

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: P331470-840

Luminaire Tested: **S122DIW-S290D435U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331470-840
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: S122DIW-S290D435U840-4F0-1E-UDD-F1
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 435 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2732.0 lumens
Efficiency: N/A
Efficacy: 118.8 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: General Diffuse

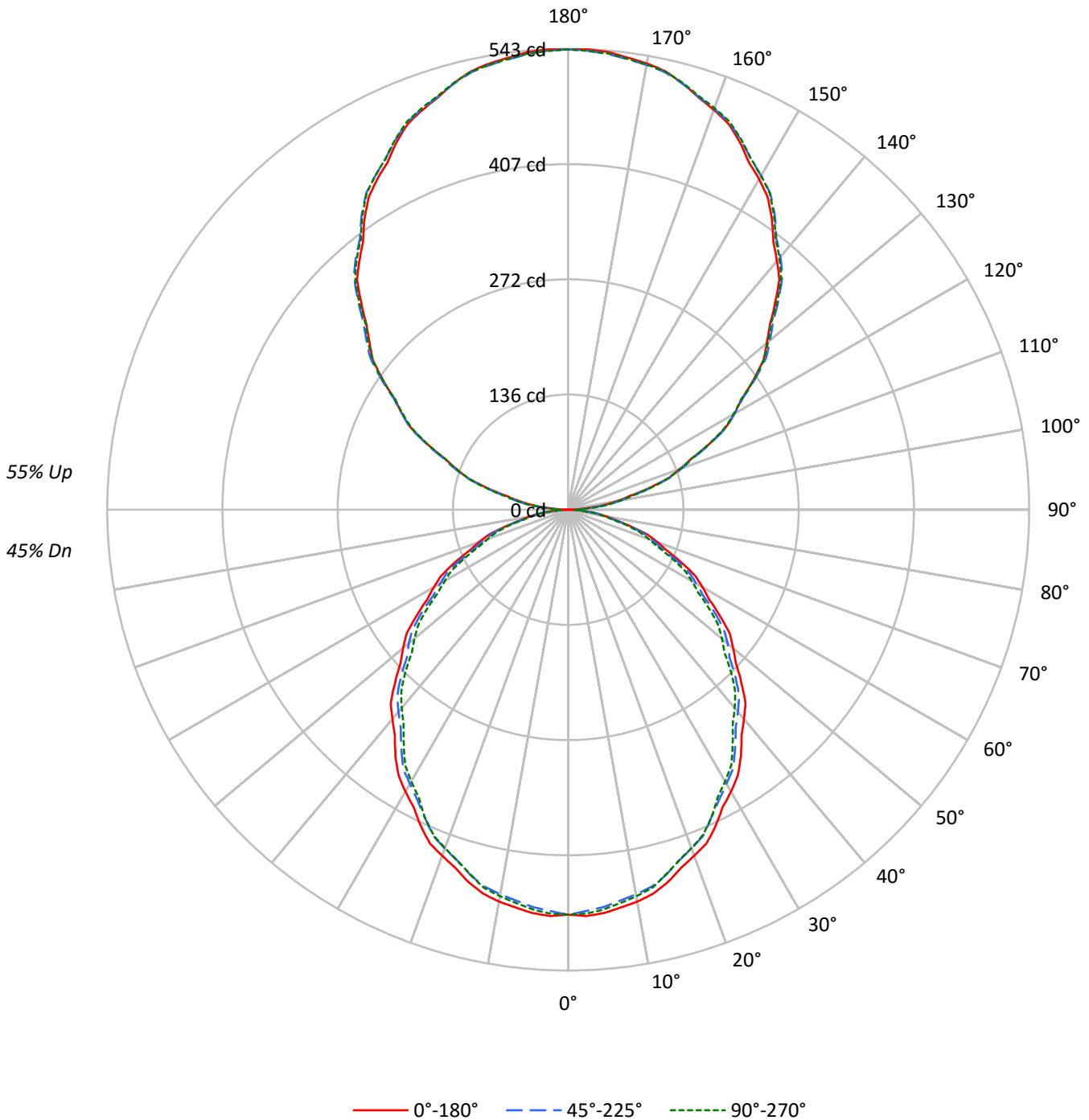
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331470-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P331470-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-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 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 | 45 | | | | 45 |
| 1 | 97 | 92 | 88 | 85 | 88 | 85 | 81 | 78 | 70 | 68 | 66 | 57 | 56 | 54 | 45 | 44 | 43 | 37 | | | | 37 |
| 2 | 88 | 81 | 74 | 69 | 80 | 74 | 69 | 64 | 62 | 58 | 54 | 50 | 48 | 45 | 40 | 38 | 36 | 31 | | | | 31 |
| 3 | 80 | 71 | 64 | 58 | 73 | 65 | 59 | 54 | 54 | 50 | 46 | 44 | 41 | 38 | 35 | 33 | 31 | 27 | | | | 27 |
| 4 | 73 | 63 | 55 | 49 | 67 | 58 | 51 | 45 | 48 | 43 | 39 | 40 | 36 | 33 | 31 | 29 | 27 | 23 | | | | 23 |
| 5 | 67 | 56 | 48 | 42 | 61 | 51 | 44 | 39 | 43 | 38 | 34 | 35 | 31 | 28 | 28 | 25 | 23 | 20 | | | | 20 |
| 6 | 62 | 50 | 42 | 36 | 57 | 46 | 39 | 34 | 39 | 33 | 29 | 32 | 28 | 25 | 26 | 23 | 20 | 17 | | | | 17 |
| 7 | 57 | 45 | 37 | 32 | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 20 | 18 | 15 | | | | 15 |
| 8 | 53 | 41 | 33 | 28 | 49 | 38 | 31 | 26 | 32 | 27 | 23 | 27 | 23 | 20 | 22 | 19 | 16 | 14 | | | | 14 |
| 9 | 49 | 37 | 30 | 25 | 45 | 35 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 18 | 20 | 17 | 15 | 12 | | | | 12 |
| 10 | 46 | 34 | 27 | 22 | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 23 | 19 | 16 | 18 | 15 | 13 | 11 | | | | 11 |

