

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242413

Luminaire Tested: S122RDRP-S485D935-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P242413  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S485D935-X4F0-XX-UDD-A-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

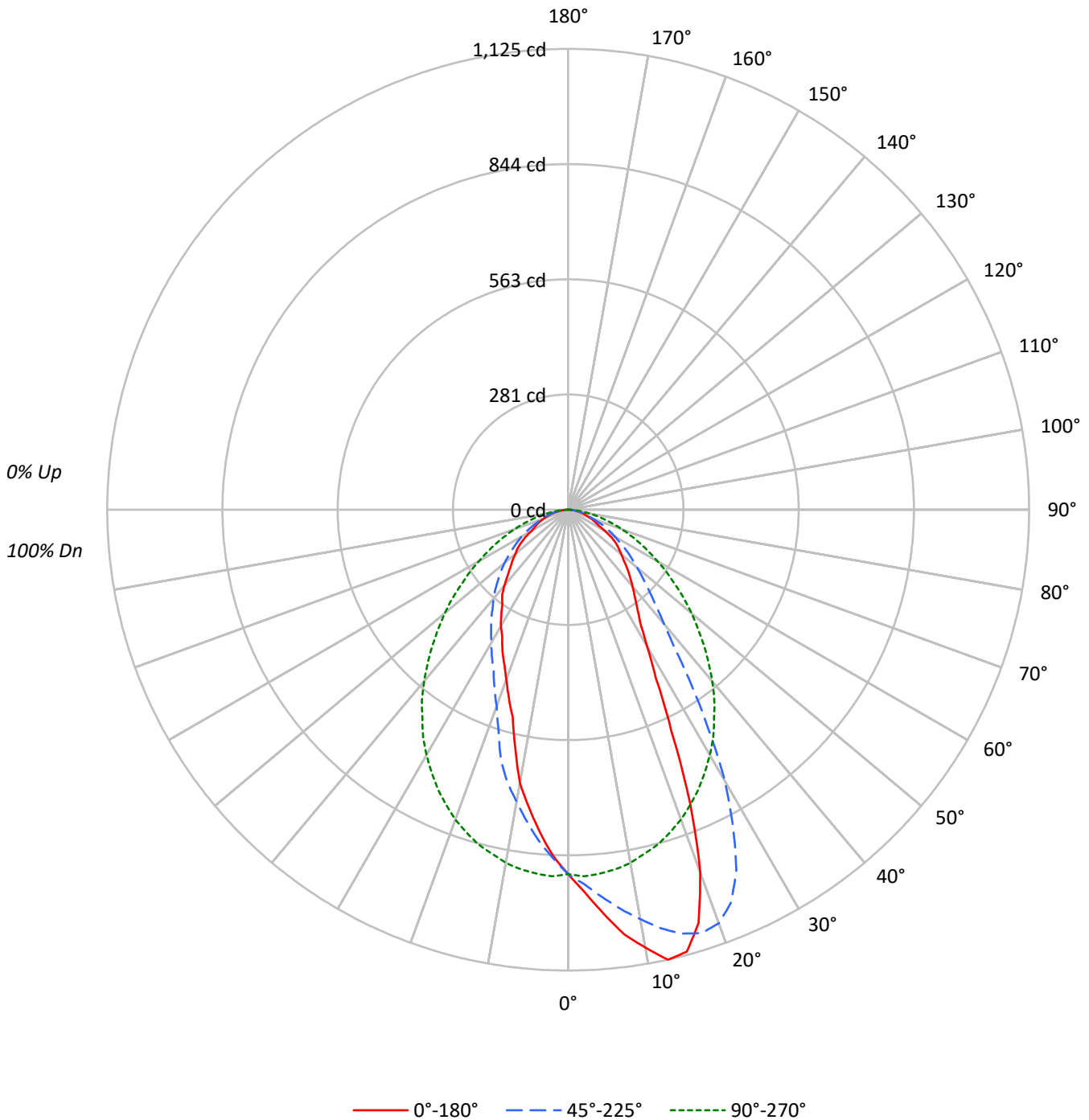
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1537.4 lumens  
Efficiency: N/A  
Efficacy: 81.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 3.88' x L: 0.15' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

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CATALOG NUMBER: S122RDRP-S485D935-X4F0-XX-UDD-A-W

