

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: P835100

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-1STD-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835100
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-LD4-1STD-35-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

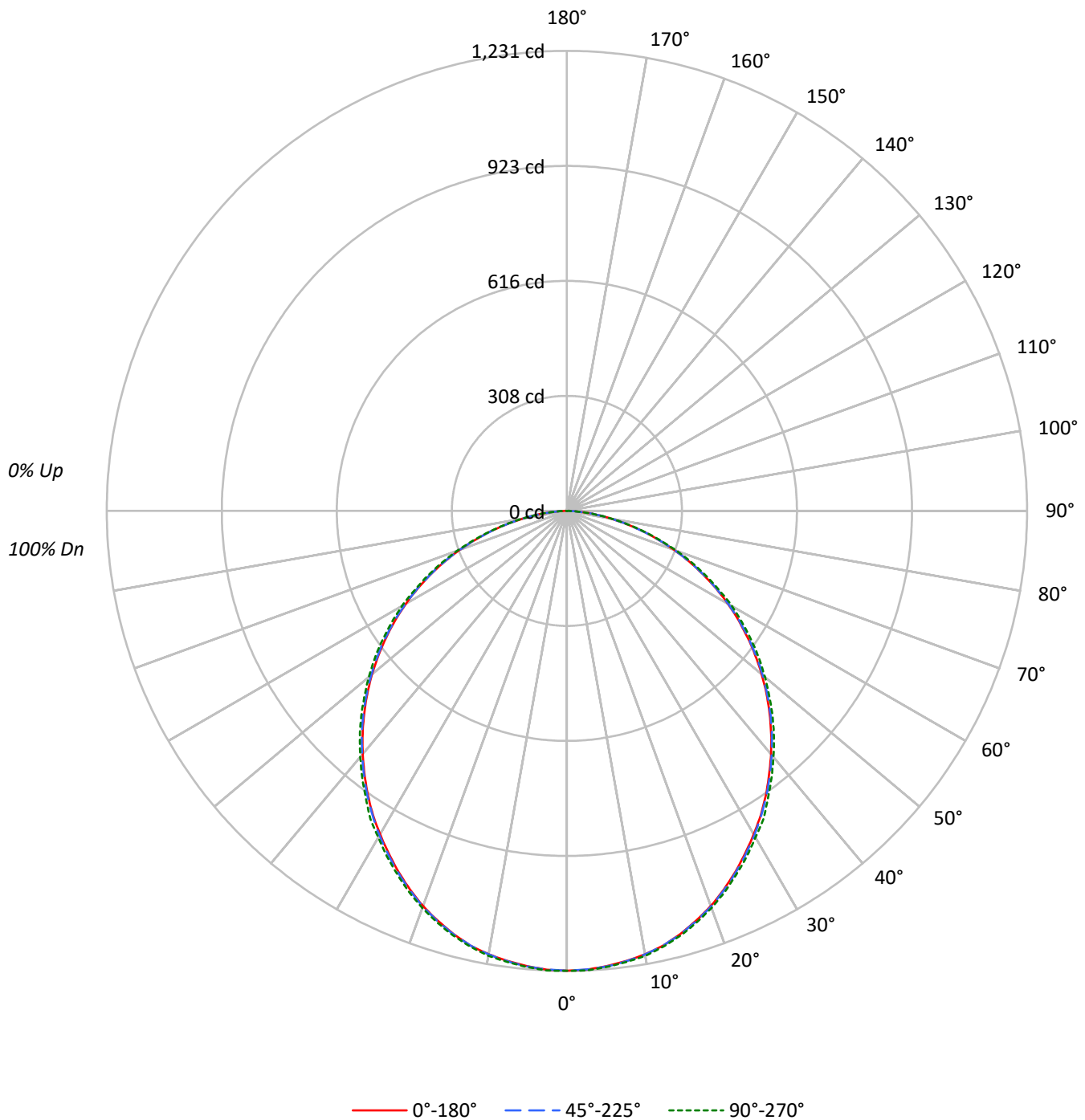
Lumens per Lamp: N/A
Luminaire Lumens: 3325.2 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P835100

