

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: P573292

Luminaire Tested: **ARCH-S-PA2-60-727-U-T2R-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573292
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-60-727-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 625mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6087 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B0 - U0 - G1

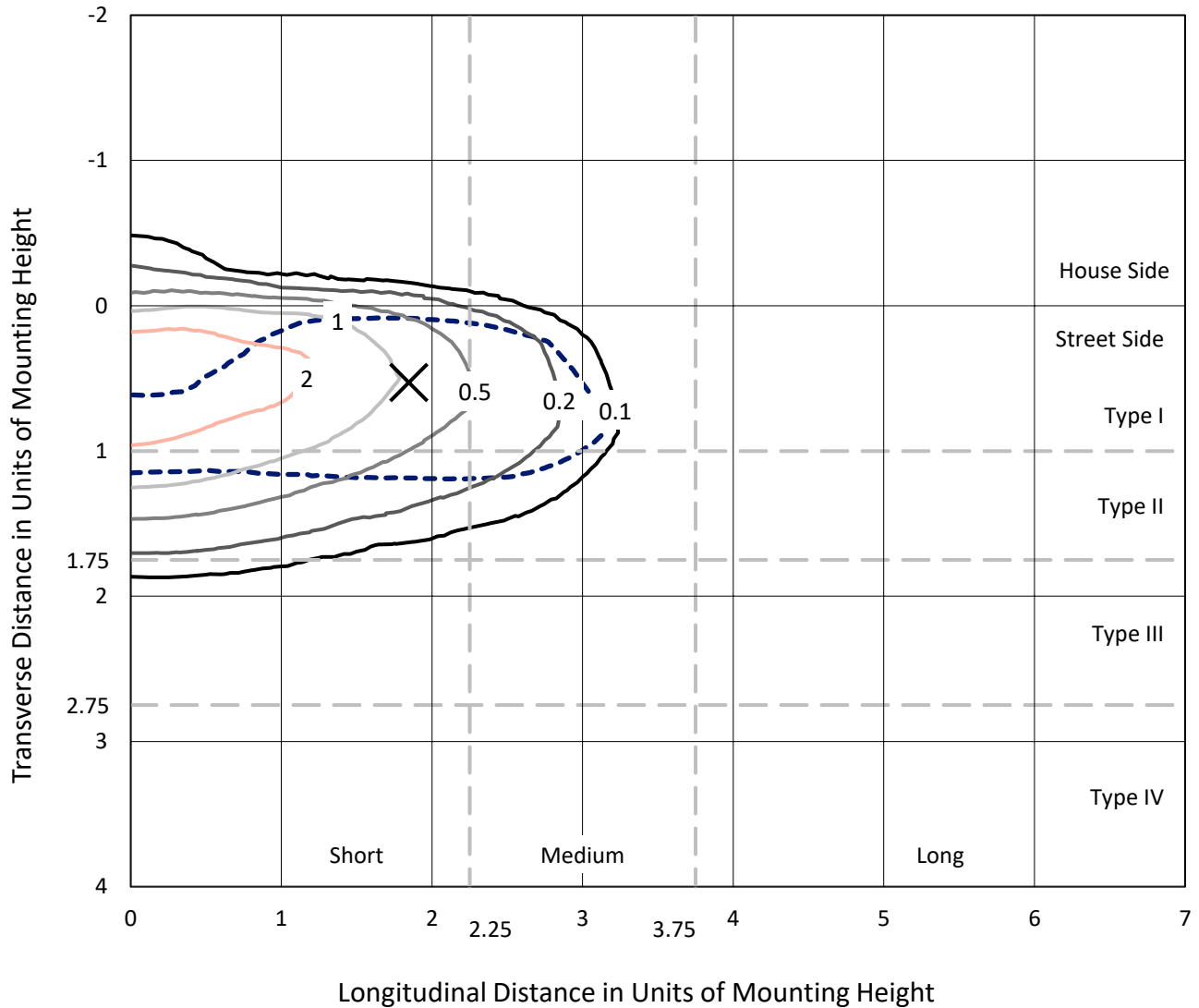
Input Watts (W): 63.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

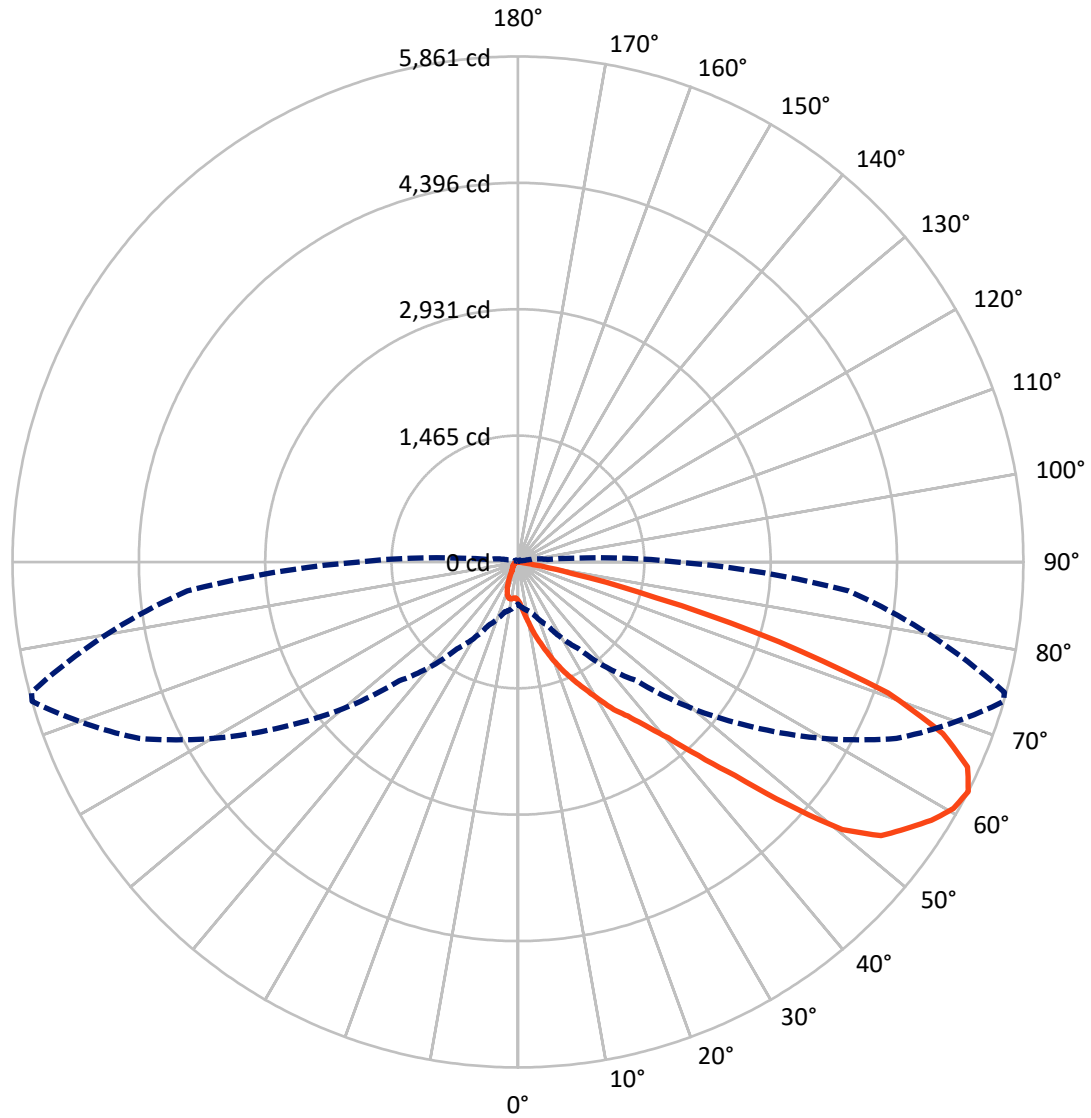
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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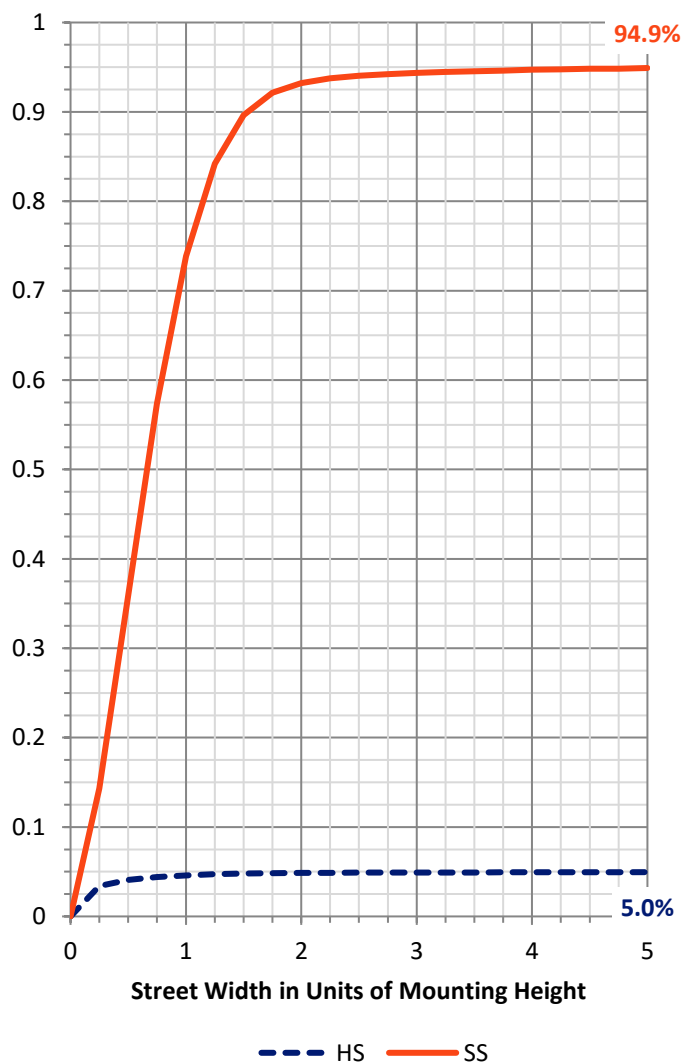
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 303.6 | 0.0 | 303.6 |
| | % Fixture | 5.0 | 0.0 | 5.0 |
| Street Side | Lumens | 5783.4 | 0.0 | 5783.4 |
| | % Fixture | 95.0 | 0.0 | 95.0 |
| Total | Lumens | 6087.0 | 0.0 | 6087.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 55.7 | 0.9 |
| 10°-20° | 234.1 | 3.8 |
| 20°-30° | 502.3 | 8.3 |
| 30°-40° | 881.0 | 14.5 |
| 40°-50° | 1365.8 | 22.4 |
| 50°-60° | 1574.5 | 25.9 |
| 60°-70° | 1106.2 | 18.2 |
| 70°-80° | 344.6 | 5.7 |
| 80°-90° | 22.8 | 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° | 6087.0 | 100.0 |