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: P331470-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-UDD-F1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 44.9 | 1.6 |
| 10°-20° | 126.2 | 4.6 |
| 20°-30° | 185.5 | 6.8 |
| 30°-40° | 215.5 | 7.9 |
| 40°-50° | 215.3 | 7.9 |
| 50°-60° | 187.7 | 6.9 |
| 60°-70° | 138.8 | 5.1 |
| 70°-80° | 78.6 | 2.9 |
| 80°-90° | 23.3 | 0.9 |
| 90°-100° | 34.4 | 1.3 |
| 100°-110° | 106.7 | 3.9 |
| 110°-120° | 182.4 | 6.7 |
| 120°-130° | 239.9 | 8.8 |
| 130°-140° | 269.2 | 9.9 |
| 140°-150° | 263.9 | 9.7 |
| 150°-160° | 221.4 | 8.1 |
| 160°-170° | 146.8 | 5.4 |
| 170°-180° | 51.3 | 1.9 |
| 0°-30° | 356.6 | 13.1 |
| 0°-40° | 572.2 | 20.9 |
| 0°-60° | 975.2 | 35.7 |
| 0°-90° | 1216.0 | 44.5 |
| 90°-120° | 323.4 | 11.8 |
| 90°-150° | 1096.4 | 40.1 |
| 90°-180° | 1516.0 | 55.5 |
| 0°-180° | 2732.0 | 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° | 0 | 6 | 16 | 15 | 16 | 2 |
| 95° | 24 | 28 | 29 | 29 | 28 | 27 |
| 105° | 98 | 100 | 101 | 102 | 102 | 104 |
| 115° | 183 | 186 | 185 | 184 | 183 | 181 |
| 125° | 266 | 270 | 269 | 268 | 267 | 238 |
| 135° | 345 | 349 | 350 | 350 | 349 | 266 |
| 145° | 418 | 421 | 424 | 424 | 423 | 261 |
| 155° | 478 | 480 | 481 | 483 | 482 | 220 |
| 165° | 520 | 520 | 520 | 523 | 521 | 147 |
| 175° | 541 | 540 | 539 | 542 | 540 | 51 |
| 180° | 542 | 542 | 542 | 542 | 542 | |



