

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: P331779-830

Luminaire Tested: **S122RDIW-S290D1240U830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331779-830
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-S290D1240U830-4F0-1E-UDD-F
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1240 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5646.6 lumens
Efficiency: N/A
Efficacy: 121.2 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

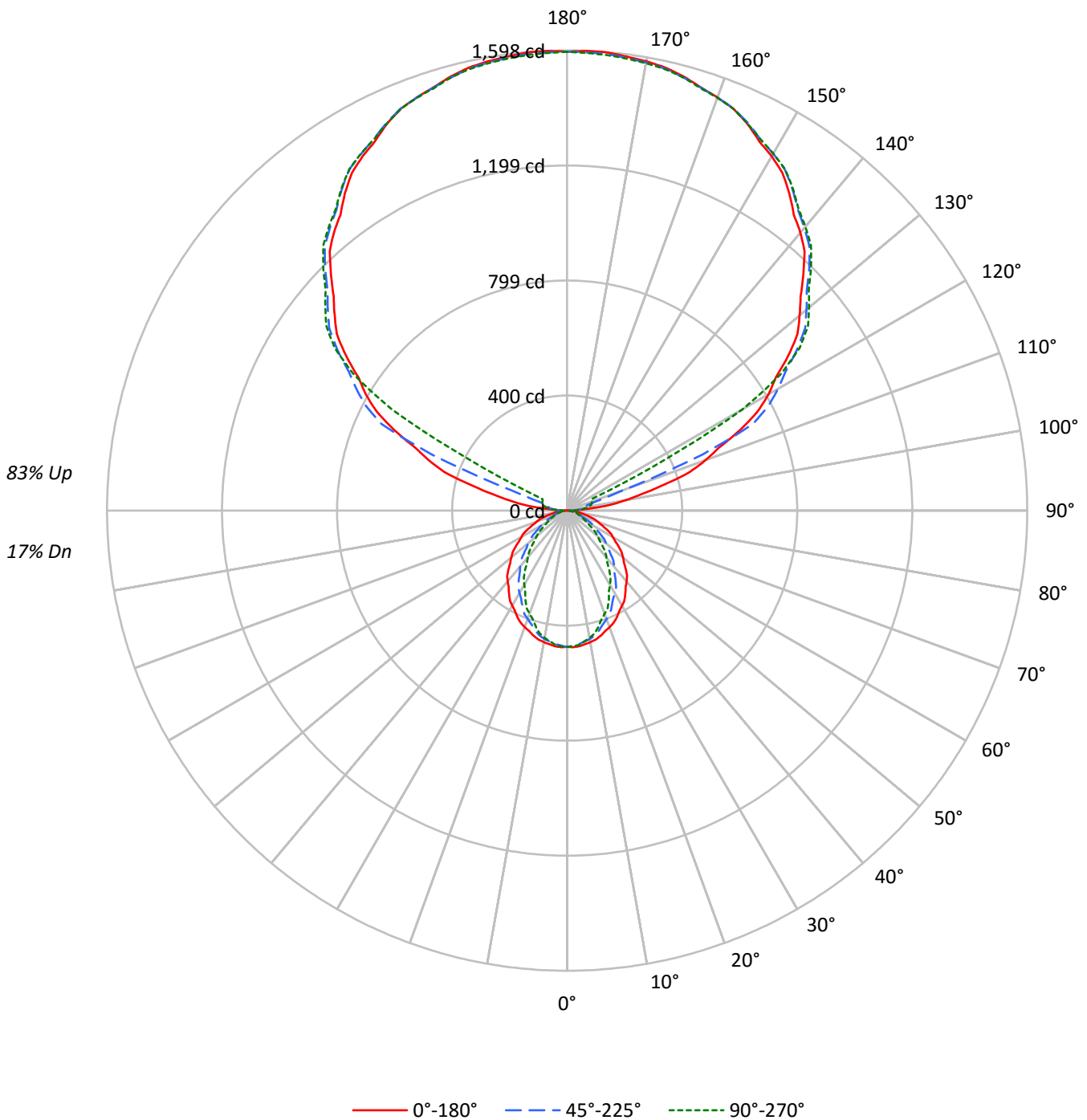
Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331779-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P331779-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-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 | 99 | 99 | 99 | 99 | 87 | 87 | 87 | 87 | 65 | 65 | 65 | 45 | 45 | 45 | 26 | 26 | 26 | 17 |
| 1 | 91 | 87 | 83 | 80 | 80 | 76 | 73 | 71 | 57 | 55 | 53 | 39 | 38 | 37 | 23 | 23 | 22 | 15 |
| 2 | 83 | 76 | 70 | 65 | 72 | 67 | 62 | 58 | 50 | 47 | 44 | 35 | 33 | 31 | 21 | 20 | 19 | 13 |
| 3 | 75 | 67 | 60 | 54 | 66 | 59 | 53 | 49 | 44 | 41 | 37 | 31 | 29 | 27 | 18 | 17 | 16 | 11 |
| 4 | 69 | 59 | 52 | 46 | 60 | 52 | 46 | 41 | 39 | 35 | 32 | 28 | 25 | 23 | 17 | 15 | 14 | 10 |
| 5 | 63 | 52 | 45 | 39 | 55 | 46 | 40 | 35 | 35 | 31 | 27 | 25 | 22 | 20 | 15 | 13 | 12 | 8 |
| 6 | 58 | 47 | 39 | 34 | 51 | 42 | 35 | 30 | 32 | 27 | 24 | 22 | 19 | 17 | 14 | 12 | 11 | 7 |
| 7 | 54 | 42 | 35 | 29 | 47 | 37 | 31 | 27 | 29 | 24 | 21 | 20 | 17 | 15 | 12 | 11 | 10 | 7 |
| 8 | 50 | 38 | 31 | 26 | 44 | 34 | 28 | 23 | 26 | 21 | 18 | 18 | 16 | 13 | 11 | 10 | 9 | 6 |
| 9 | 46 | 35 | 28 | 23 | 40 | 31 | 25 | 21 | 24 | 19 | 16 | 17 | 14 | 12 | 10 | 9 | 8 | 5 |
| 10 | 43 | 32 | 25 | 20 | 38 | 28 | 22 | 18 | 22 | 17 | 15 | 15 | 13 | 11 | 10 | 8 | 7 | 5 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7640 | 7640 | 7640 |
| 5° | 7669 | 7543 | 7585 |
| 10° | 7609 | 7420 | 7356 |
| 15° | 7522 | 7199 | 6992 |
| 20° | 7400 | 6887 | 6541 |
| 25° | 7277 | 6531 | 6102 |
| 30° | 7105 | 6162 | 5541 |
| 35° | 6936 | 5765 | 5048 |
| 40° | 6768 | 5351 | 4477 |
