

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: P572756

Luminaire Tested: **ARCH-S-PA2-110-740-U-T3-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572756  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-110-740-U-T3-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1105mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11190 lumens  
Efficiency: N/A  
Efficacy: 98.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

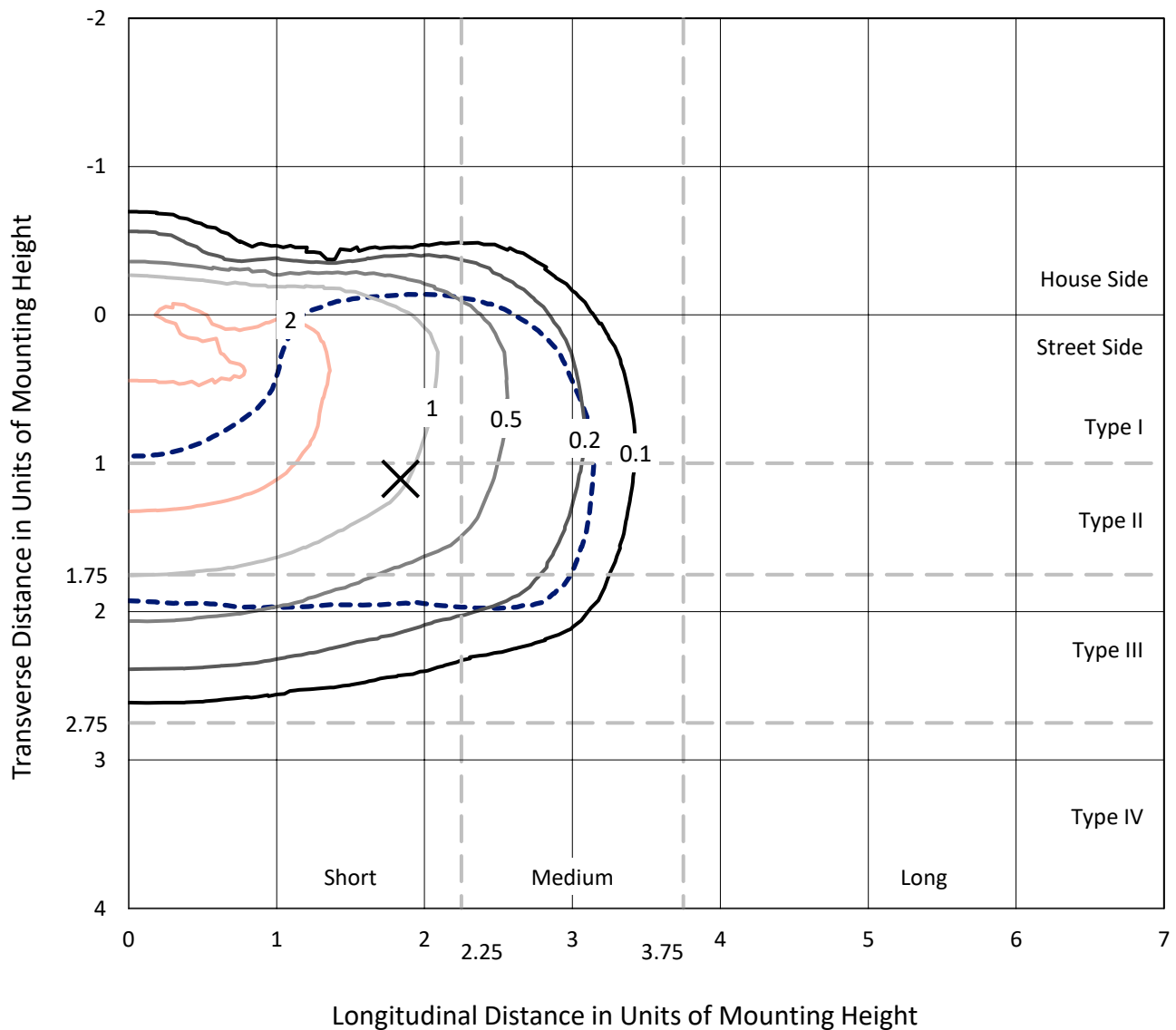
Input Watts (W): 114.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

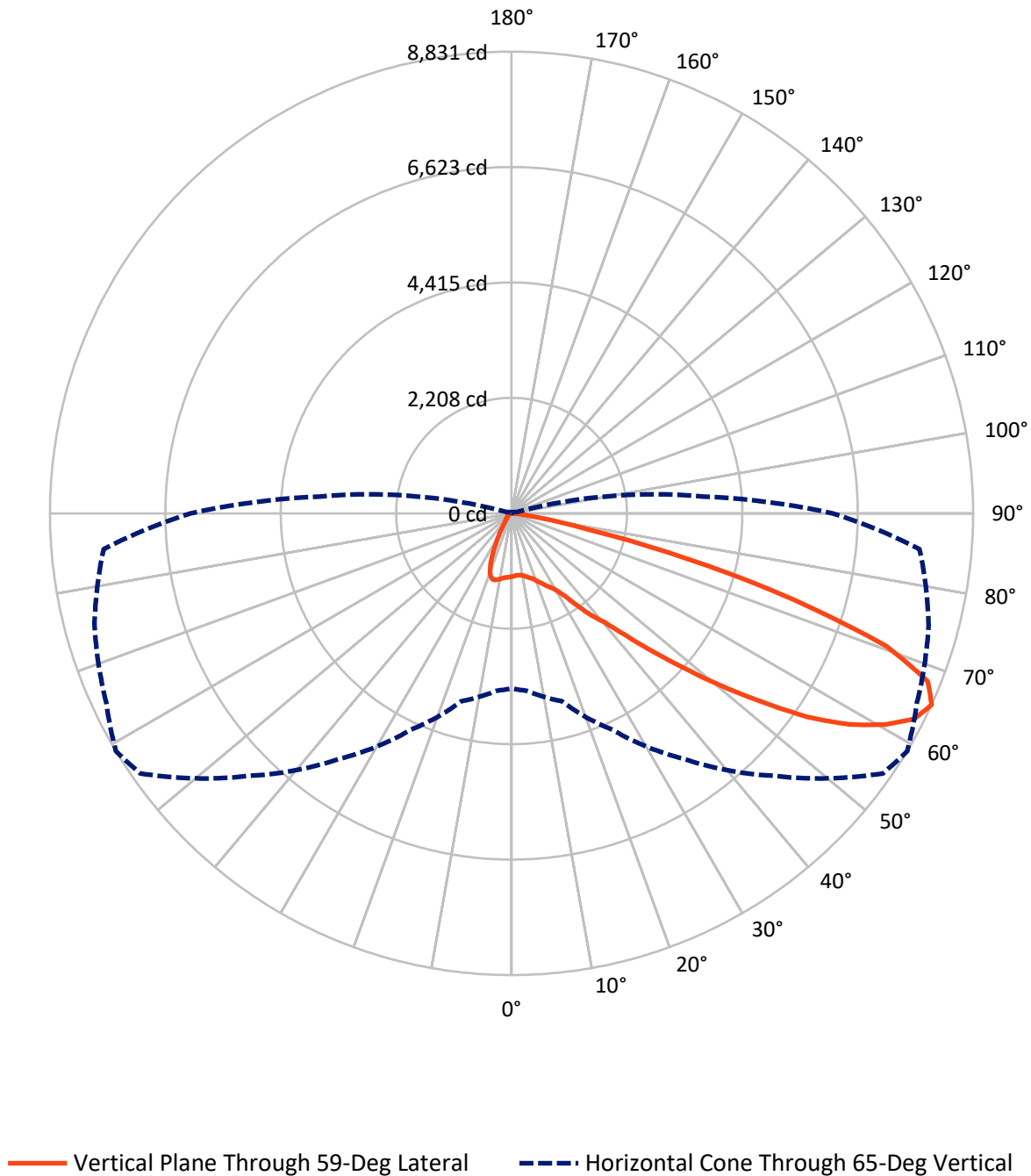
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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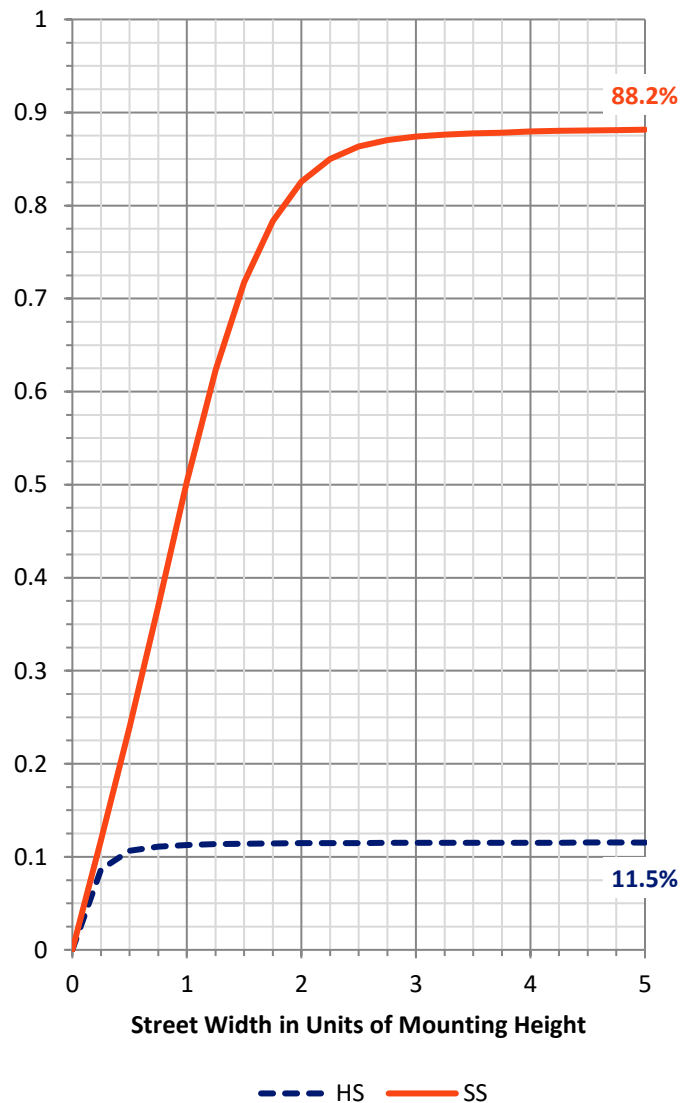
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1305.4   | 0.0    | 1305.4  |
|                    | % Fixture | 11.7     | 0.0    | 11.7    |
| <b>Street Side</b> | Lumens    | 9884.6   | 0.0    | 9884.6  |
|                    | % Fixture | 88.3     | 0.0    | 88.3    |
| <b>Total</b>       | Lumens    | 11190.0  | 0.0    | 11190.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 114.2   | 1.0       |
| 10°-20°   | 324.6   | 2.9       |
| 20°-30°   | 551.3   | 4.9       |
| 30°-40°   | 976.6   | 8.7       |
| 40°-50°   | 1842.3  | 16.5      |
| 50°-60°   | 3117.1  | 27.9      |
| 60°-70°   | 3240.9  | 29.0      |
| 70°-80°   | 971.9   | 8.7       |
