

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: P963685

Luminaire Tested: **NVN-SB3A-835-U-AFL-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P963685  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB3A-835-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 10910.1 lumens  
Efficiency: N/A  
Efficacy: 128.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 84.7  
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

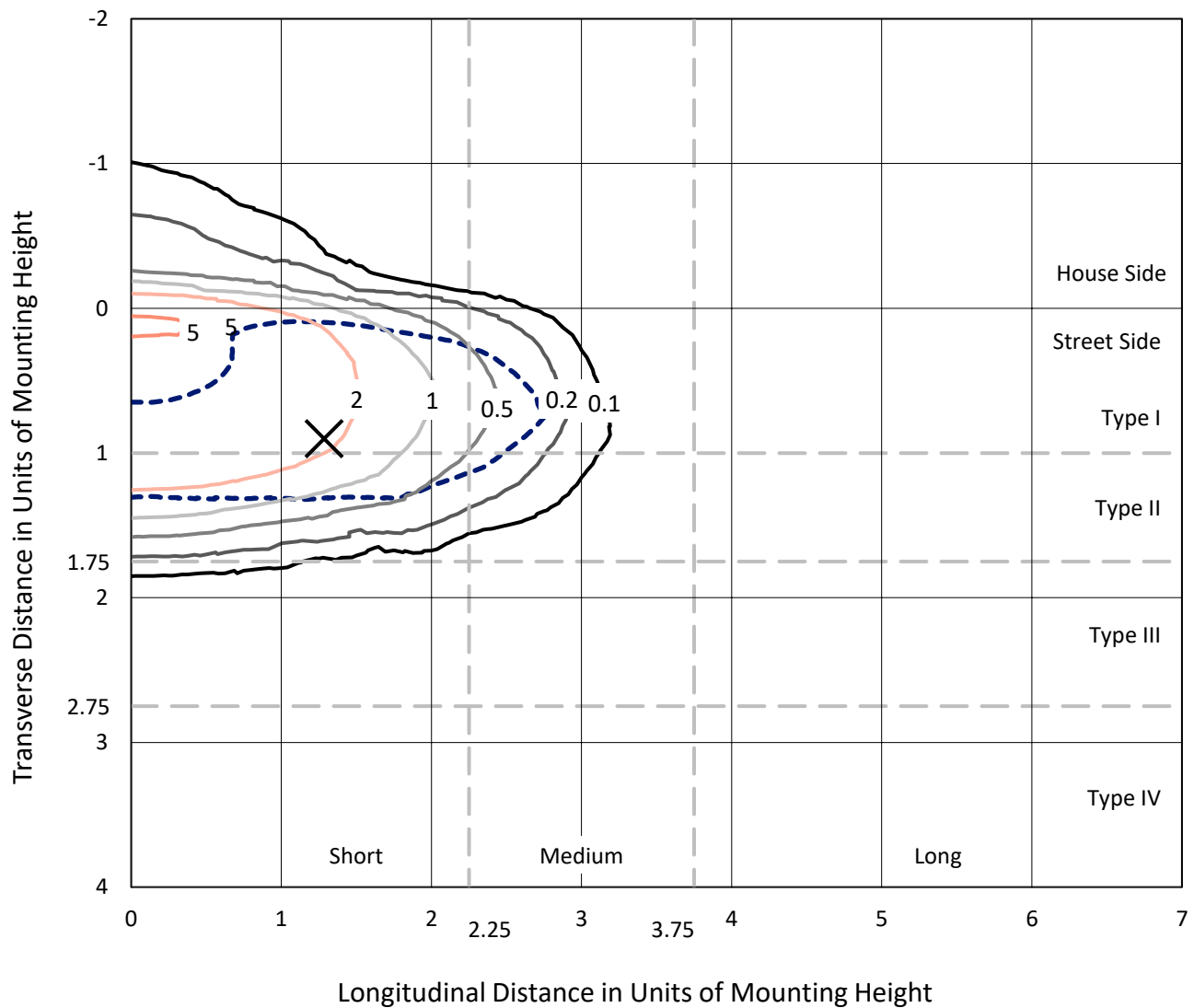


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
- - - 1/2 Max cd

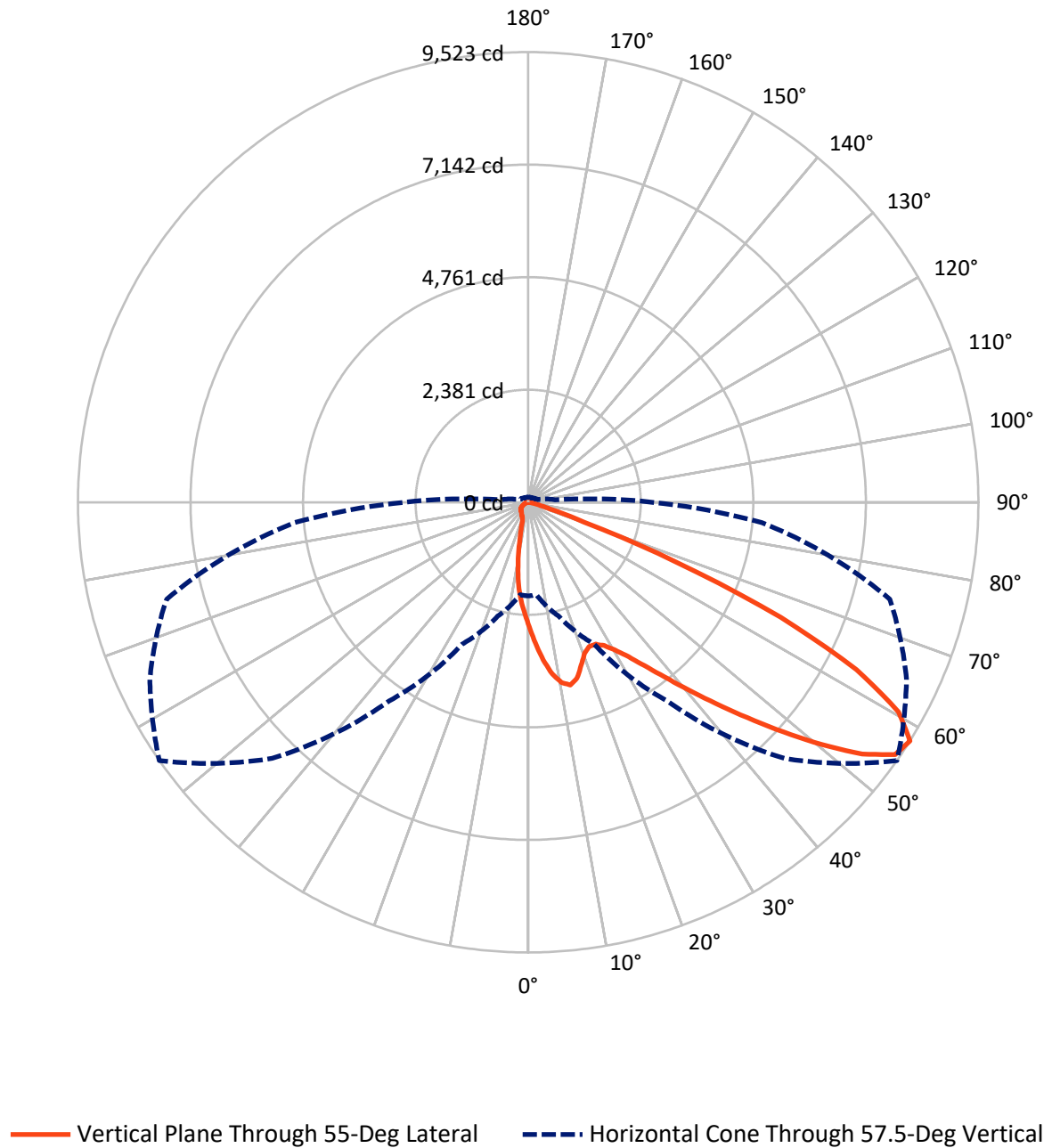


Based on 25 foot mounting height. Maximum calculated value = 6 fc  
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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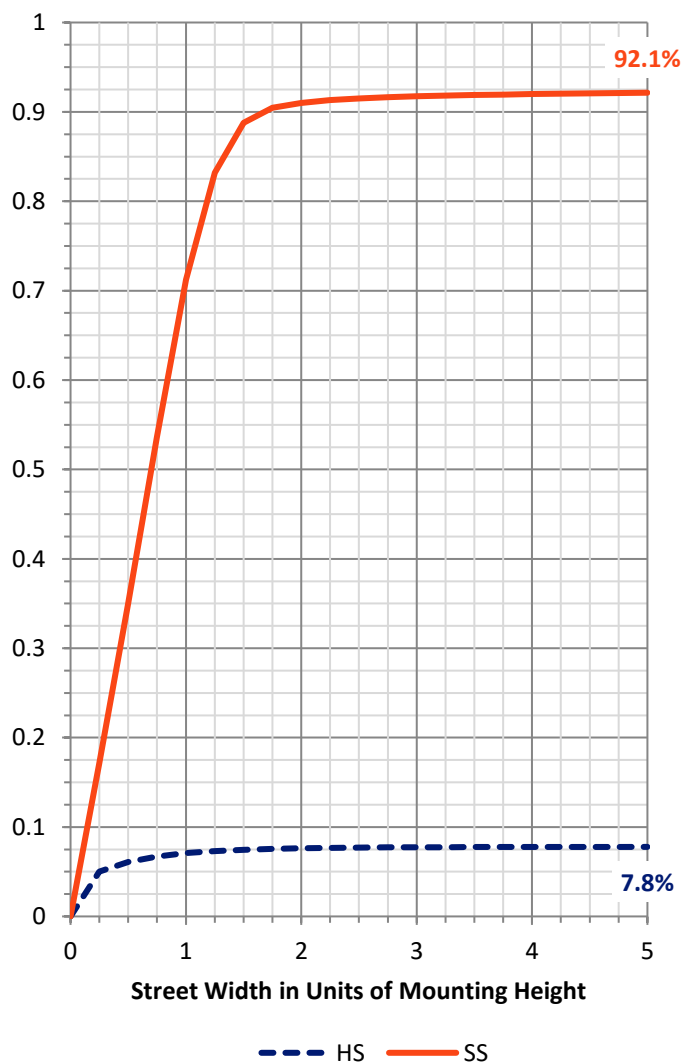
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 852.0    | 0.0    | 852.0   |
|                    | % Fixture | 7.8      | 0.0    | 7.8     |
| <b>Street Side</b> | Lumens    | 10058.1  | 0.0    | 10058.1 |
|                    | % Fixture | 92.2     | 0.0    | 92.2    |
| <b>Total</b>       | Lumens    | 10910.1  | 0.0    | 10910.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 244.6   | 2.2       |
| 10°-20°   | 590.9   | 5.4       |
| 20°-30°   | 945.4   | 8.7       |
| 30°-40°   | 1600.2  | 14.7      |
| 40°-50°   | 2627.1  | 24.1      |
| 50°-60°   | 2887.4  | 26.5      |
