

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: P557389

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-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: P557389
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-LD4-2LO-50-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 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

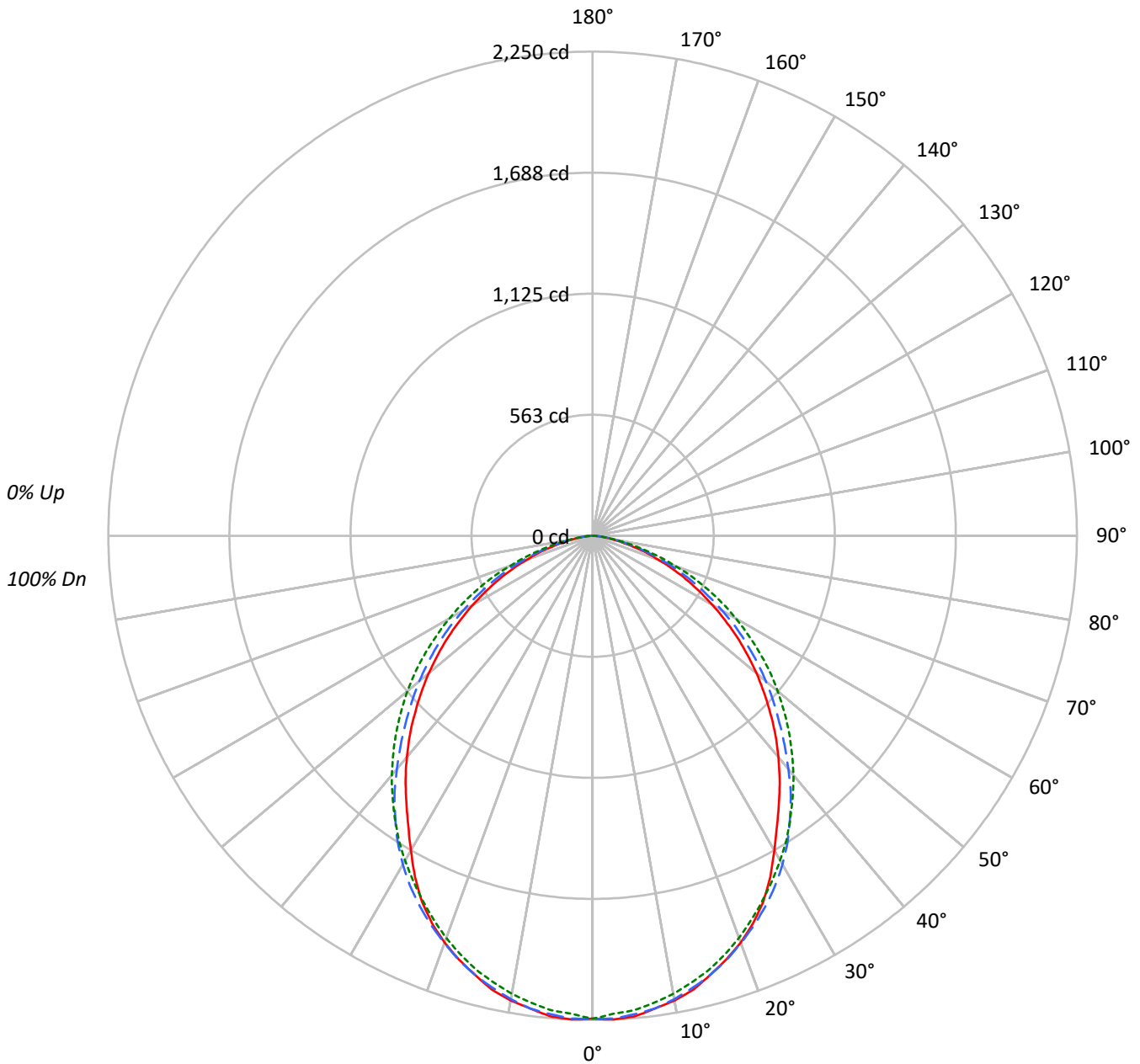
Lumens per Lamp: N/A
Luminaire Lumens: 5189.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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: P557389

