

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: P832160

Luminaire Tested: S123RDIP-S340D805U930-4F0-1E-UDD-G4

Issue Date: 05/03/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P832160  
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-S340D805U930-4F0-1E-UDD-G4  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 340 LUMENS PER FOOT, GRAZE OPTIC  
UPLIGHT 805 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: -

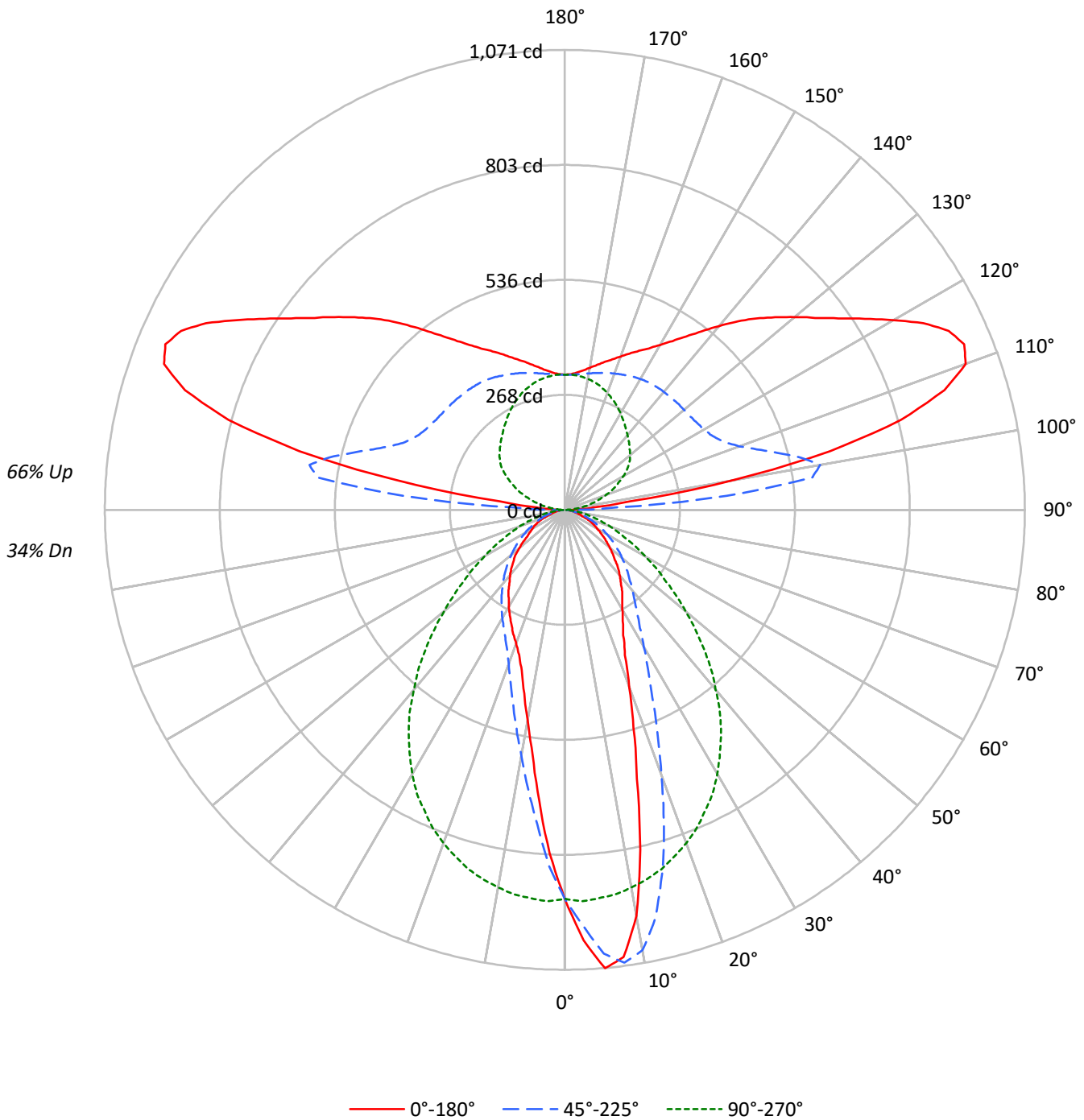
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3571.2 lumens  
Efficiency: N/A  
Efficacy: 108.2 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: Semi-Indirect  
  
Input Watts (W): 33  
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: P832160

