

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: P834952

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-6LO-20-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834952
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-4-INS-OPL-LD4-6LO-20-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

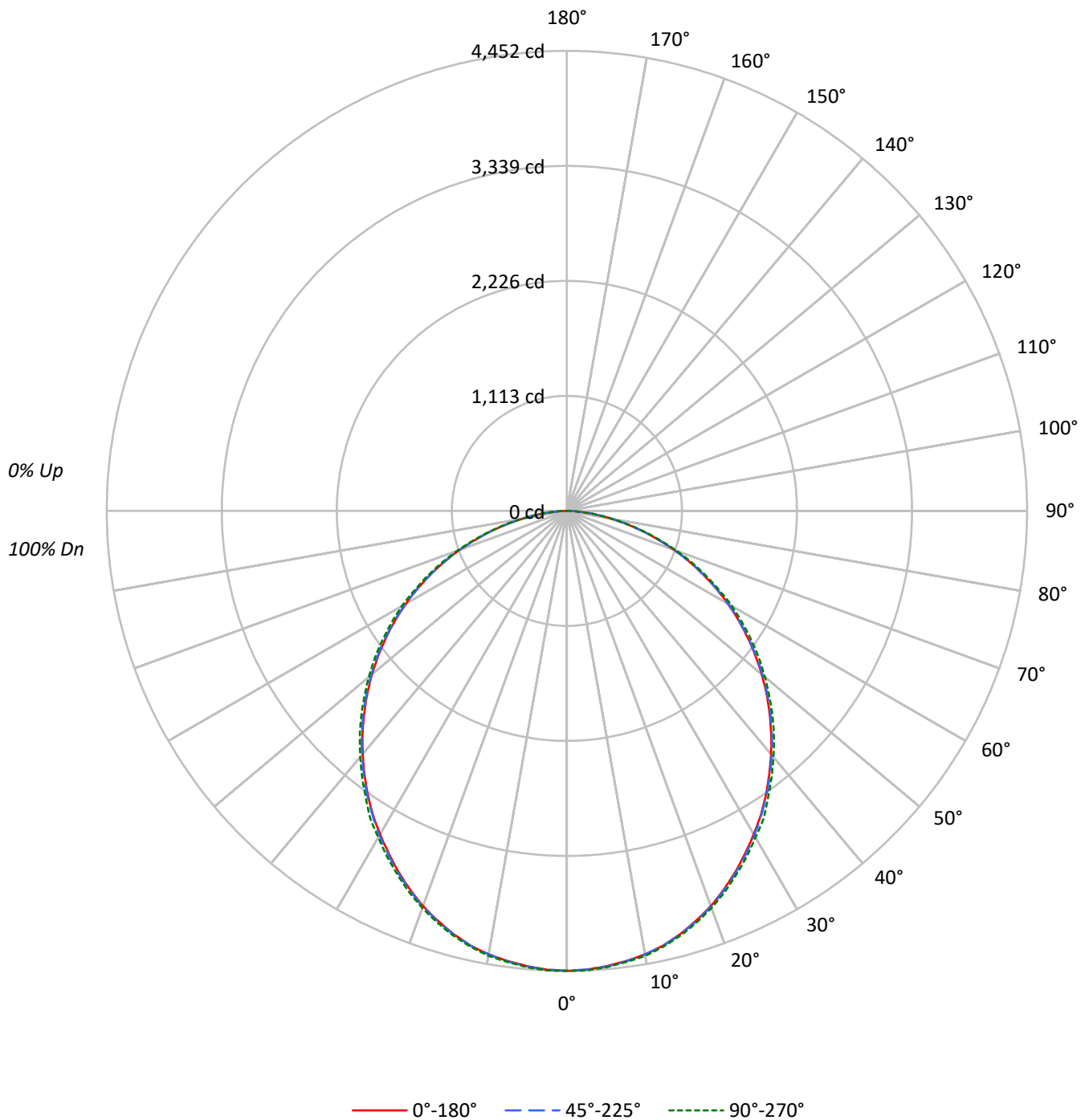
Lumens per Lamp: N/A
Luminaire Lumens: 12026.2 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 140.4
Input Voltage (V): 120
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: 28.75 FT

