

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: P331942-930

Luminaire Tested: **S123DIP-S560D1025U930-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331942-930  
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-S560D1025U930-4F0-1E-UDD-D4  
Description: DEFINE 3 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 560 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1025 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4954.4 lumens  
Efficiency: N/A  
Efficacy: 111.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.37  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

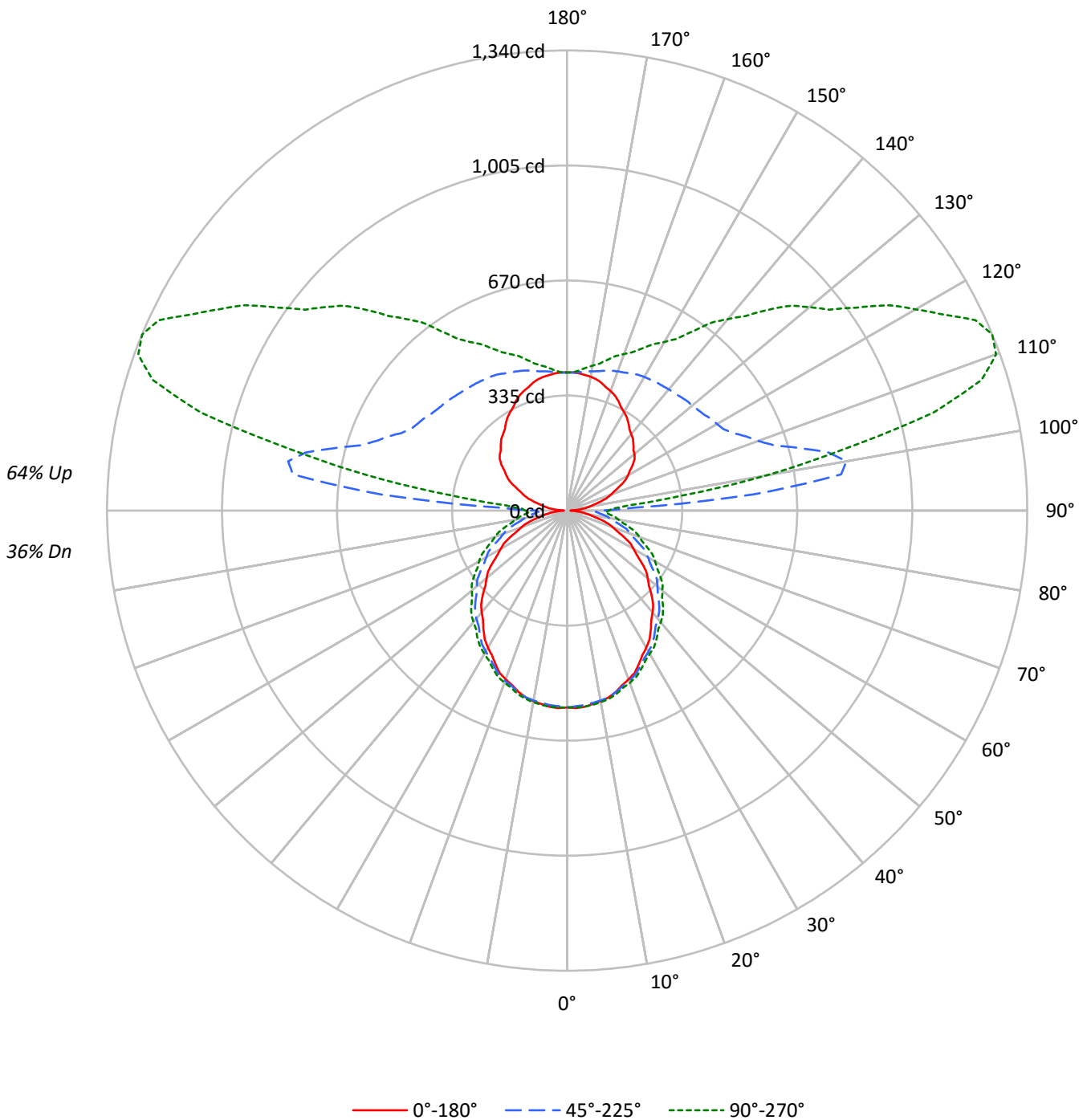
Input Watts (W): 44.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331942-930

CATALOG NUMBER: S123DIP-S560D1025U930-4F0-1E-UDD-D4

### Luminous Intensity Polar Plot





TEST NUMBER: P331942-930

CATALOG NUMBER: S123DIP-S560D1025U930-4F0-1E-UDD-D4

**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 | 43 | 43 | 43 | 36 |
| 1   | 94  | 89  | 85  | 81  | 85 | 81 | 77 | 74 | 65 | 62 | 60 | 50 | 49 | 47 | 37 | 36 | 35 | 28 |
| 2   | 85  | 77  | 71  | 66  | 77 | 70 | 65 | 60 | 56 | 53 | 49 | 44 | 41 | 39 | 32 | 30 | 29 | 23 |
| 3   | 77  | 68  | 60  | 54  | 70 | 61 | 55 | 50 | 49 | 45 | 41 | 38 | 35 | 32 | 28 | 26 | 24 | 19 |
| 4   | 71  | 60  | 52  | 46  | 63 | 54 | 47 | 42 | 44 | 39 | 35 | 34 | 30 | 27 | 25 | 22 | 21 | 16 |
| 5   | 65  | 53  | 45  | 39  | 58 | 48 | 41 | 36 | 39 | 34 | 30 | 30 | 27 | 24 | 22 | 20 | 18 | 14 |
| 6   | 59  | 47  | 39  | 34  | 53 | 43 | 36 | 31 | 35 | 30 | 26 | 27 | 23 | 21 | 20 | 18 | 15 | 12 |
| 7   | 55  | 43  | 35  | 29  | 49 | 39 | 32 | 27 | 32 | 26 | 22 | 25 | 21 | 18 | 18 | 16 | 14 | 11 |
| 8   | 51  | 39  | 31  | 26  | 46 | 35 | 28 | 24 | 29 | 23 | 20 | 23 | 19 | 16 | 17 | 14 | 12 | 10 |
| 9   | 47  | 35  | 28  | 23  | 43 | 32 | 25 | 21 | 26 | 21 | 18 | 21 | 17 | 14 | 16 | 13 | 11 | 9  |
| 10  | 44  | 32  | 25  | 20  | 40 | 29 | 23 | 19 | 24 | 19 | 16 | 19 | 15 | 13 | 14 | 12 | 10 | 8  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 6171 | 6171 | 6171 |
| 5°  | 6191 | 6015 | 6019 |
| 10° | 6135 | 5878 | 5848 |
| 15° | 6056 | 5720 | 5660 |
| 20° | 5943 | 5540 | 5454 |
| 25° | 5804 | 5333 | 5238 |
| 30° | 5660 | 5147 | 5019 |
| 35° | 5500 | 4950 | 4844 |