CATALOG NUMBER: S123RDIP-S340D805U930-4F0-1E-UDD-G4

### Luminous Intensity Polar Plot





TEST NUMBER: P832160

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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 | 50 | 30 | 10 | 0  |   |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 0   | 103 | 103 | 103 | 103 | 93 | 93 | 93 | 93 | 74 | 74 | 74 | 57 | 57 | 57 | 41 | 41 | 41 | 34 |    |    |    |   |
| 1   | 95  | 91  | 87  | 84  | 85 | 82 | 79 | 76 | 66 | 64 | 62 | 51 | 50 | 48 | 37 | 36 | 36 | 29 |    |    |    |   |
| 2   | 87  | 80  | 74  | 69  | 78 | 72 | 68 | 63 | 58 | 55 | 52 | 45 | 43 | 41 | 33 | 32 | 31 | 26 |    |    |    |   |
| 3   | 79  | 71  | 64  | 58  | 71 | 64 | 58 | 54 | 52 | 48 | 44 | 41 | 38 | 36 | 30 | 28 | 27 | 22 |    |    |    |   |
| 4   | 73  | 63  | 56  | 50  | 66 | 57 | 51 | 46 | 46 | 42 | 38 | 37 | 34 | 31 | 27 | 25 | 24 | 20 |    |    |    |   |
| 5   | 67  | 56  | 49  | 43  | 60 | 51 | 45 | 40 | 42 | 37 | 34 | 33 | 30 | 27 | 25 | 23 | 21 | 18 |    |    |    |   |
| 6   | 62  | 51  | 43  | 38  | 56 | 46 | 40 | 35 | 38 | 33 | 30 | 30 | 27 | 24 | 23 | 21 | 19 | 16 |    |    |    |   |
| 7   | 57  | 46  | 38  | 33  | 52 | 42 | 36 | 31 | 35 | 30 | 26 | 28 | 24 | 22 | 21 | 19 | 17 | 14 |    |    |    |   |
| 8   | 53  | 42  | 35  | 30  | 48 | 38 | 32 | 28 | 32 | 27 | 24 | 25 | 22 | 20 | 20 | 17 | 16 | 13 |    |    |    |   |
| 9   | 50  | 38  | 31  | 26  | 45 | 35 | 29 | 25 | 29 | 25 | 21 | 24 | 20 | 18 | 18 | 16 | 14 | 12 |    |    |    |   |
| 10  | 47  | 35  | 28  | 24  | 42 | 32 | 26 | 22 | 27 | 22 | 19 | 22 | 19 | 16 | 17 | 15 | 13 | 11 |    |    |    |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°  | 135° | 180° |
|-----|-------|-------|------|------|------|
| 0°  | 9749  | 9749  | 9749 | 9749 | 9749 |
| 5°  | 11577 | 11207 | 9811 | 7931 | 7363 |
| 10° | 10488 | 11384 | 9762 | 6355 | 5451 |
| 15° | 7221  | 9760  | 9658 | 5194 | 4313 |
| 20° | 5024  | 7514  | 9465 | 4379 | 3790 |
| 25° | 3828  | 5727  | 9183 | 3892 | 3493 |
| 30° | 3332  | 4579  | 8830 | 3614 | 3235 |
| 35° | 3059  | 3862  | 8330 | 3380 | 3001 |
| 40° | 2792  | 3450  | 7676 | 3149 | 2786 |
| 45° | 2521  | 3154  | 6970 | 2930 | 2573 |
| 50° | 2289  | 2910  | 6137 | 2718 | 2308 |
| 55° | 2070  | 2672  | 5339 | 2509 | 1980 |
| 60° | 1856  | 2430  | 4637 | 2278 | 1871 |
| 65° | 1712  | 2157  | 3991 | 2048 | 1768 |
| 70° | 1391  | 1863  | 3484 | 1854 | 1438 |
| 75° | 1219  | 1485  | 2949 | 1535 | 1268 |
| 80° | 1103  | 1252  | 2417 | 1289 | 1196 |
| 85° | 1013  | 1099  | 1840 | 1173 | 1099 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 80°  
 Vertical Angle: 45°  
 Luminance: 7354 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 82.6   | 2.3       |
| 10°-20°   | 191.0  | 5.3       |
| 20°-30°   | 219.2  | 6.1       |
| 30°-40°   | 216.0  | 6.0       |
| 40°-50°   | 190.5  | 5.3       |
| 50°-60°   | 146.6  | 4.1       |
| 60°-70°   | 96.4   | 2.7       |
| 70°-80°   | 46.8   | 1.3       |
| 80°-90°   | 13.5   | 0.4       |
| 90°-100°  | 170.9  | 4.8       |
| 100°-110° | 500.3  | 14.0      |
| 110°-120° | 488.5  | 13.7      |
| 120°-130° | 389.1  | 10.9      |
| 130°-140° | 307.0  | 8.6       |
| 140°-150° | 229.0  | 6.4       |
| 150°-160° | 159.7  | 4.5       |
| 160°-170° | 93.8   | 2.6       |
| 170°-180° | 30.5   | 0.9       |
| 0°-30°    | 492.8  | 13.8      |
| 0°-40°    | 708.8  | 19.8      |
| 0°-60°    | 1045.9 | 29.3      |
| 0°-90°    | 1202.6 | 33.7      |
| 90°-120°  | 1159.6 | 32.5      |
| 90°-150°  | 2084.6 | 58.4      |
| 90°-180°  | 2369.0 | 66.3      |
| 0°-180°   | 3571.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 45°  | 90° | 135° | 180° | Flux |
|------|------|------|-----|------|------|------|
| 0°   | 906  | 906  | 906 | 906  | 906  |      |
| 5°   | 1071 | 1037 | 908 | 734  | 681  | 98   |
| 15°  | 648  | 876  | 867 | 466  | 387  | 183  |
| 25°  | 322  | 482  | 773 | 328  | 294  | 152  |
| 35°  | 233  | 294  | 634 | 257  | 228  | 145  |
| 45°  | 166  | 207  | 458 | 192  | 169  | 129  |
| 55°  | 110  | 142  | 284 | 134  | 106  | 99   |
| 65°  | 67   | 85   | 157 | 80   | 69   | 66   |
| 75°  | 29   | 36   | 71  | 37   | 30   | 32   |
| 85°  | 8    | 9    | 15  | 10   | 9    | 9    |
| 90°  | 18   | 16   | 1   | 16   | 18   | 10   |
| 95°  | 74   | 378  | 22  | 378  | 74   | 120  |
| 105° | 811  | 512  | 74  | 512  | 811  | 809  |
| 115° | 986  | 392  | 131 | 392  | 986  | 962  |
| 125° | 778  | 366  | 182 | 366  | 778  | 704  |
| 135° | 630  | 361  | 213 | 361  | 630  | 489  |
| 145° | 493  | 356  | 243 | 356  | 493  | 313  |
| 155° | 409  | 345  | 276 | 345  | 409  | 190  |
| 165° | 356  | 330  | 302 | 330  | 356  | 102  |
| 175° | 321  | 317  | 314 | 317  | 321  | 31   |
| 180° | 315  | 315  | 315 | 315  | 315  |      |



