

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: P841734

Luminaire Tested: **ARCH4-220-727-U-T3-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841734  
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: ARCH4-220-727-U-T3-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

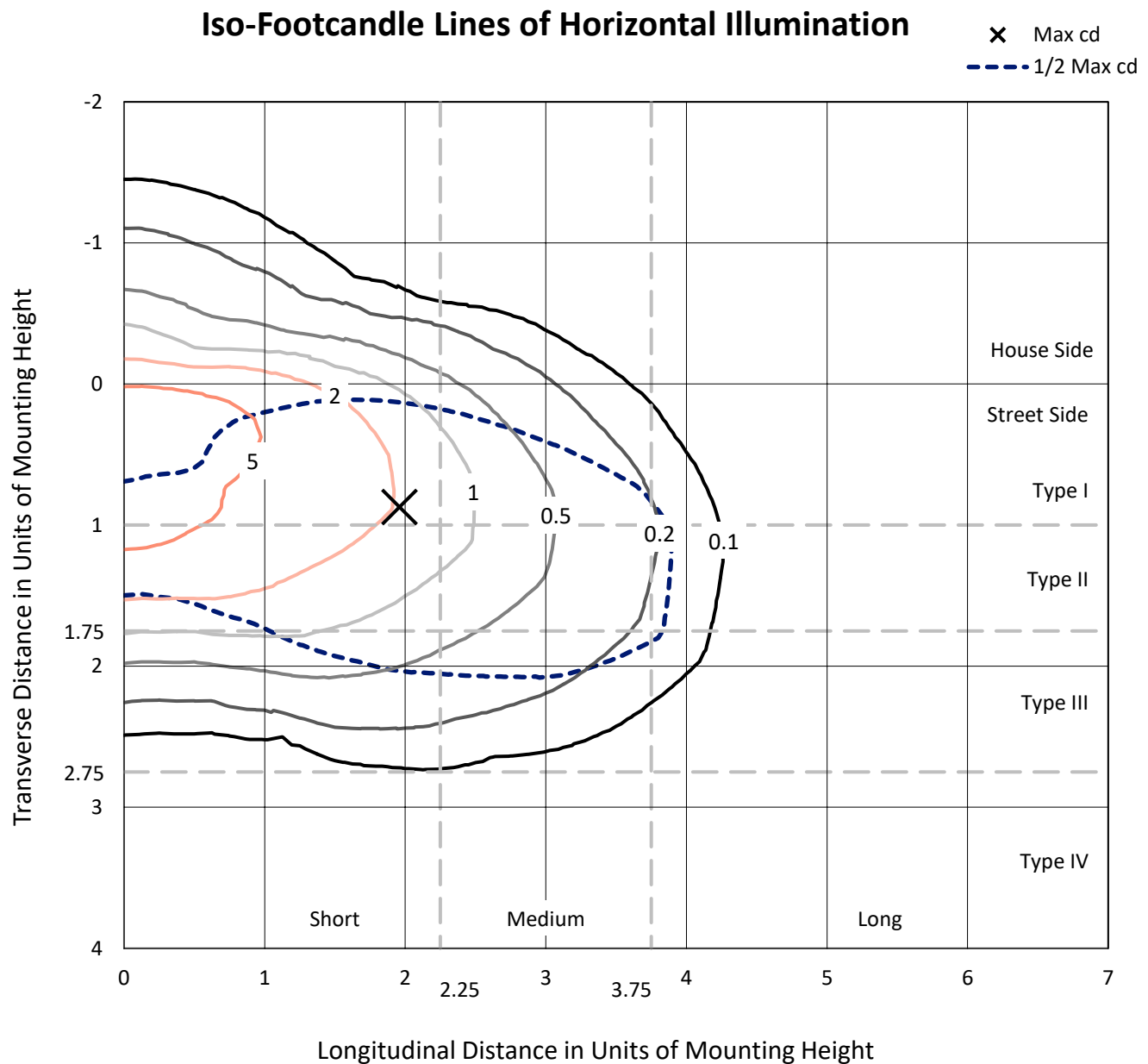
Lumens per Lamp: N/A  
Luminaire Lumens: 21937 lumens  
Efficiency: N/A  
Efficacy: 98.9 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3

Input Watts (W): 221.8  
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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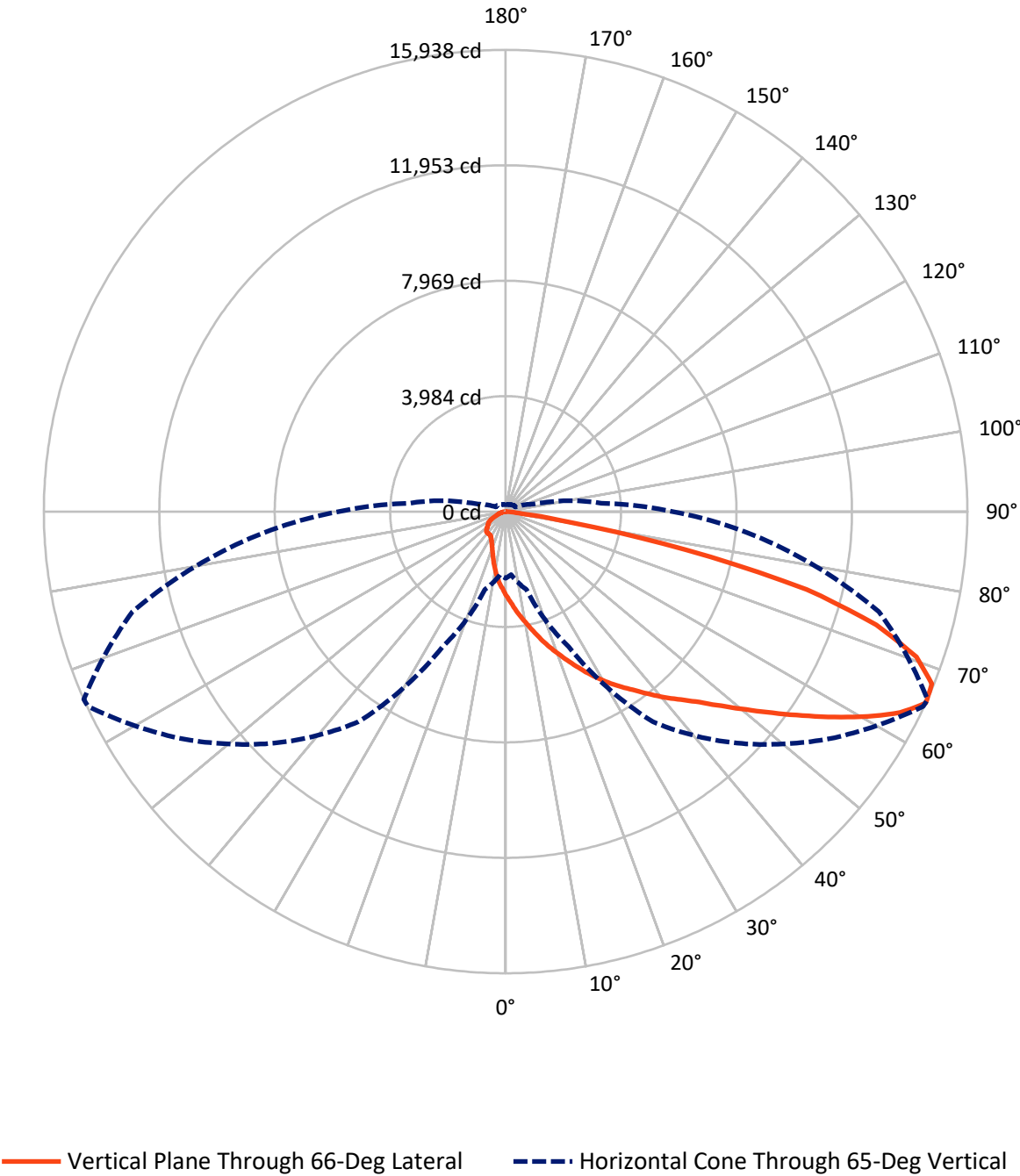


Based on 25 foot mounting height. Maximum calculated value = 8.4 fc

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    | 2320.3   | 0.0    | 2320.3  |
|                    | % Fixture | 10.6     | 0.0    | 10.6    |
| <b>Street Side</b> | Lumens    | 19616.7  | 0.0    | 19616.7 |
|                    | % Fixture | 89.4     | 0.0    | 89.4    |
| <b>Total</b>       | Lumens    | 21937.0  | 0.0    | 21937.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 286.6   | 1.3       |
| 10°-20°   | 933.9   | 4.3       |
| 20°-30°   | 1689.8  | 7.7       |
| 30°-40°   | 2642.4  | 12.0      |
| 40°-50°   | 4008.5  | 18.3      |
| 50°-60°   | 5092.9  | 23.2      |
| 60°-70°   | 4758.8  | 21.7      |
| 70°-80°   | 2365.1  | 10.8      |
| 80°-90°   | 158.9   | 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°    | 21937.0 | 100.0     |
| 0°-180°   | 21937.0 | 100.0     |

