

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: P841379

Luminaire Tested: **ARCH4-170-730-U-T2R-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841379  
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: ARCH4-170-730-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 1380mA 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: 18963 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

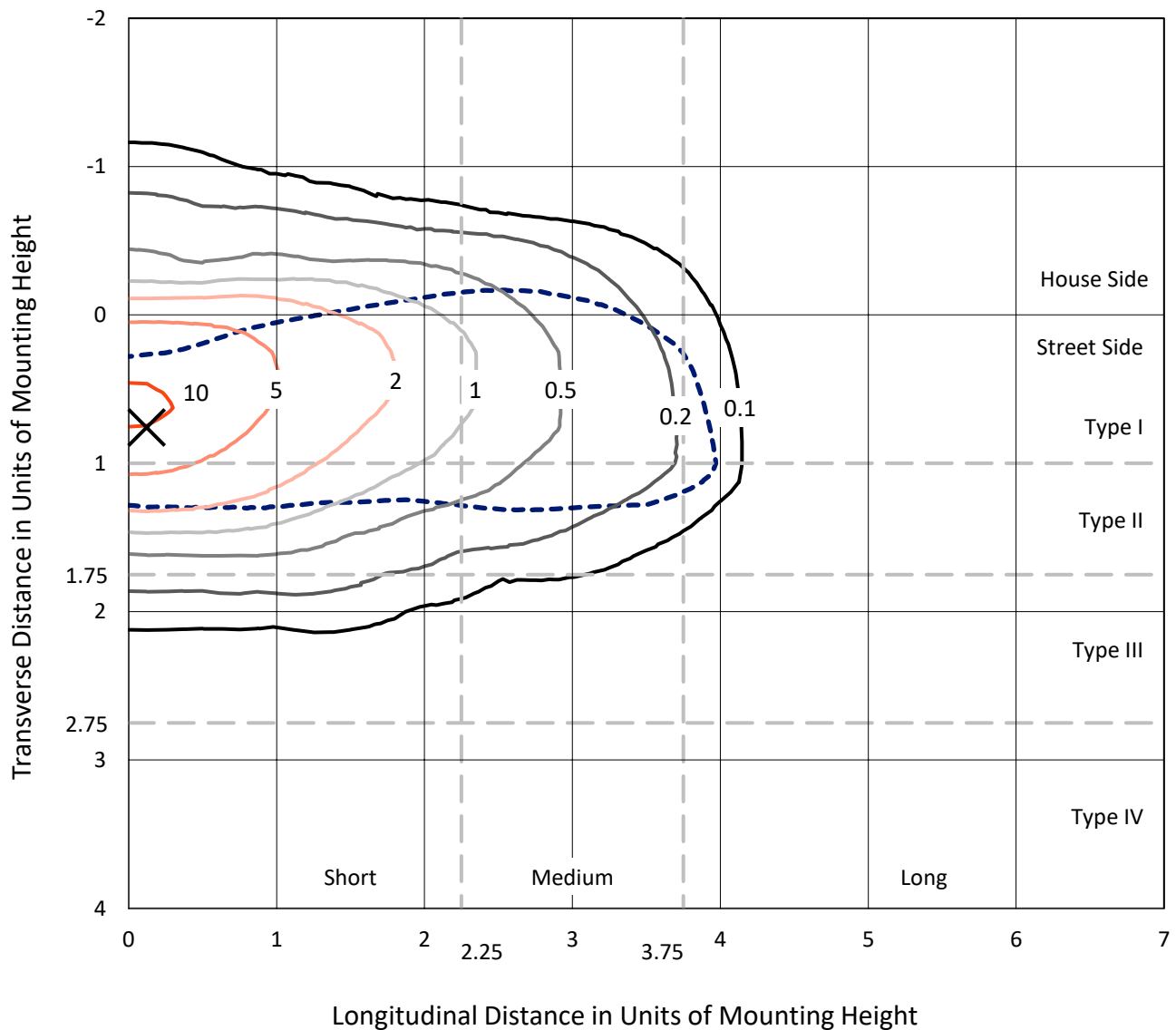
Input Watts (W): 169.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

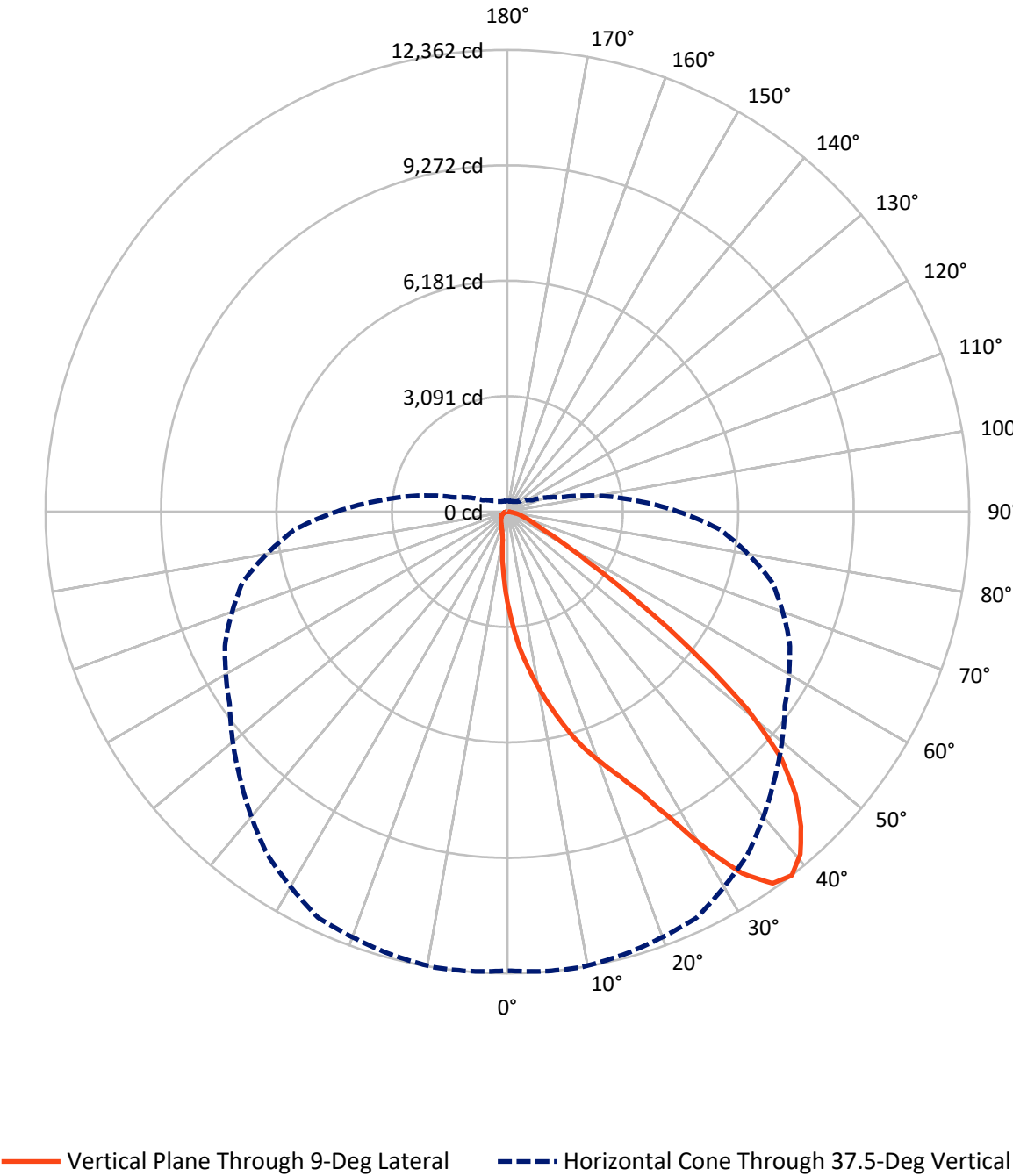
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc  
Type II - Short - N/A

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Luminous Intensity Polar Plot



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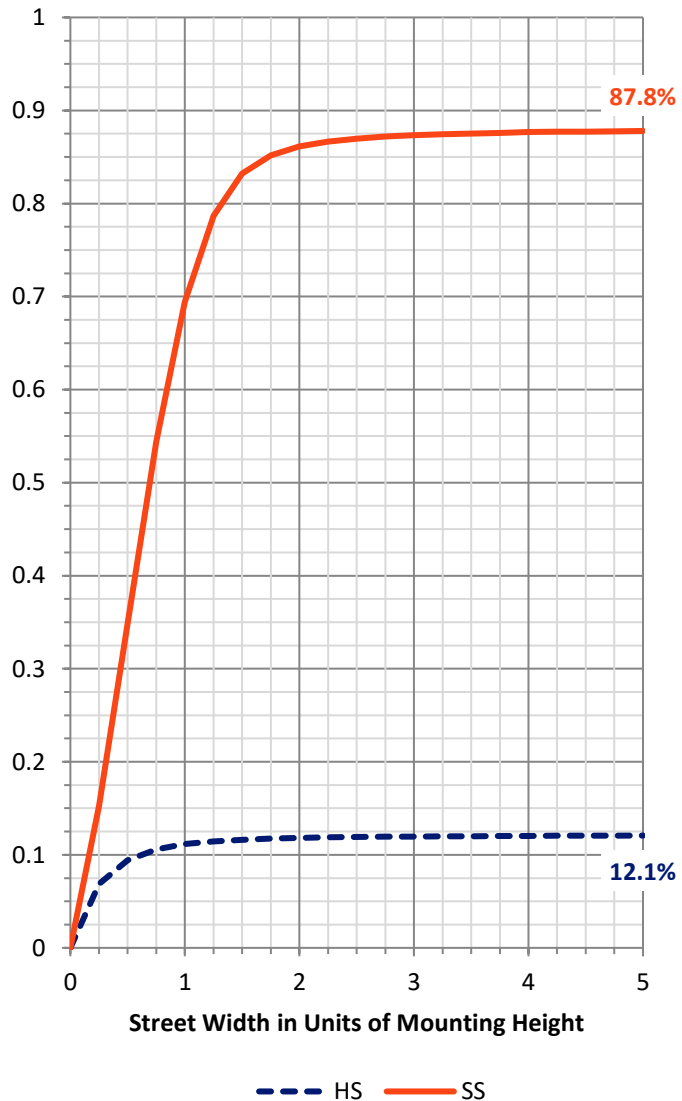
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2306.2   | 0.0    | 2306.2  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 16656.7  | 0.0    | 16656.7 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 18963.0  | 0.0    | 18963.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 252.0   | 1.3       |
| 10°-20°   | 875.7   | 4.6       |
| 20°-30°   | 1799.4  | 9.5       |
| 30°-40°   | 3180.6  | 16.8      |
| 40°-50°   | 4225.2  | 22.3      |
| 50°-60°   | 4007.3  | 21.1      |
| 60°-70°   | 3057.2  | 16.1      |
| 70°-80°   | 1482.1  | 7.8       |
| 80°-90°   | 83.4    | 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°    | 18963.0 | 100.0     |
