

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: P332118-840

Luminaire Tested: **S123DIW-S340D1535U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332118-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-5,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIW-S340D1535U840-4F0-1E-UDD-F
Description: DEFINE 3 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1535 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7626.6 lumens
Efficiency: N/A
Efficacy: 142.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Semi-Indirect

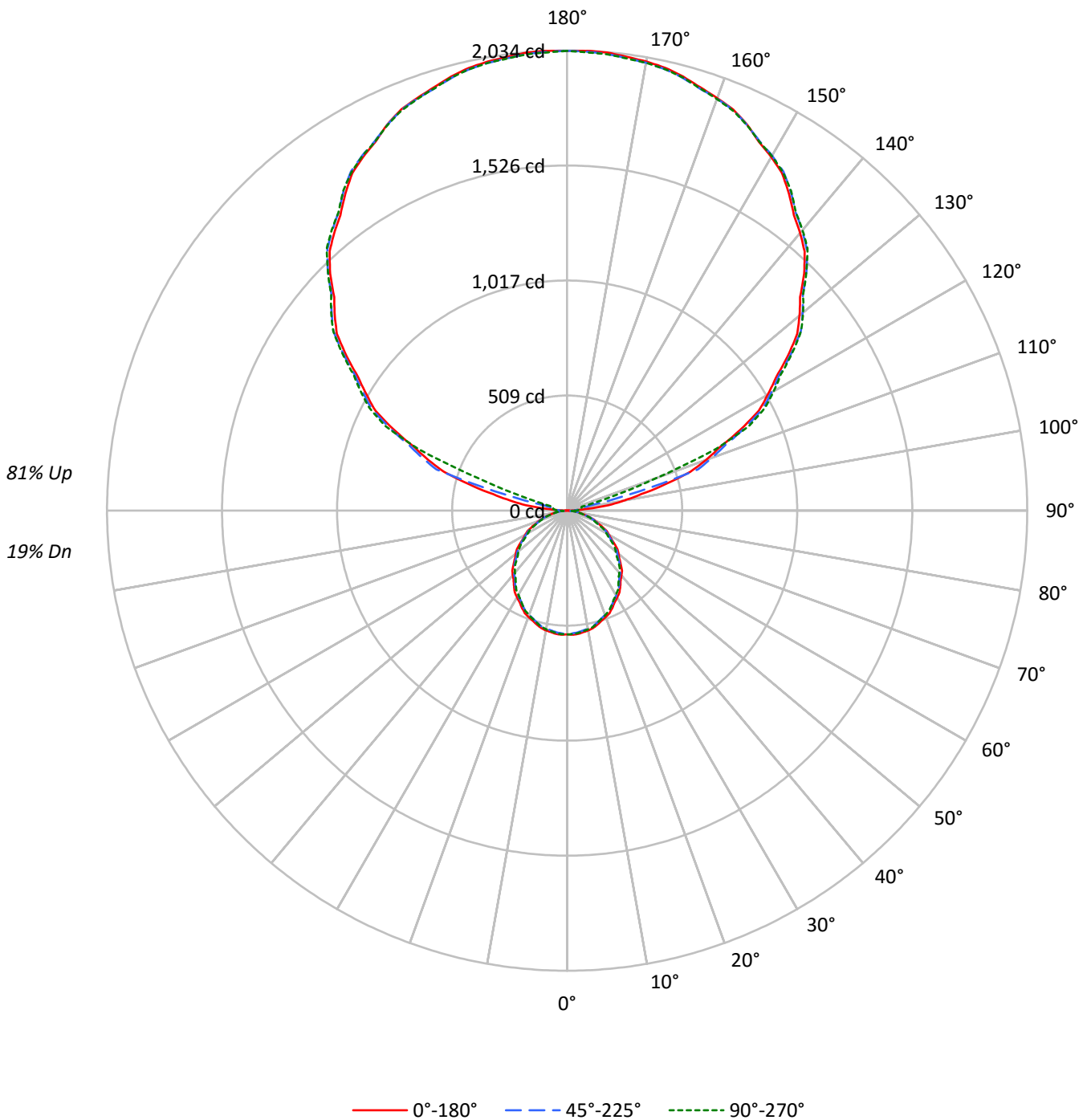
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332118-840

CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P332118-840

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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 100 | 100 | 100 | 100 | 88 | 88 | 88 | 88 | 66 | 66 | 66 | 46 | 46 | 46 | 27 | 27 | 27 | 19 |
| 1 | 91 | 87 | 83 | 80 | 80 | 76 | 73 | 71 | 58 | 56 | 54 | 40 | 39 | 38 | 24 | 24 | 23 | 16 |
| 2 | 83 | 76 | 70 | 65 | 73 | 67 | 62 | 58 | 50 | 47 | 44 | 35 | 33 | 32 | 21 | 20 | 19 | 13 |
| 3 | 75 | 66 | 59 | 54 | 66 | 59 | 53 | 48 | 44 | 40 | 37 | 31 | 29 | 27 | 19 | 17 | 16 | 11 |
| 4 | 69 | 58 | 51 | 45 | 60 | 52 | 46 | 41 | 39 | 35 | 32 | 28 | 25 | 23 | 17 | 15 | 14 | 10 |
| 5 | 63 | 52 | 44 | 39 | 55 | 46 | 40 | 35 | 35 | 30 | 27 | 25 | 22 | 20 | 15 | 13 | 12 | 8 |
| 6 | 58 | 46 | 39 | 33 | 51 | 41 | 35 | 30 | 31 | 27 | 23 | 22 | 19 | 17 | 14 | 12 | 11 | 7 |
| 7 | 53 | 42 | 34 | 29 | 47 | 37 | 31 | 26 | 28 | 24 | 20 | 20 | 17 | 15 | 12 | 11 | 9 | 6 |
| 8 | 49 | 38 | 30 | 25 | 43 | 33 | 27 | 23 | 26 | 21 | 18 | 18 | 15 | 13 | 11 | 10 | 8 | 6 |
| 9 | 46 | 34 | 27 | 22 | 40 | 30 | 24 | 20 | 23 | 19 | 16 | 17 | 14 | 12 | 10 | 9 | 8 | 5 |
| 10 | 43 | 31 | 24 | 20 | 37 | 28 | 22 | 18 | 21 | 17 | 14 | 15 | 12 | 10 | 10 | 8 | 7 | 5 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 5890 | 5890 | 5890 |
| 5° | 5919 | 5837 | 5877 |
| 10° | 5879 | 5786 | 5822 |
| 15° | 5810 | 5721 | 5731 |
| 20° | 5730 | 5628 | 5632 |
| 25° | 5621 | 5516 | 5505 |
| 30° | 5504 | 5392 | 5351 |
| 35° | 5380 | 5261 | 5194 |
| 40° | 5251 | 5117 | 5039 |
| 45° | 5107 | 4985 | 4864 |
| 50° | 4963 | 4823 | 4687 |
| 55° | 4778 | 4654 | 4511 |
| 60° | 4590 | 4456 | 4316 |
| 65° | 4422 | 4241 | 4111 |
| 70° | 4176 | 3997 | 3821 |
| 75° | 3818 | 3681 | 3523 |
| 80° | 3440 | 3298 | 3267 |
| 85° | 3013 | 2902 | 2791 |



