

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: P242482

Luminaire Tested: S123DRP-S560D935-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242482
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-20)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DRP-S560D935-X4F0-XX-UDD-A-W
Description: DEFINE 3 DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

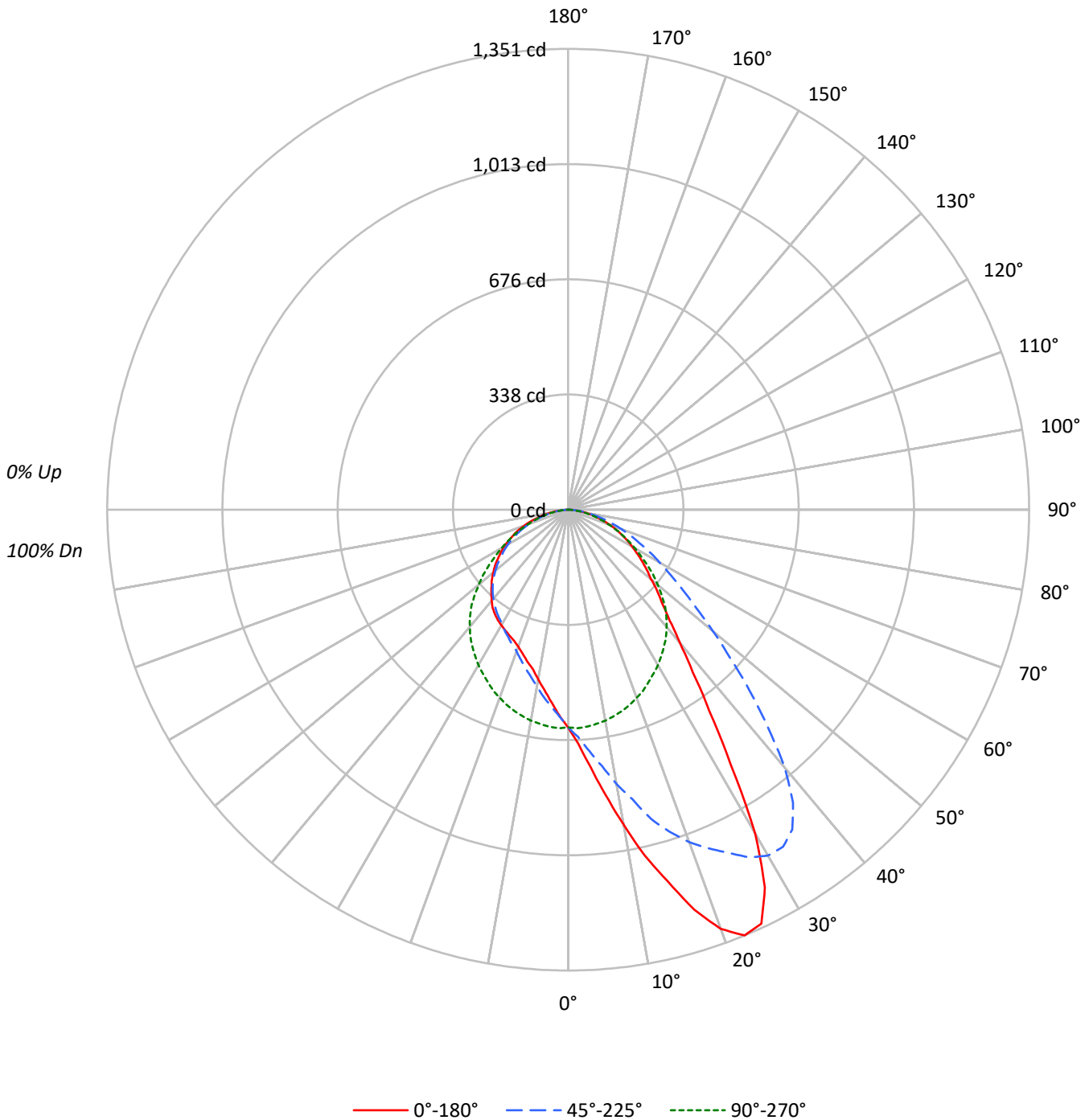
Lumens per Lamp: N/A
Luminaire Lumens: 1925.6 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.5
Luminous Opening: Rectangular (W 3.88' x L: 0.23' x H: 0')
CIE Type: Direct

Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P242482

CATALOG NUMBER: S123DRP-S560D935-X4F0-XX-UDD-A-W

Luminous Intensity Polar Plot



TEST NUMBER: P242482

CATALOG NUMBER: S123DRP-S560D935-X4F0-XX-UDD-A-W

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 | 110 | 105 | 101 | 98 | 107 | 103 | 99 | 96 | 99 | 96 | 93 | 95 | 92 | 90 | 91 | 89 | 87 | | | | | 85 | | | | |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 74 | | | | | 72 | | | | |
| 3 | 92 | 82 | 74 | 68 | 89 | 80 | 73 | 67 | 77 | 71 | 66 | 75 | 69 | 65 | 72 | 68 | 64 | | | | | 62 | | | | |
| 4 | 84 | 73 | 65 | 58 | 82 | 72 | 64 | 58 | 69 | 62 | 57 | 67 | 61 | 56 | 65 | 60 | 56 | | | | | 53 | | | | |
| 5 | 78 | 66 | 57 | 51 | 76 | 64 | 56 | 50 | 62 | 55 | 50 | 60 | 54 | 49 | 59 | 53 | 49 | | | | | 47 | | | | |
| 6 | 72 | 59 | 51 | 44 | 70 | 58 | 50 | 44 | 56 | 49 | 44 | 55 | 48 | 43 | 53 | 48 | 43 | | | | | 41 | | | | |
| 7 | 67 | 54 | 45 | 39 | 65 | 53 | 45 | 39 | 52 | 44 | 39 | 50 | 44 | 39 | 49 | 43 | 38 | | | | | 36 | | | | |
| 8 | 62 | 49 | 41 | 35 | 61 | 49 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | | | | | 33 | | | | |
| 9 | 58 | 45 | 37 | 32 | 57 | 45 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 31 | 41 | 36 | 31 | | | | | 29 | | | | |
| 10 | 55 | 42 | 34 | 29 | 53 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 29 | 38 | 33 | 28 | | | | | 27 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|-------|-------|------|------|------|
| 0° | 7733 | 7733 | 7733 | 7733 | 7733 |
| 5° | 9222 | 8643 | 7767 | 7033 | 6882 |
| 10° | 11543 | 10047 | 7727 | 6479 | 6217 |
| 15° | 14158 | 11783 | 7665 | 6044 | 5788 |
| 20° | 16866 | 13380 | 7568 | 5701 | 5511 |
| 25° | 17908 | 14841 | 7449 | 5536 | 5449 |
| 30° | 15350 | 16388 | 7363 | 5429 | 5477 |
| 35° | 10675 | 16933 | 7240 | 5411 | 5534 |
| 40° | 8041 | 15632 | 7097 | 5399 | 5518 |
| 45° | 6677 | 12928 | 6883 | 5362 | 5448 |
| 50° | 5980 | 10434 | 6447 | 5257 | 5397 |
| 55° | 5592 | 8656 | 5976 | 5108 | 5330 |
| 60° | 5246 | 7486 | 5486 | 4960 | 5275 |
| 65° | 4930 | 6588 | 4999 | 4707 | 5105 |
| 70° | 4621 | 5883 | 4448 | 4327 | 4862 |
| 75° | 4140 | 5095 | 3892 | 3864 | 4458 |
| 80° | 3623 | 4188 | 3190 | 3127 | 3839 |
| 85° | 2837 | 3268 | 2323 | 2281 | 2573 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 55°
 Vertical Angle: 45°
 Luminance: 15280 cd/sqm



TEST NUMBER: P242482

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 62.7 | 3.3 |
| 10°-20° | 201.5 | 10.5 |
| 20°-30° | 339.1 | 17.6 |
| 30°-40° | 383.2 | 19.9 |
| 40°-50° | 343.3 | 17.8 |
| 50°-60° | 277.1 | 14.4 |
| 60°-70° | 193.1 | 10.0 |
| 70°-80° | 101.3 | 5.3 |
| 80°-90° | 24.3 | 1.3 |
| 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° | 603.4 | 31.3 |
| 0°-40° | 986.6 | 51.2 |
| 0°-60° | 1606.9 | 83.5 |
| 0°-90° | 1925.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1925.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0° | 638 | 638 | 638 | 638 | 638 | |
| 5° | 758 | 710 | 638 | 578 | 566 | 78 |
| 15° | 1128 | 939 | 611 | 482 | 461 | 326 |
| 25° | 1339 | 1110 | 557 | 414 | 407 | 592 |
| 35° | 721 | 1144 | 489 | 366 | 374 | 466 |
| 45° | 390 | 754 | 402 | 313 | 318 | 307 |
| 55° | 265 | 410 | 283 | 242 | 252 | 237 |
| 65° | 172 | 230 | 174 | 164 | 178 | 171 |
| 75° | 88 | 109 | 83 | 82 | 95 | 94 |
| 85° | 20 | 24 | 17 | 16 | 18 | 25 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P242482

