

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: P837884

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-4LO-35-120-EDD**

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: P837884
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-LD4-4LO-35-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

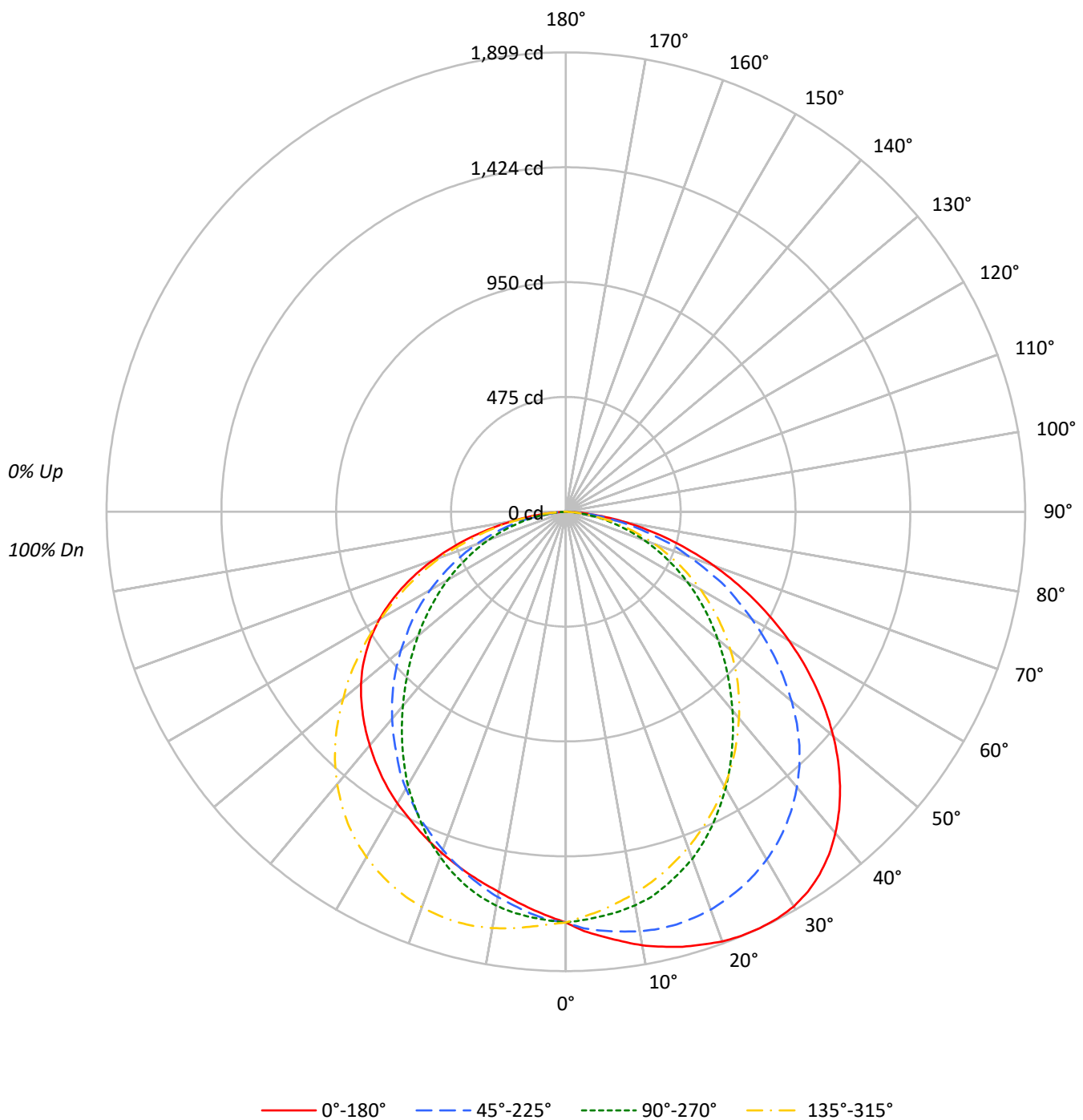
Lumens per Lamp: N/A
Luminaire Lumens: 4981.0 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P837884

