

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: P557679

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-93-97-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: P557679
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-93-97-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

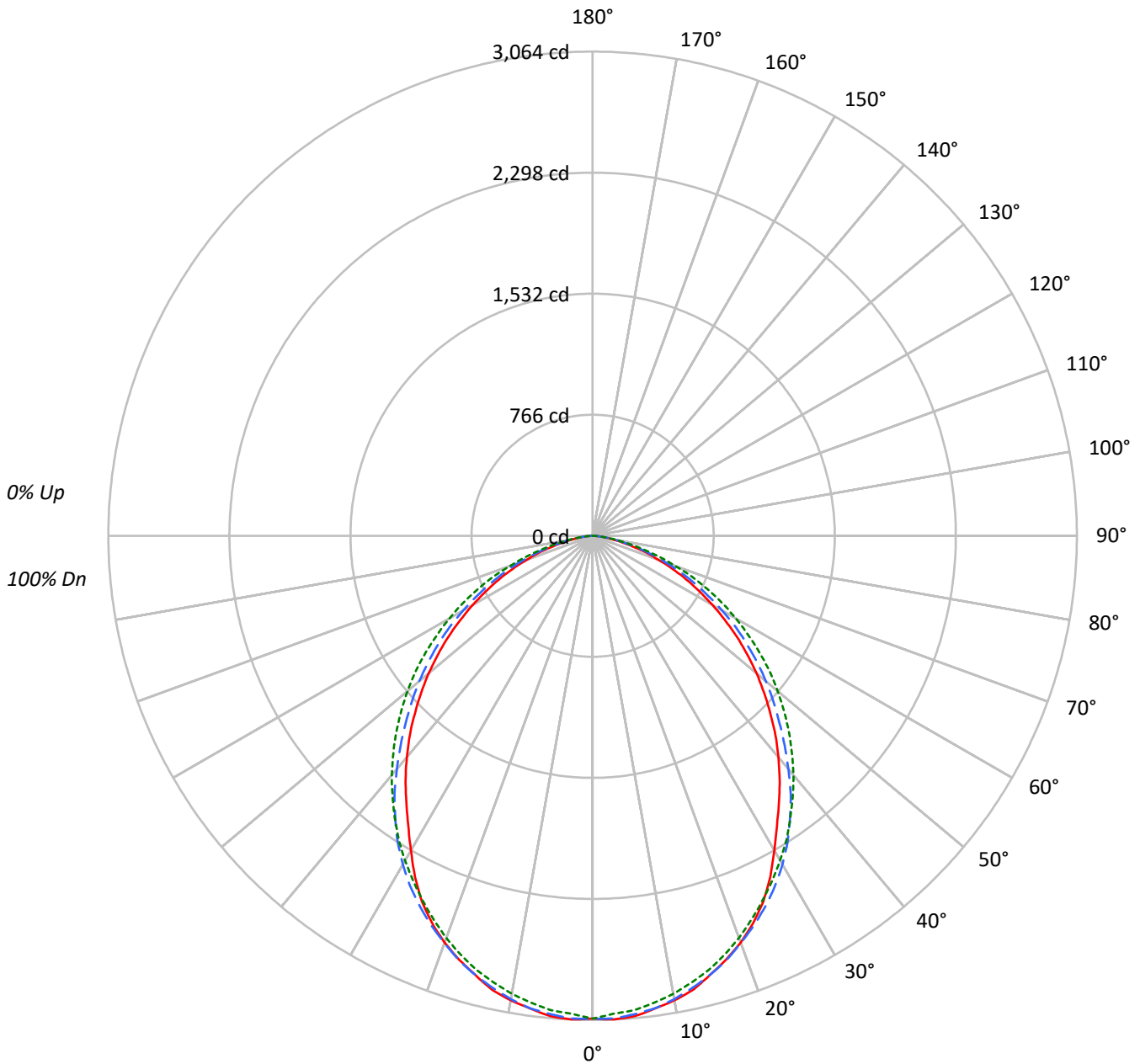
Lumens per Lamp: N/A
Luminaire Lumens: 7066.0 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8223	8223	8223
5°	8245	8210	8141
10°	8158	8135	8042
15°	8013	8013	7921
20°	7843	7853	7753
25°	7585	7679	7557
30°	7142	7464	7372
35°	6749	7154	7165
40°	6421	6767	6945
45°	6054	6358	6684
50°	5667	5991	6399
55°	5227	5574	6053
60°	4707	5086	5630
65°	4156	4523	5121
70°	3463	3851	4350
75°	2722	3075	3405
80°	1946	2165	2402
85°	1269	1269	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.7	4.1
10°-20°	808.3	11.4
20°-30°	1181.2	16.7
30°-40°	1340.8	19.0
40°-50°	1294.3	18.3
50°-60°	1067.7	15.1
60°-70°	711.0	10.1
70°-80°	318.2	4.5
80°-90°	56.9	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°	2277.2	32.2
0°-40°	3617.9	51.2
0°-60°	5979.9	84.6
0°-90°	7066.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7066.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3056	3056	3056	3056	3056	
5°	3052	3051	3039	3023	3014	289
15°	2876	2883	2876	2863	2843	811
25°	2555	2574	2586	2568	2545	1170
35°	2054	2083	2178	2190	2181	1287
45°	1591	1618	1671	1747	1756	1227
55°	1114	1133	1188	1254	1290	994
65°	653	670	710	761	804	647
75°	262	276	296	310	328	286