| 0°-180°   | 18963.0 | 100.0     |

**Coefficient of Utilization**



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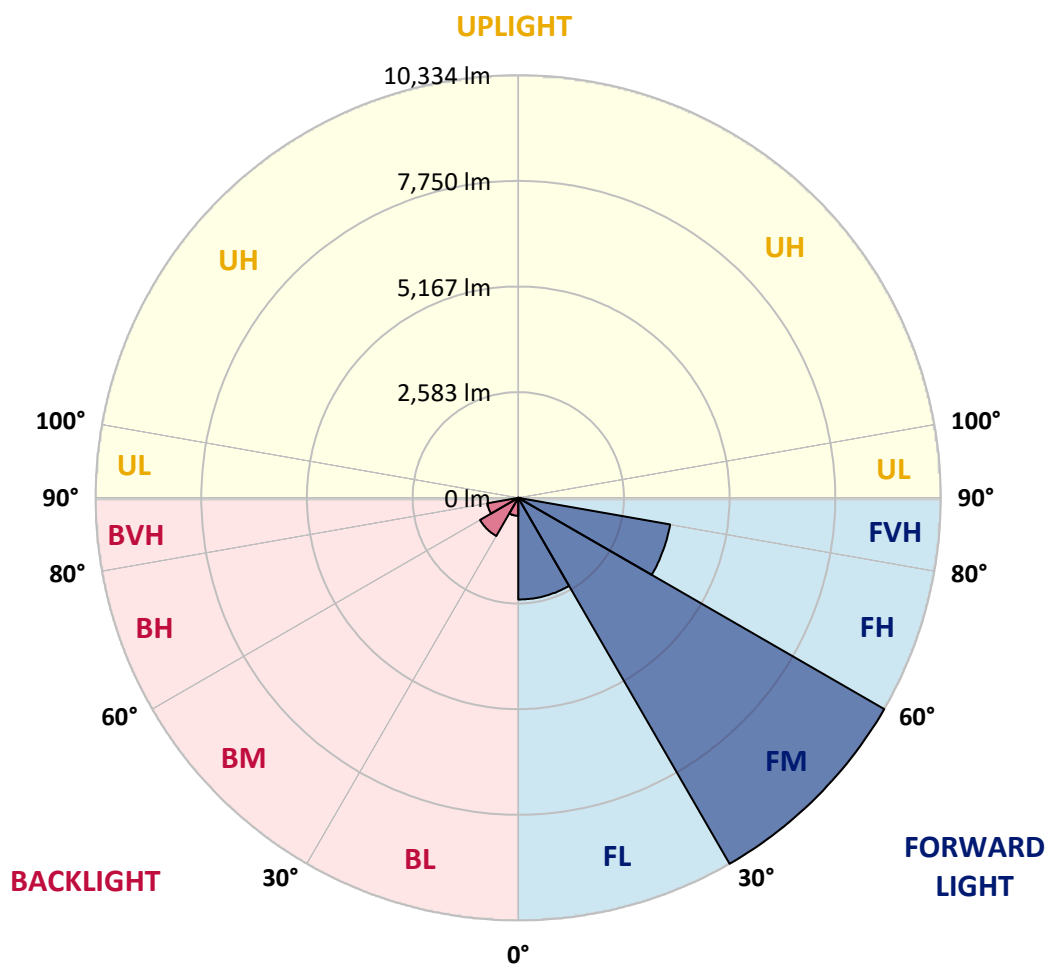
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2487.0  | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 10333.9 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 3769.8  | 19.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 66.1    | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 440.1   | 2.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1079.2  | 5.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 769.6   | 4.1       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 17.4    | 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°    | 2506.7  | 2506.7  | 2506.7  | 2506.7  | 2506.7  | 2506.7  | 2506.7  | 2506.7  | 2506.7  | 2506.7  | 2506.7  |
| 2.5°  | 3106.1  | 3051.6  | 3113.9  | 3106.1  | 3051.6  | 3016.6  | 2907.6  | 2872.6  | 2744.1  | 2650.7  | 2569.0  |
| 5°    | 3744.4  | 3690.0  | 3744.4  | 3728.9  | 3651.0  | 3565.4  | 3386.4  | 3269.6  | 3039.9  | 2837.5  | 2654.6  |
| 7.5°  | 4273.8  | 4273.8  | 4297.2  | 4301.1  | 4207.6  | 4075.3  | 3853.4  | 3678.3  | 3355.2  | 3043.8  | 2751.9  |
| 10°   | 4846.0  | 4849.9  | 4900.5  | 4865.4  | 4740.9  | 4561.8  | 4281.6  | 4059.7  | 3670.5  | 3261.8  | 2845.3  |
| 12.5° | 5457.1  | 5461.0  | 5476.5  | 5461.0  | 5313.1  | 5083.4  | 4744.8  | 4452.9  | 4005.2  | 3510.9  | 2973.8  |
