

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: P838026

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-3STD-50-120-EDD-90**

Issue Date: 5/21/2024

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

**Test Information**

Test Method: LM-79-08
Report Number: P838026
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-ASY2R-LD4-3STD-50-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

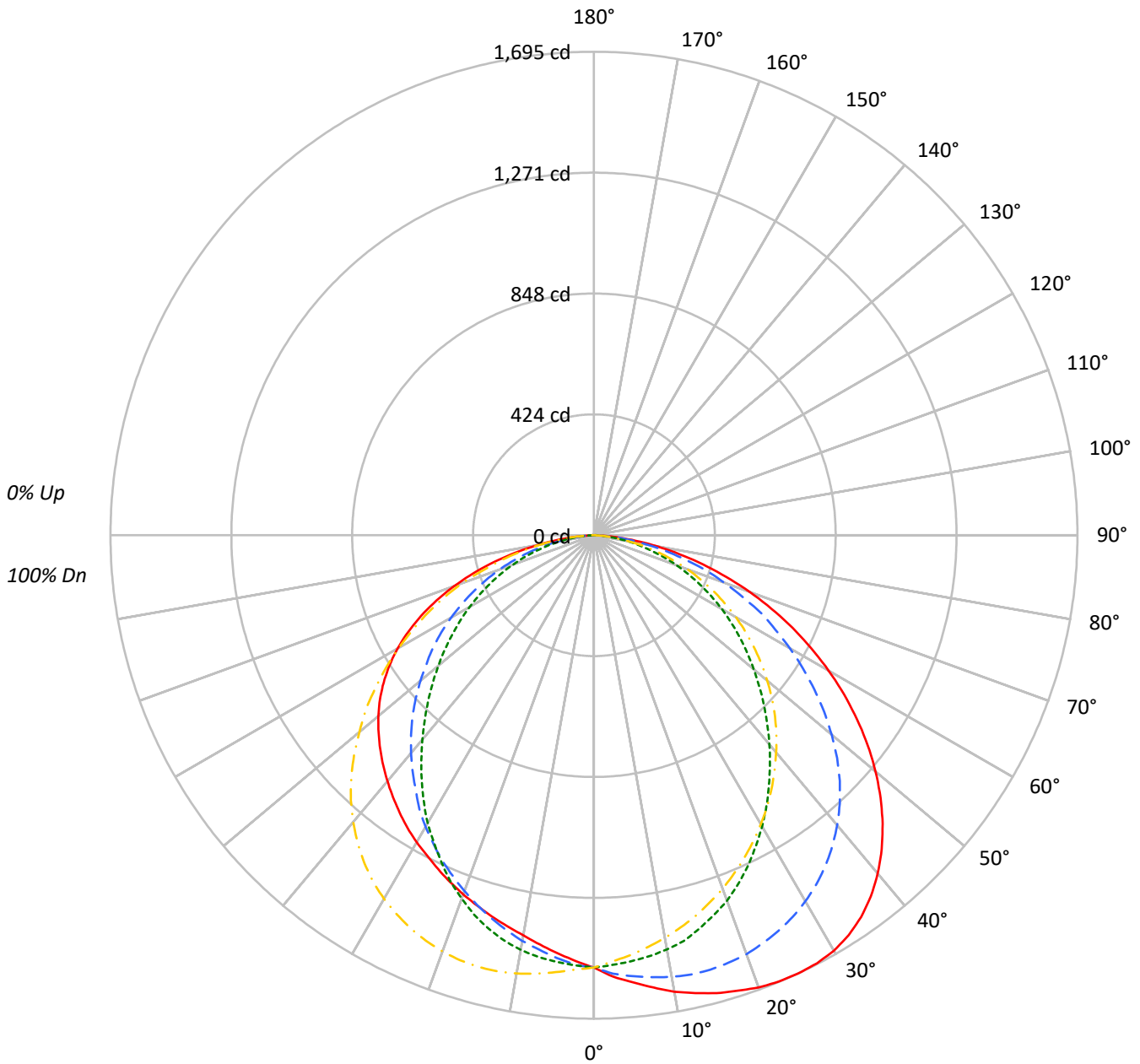
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4446.6 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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: 25 FT