TEST NUMBER: P331470-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-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° | 6.7 | 6.8 | 6.9 | 7.0 | 7.1 | 7.2 | 7.5 | 7.8 | 8.1 | 8.4 | 8.1 |
| 90° | 0.5 | 1.7 | 2.9 | 4.1 | 5.4 | 7.1 | 9.3 | 11.5 | 13.7 | 16.1 | 15.9 |
| 92.5° | 8.2 | 9.1 | 9.9 | 10.8 | 11.7 | 12.4 | 12.9 | 13.5 | 14.0 | 14.5 | 14.5 |
| 95° | 23.8 | 24.8 | 25.9 | 26.9 | 27.9 | 28.5 | 28.7 | 28.9 | 29.1 | 29.3 | 29.3 |
| 97.5° | 43.4 | 44.3 | 45.2 | 46.2 | 47.1 | 47.7 | 48.1 | 48.5 | 48.9 | 49.2 | 49.2 |
| 100° | 58.1 | 58.9 | 59.7 | 60.6 | 61.4 | 61.9 | 62.2 | 62.5 | 62.8 | 63.1 | 63.1 |
| 102.5° | 73.5 | 74.1 | 74.7 | 75.4 | 76.0 | 76.6 | 77.0 | 77.4 | 77.8 | 78.2 | 78.3 |
| 105° | 98.4 | 98.7 | 99.0 | 99.3 | 99.6 | 99.9 | 100.1 | 100.3 | 100.5 | 100.7 | 100.9 |
| 107.5° | 123.4 | 123.9 | 124.3 | 124.8 | 125.2 | 125.4 | 125.4 | 125.4 | 125.4 | 125.4 | 125.5 |
| 110° | 139.6 | 140.2 | 140.8 | 141.4 | 142.0 | 142.3 | 142.3 | 142.3 | 142.3 | 142.3 | 142.3 |



