

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: P265665

Luminaire Tested: **ARCH-L-AF72-190-D-U-T2U-7027-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265665  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-190-D-U-T2U-7027-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13982.2 lumens  
Efficiency: N/A  
Efficacy: 74.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 189  
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: 28.75 FT

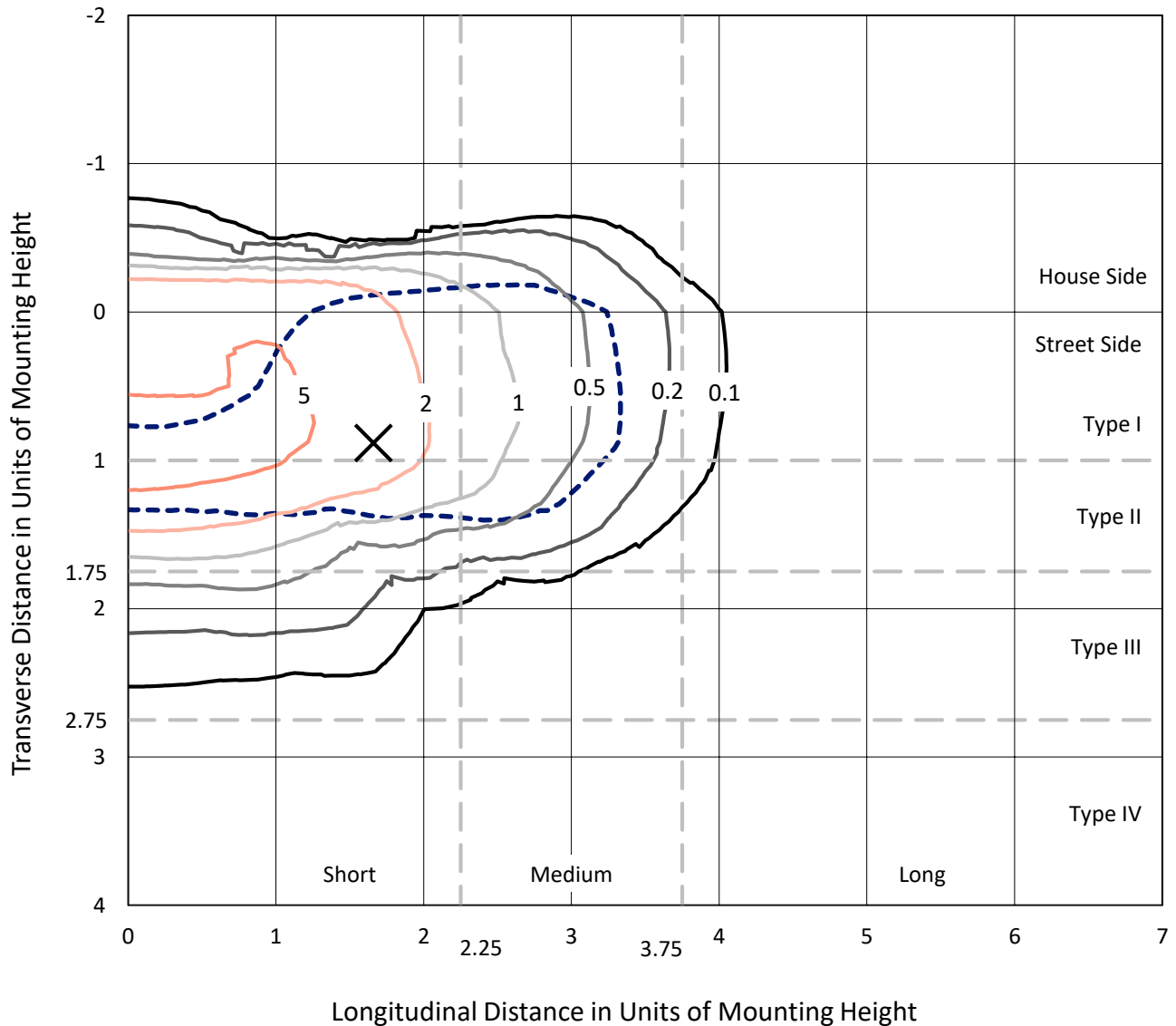


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

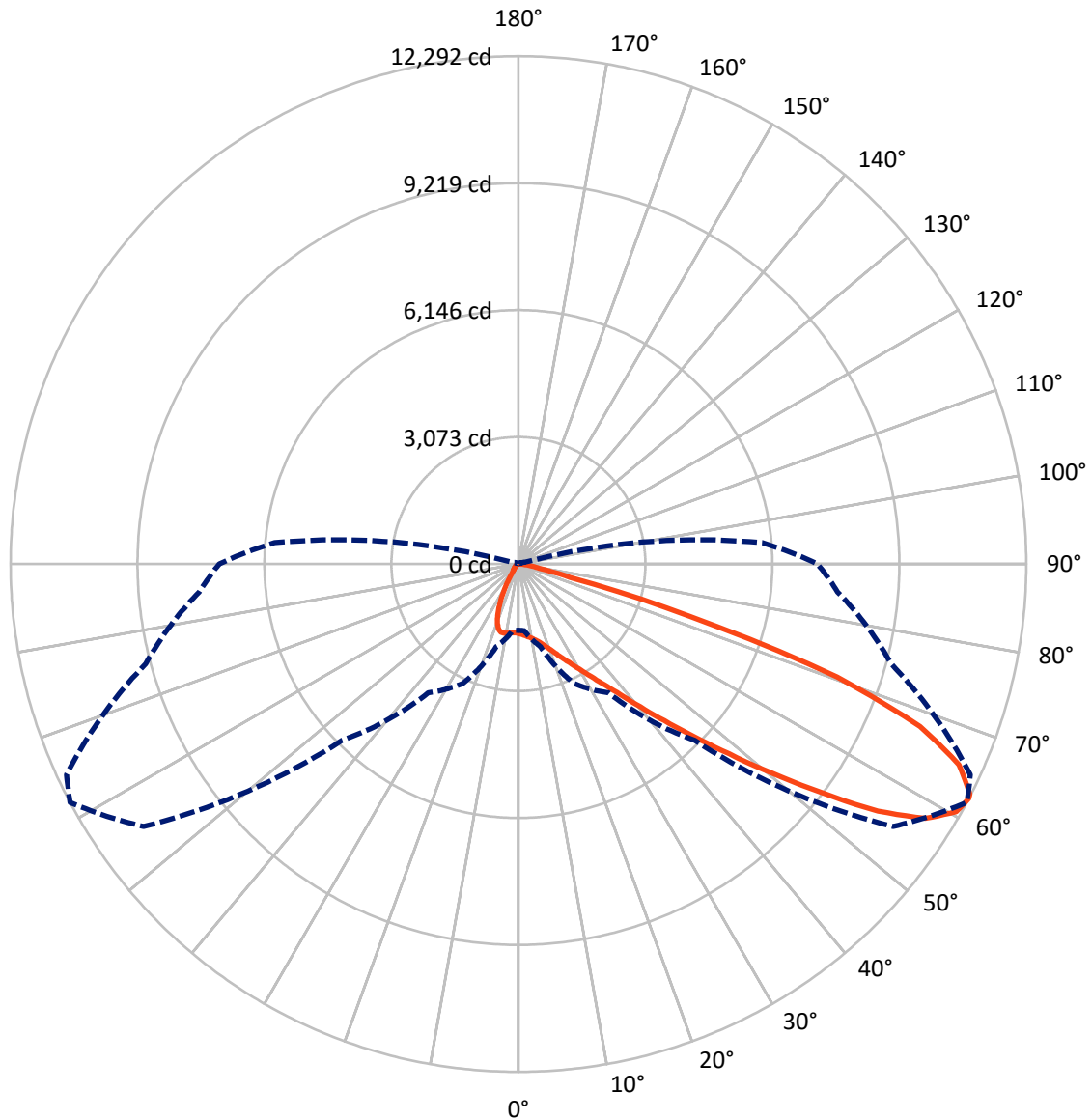


Based on 20 foot mounting height. Maximum calculated value = 8 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62-Deg Vertical



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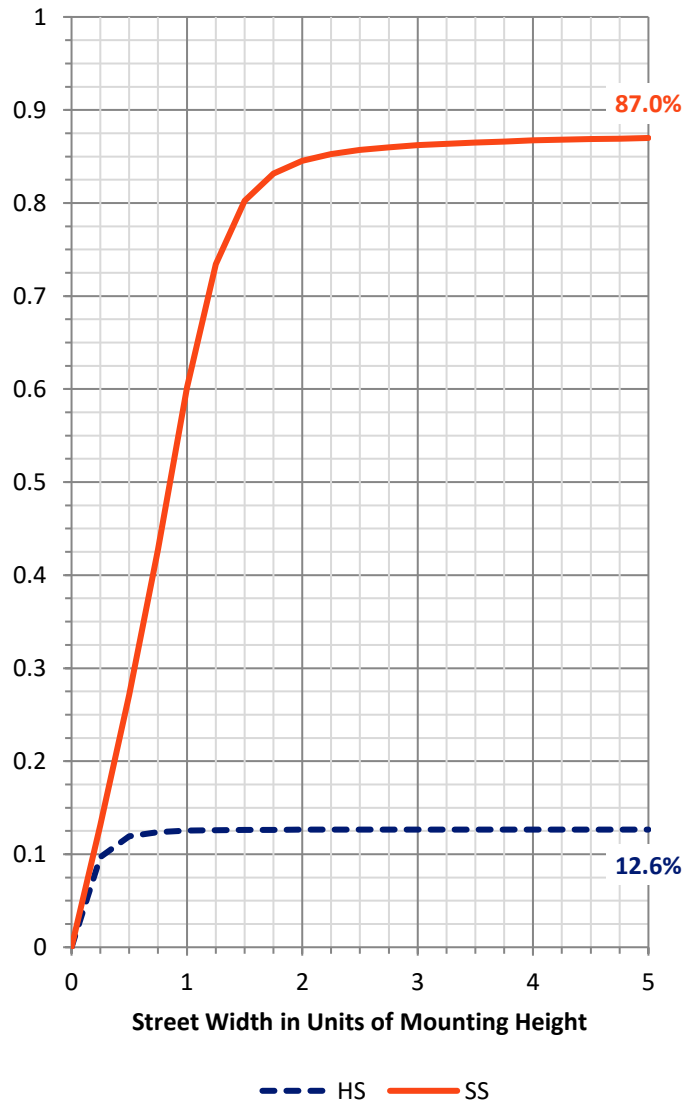
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1787.8   | 0.0    | 1787.8  |
|                    | % Fixture | 12.8     | 0.0    | 12.8    |
| <b>Street Side</b> | Lumens    | 12194.4  | 0.0    | 12194.4 |
|                    | % Fixture | 87.2     | 0.0    | 87.2    |
| <b>Total</b>       | Lumens    | 13982.2  | 0.0    | 13982.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 162.1   | 1.2       |
| 10°-20°   | 452.7   | 3.2       |
| 20°-30°   | 760.2   | 5.4       |
| 30°-40°   | 1457.2  | 10.4      |
| 40°-50°   | 2976.4  | 21.3      |
| 50°-60°   | 3938.9  | 28.2      |
| 60°-70°   | 3059.8  | 21.9      |
| 70°-80°   | 1104.5  | 7.9       |
| 80°-90°   | 70.4    | 0.5       |
