

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: P331745-830

Luminaire Tested: **SA2XXRDIP-C1005D530U830-4F0-1E-UDD-F1**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331745-830  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: SA2XXRDIP-C1005D530U830-4F0-1E-UDD-F1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1005 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 530 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

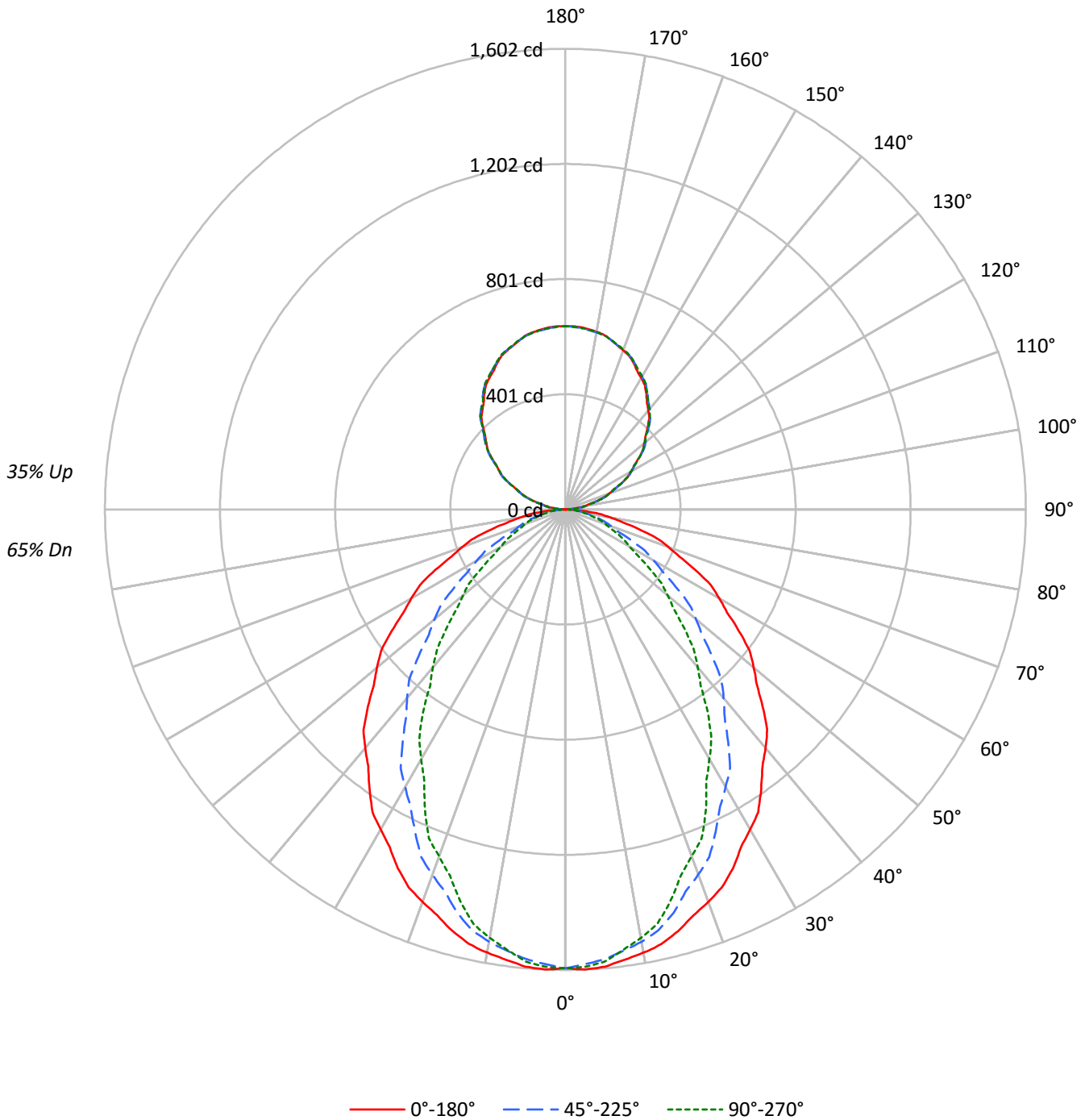
Lumens per Lamp: N/A  
Luminaire Lumens: 5066.3 lumens  
Efficiency: N/A  
Efficacy: 91.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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: P331745-830  
CATALOG NUMBER: SA2XXRDIP-C1005D530U830-4F0-1E-UDD-F1

