

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: P841437

Luminaire Tested: **ARCH4-180-722-U-T3-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841437  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-180-722-U-T3-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 1455mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 16922 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G3

Input Watts (W): 180  
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



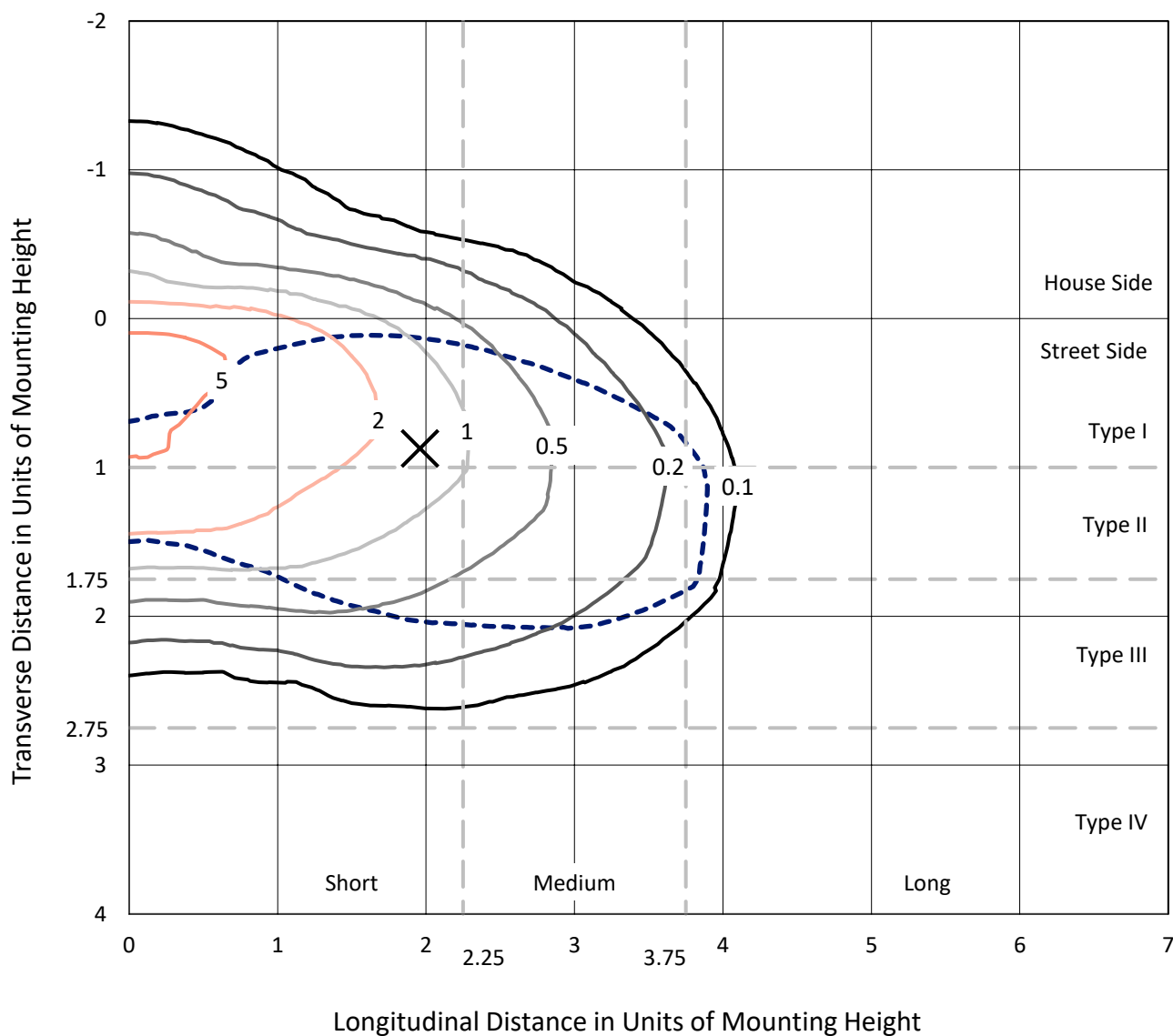
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

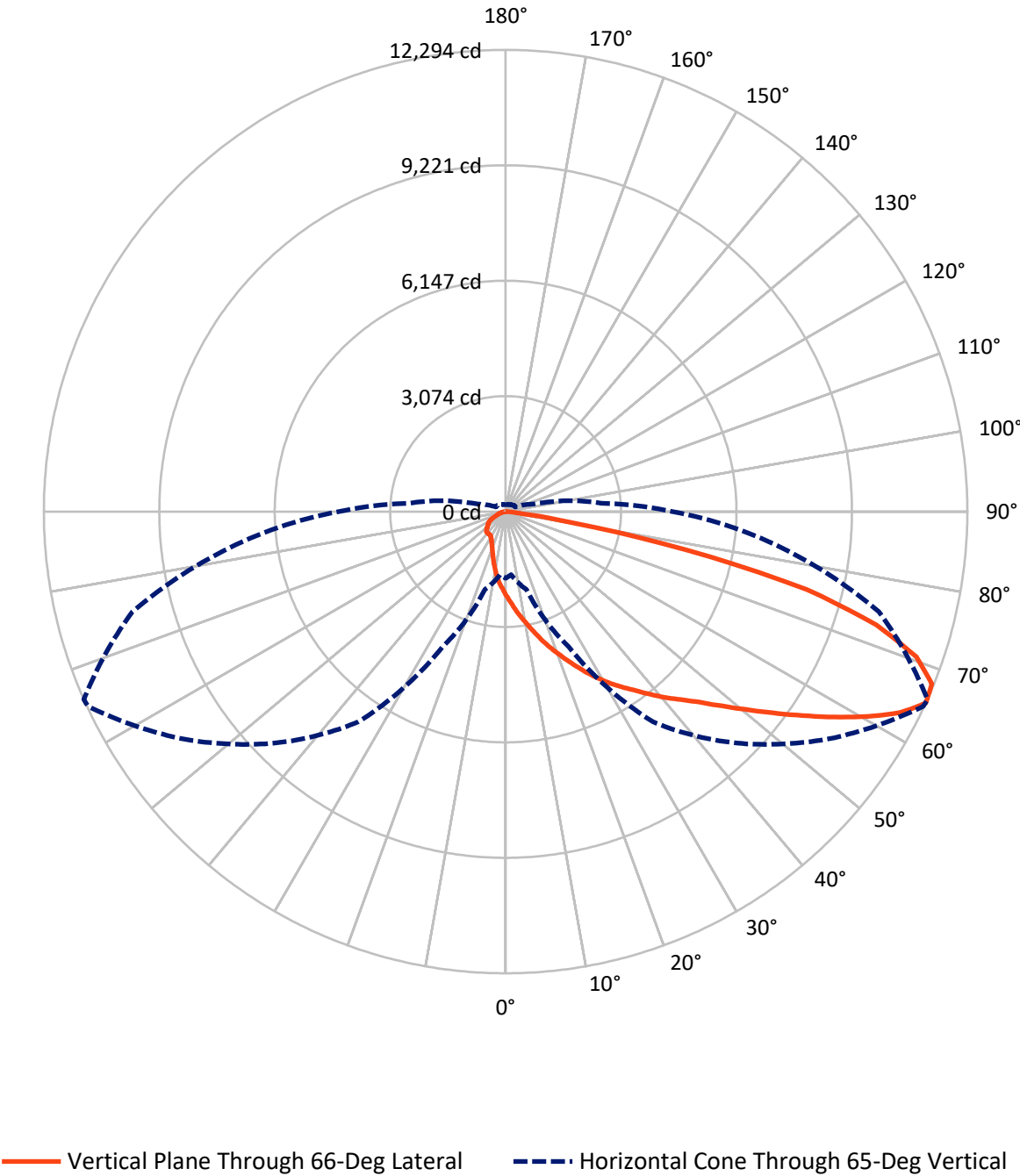


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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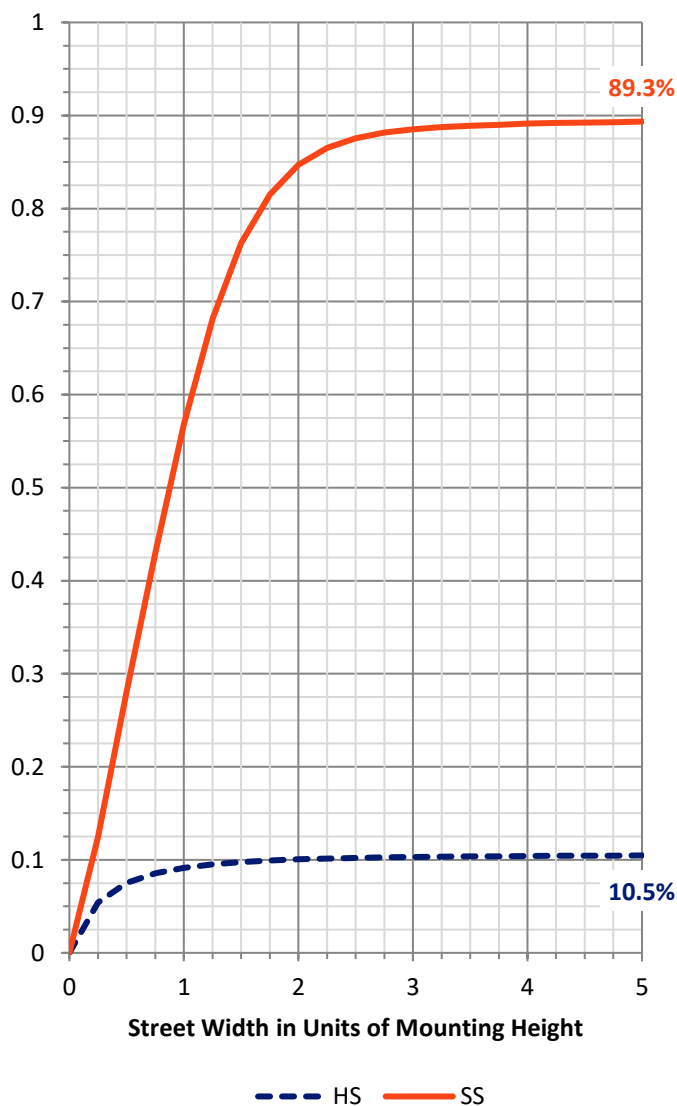
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1789.9   | 0.0    | 1789.9  |
|                    | % Fixture | 10.6     | 0.0    | 10.6    |
| <b>Street Side</b> | Lumens    | 15132.1  | 0.0    | 15132.1 |
|                    | % Fixture | 89.4     | 0.0    | 89.4    |
| <b>Total</b>       | Lumens    | 16922.0  | 0.0    | 16922.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 221.0   | 1.3       |
| 10°-20°   | 720.4   | 4.3       |
| 20°-30°   | 1303.5  | 7.7       |
| 30°-40°   | 2038.3  | 12.0      |
| 40°-50°   | 3092.1  | 18.3      |
| 50°-60°   | 3928.6  | 23.2      |
| 60°-70°   | 3670.9  | 21.7      |
| 70°-80°   | 1824.4  | 10.8      |
| 80°-90°   | 122.6   | 0.7       |