| 40° | 5347 | 4771 | 4656 |
| 45° | 5177 | 4599 | 4506 |
| 50° | 5010 | 4430 | 4341 |
| 55° | 4826 | 4256 | 4193 |
| 60° | 4646 | 4080 | 4040 |
| 65° | 4462 | 3891 | 3859 |
| 70° | 4185 | 3680 | 3673 |
| 75° | 3832 | 3437 | 3484 |
| 80° | 3426 | 3199 | 3268 |
| 85° | 3052 | 3034 | 3143 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 54.4   | 1.1       |
| 10°-20°   | 154.9  | 3.1       |
| 20°-30°   | 231.7  | 4.7       |
| 30°-40°   | 276.7  | 5.6       |
| 40°-50°   | 289.5  | 5.8       |
| 50°-60°   | 271.7  | 5.5       |
| 60°-70°   | 226.9  | 4.6       |
| 70°-80°   | 162.4  | 3.3       |
| 80°-90°   | 99.9   | 2.0       |
| 90°-100°  | 284.5  | 5.7       |
| 100°-110° | 678.2  | 13.7      |
| 110°-120° | 653.0  | 13.2      |
| 120°-130° | 514.1  | 10.4      |
| 130°-140° | 399.6  | 8.1       |
| 140°-150° | 294.2  | 5.9       |
| 150°-160° | 203.9  | 4.1       |
| 160°-170° | 119.8  | 2.4       |
| 170°-180° | 39.0   | 0.8       |
| 0°-30°    | 441.0  | 8.9       |
| 0°-40°    | 717.7  | 14.5      |
| 0°-60°    | 1279.0 | 25.8      |
| 0°-90°    | 1768.2 | 35.7      |
| 90°-120°  | 1615.7 | 32.6      |
| 90°-150°  | 2823.5 | 57.0      |
| 90°-180°  | 3186.0 | 64.3      |
| 0°-180°   | 4954.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90°  | Flux |
|------|-----|-------|-----|-------|------|------|
| 0°   | 573 | 573   | 573 | 573   | 573  |      |
| 5°   | 574 | 573   | 569 | 574   | 573  | 54   |
| 15°  | 546 | 548   | 548 | 554   | 553  | 154  |
| 25°  | 493 | 499   | 502 | 509   | 510  | 227  |
| 35°  | 425 | 435   | 443 | 452   | 455  | 266  |
| 45°  | 347 | 362   | 378 | 389   | 395  | 268  |
| 55°  | 265 | 286   | 308 | 324   | 330  | 237  |
| 65°  | 183 | 208   | 235 | 253   | 260  | 181  |
| 75°  | 99  | 129   | 160 | 180   | 188  | 106  |
| 85°  | 31  | 62    | 95  | 115   | 122  | 32   |
| 90°  | 10  | 49    | 91  | 114   | 122  | 7    |
| 95°  | 35  | 122   | 544 | 221   | 182  | 35   |
| 105° | 99  | 160   | 701 | 1208  | 1105 | 105  |
| 115° | 170 | 219   | 534 | 1145  | 1312 | 168  |
| 125° | 234 | 277   | 487 | 879   | 1030 | 208  |
| 135° | 273 | 325   | 468 | 715   | 827  | 211  |
| 145° | 311 | 355   | 455 | 577   | 637  | 195  |
| 155° | 352 | 380   | 440 | 500   | 522  | 162  |
