

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: P557162

Luminaire Tested: **FUSL-12-4-LD4-2HI-50-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: P557162
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-LD4-2HI-50-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 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

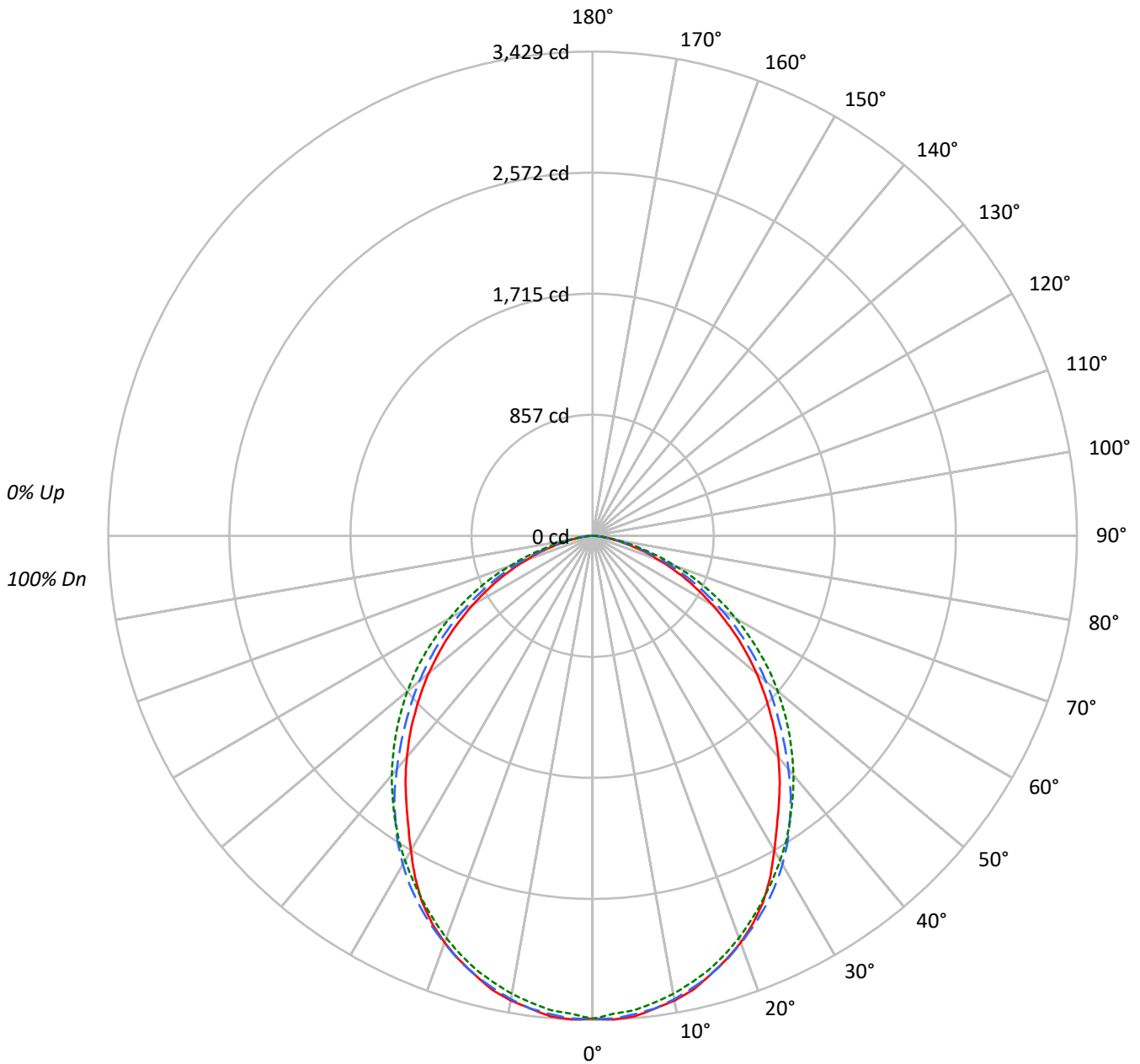
Lumens per Lamp: N/A
Luminaire Lumens: 7908.0 lumens
Efficiency: N/A
Efficacy: 91.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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: P557162

