

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: P271136

Luminaire Tested: **NVN-AF-06-LED-U-AFL-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271136  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24160)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-AF-06-LED-U-AFL-7027-800  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(6) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25908.2 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B3 - U0 - G2

Input Watts (W): 249  
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

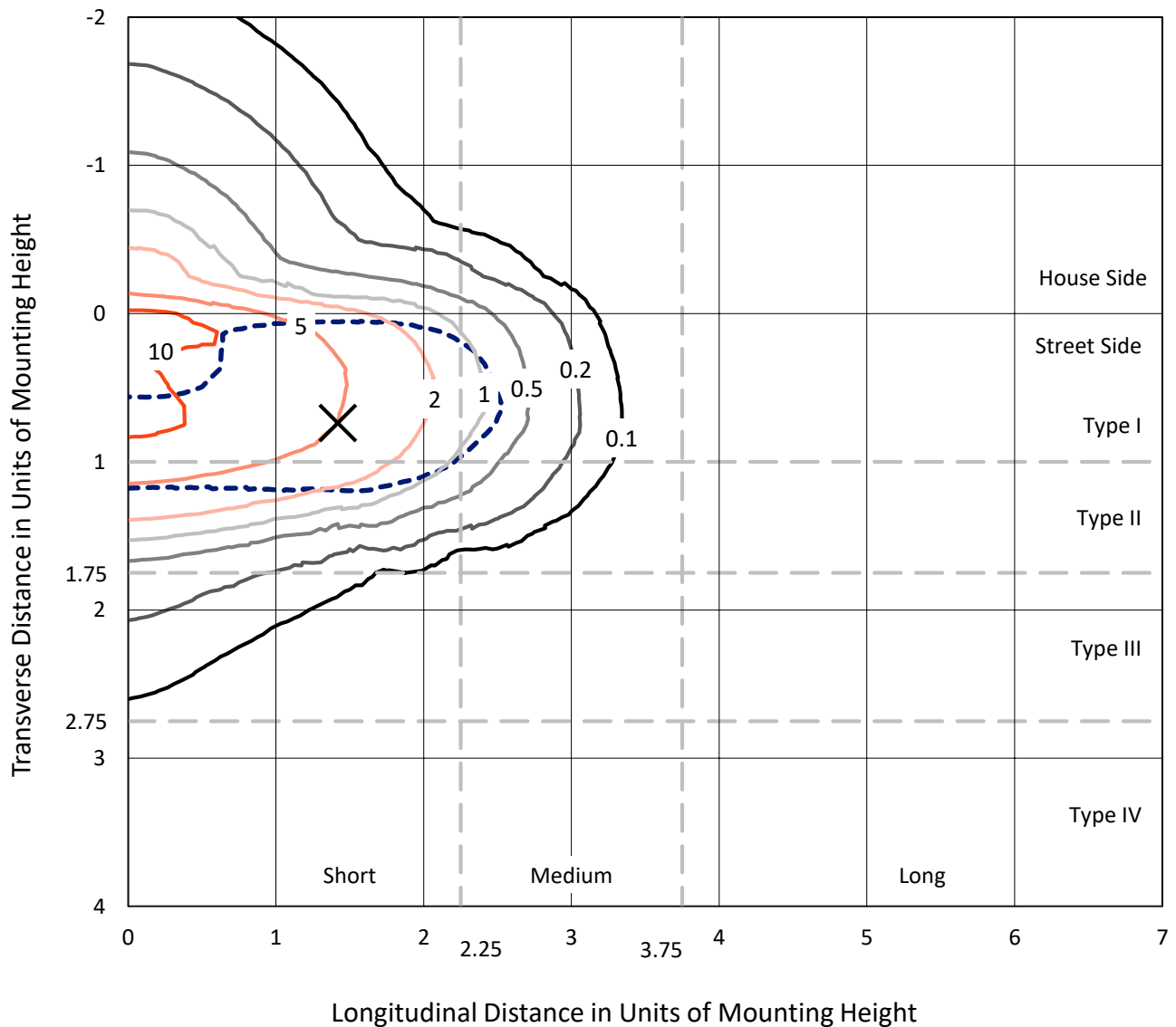


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### Iso-Footcandle Lines of Horizontal Illumination

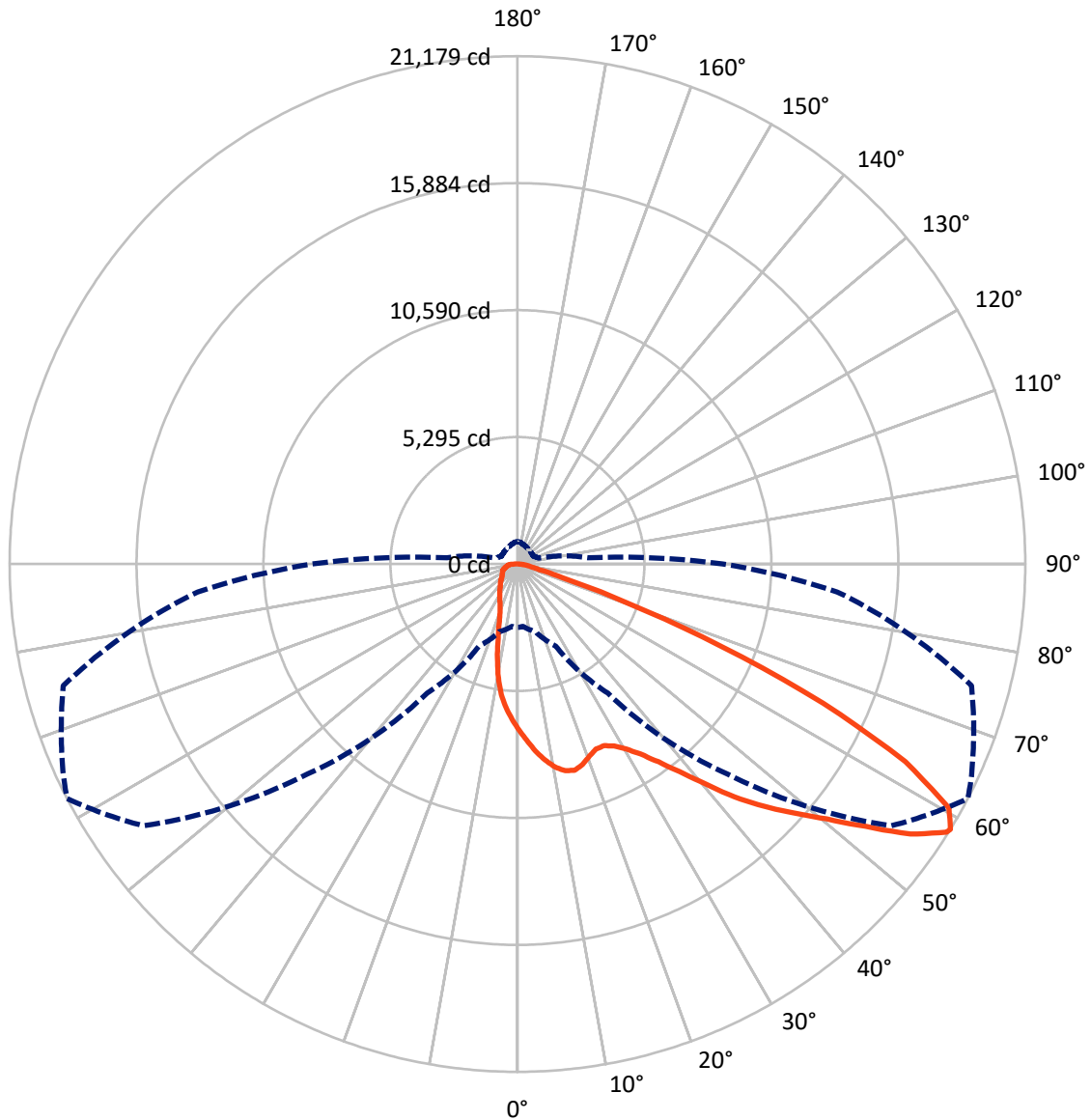
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3977.9   | 0.0    | 3977.9  |
|                    | % Fixture | 15.4     | 0.0    | 15.4    |
| <b>Street Side</b> | Lumens    | 21930.3  | 0.0    | 21930.3 |
|                    | % Fixture | 84.6     | 0.0    | 84.6    |
| <b>Total</b>       | Lumens    | 25908.2  | 0.0    | 25908.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 618.3   | 2.4       |
| 10°-20°   | 1560.4  | 6.0       |
| 20°-30°   | 2528.8  | 9.8       |
| 30°-40°   | 4037.5  | 15.6      |
| 40°-50°   | 5872.7  | 22.7      |
| 50°-60°   | 6145.2  | 23.7      |
| 60°-70°   | 3746.3  | 14.5      |
| 70°-80°   | 1047.7  | 4.0       |
| 80°-90°   | 351.2   | 1.4       |
| 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°    | 25908.2 | 100.0     |
| 0°-180°   | 25908.2 | 100.0     |

