

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: P646638

Luminaire Tested: S123DRP-S340D940-X4F0-XX-UDD-G-W

Issue Date: 3/20/2023

Test Information

Test Method: LM-79-2024
Report Number: P646638
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-905-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/20/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DRP-S340D940-X4F0-XX-UDD-G-W
Description: DEFINE 3 DIRECT RECESSED WITH WALL GRAZE FLUSH OPTIC
STANDARD LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

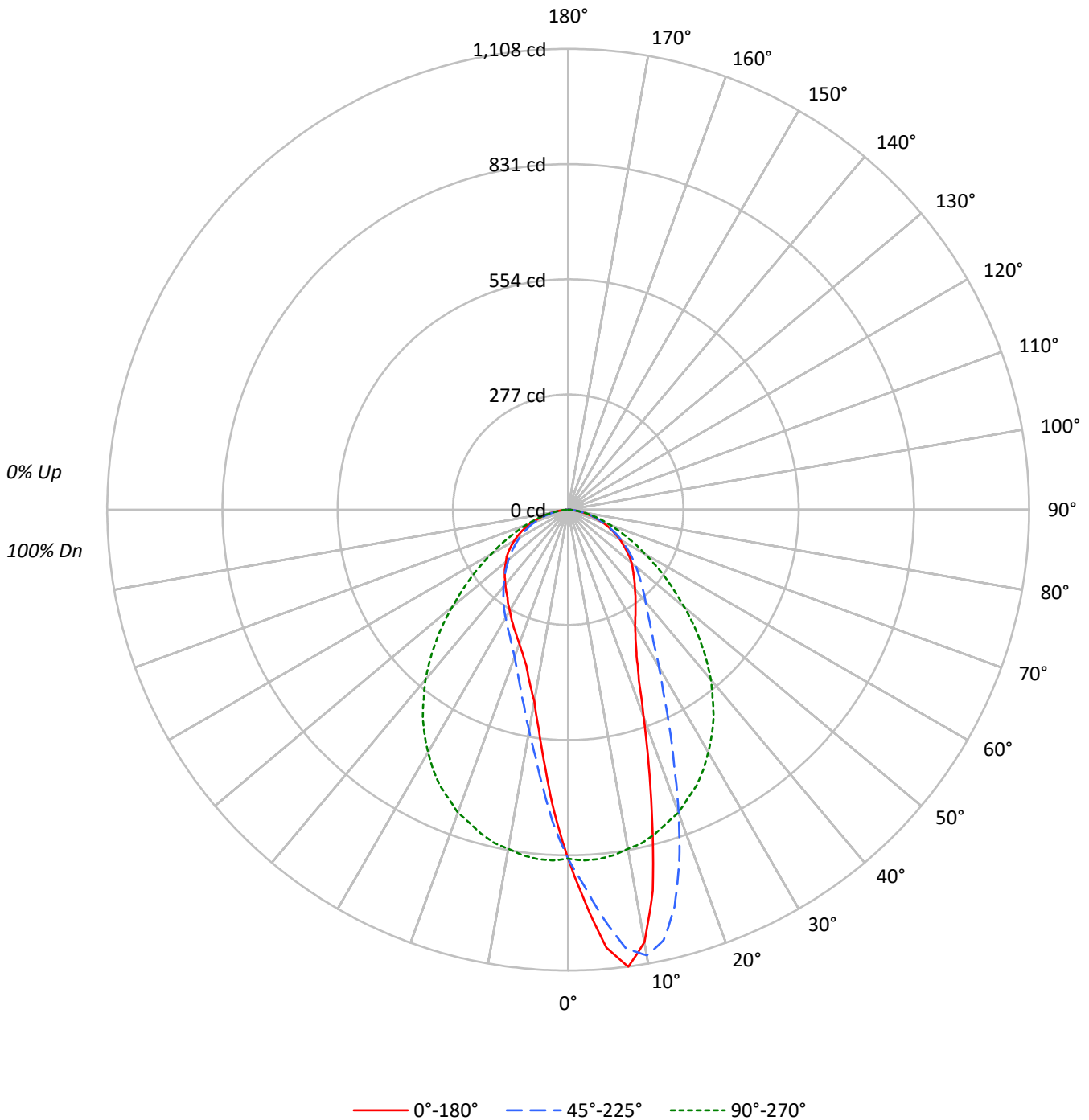
Lumens per Lamp: N/A
Luminaire Lumens: 1348.1 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Spacing Criteria (0/90/45): 0.65 / 1.19 / 0.89
Luminous Opening: Rectangular (W 4' x L: 0.22' x H: 0')
CIE Type: Direct

