

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: P331470-940

Luminaire Tested: **S122DIW-S290D435U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P331470-940
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-S290D435U940-4F0-1E-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: 2412.3 lumens
Efficiency: N/A
Efficacy: 104.9 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

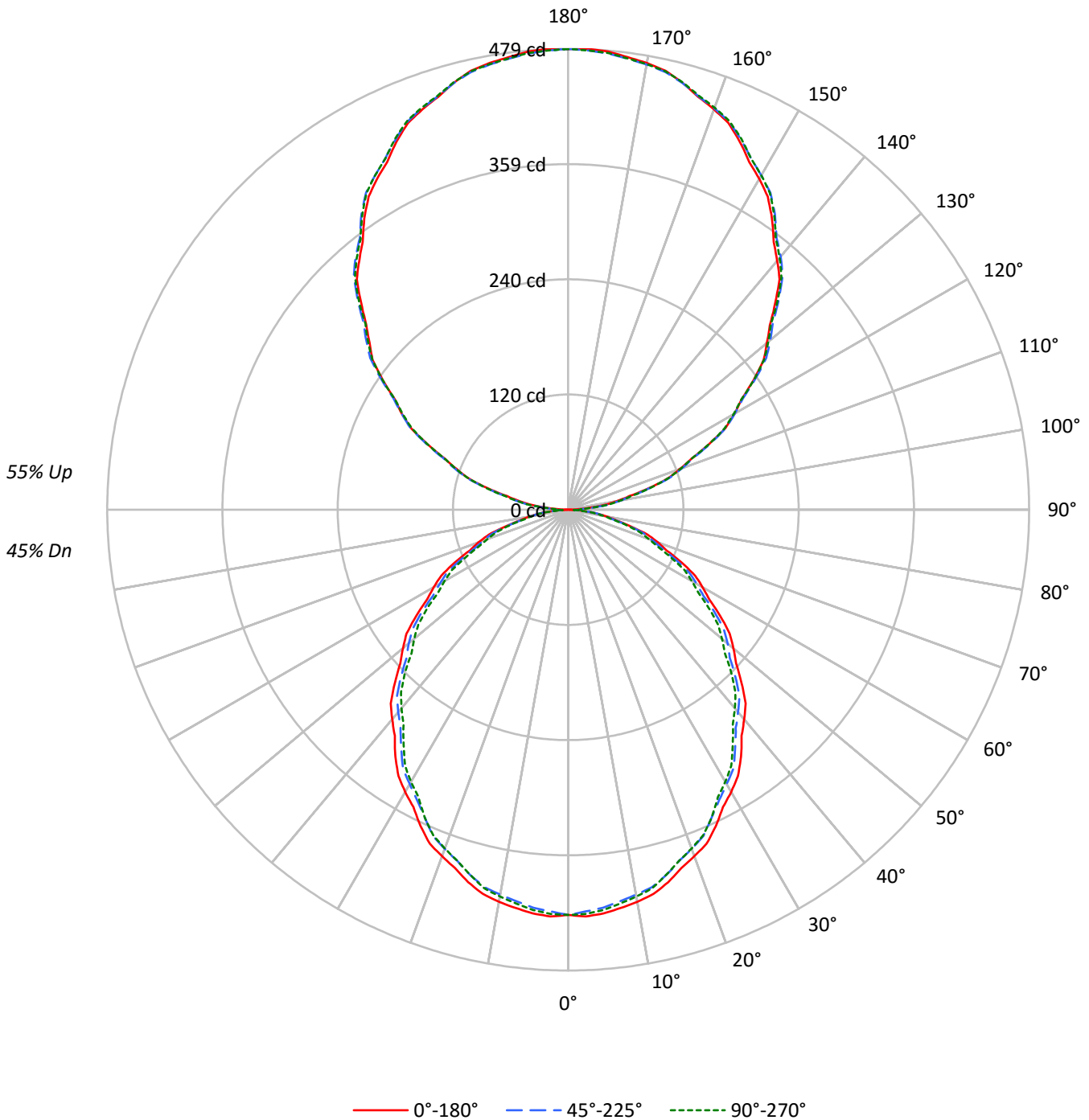
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331470-940

