

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: P558292

Luminaire Tested: **FUSL-12-4-LD4-3STD-35-UNV-82-86-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: P558292
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-82-86-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

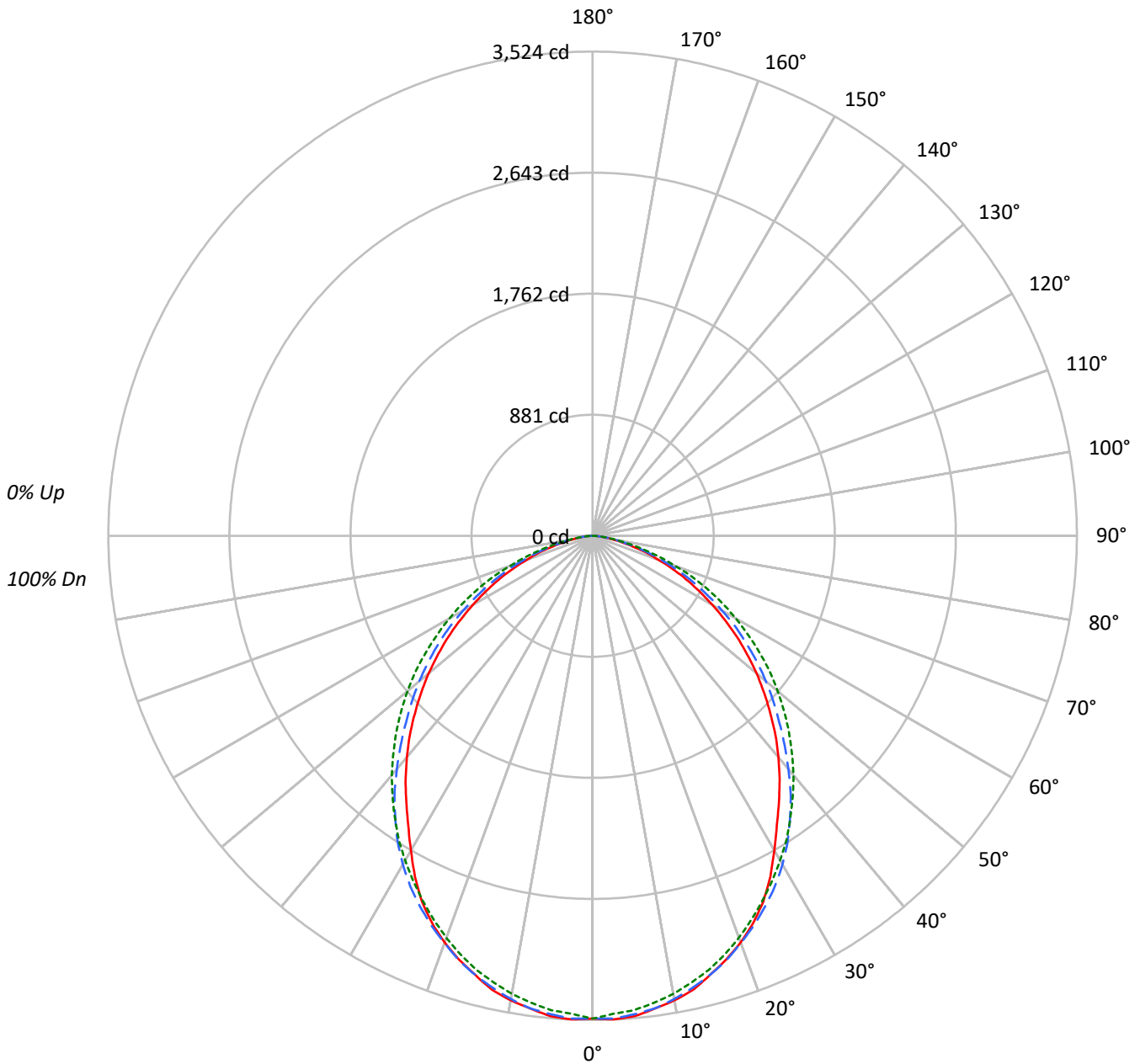
Lumens per Lamp: N/A
Luminaire Lumens: 8126.0 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
Input Voltage (V): NR
Input Current (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: P558292