| 80°-90°   | 51.0    | 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°    | 11190.0 | 100.0     |
| 0°-180°   | 11190.0 | 100.0     |

**Coefficient of Utilization**



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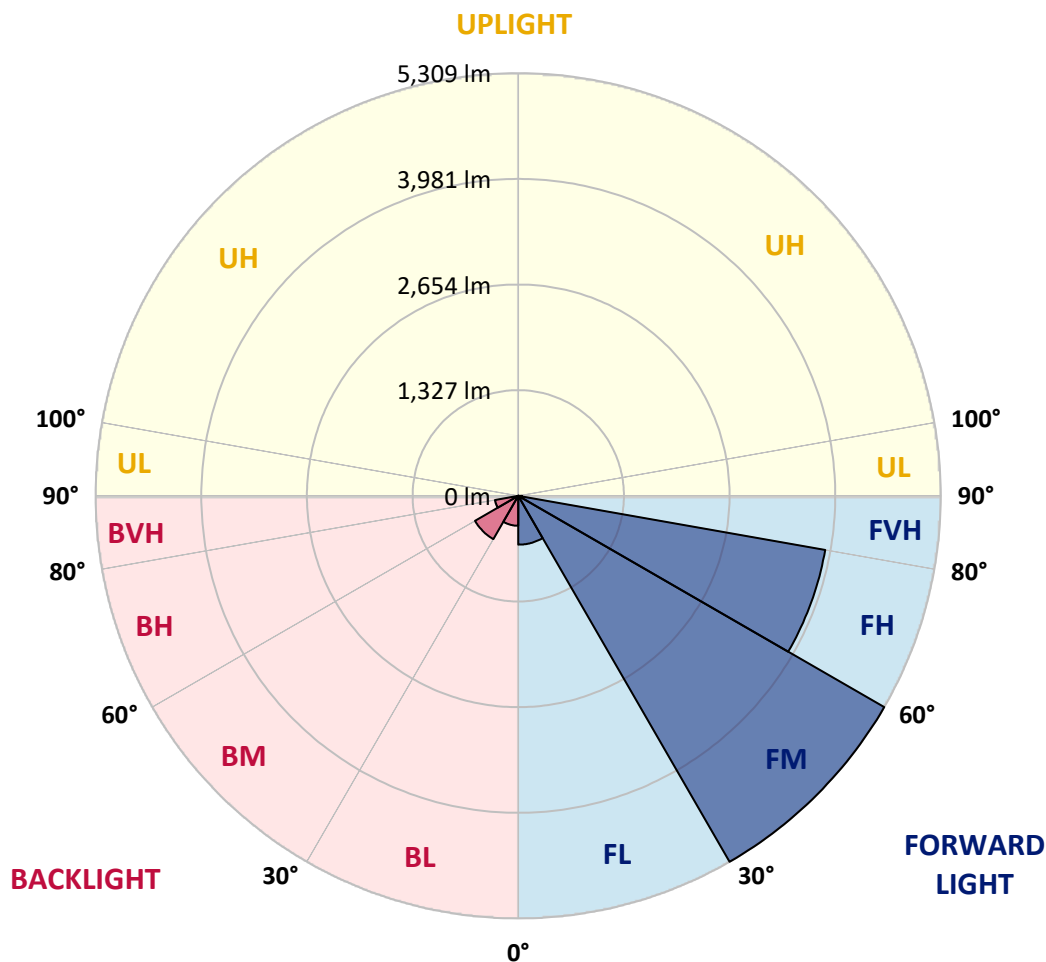
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 613.6  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 5308.6 | 47.4      |                         |      |         |
| FH   | (60°-80°)   | 3915.7 | 35.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 46.7   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 376.6  | 3.4       | B1/500                  |      |         |
| BM   | (30°-60°)   | 627.5  | 5.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 297.0  | 2.7       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 4.3    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 59°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 |
| 2.5°  | 1176.6 | 1172.5 | 1172.5 | 1180.7 | 1184.8 | 1188.8 | 1197.0 | 1197.0 | 1197.0 | 1205.1 | 1209.2 |
| 5°    | 1119.6 | 1119.6 | 1123.7 | 1131.8 | 1148.1 | 1160.3 | 1184.8 | 1188.8 | 1192.9 | 1213.3 | 1221.4 |
| 7.5°  | 1083.0 | 1083.0 | 1087.1 | 1103.3 | 1123.7 | 1152.2 | 1184.8 | 1192.9 | 1205.1 | 1233.6 | 1254.0 |
| 10°   | 1078.9 | 1074.8 | 1083.0 | 1099.3 | 1123.7 | 1160.3 | 1197.0 | 1209.2 | 1233.6 | 1270.3 | 1298.8 |
| 12.5° | 1091.1 | 1087.1 | 1095.2 | 1111.5 | 1135.9 | 1172.5 | 1221.4 | 1241.8 | 1270.3 | 1319.1 | 1359.8 |