### Luminous Intensity Polar Plot





TEST NUMBER: P331745-830

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**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   | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 92 | 92 | 92 | 80 | 80 | 80 | 70 | 70 | 70 | 65 |    |    |    |   |
| 1   | 102 | 98  | 94  | 90  | 96  | 92  | 89  | 86  | 81 | 79 | 77 | 72 | 70 | 68 | 63 | 61 | 60 | 56 |    |    |    |   |
| 2   | 93  | 86  | 80  | 75  | 87  | 81  | 76  | 71  | 72 | 68 | 64 | 64 | 61 | 58 | 56 | 54 | 52 | 48 |    |    |    |   |
| 3   | 85  | 76  | 69  | 63  | 80  | 72  | 66  | 60  | 64 | 59 | 55 | 57 | 53 | 50 | 50 | 47 | 45 | 41 |    |    |    |   |
| 4   | 78  | 68  | 60  | 54  | 74  | 64  | 57  | 52  | 57 | 52 | 47 | 51 | 47 | 43 | 45 | 42 | 39 | 36 |    |    |    |   |
| 5   | 72  | 61  | 53  | 47  | 68  | 58  | 50  | 45  | 52 | 46 | 41 | 46 | 42 | 38 | 41 | 37 | 34 | 32 |    |    |    |   |
| 6   | 67  | 55  | 47  | 41  | 63  | 52  | 45  | 40  | 47 | 41 | 37 | 42 | 37 | 34 | 37 | 34 | 31 | 28 |    |    |    |   |
| 7   | 62  | 50  | 42  | 36  | 58  | 47  | 40  | 35  | 43 | 37 | 33 | 38 | 34 | 30 | 34 | 30 | 28 | 25 |    |    |    |   |
| 8   | 58  | 46  | 38  | 33  | 54  | 43  | 36  | 31  | 39 | 33 | 29 | 35 | 31 | 27 | 32 | 28 | 25 | 23 |    |    |    |   |
| 9   | 54  | 42  | 34  | 29  | 51  | 40  | 33  | 28  | 36 | 30 | 26 | 33 | 28 | 25 | 29 | 26 | 23 | 21 |    |    |    |   |
| 10  | 51  | 39  | 31  | 27  | 48  | 37  | 30  | 26  | 34 | 28 | 24 | 30 | 26 | 22 | 27 | 24 | 21 | 19 |    |    |    |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 25770 | 25770 | 25770 |
| 5°  | 25869 | 25449 | 25590 |
| 10° | 25671 | 25032 | 24819 |
| 15° | 25377 | 24289 | 23590 |
| 20° | 24967 | 23230 | 22063 |
| 25° | 24549 | 22026 | 20587 |
| 30° | 23968 | 20789 | 18690 |
| 35° | 23402 | 19446 | 17026 |
| 40° | 22835 | 18054 | 15099 |
| 45° | 22165 | 16493 | 13358 |
| 50° | 21481 | 14913 | 11645 |
| 55° | 20777 | 13216 | 10001 |
| 60° | 19963 | 11428 | 8302  |
| 65° | 19037 | 9605  | 7561  |
| 70° | 17934 | 7912  | 6954  |
| 75° | 16581 | 7211  | 6488  |
| 80° | 14635 | 6453  | 5904  |
| 85° | 11504 | 5076  | 5076  |



