

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: P331380-927

Luminaire Tested: **SA2XXDIP-C865D330U927-4F0-1E-UDD-D4**

Issue Date: 10/7/2019

Test Information

Test Method: LM-79-08
Report Number: P331380-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16,
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-C865D330U927-4F0-1E-UDD-D4
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 865 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 330 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3781.3 lumens
Efficiency: N/A
Efficacy: 86.9 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: Semi-Direct

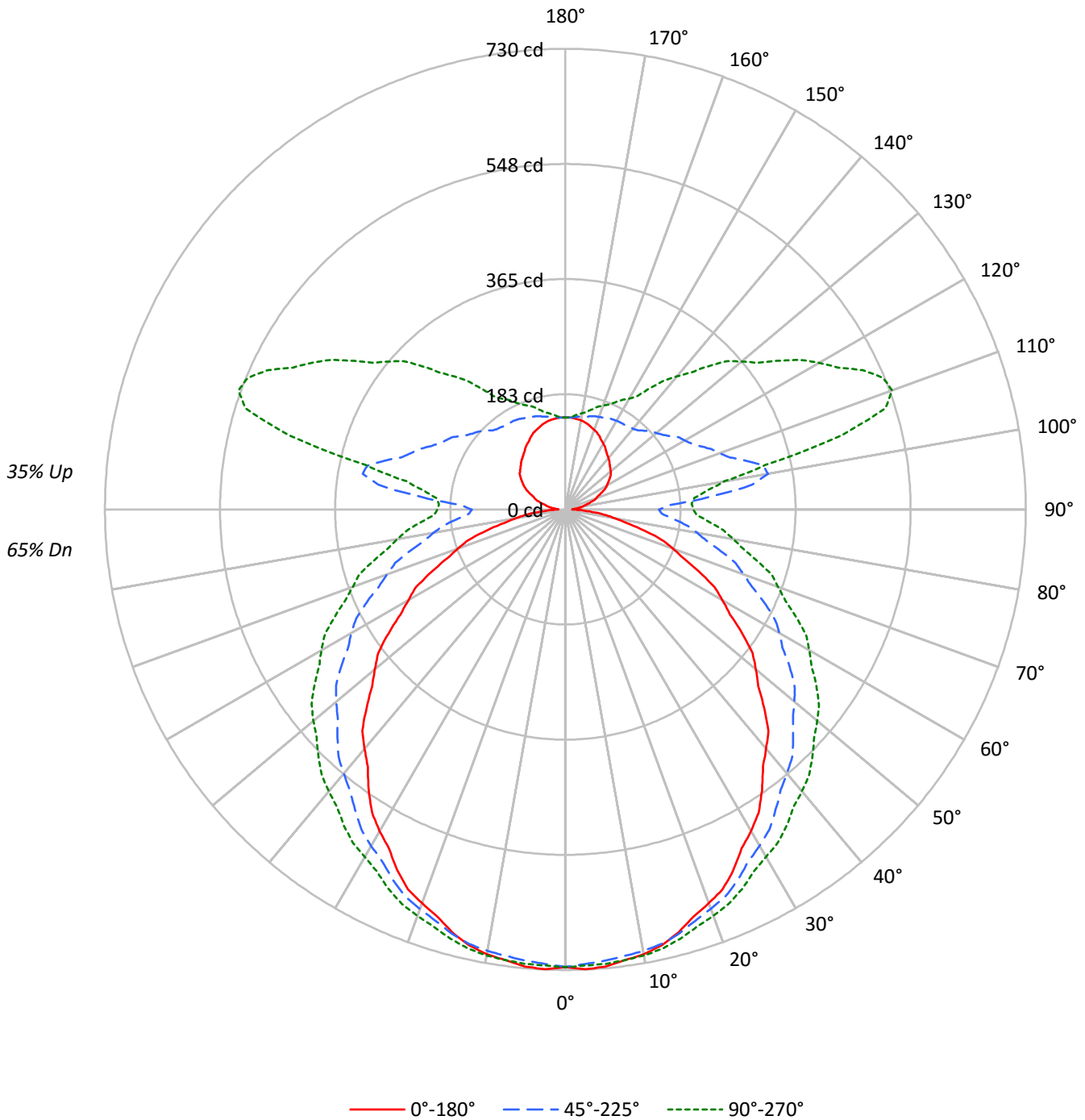
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P331380-927

