

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: P557505

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-UNV-81-84-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: P557505
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-35-UNV-81-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

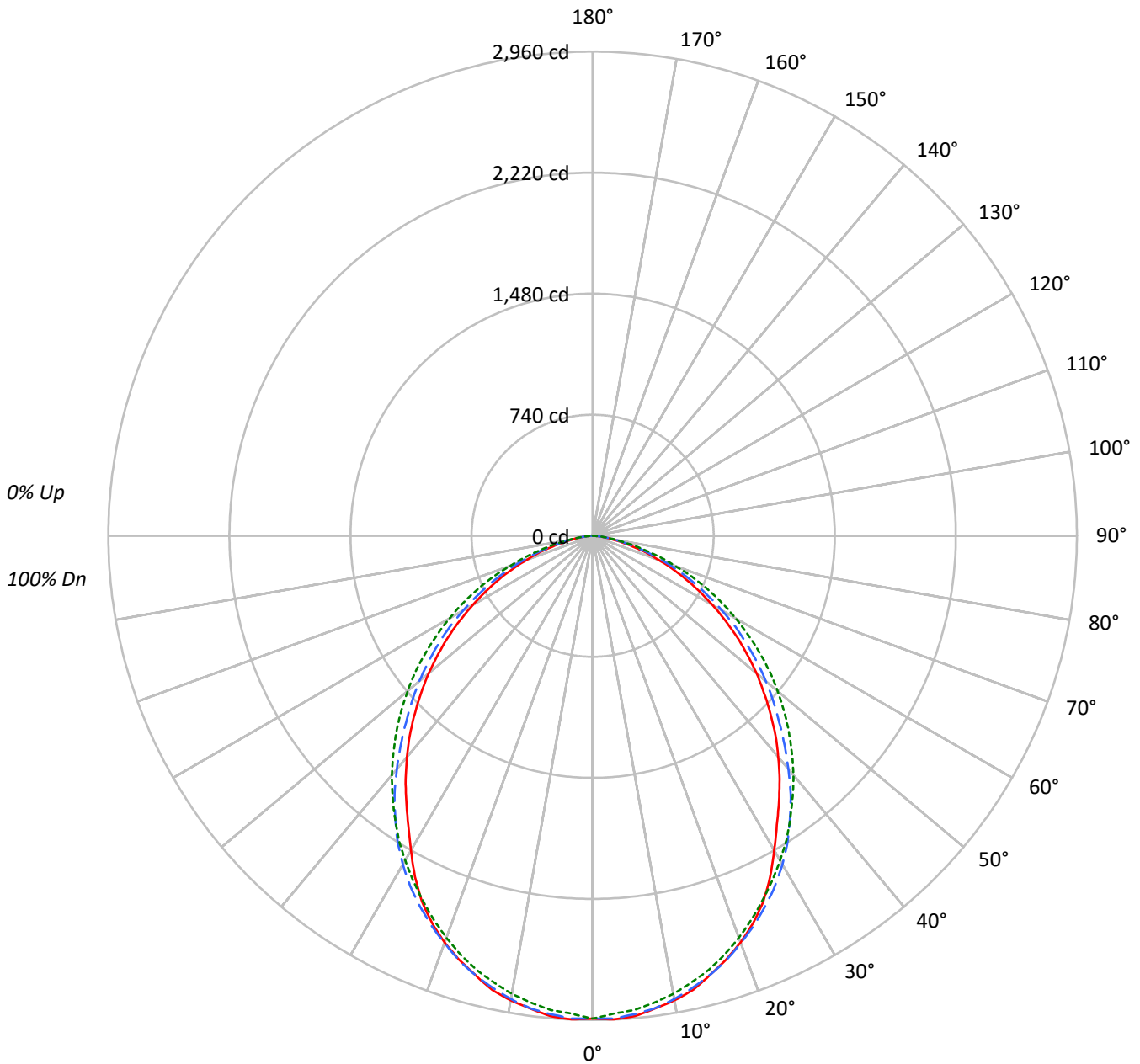
Lumens per Lamp: N/A
Luminaire Lumens: 6825.0 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P557505

