

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: P331283-840

Luminaire Tested: **S122DIP-S290D1080U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331283-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-8,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122DIP-S290D1080U840-4F0-1E-UDD-F1
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

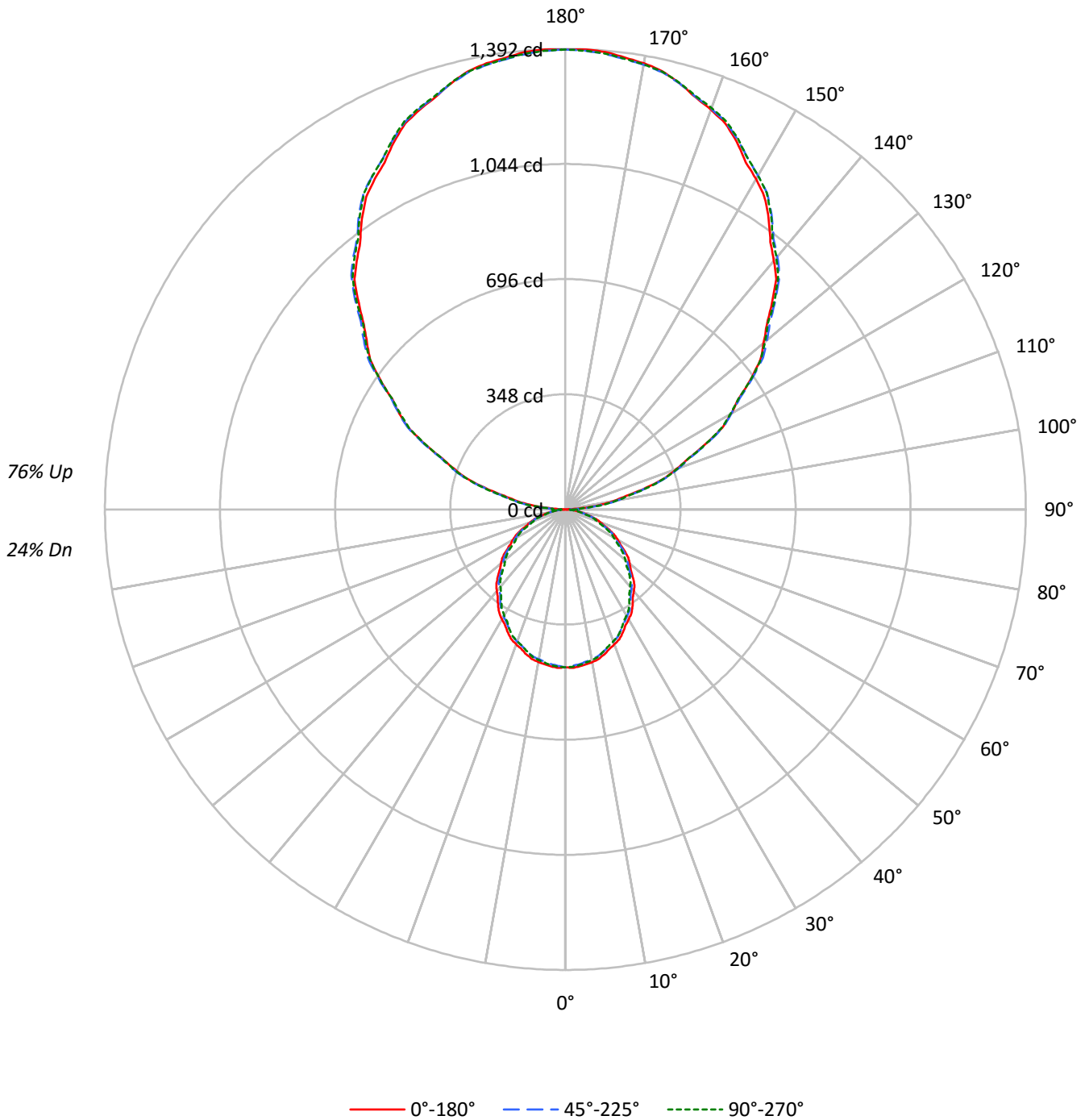
Lumens per Lamp: N/A
Luminaire Lumens: 5106.2 lumens
Efficiency: N/A
Efficacy: 121.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.3
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.2
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: P331283-840
CATALOG NUMBER: S122DIP-S290D1080U840-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P331283-840

