

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: P558136

Luminaire Tested: **FUSL-12-4-LD4-3LO-50-UNV-80-88-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: P558136
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-LD4-3LO-50-UNV-80-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

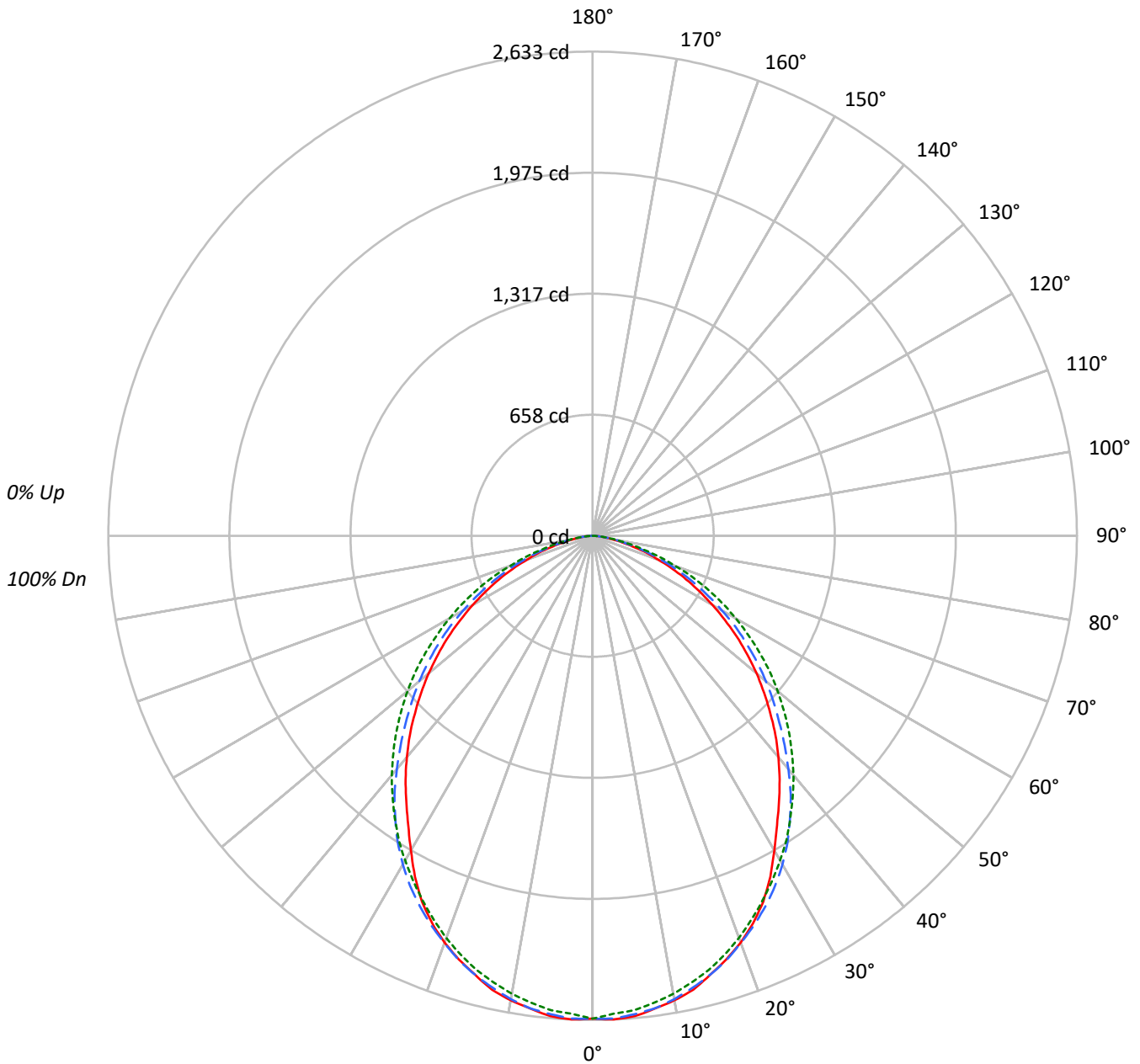
Lumens per Lamp: N/A
Luminaire Lumens: 6072.0 lumens
Efficiency: N/A
Efficacy: 86.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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

