

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: P557876

Luminaire Tested: **FUSL-12-4-LD4-3HI-50-UNV-80-86-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: P557876
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-LD4-3HI-50-UNV-80-86-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

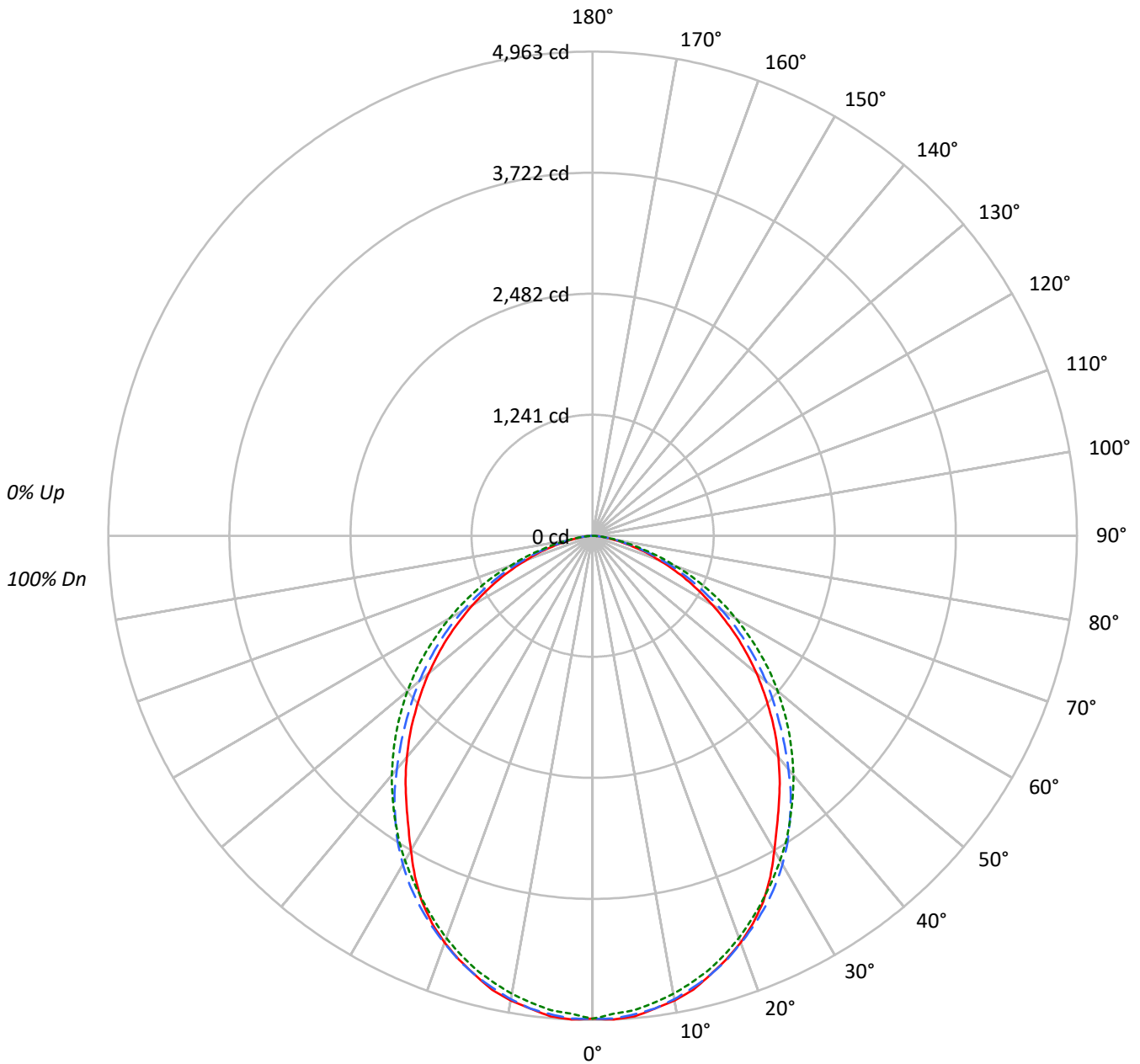
Lumens per Lamp: N/A
Luminaire Lumens: 11446.0 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 129.6
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°	13321	13321	13321
5°	13356	13300	13186
10°	13214	13178	13027
15°	12980	12980	12832
20°	12705	12721	12558
25°	12287	12439	12242
30°	11570	12090	11942
35°	10933	11588	11607
40°	10401	10962	11249
45°	9806	10298	10827
50°	9179	9705	10366
55°	8467	9029	9805
60°	7625	8239	9119
65°	6732	7326	8295
70°	5611	6239	7047
75°	4409	4982	5517
80°	3154	3507	3890
85°	2056	2056	1939



