

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: P834986

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5STD-30-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834986
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-LD4-5STD-30-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

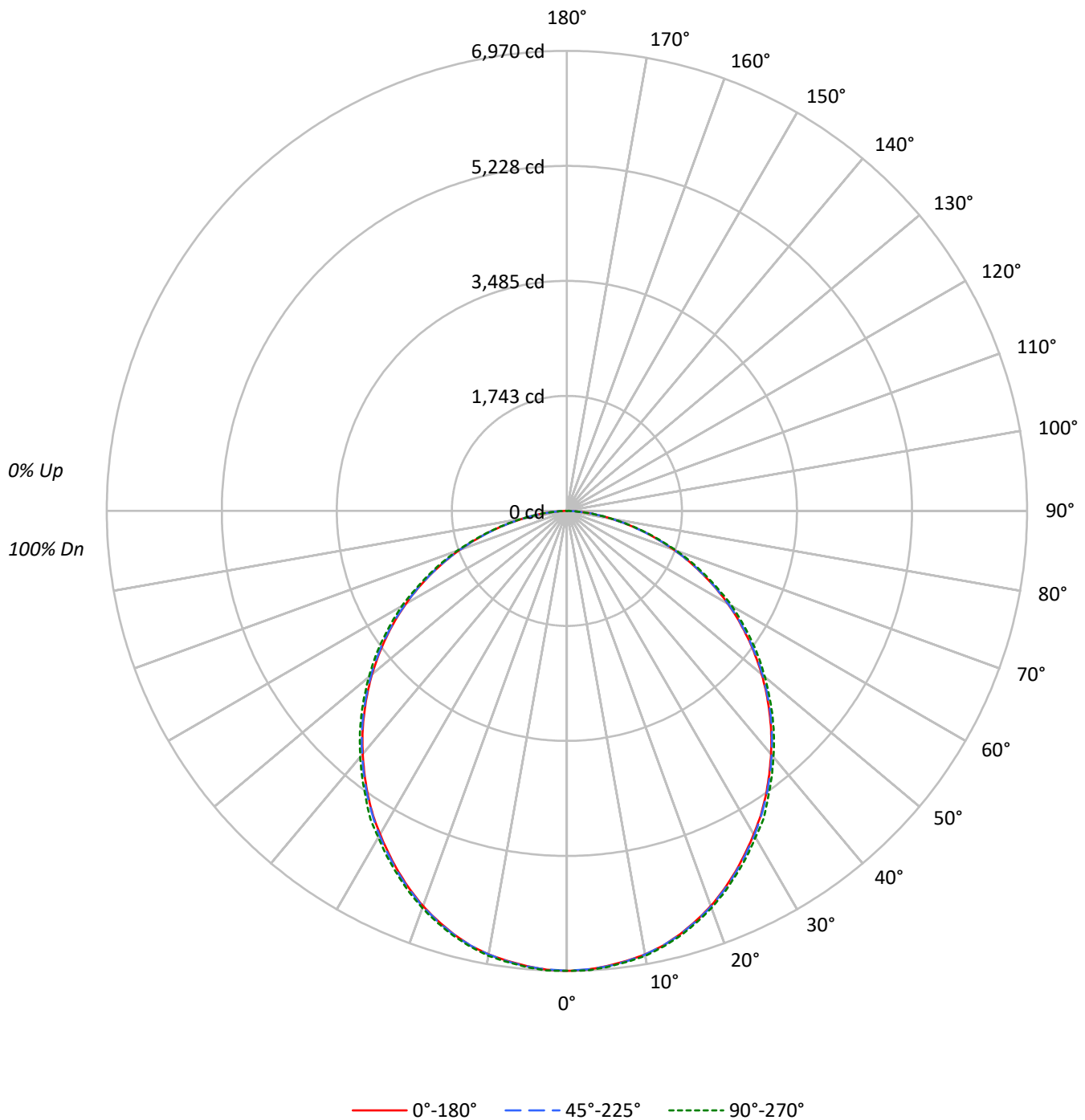
Lumens per Lamp: N/A
Luminaire Lumens: 18828.6 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 166.5
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	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	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9376	9376	9376
5°	9351	9359	9370
10°	9321	9323	9351
15°	9244	9250	9276
20°	9124	9134	9167
25°	8959	8980	9021
30°	8791	8820	8874
35°	8630	8652	8720
40°	8448	8476	8552
45°	8263	8299	8384
50°	8063	8099	8193
55°	7834	7872	8000
60°	7574	7605	7776
65°	7243	7266	7404
70°	6799	6805	6952
75°	6180	6157	6300
80°	5310	5287	5377
85°	4120	4054	4076