| 15°   | 1099.3 | 1095.2 | 1103.3 | 1123.7 | 1152.2 | 1197.0 | 1254.0 | 1278.4 | 1315.0 | 1384.3 | 1425.0 |
| 17.5° | 1123.7 | 1119.6 | 1123.7 | 1140.0 | 1168.5 | 1217.3 | 1290.6 | 1315.0 | 1376.1 | 1453.5 | 1498.3 |
| 20°   | 1233.6 | 1229.5 | 1205.1 | 1197.0 | 1201.0 | 1245.8 | 1339.5 | 1380.2 | 1453.5 | 1551.2 | 1583.8 |
| 22.5° | 1461.6 | 1445.3 | 1400.5 | 1327.3 | 1278.4 | 1294.7 | 1400.5 | 1445.3 | 1543.0 | 1653.0 | 1677.4 |
| 25°   | 1767.0 | 1754.8 | 1689.6 | 1563.4 | 1425.0 | 1384.3 | 1469.8 | 1530.8 | 1648.9 | 1771.0 | 1762.9 |
| 27.5° | 2113.0 | 2088.6 | 2027.5 | 1852.5 | 1665.2 | 1530.8 | 1555.3 | 1608.2 | 1738.5 | 1868.7 | 1828.0 |
| 30°   | 2414.3 | 2406.2 | 2337.0 | 2190.4 | 1970.5 | 1771.0 | 1685.5 | 1714.0 | 1832.1 | 1970.5 | 1921.7 |
| 32.5° | 2691.2 | 2666.7 | 2609.7 | 2471.3 | 2267.7 | 2064.2 | 1893.2 | 1893.2 | 1990.9 | 2153.7 | 2080.5 |
| 35°   | 2996.5 | 2980.2 | 2911.0 | 2772.6 | 2577.2 | 2337.0 | 2182.2 | 2166.0 | 2247.4 | 2430.6 | 2271.8 |
| 37.5° | 3310.0 | 3269.3 | 3236.7 | 3094.2 | 2898.8 | 2691.2 | 2503.9 | 2467.2 | 2508.0 | 2642.3 | 2446.9 |
| 40°   | 3700.9 | 3700.9 | 3627.6 | 3497.3 | 3314.1 | 3094.2 | 2833.7 | 2740.0 | 2727.8 | 2902.9 | 2752.2 |
| 42.5° | 4156.8 | 4144.6 | 4083.6 | 3961.4 | 3786.4 | 3582.8 | 3253.0 | 3167.5 | 3159.4 | 3371.1 | 3191.9 |
| 45°   | 4682.1 | 4673.9 | 4600.6 | 4498.8 | 4376.7 | 4152.8 | 3827.1 | 3741.6 | 3692.7 | 3937.0 | 3725.3 |
