

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: P331746-840

Luminaire Tested: **SA2XXRDIP-C1005D530U840-4F0-1E-UDD-F4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331746-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-C1005D530U840-4F0-1E-UDD-F4
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1005 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 530 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5604.0 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

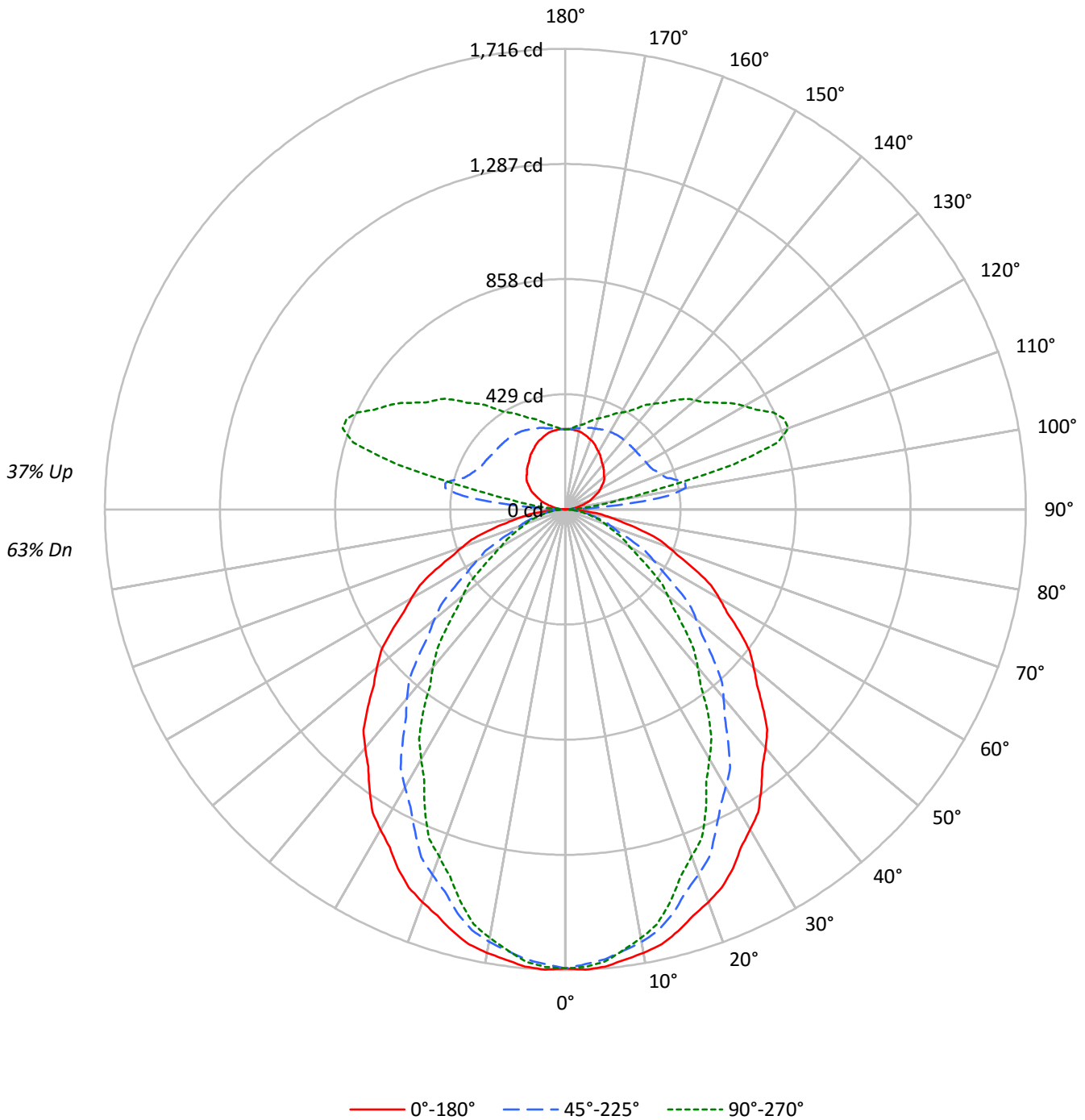
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331746-840

CATALOG NUMBER: SA2XXRDIP-C1005D530U840-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P331746-840