### Luminous Intensity Polar Plot



TEST NUMBER: P242413

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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 | 50 | 30 | 10  | 0 |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |     |   |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    |    | 100 |   |  |   |
| 1   | 111 | 106 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 97  | 95  | 96  | 94  | 92  | 93  | 91  | 89  |     |    |    |    | 87 |     |   |  |   |
| 2   | 102 | 95  | 89  | 84  | 100 | 93  | 88  | 83  | 90  | 85  | 81  | 87  | 83  | 80  | 84  | 81  | 78  |     |    |    |    | 76 |     |   |  |   |
| 3   | 94  | 85  | 78  | 72  | 92  | 84  | 77  | 72  | 81  | 75  | 71  | 78  | 73  | 69  | 76  | 72  | 68  |     |    |    |    | 66 |     |   |  |   |
| 4   | 87  | 77  | 69  | 63  | 85  | 76  | 68  | 63  | 73  | 67  | 62  | 71  | 66  | 61  | 69  | 64  | 60  |     |    |    |    | 59 |     |   |  |   |
| 5   | 81  | 70  | 62  | 56  | 79  | 69  | 61  | 56  | 67  | 60  | 55  | 65  | 59  | 55  | 63  | 58  | 54  |     |    |    |    | 52 |     |   |  |   |
| 6   | 76  | 64  | 56  | 50  | 74  | 63  | 55  | 50  | 61  | 54  | 49  | 60  | 54  | 49  | 58  | 53  | 49  |     |    |    |    | 47 |     |   |  |   |
| 7   | 71  | 59  | 51  | 45  | 69  | 58  | 50  | 45  | 56  | 50  | 45  | 55  | 49  | 44  | 54  | 48  | 44  |     |    |    |    | 42 |     |   |  |   |
| 8   | 66  | 54  | 46  | 41  | 65  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 40  | 50  | 44  | 40  |     |    |    |    | 39 |     |   |  |   |
| 9   | 62  | 50  | 43  | 38  | 61  | 50  | 42  | 37  | 49  | 42  | 37  | 47  | 41  | 37  | 47  | 41  | 37  |     |    |    |    | 35 |     |   |  |   |
| 10  | 59  | 47  | 39  | 35  | 58  | 46  | 39  | 35  | 45  | 39  | 34  | 44  | 38  | 34  | 44  | 38  | 34  |     |    |    |    | 33 |     |   |  |   |

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

|     | 0°    | 45°   | 90°   | 135°  | 180°  |
|-----|-------|-------|-------|-------|-------|
| 0°  | 16947 | 16947 | 16947 | 16947 | 16947 |
| 5°  | 18925 | 18145 | 17052 | 15539 | 15119 |
| 10° | 20999 | 19630 | 16932 | 14003 | 13106 |
| 15° | 22031 | 21128 | 16685 | 12490 | 10327 |
| 20° | 19099 | 21780 | 16317 | 10346 | 8935  |
| 25° | 12526 | 20407 | 15813 | 9056  | 7978  |
| 30° | 8430  | 16802 | 15203 | 8248  | 7221  |
| 35° | 6829  | 12271 | 14433 | 7606  | 6513  |
| 40° | 6072  | 9016  | 13596 | 7017  | 6027  |
| 45° | 5495  | 7494  | 12615 | 6503  | 5379  |
| 50° | 5002  | 6496  | 11643 | 6010  | 4984  |
| 55° | 4702  | 5748  | 10564 | 5430  | 4639  |
| 60° | 3931  | 5006  | 9573  | 4983  | 3886  |
| 65° | 3317  | 4457  | 8694  | 4430  | 3763  |
| 70° | 3063  | 3548  | 7763  | 3910  | 3548  |
| 75° | 2863  | 3209  | 6756  | 3687  | 3275  |
| 80° | 2644  | 2918  | 5561  | 3225  | 2918  |
| 85° | 2426  | 2491  | 4393  | 2557  | 2557  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 70°  
 Vertical Angle: 45°  
 Luminance: 18377 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 84.4   | 5.5       |
| 10°-20°   | 235.5  | 15.3      |
| 20°-30°   | 303.1  | 19.7      |
| 30°-40°   | 287.6  | 18.7      |
| 40°-50°   | 246.4  | 16.0      |
| 50°-60°   | 187.7  | 12.2      |
| 60°-70°   | 118.4  | 7.7       |
| 70°-80°   | 59.1   | 3.8       |
| 80°-90°   | 15.2   | 1.0       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 623.0  | 40.5      |
| 0°-40°    | 910.6  | 59.2      |
| 0°-60°    | 1344.7 | 87.5      |
| 0°-90°    | 1537.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1537.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 890  | 890  | 890 | 890  | 890  |      |
| 5°  | 990  | 949  | 892 | 813  | 791  | 98   |
| 15° | 1117 | 1071 | 846 | 633  | 524  | 304  |
| 25° | 596  | 971  | 752 | 431  | 380  | 281  |
| 35° | 294  | 528  | 621 | 327  | 280  | 187  |
| 45° | 204  | 278  | 468 | 241  | 200  | 158  |
| 55° | 142  | 173  | 318 | 164  | 140  | 125  |
| 65° | 74   | 99   | 193 | 98   | 84   | 74   |
| 75° | 39   | 44   | 92  | 50   | 44   | 41   |
| 85° | 11   | 11   | 20  | 12   | 12   | 12   |
| 90° | 0    | 0    | 0   | 0    | 0    |      |



