

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: P841367

Luminaire Tested: **ARCH4-170-722-U-T4W-HSS**

Issue Date: 5/27/2024

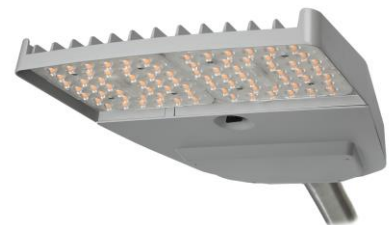
### Test Information

Test Method: LM-79-08  
Report Number: P841367  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-170-722-U-T4W-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 1380mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 16494 lumens  
Efficiency: N/A  
Efficacy: 97.1 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - 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



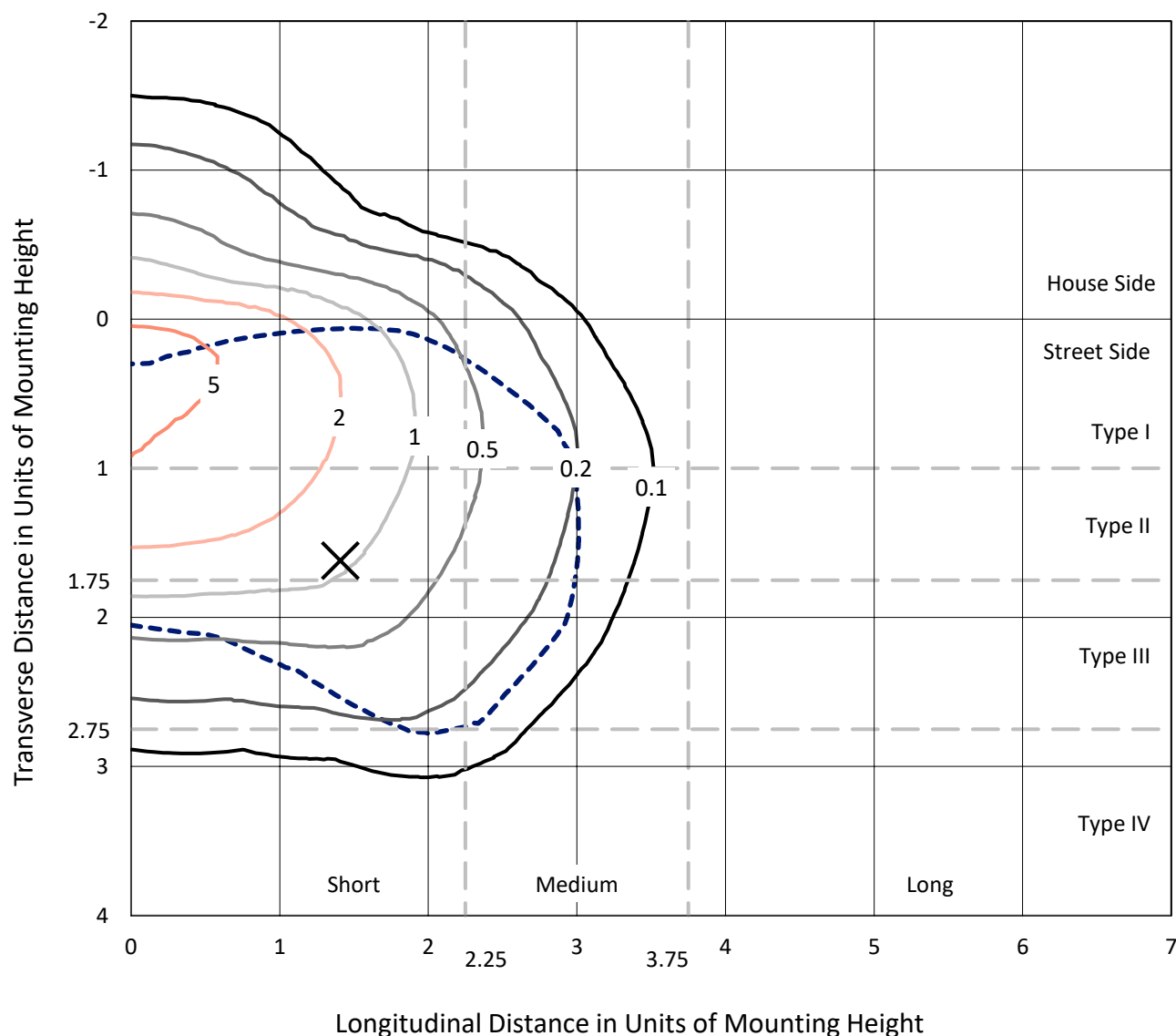
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

