

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: P331415-840

Luminaire Tested: **S122DIP-S865D1080U840-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P331415-840  
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: S122DIP-S865D1080U840-4F0-1E-UDD-D1  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 865 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1080 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7419.9 lumens  
Efficiency: N/A  
Efficacy: 113.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.42  
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

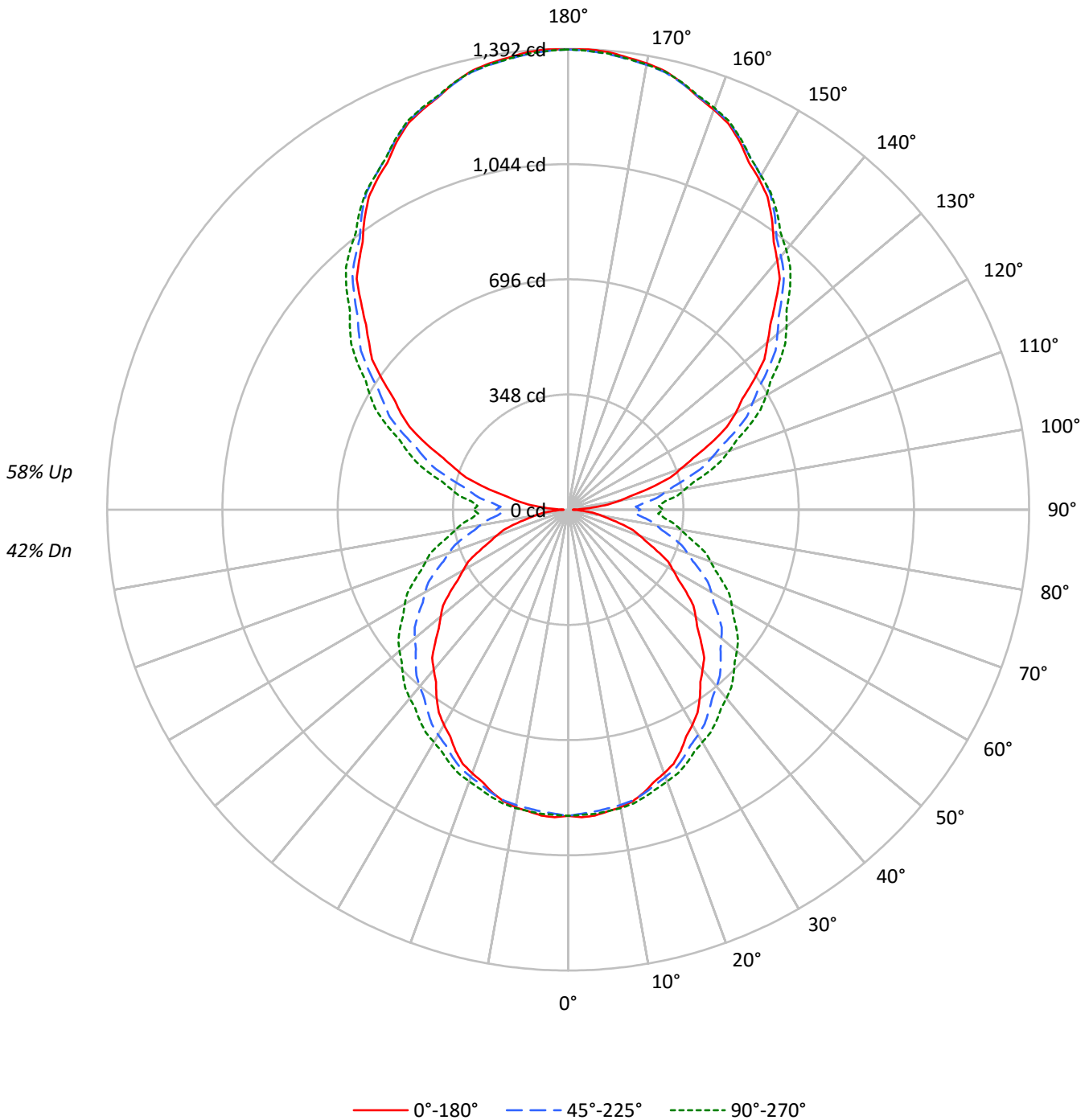
Input Watts (W): 65.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331415-840

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### Luminous Intensity Polar Plot





TEST NUMBER: P331415-840

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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   | 105 | 105 | 105 | 105 | 96 | 96 | 96 | 96 | 79 | 79 | 79 | 63 | 63 | 63 | 49 | 49 | 49 | 42 |
| 1   | 95  | 90  | 86  | 82  | 86 | 82 | 78 | 75 | 67 | 65 | 62 | 54 | 52 | 50 | 41 | 40 | 39 | 33 |
| 2   | 86  | 78  | 71  | 66  | 78 | 71 | 65 | 60 | 58 | 54 | 50 | 46 | 43 | 41 | 36 | 34 | 32 | 27 |
| 3   | 78  | 68  | 60  | 54  | 71 | 62 | 55 | 50 | 51 | 46 | 42 | 41 | 37 | 34 | 31 | 29 | 26 | 22 |
| 4   | 71  | 60  | 52  | 45  | 64 | 55 | 47 | 42 | 45 | 40 | 35 | 36 | 32 | 29 | 28 | 25 | 22 | 18 |
| 5   | 65  | 53  | 45  | 38  | 59 | 49 | 41 | 36 | 40 | 34 | 30 | 32 | 28 | 25 | 25 | 22 | 19 | 16 |
| 6   | 60  | 47  | 39  | 33  | 54 | 43 | 36 | 31 | 36 | 30 | 26 | 29 | 25 | 21 | 22 | 19 | 17 | 14 |
| 7   | 55  | 43  | 35  | 29  | 50 | 39 | 32 | 27 | 32 | 27 | 23 | 26 | 22 | 19 | 20 | 17 | 15 | 12 |
| 8   | 51  | 39  | 31  | 25  | 46 | 35 | 28 | 24 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 16 | 13 | 11 |
| 9   | 48  | 35  | 28  | 22  | 43 | 32 | 26 | 21 | 27 | 22 | 18 | 22 | 18 | 15 | 17 | 14 | 12 | 10 |
| 10  | 44  | 32  | 25  | 20  | 40 | 30 | 23 | 19 | 25 | 20 | 16 | 20 | 16 | 13 | 16 | 13 | 11 | 9  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 14928 | 14928 | 14928 |
| 5°  | 15002 | 14370 | 14315 |
| 10° | 14907 | 13945 | 13789 |
| 15° | 14701 | 13496 | 13236 |
| 20° | 14442 | 13015 | 12701 |
