

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P331954-940

Luminaire Tested: **S123DIP-S560D1195U940-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331954-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-17,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DIP-S560D1195U940-4F0-1E-UDD-F4
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1195 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5921.6 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Semi-Indirect

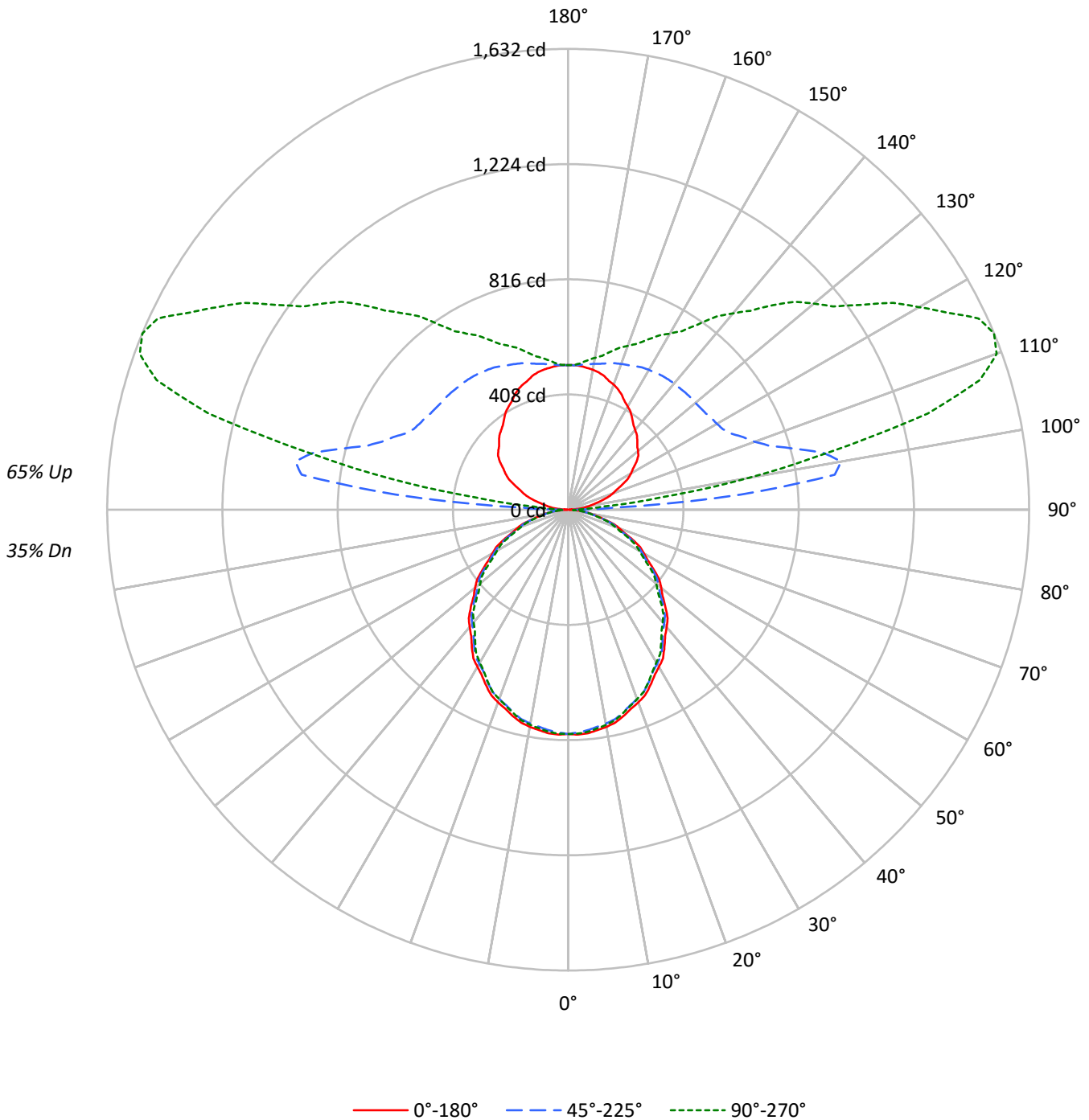
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331954-940

