

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: P331783-840

Luminaire Tested: **S122RDIW-S290D1440U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331783-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDIW-S290D1440U840-4F0-1E-UDD-F
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1440 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6864.4 lumens
Efficiency: N/A
Efficacy: 128.5 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-Indirect

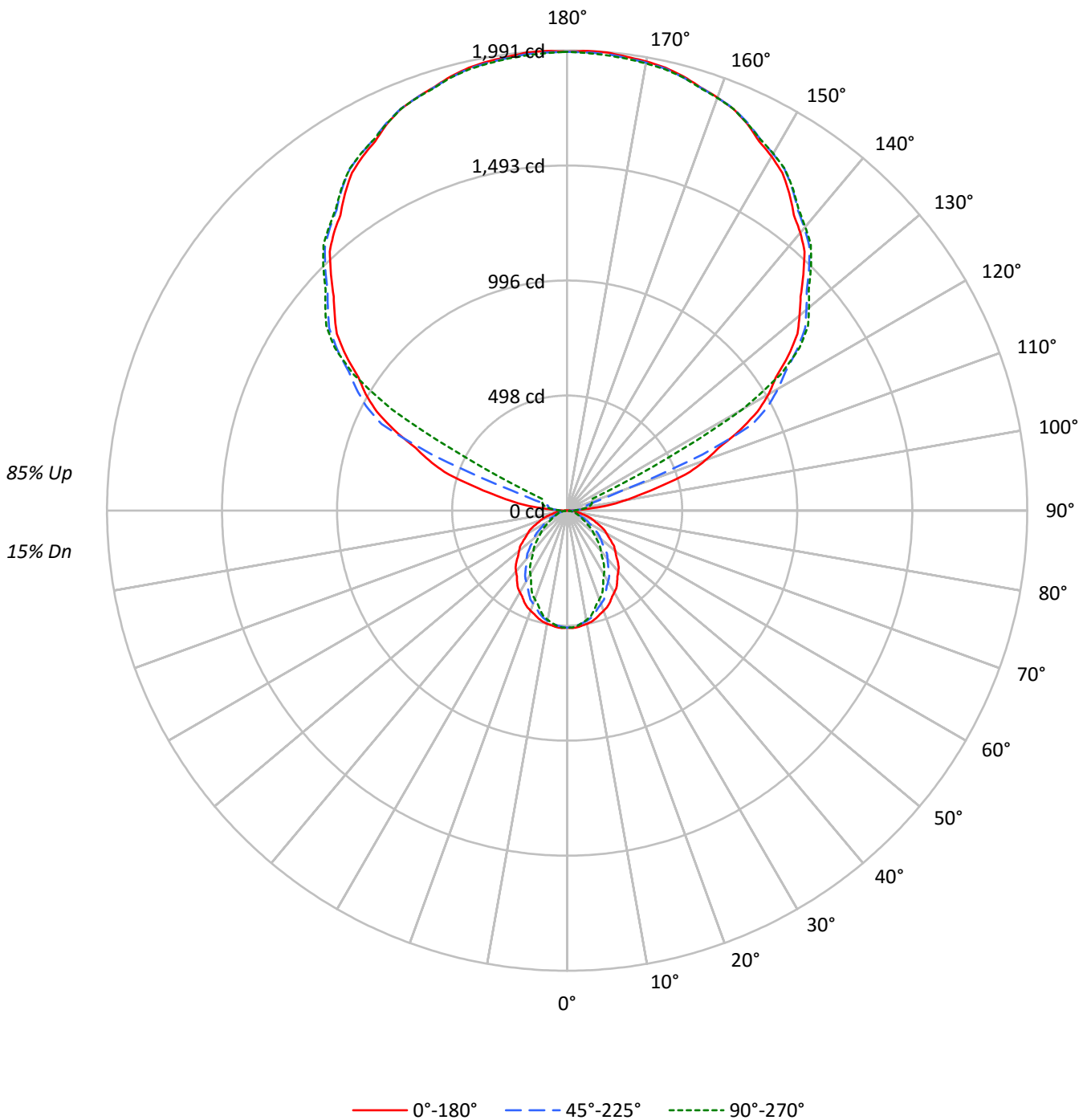
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331783-840

CATALOG NUMBER: S122RDIW-S290D1440U840-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P331783-840

