

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: P884450

Luminaire Tested: **NVN-SB5B-735-U-T4FT-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884450  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SB5B-735-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

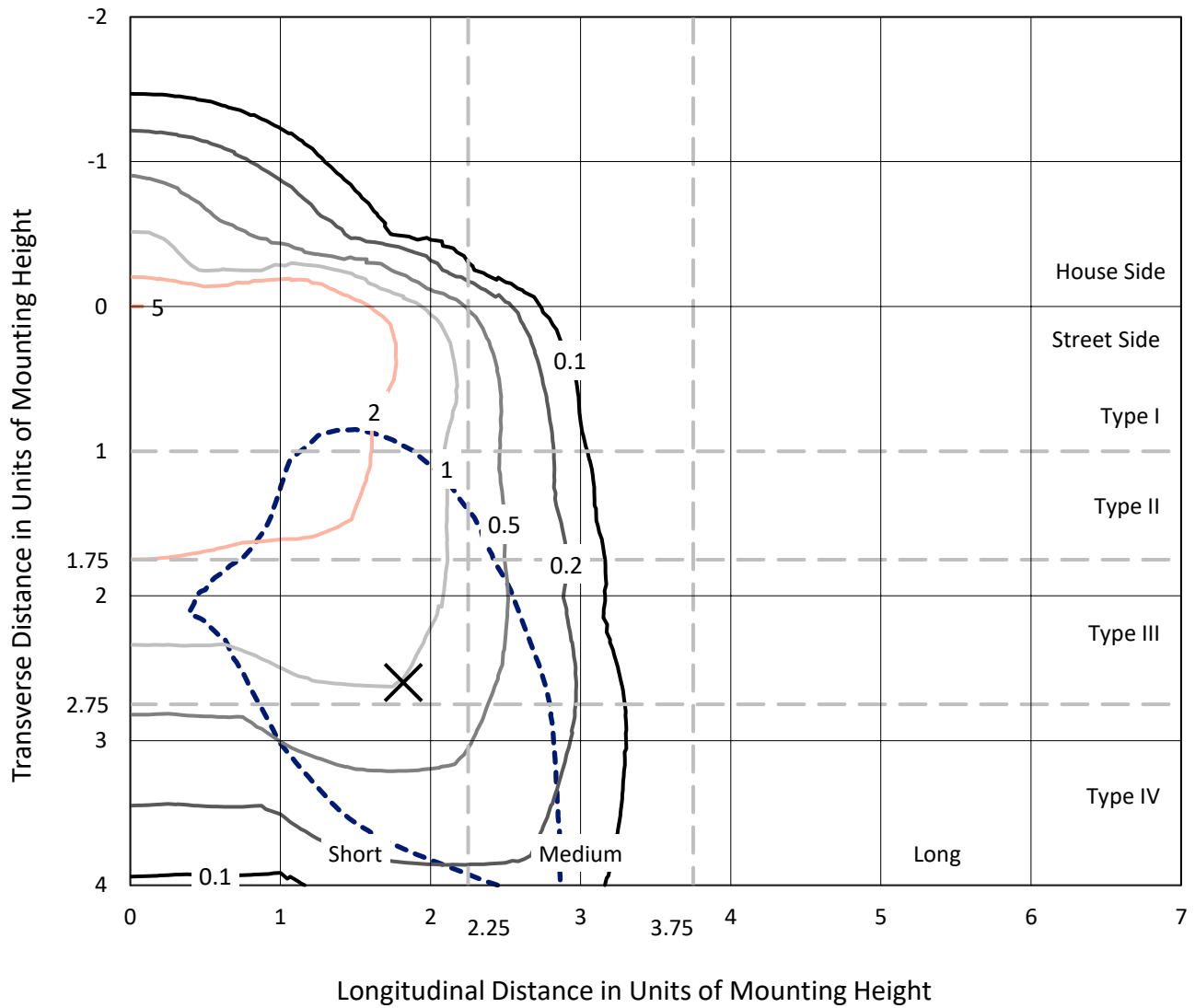
Lumens per Lamp: N/A  
Luminaire Lumens: 21635 lumens  
Efficiency: N/A  
Efficacy: 118.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4  
  
Input Watts (W): 182.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.547  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 11.125  
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

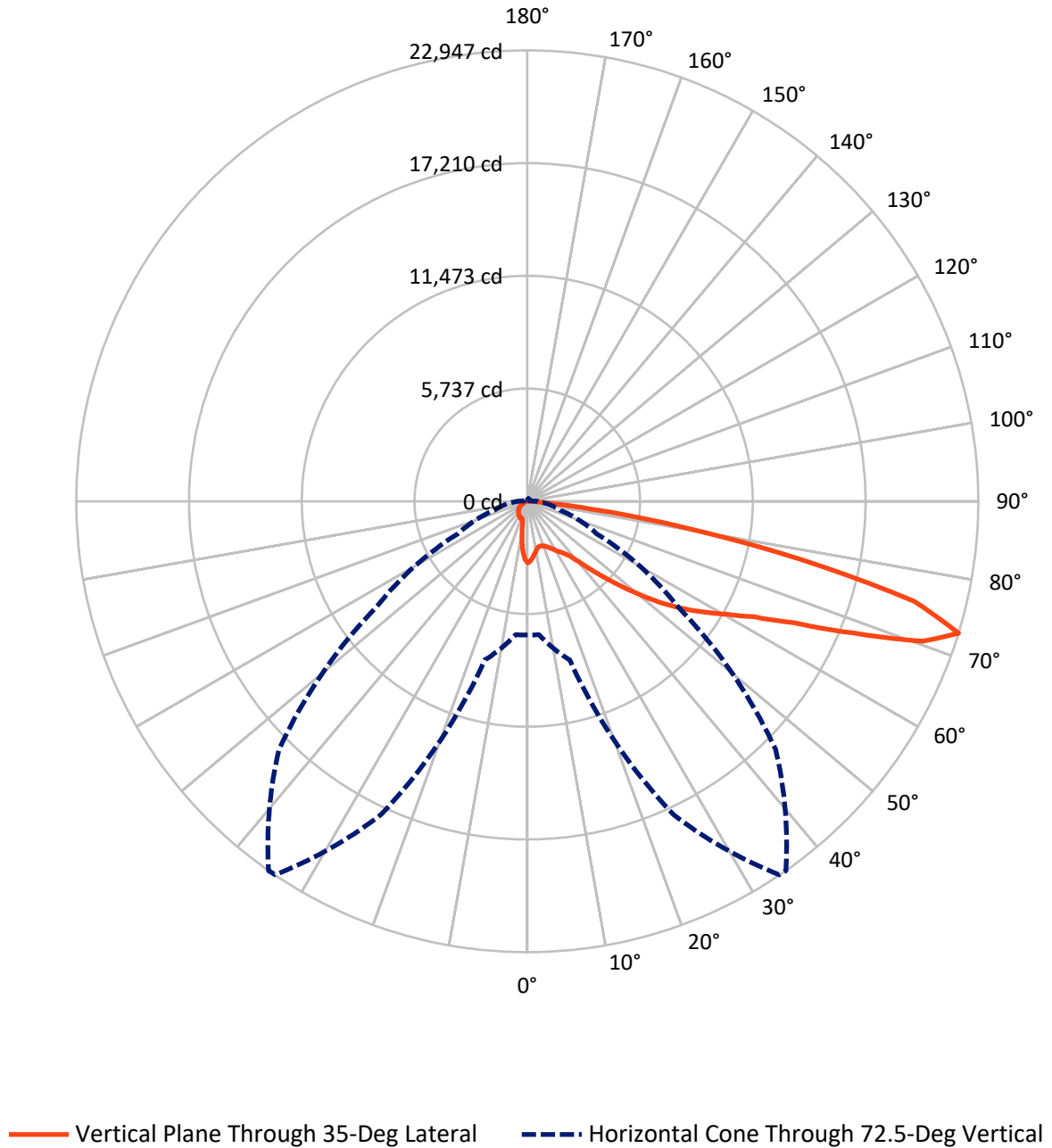
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type IV - 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    | 2434.9   | 0.0    | 2434.9  |
|                    | % Fixture | 11.3     | 0.0    | 11.3    |
| <b>Street Side</b> | Lumens    | 19200.1  | 0.0    | 19200.1 |
|                    | % Fixture | 88.7     | 0.0    | 88.7    |
| <b>Total</b>       | Lumens    | 21635.0  | 0.0    | 21635.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 257.7   | 1.2       |
| 10°-20°   | 602.8   | 2.8       |
| 20°-30°   | 979.2   | 4.5       |
| 30°-40°   | 1633.8  | 7.6       |
| 40°-50°   | 3091.2  | 14.3      |
| 50°-60°   | 4911.8  | 22.7      |
| 60°-70°   | 6076.3  | 28.1      |
| 70°-80°   | 3777.1  | 17.5      |
| 80°-90°   | 305.3   | 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°    | 21635.0 | 100.0     |
