

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: P841667

Luminaire Tested: **ARCH4-210-730-U-T2R-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841667  
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: ARCH4-210-730-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 835mA 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: 22533 lumens  
Efficiency: N/A  
Efficacy: 105.7 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

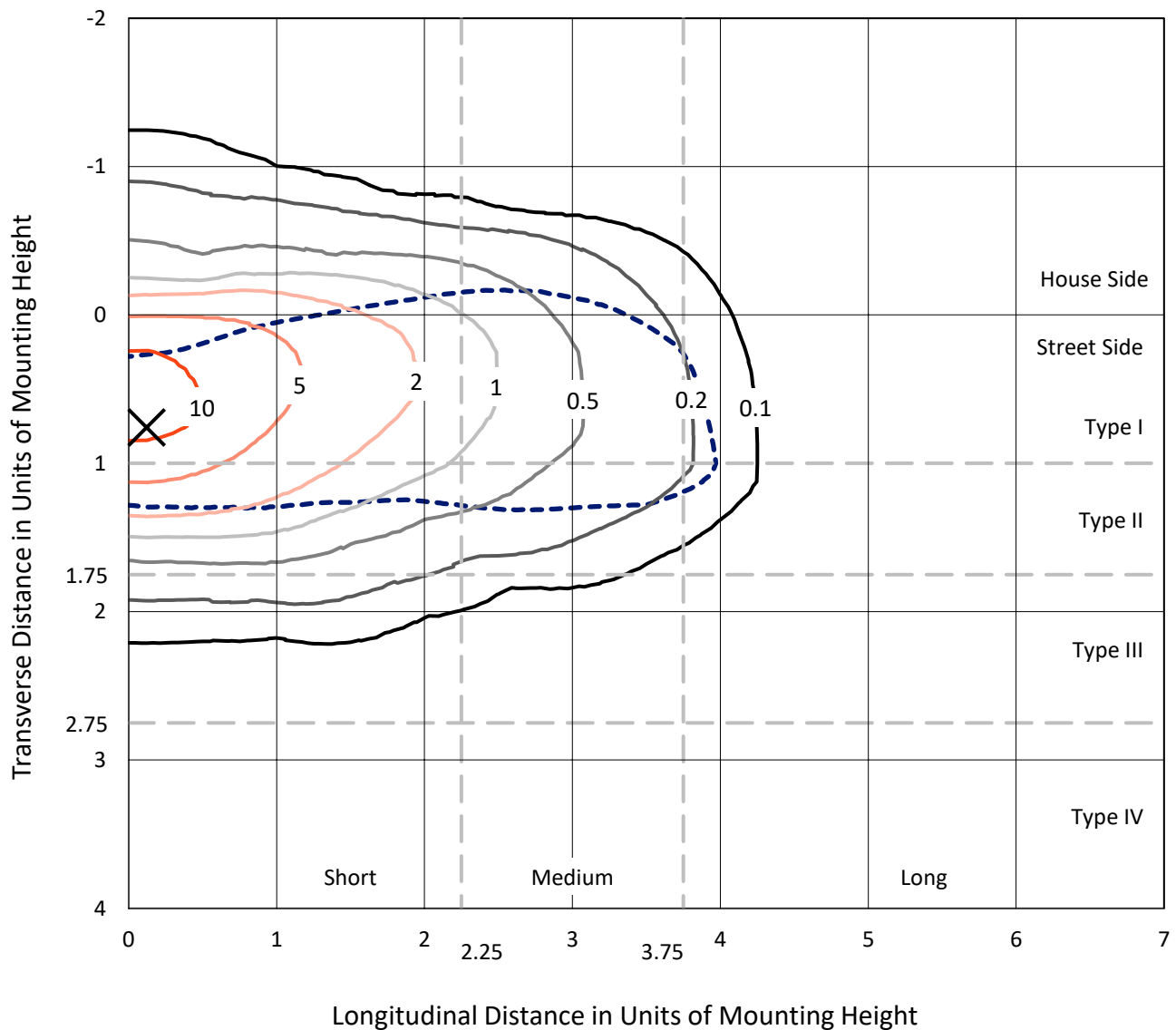
Input Watts (W): 213.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

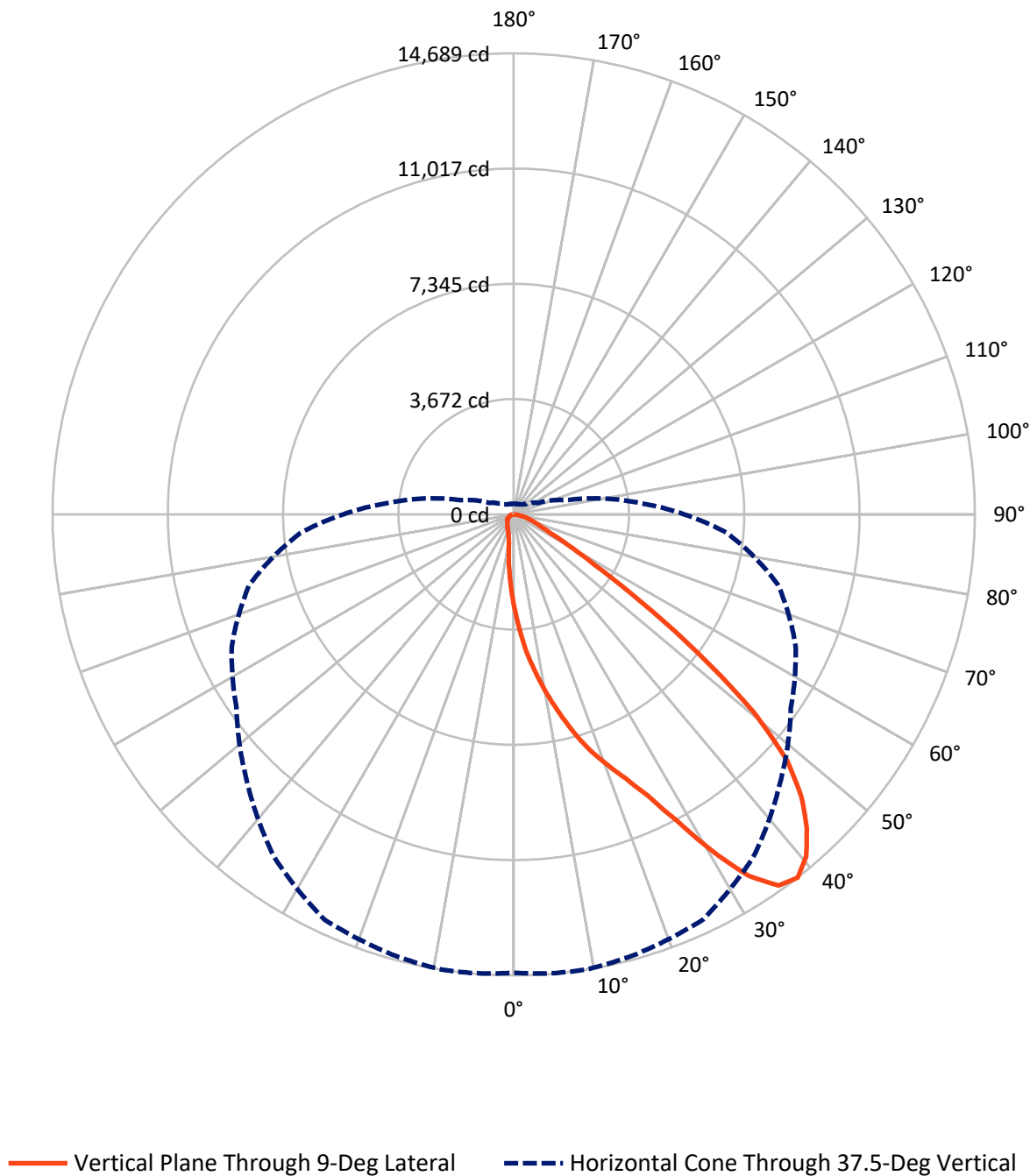
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.2 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    | 2740.4   | 0.0    | 2740.4  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 19792.6  | 0.0    | 19792.6 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 22533.0  | 0.0    | 22533.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 299.4   | 1.3       |
| 10°-20°   | 1040.6  | 4.6       |
| 20°-30°   | 2138.2  | 9.5       |
| 30°-40°   | 3779.4  | 16.8      |
| 40°-50°   | 5020.6  | 22.3      |
| 50°-60°   | 4761.7  | 21.1      |
| 60°-70°   | 3632.8  | 16.1      |
| 70°-80°   | 1761.2  | 7.8       |
| 80°-90°   | 99.1    | 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°    | 22533.0 | 100.0     |
| 0°-180°   | 22533.0 | 100.0     |

**Coefficient of Utilization**



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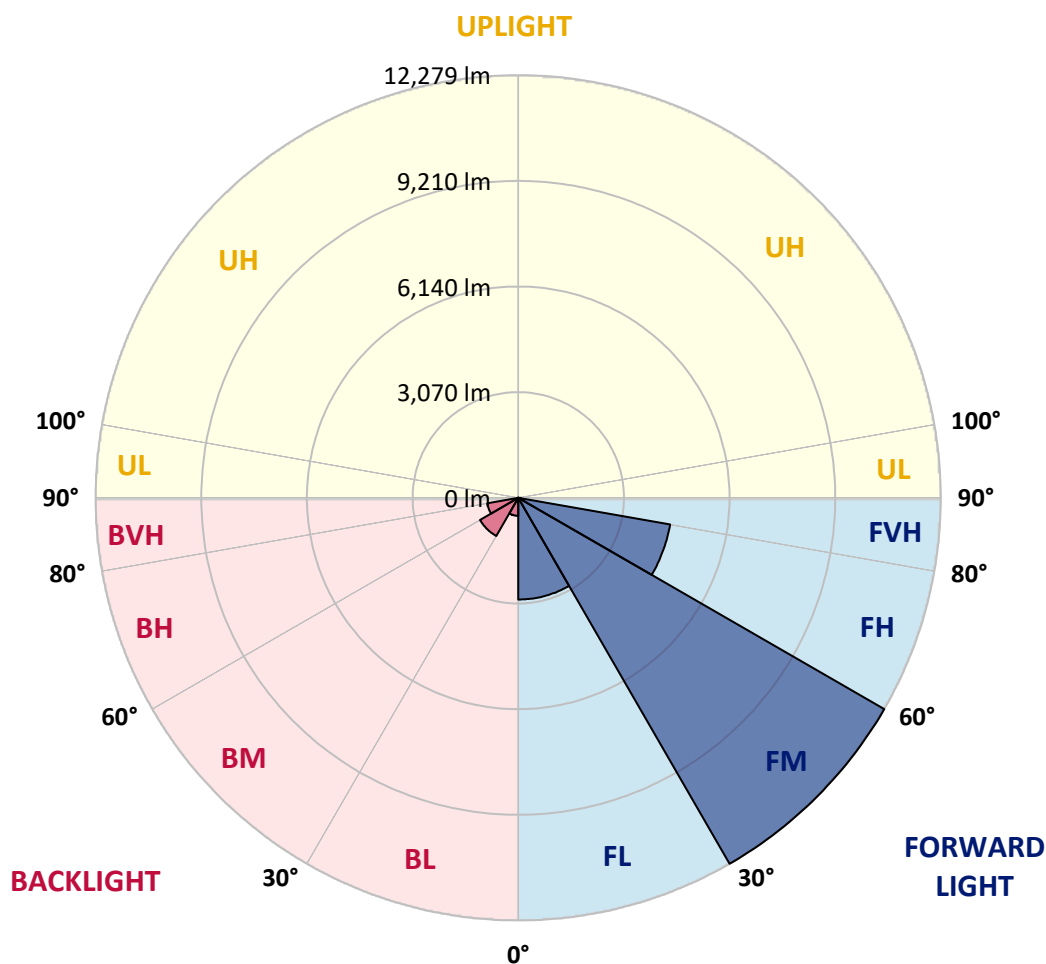
