

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: P331767-940

Luminaire Tested: **S122RDIW-S290D435U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331767-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-2,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122RDIW-S290D435U940-4F0-1E-UDD-F
Description: DEFINE 2 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 290 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 435 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2465.5 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

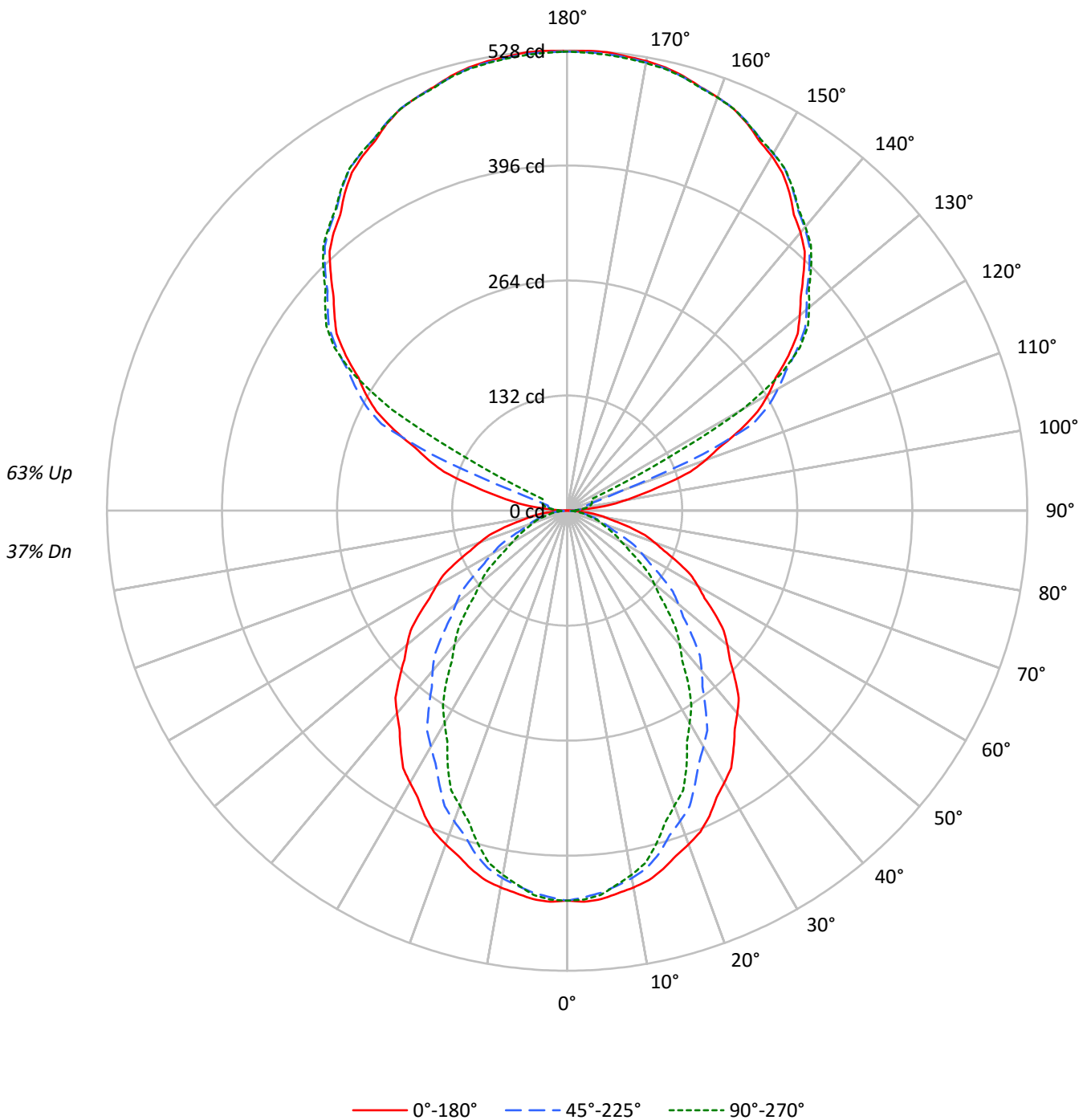
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331767-940