TEST NUMBER: P332118-840

CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 51.5 | 0.7 |
| 10°-20° | 145.6 | 1.9 |
| 20°-30° | 215.0 | 2.8 |
| 30°-40° | 251.2 | 3.3 |
| 40°-50° | 252.5 | 3.3 |
| 50°-60° | 221.8 | 2.9 |
| 60°-70° | 165.2 | 2.2 |
| 70°-80° | 94.1 | 1.2 |
| 80°-90° | 32.7 | 0.4 |
| 90°-100° | 73.9 | 1.0 |
| 100°-110° | 352.1 | 4.6 |
| 110°-120° | 845.8 | 11.1 |
| 120°-130° | 1077.0 | 14.1 |
| 130°-140° | 1150.8 | 15.1 |
| 140°-150° | 1076.1 | 14.1 |
| 150°-160° | 868.0 | 11.4 |
| 160°-170° | 560.2 | 7.3 |
| 170°-180° | 193.1 | 2.5 |
| 0°-30° | 412.1 | 5.4 |
| 0°-40° | 663.3 | 8.7 |
| 0°-60° | 1137.6 | 14.9 |
| 0°-90° | 1429.7 | 18.7 |
| 90°-120° | 1271.8 | 16.7 |
| 90°-150° | 4575.6 | 60.0 |
| 90°-180° | 6197.0 | 81.3 |
| 0°-180° | 7626.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 547 | 547 | 547 | 547 | 547 | |
| 5° | 548 | 545 | 540 | 545 | 544 | 52 |
| 15° | 521 | 519 | 513 | 517 | 514 | 147 |
| 25° | 473 | 470 | 464 | 465 | 464 | 218 |
| 35° | 409 | 406 | 400 | 398 | 395 | 256 |
| 45° | 336 | 333 | 328 | 322 | 320 | 259 |
| 55° | 255 | 254 | 248 | 243 | 240 | 228 |
| 65° | 174 | 171 | 166 | 163 | 161 | 171 |
| 75° | 92 | 90 | 88 | 86 | 85 | 98 |
| 85° | 24 | 24 | 24 | 23 | 23 | 27 |
| 90° | 2 | 17 | 36 | 42 | 45 | 6 |
| 95° | 92 | 35 | 47 | 57 | 57 | 114 |
| 105° | 450 | 458 | 331 | 78 | 66 | 477 |
| 115° | 844 | 853 | 867 | 881 | 888 | 833 |
| 125° | 1190 | 1201 | 1208 | 1211 | 1214 | 1062 |
| 135° | 1481 | 1490 | 1496 | 1500 | 1496 | 1140 |
| 145° | 1709 | 1719 | 1723 | 1726 | 1726 | 1069 |
| 155° | 1883 | 1880 | 1881 | 1888 | 1880 | 867 |
| 165° | 1985 | 1981 | 1979 | 1990 | 1981 | 561 |
| 175° | 2032 | 2025 | 2026 | 2035 | 2025 | 193 |
| 180° | 2032 | 2032 | 2032 | 2032 | 2032 | |