| 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°    | 16922.0 | 100.0     |
| 0°-180°   | 16922.0 | 100.0     |

**Coefficient of Utilization**



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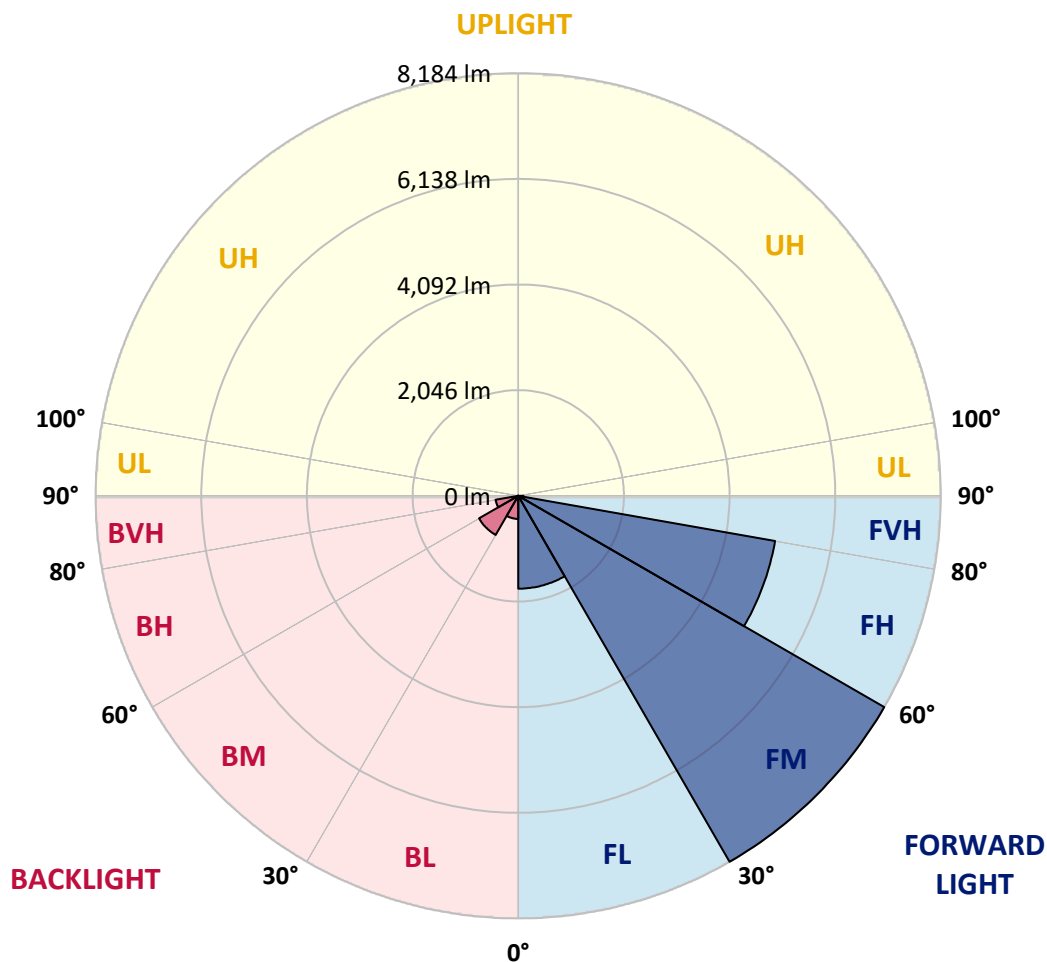
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1798.0 | 10.6      |                         |      |         |
| FM   | (30°-60°)   | 8183.7 | 48.4      |                         |      |         |
| FH   | (60°-80°)   | 5049.6 | 29.8      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 100.9  | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 447.0  | 2.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 875.4  | 5.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 445.7  | 2.6       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 21.7   | 0.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G3**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 66°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| 0°    | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5  | 2239.5  | 2239.5  | 2239.5  | 2239.5 |
| 2.5°  | 2615.7 | 2637.0 | 2647.7 | 2651.2 | 2569.6 | 2534.1 | 2498.6  | 2417.0  | 2399.2  | 2353.1  | 2292.8 |
| 5°    | 3077.1 | 3105.5 | 3098.4 | 3084.2 | 2984.9 | 2871.3 | 2779.0  | 2626.4  | 2601.6  | 2491.5  | 2356.7 |
| 7.5°  | 3531.4 | 3556.3 | 3549.2 | 3495.9 | 3385.9 | 3226.2 | 3073.6  | 2850.0  | 2814.5  | 2637.0  | 2420.5 |
| 10°   | 3911.2 | 3932.5 | 3928.9 | 3875.7 | 3744.4 | 3549.2 | 3364.6  | 3066.5  | 3023.9  | 2771.9  | 2473.8 |