Input Watts (W): 11.9
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: P646638

CATALOG NUMBER: S123DRP-S340D940-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





TEST NUMBER: P646638

CATALOG NUMBER: S123DRP-S340D940-X4F0-XX-UDD-G-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 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | 100 |
| 1 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 | | | | 86 |
| 2 | 101 | 94 | 88 | 82 | 99 | 92 | 86 | 82 | 88 | 84 | 80 | 85 | 81 | 78 | 82 | 79 | 76 | 74 | | | | 74 |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 69 | 77 | 72 | 67 | 74 | 70 | 66 | 64 | | | | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 69 | 64 | 59 | 67 | 62 | 58 | 56 | | | | 56 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 59 | 54 | 65 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 52 | 50 | | | | 50 |
| 6 | 74 | 62 | 54 | 48 | 73 | 61 | 53 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 47 | 45 | | | | 45 |
| 7 | 70 | 57 | 49 | 43 | 68 | 56 | 49 | 43 | 55 | 48 | 43 | 53 | 47 | 43 | 52 | 47 | 42 | 40 | | | | 40 |
| 8 | 65 | 53 | 45 | 39 | 64 | 52 | 44 | 39 | 51 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 37 | | | | 37 |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 36 | 45 | 40 | 35 | 34 | | | | 34 |
| 10 | 58 | 45 | 38 | 33 | 57 | 45 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 33 | 42 | 37 | 33 | 31 | | | | 31 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|-------|-------|-------|-------|-------|
| 0° | 10109 | 10109 | 10109 | 10109 | 10109 |
| 5° | 12786 | 11956 | 10200 | 8180 | 7553 |
| 10° | 12909 | 13309 | 10132 | 6607 | 5726 |
| 15° | 9724 | 12317 | 10063 | 5537 | 4842 |
| 20° | 6774 | 9959 | 9935 | 4828 | 4398 |
| 25° | 5166 | 7641 | 9716 | 4426 | 4125 |
| 30° | 4469 | 6073 | 9366 | 4182 | 3905 |
| 35° | 4147 | 5085 | 8962 | 3986 | 3751 |
| 40° | 3926 | 4550 | 8396 | 3803 | 3699 |
| 45° | 3795 | 4226 | 7677 | 3641 | 3676 |
| 50° | 3730 | 3993 | 6823 | 3503 | 3657 |
| 55° | 3590 | 3771 | 5987 | 3378 | 3672 |
| 60° | 3463 | 3567 | 5159 | 3256 | 3612 |
| 65° | 3253 | 3341 | 4451 | 3119 | 3541 |
| 70° | 3005 | 3100 | 3787 | 2949 | 3333 |
| 75° | 2719 | 2807 | 3245 | 2700 | 3045 |
| 80° | 2241 | 2408 | 2567 | 2352 | 2567 |
| 85° | 1770 | 1935 | 1880 | 2046 | 2046 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 80°
 Vertical Angle: 45°
 Luminance: 8764 cd/sqm

