

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: P331335-940

Luminaire Tested: **SA2XXDIP-C675D330U940-4F0-1E-UDD-D4**

Issue Date: 10/7/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P331335-940  
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-C675D330U940-4F0-1E-UDD-D4  
Description: DEFINE 2 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 675 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: 3537.8 lumens  
Efficiency: N/A  
Efficacy: 101.1 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

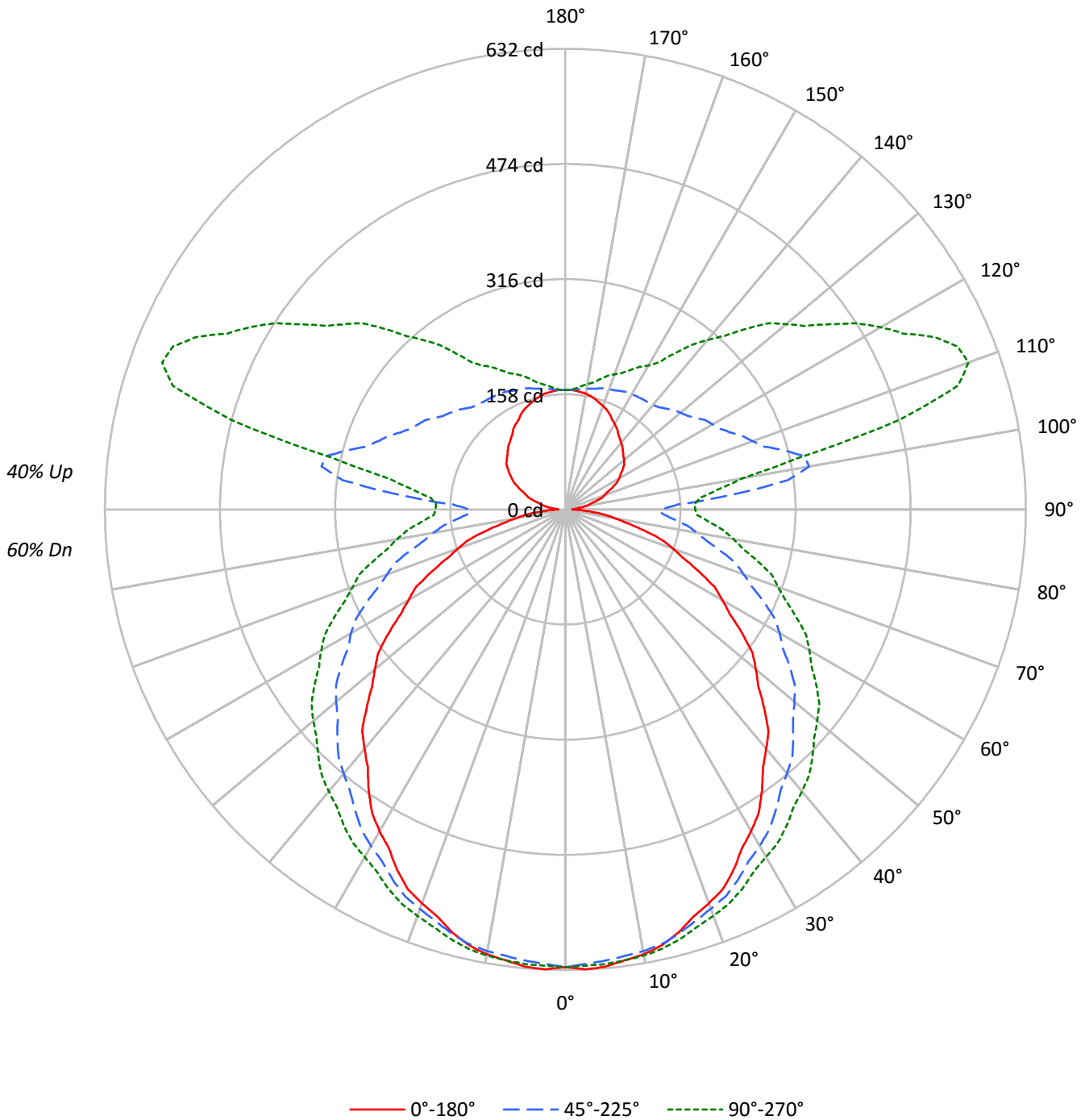
Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P331335-940