CATALOG NUMBER: S123DRP-S560D935-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 |
| 2.5° | 686.8 | 686.2 | 684.7 | 685.9 | 683.4 | 680.0 | 679.7 | 676.6 | 667.7 | 667.0 | 664.6 |
| 5° | 757.9 | 755.4 | 755.1 | 754.8 | 750.5 | 744.6 | 733.5 | 732.6 | 717.7 | 710.3 | 701.3 |
| 7.5° | 843.8 | 842.9 | 840.4 | 837.7 | 823.1 | 816.0 | 805.5 | 791.9 | 774.6 | 757.9 | 747.4 |
| 10° | 937.8 | 948.0 | 935.3 | 926.7 | 918.6 | 903.5 | 885.9 | 863.9 | 842.0 | 816.3 | 796.9 |
| 12.5° | 1038.6 | 1042.3 | 1042.3 | 1034.2 | 1020.6 | 995.6 | 961.0 | 936.3 | 916.5 | 869.5 | 852.8 |
| 15° | 1128.2 | 1147.1 | 1135.0 | 1107.2 | 1107.8 | 1085.9 | 1045.1 | 1000.2 | 976.4 | 939.0 | 888.0 |
| 17.5° | 1229.6 | 1233.0 | 1229.3 | 1203.3 | 1190.6 | 1158.8 | 1122.0 | 1080.3 | 1035.5 | 990.0 | 937.2 |
| 20° | 1307.5 | 1305.6 | 1294.8 | 1282.8 | 1256.2 | 1232.7 | 1191.6 | 1143.7 | 1081.8 | 1037.3 | 978.3 |
| 22.5° | 1350.8 | 1347.4 | 1343.6 | 1334.1 | 1313.0 | 1287.4 | 1251.5 | 1198.1 | 1140.0 | 1074.4 | 1003.9 |
| 25° | 1339.0 | 1343.0 | 1343.6 | 1340.9 | 1333.1 | 1318.0 | 1288.9 | 1247.2 | 1188.5 | 1109.7 | 1038.6 |
| 27.5° | 1248.1 | 1258.3 | 1271.3 | 1280.0 | 1293.9 | 1303.2 | 1293.9 | 1267.6 | 1219.4 | 1148.9 | 1061.4 |
| 30° | 1096.7 | 1084.3 | 1114.9 | 1153.6 | 1179.8 | 1226.2 | 1252.2 | 1253.7 | 1229.3 | 1170.9 | 1086.2 |
| 32.5° | 886.5 | 906.6 | 915.9 | 965.6 | 1030.8 | 1084.3 | 1142.4 | 1194.0 | 1206.1 | 1172.1 | 1100.7 |
| 35° | 721.4 | 738.4 | 763.2 | 787.9 | 849.7 | 902.9 | 993.7 | 1072.9 | 1135.9 | 1144.3 | 1098.8 |
| 37.5° | 599.6 | 609.5 | 624.7 | 651.0 | 693.3 | 759.1 | 831.2 | 934.1 | 1020.9 | 1082.2 | 1076.0 |
| 40° | 508.2 | 510.6 | 528.2 | 547.1 | 579.9 | 631.8 | 695.2 | 783.6 | 893.0 | 987.9 | 1027.4 |
| 42.5° | 439.5 | 445.7 | 450.7 | 468.6 | 493.0 | 528.9 | 586.7 | 655.9 | 753.9 | 866.7 | 953.6 |