TEST NUMBER: P646638

CATALOG NUMBER: S123DRP-S340D940-X4F0-XX-UDD-G-W

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 79.3 | 5.9 |
| 10°-20° | 197.4 | 14.6 |
| 20°-30° | 233.6 | 17.3 |
| 30°-40° | 234.8 | 17.4 |
| 40°-50° | 215.3 | 16.0 |
| 50°-60° | 177.7 | 13.2 |
| 60°-70° | 125.8 | 9.3 |
| 70°-80° | 67.2 | 5.0 |
| 80°-90° | 17.0 | 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° | 510.3 | 37.9 |
| 0°-40° | 745.1 | 55.3 |
| 0°-60° | 1138.1 | 84.4 |
| 0°-90° | 1348.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1348.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0° | 839 | 839 | 839 | 839 | 839 | |
| 5° | 1057 | 988 | 843 | 676 | 624 | 101 |
| 15° | 780 | 987 | 807 | 444 | 388 | 215 |
| 25° | 389 | 575 | 731 | 333 | 310 | 183 |
| 35° | 282 | 346 | 609 | 271 | 255 | 177 |
| 45° | 223 | 248 | 450 | 214 | 216 | 172 |
| 55° | 171 | 180 | 285 | 161 | 175 | 153 |
| 65° | 114 | 117 | 156 | 109 | 124 | 113 |
| 75° | 58 | 60 | 70 | 58 | 65 | 61 |
| 85° | 13 | 14 | 14 | 15 | 15 | 15 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P646638

CATALOG NUMBER: S123DRP-S340D940-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