| 0°-180°   | 21635.0 | 100.0     |

**Coefficient of Utilization**



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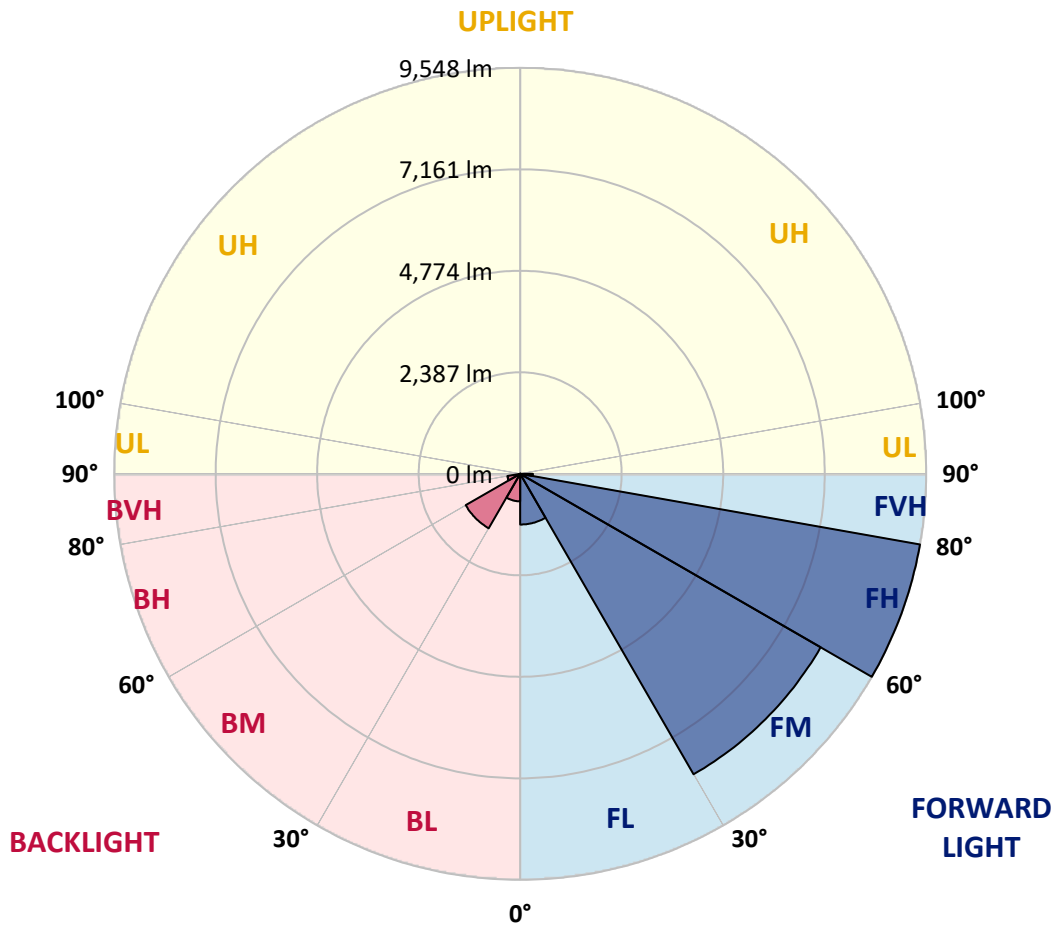
CATALOG NUMBER: NVN-SB5B-735-U-T4FT-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 1192.6 | 5.5       |                         |      |          |
| FM (30°-60°)   | 8158.6 | 37.7      |                         |      |          |
| FH (60°-80°)   | 9547.8 | 44.1      |                         |      | G4/12000 |
| FVH (80°-90°)  | 301.1  | 1.4       |                         |      | G3/500   |
| BL (0°-30°)    | 647.0  | 3.0       | B2/1000                 |      |          |
| BM (30°-60°)   | 1478.2 | 6.8       | B2/2500                 |      |          |
| BH (60°-80°)   | 305.5  | 1.4       | B1/500                  |      | G1/500   |
| BVH (80°-90°)  | 4.2    | 0.0       |                         |      | G0/10    |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

**BUG Rating: B2-U0-G4**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 34°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3135.6  | 3135.6  | 3135.6  | 3135.6  | 3135.6  | 3135.6  | 3135.6  | 3135.6  | 3135.6  | 3135.6  | 3135.6  |
| 2.5°  | 2996.1  | 3021.5  | 3026.3  | 3034.2  | 3034.2  | 3043.7  | 3059.5  | 3081.7  | 3118.2  | 3137.2  | 3149.9  |
| 5°    | 2761.5  | 2780.5  | 2804.3  | 2823.3  | 2859.8  | 2864.6  | 2926.4  | 2986.6  | 3070.6  | 3134.1  | 3178.4  |
| 7.5°  | 2525.3  | 2547.5  | 2579.2  | 2625.2  | 2672.7  | 2687.0  | 2780.5  | 2882.0  | 3015.2  | 3134.1  | 3208.6  |
