

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: P557941

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-80-86-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: P557941
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
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

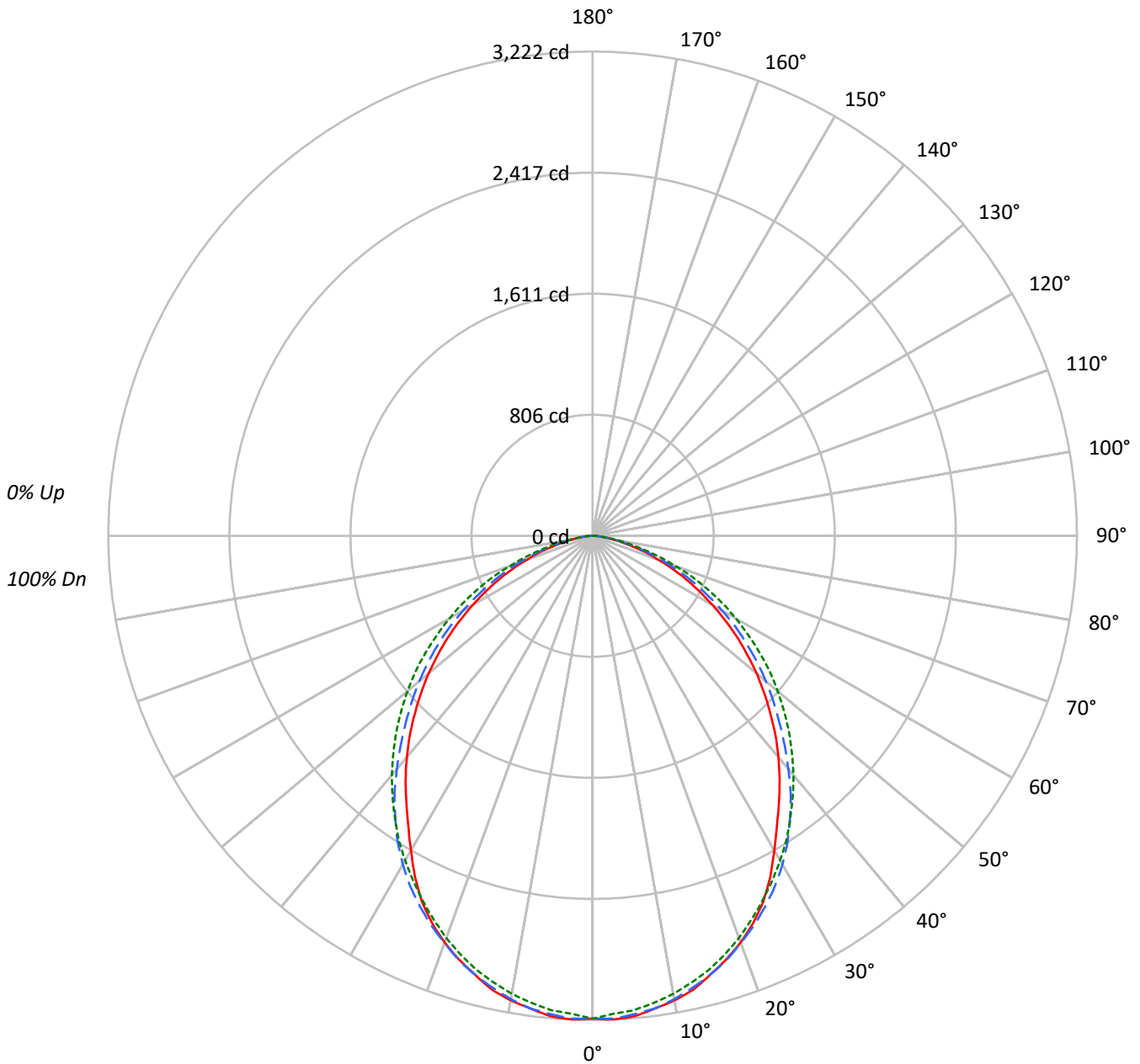
Lumens per Lamp: N/A
Luminaire Lumens: 7430.0 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	8647	8647	8647
5°	8670	8633	8560
10°	8578	8554	8457
15°	8426	8426	8329
20°	8247	8258	8152
25°	7976	8075	7946
30°	7511	7848	7752
35°	7097	7523	7535
40°	6752	7116	7302
45°	6366	6685	7028
50°	5959	6300	6729
55°	5496	5861	6365
60°	4950	5348	5920
65°	4371	4755	5384
70°	3642	4050	4574
75°	2862	3235	3581
80°	2047	2276	2524
85°	1334	1334	1257