**Coefficient of Utilization**



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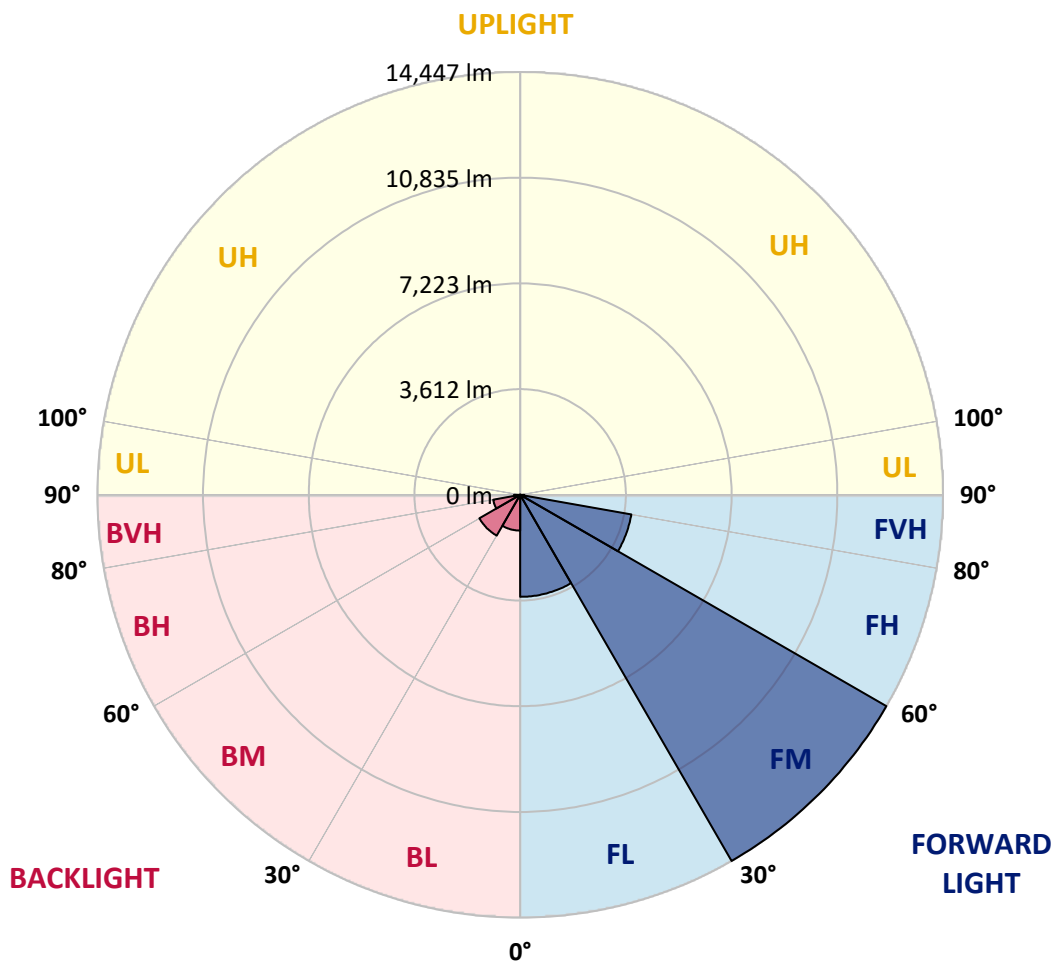
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3484.7  | 13.5      |                         |      |         |
| FM   | (30°-60°)   | 14446.7 | 55.8      |                         |      |         |
| FH   | (60°-80°)   | 3857.6  | 14.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 141.3   | 0.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1222.8  | 4.7       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 1608.7  | 6.2       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 936.5   | 3.6       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 209.9   | 0.8       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 62.5°   | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6917.3  | 6917.3  | 6917.3  | 6917.3  | 6917.3  | 6917.3  | 6917.3  | 6917.3  | 6917.3  | 6917.3  | 6917.3  |
| 2.5°  | 7851.5  | 7846.8  | 7780.4  | 7736.7  | 7684.8  | 7564.9  | 7445.2  | 7356.1  | 7310.8  | 7137.6  | 6969.1  |
| 5°    | 8500.9  | 8481.4  | 8444.2  | 8397.3  | 8329.3  | 8178.7  | 7989.3  | 7825.7  | 7760.9  | 7453.2  | 7144.0  |
| 7.5°  | 8157.7  | 8188.4  | 8303.4  | 8432.8  | 8568.9  | 8578.6  | 8444.2  | 8249.9  | 8178.7  | 7767.5  | 7314.0  |
| 10°   | 7207.1  | 7194.2  | 7338.3  | 7590.9  | 8039.4  | 8483.1  | 8704.9  | 8609.4  | 8534.8  | 8065.3  | 7484.0  |
| 12.5° | 6918.9  | 6915.7  | 6939.9  | 7004.8  | 7286.5  | 7895.4  | 8638.6  | 8845.8  | 8819.9  | 8381.0  | 7665.3  |