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P331954-940

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-F4

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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 104 | 104 | 104 | 104 | 94 | 94 | 94 | 94 | 75 | 75 | 75 | 58 | 58 | 58 | 42 | 42 | 42 | 35 |
| 1 | 94 | 90 | 86 | 83 | 85 | 82 | 78 | 75 | 66 | 63 | 61 | 51 | 49 | 48 | 37 | 36 | 36 | 29 |
| 2 | 86 | 79 | 73 | 68 | 77 | 71 | 66 | 62 | 57 | 54 | 51 | 45 | 42 | 40 | 33 | 31 | 30 | 25 |
| 3 | 78 | 69 | 62 | 56 | 70 | 63 | 56 | 52 | 51 | 46 | 43 | 39 | 36 | 34 | 29 | 27 | 25 | 21 |
| 4 | 72 | 61 | 53 | 47 | 64 | 55 | 49 | 44 | 45 | 40 | 36 | 35 | 32 | 29 | 26 | 24 | 22 | 18 |
| 5 | 66 | 54 | 46 | 40 | 59 | 49 | 42 | 37 | 40 | 35 | 31 | 31 | 28 | 25 | 23 | 21 | 19 | 15 |
| 6 | 60 | 49 | 41 | 35 | 54 | 44 | 37 | 32 | 36 | 31 | 27 | 28 | 25 | 22 | 21 | 19 | 17 | 14 |
| 7 | 56 | 44 | 36 | 31 | 50 | 40 | 33 | 28 | 33 | 27 | 24 | 26 | 22 | 19 | 19 | 17 | 15 | 12 |
| 8 | 52 | 40 | 32 | 27 | 47 | 36 | 29 | 25 | 30 | 25 | 21 | 23 | 20 | 17 | 18 | 15 | 13 | 11 |
| 9 | 48 | 36 | 29 | 24 | 43 | 33 | 26 | 22 | 27 | 22 | 19 | 22 | 18 | 15 | 16 | 14 | 12 | 10 |
| 10 | 45 | 33 | 26 | 21 | 40 | 30 | 24 | 20 | 25 | 20 | 17 | 20 | 16 | 14 | 15 | 13 | 11 | 9 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 8551 | 8551 | 8551 |
| 5° | 8590 | 8473 | 8532 |
| 10° | 8534 | 8400 | 8451 |
| 15° | 8433 | 8304 | 8320 |
| 20° | 8317 | 8168 | 8176 |
| 25° | 8162 | 8007 | 7991 |
| 30° | 7988 | 7828 | 7768 |
| 35° | 7808 | 7638 | 7540 |
| 40° | 7620 | 7429 | 7314 |
| 45° | 7415 | 7237 | 7060 |
| 50° | 7206 | 7000 | 6805 |
| 55° | 6934 | 6756 | 6549 |
| 60° | 6661 | 6469 | 6265 |
| 65° | 6421 | 6159 | 5968 |
| 70° | 6061 | 5803 | 5545 |
| 75° | 5540 | 5340 | 5115 |
| 80° | 4996 | 4785 | 4742 |
| 85° | 4384 | 4224 | 4051 |