CATALOG NUMBER: S122DIP-S290D1080U840-4F0-1E-UDD-F1

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 | 101 | 101 | 101 | 101 | 90 | 90 | 90 | 90 | 69 | 69 | 69 | 50 | 50 | 50 | 32 | 32 | 32 | 24 | | | | 24 |
| 1 | 92 | 88 | 84 | 81 | 82 | 78 | 75 | 72 | 60 | 58 | 56 | 44 | 42 | 41 | 28 | 28 | 27 | 20 | | | | 20 |
| 2 | 84 | 77 | 71 | 66 | 74 | 68 | 63 | 59 | 53 | 49 | 46 | 38 | 36 | 34 | 25 | 24 | 23 | 17 | | | | 17 |
| 3 | 76 | 67 | 60 | 55 | 67 | 60 | 54 | 49 | 46 | 42 | 39 | 34 | 31 | 29 | 22 | 21 | 19 | 14 | | | | 14 |
| 4 | 70 | 59 | 52 | 46 | 62 | 53 | 47 | 42 | 41 | 37 | 33 | 30 | 27 | 25 | 20 | 18 | 17 | 12 | | | | 12 |
| 5 | 64 | 53 | 45 | 39 | 56 | 47 | 41 | 36 | 37 | 32 | 28 | 27 | 24 | 21 | 18 | 16 | 14 | 11 | | | | 11 |
| 6 | 59 | 47 | 39 | 34 | 52 | 42 | 36 | 31 | 33 | 28 | 25 | 24 | 21 | 19 | 16 | 14 | 13 | 9 | | | | 9 |
| 7 | 54 | 42 | 35 | 29 | 48 | 38 | 31 | 27 | 30 | 25 | 21 | 22 | 19 | 16 | 15 | 13 | 11 | 8 | | | | 8 |
| 8 | 50 | 38 | 31 | 26 | 44 | 34 | 28 | 23 | 27 | 22 | 19 | 20 | 17 | 14 | 13 | 11 | 10 | 7 | | | | 7 |
| 9 | 46 | 35 | 28 | 23 | 41 | 31 | 25 | 21 | 25 | 20 | 17 | 18 | 15 | 13 | 12 | 10 | 9 | 7 | | | | 7 |
| 10 | 43 | 32 | 25 | 20 | 38 | 29 | 23 | 18 | 23 | 18 | 15 | 17 | 14 | 12 | 11 | 10 | 8 | 6 | | | | 6 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7703 | 7703 | 7703 |
| 5° | 7733 | 7621 | 7666 |
| 10° | 7688 | 7543 | 7581 |
| 15° | 7590 | 7447 | 7438 |
| 20° | 7455 | 7301 | 7290 |
| 25° | 7322 | 7119 | 7119 |
| 30° | 7150 | 6952 | 6893 |
| 35° | 6991 | 6753 | 6654 |
| 40° | 6787 | 6555 | 6431 |
| 45° | 6588 | 6357 | 6202 |
| 50° | 6373 | 6154 | 5935 |
| 55° | 6145 | 5917 | 5695 |
| 60° | 5896 | 5628 | 5422 |
| 65° | 5624 | 5349 | 5100 |
| 70° | 5282 | 4999 | 4763 |
| 75° | 4810 | 4604 | 4492 |
| 80° | 4258 | 4138 | 3924 |
| 85° | 3483 | 3316 | 2983 |



