

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: P332639-927

Luminaire Tested: **S124DIP-S1020D590U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332639-927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DIP-S1020D590U927-4F0-1E-UDD-D4  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1020 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5008.3 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')  
CIE Type: Semi-Direct

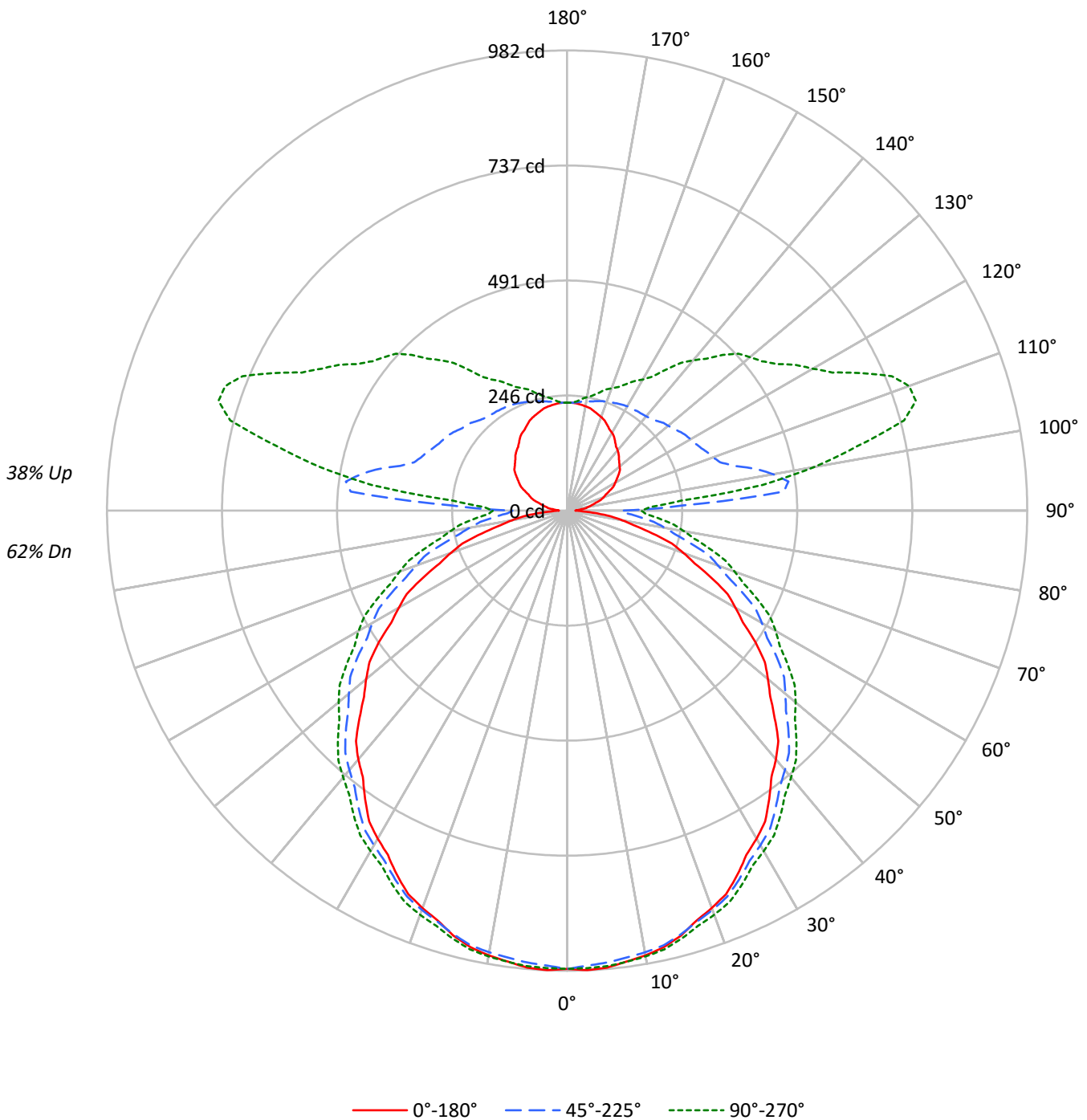
Input Watts (W): 48.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P332639-927

CATALOG NUMBER: S124DIP-S1020D590U927-4F0-1E-UDD-D4

### Luminous Intensity Polar Plot





TEST NUMBER: P332639-927

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**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   | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 90 | 90 | 90 | 78 | 78 | 78 | 67 | 67 | 67 | 62 |
| 1   | 99  | 94  | 90  | 86  | 92  | 88  | 84  | 81  | 77 | 74 | 71 | 67 | 64 | 62 | 57 | 55 | 54 | 49 |
| 2   | 90  | 82  | 75  | 69  | 84  | 76  | 70  | 65  | 67 | 62 | 58 | 58 | 54 | 51 | 49 | 47 | 44 | 40 |
| 3   | 82  | 71  | 63  | 57  | 76  | 67  | 60  | 54  | 58 | 53 | 48 | 51 | 46 | 43 | 43 | 40 | 37 | 33 |
| 4   | 74  | 63  | 54  | 48  | 69  | 59  | 51  | 45  | 52 | 46 | 41 | 45 | 40 | 36 | 39 | 35 | 32 | 28 |
| 5   | 68  | 56  | 47  | 41  | 63  | 52  | 45  | 39  | 46 | 40 | 35 | 40 | 35 | 31 | 35 | 31 | 27 | 24 |
| 6   | 63  | 50  | 41  | 35  | 58  | 47  | 39  | 34  | 41 | 35 | 30 | 36 | 31 | 27 | 31 | 27 | 24 | 21 |
| 7   | 58  | 45  | 37  | 31  | 54  | 42  | 35  | 29  | 38 | 31 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 19 |
| 8   | 54  | 41  | 33  | 27  | 50  | 39  | 31  | 26  | 34 | 28 | 24 | 30 | 25 | 21 | 26 | 22 | 19 | 17 |
| 9   | 50  | 37  | 30  | 24  | 47  | 35  | 28  | 23  | 31 | 25 | 21 | 28 | 23 | 19 | 24 | 20 | 17 | 15 |
| 10  | 47  | 34  | 27  | 22  | 44  | 32  | 25  | 21  | 29 | 23 | 19 | 26 | 21 | 17 | 22 | 18 | 15 | 13 |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 7896 | 7896 | 7896 |
| 5°  | 7920 | 7717 | 7739 |
| 10° | 7872 | 7591 | 7585 |
| 15° | 7802 | 7444 | 7404 |
| 20° | 7695 | 7284 | 7227 |