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2955.2  | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 12279.4 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 4479.5  | 19.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 78.5    | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 523.0   | 2.3       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1282.3  | 5.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 914.5   | 4.1       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 20.6    | 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°    | 2978.6  | 2978.6  | 2978.6  | 2978.6  | 2978.6  | 2978.6  | 2978.6  | 2978.6  | 2978.6  | 2978.6  | 2978.6  |
| 2.5°  | 3690.9  | 3626.1  | 3700.1  | 3690.9  | 3626.1  | 3584.5  | 3455.0  | 3413.4  | 3260.7  | 3149.7  | 3052.6  |
| 5°    | 4449.4  | 4384.6  | 4449.4  | 4430.9  | 4338.4  | 4236.6  | 4023.9  | 3885.1  | 3612.2  | 3371.7  | 3154.3  |
| 7.5°  | 5078.4  | 5078.4  | 5106.2  | 5110.8  | 4999.8  | 4842.5  | 4578.9  | 4370.8  | 3986.9  | 3616.9  | 3270.0  |
| 10°   | 5758.3  | 5762.9  | 5823.1  | 5781.4  | 5633.4  | 5420.7  | 5087.7  | 4824.0  | 4361.5  | 3875.9  | 3381.0  |
| 12.5° | 6484.4  | 6489.1  | 6507.6  | 6489.1  | 6313.3  | 6040.4  | 5638.0  | 5291.2  | 4759.3  | 4171.9  | 3533.6  |
| 15°   | 7210.6  | 7215.2  | 7238.3  | 7206.0  | 7011.7  | 6692.6  | 6234.7  | 5809.2  | 5180.2  | 4504.9  | 3718.6  |
| 17.5° | 7890.5  | 7899.7  | 7918.2  | 7876.6  | 7673.1  | 7293.8  | 6826.7  | 6313.3  | 5628.8  | 4861.0  | 3926.7  |
| 20°   | 8501.0  | 8510.3  | 8524.1  | 8468.6  | 8265.1  | 7885.9  | 7381.7  | 6845.2  | 6086.7  | 5226.4  | 4153.4  |
| 22.5° | 9116.2  | 9125.4  | 9148.5  | 9074.5  | 8847.9  | 8413.1  | 7918.2  | 7363.2  | 6572.3  | 5628.8  | 4417.0  |
| 25°   | 9902.4  | 9911.7  | 9930.2  | 9823.8  | 9513.9  | 9005.1  | 8482.5  | 7913.6  | 7099.6  | 6082.1  | 4740.8  |
