

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: P558270

Luminaire Tested: **FUSL-12-4-LD4-3STD-35-UNV-80-97-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: P558270
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-80-97-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND
3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

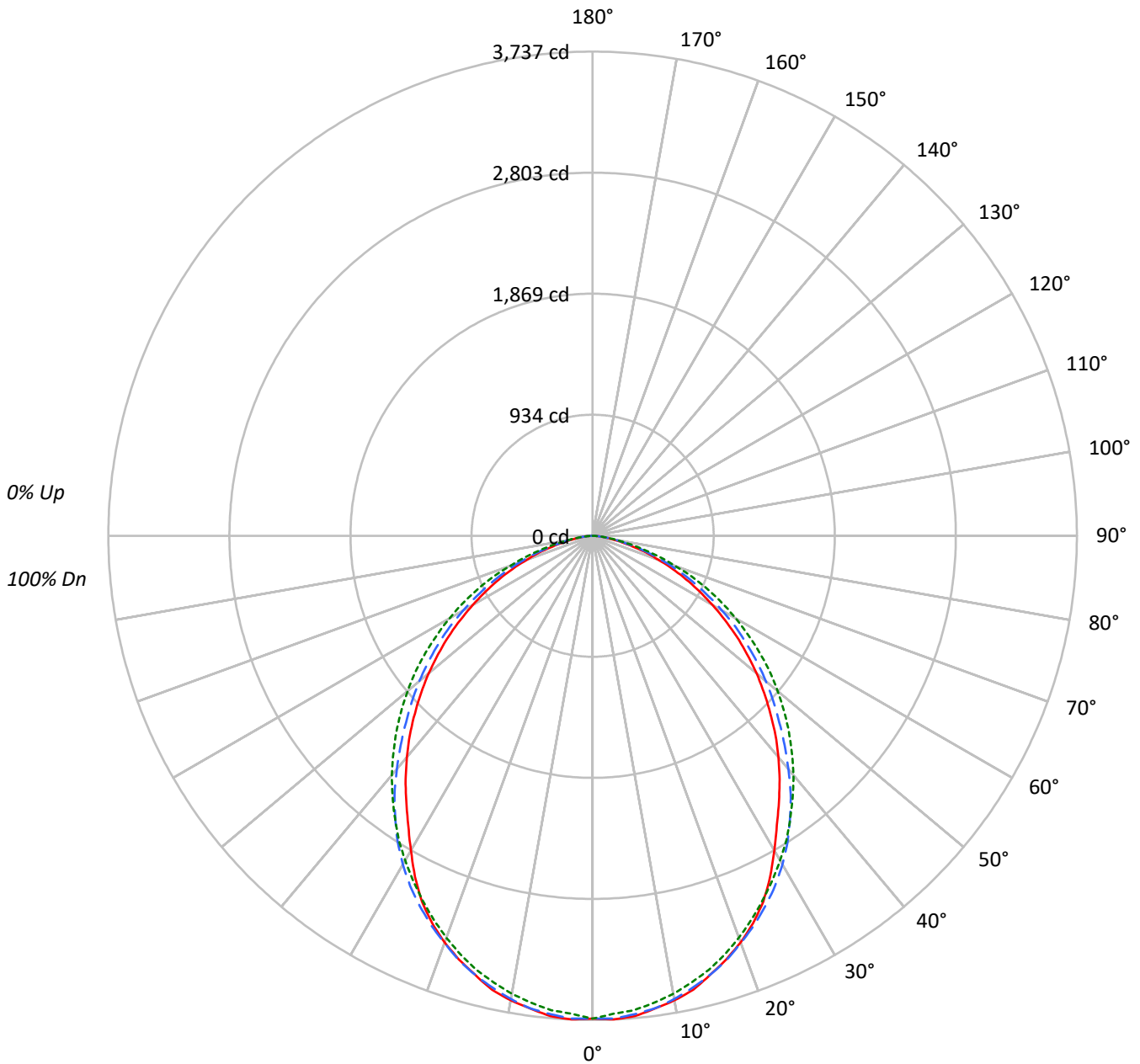
Lumens per Lamp: N/A
Luminaire Lumens: 8617.0 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
Input Current (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: P558270

