

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: P840893

Luminaire Tested: **ARCH4-100-740-U-T2R-HSS**

Issue Date: 5/27/2024

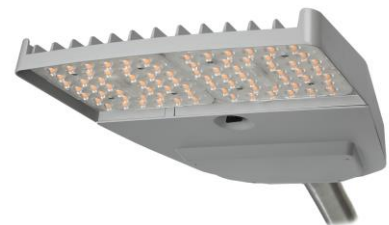
### Test Information

Test Method: LM-79-08  
Report Number: P840893  
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: ARCH4-100-740-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 845mA 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: 12826 lumens  
Efficiency: N/A  
Efficacy: 124.4 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

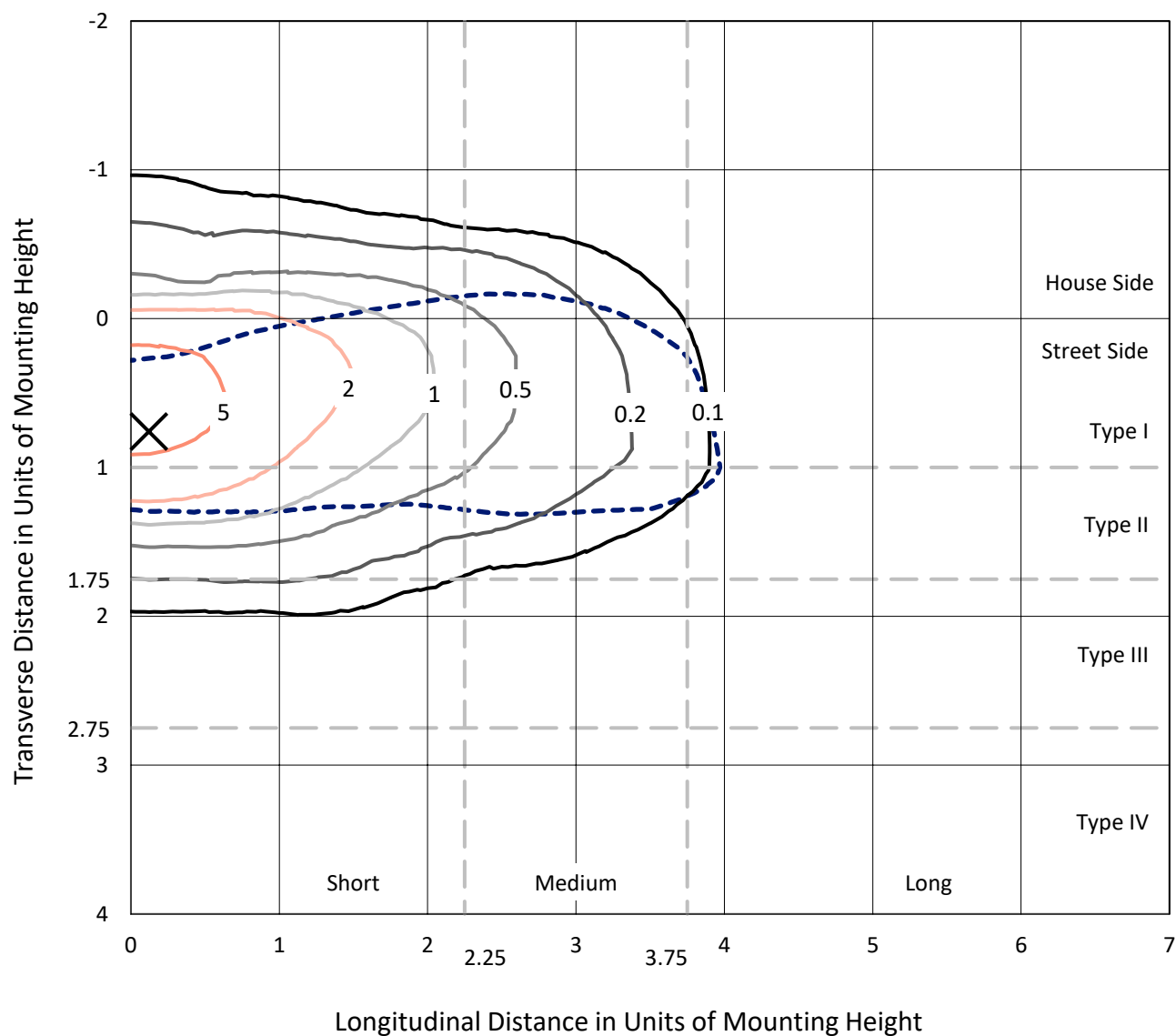
Input Watts (W): 103.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

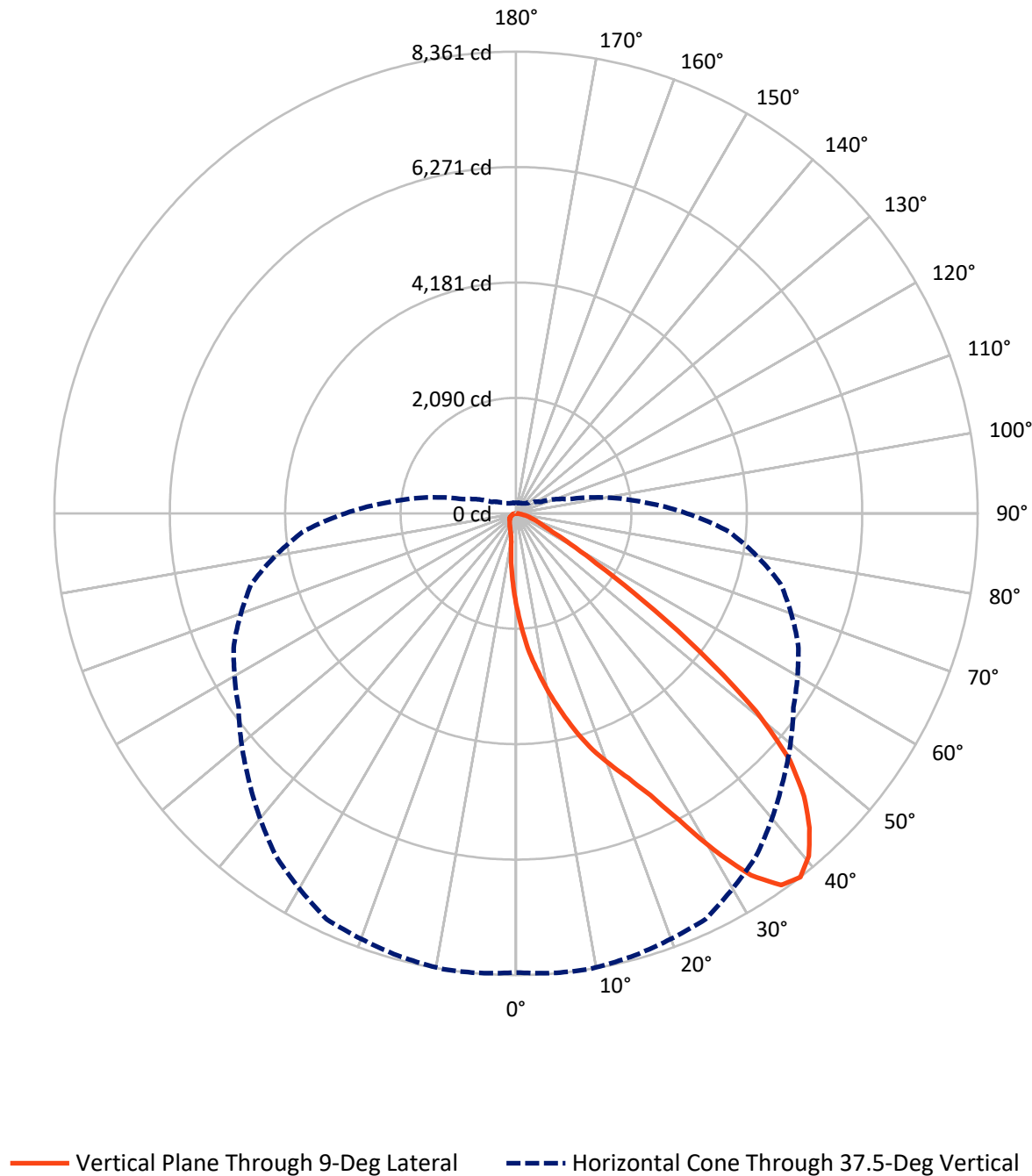
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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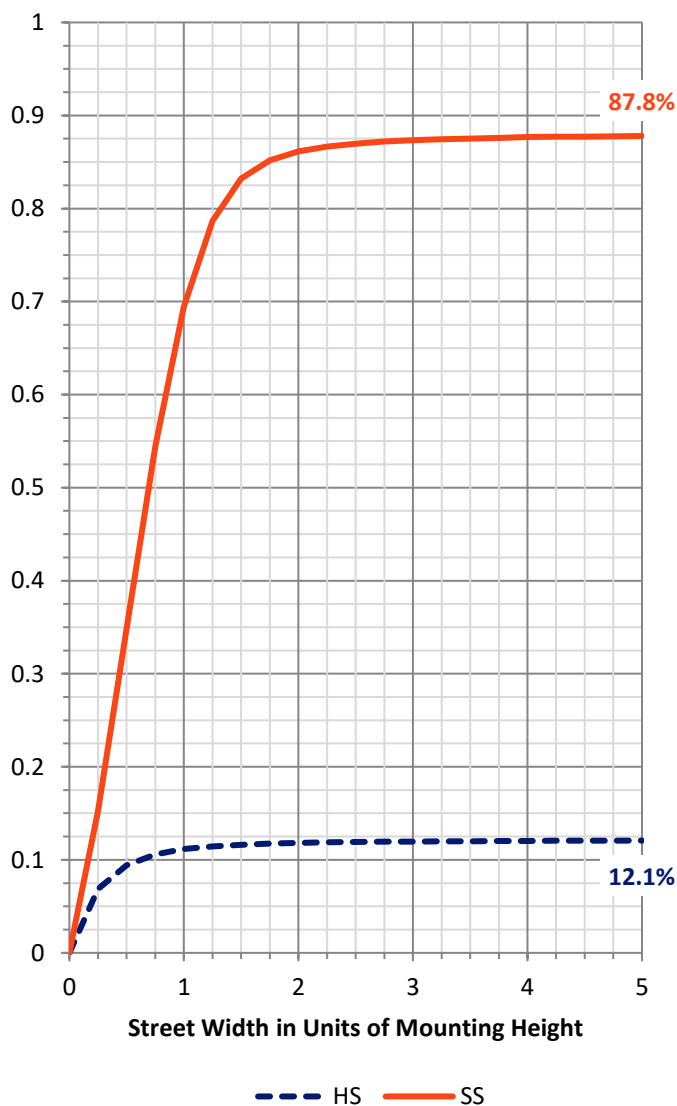
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1559.9   | 0.0    | 1559.9  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 11266.1  | 0.0    | 11266.1 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 12826.0  | 0.0    | 12826.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 170.4   | 1.3       |
| 10°-20°   | 592.3   | 4.6       |
| 20°-30°   | 1217.1  | 9.5       |
| 30°-40°   | 2151.3  | 16.8      |
| 40°-50°   | 2857.8  | 22.3      |
| 50°-60°   | 2710.4  | 21.1      |
| 60°-70°   | 2067.8  | 16.1      |
| 70°-80°   | 1002.5  | 7.8       |