85°	41	41	41	39	39	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3055.9	3055.9	3055.9	3055.9	3055.9
2.5°	3064.1	3065.3	3058.2	3039.4	3027.7
5°	3052.3	3051.2	3039.4	3023.0	3013.6
7.5°	3018.3	3020.6	3017.1	2993.6	2980.7
10°	2985.4	2986.6	2977.2	2958.4	2943.2
12.5°	2943.2	2942.0	2929.1	2919.7	2895.0
15°	2876.2	2883.3	2876.2	2863.3	2843.4
17.5°	2811.7	2811.7	2816.4	2794.1	2778.8
20°	2738.9	2742.4	2742.4	2724.8	2707.2
22.5°	2654.4	2664.9	2668.5	2649.7	2628.5
25°	2554.6	2574.5	2586.3	2567.5	2545.2
27.5°	2433.7	2464.2	2499.4	2485.3	2460.7
30°	2298.6	2343.3	2402.0	2390.2	2372.6
32.5°	2170.7	2215.3	2296.3	2291.6	2282.2
35°	2054.5	2082.6	2177.7	2189.5	2181.2
37.5°	1944.1	1969.9	2059.2	2086.2	2079.1
40°	1827.9	1856.1	1926.5	1974.6	1977.0
42.5°	1712.8	1739.8	1797.4	1866.6	1866.6
45°	1590.7	1617.7	1670.6	1746.9	1756.3
47.5°	1471.0	1499.2	1550.8	1627.1	1642.4
50°	1353.6	1379.4	1431.1	1505.0	1528.5
52.5°	1231.5	1259.7	1310.2	1378.2	1412.3
55°	1114.1	1132.9	1188.1	1253.8	1290.2
57.5°	992.0	1009.6	1071.8	1128.2	1165.8
60°	874.6	896.9	945.1	1002.6	1046.0
62.5°	761.9	785.4	826.5	877.0	926.3
65°	652.7	670.3	710.3	760.7	804.2
67.5°	547.1	562.3	602.3	637.5	683.3
70°	440.2	460.2	489.5	523.6	552.9
72.5°	354.5	362.8	387.4	412.1	442.6
75°	261.8	275.9	295.8	309.9	327.5
77.5°	187.8	196.1	207.8	219.5	236.0
80°	125.6	129.1	139.7	142.1	155.0
82.5°	76.3	78.7	81.0	82.2	86.9
85°	41.1	41.1	41.1	38.7	38.7
87.5°	23.5	23.5	20.0	16.4	11.7
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)