

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: P332816-830

Luminaire Tested: **S124DIW-S1020D770U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332816-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIW-S1020D770U830-4F0-1E-UDD-F1
Description: DEFINE 4 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6685.7 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Semi-Direct

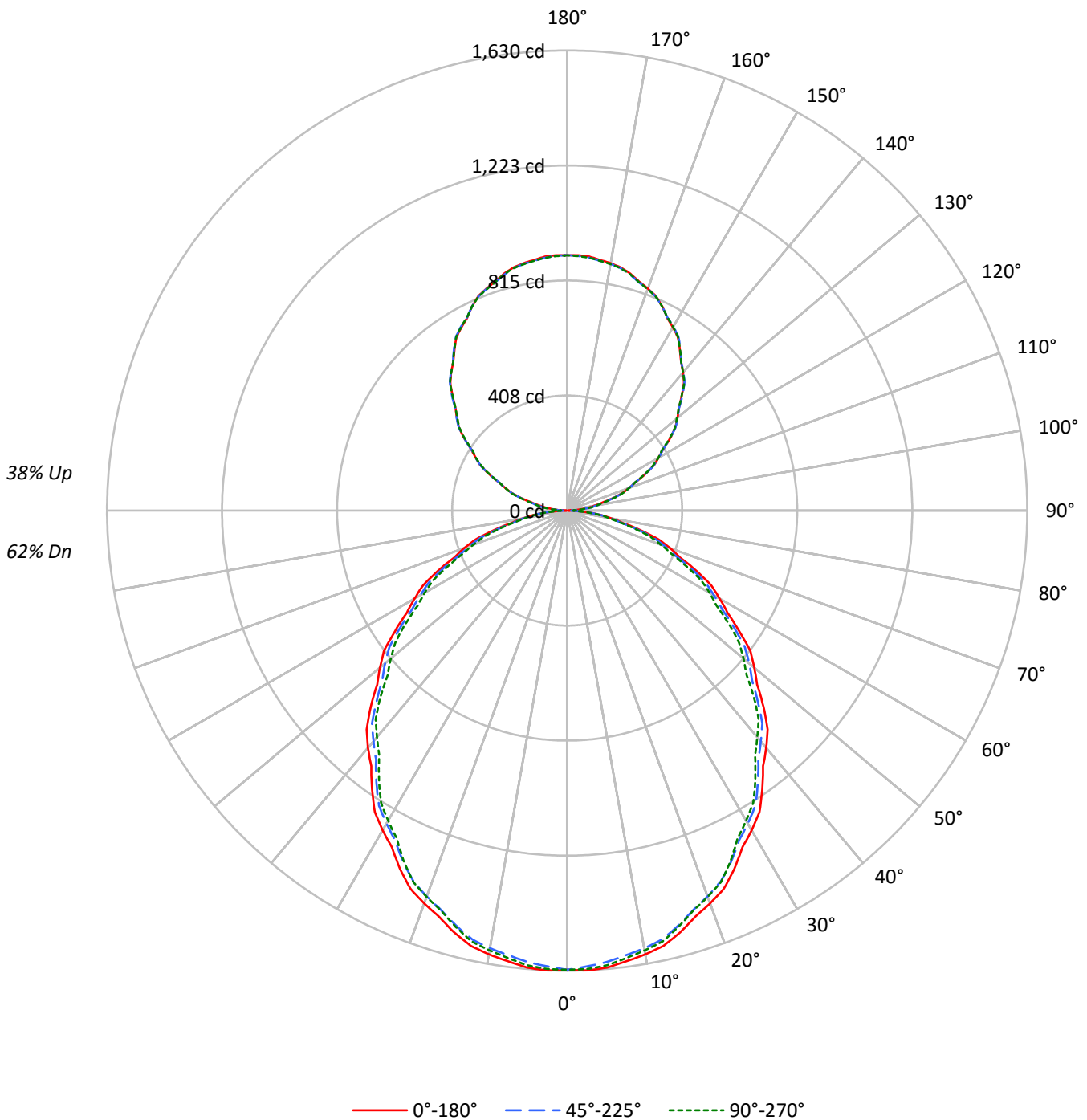
Input Watts (W): 53.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P332816-830

CATALOG NUMBER: S124DIW-S1020D770U830-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P332816-830

