

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: P558152

Luminaire Tested: **FUSL-12-4-LD4-3LO-50-UNV-81-88-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: P558152
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-81-88-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC 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

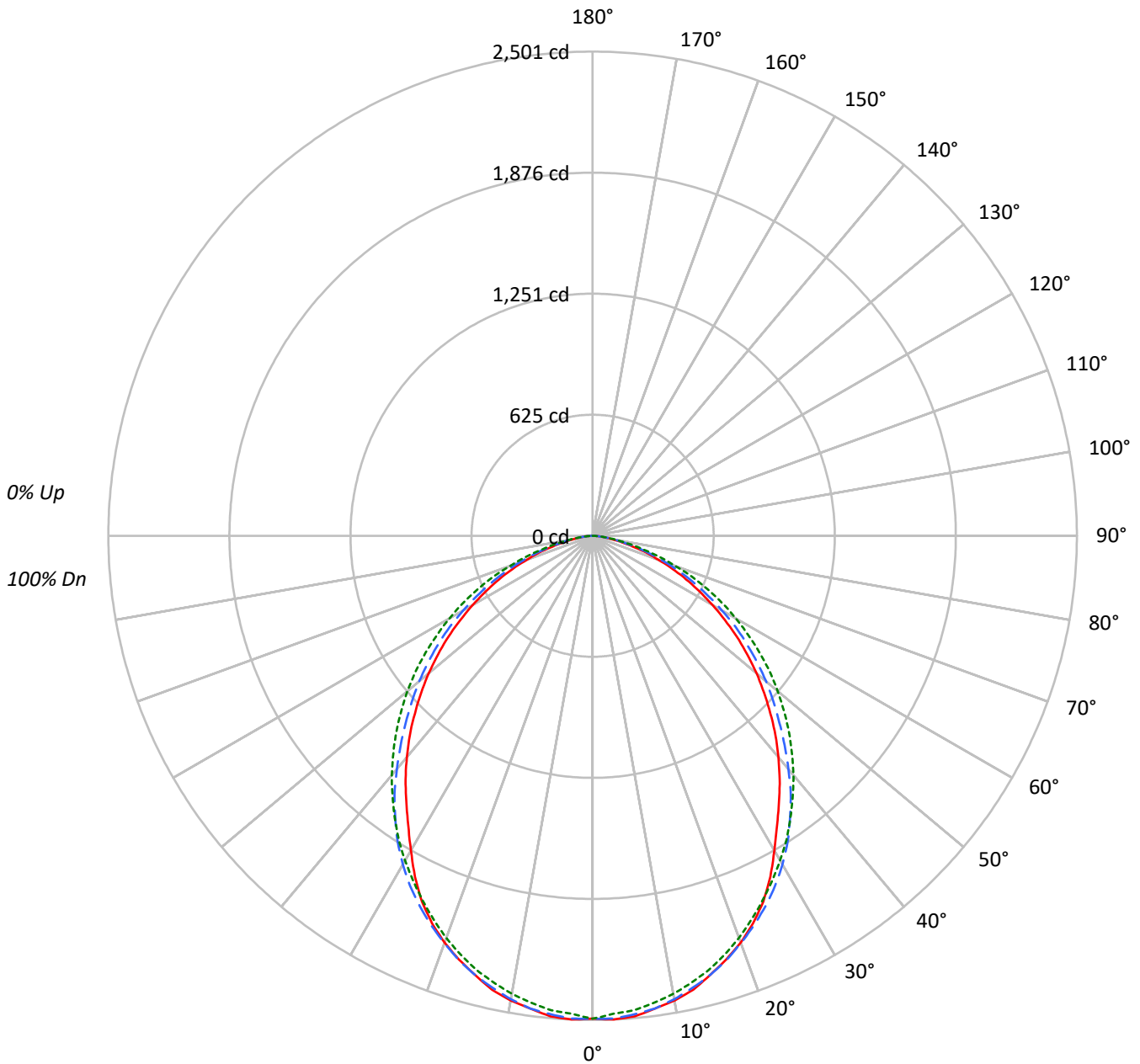
Lumens per Lamp: N/A
Luminaire Lumens: 5768.0 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
Input Voltage (V): NR
Input Current (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°	6713	6713	6713
5°	6730	6702	6645
10°	6659	6641	6565
15°	6541	6541	6466
20°	6403	6411	6328
25°	6192	6269	6169
30°	5830	6092	6018
35°	5509	5840	5849
40°	5241	5524	5669
45°	4942	5190	5456
50°	4626	4891	5223
55°	4267	4550	4941
60°	3842	4152	4596
65°	3393	3692	4180
70°	2828	3144	3552
75°	2222	2511	2780
80°	1588	1767	1960
85°	1034	1034	976