**Coefficient of Utilization**



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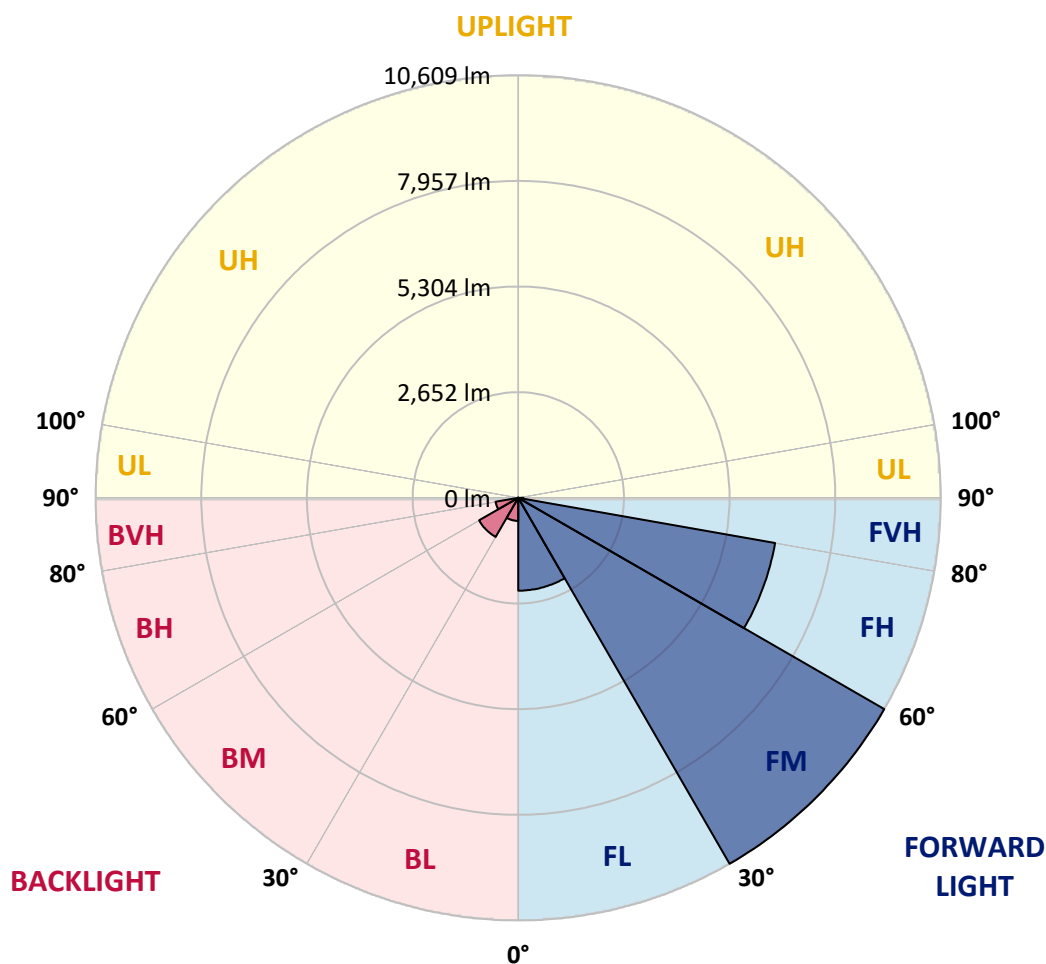
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2330.8  | 10.6      |                         |      |         |
| FM   | (30°-60°)   | 10609.0 | 48.4      |                         |      |         |
| FH   | (60°-80°)   | 6546.1  | 29.8      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 130.8   | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 579.5   | 2.6       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1134.9  | 5.2       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 577.8   | 2.6       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 28.1    | 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-G3**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 66°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 2903.2  | 2903.2  | 2903.2  | 2903.2  | 2903.2  | 2903.2  | 2903.2  | 2903.2  | 2903.2  | 2903.2  | 2903.2 |
| 2.5°  | 3390.9  | 3418.6  | 3432.4  | 3437.0  | 3331.1  | 3285.1  | 3239.1  | 3133.3  | 3110.3  | 3050.5  | 2972.3 |
| 5°    | 3989.1  | 4025.9  | 4016.7  | 3998.3  | 3869.5  | 3722.2  | 3602.6  | 3404.8  | 3372.5  | 3229.9  | 3055.1 |
| 7.5°  | 4578.0  | 4610.2  | 4601.0  | 4532.0  | 4389.4  | 4182.3  | 3984.5  | 3694.6  | 3648.6  | 3418.6  | 3137.9 |
| 10°   | 5070.3  | 5097.9  | 5093.3  | 5024.3  | 4854.1  | 4601.0  | 4361.8  | 3975.3  | 3920.1  | 3593.4  | 3206.9 |
