

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: P397883

Luminaire Tested: **ARCH-S-PA1-50-830-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397883
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-830-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6252 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 54
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: 28.75 FT

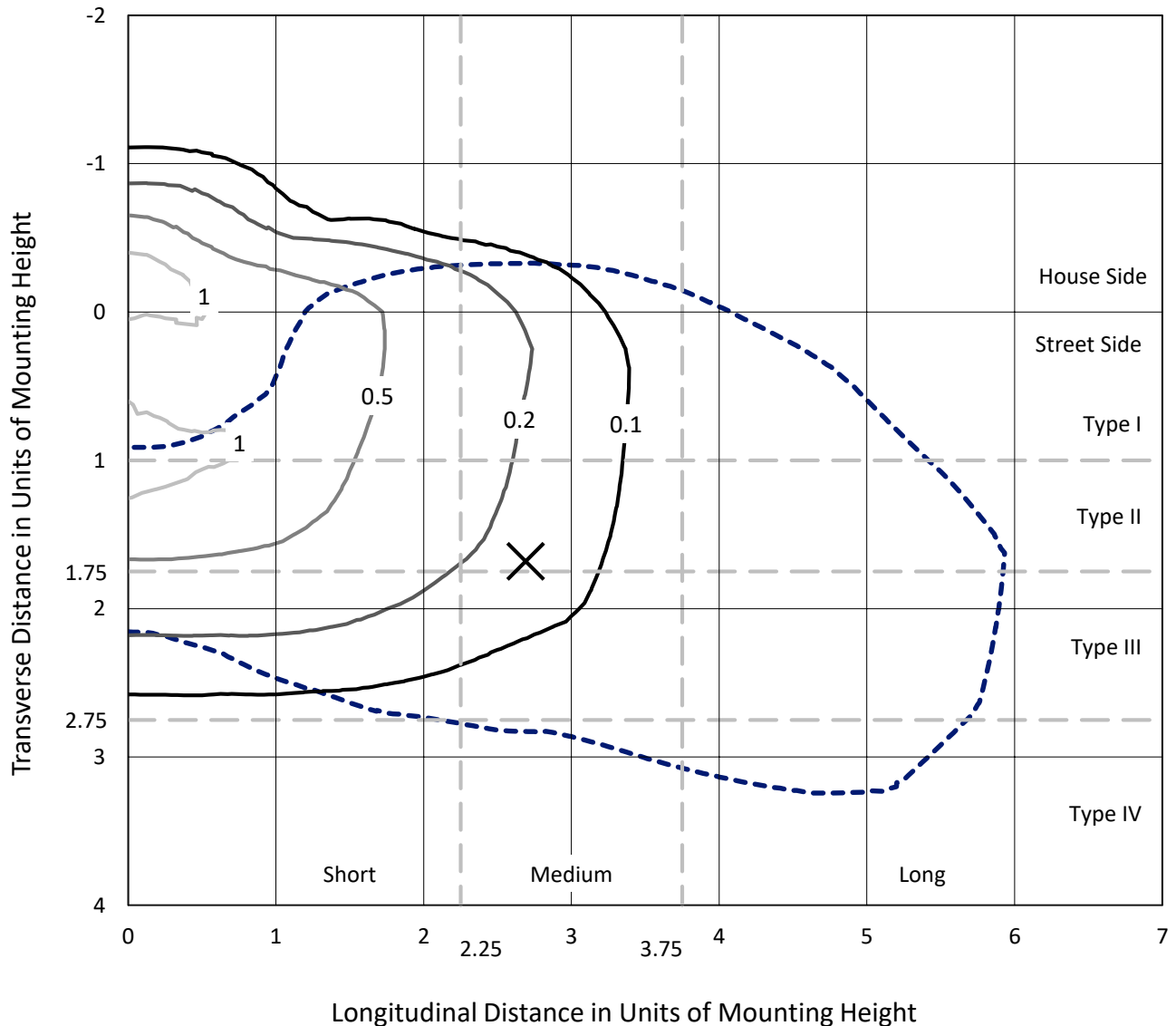


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

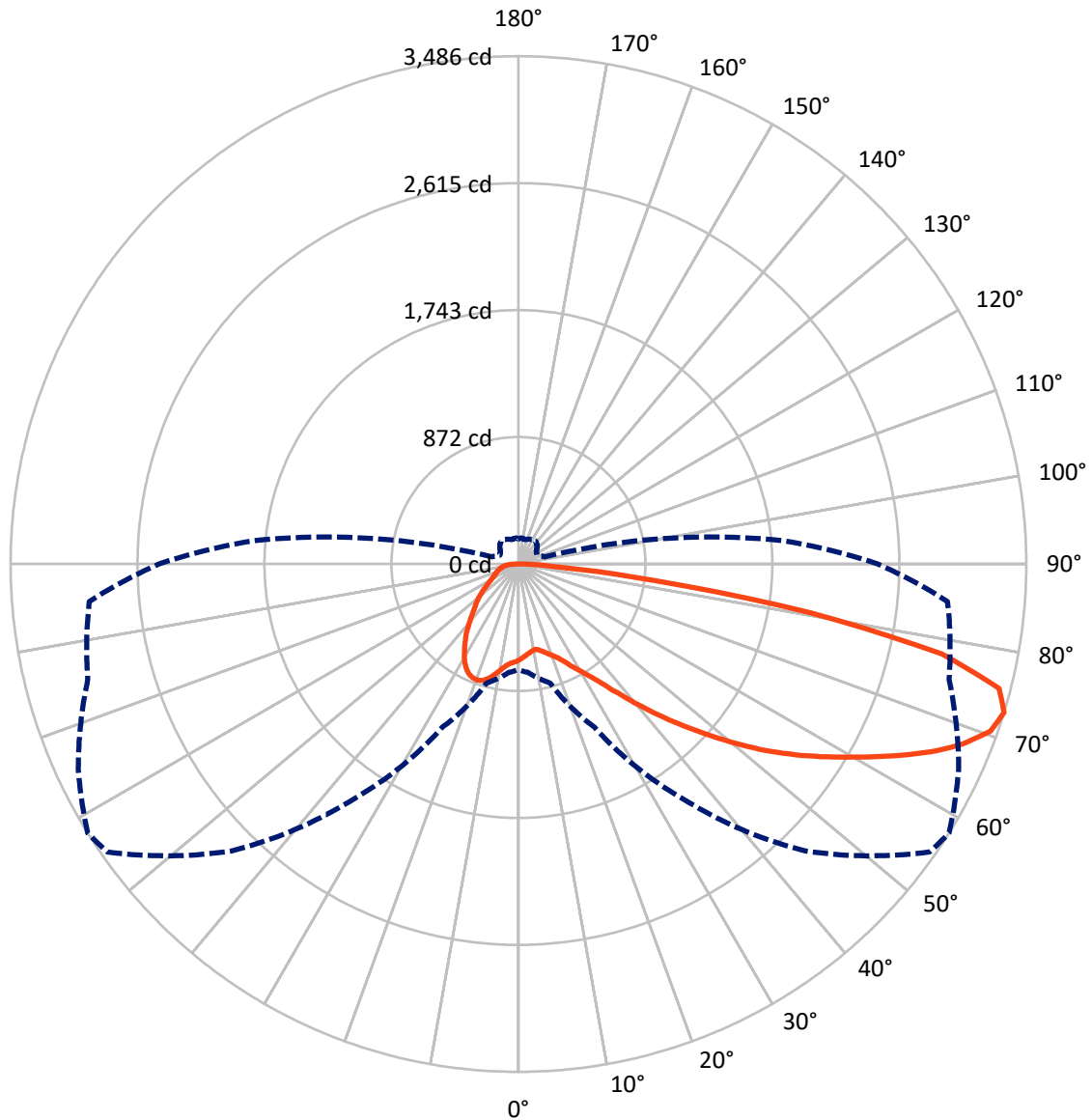


Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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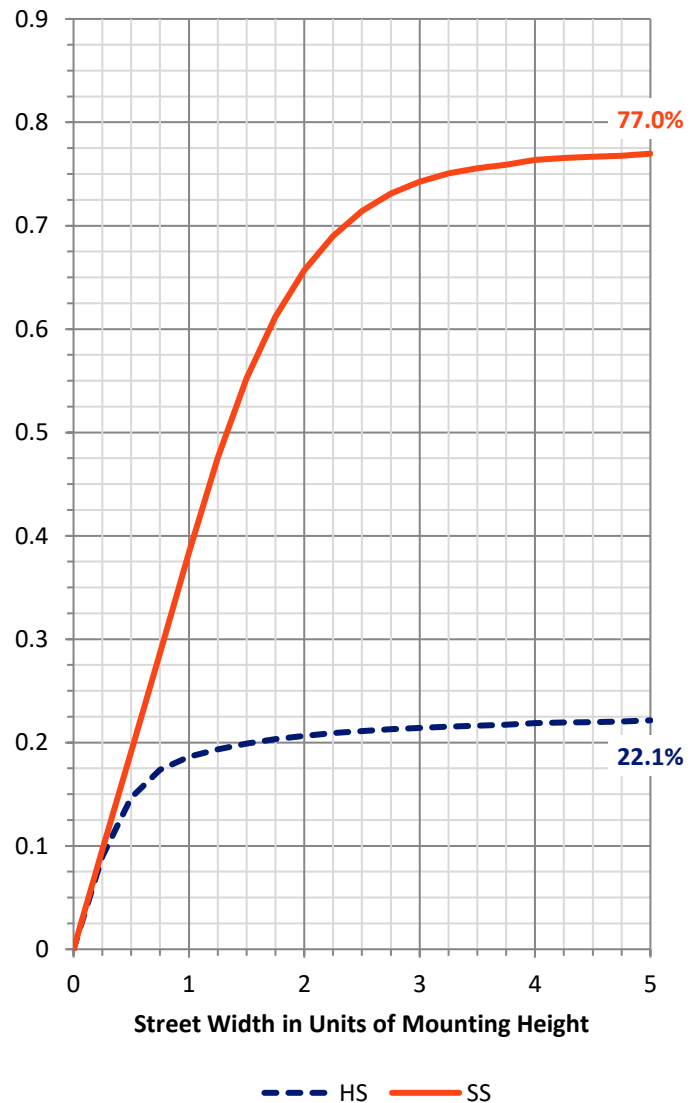
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1417.9 | 0.0 | 1417.9 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 4834.1 | 0.0 | 4834.1 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 6252.0 | 0.0 | 6252.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 63.5 | 1.0 |
| 10°-20° | 201.7 | 3.2 |
| 20°-30° | 361.4 | 5.8 |
| 30°-40° | 543.6 | 8.7 |
| 40°-50° | 880.3 | 14.1 |
| 50°-60° | 1325.2 | 21.2 |
| 60°-70° | 1559.6 | 24.9 |
| 70°-80° | 1105.9 | 17.7 |
| 80°-90° | 210.7 | 3.4 |
| 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° | 6252.0 | 100.0 |
| 0°-180° | 6252.0 | 100.0 |