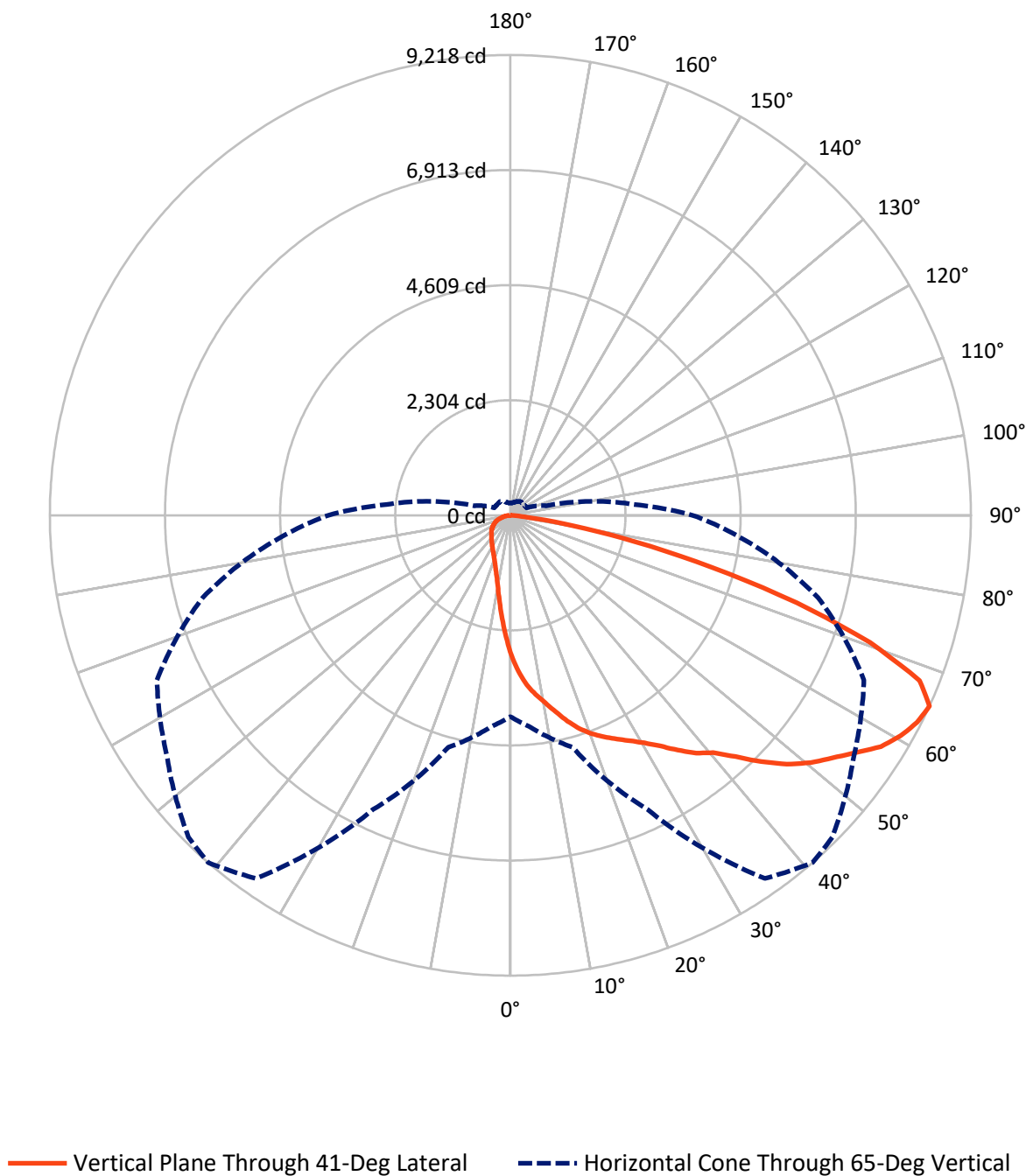


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc

Type III - Short - N/A

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## Luminous Intensity Polar Plot