| 47.5° | 5162.5 | 5134.0 | 5109.5 | 5121.8 | 5052.5 | 4800.1 | 4494.8 | 4393.0 | 4388.9 | 4580.3 | 4307.5 |
| 50°   | 5492.3 | 5476.0 | 5561.5 | 5642.9 | 5773.2 | 5614.4 | 5252.0 | 5162.5 | 5093.3 | 5345.7 | 4914.1 |
| 52.5° | 5708.0 | 5699.9 | 5870.9 | 6103.0 | 6371.7 | 6359.4 | 6037.8 | 5984.9 | 5927.9 | 5997.1 | 5455.6 |
| 55°   | 5793.5 | 5793.5 | 5997.1 | 6424.6 | 6896.9 | 7100.4 | 6949.8 | 6876.5 | 6677.0 | 6534.5 | 6050.0 |
| 57.5° | 5691.7 | 5679.5 | 5944.2 | 6501.9 | 7222.6 | 7641.9 | 7707.1 | 7621.6 | 7308.1 | 7149.3 | 6709.6 |
| 60°   | 5260.2 | 5268.3 | 5581.8 | 6286.2 | 7198.1 | 7861.8 | 8281.1 | 8203.8 | 7890.3 | 7654.1 | 7263.3 |
| 62.5° | 4454.1 | 4523.3 | 4853.0 | 5618.5 | 6677.0 | 7686.7 | 8610.9 | 8651.6 | 8313.7 | 8020.6 | 7755.9 |
| 65°   | 3346.6 | 3407.7 | 3721.2 | 4568.1 | 5728.4 | 7100.4 | 8672.0 | 8830.8 | 8558.0 | 8260.8 | 7833.3 |
| 67.5° | 2035.7 | 2056.0 | 2438.7 | 3077.9 | 4217.9 | 5915.7 | 8244.5 | 8590.5 | 8395.1 | 7906.6 | 7067.9 |
| 70°   | 948.6  | 1001.6 | 1188.8 | 1681.5 | 2670.8 | 4356.3 | 7124.9 | 7613.4 | 7393.6 | 6786.9 | 5374.2 |
| 72.5° | 370.5  | 386.8  | 504.8  | 777.6  | 1416.8 | 2740.0 | 5317.2 | 5642.9 | 5492.3 | 4820.5 | 3204.2 |
| 75°   | 183.2  | 195.4  | 244.3  | 370.5  | 647.3  | 1131.8 | 3248.9 | 3460.6 | 3212.3 | 2422.5 | 1355.8 |
| 77.5° | 134.4  | 134.4  | 162.9  | 228.0  | 354.2  | 419.3  | 1368.0 | 1534.9 | 1449.4 | 936.4  | 370.5  |
