

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: P557104

Luminaire Tested: **FUSL-12-4-LD4-2HI-50-UNV-80-84-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: P557104
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-LD4-2HI-50-UNV-80-84-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

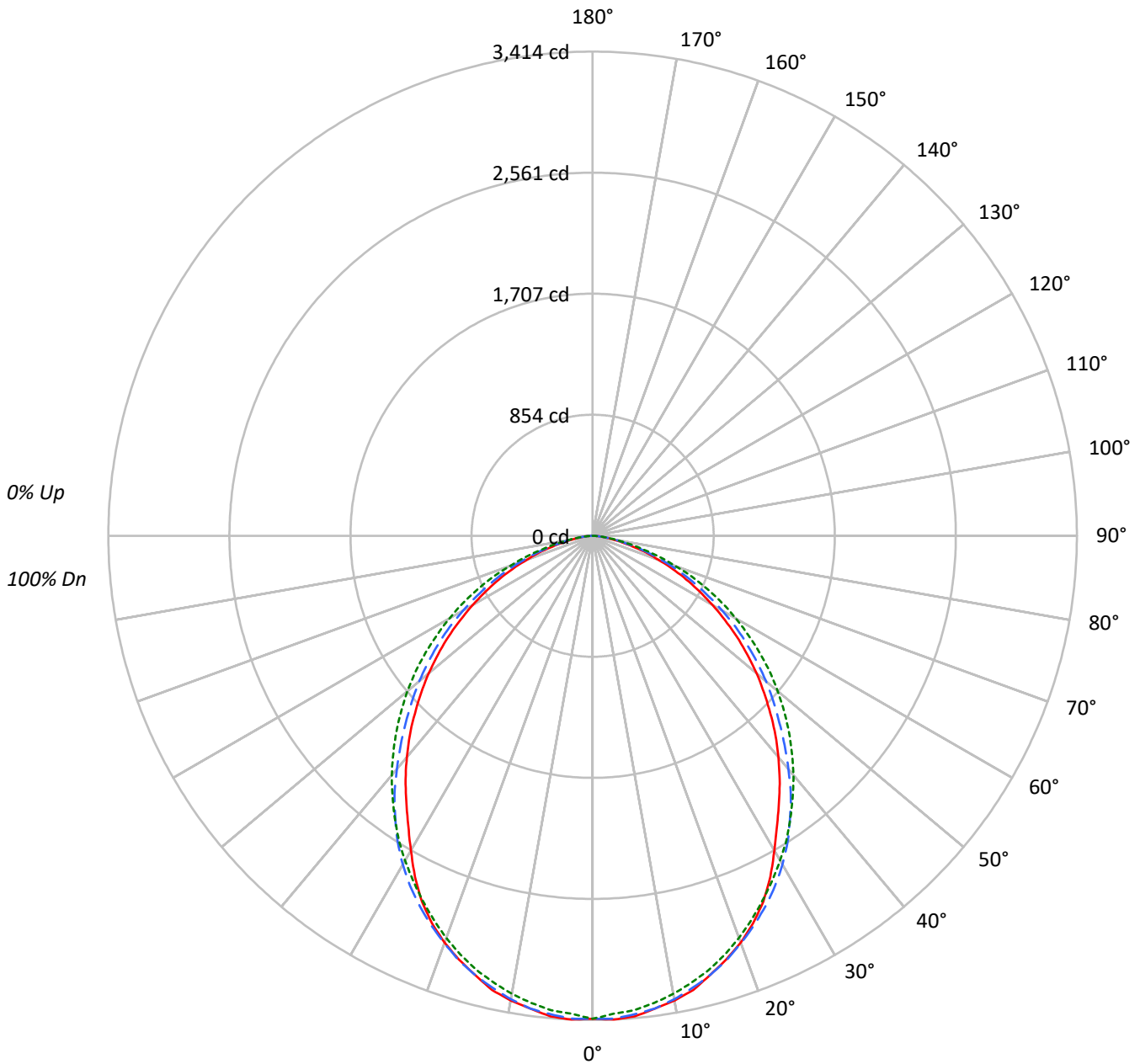
Lumens per Lamp: N/A
Luminaire Lumens: 7874.0 lumens
Efficiency: N/A
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
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: P557104

