

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: P556497

Luminaire Tested: **FUSL-12-4-LD4-1LO-35-UNV-82-84-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: P556497
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-LD4-1LO-35-UNV-82-84-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

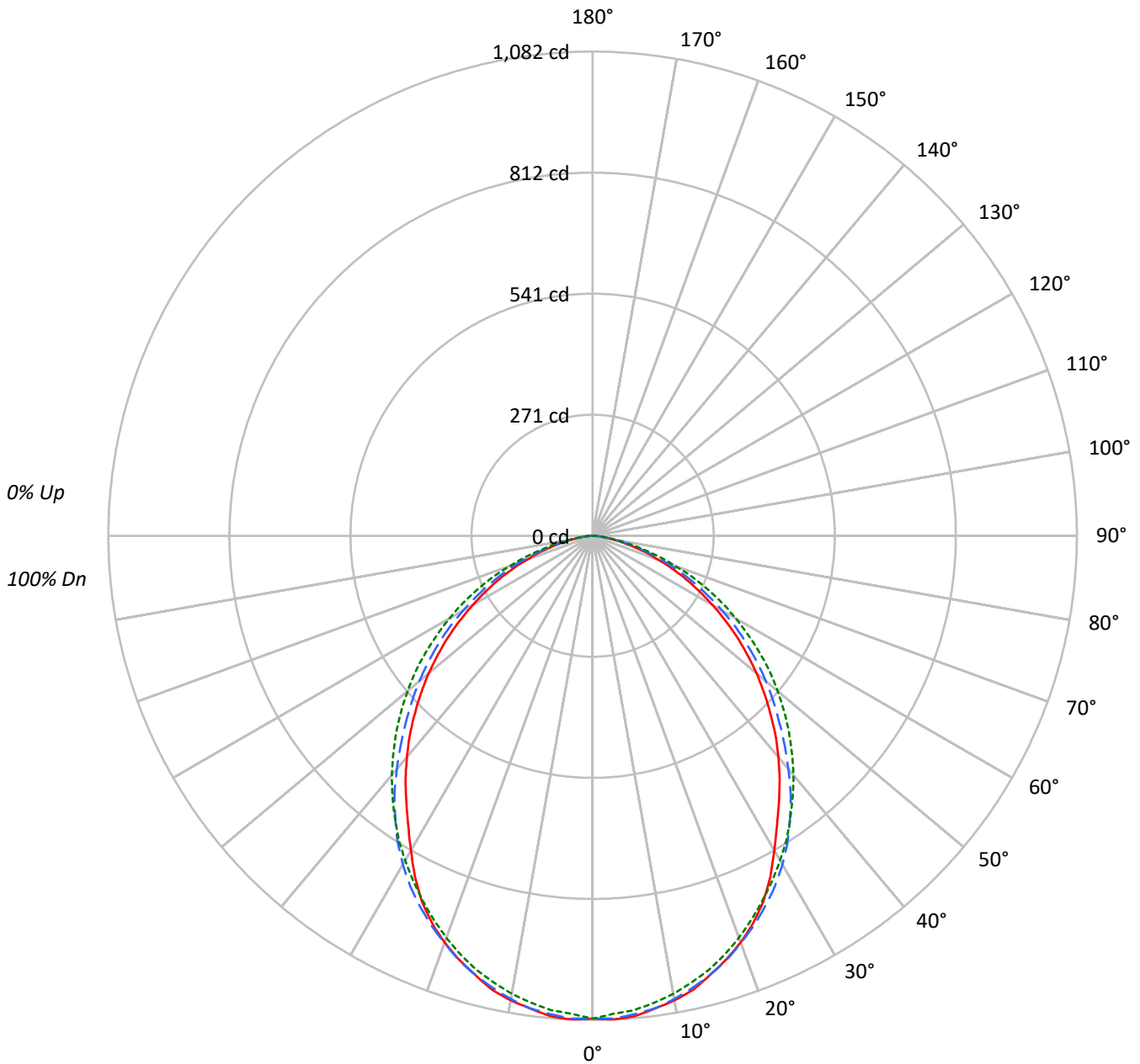
Lumens per Lamp: N/A
Luminaire Lumens: 2495.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	2904	2904	2904
5°	2911	2899	2874
10°	2881	2872	2840
15°	2829	2829	2797
20°	2769	2773	2737
25°	2678	2711	2668
30°	2522	2635	2603
35°	2383	2526	2530
40°	2267	2389	2452
45°	2138	2245	2360
50°	2001	2115	2259
55°	1846	1968	2137
60°	1662	1796	1988
65°	1468	1597	1808
70°	1223	1360	1536
75°	961	1087	1203
80°	688	764	848
85°	448	448	423



