

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: P557635

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-81-85-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: P557635
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-81-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

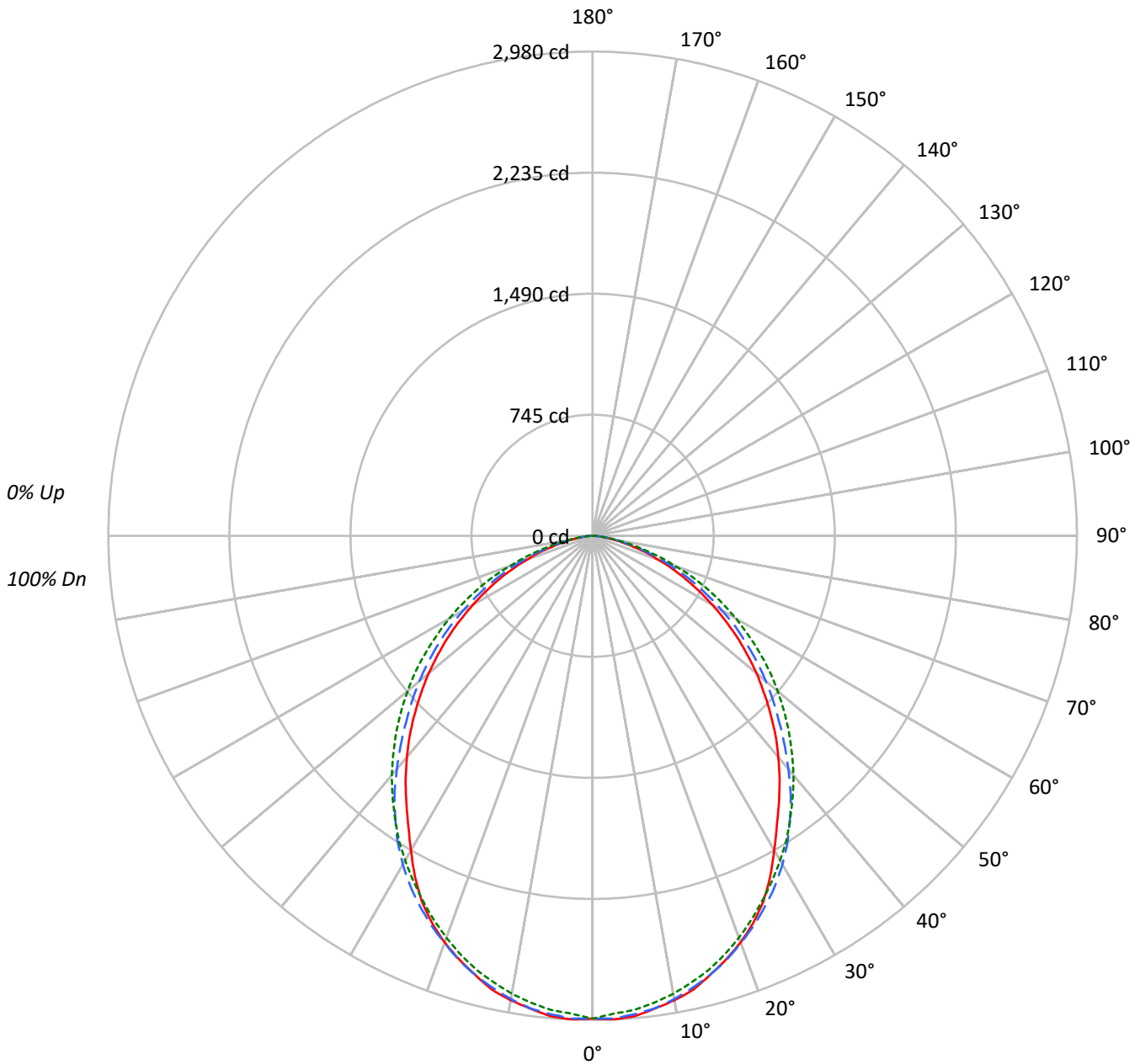
Lumens per Lamp: N/A
Luminaire Lumens: 6871.0 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P557635

