

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: P332960

Luminaire Tested: **SA4XXRDIP-C1020D365U835-4F0-1E-UDD-F4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P332960
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA4XXRDIP-C1020D365U835-4F0-1E-UDD-F4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1020 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

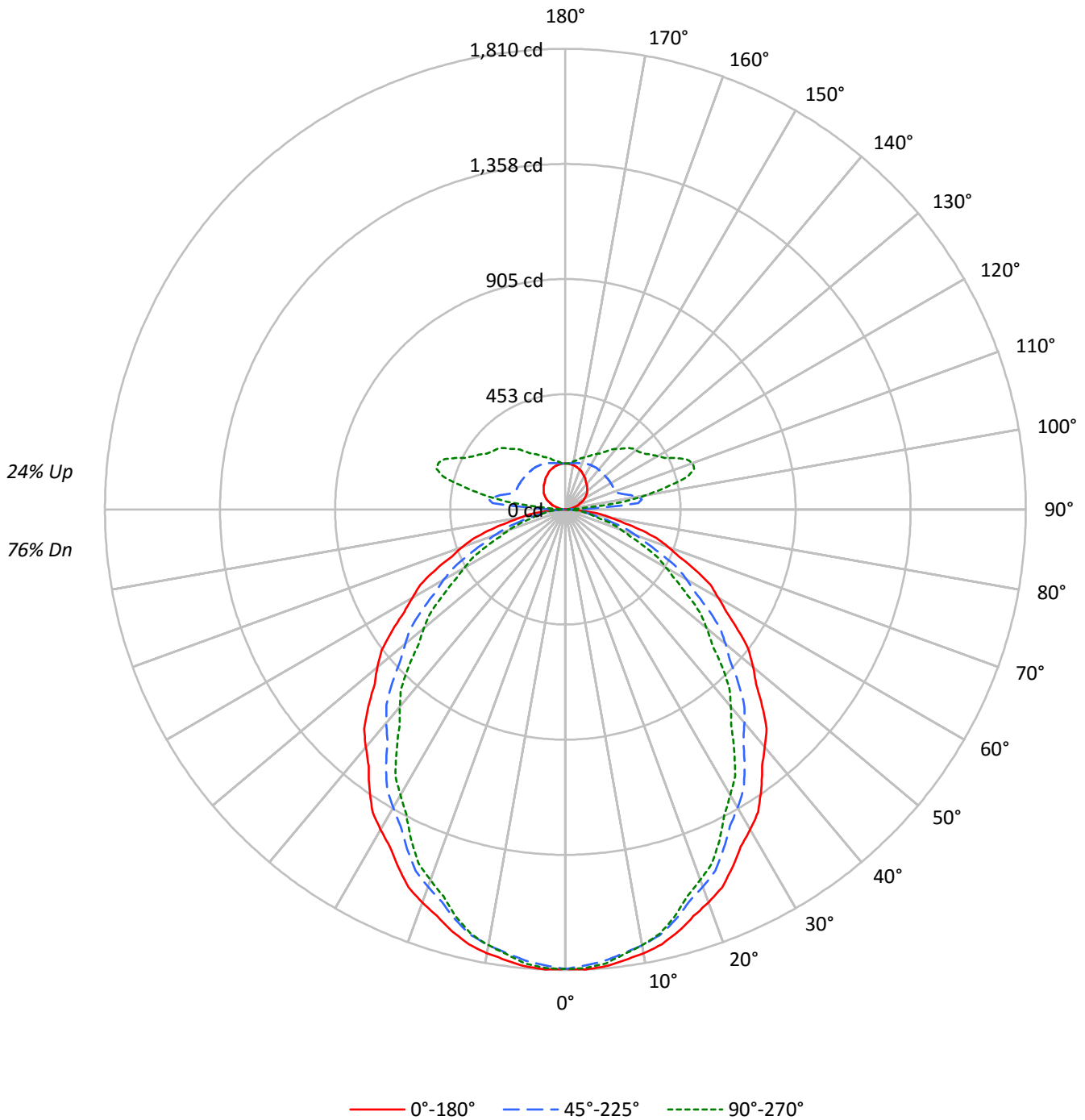
Lumens per Lamp: N/A
Luminaire Lumens: 5481.2 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 43.5
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: P332960
CATALOG NUMBER: SA4XXRDIP-C1020D365U835-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P332960