CATALOG NUMBER: S122DIW-S290D435U940-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P331470-940

CATALOG NUMBER: S122DIW-S290D435U940-4F0-1E-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 | 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° | 6801 | 6801 | 6801 |
| 5° | 6827 | 6729 | 6770 |
| 10° | 6787 | 6661 | 6694 |
| 15° | 6703 | 6574 | 6569 |
| 20° | 6584 | 6445 | 6438 |
| 25° | 6465 | 6285 | 6285 |
| 30° | 6315 | 6139 | 6087 |
| 35° | 6173 | 5964 | 5876 |
| 40° | 5994 | 5788 | 5678 |
| 45° | 5818 | 5613 | 5476 |
| 50° | 5627 | 5433 | 5242 |
| 55° | 5427 | 5225 | 5027 |
| 60° | 5205 | 4970 | 4789 |
| 65° | 4967 | 4722 | 4504 |
| 70° | 4664 | 4414 | 4206 |
| 75° | 4242 | 4067 | 3968 |
| 80° | 3766 | 3654 | 3468 |
| 85° | 3075 | 2927 | 2631 |



TEST NUMBER: P331470-940

CATALOG NUMBER: S122DIW-S290D435U940-4F0-1E-UDD-F1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 39.6 | 1.6 |
| 10°-20° | 111.5 | 4.6 |
| 20°-30° | 163.8 | 6.8 |
| 30°-40° | 190.3 | 7.9 |
| 40°-50° | 190.1 | 7.9 |
| 50°-60° | 165.8 | 6.9 |
| 60°-70° | 122.6 | 5.1 |
| 70°-80° | 69.4 | 2.9 |
| 80°-90° | 20.6 | 0.9 |
| 90°-100° | 30.3 | 1.3 |
| 100°-110° | 94.2 | 3.9 |
| 110°-120° | 161.0 | 6.7 |
| 120°-130° | 211.8 | 8.8 |
| 130°-140° | 237.7 | 9.9 |
| 140°-150° | 233.1 | 9.7 |
| 150°-160° | 195.5 | 8.1 |
| 160°-170° | 129.7 | 5.4 |
| 170°-180° | 45.3 | 1.9 |
| 0°-30° | 314.9 | 13.1 |
| 0°-40° | 505.2 | 20.9 |
| 0°-60° | 861.1 | 35.7 |
| 0°-90° | 1073.7 | 44.5 |
| 90°-120° | 285.6 | 11.8 |
| 90°-150° | 968.1 | 40.1 |
| 90°-180° | 1339.0 | 55.5 |
| 0°-180° | 2412.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 421 | 421 | 421 | 421 | 421 | |
| 5° | 421 | 420 | 415 | 418 | 418 | 40 |
| 15° | 401 | 398 | 393 | 395 | 393 | 113 |
| 25° | 363 | 360 | 353 | 354 | 353 | 167 |
| 35° | 313 | 309 | 303 | 300 | 298 | 195 |
| 45° | 255 | 252 | 246 | 242 | 240 | 197 |
| 55° | 193 | 190 | 186 | 181 | 179 | 172 |
| 65° | 130 | 128 | 124 | 120 | 118 | 129 |
| 75° | 68 | 67 | 65 | 63 | 64 | 73 |
| 85° | 17 | 16 | 16 | 15 | 14 | 19 |
| 90° | 0 | 5 | 14 | 13 | 14 | 2 |
| 95° | 21 | 25 | 26 | 26 | 25 | 24 |
| 105° | 87 | 88 | 89 | 90 | 90 | 92 |
| 115° | 162 | 164 | 163 | 163 | 162 | 160 |
| 125° | 235 | 238 | 238 | 236 | 236 | 210 |
| 135° | 304 | 308 | 309 | 309 | 308 | 235 |
| 145° | 369 | 372 | 374 | 375 | 373 | 231 |
| 155° | 422 | 423 | 425 | 426 | 425 | 194 |
| 165° | 459 | 459 | 459 | 462 | 460 | 129 |
| 175° | 478 | 477 | 476 | 478 | 476 | 45 |
| 180° | 479 | 479 | 479 | 479 | 479 | |