TEST NUMBER: P332118-840

CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 |
| 2.5° | 549.2 | 548.8 | 548.5 | 548.2 | 547.8 | 547.1 | 546.2 | 545.3 | 544.4 | 543.5 | 544.3 |
| 5° | 547.8 | 547.1 | 546.6 | 546.1 | 545.6 | 544.8 | 543.6 | 542.5 | 541.3 | 540.2 | 541.2 |
| 7.5° | 542.4 | 541.8 | 541.3 | 540.8 | 540.3 | 539.4 | 538.3 | 537.0 | 535.8 | 534.6 | 535.5 |
| 10° | 537.9 | 537.3 | 536.7 | 536.2 | 535.7 | 534.8 | 533.4 | 532.1 | 530.7 | 529.4 | 530.3 |
| 12.5° | 531.8 | 531.4 | 530.9 | 530.5 | 530.1 | 529.2 | 528.0 | 526.6 | 525.3 | 524.1 | 524.8 |
| 15° | 521.4 | 521.0 | 520.5 | 520.1 | 519.7 | 518.8 | 517.5 | 516.0 | 514.7 | 513.4 | 514.2 |
| 17.5° | 509.2 | 508.7 | 508.2 | 507.6 | 507.1 | 506.1 | 504.7 | 503.4 | 502.0 | 500.7 | 501.2 |
| 20° | 500.2 | 499.6 | 499.0 | 498.3 | 497.7 | 496.7 | 495.3 | 493.9 | 492.6 | 491.3 | 491.7 |
| 22.5° | 490.0 | 489.4 | 488.8 | 488.2 | 487.6 | 486.6 | 485.1 | 483.8 | 482.4 | 481.1 | 481.4 |
| 25° | 473.3 | 472.7 | 472.1 | 471.5 | 470.9 | 469.9 | 468.5 | 467.2 | 465.7 | 464.4 | 464.5 |
| 27.5° | 455.6 | 454.9 | 454.3 | 453.7 | 453.1 | 452.1 | 450.7 | 449.2 | 447.8 | 446.3 | 446.4 |
| 30° | 442.8 | 442.2 | 441.7 | 441.2 | 440.7 | 439.7 | 438.3 | 436.8 | 435.4 | 433.8 | 433.8 |
| 32.5° | 430.0 | 429.3 | 428.6 | 427.9 | 427.3 | 426.3 | 425.2 | 424.0 | 422.9 | 421.8 | 421.2 |
| 35° | 409.4 | 408.8 | 408.1 | 407.5 | 406.9 | 405.9 | 404.6 | 403.1 | 401.8 | 400.4 | 399.8 |
| 37.5° | 388.3 | 387.5 | 386.7 | 385.9 | 385.2 | 384.1 | 382.6 | 381.2 | 379.9 | 378.5 | 377.8 |
| 40° | 373.7 | 372.9 | 372.3 | 371.7 | 371.1 | 370.0 | 368.6 | 367.1 | 365.7 | 364.2 | 363.3 |
| 42.5° | 358.9 | 358.2 | 357.5 | 356.8 | 356.1 | 355.0 | 353.6 | 352.0 | 350.6 | 349.1 | 348.3 |
| 45° | 335.5 | 335.1 | 334.7 | 334.3 | 333.9 | 333.0 | 331.5 | 330.2 | 328.8 | 327.5 | 326.3 |
| 47.5° | 312.3 | 311.6 | 311.0 | 310.4 | 309.8 | 308.9 | 307.6 | 306.3 | 305.1 | 303.8 | 302.6 |
| 50° | 296.4 | 295.9 | 295.4 | 294.9 | 294.4 | 293.4 | 292.1 | 290.7 | 289.3 | 288.0 | 286.8 |
| 52.5° | 279.8 | 279.5 | 279.1 | 278.8 | 278.4 | 277.5 | 276.1 | 274.7 | 273.3 | 271.8 | 270.8 |
