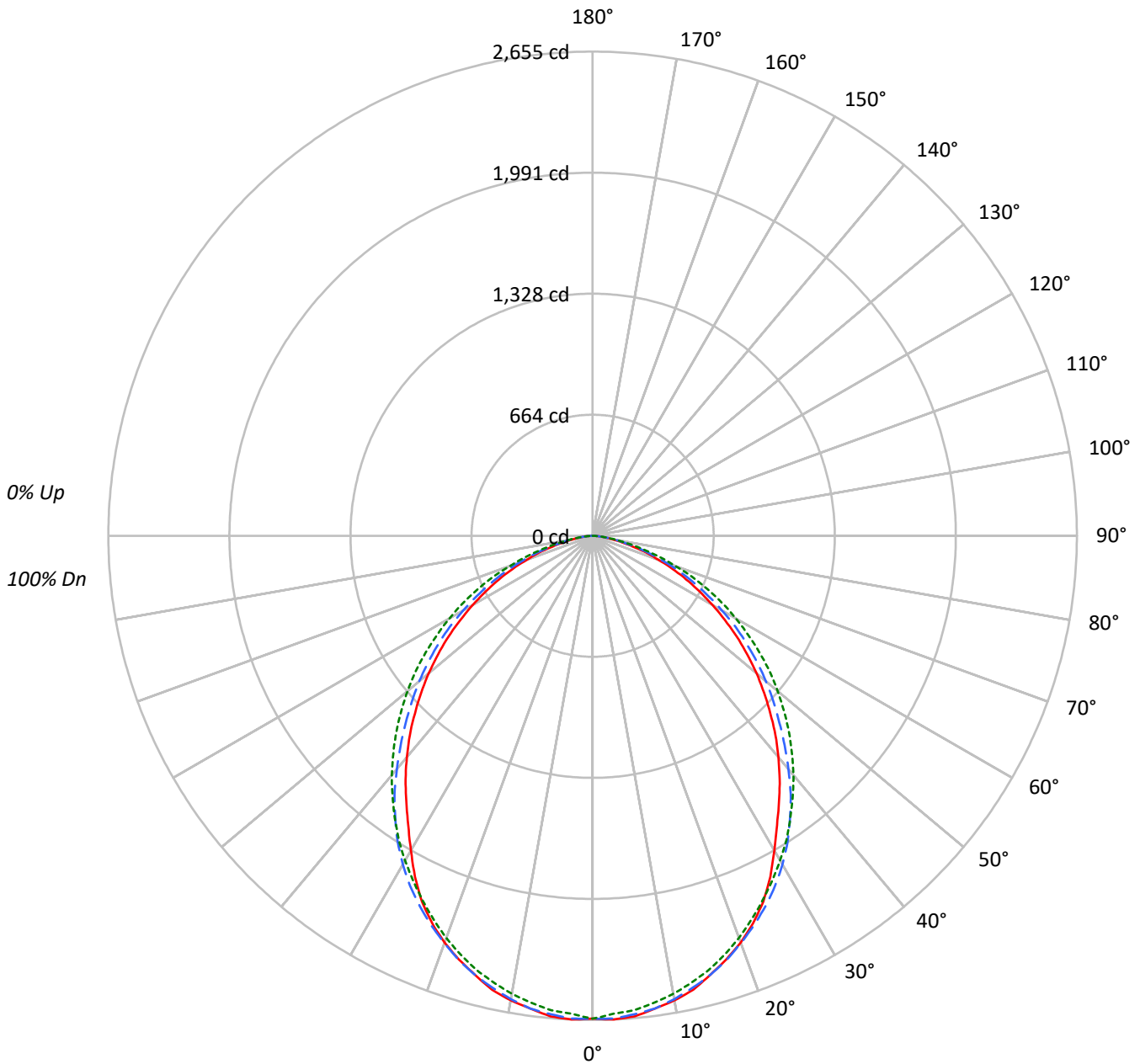
Lumens per Lamp: N/A
Luminaire Lumens: 6123.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (A_{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: P557610

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-93-94-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557610