CATALOG NUMBER: S122RDIW-S290D1440U840-4F0-1E-UDD-F

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 | 50 | 30 | 10 | 0 | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 99 | 99 | 99 | 99 | 87 | 87 | 87 | 87 | 64 | 64 | 64 | 43 | 43 | 43 | 24 | 24 | 24 | 15 | | | | | | | | | | | | | | | | | | | |
| 1 | 90 | 86 | 82 | 79 | 79 | 76 | 73 | 70 | 56 | 54 | 52 | 38 | 37 | 36 | 22 | 21 | 21 | 13 | | | | | | | | | | | | | | | | | | | |
| 2 | 82 | 75 | 70 | 65 | 72 | 66 | 62 | 58 | 49 | 46 | 44 | 34 | 32 | 30 | 19 | 18 | 18 | 11 | | | | | | | | | | | | | | | | | | | |
| 3 | 75 | 66 | 59 | 54 | 65 | 58 | 53 | 48 | 43 | 40 | 37 | 30 | 28 | 26 | 17 | 16 | 15 | 10 | | | | | | | | | | | | | | | | | | | |
| 4 | 68 | 58 | 51 | 46 | 60 | 52 | 45 | 41 | 39 | 34 | 31 | 27 | 24 | 22 | 15 | 14 | 13 | 8 | | | | | | | | | | | | | | | | | | | |
| 5 | 63 | 52 | 44 | 39 | 55 | 46 | 40 | 35 | 34 | 30 | 27 | 24 | 21 | 19 | 14 | 12 | 11 | 7 | | | | | | | | | | | | | | | | | | | |
| 6 | 58 | 46 | 39 | 33 | 50 | 41 | 35 | 30 | 31 | 27 | 23 | 21 | 19 | 17 | 13 | 11 | 10 | 7 | | | | | | | | | | | | | | | | | | | |
| 7 | 53 | 42 | 34 | 29 | 47 | 37 | 31 | 26 | 28 | 24 | 20 | 19 | 17 | 15 | 11 | 10 | 9 | 6 | | | | | | | | | | | | | | | | | | | |
| 8 | 49 | 38 | 30 | 25 | 43 | 33 | 27 | 23 | 25 | 21 | 18 | 18 | 15 | 13 | 10 | 9 | 8 | 5 | | | | | | | | | | | | | | | | | | | |
| 9 | 46 | 34 | 27 | 22 | 40 | 30 | 24 | 20 | 23 | 19 | 16 | 16 | 13 | 12 | 10 | 8 | 7 | 5 | | | | | | | | | | | | | | | | | | | |
| 10 | 42 | 31 | 24 | 20 | 37 | 28 | 22 | 18 | 21 | 17 | 14 | 15 | 12 | 10 | 9 | 8 | 7 | 4 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8186 | 8186 | 8186 |
| 5° | 8217 | 8083 | 8126 |
| 10° | 8153 | 7950 | 7883 |
| 15° | 8058 | 7714 | 7492 |
| 20° | 7930 | 7378 | 7009 |
| 25° | 7798 | 6996 | 6538 |
| 30° | 7612 | 6604 | 5936 |
| 35° | 7433 | 6177 | 5409 |
| 40° | 7253 | 5735 | 4795 |
| 45° | 7040 | 5236 | 4242 |
| 50° | 6822 | 4735 | 3697 |
| 55° | 6598 | 4197 | 3178 |
| 60° | 6339 | 3630 | 2638 |
| 65° | 6044 | 3049 | 2399 |
| 70° | 5698 | 2511 | 2209 |
| 75° | 5265 | 2289 | 2059 |
| 80° | 4649 | 2046 | 1878 |
| 85° | 3649 | 1612 | 1612 |