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-93-94-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557162

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-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°	9203	9203	9203
5°	9228	9189	9111
10°	9130	9105	9001
15°	8968	8968	8865
20°	8778	8789	8676
25°	8489	8594	8458
30°	7994	8353	8251
35°	7553	8006	8020
40°	7186	7574	7772
45°	6775	7115	7480
50°	6342	6705	7162
55°	5850	6238	6774
60°	5268	5692	6301
65°	4651	5061	5731
70°	3877	4311	4869
75°	3046	3442	3812
80°	2179	2424	2687
85°	1420	1420	1340



TEST NUMBER: P557162

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-93-94-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.0	4.1
10°-20°	904.6	11.4
20°-30°	1321.9	16.7
30°-40°	1500.5	19.0
40°-50°	1448.5	18.3
50°-60°	1194.9	15.1
60°-70°	795.7	10.1
70°-80°	356.1	4.5
80°-90°	63.7	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°	2548.5	32.2
0°-40°	4049.0	51.2
0°-60°	6692.5	84.6
0°-90°	7908.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7908.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3420	3420	3420	3420	3420	
5°	3416	3415	3402	3383	3373	323
15°	3219	3227	3219	3204	3182	907
25°	2859	2881	2894	2873	2848	1309
35°	2299	2331	2437	2450	2441	1441
45°	1780	1810	1870	1955	1966	1374
55°	1247	1268	1330	1403	1444	1113
65°	730	750	795	851	900	724
75°	293	309	331	347	367	320
85°	46	46	46	43	43	62
90°	0	0	0	0	0	



TEST NUMBER: P557162

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-93-94-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3420.0	3420.0	3420.0	3420.0	3420.0
2.5°	3429.2	3430.5	3422.6	3401.6	3388.5
5°	3416.1	3414.8	3401.6	3383.2	3372.7
7.5°	3378.0	3380.6	3376.6	3350.4	3335.9
10°	3341.2	3342.5	3332.0	3311.0	3293.9
12.5°	3293.9	3292.6	3278.1	3267.6	3240.0
15°	3219.0	3226.9	3219.0	3204.5	3182.2
17.5°	3146.7	3146.7	3152.0	3127.0	3109.9
20°	3065.3	3069.2	3069.2	3049.5	3029.8
22.5°	2970.7	2982.5	2986.4	2965.4	2941.8
25°	2859.0	2881.3	2894.5	2873.4	2848.5
27.5°	2723.7	2757.8	2797.2	2781.5	2753.9
30°	2572.6	2622.5	2688.2	2675.0	2655.3
32.5°	2429.3	2479.3	2569.9	2564.7	2554.2
35°	2299.3	2330.8	2437.2	2450.4	2441.2
37.5°	2175.8	2204.7	2304.5	2334.7	2326.9
40°	2045.7	2077.2	2156.1	2209.9	2212.6
42.5°	1916.9	1947.2	2011.5	2089.1	2089.1
45°	1780.3	1810.5	1869.6	1955.0	1965.6
47.5°	1646.3	1677.8	1735.6	1821.0	1838.1
50°	1514.9	1543.8	1601.6	1684.4	1710.7
52.5°	1378.3	1409.8	1466.3	1542.5	1580.6
55°	1246.9	1267.9	1329.6	1403.2	1443.9
57.5°	1110.2	1129.9	1199.6	1262.6	1304.7
60°	978.8	1003.8	1057.7	1122.0	1170.7
62.5°	852.7	879.0	925.0	981.5	1036.6
65°	730.5	750.2	794.9	851.4	900.0
67.5°	612.3	629.3	674.0	713.4	764.7
70°	492.7	515.0	547.9	586.0	618.8
72.5°	396.8	406.0	433.6	461.2	495.3
75°	293.0	308.8	331.1	346.9	366.6
77.5°	210.2	219.4	232.6	245.7	264.1
80°	140.6	144.5	156.4	159.0	173.4
82.5°	85.4	88.0	90.7	92.0	97.2
85°	46.0	46.0	46.0	43.4	43.4
87.5°	26.3	26.3	22.3	18.4	13.1
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)