

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: P573437

Luminaire Tested: **ARCH-S-PA2-70-830-U-T2R**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-13)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-70-830-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8538 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

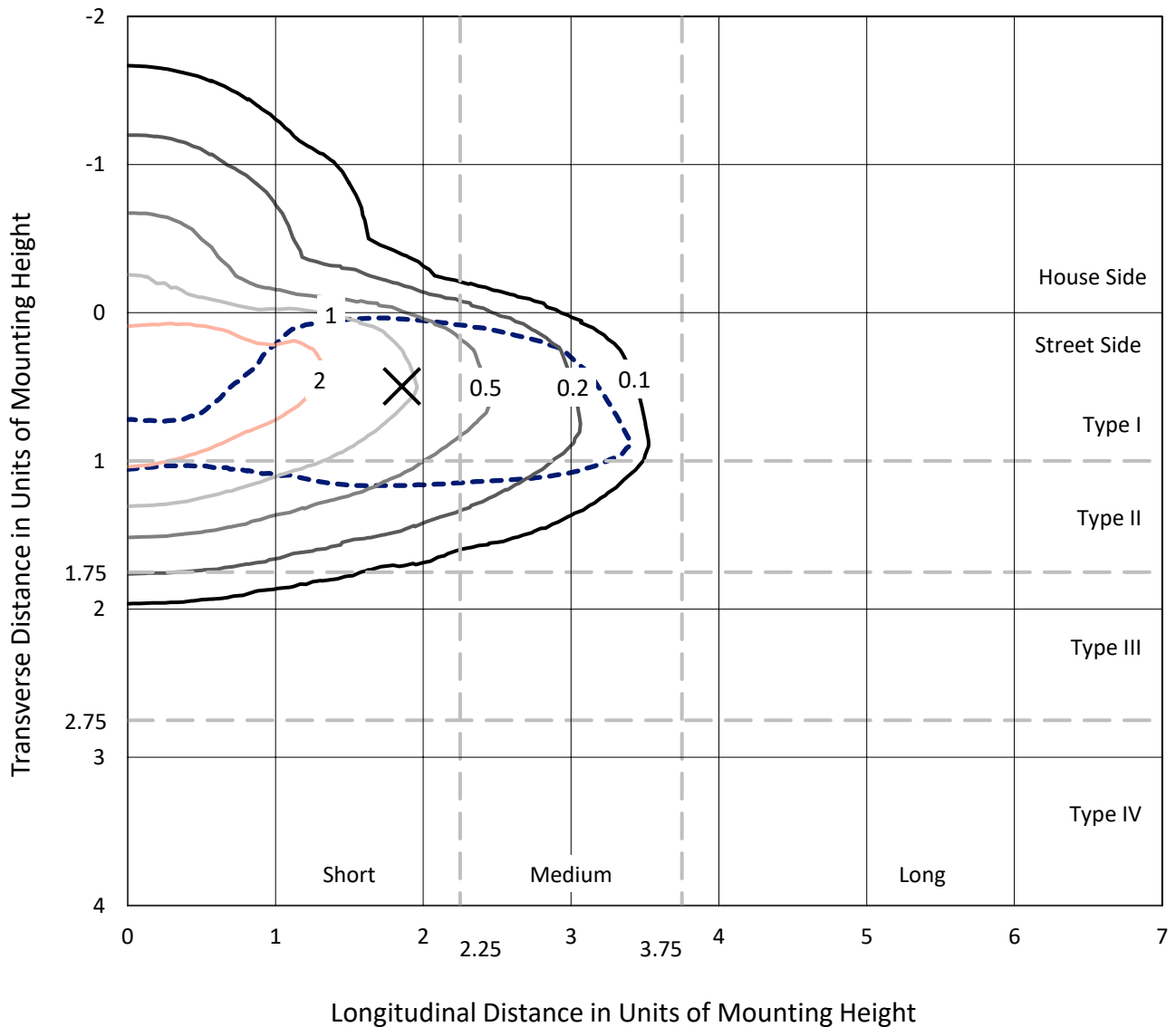
Input Watts (W): 73.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

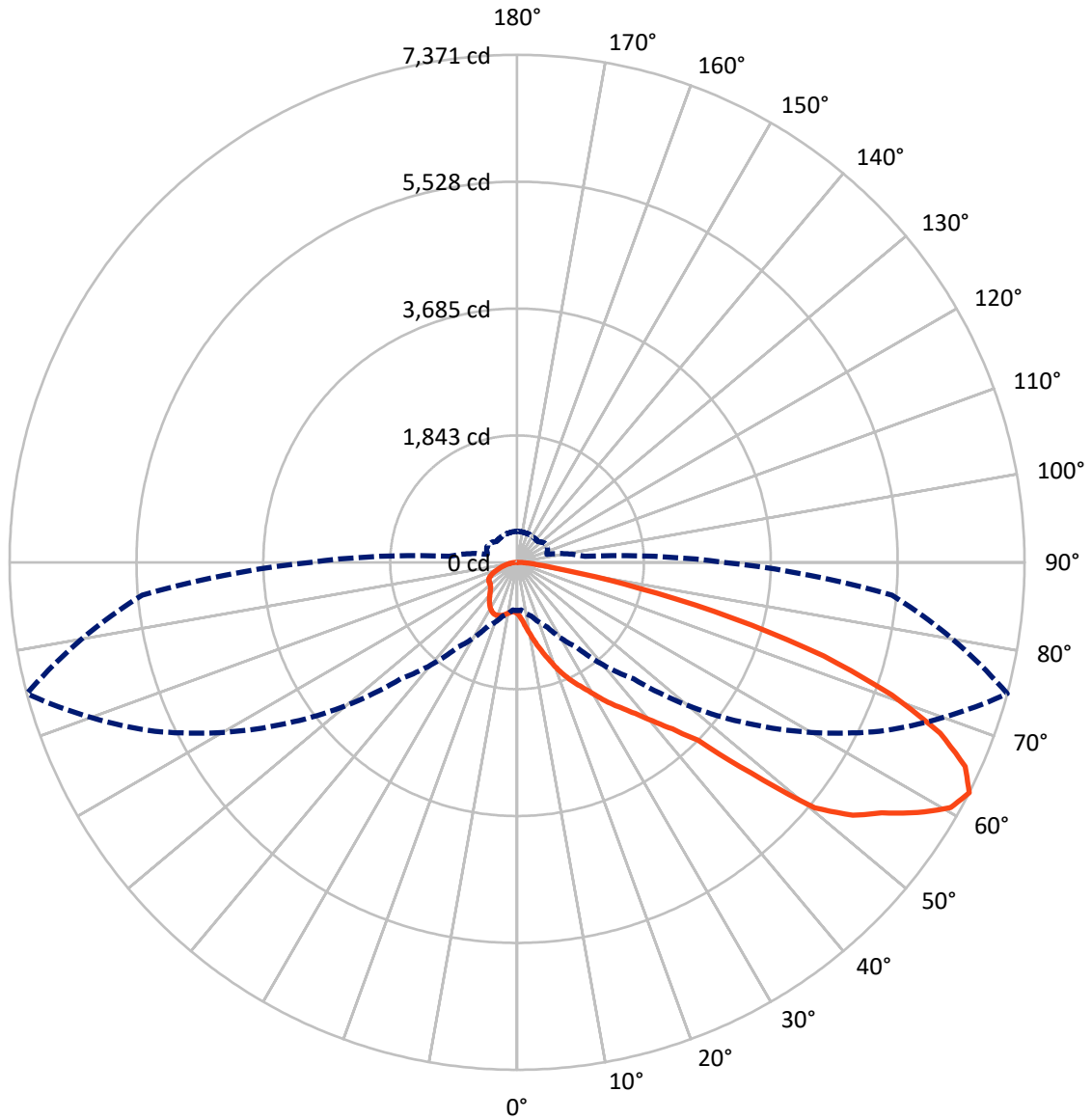
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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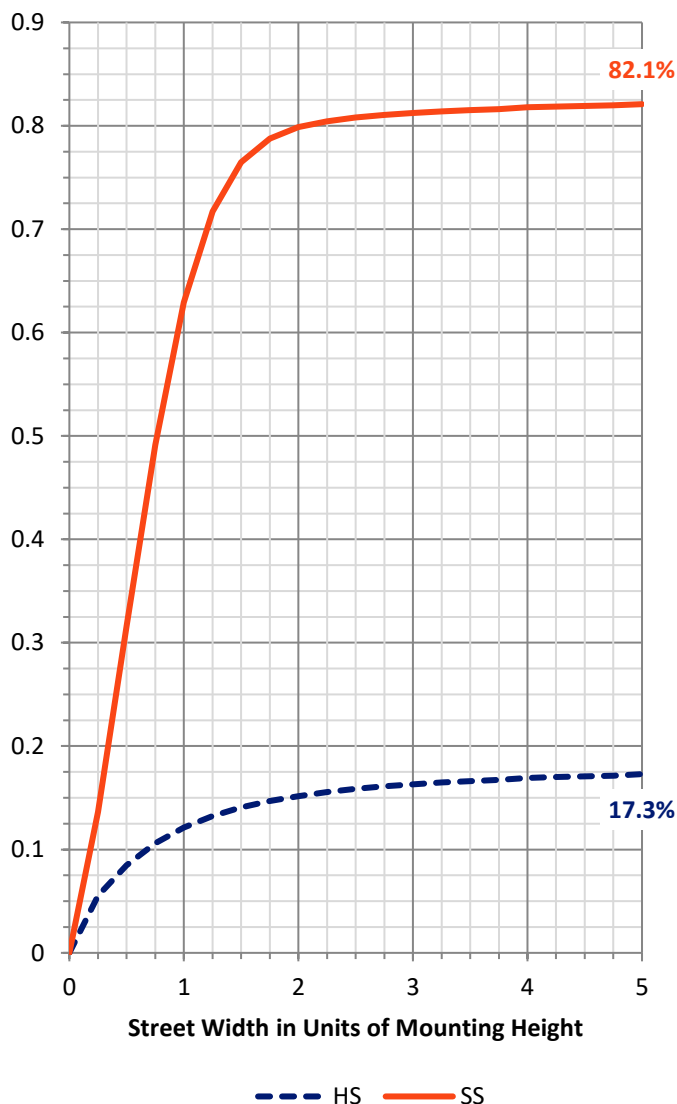
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1505.9 | 0.0 | 1505.9 |
| | % Fixture | 17.6 | 0.0 | 17.6 |
| Street Side | Lumens | 7032.1 | 0.0 | 7032.1 |
| | % Fixture | 82.4 | 0.0 | 82.4 |
| Total | Lumens | 8538.0 | 0.0 | 8538.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 89.4 | 1.0 |
| 10°-20° | 353.3 | 4.1 |
| 20°-30° | 699.0 | 8.2 |
| 30°-40° | 1165.1 | 13.6 |
| 40°-50° | 1719.2 | 20.1 |
| 50°-60° | 2066.6 | 24.2 |
| 60°-70° | 1606.2 | 18.8 |
| 70°-80° | 710.6 | 8.3 |
| 80°-90° | 128.6 | 1.5 |
| 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° | 8538.0 | 100.0 |