| 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°    | 13982.2 | 100.0     |
| 0°-180°   | 13982.2 | 100.0     |

**Coefficient of Utilization**



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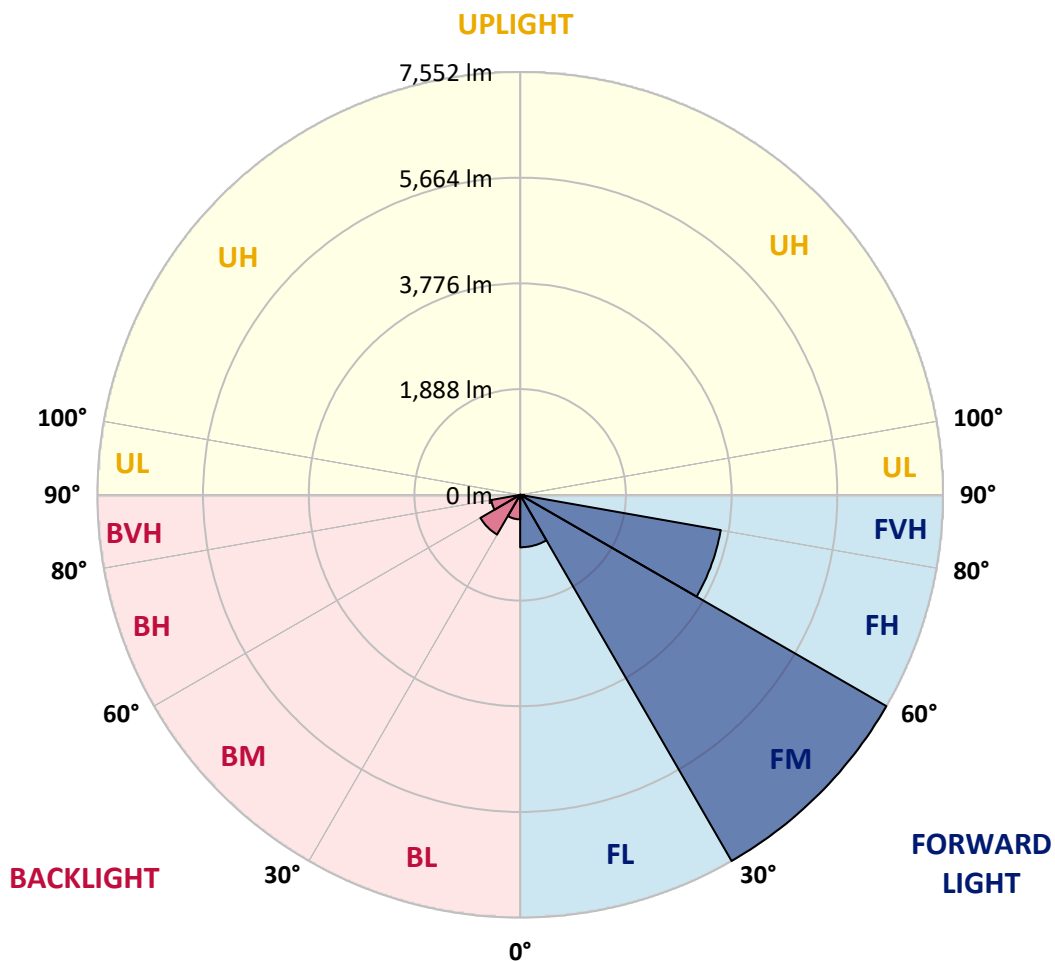
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 937.4  | 6.7       |                         |      |         |
| FM   | (30°-60°)   | 7551.8 | 54.0      |                         |      |         |
| FH   | (60°-80°)   | 3637.9 | 26.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 67.3   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 437.5  | 3.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 820.7  | 5.9       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 526.4  | 3.8       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 3.1    | 0.0       |                         |      | G0/10   |
| 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°     | 15°    | 25°    | 35°    | 45°     | 55°     | 62°     | 65°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|
| 0°    | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3  | 1684.3  | 1684.3  | 1684.3  | 1684.3  | 1684.3 |
| 2.5°  | 1729.0 | 1725.6 | 1722.1 | 1718.6 | 1718.6 | 1715.3  | 1711.8  | 1705.0  | 1698.1  | 1691.1  | 1687.7 |
| 5°    | 1760.0 | 1756.5 | 1753.1 | 1756.5 | 1753.1 | 1753.1  | 1749.7  | 1742.8  | 1736.0  | 1725.6  | 1715.3 |
| 7.5°  | 1784.0 | 1780.6 | 1777.1 | 1780.6 | 1784.0 | 1787.4  | 1791.0  | 1784.0  | 1780.6  | 1766.8  | 1756.5 |