| 12.5° | 4223.5 | 4251.9 | 4248.4 | 4212.9 | 4095.8 | 3882.8 | 3673.4  | 3314.9  | 3261.7  | 2935.2  | 2548.3 |
| 15°   | 4468.4 | 4503.9 | 4503.9 | 4489.7 | 4408.1 | 4230.6 | 3992.8  | 3588.2  | 3524.3  | 3123.3  | 2640.6 |
| 17.5° | 4617.5 | 4645.9 | 4670.7 | 4695.6 | 4638.8 | 4503.9 | 4287.4  | 3861.5  | 3794.1  | 3307.8  | 2736.4 |
| 20°   | 4695.6 | 4724.0 | 4741.7 | 4794.9 | 4805.6 | 4738.2 | 4567.8  | 4131.2  | 4060.3  | 3517.2  | 2846.4 |
| 22.5° | 4823.3 | 4848.2 | 4851.7 | 4897.9 | 4919.2 | 4936.9 | 4830.4  | 4397.4  | 4340.6  | 3747.9  | 2970.7 |
| 25°   | 5036.3 | 5064.7 | 5054.0 | 5075.3 | 5078.9 | 5100.2 | 5089.5  | 4702.7  | 4645.9  | 4010.6  | 3119.7 |
| 27.5° | 5309.6 | 5345.1 | 5338.0 | 5316.7 | 5284.7 | 5267.0 | 5313.1  | 5011.4  | 4958.2  | 4273.2  | 3272.3 |
| 30°   | 5604.2 | 5646.7 | 5636.1 | 5593.5 | 5508.3 | 5433.8 | 5497.7  | 5302.5  | 5252.8  | 4543.0  | 3442.7 |
| 32.5° | 5902.3 | 5952.0 | 5948.4 | 5877.4 | 5731.9 | 5604.2 | 5700.0  | 5575.8  | 5540.3  | 4834.0  | 3627.3 |
| 35°   | 6097.5 | 6161.4 | 6154.3 | 6111.7 | 5923.6 | 5813.6 | 5930.7  | 5856.2  | 5831.3  | 5188.9  | 3893.5 |
| 37.5° | 6413.4 | 6480.8 | 6420.5 | 6314.0 | 6097.5 | 6040.7 | 6182.7  | 6172.0  | 6154.3  | 5565.1  | 4173.8 |
| 40°   | 7180.0 | 7279.4 | 7119.7 | 6683.1 | 6328.2 | 6278.5 | 6480.8  | 6523.4  | 6505.7  | 5937.8  | 4425.8 |
| 42.5° | 7982.1 | 8131.2 | 7882.7 | 7279.4 | 6747.0 | 6566.0 | 6807.3  | 6867.7  | 6846.4  | 6257.2  | 4653.0 |
