

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: P841739

Luminaire Tested: **ARCH4-220-730-U-T2R-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841739  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-220-730-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 23327 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 221.8  
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

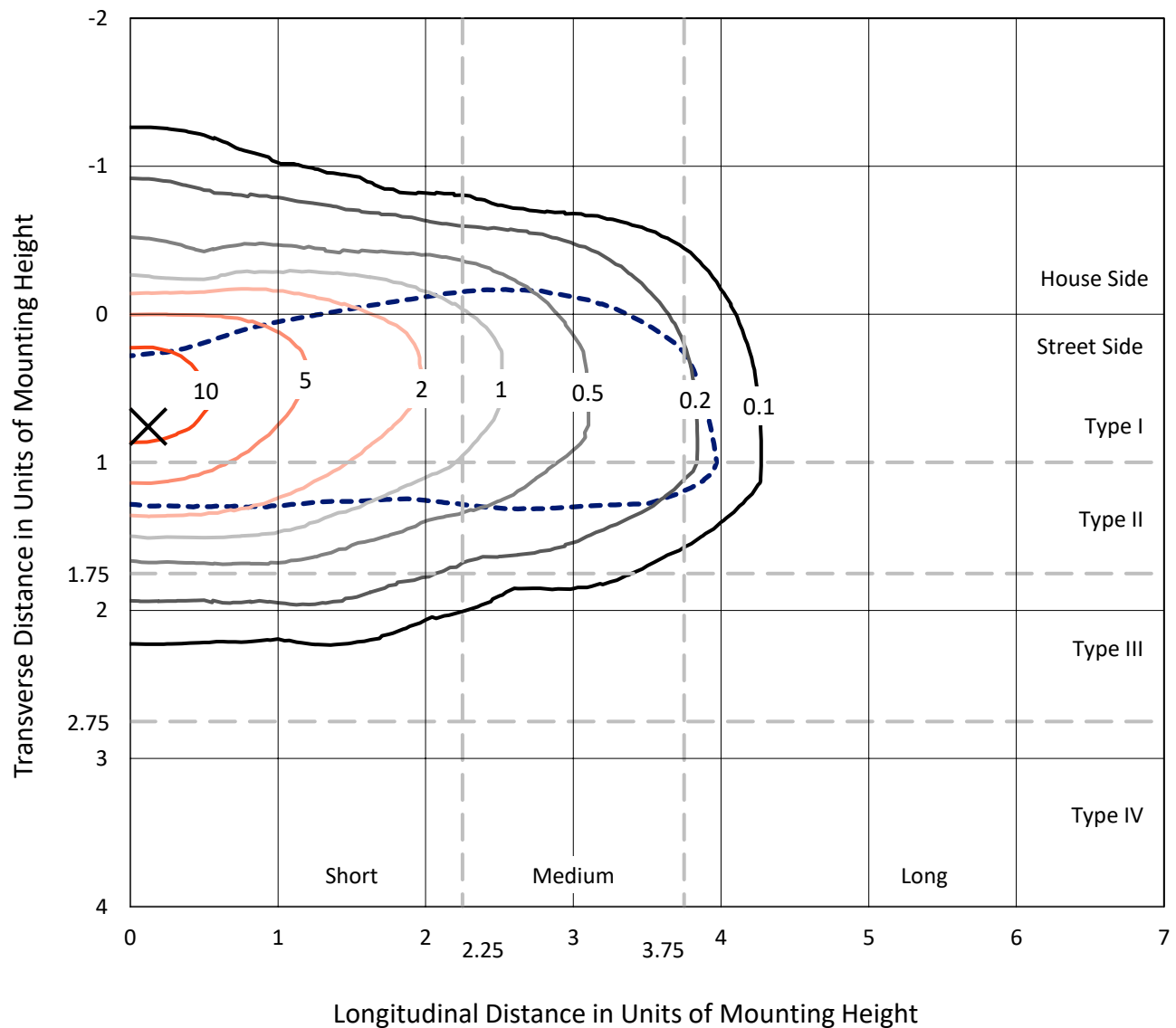


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

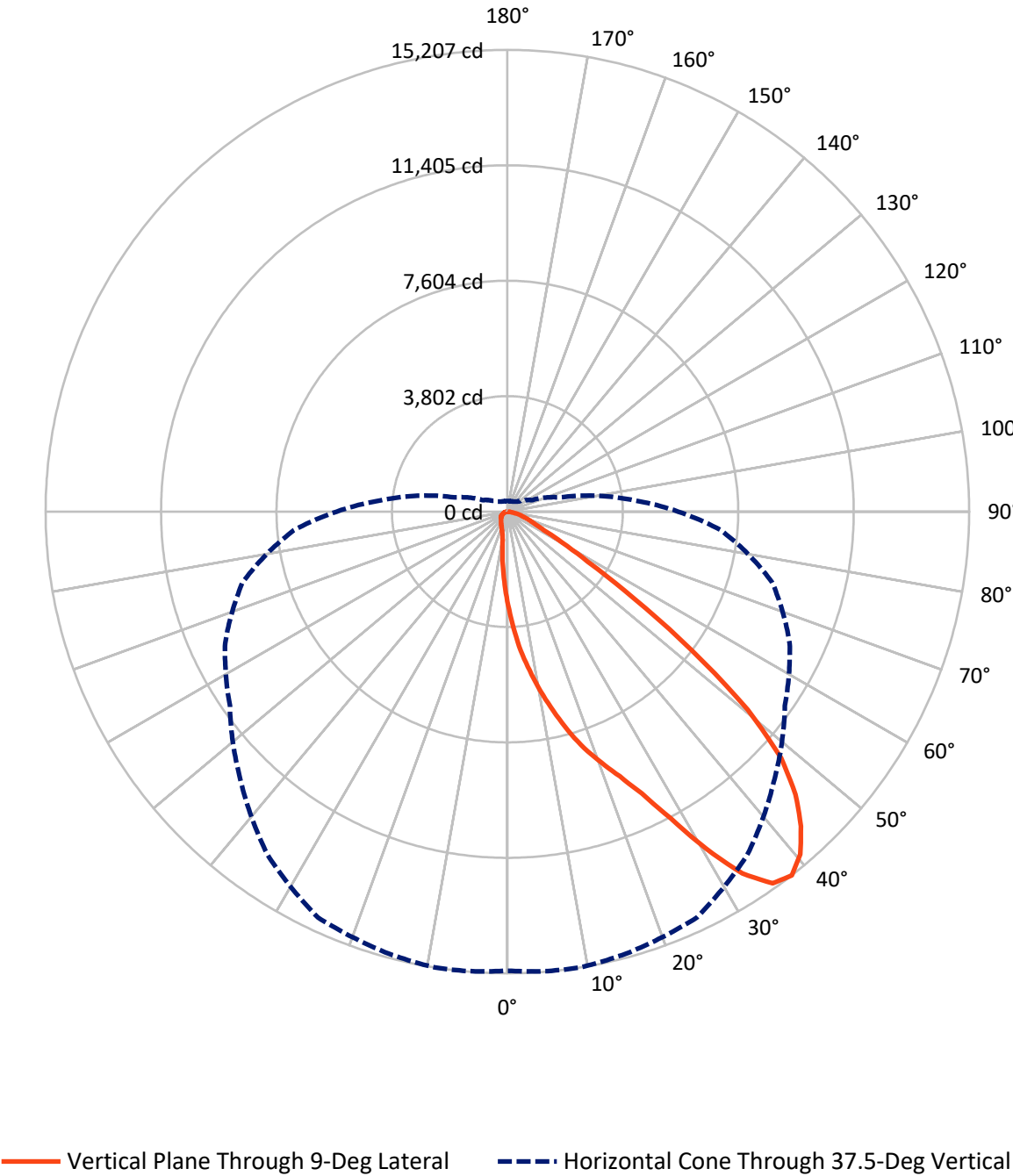


Based on 25 foot mounting height. Maximum calculated value = 13.6 fc

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    | 2837.0   | 0.0    | 2837.0  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 20490.0  | 0.0    | 20490.0 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 23327.0  | 0.0    | 23327.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 309.9   | 1.3       |
| 10°-20°   | 1077.3  | 4.6       |
| 20°-30°   | 2213.5  | 9.5       |
| 30°-40°   | 3912.6  | 16.8      |
| 40°-50°   | 5197.5  | 22.3      |
| 50°-60°   | 4929.5  | 21.1      |
| 60°-70°   | 3760.8  | 16.1      |
| 70°-80°   | 1823.2  | 7.8       |
| 80°-90°   | 102.6   | 0.4       |
| 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°    | 23327.0 | 100.0     |
| 0°-180°   | 23327.0 | 100.0     |

**Coefficient of Utilization**



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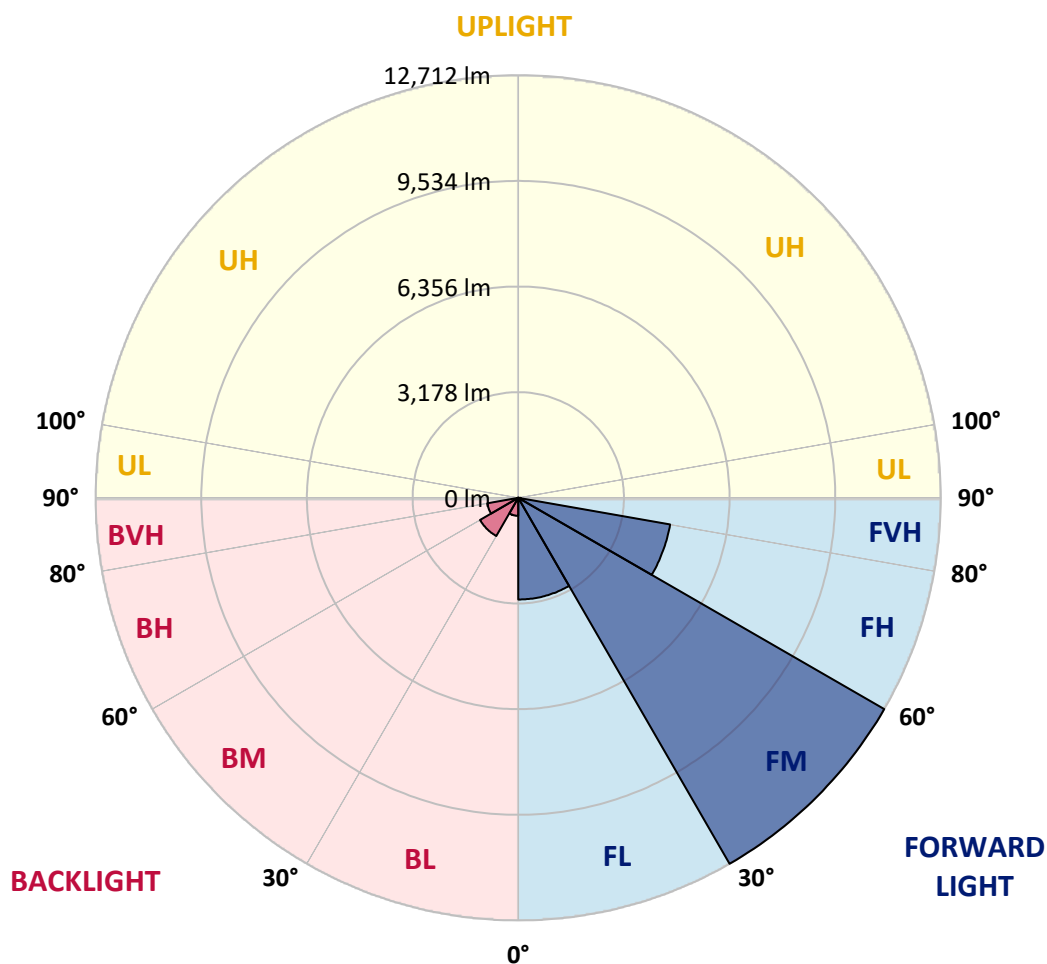
