

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: STREETWORKS

Report Number: P199130

Luminaire Tested: **XNV-AF-01-LED-U-5NQ-8030-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199130  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24130)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV-AF-01-LED-U-5NQ-8030-600  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3343 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B2 - U0 - G0  
  
Input Watts (W): 34  
Input Voltage (V): NR  
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: 28.75 FT

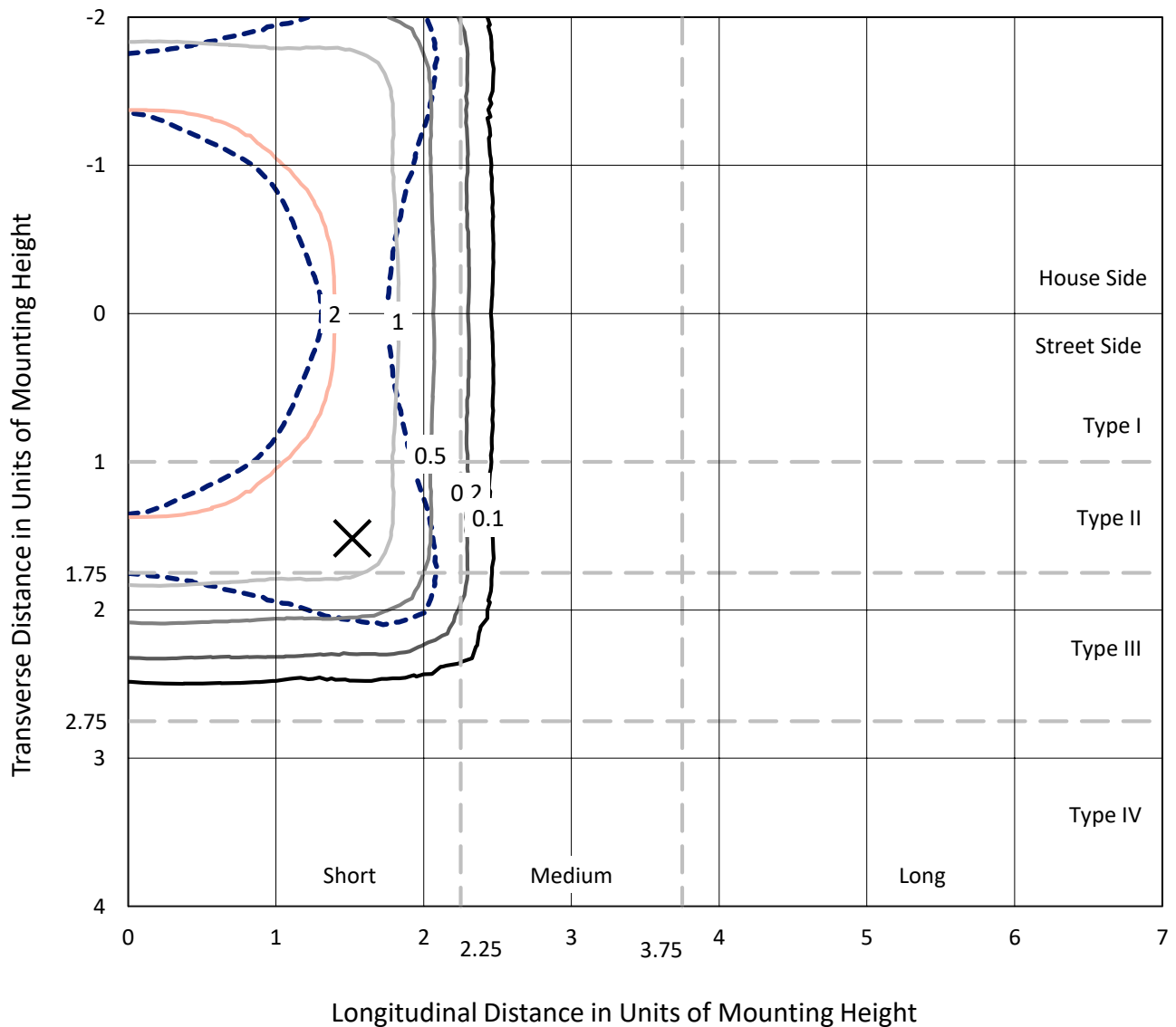


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### Iso-Footcandle Lines of Horizontal Illumination

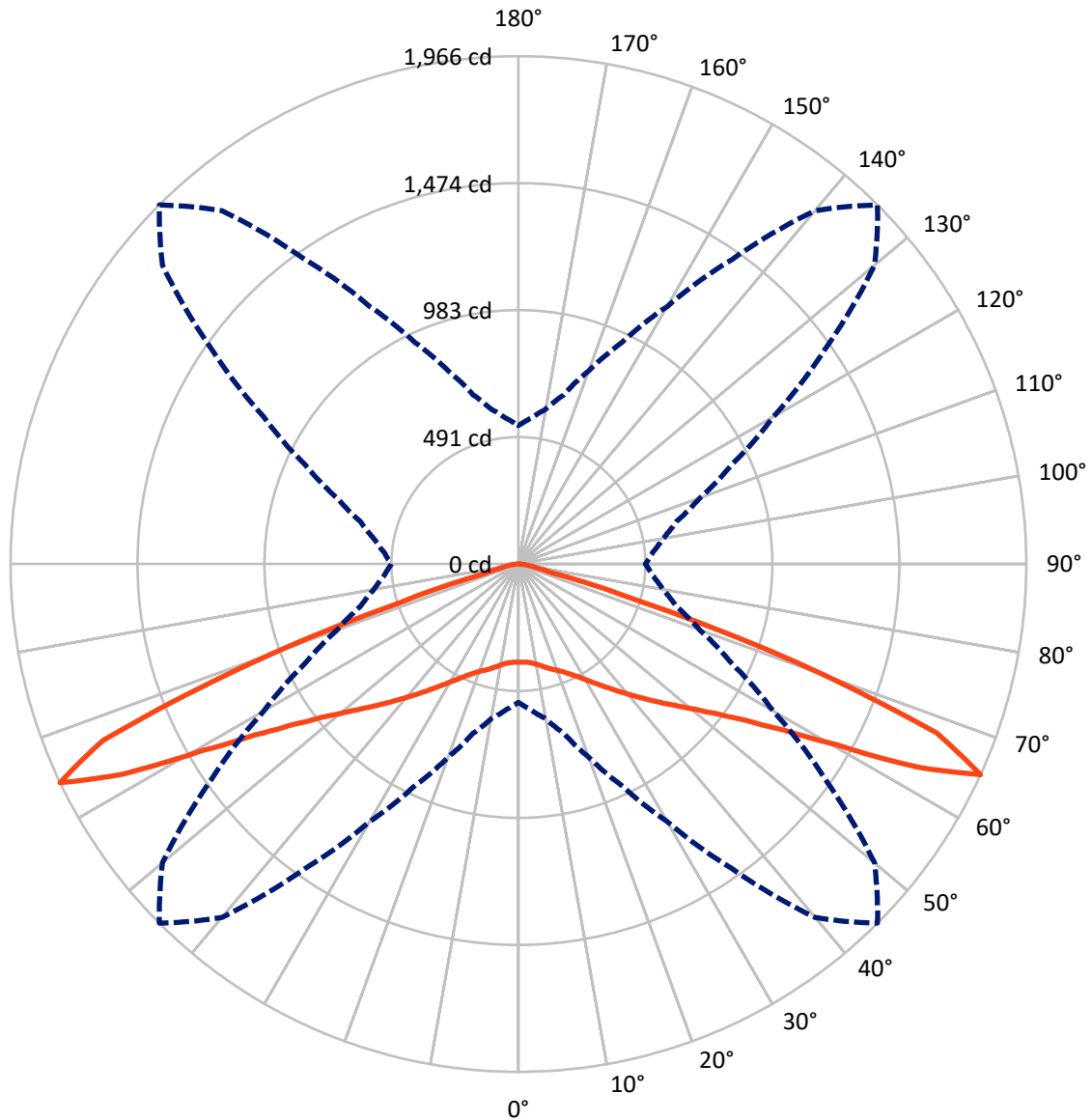
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.8 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1671.5   | 0.0    | 1671.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 1671.5   | 0.0    | 1671.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 3343.0   | 0.0    | 3343.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 37.0   | 1.1       |
| 10°-20°   | 118.7  | 3.6       |
| 20°-30°   | 221.4  | 6.6       |
| 30°-40°   | 373.3  | 11.2      |
| 40°-50°   | 606.4  | 18.1      |
| 50°-60°   | 950.1  | 28.4      |
| 60°-70°   | 896.8  | 26.8      |
| 70°-80°   | 120.9  | 3.6       |
| 80°-90°   | 18.4   | 0.6       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-90°    | 3343.0 | 100.0     |
| 0°-180°   | 3343.0 | 100.0     |

