

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: P557485

Luminaire Tested: **FUSL-12-4-LD4-2STD-30-UNV-93-96-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: P557485
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-93-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE
AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND
3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

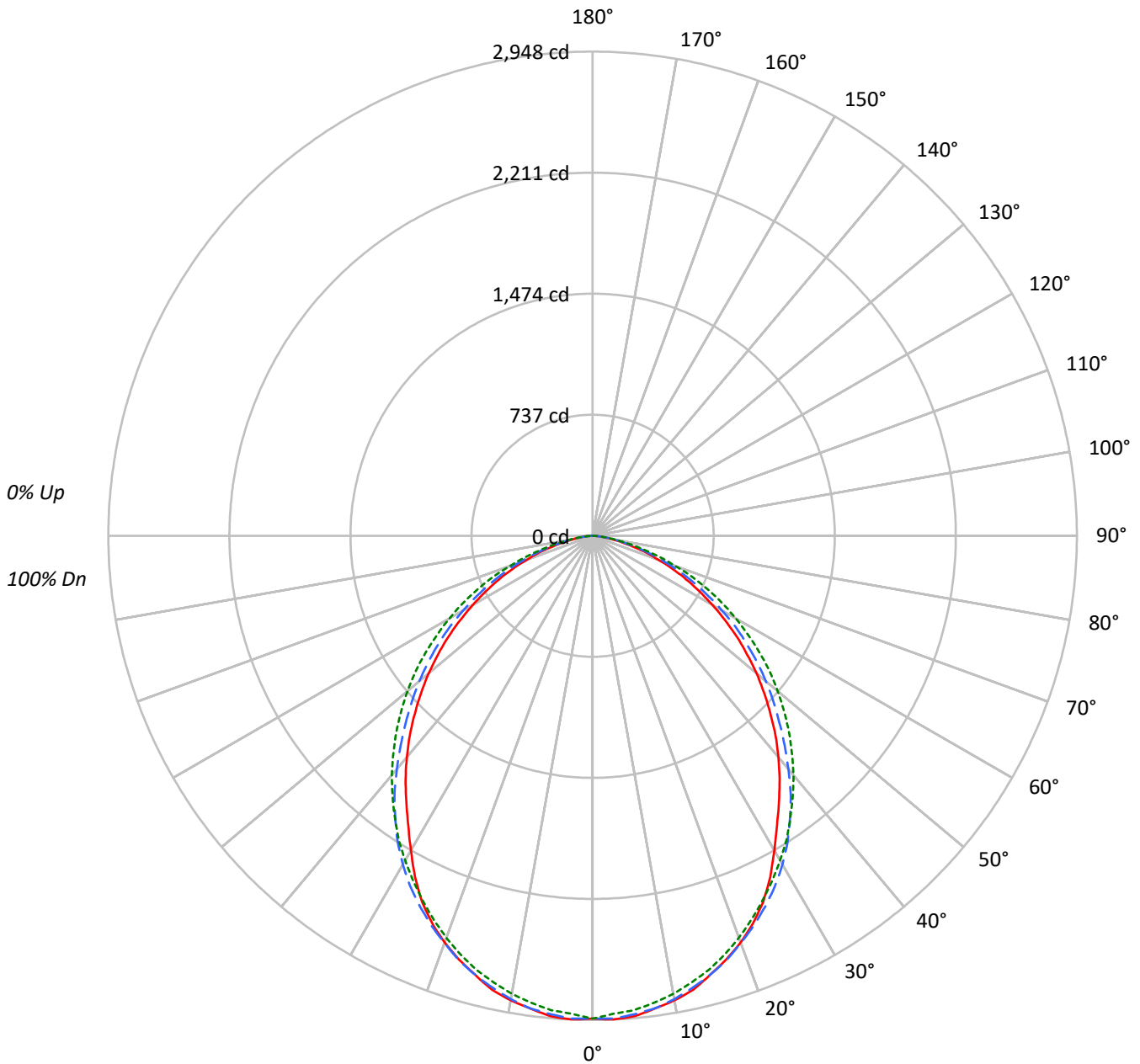
Lumens per Lamp: N/A
Luminaire Lumens: 6798.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P557485