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3059.3  | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 12712.1 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 4637.3  | 19.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 81.3    | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 541.4   | 2.3       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1327.5  | 5.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 946.7   | 4.1       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 21.4    | 0.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 9°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3083.5  | 3083.5  | 3083.5  | 3083.5  | 3083.5  | 3083.5  | 3083.5  | 3083.5  | 3083.5  | 3083.5  | 3083.5  |
| 2.5°  | 3820.9  | 3753.9  | 3830.5  | 3820.9  | 3753.9  | 3710.8  | 3576.7  | 3533.6  | 3375.6  | 3260.7  | 3160.2  |
| 5°    | 4606.2  | 4539.1  | 4606.2  | 4587.0  | 4491.3  | 4385.9  | 4165.7  | 4022.0  | 3739.5  | 3490.5  | 3265.5  |
| 7.5°  | 5257.4  | 5257.4  | 5286.1  | 5290.9  | 5176.0  | 5013.2  | 4740.2  | 4524.8  | 4127.4  | 3744.3  | 3385.2  |
| 10°   | 5961.2  | 5966.0  | 6028.2  | 5985.1  | 5831.9  | 5611.7  | 5266.9  | 4994.0  | 4515.2  | 4012.4  | 3500.1  |
| 12.5° | 6712.9  | 6717.7  | 6736.9  | 6717.7  | 6535.8  | 6253.3  | 5836.7  | 5477.6  | 4927.0  | 4318.9  | 3658.1  |
| 15°   | 7464.7  | 7469.5  | 7493.4  | 7459.9  | 7258.8  | 6928.4  | 6454.4  | 6013.9  | 5362.7  | 4663.6  | 3849.6  |
| 17.5° | 8168.5  | 8178.1  | 8197.3  | 8154.2  | 7943.5  | 7550.9  | 7067.3  | 6535.8  | 5827.1  | 5032.3  | 4065.1  |
| 20°   | 8800.6  | 8810.1  | 8824.5  | 8767.0  | 8556.4  | 8163.7  | 7641.8  | 7086.4  | 6301.2  | 5410.6  | 4299.7  |
| 22.5° | 9437.4  | 9447.0  | 9470.9  | 9394.3  | 9159.7  | 8709.6  | 8197.3  | 7622.7  | 6803.9  | 5827.1  | 4572.7  |
| 25°   | 10251.4 | 10260.9 | 10280.1 | 10170.0 | 9849.2  | 9322.5  | 8781.4  | 8192.5  | 7349.8  | 6296.4  | 4907.8  |
