

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: P557273

Luminaire Tested: **FUSL-12-4-LD4-2LO-35-UNV-82-88-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: P557273
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-35-UNV-82-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

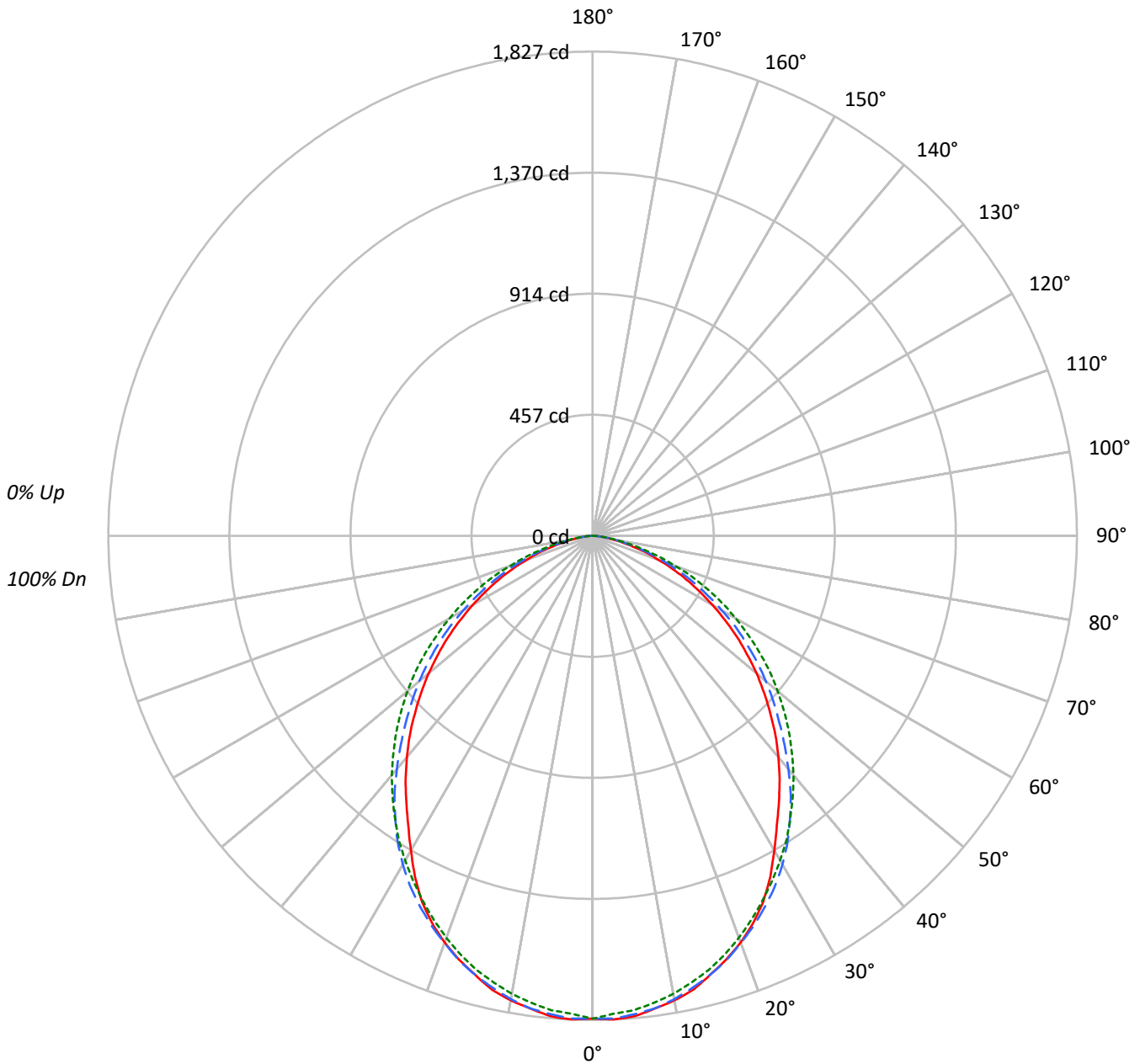
Lumens per Lamp: N/A
Luminaire Lumens: 4213.0 lumens
Efficiency: N/A
Efficacy: 90.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557273