TEST NUMBER: P838026
CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3STD-50-120-EDD-90

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - · - 90°-270° - · - 135°-315°



TEST NUMBER: P838026

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3STD-50-120-EDD-90

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	94	97	94	91	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	72	72	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	61	61	61	59
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	52	52	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	45	45	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	40	40	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	35	35	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	31	31	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	28	28	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4078	4078	4078	4078
5°	4251	4049	3973	4056
10°	4440	4029	3892	4034
15°	4630	3977	3854	3978
20°	4832	3905	3837	3883
25°	5032	3796	3837	3757
30°	5227	3664	3862	3623
35°	5366	3513	3901	3458
40°	5437	3362	3955	3286
45°	5448	3209	4032	3128
50°	5396	3062	4131	2981
55°	5285	2926	4223	2845
60°	5118	2784	4279	2711
65°	4890	2620	4257	2560
70°	4567	2428	4105	2384
75°	4110	2165	3768	2154
80°	3485	1813	3166	1841
85°	2424	1201	2010	1232

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838026

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3STD-50-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.9	3.2
10°-20°	416.7	9.4
20°-30°	638.6	14.4
30°-40°	776.5	17.5
40°-50°	807.2	18.2
50°-60°	729.2	16.4
60°-70°	554.3	12.5
70°-80°	309.0	7.0
80°-90°	71.2	1.6
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°	1199.2	27.0
0°-40°	1975.7	44.4
0°-60°	3512.1	79.0
0°-90°	4446.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4446.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1516	1516	1516	1516	1516	
5°	1574	1499	1471	1502	1574	152
15°	1662	1428	1383	1428	1662	471
25°	1695	1278	1292	1265	1695	783
35°	1633	1070	1188	1052	1633	1020
45°	1432	843	1060	822	1432	1102
55°	1126	624	900	606	1126	1006
65°	768	412	668	402	768	759
75°	395	208	362	207	395	420
85°	78	39	65	40	78	99
90°	0	0	0	0	0	

