

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: P841687

Luminaire Tested: **ARCH4-210-740-U-T2U-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841687  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-210-740-U-T2U-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 835mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 23791 lumens  
Efficiency: N/A  
Efficacy: 111.6 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

Input Watts (W): 213.1  
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



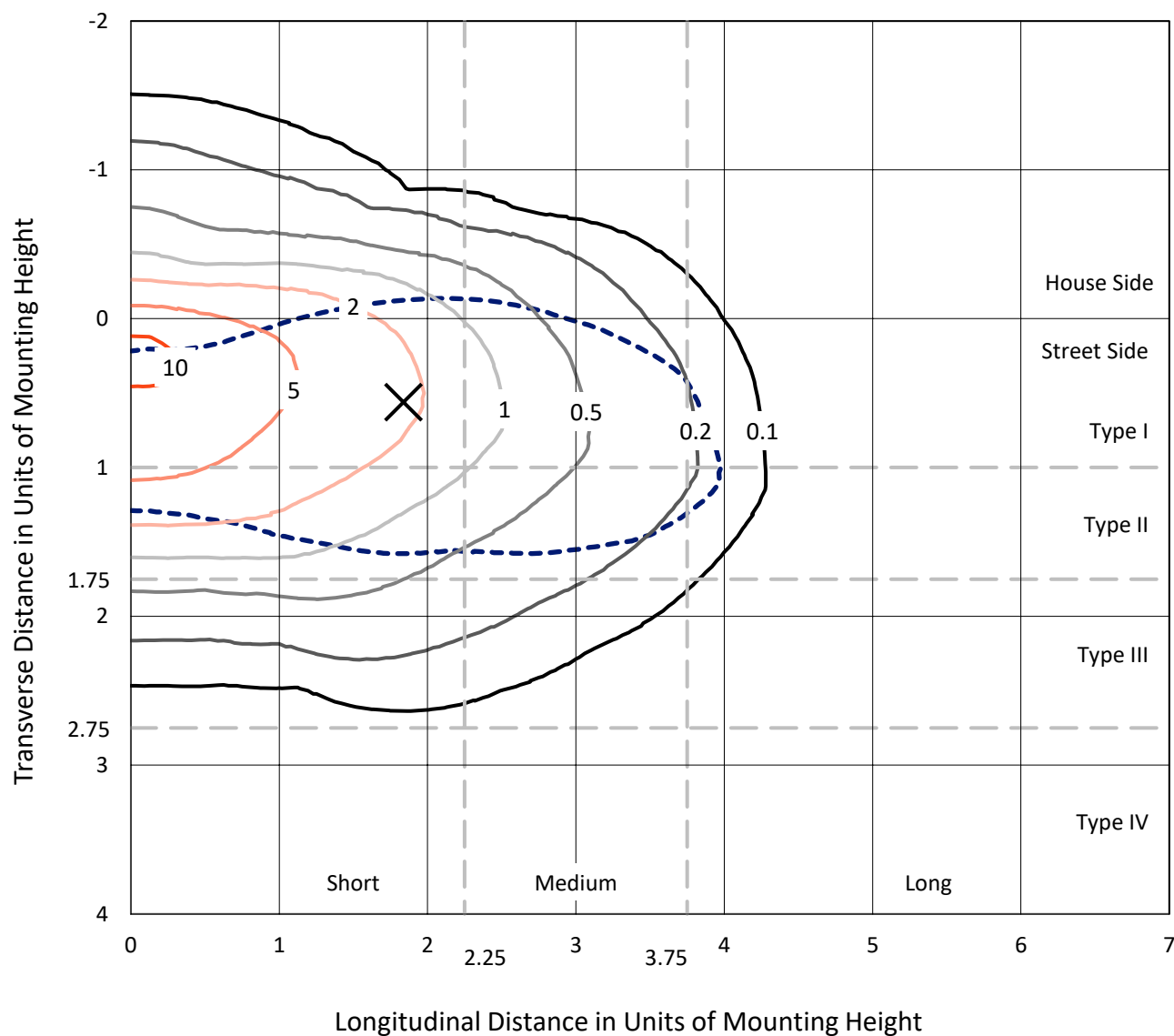
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

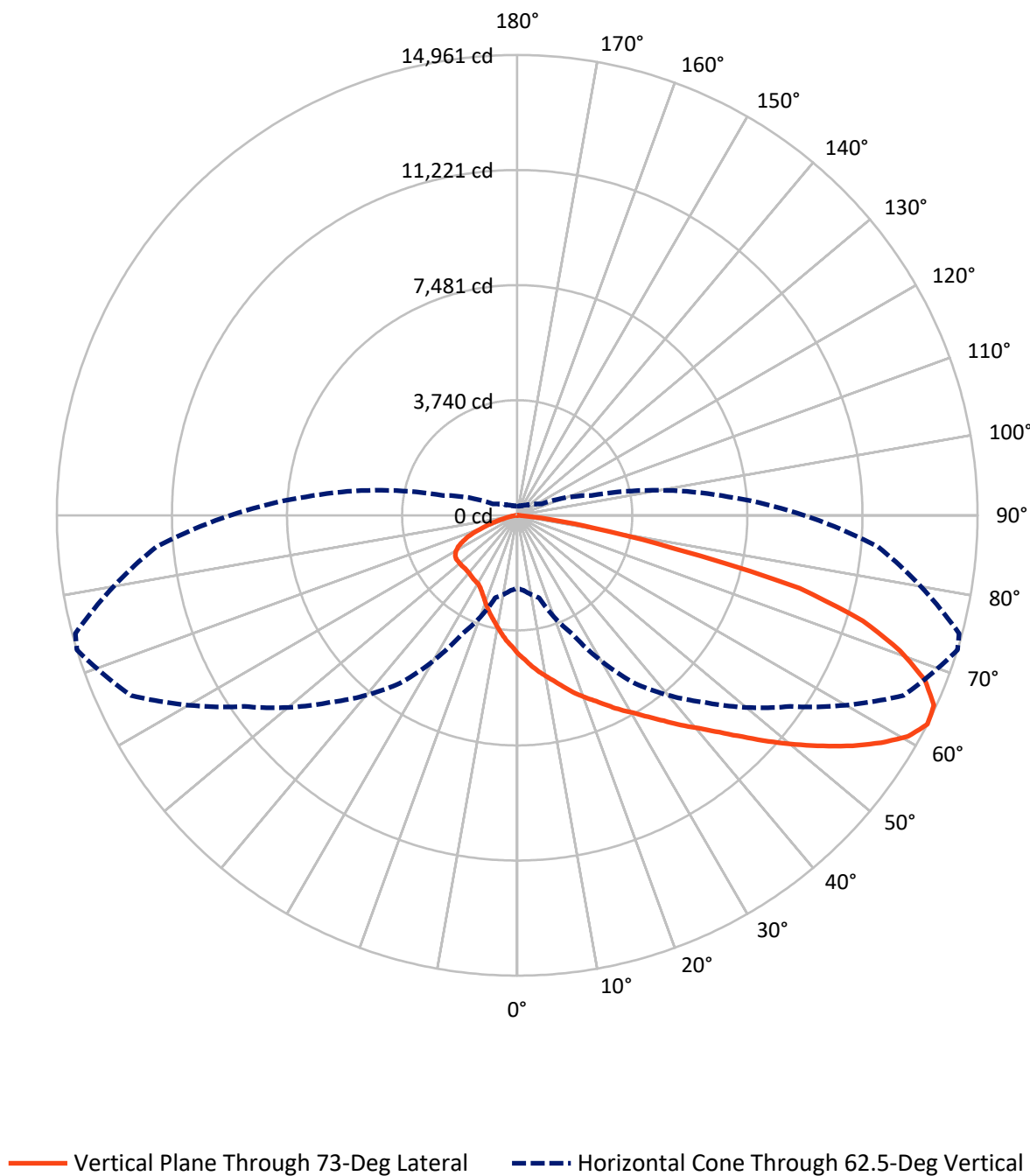


Based on 25 foot mounting height. Maximum calculated value = 11.3 fc

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    | 3688.0   | 0.0    | 3688.0  |
|                    | % Fixture | 15.5     | 0.0    | 15.5    |
| <b>Street Side</b> | Lumens    | 20103.1  | 0.0    | 20103.1 |
|                    | % Fixture | 84.5     | 0.0    | 84.5    |
| <b>Total</b>       | Lumens    | 23791.0  | 0.0    | 23791.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 435.2   | 1.8       |
| 10°-20°   | 1313.2  | 5.5       |
| 20°-30°   | 2185.9  | 9.2       |
| 30°-40°   | 3298.2  | 13.9      |
| 40°-50°   | 4610.0  | 19.4      |
| 50°-60°   | 5092.1  | 21.4      |
| 60°-70°   | 4435.8  | 18.6      |
| 70°-80°   | 2240.7  | 9.4       |
| 80°-90°   | 179.9   | 0.8       |
| 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°    | 23791.0 | 100.0     |