CATALOG NUMBER: SA2XXDIP-C865D330U927-4F0-1E-UDD-D4

Luminous Intensity Polar Plot





TEST NUMBER: P331380-927

CATALOG NUMBER: SA2XXDIP-C865D330U927-4F0-1E-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 | 111 | 111 | 111 | 111 | 104 | 104 | 104 | 104 | 92 | 92 | 92 | 80 | 80 | 80 | 70 | 70 | 70 | 65 |
| 1 | 99 | 94 | 89 | 85 | 93 | 88 | 84 | 80 | 78 | 74 | 71 | 68 | 65 | 63 | 59 | 57 | 55 | 51 |
| 2 | 90 | 81 | 74 | 68 | 84 | 76 | 70 | 64 | 67 | 62 | 58 | 58 | 55 | 51 | 51 | 48 | 45 | 41 |
| 3 | 81 | 71 | 62 | 56 | 76 | 66 | 59 | 53 | 58 | 52 | 48 | 51 | 46 | 42 | 44 | 41 | 37 | 34 |
| 4 | 74 | 62 | 53 | 47 | 69 | 58 | 51 | 44 | 52 | 45 | 40 | 45 | 40 | 36 | 39 | 35 | 32 | 28 |
| 5 | 68 | 55 | 46 | 40 | 63 | 52 | 44 | 38 | 46 | 39 | 34 | 40 | 35 | 31 | 35 | 31 | 27 | 24 |
| 6 | 62 | 49 | 41 | 34 | 58 | 47 | 39 | 33 | 41 | 35 | 30 | 36 | 31 | 27 | 32 | 27 | 24 | 21 |
| 7 | 58 | 45 | 36 | 30 | 54 | 42 | 34 | 29 | 37 | 31 | 26 | 33 | 28 | 24 | 29 | 24 | 21 | 19 |
| 8 | 54 | 40 | 32 | 26 | 50 | 38 | 31 | 25 | 34 | 28 | 23 | 30 | 25 | 21 | 26 | 22 | 19 | 16 |
| 9 | 50 | 37 | 29 | 24 | 47 | 35 | 28 | 23 | 31 | 25 | 21 | 28 | 22 | 19 | 24 | 20 | 17 | 15 |
| 10 | 47 | 34 | 26 | 21 | 44 | 32 | 25 | 20 | 29 | 23 | 19 | 26 | 21 | 17 | 23 | 18 | 15 | 13 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 11711 | 11711 | 11711 |
| 5° | 11768 | 11274 | 11230 |
| 10° | 11694 | 10940 | 10818 |
| 15° | 11533 | 10587 | 10382 |
| 20° | 11328 | 10209 | 9963 |
| 25° | 11128 | 9845 | 9582 |
| 30° | 10845 | 9471 | 9201 |
| 35° | 10557 | 9109 | 8932 |
| 40° | 10256 | 8801 | 8662 |
| 45° | 9969 | 8526 | 8433 |
| 50° | 9662 | 8276 | 8207 |
| 55° | 9341 | 8008 | 7975 |
| 60° | 8945 | 7730 | 7732 |
| 65° | 8536 | 7405 | 7441 |
| 70° | 8073 | 7053 | 7130 |
| 75° | 7484 | 6710 | 6841 |
| 80° | 6553 | 6361 | 6548 |
| 85° | 5671 | 6056 | 6323 |