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

Luminous Intensity Polar Plot





TEST NUMBER: P557505

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

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°	7943	7943	7943
5°	7964	7930	7863
10°	7879	7858	7768
15°	7740	7740	7651
20°	7576	7586	7488
25°	7326	7417	7299
30°	6899	7209	7121
35°	6519	6910	6921
40°	6202	6537	6708
45°	5847	6141	6456
50°	5473	5787	6181
55°	5049	5384	5847
60°	4547	4913	5437
65°	4015	4368	4946
70°	3345	3721	4202
75°	2629	2972	3290
80°	1880	2091	2320
85°	1226	1226	1155



TEST NUMBER: P557505

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.9	4.1
10°-20°	780.7	11.4
20°-30°	1140.9	16.7
30°-40°	1295.0	19.0
40°-50°	1250.2	18.3
50°-60°	1031.3	15.1
60°-70°	686.8	10.1
70°-80°	307.3	4.5
80°-90°	55.0	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°	2199.5	32.2
0°-40°	3494.5	51.2
0°-60°	5775.9	84.6
0°-90°	6825.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6825.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2952	2952	2952	2952	2952	
5°	2948	2947	2936	2920	2911	279
15°	2778	2785	2778	2766	2746	783
25°	2467	2487	2498	2480	2458	1130
35°	1984	2012	2104	2115	2107	1243
45°	1536	1563	1614	1687	1696	1185
55°	1076	1094	1148	1211	1246	960
65°	630	648	686	735	777	625
75°	253	266	286	299	316	276
85°	40	40	40	37	37	54
90°	0	0	0	0	0	



TEST NUMBER: P557505

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2951.6	2951.6	2951.6	2951.6	2951.6
2.5°	2959.6	2960.7	2953.9	2935.8	2924.4
5°	2948.2	2947.1	2935.8	2919.9	2910.8
7.5°	2915.4	2917.6	2914.2	2891.5	2879.1
10°	2883.6	2884.7	2875.7	2857.5	2842.8
12.5°	2842.8	2841.6	2829.2	2820.1	2796.3
15°	2778.1	2784.9	2778.1	2765.7	2746.4
17.5°	2715.8	2715.8	2720.3	2698.8	2684.0
20°	2645.5	2648.9	2648.9	2631.9	2614.9
22.5°	2563.8	2574.0	2577.4	2559.3	2538.9
25°	2467.4	2486.7	2498.1	2479.9	2458.4
27.5°	2350.6	2380.1	2414.2	2400.5	2376.7
30°	2220.2	2263.3	2320.0	2308.7	2291.7
32.5°	2096.6	2139.7	2218.0	2213.4	2204.4
35°	1984.4	2011.6	2103.5	2114.8	2106.9
37.5°	1877.8	1902.7	1988.9	2015.0	2008.2
40°	1765.5	1792.8	1860.8	1907.3	1909.5
42.5°	1654.4	1680.5	1736.1	1803.0	1803.0
45°	1536.5	1562.6	1613.6	1687.3	1696.4
47.5°	1420.8	1448.0	1497.9	1571.6	1586.4
50°	1307.4	1332.4	1382.3	1453.7	1476.4
52.5°	1189.5	1216.7	1265.5	1331.2	1364.1
55°	1076.1	1094.2	1147.5	1211.0	1246.2
57.5°	958.2	975.2	1035.3	1089.7	1126.0
60°	844.8	866.3	912.8	968.4	1010.3
62.5°	735.9	758.6	798.3	847.1	894.7
65°	630.5	647.5	686.0	734.8	776.7
67.5°	528.4	543.2	581.7	615.7	660.0
70°	425.2	444.5	472.9	505.7	534.1
72.5°	342.4	350.4	374.2	398.0	427.5
75°	252.9	266.5	285.8	299.4	316.4
77.5°	181.4	189.4	200.7	212.0	227.9
80°	121.3	124.7	134.9	137.2	149.7
82.5°	73.7	76.0	78.2	79.4	83.9
85°	39.7	39.7	39.7	37.4	37.4
87.5°	22.7	22.7	19.3	15.9	11.3
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)