| 25° | 14187 | 12551 | 12216 |
| 30° | 13824 | 12074 | 11729 |
| 35° | 13459 | 11611 | 11386 |
| 40° | 13075 | 11219 | 11044 |
| 45° | 12709 | 10869 | 10750 |
| 50° | 12316 | 10551 | 10462 |
| 55° | 11908 | 10209 | 10166 |
| 60° | 11404 | 9856  | 9857  |
| 65° | 10880 | 9439  | 9485  |
| 70° | 10292 | 8992  | 9089  |
| 75° | 9539  | 8554  | 8722  |
| 80° | 8357  | 8107  | 8349  |
| 85° | 7227  | 7720  | 8061  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 87.6   | 1.2       |
| 10°-20°   | 251.2  | 3.4       |
| 20°-30°   | 380.7  | 5.1       |
| 30°-40°   | 463.7  | 6.2       |
| 40°-50°   | 498.9  | 6.7       |
| 50°-60°   | 484.5  | 6.5       |
| 60°-70°   | 423.0  | 5.7       |
| 70°-80°   | 325.7  | 4.4       |
| 80°-90°   | 224.1  | 3.0       |
| 90°-100°  | 238.6  | 3.2       |
| 100°-110° | 383.5  | 5.2       |
| 110°-120° | 540.2  | 7.3       |
| 120°-130° | 655.5  | 8.8       |
| 130°-140° | 707.2  | 9.5       |
| 140°-150° | 679.7  | 9.2       |
| 150°-160° | 567.6  | 7.7       |
| 160°-170° | 376.5  | 5.1       |
| 170°-180° | 131.6  | 1.8       |
| 0°-30°    | 719.6  | 9.7       |
| 0°-40°    | 1183.3 | 15.9      |
| 0°-60°    | 2166.6 | 29.2      |
| 0°-90°    | 3139.4 | 42.3      |
| 90°-120°  | 1162.4 | 15.7      |
| 90°-150°  | 3204.8 | 43.2      |
| 90°-180°  | 4280.0 | 57.7      |
| 0°-180°   | 7419.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 925  | 925   | 925  | 925   | 925  |      |
| 5°   | 927  | 923   | 915  | 923   | 922  | 88   |
| 15°  | 884  | 887   | 887  | 898   | 898  | 249  |
| 25°  | 804  | 814   | 826  | 841   | 846  | 369  |
| 35°  | 693  | 716   | 741  | 769   | 780  | 433  |
| 45°  | 568  | 605   | 651  | 691   | 706  | 438  |
| 55°  | 436  | 485   | 553  | 600   | 619  | 389  |
| 65°  | 298  | 364   | 442  | 495   | 514  | 295  |
| 75°  | 165  | 240   | 326  | 381   | 401  | 174  |
| 85°  | 48   | 132   | 217  | 271   | 292  | 52   |
| 90°  | 14   | 107   | 218  | 267   | 286  | 12   |
| 95°  | 72   | 147   | 229  | 278   | 294  | 78   |
| 105° | 259  | 303   | 373  | 421   | 437  | 274  |
| 115° | 474  | 498   | 554  | 592   | 605  | 469  |
| 125° | 685  | 698   | 735  | 767   | 779  | 613  |
| 135° | 885  | 898   | 913  | 939   | 948  | 684  |
