

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: P556992

Luminaire Tested: **FUSL-12-4-LD4-2HI-35-UNV-81-84-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: P556992
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-LD4-2HI-35-UNV-81-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

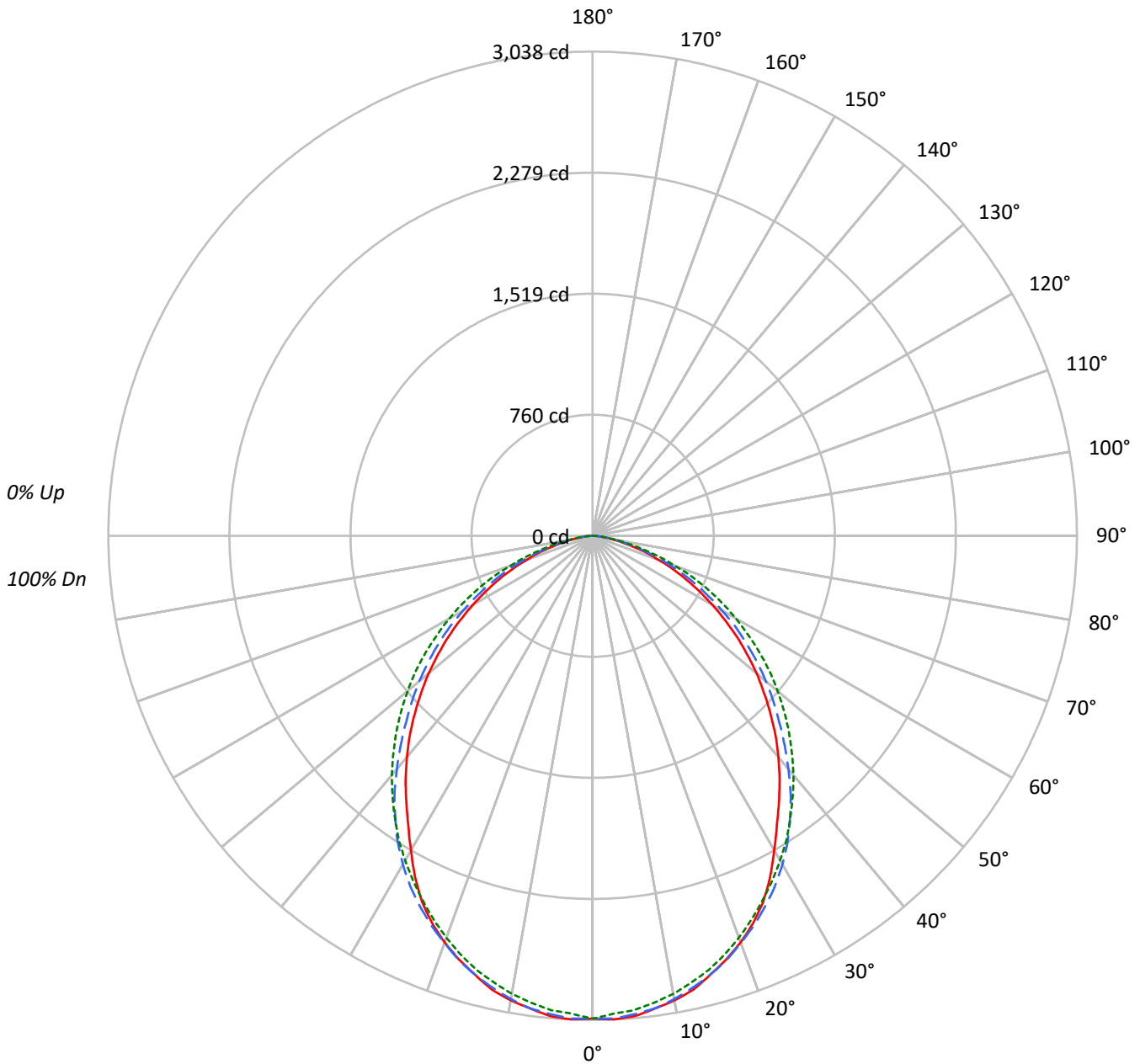
Lumens per Lamp: N/A
Luminaire Lumens: 7005.0 lumens
Efficiency: N/A
Efficacy: 81.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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: P556992