**Coefficient of Utilization**



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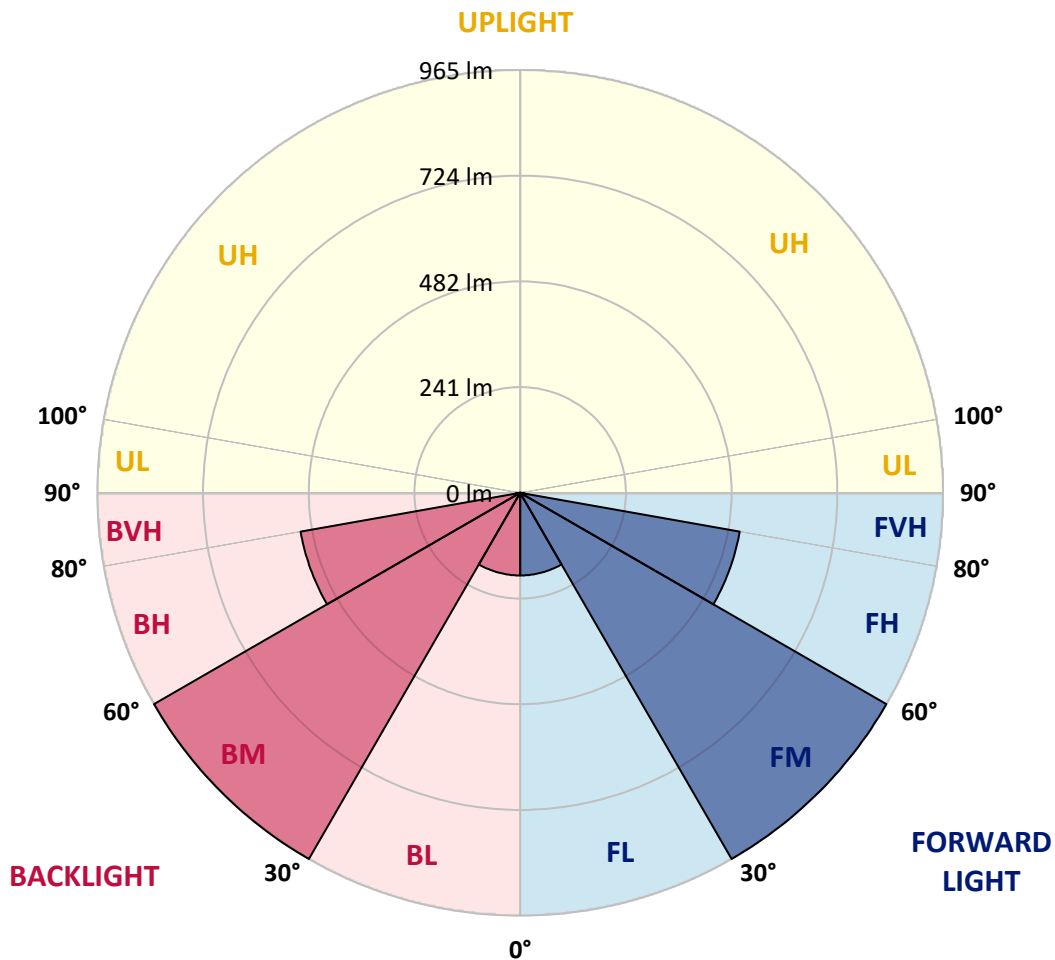
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 188.6  | 5.6       |                         |      |        |
| FM   | (30°-60°)   | 964.9  | 28.9      |                         |      |        |
| FH   | (60°-80°)   | 508.8  | 15.2      |                         |      | G0/660 |
| FVH  | (80°-90°)   | 9.2    | 0.3       |                         |      | G0/10  |
| BL   | (0°-30°)    | 188.6  | 5.6       | B1/500                  |      |        |
| BM   | (30°-60°)   | 964.9  | 28.9      | B1/1000                 |      |        |
| BH   | (60°-80°)   | 508.8  | 15.2      | B2/1000                 |      | G0/660 |
| BVH  | (80°-90°)   | 9.2    | 0.3       |                         |      | G0/10  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G0**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  |
| 2.5°  | 383.4  | 383.4  | 384.0  | 383.8  | 383.0  | 382.3  | 381.7  | 380.9  | 380.5  | 380.1  | 379.8  |
| 5°    | 385.5  | 385.5  | 386.1  | 385.9  | 385.3  | 384.4  | 384.0  | 383.4  | 382.8  | 382.3  | 382.6  |
| 7.5°  | 390.7  | 390.9  | 391.1  | 390.9  | 390.3  | 389.6  | 388.8  | 388.6  | 387.8  | 387.1  | 387.6  |
| 10°   | 398.6  | 398.6  | 398.8  | 399.0  | 398.6  | 397.1  | 397.1  | 396.7  | 395.9  | 395.0  | 395.3  |
| 12.5° | 407.3  | 407.3  | 407.5  | 407.5  | 407.5  | 406.7  | 406.9  | 406.7  | 405.7  | 405.3  | 405.7  |
| 15°   | 415.9  | 416.1  | 416.1  | 416.5  | 416.5  | 416.7  | 417.5  | 417.5  | 417.1  | 416.9  | 416.9  |
