

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: P557041

Luminaire Tested: **FUSL-12-4-LD4-2HI-40-UNV-80-84-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: P557041
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-40-UNV-80-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

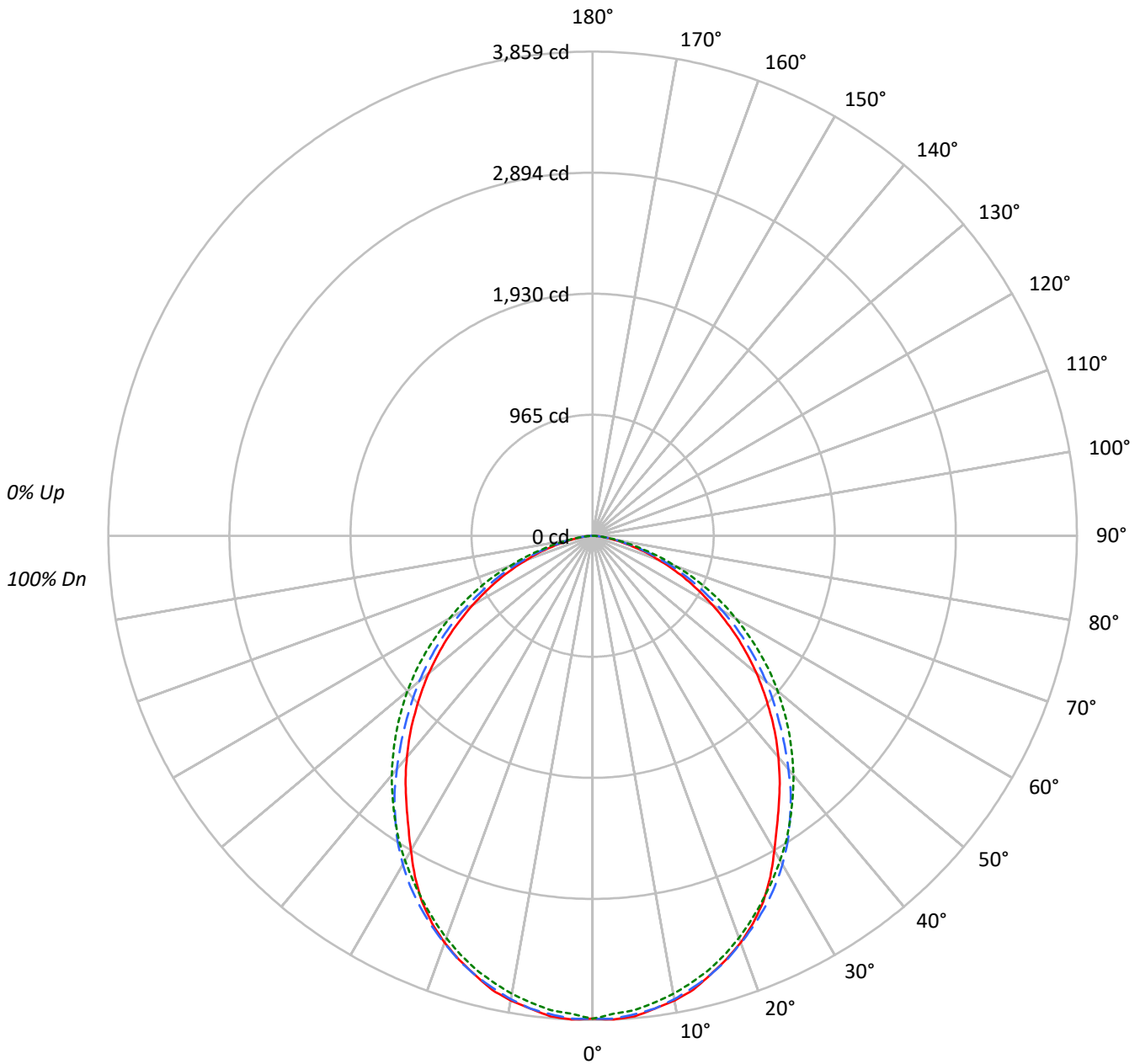
Lumens per Lamp: N/A
Luminaire Lumens: 8900.0 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	10358	10358	10358
5°	10385	10341	10253
10°	10275	10247	10130
15°	10093	10093	9977
20°	9879	9892	9765
25°	9554	9672	9519
30°	8996	9401	9286
35°	8501	9011	9025
40°	8088	8524	8747
45°	7625	8008	8418
50°	7137	7546	8060
55°	6584	7020	7624
60°	5929	6406	7091
65°	5235	5696	6450
70°	4363	4851	5480
75°	3428	3874	4290
80°	2452	2727	3025
85°	1599	1599	1507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	362.4	4.1
10°-20°	1018.1	11.4
20°-30°	1487.7	16.7
30°-40°	1688.8	19.0
40°-50°	1630.2	18.3
50°-60°	1344.8	15.1
60°-70°	895.5	10.1
70°-80°	400.7	4.5
80°-90°	71.7	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°	2868.2	32.2
0°-40°	4557.0	51.2
0°-60°	7532.0	84.6
0°-90°	8900.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8900.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3849	3849	3849	3849	3849	
5°	3845	3843	3828	3808	3796	364
15°	3623	3632	3623	3606	3581	1021
25°	3218	3243	3258	3234	3206	1474
35°	2588	2623	2743	2758	2747	1621
45°	2004	2038	2104	2200	2212	1546
55°	1403	1427	1496	1579	1625	1252
65°	822	844	895	958	1013	815
75°	330	348	373	390	413	361