CATALOG NUMBER: SA4XXRDIP-C1020D365U835-4F0-1E-UDD-F4

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 | 113 | 113 | 113 | 113 | 108 | 108 | 108 | 108 | 98 | 98 | 98 | 89 | 89 | 89 | 80 | 80 | 80 | 76 | | | | 76 |
| 1 | 104 | 100 | 96 | 92 | 99 | 95 | 92 | 89 | 87 | 84 | 82 | 79 | 77 | 75 | 72 | 70 | 69 | | | | 65 | |
| 2 | 95 | 88 | 81 | 76 | 90 | 84 | 78 | 73 | 76 | 72 | 68 | 70 | 66 | 63 | 63 | 61 | 58 | | | | 55 | |
| 3 | 87 | 77 | 70 | 64 | 83 | 74 | 67 | 62 | 68 | 62 | 58 | 62 | 58 | 54 | 57 | 53 | 50 | | | | 47 | |
| 4 | 80 | 69 | 61 | 55 | 76 | 66 | 59 | 53 | 61 | 55 | 50 | 56 | 51 | 47 | 51 | 47 | 44 | | | | 41 | |
| 5 | 74 | 62 | 53 | 47 | 70 | 59 | 52 | 46 | 54 | 48 | 43 | 50 | 45 | 41 | 46 | 42 | 38 | | | | 36 | |
| 6 | 68 | 56 | 47 | 41 | 65 | 53 | 46 | 40 | 49 | 43 | 38 | 45 | 40 | 36 | 42 | 37 | 34 | | | | 31 | |
| 7 | 63 | 51 | 42 | 37 | 60 | 49 | 41 | 36 | 45 | 39 | 34 | 42 | 36 | 32 | 38 | 34 | 30 | | | | 28 | |
| 8 | 59 | 46 | 38 | 33 | 56 | 44 | 37 | 32 | 41 | 35 | 30 | 38 | 33 | 29 | 35 | 31 | 27 | | | | 25 | |
| 9 | 55 | 42 | 35 | 29 | 52 | 41 | 34 | 29 | 38 | 32 | 27 | 35 | 30 | 26 | 33 | 28 | 25 | | | | 23 | |
| 10 | 51 | 39 | 32 | 27 | 49 | 38 | 31 | 26 | 35 | 29 | 25 | 33 | 27 | 24 | 30 | 26 | 23 | | | | 21 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14577 | 14577 | 14577 |
| 5° | 14610 | 14431 | 14521 |
| 10° | 14519 | 14258 | 14258 |
| 15° | 14352 | 13959 | 13855 |
| 20° | 14123 | 13564 | 13315 |
| 25° | 13831 | 13104 | 12772 |
| 30° | 13546 | 12618 | 12089 |
| 35° | 13231 | 12113 | 11404 |
| 40° | 12852 | 11540 | 10666 |
| 45° | 12501 | 10970 | 9913 |
| 50° | 12103 | 10315 | 9117 |
| 55° | 11676 | 9633 | 8251 |
| 60° | 11207 | 8885 | 7367 |
| 65° | 10776 | 7950 | 6497 |
| 70° | 10150 | 6918 | 5516 |
| 75° | 9357 | 5736 | 4485 |
| 80° | 8164 | 4370 | 4114 |
| 85° | 6919 | 3974 | 3714 |