TEST NUMBER: P331783-840

CATALOG NUMBER: S122RDIW-S290D1440U840-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 47.4 | 0.7 |
| 10°-20° | 130.3 | 1.9 |
| 20°-30° | 183.0 | 2.7 |
| 30°-40° | 199.5 | 2.9 |
| 40°-50° | 183.4 | 2.7 |
| 50°-60° | 144.1 | 2.1 |
| 60°-70° | 93.9 | 1.4 |
| 70°-80° | 48.4 | 0.7 |
| 80°-90° | 17.5 | 0.3 |
| 90°-100° | 66.2 | 1.0 |
| 100°-110° | 242.8 | 3.5 |
| 110°-120° | 649.0 | 9.5 |
| 120°-130° | 1071.4 | 15.6 |
| 130°-140° | 1139.4 | 16.6 |
| 140°-150° | 1059.0 | 15.4 |
| 150°-160° | 851.5 | 12.4 |
| 160°-170° | 548.7 | 8.0 |
| 170°-180° | 188.9 | 2.8 |
| 0°-30° | 360.7 | 5.3 |
| 0°-40° | 560.2 | 8.2 |
| 0°-60° | 887.7 | 12.9 |
| 0°-90° | 1047.5 | 15.3 |
| 90°-120° | 958.1 | 14.0 |
| 90°-150° | 4227.9 | 61.6 |
| 90°-180° | 5817.0 | 84.7 |
| 0°-180° | 6864.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 507 | 507 | 507 | 507 | 507 | |
| 5° | 507 | 504 | 499 | 502 | 501 | 48 |
| 15° | 482 | 476 | 462 | 453 | 448 | 136 |
| 25° | 438 | 422 | 393 | 375 | 367 | 201 |
| 35° | 377 | 353 | 313 | 285 | 274 | 236 |
| 45° | 308 | 277 | 229 | 198 | 186 | 238 |
| 55° | 234 | 198 | 149 | 123 | 113 | 209 |
| 65° | 158 | 121 | 80 | 65 | 63 | 157 |
| 75° | 84 | 53 | 37 | 34 | 33 | 89 |
| 85° | 20 | 11 | 9 | 9 | 9 | 23 |
| 90° | 1 | 17 | 29 | 36 | 39 | 5 |
| 95° | 93 | 49 | 56 | 63 | 62 | 114 |
| 105° | 437 | 456 | 88 | 103 | 109 | 467 |
| 115° | 826 | 851 | 886 | 252 | 118 | 813 |
| 125° | 1168 | 1187 | 1214 | 1223 | 1228 | 1041 |
| 135° | 1445 | 1467 | 1481 | 1494 | 1492 | 1116 |
| 145° | 1676 | 1676 | 1699 | 1708 | 1702 | 1048 |
| 155° | 1846 | 1834 | 1850 | 1857 | 1847 | 850 |
| 165° | 1945 | 1937 | 1940 | 1949 | 1940 | 549 |
| 175° | 1989 | 1980 | 1982 | 1991 | 1978 | 189 |
| 180° | 1985 | 1985 | 1985 | 1985 | 1985 | |



