

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: P557940

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-80-86-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: P557940
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-30-UNV-80-86-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND
.250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

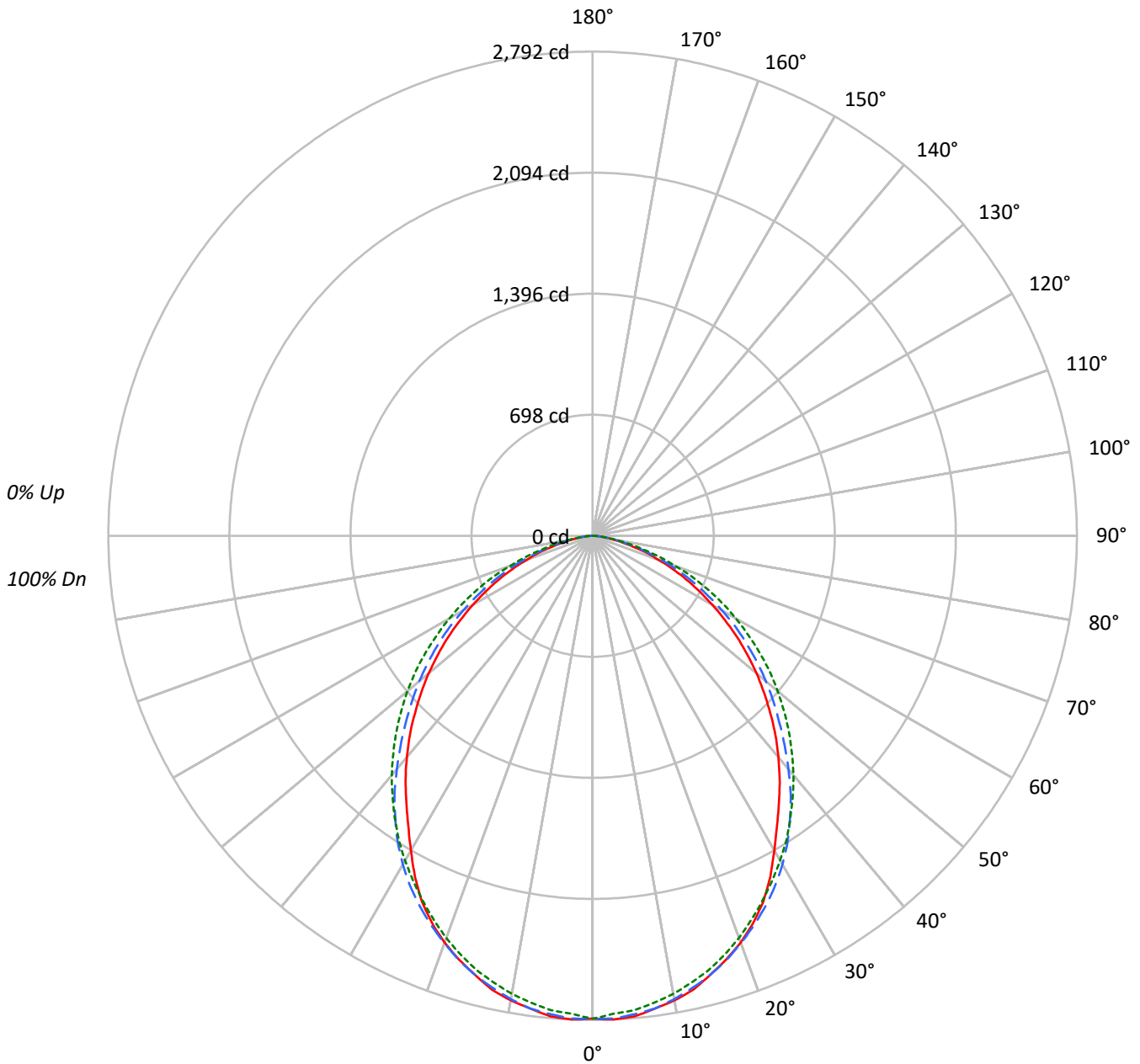
Lumens per Lamp: N/A
Luminaire Lumens: 6439.0 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	7494	7494	7494
5°	7514	7482	7418
10°	7434	7413	7329
15°	7302	7302	7219
20°	7147	7157	7065
25°	6912	6998	6886
30°	6509	6801	6718
35°	6150	6519	6530
40°	5851	6167	6329
45°	5517	5793	6091
50°	5164	5460	5831
55°	4763	5079	5516
60°	4289	4635	5130
65°	3787	4121	4666
70°	3157	3510	3965
75°	2481	2803	3104
80°	1774	1973	2188
85°	1155	1155	1090



