

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: P836181

Luminaire Tested: **ARCH3-150-730-U-T2R**

Issue Date: 5/16/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P836181  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-150-730-U-T2R  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1170mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21429 lumens  
Efficiency: N/A  
Efficacy: 142.2 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

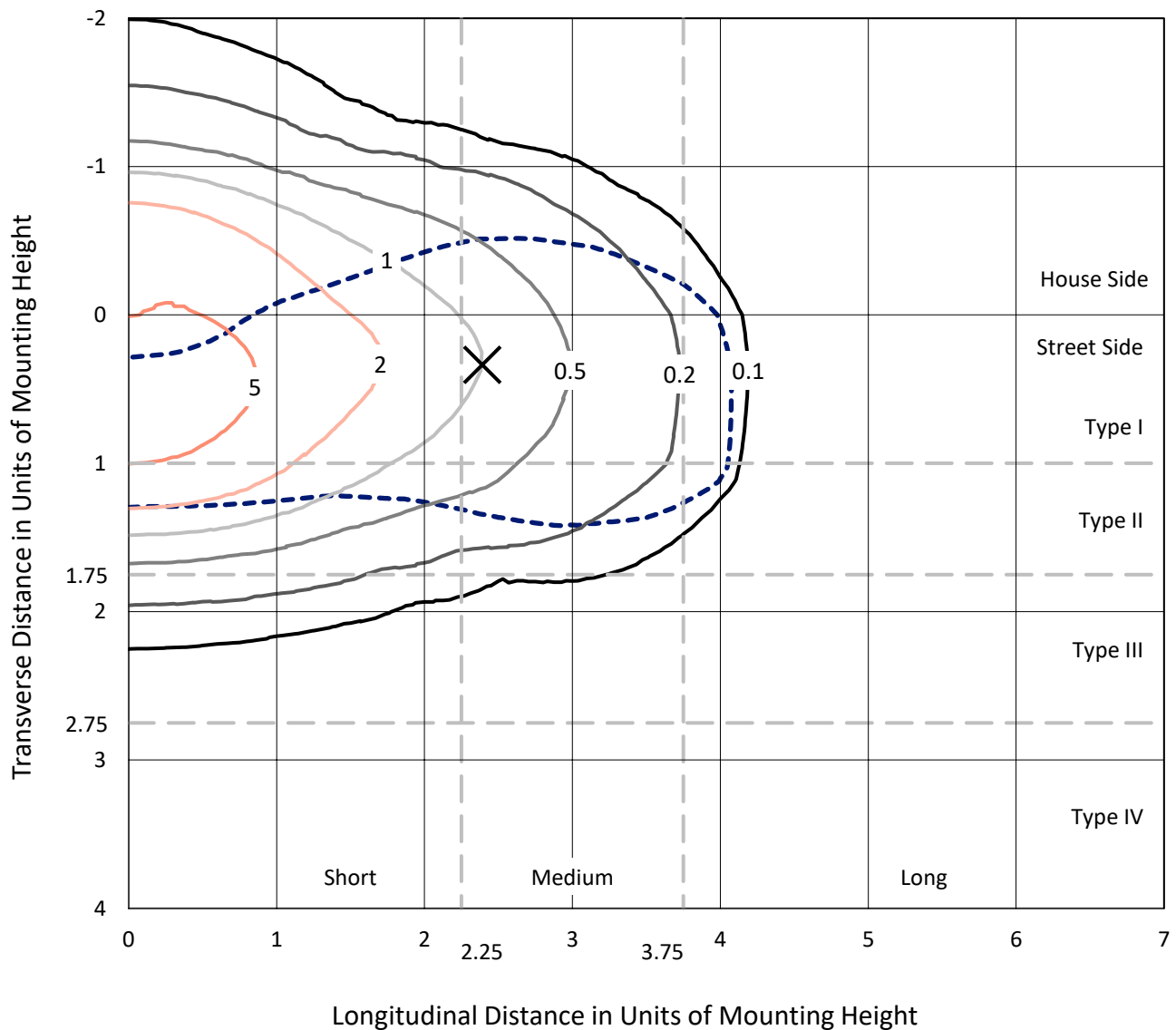
Input Watts (W): 150.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

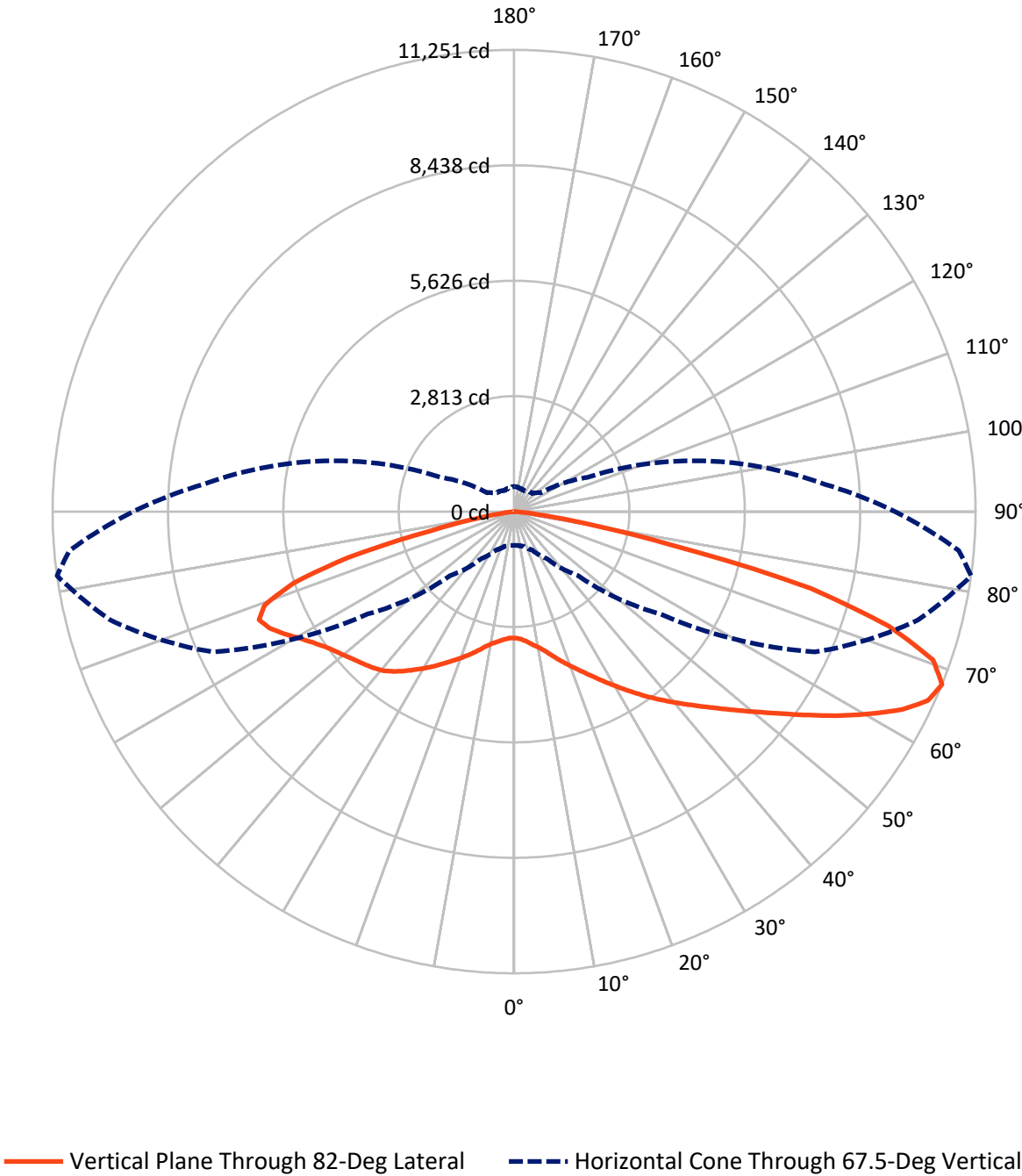
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc  
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6526.0   | 0.0    | 6526.0  |
|                    | % Fixture | 30.5     | 0.0    | 30.5    |
| <b>Street Side</b> | Lumens    | 14903.0  | 0.0    | 14903.0 |
|                    | % Fixture | 69.5     | 0.0    | 69.5    |
| <b>Total</b>       | Lumens    | 21429.0  | 0.0    | 21429.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 318.4   | 1.5       |
| 10°-20°   | 1146.7  | 5.4       |
| 20°-30°   | 2304.6  | 10.8      |
| 30°-40°   | 3620.2  | 16.9      |
| 40°-50°   | 4410.1  | 20.6      |
| 50°-60°   | 4167.0  | 19.4      |
| 60°-70°   | 3441.0  | 16.1      |
| 70°-80°   | 1873.8  | 8.7       |
| 80°-90°   | 147.3   | 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°    | 21429.0 | 100.0     |
| 0°-180°   | 21429.0 | 100.0     |