TEST NUMBER: P331783-840

CATALOG NUMBER: S122RDIW-S290D1440U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 |
| 2.5° | 508.8 | 508.4 | 508.0 | 507.6 | 507.2 | 506.4 | 505.5 | 504.7 | 503.8 | 502.9 | 503.7 |
| 5° | 507.0 | 506.4 | 505.9 | 505.4 | 504.9 | 503.9 | 502.6 | 501.3 | 500.0 | 498.7 | 499.6 |
| 7.5° | 501.7 | 501.1 | 500.4 | 499.8 | 499.2 | 498.1 | 496.6 | 494.9 | 493.4 | 491.9 | 492.1 |
| 10° | 497.3 | 496.6 | 495.8 | 495.1 | 494.4 | 493.0 | 491.0 | 489.0 | 487.0 | 484.9 | 484.6 |
| 12.5° | 491.8 | 490.9 | 490.0 | 489.2 | 488.3 | 486.6 | 483.9 | 481.3 | 478.7 | 476.1 | 475.5 |
| 15° | 482.1 | 481.0 | 479.9 | 478.8 | 477.7 | 475.3 | 471.9 | 468.5 | 464.9 | 461.5 | 459.6 |
| 17.5° | 470.3 | 468.6 | 466.9 | 465.1 | 463.4 | 460.4 | 456.0 | 451.5 | 447.1 | 442.6 | 440.3 |
| 20° | 461.5 | 459.5 | 457.5 | 455.3 | 453.3 | 449.8 | 444.6 | 439.6 | 434.5 | 429.4 | 426.9 |
| 22.5° | 452.0 | 449.7 | 447.4 | 445.1 | 442.8 | 438.8 | 433.0 | 427.3 | 421.6 | 415.9 | 412.5 |
| 25° | 437.7 | 434.3 | 431.1 | 427.9 | 424.6 | 419.6 | 412.8 | 406.2 | 399.4 | 392.7 | 388.5 |
| 27.5° | 420.4 | 416.9 | 413.3 | 409.8 | 406.2 | 400.6 | 393.0 | 385.5 | 377.9 | 370.3 | 365.5 |
| 30° | 408.3 | 404.5 | 400.5 | 396.7 | 392.8 | 386.8 | 378.6 | 370.5 | 362.3 | 354.2 | 349.0 |
| 32.5° | 396.6 | 392.0 | 387.5 | 382.9 | 378.4 | 372.0 | 363.8 | 355.4 | 347.1 | 338.7 | 332.9 |
| 35° | 377.1 | 371.9 | 366.7 | 361.5 | 356.3 | 349.2 | 340.2 | 331.2 | 322.3 | 313.4 | 306.9 |
| 37.5° | 357.7 | 351.9 | 346.2 | 340.5 | 334.8 | 327.2 | 317.6 | 308.0 | 298.5 | 288.9 | 281.9 |
| 40° | 344.1 | 338.0 | 331.8 | 325.7 | 319.6 | 311.6 | 301.7 | 291.9 | 282.0 | 272.1 | 264.8 |
| 42.5° | 330.1 | 323.7 | 317.2 | 310.8 | 304.4 | 296.0 | 285.8 | 275.6 | 265.4 | 255.2 | 247.7 |
| 45° | 308.3 | 301.4 | 294.6 | 287.8 | 280.9 | 272.2 | 261.5 | 250.7 | 240.0 | 229.3 | 222.2 |
| 47.5° | 287.0 | 279.7 | 272.6 | 265.3 | 258.0 | 248.9 | 237.8 | 226.8 | 215.7 | 204.7 | 197.5 |
| 50° | 271.6 | 264.4 | 257.1 | 249.8 | 242.7 | 233.4 | 222.2 | 211.0 | 199.8 | 188.5 | 181.5 |
| 52.5° | 256.5 | 248.9 | 241.5 | 233.9 | 226.3 | 217.0 | 206.0 | 195.1 | 184.1 | 173.1 | 166.3 |
