

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: P557665

Luminaire Tested: **FUSL-12-4-LD4-2STD-50-UNV-93-84-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: P557665
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-93-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

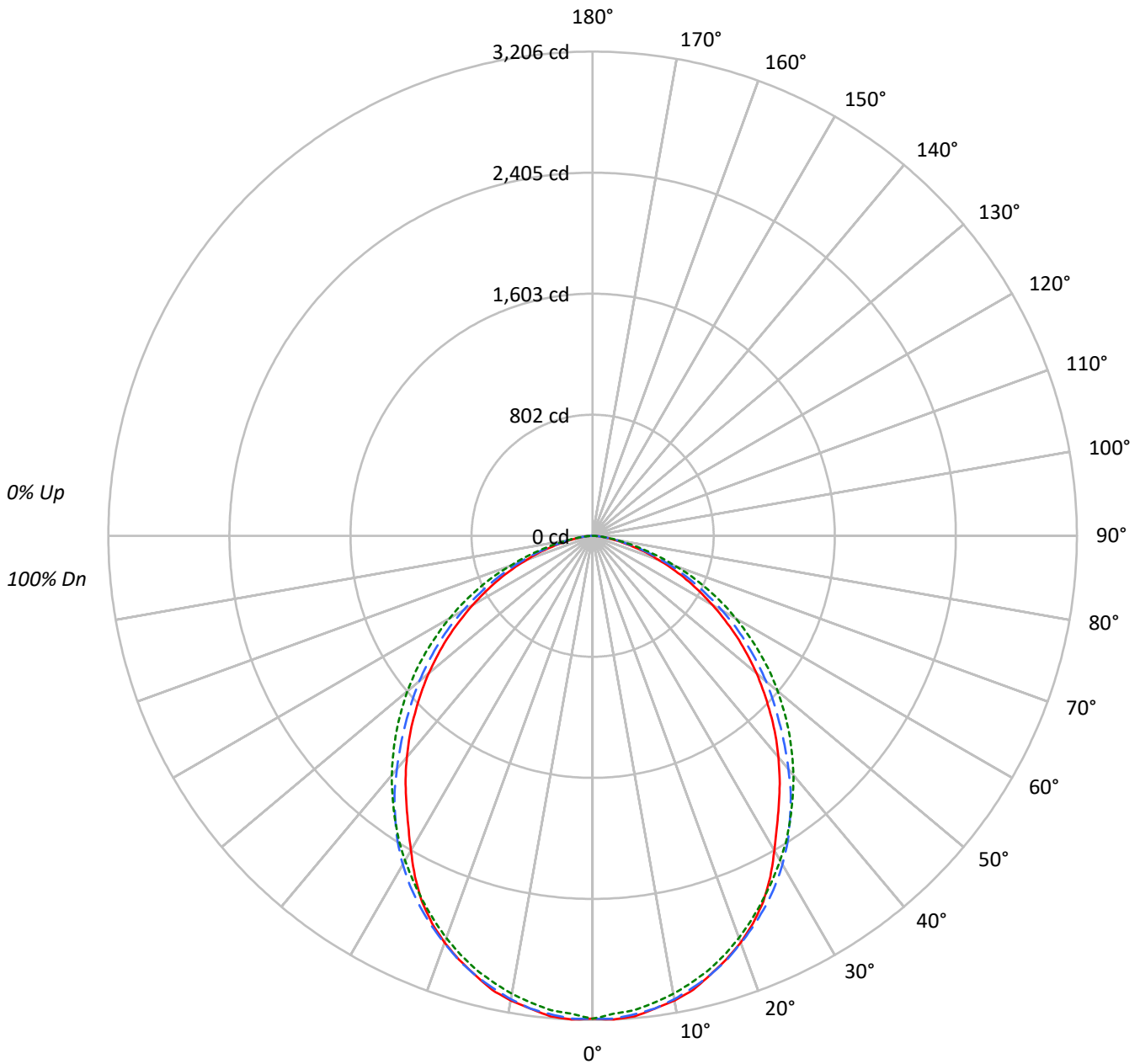
Lumens per Lamp: N/A
Luminaire Lumens: 7394.0 lumens
Efficiency: N/A
Efficacy: 111.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
Input Voltage (V): NR
Input Current (A_{in}): 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: P557665

CATALOG NUMBER: FUSL-12-4-LD4-2STD-50-UNV-93-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557665