CATALOG NUMBER: S124DIW-S1020D770U830-4F0-1E-UDD-F1

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 | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 90 | 90 | 90 | 78 | 78 | 78 | 68 | 68 | 68 | 62 |
| 1 | 101 | 96 | 92 | 89 | 94 | 90 | 87 | 84 | 79 | 77 | 74 | 69 | 67 | 65 | 60 | 58 | 57 | 53 |
| 2 | 92 | 84 | 78 | 72 | 86 | 79 | 73 | 69 | 69 | 65 | 61 | 61 | 57 | 55 | 52 | 50 | 48 | 44 |
| 3 | 84 | 74 | 66 | 60 | 78 | 69 | 63 | 57 | 61 | 56 | 52 | 54 | 50 | 46 | 47 | 43 | 41 | 37 |
| 4 | 76 | 65 | 57 | 51 | 71 | 62 | 54 | 49 | 54 | 49 | 44 | 48 | 43 | 40 | 42 | 38 | 35 | 32 |
| 5 | 70 | 58 | 50 | 44 | 66 | 55 | 48 | 42 | 49 | 43 | 38 | 43 | 38 | 34 | 37 | 34 | 31 | 28 |
| 6 | 65 | 52 | 44 | 38 | 60 | 49 | 42 | 37 | 44 | 38 | 33 | 39 | 34 | 30 | 34 | 30 | 27 | 24 |
| 7 | 60 | 47 | 39 | 34 | 56 | 45 | 37 | 32 | 40 | 34 | 29 | 35 | 30 | 27 | 31 | 27 | 24 | 22 |
| 8 | 56 | 43 | 35 | 30 | 52 | 41 | 34 | 29 | 36 | 30 | 26 | 32 | 27 | 24 | 29 | 25 | 22 | 19 |
| 9 | 52 | 39 | 32 | 27 | 49 | 37 | 30 | 26 | 34 | 28 | 24 | 30 | 25 | 22 | 26 | 22 | 20 | 17 |
| 10 | 49 | 36 | 29 | 24 | 46 | 34 | 28 | 23 | 31 | 25 | 21 | 28 | 23 | 19 | 25 | 21 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 13130 | 13130 | 13130 |
| 5° | 13169 | 13011 | 13105 |
| 10° | 13086 | 12904 | 12969 |
| 15° | 12929 | 12721 | 12754 |
| 20° | 12718 | 12494 | 12506 |
| 25° | 12479 | 12235 | 12200 |
| 30° | 12185 | 11929 | 11820 |
| 35° | 11880 | 11610 | 11456 |
| 40° | 11564 | 11248 | 11041 |
| 45° | 11233 | 10891 | 10683 |
| 50° | 10868 | 10574 | 10246 |
| 55° | 10473 | 10162 | 9831 |
| 60° | 10078 | 9700 | 9405 |
| 65° | 9635 | 9259 | 8886 |
| 70° | 9135 | 8674 | 8337 |
| 75° | 8372 | 7966 | 7764 |
| 80° | 7452 | 7146 | 6969 |
| 85° | 6521 | 6280 | 6150 |