| 0°-180° | 8538.0 | 100.0 |

Coefficient of Utilization

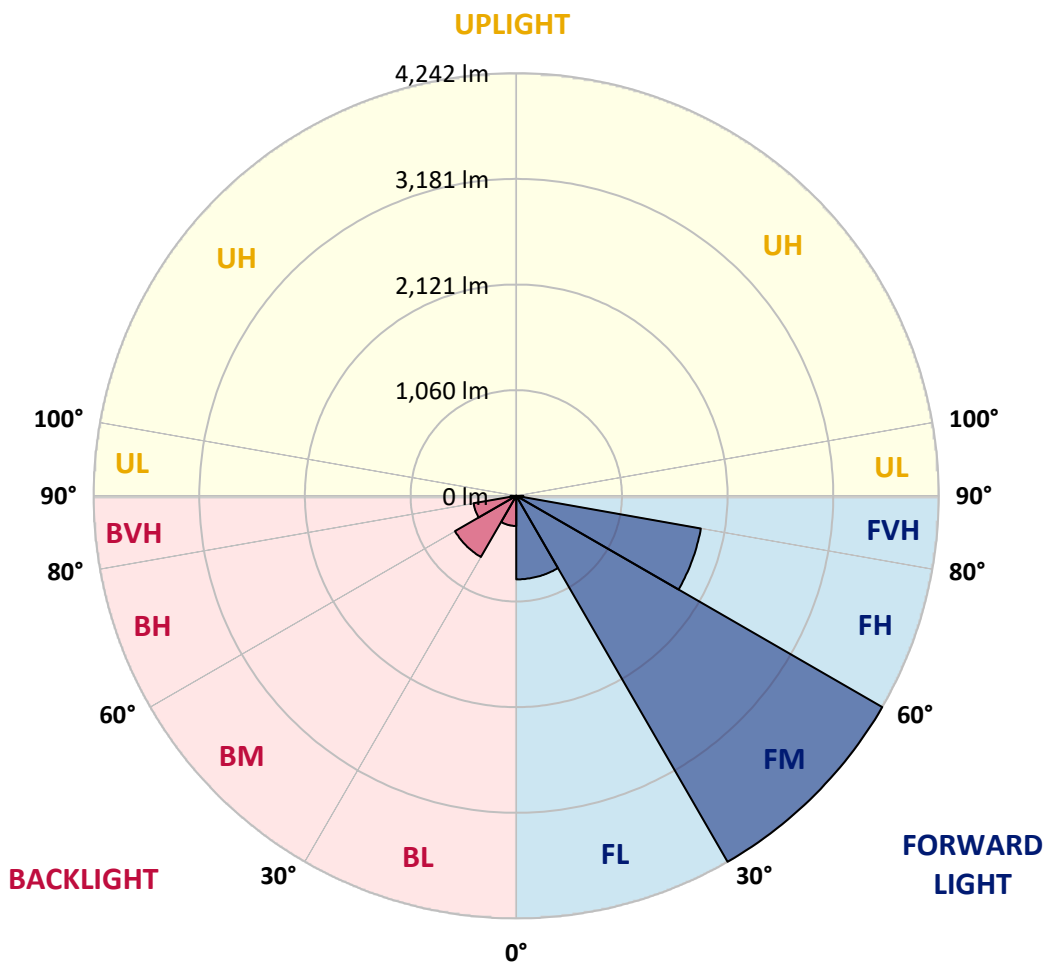


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 838.7 | 9.8 | | | |
| FM (30°-60°) | 4241.7 | 49.7 | | | |
| FH (60°-80°) | 1881.1 | 22.0 | | | G2/5000 |
| FVH (80°-90°) | 70.7 | 0.8 | | | G1/100 |
| BL (0°-30°) | 303.0 | 3.5 | B1/500 | | |
| BM (30°-60°) | 709.2 | 8.3 | B1/1000 | | |
| BH (60°-80°) | 435.7 | 5.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 57.9 | 0.7 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 |
| 2.5° | 951.6 | 924.0 | 924.0 | 894.0 | 896.3 | 871.0 | 843.3 | 815.7 | 785.7 | 762.7 | 751.1 |
| 5° | 1244.2 | 1223.5 | 1216.6 | 1182.0 | 1126.7 | 1064.5 | 997.7 | 928.6 | 857.1 | 801.8 | 774.2 |
| 7.5° | 1518.4 | 1502.3 | 1493.1 | 1453.9 | 1377.9 | 1311.0 | 1205.1 | 1078.3 | 956.2 | 852.5 | 811.0 |
| 10° | 1721.2 | 1709.7 | 1691.2 | 1672.8 | 1617.5 | 1559.9 | 1428.6 | 1248.8 | 1069.1 | 914.7 | 852.5 |
| 12.5° | 1868.6 | 1852.5 | 1852.5 | 1850.2 | 1813.3 | 1760.3 | 1638.2 | 1444.7 | 1200.4 | 983.9 | 898.6 |
| 15° | 1967.7 | 1965.4 | 1972.3 | 1986.1 | 1976.9 | 1942.4 | 1820.3 | 1624.4 | 1334.1 | 1062.2 | 951.6 |
| 17.5° | 2041.4 | 2032.2 | 2046.1 | 2082.9 | 2110.6 | 2096.7 | 1995.4 | 1797.2 | 1481.5 | 1147.5 | 1009.2 |
