

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: P199128

Luminaire Tested: **XNV-AF-01-LED-U-5MQ-8030-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199128  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)  
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-5MQ-8030-1200  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5766 lumens  
Efficiency: N/A  
Efficacy: 87.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

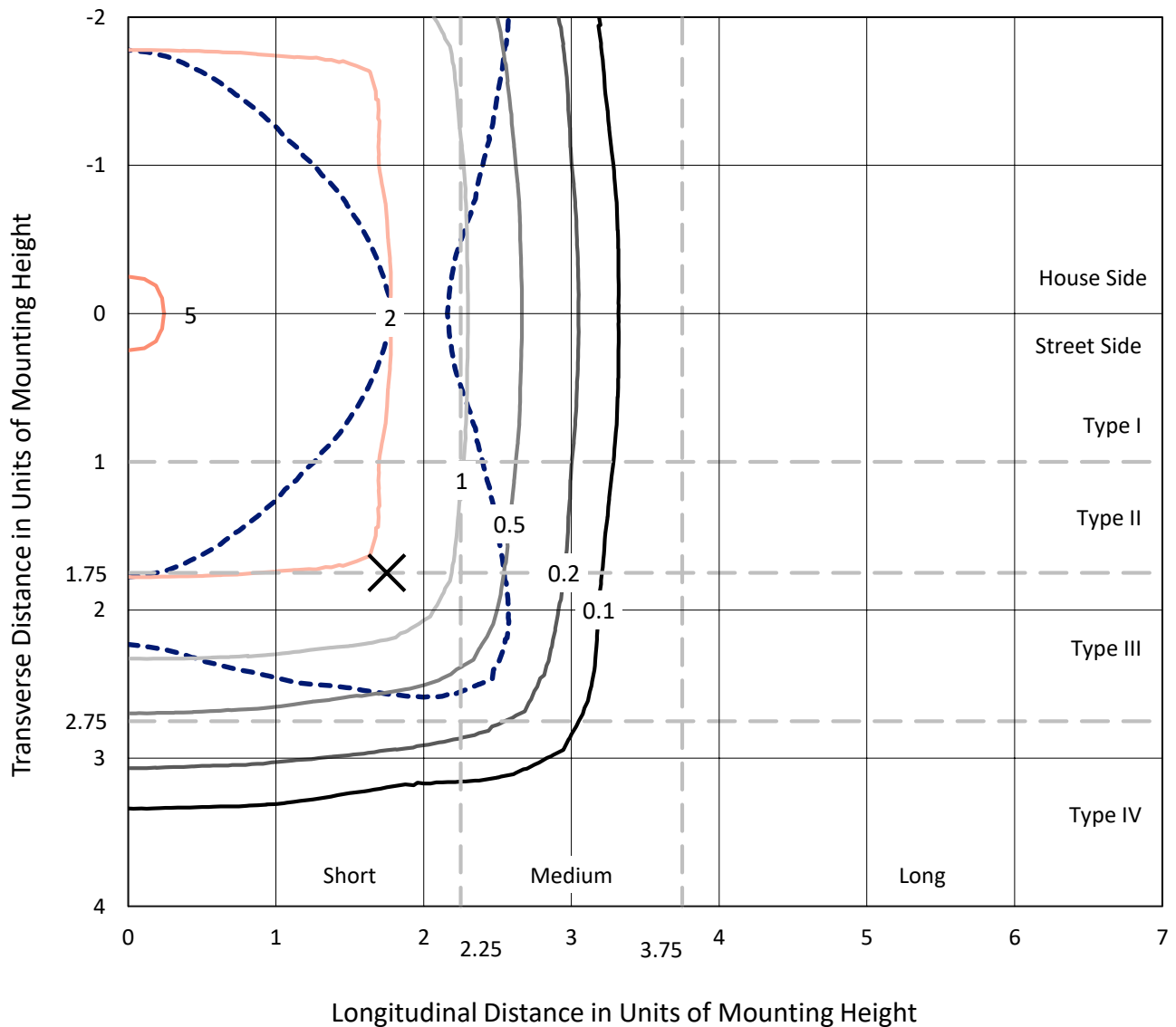
Input Watts (W): 66  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

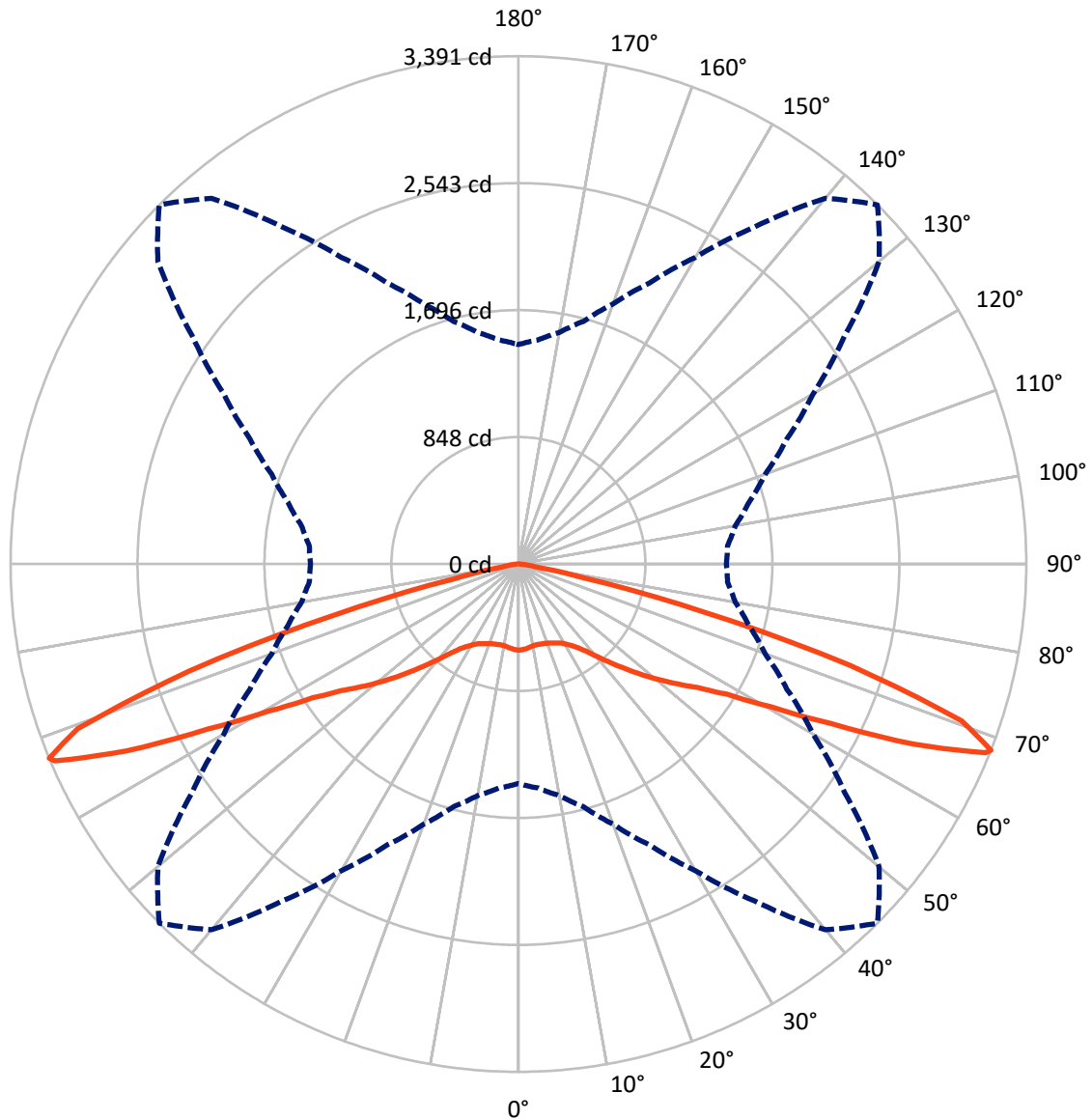
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.8 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 68-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2883.0   | 0.0    | 2883.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2883.0   | 0.0    | 2883.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 5766.0   | 0.0    | 5766.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 53.8   | 0.9       |
| 10°-20°   | 156.1  | 2.7       |
| 20°-30°   | 265.4  | 4.6       |
| 30°-40°   | 434.3  | 7.5       |
| 40°-50°   | 776.1  | 13.5      |
| 50°-60°   | 1310.7 | 22.7      |
| 60°-70°   | 2032.4 | 35.2      |
| 70°-80°   | 698.8  | 12.1      |
| 80°-90°   | 38.4   | 0.7       |
| 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°    | 5766.0 | 100.0     |
| 0°-180°   | 5766.0 | 100.0     |



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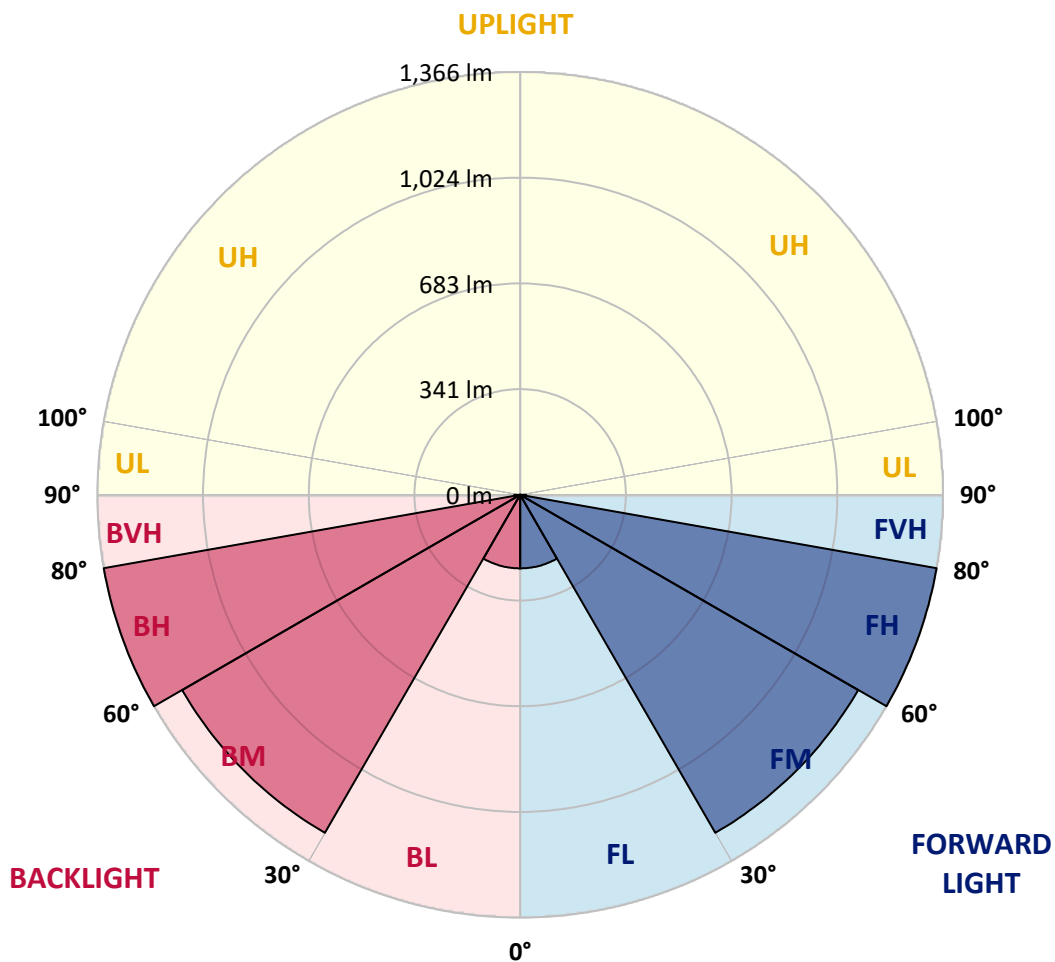