| 45°   | 8468.3 | 8532.2 | 8283.8 | 7815.3 | 7488.8 | 6913.8 | 7155.2  | 7254.5  | 7236.8  | 6640.5  | 4944.0 |
| 47.5° | 8865.9 | 8841.0 | 8557.1 | 8241.2 | 8301.5 | 7403.6 | 7549.1  | 7744.3  | 7730.1  | 7062.9  | 5263.4 |
| 50°   | 8951.0 | 8894.3 | 8780.7 | 8581.9 | 8741.6 | 7900.5 | 7964.4  | 8301.5  | 8287.3  | 7531.4  | 5586.4 |
| 52.5° | 8351.2 | 8276.7 | 8585.5 | 8752.3 | 8699.0 | 8262.5 | 8422.2  | 8912.0  | 8904.9  | 8038.9  | 5895.2 |
| 55°   | 6853.5 | 6793.1 | 7623.6 | 8486.1 | 8652.9 | 8518.0 | 8929.7  | 9547.3  | 9586.3  | 8578.4  | 6175.6 |
| 57.5° | 5391.2 | 5327.3 | 6143.6 | 7818.8 | 8482.5 | 8752.3 | 9522.5  | 10274.9 | 10324.6 | 9164.0  | 6441.8 |
| 60°   | 4298.1 | 4202.2 | 4826.9 | 6768.3 | 8163.1 | 8933.3 | 10093.9 | 11073.4 | 11080.5 | 9699.9  | 6605.0 |
| 62.5° | 2921.0 | 2814.5 | 3506.6 | 5437.3 | 7627.2 | 8961.7 | 10534.0 | 11762.0 | 11790.4 | 10101.0 | 6633.4 |
| 65°   | 1774.6 | 1685.9 | 2154.4 | 3971.5 | 6835.7 | 8720.3 | 10541.1 | 12269.5 | 12294.4 | 10285.5 | 6463.1 |
| 67.5° | 1029.3 | 993.8  | 1231.6 | 2473.8 | 5522.5 | 8070.8 | 10097.4 | 12191.4 | 12237.6 | 10207.4 | 6076.2 |
| 70°   | 599.8  | 596.3  | 685.0  | 1224.5 | 3897.0 | 6782.5 | 9107.2  | 11534.8 | 11602.3 | 9799.3  | 5483.5 |
| 72.5° | 440.1  | 447.2  | 482.7  | 656.6  | 2257.3 | 4883.7 | 7712.4  | 10214.5 | 10317.5 | 9000.7  | 4638.8 |
| 75°   | 347.8  | 351.4  | 383.3  | 447.2  | 1185.4 | 2761.3 | 5778.1  | 8198.6  | 8280.2  | 7577.5  | 3623.7 |