TEST NUMBER: P331380-927

CATALOG NUMBER: SA2XXDIP-C865D330U927-4F0-1E-UDD-D4

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 68.7 | 1.8 |
| 10°-20° | 197.1 | 5.2 |
| 20°-30° | 298.7 | 7.9 |
| 30°-40° | 363.8 | 9.6 |
| 40°-50° | 391.3 | 10.3 |
| 50°-60° | 380.0 | 10.1 |
| 60°-70° | 331.8 | 8.8 |
| 70°-80° | 255.5 | 6.8 |
| 80°-90° | 172.8 | 4.6 |
| 90°-100° | 176.3 | 4.7 |
| 100°-110° | 283.7 | 7.5 |
| 110°-120° | 266.8 | 7.1 |
| 120°-130° | 204.5 | 5.4 |
| 130°-140° | 152.0 | 4.0 |
| 140°-150° | 107.1 | 2.8 |
| 150°-160° | 73.7 | 1.9 |
| 160°-170° | 43.4 | 1.1 |
| 170°-180° | 14.1 | 0.4 |
| 0°-30° | 564.5 | 14.9 |
| 0°-40° | 928.2 | 24.5 |
| 0°-60° | 1699.6 | 44.9 |
| 0°-90° | 2459.7 | 65.0 |
| 90°-120° | 726.8 | 19.2 |
| 90°-150° | 1190.5 | 31.5 |
| 90°-180° | 1322.0 | 35.0 |
| 0°-180° | 3781.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 725 | 725 | 725 | 725 | 725 | |
| 5° | 727 | 724 | 718 | 724 | 723 | 69 |
| 15° | 694 | 696 | 696 | 705 | 704 | 195 |
| 25° | 631 | 638 | 648 | 660 | 663 | 290 |
| 35° | 543 | 562 | 581 | 604 | 612 | 340 |
| 45° | 446 | 475 | 511 | 542 | 554 | 344 |
| 55° | 342 | 380 | 434 | 471 | 486 | 305 |
| 65° | 233 | 286 | 347 | 388 | 404 | 232 |
| 75° | 129 | 189 | 255 | 299 | 314 | 137 |
| 85° | 38 | 103 | 170 | 213 | 229 | 41 |
| 90° | 11 | 76 | 148 | 188 | 203 | 8 |
| 95° | 18 | 83 | 231 | 201 | 205 | 17 |
| 105° | 39 | 89 | 298 | 496 | 454 | 42 |
| 115° | 64 | 94 | 237 | 452 | 521 | 63 |
| 125° | 86 | 103 | 203 | 353 | 410 | 77 |
| 135° | 100 | 119 | 176 | 277 | 321 | 77 |
| 145° | 112 | 129 | 164 | 210 | 234 | 71 |
| 155° | 128 | 138 | 159 | 180 | 187 | 59 |
| 165° | 139 | 144 | 153 | 162 | 164 | 39 |
| 175° | 145 | 145 | 147 | 148 | 148 | 14 |
| 180° | 146 | 146 | 146 | 146 | 146 | |