| 0°-180° | 6087.0 | 100.0 |

Coefficient of Utilization



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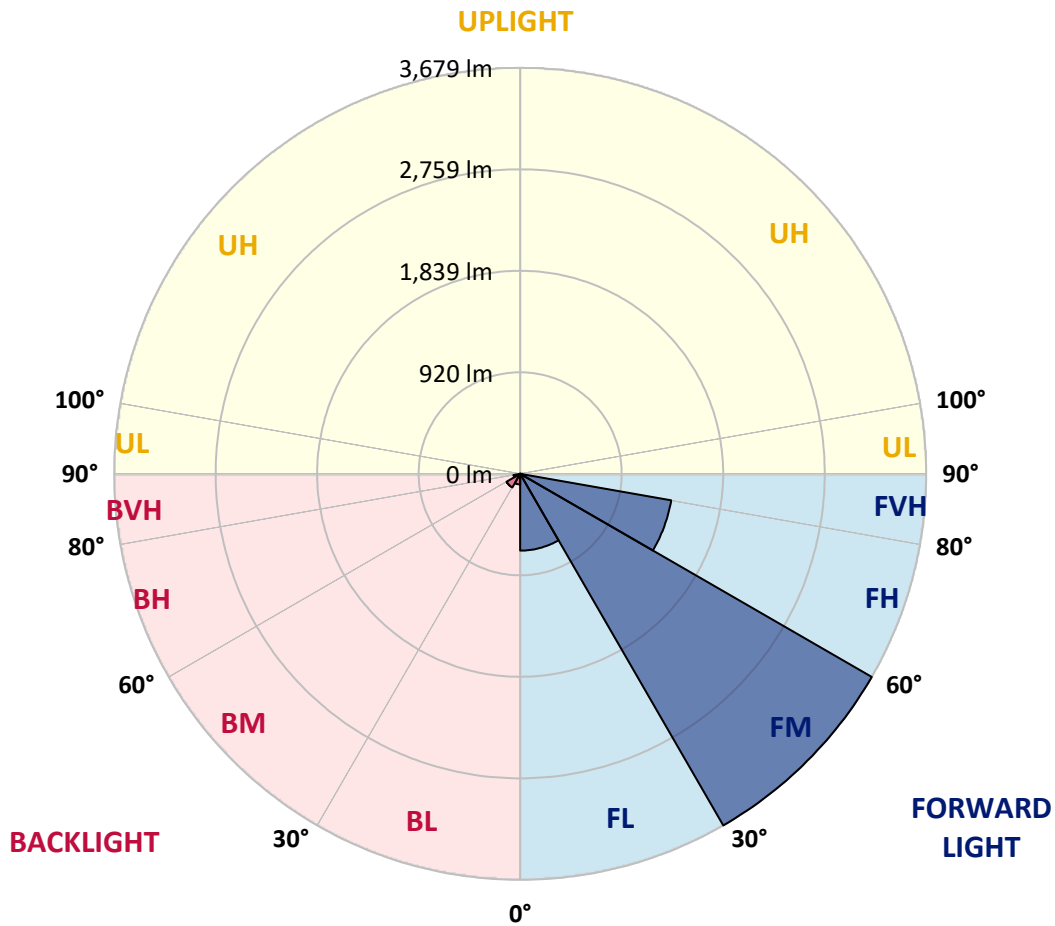
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 695.8 | 11.4 | | | |
| FM (30°-60°) | 3678.7 | 60.4 | | | |
| FH (60°-80°) | 1389.3 | 22.8 | | | G1/1800 |
| FVH (80°-90°) | 19.6 | 0.3 | | | G1/100 |
| BL (0°-30°) | 96.3 | 1.6 | B0/110 | | |
| BM (30°-60°) | 142.7 | 2.3 | B0/220 | | |
| BH (60°-80°) | 61.4 | 1.0 | B0/110 | | G0/110 |
| BVH (80°-90°) | 3.1 | 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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 74° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 |
| 2.5° | 619.1 | 608.4 | 595.5 | 584.8 | 563.4 | 548.4 | 529.1 | 507.7 | 484.1 | 482.0 | 462.7 |
| 5° | 867.6 | 835.5 | 835.5 | 807.6 | 775.5 | 717.7 | 664.1 | 597.7 | 548.4 | 544.1 | 492.7 |
| 7.5° | 1122.5 | 1096.8 | 1081.8 | 1039.0 | 987.6 | 923.3 | 837.6 | 726.2 | 636.2 | 621.3 | 537.7 |
| 10° | 1360.3 | 1341.0 | 1313.2 | 1278.9 | 1233.9 | 1129.0 | 1021.9 | 876.2 | 732.6 | 721.9 | 591.3 |
| 12.5° | 1544.6 | 1521.0 | 1508.1 | 1493.1 | 1435.3 | 1351.8 | 1212.5 | 1028.3 | 856.9 | 833.3 | 644.8 |