| 15°   | 6068.2  | 6072.1  | 6091.5  | 6064.3  | 5900.8  | 5632.2  | 5246.9  | 4888.8  | 4359.4  | 3791.2  | 3129.5  |
| 17.5° | 6640.4  | 6648.1  | 6663.7  | 6628.7  | 6457.4  | 6138.3  | 5745.1  | 5313.1  | 4737.0  | 4090.9  | 3304.6  |
| 20°   | 7154.2  | 7161.9  | 7173.6  | 7126.9  | 6955.6  | 6636.5  | 6212.2  | 5760.7  | 5122.3  | 4398.4  | 3495.3  |
| 22.5° | 7671.8  | 7679.6  | 7699.1  | 7636.8  | 7446.1  | 7080.2  | 6663.7  | 6196.6  | 5531.0  | 4737.0  | 3717.2  |
| 25°   | 8333.5  | 8341.3  | 8356.9  | 8267.4  | 8006.6  | 7578.4  | 7138.6  | 6659.8  | 5974.8  | 5118.5  | 3989.7  |
| 27.5° | 9302.7  | 9295.0  | 9295.0  | 9131.5  | 8683.9  | 8127.2  | 7617.3  | 7130.8  | 6453.5  | 5527.1  | 4289.4  |
| 30°   | 10501.6 | 10482.1 | 10470.4 | 10248.6 | 9610.2  | 8746.1  | 8107.8  | 7570.6  | 6912.8  | 5959.2  | 4612.4  |
| 32.5° | 11575.9 | 11575.9 | 11552.5 | 11319.0 | 10641.7 | 9579.1  | 8629.4  | 7998.8  | 7356.6  | 6395.1  | 4947.2  |
| 35°   | 12210.3 | 12237.6 | 12225.9 | 12050.7 | 11556.4 | 10474.3 | 9333.9  | 8512.6  | 7823.6  | 6850.6  | 5348.1  |
| 37.5° | 12296.0 | 12350.5 | 12362.1 | 12257.0 | 11996.3 | 11206.1 | 10116.2 | 9069.2  | 8337.4  | 7341.0  | 5737.3  |
| 40°   | 11949.5 | 12066.3 | 12066.3 | 12050.7 | 11957.3 | 11552.5 | 10774.0 | 9715.3  | 8866.8  | 7850.9  | 6130.5  |
| 42.5° | 11416.3 | 11537.0 | 11521.4 | 11579.8 | 11556.4 | 11470.8 | 11143.8 | 10318.6 | 9396.2  | 8376.4  | 6488.6  |
| 45°   | 10719.6 | 10844.1 | 10813.0 | 10918.1 | 10964.8 | 11058.2 | 11104.9 | 10739.0 | 9917.7  | 8948.5  | 6889.5  |
