

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: P558141

Luminaire Tested: **FUSL-12-4-LD4-3LO-50-UNV-80-96-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: P558141
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-LD4-3LO-50-UNV-80-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

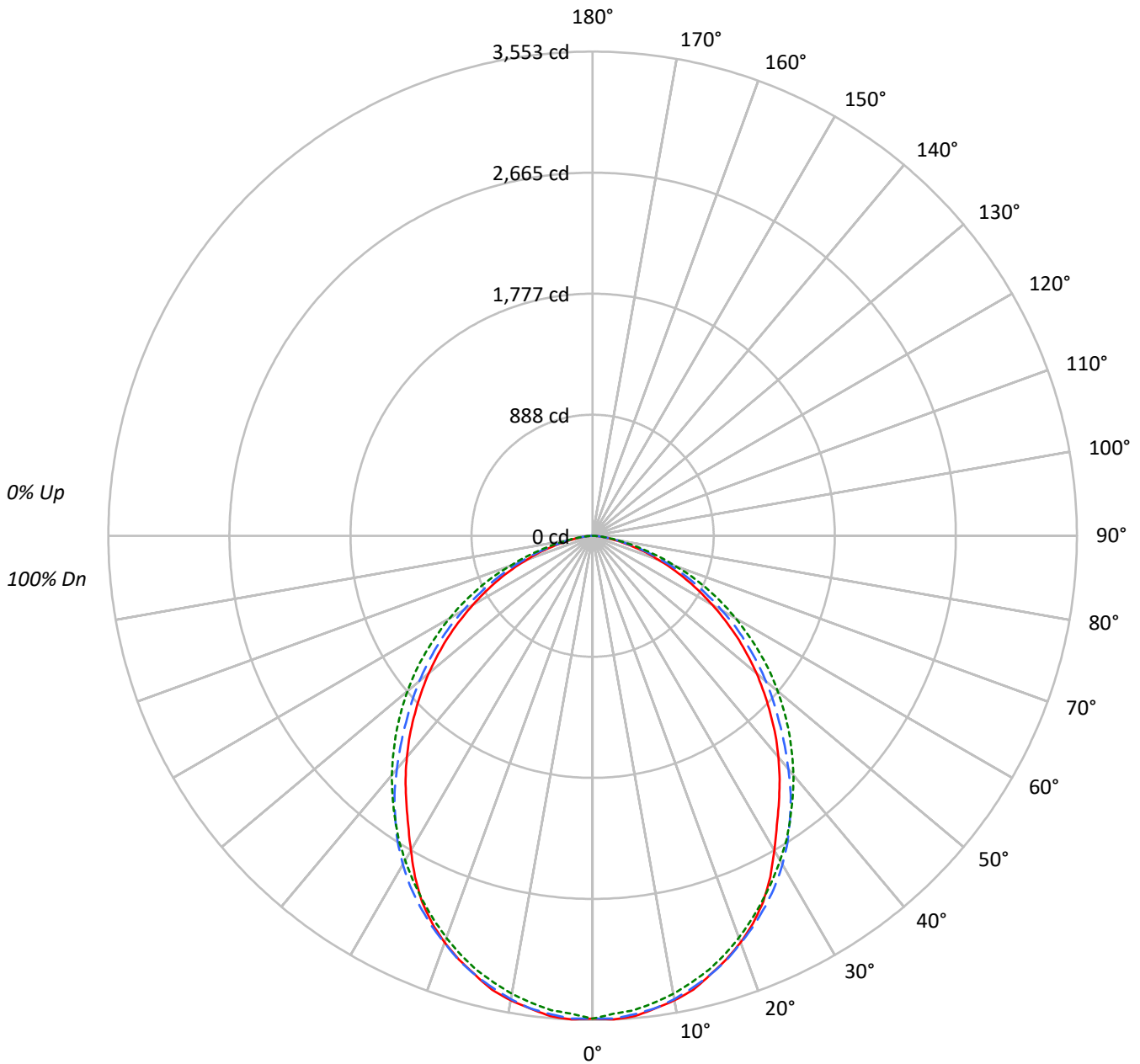
Lumens per Lamp: N/A
Luminaire Lumens: 8193.0 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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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CATALOG NUMBER: FUSL-12-4-LD4-3LO-50-UNV-80-96-EDD

