

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: P836853

Luminaire Tested: **ARCH3-80-740-U-T4W**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836853  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-80-740-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 650mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 13421 lumens  
Efficiency: N/A  
Efficacy: 163.9 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

Input Watts (W): 81.9  
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

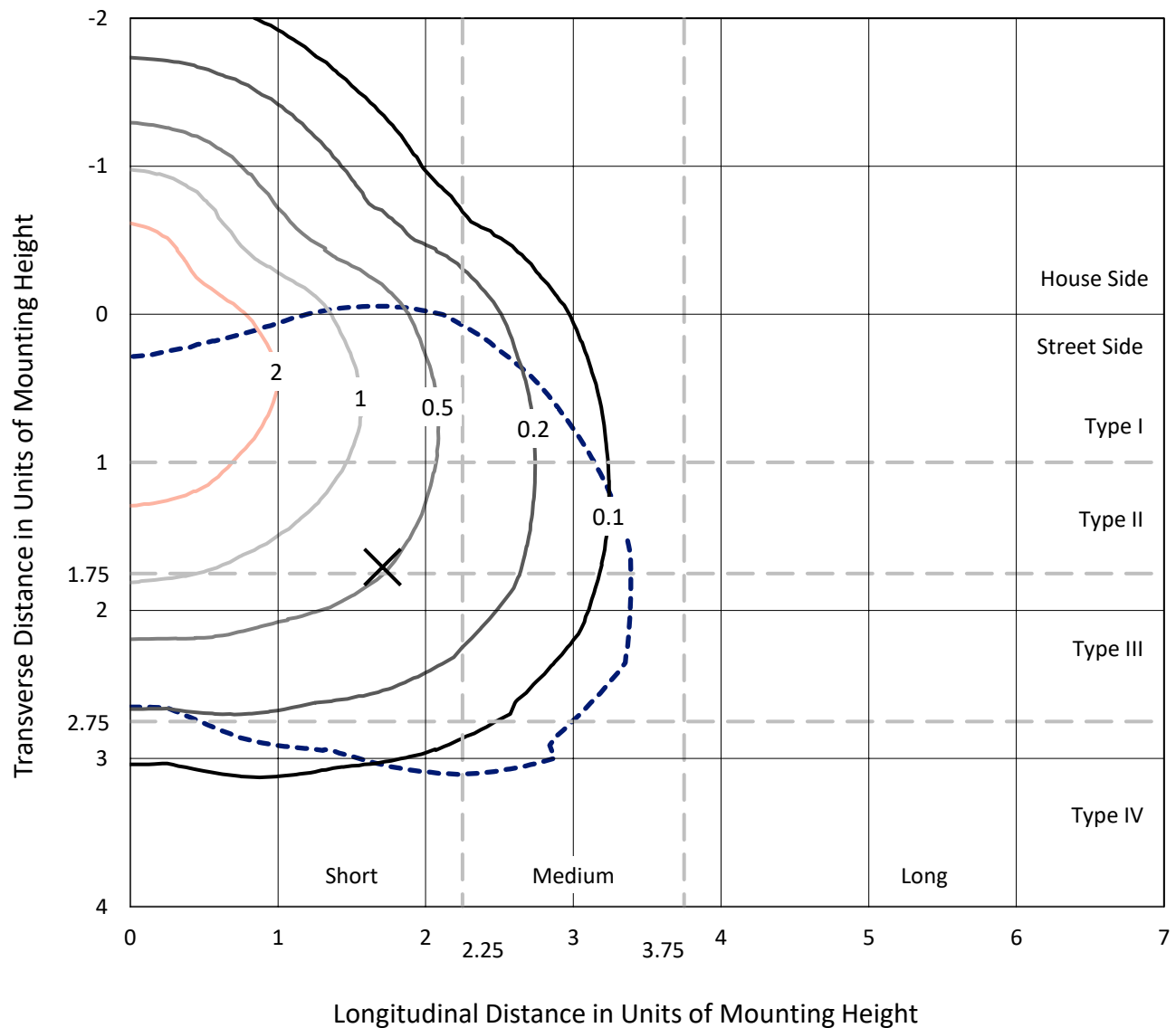


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## Iso-Footcandle Lines of Horizontal Illumination

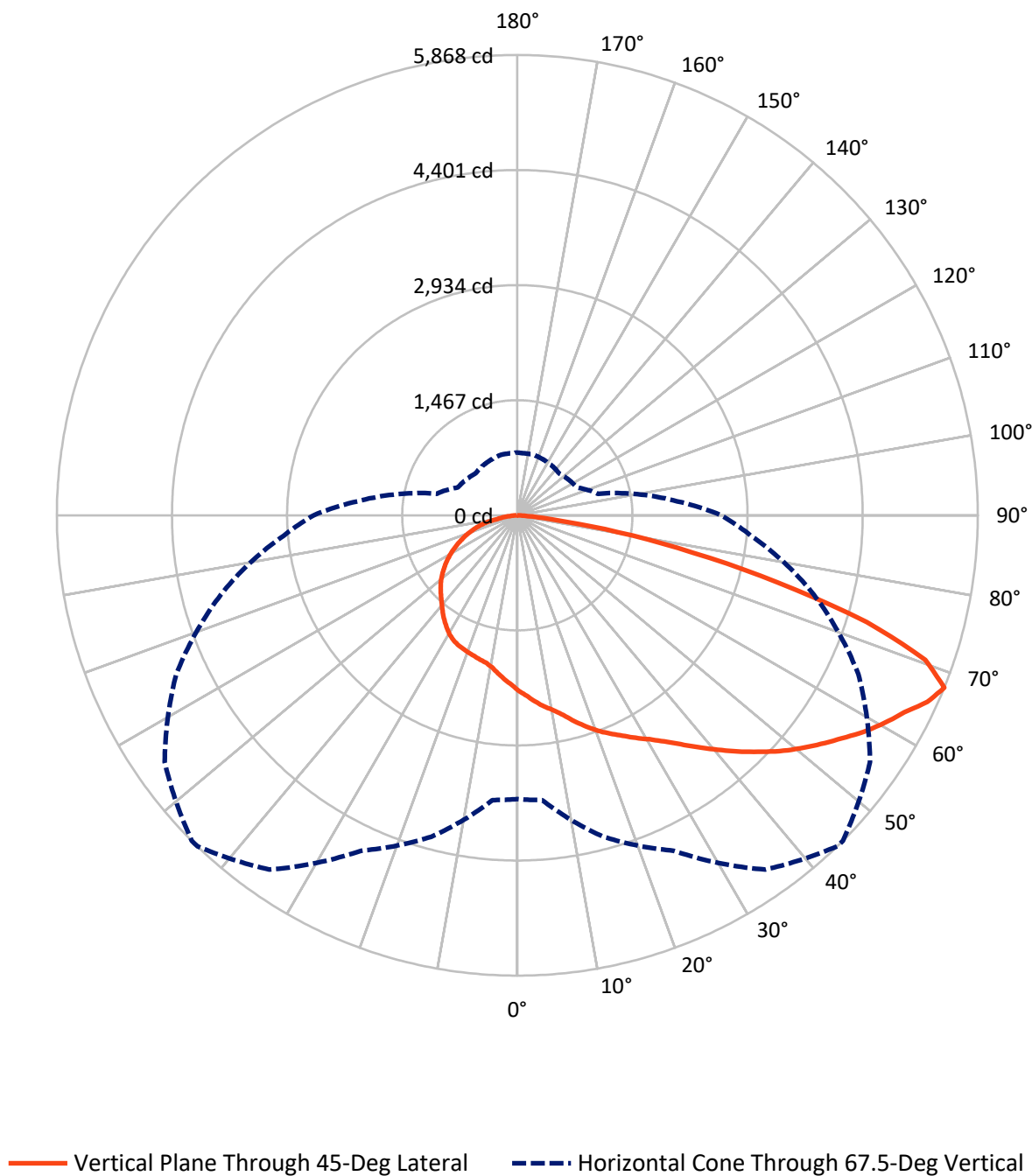
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc  
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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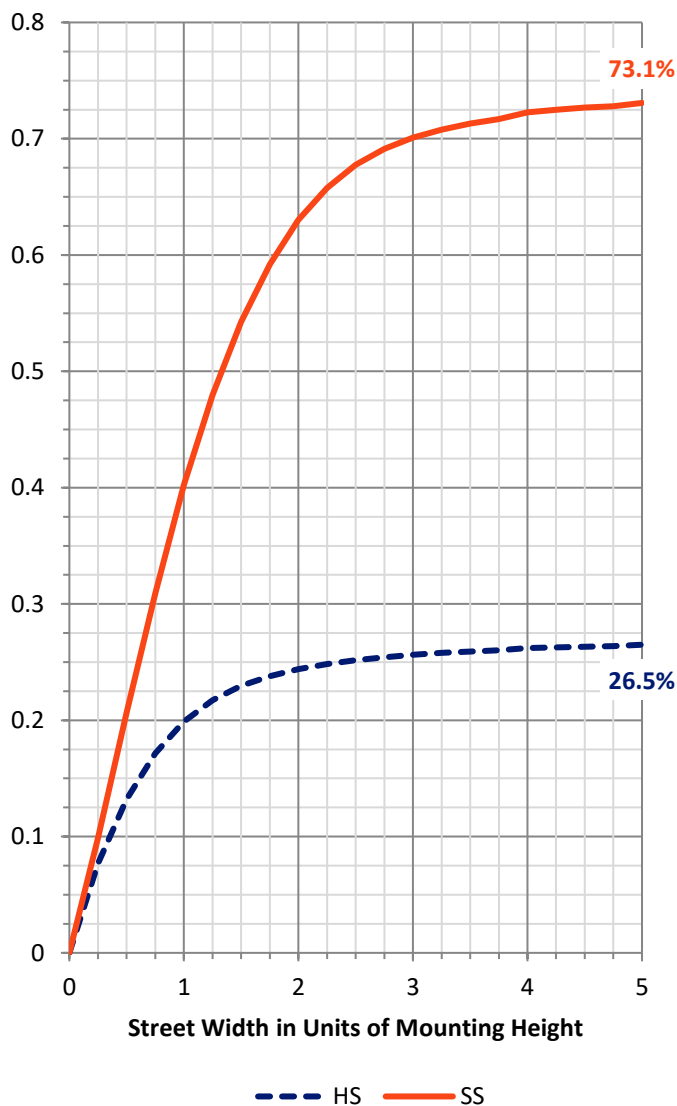
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3585.4   | 0.0    | 3585.4  |
|                    | % Fixture | 26.7     | 0.0    | 26.7    |
| <b>Street Side</b> | Lumens    | 9835.6   | 0.0    | 9835.6  |
|                    | % Fixture | 73.3     | 0.0    | 73.3    |
| <b>Total</b>       | Lumens    | 13421.0  | 0.0    | 13421.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 214.3   | 1.6       |
| 10°-20°   | 662.0   | 4.9       |
| 20°-30°   | 1142.8  | 8.5       |
| 30°-40°   | 1685.2  | 12.6      |
| 40°-50°   | 2283.1  | 17.0      |
| 50°-60°   | 2790.4  | 20.8      |