| 10°   | 1814.9 | 1811.5 | 1808.1 | 1814.9 | 1814.9 | 1832.2  | 1835.5  | 1832.2  | 1828.7  | 1818.3  | 1801.2 |
| 12.5° | 1859.6 | 1863.1 | 1863.1 | 1869.9 | 1876.7 | 1897.5  | 1904.3  | 1894.0  | 1894.0  | 1880.2  | 1859.6 |
| 15°   | 1942.1 | 1942.1 | 1942.1 | 1949.1 | 1952.5 | 1980.0  | 1986.8  | 1976.5  | 1983.4  | 1959.4  | 1938.7 |
| 17.5° | 2021.1 | 2024.6 | 2031.4 | 2045.4 | 2045.4 | 2069.3  | 2083.1  | 2083.1  | 2096.9  | 2065.9  | 2038.4 |
| 20°   | 2100.2 | 2103.7 | 2114.0 | 2145.0 | 2145.0 | 2175.9  | 2199.9  | 2210.3  | 2224.1  | 2193.1  | 2145.0 |
| 22.5° | 2186.1 | 2186.1 | 2203.5 | 2251.5 | 2241.2 | 2303.1  | 2347.8  | 2365.0  | 2378.7  | 2337.4  | 2261.8 |
| 25°   | 2316.8 | 2303.1 | 2316.8 | 2361.6 | 2354.6 | 2440.5  | 2523.1  | 2540.2  | 2557.5  | 2509.3  | 2395.9 |
| 27.5° | 2564.3 | 2543.7 | 2495.6 | 2499.1 | 2499.1 | 2598.6  | 2715.5  | 2739.7  | 2749.9  | 2708.7  | 2567.7 |
| 30°   | 3059.3 | 3059.3 | 2880.5 | 2760.2 | 2681.3 | 2770.6  | 2935.5  | 2976.9  | 2990.5  | 2928.7  | 2743.1 |
| 32.5° | 3922.1 | 3922.1 | 3592.1 | 3286.2 | 2987.1 | 2987.1  | 3176.1  | 3251.9  | 3265.6  | 3193.4  | 2976.9 |
| 35°   | 5022.1 | 5015.1 | 4520.2 | 4100.9 | 3516.4 | 3296.5  | 3458.0  | 3585.2  | 3626.5  | 3530.2  | 3279.4 |
| 37.5° | 6190.8 | 6146.2 | 5613.2 | 5132.0 | 4331.2 | 3791.4  | 3839.5  | 4008.1  | 4045.8  | 3966.7  | 3671.2 |
| 40°   | 7139.5 | 7087.9 | 6658.2 | 6256.1 | 5383.1 | 4582.1  | 4389.6  | 4544.3  | 4588.9  | 4478.9  | 4138.6 |
| 42.5° | 7998.9 | 7871.7 | 7576.0 | 7287.3 | 6593.0 | 5950.2  | 5121.7  | 5183.6  | 5231.8  | 5114.9  | 4664.5 |