| 145° | 1072 | 1080  | 1087 | 1096  | 1099 | 670  |
| 155° | 1226 | 1229  | 1233 | 1238  | 1235 | 564  |
| 165° | 1334 | 1333  | 1333 | 1340  | 1335 | 376  |
| 175° | 1388 | 1384  | 1382 | 1389  | 1383 | 132  |
| 180° | 1390 | 1390  | 1390 | 1390  | 1390 |      |



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 |
| 2.5°   | 930.0 | 929.3 | 928.6 | 927.9 | 927.2 | 925.9 | 924.2 | 922.6 | 920.9 | 919.3 | 920.5 |
| 5°     | 927.3 | 926.5 | 925.5 | 924.6 | 923.7 | 922.4 | 920.6 | 918.8 | 917.1 | 915.2 | 917.1 |
| 7.5°   | 919.0 | 918.4 | 917.8 | 917.3 | 916.7 | 915.6 | 914.2 | 912.9 | 911.5 | 910.2 | 912.3 |
| 10°    | 912.6 | 912.0 | 911.4 | 910.8 | 910.2 | 909.5 | 908.6 | 907.7 | 906.8 | 905.8 | 908.3 |
| 12.5°  | 901.8 | 902.0 | 902.1 | 902.2 | 902.3 | 902.0 | 901.4 | 900.7 | 900.1 | 899.4 | 901.8 |
| 15°    | 884.4 | 885.0 | 885.7 | 886.3 | 886.8 | 887.1 | 887.1 | 887.1 | 887.1 | 887.1 | 889.8 |
| 17.5°  | 861.9 | 863.1 | 864.4 | 865.7 | 866.9 | 868.0 | 869.0 | 869.9 | 870.9 | 871.8 | 874.6 |
| 20°    | 846.9 | 848.4 | 849.9 | 851.4 | 852.8 | 854.2 | 855.4 | 856.6 | 857.8 | 859.0 | 862.2 |
| 22.5°  | 830.8 | 832.5 | 834.2 | 836.0 | 837.7 | 839.4 | 841.1 | 842.7 | 844.4 | 846.1 | 849.4 |
| 25°    | 804.1 | 806.1 | 808.2 | 810.3 | 812.3 | 814.8 | 817.4 | 820.1 | 822.7 | 825.5 | 829.0 |
| 27.5°  | 771.8 | 775.3 | 778.6 | 782.0 | 785.5 | 788.7 | 791.8 | 795.1 | 798.2 | 801.3 | 805.9 |
| 30°    | 750.4 | 754.3 | 758.2 | 762.0 | 765.9 | 769.8 | 773.7 | 777.5 | 781.4 | 785.3 | 790.0 |
| 32.5°  | 726.8 | 731.1 | 735.5 | 739.9 | 744.3 | 748.7 | 753.3 | 757.9 | 762.4 | 767.0 | 772.5 |
| 35°    | 692.8 | 697.8 | 703.0 | 708.0 | 713.1 | 718.4 | 724.1 | 729.7 | 735.4 | 741.0 | 747.6 |
| 37.5°  | 655.8 | 661.7 | 667.5 | 673.3 | 679.1 | 685.7 | 693.1 | 700.4 | 707.7 | 715.1 | 722.4 |
| 40°    | 631.2 | 637.7 | 644.3 | 650.9 | 657.3 | 664.7 | 672.7 | 680.8 | 688.8 | 696.8 | 704.6 |
| 42.5°  | 607.5 | 614.1 | 620.7 | 627.2 | 633.8 | 641.7 | 650.9 | 660.1 | 669.3 | 678.6 | 687.0 |
| 45°    | 568.2 | 576.2 | 584.2 | 592.3 | 600.4 | 609.6 | 620.0 | 630.5 | 640.9 | 651.3 | 660.5 |
| 47.5°  | 529.3 | 538.1 | 546.8 | 555.6 | 564.3 | 574.8 | 587.0 | 599.3 | 611.5 | 623.7 | 633.3 |
| 50°    | 502.5 | 511.7 | 521.0 | 530.2 | 539.5 | 550.8 | 564.1 | 577.5 | 591.0 | 604.4 | 614.5 |