| 47.5° | 9602.4  | 9812.6  | 9859.3  | 10046.2 | 10240.8 | 10532.7 | 10754.6 | 10890.8 | 10404.3 | 9563.5  | 7325.4  |
| 50°   | 7952.1  | 8247.9  | 8341.3  | 8734.5  | 9267.7  | 9871.0  | 10229.1 | 10704.0 | 10746.8 | 10194.1 | 7796.4  |
| 52.5° | 5694.5  | 6037.0  | 6181.1  | 6827.2  | 7924.8  | 8975.8  | 9621.9  | 10291.4 | 10879.1 | 10797.4 | 8306.3  |
| 55°   | 3682.2  | 3974.1  | 4114.2  | 4721.4  | 6181.1  | 7831.4  | 8905.7  | 9758.1  | 10805.2 | 11350.1 | 8890.1  |
| 57.5° | 2269.2  | 2436.6  | 2530.0  | 3051.6  | 4394.5  | 6364.0  | 7967.7  | 9267.7  | 10579.4 | 11828.9 | 9497.4  |
| 60°   | 1529.7  | 1627.0  | 1673.7  | 1918.9  | 2985.4  | 4756.5  | 6679.3  | 8753.9  | 10283.6 | 12151.9 | 10050.1 |
| 62.5° | 1015.9  | 1047.0  | 1093.8  | 1245.6  | 1969.5  | 3339.6  | 5130.1  | 7835.3  | 10061.7 | 12171.4 | 10458.8 |
| 65°   | 786.3   | 801.8   | 821.3   | 887.5   | 1214.4  | 2335.4  | 3608.2  | 6348.4  | 9730.9  | 11758.8 | 10587.2 |
| 67.5° | 618.9   | 634.5   | 657.8   | 692.8   | 879.7   | 1584.2  | 2456.1  | 4651.4  | 9053.6  | 11112.7 | 10377.0 |
| 70°   | 486.5   | 498.2   | 513.8   | 544.9   | 685.1   | 1148.2  | 1623.1  | 3090.5  | 7687.4  | 10497.7 | 9715.3  |
| 72.5° | 385.3   | 397.0   | 412.6   | 443.7   | 556.6   | 840.7   | 1113.2  | 1926.7  | 5928.1  | 9746.5  | 8442.5  |
| 75°   | 303.6   | 311.4   | 323.1   | 354.2   | 447.6   | 653.9   | 755.1   | 1152.1  | 4028.6  | 8372.5  | 6578.1  |
| 77.5° | 151.8   | 186.8   | 214.1   | 245.2   | 327.0   | 451.5   | 502.1   | 638.3   | 1701.0  | 4297.2  | 3137.2  |