85°	52	52	52	49	49	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3849.0	3849.0	3849.0	3849.0	3849.0
2.5°	3859.4	3860.8	3852.0	3828.3	3813.5
5°	3844.6	3843.1	3828.3	3807.6	3795.8
7.5°	3801.7	3804.7	3800.2	3770.6	3754.4
10°	3760.3	3761.8	3749.9	3726.3	3707.1
12.5°	3707.1	3705.6	3689.3	3677.5	3646.4
15°	3622.8	3631.7	3622.8	3606.5	3581.4
17.5°	3541.5	3541.5	3547.4	3519.3	3500.1
20°	3449.8	3454.2	3454.2	3432.0	3409.9
22.5°	3343.3	3356.6	3361.1	3337.4	3310.8
25°	3217.6	3242.8	3257.5	3233.9	3205.8
27.5°	3065.3	3103.8	3148.1	3130.4	3099.3
30°	2895.3	2951.5	3025.4	3010.6	2988.4
32.5°	2734.1	2790.3	2892.3	2886.4	2874.6
35°	2587.7	2623.2	2743.0	2757.7	2747.4
37.5°	2448.7	2481.2	2593.6	2627.6	2618.8
40°	2302.3	2337.8	2426.5	2487.2	2490.1
42.5°	2157.4	2191.4	2263.9	2351.1	2351.1
45°	2003.6	2037.6	2104.2	2200.3	2212.1
47.5°	1852.8	1888.3	1953.3	2049.5	2068.7
50°	1704.9	1737.5	1802.5	1895.7	1925.2
52.5°	1551.1	1586.6	1650.2	1736.0	1778.9
55°	1403.3	1426.9	1496.4	1579.2	1625.1
57.5°	1249.5	1271.7	1350.0	1421.0	1468.3
60°	1101.6	1129.7	1190.3	1262.8	1317.5
62.5°	959.7	989.2	1041.0	1104.6	1166.7
65°	822.1	844.3	894.6	958.2	1012.9
67.5°	689.1	708.3	758.6	802.9	860.6
70°	554.5	579.6	616.6	659.5	696.5
72.5°	446.6	456.9	488.0	519.0	557.5
75°	329.7	347.5	372.6	390.4	412.6
77.5°	236.6	246.9	261.7	276.5	297.2
80°	158.2	162.7	176.0	178.9	195.2
82.5°	96.1	99.1	102.0	103.5	109.4
85°	51.8	51.8	51.8	48.8	48.8
87.5°	29.6	29.6	25.1	20.7	14.8
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)