

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: P834960

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-2HI-27-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834960
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-LD4-2HI-27-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

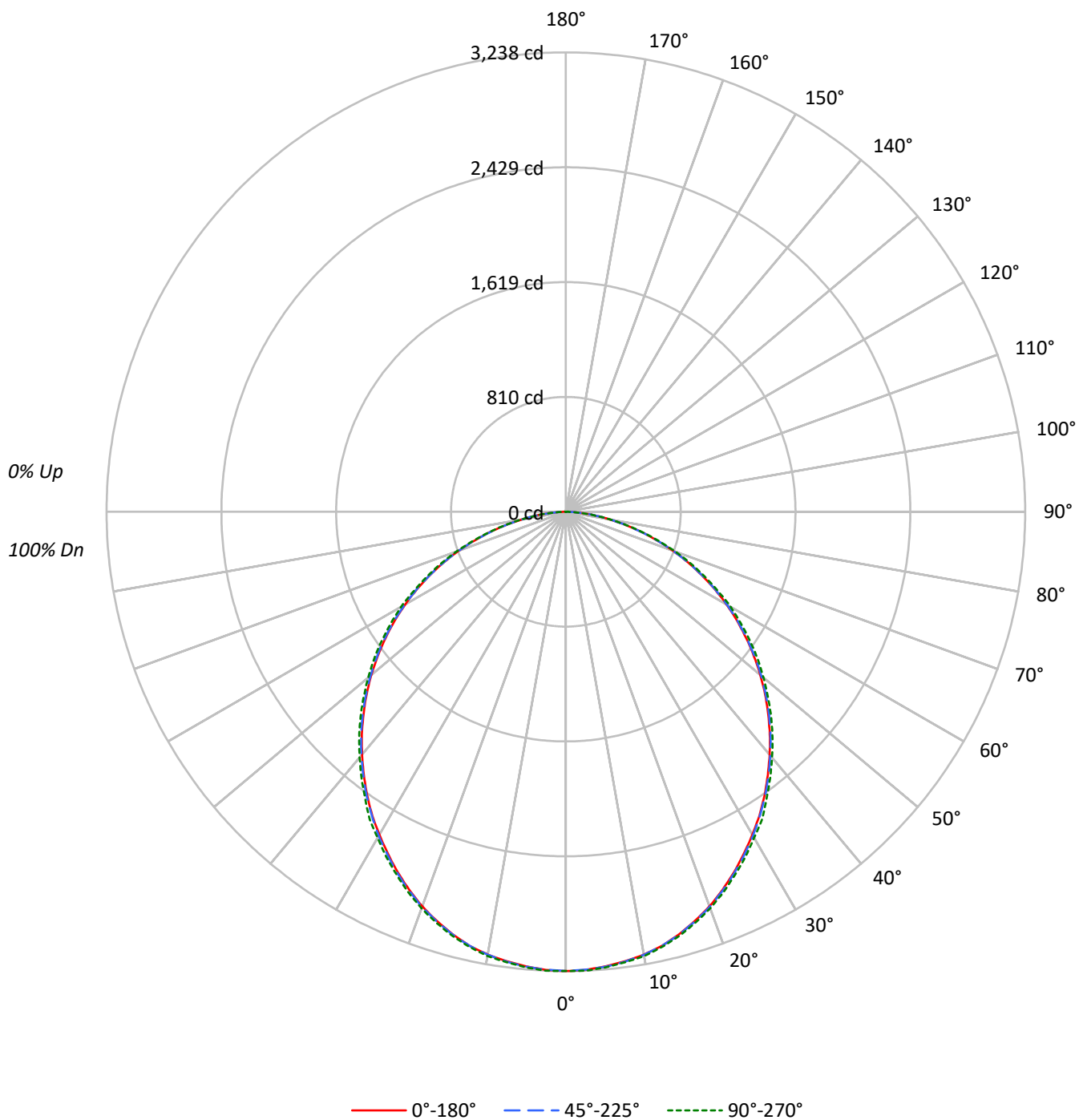
Lumens per Lamp: N/A
Luminaire Lumens: 8746.9 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 88
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