TEST NUMBER: P832160

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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 905.7  | 905.7  | 905.7  | 905.7  | 905.7  | 905.7  | 905.7  | 905.7  | 905.7  | 905.7  | 905.7  |
| 2.5°   | 1003.8 | 1000.6 | 997.5  | 996.5  | 995.6  | 992.6  | 989.7  | 983.0  | 976.3  | 969.4  | 962.6  |
| 5°     | 1071.4 | 1071.7 | 1072.1 | 1071.2 | 1070.2 | 1066.3 | 1062.4 | 1054.3 | 1046.1 | 1037.2 | 1028.3 |
| 7.5°   | 1050.6 | 1056.5 | 1062.4 | 1063.6 | 1064.7 | 1067.6 | 1070.6 | 1068.8 | 1066.9 | 1063.6 | 1060.2 |
| 10°    | 959.6  | 959.2  | 958.8  | 965.5  | 972.2  | 992.1  | 1011.9 | 1022.2 | 1032.4 | 1041.5 | 1050.6 |
| 12.5°  | 811.0  | 811.6  | 812.2  | 834.1  | 856.0  | 874.7  | 893.5  | 919.5  | 945.5  | 973.5  | 1001.5 |
| 15°    | 648.0  | 657.1  | 666.2  | 685.7  | 705.2  | 733.4  | 761.7  | 796.6  | 831.5  | 875.8  | 920.2  |
| 17.5°  | 532.2  | 536.1  | 540.0  | 558.7  | 577.5  | 604.2  | 630.9  | 670.5  | 710.0  | 767.2  | 824.4  |
| 20°    | 438.6  | 442.1  | 445.6  | 459.2  | 472.7  | 498.4  | 524.0  | 561.7  | 599.4  | 656.0  | 712.6  |
| 22.5°  | 366.2  | 373.0  | 379.9  | 389.0  | 398.1  | 416.7  | 435.2  | 473.7  | 512.1  | 563.7  | 615.3  |
| 25°    | 322.3  | 325.5  | 328.7  | 336.4  | 344.2  | 362.1  | 379.9  | 405.3  | 430.8  | 482.2  | 533.6  |
| 27.5°  | 292.6  | 293.6  | 294.5  | 300.2  | 306.0  | 317.5  | 329.0  | 352.6  | 376.2  | 418.5  | 460.9  |
| 30°    | 268.1  | 269.8  | 271.5  | 275.9  | 280.4  | 288.7  | 297.1  | 313.8  | 330.5  | 368.4  | 406.3  |
| 32.5°  | 249.2  | 250.1  | 251.0  | 254.8  | 258.5  | 264.6  | 270.7  | 283.9  | 297.1  | 326.1  | 355.0  |
| 35°    | 232.8  | 233.0  | 233.2  | 236.0  | 238.8  | 244.7  | 250.7  | 261.6  | 272.6  | 293.9  | 315.3  |
| 37.5°  | 214.3  | 215.6  | 216.9  | 218.9  | 221.0  | 226.2  | 231.4  | 240.3  | 249.2  | 266.8  | 284.5  |
| 40°    | 198.7  | 199.8  | 200.9  | 203.3  | 205.7  | 209.8  | 213.9  | 222.1  | 230.2  | 245.5  | 260.7  |
| 42.5°  | 183.1  | 183.8  | 184.6  | 187.0  | 189.4  | 194.4  | 199.4  | 205.9  | 212.4  | 225.0  | 237.7  |
| 45°    | 165.6  | 167.5  | 169.3  | 171.9  | 174.5  | 178.8  | 183.1  | 189.8  | 196.4  | 207.2  | 218.0  |
| 47.5°  | 151.1  | 152.1  | 153.0  | 155.2  | 157.5  | 162.7  | 167.9  | 173.8  | 179.7  | 189.8  | 199.8  |
| 50°    | 136.7  | 137.0  | 137.4  | 139.4  | 141.5  | 146.1  | 150.8  | 157.6  | 164.5  | 173.8  | 183.1  |
| 52.5°  | 122.9  | 123.8  | 124.8  | 126.8  | 128.9  | 132.0  | 135.2  | 142.2  | 149.3  | 158.4  | 167.5  |
| 55°    | 110.3  | 110.8  | 111.4  | 112.9  | 114.4  | 118.1  | 121.8  | 127.9  | 134.1  | 142.4  | 150.8  |
| 57.5°  | 98.4   | 99.2   | 99.9   | 101.0  | 102.1  | 105.5  | 108.8  | 114.2  | 119.6  | 127.9  | 136.3  |
| 60°    | 86.2   | 87.1   | 88.0   | 89.3   | 90.6   | 93.2   | 95.8   | 100.6  | 105.5  | 112.9  | 120.3  |
| 62.5°  | 77.2   | 77.4   | 77.6   | 78.7   | 79.8   | 81.7   | 83.6   | 87.5   | 91.4   | 98.8   | 106.2  |
| 65°    | 67.2   | 67.8   | 68.3   | 68.9   | 69.4   | 70.9   | 72.4   | 75.8   | 79.1   | 84.7   | 90.2   |
| 67.5°  | 56.8   | 57.4   | 57.9   | 58.9   | 59.8   | 61.1   | 62.4   | 64.6   | 66.8   | 72.0   | 77.2   |
| 70°    | 44.2   | 44.2   | 44.2   | 45.7   | 47.2   | 49.4   | 51.6   | 53.3   | 55.0   | 59.2   | 63.5   |
| 72.5°  | 36.0   | 36.2   | 36.4   | 36.6   | 36.8   | 38.1   | 39.4   | 42.1   | 44.9   | 47.5   | 50.1   |
| 75°    | 29.3   | 29.5   | 29.7   | 29.9   | 30.1   | 30.5   | 30.8   | 31.8   | 32.7   | 35.7   | 38.6   |
| 77.5°  | 23.4   | 23.6   | 23.8   | 24.0   | 24.1   | 24.5   | 24.9   | 25.3   | 25.6   | 26.7   | 27.9   |
| 80°    | 17.8   | 18.0   | 18.2   | 18.4   | 18.6   | 18.8   | 18.9   | 19.3   | 19.7   | 20.2   | 20.8   |
| 82.5°  | 13.0   | 13.0   | 13.0   | 13.0   | 13.0   | 13.4   | 13.7   | 13.7   | 13.7   | 14.1   | 14.5   |
| 85°    | 8.2    | 8.2    | 8.2    | 8.4    | 8.5    | 8.5    | 8.5    | 8.7    | 8.9    | 8.9    | 8.9    |
| 87.5°  | 3.7    | 3.5    | 3.3    | 3.5    | 3.7    | 3.7    | 3.7    | 3.9    | 4.1    | 4.1    | 4.1    |
| 90°    | 18.5   | 19.1   | 18.5   | 17.8   | 18.5   | 17.2   | 16.6   | 15.9   | 15.3   | 15.9   | 14.0   |
| 92.5°  | 33.8   | 35.1   | 34.4   | 37.0   | 38.2   | 42.7   | 49.1   | 63.1   | 88.6   | 118.6  | 131.3  |
| 95°    | 73.9   | 76.5   | 81.0   | 86.7   | 98.8   | 121.7  | 155.5  | 229.5  | 306.6  | 378.0  | 336.6  |
| 97.5°  | 151.7  | 158.7  | 174.0  | 198.2  | 240.9  | 313.6  | 397.7  | 527.1  | 601.1  | 581.3  | 434.1  |
| 100°   | 399.7  | 399.0  | 423.9  | 470.4  | 534.8  | 625.3  | 699.9  | 751.5  | 729.2  | 603.6  | 407.9  |
| 102.5° | 633.0  | 651.4  | 671.2  | 705.6  | 752.2  | 801.2  | 836.9  | 826.1  | 735.6  | 562.2  | 369.7  |
| 105°   | 810.8  | 814.0  | 834.4  | 858.6  | 887.9  | 904.5  | 892.4  | 828.6  | 695.4  | 512.5  | 339.7  |
| 107.5° | 926.8  | 933.8  | 942.1  | 953.6  | 957.4  | 940.2  | 890.5  | 790.4  | 638.1  | 468.5  | 318.1  |
| 110°   | 993.1  | 994.4  | 995.6  | 990.5  | 972.7  | 928.1  | 847.8  | 730.5  | 584.5  | 432.2  | 306.6  |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 1006.5 | 1005.8 | 999.5 | 981.0 | 944.7 | 884.1 | 791.7 | 671.2 | 538.0 | 407.9 | 300.2 |
| 115°   | 986.1  | 982.9  | 970.1 | 942.1 | 894.3 | 824.8 | 731.1 | 620.2 | 502.3 | 392.0 | 299.6 |
| 117.5° | 941.5  | 937.0  | 917.9 | 886.6 | 836.9 | 764.9 | 678.8 | 580.7 | 478.7 | 381.2 | 300.2 |
| 120°   | 882.8  | 879.0  | 863.7 | 828.0 | 777.6 | 713.3 | 636.8 | 550.7 | 460.9 | 374.2 | 302.8 |
| 122.5° | 828.0  | 822.9  | 805.7 | 774.5 | 731.1 | 672.5 | 603.0 | 527.1 | 446.2 | 369.7 | 307.2 |
| 125°   | 777.6  | 773.2  | 757.3 | 729.2 | 688.4 | 637.4 | 576.2 | 506.7 | 434.1 | 365.9 | 311.7 |
| 127.5° | 734.3  | 730.5  | 715.8 | 691.6 | 654.6 | 607.5 | 551.4 | 488.3 | 422.6 | 364.0 | 316.8 |
| 130°   | 698.6  | 693.5  | 680.1 | 657.2 | 623.4 | 580.0 | 528.4 | 471.1 | 413.7 | 362.1 | 321.9 |
| 132.5° | 663.6  | 660.4  | 648.9 | 625.9 | 594.7 | 553.9 | 506.7 | 455.1 | 405.4 | 361.4 | 325.7 |
| 135°   | 630.4  | 625.9  | 614.5 | 595.3 | 564.1 | 527.8 | 486.3 | 441.1 | 398.4 | 360.8 | 329.5 |
| 137.5° | 595.3  | 591.5  | 582.0 | 562.2 | 535.4 | 502.9 | 466.0 | 427.7 | 392.0 | 359.5 | 332.1 |
| 140°   | 558.4  | 559.0  | 548.8 | 531.0 | 506.7 | 479.3 | 448.7 | 416.2 | 386.3 | 358.9 | 334.6 |
| 142.5° | 524.0  | 524.6  | 515.7 | 500.4 | 480.6 | 457.7 | 432.2 | 405.4 | 381.2 | 357.6 | 336.6 |
| 145°   | 492.7  | 491.4  | 486.3 | 473.0 | 457.0 | 438.5 | 418.1 | 397.1 | 376.7 | 356.3 | 337.2 |
| 147.5° | 466.0  | 465.3  | 460.2 | 450.7 | 437.9 | 424.5 | 407.3 | 390.1 | 372.3 | 354.4 | 337.2 |
| 150°   | 443.0  | 443.0  | 439.2 | 432.2 | 422.6 | 410.5 | 397.1 | 382.4 | 367.8 | 351.9 | 337.2 |
| 152.5° | 423.9  | 423.9  | 422.0 | 415.6 | 408.6 | 399.0 | 387.5 | 375.4 | 362.7 | 348.7 | 335.3 |
| 155°   | 408.6  | 407.9  | 406.7 | 401.6 | 395.8 | 388.2 | 378.6 | 368.4 | 357.6 | 344.8 | 334.0 |
| 157.5° | 393.9  | 393.9  | 392.6 | 388.8 | 383.7 | 377.4 | 369.7 | 360.8 | 351.9 | 341.7 | 332.1 |
| 160°   | 379.9  | 380.5  | 380.5 | 376.7 | 372.3 | 367.8 | 361.4 | 354.4 | 346.1 | 337.8 | 330.8 |
| 162.5° | 367.2  | 367.8  | 367.8 | 364.6 | 362.1 | 358.2 | 352.5 | 346.8 | 340.4 | 334.0 | 328.3 |
| 165°   | 356.3  | 356.3  | 357.0 | 354.4 | 351.9 | 348.7 | 344.2 | 340.4 | 335.3 | 330.2 | 325.7 |
| 167.5° | 345.5  | 345.5  | 346.1 | 344.2 | 342.9 | 340.4 | 337.8 | 334.6 | 330.2 | 326.4 | 323.2 |
| 170°   | 335.9  | 335.9  | 336.6 | 335.3 | 334.6 | 333.4 | 330.8 | 328.9 | 325.7 | 322.5 | 320.6 |
| 172.5° | 327.0  | 327.6  | 328.9 | 327.6 | 327.6 | 327.0 | 325.1 | 323.8 | 321.3 | 319.3 | 318.7 |
| 175°   | 320.6  | 321.3  | 321.9 | 321.3 | 321.3 | 321.3 | 320.0 | 319.3 | 318.1 | 316.8 | 316.8 |
| 177.5° | 316.2  | 316.2  | 317.4 | 316.8 | 317.4 | 317.4 | 316.8 | 316.2 | 315.5 | 314.9 | 315.5 |
| 180°   | 314.9  | 314.9  | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 |