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-93-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557485

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-93-96-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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°	7911	7911	7911
5°	7933	7899	7832
10°	7848	7827	7737
15°	7709	7709	7621
20°	7546	7556	7458
25°	7297	7388	7270
30°	6872	7181	7093
35°	6493	6883	6894
40°	6178	6511	6681
45°	5824	6116	6430
50°	5452	5764	6156
55°	5028	5362	5824
60°	4528	4893	5416
65°	3999	4351	4926
70°	3332	3706	4186
75°	2619	2959	3276
80°	1874	2083	2311
85°	1220	1220	1152



TEST NUMBER: P557485

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-93-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.8	4.1
10°-20°	777.6	11.4
20°-30°	1136.4	16.7
30°-40°	1289.9	19.0
40°-50°	1245.2	18.3
50°-60°	1027.2	15.1
60°-70°	684.0	10.1
70°-80°	306.1	4.5
80°-90°	54.8	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°	2190.8	32.2
0°-40°	3480.7	51.2
0°-60°	5753.1	84.6
0°-90°	6798.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6798.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2940	2940	2940	2940	2940	
5°	2937	2935	2924	2908	2899	278
15°	2767	2774	2767	2755	2736	780
25°	2458	2477	2488	2470	2449	1126
35°	1976	2004	2095	2106	2098	1238
45°	1530	1556	1607	1681	1690	1181
55°	1072	1090	1143	1206	1241	957
65°	628	645	683	732	774	623
75°	252	265	285	298	315	275
85°	40	40	40	37	37	53
90°	0	0	0	0	0	



TEST NUMBER: P557485

CATALOG NUMBER: FUSL-12-4-LD4-2STD-30-UNV-93-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2940.0	2940.0	2940.0	2940.0	2940.0
2.5°	2947.9	2949.0	2942.2	2924.1	2912.9
5°	2936.6	2935.4	2924.1	2908.3	2899.3
7.5°	2903.8	2906.1	2902.7	2880.1	2867.7
10°	2872.2	2873.3	2864.3	2846.2	2831.5
12.5°	2831.5	2830.4	2818.0	2808.9	2785.2
15°	2767.2	2773.9	2767.2	2754.7	2735.5
17.5°	2705.0	2705.0	2709.6	2688.1	2673.4
20°	2635.0	2638.4	2638.4	2621.5	2604.5
22.5°	2553.7	2563.9	2567.2	2549.2	2528.8
25°	2457.7	2476.9	2488.2	2470.1	2448.6
27.5°	2341.4	2370.7	2404.6	2391.0	2367.3
30°	2211.5	2254.4	2310.9	2299.6	2282.6
32.5°	2088.4	2131.3	2209.2	2204.7	2195.7
35°	1976.5	2003.6	2095.1	2106.4	2098.5
37.5°	1870.4	1895.2	1981.1	2007.0	2000.3
40°	1758.6	1785.7	1853.4	1899.7	1902.0
42.5°	1647.9	1673.8	1729.2	1795.8	1795.8
45°	1530.4	1556.4	1607.2	1680.6	1689.7
47.5°	1415.2	1442.3	1492.0	1565.4	1580.1
50°	1302.3	1327.1	1376.8	1448.0	1470.5
52.5°	1184.8	1211.9	1260.5	1326.0	1358.7
55°	1071.8	1089.9	1143.0	1206.3	1241.3
57.5°	954.4	971.3	1031.2	1085.4	1121.5
60°	841.4	862.9	909.2	964.6	1006.3
62.5°	733.0	755.6	795.1	843.7	891.1
65°	628.0	644.9	683.3	731.9	773.7
67.5°	526.3	541.0	579.4	613.3	657.3
70°	423.5	442.7	471.0	503.7	532.0
72.5°	341.1	349.0	372.7	396.4	425.8
75°	251.9	265.4	284.6	298.2	315.1
77.5°	180.7	188.6	199.9	211.2	227.0
80°	120.9	124.2	134.4	136.7	149.1
82.5°	73.4	75.7	77.9	79.1	83.6
85°	39.5	39.5	39.5	37.3	37.3
87.5°	22.6	22.6	19.2	15.8	11.3
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)