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-80-84-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P557104

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-80-84-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°	9164	9164	9164
5°	9188	9149	9071
10°	9090	9066	8962
15°	8929	8929	8827
20°	8740	8751	8639
25°	8452	8557	8421
30°	7959	8317	8215
35°	7521	7972	7985
40°	7155	7541	7739
45°	6746	7085	7448
50°	6315	6676	7131
55°	5825	6211	6745
60°	5245	5668	6273
65°	4632	5040	5706
70°	3860	4292	4848
75°	3033	3428	3795
80°	2170	2413	2676
85°	1414	1414	1334



TEST NUMBER: P557104

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-80-84-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.6	4.1
10°-20°	900.7	11.4
20°-30°	1316.2	16.7
30°-40°	1494.1	19.0
40°-50°	1442.3	18.3
50°-60°	1189.8	15.1
60°-70°	792.3	10.1
70°-80°	354.5	4.5
80°-90°	63.4	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°	2537.6	32.2
0°-40°	4031.6	51.2
0°-60°	6663.7	84.6
0°-90°	7874.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7874.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3405	3405	3405	3405	3405	
5°	3401	3400	3387	3369	3358	322
15°	3205	3213	3205	3191	3168	904
25°	2847	2869	2882	2861	2836	1304
35°	2289	2321	2427	2440	2431	1434
45°	1773	1803	1862	1947	1957	1368
55°	1242	1262	1324	1397	1438	1108
65°	727	747	792	848	896	721
75°	292	307	330	345	365	319
85°	46	46	46	43	43	62
90°	0	0	0	0	0	



TEST NUMBER: P557104

CATALOG NUMBER: FUSL-12-4-LD4-2HI-50-UNV-80-84-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3405.3	3405.3	3405.3	3405.3	3405.3
2.5°	3414.5	3415.8	3407.9	3387.0	3373.9
5°	3401.4	3400.1	3387.0	3368.7	3358.2
7.5°	3363.4	3366.1	3362.1	3336.0	3321.6
10°	3326.8	3328.1	3317.7	3296.7	3279.7
12.5°	3279.7	3278.4	3264.0	3253.5	3226.1
15°	3205.1	3213.0	3205.1	3190.8	3168.5
17.5°	3133.2	3133.2	3138.4	3113.6	3096.6
20°	3052.1	3056.0	3056.0	3036.4	3016.8
22.5°	2957.9	2969.7	2973.6	2952.7	2929.1
25°	2846.7	2868.9	2882.0	2861.1	2836.2
27.5°	2711.9	2746.0	2785.2	2769.5	2742.0
30°	2561.5	2611.2	2676.6	2663.5	2643.9
32.5°	2418.9	2468.6	2558.9	2553.6	2543.2
35°	2289.4	2320.8	2426.8	2439.8	2430.7
37.5°	2166.4	2195.2	2294.6	2324.7	2316.9
40°	2036.9	2068.3	2146.8	2200.4	2203.0
42.5°	1908.7	1938.8	2002.9	2080.1	2080.1
45°	1772.6	1802.7	1861.6	1946.6	1957.1
47.5°	1639.2	1670.6	1728.2	1813.2	1830.2
50°	1508.4	1537.2	1594.7	1677.1	1703.3
52.5°	1372.3	1403.7	1460.0	1535.9	1573.8
55°	1241.5	1262.4	1323.9	1397.2	1437.7
57.5°	1105.4	1125.1	1194.4	1257.2	1299.1
60°	974.6	999.5	1053.1	1117.2	1165.6
62.5°	849.0	875.2	921.0	977.2	1032.2
65°	727.4	747.0	791.5	847.7	896.1
67.5°	609.6	626.6	671.1	710.4	761.4
70°	490.6	512.8	545.5	583.5	616.2
72.5°	395.1	404.2	431.7	459.2	493.2
75°	291.7	307.4	329.7	345.4	365.0
77.5°	209.3	218.5	231.6	244.6	263.0
80°	140.0	143.9	155.7	158.3	172.7
82.5°	85.0	87.7	90.3	91.6	96.8
85°	45.8	45.8	45.8	43.2	43.2
87.5°	26.2	26.2	22.2	18.3	13.1
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)