

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: P557493

Luminaire Tested: **FUSL-12-4-LD4-2STD-35-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: P557493
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-LD4-2STD-35-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 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

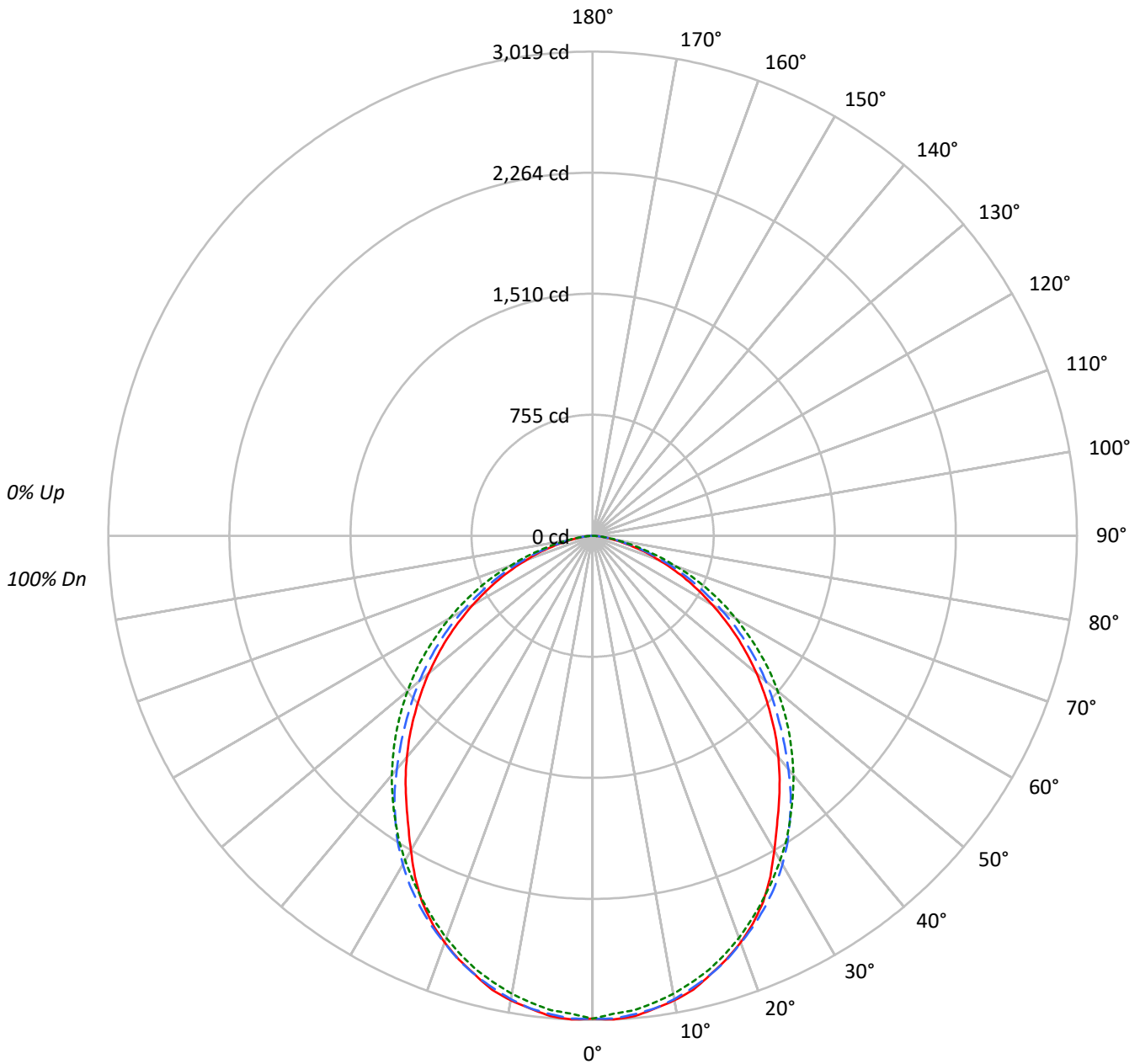
Lumens per Lamp: N/A
Luminaire Lumens: 6962.0 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	8102	8102	8102
5°	8124	8089	8021
10°	8038	8015	7924
15°	7895	7895	7805
20°	7728	7738	7638
25°	7473	7566	7446
30°	7037	7354	7264
35°	6650	7049	7060
40°	6327	6668	6843
45°	5965	6264	6585
50°	5583	5903	6305
55°	5150	5492	5964
60°	4638	5011	5547
65°	4095	4456	5045
70°	3413	3795	4286
75°	2681	3031	3355
80°	1918	2132	2366
85°	1250	1250	1179



