

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: P571718

Luminaire Tested: **RLS4099FSE1WHDM 3000K**

Issue Date: 9/21/2021

Test Information

Test Method: LM-41-14
Report Number: P571718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (A2105753A001)
Test Lab:
Issue Date: 9/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: RLS4099FSE1WHDM 3000K
Description: 4 INCH SLOPE DM AT 9 Degrees TILT
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 966.0 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 0.61 / 0.76 / 0.7
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

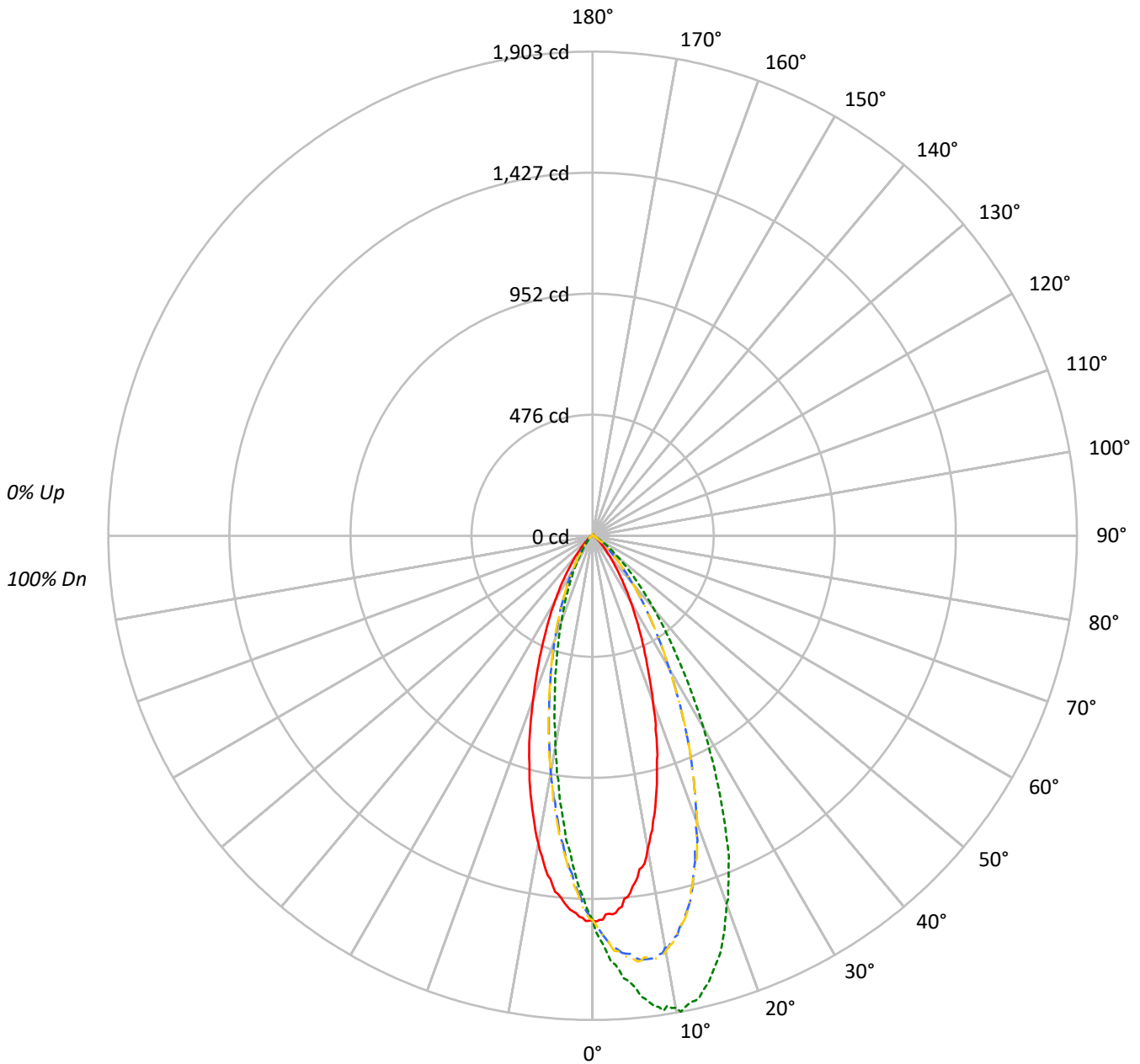
Input Watts (W): 11
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