| 60°-70°   | 1656.2  | 15.2      |
| 70°-80°   | 338.4   | 3.1       |
| 80°-90°   | 20.0    | 0.2       |
| 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°    | 10910.1 | 100.0     |
| 0°-180°   | 10910.1 | 100.0     |

**Coefficient of Utilization**



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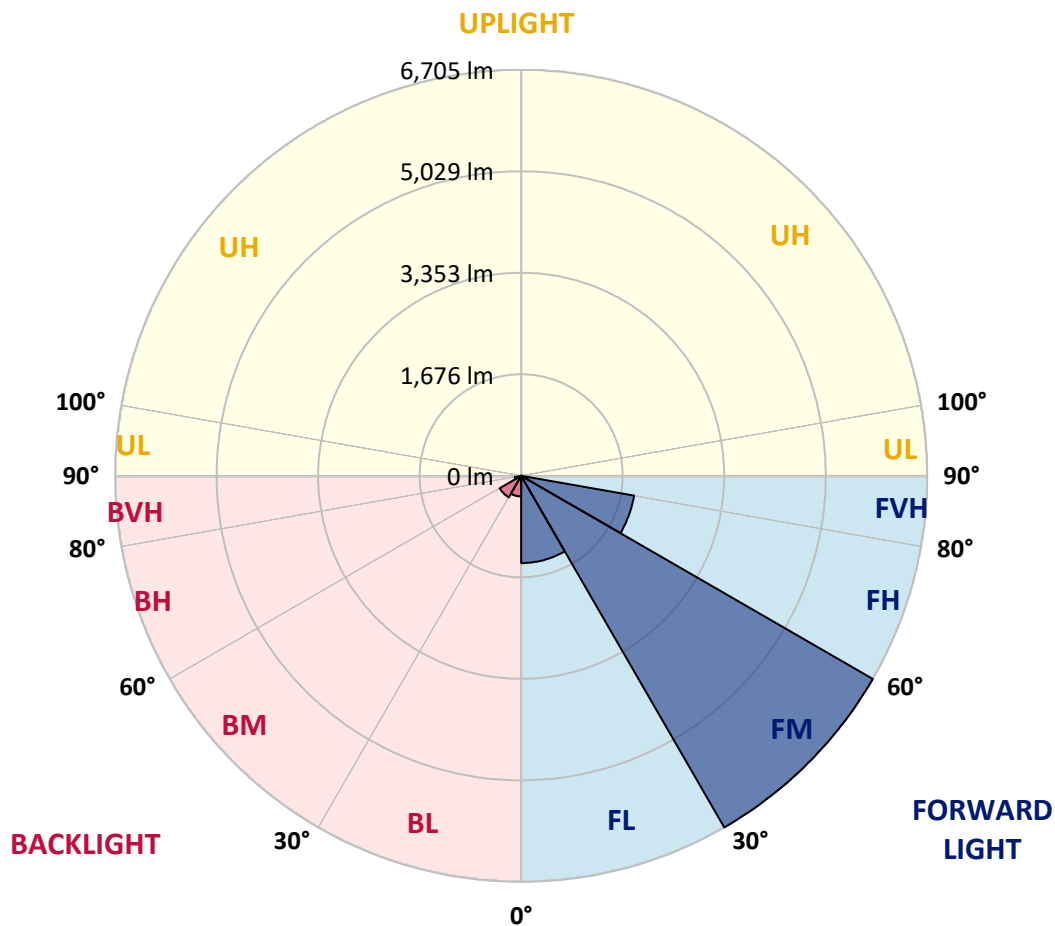
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1440.7 | 13.2      |                         |      |         |
| FM   | (30°-60°)   | 6705.4 | 61.5      |                         |      |         |
| FH   | (60°-80°)   | 1893.3 | 17.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 18.6   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 340.2  | 3.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 409.2  | 3.8       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 101.3  | 0.9       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 1.3    | 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-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 |
| 2.5°  | 3262.1 | 3221.1 | 3215.0 | 3206.9 | 3128.9 | 3070.4 | 2985.6 | 2892.8 | 2788.5 | 2682.2 | 2635.1 |
| 5°    | 3768.7 | 3736.4 | 3730.4 | 3692.7 | 3603.9 | 3504.3 | 3353.6 | 3163.3 | 2968.8 | 2740.0 | 2641.8 |
| 7.5°  | 3866.9 | 3860.9 | 3888.4 | 3887.1 | 3875.0 | 3796.3 | 3669.1 | 3442.4 | 3150.4 | 2811.4 | 2659.4 |