| 27.5° | 11443.6 | 11434.0 | 11434.0 | 11232.9 | 10682.3 | 9997.6  | 9370.3  | 8771.8  | 7938.7  | 6799.1  | 5276.5  |
| 30°   | 12918.3 | 12894.4 | 12880.0 | 12607.1 | 11821.9 | 10758.9 | 9973.6  | 9312.9  | 8503.7  | 7330.6  | 5673.9  |
| 32.5° | 14239.9 | 14239.9 | 14211.1 | 13923.8 | 13090.7 | 11783.6 | 10615.3 | 9839.6  | 9049.5  | 7866.9  | 6085.7  |
| 35°   | 15020.3 | 15053.8 | 15039.5 | 14824.0 | 14215.9 | 12884.8 | 11481.9 | 10471.6 | 9624.1  | 8427.1  | 6578.9  |
| 37.5° | 15125.7 | 15192.7 | 15207.1 | 15077.8 | 14757.0 | 13785.0 | 12444.3 | 11156.3 | 10256.1 | 9030.4  | 7057.7  |
| 40°   | 14699.5 | 14843.2 | 14843.2 | 14824.0 | 14709.1 | 14211.1 | 13253.5 | 11951.1 | 10907.3 | 9657.6  | 7541.3  |
| 42.5° | 14043.5 | 14192.0 | 14172.8 | 14244.6 | 14215.9 | 14110.6 | 13708.4 | 12693.3 | 11558.5 | 10304.0 | 7981.8  |
| 45°   | 13186.5 | 13339.7 | 13301.4 | 13430.7 | 13488.1 | 13603.0 | 13660.5 | 13210.4 | 12200.1 | 11007.9 | 8475.0  |
| 47.5° | 11812.3 | 12070.8 | 12128.3 | 12358.1 | 12597.5 | 12956.6 | 13229.6 | 13397.2 | 12798.6 | 11764.4 | 9011.2  |
| 50°   | 9782.1  | 10146.0 | 10260.9 | 10744.5 | 11400.5 | 12142.7 | 12583.2 | 13167.3 | 13220.0 | 12540.1 | 9590.6  |
| 52.5° | 7005.0  | 7426.4  | 7603.5  | 8398.4  | 9748.6  | 11041.4 | 11836.2 | 12659.8 | 13382.8 | 13282.2 | 10217.8 |
| 55°   | 4529.6  | 4888.7  | 5061.0  | 5808.0  | 7603.5  | 9633.7  | 10955.2 | 12003.8 | 13291.8 | 13962.1 | 10936.1 |
| 57.5° | 2791.5  | 2997.4  | 3112.3  | 3753.9  | 5405.8  | 7828.6  | 9801.3  | 11400.5 | 13014.1 | 14551.1 | 11683.0 |
| 60°   | 1881.7  | 2001.4  | 2058.9  | 2360.5  | 3672.5  | 5851.1  | 8216.4  | 10768.5 | 12650.2 | 14948.5 | 12362.9 |
| 62.5° | 1249.7  | 1288.0  | 1345.5  | 1532.2  | 2422.8  | 4108.2  | 6310.7  | 9638.5  | 12377.3 | 14972.4 | 12865.7 |