| 45°   | 8621.0 | 8425.2 | 8273.8 | 8184.5 | 7816.7 | 7452.2  | 6070.4  | 5946.7  | 5963.9  | 5819.6  | 5238.6 |
| 47.5° | 8638.2 | 8500.8 | 8514.5 | 8748.2 | 8899.5 | 8885.8  | 7304.5  | 6864.5  | 6799.2  | 6558.5  | 5850.5 |
| 50°   | 7813.3 | 7892.2 | 8143.2 | 8810.0 | 9628.3 | 10123.2 | 8772.3  | 7950.8  | 7754.8  | 7321.7  | 6459.0 |
| 52.5° | 6438.3 | 6561.9 | 7033.0 | 8157.0 | 9734.8 | 10937.9 | 10295.0 | 9191.6  | 8841.1  | 8078.0  | 6926.4 |
| 55°   | 5042.6 | 5049.6 | 5544.6 | 6689.1 | 9023.3 | 11085.7 | 11511.9 | 10556.3 | 10020.1 | 8651.9  | 7235.8 |
| 57.5° | 3468.4 | 3657.4 | 4286.4 | 5056.5 | 7417.9 | 10350.1 | 11969.0 | 11615.1 | 10924.1 | 9006.0  | 7452.2 |
| 60°   | 2272.2 | 2282.5 | 3014.6 | 3904.9 | 5049.6 | 8421.7  | 11690.6 | 12175.4 | 11656.2 | 9215.7  | 7600.1 |
| 62°   | 1601.9 | 1619.0 | 2072.7 | 3189.9 | 3805.2 | 6036.2  | 11075.4 | 12292.1 | 12068.8 | 9339.5  | 7754.8 |
| 62.5° | 1485.0 | 1498.7 | 1880.2 | 3011.2 | 3575.0 | 5413.9  | 10855.4 | 12264.6 | 12130.6 | 9380.7  | 7809.9 |
| 65°   | 1089.6 | 1089.6 | 1230.6 | 2069.3 | 2619.3 | 2925.2  | 9198.6  | 11718.2 | 12048.2 | 9710.7  | 8016.0 |
| 67.5° | 842.3  | 849.1  | 897.1  | 1275.2 | 1976.5 | 1773.8  | 5871.1  | 10487.6 | 11188.7 | 10198.8 | 8133.0 |
| 70°   | 725.3  | 721.9  | 756.3  | 845.7  | 1426.5 | 1179.0  | 2585.0  | 8184.5  | 9370.4  | 10075.1 | 8026.4 |
| 72.5° | 536.3  | 539.7  | 618.8  | 742.4  | 993.4  | 766.6   | 1168.8  | 4344.9  | 6077.4  | 7885.4  | 6878.3 |
| 75°   | 343.7  | 347.1  | 436.5  | 584.3  | 715.1  | 501.9   | 673.6   | 1296.0  | 2488.7  | 4372.4  | 4207.4 |