TEST NUMBER: P242413

CATALOG NUMBER: S122RDRP-S485D935-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 889.7  | 889.7  | 889.7  | 889.7  | 889.7  | 889.7  | 889.7  | 889.7  | 889.7  | 889.7  | 889.7  |
| 2.5°  | 934.8  | 935.7  | 936.7  | 934.5  | 934.5  | 932.6  | 928.6  | 925.5  | 916.9  | 915.6  | 915.6  |
| 5°    | 989.8  | 989.2  | 990.4  | 986.4  | 980.9  | 979.6  | 973.7  | 966.0  | 958.0  | 949.0  | 947.2  |
| 7.5°  | 1045.5 | 1041.8 | 1040.2 | 1042.1 | 1036.2 | 1028.2 | 1018.3 | 1009.0 | 995.1  | 983.6  | 976.5  |
| 10°   | 1085.7 | 1095.9 | 1089.7 | 1078.9 | 1081.0 | 1066.5 | 1058.8 | 1045.5 | 1034.3 | 1014.9 | 1010.5 |
| 12.5° | 1125.2 | 1127.7 | 1126.8 | 1121.8 | 1117.8 | 1108.8 | 1097.7 | 1086.6 | 1063.7 | 1046.7 | 1028.8 |
| 15°   | 1117.2 | 1123.1 | 1124.6 | 1122.7 | 1124.3 | 1123.7 | 1118.1 | 1108.5 | 1090.6 | 1071.4 | 1054.7 |
| 17.5° | 1057.8 | 1064.6 | 1070.2 | 1075.1 | 1082.9 | 1098.0 | 1102.7 | 1104.5 | 1097.1 | 1083.5 | 1069.6 |
| 20°   | 942.2  | 935.4  | 963.9  | 978.4  | 990.8  | 1021.7 | 1048.2 | 1058.5 | 1074.8 | 1074.5 | 1071.4 |
| 22.5° | 778.4  | 782.1  | 808.7  | 826.6  | 868.6  | 899.6  | 930.8  | 976.2  | 1011.8 | 1038.0 | 1054.1 |
| 25°   | 596.0  | 607.7  | 634.6  | 658.1  | 698.3  | 755.8  | 808.1  | 868.6  | 925.8  | 971.0  | 1013.9 |
| 27.5° | 463.7  | 465.2  | 489.7  | 513.5  | 538.2  | 588.0  | 657.8  | 730.5  | 812.1  | 870.8  | 945.0  |
| 30°   | 383.3  | 381.5  | 390.4  | 403.7  | 424.1  | 460.6  | 510.1  | 581.2  | 662.5  | 763.9  | 854.1  |
| 32.5° | 326.4  | 327.1  | 333.2  | 342.2  | 358.3  | 379.9  | 409.9  | 464.3  | 540.0  | 639.3  | 749.0  |
| 35°   | 293.7  | 293.4  | 298.3  | 305.4  | 312.5  | 328.3  | 351.5  | 381.8  | 434.6  | 527.7  | 635.9  |
| 37.5° | 266.5  | 268.0  | 270.2  | 274.8  | 283.5  | 292.7  | 307.3  | 328.6  | 368.8  | 426.6  | 523.7  |
| 40°   | 244.2  | 244.8  | 248.2  | 251.9  | 256.6  | 263.4  | 274.8  | 291.2  | 318.7  | 362.6  | 429.1  |
| 42.5° | 223.8  | 224.4  | 226.6  | 230.0  | 233.4  | 240.2  | 249.2  | 262.8  | 283.8  | 315.6  | 367.6  |
| 45°   | 204.0  | 204.0  | 206.2  | 207.7  | 211.8  | 217.9  | 225.7  | 237.4  | 252.9  | 278.2  | 314.7  |
| 47.5° | 184.9  | 184.9  | 186.4  | 189.2  | 192.0  | 196.9  | 205.0  | 214.8  | 226.0  | 246.7  | 279.1  |
| 50°   | 168.8  | 169.1  | 170.0  | 172.2  | 173.7  | 178.1  | 183.9  | 192.3  | 204.0  | 219.2  | 245.1  |
| 52.5° | 155.8  | 155.5  | 156.7  | 157.3  | 158.3  | 161.1  | 165.1  | 172.2  | 182.4  | 195.1  | 215.5  |
| 55°   | 141.6  | 140.3  | 142.2  | 143.7  | 144.7  | 145.9  | 148.4  | 153.0  | 162.0  | 173.1  | 189.2  |