| 165° | 385 | 396   | 422 | 447   | 455  | 108  |
| 175° | 401 | 402   | 404 | 410   | 409  | 38   |
| 180° | 402 | 402   | 402 | 402   | 402  |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 573.3 | 573.3 | 573.3 | 573.3 | 573.3 | 573.3 | 573.3 | 573.3 | 573.3 | 573.3 | 573.3 |
| 2.5°   | 575.8 | 575.5 | 575.2 | 574.8 | 574.5 | 573.9 | 573.0 | 572.1 | 571.2 | 570.3 | 571.2 |
| 5°     | 574.0 | 573.6 | 573.4 | 573.2 | 572.8 | 572.3 | 571.4 | 570.6 | 569.8 | 568.9 | 570.1 |
| 7.5°   | 568.3 | 568.3 | 568.4 | 568.5 | 568.6 | 568.2 | 567.4 | 566.6 | 565.7 | 564.9 | 566.3 |
| 10°    | 563.4 | 563.6 | 563.9 | 564.2 | 564.4 | 564.3 | 563.5 | 562.9 | 562.1 | 561.5 | 562.9 |
| 12.5°  | 557.3 | 557.7 | 558.2 | 558.5 | 558.9 | 558.9 | 558.4 | 557.9 | 557.4 | 556.9 | 558.2 |
| 15°    | 546.5 | 546.9 | 547.3 | 547.7 | 548.1 | 548.3 | 548.1 | 548.0 | 547.9 | 547.7 | 549.1 |
| 17.5°  | 532.7 | 533.5 | 534.4 | 535.2 | 536.1 | 536.5 | 536.4 | 536.3 | 536.3 | 536.2 | 537.4 |
| 20°    | 522.8 | 523.6 | 524.4 | 525.2 | 526.0 | 526.6 | 526.9 | 527.2 | 527.4 | 527.7 | 529.0 |
| 22.5°  | 512.3 | 513.1 | 513.9 | 514.8 | 515.6 | 516.2 | 516.6 | 517.0 | 517.4 | 517.7 | 519.3 |
| 25°    | 493.4 | 494.8 | 496.2 | 497.6 | 499.0 | 499.9 | 500.3 | 500.7 | 501.1 | 501.5 | 503.3 |
| 27.5°  | 474.4 | 476.0 | 477.6 | 479.2 | 480.7 | 481.9 | 482.8 | 483.7 | 484.6 | 485.5 | 487.1 |
| 30°    | 460.9 | 462.7 | 464.5 | 466.4 | 468.1 | 469.6 | 470.7 | 471.8 | 472.9 | 474.0 | 475.7 |
| 32.5°  | 445.9 | 447.9 | 450.0 | 452.0 | 454.0 | 455.8 | 457.2 | 458.6 | 460.1 | 461.5 | 463.3 |
| 35°    | 424.7 | 426.9 | 429.1 | 431.4 | 433.6 | 435.6 | 437.4 | 439.2 | 441.0 | 442.8 | 444.9 |
| 37.5°  | 402.2 | 404.7 | 407.2 | 409.7 | 412.2 | 414.6 | 416.8 | 419.0 | 421.2 | 423.5 | 425.8 |
| 40°    | 387.2 | 389.7 | 392.2 | 394.7 | 397.2 | 399.8 | 402.6 | 405.4 | 408.1 | 410.9 | 413.3 |
| 42.5°  | 370.7 | 373.8 | 376.8 | 379.8 | 382.9 | 385.9 | 388.8 | 391.7 | 394.6 | 397.5 | 400.1 |
| 45°    | 347.2 | 350.6 | 353.9 | 357.3 | 360.5 | 363.9 | 367.5 | 370.9 | 374.4 | 377.8 | 380.5 |
| 47.5°  | 322.6 | 326.4 | 330.2 | 333.9 | 337.7 | 341.6 | 345.6 | 349.5 | 353.5 | 357.5 | 360.4 |
| 50°    | 306.6 | 310.5 | 314.4 | 318.3 | 322.2 | 326.3 | 330.6 | 334.9 | 339.2 | 343.5 | 346.7 |