TEST NUMBER: P331954-940

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-F4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 74.8 | 1.3 |
| 10°-20° | 211.3 | 3.6 |
| 20°-30° | 312.1 | 5.3 |
| 30°-40° | 364.6 | 6.2 |
| 40°-50° | 366.5 | 6.2 |
| 50°-60° | 322.0 | 5.4 |
| 60°-70° | 239.9 | 4.1 |
| 70°-80° | 136.7 | 2.3 |
| 80°-90° | 43.2 | 0.7 |
| 90°-100° | 284.8 | 4.8 |
| 100°-110° | 806.5 | 13.6 |
| 110°-120° | 793.4 | 13.4 |
| 120°-130° | 632.8 | 10.7 |
| 130°-140° | 498.9 | 8.4 |
| 140°-150° | 372.4 | 6.3 |
| 150°-160° | 259.6 | 4.4 |
| 160°-170° | 152.5 | 2.6 |
| 170°-180° | 49.6 | 0.8 |
| 0°-30° | 598.2 | 10.1 |
| 0°-40° | 962.8 | 16.3 |
| 0°-60° | 1651.3 | 27.9 |
| 0°-90° | 2071.1 | 35.0 |
| 90°-120° | 1884.7 | 31.8 |
| 90°-150° | 3388.9 | 57.2 |
| 90°-180° | 3851.0 | 65.0 |
| 0°-180° | 5921.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|------|------|
| 0° | 794 | 794 | 794 | 794 | 794 | |
| 5° | 795 | 791 | 784 | 791 | 790 | 75 |
| 15° | 757 | 754 | 745 | 750 | 747 | 213 |
| 25° | 687 | 683 | 674 | 675 | 673 | 316 |
| 35° | 594 | 590 | 581 | 577 | 574 | 372 |
| 45° | 487 | 484 | 475 | 467 | 464 | 376 |
| 55° | 370 | 368 | 360 | 353 | 349 | 331 |
| 65° | 252 | 248 | 242 | 236 | 234 | 249 |
| 75° | 133 | 131 | 128 | 125 | 123 | 142 |
| 85° | 36 | 34 | 34 | 33 | 33 | 39 |
| 90° | 2 | 12 | 26 | 29 | 30 | 4 |
| 95° | 35 | 114 | 614 | 179 | 120 | 38 |
| 105° | 120 | 178 | 833 | 1457 | 1318 | 128 |
| 115° | 212 | 265 | 637 | 1397 | 1603 | 210 |
| 125° | 295 | 349 | 595 | 1077 | 1264 | 262 |
| 135° | 346 | 413 | 586 | 887 | 1025 | 267 |
| 145° | 395 | 452 | 579 | 728 | 801 | 247 |
| 155° | 449 | 484 | 560 | 637 | 664 | 206 |
| 165° | 490 | 504 | 537 | 569 | 579 | 138 |
| 175° | 511 | 511 | 515 | 522 | 521 | 48 |
| 180° | 512 | 512 | 512 | 512 | 512 | |



