

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: P557957

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-81-86-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: P557957
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-30-UNV-81-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

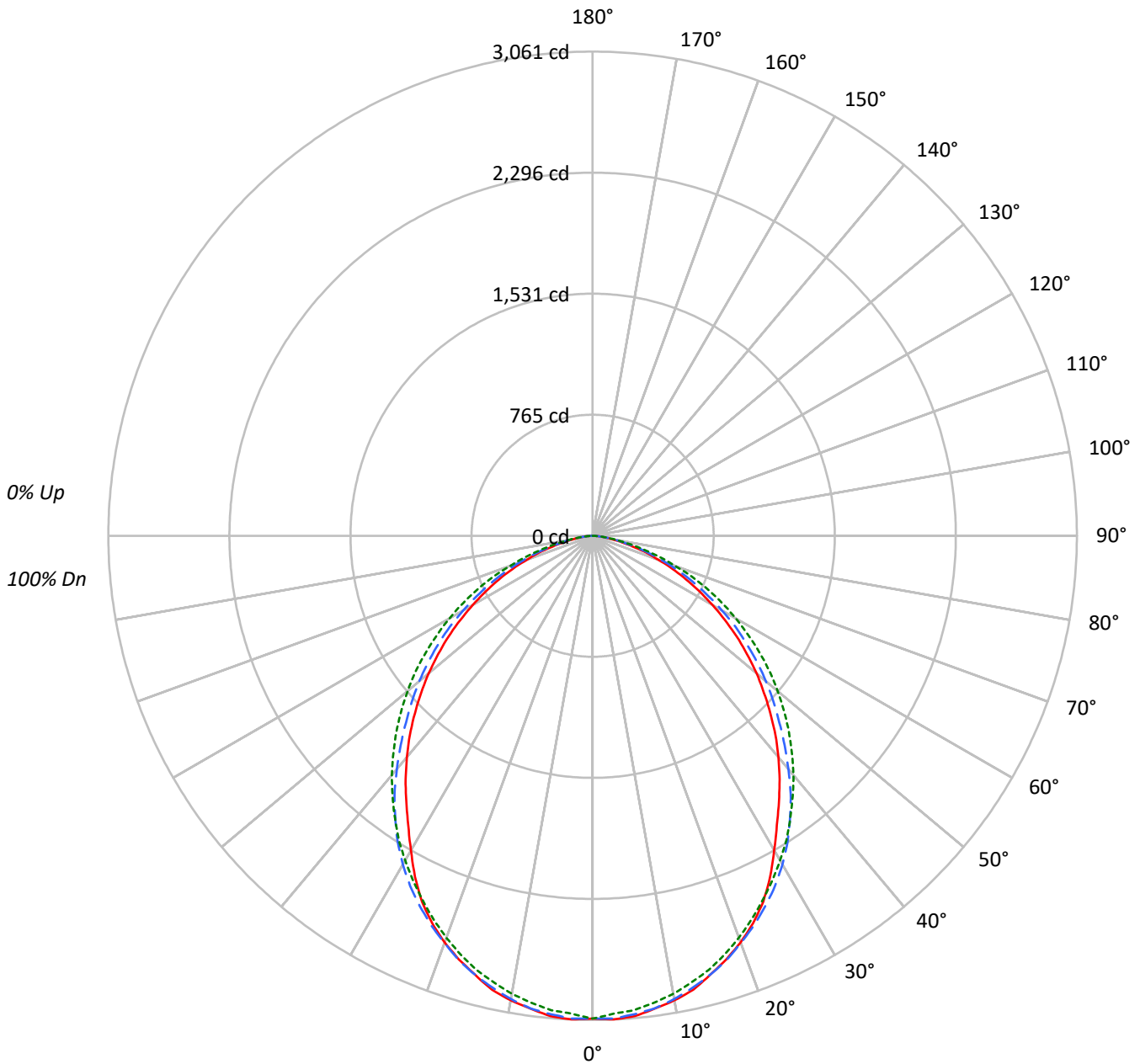
Lumens per Lamp: N/A
Luminaire Lumens: 7058.0 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8214	8214	8214
5°	8236	8201	8131
10°	8148	8126	8033
15°	8004	8004	7913
20°	7834	7844	7744
25°	7576	7670	7549
30°	7134	7455	7364
35°	6741	7146	7158
40°	6414	6760	6937
45°	6047	6350	6676
50°	5660	5984	6392
55°	5221	5567	6046
60°	4702	5081	5623
65°	4152	4518	5115
70°	3460	3847	4345
75°	2719	3072	3402
80°	1945	2162	2399
85°	1266	1266	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.4	4.1
10°-20°	807.4	11.4
20°-30°	1179.8	16.7
30°-40°	1339.2	19.0
40°-50°	1292.8	18.3
50°-60°	1066.5	15.1
60°-70°	710.2	10.1
70°-80°	317.8	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°	2274.6	32.2
0°-40°	3613.8	51.2
0°-60°	5973.1	84.6
0°-90°	7058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7058.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3052	3052	3052	3052	3052	
5°	3049	3048	3036	3020	3010	289
15°	2873	2880	2873	2860	2840	810
25°	2552	2572	2583	2565	2542	1169
35°	2052	2080	2175	2187	2179	1286
45°	1589	1616	1669	1745	1754	1226
55°	1113	1132	1187	1252	1289	993
65°	652	670	710	760	803	646