| 25° | 7575 | 7102 | 7034 |
| 30° | 7445 | 6922 | 6835 |
| 35° | 7299 | 6739 | 6660 |
| 40° | 7181 | 6564 | 6478 |
| 45° | 7007 | 6402 | 6322 |
| 50° | 6859 | 6215 | 6158 |
| 55° | 6707 | 6040 | 5964 |
| 60° | 6469 | 5816 | 5788 |
| 65° | 6208 | 5578 | 5571 |
| 70° | 5894 | 5303 | 5319 |
| 75° | 5453 | 5001 | 5089 |
| 80° | 4964 | 4711 | 4865 |
| 85° | 4347 | 4456 | 4735 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 92.6   | 1.8       |
| 10°-20°   | 265.4  | 5.3       |
| 20°-30°   | 401.3  | 8.0       |
| 30°-40°   | 485.5  | 9.7       |
| 40°-50°   | 513.3  | 10.2      |
| 50°-60°   | 483.1  | 9.6       |
| 60°-70°   | 400.8  | 8.0       |
| 70°-80°   | 281.5  | 5.6       |
| 80°-90°   | 160.4  | 3.2       |
| 90°-100°  | 260.6  | 5.2       |
| 100°-110° | 415.7  | 8.3       |
| 110°-120° | 356.6  | 7.1       |
| 120°-130° | 287.0  | 5.7       |
| 130°-140° | 228.7  | 4.6       |
| 140°-150° | 168.3  | 3.4       |
| 150°-160° | 116.7  | 2.3       |
| 160°-170° | 68.6   | 1.4       |
| 170°-180° | 22.3   | 0.4       |
| 0°-30°    | 759.3  | 15.2      |
| 0°-40°    | 1244.8 | 24.9      |
| 0°-60°    | 2241.1 | 44.7      |
| 0°-90°    | 3083.8 | 61.6      |
| 90°-120°  | 1033.0 | 20.6      |
| 90°-150°  | 1716.9 | 34.3      |
| 90°-180°  | 1925.0 | 38.4      |
| 0°-180°   | 5008.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 978 | 978   | 978 | 978   | 978 |      |
| 5°   | 979 | 976   | 968 | 976   | 976 | 93   |
| 15°  | 939 | 940   | 936 | 946   | 945 | 264  |
| 25°  | 859 | 865   | 868 | 880   | 882 | 395  |
| 35°  | 751 | 764   | 776 | 790   | 794 | 470  |
| 45°  | 626 | 647   | 668 | 686   | 692 | 484  |
| 55°  | 491 | 514   | 546 | 568   | 575 | 437  |
| 65°  | 340 | 375   | 412 | 438   | 448 | 336  |
| 75°  | 188 | 229   | 275 | 304   | 315 | 200  |
| 85°  | 58  | 104   | 153 | 185   | 197 | 62   |
| 90°  | 18  | 65    | 116 | 148   | 158 | 12   |
| 95°  | 29  | 98    | 464 | 306   | 245 | 28   |
| 105° | 63  | 109   | 369 | 737   | 744 | 67   |
| 115° | 100 | 135   | 316 | 583   | 694 | 99   |
| 125° | 134 | 159   | 294 | 483   | 545 | 120  |
| 135° | 156 | 186   | 271 | 410   | 470 | 121  |