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	234.9	4.1
10°-20°	659.8	11.4
20°-30°	964.2	16.7
30°-40°	1094.5	19.0
40°-50°	1056.5	18.3
50°-60°	871.6	15.1
60°-70°	580.4	10.1
70°-80°	259.7	4.5
80°-90°	46.5	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°	1858.9	32.2
0°-40°	2953.3	51.2
0°-60°	4881.4	84.6
0°-90°	5768.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5768.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2494	2494	2494	2494	2494	
5°	2492	2491	2481	2468	2460	236
15°	2348	2354	2348	2337	2321	662
25°	2085	2102	2111	2096	2078	955
35°	1677	1700	1778	1787	1781	1051
45°	1298	1321	1364	1426	1434	1002
55°	909	925	970	1024	1053	812
65°	533	547	580	621	656	528
75°	214	225	242	253	267	234
85°	34	34	34	32	32	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2494.5	2494.5	2494.5	2494.5	2494.5
2.5°	2501.2	2502.2	2496.4	2481.1	2471.5
5°	2491.6	2490.7	2481.1	2467.7	2460.0
7.5°	2463.8	2465.8	2462.9	2443.7	2433.2
10°	2437.0	2438.0	2430.3	2415.0	2402.5
12.5°	2402.5	2401.6	2391.0	2383.3	2363.2
15°	2347.9	2353.6	2347.9	2337.3	2321.1
17.5°	2295.2	2295.2	2299.0	2280.8	2268.3
20°	2235.8	2238.6	2238.6	2224.3	2209.9
22.5°	2166.8	2175.4	2178.3	2162.9	2145.7
25°	2085.3	2101.6	2111.2	2095.8	2077.6
27.5°	1986.6	2011.5	2040.3	2028.8	2008.6
30°	1876.4	1912.8	1960.7	1951.1	1936.8
32.5°	1771.9	1808.4	1874.5	1870.6	1863.0
35°	1677.1	1700.1	1777.7	1787.3	1780.6
37.5°	1587.0	1608.1	1680.9	1702.9	1697.2
40°	1492.1	1515.1	1572.6	1611.9	1613.8
42.5°	1398.2	1420.2	1467.2	1523.7	1523.7
45°	1298.5	1320.6	1363.7	1426.0	1433.6
47.5°	1200.8	1223.8	1265.9	1328.2	1340.7
50°	1104.9	1126.0	1168.2	1228.6	1247.7
52.5°	1005.3	1028.3	1069.5	1125.1	1152.9
55°	909.4	924.8	969.8	1023.5	1053.2
57.5°	809.8	824.2	874.9	920.9	951.6
60°	713.9	732.2	771.4	818.4	853.9
62.5°	622.0	641.1	674.7	715.9	756.1
65°	532.8	547.2	579.8	621.0	656.5
67.5°	446.6	459.0	491.6	520.4	557.7
70°	359.4	375.7	399.6	427.4	451.4
72.5°	289.4	296.1	316.2	336.4	361.3
75°	213.7	225.2	241.5	253.0	267.4
77.5°	153.3	160.0	169.6	179.2	192.6
80°	102.5	105.4	114.0	116.0	126.5
82.5°	62.3	64.2	66.1	67.1	70.9
85°	33.5	33.5	33.5	31.6	31.6
87.5°	19.2	19.2	16.3	13.4	9.6
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)