

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: NEO-RAY

Report Number: P332685-840

Luminaire Tested: **S124DIP-S1195D590U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332685-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S1195D590U840-4F0-1E-UDD-F
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1195 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7549.0 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Semi-Direct

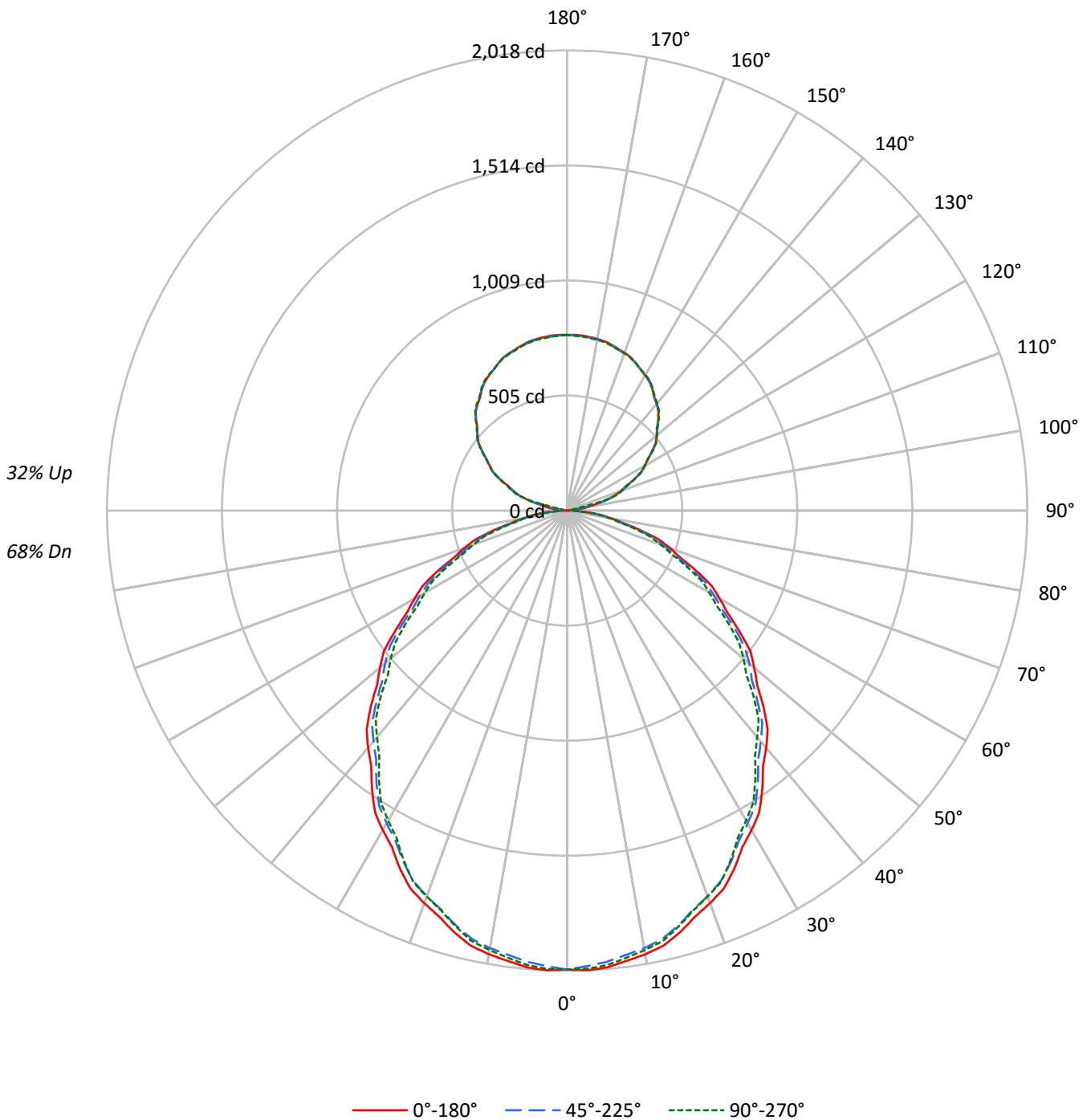
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332685-840

CATALOG NUMBER: S124DIP-S1195D590U840-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P332685-840