| 60°-70°   | 2878.0  | 21.4      |
| 70°-80°   | 1576.3  | 11.7      |
| 80°-90°   | 188.9   | 1.4       |
| 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°    | 13421.0 | 100.0     |
| 0°-180°   | 13421.0 | 100.0     |

**Coefficient of Utilization**



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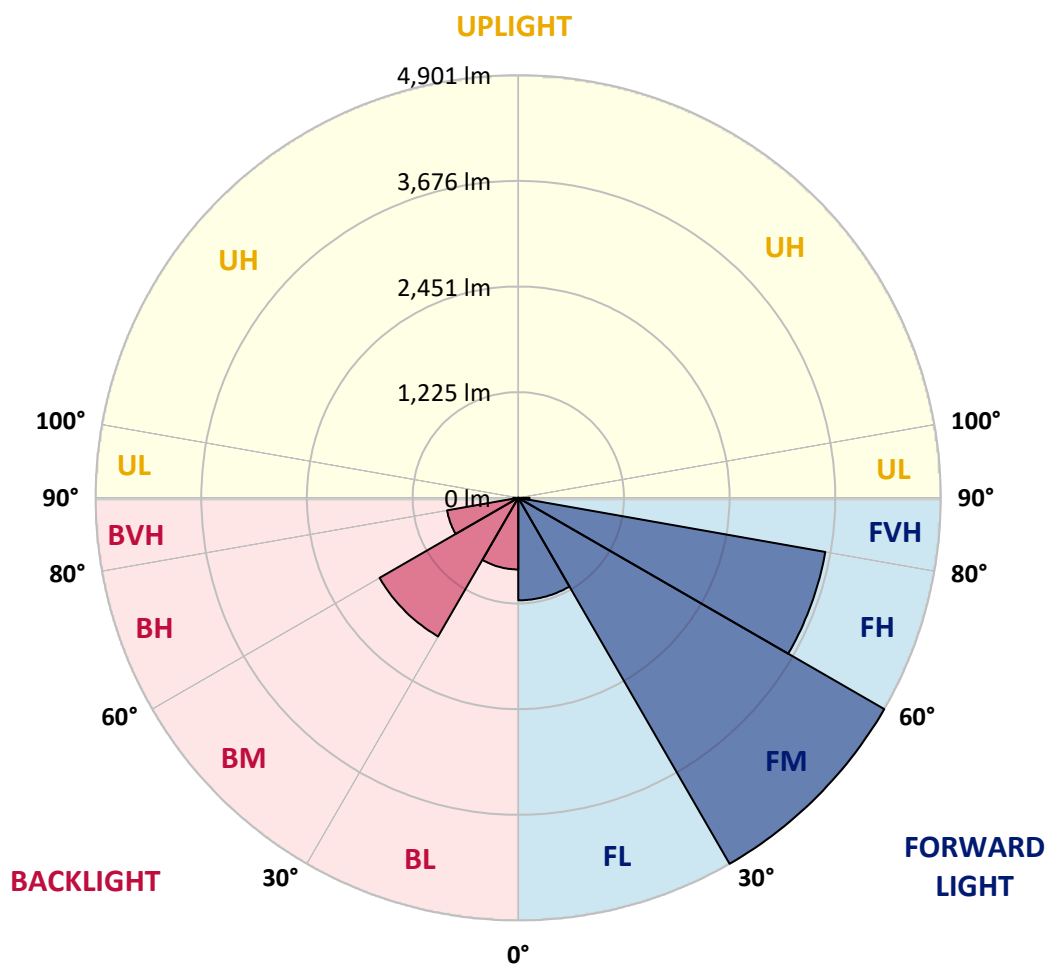
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1188.1 | 8.9       |                         |      |         |
| FM   | (30°-60°)   | 4901.5 | 36.5      |                         |      |         |
| FH   | (60°-80°)   | 3615.8 | 26.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 130.2  | 1.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 831.0  | 6.2       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1857.2 | 13.8      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 838.5  | 6.2       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 58.8   | 0.4       |                         |      | 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 IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 44°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 |
| 2.5°  | 2336.4 | 2334.4 | 2338.4 | 2324.1 | 2305.8 | 2303.7 | 2303.7 | 2291.5 | 2277.2 | 2248.6 | 2226.1 |
| 5°    | 2446.7 | 2442.6 | 2444.6 | 2424.2 | 2399.7 | 2387.5 | 2385.4 | 2358.9 | 2326.2 | 2281.3 | 2240.4 |
| 7.5°  | 2548.8 | 2544.7 | 2542.7 | 2520.2 | 2483.4 | 2463.0 | 2461.0 | 2422.2 | 2383.4 | 2313.9 | 2254.7 |