| 17.5° | 425.9  | 426.3  | 426.5  | 427.1  | 427.3  | 427.7  | 428.6  | 428.8  | 429.0  | 428.4  | 428.6  |
| 20°   | 439.2  | 439.4  | 440.0  | 440.2  | 441.1  | 441.1  | 441.5  | 441.3  | 440.9  | 440.0  | 440.0  |
| 22.5° | 454.2  | 454.6  | 455.9  | 455.9  | 456.9  | 456.3  | 456.5  | 455.9  | 454.8  | 454.4  | 454.0  |
| 25°   | 473.8  | 474.4  | 475.4  | 475.0  | 475.4  | 474.4  | 474.4  | 474.4  | 473.8  | 473.1  | 472.9  |
| 27.5° | 498.5  | 497.5  | 498.5  | 497.7  | 497.5  | 496.7  | 496.9  | 496.5  | 495.8  | 495.6  | 494.8  |
| 30°   | 524.4  | 523.1  | 523.7  | 524.0  | 523.5  | 523.3  | 522.5  | 521.9  | 520.8  | 521.0  | 520.4  |
| 32.5° | 553.9  | 552.7  | 553.3  | 553.5  | 553.1  | 553.5  | 553.3  | 551.9  | 550.6  | 551.4  | 551.4  |
| 35°   | 589.1  | 588.3  | 590.0  | 590.6  | 589.3  | 588.7  | 587.9  | 586.2  | 584.3  | 585.6  | 585.8  |
| 37.5° | 631.4  | 630.4  | 631.6  | 633.3  | 631.0  | 629.7  | 626.4  | 623.9  | 622.7  | 623.3  | 624.1  |
| 40°   | 675.4  | 675.6  | 679.1  | 679.5  | 677.0  | 675.6  | 672.2  | 668.5  | 664.9  | 664.9  | 666.0  |
| 42.5° | 721.6  | 722.2  | 726.4  | 727.8  | 727.0  | 724.3  | 719.7  | 715.1  | 710.5  | 711.4  | 712.6  |
| 45°   | 773.9  | 773.0  | 777.4  | 780.9  | 780.3  | 779.5  | 775.1  | 766.8  | 762.6  | 762.4  | 764.5  |
| 47.5° | 828.8  | 830.5  | 835.1  | 841.1  | 840.9  | 838.8  | 833.2  | 825.5  | 817.8  | 818.4  | 820.9  |
| 50°   | 893.0  | 895.3  | 903.0  | 909.0  | 909.8  | 909.2  | 902.6  | 893.6  | 882.8  | 883.4  | 886.7  |
