

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: P557581

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-81-96-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: P557581
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-81-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

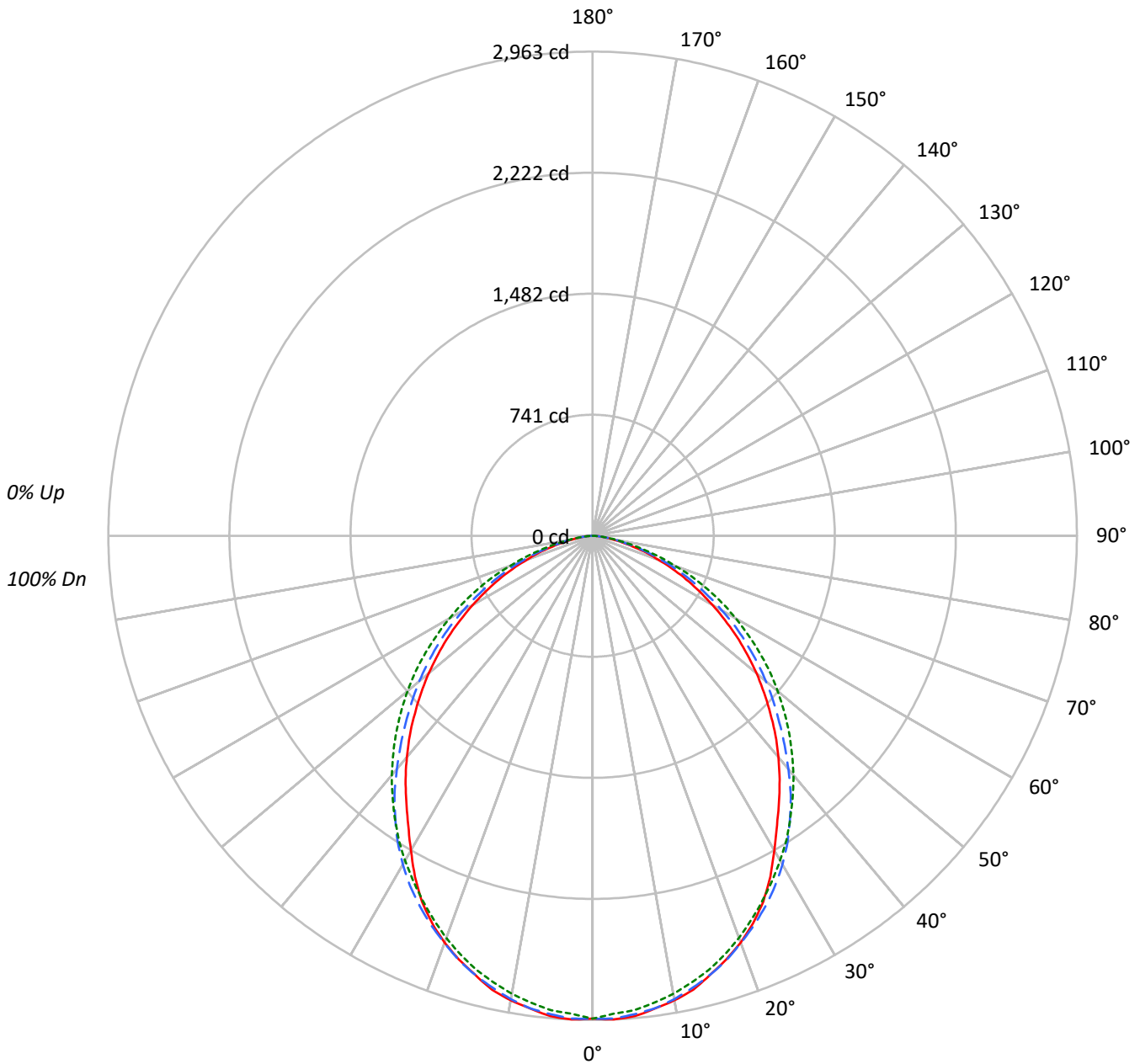
Lumens per Lamp: N/A
Luminaire Lumens: 6833.0 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557581