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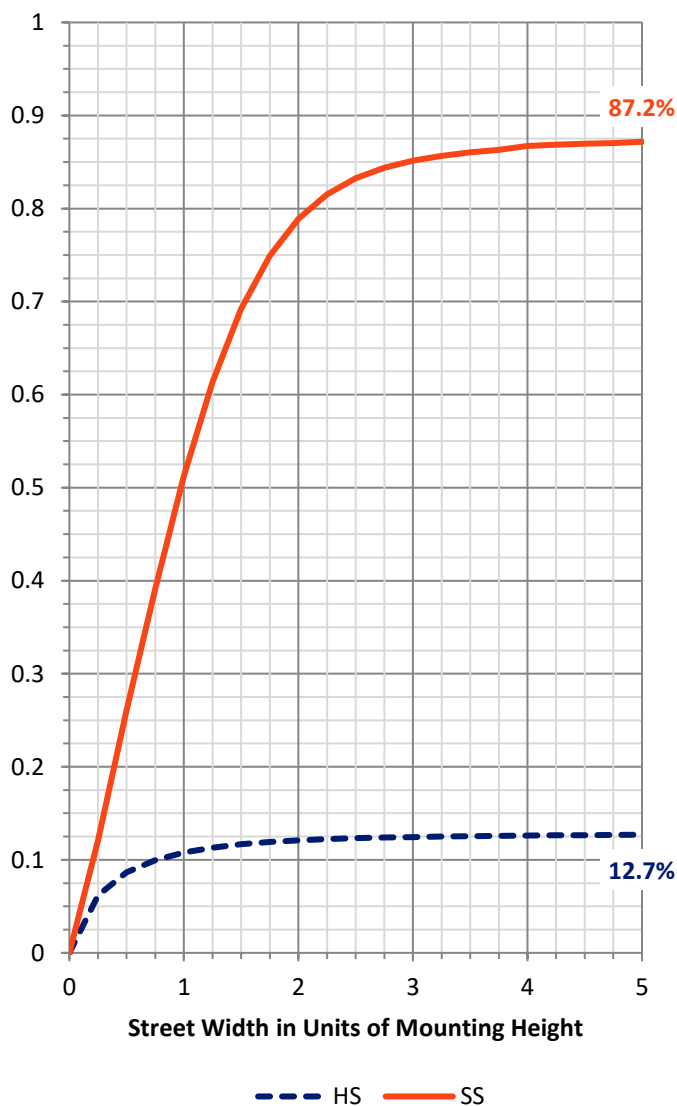
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2117.6   | 0.0    | 2117.6  |
|                    | % Fixture | 12.8     | 0.0    | 12.8    |
| <b>Street Side</b> | Lumens    | 14376.4  | 0.0    | 14376.4 |
|                    | % Fixture | 87.2     | 0.0    | 87.2    |
| <b>Total</b>       | Lumens    | 16494.0  | 0.0    | 16494.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 261.9   | 1.6       |
| 10°-20°   | 785.2   | 4.8       |
| 20°-30°   | 1350.9  | 8.2       |
| 30°-40°   | 2048.8  | 12.4      |
| 40°-50°   | 3001.5  | 18.2      |
| 50°-60°   | 3790.3  | 23.0      |
| 60°-70°   | 3554.1  | 21.5      |
| 70°-80°   | 1584.0  | 9.6       |
| 80°-90°   | 117.3   | 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°    | 16494.0 | 100.0     |
| 0°-180°   | 16494.0 | 100.0     |