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**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| 0°     | 905.7  | 905.7  | 905.7  | 905.7  | 905.7  | 905.7 | 905.7 | 905.7 | 905.7 | 905.7 | 905.7 |
| 2.5°   | 961.6  | 960.7  | 951.8  | 942.9  | 934.1  | 925.4 | 918.9 | 912.4 | 901.5 | 890.5 | 883.6 |
| 5°     | 1021.2 | 1014.2 | 1000.1 | 986.0  | 964.8  | 943.6 | 925.8 | 908.0 | 885.3 | 862.7 | 843.7 |
| 7.5°   | 1054.5 | 1048.7 | 1031.6 | 1014.5 | 986.5  | 958.5 | 930.6 | 902.8 | 869.3 | 835.9 | 807.3 |
| 10°    | 1055.4 | 1060.2 | 1046.1 | 1032.0 | 1000.4 | 968.9 | 931.0 | 893.1 | 848.2 | 803.2 | 766.3 |
| 12.5°  | 1022.3 | 1043.1 | 1040.2 | 1037.2 | 1005.1 | 973.0 | 926.9 | 880.9 | 825.7 | 770.6 | 724.3 |
| 15°    | 960.5  | 1000.8 | 1012.7 | 1024.6 | 998.0  | 971.5 | 919.1 | 866.7 | 801.9 | 737.1 | 684.0 |
| 17.5°  | 880.9  | 937.3  | 968.7  | 1000.1 | 980.8  | 961.4 | 904.1 | 846.7 | 773.7 | 700.7 | 643.0 |
| 20°    | 786.5  | 860.4  | 909.6  | 958.8  | 951.8  | 944.7 | 885.5 | 826.3 | 747.5 | 668.8 | 606.2 |
| 22.5°  | 693.3  | 771.3  | 839.3  | 907.2  | 914.5  | 921.7 | 861.9 | 802.1 | 716.0 | 629.8 | 566.1 |
| 25°    | 612.9  | 692.2  | 773.2  | 854.1  | 870.5  | 886.8 | 830.0 | 773.2 | 683.9 | 594.5 | 531.2 |
| 27.5°  | 536.2  | 611.6  | 700.7  | 789.9  | 819.6  | 849.3 | 797.3 | 745.3 | 652.3 | 559.3 | 496.1 |
| 30°    | 473.7  | 541.1  | 632.0  | 723.0  | 764.4  | 805.8 | 758.1 | 710.4 | 618.1 | 525.8 | 464.0 |
| 32.5°  | 415.4  | 475.7  | 567.1  | 658.4  | 706.5  | 754.6 | 713.4 | 672.2 | 583.4 | 494.6 | 433.6 |
| 35°    | 369.3  | 423.3  | 508.6  | 593.8  | 647.6  | 701.5 | 667.7 | 633.9 | 547.2 | 460.5 | 402.7 |
| 37.5°  | 329.8  | 375.1  | 455.1  | 535.1  | 592.3  | 649.5 | 621.3 | 593.1 | 511.5 | 430.0 | 375.4 |
| 40°    | 297.1  | 333.5  | 407.9  | 482.4  | 538.5  | 594.5 | 570.4 | 546.3 | 473.3 | 400.3 | 349.3 |
| 42.5°  | 269.0  | 300.4  | 367.3  | 434.1  | 485.5  | 537.0 | 521.0 | 505.0 | 438.9 | 372.8 | 325.5 |
| 45°    | 244.4  | 270.7  | 329.6  | 388.4  | 435.8  | 483.1 | 470.5 | 457.9 | 400.9 | 343.9 | 300.4 |
| 47.5°  | 222.4  | 245.1  | 297.6  | 350.2  | 392.7  | 435.2 | 423.5 | 411.8 | 364.7 | 317.5 | 278.0 |
| 50°    | 202.4  | 221.7  | 265.5  | 309.3  | 347.6  | 385.8 | 376.2 | 366.5 | 327.5 | 288.5 | 254.4 |
| 52.5°  | 183.4  | 199.4  | 238.8  | 278.1  | 309.0  | 339.8 | 332.4 | 324.9 | 294.9 | 264.8 | 233.8 |
| 55°    | 165.4  | 180.1  | 213.3  | 246.6  | 272.9  | 299.3 | 291.9 | 284.5 | 261.1 | 237.7 | 210.4 |
| 57.5°  | 149.1  | 161.9  | 188.8  | 215.8  | 236.7  | 257.7 | 254.2 | 250.7 | 231.2 | 211.7 | 189.2 |
| 60°    | 131.8  | 143.3  | 166.6  | 189.8  | 206.7  | 223.6 | 219.5 | 215.4 | 201.5 | 187.5 | 168.2 |
| 62.5°  | 116.4  | 126.6  | 145.2  | 163.8  | 177.5  | 191.2 | 188.3 | 185.3 | 174.7 | 164.1 | 148.2 |
| 65°    | 100.3  | 110.3  | 125.3  | 140.4  | 151.1  | 161.9 | 159.3 | 156.7 | 148.7 | 140.7 | 127.9 |
| 67.5°  | 85.6   | 94.0   | 107.0  | 119.9  | 127.2  | 134.4 | 132.9 | 131.5 | 125.3 | 119.2 | 109.2 |
| 70°    | 70.7   | 78.0   | 88.8   | 99.5   | 104.5  | 109.6 | 110.1 | 110.7 | 105.1 | 99.5  | 92.1  |
| 72.5°  | 55.9   | 61.6   | 71.7   | 81.7   | 85.6   | 89.5  | 89.3  | 89.1  | 85.8  | 82.4  | 75.8  |
| 75°    | 42.9   | 47.2   | 55.0   | 62.8   | 66.1   | 69.4  | 70.2  | 70.9  | 67.8  | 64.6  | 60.9  |
| 77.5°  | 30.8   | 33.8   | 39.7   | 45.7   | 49.4   | 53.1  | 53.5  | 53.8  | 52.4  | 50.9  | 47.3  |
| 80°    | 21.7   | 22.7   | 26.4   | 30.1   | 34.0   | 37.9  | 38.4  | 39.0  | 37.5  | 36.0  | 33.8  |
| 82.5°  | 15.0   | 15.6   | 16.9   | 18.2   | 21.4   | 24.5  | 25.3  | 26.0  | 25.3  | 24.5  | 22.1  |
| 85°    | 9.1    | 9.3    | 9.8    | 10.4   | 11.9   | 13.4  | 14.1  | 14.9  | 14.5  | 14.1  | 12.8  |
| 87.5°  | 4.1    | 4.1    | 4.3    | 4.5    | 4.8    | 5.2   | 6.1   | 7.1   | 6.5   | 5.9   | 5.4   |
| 90°    | 12.1   | 10.2   | 8.3    | 7.0    | 5.7    | 3.8   | 2.5   | 1.3   | 2.5   | 3.8   | 5.7   |
| 92.5°  | 98.2   | 64.4   | 44.0   | 32.5   | 26.1   | 20.4  | 14.0  | 9.6   | 14.0  | 20.4  | 26.1  |
| 95°    | 232.0  | 137.0  | 82.9   | 58.0   | 41.4   | 30.6  | 23.6  | 21.7  | 23.6  | 30.6  | 41.4  |
| 97.5°  | 258.2  | 147.9  | 94.3   | 66.9   | 50.4   | 40.8  | 35.1  | 34.4  | 35.1  | 40.8  | 50.4  |
| 100°   | 240.3  | 146.0  | 101.3  | 76.5   | 61.2   | 52.3  | 47.8  | 47.2  | 47.8  | 52.3  | 61.2  |
| 102.5° | 225.0  | 148.5  | 109.6  | 87.3   | 73.9   | 65.7  | 61.8  | 60.6  | 61.8  | 65.7  | 73.9  |
| 105°   | 219.3  | 153.6  | 119.2  | 99.4   | 87.3   | 79.7  | 75.9  | 73.9  | 75.9  | 79.7  | 87.3  |
| 107.5° | 218.0  | 161.9  | 131.3  | 112.8  | 101.3  | 93.7  | 89.9  | 88.0  | 89.9  | 93.7  | 101.3 |
| 110°   | 221.2  | 172.7  | 144.1  | 126.2  | 115.4  | 108.4 | 105.2 | 103.3 | 105.2 | 108.4 | 115.4 |