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4LO-35-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837884

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4LO-35-120-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	100		
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70		
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	59		
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4569	4569	4569	4569
5°	4762	4536	4450	4543
10°	4973	4512	4360	4519
15°	5187	4455	4317	4456
20°	5413	4374	4298	4349
25°	5637	4252	4298	4208
30°	5855	4104	4327	4058
35°	6010	3936	4370	3873
40°	6091	3766	4431	3681
45°	6102	3594	4517	3504
50°	6045	3430	4627	3339
55°	5919	3278	4731	3187
60°	5733	3118	4794	3037
65°	5477	2935	4769	2867
70°	5116	2720	4599	2670
75°	4604	2426	4220	2413
80°	3904	2032	3547	2063
85°	2714	1346	2251	1383

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837884

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4LO-35-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.2	3.2
10°-20°	466.8	9.4
20°-30°	715.4	14.4
30°-40°	869.8	17.5
40°-50°	904.2	18.2
50°-60°	816.8	16.4
60°-70°	621.0	12.5
70°-80°	346.2	7.0
80°-90°	79.7	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°	1343.3	27.0
0°-40°	2213.1	44.4
0°-60°	3934.2	79.0
0°-90°	4981.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4981.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1698	1698	1698	1698	1698	
5°	1763	1679	1648	1682	1763	170
15°	1862	1599	1550	1600	1862	528
25°	1899	1432	1448	1417	1899	877
35°	1830	1198	1330	1179	1830	1143
45°	1604	944	1187	921	1604	1235
55°	1262	699	1008	679	1262	1126
65°	860	461	749	450	860	850
75°	443	233	406	232	443	470
85°	88	44	73	45	88	111
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837884