TEST NUMBER: P331745-830

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 149.4  | 2.9       |
| 10°-20°   | 410.2  | 8.1       |
| 20°-30°   | 576.1  | 11.4      |
| 30°-40°   | 628.2  | 12.4      |
| 40°-50°   | 577.6  | 11.4      |
| 50°-60°   | 453.6  | 9.0       |
| 60°-70°   | 295.8  | 5.8       |
| 70°-80°   | 152.5  | 3.0       |
| 80°-90°   | 42.1   | 0.8       |
| 90°-100°  | 40.4   | 0.8       |
| 100°-110° | 125.3  | 2.5       |
| 110°-120° | 214.3  | 4.2       |
| 120°-130° | 281.8  | 5.6       |
| 130°-140° | 316.2  | 6.2       |
| 140°-150° | 310.1  | 6.1       |
| 150°-160° | 260.1  | 5.1       |
| 160°-170° | 172.5  | 3.4       |
| 170°-180° | 60.3   | 1.2       |
| 0°-30°    | 1135.7 | 22.4      |
| 0°-40°    | 1763.9 | 34.8      |
| 0°-60°    | 2795.1 | 55.2      |
| 0°-90°    | 3285.4 | 64.8      |
| 90°-120°  | 380.0  | 7.5       |
| 90°-150°  | 1288.0 | 25.4      |
| 90°-180°  | 1781.0 | 35.2      |
| 0°-180°   | 5066.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1596 | 1596  | 1596 | 1596  | 1596 |      |
| 5°   | 1596 | 1588  | 1570 | 1582  | 1579 | 151  |
| 15°  | 1518 | 1500  | 1453 | 1426  | 1411 | 427  |
| 25°  | 1378 | 1329  | 1236 | 1179  | 1156 | 633  |
| 35°  | 1187 | 1111  | 987  | 899   | 864  | 743  |
| 45°  | 971  | 871   | 722  | 623   | 585  | 749  |
| 55°  | 738  | 623   | 470  | 386   | 355  | 659  |
| 65°  | 498  | 381   | 251  | 205   | 198  | 494  |
| 75°  | 266  | 168   | 116  | 106   | 104  | 281  |
| 85°  | 62   | 33    | 27   | 27    | 27   | 73   |
| 90°  | 1    | 7     | 19   | 18    | 18   | 4    |
| 95°  | 28   | 33    | 34   | 34    | 33   | 32   |
| 105° | 116  | 117   | 118  | 119   | 119  | 122  |
| 115° | 215  | 218   | 217  | 217   | 215  | 213  |
| 125° | 313  | 317   | 316  | 314   | 314  | 279  |
| 135° | 405  | 410   | 412  | 411   | 410  | 312  |
| 145° | 491  | 495   | 498  | 499   | 497  | 307  |
| 155° | 562  | 563   | 565  | 567   | 566  | 258  |
| 165° | 611  | 611   | 611  | 614   | 612  | 172  |
| 175° | 636  | 634   | 633  | 637   | 634  | 60   |
| 180° | 637  | 637   | 637  | 637   | 637  |      |