TEST NUMBER: P331954-940

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 0° | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 |
| 2.5° | 797.1 | 796.7 | 796.2 | 795.7 | 795.2 | 794.2 | 792.9 | 791.6 | 790.3 | 789.0 | 790.1 |
| 5° | 795.0 | 794.3 | 793.5 | 792.8 | 792.0 | 790.9 | 789.2 | 787.5 | 785.9 | 784.2 | 785.7 |
| 7.5° | 787.3 | 786.6 | 785.8 | 785.1 | 784.3 | 783.0 | 781.3 | 779.5 | 777.8 | 776.1 | 777.5 |
| 10° | 780.8 | 780.0 | 779.3 | 778.5 | 777.8 | 776.3 | 774.4 | 772.4 | 770.4 | 768.5 | 769.8 |
| 12.5° | 772.0 | 771.3 | 770.7 | 770.1 | 769.5 | 768.2 | 766.3 | 764.5 | 762.7 | 760.8 | 761.8 |
| 15° | 756.8 | 756.3 | 755.6 | 755.0 | 754.4 | 753.1 | 751.2 | 749.2 | 747.2 | 745.2 | 746.5 |
| 17.5° | 739.2 | 738.4 | 737.6 | 736.8 | 736.0 | 734.7 | 732.7 | 730.8 | 728.8 | 726.7 | 727.6 |
| 20° | 726.1 | 725.2 | 724.2 | 723.4 | 722.5 | 721.0 | 719.1 | 717.1 | 715.1 | 713.1 | 713.7 |
| 22.5° | 711.3 | 710.4 | 709.5 | 708.6 | 707.7 | 706.2 | 704.3 | 702.3 | 700.3 | 698.4 | 698.8 |
| 25° | 687.2 | 686.3 | 685.4 | 684.5 | 683.5 | 682.1 | 680.1 | 678.1 | 676.2 | 674.2 | 674.3 |
| 27.5° | 661.4 | 660.5 | 659.6 | 658.7 | 657.8 | 656.3 | 654.2 | 652.1 | 650.0 | 647.8 | 647.9 |
| 30° | 642.7 | 642.0 | 641.2 | 640.5 | 639.7 | 638.3 | 636.1 | 634.0 | 632.0 | 629.8 | 629.8 |
| 32.5° | 624.2 | 623.2 | 622.1 | 621.2 | 620.2 | 618.8 | 617.2 | 615.5 | 613.9 | 612.3 | 611.4 |
| 35° | 594.2 | 593.3 | 592.5 | 591.6 | 590.7 | 589.2 | 587.2 | 585.2 | 583.3 | 581.3 | 580.4 |
| 37.5° | 563.7 | 562.5 | 561.3 | 560.2 | 559.0 | 557.5 | 555.4 | 553.5 | 551.4 | 549.5 | 548.4 |
| 40° | 542.3 | 541.4 | 540.6 | 539.7 | 538.7 | 537.2 | 535.0 | 533.0 | 530.8 | 528.7 | 527.4 |
| 42.5° | 521.0 | 520.0 | 519.0 | 517.9 | 516.9 | 515.3 | 513.2 | 511.1 | 509.0 | 506.8 | 505.6 |
| 45° | 487.1 | 486.4 | 485.8 | 485.2 | 484.6 | 483.3 | 481.3 | 479.4 | 477.4 | 475.4 | 473.6 |
| 47.5° | 453.3 | 452.4 | 451.6 | 450.7 | 449.8 | 448.4 | 446.6 | 444.7 | 442.8 | 441.0 | 439.2 |
| 50° | 430.3 | 429.5 | 428.8 | 428.0 | 427.3 | 426.0 | 423.9 | 422.0 | 420.0 | 418.0 | 416.3 |
| 52.5° | 406.3 | 405.7 | 405.3 | 404.7 | 404.2 | 402.9 | 400.8 | 398.8 | 396.6 | 394.6 | 393.2 |