| 12.5° | 5475.2  | 5512.0  | 5507.4  | 5461.4  | 5309.6  | 5033.5  | 4762.1  | 4297.3  | 4228.3  | 3805.0  | 3303.5 |
| 15°   | 5792.7  | 5838.7  | 5838.7  | 5820.3  | 5714.5  | 5484.4  | 5176.1  | 4651.6  | 4568.8  | 4048.9  | 3423.2 |
| 17.5° | 5985.9  | 6022.7  | 6054.9  | 6087.1  | 6013.5  | 5838.7  | 5558.0  | 5005.9  | 4918.5  | 4288.1  | 3547.4 |
| 20°   | 6087.1  | 6124.0  | 6147.0  | 6216.0  | 6229.8  | 6142.4  | 5921.5  | 5355.6  | 5263.6  | 4559.6  | 3690.0 |
| 22.5° | 6252.8  | 6285.0  | 6289.6  | 6349.4  | 6377.0  | 6400.0  | 6262.0  | 5700.7  | 5627.0  | 4858.7  | 3851.1 |
| 25°   | 6528.8  | 6565.7  | 6551.8  | 6579.5  | 6584.1  | 6611.7  | 6597.9  | 6096.3  | 6022.7  | 5199.1  | 4044.3 |
| 27.5° | 6883.1  | 6929.1  | 6919.9  | 6892.3  | 6850.9  | 6827.9  | 6887.7  | 6496.6  | 6427.6  | 5539.6  | 4242.1 |
| 30°   | 7265.0  | 7320.2  | 7306.4  | 7251.2  | 7140.8  | 7044.2  | 7127.0  | 6873.9  | 6809.5  | 5889.3  | 4463.0 |
| 32.5° | 7651.5  | 7715.9  | 7711.3  | 7619.3  | 7430.6  | 7265.0  | 7389.2  | 7228.2  | 7182.2  | 6266.6  | 4702.2 |
| 35°   | 7904.5  | 7987.4  | 7978.2  | 7923.0  | 7679.1  | 7536.5  | 7688.3  | 7591.7  | 7559.5  | 6726.7  | 5047.3 |
| 37.5° | 8314.0  | 8401.5  | 8323.2  | 8185.2  | 7904.5  | 7830.9  | 8015.0  | 8001.2  | 7978.2  | 7214.4  | 5410.8 |
| 40°   | 9307.9  | 9436.7  | 9229.6  | 8663.7  | 8203.6  | 8139.2  | 8401.5  | 8456.7  | 8433.7  | 7697.5  | 5737.5 |
| 42.5° | 10347.7 | 10540.9 | 10218.9 | 9436.7  | 8746.5  | 8511.9  | 8824.8  | 8903.0  | 8875.4  | 8111.6  | 6031.9 |