| 65°   | 967.2   | 986.4   | 1010.3  | 1091.7  | 1493.9  | 2872.9  | 4438.6  | 7809.4  | 11970.3 | 14464.9 | 13023.7 |
| 67.5° | 761.3   | 780.5   | 809.2   | 852.3   | 1082.1  | 1948.8  | 3021.3  | 5721.8  | 11137.2 | 13670.1 | 12765.1 |
| 70°   | 598.5   | 612.9   | 632.0   | 670.3   | 842.7   | 1412.5  | 1996.6  | 3801.8  | 9456.5  | 12913.6 | 11951.1 |
| 72.5° | 474.0   | 488.4   | 507.5   | 545.8   | 684.7   | 1034.2  | 1369.4  | 2370.1  | 7292.3  | 11989.4 | 10385.4 |
| 75°   | 373.5   | 383.0   | 397.4   | 435.7   | 550.6   | 804.4   | 928.9   | 1417.3  | 4955.7  | 10299.2 | 8091.9  |
| 77.5° | 186.7   | 229.8   | 263.3   | 301.7   | 402.2   | 555.4   | 617.7   | 785.3   | 2092.4  | 5286.1  | 3859.2  |
| 80°   | 110.1   | 134.1   | 143.6   | 167.6   | 263.3   | 335.2   | 335.2   | 316.0   | 660.8   | 2030.2  | 1575.3  |
| 82.5° | 62.2    | 86.2    | 91.0    | 95.8    | 158.0   | 191.5   | 153.2   | 114.9   | 134.1   | 679.9   | 459.7   |
| 85°   | 19.2    | 28.7    | 33.5    | 38.3    | 52.7    | 57.5    | 52.7    | 47.9    | 38.3    | 67.0    | 43.1    |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 4.8     | 9.6     | 9.6     | 9.6     | 14.4    | 14.4    | 14.4    |
| 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°    | 3083.5 | 3083.5 | 3083.5 | 3083.5 | 3083.5 | 3083.5 | 3083.5 | 3083.5 | 3083.5 | 3083.5 | 3083.5 |
| 2.5°  | 3102.7 | 3040.5 | 2920.8 | 2810.6 | 2705.3 | 2628.7 | 2556.9 | 2489.8 | 2441.9 | 2403.6 | 2398.8 |
| 5°    | 3145.8 | 3021.3 | 2791.5 | 2576.0 | 2379.7 | 2216.9 | 2078.0 | 1967.9 | 1886.5 | 1829.1 | 1824.3 |
| 7.5°  | 3203.3 | 3011.7 | 2662.2 | 2341.4 | 2049.3 | 1814.7 | 1613.6 | 1465.2 | 1359.8 | 1316.7 | 1283.2 |