CATALOG NUMBER: SA2XXRDIP-C1005D530U840-4F0-1E-UDD-F4

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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 90 | 90 | 90 | 79 | 79 | 79 | 68 | 68 | 68 | 63 | | | | |
| 1 | 101 | 97 | 93 | 90 | 95 | 91 | 88 | 85 | 80 | 78 | 76 | 70 | 68 | 67 | 61 | 60 | 59 | 54 | | | | |
| 2 | 93 | 85 | 80 | 74 | 87 | 80 | 75 | 71 | 71 | 67 | 64 | 62 | 59 | 57 | 54 | 52 | 50 | 46 | | | | |
| 3 | 85 | 76 | 69 | 63 | 79 | 71 | 65 | 60 | 63 | 58 | 54 | 56 | 52 | 49 | 49 | 46 | 43 | 40 | | | | |
| 4 | 78 | 67 | 60 | 54 | 73 | 64 | 57 | 51 | 57 | 51 | 47 | 50 | 46 | 42 | 44 | 41 | 38 | 35 | | | | |
| 5 | 72 | 61 | 52 | 47 | 67 | 57 | 50 | 45 | 51 | 45 | 41 | 45 | 41 | 37 | 40 | 36 | 33 | 31 | | | | |
| 6 | 67 | 55 | 47 | 41 | 62 | 52 | 44 | 39 | 46 | 40 | 36 | 41 | 36 | 33 | 36 | 33 | 30 | 27 | | | | |
| 7 | 62 | 50 | 42 | 36 | 58 | 47 | 40 | 35 | 42 | 36 | 32 | 38 | 33 | 29 | 33 | 30 | 27 | 24 | | | | |
| 8 | 57 | 45 | 38 | 32 | 54 | 43 | 36 | 31 | 39 | 33 | 29 | 35 | 30 | 26 | 31 | 27 | 24 | 22 | | | | |
| 9 | 54 | 42 | 34 | 29 | 50 | 39 | 33 | 28 | 36 | 30 | 26 | 32 | 27 | 24 | 29 | 25 | 22 | 20 | | | | |
| 10 | 50 | 38 | 31 | 26 | 47 | 36 | 30 | 25 | 33 | 27 | 24 | 30 | 25 | 22 | 27 | 23 | 20 | 18 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 27611 | 27611 | 27611 |
| 5° | 27716 | 27266 | 27417 |
| 10° | 27506 | 26820 | 26591 |
| 15° | 27189 | 26024 | 25275 |
| 20° | 26751 | 24890 | 23639 |
| 25° | 26302 | 23599 | 22057 |
| 30° | 25682 | 22275 | 20025 |
| 35° | 25074 | 20834 | 18242 |
| 40° | 24464 | 19344 | 16179 |
| 45° | 23749 | 17671 | 14312 |
| 50° | 23016 | 15978 | 12479 |
| 55° | 22261 | 14159 | 10716 |
| 60° | 21390 | 12245 | 8896 |
| 65° | 20397 | 10288 | 8103 |
| 70° | 19218 | 8478 | 7449 |
| 75° | 17767 | 7723 | 6949 |
| 80° | 15676 | 6908 | 6332 |
| 85° | 12338 | 5446 | 5446 |