TEST NUMBER: P832160

CATALOG NUMBER: S123RDIP-S340D805U930-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 227.6 | 183.6 | 157.4 | 140.2 | 129.4 | 122.4 | 119.2 | 117.3 | 119.2 | 122.4 | 129.4 |
| 115°   | 234.6 | 195.7 | 171.5 | 154.3 | 143.4 | 137.0 | 133.2 | 130.7 | 133.2 | 137.0 | 143.4 |
| 117.5° | 243.5 | 208.4 | 184.2 | 168.3 | 156.2 | 150.4 | 147.2 | 144.1 | 147.2 | 150.4 | 156.2 |
| 120°   | 253.7 | 220.5 | 197.6 | 181.7 | 169.6 | 163.2 | 160.0 | 158.1 | 160.0 | 163.2 | 169.6 |
| 122.5° | 263.3 | 233.3 | 211.0 | 193.8 | 182.3 | 175.3 | 172.1 | 170.2 | 172.1 | 175.3 | 182.3 |
| 125°   | 273.5 | 245.4 | 223.1 | 205.9 | 193.8 | 186.8 | 182.9 | 181.7 | 182.9 | 186.8 | 193.8 |
| 127.5° | 281.7 | 256.2 | 234.6 | 217.4 | 204.0 | 197.0 | 192.5 | 190.6 | 192.5 | 197.0 | 204.0 |
| 130°   | 290.0 | 265.8 | 244.8 | 227.6 | 214.2 | 206.5 | 200.8 | 198.9 | 200.8 | 206.5 | 214.2 |
| 132.5° | 297.7 | 274.1 | 253.7 | 237.1 | 223.7 | 214.2 | 207.8 | 205.2 | 207.8 | 214.2 | 223.7 |
| 135°   | 304.0 | 282.4 | 262.6 | 245.4 | 232.0 | 222.5 | 215.4 | 212.9 | 215.4 | 222.5 | 232.0 |
| 137.5° | 309.1 | 288.1 | 269.0 | 253.1 | 239.7 | 229.5 | 222.5 | 219.9 | 222.5 | 229.5 | 239.7 |
| 140°   | 313.0 | 293.8 | 275.4 | 259.4 | 246.7 | 236.5 | 230.1 | 226.9 | 230.1 | 236.5 | 246.7 |
| 142.5° | 316.8 | 298.3 | 280.5 | 265.8 | 253.1 | 244.1 | 237.1 | 234.6 | 237.1 | 244.1 | 253.1 |
| 145°   | 319.3 | 302.1 | 285.6 | 270.9 | 260.1 | 250.5 | 244.8 | 242.9 | 244.8 | 250.5 | 260.1 |
| 147.5° | 321.3 | 305.3 | 290.0 | 277.3 | 266.4 | 258.2 | 252.4 | 251.1 | 252.4 | 258.2 | 266.4 |
| 150°   | 321.9 | 308.5 | 293.8 | 282.4 | 273.5 | 265.2 | 260.1 | 259.4 | 260.1 | 265.2 | 273.5 |
| 152.5° | 323.2 | 310.4 | 298.3 | 287.5 | 279.8 | 272.8 | 267.7 | 267.7 | 267.7 | 272.8 | 279.8 |
| 155°   | 323.2 | 313.0 | 302.1 | 293.2 | 286.2 | 279.8 | 276.0 | 276.0 | 276.0 | 279.8 | 286.2 |
| 157.5° | 323.8 | 314.2 | 305.3 | 298.3 | 291.9 | 286.2 | 283.0 | 282.4 | 283.0 | 286.2 | 291.9 |
| 160°   | 323.8 | 316.2 | 308.5 | 302.1 | 297.7 | 292.6 | 290.0 | 290.0 | 290.0 | 292.6 | 297.7 |
| 162.5° | 323.2 | 316.8 | 310.4 | 305.3 | 301.5 | 297.7 | 295.8 | 295.8 | 295.8 | 297.7 | 301.5 |
| 165°   | 321.9 | 317.4 | 312.3 | 307.9 | 305.3 | 302.1 | 300.9 | 301.5 | 300.9 | 302.1 | 305.3 |
| 167.5° | 321.3 | 317.4 | 313.6 | 310.4 | 308.5 | 306.0 | 305.3 | 306.0 | 305.3 | 306.0 | 308.5 |
| 170°   | 319.3 | 316.8 | 313.6 | 312.3 | 311.1 | 309.1 | 308.5 | 309.8 | 308.5 | 309.1 | 311.1 |
| 172.5° | 318.7 | 316.8 | 314.2 | 313.6 | 313.0 | 311.7 | 311.7 | 312.3 | 311.7 | 311.7 | 313.0 |
| 175°   | 317.4 | 316.2 | 314.9 | 314.2 | 314.2 | 313.0 | 313.6 | 314.2 | 313.6 | 313.0 | 314.2 |
| 177.5° | 316.8 | 315.5 | 314.9 | 314.9 | 314.9 | 314.2 | 314.9 | 315.5 | 314.9 | 314.2 | 314.9 |
| 180°   | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 |