| 15°   | 7006.4  | 7009.7  | 7007.9  | 7016.1  | 7093.8  | 7383.7  | 8267.7  | 8925.1  | 9006.0  | 8693.5  | 7850.0  |
| 17.5° | 7286.5  | 7275.2  | 7239.5  | 7200.6  | 7212.0  | 7315.6  | 7867.7  | 8789.1  | 9032.0  | 8972.1  | 8005.4  |
| 20°   | 7718.9  | 7718.9  | 7623.2  | 7514.9  | 7443.5  | 7466.3  | 7701.0  | 8555.9  | 8912.2  | 9208.5  | 8122.0  |
| 22.5° | 8261.3  | 8269.3  | 8128.6  | 7931.0  | 7769.0  | 7707.5  | 7796.6  | 8382.8  | 8766.5  | 9427.2  | 8225.6  |
| 25°   | 8934.8  | 8933.3  | 8727.7  | 8444.2  | 8188.4  | 8041.1  | 8039.4  | 8390.8  | 8721.1  | 9682.9  | 8334.1  |
| 27.5° | 9768.8  | 9692.6  | 9453.0  | 9049.9  | 8688.8  | 8463.7  | 8361.7  | 8594.9  | 8816.7  | 9997.1  | 8479.9  |
| 30°   | 10709.6 | 10631.8 | 10317.7 | 9799.5  | 9310.6  | 8981.9  | 8813.5  | 8947.7  | 9108.2  | 10397.1 | 8700.1  |
| 32.5° | 11640.5 | 11658.5 | 11289.2 | 10704.7 | 10076.4 | 9613.3  | 9363.9  | 9446.5  | 9558.2  | 10886.0 | 8998.1  |
| 35°   | 13004.0 | 13002.3 | 12519.8 | 11789.5 | 11043.0 | 10401.8 | 10086.1 | 10129.8 | 10231.9 | 11575.7 | 9415.8  |
| 37.5° | 14020.8 | 14004.7 | 13693.8 | 13047.7 | 12207.2 | 11438.2 | 10981.6 | 10988.1 | 11075.5 | 12442.1 | 9966.2  |
| 40°   | 14124.5 | 14121.3 | 14119.6 | 14027.4 | 13452.5 | 12727.0 | 12155.4 | 12037.3 | 12073.0 | 13361.7 | 10550.9 |
| 42.5° | 13332.6 | 13451.0 | 13790.9 | 14312.2 | 14472.7 | 14092.2 | 13551.2 | 13287.3 | 13209.5 | 14417.5 | 11169.3 |
| 45°   | 12204.1 | 12264.0 | 12859.9 | 14032.2 | 14985.9 | 15374.5 | 14968.1 | 14411.1 | 14278.3 | 15444.1 | 11672.9 |