TEST NUMBER: P331283-840

CATALOG NUMBER: S122DIP-S290D1080U840-4F0-1E-UDD-F1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 44.9 | 0.9 |
| 10°-20° | 126.2 | 2.5 |
| 20°-30° | 185.5 | 3.6 |
| 30°-40° | 215.5 | 4.2 |
| 40°-50° | 215.3 | 4.2 |
| 50°-60° | 187.7 | 3.7 |
| 60°-70° | 138.8 | 2.7 |
| 70°-80° | 78.6 | 1.5 |
| 80°-90° | 26.7 | 0.5 |
| 90°-100° | 88.1 | 1.7 |
| 100°-110° | 273.6 | 5.4 |
| 110°-120° | 467.6 | 9.2 |
| 120°-130° | 614.9 | 12.0 |
| 130°-140° | 690.2 | 13.5 |
| 140°-150° | 676.7 | 13.3 |
| 150°-160° | 567.6 | 11.1 |
| 160°-170° | 376.5 | 7.4 |
| 170°-180° | 131.6 | 2.6 |
| 0°-30° | 356.6 | 7.0 |
| 0°-40° | 572.2 | 11.2 |
| 0°-60° | 975.2 | 19.1 |
| 0°-90° | 1219.3 | 23.9 |
| 90°-120° | 829.3 | 16.2 |
| 90°-150° | 2811.1 | 55.1 |
| 90°-180° | 3887.0 | 76.1 |
| 0°-180° | 5106.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 477 | 477 | 477 | 477 | 477 | |
| 5° | 477 | 475 | 470 | 474 | 473 | 45 |
| 15° | 454 | 451 | 446 | 447 | 445 | 128 |
| 25° | 411 | 407 | 400 | 400 | 400 | 189 |
| 35° | 355 | 350 | 343 | 340 | 338 | 221 |
| 45° | 288 | 285 | 278 | 274 | 272 | 223 |
| 55° | 218 | 215 | 210 | 205 | 202 | 195 |
| 65° | 147 | 144 | 140 | 136 | 134 | 146 |
| 75° | 77 | 76 | 74 | 71 | 72 | 82 |
| 85° | 19 | 18 | 18 | 17 | 16 | 22 |
| 90° | 1 | 16 | 41 | 39 | 40 | 4 |
| 95° | 61 | 72 | 75 | 75 | 73 | 70 |
| 105° | 252 | 256 | 258 | 260 | 260 | 266 |
| 115° | 469 | 476 | 474 | 473 | 469 | 464 |
| 125° | 683 | 692 | 690 | 686 | 685 | 610 |
| 135° | 883 | 896 | 899 | 897 | 894 | 682 |
| 145° | 1072 | 1080 | 1087 | 1088 | 1084 | 670 |
| 155° | 1226 | 1229 | 1233 | 1238 | 1235 | 564 |
| 165° | 1334 | 1333 | 1333 | 1340 | 1335 | 376 |
| 175° | 1388 | 1384 | 1382 | 1389 | 1383 | 132 |
| 180° | 1390 | 1390 | 1390 | 1390 | 1390 | |