| 10°   | 3251.1 | 3002.1 | 2532.9 | 2106.8 | 1723.7 | 1426.9 | 1187.5 | 1039.0 | 962.4  | 933.7  | 919.3  |
| 12.5° | 3332.5 | 3011.7 | 2422.8 | 1891.3 | 1441.2 | 1091.7 | 909.7  | 828.3  | 794.8  | 770.9  | 766.1  |
| 15°   | 3452.2 | 3054.8 | 2317.4 | 1680.6 | 1153.9 | 881.0  | 775.7  | 723.0  | 689.5  | 684.7  | 679.9  |
| 17.5° | 3571.9 | 3093.1 | 2221.7 | 1465.2 | 957.6  | 766.1  | 694.3  | 651.2  | 627.2  | 622.5  | 622.5  |
| 20°   | 3710.8 | 3141.0 | 2116.3 | 1259.3 | 818.8  | 689.5  | 632.0  | 598.5  | 569.8  | 565.0  | 565.0  |
| 22.5° | 3873.6 | 3208.0 | 2015.8 | 1077.3 | 727.8  | 632.0  | 584.2  | 545.8  | 521.9  | 517.1  | 517.1  |
| 25°   | 4093.8 | 3308.6 | 1934.4 | 943.3  | 665.5  | 584.2  | 541.1  | 507.5  | 488.4  | 478.8  | 478.8  |
| 27.5° | 4338.0 | 3447.4 | 1876.9 | 861.9  | 622.5  | 545.8  | 502.8  | 474.0  | 454.9  | 445.3  | 445.3  |
| 30°   | 4611.0 | 3600.7 | 1838.6 | 828.3  | 598.5  | 512.3  | 474.0  | 445.3  | 421.4  | 416.6  | 416.6  |
| 32.5° | 4912.6 | 3777.8 | 1814.7 | 833.1  | 593.7  | 488.4  | 445.3  | 416.6  | 397.4  | 387.8  | 387.8  |
| 35°   | 5247.8 | 3974.1 | 1800.3 | 861.9  | 603.3  | 469.2  | 421.4  | 392.6  | 373.5  | 363.9  | 363.9  |
| 37.5° | 5621.2 | 4204.0 | 1800.3 | 890.6  | 627.2  | 464.4  | 397.4  | 368.7  | 354.3  | 344.7  | 344.7  |
| 40°   | 5970.8 | 4448.2 | 1819.5 | 924.1  | 651.2  | 464.4  | 378.3  | 354.3  | 335.2  | 325.6  | 325.6  |
| 42.5° | 6243.7 | 4587.0 | 1833.8 | 957.6  | 665.5  | 459.7  | 359.1  | 335.2  | 320.8  | 311.2  | 311.2  |
| 45°   | 6554.9 | 4735.4 | 1805.1 | 972.0  | 665.5  | 450.1  | 344.7  | 320.8  | 306.4  | 296.9  | 296.9  |
| 47.5° | 6899.7 | 4917.4 | 1800.3 | 981.6  | 651.2  | 430.9  | 330.4  | 306.4  | 296.9  | 287.3  | 287.3  |