| 10°   | 2644.8 | 2640.7 | 2636.6 | 2606.0 | 2561.1 | 2530.4 | 2526.3 | 2477.3 | 2428.3 | 2342.5 | 2267.0 |
| 12.5° | 2767.3 | 2759.2 | 2755.1 | 2718.3 | 2653.0 | 2620.3 | 2614.2 | 2548.8 | 2487.5 | 2383.4 | 2291.5 |
| 15°   | 2896.0 | 2889.9 | 2883.7 | 2849.0 | 2775.5 | 2732.6 | 2722.4 | 2640.7 | 2557.0 | 2436.5 | 2328.2 |
| 17.5° | 2992.0 | 2985.9 | 2985.9 | 2955.2 | 2887.8 | 2838.8 | 2830.6 | 2732.6 | 2628.4 | 2485.5 | 2356.8 |
| 20°   | 3051.2 | 3045.1 | 3051.2 | 3032.8 | 2981.8 | 2940.9 | 2932.8 | 2824.5 | 2699.9 | 2530.4 | 2381.3 |
| 22.5° | 3094.1 | 3088.0 | 3098.2 | 3090.0 | 3053.2 | 3028.7 | 3022.6 | 2916.4 | 2773.5 | 2577.4 | 2405.8 |
| 25°   | 3169.7 | 3169.7 | 3169.7 | 3155.4 | 3120.6 | 3112.5 | 3112.5 | 3020.6 | 2867.4 | 2638.7 | 2442.6 |
| 27.5° | 3320.8 | 3312.6 | 3302.4 | 3261.6 | 3202.3 | 3200.3 | 3212.5 | 3126.8 | 2975.6 | 2718.3 | 2487.5 |
| 30°   | 3543.4 | 3539.3 | 3500.5 | 3414.7 | 3314.7 | 3304.5 | 3312.6 | 3241.1 | 3092.1 | 2802.0 | 2538.6 |
| 32.5° | 3831.4 | 3817.1 | 3737.4 | 3608.8 | 3465.8 | 3418.8 | 3435.2 | 3359.6 | 3214.6 | 2887.8 | 2587.6 |
| 35°   | 4035.6 | 4039.7 | 3982.5 | 3866.1 | 3696.6 | 3572.0 | 3584.2 | 3492.3 | 3347.3 | 2983.8 | 2648.9 |
| 37.5° | 4270.5 | 4284.8 | 4199.0 | 4111.2 | 3953.9 | 3741.5 | 3753.8 | 3629.2 | 3480.1 | 3104.3 | 2714.2 |
| 40°   | 4595.2 | 4566.6 | 4421.6 | 4317.4 | 4143.8 | 3919.2 | 3929.4 | 3782.4 | 3633.3 | 3218.7 | 2789.8 |
| 42.5° | 4866.8 | 4815.8 | 4640.1 | 4507.4 | 4299.1 | 4107.1 | 4117.3 | 3947.8 | 3788.5 | 3345.3 | 2873.5 |