TEST NUMBER: P331283-840

CATALOG NUMBER: S122DIP-S290D1080U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 |
| 2.5° | 479.3 | 478.9 | 478.5 | 478.1 | 477.7 | 477.1 | 476.2 | 475.2 | 474.3 | 473.4 | 474.2 |
| 5° | 477.1 | 476.7 | 476.3 | 475.8 | 475.4 | 474.7 | 473.6 | 472.5 | 471.3 | 470.2 | 471.0 |
| 7.5° | 472.9 | 472.2 | 471.6 | 471.0 | 470.4 | 469.5 | 468.4 | 467.2 | 466.1 | 464.9 | 465.7 |
| 10° | 468.9 | 468.2 | 467.5 | 466.8 | 466.0 | 465.0 | 463.8 | 462.6 | 461.4 | 460.1 | 460.9 |
| 12.5° | 463.3 | 462.7 | 462.1 | 461.4 | 460.8 | 459.9 | 458.7 | 457.5 | 456.3 | 455.0 | 455.6 |
| 15° | 454.1 | 453.5 | 452.9 | 452.3 | 451.7 | 450.8 | 449.4 | 448.1 | 446.8 | 445.5 | 445.9 |
| 17.5° | 442.4 | 441.8 | 441.2 | 440.6 | 440.0 | 439.0 | 437.7 | 436.3 | 434.9 | 433.6 | 434.0 |
| 20° | 433.9 | 433.3 | 432.7 | 432.1 | 431.5 | 430.5 | 429.1 | 427.7 | 426.3 | 424.9 | 425.2 |
| 22.5° | 425.6 | 424.6 | 423.8 | 422.9 | 422.1 | 421.0 | 419.7 | 418.3 | 417.0 | 415.7 | 415.7 |
| 25° | 411.0 | 410.2 | 409.4 | 408.6 | 407.8 | 406.5 | 404.8 | 403.0 | 401.3 | 399.6 | 399.8 |
| 27.5° | 394.6 | 393.8 | 393.0 | 392.3 | 391.6 | 390.5 | 389.2 | 387.8 | 386.5 | 385.1 | 384.8 |
| 30° | 383.5 | 382.7 | 381.9 | 381.1 | 380.2 | 379.1 | 377.6 | 376.1 | 374.5 | 372.9 | 372.6 |
| 32.5° | 371.7 | 371.1 | 370.5 | 369.8 | 369.2 | 368.0 | 366.4 | 364.9 | 363.2 | 361.6 | 361.0 |
| 35° | 354.7 | 353.6 | 352.5 | 351.5 | 350.5 | 349.2 | 347.6 | 346.0 | 344.4 | 342.6 | 342.0 |
| 37.5° | 335.3 | 334.4 | 333.5 | 332.5 | 331.6 | 330.4 | 328.8 | 327.2 | 325.5 | 323.9 | 323.2 |
| 40° | 322.0 | 321.2 | 320.4 | 319.6 | 318.8 | 317.6 | 315.9 | 314.3 | 312.7 | 311.0 | 310.1 |
| 42.5° | 309.2 | 308.4 | 307.6 | 306.8 | 306.0 | 304.7 | 303.1 | 301.4 | 299.8 | 298.2 | 297.2 |
| 45° | 288.5 | 287.8 | 287.1 | 286.4 | 285.7 | 284.6 | 283.1 | 281.6 | 280.0 | 278.4 | 277.3 |
| 47.5° | 268.0 | 267.3 | 266.7 | 266.0 | 265.3 | 264.2 | 262.6 | 261.1 | 259.4 | 257.8 | 256.6 |
| 50° | 253.7 | 253.2 | 252.7 | 252.2 | 251.7 | 250.6 | 249.2 | 247.8 | 246.4 | 245.0 | 243.6 |
| 52.5° | 239.7 | 239.0 | 238.4 | 237.7 | 237.0 | 236.0 | 234.7 | 233.4 | 232.0 | 230.7 | 229.4 |