| 57.5° | 124.9  | 124.3  | 125.2  | 126.7  | 129.5  | 132.6  | 134.2  | 137.3  | 141.9  | 150.5  | 167.5  |
| 60°   | 103.2  | 103.2  | 106.0  | 107.0  | 110.4  | 114.7  | 119.0  | 121.5  | 126.1  | 131.4  | 143.1  |
| 62.5° | 84.1   | 84.4   | 85.3   | 86.2   | 87.8   | 93.4   | 99.8   | 106.0  | 110.4  | 115.3  | 122.1  |
| 65°   | 73.6   | 74.2   | 74.2   | 74.8   | 76.0   | 77.3   | 79.8   | 84.1   | 91.8   | 98.9   | 104.8  |
| 67.5° | 64.3   | 64.3   | 64.6   | 65.2   | 65.5   | 67.1   | 68.0   | 70.2   | 71.7   | 79.8   | 87.8   |
| 70°   | 55.0   | 56.0   | 55.6   | 56.3   | 56.6   | 57.2   | 58.4   | 59.4   | 62.1   | 63.7   | 68.0   |
| 72.5° | 46.4   | 47.0   | 47.0   | 47.3   | 48.2   | 48.2   | 49.2   | 50.1   | 51.6   | 52.9   | 54.7   |
| 75°   | 38.9   | 38.6   | 38.9   | 39.6   | 39.9   | 40.2   | 40.2   | 41.4   | 42.4   | 43.6   | 45.1   |
| 77.5° | 31.5   | 31.8   | 31.8   | 31.8   | 31.8   | 32.5   | 32.5   | 33.1   | 34.0   | 34.6   | 35.5   |
| 80°   | 24.1   | 24.4   | 24.1   | 24.4   | 24.7   | 25.0   | 24.7   | 25.0   | 26.0   | 26.6   | 26.6   |
| 82.5° | 17.3   | 17.3   | 17.6   | 17.6   | 17.6   | 17.6   | 18.2   | 18.2   | 18.9   | 18.5   | 18.9   |
| 85°   | 11.1   | 10.8   | 10.8   | 10.8   | 11.1   | 11.4   | 11.1   | 11.1   | 11.4   | 11.4   | 11.4   |
| 87.5° | 4.9    | 5.3    | 5.3    | 5.3    | 5.3    | 5.3    | 5.3    | 5.6    | 5.3    | 5.6    | 5.3    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   | 100°  | 105°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 889.7  | 889.7  | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 |
| 2.5°  | 916.3  | 913.8  | 911.6 | 906.1 | 903.3 | 897.1 | 896.2 | 895.8 | 887.8 | 880.1 | 877.9 |
| 5°    | 942.2  | 937.3  | 929.9 | 921.2 | 912.2 | 903.0 | 896.8 | 891.8 | 879.5 | 867.7 | 860.9 |
| 7.5°  | 967.9  | 958.9  | 947.2 | 932.3 | 919.7 | 904.8 | 894.6 | 885.3 | 868.3 | 852.9 | 842.7 |
| 10°   | 997.2  | 979.9  | 962.9 | 940.4 | 922.7 | 905.4 | 889.4 | 875.4 | 855.7 | 833.4 | 817.6 |
| 12.5° | 1015.5 | 996.0  | 971.0 | 949.0 | 924.9 | 901.7 | 878.8 | 860.0 | 835.9 | 812.7 | 793.2 |
| 15°   | 1031.6 | 1011.2 | 982.7 | 951.2 | 921.8 | 893.1 | 868.3 | 846.1 | 815.8 | 788.3 | 765.4 |
| 17.5° | 1046.4 | 1018.3 | 988.9 | 952.4 | 920.0 | 885.0 | 853.8 | 826.0 | 792.9 | 760.5 | 734.5 |
| 20°   | 1052.9 | 1025.1 | 989.8 | 953.3 | 913.2 | 870.2 | 835.9 | 805.0 | 768.8 | 732.6 | 701.7 |
| 22.5° | 1048.9 | 1028.8 | 988.6 | 943.1 | 901.7 | 856.3 | 816.4 | 779.3 | 738.2 | 701.1 | 664.0 |
| 25°   | 1027.8 | 1020.4 | 983.3 | 935.7 | 888.7 | 836.5 | 791.7 | 752.4 | 706.7 | 667.1 | 628.1 |