| 77.5° | 230.3  | 237.2  | 285.3  | 409.1  | 625.6  | 312.8   | 422.8   | 543.1   | 749.4   | 1639.6  | 1509.1 |
| 80°   | 154.7  | 154.7  | 182.1  | 275.1  | 395.3  | 261.2   | 226.9   | 360.8   | 388.4   | 508.7   | 254.4  |
| 82.5° | 103.1  | 103.1  | 120.4  | 182.1  | 257.9  | 233.7   | 137.5   | 195.9   | 226.9   | 254.4   | 89.4   |
| 85°   | 61.9   | 61.9   | 82.6   | 113.5  | 168.4  | 130.7   | 89.4    | 110.0   | 116.9   | 161.5   | 48.1   |
| 87.5° | 37.8   | 34.3   | 54.9   | 79.1   | 89.4   | 79.1    | 58.4    | 58.4    | 61.9    | 89.4    | 24.1   |
| 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°    | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3 | 1684.3 |
| 2.5°  | 1680.9 | 1677.5 | 1674.0 | 1667.2 | 1656.8 | 1649.9 | 1643.1 | 1636.3 | 1629.3 | 1629.3 | 1639.6 |
| 5°    | 1711.8 | 1701.5 | 1687.7 | 1674.0 | 1653.4 | 1639.6 | 1629.3 | 1615.6 | 1608.8 | 1608.8 | 1612.2 |
| 7.5°  | 1749.7 | 1739.4 | 1715.3 | 1691.1 | 1660.2 | 1636.3 | 1612.2 | 1581.1 | 1557.1 | 1546.8 | 1557.1 |
| 10°   | 1791.0 | 1777.1 | 1742.8 | 1705.0 | 1670.6 | 1608.8 | 1529.6 | 1433.4 | 1351.0 | 1313.1 | 1330.3 |
| 12.5° | 1842.5 | 1825.3 | 1784.0 | 1732.4 | 1653.4 | 1502.1 | 1306.2 | 1082.7 | 941.9  | 876.6  | 890.3  |
| 15°   | 1918.2 | 1894.0 | 1835.5 | 1756.5 | 1581.1 | 1254.7 | 935.0  | 677.1  | 546.6  | 491.6  | 498.4  |
| 17.5° | 2007.4 | 1976.5 | 1897.5 | 1749.7 | 1395.5 | 904.1  | 556.9  | 395.3  | 340.3  | 326.5  | 326.5  |
| 20°   | 2103.7 | 2062.5 | 1959.4 | 1698.1 | 1113.7 | 567.2  | 347.1  | 302.5  | 281.9  | 271.6  | 271.6  |