| 55° | 218.3 | 217.7 | 217.1 | 216.5 | 215.9 | 215.0 | 213.8 | 212.6 | 211.4 | 210.2 | 208.8 |
| 57.5° | 196.9 | 196.4 | 195.9 | 195.4 | 194.9 | 194.0 | 192.7 | 191.4 | 190.0 | 188.6 | 187.4 |
| 60° | 182.6 | 182.2 | 181.8 | 181.4 | 181.0 | 180.1 | 178.6 | 177.2 | 175.7 | 174.3 | 173.2 |
| 62.5° | 168.6 | 167.9 | 167.3 | 166.7 | 166.0 | 165.1 | 164.0 | 163.0 | 161.9 | 160.8 | 159.7 |
| 65° | 147.2 | 146.6 | 146.0 | 145.4 | 144.8 | 144.0 | 143.0 | 142.0 | 141.0 | 140.0 | 139.0 |
| 67.5° | 125.5 | 125.0 | 124.5 | 124.0 | 123.6 | 122.9 | 121.9 | 121.0 | 120.1 | 119.2 | 118.5 |
| 70° | 111.9 | 111.5 | 111.1 | 110.7 | 110.3 | 109.7 | 108.8 | 107.9 | 106.8 | 105.9 | 105.2 |
| 72.5° | 98.0 | 97.6 | 97.1 | 96.7 | 96.3 | 95.8 | 95.2 | 94.7 | 94.1 | 93.5 | 92.8 |
| 75° | 77.1 | 76.9 | 76.6 | 76.4 | 76.2 | 75.9 | 75.4 | 74.8 | 74.3 | 73.8 | 73.2 |
| 77.5° | 58.4 | 58.0 | 57.7 | 57.4 | 57.0 | 56.7 | 56.5 | 56.2 | 56.0 | 55.8 | 55.5 |
| 80° | 45.8 | 45.7 | 45.6 | 45.5 | 45.4 | 45.3 | 45.1 | 44.9 | 44.7 | 44.5 | 44.2 |
| 82.5° | 34.1 | 34.1 | 34.1 | 34.0 | 34.0 | 33.9 | 33.8 | 33.7 | 33.6 | 33.5 | 33.1 |
| 85° | 18.8 | 18.7 | 18.6 | 18.5 | 18.4 | 18.3 | 18.2 | 18.1 | 18.0 | 17.9 | 17.6 |
| 87.5° | 6.9 | 7.3 | 7.8 | 8.2 | 8.7 | 9.4 | 10.4 | 11.4 | 12.3 | 13.3 | 13.0 |
| 90° | 1.2 | 4.3 | 7.5 | 10.6 | 13.7 | 18.1 | 23.8 | 29.6 | 35.3 | 41.1 | 40.5 |
| 92.5° | 20.9 | 23.1 | 25.4 | 27.8 | 30.1 | 31.9 | 33.2 | 34.6 | 36.0 | 37.3 | 37.4 |
| 95° | 61.0 | 63.6 | 66.2 | 68.8 | 71.4 | 73.0 | 73.5 | 74.0 | 74.5 | 75.0 | 75.0 |
| 97.5° | 111.5 | 113.7 | 116.0 | 118.4 | 120.6 | 122.3 | 123.2 | 124.2 | 125.2 | 126.2 | 126.2 |
| 100° | 149.0 | 151.1 | 153.2 | 155.2 | 157.3 | 158.8 | 159.6 | 160.3 | 161.1 | 161.9 | 161.9 |
| 102.5° | 188.4 | 190.1 | 191.8 | 193.4 | 195.1 | 196.4 | 197.4 | 198.3 | 199.3 | 200.4 | 200.6 |
| 105° | 252.2 | 253.0 | 253.8 | 254.6 | 255.3 | 256.0 | 256.5 | 257.0 | 257.5 | 258.0 | 258.6 |
| 107.5° | 316.5 | 317.6 | 318.8 | 319.9 | 321.0 | 321.6 | 321.6 | 321.6 | 321.6 | 321.6 | 321.8 |
| 110° | 357.8 | 359.3 | 360.9 | 362.4 | 364.1 | 364.9 | 364.9 | 364.9 | 364.9 | 364.9 | 364.9 |