Luminous Intensity Polar Plot





TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 113 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 95 | 93 | | | | | | | | | | | | | | | | | | | |
| 2 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 86 | | | | | | | | | | | | | | | | | | | |
| 3 | 102 | 96 | 91 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 85 | 89 | 86 | 83 | 87 | 84 | 82 | 80 | | | | | | | | | | | | | | | | | | | |
| 4 | 97 | 90 | 84 | 80 | 95 | 88 | 83 | 79 | 86 | 82 | 78 | 84 | 81 | 77 | 82 | 79 | 77 | 75 | | | | | | | | | | | | | | | | | | | |
| 5 | 92 | 84 | 78 | 74 | 91 | 83 | 78 | 74 | 81 | 77 | 73 | 80 | 76 | 72 | 78 | 75 | 72 | 70 | | | | | | | | | | | | | | | | | | | |
| 6 | 88 | 79 | 73 | 69 | 86 | 78 | 73 | 69 | 77 | 72 | 68 | 75 | 71 | 68 | 74 | 70 | 67 | 66 | | | | | | | | | | | | | | | | | | | |
| 7 | 84 | 75 | 69 | 65 | 82 | 74 | 68 | 64 | 73 | 68 | 64 | 71 | 67 | 64 | 70 | 66 | 63 | 62 | | | | | | | | | | | | | | | | | | | |
| 8 | 80 | 71 | 65 | 61 | 79 | 70 | 64 | 61 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 58 | | | | | | | | | | | | | | | | | | | |
| 9 | 76 | 67 | 61 | 57 | 75 | 66 | 61 | 57 | 66 | 60 | 57 | 65 | 60 | 57 | 64 | 60 | 57 | 55 | | | | | | | | | | | | | | | | | | | |
| 10 | 73 | 64 | 58 | 54 | 72 | 63 | 58 | 54 | 62 | 57 | 54 | 62 | 57 | 54 | 61 | 57 | 54 | 52 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|--------|--------|--------|--------|
| 0° | 190222 | 190222 | 190222 | 190222 |
| 5° | 180842 | 223453 | 180387 | 151609 |
| 10° | 159573 | 240720 | 156928 | 107881 |
| 15° | 127214 | 233804 | 124895 | 73587 |
| 20° | 92838 | 206086 | 91499 | 48428 |
| 25° | 64723 | 169215 | 63737 | 30966 |
| 30° | 43479 | 126529 | 42913 | 18717 |
| 35° | 27593 | 88478 | 27024 | 10754 |
| 40° | 16856 | 60950 | 16478 | 6588 |
| 45° | 10252 | 40632 | 10038 | 4699 |
| 50° | 6813 | 25609 | 6461 | 3779 |
| 55° | 5046 | 15227 | 4608 | 3094 |
| 60° | 3977 | 8029 | 3398 | 2542 |
| 65° | 3216 | 5360 | 2591 | 2025 |
| 70° | 2686 | 3974 | 2061 | 1619 |
| 75° | 2042 | 3209 | 1459 | 1216 |
| 80° | 1232 | 2029 | 580 | 1305 |
| 85° | 1444 | 289 | 578 | 1300 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 133.8 | 13.8 |
| 10°-20° | 293.7 | 30.4 |
| 20°-30° | 265.8 | 27.5 |
| 30°-40° | 155.8 | 16.1 |
| 40°-50° | 69.9 | 7.2 |
| 50°-60° | 27.6 | 2.9 |
| 60°-70° | 11.2 | 1.2 |
| 70°-80° | 4.4 | 0.5 |
| 80°-90° | 0.8 | 0.1 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.1 | 0.0 |
| 130°-140° | 0.2 | 0.0 |
| 140°-150° | 0.6 | 0.1 |
| 150°-160° | 1.0 | 0.1 |
| 160°-170° | 1.0 | 0.1 |
| 170°-180° | 0.4 | 0.0 |
| 0°-30° | 693.2 | 71.8 |
| 0°-40° | 849.0 | 87.9 |
| 0°-60° | 946.5 | 98.0 |
| 0°-90° | 962.8 | 99.7 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.9 | 0.1 |
| 90°-180° | 3.0 | 0.3 |
| 0°-180° | 966.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1512 | 1512 | 1512 | 1512 | 1512 | |
| 5° | 1432 | 1769 | 1428 | 1200 | 1432 | 131 |
| 15° | 976 | 1794 | 959 | 565 | 976 | 268 |
| 25° | 466 | 1219 | 459 | 223 | 466 | 215 |
| 35° | 180 | 576 | 176 | 70 | 180 | 115 |
| 45° | 58 | 228 | 56 | 26 | 58 | 47 |
| 55° | 23 | 69 | 21 | 14 | 23 | 21 |
| 65° | 11 | 18 | 9 | 7 | 11 | 11 |
| 75° | 4 | 7 | 3 | 2 | 4 | 5 |
| 85° | 1 | 0 | 0 | 1 | 1 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |
| 95° | 0 | 0 | 0 | 0 | 0 | 0 |
| 105° | 0 | 0 | 0 | 0 | 0 | 0 |
| 115° | 0 | 0 | 0 | 0 | 0 | 0 |
| 125° | 0 | 0 | 0 | 0 | 0 | 0 |
| 135° | 0 | 0 | 0 | 1 | 0 | 0 |
| 145° | 1 | 0 | 1 | 2 | 1 | 1 |
| 155° | 2 | 1 | 2 | 4 | 2 | 1 |
| 165° | 4 | 2 | 3 | 5 | 4 | 1 |
| 175° | 5 | 4 | 4 | 5 | 5 | 0 |
| 180° | 5 | 5 | 5 | 5 | 5 | |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 |
| 0.5° | 1516.9 | 1528.5 | 1531.4 | 1537.2 | 1556.8 | 1528.7 | 1529.8 | 1515.0 | 1513.0 | 1501.9 | 1491.7 |
| 1° | 1510.7 | 1532.1 | 1550.6 | 1564.0 | 1582.9 | 1552.7 | 1550.6 | 1520.6 | 1514.7 | 1485.1 | 1473.9 |
| 1.5° | 1509.8 | 1546.0 | 1570.6 | 1584.4 | 1607.6 | 1577.7 | 1571.7 | 1534.2 | 1501.9 | 1468.2 | 1450.3 |
| 2° | 1488.9 | 1542.6 | 1590.5 | 1609.9 | 1640.3 | 1604.9 | 1583.9 | 1539.0 | 1497.9 | 1460.0 | 1415.6 |
| 2.5° | 1487.5 | 1537.5 | 1606.8 | 1644.8 | 1675.4 | 1636.4 | 1612.4 | 1545.2 | 1485.5 | 1440.5 | 1394.9 |
| 3° | 1489.5 | 1548.1 | 1618.7 | 1660.4 | 1687.2 | 1658.0 | 1633.6 | 1552.4 | 1478.0 | 1428.6 | 1368.0 |
| 3.5° | 1485.1 | 1554.4 | 1629.8 | 1678.6 | 1710.3 | 1670.4 | 1635.6 | 1544.2 | 1471.4 | 1392.4 | 1330.1 |
| 4° | 1469.6 | 1560.1 | 1643.3 | 1687.3 | 1742.7 | 1691.2 | 1646.0 | 1547.5 | 1457.5 | 1371.0 | 1310.1 |
| 4.5° | 1462.7 | 1556.1 | 1647.5 | 1722.0 | 1753.1 | 1711.4 | 1656.7 | 1553.0 | 1443.3 | 1356.7 | 1282.2 |
| 5° | 1431.5 | 1551.2 | 1649.6 | 1734.9 | 1768.8 | 1721.5 | 1674.3 | 1550.5 | 1427.9 | 1327.7 | 1251.7 |
| 5.5° | 1426.9 | 1543.6 | 1650.3 | 1747.1 | 1787.9 | 1732.9 | 1671.1 | 1536.2 | 1415.0 | 1298.4 | 1215.9 |
| 6° | 1411.0 | 1537.8 | 1670.8 | 1752.2 | 1820.5 | 1760.8 | 1682.8 | 1527.6 | 1406.9 | 1277.2 | 1195.6 |
| 6.5° | 1386.4 | 1537.1 | 1678.2 | 1767.0 | 1831.8 | 1775.2 | 1680.6 | 1516.8 | 1383.8 | 1251.5 | 1167.2 |
| 7° | 1373.4 | 1525.2 | 1677.1 | 1769.8 | 1848.7 | 1787.3 | 1668.7 | 1514.1 | 1358.9 | 1223.9 | 1125.3 |
| 7.5° | 1354.1 | 1514.3 | 1677.8 | 1787.2 | 1864.7 | 1792.7 | 1673.2 | 1505.4 | 1346.9 | 1195.3 | 1097.6 |
| 8° | 1323.5 | 1494.2 | 1677.6 | 1778.1 | 1870.1 | 1793.8 | 1675.7 | 1487.6 | 1324.6 | 1178.3 | 1057.0 |
| 8.5° | 1316.8 | 1480.7 | 1669.4 | 1787.9 | 1887.2 | 1802.8 | 1679.9 | 1474.4 | 1300.6 | 1151.1 | 1038.4 |
| 9° | 1305.2 | 1463.8 | 1666.5 | 1792.8 | 1871.3 | 1802.1 | 1676.9 | 1458.1 | 1273.6 | 1122.9 | 998.3 |
| 9.5° | 1278.6 | 1454.5 | 1662.7 | 1792.7 | 1882.4 | 1801.8 | 1671.2 | 1440.5 | 1256.2 | 1094.2 | 976.9 |
| 10° | 1248.7 | 1430.0 | 1644.1 | 1790.5 | 1883.7 | 1792.1 | 1658.5 | 1430.8 | 1228.0 | 1063.0 | 945.6 |
| 10.5° | 1226.4 | 1419.8 | 1644.0 | 1780.0 | 1902.7 | 1795.8 | 1642.3 | 1414.6 | 1206.7 | 1030.6 | 912.9 |
| 11° | 1197.6 | 1411.8 | 1620.8 | 1776.3 | 1890.0 | 1803.0 | 1632.7 | 1391.0 | 1179.7 | 1009.3 | 883.0 |
| 11.5° | 1179.0 | 1388.7 | 1611.0 | 1770.2 | 1880.2 | 1787.1 | 1621.2 | 1369.3 | 1151.2 | 981.1 | 852.4 |
| 12° | 1144.1 | 1366.3 | 1604.2 | 1750.7 | 1873.0 | 1763.7 | 1599.4 | 1343.0 | 1123.9 | 949.7 | 822.4 |
| 12.5° | 1121.5 | 1331.3 | 1577.0 | 1752.9 | 1871.3 | 1770.2 | 1576.8 | 1323.5 | 1096.5 | 921.6 | 794.8 |
| 13° | 1095.0 | 1315.3 | 1565.3 | 1726.1 | 1863.3 | 1743.5 | 1563.6 | 1300.5 | 1067.9 | 888.8 | 763.9 |
| 13.5° | 1065.5 | 1293.0 | 1543.2 | 1731.5 | 1844.5 | 1733.1 | 1551.0 | 1268.8 | 1044.8 | 860.6 | 735.9 |
| 14° | 1035.7 | 1263.0 | 1525.0 | 1698.6 | 1829.4 | 1727.7 | 1531.7 | 1251.6 | 1016.2 | 838.7 | 706.7 |
| 14.5° | 1008.6 | 1243.3 | 1504.8 | 1689.7 | 1815.4 | 1704.1 | 1503.5 | 1226.7 | 990.0 | 812.4 | 681.6 |
| 15° | 976.4 | 1215.6 | 1484.4 | 1648.4 | 1794.5 | 1686.2 | 1479.0 | 1198.7 | 958.6 | 781.1 | 654.7 |
| 15.5° | 944.9 | 1188.0 | 1456.5 | 1636.8 | 1774.0 | 1657.4 | 1444.9 | 1171.1 | 929.5 | 754.8 | 629.9 |
| 16° | 917.2 | 1161.7 | 1428.1 | 1616.6 | 1753.9 | 1636.7 | 1428.5 | 1140.2 | 905.3 | 725.9 | 603.9 |
| 16.5° | 897.7 | 1142.6 | 1393.5 | 1591.5 | 1734.8 | 1615.5 | 1392.0 | 1111.9 | 877.7 | 698.7 | 583.1 |
| 17° | 862.9 | 1103.0 | 1362.7 | 1567.7 | 1716.2 | 1591.4 | 1374.8 | 1088.7 | 851.1 | 673.3 | 560.9 |
| 17.5° | 835.1 | 1074.5 | 1341.6 | 1544.5 | 1689.2 | 1571.4 | 1346.8 | 1061.8 | 822.1 | 644.1 | 534.5 |
| 18° | 801.9 | 1045.8 | 1299.2 | 1524.5 | 1659.2 | 1540.2 | 1328.3 | 1031.6 | 792.9 | 618.6 | 510.7 |
| 18.5° | 782.7 | 1015.9 | 1286.1 | 1494.0 | 1633.4 | 1512.1 | 1292.2 | 1000.7 | 763.8 | 595.2 | 491.6 |
| 19° | 752.4 | 984.5 | 1266.3 | 1464.7 | 1600.3 | 1486.1 | 1256.4 | 974.6 | 736.9 | 573.9 | 472.5 |
| 19.5° | 719.2 | 955.7 | 1215.5 | 1429.1 | 1572.6 | 1460.5 | 1223.4 | 944.0 | 707.7 | 553.6 | 454.5 |
| 20° | 693.2 | 923.1 | 1188.3 | 1401.9 | 1538.8 | 1422.7 | 1201.7 | 916.6 | 683.2 | 528.9 | 436.1 |