| 22.5° | 2203.5 | 2148.3 | 2010.9 | 1577.8 | 794.0  | 354.0  | 285.3  | 254.4  | 230.3  | 219.9  | 219.9  |
| 25°   | 2323.6 | 2251.5 | 2062.5 | 1368.1 | 505.2  | 285.3  | 244.1  | 213.1  | 189.1  | 175.3  | 178.8  |
| 27.5° | 2464.6 | 2371.9 | 2107.2 | 1106.8 | 326.5  | 247.6  | 202.7  | 171.8  | 151.3  | 144.4  | 144.4  |
| 30°   | 2612.5 | 2502.5 | 2117.5 | 828.3  | 264.7  | 213.1  | 168.4  | 140.9  | 127.2  | 120.4  | 120.4  |
| 32.5° | 2815.3 | 2670.9 | 2086.6 | 550.0  | 223.4  | 178.8  | 140.9  | 116.9  | 106.5  | 103.1  | 103.1  |
| 35°   | 3083.3 | 2890.8 | 2014.3 | 340.3  | 189.1  | 147.9  | 116.9  | 103.1  | 92.9   | 89.4   | 89.4   |
| 37.5° | 3423.7 | 3196.8 | 1887.2 | 233.7  | 161.5  | 120.4  | 99.7   | 89.4   | 82.6   | 79.1   | 79.1   |
| 40°   | 3877.4 | 3568.1 | 1722.1 | 202.7  | 137.5  | 103.1  | 86.0   | 79.1   | 72.1   | 72.1   | 72.1   |
| 42.5° | 4358.7 | 4018.4 | 1509.1 | 178.8  | 116.9  | 89.4   | 75.6   | 68.7   | 65.2   | 61.9   | 61.9   |
| 45°   | 4884.5 | 4478.9 | 1244.3 | 158.1  | 99.7   | 79.1   | 68.7   | 58.4   | 54.9   | 54.9   | 54.9   |
| 47.5° | 5407.1 | 4953.3 | 955.5  | 137.5  | 86.0   | 68.7   | 58.4   | 51.6   | 48.1   | 44.6   | 44.6   |
| 50°   | 5943.2 | 5383.1 | 701.2  | 120.4  | 75.6   | 61.9   | 51.6   | 44.6   | 37.8   | 34.3   | 34.3   |
| 52.5° | 6331.8 | 5640.7 | 512.2  | 103.1  | 65.2   | 51.6   | 41.2   | 34.3   | 27.5   | 24.1   | 24.1   |
| 55°   | 6617.1 | 5798.9 | 374.7  | 86.0   | 58.4   | 44.6   | 34.3   | 27.5   | 20.7   | 20.7   | 17.2   |