TEST NUMBER: P331380-927

CATALOG NUMBER: SA2XXDIP-C865D330U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 |
| 2.5° | 729.5 | 729.0 | 728.4 | 727.9 | 727.3 | 726.4 | 725.0 | 723.7 | 722.4 | 721.1 | 722.1 |
| 5° | 727.4 | 726.7 | 726.0 | 725.3 | 724.6 | 723.6 | 722.2 | 720.7 | 719.4 | 718.0 | 719.4 |
| 7.5° | 720.9 | 720.4 | 719.9 | 719.5 | 719.1 | 718.3 | 717.2 | 716.1 | 715.0 | 714.0 | 715.7 |
| 10° | 715.9 | 715.4 | 714.9 | 714.5 | 714.0 | 713.4 | 712.7 | 712.0 | 711.3 | 710.6 | 712.5 |
| 12.5° | 707.4 | 707.6 | 707.7 | 707.7 | 707.8 | 707.6 | 707.1 | 706.5 | 706.1 | 705.5 | 707.4 |
| 15° | 693.8 | 694.3 | 694.7 | 695.2 | 695.6 | 695.9 | 695.9 | 695.9 | 695.9 | 695.9 | 698.0 |
| 17.5° | 676.1 | 677.1 | 678.1 | 679.1 | 680.0 | 680.9 | 681.7 | 682.4 | 683.2 | 683.9 | 686.1 |
| 20° | 664.3 | 665.5 | 666.7 | 667.9 | 669.0 | 670.1 | 671.0 | 671.9 | 672.9 | 673.8 | 676.4 |
| 22.5° | 651.7 | 653.1 | 654.4 | 655.8 | 657.1 | 658.5 | 659.8 | 661.1 | 662.4 | 663.7 | 666.3 |
| 25° | 630.7 | 632.3 | 634.0 | 635.6 | 637.2 | 639.1 | 641.2 | 643.3 | 645.4 | 647.5 | 650.3 |
| 27.5° | 605.5 | 608.2 | 610.8 | 613.5 | 616.2 | 618.7 | 621.2 | 623.7 | 626.1 | 628.6 | 632.2 |
| 30° | 588.7 | 591.7 | 594.8 | 597.8 | 600.8 | 603.9 | 606.9 | 609.9 | 613.0 | 616.0 | 619.7 |
| 32.5° | 570.1 | 573.5 | 576.9 | 580.4 | 583.8 | 587.3 | 590.9 | 594.5 | 598.1 | 601.7 | 606.0 |
| 35° | 543.4 | 547.4 | 551.4 | 555.4 | 559.4 | 563.6 | 568.0 | 572.4 | 576.9 | 581.3 | 586.5 |
| 37.5° | 514.4 | 519.0 | 523.6 | 528.1 | 532.7 | 537.9 | 543.7 | 549.5 | 555.2 | 560.9 | 566.6 |
| 40° | 495.1 | 500.3 | 505.4 | 510.6 | 515.6 | 521.4 | 527.7 | 534.0 | 540.3 | 546.6 | 552.7 |
| 42.5° | 476.6 | 481.7 | 486.9 | 492.0 | 497.2 | 503.4 | 510.6 | 517.8 | 525.1 | 532.3 | 538.9 |
| 45° | 445.7 | 452.0 | 458.3 | 464.6 | 471.0 | 478.2 | 486.3 | 494.6 | 502.7 | 510.9 | 518.1 |
| 47.5° | 415.2 | 422.1 | 429.0 | 435.9 | 442.7 | 450.9 | 460.5 | 470.1 | 479.7 | 489.3 | 496.8 |
| 50° | 394.2 | 401.4 | 408.7 | 415.9 | 423.2 | 432.1 | 442.5 | 453.0 | 463.6 | 474.1 | 482.0 |
| 52.5° | 374.0 | 381.6 | 389.3 | 396.9 | 404.5 | 413.8 | 424.9 | 435.9 | 447.0 | 458.1 | 466.2 |