TEST NUMBER: P332960

CATALOG NUMBER: SA4XXRDIP-C1020D365U835-4F0-1E-UDD-F4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 169.6 | 3.1 |
| 10°-20° | 473.0 | 8.6 |
| 20°-30° | 683.0 | 12.5 |
| 30°-40° | 774.2 | 14.1 |
| 40°-50° | 747.6 | 13.6 |
| 50°-60° | 621.7 | 11.3 |
| 60°-70° | 429.3 | 7.8 |
| 70°-80° | 217.6 | 4.0 |
| 80°-90° | 56.8 | 1.0 |
| 90°-100° | 129.9 | 2.4 |
| 100°-110° | 270.4 | 4.9 |
| 110°-120° | 242.2 | 4.4 |
| 120°-130° | 203.7 | 3.7 |
| 130°-140° | 169.9 | 3.1 |
| 140°-150° | 129.8 | 2.4 |
| 150°-160° | 91.2 | 1.7 |
| 160°-170° | 53.7 | 1.0 |
| 170°-180° | 17.5 | 0.3 |
| 0°-30° | 1325.6 | 24.2 |
| 0°-40° | 2099.9 | 38.3 |
| 0°-60° | 3469.2 | 63.3 |
| 0°-90° | 4172.9 | 76.1 |
| 90°-120° | 642.6 | 11.7 |
| 90°-150° | 1146.0 | 20.9 |
| 90°-180° | 1308.0 | 23.9 |
| 0°-180° | 5481.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1806 | 1806 | 1806 | 1806 | 1806 | |
| 5° | 1803 | 1797 | 1781 | 1794 | 1792 | 171 |
| 15° | 1717 | 1704 | 1670 | 1667 | 1658 | 484 |
| 25° | 1553 | 1526 | 1471 | 1448 | 1434 | 715 |
| 35° | 1342 | 1297 | 1229 | 1183 | 1157 | 839 |
| 45° | 1095 | 1042 | 961 | 896 | 868 | 844 |
| 55° | 830 | 772 | 684 | 615 | 586 | 742 |
| 65° | 564 | 503 | 416 | 359 | 340 | 557 |
| 75° | 300 | 248 | 184 | 153 | 144 | 317 |
| 85° | 75 | 48 | 43 | 40 | 40 | 84 |
| 90° | 0 | 3 | 6 | 7 | 7 | 4 |
| 95° | 12 | 37 | 288 | 143 | 86 | 13 |
| 105° | 41 | 60 | 232 | 499 | 497 | 44 |
| 115° | 73 | 91 | 207 | 397 | 478 | 72 |
| 125° | 101 | 121 | 206 | 338 | 381 | 90 |
| 135° | 120 | 144 | 204 | 300 | 341 | 93 |
| 145° | 139 | 159 | 203 | 253 | 278 | 87 |
| 155° | 158 | 171 | 197 | 223 | 233 | 73 |
| 165° | 172 | 177 | 189 | 200 | 203 | 49 |
| 175° | 180 | 180 | 181 | 184 | 183 | 17 |
| 180° | 180 | 180 | 180 | 180 | 180 | |