TEST NUMBER: P332816-830

CATALOG NUMBER: S124DIW-S1020D770U830-4F0-1E-UDD-F1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 153.2 | 2.3 |
| 10°-20° | 431.5 | 6.5 |
| 20°-30° | 635.2 | 9.5 |
| 30°-40° | 738.4 | 11.0 |
| 40°-50° | 738.4 | 11.0 |
| 50°-60° | 645.9 | 9.7 |
| 60°-70° | 479.7 | 7.2 |
| 70°-80° | 272.5 | 4.1 |
| 80°-90° | 81.4 | 1.2 |
| 90°-100° | 59.7 | 0.9 |
| 100°-110° | 176.7 | 2.6 |
| 110°-120° | 300.0 | 4.5 |
| 120°-130° | 395.5 | 5.9 |
| 130°-140° | 444.2 | 6.6 |
| 140°-150° | 436.5 | 6.5 |
| 150°-160° | 367.1 | 5.5 |
| 160°-170° | 244.3 | 3.7 |
| 170°-180° | 85.5 | 1.3 |
| 0°-30° | 1219.8 | 18.2 |
| 0°-40° | 1958.2 | 29.3 |
| 0°-60° | 3342.6 | 50.0 |
| 0°-90° | 4176.2 | 62.5 |
| 90°-120° | 536.4 | 8.0 |
| 90°-150° | 1812.6 | 27.1 |
| 90°-180° | 2510.0 | 37.5 |
| 0°-180° | 6685.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1626 | 1626 | 1626 | 1626 | 1626 | |
| 5° | 1625 | 1619 | 1606 | 1619 | 1617 | 154 |
| 15° | 1547 | 1541 | 1522 | 1529 | 1526 | 436 |
| 25° | 1401 | 1391 | 1374 | 1374 | 1370 | 644 |
| 35° | 1205 | 1196 | 1178 | 1169 | 1162 | 753 |
| 45° | 984 | 974 | 954 | 940 | 936 | 758 |
| 55° | 744 | 739 | 722 | 707 | 698 | 666 |
| 65° | 504 | 497 | 485 | 472 | 465 | 499 |
| 75° | 268 | 262 | 255 | 250 | 249 | 285 |
| 85° | 70 | 70 | 68 | 68 | 66 | 77 |
| 90° | 2 | 10 | 15 | 19 | 21 | 6 |
| 95° | 42 | 48 | 53 | 55 | 55 | 47 |
| 105° | 163 | 164 | 166 | 169 | 171 | 173 |
| 115° | 305 | 305 | 304 | 303 | 302 | 301 |
| 125° | 444 | 444 | 444 | 442 | 441 | 396 |
| 135° | 573 | 577 | 577 | 576 | 574 | 443 |
| 145° | 696 | 699 | 700 | 699 | 697 | 435 |
| 155° | 798 | 797 | 797 | 799 | 797 | 367 |
| 165° | 868 | 866 | 865 | 868 | 866 | 245 |
| 175° | 903 | 900 | 899 | 903 | 899 | 86 |
| 180° | 904 | 904 | 904 | 904 | 904 | |