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	658.5	3.5
10°-20°	1873.0	9.9
20°-30°	2788.4	14.8
30°-40°	3297.5	17.5
40°-50°	3366.3	17.9
50°-60°	3004.2	16.0
60°-70°	2262.8	12.0
70°-80°	1261.9	6.7
80°-90°	316.1	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°	5319.8	28.3
0°-40°	8617.3	45.8
0°-60°	14987.8	79.6
0°-90°	18828.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18828.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6968	6968	6968	6968	6968	
5°	6923	6936	6929	6931	6938	658
15°	6636	6644	6641	6646	6659	1870
25°	6035	6042	6049	6065	6076	2780
35°	5254	5248	5267	5287	5309	3286
45°	4342	4341	4361	4383	4406	3350
55°	3340	3336	3356	3379	3410	2985
65°	2275	2266	2282	2302	2326	2250
75°	1189	1179	1184	1190	1212	1260
85°	267	260	263	260	264	320
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6968.1	6968.1	6968.1	6968.1	6968.1
2.5°	6956.6	6968.1	6953.7	6956.6	6969.6
5°	6923.4	6936.4	6929.2	6930.6	6937.8
7.5°	6877.2	6894.5	6884.4	6887.3	6894.5
10°	6822.4	6835.4	6823.9	6831.1	6844.1
12.5°	6744.5	6750.3	6744.5	6747.4	6761.8
15°	6636.3	6643.5	6640.6	6646.4	6659.4
17.5°	6509.4	6518.0	6516.6	6528.1	6538.2
20°	6372.3	6373.7	6379.5	6391.1	6402.6
22.5°	6210.7	6215.0	6220.8	6236.7	6248.2
25°	6034.7	6041.9	6049.1	6065.0	6076.5
27.5°	5848.6	5855.8	5865.9	5883.2	5902.0
30°	5658.2	5658.2	5676.9	5694.2	5711.6
32.5°	5466.3	5459.1	5476.4	5498.0	5539.9
35°	5254.2	5248.5	5267.2	5287.4	5309.0
37.5°	5033.5	5029.2	5050.8	5072.4	5092.6
40°	4809.9	4804.1	4825.8	4847.4	4869.0
42.5°	4580.5	4577.6	4597.8	4619.4	4642.5
45°	4342.5	4341.0	4361.2	4382.8	4405.9
47.5°	4100.1	4097.2	4117.4	4140.5	4160.7
50°	3851.9	3849.1	3869.3	3892.3	3914.0
52.5°	3596.6	3596.6	3615.3	3635.5	3668.7
55°	3339.8	3335.5	3355.7	3378.7	3410.5
57.5°	3080.1	3074.3	3093.1	3116.2	3145.0
60°	2814.7	2808.9	2826.2	2849.3	2889.7
62.5°	2546.3	2537.7	2555.0	2576.6	2601.1
65°	2275.1	2266.4	2282.3	2302.5	2325.6
67.5°	2002.4	1992.3	2008.2	2025.5	2047.2
70°	1728.3	1718.2	1729.8	1747.1	1767.3
72.5°	1455.7	1445.6	1455.7	1462.9	1487.4
75°	1188.8	1178.7	1184.4	1190.2	1211.8
77.5°	929.1	919.0	930.5	933.4	946.4
80°	685.3	675.2	682.4	683.8	693.9
82.5°	463.1	454.4	464.5	457.3	466.0
85°	266.9	259.7	262.6	259.7	264.0
87.5°	105.3	99.5	101.0	95.2	95.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)