CATALOG NUMBER: SA2XXDIP-C675D330U940-4F0-1E-UDD-D4

### Luminous Intensity Polar Plot





TEST NUMBER: P331335-940

CATALOG NUMBER: SA2XXDIP-C675D330U940-4F0-1E-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 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |  |   |
| RCR |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |   |
| 0   | 110 | 110 | 110 | 110 | 102 | 102 | 102 | 102 | 89 | 89 | 89 | 77 | 77 | 77 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 66 | 60 |  |   |
| 1   | 98  | 93  | 88  | 84  | 91  | 87  | 83  | 79  | 75 | 72 | 69 | 65 | 62 | 60 | 55 | 53 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 47 |  |   |
| 2   | 89  | 80  | 73  | 67  | 82  | 75  | 69  | 64  | 65 | 60 | 56 | 56 | 52 | 49 | 47 | 45 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | 38 |  |   |
| 3   | 81  | 70  | 62  | 55  | 75  | 65  | 58  | 52  | 57 | 51 | 46 | 49 | 44 | 41 | 41 | 38 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 31 |  |   |
| 4   | 73  | 62  | 53  | 46  | 68  | 58  | 50  | 44  | 50 | 44 | 39 | 43 | 38 | 34 | 37 | 33 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 26 |  |   |
| 5   | 67  | 55  | 46  | 39  | 62  | 51  | 43  | 37  | 45 | 38 | 33 | 39 | 33 | 29 | 33 | 29 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 23 |  |   |
| 6   | 62  | 49  | 40  | 34  | 57  | 46  | 38  | 32  | 40 | 34 | 29 | 35 | 30 | 26 | 30 | 26 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 20 |  |   |
| 7   | 57  | 44  | 36  | 30  | 53  | 41  | 34  | 28  | 36 | 30 | 25 | 32 | 26 | 23 | 27 | 23 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 17 |  |   |
| 8   | 53  | 40  | 32  | 26  | 49  | 38  | 30  | 25  | 33 | 27 | 22 | 29 | 24 | 20 | 25 | 21 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 15 |  |   |
| 9   | 49  | 37  | 29  | 23  | 46  | 34  | 27  | 22  | 30 | 24 | 20 | 26 | 21 | 18 | 23 | 19 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 14 |  |   |
| 10  | 46  | 33  | 26  | 21  | 43  | 32  | 25  | 20  | 28 | 22 | 18 | 24 | 20 | 16 | 21 | 17 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 10141 | 10141 | 10141 |
| 5°  | 10191 | 9762  | 9724  |
| 10° | 10126 | 9474  | 9367  |
| 15° | 9987  | 9168  | 8990  |
| 20° | 9810  | 8841  | 8627  |
| 25° | 9637  | 8525  | 8298  |
| 30° | 9392  | 8201  | 7967  |
| 35° | 9142  | 7888  | 7735  |
| 40° | 8880  | 7621  | 7501  |
| 45° | 8632  | 7383  | 7302  |
| 50° | 8365  | 7166  | 7106  |
| 55° | 8089  | 6934  | 6906  |
| 60° | 7745  | 6695  | 6695  |
| 65° | 7391  | 6412  | 6445  |
| 70° | 6992  | 6110  | 6173  |
| 75° | 6483  | 5811  | 5925  |
| 80° | 5680  | 5509  | 5672  |
| 85° | 4908  | 5245  | 5473  |