CATALOG NUMBER: FUSL-12-4-LD4-2STD-50-UNV-81-85-EDD

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°	7996	7996	7996
5°	8018	7984	7916
10°	7932	7911	7820
15°	7792	7792	7703
20°	7627	7637	7539
25°	7376	7467	7348
30°	6945	7258	7169
35°	6563	6956	6968
40°	6244	6581	6753
45°	5887	6182	6499
50°	5510	5826	6222
55°	5083	5420	5886
60°	4577	4946	5474
65°	4041	4398	4979
70°	3368	3745	4231
75°	2647	2991	3311
80°	1892	2104	2335
85°	1235	1235	1164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.8	4.1
10°-20°	786.0	11.4
20°-30°	1148.6	16.7
30°-40°	1303.8	19.0
40°-50°	1258.6	18.3
50°-60°	1038.2	15.1
60°-70°	691.4	10.1
70°-80°	309.4	4.5
80°-90°	55.4	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°	2214.3	32.2
0°-40°	3518.1	51.2
0°-60°	5814.9	84.6
0°-90°	6871.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6871.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2972	2972	2972	2972	2972	
5°	2968	2967	2956	2940	2930	281
15°	2797	2804	2797	2784	2765	788
25°	2484	2504	2515	2497	2475	1138
35°	1998	2025	2118	2129	2121	1252
45°	1547	1573	1624	1699	1708	1193
55°	1083	1102	1155	1219	1255	967
65°	635	652	691	740	782	629
75°	255	268	288	301	318	278
85°	40	40	40	38	38	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2971.5	2971.5	2971.5	2971.5	2971.5
2.5°	2979.5	2980.7	2973.8	2955.5	2944.1
5°	2968.1	2967.0	2955.5	2939.6	2930.4
7.5°	2935.0	2937.3	2933.9	2911.0	2898.5
10°	2903.0	2904.2	2895.0	2876.8	2861.9
12.5°	2861.9	2860.8	2848.2	2839.1	2815.1
15°	2796.9	2803.7	2796.9	2784.3	2764.9
17.5°	2734.1	2734.1	2738.6	2717.0	2702.1
20°	2663.3	2666.7	2666.7	2649.6	2632.5
22.5°	2581.1	2591.4	2594.8	2576.5	2556.0
25°	2484.1	2503.5	2514.9	2496.6	2474.9
27.5°	2366.5	2396.2	2430.4	2416.7	2392.7
30°	2235.2	2278.6	2335.7	2324.3	2307.1
32.5°	2110.8	2154.2	2232.9	2228.4	2219.2
35°	1997.8	2025.2	2117.6	2129.0	2121.1
37.5°	1890.5	1915.6	2002.3	2028.6	2021.7
40°	1777.4	1804.8	1873.3	1920.1	1922.4
42.5°	1665.6	1691.8	1747.8	1815.1	1815.1
45°	1546.8	1573.1	1624.5	1698.7	1707.8
47.5°	1430.4	1457.8	1508.0	1582.2	1597.1
50°	1316.2	1341.4	1391.6	1463.5	1486.3
52.5°	1197.5	1224.9	1274.0	1340.2	1373.3
55°	1083.4	1101.6	1155.3	1219.2	1254.6
57.5°	964.6	981.8	1042.3	1097.1	1133.6
60°	850.5	872.2	919.0	974.9	1017.1
62.5°	740.9	763.7	803.7	852.8	900.7
65°	634.7	651.8	690.7	739.7	782.0
67.5°	532.0	546.8	585.6	619.9	664.4
70°	428.1	447.5	476.0	509.1	537.7
72.5°	344.8	352.7	376.7	400.7	430.4
75°	254.6	268.3	287.7	301.4	318.5
77.5°	182.7	190.6	202.1	213.5	229.5
80°	122.1	125.6	135.8	138.1	150.7
82.5°	74.2	76.5	78.8	79.9	84.5
85°	40.0	40.0	40.0	37.7	37.7
87.5°	22.8	22.8	19.4	16.0	11.4
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)