| 27.5° | 11054.1 | 11044.8 | 11044.8 | 10850.6 | 10318.7 | 9657.3  | 9051.4  | 8473.3  | 7668.5  | 6567.7  | 5096.9  |
| 30°   | 12478.6 | 12455.5 | 12441.6 | 12178.0 | 11419.5 | 10392.7 | 9634.2  | 8995.9  | 8214.2  | 7081.1  | 5480.8  |
| 32.5° | 13755.2 | 13755.2 | 13727.4 | 13449.9 | 12645.1 | 11382.5 | 10253.9 | 9504.7  | 8741.5  | 7599.1  | 5878.6  |
| 35°   | 14509.1 | 14541.4 | 14527.6 | 14319.4 | 13732.0 | 12446.3 | 11091.1 | 10115.2 | 9296.5  | 8140.2  | 6354.9  |
| 37.5° | 14610.8 | 14675.6 | 14689.4 | 14564.6 | 14254.7 | 13315.8 | 12020.7 | 10776.6 | 9907.0  | 8723.0  | 6817.5  |
| 40°   | 14199.2 | 14337.9 | 14337.9 | 14319.4 | 14208.4 | 13727.4 | 12802.4 | 11544.3 | 10536.1 | 9328.9  | 7284.6  |
| 42.5° | 13565.5 | 13708.9 | 13690.4 | 13759.8 | 13732.0 | 13630.3 | 13241.8 | 12261.2 | 11165.1 | 9953.3  | 7710.1  |
| 45°   | 12737.6 | 12885.6 | 12848.6 | 12973.5 | 13029.0 | 13140.0 | 13195.5 | 12760.8 | 11784.9 | 10633.2 | 8186.5  |
| 47.5° | 11410.2 | 11660.0 | 11715.5 | 11937.5 | 12168.7 | 12515.6 | 12779.3 | 12941.1 | 12363.0 | 11364.0 | 8704.5  |
| 50°   | 9449.2  | 9800.7  | 9911.7  | 10378.8 | 11012.5 | 11729.4 | 12154.9 | 12719.1 | 12770.0 | 12113.2 | 9264.2  |
| 52.5° | 6766.6  | 7173.6  | 7344.7  | 8112.5  | 9416.8  | 10665.6 | 11433.3 | 12228.9 | 12927.3 | 12830.1 | 9870.0  |
| 55°   | 4375.4  | 4722.3  | 4888.8  | 5610.3  | 7344.7  | 9305.8  | 10582.3 | 11595.2 | 12839.4 | 13486.9 | 10563.8 |
| 57.5° | 2696.5  | 2895.3  | 3006.3  | 3626.1  | 5221.8  | 7562.1  | 9467.7  | 11012.5 | 12571.1 | 14055.8 | 11285.3 |
| 60°   | 1817.7  | 1933.3  | 1988.8  | 2280.2  | 3547.5  | 5651.9  | 7936.7  | 10401.9 | 12219.6 | 14439.7 | 11942.1 |
| 62.5° | 1207.2  | 1244.2  | 1299.7  | 1480.0  | 2340.3  | 3968.4  | 6095.9  | 9310.4  | 11956.0 | 14462.8 | 12427.8 |