| 52.5°  | 289.7 | 293.8 | 297.9 | 302.0 | 306.1 | 310.5 | 315.3 | 320.0 | 324.7 | 329.5 | 332.8 |
| 55°    | 264.8 | 269.4 | 273.9 | 278.5 | 283.2 | 287.9 | 292.9 | 297.9 | 302.9 | 307.9 | 311.6 |
| 57.5°  | 240.6 | 245.3 | 250.1 | 254.9 | 259.7 | 264.8 | 270.3 | 275.7 | 281.2 | 286.7 | 290.4 |
| 60°    | 223.6 | 228.6 | 233.6 | 238.6 | 243.5 | 248.9 | 254.6 | 260.3 | 266.0 | 271.7 | 275.6 |
| 62.5°  | 207.6 | 212.7 | 217.8 | 222.9 | 228.0 | 233.6 | 239.6 | 245.6 | 251.7 | 257.7 | 261.5 |
| 65°    | 183.0 | 188.4 | 193.8 | 199.3 | 204.6 | 210.4 | 216.5 | 222.6 | 228.7 | 234.8 | 239.0 |
| 67.5°  | 158.0 | 163.8 | 169.5 | 175.2 | 181.0 | 186.9 | 193.2 | 199.4 | 205.6 | 211.8 | 216.4 |
| 70°    | 140.6 | 146.5 | 152.5 | 158.4 | 164.4 | 170.7 | 177.3 | 184.0 | 190.7 | 197.4 | 201.8 |
| 72.5°  | 124.5 | 130.5 | 136.5 | 142.4 | 148.4 | 154.8 | 161.7 | 168.6 | 175.5 | 182.4 | 186.9 |
| 75°    | 99.3  | 105.8 | 112.3 | 118.9 | 125.4 | 132.2 | 139.1 | 146.0 | 153.0 | 159.9 | 164.4 |
| 77.5°  | 77.3  | 83.9  | 90.5  | 97.0  | 103.6 | 110.4 | 117.4 | 124.4 | 131.4 | 138.4 | 143.2 |
| 80°    | 61.8  | 68.6  | 75.4  | 82.3  | 89.0  | 96.0  | 103.2 | 110.5 | 117.7 | 124.9 | 129.6 |
| 82.5°  | 48.3  | 55.3  | 62.1  | 69.1  | 76.0  | 83.1  | 90.4  | 97.8  | 105.1 | 112.4 | 117.2 |
| 85°    | 30.6  | 37.5  | 44.5  | 51.4  | 58.4  | 65.5  | 72.9  | 80.2  | 87.6  | 94.9  | 99.6  |
| 87.5°  | 17.0  | 24.2  | 31.4  | 38.8  | 46.1  | 53.4  | 60.9  | 68.5  | 76.1  | 83.6  | 88.2  |
| 90°    | 9.8   | 18.2  | 26.6  | 35.9  | 44.3  | 52.8  | 62.4  | 71.9  | 81.4  | 90.9  | 94.8  |
| 92.5°  | 17.7  | 28.7  | 41.7  | 54.2  | 67.2  | 85.8  | 114.1 | 156.0 | 197.3 | 191.8 | 165.6 |
| 95°    | 34.6  | 42.4  | 56.7  | 76.0  | 102.6 | 140.4 | 216.4 | 344.5 | 484.7 | 544.5 | 457.5 |
| 97.5°  | 53.3  | 59.0  | 70.9  | 87.8  | 113.6 | 153.6 | 226.2 | 369.4 | 598.3 | 805.2 | 861.6 |
| 100°   | 65.9  | 71.1  | 81.2  | 97.1  | 121.1 | 158.2 | 221.5 | 348.4 | 568.8 | 825.0 | 989.4 |
| 102.5° | 79.0  | 84.5  | 93.5  | 108.3 | 129.8 | 164.1 | 221.5 | 330.0 | 526.8 | 779.7 | 992.8 |
| 105°   | 99.4  | 105.2 | 113.4 | 126.5 | 145.3 | 175.1 | 225.1 | 314.9 | 474.7 | 701.2 | 938.6 |
| 107.5° | 120.4 | 125.7 | 133.3 | 145.7 | 163.1 | 190.7 | 235.0 | 310.3 | 439.9 | 631.4 | 847.2 |