TEST NUMBER: P331745-830

CATALOG NUMBER: SA2XXRDIP-C1005D530U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 |
| 2.5°   | 1601.9 | 1600.6 | 1599.3 | 1598.1 | 1596.8 | 1594.7 | 1591.9 | 1589.1 | 1586.3 | 1583.5 | 1586.0 |
| 5°     | 1596.1 | 1594.5 | 1592.9 | 1591.3 | 1589.7 | 1586.9 | 1582.6 | 1578.5 | 1574.3 | 1570.2 | 1573.0 |
| 7.5°   | 1579.7 | 1577.7 | 1575.7 | 1573.7 | 1571.7 | 1568.3 | 1563.4 | 1558.5 | 1553.7 | 1548.8 | 1549.6 |
| 10°    | 1565.8 | 1563.6 | 1561.3 | 1559.1 | 1556.8 | 1552.5 | 1546.1 | 1539.6 | 1533.2 | 1526.8 | 1525.9 |
| 12.5°  | 1548.5 | 1545.7 | 1542.9 | 1540.2 | 1537.5 | 1531.9 | 1523.7 | 1515.5 | 1507.3 | 1499.1 | 1497.3 |
| 15°    | 1518.2 | 1514.6 | 1511.1 | 1507.5 | 1504.0 | 1496.8 | 1485.9 | 1475.0 | 1464.1 | 1453.1 | 1447.1 |
| 17.5°  | 1480.8 | 1475.5 | 1470.1 | 1464.7 | 1459.3 | 1449.6 | 1435.6 | 1421.6 | 1407.6 | 1393.6 | 1386.4 |
| 20°    | 1453.1 | 1446.7 | 1440.3 | 1433.9 | 1427.5 | 1416.3 | 1400.1 | 1384.1 | 1368.1 | 1352.0 | 1344.0 |
| 22.5°  | 1423.1 | 1415.9 | 1408.7 | 1401.6 | 1394.3 | 1381.7 | 1363.6 | 1345.5 | 1327.4 | 1309.3 | 1298.9 |
| 25°    | 1378.0 | 1367.7 | 1357.4 | 1347.2 | 1336.9 | 1321.3 | 1300.0 | 1278.8 | 1257.6 | 1236.4 | 1223.3 |
| 27.5°  | 1323.7 | 1312.6 | 1301.4 | 1290.2 | 1279.0 | 1261.5 | 1237.7 | 1213.7 | 1189.9 | 1166.0 | 1150.7 |
| 30°    | 1285.6 | 1273.4 | 1261.2 | 1249.0 | 1236.8 | 1217.9 | 1192.1 | 1166.5 | 1140.9 | 1115.1 | 1098.7 |
| 32.5°  | 1248.6 | 1234.4 | 1220.1 | 1205.9 | 1191.6 | 1171.4 | 1145.2 | 1119.0 | 1092.8 | 1066.6 | 1047.9 |
| 35°    | 1187.3 | 1171.0 | 1154.6 | 1138.2 | 1121.9 | 1099.6 | 1071.3 | 1043.1 | 1014.8 | 986.6  | 966.4  |
| 37.5°  | 1126.1 | 1108.1 | 1090.1 | 1072.1 | 1054.2 | 1030.2 | 1000.0 | 970.0  | 939.8  | 909.7  | 887.5  |
| 40°    | 1083.4 | 1064.1 | 1044.8 | 1025.6 | 1006.4 | 981.1  | 950.0  | 918.9  | 887.7  | 856.6  | 833.8  |
| 42.5°  | 1039.4 | 1019.2 | 998.9  | 978.5  | 958.3  | 932.1  | 899.9  | 867.7  | 835.6  | 803.4  | 779.9  |
| 45°    | 970.7  | 949.1  | 927.7  | 906.2  | 884.7  | 857.1  | 823.3  | 789.7  | 755.9  | 722.3  | 699.5  |
| 47.5°  | 903.6  | 880.9  | 858.1  | 835.3  | 812.5  | 783.7  | 748.9  | 714.1  | 679.3  | 644.5  | 621.9  |
| 50°    | 855.2  | 832.4  | 809.5  | 786.7  | 763.9  | 734.9  | 699.6  | 664.3  | 629.0  | 593.7  | 571.6  |
| 52.5°  | 807.8  | 783.9  | 760.2  | 736.3  | 712.5  | 683.3  | 648.8  | 614.3  | 579.7  | 545.2  | 523.8  |