| 10°   | 3428.9 | 3444.4 | 3526.5 | 3598.5 | 3792.9 | 3906.0 | 3878.3 | 3691.3 | 3337.5 | 2892.8 | 2678.8 |
| 12.5° | 3030.0 | 3011.9 | 3070.4 | 3151.8 | 3377.8 | 3714.2 | 3965.1 | 3899.2 | 3551.4 | 2984.9 | 2707.7 |
| 15°   | 2779.8 | 2772.3 | 2805.3 | 2843.0 | 3015.2 | 3354.3 | 3864.2 | 4068.0 | 3757.2 | 3094.0 | 2751.5 |
| 17.5° | 2699.7 | 2693.6 | 2703.7 | 2713.2 | 2824.8 | 3087.2 | 3624.1 | 4171.6 | 3954.3 | 3218.4 | 2799.9 |
| 20°   | 2764.9 | 2756.8 | 2755.5 | 2748.1 | 2794.6 | 2973.5 | 3406.8 | 4179.0 | 4131.3 | 3331.5 | 2841.6 |
| 22.5° | 2955.4 | 2946.0 | 2912.9 | 2883.3 | 2887.4 | 2989.0 | 3309.8 | 4105.0 | 4264.5 | 3437.0 | 2867.8 |
| 25°   | 3300.5 | 3285.0 | 3216.3 | 3116.8 | 3053.6 | 3096.6 | 3324.7 | 4007.5 | 4391.6 | 3519.7 | 2855.1 |
| 27.5° | 3732.3 | 3712.1 | 3624.1 | 3476.1 | 3331.5 | 3279.0 | 3431.6 | 3940.2 | 4497.3 | 3583.0 | 2827.6 |
| 30°   | 4155.6 | 4129.3 | 4042.5 | 3927.5 | 3716.2 | 3550.7 | 3624.7 | 3969.8 | 4623.1 | 3648.9 | 2791.2 |
| 32.5° | 4612.3 | 4587.4 | 4472.4 | 4329.7 | 4154.8 | 3932.2 | 3889.1 | 4114.5 | 4777.1 | 3741.1 | 2765.7 |
| 35°   | 5190.2 | 5151.1 | 4987.6 | 4793.3 | 4607.6 | 4382.2 | 4247.0 | 4364.0 | 4982.3 | 3881.7 | 2779.8 |
| 37.5° | 5848.1 | 5795.7 | 5619.4 | 5351.0 | 5108.8 | 4856.6 | 4682.9 | 4707.1 | 5283.1 | 4070.1 | 2823.5 |
| 40°   | 6468.4 | 6420.6 | 6257.8 | 6004.9 | 5700.7 | 5394.7 | 5209.7 | 5155.9 | 5698.1 | 4299.5 | 2900.1 |