| 65°   | 934.3   | 952.8   | 975.9   | 1054.5  | 1443.0  | 2775.1  | 4287.5  | 7543.6  | 11562.8 | 13972.5 | 12580.4 |
| 67.5° | 735.4   | 753.9   | 781.6   | 823.3   | 1045.3  | 1882.4  | 2918.5  | 5527.0  | 10758.1 | 13204.8 | 12330.6 |
| 70°   | 578.1   | 592.0   | 610.5   | 647.5   | 814.0   | 1364.4  | 1928.7  | 3672.4  | 9134.7  | 12474.0 | 11544.3 |
| 72.5° | 457.9   | 471.8   | 490.3   | 527.3   | 661.4   | 999.0   | 1322.8  | 2289.4  | 7044.1  | 11581.3 | 10031.9 |
| 75°   | 360.8   | 370.0   | 383.9   | 420.9   | 531.9   | 777.0   | 897.3   | 1369.0  | 4787.0  | 9948.7  | 7816.5  |
| 77.5° | 180.4   | 222.0   | 254.4   | 291.4   | 388.5   | 536.5   | 596.6   | 758.5   | 2021.2  | 5106.2  | 3727.9  |
| 80°   | 106.4   | 129.5   | 138.8   | 161.9   | 254.4   | 323.8   | 323.8   | 305.3   | 638.3   | 1961.1  | 1521.7  |
| 82.5° | 60.1    | 83.3    | 87.9    | 92.5    | 152.6   | 185.0   | 148.0   | 111.0   | 129.5   | 656.8   | 444.0   |
| 85°   | 18.5    | 27.8    | 32.4    | 37.0    | 50.9    | 55.5    | 50.9    | 46.3    | 37.0    | 64.8    | 41.6    |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 4.6     | 9.3     | 9.3     | 9.3     | 13.9    | 13.9    | 13.9    |
| 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°    | 2978.6 | 2978.6 | 2978.6 | 2978.6 | 2978.6 | 2978.6 | 2978.6 | 2978.6 | 2978.6 | 2978.6 | 2978.6 |
| 2.5°  | 2997.1 | 2937.0 | 2821.3 | 2715.0 | 2613.2 | 2539.2 | 2469.8 | 2405.1 | 2358.8 | 2321.8 | 2317.2 |
| 5°    | 3038.7 | 2918.5 | 2696.5 | 2488.3 | 2298.7 | 2141.4 | 2007.3 | 1900.9 | 1822.3 | 1766.8 | 1762.2 |
| 7.5°  | 3094.2 | 2909.2 | 2571.6 | 2261.7 | 1979.6 | 1752.9 | 1558.7 | 1415.3 | 1313.5 | 1271.9 | 1239.5 |