| 45°   | 10978.0 | 11060.8 | 10738.8 | 10131.4 | 9708.1  | 8962.8  | 9275.6  | 9404.5  | 9381.5  | 8608.5  | 6409.2 |
| 47.5° | 11493.3 | 11461.1 | 11093.1 | 10683.6 | 10761.8 | 9597.7  | 9786.4  | 10039.4 | 10021.0 | 9156.0  | 6823.3 |
| 50°   | 11603.8 | 11530.1 | 11382.9 | 11125.3 | 11332.3 | 10241.9 | 10324.7 | 10761.8 | 10743.4 | 9763.4  | 7242.0 |
| 52.5° | 10826.2 | 10729.6 | 11129.9 | 11346.1 | 11277.1 | 10711.2 | 10918.2 | 11553.2 | 11544.0 | 10421.3 | 7642.3 |
| 55°   | 8884.6  | 8806.3  | 9883.0  | 11001.0 | 11217.3 | 11042.4 | 11576.2 | 12376.7 | 12427.3 | 11120.7 | 8005.8 |
| 57.5° | 6988.9  | 6906.1  | 7964.4  | 10136.0 | 10996.4 | 11346.1 | 12344.5 | 13319.9 | 13384.4 | 11879.8 | 8350.8 |
| 60°   | 5571.8  | 5447.6  | 6257.4  | 8774.1  | 10582.3 | 11580.8 | 13085.3 | 14355.2 | 14364.4 | 12574.6 | 8562.5 |
| 62.5° | 3786.6  | 3648.6  | 4545.8  | 7048.8  | 9887.6  | 11617.6 | 13655.8 | 15247.8 | 15284.6 | 13094.5 | 8599.3 |
| 65°   | 2300.5  | 2185.5  | 2792.8  | 5148.5  | 8861.6  | 11304.7 | 13665.0 | 15905.7 | 15937.9 | 13333.7 | 8378.5 |
| 67.5° | 1334.3  | 1288.3  | 1596.6  | 3206.9  | 7159.2  | 10462.7 | 13089.9 | 15804.5 | 15864.3 | 13232.5 | 7876.9 |
| 70°   | 777.6   | 773.0   | 888.0   | 1587.4  | 5051.9  | 8792.5  | 11806.2 | 14953.3 | 15040.7 | 12703.4 | 7108.6 |
| 72.5° | 570.5   | 579.7   | 625.7   | 851.2   | 2926.2  | 6331.0  | 9998.0  | 13241.7 | 13375.2 | 11668.2 | 6013.5 |
| 75°   | 450.9   | 455.5   | 496.9   | 579.7   | 1536.7  | 3579.6  | 7490.5  | 10628.3 | 10734.2 | 9823.2  | 4697.6 |