| 0°-180°   | 23791.0 | 100.0     |

**Coefficient of Utilization**



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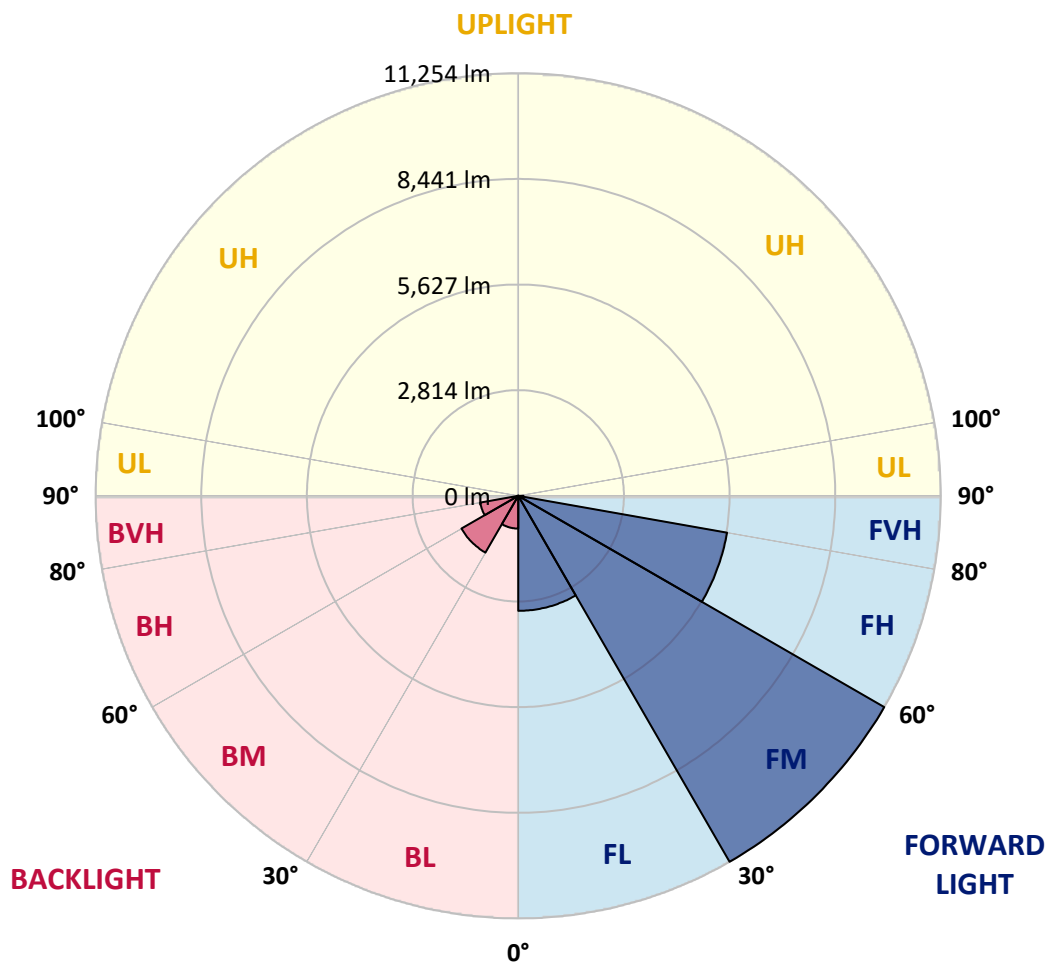
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3062.6  | 12.9      |                         |      |         |
| FM   | (30°-60°)   | 11254.0 | 47.3      |                         |      |         |
| FH   | (60°-80°)   | 5647.2  | 23.7      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 139.2   | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 871.7   | 3.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1746.2  | 7.3       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1029.4  | 4.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 40.7    | 0.2       |                         |      | 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 Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 73°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4504.9  | 4504.9  | 4504.9  | 4504.9  | 4504.9  | 4504.9  | 4504.9  | 4504.9  | 4504.9  | 4504.9  | 4504.9  |
| 2.5°  | 5127.0  | 5184.0  | 5152.9  | 5173.6  | 5069.9  | 5002.5  | 4924.8  | 4774.4  | 4691.5  | 4681.1  | 4582.6  |
| 5°    | 5878.6  | 5940.8  | 5889.0  | 5873.4  | 5692.0  | 5536.5  | 5360.2  | 5095.8  | 4919.6  | 4888.5  | 4670.8  |
| 7.5°  | 6630.3  | 6687.3  | 6625.1  | 6578.5  | 6334.8  | 6060.1  | 5800.9  | 5412.1  | 5137.3  | 5085.5  | 4743.3  |
| 10°   | 7159.1  | 7210.9  | 7164.3  | 7117.6  | 6863.6  | 6583.7  | 6215.6  | 5707.6  | 5334.3  | 5251.4  | 4790.0  |