| 80°   | 89.6   | 97.7   | 114.0  | 154.7  | 223.9  | 203.6  | 517.1  | 614.8  | 513.0  | 289.1  | 130.3  |
| 82.5° | 52.9   | 57.0   | 85.5   | 109.9  | 150.6  | 118.1  | 175.1  | 195.4  | 211.7  | 142.5  | 61.1   |
| 85°   | 28.5   | 28.5   | 57.0   | 81.4   | 81.4   | 52.9   | 61.1   | 69.2   | 81.4   | 85.5   | 32.6   |
| 87.5° | 8.1    | 8.1    | 36.6   | 48.9   | 32.6   | 28.5   | 32.6   | 32.6   | 36.6   | 44.8   | 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°    | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 | 1209.2 |
| 2.5°  | 1213.3 | 1213.3 | 1217.3 | 1217.3 | 1221.4 | 1221.4 | 1221.4 | 1221.4 | 1225.5 | 1229.5 | 1229.5 |
| 5°    | 1225.5 | 1229.5 | 1229.5 | 1229.5 | 1229.5 | 1221.4 | 1217.3 | 1213.3 | 1213.3 | 1217.3 | 1217.3 |
| 7.5°  | 1258.0 | 1262.1 | 1258.0 | 1249.9 | 1237.7 | 1221.4 | 1205.1 | 1205.1 | 1201.0 | 1205.1 | 1201.0 |
| 10°   | 1306.9 | 1306.9 | 1302.8 | 1282.5 | 1262.1 | 1229.5 | 1197.0 | 1172.5 | 1156.3 | 1152.2 | 1144.0 |
| 12.5° | 1368.0 | 1368.0 | 1355.8 | 1319.1 | 1282.5 | 1221.4 | 1135.9 | 1054.5 | 989.3  | 960.8  | 952.7  |
| 15°   | 1429.0 | 1429.0 | 1412.8 | 1359.8 | 1286.5 | 1140.0 | 960.8  | 789.8  | 692.1  | 651.4  | 627.0  |
| 17.5° | 1502.3 | 1494.2 | 1465.7 | 1392.4 | 1241.8 | 977.1  | 688.1  | 513.0  | 435.6  | 399.0  | 399.0  |
| 20°   | 1579.7 | 1571.5 | 1518.6 | 1396.5 | 1127.8 | 700.3  | 447.8  | 354.2  | 333.9  | 325.7  | 325.7  |
| 22.5° | 1665.2 | 1644.8 | 1563.4 | 1363.9 | 887.6  | 476.3  | 337.9  | 313.5  | 305.4  | 301.3  | 301.3  |