| 110°   | 135.6 | 140.6 | 147.1 | 158.6 | 174.9 | 201.7 | 243.9 | 311.3 | 425.8 | 591.7 | 789.9 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 149.9 | 154.4 | 160.5 | 171.5 | 187.4 | 213.3 | 252.6 | 315.2 | 416.6 | 564.0 | 739.2 |
| 115°   | 170.0 | 174.9 | 181.4 | 191.2 | 206.8 | 232.0 | 268.0 | 322.6 | 410.6 | 533.6 | 677.7 |
| 117.5° | 190.5 | 195.3 | 200.4 | 208.9 | 225.3 | 248.6 | 283.9 | 332.8 | 408.0 | 513.6 | 638.6 |
| 120°   | 204.3 | 207.5 | 212.2 | 221.0 | 237.2 | 260.2 | 294.1 | 341.0 | 408.2 | 503.9 | 617.8 |
| 122.5° | 216.7 | 219.5 | 224.0 | 233.1 | 248.3 | 272.2 | 305.2 | 348.7 | 410.5 | 496.9 | 600.2 |
| 125°   | 233.8 | 235.5 | 240.4 | 249.2 | 264.7 | 288.7 | 321.2 | 361.1 | 413.9 | 487.1 | 577.1 |
| 127.5° | 247.3 | 249.6 | 255.5 | 264.5 | 281.4 | 305.0 | 335.8 | 371.4 | 418.7 | 480.5 | 556.3 |
| 130°   | 255.8 | 258.1 | 265.3 | 274.9 | 291.9 | 315.1 | 344.8 | 378.5 | 421.9 | 476.0 | 544.5 |
| 132.5° | 261.8 | 264.9 | 272.8 | 284.5 | 301.6 | 324.0 | 352.4 | 384.9 | 423.9 | 472.9 | 533.5 |
| 135°   | 273.0 | 276.1 | 285.0 | 297.1 | 314.1 | 336.7 | 363.5 | 392.6 | 426.7 | 468.1 | 518.6 |
| 137.5° | 283.6 | 287.0 | 295.6 | 308.6 | 325.4 | 346.1 | 371.2 | 398.4 | 428.3 | 463.3 | 505.7 |
| 140°   | 290.3 | 294.4 | 302.6 | 315.6 | 331.8 | 352.4 | 376.4 | 401.2 | 429.3 | 460.6 | 497.7 |
| 142.5° | 298.2 | 301.5 | 310.1 | 321.7 | 337.9 | 356.9 | 380.0 | 403.8 | 429.7 | 457.4 | 490.3 |
| 145°   | 310.7 | 313.0 | 320.2 | 332.2 | 345.9 | 364.6 | 385.7 | 407.7 | 430.5 | 454.9 | 482.1 |
| 147.5° | 322.8 | 324.2 | 331.4 | 341.9 | 355.3 | 371.3 | 390.6 | 410.3 | 430.5 | 451.8 | 474.4 |
| 150°   | 331.3 | 332.1 | 338.5 | 349.1 | 360.5 | 375.2 | 393.9 | 411.0 | 430.5 | 449.2 | 469.5 |
| 152.5° | 339.7 | 339.8 | 346.3 | 355.6 | 365.7 | 379.8 | 395.8 | 412.3 | 428.5 | 446.0 | 464.4 |
| 155°   | 352.4 | 352.4 | 357.3 | 365.4 | 374.4 | 385.7 | 399.6 | 412.6 | 426.4 | 440.3 | 456.6 |
| 157.5° | 362.5 | 363.1 | 367.0 | 374.2 | 381.8 | 390.6 | 401.7 | 413.4 | 423.7 | 435.2 | 447.8 |
| 160°   | 370.3 | 370.3 | 373.6 | 380.0 | 385.7 | 393.9 | 403.7 | 413.4 | 422.4 | 431.3 | 441.9 |
| 162.5° | 376.2 | 376.2 | 378.8 | 383.9 | 389.0 | 395.8 | 404.3 | 412.8 | 419.8 | 427.4 | 436.0 |
| 165°   | 384.9 | 384.1 | 385.7 | 389.8 | 393.1 | 398.8 | 405.3 | 411.0 | 415.9 | 421.6 | 428.0 |