| 45° | 6572 | 4889 | 3959 |
| 50° | 6365 | 4421 | 3451 |
| 55° | 6159 | 3916 | 2967 |
| 60° | 5916 | 3387 | 2464 |
| 65° | 5643 | 2846 | 2239 |
| 70° | 5316 | 2346 | 2058 |
| 75° | 4916 | 2133 | 1921 |
| 80° | 4342 | 1906 | 1757 |
| 85° | 3409 | 1501 | 1501 |



TEST NUMBER: P331779-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 44.3 | 0.8 |
| 10°-20° | 121.6 | 2.2 |
| 20°-30° | 170.8 | 3.0 |
| 30°-40° | 186.2 | 3.3 |
| 40°-50° | 171.2 | 3.0 |
| 50°-60° | 134.5 | 2.4 |
| 60°-70° | 87.7 | 1.6 |
| 70°-80° | 45.2 | 0.8 |
| 80°-90° | 15.6 | 0.3 |
| 90°-100° | 53.1 | 0.9 |
| 100°-110° | 194.9 | 3.5 |
| 110°-120° | 521.0 | 9.2 |
| 120°-130° | 860.1 | 15.2 |
| 130°-140° | 914.7 | 16.2 |
| 140°-150° | 850.1 | 15.1 |
| 150°-160° | 683.5 | 12.1 |
| 160°-170° | 440.5 | 7.8 |
| 170°-180° | 151.6 | 2.7 |
| 0°-30° | 336.6 | 6.0 |
| 0°-40° | 522.8 | 9.3 |
| 0°-60° | 828.5 | 14.7 |
| 0°-90° | 977.0 | 17.3 |
| 90°-120° | 769.1 | 13.6 |
| 90°-150° | 3394.0 | 60.1 |
| 90°-180° | 4670.0 | 82.7 |
| 0°-180° | 5646.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 473 | 473 | 473 | 473 | 473 | |
| 5° | 473 | 471 | 465 | 469 | 468 | 45 |
| 15° | 450 | 445 | 431 | 423 | 418 | 127 |
| 25° | 408 | 394 | 367 | 350 | 342 | 188 |
| 35° | 352 | 329 | 292 | 266 | 256 | 220 |
| 45° | 288 | 258 | 214 | 185 | 173 | 222 |
| 55° | 219 | 185 | 139 | 114 | 105 | 195 |
| 65° | 148 | 113 | 74 | 61 | 59 | 146 |
| 75° | 79 | 50 | 34 | 31 | 31 | 83 |
| 85° | 18 | 10 | 8 | 8 | 8 | 22 |
| 90° | 1 | 14 | 23 | 29 | 31 | 4 |
| 95° | 75 | 39 | 45 | 50 | 50 | 92 |
| 105° | 350 | 366 | 70 | 83 | 88 | 375 |
| 115° | 663 | 683 | 711 | 203 | 94 | 653 |
| 125° | 937 | 953 | 974 | 982 | 986 | 835 |
| 135° | 1160 | 1178 | 1189 | 1200 | 1198 | 896 |
| 145° | 1346 | 1346 | 1364 | 1371 | 1366 | 841 |
| 155° | 1482 | 1472 | 1485 | 1491 | 1483 | 682 |
| 165° | 1561 | 1555 | 1558 | 1565 | 1558 | 441 |
| 175° | 1597 | 1589 | 1591 | 1598 | 1588 | 152 |
| 180° | 1593 | 1593 | 1593 | 1593 | 1593 | |



TEST NUMBER: P331779-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 |
