

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: P835617

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-5HI-27-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835617
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-OPL-LD4-5HI-27-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

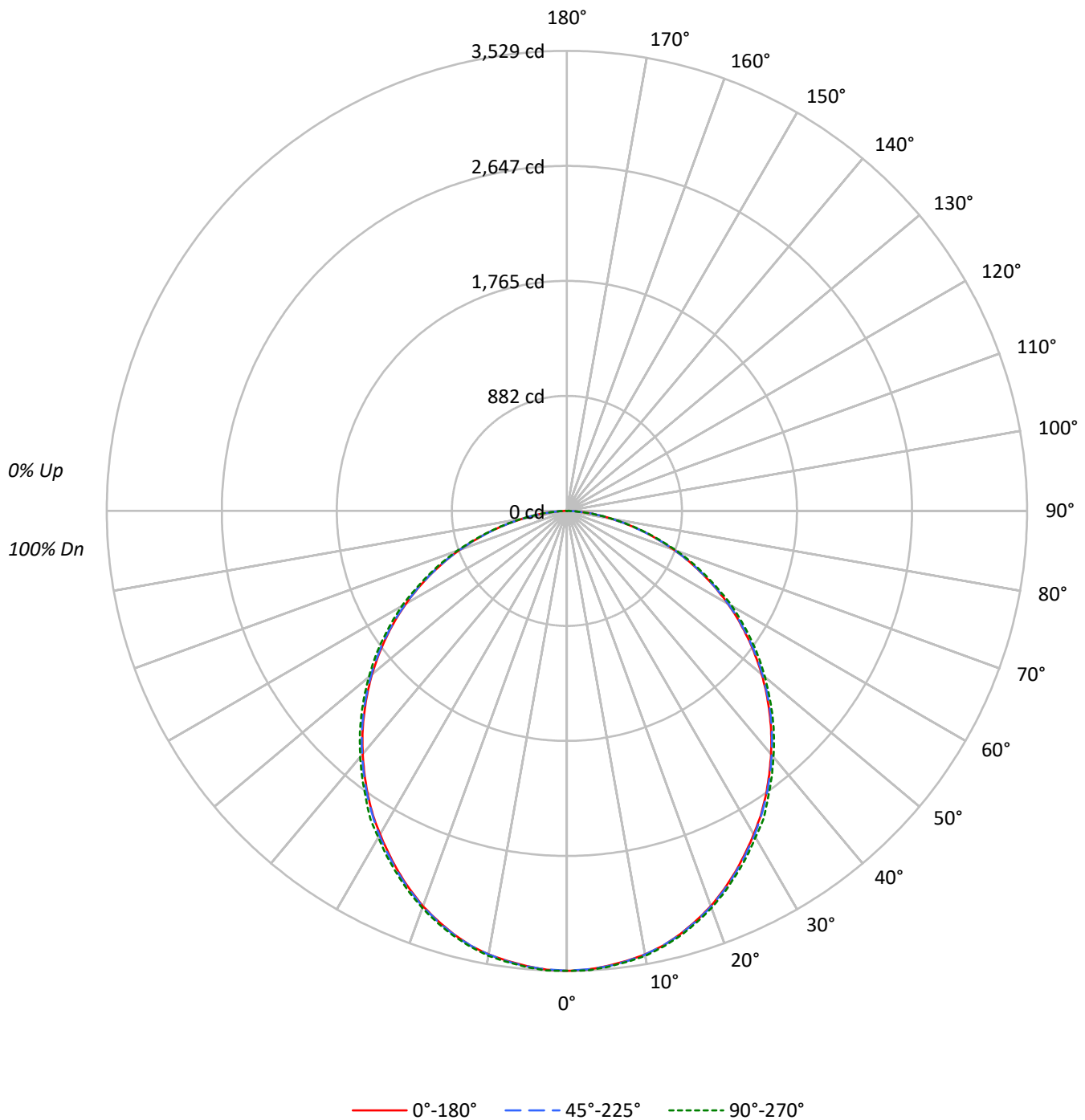
Lumens per Lamp: N/A
Luminaire Lumens: 9533.4 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 110
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°	9494	9494	9494
5°	9469	9477	9489
10°	9439	9441	9469
15°	9361	9367	9394
20°	9240	9250	9283
25°	9072	9094	9135
30°	8902	8932	8986
35°	8740	8761	8831
40°	8555	8583	8660
45°	8367	8404	8490
50°	8165	8202	8297
55°	7933	7971	8101
60°	7670	7702	7874
65°	7335	7358	7498
70°	6885	6891	7040
75°	6258	6235	6380
80°	5377	5354	5446
85°	4171	4103	4128