| 167.5° | 391.6 | 390.6 | 391.4 | 394.5 | 396.8 | 400.4 | 405.1 | 409.7 | 412.0 | 415.7 | 420.4 |
| 170°   | 395.5 | 393.9 | 394.7 | 397.1 | 398.8 | 400.4 | 404.5 | 407.7 | 409.4 | 411.8 | 415.9 |
| 172.5° | 398.1 | 397.1 | 397.3 | 399.1 | 400.1 | 401.0 | 404.5 | 407.1 | 407.4 | 408.5 | 411.3 |
| 175°   | 401.2 | 400.4 | 399.6 | 401.2 | 401.2 | 402.0 | 403.7 | 405.3 | 404.5 | 404.5 | 406.1 |
| 177.5° | 402.7 | 402.0 | 401.4 | 402.0 | 402.0 | 402.0 | 402.7 | 404.0 | 402.7 | 402.0 | 402.7 |
| 180°   | 402.0 | 402.0 | 402.0 | 402.0 | 402.0 | 402.0 | 402.0 | 402.0 | 402.0 | 402.0 | 402.0 |



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**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 573.3  | 573.3  | 573.3  | 573.3  | 573.3  | 573.3  | 573.3  | 573.3  |
| 2.5°   | 572.1  | 573.0  | 573.9  | 574.3  | 574.1  | 574.1  | 574.0  | 573.8  |
| 5°     | 571.2  | 572.3  | 573.4  | 573.9  | 573.7  | 573.6  | 573.5  | 573.3  |
| 7.5°   | 567.7  | 569.1  | 570.5  | 571.1  | 571.0  | 570.8  | 570.6  | 570.5  |
| 10°    | 564.3  | 565.7  | 567.0  | 567.5  | 567.3  | 567.0  | 566.7  | 566.5  |
| 12.5°  | 559.5  | 560.8  | 562.1  | 562.6  | 562.3  | 562.0  | 561.7  | 561.5  |
| 15°    | 550.5  | 551.9  | 553.3  | 553.9  | 553.8  | 553.6  | 553.5  | 553.3  |
| 17.5°  | 538.7  | 540.0  | 541.2  | 541.8  | 541.5  | 541.4  | 541.2  | 541.0  |
| 20°    | 530.3  | 531.5  | 532.7  | 533.5  | 533.5  | 533.7  | 533.9  | 533.9  |
| 22.5°  | 520.9  | 522.5  | 524.1  | 524.8  | 524.7  | 524.6  | 524.6  | 524.5  |
| 25°    | 505.1  | 507.0  | 508.7  | 509.6  | 509.6  | 509.6  | 509.6  | 509.6  |
| 27.5°  | 488.6  | 490.2  | 491.7  | 492.6  | 492.7  | 492.8  | 492.9  | 493.0  |
| 30°    | 477.4  | 479.0  | 480.7  | 481.5  | 481.5  | 481.5  | 481.5  | 481.5  |
| 32.5°  | 465.0  | 466.8  | 468.6  | 469.7  | 470.0  | 470.3  | 470.7  | 471.0  |
| 35°    | 446.9  | 449.1  | 451.1  | 452.4  | 453.0  | 453.6  | 454.1  | 454.7  |
| 37.5°  | 428.1  | 430.5  | 432.8  | 434.3  | 434.7  | 435.1  | 435.6  | 436.0  |
| 40°    | 415.6  | 418.0  | 420.4  | 421.8  | 422.4  | 423.0  | 423.5  | 424.0  |
| 42.5°  | 402.6  | 405.2  | 407.8  | 409.4  | 410.3  | 411.0  | 411.8  | 412.5  |
| 45°    | 383.1  | 385.7  | 388.4  | 390.3  | 391.3  | 392.5  | 393.6  | 394.7  |