| 2.5° | 474.9 | 474.5 | 474.1 | 473.7 | 473.3 | 472.7 | 471.8 | 471.1 | 470.2 | 469.4 | 470.1 |
| 5° | 473.2 | 472.7 | 472.2 | 471.7 | 471.3 | 470.3 | 469.1 | 467.9 | 466.7 | 465.4 | 466.3 |
| 7.5° | 468.3 | 467.7 | 467.0 | 466.5 | 465.9 | 464.9 | 463.4 | 461.9 | 460.5 | 459.1 | 459.3 |
| 10° | 464.1 | 463.4 | 462.8 | 462.1 | 461.5 | 460.1 | 458.3 | 456.4 | 454.5 | 452.6 | 452.3 |
| 12.5° | 459.0 | 458.2 | 457.3 | 456.6 | 455.7 | 454.1 | 451.7 | 449.2 | 446.8 | 444.3 | 443.8 |
| 15° | 450.0 | 448.9 | 447.9 | 446.9 | 445.8 | 443.7 | 440.5 | 437.2 | 433.9 | 430.7 | 429.0 |
| 17.5° | 438.9 | 437.3 | 435.7 | 434.1 | 432.5 | 429.7 | 425.6 | 421.4 | 417.3 | 413.1 | 410.9 |
| 20° | 430.7 | 428.9 | 427.0 | 425.0 | 423.1 | 419.8 | 415.0 | 410.3 | 405.6 | 400.8 | 398.4 |
| 22.5° | 421.9 | 419.7 | 417.5 | 415.5 | 413.3 | 409.5 | 404.2 | 398.8 | 393.5 | 388.1 | 385.0 |
| 25° | 408.5 | 405.4 | 402.4 | 399.4 | 396.3 | 391.6 | 385.3 | 379.1 | 372.8 | 366.6 | 362.6 |
| 27.5° | 392.4 | 389.1 | 385.8 | 382.5 | 379.1 | 373.9 | 366.8 | 359.8 | 352.7 | 345.6 | 341.1 |
| 30° | 381.1 | 377.5 | 373.8 | 370.2 | 366.6 | 361.0 | 353.4 | 345.8 | 338.2 | 330.5 | 325.7 |
| 32.5° | 370.1 | 365.9 | 361.7 | 357.4 | 353.2 | 347.2 | 339.5 | 331.7 | 324.0 | 316.1 | 310.7 |
| 35° | 351.9 | 347.1 | 342.2 | 337.4 | 332.5 | 325.9 | 317.5 | 309.2 | 300.9 | 292.5 | 286.4 |
| 37.5° | 333.8 | 328.5 | 323.1 | 317.8 | 312.5 | 305.4 | 296.4 | 287.5 | 278.6 | 269.7 | 263.1 |
| 40° | 321.1 | 315.5 | 309.7 | 304.0 | 298.3 | 290.9 | 281.6 | 272.4 | 263.2 | 253.9 | 247.1 |
| 42.5° | 308.1 | 302.1 | 296.1 | 290.1 | 284.1 | 276.3 | 266.7 | 257.2 | 247.7 | 238.2 | 231.2 |
| 45° | 287.8 | 281.3 | 274.9 | 268.6 | 262.2 | 254.0 | 244.0 | 234.0 | 224.0 | 214.1 | 207.4 |
| 47.5° | 267.9 | 261.1 | 254.4 | 247.6 | 240.8 | 232.3 | 222.0 | 211.7 | 201.3 | 191.1 | 184.4 |
| 50° | 253.4 | 246.8 | 240.0 | 233.2 | 226.5 | 217.8 | 207.4 | 196.9 | 186.4 | 176.0 | 169.4 |
| 52.5° | 239.4 | 232.3 | 225.4 | 218.3 | 211.2 | 202.6 | 192.3 | 182.1 | 171.8 | 161.6 | 155.2 |
| 55° | 218.8 | 211.4 | 204.0 | 196.5 | 189.1 | 180.3 | 169.9 | 159.7 | 149.4 | 139.1 | 133.5 |
