

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: P557139

Luminaire Tested: **FUSL-12-4-LD4-2HI-50-UNV-82-85-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: P557139
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-50-UNV-82-85-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

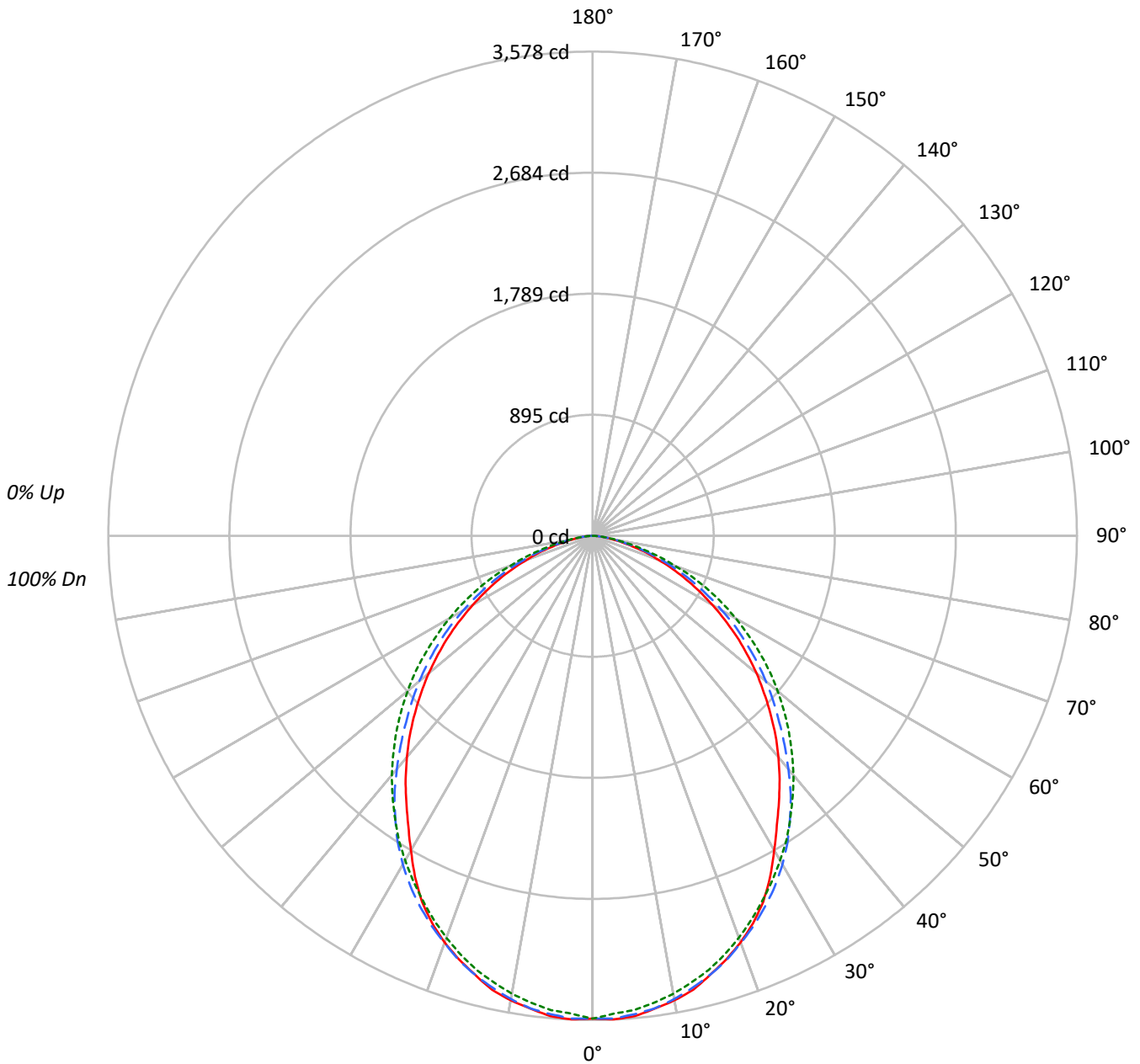
Lumens per Lamp: N/A
Luminaire Lumens: 8250.0 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P557139

