

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: P573033

Luminaire Tested: **ARCH-S-PA2-20-830-U-T2U-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573033  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-20-830-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 220mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2016 lumens  
Efficiency: N/A  
Efficacy: 85.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G0

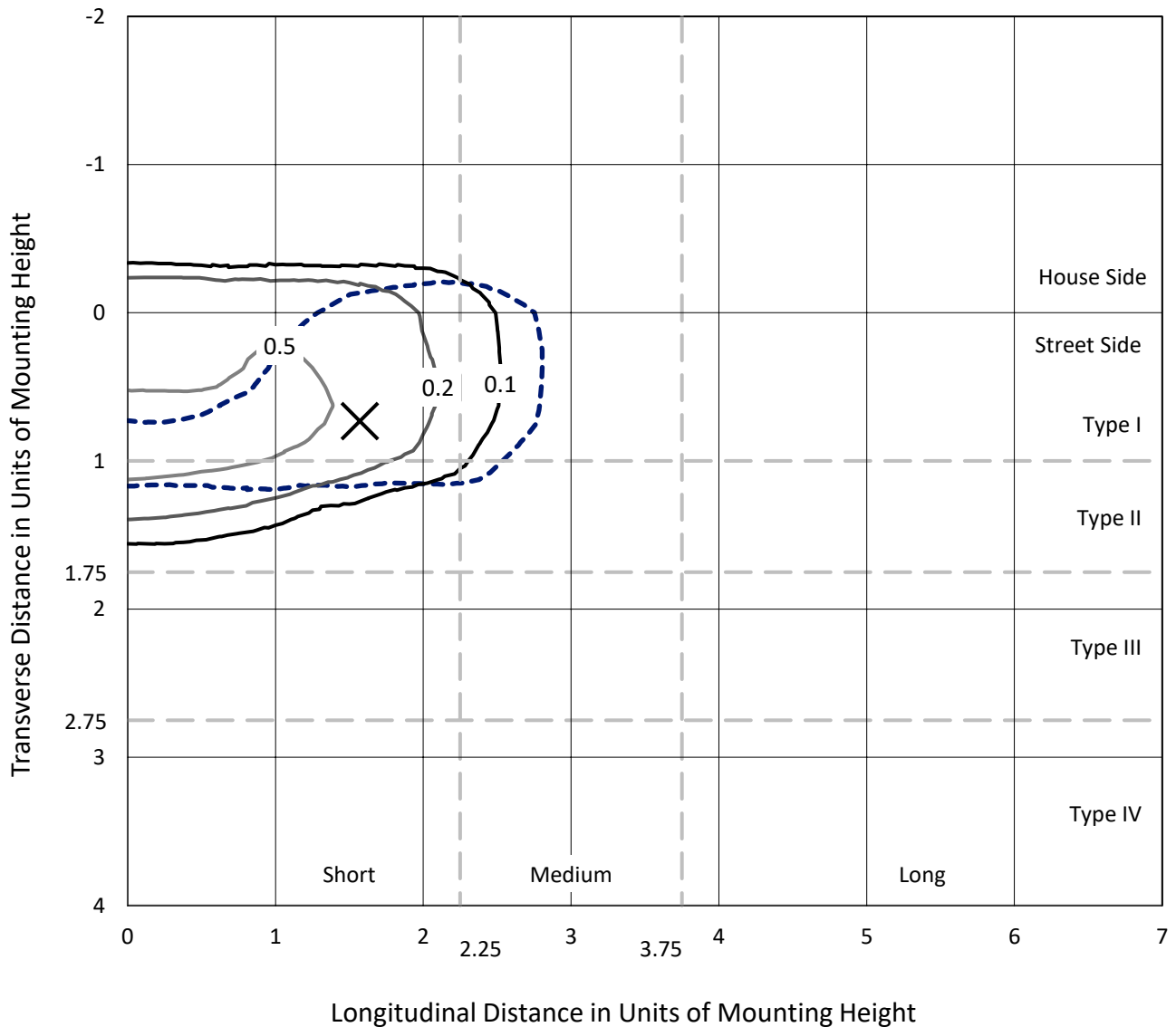
Input Watts (W): 23.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

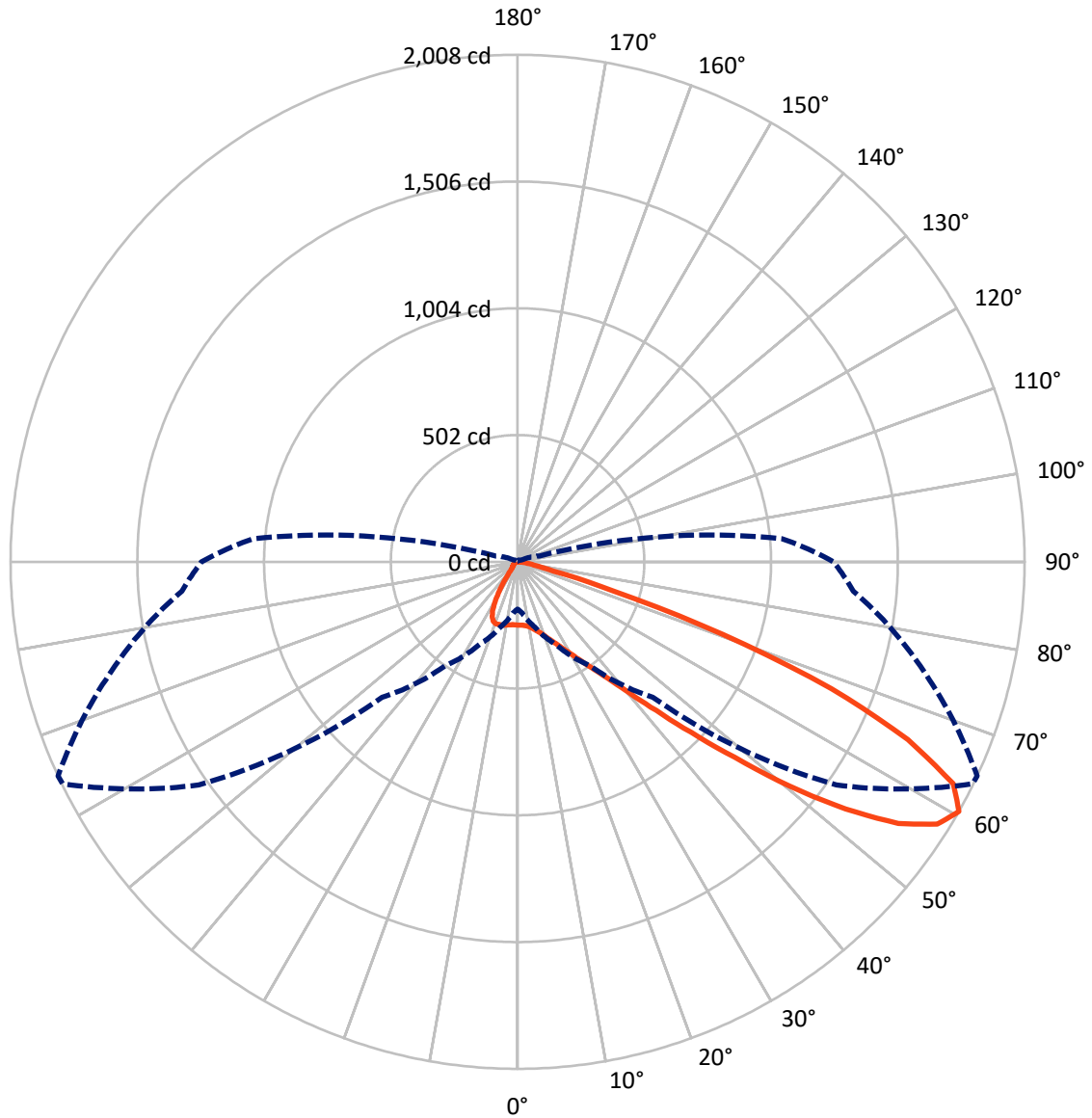
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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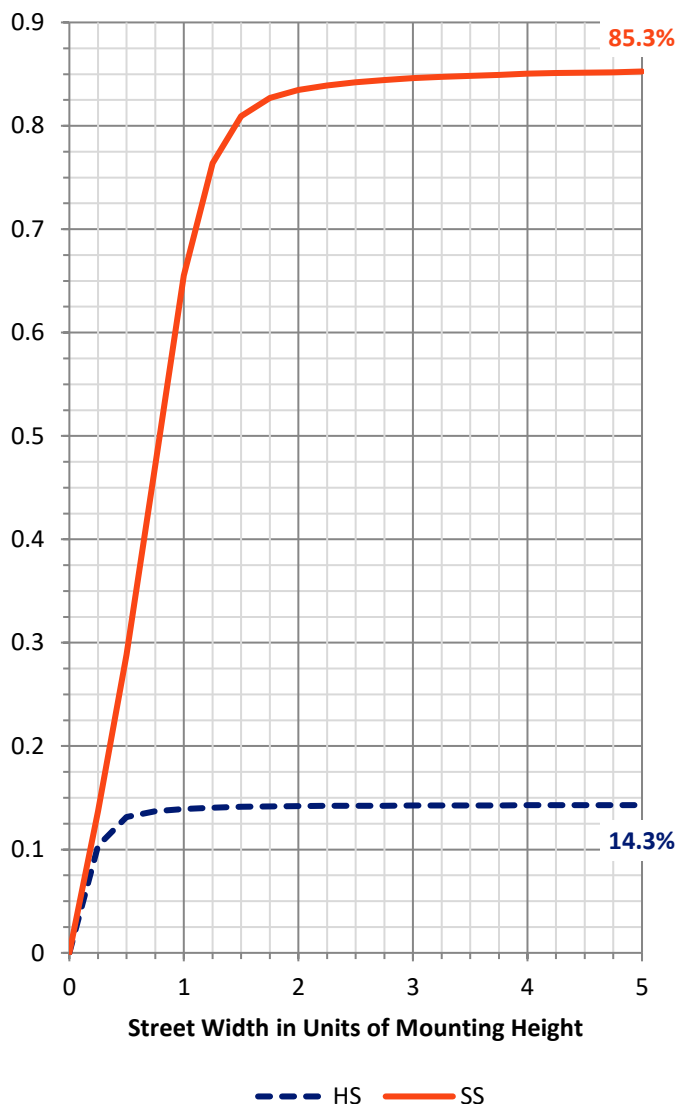
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 291.9    | 0.0    | 291.9  |
|                    | % Fixture | 14.5     | 0.0    | 14.5   |
| <b>Street Side</b> | Lumens    | 1724.1   | 0.0    | 1724.1 |
|                    | % Fixture | 85.5     | 0.0    | 85.5   |
| <b>Total</b>       | Lumens    | 2016.0   | 0.0    | 2016.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 23.7   | 1.2       |
| 10°-20°   | 67.3   | 3.3       |
| 20°-30°   | 114.4  | 5.7       |
| 30°-40°   | 236.0  | 11.7      |
| 40°-50°   | 474.7  | 23.5      |
| 50°-60°   | 580.9  | 28.8      |
| 60°-70°   | 410.9  | 20.4      |
| 70°-80°   | 99.0   | 4.9       |
| 80°-90°   | 9.0    | 0.4       |