| 47.5°  | 363.5  | 366.4  | 369.3  | 371.3  | 372.1  | 373.0  | 373.9  | 374.7  |
| 50°    | 349.8  | 353.1  | 356.3  | 358.3  | 359.3  | 360.3  | 361.3  | 362.2  |
| 52.5°  | 336.1  | 339.4  | 342.8  | 345.0  | 346.2  | 347.3  | 348.5  | 349.8  |
| 55°    | 315.4  | 319.1  | 322.9  | 325.3  | 326.4  | 327.5  | 328.6  | 329.8  |
| 57.5°  | 294.2  | 298.0  | 301.7  | 304.3  | 305.6  | 306.9  | 308.2  | 309.5  |
| 60°    | 279.5  | 283.3  | 287.2  | 289.9  | 291.5  | 292.9  | 294.5  | 296.0  |
| 62.5°  | 265.5  | 269.4  | 273.2  | 275.9  | 277.3  | 278.7  | 280.1  | 281.5  |
| 65°    | 243.1  | 247.3  | 251.5  | 254.3  | 255.7  | 257.1  | 258.4  | 259.8  |
| 67.5°  | 220.9  | 225.5  | 230.1  | 232.9  | 234.1  | 235.2  | 236.4  | 237.6  |
| 70°    | 206.3  | 210.7  | 215.2  | 218.0  | 219.4  | 220.8  | 222.2  | 223.6  |
| 72.5°  | 191.4  | 196.0  | 200.6  | 203.6  | 205.0  | 206.4  | 207.7  | 209.1  |
| 75°    | 169.0  | 173.7  | 178.2  | 181.3  | 183.0  | 184.7  | 186.3  | 188.0  |
| 77.5°  | 148.1  | 152.9  | 157.7  | 160.8  | 162.1  | 163.3  | 164.6  | 165.9  |
| 80°    | 134.4  | 139.1  | 143.8  | 146.8  | 148.2  | 149.6  | 151.0  | 152.4  |
| 82.5°  | 121.9  | 126.5  | 131.3  | 134.4  | 135.7  | 137.1  | 138.5  | 139.9  |
| 85°    | 104.4  | 109.1  | 113.8  | 116.8  | 118.2  | 119.6  | 121.0  | 122.4  |
| 87.5°  | 93.1   | 97.9   | 102.8  | 106.2  | 107.5  | 109.0  | 110.6  | 111.8  |
| 90°    | 100.4  | 105.9  | 111.5  | 116.1  | 116.7  | 118.9  | 121.1  | 121.6  |
| 92.5°  | 144.3  | 134.8  | 133.1  | 131.8  | 131.5  | 130.4  | 132.5  | 132.2  |
| 95°    | 363.4  | 273.3  | 234.5  | 208.1  | 194.0  | 188.0  | 183.7  | 181.8  |
| 97.5°  | 795.9  | 654.7  | 553.8  | 459.3  | 400.6  | 365.4  | 344.8  | 339.2  |
| 100°   | 1021.9 | 960.0  | 868.8  | 755.9  | 675.1  | 617.1  | 586.8  | 589.0  |
| 102.5° | 1094.9 | 1096.7 | 1045.1 | 974.4  | 911.8  | 866.2  | 841.1  | 823.8  |
| 105°   | 1112.6 | 1197.8 | 1217.2 | 1198.6 | 1162.4 | 1132.7 | 1107.9 | 1105.1 |
| 107.5° | 1043.7 | 1179.7 | 1254.7 | 1286.1 | 1287.9 | 1278.7 | 1271.2 | 1264.9 |
| 110°   | 979.8  | 1133.2 | 1239.3 | 1298.6 | 1322.6 | 1330.2 | 1329.7 | 1329.1 |





TEST NUMBER: P331942-930

CATALOG NUMBER: S123DIP-S560D1025U930-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 916.1 | 1072.5 | 1191.0 | 1266.6 | 1309.5 | 1330.8 | 1338.2 | 1339.8 |