CATALOG NUMBER: S122RDIW-S290D435U940-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P331767-940

CATALOG NUMBER: S122RDIW-S290D435U940-4F0-1E-UDD-F

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 | 76 | 76 | 76 | 60 | 60 | 60 | 45 | 45 | 45 | 37 |
| 1 | 95 | 91 | 88 | 84 | 86 | 83 | 80 | 77 | 67 | 65 | 63 | 53 | 52 | 50 | 40 | 39 | 38 | 32 |
| 2 | 87 | 80 | 74 | 69 | 79 | 73 | 68 | 64 | 59 | 56 | 53 | 47 | 45 | 43 | 36 | 34 | 33 | 28 |
| 3 | 80 | 71 | 64 | 58 | 72 | 64 | 58 | 54 | 53 | 48 | 45 | 42 | 39 | 36 | 32 | 30 | 28 | 24 |
| 4 | 73 | 63 | 55 | 49 | 66 | 57 | 51 | 46 | 47 | 42 | 38 | 37 | 34 | 31 | 29 | 26 | 25 | 21 |
| 5 | 67 | 56 | 48 | 42 | 61 | 51 | 44 | 39 | 42 | 37 | 33 | 34 | 30 | 27 | 26 | 24 | 22 | 18 |
| 6 | 62 | 50 | 42 | 37 | 56 | 46 | 39 | 34 | 38 | 33 | 29 | 31 | 27 | 24 | 24 | 21 | 19 | 16 |
| 7 | 57 | 45 | 38 | 32 | 52 | 42 | 35 | 30 | 35 | 29 | 26 | 28 | 24 | 21 | 22 | 19 | 17 | 14 |
| 8 | 53 | 41 | 34 | 29 | 48 | 38 | 31 | 27 | 32 | 27 | 23 | 26 | 22 | 19 | 20 | 17 | 16 | 13 |
| 9 | 49 | 38 | 30 | 26 | 45 | 35 | 28 | 24 | 29 | 24 | 21 | 24 | 20 | 17 | 18 | 16 | 14 | 12 |
| 10 | 46 | 34 | 28 | 23 | 42 | 32 | 26 | 21 | 27 | 22 | 19 | 22 | 18 | 16 | 17 | 15 | 13 | 11 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7227 | 7227 | 7227 |
| 5° | 7254 | 7136 | 7175 |
| 10° | 7199 | 7020 | 6960 |
| 15° | 7116 | 6812 | 6614 |
| 20° | 7002 | 6515 | 6189 |
| 25° | 6885 | 6178 | 5772 |
| 30° | 6721 | 5830 | 5243 |
| 35° | 6564 | 5454 | 4776 |
| 40° | 6403 | 5063 | 4234 |
| 45° | 6215 | 4624 | 3747 |
| 50° | 6023 | 4182 | 3265 |
| 55° | 5827 | 3704 | 2806 |
| 60° | 5596 | 3203 | 2328 |
| 65° | 5337 | 2690 | 2120 |
| 70° | 5032 | 2219 | 1950 |
| 75° | 4648 | 2021 | 1822 |
| 80° | 4100 | 1804 | 1655 |
| 85° | 3223 | 1426 | 1426 |