TEST NUMBER: P332816-830

CATALOG NUMBER: S124DIW-S1020D770U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 |
| 2.5° | 1630.5 | 1629.8 | 1629.1 | 1628.4 | 1627.8 | 1626.1 | 1623.5 | 1621.0 | 1618.4 | 1615.9 | 1618.3 |
| 5° | 1625.0 | 1623.9 | 1622.8 | 1621.6 | 1620.4 | 1618.3 | 1615.0 | 1611.8 | 1608.7 | 1605.5 | 1608.7 |
| 7.5° | 1610.0 | 1608.7 | 1607.6 | 1606.5 | 1605.3 | 1603.0 | 1599.4 | 1595.9 | 1592.3 | 1588.8 | 1591.4 |
| 10° | 1596.4 | 1595.3 | 1594.0 | 1592.9 | 1591.8 | 1589.3 | 1585.5 | 1581.8 | 1578.0 | 1574.2 | 1576.5 |
| 12.5° | 1578.7 | 1577.5 | 1576.3 | 1575.2 | 1574.0 | 1571.4 | 1567.4 | 1563.5 | 1559.4 | 1555.5 | 1558.0 |
| 15° | 1546.9 | 1545.7 | 1544.5 | 1543.4 | 1542.2 | 1539.5 | 1535.1 | 1530.8 | 1526.4 | 1522.1 | 1523.8 |
| 17.5° | 1508.5 | 1507.1 | 1505.6 | 1504.2 | 1502.8 | 1500.0 | 1495.8 | 1491.8 | 1487.6 | 1483.6 | 1484.6 |
| 20° | 1480.4 | 1478.9 | 1477.5 | 1476.0 | 1474.6 | 1471.7 | 1467.4 | 1463.0 | 1458.7 | 1454.3 | 1455.2 |
| 22.5° | 1450.2 | 1448.2 | 1446.3 | 1444.4 | 1442.6 | 1439.4 | 1435.0 | 1430.7 | 1426.3 | 1422.0 | 1423.6 |
| 25° | 1400.9 | 1398.9 | 1396.8 | 1394.8 | 1392.8 | 1389.8 | 1385.7 | 1381.7 | 1377.6 | 1373.6 | 1373.9 |
| 27.5° | 1344.6 | 1342.6 | 1340.4 | 1338.3 | 1336.2 | 1333.3 | 1329.6 | 1325.8 | 1322.0 | 1318.2 | 1317.6 |
| 30° | 1307.1 | 1304.8 | 1302.4 | 1300.1 | 1297.8 | 1294.8 | 1291.0 | 1287.2 | 1283.5 | 1279.7 | 1278.6 |
| 32.5° | 1267.4 | 1265.4 | 1263.3 | 1261.2 | 1259.1 | 1256.0 | 1252.1 | 1248.1 | 1244.1 | 1240.1 | 1238.7 |
| 35° | 1205.4 | 1203.4 | 1201.4 | 1199.4 | 1197.3 | 1194.3 | 1190.2 | 1186.2 | 1182.1 | 1178.1 | 1176.0 |
| 37.5° | 1140.0 | 1138.1 | 1136.3 | 1134.4 | 1132.6 | 1129.5 | 1125.1 | 1120.8 | 1116.4 | 1112.1 | 1109.9 |
| 40° | 1097.3 | 1095.0 | 1092.6 | 1090.3 | 1088.0 | 1084.7 | 1080.3 | 1076.0 | 1071.7 | 1067.3 | 1064.4 |
| 42.5° | 1051.4 | 1050.0 | 1048.6 | 1047.3 | 1045.8 | 1042.7 | 1037.9 | 1033.1 | 1028.3 | 1023.5 | 1020.1 |
| 45° | 983.9 | 981.8 | 979.9 | 977.8 | 975.8 | 972.4 | 967.8 | 963.2 | 958.6 | 953.9 | 950.7 |
| 47.5° | 913.2 | 911.9 | 910.5 | 909.1 | 907.7 | 904.8 | 900.6 | 896.3 | 892.0 | 887.7 | 884.1 |
| 50° | 865.3 | 864.1 | 863.0 | 861.9 | 860.6 | 858.1 | 854.0 | 850.0 | 845.9 | 841.9 | 837.8 |
