

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: P959986

Luminaire Tested: **NVN-SB1B-830-U-T3R-HSS**

Issue Date: 1/21/2025

### Test Information

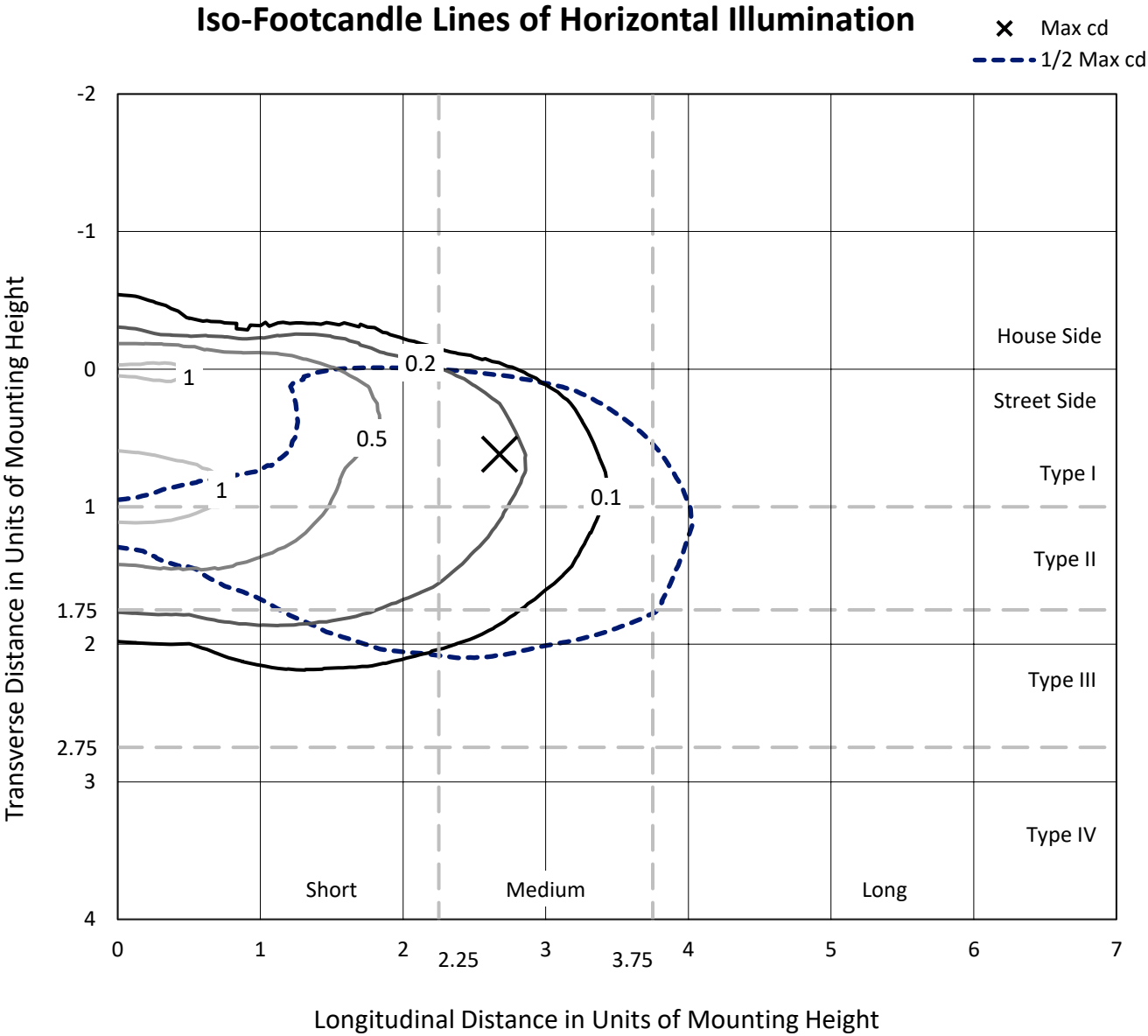
Test Method: LM-79-08  
Report Number: P959986  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB1B-830-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(1) 80 CRI, 3000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE III ROADWAY  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 4319.3 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 39.8  
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: 24 FT

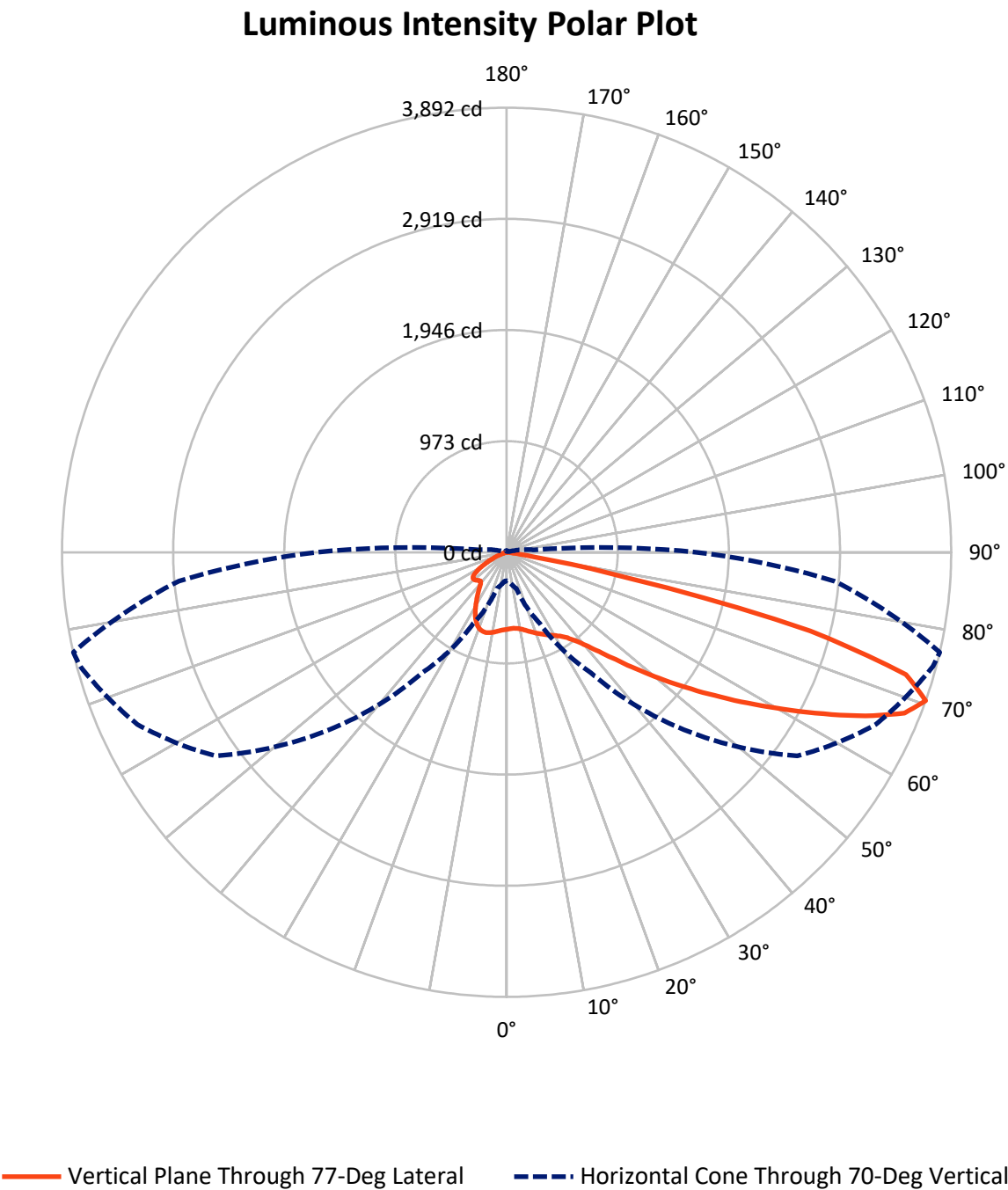


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Based on 25 foot mounting height. Maximum calculated value = 1.3 fc  
Type III - Medium - N/A

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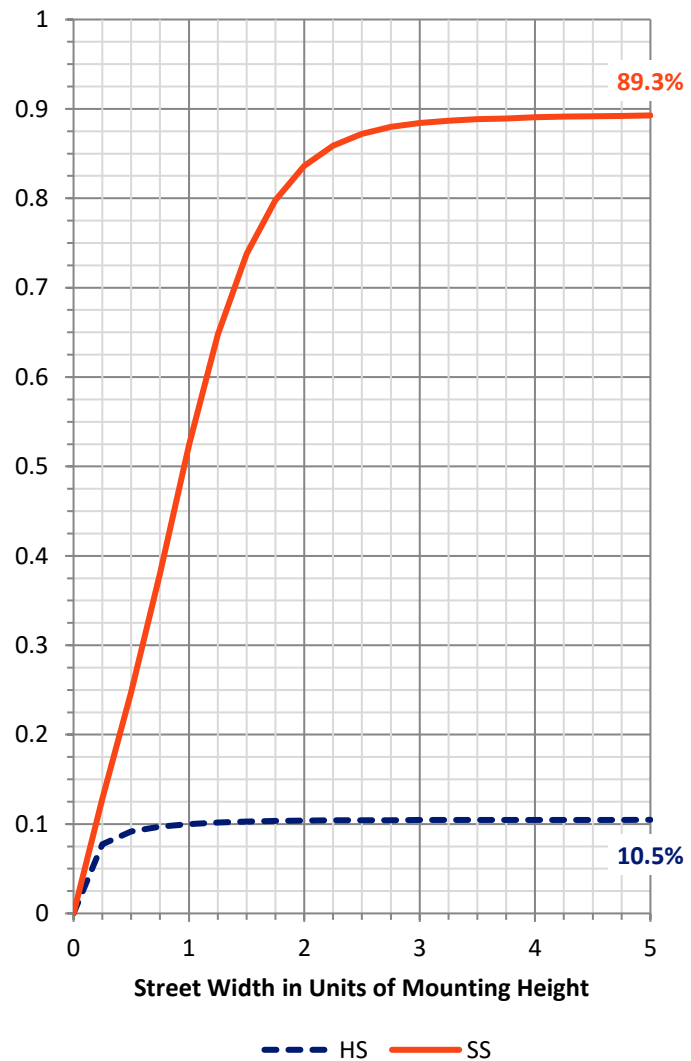
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 455.3    | 0.0    | 455.3  |
|                    | % Fixture | 10.5     | 0.0    | 10.5   |
| <b>Street Side</b> | Lumens    | 3864.0   | 0.0    | 3864.0 |
|                    | % Fixture | 89.5     | 0.0    | 89.5   |
| <b>Total</b>       | Lumens    | 4319.3   | 0.0    | 4319.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 58.1   | 1.3       |
| 10°-20°   | 137.8  | 3.2       |
| 20°-30°   | 213.2  | 4.9       |
| 30°-40°   | 386.9  | 9.0       |
