

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: P554534

Luminaire Tested: **FUSL-12-2-LD4-1STD-40-UNV-93-87-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: P554534
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-93-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS 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

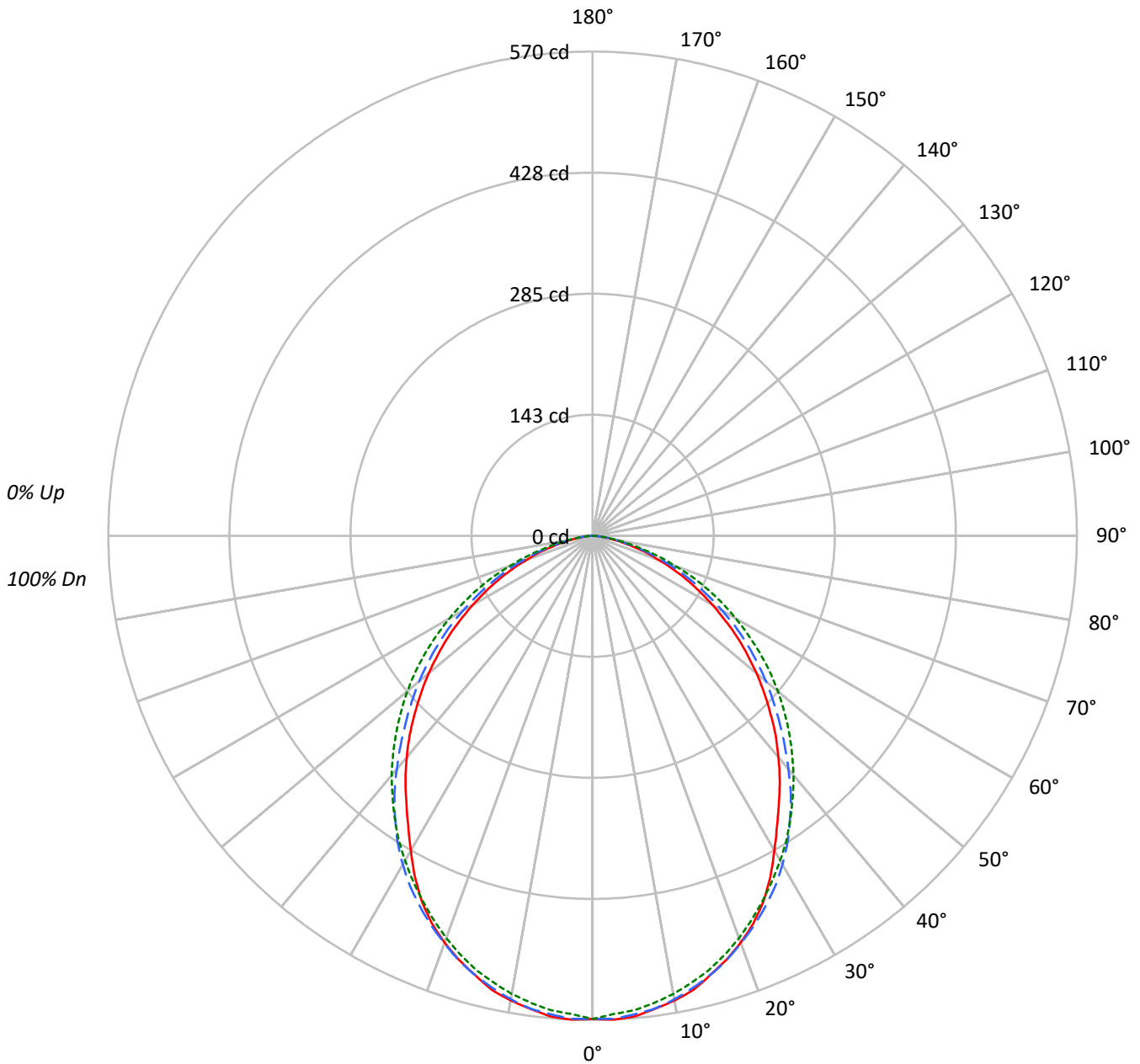
Lumens per Lamp: N/A
Luminaire Lumens: 1315.0 lumens
Efficiency: N/A
Efficacy: 79.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (A_{in}): 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°	3061	3061	3061
5°	3069	3056	3030
10°	3036	3028	2993
15°	2983	2983	2949
20°	2919	2923	2885
25°	2823	2858	2813
30°	2659	2778	2744
35°	2512	2663	2667
40°	2390	2519	2585
45°	2253	2366	2487
50°	2109	2230	2382
55°	1945	2075	2253
60°	1752	1893	2096
65°	1547	1684	1906
70°	1289	1434	1619
75°	1013	1146	1268
80°	725	806	893
85°	469	469	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	4.1
10°-20°	150.4	11.4
20°-30°	219.8	16.7
30°-40°	249.5	19.0
40°-50°	240.9	18.3
50°-60°	198.7	15.1
60°-70°	132.3	10.1
70°-80°	59.2	4.5
80°-90°	10.6	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°	423.8	32.2
0°-40°	673.3	51.2
0°-60°	1112.9	84.6
0°-90°	1315.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1315.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	569	569	569	569	569	
5°	568	568	566	563	561	54
15°	535	537	535	533	529	151
25°	475	479	481	478	474	218
35°	382	388	405	408	406	240
45°	296	301	311	325	327	228
55°	207	211	221	233	240	185
65°	122	125	132	142	150	120
75°	49	51	55	58	61	53
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	568.7	568.7	568.7	568.7	568.7
2.5°	570.2	570.5	569.1	565.6	563.5
5°	568.0	567.8	565.6	562.6	560.8
7.5°	561.7	562.1	561.5	557.1	554.7
10°	555.6	555.8	554.1	550.6	547.7
12.5°	547.7	547.5	545.1	543.4	538.8
15°	535.3	536.6	535.3	532.9	529.2
17.5°	523.3	523.3	524.1	520.0	517.1
20°	509.7	510.4	510.4	507.1	503.8
22.5°	494.0	495.9	496.6	493.1	489.2
25°	475.4	479.1	481.3	477.8	473.7
27.5°	452.9	458.6	465.1	462.5	457.9
30°	427.8	436.1	447.0	444.8	441.5
32.5°	404.0	412.3	427.3	426.5	424.7
35°	382.3	387.6	405.3	407.5	405.9
37.5°	361.8	366.6	383.2	388.2	386.9
40°	340.2	345.4	358.5	367.5	367.9
42.5°	318.8	323.8	334.5	347.4	347.4
45°	296.0	301.1	310.9	325.1	326.8
47.5°	273.8	279.0	288.6	302.8	305.7
50°	251.9	256.7	266.3	280.1	284.5
52.5°	229.2	234.4	243.8	256.5	262.8
55°	207.3	210.8	221.1	233.3	240.1
57.5°	184.6	187.9	199.5	210.0	217.0
60°	162.8	166.9	175.9	186.6	194.7
62.5°	141.8	146.2	153.8	163.2	172.4
65°	121.5	124.8	132.2	141.6	149.7
67.5°	101.8	104.7	112.1	118.6	127.2
70°	81.9	85.6	91.1	97.4	102.9
72.5°	66.0	67.5	72.1	76.7	82.4
75°	48.7	51.3	55.1	57.7	61.0
77.5°	35.0	36.5	38.7	40.9	43.9
80°	23.4	24.0	26.0	26.4	28.8
82.5°	14.2	14.6	15.1	15.3	16.2
85°	7.6	7.6	7.6	7.2	7.2
87.5°	4.4	4.4	3.7	3.1	2.2
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)