| 55° | 234.4 | 226.5 | 218.5 | 210.6 | 202.6 | 193.2 | 182.1 | 171.1 | 160.1 | 149.1 | 143.0 |
| 57.5° | 211.8 | 203.6 | 195.4 | 187.3 | 179.2 | 169.8 | 159.2 | 148.7 | 138.0 | 127.4 | 121.8 |
| 60° | 196.3 | 188.2 | 180.1 | 171.9 | 163.7 | 154.4 | 143.9 | 133.4 | 122.9 | 112.4 | 107.1 |
| 62.5° | 181.3 | 173.2 | 165.0 | 156.8 | 148.7 | 139.6 | 129.6 | 119.6 | 109.6 | 99.6 | 94.6 |
| 65° | 158.2 | 150.0 | 141.8 | 133.5 | 125.2 | 116.5 | 107.3 | 98.2 | 89.0 | 79.8 | 76.3 |
| 67.5° | 136.0 | 127.8 | 119.7 | 111.5 | 103.3 | 95.0 | 86.7 | 78.6 | 70.3 | 62.0 | 60.4 |
| 70° | 120.7 | 112.7 | 104.7 | 96.8 | 88.9 | 81.4 | 74.3 | 67.3 | 60.3 | 53.2 | 52.2 |
| 72.5° | 105.9 | 98.4 | 90.7 | 83.1 | 75.4 | 68.9 | 63.2 | 57.6 | 51.9 | 46.3 | 45.3 |
| 75° | 84.4 | 77.3 | 70.2 | 63.0 | 55.8 | 50.6 | 47.1 | 43.6 | 40.2 | 36.7 | 36.0 |
| 77.5° | 63.2 | 57.0 | 50.7 | 44.4 | 38.2 | 34.2 | 32.5 | 30.9 | 29.2 | 27.6 | 27.2 |
| 80° | 50.0 | 44.8 | 39.6 | 34.4 | 29.2 | 26.1 | 25.0 | 24.0 | 23.0 | 22.0 | 21.6 |
| 82.5° | 37.9 | 33.8 | 29.8 | 25.8 | 21.7 | 19.3 | 18.6 | 17.9 | 17.2 | 16.6 | 16.3 |
| 85° | 19.7 | 17.6 | 15.5 | 13.3 | 11.2 | 9.9 | 9.6 | 9.3 | 9.0 | 8.7 | 8.7 |
| 87.5° | 6.2 | 6.2 | 6.3 | 6.3 | 6.4 | 6.7 | 7.2 | 7.7 | 8.2 | 8.7 | 8.9 |
| 90° | 1.4 | 4.9 | 8.5 | 12.0 | 15.5 | 18.5 | 21.1 | 23.6 | 26.2 | 28.7 | 30.3 |
| 92.5° | 29.0 | 28.7 | 28.4 | 28.1 | 27.8 | 28.2 | 29.5 | 30.8 | 32.0 | 33.3 | 34.1 |
| 95° | 93.3 | 82.8 | 72.3 | 61.8 | 51.2 | 47.1 | 49.3 | 51.5 | 53.8 | 56.0 | 57.6 |
| 97.5° | 185.3 | 155.6 | 125.9 | 96.2 | 66.6 | 54.3 | 59.5 | 64.6 | 69.8 | 74.9 | 76.2 |
| 100° | 254.2 | 210.5 | 166.7 | 123.0 | 79.3 | 60.2 | 65.5 | 71.0 | 76.4 | 81.9 | 84.4 |
| 102.5° | 330.0 | 320.8 | 311.5 | 302.3 | 293.1 | 265.7 | 220.4 | 174.9 | 129.6 | 84.1 | 87.5 |
| 105° | 436.7 | 446.2 | 455.8 | 465.3 | 474.9 | 436.2 | 349.0 | 261.9 | 174.7 | 87.7 | 91.1 |
| 107.5° | 558.2 | 565.8 | 573.6 | 581.3 | 589.1 | 540.7 | 436.2 | 331.6 | 227.1 | 122.7 | 119.1 |
| 110° | 636.3 | 643.0 | 649.6 | 656.4 | 663.1 | 620.3 | 528.1 | 435.9 | 343.6 | 251.4 | 219.4 |