| 80°-90°   | 56.4    | 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°    | 12826.0 | 100.0     |
| 0°-180°   | 12826.0 | 100.0     |

**Coefficient of Utilization**



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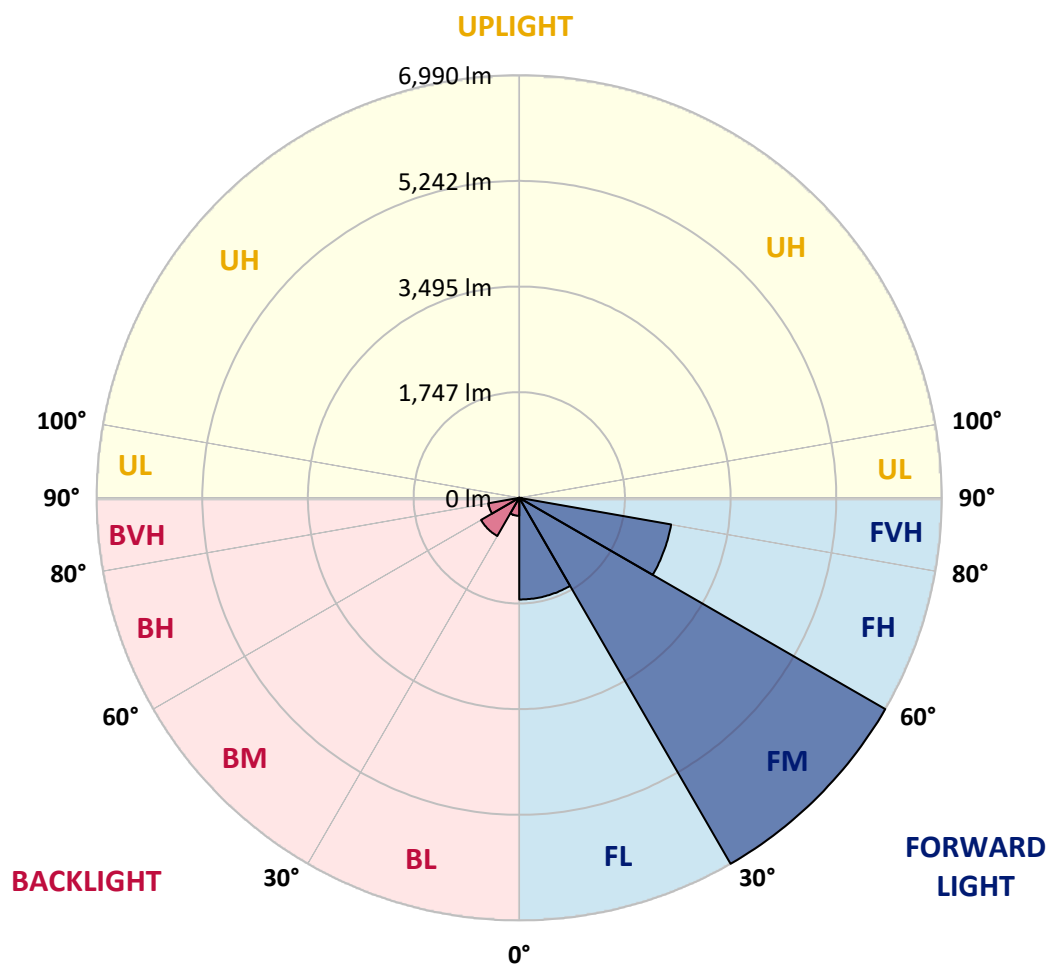
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1682.1 | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 6989.5 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 2549.8 | 19.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 44.7   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 297.7  | 2.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 729.9  | 5.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 520.5  | 4.1       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 11.8   | 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°    | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 |
| 2.5°  | 2100.9 | 2064.0 | 2106.1 | 2100.9 | 2064.0 | 2040.3 | 1966.6 | 1942.9 | 1856.0 | 1792.9 | 1737.6 |
| 5°    | 2532.6 | 2495.8 | 2532.6 | 2522.1 | 2469.4 | 2411.5 | 2290.4 | 2211.4 | 2056.1 | 1919.2 | 1795.5 |
| 7.5°  | 2890.7 | 2890.7 | 2906.5 | 2909.1 | 2845.9 | 2756.4 | 2606.3 | 2487.9 | 2269.4 | 2058.8 | 1861.3 |
| 10°   | 3277.7 | 3280.3 | 3314.5 | 3290.8 | 3206.6 | 3085.5 | 2895.9 | 2745.9 | 2482.6 | 2206.2 | 1924.5 |
| 12.5° | 3691.0 | 3693.6 | 3704.2 | 3693.6 | 3593.6 | 3438.3 | 3209.2 | 3011.8 | 2709.0 | 2374.7 | 2011.4 |