| 40°-50°   | 730.3  | 16.9      |
| 50°-60°   | 1055.2 | 24.4      |
| 60°-70°   | 1123.2 | 26.0      |
| 70°-80°   | 595.2  | 13.8      |
| 80°-90°   | 19.5   | 0.5       |
| 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°    | 4319.3 | 100.0     |
| 0°-180°   | 4319.3 | 100.0     |

**Coefficient of Utilization**



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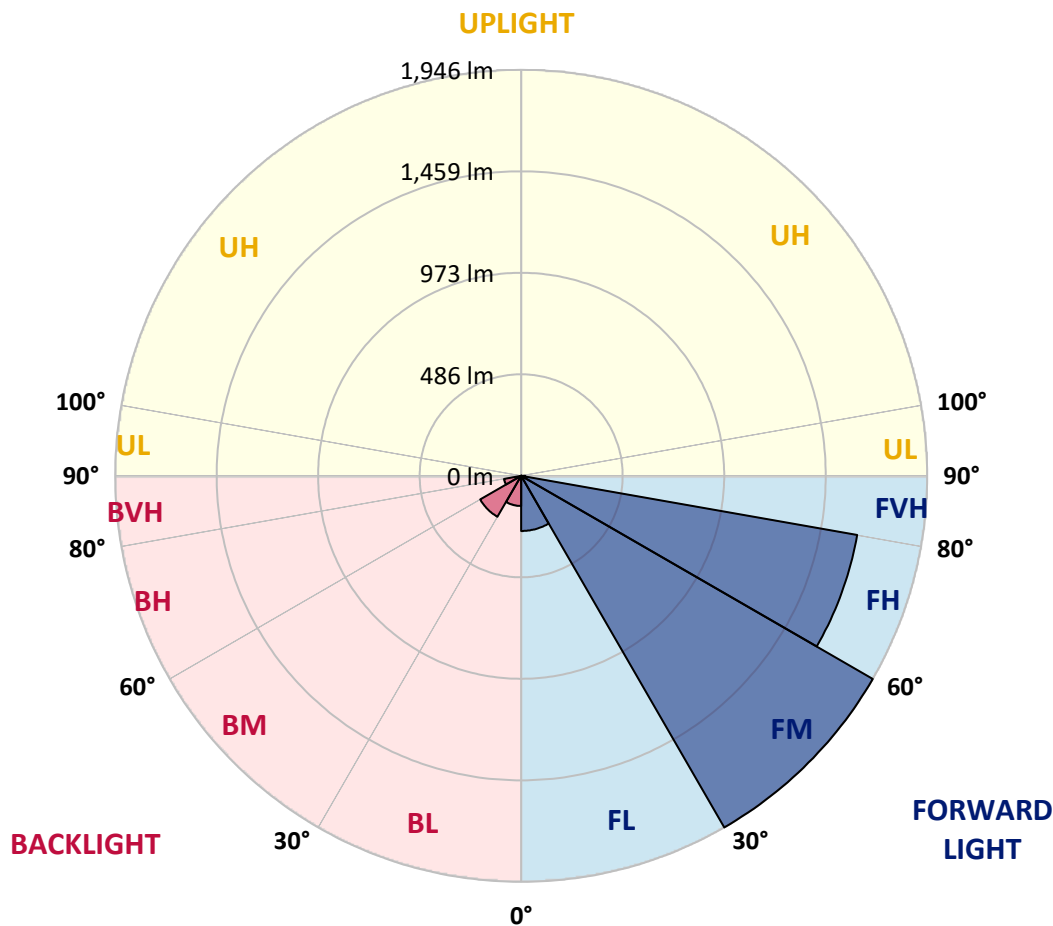
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 264.4  | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 1945.6 | 45.0      |                         |      |         |
| FH   | (60°-80°)   | 1634.9 | 37.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 19.0   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 144.7  | 3.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 226.7  | 5.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 83.5   | 1.9       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.5    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 77°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 673.7  | 673.7  | 673.7  | 673.7  | 673.7  | 673.7  | 673.7  | 673.7  | 673.7  | 673.7  | 673.7  |
| 2.5°  | 632.5  | 638.3  | 637.4  | 641.2  | 642.7  | 648.1  | 653.5  | 660.9  | 669.1  | 668.8  | 674.2  |
| 5°    | 596.9  | 602.6  | 603.9  | 609.1  | 615.6  | 624.1  | 635.3  | 650.1  | 665.3  | 667.8  | 678.7  |
| 7.5°  | 554.5  | 560.6  | 564.1  | 574.4  | 586.5  | 603.9  | 622.2  | 643.7  | 669.1  | 672.6  | 693.6  |