| 42.5° | 6840.4 | 6797.4 | 6728.7 | 6621.8 | 6365.5 | 6053.3 | 5819.8 | 5703.5 | 6189.2 | 4574.0 | 2993.7 |
| 45°   | 6861.2 | 6823.6 | 6915.8 | 7040.2 | 6989.8 | 6781.9 | 6497.3 | 6284.1 | 6682.3 | 4831.6 | 3090.6 |
| 47.5° | 6527.6 | 6502.0 | 6781.9 | 7216.5 | 7433.1 | 7520.5 | 7258.2 | 6816.1 | 7089.3 | 5016.7 | 3130.2 |
| 50°   | 5618.0 | 5608.6 | 6184.5 | 6982.4 | 7601.9 | 8167.7 | 8060.8 | 7311.3 | 7404.8 | 5112.2 | 3092.6 |
| 52.5° | 4871.3 | 4837.0 | 5172.7 | 6232.9 | 7356.4 | 8508.1 | 8845.1 | 7797.1 | 7625.5 | 5130.3 | 3004.5 |
| 55°   | 3694.7 | 3664.4 | 4085.5 | 4978.9 | 6564.6 | 8387.1 | 9419.0 | 8298.2 | 7783.6 | 5083.9 | 2846.3 |
| 57.5° | 1981.9 | 1963.1 | 2495.2 | 3313.9 | 5131.7 | 7660.4 | 9522.7 | 8828.3 | 7916.8 | 4960.8 | 2625.0 |
| 60°   | 771.6  | 768.2  | 967.4  | 1607.8 | 3118.9 | 6232.3 | 8999.9 | 9146.6 | 8000.2 | 4809.4 | 2440.0 |
| 62.5° | 466.9  | 476.9  | 509.2  | 721.8  | 1377.8 | 3871.6 | 7795.0 | 8784.7 | 8056.1 | 4670.8 | 2287.3 |
| 65°   | 386.1  | 386.8  | 390.8  | 495.8  | 660.0  | 1619.9 | 5868.3 | 7593.9 | 7918.1 | 4423.9 | 2070.7 |
| 67.5° | 331.0  | 337.0  | 352.5  | 393.6  | 465.6  | 710.4  | 3378.5 | 5882.5 | 7079.3 | 3849.4 | 1733.0 |
| 70°   | 261.1  | 269.1  | 288.6  | 323.6  | 359.3  | 444.6  | 1248.7 | 3914.0 | 5408.1 | 2901.6 | 1310.5 |
| 72.5° | 220.0  | 219.4  | 229.4  | 263.0  | 285.3  | 312.8  | 480.3  | 2193.1 | 3143.1 | 1385.2 | 648.5  |
