

Classified
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P835022

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5STD-40-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835022
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-40-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

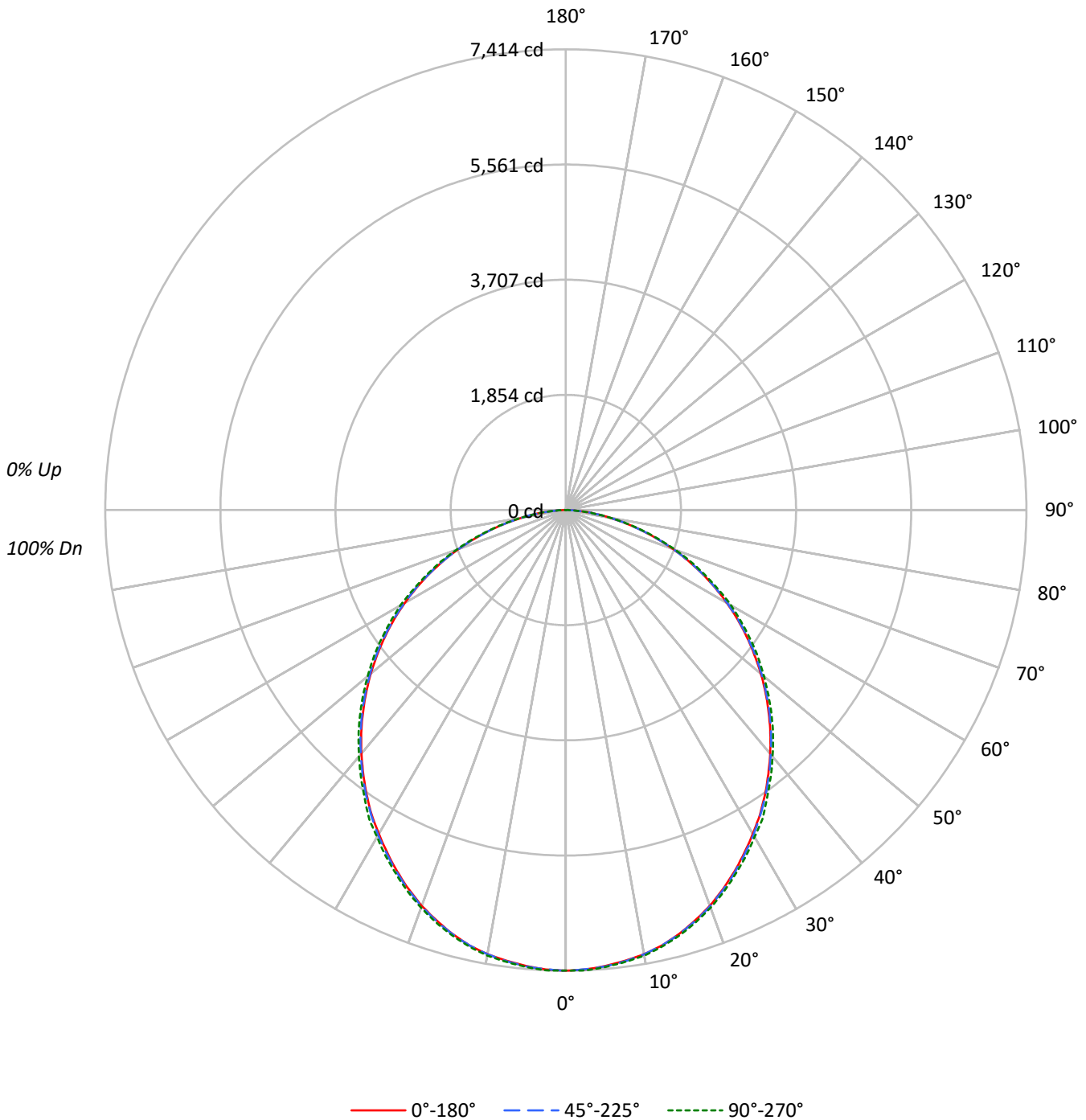
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20030.5 lumens
Efficiency: N/A
Efficacy: 120.3 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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9974	9974	9974
5°	9948	9956	9969
10°	9916	9918	9947
15°	9834	9841	9868
20°	9706	9717	9753
25°	9531	9554	9597
30°	9352	9383	9440
35°	9181	9204	9277
40°	8987	9017	9098
45°	8790	8828	8919
50°	8578	8616	8716
55°	8335	8374	8511
60°	8058	8091	8272
65°	7706	7730	7876
70°	7233	7239	7396
75°	6574	6550	6702
80°	5649	5625	5720
85°	4383	4312	4336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	700.5	3.5
10°-20°	1992.6	9.9
20°-30°	2966.3	14.8
30°-40°	3508.0	17.5
40°-50°	3581.2	17.9
50°-60°	3196.0	16.0
60°-70°	2407.2	12.0
70°-80°	1342.4	6.7
80°-90°	336.3	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°	5659.4	28.3
0°-40°	9167.4	45.8
0°-60°	15944.5	79.6
0°-90°	20030.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20030.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7413	7413	7413	7413	7413	
5°	7365	7379	7372	7373	7381	700
15°	7060	7068	7064	7071	7084	1990
25°	6420	6428	6435	6452	6464	2958
35°	5590	5584	5603	5625	5648	3495
45°	4620	4618	4640	4663	4687	3564
55°	3553	3548	3570	3594	3628	3176
65°	2420	2411	2428	2450	2474	2394
