

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: P557576

Luminaire Tested: **FUSL-12-4-LD4-2STD-40-UNV-81-88-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: P557576
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-LD4-2STD-40-UNV-81-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

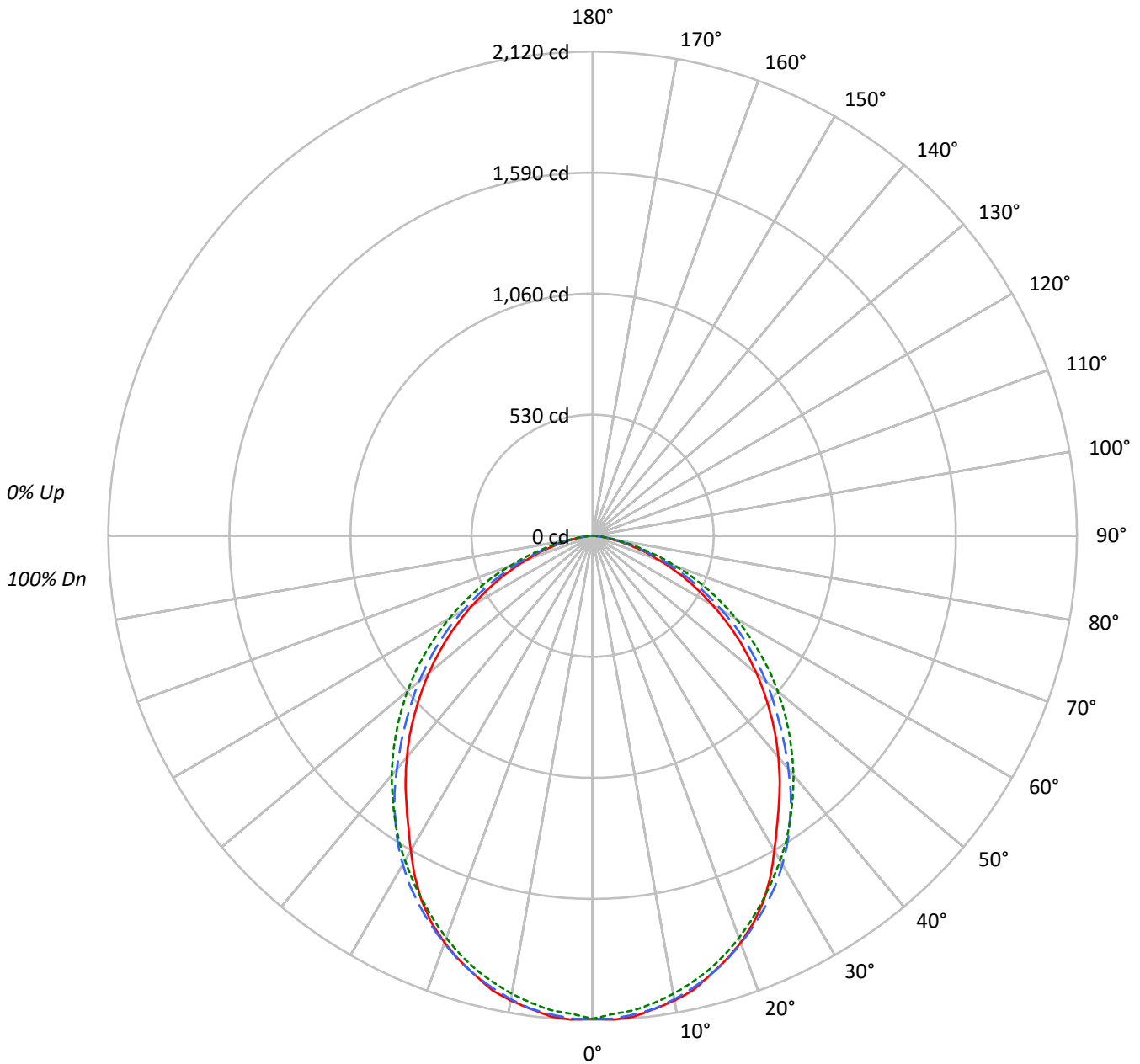
Lumens per Lamp: N/A
Luminaire Lumens: 4890.0 lumens
Efficiency: N/A
Efficacy: 73.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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: P557576