| 10°   | 2358.9  | 2360.4  | 2389.0  | 2435.0  | 2511.0  | 2528.5  | 2642.6  | 2786.9  | 2953.3  | 3115.0  | 3237.1  |
| 12.5° | 2265.3  | 2276.4  | 2289.1  | 2324.0  | 2396.9  | 2408.0  | 2530.1  | 2699.7  | 2891.5  | 3103.9  | 3270.4  |
| 15°   | 2265.3  | 2273.3  | 2281.2  | 2298.6  | 2357.3  | 2366.8  | 2474.6  | 2644.2  | 2859.8  | 3108.7  | 3324.3  |
| 17.5° | 2289.1  | 2301.8  | 2295.5  | 2316.1  | 2377.9  | 2384.2  | 2479.3  | 2628.4  | 2858.2  | 3138.8  | 3406.7  |
| 20°   | 2346.2  | 2355.7  | 2343.0  | 2355.7  | 2417.5  | 2430.2  | 2528.5  | 2658.5  | 2885.2  | 3191.1  | 3509.8  |
| 22.5° | 2436.5  | 2441.3  | 2411.2  | 2420.7  | 2484.1  | 2499.9  | 2614.1  | 2744.1  | 2950.2  | 3275.1  | 3647.7  |
| 25°   | 2550.7  | 2560.2  | 2514.2  | 2525.3  | 2585.6  | 2604.6  | 2736.2  | 2872.5  | 3053.2  | 3390.9  | 3823.6  |
| 27.5° | 2682.3  | 2687.0  | 2647.4  | 2645.8  | 2723.5  | 2750.4  | 2883.6  | 3031.0  | 3191.1  | 3536.7  | 4045.6  |
| 30°   | 2832.9  | 2847.1  | 2809.1  | 2802.7  | 2901.0  | 2923.2  | 3054.8  | 3226.0  | 3394.0  | 3755.5  | 4361.0  |
| 32.5° | 2951.7  | 2962.8  | 2940.7  | 2956.5  | 3056.4  | 3073.8  | 3262.5  | 3501.8  | 3712.7  | 4066.2  | 4790.6  |
| 35°   | 3123.0  | 3129.3  | 3078.6  | 3107.1  | 3221.2  | 3265.6  | 3546.2  | 3888.6  | 4113.7  | 4456.2  | 5351.8  |
| 37.5° | 3742.8  | 3742.8  | 3527.2  | 3386.1  | 3495.5  | 3535.1  | 3934.6  | 4375.3  | 4608.3  | 4979.3  | 6058.8  |
| 40°   | 4600.4  | 4586.1  | 4270.7  | 3982.2  | 3967.9  | 4045.6  | 4487.9  | 4988.8  | 5247.2  | 5607.1  | 6854.6  |