TEST NUMBER: P331767-940

CATALOG NUMBER: S122RDIW-S290D435U940-4F0-1E-UDD-F

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 41.9 | 1.7 |
| 10°-20° | 115.0 | 4.7 |
| 20°-30° | 161.6 | 6.6 |
| 30°-40° | 176.2 | 7.1 |
| 40°-50° | 162.0 | 6.6 |
| 50°-60° | 127.2 | 5.2 |
| 60°-70° | 82.9 | 3.4 |
| 70°-80° | 42.8 | 1.7 |
| 80°-90° | 12.4 | 0.5 |
| 90°-100° | 17.6 | 0.7 |
| 100°-110° | 64.4 | 2.6 |
| 110°-120° | 172.2 | 7.0 |
| 120°-130° | 284.3 | 11.5 |
| 130°-140° | 302.4 | 12.3 |
| 140°-150° | 281.0 | 11.4 |
| 150°-160° | 225.9 | 9.2 |
| 160°-170° | 145.6 | 5.9 |
| 170°-180° | 50.1 | 2.0 |
| 0°-30° | 318.5 | 12.9 |
| 0°-40° | 494.7 | 20.1 |
| 0°-60° | 783.8 | 31.8 |
| 0°-90° | 921.9 | 37.4 |
| 90°-120° | 254.2 | 10.3 |
| 90°-150° | 1121.9 | 45.5 |
| 90°-180° | 1544.0 | 62.6 |
| 0°-180° | 2465.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 448 | 448 | 448 | 448 | 448 | |
| 5° | 448 | 445 | 440 | 444 | 443 | 42 |
| 15° | 426 | 421 | 408 | 400 | 396 | 120 |
| 25° | 386 | 373 | 347 | 331 | 324 | 178 |
| 35° | 333 | 312 | 277 | 252 | 242 | 208 |
| 45° | 272 | 244 | 202 | 175 | 164 | 210 |
| 55° | 207 | 175 | 132 | 108 | 100 | 185 |
| 65° | 140 | 107 | 70 | 57 | 56 | 138 |
| 75° | 74 | 47 | 32 | 30 | 29 | 79 |
| 85° | 17 | 9 | 8 | 8 | 8 | 21 |
| 90° | 0 | 4 | 8 | 9 | 10 | 2 |
| 95° | 25 | 13 | 15 | 17 | 16 | 30 |
| 105° | 116 | 121 | 23 | 27 | 29 | 124 |
| 115° | 219 | 226 | 235 | 67 | 31 | 216 |
| 125° | 310 | 315 | 322 | 325 | 326 | 276 |
| 135° | 383 | 389 | 393 | 396 | 396 | 296 |
| 145° | 445 | 445 | 451 | 453 | 452 | 278 |
| 155° | 490 | 487 | 491 | 493 | 490 | 226 |
| 165° | 516 | 514 | 515 | 517 | 515 | 146 |
| 175° | 528 | 525 | 526 | 528 | 525 | 50 |
| 180° | 527 | 527 | 527 | 527 | 527 | |



