

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: P558273

Luminaire Tested: **FUSL-12-4-LD4-3STD-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: P558273
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-LD4-3STD-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

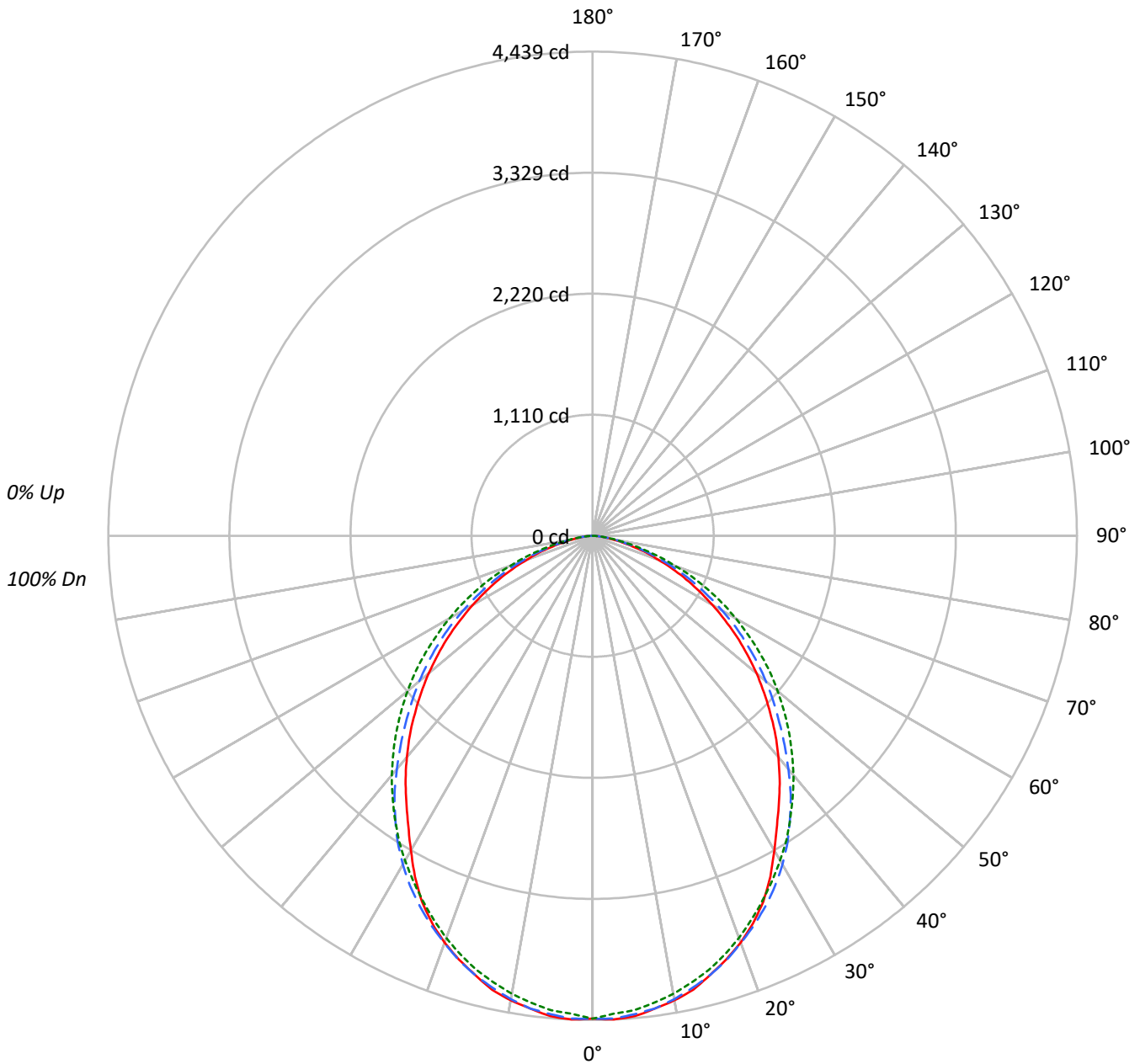
Lumens per Lamp: N/A
Luminaire Lumens: 10237.0 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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: P558273