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



TEST NUMBER: P838026

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3STD-50-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6
2.5°	1549.2	1526.6	1526.9	1546.7	1531.5	1539.0	1517.7	1525.9	1523.4	1525.2	1507.8
5°	1573.6	1549.2	1548.9	1565.8	1548.9	1552.0	1525.2	1530.5	1522.7	1517.7	1499.0
7.5°	1599.4	1575.0	1572.5	1587.4	1565.1	1562.6	1532.9	1532.9	1518.8	1506.4	1488.8
10°	1624.9	1599.8	1596.6	1607.9	1580.3	1572.2	1536.1	1530.5	1511.7	1493.3	1474.3
12.5°	1644.0	1618.5	1616.0	1623.1	1592.0	1577.1	1536.1	1525.2	1497.6	1471.8	1456.9
15°	1662.0	1635.8	1629.1	1632.6	1596.9	1577.1	1531.2	1514.2	1478.9	1444.9	1427.6
17.5°	1674.7	1649.6	1642.9	1642.5	1599.4	1571.1	1520.6	1497.2	1454.8	1413.8	1396.5
20°	1687.4	1662.3	1653.9	1647.5	1598.7	1563.0	1505.0	1473.5	1424.1	1378.1	1363.6
22.5°	1693.8	1668.0	1658.8	1649.3	1594.1	1548.1	1485.9	1446.0	1389.4	1334.6	1322.6
25°	1694.9	1668.3	1658.4	1644.7	1584.9	1530.5	1461.2	1412.7	1349.5	1288.6	1278.4
27.5°	1692.0	1663.0	1653.1	1636.5	1571.1	1508.9	1431.8	1374.9	1307.0	1239.9	1228.9
30°	1682.1	1652.8	1643.2	1621.7	1551.7	1482.4	1399.7	1332.8	1260.0	1188.6	1179.1
32.5°	1662.3	1633.7	1625.9	1604.4	1530.5	1451.6	1362.2	1287.6	1208.0	1139.8	1125.7
35°	1633.3	1604.7	1599.8	1577.1	1500.8	1414.9	1321.2	1238.1	1152.9	1083.2	1069.5
37.5°	1595.5	1571.5	1564.1	1541.8	1465.8	1373.1	1274.2	1184.4	1096.7	1021.7	1013.2
40°	1547.8	1525.2	1519.5	1499.7	1425.1	1326.8	1223.2	1128.8	1038.7	969.0	957.0
42.5°	1493.3	1472.1	1469.0	1448.4	1374.9	1275.6	1168.1	1071.2	978.2	911.1	899.0
45°	1431.5	1411.0	1410.3	1390.8	1320.1	1218.6	1110.1	1012.9	919.2	849.6	843.2
47.5°	1363.2	1344.9	1344.9	1326.8	1259.0	1156.1	1050.4	952.1	859.8	798.3	787.0
50°	1289.0	1271.7	1266.4	1257.5	1191.4	1087.8	987.4	892.7	801.1	742.4	731.5
52.5°	1209.8	1195.0	1198.5	1182.2	1118.2	1016.8	923.8	825.9	742.1	688.7	677.7
55°	1126.4	1105.2	1108.3	1102.3	1041.9	943.6	852.4	770.7	684.1	633.9	623.6
57.5°	1039.8	1012.2	1023.5	1020.0	960.6	868.6	787.0	708.1	626.5	580.2	570.3
60°	951.0	924.5	936.2	933.0	877.1	793.7	719.5	646.3	569.2	527.1	517.2
62.5°	859.8	835.4	846.0	843.5	792.3	717.0	652.3	585.1	511.6	473.7	464.5
65°	767.9	744.6	754.1	752.3	705.0	647.7	583.3	521.8	453.6	420.7	411.5
67.5°	673.8	652.3	661.1	661.1	617.6	562.8	514.0	457.8	396.7	368.4	359.9
70°	580.5	560.4	568.1	567.4	530.7	486.1	444.0	393.8	339.0	315.7	308.6
72.5°	486.5	468.8	475.9	475.2	444.4	415.8	374.0	330.6	282.8	264.1	257.7
75°	395.3	378.6	385.4	384.7	359.5	332.7	304.8	268.7	227.7	214.6	208.2
77.5°	308.3	291.3	297.0	297.0	278.6	259.1	236.9	208.9	180.0	165.8	161.2
80°	224.9	216.7	213.9	214.2	201.9	189.1	177.8	151.0	129.7	120.2	117.0
82.5°	147.8	141.1	138.2	138.9	131.9	124.1	117.0	98.3	84.1	78.5	76.7
85°	78.5	73.5	71.1	72.8	71.4	67.2	63.6	50.9	42.1	39.9	38.9
87.5°	24.7	21.6	19.8	26.2	22.3	19.8	19.1	15.2	11.7	11.7	11.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P838026