TEST NUMBER: P331283-840

CATALOG NUMBER: S122DIP-S290D1080U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 402.8 | 404.3 | 406.0 | 407.5 | 409.1 | 409.8 | 409.5 | 409.3 | 409.1 | 408.9 | 408.3 |
| 115° | 469.2 | 470.8 | 472.3 | 473.9 | 475.4 | 475.9 | 475.4 | 474.9 | 474.4 | 473.9 | 473.6 |
| 117.5° | 535.3 | 537.5 | 539.6 | 541.6 | 543.7 | 544.0 | 542.6 | 541.1 | 539.7 | 538.2 | 537.6 |
| 120° | 579.5 | 581.6 | 583.7 | 585.7 | 587.8 | 587.8 | 585.7 | 583.7 | 581.6 | 579.5 | 579.5 |
| 122.5° | 619.9 | 622.4 | 624.8 | 627.3 | 629.9 | 630.4 | 628.9 | 627.4 | 626.0 | 624.5 | 623.9 |
| 125° | 682.7 | 685.1 | 687.4 | 689.7 | 692.1 | 692.9 | 692.1 | 691.4 | 690.5 | 689.7 | 688.9 |
| 127.5° | 744.0 | 746.9 | 749.9 | 752.9 | 755.8 | 756.9 | 755.9 | 755.0 | 754.1 | 753.1 | 752.1 |
| 130° | 782.4 | 785.8 | 789.2 | 792.5 | 796.0 | 797.4 | 796.9 | 796.4 | 795.9 | 795.4 | 794.8 |
| 132.5° | 825.6 | 828.4 | 831.1 | 833.8 | 836.7 | 838.1 | 838.2 | 838.3 | 838.4 | 838.5 | 837.4 |
| 135° | 883.3 | 886.2 | 889.1 | 891.9 | 894.7 | 896.5 | 897.0 | 897.5 | 898.1 | 898.6 | 898.3 |
| 137.5° | 944.0 | 946.4 | 948.8 | 951.1 | 953.4 | 954.9 | 955.6 | 956.3 | 956.9 | 957.7 | 957.5 |
| 140° | 980.7 | 983.0 | 985.3 | 987.7 | 990.1 | 991.9 | 993.2 | 994.5 | 995.8 | 997.0 | 997.0 |
| 142.5° | 1018.2 | 1020.6 | 1022.9 | 1025.2 | 1027.5 | 1029.2 | 1030.1 | 1031.0 | 1031.9 | 1032.8 | 1033.0 |
| 145° | 1072.2 | 1074.0 | 1075.8 | 1077.6 | 1079.4 | 1081.2 | 1082.7 | 1084.3 | 1085.8 | 1087.4 | 1087.6 |
| 147.5° | 1120.2 | 1122.5 | 1124.6 | 1126.8 | 1129.0 | 1130.6 | 1131.7 | 1132.8 | 1133.8 | 1134.8 | 1135.4 |
| 150° | 1153.1 | 1154.7 | 1156.2 | 1157.8 | 1159.3 | 1160.6 | 1161.7 | 1162.8 | 1163.8 | 1164.9 | 1165.6 |
| 152.5° | 1182.1 | 1183.8 | 1185.3 | 1186.9 | 1188.4 | 1189.8 | 1191.1 | 1192.3 | 1193.7 | 1194.9 | 1195.9 |
| 155° | 1225.9 | 1226.6 | 1227.4 | 1228.2 | 1229.0 | 1229.7 | 1230.5 | 1231.3 | 1232.1 | 1232.8 | 1234.2 |
| 157.5° | 1263.1 | 1263.6 | 1264.1 | 1264.7 | 1265.3 | 1265.7 | 1266.2 | 1266.7 | 1267.1 | 1267.6 | 1269.4 |
| 160° | 1285.7 | 1286.2 | 1286.7 | 1287.2 | 1287.8 | 1288.1 | 1288.4 | 1288.7 | 1288.9 | 1289.2 | 1290.7 |
| 162.5° | 1306.3 | 1306.4 | 1306.5 | 1306.6 | 1306.8 | 1306.9 | 1307.2 | 1307.4 | 1307.7 | 1308.0 | 1309.7 |
| 165° | 1333.7 | 1333.5 | 1333.2 | 1332.9 | 1332.7 | 1332.6 | 1332.6 | 1332.6 | 1332.6 | 1332.6 | 1334.4 |
| 167.5° | 1356.8 | 1355.9 | 1355.1 | 1354.4 | 1353.6 | 1353.2 | 1353.1 | 1353.1 | 1353.0 | 1353.0 | 1354.8 |
| 170° | 1369.0 | 1368.2 | 1367.4 | 1366.5 | 1365.8 | 1365.3 | 1365.0 | 1364.7 | 1364.5 | 1364.2 | 1366.0 |
| 172.5° | 1377.4 | 1376.6 | 1375.8 | 1375.0 | 1374.2 | 1373.7 | 1373.5 | 1373.2 | 1372.9 | 1372.7 | 1374.5 |
| 175° | 1387.8 | 1386.9 | 1386.1 | 1385.3 | 1384.6 | 1383.9 | 1383.4 | 1382.9 | 1382.4 | 1381.8 | 1383.7 |
| 177.5° | 1391.9 | 1391.3 | 1390.7 | 1390.1 | 1389.5 | 1388.9 | 1388.5 | 1388.1 | 1387.7 | 1387.3 | 1388.5 |
| 180° | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 |