| 145° | 179 | 203   | 259 | 330   | 367 | 112  |
| 155° | 202 | 218   | 252 | 286   | 298 | 93   |
| 165° | 220 | 227   | 242 | 256   | 260 | 62   |
| 175° | 230 | 230   | 232 | 235   | 234 | 22   |
| 180° | 230 | 230   | 230 | 230   | 230 |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 |
| 2.5°   | 981.6 | 981.0 | 980.4 | 979.9 | 979.2 | 978.2 | 976.6 | 975.1 | 973.5 | 971.9 | 973.3 |
| 5°     | 979.1 | 978.4 | 977.7 | 977.0 | 976.3 | 975.0 | 973.4 | 971.6 | 969.9 | 968.2 | 970.2 |
| 7.5°   | 970.8 | 970.4 | 969.9 | 969.6 | 969.1 | 968.2 | 966.8 | 965.4 | 963.9 | 962.5 | 964.7 |
| 10°    | 963.8 | 963.6 | 963.4 | 963.1 | 962.9 | 962.1 | 960.9 | 959.7 | 958.5 | 957.3 | 959.5 |
| 12.5°  | 954.2 | 954.2 | 954.1 | 954.0 | 954.0 | 953.5 | 952.8 | 951.9 | 951.1 | 950.2 | 952.3 |
| 15°    | 938.7 | 938.9 | 939.1 | 939.4 | 939.6 | 939.4 | 938.7 | 937.9 | 937.2 | 936.4 | 938.7 |
| 17.5°  | 917.4 | 918.1 | 918.9 | 919.6 | 920.4 | 920.6 | 920.4 | 920.4 | 920.2 | 920.0 | 922.3 |
| 20°    | 902.5 | 903.2 | 904.0 | 904.7 | 905.5 | 905.9 | 906.2 | 906.4 | 906.7 | 906.9 | 909.3 |
| 22.5°  | 885.8 | 886.8 | 887.7 | 888.7 | 889.5 | 890.3 | 890.7 | 891.1 | 891.5 | 892.0 | 894.5 |
| 25°    | 858.7 | 860.2 | 861.6 | 863.1 | 864.5 | 865.6 | 866.3 | 867.1 | 867.8 | 868.5 | 871.2 |
| 27.5°  | 828.5 | 830.6 | 832.7 | 834.9 | 837.0 | 838.7 | 839.8 | 840.9 | 842.0 | 843.1 | 845.7 |
| 30°    | 808.3 | 810.2 | 812.2 | 814.1 | 816.1 | 817.9 | 819.6 | 821.3 | 823.0 | 824.7 | 827.4 |
| 32.5°  | 786.4 | 788.8 | 791.1 | 793.4 | 795.7 | 797.9 | 799.8 | 801.7 | 803.6 | 805.5 | 808.5 |
| 35°    | 751.4 | 754.3 | 757.2 | 760.1 | 763.0 | 765.7 | 768.2 | 770.6 | 773.0 | 775.5 | 778.9 |
| 37.5°  | 716.1 | 719.5 | 722.8 | 726.2 | 729.5 | 732.7 | 735.7 | 738.7 | 741.8 | 744.8 | 748.2 |
| 40°    | 693.3 | 696.5 | 699.7 | 702.8 | 706.0 | 709.2 | 712.6 | 716.1 | 719.5 | 722.9 | 726.5 |
| 42.5°  | 667.0 | 670.6 | 674.1 | 677.7 | 681.2 | 685.0 | 689.0 | 693.0 | 697.0 | 701.0 | 705.0 |
| 45°    | 626.5 | 631.1 | 635.7 | 640.4 | 645.0 | 649.6 | 654.3 | 658.9 | 663.5 | 668.1 | 672.2 |
| 47.5°  | 587.7 | 592.5 | 597.2 | 602.1 | 606.8 | 611.9 | 617.2 | 622.6 | 628.0 | 633.3 | 637.5 |