**Coefficient of Utilization**



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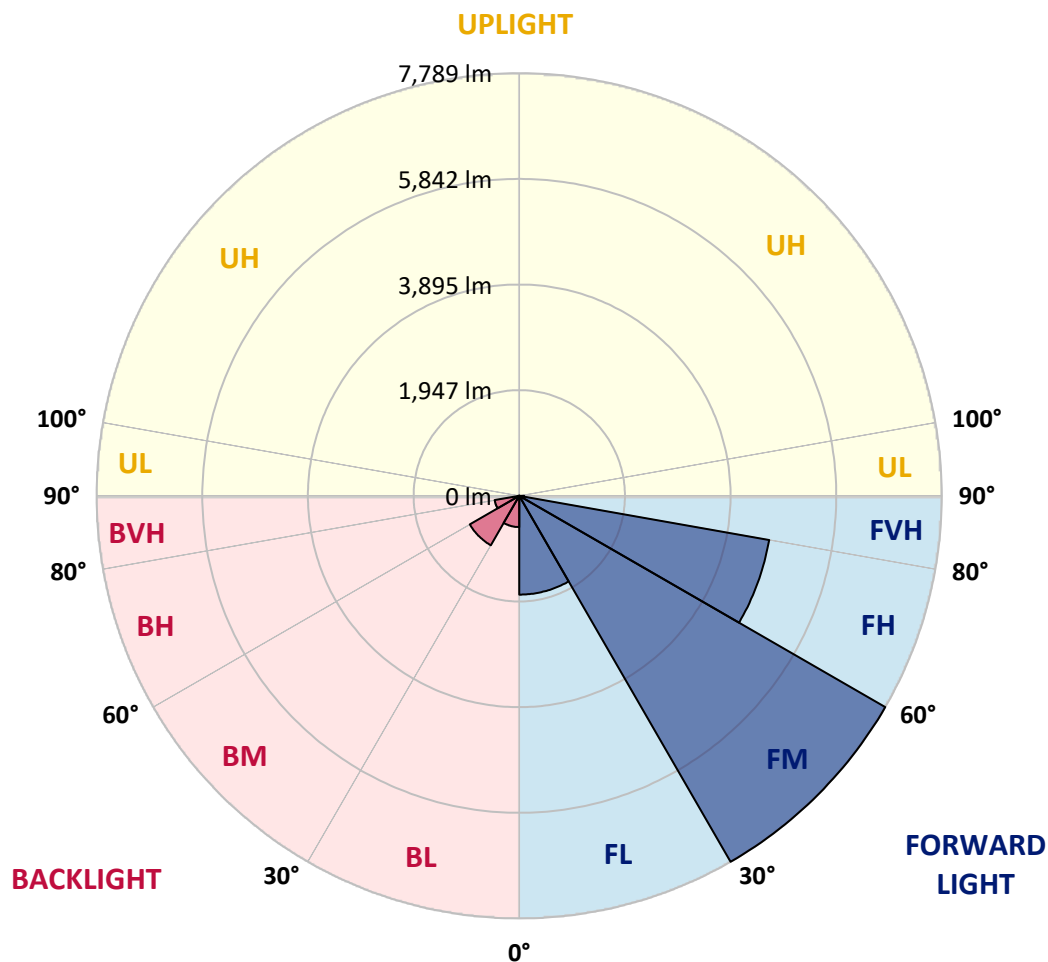
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1821.6 | 11.0      |                         |      |         |
| FM   | (30°-60°)   | 7789.1 | 47.2      |                         |      |         |
| FH   | (60°-80°)   | 4678.1 | 28.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 87.6   | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 576.4  | 3.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1051.5 | 6.4       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 460.0  | 2.8       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 29.7   | 0.2       |                         |      | 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 III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 41°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 |
| 2.5°  | 3241.8 | 3231.4 | 3224.4 | 3186.2 | 3186.2 | 3134.0 | 3137.5 | 3088.8 | 3029.6 | 2935.7 | 2834.8 |
| 5°    | 3547.9 | 3534.0 | 3516.6 | 3478.3 | 3464.4 | 3412.2 | 3405.3 | 3335.7 | 3234.8 | 3071.4 | 2890.5 |
| 7.5°  | 3815.7 | 3801.8 | 3777.5 | 3721.8 | 3683.6 | 3620.9 | 3603.6 | 3513.1 | 3401.8 | 3200.1 | 2946.1 |
| 10°   | 4059.2 | 4048.8 | 4017.5 | 3947.9 | 3895.7 | 3819.2 | 3787.9 | 3666.2 | 3527.0 | 3304.4 | 2991.4 |
| 12.5° | 4306.2 | 4292.3 | 4250.5 | 4191.4 | 4128.8 | 4038.3 | 4000.1 | 3843.6 | 3666.2 | 3419.2 | 3057.5 |
| 15°   | 4535.7 | 4514.9 | 4483.6 | 4421.0 | 4365.3 | 4278.3 | 4236.6 | 4052.3 | 3836.6 | 3547.9 | 3144.4 |
| 17.5° | 4685.3 | 4667.9 | 4640.1 | 4605.3 | 4560.1 | 4494.0 | 4452.3 | 4271.4 | 4007.0 | 3673.1 | 3234.8 |
| 20°   | 4775.7 | 4768.8 | 4758.4 | 4737.5 | 4716.6 | 4671.4 | 4640.1 | 4469.7 | 4191.4 | 3794.9 | 3321.8 |
| 22.5° | 4845.3 | 4838.4 | 4834.9 | 4834.9 | 4838.4 | 4821.0 | 4800.1 | 4654.0 | 4368.8 | 3923.6 | 3401.8 |
| 25°   | 4953.1 | 4949.7 | 4942.7 | 4935.8 | 4960.1 | 4963.6 | 4956.6 | 4855.7 | 4591.4 | 4094.0 | 3502.7 |
| 27.5° | 5102.7 | 5092.3 | 5078.4 | 5071.4 | 5095.8 | 5113.1 | 5127.1 | 5057.5 | 4827.9 | 4267.9 | 3617.5 |
| 30°   | 5332.3 | 5301.0 | 5266.2 | 5241.8 | 5259.2 | 5287.1 | 5318.4 | 5276.6 | 5071.4 | 4483.6 | 3735.7 |