| 20.5° | 668.8 | 898.1 | 1162.6 | 1373.3 | 1522.9 | 1393.5 | 1168.2 | 887.8 | 657.6 | 505.8 | 415.6 |
| 21° | 644.3 | 865.4 | 1130.4 | 1337.7 | 1485.0 | 1362.8 | 1139.3 | 855.4 | 633.6 | 484.1 | 396.1 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-------|-------|--------|--------|--------|--------|--------|--------|-------|--------|-------|
| 22.5° | 569.9 | 776.9 | 1038.4 | 1244.5 | 1397.1 | 1271.2 | 1035.9 | 768.5 | 562.0 | 426.3 | 346.8 |
| 23° | 547.5 | 751.1 | 1004.0 | 1211.3 | 1370.6 | 1235.1 | 1004.8 | 738.6 | 541.3 | 411.3 | 333.2 |
| 23.5° | 526.6 | 723.0 | 976.2 | 1182.8 | 1330.6 | 1195.4 | 977.4 | 713.0 | 520.2 | 393.6 | 315.9 |
| 24° | 505.1 | 694.7 | 945.6 | 1146.6 | 1290.4 | 1164.6 | 945.8 | 689.4 | 498.4 | 376.4 | 300.0 |
| 24.5° | 485.8 | 666.7 | 914.8 | 1115.9 | 1258.8 | 1143.4 | 914.7 | 661.9 | 477.2 | 360.5 | 284.4 |
| 25° | 466.1 | 640.3 | 882.2 | 1080.7 | 1218.6 | 1103.4 | 887.2 | 637.4 | 459.0 | 345.7 | 270.3 |
| 25.5° | 449.4 | 616.4 | 851.4 | 1047.3 | 1182.9 | 1064.5 | 855.7 | 607.8 | 438.6 | 328.0 | 257.9 |
| 26° | 425.8 | 595.3 | 822.9 | 1018.9 | 1146.8 | 1025.7 | 824.4 | 588.1 | 421.9 | 310.4 | 246.1 |
| 26.5° | 410.5 | 569.3 | 795.1 | 977.0 | 1111.8 | 993.8 | 793.7 | 564.2 | 403.5 | 298.6 | 233.8 |
| 27° | 392.2 | 547.9 | 763.0 | 946.3 | 1072.4 | 962.3 | 764.3 | 541.0 | 387.3 | 285.3 | 222.3 |
| 27.5° | 374.9 | 527.2 | 740.8 | 916.4 | 1039.9 | 930.6 | 734.9 | 518.0 | 372.4 | 271.5 | 210.9 |
| 28° | 358.7 | 506.6 | 704.5 | 884.6 | 1007.8 | 901.6 | 706.9 | 496.6 | 355.3 | 256.5 | 199.5 |
| 28.5° | 343.3 | 488.6 | 679.5 | 851.7 | 967.5 | 874.7 | 678.7 | 475.9 | 339.3 | 243.5 | 188.4 |
| 29° | 329.0 | 465.0 | 654.0 | 820.1 | 938.0 | 843.0 | 650.9 | 458.4 | 323.9 | 231.5 | 179.3 |
| 29.5° | 315.7 | 443.6 | 627.1 | 789.4 | 903.1 | 805.0 | 625.5 | 440.7 | 309.1 | 222.2 | 169.4 |
| 30° | 299.2 | 427.6 | 599.8 | 757.5 | 870.7 | 777.2 | 602.0 | 421.3 | 295.3 | 211.6 | 159.9 |
| 30.5° | 285.1 | 408.5 | 574.3 | 733.6 | 837.6 | 747.4 | 576.2 | 401.2 | 280.4 | 199.8 | 151.4 |
| 31° | 273.1 | 390.4 | 553.5 | 701.6 | 809.2 | 718.7 | 554.7 | 386.5 | 267.1 | 188.7 | 144.1 |
| 31.5° | 259.8 | 373.6 | 532.6 | 673.4 | 776.1 | 689.2 | 537.1 | 370.2 | 254.4 | 178.8 | 135.9 |
| 32° | 245.5 | 357.0 | 512.7 | 645.4 | 744.5 | 663.9 | 513.8 | 354.7 | 241.8 | 168.7 | 128.3 |
| 32.5° | 234.1 | 341.1 | 490.0 | 621.7 | 715.2 | 638.1 | 493.9 | 339.1 | 230.4 | 159.0 | 120.9 |
| 33° | 221.5 | 325.3 | 468.0 | 594.4 | 686.5 | 614.2 | 471.7 | 323.1 | 217.6 | 148.9 | 113.7 |
| 33.5° | 211.4 | 309.8 | 449.6 | 570.7 | 657.3 | 587.7 | 452.8 | 306.3 | 205.8 | 140.0 | 107.6 |
| 34° | 200.3 | 296.5 | 432.6 | 546.0 | 630.4 | 559.5 | 431.3 | 291.6 | 195.5 | 132.5 | 101.8 |
| 34.5° | 190.3 | 284.1 | 410.8 | 524.8 | 603.1 | 536.1 | 412.6 | 279.0 | 185.4 | 126.0 | 96.0 |
| 35° | 179.6 | 270.7 | 394.6 | 502.9 | 575.9 | 518.3 | 394.7 | 266.9 | 175.9 | 118.6 | 90.3 |
| 35.5° | 170.5 | 257.3 | 374.9 | 480.7 | 553.5 | 497.8 | 377.6 | 251.4 | 166.5 | 111.6 | 84.8 |
| 36° | 161.7 | 245.6 | 358.2 | 462.8 | 532.3 | 478.2 | 362.5 | 240.2 | 158.2 | 105.6 | 79.6 |
| 36.5° | 153.0 | 234.1 | 344.0 | 443.0 | 509.5 | 457.7 | 346.0 | 229.3 | 149.1 | 99.5 | 75.0 |
| 37° | 143.9 | 221.9 | 328.1 | 423.7 | 486.4 | 434.9 | 329.8 | 217.9 | 141.5 | 93.9 | 70.9 |
| 37.5° | 136.3 | 210.8 | 312.7 | 404.6 | 466.4 | 415.5 | 313.4 | 207.3 | 133.7 | 88.3 | 66.4 |
| 38° | 128.4 | 200.3 | 297.0 | 386.3 | 447.4 | 396.9 | 298.0 | 195.8 | 125.7 | 83.2 | 63.0 |
| 38.5° | 121.8 | 189.0 | 281.7 | 368.9 | 427.5 | 377.3 | 282.1 | 184.3 | 119.0 | 78.2 | 59.2 |
| 39° | 115.6 | 179.2 | 268.4 | 352.1 | 406.6 | 359.2 | 268.7 | 175.1 | 112.6 | 73.6 | 56.1 |
| 39.5° | 109.1 | 169.5 | 255.0 | 336.3 | 386.8 | 343.6 | 256.0 | 165.8 | 106.4 | 69.2 | 53.1 |
| 40° | 102.6 | 160.2 | 242.3 | 319.7 | 371.0 | 327.0 | 242.0 | 156.2 | 100.3 | 65.0 | 50.1 |
| 40.5° | 96.3 | 151.5 | 230.0 | 305.2 | 354.4 | 311.5 | 228.9 | 147.7 | 94.3 | 61.5 | 47.7 |
| 41° | 91.1 | 143.3 | 218.7 | 289.7 | 337.6 | 295.8 | 217.3 | 140.8 | 89.1 | 58.0 | 45.2 |
| 41.5° | 86.1 | 135.7 | 207.6 | 275.3 | 321.3 | 281.9 | 206.6 | 132.7 | 84.3 | 55.0 | 42.6 |
| 42° | 80.9 | 127.9 | 196.7 | 262.0 | 307.4 | 268.7 | 194.9 | 125.0 | 79.5 | 52.0 | 40.4 |
| 42.5° | 76.5 | 120.6 | 186.5 | 249.6 | 292.0 | 255.0 | 184.6 | 117.2 | 75.0 | 49.0 | 38.6 |
| 43° | 72.3 | 113.9 | 175.7 | 237.3 | 277.2 | 242.3 | 175.1 | 111.0 | 70.6 | 46.4 | 36.6 |
| 43.5° | 68.6 | 107.3 | 165.7 | 224.3 | 266.2 | 229.8 | 165.4 | 104.8 | 66.7 | 44.0 | 34.8 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|------|-------|-------|-------|-------|--------|-------|--------|------|--------|------|
| 45° | 57.6 | 89.3 | 138.7 | 191.5 | 228.3 | 193.9 | 138.5 | 87.6 | 56.4 | 37.7 | 30.2 |
| 45.5° | 54.6 | 84.0 | 130.7 | 180.9 | 217.0 | 184.4 | 130.1 | 82.4 | 53.2 | 35.8 | 28.9 |
| 46° | 51.4 | 79.1 | 123.4 | 171.1 | 205.5 | 174.7 | 122.2 | 77.5 | 50.7 | 34.0 | 27.8 |
| 46.5° | 49.0 | 74.6 | 116.5 | 161.7 | 194.4 | 165.6 | 115.6 | 72.8 | 47.8 | 32.7 | 26.8 |
| 47° | 46.6 | 69.9 | 109.4 | 152.6 | 183.9 | 156.7 | 108.9 | 68.5 | 45.5 | 31.2 | 25.7 |
| 47.5° | 44.5 | 65.8 | 102.6 | 144.5 | 174.3 | 148.3 | 102.5 | 64.4 | 42.9 | 29.8 | 24.7 |
| 48° | 42.3 | 62.3 | 96.4 | 136.3 | 164.9 | 139.6 | 96.2 | 60.8 | 40.7 | 28.5 | 23.7 |
| 48.5° | 40.3 | 59.0 | 90.2 | 128.2 | 156.6 | 131.7 | 90.0 | 57.5 | 38.6 | 27.3 | 22.9 |
| 49° | 38.4 | 55.9 | 84.8 | 120.9 | 147.6 | 123.9 | 84.7 | 54.5 | 36.7 | 26.2 | 22.1 |
| 49.5° | 36.6 | 52.8 | 79.7 | 114.3 | 139.3 | 117.2 | 79.8 | 51.6 | 34.8 | 25.1 | 21.5 |
| 50° | 34.8 | 49.7 | 74.8 | 107.6 | 130.8 | 110.0 | 74.7 | 48.7 | 33.0 | 24.1 | 20.8 |
| 50.5° | 33.4 | 46.9 | 70.4 | 101.2 | 123.5 | 103.2 | 70.4 | 46.1 | 31.4 | 23.1 | 20.2 |
| 51° | 32.0 | 44.5 | 66.3 | 95.0 | 116.0 | 97.2 | 65.7 | 43.4 | 29.9 | 22.2 | 19.7 |
| 51.5° | 30.6 | 42.3 | 62.5 | 88.9 | 109.2 | 91.7 | 61.6 | 41.1 | 28.6 | 21.4 | 18.8 |
| 52° | 29.4 | 40.1 | 58.7 | 83.7 | 102.9 | 86.3 | 58.1 | 38.9 | 27.3 | 20.8 | 18.2 |
| 52.5° | 28.2 | 38.0 | 55.3 | 78.6 | 96.6 | 80.6 | 54.8 | 36.8 | 26.1 | 19.8 | 17.6 |
| 53° | 27.1 | 36.2 | 52.2 | 73.8 | 90.5 | 75.5 | 51.7 | 34.8 | 25.0 | 19.1 | 16.9 |
| 53.5° | 25.9 | 34.6 | 49.0 | 69.2 | 84.9 | 70.6 | 48.7 | 32.9 | 23.9 | 18.6 | 16.5 |
| 54° | 25.0 | 33.0 | 46.0 | 64.8 | 79.3 | 66.2 | 46.1 | 31.1 | 22.8 | 17.9 | 15.8 |
| 54.5° | 24.0 | 31.4 | 43.5 | 60.8 | 74.4 | 62.0 | 43.2 | 29.5 | 21.8 | 17.3 | 15.4 |
| 55° | 23.0 | 30.0 | 41.2 | 57.5 | 69.4 | 58.1 | 40.4 | 27.8 | 21.0 | 16.6 | 14.8 |
| 55.5° | 22.2 | 28.6 | 39.1 | 54.2 | 64.5 | 54.1 | 37.5 | 26.2 | 20.0 | 16.0 | 14.4 |
| 56° | 21.5 | 27.3 | 36.9 | 50.4 | 59.7 | 49.8 | 34.6 | 24.6 | 19.2 | 15.5 | 13.8 |
| 56.5° | 20.7 | 25.8 | 34.2 | 46.4 | 54.9 | 45.7 | 32.1 | 23.1 | 18.3 | 14.7 | 13.4 |
| 57° | 19.8 | 24.3 | 31.7 | 42.5 | 50.0 | 41.8 | 29.8 | 22.0 | 17.5 | 14.3 | 12.8 |
| 57.5° | 19.1 | 23.1 | 29.6 | 39.0 | 45.4 | 38.7 | 28.0 | 21.0 | 16.7 | 13.7 | 12.5 |
| 58° | 18.4 | 22.1 | 27.9 | 36.0 | 42.1 | 36.1 | 26.2 | 20.1 | 16.0 | 13.2 | 11.9 |
| 58.5° | 17.7 | 21.4 | 26.5 | 33.5 | 38.9 | 33.6 | 24.9 | 19.2 | 15.5 | 12.6 | 11.5 |
| 59° | 17.0 | 20.5 | 25.3 | 31.5 | 36.3 | 31.4 | 23.6 | 18.6 | 14.7 | 12.3 | 10.9 |
| 59.5° | 16.4 | 19.6 | 24.1 | 29.7 | 33.9 | 29.6 | 22.3 | 17.6 | 14.1 | 11.7 | 10.6 |
| 60° | 15.8 | 18.8 | 22.9 | 28.1 | 31.9 | 27.9 | 21.3 | 16.8 | 13.5 | 11.4 | 10.1 |
| 60.5° | 15.2 | 18.1 | 21.9 | 26.5 | 29.9 | 26.3 | 20.3 | 16.2 | 12.9 | 10.8 | 9.7 |
| 61° | 14.7 | 17.3 | 21.0 | 25.1 | 28.1 | 24.8 | 19.3 | 15.6 | 12.5 | 10.5 | 9.4 |
| 61.5° | 14.1 | 16.6 | 20.2 | 23.7 | 26.5 | 23.4 | 18.4 | 14.6 | 11.8 | 10.0 | 8.9 |
| 62° | 13.6 | 15.9 | 19.2 | 22.4 | 24.8 | 22.1 | 17.4 | 14.0 | 11.5 | 9.6 | 8.6 |
| 62.5° | 13.1 | 15.4 | 18.4 | 21.6 | 23.3 | 21.1 | 16.8 | 13.5 | 10.9 | 9.4 | 8.4 |
| 63° | 12.6 | 14.7 | 17.6 | 20.5 | 22.1 | 19.9 | 15.9 | 12.9 | 10.7 | 8.8 | 7.9 |
| 63.5° | 12.1 | 14.1 | 16.8 | 19.5 | 21.1 | 18.9 | 15.2 | 12.3 | 10.0 | 8.5 | 7.6 |