| 15°   | 4104.3 | 4107.0 | 4120.1 | 4101.7 | 3991.1 | 3809.5 | 3548.8 | 3306.6 | 2948.6 | 2564.2 | 2116.7 |
| 17.5° | 4491.3 | 4496.6 | 4507.1 | 4483.4 | 4367.6 | 4151.7 | 3885.8 | 3593.6 | 3204.0 | 2766.9 | 2235.1 |
| 20°   | 4838.9 | 4844.1 | 4852.0 | 4820.4 | 4704.6 | 4488.7 | 4201.7 | 3896.4 | 3464.6 | 2974.9 | 2364.1 |
| 22.5° | 5189.0 | 5194.3 | 5207.4 | 5165.3 | 5036.3 | 4788.8 | 4507.1 | 4191.2 | 3741.0 | 3204.0 | 2514.2 |
| 25°   | 5636.6 | 5641.8 | 5652.4 | 5591.8 | 5415.4 | 5125.8 | 4828.3 | 4504.5 | 4041.2 | 3462.0 | 2698.5 |
| 27.5° | 6292.1 | 6286.8 | 6286.8 | 6176.3 | 5873.5 | 5497.0 | 5152.1 | 4823.1 | 4365.0 | 3738.4 | 2901.2 |
| 30°   | 7103.0 | 7089.8 | 7081.9 | 6931.8 | 6500.1 | 5915.6 | 5483.9 | 5120.6 | 4675.6 | 4030.6 | 3119.7 |
| 32.5° | 7829.6 | 7829.6 | 7813.8 | 7655.8 | 7197.7 | 6479.0 | 5836.6 | 5410.1 | 4975.8 | 4325.5 | 3346.1 |
| 35°   | 8258.7 | 8277.1 | 8269.2 | 8150.8 | 7816.4 | 7084.5 | 6313.2 | 5757.7 | 5291.7 | 4633.5 | 3617.3 |
| 37.5° | 8316.6 | 8353.5 | 8361.4 | 8290.3 | 8113.9 | 7579.5 | 6842.3 | 6134.1 | 5639.2 | 4965.2 | 3880.6 |
| 40°   | 8082.3 | 8161.3 | 8161.3 | 8150.8 | 8087.6 | 7813.8 | 7287.2 | 6571.2 | 5997.2 | 5310.1 | 4146.5 |
| 42.5° | 7721.6 | 7803.2 | 7792.7 | 7832.2 | 7816.4 | 7758.5 | 7537.3 | 6979.2 | 6355.3 | 5665.5 | 4388.7 |
| 45°   | 7250.4 | 7334.6 | 7313.6 | 7384.7 | 7416.2 | 7479.4 | 7511.0 | 7263.5 | 6708.1 | 6052.5 | 4659.8 |