| 55° | 341.7 | 350.1 | 358.5 | 366.9 | 375.3 | 385.6 | 397.7 | 409.9 | 422.0 | 434.1 | 442.5 |
| 57.5° | 309.7 | 319.2 | 328.7 | 338.1 | 347.6 | 358.5 | 370.9 | 383.3 | 395.7 | 408.1 | 417.2 |
| 60° | 287.0 | 297.0 | 307.0 | 317.1 | 327.2 | 338.8 | 352.1 | 365.4 | 378.7 | 392.1 | 401.0 |
| 62.5° | 266.8 | 277.2 | 287.6 | 298.0 | 308.5 | 320.4 | 333.7 | 347.0 | 360.3 | 373.6 | 383.0 |
| 65° | 233.4 | 244.8 | 256.3 | 267.7 | 279.2 | 291.8 | 305.5 | 319.3 | 333.1 | 346.9 | 356.5 |
| 67.5° | 202.6 | 214.6 | 226.6 | 238.5 | 250.5 | 263.6 | 277.7 | 291.8 | 305.9 | 320.0 | 329.6 |
| 70° | 180.8 | 193.0 | 205.1 | 217.2 | 229.4 | 242.7 | 257.2 | 271.6 | 286.1 | 300.6 | 310.7 |
| 72.5° | 160.7 | 173.2 | 185.7 | 198.2 | 210.7 | 224.3 | 239.0 | 253.7 | 268.3 | 283.0 | 292.9 |
| 75° | 129.3 | 142.4 | 155.4 | 168.6 | 181.6 | 195.7 | 210.6 | 225.5 | 240.5 | 255.4 | 265.5 |
| 77.5° | 99.0 | 112.7 | 126.4 | 140.1 | 153.8 | 168.2 | 183.4 | 198.6 | 213.7 | 228.9 | 238.9 |
| 80° | 78.8 | 93.1 | 107.3 | 121.6 | 135.9 | 150.5 | 165.7 | 180.9 | 196.1 | 211.3 | 221.1 |
| 82.5° | 62.0 | 76.0 | 90.2 | 104.2 | 118.3 | 133.0 | 148.4 | 163.7 | 179.1 | 194.5 | 204.3 |
| 85° | 37.9 | 52.4 | 66.8 | 81.3 | 95.8 | 110.5 | 125.4 | 140.4 | 155.3 | 170.3 | 180.1 |
| 87.5° | 20.7 | 34.8 | 48.9 | 62.9 | 77.0 | 91.6 | 106.8 | 122.2 | 137.4 | 152.4 | 161.9 |
| 90° | 10.8 | 25.2 | 39.8 | 53.9 | 68.0 | 83.2 | 99.5 | 116.5 | 133.0 | 148.3 | 157.3 |
| 92.5° | 13.1 | 27.2 | 41.8 | 55.7 | 70.2 | 86.3 | 107.0 | 130.3 | 152.7 | 167.5 | 171.1 |
| 95° | 18.2 | 30.3 | 44.0 | 57.6 | 73.0 | 92.3 | 119.1 | 157.5 | 204.0 | 230.6 | 225.8 |
| 97.5° | 23.3 | 34.6 | 47.3 | 60.9 | 75.8 | 95.1 | 124.7 | 172.1 | 239.5 | 299.1 | 317.0 |
| 100° | 28.9 | 38.4 | 49.6 | 62.7 | 76.9 | 95.6 | 123.5 | 170.8 | 244.3 | 326.2 | 375.2 |
| 102.5° | 33.2 | 41.7 | 52.1 | 64.5 | 78.3 | 96.4 | 122.8 | 165.9 | 234.6 | 321.5 | 393.3 |
| 105° | 39.4 | 47.3 | 56.0 | 67.0 | 79.9 | 97.2 | 122.6 | 159.6 | 217.9 | 297.8 | 380.4 |
| 107.5° | 47.3 | 53.6 | 60.9 | 70.2 | 81.7 | 98.2 | 122.6 | 155.9 | 205.7 | 273.3 | 346.9 |
| 110° | 51.8 | 57.6 | 63.9 | 72.2 | 82.8 | 98.9 | 122.7 | 154.3 | 199.9 | 260.6 | 326.1 |