CATALOG NUMBER: FUSL-12-4-LD4-2STD-50-UNV-93-84-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°	8605	8605	8605
5°	8628	8591	8518
10°	8536	8513	8416
15°	8385	8385	8289
20°	8207	8218	8113
25°	7937	8035	7908
30°	7474	7810	7714
35°	7062	7486	7498
40°	6719	7082	7267
45°	6335	6653	6994
50°	5930	6269	6696
55°	5469	5833	6334
60°	4926	5322	5891
65°	4349	4732	5358
70°	3625	4031	4552
75°	2848	3219	3563
80°	2036	2266	2514
85°	1328	1328	1250



TEST NUMBER: P557665

CATALOG NUMBER: FUSL-12-4-LD4-2STD-50-UNV-93-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.1	4.1
10°-20°	845.8	11.4
20°-30°	1236.0	16.7
30°-40°	1403.0	19.0
40°-50°	1354.4	18.3
50°-60°	1117.3	15.1
60°-70°	744.0	10.1
70°-80°	332.9	4.5
80°-90°	59.6	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°	2382.9	32.2
0°-40°	3785.9	51.2
0°-60°	6257.5	84.6
0°-90°	7394.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7394.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3198	3198	3198	3198	3198	
5°	3194	3193	3180	3163	3154	302
15°	3010	3017	3010	2996	2975	848
25°	2673	2694	2706	2687	2663	1224
35°	2150	2179	2279	2291	2282	1347
45°	1665	1693	1748	1828	1838	1284
55°	1166	1186	1243	1312	1350	1041
65°	683	702	743	796	842	677
75°	274	289	310	324	343	300
85°	43	43	43	40	40	58
90°	0	0	0	0	0	



TEST NUMBER: P557665

CATALOG NUMBER: FUSL-12-4-LD4-2STD-50-UNV-93-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3197.7	3197.7	3197.7	3197.7	3197.7
2.5°	3206.3	3207.5	3200.2	3180.5	3168.2
5°	3194.0	3192.8	3180.5	3163.3	3153.5
7.5°	3158.4	3160.9	3157.2	3132.6	3119.1
10°	3124.0	3125.2	3115.4	3095.8	3079.8
12.5°	3079.8	3078.6	3065.0	3055.2	3029.4
15°	3009.8	3017.1	3009.8	2996.2	2975.4
17.5°	2942.2	2942.2	2947.1	2923.8	2907.8
20°	2866.0	2869.7	2869.7	2851.3	2832.9
22.5°	2777.6	2788.6	2792.3	2772.7	2750.6
25°	2673.2	2694.0	2706.3	2686.7	2663.3
27.5°	2546.6	2578.6	2615.4	2600.7	2574.9
30°	2405.3	2452.0	2513.5	2501.2	2482.7
32.5°	2271.4	2318.1	2402.9	2398.0	2388.2
35°	2149.8	2179.3	2278.8	2291.1	2282.5
37.5°	2034.4	2061.4	2154.7	2183.0	2175.6
40°	1912.7	1942.2	2015.9	2066.3	2068.7
42.5°	1792.3	1820.6	1880.8	1953.3	1953.3
45°	1664.6	1692.8	1748.1	1828.0	1837.8
47.5°	1539.3	1568.8	1622.8	1702.7	1718.6
50°	1416.4	1443.5	1497.5	1574.9	1599.5
52.5°	1288.7	1318.2	1371.0	1442.2	1477.9
55°	1165.8	1185.5	1243.2	1312.0	1350.1
57.5°	1038.1	1056.5	1121.6	1180.6	1219.9
60°	915.2	938.6	988.9	1049.1	1094.6
62.5°	797.3	821.8	864.8	917.7	969.3
65°	683.0	701.5	743.2	796.1	841.5
67.5°	572.5	588.4	630.2	667.1	715.0
70°	460.7	481.6	512.3	547.9	578.6
72.5°	371.0	379.6	405.4	431.2	463.1
75°	273.9	288.7	309.6	324.3	342.7
77.5°	196.6	205.2	217.4	229.7	246.9
80°	131.4	135.1	146.2	148.6	162.2
82.5°	79.9	82.3	84.8	86.0	90.9
85°	43.0	43.0	43.0	40.5	40.5
87.5°	24.6	24.6	20.9	17.2	12.3
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)