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.4	3.5
10°-20°	948.4	9.9
20°-30°	1411.8	14.8
30°-40°	1669.6	17.5
40°-50°	1704.4	17.9
50°-60°	1521.1	16.0
60°-70°	1145.7	12.0
70°-80°	638.9	6.7
80°-90°	160.1	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°	2693.6	28.3
0°-40°	4363.2	45.8
0°-60°	7588.7	79.6
0°-90°	9533.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9533.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3528	3528	3528	3528	3528	
5°	3506	3512	3508	3509	3513	333
15°	3360	3364	3362	3365	3372	947
25°	3056	3059	3063	3071	3077	1408
35°	2660	2657	2667	2677	2688	1664
45°	2199	2198	2208	2219	2231	1696
55°	1691	1689	1699	1711	1727	1512
65°	1152	1148	1156	1166	1178	1139
75°	602	597	600	603	614	638
85°	135	132	133	132	134	162
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3528.1	3528.1	3528.1	3528.1	3528.1
2.5°	3522.3	3528.1	3520.8	3522.3	3528.9
5°	3505.5	3512.1	3508.4	3509.2	3512.8
7.5°	3482.1	3490.9	3485.8	3487.2	3490.9
10°	3454.4	3460.9	3455.1	3458.8	3465.3
12.5°	3414.9	3417.8	3414.9	3416.4	3423.7
15°	3360.1	3363.8	3362.3	3365.3	3371.8
17.5°	3295.9	3300.2	3299.5	3305.4	3310.5
20°	3226.5	3227.2	3230.1	3236.0	3241.8
22.5°	3144.7	3146.8	3149.8	3157.8	3163.6
25°	3055.5	3059.2	3062.8	3070.9	3076.7
27.5°	2961.3	2965.0	2970.1	2978.8	2988.3
30°	2864.9	2864.9	2874.4	2883.1	2891.9
32.5°	2767.7	2764.1	2772.8	2783.8	2805.0
35°	2660.4	2657.4	2666.9	2677.2	2688.1
37.5°	2548.6	2546.4	2557.4	2568.3	2578.5
40°	2435.4	2432.4	2443.4	2454.4	2465.3
42.5°	2319.2	2317.8	2328.0	2338.9	2350.6
45°	2198.7	2198.0	2208.2	2219.2	2230.8
47.5°	2076.0	2074.5	2084.7	2096.4	2106.7
50°	1950.3	1948.9	1959.1	1970.8	1981.8
52.5°	1821.0	1821.0	1830.5	1840.8	1857.6
55°	1691.0	1688.8	1699.1	1710.7	1726.8
57.5°	1559.5	1556.6	1566.1	1577.8	1592.4
60°	1425.1	1422.2	1431.0	1442.7	1463.1
62.5°	1289.3	1284.9	1293.7	1304.6	1317.0
65°	1151.9	1147.6	1155.6	1165.8	1177.5
67.5°	1013.9	1008.8	1016.8	1025.6	1036.5
70°	875.1	870.0	875.8	884.6	894.8
72.5°	737.0	731.9	737.0	740.7	753.1
75°	601.9	596.8	599.7	602.6	613.6
77.5°	470.4	465.3	471.1	472.6	479.2
80°	347.0	341.9	345.5	346.2	351.4
82.5°	234.5	230.1	235.2	231.6	235.9
85°	135.1	131.5	132.9	131.5	133.7
87.5°	53.3	50.4	51.1	48.2	48.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)