| 55° | 254.6 | 254.5 | 254.4 | 254.3 | 254.2 | 253.4 | 252.1 | 250.6 | 249.3 | 248.0 | 246.8 |
| 57.5° | 230.5 | 230.1 | 229.7 | 229.4 | 229.0 | 228.3 | 227.2 | 226.1 | 225.1 | 224.0 | 223.0 |
| 60° | 213.2 | 213.1 | 213.0 | 212.9 | 212.8 | 212.1 | 210.8 | 209.5 | 208.3 | 207.0 | 206.1 |
| 62.5° | 197.7 | 197.4 | 197.2 | 196.9 | 196.6 | 195.9 | 194.6 | 193.4 | 192.1 | 190.9 | 190.0 |
| 65° | 173.6 | 173.1 | 172.6 | 172.1 | 171.6 | 170.8 | 169.8 | 168.6 | 167.6 | 166.5 | 165.7 |
| 67.5° | 148.1 | 147.6 | 147.2 | 146.7 | 146.3 | 145.6 | 144.9 | 144.1 | 143.3 | 142.5 | 141.8 |
| 70° | 132.7 | 132.1 | 131.5 | 130.8 | 130.2 | 129.6 | 129.0 | 128.3 | 127.6 | 127.0 | 126.3 |
| 72.5° | 116.5 | 116.0 | 115.6 | 115.1 | 114.6 | 114.1 | 113.4 | 112.7 | 112.0 | 111.3 | 110.6 |
| 75° | 91.8 | 91.3 | 90.9 | 90.5 | 90.1 | 89.7 | 89.4 | 89.1 | 88.8 | 88.5 | 88.0 |
| 77.5° | 69.8 | 69.6 | 69.4 | 69.2 | 68.9 | 68.6 | 68.3 | 67.9 | 67.5 | 67.1 | 66.8 |
| 80° | 55.5 | 55.2 | 54.9 | 54.6 | 54.2 | 54.0 | 53.8 | 53.6 | 53.4 | 53.2 | 53.0 |
| 82.5° | 41.6 | 41.5 | 41.5 | 41.4 | 41.3 | 41.3 | 41.2 | 41.2 | 41.2 | 41.1 | 40.9 |
| 85° | 24.4 | 24.2 | 24.0 | 23.8 | 23.6 | 23.5 | 23.5 | 23.5 | 23.5 | 23.5 | 23.3 |
| 87.5° | 10.1 | 10.5 | 10.9 | 11.3 | 11.8 | 12.4 | 13.1 | 13.9 | 14.7 | 15.6 | 15.8 |
| 90° | 1.5 | 4.8 | 8.2 | 11.6 | 14.9 | 18.8 | 23.1 | 27.5 | 31.9 | 36.3 | 37.6 |
| 92.5° | 28.1 | 27.2 | 26.2 | 25.2 | 24.3 | 25.4 | 28.8 | 32.1 | 35.3 | 38.7 | 40.8 |
| 95° | 92.1 | 78.4 | 64.6 | 50.8 | 37.1 | 32.0 | 35.7 | 39.4 | 43.1 | 46.8 | 49.2 |
| 97.5° | 185.1 | 178.9 | 172.8 | 166.5 | 160.4 | 145.2 | 121.1 | 96.9 | 72.8 | 48.6 | 51.3 |
| 100° | 255.2 | 261.9 | 268.5 | 275.3 | 282.0 | 259.1 | 206.8 | 154.5 | 102.2 | 49.8 | 52.5 |
| 102.5° | 334.9 | 339.7 | 344.6 | 349.3 | 354.2 | 328.0 | 270.8 | 213.7 | 156.5 | 99.4 | 91.0 |
| 105° | 449.9 | 453.6 | 457.3 | 461.0 | 464.6 | 451.4 | 421.2 | 391.0 | 360.8 | 330.6 | 271.2 |
| 107.5° | 571.3 | 574.2 | 577.1 | 580.2 | 583.1 | 586.9 | 591.7 | 596.5 | 601.3 | 606.0 | 562.5 |
| 110° | 652.2 | 654.9 | 657.5 | 660.2 | 663.0 | 666.1 | 669.8 | 673.5 | 677.2 | 680.9 | 669.8 |