**Coefficient of Utilization**



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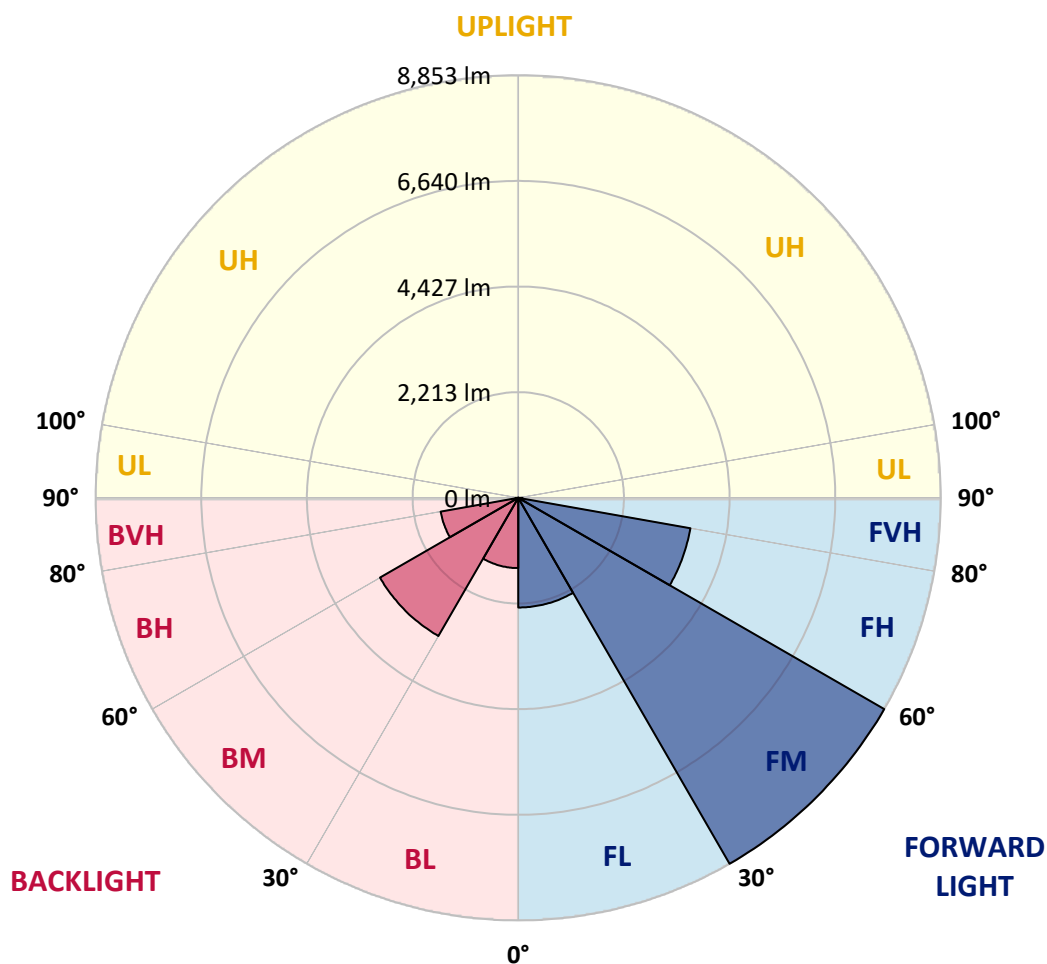
CATALOG NUMBER: ARCH3-150-730-U-T2R

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2298.0 | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 8853.2 | 41.3      |                         |      |         |
| FH   | (60°-80°)   | 3663.0 | 17.1      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 88.8   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 1471.7 | 6.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3344.1 | 15.6      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1651.8 | 7.7       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 58.5   | 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-G3**

Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 82°     | 85°     |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0°    | 3080.4  | 3080.4  | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4  | 3080.4  | 3080.4  |
| 2.5°  | 3220.4  | 3220.4  | 3245.3 | 3245.3 | 3223.5 | 3189.3 | 3180.0 | 3142.6 | 3108.4  | 3108.4  | 3111.5  |
| 5°    | 3528.5  | 3525.4  | 3544.0 | 3519.1 | 3466.2 | 3397.8 | 3351.1 | 3270.2 | 3201.8  | 3180.0  | 3176.9  |
| 7.5°  | 3905.0  | 3901.8  | 3911.2 | 3870.7 | 3771.2 | 3659.2 | 3565.8 | 3435.1 | 3323.1  | 3276.4  | 3264.0  |
| 10°   | 4325.0  | 4321.9  | 4312.6 | 4244.1 | 4110.3 | 3936.1 | 3796.1 | 3615.6 | 3447.6  | 3372.9  | 3357.3  |