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4LO-35-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8
2.5°	1735.4	1710.0	1710.4	1732.6	1715.6	1723.9	1700.1	1709.3	1706.5	1708.5	1689.1
5°	1762.7	1735.4	1735.0	1754.0	1735.0	1738.6	1708.5	1714.4	1705.7	1700.1	1679.2
7.5°	1791.6	1764.3	1761.5	1778.2	1753.2	1750.4	1717.2	1717.2	1701.3	1687.5	1667.7
10°	1820.1	1792.0	1788.5	1801.1	1770.2	1761.1	1720.7	1714.4	1693.4	1672.8	1651.4
12.5°	1841.5	1813.0	1810.2	1818.2	1783.3	1766.7	1720.7	1708.5	1677.6	1648.7	1632.0
15°	1861.7	1832.4	1824.9	1828.9	1788.9	1766.7	1715.2	1696.2	1656.6	1618.6	1599.2
17.5°	1876.0	1847.9	1840.3	1839.9	1791.6	1759.9	1703.3	1677.2	1629.7	1583.7	1564.3
20°	1890.2	1862.1	1852.6	1845.5	1790.8	1750.8	1685.9	1650.6	1595.2	1543.7	1527.5
22.5°	1897.4	1868.5	1858.2	1847.5	1785.7	1734.2	1664.5	1619.8	1556.4	1495.0	1481.5
25°	1898.6	1868.9	1857.8	1842.3	1775.4	1714.4	1636.8	1582.5	1511.6	1443.5	1432.0
27.5°	1895.4	1862.9	1851.8	1833.2	1759.9	1690.2	1603.9	1540.2	1464.1	1388.9	1376.6
30°	1884.3	1851.4	1840.7	1816.6	1738.2	1660.5	1567.9	1493.0	1411.4	1331.4	1320.8
32.5°	1862.1	1830.0	1821.3	1797.2	1714.4	1626.1	1525.9	1442.3	1353.2	1276.8	1261.0
35°	1829.6	1797.6	1792.0	1766.7	1681.1	1584.9	1480.0	1386.9	1291.4	1213.4	1198.0
37.5°	1787.3	1760.3	1752.0	1727.1	1641.9	1538.2	1427.3	1326.7	1228.5	1144.5	1135.0
40°	1733.8	1708.5	1702.1	1679.9	1596.4	1486.3	1370.3	1264.5	1163.5	1085.5	1072.0
42.5°	1672.8	1649.1	1645.5	1622.5	1540.2	1428.9	1308.5	1200.0	1095.8	1020.6	1007.1
45°	1603.5	1580.5	1579.8	1558.0	1478.8	1365.1	1243.5	1134.6	1029.7	951.7	944.5
47.5°	1527.1	1506.5	1506.5	1486.3	1410.3	1295.0	1176.6	1066.5	963.1	894.2	881.6
50°	1443.9	1424.5	1418.6	1408.7	1334.6	1218.6	1106.1	1000.0	897.4	831.7	819.4
52.5°	1355.2	1338.6	1342.5	1324.3	1252.6	1139.0	1034.8	925.1	831.3	771.5	759.2
55°	1261.7	1238.0	1241.5	1234.8	1167.1	1057.0	954.8	863.3	766.3	710.1	698.6
57.5°	1164.7	1133.8	1146.5	1142.5	1076.0	973.0	881.6	793.2	701.8	649.9	638.8
60°	1065.3	1035.6	1048.7	1045.1	982.5	889.1	805.9	723.9	637.6	590.5	579.4
62.5°	963.1	935.8	947.7	944.9	887.5	803.1	730.7	655.4	573.1	530.7	520.4
65°	860.2	834.0	844.7	842.7	789.7	725.5	653.4	584.5	508.1	471.3	461.0
67.5°	754.8	730.7	740.6	740.6	691.9	630.5	575.8	512.9	444.3	412.7	403.2
70°	650.3	627.7	636.4	635.6	594.4	544.5	497.4	441.2	379.8	353.7	345.7
72.5°	544.9	525.1	533.1	532.3	497.8	465.7	419.0	370.3	316.8	295.8	288.7
75°	442.8	424.1	431.7	430.9	402.8	372.7	341.4	301.0	255.0	240.4	233.3
77.5°	345.3	326.3	332.7	332.7	312.1	290.3	265.3	234.1	201.6	185.7	180.6
80°	251.9	242.8	239.6	240.0	226.1	211.9	199.2	169.1	145.3	134.6	131.1
82.5°	165.5	158.0	154.8	155.6	147.7	139.0	131.1	110.1	94.3	87.9	85.9
85°	87.9	82.4	79.6	81.6	80.0	75.2	71.3	57.0	47.1	44.8	43.6
87.5°	27.7	24.2	22.2	29.3	24.9	22.2	21.4	17.0	13.1	13.1	12.7
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: P837884