| 10°   | 512.3  | 517.7  | 522.3  | 537.1  | 556.2  | 582.1  | 611.8  | 642.9  | 677.0  | 682.2  | 712.0  |
| 12.5° | 486.1  | 491.3  | 496.4  | 509.2  | 533.0  | 564.7  | 605.0  | 646.8  | 690.1  | 697.5  | 736.8  |
| 15°   | 476.8  | 481.4  | 485.5  | 497.0  | 519.1  | 555.0  | 603.6  | 654.7  | 706.7  | 716.6  | 766.8  |
| 17.5° | 478.2  | 480.6  | 483.4  | 492.1  | 513.6  | 550.7  | 606.1  | 668.3  | 726.4  | 735.1  | 796.7  |
| 20°   | 486.1  | 487.5  | 487.7  | 493.7  | 512.8  | 550.2  | 611.0  | 681.4  | 745.0  | 756.7  | 826.5  |
| 22.5° | 496.2  | 496.7  | 496.2  | 500.3  | 518.0  | 554.2  | 617.6  | 697.2  | 765.7  | 776.5  | 856.5  |
| 25°   | 543.4  | 533.0  | 519.9  | 512.0  | 526.7  | 562.2  | 627.4  | 718.5  | 788.3  | 799.0  | 885.7  |
| 27.5° | 689.8  | 660.1  | 613.2  | 560.6  | 544.7  | 573.6  | 641.0  | 740.0  | 811.2  | 820.7  | 917.1  |
| 30°   | 927.7  | 888.7  | 809.0  | 690.3  | 602.6  | 597.7  | 658.8  | 761.6  | 835.5  | 845.8  | 950.6  |
| 32.5° | 1166.0 | 1156.5 | 1064.7 | 900.5  | 732.7  | 651.1  | 688.2  | 790.8  | 867.7  | 875.9  | 995.9  |
| 35°   | 1407.2 | 1387.8 | 1312.6 | 1150.3 | 933.2  | 759.9  | 737.3  | 828.9  | 910.0  | 919.2  | 1061.9 |
| 37.5° | 1591.9 | 1580.1 | 1533.5 | 1399.8 | 1171.0 | 927.9  | 821.3  | 888.2  | 971.3  | 981.7  | 1146.5 |
| 40°   | 1755.0 | 1749.6 | 1733.7 | 1645.6 | 1436.9 | 1147.8 | 951.9  | 979.8  | 1056.5 | 1068.7 | 1250.1 |
