

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: P557937

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-80-84-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: P557937
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-30-UNV-80-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

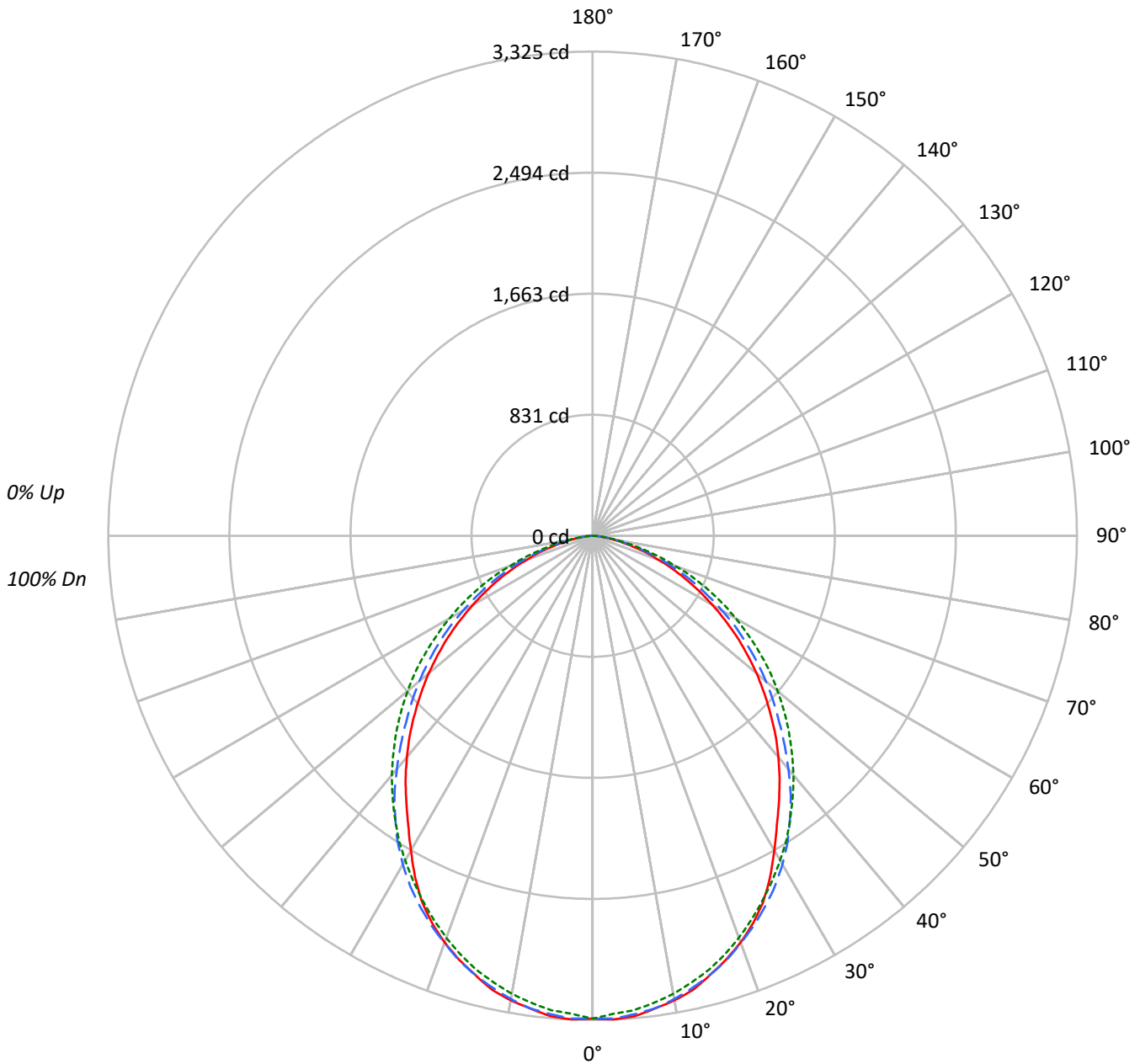
Lumens per Lamp: N/A
Luminaire Lumens: 7667.0 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
Input Voltage (V): NR
Input Current (Ain): 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: P557937

CATALOG NUMBER: FUSL-12-4-LD4-3LO-30-UNV-80-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557937

CATALOG NUMBER: FUSL-12-4-LD4-3LO-30-UNV-80-84-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°	8923	8923	8923
5°	8947	8908	8833
10°	8851	8827	8726
15°	8695	8695	8595
20°	8510	8521	8412
25°	8230	8332	8200
30°	7750	8098	7999
35°	7323	7763	7775
40°	6967	7343	7535
45°	6568	6898	7252
50°	6149	6501	6943
55°	5672	6048	6568
60°	5107	5519	6109
65°	4509	4907	5556
70°	3758	4179	4721
75°	2954	3337	3695
80°	2112	2349	2605
85°	1377	1377	1297



