

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: P557366

Luminaire Tested: **FUSL-12-4-LD4-2LO-50-UNV-80-87-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: P557366
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-80-87-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

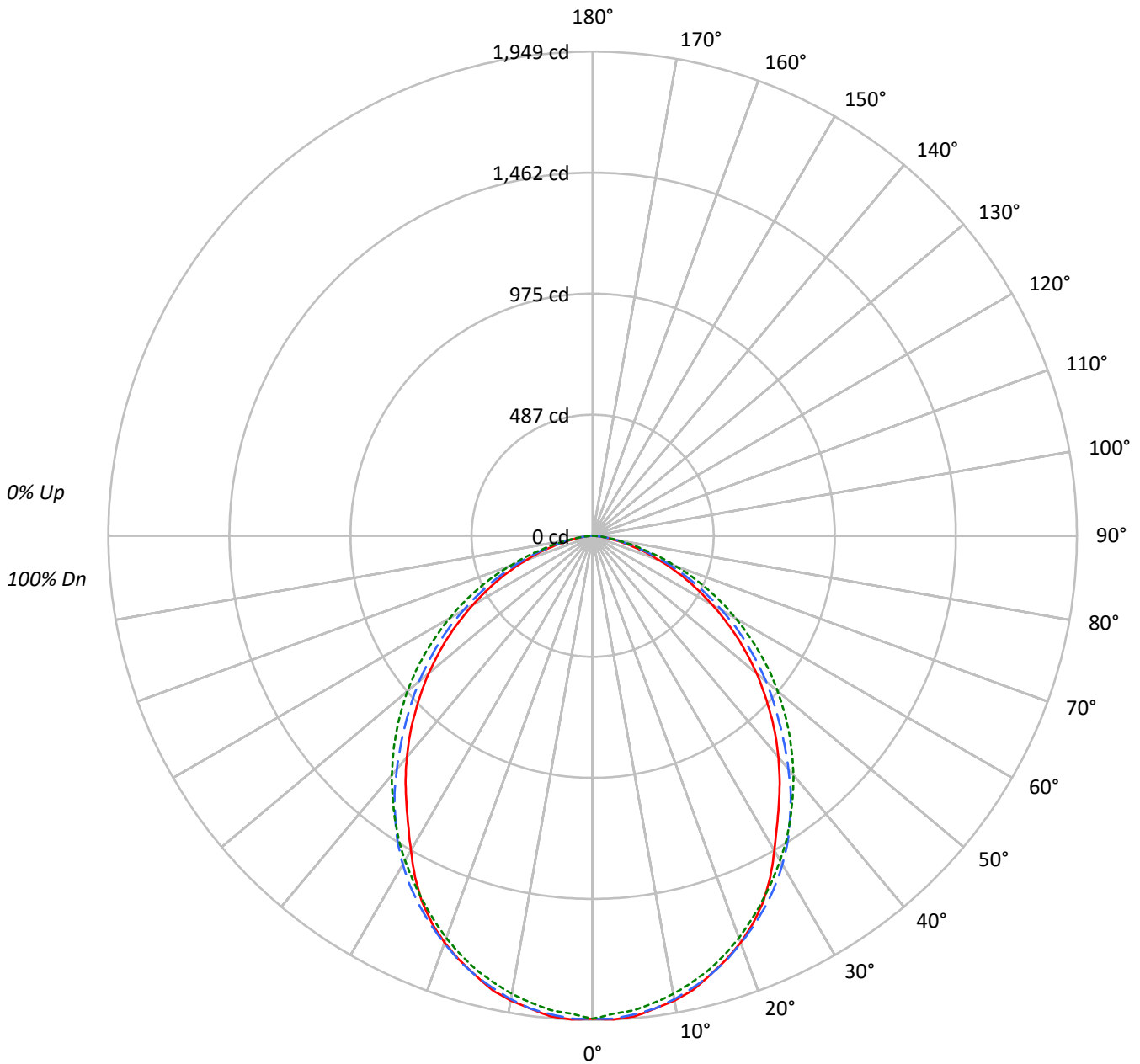
Lumens per Lamp: N/A
Luminaire Lumens: 4495.0 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V): NR
Input Current (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: P557366