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-82-88-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557273

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-82-88-EDD

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20	
RC	80				70				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				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4903	4903	4903
5°	4916	4895	4854
10°	4864	4850	4795
15°	4778	4778	4723
20°	4676	4682	4622
25°	4522	4578	4506
30°	4259	4450	4396
35°	4024	4265	4272
40°	3828	4035	4141
45°	3610	3791	3985
50°	3379	3572	3816
55°	3117	3324	3609
60°	2807	3033	3357
65°	2478	2697	3053
70°	2065	2297	2594
75°	1623	1834	2031
80°	1161	1291	1432
85°	756	756	713



TEST NUMBER: P557273

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-82-88-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.5	4.1
10°-20°	481.9	11.4
20°-30°	704.2	16.7
30°-40°	799.4	19.0
40°-50°	771.7	18.3
50°-60°	636.6	15.1
60°-70°	423.9	10.1
70°-80°	189.7	4.5
80°-90°	33.9	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°	1357.7	32.2
0°-40°	2157.1	51.2
0°-60°	3565.4	84.6
0°-90°	4213.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4213.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1822	1822	1822	1822	1822	
5°	1820	1819	1812	1802	1797	172
15°	1715	1719	1715	1707	1695	483
25°	1523	1535	1542	1531	1518	698
35°	1225	1242	1298	1305	1300	767
45°	948	965	996	1042	1047	732
55°	664	676	708	748	769	593
65°	389	400	424	454	480	386
75°	156	164	176	185	195	171
85°	24	24	24	23	23	33
90°	0	0	0	0	0	



TEST NUMBER: P557273

CATALOG NUMBER: FUSL-12-4-LD4-2LO-35-UNV-82-88-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1822.0	1822.0	1822.0	1822.0	1822.0
2.5°	1826.9	1827.6	1823.4	1812.2	1805.2
5°	1819.9	1819.2	1812.2	1802.4	1796.8
7.5°	1799.6	1801.0	1798.9	1784.9	1777.2
10°	1780.0	1780.7	1775.1	1763.9	1754.8
12.5°	1754.8	1754.1	1746.4	1740.8	1726.1
15°	1714.9	1719.1	1714.9	1707.2	1695.3
17.5°	1676.4	1676.4	1679.2	1665.9	1656.8
20°	1633.0	1635.1	1635.1	1624.6	1614.1
22.5°	1582.6	1588.9	1591.0	1579.8	1567.2
25°	1523.1	1535.0	1542.0	1530.8	1517.5
27.5°	1451.0	1469.2	1490.2	1481.8	1467.1
30°	1370.5	1397.1	1432.1	1425.1	1414.6
32.5°	1294.2	1320.8	1369.1	1366.3	1360.7
35°	1224.9	1241.7	1298.4	1305.4	1300.5
37.5°	1159.1	1174.5	1227.7	1243.8	1239.6
40°	1089.8	1106.6	1148.6	1177.3	1178.7
42.5°	1021.3	1037.4	1071.6	1112.9	1112.9
45°	948.5	964.6	996.1	1041.6	1047.2
47.5°	877.1	893.9	924.7	970.2	979.3
50°	807.1	822.5	853.3	897.4	911.4
52.5°	734.3	751.1	781.2	821.8	842.1
55°	664.3	675.5	708.4	747.6	769.3
57.5°	591.5	602.0	639.1	672.7	695.1
60°	521.5	534.8	563.5	597.8	623.7
62.5°	454.3	468.3	492.8	522.9	552.3
65°	389.2	399.7	423.5	453.6	479.5
67.5°	326.2	335.3	359.1	380.1	407.4
70°	262.5	274.4	291.9	312.2	329.7
72.5°	211.4	216.3	231.0	245.7	263.9
75°	156.1	164.5	176.4	184.8	195.3
77.5°	112.0	116.9	123.9	130.9	140.7
80°	74.9	77.0	83.3	84.7	92.4
82.5°	45.5	46.9	48.3	49.0	51.8
85°	24.5	24.5	24.5	23.1	23.1
87.5°	14.0	14.0	11.9	9.8	7.0
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)