| 52.5° | 818.4 | 817.0 | 815.6 | 814.3 | 812.8 | 810.0 | 805.7 | 801.4 | 797.1 | 792.9 | 789.3 |
| 55° | 744.1 | 743.2 | 742.3 | 741.5 | 740.6 | 738.2 | 734.1 | 730.1 | 726.0 | 722.0 | 718.5 |
| 57.5° | 673.3 | 672.2 | 671.3 | 670.2 | 669.3 | 666.8 | 662.8 | 658.8 | 654.8 | 650.8 | 647.5 |
| 60° | 624.2 | 622.7 | 621.3 | 619.9 | 618.4 | 615.9 | 612.1 | 608.3 | 604.5 | 600.8 | 598.1 |
| 62.5° | 576.3 | 575.0 | 573.8 | 572.6 | 571.4 | 568.8 | 564.8 | 560.8 | 556.8 | 552.8 | 550.4 |
| 65° | 504.4 | 502.8 | 501.4 | 500.0 | 498.5 | 496.3 | 493.4 | 490.6 | 487.7 | 484.7 | 481.9 |
| 67.5° | 431.9 | 430.6 | 429.2 | 427.9 | 426.5 | 424.5 | 421.7 | 419.0 | 416.1 | 413.4 | 410.6 |
| 70° | 387.0 | 385.0 | 383.0 | 381.0 | 378.9 | 376.7 | 374.5 | 372.1 | 369.9 | 367.5 | 365.1 |
| 72.5° | 339.1 | 337.1 | 335.1 | 333.0 | 331.0 | 329.0 | 327.2 | 325.4 | 323.5 | 321.6 | 319.8 |
| 75° | 268.4 | 267.0 | 265.5 | 264.1 | 262.7 | 261.2 | 259.8 | 258.4 | 256.8 | 255.4 | 254.3 |
| 77.5° | 201.0 | 200.3 | 199.6 | 199.1 | 198.4 | 197.5 | 196.1 | 194.9 | 193.6 | 192.4 | 192.0 |
| 80° | 160.3 | 159.4 | 158.5 | 157.7 | 156.8 | 156.1 | 155.5 | 155.0 | 154.4 | 153.7 | 153.2 |
| 82.5° | 120.6 | 120.3 | 119.9 | 119.4 | 119.0 | 118.8 | 118.7 | 118.6 | 118.5 | 118.3 | 118.0 |
| 85° | 70.4 | 70.4 | 70.4 | 70.4 | 70.4 | 70.1 | 69.5 | 68.9 | 68.3 | 67.8 | 67.8 |
| 87.5° | 27.5 | 27.6 | 27.7 | 27.9 | 28.0 | 28.0 | 28.1 | 28.1 | 28.1 | 28.1 | 28.3 |
| 90° | 2.1 | 3.8 | 5.6 | 7.3 | 9.0 | 10.5 | 11.7 | 12.9 | 14.1 | 15.4 | 16.3 |
| 92.5° | 15.0 | 17.0 | 18.9 | 20.8 | 22.8 | 24.2 | 25.1 | 25.9 | 26.9 | 27.7 | 28.3 |
| 95° | 41.9 | 43.4 | 44.8 | 46.2 | 47.6 | 48.8 | 49.9 | 51.0 | 52.1 | 53.2 | 53.6 |
| 97.5° | 73.3 | 74.5 | 75.6 | 76.6 | 77.8 | 79.0 | 80.3 | 81.5 | 82.8 | 84.1 | 84.6 |
| 100° | 97.9 | 98.6 | 99.2 | 99.8 | 100.4 | 101.4 | 102.8 | 104.2 | 105.7 | 107.1 | 107.4 |
| 102.5° | 123.7 | 123.9 | 124.1 | 124.4 | 124.7 | 125.5 | 126.7 | 128.0 | 129.2 | 130.5 | 131.0 |
| 105° | 163.0 | 163.2 | 163.3 | 163.4 | 163.6 | 164.0 | 164.7 | 165.2 | 165.9 | 166.5 | 166.9 |
| 107.5° | 204.2 | 204.4 | 204.6 | 204.8 | 205.0 | 205.2 | 205.3 | 205.4 | 205.5 | 205.6 | 205.9 |
| 110° | 232.2 | 232.5 | 232.9 | 233.2 | 233.5 | 233.6 | 233.4 | 233.3 | 233.1 | 232.9 | 232.6 |