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-81-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557581

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-81-96-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°	7952	7952	7952
5°	7973	7940	7872
10°	7889	7867	7777
15°	7749	7749	7660
20°	7585	7594	7497
25°	7335	7426	7308
30°	6907	7218	7129
35°	6526	6918	6929
40°	6209	6544	6716
45°	5854	6148	6463
50°	5480	5794	6188
55°	5055	5390	5854
60°	4552	4919	5444
65°	4019	4373	4952
70°	3349	3725	4207
75°	2633	2975	3293
80°	1883	2094	2323
85°	1226	1226	1158



TEST NUMBER: P557581

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-81-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.2	4.1
10°-20°	781.6	11.4
20°-30°	1142.2	16.7
30°-40°	1296.6	19.0
40°-50°	1251.6	18.3
50°-60°	1032.5	15.1
60°-70°	687.5	10.1
70°-80°	307.7	4.5
80°-90°	55.0	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°	2202.1	32.2
0°-40°	3498.6	51.2
0°-60°	5782.7	84.6
0°-90°	6833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6833.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2955	2955	2955	2955	2955	
5°	2952	2951	2939	2923	2914	279
15°	2781	2788	2781	2769	2750	784
25°	2470	2490	2501	2483	2461	1131
35°	1987	2014	2106	2117	2109	1245
45°	1538	1564	1616	1689	1698	1187
55°	1077	1096	1149	1212	1248	962
65°	631	648	687	736	778	626
75°	253	267	286	300	317	277
85°	40	40	40	38	38	54
90°	0	0	0	0	0	



TEST NUMBER: P557581

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-81-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2955.1	2955.1	2955.1	2955.1	2955.1
2.5°	2963.0	2964.2	2957.4	2939.2	2927.8
5°	2951.7	2950.6	2939.2	2923.3	2914.2
7.5°	2918.8	2921.0	2917.6	2894.9	2882.4
10°	2887.0	2888.1	2879.0	2860.9	2846.1
12.5°	2846.1	2845.0	2832.5	2823.4	2799.6
15°	2781.4	2788.2	2781.4	2768.9	2749.6
17.5°	2719.0	2719.0	2723.5	2701.9	2687.2
20°	2648.6	2652.0	2652.0	2635.0	2617.9
22.5°	2566.8	2577.1	2580.5	2562.3	2541.9
25°	2470.3	2489.6	2501.0	2482.8	2461.3
27.5°	2353.4	2382.9	2417.0	2403.4	2379.5
30°	2222.8	2266.0	2322.8	2311.4	2294.4
32.5°	2099.1	2142.2	2220.6	2216.0	2207.0
35°	1986.7	2014.0	2105.9	2117.3	2109.3
37.5°	1880.0	1905.0	1991.3	2017.4	2010.6
40°	1767.6	1794.9	1863.0	1909.5	1911.8
42.5°	1656.4	1682.5	1738.1	1805.1	1805.1
45°	1538.3	1564.4	1615.5	1689.3	1698.4
47.5°	1422.5	1449.7	1499.7	1573.5	1588.2
50°	1309.0	1333.9	1383.9	1455.4	1478.1
52.5°	1190.9	1218.1	1267.0	1332.8	1365.7
55°	1077.4	1095.5	1148.9	1212.5	1247.7
57.5°	959.3	976.3	1036.5	1091.0	1127.3
60°	845.8	867.3	913.9	969.5	1011.5
62.5°	736.8	759.5	799.2	848.0	895.7
65°	631.2	648.2	686.8	735.7	777.7
67.5°	529.0	543.8	582.4	616.4	660.7
70°	425.7	445.0	473.4	506.3	534.7
72.5°	342.9	350.8	374.6	398.5	428.0
75°	253.2	266.8	286.1	299.7	316.7
77.5°	181.6	189.6	200.9	212.3	228.2
80°	121.5	124.9	135.1	137.4	149.9
82.5°	73.8	76.1	78.3	79.5	84.0
85°	39.7	39.7	39.7	37.5	37.5
87.5°	22.7	22.7	19.3	15.9	11.4
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)