| 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°    | 2016.0 | 100.0     |
| 0°-180°   | 2016.0 | 100.0     |

**Coefficient of Utilization**

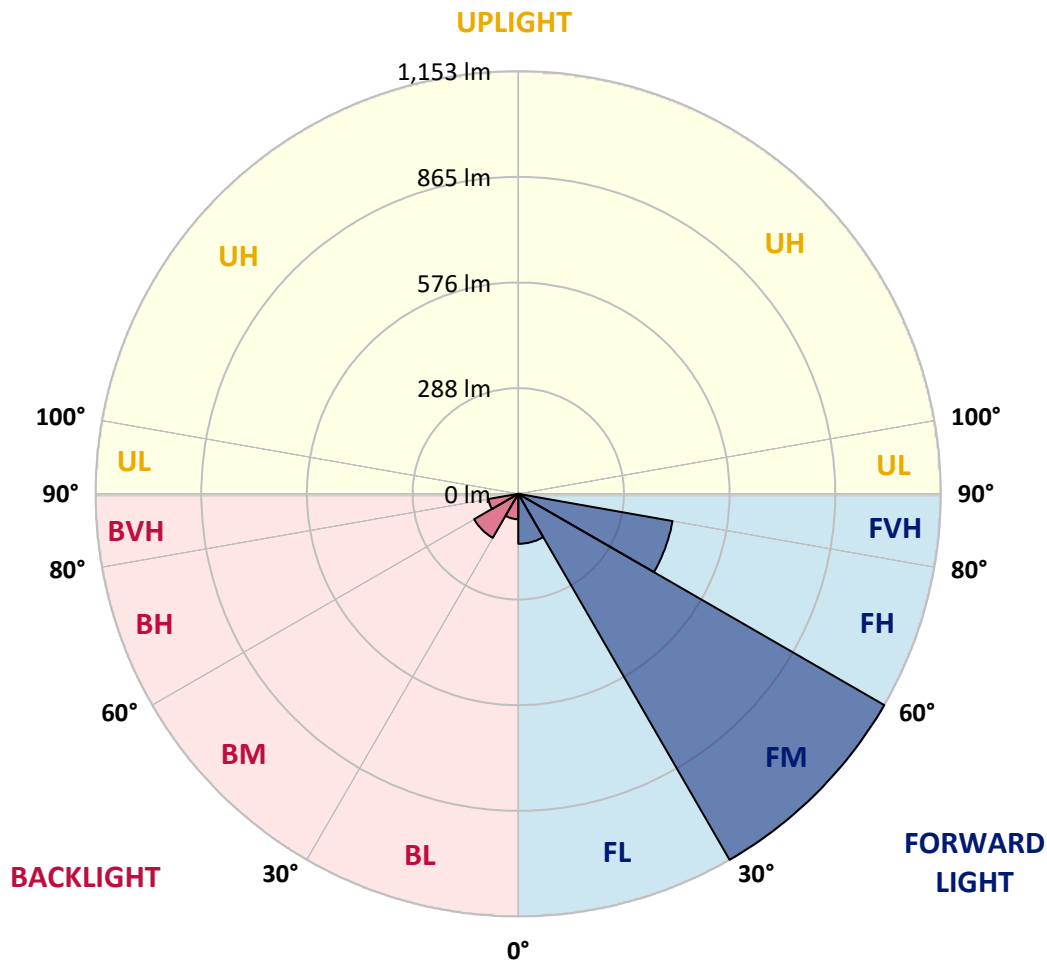


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|--------|-----------|-------------------------|------|--------|
|                |        |           | B                       | U    | G      |
| FL (0°-30°)    | 136.3  | 6.8       |                         |      |        |
| FM (30°-60°)   | 1152.8 | 57.2      |                         |      |        |
| FH (60°-80°)   | 427.2  | 21.2      |                         |      | G0/660 |
| FVH (80°-90°)  | 7.8    | 0.4       |                         |      | G0/10  |
| BL (0°-30°)    | 69.2   | 3.4       | B0/110                  |      |        |
| BM (30°-60°)   | 138.8  | 6.9       | B0/220                  |      |        |
| BH (60°-80°)   | 82.7   | 4.1       | B0/110                  |      | G0/110 |
| BVH (80°-90°)  | 1.2    | 0.1       |                         |      | G0/10  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B0-U0-G0**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 64°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 251.1  | 251.1  | 251.1  | 251.1  | 251.1  | 251.1  | 251.1  | 251.1  | 251.1  | 251.1  | 251.1  |
| 2.5°  | 251.9  | 251.1  | 251.1  | 251.1  | 251.9  | 251.9  | 252.7  | 251.1  | 251.1  | 251.1  | 251.1  |
| 5°    | 250.3  | 249.6  | 249.6  | 250.3  | 251.1  | 251.1  | 252.7  | 252.7  | 252.7  | 253.5  | 253.5  |