TEST NUMBER: P331335-940

CATALOG NUMBER: SA2XXDIP-C675D330U940-4F0-1E-UDD-D4

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 59.5   | 1.7       |
| 10°-20°   | 170.7  | 4.8       |
| 20°-30°   | 258.6  | 7.3       |
| 30°-40°   | 315.0  | 8.9       |
| 40°-50°   | 338.9  | 9.6       |
| 50°-60°   | 329.1  | 9.3       |
| 60°-70°   | 287.4  | 8.1       |
| 70°-80°   | 221.2  | 6.3       |
| 80°-90°   | 149.9  | 4.2       |
| 90°-100°  | 167.8  | 4.7       |
| 100°-110° | 297.0  | 8.4       |
| 110°-120° | 285.5  | 8.1       |
| 120°-130° | 221.9  | 6.3       |
| 130°-140° | 167.7  | 4.7       |
| 140°-150° | 120.0  | 3.4       |
| 150°-160° | 82.9   | 2.3       |
| 160°-170° | 48.8   | 1.4       |
| 170°-180° | 15.9   | 0.4       |
| 0°-30°    | 488.8  | 13.8      |
| 0°-40°    | 803.8  | 22.7      |
| 0°-60°    | 1471.8 | 41.6      |
| 0°-90°    | 2130.4 | 60.2      |
| 90°-120°  | 750.3  | 21.2      |
| 90°-150°  | 1259.9 | 35.6      |
| 90°-180°  | 1407.0 | 39.8      |
| 0°-180°   | 3537.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0°   | 628 | 628   | 628 | 628   | 628 |      |
| 5°   | 630 | 627   | 622 | 627   | 626 | 60   |
| 15°  | 601 | 602   | 603 | 610   | 610 | 169  |
| 25°  | 546 | 553   | 561 | 571   | 574 | 251  |
| 35°  | 471 | 486   | 503 | 523   | 530 | 294  |
| 45°  | 386 | 411   | 442 | 470   | 480 | 298  |
| 55°  | 296 | 329   | 376 | 408   | 420 | 264  |
| 65°  | 202 | 247   | 300 | 336   | 350 | 201  |
| 75°  | 112 | 163   | 221 | 259   | 272 | 118  |
| 85°  | 33  | 89    | 148 | 184   | 198 | 35   |
| 90°  | 10  | 66    | 131 | 165   | 178 | 7    |
| 95°  | 18  | 78    | 228 | 185   | 186 | 17   |
| 105° | 43  | 90    | 312 | 526   | 475 | 46   |
| 115° | 71  | 101   | 250 | 484   | 559 | 70   |
| 125° | 96  | 115   | 219 | 381   | 443 | 86   |
| 135° | 112 | 134   | 196 | 303   | 350 | 87   |
| 145° | 127 | 146   | 185 | 235   | 261 | 80   |
| 155° | 144 | 155   | 179 | 203   | 211 | 66   |
| 165° | 157 | 162   | 172 | 182   | 185 | 44   |
| 175° | 164 | 164   | 165 | 167   | 167 | 16   |
| 180° | 164 | 164   | 164 | 164   | 164 |      |