Coefficient of Utilization



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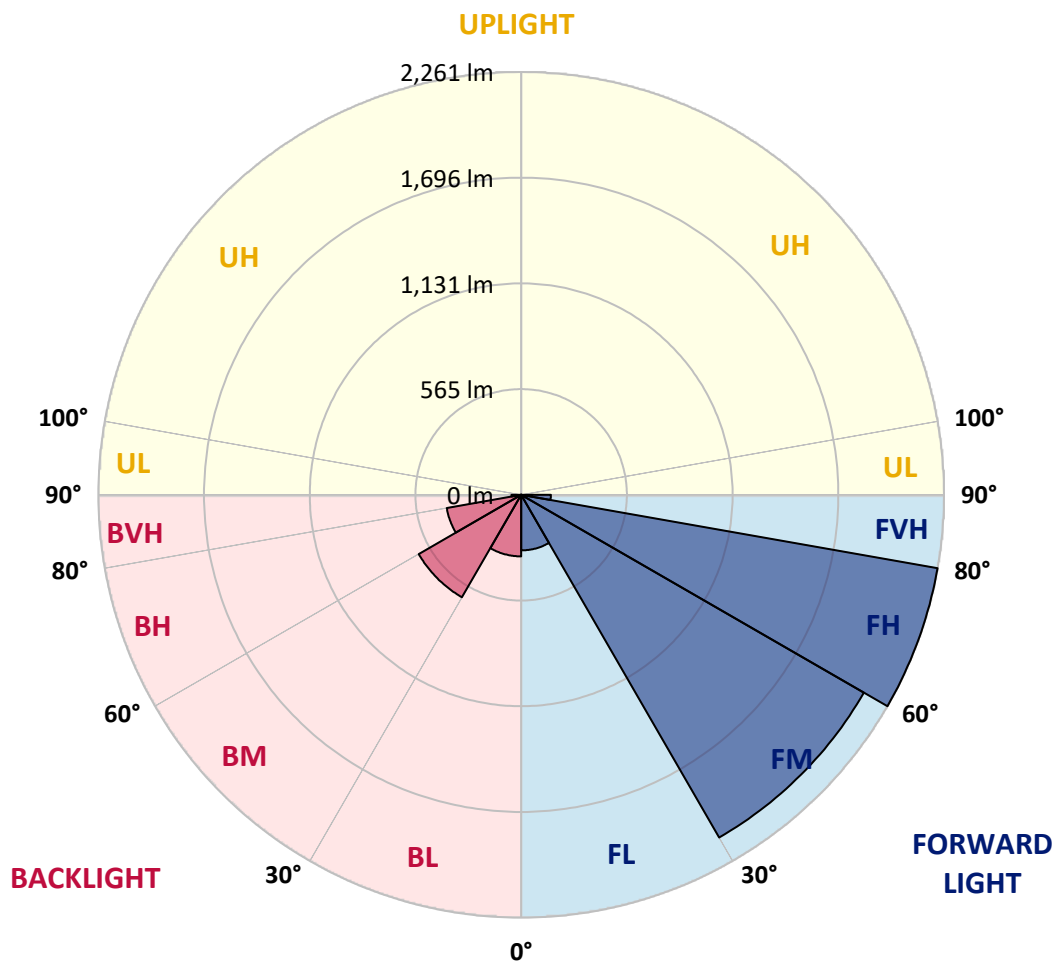
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 297.3 | 4.8 | | | |
| FM | (30°-60°) | 2116.5 | 33.9 | | | |
| FH | (60°-80°) | 2261.4 | 36.2 | | | G2/5000 |
| FVH | (80°-90°) | 158.9 | 2.5 | | | G2/225 |
| BL | (0°-30°) | 329.4 | 5.3 | B1/500 | | |
| BM | (30°-60°) | 632.7 | 10.1 | B1/1000 | | |
| BH | (60°-80°) | 404.1 | 6.5 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 51.8 | 0.8 | | | 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 IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 |
| 2.5° | 634.7 | 631.4 | 632.2 | 632.2 | 635.5 | 637.2 | 638.0 | 640.5 | 642.1 | 646.2 | 652.0 |
| 5° | 605.0 | 602.5 | 603.3 | 604.2 | 609.9 | 615.7 | 620.7 | 624.0 | 628.9 | 635.5 | 643.8 |
| 7.5° | 583.5 | 581.9 | 582.7 | 584.3 | 589.3 | 595.9 | 604.2 | 609.1 | 616.5 | 628.9 | 642.9 |
| 10° | 567.8 | 567.8 | 568.7 | 572.0 | 576.9 | 585.2 | 591.8 | 597.6 | 612.4 | 634.7 | 656.2 |
| 12.5° | 555.5 | 555.5 | 557.9 | 564.5 | 572.8 | 581.0 | 596.7 | 603.3 | 623.1 | 653.7 | 679.3 |
| 15° | 554.6 | 555.5 | 556.3 | 562.1 | 571.1 | 589.3 | 612.4 | 622.3 | 646.2 | 682.6 | 712.3 |
| 17.5° | 567.8 | 568.7 | 565.4 | 567.0 | 577.7 | 603.3 | 633.9 | 645.4 | 676.0 | 715.6 | 746.1 |