| 52.5°  | 476.8 | 486.5 | 496.2 | 505.9 | 515.6 | 527.6 | 541.7 | 555.7 | 569.9 | 584.0 | 594.3 |
| 55°    | 435.6 | 446.3 | 457.0 | 467.7 | 478.4 | 491.5 | 507.0 | 522.5 | 538.0 | 553.4 | 564.1 |
| 57.5°  | 394.8 | 406.9 | 419.0 | 431.0 | 443.1 | 457.1 | 472.8 | 488.7 | 504.4 | 520.2 | 531.8 |
| 60°    | 365.9 | 378.6 | 391.4 | 404.2 | 417.1 | 431.9 | 448.9 | 465.9 | 482.8 | 499.9 | 511.2 |
| 62.5°  | 340.1 | 353.4 | 366.7 | 379.9 | 393.2 | 408.4 | 425.4 | 442.3 | 459.3 | 476.3 | 488.3 |
| 65°    | 297.5 | 312.0 | 326.7 | 341.2 | 355.9 | 371.9 | 389.5 | 407.1 | 424.6 | 442.2 | 454.4 |
| 67.5°  | 258.3 | 273.6 | 288.8 | 304.1 | 319.3 | 336.0 | 354.0 | 371.9 | 389.9 | 407.9 | 420.2 |
| 70°    | 230.5 | 246.0 | 261.5 | 276.9 | 292.5 | 309.4 | 327.9 | 346.3 | 364.8 | 383.2 | 396.1 |
| 72.5°  | 204.8 | 220.8 | 236.7 | 252.7 | 268.6 | 285.9 | 304.7 | 323.4 | 342.0 | 360.7 | 373.3 |
| 75°    | 164.8 | 181.5 | 198.1 | 214.9 | 231.6 | 249.4 | 268.4 | 287.5 | 306.6 | 325.6 | 338.4 |
| 77.5°  | 126.2 | 143.7 | 161.2 | 178.5 | 196.0 | 214.4 | 233.8 | 253.2 | 272.5 | 291.9 | 304.6 |
| 80°    | 100.5 | 118.7 | 136.8 | 155.0 | 173.2 | 191.9 | 211.3 | 230.7 | 249.9 | 269.3 | 281.9 |
| 82.5°  | 79.1  | 96.9  | 114.9 | 132.8 | 150.8 | 169.6 | 189.1 | 208.7 | 228.3 | 247.9 | 260.4 |
| 85°    | 48.3  | 66.8  | 85.1  | 103.6 | 122.1 | 140.9 | 159.9 | 178.9 | 198.0 | 217.1 | 229.6 |
| 87.5°  | 26.5  | 44.8  | 63.2  | 81.6  | 100.0 | 119.3 | 139.5 | 159.7 | 179.9 | 200.1 | 212.2 |
| 90°    | 14.5  | 34.9  | 55.3  | 75.7  | 96.1  | 118.8 | 143.6 | 168.3 | 193.2 | 217.9 | 229.3 |
| 92.5°  | 33.2  | 51.6  | 70.0  | 88.4  | 106.7 | 125.7 | 145.4 | 165.1 | 184.8 | 204.5 | 216.3 |
| 95°    | 71.7  | 88.4  | 104.9 | 121.5 | 138.1 | 155.6 | 174.0 | 192.4 | 210.8 | 229.1 | 240.4 |
| 97.5°  | 120.8 | 135.5 | 150.3 | 165.0 | 179.8 | 196.2 | 214.4 | 232.5 | 250.6 | 268.8 | 279.8 |
| 100°   | 158.3 | 171.5 | 184.6 | 197.6 | 210.8 | 226.0 | 243.5 | 260.9 | 278.4 | 295.9 | 306.9 |
| 102.5° | 196.7 | 208.4 | 220.2 | 231.9 | 243.7 | 258.1 | 275.3 | 292.5 | 309.6 | 326.9 | 337.8 |
| 105°   | 258.9 | 268.3 | 277.7 | 287.2 | 296.6 | 309.3 | 325.3 | 341.3 | 357.3 | 373.3 | 384.3 |
| 107.5° | 323.0 | 330.9 | 339.0 | 347.1 | 355.2 | 366.6 | 381.4 | 396.3 | 411.1 | 425.9 | 436.2 |