TEST NUMBER: P832160

CATALOG NUMBER: S123RDIP-S340D805U930-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 905.7 | 905.7 | 905.7 | 905.7 | 905.7 | 905.7 | 905.7 | 905.7 | 905.7 | 905.7 | 905.7 |
| 2.5°   | 876.8 | 866.2 | 855.6 | 848.0 | 840.4 | 830.9 | 821.4 | 821.1 | 820.7 | 813.6 | 806.6 |
| 5°     | 824.8 | 806.4 | 788.0 | 770.0 | 752.0 | 734.0 | 716.0 | 711.9 | 707.8 | 701.7 | 695.6 |
| 7.5°   | 778.7 | 749.4 | 720.1 | 697.0 | 674.0 | 656.0 | 638.0 | 625.7 | 613.5 | 604.0 | 594.5 |
| 10°    | 729.3 | 693.0 | 656.6 | 628.7 | 600.9 | 581.4 | 561.9 | 547.8 | 533.6 | 527.0 | 520.3 |
| 12.5°  | 678.1 | 638.5 | 599.0 | 571.7 | 544.4 | 521.0 | 497.6 | 484.8 | 472.0 | 462.7 | 453.4 |
| 15°    | 630.9 | 588.4 | 545.9 | 516.9 | 488.0 | 466.1 | 444.1 | 431.3 | 418.5 | 409.2 | 400.0 |
| 17.5°  | 585.3 | 542.4 | 499.5 | 470.1 | 440.8 | 420.9 | 401.1 | 388.6 | 376.2 | 370.4 | 364.7 |
| 20°    | 543.7 | 500.4 | 457.1 | 429.5 | 401.8 | 382.3 | 362.8 | 356.1 | 349.4 | 344.1 | 338.7 |
| 22.5°  | 502.4 | 460.9 | 419.3 | 392.7 | 366.2 | 352.0 | 337.9 | 332.5 | 327.2 | 323.1 | 319.0 |
| 25°    | 467.9 | 426.5 | 385.1 | 361.9 | 338.7 | 327.7 | 316.8 | 313.2 | 309.7 | 305.6 | 301.5 |
| 27.5°  | 433.0 | 393.6 | 354.3 | 335.7 | 317.1 | 308.2 | 299.3 | 294.9 | 290.4 | 287.1 | 283.7 |
| 30°    | 402.2 | 365.8 | 329.4 | 314.0 | 298.6 | 290.8 | 283.0 | 278.1 | 273.3 | 270.2 | 267.0 |
| 32.5°  | 372.5 | 340.2 | 307.9 | 294.7 | 281.5 | 273.9 | 266.3 | 261.6 | 257.0 | 253.3 | 249.6 |
| 35°    | 345.0 | 317.0 | 288.9 | 276.8 | 264.8 | 257.2 | 249.6 | 244.9 | 240.3 | 236.6 | 232.8 |
| 37.5°  | 320.9 | 295.4 | 270.0 | 258.6 | 247.3 | 240.6 | 234.0 | 229.1 | 224.3 | 220.4 | 216.5 |
| 40°    | 298.2 | 275.7 | 253.3 | 242.3 | 231.4 | 224.1 | 216.9 | 212.6 | 208.3 | 204.8 | 201.3 |
| 42.5°  | 278.1 | 257.5 | 236.9 | 226.2 | 215.4 | 208.5 | 201.6 | 196.6 | 191.6 | 189.6 | 187.5 |
| 45°    | 257.0 | 238.8 | 220.6 | 210.2 | 199.8 | 192.5 | 185.3 | 181.0 | 176.8 | 174.9 | 173.1 |
| 47.5°  | 238.4 | 221.5 | 204.6 | 194.4 | 184.2 | 177.7 | 171.2 | 167.9 | 164.5 | 161.9 | 159.3 |
| 50°    | 220.2 | 203.9 | 187.5 | 177.7 | 167.9 | 162.3 | 156.7 | 152.6 | 148.5 | 146.7 | 144.8 |
| 52.5°  | 202.8 | 187.9 | 173.1 | 163.0 | 153.0 | 147.6 | 142.2 | 138.7 | 135.2 | 131.3 | 127.4 |
| 55°    | 183.1 | 170.1 | 157.1 | 148.2 | 139.3 | 133.7 | 128.1 | 124.0 | 119.9 | 115.9 | 111.8 |
| 57.5°  | 166.7 | 153.9 | 141.1 | 133.1 | 125.1 | 119.8 | 114.4 | 109.9 | 105.5 | 102.1 | 98.8  |
| 60°    | 148.9 | 137.8 | 126.6 | 118.8 | 111.0 | 105.8 | 100.6 | 96.4  | 92.1  | 90.4  | 88.8  |
| 62.5°  | 132.2 | 121.8 | 111.4 | 104.5 | 97.7  | 92.7  | 87.6  | 84.9  | 82.1  | 81.0  | 79.8  |
| 65°    | 115.1 | 106.2 | 97.3  | 91.0  | 84.7  | 80.4  | 76.1  | 74.8  | 73.5  | 72.6  | 71.7  |
| 67.5°  | 99.2  | 91.5  | 83.9  | 78.4  | 72.8  | 69.8  | 66.8  | 65.4  | 63.9  | 62.8  | 61.6  |
| 70°    | 84.7  | 78.0  | 71.3  | 66.5  | 61.6  | 58.9  | 56.1  | 54.8  | 53.5  | 51.4  | 49.4  |
| 72.5°  | 69.1  | 63.9  | 58.7  | 55.0  | 51.2  | 48.8  | 46.4  | 43.8  | 41.2  | 39.4  | 37.5  |
| 75°    | 57.2  | 52.0  | 46.8  | 43.3  | 39.7  | 36.9  | 34.2  | 33.2  | 32.3  | 31.8  | 31.2  |
| 77.5°  | 43.8  | 39.4  | 34.9  | 32.1  | 29.3  | 28.0  | 26.7  | 26.2  | 25.6  | 25.4  | 25.3  |
| 80°    | 31.6  | 27.9  | 24.1  | 22.7  | 21.2  | 20.8  | 20.4  | 20.1  | 19.7  | 19.5  | 19.3  |
| 82.5°  | 19.7  | 17.8  | 16.0  | 15.6  | 15.2  | 15.0  | 14.9  | 14.7  | 14.5  | 14.3  | 14.1  |
| 85°    | 11.5  | 10.8  | 10.0  | 9.8   | 9.7   | 9.5   | 9.3   | 9.3   | 9.3   | 9.3   | 9.3   |
| 87.5°  | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.6   | 4.5   |
| 90°    | 7.0   | 8.3   | 10.2  | 12.1  | 14.0  | 15.9  | 15.3  | 15.9  | 16.6  | 17.2  | 18.5  |
| 92.5°  | 32.5  | 44.0  | 64.4  | 98.2  | 131.3 | 118.6 | 88.6  | 63.1  | 49.1  | 42.7  | 38.2  |
| 95°    | 58.0  | 82.9  | 137.0 | 232.0 | 336.6 | 378.0 | 306.6 | 229.5 | 155.5 | 121.7 | 98.8  |
| 97.5°  | 66.9  | 94.3  | 147.9 | 258.2 | 434.1 | 581.3 | 601.1 | 527.1 | 397.7 | 313.6 | 240.9 |
| 100°   | 76.5  | 101.3 | 146.0 | 240.3 | 407.9 | 603.6 | 729.2 | 751.5 | 699.9 | 625.3 | 534.8 |
| 102.5° | 87.3  | 109.6 | 148.5 | 225.0 | 369.7 | 562.2 | 735.6 | 826.1 | 836.9 | 801.2 | 752.2 |
| 105°   | 99.4  | 119.2 | 153.6 | 219.3 | 339.7 | 512.5 | 695.4 | 828.6 | 892.4 | 904.5 | 887.9 |
| 107.5° | 112.8 | 131.3 | 161.9 | 218.0 | 318.1 | 468.5 | 638.1 | 790.4 | 890.5 | 940.2 | 957.4 |
| 110°   | 126.2 | 144.1 | 172.7 | 221.2 | 306.6 | 432.2 | 584.5 | 730.5 | 847.8 | 928.1 | 972.7 |



