

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: P556619

Luminaire Tested: **FUSL-12-4-LD4-1LO-50-UNV-81-94-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: P556619
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-LD4-1LO-50-UNV-81-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

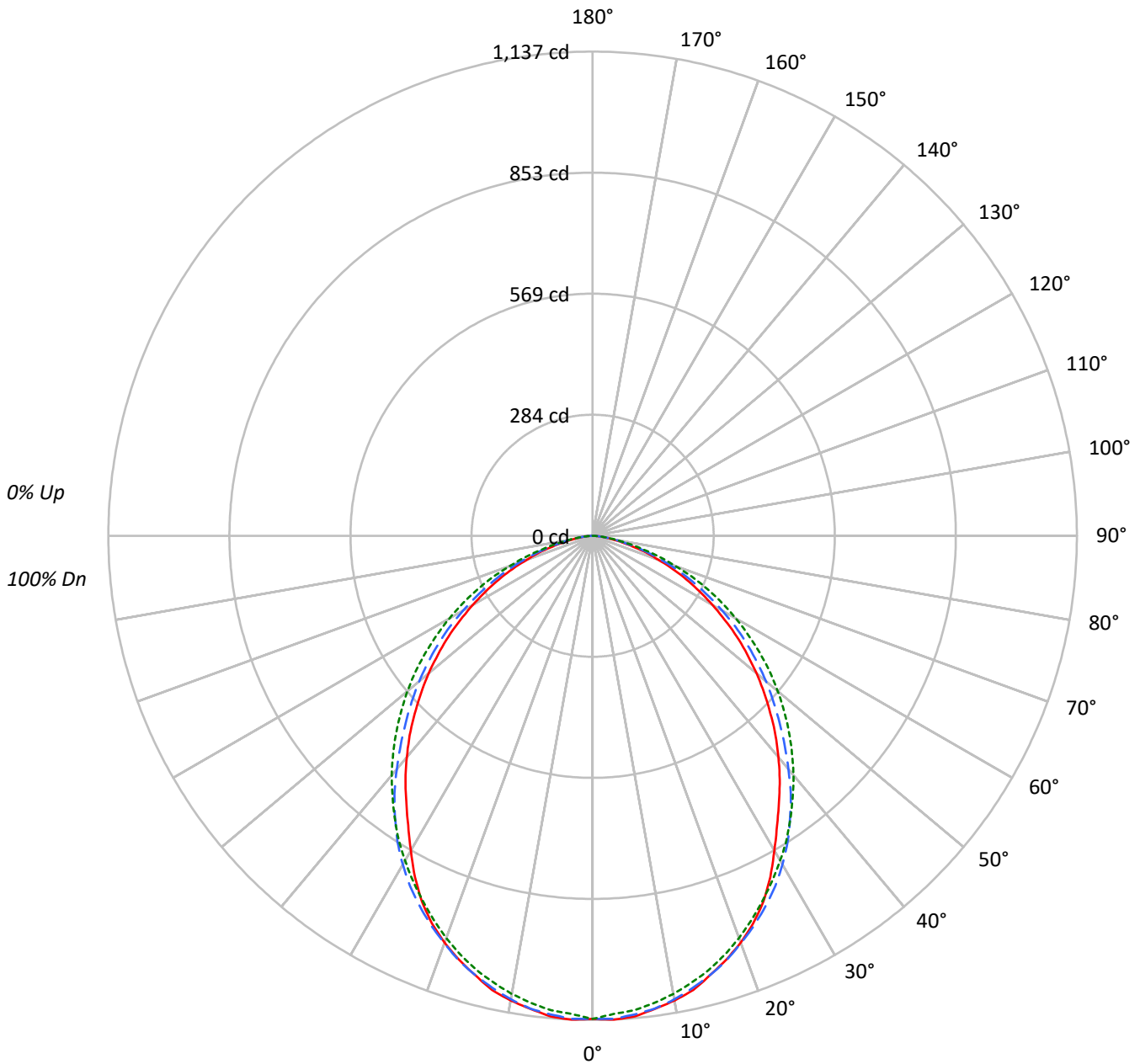
Lumens per Lamp: N/A
Luminaire Lumens: 2623.0 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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: P556619