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-82-86-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558292

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-82-86-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°	9457	9457	9457
5°	9482	9442	9362
10°	9381	9356	9249
15°	9215	9215	9110
20°	9020	9031	8915
25°	8723	8831	8691
30°	8214	8583	8478
35°	7762	8227	8241
40°	7384	7783	7987
45°	6962	7311	7686
50°	6517	6890	7359
55°	6011	6410	6961
60°	5413	5849	6474
65°	4780	5201	5889
70°	3984	4430	5003
75°	3131	3537	3917
80°	2239	2490	2762
85°	1460	1460	1377



TEST NUMBER: P558292

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-82-86-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	330.9	4.1
10°-20°	929.5	11.4
20°-30°	1358.4	16.7
30°-40°	1541.9	19.0
40°-50°	1488.5	18.3
50°-60°	1227.9	15.1
60°-70°	817.7	10.1
70°-80°	365.9	4.5
80°-90°	65.5	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°	2618.8	32.2
0°-40°	4160.7	51.2
0°-60°	6877.0	84.6
0°-90°	8126.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8126.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3514	3514	3514	3514	3514	
5°	3510	3509	3495	3476	3466	332
15°	3308	3316	3308	3293	3270	932
25°	2938	2961	2974	2953	2927	1345
35°	2363	2395	2504	2518	2508	1480
45°	1829	1860	1921	2009	2020	1411
55°	1281	1303	1366	1442	1484	1144
65°	751	771	817	875	925	744
75°	301	317	340	356	377	329
85°	47	47	47	45	45	64
90°	0	0	0	0	0	



TEST NUMBER: P558292

CATALOG NUMBER: FUSL-12-4-LD4-3STD-35-UNV-82-86-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3514.3	3514.3	3514.3	3514.3	3514.3
2.5°	3523.7	3525.1	3517.0	3495.4	3481.9
5°	3510.2	3508.9	3495.4	3476.5	3465.7
7.5°	3471.1	3473.8	3469.7	3442.7	3427.9
10°	3433.3	3434.6	3423.8	3402.2	3384.7
12.5°	3384.7	3383.3	3368.5	3357.7	3329.3
15°	3307.7	3315.8	3307.7	3292.9	3269.9
17.5°	3233.5	3233.5	3238.9	3213.2	3195.7
20°	3149.8	3153.8	3153.8	3133.6	3113.3
22.5°	3052.6	3064.7	3068.8	3047.2	3022.9
25°	2937.8	2960.7	2974.2	2952.6	2927.0
27.5°	2798.7	2833.8	2874.3	2858.1	2829.8
30°	2643.5	2694.8	2762.3	2748.8	2728.5
32.5°	2496.3	2547.6	2640.8	2635.4	2624.6
35°	2362.7	2395.1	2504.4	2517.9	2508.5
37.5°	2235.7	2265.5	2368.1	2399.1	2391.0
40°	2102.1	2134.5	2215.5	2270.9	2273.6
42.5°	1969.8	2000.8	2067.0	2146.6	2146.6
45°	1829.4	1860.4	1921.2	2008.9	2019.7
47.5°	1691.7	1724.1	1783.5	1871.2	1888.8
50°	1556.7	1586.4	1645.8	1730.8	1757.8
52.5°	1416.2	1448.6	1506.7	1585.0	1624.2
55°	1281.2	1302.8	1366.3	1441.9	1483.7
57.5°	1140.8	1161.1	1232.6	1297.4	1340.6
60°	1005.8	1031.5	1086.8	1153.0	1202.9
62.5°	876.2	903.2	950.5	1008.5	1065.2
65°	750.7	770.9	816.8	874.9	924.8
67.5°	629.1	646.7	692.6	733.1	785.8
70°	506.3	529.2	563.0	602.1	635.9
72.5°	407.7	417.2	445.5	473.9	509.0
75°	301.1	317.3	340.2	356.4	376.7
77.5°	216.0	225.5	239.0	252.5	271.4
80°	144.5	148.5	160.7	163.4	178.2
82.5°	87.8	90.5	93.2	94.5	99.9
85°	47.3	47.3	47.3	44.6	44.6
87.5°	27.0	27.0	23.0	18.9	13.5
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)