

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: P557975

Luminaire Tested: **FUSL-12-4-LD4-3LO-30-UNV-82-87-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: P557975
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-82-87-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

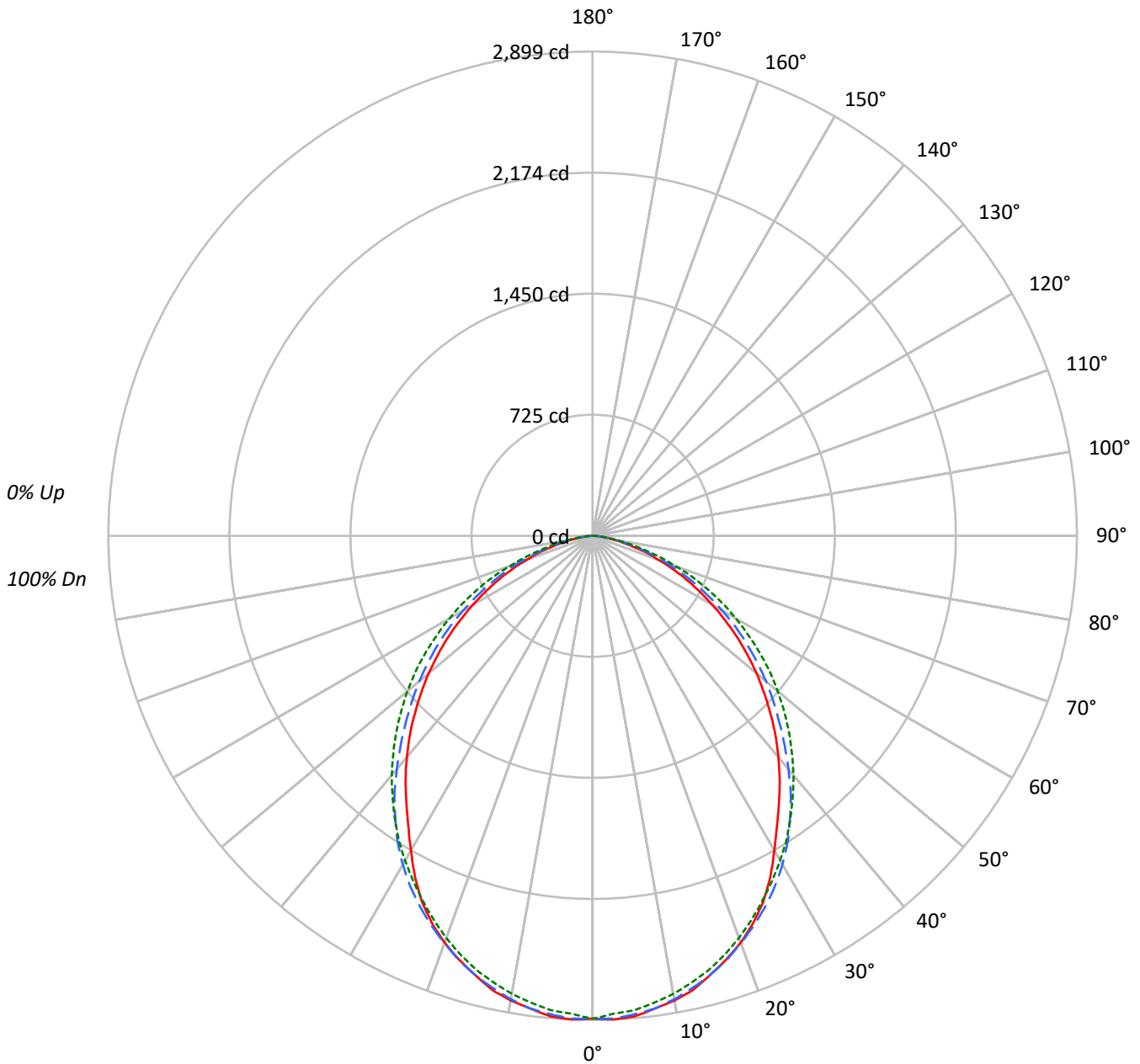
Lumens per Lamp: N/A
Luminaire Lumens: 6686.0 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	7781	7781	7781
5°	7802	7769	7703
10°	7719	7698	7610
15°	7582	7582	7495
20°	7422	7431	7336
25°	7177	7266	7151
30°	6758	7062	6976
35°	6386	6769	6780
40°	6076	6404	6571
45°	5728	6016	6324
50°	5362	5669	6055
55°	4946	5274	5727
60°	4454	4813	5327
65°	3933	4280	4845
70°	3278	3644	4116
75°	2575	2910	3222
80°	1843	2049	2272
85°	1201	1201	1133