| 50°    | 559.7 | 565.1 | 570.4 | 575.8 | 581.1 | 586.5 | 591.8 | 597.1 | 602.5 | 607.8 | 612.8 |
| 52.5°  | 531.6 | 537.0 | 542.3 | 547.7 | 553.1 | 558.8 | 564.9 | 571.1 | 577.2 | 583.4 | 588.2 |
| 55°    | 490.7 | 495.8 | 500.9 | 506.0 | 511.1 | 517.3 | 524.7 | 532.0 | 539.2 | 546.5 | 551.4 |
| 57.5°  | 444.9 | 451.2 | 457.6 | 463.9 | 470.2 | 477.0 | 484.3 | 491.5 | 498.8 | 506.0 | 511.8 |
| 60°    | 415.1 | 421.4 | 427.8 | 434.1 | 440.5 | 447.6 | 455.7 | 463.7 | 471.7 | 479.7 | 485.3 |
| 62.5°  | 386.2 | 393.1 | 400.1 | 406.9 | 413.8 | 421.3 | 429.4 | 437.4 | 445.4 | 453.4 | 459.1 |
| 65°    | 339.5 | 347.3 | 355.1 | 362.9 | 370.7 | 378.7 | 387.0 | 395.3 | 403.5 | 411.9 | 417.9 |
| 67.5°  | 294.6 | 302.9 | 311.2 | 319.5 | 327.7 | 336.3 | 345.2 | 354.0 | 362.9 | 371.8 | 378.0 |
| 70°    | 264.0 | 272.3 | 280.5 | 288.8 | 297.1 | 305.9 | 315.1 | 324.3 | 333.6 | 342.9 | 349.4 |
| 72.5°  | 234.2 | 242.6 | 251.1 | 259.6 | 268.1 | 277.2 | 287.0 | 296.8 | 306.7 | 316.6 | 322.9 |
| 75°    | 188.4 | 197.4 | 206.4 | 215.4 | 224.4 | 234.0 | 244.2 | 254.4 | 264.7 | 274.9 | 281.7 |
| 77.5°  | 145.7 | 155.2 | 164.8 | 174.3 | 183.9 | 193.9 | 204.7 | 215.4 | 226.1 | 236.8 | 243.7 |
| 80°    | 119.4 | 129.1 | 138.9 | 148.6 | 158.4 | 168.6 | 179.3 | 190.0 | 200.7 | 211.4 | 218.7 |
| 82.5°  | 93.1  | 103.2 | 113.4 | 123.5 | 133.6 | 144.0 | 154.7 | 165.4 | 176.2 | 186.9 | 194.3 |
| 85°    | 58.1  | 68.3  | 78.5  | 88.7  | 98.9  | 109.6 | 120.5 | 131.4 | 142.4 | 153.4 | 160.7 |
| 87.5°  | 32.5  | 42.6  | 52.8  | 62.8  | 72.9  | 83.2  | 94.3  | 105.0 | 115.9 | 126.7 | 133.6 |
| 90°    | 18.0  | 28.6  | 39.7  | 49.9  | 60.0  | 70.2  | 83.3  | 93.8  | 105.2 | 116.5 | 123.2 |
| 92.5°  | 21.8  | 32.9  | 45.9  | 60.2  | 75.6  | 94.6  | 128.0 | 173.5 | 218.2 | 246.5 | 229.4 |
| 95°    | 29.2  | 38.5  | 51.1  | 65.0  | 83.9  | 111.9 | 161.1 | 245.3 | 363.2 | 463.6 | 480.5 |
| 97.5°  | 39.7  | 46.6  | 57.4  | 69.7  | 86.0  | 110.3 | 150.4 | 221.5 | 338.7 | 476.4 | 570.6 |
| 100°   | 46.4  | 52.8  | 62.2  | 74.0  | 88.9  | 111.2 | 147.4 | 207.9 | 309.7 | 446.6 | 568.8 |
| 102.5° | 53.6  | 59.9  | 68.2  | 78.8  | 92.6  | 113.8 | 147.2 | 201.5 | 289.1 | 411.5 | 537.1 |
