

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: P555909

Luminaire Tested: **FUSL-12-2-LD4-3STD-30-UNV-81-86-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: P555909
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-12-2-LD4-3STD-30-UNV-81-86-EDD
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

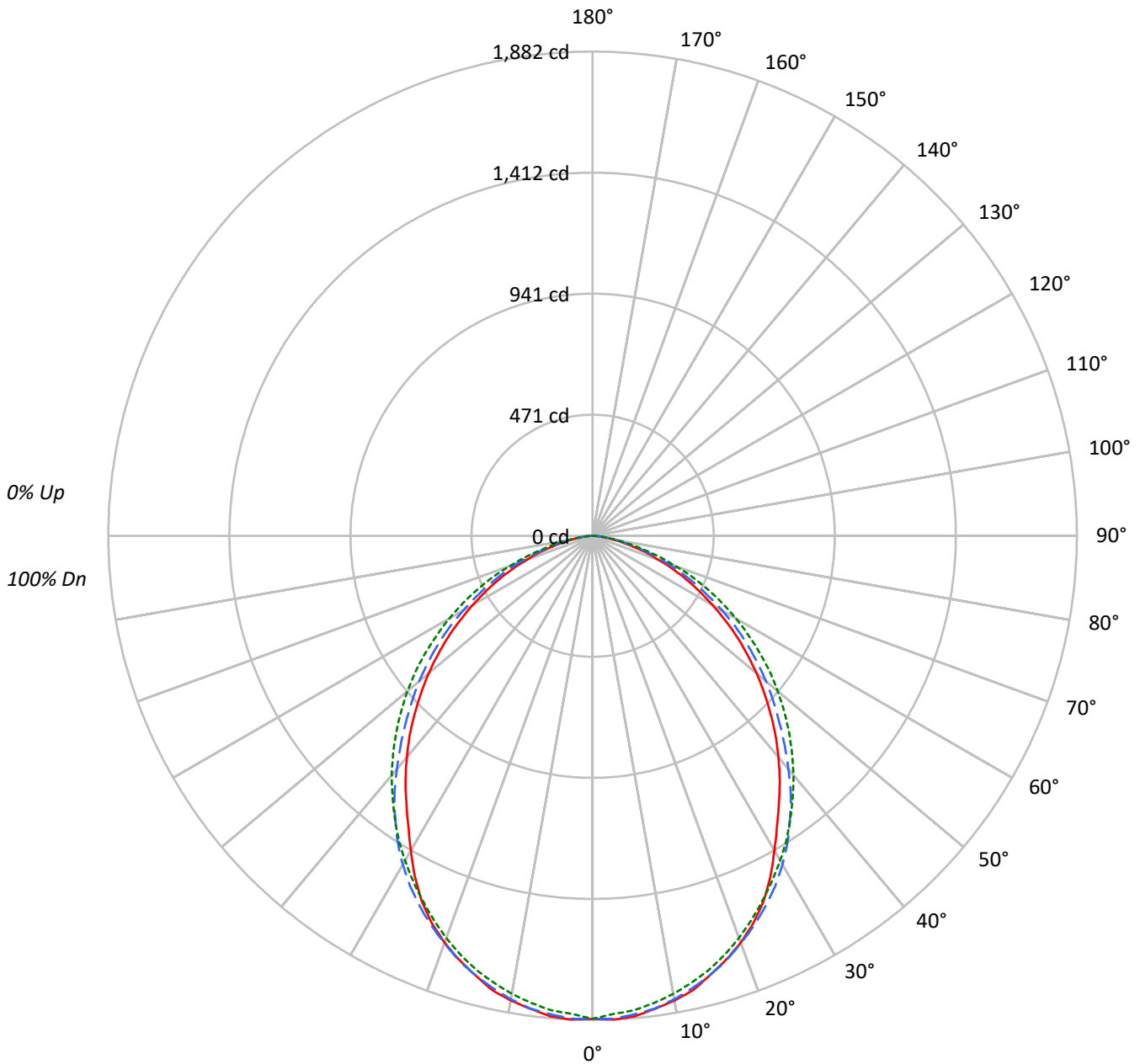
Lumens per Lamp: N/A
Luminaire Lumens: 4341.0 lumens
Efficiency: N/A
Efficacy: 86.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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					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	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°	10104	10104	10104
5°	10131	10088	10002
10°	10023	9995	9881
15°	9845	9845	9733
20°	9637	9649	9526
25°	9320	9435	9285
30°	8776	9170	9058
35°	8293	8790	8805
40°	7890	8315	8533
45°	7438	7811	8213
50°	6963	7361	7862
55°	6423	6849	7437
60°	5783	6250	6917
65°	5107	5556	6291
70°	4257	4733	5345
75°	3344	3780	4184
80°	2393	2659	2951
85°	1556	1556	1470