TEST NUMBER: P331283-840

CATALOG NUMBER: S122DIP-S290D1080U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 | 477.1 |
| 2.5° | 475.0 | 475.8 | 476.7 | 477.1 | 476.9 | 476.7 | 476.6 | 476.4 |
| 5° | 471.9 | 472.7 | 473.5 | 473.8 | 473.6 | 473.4 | 473.2 | 473.0 |
| 7.5° | 466.6 | 467.4 | 468.2 | 468.5 | 468.3 | 468.0 | 467.8 | 467.6 |
| 10° | 461.8 | 462.6 | 463.4 | 463.6 | 463.3 | 463.0 | 462.7 | 462.4 |
| 12.5° | 456.2 | 456.7 | 457.3 | 457.5 | 457.3 | 457.0 | 456.8 | 456.6 |
| 15° | 446.3 | 446.7 | 447.1 | 447.1 | 446.6 | 446.1 | 445.6 | 445.0 |
| 17.5° | 434.5 | 435.0 | 435.5 | 435.5 | 434.9 | 434.5 | 434.0 | 433.5 |
| 20° | 425.5 | 425.8 | 426.1 | 426.0 | 425.6 | 425.2 | 424.7 | 424.3 |
| 22.5° | 415.8 | 415.9 | 415.9 | 415.8 | 415.6 | 415.3 | 415.1 | 414.9 |
| 25° | 400.0 | 400.2 | 400.4 | 400.4 | 400.2 | 400.0 | 399.8 | 399.6 |
| 27.5° | 384.5 | 384.2 | 383.8 | 383.4 | 382.9 | 382.4 | 382.0 | 381.5 |
| 30° | 372.3 | 372.0 | 371.7 | 371.4 | 371.0 | 370.6 | 370.2 | 369.7 |
| 32.5° | 360.5 | 359.9 | 359.4 | 358.9 | 358.5 | 358.1 | 357.7 | 357.3 |
| 35° | 341.4 | 340.8 | 340.2 | 339.7 | 339.2 | 338.7 | 338.2 | 337.6 |
| 37.5° | 322.3 | 321.6 | 320.8 | 320.2 | 319.7 | 319.2 | 318.8 | 318.3 |
| 40° | 309.2 | 308.3 | 307.4 | 306.7 | 306.3 | 305.9 | 305.5 | 305.1 |
| 42.5° | 296.2 | 295.2 | 294.2 | 293.4 | 292.9 | 292.3 | 291.8 | 291.1 |
| 45° | 276.2 | 275.1 | 274.0 | 273.2 | 272.8 | 272.4 | 272.0 | 271.6 |
| 47.5° | 255.5 | 254.3 | 253.1 | 252.2 | 251.7 | 251.1 | 250.4 | 249.8 |
| 50° | 242.2 | 240.7 | 239.2 | 238.3 | 237.8 | 237.3 | 236.8 | 236.3 |
| 52.5° | 228.3 | 227.1 | 225.9 | 225.0 | 224.3 | 223.7 | 223.0 | 222.3 |
| 55° | 207.6 | 206.4 | 205.2 | 204.4 | 203.9 | 203.3 | 202.8 | 202.3 |
| 57.5° | 186.2 | 185.0 | 183.8 | 183.0 | 182.7 | 182.3 | 181.9 | 181.5 |
| 60° | 172.1 | 171.0 | 169.9 | 169.2 | 168.8 | 168.5 | 168.2 | 167.9 |
| 62.5° | 158.6 | 157.6 | 156.6 | 155.9 | 155.5 | 155.1 | 154.7 | 154.3 |
| 65° | 138.0 | 137.1 | 136.2 | 135.5 | 135.0 | 134.5 | 134.0 | 133.5 |
| 67.5° | 117.8 | 117.0 | 116.3 | 115.7 | 115.3 | 114.9 | 114.5 | 114.1 |
| 70° | 104.5 | 103.8 | 103.1 | 102.6 | 102.2 | 101.7 | 101.3 | 100.9 |
| 72.5° | 92.1 | 91.4 | 90.7 | 90.1 | 89.8 | 89.5 | 89.2 | 88.8 |
| 75° | 72.6 | 72.0 | 71.4 | 71.2 | 71.4 | 71.6 | 71.8 | 72.0 |
| 77.5° | 55.2 | 54.9 | 54.6 | 54.3 | 54.0 | 53.8 | 53.5 | 53.2 |
| 80° | 43.9 | 43.6 | 43.3 | 43.0 | 42.8 | 42.6 | 42.4 | 42.2 |
| 82.5° | 32.7 | 32.3 | 31.9 | 31.7 | 31.7 | 31.6 | 31.6 | 31.6 |
| 85° | 17.3 | 17.0 | 16.7 | 16.5 | 16.4 | 16.3 | 16.2 | 16.1 |
| 87.5° | 12.6 | 12.3 | 11.9 | 11.7 | 11.7 | 11.7 | 11.7 | 11.6 |
| 90° | 40.0 | 39.5 | 39.0 | 38.9 | 39.1 | 39.4 | 39.6 | 39.9 |
| 92.5° | 37.5 | 37.6 | 37.8 | 37.8 | 37.9 | 37.9 | 38.0 | 38.0 |
| 95° | 75.0 | 75.0 | 75.0 | 74.8 | 74.3 | 73.8 | 73.2 | 72.7 |
| 97.5° | 126.2 | 126.2 | 126.2 | 126.2 | 126.1 | 126.1 | 126.0 | 126.0 |
| 100° | 161.9 | 161.9 | 161.9 | 161.8 | 161.5 | 161.3 | 161.0 | 160.7 |
| 102.5° | 200.8 | 201.0 | 201.2 | 201.2 | 200.9 | 200.7 | 200.4 | 200.2 |
| 105° | 259.1 | 259.6 | 260.1 | 260.4 | 260.4 | 260.4 | 260.4 | 260.4 |
| 107.5° | 322.0 | 322.2 | 322.4 | 321.9 | 320.8 | 319.6 | 318.4 | 317.2 |
| 110° | 364.9 | 364.9 | 364.9 | 364.5 | 363.7 | 362.8 | 362.0 | 361.3 |