| 42.5° | 5515.1  | 5492.9  | 5063.3  | 4778.0  | 4730.4  | 4757.4  | 5126.7  | 5745.0  | 6008.1  | 6372.7  | 7710.7  |
| 45°   | 6326.8  | 6320.4  | 5927.3  | 5543.6  | 5458.0  | 5543.6  | 5924.1  | 6629.5  | 6818.2  | 7201.8  | 8565.1  |
| 47.5° | 7006.8  | 7006.8  | 6719.9  | 6469.4  | 6425.0  | 6475.8  | 7003.7  | 7610.8  | 7593.4  | 8084.8  | 9397.4  |
| 50°   | 7789.9  | 7783.6  | 7510.9  | 7403.1  | 7449.1  | 7520.5  | 8246.5  | 8644.4  | 8395.5  | 8951.9  | 10140.9 |
| 52.5° | 8338.4  | 8376.5  | 8283.0  | 8265.5  | 8500.1  | 8623.8  | 9508.4  | 9655.8  | 9113.6  | 9774.7  | 10697.3 |
| 55°   | 8772.8  | 8817.2  | 8925.0  | 9047.1  | 9498.9  | 9660.6  | 10730.6 | 10614.9 | 9714.5  | 10488.1 | 11017.5 |
| 57.5° | 9387.9  | 9324.5  | 9490.9  | 9731.9  | 10462.7 | 10657.7 | 11914.8 | 11520.1 | 10198.0 | 11066.7 | 11052.4 |
| 60°   | 10134.5 | 10144.1 | 10172.6 | 10477.0 | 11424.9 | 11675.4 | 13081.5 | 12376.1 | 10508.7 | 11421.8 | 10665.6 |
| 62.5° | 11031.8 | 11046.1 | 11104.7 | 11572.4 | 12716.9 | 12953.1 | 14324.4 | 13076.8 | 10651.3 | 11321.9 | 9666.9  |
| 65°   | 10970.0 | 11030.2 | 11684.9 | 13284.4 | 14681.1 | 14914.1 | 15774.9 | 13568.2 | 10435.7 | 10408.8 | 7870.8  |
| 67.5° | 9993.5  | 10091.7 | 11187.2 | 15329.4 | 17642.3 | 17902.3 | 17528.2 | 13664.9 | 9505.2  | 8094.3  | 5134.6  |
| 70°   | 8712.6  | 8747.4  | 10064.8 | 17168.3 | 21071.2 | 21334.4 | 19097.6 | 12601.2 | 7212.9  | 4514.8  | 2300.2  |
| 72.5° | 6803.9  | 6811.8  | 8357.5  | 17594.8 | 22932.3 | 22946.6 | 17865.8 | 9354.6  | 3879.1  | 1734.3  | 799.0   |