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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°	7067	7067	7067
5°	7085	7055	6995
10°	7010	6991	6911
15°	6886	6886	6807
20°	6740	6749	6662
25°	6518	6599	6494
30°	6138	6414	6335
35°	5800	6148	6158
40°	5518	5815	5968
45°	5202	5463	5743
50°	4870	5148	5499
55°	4492	4790	5202
60°	4045	4371	4838
65°	3571	3886	4400
70°	2976	3310	3739
75°	2339	2643	2927
80°	1672	1861	2064
85°	1090	1090	1028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.2	4.1
10°-20°	694.6	11.4
20°-30°	1015.0	16.7
30°-40°	1152.2	19.0
40°-50°	1112.2	18.3
50°-60°	917.5	15.1
60°-70°	611.0	10.1
70°-80°	273.4	4.5
80°-90°	48.9	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°	1956.8	32.2
0°-40°	3109.0	51.2
0°-60°	5138.7	84.6
0°-90°	6072.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6072.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2626	2626	2626	2626	2626	
5°	2623	2622	2612	2598	2590	248
15°	2472	2478	2472	2460	2443	697
25°	2195	2212	2222	2206	2187	1005
35°	1766	1790	1871	1882	1874	1106
45°	1367	1390	1436	1501	1509	1055
55°	957	974	1021	1077	1109	855
65°	561	576	610	654	691	556
75°	225	237	254	266	282	246
85°	35	35	35	33	33	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2626.0	2626.0	2626.0	2626.0	2626.0
2.5°	2633.0	2634.1	2628.0	2611.9	2601.8
5°	2623.0	2621.9	2611.9	2597.7	2589.7
7.5°	2593.7	2595.7	2592.7	2572.5	2561.4
10°	2565.5	2566.5	2558.4	2542.3	2529.1
12.5°	2529.1	2528.1	2517.0	2509.0	2487.8
15°	2471.6	2477.7	2471.6	2460.5	2443.4
17.5°	2416.1	2416.1	2420.2	2401.0	2387.9
20°	2353.6	2356.6	2356.6	2341.5	2326.4
22.5°	2281.0	2290.0	2293.1	2276.9	2258.8
25°	2195.2	2212.4	2222.5	2206.3	2187.1
27.5°	2091.3	2117.5	2147.8	2135.7	2114.5
30°	1975.3	2013.6	2064.1	2054.0	2038.8
32.5°	1865.3	1903.7	1973.3	1969.2	1961.2
35°	1765.5	1789.7	1871.4	1881.5	1874.4
37.5°	1670.6	1692.8	1769.5	1792.7	1786.6
40°	1570.7	1595.0	1655.5	1696.9	1698.9
42.5°	1471.9	1495.1	1544.5	1604.0	1604.0
45°	1367.0	1390.2	1435.6	1501.1	1509.2
47.5°	1264.1	1288.3	1332.7	1398.2	1411.4
50°	1163.2	1185.4	1229.8	1293.3	1313.5
52.5°	1058.3	1082.5	1125.9	1184.4	1213.6
55°	957.4	973.5	1020.9	1077.4	1108.7
57.5°	852.5	867.6	921.1	969.5	1001.8
60°	751.6	770.7	812.1	861.5	898.9
62.5°	654.7	674.9	710.2	753.6	796.0
65°	560.9	576.0	610.3	653.7	691.0
67.5°	470.1	483.2	517.5	547.8	587.1
70°	378.3	395.5	420.7	449.9	475.2
72.5°	304.7	311.7	332.9	354.1	380.3
75°	225.0	237.1	254.2	266.3	281.5
77.5°	161.4	168.5	178.6	188.7	202.8
80°	107.9	111.0	120.1	122.1	133.2
82.5°	65.6	67.6	69.6	70.6	74.7
85°	35.3	35.3	35.3	33.3	33.3
87.5°	20.2	20.2	17.2	14.1	10.1
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)