| 15° | 1683.8 | 1673.1 | 1660.2 | 1660.2 | 1630.2 | 1548.8 | 1405.3 | 1191.1 | 976.9 | 949.0 | 713.4 |
| 17.5° | 1795.2 | 1782.3 | 1780.2 | 1793.1 | 1784.5 | 1726.6 | 1591.7 | 1347.5 | 1101.1 | 1079.7 | 784.1 |
| 20° | 1919.5 | 1902.3 | 1902.3 | 1913.0 | 1910.9 | 1878.7 | 1760.9 | 1527.4 | 1246.8 | 1208.2 | 865.5 |
| 22.5° | 2095.1 | 2084.4 | 2075.8 | 2058.7 | 2045.8 | 2015.9 | 1913.0 | 1703.1 | 1386.0 | 1349.6 | 949.0 |
| 25° | 2330.8 | 2317.9 | 2279.3 | 2249.4 | 2193.7 | 2148.7 | 2060.8 | 1859.5 | 1527.4 | 1486.7 | 1030.4 |
| 27.5° | 2560.0 | 2534.3 | 2497.9 | 2459.3 | 2397.2 | 2320.1 | 2210.8 | 2007.3 | 1675.2 | 1632.4 | 1114.0 |
| 30° | 2802.1 | 2782.8 | 2737.8 | 2675.7 | 2598.5 | 2512.9 | 2382.2 | 2185.1 | 1844.5 | 1797.3 | 1203.9 |
| 32.5° | 2994.9 | 2964.9 | 2924.2 | 2864.2 | 2784.9 | 2724.9 | 2583.5 | 2380.0 | 2039.4 | 1977.3 | 1298.2 |
| 35° | 3149.1 | 3125.5 | 3072.0 | 3014.1 | 2954.2 | 2937.0 | 2782.8 | 2538.6 | 2195.8 | 2138.0 | 1398.9 |
| 37.5° | 3247.6 | 3224.1 | 3179.1 | 3121.3 | 3097.7 | 3127.7 | 3027.0 | 2754.9 | 2405.7 | 2332.9 | 1514.6 |
| 40° | 3324.8 | 3296.9 | 3260.5 | 3234.8 | 3226.2 | 3309.8 | 3299.1 | 3035.6 | 2682.1 | 2639.2 | 1673.1 |
| 42.5° | 3380.5 | 3352.6 | 3329.0 | 3326.9 | 3382.6 | 3545.4 | 3665.4 | 3427.6 | 3067.7 | 2979.9 | 1876.6 |