TEST NUMBER: P332960

CATALOG NUMBER: SA4XXRDIP-C1020D365U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 |
| 2.5° | 1810.1 | 1809.1 | 1808.1 | 1807.2 | 1806.2 | 1804.3 | 1801.6 | 1798.9 | 1796.2 | 1793.5 | 1796.2 |
| 5° | 1802.9 | 1801.7 | 1800.5 | 1799.2 | 1798.0 | 1795.5 | 1791.9 | 1788.2 | 1784.5 | 1780.8 | 1783.9 |
| 7.5° | 1786.6 | 1785.3 | 1784.0 | 1782.7 | 1781.4 | 1778.4 | 1773.6 | 1768.8 | 1764.0 | 1759.2 | 1761.2 |
| 10° | 1771.1 | 1769.6 | 1768.0 | 1766.5 | 1765.0 | 1761.4 | 1755.9 | 1750.4 | 1744.8 | 1739.3 | 1740.5 |
| 12.5° | 1751.2 | 1749.4 | 1747.6 | 1745.9 | 1744.1 | 1739.9 | 1733.4 | 1726.9 | 1720.4 | 1713.9 | 1714.6 |
| 15° | 1717.2 | 1714.4 | 1711.7 | 1708.9 | 1706.1 | 1700.9 | 1693.2 | 1685.5 | 1677.9 | 1670.2 | 1669.6 |
| 17.5° | 1676.0 | 1672.0 | 1668.0 | 1664.0 | 1660.0 | 1653.4 | 1644.2 | 1635.0 | 1625.8 | 1616.5 | 1614.8 |
| 20° | 1643.9 | 1639.9 | 1635.9 | 1631.9 | 1627.9 | 1620.7 | 1610.3 | 1599.8 | 1589.4 | 1578.9 | 1576.5 |
| 22.5° | 1608.5 | 1604.0 | 1599.5 | 1595.1 | 1590.6 | 1582.7 | 1571.6 | 1560.4 | 1549.2 | 1538.0 | 1534.3 |
| 25° | 1552.7 | 1547.1 | 1541.6 | 1536.1 | 1530.5 | 1521.5 | 1508.9 | 1496.3 | 1483.7 | 1471.1 | 1465.9 |
| 27.5° | 1494.0 | 1487.1 | 1480.2 | 1473.2 | 1466.3 | 1456.1 | 1442.6 | 1429.2 | 1415.7 | 1402.2 | 1395.8 |
| 30° | 1453.1 | 1445.4 | 1437.8 | 1430.1 | 1422.4 | 1411.3 | 1396.9 | 1382.4 | 1368.0 | 1353.6 | 1345.9 |
| 32.5° | 1410.0 | 1401.3 | 1392.6 | 1384.0 | 1375.3 | 1363.5 | 1348.6 | 1333.7 | 1318.7 | 1303.8 | 1294.9 |
| 35° | 1342.5 | 1332.7 | 1322.8 | 1313.0 | 1303.2 | 1290.6 | 1275.2 | 1259.9 | 1244.5 | 1229.1 | 1218.7 |
| 37.5° | 1270.3 | 1260.2 | 1250.1 | 1239.9 | 1229.8 | 1216.2 | 1199.2 | 1182.2 | 1165.1 | 1148.1 | 1136.4 |
| 40° | 1219.5 | 1209.3 | 1199.2 | 1189.0 | 1178.9 | 1165.1 | 1147.6 | 1130.0 | 1112.5 | 1095.0 | 1082.1 |
| 42.5° | 1170.8 | 1160.2 | 1149.5 | 1138.9 | 1128.3 | 1113.8 | 1095.6 | 1077.3 | 1059.1 | 1040.8 | 1027.7 |
| 45° | 1095.0 | 1083.7 | 1072.3 | 1060.9 | 1049.5 | 1034.6 | 1016.2 | 997.8 | 979.3 | 960.9 | 945.9 |
| 47.5° | 1016.8 | 1005.0 | 993.3 | 981.6 | 969.8 | 954.4 | 935.2 | 916.0 | 896.8 | 877.7 | 862.1 |
| 50° | 963.7 | 951.7 | 939.7 | 927.7 | 915.7 | 899.9 | 880.3 | 860.6 | 840.9 | 821.3 | 805.9 |