| 25°   | 1734.4 | 1701.8 | 1596.0 | 1274.3 | 635.1  | 333.9  | 297.2  | 289.1  | 272.8  | 268.7  | 260.6  |
| 27.5° | 1787.3 | 1738.5 | 1608.2 | 1083.0 | 419.3  | 276.9  | 264.6  | 248.4  | 232.1  | 215.8  | 215.8  |
| 30°   | 1856.5 | 1795.5 | 1616.3 | 842.8  | 285.0  | 240.2  | 228.0  | 207.6  | 187.3  | 171.0  | 171.0  |
| 32.5° | 1995.0 | 1905.4 | 1620.4 | 590.3  | 236.1  | 211.7  | 187.3  | 162.9  | 142.5  | 134.4  | 130.3  |
| 35°   | 2145.6 | 2023.5 | 1575.6 | 382.7  | 207.6  | 179.1  | 150.6  | 130.3  | 109.9  | 105.9  | 105.9  |
| 37.5° | 2312.5 | 2198.5 | 1477.9 | 260.6  | 183.2  | 150.6  | 122.1  | 101.8  | 89.6   | 85.5   | 85.5   |
| 40°   | 2593.4 | 2459.1 | 1315.0 | 207.6  | 158.8  | 126.2  | 101.8  | 85.5   | 77.4   | 73.3   | 73.3   |
| 42.5° | 2996.5 | 2764.4 | 1111.5 | 179.1  | 138.4  | 105.9  | 81.4   | 69.2   | 65.1   | 61.1   | 61.1   |
| 45°   | 3460.6 | 3106.4 | 875.3  | 162.9  | 122.1  | 89.6   | 69.2   | 61.1   | 57.0   | 52.9   | 52.9   |
| 47.5° | 3994.0 | 3460.6 | 692.1  | 142.5  | 105.9  | 77.4   | 61.1   | 52.9   | 48.9   | 44.8   | 44.8   |
| 50°   | 4498.8 | 3737.5 | 521.1  | 126.2  | 93.6   | 65.1   | 52.9   | 48.9   | 44.8   | 40.7   | 40.7   |
| 52.5° | 4914.1 | 3924.8 | 394.9  | 109.9  | 81.4   | 57.0   | 48.9   | 44.8   | 36.6   | 36.6   | 36.6   |
| 55°   | 5414.9 | 4071.3 | 301.3  | 97.7   | 73.3   | 52.9   | 44.8   | 36.6   | 32.6   | 28.5   | 28.5   |