CATALOG NUMBER: S124DIP-S1195D590U840-4F0-1E-UDD-F

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|
| RF | 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 105 | 94 | 94 | 94 | 83 | 83 | 83 | 73 | 73 | 73 | 68 |
| 1 | 102 | 97 | 93 | 90 | 96 | 92 | 89 | 85 | 82 | 79 | 77 | 73 | 71 | 69 | 65 | 63 | 62 | 58 |
| 2 | 93 | 85 | 79 | 73 | 87 | 81 | 75 | 70 | 72 | 68 | 64 | 64 | 61 | 58 | 57 | 54 | 52 | 48 |
| 3 | 85 | 75 | 67 | 61 | 80 | 71 | 64 | 59 | 64 | 58 | 54 | 57 | 52 | 49 | 50 | 47 | 44 | 41 |
| 4 | 78 | 66 | 58 | 52 | 73 | 63 | 56 | 50 | 56 | 51 | 46 | 51 | 46 | 42 | 45 | 41 | 38 | 35 |
| 5 | 71 | 59 | 51 | 45 | 67 | 56 | 49 | 43 | 51 | 44 | 40 | 45 | 40 | 36 | 41 | 36 | 33 | 30 |
| 6 | 66 | 53 | 45 | 39 | 62 | 51 | 43 | 37 | 46 | 39 | 35 | 41 | 36 | 32 | 37 | 33 | 29 | 27 |
| 7 | 61 | 48 | 40 | 34 | 57 | 46 | 38 | 33 | 42 | 35 | 31 | 37 | 32 | 28 | 34 | 29 | 26 | 24 |
| 8 | 57 | 44 | 36 | 30 | 53 | 42 | 34 | 29 | 38 | 32 | 27 | 34 | 29 | 25 | 31 | 27 | 23 | 21 |
| 9 | 53 | 40 | 32 | 27 | 50 | 38 | 31 | 26 | 35 | 29 | 25 | 32 | 27 | 23 | 29 | 24 | 21 | 19 |
| 10 | 49 | 37 | 29 | 25 | 47 | 35 | 28 | 24 | 32 | 26 | 22 | 29 | 24 | 21 | 27 | 22 | 19 | 17 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 16247 | 16247 | 16247 |
| 5° | 16295 | 16100 | 16216 |
| 10° | 16193 | 15969 | 16047 |
| 15° | 15998 | 15742 | 15782 |
| 20° | 15738 | 15460 | 15474 |
| 25° | 15441 | 15139 | 15097 |
| 30° | 15077 | 14762 | 14626 |
| 35° | 14701 | 14366 | 14177 |
| 40° | 14309 | 13918 | 13663 |
| 45° | 13900 | 13476 | 13218 |
| 50° | 13448 | 13083 | 12679 |
| 55° | 12960 | 12573 | 12165 |
| 60° | 12471 | 12003 | 11638 |
| 65° | 11922 | 11459 | 10997 |
| 70° | 11306 | 10733 | 10315 |
| 75° | 10359 | 9860 | 9607 |
| 80° | 9219 | 8847 | 8619 |
| 85° | 8068 | 7762 | 7614 |