| 64° | 11.7 | 13.5 | 16.2 | 18.6 | 20.0 | 17.9 | 14.6 | 11.7 | 9.6 | 8.1 | 7.5 |
| 64.5° | 11.2 | 13.1 | 15.5 | 17.8 | 19.0 | 17.1 | 13.8 | 11.4 | 9.1 | 7.7 | 7.0 |
| 65° | 10.8 | 12.6 | 14.9 | 17.1 | 18.0 | 16.3 | 13.2 | 10.8 | 8.7 | 7.6 | 6.7 |
| 65.5° | 10.4 | 12.1 | 14.2 | 16.2 | 17.1 | 15.6 | 12.8 | 10.5 | 8.6 | 7.2 | 6.5 |
| 66° | 10.0 | 11.7 | 13.7 | 15.5 | 16.3 | 14.7 | 12.0 | 9.9 | 7.9 | 6.9 | 6.1 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|-------|-----|-------|------|-------|------|--------|------|--------|------|--------|------|
| 67.5° | 8.8 | 10.4 | 12.2 | 13.6 | 14.0 | 12.8 | 10.6 | 8.7 | 6.9 | 5.9 | 5.5 |
| 68° | 8.5 | 10.0 | 11.7 | 13.0 | 13.3 | 12.1 | 10.1 | 8.5 | 6.6 | 5.7 | 5.2 |
| 68.5° | 8.2 | 9.6 | 11.2 | 12.4 | 12.7 | 11.7 | 9.7 | 7.8 | 6.5 | 5.5 | 4.9 |
| 69° | 7.9 | 9.2 | 10.8 | 11.8 | 12.1 | 11.0 | 9.2 | 7.5 | 6.1 | 5.4 | 4.9 |
| 69.5° | 7.6 | 8.8 | 10.3 | 11.3 | 11.5 | 10.7 | 8.8 | 7.3 | 5.8 | 5.0 | 4.9 |
| 70° | 7.3 | 8.5 | 9.9 | 10.8 | 10.8 | 9.9 | 8.5 | 6.8 | 5.6 | 4.7 | 4.8 |
| 70.5° | 7.0 | 8.2 | 9.5 | 10.4 | 10.3 | 9.5 | 8.0 | 6.6 | 5.4 | 4.7 | 4.0 |
| 71° | 6.8 | 7.8 | 9.1 | 10.0 | 9.8 | 9.0 | 7.7 | 6.4 | 5.1 | 4.7 | 3.7 |
| 71.5° | 6.5 | 7.5 | 8.7 | 9.5 | 9.4 | 8.7 | 7.4 | 5.9 | 4.8 | 3.9 | 3.7 |
| 72° | 6.2 | 7.3 | 8.3 | 9.1 | 8.8 | 8.1 | 7.0 | 5.6 | 4.9 | 3.6 | 3.5 |
| 72.5° | 5.8 | 7.0 | 8.0 | 8.7 | 8.6 | 7.8 | 6.6 | 5.6 | 4.9 | 3.6 | 2.9 |
| 73° | 5.5 | 6.7 | 7.7 | 8.3 | 8.0 | 7.4 | 6.4 | 5.1 | 3.9 | 3.4 | 2.6 |
| 73.5° | 5.2 | 6.4 | 7.3 | 7.9 | 7.7 | 7.1 | 5.9 | 4.9 | 3.7 | 3.0 | 2.5 |
| 74° | 4.8 | 6.0 | 6.9 | 7.5 | 7.1 | 6.6 | 5.6 | 4.7 | 3.4 | 2.7 | 2.4 |
| 74.5° | 4.4 | 5.6 | 6.5 | 7.1 | 6.8 | 6.2 | 5.4 | 4.7 | 3.3 | 2.5 | 2.0 |
| 75° | 4.2 | 5.2 | 6.2 | 6.7 | 6.6 | 5.8 | 5.0 | 3.9 | 3.0 | 2.3 | 1.7 |
| 75.5° | 3.9 | 5.0 | 5.9 | 6.4 | 5.9 | 5.5 | 4.8 | 3.5 | 2.7 | 2.0 | 1.7 |
| 76° | 3.6 | 4.6 | 5.5 | 6.1 | 5.6 | 5.1 | 4.8 | 3.4 | 2.5 | 1.7 | 1.7 |
| 76.5° | 3.3 | 4.3 | 5.2 | 5.6 | 5.3 | 4.8 | 3.9 | 3.2 | 2.3 | 1.6 | 1.6 |
| 77° | 3.0 | 4.0 | 4.8 | 5.2 | 4.9 | 4.7 | 3.6 | 2.8 | 1.9 | 1.5 | 1.6 |
| 77.5° | 2.7 | 3.6 | 4.4 | 5.0 | 4.8 | 4.4 | 3.6 | 2.6 | 1.6 | 1.5 | 1.6 |
| 78° | 2.5 | 3.3 | 4.1 | 4.6 | 4.6 | 3.8 | 3.1 | 2.5 | 1.6 | 1.3 | 1.6 |
| 78.5° | 2.3 | 2.9 | 3.8 | 4.2 | 3.8 | 3.6 | 2.7 | 2.0 | 1.6 | 1.1 | 1.6 |
| 79° | 2.2 | 2.7 | 3.5 | 3.8 | 3.5 | 3.1 | 2.6 | 1.7 | 1.0 | 0.9 | 1.3 |
| 79.5° | 1.9 | 2.4 | 3.1 | 3.5 | 3.1 | 2.7 | 2.1 | 1.5 | 0.9 | 1.0 | 1.1 |
| 80° | 1.7 | 2.2 | 2.8 | 3.1 | 2.8 | 2.5 | 1.9 | 1.5 | 0.8 | 0.9 | 1.0 |
| 80.5° | 1.6 | 1.9 | 2.4 | 2.8 | 2.4 | 2.0 | 1.6 | 1.1 | 0.7 | 0.9 | 0.9 |
| 81° | 1.5 | 1.7 | 2.2 | 2.5 | 2.0 | 1.7 | 1.5 | 0.8 | 0.8 | 0.8 | 0.8 |
| 81.5° | 1.5 | 1.5 | 1.9 | 2.2 | 1.7 | 1.5 | 1.2 | 0.7 | 0.7 | 0.7 | 0.8 |
| 82° | 1.5 | 1.3 | 1.7 | 1.9 | 1.6 | 1.3 | 0.9 | 0.7 | 0.7 | 0.7 | 0.7 |
| 82.5° | 1.4 | 1.1 | 1.4 | 1.7 | 1.2 | 1.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 83° | 1.2 | 1.1 | 1.3 | 1.5 | 0.8 | 0.8 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 |
| 83.5° | 1.3 | 1.1 | 1.1 | 1.3 | 0.6 | 0.6 | 0.5 | 0.6 | 0.7 | 0.7 | 0.6 |
| 84° | 1.2 | 1.1 | 0.9 | 1.0 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 |
| 84.5° | 1.1 | 1.0 | 0.9 | 0.8 | 0.5 | 0.3 | 0.5 | 0.4 | 0.6 | 0.6 | 0.7 |
| 85° | 1.0 | 0.9 | 0.9 | 0.8 | 0.2 | 0.3 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 |
| 85.5° | 0.9 | 0.8 | 0.8 | 0.8 | 0.1 | 0.2 | 0.4 | 0.4 | 0.2 | 0.4 | 0.4 |
| 86° | 0.8 | 0.8 | 0.8 | 0.8 | 0.1 | 0.2 | 0.4 | 0.4 | 0.1 | 0.3 | 0.3 |
| 86.5° | 0.7 | 0.7 | 0.7 | 0.6 | 0.1 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 |
| 87° | 0.7 | 0.6 | 0.6 | 0.6 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 |
| 87.5° | 0.6 | 0.6 | 0.5 | 0.6 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88° | 0.4 | 0.4 | 0.5 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88.5° | 0.4 | 0.3 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 90° | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90.5° | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 91° | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 91.5° | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92° | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 93° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 93.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 94° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 94.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 96° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 96.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 98° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 98.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 99° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 99.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 101° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 101.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 103° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 103.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 104° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 104.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 106° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 106.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 108° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 108.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 109° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 109.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 110.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 111° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 113° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 113.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 114° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 114.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 115.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 116° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 116.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 117° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 118° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 118.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 119° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 119.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 120.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 121° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 121.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 122° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 123° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 123.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 124° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 124.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| 125.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 126° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 126.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 127° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 128° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 128.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 |
| 129° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 |
| 129.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 130.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 131° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| 131.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 132° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| 133° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 |
| 133.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 |
| 135.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 |
| 136° | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 |
| 136.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 |
| 137° | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.6 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.5 |
| 138° | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.5 |