TEST NUMBER: P331746-840

CATALOG NUMBER: SA2XXRDIP-C1005D530U840-4F0-1E-UDD-F4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 160.1 | 2.9 |
| 10°-20° | 439.5 | 7.8 |
| 20°-30° | 617.2 | 11.0 |
| 30°-40° | 673.0 | 12.0 |
| 40°-50° | 618.8 | 11.0 |
| 50°-60° | 486.0 | 8.7 |
| 60°-70° | 316.9 | 5.7 |
| 70°-80° | 163.4 | 2.9 |
| 80°-90° | 45.1 | 0.8 |
| 90°-100° | 119.7 | 2.1 |
| 100°-110° | 406.3 | 7.3 |
| 110°-120° | 431.7 | 7.7 |
| 120°-130° | 355.4 | 6.3 |
| 130°-140° | 285.4 | 5.1 |
| 140°-150° | 215.7 | 3.8 |
| 150°-160° | 151.6 | 2.7 |
| 160°-170° | 89.2 | 1.6 |
| 170°-180° | 29.0 | 0.5 |
| 0°-30° | 1216.8 | 21.7 |
| 0°-40° | 1889.8 | 33.7 |
| 0°-60° | 2994.7 | 53.4 |
| 0°-90° | 3520.0 | 62.8 |
| 90°-120° | 957.8 | 17.1 |
| 90°-150° | 1814.1 | 32.4 |
| 90°-180° | 2084.0 | 37.2 |
| 0°-180° | 5604.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1710 | 1710 | 1710 | 1710 | 1710 | |
| 5° | 1710 | 1702 | 1682 | 1695 | 1692 | 162 |
| 15° | 1627 | 1608 | 1557 | 1528 | 1512 | 458 |
| 25° | 1476 | 1424 | 1325 | 1264 | 1238 | 679 |
| 35° | 1272 | 1190 | 1057 | 963 | 926 | 796 |
| 45° | 1040 | 933 | 774 | 668 | 627 | 803 |
| 55° | 791 | 668 | 503 | 414 | 381 | 706 |
| 65° | 534 | 408 | 269 | 219 | 212 | 529 |
| 75° | 285 | 180 | 124 | 114 | 111 | 301 |
| 85° | 67 | 36 | 29 | 29 | 29 | 78 |
| 90° | 1 | 8 | 20 | 19 | 19 | 4 |
| 95° | 20 | 50 | 226 | 85 | 66 | 21 |
| 105° | 70 | 106 | 427 | 763 | 649 | 75 |
| 115° | 124 | 156 | 357 | 737 | 854 | 123 |
| 125° | 173 | 204 | 343 | 597 | 693 | 153 |
| 135° | 203 | 242 | 339 | 502 | 574 | 157 |
| 145° | 232 | 266 | 338 | 419 | 458 | 145 |
| 155° | 263 | 284 | 328 | 371 | 385 | 121 |
| 165° | 287 | 295 | 314 | 333 | 338 | 81 |
| 175° | 299 | 299 | 302 | 306 | 305 | 28 |
| 180° | 299 | 299 | 299 | 299 | 299 | |



