

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: P835661

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-2STD-40-120-EDD**

Issue Date: 5/16/2024

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

**Test Information**

Test Method: LM-79-08
Report Number: P835661
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-LD4-2STD-40-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

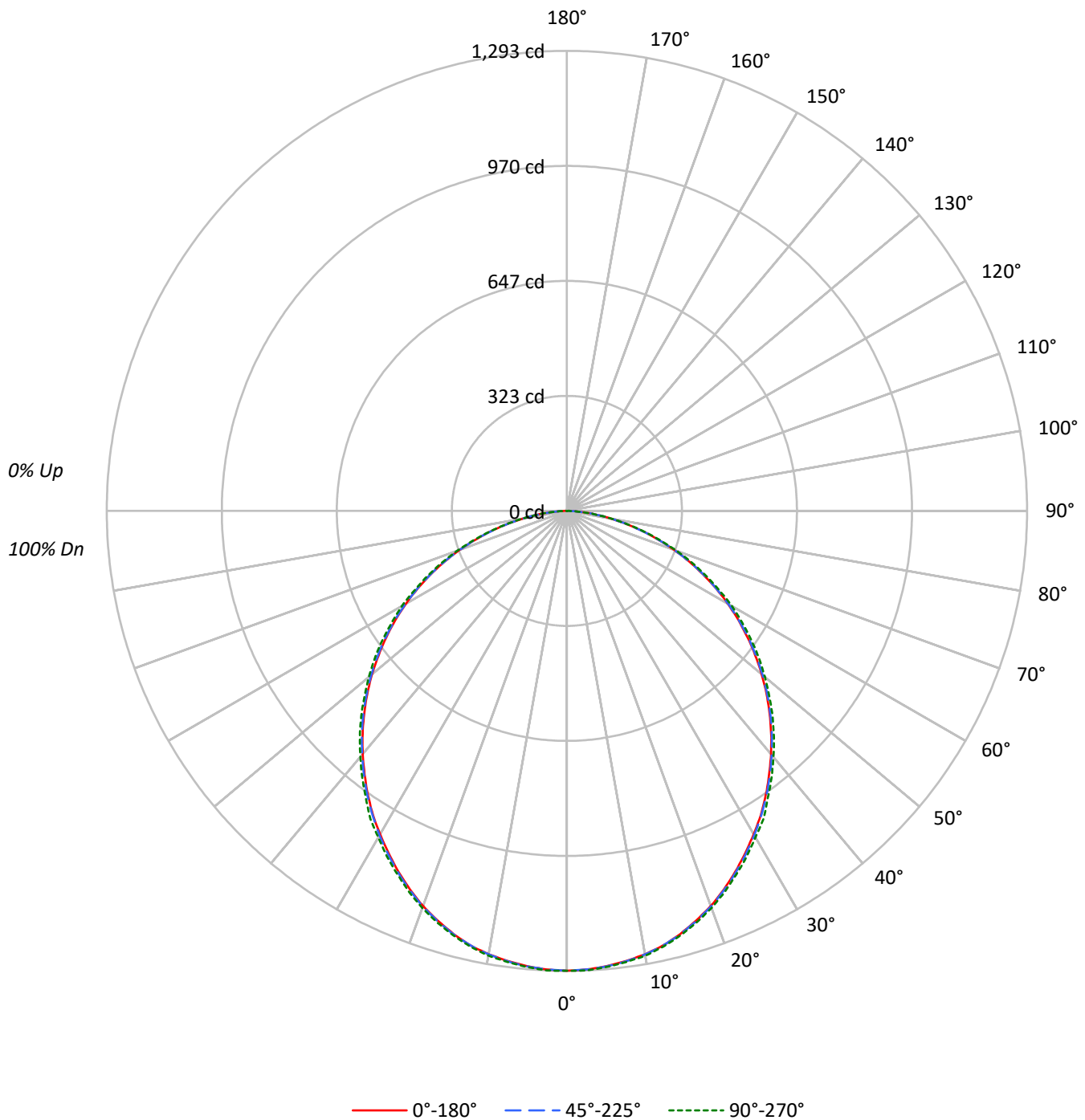
Lumens per Lamp: N/A
Luminaire Lumens: 3492.4 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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: P835661