| 138.5° | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 |
| 139° | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.6 |
| 139.5° | 0.4 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 | 0.5 | 0.7 |
| 140° | 0.4 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.6 | 0.7 |
| 140.5° | 0.6 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.3 | 0.5 | 0.8 |
| 141° | 0.7 | 0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.2 | 0.4 | 0.6 | 0.8 |
| 141.5° | 0.6 | 0.3 | 0.0 | 0.0 | 0.1 | 0.1 | 0.3 | 0.2 | 0.4 | 0.6 | 0.8 |
| 142° | 0.6 | 0.4 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 |
| 142.5° | 0.6 | 0.3 | 0.1 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 |
| 143° | 0.6 | 0.5 | 0.2 | 0.0 | 0.2 | 0.2 | 0.3 | 0.3 | 0.6 | 0.6 | 0.9 |
| 143.5° | 0.6 | 0.6 | 0.3 | 0.0 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 | 1.0 |
| 144° | 0.6 | 0.6 | 0.4 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.8 | 1.1 |
| 144.5° | 0.7 | 0.7 | 0.3 | 0.1 | 0.3 | 0.2 | 0.3 | 0.3 | 0.6 | 0.9 | 1.1 |
| 145° | 0.7 | 0.7 | 0.3 | 0.2 | 0.3 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 | 1.1 |
| 145.5° | 0.8 | 0.7 | 0.4 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.6 | 0.9 | 1.2 |
| 146° | 0.8 | 0.7 | 0.6 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 0.9 | 1.2 |
| 146.5° | 0.8 | 0.7 | 0.6 | 0.2 | 0.3 | 0.3 | 0.4 | 0.5 | 0.8 | 1.0 | 1.3 |
| 147° | 1.0 | 0.7 | 0.6 | 0.3 | 0.3 | 0.4 | 0.4 | 0.6 | 0.8 | 1.0 | 1.3 |
| 147.5° | 1.1 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.4 |
| 148° | 1.2 | 0.8 | 0.6 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.8 | 1.1 | 1.4 |
| 148.5° | 1.5 | 0.7 | 0.8 | 0.6 | 0.3 | 0.4 | 0.4 | 0.6 | 0.9 | 1.2 | 1.5 |
| 149° | 1.7 | 0.7 | 0.8 | 0.6 | 0.4 | 0.4 | 0.5 | 0.6 | 0.9 | 1.2 | 1.6 |
| 149.5° | 1.7 | 0.8 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.7 | 0.9 | 1.3 | 1.6 |
| 150° | 1.6 | 0.9 | 0.7 | 0.7 | 0.5 | 0.4 | 0.6 | 0.7 | 1.0 | 1.4 | 1.7 |
| 150.5° | 1.6 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 1.1 | 1.4 | 1.8 |
| 151° | 1.7 | 1.0 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 1.1 | 1.4 | 1.9 |
| 151.5° | 1.6 | 1.2 | 0.7 | 0.6 | 0.6 | 0.5 | 0.6 | 0.8 | 1.1 | 1.5 | 2.0 |
| 152° | 1.7 | 1.4 | 0.7 | 0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 1.2 | 1.5 | 2.0 |
| 152.5° | 1.9 | 1.7 | 0.8 | 0.6 | 0.6 | 0.6 | 0.7 | 0.9 | 1.2 | 1.6 | 2.1 |
| 153° | 1.9 | 1.6 | 0.8 | 0.7 | 0.6 | 0.7 | 0.6 | 0.9 | 1.3 | 1.6 | 2.1 |
| 153.5° | 2.0 | 1.6 | 0.9 | 0.7 | 0.7 | 0.7 | 0.6 | 0.9 | 1.3 | 1.8 | 2.2 |
| 154° | 2.3 | 1.7 | 1.1 | 0.8 | 0.7 | 0.6 | 0.7 | 1.0 | 1.3 | 1.8 | 2.3 |
| 154.5° | 2.5 | 1.6 | 1.3 | 0.9 | 0.8 | 0.7 | 0.8 | 1.0 | 1.5 | 1.9 | 2.4 |
| 155° | 2.5 | 1.6 | 1.4 | 0.9 | 0.8 | 0.8 | 0.8 | 1.1 | 1.5 | 1.9 | 2.4 |
| 155.5° | 2.5 | 1.7 | 1.5 | 1.0 | 0.8 | 0.8 | 0.8 | 1.1 | 1.5 | 2.1 | 2.5 |
| 156° | 2.6 | 1.8 | 1.6 | 1.1 | 0.8 | 0.9 | 1.0 | 1.1 | 1.6 | 2.1 | 2.6 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 157.5° | 2.7 | 2.3 | 1.6 | 1.6 | 1.0 | 1.0 | 1.0 | 1.3 | 1.7 | 2.3 | 2.8 |
| 158° | 2.8 | 2.6 | 1.6 | 1.6 | 1.0 | 1.1 | 1.2 | 1.3 | 1.8 | 2.4 | 2.9 |
| 158.5° | 3.0 | 2.7 | 1.8 | 1.6 | 1.1 | 1.0 | 1.2 | 1.4 | 2.0 | 2.5 | 3.1 |
| 159° | 3.0 | 2.7 | 1.8 | 1.6 | 1.2 | 1.1 | 1.2 | 1.5 | 2.0 | 2.6 | 3.1 |
| 159.5° | 3.2 | 2.6 | 1.9 | 1.6 | 1.2 | 1.1 | 1.2 | 1.6 | 2.1 | 2.7 | 3.2 |
| 160° | 3.5 | 2.7 | 2.0 | 1.7 | 1.3 | 1.3 | 1.3 | 1.6 | 2.2 | 2.7 | 3.3 |
| 160.5° | 3.6 | 2.7 | 2.1 | 1.7 | 1.3 | 1.3 | 1.4 | 1.7 | 2.3 | 2.8 | 3.4 |
| 161° | 3.6 | 2.7 | 2.5 | 1.8 | 1.4 | 1.3 | 1.4 | 1.7 | 2.3 | 2.9 | 3.5 |
| 161.5° | 3.6 | 2.9 | 2.5 | 1.9 | 1.4 | 1.4 | 1.5 | 1.8 | 2.5 | 3.0 | 3.6 |
| 162° | 3.6 | 2.9 | 2.6 | 1.9 | 1.5 | 1.4 | 1.6 | 1.9 | 2.5 | 3.1 | 3.7 |
| 162.5° | 3.6 | 3.1 | 2.6 | 2.0 | 1.5 | 1.6 | 1.6 | 2.0 | 2.6 | 3.2 | 3.8 |
| 163° | 3.8 | 3.2 | 2.6 | 2.2 | 1.5 | 1.6 | 1.7 | 2.0 | 2.7 | 3.3 | 3.8 |
| 163.5° | 3.8 | 3.5 | 2.6 | 2.6 | 1.6 | 1.6 | 1.7 | 2.1 | 2.7 | 3.3 | 4.0 |
| 164° | 3.8 | 3.6 | 2.7 | 2.7 | 1.7 | 1.7 | 1.9 | 2.2 | 2.8 | 3.5 | 4.1 |
| 164.5° | 3.9 | 3.6 | 2.8 | 2.6 | 1.8 | 1.8 | 1.9 | 2.3 | 2.9 | 3.5 | 4.1 |
| 165° | 4.1 | 3.6 | 2.8 | 2.6 | 1.9 | 1.8 | 2.0 | 2.3 | 2.9 | 3.6 | 4.2 |
| 165.5° | 4.6 | 3.6 | 3.0 | 2.6 | 1.9 | 1.9 | 2.1 | 2.4 | 3.0 | 3.6 | 4.3 |
| 166° | 4.9 | 3.6 | 3.1 | 2.6 | 2.0 | 2.0 | 2.1 | 2.5 | 3.2 | 3.8 | 4.4 |
| 166.5° | 4.9 | 3.7 | 3.3 | 2.7 | 2.1 | 2.0 | 2.2 | 2.6 | 3.2 | 3.9 | 4.4 |
| 167° | 4.9 | 3.8 | 3.5 | 2.8 | 2.1 | 2.2 | 2.2 | 2.6 | 3.4 | 3.9 | 4.5 |
| 167.5° | 4.9 | 3.8 | 3.6 | 2.9 | 2.2 | 2.2 | 2.3 | 2.8 | 3.4 | 4.0 | 4.6 |
| 168° | 4.9 | 3.8 | 3.7 | 2.9 | 2.4 | 2.3 | 2.4 | 2.8 | 3.4 | 4.1 | 4.7 |
| 168.5° | 4.9 | 4.0 | 3.7 | 3.0 | 2.4 | 2.4 | 2.5 | 2.9 | 3.6 | 4.2 | 4.7 |
| 169° | 4.9 | 4.0 | 3.7 | 3.3 | 2.4 | 2.4 | 2.5 | 3.0 | 3.6 | 4.2 | 4.7 |
| 169.5° | 4.9 | 4.5 | 3.7 | 3.4 | 2.5 | 2.5 | 2.6 | 3.1 | 3.7 | 4.2 | 4.8 |
| 170° | 4.9 | 4.7 | 3.7 | 3.6 | 2.6 | 2.5 | 2.8 | 3.1 | 3.7 | 4.3 | 4.9 |
| 170.5° | 4.9 | 4.8 | 3.8 | 3.7 | 2.6 | 2.7 | 2.8 | 3.2 | 3.9 | 4.3 | 5.0 |
| 171° | 4.9 | 4.8 | 3.8 | 3.6 | 2.8 | 2.7 | 2.9 | 3.3 | 3.9 | 4.4 | 5.0 |
| 171.5° | 4.9 | 4.8 | 3.8 | 3.6 | 2.8 | 2.8 | 3.0 | 3.4 | 3.9 | 4.5 | 4.9 |
| 172° | 4.9 | 4.8 | 4.0 | 3.6 | 3.0 | 2.9 | 3.1 | 3.5 | 4.0 | 4.6 | 4.9 |
| 172.5° | 4.9 | 4.8 | 4.1 | 3.6 | 3.1 | 3.0 | 3.1 | 3.5 | 4.1 | 4.7 | 4.9 |
| 173° | 4.9 | 4.8 | 4.3 | 3.7 | 3.2 | 3.2 | 3.2 | 3.7 | 4.2 | 4.7 | 4.9 |
| 173.5° | 4.9 | 4.8 | 4.6 | 3.7 | 3.3 | 3.2 | 3.3 | 3.8 | 4.2 | 4.8 | 4.9 |
| 174° | 4.9 | 4.8 | 4.8 | 3.7 | 3.3 | 3.4 | 3.4 | 3.8 | 4.3 | 4.8 | 4.9 |
| 174.5° | 4.9 | 4.8 | 4.9 | 3.7 | 3.4 | 3.4 | 3.5 | 3.9 | 4.4 | 4.8 | 4.9 |
| 175° | 4.9 | 4.8 | 4.9 | 3.8 | 3.5 | 3.5 | 3.5 | 3.9 | 4.4 | 4.8 | 4.9 |
| 175.5° | 4.9 | 4.8 | 4.9 | 3.8 | 3.6 | 3.5 | 3.5 | 3.9 | 4.4 | 4.8 | 4.9 |
| 176° | 4.9 | 4.8 | 4.9 | 3.8 | 3.6 | 3.6 | 3.7 | 4.0 | 4.5 | 4.8 | 4.9 |
| 176.5° | 4.9 | 4.8 | 4.9 | 3.9 | 3.7 | 3.7 | 3.7 | 4.0 | 4.5 | 4.8 | 4.9 |
| 177° | 5.0 | 4.8 | 4.9 | 3.9 | 3.8 | 3.7 | 3.7 | 4.1 | 4.4 | 4.8 | 4.9 |
| 177.5° | 4.9 | 4.9 | 4.9 | 3.9 | 3.7 | 3.8 | 3.8 | 4.1 | 4.4 | 4.7 | 4.9 |
| 178° | 4.8 | 4.8 | 4.8 | 3.9 | 3.8 | 3.8 | 3.9 | 4.2 | 4.4 | 4.7 | 4.9 |
| 178.5° | 4.6 | 4.8 | 4.7 | 3.9 | 3.9 | 3.9 | 3.8 | 4.2 | 4.4 | 4.7 | 4.9 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|------|-----|-------|-----|-------|-----|--------|------|--------|------|--------|------|
| 180° | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|--------|--------|--------|--------|--------|
| 0° | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 | 1511.5 |
| 0.5° | 1480.2 | 1486.1 | 1478.0 | 1503.6 | 1499.5 | 1516.9 |
| 1° | 1455.5 | 1457.4 | 1445.1 | 1484.6 | 1489.1 | 1510.7 |
| 1.5° | 1422.3 | 1418.5 | 1416.1 | 1460.6 | 1476.0 | 1509.8 |
| 2° | 1397.4 | 1395.3 | 1386.4 | 1429.3 | 1456.6 | 1488.9 |
| 2.5° | 1351.8 | 1363.4 | 1353.7 | 1400.9 | 1444.1 | 1487.5 |
| 3° | 1326.5 | 1326.4 | 1321.7 | 1378.1 | 1414.3 | 1489.5 |
| 3.5° | 1293.1 | 1293.2 | 1294.1 | 1345.1 | 1389.2 | 1485.1 |
| 4° | 1264.1 | 1249.2 | 1260.8 | 1323.0 | 1367.8 | 1469.6 |
| 4.5° | 1230.7 | 1225.0 | 1225.9 | 1288.7 | 1348.1 | 1462.7 |
| 5° | 1203.4 | 1200.1 | 1193.1 | 1260.5 | 1330.6 | 1431.5 |
| 5.5° | 1170.4 | 1150.0 | 1160.3 | 1233.1 | 1305.3 | 1426.9 |
| 6° | 1137.8 | 1118.2 | 1130.6 | 1203.9 | 1277.2 | 1411.0 |
| 6.5° | 1101.2 | 1079.4 | 1090.1 | 1173.6 | 1258.5 | 1386.4 |
| 7° | 1065.3 | 1053.5 | 1056.4 | 1138.9 | 1238.3 | 1373.4 |
| 7.5° | 1034.1 | 1011.2 | 1022.0 | 1109.2 | 1203.5 | 1354.1 |
| 8° | 996.0 | 966.9 | 989.6 | 1079.5 | 1176.8 | 1323.5 |
| 8.5° | 969.0 | 948.3 | 961.3 | 1052.1 | 1154.6 | 1316.8 |
| 9° | 935.1 | 904.0 | 931.7 | 1006.8 | 1126.8 | 1305.2 |
| 9.5° | 899.0 | 876.1 | 899.7 | 980.2 | 1091.5 | 1278.6 |
| 10° | 869.8 | 844.2 | 862.4 | 950.6 | 1070.0 | 1248.7 |
| 10.5° | 840.5 | 805.1 | 831.8 | 915.9 | 1038.2 | 1226.4 |
| 11° | 809.2 | 775.9 | 797.8 | 890.4 | 1007.0 | 1197.6 |