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Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	94	92		94	91	89		90
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	55	80	69	61	55	67	60	54		65	58	53		62
5	76	63	54	48	74	62	54	47	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5988	5988	5988
5°	5973	5978	5985
10°	5954	5955	5972
15°	5904	5908	5925
20°	5828	5834	5855
25°	5722	5736	5762
30°	5615	5633	5668
35°	5512	5526	5570
40°	5396	5414	5462
45°	5278	5300	5355
50°	5150	5173	5233
55°	5004	5028	5110
60°	4838	4857	4967
65°	4626	4641	4729
70°	4343	4346	4441
75°	3947	3933	4024
80°	3391	3378	3434
85°	2632	2589	2603

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	420.6	3.5
10°-20°	1196.3	9.9
20°-30°	1781.0	14.8
30°-40°	2106.2	17.5
40°-50°	2150.1	17.9
50°-60°	1918.9	16.0
60°-70°	1445.3	12.0
70°-80°	806.0	6.7
80°-90°	201.9	1.7
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°	3397.9	28.3
0°-40°	5504.0	45.8
0°-60°	9573.0	79.6
0°-90°	12026.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12026.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4451	4451	4451	4451	4451	
5°	4422	4430	4426	4427	4431	420
15°	4239	4243	4242	4245	4254	1195
25°	3854	3859	3864	3874	3881	1776
35°	3356	3352	3364	3377	3391	2099
45°	2774	2773	2786	2799	2814	2140
55°	2133	2130	2143	2158	2178	1907
65°	1453	1448	1458	1471	1485	1437
75°	759	753	756	760	774	805
85°	170	166	168	166	169	205
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4450.7	4450.7	4450.7	4450.7	4450.7
2.5°	4443.3	4450.7	4441.4	4443.3	4451.6
5°	4422.1	4430.4	4425.8	4426.7	4431.3
7.5°	4392.6	4403.7	4397.2	4399.1	4403.7
10°	4357.6	4365.9	4358.5	4363.1	4371.4
12.5°	4307.8	4311.5	4307.8	4309.7	4318.9
15°	4238.7	4243.3	4241.5	4245.2	4253.5
17.5°	4157.6	4163.2	4162.2	4169.6	4176.1
20°	4070.1	4071.0	4074.7	4082.1	4089.4
22.5°	3966.9	3969.7	3973.3	3983.5	3990.8
25°	3854.5	3859.1	3863.7	3873.8	3881.2
27.5°	3735.6	3740.2	3746.7	3757.7	3769.7
30°	3614.0	3614.0	3625.9	3637.0	3648.1
32.5°	3491.4	3486.8	3497.9	3511.7	3538.4
35°	3356.0	3352.3	3364.3	3377.2	3391.0
37.5°	3215.0	3212.2	3226.0	3239.9	3252.8
40°	3072.1	3068.5	3082.3	3096.1	3109.9
42.5°	2925.6	2923.8	2936.7	2950.5	2965.3
45°	2773.6	2772.7	2785.6	2799.4	2814.1
47.5°	2618.8	2616.9	2629.8	2644.6	2657.5
50°	2460.3	2458.5	2471.4	2486.1	2499.9
52.5°	2297.2	2297.2	2309.2	2322.1	2343.3
55°	2133.2	2130.4	2143.3	2158.1	2178.3
57.5°	1967.3	1963.6	1975.6	1990.4	2008.8
60°	1797.8	1794.1	1805.1	1819.9	1845.7
62.5°	1626.4	1620.8	1631.9	1645.7	1661.4
65°	1453.1	1447.6	1457.8	1470.7	1485.4
67.5°	1279.0	1272.5	1282.7	1293.7	1307.6
70°	1103.9	1097.5	1104.8	1115.9	1128.8
72.5°	929.8	923.3	929.8	934.4	950.0
75°	759.3	752.8	756.5	760.2	774.0
77.5°	593.4	587.0	594.3	596.2	604.5
80°	437.7	431.2	435.9	436.8	443.2
82.5°	295.8	290.3	296.7	292.1	297.6
85°	170.5	165.9	167.7	165.9	168.6
87.5°	67.3	63.6	64.5	60.8	60.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)