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-82-85-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P557139

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-82-85-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°	9601	9601	9601
5°	9627	9586	9505
10°	9525	9498	9390
15°	9356	9356	9249
20°	9157	9169	9052
25°	8856	8966	8823
30°	8339	8714	8608
35°	7880	8353	8366
40°	7497	7901	8108
45°	7068	7423	7804
50°	6616	6995	7471
55°	6103	6508	7067
60°	5496	5938	6573
65°	4853	5280	5978
70°	4044	4497	5080
75°	3178	3591	3976
80°	2273	2528	2803
85°	1482	1482	1396



TEST NUMBER: P557139

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-82-85-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.9	4.1
10°-20°	943.7	11.4
20°-30°	1379.1	16.7
30°-40°	1565.4	19.0
40°-50°	1511.2	18.3
50°-60°	1246.6	15.1
60°-70°	830.1	10.1
70°-80°	371.5	4.5
80°-90°	66.5	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°	2658.7	32.2
0°-40°	4224.1	51.2
0°-60°	6981.9	84.6
0°-90°	8250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3568	3568	3568	3568	3568	
5°	3564	3562	3549	3530	3519	337
15°	3358	3366	3358	3343	3320	947
25°	2983	3006	3020	2998	2972	1366
35°	2399	2432	2543	2556	2547	1503
45°	1857	1889	1950	2040	2051	1433
55°	1301	1323	1387	1464	1506	1161
65°	762	783	829	888	939	756
75°	306	322	345	362	382	334
85°	48	48	48	45	45	65
90°	0	0	0	0	0	



TEST NUMBER: P557139

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-82-85-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3567.9	3567.9	3567.9	3567.9	3567.9
2.5°	3577.5	3578.9	3570.7	3548.7	3535.0
5°	3563.8	3562.4	3548.7	3529.5	3518.6
7.5°	3524.0	3526.8	3522.7	3495.3	3480.2
10°	3485.7	3487.0	3476.1	3454.1	3436.3
12.5°	3436.3	3435.0	3419.9	3408.9	3380.1
15°	3358.2	3366.4	3358.2	3343.1	3319.8
17.5°	3282.8	3282.8	3288.3	3262.2	3244.4
20°	3197.8	3201.9	3201.9	3181.4	3160.8
22.5°	3099.1	3111.5	3115.6	3093.7	3069.0
25°	2982.6	3005.9	3019.6	2997.7	2971.7
27.5°	2841.4	2877.1	2918.2	2901.8	2873.0
30°	2683.8	2735.9	2804.4	2790.7	2770.2
32.5°	2534.4	2586.5	2681.1	2675.6	2664.6
35°	2398.7	2431.6	2542.6	2556.3	2546.7
37.5°	2269.9	2300.0	2404.2	2435.7	2427.5
40°	2134.2	2167.1	2249.3	2305.5	2308.2
42.5°	1999.8	2031.4	2098.5	2179.4	2179.4
45°	1857.3	1888.8	1950.5	2039.6	2050.6
47.5°	1717.5	1750.4	1810.7	1899.8	1917.6
50°	1580.4	1610.6	1670.9	1757.2	1784.6
52.5°	1437.9	1470.8	1529.7	1609.2	1648.9
55°	1300.8	1322.7	1387.1	1463.9	1506.4
57.5°	1158.2	1178.8	1251.4	1317.2	1361.1
60°	1021.2	1047.2	1103.4	1170.6	1221.3
62.5°	889.6	917.0	965.0	1023.9	1081.5
65°	762.1	782.7	829.3	888.2	938.9
67.5°	638.7	656.6	703.2	744.3	797.7
70°	514.0	537.3	571.6	611.3	645.6
72.5°	413.9	423.5	452.3	481.1	516.8
75°	305.7	322.1	345.4	361.9	382.4
77.5°	219.3	228.9	242.6	256.3	275.5
80°	146.7	150.8	163.1	165.9	180.9
82.5°	89.1	91.8	94.6	95.9	101.4
85°	48.0	48.0	48.0	45.2	45.2
87.5°	27.4	27.4	23.3	19.2	13.7
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)