| 55°    | 738.1  | 713.1  | 688.1  | 663.0  | 638.0  | 608.1  | 573.4  | 538.8  | 504.2  | 469.5  | 450.2  |
| 57.5°  | 666.8  | 641.1  | 615.4  | 589.7  | 564.0  | 534.5  | 501.2  | 467.9  | 434.6  | 401.2  | 383.6  |
| 60°    | 618.2  | 592.6  | 566.8  | 541.2  | 515.5  | 486.2  | 453.1  | 420.0  | 386.9  | 353.9  | 337.5  |
| 62.5°  | 570.9  | 545.2  | 519.5  | 493.8  | 468.2  | 439.5  | 408.0  | 376.5  | 345.0  | 313.5  | 297.8  |
| 65°    | 498.3  | 472.3  | 446.4  | 420.4  | 394.4  | 366.9  | 338.0  | 309.2  | 280.2  | 251.4  | 240.4  |
| 67.5°  | 428.4  | 402.7  | 376.8  | 351.0  | 325.2  | 299.3  | 273.3  | 247.3  | 221.3  | 195.3  | 190.3  |
| 70°    | 379.9  | 354.9  | 329.8  | 304.8  | 279.7  | 256.2  | 234.0  | 211.9  | 189.7  | 167.6  | 164.4  |
| 72.5°  | 333.7  | 309.6  | 285.7  | 261.6  | 237.6  | 216.7  | 199.0  | 181.2  | 163.3  | 145.6  | 142.9  |
| 75°    | 265.8  | 243.3  | 220.8  | 198.4  | 175.9  | 159.2  | 148.3  | 137.4  | 126.5  | 115.6  | 113.3  |
| 77.5°  | 199.1  | 179.4  | 159.7  | 140.0  | 120.2  | 107.7  | 102.5  | 97.2   | 91.9   | 86.7   | 85.4   |
| 80°    | 157.4  | 141.1  | 124.7  | 108.3  | 92.0   | 82.2   | 79.0   | 75.8   | 72.6   | 69.4   | 68.1   |
| 82.5°  | 119.3  | 106.5  | 93.8   | 81.0   | 68.2   | 60.7   | 58.5   | 56.4   | 54.2   | 52.0   | 51.3   |
| 85°    | 62.1   | 55.3   | 48.6   | 41.8   | 35.2   | 31.3   | 30.3   | 29.4   | 28.4   | 27.4   | 27.4   |
| 87.5°  | 18.6   | 16.9   | 15.1   | 13.3   | 11.5   | 10.9   | 11.4   | 12.0   | 12.4   | 13.0   | 12.7   |
| 90°    | 0.6    | 2.0    | 3.4    | 4.8    | 6.3    | 8.3    | 10.9   | 13.6   | 16.2   | 18.9   | 18.6   |
| 92.5°  | 9.6    | 10.7   | 11.7   | 12.7   | 13.8   | 14.6   | 15.3   | 15.8   | 16.5   | 17.1   | 17.2   |
| 95°    | 28.0   | 29.1   | 30.3   | 31.6   | 32.7   | 33.5   | 33.6   | 33.9   | 34.1   | 34.4   | 34.4   |
| 97.5°  | 51.1   | 52.1   | 53.2   | 54.2   | 55.2   | 56.0   | 56.5   | 56.9   | 57.4   | 57.9   | 57.9   |
| 100°   | 68.2   | 69.2   | 70.1   | 71.2   | 72.1   | 72.8   | 73.1   | 73.4   | 73.8   | 74.2   | 74.2   |
| 102.5° | 86.3   | 87.1   | 87.8   | 88.6   | 89.4   | 90.0   | 90.5   | 90.9   | 91.3   | 91.8   | 91.9   |
| 105°   | 115.6  | 115.9  | 116.3  | 116.6  | 117.0  | 117.3  | 117.5  | 117.7  | 118.0  | 118.3  | 118.5  |
| 107.5° | 145.1  | 145.5  | 146.1  | 146.6  | 147.1  | 147.4  | 147.4  | 147.4  | 147.4  | 147.4  | 147.5  |
| 110°   | 163.9  | 164.7  | 165.3  | 166.1  | 166.8  | 167.1  | 167.1  | 167.1  | 167.1  | 167.1  | 167.1  |



