

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: P557305

Luminaire Tested: **FUSL-12-4-LD4-2LO-40-UNV-80-88-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: P557305
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-40-UNV-80-88-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

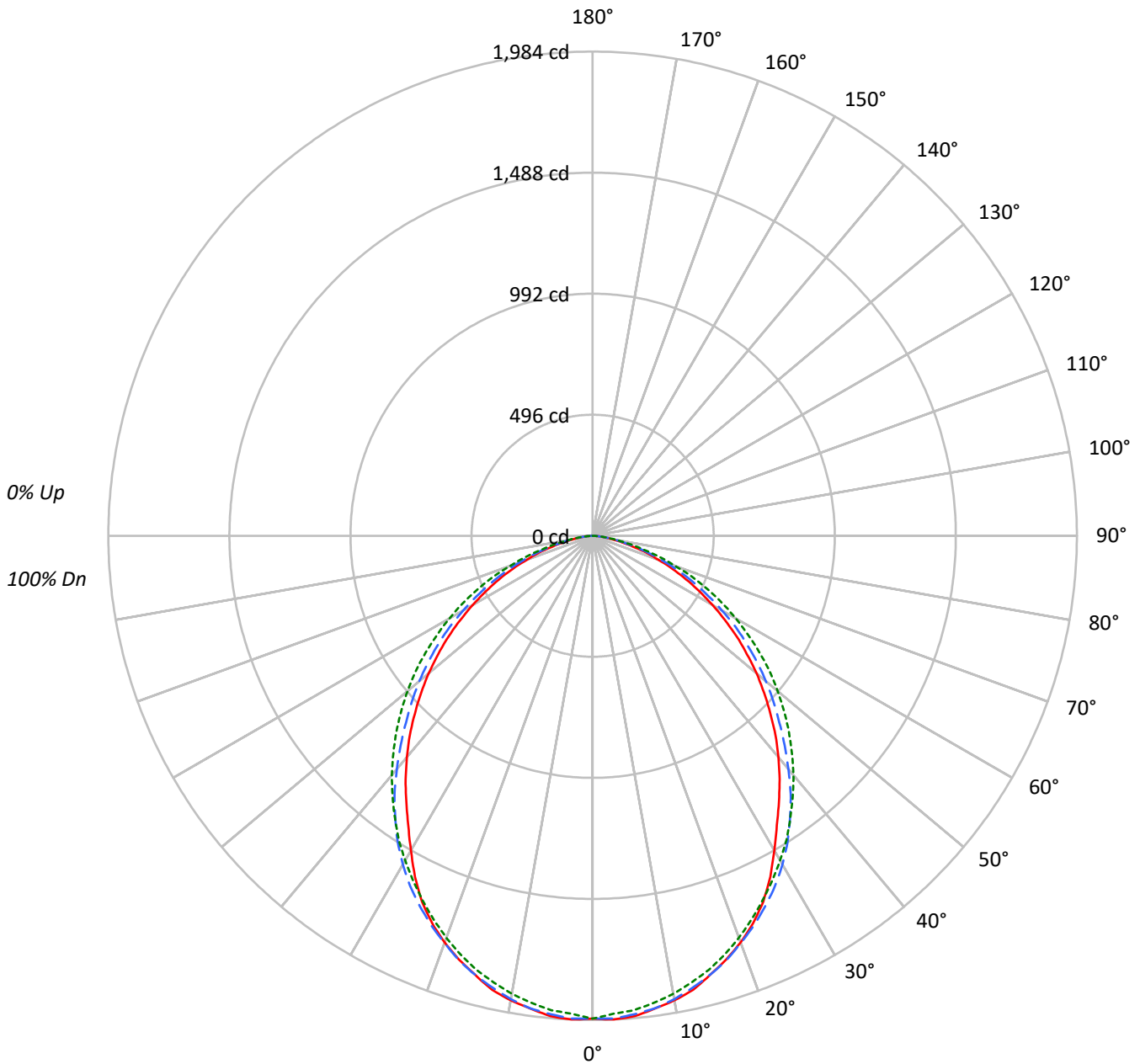
Lumens per Lamp: N/A
Luminaire Lumens: 4575.0 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P557305

CATALOG NUMBER: FUSL-12-4-LD4-2LO-40-UNV-80-88-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557305

