

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: P557147

Luminaire Tested: **FUSL-12-4-LD4-2HI-50-UNV-82-94-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: P557147
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-82-94-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDES
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

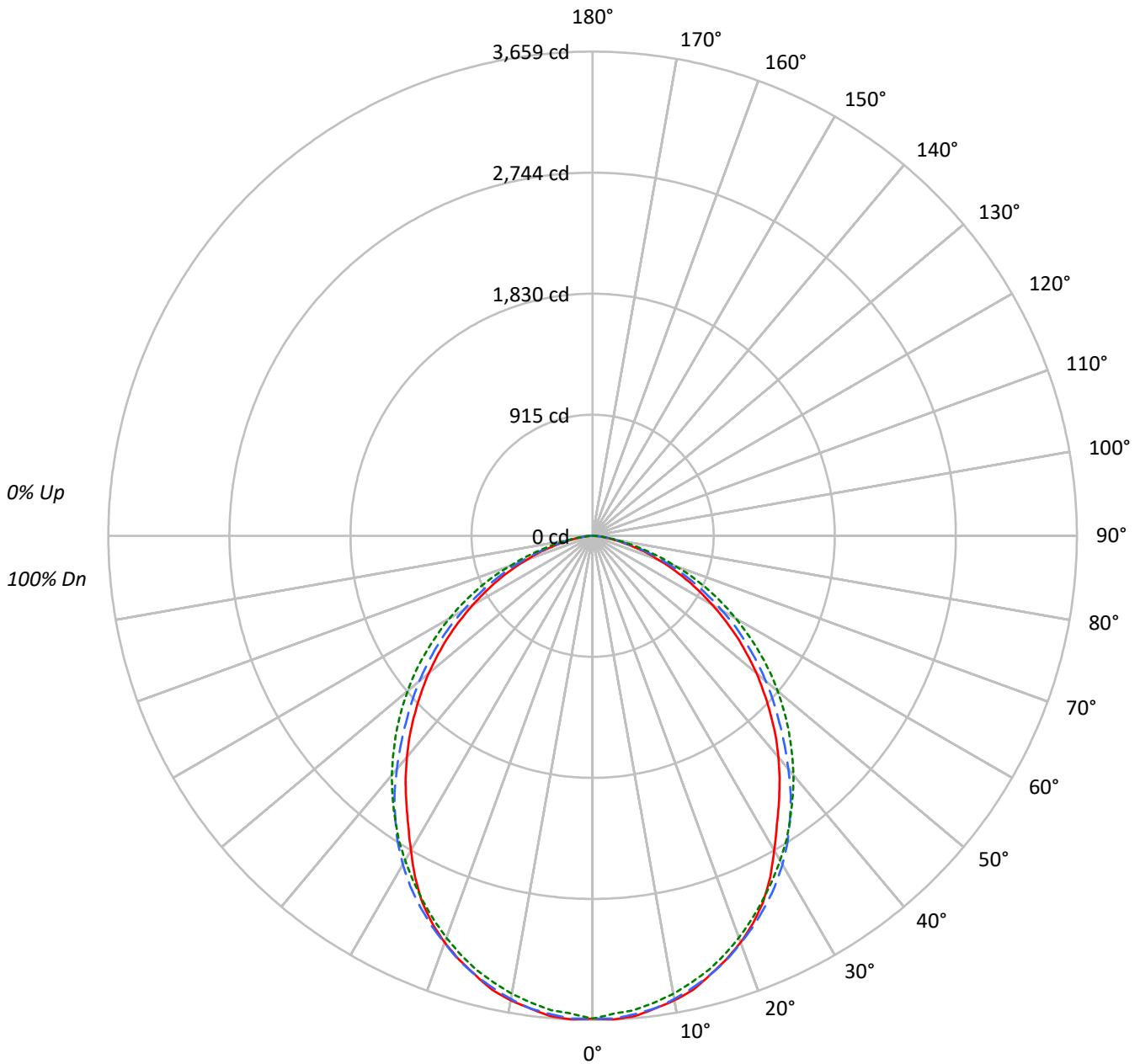
Lumens per Lamp: N/A
Luminaire Lumens: 8437.0 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 86.4
Input Voltage (V): NR
Input Current (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