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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4355	4355	4355
5°	4344	4348	4353
10°	4330	4331	4344
15°	4294	4297	4309
20°	4239	4243	4259
25°	4162	4172	4191
30°	4084	4097	4122
35°	4009	4019	4051
40°	3925	3938	3973
45°	3839	3855	3895
50°	3746	3763	3806
55°	3639	3657	3717
60°	3519	3533	3612
65°	3365	3376	3440
70°	3159	3161	3230
75°	2871	2860	2927
80°	2466	2456	2498
85°	1914	1883	1893

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.9	3.5
10°-20°	870.1	9.9
20°-30°	1295.4	14.8
30°-40°	1531.9	17.5
40°-50°	1563.8	17.9
50°-60°	1395.6	16.0
60°-70°	1051.2	12.0
70°-80°	586.2	6.7
80°-90°	146.9	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°	2471.4	28.3
0°-40°	4003.2	45.8
0°-60°	6962.7	79.6
0°-90°	8746.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8746.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3237	3237	3237	3237	3237	
5°	3216	3222	3219	3220	3223	306
15°	3083	3086	3085	3088	3094	869
25°	2804	2807	2810	2818	2823	1292
35°	2441	2438	2447	2456	2466	1526
45°	2017	2017	2026	2036	2047	1556
55°	1552	1550	1559	1570	1584	1387
65°	1057	1053	1060	1070	1080	1045
75°	552	548	550	553	563	585
85°	124	121	122	121	123	149
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3237.1	3237.1	3237.1	3237.1	3237.1
2.5°	3231.7	3237.1	3230.4	3231.7	3237.8
5°	3216.3	3222.3	3219.0	3219.7	3223.0
7.5°	3194.9	3202.9	3198.2	3199.6	3202.9
10°	3169.4	3175.4	3170.1	3173.4	3179.4
12.5°	3133.2	3135.9	3133.2	3134.5	3141.2
15°	3082.9	3086.3	3085.0	3087.6	3093.7
17.5°	3024.0	3028.0	3027.3	3032.7	3037.4
20°	2960.3	2961.0	2963.6	2969.0	2974.4
22.5°	2885.2	2887.2	2889.9	2897.3	2902.7
25°	2803.5	2806.8	2810.2	2817.5	2822.9
27.5°	2717.0	2720.4	2725.1	2733.1	2741.8
30°	2628.5	2628.5	2637.3	2645.3	2653.3
32.5°	2539.4	2536.1	2544.1	2554.1	2573.6
35°	2440.9	2438.2	2446.9	2456.3	2466.4
37.5°	2338.3	2336.3	2346.4	2356.4	2365.8
40°	2234.5	2231.8	2241.8	2251.9	2261.9
42.5°	2127.9	2126.6	2135.9	2146.0	2156.7
45°	2017.3	2016.6	2026.0	2036.1	2046.8
47.5°	1904.7	1903.4	1912.8	1923.5	1932.9
50°	1789.4	1788.1	1797.5	1808.2	1818.3
52.5°	1670.8	1670.8	1679.5	1688.9	1704.3
55°	1551.5	1549.5	1558.9	1569.6	1584.4
57.5°	1430.9	1428.2	1436.9	1447.6	1461.0
60°	1307.6	1304.9	1312.9	1323.7	1342.4
62.5°	1182.9	1178.9	1186.9	1197.0	1208.4
65°	1056.9	1052.9	1060.3	1069.6	1080.4
67.5°	930.2	925.6	932.9	941.0	951.0
70°	802.9	798.2	803.6	811.6	821.0
72.5°	676.2	671.5	676.2	679.6	691.0
75°	552.2	547.6	550.2	552.9	563.0
77.5°	431.6	426.9	432.3	433.6	439.7
80°	318.3	313.7	317.0	317.7	322.4
82.5°	215.1	211.1	215.8	212.5	216.5
85°	124.0	120.6	122.0	120.6	122.6
87.5°	48.9	46.2	46.9	44.2	44.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)