

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: P558162

Luminaire Tested: **FUSL-12-4-LD4-3LO-50-UNV-82-85-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: P558162
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-82-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

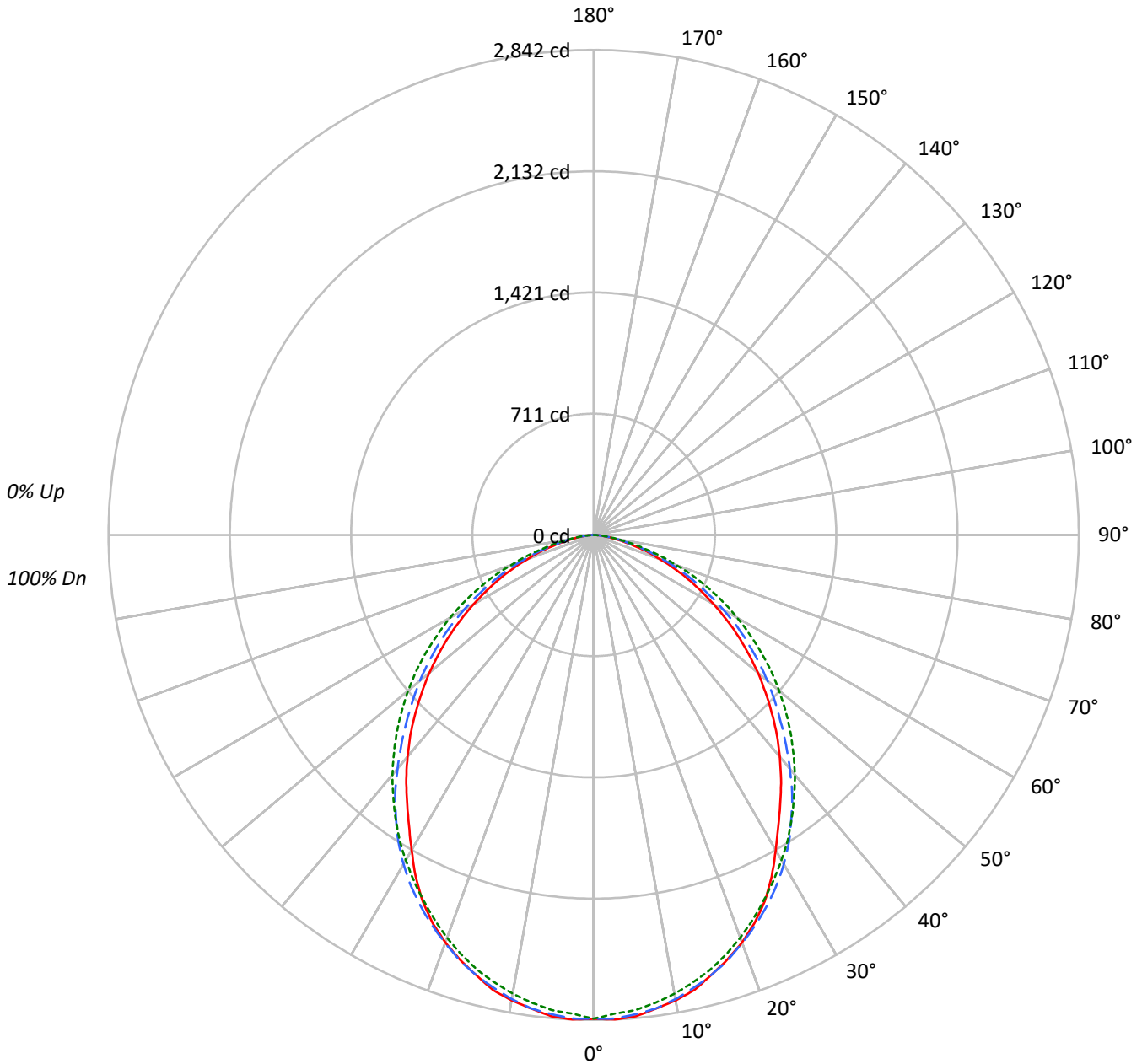
Lumens per Lamp: N/A
Luminaire Lumens: 6555.0 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P558162

CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-82-85-EDD-90

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°	7629	7629	7629
5°	7649	7616	7552
10°	7568	7547	7461
15°	7433	7433	7348
20°	7276	7285	7192
25°	7036	7124	7010
30°	6626	6924	6839
35°	6261	6637	6647
40°	5957	6278	6443
45°	5616	5898	6200
50°	5257	5558	5936
55°	4849	5171	5615
60°	4367	4718	5223
65°	3855	4195	4750
70°	3213	3573	4036
75°	2525	2853	3160
80°	1805	2008	2228
85°	1176	1176	1108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.9	4.1
10°-20°	749.8	11.4
20°-30°	1095.7	16.7
30°-40°	1243.8	19.0
40°-50°	1200.7	18.3
50°-60°	990.5	15.1
60°-70°	659.6	10.1
70°-80°	295.2	4.5
80°-90°	52.8	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°	2112.5	32.2
0°-40°	3356.3	51.2
0°-60°	5547.5	84.6
0°-90°	6555.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6555.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2835	2835	2835	2835	2835	
5°	2832	2830	2820	2804	2796	268
15°	2668	2675	2668	2656	2638	752
25°	2370	2388	2399	2382	2361	1085
35°	1906	1932	2020	2031	2024	1194
45°	1476	1501	1550	1620	1629	1139
55°	1034	1051	1102	1163	1197	922
65°	606	622	659	706	746	600
75°	243	256	274	288	304	266
85°	38	38	38	36	36	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2834.9	2834.9	2834.9	2834.9	2834.9
2.5°	2842.5	2843.6	2837.0	2819.6	2808.7
5°	2831.6	2830.5	2819.6	2804.4	2795.7
7.5°	2800.0	2802.2	2798.9	2777.1	2765.2
10°	2769.5	2770.6	2761.9	2744.5	2730.3
12.5°	2730.3	2729.2	2717.2	2708.5	2685.7
15°	2668.2	2674.8	2668.2	2656.3	2637.7
17.5°	2608.3	2608.3	2612.7	2592.0	2577.8
20°	2540.8	2544.1	2544.1	2527.7	2511.4
22.5°	2462.4	2472.2	2475.5	2458.0	2438.4
25°	2369.8	2388.3	2399.2	2381.8	2361.1
27.5°	2257.7	2286.0	2318.6	2305.6	2282.7
30°	2132.4	2173.8	2228.3	2217.4	2201.0
32.5°	2013.7	2055.1	2130.2	2125.9	2117.2
35°	1905.9	1932.0	2020.2	2031.1	2023.5
37.5°	1803.5	1827.5	1910.2	1935.3	1928.8
40°	1695.7	1721.8	1787.2	1831.8	1834.0
42.5°	1589.0	1614.0	1667.4	1731.6	1731.6
45°	1475.7	1500.7	1549.8	1620.5	1629.3
47.5°	1364.6	1390.8	1438.7	1509.5	1523.6
50°	1255.7	1279.7	1327.6	1396.2	1418.0
52.5°	1142.4	1168.6	1215.4	1278.6	1310.2
55°	1033.5	1051.0	1102.1	1163.1	1196.9
57.5°	920.3	936.6	994.3	1046.6	1081.5
60°	811.4	832.1	876.7	930.1	970.4
62.5°	706.8	728.6	766.7	813.5	859.3
65°	605.5	621.9	658.9	705.7	746.0
67.5°	507.5	521.7	558.7	591.4	633.8
70°	408.4	426.9	454.1	485.7	513.0
72.5°	328.9	336.5	359.4	382.3	410.6
75°	242.9	255.9	274.4	287.5	303.9
77.5°	174.3	181.9	192.8	203.7	218.9
80°	116.5	119.8	129.6	131.8	143.8
82.5°	70.8	73.0	75.1	76.2	80.6
85°	38.1	38.1	38.1	35.9	35.9
87.5°	21.8	21.8	18.5	15.2	10.9
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)