| 45° | 389.5 | 395.6 | 400.3 | 412.3 | 430.9 | 457.2 | 498.3 | 565.0 | 641.4 | 754.2 | 858.4 |
| 47.5° | 354.8 | 354.2 | 358.2 | 367.8 | 381.1 | 402.1 | 432.4 | 476.9 | 550.2 | 644.5 | 753.6 |
| 50° | 317.1 | 322.1 | 323.3 | 330.4 | 340.3 | 354.8 | 379.0 | 415.4 | 472.9 | 553.3 | 651.6 |
| 52.5° | 290.6 | 291.2 | 295.2 | 299.8 | 308.2 | 318.7 | 338.8 | 365.4 | 407.4 | 472.9 | 561.3 |
| 55° | 264.6 | 264.6 | 268.0 | 272.0 | 277.0 | 287.2 | 301.1 | 322.1 | 356.4 | 409.6 | 484.4 |
| 57.5° | 240.5 | 241.7 | 244.8 | 245.7 | 250.1 | 257.2 | 269.2 | 285.9 | 312.2 | 355.2 | 417.0 |
| 60° | 216.4 | 219.2 | 218.8 | 221.3 | 225.0 | 230.3 | 240.2 | 253.2 | 276.0 | 308.8 | 358.9 |
| 62.5° | 195.3 | 194.4 | 194.4 | 197.5 | 201.2 | 206.2 | 211.7 | 222.6 | 241.1 | 269.2 | 310.0 |
| 65° | 171.9 | 171.2 | 173.4 | 175.3 | 176.5 | 180.2 | 185.1 | 195.0 | 208.0 | 229.7 | 262.7 |
| 67.5° | 151.5 | 149.6 | 151.1 | 151.8 | 153.9 | 157.0 | 162.0 | 168.1 | 178.7 | 196.9 | 223.5 |
| 70° | 130.4 | 128.9 | 128.6 | 129.2 | 131.1 | 133.2 | 136.6 | 142.5 | 152.1 | 166.0 | 184.2 |
| 72.5° | 108.8 | 107.9 | 107.9 | 109.4 | 110.0 | 111.3 | 113.4 | 118.7 | 125.8 | 135.4 | 152.1 |
| 75° | 88.4 | 88.4 | 88.4 | 88.7 | 89.6 | 90.9 | 92.7 | 95.5 | 101.4 | 108.8 | 120.2 |
| 77.5° | 69.9 | 70.2 | 69.5 | 69.2 | 70.8 | 71.4 | 71.7 | 74.8 | 78.2 | 83.8 | 92.7 |
| 80° | 51.9 | 50.4 | 51.0 | 51.9 | 52.5 | 52.9 | 53.8 | 54.4 | 57.2 | 60.0 | 65.8 |
| 82.5° | 35.2 | 34.0 | 34.0 | 35.5 | 35.5 | 35.9 | 36.8 | 37.7 | 38.3 | 40.8 | 43.3 |
| 85° | 20.4 | 20.4 | 20.7 | 20.7 | 21.0 | 20.7 | 21.6 | 21.9 | 21.9 | 23.5 | 25.3 |
| 87.5° | 9.3 | 8.7 | 9.0 | 9.3 | 9.0 | 9.3 | 9.6 | 9.9 | 10.2 | 10.5 | 10.8 |
| 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: P242482