TEST NUMBER: P331380-927

CATALOG NUMBER: SA2XXDIP-C865D330U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 56.7 | 61.8 | 67.6 | 74.9 | 84.5 | 100.2 | 123.0 | 152.9 | 194.8 | 249.9 | 309.4 |
| 115° | 64.4 | 68.4 | 72.6 | 78.5 | 86.7 | 100.8 | 123.3 | 150.9 | 188.6 | 236.6 | 287.9 |
| 117.5° | 71.3 | 74.1 | 77.5 | 82.1 | 89.1 | 102.7 | 123.6 | 149.2 | 182.8 | 225.4 | 270.8 |
| 120° | 76.2 | 78.3 | 80.9 | 84.4 | 90.9 | 103.9 | 124.1 | 148.5 | 179.4 | 218.7 | 260.9 |
| 122.5° | 80.9 | 82.1 | 84.2 | 87.4 | 93.3 | 106.0 | 125.0 | 147.7 | 176.5 | 212.8 | 251.8 |
| 125° | 86.1 | 86.9 | 88.6 | 92.0 | 97.5 | 109.1 | 126.7 | 146.7 | 171.6 | 202.6 | 237.7 |
| 127.5° | 91.0 | 91.9 | 94.0 | 97.4 | 102.6 | 113.6 | 129.4 | 146.7 | 167.9 | 194.0 | 224.6 |
| 130° | 93.9 | 94.8 | 97.4 | 101.1 | 106.4 | 116.6 | 131.3 | 146.8 | 165.7 | 188.5 | 215.9 |
| 132.5° | 96.6 | 97.7 | 100.5 | 104.4 | 110.0 | 119.6 | 132.8 | 146.9 | 163.6 | 183.3 | 208.0 |
| 135° | 99.6 | 100.7 | 104.1 | 108.3 | 114.7 | 123.7 | 135.0 | 147.1 | 160.7 | 176.4 | 197.3 |
| 137.5° | 103.4 | 104.6 | 108.0 | 112.4 | 118.7 | 126.5 | 136.4 | 146.6 | 157.8 | 170.2 | 188.0 |
| 140° | 106.3 | 107.2 | 110.3 | 114.5 | 120.5 | 127.9 | 136.7 | 145.8 | 155.8 | 166.7 | 182.4 |
| 142.5° | 109.2 | 109.9 | 112.8 | 117.0 | 122.7 | 129.4 | 137.8 | 146.3 | 155.2 | 165.0 | 178.5 |
| 145° | 112.5 | 113.7 | 116.5 | 120.6 | 126.3 | 132.4 | 140.0 | 147.8 | 155.6 | 164.0 | 174.4 |
| 147.5° | 117.2 | 118.0 | 120.7 | 124.6 | 129.3 | 134.8 | 141.9 | 148.8 | 155.8 | 163.0 | 171.0 |
| 150° | 120.3 | 121.2 | 123.4 | 127.1 | 131.3 | 136.3 | 142.8 | 149.2 | 155.6 | 162.3 | 169.1 |
| 152.5° | 123.5 | 123.9 | 126.1 | 129.3 | 133.3 | 137.8 | 143.6 | 149.4 | 155.2 | 161.2 | 167.5 |
| 155° | 127.9 | 128.2 | 129.8 | 132.9 | 136.0 | 140.2 | 145.0 | 149.7 | 154.5 | 159.2 | 164.6 |
| 157.5° | 131.6 | 131.9 | 133.2 | 135.9 | 138.4 | 141.9 | 145.9 | 149.7 | 153.2 | 157.2 | 161.8 |
| 160° | 134.0 | 134.4 | 135.5 | 137.7 | 140.0 | 143.1 | 146.4 | 149.7 | 152.6 | 155.9 | 159.8 |
| 162.5° | 136.6 | 136.3 | 137.5 | 139.3 | 141.3 | 143.7 | 146.6 | 149.5 | 151.9 | 154.8 | 158.0 |
| 165° | 139.4 | 139.1 | 139.7 | 141.3 | 142.8 | 144.4 | 146.9 | 148.9 | 150.6 | 152.6 | 155.0 |
| 167.5° | 141.7 | 141.4 | 141.9 | 143.0 | 144.0 | 145.0 | 146.9 | 148.5 | 149.3 | 150.6 | 152.2 |
| 170° | 143.3 | 142.8 | 143.1 | 143.9 | 144.4 | 145.3 | 146.6 | 148.1 | 148.6 | 149.5 | 150.6 |
| 172.5° | 144.2 | 143.9 | 143.7 | 144.6 | 144.9 | 145.5 | 146.5 | 147.4 | 147.7 | 148.1 | 149.0 |
| 175° | 145.3 | 145.0 | 144.7 | 145.3 | 145.3 | 145.5 | 146.1 | 146.6 | 146.4 | 146.6 | 146.9 |
| 177.5° | 145.8 | 145.3 | 145.1 | 145.5 | 145.5 | 145.5 | 145.8 | 146.2 | 145.8 | 145.5 | 145.8 |
| 180° | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 |