TEST NUMBER: P331470-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 157.1 | 157.7 | 158.3 | 159.0 | 159.6 | 159.9 | 159.8 | 159.7 | 159.6 | 159.5 | 159.3 |
| 115° | 183.0 | 183.6 | 184.2 | 184.8 | 185.4 | 185.6 | 185.4 | 185.2 | 185.0 | 184.8 | 184.7 |
| 117.5° | 208.8 | 209.6 | 210.5 | 211.3 | 212.1 | 212.2 | 211.7 | 211.1 | 210.5 | 210.0 | 209.6 |
| 120° | 226.0 | 226.8 | 227.6 | 228.4 | 229.2 | 229.2 | 228.4 | 227.6 | 226.8 | 226.0 | 226.0 |
| 122.5° | 241.8 | 242.8 | 243.7 | 244.7 | 245.7 | 245.9 | 245.3 | 244.7 | 244.2 | 243.6 | 243.4 |
| 125° | 266.3 | 267.2 | 268.1 | 269.0 | 269.9 | 270.2 | 269.9 | 269.6 | 269.3 | 269.0 | 268.7 |
| 127.5° | 290.1 | 291.3 | 292.5 | 293.7 | 294.8 | 295.2 | 294.9 | 294.5 | 294.1 | 293.8 | 293.4 |
| 130° | 305.2 | 306.5 | 307.8 | 309.1 | 310.4 | 311.0 | 310.8 | 310.6 | 310.4 | 310.2 | 310.0 |
| 132.5° | 322.0 | 323.1 | 324.2 | 325.3 | 326.3 | 326.9 | 326.9 | 327.0 | 327.0 | 327.0 | 326.6 |
| 135° | 344.6 | 345.7 | 346.8 | 347.9 | 349.0 | 349.6 | 349.8 | 350.0 | 350.2 | 350.4 | 350.3 |
| 137.5° | 368.2 | 369.1 | 370.0 | 370.9 | 371.8 | 372.4 | 372.7 | 373.0 | 373.2 | 373.5 | 373.4 |
| 140° | 382.5 | 383.4 | 384.4 | 385.3 | 386.2 | 386.9 | 387.4 | 387.9 | 388.4 | 388.9 | 388.9 |
| 142.5° | 397.2 | 398.1 | 399.0 | 399.9 | 400.8 | 401.4 | 401.7 | 402.1 | 402.4 | 402.8 | 402.9 |
| 145° | 418.2 | 418.9 | 419.6 | 420.3 | 421.0 | 421.7 | 422.3 | 422.9 | 423.5 | 424.1 | 424.2 |
| 147.5° | 437.0 | 437.8 | 438.7 | 439.5 | 440.4 | 441.0 | 441.4 | 441.8 | 442.2 | 442.6 | 442.8 |
| 150° | 449.8 | 450.4 | 451.0 | 451.6 | 452.2 | 452.7 | 453.1 | 453.5 | 453.9 | 454.3 | 454.6 |
| 152.5° | 461.1 | 461.7 | 462.3 | 462.9 | 463.5 | 464.1 | 464.5 | 465.0 | 465.5 | 466.1 | 466.5 |
| 155° | 478.1 | 478.4 | 478.7 | 479.1 | 479.4 | 479.7 | 480.0 | 480.3 | 480.6 | 480.9 | 481.4 |
| 157.5° | 492.7 | 492.9 | 493.1 | 493.3 | 493.5 | 493.6 | 493.8 | 494.0 | 494.2 | 494.4 | 495.1 |
| 160° | 501.5 | 501.7 | 501.9 | 502.1 | 502.3 | 502.4 | 502.5 | 502.6 | 502.7 | 502.8 | 503.4 |
| 162.5° | 509.5 | 509.6 | 509.6 | 509.6 | 509.7 | 509.8 | 509.9 | 510.0 | 510.1 | 510.2 | 510.8 |
| 165° | 520.2 | 520.1 | 520.0 | 519.9 | 519.8 | 519.8 | 519.8 | 519.8 | 519.8 | 519.8 | 520.5 |
| 167.5° | 529.2 | 528.9 | 528.6 | 528.3 | 528.0 | 527.8 | 527.8 | 527.8 | 527.8 | 527.8 | 528.5 |
| 170° | 533.9 | 533.6 | 533.3 | 533.0 | 532.7 | 532.5 | 532.4 | 532.3 | 532.2 | 532.1 | 532.8 |
| 172.5° | 537.2 | 536.9 | 536.6 | 536.3 | 536.0 | 535.8 | 535.7 | 535.6 | 535.5 | 535.4 | 536.1 |
| 175° | 541.3 | 541.0 | 540.7 | 540.4 | 540.1 | 539.8 | 539.6 | 539.4 | 539.2 | 539.0 | 539.7 |
| 177.5° | 542.9 | 542.7 | 542.4 | 542.2 | 541.9 | 541.7 | 541.6 | 541.4 | 541.2 | 541.1 | 541.6 |
| 180° | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 |



TEST NUMBER: P331470-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-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° | 7.8 | 7.5 | 7.2 | 7.1 | 7.0 | 6.9 | 6.9 | 6.8 |
| 90° | 15.7 | 15.5 | 15.2 | 15.1 | 15.2 | 15.3 | 15.5 | 15.6 |
| 92.5° | 14.6 | 14.6 | 14.7 | 14.7 | 14.7 | 14.7 | 14.8 | 14.8 |
| 95° | 29.3 | 29.3 | 29.3 | 29.2 | 29.0 | 28.8 | 28.6 | 28.4 |
| 97.5° | 49.2 | 49.2 | 49.2 | 49.2 | 49.2 | 49.2 | 49.2 | 49.2 |
| 100° | 63.1 | 63.1 | 63.1 | 63.1 | 63.0 | 62.9 | 62.8 | 62.7 |
| 102.5° | 78.3 | 78.4 | 78.5 | 78.5 | 78.4 | 78.3 | 78.2 | 78.1 |
| 105° | 101.1 | 101.3 | 101.5 | 101.6 | 101.6 | 101.6 | 101.6 | 101.6 |
| 107.5° | 125.6 | 125.7 | 125.8 | 125.6 | 125.1 | 124.6 | 124.2 | 123.7 |
| 110° | 142.3 | 142.3 | 142.3 | 142.1 | 141.8 | 141.5 | 141.2 | 140.9 |



