

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P831788

Luminaire Tested: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

Issue Date: 05/03/2024

Test Information

Test Method: LM-79-2019
Report Number: P831788
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-905-2, G3-1807-864-17)
Test Lab: INNOVATION CENTER
Issue Date: 05/03/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT, GRAZE OPTIC
UPLIGHT 1025 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: -

Summary

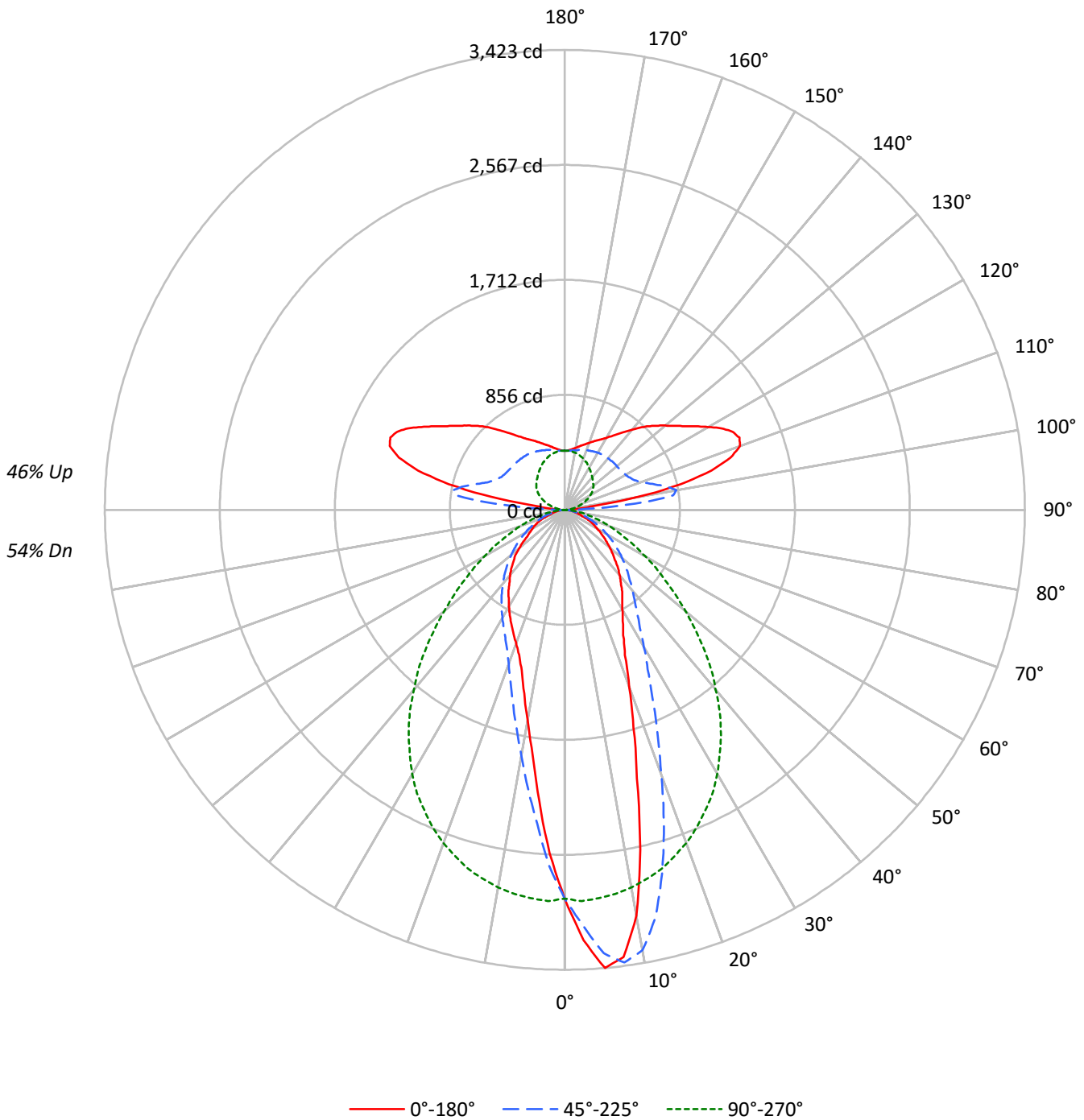
Lumens per Lamp: N/A
Luminaire Lumens: 7146.5 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 1.17 / 0.8
Luminous Opening: Rectangular (W 4' x L: 0.25' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 61
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: 24 FT

TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

Luminous Intensity Polar Plot





TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

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 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | | | | | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 72 | 72 | 72 | 60 | 60 | 60 | 54 | 54 | 54 | 47 | 47 | 47 | 41 | 41 | 41 | 36 | 36 | 36 | 32 | 32 | 32 | 28 | 28 | 28 | 25 | 25 | 25 | 23 | 23 | 23 | 21 | 21 | 21 | 19 | 19 | 19 | 18 | 18 | 18 |
| 1 | 99 | 95 | 92 | 89 | 92 | 89 | 86 | 83 | 76 | 74 | 72 | 65 | 63 | 62 | 54 | 53 | 52 | 47 | 47 | 47 | 41 | 41 | 41 | 36 | 36 | 36 | 32 | 32 | 32 | 28 | 28 | 28 | 25 | 25 | 25 | 23 | 23 | 23 | 21 | 21 | 21 | 19 | 19 | 19 | 18 | 18 | 18 | | | |
| 2 | 91 | 84 | 79 | 74 | 85 | 79 | 74 | 69 | 68 | 64 | 61 | 58 | 55 | 53 | 49 | 47 | 45 | 41 | 41 | 41 | 36 | 36 | 36 | 32 | 32 | 32 | 28 | 28 | 28 | 25 | 25 | 25 | 23 | 23 | 23 | 21 | 21 | 21 | 19 | 19 | 19 | 18 | 18 | 18 | | | | | | |
| 3 | 84 | 75 | 68 | 63 | 78 | 70 | 64 | 59 | 61 | 56 | 52 | 52 | 49 | 46 | 44 | 42 | 40 | 36 | 36 | 36 | 32 | 32 | 32 | 28 | 28 | 28 | 25 | 25 | 25 | 23 | 23 | 23 | 21 | 21 | 21 | 19 | 19 | 19 | 18 | 18 | 18 | | | | | | | | | |
| 4 | 77 | 67 | 60 | 54 | 72 | 63 | 56 | 51 | 55 | 50 | 46 | 47 | 43 | 40 | 40 | 37 | 35 | 32 | 32 | 32 | 28 | 28 | 28 | 25 | 25 | 25 | 23 | 23 | 23 | 21 | 21 | 21 | 19 | 19 | 19 | 18 | 18 | 18 | | | | | | | | | | | | |
| 5 | 71 | 60 | 53 | 47 | 66 | 57 | 50 | 45 | 50 | 44 | 40 | 43 | 39 | 36 | 37 | 34 | 31 | 28 | 28 | 28 | 25 | 25 | 25 | 23 | 23 | 23 | 21 | 21 | 21 | 19 | 19 | 19 | 18 | 18 | 18 | | | | | | | | | | | | | | | |
| 6 | 66 | 55 | 47 | 42 | 61 | 51 | 45 | 40 | 45 | 40 | 36 | 39 | 35 | 32 | 34 | 31 | 28 | 25 | 25 | 25 | 23 | 23 | 23 | 21 | 21 | 21 | 19 | 19 | 19 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | |
| 7 | 62 | 50 | 42 | 37 | 57 | 47 | 40 | 35 | 41 | 36 | 32 | 36 | 32 | 29 | 31 | 28 | 26 | 23 | 23 | 23 | 21 | 21 | 21 | 19 | 19 | 19 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | |
| 8 | 57 | 46 | 38 | 33 | 53 | 43 | 36 | 32 | 38 | 33 | 29 | 33 | 29 | 26 | 29 | 26 | 23 | 21 | 21 | 21 | 19 | 19 | 19 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 54 | 42 | 35 | 30 | 50 | 40 | 33 | 29 | 35 | 30 | 26 | 31 | 27 | 24 | 27 | 24 | 21 | 19 | 19 | 19 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 50 | 39 | 32 | 27 | 47 | 37 | 31 | 26 | 33 | 28 | 24 | 29 | 25 | 22 | 25 | 22 | 20 | 18 | 18 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|-------|-------|-------|-------|-------|
| 0° | 31146 | 31146 | 31146 | 31146 | 31146 |
| 5° | 36983 | 35804 | 31342 | 25337 | 23523 |
| 10° | 33507 | 36366 | 31186 | 20300 | 17415 |
| 15° | 23071 | 31181 | 30857 | 16592 | 13776 |
| 20° | 16049 | 24007 | 30237 | 13991 | 12109 |
| 25° | 12231 | 18296 | 29337 | 12435 | 11159 |
| 30° | 10647 | 14628 | 28209 | 11545 | 10337 |
| 35° | 9775 | 12339 | 26612 | 10796 | 9587 |
| 40° | 8918 | 11019 | 24522 | 10061 | 8901 |
| 45° | 8054 | 10077 | 22267 | 9363 | 8217 |
| 50° | 7311 | 9297 | 19609 | 8683 | 7371 |
| 55° | 6613 | 8539 | 17055 | 8015 | 6322 |
| 60° | 5924 | 7765 | 14813 | 7279 | 5976 |
| 65° | 5468 | 6890 | 12753 | 6543 | 5652 |
| 70° | 4444 | 5954 | 11125 | 5917 | 4592 |
| 75° | 3897 | 4737 | 9424 | 4907 | 4047 |
| 80° | 3527 | 4011 | 7724 | 4116 | 3825 |
| 85° | 3223 | 3520 | 5866 | 3742 | 3520 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 80°
 Vertical Angle: 45°
 Luminance: 23496 cd/sqm



TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 263.7 | 3.7 |
| 10°-20° | 610.3 | 8.5 |
| 20°-30° | 700.2 | 9.8 |
| 30°-40° | 690.2 | 9.7 |
| 40°-50° | 608.7 | 8.5 |
| 50°-60° | 468.3 | 6.6 |
| 60°-70° | 307.9 | 4.3 |
| 70°-80° | 149.5 | 2.1 |
| 80°-90° | 40.1 | 0.6 |
| 90°-100° | 238.6 | 3.3 |
| 100°-110° | 698.6 | 9.8 |
| 110°-120° | 682.2 | 9.5 |
| 120°-130° | 543.3 | 7.6 |
| 130°-140° | 428.6 | 6.0 |
| 140°-150° | 319.8 | 4.5 |
| 150°-160° | 222.9 | 3.1 |
| 160°-170° | 131.0 | 1.8 |
| 170°-180° | 42.6 | 0.6 |
| 0°-30° | 1574.3 | 22.0 |
| 0°-40° | 2264.5 | 31.7 |
| 0°-60° | 3341.4 | 46.8 |
| 0°-90° | 3838.9 | 53.7 |
| 90°-120° | 1619.3 | 22.7 |
| 90°-150° | 2911.0 | 40.7 |
| 90°-180° | 3308.0 | 46.3 |
| 0°-180° | 7146.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|------|------|------|------|------|------|------|
| 0° | 2894 | 2894 | 2894 | 2894 | 2894 | |
| 5° | 3423 | 3314 | 2901 | 2345 | 2177 | 313 |
| 15° | 2070 | 2798 | 2769 | 1489 | 1236 | 584 |
| 25° | 1030 | 1540 | 2470 | 1047 | 940 | 486 |
| 35° | 744 | 939 | 2025 | 822 | 730 | 464 |
| 45° | 529 | 662 | 1463 | 615 | 540 | 411 |
| 55° | 352 | 455 | 909 | 427 | 337 | 316 |
| 65° | 215 | 270 | 501 | 257 | 222 | 210 |
| 75° | 94 | 114 | 227 | 118 | 97 | 101 |
| 85° | 26 | 28 | 48 | 30 | 28 | 28 |
| 90° | 26 | 22 | 2 | 22 | 26 | 15 |
| 95° | 103 | 528 | 30 | 528 | 103 | 168 |
| 105° | 1132 | 716 | 103 | 716 | 1132 | 1130 |
| 115° | 1377 | 547 | 182 | 547 | 1377 | 1343 |
| 125° | 1086 | 511 | 254 | 511 | 1086 | 983 |
| 135° | 880 | 504 | 297 | 504 | 880 | 683 |
| 145° | 688 | 498 | 339 | 498 | 688 | 437 |
| 155° | 570 | 482 | 385 | 482 | 570 | 266 |
| 165° | 498 | 461 | 421 | 461 | 498 | 142 |
| 175° | 448 | 442 | 439 | 442 | 448 | 43 |
| 180° | 440 | 440 | 440 | 440 | 440 | |



TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 |
| 2.5° | 3206.8 | 3196.7 | 3186.7 | 3183.7 | 3180.7 | 3171.2 | 3161.7 | 3140.4 | 3119.0 | 3097.1 | 3075.1 |
| 5° | 3422.8 | 3423.9 | 3425.1 | 3422.2 | 3419.2 | 3406.7 | 3394.3 | 3368.2 | 3342.1 | 3313.6 | 3285.1 |
| 7.5° | 3356.3 | 3375.3 | 3394.3 | 3397.8 | 3401.4 | 3410.9 | 3420.4 | 3414.4 | 3408.5 | 3397.8 | 3387.2 |
| 10° | 3065.6 | 3064.5 | 3063.3 | 3084.6 | 3106.0 | 3169.5 | 3232.9 | 3265.6 | 3298.2 | 3327.2 | 3356.3 |
| 12.5° | 2591.1 | 2592.9 | 2594.6 | 2664.6 | 2734.6 | 2794.6 | 2854.5 | 2937.5 | 3020.6 | 3110.1 | 3199.7 |
| 15° | 2070.3 | 2099.3 | 2128.4 | 2190.7 | 2253.0 | 2343.1 | 2433.3 | 2544.8 | 2656.3 | 2798.1 | 2939.9 |
| 17.5° | 1700.1 | 1712.6 | 1725.0 | 1784.9 | 1844.8 | 1930.3 | 2015.7 | 2142.0 | 2268.4 | 2451.1 | 2633.8 |
| 20° | 1401.1 | 1412.4 | 1423.7 | 1467.0 | 1510.3 | 1592.1 | 1674.0 | 1794.4 | 1914.8 | 2095.8 | 2276.7 |
| 22.5° | 1169.8 | 1191.7 | 1213.7 | 1242.7 | 1271.8 | 1331.1 | 1390.5 | 1513.2 | 1636.0 | 1800.9 | 1965.9 |
| 25° | 1029.8 | 1039.9 | 1050.0 | 1074.9 | 1099.8 | 1156.7 | 1213.7 | 1295.0 | 1376.2 | 1540.5 | 1704.9 |
| 27.5° | 934.9 | 937.8 | 940.8 | 959.2 | 977.6 | 1014.4 | 1051.1 | 1126.5 | 1201.8 | 1337.1 | 1472.3 |
| 30° | 856.6 | 861.9 | 867.3 | 881.5 | 895.7 | 922.4 | 949.1 | 1002.5 | 1055.9 | 1176.9 | 1297.9 |
| 32.5° | 796.1 | 799.0 | 802.0 | 813.9 | 825.7 | 845.3 | 864.9 | 907.0 | 949.1 | 1041.7 | 1134.2 |
| 35° | 743.9 | 744.5 | 745.1 | 754.0 | 762.9 | 781.8 | 800.8 | 835.8 | 870.8 | 939.0 | 1007.2 |
| 37.5° | 684.6 | 688.7 | 692.9 | 699.4 | 705.9 | 722.5 | 739.1 | 767.6 | 796.1 | 852.4 | 908.8 |
| 40° | 634.7 | 638.3 | 641.8 | 649.6 | 657.3 | 670.3 | 683.4 | 709.5 | 735.6 | 784.2 | 832.8 |
| 42.5° | 584.9 | 587.3 | 589.6 | 597.4 | 605.1 | 621.1 | 637.1 | 657.9 | 678.6 | 719.0 | 759.3 |
| 45° | 529.1 | 535.1 | 541.0 | 549.3 | 557.6 | 571.2 | 584.9 | 606.2 | 627.6 | 662.0 | 696.4 |
| 47.5° | 482.9 | 485.8 | 488.8 | 495.9 | 503.0 | 519.6 | 536.3 | 555.2 | 574.2 | 606.2 | 638.3 |
| 50° | 436.6 | 437.8 | 439.0 | 445.5 | 452.0 | 466.8 | 481.7 | 503.6 | 525.6 | 555.2 | 584.9 |
| 52.5° | 392.7 | 395.7 | 398.6 | 405.2 | 411.7 | 421.8 | 431.8 | 454.4 | 476.9 | 506.0 | 535.1 |
| 55° | 352.4 | 354.1 | 355.9 | 360.7 | 365.4 | 377.3 | 389.1 | 408.7 | 428.3 | 455.0 | 481.7 |
| 57.5° | 314.4 | 316.8 | 319.1 | 322.7 | 326.3 | 336.9 | 347.6 | 364.8 | 382.0 | 408.7 | 435.4 |
| 60° | 275.2 | 278.2 | 281.2 | 285.3 | 289.5 | 297.8 | 306.1 | 321.5 | 336.9 | 360.7 | 384.4 |
| 62.5° | 246.8 | 247.4 | 248.0 | 251.5 | 255.1 | 261.0 | 266.9 | 279.4 | 291.9 | 315.6 | 339.3 |
| 65° | 214.7 | 216.5 | 218.3 | 220.1 | 221.9 | 226.6 | 231.3 | 242.0 | 252.7 | 270.5 | 288.3 |
| 67.5° | 181.5 | 183.3 | 185.1 | 188.0 | 191.0 | 195.2 | 199.3 | 206.4 | 213.6 | 230.2 | 246.8 |
| 70° | 141.2 | 141.2 | 141.2 | 145.9 | 150.7 | 157.8 | 164.9 | 170.2 | 175.6 | 189.2 | 202.9 |
| 72.5° | 115.1 | 115.7 | 116.3 | 116.9 | 117.5 | 121.6 | 125.8 | 134.7 | 143.6 | 151.9 | 160.2 |
| 75° | 93.7 | 94.3 | 94.9 | 95.5 | 96.1 | 97.3 | 98.5 | 101.4 | 104.4 | 113.9 | 123.4 |
| 77.5° | 74.7 | 75.3 | 75.9 | 76.5 | 77.1 | 78.3 | 79.5 | 80.7 | 81.9 | 85.4 | 89.0 |
| 80° | 56.9 | 57.5 | 58.1 | 58.7 | 59.3 | 59.9 | 60.5 | 61.7 | 62.9 | 64.7 | 66.4 |
| 82.5° | 41.5 | 41.5 | 41.5 | 41.5 | 41.5 | 42.7 | 43.9 | 43.9 | 43.9 | 45.1 | 46.3 |
| 85° | 26.1 | 26.1 | 26.1 | 26.7 | 27.3 | 27.3 | 27.3 | 27.9 | 28.5 | 28.5 | 28.5 |
| 87.5° | 11.9 | 11.3 | 10.7 | 11.3 | 11.9 | 11.9 | 11.9 | 12.5 | 13.1 | 13.1 | 13.1 |
| 90° | 25.8 | 26.7 | 25.8 | 24.9 | 25.8 | 24.0 | 23.1 | 22.3 | 21.4 | 22.3 | 19.6 |
| 92.5° | 47.2 | 49.0 | 48.1 | 51.6 | 53.4 | 59.6 | 68.5 | 88.1 | 123.7 | 165.6 | 183.4 |
| 95° | 103.3 | 106.8 | 113.0 | 121.1 | 138.0 | 170.0 | 217.2 | 320.4 | 428.1 | 527.8 | 470.0 |
| 97.5° | 211.8 | 221.6 | 243.0 | 276.8 | 336.5 | 437.9 | 555.4 | 736.1 | 839.4 | 811.8 | 606.1 |
| 100° | 558.1 | 557.2 | 591.9 | 656.9 | 746.8 | 873.2 | 977.3 | 1049.4 | 1018.3 | 842.9 | 569.7 |
| 102.5° | 883.9 | 909.7 | 937.3 | 985.3 | 1050.3 | 1118.8 | 1168.7 | 1153.6 | 1027.2 | 785.1 | 516.3 |
| 105° | 1132.2 | 1136.6 | 1165.1 | 1198.9 | 1239.9 | 1263.0 | 1246.1 | 1157.1 | 971.1 | 715.6 | 474.4 |
| 107.5° | 1294.2 | 1304.0 | 1315.5 | 1331.6 | 1336.9 | 1312.9 | 1243.5 | 1103.7 | 891.0 | 654.2 | 444.2 |
| 110° | 1386.8 | 1388.5 | 1390.3 | 1383.2 | 1358.3 | 1296.0 | 1183.8 | 1020.0 | 816.2 | 603.5 | 428.1 |



TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 112.5° | 1405.4 | 1404.6 | 1395.7 | 1369.8 | 1319.1 | 1234.6 | 1105.5 | 937.3 | 751.2 | 569.7 | 419.2 |
| 115° | 1377.0 | 1372.5 | 1354.7 | 1315.5 | 1248.8 | 1151.8 | 1020.9 | 866.1 | 701.4 | 547.4 | 418.3 |
| 117.5° | 1314.7 | 1308.4 | 1281.7 | 1238.1 | 1168.7 | 1068.1 | 947.9 | 810.9 | 668.5 | 532.3 | 419.2 |
| 120° | 1232.8 | 1227.4 | 1206.1 | 1156.2 | 1085.9 | 996.0 | 889.2 | 769.0 | 643.5 | 522.5 | 422.8 |
| 122.5° | 1156.2 | 1149.1 | 1125.1 | 1081.5 | 1020.9 | 939.0 | 842.0 | 736.1 | 623.1 | 516.3 | 429.0 |
| 125° | 1085.9 | 1079.7 | 1057.4 | 1018.3 | 961.3 | 890.1 | 804.6 | 707.6 | 606.1 | 510.9 | 435.3 |
| 127.5° | 1025.4 | 1020.0 | 999.6 | 965.7 | 914.1 | 848.3 | 769.9 | 681.8 | 590.1 | 508.2 | 442.4 |
| 130° | 975.5 | 968.4 | 949.7 | 917.7 | 870.5 | 810.0 | 737.9 | 657.8 | 577.7 | 505.6 | 449.5 |
| 132.5° | 926.6 | 922.1 | 906.1 | 874.1 | 830.5 | 773.5 | 707.6 | 635.5 | 566.1 | 504.7 | 454.8 |
| 135° | 880.3 | 874.1 | 858.0 | 831.3 | 787.7 | 737.0 | 679.1 | 615.9 | 556.3 | 503.8 | 460.2 |
| 137.5° | 831.3 | 826.0 | 812.6 | 785.1 | 747.7 | 702.3 | 650.7 | 597.2 | 547.4 | 502.0 | 463.7 |
| 140° | 779.7 | 780.6 | 766.4 | 741.4 | 707.6 | 669.3 | 626.6 | 581.2 | 539.4 | 501.1 | 467.3 |
| 142.5° | 731.7 | 732.5 | 720.1 | 698.7 | 671.1 | 639.1 | 603.5 | 566.1 | 532.3 | 499.3 | 470.0 |
| 145° | 688.0 | 686.3 | 679.1 | 660.4 | 638.2 | 612.4 | 583.9 | 554.5 | 526.0 | 497.6 | 470.9 |
| 147.5° | 650.7 | 649.8 | 642.6 | 629.3 | 611.5 | 592.8 | 568.8 | 544.7 | 519.8 | 494.9 | 470.9 |
| 150° | 618.6 | 618.6 | 613.3 | 603.5 | 590.1 | 573.2 | 554.5 | 534.1 | 513.6 | 491.3 | 470.9 |
| 152.5° | 591.9 | 591.9 | 589.2 | 580.3 | 570.5 | 557.2 | 541.2 | 524.3 | 506.5 | 486.9 | 468.2 |
| 155° | 570.5 | 569.7 | 567.9 | 560.8 | 552.7 | 542.1 | 528.7 | 514.5 | 499.3 | 481.5 | 466.4 |
| 157.5° | 550.1 | 550.1 | 548.3 | 543.0 | 535.8 | 526.9 | 516.3 | 503.8 | 491.3 | 477.1 | 463.7 |
| 160° | 530.5 | 531.4 | 531.4 | 526.0 | 519.8 | 513.6 | 504.7 | 494.9 | 483.3 | 471.7 | 462.0 |
| 162.5° | 512.7 | 513.6 | 513.6 | 509.1 | 505.6 | 500.2 | 492.2 | 484.2 | 475.3 | 466.4 | 458.4 |
| 165° | 497.6 | 497.6 | 498.4 | 494.9 | 491.3 | 486.9 | 480.6 | 475.3 | 468.2 | 461.1 | 454.8 |
| 167.5° | 482.4 | 482.4 | 483.3 | 480.6 | 478.9 | 475.3 | 471.7 | 467.3 | 461.1 | 455.7 | 451.3 |
| 170° | 469.1 | 469.1 | 470.0 | 468.2 | 467.3 | 465.5 | 462.0 | 459.3 | 454.8 | 450.4 | 447.7 |
| 172.5° | 456.6 | 457.5 | 459.3 | 457.5 | 457.5 | 456.6 | 453.9 | 452.2 | 448.6 | 445.9 | 445.0 |
| 175° | 447.7 | 448.6 | 449.5 | 448.6 | 448.6 | 448.6 | 446.8 | 445.9 | 444.2 | 442.4 | 442.4 |
| 177.5° | 441.5 | 441.5 | 443.3 | 442.4 | 443.3 | 443.3 | 442.4 | 441.5 | 440.6 | 439.7 | 440.6 |
| 180° | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 |



TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 |
| 2.5° | 3072.2 | 3069.2 | 3040.7 | 3012.3 | 2984.4 | 2956.5 | 2935.7 | 2915.0 | 2880.0 | 2845.0 | 2823.0 |
| 5° | 3262.6 | 3240.0 | 3195.0 | 3149.9 | 3082.3 | 3014.6 | 2957.7 | 2900.7 | 2828.4 | 2756.0 | 2695.5 |
| 7.5° | 3368.8 | 3350.4 | 3295.8 | 3241.2 | 3151.7 | 3062.1 | 2973.1 | 2884.1 | 2777.4 | 2670.6 | 2579.2 |
| 10° | 3371.7 | 3387.2 | 3342.1 | 3297.0 | 3196.1 | 3095.3 | 2974.3 | 2853.3 | 2709.7 | 2566.2 | 2448.1 |
| 12.5° | 3266.1 | 3332.6 | 3323.1 | 3313.6 | 3211.0 | 3108.4 | 2961.2 | 2814.1 | 2638.0 | 2461.8 | 2314.1 |
| 15° | 3068.6 | 3197.3 | 3235.3 | 3273.3 | 3188.4 | 3103.6 | 2936.3 | 2769.0 | 2562.0 | 2355.0 | 2185.3 |
| 17.5° | 2814.1 | 2994.5 | 3094.7 | 3195.0 | 3133.3 | 3071.6 | 2888.3 | 2705.0 | 2471.9 | 2238.7 | 2054.2 |
| 20° | 2512.8 | 2748.9 | 2906.1 | 3063.3 | 3040.7 | 3018.2 | 2829.0 | 2639.7 | 2388.2 | 2136.7 | 1936.8 |
| 22.5° | 2215.0 | 2464.1 | 2681.3 | 2898.4 | 2921.5 | 2944.6 | 2753.6 | 2562.6 | 2287.4 | 2012.1 | 1808.7 |
| 25° | 1958.1 | 2211.4 | 2470.1 | 2728.7 | 2780.9 | 2833.1 | 2651.6 | 2470.1 | 2184.7 | 1899.4 | 1697.1 |
| 27.5° | 1713.2 | 1954.0 | 2238.7 | 2523.5 | 2618.4 | 2713.3 | 2547.2 | 2381.1 | 2083.9 | 1786.7 | 1585.0 |
| 30° | 1513.2 | 1728.6 | 2019.2 | 2309.9 | 2442.2 | 2574.5 | 2422.0 | 2269.6 | 1974.8 | 1679.9 | 1482.4 |
| 32.5° | 1327.0 | 1519.8 | 1811.6 | 2103.5 | 2257.1 | 2410.8 | 2279.1 | 2147.4 | 1863.8 | 1580.3 | 1385.1 |
| 35° | 1179.9 | 1352.5 | 1624.8 | 1897.0 | 2069.1 | 2241.1 | 2133.1 | 2025.2 | 1748.2 | 1471.1 | 1286.6 |
| 37.5° | 1053.5 | 1198.3 | 1453.9 | 1709.6 | 1892.3 | 2075.0 | 1984.8 | 1894.7 | 1634.3 | 1373.8 | 1199.4 |
| 40° | 949.1 | 1065.4 | 1303.3 | 1541.1 | 1720.3 | 1899.4 | 1822.3 | 1745.2 | 1512.1 | 1278.9 | 1115.8 |
| 42.5° | 859.5 | 959.8 | 1173.3 | 1386.9 | 1551.2 | 1715.5 | 1664.5 | 1613.5 | 1402.3 | 1191.1 | 1039.9 |
| 45° | 780.6 | 864.9 | 1052.9 | 1241.0 | 1392.2 | 1543.5 | 1503.2 | 1462.8 | 1280.7 | 1098.6 | 959.8 |
| 47.5° | 710.7 | 783.0 | 950.9 | 1118.8 | 1254.6 | 1390.5 | 1353.1 | 1315.7 | 1165.0 | 1014.4 | 888.0 |
| 50° | 646.6 | 708.3 | 848.3 | 988.3 | 1110.5 | 1232.7 | 1201.8 | 1171.0 | 1046.4 | 921.8 | 812.7 |
| 52.5° | 586.1 | 637.1 | 762.9 | 888.6 | 987.1 | 1085.6 | 1061.8 | 1038.1 | 942.0 | 845.9 | 746.8 |
| 55° | 528.5 | 575.4 | 681.6 | 787.8 | 872.0 | 956.2 | 932.5 | 908.8 | 834.0 | 759.3 | 672.1 |
| 57.5° | 476.3 | 517.3 | 603.3 | 689.3 | 756.3 | 823.4 | 812.1 | 800.8 | 738.5 | 676.2 | 604.5 |
| 60° | 421.2 | 457.9 | 532.1 | 606.2 | 660.2 | 714.2 | 701.2 | 688.1 | 643.6 | 599.1 | 537.4 |
| 62.5° | 371.9 | 404.6 | 463.9 | 523.2 | 567.1 | 611.0 | 601.5 | 592.0 | 558.2 | 524.4 | 473.4 |
| 65° | 320.3 | 352.4 | 400.4 | 448.5 | 482.9 | 517.3 | 509.0 | 500.7 | 475.2 | 449.6 | 408.7 |
| 67.5° | 273.5 | 300.2 | 341.7 | 383.2 | 406.3 | 429.5 | 424.7 | 420.0 | 400.4 | 380.8 | 348.8 |
| 70° | 226.0 | 249.1 | 283.5 | 318.0 | 334.0 | 350.0 | 351.8 | 353.5 | 335.7 | 318.0 | 294.2 |
| 72.5° | 178.6 | 196.9 | 229.0 | 261.0 | 273.5 | 285.9 | 285.3 | 284.7 | 274.1 | 263.4 | 242.0 |
| 75° | 137.0 | 150.7 | 175.6 | 200.5 | 211.2 | 221.9 | 224.2 | 226.6 | 216.5 | 206.4 | 194.6 |
| 77.5° | 98.5 | 108.0 | 126.9 | 145.9 | 157.8 | 169.7 | 170.8 | 172.0 | 167.3 | 162.5 | 151.3 |
| 80° | 69.4 | 72.4 | 84.2 | 96.1 | 108.6 | 121.0 | 122.8 | 124.6 | 119.8 | 115.1 | 108.0 |
| 82.5° | 48.0 | 49.8 | 54.0 | 58.1 | 68.2 | 78.3 | 80.7 | 83.0 | 80.7 | 78.3 | 70.6 |
| 85° | 29.1 | 29.7 | 31.4 | 33.2 | 38.0 | 42.7 | 45.1 | 47.5 | 46.3 | 45.1 | 40.9 |
| 87.5° | 13.1 | 13.1 | 13.6 | 14.2 | 15.4 | 16.6 | 19.6 | 22.5 | 20.8 | 19.0 | 17.2 |
| 90° | 16.9 | 14.2 | 11.6 | 9.8 | 8.0 | 5.3 | 3.6 | 1.8 | 3.6 | 5.3 | 8.0 |
| 92.5° | 137.1 | 89.9 | 61.4 | 45.4 | 36.5 | 28.5 | 19.6 | 13.4 | 19.6 | 28.5 | 36.5 |
| 95° | 324.0 | 191.4 | 115.7 | 81.0 | 57.9 | 42.7 | 32.9 | 30.3 | 32.9 | 42.7 | 57.9 |
| 97.5° | 360.5 | 206.5 | 131.7 | 93.5 | 70.3 | 57.0 | 49.0 | 48.1 | 49.0 | 57.0 | 70.3 |
| 100° | 335.6 | 203.8 | 141.5 | 106.8 | 85.4 | 73.0 | 66.8 | 65.9 | 66.8 | 73.0 | 85.4 |
| 102.5° | 314.2 | 207.4 | 153.1 | 121.9 | 103.3 | 91.7 | 86.3 | 84.6 | 86.3 | 91.7 | 103.3 |
| 105° | 306.2 | 214.5 | 166.4 | 138.9 | 121.9 | 111.3 | 105.9 | 103.3 | 105.9 | 111.3 | 121.9 |
| 107.5° | 304.4 | 226.1 | 183.4 | 157.5 | 141.5 | 130.8 | 125.5 | 122.8 | 125.5 | 130.8 | 141.5 |
| 110° | 308.9 | 241.2 | 201.2 | 176.2 | 161.1 | 151.3 | 146.9 | 144.2 | 146.9 | 151.3 | 161.1 |

TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 317.8 | 256.3 | 219.9 | 195.8 | 180.7 | 170.9 | 166.4 | 163.8 | 166.4 | 170.9 | 180.7 |
| 115° | 327.6 | 273.3 | 239.4 | 215.4 | 200.3 | 191.4 | 186.0 | 182.5 | 186.0 | 191.4 | 200.3 |
| 117.5° | 340.0 | 291.1 | 257.2 | 235.0 | 218.1 | 210.1 | 205.6 | 201.2 | 205.6 | 210.1 | 218.1 |
| 120° | 354.3 | 308.0 | 275.9 | 253.7 | 236.8 | 227.9 | 223.4 | 220.7 | 223.4 | 227.9 | 236.8 |
| 122.5° | 367.6 | 325.8 | 294.6 | 270.6 | 254.6 | 244.8 | 240.3 | 237.7 | 240.3 | 244.8 | 254.6 |
| 125° | 381.8 | 342.7 | 311.5 | 287.5 | 270.6 | 260.8 | 255.5 | 253.7 | 255.5 | 260.8 | 270.6 |
| 127.5° | 393.4 | 357.8 | 327.6 | 303.5 | 284.8 | 275.0 | 268.8 | 266.1 | 268.8 | 275.0 | 284.8 |
| 130° | 405.0 | 371.2 | 341.8 | 317.8 | 299.1 | 288.4 | 280.4 | 277.7 | 280.4 | 288.4 | 299.1 |
| 132.5° | 415.7 | 382.7 | 354.3 | 331.1 | 312.4 | 299.1 | 290.2 | 286.6 | 290.2 | 299.1 | 312.4 |
| 135° | 424.6 | 394.3 | 366.7 | 342.7 | 324.0 | 310.6 | 300.8 | 297.3 | 300.8 | 310.6 | 324.0 |
| 137.5° | 431.7 | 402.3 | 375.6 | 353.4 | 334.7 | 320.4 | 310.6 | 307.1 | 310.6 | 320.4 | 334.7 |
| 140° | 437.0 | 410.3 | 384.5 | 362.3 | 344.5 | 330.2 | 321.3 | 316.9 | 321.3 | 330.2 | 344.5 |
| 142.5° | 442.4 | 416.6 | 391.6 | 371.2 | 353.4 | 340.9 | 331.1 | 327.6 | 331.1 | 340.9 | 353.4 |
| 145° | 445.9 | 421.9 | 398.8 | 378.3 | 363.2 | 349.8 | 341.8 | 339.1 | 341.8 | 349.8 | 363.2 |
| 147.5° | 448.6 | 426.4 | 405.0 | 387.2 | 372.1 | 360.5 | 352.5 | 350.7 | 352.5 | 360.5 | 372.1 |
| 150° | 449.5 | 430.8 | 410.3 | 394.3 | 381.8 | 370.3 | 363.2 | 362.3 | 363.2 | 370.3 | 381.8 |
| 152.5° | 451.3 | 433.5 | 416.6 | 401.4 | 390.7 | 381.0 | 373.8 | 373.8 | 373.8 | 381.0 | 390.7 |
| 155° | 451.3 | 437.0 | 421.9 | 409.4 | 399.6 | 390.7 | 385.4 | 385.4 | 385.4 | 390.7 | 399.6 |
| 157.5° | 452.2 | 438.8 | 426.4 | 416.6 | 407.7 | 399.6 | 395.2 | 394.3 | 395.2 | 399.6 | 407.7 |
| 160° | 452.2 | 441.5 | 430.8 | 421.9 | 415.7 | 408.5 | 405.0 | 405.0 | 405.0 | 408.5 | 415.7 |
| 162.5° | 451.3 | 442.4 | 433.5 | 426.4 | 421.0 | 415.7 | 413.0 | 413.0 | 413.0 | 415.7 | 421.0 |
| 165° | 449.5 | 443.3 | 436.1 | 429.9 | 426.4 | 421.9 | 420.1 | 421.0 | 420.1 | 421.9 | 426.4 |
| 167.5° | 448.6 | 443.3 | 437.9 | 433.5 | 430.8 | 427.2 | 426.4 | 427.2 | 426.4 | 427.2 | 430.8 |
| 170° | 445.9 | 442.4 | 437.9 | 436.1 | 434.4 | 431.7 | 430.8 | 432.6 | 430.8 | 431.7 | 434.4 |
| 172.5° | 445.0 | 442.4 | 438.8 | 437.9 | 437.0 | 435.3 | 435.3 | 436.1 | 435.3 | 435.3 | 437.0 |
| 175° | 443.3 | 441.5 | 439.7 | 438.8 | 438.8 | 437.0 | 437.9 | 438.8 | 437.9 | 437.0 | 438.8 |
| 177.5° | 442.4 | 440.6 | 439.7 | 439.7 | 439.7 | 438.8 | 439.7 | 440.6 | 439.7 | 438.8 | 439.7 |
| 180° | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 |



TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 | 2893.6 |
| 2.5° | 2801.1 | 2767.3 | 2733.5 | 2709.1 | 2684.8 | 2654.6 | 2624.3 | 2623.1 | 2621.9 | 2599.4 | 2576.9 |
| 5° | 2635.0 | 2576.3 | 2517.5 | 2460.0 | 2402.5 | 2344.9 | 2287.4 | 2274.3 | 2261.3 | 2241.7 | 2222.1 |
| 7.5° | 2487.9 | 2394.1 | 2300.4 | 2226.9 | 2153.3 | 2095.8 | 2038.2 | 1999.1 | 1959.9 | 1929.7 | 1899.4 |
| 10° | 2330.1 | 2213.8 | 2097.5 | 2008.6 | 1919.6 | 1857.3 | 1795.0 | 1749.9 | 1704.9 | 1683.5 | 1662.1 |
| 12.5° | 2166.4 | 2040.0 | 1913.7 | 1826.5 | 1739.3 | 1664.5 | 1589.8 | 1548.8 | 1507.9 | 1478.2 | 1448.6 |
| 15° | 2015.7 | 1879.8 | 1744.0 | 1651.5 | 1558.9 | 1488.9 | 1418.9 | 1378.0 | 1337.1 | 1307.4 | 1277.7 |
| 17.5° | 1869.8 | 1732.7 | 1595.7 | 1502.0 | 1408.3 | 1344.8 | 1281.3 | 1241.6 | 1201.8 | 1183.4 | 1165.0 |
| 20° | 1736.9 | 1598.7 | 1460.5 | 1372.1 | 1283.7 | 1221.4 | 1159.1 | 1137.8 | 1116.4 | 1099.2 | 1082.0 |
| 22.5° | 1605.2 | 1472.3 | 1339.4 | 1254.6 | 1169.8 | 1124.7 | 1079.6 | 1062.4 | 1045.2 | 1032.2 | 1019.1 |
| 25° | 1494.9 | 1362.6 | 1230.3 | 1156.1 | 1082.0 | 1047.0 | 1012.0 | 1000.7 | 989.5 | 976.4 | 963.4 |
| 27.5° | 1383.3 | 1257.6 | 1131.8 | 1072.5 | 1013.2 | 984.7 | 956.2 | 942.0 | 927.8 | 917.1 | 906.4 |
| 30° | 1284.9 | 1168.6 | 1052.3 | 1003.1 | 953.9 | 928.9 | 904.0 | 888.6 | 873.2 | 863.1 | 853.0 |
| 32.5° | 1190.0 | 1086.7 | 983.5 | 941.4 | 899.3 | 875.0 | 850.6 | 835.8 | 821.0 | 809.1 | 797.3 |
| 35° | 1102.2 | 1012.6 | 923.0 | 884.5 | 845.9 | 821.6 | 797.3 | 782.4 | 767.6 | 755.7 | 743.9 |
| 37.5° | 1025.0 | 943.8 | 862.5 | 826.3 | 790.1 | 768.8 | 747.4 | 732.0 | 716.6 | 704.1 | 691.7 |
| 40° | 952.7 | 880.9 | 809.1 | 774.1 | 739.1 | 716.0 | 692.9 | 679.2 | 665.6 | 654.3 | 643.0 |
| 42.5° | 888.6 | 822.8 | 756.9 | 722.5 | 688.1 | 666.2 | 644.2 | 628.2 | 612.2 | 605.7 | 599.1 |
| 45° | 821.0 | 762.9 | 704.7 | 671.5 | 638.3 | 615.1 | 592.0 | 578.4 | 564.7 | 558.8 | 552.9 |
| 47.5° | 761.7 | 707.7 | 653.7 | 621.1 | 588.5 | 567.7 | 546.9 | 536.3 | 525.6 | 517.3 | 509.0 |
| 50° | 703.5 | 651.3 | 599.1 | 567.7 | 536.3 | 518.5 | 500.7 | 487.6 | 474.6 | 468.6 | 462.7 |
| 52.5° | 647.8 | 600.3 | 552.9 | 520.8 | 488.8 | 471.6 | 454.4 | 443.1 | 431.8 | 419.4 | 406.9 |
| 55° | 584.9 | 543.4 | 501.8 | 473.4 | 444.9 | 427.1 | 409.3 | 396.3 | 383.2 | 370.2 | 357.1 |
| 57.5° | 532.7 | 491.8 | 450.8 | 425.3 | 399.8 | 382.6 | 365.4 | 351.2 | 336.9 | 326.3 | 315.6 |
| 60° | 475.7 | 440.2 | 404.6 | 379.6 | 354.7 | 338.1 | 321.5 | 307.9 | 294.2 | 288.9 | 283.5 |
| 62.5° | 422.4 | 389.1 | 355.9 | 334.0 | 312.0 | 296.0 | 280.0 | 271.1 | 262.2 | 258.6 | 255.1 |
| 65° | 367.8 | 339.3 | 310.8 | 290.7 | 270.5 | 256.9 | 243.2 | 239.1 | 234.9 | 231.9 | 229.0 |
| 67.5° | 316.8 | 292.4 | 268.1 | 250.3 | 232.5 | 223.0 | 213.6 | 208.8 | 204.1 | 200.5 | 196.9 |
| 70° | 270.5 | 249.1 | 227.8 | 212.4 | 196.9 | 188.0 | 179.1 | 175.0 | 170.8 | 164.3 | 157.8 |
| 72.5° | 220.7 | 204.1 | 187.5 | 175.6 | 163.7 | 156.0 | 148.3 | 140.0 | 131.7 | 125.8 | 119.8 |
| 75° | 182.7 | 166.1 | 149.5 | 138.2 | 126.9 | 118.0 | 109.1 | 106.2 | 103.2 | 101.4 | 99.7 |
| 77.5° | 140.0 | 125.8 | 111.5 | 102.6 | 93.7 | 89.6 | 85.4 | 83.6 | 81.9 | 81.3 | 80.7 |
| 80° | 100.8 | 89.0 | 77.1 | 72.4 | 67.6 | 66.4 | 65.3 | 64.1 | 62.9 | 62.3 | 61.7 |
| 82.5° | 62.9 | 56.9 | 51.0 | 49.8 | 48.6 | 48.0 | 47.5 | 46.9 | 46.3 | 45.7 | 45.1 |
| 85° | 36.8 | 34.4 | 32.0 | 31.4 | 30.8 | 30.3 | 29.7 | 29.7 | 29.7 | 29.7 | 29.7 |
| 87.5° | 15.4 | 15.4 | 15.4 | 15.4 | 15.4 | 15.4 | 15.4 | 15.4 | 15.4 | 14.8 | 14.2 |
| 90° | 9.8 | 11.6 | 14.2 | 16.9 | 19.6 | 22.3 | 21.4 | 22.3 | 23.1 | 24.0 | 25.8 |
| 92.5° | 45.4 | 61.4 | 89.9 | 137.1 | 183.4 | 165.6 | 123.7 | 88.1 | 68.5 | 59.6 | 53.4 |
| 95° | 81.0 | 115.7 | 191.4 | 324.0 | 470.0 | 527.8 | 428.1 | 320.4 | 217.2 | 170.0 | 138.0 |
| 97.5° | 93.5 | 131.7 | 206.5 | 360.5 | 606.1 | 811.8 | 839.4 | 736.1 | 555.4 | 437.9 | 336.5 |
| 100° | 106.8 | 141.5 | 203.8 | 335.6 | 569.7 | 842.9 | 1018.3 | 1049.4 | 977.3 | 873.2 | 746.8 |
| 102.5° | 121.9 | 153.1 | 207.4 | 314.2 | 516.3 | 785.1 | 1027.2 | 1153.6 | 1168.7 | 1118.8 | 1050.3 |
| 105° | 138.9 | 166.4 | 214.5 | 306.2 | 474.4 | 715.6 | 971.1 | 1157.1 | 1246.1 | 1263.0 | 1239.9 |
| 107.5° | 157.5 | 183.4 | 226.1 | 304.4 | 444.2 | 654.2 | 891.0 | 1103.7 | 1243.5 | 1312.9 | 1336.9 |
| 110° | 176.2 | 201.2 | 241.2 | 308.9 | 428.1 | 603.5 | 816.2 | 1020.0 | 1183.8 | 1296.0 | 1358.3 |



TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| 112.5° | 195.8 | 219.9 | 256.3 | 317.8 | 419.2 | 569.7 | 751.2 | 937.3 | 1105.5 | 1234.6 | 1319.1 |
| 115° | 215.4 | 239.4 | 273.3 | 327.6 | 418.3 | 547.4 | 701.4 | 866.1 | 1020.9 | 1151.8 | 1248.8 |
| 117.5° | 235.0 | 257.2 | 291.1 | 340.0 | 419.2 | 532.3 | 668.5 | 810.9 | 947.9 | 1068.1 | 1168.7 |
| 120° | 253.7 | 275.9 | 308.0 | 354.3 | 422.8 | 522.5 | 643.5 | 769.0 | 889.2 | 996.0 | 1085.9 |
| 122.5° | 270.6 | 294.6 | 325.8 | 367.6 | 429.0 | 516.3 | 623.1 | 736.1 | 842.0 | 939.0 | 1020.9 |
| 125° | 287.5 | 311.5 | 342.7 | 381.8 | 435.3 | 510.9 | 606.1 | 707.6 | 804.6 | 890.1 | 961.3 |
| 127.5° | 303.5 | 327.6 | 357.8 | 393.4 | 442.4 | 508.2 | 590.1 | 681.8 | 769.9 | 848.3 | 914.1 |
| 130° | 317.8 | 341.8 | 371.2 | 405.0 | 449.5 | 505.6 | 577.7 | 657.8 | 737.9 | 810.0 | 870.5 |
| 132.5° | 331.1 | 354.3 | 382.7 | 415.7 | 454.8 | 504.7 | 566.1 | 635.5 | 707.6 | 773.5 | 830.5 |
| 135° | 342.7 | 366.7 | 394.3 | 424.6 | 460.2 | 503.8 | 556.3 | 615.9 | 679.1 | 737.0 | 787.7 |
| 137.5° | 353.4 | 375.6 | 402.3 | 431.7 | 463.7 | 502.0 | 547.4 | 597.2 | 650.7 | 702.3 | 747.7 |
| 140° | 362.3 | 384.5 | 410.3 | 437.0 | 467.3 | 501.1 | 539.4 | 581.2 | 626.6 | 669.3 | 707.6 |
| 142.5° | 371.2 | 391.6 | 416.6 | 442.4 | 470.0 | 499.3 | 532.3 | 566.1 | 603.5 | 639.1 | 671.1 |
| 145° | 378.3 | 398.8 | 421.9 | 445.9 | 470.9 | 497.6 | 526.0 | 554.5 | 583.9 | 612.4 | 638.2 |
| 147.5° | 387.2 | 405.0 | 426.4 | 448.6 | 470.9 | 494.9 | 519.8 | 544.7 | 568.8 | 592.8 | 611.5 |
| 150° | 394.3 | 410.3 | 430.8 | 449.5 | 470.9 | 491.3 | 513.6 | 534.1 | 554.5 | 573.2 | 590.1 |
| 152.5° | 401.4 | 416.6 | 433.5 | 451.3 | 468.2 | 486.9 | 506.5 | 524.3 | 541.2 | 557.2 | 570.5 |
| 155° | 409.4 | 421.9 | 437.0 | 451.3 | 466.4 | 481.5 | 499.3 | 514.5 | 528.7 | 542.1 | 552.7 |
| 157.5° | 416.6 | 426.4 | 438.8 | 452.2 | 463.7 | 477.1 | 491.3 | 503.8 | 516.3 | 526.9 | 535.8 |
| 160° | 421.9 | 430.8 | 441.5 | 452.2 | 462.0 | 471.7 | 483.3 | 494.9 | 504.7 | 513.6 | 519.8 |
| 162.5° | 426.4 | 433.5 | 442.4 | 451.3 | 458.4 | 466.4 | 475.3 | 484.2 | 492.2 | 500.2 | 505.6 |
| 165° | 429.9 | 436.1 | 443.3 | 449.5 | 454.8 | 461.1 | 468.2 | 475.3 | 480.6 | 486.9 | 491.3 |
| 167.5° | 433.5 | 437.9 | 443.3 | 448.6 | 451.3 | 455.7 | 461.1 | 467.3 | 471.7 | 475.3 | 478.9 |
| 170° | 436.1 | 437.9 | 442.4 | 445.9 | 447.7 | 450.4 | 454.8 | 459.3 | 462.0 | 465.5 | 467.3 |
| 172.5° | 437.9 | 438.8 | 442.4 | 445.0 | 445.0 | 445.9 | 448.6 | 452.2 | 453.9 | 456.6 | 457.5 |
| 175° | 438.8 | 439.7 | 441.5 | 443.3 | 442.4 | 442.4 | 444.2 | 445.9 | 446.8 | 448.6 | 448.6 |
| 177.5° | 439.7 | 439.7 | 440.6 | 442.4 | 440.6 | 439.7 | 440.6 | 441.5 | 442.4 | 443.3 | 443.3 |
| 180° | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 | 439.7 |



TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|--------|--------|--------|--------|--------|
| 0° | 2893.6 | 2893.6 | 2893.6 | 2893.6 |
| 2.5° | 2570.9 | 2565.0 | 2562.6 | 2560.2 |
| 5° | 2203.7 | 2185.3 | 2181.2 | 2177.0 |
| 7.5° | 1891.7 | 1884.0 | 1858.5 | 1833.0 |
| 10° | 1638.4 | 1614.7 | 1604.0 | 1593.3 |
| 12.5° | 1426.6 | 1404.7 | 1401.1 | 1397.6 |
| 15° | 1262.3 | 1246.9 | 1241.6 | 1236.2 |
| 17.5° | 1154.4 | 1143.7 | 1137.2 | 1130.6 |
| 20° | 1074.3 | 1066.6 | 1061.8 | 1057.1 |
| 22.5° | 1013.2 | 1007.2 | 1003.7 | 1000.1 |
| 25° | 954.5 | 945.6 | 942.6 | 939.6 |
| 27.5° | 898.7 | 891.0 | 888.0 | 885.1 |
| 30° | 846.5 | 840.0 | 835.8 | 831.7 |
| 32.5° | 789.5 | 781.8 | 779.5 | 777.1 |
| 35° | 739.1 | 734.4 | 732.0 | 729.6 |
| 37.5° | 685.7 | 679.8 | 676.2 | 672.7 |
| 40° | 640.1 | 637.1 | 635.3 | 633.5 |
| 42.5° | 593.8 | 588.5 | 587.9 | 587.3 |
| 45° | 547.5 | 542.2 | 541.0 | 539.8 |
| 47.5° | 504.2 | 499.5 | 498.9 | 498.3 |
| 50° | 456.2 | 449.6 | 444.9 | 440.2 |
| 52.5° | 401.0 | 395.1 | 390.9 | 386.8 |
| 55° | 350.6 | 344.1 | 340.5 | 336.9 |
| 57.5° | 312.6 | 309.6 | 307.9 | 306.1 |
| 60° | 281.8 | 280.0 | 278.8 | 277.6 |
| 62.5° | 253.3 | 251.5 | 251.5 | 251.5 |
| 65° | 227.2 | 225.4 | 223.6 | 221.9 |
| 67.5° | 193.4 | 189.8 | 189.2 | 188.6 |
| 70° | 152.5 | 147.1 | 146.5 | 145.9 |
| 72.5° | 119.2 | 118.6 | 117.5 | 116.3 |
| 75° | 98.5 | 97.3 | 97.3 | 97.3 |
| 77.5° | 79.5 | 78.3 | 78.3 | 78.3 |
| 80° | 61.1 | 60.5 | 61.1 | 61.7 |
| 82.5° | 45.1 | 45.1 | 44.5 | 43.9 |
| 85° | 29.1 | 28.5 | 28.5 | 28.5 |
| 87.5° | 14.2 | 14.2 | 14.2 | 14.2 |
| 90° | 24.9 | 25.8 | 26.7 | 25.8 |
| 92.5° | 51.6 | 48.1 | 49.0 | 47.2 |
| 95° | 121.1 | 113.0 | 106.8 | 103.3 |
| 97.5° | 276.8 | 243.0 | 221.6 | 211.8 |
| 100° | 656.9 | 591.9 | 557.2 | 558.1 |
| 102.5° | 985.3 | 937.3 | 909.7 | 883.9 |
| 105° | 1198.9 | 1165.1 | 1136.6 | 1132.2 |
| 107.5° | 1331.6 | 1315.5 | 1304.0 | 1294.2 |
| 110° | 1383.2 | 1390.3 | 1388.5 | 1386.8 |



TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|--------|--------|--------|--------|--------|
| 112.5° | 1369.8 | 1395.7 | 1404.6 | 1405.4 |
| 115° | 1315.5 | 1354.7 | 1372.5 | 1377.0 |
| 117.5° | 1238.1 | 1281.7 | 1308.4 | 1314.7 |
| 120° | 1156.2 | 1206.1 | 1227.4 | 1232.8 |
| 122.5° | 1081.5 | 1125.1 | 1149.1 | 1156.2 |
| 125° | 1018.3 | 1057.4 | 1079.7 | 1085.9 |
| 127.5° | 965.7 | 999.6 | 1020.0 | 1025.4 |
| 130° | 917.7 | 949.7 | 968.4 | 975.5 |
| 132.5° | 874.1 | 906.1 | 922.1 | 926.6 |
| 135° | 831.3 | 858.0 | 874.1 | 880.3 |
| 137.5° | 785.1 | 812.6 | 826.0 | 831.3 |
| 140° | 741.4 | 766.4 | 780.6 | 779.7 |
| 142.5° | 698.7 | 720.1 | 732.5 | 731.7 |
| 145° | 660.4 | 679.1 | 686.3 | 688.0 |
| 147.5° | 629.3 | 642.6 | 649.8 | 650.7 |
| 150° | 603.5 | 613.3 | 618.6 | 618.6 |
| 152.5° | 580.3 | 589.2 | 591.9 | 591.9 |
| 155° | 560.8 | 567.9 | 569.7 | 570.5 |
| 157.5° | 543.0 | 548.3 | 550.1 | 550.1 |
| 160° | 526.0 | 531.4 | 531.4 | 530.5 |
| 162.5° | 509.1 | 513.6 | 513.6 | 512.7 |
| 165° | 494.9 | 498.4 | 497.6 | 497.6 |
| 167.5° | 480.6 | 483.3 | 482.4 | 482.4 |
| 170° | 468.2 | 470.0 | 469.1 | 469.1 |
| 172.5° | 457.5 | 459.3 | 457.5 | 456.6 |
| 175° | 448.6 | 449.5 | 448.6 | 447.7 |
| 177.5° | 442.4 | 443.3 | 441.5 | 441.5 |
| 180° | 439.7 | 439.7 | 439.7 | 439.7 |



TEST NUMBER: P831788

CATALOG NUMBER: S123RDIP-S1000D1025U940-4F0-1E-UDD-G4

CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 13.04 | 13.87 | 13.97 | 14.82 | 16.04 | 17.70 | 18.54 | 18.64 | 19.48 | 20.70 |
| | 3H | 14.26 | 15.01 | 15.21 | 15.96 | 17.21 | 19.20 | 19.95 | 20.15 | 20.90 | 22.15 |
| | 4H | 14.64 | 15.35 | 15.60 | 16.31 | 17.56 | 19.69 | 20.40 | 20.65 | 21.36 | 22.61 |
| | 6H | 14.92 | 15.57 | 15.89 | 16.54 | 17.80 | 20.00 | 20.65 | 20.98 | 21.62 | 22.88 |
| | 8H | 15.01 | 15.63 | 15.99 | 16.61 | 17.87 | 20.08 | 20.70 | 21.06 | 21.68 | 22.94 |
| | 12H | 15.06 | 15.65 | 16.04 | 16.62 | 17.91 | 20.11 | 20.70 | 21.10 | 21.68 | 22.96 |
| 4H | 2H | 13.76 | 14.47 | 14.73 | 15.43 | 16.68 | 17.70 | 18.40 | 18.66 | 19.36 | 20.62 |
| | 3H | 15.13 | 15.72 | 16.11 | 16.71 | 17.97 | 19.36 | 19.94 | 20.33 | 20.93 | 22.20 |
| | 4H | 15.59 | 16.12 | 16.57 | 17.10 | 18.40 | 19.96 | 20.50 | 20.95 | 21.48 | 22.77 |
| | 6H | 15.95 | 16.41 | 16.95 | 17.42 | 18.71 | 20.40 | 20.86 | 21.40 | 21.87 | 23.16 |
| | 8H | 16.08 | 16.51 | 17.08 | 17.51 | 18.81 | 20.53 | 20.96 | 21.53 | 21.96 | 23.26 |
| | 12H | 16.15 | 16.54 | 17.17 | 17.56 | 18.87 | 20.59 | 20.98 | 21.61 | 22.00 | 23.30 |
| 8H | 4H | 15.90 | 16.33 | 16.90 | 17.33 | 18.63 | 19.93 | 20.36 | 20.93 | 21.36 | 22.66 |
| | 6H | 16.36 | 16.72 | 17.39 | 17.76 | 19.06 | 20.43 | 20.78 | 21.45 | 21.82 | 23.12 |
| | 8H | 16.56 | 16.87 | 17.59 | 17.90 | 19.22 | 20.61 | 20.92 | 21.64 | 21.95 | 23.27 |
| | 12H | 16.70 | 16.97 | 17.73 | 17.99 | 19.36 | 20.73 | 21.00 | 21.76 | 22.02 | 23.39 |
| 12H | 4H | 15.91 | 16.30 | 16.93 | 17.31 | 18.62 | 19.88 | 20.27 | 20.90 | 21.28 | 22.59 |
| | 6H | 16.42 | 16.73 | 17.45 | 17.76 | 19.08 | 20.40 | 20.71 | 21.43 | 21.74 | 23.06 |
| | 8H | 16.64 | 16.91 | 17.68 | 17.94 | 19.30 | 20.59 | 20.87 | 21.63 | 21.89 | 23.26 |