| 11.5° | 778.0 | 750.4 | 767.2 | 862.2 | 984.3 | 1179.0 |
| 12° | 746.8 | 722.5 | 741.8 | 828.2 | 950.5 | 1144.1 |
| 12.5° | 719.3 | 693.7 | 712.4 | 802.7 | 924.3 | 1121.5 |
| 13° | 690.6 | 662.6 | 682.5 | 772.3 | 895.7 | 1095.0 |
| 13.5° | 661.3 | 637.0 | 657.9 | 745.4 | 866.3 | 1065.5 |
| 14° | 637.7 | 611.3 | 629.6 | 713.8 | 829.9 | 1035.7 |
| 14.5° | 611.2 | 589.6 | 600.6 | 688.6 | 809.5 | 1008.6 |
| 15° | 587.9 | 564.8 | 584.3 | 666.0 | 778.5 | 976.4 |
| 15.5° | 562.1 | 538.1 | 555.1 | 633.5 | 747.7 | 944.9 |
| 16° | 535.0 | 517.7 | 536.2 | 610.0 | 722.9 | 917.2 |
| 16.5° | 513.3 | 494.8 | 512.3 | 588.2 | 701.4 | 897.7 |
| 17° | 492.5 | 476.8 | 490.4 | 561.3 | 676.1 | 862.9 |
| 17.5° | 475.7 | 453.7 | 467.8 | 542.7 | 650.8 | 835.1 |
| 18° | 453.9 | 432.4 | 447.3 | 519.3 | 623.7 | 801.9 |
| 18.5° | 433.3 | 414.9 | 430.4 | 498.2 | 599.9 | 782.7 |
| 19° | 413.8 | 393.5 | 414.2 | 479.2 | 575.9 | 752.4 |
| 19.5° | 397.2 | 378.1 | 394.6 | 455.1 | 552.3 | 719.2 |
| 20° | 381.2 | 361.6 | 374.3 | 438.0 | 532.5 | 693.2 |
| 20.5° | 363.8 | 342.7 | 357.4 | 418.4 | 509.8 | 668.8 |
| 21° | 348.3 | 328.3 | 341.8 | 402.4 | 486.7 | 644.3 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|-------|--------|-------|--------|-------|
| 22.5° | 300.2 | 285.4 | 297.4 | 346.8 | 428.9 | 569.9 |
| 23° | 286.7 | 272.1 | 280.2 | 331.0 | 413.3 | 547.5 |
| 23.5° | 273.7 | 261.2 | 265.9 | 315.8 | 396.8 | 526.6 |
| 24° | 260.4 | 246.5 | 254.3 | 299.3 | 378.4 | 505.1 |
| 24.5° | 246.7 | 234.4 | 242.4 | 286.9 | 362.3 | 485.8 |
| 25° | 234.5 | 223.0 | 229.7 | 274.3 | 346.7 | 466.1 |
| 25.5° | 224.2 | 211.2 | 220.7 | 258.8 | 331.0 | 449.4 |
| 26° | 211.1 | 200.7 | 208.2 | 247.8 | 313.8 | 425.8 |
| 26.5° | 200.6 | 189.3 | 197.7 | 236.4 | 299.0 | 410.5 |
| 27° | 190.5 | 179.3 | 188.0 | 220.9 | 285.9 | 392.2 |
| 27.5° | 181.1 | 170.0 | 178.0 | 211.8 | 271.9 | 374.9 |
| 28° | 171.7 | 160.0 | 169.4 | 201.9 | 260.2 | 358.7 |
| 28.5° | 162.5 | 152.7 | 161.3 | 191.0 | 246.4 | 343.3 |
| 29° | 153.6 | 144.3 | 152.7 | 180.3 | 234.1 | 329.0 |
| 29.5° | 145.9 | 135.6 | 143.7 | 170.4 | 222.4 | 315.7 |
| 30° | 137.3 | 128.8 | 136.2 | 162.0 | 210.8 | 299.2 |
| 30.5° | 130.0 | 121.6 | 128.8 | 152.5 | 200.3 | 285.1 |
| 31° | 123.1 | 114.2 | 121.1 | 143.3 | 190.0 | 273.1 |
| 31.5° | 115.5 | 107.5 | 114.2 | 136.6 | 178.4 | 259.8 |
| 32° | 109.2 | 101.3 | 107.7 | 129.6 | 168.5 | 245.5 |
| 32.5° | 103.8 | 95.3 | 101.8 | 121.9 | 160.3 | 234.1 |
| 33° | 97.6 | 89.6 | 95.5 | 115.6 | 151.6 | 221.5 |
| 33.5° | 91.6 | 84.2 | 89.8 | 108.7 | 143.4 | 211.4 |
| 34° | 86.4 | 79.7 | 84.4 | 102.4 | 135.2 | 200.3 |
| 34.5° | 81.7 | 74.3 | 79.7 | 96.5 | 127.2 | 190.3 |
| 35° | 76.5 | 70.0 | 74.9 | 90.1 | 119.7 | 179.6 |
| 35.5° | 72.0 | 65.8 | 70.4 | 84.6 | 112.8 | 170.5 |
| 36° | 67.5 | 62.2 | 66.4 | 80.3 | 106.5 | 161.7 |
| 36.5° | 63.3 | 58.6 | 62.7 | 75.7 | 100.2 | 153.0 |
| 37° | 59.7 | 55.4 | 59.1 | 71.4 | 94.5 | 143.9 |
| 37.5° | 56.5 | 52.2 | 55.8 | 67.3 | 89.0 | 136.3 |
| 38° | 53.4 | 49.3 | 52.7 | 63.3 | 84.0 | 128.4 |
| 38.5° | 50.3 | 46.6 | 49.6 | 60.0 | 79.4 | 121.8 |
| 39° | 47.6 | 44.2 | 46.8 | 56.8 | 74.9 | 115.6 |
| 39.5° | 45.1 | 42.0 | 44.3 | 53.7 | 70.5 | 109.1 |
| 40° | 42.9 | 40.1 | 42.0 | 50.5 | 66.7 | 102.6 |
| 40.5° | 40.4 | 38.3 | 40.1 | 47.5 | 63.1 | 96.3 |
| 41° | 38.5 | 36.4 | 38.3 | 45.1 | 59.7 | 91.1 |
| 41.5° | 36.6 | 34.8 | 36.5 | 42.8 | 56.4 | 86.1 |
| 42° | 34.9 | 33.3 | 34.8 | 40.3 | 53.3 | 80.9 |
| 42.5° | 33.2 | 32.0 | 33.4 | 38.6 | 50.4 | 76.5 |
| 43° | 31.7 | 30.8 | 32.0 | 37.1 | 47.7 | 72.3 |
| 43.5° | 30.4 | 29.6 | 30.8 | 35.3 | 45.5 | 68.6 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|------|--------|------|--------|------|
| 45° | 26.8 | 26.4 | 27.5 | 31.3 | 39.4 | 57.6 |
| 45.5° | 25.8 | 25.4 | 26.6 | 30.1 | 37.6 | 54.6 |
| 46° | 24.8 | 24.7 | 25.6 | 29.0 | 36.1 | 51.4 |
| 46.5° | 23.9 | 23.7 | 24.8 | 28.0 | 34.5 | 49.0 |
| 47° | 23.0 | 22.9 | 23.9 | 27.0 | 33.0 | 46.6 |
| 47.5° | 22.3 | 22.3 | 23.2 | 26.1 | 31.6 | 44.5 |
| 48° | 21.5 | 21.8 | 22.5 | 25.3 | 30.5 | 42.3 |
| 48.5° | 20.8 | 21.1 | 22.0 | 24.4 | 29.3 | 40.3 |
| 49° | 20.4 | 20.4 | 21.3 | 23.7 | 28.3 | 38.4 |
| 49.5° | 19.6 | 19.8 | 20.7 | 22.7 | 27.2 | 36.6 |
| 50° | 19.0 | 19.3 | 20.1 | 22.2 | 26.2 | 34.8 |
| 50.5° | 18.5 | 18.7 | 19.5 | 21.6 | 25.3 | 33.4 |
| 51° | 17.8 | 18.2 | 18.9 | 21.0 | 24.4 | 32.0 |
| 51.5° | 17.3 | 17.6 | 18.4 | 20.3 | 23.6 | 30.6 |
| 52° | 16.7 | 17.1 | 17.9 | 19.7 | 22.6 | 29.4 |
| 52.5° | 16.3 | 16.6 | 17.3 | 19.2 | 22.0 | 28.2 |
| 53° | 15.6 | 16.1 | 16.8 | 18.7 | 21.5 | 27.1 |
| 53.5° | 15.1 | 15.6 | 16.3 | 18.1 | 20.7 | 25.9 |
| 54° | 14.7 | 15.0 | 15.7 | 17.6 | 20.0 | 25.0 |
| 54.5° | 14.2 | 14.5 | 15.3 | 16.9 | 19.4 | 24.0 |
| 55° | 13.7 | 14.1 | 14.8 | 16.4 | 18.8 | 23.0 |
| 55.5° | 13.5 | 13.6 | 14.4 | 15.9 | 18.2 | 22.2 |
| 56° | 12.9 | 13.3 | 13.9 | 15.5 | 17.7 | 21.5 |
| 56.5° | 12.5 | 12.8 | 13.5 | 14.9 | 17.2 | 20.7 |
| 57° | 12.0 | 12.4 | 13.1 | 14.6 | 16.5 | 19.8 |
| 57.5° | 11.5 | 12.0 | 12.7 | 14.0 | 15.9 | 19.1 |
| 58° | 11.1 | 11.5 | 12.3 | 13.5 | 15.4 | 18.4 |
| 58.5° | 10.6 | 11.2 | 11.9 | 13.0 | 14.9 | 17.7 |
| 59° | 10.3 | 10.9 | 11.5 | 12.6 | 14.3 | 17.0 |
| 59.5° | 9.8 | 10.5 | 11.2 | 12.1 | 13.9 | 16.4 |
| 60° | 9.5 | 10.1 | 10.8 | 11.7 | 13.4 | 15.8 |
| 60.5° | 9.2 | 9.7 | 10.4 | 11.4 | 12.9 | 15.2 |
| 61° | 8.8 | 9.4 | 10.0 | 11.0 | 12.4 | 14.7 |
| 61.5° | 8.6 | 9.1 | 9.7 | 10.6 | 12.1 | 14.1 |
| 62° | 8.1 | 8.7 | 9.3 | 10.3 | 11.6 | 13.6 |
| 62.5° | 7.7 | 8.4 | 9.0 | 9.9 | 11.2 | 13.1 |
| 63° | 7.5 | 8.0 | 8.6 | 9.6 | 10.8 | 12.6 |
| 63.5° | 7.1 | 7.7 | 8.3 | 9.4 | 10.4 | 12.1 |
| 64° | 6.8 | 7.4 | 7.9 | 8.8 | 10.0 | 11.7 |
| 64.5° | 6.5 | 7.1 | 7.6 | 8.5 | 9.7 | 11.2 |
| 65° | 6.4 | 6.8 | 7.3 | 8.2 | 9.5 | 10.8 |
| 65.5° | 5.9 | 6.6 | 7.0 | 7.8 | 9.1 | 10.4 |
| 66° | 5.7 | 6.4 | 6.7 | 7.6 | 8.7 | 10.0 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|-------|--------|------|--------|------|--------|------|
| 67.5° | 4.9 | 5.7 | 6.0 | 6.7 | 7.8 | 8.8 |
| 68° | 4.8 | 5.3 | 5.7 | 6.4 | 7.4 | 8.5 |
| 68.5° | 4.8 | 5.2 | 5.5 | 6.2 | 7.2 | 8.2 |
| 69° | 4.8 | 5.1 | 5.3 | 5.8 | 6.9 | 7.9 |
| 69.5° | 4.3 | 4.7 | 5.1 | 5.6 | 6.6 | 7.6 |
| 70° | 3.8 | 4.4 | 4.8 | 5.3 | 6.2 | 7.3 |
| 70.5° | 3.6 | 4.1 | 4.5 | 5.2 | 5.9 | 7.0 |
| 71° | 3.6 | 3.8 | 4.2 | 4.9 | 5.6 | 6.8 |
| 71.5° | 3.0 | 3.5 | 3.9 | 4.6 | 5.4 | 6.5 |
| 72° | 2.7 | 3.2 | 3.6 | 4.3 | 5.1 | 6.2 |
| 72.5° | 2.4 | 3.0 | 3.3 | 4.0 | 4.8 | 5.8 |
| 73° | 2.5 | 2.8 | 3.1 | 3.7 | 4.5 | 5.5 |
| 73.5° | 2.1 | 2.8 | 2.9 | 3.4 | 4.2 | 5.2 |
| 74° | 1.9 | 2.6 | 2.7 | 3.1 | 3.9 | 4.8 |
| 74.5° | 1.8 | 2.6 | 2.6 | 2.9 | 3.6 | 4.4 |
| 75° | 1.7 | 2.5 | 2.5 | 2.7 | 3.3 | 4.2 |
| 75.5° | 1.6 | 2.4 | 2.5 | 2.5 | 3.0 | 3.9 |
| 76° | 1.6 | 2.4 | 2.5 | 2.4 | 2.8 | 3.6 |
| 76.5° | 1.6 | 2.3 | 2.4 | 2.2 | 2.6 | 3.3 |
| 77° | 1.6 | 2.3 | 2.3 | 2.2 | 2.4 | 3.0 |
| 77.5° | 1.6 | 2.2 | 2.2 | 2.2 | 2.2 | 2.7 |
| 78° | 1.6 | 2.1 | 2.2 | 2.1 | 2.0 | 2.5 |
| 78.5° | 1.6 | 2.0 | 2.2 | 2.0 | 1.9 | 2.3 |
| 79° | 1.4 | 2.0 | 2.0 | 1.9 | 1.9 | 2.2 |
| 79.5° | 1.2 | 1.9 | 1.9 | 1.9 | 1.8 | 1.9 |
| 80° | 1.0 | 1.8 | 1.8 | 1.9 | 1.7 | 1.7 |
| 80.5° | 0.9 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 |
| 81° | 0.9 | 1.6 | 1.7 | 1.7 | 1.6 | 1.5 |
| 81.5° | 0.8 | 1.5 | 1.6 | 1.6 | 1.6 | 1.5 |
| 82° | 0.6 | 1.4 | 1.5 | 1.5 | 1.5 | 1.5 |
| 82.5° | 0.6 | 1.4 | 1.4 | 1.5 | 1.4 | 1.4 |
| 83° | 0.7 | 1.4 | 1.3 | 1.4 | 1.4 | 1.2 |
| 83.5° | 0.6 | 1.2 | 1.3 | 1.3 | 1.3 | 1.3 |
| 84° | 0.6 | 1.0 | 1.1 | 1.2 | 1.2 | 1.2 |
| 84.5° | 0.6 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 |
| 85° | 0.6 | 0.9 | 1.0 | 1.0 | 0.9 | 1.0 |
| 85.5° | 0.4 | 0.8 | 0.9 | 0.8 | 0.9 | 0.9 |
| 86° | 0.3 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 86.5° | 0.1 | 0.6 | 0.6 | 0.6 | 0.8 | 0.7 |
| 87° | 0.0 | 0.5 | 0.5 | 0.6 | 0.6 | 0.7 |
| 87.5° | 0.0 | 0.3 | 0.4 | 0.5 | 0.5 | 0.6 |
| 88° | 0.0 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 |
