

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: P557632

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-81-84-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: P557632
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-LD4-2STD-50-UNV-81-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

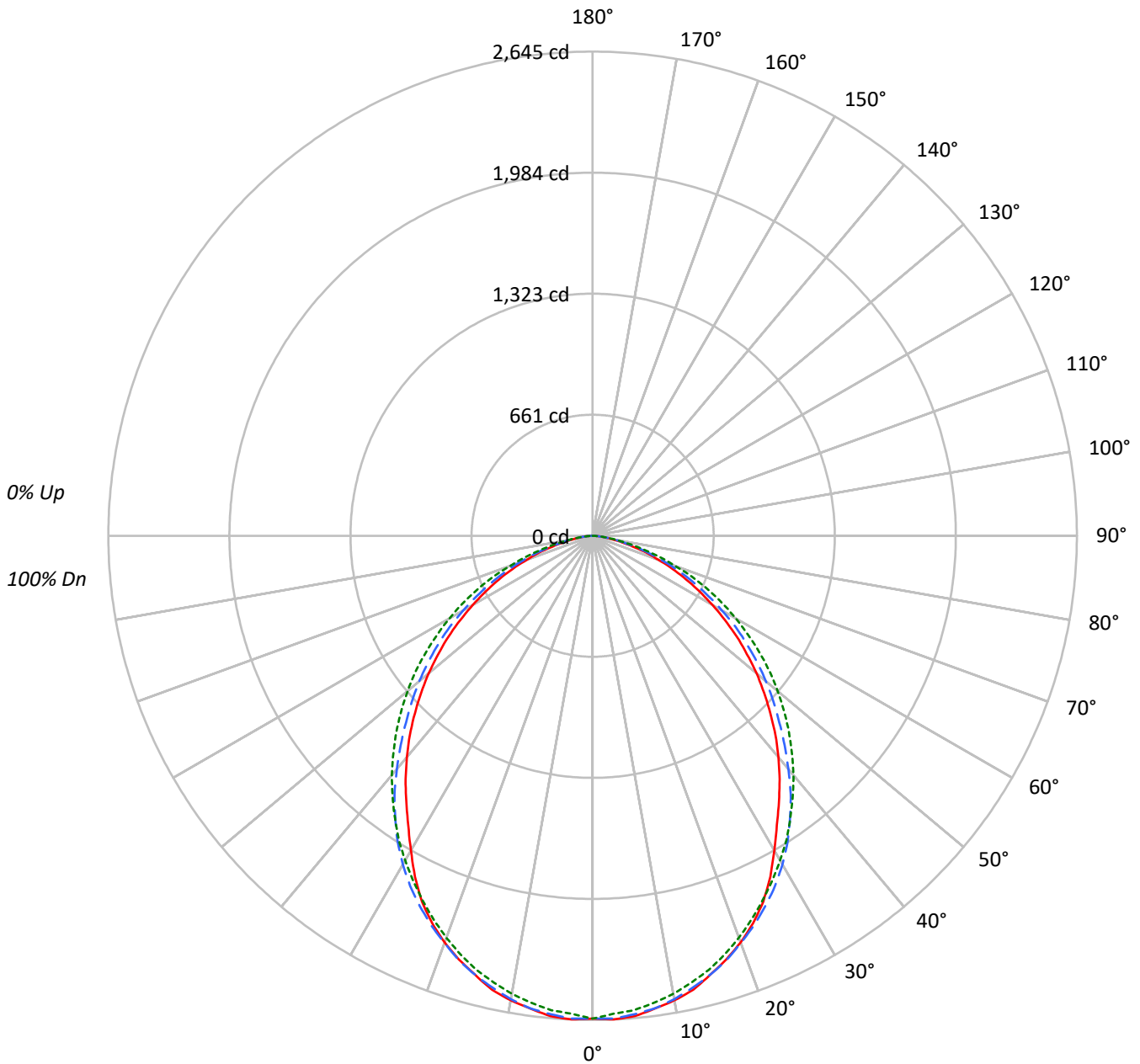
Lumens per Lamp: N/A
Luminaire Lumens: 6099.0 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	7098	7098	7098
5°	7117	7087	7027
10°	7041	7022	6942
15°	6916	6916	6837
20°	6770	6779	6692
25°	6547	6628	6523
30°	6165	6442	6363
35°	5825	6175	6185
40°	5542	5841	5994
45°	5225	5487	5769
50°	4891	5171	5523
55°	4511	4811	5225
60°	4063	4390	4859
65°	3587	3904	4420
70°	2990	3325	3755
75°	2350	2655	2939
80°	1680	1869	2073
85°	1096	1096	1031