TEST NUMBER: P331745-830

CATALOG NUMBER: SA2XXRDIP-C1005D530U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 184.5 | 185.3 | 186.0 | 186.7 | 187.5 | 187.8 | 187.7 | 187.6 | 187.5 | 187.4 | 187.1 |
| 115°   | 215.0 | 215.7 | 216.4 | 217.2 | 217.8 | 218.1 | 217.8 | 217.6 | 217.4 | 217.2 | 217.1 |
| 117.5° | 245.3 | 246.3 | 247.2 | 248.2 | 249.1 | 249.3 | 248.6 | 247.9 | 247.2 | 246.6 | 246.3 |
| 120°   | 265.5 | 266.5 | 267.4 | 268.3 | 269.4 | 269.4 | 268.3 | 267.4 | 266.5 | 265.5 | 265.5 |
| 122.5° | 284.0 | 285.1 | 286.3 | 287.5 | 288.6 | 288.8 | 288.1 | 287.5 | 286.8 | 286.2 | 285.9 |
| 125°   | 312.8 | 313.9 | 315.0 | 316.0 | 317.1 | 317.4 | 317.1 | 316.8 | 316.4 | 316.0 | 315.7 |
| 127.5° | 340.8 | 342.2 | 343.6 | 345.0 | 346.3 | 346.8 | 346.4 | 345.9 | 345.5 | 345.1 | 344.6 |
| 130°   | 358.5 | 360.1 | 361.6 | 363.2 | 364.7 | 365.3 | 365.1 | 364.9 | 364.7 | 364.4 | 364.2 |
| 132.5° | 378.2 | 379.6 | 380.8 | 382.1 | 383.3 | 384.0 | 384.1 | 384.1 | 384.2 | 384.2 | 383.7 |
| 135°   | 404.7 | 406.0 | 407.4 | 408.7 | 410.0 | 410.8 | 410.9 | 411.2 | 411.5 | 411.7 | 411.6 |
| 137.5° | 432.5 | 433.7 | 434.7 | 435.8 | 436.9 | 437.5 | 437.9 | 438.2 | 438.5 | 438.8 | 438.7 |
| 140°   | 449.3 | 450.4 | 451.5 | 452.5 | 453.6 | 454.5 | 455.1 | 455.6 | 456.3 | 456.9 | 456.9 |
| 142.5° | 466.6 | 467.6 | 468.7 | 469.8 | 470.8 | 471.6 | 472.0 | 472.4 | 472.8 | 473.2 | 473.3 |
| 145°   | 491.3 | 492.1 | 492.9 | 493.8 | 494.6 | 495.4 | 496.1 | 496.8 | 497.6 | 498.2 | 498.3 |
| 147.5° | 513.3 | 514.3 | 515.3 | 516.3 | 517.3 | 518.0 | 518.5 | 519.0 | 519.4 | 520.0 | 520.2 |
| 150°   | 528.4 | 529.0 | 529.8 | 530.5 | 531.2 | 531.8 | 532.3 | 532.7 | 533.2 | 533.8 | 534.0 |
| 152.5° | 541.7 | 542.4 | 543.1 | 543.8 | 544.5 | 545.2 | 545.7 | 546.3 | 546.9 | 547.5 | 547.9 |
| 155°   | 561.7 | 562.0 | 562.4 | 562.7 | 563.1 | 563.5 | 563.8 | 564.2 | 564.5 | 564.9 | 565.5 |
| 157.5° | 578.7 | 579.0 | 579.2 | 579.5 | 579.8 | 579.9 | 580.1 | 580.4 | 580.6 | 580.8 | 581.6 |
| 160°   | 589.1 | 589.3 | 589.6 | 589.7 | 590.0 | 590.2 | 590.3 | 590.4 | 590.6 | 590.7 | 591.4 |
| 162.5° | 598.5 | 598.6 | 598.6 | 598.7 | 598.7 | 598.8 | 598.9 | 599.1 | 599.2 | 599.3 | 600.1 |
| 165°   | 611.1 | 611.0 | 610.9 | 610.8 | 610.7 | 610.6 | 610.6 | 610.6 | 610.6 | 610.6 | 611.4 |
| 167.5° | 621.6 | 621.3 | 620.9 | 620.6 | 620.2 | 620.0 | 620.0 | 620.0 | 619.9 | 619.9 | 620.8 |
| 170°   | 627.3 | 626.9 | 626.5 | 626.1 | 625.8 | 625.6 | 625.5 | 625.3 | 625.2 | 625.1 | 625.9 |
| 172.5° | 631.1 | 630.7 | 630.4 | 630.0 | 629.7 | 629.4 | 629.3 | 629.2 | 629.1 | 629.0 | 629.8 |
| 175°   | 635.8 | 635.5 | 635.1 | 634.8 | 634.4 | 634.1 | 633.9 | 633.7 | 633.4 | 633.1 | 634.0 |
| 177.5° | 637.8 | 637.4 | 637.2 | 636.9 | 636.6 | 636.4 | 636.2 | 636.0 | 635.8 | 635.7 | 636.2 |
| 180°   | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 |



