

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: P557874

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-80-85-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: P557874
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-LD4-3HI-50-UNV-80-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

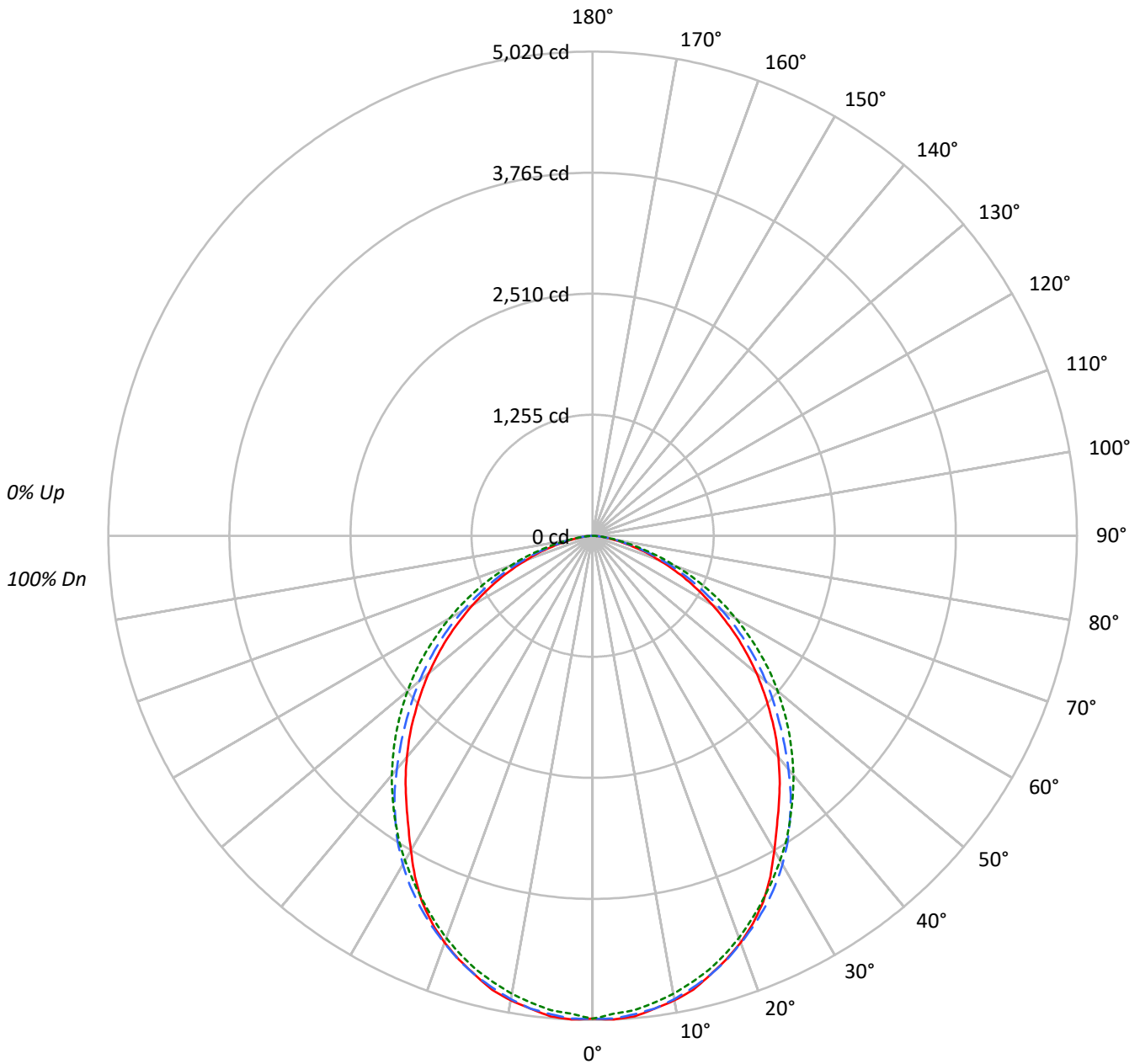
Lumens per Lamp: N/A
Luminaire Lumens: 11577.0 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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: P557874

CATALOG NUMBER: FUSL-12-4-LD4-3HI-50-UNV-80-85-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557874