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2STD-40-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835661

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2STD-40-120-EDD

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°	3478	3478	3478
5°	3469	3472	3476
10°	3458	3459	3469
15°	3429	3431	3441
20°	3385	3389	3401
25°	3323	3331	3347
30°	3261	3272	3292
35°	3202	3210	3235
40°	3134	3144	3172
45°	3065	3078	3110
50°	2991	3005	3039
55°	2906	2920	2968
60°	2810	2821	2885
65°	2687	2695	2747
70°	2522	2524	2579
75°	2293	2284	2337
80°	1970	1962	1994
85°	1528	1504	1513



TEST NUMBER: P835661

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2STD-40-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.1	3.5
10°-20°	347.4	9.9
20°-30°	517.2	14.8
30°-40°	611.6	17.5
40°-50°	624.4	17.9
50°-60°	557.2	16.0
60°-70°	419.7	12.0
70°-80°	234.1	6.7
80°-90°	58.6	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°	986.7	28.3
0°-40°	1598.4	45.8
0°-60°	2780.0	79.6
0°-90°	3492.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3492.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1292	1292	1292	1292	1292	
5°	1284	1287	1285	1286	1287	122
15°	1231	1232	1232	1233	1235	347
25°	1119	1121	1122	1125	1127	516
35°	975	974	977	981	985	609
45°	806	805	809	813	817	621
55°	620	619	622	627	633	554
65°	422	420	423	427	431	417
75°	220	219	220	221	225	234
85°	50	48	49	48	49	59
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835661

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-2STD-40-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1292.5	1292.5	1292.5	1292.5	1292.5
2.5°	1290.3	1292.5	1289.8	1290.3	1292.7
5°	1284.2	1286.6	1285.2	1285.5	1286.8
7.5°	1275.6	1278.8	1276.9	1277.5	1278.8
10°	1265.4	1267.8	1265.7	1267.0	1269.5
12.5°	1251.0	1252.1	1251.0	1251.5	1254.2
15°	1230.9	1232.3	1231.7	1232.8	1235.2
17.5°	1207.4	1209.0	1208.7	1210.9	1212.7
20°	1182.0	1182.2	1183.3	1185.4	1187.6
22.5°	1152.0	1152.8	1153.9	1156.8	1158.9
25°	1119.3	1120.7	1122.0	1125.0	1127.1
27.5°	1084.8	1086.2	1088.0	1091.2	1094.7
30°	1049.5	1049.5	1053.0	1056.2	1059.4
32.5°	1013.9	1012.6	1015.8	1019.8	1027.6
35°	974.6	973.5	977.0	980.7	984.7
37.5°	933.6	932.8	936.8	940.9	944.6
40°	892.2	891.1	895.1	899.1	903.1
42.5°	849.6	849.1	852.8	856.8	861.1
45°	805.5	805.2	808.9	812.9	817.2
47.5°	760.5	760.0	763.7	768.0	771.7
50°	714.5	713.9	717.7	722.0	726.0
52.5°	667.1	667.1	670.6	674.3	680.5
55°	619.5	618.7	622.4	626.7	632.6
57.5°	571.3	570.2	573.7	578.0	583.3
60°	522.1	521.0	524.2	528.5	536.0
62.5°	472.3	470.7	473.9	477.9	482.5
65°	422.0	420.4	423.3	427.1	431.4
67.5°	371.4	369.5	372.5	375.7	379.7
70°	320.6	318.7	320.8	324.1	327.8
72.5°	270.0	268.1	270.0	271.3	275.9
75°	220.5	218.6	219.7	220.8	224.8
77.5°	172.3	170.5	172.6	173.1	175.5
80°	127.1	125.2	126.6	126.8	128.7
82.5°	85.9	84.3	86.2	84.8	86.4
85°	49.5	48.2	48.7	48.2	49.0
87.5°	19.5	18.5	18.7	17.7	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)