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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°	9819	9819	9819
5°	9845	9803	9720
10°	9741	9714	9603
15°	9568	9568	9458
20°	9365	9377	9257
25°	9057	9169	9023
30°	8528	8912	8803
35°	8059	8542	8556
40°	7667	8081	8292
45°	7228	7591	7980
50°	6766	7153	7641
55°	6241	6655	7227
60°	5620	6073	6722
65°	4963	5400	6114
70°	4136	4599	5194
75°	3250	3672	4066
80°	2325	2585	2867
85°	1516	1516	1430



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.5	4.1
10°-20°	965.1	11.4
20°-30°	1410.3	16.7
30°-40°	1600.9	19.0
40°-50°	1545.4	18.3
50°-60°	1274.9	15.1
60°-70°	848.9	10.1
70°-80°	379.9	4.5
80°-90°	68.0	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°	2719.0	32.2
0°-40°	4319.9	51.2
0°-60°	7140.2	84.6
0°-90°	8437.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8437.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3649	3649	3649	3649	3649	
5°	3645	3643	3629	3610	3598	345
15°	3434	3443	3434	3419	3395	968
25°	3050	3074	3088	3066	3039	1397
35°	2453	2487	2600	2614	2604	1537
45°	1899	1932	1995	2086	2097	1465
55°	1330	1353	1419	1497	1540	1187
65°	779	800	848	908	960	773
75°	313	329	353	370	391	342
85°	49	49	49	46	46	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3648.8	3648.8	3648.8	3648.8	3648.8
2.5°	3658.6	3660.0	3651.6	3629.2	3615.1
5°	3644.6	3643.2	3629.2	3609.5	3598.3
7.5°	3603.9	3606.7	3602.5	3574.5	3559.1
10°	3564.7	3566.1	3554.9	3532.4	3514.2
12.5°	3514.2	3512.8	3497.4	3486.2	3456.7
15°	3434.3	3442.7	3434.3	3418.9	3395.1
17.5°	3357.2	3357.2	3362.8	3336.2	3318.0
20°	3270.3	3274.5	3274.5	3253.5	3232.5
22.5°	3169.4	3182.0	3186.2	3163.8	3138.5
25°	3050.2	3074.1	3088.1	3065.7	3039.0
27.5°	2905.9	2942.3	2984.3	2967.5	2938.1
30°	2744.6	2797.9	2868.0	2854.0	2833.0
32.5°	2591.9	2645.1	2741.8	2736.2	2725.0
35°	2453.1	2486.7	2600.3	2614.3	2604.5
37.5°	2321.3	2352.2	2458.7	2490.9	2482.5
40°	2182.5	2216.2	2300.3	2357.8	2360.6
42.5°	2045.2	2077.4	2146.1	2228.8	2228.8
45°	1899.4	1931.6	1994.7	2085.8	2097.0
47.5°	1756.4	1790.0	1851.7	1942.8	1961.1
50°	1616.2	1647.1	1708.7	1797.1	1825.1
52.5°	1470.4	1504.1	1564.4	1645.7	1686.3
55°	1330.3	1352.7	1418.6	1497.1	1540.5
57.5°	1184.5	1205.5	1279.8	1347.1	1391.9
60°	1044.3	1070.9	1128.4	1197.1	1249.0
62.5°	909.7	937.8	986.8	1047.1	1106.0
65°	779.4	800.4	848.1	908.3	960.2
67.5°	653.2	671.4	719.1	761.2	815.8
70°	525.7	549.5	584.5	625.2	660.2
72.5°	423.3	433.1	462.6	492.0	528.5
75°	312.6	329.4	353.2	370.1	391.1
77.5°	224.3	234.1	248.1	262.1	281.8
80°	150.0	154.2	166.8	169.6	185.0
82.5°	91.1	93.9	96.7	98.1	103.7
85°	49.1	49.1	49.1	46.3	46.3
87.5°	28.0	28.0	23.8	19.6	14.0
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)