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3STD-50-120-EDD-90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6
2.5°	1513.5	1513.5	1499.7	1496.5	1495.1	1496.9	1483.1	1480.6	1500.4	1493.7	1478.5
5°	1501.5	1500.8	1481.3	1477.8	1477.8	1475.7	1460.1	1456.6	1476.4	1470.7	1454.1
7.5°	1486.6	1484.5	1461.5	1459.1	1455.5	1454.1	1436.8	1434.3	1451.3	1447.7	1432.2
10°	1468.6	1466.5	1439.3	1437.5	1433.6	1430.8	1414.5	1412.7	1430.1	1424.4	1412.0
12.5°	1444.9	1441.0	1413.1	1411.3	1408.1	1407.1	1391.2	1390.5	1409.6	1403.9	1390.8
15°	1413.8	1410.6	1379.5	1380.2	1380.6	1380.6	1367.8	1367.1	1385.9	1383.4	1369.3
17.5°	1379.5	1375.3	1345.6	1347.7	1350.2	1353.0	1343.1	1344.9	1364.7	1361.5	1348.7
20°	1340.6	1336.4	1307.4	1313.4	1318.7	1324.4	1318.0	1322.9	1341.3	1339.9	1330.4
22.5°	1297.1	1292.9	1266.0	1275.2	1284.1	1294.7	1291.8	1297.5	1316.9	1316.6	1308.1
25°	1244.1	1245.2	1221.5	1232.8	1247.6	1262.5	1263.5	1272.7	1294.3	1292.2	1284.4
27.5°	1194.6	1196.0	1170.9	1190.0	1209.8	1228.9	1233.5	1246.2	1268.1	1266.4	1259.7
30°	1142.6	1144.4	1120.0	1146.2	1170.2	1193.5	1203.4	1220.8	1243.0	1243.0	1236.0
32.5°	1088.5	1091.7	1066.3	1101.3	1129.2	1156.4	1173.7	1191.8	1217.2	1216.5	1210.5
35°	1033.0	1036.6	1013.2	1057.8	1085.7	1118.9	1140.5	1164.6	1187.2	1187.5	1182.9
37.5°	976.5	980.7	959.5	1008.3	1040.1	1079.4	1106.9	1131.0	1156.1	1157.5	1153.2
40°	920.3	924.9	906.5	953.5	993.8	1037.6	1069.5	1097.7	1125.3	1126.0	1123.2
42.5°	864.0	869.0	855.2	901.2	946.8	993.8	1031.3	1063.4	1091.7	1093.5	1090.3
45°	809.2	813.5	803.6	853.8	897.6	948.9	992.0	1028.4	1057.1	1059.6	1058.5
47.5°	754.8	758.7	749.9	795.8	846.4	900.8	950.7	991.0	1021.4	1024.2	1023.5
50°	701.4	704.6	695.1	743.1	793.3	851.3	903.3	950.0	983.9	986.7	986.4
52.5°	648.4	651.6	643.4	694.0	739.6	800.8	857.3	907.9	941.5	945.7	946.4
55°	597.1	598.5	592.2	640.6	684.8	748.8	813.8	863.0	896.6	900.1	902.2
57.5°	545.9	546.2	540.9	587.2	629.7	695.1	763.3	814.9	846.7	850.3	853.4
60°	495.0	494.6	488.6	533.5	574.1	638.8	709.9	761.2	791.9	795.1	799.4
62.5°	444.4	443.3	438.0	479.4	517.6	581.6	653.0	702.5	731.8	733.9	739.6
65°	394.2	393.1	388.2	426.4	461.0	522.2	592.2	639.2	665.7	668.5	667.5
67.5°	344.7	342.6	338.7	373.0	404.4	461.0	528.2	573.1	595.0	597.5	604.2
70°	295.2	292.7	283.9	320.3	347.9	398.4	461.0	501.0	519.3	521.8	520.8
72.5°	246.4	243.9	234.4	268.0	291.3	335.5	391.4	424.6	440.5	442.6	442.6
75°	199.0	197.6	191.6	217.1	236.5	272.6	320.0	347.5	359.9	362.4	361.7
77.5°	153.4	152.4	146.4	168.3	183.5	210.4	248.5	270.1	279.3	282.1	288.1
80°	110.0	109.6	100.1	121.6	128.3	151.0	178.9	195.5	200.5	204.3	208.6
82.5°	70.4	70.7	61.2	79.5	82.4	96.9	114.2	124.4	128.0	131.2	134.3
85°	34.3	35.7	30.4	42.1	42.4	49.8	57.3	61.2	62.6	65.1	67.9
87.5°	8.8	10.3	5.7	12.0	10.6	13.8	15.9	17.0	16.6	18.4	19.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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



