

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: P554444

Luminaire Tested: **FUSL-12-2-LD4-1STD-35-UNV-81-96-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: P554444
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-35-UNV-81-96-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .250
CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

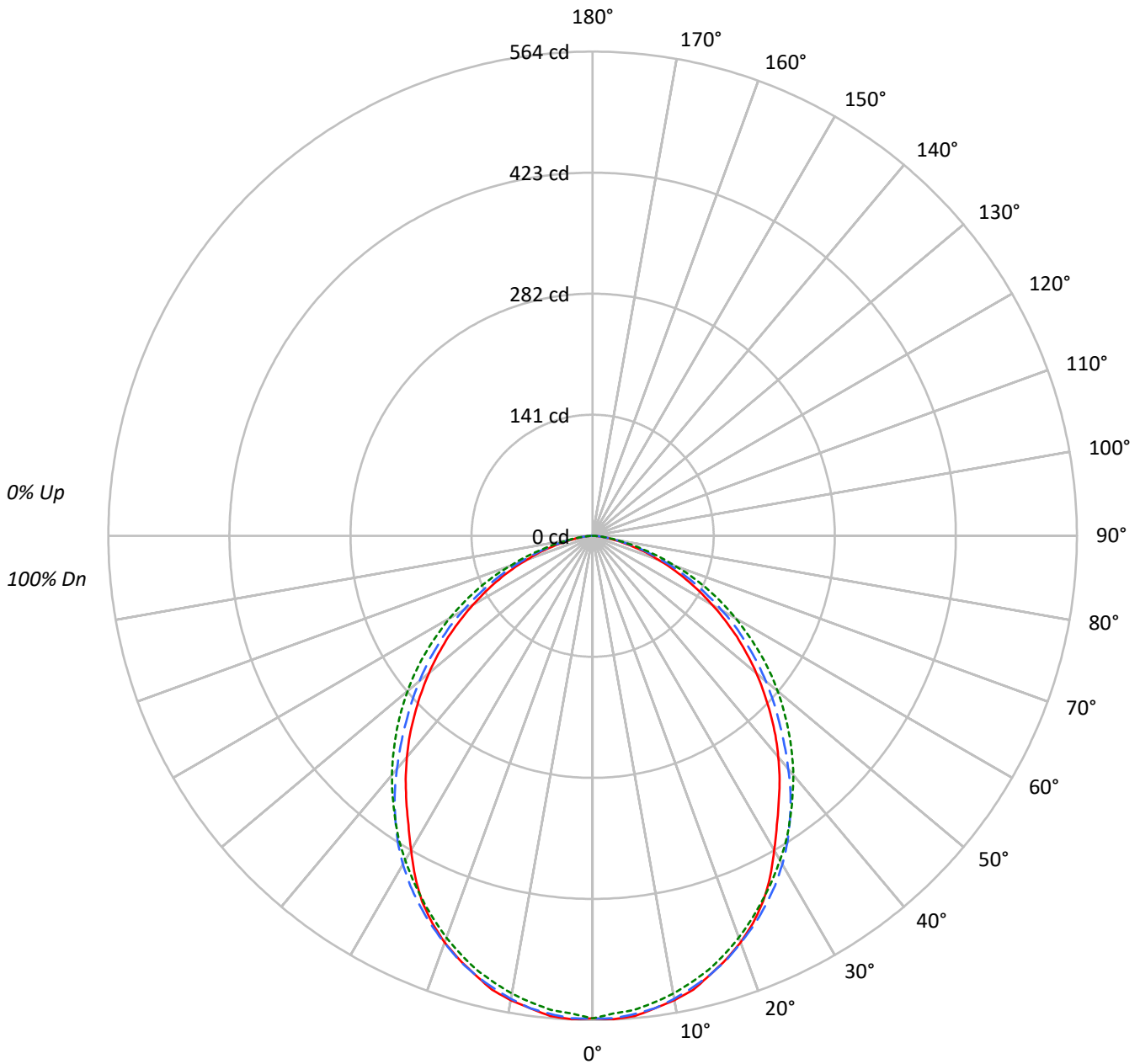
Lumens per Lamp: N/A
Luminaire Lumens: 1300.0 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	3026	3026	3026
5°	3034	3021	2995
10°	3002	2993	2959
15°	2949	2949	2915
20°	2886	2889	2853
25°	2791	2825	2781
30°	2628	2746	2713
35°	2484	2633	2637
40°	2363	2490	2555
45°	2228	2340	2459
50°	2085	2205	2354
55°	1924	2051	2228
60°	1732	1872	2071
65°	1529	1664	1885
70°	1275	1418	1600
75°	1002	1131	1254
80°	716	797	883
85°	469	469	438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.9	4.1
10°-20°	148.7	11.4
20°-30°	217.3	16.7
30°-40°	246.7	19.0
40°-50°	238.1	18.3
50°-60°	196.4	15.1
60°-70°	130.8	10.1
70°-80°	58.5	4.5
80°-90°	10.5	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°	419.0	32.2
0°-40°	665.6	51.2
0°-60°	1100.2	84.6
0°-90°	1300.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1300.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	562	562	562	562	562	
5°	562	561	559	556	554	53
15°	529	530	529	527	523	149
25°	470	474	476	472	468	215
35°	378	383	401	403	401	237
45°	293	298	307	321	323	226
55°	205	208	219	231	237	183
65°	120	123	131	140	148	119
75°	48	51	54	57	60	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°	562.2	562.2	562.2	562.2	562.2
2.5°	563.7	563.9	562.6	559.2	557.0
5°	561.6	561.4	559.2	556.2	554.4
7.5°	555.3	555.7	555.1	550.8	548.4
10°	549.3	549.5	547.7	544.3	541.5
12.5°	541.5	541.3	538.9	537.2	532.6
15°	529.2	530.5	529.2	526.8	523.1
17.5°	517.3	517.3	518.2	514.1	511.2
20°	503.9	504.5	504.5	501.3	498.1
22.5°	488.3	490.3	490.9	487.5	483.6
25°	470.0	473.7	475.8	472.4	468.3
27.5°	447.7	453.4	459.8	457.2	452.7
30°	422.9	431.1	441.9	439.8	436.5
32.5°	399.4	407.6	422.5	421.6	419.9
35°	378.0	383.2	400.7	402.8	401.3
37.5°	357.7	362.4	378.8	383.8	382.5
40°	336.3	341.5	354.4	363.3	363.7
42.5°	315.1	320.1	330.7	343.4	343.4
45°	292.7	297.6	307.4	321.4	323.1
47.5°	270.6	275.8	285.3	299.4	302.2
50°	249.0	253.8	263.3	276.9	281.2
52.5°	226.6	231.8	241.0	253.6	259.8
55°	205.0	208.4	218.6	230.7	237.4
57.5°	182.5	185.7	197.2	207.6	214.5
60°	160.9	165.0	173.9	184.5	192.4
62.5°	140.2	144.5	152.1	161.3	170.4
65°	120.1	123.3	130.7	140.0	148.0
67.5°	100.7	103.5	110.8	117.3	125.7
70°	81.0	84.7	90.1	96.3	101.7
72.5°	65.2	66.7	71.3	75.8	81.4
75°	48.2	50.8	54.4	57.0	60.3
77.5°	34.6	36.1	38.2	40.4	43.4
80°	23.1	23.8	25.7	26.1	28.5
82.5°	14.0	14.5	14.9	15.1	16.0
85°	7.6	7.6	7.6	7.1	7.1
87.5°	4.3	4.3	3.7	3.0	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)