

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: P557482

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-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: P557482
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-30-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
3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

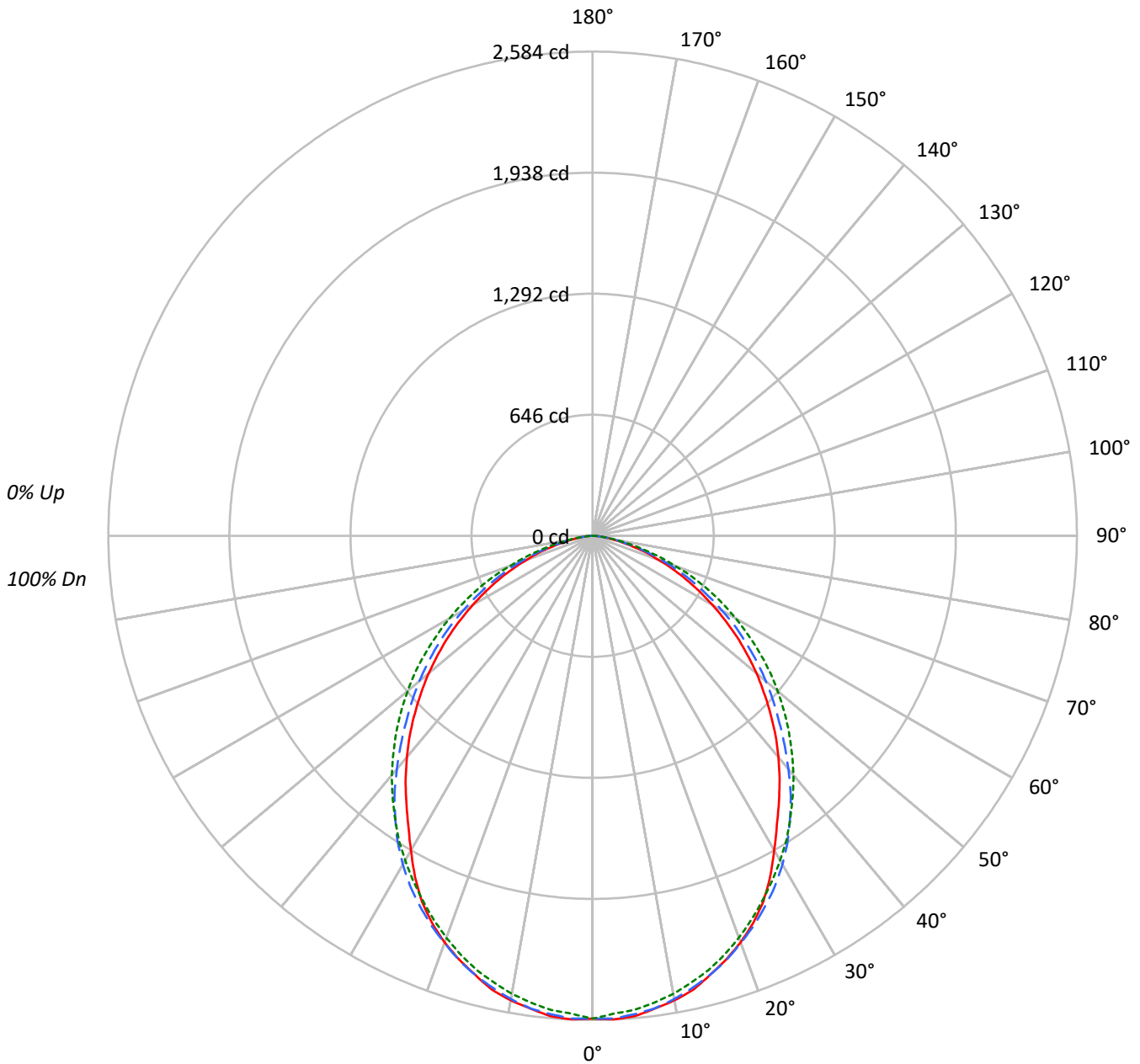
Lumens per Lamp: N/A
Luminaire Lumens: 5958.0 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557482