TEST NUMBER: P331335-940

CATALOG NUMBER: SA2XXDIP-C675D330U940-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 |
| 2.5°   | 631.8 | 631.2 | 630.8 | 630.3 | 629.8 | 629.0 | 627.9 | 626.7 | 625.6 | 624.5 | 625.3 |
| 5°     | 629.9 | 629.3 | 628.7 | 628.1 | 627.5 | 626.6 | 625.4 | 624.2 | 622.9 | 621.7 | 622.9 |
| 7.5°   | 624.3 | 623.8 | 623.5 | 623.0 | 622.7 | 622.0 | 621.1 | 620.1 | 619.2 | 618.3 | 619.7 |
| 10°    | 619.9 | 619.5 | 619.1 | 618.7 | 618.3 | 617.8 | 617.2 | 616.6 | 616.0 | 615.4 | 617.0 |
| 12.5°  | 612.6 | 612.7 | 612.8 | 612.9 | 613.0 | 612.8 | 612.3 | 611.9 | 611.4 | 611.0 | 612.6 |
| 15°    | 600.8 | 601.2 | 601.6 | 602.0 | 602.4 | 602.6 | 602.6 | 602.6 | 602.6 | 602.6 | 604.4 |
| 17.5°  | 585.5 | 586.4 | 587.2 | 588.1 | 588.9 | 589.7 | 590.3 | 590.9 | 591.6 | 592.3 | 594.1 |
| 20°    | 575.3 | 576.3 | 577.3 | 578.4 | 579.3 | 580.2 | 581.0 | 581.9 | 582.7 | 583.5 | 585.8 |
| 22.5°  | 564.4 | 565.5 | 566.8 | 567.9 | 569.1 | 570.2 | 571.4 | 572.5 | 573.6 | 574.8 | 577.0 |
| 25°    | 546.2 | 547.6 | 549.0 | 550.5 | 551.9 | 553.5 | 555.3 | 557.1 | 558.9 | 560.7 | 563.2 |
| 27.5°  | 524.3 | 526.6 | 529.0 | 531.3 | 533.6 | 535.8 | 538.0 | 540.1 | 542.2 | 544.4 | 547.4 |
| 30°    | 509.8 | 512.4 | 515.1 | 517.6 | 520.3 | 522.9 | 525.6 | 528.2 | 530.8 | 533.4 | 536.6 |
| 32.5°  | 493.7 | 496.7 | 499.6 | 502.6 | 505.6 | 508.6 | 511.8 | 514.8 | 517.9 | 521.0 | 524.8 |
| 35°    | 470.6 | 474.0 | 477.5 | 480.9 | 484.4 | 488.0 | 491.9 | 495.7 | 499.5 | 503.4 | 507.8 |
| 37.5°  | 445.5 | 449.5 | 453.4 | 457.4 | 461.4 | 465.8 | 470.8 | 475.8 | 480.7 | 485.7 | 490.7 |
| 40°    | 428.7 | 433.2 | 437.7 | 442.1 | 446.6 | 451.5 | 457.0 | 462.4 | 467.9 | 473.3 | 478.6 |
| 42.5°  | 412.8 | 417.1 | 421.6 | 426.1 | 430.5 | 435.9 | 442.2 | 448.4 | 454.7 | 461.0 | 466.7 |
| 45°    | 385.9 | 391.5 | 396.9 | 402.3 | 407.8 | 414.1 | 421.2 | 428.3 | 435.3 | 442.4 | 448.7 |
| 47.5°  | 359.5 | 365.5 | 371.5 | 377.4 | 383.3 | 390.5 | 398.8 | 407.1 | 415.4 | 423.7 | 430.3 |
| 50°    | 341.3 | 347.7 | 353.9 | 360.2 | 366.4 | 374.2 | 383.3 | 392.4 | 401.4 | 410.5 | 417.4 |
| 52.5°  | 323.9 | 330.5 | 337.1 | 343.7 | 350.3 | 358.4 | 367.9 | 377.6 | 387.1 | 396.7 | 403.8 |