| 12.5° | 4807.3  | 4801.1  | 4779.3 | 4679.7 | 4496.2 | 4272.1 | 4069.9 | 3836.5 | 3612.5  | 3509.8  | 3475.6  |
| 15°   | 5345.6  | 5336.3  | 5295.8 | 5174.5 | 4928.7 | 4645.5 | 4384.1 | 4085.4 | 3811.6  | 3677.8  | 3631.1  |
| 17.5° | 5911.9  | 5911.9  | 5849.7 | 5669.2 | 5395.4 | 5043.8 | 4720.2 | 4340.6 | 4020.1  | 3855.2  | 3799.2  |
| 20°   | 6487.5  | 6484.4  | 6406.6 | 6188.8 | 5865.2 | 5460.7 | 5050.0 | 4633.1 | 4234.8  | 4035.6  | 3967.2  |
| 22.5° | 7094.3  | 7088.0  | 6991.6 | 6742.7 | 6356.8 | 5899.4 | 5420.3 | 4922.4 | 4471.3  | 4231.7  | 4144.5  |
| 25°   | 7791.3  | 7781.9  | 7663.7 | 7358.8 | 6901.4 | 6384.8 | 5837.2 | 5261.6 | 4742.0  | 4449.5  | 4346.8  |
| 27.5° | 8531.8  | 8519.3  | 8379.3 | 8024.6 | 7523.7 | 6901.4 | 6297.7 | 5653.6 | 5040.7  | 4692.2  | 4577.1  |
| 30°   | 9191.4  | 9182.1  | 9029.6 | 8665.6 | 8090.0 | 7414.8 | 6736.4 | 6045.7 | 5354.9  | 4950.4  | 4807.3  |
| 32.5° | 9689.3  | 9689.3  | 9552.4 | 9194.6 | 8597.1 | 7906.4 | 7178.3 | 6416.0 | 5681.6  | 5227.4  | 5059.3  |
| 35°   | 9991.1  | 10000.4 | 9882.2 | 9595.9 | 9032.8 | 8370.0 | 7635.7 | 6851.6 | 6030.1  | 5523.0  | 5342.5  |
| 37.5° | 10034.7 | 10065.8 | 9997.3 | 9804.4 | 9334.6 | 8755.8 | 8083.7 | 7271.6 | 6391.1  | 5821.7  | 5619.4  |
| 40°   | 9832.4  | 9854.2  | 9857.3 | 9782.6 | 9459.0 | 9032.8 | 8478.9 | 7716.6 | 6773.8  | 6135.9  | 5902.6  |
| 42.5° | 9427.9  | 9443.5  | 9471.5 | 9493.3 | 9368.8 | 9154.1 | 8780.7 | 8130.4 | 7181.4  | 6456.4  | 6182.6  |