TEST NUMBER: P331767-940

CATALOG NUMBER: S122RDIW-S290D435U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 |
| 2.5° | 449.2 | 448.9 | 448.5 | 448.2 | 447.8 | 447.2 | 446.4 | 445.7 | 444.9 | 444.1 | 444.8 |
| 5° | 447.6 | 447.2 | 446.7 | 446.3 | 445.9 | 445.0 | 443.8 | 442.6 | 441.5 | 440.3 | 441.1 |
| 7.5° | 443.0 | 442.5 | 441.8 | 441.3 | 440.8 | 439.8 | 438.5 | 437.0 | 435.7 | 434.4 | 434.5 |
| 10° | 439.1 | 438.5 | 437.8 | 437.2 | 436.6 | 435.3 | 433.5 | 431.8 | 430.0 | 428.2 | 427.9 |
| 12.5° | 434.3 | 433.5 | 432.7 | 431.9 | 431.1 | 429.6 | 427.3 | 425.0 | 422.7 | 420.4 | 419.9 |
| 15° | 425.7 | 424.7 | 423.7 | 422.8 | 421.8 | 419.7 | 416.7 | 413.7 | 410.5 | 407.5 | 405.8 |
| 17.5° | 415.3 | 413.8 | 412.2 | 410.7 | 409.2 | 406.5 | 402.6 | 398.7 | 394.8 | 390.8 | 388.8 |
| 20° | 407.5 | 405.7 | 403.9 | 402.1 | 400.3 | 397.2 | 392.6 | 388.2 | 383.7 | 379.2 | 376.9 |
| 22.5° | 399.1 | 397.1 | 395.0 | 393.1 | 391.0 | 387.4 | 382.4 | 377.3 | 372.3 | 367.2 | 364.3 |
| 25° | 386.5 | 383.5 | 380.7 | 377.8 | 375.0 | 370.5 | 364.5 | 358.6 | 352.7 | 346.8 | 343.0 |
| 27.5° | 371.2 | 368.1 | 365.0 | 361.9 | 358.6 | 353.7 | 347.1 | 340.4 | 333.7 | 327.0 | 322.7 |
| 30° | 360.5 | 357.1 | 353.7 | 350.3 | 346.9 | 341.5 | 334.3 | 327.2 | 319.9 | 312.7 | 308.2 |
| 32.5° | 350.2 | 346.2 | 342.1 | 338.1 | 334.1 | 328.5 | 321.2 | 313.8 | 306.5 | 299.1 | 293.9 |
| 35° | 333.0 | 328.4 | 323.8 | 319.2 | 314.6 | 308.4 | 300.4 | 292.5 | 284.6 | 276.7 | 271.0 |
| 37.5° | 315.8 | 310.8 | 305.7 | 300.7 | 295.6 | 288.9 | 280.4 | 272.0 | 263.6 | 255.1 | 248.9 |
| 40° | 303.8 | 298.5 | 293.0 | 287.6 | 282.2 | 275.2 | 266.4 | 257.7 | 249.0 | 240.2 | 233.8 |
| 42.5° | 291.5 | 285.8 | 280.1 | 274.5 | 268.8 | 261.4 | 252.4 | 243.3 | 234.3 | 225.3 | 218.7 |
| 45° | 272.2 | 266.2 | 260.1 | 254.1 | 248.1 | 240.3 | 230.9 | 221.4 | 212.0 | 202.5 | 196.2 |
| 47.5° | 253.4 | 247.0 | 240.7 | 234.3 | 227.8 | 219.8 | 210.0 | 200.3 | 190.5 | 180.7 | 174.4 |
| 50° | 239.8 | 233.4 | 227.0 | 220.6 | 214.3 | 206.1 | 196.2 | 186.3 | 176.4 | 166.5 | 160.2 |