| 27.5° | 989.2  | 1000.0 | 973.7 | 922.1 | 871.4 | 815.2 | 766.3 | 722.1 | 675.4 | 631.2 | 592.3 |
| 30°   | 928.0  | 964.8  | 954.9 | 907.9 | 849.5 | 794.5 | 737.9 | 691.2 | 640.5 | 594.8 | 556.4 |
| 32.5° | 844.2  | 911.0  | 925.5 | 888.1 | 827.2 | 765.4 | 705.4 | 659.1 | 605.6 | 556.7 | 519.6 |
| 35°   | 754.3  | 845.2  | 886.9 | 861.8 | 801.3 | 736.0 | 674.8 | 620.7 | 567.6 | 520.0 | 482.9 |
| 37.5° | 647.6  | 768.8  | 833.1 | 830.3 | 772.5 | 706.0 | 639.6 | 586.1 | 531.4 | 484.4 | 445.8 |
| 40°   | 544.4  | 678.5  | 769.1 | 789.2 | 742.2 | 669.0 | 601.6 | 546.8 | 493.7 | 447.9 | 401.9 |
| 42.5° | 451.6  | 585.2  | 701.7 | 740.4 | 705.4 | 632.8 | 565.1 | 507.3 | 456.0 | 413.3 | 366.0 |
| 45°   | 380.2  | 497.1  | 619.8 | 682.2 | 661.5 | 594.1 | 522.7 | 468.3 | 419.8 | 382.4 | 337.3 |
| 47.5° | 329.2  | 414.2  | 537.6 | 619.2 | 616.7 | 552.7 | 481.6 | 429.4 | 383.6 | 349.0 | 310.7 |
| 50°   | 286.9  | 358.6  | 459.1 | 554.9 | 562.9 | 511.3 | 444.5 | 392.9 | 350.9 | 314.1 | 284.7 |
| 52.5° | 248.8  | 304.8  | 392.6 | 483.5 | 510.1 | 467.1 | 402.8 | 356.1 | 315.6 | 282.5 | 258.4 |
| 55°   | 216.7  | 262.4  | 331.1 | 417.0 | 451.6 | 420.1 | 362.6 | 318.1 | 285.0 | 256.6 | 234.9 |
| 57.5° | 188.6  | 224.4  | 281.6 | 353.6 | 392.9 | 371.6 | 322.4 | 285.6 | 256.3 | 229.7 | 212.4 |
| 60°   | 162.3  | 190.4  | 237.1 | 294.9 | 339.4 | 325.5 | 285.0 | 251.3 | 227.2 | 205.0 | 188.9 |
| 62.5° | 137.6  | 160.7  | 199.1 | 243.3 | 283.2 | 279.5 | 248.2 | 221.3 | 200.9 | 181.1 | 168.2 |
| 65°   | 114.7  | 132.3  | 163.5 | 200.3 | 233.1 | 235.9 | 212.1 | 192.9 | 174.0 | 158.0 | 145.9 |
| 67.5° | 94.9   | 107.0  | 130.5 | 162.9 | 187.9 | 196.6 | 180.5 | 165.1 | 149.6 | 136.6 | 125.8 |
| 70°   | 77.0   | 86.2   | 102.3 | 127.4 | 149.9 | 159.2 | 150.9 | 139.4 | 126.4 | 116.2 | 107.3 |
| 72.5° | 58.7   | 67.7   | 78.5  | 95.2  | 113.8 | 124.0 | 122.4 | 115.0 | 105.1 | 97.1  | 88.7  |
| 75°   | 47.0   | 49.8   | 57.8  | 70.2  | 85.3  | 94.0  | 96.1  | 91.8  | 83.5  | 77.0  | 72.0  |
| 77.5° | 36.5   | 38.3   | 42.7  | 50.1  | 60.6  | 68.3  | 71.7  | 71.1  | 64.9  | 60.6  | 56.0  |
| 80°   | 27.8   | 28.7   | 30.6  | 33.4  | 40.8  | 48.5  | 50.7  | 50.7  | 46.7  | 45.1  | 40.5  |
| 82.5° | 19.5   | 20.1   | 21.0  | 22.3  | 24.7  | 31.2  | 33.7  | 34.3  | 32.1  | 30.0  | 26.6  |
| 85°   | 12.1   | 11.7   | 12.4  | 13.3  | 13.9  | 15.8  | 19.5  | 20.1  | 19.5  | 17.0  | 16.1  |
| 87.5° | 5.3    | 5.6    | 5.6   | 5.3   | 5.6   | 5.9   | 7.4   | 9.0   | 7.7   | 6.8   | 6.2   |
| 90°   | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |



TEST NUMBER: P242413

CATALOG NUMBER: S122RDRP-S485D935-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 110°  | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  | 150°  | 155°  | 160°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 | 889.7 |
| 2.5°  | 873.9 | 871.7 | 867.7 | 861.5 | 857.8 | 851.3 | 847.0 | 849.5 | 850.1 | 849.5 | 848.9 |
| 5°    | 853.5 | 847.0 | 838.0 | 829.4 | 821.4 | 812.7 | 807.7 | 805.6 | 801.3 | 798.8 | 797.5 |
| 7.5°  | 830.3 | 820.7 | 808.1 | 794.1 | 781.2 | 768.8 | 763.2 | 758.9 | 750.9 | 746.5 | 742.5 |
| 10°   | 803.7 | 786.1 | 773.4 | 753.7 | 741.6 | 724.0 | 711.9 | 712.2 | 700.2 | 693.4 | 688.4 |
| 12.5° | 774.4 | 754.6 | 731.4 | 714.1 | 696.2 | 682.9 | 667.7 | 660.3 | 647.3 | 640.8 | 625.4 |
| 15°   | 741.3 | 718.7 | 696.5 | 672.4 | 655.3 | 633.4 | 612.4 | 586.7 | 566.0 | 548.1 | 543.1 |
| 17.5° | 706.0 | 678.2 | 656.3 | 631.5 | 605.0 | 565.1 | 539.1 | 523.4 | 511.0 | 501.7 | 494.3 |
| 20°   | 669.6 | 641.1 | 617.3 | 574.7 | 535.4 | 510.4 | 492.4 | 481.0 | 468.0 | 457.8 | 452.3 |
| 22.5° | 631.2 | 601.3 | 566.6 | 517.8 | 489.3 | 470.5 | 455.0 | 441.4 | 433.7 | 426.3 | 421.3 |
| 25°   | 595.4 | 562.9 | 509.4 | 476.7 | 451.9 | 430.9 | 419.8 | 411.8 | 402.5 | 391.7 | 386.7 |
| 27.5° | 558.0 | 506.3 | 465.9 | 442.1 | 416.7 | 403.4 | 393.8 | 380.5 | 372.2 | 368.2 | 362.6 |
| 30°   | 515.0 | 463.4 | 433.4 | 406.8 | 390.1 | 375.0 | 363.2 | 356.4 | 348.4 | 340.0 | 336.6 |
| 32.5° | 467.1 | 428.4 | 400.0 | 379.0 | 362.0 | 349.6 | 341.0 | 328.9 | 323.7 | 319.3 | 311.3 |
| 35°   | 429.1 | 397.8 | 371.6 | 353.6 | 337.6 | 327.1 | 316.2 | 309.7 | 299.2 | 294.9 | 292.1 |
| 37.5° | 394.4 | 367.2 | 347.5 | 327.7 | 315.3 | 302.9 | 296.8 | 285.9 | 281.9 | 275.1 | 269.6 |
| 40°   | 366.0 | 339.4 | 320.6 | 305.1 | 290.9 | 282.2 | 273.9 | 265.5 | 258.7 | 256.0 | 248.8 |
| 42.5° | 336.9 | 316.5 | 297.7 | 280.4 | 272.0 | 262.8 | 251.6 | 246.1 | 239.0 | 234.0 | 230.3 |
| 45°   | 310.7 | 291.5 | 275.4 | 261.5 | 251.0 | 241.4 | 234.6 | 224.4 | 220.4 | 211.4 | 207.7 |
| 47.5° | 287.5 | 268.9 | 253.5 | 239.9 | 229.4 | 223.8 | 213.9 | 205.0 | 199.4 | 193.2 | 187.9 |
| 50°   | 262.4 | 247.6 | 232.8 | 221.0 | 211.8 | 202.8 | 192.6 | 188.6 | 178.7 | 175.9 | 173.1 |
| 52.5° | 239.6 | 225.7 | 212.4 | 200.9 | 191.7 | 183.0 | 174.3 | 168.8 | 162.9 | 160.1 | 158.3 |
| 55°   | 218.6 | 205.0 | 192.0 | 181.8 | 172.5 | 163.5 | 158.0 | 151.5 | 148.4 | 146.2 | 143.7 |
| 57.5° | 196.9 | 184.5 | 174.3 | 163.8 | 154.6 | 147.1 | 140.3 | 136.6 | 133.5 | 131.1 | 127.7 |
| 60°   | 176.5 | 164.8 | 155.8 | 146.2 | 136.6 | 130.8 | 125.8 | 121.2 | 117.5 | 113.1 | 111.9 |
| 62.5° | 154.9 | 145.0 | 136.9 | 127.7 | 119.6 | 114.4 | 109.7 | 105.4 | 100.8 | 94.0  | 92.1  |
| 65°   | 135.4 | 127.4 | 118.7 | 111.0 | 103.6 | 98.3  | 91.5  | 86.6  | 84.7  | 84.1  | 83.8  |
| 67.5° | 117.5 | 109.7 | 102.3 | 94.3  | 87.5  | 81.6  | 77.6  | 77.0  | 75.7  | 75.4  | 74.5  |
| 70°   | 99.5  | 92.4  | 85.0  | 77.6  | 71.1  | 70.2  | 68.9  | 67.7  | 66.2  | 65.5  | 64.9  |
| 72.5° | 83.5  | 76.0  | 68.6  | 63.1  | 61.2  | 60.0  | 58.7  | 57.5  | 56.6  | 56.0  | 55.6  |
| 75°   | 66.5  | 59.7  | 54.7  | 52.6  | 51.0  | 50.1  | 48.2  | 47.3  | 46.7  | 45.8  | 45.4  |
| 77.5° | 50.7  | 46.4  | 43.9  | 42.7  | 40.8  | 39.9  | 38.6  | 37.7  | 36.8  | 36.8  | 36.2  |
| 80°   | 36.5  | 34.6  | 33.1  | 31.2  | 30.6  | 29.4  | 29.1  | 28.1  | 28.4  | 27.5  | 27.5  |
| 82.5° | 26.3  | 23.8  | 22.6  | 21.9  | 21.3  | 20.4  | 20.1  | 19.8  | 19.8  | 19.2  | 19.2  |
| 85°   | 14.5  | 13.9  | 13.3  | 12.7  | 12.7  | 11.7  | 12.1  | 11.7  | 11.7  | 11.1  | 10.8  |
| 87.5° | 5.9   | 5.6   | 4.9   | 4.9   | 4.9   | 4.6   | 4.6   | 4.3   | 4.3   | 4.3   | 4.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |



TEST NUMBER: P242413

CATALOG NUMBER: S122RDRP-S485D935-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|
| 0°    | 889.7 | 889.7 | 889.7 | 889.7 |
| 2.5°  | 845.5 | 846.1 | 845.2 | 845.8 |
| 5°    | 796.0 | 792.3 | 791.7 | 790.7 |
| 7.5°  | 737.6 | 737.3 | 735.4 | 733.2 |
| 10°   | 681.6 | 680.1 | 679.8 | 677.6 |
| 12.5° | 616.1 | 604.0 | 602.8 | 596.6 |
| 15°   | 535.7 | 533.9 | 527.7 | 523.7 |
| 17.5° | 490.9 | 484.7 | 482.5 | 481.6 |
| 20°   | 447.9 | 442.4 | 441.4 | 440.8 |
| 22.5° | 418.2 | 412.4 | 409.6 | 407.4 |
| 25°   | 383.6 | 381.5 | 380.2 | 379.6 |
| 27.5° | 356.4 | 350.9 | 350.2 | 348.7 |
| 30°   | 333.9 | 332.3 | 330.1 | 328.3 |
| 32.5° | 307.3 | 306.0 | 304.2 | 303.6 |
| 35°   | 289.0 | 284.7 | 282.9 | 280.1 |
| 37.5° | 268.9 | 266.5 | 263.4 | 264.6 |
| 40°   | 244.8 | 243.3 | 242.7 | 242.4 |
| 42.5° | 225.7 | 220.7 | 218.9 | 218.9 |
| 45°   | 206.2 | 202.2 | 199.4 | 199.7 |
| 47.5° | 185.2 | 185.5 | 183.6 | 184.2 |
| 50°   | 170.9 | 169.1 | 167.9 | 168.2 |
| 52.5° | 157.3 | 155.8 | 154.9 | 156.4 |
| 55°   | 142.2 | 140.3 | 140.0 | 139.7 |
| 57.5° | 125.8 | 124.9 | 123.3 | 122.4 |
| 60°   | 107.9 | 105.4 | 102.3 | 102.0 |
| 62.5° | 91.5  | 91.5  | 91.5  | 91.5  |
| 65°   | 83.2  | 82.8  | 83.2  | 83.5  |
| 67.5° | 74.5  | 73.9  | 73.3  | 73.6  |
| 70°   | 64.3  | 64.0  | 63.7  | 63.7  |
| 72.5° | 54.4  | 54.4  | 54.1  | 53.8  |
| 75°   | 45.1  | 44.5  | 44.5  | 44.5  |
| 77.5° | 36.2  | 35.9  | 35.5  | 35.2  |
| 80°   | 27.2  | 26.9  | 26.6  | 26.6  |
| 82.5° | 19.2  | 18.9  | 18.9  | 18.5  |
| 85°   | 11.1  | 11.4  | 11.1  | 11.7  |
| 87.5° | 4.0   | 3.7   | 4.0   | 3.7   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   |