TEST NUMBER: P331470-940

CATALOG NUMBER: S122DIW-S290D435U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 |
| 2.5° | 423.2 | 422.8 | 422.5 | 422.1 | 421.8 | 421.2 | 420.4 | 419.6 | 418.8 | 418.0 | 418.7 |
| 5° | 421.2 | 420.9 | 420.5 | 420.2 | 419.8 | 419.2 | 418.2 | 417.2 | 416.2 | 415.2 | 415.9 |
| 7.5° | 417.6 | 417.0 | 416.4 | 415.9 | 415.4 | 414.6 | 413.6 | 412.5 | 411.5 | 410.5 | 411.3 |
| 10° | 414.0 | 413.4 | 412.8 | 412.1 | 411.4 | 410.6 | 409.6 | 408.5 | 407.4 | 406.3 | 407.0 |
| 12.5° | 409.1 | 408.6 | 408.0 | 407.4 | 406.9 | 406.1 | 405.0 | 403.9 | 402.9 | 401.8 | 402.3 |
| 15° | 401.0 | 400.5 | 399.9 | 399.4 | 398.9 | 398.1 | 396.8 | 395.7 | 394.5 | 393.3 | 393.7 |
| 17.5° | 390.7 | 390.1 | 389.6 | 389.1 | 388.5 | 387.6 | 386.5 | 385.2 | 384.1 | 382.9 | 383.3 |
| 20° | 383.2 | 382.6 | 382.1 | 381.6 | 381.0 | 380.1 | 378.9 | 377.6 | 376.4 | 375.1 | 375.4 |
| 22.5° | 375.8 | 375.0 | 374.3 | 373.4 | 372.7 | 371.8 | 370.6 | 369.3 | 368.2 | 367.0 | 367.0 |
| 25° | 362.9 | 362.2 | 361.5 | 360.8 | 360.1 | 358.9 | 357.4 | 355.9 | 354.4 | 352.8 | 353.0 |
| 27.5° | 348.4 | 347.8 | 347.1 | 346.4 | 345.8 | 344.8 | 343.7 | 342.4 | 341.3 | 340.0 | 339.7 |
| 30° | 338.7 | 338.0 | 337.2 | 336.5 | 335.7 | 334.7 | 333.4 | 332.1 | 330.6 | 329.3 | 329.0 |
| 32.5° | 328.2 | 327.7 | 327.2 | 326.5 | 326.0 | 324.9 | 323.5 | 322.2 | 320.7 | 319.3 | 318.8 |
| 35° | 313.2 | 312.2 | 311.3 | 310.4 | 309.5 | 308.4 | 306.9 | 305.5 | 304.1 | 302.6 | 302.0 |
| 37.5° | 296.0 | 295.2 | 294.4 | 293.6 | 292.8 | 291.8 | 290.3 | 288.9 | 287.4 | 286.0 | 285.3 |
| 40° | 284.4 | 283.7 | 282.9 | 282.2 | 281.5 | 280.4 | 278.9 | 277.5 | 276.1 | 274.6 | 273.8 |
| 42.5° | 273.0 | 272.3 | 271.6 | 270.9 | 270.2 | 269.0 | 267.6 | 266.2 | 264.7 | 263.3 | 262.4 |
| 45° | 254.8 | 254.1 | 253.5 | 252.9 | 252.3 | 251.3 | 249.9 | 248.6 | 247.3 | 245.8 | 244.9 |
| 47.5° | 236.7 | 236.0 | 235.5 | 234.9 | 234.3 | 233.3 | 231.8 | 230.5 | 229.1 | 227.7 | 226.6 |
| 50° | 224.0 | 223.6 | 223.1 | 222.7 | 222.2 | 221.3 | 220.1 | 218.8 | 217.6 | 216.3 | 215.1 |