| 115°   | 831.6 | 976.6  | 1099.5 | 1190.4 | 1252.5 | 1289.5 | 1306.8 | 1312.1 |
| 117.5° | 769.1 | 894.6  | 1005.3 | 1097.6 | 1162.3 | 1204.4 | 1228.9 | 1235.5 |
| 120°   | 735.7 | 848.8  | 949.7  | 1034.0 | 1099.2 | 1145.7 | 1166.3 | 1172.1 |
| 122.5° | 708.9 | 811.5  | 905.1  | 983.4  | 1041.5 | 1083.5 | 1106.0 | 1113.1 |
| 125°   | 672.8 | 764.4  | 845.5  | 912.5  | 965.6  | 1002.3 | 1023.7 | 1030.3 |
| 127.5° | 640.7 | 722.6  | 795.8  | 856.9  | 904.2  | 935.8  | 955.1  | 961.2  |
| 130°   | 620.4 | 696.3  | 764.8  | 821.9  | 865.9  | 896.0  | 914.0  | 921.3  |
| 132.5° | 601.4 | 671.3  | 735.2  | 789.7  | 831.2  | 861.4  | 877.5  | 883.0  |
| 135°   | 575.7 | 635.9  | 691.3  | 739.3  | 779.9  | 805.0  | 820.4  | 826.7  |
| 137.5° | 552.0 | 601.6  | 649.4  | 691.0  | 725.2  | 750.6  | 763.7  | 768.2  |
| 140°   | 538.1 | 581.6  | 622.8  | 659.2  | 690.8  | 714.3  | 728.0  | 727.9  |
| 142.5° | 524.6 | 562.1  | 597.8  | 629.5  | 656.6  | 677.4  | 689.8  | 689.7  |
| 145°   | 509.2 | 537.2  | 564.4  | 588.8  | 609.7  | 627.3  | 634.4  | 636.6  |
| 147.5° | 496.8 | 518.4  | 539.7  | 556.9  | 572.9  | 585.0  | 591.7  | 592.8  |
| 150°   | 488.3 | 507.0  | 524.1  | 539.7  | 552.2  | 561.4  | 566.6  | 566.9  |
| 152.5° | 481.1 | 497.3  | 512.4  | 525.3  | 534.9  | 543.3  | 546.3  | 546.3  |
| 155°   | 470.3 | 483.4  | 495.6  | 505.4  | 512.7  | 519.2  | 520.8  | 521.6  |
| 157.5° | 459.0 | 469.9  | 479.3  | 487.0  | 493.3  | 498.2  | 499.5  | 499.4  |
| 160°   | 452.5 | 461.5  | 469.5  | 475.2  | 480.9  | 485.8  | 485.8  | 485.0  |
| 162.5° | 444.7 | 452.3  | 459.8  | 464.9  | 468.6  | 472.8  | 472.8  | 472.0  |
| 165°   | 434.6 | 439.4  | 445.2  | 449.2  | 452.5  | 455.8  | 454.9  | 454.9  |
| 167.5° | 425.7 | 429.5  | 432.8  | 435.7  | 437.2  | 439.4  | 438.6  | 438.6  |
| 170°   | 420.0 | 422.4  | 425.6  | 427.2  | 428.0  | 429.7  | 428.8  | 428.8  |
| 172.5° | 414.7 | 416.5  | 419.1  | 420.1  | 420.3  | 421.9  | 420.4  | 419.8  |
| 175°   | 407.7 | 408.5  | 410.2  | 410.2  | 410.2  | 411.0  | 410.2  | 409.4  |
| 177.5° | 403.3 | 404.0  | 404.6  | 404.6  | 404.0  | 404.6  | 403.3  | 403.3  |
| 180°   | 402.0 | 402.0  | 402.0  | 402.0  | 402.0  | 402.0  | 402.0  | 402.0  |

(END OF REPORT)