| 7.5°  | 253.5  | 251.9  | 251.9  | 252.7  | 253.5  | 253.5  | 255.1  | 255.9  | 255.9  | 257.5  | 258.3  |
| 10°   | 257.5  | 256.7  | 256.7  | 258.3  | 259.9  | 259.9  | 262.3  | 262.3  | 262.3  | 263.9  | 264.7  |
| 12.5° | 263.1  | 262.3  | 262.3  | 264.7  | 267.0  | 268.6  | 270.2  | 271.0  | 271.0  | 271.8  | 271.8  |
| 15°   | 271.0  | 270.2  | 270.2  | 272.6  | 275.8  | 279.8  | 282.1  | 282.1  | 283.7  | 282.9  | 279.8  |
| 17.5° | 282.1  | 281.3  | 282.1  | 283.7  | 287.7  | 291.7  | 296.4  | 297.2  | 296.4  | 294.9  | 290.1  |
| 20°   | 300.4  | 298.0  | 299.6  | 303.6  | 303.6  | 306.0  | 312.3  | 314.7  | 315.5  | 310.8  | 302.0  |
| 22.5° | 319.5  | 319.5  | 321.1  | 325.9  | 322.7  | 325.9  | 331.4  | 335.4  | 337.0  | 333.0  | 318.7  |
| 25°   | 355.3  | 356.8  | 354.5  | 352.9  | 344.9  | 346.5  | 353.7  | 361.6  | 361.6  | 358.4  | 337.8  |
| 27.5° | 433.9  | 432.3  | 415.7  | 392.6  | 371.9  | 373.5  | 380.7  | 391.0  | 391.8  | 384.7  | 356.8  |
| 30°   | 546.8  | 548.4  | 515.8  | 463.3  | 418.0  | 406.1  | 414.1  | 426.0  | 427.6  | 415.7  | 381.5  |
| 32.5° | 723.2  | 709.7  | 649.3  | 579.4  | 494.3  | 451.4  | 454.6  | 467.3  | 472.1  | 461.8  | 420.4  |
| 35°   | 951.3  | 919.5  | 828.9  | 742.3  | 619.1  | 532.5  | 507.8  | 521.4  | 523.7  | 518.2  | 468.9  |
| 37.5° | 1087.2 | 1061.8 | 1003.0 | 924.3  | 779.7  | 640.6  | 577.8  | 591.3  | 588.9  | 577.8  | 517.4  |
