

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: P557383

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-UNV-81-87-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: P557383
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-81-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

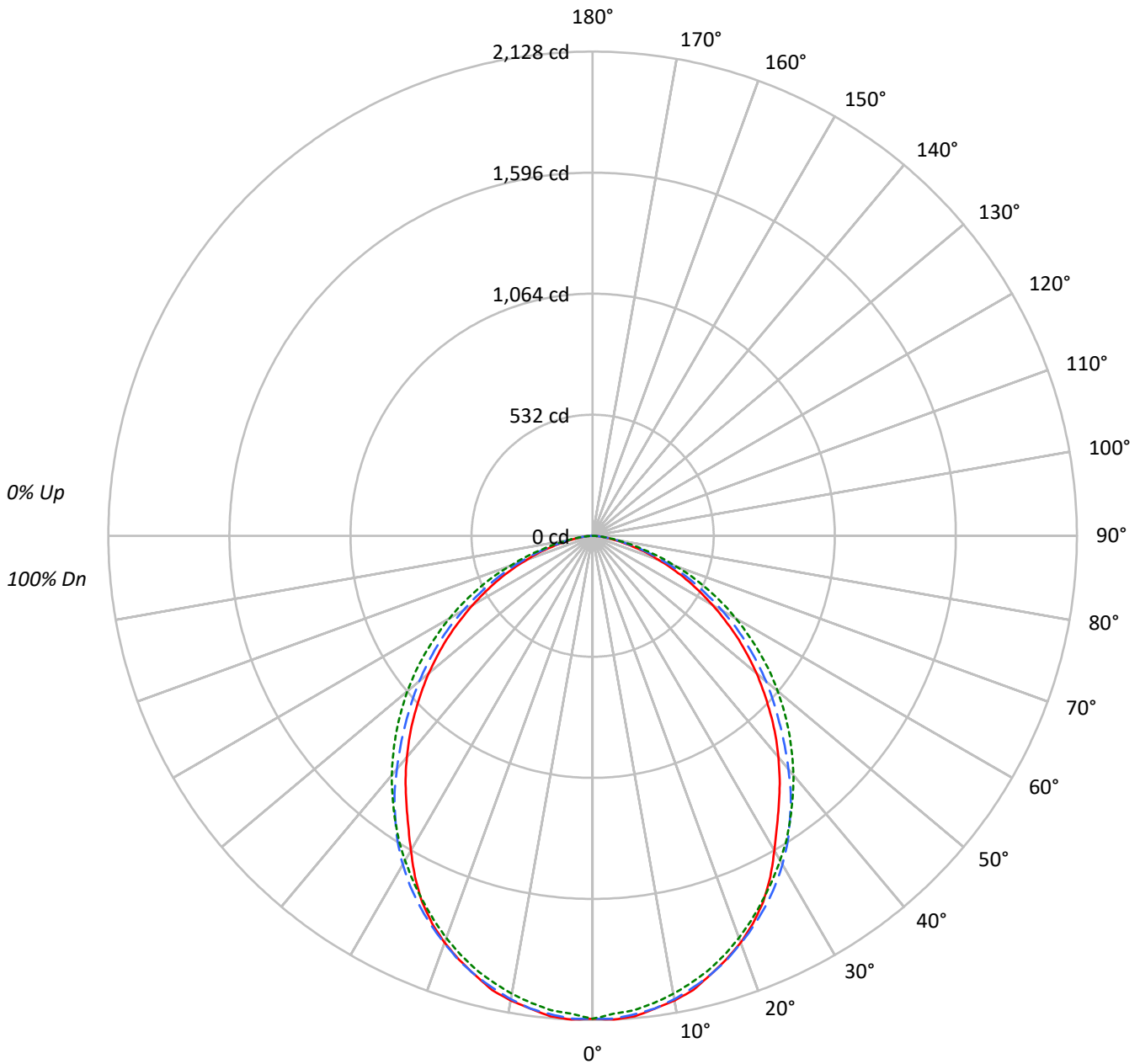
Lumens per Lamp: N/A
Luminaire Lumens: 4908.0 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V): NR
Input Current (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: P557383