| 12.5° | 7558.2  | 7589.3  | 7568.6  | 7527.1  | 7288.7  | 6988.0  | 6635.5  | 6039.3  | 5557.2  | 5453.5  | 4862.6  |
| 15°   | 7884.8  | 7936.7  | 7910.7  | 7879.6  | 7651.6  | 7350.9  | 7013.9  | 6386.7  | 5816.4  | 5686.8  | 4971.4  |
| 17.5° | 8102.6  | 8138.8  | 8144.0  | 8144.0  | 7941.9  | 7646.4  | 7319.8  | 6702.9  | 6075.6  | 5909.7  | 5075.1  |
| 20°   | 8201.1  | 8242.5  | 8268.4  | 8309.9  | 8144.0  | 7890.0  | 7558.2  | 6972.4  | 6319.3  | 6132.6  | 5173.6  |
| 22.5° | 8247.7  | 8284.0  | 8351.4  | 8444.7  | 8309.9  | 8097.4  | 7791.5  | 7221.3  | 6562.9  | 6365.9  | 5287.7  |
| 25°   | 8284.0  | 8330.7  | 8429.1  | 8605.4  | 8512.1  | 8330.7  | 8066.3  | 7506.4  | 6853.2  | 6651.0  | 5453.5  |
| 27.5° | 8382.5  | 8439.5  | 8532.8  | 8745.4  | 8631.3  | 8543.2  | 8356.6  | 7812.3  | 7159.1  | 6951.7  | 5655.7  |
| 30°   | 8724.6  | 8771.3  | 8766.1  | 8900.9  | 8760.9  | 8735.0  | 8605.4  | 8107.7  | 7454.6  | 7247.2  | 5894.2  |
| 32.5° | 9346.7  | 9393.4  | 9279.3  | 9227.5  | 8921.6  | 8926.8  | 8875.0  | 8424.0  | 7807.1  | 7594.5  | 6168.9  |
| 35°   | 10015.4 | 10067.3 | 9916.9  | 9828.8  | 9315.6  | 9165.3  | 9191.2  | 8817.9  | 8201.1  | 7988.5  | 6511.1  |
| 37.5° | 10611.6 | 10673.8 | 10544.2 | 10414.6 | 9896.2  | 9548.9  | 9543.7  | 9258.6  | 8652.1  | 8434.3  | 6889.5  |
| 40°   | 10938.2 | 11010.8 | 11088.5 | 11016.0 | 10471.6 | 10088.0 | 9922.1  | 9709.6  | 9097.9  | 8875.0  | 7299.0  |
| 42.5° | 11093.7 | 11295.9 | 11435.9 | 11389.2 | 10943.4 | 10554.6 | 10357.6 | 10181.3 | 9642.2  | 9424.5  | 7786.3  |