| 52.5° | 950.4  | 953.8  | 962.7  | 975.2  | 982.9  | 986.5  | 982.1  | 973.8  | 962.7  | 963.4  | 966.9  |
| 55°   | 1002.5 | 1007.7 | 1021.0 | 1038.1 | 1053.5 | 1067.9 | 1074.4 | 1074.1 | 1066.0 | 1067.9 | 1072.5 |
| 57.5° | 1035.2 | 1042.5 | 1062.7 | 1090.2 | 1120.8 | 1149.7 | 1174.7 | 1198.3 | 1203.5 | 1213.3 | 1213.3 |
| 60°   | 991.3  | 1008.3 | 1035.2 | 1082.3 | 1142.5 | 1207.4 | 1277.8 | 1346.3 | 1390.5 | 1425.3 | 1406.5 |
| 62.5° | 827.8  | 853.0  | 890.7  | 952.7  | 1046.5 | 1162.4 | 1303.8 | 1463.2 | 1629.3 | 1731.0 | 1656.4 |
| 65°   | 535.6  | 567.3  | 608.3  | 678.1  | 796.1  | 945.4  | 1151.4 | 1437.7 | 1785.5 | 1965.9 | 1799.3 |
| 67.5° | 212.2  | 233.7  | 258.6  | 308.2  | 410.7  | 557.3  | 788.4  | 1141.6 | 1576.7 | 1746.8 | 1560.0 |
| 70°   | 101.4  | 105.0  | 109.7  | 120.4  | 146.0  | 197.0  | 316.7  | 562.5  | 966.9  | 1146.2 | 943.8  |
| 72.5° | 73.3   | 73.9   | 76.2   | 79.8   | 87.3   | 97.7   | 118.7  | 172.0  | 333.4  | 484.8  | 333.8  |
| 75°   | 55.6   | 56.4   | 57.7   | 59.6   | 63.5   | 68.5   | 76.4   | 91.6   | 114.1  | 131.6  | 113.9  |
| 77.5° | 42.3   | 43.1   | 44.1   | 46.0   | 48.1   | 51.6   | 54.6   | 60.6   | 70.2   | 73.9   | 73.5   |
| 80°   | 30.8   | 32.3   | 33.9   | 35.6   | 37.1   | 38.7   | 38.9   | 41.9   | 47.3   | 50.8   | 49.8   |
| 82.5° | 19.6   | 20.8   | 25.2   | 27.1   | 27.3   | 27.7   | 27.5   | 27.7   | 30.6   | 33.1   | 32.3   |
| 85°   | 12.5   | 13.3   | 15.6   | 17.7   | 17.3   | 18.1   | 18.1   | 17.7   | 16.5   | 14.2   | 16.9   |