TEST NUMBER: P331745-830

CATALOG NUMBER: SA2XXRDIP-C1005D530U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 | 1596.1 |
| 2.5°   | 1588.6 | 1591.1 | 1593.7 | 1594.7 | 1594.2 | 1593.7 | 1593.2 | 1592.7 |
| 5°     | 1575.9 | 1578.9 | 1581.7 | 1582.6 | 1581.7 | 1580.7 | 1579.8 | 1578.9 |
| 7.5°   | 1550.4 | 1551.2 | 1552.1 | 1551.7 | 1550.0 | 1548.3 | 1546.7 | 1545.0 |
| 10°    | 1524.8 | 1523.9 | 1523.0 | 1521.5 | 1519.6 | 1517.7 | 1515.7 | 1513.8 |
| 12.5°  | 1495.6 | 1493.8 | 1492.1 | 1489.7 | 1486.5 | 1483.3 | 1480.1 | 1476.9 |
| 15°    | 1441.0 | 1434.8 | 1428.7 | 1424.1 | 1420.9 | 1417.7 | 1414.5 | 1411.3 |
| 17.5°  | 1379.1 | 1371.9 | 1364.6 | 1358.2 | 1352.7 | 1347.2 | 1341.6 | 1336.1 |
| 20°    | 1336.0 | 1327.9 | 1319.9 | 1312.4 | 1305.3 | 1298.3 | 1291.2 | 1284.1 |
| 22.5°  | 1288.6 | 1278.3 | 1267.9 | 1260.1 | 1254.9 | 1249.6 | 1244.3 | 1239.1 |
| 25°    | 1210.1 | 1197.0 | 1183.8 | 1174.9 | 1170.0 | 1165.2 | 1160.4 | 1155.6 |
| 27.5°  | 1135.3 | 1119.9 | 1104.6 | 1093.1 | 1085.4 | 1077.8 | 1070.2 | 1062.5 |
| 30°    | 1082.4 | 1066.0 | 1049.6 | 1037.2 | 1028.5 | 1019.8 | 1011.2 | 1002.5 |
| 32.5°  | 1029.3 | 1010.6 | 991.8  | 978.5  | 970.3  | 962.1  | 953.9  | 945.8  |
| 35°    | 946.1  | 926.0  | 905.7  | 892.0  | 885.0  | 877.9  | 870.8  | 863.8  |
| 37.5°  | 865.2  | 842.9  | 820.6  | 805.4  | 797.4  | 789.3  | 781.2  | 773.1  |
| 40°    | 811.0  | 788.2  | 765.4  | 749.9  | 741.5  | 733.1  | 724.8  | 716.4  |
| 42.5°  | 756.3  | 732.7  | 709.2  | 693.3  | 685.2  | 677.1  | 669.1  | 661.0  |
| 45°    | 676.7  | 653.8  | 631.0  | 615.9  | 608.1  | 600.4  | 592.7  | 585.0  |
| 47.5°  | 599.2  | 576.6  | 553.8  | 539.0  | 532.1  | 525.1  | 518.0  | 511.0  |
| 50°    | 549.4  | 527.3  | 505.1  | 490.6  | 483.9  | 477.1  | 470.4  | 463.6  |
| 52.5°  | 502.4  | 481.0  | 459.7  | 445.8  | 439.6  | 433.4  | 427.2  | 420.9  |
| 55°    | 430.9  | 411.7  | 392.4  | 379.8  | 373.6  | 367.5  | 361.5  | 355.3  |
| 57.5°  | 366.0  | 348.3  | 330.6  | 319.2  | 314.1  | 309.0  | 303.9  | 298.7  |
| 60°    | 321.1  | 304.8  | 288.4  | 277.7  | 272.5  | 267.4  | 262.2  | 257.1  |
| 62.5°  | 282.3  | 266.6  | 251.1  | 241.7  | 238.7  | 235.5  | 232.4  | 229.4  |
| 65°    | 229.5  | 218.6  | 207.6  | 201.7  | 200.8  | 199.8  | 198.9  | 197.9  |
| 67.5°  | 185.3  | 180.3  | 175.2  | 172.2  | 171.3  | 170.2  | 169.2  | 168.1  |
| 70°    | 161.2  | 158.0  | 154.8  | 152.5  | 151.2  | 149.9  | 148.6  | 147.3  |
| 72.5°  | 140.3  | 137.5  | 134.8  | 133.1  | 132.3  | 131.6  | 130.7  | 130.0  |
| 75°    | 111.0  | 108.9  | 106.6  | 105.3  | 105.0  | 104.6  | 104.3  | 104.0  |
| 77.5°  | 84.1   | 82.8   | 81.5   | 80.6   | 80.1   | 79.6   | 79.1   | 78.6   |
| 80°    | 66.7   | 65.5   | 64.2   | 63.5   | 63.5   | 63.5   | 63.5   | 63.5   |
| 82.5°  | 50.4   | 49.7   | 48.9   | 48.5   | 48.5   | 48.5   | 48.5   | 48.5   |
| 85°    | 27.4   | 27.4   | 27.4   | 27.4   | 27.4   | 27.4   | 27.4   | 27.4   |
| 87.5°  | 12.4   | 12.1   | 11.8   | 11.7   | 11.7   | 11.7   | 11.7   | 11.8   |
| 90°    | 18.4   | 18.1   | 17.8   | 17.8   | 17.9   | 18.0   | 18.2   | 18.3   |
| 92.5°  | 17.2   | 17.2   | 17.2   | 17.3   | 17.3   | 17.3   | 17.4   | 17.4   |
| 95°    | 34.4   | 34.4   | 34.4   | 34.3   | 34.0   | 33.8   | 33.6   | 33.4   |
| 97.5°  | 57.9   | 57.9   | 57.9   | 57.8   | 57.8   | 57.8   | 57.8   | 57.7   |
| 100°   | 74.2   | 74.2   | 74.2   | 74.1   | 74.0   | 73.9   | 73.8   | 73.6   |
| 102.5° | 92.0   | 92.1   | 92.2   | 92.2   | 92.1   | 91.9   | 91.8   | 91.7   |
| 105°   | 118.8  | 118.9  | 119.2  | 119.3  | 119.3  | 119.3  | 119.3  | 119.3  |
| 107.5° | 147.6  | 147.7  | 147.8  | 147.5  | 146.9  | 146.5  | 145.9  | 145.3  |
| 110°   | 167.1  | 167.1  | 167.1  | 167.0  | 166.6  | 166.3  | 165.9  | 165.5  |