| 75°   | 170.3  | 176.9  | 189.7  | 220.0  | 233.4  | 226.7  | 260.3  | 801.2  | 1126.2 | 419.8  | 220.7  |
| 77.5° | 133.2  | 138.6  | 150.1  | 179.6  | 193.1  | 160.8  | 150.1  | 286.6  | 361.9  | 150.7  | 99.5   |
| 80°   | 59.9   | 64.6   | 102.3  | 132.5  | 157.4  | 111.0  | 81.4   | 146.7  | 160.8  | 68.6   | 50.4   |
| 82.5° | 10.8   | 18.1   | 59.9   | 70.0   | 80.8   | 72.0   | 42.3   | 76.1   | 78.7   | 27.6   | 17.5   |
| 85°   | 0.7    | 1.3    | 20.8   | 25.5   | 32.3   | 23.6   | 12.8   | 30.2   | 26.2   | 9.4    | 6.8    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.7    | 0.7    | 3.4    | 4.0    | 5.4    | 4.0    | 3.4    | 2.7    |
| 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):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 | 2629.0 |
| 2.5°  | 2586.7 | 2491.2 | 2398.3 | 2322.3 | 2277.9 | 2202.5 | 2152.8 | 2144.7 | 2123.8 | 2142.0 |
| 5°    | 2536.9 | 2366.0 | 2193.1 | 2038.4 | 1911.2 | 1747.1 | 1624.6 | 1572.9 | 1527.8 | 1543.2 |
| 7.5°  | 2513.4 | 2243.6 | 1974.5 | 1710.1 | 1438.3 | 1176.0 | 980.8  | 899.4  | 837.5  | 846.3  |
| 10°   | 2481.7 | 2116.4 | 1694.6 | 1291.0 | 927.0  | 668.0  | 533.5  | 483.7  | 456.1  | 456.7  |
| 12.5° | 2457.5 | 1964.4 | 1369.7 | 875.2  | 564.5  | 426.5  | 384.8  | 372.7  | 364.6  | 365.3  |
| 15°   | 2445.4 | 1785.4 | 1048.8 | 583.2  | 403.6  | 361.2  | 351.2  | 345.8  | 340.4  | 339.7  |