| 40°   | 1171.5 | 1157.2 | 1125.4 | 1088.8 | 996.6  | 810.7  | 693.0  | 681.9  | 682.7  | 666.8  | 596.1  |
| 42.5° | 1219.2 | 1206.4 | 1194.5 | 1204.1 | 1177.0 | 1119.0 | 859.9  | 809.1  | 804.3  | 774.1  | 687.5  |
| 45°   | 1221.5 | 1202.5 | 1216.8 | 1272.4 | 1315.3 | 1392.4 | 1077.7 | 960.1  | 962.5  | 912.4  | 801.1  |
| 47.5° | 1130.1 | 1115.0 | 1156.4 | 1265.3 | 1407.5 | 1571.2 | 1331.2 | 1166.7 | 1155.6 | 1057.0 | 916.4  |
| 50°   | 949.7  | 948.9  | 1003.8 | 1158.0 | 1407.5 | 1663.4 | 1603.0 | 1409.1 | 1397.2 | 1208.0 | 1021.3 |
| 52.5° | 751.8  | 766.9  | 804.3  | 950.5  | 1278.0 | 1654.7 | 1803.3 | 1659.5 | 1626.1 | 1342.3 | 1108.7 |
| 55°   | 584.9  | 579.4  | 624.7  | 725.6  | 1013.3 | 1503.7 | 1868.5 | 1856.6 | 1828.7 | 1461.6 | 1185.8 |
| 57.5° | 359.2  | 379.9  | 441.1  | 530.9  | 737.5  | 1182.6 | 1774.7 | 1976.6 | 1959.9 | 1572.8 | 1266.0 |
| 60°   | 186.8  | 202.7  | 268.6  | 362.4  | 503.9  | 758.2  | 1540.2 | 2004.4 | 2007.6 | 1662.6 | 1334.4 |
| 62.5° | 117.6  | 116.8  | 147.0  | 254.3  | 324.3  | 426.0  | 1196.1 | 1905.8 | 1936.0 | 1731.8 | 1399.6 |
| 65°   | 88.2   | 89.0   | 100.9  | 168.5  | 220.1  | 222.5  | 709.7  | 1648.3 | 1698.4 | 1750.1 | 1421.8 |
| 67.5° | 81.9   | 82.7   | 88.2   | 110.5  | 165.3  | 148.6  | 312.3  | 1270.8 | 1340.8 | 1581.6 | 1336.0 |
| 70°   | 73.1   | 73.9   | 82.7   | 91.4   | 124.8  | 108.9  | 140.7  | 765.4  | 862.3  | 1147.6 | 1068.9 |