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-93-94-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557482

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-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°	6934	6934	6934
5°	6952	6923	6864
10°	6879	6860	6781
15°	6756	6756	6679
20°	6613	6622	6537
25°	6396	6475	6372
30°	6023	6293	6216
35°	5691	6032	6042
40°	5414	5706	5856
45°	5104	5361	5636
50°	4778	5052	5395
55°	4407	4700	5104
60°	3969	4289	4747
65°	3505	3813	4318
70°	2921	3248	3668
75°	2295	2594	2872
80°	1641	1826	2025
85°	1068	1068	1010



TEST NUMBER: P557482

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-93-94-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.6	4.1
10°-20°	681.5	11.4
20°-30°	996.0	16.7
30°-40°	1130.5	19.0
40°-50°	1091.3	18.3
50°-60°	900.3	15.1
60°-70°	599.5	10.1
70°-80°	268.3	4.5
80°-90°	48.0	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°	1920.1	32.2
0°-40°	3050.6	51.2
0°-60°	5042.2	84.6
0°-90°	5958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5958.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2577	2577	2577	2577	2577	
5°	2574	2573	2563	2549	2541	244
15°	2425	2431	2425	2414	2398	684
25°	2154	2171	2181	2165	2146	986
35°	1732	1756	1836	1846	1839	1085
45°	1341	1364	1409	1473	1481	1035
55°	939	955	1002	1057	1088	838
65°	550	565	599	641	678	546
75°	221	233	250	261	276	241
85°	35	35	35	33	33	47
90°	0	0	0	0	0	



TEST NUMBER: P557482

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-93-94-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2576.7	2576.7	2576.7	2576.7	2576.7
2.5°	2583.6	2584.6	2578.7	2562.8	2552.9
5°	2573.7	2572.7	2562.8	2549.0	2541.0
7.5°	2545.0	2547.0	2544.0	2524.2	2513.3
10°	2517.3	2518.3	2510.4	2494.5	2481.7
12.5°	2481.7	2480.7	2469.8	2461.9	2441.1
15°	2425.2	2431.2	2425.2	2414.3	2397.5
17.5°	2370.8	2370.8	2374.7	2355.9	2343.1
20°	2309.4	2312.4	2312.4	2297.5	2282.7
22.5°	2238.1	2247.0	2250.0	2234.2	2216.4
25°	2154.0	2170.8	2180.7	2164.9	2146.1
27.5°	2052.0	2077.8	2107.5	2095.6	2074.8
30°	1938.2	1975.8	2025.3	2015.4	2000.6
32.5°	1830.3	1867.9	1936.2	1932.3	1924.3
35°	1732.3	1756.1	1836.2	1846.1	1839.2
37.5°	1639.3	1661.0	1736.3	1759.0	1753.1
40°	1541.3	1565.0	1624.4	1665.0	1667.0
42.5°	1444.2	1467.0	1515.5	1573.9	1573.9
45°	1341.3	1364.1	1408.6	1473.0	1480.9
47.5°	1240.3	1264.1	1307.6	1372.0	1384.9
50°	1141.3	1163.1	1206.7	1269.0	1288.8
52.5°	1038.4	1062.2	1104.7	1162.1	1190.8
55°	939.4	955.2	1001.8	1057.2	1087.9
57.5°	836.5	851.3	903.8	951.3	983.0
60°	737.5	756.3	796.9	845.4	882.0
62.5°	642.4	662.2	696.9	739.4	781.0
65°	550.4	565.2	598.9	641.4	678.1
67.5°	461.3	474.2	507.8	537.5	576.1
70°	371.2	388.0	412.8	441.5	466.2
72.5°	298.9	305.9	326.7	347.5	373.2
75°	220.7	232.6	249.5	261.3	276.2
77.5°	158.4	165.3	175.2	185.1	199.0
80°	105.9	108.9	117.8	119.8	130.7
82.5°	64.3	66.3	68.3	69.3	73.3
85°	34.6	34.6	34.6	32.7	32.7
87.5°	19.8	19.8	16.8	13.9	9.9
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)