| 47.5° | 6494.8 | 6637.0 | 6668.6 | 6794.9 | 6926.6 | 7124.0 | 7274.1 | 7366.2 | 7037.1 | 6468.5 | 4954.7 |
| 50°   | 5378.6 | 5578.6 | 5641.8 | 5907.7 | 6268.4 | 6676.5 | 6918.7 | 7239.9 | 7268.8 | 6895.0 | 5273.2 |
| 52.5° | 3851.6 | 4083.3 | 4180.7 | 4617.7 | 5360.1 | 6070.9 | 6508.0 | 6960.8 | 7358.3 | 7303.0 | 5618.1 |
| 55°   | 2490.5 | 2688.0 | 2782.7 | 3193.4 | 4180.7 | 5296.9 | 6023.6 | 6600.1 | 7308.3 | 7676.9 | 6013.0 |
| 57.5° | 1534.8 | 1648.1 | 1711.2 | 2064.0 | 2972.3 | 4304.4 | 5389.1 | 6268.4 | 7155.6 | 8000.7 | 6423.7 |
| 60°   | 1034.6 | 1100.5 | 1132.0 | 1297.9 | 2019.3 | 3217.1 | 4517.7 | 5920.9 | 6955.5 | 8219.2 | 6797.6 |
| 62.5° | 687.1  | 708.2  | 739.8  | 842.5  | 1332.1 | 2258.8 | 3469.9 | 5299.6 | 6805.5 | 8232.4 | 7074.0 |
| 65°   | 531.8  | 542.3  | 555.5  | 600.2  | 821.4  | 1579.6 | 2440.5 | 4293.9 | 6581.7 | 7953.3 | 7160.9 |
| 67.5° | 418.6  | 429.1  | 444.9  | 468.6  | 595.0  | 1071.5 | 1661.2 | 3146.0 | 6123.6 | 7516.3 | 7018.7 |
| 70°   | 329.1  | 337.0  | 347.5  | 368.6  | 463.4  | 776.6  | 1097.8 | 2090.3 | 5199.5 | 7100.3 | 6571.2 |
| 72.5° | 260.6  | 268.5  | 279.1  | 300.1  | 376.5  | 568.7  | 752.9  | 1303.2 | 4009.6 | 6592.2 | 5710.3 |
| 75°   | 205.3  | 210.6  | 218.5  | 239.6  | 302.8  | 442.3  | 510.7  | 779.3  | 2724.8 | 5662.9 | 4449.2 |
| 77.5° | 102.7  | 126.4  | 144.8  | 165.9  | 221.1  | 305.4  | 339.6  | 431.8  | 1150.5 | 2906.5 | 2121.9 |
| 80°   | 60.6   | 73.7   | 79.0   | 92.1   | 144.8  | 184.3  | 184.3  | 173.8  | 363.3  | 1116.3 | 866.1  |
