

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: P557106

Luminaire Tested: **FUSL-12-4-LD4-2HI-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: P557106
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-80-85-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

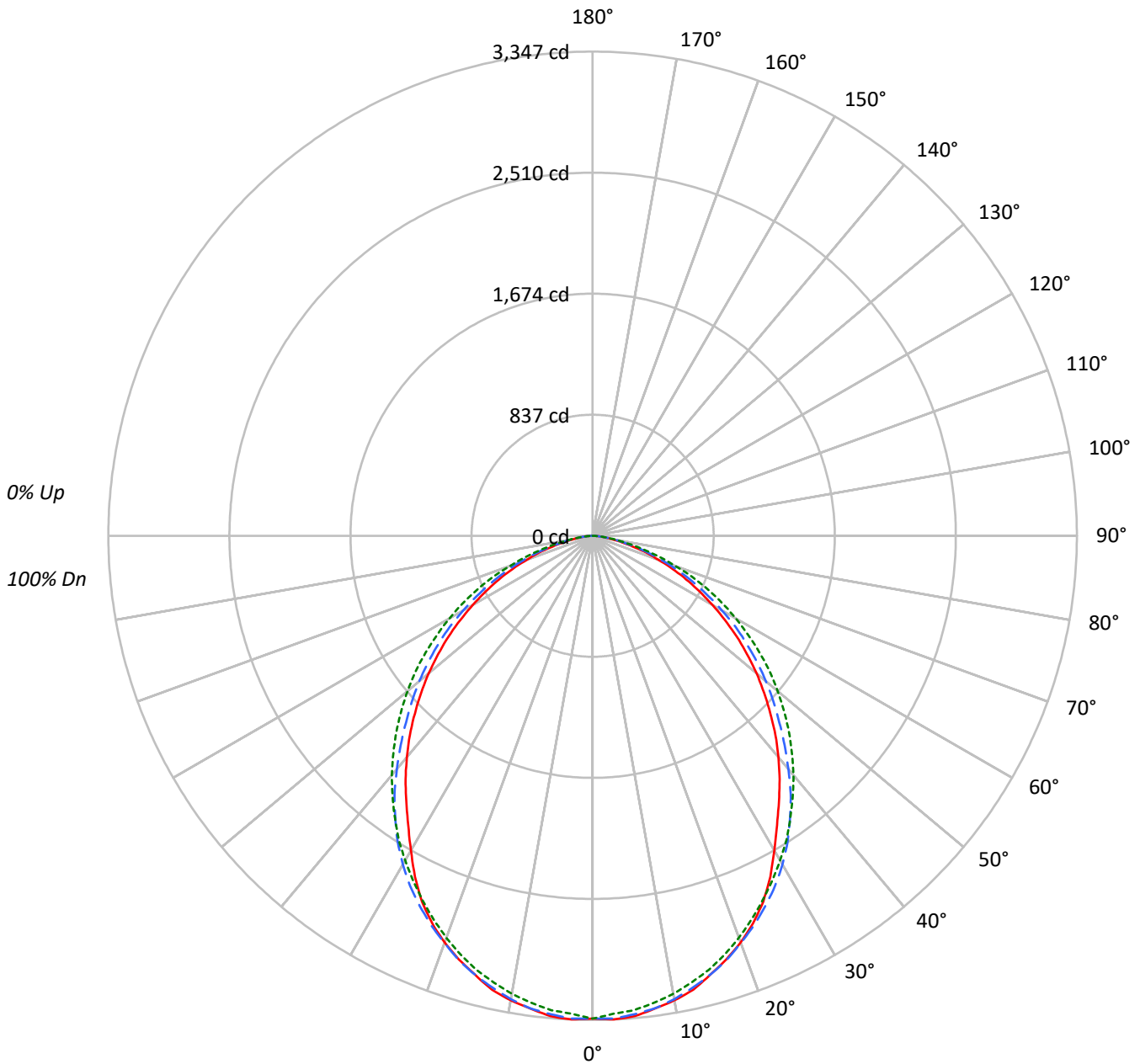
Lumens per Lamp: N/A
Luminaire Lumens: 7718.0 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	8982	8982	8982
5°	9006	8968	8892
10°	8910	8886	8784
15°	8752	8752	8652
20°	8567	8578	8468
25°	8285	8388	8254
30°	7802	8152	8053
35°	7372	7814	7827
40°	7013	7392	7586
45°	6612	6944	7300
50°	6190	6544	6990
55°	5709	6088	6612
60°	5141	5556	6149
65°	4540	4940	5593
70°	3784	4207	4752
75°	2974	3359	3720
80°	2126	2365	2624
85°	1386	1386	1306