| 50°   | 7249.2 | 5118.5 | 1809.9 | 976.8  | 632.0  | 402.2  | 311.2  | 296.9  | 282.5  | 272.9  | 272.9  |
| 52.5° | 7646.6 | 5329.2 | 1829.1 | 967.2  | 588.9  | 368.7  | 296.9  | 282.5  | 268.1  | 258.6  | 253.8  |
| 55°   | 8087.1 | 5559.0 | 1867.4 | 948.0  | 531.5  | 335.2  | 282.5  | 268.1  | 249.0  | 239.4  | 234.6  |
| 57.5° | 8594.7 | 5841.5 | 1910.5 | 909.7  | 469.2  | 306.4  | 268.1  | 249.0  | 220.3  | 205.9  | 201.1  |
| 60°   | 9078.3 | 6162.3 | 1958.3 | 818.8  | 407.0  | 277.7  | 253.8  | 225.0  | 196.3  | 186.7  | 181.9  |
| 62.5° | 9533.1 | 6478.3 | 1982.3 | 656.0  | 344.7  | 253.8  | 239.4  | 205.9  | 177.2  | 167.6  | 162.8  |
| 65°   | 9825.2 | 6823.1 | 1929.6 | 445.3  | 282.5  | 234.6  | 220.3  | 191.5  | 162.8  | 148.4  | 148.4  |
| 67.5° | 9844.4 | 6985.9 | 1747.7 | 292.1  | 229.8  | 210.7  | 201.1  | 172.4  | 143.6  | 134.1  | 129.3  |
| 70°   | 9360.8 | 6741.7 | 1335.9 | 229.8  | 191.5  | 181.9  | 181.9  | 153.2  | 124.5  | 114.9  | 110.1  |
| 72.5° | 8249.9 | 5970.8 | 852.3  | 186.7  | 162.8  | 153.2  | 153.2  | 129.3  | 110.1  | 95.8   | 91.0   |
| 75°   | 6511.8 | 4606.2 | 454.9  | 153.2  | 134.1  | 129.3  | 119.7  | 105.3  | 91.0   | 81.4   | 76.6   |
| 77.5° | 2992.6 | 2030.2 | 210.7  | 110.1  | 100.6  | 100.6  | 91.0   | 76.6   | 71.8   | 62.2   | 62.2   |
| 80°   | 1182.7 | 689.5  | 105.3  | 71.8   | 67.0   | 67.0   | 67.0   | 52.7   | 52.7   | 43.1   | 38.3   |
| 82.5° | 325.6  | 143.6  | 52.7   | 43.1   | 43.1   | 43.1   | 38.3   | 33.5   | 33.5   | 28.7   | 28.7   |
| 85°   | 33.5   | 23.9   | 23.9   | 23.9   | 23.9   | 19.2   | 19.2   | 14.4   | 9.6    | 9.6    | 9.6    |
| 87.5° | 14.4   | 14.4   | 14.4   | 14.4   | 14.4   | 9.6    | 4.8    | 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)