| 57.5° | 197.7 | 190.0 | 182.4 | 174.8 | 167.2 | 158.4 | 148.5 | 138.7 | 128.8 | 118.9 | 113.7 |
| 60° | 183.2 | 175.7 | 168.1 | 160.4 | 152.8 | 144.1 | 134.3 | 124.5 | 114.7 | 104.9 | 100.0 |
| 62.5° | 169.2 | 161.6 | 154.0 | 146.4 | 138.7 | 130.3 | 120.9 | 111.6 | 102.3 | 92.9 | 88.3 |
| 65° | 147.7 | 140.0 | 132.3 | 124.6 | 116.9 | 108.8 | 100.2 | 91.6 | 83.0 | 74.5 | 71.3 |
| 67.5° | 127.0 | 119.3 | 111.7 | 104.1 | 96.4 | 88.7 | 81.0 | 73.3 | 65.6 | 57.9 | 56.4 |
| 70° | 112.6 | 105.2 | 97.7 | 90.4 | 82.9 | 76.0 | 69.4 | 62.8 | 56.3 | 49.7 | 48.7 |
| 72.5° | 98.9 | 91.8 | 84.6 | 77.6 | 70.4 | 64.3 | 59.0 | 53.7 | 48.4 | 43.2 | 42.3 |
| 75° | 78.8 | 72.1 | 65.5 | 58.8 | 52.1 | 47.2 | 43.9 | 40.7 | 37.5 | 34.2 | 33.6 |
| 77.5° | 59.0 | 53.2 | 47.3 | 41.5 | 35.6 | 32.0 | 30.3 | 28.8 | 27.2 | 25.7 | 25.4 |
| 80° | 46.7 | 41.8 | 36.9 | 32.1 | 27.2 | 24.3 | 23.4 | 22.4 | 21.5 | 20.5 | 20.2 |
| 82.5° | 35.3 | 31.6 | 27.8 | 24.0 | 20.3 | 18.0 | 17.3 | 16.7 | 16.0 | 15.5 | 15.2 |
| 85° | 18.4 | 16.4 | 14.4 | 12.4 | 10.5 | 9.2 | 9.0 | 8.7 | 8.4 | 8.1 | 8.1 |
| 87.5° | 5.7 | 5.7 | 5.7 | 5.6 | 5.6 | 5.7 | 6.1 | 6.5 | 7.0 | 7.4 | 7.5 |
| 90° | 1.1 | 4.0 | 6.8 | 9.6 | 12.4 | 14.9 | 16.9 | 18.9 | 21.0 | 23.1 | 24.3 |
| 92.5° | 23.3 | 23.0 | 22.8 | 22.5 | 22.2 | 22.6 | 23.7 | 24.7 | 25.7 | 26.8 | 27.4 |
| 95° | 74.9 | 66.4 | 58.1 | 49.6 | 41.1 | 37.8 | 39.6 | 41.4 | 43.2 | 45.0 | 46.3 |
| 97.5° | 148.7 | 124.9 | 101.0 | 77.3 | 53.4 | 43.5 | 47.7 | 51.8 | 56.1 | 60.2 | 61.2 |
| 100° | 204.1 | 169.0 | 133.8 | 98.8 | 63.7 | 48.3 | 52.7 | 57.0 | 61.4 | 65.7 | 67.8 |
| 102.5° | 264.9 | 257.5 | 250.1 | 242.7 | 235.3 | 213.3 | 176.8 | 140.4 | 104.0 | 67.6 | 70.2 |
| 105° | 350.5 | 358.2 | 365.9 | 373.5 | 381.3 | 350.2 | 280.2 | 210.2 | 140.3 | 70.3 | 73.1 |
| 107.5° | 448.1 | 454.2 | 460.4 | 466.7 | 472.9 | 434.0 | 350.2 | 266.3 | 182.4 | 98.5 | 95.6 |
| 110° | 510.8 | 516.1 | 521.5 | 526.9 | 532.3 | 497.9 | 424.0 | 349.9 | 275.8 | 201.8 | 176.2 |



TEST NUMBER: P331779-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 569.8 | 574.6 | 579.3 | 584.1 | 588.9 | 582.1 | 563.8 | 545.5 | 527.3 | 508.9 | 415.5 |