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	4.1
10°-20°	496.6	11.4
20°-30°	725.7	16.7
30°-40°	823.7	19.0
40°-50°	795.1	18.3
50°-60°	655.9	15.1
60°-70°	436.8	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°	1399.0	32.2
0°-40°	2222.7	51.2
0°-60°	3673.8	84.6
0°-90°	4341.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4341.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1877	1877	1877	1877	1877	
5°	1875	1874	1867	1857	1851	177
15°	1767	1771	1767	1759	1747	498
25°	1569	1582	1589	1577	1564	719
35°	1262	1280	1338	1345	1340	791
45°	977	994	1026	1073	1079	754
55°	684	696	730	770	793	611
65°	401	412	436	467	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°	1877.4	1877.4	1877.4	1877.4	1877.4
2.5°	1882.4	1883.1	1878.8	1867.3	1860.1
5°	1875.2	1874.5	1867.3	1857.2	1851.4
7.5°	1854.3	1855.7	1853.6	1839.1	1831.2
10°	1834.1	1834.8	1829.0	1817.5	1808.1
12.5°	1808.1	1807.4	1799.5	1793.7	1778.6
15°	1767.0	1771.3	1767.0	1759.1	1746.8
17.5°	1727.4	1727.4	1730.2	1716.5	1707.2
20°	1682.6	1684.8	1684.8	1674.0	1663.2
22.5°	1630.7	1637.2	1639.4	1627.8	1614.8
25°	1569.4	1581.7	1588.9	1577.3	1563.6
27.5°	1495.1	1513.9	1535.5	1526.9	1511.7
30°	1412.2	1439.6	1475.6	1468.4	1457.6
32.5°	1333.6	1361.0	1410.7	1407.8	1402.1
35°	1262.2	1279.5	1337.9	1345.1	1340.1
37.5°	1194.4	1210.2	1265.0	1281.6	1277.3
40°	1123.0	1140.3	1183.5	1213.1	1214.6
42.5°	1052.3	1068.9	1104.2	1146.8	1146.8
45°	977.3	993.9	1026.3	1073.2	1079.0
47.5°	903.7	921.0	952.7	999.6	1009.0
50°	831.6	847.4	879.2	924.6	939.0
52.5°	756.6	773.9	804.9	846.7	867.6
55°	684.5	696.0	729.9	770.3	792.6
57.5°	609.4	620.3	658.5	693.1	716.2
60°	537.3	551.0	580.6	615.9	642.6
62.5°	468.1	482.5	507.7	538.8	569.1
65°	401.0	411.8	436.3	467.4	494.0
67.5°	336.1	345.5	370.0	391.6	419.8
70°	270.5	282.7	300.8	321.7	339.7
72.5°	217.8	222.9	238.0	253.2	271.9
75°	160.8	169.5	181.8	190.4	201.2
77.5°	115.4	120.4	127.7	134.9	145.0
80°	77.2	79.3	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)