TEST NUMBER: P332685-840

CATALOG NUMBER: S124DIP-S1195D590U840-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 189.5 | 2.5 |
| 10°-20° | 534.0 | 7.1 |
| 20°-30° | 786.0 | 10.4 |
| 30°-40° | 913.7 | 12.1 |
| 40°-50° | 913.7 | 12.1 |
| 50°-60° | 799.3 | 10.6 |
| 60°-70° | 593.6 | 7.9 |
| 70°-80° | 337.2 | 4.5 |
| 80°-90° | 99.5 | 1.3 |
| 90°-100° | 26.3 | 0.3 |
| 100°-110° | 168.0 | 2.2 |
| 110°-120° | 321.3 | 4.3 |
| 120°-130° | 407.9 | 5.4 |
| 130°-140° | 436.4 | 5.8 |
| 140°-150° | 408.1 | 5.4 |
| 150°-160° | 329.1 | 4.4 |
| 160°-170° | 212.2 | 2.8 |
| 170°-180° | 73.2 | 1.0 |
| 0°-30° | 1509.5 | 20.0 |
| 0°-40° | 2423.2 | 32.1 |
| 0°-60° | 4136.2 | 54.8 |
| 0°-90° | 5166.5 | 68.4 |
| 90°-120° | 515.6 | 6.8 |
| 90°-150° | 1767.9 | 23.4 |
| 90°-180° | 2382.0 | 31.6 |
| 0°-180° | 7549.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 2012 | 2012 | 2012 | 2012 | 2012 | |
| 5° | 2011 | 2004 | 1987 | 2003 | 2001 | 191 |
| 15° | 1914 | 1907 | 1884 | 1892 | 1888 | 539 |
| 25° | 1734 | 1722 | 1700 | 1701 | 1695 | 797 |
| 35° | 1492 | 1480 | 1458 | 1447 | 1438 | 932 |
| 45° | 1218 | 1205 | 1180 | 1163 | 1158 | 938 |
| 55° | 921 | 915 | 893 | 875 | 864 | 824 |
| 65° | 624 | 616 | 600 | 584 | 576 | 618 |
| 75° | 332 | 324 | 316 | 310 | 308 | 353 |
| 85° | 87 | 87 | 84 | 84 | 82 | 96 |
| 90° | 2 | 8 | 13 | 16 | 17 | 6 |
| 95° | 32 | 13 | 13 | 16 | 17 | 41 |
| 105° | 173 | 177 | 180 | 183 | 164 | 181 |
| 115° | 324 | 325 | 325 | 326 | 326 | 318 |
| 125° | 455 | 457 | 456 | 458 | 459 | 406 |
| 135° | 564 | 564 | 566 | 567 | 569 | 435 |
| 145° | 651 | 653 | 653 | 653 | 654 | 407 |
| 155° | 714 | 714 | 713 | 715 | 713 | 329 |
| 165° | 753 | 750 | 750 | 754 | 749 | 213 |
| 175° | 770 | 767 | 767 | 772 | 766 | 73 |
| 180° | 770 | 770 | 770 | 770 | 770 | |