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.2	4.1
10°-20°	736.6	11.4
20°-30°	1076.4	16.7
30°-40°	1221.8	19.0
40°-50°	1179.4	18.3
50°-60°	973.0	15.1
60°-70°	647.9	10.1
70°-80°	289.9	4.5
80°-90°	51.9	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°	2075.1	32.2
0°-40°	3296.9	51.2
0°-60°	5449.3	84.6
0°-90°	6439.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6439.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2785	2785	2785	2785	2785	
5°	2782	2780	2770	2755	2746	263
15°	2621	2627	2621	2609	2591	739
25°	2328	2346	2357	2340	2319	1066
35°	1872	1898	1984	1995	1988	1173
45°	1450	1474	1522	1592	1600	1118
55°	1015	1032	1083	1143	1176	906
65°	595	611	647	693	733	590
75°	239	251	270	282	298	261
85°	37	37	37	35	35	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2784.7	2784.7	2784.7	2784.7	2784.7
2.5°	2792.2	2793.3	2786.8	2769.7	2759.0
5°	2781.5	2780.4	2769.7	2754.7	2746.2
7.5°	2750.5	2752.6	2749.4	2728.0	2716.2
10°	2720.5	2721.6	2713.0	2695.9	2682.0
12.5°	2682.0	2680.9	2669.2	2660.6	2638.1
15°	2621.0	2627.4	2621.0	2609.3	2591.1
17.5°	2562.2	2562.2	2566.5	2546.1	2532.2
20°	2495.9	2499.1	2499.1	2483.0	2467.0
22.5°	2418.8	2428.5	2431.7	2414.5	2395.3
25°	2327.9	2346.1	2356.8	2339.7	2319.3
27.5°	2217.7	2245.5	2277.6	2264.8	2242.3
30°	2094.7	2135.3	2188.8	2178.1	2162.1
32.5°	1978.1	2018.7	2092.5	2088.3	2079.7
35°	1872.2	1897.8	1984.5	1995.2	1987.7
37.5°	1771.6	1795.1	1876.4	1901.0	1894.6
40°	1665.7	1691.4	1755.5	1799.4	1801.6
42.5°	1560.8	1585.5	1637.9	1701.0	1701.0
45°	1449.6	1474.2	1522.3	1591.9	1600.4
47.5°	1340.5	1366.1	1413.2	1482.7	1496.7
50°	1233.5	1257.0	1304.1	1371.5	1392.9
52.5°	1122.2	1147.9	1193.9	1256.0	1287.0
55°	1015.2	1032.4	1082.6	1142.6	1175.7
57.5°	904.0	920.0	976.7	1028.1	1062.3
60°	797.0	817.3	861.2	913.6	953.2
62.5°	694.3	715.7	753.1	799.1	844.1
65°	594.8	610.9	647.2	693.2	732.8
67.5°	498.5	512.4	548.8	580.9	622.6
70°	401.2	419.4	446.1	477.1	503.9
72.5°	323.1	330.6	353.0	375.5	403.3
75°	238.6	251.4	269.6	282.4	298.5
77.5°	171.2	178.7	189.4	200.1	215.0
80°	114.5	117.7	127.3	129.4	141.2
82.5°	69.5	71.7	73.8	74.9	79.2
85°	37.4	37.4	37.4	35.3	35.3
87.5°	21.4	21.4	18.2	15.0	10.7
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)