| 115° | 663.0 | 667.3 | 671.7 | 676.0 | 680.4 | 685.8 | 692.2 | 698.6 | 705.0 | 711.4 | 592.8 |
| 117.5° | 746.2 | 751.1 | 755.9 | 760.8 | 765.7 | 770.3 | 774.7 | 779.1 | 783.5 | 788.0 | 759.2 |
| 120° | 807.1 | 811.0 | 814.7 | 818.6 | 822.5 | 826.7 | 831.3 | 835.9 | 840.6 | 845.1 | 848.2 |
| 122.5° | 858.8 | 862.8 | 866.9 | 870.9 | 875.0 | 879.5 | 884.5 | 889.5 | 894.6 | 899.6 | 901.4 |
| 125° | 937.4 | 940.7 | 944.1 | 947.3 | 950.6 | 954.8 | 959.7 | 964.5 | 969.4 | 974.3 | 976.1 |
| 127.5° | 1008.6 | 1012.3 | 1016.0 | 1019.7 | 1023.4 | 1027.1 | 1030.7 | 1034.3 | 1037.9 | 1041.6 | 1044.2 |
| 130° | 1053.9 | 1057.9 | 1062.1 | 1066.1 | 1070.3 | 1073.7 | 1076.5 | 1079.3 | 1082.1 | 1085.0 | 1087.8 |
| 132.5° | 1099.9 | 1103.4 | 1106.9 | 1110.4 | 1113.9 | 1117.0 | 1119.8 | 1122.7 | 1125.5 | 1128.3 | 1130.7 |
| 135° | 1159.9 | 1163.9 | 1168.1 | 1172.1 | 1176.3 | 1179.5 | 1181.8 | 1184.1 | 1186.4 | 1188.7 | 1191.3 |
| 137.5° | 1220.5 | 1223.4 | 1226.2 | 1229.2 | 1232.0 | 1234.7 | 1237.4 | 1240.0 | 1242.6 | 1245.2 | 1247.7 |
| 140° | 1260.2 | 1262.3 | 1264.3 | 1266.3 | 1268.4 | 1270.8 | 1273.7 | 1276.5 | 1279.3 | 1282.1 | 1284.4 |
| 142.5° | 1293.5 | 1295.2 | 1297.1 | 1298.9 | 1300.8 | 1303.3 | 1306.6 | 1309.8 | 1313.0 | 1316.3 | 1318.3 |
| 145° | 1345.5 | 1345.3 | 1345.0 | 1344.7 | 1344.5 | 1346.5 | 1350.9 | 1355.3 | 1359.6 | 1364.0 | 1365.7 |
| 147.5° | 1390.9 | 1390.0 | 1389.0 | 1388.0 | 1387.0 | 1388.7 | 1393.0 | 1397.3 | 1401.7 | 1405.9 | 1407.3 |
| 150° | 1420.5 | 1418.7 | 1416.9 | 1415.0 | 1413.2 | 1414.5 | 1418.5 | 1422.7 | 1426.7 | 1430.9 | 1432.4 |
| 152.5° | 1445.4 | 1443.4 | 1441.3 | 1439.4 | 1437.4 | 1438.3 | 1442.2 | 1446.1 | 1450.0 | 1453.9 | 1455.5 |
| 155° | 1481.6 | 1479.2 | 1477.0 | 1474.6 | 1472.3 | 1472.7 | 1475.8 | 1478.8 | 1482.0 | 1485.1 | 1486.6 |
| 157.5° | 1510.0 | 1508.0 | 1506.0 | 1504.1 | 1502.1 | 1502.2 | 1504.4 | 1506.6 | 1508.7 | 1510.9 | 1512.6 |
| 160° | 1526.5 | 1525.0 | 1523.4 | 1521.9 | 1520.4 | 1520.4 | 1521.9 | 1523.4 | 1525.0 | 1526.5 | 1528.0 |
| 162.5° | 1541.3 | 1539.7 | 1538.2 | 1536.7 | 1535.1 | 1535.0 | 1536.3 | 1537.7 | 1539.1 | 1540.4 | 1542.1 |