| 75°   | 4860.4  | 4812.8  | 5597.5  | 14268.9 | 20175.6 | 20337.3 | 13393.8 | 4388.0  | 1482.2  | 819.6   | 397.9   |
| 77.5° | 2606.2  | 2658.5  | 3167.3  | 8462.1  | 13937.6 | 14213.4 | 7308.0  | 1265.0  | 754.6   | 558.0   | 263.2   |
| 80°   | 805.3   | 849.7   | 1298.3  | 3874.4  | 7894.6  | 8061.0  | 2709.2  | 562.8   | 526.3   | 397.9   | 172.8   |
| 82.5° | 253.6   | 263.2   | 605.6   | 1628.1  | 3276.7  | 3352.8  | 784.7   | 318.6   | 359.9   | 263.2   | 101.5   |
| 85°   | 72.9    | 74.5    | 269.5   | 607.2   | 810.1   | 825.9   | 220.4   | 123.6   | 206.1   | 163.3   | 52.3    |
| 87.5° | 7.9     | 25.4    | 101.5   | 101.5   | 71.3    | 69.8    | 23.8    | 26.9    | 58.7    | 20.6    | 9.5     |
| 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°    | 3135.6 | 3135.6 | 3135.6 | 3135.6 | 3135.6 | 3135.6 | 3135.6 | 3135.6 | 3135.6 | 3135.6 | 3135.6 |
| 2.5°  | 3142.0 | 3143.6 | 3123.0 | 3088.1 | 3050.0 | 3018.3 | 2978.7 | 2947.0 | 2924.8 | 2918.5 | 2929.6 |
| 5°    | 3164.2 | 3153.1 | 3094.4 | 2988.2 | 2861.4 | 2752.0 | 2629.9 | 2533.2 | 2469.8 | 2442.9 | 2452.4 |
| 7.5°  | 3197.5 | 3165.8 | 3037.4 | 2828.1 | 2585.6 | 2370.0 | 2151.2 | 1981.6 | 1873.8 | 1819.9 | 1827.8 |
| 10°   | 3226.0 | 3162.6 | 2942.2 | 2596.6 | 2225.7 | 1899.1 | 1604.3 | 1399.8 | 1285.6 | 1231.7 | 1233.3 |
| 12.5° | 3252.9 | 3161.0 | 2818.6 | 2322.4 | 1819.9 | 1420.4 | 1146.1 | 1044.7 | 1013.0 | 1001.9 | 998.7  |
| 15°   | 3303.7 | 3165.8 | 2663.2 | 2008.5 | 1415.6 | 1073.2 | 973.3  | 971.8  | 978.1  | 974.9  | 973.3  |
