

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: P557970

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-82-85-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: P557970
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-82-85-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

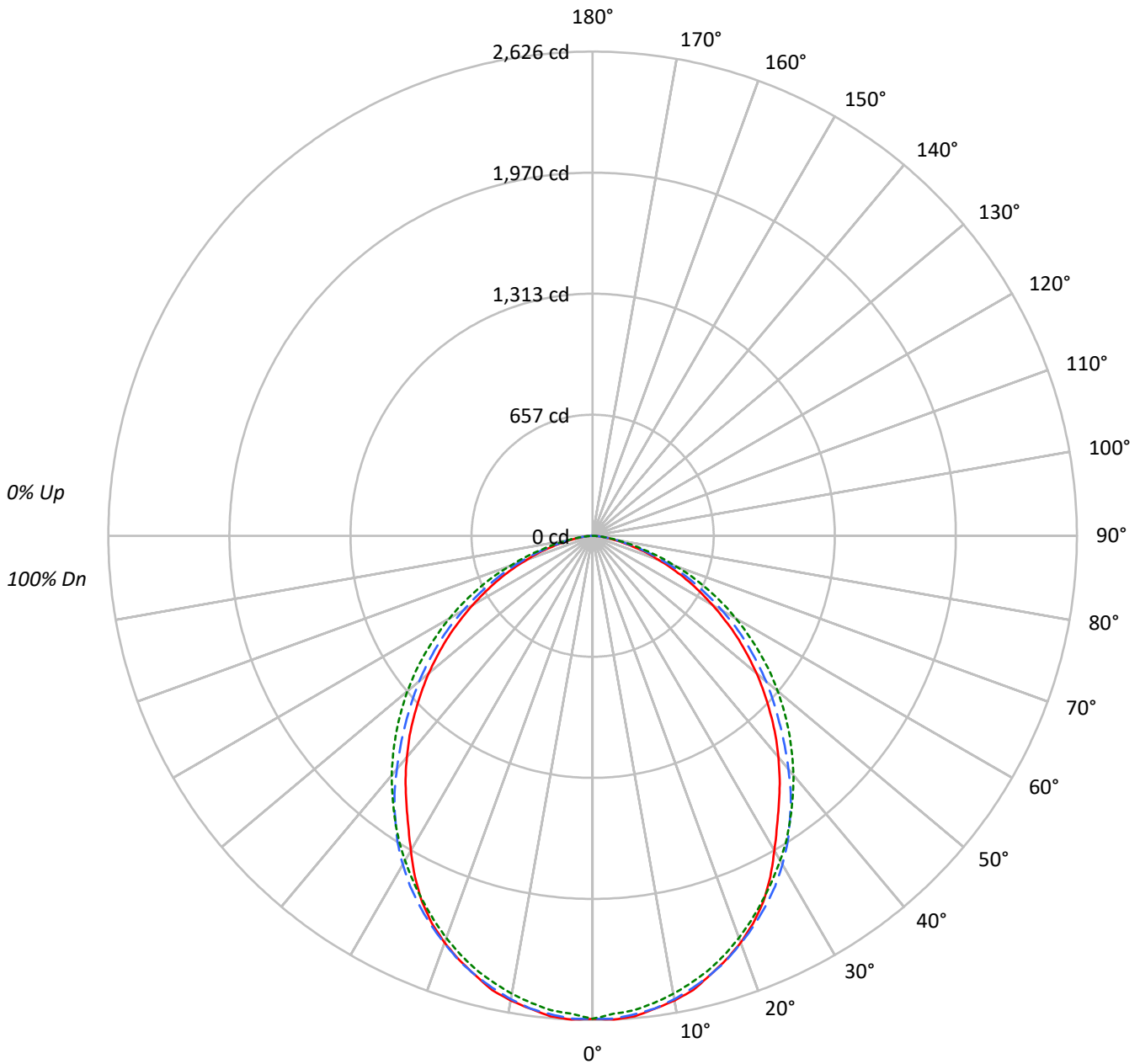
Lumens per Lamp: N/A
Luminaire Lumens: 6057.0 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	7049	7049	7049
5°	7068	7038	6978
10°	6993	6974	6894
15°	6869	6869	6790
20°	6723	6732	6645
25°	6502	6583	6478
30°	6123	6398	6320
35°	5785	6133	6142
40°	5504	5801	5953
45°	5189	5450	5729
50°	4858	5135	5485
55°	4480	4778	5189
60°	4035	4360	4825
65°	3563	3876	4389
70°	2969	3301	3729
75°	2333	2637	2920
80°	1669	1857	2058
85°	1087	1087	1025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.6	4.1
10°-20°	692.9	11.4
20°-30°	1012.5	16.7
30°-40°	1149.3	19.0
40°-50°	1109.5	18.3
50°-60°	915.2	15.1
60°-70°	609.5	10.1
70°-80°	272.7	4.5
80°-90°	48.8	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°	1952.0	32.2
0°-40°	3101.3	51.2
0°-60°	5126.0	84.6
0°-90°	6057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6057.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2620	2620	2620	2620	2620	
5°	2616	2616	2605	2591	2583	248
15°	2466	2472	2466	2454	2437	695
25°	2190	2207	2217	2201	2182	1003
35°	1761	1785	1867	1877	1870	1103
45°	1364	1387	1432	1497	1506	1052
55°	955	971	1018	1075	1106	852
65°	560	575	609	652	689	555
75°	224	236	254	266	281	245