| 55°    | 295.9 | 303.1 | 310.4 | 317.7 | 324.9 | 333.9 | 344.4 | 354.9 | 365.4 | 375.9 | 383.3 |
| 57.5°  | 268.1 | 276.4 | 284.6 | 292.8 | 301.0 | 310.5 | 321.2 | 331.9 | 342.7 | 353.4 | 361.2 |
| 60°    | 248.5 | 257.2 | 265.9 | 274.6 | 283.3 | 293.5 | 305.0 | 316.5 | 328.0 | 339.6 | 347.2 |
| 62.5°  | 231.0 | 240.0 | 249.1 | 258.1 | 267.2 | 277.4 | 288.9 | 300.4 | 312.0 | 323.5 | 331.7 |
| 65°    | 202.1 | 212.0 | 221.9 | 231.8 | 241.7 | 252.6 | 264.6 | 276.5 | 288.5 | 300.4 | 308.7 |
| 67.5°  | 175.5 | 185.8 | 196.3 | 206.6 | 217.0 | 228.2 | 240.4 | 252.6 | 264.8 | 277.1 | 285.4 |
| 70°    | 156.6 | 167.1 | 177.6 | 188.2 | 198.7 | 210.2 | 222.7 | 235.2 | 247.8 | 260.4 | 269.0 |
| 72.5°  | 139.1 | 149.9 | 160.8 | 171.7 | 182.4 | 194.2 | 207.0 | 219.6 | 232.4 | 245.0 | 253.6 |
| 75°    | 112.0 | 123.3 | 134.6 | 146.0 | 157.3 | 169.4 | 182.4 | 195.3 | 208.2 | 221.2 | 229.9 |
| 77.5°  | 85.8  | 97.6  | 109.5 | 121.3 | 133.1 | 145.7 | 158.8 | 172.0 | 185.1 | 198.2 | 207.0 |
| 80°    | 68.3  | 80.6  | 92.9  | 105.3 | 117.6 | 130.4 | 143.6 | 156.7 | 169.8 | 183.0 | 191.5 |
| 82.5°  | 53.7  | 65.9  | 78.0  | 90.2  | 102.5 | 115.1 | 128.5 | 141.8 | 155.1 | 168.4 | 176.9 |
| 85°    | 32.8  | 45.3  | 57.9  | 70.4  | 82.9  | 95.7  | 108.6 | 121.5 | 134.6 | 147.5 | 156.0 |
| 87.5°  | 17.9  | 30.1  | 42.4  | 54.7  | 66.8  | 79.5  | 92.7  | 106.2 | 119.5 | 132.5 | 140.7 |
| 90°    | 9.5   | 22.1  | 35.1  | 47.4  | 59.8  | 73.1  | 87.7  | 102.8 | 117.6 | 130.9 | 138.7 |
| 92.5°  | 12.2  | 24.9  | 38.1  | 50.4  | 63.4  | 78.0  | 97.6  | 120.1 | 141.5 | 154.5 | 156.1 |
| 95°    | 18.3  | 29.1  | 41.7  | 54.0  | 68.7  | 87.0  | 113.6 | 153.2 | 201.9 | 228.2 | 220.4 |
| 97.5°  | 24.3  | 34.5  | 46.3  | 59.0  | 73.3  | 91.9  | 121.8 | 171.6 | 244.0 | 307.7 | 325.5 |
| 100°   | 30.7  | 39.1  | 49.4  | 61.9  | 75.7  | 93.9  | 122.0 | 171.7 | 251.1 | 339.9 | 392.8 |
| 102.5° | 35.7  | 43.2  | 52.9  | 64.8  | 78.2  | 95.9  | 122.3 | 167.6 | 241.6 | 336.1 | 414.7 |
| 105°   | 43.0  | 50.1  | 58.2  | 68.8  | 81.6  | 98.6  | 123.9 | 162.5 | 225.0 | 311.7 | 402.6 |
| 107.5° | 51.9  | 57.6  | 64.4  | 73.5  | 85.0  | 101.3 | 125.7 | 160.2 | 213.3 | 286.4 | 367.2 |
| 110°   | 57.2  | 62.5  | 68.5  | 76.6  | 87.2  | 103.3 | 127.2 | 159.7 | 208.1 | 273.5 | 345.2 |