TEST NUMBER: P332816-830

CATALOG NUMBER: S124DIW-S1020D770U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 261.4 | 261.4 | 261.5 | 261.6 | 261.6 | 261.5 | 261.2 | 260.9 | 260.6 | 260.3 | 260.3 |
| 115° | 305.0 | 305.0 | 305.0 | 305.0 | 305.0 | 304.8 | 304.5 | 304.3 | 303.9 | 303.6 | 303.4 |
| 117.5° | 346.1 | 346.3 | 346.4 | 346.5 | 346.7 | 346.6 | 346.4 | 346.2 | 345.9 | 345.7 | 345.2 |
| 120° | 373.5 | 374.2 | 374.8 | 375.4 | 376.1 | 376.1 | 375.7 | 375.2 | 374.8 | 374.3 | 373.4 |
| 122.5° | 402.1 | 402.4 | 402.6 | 402.8 | 403.1 | 403.1 | 402.9 | 402.7 | 402.5 | 402.3 | 401.7 |
| 125° | 444.2 | 444.2 | 444.2 | 444.2 | 444.2 | 444.1 | 443.9 | 443.8 | 443.7 | 443.5 | 443.2 |
| 127.5° | 482.4 | 482.9 | 483.3 | 483.8 | 484.3 | 484.4 | 484.1 | 483.9 | 483.6 | 483.4 | 483.1 |
| 130° | 509.3 | 509.7 | 510.2 | 510.7 | 511.1 | 511.3 | 511.3 | 511.3 | 511.3 | 511.3 | 511.0 |
| 132.5° | 536.7 | 537.1 | 537.3 | 537.7 | 538.1 | 538.2 | 538.0 | 537.9 | 537.8 | 537.6 | 537.3 |
| 135° | 573.0 | 573.8 | 574.8 | 575.7 | 576.6 | 577.1 | 577.1 | 577.1 | 577.1 | 577.1 | 576.8 |
| 137.5° | 612.4 | 612.8 | 613.2 | 613.7 | 614.2 | 614.4 | 614.7 | 614.9 | 615.2 | 615.5 | 615.0 |
| 140° | 638.7 | 638.9 | 639.3 | 639.6 | 639.9 | 640.1 | 640.1 | 640.1 | 640.1 | 640.1 | 639.9 |
| 142.5° | 662.7 | 663.1 | 663.4 | 663.6 | 664.0 | 664.1 | 663.9 | 663.8 | 663.7 | 663.5 | 663.5 |
| 145° | 696.1 | 696.6 | 697.3 | 698.0 | 698.5 | 698.9 | 699.1 | 699.3 | 699.4 | 699.6 | 699.4 |
| 147.5° | 729.1 | 729.8 | 730.6 | 731.3 | 732.1 | 732.4 | 732.3 | 732.1 | 732.0 | 731.9 | 731.7 |
| 150° | 749.2 | 749.8 | 750.5 | 751.1 | 751.7 | 752.1 | 752.1 | 752.1 | 752.1 | 752.1 | 752.1 |
| 152.5° | 768.3 | 768.6 | 769.0 | 769.4 | 769.8 | 770.0 | 770.1 | 770.2 | 770.3 | 770.4 | 770.8 |
| 155° | 797.5 | 797.5 | 797.5 | 797.5 | 797.5 | 797.4 | 797.2 | 797.1 | 796.9 | 796.8 | 797.4 |
| 157.5° | 822.1 | 821.8 | 821.5 | 821.2 | 821.0 | 820.9 | 820.8 | 820.8 | 820.8 | 820.7 | 821.1 |
| 160° | 836.7 | 836.5 | 836.3 | 836.2 | 836.0 | 835.8 | 835.8 | 835.6 | 835.4 | 835.3 | 835.8 |
| 162.5° | 850.1 | 849.7 | 849.2 | 848.9 | 848.5 | 848.2 | 848.0 | 847.9 | 847.7 | 847.5 | 848.4 |
| 165° | 868.2 | 867.7 | 867.2 | 866.8 | 866.3 | 865.9 | 865.5 | 865.3 | 865.0 | 864.6 | 865.5 |
| 167.5° | 881.9 | 881.4 | 880.7 | 880.1 | 879.4 | 879.0 | 879.1 | 879.1 | 879.1 | 879.2 | 880.1 |
| 170° | 889.9 | 889.0 | 888.3 | 887.5 | 886.7 | 886.4 | 886.6 | 886.7 | 886.8 | 887.0 | 888.0 |
| 172.5° | 895.4 | 894.8 | 894.1 | 893.4 | 892.8 | 892.5 | 892.5 | 892.6 | 892.6 | 892.6 | 893.7 |
| 175° | 903.1 | 902.3 | 901.5 | 900.8 | 900.0 | 899.6 | 899.4 | 899.2 | 899.1 | 898.9 | 900.0 |
| 177.5° | 905.6 | 905.0 | 904.4 | 903.8 | 903.1 | 902.9 | 902.9 | 902.9 | 902.9 | 902.9 | 903.7 |
| 180° | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 |