85°	35	35	35	33	33	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2619.5	2619.5	2619.5	2619.5	2619.5
2.5°	2626.5	2627.5	2621.5	2605.4	2595.3
5°	2616.5	2615.5	2605.4	2591.3	2583.3
7.5°	2587.3	2589.3	2586.3	2566.2	2555.1
10°	2559.1	2560.1	2552.1	2536.0	2522.9
12.5°	2522.9	2521.9	2510.8	2502.8	2481.6
15°	2465.5	2471.6	2465.5	2454.5	2437.3
17.5°	2410.2	2410.2	2414.2	2395.1	2382.0
20°	2347.8	2350.8	2350.8	2335.7	2320.6
22.5°	2275.3	2284.4	2287.4	2271.3	2253.2
25°	2189.8	2206.9	2217.0	2200.9	2181.7
27.5°	2086.1	2112.3	2142.5	2130.4	2109.3
30°	1970.4	2008.6	2059.0	2048.9	2033.8
32.5°	1860.7	1899.0	1968.4	1964.4	1956.3
35°	1761.1	1785.2	1866.8	1876.8	1869.8
37.5°	1666.5	1688.6	1765.1	1788.3	1782.2
40°	1566.9	1591.0	1651.4	1692.7	1694.7
42.5°	1468.2	1491.4	1540.7	1600.1	1600.1
45°	1363.6	1386.7	1432.0	1497.4	1505.5
47.5°	1260.9	1285.1	1329.4	1394.8	1407.9
50°	1160.3	1182.4	1226.7	1290.1	1310.3
52.5°	1055.6	1079.8	1123.1	1181.4	1210.6
55°	955.0	971.1	1018.4	1074.8	1106.0
57.5°	850.4	865.5	918.8	967.1	999.3
60°	749.7	768.8	810.1	859.4	896.6
62.5°	653.1	673.2	708.5	751.7	794.0
65°	559.5	574.6	608.8	652.1	689.3
67.5°	469.0	482.0	516.3	546.4	585.7
70°	377.4	394.5	419.6	448.8	474.0
72.5°	303.9	311.0	332.1	353.2	379.4
75°	224.4	236.5	253.6	265.7	280.8
77.5°	161.0	168.1	178.1	188.2	202.3
80°	107.7	110.7	119.8	121.8	132.8
82.5°	65.4	67.4	69.4	70.4	74.5
85°	35.2	35.2	35.2	33.2	33.2
87.5°	20.1	20.1	17.1	14.1	10.1
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)