

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: P557170

Luminaire Tested: **FUSL-12-4-LD4-2LO-30-UNV-80-85-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: P557170
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-30-UNV-80-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

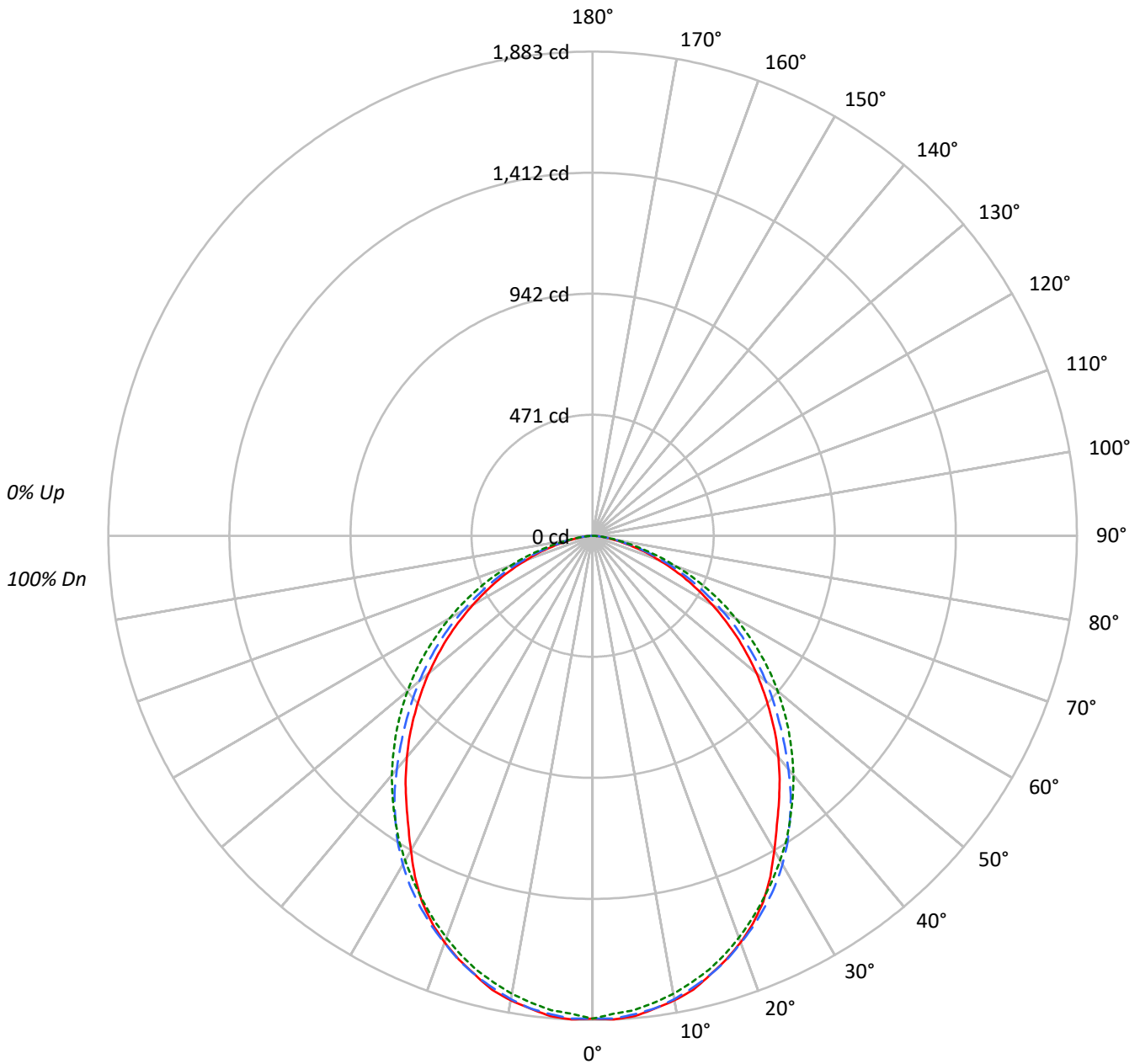
Lumens per Lamp: N/A
Luminaire Lumens: 4342.0 lumens
Efficiency: N/A
Efficacy: 92.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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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°	5053	5053	5053
5°	5066	5045	5002
10°	5013	4999	4942
15°	4924	4924	4868
20°	4820	4826	4764
25°	4661	4719	4644
30°	4389	4586	4530
35°	4147	4396	4403
40°	3946	4158	4267
45°	3720	3907	4107
50°	3482	3682	3932
55°	3212	3425	3719
60°	2892	3125	3460
65°	2554	2779	3147
70°	2128	2367	2674
75°	1673	1890	2093
80°	1196	1330	1475
85°	778	778	735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	4.1
10°-20°	496.7	11.4
20°-30°	725.8	16.7
30°-40°	823.9	19.0
40°-50°	795.3	18.3
50°-60°	656.1	15.1
60°-70°	436.9	10.1
70°-80°	195.5	4.5
80°-90°	35.0	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°	1399.3	32.2
0°-40°	2223.2	51.2
0°-60°	3674.6	84.6
0°-90°	4342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4342.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1878	1878	1878	1878	1878	
5°	1876	1875	1868	1858	1852	178
15°	1767	1772	1767	1760	1747	498
25°	1570	1582	1589	1578	1564	719
35°	1262	1280	1338	1345	1340	791
45°	978	994	1027	1073	1079	754