| 17.5° | 3373.4 | 3170.5 | 2487.3 | 1675.6 | 1092.2 | 946.4  | 941.6  | 955.9  | 965.4  | 960.7  | 959.1  |
| 20°   | 3463.8 | 3189.5 | 2300.2 | 1345.9 | 938.5  | 914.7  | 925.8  | 938.5  | 946.4  | 938.5  | 936.9  |
| 22.5° | 3590.6 | 3222.8 | 2095.7 | 1081.1 | 889.3  | 895.7  | 905.2  | 919.4  | 927.4  | 916.3  | 914.7  |
| 25°   | 3746.0 | 3275.1 | 1894.4 | 940.1  | 865.5  | 873.5  | 887.7  | 903.6  | 913.1  | 902.0  | 900.4  |
| 27.5° | 3947.3 | 3359.2 | 1708.9 | 908.4  | 841.8  | 846.5  | 867.1  | 890.9  | 903.6  | 889.3  | 889.3  |
| 30°   | 4239.0 | 3497.1 | 1548.8 | 922.6  | 827.5  | 816.4  | 844.9  | 878.2  | 892.5  | 879.8  | 878.2  |
| 32.5° | 4625.8 | 3692.1 | 1450.5 | 944.8  | 821.2  | 781.5  | 808.5  | 851.3  | 875.1  | 867.1  | 867.1  |
| 35°   | 5133.1 | 3988.5 | 1412.5 | 970.2  | 816.4  | 745.1  | 764.1  | 810.1  | 851.3  | 859.2  | 859.2  |
| 37.5° | 5748.1 | 4400.7 | 1423.6 | 981.3  | 802.1  | 715.0  | 724.5  | 764.1  | 818.0  | 843.4  | 849.7  |
| 40°   | 6447.2 | 4881.0 | 1487.0 | 970.2  | 786.3  | 689.6  | 691.2  | 721.3  | 768.8  | 806.9  | 819.6  |
| 42.5° | 7168.5 | 5442.2 | 1604.3 | 929.0  | 772.0  | 667.4  | 662.6  | 683.2  | 715.0  | 741.9  | 753.0  |
| 45°   | 7854.9 | 6019.2 | 1720.0 | 871.9  | 754.6  | 645.2  | 634.1  | 642.0  | 648.4  | 659.5  | 665.8  |
| 47.5° | 8454.2 | 6425.0 | 1686.7 | 819.6  | 730.8  | 619.8  | 600.8  | 597.6  | 578.6  | 577.0  | 575.4  |
| 50°   | 8867.9 | 6513.8 | 1498.1 | 767.3  | 695.9  | 591.3  | 561.2  | 542.2  | 508.9  | 493.0  | 494.6  |