| 17.5° | 2425.3 | 1586.3 | 767.6  | 425.9  | 353.2  | 338.4  | 329.6  | 323.6  | 316.8  | 315.5  |
| 20°   | 2394.9 | 1360.3 | 561.1  | 359.9  | 331.0  | 319.6  | 307.4  | 299.4  | 291.3  | 290.0  |
| 22.5° | 2339.2 | 1121.5 | 431.2  | 333.0  | 314.9  | 302.1  | 287.3  | 277.9  | 269.8  | 268.4  |
| 25°   | 2235.5 | 897.4  | 363.3  | 316.2  | 300.7  | 285.3  | 269.1  | 256.4  | 248.9  | 247.5  |
| 27.5° | 2104.3 | 705.0  | 329.6  | 300.7  | 282.6  | 268.4  | 250.3  | 238.1  | 231.4  | 230.1  |
| 30°   | 1949.5 | 542.9  | 310.2  | 283.2  | 261.1  | 248.9  | 232.8  | 222.6  | 218.6  | 218.6  |
| 32.5° | 1782.8 | 433.9  | 302.1  | 265.8  | 242.2  | 228.8  | 216.0  | 211.9  | 210.5  | 209.9  |
| 35°   | 1626.1 | 376.7  | 298.1  | 251.6  | 225.4  | 212.6  | 207.2  | 207.9  | 210.5  | 210.5  |
| 37.5° | 1486.8 | 358.5  | 296.0  | 241.5  | 210.5  | 199.2  | 202.5  | 208.6  | 205.8  | 205.8  |
| 40°   | 1361.0 | 360.6  | 294.7  | 234.1  | 198.4  | 191.8  | 198.4  | 193.7  | 187.1  | 186.3  |
| 42.5° | 1264.7 | 377.4  | 291.9  | 228.1  | 191.1  | 186.3  | 183.7  | 176.3  | 175.6  | 176.9  |
| 45°   | 1194.7 | 392.2  | 291.3  | 225.4  | 183.0  | 174.2  | 170.9  | 163.5  | 176.9  | 180.3  |
| 47.5° | 1112.0 | 392.2  | 291.3  | 216.0  | 169.5  | 166.2  | 160.8  | 152.7  | 166.2  | 169.5  |
| 50°   | 1005.1 | 367.4  | 279.8  | 205.2  | 158.8  | 156.7  | 147.3  | 137.2  | 134.6  | 136.5  |
| 52.5° | 869.8  | 322.3  | 250.9  | 190.3  | 148.0  | 144.0  | 132.5  | 125.2  | 123.1  | 123.1  |
