

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: P558325

Luminaire Tested: **FUSL-12-4-LD4-3STD-40-UNV-80-86-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: P558325
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-40-UNV-80-86-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

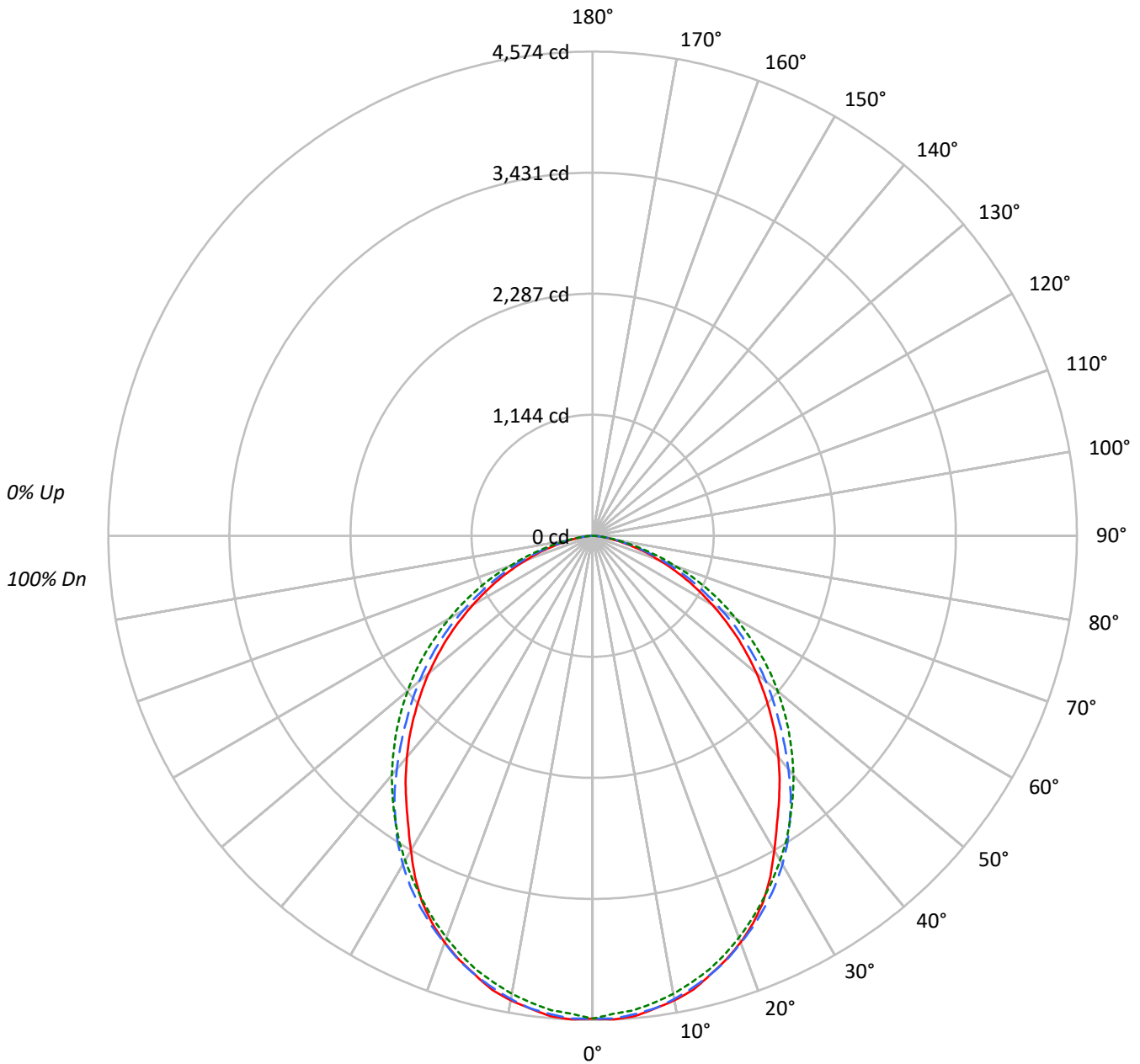
Lumens per Lamp: N/A
Luminaire Lumens: 10547.0 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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: P558325

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-86-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P558325