| 52.5° | 211.7 | 211.1 | 210.5 | 209.9 | 209.3 | 208.4 | 207.2 | 206.1 | 204.8 | 203.7 | 202.6 |
| 55° | 192.8 | 192.3 | 191.7 | 191.2 | 190.6 | 189.8 | 188.8 | 187.7 | 186.6 | 185.6 | 184.4 |
| 57.5° | 173.9 | 173.4 | 173.0 | 172.5 | 172.1 | 171.3 | 170.1 | 169.0 | 167.7 | 166.6 | 165.5 |
| 60° | 161.2 | 160.9 | 160.5 | 160.2 | 159.8 | 159.0 | 157.7 | 156.5 | 155.2 | 153.9 | 152.9 |
| 62.5° | 148.9 | 148.3 | 147.8 | 147.2 | 146.6 | 145.8 | 144.8 | 143.9 | 142.9 | 142.0 | 141.0 |
| 65° | 130.0 | 129.5 | 128.9 | 128.4 | 127.9 | 127.2 | 126.3 | 125.4 | 124.5 | 123.6 | 122.7 |
| 67.5° | 110.8 | 110.4 | 109.9 | 109.5 | 109.1 | 108.5 | 107.6 | 106.8 | 106.0 | 105.2 | 104.6 |
| 70° | 98.8 | 98.4 | 98.1 | 97.7 | 97.4 | 96.8 | 96.0 | 95.2 | 94.3 | 93.5 | 92.9 |
| 72.5° | 86.5 | 86.1 | 85.8 | 85.4 | 85.1 | 84.6 | 84.1 | 83.6 | 83.1 | 82.6 | 81.9 |
| 75° | 68.0 | 67.9 | 67.7 | 67.5 | 67.3 | 67.1 | 66.6 | 66.1 | 65.6 | 65.2 | 64.6 |
| 77.5° | 51.5 | 51.2 | 50.9 | 50.6 | 50.3 | 50.0 | 49.8 | 49.7 | 49.5 | 49.3 | 49.0 |
| 80° | 40.5 | 40.4 | 40.3 | 40.2 | 40.1 | 40.0 | 39.9 | 39.7 | 39.5 | 39.3 | 39.1 |
| 82.5° | 30.1 | 30.1 | 30.1 | 30.1 | 30.1 | 30.0 | 29.9 | 29.8 | 29.7 | 29.6 | 29.2 |
| 85° | 16.6 | 16.5 | 16.4 | 16.3 | 16.2 | 16.1 | 16.1 | 16.0 | 15.9 | 15.8 | 15.5 |
| 87.5° | 5.9 | 6.0 | 6.1 | 6.2 | 6.2 | 6.3 | 6.6 | 6.9 | 7.1 | 7.4 | 7.1 |
| 90° | 0.4 | 1.5 | 2.6 | 3.7 | 4.7 | 6.2 | 8.2 | 10.2 | 12.1 | 14.2 | 14.0 |
| 92.5° | 7.2 | 8.0 | 8.7 | 9.5 | 10.3 | 11.0 | 11.4 | 11.9 | 12.4 | 12.8 | 12.8 |
| 95° | 21.0 | 21.9 | 22.8 | 23.7 | 24.6 | 25.1 | 25.3 | 25.5 | 25.7 | 25.9 | 25.9 |
| 97.5° | 38.3 | 39.1 | 39.9 | 40.8 | 41.6 | 42.1 | 42.4 | 42.8 | 43.2 | 43.4 | 43.4 |
| 100° | 51.3 | 52.0 | 52.7 | 53.5 | 54.2 | 54.7 | 54.9 | 55.2 | 55.5 | 55.7 | 55.7 |
| 102.5° | 64.9 | 65.5 | 66.0 | 66.6 | 67.1 | 67.7 | 67.9 | 68.3 | 68.7 | 69.0 | 69.1 |
| 105° | 86.9 | 87.1 | 87.4 | 87.7 | 87.9 | 88.2 | 88.4 | 88.5 | 88.7 | 88.9 | 89.1 |
| 107.5° | 109.0 | 109.4 | 109.8 | 110.2 | 110.6 | 110.8 | 110.8 | 110.8 | 110.8 | 110.8 | 110.8 |
| 110° | 123.2 | 123.8 | 124.3 | 124.8 | 125.4 | 125.6 | 125.6 | 125.6 | 125.6 | 125.6 | 125.6 |