| 45°   | 5256.9 | 5116.0 | 4862.7 | 4797.4 | 4458.4 | 4290.9 | 4301.1 | 4123.4 | 3951.9 | 3480.1 | 2963.4 |
| 47.5° | 5483.6 | 5258.9 | 5097.6 | 5062.9 | 4634.0 | 4480.8 | 4493.1 | 4309.3 | 4127.5 | 3633.3 | 3057.3 |
| 50°   | 5469.3 | 5324.3 | 5277.3 | 5191.5 | 4789.2 | 4658.5 | 4670.8 | 4501.2 | 4305.2 | 3784.4 | 3147.2 |
| 52.5° | 5375.4 | 5401.9 | 5377.4 | 5234.4 | 4944.4 | 4830.1 | 4844.4 | 4691.2 | 4486.9 | 3925.3 | 3230.9 |
| 55°   | 5520.4 | 5538.7 | 5491.8 | 5303.9 | 5116.0 | 5001.6 | 5017.9 | 4891.3 | 4666.7 | 4049.9 | 3302.4 |
| 57.5° | 5694.0 | 5628.6 | 5581.6 | 5426.4 | 5293.7 | 5187.5 | 5205.8 | 5095.6 | 4821.9 | 4150.0 | 3357.6 |
| 60°   | 5685.8 | 5548.9 | 5595.9 | 5434.6 | 5414.2 | 5359.0 | 5375.4 | 5263.0 | 4940.3 | 4223.5 | 3380.0 |
| 62.5° | 5267.1 | 5193.6 | 5430.5 | 5375.4 | 5512.2 | 5512.2 | 5532.6 | 5365.1 | 5011.8 | 4254.1 | 3367.8 |
| 65°   | 4540.0 | 4544.1 | 4960.8 | 5189.5 | 5628.6 | 5722.5 | 5738.9 | 5428.5 | 4971.0 | 4164.3 | 3253.4 |
| 67.5° | 3616.9 | 3643.5 | 4241.9 | 4717.7 | 5512.2 | 5865.5 | 5867.5 | 5485.6 | 4795.3 | 3911.0 | 2987.9 |
| 70°   | 2646.8 | 2667.3 | 3373.9 | 3951.9 | 4962.8 | 5548.9 | 5516.3 | 5324.3 | 4413.4 | 3469.9 | 2573.3 |
| 72.5° | 1789.1 | 1807.4 | 2534.5 | 3034.9 | 4072.4 | 4725.9 | 4654.4 | 4705.5 | 3761.9 | 2851.1 | 2068.9 |
| 75°   | 1202.9 | 1225.4 | 1803.4 | 2171.0 | 2996.1 | 3588.3 | 3429.0 | 3563.8 | 2910.3 | 2158.7 | 1509.3 |