| 72.5° | 57.2   | 58.8   | 69.1   | 86.6   | 93.0   | 82.7   | 97.8   | 338.6  | 395.0  | 631.0  | 612.0  |
| 75°   | 42.1   | 42.9   | 52.5   | 66.8   | 81.9   | 58.8   | 75.5   | 134.3  | 147.0  | 236.8  | 201.9  |
| 77.5° | 29.4   | 29.4   | 36.6   | 50.1   | 68.3   | 41.3   | 54.0   | 72.3   | 73.9   | 88.2   | 58.0   |
| 80°   | 18.3   | 19.1   | 23.0   | 34.2   | 42.1   | 39.7   | 33.4   | 48.5   | 48.5   | 46.1   | 23.8   |
| 82.5° | 10.3   | 11.1   | 15.9   | 23.0   | 28.6   | 27.0   | 21.5   | 27.8   | 28.6   | 29.4   | 13.5   |
| 85°   | 4.8    | 5.6    | 9.5    | 14.3   | 16.7   | 12.7   | 12.7   | 14.3   | 14.3   | 19.1   | 7.9    |
| 87.5° | 0.8    | 0.8    | 4.8    | 6.4    | 5.6    | 6.4    | 6.4    | 7.9    | 7.9    | 9.5    | 4.0    |
| 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°    | 251.1  | 251.1  | 251.1 | 251.1 | 251.1 | 251.1 | 251.1 | 251.1 | 251.1 | 251.1 | 251.1 |
| 2.5°  | 250.3  | 250.3  | 250.3 | 249.6 | 249.6 | 248.8 | 247.2 | 247.2 | 247.2 | 247.2 | 248.0 |
| 5°    | 253.5  | 252.7  | 251.9 | 249.6 | 248.0 | 244.8 | 241.6 | 240.8 | 238.4 | 238.4 | 239.2 |
| 7.5°  | 257.5  | 257.5  | 255.1 | 251.1 | 247.2 | 241.6 | 236.0 | 232.1 | 228.1 | 227.3 | 226.5 |
| 10°   | 264.7  | 263.1  | 260.7 | 253.5 | 247.2 | 238.4 | 229.7 | 219.4 | 211.4 | 207.4 | 205.8 |
| 12.5° | 270.2  | 269.4  | 264.7 | 256.7 | 246.4 | 232.9 | 213.0 | 189.2 | 170.1 | 159.7 | 159.7 |
| 15°   | 278.2  | 276.6  | 269.4 | 258.3 | 244.0 | 212.2 | 171.7 | 135.1 | 114.4 | 103.3 | 101.7 |