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 237.6  | 4.1       |                         |      |         |
| FM (30°-60°)   | 1260.5 | 21.9      |                         |      |         |
| FH (60°-80°)   | 1365.6 | 23.7      |                         |      | G1/1800 |
| FVH (80°-90°)  | 19.2   | 0.3       |                         |      | G1/100  |
| BL (0°-30°)    | 237.6  | 4.1       | B1/500                  |      |         |
| BM (30°-60°)   | 1260.5 | 21.9      | B2/2500                 |      |         |
| BH (60°-80°)   | 1365.6 | 23.7      | B3/2500                 |      | G1/1800 |
| BVH (80°-90°)  | 19.2   | 0.3       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  |
| 2.5°  | 577.6  | 577.6  | 578.4  | 578.0  | 576.9  | 575.9  | 574.8  | 573.8  | 573.1  | 572.4  | 571.6  |
| 5°    | 571.6  | 571.6  | 572.7  | 572.0  | 571.3  | 570.2  | 569.5  | 568.5  | 567.8  | 567.1  | 567.4  |
| 7.5°  | 563.9  | 564.6  | 565.3  | 564.9  | 563.5  | 563.2  | 562.1  | 561.8  | 561.1  | 560.0  | 560.3  |
| 10°   | 557.2  | 557.5  | 558.2  | 557.9  | 557.5  | 556.5  | 556.1  | 555.8  | 555.4  | 554.0  | 553.6  |
| 12.5° | 550.5  | 551.2  | 551.9  | 552.2  | 551.9  | 552.2  | 552.6  | 552.9  | 552.6  | 551.9  | 551.9  |
| 15°   | 545.2  | 545.9  | 546.9  | 548.0  | 548.3  | 550.5  | 551.9  | 553.3  | 554.3  | 554.7  | 553.6  |
| 17.5° | 542.3  | 543.4  | 544.8  | 546.9  | 548.7  | 551.2  | 553.6  | 555.8  | 557.5  | 557.9  | 556.8  |
| 20°   | 542.0  | 543.0  | 545.2  | 547.6  | 550.8  | 554.0  | 557.9  | 561.1  | 562.8  | 563.9  | 562.8  |