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.2	4.1
10°-20°	764.8	11.4
20°-30°	1117.6	16.7
30°-40°	1268.7	19.0
40°-50°	1224.7	18.3
50°-60°	1010.3	15.1
60°-70°	672.8	10.1
70°-80°	301.1	4.5
80°-90°	53.9	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°	2154.7	32.2
0°-40°	3423.4	51.2
0°-60°	5658.3	84.6
0°-90°	6686.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6686.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2892	2892	2892	2892	2892	
5°	2888	2887	2876	2860	2852	273
15°	2722	2728	2722	2709	2690	767
25°	2417	2436	2447	2429	2408	1107
35°	1944	1971	2061	2072	2064	1218
45°	1505	1531	1581	1653	1662	1161
55°	1054	1072	1124	1186	1221	941
65°	618	634	672	720	761	612
75°	248	261	280	293	310	271
85°	39	39	39	37	37	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2891.5	2891.5	2891.5	2891.5	2891.5
2.5°	2899.3	2900.4	2893.7	2876.0	2864.9
5°	2888.2	2887.1	2876.0	2860.4	2851.5
7.5°	2856.0	2858.2	2854.9	2832.6	2820.4
10°	2824.9	2826.0	2817.1	2799.3	2784.9
12.5°	2784.9	2783.8	2771.6	2762.7	2739.3
15°	2721.6	2728.2	2721.6	2709.3	2690.5
17.5°	2660.5	2660.5	2664.9	2643.8	2629.4
20°	2591.6	2594.9	2594.9	2578.3	2561.6
22.5°	2511.6	2521.6	2524.9	2507.2	2487.2
25°	2417.2	2436.1	2447.2	2429.4	2408.3
27.5°	2302.8	2331.7	2365.0	2351.7	2328.3
30°	2175.0	2217.2	2272.8	2261.7	2245.0
32.5°	2053.9	2096.2	2172.8	2168.4	2159.5
35°	1944.0	1970.6	2060.6	2071.7	2063.9
37.5°	1839.6	1864.0	1948.4	1974.0	1967.3
40°	1729.6	1756.2	1822.9	1868.4	1870.7
42.5°	1620.7	1646.3	1700.7	1766.2	1766.2
45°	1505.2	1530.7	1580.7	1652.9	1661.8
47.5°	1391.9	1418.5	1467.4	1539.6	1554.1
50°	1280.8	1305.2	1354.1	1424.1	1446.3
52.5°	1165.3	1191.9	1239.7	1304.1	1336.3
55°	1054.2	1072.0	1124.2	1186.4	1220.8
57.5°	938.7	955.3	1014.2	1067.5	1103.1
60°	827.6	848.7	894.2	948.7	989.8
62.5°	720.9	743.2	782.0	829.8	876.5
65°	617.6	634.3	672.1	719.8	760.9
67.5°	517.7	532.1	569.9	603.2	646.5
70°	416.6	435.5	463.2	495.4	523.2
72.5°	335.5	343.3	366.6	389.9	418.8
75°	247.7	261.0	279.9	293.3	309.9
77.5°	177.7	185.5	196.6	207.7	223.3
80°	118.9	122.2	132.2	134.4	146.6
82.5°	72.2	74.4	76.6	77.8	82.2
85°	38.9	38.9	38.9	36.7	36.7
87.5°	22.2	22.2	18.9	15.6	11.1
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)