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.5	4.1
10°-20°	849.9	11.4
20°-30°	1242.0	16.7
30°-40°	1409.8	19.0
40°-50°	1361.0	18.3
50°-60°	1122.7	15.1
60°-70°	747.6	10.1
70°-80°	334.6	4.5
80°-90°	59.8	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°	2394.5	32.2
0°-40°	3804.3	51.2
0°-60°	6288.0	84.6
0°-90°	7430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7430.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3213	3213	3213	3213	3213	
5°	3210	3208	3196	3179	3169	304
15°	3024	3032	3024	3011	2990	853
25°	2686	2707	2720	2700	2676	1230
35°	2160	2190	2290	2302	2294	1354
45°	1673	1701	1757	1837	1847	1291
55°	1172	1191	1249	1318	1357	1046
65°	686	705	747	800	846	681
75°	275	290	311	326	344	301
85°	43	43	43	41	41	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3213.3	3213.3	3213.3	3213.3	3213.3
2.5°	3221.9	3223.2	3215.8	3196.0	3183.7
5°	3209.6	3208.3	3196.0	3178.7	3168.8
7.5°	3173.8	3176.2	3172.5	3147.9	3134.3
10°	3139.2	3140.5	3130.6	3110.8	3094.8
12.5°	3094.8	3093.5	3080.0	3070.1	3044.2
15°	3024.4	3031.8	3024.4	3010.8	2989.8
17.5°	2956.5	2956.5	2961.5	2938.0	2922.0
20°	2880.0	2883.7	2883.7	2865.2	2846.7
22.5°	2791.1	2802.2	2805.9	2786.2	2763.9
25°	2686.2	2707.2	2719.5	2699.8	2676.3
27.5°	2559.0	2591.1	2628.2	2613.3	2587.4
30°	2417.1	2464.0	2525.7	2513.3	2494.8
32.5°	2282.5	2329.4	2414.6	2409.7	2399.8
35°	2160.3	2189.9	2289.9	2302.3	2293.6
37.5°	2044.3	2071.4	2165.2	2193.6	2186.2
40°	1922.0	1951.7	2025.7	2076.4	2078.8
42.5°	1801.1	1829.5	1889.9	1962.8	1962.8
45°	1672.7	1701.1	1756.6	1836.9	1846.7
47.5°	1546.8	1576.4	1630.7	1711.0	1727.0
50°	1423.3	1450.5	1504.8	1582.6	1607.3
52.5°	1294.9	1324.6	1377.7	1449.2	1485.0
55°	1171.5	1191.2	1249.3	1318.4	1356.7
57.5°	1043.1	1061.6	1127.1	1186.3	1225.8
60°	919.7	943.1	993.7	1054.2	1099.9
62.5°	801.2	825.8	869.1	922.1	974.0
65°	686.4	704.9	746.8	799.9	845.6
67.5°	575.3	591.3	633.3	670.3	718.5
70°	462.9	483.9	514.8	550.6	581.4
72.5°	372.8	381.4	407.4	433.3	465.4
75°	275.3	290.1	311.1	325.9	344.4
77.5°	197.5	206.2	218.5	230.8	248.1
80°	132.1	135.8	146.9	149.4	162.9
82.5°	80.2	82.7	85.2	86.4	91.3
85°	43.2	43.2	43.2	40.7	40.7
87.5°	24.7	24.7	21.0	17.3	12.3
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)