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4LO-35-120-EDD

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8
2.5°	1695.4	1695.4	1679.9	1676.4	1674.8	1676.8	1661.3	1658.6	1680.7	1673.2	1656.2
5°	1681.9	1681.1	1659.4	1655.4	1655.4	1653.0	1635.6	1631.6	1653.8	1647.5	1628.9
7.5°	1665.3	1662.9	1637.2	1634.4	1630.4	1628.9	1609.5	1606.7	1625.7	1621.7	1604.3
10°	1645.1	1642.7	1612.2	1610.2	1605.9	1602.7	1584.5	1582.5	1601.9	1595.6	1581.7
12.5°	1618.6	1614.2	1582.9	1580.9	1577.4	1576.2	1558.4	1557.6	1579.0	1572.6	1558.0
15°	1583.7	1580.1	1545.3	1546.1	1546.5	1546.5	1532.2	1531.4	1552.4	1549.7	1533.8
17.5°	1545.3	1540.5	1507.3	1509.7	1512.4	1515.6	1504.5	1506.5	1528.7	1525.1	1510.8
20°	1501.7	1497.0	1464.5	1471.2	1477.2	1483.5	1476.4	1481.9	1502.5	1500.9	1490.3
22.5°	1453.0	1448.3	1418.2	1428.5	1438.4	1450.3	1447.1	1453.4	1475.2	1474.8	1465.3
25°	1393.6	1394.8	1368.3	1380.9	1397.6	1414.2	1415.4	1425.7	1449.9	1447.5	1438.8
27.5°	1338.2	1339.8	1311.6	1333.0	1355.2	1376.6	1381.7	1396.0	1420.5	1418.6	1411.0
30°	1280.0	1281.9	1254.6	1283.9	1310.9	1337.0	1348.1	1367.5	1392.4	1392.4	1384.5
32.5°	1219.4	1222.9	1194.4	1233.6	1264.9	1295.4	1314.8	1335.0	1363.5	1362.7	1356.0
35°	1157.2	1161.2	1135.0	1184.9	1216.2	1253.4	1277.6	1304.5	1329.9	1330.3	1325.1
37.5°	1093.8	1098.6	1074.8	1129.5	1165.1	1209.1	1240.0	1266.9	1295.0	1296.6	1291.8
40°	1030.9	1036.0	1015.4	1068.1	1113.2	1162.3	1198.0	1229.7	1260.6	1261.3	1258.2
42.5°	967.9	973.4	958.0	1009.5	1060.6	1113.2	1155.2	1191.3	1222.9	1224.9	1221.3
45°	906.5	911.3	900.2	956.4	1005.5	1062.9	1111.3	1152.0	1184.1	1186.9	1185.7
47.5°	845.5	849.9	840.0	891.5	948.1	1009.1	1064.9	1110.1	1144.1	1147.3	1146.5
50°	785.7	789.3	778.6	832.4	888.7	953.6	1011.8	1064.1	1102.1	1105.3	1104.9
52.5°	726.3	729.9	720.8	777.4	828.5	897.0	960.4	1017.0	1054.6	1059.4	1060.2
55°	668.9	670.5	663.3	717.6	767.1	838.8	911.7	966.7	1004.3	1008.3	1010.7
57.5°	611.5	611.9	605.9	657.8	705.3	778.6	855.0	912.8	948.5	952.4	956.0
60°	554.4	554.0	547.3	597.6	643.1	715.6	795.2	852.6	887.1	890.7	895.4
62.5°	497.8	496.6	490.7	537.0	579.8	651.5	731.5	786.9	819.8	822.2	828.5
65°	441.6	440.4	434.8	477.6	516.4	584.9	663.3	716.0	745.7	748.9	747.7
67.5°	386.1	383.8	379.4	417.8	453.1	516.4	591.7	642.0	666.5	669.3	676.8
70°	330.7	327.9	318.0	358.8	389.7	446.3	516.4	561.2	581.8	584.5	583.3
72.5°	276.0	273.3	262.6	300.2	326.3	375.8	438.4	475.6	493.5	495.8	495.8
75°	223.0	221.4	214.6	243.2	264.9	305.3	358.4	389.3	403.2	405.9	405.1
77.5°	171.9	170.7	164.0	188.5	205.5	235.6	278.4	302.6	312.9	316.0	322.8
80°	123.2	122.8	112.1	136.2	143.8	169.1	200.4	219.0	224.5	228.9	233.7
82.5°	78.8	79.2	68.5	89.1	92.3	108.5	127.9	139.4	143.4	146.9	150.5
85°	38.4	40.0	34.1	47.1	47.5	55.8	64.2	68.5	70.1	72.9	76.0
87.5°	9.9	11.5	6.3	13.5	11.9	15.4	17.8	19.0	18.6	20.6	21.8
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: P837884