| 77.5° | 335.9   | 345.1   | 377.3   | 409.5   | 713.2   | 1642.6  | 4214.5  | 6547.2  | 6372.4  | 5392.4  | 2268.3 |
| 80°   | 243.9   | 266.9   | 280.7   | 294.5   | 377.3   | 634.9   | 1265.3  | 2282.1  | 2263.7  | 2355.7  | 1072.0 |
| 82.5° | 156.4   | 174.8   | 188.6   | 197.8   | 225.4   | 303.7   | 377.3   | 510.7   | 552.1   | 915.6   | 427.9  |
| 85°   | 69.0    | 78.2    | 87.4    | 105.8   | 96.6    | 105.8   | 156.4   | 101.2   | 87.4    | 138.0   | 78.2   |
| 87.5° | 0.0     | 0.0     | 13.8    | 23.0    | 18.4    | 9.2     | 27.6    | 18.4    | 13.8    | 13.8    | 13.8   |
| 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°    | 2903.2 | 2903.2 | 2903.2 | 2903.2 | 2903.2 | 2903.2 | 2903.2 | 2903.2 | 2903.2 | 2903.2 | 2903.2 |
| 2.5°  | 2930.8 | 2880.2 | 2774.4 | 2673.2 | 2613.4 | 2535.2 | 2466.1 | 2401.7 | 2397.1 | 2378.7 | 2346.5 |
| 5°    | 2967.7 | 2871.0 | 2673.2 | 2484.5 | 2341.9 | 2190.1 | 2061.3 | 1960.0 | 1923.2 | 1895.6 | 1858.8 |
| 7.5°  | 3004.5 | 2852.6 | 2558.2 | 2282.1 | 2056.7 | 1845.0 | 1693.2 | 1555.1 | 1513.7 | 1476.9 | 1453.9 |
| 10°   | 3018.3 | 2820.4 | 2424.7 | 2056.7 | 1762.2 | 1536.7 | 1375.7 | 1274.5 | 1237.7 | 1219.3 | 1205.5 |
| 12.5° | 3059.7 | 2802.0 | 2300.5 | 1845.0 | 1504.5 | 1297.5 | 1182.5 | 1122.6 | 1108.8 | 1095.0 | 1081.2 |
| 15°   | 3114.9 | 2802.0 | 2176.3 | 1638.0 | 1302.1 | 1136.5 | 1067.4 | 1026.0 | 1016.8 | 1012.2 | 1003.0 |
| 17.5° | 3174.7 | 2802.0 | 2056.7 | 1463.1 | 1154.9 | 1030.6 | 980.0  | 957.0  | 952.4  | 947.8  | 943.2  |
