

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: P557914

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-82-94-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: P557914
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-82-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

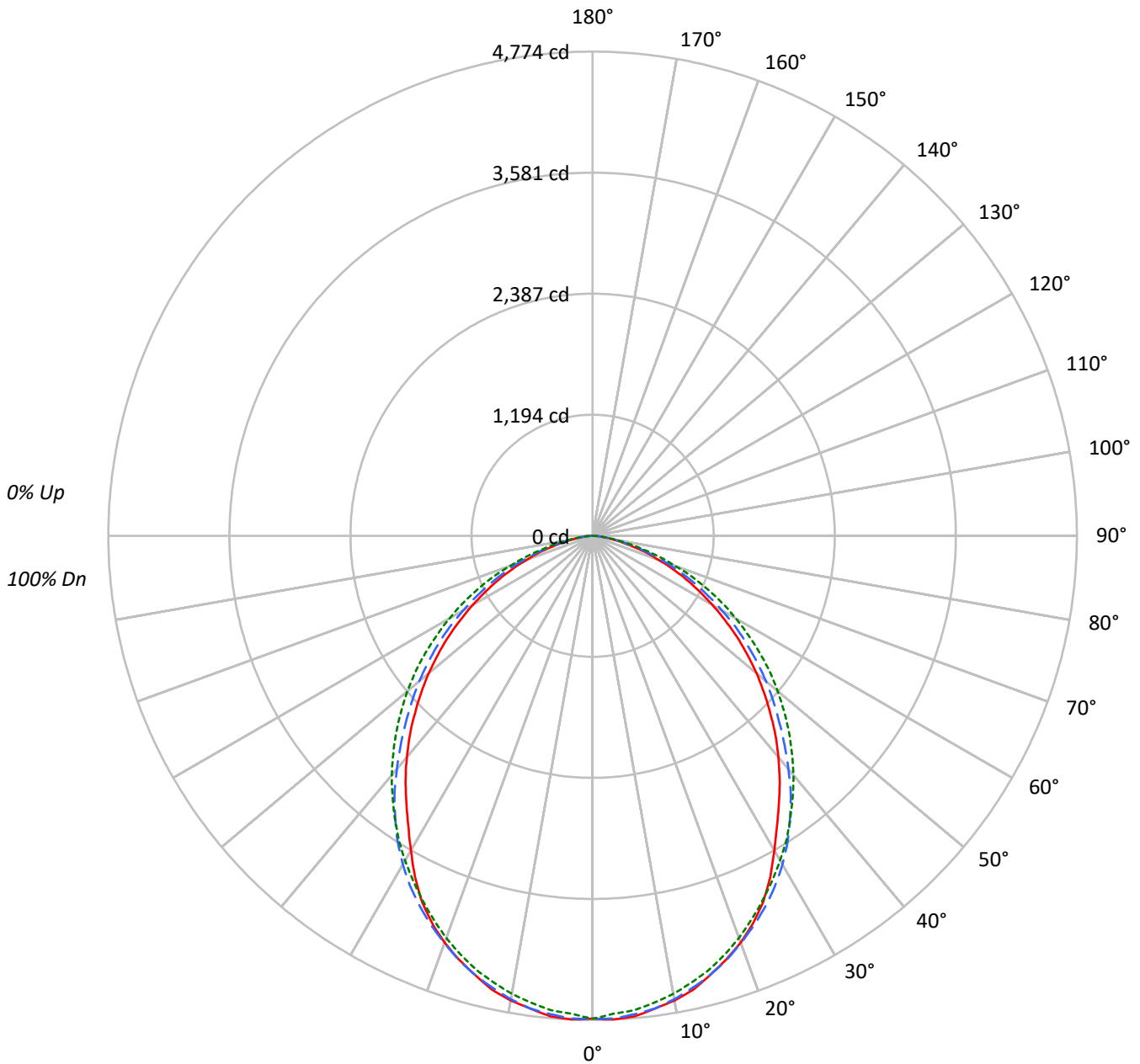
Lumens per Lamp: N/A
Luminaire Lumens: 11010.0 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
Input Voltage (V): NR
Input Current (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: P557914