| 110°   | 363.1 | 370.6 | 378.2 | 385.7 | 393.2 | 404.2 | 418.9 | 433.4 | 448.1 | 462.6 | 472.2 |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 408.2  | 414.8  | 421.3  | 427.9  | 434.4  | 444.5  | 458.3  | 471.9  | 485.5  | 499.3  | 508.2  |
| 115°   | 474.5  | 479.4  | 484.2  | 489.1  | 493.9  | 502.8  | 515.6  | 528.6  | 541.4  | 554.3  | 563.0  |
| 117.5° | 539.4  | 543.6  | 547.9  | 552.1  | 556.3  | 563.9  | 574.8  | 585.7  | 596.6  | 607.6  | 615.8  |
| 120°   | 583.5  | 586.7  | 590.1  | 593.3  | 596.6  | 603.2  | 613.0  | 622.8  | 632.7  | 642.5  | 650.8  |
| 122.5° | 623.9  | 626.8  | 629.9  | 632.8  | 635.8  | 642.2  | 651.9  | 661.6  | 671.4  | 681.1  | 688.5  |
| 125°   | 685.4  | 687.7  | 690.0  | 692.5  | 694.8  | 700.3  | 709.0  | 717.8  | 726.6  | 735.3  | 742.6  |
| 127.5° | 746.6  | 749.3  | 751.9  | 754.7  | 757.3  | 762.0  | 768.8  | 775.5  | 782.2  | 789.0  | 795.5  |
| 130°   | 785.1  | 788.2  | 791.3  | 794.4  | 797.5  | 801.8  | 807.6  | 813.3  | 819.1  | 824.8  | 831.4  |
| 132.5° | 828.3  | 830.7  | 833.2  | 835.7  | 838.1  | 841.8  | 846.8  | 851.7  | 856.6  | 861.5  | 867.3  |
| 135°   | 884.6  | 887.5  | 890.4  | 893.2  | 896.2  | 899.3  | 902.8  | 906.3  | 909.8  | 913.3  | 919.3  |
| 137.5° | 945.4  | 947.7  | 950.0  | 952.3  | 954.5  | 956.6  | 958.7  | 960.7  | 962.6  | 964.6  | 969.9  |
| 140°   | 982.0  | 984.0  | 986.1  | 988.2  | 990.2  | 992.2  | 994.1  | 995.9  | 997.8  | 999.8  | 1004.5 |
| 142.5° | 1019.6 | 1021.6 | 1023.6 | 1025.7 | 1027.7 | 1029.3 | 1030.3 | 1031.3 | 1032.3 | 1033.3 | 1037.3 |
| 145°   | 1072.2 | 1074.0 | 1075.8 | 1077.6 | 1079.4 | 1081.2 | 1082.7 | 1084.3 | 1085.8 | 1087.4 | 1089.4 |
| 147.5° | 1120.2 | 1122.5 | 1124.6 | 1126.8 | 1129.0 | 1130.6 | 1131.7 | 1132.8 | 1133.8 | 1134.8 | 1135.6 |
| 150°   | 1153.1 | 1154.7 | 1156.2 | 1157.8 | 1159.3 | 1160.6 | 1161.7 | 1162.8 | 1163.8 | 1164.9 | 1165.6 |
| 152.5° | 1182.1 | 1183.8 | 1185.3 | 1186.9 | 1188.4 | 1189.8 | 1191.1 | 1192.3 | 1193.7 | 1194.9 | 1195.9 |
| 155°   | 1225.9 | 1226.6 | 1227.4 | 1228.2 | 1229.0 | 1229.7 | 1230.5 | 1231.3 | 1232.1 | 1232.8 | 1234.2 |
| 157.5° | 1263.1 | 1263.6 | 1264.1 | 1264.7 | 1265.3 | 1265.7 | 1266.2 | 1266.7 | 1267.1 | 1267.6 | 1269.4 |