| 32.5° | 5603.6 | 5565.3 | 5485.3 | 5440.1 | 5485.3 | 5506.2 | 5530.5 | 5509.7 | 5325.3 | 4716.6 | 3854.0 |
| 35°   | 5934.0 | 5888.8 | 5805.3 | 5739.2 | 5819.2 | 5774.0 | 5763.6 | 5742.7 | 5565.3 | 4946.2 | 3986.2 |
| 37.5° | 6483.6 | 6417.5 | 6285.3 | 6139.3 | 6139.3 | 6041.9 | 6003.6 | 5941.0 | 5781.0 | 5151.4 | 4114.9 |
| 40°   | 7120.1 | 7033.2 | 6862.7 | 6647.1 | 6448.8 | 6247.1 | 6222.7 | 6177.5 | 6034.9 | 5387.9 | 4261.0 |
| 42.5° | 7819.3 | 7652.3 | 7415.8 | 7154.9 | 6834.9 | 6605.4 | 6549.7 | 6421.0 | 6281.9 | 5627.9 | 4407.0 |
| 45°   | 8595.0 | 8247.1 | 7902.8 | 7770.6 | 7241.9 | 7033.2 | 6928.8 | 6695.8 | 6539.3 | 5878.4 | 4560.1 |
| 47.5° | 8720.2 | 8448.9 | 8219.3 | 8198.4 | 7621.0 | 7447.1 | 7328.8 | 6994.9 | 6817.5 | 6146.2 | 4720.1 |
| 50°   | 8650.6 | 8487.1 | 8511.5 | 8428.0 | 7899.3 | 7784.5 | 7694.1 | 7314.9 | 7092.3 | 6403.6 | 4866.2 |
| 52.5° | 8358.4 | 8448.9 | 8588.0 | 8435.0 | 8163.6 | 8069.7 | 8024.5 | 7659.3 | 7349.7 | 6640.1 | 4998.4 |
| 55°   | 8010.6 | 8073.2 | 8372.3 | 8560.2 | 8469.7 | 8386.3 | 8344.5 | 8059.3 | 7603.6 | 6838.4 | 5120.1 |
| 57.5° | 7502.8 | 7474.9 | 7805.4 | 8539.3 | 8789.7 | 8741.0 | 8695.8 | 8452.3 | 7840.2 | 6981.0 | 5196.6 |
| 60°   | 6741.0 | 6681.9 | 7099.3 | 8121.9 | 8894.1 | 8970.6 | 8949.7 | 8713.2 | 8021.0 | 6977.5 | 5165.3 |
| 62.5° | 5422.7 | 5568.8 | 6146.2 | 7440.1 | 8939.3 | 9134.1 | 9095.8 | 8734.1 | 8080.2 | 6775.8 | 4967.1 |
| 65°   | 4031.4 | 4240.1 | 4807.1 | 6501.0 | 8876.7 | 9217.6 | 9113.2 | 8393.2 | 7805.4 | 6375.8 | 4532.3 |
| 67.5° | 2904.4 | 3088.8 | 3502.7 | 5349.7 | 8274.9 | 8835.0 | 8713.2 | 7836.7 | 7172.3 | 5808.8 | 3930.5 |
| 70°   | 1986.1 | 2118.3 | 2400.0 | 3895.7 | 7064.5 | 7638.4 | 7561.9 | 7005.4 | 6174.0 | 5134.0 | 3193.1 |
| 72.5° | 1401.8 | 1457.4 | 1638.3 | 2570.5 | 5367.1 | 5993.2 | 5902.7 | 5763.6 | 4960.1 | 4267.9 | 2483.5 |
| 75°   | 1050.5 | 1085.2 | 1182.6 | 1662.6 | 3620.9 | 4153.1 | 4069.6 | 4149.6 | 3704.4 | 3231.4 | 1808.7 |
| 77.5° | 396.5  | 431.3  | 671.3  | 1060.9 | 2142.7 | 2549.6 | 2466.1 | 2514.8 | 2059.2 | 1631.3 | 900.9  |
| 80°   | 107.8  | 114.8  | 222.6  | 504.4  | 973.9  | 1269.6 | 1154.8 | 991.3  | 765.2  | 751.3  | 476.5  |