| 52.5° | 909.5 | 897.7 | 886.0 | 874.3 | 862.5 | 846.6 | 826.4 | 806.3 | 786.1 | 766.0 | 750.4 |
| 55° | 829.6 | 817.3 | 805.0 | 792.7 | 780.4 | 764.3 | 744.3 | 724.3 | 704.4 | 684.4 | 668.4 |
| 57.5° | 750.5 | 737.7 | 724.9 | 712.1 | 699.4 | 683.1 | 663.5 | 643.8 | 624.1 | 604.5 | 588.3 |
| 60° | 694.1 | 681.8 | 669.5 | 657.2 | 644.9 | 628.9 | 609.3 | 589.6 | 569.9 | 550.3 | 534.3 |
| 62.5° | 643.2 | 630.4 | 617.6 | 604.8 | 592.1 | 575.6 | 555.4 | 535.3 | 515.1 | 495.0 | 480.2 |
| 65° | 564.1 | 550.9 | 537.7 | 524.5 | 511.3 | 494.8 | 475.2 | 455.5 | 435.8 | 416.2 | 403.0 |
| 67.5° | 482.0 | 469.3 | 456.7 | 444.0 | 431.3 | 415.9 | 397.6 | 379.4 | 361.1 | 342.9 | 331.5 |
| 70° | 430.0 | 417.1 | 404.2 | 391.3 | 378.4 | 363.2 | 345.7 | 328.1 | 310.6 | 293.1 | 283.0 |
| 72.5° | 374.7 | 363.0 | 351.3 | 339.7 | 328.0 | 313.9 | 297.4 | 280.8 | 264.3 | 247.8 | 239.1 |
| 75° | 300.0 | 288.7 | 277.3 | 265.9 | 254.6 | 241.6 | 227.2 | 212.8 | 198.3 | 183.9 | 176.8 |
| 77.5° | 224.3 | 214.6 | 205.0 | 195.3 | 185.7 | 175.0 | 163.3 | 151.7 | 140.0 | 128.3 | 124.2 |
| 80° | 175.6 | 166.7 | 157.8 | 148.9 | 140.0 | 130.9 | 121.7 | 112.5 | 103.2 | 94.0 | 93.1 |
| 82.5° | 133.6 | 125.4 | 117.2 | 109.0 | 100.9 | 94.1 | 88.9 | 83.6 | 78.3 | 73.0 | 72.3 |
| 85° | 74.7 | 68.5 | 62.4 | 56.2 | 50.1 | 46.5 | 45.6 | 44.7 | 43.8 | 42.9 | 42.2 |
| 87.5° | 25.5 | 23.7 | 21.9 | 20.0 | 18.1 | 17.0 | 17.2 | 17.0 | 16.9 | 16.8 | 16.4 |
| 90° | 0.4 | 1.1 | 2.1 | 2.5 | 2.8 | 2.8 | 4.9 | 4.9 | 5.7 | 6.4 | 6.0 |
| 92.5° | 4.0 | 5.9 | 9.2 | 13.5 | 18.7 | 26.0 | 44.0 | 71.4 | 98.1 | 112.1 | 93.4 |
| 95° | 11.7 | 12.7 | 16.3 | 20.9 | 29.3 | 44.2 | 74.9 | 132.9 | 217.4 | 288.0 | 296.2 |
| 97.5° | 20.9 | 20.9 | 24.0 | 28.2 | 35.5 | 47.9 | 71.6 | 119.5 | 203.4 | 303.4 | 372.1 |
| 100° | 26.9 | 26.9 | 29.3 | 33.6 | 40.3 | 51.6 | 72.5 | 112.4 | 184.5 | 284.2 | 374.6 |
| 102.5° | 32.5 | 33.1 | 35.3 | 39.2 | 45.7 | 56.4 | 75.3 | 110.4 | 171.8 | 260.1 | 353.4 |
| 105° | 41.4 | 42.4 | 44.2 | 48.4 | 54.8 | 65.0 | 82.0 | 111.3 | 160.8 | 231.8 | 314.9 |
| 107.5° | 51.1 | 51.8 | 53.6 | 58.1 | 64.2 | 74.3 | 89.8 | 116.6 | 158.8 | 216.0 | 283.8 |
| 110° | 57.6 | 58.3 | 60.1 | 64.3 | 70.7 | 80.2 | 95.8 | 120.5 | 159.4 | 210.6 | 268.3 |