CATALOG NUMBER: S123DRP-S560D935-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 |
| 2.5° | 662.7 | 660.2 | 657.8 | 653.4 | 649.7 | 644.5 | 642.9 | 641.1 | 635.5 | 630.6 | 626.9 |
| 5° | 697.9 | 690.5 | 679.7 | 669.8 | 661.8 | 651.0 | 644.8 | 638.3 | 629.0 | 620.7 | 613.9 |
| 7.5° | 731.6 | 718.7 | 703.5 | 687.1 | 671.4 | 656.2 | 644.2 | 633.3 | 621.3 | 609.5 | 600.6 |
| 10° | 773.4 | 752.3 | 728.9 | 703.5 | 681.9 | 660.9 | 643.2 | 627.8 | 611.1 | 596.6 | 584.5 |
| 12.5° | 821.0 | 787.3 | 752.7 | 720.5 | 693.9 | 662.7 | 640.5 | 619.7 | 600.3 | 582.0 | 568.1 |
| 15° | 856.5 | 816.9 | 778.6 | 736.3 | 697.3 | 660.9 | 635.5 | 610.8 | 588.8 | 570.9 | 553.6 |
| 17.5° | 891.7 | 848.5 | 799.6 | 748.6 | 702.9 | 660.9 | 626.2 | 599.6 | 572.8 | 551.1 | 534.4 |
| 20° | 920.8 | 869.8 | 812.6 | 759.1 | 707.2 | 659.0 | 620.0 | 586.7 | 557.0 | 533.8 | 514.3 |
| 22.5° | 945.8 | 884.0 | 824.4 | 766.3 | 706.9 | 654.1 | 608.6 | 574.0 | 541.2 | 518.7 | 497.6 |
| 25° | 961.6 | 890.2 | 830.9 | 763.8 | 699.2 | 645.4 | 595.9 | 557.0 | 524.8 | 498.3 | 476.9 |
| 27.5° | 976.4 | 889.3 | 822.2 | 749.9 | 689.9 | 636.4 | 583.3 | 541.5 | 507.8 | 479.1 | 457.2 |
| 30° | 991.3 | 890.8 | 807.1 | 735.7 | 675.1 | 619.4 | 568.1 | 526.1 | 490.2 | 460.9 | 440.5 |
| 32.5° | 1000.5 | 889.9 | 793.1 | 715.9 | 651.6 | 604.0 | 551.7 | 507.8 | 470.8 | 442.0 | 422.5 |
| 35° | 1003.0 | 884.6 | 776.8 | 687.1 | 625.9 | 578.0 | 534.4 | 489.3 | 450.7 | 423.8 | 401.5 |
| 37.5° | 997.8 | 875.1 | 758.8 | 661.2 | 595.0 | 547.4 | 509.4 | 470.8 | 433.7 | 403.7 | 384.2 |
| 40° | 980.8 | 865.8 | 737.2 | 633.3 | 562.9 | 517.4 | 486.2 | 448.5 | 412.0 | 383.9 | 366.0 |
| 42.5° | 948.3 | 846.9 | 713.4 | 602.4 | 529.5 | 484.0 | 455.9 | 425.9 | 391.9 | 366.0 | 348.0 |
| 45° | 891.4 | 817.9 | 689.6 | 571.5 | 496.7 | 449.7 | 424.4 | 401.5 | 370.3 | 344.6 | 329.2 |
| 47.5° | 818.8 | 778.6 | 655.3 | 539.1 | 462.4 | 417.0 | 390.4 | 371.5 | 347.1 | 326.4 | 311.3 |
| 50° | 742.5 | 727.9 | 620.4 | 505.7 | 428.1 | 383.9 | 358.6 | 341.9 | 325.5 | 304.8 | 291.2 |
| 52.5° | 654.4 | 669.2 | 579.6 | 471.1 | 393.2 | 349.9 | 326.4 | 314.0 | 299.5 | 283.4 | 272.0 |
| 55° | 572.8 | 605.2 | 531.3 | 431.5 | 358.6 | 317.1 | 294.6 | 282.8 | 274.2 | 261.5 | 251.3 |
| 57.5° | 493.6 | 535.0 | 481.3 | 391.6 | 324.6 | 288.4 | 266.1 | 252.8 | 247.3 | 240.2 | 231.8 |
| 60° | 424.7 | 465.5 | 426.9 | 351.4 | 290.2 | 256.2 | 237.1 | 226.3 | 220.7 | 216.1 | 209.3 |
| 62.5° | 363.2 | 404.6 | 373.7 | 310.6 | 256.6 | 225.6 | 209.6 | 199.1 | 195.0 | 193.2 | 187.6 |
| 65° | 307.9 | 343.4 | 321.8 | 268.0 | 224.7 | 196.9 | 181.7 | 174.3 | 170.3 | 169.4 | 165.7 |
| 67.5° | 260.0 | 287.5 | 270.8 | 230.3 | 195.0 | 169.7 | 156.4 | 149.9 | 146.5 | 146.2 | 143.1 |
| 70° | 213.0 | 238.3 | 226.3 | 190.4 | 161.0 | 142.2 | 131.1 | 125.5 | 123.6 | 123.3 | 121.8 |
| 72.5° | 176.5 | 192.3 | 183.3 | 154.9 | 133.8 | 117.1 | 109.7 | 103.9 | 101.7 | 102.3 | 101.4 |
| 75° | 136.0 | 149.3 | 143.7 | 123.0 | 104.8 | 93.7 | 86.9 | 83.1 | 81.3 | 82.2 | 81.0 |
| 77.5° | 103.9 | 113.1 | 107.6 | 91.8 | 80.1 | 71.7 | 66.5 | 64.0 | 62.1 | 62.1 | 61.5 |
| 80° | 73.9 | 78.8 | 76.0 | 67.4 | 58.1 | 51.3 | 47.3 | 45.7 | 44.8 | 44.5 | 44.2 |
| 82.5° | 47.3 | 51.3 | 47.9 | 42.7 | 37.1 | 33.7 | 31.8 | 29.7 | 29.1 | 29.4 | 29.1 |
| 85° | 26.6 | 28.1 | 26.9 | 23.2 | 20.7 | 18.9 | 17.6 | 16.7 | 16.1 | 16.4 | 15.8 |
| 87.5° | 11.4 | 11.7 | 10.8 | 9.6 | 9.0 | 8.0 | 8.0 | 7.4 | 6.8 | 6.8 | 6.5 |
| 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: P242482