| 55° | 369.5 | 369.3 | 369.3 | 369.1 | 368.9 | 367.8 | 365.9 | 363.9 | 361.9 | 360.0 | 358.3 |
| 57.5° | 334.6 | 334.0 | 333.5 | 333.1 | 332.5 | 331.4 | 329.8 | 328.3 | 326.7 | 325.1 | 323.7 |
| 60° | 309.4 | 309.2 | 309.2 | 309.0 | 308.8 | 307.8 | 306.0 | 304.2 | 302.4 | 300.5 | 299.2 |
| 62.5° | 287.0 | 286.6 | 286.2 | 285.9 | 285.4 | 284.4 | 282.5 | 280.7 | 278.8 | 277.1 | 275.7 |
| 65° | 252.1 | 251.3 | 250.6 | 249.8 | 249.1 | 247.9 | 246.4 | 244.9 | 243.3 | 241.8 | 240.6 |
| 67.5° | 215.0 | 214.4 | 213.7 | 213.0 | 212.3 | 211.4 | 210.3 | 209.1 | 207.9 | 206.9 | 205.8 |
| 70° | 192.6 | 191.7 | 190.8 | 189.9 | 189.0 | 188.1 | 187.2 | 186.3 | 185.3 | 184.4 | 183.3 |
| 72.5° | 169.2 | 168.4 | 167.8 | 167.1 | 166.5 | 165.6 | 164.6 | 163.5 | 162.5 | 161.5 | 160.5 |
| 75° | 133.2 | 132.6 | 132.0 | 131.3 | 130.8 | 130.3 | 129.7 | 129.3 | 128.9 | 128.4 | 127.7 |
| 77.5° | 101.4 | 101.0 | 100.7 | 100.4 | 100.0 | 99.6 | 99.1 | 98.5 | 97.9 | 97.4 | 96.9 |
| 80° | 80.6 | 80.2 | 79.7 | 79.3 | 78.7 | 78.4 | 78.1 | 77.8 | 77.5 | 77.2 | 77.0 |
| 82.5° | 60.4 | 60.3 | 60.2 | 60.1 | 60.0 | 59.9 | 59.9 | 59.8 | 59.7 | 59.7 | 59.4 |
| 85° | 35.5 | 35.2 | 35.0 | 34.6 | 34.3 | 34.2 | 34.2 | 34.2 | 34.2 | 34.2 | 33.9 |
| 87.5° | 14.6 | 14.7 | 14.7 | 15.0 | 15.1 | 15.2 | 15.7 | 16.2 | 16.7 | 17.2 | 16.9 |
| 90° | 2.1 | 4.1 | 6.2 | 9.4 | 11.4 | 13.5 | 16.6 | 19.7 | 22.8 | 25.9 | 24.9 |
| 92.5° | 12.8 | 19.1 | 27.7 | 35.8 | 44.6 | 59.9 | 87.0 | 131.6 | 175.3 | 159.3 | 120.2 |
| 95° | 35.2 | 38.3 | 49.8 | 67.3 | 94.3 | 134.6 | 222.7 | 377.1 | 547.1 | 614.4 | 498.3 |
| 97.5° | 60.1 | 61.1 | 70.0 | 85.3 | 111.9 | 155.6 | 239.8 | 413.8 | 697.1 | 952.1 | 1018.6 |
| 100° | 76.7 | 77.7 | 85.0 | 99.4 | 124.3 | 164.7 | 237.3 | 390.6 | 663.1 | 981.1 | 1185.3 |
| 102.5° | 94.1 | 95.9 | 102.4 | 116.0 | 138.4 | 175.5 | 240.6 | 370.7 | 613.3 | 927.3 | 1193.5 |
| 105° | 120.2 | 123.3 | 129.5 | 142.0 | 161.6 | 193.8 | 249.7 | 356.4 | 552.2 | 832.9 | 1130.3 |
| 107.5° | 147.9 | 151.1 | 157.0 | 169.2 | 187.7 | 217.6 | 266.7 | 355.3 | 513.3 | 749.7 | 1019.7 |
| 110° | 167.8 | 170.9 | 176.1 | 187.5 | 205.1 | 234.2 | 280.8 | 359.5 | 498.3 | 702.4 | 950.0 |