TEST NUMBER: P332960

CATALOG NUMBER: SA4XXRDIP-C1020D365U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 63.8 | 64.5 | 66.6 | 70.5 | 76.9 | 86.4 | 101.4 | 124.8 | 161.1 | 208.1 | 259.5 |
| 115° | 72.8 | 73.9 | 76.3 | 79.9 | 86.6 | 96.1 | 110.3 | 131.5 | 164.3 | 206.8 | 251.3 |
| 117.5° | 82.1 | 83.1 | 85.3 | 89.2 | 95.5 | 105.4 | 118.8 | 138.3 | 167.8 | 206.4 | 247.6 |
| 120° | 88.4 | 89.1 | 91.5 | 95.4 | 101.4 | 111.3 | 124.8 | 143.1 | 170.4 | 206.4 | 245.6 |
| 122.5° | 94.0 | 94.7 | 97.2 | 100.8 | 107.4 | 117.0 | 130.4 | 147.7 | 172.9 | 206.1 | 243.4 |
| 125° | 101.4 | 102.8 | 105.0 | 108.9 | 115.6 | 125.5 | 138.2 | 154.4 | 176.7 | 205.7 | 239.6 |
| 127.5° | 108.0 | 109.1 | 111.7 | 116.1 | 123.1 | 133.1 | 145.4 | 160.3 | 179.8 | 204.9 | 234.6 |
| 130° | 111.7 | 113.1 | 115.9 | 121.2 | 127.9 | 138.2 | 150.2 | 164.0 | 182.0 | 204.6 | 231.5 |
| 132.5° | 115.4 | 116.5 | 120.2 | 125.2 | 132.5 | 142.1 | 154.2 | 167.7 | 184.0 | 204.4 | 228.7 |
| 135° | 120.5 | 121.9 | 125.5 | 131.5 | 138.9 | 148.1 | 159.7 | 172.5 | 187.0 | 203.9 | 224.4 |
| 137.5° | 125.7 | 127.0 | 130.9 | 136.6 | 144.3 | 153.1 | 164.0 | 175.9 | 188.7 | 203.9 | 220.8 |
| 140° | 129.4 | 130.4 | 134.3 | 140.3 | 147.7 | 156.2 | 166.8 | 178.1 | 190.1 | 203.6 | 218.8 |
| 142.5° | 133.3 | 134.4 | 138.0 | 143.7 | 150.8 | 159.0 | 169.4 | 179.8 | 191.3 | 203.6 | 217.1 |
| 145° | 138.9 | 140.0 | 143.5 | 148.4 | 155.2 | 162.9 | 172.1 | 181.7 | 191.9 | 202.9 | 214.2 |
| 147.5° | 145.2 | 145.5 | 148.7 | 153.7 | 159.3 | 166.3 | 174.9 | 183.3 | 192.3 | 201.6 | 211.6 |
| 150° | 149.1 | 149.5 | 152.3 | 156.6 | 161.9 | 168.6 | 176.4 | 184.1 | 192.3 | 200.7 | 209.6 |
| 152.5° | 152.8 | 152.9 | 155.7 | 159.7 | 164.4 | 170.6 | 177.5 | 184.7 | 191.7 | 199.3 | 207.3 |
| 155° | 158.0 | 158.3 | 160.5 | 164.0 | 167.9 | 173.2 | 179.2 | 185.2 | 190.9 | 197.2 | 203.9 |
| 157.5° | 163.0 | 163.0 | 165.0 | 167.7 | 171.1 | 175.3 | 180.4 | 185.2 | 189.9 | 195.0 | 200.5 |
| 160° | 166.1 | 166.1 | 167.5 | 170.0 | 172.8 | 176.7 | 181.0 | 185.2 | 189.1 | 193.3 | 197.9 |
| 162.5° | 168.9 | 168.7 | 169.8 | 172.0 | 174.5 | 177.6 | 181.5 | 185.2 | 188.2 | 191.6 | 195.7 |
| 165° | 172.1 | 172.1 | 172.8 | 174.6 | 176.4 | 178.5 | 181.7 | 184.5 | 186.6 | 189.1 | 191.9 |
| 167.5° | 175.3 | 174.9 | 175.3 | 176.6 | 177.6 | 179.3 | 181.6 | 183.6 | 184.9 | 186.5 | 188.5 |
| 170° | 176.7 | 176.4 | 176.7 | 177.8 | 178.5 | 179.5 | 181.3 | 183.1 | 183.8 | 184.8 | 186.3 |
| 172.5° | 178.1 | 177.8 | 177.8 | 178.6 | 179.0 | 179.8 | 181.0 | 182.5 | 182.7 | 183.1 | 184.3 |
| 175° | 179.5 | 179.2 | 179.2 | 179.5 | 179.9 | 179.9 | 180.6 | 181.7 | 181.3 | 181.3 | 182.0 |
| 177.5° | 180.2 | 179.9 | 179.6 | 179.9 | 179.9 | 179.9 | 180.2 | 180.7 | 180.2 | 180.2 | 180.5 |
| 180° | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 |