TEST NUMBER: P332685-840

CATALOG NUMBER: S124DIP-S1195D590U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 |
| 2.5° | 2017.6 | 2016.8 | 2015.9 | 2015.1 | 2014.2 | 2012.2 | 2009.0 | 2005.9 | 2002.8 | 1999.6 | 2002.5 |
| 5° | 2010.8 | 2009.4 | 2008.0 | 2006.6 | 2005.2 | 2002.5 | 1998.5 | 1994.6 | 1990.6 | 1986.7 | 1990.6 |
| 7.5° | 1992.2 | 1990.7 | 1989.3 | 1987.8 | 1986.4 | 1983.6 | 1979.1 | 1974.8 | 1970.4 | 1966.0 | 1969.2 |
| 10° | 1975.4 | 1974.0 | 1972.6 | 1971.1 | 1969.6 | 1966.6 | 1962.0 | 1957.3 | 1952.7 | 1948.0 | 1950.9 |
| 12.5° | 1953.5 | 1952.1 | 1950.6 | 1949.1 | 1947.7 | 1944.5 | 1939.6 | 1934.7 | 1929.8 | 1924.8 | 1927.9 |
| 15° | 1914.1 | 1912.7 | 1911.3 | 1909.9 | 1908.3 | 1905.0 | 1899.6 | 1894.2 | 1888.9 | 1883.5 | 1885.6 |
| 17.5° | 1866.7 | 1864.9 | 1863.1 | 1861.4 | 1859.6 | 1856.1 | 1851.0 | 1845.9 | 1840.9 | 1835.7 | 1837.1 |
| 20° | 1831.9 | 1830.1 | 1828.3 | 1826.5 | 1824.7 | 1821.1 | 1815.7 | 1810.4 | 1805.0 | 1799.6 | 1800.7 |
| 22.5° | 1794.4 | 1792.1 | 1789.8 | 1787.4 | 1785.0 | 1781.1 | 1775.7 | 1770.4 | 1765.0 | 1759.6 | 1761.6 |
| 25° | 1733.5 | 1731.0 | 1728.5 | 1726.0 | 1723.4 | 1719.7 | 1714.6 | 1709.7 | 1704.7 | 1699.6 | 1700.0 |
| 27.5° | 1663.9 | 1661.2 | 1658.7 | 1656.1 | 1653.6 | 1649.9 | 1645.3 | 1640.6 | 1636.0 | 1631.2 | 1630.4 |
| 30° | 1617.4 | 1614.6 | 1611.6 | 1608.8 | 1606.0 | 1602.2 | 1597.5 | 1592.9 | 1588.2 | 1583.6 | 1582.2 |
| 32.5° | 1568.4 | 1565.8 | 1563.3 | 1560.6 | 1558.0 | 1554.3 | 1549.3 | 1544.4 | 1539.4 | 1534.5 | 1532.8 |
| 35° | 1491.7 | 1489.1 | 1486.6 | 1484.1 | 1481.6 | 1477.8 | 1472.8 | 1467.8 | 1462.8 | 1457.7 | 1455.2 |
| 37.5° | 1410.7 | 1408.4 | 1406.1 | 1403.8 | 1401.5 | 1397.7 | 1392.3 | 1386.9 | 1381.5 | 1376.1 | 1373.4 |
| 40° | 1357.8 | 1354.9 | 1352.0 | 1349.2 | 1346.4 | 1342.2 | 1336.9 | 1331.4 | 1326.1 | 1320.7 | 1317.1 |
| 42.5° | 1301.0 | 1299.3 | 1297.6 | 1295.9 | 1294.1 | 1290.3 | 1284.3 | 1278.4 | 1272.4 | 1266.5 | 1262.3 |
| 45° | 1217.5 | 1215.0 | 1212.4 | 1209.9 | 1207.5 | 1203.4 | 1197.6 | 1191.8 | 1186.1 | 1180.4 | 1176.5 |
| 47.5° | 1130.0 | 1128.3 | 1126.6 | 1124.9 | 1123.2 | 1119.7 | 1114.4 | 1109.1 | 1103.8 | 1098.5 | 1094.1 |
| 50° | 1070.8 | 1069.3 | 1067.8 | 1066.4 | 1065.0 | 1061.8 | 1056.7 | 1051.8 | 1046.7 | 1041.7 | 1036.7 |