| 52.5° | 226.5 | 219.8 | 213.2 | 206.5 | 199.8 | 191.6 | 181.9 | 172.3 | 162.6 | 152.8 | 146.9 |
| 55° | 207.0 | 200.0 | 193.0 | 185.9 | 178.9 | 170.6 | 160.8 | 151.1 | 141.3 | 131.6 | 126.3 |
| 57.5° | 187.0 | 179.8 | 172.5 | 165.4 | 158.2 | 149.9 | 140.5 | 131.3 | 121.9 | 112.5 | 107.5 |
| 60° | 173.3 | 166.2 | 159.0 | 151.8 | 144.5 | 136.3 | 127.1 | 117.8 | 108.5 | 99.2 | 94.6 |
| 62.5° | 160.1 | 152.9 | 145.7 | 138.5 | 131.3 | 123.2 | 114.4 | 105.6 | 96.8 | 87.9 | 83.6 |
| 65° | 139.7 | 132.4 | 125.2 | 117.9 | 110.6 | 102.9 | 94.8 | 86.7 | 78.6 | 70.4 | 67.4 |
| 67.5° | 120.1 | 112.9 | 105.7 | 98.4 | 91.2 | 83.9 | 76.6 | 69.4 | 62.1 | 54.8 | 53.3 |
| 70° | 106.6 | 99.5 | 92.5 | 85.5 | 78.5 | 71.9 | 65.6 | 59.4 | 53.2 | 47.0 | 46.1 |
| 72.5° | 93.5 | 86.9 | 80.1 | 73.4 | 66.6 | 60.8 | 55.8 | 50.8 | 45.8 | 40.8 | 40.0 |
| 75° | 74.5 | 68.2 | 62.0 | 55.6 | 49.3 | 44.7 | 41.6 | 38.5 | 35.5 | 32.4 | 31.7 |
| 77.5° | 55.8 | 50.3 | 44.8 | 39.2 | 33.7 | 30.2 | 28.7 | 27.3 | 25.8 | 24.3 | 24.0 |
| 80° | 44.1 | 39.6 | 35.0 | 30.4 | 25.8 | 23.0 | 22.1 | 21.2 | 20.3 | 19.4 | 19.1 |
| 82.5° | 33.4 | 29.9 | 26.3 | 22.7 | 19.2 | 17.0 | 16.4 | 15.8 | 15.2 | 14.6 | 14.4 |
| 85° | 17.4 | 15.5 | 13.6 | 11.8 | 9.9 | 8.7 | 8.5 | 8.2 | 7.9 | 7.7 | 7.7 |
| 87.5° | 5.3 | 4.9 | 4.5 | 4.1 | 3.7 | 3.6 | 3.7 | 3.8 | 4.0 | 4.1 | 4.1 |
| 90° | 0.4 | 1.3 | 2.2 | 3.2 | 4.1 | 4.9 | 5.6 | 6.2 | 7.0 | 7.6 | 8.0 |
| 92.5° | 7.7 | 7.6 | 7.5 | 7.4 | 7.4 | 7.5 | 7.8 | 8.2 | 8.5 | 8.8 | 9.1 |
| 95° | 24.8 | 21.9 | 19.2 | 16.4 | 13.6 | 12.5 | 13.1 | 13.6 | 14.3 | 14.9 | 15.2 |
| 97.5° | 49.1 | 41.3 | 33.4 | 25.5 | 17.7 | 14.4 | 15.8 | 17.1 | 18.5 | 19.9 | 20.2 |
| 100° | 67.5 | 55.8 | 44.2 | 32.6 | 21.0 | 16.0 | 17.4 | 18.8 | 20.2 | 21.8 | 22.4 |
| 102.5° | 87.6 | 85.2 | 82.7 | 80.3 | 77.8 | 70.5 | 58.5 | 46.5 | 34.4 | 22.3 | 23.2 |
| 105° | 115.8 | 118.4 | 120.9 | 123.5 | 126.0 | 115.7 | 92.6 | 69.5 | 46.4 | 23.3 | 24.2 |
| 107.5° | 148.1 | 150.2 | 152.2 | 154.3 | 156.3 | 143.5 | 115.7 | 88.0 | 60.3 | 32.5 | 31.6 |
| 110° | 168.8 | 170.6 | 172.4 | 174.2 | 175.9 | 164.6 | 140.1 | 115.7 | 91.1 | 66.7 | 58.2 |