TEST NUMBER: P331745-830

CATALOG NUMBER: SA2XXRDIP-C1005D530U830-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 186.8 | 186.5 | 186.2 | 186.0 | 185.7 | 185.4 | 185.1 | 184.9 |
| 115°   | 216.9 | 216.8 | 216.7 | 216.4 | 216.0 | 215.7 | 215.4 | 215.0 |
| 117.5° | 246.0 | 245.7 | 245.4 | 245.2 | 244.8 | 244.4 | 244.0 | 243.6 |
| 120°   | 265.5 | 265.5 | 265.5 | 265.3 | 264.9 | 264.7 | 264.3 | 263.9 |
| 122.5° | 285.6 | 285.3 | 285.0 | 284.7 | 284.5 | 284.2 | 284.0 | 283.7 |
| 125°   | 315.3 | 315.0 | 314.6 | 314.3 | 314.2 | 314.1 | 314.0 | 313.9 |
| 127.5° | 344.2 | 343.7 | 343.4 | 342.9 | 342.5 | 342.1 | 341.8 | 341.4 |
| 130°   | 363.9 | 363.7 | 363.4 | 363.1 | 362.6 | 362.1 | 361.7 | 361.2 |
| 132.5° | 383.1 | 382.6 | 382.1 | 381.6 | 381.3 | 380.9 | 380.5 | 380.1 |
| 135°   | 411.5 | 411.3 | 411.2 | 410.9 | 410.7 | 410.3 | 409.9 | 409.5 |
| 137.5° | 438.6 | 438.5 | 438.4 | 438.1 | 437.6 | 437.2 | 436.7 | 436.2 |
| 140°   | 456.9 | 456.9 | 456.9 | 456.7 | 456.1 | 455.6 | 455.2 | 454.7 |
| 142.5° | 473.3 | 473.4 | 473.5 | 473.3 | 472.9 | 472.4 | 471.9 | 471.5 |
| 145°   | 498.5 | 498.6 | 498.7 | 498.5 | 498.0 | 497.6 | 497.1 | 496.6 |
| 147.5° | 520.5 | 520.8 | 521.0 | 520.9 | 520.5 | 520.0 | 519.5 | 519.1 |
| 150°   | 534.4 | 534.8 | 535.2 | 535.2 | 534.8 | 534.4 | 534.0 | 533.8 |
| 152.5° | 548.4 | 548.8 | 549.3 | 549.3 | 548.8 | 548.4 | 547.9 | 547.5 |
| 155°   | 566.1 | 566.7 | 567.3 | 567.4 | 567.0 | 566.7 | 566.3 | 566.0 |
| 157.5° | 582.4 | 583.2 | 584.1 | 584.2 | 583.6 | 583.1 | 582.5 | 581.8 |
| 160°   | 592.1 | 592.9 | 593.5 | 593.7 | 593.2 | 592.8 | 592.2 | 591.7 |
| 162.5° | 600.9 | 601.7 | 602.6 | 602.7 | 602.1 | 601.5 | 601.0 | 600.4 |
| 165°   | 612.3 | 613.1 | 613.9 | 614.1 | 613.4 | 612.8 | 612.3 | 611.6 |
| 167.5° | 621.6 | 622.5 | 623.3 | 623.4 | 622.7 | 622.2 | 621.5 | 620.9 |
| 170°   | 626.8 | 627.6 | 628.4 | 628.5 | 627.7 | 627.1 | 626.3 | 625.7 |
| 172.5° | 630.7 | 631.5 | 632.3 | 632.4 | 631.7 | 630.9 | 630.2 | 629.5 |
| 175°   | 634.8 | 635.7 | 636.5 | 636.6 | 635.8 | 635.1 | 634.4 | 633.7 |
| 177.5° | 636.8 | 637.3 | 637.9 | 637.9 | 637.3 | 636.8 | 636.2 | 635.7 |
| 180°   | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 | 636.9 |

(END OF REPORT)