| 52.5° | 1012.7 | 1011.0 | 1009.3 | 1007.5 | 1005.8 | 1002.3 | 997.0 | 991.7 | 986.4 | 981.1 | 976.6 |
| 55° | 920.8 | 919.7 | 918.7 | 917.6 | 916.5 | 913.4 | 908.4 | 903.4 | 898.4 | 893.3 | 889.1 |
| 57.5° | 833.0 | 831.8 | 830.6 | 829.4 | 828.2 | 825.1 | 820.1 | 815.2 | 810.2 | 805.3 | 801.2 |
| 60° | 772.4 | 770.6 | 768.8 | 767.1 | 765.3 | 762.0 | 757.4 | 752.8 | 748.0 | 743.4 | 740.1 |
| 62.5° | 713.1 | 711.6 | 710.0 | 708.5 | 707.1 | 703.9 | 698.9 | 694.0 | 689.0 | 684.1 | 681.2 |
| 65° | 624.1 | 622.3 | 620.5 | 618.6 | 616.9 | 614.2 | 610.7 | 607.0 | 603.5 | 599.9 | 596.3 |
| 67.5° | 534.4 | 532.8 | 531.1 | 529.5 | 527.9 | 525.2 | 521.8 | 518.4 | 514.9 | 511.5 | 508.1 |
| 70° | 479.0 | 476.5 | 473.9 | 471.4 | 468.9 | 466.3 | 463.3 | 460.5 | 457.6 | 454.7 | 451.9 |
| 72.5° | 419.6 | 417.1 | 414.5 | 412.0 | 409.6 | 407.2 | 404.9 | 402.5 | 400.3 | 398.0 | 395.7 |
| 75° | 332.1 | 330.4 | 328.6 | 326.8 | 325.0 | 323.3 | 321.4 | 319.6 | 317.9 | 316.1 | 314.7 |
| 77.5° | 248.6 | 247.8 | 247.1 | 246.3 | 245.5 | 244.3 | 242.8 | 241.2 | 239.6 | 238.0 | 237.6 |
| 80° | 198.3 | 197.2 | 196.2 | 195.1 | 194.1 | 193.2 | 192.5 | 191.7 | 191.0 | 190.3 | 189.6 |
| 82.5° | 149.4 | 148.9 | 148.3 | 147.8 | 147.3 | 147.0 | 146.8 | 146.7 | 146.5 | 146.4 | 146.0 |
| 85° | 87.1 | 87.1 | 87.1 | 87.1 | 87.1 | 86.7 | 86.0 | 85.3 | 84.5 | 83.8 | 83.8 |
| 87.5° | 33.9 | 33.9 | 33.8 | 33.8 | 33.8 | 33.8 | 33.7 | 33.6 | 33.5 | 33.5 | 33.6 |
| 90° | 1.7 | 3.1 | 4.5 | 6.0 | 7.4 | 8.6 | 9.6 | 10.6 | 11.6 | 12.6 | 13.4 |
| 92.5° | 7.3 | 7.4 | 7.4 | 7.5 | 7.6 | 8.1 | 9.2 | 10.2 | 11.2 | 12.2 | 13.0 |
| 95° | 31.7 | 27.4 | 23.0 | 18.6 | 14.2 | 12.1 | 12.3 | 12.4 | 12.5 | 12.6 | 13.4 |
| 97.5° | 67.3 | 70.0 | 72.7 | 75.4 | 78.2 | 72.3 | 58.1 | 43.8 | 29.5 | 15.2 | 15.2 |
| 100° | 94.4 | 96.7 | 99.1 | 101.4 | 103.7 | 96.0 | 78.4 | 60.7 | 43.0 | 25.3 | 23.1 |
| 102.5° | 124.9 | 126.5 | 128.3 | 130.0 | 131.7 | 131.4 | 129.1 | 126.7 | 124.4 | 122.1 | 98.7 |
| 105° | 173.4 | 174.2 | 174.9 | 175.7 | 176.4 | 177.1 | 177.8 | 178.4 | 179.0 | 179.8 | 180.9 |
| 107.5° | 218.4 | 218.8 | 219.2 | 219.5 | 219.9 | 220.6 | 221.5 | 222.4 | 223.2 | 224.1 | 224.7 |
| 110° | 248.8 | 249.2 | 249.6 | 250.0 | 250.3 | 251.0 | 251.8 | 252.5 | 253.3 | 254.1 | 254.3 |