| 22.5° | 544.5  | 545.9  | 548.7  | 551.9  | 555.8  | 560.0  | 564.9  | 568.5  | 572.0  | 573.4  | 572.4  |
| 25°   | 551.5  | 552.9  | 556.1  | 560.0  | 564.2  | 569.5  | 574.5  | 579.1  | 582.6  | 584.4  | 582.9  |
| 27.5° | 566.3  | 566.7  | 570.2  | 574.5  | 579.4  | 584.0  | 590.4  | 592.5  | 595.3  | 597.1  | 595.3  |
| 30°   | 587.2  | 587.9  | 591.1  | 597.8  | 602.4  | 608.4  | 611.9  | 614.0  | 617.2  | 619.0  | 616.8  |
| 32.5° | 619.0  | 619.7  | 622.5  | 628.8  | 633.1  | 637.7  | 641.9  | 643.3  | 646.5  | 648.6  | 646.1  |
| 35°   | 663.8  | 665.2  | 667.7  | 671.9  | 675.5  | 679.0  | 682.2  | 681.1  | 683.2  | 686.0  | 683.6  |
| 37.5° | 725.2  | 724.9  | 725.6  | 728.8  | 732.3  | 734.4  | 739.4  | 736.9  | 739.0  | 741.5  | 740.1  |
| 40°   | 796.9  | 796.9  | 796.6  | 802.2  | 803.6  | 805.7  | 811.0  | 807.9  | 810.7  | 813.5  | 811.0  |
| 42.5° | 878.5  | 879.9  | 881.7  | 886.2  | 890.1  | 890.8  | 893.3  | 891.9  | 895.4  | 897.9  | 895.4  |
| 45°   | 972.4  | 974.5  | 976.6  | 987.2  | 989.0  | 990.4  | 992.2  | 987.6  | 991.5  | 993.6  | 992.9  |
| 47.5° | 1069.8 | 1073.7 | 1078.3 | 1089.3 | 1096.3 | 1099.5 | 1100.9 | 1095.6 | 1096.0 | 1099.2 | 1099.5 |
| 50°   | 1180.0 | 1184.2 | 1188.8 | 1201.2 | 1207.9 | 1213.6 | 1215.3 | 1209.3 | 1210.0 | 1212.5 | 1213.2 |
| 52.5° | 1281.7 | 1286.6 | 1296.5 | 1313.1 | 1322.7 | 1332.5 | 1333.2 | 1325.8 | 1329.0 | 1330.8 | 1329.4 |
| 55°   | 1377.4 | 1383.7 | 1396.8 | 1419.0 | 1436.4 | 1455.8 | 1464.6 | 1456.5 | 1456.5 | 1455.1 | 1454.4 |