| 47.5° | 11679.5 | 11653.5 | 11998.4 | 13276.1 | 14935.7 | 16394.5 | 16423.7 | 15510.6 | 15285.4 | 16329.8 | 12102.1 |
| 50°   | 10554.0 | 10520.1 | 10955.6 | 12163.6 | 14388.4 | 16901.4 | 17918.3 | 16708.7 | 16292.6 | 17171.8 | 12490.7 |
| 52.5° | 8311.5  | 8279.0  | 8863.7  | 10419.7 | 13164.2 | 16712.0 | 19178.0 | 18179.0 | 17469.8 | 17983.1 | 12853.4 |
| 55°   | 5408.2  | 5411.4  | 5968.5  | 7573.2  | 10652.8 | 15607.7 | 19769.1 | 19877.5 | 19082.5 | 18794.2 | 13146.4 |
| 57.5° | 2977.7  | 2950.3  | 3346.9  | 4333.1  | 7328.6  | 13099.5 | 19276.8 | 21101.6 | 20687.2 | 19490.5 | 13358.5 |
| 58°   | 2647.5  | 2615.1  | 2921.1  | 3771.2  | 6570.8  | 12391.8 | 19029.1 | 21179.3 | 20892.8 | 19605.5 | 13389.3 |
| 60°   | 1886.4  | 1831.4  | 1784.4  | 2126.1  | 3785.7  | 8934.8  | 17377.5 | 20675.7 | 20952.6 | 19835.5 | 13360.2 |
| 62.5° | 1590.1  | 1526.8  | 1358.5  | 1345.7  | 1782.7  | 4370.3  | 13742.4 | 18157.9 | 18933.5 | 19306.0 | 12890.6 |
| 65°   | 1476.8  | 1413.7  | 1191.7  | 1112.5  | 1209.6  | 1886.4  | 8497.6  | 14020.8 | 15057.1 | 17464.8 | 11708.6 |
| 67.5° | 1395.7  | 1321.2  | 1083.3  | 979.6   | 999.0   | 1128.6  | 3605.9  | 9169.7  | 10371.1 | 13619.3 | 9393.0  |
| 70°   | 1322.9  | 1240.3  | 997.5   | 877.6   | 861.5   | 858.2   | 1408.7  | 4788.1  | 5945.8  | 8912.2  | 6292.3  |
| 72.5° | 1240.3  | 1159.4  | 921.3   | 793.5   | 757.8   | 696.2   | 846.8   | 1978.6  | 2712.3  | 4368.6  | 2883.7  |
| 75°   | 1120.5  | 1054.2  | 837.1   | 723.8   | 662.3   | 565.2   | 625.0   | 948.9   | 1169.1  | 1672.6  | 1339.2  |