| 20° | 2122.1 | 2103.7 | 2122.1 | 2168.2 | 2202.7 | 2223.5 | 2175.1 | 1963.1 | 1640.5 | 1239.6 | 1064.5 |
| 22.5° | 2276.5 | 2274.2 | 2264.9 | 2278.8 | 2301.8 | 2338.7 | 2311.0 | 2131.3 | 1794.9 | 1331.8 | 1129.0 |
| 25° | 2553.0 | 2527.6 | 2502.3 | 2472.3 | 2447.0 | 2458.5 | 2435.5 | 2288.0 | 1935.5 | 1433.2 | 1184.3 |
| 27.5° | 2861.7 | 2834.1 | 2788.0 | 2714.2 | 2645.1 | 2603.7 | 2555.3 | 2423.9 | 2071.4 | 1525.3 | 1237.3 |
| 30° | 3145.1 | 3135.9 | 3066.8 | 2986.1 | 2866.3 | 2790.3 | 2698.1 | 2580.6 | 2235.0 | 1626.7 | 1292.6 |
| 32.5° | 3410.1 | 3391.7 | 3322.5 | 3237.3 | 3096.7 | 3011.5 | 2884.8 | 2751.1 | 2421.6 | 1751.1 | 1350.2 |
| 35° | 3638.2 | 3619.8 | 3539.1 | 3430.8 | 3308.7 | 3235.0 | 3089.8 | 2903.2 | 2592.1 | 1859.4 | 1398.6 |
| 37.5° | 3811.0 | 3790.3 | 3714.2 | 3608.2 | 3500.0 | 3465.4 | 3341.0 | 3096.7 | 2785.7 | 1995.4 | 1458.5 |
| 40° | 3907.8 | 3882.4 | 3831.7 | 3758.0 | 3668.2 | 3652.0 | 3599.0 | 3336.4 | 3029.9 | 2161.3 | 1546.1 |
| 42.5° | 3919.3 | 3896.3 | 3868.6 | 3861.7 | 3854.8 | 3868.6 | 3894.0 | 3608.2 | 3308.7 | 2382.5 | 1675.1 |
| 45° | 3817.9 | 3804.1 | 3806.4 | 3884.7 | 3993.0 | 4119.8 | 4271.8 | 4009.2 | 3684.3 | 2804.1 | 1965.4 |