| 45°   | 10658.3 | 10663.4 | 10958.9 | 11212.9 | 11130.0 | 10870.8 | 10834.5 | 10710.1 | 10264.3 | 10056.9 | 8335.8  |
| 47.5° | 10113.9 | 10072.5 | 10279.8 | 10730.8 | 10964.1 | 11031.5 | 11244.0 | 11295.9 | 10974.5 | 10767.1 | 8895.7  |
| 50°   | 8807.6  | 8833.5  | 9507.4  | 10155.4 | 10611.6 | 11047.1 | 11534.3 | 11897.2 | 11705.4 | 11508.4 | 9486.7  |
| 52.5° | 7164.3  | 7226.5  | 7998.9  | 9424.5  | 10145.0 | 10891.5 | 11705.4 | 12498.6 | 12451.9 | 12265.3 | 10077.7 |
| 55°   | 5743.8  | 5842.3  | 6661.4  | 8206.2  | 9548.9  | 10544.2 | 11778.0 | 13048.1 | 13224.3 | 13053.3 | 10658.3 |
| 57.5° | 4390.8  | 4494.5  | 5184.0  | 6770.3  | 8786.8  | 9979.2  | 11726.2 | 13530.2 | 13944.9 | 13836.0 | 11192.2 |
| 60°   | 3307.4  | 3411.1  | 3851.7  | 5489.8  | 7833.0  | 9346.7  | 11467.0 | 13846.4 | 14592.9 | 14478.8 | 11581.0 |
| 62.5° | 2369.1  | 2452.0  | 2778.6  | 4271.6  | 6671.8  | 8595.0  | 10829.3 | 13851.6 | 14961.0 | 14867.6 | 11767.6 |
| 65°   | 1705.5  | 1705.5  | 1969.9  | 3048.2  | 5583.1  | 7693.0  | 9865.1  | 13214.0 | 14883.2 | 14857.3 | 11638.0 |
| 67.5° | 1228.6  | 1239.0  | 1451.5  | 2130.6  | 4453.0  | 6599.2  | 8615.8  | 12078.7 | 14281.9 | 14411.5 | 11171.5 |
| 70°   | 870.9   | 896.8   | 995.3   | 1487.8  | 3364.4  | 5209.9  | 7278.3  | 10590.9 | 13198.4 | 13426.5 | 10269.5 |
| 72.5° | 673.9   | 689.5   | 756.9   | 1036.8  | 2457.2  | 3872.4  | 5800.9  | 8932.0  | 11752.1 | 12011.3 | 9040.9  |
| 75°   | 518.4   | 533.9   | 585.8   | 762.0   | 1762.6  | 2716.4  | 4121.3  | 6931.0  | 9476.3  | 9937.7  | 7262.8  |