TEST NUMBER: P838026

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3STD-50-120-EDD-90

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6
2.5°	1483.4	1494.8	1489.1	1507.5	1514.6	1503.2	1523.0	1523.4	1509.3	1525.9	1535.1
5°	1460.5	1472.1	1468.6	1487.7	1496.5	1486.6	1510.7	1515.3	1501.5	1520.2	1535.1
7.5°	1437.1	1450.9	1446.3	1465.8	1476.4	1468.6	1494.4	1501.8	1491.2	1511.7	1531.5
10°	1417.0	1428.6	1423.7	1444.2	1453.4	1447.0	1472.5	1486.3	1476.4	1501.5	1525.2
12.5°	1397.2	1406.7	1401.1	1418.0	1426.9	1418.8	1449.9	1462.6	1455.5	1481.7	1512.1
15°	1371.7	1382.3	1374.6	1389.8	1396.5	1389.4	1414.9	1436.8	1427.9	1456.6	1490.2
17.5°	1352.3	1358.3	1347.7	1359.7	1363.6	1354.1	1379.9	1401.4	1395.1	1426.2	1465.1
20°	1330.7	1335.7	1320.8	1327.5	1327.2	1315.2	1338.9	1360.1	1355.8	1390.1	1434.3
22.5°	1306.7	1309.2	1291.8	1293.2	1292.5	1272.7	1294.0	1315.5	1313.7	1348.4	1397.9
25°	1281.2	1281.6	1259.3	1258.6	1250.8	1227.5	1246.2	1270.6	1265.3	1302.8	1354.8
27.5°	1256.1	1252.6	1225.7	1219.4	1207.0	1179.1	1195.7	1217.6	1214.4	1251.2	1308.8
30°	1229.3	1224.7	1191.8	1180.1	1162.1	1129.9	1143.7	1164.2	1166.0	1198.1	1258.6
32.5°	1203.8	1192.1	1155.7	1138.7	1116.1	1078.6	1086.1	1106.9	1109.8	1142.3	1204.5
35°	1170.9	1163.1	1118.2	1089.3	1067.0	1026.0	1033.7	1048.2	1052.5	1084.3	1147.6
37.5°	1139.8	1127.4	1079.7	1044.4	1015.7	972.6	974.7	989.6	993.8	1026.0	1088.5
40°	1107.6	1090.0	1038.7	997.3	964.5	919.2	916.7	932.3	935.5	966.9	1023.5
42.5°	1073.3	1052.1	994.5	949.3	911.4	865.5	860.5	873.9	877.5	908.2	963.7
45°	1038.7	1013.2	949.3	899.8	858.4	811.4	806.4	816.7	822.0	851.0	904.4
47.5°	1001.9	972.2	902.6	847.4	804.7	757.6	751.6	761.9	766.1	794.8	845.3
50°	963.4	927.3	854.5	793.7	751.3	705.0	696.1	708.1	712.0	738.9	788.4
52.5°	921.0	881.0	803.2	739.6	697.2	653.0	642.4	654.0	658.6	684.8	730.4
55°	876.1	832.9	751.6	689.8	643.8	600.7	591.8	596.4	606.3	631.1	673.5
57.5°	825.5	782.7	697.2	634.2	590.1	548.7	541.3	545.5	554.7	578.7	616.9
60°	771.8	726.5	641.7	578.7	536.0	496.7	490.0	493.9	503.8	525.7	561.1
62.5°	718.7	667.8	584.4	521.8	482.9	446.5	444.8	443.3	452.5	473.7	504.9
65°	654.4	605.6	524.7	465.3	429.9	397.0	390.0	393.1	402.0	421.4	453.9
67.5°	585.5	541.3	463.5	408.7	377.2	347.9	341.9	343.3	352.5	369.4	397.7
70°	512.3	473.4	400.9	351.8	325.3	297.7	293.8	294.1	303.0	317.8	342.6
72.5°	435.6	400.6	337.6	295.6	273.6	253.8	250.3	246.1	254.2	266.9	288.1
75°	357.4	326.7	274.7	240.4	223.1	206.5	203.3	199.0	207.2	218.1	234.7
77.5°	278.6	253.8	213.5	187.0	173.6	161.2	158.4	153.8	161.9	170.1	183.1
80°	201.5	183.5	159.4	131.5	126.9	118.8	116.0	111.0	118.8	124.1	134.0
82.5°	130.1	118.1	104.3	84.8	84.1	78.1	76.7	71.1	78.1	81.3	88.7
85°	65.8	60.1	56.6	43.1	44.5	40.7	40.3	34.3	39.9	41.4	45.6
87.5°	18.7	19.8	17.7	10.6	13.4	12.7	12.7	9.2	12.7	12.7	14.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P838026