| 45° | 3309.8 | 3286.2 | 3299.1 | 3374.0 | 3509.0 | 3766.1 | 4108.8 | 3982.4 | 3532.6 | 3470.4 | 2202.2 |
| 47.5° | 3112.7 | 3097.7 | 3155.5 | 3292.6 | 3543.3 | 3901.0 | 4537.3 | 4590.8 | 4196.7 | 4102.4 | 2624.3 |
| 50° | 2804.2 | 2802.1 | 2894.2 | 3080.5 | 3436.2 | 3952.4 | 4753.6 | 5175.7 | 4877.9 | 4781.5 | 2967.0 |
| 52.5° | 2386.5 | 2377.9 | 2512.9 | 2772.1 | 3183.4 | 3856.0 | 4794.3 | 5409.2 | 5272.1 | 5158.5 | 3183.4 |
| 55° | 1913.0 | 1893.7 | 2054.4 | 2339.3 | 2810.6 | 3575.4 | 4685.1 | 5460.6 | 5460.6 | 5357.8 | 3344.0 |
| 57.5° | 1345.3 | 1375.3 | 1508.1 | 1850.9 | 2350.0 | 3155.5 | 4415.2 | 5413.5 | 5651.2 | 5563.4 | 3560.4 |
| 60° | 848.3 | 861.2 | 1006.9 | 1283.2 | 1782.3 | 2594.3 | 3933.2 | 5209.9 | 5803.3 | 5751.9 | 3733.9 |
| 62.5° | 488.4 | 529.1 | 602.0 | 811.9 | 1229.6 | 1949.4 | 3337.6 | 4843.6 | 5861.2 | 5839.8 | 3847.5 |
| 65° | 297.8 | 302.1 | 336.3 | 458.4 | 756.2 | 1330.3 | 2671.4 | 4333.8 | 5730.5 | 5749.8 | 3826.1 |
| 67.5° | 222.8 | 222.8 | 233.5 | 289.2 | 430.6 | 846.2 | 1970.9 | 3714.7 | 5312.8 | 5374.9 | 3624.7 |
| 70° | 192.8 | 192.8 | 194.9 | 212.1 | 265.6 | 501.3 | 1302.5 | 2994.9 | 4554.4 | 4548.0 | 2994.9 |
| 72.5° | 152.1 | 158.5 | 171.4 | 179.9 | 201.4 | 293.5 | 762.6 | 2093.0 | 3164.1 | 3239.1 | 1928.0 |