| 80°   | 89.5    | 109.0   | 116.8   | 136.2   | 214.1   | 272.5   | 272.5   | 256.9   | 537.1   | 1650.4  | 1280.6  |
| 82.5° | 50.6    | 70.1    | 74.0    | 77.8    | 128.4   | 155.7   | 124.6   | 93.4    | 109.0   | 552.7   | 373.7   |
| 85°   | 15.6    | 23.4    | 27.2    | 31.1    | 42.8    | 46.7    | 42.8    | 38.9    | 31.1    | 54.5    | 35.0    |
| 87.5° | 0.0     | 0.0     | 0.0     | 0.0     | 3.9     | 7.8     | 7.8     | 7.8     | 11.7    | 11.7    | 11.7    |
| 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°    | 2506.7 | 2506.7 | 2506.7 | 2506.7 | 2506.7 | 2506.7 | 2506.7 | 2506.7 | 2506.7 | 2506.7 | 2506.7 |
| 2.5°  | 2522.2 | 2471.6 | 2374.3 | 2284.8 | 2199.2 | 2136.9 | 2078.5 | 2024.0 | 1985.1 | 1954.0 | 1950.1 |
| 5°    | 2557.3 | 2456.1 | 2269.2 | 2094.1 | 1934.5 | 1802.2 | 1689.3 | 1599.8 | 1533.6 | 1486.9 | 1483.0 |
| 7.5°  | 2604.0 | 2448.3 | 2164.2 | 1903.4 | 1665.9 | 1475.2 | 1311.7 | 1191.1 | 1105.4 | 1070.4 | 1043.2 |
| 10°   | 2642.9 | 2440.5 | 2059.1 | 1712.6 | 1401.2 | 1159.9 | 965.3  | 844.6  | 782.4  | 759.0  | 747.3  |
| 12.5° | 2709.1 | 2448.3 | 1969.5 | 1537.5 | 1171.6 | 887.5  | 739.5  | 673.4  | 646.1  | 626.7  | 622.8  |
| 15°   | 2806.4 | 2483.3 | 1883.9 | 1366.2 | 938.1  | 716.2  | 630.6  | 587.7  | 560.5  | 556.6  | 552.7  |
| 17.5° | 2903.7 | 2514.5 | 1806.1 | 1191.1 | 778.5  | 622.8  | 564.4  | 529.4  | 509.9  | 506.0  | 506.0  |