| | 0° | 10° | 20° | 22.5° | 30° | 40° | 45° | 50° | 60° | 67.5° | 70° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 |
| 2.5° | 945.7 | 943.8 | 934.0 | 927.8 | 929.4 | 915.3 | 906.8 | 899.8 | 895.1 | 883.8 | 878.0 |
| 5° | 1057.1 | 1062.5 | 1056.3 | 1053.2 | 1037.2 | 1011.9 | 988.5 | 983.5 | 961.7 | 934.8 | 925.5 |
| 7.5° | 1108.5 | 1111.6 | 1107.7 | 1107.7 | 1102.6 | 1080.0 | 1063.7 | 1050.8 | 1013.5 | 978.8 | 962.8 |
| 10° | 1055.1 | 1062.1 | 1077.3 | 1084.3 | 1094.4 | 1091.3 | 1087.8 | 1082.8 | 1057.5 | 1017.4 | 999.1 |
| 12.5° | 937.9 | 946.5 | 976.9 | 981.1 | 1015.8 | 1049.3 | 1060.2 | 1072.6 | 1075.0 | 1041.1 | 1021.2 |
| 15° | 779.5 | 803.2 | 830.9 | 844.1 | 888.1 | 958.6 | 987.4 | 1021.2 | 1061.3 | 1047.3 | 1031.8 |
| 17.5° | 642.0 | 651.0 | 680.6 | 708.6 | 752.6 | 834.0 | 887.3 | 937.9 | 1024.0 | 1038.0 | 1028.3 |
| 20° | 528.3 | 536.5 | 575.4 | 573.5 | 631.9 | 723.4 | 776.7 | 835.1 | 962.1 | 1007.6 | 1005.7 |
| 22.5° | 443.9 | 456.7 | 478.5 | 490.6 | 532.6 | 614.0 | 664.6 | 737.4 | 891.6 | 963.6 | 971.4 |
| 25° | 388.6 | 397.9 | 411.1 | 421.7 | 454.4 | 521.3 | 574.7 | 634.6 | 802.8 | 906.0 | 925.5 |
| 27.5° | 350.8 | 354.7 | 367.9 | 374.2 | 396.0 | 453.6 | 494.9 | 549.8 | 720.7 | 841.4 | 868.6 |
| 30° | 321.2 | 323.9 | 335.6 | 337.6 | 354.7 | 396.4 | 436.5 | 481.2 | 640.5 | 774.8 | 805.9 |
| 32.5° | 300.6 | 302.5 | 311.5 | 312.3 | 325.1 | 355.5 | 383.5 | 425.6 | 564.5 | 703.5 | 742.1 |
| 35° | 281.9 | 283.1 | 289.7 | 291.6 | 299.8 | 322.8 | 345.7 | 378.1 | 504.2 | 639.3 | 681.7 |
| 37.5° | 265.5 | 267.1 | 271.0 | 273.3 | 279.9 | 298.2 | 313.8 | 340.7 | 446.2 | 572.3 | 619.4 |
| 40° | 249.6 | 252.3 | 255.0 | 255.0 | 262.4 | 276.4 | 289.3 | 311.5 | 396.4 | 513.9 | 555.6 |
| 42.5° | 235.9 | 238.7 | 239.8 | 240.2 | 244.1 | 257.0 | 267.9 | 283.1 | 358.6 | 462.1 | 503.0 |
| 45° | 222.7 | 223.9 | 225.0 | 225.8 | 228.5 | 239.8 | 248.0 | 262.4 | 322.8 | 414.3 | 454.0 |
| 47.5° | 210.6 | 210.6 | 211.4 | 212.6 | 214.5 | 222.7 | 229.7 | 240.2 | 292.0 | 371.4 | 404.1 |
| 50° | 199.0 | 199.0 | 197.8 | 198.6 | 199.7 | 206.0 | 213.0 | 221.5 | 263.2 | 332.1 | 361.3 |
| 52.5° | 184.9 | 184.9 | 185.3 | 184.2 | 185.3 | 190.8 | 196.2 | 204.8 | 238.7 | 295.9 | 320.8 |
| 55° | 170.9 | 172.5 | 171.3 | 170.5 | 172.1 | 175.6 | 179.5 | 186.9 | 215.7 | 267.1 | 286.9 |
| 57.5° | 156.9 | 157.7 | 157.3 | 158.5 | 157.7 | 160.8 | 164.3 | 169.4 | 195.1 | 234.8 | 253.5 |
| 60° | 143.7 | 143.7 | 142.9 | 143.7 | 143.7 | 145.2 | 148.0 | 153.0 | 174.0 | 207.1 | 222.7 |
| 62.5° | 128.9 | 129.3 | 129.7 | 129.3 | 128.9 | 130.8 | 133.2 | 136.7 | 155.7 | 180.3 | 191.9 |
| 65° | 114.1 | 114.5 | 115.6 | 115.2 | 114.9 | 116.8 | 117.2 | 121.1 | 135.5 | 156.5 | 165.1 |
| 67.5° | 100.8 | 100.1 | 100.5 | 101.2 | 101.6 | 102.0 | 102.8 | 106.7 | 116.8 | 133.9 | 140.9 |
| 70° | 85.3 | 86.0 | 85.7 | 86.8 | 86.0 | 87.2 | 88.0 | 90.7 | 100.5 | 111.7 | 116.4 |
| 72.5° | 71.2 | 71.6 | 71.6 | 72.8 | 72.4 | 73.6 | 74.4 | 75.5 | 82.5 | 92.7 | 94.6 |
| 75° | 58.4 | 58.4 | 59.2 | 59.6 | 59.6 | 59.6 | 60.3 | 61.1 | 67.0 | 73.2 | 75.1 |
| 77.5° | 44.4 | 46.3 | 45.9 | 46.3 | 46.7 | 47.9 | 47.1 | 48.7 | 52.2 | 55.7 | 56.8 |
| 80° | 32.3 | 32.3 | 32.7 | 33.1 | 33.9 | 34.7 | 34.7 | 36.2 | 37.8 | 39.7 | 40.9 |
| 82.5° | 20.6 | 21.0 | 22.2 | 22.6 | 23.0 | 24.1 | 24.1 | 24.1 | 26.1 | 26.9 | 26.9 |
| 85° | 12.8 | 12.1 | 12.8 | 13.2 | 13.6 | 14.0 | 14.0 | 14.8 | 15.2 | 15.6 | 15.6 |
| 87.5° | 6.2 | 6.2 | 6.2 | 6.2 | 6.6 | 6.6 | 6.6 | 6.6 | 7.0 | 7.0 | 7.0 |
| 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: P646638