TEST NUMBER: P242413  
 CATALOG NUMBER: S122RDRP-S485D935-X4F0-XX-UDD-A-W

**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 | 15.37            | 16.82 | 15.73 | 17.13 | 17.45 | 21.27          | 22.72 | 21.63 | 23.03 | 23.35 |
|                 | 3H   | 16.48            | 17.78 | 16.86 | 18.11 | 18.47 | 22.42          | 23.72 | 22.80 | 24.05 | 24.41 |
|                 | 4H   | 16.93            | 18.15 | 17.33 | 18.50 | 18.88 | 22.82          | 24.03 | 23.22 | 24.38 | 24.76 |
|                 | 6H   | 17.30            | 18.42 | 17.71 | 18.79 | 19.18 | 23.08          | 24.21 | 23.50 | 24.57 | 24.97 |
|                 | 8H   | 17.42            | 18.49 | 17.85 | 18.88 | 19.28 | 23.16          | 24.22 | 23.58 | 24.61 | 25.01 |
|                 | 12H  | 17.50            | 18.52 | 17.93 | 18.91 | 19.34 | 23.19          | 24.21 | 23.62 | 24.60 | 25.02 |
| 4H              | 2H   | 16.08            | 17.29 | 16.48 | 17.64 | 18.02 | 21.23          | 22.45 | 21.63 | 22.80 | 23.18 |
|                 | 3H   | 17.35            | 18.35 | 17.76 | 18.75 | 19.16 | 22.53          | 23.53 | 22.94 | 23.93 | 24.34 |
|                 | 4H   | 17.90            | 18.80 | 18.33 | 19.22 | 19.66 | 23.02          | 23.92 | 23.45 | 24.34 | 24.78 |
|                 | 6H   | 18.37            | 19.15 | 18.83 | 19.60 | 20.06 | 23.41          | 24.19 | 23.86 | 24.63 | 25.10 |
|                 | 8H   | 18.53            | 19.26 | 18.99 | 19.70 | 20.17 | 23.52          | 24.25 | 23.98 | 24.70 | 25.17 |
|                 | 12H  | 18.65            | 19.30 | 19.13 | 19.78 | 20.25 | 23.60          | 24.25 | 24.08 | 24.73 | 25.20 |
| 8H              | 4H   | 18.24            | 18.97 | 18.71 | 19.42 | 19.89 | 23.01          | 23.74 | 23.47 | 24.18 | 24.65 |
|                 | 6H   | 18.81            | 19.41 | 19.31 | 19.91 | 20.38 | 23.43          | 24.04 | 23.93 | 24.53 | 25.01 |
|                 | 8H   | 19.03            | 19.57 | 19.55 | 20.09 | 20.57 | 23.58          | 24.12 | 24.10 | 24.63 | 25.12 |
|                 | 12H  | 19.22            | 19.70 | 19.73 | 20.19 | 20.76 | 23.70          | 24.18 | 24.22 | 24.67 | 25.24 |
| 12H             | 4H   | 18.28            | 18.93 | 18.77 | 19.41 | 19.89 | 22.98          | 23.63 | 23.47 | 24.11 | 24.59 |
|                 | 6H   | 18.87            | 19.41 | 19.39 | 19.93 | 20.41 | 23.41          | 23.95 | 23.92 | 24.46 | 24.95 |
|                 | 8H   | 19.15            | 19.63 | 19.66 | 20.12 | 20.69 | 23.59          | 24.07 | 24.10 | 24.56 | 25.13 |