| 57.5° | 5850.5 | 4124.3 | 219.9  | 85.5   | 65.1   | 48.9   | 40.7   | 32.6   | 24.4   | 20.4   | 20.4   |
| 60°   | 6143.7 | 4079.5 | 158.8  | 73.3   | 57.0   | 40.7   | 32.6   | 24.4   | 16.3   | 12.2   | 12.2   |
| 62.5° | 6351.3 | 3981.8 | 122.1  | 65.1   | 48.9   | 36.6   | 28.5   | 20.4   | 12.2   | 8.1    | 8.1    |
| 65°   | 6143.7 | 3680.5 | 97.7   | 57.0   | 40.7   | 32.6   | 20.4   | 16.3   | 8.1    | 4.1    | 4.1    |
| 67.5° | 5313.1 | 3086.1 | 77.4   | 48.9   | 36.6   | 28.5   | 20.4   | 12.2   | 4.1    | 0.0    | 0.0    |
| 70°   | 3818.9 | 2202.6 | 65.1   | 44.8   | 32.6   | 24.4   | 16.3   | 8.1    | 4.1    | 0.0    | 0.0    |
| 72.5° | 2129.3 | 1135.9 | 61.1   | 40.7   | 32.6   | 24.4   | 16.3   | 8.1    | 4.1    | 0.0    | 0.0    |
| 75°   | 863.1  | 390.8  | 57.0   | 40.7   | 32.6   | 20.4   | 16.3   | 8.1    | 4.1    | 0.0    | 0.0    |
| 77.5° | 252.4  | 134.4  | 48.9   | 36.6   | 32.6   | 24.4   | 16.3   | 8.1    | 4.1    | 0.0    | 0.0    |
| 80°   | 89.6   | 61.1   | 36.6   | 32.6   | 24.4   | 20.4   | 16.3   | 12.2   | 4.1    | 0.0    | 0.0    |
| 82.5° | 40.7   | 24.4   | 16.3   | 12.2   | 12.2   | 12.2   | 12.2   | 8.1    | 4.1    | 0.0    | 0.0    |
| 85°   | 16.3   | 12.2   | 8.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 0.0    | 0.0    |
| 87.5° | 12.2   | 8.1    | 4.1    | 4.1    | 4.1    | 4.1    | 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)