| 42.5° | 1883.2 | 1896.0 | 1905.1 | 1880.5 | 1711.0 | 1398.7 | 1127.6 | 1108.5 | 1175.1 | 1187.7 | 1382.1 |
| 45°   | 2014.4 | 2018.7 | 2055.0 | 2090.5 | 1983.3 | 1661.1 | 1325.6 | 1259.4 | 1322.7 | 1338.2 | 1540.4 |
| 47.5° | 2098.7 | 2116.1 | 2180.0 | 2242.4 | 2212.2 | 1921.4 | 1538.4 | 1437.5 | 1493.7 | 1522.8 | 1717.6 |
| 50°   | 2104.9 | 2137.9 | 2225.8 | 2334.6 | 2378.8 | 2169.1 | 1769.8 | 1640.4 | 1700.2 | 1732.4 | 1906.9 |
| 52.5° | 2000.5 | 2051.7 | 2187.9 | 2347.1 | 2468.8 | 2378.8 | 2008.9 | 1843.4 | 1920.0 | 1962.1 | 2103.3 |
| 55°   | 1533.8 | 1600.8 | 2045.2 | 2279.0 | 2472.4 | 2537.8 | 2241.9 | 2054.8 | 2165.0 | 2212.5 | 2315.6 |
| 57.5° | 1336.3 | 1370.1 | 1608.0 | 2160.6 | 2406.6 | 2602.0 | 2452.5 | 2256.1 | 2431.5 | 2490.3 | 2516.1 |
| 60°   | 1111.8 | 1156.3 | 1348.6 | 1967.0 | 2317.4 | 2608.2 | 2638.5 | 2515.8 | 2720.4 | 2786.6 | 2699.8 |
| 62.5° | 755.5  | 803.8  | 995.1  | 1634.2 | 2195.5 | 2605.2 | 2791.0 | 2783.1 | 3041.4 | 3112.6 | 2855.6 |
| 65°   | 468.1  | 498.4  | 624.3  | 1334.3 | 2025.0 | 2608.5 | 2950.6 | 3107.7 | 3380.1 | 3452.4 | 2976.2 |
| 67.5° | 369.9  | 383.8  | 449.6  | 1024.5 | 1731.2 | 2534.8 | 3109.8 | 3412.9 | 3699.0 | 3756.3 | 3013.0 |
| 70°   | 248.5  | 257.0  | 327.1  | 686.9  | 1288.0 | 2194.9 | 3106.9 | 3566.2 | 3863.2 | 3891.9 | 2878.8 |
| 72.5° | 130.9  | 137.5  | 191.2  | 318.1  | 778.0  | 1560.3 | 2618.9 | 3382.9 | 3699.8 | 3656.8 | 2460.6 |