| 165° | 1561.1 | 1559.6 | 1558.0 | 1556.5 | 1555.0 | 1554.6 | 1555.4 | 1556.1 | 1556.9 | 1557.6 | 1559.4 |
| 167.5° | 1575.9 | 1574.3 | 1572.8 | 1571.3 | 1569.7 | 1569.3 | 1570.1 | 1570.7 | 1571.5 | 1572.2 | 1574.0 |
| 170° | 1584.2 | 1582.6 | 1581.1 | 1579.6 | 1578.0 | 1577.5 | 1578.0 | 1578.6 | 1579.0 | 1579.6 | 1581.4 |
| 172.5° | 1589.7 | 1588.2 | 1586.7 | 1585.1 | 1583.6 | 1583.1 | 1583.6 | 1584.0 | 1584.6 | 1585.1 | 1586.9 |
| 175° | 1596.9 | 1595.1 | 1593.3 | 1591.5 | 1589.7 | 1589.0 | 1589.6 | 1590.1 | 1590.6 | 1591.1 | 1592.9 |
| 177.5° | 1598.0 | 1596.6 | 1595.2 | 1593.7 | 1592.2 | 1591.7 | 1591.9 | 1592.0 | 1592.2 | 1592.5 | 1593.9 |
| 180° | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 |



TEST NUMBER: P331779-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 | 473.2 |
| 2.5° | 470.9 | 471.6 | 472.4 | 472.7 | 472.6 | 472.4 | 472.2 | 472.1 |
| 5° | 467.1 | 468.0 | 468.8 | 469.1 | 468.8 | 468.5 | 468.3 | 468.0 |
| 7.5° | 459.6 | 459.9 | 460.1 | 460.0 | 459.5 | 458.9 | 458.5 | 458.0 |
| 10° | 452.0 | 451.8 | 451.5 | 451.0 | 450.4 | 449.9 | 449.3 | 448.7 |
| 12.5° | 443.4 | 442.8 | 442.3 | 441.6 | 440.6 | 439.7 | 438.8 | 437.8 |
| 15° | 427.2 | 425.3 | 423.5 | 422.2 | 421.2 | 420.2 | 419.2 | 418.3 |
| 17.5° | 408.8 | 406.6 | 404.5 | 402.7 | 401.0 | 399.4 | 397.7 | 396.1 |
| 20° | 396.1 | 393.6 | 391.2 | 389.0 | 386.9 | 384.8 | 382.8 | 380.7 |
| 22.5° | 382.0 | 378.9 | 375.9 | 373.5 | 371.9 | 370.4 | 368.8 | 367.3 |
| 25° | 358.7 | 354.8 | 350.9 | 348.3 | 346.9 | 345.3 | 343.9 | 342.5 |
| 27.5° | 336.5 | 332.0 | 327.4 | 324.0 | 321.8 | 319.5 | 317.3 | 315.0 |
| 30° | 320.8 | 316.0 | 311.1 | 307.5 | 304.8 | 302.3 | 299.7 | 297.2 |
| 32.5° | 305.1 | 299.5 | 294.0 | 290.0 | 287.7 | 285.2 | 282.8 | 280.4 |
| 35° | 280.5 | 274.5 | 268.4 | 264.4 | 262.3 | 260.2 | 258.2 | 256.1 |
| 37.5° | 256.5 | 249.9 | 243.3 | 238.7 | 236.4 | 233.9 | 231.6 | 229.1 |
| 40° | 240.4 | 233.7 | 226.9 | 222.3 | 219.8 | 217.4 | 214.8 | 212.4 |
| 42.5° | 224.1 | 217.2 | 210.2 | 205.6 | 203.1 | 200.8 | 198.3 | 196.0 |
