

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: P554518

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-82-87-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: P554518
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-LD4-1STD-40-UNV-82-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

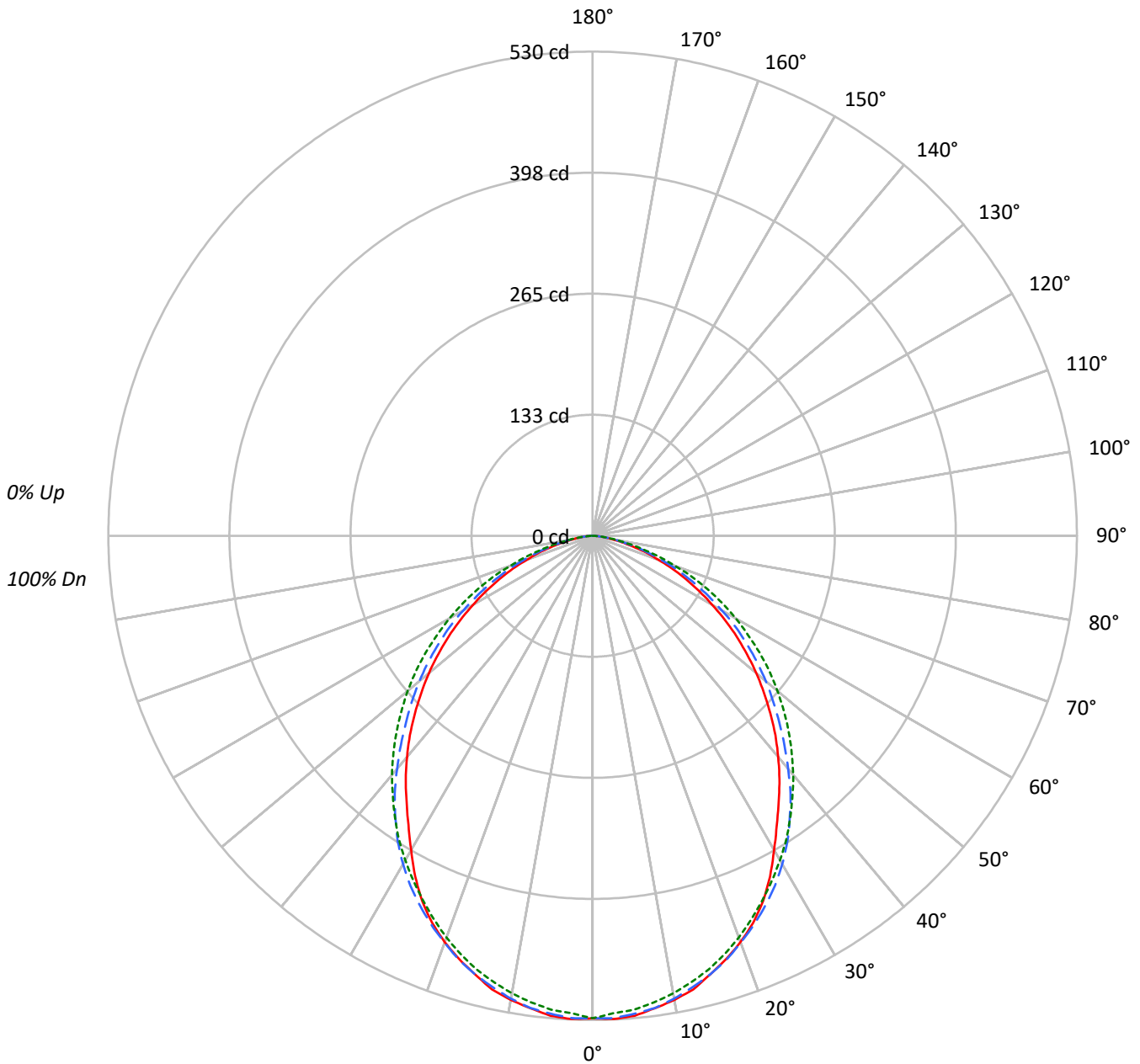
Lumens per Lamp: N/A
Luminaire Lumens: 1221.0 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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°	2842	2842	2842
5°	2849	2837	2813
10°	2819	2812	2779
15°	2769	2769	2737
20°	2711	2714	2679
25°	2621	2654	2612
30°	2468	2580	2548
35°	2332	2472	2476
40°	2219	2339	2400
45°	2092	2197	2310
50°	1958	2071	2211
55°	1806	1926	2092
60°	1626	1758	1946
65°	1436	1563	1770
70°	1197	1331	1503
75°	940	1063	1177
80°	673	747	831
85°	438	438	414



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.7	4.1
10°-20°	139.7	11.4
20°-30°	204.1	16.7
30°-40°	231.7	19.0
40°-50°	223.7	18.3
50°-60°	184.5	15.1
60°-70°	122.9	10.1
70°-80°	55.0	4.5
80°-90°	9.8	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°	393.5	32.2
0°-40°	625.2	51.2
0°-60°	1033.3	84.6
0°-90°	1221.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	527	527	525	522	521	50
15°	497	498	497	495	491	140
25°	441	445	447	444	440	202
35°	355	360	376	378	377	222
45°	275	280	289	302	304	212
55°	192	196	205	217	223	172
65°	113	116	123	132	139	112
75°	45	48	51	54	57	49
85°	7	7	7	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	528.1	528.1	528.1	528.1	528.1
2.5°	529.5	529.7	528.5	525.2	523.2
5°	527.4	527.2	525.2	522.4	520.7
7.5°	521.6	522.0	521.4	517.3	515.1
10°	515.9	516.1	514.5	511.2	508.6
12.5°	508.6	508.4	506.1	504.5	500.3
15°	497.0	498.2	497.0	494.8	491.3
17.5°	485.9	485.9	486.7	482.8	480.2
20°	473.3	473.9	473.9	470.8	467.8
22.5°	458.7	460.5	461.1	457.9	454.2
25°	441.4	444.9	446.9	443.7	439.8
27.5°	420.5	425.8	431.9	429.5	425.2
30°	397.2	404.9	415.1	413.0	410.0
32.5°	375.1	382.8	396.8	396.0	394.4
35°	355.0	359.9	376.3	378.3	376.9
37.5°	335.9	340.4	355.8	360.5	359.3
40°	315.9	320.7	332.9	341.2	341.6
42.5°	296.0	300.6	310.6	322.6	322.6
45°	274.9	279.5	288.7	301.9	303.5
47.5°	254.2	259.1	268.0	281.2	283.8
50°	233.9	238.4	247.3	260.1	264.1
52.5°	212.8	217.7	226.4	238.2	244.0
55°	192.5	195.8	205.3	216.7	222.9
57.5°	171.4	174.5	185.2	195.0	201.4
60°	151.1	155.0	163.3	173.2	180.8
62.5°	131.7	135.7	142.8	151.5	160.1
65°	112.8	115.8	122.7	131.5	139.0
67.5°	94.5	97.2	104.1	110.2	118.1
70°	76.1	79.5	84.6	90.5	95.5
72.5°	61.3	62.7	66.9	71.2	76.5
75°	45.2	47.7	51.1	53.6	56.6
77.5°	32.5	33.9	35.9	37.9	40.8
80°	21.7	22.3	24.1	24.5	26.8
82.5°	13.2	13.6	14.0	14.2	15.0
85°	7.1	7.1	7.1	6.7	6.7
87.5°	4.1	4.1	3.4	2.8	2.0
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)