CATALOG NUMBER: S123DRP-S560D935-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 | 638.0 |
| 2.5° | 624.7 | 622.5 | 619.4 | 614.8 | 611.1 | 605.2 | 605.2 | 606.1 | 606.1 | 605.8 | 605.2 |
| 5° | 608.3 | 603.7 | 598.1 | 591.6 | 584.8 | 578.0 | 576.8 | 574.3 | 572.4 | 571.2 | 569.7 |
| 7.5° | 591.6 | 583.9 | 576.2 | 567.2 | 559.5 | 553.0 | 548.3 | 544.3 | 541.8 | 539.1 | 536.9 |
| 10° | 574.6 | 564.4 | 554.8 | 545.2 | 534.7 | 526.4 | 521.1 | 517.4 | 514.6 | 512.2 | 510.9 |
| 12.5° | 554.5 | 542.5 | 531.6 | 522.7 | 510.9 | 502.3 | 497.3 | 496.1 | 492.7 | 486.8 | 483.7 |
| 15° | 535.0 | 524.2 | 511.6 | 497.6 | 492.1 | 481.6 | 475.7 | 472.9 | 471.1 | 467.0 | 465.8 |
| 17.5° | 519.0 | 504.4 | 489.9 | 479.7 | 469.5 | 461.2 | 457.8 | 454.1 | 451.6 | 447.9 | 447.0 |
| 20° | 498.9 | 486.2 | 473.2 | 462.1 | 451.3 | 442.0 | 439.2 | 436.8 | 434.3 | 432.7 | 431.5 |
| 22.5° | 478.5 | 465.8 | 455.6 | 445.4 | 433.7 | 428.4 | 425.3 | 422.5 | 421.0 | 420.1 | 418.8 |
| 25° | 459.6 | 448.5 | 436.4 | 427.2 | 417.9 | 413.9 | 412.0 | 410.5 | 409.2 | 407.7 | 407.4 |
| 27.5° | 442.9 | 430.6 | 420.4 | 411.4 | 404.6 | 401.2 | 399.0 | 398.1 | 398.1 | 398.7 | 399.0 |
| 30° | 423.8 | 412.6 | 404.6 | 397.2 | 391.0 | 387.9 | 387.6 | 387.6 | 388.8 | 389.2 | 389.8 |
| 32.5° | 406.2 | 397.5 | 389.5 | 382.4 | 378.0 | 376.2 | 377.7 | 377.7 | 378.6 | 379.6 | 380.8 |
| 35° | 389.2 | 381.1 | 374.9 | 368.8 | 364.7 | 365.7 | 366.3 | 366.9 | 368.4 | 370.3 | 371.5 |
| 37.5° | 373.1 | 365.7 | 359.2 | 354.2 | 351.8 | 353.6 | 355.2 | 356.4 | 358.2 | 359.8 | 361.0 |
| 40° | 355.5 | 350.2 | 344.0 | 339.7 | 340.3 | 341.2 | 342.5 | 344.0 | 345.6 | 346.5 | 347.7 |
| 42.5° | 339.1 | 333.5 | 329.2 | 325.8 | 326.7 | 328.0 | 328.6 | 329.2 | 331.0 | 332.9 | 333.5 |
| 45° | 322.4 | 318.1 | 313.7 | 311.6 | 312.2 | 312.8 | 313.4 | 314.4 | 315.9 | 317.1 | 317.4 |
| 47.5° | 303.5 | 300.4 | 297.7 | 295.2 | 296.4 | 296.1 | 297.0 | 298.9 | 299.5 | 300.1 | 302.0 |
| 50° | 285.6 | 282.8 | 279.4 | 278.8 | 278.8 | 278.8 | 279.1 | 281.6 | 281.6 | 282.8 | 284.1 |
| 52.5° | 265.8 | 264.3 | 262.4 | 261.2 | 260.6 | 260.6 | 262.1 | 263.0 | 263.7 | 265.5 | 266.8 |
| 55° | 246.4 | 244.5 | 242.6 | 241.7 | 241.1 | 241.7 | 244.2 | 244.8 | 246.4 | 247.3 | 248.2 |
| 57.5° | 226.0 | 224.7 | 223.2 | 222.6 | 222.6 | 222.9 | 224.7 | 226.3 | 226.6 | 229.7 | 230.9 |
| 60° | 205.9 | 203.7 | 202.5 | 202.5 | 201.8 | 204.6 | 204.0 | 207.1 | 207.7 | 209.6 | 211.7 |
| 62.5° | 185.1 | 182.1 | 181.7 | 181.7 | 183.0 | 183.3 | 184.5 | 185.5 | 187.3 | 189.8 | 191.3 |
| 65° | 162.6 | 161.0 | 163.2 | 162.9 | 162.3 | 164.1 | 164.1 | 165.7 | 167.5 | 169.7 | 173.1 |
| 67.5° | 141.6 | 140.3 | 140.9 | 140.6 | 141.6 | 142.8 | 143.7 | 145.0 | 147.1 | 149.6 | 151.8 |
| 70° | 120.2 | 121.2 | 119.6 | 120.9 | 121.8 | 122.1 | 122.7 | 124.6 | 127.0 | 128.6 | 131.1 |
| 72.5° | 99.5 | 99.2 | 99.8 | 100.1 | 101.1 | 101.7 | 102.3 | 104.5 | 107.3 | 108.5 | 110.3 |
| 75° | 79.7 | 79.4 | 80.4 | 80.4 | 81.9 | 82.5 | 83.1 | 84.1 | 86.5 | 88.4 | 89.9 |
| 77.5° | 61.8 | 62.1 | 61.8 | 63.1 | 62.4 | 62.7 | 64.6 | 65.5 | 65.8 | 69.9 | 70.5 |
| 80° | 43.9 | 44.5 | 44.8 | 45.1 | 45.4 | 44.8 | 47.0 | 47.9 | 47.9 | 50.1 | 51.6 |
| 82.5° | 28.4 | 28.7 | 29.7 | 30.0 | 30.0 | 30.9 | 30.6 | 31.2 | 32.1 | 32.8 | 34.9 |
| 85° | 15.8 | 16.7 | 17.0 | 16.7 | 17.0 | 16.4 | 17.3 | 17.6 | 17.9 | 17.9 | 17.9 |
| 87.5° | 6.2 | 6.5 | 6.2 | 6.5 | 6.2 | 6.5 | 6.5 | 5.9 | 5.9 | 6.8 | 5.6 |
| 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: P242482