| 77.5° | 757.7  | 772.0  | 1145.7 | 1423.5 | 2046.4 | 2442.6 | 2283.3 | 2285.3 | 1676.7 | 1162.1 | 810.8  |
| 80°   | 482.0  | 486.1  | 694.4  | 821.0  | 1184.5 | 1468.4 | 1298.9 | 1055.9 | 755.7  | 616.8  | 484.0  |
| 82.5° | 279.8  | 273.7  | 414.6  | 463.6  | 563.7  | 557.5  | 461.6  | 437.1  | 330.9  | 308.4  | 247.1  |
| 85°   | 112.3  | 104.2  | 181.8  | 169.5  | 171.6  | 181.8  | 134.8  | 134.8  | 108.2  | 83.7   | 61.3   |
| 87.5° | 22.5   | 22.5   | 24.5   | 22.5   | 22.5   | 24.5   | 18.4   | 18.4   | 16.3   | 16.3   | 16.3   |
| 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°    | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 | 2238.4 |
| 2.5°  | 2222.0 | 2217.9 | 2207.7 | 2181.2 | 2166.9 | 2158.7 | 2146.5 | 2142.4 | 2140.3 | 2142.4 | 2148.5 |
| 5°    | 2228.2 | 2213.9 | 2185.3 | 2142.4 | 2113.8 | 2095.4 | 2075.0 | 2066.8 | 2060.7 | 2060.7 | 2066.8 |
| 7.5°  | 2232.2 | 2209.8 | 2160.8 | 2097.4 | 2056.6 | 2028.0 | 2003.5 | 1993.3 | 1991.2 | 1997.4 | 1999.4 |
| 10°   | 2234.3 | 2201.6 | 2132.2 | 2052.5 | 1999.4 | 1962.7 | 1938.1 | 1932.0 | 1938.1 | 1950.4 | 1952.4 |
| 12.5° | 2248.6 | 2203.6 | 2115.8 | 2021.9 | 1958.6 | 1921.8 | 1903.4 | 1903.4 | 1919.8 | 1942.2 | 1944.3 |
| 15°   | 2273.1 | 2217.9 | 2107.7 | 1997.4 | 1932.0 | 1899.3 | 1893.2 | 1903.4 | 1927.9 | 1962.7 | 1966.7 |
| 17.5° | 2291.5 | 2226.1 | 2089.3 | 1964.7 | 1897.3 | 1876.9 | 1887.1 | 1911.6 | 1946.3 | 1993.3 | 1997.4 |
| 20°   | 2303.7 | 2226.1 | 2062.7 | 1925.9 | 1862.6 | 1858.5 | 1887.1 | 1925.9 | 1962.7 | 2017.8 | 2023.9 |