TEST NUMBER: P331746-840

CATALOG NUMBER: SA2XXRDIP-C1005D530U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 |
| 2.5° | 1716.4 | 1715.0 | 1713.5 | 1712.2 | 1710.8 | 1708.6 | 1705.6 | 1702.6 | 1699.6 | 1696.6 | 1699.3 |
| 5° | 1710.1 | 1708.4 | 1706.7 | 1705.0 | 1703.2 | 1700.2 | 1695.7 | 1691.2 | 1686.8 | 1682.3 | 1685.4 |
| 7.5° | 1692.5 | 1690.4 | 1688.3 | 1686.1 | 1683.9 | 1680.3 | 1675.1 | 1669.8 | 1664.7 | 1659.4 | 1660.3 |
| 10° | 1677.7 | 1675.3 | 1672.8 | 1670.4 | 1668.0 | 1663.3 | 1656.5 | 1649.6 | 1642.7 | 1635.9 | 1634.9 |
| 12.5° | 1659.1 | 1656.1 | 1653.1 | 1650.2 | 1647.3 | 1641.3 | 1632.5 | 1623.8 | 1615.0 | 1606.2 | 1604.3 |
| 15° | 1626.6 | 1622.8 | 1619.0 | 1615.2 | 1611.4 | 1603.7 | 1592.1 | 1580.3 | 1568.6 | 1556.9 | 1550.4 |
| 17.5° | 1586.6 | 1580.8 | 1575.1 | 1569.3 | 1563.6 | 1553.2 | 1538.1 | 1523.2 | 1508.1 | 1493.2 | 1485.4 |
| 20° | 1556.9 | 1550.0 | 1543.2 | 1536.3 | 1529.4 | 1517.4 | 1500.2 | 1483.0 | 1465.8 | 1448.6 | 1440.0 |
| 22.5° | 1524.7 | 1517.0 | 1509.3 | 1501.7 | 1493.9 | 1480.4 | 1461.0 | 1441.6 | 1422.2 | 1402.8 | 1391.7 |
| 25° | 1476.4 | 1465.4 | 1454.4 | 1443.4 | 1432.4 | 1415.6 | 1392.9 | 1370.2 | 1347.5 | 1324.7 | 1310.7 |
| 27.5° | 1418.3 | 1406.3 | 1394.3 | 1382.4 | 1370.4 | 1351.6 | 1326.1 | 1300.4 | 1274.9 | 1249.3 | 1232.8 |
| 30° | 1377.5 | 1364.3 | 1351.3 | 1338.2 | 1325.1 | 1304.8 | 1277.3 | 1249.8 | 1222.3 | 1194.8 | 1177.2 |
| 32.5° | 1337.8 | 1322.5 | 1307.3 | 1292.0 | 1276.7 | 1255.1 | 1227.0 | 1198.9 | 1170.8 | 1142.8 | 1122.8 |
| 35° | 1272.1 | 1254.7 | 1237.1 | 1219.5 | 1202.0 | 1178.1 | 1147.8 | 1117.6 | 1087.3 | 1057.0 | 1035.4 |
| 37.5° | 1206.6 | 1187.3 | 1168.0 | 1148.7 | 1129.5 | 1103.8 | 1071.5 | 1039.3 | 1006.9 | 974.7 | 950.9 |
| 40° | 1160.7 | 1140.1 | 1119.4 | 1098.8 | 1078.2 | 1051.2 | 1017.8 | 984.5 | 951.1 | 917.8 | 893.3 |
| 42.5° | 1113.7 | 1092.0 | 1070.3 | 1048.4 | 1026.7 | 998.7 | 964.2 | 929.7 | 895.2 | 860.8 | 835.6 |
| 45° | 1040.1 | 1016.9 | 993.9 | 970.9 | 947.9 | 918.3 | 882.1 | 846.1 | 809.9 | 773.9 | 749.4 |
| 47.5° | 968.2 | 943.8 | 919.4 | 894.9 | 870.5 | 839.7 | 802.4 | 765.1 | 727.8 | 690.5 | 666.3 |
| 50° | 916.3 | 891.8 | 867.4 | 842.9 | 818.5 | 787.4 | 749.6 | 711.8 | 673.9 | 636.1 | 612.4 |