| 82.5° | 34.2   | 47.4   | 50.0   | 52.7   | 86.9   | 105.3  | 84.2   | 63.2   | 73.7   | 373.8  | 252.7  |
| 85°   | 10.5   | 15.8   | 18.4   | 21.1   | 29.0   | 31.6   | 29.0   | 26.3   | 21.1   | 36.9   | 23.7   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 2.6    | 5.3    | 5.3    | 5.3    | 7.9    | 7.9    | 7.9    |
| 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°    | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 | 1695.4 |
| 2.5°  | 1706.0 | 1671.7 | 1605.9 | 1545.4 | 1487.5 | 1445.3 | 1405.8 | 1369.0 | 1342.7 | 1321.6 | 1319.0 |
| 5°    | 1729.7 | 1661.2 | 1534.8 | 1416.4 | 1308.4 | 1218.9 | 1142.6 | 1082.0 | 1037.3 | 1005.7 | 1003.0 |
| 7.5°  | 1761.3 | 1656.0 | 1463.8 | 1287.4 | 1126.8 | 997.8  | 887.2  | 805.6  | 747.7  | 724.0  | 705.6  |
| 10°   | 1787.6 | 1650.7 | 1392.7 | 1158.4 | 947.8  | 784.5  | 652.9  | 571.3  | 529.2  | 513.4  | 505.5  |
| 12.5° | 1832.3 | 1656.0 | 1332.1 | 1039.9 | 792.4  | 600.2  | 500.2  | 455.5  | 437.0  | 423.9  | 421.2  |
| 15°   | 1898.2 | 1679.6 | 1274.2 | 924.1  | 634.5  | 484.4  | 426.5  | 397.5  | 379.1  | 376.5  | 373.8  |
| 17.5° | 1964.0 | 1700.7 | 1221.6 | 805.6  | 526.5  | 421.2  | 381.7  | 358.0  | 344.9  | 342.2  | 342.2  |
| 20°   | 2040.3 | 1727.0 | 1163.6 | 692.4  | 450.2  | 379.1  | 347.5  | 329.1  | 313.3  | 310.7  | 310.7  |
| 22.5° | 2129.8 | 1763.9 | 1108.4 | 592.4  | 400.2  | 347.5  | 321.2  | 300.1  | 287.0  | 284.3  | 284.3  |