| 17.5° | 286.1  | 282.9  | 274.2 | 259.1 | 233.7 | 174.8 | 120.0 | 86.6  | 72.3  | 66.8  | 65.2  |
| 20°   | 295.6  | 290.1  | 277.4 | 259.9 | 208.2 | 127.2 | 77.9  | 58.0  | 52.5  | 50.1  | 50.9  |
| 22.5° | 308.4  | 298.8  | 280.5 | 255.1 | 170.1 | 82.7  | 54.8  | 46.9  | 43.7  | 41.3  | 41.3  |
| 25°   | 324.3  | 310.8  | 286.1 | 241.6 | 123.2 | 55.6  | 43.7  | 38.9  | 35.8  | 34.2  | 33.4  |
| 27.5° | 338.6  | 321.9  | 291.7 | 217.8 | 78.7  | 43.7  | 36.6  | 32.6  | 29.4  | 28.6  | 27.8  |
| 30°   | 357.6  | 334.6  | 297.2 | 179.6 | 51.7  | 35.8  | 31.0  | 27.0  | 24.6  | 23.8  | 23.8  |
| 32.5° | 390.2  | 359.2  | 307.6 | 136.7 | 38.9  | 31.0  | 26.2  | 23.0  | 21.5  | 20.7  | 20.7  |
| 35°   | 428.4  | 389.4  | 316.3 | 95.4  | 33.4  | 26.2  | 22.3  | 19.9  | 19.1  | 18.3  | 18.3  |
| 37.5° | 468.1  | 425.2  | 317.9 | 60.4  | 29.4  | 23.0  | 19.9  | 18.3  | 16.7  | 16.7  | 16.7  |
| 40°   | 539.6  | 488.0  | 310.8 | 40.5  | 25.4  | 20.7  | 17.5  | 16.7  | 15.1  | 15.1  | 15.1  |
| 42.5° | 623.1  | 564.3  | 292.5 | 32.6  | 23.0  | 18.3  | 16.7  | 15.1  | 13.5  | 13.5  | 12.7  |
| 45°   | 731.2  | 650.9  | 261.5 | 28.6  | 20.7  | 16.7  | 15.1  | 13.5  | 12.7  | 11.9  | 11.9  |
| 47.5° | 832.9  | 749.5  | 232.1 | 25.4  | 19.1  | 15.9  | 13.5  | 11.9  | 11.1  | 11.1  | 11.1  |
| 50°   | 929.9  | 825.0  | 197.9 | 23.8  | 17.5  | 15.1  | 12.7  | 11.1  | 10.3  | 9.5   | 9.5   |
| 52.5° | 999.8  | 884.6  | 166.1 | 21.5  | 15.9  | 13.5  | 11.9  | 10.3  | 8.7   | 7.9   | 7.9   |