CATALOG NUMBER: FUSL-12-4-LD4-1LO-50-UNV-81-94-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P556619

CATALOG NUMBER: FUSL-12-4-LD4-1LO-50-UNV-81-94-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°	3053	3053	3053
5°	3061	3048	3022
10°	3028	3020	2985
15°	2975	2975	2941
20°	2912	2915	2878
25°	2816	2851	2805
30°	2651	2770	2737
35°	2505	2656	2660
40°	2383	2512	2578
45°	2247	2360	2481
50°	2104	2224	2375
55°	1940	2069	2247
60°	1748	1888	2090
65°	1543	1679	1901
70°	1286	1430	1615
75°	1011	1142	1264
80°	722	804	891
85°	472	472	445



TEST NUMBER: P556619

CATALOG NUMBER: FUSL-12-4-LD4-1LO-50-UNV-81-94-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.8	4.1
10°-20°	300.0	11.4
20°-30°	438.5	16.7
30°-40°	497.7	19.0
40°-50°	480.5	18.3
50°-60°	396.3	15.1
60°-70°	263.9	10.1
70°-80°	118.1	4.5
80°-90°	21.1	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°	845.3	32.2
0°-40°	1343.0	51.2
0°-60°	2219.8	84.6
0°-90°	2623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2623.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1134	1134	1134	1134	1134	
5°	1133	1133	1128	1122	1119	107
15°	1068	1070	1068	1063	1056	301
25°	948	956	960	953	945	434
35°	763	773	808	813	810	478
45°	590	600	620	648	652	456
55°	414	420	441	465	479	369
65°	242	249	264	282	298	240
75°	97	102	110	115	122	106
85°	15	15	15	14	14	21
90°	0	0	0	0	0	



TEST NUMBER: P556619

CATALOG NUMBER: FUSL-12-4-LD4-1LO-50-UNV-81-94-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1134.4	1134.4	1134.4	1134.4	1134.4
2.5°	1137.4	1137.9	1135.3	1128.3	1123.9
5°	1133.1	1132.6	1128.3	1122.2	1118.7
7.5°	1120.4	1121.3	1120.0	1111.3	1106.5
10°	1108.2	1108.7	1105.2	1098.2	1092.5
12.5°	1092.5	1092.1	1087.3	1083.8	1074.7
15°	1067.7	1070.3	1067.7	1062.9	1055.5
17.5°	1043.7	1043.7	1045.5	1037.2	1031.5
20°	1016.7	1018.0	1018.0	1011.5	1004.9
22.5°	985.3	989.3	990.6	983.6	975.7
25°	948.3	955.7	960.1	953.1	944.8
27.5°	903.4	914.7	927.8	922.6	913.4
30°	853.3	869.9	891.6	887.3	880.7
32.5°	805.8	822.3	852.4	850.7	847.2
35°	762.6	773.1	808.4	812.8	809.7
37.5°	721.7	731.3	764.4	774.4	771.8
40°	678.5	689.0	715.1	733.0	733.9
42.5°	635.8	645.9	667.2	692.9	692.9
45°	590.5	600.5	620.1	648.5	652.0
47.5°	546.1	556.5	575.7	604.0	609.7
50°	502.5	512.1	531.2	558.7	567.4
52.5°	457.2	467.6	486.3	511.6	524.3
55°	413.6	420.5	441.0	465.4	478.9
57.5°	368.2	374.8	397.9	418.8	432.7
60°	324.7	332.9	350.8	372.2	388.3
62.5°	282.8	291.5	306.8	325.5	343.8
65°	242.3	248.8	263.7	282.4	298.5
67.5°	203.1	208.7	223.6	236.6	253.6
70°	163.4	170.8	181.7	194.4	205.3
72.5°	131.6	134.7	143.8	153.0	164.3
75°	97.2	102.4	109.8	115.1	121.6
77.5°	69.7	72.8	77.1	81.5	87.6
80°	46.6	47.9	51.9	52.7	57.5
82.5°	28.3	29.2	30.1	30.5	32.2
85°	15.3	15.3	15.3	14.4	14.4
87.5°	8.7	8.7	7.4	6.1	4.4
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)