| 77.5° | 259.1  | 266.2  | 291.0  | 315.9  | 550.1  | 1267.1 | 3251.1  | 5050.5  | 4915.6  | 4159.6  | 1749.7 |
| 80°   | 188.1  | 205.9  | 216.5  | 227.1  | 291.0  | 489.8  | 976.0   | 1760.4  | 1746.2  | 1817.2  | 827.0  |
| 82.5° | 120.7  | 134.9  | 145.5  | 152.6  | 173.9  | 234.2  | 291.0   | 394.0   | 425.9   | 706.3   | 330.1  |
| 85°   | 53.2   | 60.3   | 67.4   | 81.6   | 74.5   | 81.6   | 120.7   | 78.1    | 67.4    | 106.5   | 60.3   |
| 87.5° | 0.0    | 0.0    | 10.6   | 17.7   | 14.2   | 7.1    | 21.3    | 14.2    | 10.6    | 10.6    | 10.6   |
| 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°    | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5 | 2239.5 |
| 2.5°  | 2260.8 | 2221.8 | 2140.2 | 2062.1 | 2015.9 | 1955.6 | 1902.4 | 1852.7 | 1849.1 | 1834.9 | 1810.1 |
| 5°    | 2289.2 | 2214.7 | 2062.1 | 1916.6 | 1806.5 | 1689.4 | 1590.0 | 1512.0 | 1483.6 | 1462.3 | 1433.9 |
| 7.5°  | 2317.6 | 2200.5 | 1973.3 | 1760.4 | 1586.5 | 1423.2 | 1306.1 | 1199.6 | 1167.7 | 1139.3 | 1121.5 |
| 10°   | 2328.3 | 2175.6 | 1870.4 | 1586.5 | 1359.3 | 1185.4 | 1061.2 | 983.1  | 954.7  | 940.5  | 929.9  |
| 12.5° | 2360.2 | 2161.5 | 1774.6 | 1423.2 | 1160.6 | 1000.9 | 912.1  | 866.0  | 855.4  | 844.7  | 834.1  |
| 15°   | 2402.8 | 2161.5 | 1678.8 | 1263.5 | 1004.4 | 876.6  | 823.4  | 791.5  | 784.4  | 780.8  | 773.7  |
| 17.5° | 2448.9 | 2161.5 | 1586.5 | 1128.6 | 890.8  | 795.0  | 756.0  | 738.2  | 734.7  | 731.1  | 727.6  |
| 20°   | 2512.8 | 2165.0 | 1487.1 | 1011.5 | 809.2  | 734.7  | 702.7  | 681.4  | 677.9  | 674.3  | 674.3  |