| 75° | 122.1 | 124.3 | 141.4 | 156.4 | 169.2 | 199.2 | 359.9 | 1163.2 | 1660.2 | 1660.2 | 848.3 |
| 77.5° | 94.3 | 98.5 | 109.3 | 124.3 | 141.4 | 141.4 | 150.0 | 449.9 | 642.7 | 621.3 | 250.6 |
| 80° | 60.0 | 62.1 | 79.3 | 98.5 | 117.8 | 100.7 | 81.4 | 150.0 | 175.7 | 169.2 | 68.6 |
| 82.5° | 36.4 | 38.6 | 51.4 | 79.3 | 79.3 | 55.7 | 51.4 | 62.1 | 55.7 | 51.4 | 27.8 |
| 85° | 10.7 | 12.9 | 36.4 | 51.4 | 45.0 | 21.4 | 25.7 | 27.8 | 25.7 | 23.6 | 15.0 |
| 87.5° | 2.1 | 2.1 | 10.7 | 12.9 | 10.7 | 10.7 | 8.6 | 10.7 | 10.7 | 10.7 | 6.4 |
| 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° | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 | 445.6 |
| 2.5° | 452.0 | 443.4 | 426.3 | 413.5 | 402.7 | 392.0 | 383.5 | 381.3 | 377.0 | 377.0 | 374.9 |
| 5° | 471.3 | 452.0 | 419.9 | 398.5 | 381.3 | 366.3 | 353.5 | 340.6 | 336.3 | 332.0 | 334.2 |
| 7.5° | 501.3 | 471.3 | 426.3 | 394.2 | 364.2 | 329.9 | 302.1 | 278.5 | 261.4 | 257.1 | 250.6 |
| 10° | 539.8 | 494.9 | 437.0 | 385.6 | 329.9 | 269.9 | 231.4 | 207.8 | 199.2 | 188.5 | 190.7 |
| 12.5° | 578.4 | 522.7 | 445.6 | 362.0 | 272.1 | 212.1 | 179.9 | 165.0 | 158.5 | 156.4 | 158.5 |
| 15° | 623.4 | 552.7 | 441.3 | 319.2 | 218.5 | 171.4 | 152.1 | 145.7 | 141.4 | 141.4 | 139.2 |