TEST NUMBER: P331335-940

CATALOG NUMBER: SA2XXDIP-C675D330U940-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 62.8  | 67.4  | 72.9  | 80.2  | 90.0  | 105.8 | 128.5 | 159.3 | 203.8 | 262.8 | 328.0 |
| 115°   | 71.3  | 75.2  | 79.3  | 85.3  | 93.8  | 108.0 | 130.6 | 159.0 | 198.7 | 249.9 | 305.8 |
| 117.5° | 79.5  | 82.1  | 85.5  | 90.2  | 97.8  | 111.6 | 132.5 | 158.9 | 194.1 | 239.5 | 288.8 |
| 120°   | 85.0  | 87.0  | 89.7  | 93.4  | 100.5 | 113.8 | 134.1 | 159.3 | 191.6 | 233.4 | 279.1 |
| 122.5° | 90.2  | 91.6  | 93.8  | 97.2  | 103.8 | 116.9 | 136.0 | 159.3 | 189.5 | 228.0 | 270.3 |
| 125°   | 96.3  | 97.3  | 99.2  | 103.0 | 109.2 | 121.3 | 139.1 | 159.8 | 185.8 | 218.7 | 256.6 |
| 127.5° | 101.9 | 102.9 | 105.4 | 109.3 | 115.2 | 126.8 | 143.0 | 161.0 | 183.2 | 211.1 | 244.0 |
| 130°   | 105.1 | 106.2 | 109.1 | 113.3 | 119.5 | 130.3 | 145.6 | 161.8 | 181.8 | 206.3 | 235.7 |
| 132.5° | 108.2 | 109.5 | 112.7 | 117.2 | 123.5 | 133.8 | 147.7 | 162.6 | 180.4 | 201.6 | 228.1 |
| 135°   | 111.8 | 113.1 | 116.8 | 121.5 | 128.9 | 138.7 | 150.8 | 163.8 | 178.4 | 195.6 | 217.8 |
| 137.5° | 116.1 | 117.5 | 121.3 | 126.4 | 133.5 | 142.0 | 152.9 | 164.1 | 176.5 | 190.2 | 209.0 |
| 140°   | 119.4 | 120.5 | 124.0 | 128.9 | 135.5 | 143.8 | 153.7 | 163.9 | 175.0 | 187.1 | 203.8 |
| 142.5° | 122.6 | 123.5 | 126.8 | 131.6 | 138.1 | 145.7 | 155.0 | 164.6 | 174.6 | 185.7 | 200.0 |
| 145°   | 126.6 | 128.0 | 131.1 | 135.8 | 142.1 | 149.0 | 157.6 | 166.4 | 175.1 | 184.6 | 195.9 |
| 147.5° | 132.0 | 132.9 | 135.9 | 140.3 | 145.5 | 151.7 | 159.7 | 167.5 | 175.4 | 183.5 | 192.5 |
| 150°   | 135.5 | 136.4 | 138.9 | 143.0 | 147.8 | 153.5 | 160.7 | 167.9 | 175.1 | 182.7 | 190.3 |
| 152.5° | 139.0 | 139.5 | 142.0 | 145.5 | 150.1 | 155.2 | 161.7 | 168.2 | 174.7 | 181.5 | 188.5 |
| 155°   | 144.0 | 144.3 | 146.2 | 149.6 | 153.1 | 157.8 | 163.2 | 168.5 | 173.9 | 179.2 | 185.3 |
| 157.5° | 148.1 | 148.5 | 150.0 | 153.0 | 155.8 | 159.7 | 164.3 | 168.5 | 172.5 | 177.0 | 182.2 |
| 160°   | 150.9 | 151.2 | 152.5 | 155.0 | 157.6 | 161.0 | 164.8 | 168.5 | 171.7 | 175.5 | 179.9 |
| 162.5° | 153.7 | 153.5 | 154.8 | 156.8 | 159.1 | 161.8 | 165.1 | 168.3 | 170.9 | 174.2 | 177.9 |
| 165°   | 156.9 | 156.6 | 157.2 | 159.1 | 160.7 | 162.6 | 165.4 | 167.6 | 169.5 | 171.7 | 174.5 |
| 167.5° | 159.5 | 159.2 | 159.7 | 161.0 | 162.1 | 163.3 | 165.3 | 167.2 | 168.1 | 169.5 | 171.3 |
| 170°   | 161.3 | 160.7 | 161.0 | 161.9 | 162.6 | 163.5 | 165.1 | 166.7 | 167.3 | 168.3 | 169.5 |
| 172.5° | 162.3 | 161.9 | 161.8 | 162.7 | 163.1 | 163.8 | 164.9 | 165.9 | 166.3 | 166.7 | 167.7 |
| 175°   | 163.5 | 163.2 | 162.9 | 163.5 | 163.5 | 163.8 | 164.4 | 165.1 | 164.8 | 165.1 | 165.4 |
| 177.5° | 164.1 | 163.5 | 163.4 | 163.8 | 163.8 | 163.8 | 164.1 | 164.6 | 164.1 | 163.8 | 164.1 |
| 180°   | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 |