TEST NUMBER: P331954-940

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 186.1 | 189.2 | 194.4 | 205.7 | 223.4 | 251.6 | 294.9 | 367.8 | 490.1 | 670.9 | 889.6 |
| 115° | 212.4 | 216.5 | 222.7 | 233.1 | 250.7 | 278.7 | 318.1 | 381.3 | 487.0 | 637.1 | 816.4 |
| 117.5° | 238.7 | 243.4 | 248.6 | 258.2 | 277.9 | 303.8 | 342.7 | 399.0 | 488.8 | 617.2 | 772.2 |
| 120° | 256.9 | 260.0 | 265.2 | 275.6 | 295.2 | 321.2 | 358.5 | 412.3 | 492.1 | 608.1 | 749.0 |
| 122.5° | 272.7 | 275.8 | 281.0 | 292.1 | 311.0 | 338.6 | 375.1 | 424.8 | 497.9 | 602.4 | 730.0 |
| 125° | 295.2 | 297.4 | 303.5 | 315.0 | 334.7 | 362.6 | 398.9 | 444.4 | 506.6 | 594.7 | 705.5 |
| 127.5° | 312.5 | 315.6 | 323.2 | 334.8 | 356.6 | 384.6 | 419.5 | 460.7 | 516.6 | 590.9 | 684.0 |
| 130° | 323.2 | 326.4 | 335.6 | 348.1 | 369.9 | 397.8 | 432.0 | 471.4 | 523.2 | 588.4 | 672.3 |
| 132.5° | 331.5 | 335.5 | 345.6 | 360.5 | 382.3 | 409.5 | 442.8 | 481.3 | 528.2 | 587.6 | 661.6 |
| 135° | 346.1 | 350.2 | 361.6 | 377.1 | 398.9 | 426.9 | 459.0 | 494.2 | 535.7 | 586.4 | 647.6 |
| 137.5° | 359.7 | 364.1 | 375.2 | 391.8 | 413.4 | 439.3 | 470.1 | 503.7 | 540.6 | 584.1 | 635.3 |
| 140° | 368.8 | 374.0 | 384.3 | 400.9 | 421.7 | 447.5 | 477.6 | 508.7 | 543.9 | 583.3 | 627.9 |
| 142.5° | 378.8 | 383.2 | 394.3 | 409.2 | 430.0 | 454.2 | 483.4 | 513.6 | 546.4 | 581.7 | 621.2 |
| 145° | 394.8 | 397.8 | 407.2 | 422.7 | 440.3 | 464.1 | 491.1 | 519.1 | 548.0 | 579.2 | 612.3 |
| 147.5° | 410.9 | 412.8 | 421.9 | 435.3 | 452.4 | 472.6 | 497.3 | 522.4 | 548.0 | 575.2 | 603.6 |
| 150° | 421.7 | 422.7 | 431.0 | 444.4 | 459.0 | 477.6 | 501.4 | 523.2 | 548.0 | 571.9 | 597.8 |
| 152.5° | 432.5 | 432.7 | 441.0 | 452.7 | 465.6 | 483.4 | 503.9 | 524.9 | 545.5 | 567.8 | 591.2 |
| 155° | 448.6 | 448.6 | 454.9 | 465.2 | 476.5 | 491.1 | 508.7 | 525.3 | 542.9 | 560.5 | 581.2 |
| 157.5° | 461.5 | 462.3 | 467.3 | 476.4 | 486.1 | 497.3 | 511.4 | 526.3 | 539.4 | 554.1 | 570.0 |
| 160° | 471.4 | 471.4 | 475.5 | 483.8 | 491.1 | 501.4 | 513.9 | 526.3 | 537.7 | 549.1 | 562.6 |
| 162.5° | 478.8 | 478.8 | 482.1 | 488.8 | 495.3 | 503.9 | 514.7 | 525.5 | 534.4 | 544.1 | 555.1 |
| 165° | 490.1 | 489.0 | 491.1 | 496.2 | 500.4 | 507.7 | 515.9 | 523.2 | 529.4 | 536.6 | 544.9 |
| 167.5° | 498.6 | 497.3 | 498.3 | 502.3 | 505.2 | 509.7 | 515.8 | 521.6 | 524.4 | 529.2 | 535.2 |
| 170° | 503.5 | 501.4 | 502.5 | 505.6 | 507.7 | 509.7 | 514.9 | 519.1 | 521.1 | 524.2 | 529.4 |
| 172.5° | 506.8 | 505.6 | 505.8 | 508.1 | 509.3 | 510.6 | 514.9 | 518.3 | 518.6 | 520.0 | 523.6 |
| 175° | 510.8 | 509.7 | 508.7 | 510.8 | 510.8 | 511.8 | 513.9 | 515.9 | 514.9 | 514.9 | 517.0 |
| 177.5° | 512.6 | 511.8 | 511.0 | 511.8 | 511.8 | 511.8 | 512.6 | 514.2 | 512.6 | 511.8 | 512.6 |
| 180° | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 |