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°	9535	9535	9535
5°	9560	9520	9439
10°	9459	9433	9325
15°	9291	9291	9185
20°	9094	9106	8989
25°	8795	8904	8762
30°	8282	8654	8548
35°	7825	8295	8309
40°	7445	7847	8052
45°	7019	7371	7750
50°	6571	6947	7420
55°	6061	6463	7019
60°	5458	5898	6527
65°	4819	5244	5937
70°	4017	4466	5044
75°	3157	3566	3949
80°	2258	2510	2785
85°	1470	1470	1386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.6	4.1
10°-20°	937.2	11.4
20°-30°	1369.6	16.7
30°-40°	1554.6	19.0
40°-50°	1500.7	18.3
50°-60°	1238.0	15.1
60°-70°	824.4	10.1
70°-80°	368.9	4.5
80°-90°	66.0	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°	2640.4	32.2
0°-40°	4195.0	51.2
0°-60°	6933.7	84.6
0°-90°	8193.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8193.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3543	3543	3543	3543	3543	
5°	3539	3538	3524	3505	3494	335
15°	3335	3343	3335	3320	3297	940
25°	2962	2985	2999	2977	2951	1356
35°	2382	2415	2525	2539	2529	1493
45°	1844	1876	1937	2026	2036	1423
55°	1292	1314	1378	1454	1496	1153
65°	757	777	824	882	932	750
75°	304	320	343	359	380	332
85°	48	48	48	45	45	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3543.3	3543.3	3543.3	3543.3	3543.3
2.5°	3552.8	3554.2	3546.0	3524.2	3510.6
5°	3539.2	3537.8	3524.2	3505.1	3494.3
7.5°	3499.7	3502.4	3498.3	3471.1	3456.1
10°	3461.6	3462.9	3452.1	3430.3	3412.6
12.5°	3412.6	3411.2	3396.2	3385.4	3356.8
15°	3335.0	3343.2	3335.0	3320.0	3296.9
17.5°	3260.1	3260.1	3265.6	3239.7	3222.0
20°	3175.7	3179.8	3179.8	3159.4	3139.0
22.5°	3077.7	3090.0	3094.1	3072.3	3047.8
25°	2962.0	2985.2	2998.8	2977.0	2951.1
27.5°	2821.8	2857.2	2898.0	2881.7	2853.1
30°	2665.3	2717.0	2785.1	2771.4	2751.0
32.5°	2516.9	2568.6	2662.6	2657.1	2646.2
35°	2382.1	2414.8	2525.1	2538.7	2529.2
37.5°	2254.2	2284.1	2387.6	2418.9	2410.7
40°	2119.4	2152.1	2233.8	2289.6	2292.3
42.5°	1986.0	2017.3	2084.0	2164.3	2164.3
45°	1844.5	1875.8	1937.0	2025.5	2036.4
47.5°	1705.6	1738.3	1798.2	1886.7	1904.3
50°	1569.5	1599.4	1659.3	1745.1	1772.3
52.5°	1427.9	1460.6	1519.1	1598.1	1637.6
55°	1291.8	1313.6	1377.6	1453.8	1496.0
57.5°	1150.2	1170.7	1242.8	1308.1	1351.7
60°	1014.1	1040.0	1095.8	1162.5	1212.8
62.5°	883.4	910.7	958.3	1016.8	1074.0
65°	756.8	777.3	823.5	882.1	932.4
67.5°	634.3	652.0	698.3	739.1	792.2
70°	510.5	533.6	567.6	607.1	641.1
72.5°	411.1	420.6	449.2	477.8	513.2
75°	303.6	319.9	343.0	359.4	379.8
77.5°	217.8	227.3	240.9	254.5	273.6
80°	145.7	149.7	162.0	164.7	179.7
82.5°	88.5	91.2	93.9	95.3	100.7
85°	47.6	47.6	47.6	44.9	44.9
87.5°	27.2	27.2	23.1	19.1	13.6
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)