TEST NUMBER: P832160

CATALOG NUMBER: S123RDIP-S340D805U930-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 140.2 | 157.4 | 183.6 | 227.6 | 300.2 | 407.9 | 538.0 | 671.2 | 791.7 | 884.1 | 944.7 |
| 115°   | 154.3 | 171.5 | 195.7 | 234.6 | 299.6 | 392.0 | 502.3 | 620.2 | 731.1 | 824.8 | 894.3 |
| 117.5° | 168.3 | 184.2 | 208.4 | 243.5 | 300.2 | 381.2 | 478.7 | 580.7 | 678.8 | 764.9 | 836.9 |
| 120°   | 181.7 | 197.6 | 220.5 | 253.7 | 302.8 | 374.2 | 460.9 | 550.7 | 636.8 | 713.3 | 777.6 |
| 122.5° | 193.8 | 211.0 | 233.3 | 263.3 | 307.2 | 369.7 | 446.2 | 527.1 | 603.0 | 672.5 | 731.1 |
| 125°   | 205.9 | 223.1 | 245.4 | 273.5 | 311.7 | 365.9 | 434.1 | 506.7 | 576.2 | 637.4 | 688.4 |
| 127.5° | 217.4 | 234.6 | 256.2 | 281.7 | 316.8 | 364.0 | 422.6 | 488.3 | 551.4 | 607.5 | 654.6 |
| 130°   | 227.6 | 244.8 | 265.8 | 290.0 | 321.9 | 362.1 | 413.7 | 471.1 | 528.4 | 580.0 | 623.4 |
| 132.5° | 237.1 | 253.7 | 274.1 | 297.7 | 325.7 | 361.4 | 405.4 | 455.1 | 506.7 | 553.9 | 594.7 |
| 135°   | 245.4 | 262.6 | 282.4 | 304.0 | 329.5 | 360.8 | 398.4 | 441.1 | 486.3 | 527.8 | 564.1 |
| 137.5° | 253.1 | 269.0 | 288.1 | 309.1 | 332.1 | 359.5 | 392.0 | 427.7 | 466.0 | 502.9 | 535.4 |
| 140°   | 259.4 | 275.4 | 293.8 | 313.0 | 334.6 | 358.9 | 386.3 | 416.2 | 448.7 | 479.3 | 506.7 |
| 142.5° | 265.8 | 280.5 | 298.3 | 316.8 | 336.6 | 357.6 | 381.2 | 405.4 | 432.2 | 457.7 | 480.6 |
| 145°   | 270.9 | 285.6 | 302.1 | 319.3 | 337.2 | 356.3 | 376.7 | 397.1 | 418.1 | 438.5 | 457.0 |
| 147.5° | 277.3 | 290.0 | 305.3 | 321.3 | 337.2 | 354.4 | 372.3 | 390.1 | 407.3 | 424.5 | 437.9 |
| 150°   | 282.4 | 293.8 | 308.5 | 321.9 | 337.2 | 351.9 | 367.8 | 382.4 | 397.1 | 410.5 | 422.6 |
| 152.5° | 287.5 | 298.3 | 310.4 | 323.2 | 335.3 | 348.7 | 362.7 | 375.4 | 387.5 | 399.0 | 408.6 |
| 155°   | 293.2 | 302.1 | 313.0 | 323.2 | 334.0 | 344.8 | 357.6 | 368.4 | 378.6 | 388.2 | 395.8 |
| 157.5° | 298.3 | 305.3 | 314.2 | 323.8 | 332.1 | 341.7 | 351.9 | 360.8 | 369.7 | 377.4 | 383.7 |
| 160°   | 302.1 | 308.5 | 316.2 | 323.8 | 330.8 | 337.8 | 346.1 | 354.4 | 361.4 | 367.8 | 372.3 |
| 162.5° | 305.3 | 310.4 | 316.8 | 323.2 | 328.3 | 334.0 | 340.4 | 346.8 | 352.5 | 358.2 | 362.1 |
| 165°   | 307.9 | 312.3 | 317.4 | 321.9 | 325.7 | 330.2 | 335.3 | 340.4 | 344.2 | 348.7 | 351.9 |
| 167.5° | 310.4 | 313.6 | 317.4 | 321.3 | 323.2 | 326.4 | 330.2 | 334.6 | 337.8 | 340.4 | 342.9 |
| 170°   | 312.3 | 313.6 | 316.8 | 319.3 | 320.6 | 322.5 | 325.7 | 328.9 | 330.8 | 333.4 | 334.6 |
| 172.5° | 313.6 | 314.2 | 316.8 | 318.7 | 318.7 | 319.3 | 321.3 | 323.8 | 325.1 | 327.0 | 327.6 |
| 175°   | 314.2 | 314.9 | 316.2 | 317.4 | 316.8 | 316.8 | 318.1 | 319.3 | 320.0 | 321.3 | 321.3 |
| 177.5° | 314.9 | 314.9 | 315.5 | 316.8 | 315.5 | 314.9 | 315.5 | 316.2 | 316.8 | 317.4 | 317.4 |
| 180°   | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 | 314.9 |



TEST NUMBER: P832160

CATALOG NUMBER: S123RDIP-S340D805U930-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 165°  | 170°  | 175°  | 180°  |
|--------|-------|-------|-------|-------|
| 0°     | 905.7 | 905.7 | 905.7 | 905.7 |
| 2.5°   | 804.7 | 802.9 | 802.1 | 801.4 |
| 5°     | 689.8 | 684.0 | 682.7 | 681.4 |
| 7.5°   | 592.1 | 589.7 | 581.7 | 573.7 |
| 10°    | 512.8 | 505.4 | 502.1 | 498.7 |
| 12.5°  | 446.6 | 439.7 | 438.6 | 437.5 |
| 15°    | 395.1 | 390.3 | 388.6 | 387.0 |
| 17.5°  | 361.3 | 358.0 | 355.9 | 353.9 |
| 20°    | 336.3 | 333.8 | 332.4 | 330.9 |
| 22.5°  | 317.1 | 315.3 | 314.2 | 313.1 |
| 25°    | 298.8 | 296.0 | 295.0 | 294.1 |
| 27.5°  | 281.3 | 278.9 | 278.0 | 277.0 |
| 30°    | 265.0 | 262.9 | 261.6 | 260.3 |
| 32.5°  | 247.1 | 244.7 | 244.0 | 243.2 |
| 35°    | 231.4 | 229.9 | 229.1 | 228.4 |
| 37.5°  | 214.6 | 212.8 | 211.7 | 210.6 |
| 40°    | 200.3 | 199.4 | 198.9 | 198.3 |
| 42.5°  | 185.9 | 184.2 | 184.0 | 183.8 |
| 45°    | 171.4 | 169.7 | 169.3 | 169.0 |
| 47.5°  | 157.8 | 156.3 | 156.2 | 156.0 |
| 50°    | 142.8 | 140.7 | 139.3 | 137.8 |
| 52.5°  | 125.5 | 123.7 | 122.4 | 121.1 |
| 55°    | 109.7 | 107.7 | 106.6 | 105.5 |
| 57.5°  | 97.9  | 96.9  | 96.4  | 95.8  |
| 60°    | 88.2  | 87.6  | 87.3  | 86.9  |
| 62.5°  | 79.3  | 78.7  | 78.7  | 78.7  |
| 65°    | 71.1  | 70.6  | 70.0  | 69.4  |
| 67.5°  | 60.5  | 59.4  | 59.2  | 59.0  |
| 70°    | 47.7  | 46.0  | 45.9  | 45.7  |
| 72.5°  | 37.3  | 37.1  | 36.8  | 36.4  |
| 75°    | 30.8  | 30.5  | 30.5  | 30.5  |
| 77.5°  | 24.9  | 24.5  | 24.5  | 24.5  |
| 80°    | 19.1  | 18.9  | 19.1  | 19.3  |
| 82.5°  | 14.1  | 14.1  | 13.9  | 13.7  |
| 85°    | 9.1   | 8.9   | 8.9   | 8.9   |
| 87.5°  | 4.5   | 4.5   | 4.5   | 4.5   |
| 90°    | 17.8  | 18.5  | 19.1  | 18.5  |
| 92.5°  | 37.0  | 34.4  | 35.1  | 33.8  |
| 95°    | 86.7  | 81.0  | 76.5  | 73.9  |
| 97.5°  | 198.2 | 174.0 | 158.7 | 151.7 |
| 100°   | 470.4 | 423.9 | 399.0 | 399.7 |
| 102.5° | 705.6 | 671.2 | 651.4 | 633.0 |
| 105°   | 858.6 | 834.4 | 814.0 | 810.8 |
| 107.5° | 953.6 | 942.1 | 933.8 | 926.8 |
| 110°   | 990.5 | 995.6 | 994.4 | 993.1 |