| 22.5° | 2316.0 | 2222.0 | 2032.1 | 1878.9 | 1823.8 | 1836.0 | 1889.1 | 1938.1 | 1974.9 | 2034.1 | 2044.3 |
| 25°   | 2338.4 | 2228.2 | 2001.5 | 1831.9 | 1782.9 | 1817.7 | 1887.1 | 1946.3 | 1985.1 | 2046.4 | 2062.7 |
| 27.5° | 2369.1 | 2242.5 | 1979.0 | 1789.1 | 1742.1 | 1789.1 | 1872.8 | 1944.3 | 1985.1 | 2044.3 | 2062.7 |
| 30°   | 2401.8 | 2258.8 | 1952.4 | 1742.1 | 1695.1 | 1748.2 | 1842.2 | 1921.8 | 1968.8 | 2023.9 | 2046.4 |
| 32.5° | 2436.5 | 2277.2 | 1930.0 | 1691.0 | 1637.9 | 1693.1 | 1797.2 | 1887.1 | 1938.1 | 1989.2 | 2013.7 |
| 35°   | 2483.4 | 2309.8 | 1917.7 | 1650.2 | 1586.9 | 1635.9 | 1740.0 | 1842.2 | 1897.3 | 1944.3 | 1972.9 |
| 37.5° | 2540.6 | 2350.7 | 1911.6 | 1609.3 | 1531.7 | 1572.6 | 1678.8 | 1787.0 | 1846.2 | 1885.0 | 1911.6 |
| 40°   | 2606.0 | 2401.8 | 1909.6 | 1570.5 | 1476.6 | 1507.2 | 1615.5 | 1723.7 | 1780.9 | 1811.5 | 1834.0 |
| 42.5° | 2679.5 | 2458.9 | 1905.5 | 1531.7 | 1421.4 | 1446.0 | 1554.2 | 1660.4 | 1709.4 | 1736.0 | 1756.4 |
| 45°   | 2757.1 | 2516.1 | 1897.3 | 1484.8 | 1362.2 | 1390.8 | 1490.9 | 1584.8 | 1635.9 | 1658.4 | 1680.8 |
| 47.5° | 2834.7 | 2573.3 | 1881.0 | 1431.7 | 1309.1 | 1335.7 | 1423.5 | 1505.2 | 1546.0 | 1566.4 | 1588.9 |
| 50°   | 2910.3 | 2624.4 | 1842.2 | 1370.4 | 1254.0 | 1278.5 | 1345.9 | 1401.0 | 1431.7 | 1448.0 | 1470.5 |
| 52.5° | 2977.7 | 2659.1 | 1787.0 | 1298.9 | 1198.8 | 1211.1 | 1256.0 | 1303.0 | 1327.5 | 1329.5 | 1350.0 |
| 55°   | 3034.9 | 2677.5 | 1707.4 | 1225.4 | 1139.6 | 1141.6 | 1166.2 | 1202.9 | 1213.1 | 1205.0 | 1219.3 |