| 105°   | 62.7  | 68.9  | 76.0  | 86.3  | 99.3  | 119.4 | 150.1 | 196.6 | 268.9 | 368.8 | 481.0 |
| 107.5° | 75.0  | 79.9  | 86.1  | 95.9  | 107.7 | 126.8 | 155.3 | 198.0 | 260.5 | 342.1 | 434.8 |
| 110°   | 82.4  | 86.7  | 92.4  | 101.2 | 112.8 | 130.9 | 159.3 | 199.5 | 257.7 | 331.8 | 411.0 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 89.5  | 93.4  | 99.0  | 107.1 | 118.3 | 136.1 | 163.3 | 201.3 | 255.9 | 324.2 | 395.2 |
| 115°   | 99.7  | 103.2 | 108.5 | 115.3 | 126.0 | 143.2 | 169.1 | 204.0 | 253.8 | 315.8 | 378.1 |
| 117.5° | 111.4 | 113.9 | 118.0 | 124.4 | 133.7 | 150.7 | 175.1 | 207.2 | 252.2 | 308.8 | 366.5 |
| 120°   | 118.4 | 120.1 | 124.0 | 129.7 | 138.1 | 154.6 | 178.9 | 209.5 | 251.3 | 304.4 | 359.5 |
| 122.5° | 125.7 | 126.7 | 130.1 | 134.8 | 143.4 | 159.1 | 182.9 | 211.6 | 250.6 | 299.7 | 352.2 |
| 125°   | 134.0 | 135.6 | 138.1 | 142.8 | 151.1 | 166.8 | 189.1 | 215.9 | 250.6 | 293.7 | 341.7 |
| 127.5° | 142.3 | 143.5 | 146.5 | 151.9 | 160.7 | 175.6 | 196.0 | 219.8 | 249.2 | 286.1 | 328.4 |
| 130°   | 146.1 | 147.7 | 151.0 | 157.6 | 165.9 | 180.9 | 200.1 | 221.6 | 248.6 | 281.4 | 320.1 |
| 132.5° | 150.8 | 152.0 | 156.5 | 162.6 | 171.7 | 185.5 | 204.0 | 224.3 | 248.3 | 277.5 | 312.8 |
| 135°   | 156.3 | 158.1 | 162.6 | 170.3 | 179.8 | 192.4 | 209.0 | 227.0 | 247.2 | 270.6 | 300.7 |
| 137.5° | 162.9 | 164.4 | 169.1 | 176.2 | 185.8 | 197.3 | 212.0 | 228.0 | 245.3 | 265.5 | 290.7 |
| 140°   | 167.5 | 168.7 | 173.4 | 180.9 | 190.1 | 201.0 | 214.8 | 229.5 | 245.1 | 262.4 | 285.1 |
| 142.5° | 171.7 | 173.1 | 177.6 | 184.9 | 194.0 | 204.4 | 217.5 | 230.7 | 245.2 | 260.7 | 280.7 |
| 145°   | 178.7 | 179.8 | 184.1 | 190.1 | 198.5 | 208.3 | 220.1 | 232.3 | 245.4 | 259.4 | 275.3 |
| 147.5° | 186.7 | 187.0 | 190.7 | 196.9 | 203.8 | 212.7 | 223.7 | 234.3 | 245.8 | 257.8 | 270.7 |
| 150°   | 191.8 | 192.0 | 195.4 | 200.6 | 207.1 | 215.6 | 225.5 | 235.4 | 245.8 | 256.7 | 268.0 |
| 152.5° | 195.6 | 195.7 | 199.2 | 204.2 | 210.2 | 218.1 | 227.0 | 236.1 | 245.1 | 254.8 | 265.1 |
| 155°   | 202.0 | 202.5 | 205.2 | 209.7 | 214.7 | 221.4 | 229.1 | 236.8 | 244.0 | 252.2 | 260.7 |
| 157.5° | 208.4 | 208.4 | 211.0 | 214.4 | 218.8 | 224.1 | 230.7 | 236.8 | 242.9 | 249.4 | 256.4 |