| 20°   | 3016.6 | 2553.4 | 1720.4 | 1023.7 | 665.6  | 560.5  | 513.8  | 486.5  | 463.2  | 459.3  | 459.3  |
| 22.5° | 3148.9 | 2607.9 | 1638.7 | 875.8  | 591.6  | 513.8  | 474.9  | 443.7  | 424.3  | 420.4  | 420.4  |
| 25°   | 3328.0 | 2689.6 | 1572.5 | 766.8  | 541.0  | 474.9  | 439.8  | 412.6  | 397.0  | 389.2  | 389.2  |
| 27.5° | 3526.5 | 2802.5 | 1525.8 | 700.6  | 506.0  | 443.7  | 408.7  | 385.3  | 369.8  | 362.0  | 362.0  |
| 30°   | 3748.3 | 2927.1 | 1494.7 | 673.4  | 486.5  | 416.5  | 385.3  | 362.0  | 342.5  | 338.6  | 338.6  |
| 32.5° | 3993.6 | 3071.1 | 1475.2 | 677.3  | 482.7  | 397.0  | 362.0  | 338.6  | 323.1  | 315.3  | 315.3  |
| 35°   | 4266.0 | 3230.7 | 1463.5 | 700.6  | 490.4  | 381.5  | 342.5  | 319.2  | 303.6  | 295.8  | 295.8  |
| 37.5° | 4569.6 | 3417.5 | 1463.5 | 724.0  | 509.9  | 377.6  | 323.1  | 299.7  | 288.0  | 280.2  | 280.2  |
| 40°   | 4853.8 | 3616.0 | 1479.1 | 751.2  | 529.4  | 377.6  | 307.5  | 288.0  | 272.5  | 264.7  | 264.7  |
| 42.5° | 5075.6 | 3728.9 | 1490.8 | 778.5  | 541.0  | 373.7  | 291.9  | 272.5  | 260.8  | 253.0  | 253.0  |
| 45°   | 5328.6 | 3849.5 | 1467.4 | 790.1  | 541.0  | 365.9  | 280.2  | 260.8  | 249.1  | 241.3  | 241.3  |
| 47.5° | 5608.9 | 3997.5 | 1463.5 | 797.9  | 529.4  | 350.3  | 268.6  | 249.1  | 241.3  | 233.5  | 233.5  |
| 50°   | 5893.0 | 4160.9 | 1471.3 | 794.0  | 513.8  | 327.0  | 253.0  | 241.3  | 229.6  | 221.9  | 221.9  |
| 52.5° | 6216.1 | 4332.2 | 1486.9 | 786.3  | 478.8  | 299.7  | 241.3  | 229.6  | 218.0  | 210.2  | 206.3  |