| 47.5° | 3601.3 | 3594.4 | 3645.1 | 3776.4 | 4018.4 | 4306.4 | 4737.3 | 4695.8 | 4573.7 | 3483.8 | 2338.7 |
| 50° | 3251.1 | 3239.6 | 3347.9 | 3555.3 | 3900.9 | 4368.6 | 5050.6 | 5504.5 | 5605.9 | 4011.5 | 2582.9 |
| 52.5° | 2748.8 | 2762.6 | 2930.8 | 3214.2 | 3631.3 | 4301.8 | 5179.7 | 5836.3 | 6103.6 | 4400.9 | 2769.5 |
| 55° | 2235.0 | 2214.3 | 2366.3 | 2716.6 | 3232.7 | 4057.5 | 5205.0 | 6027.6 | 6426.2 | 4760.3 | 2951.6 |
| 57.5° | 1629.0 | 1679.7 | 1841.0 | 2159.0 | 2718.9 | 3615.2 | 5057.5 | 6158.9 | 6859.4 | 5119.7 | 3119.8 |
| 60° | 1103.7 | 1103.7 | 1246.5 | 1564.5 | 2101.4 | 3078.3 | 4663.5 | 6110.5 | 7237.2 | 5400.8 | 3156.6 |
| 62.5° | 702.8 | 695.8 | 811.0 | 1036.9 | 1504.6 | 2391.7 | 4073.7 | 5806.4 | 7370.9 | 5467.7 | 3002.3 |
| 65° | 444.7 | 453.9 | 495.4 | 633.6 | 963.1 | 1698.1 | 3269.5 | 5200.4 | 7152.0 | 5313.3 | 2732.7 |
| 67.5° | 357.1 | 359.4 | 380.2 | 437.8 | 592.2 | 1089.8 | 2423.9 | 4364.0 | 6628.9 | 4923.9 | 2417.0 |
| 70° | 315.7 | 320.3 | 324.9 | 345.6 | 405.5 | 688.9 | 1592.1 | 3513.8 | 5771.8 | 4246.5 | 2078.3 |
| 72.5° | 288.0 | 292.6 | 297.2 | 301.8 | 334.1 | 449.3 | 940.1 | 2663.6 | 4656.6 | 3262.6 | 1585.2 |
| 75° | 265.0 | 269.6 | 269.6 | 271.9 | 290.3 | 334.1 | 516.1 | 1836.4 | 3241.9 | 2029.9 | 988.5 |