| 87.5° | 6.2    | 6.5    | 7.5    | 9.4    | 9.0    | 7.9    | 7.7    | 7.7    | 5.6    | 4.8    | 5.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  | 380.3  |
| 2.5°  | 379.2  | 379.6  | 379.0  | 379.0  | 378.8  | 379.2  | 378.6  | 378.6  |
| 5°    | 382.1  | 382.8  | 382.6  | 382.6  | 383.0  | 383.4  | 383.2  | 383.0  |
| 7.5°  | 387.3  | 387.8  | 388.2  | 388.4  | 388.8  | 388.6  | 389.0  | 388.8  |
| 10°   | 395.3  | 394.8  | 395.5  | 394.8  | 395.0  | 394.6  | 394.8  | 394.8  |
| 12.5° | 405.3  | 404.6  | 404.2  | 403.8  | 403.8  | 403.0  | 403.0  | 403.2  |
| 15°   | 416.7  | 415.7  | 414.8  | 414.4  | 414.0  | 414.0  | 413.4  | 413.8  |
| 17.5° | 428.0  | 426.9  | 425.5  | 425.5  | 424.8  | 424.4  | 424.0  | 425.0  |
| 20°   | 439.8  | 438.8  | 437.9  | 437.7  | 436.5  | 436.1  | 436.3  | 437.5  |
| 22.5° | 453.6  | 452.9  | 452.9  | 452.5  | 451.7  | 451.1  | 451.1  | 452.5  |
| 25°   | 472.1  | 470.9  | 471.1  | 471.3  | 470.9  | 470.9  | 470.4  | 471.5  |
| 27.5° | 494.8  | 493.8  | 494.4  | 494.8  | 494.4  | 495.0  | 494.4  | 495.2  |
| 30°   | 521.5  | 520.8  | 521.5  | 522.1  | 521.0  | 521.0  | 520.6  | 521.2  |
| 32.5° | 553.3  | 552.5  | 552.9  | 552.9  | 551.4  | 550.2  | 548.5  | 549.8  |
| 35°   | 588.3  | 587.3  | 588.1  | 588.7  | 587.1  | 585.8  | 583.3  | 584.3  |
| 37.5° | 626.8  | 627.2  | 628.3  | 631.0  | 630.6  | 628.5  | 626.6  | 627.5  |
| 40°   | 669.9  | 672.0  | 676.6  | 678.5  | 678.1  | 676.0  | 673.5  | 673.9  |
| 42.5° | 718.7  | 721.4  | 726.2  | 729.3  | 727.8  | 724.9  | 721.8  | 723.0  |