| 160°   | 212.4 | 212.4 | 214.2 | 217.4 | 220.9 | 225.9 | 231.4 | 236.8 | 241.8 | 247.2 | 253.1 |
| 162.5° | 216.0 | 215.6 | 217.1 | 219.9 | 223.2 | 227.0 | 232.1 | 236.8 | 240.7 | 245.0 | 250.2 |
| 165°   | 220.1 | 220.1 | 220.9 | 223.2 | 225.5 | 228.2 | 232.3 | 235.9 | 238.6 | 241.8 | 245.4 |
| 167.5° | 224.1 | 223.7 | 224.1 | 225.9 | 227.1 | 229.2 | 232.2 | 234.8 | 236.5 | 238.5 | 241.1 |
| 170°   | 225.9 | 225.5 | 225.9 | 227.3 | 228.2 | 229.6 | 231.8 | 234.1 | 235.0 | 236.3 | 238.1 |
| 172.5° | 227.8 | 227.3 | 227.4 | 228.4 | 228.9 | 229.9 | 231.5 | 233.4 | 233.5 | 234.2 | 235.6 |
| 175°   | 229.6 | 229.1 | 229.1 | 229.6 | 230.0 | 230.0 | 230.9 | 232.3 | 231.8 | 231.8 | 232.7 |
| 177.5° | 230.4 | 230.0 | 229.7 | 230.0 | 230.0 | 230.0 | 230.4 | 231.1 | 230.4 | 230.4 | 230.8 |
| 180°   | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 |



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**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 | 978.1 |
| 2.5°   | 974.7 | 976.0 | 977.4 | 977.9 | 977.8 | 977.6 | 977.4 | 977.2 |
| 5°     | 972.1 | 974.1 | 976.0 | 976.8 | 976.6 | 976.4 | 976.1 | 975.9 |
| 7.5°   | 966.9 | 969.1 | 971.3 | 972.2 | 972.0 | 971.8 | 971.5 | 971.3 |
| 10°    | 961.6 | 963.8 | 966.1 | 967.0 | 966.8 | 966.5 | 966.3 | 966.1 |
| 12.5°  | 954.3 | 956.2 | 958.2 | 959.3 | 959.2 | 959.1 | 959.1 | 959.0 |
| 15°    | 940.9 | 943.0 | 945.2 | 946.2 | 945.9 | 945.7 | 945.5 | 945.2 |
| 17.5°  | 924.5 | 926.8 | 929.0 | 930.0 | 929.8 | 929.6 | 929.4 | 929.2 |
| 20°    | 911.7 | 914.2 | 916.6 | 917.8 | 917.8 | 917.8 | 917.8 | 917.8 |
| 22.5°  | 896.8 | 899.3 | 901.7 | 903.2 | 903.6 | 903.9 | 904.3 | 904.7 |
| 25°    | 873.9 | 876.5 | 879.2 | 880.7 | 881.0 | 881.2 | 881.5 | 881.7 |
| 27.5°  | 848.1 | 850.6 | 853.1 | 854.4 | 854.8 | 855.1 | 855.3 | 855.6 |
| 30°    | 830.1 | 832.7 | 835.4 | 837.0 | 837.5 | 838.0 | 838.5 | 839.0 |
| 32.5°  | 811.6 | 814.7 | 817.8 | 819.5 | 820.0 | 820.5 | 820.9 | 821.5 |
| 35°    | 782.3 | 785.7 | 789.1 | 791.2 | 791.9 | 792.6 | 793.4 | 794.1 |
| 37.5°  | 751.7 | 755.2 | 758.6 | 760.7 | 761.5 | 762.3 | 763.0 | 763.8 |
| 40°    | 730.2 | 733.8 | 737.5 | 739.8 | 740.8 | 741.7 | 742.8 | 743.7 |