TEST NUMBER: P331470-940

CATALOG NUMBER: S122DIW-S290D435U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 138.8 | 139.3 | 139.8 | 140.4 | 140.9 | 141.2 | 141.1 | 141.0 | 140.9 | 140.8 | 140.6 |
| 115° | 161.6 | 162.1 | 162.6 | 163.2 | 163.7 | 163.9 | 163.7 | 163.5 | 163.4 | 163.2 | 163.1 |
| 117.5° | 184.4 | 185.1 | 185.8 | 186.5 | 187.3 | 187.3 | 186.9 | 186.4 | 185.8 | 185.4 | 185.1 |
| 120° | 199.6 | 200.3 | 201.0 | 201.7 | 202.4 | 202.4 | 201.7 | 201.0 | 200.3 | 199.6 | 199.6 |
| 122.5° | 213.5 | 214.4 | 215.2 | 216.1 | 217.0 | 217.1 | 216.6 | 216.1 | 215.6 | 215.1 | 214.9 |
| 125° | 235.1 | 235.9 | 236.7 | 237.6 | 238.4 | 238.6 | 238.4 | 238.1 | 237.8 | 237.6 | 237.3 |
| 127.5° | 256.2 | 257.3 | 258.2 | 259.3 | 260.3 | 260.6 | 260.4 | 260.0 | 259.7 | 259.4 | 259.0 |
| 130° | 269.5 | 270.6 | 271.8 | 273.0 | 274.1 | 274.6 | 274.5 | 274.3 | 274.1 | 273.9 | 273.8 |
| 132.5° | 284.4 | 285.3 | 286.2 | 287.2 | 288.1 | 288.6 | 288.6 | 288.7 | 288.7 | 288.7 | 288.4 |
| 135° | 304.3 | 305.2 | 306.2 | 307.2 | 308.2 | 308.7 | 308.9 | 309.1 | 309.2 | 309.4 | 309.3 |
| 137.5° | 325.1 | 325.9 | 326.7 | 327.5 | 328.3 | 328.9 | 329.1 | 329.4 | 329.6 | 329.8 | 329.8 |
| 140° | 337.8 | 338.6 | 339.4 | 340.2 | 341.0 | 341.6 | 342.1 | 342.5 | 343.0 | 343.4 | 343.4 |
| 142.5° | 350.7 | 351.5 | 352.3 | 353.1 | 353.9 | 354.5 | 354.7 | 355.1 | 355.3 | 355.7 | 355.8 |
| 145° | 369.3 | 369.9 | 370.5 | 371.1 | 371.8 | 372.4 | 372.9 | 373.4 | 374.0 | 374.5 | 374.6 |
| 147.5° | 385.8 | 386.6 | 387.4 | 388.1 | 388.9 | 389.4 | 389.8 | 390.1 | 390.5 | 390.8 | 391.0 |
| 150° | 397.2 | 397.7 | 398.2 | 398.8 | 399.3 | 399.8 | 400.1 | 400.5 | 400.8 | 401.2 | 401.4 |
| 152.5° | 407.2 | 407.7 | 408.2 | 408.8 | 409.3 | 409.8 | 410.2 | 410.6 | 411.1 | 411.5 | 411.9 |
| 155° | 422.1 | 422.4 | 422.7 | 423.0 | 423.3 | 423.6 | 423.8 | 424.1 | 424.4 | 424.6 | 425.1 |
| 157.5° | 435.1 | 435.2 | 435.4 | 435.6 | 435.8 | 435.9 | 436.0 | 436.2 | 436.4 | 436.6 | 437.2 |
| 160° | 442.8 | 443.0 | 443.2 | 443.4 | 443.5 | 443.6 | 443.7 | 443.8 | 443.9 | 444.0 | 444.5 |
| 162.5° | 449.9 | 450.0 | 450.0 | 450.0 | 450.0 | 450.1 | 450.2 | 450.3 | 450.4 | 450.5 | 451.0 |
| 165° | 459.3 | 459.2 | 459.1 | 459.1 | 459.0 | 459.0 | 459.0 | 459.0 | 459.0 | 459.0 | 459.6 |
| 167.5° | 467.3 | 467.0 | 466.7 | 466.5 | 466.2 | 466.0 | 466.0 | 466.0 | 466.0 | 466.0 | 466.6 |
| 170° | 471.4 | 471.2 | 470.9 | 470.6 | 470.4 | 470.2 | 470.1 | 470.0 | 469.9 | 469.8 | 470.5 |
| 172.5° | 474.4 | 474.1 | 473.9 | 473.6 | 473.3 | 473.1 | 473.1 | 473.0 | 472.9 | 472.8 | 473.4 |
| 175° | 478.0 | 477.7 | 477.4 | 477.2 | 476.9 | 476.6 | 476.4 | 476.3 | 476.1 | 475.9 | 476.5 |
| 177.5° | 479.4 | 479.2 | 478.9 | 478.8 | 478.5 | 478.3 | 478.2 | 478.0 | 477.9 | 477.8 | 478.2 |
| 180° | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 |