75°	262	276	296	310	327	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°	3052.4	3052.4	3052.4	3052.4	3052.4
2.5°	3060.6	3061.8	3054.7	3036.0	3024.3
5°	3048.9	3047.7	3036.0	3019.6	3010.2
7.5°	3014.9	3017.2	3013.7	2990.3	2977.4
10°	2982.0	2983.2	2973.8	2955.1	2939.8
12.5°	2939.8	2938.7	2925.8	2916.4	2891.7
15°	2873.0	2880.0	2873.0	2860.1	2840.2
17.5°	2808.5	2808.5	2813.2	2790.9	2775.7
20°	2735.8	2739.3	2739.3	2721.7	2704.1
22.5°	2651.4	2661.9	2665.4	2646.7	2625.6
25°	2551.7	2571.6	2583.3	2564.6	2542.3
27.5°	2430.9	2461.4	2496.6	2482.5	2457.9
30°	2296.0	2340.6	2399.2	2387.5	2369.9
32.5°	2168.2	2212.8	2293.7	2289.0	2279.6
35°	2052.1	2080.3	2175.3	2187.0	2178.8
37.5°	1941.9	1967.7	2056.8	2083.8	2076.8
40°	1825.8	1854.0	1924.3	1972.4	1974.7
42.5°	1710.9	1737.9	1795.3	1864.5	1864.5
45°	1588.9	1615.9	1668.7	1744.9	1754.3
47.5°	1469.3	1497.5	1549.1	1625.3	1640.5
50°	1352.1	1377.9	1429.5	1503.3	1526.8
52.5°	1230.1	1258.3	1308.7	1376.7	1410.7
55°	1112.8	1131.6	1186.7	1252.4	1288.7
57.5°	990.9	1008.5	1070.6	1126.9	1164.4
60°	873.6	895.9	944.0	1001.4	1044.8
62.5°	761.0	784.5	825.5	876.0	925.2
65°	652.0	669.6	709.5	759.9	803.3
67.5°	546.5	561.7	601.6	636.7	682.5
70°	439.7	459.7	489.0	523.0	552.3
72.5°	354.1	362.3	387.0	411.6	442.1
75°	261.5	275.6	295.5	309.6	327.2
77.5°	187.6	195.8	207.6	219.3	235.7
80°	125.5	129.0	139.5	141.9	154.8
82.5°	76.2	78.6	80.9	82.1	86.8
85°	41.0	41.0	41.0	38.7	38.7
87.5°	23.5	23.5	19.9	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)