| 55°   | 715.8  | 269.8  | 211.9  | 168.8  | 136.5  | 129.1  | 121.1  | 117.8  | 115.7  | 114.4  |
| 57.5° | 581.9  | 221.3  | 170.3  | 150.1  | 125.8  | 116.3  | 113.7  | 109.7  | 106.3  | 104.2  |
| 60°   | 477.6  | 174.2  | 140.6  | 133.2  | 115.0  | 106.3  | 105.6  | 100.2  | 91.5   | 90.1   |
| 62.5° | 368.7  | 127.8  | 118.4  | 115.7  | 104.2  | 96.9   | 95.5   | 84.8   | 71.3   | 68.6   |
| 65°   | 260.3  | 99.5   | 95.5   | 101.6  | 92.9   | 86.1   | 82.7   | 66.6   | 52.5   | 50.4   |
| 67.5° | 183.0  | 83.4   | 75.3   | 88.8   | 80.8   | 72.0   | 70.0   | 56.5   | 43.8   | 42.3   |
| 70°   | 130.5  | 68.0   | 61.9   | 76.1   | 64.6   | 63.2   | 59.2   | 47.0   | 35.7   | 34.3   |
| 72.5° | 92.1   | 51.8   | 47.8   | 65.9   | 44.4   | 54.5   | 48.5   | 36.3   | 27.0   | 25.5   |
| 75°   | 68.0   | 37.0   | 33.6   | 38.3   | 32.3   | 41.0   | 34.3   | 24.2   | 16.8   | 16.2   |
| 77.5° | 49.8   | 23.6   | 20.2   | 18.9   | 18.9   | 25.5   | 18.9   | 10.0   | 7.4    | 6.8    |
| 80°   | 35.0   | 10.8   | 9.4    | 8.1    | 7.4    | 6.0    | 2.7    | 1.3    | 0.7    | 0.7    |
| 82.5° | 20.8   | 4.7    | 4.7    | 3.4    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 4.7    | 2.0    | 2.0    | 0.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.7    | 0.7    | 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    |

(END OF REPORT)