| 20° | 608.3 | 608.3 | 598.4 | 589.3 | 596.7 | 624.8 | 659.5 | 671.0 | 704.8 | 748.6 | 779.1 |
| 22.5° | 690.8 | 694.9 | 671.8 | 652.0 | 640.5 | 656.2 | 687.5 | 699.9 | 737.9 | 784.9 | 815.4 |
| 25° | 790.7 | 794.8 | 763.4 | 735.4 | 713.9 | 711.5 | 732.1 | 745.3 | 776.7 | 825.3 | 850.9 |
| 27.5° | 887.2 | 879.8 | 850.9 | 824.5 | 797.3 | 775.0 | 790.7 | 802.2 | 838.6 | 875.7 | 891.4 |
| 30° | 963.2 | 957.4 | 929.3 | 910.4 | 884.8 | 855.9 | 846.8 | 859.2 | 888.9 | 923.6 | 931.8 |
| 32.5° | 1047.4 | 1043.2 | 1015.2 | 990.4 | 969.0 | 941.7 | 921.9 | 927.7 | 944.2 | 969.0 | 973.9 |
| 35° | 1154.7 | 1163.7 | 1134.0 | 1083.7 | 1059.7 | 1033.3 | 1019.3 | 1021.0 | 1033.3 | 1049.0 | 1040.8 |
| 37.5° | 1267.7 | 1278.5 | 1280.1 | 1200.9 | 1168.7 | 1144.8 | 1129.9 | 1135.7 | 1150.5 | 1161.3 | 1135.7 |
| 40° | 1477.4 | 1466.6 | 1423.7 | 1365.1 | 1315.6 | 1292.5 | 1271.9 | 1271.0 | 1281.8 | 1300.7 | 1254.5 |
| 42.5° | 1755.5 | 1745.6 | 1658.9 | 1583.0 | 1504.6 | 1478.2 | 1437.8 | 1420.4 | 1425.4 | 1449.3 | 1384.9 |
| 45° | 2022.1 | 2018.0 | 1948.6 | 1860.3 | 1766.2 | 1715.1 | 1622.6 | 1580.5 | 1576.4 | 1595.4 | 1518.6 |
| 47.5° | 2259.0 | 2240.8 | 2190.5 | 2122.0 | 2112.1 | 1978.4 | 1808.3 | 1751.4 | 1731.6 | 1742.3 | 1656.5 |