| 75°   | 65.5   | 76.4   | 128.7  | 161.4  | 332.2  | 870.1  | 1626.3 | 2667.2 | 2912.1 | 2745.2 | 1578.8 |
| 77.5° | 49.6   | 60.0   | 106.4  | 106.4  | 115.6  | 292.9  | 688.7  | 1454.7 | 1341.7 | 1117.2 | 463.4  |
| 80°   | 31.7   | 40.9   | 93.0   | 80.5   | 48.3   | 74.4   | 179.5  | 407.5  | 285.1  | 216.9  | 84.3   |
| 82.5° | 18.6   | 26.8   | 77.5   | 53.2   | 27.0   | 27.6   | 50.7   | 86.7   | 73.9   | 57.6   | 25.9   |
| 85°   | 7.4    | 17.4   | 53.2   | 21.0   | 10.7   | 6.9    | 15.3   | 18.6   | 15.3   | 11.5   | 6.6    |
| 87.5° | 0.0    | 4.1    | 9.2    | 0.0    | 0.8    | 0.5    | 1.1    | 1.3    | 1.3    | 1.1    | 2.2    |
| 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):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 673.7  | 673.7  | 673.7 | 673.7 | 673.7 | 673.7 | 673.7 | 673.7 | 673.7 | 673.7 | 673.7 |
| 2.5°  | 676.7  | 677.3  | 679.0 | 679.2 | 675.4 | 670.5 | 668.6 | 667.8 | 664.5 | 664.2 | 664.7 |
| 5°    | 684.9  | 687.4  | 684.9 | 677.8 | 660.9 | 637.1 | 619.2 | 604.4 | 591.1 | 587.0 | 584.6 |
| 7.5°  | 701.3  | 703.8  | 696.4 | 668.6 | 626.0 | 578.8 | 536.3 | 506.2 | 479.3 | 469.1 | 465.0 |
| 10°   | 724.8  | 728.1  | 704.8 | 648.6 | 573.4 | 497.5 | 425.5 | 374.7 | 335.3 | 319.2 | 312.3 |
| 12.5° | 754.2  | 755.5  | 709.5 | 618.4 | 504.9 | 396.6 | 294.6 | 240.3 | 205.1 | 192.0 | 188.0 |
| 15°   | 786.7  | 784.7  | 710.0 | 577.2 | 411.6 | 280.4 | 192.3 | 158.0 | 143.7 | 139.4 | 139.4 |