| 77.5° | 986.1   | 932.7   | 751.3   | 665.6   | 582.9   | 461.5   | 477.7   | 642.8   | 722.1   | 942.4   | 775.5   |
| 80°   | 698.0   | 717.2   | 655.9   | 586.1   | 513.3   | 372.3   | 367.5   | 471.3   | 518.1   | 633.1   | 521.3   |
| 82.5° | 481.0   | 495.4   | 534.3   | 463.0   | 414.5   | 289.9   | 270.4   | 327.2   | 351.3   | 382.0   | 252.7   |
| 85°   | 343.3   | 333.6   | 370.8   | 332.0   | 304.4   | 184.6   | 173.3   | 207.2   | 221.8   | 233.2   | 121.5   |
| 87.5° | 208.9   | 207.2   | 213.7   | 171.7   | 158.7   | 94.0    | 85.8    | 98.8    | 105.2   | 102.0   | 58.3    |
| 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 6917.3 | 6917.3 | 6917.3 | 6917.3 | 6917.3 | 6917.3 | 6917.3 | 6917.3 | 6917.3 | 6917.3 | 6917.3 |
| 2.5°  | 6906.0 | 6826.6 | 6653.3 | 6514.1 | 6363.6 | 6248.6 | 6133.5 | 6068.8 | 5997.7 | 5957.1 | 5952.3 |
| 5°    | 6982.0 | 6820.1 | 6451.0 | 6107.7 | 5754.7 | 5437.4 | 5126.4 | 4896.5 | 4708.6 | 4601.8 | 4595.4 |
| 7.5°  | 7066.2 | 6812.0 | 6242.1 | 5647.9 | 5019.5 | 4394.6 | 3842.4 | 3452.1 | 3201.2 | 3084.6 | 3076.5 |
| 10°   | 7131.0 | 6778.0 | 5987.9 | 5063.2 | 4067.4 | 3241.7 | 2739.7 | 2509.8 | 2433.7 | 2414.3 | 2411.1 |
| 12.5° | 7208.8 | 6753.7 | 5667.2 | 4313.7 | 3108.9 | 2467.7 | 2315.6 | 2300.9 | 2317.1 | 2326.8 | 2328.4 |
| 15°   | 7281.7 | 6706.8 | 5235.0 | 3483.0 | 2433.7 | 2205.3 | 2208.7 | 2239.4 | 2271.8 | 2286.4 | 2288.0 |
| 17.5° | 7315.6 | 6591.9 | 4666.5 | 2744.6 | 2129.3 | 2087.2 | 2124.4 | 2164.8 | 2194.0 | 2205.3 | 2205.3 |
| 20°   | 7315.6 | 6407.3 | 4007.6 | 2223.1 | 1970.6 | 1978.6 | 2024.1 | 2054.9 | 2061.3 | 2051.5 | 2046.7 |