| 82.5° | 45.2   | 52.2   | 100.9  | 271.3  | 347.8  | 347.8  | 292.2  | 361.7  | 292.2  | 351.3  | 229.6  |
| 85°   | 17.4   | 20.9   | 24.3   | 69.6   | 45.2   | 48.7   | 52.2   | 69.6   | 59.1   | 73.0   | 52.2   |
| 87.5° | 0.0    | 0.0    | 0.0    | 3.5    | 3.5    | 7.0    | 3.5    | 7.0    | 10.4   | 10.4   | 10.4   |
| 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°    | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 | 2810.5 |
| 2.5°  | 2793.1 | 2754.8 | 2699.2 | 2608.7 | 2514.8 | 2462.7 | 2396.6 | 2386.1 | 2316.6 | 2309.6 | 2281.8 |
| 5°    | 2810.5 | 2730.5 | 2587.9 | 2414.0 | 2243.5 | 2111.3 | 2014.0 | 1961.8 | 1860.9 | 1860.9 | 1833.1 |
| 7.5°  | 2824.4 | 2699.2 | 2469.6 | 2212.2 | 1979.2 | 1801.8 | 1669.6 | 1613.9 | 1523.5 | 1516.6 | 1495.7 |
| 10°   | 2827.9 | 2660.9 | 2340.9 | 2007.0 | 1721.8 | 1540.9 | 1412.2 | 1349.6 | 1269.6 | 1262.6 | 1248.7 |
| 12.5° | 2855.7 | 2640.1 | 2226.1 | 1829.6 | 1537.4 | 1342.6 | 1217.4 | 1165.2 | 1102.6 | 1095.7 | 1081.8 |
| 15°   | 2900.9 | 2640.1 | 2128.7 | 1680.0 | 1373.9 | 1193.1 | 1085.2 | 1036.5 | 991.3  | 984.4  | 977.4  |
| 17.5° | 2946.1 | 2633.1 | 2031.3 | 1540.9 | 1238.3 | 1074.8 | 980.9  | 942.6  | 907.8  | 904.4  | 897.4  |
| 20°   | 2987.9 | 2629.6 | 1934.0 | 1422.6 | 1133.9 | 977.4  | 904.4  | 869.6  | 841.8  | 841.8  | 838.3  |
| 22.5° | 3029.6 | 2622.7 | 1840.0 | 1311.3 | 1043.5 | 904.4  | 841.8  | 803.5  | 782.6  | 782.6  | 779.1  |
| 25°   | 3092.2 | 2622.7 | 1753.1 | 1217.4 | 970.5  | 848.7  | 786.1  | 758.3  | 740.9  | 737.4  | 737.4  |
| 27.5° | 3165.3 | 2643.5 | 1676.6 | 1133.9 | 907.8  | 793.1  | 744.4  | 716.5  | 695.7  | 688.7  | 692.2  |
| 30°   | 3245.3 | 2660.9 | 1607.0 | 1060.9 | 848.7  | 751.3  | 699.1  | 671.3  | 650.4  | 643.5  | 647.0  |
| 32.5° | 3325.3 | 2681.8 | 1544.4 | 994.8  | 789.6  | 713.1  | 660.9  | 629.6  | 608.7  | 605.2  | 605.2  |
| 35°   | 3412.2 | 2702.7 | 1481.8 | 939.1  | 740.9  | 674.8  | 626.1  | 591.3  | 577.4  | 570.4  | 573.9  |
| 37.5° | 3499.2 | 2737.4 | 1422.6 | 887.0  | 706.1  | 640.0  | 594.8  | 560.0  | 549.6  | 546.1  | 546.1  |