CATALOG NUMBER: S123DRP-S340D940-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (continued):

| | 80° | 90° | 100° | 110° | 112.5° | 120° | 130° | 135° | 140° | 150° | 157.5° |
|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|--------|
| 0° | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 | 839.0 |
| 2.5° | 858.5 | 844.1 | 822.7 | 805.2 | 805.9 | 790.0 | 778.3 | 763.1 | 758.4 | 753.8 | 747.5 |
| 5° | 876.4 | 843.3 | 798.9 | 763.5 | 752.6 | 726.1 | 692.6 | 676.3 | 666.6 | 649.4 | 642.8 |
| 7.5° | 898.6 | 837.9 | 770.1 | 714.8 | 702.8 | 658.8 | 619.1 | 599.6 | 581.3 | 569.2 | 554.4 |
| 10° | 913.0 | 828.1 | 740.9 | 667.7 | 656.0 | 605.8 | 554.0 | 540.0 | 517.0 | 502.3 | 488.2 |
| 12.5° | 923.9 | 820.7 | 710.9 | 625.7 | 606.6 | 557.9 | 505.8 | 486.7 | 469.9 | 448.5 | 438.4 |
| 15° | 933.6 | 806.7 | 680.2 | 581.7 | 561.8 | 509.3 | 461.0 | 443.9 | 428.7 | 410.0 | 401.0 |
| 17.5° | 930.1 | 789.6 | 646.3 | 542.7 | 522.9 | 471.1 | 424.8 | 405.3 | 395.2 | 378.8 | 372.6 |
| 20° | 925.9 | 774.8 | 614.4 | 505.8 | 484.0 | 435.7 | 390.5 | 376.5 | 366.4 | 355.9 | 350.4 |
| 22.5° | 912.2 | 751.4 | 582.1 | 471.9 | 451.2 | 403.0 | 364.4 | 352.7 | 345.0 | 337.6 | 332.9 |
| 25° | 889.3 | 730.8 | 550.5 | 438.0 | 421.7 | 376.5 | 343.8 | 332.9 | 327.8 | 320.4 | 316.1 |
| 27.5° | 860.8 | 703.5 | 519.0 | 410.4 | 391.7 | 351.6 | 323.5 | 316.5 | 311.1 | 305.2 | 301.0 |
| 30° | 825.0 | 673.2 | 488.2 | 383.5 | 366.4 | 330.9 | 306.8 | 300.6 | 295.5 | 289.7 | 284.6 |
| 32.5° | 779.5 | 642.4 | 459.4 | 358.6 | 344.2 | 313.4 | 291.2 | 286.2 | 281.9 | 274.9 | 272.2 |
| 35° | 728.5 | 609.3 | 431.0 | 334.8 | 321.2 | 294.3 | 276.0 | 271.0 | 266.7 | 260.9 | 258.5 |
| 37.5° | 676.7 | 570.0 | 403.0 | 314.6 | 302.5 | 278.4 | 260.9 | 255.8 | 251.9 | 246.8 | 245.7 |
| 40° | 621.8 | 533.8 | 375.3 | 294.0 | 283.4 | 262.8 | 245.7 | 241.8 | 237.9 | 234.8 | 234.0 |