| 25°   | 2250.9 | 1819.2 | 1063.6 | 518.6  | 365.9  | 321.2  | 297.5  | 279.1  | 268.5  | 263.3  | 263.3  |
| 27.5° | 2385.2 | 1895.5 | 1032.0 | 473.9  | 342.2  | 300.1  | 276.4  | 260.6  | 250.1  | 244.8  | 244.8  |
| 30°   | 2535.3 | 1979.8 | 1010.9 | 455.5  | 329.1  | 281.7  | 260.6  | 244.8  | 231.7  | 229.0  | 229.0  |
| 32.5° | 2701.1 | 2077.2 | 997.8  | 458.1  | 326.5  | 268.5  | 244.8  | 229.0  | 218.5  | 213.2  | 213.2  |
| 35°   | 2885.4 | 2185.1 | 989.9  | 473.9  | 331.7  | 258.0  | 231.7  | 215.9  | 205.3  | 200.1  | 200.1  |
| 37.5° | 3090.8 | 2311.5 | 989.9  | 489.7  | 344.9  | 255.4  | 218.5  | 202.7  | 194.8  | 189.6  | 189.6  |
| 40°   | 3282.9 | 2445.8 | 1000.4 | 508.1  | 358.0  | 255.4  | 208.0  | 194.8  | 184.3  | 179.0  | 179.0  |
| 42.5° | 3433.0 | 2522.1 | 1008.3 | 526.5  | 365.9  | 252.7  | 197.5  | 184.3  | 176.4  | 171.1  | 171.1  |
| 45°   | 3604.1 | 2603.7 | 992.5  | 534.4  | 365.9  | 247.5  | 189.6  | 176.4  | 168.5  | 163.2  | 163.2  |
| 47.5° | 3793.7 | 2703.8 | 989.9  | 539.7  | 358.0  | 236.9  | 181.7  | 168.5  | 163.2  | 158.0  | 158.0  |
| 50°   | 3985.9 | 2814.3 | 995.2  | 537.1  | 347.5  | 221.1  | 171.1  | 163.2  | 155.3  | 150.1  | 150.1  |
| 52.5° | 4204.4 | 2930.2 | 1005.7 | 531.8  | 323.8  | 202.7  | 163.2  | 155.3  | 147.4  | 142.2  | 139.5  |
| 55°   | 4446.6 | 3056.5 | 1026.7 | 521.3  | 292.2  | 184.3  | 155.3  | 147.4  | 136.9  | 131.6  | 129.0  |