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-86-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°	12274	12274	12274
5°	12307	12255	12151
10°	12177	12143	12004
15°	11960	11960	11824
20°	11707	11722	11572
25°	11322	11462	11280
30°	10661	11141	11004
35°	10074	10678	10696
40°	9584	10101	10366
45°	9036	9490	9976
50°	8458	8943	9551
55°	7802	8320	9035
60°	7026	7592	8403
65°	6204	6751	7643
70°	5170	5749	6493
75°	4063	4591	5083
80°	2906	3231	3584
85°	1893	1893	1785



TEST NUMBER: P558325

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-86-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	429.5	4.1
10°-20°	1206.5	11.4
20°-30°	1763.1	16.7
30°-40°	2001.3	19.0
40°-50°	1931.9	18.3
50°-60°	1593.7	15.1
60°-70°	1061.3	10.1
70°-80°	474.9	4.5
80°-90°	84.9	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°	3399.0	32.2
0°-40°	5400.3	51.2
0°-60°	8925.9	84.6
0°-90°	10547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10547.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4561	4561	4561	4561	4561	
5°	4556	4554	4537	4512	4498	431
15°	4293	4304	4293	4274	4244	1210
25°	3813	3843	3860	3832	3799	1746
35°	3067	3109	3251	3268	3256	1921
45°	2374	2415	2494	2608	2622	1832
55°	1663	1691	1773	1872	1926	1484
65°	974	1001	1060	1136	1200	966
75°	391	412	442	463	489	427
85°	61	61	61	58	58	83
90°	0	0	0	0	0	



TEST NUMBER: P558325

CATALOG NUMBER: FUSL-12-4-LD4-3STD-40-UNV-80-86-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4561.3	4561.3	4561.3	4561.3	4561.3
2.5°	4573.6	4575.3	4564.8	4536.8	4519.2
5°	4556.0	4554.3	4536.8	4512.2	4498.2
7.5°	4505.2	4508.7	4503.5	4468.4	4449.2
10°	4456.2	4457.9	4443.9	4415.9	4393.1
12.5°	4393.1	4391.3	4372.1	4358.0	4321.2
15°	4293.2	4303.7	4293.2	4273.9	4244.1
17.5°	4196.8	4196.8	4203.8	4170.5	4147.8
20°	4088.2	4093.4	4093.4	4067.1	4040.9
22.5°	3962.0	3977.8	3983.0	3955.0	3923.5
25°	3813.1	3842.9	3860.4	3832.3	3799.0
27.5°	3632.6	3678.1	3730.7	3709.7	3672.9
30°	3431.1	3497.6	3585.3	3567.7	3541.5
32.5°	3240.1	3306.6	3427.6	3420.5	3406.5
35°	3066.6	3108.6	3250.6	3268.1	3255.8
37.5°	2901.9	2940.4	3073.6	3113.9	3103.4
40°	2728.4	2770.4	2875.6	2947.4	2950.9
42.5°	2556.6	2596.9	2682.8	2786.2	2786.2
45°	2374.4	2414.7	2493.6	2607.5	2621.5
47.5°	2195.7	2237.7	2314.8	2428.7	2451.5
50°	2020.4	2059.0	2136.1	2246.5	2281.5
52.5°	1838.2	1880.2	1955.6	2057.2	2108.0
55°	1663.0	1691.0	1773.4	1871.5	1925.8
57.5°	1480.7	1507.0	1599.9	1684.0	1740.1
60°	1305.5	1338.8	1410.6	1496.5	1561.3
62.5°	1137.3	1172.3	1233.6	1309.0	1382.6
65°	974.3	1000.6	1060.2	1135.5	1200.3
67.5°	816.6	839.4	898.9	951.5	1019.9
70°	657.1	686.9	730.7	781.5	825.3
72.5°	529.2	541.5	578.3	615.1	660.6
75°	390.8	411.8	441.6	462.6	488.9
77.5°	280.4	292.6	310.2	327.7	352.2
80°	187.5	192.8	208.5	212.0	231.3
82.5°	113.9	117.4	120.9	122.7	129.7
85°	61.3	61.3	61.3	57.8	57.8
87.5°	35.0	35.0	29.8	24.5	17.5
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)