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3STD-50-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6	1515.6
2.5°	1517.0	1523.0	1524.5	1524.1	1528.0	1549.2	1542.1	1549.2
5°	1520.6	1534.0	1537.5	1542.5	1548.9	1572.9	1565.1	1573.6
7.5°	1522.7	1542.8	1550.6	1560.2	1570.4	1597.3	1590.9	1599.4
10°	1522.7	1548.9	1560.2	1576.1	1589.9	1621.0	1615.0	1624.9
12.5°	1516.3	1549.9	1565.8	1588.1	1605.8	1639.4	1636.9	1644.0
15°	1503.2	1544.6	1566.5	1595.2	1617.1	1654.6	1653.5	1662.0
17.5°	1485.6	1535.4	1561.9	1598.0	1625.6	1667.6	1670.1	1674.7
20°	1463.3	1518.1	1552.7	1596.9	1631.6	1677.9	1681.1	1687.4
22.5°	1434.0	1497.2	1539.0	1592.3	1632.3	1682.1	1687.8	1693.8
25°	1399.3	1472.1	1520.9	1583.5	1628.8	1681.8	1689.6	1694.9
27.5°	1359.7	1439.6	1497.9	1569.4	1618.9	1676.1	1685.7	1692.0
30°	1313.7	1405.0	1471.8	1551.0	1605.4	1665.5	1675.8	1682.1
32.5°	1266.4	1366.8	1440.7	1527.3	1586.0	1648.6	1657.4	1662.3
35°	1214.8	1320.5	1403.2	1496.9	1560.9	1621.3	1628.0	1633.3
37.5°	1158.5	1270.3	1360.4	1462.6	1525.5	1583.5	1589.5	1595.5
40°	1100.6	1217.6	1312.3	1420.5	1483.4	1537.2	1543.5	1547.8
42.5°	1042.2	1159.3	1261.1	1371.0	1433.6	1485.2	1489.1	1493.3
45°	983.2	1098.8	1203.4	1316.2	1378.1	1426.5	1427.9	1431.5
47.5°	923.1	1036.2	1140.2	1253.6	1314.8	1359.0	1360.4	1363.2
50°	862.6	973.6	1072.6	1186.1	1245.9	1292.5	1286.2	1289.0
52.5°	803.2	907.9	1009.0	1113.3	1172.3	1213.7	1215.5	1209.8
55°	744.9	843.5	936.5	1036.9	1093.1	1125.3	1124.3	1126.4
57.5°	685.9	778.5	863.7	955.6	1010.4	1040.8	1047.2	1039.8
60°	625.8	712.7	789.1	872.2	925.2	950.7	958.1	951.0
62.5°	566.0	645.9	715.2	787.7	836.8	868.3	867.6	859.8
65°	506.3	578.7	640.6	702.1	744.9	776.4	775.0	767.9
67.5°	451.1	510.9	566.4	616.2	653.3	674.9	682.3	673.8
70°	390.3	441.9	490.7	530.7	561.4	580.9	587.9	580.5
72.5°	329.5	373.3	407.6	446.2	469.9	486.1	493.5	486.5
75°	269.4	305.5	333.4	363.4	380.1	393.8	402.3	395.3
77.5°	211.1	239.0	261.3	283.2	302.3	305.5	312.9	308.3
80°	155.6	175.7	192.0	206.5	220.3	221.7	227.7	224.9
82.5°	103.6	117.0	121.3	136.5	145.3	143.9	149.9	147.8
85°	54.8	62.9	70.4	75.0	79.9	75.3	80.6	78.5
87.5°	18.4	19.4	17.0	24.0	26.5	22.6	25.8	24.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)