TEST NUMBER: P331470-940

CATALOG NUMBER: S122DIW-S290D435U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 | 421.2 |
| 2.5° | 419.5 | 420.2 | 420.9 | 421.2 | 421.1 | 420.9 | 420.8 | 420.6 |
| 5° | 416.7 | 417.4 | 418.1 | 418.4 | 418.2 | 418.0 | 417.9 | 417.7 |
| 7.5° | 412.0 | 412.7 | 413.4 | 413.7 | 413.5 | 413.2 | 413.0 | 412.9 |
| 10° | 407.8 | 408.5 | 409.2 | 409.4 | 409.1 | 408.8 | 408.6 | 408.3 |
| 12.5° | 402.8 | 403.2 | 403.8 | 403.9 | 403.8 | 403.5 | 403.3 | 403.1 |
| 15° | 394.0 | 394.4 | 394.8 | 394.8 | 394.3 | 393.9 | 393.4 | 393.0 |
| 17.5° | 383.7 | 384.1 | 384.5 | 384.5 | 384.1 | 383.7 | 383.3 | 382.8 |
| 20° | 375.7 | 375.9 | 376.2 | 376.1 | 375.8 | 375.4 | 375.1 | 374.7 |
| 22.5° | 367.1 | 367.2 | 367.2 | 367.1 | 366.9 | 366.7 | 366.5 | 366.3 |
| 25° | 353.2 | 353.4 | 353.6 | 353.6 | 353.4 | 353.2 | 353.0 | 352.8 |
| 27.5° | 339.5 | 339.2 | 338.9 | 338.6 | 338.1 | 337.7 | 337.3 | 336.9 |
| 30° | 328.8 | 328.5 | 328.2 | 328.0 | 327.6 | 327.3 | 326.9 | 326.5 |
| 32.5° | 318.3 | 317.8 | 317.4 | 316.9 | 316.6 | 316.2 | 315.8 | 315.5 |
| 35° | 301.5 | 301.0 | 300.4 | 300.0 | 299.5 | 299.1 | 298.6 | 298.1 |
| 37.5° | 284.6 | 284.0 | 283.3 | 282.8 | 282.3 | 281.9 | 281.5 | 281.1 |
| 40° | 273.0 | 272.2 | 271.4 | 270.8 | 270.5 | 270.1 | 269.7 | 269.4 |
| 42.5° | 261.5 | 260.6 | 259.8 | 259.0 | 258.6 | 258.1 | 257.6 | 257.1 |
| 45° | 243.9 | 242.9 | 241.9 | 241.2 | 240.9 | 240.5 | 240.1 | 239.8 |
| 47.5° | 225.6 | 224.5 | 223.5 | 222.7 | 222.2 | 221.7 | 221.1 | 220.6 |
| 50° | 213.8 | 212.5 | 211.2 | 210.4 | 210.0 | 209.6 | 209.1 | 208.7 |