TEST NUMBER: P332685-840

CATALOG NUMBER: S124DIP-S1195D590U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 278.3 | 279.0 | 279.7 | 280.4 | 281.1 | 281.7 | 282.0 | 282.4 | 282.8 | 283.1 | 283.1 |
| 115° | 323.8 | 324.2 | 324.5 | 324.9 | 325.3 | 325.4 | 325.3 | 325.2 | 325.0 | 324.9 | 325.2 |
| 117.5° | 364.7 | 365.2 | 365.7 | 366.2 | 366.7 | 367.1 | 367.4 | 367.7 | 367.9 | 368.2 | 368.2 |
| 120° | 392.3 | 392.8 | 393.3 | 393.8 | 394.4 | 394.6 | 394.5 | 394.3 | 394.2 | 394.0 | 394.3 |
| 122.5° | 418.1 | 418.4 | 418.7 | 419.0 | 419.3 | 419.6 | 419.8 | 419.9 | 420.1 | 420.3 | 420.4 |
| 125° | 455.0 | 455.6 | 456.2 | 456.7 | 457.2 | 457.3 | 457.0 | 456.8 | 456.5 | 456.3 | 456.7 |
| 127.5° | 490.1 | 490.2 | 490.4 | 490.5 | 490.6 | 491.0 | 491.6 | 492.1 | 492.7 | 493.3 | 493.2 |
| 130° | 512.7 | 512.8 | 512.9 | 513.1 | 513.2 | 513.4 | 513.8 | 514.2 | 514.6 | 515.0 | 515.1 |
| 132.5° | 533.4 | 533.6 | 533.9 | 534.1 | 534.3 | 534.7 | 535.2 | 535.6 | 536.1 | 536.6 | 536.7 |
| 135° | 564.5 | 564.4 | 564.3 | 564.1 | 564.0 | 564.2 | 564.7 | 565.2 | 565.7 | 566.2 | 566.5 |
| 137.5° | 592.1 | 592.1 | 592.2 | 592.2 | 592.3 | 592.6 | 593.1 | 593.7 | 594.3 | 594.8 | 595.1 |
| 140° | 610.1 | 610.3 | 610.6 | 610.8 | 611.1 | 611.3 | 611.6 | 611.9 | 612.1 | 612.4 | 612.7 |
| 142.5° | 626.2 | 626.6 | 627.1 | 627.5 | 628.0 | 628.3 | 628.4 | 628.6 | 628.7 | 628.9 | 629.2 |
| 145° | 651.0 | 651.4 | 651.7 | 652.1 | 652.5 | 652.7 | 652.7 | 652.7 | 652.7 | 652.7 | 652.8 |
| 147.5° | 670.7 | 671.4 | 672.1 | 672.8 | 673.5 | 673.8 | 673.7 | 673.6 | 673.4 | 673.3 | 673.4 |
| 150° | 684.9 | 685.4 | 686.0 | 686.5 | 687.0 | 687.2 | 687.0 | 686.9 | 686.8 | 686.6 | 686.6 |
| 152.5° | 696.9 | 697.3 | 697.7 | 698.1 | 698.5 | 698.6 | 698.4 | 698.2 | 697.9 | 697.7 | 697.9 |
| 155° | 713.8 | 713.9 | 714.0 | 714.1 | 714.3 | 714.1 | 713.8 | 713.4 | 713.0 | 712.6 | 713.1 |
| 157.5° | 727.9 | 727.8 | 727.7 | 727.7 | 727.6 | 727.3 | 726.9 | 726.5 | 726.0 | 725.6 | 726.3 |
| 160° | 736.2 | 735.8 | 735.4 | 735.1 | 734.7 | 734.4 | 734.3 | 734.2 | 734.0 | 733.9 | 734.7 |
| 162.5° | 743.6 | 743.1 | 742.6 | 742.1 | 741.6 | 741.3 | 741.1 | 741.0 | 740.9 | 740.8 | 741.5 |
| 165° | 752.9 | 752.2 | 751.6 | 750.9 | 750.3 | 750.0 | 750.0 | 750.0 | 750.0 | 750.0 | 751.0 |
| 167.5° | 760.2 | 759.6 | 758.9 | 758.3 | 757.6 | 757.2 | 757.2 | 757.1 | 757.0 | 756.9 | 758.1 |
| 170° | 764.5 | 763.7 | 762.9 | 762.1 | 761.3 | 761.0 | 761.1 | 761.2 | 761.4 | 761.5 | 762.5 |
| 172.5° | 767.2 | 766.4 | 765.7 | 764.9 | 764.2 | 763.8 | 764.0 | 764.1 | 764.2 | 764.3 | 765.4 |
| 175° | 770.2 | 769.4 | 768.6 | 767.9 | 767.1 | 766.8 | 766.9 | 767.1 | 767.2 | 767.3 | 768.4 |
| 177.5° | 771.5 | 770.8 | 770.1 | 769.4 | 768.7 | 768.4 | 768.6 | 768.8 | 769.0 | 769.2 | 770.1 |
| 180° | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 |