55°	685	696	730	770	793	611
65°	401	412	436	468	494	398
75°	161	170	182	190	201	176
85°	25	25	25	24	24	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1877.8	1877.8	1877.8	1877.8	1877.8
2.5°	1882.9	1883.6	1879.2	1867.7	1860.5
5°	1875.6	1874.9	1867.7	1857.6	1851.8
7.5°	1854.7	1856.2	1854.0	1839.6	1831.6
10°	1834.5	1835.2	1829.5	1817.9	1808.5
12.5°	1808.5	1807.8	1799.9	1794.1	1779.0
15°	1767.4	1771.8	1767.4	1759.5	1747.2
17.5°	1727.8	1727.8	1730.6	1716.9	1707.6
20°	1683.0	1685.2	1685.2	1674.4	1663.5
22.5°	1631.1	1637.6	1639.7	1628.2	1615.2
25°	1569.8	1582.0	1589.2	1577.7	1564.0
27.5°	1495.5	1514.2	1535.9	1527.2	1512.1
30°	1412.5	1439.9	1476.0	1468.8	1457.9
32.5°	1333.9	1361.3	1411.1	1408.2	1402.4
35°	1262.4	1279.8	1338.2	1345.4	1340.4
37.5°	1194.6	1210.5	1265.3	1281.9	1277.6
40°	1123.2	1140.5	1183.8	1213.4	1214.8
42.5°	1052.5	1069.1	1104.5	1147.0	1147.0
45°	977.5	994.1	1026.6	1073.4	1079.2
47.5°	903.9	921.2	953.0	999.9	1009.2
50°	831.8	847.6	879.4	924.8	939.3
52.5°	756.7	774.1	805.1	846.9	867.8
55°	684.6	696.2	730.1	770.5	792.8
57.5°	609.6	620.4	658.6	693.3	716.3
60°	537.4	551.1	580.7	616.1	642.8
62.5°	468.2	482.6	507.9	538.9	569.2
65°	401.1	411.9	436.4	467.5	494.2
67.5°	336.2	345.6	370.1	391.7	419.9
70°	270.5	282.8	300.8	321.7	339.8
72.5°	217.9	222.9	238.1	253.2	272.0
75°	160.9	169.5	181.8	190.4	201.3
77.5°	115.4	120.5	127.7	134.9	145.0
80°	77.2	79.4	85.8	87.3	95.2
82.5°	46.9	48.3	49.8	50.5	53.4
85°	25.2	25.2	25.2	23.8	23.8
87.5°	14.4	14.4	12.3	10.1	7.2
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)