TEST NUMBER: P332816-830

CATALOG NUMBER: S124DIW-S1020D770U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 | 1626.4 |
| 2.5° | 1620.5 | 1622.9 | 1625.2 | 1626.3 | 1626.0 | 1625.8 | 1625.5 | 1625.3 |
| 5° | 1611.8 | 1615.0 | 1618.3 | 1619.6 | 1619.0 | 1618.3 | 1617.8 | 1617.2 |
| 7.5° | 1593.9 | 1596.5 | 1599.0 | 1600.2 | 1599.8 | 1599.4 | 1599.0 | 1598.7 |
| 10° | 1578.9 | 1581.2 | 1583.5 | 1584.3 | 1583.8 | 1583.2 | 1582.6 | 1582.1 |
| 12.5° | 1560.6 | 1563.1 | 1565.7 | 1566.5 | 1565.8 | 1564.9 | 1564.1 | 1563.3 |
| 15° | 1525.6 | 1527.3 | 1529.1 | 1529.5 | 1528.6 | 1527.8 | 1526.9 | 1526.0 |
| 17.5° | 1485.7 | 1486.9 | 1487.9 | 1488.2 | 1487.6 | 1487.0 | 1486.5 | 1485.8 |
| 20° | 1456.0 | 1457.0 | 1457.8 | 1457.9 | 1457.4 | 1456.8 | 1456.2 | 1455.7 |
| 22.5° | 1425.1 | 1426.7 | 1428.2 | 1428.5 | 1427.5 | 1426.4 | 1425.4 | 1424.4 |
| 25° | 1374.1 | 1374.4 | 1374.7 | 1374.2 | 1373.1 | 1372.0 | 1370.7 | 1369.6 |
| 27.5° | 1316.9 | 1316.2 | 1315.5 | 1314.5 | 1313.0 | 1311.5 | 1310.0 | 1308.6 |
| 30° | 1277.4 | 1276.2 | 1275.1 | 1273.8 | 1272.3 | 1270.8 | 1269.4 | 1268.0 |
| 32.5° | 1237.3 | 1236.0 | 1234.5 | 1233.1 | 1231.6 | 1230.2 | 1228.8 | 1227.3 |
| 35° | 1174.0 | 1172.0 | 1170.0 | 1168.2 | 1166.8 | 1165.4 | 1163.9 | 1162.4 |
| 37.5° | 1107.7 | 1105.5 | 1103.3 | 1101.3 | 1099.4 | 1097.4 | 1095.5 | 1093.6 |
| 40° | 1061.5 | 1058.6 | 1055.7 | 1053.6 | 1052.1 | 1050.7 | 1049.2 | 1047.7 |
| 42.5° | 1016.8 | 1013.4 | 1010.0 | 1007.9 | 1006.9 | 1005.9 | 1004.9 | 1004.0 |
| 45° | 947.5 | 944.3 | 941.1 | 939.1 | 938.3 | 937.5 | 936.5 | 935.7 |
| 47.5° | 880.5 | 876.9 | 873.4 | 870.4 | 868.3 | 866.0 | 863.8 | 861.7 |
| 50° | 833.8 | 829.7 | 825.7 | 822.7 | 821.0 | 819.3 | 817.6 | 815.8 |
| 52.5° | 785.7 | 782.0 | 778.4 | 775.6 | 773.4 | 771.2 | 769.0 | 766.8 |
| 55° | 715.0 | 711.5 | 708.0 | 705.5 | 703.7 | 702.0 | 700.2 | 698.5 |
| 57.5° | 644.2 | 640.9 | 637.6 | 635.1 | 633.4 | 631.8 | 630.1 | 628.4 |
| 60° | 595.6 | 593.0 | 590.3 | 588.3 | 586.8 | 585.4 | 584.0 | 582.5 |
| 62.5° | 548.1 | 545.6 | 543.3 | 541.4 | 540.0 | 538.5 | 537.1 | 535.6 |
| 65° | 479.0 | 476.1 | 473.2 | 471.0 | 469.6 | 468.2 | 466.7 | 465.2 |
| 67.5° | 407.8 | 405.0 | 402.3 | 400.7 | 400.2 | 399.8 | 399.4 | 399.1 |
| 70° | 362.9 | 360.5 | 358.3 | 356.7 | 355.8 | 354.9 | 354.0 | 353.2 |
| 72.5° | 317.9 | 316.0 | 314.2 | 312.8 | 312.0 | 311.1 | 310.3 | 309.3 |
| 75° | 253.1 | 251.9 | 250.8 | 250.1 | 249.8 | 249.5 | 249.2 | 248.9 |
| 77.5° | 191.6 | 191.3 | 191.0 | 190.4 | 189.6 | 188.9 | 188.1 | 187.4 |
| 80° | 152.6 | 152.0 | 151.5 | 151.0 | 150.7 | 150.4 | 150.1 | 149.9 |
| 82.5° | 117.6 | 117.3 | 117.0 | 116.6 | 116.3 | 116.0 | 115.7 | 115.5 |
| 85° | 67.8 | 67.8 | 67.8 | 67.6 | 67.3 | 67.0 | 66.7 | 66.4 |
| 87.5° | 28.5 | 28.7 | 28.8 | 28.9 | 29.0 | 29.1 | 29.1 | 29.2 |
| 90° | 17.2 | 18.2 | 19.1 | 19.7 | 20.1 | 20.4 | 20.6 | 21.0 |
| 92.5° | 28.8 | 29.4 | 30.0 | 30.3 | 30.5 | 30.7 | 30.9 | 31.1 |
| 95° | 54.1 | 54.6 | 55.0 | 55.2 | 55.2 | 55.2 | 55.2 | 55.2 |
| 97.5° | 85.2 | 85.8 | 86.3 | 86.6 | 86.6 | 86.6 | 86.6 | 86.6 |
| 100° | 107.6 | 107.9 | 108.3 | 108.4 | 108.4 | 108.4 | 108.4 | 108.4 |
| 102.5° | 131.4 | 131.9 | 132.2 | 132.5 | 132.7 | 132.8 | 132.9 | 133.1 |
| 105° | 167.4 | 167.9 | 168.3 | 168.8 | 169.3 | 169.8 | 170.2 | 170.7 |
| 107.5° | 206.4 | 206.8 | 207.3 | 207.5 | 207.5 | 207.5 | 207.4 | 207.4 |
| 110° | 232.3 | 232.1 | 231.7 | 231.8 | 232.2 | 232.7 | 233.2 | 233.7 |



