

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: P838220

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-2LO-40-120-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: P838220
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-4-INS-ASY2R-LD4-2LO-40-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and RFI grid
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

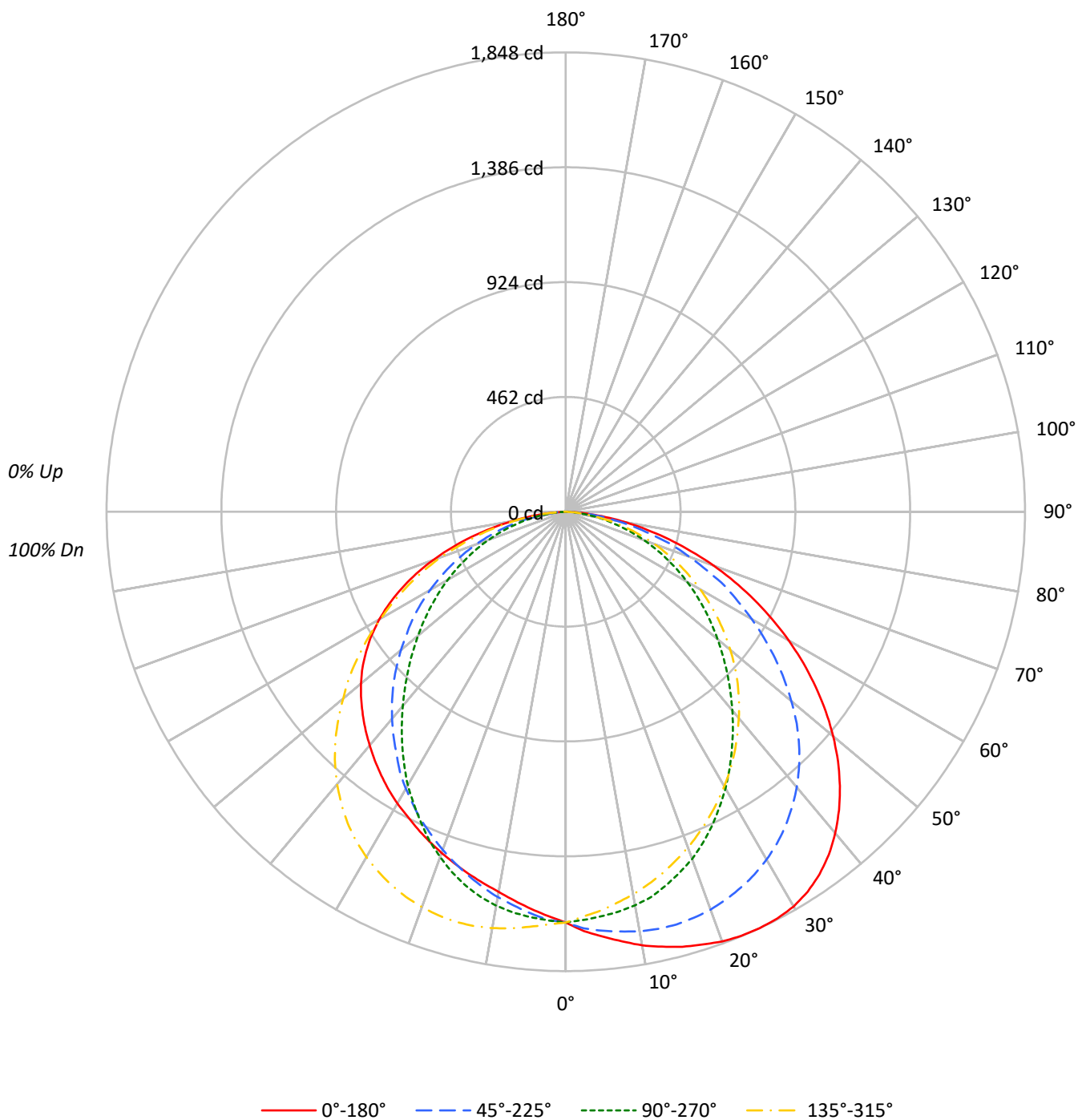
Lumens per Lamp: N/A
Luminaire Lumens: 4847.0 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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: P838220