| 42.5° | 566.5 | 492.1 | 351.2 | 276.8 | 265.5 | 246.5 | 230.9 | 226.6 | 224.3 | 222.7 | 223.1 |
| 45° | 514.3 | 450.5 | 326.3 | 257.0 | 249.2 | 231.7 | 217.3 | 213.7 | 211.8 | 210.6 | 212.2 |
| 47.5° | 457.9 | 408.0 | 302.9 | 240.2 | 232.4 | 216.9 | 203.2 | 200.1 | 199.3 | 199.0 | 201.7 |
| 50° | 408.0 | 364.0 | 277.6 | 223.1 | 216.5 | 200.5 | 189.6 | 186.9 | 186.1 | 187.3 | 191.2 |
| 52.5° | 360.9 | 323.2 | 254.6 | 207.1 | 200.5 | 186.1 | 176.0 | 174.0 | 173.6 | 176.4 | 180.3 |
| 55° | 314.2 | 285.0 | 229.7 | 189.6 | 183.0 | 170.5 | 162.7 | 160.8 | 160.4 | 165.9 | 169.4 |
| 57.5° | 274.5 | 248.0 | 206.4 | 172.9 | 167.8 | 156.1 | 149.1 | 147.6 | 148.7 | 153.8 | 157.3 |
| 60° | 235.6 | 214.1 | 184.9 | 155.0 | 151.1 | 140.9 | 135.5 | 135.1 | 136.3 | 142.1 | 145.6 |
| 62.5° | 200.5 | 184.2 | 162.0 | 138.6 | 135.9 | 126.9 | 121.9 | 122.6 | 123.8 | 129.7 | 132.8 |
| 65° | 170.5 | 156.1 | 139.4 | 122.3 | 118.7 | 112.5 | 109.0 | 109.4 | 111.7 | 116.8 | 119.9 |
| 67.5° | 141.3 | 129.7 | 120.3 | 106.7 | 104.0 | 98.5 | 95.8 | 97.3 | 98.5 | 103.6 | 106.7 |
| 70° | 116.8 | 107.5 | 100.5 | 90.3 | 88.4 | 83.7 | 81.8 | 83.7 | 84.9 | 89.2 | 93.1 |
| 72.5° | 93.8 | 88.0 | 82.5 | 75.1 | 73.2 | 70.1 | 69.7 | 70.5 | 72.4 | 76.7 | 78.3 |
| 75° | 72.8 | 69.7 | 65.0 | 60.3 | 59.2 | 57.6 | 57.2 | 58.0 | 60.0 | 62.3 | 63.9 |
| 77.5° | 55.3 | 52.6 | 49.1 | 47.1 | 45.6 | 44.8 | 45.2 | 46.3 | 47.1 | 49.4 | 50.6 |
| 80° | 40.1 | 37.0 | 36.2 | 33.5 | 33.1 | 32.7 | 33.5 | 33.9 | 35.0 | 36.6 | 37.4 |
| 82.5° | 26.5 | 24.1 | 23.4 | 23.0 | 22.6 | 22.2 | 23.4 | 23.7 | 24.5 | 25.7 | 26.1 |
| 85° | 14.4 | 13.6 | 13.6 | 13.2 | 13.6 | 14.4 | 14.4 | 14.8 | 14.8 | 15.2 | 14.8 |
| 87.5° | 6.6 | 5.8 | 6.2 | 6.2 | 6.2 | 6.6 | 6.6 | 7.0 | 7.0 | 7.0 | 6.6 |
| 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: P646638