| 160°   | 1285.7 | 1286.2 | 1286.7 | 1287.2 | 1287.8 | 1288.1 | 1288.4 | 1288.7 | 1288.9 | 1289.2 | 1290.7 |
| 162.5° | 1306.3 | 1306.4 | 1306.5 | 1306.6 | 1306.8 | 1306.9 | 1307.2 | 1307.4 | 1307.7 | 1308.0 | 1309.7 |
| 165°   | 1333.7 | 1333.5 | 1333.2 | 1332.9 | 1332.7 | 1332.6 | 1332.6 | 1332.6 | 1332.6 | 1332.6 | 1334.4 |
| 167.5° | 1356.8 | 1355.9 | 1355.1 | 1354.4 | 1353.6 | 1353.2 | 1353.1 | 1353.1 | 1353.0 | 1353.0 | 1354.8 |
| 170°   | 1369.0 | 1368.2 | 1367.4 | 1366.5 | 1365.8 | 1365.3 | 1365.0 | 1364.7 | 1364.5 | 1364.2 | 1366.0 |
| 172.5° | 1377.4 | 1376.6 | 1375.8 | 1375.0 | 1374.2 | 1373.7 | 1373.5 | 1373.2 | 1372.9 | 1372.7 | 1374.5 |
| 175°   | 1387.8 | 1386.9 | 1386.1 | 1385.3 | 1384.6 | 1383.9 | 1383.4 | 1382.9 | 1382.4 | 1381.8 | 1383.7 |
| 177.5° | 1391.9 | 1391.3 | 1390.7 | 1390.1 | 1389.5 | 1388.9 | 1388.5 | 1388.1 | 1387.7 | 1387.3 | 1388.5 |
| 180°   | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 |



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**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 | 924.6 |
| 2.5°   | 921.6 | 922.8 | 924.0 | 924.4 | 923.9 | 923.4 | 922.9 | 922.5 |
| 5°     | 918.8 | 920.6 | 922.4 | 923.1 | 922.8 | 922.5 | 922.2 | 921.9 |
| 7.5°   | 914.4 | 916.6 | 918.8 | 919.7 | 919.4 | 919.1 | 918.8 | 918.5 |
| 10°    | 910.6 | 913.0 | 915.4 | 916.5 | 916.1 | 915.8 | 915.5 | 915.2 |
| 12.5°  | 904.2 | 906.6 | 909.0 | 910.0 | 909.7 | 909.4 | 909.1 | 908.8 |
| 15°    | 892.4 | 895.1 | 897.9 | 899.0 | 898.7 | 898.4 | 898.1 | 897.9 |
| 17.5°  | 877.5 | 880.2 | 883.0 | 884.4 | 884.4 | 884.4 | 884.4 | 884.4 |
| 20°    | 865.6 | 868.8 | 872.0 | 873.7 | 873.7 | 873.7 | 873.7 | 873.7 |
| 22.5°  | 852.6 | 856.0 | 859.2 | 861.1 | 861.5 | 862.0 | 862.5 | 863.0 |
| 25°    | 832.6 | 836.2 | 839.8 | 842.0 | 842.8 | 843.7 | 844.7 | 845.6 |
| 27.5°  | 810.4 | 815.0 | 819.4 | 822.0 | 822.7 | 823.3 | 824.0 | 824.7 |
| 30°    | 794.8 | 799.5 | 804.4 | 807.2 | 808.0 | 808.9 | 809.8 | 810.7 |
| 32.5°  | 778.0 | 783.5 | 788.9 | 792.5 | 794.1 | 795.7 | 797.3 | 798.9 |
| 35°    | 754.2 | 760.7 | 767.3 | 771.5 | 773.7 | 775.8 | 777.8 | 779.9 |
| 37.5°  | 729.5 | 736.8 | 744.1 | 748.8 | 751.0 | 753.3 | 755.5 | 757.7 |
| 40°    | 712.3 | 720.0 | 727.8 | 733.0 | 735.7 | 738.3 | 741.0 | 743.8 |
| 42.5°  | 695.5 | 704.0 | 712.5 | 718.0 | 720.6 | 723.4 | 726.0 | 728.7 |