| 52.5° | 201.6 | 200.5 | 199.5 | 198.7 | 198.0 | 197.5 | 196.9 | 196.3 |
| 55° | 183.3 | 182.3 | 181.2 | 180.5 | 180.0 | 179.5 | 179.1 | 178.6 |
| 57.5° | 164.4 | 163.4 | 162.3 | 161.6 | 161.3 | 161.0 | 160.6 | 160.2 |
| 60° | 151.9 | 151.0 | 150.0 | 149.4 | 149.1 | 148.8 | 148.6 | 148.3 |
| 62.5° | 140.1 | 139.2 | 138.3 | 137.7 | 137.3 | 137.0 | 136.6 | 136.3 |
| 65° | 121.9 | 121.1 | 120.3 | 119.7 | 119.2 | 118.8 | 118.3 | 117.9 |
| 67.5° | 104.0 | 103.3 | 102.7 | 102.2 | 101.8 | 101.5 | 101.1 | 100.8 |
| 70° | 92.3 | 91.7 | 91.0 | 90.6 | 90.2 | 89.8 | 89.4 | 89.1 |
| 72.5° | 81.3 | 80.7 | 80.1 | 79.5 | 79.3 | 79.0 | 78.7 | 78.4 |
| 75° | 64.1 | 63.6 | 63.0 | 62.9 | 63.0 | 63.2 | 63.4 | 63.6 |
| 77.5° | 48.8 | 48.5 | 48.2 | 48.0 | 47.7 | 47.5 | 47.3 | 47.0 |
| 80° | 38.8 | 38.5 | 38.3 | 38.0 | 37.8 | 37.6 | 37.5 | 37.3 |
| 82.5° | 28.9 | 28.5 | 28.2 | 28.0 | 28.0 | 27.9 | 27.9 | 27.9 |
| 85° | 15.2 | 15.0 | 14.7 | 14.5 | 14.4 | 14.4 | 14.3 | 14.2 |
| 87.5° | 6.9 | 6.6 | 6.3 | 6.2 | 6.2 | 6.1 | 6.1 | 6.0 |
| 90° | 13.8 | 13.6 | 13.5 | 13.4 | 13.5 | 13.6 | 13.6 | 13.7 |
| 92.5° | 12.9 | 12.9 | 13.0 | 13.0 | 13.0 | 13.0 | 13.1 | 13.1 |
| 95° | 25.9 | 25.9 | 25.9 | 25.8 | 25.6 | 25.4 | 25.2 | 25.1 |
| 97.5° | 43.4 | 43.4 | 43.4 | 43.4 | 43.4 | 43.4 | 43.4 | 43.4 |
| 100° | 55.7 | 55.7 | 55.7 | 55.7 | 55.6 | 55.6 | 55.5 | 55.4 |
| 102.5° | 69.1 | 69.2 | 69.3 | 69.3 | 69.2 | 69.1 | 69.0 | 68.9 |
| 105° | 89.3 | 89.4 | 89.6 | 89.7 | 89.7 | 89.7 | 89.7 | 89.7 |
| 107.5° | 110.9 | 111.0 | 111.1 | 110.9 | 110.5 | 110.0 | 109.7 | 109.2 |
| 110° | 125.6 | 125.6 | 125.6 | 125.5 | 125.2 | 124.9 | 124.7 | 124.4 |