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-40-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838220

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-40-120-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	94	97	94	91		94	91	89		90
2	99	91	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	88	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		62
5	76	63	54	47	74	62	53	47	59	52	46		57	51	46		56
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2223	2223	2223	2223
5°	2317	2207	2165	2211
10°	2420	2196	2121	2199
15°	2523	2168	2101	2168
20°	2634	2128	2091	2116
25°	2743	2069	2091	2048
30°	2849	1997	2105	1975
35°	2924	1915	2126	1884
40°	2963	1832	2156	1791
45°	2969	1749	2198	1705
50°	2941	1669	2251	1625
55°	2880	1595	2302	1550
60°	2790	1517	2332	1478
65°	2665	1428	2320	1395
70°	2489	1323	2238	1299
75°	2240	1180	2053	1174
80°	1899	989	1726	1003
85°	1321	655	1095	672

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838220

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-40-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.9	3.2
10°-20°	454.2	9.4
20°-30°	696.1	14.4
30°-40°	846.4	17.5
40°-50°	879.9	18.2
50°-60°	794.8	16.4
60°-70°	604.3	12.5
70°-80°	336.9	7.0
80°-90°	77.6	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°	1307.2	27.0
0°-40°	2153.6	44.4
0°-60°	3828.3	79.0
0°-90°	4847.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4847.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1652	1652	1652	1652	1652	
5°	1715	1634	1603	1637	1715	165
15°	1812	1556	1508	1556	1812	514
25°	1848	1394	1408	1379	1848	853
35°	1780	1166	1294	1147	1780	1112
45°	1560	919	1155	896	1560	1201
55°	1228	680	981	661	1228	1096
65°	837	449	729	438	837	827
75°	431	227	395	226	431	458
85°	86	42	71	44	86	108
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838220