TEST NUMBER: P331954-940

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 | 794.4 |
| 2.5° | 791.4 | 792.6 | 793.8 | 794.3 | 794.2 | 794.1 | 794.0 | 793.9 |
| 5° | 787.2 | 788.7 | 790.2 | 790.9 | 790.5 | 790.2 | 790.0 | 789.6 |
| 7.5° | 778.8 | 780.2 | 781.6 | 782.1 | 781.9 | 781.8 | 781.6 | 781.4 |
| 10° | 771.2 | 772.6 | 773.9 | 774.5 | 774.2 | 773.8 | 773.6 | 773.2 |
| 12.5° | 762.8 | 763.8 | 764.8 | 765.2 | 765.0 | 764.8 | 764.6 | 764.5 |
| 15° | 747.7 | 748.9 | 750.1 | 750.2 | 749.3 | 748.4 | 747.5 | 746.6 |
| 17.5° | 728.5 | 729.3 | 730.2 | 730.4 | 730.1 | 729.8 | 729.4 | 729.1 |
| 20° | 714.3 | 715.0 | 715.5 | 715.6 | 715.2 | 714.7 | 714.3 | 713.8 |
| 22.5° | 699.4 | 699.8 | 700.3 | 700.3 | 699.7 | 699.1 | 698.6 | 697.9 |
| 25° | 674.5 | 674.7 | 674.8 | 674.7 | 674.2 | 673.8 | 673.2 | 672.8 |
| 27.5° | 648.1 | 648.2 | 648.3 | 648.1 | 647.5 | 646.9 | 646.3 | 645.8 |
| 30° | 629.8 | 629.8 | 629.8 | 629.3 | 628.2 | 627.1 | 626.1 | 625.0 |
| 32.5° | 610.6 | 609.8 | 608.9 | 608.1 | 607.6 | 607.1 | 606.5 | 605.9 |
| 35° | 579.4 | 578.5 | 577.7 | 576.8 | 576.0 | 575.3 | 574.5 | 573.8 |
| 37.5° | 547.2 | 546.2 | 545.1 | 544.3 | 543.9 | 543.3 | 542.9 | 542.3 |
| 40° | 526.3 | 525.0 | 523.9 | 522.9 | 522.3 | 521.7 | 521.1 | 520.5 |
| 42.5° | 504.4 | 503.2 | 501.9 | 501.1 | 500.4 | 499.9 | 499.3 | 498.6 |
| 45° | 471.8 | 469.9 | 468.1 | 466.8 | 466.1 | 465.3 | 464.6 | 463.8 |
| 47.5° | 437.4 | 435.6 | 433.8 | 432.6 | 431.9 | 431.2 | 430.6 | 429.9 |
| 50° | 414.7 | 413.0 | 411.3 | 410.1 | 409.1 | 408.2 | 407.3 | 406.4 |
| 52.5° | 391.7 | 390.3 | 388.9 | 387.6 | 386.7 | 385.8 | 385.0 | 384.1 |
| 55° | 356.6 | 355.0 | 353.3 | 352.0 | 351.3 | 350.5 | 349.8 | 349.0 |
| 57.5° | 322.2 | 320.7 | 319.2 | 318.0 | 317.1 | 316.3 | 315.4 | 314.5 |
| 60° | 297.8 | 296.5 | 295.1 | 294.0 | 293.3 | 292.5 | 291.8 | 291.0 |
| 62.5° | 274.3 | 273.0 | 271.6 | 270.6 | 270.1 | 269.7 | 269.1 | 268.6 |
| 65° | 239.3 | 238.2 | 236.9 | 236.1 | 235.7 | 235.2 | 234.8 | 234.3 |
| 67.5° | 204.7 | 203.7 | 202.6 | 201.7 | 201.1 | 200.5 | 199.8 | 199.2 |
| 70° | 182.3 | 181.3 | 180.2 | 179.2 | 178.5 | 177.7 | 177.0 | 176.2 |
| 72.5° | 159.6 | 158.6 | 157.7 | 157.0 | 156.7 | 156.2 | 155.9 | 155.4 |
| 75° | 126.9 | 126.2 | 125.4 | 124.8 | 124.3 | 123.9 | 123.4 | 123.0 |
| 77.5° | 96.4 | 95.9 | 95.3 | 95.1 | 95.1 | 95.1 | 95.1 | 95.1 |
| 80° | 76.9 | 76.7 | 76.6 | 76.5 | 76.5 | 76.5 | 76.5 | 76.5 |
| 82.5° | 59.1 | 58.9 | 58.6 | 58.4 | 58.3 | 58.1 | 58.1 | 58.0 |
| 85° | 33.5 | 33.3 | 32.9 | 32.8 | 32.8 | 32.8 | 32.8 | 32.8 |
| 87.5° | 16.9 | 17.0 | 17.1 | 17.5 | 17.3 | 17.5 | 17.7 | 17.5 |
| 90° | 25.9 | 26.9 | 28.0 | 30.1 | 29.0 | 30.1 | 31.1 | 30.1 |
| 92.5° | 87.2 | 69.2 | 61.1 | 55.7 | 53.9 | 50.7 | 51.8 | 49.9 |
| 95° | 373.0 | 252.8 | 197.9 | 160.6 | 140.9 | 131.6 | 124.3 | 120.2 |
| 97.5° | 929.7 | 744.7 | 611.1 | 487.1 | 410.7 | 364.1 | 336.1 | 327.2 |
| 100° | 1221.5 | 1137.6 | 1016.4 | 869.2 | 764.6 | 688.9 | 648.5 | 649.6 |
| 102.5° | 1318.5 | 1315.7 | 1245.1 | 1151.8 | 1070.4 | 1010.6 | 976.8 | 953.0 |
| 105° | 1346.8 | 1450.5 | 1470.2 | 1443.2 | 1395.5 | 1356.2 | 1323.0 | 1317.9 |
| 107.5° | 1265.2 | 1433.4 | 1524.2 | 1561.1 | 1561.9 | 1548.6 | 1537.5 | 1527.9 |
| 110° | 1187.3 | 1378.0 | 1508.5 | 1581.0 | 1610.0 | 1618.3 | 1616.2 | 1614.2 |