| 55°   | 1077.7 | 945.0  | 137.5 | 19.1  | 15.1  | 12.7  | 10.3  | 8.7   | 7.2   | 6.4   | 6.4   |
| 57.5° | 1165.1 | 1003.8 | 111.3 | 17.5  | 14.3  | 11.1  | 8.7   | 7.2   | 5.6   | 4.8   | 4.8   |
| 60°   | 1251.7 | 1050.7 | 89.0  | 15.9  | 12.7  | 10.3  | 7.9   | 5.6   | 4.0   | 3.2   | 3.2   |
| 62.5° | 1338.4 | 1082.5 | 68.3  | 14.3  | 11.9  | 8.7   | 6.4   | 4.0   | 2.4   | 1.6   | 1.6   |
| 65°   | 1374.1 | 1073.7 | 50.9  | 12.7  | 10.3  | 7.2   | 5.6   | 4.0   | 2.4   | 1.6   | 1.6   |
| 67.5° | 1274.8 | 965.6  | 35.8  | 12.7  | 9.5   | 7.2   | 4.8   | 3.2   | 1.6   | 0.8   | 0.8   |
| 70°   | 995.0  | 745.5  | 26.2  | 12.7  | 9.5   | 7.2   | 4.8   | 3.2   | 1.6   | 0.8   | 0.8   |
| 72.5° | 564.3  | 414.9  | 19.9  | 11.1  | 8.7   | 6.4   | 4.8   | 3.2   | 1.6   | 0.8   | 0.8   |
| 75°   | 201.1  | 133.5  | 15.1  | 10.3  | 7.9   | 5.6   | 4.8   | 3.2   | 1.6   | 0.8   | 0.8   |
| 77.5° | 48.5   | 34.2   | 11.9  | 8.7   | 7.2   | 5.6   | 4.0   | 3.2   | 2.4   | 0.8   | 0.8   |
| 80°   | 19.9   | 14.3   | 9.5   | 7.2   | 5.6   | 4.8   | 4.0   | 3.2   | 1.6   | 0.8   | 0.8   |
| 82.5° | 8.7    | 7.2    | 4.0   | 4.0   | 3.2   | 3.2   | 3.2   | 3.2   | 1.6   | 0.8   | 0.8   |
| 85°   | 4.0    | 3.2    | 1.6   | 1.6   | 0.8   | 0.8   | 0.8   | 1.6   | 1.6   | 0.8   | 0.8   |
| 87.5° | 2.4    | 1.6    | 1.6   | 1.6   | 0.8   | 0.8   | 0.8   | 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)