TEST NUMBER: P331470-940

CATALOG NUMBER: S122DIW-S290D435U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 140.4 | 140.2 | 140.0 | 139.7 | 139.6 | 139.4 | 139.2 | 139.0 |
| 115° | 163.0 | 162.9 | 162.8 | 162.6 | 162.4 | 162.1 | 161.8 | 161.6 |
| 117.5° | 184.9 | 184.7 | 184.5 | 184.2 | 184.0 | 183.7 | 183.4 | 183.2 |
| 120° | 199.6 | 199.6 | 199.6 | 199.5 | 199.2 | 198.9 | 198.7 | 198.4 |
| 122.5° | 214.6 | 214.5 | 214.2 | 214.0 | 213.8 | 213.7 | 213.4 | 213.2 |
| 125° | 237.0 | 236.7 | 236.5 | 236.3 | 236.2 | 236.1 | 236.0 | 235.9 |
| 127.5° | 258.7 | 258.4 | 258.1 | 257.8 | 257.4 | 257.2 | 256.9 | 256.6 |
| 130° | 273.6 | 273.4 | 273.2 | 273.0 | 272.6 | 272.2 | 271.9 | 271.5 |
| 132.5° | 288.0 | 287.6 | 287.2 | 286.9 | 286.6 | 286.2 | 286.0 | 285.7 |
| 135° | 309.2 | 309.2 | 309.1 | 308.9 | 308.6 | 308.4 | 308.1 | 307.8 |
| 137.5° | 329.7 | 329.6 | 329.6 | 329.3 | 329.0 | 328.6 | 328.2 | 327.9 |
| 140° | 343.4 | 343.4 | 343.4 | 343.2 | 342.9 | 342.5 | 342.1 | 341.8 |
| 142.5° | 355.8 | 355.9 | 356.0 | 355.8 | 355.4 | 355.1 | 354.7 | 354.4 |
| 145° | 374.7 | 374.8 | 374.9 | 374.7 | 374.3 | 374.0 | 373.6 | 373.3 |
| 147.5° | 391.2 | 391.5 | 391.6 | 391.6 | 391.2 | 390.8 | 390.5 | 390.2 |
| 150° | 401.7 | 402.0 | 402.3 | 402.3 | 402.0 | 401.7 | 401.4 | 401.2 |
| 152.5° | 412.1 | 412.5 | 412.9 | 412.9 | 412.5 | 412.1 | 411.9 | 411.5 |
| 155° | 425.5 | 426.0 | 426.4 | 426.5 | 426.2 | 426.0 | 425.7 | 425.4 |
| 157.5° | 437.7 | 438.4 | 439.0 | 439.1 | 438.6 | 438.2 | 437.8 | 437.4 |
| 160° | 445.1 | 445.6 | 446.1 | 446.2 | 445.9 | 445.5 | 445.1 | 444.8 |
| 162.5° | 451.7 | 452.3 | 452.9 | 453.0 | 452.5 | 452.1 | 451.7 | 451.3 |
| 165° | 460.2 | 460.8 | 461.5 | 461.5 | 461.1 | 460.7 | 460.2 | 459.8 |
| 167.5° | 467.3 | 467.9 | 468.5 | 468.6 | 468.1 | 467.6 | 467.2 | 466.7 |
| 170° | 471.1 | 471.7 | 472.3 | 472.4 | 471.9 | 471.4 | 470.8 | 470.3 |
| 172.5° | 474.0 | 474.7 | 475.3 | 475.3 | 474.7 | 474.2 | 473.7 | 473.1 |
| 175° | 477.2 | 477.8 | 478.4 | 478.5 | 478.0 | 477.4 | 476.9 | 476.4 |
| 177.5° | 478.7 | 479.0 | 479.5 | 479.5 | 479.0 | 478.7 | 478.2 | 477.8 |
| 180° | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 |

(END OF REPORT)