75°	1265	1254	1260	1266	1289	1341
85°	284	276	279	276	281	341
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7412.9	7412.9	7412.9	7412.9	7412.9
2.5°	7400.6	7412.9	7397.5	7400.6	7414.4
5°	7365.3	7379.1	7371.5	7373.0	7380.7
7.5°	7316.2	7334.6	7323.9	7327.0	7334.6
10°	7257.9	7271.7	7259.4	7267.1	7280.9
12.5°	7175.0	7181.1	7175.0	7178.1	7193.4
15°	7059.9	7067.6	7064.5	7070.6	7084.5
17.5°	6924.8	6934.1	6932.5	6944.8	6955.5
20°	6779.0	6780.6	6786.7	6799.0	6811.3
22.5°	6607.1	6611.8	6617.9	6634.8	6647.1
25°	6419.9	6427.6	6435.3	6452.1	6464.4
27.5°	6221.9	6229.6	6240.3	6258.8	6278.7
30°	6019.3	6019.3	6039.3	6057.7	6076.1
32.5°	5815.2	5807.5	5826.0	5849.0	5893.5
35°	5589.6	5583.5	5603.4	5624.9	5647.9
37.5°	5354.8	5350.2	5373.2	5396.2	5417.7
40°	5116.9	5110.8	5133.8	5156.8	5179.8
42.5°	4872.9	4869.8	4891.3	4914.3	4938.9
45°	4619.6	4618.1	4639.6	4662.6	4687.2
47.5°	4361.8	4358.7	4380.2	4404.8	4426.3
50°	4097.8	4094.7	4116.2	4140.8	4163.8
52.5°	3826.2	3826.2	3846.1	3867.6	3902.9
55°	3553.0	3548.4	3569.9	3594.4	3628.2
57.5°	3276.7	3270.6	3290.5	3315.1	3345.8
60°	2994.3	2988.2	3006.6	3031.2	3074.1
62.5°	2708.9	2699.6	2718.1	2741.1	2767.2
65°	2420.3	2411.1	2428.0	2449.5	2474.0
67.5°	2130.2	2119.5	2136.4	2154.8	2177.8
70°	1838.6	1827.9	1840.2	1858.6	1880.1
72.5°	1548.6	1537.8	1548.6	1556.2	1582.3
75°	1264.6	1253.9	1260.0	1266.2	1289.2
77.5°	988.4	977.6	989.9	993.0	1006.8
80°	729.0	718.3	725.9	727.5	738.2
82.5°	492.7	483.4	494.2	486.5	495.7
85°	283.9	276.3	279.3	276.3	280.9
87.5°	112.0	105.9	107.4	101.3	101.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)