| 45°   | 8905.2  | 8902.1  | 8948.7 | 9042.1 | 9035.9 | 9085.6 | 8948.7 | 8506.9 | 7604.6  | 6820.5  | 6493.7  |
| 47.5° | 8124.2  | 8108.6  | 8273.5 | 8485.1 | 8590.9 | 8824.3 | 8951.9 | 8802.5 | 8065.1  | 7221.8  | 6848.5  |
| 50°   | 6901.4  | 6885.8  | 7246.7 | 7744.6 | 8055.7 | 8410.4 | 8780.7 | 8979.9 | 8547.4  | 7673.0  | 7234.3  |
| 52.5° | 5414.0  | 5398.5  | 5855.9 | 6727.1 | 7405.4 | 7921.9 | 8435.3 | 9020.3 | 9004.7  | 8177.1  | 7669.9  |
| 55°   | 4026.3  | 4013.9  | 4458.8 | 5401.6 | 6500.0 | 7355.6 | 8012.2 | 8914.5 | 9434.1  | 8755.8  | 8198.9  |
| 57.5° | 2837.7  | 2831.5  | 3217.3 | 3998.3 | 5336.3 | 6664.9 | 7604.6 | 8709.2 | 9829.3  | 9384.4  | 8796.3  |
| 60°   | 1991.4  | 1982.0  | 2262.1 | 2865.7 | 4035.6 | 5622.5 | 7200.1 | 8435.3 | 10124.9 | 10003.5 | 9431.0  |
| 62.5° | 1341.1  | 1334.8  | 1534.0 | 2038.0 | 2865.7 | 4328.1 | 6587.1 | 8251.8 | 10292.9 | 10625.9 | 10072.0 |
| 65°   | 1017.5  | 1014.4  | 1104.6 | 1381.5 | 2028.7 | 3108.4 | 5613.2 | 8230.0 | 10314.7 | 11092.6 | 10616.5 |
| 67.5° | 821.4   | 824.6   | 874.3  | 1033.0 | 1403.3 | 2209.2 | 4353.0 | 8093.1 | 10199.6 | 11251.3 | 10881.0 |
| 70°   | 672.1   | 672.1   | 693.9  | 799.7  | 1036.1 | 1490.4 | 3040.0 | 7470.8 | 9879.1  | 10837.4 | 10566.7 |
| 72.5° | 513.4   | 516.5   | 585.0  | 647.2  | 781.0  | 1045.5 | 1947.8 | 6182.6 | 9123.0  | 9555.5  | 9350.1  |
| 75°   | 407.6   | 404.5   | 444.9  | 532.1  | 606.7  | 746.8  | 1194.8 | 4433.9 | 7763.2  | 7467.7  | 7337.0  |