| 52.5° | 865.5 | 839.9 | 814.5 | 788.9 | 763.4 | 732.2 | 695.1 | 658.1 | 621.1 | 584.1 | 561.2 |
| 55° | 790.8 | 764.1 | 737.2 | 710.3 | 683.6 | 651.6 | 614.4 | 577.2 | 540.2 | 503.0 | 482.3 |
| 57.5° | 714.4 | 686.9 | 659.3 | 631.9 | 604.3 | 572.7 | 537.0 | 501.3 | 465.6 | 429.9 | 411.0 |
| 60° | 662.4 | 634.9 | 607.3 | 579.9 | 552.3 | 520.9 | 485.4 | 450.0 | 414.5 | 379.2 | 361.6 |
| 62.5° | 611.7 | 584.1 | 556.6 | 529.1 | 501.6 | 470.9 | 437.2 | 403.3 | 369.6 | 335.9 | 319.1 |
| 65° | 533.9 | 506.0 | 478.3 | 450.4 | 422.5 | 393.1 | 362.1 | 331.2 | 300.2 | 269.3 | 257.6 |
| 67.5° | 459.0 | 431.4 | 403.7 | 376.1 | 348.4 | 320.6 | 292.9 | 265.0 | 237.1 | 209.2 | 203.9 |
| 70° | 407.1 | 380.2 | 353.4 | 326.6 | 299.7 | 274.5 | 250.7 | 227.0 | 203.3 | 179.6 | 176.1 |
| 72.5° | 357.5 | 331.7 | 306.1 | 280.3 | 254.6 | 232.2 | 213.2 | 194.1 | 175.0 | 156.0 | 153.1 |
| 75° | 284.8 | 260.6 | 236.6 | 212.6 | 188.4 | 170.6 | 158.9 | 147.2 | 135.5 | 123.8 | 121.4 |
| 77.5° | 213.3 | 192.2 | 171.1 | 150.0 | 128.8 | 115.4 | 109.8 | 104.1 | 98.5 | 92.9 | 91.5 |
| 80° | 168.6 | 151.2 | 133.6 | 116.0 | 98.6 | 88.1 | 84.6 | 81.2 | 77.8 | 74.3 | 72.9 |
| 82.5° | 127.8 | 114.1 | 100.5 | 86.7 | 73.1 | 65.0 | 62.7 | 60.4 | 58.1 | 55.7 | 54.9 |
| 85° | 66.6 | 59.3 | 52.1 | 44.8 | 37.7 | 33.5 | 32.5 | 31.5 | 30.4 | 29.4 | 29.4 |
| 87.5° | 19.9 | 18.1 | 16.4 | 14.3 | 12.4 | 11.6 | 12.2 | 13.0 | 13.7 | 13.8 | 13.4 |
| 90° | 0.6 | 2.3 | 4.6 | 5.8 | 6.9 | 8.7 | 11.5 | 15.6 | 19.0 | 19.6 | 19.0 |
| 92.5° | 7.1 | 10.1 | 14.2 | 16.9 | 20.7 | 26.2 | 39.2 | 57.5 | 73.8 | 74.8 | 63.2 |
| 95° | 20.2 | 22.4 | 28.2 | 33.4 | 42.6 | 56.5 | 82.9 | 133.0 | 199.9 | 225.8 | 197.5 |
| 97.5° | 32.8 | 36.0 | 42.0 | 49.9 | 60.5 | 76.1 | 109.5 | 179.3 | 290.2 | 385.4 | 404.2 |
| 100° | 44.3 | 46.0 | 51.3 | 60.5 | 72.0 | 88.2 | 118.7 | 188.9 | 313.3 | 454.9 | 537.9 |
| 102.5° | 54.9 | 56.2 | 61.4 | 70.6 | 82.6 | 98.7 | 126.9 | 189.3 | 304.6 | 457.3 | 587.6 |
| 105° | 70.3 | 72.6 | 76.5 | 85.2 | 97.9 | 114.0 | 141.1 | 192.4 | 287.4 | 426.8 | 580.0 |
| 107.5° | 86.8 | 88.7 | 92.6 | 100.6 | 113.1 | 129.4 | 155.6 | 200.3 | 278.8 | 394.0 | 529.4 |
| 110° | 97.9 | 100.2 | 103.7 | 111.2 | 123.2 | 140.0 | 165.3 | 206.7 | 277.0 | 378.4 | 497.6 |