TEST NUMBER: P331470-840

CATALOG NUMBER: S122DIW-S290D435U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 159.1 | 158.8 | 158.5 | 158.2 | 158.0 | 157.8 | 157.6 | 157.4 |
| 115° | 184.6 | 184.5 | 184.4 | 184.2 | 183.9 | 183.6 | 183.3 | 183.0 |
| 117.5° | 209.4 | 209.1 | 208.9 | 208.6 | 208.3 | 208.0 | 207.7 | 207.4 |
| 120° | 226.0 | 226.0 | 226.0 | 225.9 | 225.6 | 225.3 | 225.0 | 224.7 |
| 122.5° | 243.1 | 242.9 | 242.6 | 242.4 | 242.2 | 242.0 | 241.7 | 241.5 |
| 125° | 268.4 | 268.1 | 267.8 | 267.6 | 267.5 | 267.4 | 267.3 | 267.2 |
| 127.5° | 293.0 | 292.7 | 292.3 | 292.0 | 291.5 | 291.2 | 290.9 | 290.6 |
| 130° | 309.8 | 309.6 | 309.4 | 309.1 | 308.7 | 308.3 | 307.9 | 307.5 |
| 132.5° | 326.2 | 325.7 | 325.3 | 324.9 | 324.6 | 324.2 | 323.9 | 323.6 |
| 135° | 350.2 | 350.1 | 350.0 | 349.8 | 349.5 | 349.2 | 348.9 | 348.6 |
| 137.5° | 373.3 | 373.2 | 373.2 | 372.9 | 372.5 | 372.1 | 371.7 | 371.3 |
| 140° | 388.9 | 388.9 | 388.9 | 388.7 | 388.3 | 387.9 | 387.5 | 387.1 |
| 142.5° | 402.9 | 403.0 | 403.1 | 402.9 | 402.5 | 402.1 | 401.7 | 401.3 |
| 145° | 424.3 | 424.4 | 424.5 | 424.3 | 423.9 | 423.5 | 423.1 | 422.7 |
| 147.5° | 443.0 | 443.3 | 443.5 | 443.4 | 443.0 | 442.6 | 442.2 | 441.9 |
| 150° | 454.9 | 455.2 | 455.6 | 455.6 | 455.2 | 454.9 | 454.6 | 454.3 |
| 152.5° | 466.8 | 467.2 | 467.6 | 467.6 | 467.2 | 466.8 | 466.5 | 466.1 |
| 155° | 481.9 | 482.4 | 482.9 | 483.0 | 482.7 | 482.4 | 482.1 | 481.8 |
| 157.5° | 495.7 | 496.4 | 497.2 | 497.3 | 496.8 | 496.2 | 495.8 | 495.3 |
| 160° | 504.0 | 504.6 | 505.2 | 505.3 | 504.9 | 504.5 | 504.1 | 503.7 |
| 162.5° | 511.5 | 512.2 | 512.9 | 513.0 | 512.5 | 512.0 | 511.5 | 511.1 |
| 165° | 521.2 | 521.9 | 522.6 | 522.7 | 522.2 | 521.7 | 521.2 | 520.7 |
| 167.5° | 529.2 | 529.9 | 530.6 | 530.7 | 530.1 | 529.6 | 529.1 | 528.6 |
| 170° | 533.5 | 534.2 | 534.9 | 535.0 | 534.4 | 533.8 | 533.2 | 532.6 |
| 172.5° | 536.8 | 537.6 | 538.3 | 538.3 | 537.7 | 537.0 | 536.4 | 535.8 |
| 175° | 540.4 | 541.1 | 541.8 | 541.9 | 541.3 | 540.7 | 540.1 | 539.5 |
| 177.5° | 542.1 | 542.5 | 543.0 | 543.0 | 542.5 | 542.1 | 541.6 | 541.1 |
| 180° | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 | 542.2 |

(END OF REPORT)