| 88.5° | 0.0 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|------|--------|------|--------|------|
| 90° | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 |
| 90.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 91° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 91.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 93° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 93.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 94° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 94.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 96° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 96.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 98° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 98.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 99° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 99.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 101° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 101.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 103° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 103.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 104° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 104.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 106° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 106.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 108° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 108.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 109° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 109.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 110.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 111° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|------|--------|------|--------|------|
| 112.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 113° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 113.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 114° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 114.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 116° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 116.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 118° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 118.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 119° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 119.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 121° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 121.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 123° | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 123.5° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 124° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 124.5° | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125.5° | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 126° | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 126.5° | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 |
| 127° | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 |
| 128° | 0.2 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 |
| 128.5° | 0.3 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 |
| 129° | 0.3 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 |
| 129.5° | 0.3 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 |
| 130° | 0.4 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 |
| 130.5° | 0.4 | 0.6 | 0.4 | 0.2 | 0.0 | 0.0 |
| 131° | 0.3 | 0.6 | 0.5 | 0.4 | 0.0 | 0.0 |
| 131.5° | 0.4 | 0.6 | 0.6 | 0.3 | 0.0 | 0.0 |
| 132° | 0.4 | 0.7 | 0.6 | 0.3 | 0.0 | 0.0 |
| 132.5° | 0.4 | 0.7 | 0.8 | 0.3 | 0.0 | 0.0 |
| 133° | 0.4 | 0.7 | 0.8 | 0.4 | 0.1 | 0.0 |
| 133.5° | 0.5 | 0.7 | 0.8 | 0.4 | 0.1 | 0.0 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|------|--------|------|--------|------|
| 135° | 0.6 | 0.8 | 0.8 | 0.8 | 0.2 | 0.0 |
| 135.5° | 0.6 | 0.8 | 0.8 | 0.8 | 0.2 | 0.0 |
| 136° | 0.7 | 0.8 | 0.8 | 0.8 | 0.3 | 0.0 |
| 136.5° | 0.6 | 0.8 | 0.8 | 0.8 | 0.3 | 0.0 |
| 137° | 0.7 | 1.0 | 0.8 | 0.8 | 0.5 | 0.0 |
| 137.5° | 0.6 | 1.0 | 0.9 | 0.8 | 0.6 | 0.0 |
| 138° | 0.7 | 1.0 | 1.0 | 0.8 | 0.6 | 0.2 |
| 138.5° | 0.8 | 1.3 | 1.0 | 0.8 | 0.6 | 0.2 |
| 139° | 0.8 | 1.6 | 1.3 | 0.8 | 0.6 | 0.3 |
| 139.5° | 0.8 | 1.6 | 1.5 | 0.8 | 0.6 | 0.4 |
| 140° | 0.9 | 1.6 | 1.5 | 0.8 | 0.6 | 0.4 |
| 140.5° | 0.9 | 1.6 | 1.7 | 1.0 | 0.6 | 0.6 |
| 141° | 1.0 | 1.6 | 1.7 | 1.0 | 0.7 | 0.7 |
| 141.5° | 1.0 | 1.7 | 1.7 | 1.1 | 0.6 | 0.6 |
| 142° | 1.1 | 1.7 | 1.7 | 1.3 | 0.8 | 0.6 |
| 142.5° | 1.2 | 1.9 | 1.7 | 1.6 | 0.8 | 0.6 |
| 143° | 1.1 | 1.9 | 1.8 | 1.6 | 0.9 | 0.6 |
| 143.5° | 1.1 | 2.1 | 1.8 | 1.6 | 0.9 | 0.6 |
| 144° | 1.3 | 2.2 | 2.0 | 1.6 | 1.0 | 0.6 |
| 144.5° | 1.4 | 2.5 | 2.1 | 1.6 | 1.2 | 0.7 |
| 145° | 1.4 | 2.5 | 2.4 | 1.7 | 1.4 | 0.7 |
| 145.5° | 1.4 | 2.6 | 2.5 | 1.7 | 1.6 | 0.8 |
| 146° | 1.6 | 2.6 | 2.5 | 1.9 | 1.6 | 0.8 |
| 146.5° | 1.5 | 2.6 | 2.5 | 2.0 | 1.5 | 0.8 |
| 147° | 1.6 | 2.6 | 2.5 | 2.1 | 1.6 | 1.0 |
| 147.5° | 1.8 | 2.8 | 2.5 | 2.4 | 1.6 | 1.1 |
| 148° | 1.8 | 2.8 | 2.7 | 2.5 | 1.7 | 1.2 |
| 148.5° | 1.9 | 3.0 | 2.9 | 2.6 | 1.7 | 1.5 |
| 149° | 1.9 | 3.0 | 2.9 | 2.7 | 1.9 | 1.7 |
| 149.5° | 2.0 | 3.3 | 2.9 | 2.7 | 2.0 | 1.7 |
| 150° | 2.1 | 3.5 | 3.1 | 2.7 | 2.0 | 1.6 |
| 150.5° | 2.1 | 3.6 | 3.3 | 2.8 | 2.3 | 1.6 |
| 151° | 2.2 | 3.6 | 3.6 | 2.9 | 2.7 | 1.7 |
| 151.5° | 2.3 | 3.6 | 3.6 | 2.9 | 2.7 | 1.6 |
| 152° | 2.3 | 3.6 | 3.6 | 3.1 | 2.7 | 1.7 |
| 152.5° | 2.4 | 3.7 | 3.6 | 3.1 | 2.7 | 1.9 |
| 153° | 2.4 | 3.8 | 3.6 | 3.3 | 2.7 | 1.9 |
| 153.5° | 2.5 | 3.9 | 3.8 | 3.5 | 2.7 | 2.0 |
| 154° | 2.6 | 3.9 | 3.8 | 3.5 | 2.7 | 2.3 |
| 154.5° | 2.8 | 4.1 | 3.8 | 3.5 | 2.8 | 2.5 |
| 155° | 2.7 | 4.2 | 3.9 | 3.6 | 3.0 | 2.5 |
| 155.5° | 2.9 | 4.6 | 4.0 | 3.6 | 3.1 | 2.5 |
| 156° | 2.9 | 4.9 | 4.2 | 3.7 | 3.3 | 2.6 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|------|--------|------|--------|------|
| 157.5° | 3.2 | 5.0 | 4.9 | 4.0 | 3.5 | 2.7 |
| 158° | 3.3 | 5.0 | 4.9 | 4.5 | 3.5 | 2.8 |
| 158.5° | 3.4 | 5.0 | 4.8 | 4.8 | 3.6 | 3.0 |
| 159° | 3.5 | 5.0 | 4.8 | 4.9 | 3.7 | 3.0 |
| 159.5° | 3.6 | 5.0 | 4.8 | 4.9 | 3.7 | 3.2 |
| 160° | 3.7 | 5.0 | 4.8 | 4.9 | 3.8 | 3.5 |
| 160.5° | 3.8 | 5.0 | 4.8 | 4.9 | 3.9 | 3.6 |
| 161° | 3.9 | 5.0 | 4.8 | 4.9 | 4.0 | 3.6 |
| 161.5° | 4.1 | 5.0 | 4.8 | 4.9 | 4.5 | 3.6 |
| 162° | 4.1 | 5.0 | 4.8 | 4.9 | 4.9 | 3.6 |
| 162.5° | 4.3 | 5.0 | 4.8 | 4.9 | 4.9 | 3.6 |
| 163° | 4.3 | 5.0 | 4.8 | 4.9 | 4.9 | 3.8 |
| 163.5° | 4.4 | 5.0 | 4.8 | 4.9 | 4.9 | 3.8 |
| 164° | 4.5 | 5.0 | 4.8 | 4.9 | 4.9 | 3.8 |
| 164.5° | 4.5 | 5.0 | 4.8 | 4.9 | 4.9 | 3.9 |
| 165° | 4.6 | 5.0 | 4.8 | 4.9 | 4.9 | 4.1 |
| 165.5° | 4.7 | 5.0 | 4.8 | 4.9 | 4.9 | 4.6 |
| 166° | 4.8 | 5.0 | 4.8 | 4.9 | 4.9 | 4.9 |
| 166.5° | 4.9 | 5.0 | 4.8 | 5.0 | 4.9 | 4.9 |
| 167° | 4.9 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 167.5° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 168° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 168.5° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 169° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 169.5° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 170° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 170.5° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 171° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 171.5° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 172° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 172.5° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 173° | 4.8 | 5.0 | 4.9 | 5.0 | 4.9 | 4.9 |
| 173.5° | 4.8 | 4.8 | 4.9 | 5.0 | 4.9 | 4.9 |
| 174° | 4.8 | 4.8 | 4.9 | 5.0 | 4.9 | 4.9 |
| 174.5° | 4.8 | 4.6 | 5.0 | 5.0 | 4.9 | 4.9 |
| 175° | 4.8 | 4.6 | 4.9 | 5.0 | 4.9 | 4.9 |
| 175.5° | 4.8 | 4.4 | 4.7 | 5.0 | 4.9 | 4.9 |
| 176° | 4.8 | 4.4 | 4.6 | 5.0 | 4.9 | 4.9 |
| 176.5° | 4.8 | 4.3 | 4.6 | 4.9 | 4.9 | 4.9 |
| 177° | 4.8 | 4.2 | 4.4 | 4.7 | 4.9 | 5.0 |
| 177.5° | 4.8 | 4.3 | 4.4 | 4.7 | 4.7 | 4.9 |
| 178° | 4.8 | 4.2 | 4.2 | 4.5 | 4.7 | 4.8 |
| 178.5° | 4.8 | 4.1 | 4.1 | 4.4 | 4.5 | 4.6 |