| 77.5° | 292.5   | 289.4   | 320.5  | 395.2  | 460.5  | 529.0  | 712.5  | 2237.2 | 4222.3  | 3880.1  | 3783.6  |
| 80°   | 199.1   | 192.9   | 220.9  | 273.8  | 304.9  | 311.2  | 348.5  | 858.8  | 1842.0  | 1736.2  | 1714.4  |
| 82.5° | 102.7   | 102.7   | 118.2  | 155.6  | 158.7  | 161.8  | 155.6  | 276.9  | 609.9   | 569.4   | 544.5   |
| 85°   | 40.4    | 40.4    | 43.6   | 52.9   | 52.9   | 56.0   | 56.0   | 71.6   | 65.3    | 62.2    | 59.1    |
| 87.5° | 3.1     | 3.1     | 6.2    | 6.2    | 9.3    | 9.3    | 9.3    | 12.4   | 15.6    | 15.6    | 15.6    |
| 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°    | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4 | 3080.4 |
| 2.5°  | 3105.3 | 3092.9 | 3052.4 | 3043.1 | 3036.8 | 3027.5 | 3030.6 | 3008.8 | 2999.5 | 3002.6 | 2990.2 |
| 5°    | 3161.3 | 3139.5 | 3089.7 | 3068.0 | 3061.7 | 3052.4 | 3061.7 | 3046.2 | 3030.6 | 3036.8 | 3030.6 |
| 7.5°  | 3239.1 | 3208.0 | 3145.7 | 3124.0 | 3120.9 | 3111.5 | 3124.0 | 3111.5 | 3099.1 | 3105.3 | 3092.9 |
| 10°   | 3320.0 | 3279.5 | 3211.1 | 3189.3 | 3189.3 | 3186.2 | 3198.6 | 3180.0 | 3167.5 | 3170.6 | 3164.4 |
| 12.5° | 3438.2 | 3385.3 | 3310.7 | 3292.0 | 3282.7 | 3292.0 | 3295.1 | 3270.2 | 3248.4 | 3251.5 | 3242.2 |
| 15°   | 3581.4 | 3522.2 | 3441.3 | 3413.3 | 3407.1 | 3404.0 | 3391.6 | 3360.4 | 3332.4 | 3329.3 | 3320.0 |
| 17.5° | 3736.9 | 3662.3 | 3565.8 | 3537.8 | 3509.8 | 3500.5 | 3469.3 | 3428.9 | 3385.3 | 3385.3 | 3372.9 |
| 20°   | 3886.3 | 3802.3 | 3687.2 | 3646.7 | 3606.3 | 3568.9 | 3516.0 | 3450.7 | 3394.7 | 3385.3 | 3372.9 |