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-81-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557389

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-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°	6039	6039	6039
5°	6055	6029	5978
10°	5991	5974	5906
15°	5884	5884	5817
20°	5760	5767	5693
25°	5570	5639	5550
30°	5245	5481	5414
35°	4956	5253	5262
40°	4715	4970	5100
45°	4446	4669	4908
50°	4161	4400	4699
55°	3839	4093	4445
60°	3457	3735	4134
65°	3052	3321	3761
70°	2544	2829	3195
75°	1999	2259	2501
80°	1429	1590	1764
85°	932	932	880



TEST NUMBER: P557389

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-81-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.3	4.1
10°-20°	593.6	11.4
20°-30°	867.4	16.7
30°-40°	984.6	19.0
40°-50°	950.5	18.3
50°-60°	784.1	15.1
60°-70°	522.1	10.1
70°-80°	233.7	4.5
80°-90°	41.8	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°	1672.3	32.2
0°-40°	2656.9	51.2
0°-60°	4391.4	84.6
0°-90°	5189.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5189.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2244	2244	2244	2244	2244	
5°	2242	2241	2232	2220	2213	212
15°	2112	2117	2112	2103	2088	595
25°	1876	1891	1899	1886	1869	859
35°	1509	1529	1599	1608	1602	945
45°	1168	1188	1227	1283	1290	901
55°	818	832	872	921	948	730
65°	479	492	522	559	591	475
75°	192	203	217	228	240	210
85°	30	30	30	28	28	41
90°	0	0	0	0	0	



TEST NUMBER: P557389

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-81-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2244.1	2244.1	2244.1	2244.1	2244.1
2.5°	2250.1	2251.0	2245.8	2232.0	2223.4
5°	2241.5	2240.7	2232.0	2220.0	2213.1
7.5°	2216.5	2218.2	2215.7	2198.4	2188.9
10°	2192.4	2193.2	2186.3	2172.6	2161.3
12.5°	2161.3	2160.5	2151.0	2144.1	2126.0
15°	2112.2	2117.4	2112.2	2102.7	2088.1
17.5°	2064.8	2064.8	2068.2	2051.9	2040.6
20°	2011.3	2013.9	2013.9	2001.0	1988.1
22.5°	1949.3	1957.0	1959.6	1945.8	1930.3
25°	1876.0	1890.6	1899.3	1885.5	1869.1
27.5°	1787.2	1809.6	1835.5	1825.1	1807.0
30°	1688.0	1720.8	1763.9	1755.3	1742.4
32.5°	1594.1	1626.8	1686.3	1682.9	1676.0
35°	1508.7	1529.4	1599.2	1607.9	1601.8
37.5°	1427.7	1446.6	1512.2	1532.0	1526.8
40°	1342.3	1363.0	1414.7	1450.1	1451.8
42.5°	1257.8	1277.7	1319.9	1370.8	1370.8
45°	1168.2	1188.0	1226.8	1282.8	1289.7
47.5°	1080.2	1100.9	1138.9	1194.9	1206.1
50°	994.0	1013.0	1050.9	1105.2	1122.5
52.5°	904.4	925.1	962.1	1012.1	1037.1
55°	818.2	831.9	872.5	920.7	947.5
57.5°	728.5	741.4	787.1	828.5	856.1
60°	642.3	658.7	694.0	736.3	768.2
62.5°	559.5	576.8	606.9	644.0	680.2
65°	479.3	492.3	521.6	558.7	590.6
67.5°	401.7	413.0	442.3	468.1	501.8
70°	323.3	338.0	359.5	384.5	406.1
72.5°	260.4	266.4	284.5	302.6	325.0
75°	192.3	202.6	217.3	227.6	240.5
77.5°	137.9	144.0	152.6	161.2	173.3
80°	92.2	94.8	102.6	104.3	113.8
82.5°	56.0	57.8	59.5	60.3	63.8
85°	30.2	30.2	30.2	28.5	28.5
87.5°	17.2	17.2	14.7	12.1	8.6
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)