CATALOG NUMBER: FUSL-12-4-LD4-3HI-50-UNV-80-85-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°	13473	13473	13473
5°	13509	13452	13337
10°	13365	13329	13176
15°	13129	13129	12978
20°	12850	12867	12702
25°	12427	12582	12382
30°	11702	12228	12079
35°	11058	11721	11740
40°	10520	11088	11378
45°	9919	10416	10951
50°	9284	9816	10484
55°	8564	9132	9918
60°	7712	8333	9224
65°	6809	7410	8390
70°	5675	6311	7128
75°	4459	5039	5579
80°	3189	3547	3935
85°	2078	2078	1961



TEST NUMBER: P557874

CATALOG NUMBER: FUSL-12-4-LD4-3HI-50-UNV-80-85-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.4	4.1
10°-20°	1324.3	11.4
20°-30°	1935.2	16.7
30°-40°	2196.7	19.0
40°-50°	2120.6	18.3
50°-60°	1749.3	15.1
60°-70°	1164.9	10.1
70°-80°	521.3	4.5
80°-90°	93.3	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°	3730.9	32.2
0°-40°	5927.6	51.2
0°-60°	9797.6	84.6
0°-90°	11577.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11577.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5007	5007	5007	5007	5007	
5°	5001	4999	4980	4953	4938	473
15°	4712	4724	4712	4691	4659	1328
25°	4185	4218	4237	4207	4170	1917
35°	3366	3412	3568	3587	3574	2109
45°	2606	2650	2737	2862	2878	2011
55°	1825	1856	1946	2054	2114	1629
65°	1069	1098	1164	1246	1318	1060
75°	429	452	485	508	537	469
85°	67	67	67	64	64	91
90°	0	0	0	0	0	



TEST NUMBER: P557874

CATALOG NUMBER: FUSL-12-4-LD4-3HI-50-UNV-80-85-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5006.8	5006.8	5006.8	5006.8	5006.8
2.5°	5020.2	5022.1	5010.6	4979.8	4960.6
5°	5001.0	4999.1	4979.8	4952.9	4937.5
7.5°	4945.2	4949.0	4943.3	4904.8	4883.7
10°	4891.3	4893.3	4877.9	4847.1	4822.1
12.5°	4822.1	4820.2	4799.0	4783.6	4743.2
15°	4712.5	4724.0	4712.5	4691.3	4658.6
17.5°	4606.7	4606.7	4614.4	4577.8	4552.8
20°	4487.4	4493.2	4493.2	4464.3	4435.5
22.5°	4348.9	4366.2	4372.0	4341.2	4306.6
25°	4185.4	4218.1	4237.4	4206.6	4170.1
27.5°	3987.3	4037.3	4095.0	4072.0	4031.6
30°	3766.1	3839.2	3935.4	3916.2	3887.3
32.5°	3556.5	3629.6	3762.3	3754.6	3739.2
35°	3366.0	3412.2	3568.0	3587.2	3573.8
37.5°	3185.2	3227.6	3373.7	3418.0	3406.4
40°	2994.8	3041.0	3156.4	3235.3	3239.1
42.5°	2806.3	2850.6	2944.8	3058.3	3058.3
45°	2606.3	2650.5	2737.1	2862.1	2877.5
47.5°	2410.1	2456.3	2540.9	2665.9	2690.9
50°	2217.7	2260.1	2344.7	2465.9	2504.3
52.5°	2017.7	2063.9	2146.6	2258.1	2313.9
55°	1825.4	1856.1	1946.5	2054.3	2113.9
57.5°	1625.3	1654.2	1756.1	1848.4	1910.0
60°	1433.0	1469.5	1548.4	1642.6	1713.8
62.5°	1248.3	1286.8	1354.1	1436.8	1517.6
65°	1069.4	1098.3	1163.7	1246.4	1317.6
67.5°	896.3	921.3	986.7	1044.4	1119.5
70°	721.3	754.0	802.1	857.9	905.9
72.5°	580.9	594.3	634.7	675.1	725.1
75°	428.9	452.0	484.7	507.8	536.6
77.5°	307.8	321.2	340.5	359.7	386.6
80°	205.8	211.6	228.9	232.7	253.9
82.5°	125.0	128.9	132.7	134.6	142.3
85°	67.3	67.3	67.3	63.5	63.5
87.5°	38.5	38.5	32.7	26.9	19.2
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)