TEST NUMBER: P571718

CATALOG NUMBER: RLS4099FSE1WHDM 3000K

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|------|--------|------|--------|------|--------|------|
| 180° | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





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







| | | | | | | | | | | | |
|-------|-------|-------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 21.5° | 618.4 | 840.4 | 1103.8 | 1310.1 | 1458.0 | 1329.7 | 1101.0 | 832.4 | 607.2 | 466.5 | 378.0 |
| 22° | 593.1 | 806.8 | 1067.7 | 1276.7 | 1426.8 | 1304.2 | 1068.1 | 798.7 | 586.1 | 445.9 | 361.4 |



| | | | | | | | | | | | |
|-------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 44° | 64.9 | 101.1 | 156.5 | 212.6 | 252.1 | 217.7 | 156.2 | 98.7 | 62.7 | 41.7 | 33.1 |
| 44.5° | 61.1 | 95.2 | 147.5 | 201.9 | 237.5 | 205.6 | 147.1 | 93.3 | 59.5 | 39.7 | 31.6 |



| | | | | | | | | | | | |
|-------|-----|------|------|------|------|------|------|-----|-----|-----|-----|
| 66.5° | 9.6 | 11.3 | 13.2 | 14.8 | 15.4 | 14.1 | 11.7 | 9.5 | 7.6 | 6.6 | 5.9 |
| 67° | 9.2 | 10.9 | 12.6 | 14.2 | 14.9 | 13.5 | 11.1 | 9.0 | 7.5 | 6.5 | 5.5 |



| | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 89° | 0.3 | 0.3 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 89.5° | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



| | | | | | | | | | | | | |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 111.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |



| | | | | | | | | | | | |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 134° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 |
| 134.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 |



| | | | | | | | | | | | |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 156.5° | 2.6 | 2.0 | 1.6 | 1.3 | 0.9 | 0.8 | 1.0 | 1.1 | 1.7 | 2.1 | 2.7 |
| 157° | 2.6 | 2.1 | 1.6 | 1.5 | 1.0 | 1.0 | 1.0 | 1.3 | 1.8 | 2.3 | 2.8 |



| | | | | | | | | | | | |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 179° | 4.6 | 4.8 | 4.8 | 3.9 | 4.0 | 3.9 | 3.9 | 4.2 | 4.4 | 4.6 | 4.9 |
| 179.5° | 4.6 | 4.7 | 4.9 | 4.1 | 3.9 | 3.9 | 4.0 | 4.2 | 4.5 | 4.6 | 4.9 |





| | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|
| 21.5° | 328.8 | 313.0 | 326.8 | 384.0 | 471.1 | 618.4 |
| 22° | 314.7 | 298.9 | 312.5 | 365.0 | 450.7 | 593.1 |



| | | | | | | |
|-------|------|------|------|------|------|------|
| 44° | 29.3 | 28.6 | 29.7 | 33.8 | 43.2 | 64.9 |
| 44.5° | 28.0 | 27.4 | 28.6 | 32.5 | 41.2 | 61.1 |



| | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|
| 66.5° | 5.4 | 6.1 | 6.5 | 7.2 | 8.5 | 9.6 |
| 67° | 5.1 | 5.8 | 6.3 | 6.9 | 8.1 | 9.2 |



| | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|
| 89° | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.3 |
| 89.5° | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |



| | | | | | | |
|--------|-----|-----|-----|-----|-----|-----|
| 111.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112° | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



| | | | | | | |
|--------|-----|-----|-----|-----|-----|-----|
| 134° | 0.5 | 0.7 | 0.8 | 0.5 | 0.1 | 0.0 |
| 134.5° | 0.5 | 0.7 | 0.8 | 0.6 | 0.2 | 0.0 |



| | | | | | | |
|--------|-----|-----|-----|-----|-----|-----|
| 156.5° | 3.1 | 5.0 | 4.6 | 3.8 | 3.6 | 2.6 |
| 157° | 3.1 | 5.0 | 4.8 | 3.9 | 3.6 | 2.6 |



| | | | | | | |
|--------|-----|-----|-----|-----|-----|-----|
| 179° | 4.8 | 4.1 | 4.0 | 4.3 | 4.5 | 4.6 |
| 179.5° | 4.8 | 4.1 | 4.1 | 4.3 | 4.4 | 4.6 |



(END OF REPORT)