| 45°   | 771.8  | 775.9  | 782.2  | 785.3  | 783.4  | 780.3  | 775.9  | 778.2  |
| 47.5° | 828.0  | 836.3  | 844.7  | 848.8  | 848.2  | 843.8  | 838.2  | 838.8  |
| 50°   | 895.3  | 906.3  | 916.9  | 921.1  | 918.0  | 911.3  | 903.4  | 903.2  |
| 52.5° | 979.0  | 990.8  | 999.6  | 998.6  | 990.8  | 980.4  | 971.5  | 971.1  |
| 55°   | 1083.5 | 1087.5 | 1086.2 | 1077.3 | 1063.7 | 1047.5 | 1036.0 | 1034.2 |
| 57.5° | 1209.9 | 1196.6 | 1177.0 | 1149.9 | 1119.5 | 1088.7 | 1067.9 | 1060.2 |
| 60°   | 1364.4 | 1304.3 | 1234.3 | 1160.6 | 1093.3 | 1042.9 | 1011.0 | 991.7  |
| 62.5° | 1492.1 | 1317.8 | 1161.4 | 1033.3 | 928.6  | 866.3  | 822.8  | 795.9  |
| 65°   | 1448.4 | 1138.5 | 911.9  | 746.8  | 632.5  | 568.1  | 522.1  | 491.5  |
| 67.5° | 1118.9 | 760.7  | 529.4  | 366.9  | 278.2  | 235.5  | 205.7  | 186.4  |
| 70°   | 564.1  | 291.8  | 176.8  | 124.7  | 106.6  | 99.1   | 94.1   | 91.2   |
| 72.5° | 165.6  | 110.6  | 91.8   | 81.2   | 74.8   | 70.2   | 67.3   | 65.8   |
| 75°   | 91.6   | 74.8   | 66.0   | 60.0   | 55.8   | 52.7   | 50.8   | 49.6   |
| 77.5° | 63.1   | 54.4   | 50.0   | 46.0   | 42.7   | 40.4   | 38.9   | 37.7   |
| 80°   | 44.1   | 39.8   | 37.9   | 35.8   | 33.3   | 31.4   | 29.4   | 28.5   |
| 82.5° | 29.4   | 27.5   | 27.1   | 25.4   | 23.9   | 21.9   | 18.1   | 16.9   |
| 85°   | 17.3   | 17.1   | 17.1   | 16.5   | 15.4   | 13.5   | 10.8   | 10.8   |
| 87.5° | 6.0    | 6.2    | 6.5    | 6.9    | 6.7    | 5.6    | 4.6    | 4.4    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)