| 17.5° | 820.7  | 812.8  | 699.2 | 517.7 | 309.3 | 191.8 | 142.7 | 134.5 | 132.0 | 130.9 | 130.7 |
| 20°   | 854.3  | 836.6  | 679.2 | 439.9 | 222.0 | 143.2 | 129.6 | 127.1 | 125.8 | 125.2 | 124.6 |
| 22.5° | 884.9  | 854.5  | 645.1 | 349.7 | 161.2 | 126.6 | 122.5 | 120.3 | 117.9 | 116.7 | 116.4 |
| 25°   | 914.6  | 865.0  | 597.1 | 265.4 | 129.0 | 118.4 | 115.1 | 111.0 | 107.7 | 106.4 | 105.9 |
| 27.5° | 943.5  | 871.5  | 537.1 | 196.4 | 115.1 | 110.7 | 104.8 | 99.0  | 96.6  | 96.0  | 95.4  |
| 30°   | 974.4  | 873.7  | 468.9 | 146.5 | 106.7 | 101.2 | 92.5  | 85.9  | 84.6  | 84.9  | 84.9  |
| 32.5° | 1012.0 | 877.0  | 400.2 | 120.0 | 99.5  | 89.8  | 79.3  | 72.6  | 71.4  | 72.6  | 72.3  |
| 35°   | 1057.0 | 883.6  | 333.8 | 110.5 | 93.3  | 78.0  | 66.8  | 61.1  | 60.0  | 60.8  | 60.6  |
| 37.5° | 1118.1 | 894.1  | 271.9 | 108.5 | 88.1  | 68.2  | 56.2  | 51.6  | 51.6  | 51.9  | 51.6  |
| 40°   | 1199.4 | 922.5  | 216.6 | 107.2 | 85.4  | 60.8  | 47.5  | 45.5  | 46.3  | 46.9  | 46.9  |
| 42.5° | 1298.4 | 982.8  | 179.2 | 105.6 | 82.4  | 57.6  | 43.0  | 42.2  | 43.7  | 44.2  | 44.2  |
| 45°   | 1409.4 | 1059.1 | 166.2 | 102.8 | 79.6  | 59.8  | 41.2  | 40.1  | 41.7  | 42.0  | 42.2  |
| 47.5° | 1524.3 | 1133.9 | 164.5 | 99.8  | 76.9  | 63.0  | 40.7  | 38.2  | 40.1  | 40.4  | 40.7  |
| 50°   | 1640.4 | 1182.7 | 166.2 | 95.2  | 72.6  | 63.0  | 40.9  | 36.3  | 37.9  | 38.7  | 39.1  |