CATALOG NUMBER: FUSL-12-4-LD4-3HI-50-UNV-82-94-EDD-90

Luminous Intensity Polar Plot





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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°	12813	12813	12813
5°	12847	12793	12684
10°	12711	12676	12531
15°	12486	12486	12343
20°	12221	12237	12080
25°	11819	11965	11775
30°	11129	11629	11487
35°	10516	11147	11165
40°	10005	10545	10821
45°	9433	9906	10414
50°	8830	9335	9971
55°	8145	8685	9431
60°	7335	7925	8772
65°	6476	7047	7978
70°	5397	6002	6779
75°	4241	4793	5307
80°	3033	3374	3742
85°	1976	1976	1865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	448.3	4.1
10°-20°	1259.4	11.4
20°-30°	1840.5	16.7
30°-40°	2089.1	19.0
40°-50°	2016.7	18.3
50°-60°	1663.6	15.1
60°-70°	1107.9	10.1
70°-80°	495.8	4.5
80°-90°	88.7	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°	3548.2	32.2
0°-40°	5637.3	51.2
0°-60°	9317.7	84.6
0°-90°	11010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4762	4762	4762	4762	4762	
5°	4756	4754	4736	4710	4696	450
15°	4482	4493	4482	4462	4430	1263
25°	3980	4012	4030	4001	3966	1823
35°	3201	3245	3393	3412	3399	2006
45°	2479	2521	2603	2722	2737	1912
55°	1736	1765	1851	1954	2010	1549
65°	1017	1044	1107	1185	1253	1008
75°	408	430	461	483	510	446
85°	64	64	64	60	60	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4761.5	4761.5	4761.5	4761.5	4761.5
2.5°	4774.3	4776.2	4765.2	4735.9	4717.6
5°	4756.1	4754.2	4735.9	4710.3	4695.7
7.5°	4703.0	4706.7	4701.2	4664.6	4644.5
10°	4651.8	4653.6	4639.0	4609.7	4585.9
12.5°	4585.9	4584.1	4564.0	4549.3	4510.9
15°	4481.7	4492.6	4481.7	4461.5	4430.4
17.5°	4381.1	4381.1	4388.4	4353.6	4329.8
20°	4267.6	4273.1	4273.1	4245.7	4218.3
22.5°	4135.9	4152.4	4157.9	4128.6	4095.7
25°	3980.5	4011.5	4029.8	4000.6	3965.8
27.5°	3792.0	3839.6	3894.5	3872.5	3834.1
30°	3581.7	3651.2	3742.6	3724.4	3696.9
32.5°	3382.3	3451.8	3578.0	3570.7	3556.1
35°	3201.2	3245.1	3393.3	3411.6	3398.7
37.5°	3029.2	3069.5	3208.5	3250.6	3239.6
40°	2848.1	2892.0	3001.8	3076.8	3080.5
42.5°	2668.9	2711.0	2800.6	2908.5	2908.5
45°	2478.6	2520.7	2603.0	2721.9	2736.6
47.5°	2292.1	2336.0	2416.4	2535.3	2559.1
50°	2109.1	2149.4	2229.9	2345.1	2381.7
52.5°	1918.9	1962.8	2041.4	2147.5	2200.6
55°	1736.0	1765.2	1851.2	1953.6	2010.3
57.5°	1545.7	1573.2	1670.1	1757.9	1816.4
60°	1362.8	1397.5	1472.5	1562.2	1629.9
62.5°	1187.2	1223.8	1287.8	1366.5	1443.3
65°	1017.1	1044.5	1106.7	1185.4	1253.0
67.5°	852.4	876.2	938.4	993.3	1064.6
70°	686.0	717.1	762.8	815.8	861.6
72.5°	552.4	565.2	603.7	642.1	689.6
75°	407.9	429.9	461.0	482.9	510.4
77.5°	292.7	305.5	323.8	342.1	367.7
80°	195.7	201.2	217.7	221.3	241.5
82.5°	118.9	122.6	126.2	128.0	135.4
85°	64.0	64.0	64.0	60.4	60.4
87.5°	36.6	36.6	31.1	25.6	18.3
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)