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**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 | 628.1 |
| 2.5°   | 626.1 | 626.9 | 627.7 | 627.9 | 627.6 | 627.3 | 627.0 | 626.7 |
| 5°     | 624.2 | 625.4 | 626.6 | 627.1 | 626.9 | 626.7 | 626.5 | 626.2 |
| 7.5°   | 621.2 | 622.7 | 624.1 | 624.7 | 624.6 | 624.3 | 624.1 | 623.9 |
| 10°    | 618.6 | 620.2 | 621.9 | 622.5 | 622.3 | 622.1 | 622.0 | 621.7 |
| 12.5°  | 614.2 | 615.8 | 617.5 | 618.1 | 618.0 | 617.8 | 617.6 | 617.3 |
| 15°    | 606.3 | 608.1 | 609.9 | 610.7 | 610.6 | 610.3 | 610.1 | 609.9 |
| 17.5°  | 596.0 | 598.0 | 599.9 | 600.8 | 600.8 | 600.8 | 600.8 | 600.8 |
| 20°    | 588.0 | 590.2 | 592.4 | 593.5 | 593.5 | 593.5 | 593.5 | 593.5 |
| 22.5°  | 579.3 | 581.5 | 583.6 | 585.0 | 585.2 | 585.6 | 585.9 | 586.2 |
| 25°    | 565.6 | 568.0 | 570.4 | 571.9 | 572.6 | 573.2 | 573.8 | 574.4 |
| 27.5°  | 550.5 | 553.6 | 556.7 | 558.4 | 558.8 | 559.3 | 559.7 | 560.2 |
| 30°    | 539.9 | 543.1 | 546.4 | 548.3 | 548.9 | 549.6 | 550.1 | 550.7 |
| 32.5°  | 528.5 | 532.3 | 535.9 | 538.3 | 539.5 | 540.6 | 541.6 | 542.7 |
| 35°    | 512.3 | 516.7 | 521.2 | 524.1 | 525.6 | 527.0 | 528.3 | 529.8 |
| 37.5°  | 495.6 | 500.5 | 505.5 | 508.7 | 510.2 | 511.7 | 513.2 | 514.7 |
| 40°    | 483.8 | 489.1 | 494.4 | 497.9 | 499.7 | 501.6 | 503.4 | 505.2 |
| 42.5°  | 472.4 | 478.2 | 483.9 | 487.8 | 489.5 | 491.4 | 493.2 | 495.0 |
| 45°    | 455.0 | 461.2 | 467.5 | 471.6 | 473.7 | 475.7 | 477.7 | 479.7 |
| 47.5°  | 436.8 | 443.4 | 449.9 | 454.2 | 456.5 | 458.7 | 460.9 | 463.2 |
| 50°    | 424.3 | 431.1 | 438.1 | 442.6 | 444.9 | 447.1 | 449.2 | 451.5 |
| 52.5°  | 410.8 | 417.9 | 424.9 | 429.6 | 431.9 | 434.4 | 436.8 | 439.2 |
| 55°    | 390.5 | 397.8 | 405.1 | 410.0 | 412.7 | 415.3 | 417.9 | 420.5 |
| 57.5°  | 369.1 | 376.9 | 384.8 | 390.0 | 392.7 | 395.4 | 398.1 | 400.7 |
| 60°    | 354.9 | 362.6 | 370.3 | 375.6 | 378.4 | 381.2 | 384.1 | 386.9 |
| 62.5°  | 339.8 | 348.0 | 356.2 | 361.7 | 364.3 | 366.9 | 369.6 | 372.3 |
| 65°    | 317.0 | 325.3 | 333.6 | 339.0 | 341.7 | 344.3 | 347.0 | 349.6 |
| 67.5°  | 293.8 | 302.2 | 310.6 | 316.2 | 318.9 | 321.6 | 324.4 | 327.2 |
| 70°    | 277.8 | 286.4 | 295.2 | 300.7 | 303.1 | 305.6 | 308.0 | 310.4 |
| 72.5°  | 262.2 | 270.6 | 279.2 | 284.9 | 287.8 | 290.8 | 293.6 | 296.6 |
| 75°    | 238.6 | 247.3 | 256.0 | 261.6 | 264.3 | 266.9 | 269.6 | 272.2 |
| 77.5°  | 215.6 | 224.3 | 232.9 | 238.6 | 241.5 | 244.3 | 247.1 | 249.9 |
| 80°    | 199.9 | 208.5 | 217.0 | 222.7 | 225.4 | 228.3 | 231.1 | 234.0 |
| 82.5°  | 185.4 | 193.9 | 202.4 | 207.9 | 210.6 | 213.3 | 216.0 | 218.6 |
| 85°    | 164.4 | 173.0 | 181.5 | 187.1 | 189.9 | 192.8 | 195.6 | 198.4 |
| 87.5°  | 148.9 | 157.0 | 165.4 | 170.9 | 173.4 | 176.0 | 178.6 | 181.2 |
| 90°    | 146.4 | 153.9 | 162.6 | 168.2 | 170.6 | 173.1 | 175.5 | 177.9 |
| 92.5°  | 156.9 | 161.0 | 166.2 | 169.5 | 171.7 | 173.1 | 175.8 | 177.6 |
| 95°    | 202.6 | 191.1 | 185.6 | 183.7 | 182.0 | 181.9 | 183.3 | 186.1 |
| 97.5°  | 304.4 | 276.9 | 250.3 | 232.5 | 219.8 | 214.5 | 212.2 | 212.0 |
| 100°   | 393.7 | 362.0 | 326.4 | 293.1 | 269.2 | 257.9 | 250.9 | 247.5 |
| 102.5° | 450.5 | 449.0 | 424.7 | 389.1 | 362.9 | 342.1 | 332.9 | 327.3 |
| 105°   | 475.3 | 517.9 | 529.1 | 523.3 | 506.0 | 488.7 | 477.4 | 475.3 |
| 107.5° | 443.5 | 503.9 | 543.5 | 563.3 | 567.9 | 569.1 | 568.6 | 565.0 |
| 110°   | 418.1 | 481.0 | 527.8 | 557.9 | 573.7 | 581.9 | 587.0 | 588.9 |