| 57.5° | 6840.5 | 5874.6 | 281.9  | 75.6   | 51.6   | 37.8   | 27.5   | 20.7   | 17.2   | 13.7   | 13.7   |
| 60°   | 7012.3 | 5878.0 | 209.7  | 61.9   | 44.6   | 30.9   | 20.7   | 13.7   | 10.3   | 10.3   | 10.3   |
| 62°   | 7239.3 | 5922.6 | 171.8  | 51.6   | 41.2   | 27.5   | 17.2   | 10.3   | 6.8    | 3.5    | 3.5    |
| 62.5° | 7304.5 | 5939.9 | 165.0  | 51.6   | 37.8   | 24.1   | 13.7   | 10.3   | 6.8    | 3.5    | 3.5    |
| 65°   | 7606.9 | 5970.9 | 127.2  | 41.2   | 30.9   | 20.7   | 10.3   | 6.8    | 0.0    | 0.0    | 0.0    |
| 67.5° | 7882.0 | 5922.6 | 92.9   | 30.9   | 24.1   | 13.7   | 10.3   | 3.5    | 0.0    | 0.0    | 0.0    |
| 70°   | 7854.5 | 5592.7 | 65.2   | 20.7   | 17.2   | 10.3   | 6.8    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 6472.6 | 4186.8 | 44.6   | 17.2   | 10.3   | 6.8    | 3.5    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 3908.3 | 1832.2 | 30.9   | 10.3   | 10.3   | 6.8    | 3.5    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 1282.2 | 663.4  | 20.7   | 6.8    | 6.8    | 3.5    | 3.5    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 209.7  | 110.0  | 10.3   | 6.8    | 6.8    | 3.5    | 3.5    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 65.2   | 27.5   | 6.8    | 6.8    | 3.5    | 3.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 24.1   | 10.3   | 6.8    | 6.8    | 3.5    | 3.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 10.3   | 6.8    | 6.8    | 6.8    | 3.5    | 3.5    | 0.0    | 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)