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-81-84-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P556992

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-81-84-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34					34			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8152	8152	8152
5°	8174	8139	8070
10°	8087	8065	7973
15°	7944	7944	7853
20°	7775	7785	7686
25°	7519	7613	7492
30°	7081	7399	7309
35°	6691	7092	7104
40°	6366	6709	6885
45°	6001	6302	6626
50°	5618	5939	6344
55°	5182	5526	6001
60°	4667	5042	5581
65°	4120	4483	5076
70°	3434	3818	4313
75°	2698	3049	3376
80°	1929	2146	2380
85°	1257	1257	1186



TEST NUMBER: P556992

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-81-84-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.2	4.1
10°-20°	801.3	11.4
20°-30°	1171.0	16.7
30°-40°	1329.2	19.0
40°-50°	1283.1	18.3
50°-60°	1058.5	15.1
60°-70°	704.9	10.1
70°-80°	315.4	4.5
80°-90°	56.4	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°	2257.5	32.2
0°-40°	3586.7	51.2
0°-60°	5928.3	84.6
0°-90°	7005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7005.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3030	3030	3030	3030	3030	
5°	3026	3025	3013	2997	2988	286
15°	2851	2858	2851	2839	2819	804
25°	2532	2552	2564	2545	2523	1160
35°	2037	2065	2159	2171	2162	1276
45°	1577	1604	1656	1732	1741	1217
55°	1104	1123	1178	1243	1279	986
65°	647	665	704	754	797	642
75°	260	274	293	307	325	284
85°	41	41	41	38	38	55
90°	0	0	0	0	0	



TEST NUMBER: P556992

CATALOG NUMBER: FUSL-12-4-LD4-2HI-35-UNV-81-84-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3029.5	3029.5	3029.5	3029.5	3029.5
2.5°	3037.6	3038.8	3031.8	3013.2	3001.5
5°	3026.0	3024.8	3013.2	2996.9	2987.6
7.5°	2992.2	2994.6	2991.1	2967.8	2955.0
10°	2959.7	2960.8	2951.5	2932.9	2917.8
12.5°	2917.8	2916.6	2903.8	2894.5	2870.0
15°	2851.4	2858.4	2851.4	2838.6	2818.8
17.5°	2787.4	2787.4	2792.1	2769.9	2754.8
20°	2715.2	2718.7	2718.7	2701.3	2683.8
22.5°	2631.4	2641.9	2645.4	2626.8	2605.8
25°	2532.5	2552.3	2563.9	2545.3	2523.2
27.5°	2412.6	2442.9	2477.8	2463.9	2439.4
30°	2278.8	2323.0	2381.2	2369.6	2352.1
32.5°	2151.9	2196.2	2276.5	2271.8	2262.5
35°	2036.7	2064.7	2158.9	2170.6	2162.4
37.5°	1927.3	1952.9	2041.4	2068.1	2061.2
40°	1812.1	1840.0	1909.9	1957.6	1959.9
42.5°	1698.0	1724.8	1781.8	1850.5	1850.5
45°	1577.0	1603.8	1656.1	1731.8	1741.1
47.5°	1458.3	1486.2	1537.4	1613.1	1628.2
50°	1341.9	1367.5	1418.7	1492.0	1515.3
52.5°	1220.9	1248.8	1298.8	1366.4	1400.1
55°	1104.5	1123.1	1177.8	1243.0	1279.1
57.5°	983.4	1000.9	1062.6	1118.5	1155.7
60°	867.1	889.2	936.9	993.9	1037.0
62.5°	755.3	778.6	819.3	869.4	918.3
65°	647.1	664.6	704.1	754.2	797.2
67.5°	542.4	557.5	597.1	632.0	677.4
70°	436.4	456.2	485.3	519.1	548.2
72.5°	351.5	359.6	384.1	408.5	438.8
75°	259.5	273.5	293.3	307.3	324.7
77.5°	186.2	194.4	206.0	217.6	233.9
80°	124.5	128.0	138.5	140.8	153.6
82.5°	75.6	78.0	80.3	81.5	86.1
85°	40.7	40.7	40.7	38.4	38.4
87.5°	23.3	23.3	19.8	16.3	11.6
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)