| 22.5° | 2576.7 | 2172.1 | 1391.3 | 922.8  | 756.0  | 688.5  | 649.5  | 628.2  | 621.1  | 621.1  | 621.1  |
| 25°   | 2658.3 | 2193.4 | 1302.5 | 848.3  | 709.8  | 646.0  | 596.3  | 578.5  | 575.0  | 575.0  | 571.4  |
| 27.5° | 2754.2 | 2218.2 | 1224.5 | 791.5  | 663.7  | 596.3  | 546.6  | 528.8  | 521.7  | 521.7  | 518.2  |
| 30°   | 2857.1 | 2243.1 | 1160.6 | 748.9  | 617.6  | 546.6  | 500.4  | 479.1  | 472.0  | 475.6  | 472.0  |
| 32.5° | 2970.7 | 2278.6 | 1110.9 | 720.5  | 575.0  | 504.0  | 461.4  | 436.5  | 433.0  | 433.0  | 429.5  |
| 35°   | 3162.3 | 2378.0 | 1103.8 | 706.3  | 539.5  | 472.0  | 429.5  | 404.6  | 401.1  | 401.1  | 397.5  |
| 37.5° | 3368.2 | 2491.5 | 1135.7 | 699.2  | 511.1  | 443.6  | 404.6  | 379.8  | 376.2  | 376.2  | 376.2  |
| 40°   | 3542.1 | 2576.7 | 1171.2 | 699.2  | 493.3  | 418.8  | 383.3  | 362.0  | 362.0  | 362.0  | 362.0  |
| 42.5° | 3659.2 | 2583.8 | 1164.1 | 699.2  | 479.1  | 401.1  | 369.1  | 347.8  | 347.8  | 351.4  | 347.8  |
| 45°   | 3833.1 | 2619.3 | 1135.7 | 688.5  | 468.5  | 386.9  | 354.9  | 337.2  | 333.6  | 337.2  | 337.2  |
| 47.5° | 4039.0 | 2683.2 | 1107.3 | 646.0  | 464.9  | 372.7  | 344.3  | 323.0  | 319.4  | 323.0  | 319.4  |
| 50°   | 4234.2 | 2740.0 | 1093.1 | 589.2  | 457.8  | 358.5  | 330.1  | 308.8  | 305.2  | 308.8  | 305.2  |
| 52.5° | 4397.4 | 2764.8 | 1068.3 | 550.1  | 440.1  | 344.3  | 315.9  | 294.6  | 287.5  | 291.0  | 291.0  |