TEST NUMBER: P332960

CATALOG NUMBER: SA4XXRDIP-C1020D365U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 | 1805.7 |
| 2.5° | 1798.9 | 1801.6 | 1804.3 | 1805.6 | 1805.3 | 1805.1 | 1804.8 | 1804.6 |
| 5° | 1786.9 | 1790.0 | 1793.1 | 1794.3 | 1793.7 | 1793.1 | 1792.5 | 1791.9 |
| 7.5° | 1763.2 | 1765.1 | 1767.1 | 1767.6 | 1766.6 | 1765.6 | 1764.6 | 1763.6 |
| 10° | 1741.8 | 1743.0 | 1744.2 | 1744.2 | 1743.0 | 1741.8 | 1740.5 | 1739.3 |
| 12.5° | 1715.3 | 1716.1 | 1716.8 | 1716.3 | 1714.6 | 1712.9 | 1711.2 | 1709.5 |
| 15° | 1669.0 | 1668.3 | 1667.7 | 1666.3 | 1664.2 | 1662.0 | 1659.9 | 1657.7 |
| 17.5° | 1613.1 | 1611.4 | 1609.7 | 1607.2 | 1603.9 | 1600.7 | 1597.4 | 1594.1 |
| 20° | 1574.0 | 1571.6 | 1569.1 | 1565.9 | 1561.9 | 1557.9 | 1553.9 | 1549.9 |
| 22.5° | 1530.6 | 1526.9 | 1523.3 | 1519.8 | 1516.5 | 1513.3 | 1510.0 | 1506.8 |
| 25° | 1460.6 | 1455.4 | 1450.2 | 1446.0 | 1443.0 | 1439.9 | 1436.8 | 1433.8 |
| 27.5° | 1389.3 | 1382.9 | 1376.4 | 1371.0 | 1366.6 | 1362.1 | 1357.7 | 1353.3 |
| 30° | 1338.2 | 1330.5 | 1322.8 | 1316.5 | 1311.6 | 1306.7 | 1301.8 | 1296.9 |
| 32.5° | 1286.0 | 1277.1 | 1268.2 | 1261.4 | 1256.7 | 1252.0 | 1247.4 | 1242.7 |
| 35° | 1208.2 | 1197.8 | 1187.3 | 1179.4 | 1173.8 | 1168.3 | 1162.8 | 1157.2 |
| 37.5° | 1124.8 | 1113.1 | 1101.4 | 1092.8 | 1087.3 | 1081.7 | 1076.2 | 1070.7 |
| 40° | 1069.2 | 1056.3 | 1043.4 | 1034.2 | 1028.7 | 1023.1 | 1017.6 | 1012.1 |
| 42.5° | 1014.5 | 1001.4 | 988.2 | 978.8 | 973.0 | 967.2 | 961.4 | 955.7 |
| 45° | 930.8 | 915.7 | 900.7 | 890.4 | 884.9 | 879.3 | 873.8 | 868.3 |
| 47.5° | 846.5 | 830.9 | 815.2 | 804.4 | 798.3 | 792.2 | 786.1 | 780.1 |
| 50° | 790.5 | 775.2 | 759.8 | 749.2 | 743.4 | 737.5 | 731.7 | 725.9 |
| 52.5° | 734.7 | 719.1 | 703.5 | 692.7 | 686.6 | 680.5 | 674.4 | 668.4 |
| 55° | 652.4 | 636.5 | 620.5 | 609.6 | 603.7 | 597.9 | 592.1 | 586.2 |
| 57.5° | 572.0 | 555.8 | 539.6 | 529.3 | 524.8 | 520.4 | 516.0 | 511.6 |
| 60° | 518.3 | 502.3 | 486.4 | 475.9 | 471.0 | 466.1 | 461.2 | 456.3 |
| 62.5° | 465.5 | 450.7 | 436.0 | 426.6 | 422.7 | 418.8 | 414.8 | 410.9 |
| 65° | 389.7 | 376.5 | 363.3 | 354.9 | 351.2 | 347.5 | 343.8 | 340.1 |
| 67.5° | 320.1 | 308.8 | 297.4 | 289.7 | 285.6 | 281.6 | 277.5 | 273.5 |
| 70° | 272.8 | 262.7 | 252.6 | 245.9 | 242.9 | 239.8 | 236.7 | 233.7 |
| 72.5° | 230.4 | 221.8 | 213.1 | 207.4 | 204.5 | 201.7 | 198.9 | 196.1 |
| 75° | 169.8 | 162.7 | 155.6 | 151.2 | 149.3 | 147.5 | 145.6 | 143.8 |
| 77.5° | 120.1 | 116.0 | 111.8 | 109.5 | 108.9 | 108.4 | 107.8 | 107.3 |
| 80° | 92.2 | 91.3 | 90.3 | 89.7 | 89.4 | 89.1 | 88.8 | 88.5 |
| 82.5° | 71.6 | 71.0 | 70.3 | 69.8 | 69.5 | 69.2 | 68.9 | 68.6 |
| 85° | 41.6 | 41.0 | 40.4 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 |
| 87.5° | 16.3 | 16.1 | 15.9 | 15.9 | 16.2 | 16.5 | 16.7 | 17.0 |
| 90° | 6.4 | 6.7 | 7.1 | 7.1 | 7.4 | 7.8 | 7.4 | 7.4 |
| 92.5° | 69.4 | 52.2 | 41.6 | 34.5 | 30.3 | 28.4 | 27.2 | 27.2 |
| 95° | 261.9 | 207.1 | 159.7 | 125.5 | 108.1 | 97.2 | 90.8 | 86.2 |
| 97.5° | 386.9 | 366.6 | 332.0 | 295.1 | 269.7 | 248.5 | 237.9 | 230.5 |
| 100° | 426.2 | 433.3 | 416.0 | 389.8 | 359.1 | 337.5 | 326.9 | 324.1 |
| 102.5° | 424.3 | 459.3 | 464.3 | 453.4 | 434.6 | 419.0 | 407.8 | 405.5 |
| 105° | 395.8 | 457.0 | 492.0 | 506.5 | 507.2 | 504.3 | 499.4 | 497.3 |
| 107.5° | 355.5 | 420.6 | 469.8 | 501.4 | 518.8 | 526.9 | 530.4 | 531.3 |
| 110° | 331.2 | 392.3 | 443.6 | 482.4 | 507.5 | 522.4 | 528.7 | 531.9 |