CATALOG NUMBER: S123DRP-S340D940-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (continued):

| | 160° | 170° | 180° |
|-------|-------|-------|-------|
| 0° | 839.0 | 839.0 | 839.0 |
| 2.5° | 747.1 | 744.4 | 733.5 |
| 5° | 637.0 | 627.6 | 624.5 |
| 7.5° | 552.9 | 552.1 | 535.7 |
| 10° | 481.6 | 482.8 | 468.0 |
| 12.5° | 436.8 | 427.1 | 425.9 |
| 15° | 398.7 | 389.7 | 388.2 |
| 17.5° | 370.3 | 364.8 | 363.3 |
| 20° | 348.9 | 345.7 | 343.0 |
| 22.5° | 331.7 | 327.8 | 325.5 |
| 25° | 314.6 | 311.1 | 310.3 |
| 27.5° | 299.8 | 295.5 | 295.5 |
| 30° | 284.6 | 281.9 | 280.7 |
| 32.5° | 271.0 | 268.6 | 268.6 |
| 35° | 257.7 | 256.6 | 255.0 |
| 37.5° | 245.7 | 245.7 | 244.9 |
| 40° | 234.0 | 235.2 | 235.2 |
| 42.5° | 223.9 | 225.0 | 225.0 |
| 45° | 213.0 | 214.9 | 215.7 |
| 47.5° | 202.1 | 205.2 | 206.0 |
| 50° | 192.3 | 194.7 | 195.1 |
| 52.5° | 181.8 | 184.5 | 186.5 |
| 55° | 170.9 | 173.6 | 174.8 |
| 57.5° | 159.2 | 162.0 | 162.4 |
| 60° | 146.4 | 149.1 | 149.9 |
| 62.5° | 134.7 | 136.3 | 137.0 |
| 65° | 120.3 | 122.6 | 124.2 |
| 67.5° | 107.1 | 109.0 | 109.0 |
| 70° | 92.7 | 93.4 | 94.6 |
| 72.5° | 79.0 | 79.4 | 79.4 |
| 75° | 64.2 | 65.0 | 65.4 |
| 77.5° | 50.6 | 51.0 | 51.0 |
| 80° | 37.4 | 37.0 | 37.0 |
| 82.5° | 26.1 | 24.9 | 24.9 |
| 85° | 14.8 | 14.4 | 14.8 |
| 87.5° | 6.6 | 6.6 | 6.6 |
| 90° | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P646638
 CATALOG NUMBER: S123DRP-S340D940-X4F0-XX-UDD-G-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 | 15.53 | 17.04 | 15.89 | 17.35 | 17.66 | 17.98 | 19.49 | 18.35 | 19.80 | 20.12 |
| | 3H | 17.22 | 18.58 | 17.60 | 18.90 | 19.26 | 19.19 | 20.55 | 19.57 | 20.88 | 21.24 |
| | 4H | 17.82 | 19.09 | 18.22 | 19.44 | 19.82 | 19.62 | 20.89 | 20.02 | 21.24 | 21.62 |
| | 6H | 18.23 | 19.40 | 18.64 | 19.77 | 20.16 | 19.89 | 21.06 | 20.30 | 21.43 | 21.82 |
| | 8H | 18.33 | 19.45 | 18.75 | 19.84 | 20.24 | 19.96 | 21.08 | 20.38 | 21.47 | 21.87 |
| | 12H | 18.38 | 19.46 | 18.81 | 19.84 | 20.27 | 19.99 | 21.06 | 20.42 | 21.44 | 21.87 |
| 4H | 2H | 16.18 | 17.45 | 16.58 | 17.80 | 18.18 | 18.20 | 19.47 | 18.60 | 19.82 | 20.20 |
| | 3H | 18.06 | 19.12 | 18.47 | 19.52 | 19.92 | 19.68 | 20.74 | 20.10 | 21.14 | 21.54 |
| | 4H | 18.78 | 19.73 | 19.21 | 20.15 | 20.59 | 20.25 | 21.20 | 20.68 | 21.62 | 22.06 |
| | 6H | 19.29 | 20.12 | 19.75 | 20.56 | 21.02 | 20.64 | 21.47 | 21.10 | 21.92 | 22.38 |
| | 8H | 19.43 | 20.20 | 19.89 | 20.65 | 21.12 | 20.75 | 21.52 | 21.21 | 21.97 | 22.44 |
| | 12H | 19.52 | 20.21 | 20.00 | 20.69 | 21.16 | 20.81 | 21.51 | 21.30 | 21.99 | 22.46 |
| 8H | 4H | 19.11 | 19.88 | 19.57 | 20.33 | 20.79 | 20.41 | 21.19 | 20.88 | 21.63 | 22.10 |
| | 6H | 19.72 | 20.36 | 20.22 | 20.85 | 21.33 | 20.91 | 21.55 | 21.40 | 22.04 | 22.52 |
| | 8H | 19.92 | 20.49 | 20.43 | 21.00 | 21.49 | 21.07 | 21.64 | 21.58 | 22.15 | 22.64 |
| | 12H | 20.06 | 20.57 | 20.57 | 21.06 | 21.62 | 21.19 | 21.69 | 21.70 | 22.19 | 22.75 |
| 12H | 4H | 19.14 | 19.83 | 19.62 | 20.31 | 20.78 | 20.42 | 21.11 | 20.90 | 21.59 | 22.06 |
| | 6H | 19.77 | 20.35 | 20.29 | 20.86 | 21.34 | 20.93 | 21.50 | 21.44 | 22.01 | 22.50 |
| | 8H | 20.02 | 20.53 | 20.53 | 21.02 | 21.59 | 21.14 | 21.64 | 21.65 | 22.13 | 22.70 |