| 22.5° | 4048.1 | 3948.5 | 3814.7 | 3755.6 | 3684.0 | 3609.4 | 3519.1 | 3432.0 | 3360.4 | 3344.9 | 3335.6 |
| 25°   | 4228.6 | 4104.1 | 3945.4 | 3858.3 | 3743.2 | 3628.0 | 3494.2 | 3382.2 | 3298.2 | 3273.3 | 3267.1 |
| 27.5° | 4427.7 | 4278.3 | 4085.4 | 3957.9 | 3789.8 | 3609.4 | 3438.2 | 3304.4 | 3201.8 | 3170.6 | 3161.3 |
| 30°   | 4629.9 | 4452.6 | 4213.0 | 4026.3 | 3789.8 | 3550.2 | 3335.6 | 3180.0 | 3061.7 | 3018.2 | 3012.0 |
| 32.5° | 4832.2 | 4633.1 | 4328.1 | 4063.6 | 3752.5 | 3450.7 | 3201.8 | 3018.2 | 2884.4 | 2831.5 | 2843.9 |
| 35°   | 5074.9 | 4832.2 | 4433.9 | 4079.2 | 3690.3 | 3329.3 | 3049.3 | 2834.6 | 2697.7 | 2651.0 | 2660.4 |
| 37.5° | 5326.9 | 5031.3 | 4517.9 | 4066.8 | 3603.1 | 3192.4 | 2878.2 | 2669.7 | 2498.6 | 2417.7 | 2427.0 |
| 40°   | 5544.7 | 5211.8 | 4577.1 | 4023.2 | 3491.1 | 3036.8 | 2710.1 | 2436.3 | 2199.8 | 2122.1 | 2112.7 |
| 42.5° | 5750.1 | 5345.6 | 4608.2 | 3957.9 | 3363.6 | 2856.4 | 2470.5 | 2118.9 | 1882.5 | 1786.0 | 1789.1 |
| 45°   | 5964.8 | 5476.3 | 4595.7 | 3870.7 | 3204.9 | 2644.8 | 2162.5 | 1807.8 | 1599.3 | 1512.2 | 1515.3 |
| 47.5° | 6210.6 | 5616.3 | 4583.3 | 3777.4 | 3012.0 | 2371.0 | 1866.9 | 1534.0 | 1353.5 | 1291.3 | 1285.1 |
| 50°   | 6472.0 | 5771.9 | 4567.7 | 3662.3 | 2797.3 | 2066.1 | 1574.4 | 1278.8 | 1126.4 | 1085.9 | 1076.6 |
| 52.5° | 6767.6 | 5939.9 | 4558.4 | 3525.4 | 2539.0 | 1742.5 | 1313.1 | 1054.8 | 952.1  | 924.1  | 921.0  |
| 55°   | 7122.3 | 6135.9 | 4570.8 | 3360.4 | 2227.9 | 1437.5 | 1092.1 | 908.6  | 840.1  | 824.6  | 821.4  |