TEST NUMBER: P331783-840

CATALOG NUMBER: S122RDIW-S290D1440U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 709.8 | 715.7 | 721.6 | 727.6 | 733.6 | 725.1 | 702.4 | 679.5 | 656.7 | 634.0 | 517.6 |
| 115° | 825.9 | 831.3 | 836.7 | 842.1 | 847.6 | 854.2 | 862.2 | 870.2 | 878.2 | 886.2 | 738.4 |
| 117.5° | 929.6 | 935.6 | 941.7 | 947.8 | 953.8 | 959.6 | 965.0 | 970.6 | 976.0 | 981.6 | 945.8 |
| 120° | 1005.4 | 1010.2 | 1014.9 | 1019.8 | 1024.5 | 1029.8 | 1035.5 | 1041.3 | 1047.0 | 1052.8 | 1056.6 |
| 122.5° | 1069.8 | 1074.8 | 1079.8 | 1084.9 | 1089.9 | 1095.6 | 1101.8 | 1108.0 | 1114.3 | 1120.5 | 1122.9 |
| 125° | 1167.7 | 1171.8 | 1176.0 | 1180.1 | 1184.3 | 1189.4 | 1195.5 | 1201.5 | 1207.6 | 1213.7 | 1215.9 |
| 127.5° | 1256.5 | 1261.0 | 1265.7 | 1270.2 | 1274.9 | 1279.4 | 1283.9 | 1288.5 | 1293.0 | 1297.6 | 1300.8 |
| 130° | 1312.7 | 1317.9 | 1322.9 | 1328.1 | 1333.2 | 1337.5 | 1341.0 | 1344.5 | 1348.0 | 1351.5 | 1355.0 |
| 132.5° | 1370.2 | 1374.5 | 1378.9 | 1383.2 | 1387.6 | 1391.5 | 1395.0 | 1398.5 | 1402.0 | 1405.5 | 1408.6 |
| 135° | 1444.9 | 1450.0 | 1455.1 | 1460.2 | 1465.3 | 1469.3 | 1472.2 | 1475.0 | 1477.9 | 1480.8 | 1484.0 |
| 137.5° | 1520.5 | 1524.0 | 1527.6 | 1531.2 | 1534.7 | 1538.1 | 1541.4 | 1544.7 | 1547.9 | 1551.2 | 1554.3 |
| 140° | 1569.8 | 1572.4 | 1575.0 | 1577.5 | 1580.0 | 1583.1 | 1586.6 | 1590.1 | 1593.7 | 1597.1 | 1600.0 |
| 142.5° | 1611.2 | 1613.5 | 1615.8 | 1618.1 | 1620.4 | 1623.6 | 1627.6 | 1631.6 | 1635.6 | 1639.6 | 1642.2 |
| 145° | 1676.2 | 1675.8 | 1675.5 | 1675.2 | 1674.9 | 1677.4 | 1682.8 | 1688.3 | 1693.6 | 1699.1 | 1701.3 |
| 147.5° | 1732.7 | 1731.5 | 1730.3 | 1729.1 | 1727.9 | 1729.9 | 1735.3 | 1740.7 | 1746.1 | 1751.4 | 1753.0 |
| 150° | 1769.5 | 1767.3 | 1765.0 | 1762.8 | 1760.5 | 1762.0 | 1767.1 | 1772.2 | 1777.3 | 1782.4 | 1784.3 |
| 152.5° | 1800.5 | 1798.1 | 1795.5 | 1793.0 | 1790.6 | 1791.7 | 1796.5 | 1801.4 | 1806.2 | 1811.1 | 1813.0 |
| 155° | 1845.6 | 1842.7 | 1839.9 | 1836.9 | 1834.1 | 1834.6 | 1838.5 | 1842.3 | 1846.1 | 1849.9 | 1851.8 |
| 157.5° | 1881.0 | 1878.6 | 1876.1 | 1873.7 | 1871.3 | 1871.4 | 1874.0 | 1876.7 | 1879.4 | 1882.1 | 1884.3 |
| 160° | 1901.6 | 1899.7 | 1897.8 | 1895.9 | 1894.0 | 1894.0 | 1895.9 | 1897.8 | 1899.7 | 1901.6 | 1903.5 |
| 162.5° | 1920.0 | 1918.1 | 1916.2 | 1914.3 | 1912.4 | 1912.2 | 1913.9 | 1915.5 | 1917.2 | 1918.8 | 1921.1 |
| 165° | 1944.7 | 1942.8 | 1940.9 | 1938.9 | 1937.0 | 1936.6 | 1937.5 | 1938.4 | 1939.4 | 1940.4 | 1942.7 |
| 167.5° | 1963.1 | 1961.2 | 1959.2 | 1957.3 | 1955.4 | 1954.9 | 1955.8 | 1956.7 | 1957.6 | 1958.5 | 1960.8 |
| 170° | 1973.5 | 1971.6 | 1969.6 | 1967.7 | 1965.8 | 1965.1 | 1965.8 | 1966.4 | 1967.0 | 1967.7 | 1969.9 |
| 172.5° | 1980.3 | 1978.4 | 1976.5 | 1974.6 | 1972.7 | 1972.1 | 1972.7 | 1973.3 | 1974.0 | 1974.6 | 1976.8 |
| 175° | 1989.2 | 1987.0 | 1984.8 | 1982.6 | 1980.3 | 1979.5 | 1980.1 | 1980.7 | 1981.5 | 1982.1 | 1984.3 |
| 177.5° | 1990.6 | 1988.9 | 1987.1 | 1985.3 | 1983.5 | 1982.8 | 1983.0 | 1983.3 | 1983.5 | 1983.8 | 1985.6 |
| 180° | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 |