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	466.1	4.1
10°-20°	1309.3	11.4
20°-30°	1913.3	16.7
30°-40°	2171.8	19.0
40°-50°	2096.6	18.3
50°-60°	1729.5	15.1
60°-70°	1151.7	10.1
70°-80°	515.4	4.5
80°-90°	92.2	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°	3688.7	32.2
0°-40°	5860.6	51.2
0°-60°	9686.7	84.6
0°-90°	11446.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11446.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4950	4950	4950	4950	4950	
5°	4944	4942	4924	4897	4882	468
15°	4659	4671	4659	4638	4606	1313
25°	4138	4170	4189	4159	4123	1895
35°	3328	3374	3528	3547	3533	2085
45°	2577	2620	2706	2830	2845	1988
55°	1805	1835	1924	2031	2090	1611
65°	1057	1086	1150	1232	1303	1048
75°	424	447	479	502	531	464
85°	67	67	67	63	63	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4950.1	4950.1	4950.1	4950.1	4950.1
2.5°	4963.4	4965.3	4953.9	4923.5	4904.5
5°	4944.4	4942.5	4923.5	4896.9	4881.6
7.5°	4889.2	4893.0	4887.3	4849.3	4828.4
10°	4836.0	4837.9	4822.7	4792.3	4767.5
12.5°	4767.5	4765.6	4744.7	4729.5	4689.6
15°	4659.1	4670.6	4659.1	4638.2	4605.9
17.5°	4554.5	4554.5	4562.2	4526.0	4501.3
20°	4436.6	4442.3	4442.3	4413.8	4385.3
22.5°	4299.7	4316.8	4322.5	4292.1	4257.9
25°	4138.1	4170.4	4189.4	4159.0	4122.9
27.5°	3942.2	3991.6	4048.7	4025.9	3985.9
30°	3723.5	3795.8	3890.9	3871.8	3843.3
32.5°	3516.2	3588.5	3719.7	3712.1	3696.9
35°	3328.0	3373.6	3527.6	3546.7	3533.3
37.5°	3149.2	3191.0	3335.6	3379.3	3367.9
40°	2960.9	3006.6	3120.7	3198.6	3202.4
42.5°	2774.6	2818.3	2911.5	3023.7	3023.7
45°	2576.8	2620.5	2706.1	2829.7	2844.9
47.5°	2382.8	2428.5	2512.1	2635.7	2660.5
50°	2192.6	2234.5	2318.2	2438.0	2476.0
52.5°	1994.9	2040.5	2122.3	2232.6	2287.7
55°	1804.7	1835.1	1924.5	2031.0	2090.0
57.5°	1606.9	1635.5	1736.2	1827.5	1888.4
60°	1416.8	1452.9	1530.9	1624.0	1694.4
62.5°	1234.2	1272.2	1338.8	1420.6	1500.4
65°	1057.3	1085.9	1150.5	1232.3	1302.7
67.5°	886.2	910.9	975.6	1032.6	1106.8
70°	713.1	745.5	793.0	848.2	895.7
72.5°	574.3	587.6	627.6	667.5	716.9
75°	424.1	446.9	479.2	502.0	530.6
77.5°	304.3	317.6	336.6	355.6	382.2
80°	203.5	209.2	226.3	230.1	251.0
82.5°	123.6	127.4	131.2	133.1	140.7
85°	66.6	66.6	66.6	62.8	62.8
87.5°	38.0	38.0	32.3	26.6	19.0
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)