CATALOG NUMBER: FUSL-12-4-LD4-2LO-40-UNV-80-88-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°	5324	5324	5324
5°	5338	5316	5271
10°	5282	5267	5207
15°	5188	5188	5129
20°	5078	5085	5019
25°	4911	4972	4893
30°	4625	4832	4773
35°	4370	4632	4640
40°	4157	4382	4496
45°	3920	4116	4327
50°	3669	3879	4143
55°	3384	3609	3919
60°	3048	3293	3645
65°	2691	2928	3316
70°	2242	2494	2817
75°	1762	1991	2205
80°	1260	1402	1554
85°	821	821	775



TEST NUMBER: P557305

CATALOG NUMBER: FUSL-12-4-LD4-2LO-40-UNV-80-88-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.3	4.1
10°-20°	523.3	11.4
20°-30°	764.8	16.7
30°-40°	868.1	19.0
40°-50°	838.0	18.3
50°-60°	691.3	15.1
60°-70°	460.3	10.1
70°-80°	206.0	4.5
80°-90°	36.8	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°	1474.4	32.2
0°-40°	2342.5	51.2
0°-60°	3871.8	84.6
0°-90°	4575.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4575.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1979	1979	1979	1979	1979	
5°	1976	1976	1968	1957	1951	187
15°	1862	1867	1862	1854	1841	525
25°	1654	1667	1674	1662	1648	757
35°	1330	1348	1410	1418	1412	833
45°	1030	1047	1082	1131	1137	795
55°	721	734	769	812	835	644
65°	423	434	460	493	521	419
75°	170	179	192	201	212	185
85°	27	27	27	25	25	36
90°	0	0	0	0	0	



TEST NUMBER: P557305

CATALOG NUMBER: FUSL-12-4-LD4-2LO-40-UNV-80-88-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1978.6	1978.6	1978.6	1978.6	1978.6
2.5°	1983.9	1984.7	1980.1	1967.9	1960.3
5°	1976.3	1975.5	1967.9	1957.3	1951.2
7.5°	1954.2	1955.8	1953.5	1938.3	1929.9
10°	1933.0	1933.7	1927.6	1915.5	1905.6
12.5°	1905.6	1904.8	1896.5	1890.4	1874.4
15°	1862.3	1866.8	1862.3	1853.9	1841.0
17.5°	1820.5	1820.5	1823.5	1809.1	1799.2
20°	1773.3	1775.6	1775.6	1764.2	1752.8
22.5°	1718.6	1725.5	1727.7	1715.6	1701.9
25°	1654.0	1666.9	1674.5	1662.4	1647.9
27.5°	1575.7	1595.5	1618.3	1609.2	1593.2
30°	1488.3	1517.2	1555.2	1547.6	1536.2
32.5°	1405.4	1434.3	1486.8	1483.7	1477.7
35°	1330.2	1348.4	1410.0	1417.6	1412.3
37.5°	1258.7	1275.5	1333.2	1350.7	1346.2
40°	1183.5	1201.7	1247.3	1278.5	1280.0
42.5°	1109.0	1126.5	1163.7	1208.6	1208.6
45°	1030.0	1047.4	1081.6	1131.0	1137.1
47.5°	952.4	970.7	1004.1	1053.5	1063.4
50°	876.4	893.1	926.6	974.5	989.7
52.5°	797.4	815.6	848.3	892.4	914.4
55°	721.3	733.5	769.2	811.8	835.4
57.5°	642.3	653.7	694.0	730.5	754.8
60°	566.3	580.7	611.9	649.1	677.3
62.5°	493.3	508.5	535.1	567.8	599.7
65°	422.6	434.0	459.9	492.6	520.7
67.5°	354.2	364.1	389.9	412.7	442.4
70°	285.0	298.0	317.0	339.0	358.0
72.5°	229.6	234.9	250.8	266.8	286.6
75°	169.5	178.6	191.5	200.7	212.1
77.5°	121.6	126.9	134.5	142.1	152.8
80°	81.3	83.6	90.5	92.0	100.3
82.5°	49.4	50.9	52.4	53.2	56.2
85°	26.6	26.6	26.6	25.1	25.1
87.5°	15.2	15.2	12.9	10.6	7.6
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)