TEST NUMBER: P331380-927

CATALOG NUMBER: SA2XXDIP-C865D330U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 | 725.3 |
| 2.5° | 722.9 | 723.9 | 724.8 | 725.2 | 724.8 | 724.4 | 724.0 | 723.7 |
| 5° | 720.7 | 722.2 | 723.6 | 724.1 | 723.9 | 723.7 | 723.4 | 723.2 |
| 7.5° | 717.3 | 719.0 | 720.7 | 721.4 | 721.2 | 721.0 | 720.7 | 720.5 |
| 10° | 714.3 | 716.2 | 718.1 | 718.9 | 718.7 | 718.4 | 718.2 | 718.0 |
| 12.5° | 709.3 | 711.1 | 713.0 | 713.8 | 713.6 | 713.4 | 713.1 | 712.9 |
| 15° | 700.1 | 702.2 | 704.3 | 705.2 | 705.0 | 704.7 | 704.5 | 704.3 |
| 17.5° | 688.3 | 690.5 | 692.7 | 693.8 | 693.8 | 693.8 | 693.8 | 693.8 |
| 20° | 679.0 | 681.5 | 684.0 | 685.4 | 685.4 | 685.4 | 685.4 | 685.4 |
| 22.5° | 668.8 | 671.5 | 674.0 | 675.5 | 675.8 | 676.2 | 676.6 | 677.0 |
| 25° | 653.2 | 655.9 | 658.8 | 660.5 | 661.2 | 661.9 | 662.6 | 663.3 |
| 27.5° | 635.7 | 639.3 | 642.8 | 644.8 | 645.4 | 645.9 | 646.4 | 646.9 |
| 30° | 623.4 | 627.2 | 631.0 | 633.2 | 633.8 | 634.5 | 635.3 | 636.0 |
| 32.5° | 610.3 | 614.6 | 618.9 | 621.7 | 622.9 | 624.2 | 625.4 | 626.7 |
| 35° | 591.6 | 596.8 | 601.9 | 605.2 | 606.9 | 608.6 | 610.1 | 611.8 |
| 37.5° | 572.3 | 578.0 | 583.7 | 587.4 | 589.1 | 590.9 | 592.6 | 594.4 |
| 40° | 558.7 | 564.8 | 570.9 | 575.0 | 577.1 | 579.2 | 581.3 | 583.4 |
| 42.5° | 545.6 | 552.2 | 558.9 | 563.2 | 565.3 | 567.4 | 569.5 | 571.6 |
| 45° | 525.4 | 532.6 | 539.9 | 544.6 | 547.0 | 549.3 | 551.7 | 554.0 |
| 47.5° | 504.4 | 511.9 | 519.5 | 524.6 | 527.1 | 529.7 | 532.3 | 534.9 |
| 50° | 490.0 | 497.9 | 505.9 | 511.1 | 513.7 | 516.3 | 518.8 | 521.4 |
| 52.5° | 474.4 | 482.5 | 490.6 | 496.1 | 498.8 | 501.6 | 504.3 | 507.1 |
| 55° | 451.0 | 459.4 | 467.8 | 473.5 | 476.5 | 479.6 | 482.6 | 485.6 |
| 57.5° | 426.2 | 435.2 | 444.3 | 450.4 | 453.4 | 456.5 | 459.6 | 462.7 |
| 60° | 409.9 | 418.7 | 427.6 | 433.6 | 437.0 | 440.2 | 443.5 | 446.8 |
| 62.5° | 392.4 | 401.9 | 411.3 | 417.6 | 420.6 | 423.7 | 426.8 | 429.9 |
| 65° | 366.1 | 375.7 | 385.2 | 391.5 | 394.5 | 397.6 | 400.6 | 403.6 |
| 67.5° | 339.3 | 349.0 | 358.7 | 365.1 | 368.3 | 371.5 | 374.6 | 377.8 |
| 70° | 320.8 | 330.7 | 340.8 | 347.2 | 350.1 | 352.8 | 355.7 | 358.5 |
| 72.5° | 302.7 | 312.5 | 322.4 | 329.0 | 332.4 | 335.7 | 339.1 | 342.5 |
| 75° | 275.5 | 285.6 | 295.6 | 302.1 | 305.2 | 308.2 | 311.2 | 314.3 |
| 77.5° | 249.0 | 259.0 | 268.9 | 275.6 | 278.8 | 282.1 | 285.4 | 288.7 |
| 80° | 230.9 | 240.7 | 250.6 | 257.1 | 260.3 | 263.6 | 266.9 | 270.1 |
| 82.5° | 214.1 | 223.9 | 233.7 | 240.2 | 243.3 | 246.3 | 249.4 | 252.5 |
| 85° | 189.9 | 199.7 | 209.5 | 216.1 | 219.4 | 222.6 | 225.9 | 229.2 |
| 87.5° | 171.3 | 180.8 | 190.4 | 196.8 | 199.8 | 202.7 | 205.7 | 208.7 |
| 90° | 166.4 | 175.2 | 185.1 | 191.5 | 194.2 | 197.0 | 199.9 | 202.6 |
| 92.5° | 173.9 | 179.6 | 186.4 | 190.7 | 193.2 | 195.1 | 198.1 | 200.5 |
| 95° | 212.0 | 203.7 | 200.9 | 200.6 | 199.7 | 200.3 | 202.2 | 205.3 |
| 97.5° | 300.2 | 277.8 | 256.1 | 241.6 | 231.0 | 226.9 | 225.5 | 225.9 |
| 100° | 378.0 | 351.9 | 322.2 | 293.9 | 273.2 | 263.8 | 258.3 | 255.8 |
| 102.5° | 427.0 | 427.6 | 408.1 | 377.6 | 355.0 | 337.0 | 329.5 | 325.2 |
| 105° | 446.9 | 486.6 | 498.4 | 494.6 | 479.8 | 465.0 | 455.6 | 454.2 |
| 107.5° | 416.5 | 472.0 | 509.0 | 527.7 | 532.4 | 534.1 | 534.2 | 531.6 |
| 110° | 392.6 | 450.1 | 493.5 | 521.4 | 536.1 | 543.9 | 549.0 | 551.3 |