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-80-87-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557366

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-80-87-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°	5231	5231	5231
5°	5245	5223	5179
10°	5190	5175	5116
15°	5097	5097	5039
20°	4989	4996	4932
25°	4825	4885	4807
30°	4544	4748	4690
35°	4293	4551	4558
40°	4085	4305	4418
45°	3851	4044	4252
50°	3605	3811	4071
55°	3325	3546	3851
60°	2995	3236	3581
65°	2644	2877	3258
70°	2204	2450	2768
75°	1731	1957	2167
80°	1238	1378	1528
85°	806	806	760



TEST NUMBER: P557366

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-80-87-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.0	4.1
10°-20°	514.2	11.4
20°-30°	751.4	16.7
30°-40°	852.9	19.0
40°-50°	823.4	18.3
50°-60°	679.2	15.1
60°-70°	452.3	10.1
70°-80°	202.4	4.5
80°-90°	36.2	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°	1448.6	32.2
0°-40°	2301.5	51.2
0°-60°	3804.1	84.6
0°-90°	4495.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4495.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1944	1944	1944	1944	1944	
5°	1942	1941	1934	1923	1917	184
15°	1830	1834	1830	1822	1809	516
25°	1625	1638	1645	1633	1619	744
35°	1307	1325	1385	1393	1388	819
45°	1012	1029	1063	1111	1117	781
55°	709	721	756	798	821	633
65°	415	426	452	484	512	412
75°	166	176	188	197	208	182
85°	26	26	26	25	25	35
90°	0	0	0	0	0	



TEST NUMBER: P557366

CATALOG NUMBER: FUSL-12-4-LD4-2LO-50-UNV-80-87-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1944.0	1944.0	1944.0	1944.0	1944.0
2.5°	1949.2	1949.9	1945.5	1933.5	1926.0
5°	1941.7	1941.0	1933.5	1923.1	1917.1
7.5°	1920.1	1921.6	1919.3	1904.4	1896.2
10°	1899.2	1899.9	1893.9	1882.0	1872.3
12.5°	1872.3	1871.5	1863.3	1857.3	1841.7
15°	1829.7	1834.2	1829.7	1821.5	1808.8
17.5°	1788.6	1788.6	1791.6	1777.4	1767.7
20°	1742.3	1744.6	1744.6	1733.4	1722.2
22.5°	1688.6	1695.3	1697.5	1685.6	1672.1
25°	1625.1	1637.8	1645.2	1633.3	1619.1
27.5°	1548.2	1567.6	1590.0	1581.0	1565.3
30°	1462.3	1490.7	1528.0	1520.5	1509.3
32.5°	1380.9	1409.2	1460.8	1457.8	1451.8
35°	1306.9	1324.9	1385.4	1392.8	1387.6
37.5°	1236.7	1253.2	1309.9	1327.1	1322.6
40°	1162.8	1180.7	1225.5	1256.2	1257.6
42.5°	1089.6	1106.8	1143.4	1187.4	1187.4
45°	1011.9	1029.1	1062.7	1111.3	1117.2
47.5°	935.8	953.7	986.5	1035.1	1044.8
50°	861.1	877.5	910.4	957.4	972.4
52.5°	783.4	801.3	833.5	876.8	898.4
55°	708.7	720.7	755.8	797.6	820.8
57.5°	631.1	642.3	681.8	717.7	741.6
60°	556.4	570.6	601.2	637.8	665.4
62.5°	484.7	499.6	525.8	557.9	589.2
65°	415.2	426.4	451.8	483.9	511.6
67.5°	348.0	357.7	383.1	405.5	434.6
70°	280.1	292.8	311.4	333.1	351.8
72.5°	225.5	230.8	246.5	262.1	281.6
75°	166.5	175.5	188.2	197.2	208.4
77.5°	119.5	124.7	132.2	139.7	150.1
80°	79.9	82.2	88.9	90.4	98.6
82.5°	48.5	50.0	51.5	52.3	55.3
85°	26.1	26.1	26.1	24.6	24.6
87.5°	14.9	14.9	12.7	10.5	7.5
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)