TEST NUMBER: P832160

CATALOG NUMBER: S123RDIP-S340D805U930-4F0-1E-UDD-G4

**CANDELA DISTRIBUTION (continued):**

|        | 165°  | 170°  | 175°   | 180°   |
|--------|-------|-------|--------|--------|
| 112.5° | 981.0 | 999.5 | 1005.8 | 1006.5 |
| 115°   | 942.1 | 970.1 | 982.9  | 986.1  |
| 117.5° | 886.6 | 917.9 | 937.0  | 941.5  |
| 120°   | 828.0 | 863.7 | 879.0  | 882.8  |
| 122.5° | 774.5 | 805.7 | 822.9  | 828.0  |
| 125°   | 729.2 | 757.3 | 773.2  | 777.6  |
| 127.5° | 691.6 | 715.8 | 730.5  | 734.3  |
| 130°   | 657.2 | 680.1 | 693.5  | 698.6  |
| 132.5° | 625.9 | 648.9 | 660.4  | 663.6  |
| 135°   | 595.3 | 614.5 | 625.9  | 630.4  |
| 137.5° | 562.2 | 582.0 | 591.5  | 595.3  |
| 140°   | 531.0 | 548.8 | 559.0  | 558.4  |
| 142.5° | 500.4 | 515.7 | 524.6  | 524.0  |
| 145°   | 473.0 | 486.3 | 491.4  | 492.7  |
| 147.5° | 450.7 | 460.2 | 465.3  | 466.0  |
| 150°   | 432.2 | 439.2 | 443.0  | 443.0  |
| 152.5° | 415.6 | 422.0 | 423.9  | 423.9  |
| 155°   | 401.6 | 406.7 | 407.9  | 408.6  |
| 157.5° | 388.8 | 392.6 | 393.9  | 393.9  |
| 160°   | 376.7 | 380.5 | 380.5  | 379.9  |
| 162.5° | 364.6 | 367.8 | 367.8  | 367.2  |
| 165°   | 354.4 | 357.0 | 356.3  | 356.3  |
| 167.5° | 344.2 | 346.1 | 345.5  | 345.5  |
| 170°   | 335.3 | 336.6 | 335.9  | 335.9  |
| 172.5° | 327.6 | 328.9 | 327.6  | 327.0  |
| 175°   | 321.3 | 321.9 | 321.3  | 320.6  |
| 177.5° | 316.8 | 317.4 | 316.2  | 316.2  |
| 180°   | 314.9 | 314.9 | 314.9  | 314.9  |



TEST NUMBER: P832160

CATALOG NUMBER: S123RDIP-S340D805U930-4F0-1E-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 | 6.90             | 7.59  | 7.99  | 8.68  | 10.17 | 11.56          | 12.26 | 12.65 | 13.34 | 14.84 |
|                 | 3H   | 8.11             | 8.73  | 9.21  | 9.83  | 11.33 | 13.05          | 13.67 | 14.15 | 14.77 | 16.28 |
|                 | 4H   | 8.48             | 9.08  | 9.60  | 10.17 | 11.69 | 13.53          | 14.12 | 14.65 | 15.22 | 16.73 |
|                 | 6H   | 8.76             | 9.30  | 9.88  | 10.40 | 11.93 | 13.84          | 14.38 | 14.96 | 15.48 | 17.01 |
|                 | 8H   | 8.84             | 9.36  | 9.97  | 10.47 | 11.99 | 13.91          | 14.43 | 15.04 | 15.55 | 17.06 |
|                 | 12H  | 8.89             | 9.38  | 10.02 | 10.49 | 12.03 | 13.94          | 14.43 | 15.07 | 15.54 | 17.08 |
| 4H              | 2H   | 7.60             | 8.20  | 8.72  | 9.29  | 10.81 | 11.54          | 12.13 | 12.66 | 13.23 | 14.74 |
|                 | 3H   | 8.96             | 9.45  | 10.09 | 10.58 | 12.10 | 13.19          | 13.68 | 14.31 | 14.80 | 16.33 |
|                 | 4H   | 9.41             | 9.86  | 10.54 | 10.98 | 12.52 | 13.79          | 14.24 | 14.92 | 15.35 | 16.90 |
|                 | 6H   | 9.77             | 10.16 | 10.91 | 11.29 | 12.83 | 14.22          | 14.61 | 15.35 | 15.74 | 17.28 |
|                 | 8H   | 9.90             | 10.26 | 11.03 | 11.38 | 12.94 | 14.35          | 14.71 | 15.48 | 15.84 | 17.39 |
|                 | 12H  | 9.97             | 10.29 | 11.12 | 11.43 | 12.99 | 14.40          | 14.73 | 15.56 | 15.87 | 17.43 |
| 8H              | 4H   | 9.72             | 10.08 | 10.85 | 11.20 | 12.76 | 13.75          | 14.11 | 14.88 | 15.23 | 16.79 |
|                 | 6H   | 10.18            | 10.47 | 11.33 | 11.64 | 13.19 | 14.24          | 14.53 | 15.39 | 15.70 | 17.25 |
|                 | 8H   | 10.37            | 10.63 | 11.53 | 11.78 | 13.35 | 14.42          | 14.68 | 15.59 | 15.83 | 17.40 |
|                 | 12H  | 10.51            | 10.73 | 11.67 | 11.88 | 13.49 | 14.53          | 14.76 | 15.70 | 15.91 | 17.51 |
| 12H             | 4H   | 9.72             | 10.05 | 10.87 | 11.19 | 12.75 | 13.69          | 14.02 | 14.84 | 15.16 | 16.71 |
|                 | 6H   | 10.23            | 10.49 | 11.40 | 11.64 | 13.21 | 14.21          | 14.47 | 15.37 | 15.62 | 17.19 |
|                 | 8H   | 10.45            | 10.67 | 11.61 | 11.82 | 13.43 | 14.40          | 14.63 | 15.56 | 15.77 | 17.38 |