TEST NUMBER: P332816-830

CATALOG NUMBER: S124DIW-S1020D770U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 260.2 | 260.1 | 260.1 | 260.1 | 260.2 | 260.3 | 260.4 | 260.5 |
| 115° | 303.3 | 303.1 | 302.9 | 302.8 | 302.7 | 302.6 | 302.4 | 302.2 |
| 117.5° | 344.7 | 344.1 | 343.6 | 343.2 | 342.9 | 342.5 | 342.2 | 342.0 |
| 120° | 372.7 | 371.9 | 371.2 | 370.9 | 371.3 | 371.6 | 371.8 | 372.1 |
| 122.5° | 401.1 | 400.7 | 400.1 | 399.5 | 399.0 | 398.4 | 397.9 | 397.4 |
| 125° | 442.9 | 442.6 | 442.2 | 442.0 | 441.7 | 441.3 | 441.0 | 440.7 |
| 127.5° | 482.8 | 482.5 | 482.1 | 481.8 | 481.6 | 481.4 | 481.1 | 480.9 |
| 130° | 510.8 | 510.4 | 510.1 | 509.6 | 509.1 | 508.4 | 507.7 | 507.2 |
| 132.5° | 537.1 | 536.8 | 536.4 | 536.1 | 535.9 | 535.6 | 535.4 | 535.2 |
| 135° | 576.5 | 576.2 | 575.9 | 575.5 | 575.0 | 574.6 | 574.1 | 573.6 |
| 137.5° | 614.6 | 614.3 | 613.9 | 613.7 | 613.8 | 613.9 | 614.0 | 614.1 |
| 140° | 639.8 | 639.6 | 639.4 | 639.3 | 639.1 | 638.9 | 638.9 | 638.7 |
| 142.5° | 663.5 | 663.5 | 663.5 | 663.5 | 663.4 | 663.4 | 663.4 | 663.3 |
| 145° | 699.3 | 699.1 | 698.9 | 698.6 | 698.1 | 697.7 | 697.2 | 696.7 |
| 147.5° | 731.6 | 731.5 | 731.3 | 731.2 | 731.0 | 730.9 | 730.8 | 730.6 |
| 150° | 752.1 | 752.1 | 752.1 | 752.0 | 751.8 | 751.6 | 751.5 | 751.3 |
| 152.5° | 771.2 | 771.6 | 771.9 | 771.9 | 771.6 | 771.2 | 770.7 | 770.3 |
| 155° | 798.1 | 798.6 | 799.3 | 799.3 | 798.6 | 798.1 | 797.4 | 796.8 |
| 157.5° | 821.6 | 822.1 | 822.6 | 822.6 | 822.0 | 821.5 | 821.0 | 820.4 |
| 160° | 836.2 | 836.7 | 837.2 | 837.0 | 836.2 | 835.4 | 834.6 | 833.9 |
| 162.5° | 849.2 | 850.1 | 850.9 | 850.9 | 850.2 | 849.4 | 848.7 | 847.8 |
| 165° | 866.5 | 867.4 | 868.4 | 868.6 | 867.9 | 867.2 | 866.7 | 866.0 |
| 167.5° | 881.1 | 881.9 | 882.9 | 882.9 | 881.9 | 881.0 | 880.1 | 879.0 |
| 170° | 888.9 | 889.9 | 890.8 | 890.7 | 889.6 | 888.5 | 887.4 | 886.4 |
| 172.5° | 894.8 | 895.8 | 896.8 | 896.8 | 895.7 | 894.7 | 893.5 | 892.5 |
| 175° | 901.1 | 902.2 | 903.2 | 903.2 | 902.2 | 901.1 | 900.0 | 898.9 |
| 177.5° | 904.6 | 905.4 | 906.3 | 906.3 | 905.2 | 904.3 | 903.2 | 902.3 |
| 180° | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 | 904.5 |

(END OF REPORT)