TEST NUMBER: P331767-940

CATALOG NUMBER: S122RDIW-S290D435U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 188.3 | 189.9 | 191.5 | 193.1 | 194.7 | 192.4 | 186.4 | 180.3 | 174.2 | 168.3 | 137.3 |
| 115° | 219.2 | 220.6 | 222.0 | 223.5 | 224.9 | 226.7 | 228.8 | 231.0 | 233.0 | 235.1 | 195.9 |
| 117.5° | 246.6 | 248.3 | 249.9 | 251.5 | 253.1 | 254.7 | 256.1 | 257.5 | 259.0 | 260.5 | 251.0 |
| 120° | 266.8 | 268.0 | 269.3 | 270.6 | 271.9 | 273.3 | 274.8 | 276.3 | 277.9 | 279.4 | 280.4 |
| 122.5° | 283.8 | 285.2 | 286.5 | 287.8 | 289.2 | 290.7 | 292.4 | 294.0 | 295.7 | 297.4 | 298.0 |
| 125° | 309.9 | 310.9 | 312.1 | 313.2 | 314.2 | 315.6 | 317.3 | 318.9 | 320.5 | 322.1 | 322.6 |
| 127.5° | 333.4 | 334.7 | 335.8 | 337.1 | 338.3 | 339.5 | 340.7 | 341.9 | 343.1 | 344.3 | 345.2 |
| 130° | 348.4 | 349.7 | 351.1 | 352.4 | 353.7 | 354.9 | 355.9 | 356.8 | 357.8 | 358.6 | 359.5 |
| 132.5° | 363.6 | 364.7 | 365.9 | 367.0 | 368.2 | 369.3 | 370.1 | 371.1 | 372.0 | 373.0 | 373.8 |
| 135° | 383.4 | 384.8 | 386.1 | 387.4 | 388.9 | 389.9 | 390.7 | 391.5 | 392.2 | 393.0 | 393.8 |
| 137.5° | 403.5 | 404.4 | 405.4 | 406.4 | 407.2 | 408.1 | 409.0 | 409.9 | 410.7 | 411.6 | 412.4 |
| 140° | 416.6 | 417.2 | 417.9 | 418.6 | 419.3 | 420.1 | 421.1 | 422.0 | 422.8 | 423.8 | 424.5 |
| 142.5° | 427.6 | 428.2 | 428.7 | 429.4 | 430.0 | 430.9 | 431.9 | 432.9 | 434.0 | 435.1 | 435.8 |
| 145° | 444.8 | 444.7 | 444.6 | 444.5 | 444.4 | 445.1 | 446.6 | 448.0 | 449.4 | 450.8 | 451.5 |
| 147.5° | 459.8 | 459.5 | 459.1 | 458.9 | 458.5 | 459.1 | 460.5 | 461.9 | 463.3 | 464.8 | 465.2 |
| 150° | 469.6 | 469.0 | 468.3 | 467.8 | 467.2 | 467.5 | 469.0 | 470.3 | 471.6 | 473.0 | 473.5 |
| 152.5° | 477.8 | 477.2 | 476.4 | 475.8 | 475.1 | 475.5 | 476.7 | 478.0 | 479.3 | 480.6 | 481.1 |
| 155° | 489.7 | 489.0 | 488.2 | 487.5 | 486.7 | 486.9 | 487.9 | 488.8 | 489.9 | 490.9 | 491.4 |
| 157.5° | 499.1 | 498.5 | 497.8 | 497.2 | 496.6 | 496.6 | 497.3 | 498.0 | 498.7 | 499.4 | 500.0 |
| 160° | 504.6 | 504.1 | 503.6 | 503.1 | 502.6 | 502.6 | 503.1 | 503.6 | 504.1 | 504.6 | 505.2 |
| 162.5° | 509.5 | 509.0 | 508.5 | 508.0 | 507.5 | 507.5 | 507.8 | 508.3 | 508.7 | 509.2 | 509.8 |
| 165° | 516.0 | 515.6 | 515.1 | 514.5 | 514.0 | 513.9 | 514.2 | 514.4 | 514.7 | 514.9 | 515.5 |
| 167.5° | 520.9 | 520.4 | 520.0 | 519.4 | 518.9 | 518.8 | 519.0 | 519.2 | 519.5 | 519.7 | 520.3 |
| 170° | 523.7 | 523.2 | 522.6 | 522.2 | 521.7 | 521.5 | 521.7 | 521.8 | 522.0 | 522.2 | 522.7 |
| 172.5° | 525.5 | 525.0 | 524.5 | 524.0 | 523.4 | 523.3 | 523.4 | 523.6 | 523.8 | 524.0 | 524.6 |
| 175° | 527.9 | 527.3 | 526.6 | 526.1 | 525.5 | 525.3 | 525.5 | 525.7 | 525.8 | 525.9 | 526.6 |
| 177.5° | 528.2 | 527.8 | 527.3 | 526.8 | 526.4 | 526.1 | 526.2 | 526.3 | 526.4 | 526.4 | 526.9 |
| 180° | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 |