| 77.5° | 378.4   | 399.2   | 435.5   | 554.7   | 1026.4  | 1726.3  | 2498.7  | 3898.4  | 5230.6  | 5448.4  | 3805.0  |
| 80°   | 176.3   | 202.2   | 254.0   | 357.7   | 554.7   | 813.9   | 886.5   | 1503.4  | 2514.2  | 2628.3  | 2063.2  |
| 82.5° | 98.5    | 124.4   | 145.2   | 217.7   | 279.9   | 290.3   | 300.7   | 378.4   | 948.7   | 1047.2  | 865.7   |
| 85°   | 46.7    | 62.2    | 67.4    | 93.3    | 93.3    | 82.9    | 98.5    | 72.6    | 155.5   | 186.6   | 181.4   |
| 87.5° | 0.0     | 5.2     | 10.4    | 25.9    | 20.7    | 15.6    | 15.6    | 15.6    | 15.6    | 20.7    | 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°    | 4504.9 | 4504.9 | 4504.9 | 4504.9 | 4504.9 | 4504.9 | 4504.9 | 4504.9 | 4504.9 | 4504.9 | 4504.9 |
| 2.5°  | 4536.0 | 4468.6 | 4313.1 | 4178.3 | 4090.2 | 4012.4 | 3908.7 | 3862.1 | 3779.1 | 3794.7 | 3748.0 |
| 5°    | 4561.9 | 4437.5 | 4162.7 | 3908.7 | 3722.1 | 3556.2 | 3374.8 | 3271.1 | 3157.0 | 3146.7 | 3110.4 |
| 7.5°  | 4577.5 | 4385.6 | 3991.7 | 3634.0 | 3348.8 | 3094.8 | 2851.2 | 2716.4 | 2576.4 | 2545.3 | 2514.2 |
| 10°   | 4561.9 | 4307.9 | 3815.4 | 3348.8 | 2970.4 | 2654.2 | 2379.4 | 2208.4 | 2063.2 | 2026.9 | 1995.8 |
| 12.5° | 4577.5 | 4266.4 | 3649.5 | 3084.5 | 2633.5 | 2275.8 | 1964.7 | 1788.5 | 1653.7 | 1617.4 | 1596.7 |
| 15°   | 4613.7 | 4240.5 | 3509.6 | 2846.0 | 2332.8 | 1933.6 | 1627.8 | 1477.4 | 1368.6 | 1332.3 | 1321.9 |
| 17.5° | 4644.8 | 4214.6 | 3359.2 | 2612.7 | 2032.1 | 1633.0 | 1368.6 | 1244.2 | 1150.8 | 1114.6 | 1104.2 |