TEST NUMBER: P332685-840

CATALOG NUMBER: S124DIP-S1195D590U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 | 2012.5 |
| 2.5° | 2005.3 | 2008.2 | 2011.0 | 2012.4 | 2012.1 | 2011.8 | 2011.4 | 2011.1 |
| 5° | 1994.6 | 1998.5 | 2002.5 | 2004.1 | 2003.4 | 2002.7 | 2002.0 | 2001.1 |
| 7.5° | 1972.4 | 1975.5 | 1978.6 | 1980.0 | 1979.6 | 1979.1 | 1978.7 | 1978.3 |
| 10° | 1953.7 | 1956.6 | 1959.4 | 1960.6 | 1959.8 | 1959.1 | 1958.3 | 1957.6 |
| 12.5° | 1931.1 | 1934.2 | 1937.4 | 1938.4 | 1937.4 | 1936.4 | 1935.4 | 1934.4 |
| 15° | 1887.7 | 1890.0 | 1892.1 | 1892.6 | 1891.6 | 1890.5 | 1889.4 | 1888.3 |
| 17.5° | 1838.5 | 1839.9 | 1841.2 | 1841.5 | 1840.8 | 1840.1 | 1839.4 | 1838.7 |
| 20° | 1801.8 | 1802.8 | 1803.9 | 1804.1 | 1803.4 | 1802.7 | 1802.0 | 1801.2 |
| 22.5° | 1763.5 | 1765.4 | 1767.4 | 1767.7 | 1766.5 | 1765.1 | 1763.8 | 1762.5 |
| 25° | 1700.4 | 1700.7 | 1701.1 | 1700.5 | 1699.1 | 1697.7 | 1696.3 | 1694.9 |
| 27.5° | 1629.5 | 1628.7 | 1627.8 | 1626.5 | 1624.7 | 1623.0 | 1621.1 | 1619.3 |
| 30° | 1580.6 | 1579.2 | 1577.8 | 1576.2 | 1574.4 | 1572.7 | 1570.8 | 1569.0 |
| 32.5° | 1531.1 | 1529.3 | 1527.6 | 1525.9 | 1524.1 | 1522.3 | 1520.6 | 1518.7 |
| 35° | 1452.8 | 1450.3 | 1447.7 | 1445.6 | 1443.8 | 1442.0 | 1440.2 | 1438.5 |
| 37.5° | 1370.7 | 1368.0 | 1365.2 | 1362.7 | 1360.4 | 1358.0 | 1355.6 | 1353.2 |
| 40° | 1313.5 | 1309.9 | 1306.4 | 1303.6 | 1301.9 | 1300.1 | 1298.3 | 1296.5 |
| 42.5° | 1258.2 | 1254.1 | 1249.9 | 1247.2 | 1246.0 | 1244.8 | 1243.5 | 1242.3 |
| 45° | 1172.6 | 1168.6 | 1164.7 | 1162.2 | 1161.0 | 1159.9 | 1158.9 | 1157.8 |
| 47.5° | 1089.6 | 1085.2 | 1080.8 | 1077.1 | 1074.4 | 1071.7 | 1068.9 | 1066.2 |
| 50° | 1031.7 | 1026.6 | 1021.7 | 1018.0 | 1015.9 | 1013.8 | 1011.6 | 1009.5 |
| 52.5° | 972.2 | 967.8 | 963.3 | 959.8 | 957.0 | 954.3 | 951.6 | 948.9 |
| 55° | 884.7 | 880.5 | 876.2 | 872.9 | 870.8 | 868.7 | 866.5 | 864.3 |
| 57.5° | 797.2 | 793.0 | 789.0 | 785.9 | 783.9 | 781.7 | 779.6 | 777.6 |
| 60° | 736.9 | 733.8 | 730.5 | 728.0 | 726.2 | 724.4 | 722.7 | 720.8 |
| 62.5° | 678.1 | 675.2 | 672.3 | 669.9 | 668.1 | 666.3 | 664.6 | 662.8 |
| 65° | 592.7 | 589.2 | 585.5 | 582.9 | 581.1 | 579.3 | 577.4 | 575.7 |
| 67.5° | 504.6 | 501.2 | 497.8 | 495.7 | 495.2 | 494.7 | 494.2 | 493.7 |
| 70° | 449.0 | 446.2 | 443.2 | 441.3 | 440.2 | 439.2 | 438.1 | 437.0 |
| 72.5° | 393.4 | 391.1 | 388.8 | 387.1 | 386.1 | 385.0 | 383.8 | 382.8 |
| 75° | 313.2 | 311.7 | 310.3 | 309.4 | 309.1 | 308.7 | 308.3 | 308.0 |
| 77.5° | 237.1 | 236.7 | 236.3 | 235.6 | 234.7 | 233.8 | 232.8 | 231.9 |
| 80° | 188.8 | 188.1 | 187.4 | 186.9 | 186.5 | 186.1 | 185.8 | 185.4 |
| 82.5° | 145.5 | 145.1 | 144.7 | 144.3 | 143.9 | 143.6 | 143.2 | 142.9 |
| 85° | 83.8 | 83.8 | 83.8 | 83.7 | 83.3 | 82.9 | 82.6 | 82.2 |
| 87.5° | 33.8 | 33.9 | 34.1 | 34.2 | 34.2 | 34.3 | 34.3 | 34.4 |
| 90° | 14.2 | 14.9 | 15.8 | 16.3 | 16.6 | 16.8 | 17.1 | 17.3 |
| 92.5° | 13.7 | 14.5 | 15.2 | 15.7 | 15.8 | 15.8 | 15.9 | 15.9 |
| 95° | 14.2 | 14.9 | 15.8 | 16.2 | 16.4 | 16.5 | 16.6 | 16.7 |
| 97.5° | 15.3 | 15.5 | 15.6 | 15.7 | 15.8 | 15.9 | 16.0 | 16.2 |
| 100° | 21.0 | 18.8 | 16.7 | 15.7 | 15.8 | 15.9 | 16.0 | 16.2 |
| 102.5° | 75.1 | 51.7 | 28.2 | 16.5 | 16.6 | 16.6 | 16.6 | 16.6 |
| 105° | 182.1 | 183.2 | 184.3 | 182.6 | 178.0 | 173.4 | 168.7 | 164.2 |
| 107.5° | 225.2 | 225.8 | 226.3 | 226.8 | 227.3 | 227.8 | 228.3 | 228.8 |
| 110° | 254.6 | 254.8 | 255.1 | 255.4 | 255.8 | 256.1 | 256.5 | 256.9 |