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4LO-35-120-EDD

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8
2.5°	1661.7	1674.4	1668.1	1688.7	1696.6	1683.9	1706.1	1706.5	1690.6	1709.3	1719.6
5°	1636.0	1649.1	1645.1	1666.5	1676.4	1665.3	1692.2	1697.4	1681.9	1702.9	1719.6
7.5°	1609.9	1625.3	1620.1	1641.9	1653.8	1645.1	1674.0	1682.3	1670.4	1693.4	1715.6
10°	1587.3	1600.3	1594.8	1617.8	1628.1	1620.9	1649.5	1664.9	1653.8	1681.9	1708.5
12.5°	1565.1	1575.8	1569.5	1588.5	1598.4	1589.3	1624.1	1638.4	1630.4	1659.8	1693.8
15°	1536.6	1548.5	1539.8	1556.8	1564.3	1556.4	1584.9	1609.5	1599.6	1631.6	1669.3
17.5°	1514.8	1521.5	1509.7	1523.1	1527.5	1516.8	1545.7	1569.9	1562.7	1597.6	1641.1
20°	1490.6	1496.2	1479.6	1487.1	1486.7	1473.2	1499.8	1523.5	1518.8	1557.2	1606.7
22.5°	1463.7	1466.5	1447.1	1448.7	1447.9	1425.7	1449.5	1473.6	1471.6	1510.4	1565.9
25°	1435.2	1435.6	1410.6	1409.9	1401.1	1375.0	1396.0	1423.3	1417.4	1459.4	1517.6
27.5°	1407.1	1403.1	1373.0	1365.9	1352.0	1320.8	1339.4	1363.9	1360.4	1401.5	1466.1
30°	1377.0	1371.8	1335.0	1321.9	1301.7	1265.7	1281.1	1304.1	1306.1	1342.1	1409.9
32.5°	1348.5	1335.4	1294.6	1275.6	1250.3	1208.3	1216.6	1240.0	1243.1	1279.6	1349.3
35°	1311.6	1302.9	1252.6	1220.2	1195.2	1149.3	1158.0	1174.2	1179.0	1214.6	1285.5
37.5°	1276.8	1262.9	1209.5	1169.9	1137.8	1089.5	1091.8	1108.5	1113.2	1149.3	1219.4
40°	1240.8	1221.0	1163.5	1117.2	1080.4	1029.7	1026.9	1044.3	1047.9	1083.1	1146.5
42.5°	1202.3	1178.6	1114.0	1063.3	1021.0	969.5	963.9	979.0	982.9	1017.4	1079.6
45°	1163.5	1135.0	1063.3	1007.9	961.6	908.9	903.3	914.8	920.8	953.2	1013.0
47.5°	1122.3	1089.1	1011.1	949.3	901.4	848.7	842.0	853.4	858.2	890.3	946.9
50°	1079.2	1038.8	957.2	889.1	841.6	789.7	779.8	793.2	797.6	827.7	883.1
52.5°	1031.7	986.9	899.8	828.5	781.0	731.5	719.6	732.7	737.8	767.1	818.2
55°	981.4	933.0	842.0	772.6	721.2	672.9	662.9	668.1	679.2	706.9	754.4
57.5°	924.7	876.8	781.0	710.5	661.0	614.6	606.3	611.1	621.4	648.3	691.1
60°	864.5	813.8	718.8	648.3	600.4	556.4	548.9	553.3	564.3	588.9	628.5
62.5°	805.1	748.1	654.6	584.5	541.0	500.2	498.2	496.6	506.9	530.7	565.5
65°	733.0	678.4	587.7	521.2	481.6	444.7	436.8	440.4	450.3	472.1	508.5
67.5°	655.8	606.3	519.2	457.8	422.6	389.7	383.0	384.5	394.8	413.8	445.5
70°	573.8	530.3	449.1	394.0	364.3	333.5	329.1	329.5	339.4	356.0	383.8
72.5°	487.9	448.7	378.2	331.1	306.5	284.3	280.4	275.6	284.7	299.0	322.8
75°	400.4	365.9	307.7	269.3	249.9	231.3	227.7	223.0	232.1	244.3	263.0
77.5°	312.1	284.3	239.2	209.5	194.4	180.6	177.4	172.3	181.4	190.5	205.1
80°	225.7	205.5	178.6	147.3	142.2	133.1	129.9	124.4	133.1	139.0	150.1
82.5°	145.7	132.3	116.8	95.0	94.3	87.5	85.9	79.6	87.5	91.1	99.4
85°	73.7	67.3	63.4	48.3	49.9	45.5	45.1	38.4	44.8	46.3	51.1
87.5°	21.0	22.2	19.8	11.9	15.0	14.3	14.3	10.3	14.3	14.3	16.2
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: P837884