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.5	4.1
10°-20°	796.4	11.4
20°-30°	1163.8	16.7
30°-40°	1321.0	19.0
40°-50°	1275.2	18.3
50°-60°	1052.0	15.1
60°-70°	700.5	10.1
70°-80°	313.5	4.5
80°-90°	56.1	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°	2243.6	32.2
0°-40°	3564.7	51.2
0°-60°	5891.9	84.6
0°-90°	6962.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6962.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3011	3011	3011	3011	3011	
5°	3007	3006	2995	2978	2969	285
15°	2834	2841	2834	2821	2802	799
25°	2517	2537	2548	2530	2508	1153
35°	2024	2052	2146	2157	2149	1268
45°	1567	1594	1646	1721	1730	1209
55°	1098	1116	1171	1235	1271	980
65°	643	660	700	750	792	638
75°	258	272	292	305	323	282
85°	40	40	40	38	38	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3010.9	3010.9	3010.9	3010.9	3010.9
2.5°	3019.0	3020.1	3013.2	2994.7	2983.1
5°	3007.4	3006.3	2994.7	2978.5	2969.2
7.5°	2973.9	2976.2	2972.7	2949.6	2936.9
10°	2941.5	2942.6	2933.4	2914.9	2899.8
12.5°	2899.8	2898.7	2886.0	2876.7	2852.4
15°	2833.9	2840.9	2833.9	2821.2	2801.5
17.5°	2770.3	2770.3	2774.9	2752.9	2737.9
20°	2698.6	2702.0	2702.0	2684.7	2667.3
22.5°	2615.3	2625.7	2629.2	2610.7	2589.8
25°	2517.0	2536.6	2548.2	2529.7	2507.7
27.5°	2397.8	2427.9	2462.6	2448.7	2424.4
30°	2264.8	2308.8	2366.6	2355.0	2337.7
32.5°	2138.7	2182.7	2262.5	2257.9	2248.6
35°	2024.2	2052.0	2145.7	2157.2	2149.1
37.5°	1915.5	1940.9	2028.8	2055.5	2048.5
40°	1801.0	1828.7	1898.1	1945.6	1947.9
42.5°	1687.6	1714.2	1770.9	1839.2	1839.2
45°	1567.3	1593.9	1646.0	1721.2	1730.4
47.5°	1449.3	1477.1	1528.0	1603.2	1618.2
50°	1333.7	1359.1	1410.0	1482.9	1506.0
52.5°	1213.4	1241.1	1290.9	1358.0	1391.5
55°	1097.7	1116.2	1170.6	1235.4	1271.2
57.5°	977.4	994.8	1056.1	1111.6	1148.6
60°	861.7	883.7	931.1	987.8	1030.6
62.5°	750.7	773.8	814.3	864.1	912.6
65°	643.1	660.5	699.8	749.5	792.3
67.5°	539.0	554.1	593.4	628.1	673.2
70°	433.8	453.4	482.3	515.9	544.8
72.5°	349.3	357.4	381.7	406.0	436.1
75°	257.9	271.8	291.5	305.4	322.7
77.5°	185.1	193.2	204.7	216.3	232.5
80°	123.8	127.2	137.6	140.0	152.7
82.5°	75.2	77.5	79.8	81.0	85.6
85°	40.5	40.5	40.5	38.2	38.2
87.5°	23.1	23.1	19.7	16.2	11.6
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)