CATALOG NUMBER: S123DRP-S560D935-X4F0-XX-UDD-A-W

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|-------|-------|-------|-------|-------|
| 0° | 638.0 | 638.0 | 638.0 | 638.0 |
| 2.5° | 603.0 | 602.7 | 604.9 | 603.4 |
| 5° | 567.8 | 568.7 | 565.6 | 565.6 |
| 7.5° | 536.0 | 534.7 | 535.0 | 532.9 |
| 10° | 507.2 | 505.4 | 504.8 | 505.1 |
| 12.5° | 483.4 | 483.4 | 478.5 | 478.5 |
| 15° | 465.8 | 459.9 | 459.3 | 461.2 |
| 17.5° | 446.3 | 442.9 | 443.2 | 442.6 |
| 20° | 431.5 | 429.6 | 429.3 | 427.2 |
| 22.5° | 417.9 | 417.6 | 417.9 | 415.4 |
| 25° | 407.1 | 408.6 | 407.4 | 407.4 |
| 27.5° | 399.7 | 399.7 | 398.7 | 398.7 |
| 30° | 391.0 | 390.7 | 391.3 | 391.3 |
| 32.5° | 382.4 | 383.0 | 383.0 | 383.3 |
| 35° | 373.4 | 373.7 | 374.6 | 374.0 |
| 37.5° | 361.6 | 363.2 | 362.9 | 363.5 |
| 40° | 348.0 | 349.0 | 348.7 | 348.7 |
| 42.5° | 334.1 | 334.8 | 333.8 | 333.2 |
| 45° | 318.7 | 318.1 | 319.0 | 317.8 |
| 47.5° | 301.7 | 302.0 | 302.3 | 303.5 |
| 50° | 284.7 | 286.5 | 286.5 | 286.2 |
| 52.5° | 268.0 | 268.6 | 270.2 | 270.2 |
| 55° | 250.7 | 251.3 | 251.9 | 252.2 |
| 57.5° | 233.1 | 232.8 | 234.0 | 234.3 |
| 60° | 214.2 | 214.2 | 216.7 | 217.6 |
| 62.5° | 194.1 | 195.3 | 197.8 | 196.0 |
| 65° | 174.6 | 177.1 | 176.8 | 178.0 |
| 67.5° | 154.2 | 155.8 | 158.3 | 158.3 |
| 70° | 133.5 | 135.1 | 136.3 | 137.2 |
| 72.5° | 113.4 | 114.1 | 117.5 | 115.6 |
| 75° | 92.1 | 94.3 | 96.1 | 95.2 |
| 77.5° | 71.7 | 74.5 | 75.1 | 74.2 |
| 80° | 53.8 | 53.5 | 55.3 | 55.0 |
| 82.5° | 35.9 | 35.5 | 36.2 | 36.5 |
| 85° | 19.2 | 20.1 | 18.9 | 18.5 |
| 87.5° | 5.6 | 5.6 | 5.3 | 4.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

