

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: P558071

Luminaire Tested: **FUSL-12-4-LD4-3LO-40-UNV-80-87-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: P558071
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-LD4-3LO-40-UNV-80-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

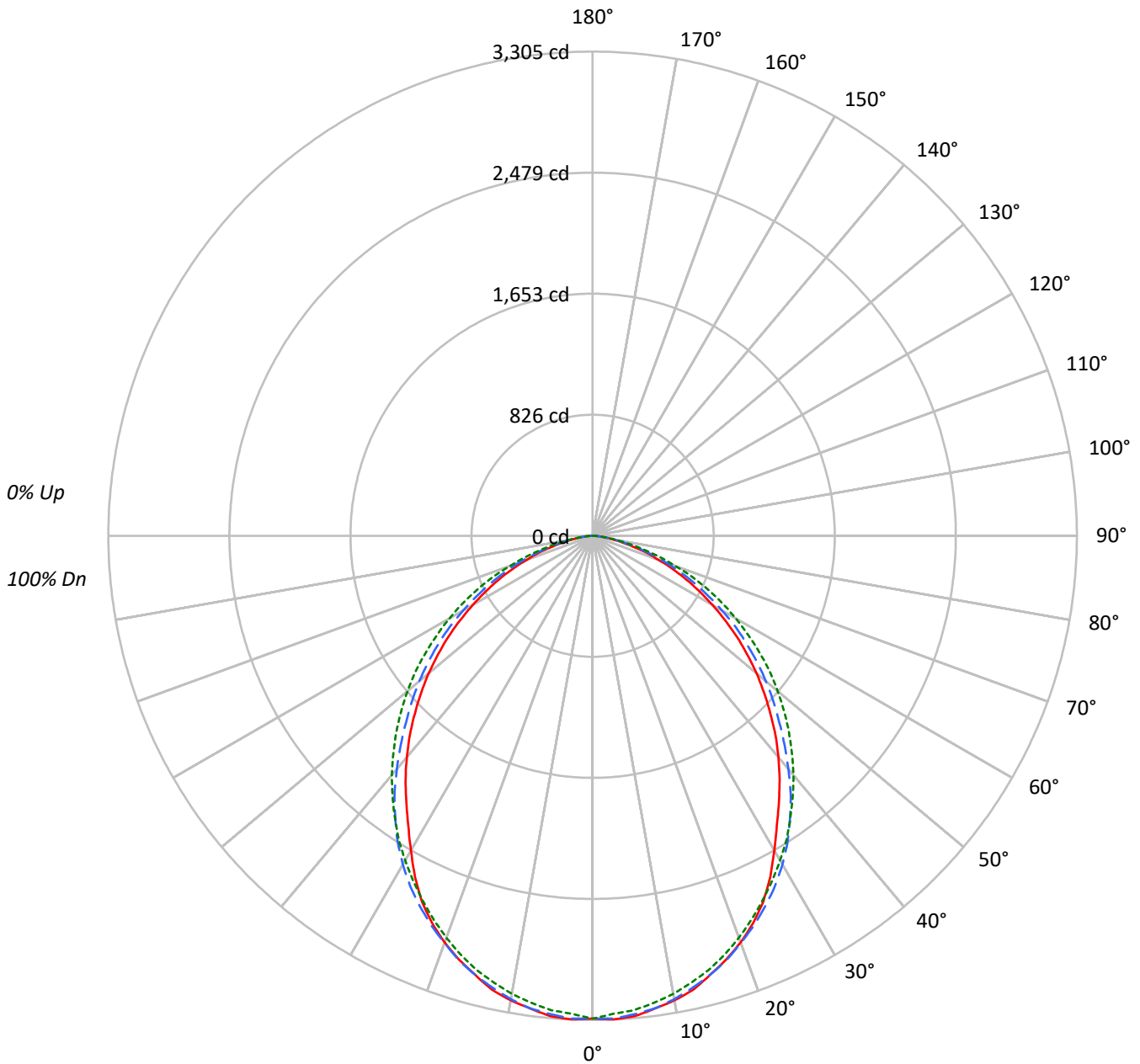
Lumens per Lamp: N/A
Luminaire Lumens: 7621.0 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	8869	8869	8869
5°	8893	8855	8780
10°	8798	8774	8674
15°	8642	8642	8544
20°	8459	8470	8361
25°	8181	8282	8151
30°	7704	8050	7952
35°	7279	7716	7728
40°	6926	7299	7490
45°	6529	6857	7209
50°	6112	6462	6902
55°	5637	6012	6528
60°	5077	5486	6072
65°	4483	4877	5522
70°	3736	4154	4692
75°	2936	3318	3673
80°	2100	2335	2590
85°	1368	1368	1291