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.3	4.1
10°-20°	882.9	11.4
20°-30°	1290.2	16.7
30°-40°	1464.5	19.0
40°-50°	1413.7	18.3
50°-60°	1166.2	15.1
60°-70°	776.6	10.1
70°-80°	347.5	4.5
80°-90°	62.2	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°	2487.3	32.2
0°-40°	3951.8	51.2
0°-60°	6531.7	84.6
0°-90°	7718.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7718.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3338	3338	3338	3338	3338	
5°	3334	3333	3320	3302	3292	316
15°	3142	3149	3142	3128	3106	886
25°	2790	2812	2825	2804	2780	1278
35°	2244	2275	2379	2392	2382	1406
45°	1738	1767	1825	1908	1918	1341
55°	1217	1237	1298	1370	1409	1086
65°	713	732	776	831	878	707
75°	286	301	323	338	358	313
85°	45	45	45	42	42	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3337.8	3337.8	3337.8	3337.8	3337.8
2.5°	3346.8	3348.1	3340.4	3319.9	3307.1
5°	3334.0	3332.7	3319.9	3301.9	3291.7
7.5°	3296.8	3299.4	3295.5	3269.9	3255.8
10°	3260.9	3262.2	3251.9	3231.4	3214.7
12.5°	3214.7	3213.5	3199.3	3189.1	3162.2
15°	3141.6	3149.3	3141.6	3127.5	3105.7
17.5°	3071.1	3071.1	3076.2	3051.9	3035.2
20°	2991.6	2995.5	2995.5	2976.2	2957.0
22.5°	2899.3	2910.8	2914.7	2894.2	2871.1
25°	2790.3	2812.1	2824.9	2804.4	2780.0
27.5°	2658.2	2691.6	2730.0	2714.6	2687.7
30°	2510.8	2559.5	2623.6	2610.8	2591.5
32.5°	2371.0	2419.7	2508.2	2503.1	2492.8
35°	2244.0	2274.8	2378.7	2391.5	2382.5
37.5°	2123.5	2151.7	2249.2	2278.7	2271.0
40°	1996.5	2027.3	2104.3	2156.8	2159.4
42.5°	1870.9	1900.4	1963.2	2038.9	2038.9
45°	1737.5	1767.0	1824.7	1908.1	1918.3
47.5°	1606.7	1637.5	1693.9	1777.3	1793.9
50°	1478.5	1506.7	1563.1	1643.9	1669.6
52.5°	1345.1	1375.9	1431.1	1505.4	1542.6
55°	1216.9	1237.4	1297.7	1369.5	1409.3
57.5°	1083.5	1102.8	1170.7	1232.3	1273.3
60°	955.3	979.7	1032.3	1095.1	1142.5
62.5°	832.2	857.9	902.7	957.9	1011.7
65°	713.0	732.2	775.8	830.9	878.4
67.5°	597.6	614.2	657.8	696.3	746.3
70°	480.9	502.7	534.7	571.9	604.0
72.5°	387.3	396.2	423.2	450.1	483.4
75°	286.0	301.3	323.1	338.5	357.8
77.5°	205.2	214.1	227.0	239.8	257.7
80°	137.2	141.1	152.6	155.2	169.3
82.5°	83.3	85.9	88.5	89.8	94.9
85°	44.9	44.9	44.9	42.3	42.3
87.5°	25.6	25.6	21.8	18.0	12.8
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)