| 45° | 200.6 | 193.8 | 187.1 | 182.6 | 180.3 | 178.0 | 175.7 | 173.4 |
| 47.5° | 177.6 | 170.9 | 164.2 | 159.8 | 157.7 | 155.6 | 153.5 | 151.5 |
| 50° | 162.9 | 156.3 | 149.7 | 145.4 | 143.5 | 141.5 | 139.4 | 137.4 |
| 52.5° | 148.9 | 142.6 | 136.3 | 132.1 | 130.4 | 128.5 | 126.6 | 124.8 |
| 55° | 127.7 | 122.1 | 116.3 | 112.5 | 110.7 | 109.0 | 107.2 | 105.4 |
| 57.5° | 108.5 | 103.2 | 98.0 | 94.6 | 93.1 | 91.6 | 90.1 | 88.5 |
| 60° | 95.2 | 90.4 | 85.5 | 82.3 | 80.8 | 79.3 | 77.8 | 76.3 |
| 62.5° | 83.7 | 79.1 | 74.5 | 71.6 | 70.7 | 69.8 | 68.9 | 68.0 |
| 65° | 68.1 | 64.8 | 61.5 | 59.8 | 59.5 | 59.2 | 58.9 | 58.6 |
| 67.5° | 55.0 | 53.4 | 51.9 | 51.1 | 50.7 | 50.4 | 50.1 | 49.9 |
| 70° | 47.8 | 46.8 | 45.9 | 45.2 | 44.8 | 44.4 | 44.0 | 43.6 |
| 72.5° | 41.6 | 40.7 | 40.0 | 39.5 | 39.2 | 39.0 | 38.7 | 38.5 |
| 75° | 32.9 | 32.2 | 31.6 | 31.2 | 31.1 | 31.0 | 30.9 | 30.8 |
| 77.5° | 24.9 | 24.5 | 24.1 | 23.9 | 23.8 | 23.6 | 23.5 | 23.3 |
| 80° | 19.8 | 19.4 | 19.0 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 |
| 82.5° | 15.0 | 14.7 | 14.5 | 14.4 | 14.4 | 14.4 | 14.4 | 14.4 |
| 85° | 8.1 | 8.1 | 8.1 | 8.1 | 8.1 | 8.1 | 8.1 | 8.1 |
| 87.5° | 7.7 | 7.9 | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 |
| 90° | 25.6 | 26.9 | 28.2 | 29.1 | 29.6 | 30.1 | 30.6 | 31.1 |
| 92.5° | 28.1 | 28.7 | 29.4 | 29.9 | 30.2 | 30.5 | 30.8 | 31.1 |
| 95° | 47.5 | 48.8 | 50.0 | 50.6 | 50.3 | 50.0 | 49.9 | 49.6 |
| 97.5° | 62.2 | 63.2 | 64.3 | 64.9 | 65.2 | 65.6 | 65.9 | 66.2 |
| 100° | 69.8 | 71.8 | 73.9 | 75.2 | 75.7 | 76.3 | 76.7 | 77.3 |
| 102.5° | 72.9 | 75.6 | 78.2 | 79.9 | 80.6 | 81.3 | 82.1 | 82.8 |
| 105° | 76.0 | 78.8 | 81.6 | 83.5 | 84.5 | 85.6 | 86.6 | 87.7 |
| 107.5° | 92.7 | 89.8 | 87.0 | 86.1 | 87.1 | 88.1 | 89.2 | 90.2 |
| 110° | 150.5 | 124.9 | 99.2 | 87.0 | 88.0 | 89.1 | 90.1 | 91.0 |



TEST NUMBER: P331779-830

CATALOG NUMBER: S122RDIW-S290D1240U830-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 322.0 | 228.6 | 135.1 | 88.7 | 89.5 | 90.4 | 91.1 | 92.0 |
| 115° | 474.1 | 355.5 | 236.9 | 168.3 | 149.9 | 131.5 | 113.0 | 94.5 |