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-40-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1
2.5°	1688.7	1664.0	1664.4	1686.0	1669.4	1677.5	1654.4	1663.3	1660.6	1662.5	1643.6
5°	1715.3	1688.7	1688.3	1706.8	1688.3	1691.8	1662.5	1668.3	1659.8	1654.4	1634.0
7.5°	1743.4	1716.8	1714.1	1730.3	1706.1	1703.4	1671.0	1671.0	1655.6	1642.1	1622.8
10°	1771.2	1743.8	1740.4	1752.7	1722.6	1713.8	1674.5	1668.3	1647.9	1627.8	1607.0
12.5°	1792.0	1764.2	1761.5	1769.3	1735.3	1719.2	1674.5	1662.5	1632.4	1604.3	1588.1
15°	1811.6	1783.1	1775.8	1779.7	1740.7	1719.2	1669.1	1650.6	1612.0	1575.0	1556.1
17.5°	1825.5	1798.2	1790.8	1790.4	1743.4	1712.6	1657.5	1632.1	1585.8	1541.1	1522.2
20°	1839.4	1812.0	1802.8	1795.8	1742.7	1703.7	1640.5	1606.2	1552.3	1502.2	1486.4
22.5°	1846.3	1818.2	1808.2	1797.8	1737.7	1687.6	1619.7	1576.2	1514.5	1454.8	1441.7
25°	1847.5	1818.6	1807.8	1792.8	1727.6	1668.3	1592.8	1540.0	1471.0	1404.7	1393.5
27.5°	1844.4	1812.8	1802.0	1783.9	1712.6	1644.8	1560.8	1498.7	1424.7	1351.5	1339.6
30°	1833.6	1801.6	1791.2	1767.7	1691.4	1615.9	1525.7	1452.9	1373.5	1295.6	1285.2
32.5°	1812.0	1780.8	1772.3	1748.8	1668.3	1582.3	1484.8	1403.5	1316.8	1242.4	1227.0
35°	1780.4	1749.2	1743.8	1719.2	1635.9	1542.3	1440.1	1349.6	1256.7	1180.8	1165.8
37.5°	1739.2	1713.0	1704.9	1680.6	1597.8	1496.8	1388.9	1291.0	1195.4	1113.7	1104.5
40°	1687.2	1662.5	1656.3	1634.8	1553.4	1446.3	1333.4	1230.5	1132.2	1056.3	1043.2
42.5°	1627.8	1604.7	1601.2	1578.9	1498.7	1390.4	1273.3	1167.7	1066.3	993.1	980.0
45°	1560.4	1538.0	1537.3	1516.1	1439.0	1328.4	1210.1	1104.1	1002.0	926.1	919.1
47.5°	1486.0	1466.0	1466.0	1446.3	1372.3	1260.2	1144.9	1037.8	937.2	870.2	857.8
50°	1405.1	1386.2	1380.4	1370.8	1298.7	1185.8	1076.4	973.1	873.3	809.3	797.3
52.5°	1318.8	1302.6	1306.4	1288.7	1218.9	1108.3	1007.0	900.2	808.9	750.7	738.8
55°	1227.8	1204.7	1208.1	1201.6	1135.7	1028.6	929.1	840.1	745.7	691.0	679.8
57.5°	1133.4	1103.3	1115.7	1111.8	1047.1	946.9	857.8	771.9	682.9	632.4	621.6
60°	1036.7	1007.8	1020.5	1017.0	956.1	865.2	784.2	704.5	620.5	574.6	563.8
62.5°	937.2	910.6	922.2	919.5	863.6	781.5	711.0	637.8	557.6	516.4	506.4
65°	837.0	811.6	822.0	820.1	768.4	706.0	635.9	568.8	494.4	458.6	448.6
67.5°	734.5	711.0	720.7	720.7	673.2	613.5	560.3	499.1	432.4	401.6	392.3
70°	632.8	610.8	619.3	618.5	578.4	529.9	484.0	429.3	369.6	344.1	336.4
72.5°	530.3	511.0	518.7	517.9	484.4	453.2	407.7	360.3	308.3	287.9	280.9
75°	430.8	412.7	420.1	419.3	391.9	362.6	332.2	292.9	248.2	233.9	227.0
77.5°	336.0	317.5	323.7	323.7	303.7	282.5	258.2	227.8	196.2	180.7	175.7
80°	245.1	236.2	233.2	233.5	220.0	206.2	193.8	164.6	141.4	131.0	127.6
82.5°	161.1	153.8	150.7	151.5	143.7	135.3	127.6	107.1	91.7	85.6	83.6
85°	85.6	80.2	77.5	79.4	77.8	73.2	69.4	55.5	45.9	43.5	42.4
87.5°	27.0	23.5	21.6	28.5	24.3	21.6	20.8	16.6	12.7	12.7	12.3
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: P838220