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-80-97-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558270

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-80-97-EDD-90

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°	10028	10028	10028
5°	10055	10012	9927
10°	9948	9921	9807
15°	9772	9772	9660
20°	9565	9577	9454
25°	9250	9365	9216
30°	8710	9102	8991
35°	8230	8724	8738
40°	7830	8253	8469
45°	7383	7753	8151
50°	6911	7306	7803
55°	6374	6797	7382
60°	5740	6203	6865
65°	5068	5515	6245
70°	4224	4697	5305
75°	3320	3751	4153
80°	2374	2641	2929
85°	1547	1547	1457



TEST NUMBER: P558270

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-80-97-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.9	4.1
10°-20°	985.7	11.4
20°-30°	1440.4	16.7
30°-40°	1635.1	19.0
40°-50°	1578.4	18.3
50°-60°	1302.1	15.1
60°-70°	867.1	10.1
70°-80°	388.0	4.5
80°-90°	69.4	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°	2777.0	32.2
0°-40°	4412.1	51.2
0°-60°	7292.5	84.6
0°-90°	8617.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8617.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3727	3727	3727	3727	3727	
5°	3722	3721	3707	3686	3675	352
15°	3508	3516	3508	3492	3468	989
25°	3115	3140	3154	3131	3104	1427
35°	2505	2540	2656	2670	2660	1570
45°	1940	1973	2037	2130	2142	1497
55°	1359	1382	1449	1529	1573	1213
65°	796	818	866	928	981	789
75°	319	336	361	378	399	349
85°	50	50	50	47	47	68
90°	0	0	0	0	0	



TEST NUMBER: P558270

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-80-97-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3726.6	3726.6	3726.6	3726.6	3726.6
2.5°	3736.7	3738.1	3729.5	3706.6	3692.3
5°	3722.3	3720.9	3706.6	3686.5	3675.1
7.5°	3680.8	3683.7	3679.4	3650.8	3635.0
10°	3640.7	3642.2	3630.7	3607.8	3589.2
12.5°	3589.2	3587.8	3572.0	3560.6	3530.5
15°	3507.6	3516.2	3507.6	3491.8	3467.5
17.5°	3428.8	3428.8	3434.6	3407.4	3388.8
20°	3340.1	3344.4	3344.4	3322.9	3301.4
22.5°	3237.0	3249.9	3254.2	3231.3	3205.5
25°	3115.3	3139.6	3154.0	3131.1	3103.9
27.5°	2967.8	3005.1	3048.0	3030.8	3000.8
30°	2803.2	2857.6	2929.2	2914.9	2893.4
32.5°	2647.2	2701.6	2800.3	2794.6	2783.2
35°	2505.4	2539.8	2655.7	2670.1	2660.0
37.5°	2370.8	2402.3	2511.1	2544.1	2535.5
40°	2229.1	2263.5	2349.4	2408.1	2410.9
42.5°	2088.8	2121.7	2191.9	2276.4	2276.4
45°	1939.9	1972.8	2037.3	2130.3	2141.8
47.5°	1793.9	1828.2	1891.2	1984.3	2002.9
50°	1650.7	1682.2	1745.2	1835.4	1864.0
52.5°	1501.8	1536.2	1597.7	1680.8	1722.3
55°	1358.7	1381.6	1448.8	1529.0	1573.4
57.5°	1209.8	1231.2	1307.1	1375.8	1421.6
60°	1066.6	1093.8	1152.5	1222.6	1275.6
62.5°	929.2	957.8	1007.9	1069.5	1129.6
65°	796.0	817.5	866.2	927.7	980.7
67.5°	667.2	685.8	734.4	777.4	833.2
70°	536.9	561.2	597.0	638.5	674.3
72.5°	432.4	442.4	472.5	502.5	539.7
75°	319.3	336.4	360.8	378.0	399.4
77.5°	229.1	239.1	253.4	267.7	287.8
80°	153.2	157.5	170.4	173.2	189.0
82.5°	93.1	95.9	98.8	100.2	105.9
85°	50.1	50.1	50.1	47.2	47.2
87.5°	28.6	28.6	24.3	20.0	14.3
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)