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.6	4.1
10°-20°	285.4	11.4
20°-30°	417.1	16.7
30°-40°	473.4	19.0
40°-50°	457.0	18.3
50°-60°	377.0	15.1
60°-70°	251.1	10.1
70°-80°	112.3	4.5
80°-90°	20.1	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°	804.1	32.2
0°-40°	1277.5	51.2
0°-60°	2111.5	84.6
0°-90°	2495.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2495.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1079	1079	1079	1079	1079	
5°	1078	1077	1073	1067	1064	102
15°	1016	1018	1016	1011	1004	286
25°	902	909	913	907	899	413
35°	725	735	769	773	770	455
45°	562	571	590	617	620	433
55°	393	400	420	443	456	351
65°	230	237	251	269	284	229
75°	92	97	104	109	116	101
85°	14	14	14	14	14	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1079.0	1079.0	1079.0	1079.0	1079.0
2.5°	1081.9	1082.3	1079.9	1073.2	1069.1
5°	1077.8	1077.4	1073.2	1067.4	1064.1
7.5°	1065.8	1066.6	1065.3	1057.1	1052.5
10°	1054.2	1054.6	1051.2	1044.6	1039.2
12.5°	1039.2	1038.8	1034.3	1030.9	1022.2
15°	1015.6	1018.1	1015.6	1011.0	1004.0
17.5°	992.8	992.8	994.5	986.6	981.2
20°	967.1	968.3	968.3	962.1	955.9
22.5°	937.3	941.0	942.2	935.6	928.1
25°	902.0	909.1	913.2	906.6	898.7
27.5°	859.3	870.1	882.5	877.6	868.9
30°	811.7	827.4	848.1	844.0	837.8
32.5°	766.5	782.2	810.8	809.2	805.8
35°	725.4	735.4	769.0	773.1	770.2
37.5°	686.5	695.6	727.1	736.6	734.1
40°	645.4	655.4	680.2	697.2	698.1
42.5°	604.8	614.3	634.6	659.1	659.1
45°	561.7	571.2	589.9	616.8	620.1
47.5°	519.4	529.4	547.6	574.5	579.9
50°	478.0	487.1	505.3	531.4	539.7
52.5°	434.8	444.8	462.6	486.7	498.7
55°	393.4	400.0	419.5	442.7	455.6
57.5°	350.3	356.5	378.5	398.4	411.6
60°	308.8	316.7	333.7	354.0	369.3
62.5°	269.0	277.3	291.8	309.7	327.1
65°	230.5	236.7	250.8	268.6	284.0
67.5°	193.2	198.6	212.7	225.1	241.3
70°	155.4	162.5	172.9	184.9	195.2
72.5°	125.2	128.1	136.8	145.5	156.3
75°	92.4	97.4	104.5	109.4	115.7
77.5°	66.3	69.2	73.4	77.5	83.3
80°	44.4	45.6	49.3	50.2	54.7
82.5°	26.9	27.8	28.6	29.0	30.7
85°	14.5	14.5	14.5	13.7	13.7
87.5°	8.3	8.3	7.0	5.8	4.1
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)