| 42.5°  | 709.1 | 713.1 | 717.2 | 719.5 | 720.3 | 721.1 | 721.9 | 722.6 |
| 45°    | 676.4 | 680.6 | 684.7 | 687.4 | 688.6 | 689.8 | 691.0 | 692.2 |
| 47.5°  | 641.8 | 646.1 | 650.5 | 653.3 | 654.7 | 656.2 | 657.7 | 659.2 |
| 50°    | 617.6 | 622.5 | 627.3 | 630.5 | 632.0 | 633.4 | 634.9 | 636.4 |
| 52.5°  | 593.1 | 597.9 | 602.9 | 605.9 | 607.4 | 608.9 | 610.4 | 611.8 |
| 55°    | 556.3 | 561.2 | 566.0 | 569.2 | 570.6 | 572.1 | 573.5 | 575.0 |
| 57.5°  | 517.6 | 523.4 | 529.2 | 532.7 | 534.1 | 535.5 | 536.9 | 538.2 |
| 60°    | 490.9 | 496.5 | 502.1 | 505.9 | 507.9 | 509.8 | 511.7 | 513.7 |
| 62.5°  | 464.6 | 470.2 | 475.9 | 479.6 | 481.6 | 483.5 | 485.4 | 487.4 |
| 65°    | 424.0 | 430.1 | 436.2 | 440.2 | 442.1 | 444.1 | 446.0 | 448.0 |
| 67.5°  | 384.1 | 390.3 | 396.5 | 400.5 | 402.4 | 404.3 | 406.2 | 408.1 |
| 70°    | 355.9 | 362.5 | 369.1 | 373.3 | 374.9 | 376.7 | 378.3 | 380.1 |
| 72.5°  | 329.3 | 335.6 | 342.1 | 346.2 | 348.1 | 350.0 | 351.9 | 353.8 |
| 75°    | 288.5 | 295.3 | 302.1 | 306.7 | 308.9 | 311.1 | 313.2 | 315.4 |
| 77.5°  | 250.6 | 257.5 | 264.4 | 269.1 | 271.4 | 273.8 | 276.1 | 278.5 |
| 80°    | 226.0 | 233.3 | 240.6 | 245.2 | 247.2 | 249.1 | 251.0 | 253.0 |
| 82.5°  | 201.8 | 209.4 | 216.8 | 221.7 | 223.8 | 225.9 | 228.1 | 230.2 |
| 85°    | 167.9 | 175.2 | 182.5 | 187.4 | 189.9 | 192.3 | 194.7 | 197.2 |
| 87.5°  | 140.9 | 148.0 | 155.1 | 159.7 | 161.9 | 164.2 | 166.2 | 168.4 |
| 90°    | 130.7 | 138.2 | 145.7 | 150.2 | 152.6 | 155.0 | 156.5 | 158.4 |
| 92.5°  | 205.7 | 190.5 | 183.8 | 179.1 | 175.8 | 175.2 | 175.7 | 177.6 |
| 95°    | 443.3 | 379.9 | 325.8 | 286.4 | 266.4 | 254.6 | 248.7 | 244.9 |
| 97.5°  | 596.0 | 576.3 | 538.5 | 495.6 | 465.2 | 440.1 | 428.6 | 421.4 |
| 100°   | 641.4 | 657.0 | 641.4 | 612.1 | 574.5 | 548.7 | 536.8 | 534.9 |
| 102.5° | 634.1 | 685.3 | 698.1 | 688.3 | 666.1 | 648.0 | 635.6 | 634.6 |
| 105°   | 590.6 | 674.9 | 725.6 | 748.2 | 751.1 | 749.4 | 745.0 | 744.3 |
| 107.5° | 532.4 | 621.6 | 690.6 | 734.8 | 758.9 | 771.0 | 777.2 | 780.1 |
| 110°   | 497.1 | 580.8 | 652.0 | 705.4 | 739.5 | 760.4 | 770.5 | 776.5 |





TEST NUMBER: P332639-927