| 57.5° | 1489.0 | 1496.0 | 1509.4 | 1535.2 | 1559.2 | 1587.1 | 1611.1 | 1619.2 | 1634.1 | 1639.0 | 1631.3 |
| 60°   | 1657.0 | 1664.4 | 1678.2 | 1712.1 | 1742.5 | 1783.1 | 1822.6 | 1854.8 | 1907.0 | 1935.3 | 1909.8 |
| 62.5° | 1810.6 | 1821.9 | 1854.4 | 1913.7 | 1979.4 | 2054.6 | 2141.8 | 2204.0 | 2298.9 | 2346.3 | 2282.3 |
| 65°   | 1775.7 | 1798.6 | 1862.2 | 1955.4 | 2091.0 | 2254.1 | 2431.7 | 2602.2 | 2798.6 | 2899.2 | 2769.2 |
| 67.5° | 1551.1 | 1570.5 | 1639.0 | 1747.4 | 1916.5 | 2141.5 | 2417.6 | 2770.7 | 3175.6 | 3364.2 | 3134.3 |
| 68°   | 1465.3 | 1501.7 | 1569.8 | 1677.5 | 1848.0 | 2069.1 | 2363.9 | 2745.2 | 3187.3 | 3391.0 | 3142.8 |
| 70°   | 1123.5 | 1136.6 | 1201.9 | 1298.6 | 1482.6 | 1699.4 | 1997.0 | 2431.7 | 2931.3 | 3141.0 | 2885.8 |
| 72.5° | 533.9  | 541.6  | 584.0  | 679.3  | 796.2  | 972.7  | 1235.4 | 1645.4 | 2095.6 | 2313.8 | 2059.2 |
| 75°   | 195.6  | 197.4  | 207.3  | 229.9  | 273.6  | 340.0  | 466.1  | 721.0  | 1067.4 | 1272.9 | 1071.6 |
| 77.5° | 105.6  | 105.9  | 109.8  | 115.5  | 123.2  | 132.1  | 151.1  | 202.7  | 327.0  | 444.9  | 345.3  |
| 80°   | 66.4   | 66.0   | 69.9   | 74.5   | 79.8   | 84.0   | 85.8   | 91.8   | 103.5  | 121.1  | 111.2  |
| 82.5° | 33.9   | 37.1   | 45.9   | 50.8   | 58.6   | 60.0   | 58.3   | 57.9   | 61.4   | 66.4   | 68.5   |
| 85°   | 18.7   | 16.6   | 24.4   | 32.5   | 35.3   | 36.4   | 36.7   | 34.6   | 33.9   | 33.2   | 35.0   |
| 87.5° | 9.5    | 8.8    | 10.6   | 16.2   | 17.3   | 14.1   | 14.5   | 12.4   | 8.5    | 8.5    | 8.8    |