TEST NUMBER: P332118-840

CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 729.5 | 732.0 | 734.4 | 736.8 | 739.1 | 742.3 | 745.9 | 749.6 | 753.3 | 757.0 | 757.2 |
| 115° | 843.9 | 846.0 | 848.0 | 850.0 | 852.0 | 854.5 | 857.6 | 860.5 | 863.5 | 866.6 | 869.9 |
| 117.5° | 954.7 | 957.3 | 959.7 | 962.2 | 964.7 | 966.7 | 968.3 | 969.8 | 971.3 | 972.9 | 975.5 |
| 120° | 1023.6 | 1026.6 | 1029.7 | 1032.7 | 1035.7 | 1037.7 | 1038.6 | 1039.7 | 1040.7 | 1041.7 | 1044.4 |
| 122.5° | 1093.7 | 1096.1 | 1098.6 | 1101.1 | 1103.6 | 1105.5 | 1106.7 | 1108.0 | 1109.2 | 1110.5 | 1112.5 |
| 125° | 1189.6 | 1192.3 | 1195.1 | 1197.7 | 1200.4 | 1202.4 | 1203.8 | 1205.1 | 1206.5 | 1207.8 | 1208.5 |
| 127.5° | 1282.6 | 1285.4 | 1288.1 | 1290.7 | 1293.4 | 1295.6 | 1297.2 | 1298.8 | 1300.4 | 1302.0 | 1303.0 |
| 130° | 1340.6 | 1343.3 | 1346.0 | 1348.7 | 1351.4 | 1353.4 | 1354.7 | 1356.0 | 1357.5 | 1358.8 | 1360.1 |
| 132.5° | 1396.2 | 1398.9 | 1401.6 | 1404.2 | 1406.9 | 1408.9 | 1409.9 | 1411.0 | 1412.0 | 1413.1 | 1414.4 |
| 135° | 1481.1 | 1483.1 | 1485.1 | 1487.1 | 1489.1 | 1490.8 | 1492.1 | 1493.5 | 1494.8 | 1496.1 | 1497.1 |
| 137.5° | 1553.5 | 1556.1 | 1558.6 | 1561.2 | 1563.7 | 1565.4 | 1566.1 | 1566.8 | 1567.6 | 1568.3 | 1569.9 |
| 140° | 1601.8 | 1603.9 | 1605.9 | 1607.9 | 1609.9 | 1611.3 | 1612.4 | 1613.4 | 1614.4 | 1615.4 | 1616.8 |
| 142.5° | 1646.5 | 1648.5 | 1650.5 | 1652.5 | 1654.6 | 1656.1 | 1657.1 | 1658.1 | 1659.1 | 1660.1 | 1661.1 |
| 145° | 1709.0 | 1711.3 | 1713.7 | 1716.1 | 1718.4 | 1719.9 | 1720.6 | 1721.2 | 1721.9 | 1722.6 | 1723.2 |
| 147.5° | 1767.9 | 1769.5 | 1771.0 | 1772.5 | 1774.0 | 1775.1 | 1775.8 | 1776.6 | 1777.2 | 1777.9 | 1778.6 |
| 150° | 1804.1 | 1805.1 | 1806.1 | 1807.2 | 1808.2 | 1809.0 | 1809.7 | 1810.4 | 1811.0 | 1811.7 | 1812.3 |
| 152.5° | 1836.7 | 1837.2 | 1837.7 | 1838.2 | 1838.7 | 1839.1 | 1839.5 | 1839.9 | 1840.3 | 1840.7 | 1841.9 |
| 155° | 1882.6 | 1882.0 | 1881.3 | 1880.7 | 1880.0 | 1879.8 | 1880.2 | 1880.5 | 1880.8 | 1881.1 | 1882.8 |
| 157.5° | 1918.2 | 1918.2 | 1918.1 | 1918.0 | 1918.0 | 1917.8 | 1917.4 | 1917.1 | 1916.8 | 1916.4 | 1918.4 |
| 160° | 1940.1 | 1939.6 | 1939.3 | 1939.0 | 1938.6 | 1938.3 | 1938.0 | 1937.6 | 1937.3 | 1937.0 | 1939.0 |
| 162.5° | 1960.6 | 1959.6 | 1958.8 | 1957.9 | 1957.0 | 1956.4 | 1956.1 | 1955.8 | 1955.4 | 1955.1 | 1957.4 |
| 165° | 1985.3 | 1984.3 | 1983.3 | 1982.3 | 1981.3 | 1980.6 | 1980.2 | 1979.9 | 1979.6 | 1979.2 | 1982.0 |
| 167.5° | 2004.6 | 2003.3 | 2002.0 | 2000.6 | 1999.2 | 1998.6 | 1998.6 | 1998.6 | 1998.6 | 1998.6 | 2001.2 |
| 170° | 2015.5 | 2014.2 | 2012.8 | 2011.4 | 2010.1 | 2009.4 | 2009.4 | 2009.4 | 2009.4 | 2009.4 | 2012.2 |
| 172.5° | 2022.8 | 2021.1 | 2019.5 | 2017.9 | 2016.3 | 2015.6 | 2015.9 | 2016.2 | 2016.4 | 2016.7 | 2019.4 |
| 175° | 2032.1 | 2030.4 | 2028.7 | 2027.1 | 2025.4 | 2024.7 | 2025.1 | 2025.4 | 2025.7 | 2026.1 | 2028.4 |
| 177.5° | 2034.5 | 2033.2 | 2031.8 | 2030.5 | 2029.1 | 2028.6 | 2028.9 | 2029.1 | 2029.4 | 2029.7 | 2031.8 |
| 180° | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 |