| 55°   | 4528.8 | 2757.7 | 1032.8 | 518.2  | 408.2  | 330.1  | 298.1  | 280.4  | 269.7  | 269.7  | 266.2  |
| 57.5° | 4649.4 | 2761.3 | 1000.9 | 486.2  | 372.7  | 308.8  | 283.9  | 262.6  | 248.4  | 244.9  | 241.3  |
| 60°   | 4695.6 | 2743.5 | 944.1  | 443.6  | 337.2  | 291.0  | 266.2  | 241.3  | 227.1  | 223.6  | 220.0  |
| 62.5° | 4631.7 | 2679.6 | 869.5  | 369.1  | 305.2  | 269.7  | 248.4  | 223.6  | 209.4  | 205.9  | 202.3  |
| 65°   | 4450.7 | 2559.0 | 756.0  | 291.0  | 276.8  | 244.9  | 227.1  | 209.4  | 191.7  | 184.6  | 181.0  |
| 67.5° | 4141.9 | 2385.1 | 614.0  | 234.2  | 244.9  | 223.6  | 213.0  | 191.7  | 170.4  | 163.3  | 159.7  |
| 70°   | 3701.8 | 2154.4 | 461.4  | 198.8  | 216.5  | 198.8  | 191.7  | 170.4  | 152.6  | 145.5  | 142.0  |
| 72.5° | 3084.2 | 1781.7 | 323.0  | 170.4  | 188.1  | 173.9  | 166.8  | 152.6  | 134.9  | 124.2  | 124.2  |
| 75°   | 2331.8 | 1277.7 | 213.0  | 145.5  | 156.2  | 149.1  | 138.4  | 127.8  | 117.1  | 110.0  | 106.5  |
| 77.5° | 1004.4 | 496.9  | 131.3  | 110.0  | 127.8  | 124.2  | 110.0  | 102.9  | 99.4   | 92.3   | 92.3   |
| 80°   | 433.0  | 202.3  | 81.6   | 81.6   | 92.3   | 88.7   | 85.2   | 78.1   | 78.1   | 74.5   | 71.0   |
| 82.5° | 159.7  | 81.6   | 49.7   | 60.3   | 67.4   | 60.3   | 60.3   | 60.3   | 60.3   | 56.8   | 56.8   |
| 85°   | 39.0   | 24.8   | 24.8   | 35.5   | 39.0   | 35.5   | 39.0   | 35.5   | 35.5   | 35.5   | 31.9   |
| 87.5° | 10.6   | 10.6   | 14.2   | 14.2   | 14.2   | 14.2   | 14.2   | 10.6   | 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)