TEST NUMBER: P331746-840

CATALOG NUMBER: SA2XXRDIP-C1005D530U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 108.1 | 110.4 | 114.2 | 121.3 | 132.9 | 150.1 | 174.5 | 213.7 | 277.5 | 368.2 | 475.4 |
| 115° | 123.8 | 126.7 | 130.2 | 137.0 | 148.6 | 164.1 | 188.9 | 224.0 | 279.9 | 357.1 | 448.1 |
| 117.5° | 140.2 | 142.5 | 145.9 | 152.1 | 163.1 | 179.3 | 202.2 | 235.1 | 284.1 | 351.6 | 430.8 |
| 120° | 150.3 | 152.6 | 156.0 | 161.3 | 172.8 | 188.9 | 211.4 | 242.5 | 286.8 | 348.4 | 421.6 |
| 122.5° | 160.0 | 161.9 | 165.3 | 171.0 | 182.5 | 199.0 | 220.2 | 248.9 | 290.0 | 346.6 | 413.7 |
| 125° | 172.8 | 174.5 | 177.9 | 184.9 | 196.4 | 212.5 | 233.3 | 259.1 | 294.9 | 343.3 | 402.5 |
| 127.5° | 182.9 | 185.2 | 190.1 | 197.6 | 208.7 | 225.3 | 245.5 | 268.7 | 299.8 | 341.3 | 392.2 |
| 130° | 188.9 | 191.2 | 196.9 | 205.0 | 216.5 | 232.7 | 252.9 | 274.7 | 303.5 | 340.3 | 385.3 |
| 132.5° | 194.4 | 197.2 | 203.4 | 212.0 | 223.9 | 240.0 | 259.2 | 280.7 | 307.2 | 339.9 | 379.7 |
| 135° | 202.7 | 205.0 | 212.0 | 220.6 | 233.8 | 249.9 | 268.4 | 288.5 | 311.5 | 339.2 | 372.0 |
| 137.5° | 210.6 | 213.3 | 220.3 | 229.4 | 242.6 | 257.5 | 275.8 | 294.5 | 315.5 | 339.1 | 366.6 |
| 140° | 216.5 | 218.8 | 225.8 | 235.0 | 247.6 | 262.7 | 279.9 | 297.7 | 317.3 | 338.6 | 363.5 |
| 142.5° | 222.6 | 224.4 | 230.9 | 240.0 | 252.3 | 266.3 | 283.2 | 300.5 | 318.7 | 338.6 | 360.2 |
| 145° | 231.6 | 233.8 | 239.5 | 248.2 | 259.7 | 272.4 | 287.9 | 304.1 | 320.2 | 337.5 | 355.9 |
| 147.5° | 241.2 | 242.9 | 248.4 | 256.4 | 266.0 | 277.2 | 291.9 | 306.1 | 320.6 | 335.4 | 351.5 |
| 150° | 247.6 | 249.3 | 254.0 | 261.5 | 270.1 | 280.4 | 293.7 | 307.0 | 320.2 | 334.1 | 347.9 |
| 152.5° | 254.1 | 254.9 | 259.5 | 266.1 | 274.3 | 283.7 | 295.6 | 307.4 | 319.3 | 331.7 | 344.7 |
| 155° | 263.2 | 263.8 | 267.2 | 273.6 | 279.9 | 288.5 | 298.3 | 308.1 | 317.9 | 327.7 | 338.6 |
| 157.5° | 270.7 | 271.4 | 274.2 | 279.6 | 284.8 | 292.0 | 300.2 | 308.1 | 315.3 | 323.6 | 333.0 |
| 160° | 275.9 | 276.4 | 278.7 | 283.4 | 287.9 | 294.3 | 301.2 | 308.1 | 313.9 | 320.8 | 328.8 |
| 162.5° | 280.9 | 280.5 | 282.9 | 286.6 | 290.7 | 295.7 | 301.6 | 307.6 | 312.5 | 318.5 | 325.2 |
| 165° | 286.8 | 286.2 | 287.4 | 290.8 | 293.7 | 297.2 | 302.4 | 306.4 | 309.8 | 313.9 | 319.0 |
| 167.5° | 291.6 | 290.9 | 292.0 | 294.2 | 296.3 | 298.4 | 302.3 | 305.6 | 307.2 | 309.8 | 313.1 |
| 170° | 294.9 | 293.7 | 294.3 | 296.0 | 297.2 | 298.9 | 301.7 | 304.7 | 305.8 | 307.5 | 309.8 |
| 172.5° | 296.7 | 296.0 | 295.7 | 297.4 | 298.1 | 299.3 | 301.3 | 303.3 | 304.0 | 304.8 | 306.6 |
| 175° | 298.9 | 298.3 | 297.7 | 298.9 | 298.9 | 299.4 | 300.6 | 301.7 | 301.2 | 301.7 | 302.4 |
| 177.5° | 299.9 | 299.0 | 298.5 | 299.4 | 299.4 | 299.4 | 299.9 | 300.8 | 299.9 | 299.4 | 299.9 |
| 180° | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 |