| 77.5° | 237.3 | 239.6 | 239.6 | 244.2 | 262.7 | 262.7 | 320.3 | 1135.9 | 1799.5 | 919.3 | 500.0 |
| 80° | 200.5 | 205.1 | 205.1 | 212.0 | 230.4 | 202.8 | 214.3 | 580.6 | 746.5 | 377.9 | 223.5 |
| 82.5° | 147.5 | 156.7 | 161.3 | 172.8 | 184.3 | 154.4 | 154.4 | 292.6 | 315.7 | 168.2 | 119.8 |
| 85° | 80.6 | 82.9 | 119.8 | 129.0 | 135.9 | 92.2 | 103.7 | 145.2 | 156.7 | 73.7 | 59.9 |
| 87.5° | 23.0 | 25.3 | 57.6 | 71.4 | 64.5 | 39.2 | 43.8 | 55.3 | 55.3 | 20.7 | 16.1 |
| 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):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 | 744.2 |
| 2.5° | 741.9 | 723.5 | 707.4 | 695.8 | 684.3 | 677.4 | 675.1 | 670.5 | 670.5 | 672.8 |
| 5° | 751.1 | 718.9 | 693.5 | 679.7 | 670.5 | 665.9 | 663.6 | 663.6 | 665.9 | 665.9 |
| 7.5° | 774.2 | 725.8 | 702.8 | 691.2 | 682.0 | 677.4 | 677.4 | 675.1 | 677.4 | 677.4 |
| 10° | 806.4 | 746.5 | 721.2 | 707.4 | 700.5 | 693.5 | 691.2 | 688.9 | 688.9 | 688.9 |
| 12.5° | 841.0 | 769.6 | 741.9 | 725.8 | 714.3 | 705.1 | 700.5 | 695.8 | 693.5 | 693.5 |
| 15° | 873.3 | 792.6 | 755.8 | 737.3 | 721.2 | 707.4 | 698.1 | 691.2 | 688.9 | 688.9 |
| 17.5° | 907.8 | 808.7 | 765.0 | 739.6 | 718.9 | 700.5 | 688.9 | 679.7 | 675.1 | 675.1 |
| 20° | 944.7 | 820.3 | 765.0 | 732.7 | 705.1 | 686.6 | 672.8 | 663.6 | 654.4 | 654.4 |