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1STD-35-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835100

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1STD-35-120-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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	94	92		94	91	89		90
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	55	80	69	61	55	67	60	54		65	58	53		62
5	76	63	54	48	74	62	54	47	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1656	1656	1656
5°	1651	1653	1655
10°	1646	1646	1651
15°	1633	1634	1638
20°	1611	1613	1619
25°	1582	1586	1593
30°	1553	1558	1567
35°	1524	1528	1540
40°	1492	1497	1510
45°	1459	1466	1481
50°	1424	1430	1447
55°	1384	1390	1413
60°	1338	1343	1373
65°	1279	1283	1308
70°	1201	1202	1228
75°	1091	1088	1112
80°	938	934	950
85°	727	716	719

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835100

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1STD-35-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	3.5
10°-20°	330.8	9.9
20°-30°	492.4	14.8
30°-40°	582.4	17.5
40°-50°	594.5	17.9
50°-60°	530.6	16.0
60°-70°	399.6	12.0
70°-80°	222.9	6.7
80°-90°	55.8	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°	939.5	28.3
0°-40°	1521.9	45.8
0°-60°	2646.9	79.6
0°-90°	3325.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3325.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1231	1231	1231	1231	1231	
5°	1223	1225	1224	1224	1225	116
15°	1172	1173	1173	1174	1176	330
25°	1066	1067	1068	1071	1073	491
35°	928	927	930	934	938	580
45°	767	767	770	774	778	592
55°	590	589	593	597	602	527
65°	402	400	403	407	411	397
75°	210	208	209	210	214	223
85°	47	46	46	46	47	57
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835100

CATALOG NUMBER: ORLG-24-4-INS-OPL-LD4-1STD-35-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1230.6	1230.6	1230.6	1230.6	1230.6
2.5°	1228.6	1230.6	1228.1	1228.6	1230.9
5°	1222.7	1225.0	1223.7	1224.0	1225.2
7.5°	1214.5	1217.6	1215.8	1216.3	1217.6
10°	1204.9	1207.2	1205.1	1206.4	1208.7
12.5°	1191.1	1192.1	1191.1	1191.6	1194.2
15°	1172.0	1173.3	1172.8	1173.8	1176.1
17.5°	1149.6	1151.1	1150.9	1152.9	1154.7
20°	1125.4	1125.6	1126.6	1128.7	1130.7
22.5°	1096.8	1097.6	1098.6	1101.4	1103.5
25°	1065.8	1067.0	1068.3	1071.1	1073.1
27.5°	1032.9	1034.2	1035.9	1039.0	1042.3
30°	999.3	999.3	1002.6	1005.6	1008.7
32.5°	965.4	964.1	967.2	971.0	978.4
35°	927.9	926.9	930.2	933.8	937.6
37.5°	888.9	888.2	892.0	895.8	899.4
40°	849.4	848.4	852.2	856.1	859.9
42.5°	808.9	808.4	812.0	815.8	819.9
45°	766.9	766.6	770.2	774.0	778.1
47.5°	724.1	723.6	727.1	731.2	734.8
50°	680.3	679.8	683.3	687.4	691.2
52.5°	635.2	635.2	638.5	642.1	647.9
55°	589.8	589.1	592.6	596.7	602.3
57.5°	544.0	542.9	546.3	550.3	555.4
60°	497.1	496.1	499.1	503.2	510.3
62.5°	449.7	448.2	451.2	455.0	459.4
65°	401.8	400.3	403.1	406.6	410.7
67.5°	353.6	351.9	354.7	357.7	361.5
70°	305.2	303.4	305.5	308.5	312.1
72.5°	257.1	255.3	257.1	258.3	262.7
75°	209.9	208.2	209.2	210.2	214.0
77.5°	164.1	162.3	164.3	164.8	167.1
80°	121.0	119.2	120.5	120.8	122.6
82.5°	81.8	80.3	82.0	80.8	82.3
85°	47.1	45.9	46.4	45.9	46.6
87.5°	18.6	17.6	17.8	16.8	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)