

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: P553986

Luminaire Tested: **FUSL-12-2-LD4-1HI-40-UNV-81-85-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: P553986
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-12-2-LD4-1HI-40-UNV-81-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

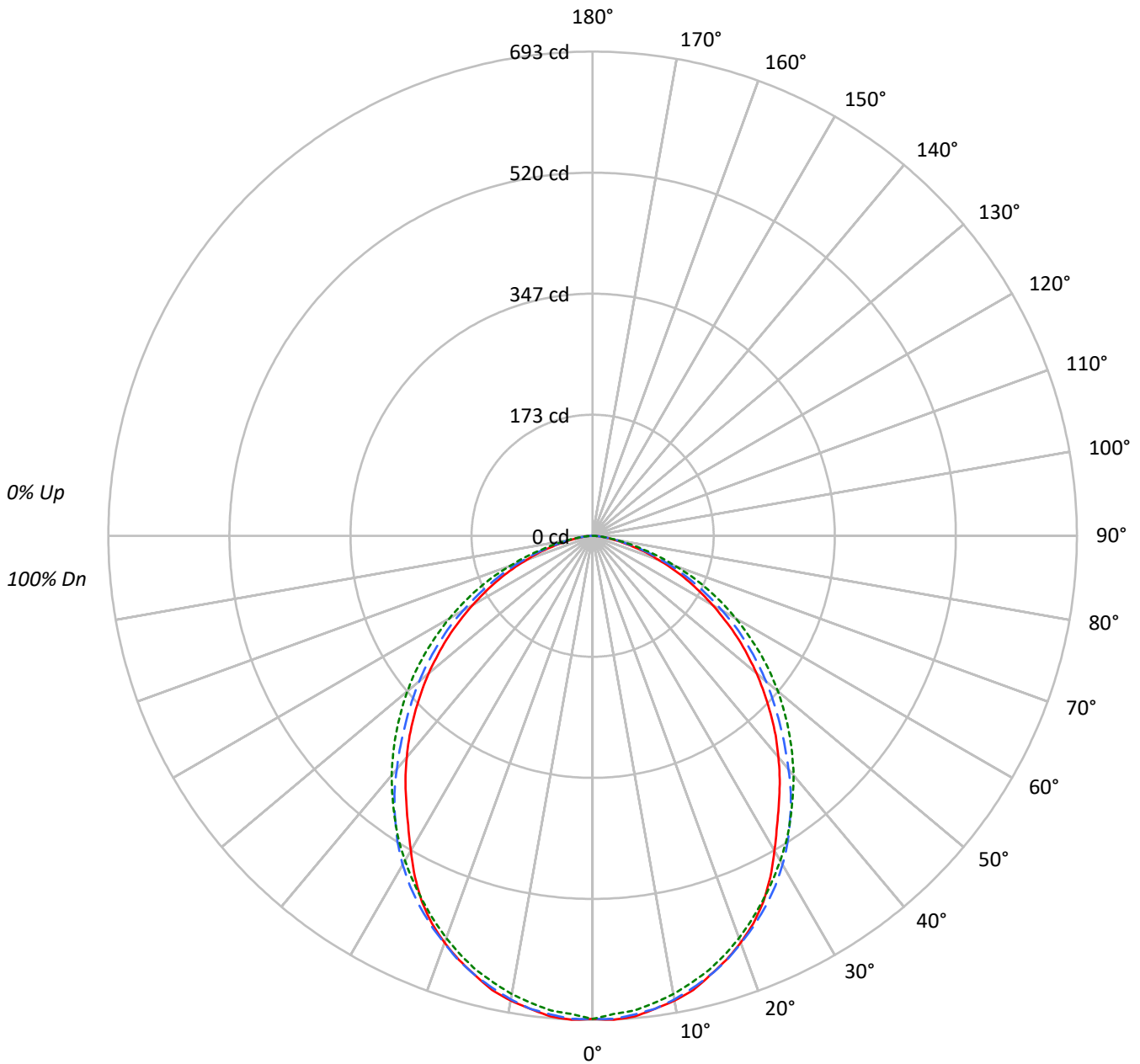
Lumens per Lamp: N/A
Luminaire Lumens: 1599.0 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	3722	3722	3722
5°	3732	3716	3685
10°	3692	3682	3640
15°	3627	3627	3585
20°	3550	3554	3509
25°	3433	3476	3420
30°	3233	3378	3337
35°	3054	3238	3243
40°	2906	3063	3143
45°	2740	2877	3025
50°	2565	2711	2896
55°	2365	2523	2740
60°	2130	2302	2548
65°	1881	2046	2318
70°	1567	1744	1969
75°	1231	1391	1541
80°	880	979	1088
85°	574	574	543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.1	4.1
10°-20°	182.9	11.4
20°-30°	267.3	16.7
30°-40°	303.4	19.0
40°-50°	292.9	18.3
50°-60°	241.6	15.1
60°-70°	160.9	10.1
70°-80°	72.0	4.5
80°-90°	12.9	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°	515.3	32.2
0°-40°	818.7	51.2
0°-60°	1353.2	84.6
0°-90°	1599.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1599.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	692	692	692	692	692	
5°	691	690	688	684	682	65
15°	651	652	651	648	643	183
25°	578	583	585	581	576	265
35°	465	471	493	496	494	291
45°	360	366	378	395	397	278
55°	252	256	269	284	292	225
65°	148	152	161	172	182	146
75°	59	62	67	70	74	65
85°	9	9	9	9	9	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	691.5	691.5	691.5	691.5	691.5
2.5°	693.4	693.7	692.1	687.8	685.2
5°	690.7	690.5	687.8	684.1	682.0
7.5°	683.0	683.6	682.8	677.4	674.5
10°	675.6	675.9	673.7	669.5	666.0
12.5°	666.0	665.8	662.8	660.7	655.1
15°	650.9	652.5	650.9	648.0	643.4
17.5°	636.3	636.3	637.3	632.3	628.8
20°	619.8	620.6	620.6	616.6	612.6
22.5°	600.7	603.1	603.9	599.6	594.8
25°	578.1	582.6	585.3	581.0	576.0
27.5°	550.7	557.6	565.6	562.4	556.8
30°	520.2	530.3	543.6	540.9	536.9
32.5°	491.2	501.3	519.6	518.6	516.5
35°	464.9	471.3	492.8	495.5	493.6
37.5°	439.9	445.8	466.0	472.1	470.5
40°	413.6	420.0	436.0	446.8	447.4
42.5°	387.6	393.7	406.7	422.4	422.4
45°	360.0	366.1	378.0	395.3	397.4
47.5°	332.9	339.3	350.9	368.2	371.7
50°	306.3	312.2	323.8	340.6	345.9
52.5°	278.7	285.1	296.5	311.9	319.6
55°	252.1	256.4	268.9	283.7	292.0
57.5°	224.5	228.5	242.6	255.3	263.8
60°	197.9	203.0	213.9	226.9	236.7
62.5°	172.4	177.7	187.0	198.5	209.6
65°	147.7	151.7	160.7	172.2	182.0
67.5°	123.8	127.3	136.3	144.3	154.6
70°	99.6	104.1	110.8	118.5	125.1
72.5°	80.2	82.1	87.7	93.2	100.2
75°	59.2	62.4	66.9	70.1	74.1
77.5°	42.5	44.4	47.0	49.7	53.4
80°	28.4	29.2	31.6	32.1	35.1
82.5°	17.3	17.8	18.3	18.6	19.7
85°	9.3	9.3	9.3	8.8	8.8
87.5°	5.3	5.3	4.5	3.7	2.7
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)