TEST NUMBER: P332960

CATALOG NUMBER: SA4XXRDIP-C1020D365U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 313.3 | 367.4 | 415.8 | 454.7 | 483.2 | 501.2 | 510.1 | 515.2 |
| 115° | 295.5 | 338.9 | 380.3 | 414.2 | 442.1 | 463.3 | 474.7 | 477.5 |
| 117.5° | 286.7 | 322.7 | 355.2 | 384.0 | 407.8 | 425.6 | 437.0 | 439.2 |
| 120° | 282.7 | 315.6 | 343.9 | 369.0 | 389.1 | 404.7 | 413.9 | 417.8 |
| 122.5° | 279.3 | 311.1 | 336.8 | 358.8 | 375.8 | 389.1 | 396.9 | 400.8 |
| 125° | 273.6 | 303.9 | 328.3 | 347.8 | 361.9 | 372.2 | 378.9 | 381.0 |
| 127.5° | 266.5 | 295.5 | 319.9 | 338.3 | 352.5 | 361.6 | 367.3 | 369.4 |
| 130° | 260.8 | 288.8 | 312.8 | 331.5 | 346.0 | 354.8 | 360.5 | 362.6 |
| 132.5° | 254.9 | 281.1 | 304.6 | 323.3 | 337.5 | 347.5 | 352.9 | 355.0 |
| 135° | 246.7 | 269.7 | 291.2 | 308.9 | 323.0 | 332.9 | 338.6 | 340.7 |
| 137.5° | 239.3 | 258.7 | 276.9 | 292.8 | 306.1 | 315.8 | 320.5 | 323.0 |
| 140° | 235.0 | 251.6 | 267.5 | 282.4 | 294.8 | 302.5 | 307.5 | 310.3 |
| 142.5° | 231.1 | 245.7 | 259.3 | 272.2 | 283.2 | 290.4 | 294.8 | 296.7 |
| 145° | 225.5 | 237.5 | 248.1 | 258.0 | 266.8 | 272.8 | 276.4 | 278.1 |
| 147.5° | 220.9 | 230.4 | 238.9 | 246.7 | 253.2 | 258.4 | 261.0 | 261.7 |
| 150° | 218.1 | 226.2 | 233.3 | 239.6 | 245.3 | 249.9 | 252.0 | 252.3 |
| 152.5° | 215.0 | 222.0 | 228.5 | 233.7 | 238.5 | 242.2 | 243.5 | 243.9 |
| 155° | 210.3 | 215.9 | 221.2 | 225.5 | 229.0 | 231.8 | 232.9 | 232.9 |
| 157.5° | 205.3 | 210.0 | 214.5 | 217.9 | 220.5 | 222.7 | 223.3 | 223.3 |
| 160° | 202.2 | 206.0 | 209.9 | 212.8 | 214.9 | 217.0 | 217.4 | 217.4 |
| 162.5° | 199.1 | 202.4 | 205.4 | 208.0 | 209.5 | 211.6 | 212.0 | 211.7 |
| 165° | 194.7 | 196.9 | 199.3 | 201.1 | 202.5 | 203.9 | 203.6 | 203.2 |
| 167.5° | 190.6 | 192.2 | 194.2 | 195.2 | 195.9 | 196.9 | 196.8 | 196.5 |
| 170° | 188.0 | 189.1 | 190.5 | 191.6 | 192.3 | 192.6 | 192.3 | 192.3 |
| 172.5° | 185.8 | 186.5 | 187.4 | 188.2 | 188.6 | 188.9 | 188.6 | 188.0 |
| 175° | 182.7 | 183.1 | 183.8 | 183.8 | 183.8 | 184.5 | 183.8 | 183.1 |
| 177.5° | 180.7 | 181.0 | 181.0 | 181.3 | 181.0 | 181.3 | 180.7 | 180.2 |
| 180° | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 | 179.9 |

(END OF REPORT)