| 52.5° | 8999.5 | 6163.5 | 1223.8 | 715.0  | 638.9  | 553.3  | 510.5  | 480.3  | 439.1  | 424.8  | 423.3  |
| 55°   | 8825.1 | 5477.1 | 978.1  | 651.5  | 559.6  | 502.5  | 455.0  | 415.3  | 382.0  | 364.6  | 364.6  |
| 57.5° | 8398.7 | 4603.6 | 773.6  | 577.0  | 475.6  | 445.5  | 397.9  | 358.3  | 329.7  | 312.3  | 309.1  |
| 60°   | 7691.7 | 3655.6 | 611.9  | 488.3  | 405.8  | 383.6  | 334.5  | 309.1  | 283.8  | 263.2  | 258.4  |
| 62.5° | 6618.4 | 2609.3 | 480.3  | 386.8  | 339.2  | 313.9  | 285.3  | 266.3  | 236.2  | 207.7  | 202.9  |
| 65°   | 5164.8 | 1596.4 | 370.9  | 283.8  | 272.7  | 260.0  | 242.5  | 225.1  | 188.6  | 160.1  | 155.4  |
| 67.5° | 3257.7 | 756.2  | 264.7  | 214.0  | 215.6  | 209.3  | 201.3  | 187.1  | 160.1  | 134.7  | 131.6  |
| 70°   | 1434.7 | 366.2  | 174.4  | 163.3  | 160.1  | 160.1  | 166.5  | 161.7  | 136.3  | 112.6  | 107.8  |
| 72.5° | 488.3  | 196.6  | 130.0  | 123.6  | 115.7  | 114.1  | 139.5  | 134.7  | 109.4  | 87.2   | 82.4   |
| 75°   | 255.2  | 131.6  | 95.1   | 88.8   | 69.8   | 84.0   | 111.0  | 104.6  | 77.7   | 57.1   | 52.3   |
| 77.5° | 166.5  | 93.5   | 65.0   | 57.1   | 39.6   | 55.5   | 82.4   | 72.9   | 46.0   | 28.5   | 25.4   |
| 80°   | 104.6  | 61.8   | 38.0   | 26.9   | 19.0   | 30.1   | 44.4   | 31.7   | 17.4   | 6.3    | 4.8    |
| 82.5° | 55.5   | 31.7   | 14.3   | 9.5    | 7.9    | 9.5    | 11.1   | 7.9    | 3.2    | 0.0    | 0.0    |
| 85°   | 22.2   | 11.1   | 4.8    | 3.2    | 1.6    | 0.0    | 3.2    | 1.6    | 0.0    | 0.0    | 0.0    |
| 87.5° | 7.9    | 1.6    | 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)