TEST NUMBER: P332685-840

CATALOG NUMBER: S124DIP-S1195D590U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 283.0 | 283.0 | 282.9 | 283.1 | 283.6 | 284.1 | 284.6 | 285.0 |
| 115° | 325.4 | 325.7 | 325.9 | 326.1 | 326.1 | 326.1 | 326.1 | 326.1 |
| 117.5° | 368.1 | 368.1 | 368.0 | 368.0 | 367.9 | 367.9 | 367.8 | 367.8 |
| 120° | 394.6 | 394.8 | 395.1 | 395.1 | 394.8 | 394.6 | 394.3 | 394.0 |
| 122.5° | 420.6 | 420.7 | 420.9 | 420.8 | 420.6 | 420.3 | 420.1 | 419.8 |
| 125° | 457.0 | 457.4 | 457.8 | 458.1 | 458.2 | 458.3 | 458.4 | 458.6 |
| 127.5° | 493.2 | 493.1 | 493.0 | 492.9 | 492.8 | 492.7 | 492.6 | 492.5 |
| 130° | 515.2 | 515.3 | 515.5 | 515.5 | 515.5 | 515.5 | 515.5 | 515.5 |
| 132.5° | 536.9 | 537.0 | 537.1 | 537.1 | 537.0 | 536.9 | 536.8 | 536.7 |
| 135° | 566.7 | 567.0 | 567.2 | 567.5 | 567.7 | 568.0 | 568.4 | 568.6 |
| 137.5° | 595.4 | 595.7 | 595.9 | 596.0 | 596.0 | 595.9 | 595.8 | 595.7 |
| 140° | 613.1 | 613.5 | 613.9 | 614.1 | 614.3 | 614.4 | 614.5 | 614.6 |
| 142.5° | 629.4 | 629.8 | 630.1 | 630.3 | 630.3 | 630.3 | 630.3 | 630.4 |
| 145° | 652.9 | 653.1 | 653.2 | 653.4 | 653.6 | 653.9 | 654.2 | 654.4 |
| 147.5° | 673.5 | 673.6 | 673.7 | 673.8 | 674.0 | 674.1 | 674.2 | 674.3 |
| 150° | 686.6 | 686.6 | 686.6 | 686.7 | 686.8 | 687.0 | 687.1 | 687.2 |
| 152.5° | 698.1 | 698.3 | 698.5 | 698.6 | 698.5 | 698.4 | 698.3 | 698.3 |
| 155° | 713.6 | 714.1 | 714.6 | 714.7 | 714.3 | 713.9 | 713.6 | 713.2 |
| 157.5° | 726.9 | 727.6 | 728.2 | 728.2 | 727.6 | 726.9 | 726.3 | 725.6 |
| 160° | 735.4 | 736.2 | 737.0 | 737.0 | 736.2 | 735.4 | 734.7 | 733.9 |
| 162.5° | 742.4 | 743.1 | 743.9 | 743.9 | 743.0 | 742.0 | 741.2 | 740.3 |
| 165° | 752.0 | 753.1 | 754.2 | 754.1 | 752.9 | 751.7 | 750.6 | 749.4 |
| 167.5° | 759.2 | 760.3 | 761.4 | 761.3 | 760.1 | 758.8 | 757.5 | 756.3 |
| 170° | 763.6 | 764.6 | 765.7 | 765.5 | 764.3 | 763.0 | 761.6 | 760.4 |
| 172.5° | 766.4 | 767.4 | 768.4 | 768.2 | 766.9 | 765.5 | 764.1 | 762.7 |
| 175° | 769.6 | 770.7 | 771.9 | 771.7 | 770.2 | 768.6 | 767.1 | 765.6 |
| 177.5° | 770.9 | 771.7 | 772.5 | 772.3 | 771.1 | 769.9 | 768.6 | 767.4 |
| 180° | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 | 770.2 |

(END OF REPORT)