| 45°    | 669.7 | 678.9 | 688.2 | 694.3 | 697.3 | 700.2 | 703.3 | 706.2 |
| 47.5°  | 643.0 | 652.6 | 662.3 | 668.7 | 672.0 | 675.3 | 678.5 | 681.9 |
| 50°    | 624.6 | 634.7 | 644.9 | 651.6 | 654.8 | 658.1 | 661.4 | 664.7 |
| 52.5°  | 604.7 | 615.1 | 625.4 | 632.4 | 635.9 | 639.4 | 642.9 | 646.4 |
| 55°    | 574.9 | 585.6 | 596.3 | 603.6 | 607.4 | 611.4 | 615.2 | 619.0 |
| 57.5°  | 543.3 | 554.8 | 566.4 | 574.2 | 578.0 | 582.0 | 585.9 | 589.9 |
| 60°    | 522.5 | 533.8 | 545.1 | 552.8 | 557.0 | 561.2 | 565.3 | 569.6 |
| 62.5°  | 500.3 | 512.3 | 524.3 | 532.4 | 536.2 | 540.2 | 544.1 | 548.1 |
| 65°    | 466.7 | 478.9 | 491.1 | 499.1 | 502.9 | 506.9 | 510.7 | 514.5 |
| 67.5°  | 432.5 | 444.8 | 457.3 | 465.4 | 469.5 | 473.5 | 477.6 | 481.6 |
| 70°    | 408.9 | 421.6 | 434.4 | 442.6 | 446.3 | 449.8 | 453.4 | 457.0 |
| 72.5°  | 385.9 | 398.4 | 411.0 | 419.4 | 423.7 | 428.0 | 432.3 | 436.6 |
| 75°    | 351.2 | 364.1 | 376.9 | 385.2 | 389.1 | 392.9 | 396.8 | 400.7 |
| 77.5°  | 317.4 | 330.1 | 342.8 | 351.3 | 355.5 | 359.6 | 363.9 | 368.0 |
| 80°    | 294.4 | 306.9 | 319.4 | 327.7 | 331.8 | 336.1 | 340.2 | 344.4 |
| 82.5°  | 273.0 | 285.4 | 297.9 | 306.2 | 310.1 | 314.0 | 317.9 | 321.8 |
| 85°    | 242.1 | 254.6 | 267.1 | 275.5 | 279.6 | 283.8 | 287.9 | 292.2 |
| 87.5°  | 224.2 | 236.2 | 248.3 | 256.2 | 260.1 | 264.0 | 267.8 | 271.7 |
| 90°    | 240.8 | 252.1 | 263.5 | 271.1 | 275.0 | 278.8 | 282.7 | 286.5 |
| 92.5°  | 228.1 | 239.8 | 251.7 | 259.3 | 263.0 | 266.6 | 270.2 | 273.9 |
| 95°    | 251.9 | 263.2 | 274.5 | 281.7 | 284.7 | 287.7 | 290.7 | 293.9 |
| 97.5°  | 290.8 | 301.8 | 312.9 | 320.1 | 323.6 | 327.0 | 330.5 | 334.0 |
| 100°   | 317.9 | 328.9 | 339.9 | 347.0 | 350.0 | 353.0 | 356.0 | 359.0 |
| 102.5° | 348.8 | 359.8 | 370.8 | 377.8 | 380.8 | 383.8 | 386.9 | 389.9 |
| 105°   | 395.2 | 406.2 | 417.1 | 424.2 | 427.5 | 430.7 | 434.0 | 437.3 |
| 107.5° | 446.4 | 456.6 | 466.8 | 472.9 | 474.9 | 477.1 | 479.2 | 481.2 |
| 110°   | 481.7 | 491.2 | 500.8 | 506.8 | 509.3 | 511.8 | 514.2 | 516.7 |





TEST NUMBER: P331415-840

CATALOG NUMBER: S122DIP-S865D1080U840-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

|        | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 517.1  | 525.9  | 534.8  | 540.7  | 543.4  | 546.0  | 548.8  | 551.5  |