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-93-94-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°	7126	7126	7126
5°	7145	7115	7054
10°	7069	7050	6969
15°	6944	6944	6864
20°	6797	6805	6718
25°	6573	6654	6548
30°	6189	6467	6389
35°	5848	6199	6209
40°	5564	5864	6018
45°	5246	5509	5792
50°	4911	5192	5545
55°	4529	4830	5245
60°	4079	4407	4878
65°	3601	3919	4437
70°	3002	3338	3770
75°	2359	2666	2951
80°	1688	1877	2081
85°	1099	1099	1037



TEST NUMBER: P557610

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-93-94-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	249.3	4.1
10°-20°	700.4	11.4
20°-30°	1023.5	16.7
30°-40°	1161.8	19.0
40°-50°	1121.6	18.3
50°-60°	925.2	15.1
60°-70°	616.1	10.1
70°-80°	275.7	4.5
80°-90°	49.3	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°	1973.3	32.2
0°-40°	3135.1	51.2
0°-60°	5181.8	84.6
0°-90°	6123.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6123.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2648	2648	2648	2648	2648	
5°	2645	2644	2634	2620	2611	250
15°	2492	2498	2492	2481	2464	703
25°	2214	2231	2241	2225	2206	1014
35°	1780	1805	1887	1897	1890	1115
45°	1378	1402	1448	1514	1522	1064
55°	965	982	1030	1086	1118	862
65°	566	581	616	659	697	561
75°	227	239	256	269	284	248
85°	36	36	36	34	34	48
90°	0	0	0	0	0	



TEST NUMBER: P557610

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-93-94-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2648.0	2648.0	2648.0	2648.0	2648.0
2.5°	2655.2	2656.2	2650.1	2633.8	2623.6
5°	2645.0	2644.0	2633.8	2619.6	2611.4
7.5°	2615.5	2617.5	2614.5	2594.1	2582.9
10°	2587.0	2588.0	2579.9	2563.6	2550.4
12.5°	2550.4	2549.4	2538.2	2530.0	2508.7
15°	2492.4	2498.5	2492.4	2481.2	2463.9
17.5°	2436.4	2436.4	2440.5	2421.2	2408.0
20°	2373.4	2376.4	2376.4	2361.2	2345.9
22.5°	2300.1	2309.3	2312.3	2296.1	2277.7
25°	2213.7	2230.9	2241.1	2224.8	2205.5
27.5°	2108.9	2135.3	2165.8	2153.6	2132.3
30°	1991.9	2030.5	2081.4	2071.2	2056.0
32.5°	1881.0	1919.7	1989.8	1985.8	1977.6
35°	1780.3	1804.7	1887.1	1897.3	1890.1
37.5°	1684.7	1707.0	1784.3	1807.7	1801.6
40°	1583.9	1608.4	1669.4	1711.1	1713.1
42.5°	1484.2	1507.6	1557.5	1617.5	1617.5
45°	1378.4	1401.8	1447.6	1513.7	1521.9
47.5°	1274.7	1299.1	1343.9	1410.0	1423.2
50°	1173.0	1195.3	1240.1	1304.2	1324.5
52.5°	1067.2	1091.6	1135.3	1194.3	1223.8
55°	965.4	981.7	1029.5	1086.5	1118.0
57.5°	859.6	874.9	928.8	977.6	1010.2
60°	757.9	777.2	818.9	868.8	906.4
62.5°	660.2	680.6	716.2	759.9	802.7
65°	565.6	580.9	615.5	659.2	696.9
67.5°	474.1	487.3	521.9	552.4	592.1
70°	381.5	398.8	424.2	453.7	479.1
72.5°	307.2	314.3	335.7	357.1	383.5
75°	226.9	239.1	256.4	268.6	283.8
77.5°	162.8	169.9	180.1	190.2	204.5
80°	108.9	111.9	121.1	123.1	134.3
82.5°	66.1	68.2	70.2	71.2	75.3
85°	35.6	35.6	35.6	33.6	33.6
87.5°	20.3	20.3	17.3	14.2	10.2
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)