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-40-120-EDD-90

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1
2.5°	1649.8	1649.8	1634.8	1631.3	1629.7	1631.7	1616.6	1613.9	1635.5	1628.2	1611.6
5°	1636.7	1635.9	1614.7	1610.9	1610.9	1608.6	1591.6	1587.7	1609.3	1603.2	1585.0
7.5°	1620.5	1618.2	1593.1	1590.4	1586.6	1585.0	1566.2	1563.5	1582.0	1578.1	1561.2
10°	1600.8	1598.5	1568.9	1566.9	1562.7	1559.6	1541.9	1540.0	1558.8	1552.7	1539.2
12.5°	1575.0	1570.8	1540.3	1538.4	1534.9	1533.8	1516.4	1515.7	1536.5	1530.3	1516.1
15°	1541.1	1537.6	1503.7	1504.5	1504.9	1504.9	1491.0	1490.2	1510.7	1508.0	1492.6
17.5°	1503.7	1499.1	1466.7	1469.0	1471.7	1474.8	1464.0	1466.0	1487.5	1484.1	1470.2
20°	1461.3	1456.7	1425.1	1431.7	1437.4	1443.6	1436.7	1442.1	1462.1	1460.6	1450.2
22.5°	1413.9	1409.3	1380.0	1390.0	1399.7	1411.2	1408.2	1414.3	1435.5	1435.1	1425.9
25°	1356.1	1357.3	1331.5	1343.8	1360.0	1376.2	1377.3	1387.3	1410.9	1408.5	1400.1
27.5°	1302.2	1303.7	1276.4	1297.2	1318.8	1339.6	1344.6	1358.4	1382.3	1380.4	1373.1
30°	1245.5	1247.5	1220.9	1249.4	1275.6	1301.0	1311.8	1330.7	1355.0	1355.0	1347.3
32.5°	1186.6	1190.0	1162.3	1200.4	1230.9	1260.6	1279.4	1299.1	1326.8	1326.1	1319.5
35°	1126.1	1129.9	1104.5	1153.0	1183.5	1219.7	1243.2	1269.4	1294.1	1294.5	1289.5
37.5°	1064.4	1069.0	1045.9	1099.1	1133.8	1176.5	1206.6	1232.8	1260.2	1261.7	1257.1
40°	1003.1	1008.1	988.1	1039.4	1083.3	1131.1	1165.8	1196.6	1226.6	1227.4	1224.3
42.5°	941.9	947.3	932.2	982.3	1032.0	1083.3	1124.1	1159.2	1190.0	1192.0	1188.5
45°	882.1	886.7	876.0	930.7	978.5	1034.3	1081.4	1121.1	1152.3	1155.0	1153.8
47.5°	822.8	827.0	817.4	867.5	922.6	981.9	1036.3	1080.2	1113.3	1116.4	1115.7
50°	764.6	768.1	757.6	810.1	864.8	928.0	984.6	1035.5	1072.5	1075.6	1075.2
52.5°	706.8	710.2	701.4	756.5	806.2	872.9	934.5	989.6	1026.3	1030.9	1031.6
55°	650.9	652.4	645.5	698.3	746.5	816.2	887.1	940.7	977.3	981.2	983.5
57.5°	595.0	595.4	589.6	640.1	686.4	757.6	832.0	888.3	923.0	926.8	930.3
60°	539.5	539.1	532.6	581.5	625.8	696.4	773.8	829.7	863.2	866.7	871.3
62.5°	484.4	483.3	477.5	522.6	564.2	633.9	711.8	765.7	797.7	800.0	806.2
65°	429.7	428.5	423.1	464.8	502.5	569.2	645.5	696.8	725.7	728.7	727.6
67.5°	375.7	373.4	369.2	406.6	440.9	502.5	575.7	624.7	648.6	651.3	658.6
70°	321.8	319.1	309.5	349.1	379.2	434.3	502.5	546.1	566.1	568.8	567.7
72.5°	268.6	265.9	255.5	292.1	317.5	365.7	426.6	462.8	480.2	482.5	482.5
75°	217.0	215.4	208.9	236.6	257.8	297.1	348.8	378.8	392.3	395.0	394.2
77.5°	167.3	166.1	159.5	183.4	200.0	229.3	270.9	294.4	304.4	307.5	314.1
80°	119.9	119.5	109.1	132.6	139.9	164.6	195.0	213.1	218.5	222.7	227.4
82.5°	76.7	77.1	66.7	86.7	89.8	105.6	124.5	135.7	139.5	143.0	146.4
85°	37.4	38.9	33.1	45.9	46.2	54.3	62.4	66.7	68.2	70.9	74.0
87.5°	9.6	11.2	6.2	13.1	11.6	15.0	17.3	18.5	18.1	20.0	21.2
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: P838220