| 115°   | 571.7  | 580.4  | 589.0  | 594.6  | 597.0  | 599.6  | 602.1  | 604.6  |
| 117.5° | 624.0  | 632.2  | 640.4  | 645.6  | 647.8  | 650.1  | 652.4  | 654.6  |
| 120°   | 659.1  | 667.5  | 675.8  | 681.3  | 683.7  | 686.2  | 688.7  | 691.3  |
| 122.5° | 696.0  | 703.5  | 710.9  | 715.8  | 718.0  | 720.2  | 722.5  | 724.7  |
| 125°   | 749.8  | 757.1  | 764.4  | 769.2  | 771.6  | 774.1  | 776.5  | 778.9  |
| 127.5° | 801.9  | 808.3  | 814.8  | 818.9  | 820.7  | 822.4  | 824.3  | 826.1  |
| 130°   | 838.1  | 844.7  | 851.3  | 855.3  | 856.7  | 858.0  | 859.3  | 860.6  |
| 132.5° | 873.0  | 878.8  | 884.5  | 888.3  | 889.8  | 891.3  | 892.9  | 894.4  |
| 135°   | 925.2  | 931.3  | 937.3  | 941.1  | 942.7  | 944.2  | 945.8  | 947.5  |
| 137.5° | 975.2  | 980.5  | 985.7  | 988.9  | 989.9  | 990.8  | 991.8  | 992.8  |
| 140°   | 1009.3 | 1014.1 | 1018.9 | 1021.6 | 1022.3 | 1023.1 | 1023.8 | 1024.5 |
| 142.5° | 1041.4 | 1045.3 | 1049.4 | 1051.7 | 1052.2 | 1052.7 | 1053.2 | 1053.7 |
| 145°   | 1091.5 | 1093.6 | 1095.6 | 1096.8 | 1097.3 | 1097.7 | 1098.2 | 1098.6 |
| 147.5° | 1136.4 | 1137.2 | 1138.0 | 1138.3 | 1138.0 | 1137.8 | 1137.5 | 1137.2 |
| 150°   | 1166.4 | 1167.2 | 1168.0 | 1168.0 | 1167.2 | 1166.4 | 1165.6 | 1164.9 |
| 152.5° | 1196.9 | 1197.8 | 1198.8 | 1198.8 | 1197.8 | 1196.9 | 1195.9 | 1194.9 |
| 155°   | 1235.5 | 1236.8 | 1238.1 | 1238.3 | 1237.6 | 1236.8 | 1236.0 | 1235.2 |
| 157.5° | 1271.1 | 1272.9 | 1274.7 | 1275.0 | 1273.6 | 1272.4 | 1271.2 | 1269.9 |
| 160°   | 1292.3 | 1293.8 | 1295.5 | 1295.7 | 1294.6 | 1293.6 | 1292.5 | 1291.5 |
| 162.5° | 1311.5 | 1313.2 | 1315.0 | 1315.2 | 1314.0 | 1312.8 | 1311.5 | 1310.3 |
| 165°   | 1336.3 | 1338.1 | 1339.9 | 1340.1 | 1338.9 | 1337.6 | 1336.3 | 1334.9 |
| 167.5° | 1356.7 | 1358.5 | 1360.3 | 1360.5 | 1359.2 | 1357.8 | 1356.5 | 1355.1 |
| 170°   | 1367.9 | 1369.7 | 1371.5 | 1371.7 | 1370.1 | 1368.6 | 1367.0 | 1365.4 |
| 172.5° | 1376.3 | 1378.2 | 1380.0 | 1380.1 | 1378.6 | 1377.0 | 1375.4 | 1373.8 |
| 175°   | 1385.5 | 1387.4 | 1389.2 | 1389.3 | 1387.8 | 1386.1 | 1384.6 | 1383.0 |
| 177.5° | 1389.8 | 1391.0 | 1392.2 | 1392.2 | 1391.0 | 1389.8 | 1388.5 | 1387.3 |
| 180°   | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 | 1390.1 |

(END OF REPORT)