| 50° | 2512.4 | 2450.5 | 2381.1 | 2339.0 | 2410.8 | 2286.2 | 1995.7 | 1936.3 | 1887.6 | 1895.0 | 1805.9 |
| 52.5° | 2646.9 | 2542.9 | 2497.5 | 2509.9 | 2606.4 | 2558.6 | 2199.6 | 2126.9 | 2048.5 | 2059.2 | 1954.4 |
| 55° | 2531.3 | 2530.5 | 2550.3 | 2627.1 | 2761.6 | 2706.3 | 2393.5 | 2311.8 | 2226.0 | 2228.4 | 2125.3 |
| 57.5° | 2372.9 | 2405.1 | 2507.4 | 2676.6 | 2953.9 | 2861.5 | 2584.2 | 2497.5 | 2419.1 | 2406.7 | 2319.2 |
| 60° | 2228.4 | 2263.9 | 2412.5 | 2668.4 | 3020.8 | 3003.4 | 2765.7 | 2689.8 | 2626.3 | 2589.9 | 2523.1 |
| 62.5° | 2008.9 | 2035.3 | 2245.8 | 2615.5 | 2964.7 | 3105.8 | 2949.8 | 2897.8 | 2849.9 | 2774.8 | 2742.6 |
| 65° | 1750.6 | 1759.6 | 1981.7 | 2441.4 | 2894.5 | 3145.4 | 3133.0 | 3109.9 | 3063.7 | 2953.1 | 2959.7 |
| 67.5° | 1470.8 | 1488.9 | 1683.7 | 2163.2 | 2741.0 | 3127.2 | 3275.0 | 3294.0 | 3239.5 | 3073.6 | 3098.4 |
| 70° | 1172.8 | 1195.1 | 1342.8 | 1778.6 | 2480.2 | 3048.8 | 3406.2 | 3436.7 | 3331.9 | 3113.2 | 3123.9 |
| 72.5° | 725.5 | 746.9 | 846.0 | 1235.5 | 1966.0 | 2785.5 | 3446.7 | 3486.3 | 3334.4 | 3060.4 | 2957.2 |
| 75° | 250.9 | 253.4 | 331.0 | 592.6 | 1167.0 | 2103.0 | 3314.6 | 3407.9 | 3229.6 | 2868.1 | 2573.4 |
| 77.5° | 114.7 | 118.9 | 146.9 | 244.3 | 517.5 | 1134.9 | 2736.9 | 2970.4 | 2911.0 | 2567.7 | 1980.8 |
| 80° | 79.2 | 80.9 | 101.5 | 146.1 | 298.8 | 399.5 | 1727.5 | 2032.0 | 2136.0 | 1988.3 | 1269.4 |