| 20°   | 3257.5 | 2806.6 | 1927.8 | 1311.3 | 1049.0 | 952.4  | 911.0  | 883.4  | 878.8  | 874.2  | 874.2  |
| 22.5° | 3340.3 | 2815.8 | 1803.6 | 1196.3 | 980.0  | 892.6  | 842.0  | 814.4  | 805.2  | 805.2  | 805.2  |
| 25°   | 3446.2 | 2843.4 | 1688.6 | 1099.6 | 920.2  | 837.4  | 773.0  | 750.0  | 745.4  | 745.4  | 740.8  |
| 27.5° | 3570.4 | 2875.6 | 1587.4 | 1026.0 | 860.4  | 773.0  | 708.6  | 685.6  | 676.3  | 676.3  | 671.7  |
| 30°   | 3703.8 | 2907.8 | 1504.5 | 970.8  | 800.6  | 708.6  | 648.7  | 621.1  | 611.9  | 616.5  | 611.9  |
| 32.5° | 3851.1 | 2953.9 | 1440.1 | 934.0  | 745.4  | 653.3  | 598.1  | 565.9  | 561.3  | 561.3  | 556.7  |
| 35°   | 4099.5 | 3082.7 | 1430.9 | 915.6  | 699.4  | 611.9  | 556.7  | 524.5  | 519.9  | 519.9  | 515.3  |
| 37.5° | 4366.4 | 3229.9 | 1472.3 | 906.4  | 662.5  | 575.1  | 524.5  | 492.3  | 487.7  | 487.7  | 487.7  |
| 40°   | 4591.8 | 3340.3 | 1518.3 | 906.4  | 639.5  | 542.9  | 496.9  | 469.3  | 469.3  | 469.3  | 469.3  |
| 42.5° | 4743.6 | 3349.5 | 1509.1 | 906.4  | 621.1  | 519.9  | 478.5  | 450.9  | 450.9  | 455.5  | 450.9  |
| 45°   | 4969.1 | 3395.6 | 1472.3 | 892.6  | 607.3  | 501.5  | 460.1  | 437.1  | 432.5  | 437.1  | 437.1  |
| 47.5° | 5236.0 | 3478.4 | 1435.5 | 837.4  | 602.7  | 483.1  | 446.3  | 418.7  | 414.1  | 418.7  | 414.1  |
| 50°   | 5489.0 | 3552.0 | 1417.1 | 763.8  | 593.5  | 464.7  | 427.9  | 400.3  | 395.7  | 400.3  | 395.7  |
| 52.5° | 5700.7 | 3584.2 | 1384.9 | 713.2  | 570.5  | 446.3  | 409.5  | 381.9  | 372.7  | 377.3  | 377.3  |