| 22.5° | 974.6 | 824.9 | 755.8 | 716.6 | 688.9 | 665.9 | 652.1 | 640.5 | 633.6 | 633.6 |
| 25° | 1000.0 | 820.3 | 735.0 | 691.2 | 659.0 | 638.2 | 624.4 | 615.2 | 608.3 | 608.3 |
| 27.5° | 1016.1 | 801.8 | 709.7 | 663.6 | 633.6 | 612.9 | 603.7 | 594.5 | 589.9 | 589.9 |
| 30° | 1025.3 | 778.8 | 677.4 | 633.6 | 603.7 | 592.2 | 587.5 | 578.3 | 571.4 | 569.1 |
| 32.5° | 1029.9 | 744.2 | 645.2 | 603.7 | 582.9 | 578.3 | 578.3 | 566.8 | 557.6 | 555.3 |
| 35° | 1025.3 | 707.4 | 612.9 | 578.3 | 571.4 | 573.7 | 569.1 | 555.3 | 543.8 | 539.2 |
| 37.5° | 1018.4 | 663.6 | 578.3 | 559.9 | 566.8 | 571.4 | 557.6 | 539.2 | 520.7 | 516.1 |
| 40° | 1013.8 | 624.4 | 550.7 | 541.5 | 562.2 | 564.5 | 539.2 | 504.6 | 490.8 | 486.2 |
| 42.5° | 1036.9 | 585.2 | 525.3 | 527.6 | 550.7 | 553.0 | 506.9 | 490.8 | 481.6 | 479.3 |
| 45° | 1115.2 | 550.7 | 504.6 | 518.4 | 536.9 | 527.6 | 490.8 | 488.5 | 481.6 | 479.3 |
| 47.5° | 1175.1 | 525.3 | 495.4 | 511.5 | 525.3 | 493.1 | 488.5 | 486.2 | 479.3 | 477.0 |
| 50° | 1195.8 | 509.2 | 493.1 | 506.9 | 509.2 | 477.0 | 483.9 | 483.9 | 477.0 | 474.6 |
| 52.5° | 1198.1 | 500.0 | 497.7 | 504.6 | 483.9 | 470.0 | 479.3 | 479.3 | 472.3 | 470.0 |