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.3	4.1
10°-20°	871.8	11.4
20°-30°	1273.9	16.7
30°-40°	1446.1	19.0
40°-50°	1395.9	18.3
50°-60°	1151.6	15.1
60°-70°	766.8	10.1
70°-80°	343.2	4.5
80°-90°	61.4	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°	2456.0	32.2
0°-40°	3902.1	51.2
0°-60°	6449.6	84.6
0°-90°	7621.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7621.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3296	3296	3296	3296	3296	
5°	3292	3291	3278	3260	3250	312
15°	3102	3110	3102	3088	3067	875
25°	2755	2777	2789	2769	2745	1262
35°	2216	2246	2349	2361	2353	1388
45°	1716	1745	1802	1884	1894	1324
55°	1202	1222	1281	1352	1392	1072
65°	704	723	766	820	867	698
75°	282	298	319	334	353	309
85°	44	44	44	42	42	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3295.9	3295.9	3295.9	3295.9	3295.9
2.5°	3304.7	3306.0	3298.4	3278.2	3265.5
5°	3292.1	3290.8	3278.2	3260.4	3250.3
7.5°	3255.4	3257.9	3254.1	3228.8	3214.8
10°	3219.9	3221.2	3211.1	3190.8	3174.3
12.5°	3174.3	3173.1	3159.1	3149.0	3122.4
15°	3102.2	3109.8	3102.2	3088.2	3066.7
17.5°	3032.5	3032.5	3037.6	3013.5	2997.1
20°	2954.0	2957.8	2957.8	2938.8	2919.8
22.5°	2862.8	2874.2	2878.0	2857.8	2835.0
25°	2755.2	2776.7	2789.4	2769.2	2745.1
27.5°	2624.8	2657.7	2695.7	2680.5	2653.9
30°	2479.2	2527.3	2590.6	2578.0	2559.0
32.5°	2341.2	2389.3	2476.7	2471.6	2461.5
35°	2215.8	2246.2	2348.8	2361.4	2352.6
37.5°	2096.8	2124.7	2220.9	2250.0	2242.4
40°	1971.5	2001.8	2077.8	2129.7	2132.3
42.5°	1847.4	1876.5	1938.5	2013.2	2013.2
45°	1715.7	1744.8	1801.8	1884.1	1894.2
47.5°	1586.5	1616.9	1672.6	1754.9	1771.4
50°	1459.9	1487.8	1543.5	1623.3	1648.6
52.5°	1328.2	1358.6	1413.1	1486.5	1523.2
55°	1201.6	1221.9	1281.4	1352.3	1391.5
57.5°	1069.9	1088.9	1156.0	1216.8	1257.3
60°	943.3	967.4	1019.3	1081.3	1128.2
62.5°	821.8	847.1	891.4	945.8	999.0
65°	704.0	723.0	766.0	820.5	867.3
67.5°	590.0	606.5	649.6	687.5	736.9
70°	474.8	496.3	528.0	564.7	596.4
72.5°	382.4	391.3	417.8	444.4	477.4
75°	282.4	297.6	319.1	334.3	353.3
77.5°	202.6	211.5	224.1	236.8	254.5
80°	135.5	139.3	150.7	153.2	167.1
82.5°	82.3	84.8	87.4	88.6	93.7
85°	44.3	44.3	44.3	41.8	41.8
87.5°	25.3	25.3	21.5	17.7	12.7
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)