TEST NUMBER: P331783-840

CATALOG NUMBER: S122RDIW-S290D1440U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 | 507.0 |
| 2.5° | 504.5 | 505.3 | 506.1 | 506.4 | 506.3 | 506.1 | 505.9 | 505.8 |
| 5° | 500.5 | 501.4 | 502.3 | 502.6 | 502.3 | 502.0 | 501.7 | 501.4 |
| 7.5° | 492.4 | 492.7 | 492.9 | 492.8 | 492.3 | 491.7 | 491.2 | 490.7 |
| 10° | 484.3 | 484.0 | 483.7 | 483.2 | 482.6 | 482.0 | 481.4 | 480.8 |
| 12.5° | 475.0 | 474.4 | 473.9 | 473.1 | 472.1 | 471.1 | 470.1 | 469.1 |
| 15° | 457.7 | 455.7 | 453.7 | 452.3 | 451.3 | 450.2 | 449.2 | 448.2 |
| 17.5° | 438.0 | 435.7 | 433.4 | 431.4 | 429.6 | 427.9 | 426.1 | 424.3 |
| 20° | 424.3 | 421.7 | 419.2 | 416.8 | 414.5 | 412.3 | 410.1 | 407.9 |
| 22.5° | 409.3 | 406.0 | 402.7 | 400.2 | 398.5 | 396.9 | 395.2 | 393.5 |
| 25° | 384.4 | 380.1 | 376.0 | 373.1 | 371.6 | 370.0 | 368.5 | 367.0 |
| 27.5° | 360.5 | 355.7 | 350.8 | 347.2 | 344.8 | 342.3 | 339.9 | 337.5 |
| 30° | 343.8 | 338.6 | 333.4 | 329.4 | 326.6 | 323.9 | 321.1 | 318.4 |
| 32.5° | 326.9 | 320.9 | 315.0 | 310.7 | 308.2 | 305.6 | 303.0 | 300.4 |
| 35° | 300.5 | 294.1 | 287.6 | 283.3 | 281.0 | 278.8 | 276.6 | 274.4 |
| 37.5° | 274.8 | 267.7 | 260.6 | 255.8 | 253.3 | 250.6 | 248.1 | 245.5 |
| 40° | 257.6 | 250.3 | 243.1 | 238.1 | 235.5 | 232.9 | 230.1 | 227.5 |
| 42.5° | 240.1 | 232.7 | 225.2 | 220.3 | 217.6 | 215.1 | 212.5 | 210.0 |
| 45° | 214.9 | 207.6 | 200.5 | 195.6 | 193.2 | 190.7 | 188.2 | 185.8 |
| 47.5° | 190.3 | 183.1 | 175.9 | 171.2 | 169.0 | 166.7 | 164.5 | 162.3 |
| 50° | 174.5 | 167.4 | 160.4 | 155.8 | 153.7 | 151.6 | 149.4 | 147.2 |
| 52.5° | 159.6 | 152.8 | 146.0 | 141.6 | 139.7 | 137.6 | 135.6 | 133.7 |
| 55° | 136.8 | 130.8 | 124.6 | 120.6 | 118.7 | 116.7 | 114.8 | 112.9 |
| 57.5° | 116.2 | 110.6 | 105.0 | 101.4 | 99.8 | 98.2 | 96.5 | 94.8 |
| 60° | 102.0 | 96.8 | 91.6 | 88.2 | 86.5 | 84.9 | 83.3 | 81.7 |
| 62.5° | 89.7 | 84.7 | 79.8 | 76.7 | 75.7 | 74.8 | 73.8 | 72.8 |
| 65° | 72.9 | 69.4 | 65.9 | 64.0 | 63.7 | 63.4 | 63.1 | 62.8 |
| 67.5° | 58.9 | 57.3 | 55.6 | 54.7 | 54.3 | 54.0 | 53.7 | 53.4 |
| 70° | 51.2 | 50.2 | 49.2 | 48.5 | 48.0 | 47.6 | 47.2 | 46.8 |
| 72.5° | 44.5 | 43.6 | 42.8 | 42.3 | 42.0 | 41.8 | 41.5 | 41.3 |
| 75° | 35.2 | 34.5 | 33.8 | 33.4 | 33.3 | 33.2 | 33.1 | 33.0 |
| 77.5° | 26.7 | 26.3 | 25.9 | 25.7 | 25.4 | 25.2 | 25.1 | 24.9 |
| 80° | 21.2 | 20.8 | 20.4 | 20.2 | 20.2 | 20.2 | 20.2 | 20.2 |
| 82.5° | 16.1 | 15.8 | 15.6 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 |
| 85° | 8.7 | 8.7 | 8.7 | 8.7 | 8.7 | 8.7 | 8.7 | 8.7 |
| 87.5° | 9.2 | 9.4 | 9.6 | 9.8 | 9.9 | 10.1 | 10.2 | 10.3 |
| 90° | 31.9 | 33.5 | 35.1 | 36.3 | 36.9 | 37.5 | 38.2 | 38.8 |
| 92.5° | 34.9 | 35.9 | 36.7 | 37.3 | 37.7 | 38.0 | 38.4 | 38.8 |
| 95° | 59.2 | 60.8 | 62.4 | 63.0 | 62.7 | 62.4 | 62.1 | 61.8 |
| 97.5° | 77.6 | 78.8 | 80.1 | 80.9 | 81.3 | 81.7 | 82.1 | 82.4 |
| 100° | 86.9 | 89.6 | 92.1 | 93.7 | 94.3 | 94.9 | 95.6 | 96.2 |
| 102.5° | 90.8 | 94.1 | 97.5 | 99.6 | 100.5 | 101.3 | 102.2 | 103.1 |
| 105° | 94.6 | 98.2 | 101.7 | 104.0 | 105.3 | 106.6 | 107.9 | 109.2 |
| 107.5° | 115.5 | 111.9 | 108.4 | 107.2 | 108.5 | 109.8 | 111.1 | 112.3 |
| 110° | 187.5 | 155.6 | 123.7 | 108.4 | 109.7 | 110.9 | 112.2 | 113.5 |