| 22.5° | 7284.9 | 6178.9 | 3366.4 | 1939.8 | 1841.0 | 1871.8 | 1907.5 | 1886.4 | 1810.3 | 1752.1 | 1740.6 |
| 25°   | 7257.3 | 5908.5 | 2749.4 | 1766.5 | 1727.7 | 1768.3 | 1753.6 | 1609.6 | 1493.0 | 1432.9 | 1423.3 |
| 27.5° | 7212.0 | 5581.4 | 2234.5 | 1624.0 | 1617.6 | 1649.9 | 1505.9 | 1366.6 | 1308.3 | 1276.0 | 1269.5 |
| 30°   | 7200.6 | 5226.9 | 1870.2 | 1497.7 | 1509.2 | 1463.8 | 1298.6 | 1253.2 | 1240.3 | 1222.6 | 1214.4 |
| 32.5° | 7238.0 | 4872.2 | 1641.9 | 1394.2 | 1405.5 | 1256.5 | 1193.4 | 1199.9 | 1198.2 | 1175.5 | 1167.4 |
| 35°   | 7340.0 | 4527.4 | 1496.1 | 1300.2 | 1267.9 | 1125.3 | 1133.4 | 1152.9 | 1152.9 | 1125.3 | 1115.7 |
| 37.5° | 7518.0 | 4206.8 | 1404.0 | 1220.8 | 1109.1 | 1057.3 | 1078.3 | 1104.2 | 1104.2 | 1084.9 | 1076.8 |
| 40°   | 7707.5 | 3894.2 | 1334.3 | 1157.7 | 1008.7 | 1010.5 | 1031.4 | 1050.8 | 1059.0 | 1062.2 | 1055.8 |
| 42.5° | 7879.2 | 3570.4 | 1259.8 | 1089.7 | 963.4  | 974.8  | 984.5  | 999.0  | 1033.1 | 1055.8 | 1052.5 |
| 45°   | 7979.6 | 3244.9 | 1178.8 | 1005.6 | 932.7  | 937.6  | 934.2  | 960.2  | 1000.7 | 1034.7 | 1034.7 |
| 47.5° | 8071.8 | 2977.7 | 1112.5 | 921.3  | 901.9  | 901.9  | 892.1  | 918.1  | 955.3  | 995.9  | 999.0  |
| 50°   | 8159.2 | 2804.5 | 1065.4 | 856.5  | 863.0  | 858.2  | 854.9  | 879.3  | 929.4  | 978.1  | 986.1  |
| 52.5° | 8248.2 | 2746.2 | 1023.3 | 809.6  | 822.6  | 816.1  | 819.3  | 853.3  | 910.1  | 960.2  | 968.4  |
| 55°   | 8373.0 | 2783.5 | 979.6  | 777.3  | 783.7  | 782.1  | 795.0  | 833.8  | 884.1  | 934.2  | 937.6  |