TEST NUMBER: P331380-927

CATALOG NUMBER: SA2XXDIP-C865D330U927-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 370.1 | 425.7 | 471.4 | 502.8 | 522.1 | 533.5 | 540.9 | 544.9 |
| 115° | 341.0 | 391.2 | 434.8 | 468.4 | 490.9 | 506.4 | 516.2 | 521.3 |
| 117.5° | 316.9 | 361.6 | 401.8 | 433.5 | 456.1 | 472.1 | 482.2 | 486.7 |
| 120° | 303.5 | 344.8 | 381.0 | 411.0 | 433.2 | 448.9 | 459.5 | 464.9 |
| 122.5° | 292.0 | 330.2 | 364.6 | 391.9 | 411.7 | 426.8 | 436.3 | 440.8 |
| 125° | 274.5 | 309.7 | 340.6 | 365.8 | 384.1 | 396.9 | 406.0 | 410.3 |
| 127.5° | 257.2 | 289.1 | 318.1 | 341.4 | 357.7 | 369.7 | 377.8 | 381.6 |
| 130° | 246.2 | 275.9 | 303.6 | 325.8 | 341.4 | 352.8 | 360.3 | 364.4 |
| 132.5° | 235.4 | 263.2 | 288.8 | 309.9 | 325.2 | 336.6 | 343.6 | 347.5 |
| 135° | 220.4 | 243.8 | 267.1 | 286.2 | 300.1 | 311.2 | 318.1 | 321.1 |
| 137.5° | 207.1 | 226.8 | 245.8 | 262.4 | 275.0 | 284.5 | 290.5 | 293.7 |
| 140° | 198.8 | 215.9 | 232.6 | 247.5 | 257.9 | 266.5 | 272.1 | 275.2 |
| 142.5° | 192.5 | 206.9 | 220.9 | 233.4 | 243.1 | 250.9 | 255.9 | 257.5 |
| 145° | 184.4 | 195.1 | 205.2 | 214.6 | 222.4 | 228.4 | 232.3 | 234.3 |
| 147.5° | 178.6 | 186.1 | 193.1 | 199.3 | 205.4 | 209.8 | 212.3 | 213.3 |
| 150° | 175.8 | 182.0 | 187.8 | 192.8 | 197.0 | 200.4 | 202.1 | 202.4 |
| 152.5° | 173.3 | 179.0 | 184.0 | 188.4 | 191.7 | 194.6 | 195.8 | 195.9 |
| 155° | 169.9 | 174.4 | 178.6 | 181.6 | 184.7 | 186.7 | 187.8 | 187.3 |
| 157.5° | 166.0 | 169.7 | 173.2 | 175.6 | 177.8 | 179.4 | 179.9 | 179.9 |
| 160° | 163.4 | 166.5 | 169.6 | 171.6 | 173.6 | 174.9 | 175.2 | 175.2 |
| 162.5° | 161.0 | 163.7 | 166.3 | 167.8 | 169.8 | 170.7 | 171.0 | 170.7 |
| 165° | 157.3 | 159.2 | 161.2 | 162.3 | 163.4 | 164.6 | 164.6 | 164.3 |
| 167.5° | 153.8 | 155.3 | 156.6 | 157.6 | 158.1 | 158.8 | 158.7 | 158.4 |
| 170° | 152.0 | 152.8 | 153.9 | 154.5 | 154.8 | 155.6 | 155.3 | 154.8 |
| 172.5° | 150.0 | 150.6 | 151.5 | 151.8 | 152.1 | 152.5 | 152.2 | 151.9 |
| 175° | 147.8 | 148.1 | 148.4 | 148.6 | 148.6 | 148.9 | 148.6 | 148.1 |
| 177.5° | 146.2 | 146.2 | 146.5 | 146.5 | 146.5 | 146.5 | 146.2 | 145.8 |
| 180° | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 | 145.5 |

(END OF REPORT)