TEST NUMBER: P331283-840

CATALOG NUMBER: S122DIP-S290D1080U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 407.7 | 407.1 | 406.5 | 405.9 | 405.3 | 404.7 | 404.1 | 403.5 |
| 115° | 473.4 | 473.1 | 472.8 | 472.3 | 471.6 | 470.8 | 470.0 | 469.2 |
| 117.5° | 536.9 | 536.3 | 535.7 | 535.0 | 534.2 | 533.4 | 532.6 | 531.9 |
| 120° | 579.5 | 579.5 | 579.5 | 579.1 | 578.3 | 577.5 | 576.7 | 575.9 |
| 122.5° | 623.3 | 622.7 | 622.0 | 621.5 | 620.9 | 620.3 | 619.8 | 619.1 |
| 125° | 688.2 | 687.4 | 686.6 | 686.1 | 685.8 | 685.6 | 685.3 | 685.1 |
| 127.5° | 751.2 | 750.2 | 749.3 | 748.4 | 747.6 | 746.8 | 746.0 | 745.1 |
| 130° | 794.3 | 793.8 | 793.2 | 792.4 | 791.4 | 790.3 | 789.3 | 788.3 |
| 132.5° | 836.2 | 835.1 | 833.9 | 832.9 | 832.1 | 831.2 | 830.4 | 829.6 |
| 135° | 898.1 | 897.8 | 897.5 | 897.0 | 896.2 | 895.4 | 894.6 | 893.8 |
| 137.5° | 957.3 | 957.0 | 956.8 | 956.2 | 955.1 | 954.1 | 953.1 | 952.0 |
| 140° | 997.0 | 997.0 | 997.0 | 996.5 | 995.5 | 994.5 | 993.4 | 992.4 |
| 142.5° | 1033.2 | 1033.4 | 1033.6 | 1033.2 | 1032.1 | 1031.1 | 1030.1 | 1029.0 |
| 145° | 1087.9 | 1088.2 | 1088.4 | 1088.0 | 1087.0 | 1086.0 | 1084.9 | 1083.9 |
| 147.5° | 1136.0 | 1136.5 | 1137.1 | 1136.9 | 1135.9 | 1134.9 | 1133.9 | 1133.0 |
| 150° | 1166.4 | 1167.2 | 1168.0 | 1168.0 | 1167.2 | 1166.4 | 1165.6 | 1164.9 |
| 152.5° | 1196.9 | 1197.8 | 1198.8 | 1198.8 | 1197.8 | 1196.9 | 1195.9 | 1194.9 |
| 155° | 1235.5 | 1236.8 | 1238.1 | 1238.3 | 1237.6 | 1236.8 | 1236.0 | 1235.2 |
| 157.5° | 1271.1 | 1272.9 | 1274.7 | 1275.0 | 1273.6 | 1272.4 | 1271.2 | 1269.9 |
| 160° | 1292.3 | 1293.8 | 1295.5 | 1295.7 | 1294.6 | 1293.6 | 1292.5 | 1291.5 |
| 162.5° | 1311.5 | 1313.2 | 1315.0 | 1315.2 | 1314.0 | 1312.8 | 1311.5 | 1310.3 |
| 165° | 1336.3 | 1338.1 | 1339.9 | 1340.1 | 1338.9 | 1337.6 | 1336.3 | 1334.9 |
| 167.5° | 1356.7 | 1358.5 | 1360.3 | 1360.5 | 1359.2 | 1357.8 | 1356.5 | 1355.1 |
| 170° | 1367.9 | 1369.7 | 1371.5 | 1371.7 | 1370.1 | 1368.6 | 1367.0 | 1365.4 |
| 172.5° | 1376.3 | 1378.2 | 1380.0 | 1380.1 | 1378.6 | 1377.0 | 1375.4 | 1373.8 |
| 175° | 1385.5 | 1387.4 | 1389.2 | 1389.3 | 1387.8 | 1386.1 | 1384.6 | 1383.0 |
| 177.5° | 1389.8 | 1391.0 | 1392.2 | 1392.2 | 1391.0 | 1389.8 | 1388.5 | 1387.3 |
| 180° | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 |

(END OF REPORT)