TEST NUMBER: P331954-940

CATALOG NUMBER: S123DIP-S560D1195U940-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 1110.2 | 1305.0 | 1451.3 | 1544.5 | 1597.6 | 1623.3 | 1631.1 | 1631.6 |
| 115° | 1008.1 | 1188.3 | 1340.6 | 1453.6 | 1531.2 | 1576.8 | 1597.6 | 1602.8 |
| 117.5° | 934.1 | 1089.7 | 1226.5 | 1341.0 | 1422.1 | 1474.3 | 1504.1 | 1511.2 |
| 120° | 895.1 | 1035.0 | 1159.3 | 1264.0 | 1345.8 | 1403.8 | 1428.7 | 1434.9 |
| 122.5° | 864.4 | 991.0 | 1106.3 | 1203.5 | 1276.2 | 1328.4 | 1355.8 | 1363.6 |
| 125° | 823.7 | 936.6 | 1036.0 | 1118.9 | 1185.3 | 1230.8 | 1256.7 | 1264.0 |
| 127.5° | 788.0 | 888.7 | 978.4 | 1053.8 | 1112.9 | 1151.8 | 1175.3 | 1181.9 |
| 130° | 765.6 | 858.9 | 942.8 | 1013.3 | 1068.2 | 1105.5 | 1127.2 | 1135.5 |
| 132.5° | 744.9 | 830.7 | 908.8 | 976.0 | 1027.5 | 1064.8 | 1084.1 | 1089.9 |
| 135° | 716.9 | 790.5 | 857.8 | 916.9 | 967.7 | 998.7 | 1017.4 | 1024.7 |
| 137.5° | 691.4 | 751.7 | 809.8 | 860.9 | 903.7 | 935.1 | 950.8 | 955.6 |
| 140° | 676.5 | 729.3 | 779.1 | 823.7 | 863.0 | 892.1 | 908.6 | 907.6 |
| 142.5° | 662.5 | 707.8 | 750.9 | 789.7 | 823.2 | 848.9 | 863.8 | 862.8 |
| 145° | 645.4 | 679.7 | 712.8 | 742.8 | 768.7 | 790.5 | 798.8 | 800.8 |
| 147.5° | 631.6 | 658.7 | 685.5 | 706.8 | 726.5 | 741.2 | 749.0 | 749.8 |
| 150° | 621.6 | 645.4 | 667.2 | 686.9 | 702.4 | 713.8 | 720.1 | 720.1 |
| 152.5° | 612.5 | 633.0 | 652.3 | 668.7 | 680.9 | 691.4 | 695.2 | 695.2 |
| 155° | 598.8 | 615.4 | 631.0 | 643.4 | 652.7 | 661.0 | 663.1 | 664.1 |
| 157.5° | 584.3 | 598.2 | 610.2 | 619.9 | 628.0 | 634.3 | 635.9 | 635.7 |
| 160° | 576.0 | 587.5 | 597.8 | 605.0 | 612.3 | 618.5 | 618.5 | 617.5 |
| 162.5° | 566.1 | 575.9 | 585.3 | 591.7 | 596.6 | 601.9 | 601.9 | 600.9 |
| 165° | 553.2 | 559.5 | 566.7 | 571.9 | 576.0 | 580.1 | 579.2 | 579.2 |
| 167.5° | 542.1 | 546.8 | 551.0 | 554.7 | 556.5 | 559.5 | 558.4 | 558.4 |
| 170° | 534.6 | 537.7 | 541.8 | 543.9 | 544.9 | 547.1 | 546.0 | 546.0 |
| 172.5° | 528.0 | 530.2 | 533.6 | 534.8 | 535.0 | 537.1 | 535.2 | 534.4 |
| 175° | 519.1 | 520.0 | 522.2 | 522.2 | 522.2 | 523.2 | 522.2 | 521.1 |
| 177.5° | 513.4 | 514.2 | 515.1 | 515.1 | 514.2 | 515.1 | 513.4 | 513.4 |
| 180° | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 | 511.8 |

(END OF REPORT)