TEST NUMBER: P557937

CATALOG NUMBER: FUSL-12-4-LD4-3LO-30-UNV-80-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.2	4.1
10°-20°	877.0	11.4
20°-30°	1281.6	16.7
30°-40°	1454.8	19.0
40°-50°	1404.4	18.3
50°-60°	1158.5	15.1
60°-70°	771.5	10.1
70°-80°	345.2	4.5
80°-90°	61.8	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°	2470.9	32.2
0°-40°	3925.7	51.2
0°-60°	6488.5	84.6
0°-90°	7667.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7667.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3316	3316	3316	3316	3316	
5°	3312	3311	3298	3280	3270	313
15°	3121	3128	3121	3107	3085	880
25°	2772	2794	2806	2786	2762	1269
35°	2229	2260	2363	2376	2367	1397
45°	1726	1755	1813	1896	1906	1332
55°	1209	1229	1289	1360	1400	1079
65°	708	727	771	825	873	702
75°	284	299	321	336	355	311
85°	45	45	45	42	42	60
90°	0	0	0	0	0	



TEST NUMBER: P557937

CATALOG NUMBER: FUSL-12-4-LD4-3LO-30-UNV-80-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3315.8	<i>3315.8</i>	3315.8	3315.8	3315.8
2.5°	<i>3324.7</i>	<i>3326.0</i>	<i>3318.3</i>	<i>3297.9</i>	<i>3285.2</i>
5°	3312.0	<i>3310.7</i>	3297.9	3280.1	3269.9
7.5°	3275.0	<i>3277.6</i>	3273.7	3248.3	3234.3
10°	3239.3	<i>3240.6</i>	3230.4	3210.1	3193.5
12.5°	3193.5	<i>3192.2</i>	3178.2	3168.0	3141.3
15°	3120.9	<i>3128.5</i>	3120.9	3106.9	3085.2
17.5°	3050.8	<i>3050.8</i>	3055.9	3031.7	3015.2
20°	2971.8	<i>2975.7</i>	2975.7	2956.6	2937.5
22.5°	2880.1	<i>2891.6</i>	2895.4	2875.0	2852.1
25°	2771.9	<i>2793.5</i>	2806.2	2785.9	2761.7
27.5°	2640.6	<i>2673.8</i>	2712.0	2696.7	2669.9
30°	2494.2	<i>2542.6</i>	2606.3	2593.5	2574.4
32.5°	2355.3	<i>2403.7</i>	2491.6	2486.5	2476.3
35°	2229.2	<i>2259.8</i>	2363.0	2375.7	2366.8
37.5°	2109.5	<i>2137.5</i>	2234.3	2263.6	2256.0
40°	1983.4	<i>2013.9</i>	2090.4	2142.6	2145.1
42.5°	1858.5	<i>1887.8</i>	1950.2	2025.4	2025.4
45°	1726.0	<i>1755.3</i>	1812.7	1895.5	1905.6
47.5°	1596.1	<i>1626.7</i>	1682.7	1765.5	1782.1
50°	1468.7	<i>1496.8</i>	1552.8	1633.1	1658.5
52.5°	1336.2	<i>1366.8</i>	1421.6	1495.5	1532.4
55°	1208.9	<i>1229.2</i>	1289.1	1360.5	1399.9
57.5°	1076.4	<i>1095.5</i>	1163.0	1224.2	1264.9
60°	949.0	<i>973.2</i>	1025.4	1087.9	1135.0
62.5°	826.7	<i>852.2</i>	896.8	951.6	1005.1
65°	708.2	<i>727.4</i>	770.7	825.4	872.6
67.5°	593.6	<i>610.2</i>	653.5	691.7	741.4
70°	477.7	<i>499.3</i>	531.2	568.1	600.0
72.5°	384.7	<i>393.6</i>	420.4	447.1	480.2
75°	284.1	<i>299.4</i>	321.0	336.3	355.4
77.5°	203.8	<i>212.7</i>	225.5	238.2	256.0
80°	136.3	<i>140.1</i>	151.6	154.1	168.1
82.5°	82.8	<i>85.3</i>	87.9	89.2	94.3
85°	44.6	<i>44.6</i>	44.6	42.0	42.0
87.5°	25.5	<i>25.5</i>	21.7	17.8	12.7
90°	0.0	<i>0.0</i>	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)