| 17.5° | 668.4 | 578.4 | 426.3 | 263.5 | 175.7 | 145.7 | 137.1 | 130.7 | 126.4 | 124.3 | 124.3 |
| 20° | 717.7 | 602.0 | 392.0 | 209.9 | 145.7 | 132.8 | 124.3 | 115.7 | 111.4 | 111.4 | 111.4 |
| 22.5° | 769.1 | 619.1 | 347.0 | 167.1 | 130.7 | 117.8 | 109.3 | 102.8 | 98.5 | 98.5 | 98.5 |
| 25° | 814.1 | 627.7 | 293.5 | 139.2 | 120.0 | 107.1 | 98.5 | 92.1 | 90.0 | 87.8 | 87.8 |
| 27.5° | 856.9 | 625.5 | 237.8 | 122.1 | 107.1 | 96.4 | 87.8 | 83.5 | 79.3 | 79.3 | 79.3 |
| 30° | 899.7 | 612.7 | 188.5 | 111.4 | 98.5 | 85.7 | 79.3 | 75.0 | 72.8 | 70.7 | 70.7 |
| 32.5° | 936.2 | 591.3 | 147.8 | 102.8 | 90.0 | 77.1 | 70.7 | 66.4 | 66.4 | 64.3 | 64.3 |
| 35° | 972.6 | 559.1 | 124.3 | 96.4 | 81.4 | 70.7 | 64.3 | 62.1 | 60.0 | 60.0 | 60.0 |
| 37.5° | 1011.1 | 518.4 | 109.3 | 87.8 | 72.8 | 64.3 | 60.0 | 57.8 | 55.7 | 53.6 | 53.6 |
| 40° | 1058.3 | 477.7 | 102.8 | 81.4 | 66.4 | 57.8 | 53.6 | 51.4 | 49.3 | 49.3 | 49.3 |
| 42.5° | 1133.2 | 443.4 | 96.4 | 72.8 | 60.0 | 53.6 | 49.3 | 45.0 | 45.0 | 42.8 | 42.8 |
| 45° | 1274.6 | 430.6 | 90.0 | 66.4 | 55.7 | 47.1 | 45.0 | 40.7 | 38.6 | 38.6 | 38.6 |
| 47.5° | 1458.9 | 432.7 | 83.5 | 60.0 | 51.4 | 42.8 | 40.7 | 38.6 | 34.3 | 34.3 | 34.3 |
| 50° | 1611.0 | 422.0 | 77.1 | 55.7 | 45.0 | 40.7 | 36.4 | 34.3 | 32.1 | 32.1 | 32.1 |