| 55° | 1207.4 | 495.4 | 500.0 | 504.6 | 456.2 | 460.8 | 470.0 | 472.3 | 465.4 | 463.1 |
| 57.5° | 1188.9 | 488.5 | 504.6 | 506.9 | 444.7 | 451.6 | 460.8 | 460.8 | 460.8 | 460.8 |
| 60° | 1117.5 | 474.6 | 502.3 | 502.3 | 435.5 | 440.1 | 449.3 | 453.9 | 456.2 | 456.2 |
| 62.5° | 986.2 | 447.0 | 488.5 | 488.5 | 426.3 | 430.9 | 442.4 | 442.4 | 449.3 | 449.3 |
| 65° | 820.3 | 407.8 | 460.8 | 458.5 | 417.0 | 421.7 | 435.5 | 430.9 | 442.4 | 444.7 |
| 67.5° | 684.3 | 359.4 | 419.3 | 424.0 | 407.8 | 419.3 | 428.6 | 412.4 | 435.5 | 435.5 |
| 70° | 546.1 | 301.8 | 364.1 | 384.8 | 391.7 | 421.7 | 414.7 | 389.4 | 419.3 | 412.4 |
| 72.5° | 424.0 | 255.8 | 299.5 | 336.4 | 373.3 | 419.3 | 384.8 | 357.1 | 375.6 | 364.1 |
| 75° | 308.8 | 212.0 | 246.5 | 278.8 | 347.9 | 412.4 | 354.8 | 313.4 | 313.4 | 308.8 |
| 77.5° | 216.6 | 172.8 | 198.2 | 221.2 | 322.6 | 394.0 | 318.0 | 269.6 | 258.1 | 255.8 |
| 80° | 147.5 | 135.9 | 156.7 | 170.5 | 285.7 | 357.1 | 274.2 | 223.5 | 202.8 | 198.2 |
| 82.5° | 96.8 | 96.8 | 106.0 | 115.2 | 221.2 | 297.2 | 214.3 | 165.9 | 214.3 | 205.1 |
| 85° | 55.3 | 57.6 | 57.6 | 66.8 | 122.1 | 209.7 | 152.1 | 165.9 | 99.1 | 92.2 |
| 87.5° | 18.4 | 18.4 | 18.4 | 18.4 | 25.3 | 85.3 | 64.5 | 59.9 | 23.0 | 20.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)