| 10°   | 3140.5 | 2900.0 | 2446.7 | 2035.1 | 1665.1 | 1378.3 | 1147.0 | 1003.7 | 929.7  | 901.9  | 888.0  |
| 12.5° | 3219.1 | 2909.2 | 2340.3 | 1826.9 | 1392.2 | 1054.5 | 878.8  | 800.1  | 767.8  | 744.6  | 740.0  |
| 15°   | 3334.7 | 2950.8 | 2238.6 | 1623.4 | 1114.7 | 851.0  | 749.3  | 698.4  | 666.0  | 661.4  | 656.8  |
| 17.5° | 3450.4 | 2987.8 | 2146.1 | 1415.3 | 925.0  | 740.0  | 670.6  | 629.0  | 605.9  | 601.3  | 601.3  |
| 20°   | 3584.5 | 3034.1 | 2044.3 | 1216.4 | 790.9  | 666.0  | 610.5  | 578.1  | 550.4  | 545.8  | 545.8  |
| 22.5° | 3741.7 | 3098.8 | 1947.2 | 1040.7 | 703.0  | 610.5  | 564.3  | 527.3  | 504.1  | 499.5  | 499.5  |
| 25°   | 3954.5 | 3196.0 | 1868.6 | 911.2  | 642.9  | 564.3  | 522.6  | 490.3  | 471.8  | 462.5  | 462.5  |
| 27.5° | 4190.4 | 3330.1 | 1813.1 | 832.5  | 601.3  | 527.3  | 485.6  | 457.9  | 439.4  | 430.1  | 430.1  |
| 30°   | 4454.0 | 3478.1 | 1776.1 | 800.1  | 578.1  | 494.9  | 457.9  | 430.1  | 407.0  | 402.4  | 402.4  |
| 32.5° | 4745.4 | 3649.2 | 1752.9 | 804.8  | 573.5  | 471.8  | 430.1  | 402.4  | 383.9  | 374.6  | 374.6  |
| 35°   | 5069.2 | 3838.9 | 1739.1 | 832.5  | 582.8  | 453.3  | 407.0  | 379.3  | 360.8  | 351.5  | 351.5  |
| 37.5° | 5429.9 | 4060.9 | 1739.1 | 860.3  | 605.9  | 448.6  | 383.9  | 356.1  | 342.3  | 333.0  | 333.0  |
| 40°   | 5767.5 | 4296.8 | 1757.6 | 892.7  | 629.0  | 448.6  | 365.4  | 342.3  | 323.8  | 314.5  | 314.5  |
| 42.5° | 6031.2 | 4430.9 | 1771.4 | 925.0  | 642.9  | 444.0  | 346.9  | 323.8  | 309.9  | 300.6  | 300.6  |
| 45°   | 6331.8 | 4574.3 | 1743.7 | 938.9  | 642.9  | 434.8  | 333.0  | 309.9  | 296.0  | 286.8  | 286.8  |
| 47.5° | 6664.8 | 4750.0 | 1739.1 | 948.2  | 629.0  | 416.3  | 319.1  | 296.0  | 286.8  | 277.5  | 277.5  |