| 82.5° | 59.4 | 61.1 | 78.4 | 99.0 | 215.4 | 194.0 | 657.8 | 944.2 | 1173.6 | 1152.2 | 530.7 |
| 85° | 56.9 | 56.1 | 61.1 | 66.0 | 143.6 | 115.5 | 212.9 | 292.2 | 458.1 | 392.0 | 133.7 |
| 87.5° | 24.8 | 27.2 | 62.7 | 37.1 | 75.1 | 53.6 | 92.4 | 108.1 | 139.5 | 121.3 | 47.9 |
| 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° | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 | 659.5 |
| 2.5° | 654.5 | 656.2 | 661.1 | 668.5 | 672.7 | 680.9 | 686.7 | 690.0 | 692.5 | 693.3 | 693.3 |
| 5° | 648.7 | 652.0 | 662.8 | 675.1 | 686.7 | 704.0 | 719.7 | 728.8 | 735.4 | 737.9 | 738.7 |
| 7.5° | 650.4 | 658.6 | 674.3 | 692.5 | 707.3 | 729.6 | 748.6 | 766.7 | 781.6 | 787.4 | 787.4 |
| 10° | 666.1 | 677.6 | 699.1 | 723.0 | 742.0 | 765.1 | 784.9 | 800.6 | 817.9 | 827.8 | 829.5 |
| 12.5° | 690.0 | 704.0 | 732.1 | 758.5 | 780.0 | 798.1 | 816.3 | 827.8 | 836.1 | 843.5 | 845.2 |
| 15° | 723.8 | 741.2 | 769.2 | 796.5 | 815.4 | 827.0 | 832.0 | 832.0 | 831.1 | 832.0 | 833.6 |
| 17.5° | 757.7 | 774.2 | 802.2 | 829.5 | 838.6 | 832.0 | 826.2 | 824.5 | 823.7 | 822.0 | 822.9 |
| 20° | 790.7 | 806.4 | 830.3 | 850.9 | 843.5 | 820.4 | 813.0 | 812.1 | 809.7 | 808.0 | 806.4 |
| 22.5° | 823.7 | 835.3 | 855.1 | 862.5 | 832.8 | 799.8 | 790.7 | 785.7 | 782.4 | 778.3 | 774.2 |