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.3	4.1
10°-20°	697.7	11.4
20°-30°	1019.5	16.7
30°-40°	1157.3	19.0
40°-50°	1117.2	18.3
50°-60°	921.6	15.1
60°-70°	613.7	10.1
70°-80°	274.6	4.5
80°-90°	49.1	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°	1965.5	32.2
0°-40°	3122.8	51.2
0°-60°	5161.5	84.6
0°-90°	6099.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6099.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2638	2638	2638	2638	2638	
5°	2635	2634	2624	2609	2601	249
15°	2483	2489	2483	2472	2454	700
25°	2205	2222	2232	2216	2197	1010
35°	1773	1798	1880	1890	1883	1111
45°	1373	1396	1442	1508	1516	1059
55°	962	978	1026	1082	1114	858
65°	563	579	613	657	694	559
75°	226	238	255	268	283	247
85°	36	36	36	33	33	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2637.7	2637.7	2637.7	2637.7	2637.7
2.5°	2644.8	2645.8	2639.7	2623.5	2613.3
5°	2634.6	2633.6	2623.5	2609.3	2601.2
7.5°	2605.2	2607.3	2604.2	2584.0	2572.8
10°	2576.9	2577.9	2569.8	2553.6	2540.4
12.5°	2540.4	2539.4	2528.2	2520.1	2498.8
15°	2482.6	2488.7	2482.6	2471.5	2454.2
17.5°	2426.9	2426.9	2430.9	2411.7	2398.5
20°	2364.1	2367.1	2367.1	2351.9	2336.7
22.5°	2291.1	2300.2	2303.3	2287.1	2268.8
25°	2205.0	2222.2	2232.3	2216.1	2196.9
27.5°	2100.6	2126.9	2157.3	2145.2	2123.9
30°	1984.1	2022.6	2073.2	2063.1	2047.9
32.5°	1873.6	1912.1	1982.0	1978.0	1969.9
35°	1773.3	1797.6	1879.7	1889.8	1882.7
37.5°	1678.1	1700.3	1777.4	1800.7	1794.6
40°	1577.7	1602.1	1662.9	1704.4	1706.4
42.5°	1478.4	1501.7	1551.4	1611.2	1611.2
45°	1373.0	1396.3	1441.9	1507.8	1515.9
47.5°	1269.7	1294.0	1338.6	1404.5	1417.6
50°	1168.4	1190.6	1235.2	1299.1	1319.3
52.5°	1063.0	1087.3	1130.9	1189.6	1219.0
55°	961.6	977.8	1025.5	1082.2	1113.6
57.5°	856.3	871.5	925.2	973.8	1006.2
60°	754.9	774.2	815.7	865.4	902.9
62.5°	657.6	677.9	713.4	756.9	799.5
65°	563.4	578.6	613.1	656.6	694.1
67.5°	472.2	485.4	519.8	550.2	589.7
70°	380.0	397.2	422.6	451.9	477.3
72.5°	306.0	313.1	334.4	355.7	382.0
75°	226.0	238.1	255.4	267.5	282.7
77.5°	162.1	169.2	179.4	189.5	203.7
80°	108.4	111.5	120.6	122.6	133.8
82.5°	65.9	67.9	69.9	70.9	75.0
85°	35.5	35.5	35.5	33.4	33.4
87.5°	20.3	20.3	17.2	14.2	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)