| 50°   | 7002.5 | 4944.3 | 1748.3 | 943.5  | 610.5  | 388.5  | 300.6  | 286.8  | 272.9  | 263.6  | 263.6  |
| 52.5° | 7386.3 | 5147.8 | 1766.8 | 934.3  | 568.9  | 356.1  | 286.8  | 272.9  | 259.0  | 249.8  | 245.1  |
| 55°   | 7811.9 | 5369.8 | 1803.8 | 915.8  | 513.4  | 323.8  | 272.9  | 259.0  | 240.5  | 231.3  | 226.6  |
| 57.5° | 8302.1 | 5642.7 | 1845.4 | 878.8  | 453.3  | 296.0  | 259.0  | 240.5  | 212.8  | 198.9  | 194.3  |
| 60°   | 8769.3 | 5952.6 | 1891.7 | 790.9  | 393.1  | 268.3  | 245.1  | 217.4  | 189.6  | 180.4  | 175.8  |
| 62.5° | 9208.7 | 6257.8 | 1914.8 | 633.6  | 333.0  | 245.1  | 231.3  | 198.9  | 171.1  | 161.9  | 157.3  |
| 65°   | 9490.8 | 6590.8 | 1863.9 | 430.1  | 272.9  | 226.6  | 212.8  | 185.0  | 157.3  | 143.4  | 143.4  |
| 67.5° | 9509.3 | 6748.1 | 1688.2 | 282.1  | 222.0  | 203.5  | 194.3  | 166.5  | 138.8  | 129.5  | 124.9  |
| 70°   | 9042.1 | 6512.2 | 1290.4 | 222.0  | 185.0  | 175.8  | 175.8  | 148.0  | 120.3  | 111.0  | 106.4  |
| 72.5° | 7969.1 | 5767.5 | 823.3  | 180.4  | 157.3  | 148.0  | 148.0  | 124.9  | 106.4  | 92.5   | 87.9   |
| 75°   | 6290.2 | 4449.4 | 439.4  | 148.0  | 129.5  | 124.9  | 115.6  | 101.8  | 87.9   | 78.6   | 74.0   |
| 77.5° | 2890.7 | 1961.1 | 203.5  | 106.4  | 97.1   | 97.1   | 87.9   | 74.0   | 69.4   | 60.1   | 60.1   |
| 80°   | 1142.4 | 666.0  | 101.8  | 69.4   | 64.8   | 64.8   | 64.8   | 50.9   | 50.9   | 41.6   | 37.0   |
| 82.5° | 314.5  | 138.8  | 50.9   | 41.6   | 41.6   | 41.6   | 37.0   | 32.4   | 32.4   | 27.8   | 27.8   |
| 85°   | 32.4   | 23.1   | 23.1   | 23.1   | 23.1   | 18.5   | 18.5   | 13.9   | 9.3    | 9.3    | 9.3    |
| 87.5° | 13.9   | 13.9   | 13.9   | 13.9   | 13.9   | 9.3    | 4.6    | 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)