TEST NUMBER: P331335-940

CATALOG NUMBER: SA2XXDIP-C675D330U940-4F0-1E-UDD-D4

**CANDELA DISTRIBUTION (continued):**

|        | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 394.3 | 455.0 | 504.5 | 538.5 | 559.5 | 571.8 | 579.3 | 583.3 |
| 115°   | 363.9 | 418.5 | 465.8 | 502.4 | 527.0 | 543.7 | 554.1 | 559.2 |
| 117.5° | 338.9 | 387.5 | 431.0 | 465.5 | 490.4 | 507.7 | 518.4 | 522.8 |
| 120°   | 325.4 | 370.1 | 409.2 | 441.8 | 466.1 | 483.1 | 494.5 | 499.8 |
| 122.5° | 313.9 | 355.2 | 392.4 | 422.0 | 443.6 | 460.0 | 470.1 | 474.7 |
| 125°   | 296.4 | 334.4 | 367.6 | 394.8 | 414.9 | 428.7 | 438.4 | 442.7 |
| 127.5° | 279.2 | 313.6 | 344.8 | 370.0 | 387.7 | 400.7 | 409.3 | 413.1 |
| 130°   | 268.2 | 300.1 | 329.9 | 354.0 | 371.0 | 383.3 | 391.3 | 395.4 |
| 132.5° | 257.5 | 287.3 | 314.9 | 337.5 | 354.4 | 366.7 | 374.1 | 378.0 |
| 135°   | 242.5 | 267.6 | 292.6 | 313.2 | 328.3 | 340.4 | 347.7 | 350.5 |
| 137.5° | 229.4 | 250.6 | 270.8 | 288.7 | 302.5 | 312.7 | 319.1 | 322.4 |
| 140°   | 221.3 | 239.6 | 257.3 | 273.5 | 284.7 | 294.2 | 300.1 | 303.2 |
| 142.5° | 215.0 | 230.4 | 245.5 | 259.0 | 269.6 | 278.0 | 283.3 | 284.7 |
| 145°   | 206.9 | 218.6 | 229.5 | 239.8 | 248.3 | 254.7 | 258.9 | 260.8 |
| 147.5° | 201.0 | 209.3 | 217.1 | 224.1 | 230.9 | 235.6 | 238.3 | 239.2 |
| 150°   | 197.9 | 204.8 | 211.4 | 217.0 | 221.8 | 225.6 | 227.5 | 227.8 |
| 152.5° | 195.1 | 201.5 | 207.1 | 212.0 | 215.8 | 219.0 | 220.4 | 220.5 |
| 155°   | 191.3 | 196.3 | 201.0 | 204.5 | 207.9 | 210.2 | 211.4 | 210.8 |
| 157.5° | 186.8 | 191.0 | 194.9 | 197.7 | 200.1 | 202.0 | 202.5 | 202.5 |
| 160°   | 184.0 | 187.4 | 190.9 | 193.1 | 195.4 | 196.9 | 197.2 | 197.2 |
| 162.5° | 181.2 | 184.2 | 187.2 | 188.9 | 191.1 | 192.2 | 192.4 | 192.2 |
| 165°   | 177.1 | 179.2 | 181.5 | 182.7 | 184.0 | 185.3 | 185.3 | 184.9 |
| 167.5° | 173.1 | 174.8 | 176.3 | 177.5 | 178.0 | 178.7 | 178.6 | 178.3 |
| 170°   | 171.1 | 172.0 | 173.3 | 173.9 | 174.2 | 175.1 | 174.9 | 174.2 |
| 172.5° | 168.8 | 169.5 | 170.5 | 170.9 | 171.2 | 171.7 | 171.3 | 170.9 |
| 175°   | 166.4 | 166.7 | 167.0 | 167.3 | 167.3 | 167.6 | 167.3 | 166.7 |
| 177.5° | 164.6 | 164.6 | 164.9 | 164.9 | 164.9 | 164.9 | 164.6 | 164.1 |
| 180°   | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 | 163.8 |

(END OF REPORT)