CATALOG NUMBER: S124DIP-S1020D590U927-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 469.5 | 544.1 | 611.4 | 664.7 | 703.1 | 728.0 | 741.3 | 749.9 |
| 115°   | 440.0 | 500.9 | 559.1 | 606.0 | 643.5 | 672.2 | 688.4 | 693.8 |
| 117.5° | 421.6 | 472.7 | 519.4 | 559.6 | 592.0 | 616.7 | 633.3 | 638.1 |
| 120°   | 411.8 | 458.7 | 499.7 | 535.2 | 562.9 | 584.7 | 598.4 | 605.3 |
| 122.5° | 403.1 | 448.5 | 486.2 | 517.7 | 541.2 | 560.0 | 571.6 | 578.4 |
| 125°   | 389.7 | 433.2 | 469.0 | 496.9 | 516.4 | 531.0 | 541.1 | 545.2 |
| 127.5° | 373.6 | 415.1 | 450.6 | 477.2 | 497.0 | 510.3 | 519.2 | 523.6 |
| 130°   | 361.9 | 402.0 | 437.2 | 464.1 | 484.0 | 496.8 | 505.5 | 509.6 |
| 132.5° | 350.5 | 388.2 | 422.4 | 449.2 | 468.8 | 483.0 | 491.3 | 495.5 |
| 135°   | 333.0 | 366.3 | 397.8 | 423.1 | 442.6 | 456.7 | 465.4 | 469.6 |
| 137.5° | 317.8 | 346.3 | 373.0 | 395.9 | 414.0 | 427.7 | 434.8 | 439.3 |
| 140°   | 309.0 | 333.4 | 357.0 | 378.1 | 395.1 | 406.3 | 413.8 | 418.7 |
| 142.5° | 301.4 | 322.9 | 343.2 | 361.5 | 376.5 | 386.7 | 393.4 | 397.0 |
| 145°   | 291.2 | 308.1 | 323.1 | 336.9 | 349.2 | 357.9 | 363.4 | 366.6 |
| 147.5° | 282.8 | 295.2 | 306.3 | 316.7 | 325.8 | 333.2 | 337.4 | 339.0 |
| 150°   | 278.8 | 289.2 | 298.3 | 306.4 | 313.6 | 319.5 | 322.2 | 322.7 |
| 152.5° | 274.8 | 283.8 | 292.1 | 298.8 | 304.9 | 309.7 | 311.3 | 311.8 |
| 155°   | 268.9 | 276.1 | 282.9 | 288.3 | 292.9 | 296.4 | 297.8 | 297.8 |
| 157.5° | 262.4 | 268.5 | 274.2 | 278.5 | 282.0 | 284.7 | 285.5 | 285.5 |
| 160°   | 258.5 | 263.5 | 268.4 | 272.0 | 274.7 | 277.5 | 277.9 | 277.9 |
| 162.5° | 254.5 | 258.7 | 262.6 | 265.9 | 267.9 | 270.6 | 271.1 | 270.7 |
| 165°   | 249.0 | 251.7 | 254.8 | 257.1 | 259.0 | 260.7 | 260.3 | 259.8 |
| 167.5° | 243.7 | 245.7 | 248.3 | 249.6 | 250.6 | 251.7 | 251.6 | 251.3 |
| 170°   | 240.4 | 241.8 | 243.6 | 244.9 | 245.8 | 246.3 | 245.8 | 245.8 |
| 172.5° | 237.5 | 238.5 | 239.6 | 240.6 | 241.1 | 241.6 | 241.1 | 240.4 |
| 175°   | 233.6 | 234.1 | 235.0 | 235.0 | 235.0 | 235.9 | 235.0 | 234.1 |
| 177.5° | 231.1 | 231.5 | 231.5 | 231.8 | 231.5 | 231.8 | 231.1 | 230.4 |
| 180°   | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 | 230.0 |

(END OF REPORT)