| 40°   | 3603.6 | 2789.6 | 1398.3 | 852.2  | 674.8  | 608.7  | 570.4  | 535.7  | 525.2  | 525.2  | 525.2  |
| 42.5° | 3690.5 | 2831.4 | 1377.4 | 813.9  | 650.4  | 580.9  | 546.1  | 518.3  | 511.3  | 507.8  | 511.3  |
| 45°   | 3777.5 | 2869.6 | 1349.6 | 779.1  | 619.1  | 553.1  | 525.2  | 497.4  | 490.4  | 490.4  | 490.4  |
| 47.5° | 3864.4 | 2890.5 | 1311.3 | 744.4  | 591.3  | 528.7  | 504.4  | 480.0  | 473.1  | 473.1  | 473.1  |
| 50°   | 3934.0 | 2907.9 | 1255.7 | 706.1  | 560.0  | 507.8  | 483.5  | 459.1  | 452.2  | 452.2  | 452.2  |
| 52.5° | 4003.6 | 2911.4 | 1196.5 | 660.9  | 528.7  | 483.5  | 462.6  | 438.3  | 431.3  | 427.8  | 427.8  |
| 55°   | 4066.2 | 2907.9 | 1127.0 | 608.7  | 493.9  | 455.7  | 438.3  | 417.4  | 403.5  | 389.6  | 396.5  |
| 57.5° | 4111.4 | 2904.4 | 1047.0 | 556.5  | 459.1  | 427.8  | 420.9  | 393.1  | 365.2  | 330.4  | 337.4  |
| 60°   | 4094.0 | 2866.1 | 960.0  | 490.4  | 420.9  | 400.0  | 400.0  | 361.7  | 313.0  | 295.7  | 299.1  |
| 62.5° | 3982.7 | 2758.3 | 869.6  | 420.9  | 382.6  | 372.2  | 368.7  | 327.0  | 288.7  | 271.3  | 274.8  |
| 65°   | 3648.8 | 2487.0 | 737.4  | 358.3  | 344.4  | 340.9  | 340.9  | 302.6  | 267.8  | 247.0  | 250.4  |
| 67.5° | 3140.9 | 2087.0 | 601.8  | 302.6  | 306.1  | 313.0  | 313.0  | 278.3  | 243.5  | 222.6  | 226.1  |
| 70°   | 2518.3 | 1631.3 | 480.0  | 260.9  | 264.4  | 274.8  | 281.7  | 250.4  | 219.1  | 198.3  | 198.3  |
| 72.5° | 1895.7 | 1238.3 | 386.1  | 219.1  | 236.5  | 236.5  | 247.0  | 222.6  | 191.3  | 170.4  | 173.9  |
| 75°   | 1373.9 | 887.0  | 306.1  | 184.4  | 205.2  | 201.7  | 201.7  | 187.8  | 163.5  | 149.6  | 149.6  |
| 77.5° | 650.4  | 466.1  | 243.5  | 132.2  | 160.0  | 156.5  | 160.0  | 149.6  | 139.1  | 125.2  | 128.7  |
| 80°   | 320.0  | 229.6  | 156.5  | 93.9   | 111.3  | 114.8  | 125.2  | 118.3  | 114.8  | 104.3  | 104.3  |
| 82.5° | 153.0  | 90.4   | 73.0   | 66.1   | 76.5   | 80.0   | 87.0   | 87.0   | 90.4   | 83.5   | 83.5   |
| 85°   | 41.7   | 24.3   | 31.3   | 41.7   | 48.7   | 52.2   | 59.1   | 62.6   | 62.6   | 59.1   | 62.6   |
| 87.5° | 10.4   | 10.4   | 13.9   | 20.9   | 24.3   | 27.8   | 31.3   | 31.3   | 13.9   | 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)