TEST NUMBER: P331767-940

CATALOG NUMBER: S122RDIW-S290D435U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 | 447.6 |
| 2.5° | 445.5 | 446.2 | 446.9 | 447.2 | 447.1 | 446.9 | 446.7 | 446.7 |
| 5° | 441.9 | 442.7 | 443.5 | 443.8 | 443.5 | 443.3 | 443.0 | 442.7 |
| 7.5° | 434.8 | 435.1 | 435.2 | 435.2 | 434.7 | 434.2 | 433.7 | 433.3 |
| 10° | 427.7 | 427.4 | 427.1 | 426.7 | 426.1 | 425.6 | 425.1 | 424.5 |
| 12.5° | 419.5 | 418.9 | 418.5 | 417.8 | 416.9 | 416.0 | 415.1 | 414.2 |
| 15° | 404.1 | 402.3 | 400.6 | 399.4 | 398.5 | 397.5 | 396.6 | 395.7 |
| 17.5° | 386.7 | 384.7 | 382.7 | 380.9 | 379.3 | 377.8 | 376.2 | 374.7 |
| 20° | 374.7 | 372.4 | 370.1 | 368.0 | 366.0 | 364.1 | 362.1 | 360.2 |
| 22.5° | 361.4 | 358.5 | 355.6 | 353.4 | 351.9 | 350.4 | 348.9 | 347.5 |
| 25° | 339.4 | 335.6 | 332.0 | 329.5 | 328.1 | 326.7 | 325.4 | 324.0 |
| 27.5° | 318.3 | 314.1 | 309.8 | 306.6 | 304.4 | 302.3 | 300.1 | 298.0 |
| 30° | 303.5 | 299.0 | 294.4 | 290.9 | 288.4 | 286.0 | 283.6 | 281.2 |
| 32.5° | 288.6 | 283.4 | 278.1 | 274.4 | 272.2 | 269.8 | 267.5 | 265.3 |
| 35° | 265.4 | 259.7 | 254.0 | 250.1 | 248.2 | 246.2 | 244.2 | 242.3 |
| 37.5° | 242.6 | 236.4 | 230.2 | 225.9 | 223.6 | 221.3 | 219.1 | 216.8 |
| 40° | 227.5 | 221.1 | 214.6 | 210.3 | 207.9 | 205.6 | 203.2 | 200.9 |
| 42.5° | 212.0 | 205.5 | 198.9 | 194.5 | 192.2 | 189.9 | 187.6 | 185.4 |
| 45° | 189.8 | 183.3 | 177.0 | 172.7 | 170.6 | 168.4 | 166.2 | 164.1 |
| 47.5° | 168.0 | 161.7 | 155.3 | 151.1 | 149.2 | 147.2 | 145.3 | 143.3 |
| 50° | 154.1 | 147.8 | 141.6 | 137.6 | 135.7 | 133.8 | 131.9 | 130.0 |
| 52.5° | 140.9 | 134.9 | 128.9 | 125.0 | 123.3 | 121.5 | 119.8 | 118.1 |
| 55° | 120.8 | 115.5 | 110.0 | 106.5 | 104.8 | 103.1 | 101.4 | 99.7 |
| 57.5° | 102.6 | 97.6 | 92.7 | 89.5 | 88.1 | 86.7 | 85.2 | 83.7 |
| 60° | 90.1 | 85.5 | 80.9 | 77.8 | 76.4 | 75.0 | 73.6 | 72.1 |
| 62.5° | 79.2 | 74.8 | 70.4 | 67.8 | 66.9 | 66.1 | 65.2 | 64.3 |
| 65° | 64.4 | 61.3 | 58.2 | 56.5 | 56.3 | 56.0 | 55.7 | 55.5 |
| 67.5° | 52.0 | 50.6 | 49.1 | 48.3 | 48.0 | 47.7 | 47.4 | 47.2 |
| 70° | 45.2 | 44.3 | 43.4 | 42.8 | 42.4 | 42.0 | 41.6 | 41.3 |
| 72.5° | 39.3 | 38.5 | 37.8 | 37.4 | 37.1 | 36.9 | 36.6 | 36.5 |
| 75° | 31.1 | 30.5 | 29.9 | 29.5 | 29.4 | 29.3 | 29.2 | 29.2 |
| 77.5° | 23.5 | 23.2 | 22.8 | 22.6 | 22.5 | 22.3 | 22.2 | 22.0 |
| 80° | 18.7 | 18.4 | 18.0 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 |
| 82.5° | 14.2 | 13.9 | 13.7 | 13.6 | 13.6 | 13.6 | 13.6 | 13.6 |
| 85° | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 |
| 87.5° | 4.1 | 4.2 | 4.2 | 4.2 | 4.2 | 4.3 | 4.3 | 4.4 |
| 90° | 8.5 | 8.9 | 9.3 | 9.6 | 9.8 | 10.0 | 10.2 | 10.3 |
| 92.5° | 9.3 | 9.5 | 9.7 | 9.9 | 10.0 | 10.1 | 10.2 | 10.3 |
| 95° | 15.7 | 16.1 | 16.6 | 16.8 | 16.7 | 16.6 | 16.5 | 16.4 |
| 97.5° | 20.6 | 21.0 | 21.2 | 21.5 | 21.6 | 21.7 | 21.8 | 21.8 |
| 100° | 23.1 | 23.7 | 24.4 | 24.9 | 25.1 | 25.2 | 25.3 | 25.5 |
| 102.5° | 24.1 | 25.0 | 25.9 | 26.4 | 26.7 | 26.9 | 27.1 | 27.4 |
| 105° | 25.1 | 26.0 | 27.0 | 27.6 | 27.9 | 28.3 | 28.6 | 29.0 |
| 107.5° | 30.7 | 29.7 | 28.7 | 28.4 | 28.8 | 29.2 | 29.4 | 29.8 |
| 110° | 49.8 | 41.3 | 32.8 | 28.7 | 29.1 | 29.4 | 29.8 | 30.1 |