TEST NUMBER: P331746-840

CATALOG NUMBER: SA2XXRDIP-C1005D530U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 | 1710.1 |
| 2.5° | 1702.0 | 1704.8 | 1707.6 | 1708.6 | 1708.1 | 1707.6 | 1707.0 | 1706.5 |
| 5° | 1688.5 | 1691.6 | 1694.7 | 1695.7 | 1694.7 | 1693.6 | 1692.6 | 1691.6 |
| 7.5° | 1661.1 | 1662.0 | 1662.9 | 1662.5 | 1660.7 | 1658.9 | 1657.2 | 1655.4 |
| 10° | 1633.8 | 1632.7 | 1631.7 | 1630.2 | 1628.1 | 1626.1 | 1624.0 | 1621.9 |
| 12.5° | 1602.5 | 1600.5 | 1598.7 | 1596.1 | 1592.7 | 1589.2 | 1585.8 | 1582.4 |
| 15° | 1543.9 | 1537.3 | 1530.8 | 1525.8 | 1522.4 | 1518.9 | 1515.5 | 1512.1 |
| 17.5° | 1477.6 | 1469.9 | 1462.1 | 1455.2 | 1449.4 | 1443.4 | 1437.4 | 1431.6 |
| 20° | 1431.4 | 1422.8 | 1414.2 | 1406.1 | 1398.6 | 1391.0 | 1383.4 | 1375.8 |
| 22.5° | 1380.7 | 1369.6 | 1358.5 | 1350.1 | 1344.5 | 1338.9 | 1333.2 | 1327.6 |
| 25° | 1296.6 | 1282.5 | 1268.4 | 1258.8 | 1253.5 | 1248.4 | 1243.2 | 1238.1 |
| 27.5° | 1216.4 | 1199.9 | 1183.5 | 1171.1 | 1163.0 | 1154.8 | 1146.6 | 1138.4 |
| 30° | 1159.7 | 1142.2 | 1124.6 | 1111.3 | 1102.0 | 1092.7 | 1083.4 | 1074.1 |
| 32.5° | 1102.8 | 1082.8 | 1062.7 | 1048.3 | 1039.7 | 1030.9 | 1022.1 | 1013.4 |
| 35° | 1013.7 | 992.1 | 970.4 | 955.7 | 948.2 | 940.6 | 933.0 | 925.5 |
| 37.5° | 927.0 | 903.1 | 879.2 | 862.9 | 854.3 | 845.7 | 837.0 | 828.3 |
| 40° | 868.9 | 844.4 | 820.1 | 803.4 | 794.5 | 785.5 | 776.6 | 767.6 |
| 42.5° | 810.3 | 785.1 | 759.8 | 742.9 | 734.2 | 725.5 | 716.9 | 708.2 |
| 45° | 725.0 | 700.5 | 676.1 | 659.8 | 651.6 | 643.3 | 635.0 | 626.8 |
| 47.5° | 642.0 | 617.7 | 593.4 | 577.5 | 570.1 | 562.6 | 555.0 | 547.5 |
| 50° | 588.7 | 564.9 | 541.2 | 525.6 | 518.5 | 511.2 | 504.0 | 496.8 |
| 52.5° | 538.3 | 515.3 | 492.5 | 477.7 | 471.0 | 464.3 | 457.7 | 451.0 |
| 55° | 461.7 | 441.1 | 420.4 | 406.9 | 400.3 | 393.7 | 387.3 | 380.7 |
| 57.5° | 392.1 | 373.1 | 354.3 | 342.0 | 336.6 | 331.0 | 325.6 | 320.0 |
| 60° | 344.1 | 326.6 | 309.0 | 297.5 | 292.0 | 286.5 | 280.9 | 275.5 |
| 62.5° | 302.5 | 285.7 | 269.0 | 258.9 | 255.7 | 252.4 | 249.0 | 245.8 |
| 65° | 245.9 | 234.2 | 222.5 | 216.1 | 215.1 | 214.1 | 213.1 | 212.1 |
| 67.5° | 198.5 | 193.2 | 187.7 | 184.5 | 183.5 | 182.4 | 181.3 | 180.2 |
| 70° | 172.7 | 169.3 | 165.8 | 163.4 | 162.0 | 160.6 | 159.3 | 157.8 |
| 72.5° | 150.3 | 147.3 | 144.4 | 142.6 | 141.8 | 141.0 | 140.1 | 139.3 |
| 75° | 119.0 | 116.6 | 114.2 | 112.8 | 112.5 | 112.1 | 111.8 | 111.4 |
| 77.5° | 90.1 | 88.8 | 87.4 | 86.3 | 85.8 | 85.3 | 84.7 | 84.2 |
| 80° | 71.5 | 70.2 | 68.8 | 68.1 | 68.1 | 68.1 | 68.1 | 68.1 |
| 82.5° | 54.0 | 53.2 | 52.4 | 52.0 | 52.0 | 52.0 | 52.0 | 52.0 |
| 85° | 29.4 | 29.4 | 29.4 | 29.4 | 29.4 | 29.4 | 29.4 | 29.4 |
| 87.5° | 13.0 | 12.5 | 12.5 | 12.4 | 12.4 | 12.4 | 12.4 | 12.4 |
| 90° | 18.4 | 17.3 | 18.4 | 19.0 | 19.0 | 19.0 | 19.0 | 19.0 |
| 92.5° | 50.2 | 43.1 | 38.3 | 34.6 | 34.2 | 32.4 | 32.8 | 31.9 |
| 95° | 150.9 | 115.7 | 91.6 | 78.9 | 71.4 | 66.9 | 65.0 | 65.6 |
| 97.5° | 352.1 | 288.1 | 225.8 | 184.2 | 156.6 | 142.5 | 134.1 | 129.3 |
| 100° | 525.8 | 454.4 | 375.5 | 305.8 | 258.0 | 233.3 | 216.5 | 206.2 |
| 102.5° | 639.6 | 623.5 | 565.8 | 491.9 | 440.0 | 397.7 | 376.9 | 362.8 |
| 105° | 699.7 | 764.8 | 772.3 | 753.3 | 717.6 | 681.9 | 657.1 | 649.0 |
| 107.5° | 656.4 | 754.5 | 814.4 | 842.2 | 846.7 | 844.8 | 839.8 | 829.1 |
| 110° | 619.1 | 722.2 | 795.9 | 843.1 | 867.9 | 878.9 | 884.0 | 883.4 |