| 57.5° | 8526.8 | 2919.4 | 942.4  | 752.9  | 746.4  | 756.2  | 777.3  | 814.5  | 863.0  | 923.0  | 927.8  |
| 58°   | 8557.6 | 2951.8 | 935.9  | 746.4  | 738.3  | 752.9  | 774.0  | 809.6  | 859.8  | 923.0  | 927.8  |
| 60°   | 8604.5 | 3066.9 | 919.8  | 733.5  | 710.7  | 736.7  | 762.7  | 798.2  | 853.3  | 931.1  | 940.7  |
| 62.5° | 8377.9 | 3089.5 | 914.8  | 719.0  | 681.8  | 714.1  | 744.9  | 785.3  | 846.8  | 958.6  | 979.6  |
| 65°   | 7592.6 | 2856.3 | 880.9  | 694.7  | 657.4  | 696.2  | 728.6  | 775.5  | 866.2  | 1041.1 | 1050.8 |
| 67.5° | 6094.7 | 2372.2 | 798.2  | 657.4  | 629.9  | 675.3  | 715.7  | 775.5  | 874.4  | 1054.2 | 1060.5 |
| 70°   | 4190.6 | 1782.7 | 694.7  | 617.0  | 597.6  | 649.4  | 710.7  | 793.5  | 846.8  | 997.5  | 978.1  |
| 72.5° | 2189.2 | 1240.3 | 608.8  | 570.0  | 558.7  | 626.7  | 757.8  | 775.5  | 814.5  | 931.1  | 911.6  |
| 75°   | 1102.7 | 843.6  | 536.0  | 516.5  | 514.9  | 618.6  | 848.4  | 746.4  | 780.4  | 875.9  | 918.1  |
| 77.5° | 650.9  | 660.7  | 477.7  | 466.3  | 474.5  | 604.0  | 850.1  | 717.2  | 741.6  | 806.4  | 851.8  |
| 80°   | 445.3  | 545.7  | 432.4  | 429.1  | 435.6  | 555.4  | 783.7  | 681.8  | 696.2  | 762.7  | 811.2  |
| 82.5° | 250.9  | 301.2  | 378.8  | 399.9  | 396.7  | 455.0  | 676.9  | 620.2  | 637.9  | 901.9  | 953.7  |
| 85°   | 121.5  | 181.4  | 317.5  | 374.1  | 338.4  | 302.8  | 550.5  | 550.5  | 555.4  | 646.2  | 654.1  |
| 87.5° | 45.4   | 80.9   | 213.7  | 296.4  | 236.4  | 181.4  | 374.1  | 390.3  | 433.9  | 446.8  | 456.6  |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)