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-40-120-EDD-90

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1
2.5°	1617.0	1629.4	1623.2	1643.2	1650.9	1638.6	1660.2	1660.6	1645.2	1663.3	1673.3
5°	1592.0	1604.7	1600.8	1621.7	1631.3	1620.5	1646.7	1651.7	1636.7	1657.1	1673.3
7.5°	1566.5	1581.6	1576.6	1597.8	1609.3	1600.8	1629.0	1637.1	1625.5	1647.9	1669.4
10°	1544.6	1557.3	1551.9	1574.3	1584.3	1577.3	1605.1	1620.1	1609.3	1636.7	1662.5
12.5°	1523.0	1533.4	1527.2	1545.7	1555.4	1546.5	1580.4	1594.3	1586.6	1615.1	1648.2
15°	1495.3	1506.8	1498.3	1514.9	1522.2	1514.5	1542.3	1566.2	1556.5	1587.7	1624.4
17.5°	1474.1	1480.6	1469.0	1482.2	1486.4	1476.0	1504.1	1527.6	1520.7	1554.6	1597.0
20°	1450.5	1455.9	1439.8	1447.1	1446.7	1433.6	1459.4	1482.5	1477.9	1515.3	1563.5
22.5°	1424.3	1427.0	1408.2	1409.7	1408.9	1387.3	1410.5	1434.0	1432.1	1469.8	1523.8
25°	1396.6	1397.0	1372.7	1371.9	1363.5	1338.0	1358.4	1385.0	1379.3	1420.1	1476.8
27.5°	1369.2	1365.4	1336.1	1329.2	1315.7	1285.2	1303.3	1327.2	1323.8	1363.8	1426.7
30°	1339.9	1334.9	1299.1	1286.4	1266.7	1231.7	1246.7	1269.0	1271.0	1306.0	1371.9
32.5°	1312.2	1299.5	1259.8	1241.3	1216.6	1175.8	1183.9	1206.6	1209.7	1245.1	1313.0
35°	1276.4	1267.9	1218.9	1187.3	1163.1	1118.4	1126.8	1142.6	1147.3	1181.9	1250.9
37.5°	1242.4	1229.0	1176.9	1138.4	1107.2	1060.2	1062.5	1078.7	1083.3	1118.4	1186.6
40°	1207.4	1188.1	1132.2	1087.1	1051.3	1002.0	999.3	1016.2	1019.7	1054.0	1115.7
42.5°	1170.0	1146.9	1084.1	1034.7	993.5	943.4	938.0	952.6	956.5	990.0	1050.5
45°	1132.2	1104.5	1034.7	980.8	935.7	884.4	879.0	890.2	896.0	927.6	985.8
47.5°	1092.2	1059.8	983.9	923.7	877.1	825.9	819.3	830.5	835.1	866.3	921.4
50°	1050.1	1010.8	931.5	865.2	818.9	768.4	758.8	771.9	776.1	805.4	859.4
52.5°	1003.9	960.4	875.6	806.2	760.0	711.8	700.2	712.9	718.0	746.5	796.2
55°	955.0	907.9	819.3	751.9	701.8	654.8	645.1	650.1	660.9	687.9	734.1
57.5°	899.8	853.2	760.0	691.4	643.2	598.1	590.0	594.6	604.7	630.9	672.5
60°	841.3	791.9	699.5	630.9	584.2	541.5	534.1	538.4	549.2	573.1	611.6
62.5°	783.5	728.0	637.0	568.8	526.4	486.7	484.8	483.3	493.3	516.4	550.3
65°	713.3	660.1	571.9	507.2	468.6	432.8	425.1	428.5	438.2	459.4	494.8
67.5°	638.2	590.0	505.2	445.5	411.2	379.2	372.7	374.2	384.2	402.7	433.5
70°	558.4	516.0	437.0	383.4	354.5	324.5	320.2	320.6	330.3	346.5	373.4
72.5°	474.8	436.6	368.0	322.2	298.3	276.7	272.8	268.2	277.1	291.0	314.1
75°	389.6	356.1	299.4	262.1	243.2	225.1	221.6	217.0	225.8	237.8	255.9
77.5°	303.7	276.7	232.8	203.9	189.2	175.7	172.6	167.6	176.5	185.4	199.6
80°	219.7	200.0	173.8	143.4	138.3	129.5	126.4	121.0	129.5	135.3	146.1
82.5°	141.8	128.7	113.7	92.5	91.7	85.2	83.6	77.5	85.2	88.6	96.7
85°	71.7	65.5	61.7	47.0	48.6	44.3	43.9	37.4	43.5	45.1	49.7
87.5°	20.4	21.6	19.3	11.6	14.6	13.9	13.9	10.0	13.9	13.9	15.8
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: P838220