TEST NUMBER: P331746-840

CATALOG NUMBER: SA2XXRDIP-C1005D530U840-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 585.0 | 684.0 | 762.8 | 816.9 | 851.3 | 869.6 | 879.4 | 882.5 |
| 115° | 543.1 | 631.8 | 707.2 | 766.6 | 807.4 | 833.9 | 848.9 | 854.0 |
| 117.5° | 511.5 | 589.4 | 657.8 | 713.5 | 755.2 | 783.2 | 798.9 | 803.2 |
| 120° | 495.8 | 567.2 | 628.3 | 680.8 | 721.0 | 748.1 | 764.8 | 770.5 |
| 122.5° | 483.4 | 548.9 | 606.6 | 654.0 | 690.1 | 716.8 | 731.6 | 736.5 |
| 125° | 465.3 | 524.6 | 575.3 | 618.5 | 652.0 | 673.8 | 688.2 | 692.9 |
| 127.5° | 447.5 | 501.2 | 549.0 | 588.9 | 617.9 | 638.4 | 650.9 | 654.6 |
| 130° | 436.0 | 485.5 | 531.0 | 569.0 | 597.2 | 616.8 | 628.3 | 632.9 |
| 132.5° | 425.0 | 470.8 | 512.6 | 548.3 | 576.0 | 595.6 | 606.2 | 610.4 |
| 135° | 409.5 | 447.5 | 485.5 | 517.8 | 542.5 | 561.5 | 571.9 | 574.2 |
| 137.5° | 397.2 | 429.0 | 459.1 | 487.3 | 509.8 | 526.1 | 535.2 | 538.7 |
| 140° | 389.3 | 417.0 | 443.4 | 468.8 | 487.3 | 502.2 | 510.8 | 514.3 |
| 142.5° | 382.8 | 406.4 | 429.2 | 450.4 | 467.9 | 481.5 | 489.2 | 489.9 |
| 145° | 373.8 | 392.7 | 410.6 | 427.4 | 441.1 | 450.9 | 456.7 | 458.4 |
| 147.5° | 366.8 | 381.7 | 395.7 | 407.9 | 419.3 | 427.1 | 431.0 | 432.0 |
| 150° | 361.6 | 374.4 | 386.5 | 396.8 | 405.5 | 412.3 | 415.8 | 416.4 |
| 152.5° | 356.6 | 368.4 | 378.6 | 387.6 | 394.4 | 400.4 | 402.9 | 403.0 |
| 155° | 349.6 | 358.8 | 367.4 | 373.8 | 380.1 | 384.2 | 386.5 | 385.3 |
| 157.5° | 341.4 | 349.1 | 356.4 | 361.3 | 365.8 | 369.2 | 370.2 | 370.2 |
| 160° | 336.3 | 342.6 | 349.0 | 353.0 | 357.1 | 359.9 | 360.5 | 360.5 |
| 162.5° | 331.2 | 336.7 | 342.1 | 345.2 | 349.2 | 351.2 | 351.7 | 351.3 |
| 165° | 323.7 | 327.7 | 331.7 | 334.1 | 336.3 | 338.6 | 338.6 | 338.1 |
| 167.5° | 316.4 | 319.5 | 322.2 | 324.4 | 325.4 | 326.7 | 326.6 | 325.9 |
| 170° | 312.8 | 314.5 | 316.8 | 317.9 | 318.5 | 320.2 | 319.6 | 318.5 |
| 172.5° | 308.6 | 309.8 | 311.6 | 312.4 | 313.0 | 313.8 | 313.2 | 312.5 |
| 175° | 304.1 | 304.7 | 305.3 | 305.8 | 305.8 | 306.4 | 305.8 | 304.7 |
| 177.5° | 300.8 | 300.8 | 301.3 | 301.3 | 301.3 | 301.3 | 300.8 | 299.9 |
| 180° | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 | 299.4 |

(END OF REPORT)