| 52.5° | 1671.0 | 402.7 | 70.7 | 51.4 | 42.8 | 36.4 | 34.3 | 32.1 | 30.0 | 30.0 | 30.0 |
| 55° | 1730.9 | 394.2 | 64.3 | 45.0 | 38.6 | 36.4 | 32.1 | 30.0 | 27.8 | 25.7 | 25.7 |
| 57.5° | 1840.2 | 398.5 | 57.8 | 42.8 | 36.4 | 34.3 | 30.0 | 25.7 | 21.4 | 19.3 | 19.3 |
| 60° | 1898.0 | 383.5 | 53.6 | 38.6 | 34.3 | 32.1 | 25.7 | 19.3 | 15.0 | 12.9 | 12.9 |
| 62.5° | 1848.8 | 340.6 | 49.3 | 36.4 | 32.1 | 27.8 | 19.3 | 15.0 | 10.7 | 6.4 | 6.4 |
| 65° | 1711.7 | 280.6 | 45.0 | 34.3 | 27.8 | 21.4 | 17.1 | 10.7 | 6.4 | 4.3 | 4.3 |
| 67.5° | 1538.1 | 220.7 | 40.7 | 32.1 | 25.7 | 19.3 | 15.0 | 8.6 | 4.3 | 2.1 | 2.1 |
| 70° | 1242.5 | 158.5 | 38.6 | 30.0 | 23.6 | 17.1 | 12.9 | 8.6 | 4.3 | 2.1 | 2.1 |
| 72.5° | 801.2 | 102.8 | 34.3 | 27.8 | 21.4 | 17.1 | 10.7 | 6.4 | 4.3 | 2.1 | 2.1 |
| 75° | 370.6 | 68.6 | 32.1 | 25.7 | 21.4 | 15.0 | 10.7 | 8.6 | 4.3 | 2.1 | 2.1 |
| 77.5° | 109.3 | 49.3 | 30.0 | 23.6 | 19.3 | 15.0 | 10.7 | 8.6 | 4.3 | 2.1 | 2.1 |
| 80° | 45.0 | 34.3 | 23.6 | 21.4 | 19.3 | 15.0 | 10.7 | 8.6 | 4.3 | 2.1 | 2.1 |
| 82.5° | 21.4 | 15.0 | 10.7 | 8.6 | 10.7 | 10.7 | 8.6 | 8.6 | 4.3 | 2.1 | 2.1 |
| 85° | 10.7 | 6.4 | 4.3 | 4.3 | 4.3 | 2.1 | 2.1 | 4.3 | 4.3 | 2.1 | 2.1 |
| 87.5° | 6.4 | 4.3 | 4.3 | 4.3 | 2.1 | 2.1 | 2.1 | 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)