TEST NUMBER: P332118-840

CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 | 547.2 |
| 2.5° | 545.1 | 546.0 | 546.8 | 547.2 | 547.1 | 547.0 | 546.9 | 546.8 |
| 5° | 542.3 | 543.3 | 544.4 | 544.8 | 544.6 | 544.4 | 544.1 | 543.9 |
| 7.5° | 536.5 | 537.5 | 538.4 | 538.8 | 538.7 | 538.6 | 538.5 | 538.3 |
| 10° | 531.3 | 532.2 | 533.1 | 533.5 | 533.3 | 533.1 | 532.9 | 532.7 |
| 12.5° | 525.4 | 526.1 | 526.8 | 527.1 | 527.0 | 526.8 | 526.7 | 526.6 |
| 15° | 515.0 | 515.8 | 516.7 | 516.8 | 516.1 | 515.5 | 514.9 | 514.3 |
| 17.5° | 501.8 | 502.4 | 503.0 | 503.2 | 502.9 | 502.7 | 502.5 | 502.3 |
| 20° | 492.1 | 492.5 | 492.9 | 493.0 | 492.6 | 492.3 | 492.0 | 491.7 |
| 22.5° | 481.7 | 482.1 | 482.4 | 482.4 | 482.0 | 481.6 | 481.2 | 480.8 |
| 25° | 464.6 | 464.7 | 464.8 | 464.7 | 464.4 | 464.1 | 463.8 | 463.5 |
| 27.5° | 446.5 | 446.6 | 446.6 | 446.5 | 446.1 | 445.7 | 445.2 | 444.8 |
| 30° | 433.8 | 433.8 | 433.8 | 433.4 | 432.7 | 432.0 | 431.3 | 430.5 |
| 32.5° | 420.6 | 420.0 | 419.5 | 419.0 | 418.6 | 418.2 | 417.8 | 417.4 |
| 35° | 399.2 | 398.6 | 397.9 | 397.4 | 396.9 | 396.3 | 395.8 | 395.3 |
| 37.5° | 377.0 | 376.3 | 375.5 | 375.0 | 374.7 | 374.3 | 374.0 | 373.7 |
| 40° | 362.5 | 361.7 | 360.8 | 360.2 | 359.8 | 359.4 | 359.0 | 358.6 |
| 42.5° | 347.5 | 346.6 | 345.8 | 345.2 | 344.8 | 344.4 | 344.0 | 343.5 |
| 45° | 325.0 | 323.8 | 322.4 | 321.6 | 321.0 | 320.5 | 320.0 | 319.5 |
| 47.5° | 301.3 | 300.1 | 298.8 | 298.0 | 297.5 | 297.1 | 296.6 | 296.2 |
| 50° | 285.7 | 284.5 | 283.4 | 282.5 | 281.9 | 281.2 | 280.6 | 279.9 |
| 52.5° | 269.8 | 268.8 | 267.8 | 267.0 | 266.4 | 265.8 | 265.2 | 264.6 |
| 55° | 245.7 | 244.5 | 243.4 | 242.6 | 242.1 | 241.5 | 241.0 | 240.4 |
| 57.5° | 222.0 | 220.9 | 219.8 | 219.0 | 218.4 | 217.8 | 217.2 | 216.6 |
| 60° | 205.2 | 204.2 | 203.3 | 202.6 | 202.0 | 201.5 | 201.0 | 200.5 |
| 62.5° | 188.9 | 188.0 | 187.1 | 186.4 | 186.1 | 185.7 | 185.4 | 185.0 |
| 65° | 164.9 | 164.1 | 163.2 | 162.7 | 162.4 | 162.0 | 161.7 | 161.4 |
| 67.5° | 141.0 | 140.3 | 139.6 | 139.0 | 138.6 | 138.0 | 137.6 | 137.2 |
| 70° | 125.6 | 124.8 | 124.1 | 123.5 | 123.0 | 122.5 | 121.9 | 121.4 |
| 72.5° | 110.0 | 109.3 | 108.7 | 108.2 | 108.0 | 107.7 | 107.3 | 107.0 |
| 75° | 87.5 | 86.8 | 86.3 | 85.9 | 85.6 | 85.3 | 85.0 | 84.7 |
| 77.5° | 66.3 | 66.0 | 65.6 | 65.5 | 65.5 | 65.5 | 65.5 | 65.5 |
| 80° | 52.9 | 52.8 | 52.7 | 52.7 | 52.7 | 52.7 | 52.7 | 52.7 |
| 82.5° | 40.8 | 40.6 | 40.4 | 40.2 | 40.2 | 40.1 | 40.0 | 39.9 |
| 85° | 23.1 | 22.9 | 22.7 | 22.6 | 22.6 | 22.6 | 22.6 | 22.6 |
| 87.5° | 15.9 | 16.1 | 16.3 | 16.5 | 16.6 | 16.7 | 16.9 | 17.0 |
| 90° | 38.9 | 40.3 | 41.6 | 42.6 | 43.3 | 43.9 | 44.6 | 45.2 |
| 92.5° | 42.9 | 45.1 | 47.3 | 48.5 | 48.9 | 49.3 | 49.7 | 50.1 |
| 95° | 51.5 | 53.8 | 56.1 | 57.4 | 57.4 | 57.4 | 57.4 | 57.4 |
| 97.5° | 54.0 | 56.7 | 59.4 | 60.9 | 61.2 | 61.5 | 61.9 | 62.2 |
| 100° | 55.1 | 57.9 | 60.6 | 62.1 | 62.4 | 62.7 | 63.1 | 63.4 |
| 102.5° | 82.7 | 74.4 | 66.0 | 62.2 | 62.8 | 63.4 | 64.0 | 64.6 |
| 105° | 211.9 | 152.5 | 93.1 | 63.7 | 64.4 | 65.1 | 65.7 | 66.4 |
| 107.5° | 518.9 | 475.3 | 431.8 | 387.7 | 343.0 | 298.1 | 253.4 | 208.6 |
| 110° | 658.7 | 647.6 | 636.6 | 607.0 | 559.1 | 511.1 | 463.1 | 415.2 |