| 57.5° | 7554.8 | 6388.0 | 4608.2 | 3167.5 | 1901.1 | 1173.0 | 930.3  | 818.3  | 774.8  | 762.3  | 762.3  |
| 60°   | 8024.6 | 6674.2 | 4676.6 | 2949.7 | 1574.4 | 967.7  | 824.6  | 746.8  | 728.1  | 743.7  | 743.7  |
| 62.5° | 8531.8 | 7010.3 | 4798.0 | 2685.2 | 1269.5 | 818.3  | 740.5  | 687.6  | 675.2  | 706.3  | 709.4  |
| 65°   | 9001.6 | 7337.0 | 4875.8 | 2367.9 | 1008.1 | 709.4  | 675.2  | 628.5  | 634.8  | 665.9  | 662.8  |
| 67.5° | 9291.0 | 7607.7 | 4766.9 | 1969.6 | 799.7  | 628.5  | 606.7  | 566.3  | 581.9  | 606.7  | 609.9  |
| 70°   | 9113.7 | 7455.2 | 4228.6 | 1487.3 | 625.4  | 547.6  | 532.1  | 507.2  | 519.6  | 550.7  | 563.2  |
| 72.5° | 8245.5 | 6677.3 | 3288.9 | 1005.0 | 504.1  | 460.5  | 466.7  | 454.3  | 469.8  | 497.8  | 525.8  |
| 75°   | 6692.9 | 5046.9 | 2206.1 | 644.1  | 398.3  | 392.1  | 401.4  | 392.1  | 398.3  | 426.3  | 441.8  |
| 77.5° | 3494.2 | 2461.2 | 1098.4 | 401.4  | 295.6  | 304.9  | 320.5  | 323.6  | 342.3  | 348.5  | 354.7  |
| 80°   | 1630.4 | 1107.7 | 457.4  | 224.0  | 196.0  | 214.7  | 245.8  | 248.9  | 255.1  | 264.5  | 267.6  |
| 82.5° | 532.1  | 332.9  | 211.6  | 121.3  | 112.0  | 121.3  | 158.7  | 189.8  | 192.9  | 211.6  | 211.6  |
| 85°   | 56.0   | 34.2   | 46.7   | 49.8   | 43.6   | 52.9   | 71.6   | 68.5   | 31.1   | 18.7   | 18.7   |
| 87.5° | 15.6   | 12.4   | 15.6   | 15.6   | 12.4   | 12.4   | 9.3    | 3.1    | 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)