| 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°    | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  | 575.2  |
| 2.5°  | 570.9  | 571.3  | 570.6  | 570.6  | 570.6  | 570.9  | 570.6  | 570.2  |
| 5°    | 566.3  | 567.1  | 567.1  | 567.4  | 567.8  | 567.8  | 567.8  | 567.8  |
| 7.5°  | 559.6  | 560.0  | 560.7  | 560.7  | 560.7  | 560.7  | 560.7  | 560.7  |
| 10°   | 553.3  | 552.6  | 552.2  | 551.5  | 551.5  | 550.5  | 550.8  | 551.2  |
| 12.5° | 550.1  | 548.7  | 548.0  | 546.9  | 546.2  | 545.2  | 545.2  | 545.5  |
| 15°   | 551.5  | 549.4  | 547.3  | 546.6  | 545.9  | 545.2  | 544.5  | 544.8  |
| 17.5° | 554.3  | 551.9  | 549.4  | 548.0  | 546.6  | 545.5  | 545.2  | 545.5  |
| 20°   | 560.3  | 556.8  | 552.9  | 550.5  | 547.6  | 546.9  | 545.9  | 546.9  |
| 22.5° | 568.5  | 564.2  | 559.3  | 554.7  | 551.5  | 550.1  | 548.7  | 549.8  |
| 25°   | 578.4  | 573.8  | 568.8  | 563.5  | 560.0  | 558.9  | 557.2  | 557.2  |
| 27.5° | 592.1  | 588.2  | 584.0  | 579.1  | 575.5  | 574.5  | 571.6  | 571.6  |
| 30°   | 614.0  | 610.1  | 606.2  | 602.0  | 598.5  | 597.4  | 593.9  | 593.9  |
| 32.5° | 643.0  | 638.7  | 636.3  | 632.7  | 629.9  | 628.1  | 623.9  | 623.5  |
| 35°   | 681.8  | 677.9  | 677.6  | 675.1  | 672.3  | 672.6  | 668.4  | 667.7  |
| 37.5° | 737.6  | 734.4  | 735.5  | 733.4  | 730.9  | 733.0  | 730.5  | 730.5  |
| 40°   | 808.9  | 807.9  | 808.9  | 807.5  | 807.9  | 808.2  | 806.1  | 806.8  |
| 42.5° | 895.1  | 892.2  | 898.6  | 897.9  | 896.8  | 899.7  | 894.7  | 891.2  |
| 45°   | 994.3  | 993.2  | 999.6  | 1000.6 | 998.5  | 1000.3 | 991.5  | 991.1  |
