

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: P835717

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-3LO-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835717
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-LD4-3LO-27-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

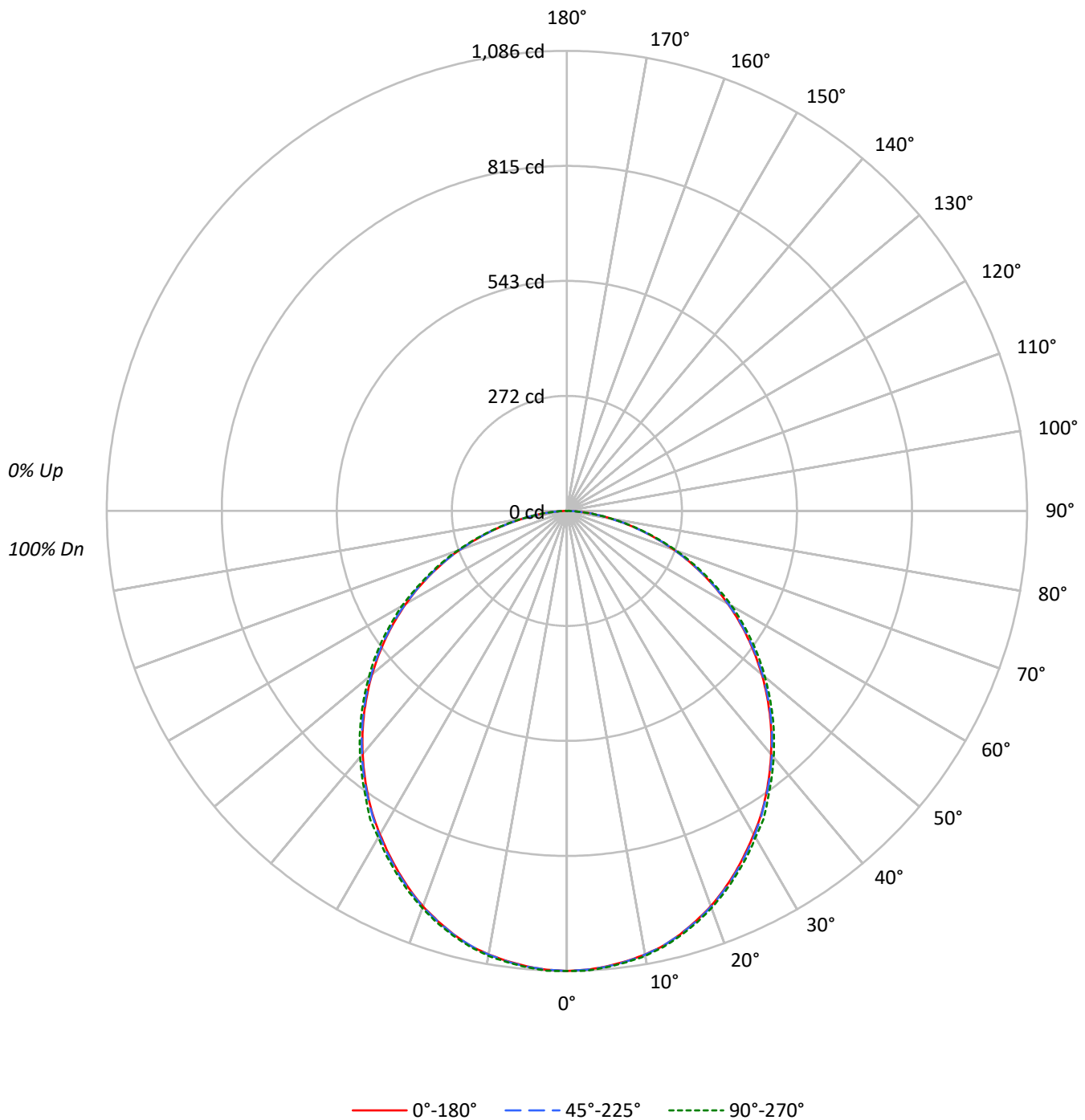
Lumens per Lamp: N/A
Luminaire Lumens: 2934.9 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 35.1
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