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-81-87-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557383

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-81-87-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°	5712	5712	5712
5°	5727	5703	5654
10°	5666	5651	5586
15°	5566	5566	5502
20°	5448	5455	5385
25°	5268	5334	5249
30°	4961	5184	5121
35°	4688	4969	4977
40°	4460	4701	4824
45°	4205	4416	4642
50°	3936	4161	4445
55°	3630	3871	4205
60°	3270	3533	3911
65°	2887	3141	3557
70°	2406	2675	3022
75°	1890	2137	2365
80°	1353	1503	1667
85°	880	880	831



TEST NUMBER: P557383

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-81-87-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.8	4.1
10°-20°	561.4	11.4
20°-30°	820.4	16.7
30°-40°	931.3	19.0
40°-50°	899.0	18.3
50°-60°	741.6	15.1
60°-70°	493.9	10.1
70°-80°	221.0	4.5
80°-90°	39.5	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°	1581.7	32.2
0°-40°	2513.0	51.2
0°-60°	4153.6	84.6
0°-90°	4908.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4908.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2123	2123	2123	2123	2123	
5°	2120	2119	2111	2100	2093	201
15°	1998	2003	1998	1989	1975	563
25°	1774	1788	1796	1783	1768	813
35°	1427	1447	1513	1521	1515	894
45°	1105	1124	1160	1213	1220	852
55°	774	787	825	871	896	691
65°	453	466	493	528	559	450
75°	182	192	206	215	228	199
85°	28	28	28	27	27	38
90°	0	0	0	0	0	



TEST NUMBER: P557383

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-81-87-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2122.6	2122.6	2122.6	2122.6	2122.6
2.5°	2128.3	2129.1	2124.2	2111.2	2103.0
5°	2120.1	2119.3	2111.2	2099.8	2093.2
7.5°	2096.5	2098.1	2095.7	2079.4	2070.4
10°	2073.7	2074.5	2067.9	2054.9	2044.3
12.5°	2044.3	2043.5	2034.5	2028.0	2010.9
15°	1997.8	2002.7	1997.8	1988.9	1975.0
17.5°	1953.0	1953.0	1956.2	1940.7	1930.1
20°	1902.4	1904.9	1904.9	1892.6	1880.4
22.5°	1843.7	1851.0	1853.5	1840.4	1825.8
25°	1774.4	1788.3	1796.4	1783.4	1767.9
27.5°	1690.4	1711.6	1736.1	1726.3	1709.2
30°	1596.6	1627.6	1668.4	1660.2	1648.0
32.5°	1507.7	1538.7	1595.0	1591.7	1585.2
35°	1427.0	1446.6	1512.6	1520.8	1515.1
37.5°	1350.4	1368.3	1430.3	1449.0	1444.1
40°	1269.6	1289.2	1338.1	1371.6	1373.2
42.5°	1189.7	1208.5	1248.4	1296.5	1296.5
45°	1104.9	1123.7	1160.4	1213.4	1219.9
47.5°	1021.7	1041.3	1077.2	1130.2	1140.8
50°	940.2	958.1	994.0	1045.4	1061.7
52.5°	855.4	875.0	910.0	957.3	981.0
55°	773.8	786.9	825.2	870.9	896.2
57.5°	689.0	701.3	744.5	783.6	809.7
60°	607.5	623.0	656.4	696.4	726.6
62.5°	529.2	545.5	574.1	609.1	643.4
65°	453.4	465.6	493.3	528.4	558.6
67.5°	380.0	390.6	418.3	442.8	474.6
70°	305.8	319.7	340.0	363.7	384.1
72.5°	246.3	252.0	269.1	286.2	307.4
75°	181.8	191.6	205.5	215.3	227.5
77.5°	130.5	136.2	144.3	152.5	163.9
80°	87.3	89.7	97.0	98.7	107.6
82.5°	53.0	54.6	56.3	57.1	60.3
85°	28.5	28.5	28.5	26.9	26.9
87.5°	16.3	16.3	13.9	11.4	8.2
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)