| 25° | 861.7 | 865.0 | 879.8 | 868.3 | 806.4 | 761.8 | 748.6 | 741.2 | 737.9 | 733.7 | 730.4 |
| 27.5° | 897.2 | 897.2 | 899.6 | 859.2 | 767.6 | 711.5 | 691.6 | 678.4 | 677.6 | 676.8 | 676.0 |
| 30° | 929.3 | 925.2 | 917.0 | 832.0 | 717.2 | 649.5 | 619.8 | 606.6 | 611.6 | 615.7 | 616.5 |
| 32.5° | 967.3 | 959.1 | 935.9 | 794.8 | 657.0 | 580.2 | 543.9 | 538.1 | 543.9 | 548.9 | 545.6 |
| 35° | 1026.7 | 1011.9 | 955.8 | 751.9 | 599.2 | 516.7 | 482.0 | 473.7 | 472.1 | 471.3 | 464.7 |
| 37.5° | 1111.7 | 1086.2 | 971.4 | 705.7 | 542.3 | 460.5 | 435.0 | 417.6 | 401.9 | 385.4 | 383.0 |
| 40° | 1215.7 | 1172.0 | 982.2 | 652.9 | 482.0 | 413.5 | 386.3 | 364.0 | 337.6 | 308.7 | 305.4 |
| 42.5° | 1329.6 | 1264.4 | 987.1 | 594.3 | 429.2 | 374.7 | 340.9 | 312.8 | 283.1 | 260.8 | 256.7 |
| 45° | 1452.6 | 1364.3 | 983.0 | 538.1 | 386.3 | 341.7 | 303.7 | 273.2 | 249.3 | 233.6 | 230.3 |
| 47.5° | 1572.3 | 1479.0 | 971.4 | 493.6 | 353.2 | 313.6 | 274.8 | 246.8 | 228.6 | 211.3 | 207.2 |
| 50° | 1725.8 | 1588.8 | 957.4 | 458.9 | 316.9 | 285.6 | 256.7 | 227.0 | 206.3 | 198.1 | 196.4 |
| 52.5° | 1895.8 | 1698.6 | 940.9 | 415.2 | 281.4 | 263.3 | 245.1 | 218.7 | 212.1 | 196.4 | 194.0 |
| 55° | 2079.9 | 1829.0 | 937.6 | 359.9 | 250.1 | 247.6 | 233.6 | 226.1 | 227.8 | 196.4 | 192.3 |