TEST NUMBER: P331767-940

CATALOG NUMBER: S122RDIW-S290D435U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 106.5 | 75.5 | 44.7 | 29.3 | 29.6 | 29.9 | 30.1 | 30.4 |
| 115° | 156.8 | 117.5 | 78.3 | 55.6 | 49.6 | 43.4 | 37.4 | 31.2 |
| 117.5° | 241.5 | 232.0 | 222.5 | 207.8 | 187.7 | 167.6 | 147.7 | 127.6 |
| 120° | 281.4 | 282.4 | 283.5 | 278.2 | 266.8 | 255.4 | 243.9 | 232.5 |
| 122.5° | 298.5 | 299.2 | 299.8 | 299.0 | 296.8 | 294.5 | 292.3 | 290.1 |
| 125° | 323.2 | 323.9 | 324.4 | 324.9 | 325.1 | 325.4 | 325.7 | 325.8 |
| 127.5° | 346.1 | 346.9 | 347.8 | 348.2 | 348.3 | 348.3 | 348.4 | 348.4 |
| 130° | 360.5 | 361.4 | 362.4 | 362.8 | 362.7 | 362.7 | 362.6 | 362.5 |
| 132.5° | 374.6 | 375.3 | 376.1 | 376.5 | 376.4 | 376.3 | 376.3 | 376.2 |
| 135° | 394.7 | 395.5 | 396.4 | 396.6 | 396.5 | 396.4 | 396.2 | 396.0 |
| 137.5° | 413.3 | 414.1 | 414.9 | 415.2 | 414.9 | 414.6 | 414.4 | 414.0 |
| 140° | 425.3 | 426.1 | 426.9 | 427.0 | 426.6 | 426.1 | 425.8 | 425.3 |
| 142.5° | 436.5 | 437.2 | 437.9 | 438.0 | 437.6 | 437.2 | 436.8 | 436.3 |
| 145° | 452.1 | 452.6 | 453.3 | 453.3 | 452.9 | 452.5 | 452.1 | 451.7 |
| 147.5° | 465.7 | 466.1 | 466.5 | 466.5 | 466.2 | 465.8 | 465.5 | 465.1 |
| 150° | 474.0 | 474.5 | 475.0 | 475.1 | 474.7 | 474.2 | 473.8 | 473.4 |
| 152.5° | 481.6 | 482.1 | 482.7 | 482.6 | 482.1 | 481.5 | 480.9 | 480.4 |
| 155° | 492.0 | 492.4 | 492.9 | 492.8 | 492.1 | 491.5 | 490.8 | 490.2 |
| 157.5° | 500.6 | 501.1 | 501.8 | 501.7 | 501.1 | 500.3 | 499.7 | 499.1 |
| 160° | 505.6 | 506.1 | 506.7 | 506.6 | 506.0 | 505.4 | 504.8 | 504.3 |
| 162.5° | 510.3 | 511.0 | 511.5 | 511.4 | 510.7 | 510.0 | 509.3 | 508.5 |
| 165° | 516.1 | 516.7 | 517.3 | 517.3 | 516.7 | 516.1 | 515.5 | 514.9 |
| 167.5° | 520.9 | 521.5 | 522.1 | 522.0 | 521.2 | 520.5 | 519.7 | 519.0 |
| 170° | 523.3 | 524.0 | 524.5 | 524.4 | 523.7 | 522.9 | 522.2 | 521.4 |
| 172.5° | 525.1 | 525.8 | 526.4 | 526.3 | 525.5 | 524.8 | 524.0 | 523.3 |
| 175° | 527.2 | 527.7 | 528.3 | 528.2 | 527.4 | 526.6 | 525.7 | 524.9 |
| 177.5° | 527.4 | 527.8 | 528.3 | 528.2 | 527.6 | 527.0 | 526.4 | 525.8 |
| 180° | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 | 526.7 |

(END OF REPORT)