TEST NUMBER: P331783-840

CATALOG NUMBER: S122RDIW-S290D1440U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 401.1 | 284.7 | 168.2 | 110.5 | 111.6 | 112.6 | 113.6 | 114.6 |
| 115° | 590.7 | 442.8 | 295.1 | 209.6 | 186.7 | 163.7 | 140.8 | 117.8 |
| 117.5° | 910.1 | 874.3 | 838.6 | 782.9 | 707.4 | 631.9 | 556.3 | 480.9 |
| 120° | 1060.5 | 1064.3 | 1068.1 | 1048.4 | 1005.4 | 962.3 | 919.2 | 876.2 |
| 122.5° | 1125.2 | 1127.5 | 1129.7 | 1126.7 | 1118.3 | 1110.0 | 1101.7 | 1093.3 |
| 125° | 1218.1 | 1220.3 | 1222.5 | 1224.2 | 1225.2 | 1226.1 | 1227.1 | 1228.0 |
| 127.5° | 1304.0 | 1307.3 | 1310.5 | 1312.3 | 1312.4 | 1312.6 | 1312.8 | 1313.0 |
| 130° | 1358.6 | 1362.1 | 1365.5 | 1367.2 | 1366.9 | 1366.5 | 1366.2 | 1365.8 |
| 132.5° | 1411.5 | 1414.5 | 1417.5 | 1418.9 | 1418.6 | 1418.3 | 1418.0 | 1417.5 |
| 135° | 1487.1 | 1490.4 | 1493.6 | 1494.8 | 1494.2 | 1493.6 | 1492.9 | 1492.3 |
| 137.5° | 1557.4 | 1560.5 | 1563.7 | 1564.7 | 1563.6 | 1562.6 | 1561.5 | 1560.3 |
| 140° | 1602.9 | 1605.8 | 1608.6 | 1609.2 | 1607.7 | 1606.1 | 1604.5 | 1602.9 |
| 142.5° | 1644.9 | 1647.5 | 1650.1 | 1650.6 | 1649.0 | 1647.4 | 1645.9 | 1644.3 |
| 145° | 1703.5 | 1705.8 | 1708.1 | 1708.4 | 1706.8 | 1705.2 | 1703.5 | 1702.0 |
| 147.5° | 1754.7 | 1756.4 | 1758.1 | 1758.2 | 1756.9 | 1755.5 | 1754.1 | 1752.8 |
| 150° | 1786.2 | 1788.2 | 1790.1 | 1790.2 | 1788.7 | 1787.1 | 1785.4 | 1783.8 |
| 152.5° | 1814.9 | 1816.8 | 1818.8 | 1818.7 | 1816.5 | 1814.5 | 1812.4 | 1810.3 |
| 155° | 1853.7 | 1855.6 | 1857.5 | 1857.2 | 1854.7 | 1852.2 | 1849.6 | 1847.0 |
| 157.5° | 1886.4 | 1888.5 | 1890.8 | 1890.6 | 1888.1 | 1885.6 | 1883.1 | 1880.7 |
| 160° | 1905.4 | 1907.3 | 1909.3 | 1909.1 | 1906.9 | 1904.6 | 1902.4 | 1900.2 |
| 162.5° | 1923.2 | 1925.4 | 1927.5 | 1927.2 | 1924.5 | 1921.8 | 1919.0 | 1916.3 |
| 165° | 1944.9 | 1947.1 | 1949.3 | 1949.3 | 1947.1 | 1944.9 | 1942.7 | 1940.4 |
| 167.5° | 1963.0 | 1965.2 | 1967.4 | 1967.1 | 1964.3 | 1961.4 | 1958.5 | 1955.6 |
| 170° | 1972.2 | 1974.4 | 1976.6 | 1976.3 | 1973.5 | 1970.5 | 1967.7 | 1964.8 |
| 172.5° | 1979.0 | 1981.3 | 1983.5 | 1983.2 | 1980.3 | 1977.4 | 1974.6 | 1971.7 |
| 175° | 1986.5 | 1988.7 | 1990.9 | 1990.5 | 1987.3 | 1984.1 | 1981.0 | 1977.7 |
| 177.5° | 1987.3 | 1989.1 | 1990.9 | 1990.6 | 1988.3 | 1986.1 | 1983.8 | 1981.5 |
| 180° | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 | 1984.9 |

(END OF REPORT)