| 20°   | 4686.3 | 4178.3 | 3208.9 | 2389.8 | 1767.7 | 1394.5 | 1161.2 | 1052.3 | 979.8  | 953.9  | 948.7  |
| 22.5° | 4722.6 | 4152.4 | 3068.9 | 2166.9 | 1524.1 | 1202.7 | 1005.7 | 917.6  | 865.7  | 839.8  | 839.8  |
| 25°   | 4815.9 | 4162.7 | 2949.7 | 1959.5 | 1342.7 | 1052.3 | 886.5  | 819.1  | 777.6  | 762.0  | 762.0  |
| 27.5° | 4924.8 | 4204.2 | 2856.4 | 1783.3 | 1187.1 | 938.3  | 803.5  | 746.5  | 725.8  | 705.0  | 710.2  |
| 30°   | 5080.3 | 4287.1 | 2794.2 | 1638.1 | 1073.1 | 850.2  | 736.1  | 694.7  | 673.9  | 668.7  | 668.7  |
| 32.5° | 5277.3 | 4421.9 | 2789.0 | 1544.8 | 990.1  | 782.8  | 689.5  | 653.2  | 642.8  | 637.6  | 637.6  |
| 35°   | 5510.6 | 4541.2 | 2757.9 | 1503.4 | 938.3  | 736.1  | 653.2  | 627.3  | 622.1  | 622.1  | 622.1  |
| 37.5° | 5790.5 | 4738.2 | 2737.1 | 1446.3 | 912.4  | 710.2  | 627.3  | 606.5  | 606.5  | 606.5  | 606.5  |
| 40°   | 6080.8 | 4898.9 | 2706.0 | 1394.5 | 902.0  | 694.7  | 611.7  | 585.8  | 585.8  | 585.8  | 585.8  |
| 42.5° | 6428.1 | 5132.1 | 2695.7 | 1368.6 | 886.5  | 684.3  | 591.0  | 559.9  | 565.1  | 565.1  | 570.2  |
| 45°   | 6848.0 | 5396.5 | 2690.5 | 1342.7 | 881.3  | 673.9  | 570.2  | 533.9  | 539.1  | 533.9  | 533.9  |
| 47.5° | 7273.1 | 5702.4 | 2706.0 | 1327.1 | 876.1  | 663.5  | 554.7  | 508.0  | 508.0  | 502.8  | 502.8  |
| 50°   | 7718.9 | 5982.3 | 2716.4 | 1311.5 | 865.7  | 642.8  | 528.8  | 487.3  | 476.9  | 466.6  | 471.7  |
| 52.5° | 8138.8 | 6241.5 | 2721.6 | 1285.6 | 834.6  | 611.7  | 508.0  | 461.4  | 445.8  | 430.3  | 435.5  |