TEST NUMBER: P835717

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-3LO-27-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835717

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-3LO-27-120-EDD-90

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2923	2923	2923
5°	2915	2918	2921
10°	2906	2907	2915
15°	2882	2884	2892
20°	2844	2848	2858
25°	2793	2800	2812
30°	2741	2750	2766
35°	2690	2697	2718
40°	2634	2642	2666
45°	2576	2587	2614
50°	2514	2525	2554
55°	2442	2454	2494
60°	2361	2371	2424
65°	2258	2266	2308
70°	2120	2121	2168
75°	1927	1919	1964
80°	1655	1649	1677
85°	1284	1263	1272

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835717

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-3LO-27-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.6	3.5
10°-20°	292.0	9.9
20°-30°	434.6	14.8
30°-40°	514.0	17.5
40°-50°	524.7	17.9
50°-60°	468.3	16.0
60°-70°	352.7	12.0
70°-80°	196.7	6.7
80°-90°	49.3	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°	829.2	28.3
0°-40°	1343.2	45.8
0°-60°	2336.2	79.6
0°-90°	2934.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2934.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1086	1086	1086	1086	1086	
5°	1079	1081	1080	1080	1081	103
15°	1034	1036	1035	1036	1038	292
25°	941	942	943	945	947	433
35°	819	818	821	824	828	512
45°	677	677	680	683	687	522
55°	521	520	523	527	532	465
65°	355	353	356	359	362	351
75°	185	184	185	186	189	196
85°	42	40	41	40	41	50
90°	0	0	0	0	0	

TEST NUMBER: P835717

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-3LO-27-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1086.1	1086.1	1086.1	1086.1	1086.1
2.5°	1084.3	1086.1	1083.9	1084.3	1086.4
5°	1079.2	1081.2	1080.1	1080.3	1081.4
7.5°	1072.0	1074.7	1073.1	1073.5	1074.7
10°	1063.4	1065.5	1063.7	1064.8	1066.8
12.5°	1051.3	1052.2	1051.3	1051.7	1054.0
15°	1034.4	1035.5	1035.1	1036.0	1038.0
17.5°	1014.6	1016.0	1015.8	1017.6	1019.1
20°	993.3	993.5	994.4	996.2	998.0
22.5°	968.1	968.8	969.7	972.1	973.9
25°	940.6	941.8	942.9	945.4	947.2
27.5°	911.6	912.8	914.3	917.0	920.0
30°	882.0	882.0	884.9	887.6	890.3
32.5°	852.0	850.9	853.6	857.0	863.5
35°	819.0	818.1	821.0	824.2	827.5
37.5°	784.6	783.9	787.3	790.7	793.8
40°	749.7	748.8	752.2	755.6	759.0
42.5°	714.0	713.5	716.7	720.0	723.6
45°	676.9	676.6	679.8	683.2	686.8
47.5°	639.1	638.6	641.8	645.4	648.5
50°	600.4	600.0	603.1	606.7	610.1
52.5°	560.6	560.6	563.5	566.7	571.9
55°	520.6	519.9	523.1	526.7	531.6
57.5°	480.1	479.2	482.1	485.7	490.2
60°	438.7	437.8	440.5	444.1	450.4
62.5°	396.9	395.6	398.3	401.6	405.4
65°	354.6	353.3	355.8	358.9	362.5
67.5°	312.1	310.6	313.0	315.7	319.1
70°	269.4	267.8	269.6	272.3	275.5
72.5°	226.9	225.3	226.9	228.0	231.8
75°	185.3	183.7	184.6	185.5	188.9
77.5°	144.8	143.2	145.0	145.5	147.5
80°	106.8	105.2	106.4	106.6	108.2
82.5°	72.2	70.8	72.4	71.3	72.6
85°	41.6	40.5	40.9	40.5	41.2
87.5°	16.4	15.5	15.7	14.8	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)