TEST NUMBER: P332118-840

CATALOG NUMBER: S123DIW-S340D1535U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 757.4 | 757.6 | 757.8 | 752.9 | 742.7 | 732.6 | 722.5 | 712.3 |
| 115° | 873.3 | 876.7 | 880.0 | 882.3 | 883.7 | 885.0 | 886.4 | 887.8 |
| 117.5° | 978.3 | 980.9 | 983.6 | 985.1 | 985.3 | 985.6 | 985.9 | 986.1 |
| 120° | 1047.1 | 1049.8 | 1052.5 | 1053.8 | 1053.8 | 1053.8 | 1053.8 | 1053.8 |
| 122.5° | 1114.3 | 1116.2 | 1118.1 | 1119.1 | 1119.4 | 1119.6 | 1119.9 | 1120.2 |
| 125° | 1209.1 | 1209.8 | 1210.4 | 1211.1 | 1211.8 | 1212.4 | 1213.2 | 1213.9 |
| 127.5° | 1304.1 | 1305.3 | 1306.3 | 1306.5 | 1305.9 | 1305.1 | 1304.4 | 1303.8 |
| 130° | 1361.4 | 1362.8 | 1364.1 | 1364.4 | 1363.8 | 1363.1 | 1362.4 | 1361.8 |
| 132.5° | 1415.8 | 1417.1 | 1418.5 | 1418.7 | 1417.7 | 1416.8 | 1415.8 | 1414.9 |
| 135° | 1498.1 | 1499.1 | 1500.2 | 1500.2 | 1499.1 | 1498.1 | 1497.1 | 1496.1 |
| 137.5° | 1571.6 | 1573.2 | 1574.8 | 1575.2 | 1574.6 | 1573.9 | 1573.2 | 1572.6 |
| 140° | 1618.1 | 1619.4 | 1620.7 | 1621.1 | 1620.4 | 1619.8 | 1619.1 | 1618.4 |
| 142.5° | 1662.2 | 1663.3 | 1664.4 | 1664.5 | 1663.6 | 1662.5 | 1661.6 | 1660.7 |
| 145° | 1723.9 | 1724.6 | 1725.3 | 1725.7 | 1725.7 | 1725.7 | 1725.7 | 1725.7 |
| 147.5° | 1779.2 | 1779.9 | 1780.6 | 1780.1 | 1778.6 | 1777.1 | 1775.4 | 1773.9 |
| 150° | 1813.0 | 1813.7 | 1814.3 | 1814.2 | 1813.2 | 1812.2 | 1811.2 | 1810.2 |
| 152.5° | 1843.1 | 1844.3 | 1845.5 | 1845.3 | 1843.8 | 1842.2 | 1840.7 | 1839.2 |
| 155° | 1884.5 | 1886.1 | 1887.8 | 1887.6 | 1885.6 | 1883.6 | 1881.6 | 1879.7 |
| 157.5° | 1920.5 | 1922.5 | 1924.5 | 1924.2 | 1921.6 | 1918.9 | 1916.3 | 1913.7 |
| 160° | 1941.1 | 1943.0 | 1945.0 | 1944.9 | 1942.5 | 1940.2 | 1937.8 | 1935.5 |
| 162.5° | 1959.6 | 1962.0 | 1964.2 | 1964.3 | 1962.3 | 1960.1 | 1958.1 | 1956.0 |
| 165° | 1984.6 | 1987.3 | 1990.0 | 1990.1 | 1987.8 | 1985.5 | 1983.1 | 1980.7 |
| 167.5° | 2004.0 | 2006.6 | 2009.3 | 2009.3 | 2006.6 | 2004.0 | 2001.2 | 1998.6 |
| 170° | 2014.8 | 2017.5 | 2020.2 | 2020.2 | 2017.5 | 2014.8 | 2012.2 | 2009.4 |
| 172.5° | 2022.1 | 2024.8 | 2027.4 | 2027.3 | 2024.4 | 2021.4 | 2018.4 | 2015.5 |
| 175° | 2030.7 | 2033.1 | 2035.5 | 2035.3 | 2032.6 | 2029.9 | 2027.2 | 2024.6 |
| 177.5° | 2034.0 | 2036.1 | 2038.3 | 2038.0 | 2035.3 | 2032.7 | 2029.9 | 2027.3 |
| 180° | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 | 2032.1 |

(END OF REPORT)