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-81-88-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557576

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-81-88-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°	5691	5691	5691
5°	5706	5682	5634
10°	5646	5630	5566
15°	5545	5545	5482
20°	5428	5435	5365
25°	5249	5314	5230
30°	4943	5165	5102
35°	4671	4951	4959
40°	4444	4683	4806
45°	4190	4400	4625
50°	3922	4146	4428
55°	3617	3857	4189
60°	3258	3520	3896
65°	2876	3130	3543
70°	2397	2666	3011
75°	1884	2128	2357
80°	1347	1499	1661
85°	877	877	827



TEST NUMBER: P557576

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-81-88-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.1	4.1
10°-20°	559.4	11.4
20°-30°	817.4	16.7
30°-40°	927.9	19.0
40°-50°	895.7	18.3
50°-60°	738.9	15.1
60°-70°	492.1	10.1
70°-80°	220.2	4.5
80°-90°	39.4	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°	1575.9	32.2
0°-40°	2503.8	51.2
0°-60°	4138.4	84.6
0°-90°	4890.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4890.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2115	2115	2115	2115	2115	
5°	2112	2112	2103	2092	2086	200
15°	1990	1995	1990	1982	1968	561
25°	1768	1782	1790	1777	1761	810
35°	1422	1441	1507	1515	1510	891
45°	1101	1120	1156	1209	1215	849
55°	771	784	822	868	893	688
65°	452	464	492	526	556	448
75°	181	191	205	214	227	198
85°	28	28	28	27	27	38
90°	0	0	0	0	0	



TEST NUMBER: P557576

CATALOG NUMBER: FUSL-12-4-LD4-2STD-40-UNV-81-88-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2114.8	2114.8	2114.8	2114.8	2114.8
2.5°	2120.5	2121.3	2116.4	2103.4	2095.3
5°	2112.4	2111.5	2103.4	2092.1	2085.6
7.5°	2088.8	2090.4	2088.0	2071.7	2062.8
10°	2066.1	2066.9	2060.4	2047.4	2036.8
12.5°	2036.8	2036.0	2027.1	2020.6	2003.5
15°	1990.5	1995.4	1990.5	1981.6	1967.7
17.5°	1945.8	1945.8	1949.1	1933.6	1923.1
20°	1895.4	1897.9	1897.9	1885.7	1873.5
22.5°	1836.9	1844.3	1846.7	1833.7	1819.1
25°	1767.9	1781.7	1789.8	1776.8	1761.4
27.5°	1684.2	1705.3	1729.7	1719.9	1702.9
30°	1590.8	1621.6	1662.3	1654.1	1642.0
32.5°	1502.2	1533.1	1589.1	1585.9	1579.4
35°	1421.8	1441.3	1507.1	1515.2	1509.5
37.5°	1345.4	1363.3	1425.0	1443.7	1438.8
40°	1265.0	1284.5	1333.2	1366.5	1368.2
42.5°	1185.4	1204.0	1243.9	1291.8	1291.8
45°	1100.9	1119.6	1156.1	1208.9	1215.4
47.5°	1018.0	1037.5	1073.2	1126.1	1136.6
50°	936.8	954.6	990.4	1041.6	1057.8
52.5°	852.3	871.8	906.7	953.8	977.4
55°	771.0	784.0	822.2	867.7	892.9
57.5°	686.5	698.7	741.8	780.8	806.8
60°	605.3	620.7	654.0	693.8	723.9
62.5°	527.3	543.5	572.0	606.9	641.0
65°	451.7	463.9	491.5	526.5	556.5
67.5°	378.6	389.2	416.8	441.2	472.8
70°	304.7	318.5	338.8	362.4	382.7
72.5°	245.4	251.0	268.1	285.2	306.3
75°	181.2	190.9	204.7	214.5	226.7
77.5°	130.0	135.7	143.8	151.9	163.3
80°	86.9	89.4	96.7	98.3	107.2
82.5°	52.8	54.4	56.1	56.9	60.1
85°	28.4	28.4	28.4	26.8	26.8
87.5°	16.2	16.2	13.8	11.4	8.1
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)