| 57.5° | 2273.8 | 1968.5 | 945.0 | 304.6 | 224.5 | 233.6 | 238.5 | 232.7 | 230.3 | 200.6 | 192.3 |
| 60° | 2476.0 | 2103.0 | 922.7 | 253.4 | 204.7 | 222.0 | 244.3 | 229.4 | 211.3 | 198.9 | 193.1 |
| 62.5° | 2672.5 | 2216.1 | 826.2 | 217.1 | 189.8 | 218.7 | 241.0 | 217.1 | 196.4 | 196.4 | 194.0 |
| 65° | 2815.3 | 2266.4 | 646.2 | 190.7 | 179.9 | 214.6 | 235.2 | 208.8 | 192.3 | 198.1 | 194.8 |
| 67.5° | 2831.8 | 2214.4 | 434.1 | 170.0 | 171.7 | 207.2 | 222.0 | 201.4 | 188.2 | 203.0 | 198.1 |
| 70° | 2730.3 | 2079.1 | 265.8 | 154.3 | 160.9 | 194.0 | 210.5 | 194.0 | 182.4 | 198.9 | 191.5 |
| 72.5° | 2467.0 | 1826.5 | 187.4 | 141.1 | 149.4 | 181.6 | 199.7 | 187.4 | 174.1 | 179.9 | 172.5 |
| 75° | 2023.8 | 1415.5 | 148.6 | 128.8 | 137.8 | 170.0 | 190.7 | 177.4 | 164.2 | 161.8 | 156.8 |
| 77.5° | 1433.6 | 907.1 | 119.7 | 118.9 | 125.5 | 156.0 | 178.3 | 165.9 | 152.7 | 147.7 | 144.4 |
| 80° | 824.5 | 444.9 | 103.2 | 107.3 | 113.9 | 142.0 | 163.4 | 152.7 | 140.3 | 132.9 | 127.9 |
| 82.5° | 315.3 | 155.2 | 90.8 | 93.3 | 100.7 | 127.1 | 148.6 | 139.5 | 127.1 | 133.7 | 112.2 |
| 85° | 102.3 | 85.0 | 74.3 | 76.8 | 84.2 | 105.6 | 131.2 | 123.8 | 109.8 | 97.4 | 90.0 |
| 87.5° | 45.4 | 46.2 | 39.6 | 43.7 | 52.8 | 70.2 | 95.7 | 90.8 | 80.1 | 66.9 | 64.4 |
| 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)