| 117.5° | 730.6 | 701.8 | 673.2 | 628.5 | 567.9 | 507.3 | 446.7 | 386.0 |
| 120° | 851.3 | 854.3 | 857.4 | 841.7 | 807.1 | 772.5 | 737.9 | 703.3 |
| 122.5° | 903.2 | 905.1 | 906.9 | 904.5 | 897.8 | 891.1 | 884.4 | 877.6 |
| 125° | 977.9 | 979.7 | 981.5 | 982.7 | 983.4 | 984.3 | 985.1 | 985.8 |
| 127.5° | 1046.8 | 1049.4 | 1052.1 | 1053.5 | 1053.6 | 1053.8 | 1053.9 | 1054.0 |
| 130° | 1090.6 | 1093.4 | 1096.2 | 1097.5 | 1097.2 | 1097.0 | 1096.7 | 1096.5 |
| 132.5° | 1133.1 | 1135.5 | 1137.9 | 1139.0 | 1138.8 | 1138.5 | 1138.2 | 1138.0 |
| 135° | 1193.8 | 1196.4 | 1199.0 | 1200.0 | 1199.5 | 1199.0 | 1198.4 | 1198.0 |
| 137.5° | 1250.2 | 1252.7 | 1255.3 | 1256.0 | 1255.2 | 1254.3 | 1253.5 | 1252.5 |
| 140° | 1286.8 | 1289.0 | 1291.4 | 1291.8 | 1290.5 | 1289.3 | 1288.0 | 1286.8 |
| 142.5° | 1320.4 | 1322.6 | 1324.6 | 1325.0 | 1323.8 | 1322.5 | 1321.2 | 1319.9 |
| 145° | 1367.5 | 1369.3 | 1371.1 | 1371.4 | 1370.1 | 1368.9 | 1367.5 | 1366.3 |
| 147.5° | 1408.6 | 1409.9 | 1411.3 | 1411.4 | 1410.3 | 1409.2 | 1408.2 | 1407.1 |
| 150° | 1433.9 | 1435.5 | 1437.0 | 1437.1 | 1435.9 | 1434.5 | 1433.2 | 1432.0 |
| 152.5° | 1457.0 | 1458.5 | 1460.1 | 1460.0 | 1458.3 | 1456.6 | 1454.9 | 1453.2 |
| 155° | 1488.1 | 1489.7 | 1491.2 | 1490.9 | 1488.8 | 1486.9 | 1484.8 | 1482.7 |
| 157.5° | 1514.4 | 1516.1 | 1517.9 | 1517.7 | 1515.7 | 1513.7 | 1511.7 | 1509.7 |
| 160° | 1529.7 | 1531.2 | 1532.7 | 1532.6 | 1530.8 | 1529.0 | 1527.2 | 1525.4 |
| 162.5° | 1543.9 | 1545.6 | 1547.4 | 1547.1 | 1544.9 | 1542.7 | 1540.5 | 1538.3 |
| 165° | 1561.2 | 1563.0 | 1564.8 | 1564.8 | 1563.0 | 1561.2 | 1559.4 | 1557.6 |
| 167.5° | 1575.7 | 1577.5 | 1579.3 | 1579.1 | 1576.8 | 1574.5 | 1572.2 | 1569.9 |
| 170° | 1583.2 | 1585.0 | 1586.8 | 1586.5 | 1584.2 | 1581.9 | 1579.6 | 1577.3 |
| 172.5° | 1588.7 | 1590.4 | 1592.2 | 1592.0 | 1589.7 | 1587.4 | 1585.1 | 1582.8 |
| 175° | 1594.7 | 1596.5 | 1598.3 | 1597.9 | 1595.3 | 1592.8 | 1590.2 | 1587.6 |
| 177.5° | 1595.3 | 1596.8 | 1598.3 | 1598.0 | 1596.2 | 1594.3 | 1592.5 | 1590.6 |
| 180° | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 | 1593.4 |

(END OF REPORT)