| 55°   | 8558.7 | 6490.3 | 2732.0 | 1254.5 | 793.1  | 580.6  | 482.1  | 435.5  | 414.7  | 394.0  | 394.0  |
| 57.5° | 8937.2 | 6708.1 | 2706.0 | 1176.8 | 746.5  | 549.5  | 456.2  | 404.4  | 373.2  | 352.5  | 352.5  |
| 60°   | 9196.4 | 6863.6 | 2628.3 | 1062.7 | 684.3  | 513.2  | 430.3  | 373.2  | 337.0  | 321.4  | 321.4  |
| 62.5° | 9320.8 | 6889.5 | 2488.3 | 876.1  | 606.5  | 476.9  | 399.2  | 342.1  | 311.0  | 300.7  | 300.7  |
| 65°   | 9201.6 | 6775.5 | 2270.6 | 658.4  | 523.6  | 435.5  | 368.1  | 316.2  | 285.1  | 259.2  | 259.2  |
| 67.5° | 8786.8 | 6454.1 | 1969.9 | 497.7  | 445.8  | 394.0  | 337.0  | 290.3  | 254.0  | 233.3  | 233.3  |
| 70°   | 7952.2 | 5785.3 | 1524.1 | 399.2  | 378.4  | 342.1  | 305.9  | 259.2  | 228.1  | 202.2  | 202.2  |
| 72.5° | 6858.4 | 4904.0 | 1073.1 | 321.4  | 321.4  | 290.3  | 259.2  | 228.1  | 197.0  | 176.3  | 176.3  |
| 75°   | 5261.7 | 3628.8 | 720.6  | 259.2  | 264.4  | 243.6  | 212.5  | 186.6  | 165.9  | 150.3  | 150.3  |
| 77.5° | 2871.9 | 1793.7 | 440.6  | 191.8  | 197.0  | 186.6  | 165.9  | 150.3  | 140.0  | 124.4  | 124.4  |
| 80°   | 1394.5 | 788.0  | 254.0  | 134.8  | 140.0  | 134.8  | 124.4  | 108.9  | 108.9  | 98.5   | 98.5   |
| 82.5° | 585.8  | 295.5  | 134.8  | 93.3   | 93.3   | 82.9   | 77.8   | 77.8   | 77.8   | 72.6   | 72.6   |
| 85°   | 145.2  | 57.0   | 57.0   | 51.8   | 51.8   | 51.8   | 46.7   | 46.7   | 46.7   | 36.3   | 41.5   |
| 87.5° | 20.7   | 20.7   | 20.7   | 20.7   | 20.7   | 20.7   | 15.6   | 5.2    | 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)