| 55°   | 6574.2 | 4519.0 | 1518.0 | 770.7  | 432.1  | 272.5  | 229.6  | 218.0  | 202.4  | 194.6  | 190.7  |
| 57.5° | 6986.8 | 4748.7 | 1553.1 | 739.5  | 381.5  | 249.1  | 218.0  | 202.4  | 179.0  | 167.4  | 163.5  |
| 60°   | 7379.9 | 5009.5 | 1592.0 | 665.6  | 330.9  | 225.8  | 206.3  | 182.9  | 159.6  | 151.8  | 147.9  |
| 62.5° | 7749.7 | 5266.4 | 1611.4 | 533.3  | 280.2  | 206.3  | 194.6  | 167.4  | 144.0  | 136.2  | 132.3  |
| 65°   | 7987.1 | 5546.6 | 1568.6 | 362.0  | 229.6  | 190.7  | 179.0  | 155.7  | 132.3  | 120.7  | 120.7  |
| 67.5° | 8002.7 | 5679.0 | 1420.7 | 237.4  | 186.8  | 171.3  | 163.5  | 140.1  | 116.8  | 109.0  | 105.1  |
| 70°   | 7609.6 | 5480.4 | 1086.0 | 186.8  | 155.7  | 147.9  | 147.9  | 124.6  | 101.2  | 93.4   | 89.5   |
| 72.5° | 6706.5 | 4853.8 | 692.8  | 151.8  | 132.3  | 124.6  | 124.6  | 105.1  | 89.5   | 77.8   | 74.0   |
| 75°   | 5293.6 | 3744.4 | 369.8  | 124.6  | 109.0  | 105.1  | 97.3   | 85.6   | 74.0   | 66.2   | 62.3   |
| 77.5° | 2432.7 | 1650.4 | 171.3  | 89.5   | 81.7   | 81.7   | 74.0   | 62.3   | 58.4   | 50.6   | 50.6   |
| 80°   | 961.4  | 560.5  | 85.6   | 58.4   | 54.5   | 54.5   | 54.5   | 42.8   | 42.8   | 35.0   | 31.1   |
| 82.5° | 264.7  | 116.8  | 42.8   | 35.0   | 35.0   | 35.0   | 31.1   | 27.2   | 27.2   | 23.4   | 23.4   |
| 85°   | 27.2   | 19.5   | 19.5   | 19.5   | 19.5   | 15.6   | 15.6   | 11.7   | 7.8    | 7.8    | 7.8    |
| 87.5° | 11.7   | 11.7   | 11.7   | 11.7   | 11.7   | 7.8    | 3.9    | 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)