| 47.5° | 1102.0 | 1102.0 | 1107.6 | 1106.9 | 1104.8 | 1105.2 | 1094.6 | 1087.9 |
| 50°   | 1214.3 | 1213.6 | 1219.2 | 1217.8 | 1215.0 | 1214.6 | 1203.7 | 1197.0 |
| 52.5° | 1331.1 | 1331.1 | 1339.3 | 1335.4 | 1328.7 | 1325.5 | 1312.1 | 1303.2 |
| 55°   | 1460.4 | 1458.6 | 1461.1 | 1448.4 | 1435.3 | 1425.8 | 1409.2 | 1402.5 |
| 57.5° | 1623.8 | 1603.4 | 1585.7 | 1569.5 | 1551.1 | 1539.8 | 1520.4 | 1513.3 |
| 60°   | 1855.8 | 1801.1 | 1777.4 | 1744.9 | 1714.6 | 1699.4 | 1673.6 | 1659.9 |
| 62.5° | 2177.1 | 2086.4 | 2022.1 | 1950.4 | 1881.2 | 1832.5 | 1793.3 | 1776.0 |
| 65°   | 2548.6 | 2350.8 | 2187.4 | 2033.8 | 1903.5 | 1800.0 | 1742.5 | 1724.5 |
| 67.5° | 2689.8 | 2326.8 | 2044.7 | 1824.4 | 1666.2 | 1543.0 | 1474.1 | 1459.7 |
| 68°   | 2659.8 | 2271.7 | 1978.7 | 1753.1 | 1594.2 | 1469.9 | 1401.4 | 1388.3 |
| 70°   | 2346.3 | 1916.5 | 1607.2 | 1382.7 | 1234.4 | 1116.1 | 1067.7 | 1046.9 |
| 72.5° | 1599.5 | 1230.9 | 944.1  | 755.2  | 644.4  | 569.5  | 525.0  | 509.9  |
| 75°   | 736.2  | 497.5  | 332.3  | 248.2  | 210.8  | 192.8  | 179.0  | 175.5  |
| 77.5° | 214.7  | 156.1  | 134.2  | 124.3  | 116.9  | 110.5  | 105.9  | 105.6  |
| 80°   | 102.0  | 95.7   | 92.9   | 86.5   | 79.8   | 73.8   | 69.6   | 70.3   |
| 82.5° | 68.5   | 66.7   | 66.7   | 60.4   | 49.8   | 42.7   | 35.3   | 31.8   |
| 85°   | 36.4   | 37.8   | 39.9   | 37.8   | 32.8   | 24.4   | 15.9   | 17.3   |
| 87.5° | 12.4   | 14.1   | 14.8   | 14.5   | 13.1   | 9.9    | 7.4    | 7.4    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)