| 57.5° | 4725.6 | 3211.9 | 1050.4 | 500.2  | 258.0  | 168.5  | 147.4  | 136.9  | 121.1  | 113.2  | 110.6  |
| 60°   | 4991.5 | 3388.3 | 1076.8 | 450.2  | 223.8  | 152.7  | 139.5  | 123.7  | 107.9  | 102.7  | 100.0  |
| 62.5° | 5241.7 | 3562.0 | 1089.9 | 360.7  | 189.6  | 139.5  | 131.6  | 113.2  | 97.4   | 92.1   | 89.5   |
| 65°   | 5402.2 | 3751.6 | 1061.0 | 244.8  | 155.3  | 129.0  | 121.1  | 105.3  | 89.5   | 81.6   | 81.6   |
| 67.5° | 5412.8 | 3841.1 | 960.9  | 160.6  | 126.4  | 115.8  | 110.6  | 94.8   | 79.0   | 73.7   | 71.1   |
| 70°   | 5146.9 | 3706.8 | 734.5  | 126.4  | 105.3  | 100.0  | 100.0  | 84.2   | 68.4   | 63.2   | 60.6   |
| 72.5° | 4536.1 | 3282.9 | 468.6  | 102.7  | 89.5   | 84.2   | 84.2   | 71.1   | 60.6   | 52.7   | 50.0   |
| 75°   | 3580.4 | 2532.6 | 250.1  | 84.2   | 73.7   | 71.1   | 65.8   | 57.9   | 50.0   | 44.8   | 42.1   |
| 77.5° | 1645.4 | 1116.3 | 115.8  | 60.6   | 55.3   | 55.3   | 50.0   | 42.1   | 39.5   | 34.2   | 34.2   |
| 80°   | 650.3  | 379.1  | 57.9   | 39.5   | 36.9   | 36.9   | 36.9   | 29.0   | 29.0   | 23.7   | 21.1   |
| 82.5° | 179.0  | 79.0   | 29.0   | 23.7   | 23.7   | 23.7   | 21.1   | 18.4   | 18.4   | 15.8   | 15.8   |
| 85°   | 18.4   | 13.2   | 13.2   | 13.2   | 13.2   | 10.5   | 10.5   | 7.9    | 5.3    | 5.3    | 5.3    |
| 87.5° | 7.9    | 7.9    | 7.9    | 7.9    | 7.9    | 5.3    | 2.6    | 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)