| 52.5° | 1757.5 | 1205.1 | 165.0 | 85.1  | 64.9  | 59.1  | 40.9  | 34.6  | 36.3  | 36.8  | 36.8  |
| 55°   | 1870.9 | 1200.7 | 148.4 | 70.1  | 55.1  | 52.4  | 39.9  | 33.3  | 34.3  | 34.6  | 34.6  |
| 57.5° | 1960.6 | 1139.9 | 117.6 | 54.5  | 44.7  | 43.7  | 36.3  | 31.7  | 32.5  | 32.2  | 32.2  |
| 60°   | 2007.6 | 1006.2 | 84.0  | 42.0  | 35.2  | 34.3  | 31.9  | 29.4  | 30.0  | 28.6  | 28.4  |
| 62.5° | 2008.2 | 829.5  | 56.2  | 33.3  | 28.1  | 27.3  | 27.3  | 26.4  | 25.9  | 23.2  | 22.3  |
| 65°   | 1965.3 | 633.3  | 37.4  | 26.4  | 22.7  | 21.3  | 23.0  | 22.7  | 20.7  | 16.9  | 16.4  |
| 67.5° | 1868.2 | 415.1  | 28.4  | 20.7  | 17.4  | 16.6  | 18.2  | 19.1  | 17.7  | 14.1  | 13.9  |
| 70°   | 1668.5 | 241.7  | 23.5  | 16.1  | 13.1  | 12.3  | 14.8  | 16.4  | 14.8  | 11.5  | 10.9  |
| 72.5° | 1385.9 | 130.4  | 19.1  | 12.0  | 9.0   | 8.2   | 11.7  | 13.3  | 11.7  | 8.4   | 8.2   |
| 75°   | 899.3  | 69.8   | 14.8  | 7.9   | 4.6   | 5.2   | 8.7   | 9.8   | 8.2   | 5.4   | 4.9   |
| 77.5° | 302.0  | 30.9   | 9.2   | 3.8   | 2.2   | 2.2   | 5.2   | 6.0   | 3.8   | 1.9   | 1.6   |
| 80°   | 67.3   | 12.8   | 3.8   | 1.6   | 0.8   | 0.8   | 1.1   | 1.1   | 0.5   | 0.0   | 0.0   |
| 82.5° | 22.1   | 5.2    | 1.6   | 0.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 8.4    | 1.9    | 0.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 3.3    | 0.3    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 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)