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-81-84-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558273

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-81-84-EDD

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°	11914	11914	11914
5°	11945	11895	11794
10°	11819	11786	11651
15°	11609	11609	11476
20°	11363	11378	11232
25°	10989	11125	10949
30°	10348	10813	10681
35°	9778	10364	10381
40°	9303	9804	10061
45°	8770	9211	9683
50°	8210	8680	9271
55°	7573	8075	8769
60°	6819	7369	8156
65°	6022	6552	7419
70°	5018	5580	6303
75°	3944	4456	4933
80°	2820	3137	3479
85°	1837	1837	1732



TEST NUMBER: P558273

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-81-84-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	416.8	4.1
10°-20°	1171.0	11.4
20°-30°	1711.2	16.7
30°-40°	1942.4	19.0
40°-50°	1875.1	18.3
50°-60°	1546.9	15.1
60°-70°	1030.1	10.1
70°-80°	460.9	4.5
80°-90°	82.5	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°	3299.1	32.2
0°-40°	5241.5	51.2
0°-60°	8663.5	84.6
0°-90°	10237.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10237.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4427	4427	4427	4427	4427	
5°	4422	4420	4403	4380	4366	419
15°	4167	4177	4167	4148	4119	1175
25°	3701	3730	3747	3720	3687	1695
35°	2976	3017	3155	3172	3160	1865
45°	2305	2344	2420	2531	2544	1778
55°	1614	1641	1721	1816	1869	1441
65°	946	971	1029	1102	1165	938
75°	379	400	429	449	474	415
85°	60	60	60	56	56	80
90°	0	0	0	0	0	



TEST NUMBER: P558273

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-81-84-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4427.2	4427.2	4427.2	4427.2	4427.2
2.5°	4439.1	4440.8	4430.6	4403.4	4386.4
5°	4422.1	4420.4	4403.4	4379.6	4366.0
7.5°	4372.8	4376.2	4371.1	4337.1	4318.4
10°	4325.2	4326.9	4313.3	4286.1	4264.0
12.5°	4264.0	4262.3	4243.5	4229.9	4194.2
15°	4167.0	4177.2	4167.0	4148.3	4119.4
17.5°	4073.5	4073.5	4080.3	4048.0	4025.8
20°	3968.0	3973.1	3973.1	3947.6	3922.1
22.5°	3845.6	3860.9	3866.0	3838.8	3808.1
25°	3701.0	3729.9	3746.9	3719.7	3687.4
27.5°	3525.8	3570.0	3621.0	3600.6	3564.9
30°	3330.2	3394.8	3479.9	3462.9	3437.4
32.5°	3144.8	3209.4	3326.8	3320.0	3306.4
35°	2976.4	3017.3	3155.0	3172.0	3160.1
37.5°	2816.6	2854.0	2983.2	3022.4	3012.2
40°	2648.2	2689.0	2791.0	2860.8	2864.2
42.5°	2481.5	2520.6	2604.0	2704.3	2704.3
45°	2304.6	2343.7	2420.3	2530.8	2544.4
47.5°	2131.1	2171.9	2246.8	2357.3	2379.4
50°	1961.0	1998.5	2073.3	2180.5	2214.5
52.5°	1784.2	1825.0	1898.1	1996.8	2046.1
55°	1614.1	1641.3	1721.2	1816.5	1869.2
57.5°	1437.2	1462.7	1552.8	1634.5	1688.9
60°	1267.1	1299.4	1369.2	1452.5	1515.4
62.5°	1103.8	1137.8	1197.4	1270.5	1341.9
65°	945.7	971.2	1029.0	1102.1	1165.1
67.5°	792.6	814.7	872.5	923.5	989.9
70°	637.8	666.7	709.2	758.6	801.1
72.5°	513.6	525.6	561.3	597.0	641.2
75°	379.3	399.7	428.6	449.0	474.5
77.5°	272.1	284.0	301.0	318.1	341.9
80°	182.0	187.1	202.4	205.8	224.5
82.5°	110.6	114.0	117.4	119.1	125.9
85°	59.5	59.5	59.5	56.1	56.1
87.5°	34.0	34.0	28.9	23.8	17.0
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)