| 57.5° | 3067.5 | 2667.3 | 1619.5 | 1149.8 | 1078.3 | 1070.2 | 1088.5 | 1106.9 | 1109.0 | 1088.5 | 1102.8 |
| 60°   | 3075.7 | 2620.3 | 1505.2 | 1074.3 | 1017.1 | 994.6  | 1000.7 | 996.6  | 992.6  | 984.4  | 996.6  |
| 62.5° | 3034.9 | 2520.2 | 1378.6 | 1000.7 | 951.7  | 917.0  | 915.0  | 912.9  | 919.0  | 921.1  | 923.1  |
| 65°   | 2885.8 | 2332.3 | 1227.4 | 925.2  | 882.3  | 835.3  | 833.3  | 857.8  | 865.9  | 853.7  | 857.8  |
| 67.5° | 2597.8 | 2044.3 | 1062.0 | 837.3  | 794.5  | 753.6  | 769.9  | 784.2  | 798.5  | 794.5  | 798.5  |
| 70°   | 2189.4 | 1678.8 | 910.9  | 739.3  | 698.5  | 676.0  | 694.4  | 706.6  | 708.7  | 704.6  | 708.7  |
| 72.5° | 1721.7 | 1311.2 | 769.9  | 639.2  | 602.5  | 592.3  | 614.7  | 624.9  | 643.3  | 651.5  | 653.5  |
| 75°   | 1243.8 | 968.1  | 631.1  | 531.0  | 500.4  | 500.4  | 520.8  | 539.2  | 555.5  | 545.3  | 539.2  |
| 77.5° | 694.4  | 578.0  | 453.4  | 365.6  | 371.7  | 400.3  | 408.5  | 428.9  | 445.2  | 443.2  | 439.1  |
| 80°   | 420.7  | 361.5  | 306.3  | 236.9  | 234.9  | 257.3  | 310.4  | 345.1  | 353.3  | 334.9  | 332.9  |
| 82.5° | 218.5  | 189.9  | 163.4  | 132.7  | 147.0  | 171.6  | 179.7  | 216.5  | 238.9  | 230.8  | 241.0  |
| 85°   | 55.1   | 53.1   | 59.2   | 61.3   | 75.6   | 83.7   | 91.9   | 108.2  | 71.5   | 34.7   | 34.7   |
| 87.5° | 16.3   | 16.3   | 20.4   | 20.4   | 26.5   | 32.7   | 30.6   | 30.6   | 16.3   | 2.0    | 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)