TEST NUMBER: P242482
 CATALOG NUMBER: S123DRP-S560D935-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 | 17.49 | 19.05 | 17.86 | 19.36 | 19.68 | 18.04 | 19.60 | 18.41 | 19.91 | 20.23 |
| | 3H | 19.04 | 20.44 | 19.42 | 20.76 | 21.13 | 19.38 | 20.78 | 19.75 | 21.10 | 21.46 |
| | 4H | 19.60 | 20.92 | 20.00 | 21.27 | 21.64 | 19.84 | 21.15 | 20.24 | 21.50 | 21.88 |
| | 6H | 20.00 | 21.22 | 20.41 | 21.58 | 21.98 | 20.13 | 21.35 | 20.54 | 21.71 | 22.10 |
| | 8H | 20.12 | 21.27 | 20.54 | 21.66 | 22.06 | 20.20 | 21.36 | 20.63 | 21.75 | 22.15 |
| | 12H | 20.18 | 21.29 | 20.61 | 21.67 | 22.10 | 20.24 | 21.35 | 20.67 | 21.73 | 22.16 |
| 4H | 2H | 18.64 | 19.96 | 19.04 | 20.31 | 20.68 | 18.81 | 20.12 | 19.21 | 20.47 | 20.85 |
| | 3H | 20.24 | 21.33 | 20.65 | 21.73 | 22.13 | 20.61 | 21.71 | 21.02 | 22.11 | 22.51 |
| | 4H | 20.86 | 21.84 | 21.29 | 22.26 | 22.70 | 21.18 | 22.17 | 21.61 | 22.58 | 23.02 |
| | 6H | 21.33 | 22.19 | 21.79 | 22.63 | 23.09 | 21.54 | 22.40 | 22.00 | 22.84 | 23.30 |
| | 8H | 21.47 | 22.27 | 21.93 | 22.71 | 23.18 | 21.63 | 22.44 | 22.10 | 22.88 | 23.35 |
| | 12H | 21.56 | 22.28 | 22.04 | 22.76 | 23.23 | 21.69 | 22.40 | 22.17 | 22.88 | 23.35 |
| 8H | 4H | 21.34 | 22.15 | 21.81 | 22.59 | 23.06 | 21.48 | 22.29 | 21.95 | 22.73 | 23.20 |
| | 6H | 21.89 | 22.56 | 22.39 | 23.05 | 23.52 | 21.99 | 22.66 | 22.49 | 23.15 | 23.62 |
| | 8H | 22.08 | 22.67 | 22.59 | 23.18 | 23.67 | 22.14 | 22.73 | 22.65 | 23.24 | 23.73 |
| | 12H | 22.22 | 22.75 | 22.73 | 23.24 | 23.80 | 22.24 | 22.76 | 22.74 | 23.25 | 23.82 |
| 12H | 4H | 21.40 | 22.11 | 21.88 | 22.59 | 23.06 | 21.50 | 22.21 | 21.98 | 22.69 | 23.16 |
| | 6H | 21.97 | 22.56 | 22.48 | 23.07 | 23.56 | 22.03 | 22.62 | 22.54 | 23.13 | 23.62 |
| | 8H | 22.21 | 22.73 | 22.71 | 23.22 | 23.79 | 22.23 | 22.76 | 22.74 | 23.25 | 23.81 |