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-40-120-EDD-90

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1	1652.1
2.5°	1653.6	1660.2	1661.7	1661.3	1665.6	1688.7	1681.0	1688.7
5°	1657.5	1672.1	1676.0	1681.4	1688.3	1714.5	1706.1	1715.3
7.5°	1659.8	1681.8	1690.3	1700.7	1711.8	1741.1	1734.2	1743.4
10°	1659.8	1688.3	1700.7	1718.0	1733.0	1766.9	1760.4	1771.2
12.5°	1652.9	1689.5	1706.8	1731.1	1750.4	1787.0	1784.3	1792.0
15°	1638.6	1683.7	1707.6	1738.8	1762.7	1803.6	1802.4	1811.6
17.5°	1619.3	1673.7	1702.6	1741.9	1772.0	1817.8	1820.5	1825.5
20°	1595.1	1654.8	1692.6	1740.7	1778.5	1829.0	1832.5	1839.4
22.5°	1563.1	1632.1	1677.5	1735.7	1779.3	1833.6	1839.8	1846.3
25°	1525.3	1604.7	1657.9	1726.1	1775.4	1833.2	1841.7	1847.5
27.5°	1482.2	1569.2	1632.8	1710.7	1764.6	1827.1	1837.5	1844.4
30°	1432.1	1531.5	1604.3	1690.6	1750.0	1815.5	1826.7	1833.6
32.5°	1380.4	1489.9	1570.4	1664.8	1728.8	1797.0	1806.6	1812.0
35°	1324.1	1439.4	1529.6	1631.7	1701.4	1767.3	1774.6	1780.4
37.5°	1262.9	1384.7	1482.9	1594.3	1662.9	1726.1	1732.6	1739.2
40°	1199.7	1327.2	1430.5	1548.4	1617.0	1675.6	1682.5	1687.2
42.5°	1136.1	1263.6	1374.6	1494.5	1562.7	1619.0	1623.2	1627.8
45°	1071.7	1197.7	1311.8	1434.7	1502.2	1555.0	1556.5	1560.4
47.5°	1006.2	1129.5	1242.8	1366.5	1433.2	1481.4	1482.9	1486.0
50°	940.3	1061.3	1169.2	1292.9	1358.1	1408.9	1402.0	1405.1
52.5°	875.6	989.6	1099.9	1213.5	1277.9	1323.0	1324.9	1318.8
55°	812.0	919.5	1020.9	1130.3	1191.6	1226.6	1225.5	1227.8
57.5°	747.6	848.6	941.5	1041.7	1101.4	1134.5	1141.5	1133.4
60°	682.1	776.9	860.2	950.7	1008.5	1036.3	1044.4	1036.7
62.5°	617.0	704.1	779.6	858.6	912.2	946.5	945.7	937.2
65°	551.9	630.9	698.3	765.4	812.0	846.3	844.7	837.0
67.5°	491.7	556.9	617.4	671.7	712.2	735.7	743.8	734.5
70°	425.5	481.7	534.9	578.4	612.0	633.2	640.9	632.8
72.5°	359.2	407.0	444.3	486.3	512.2	529.9	538.0	530.3
75°	293.7	333.0	363.4	396.2	414.3	429.3	438.6	430.8
77.5°	230.1	260.5	284.8	308.7	329.5	333.0	341.1	336.0
80°	169.6	191.5	209.3	225.1	240.1	241.6	248.2	245.1
82.5°	112.9	127.6	132.2	148.8	158.4	156.8	163.4	161.1
85°	59.7	68.6	76.7	81.7	87.1	82.1	87.9	85.6
87.5°	20.0	21.2	18.5	26.2	28.9	24.7	28.1	27.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)