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-4LO-35-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8	1697.8
2.5°	1699.4	1706.1	1707.7	1707.3	1711.6	1735.4	1727.5	1735.4
5°	1703.3	1718.4	1722.3	1727.9	1735.0	1761.9	1753.2	1762.7
7.5°	1705.7	1728.3	1737.0	1747.7	1759.2	1789.3	1782.1	1791.6
10°	1705.7	1735.0	1747.7	1765.5	1780.9	1815.8	1809.1	1820.1
12.5°	1698.6	1736.2	1754.0	1779.0	1798.8	1836.4	1833.6	1841.5
15°	1683.9	1730.2	1754.8	1786.9	1811.4	1853.4	1852.2	1861.7
17.5°	1664.1	1719.9	1749.6	1790.0	1820.9	1868.1	1870.8	1876.0
20°	1639.2	1700.5	1739.4	1788.9	1827.7	1879.5	1883.1	1890.2
22.5°	1606.3	1677.2	1723.9	1783.7	1828.5	1884.3	1890.6	1897.4
25°	1567.5	1649.1	1703.7	1773.8	1824.5	1883.9	1892.6	1898.6
27.5°	1523.1	1612.6	1678.0	1758.0	1813.4	1877.6	1888.3	1895.4
30°	1471.6	1573.8	1648.7	1737.4	1798.4	1865.7	1877.2	1884.3
32.5°	1418.6	1531.0	1613.8	1710.8	1776.6	1846.7	1856.6	1862.1
35°	1360.7	1479.2	1571.8	1676.8	1748.5	1816.2	1823.7	1829.6
37.5°	1297.8	1422.9	1523.9	1638.4	1708.9	1773.8	1780.5	1787.3
40°	1232.8	1363.9	1470.1	1591.2	1661.7	1721.9	1729.1	1733.8
42.5°	1167.5	1298.6	1412.6	1535.8	1605.9	1663.7	1668.1	1672.8
45°	1101.4	1230.9	1348.1	1474.4	1543.7	1598.0	1599.6	1603.5
47.5°	1034.0	1160.8	1277.2	1404.3	1472.8	1522.3	1523.9	1527.1
50°	966.3	1090.7	1201.5	1328.7	1395.6	1447.9	1440.7	1443.9
52.5°	899.8	1017.0	1130.3	1247.1	1313.2	1359.6	1361.5	1355.2
55°	834.4	944.9	1049.1	1161.5	1224.5	1260.6	1259.4	1261.7
57.5°	768.3	872.1	967.5	1070.5	1131.8	1165.9	1173.0	1164.7
60°	701.0	798.4	883.9	977.0	1036.4	1064.9	1073.2	1065.3
62.5°	634.0	723.5	801.2	882.3	937.4	972.6	971.9	963.1
65°	567.1	648.3	717.6	786.5	834.4	869.7	868.1	860.2
67.5°	505.3	572.3	634.4	690.3	731.9	756.0	764.3	754.8
70°	437.2	495.0	549.7	594.4	628.9	650.7	658.6	650.3
72.5°	369.1	418.2	456.6	499.8	526.3	544.5	552.9	544.9
75°	301.8	342.2	373.5	407.1	425.7	441.2	450.7	442.8
77.5°	236.4	267.7	292.7	317.2	338.6	342.2	350.5	345.3
80°	174.3	196.8	215.0	231.3	246.7	248.3	255.0	251.9
82.5°	116.0	131.1	135.8	152.9	162.8	161.2	167.9	165.5
85°	61.4	70.5	78.8	84.0	89.5	84.4	90.3	87.9
87.5°	20.6	21.8	19.0	26.9	29.7	25.3	28.9	27.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)