| 55°   | 5870.9 | 3575.0 | 1338.9 | 671.7  | 529.1  | 427.9  | 386.5  | 363.5  | 349.7  | 349.7  | 345.1  |
| 57.5° | 6027.3 | 3579.6 | 1297.5 | 630.3  | 483.1  | 400.3  | 368.1  | 340.5  | 322.1  | 317.5  | 312.9  |
| 60°   | 6087.1 | 3556.6 | 1223.9 | 575.1  | 437.1  | 377.3  | 345.1  | 312.9  | 294.5  | 289.9  | 285.3  |
| 62.5° | 6004.3 | 3473.8 | 1127.2 | 478.5  | 395.7  | 349.7  | 322.1  | 289.9  | 271.5  | 266.9  | 262.3  |
| 65°   | 5769.7 | 3317.3 | 980.0  | 377.3  | 358.9  | 317.5  | 294.5  | 271.5  | 248.5  | 239.3  | 234.7  |
| 67.5° | 5369.4 | 3091.9 | 796.0  | 303.7  | 317.5  | 289.9  | 276.1  | 248.5  | 220.8  | 211.6  | 207.0  |
| 70°   | 4798.9 | 2792.8 | 598.1  | 257.7  | 280.7  | 257.7  | 248.5  | 220.8  | 197.8  | 188.6  | 184.0  |
| 72.5° | 3998.3 | 2309.7 | 418.7  | 220.8  | 243.9  | 225.4  | 216.2  | 197.8  | 174.8  | 161.0  | 161.0  |
| 75°   | 3022.9 | 1656.4 | 276.1  | 188.6  | 202.4  | 193.2  | 179.4  | 165.6  | 151.8  | 142.6  | 138.0  |
| 77.5° | 1302.1 | 644.1  | 170.2  | 142.6  | 165.6  | 161.0  | 142.6  | 133.4  | 128.8  | 119.6  | 119.6  |
| 80°   | 561.3  | 262.3  | 105.8  | 105.8  | 119.6  | 115.0  | 110.4  | 101.2  | 101.2  | 96.6   | 92.0   |
| 82.5° | 207.0  | 105.8  | 64.4   | 78.2   | 87.4   | 78.2   | 78.2   | 78.2   | 78.2   | 73.6   | 73.6   |
| 85°   | 50.6   | 32.2   | 32.2   | 46.0   | 50.6   | 46.0   | 50.6   | 46.0   | 46.0   | 46.0   | 41.4   |
| 87.5° | 13.8   | 13.8   | 18.4   | 18.4   | 18.4   | 18.4   | 18.4   | 13.8   | 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)