

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: P348998

Luminaire Tested: **ARCH-N-PA1-30-750-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348998
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1908-474-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-30-750-U-T2U-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 560mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3141 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

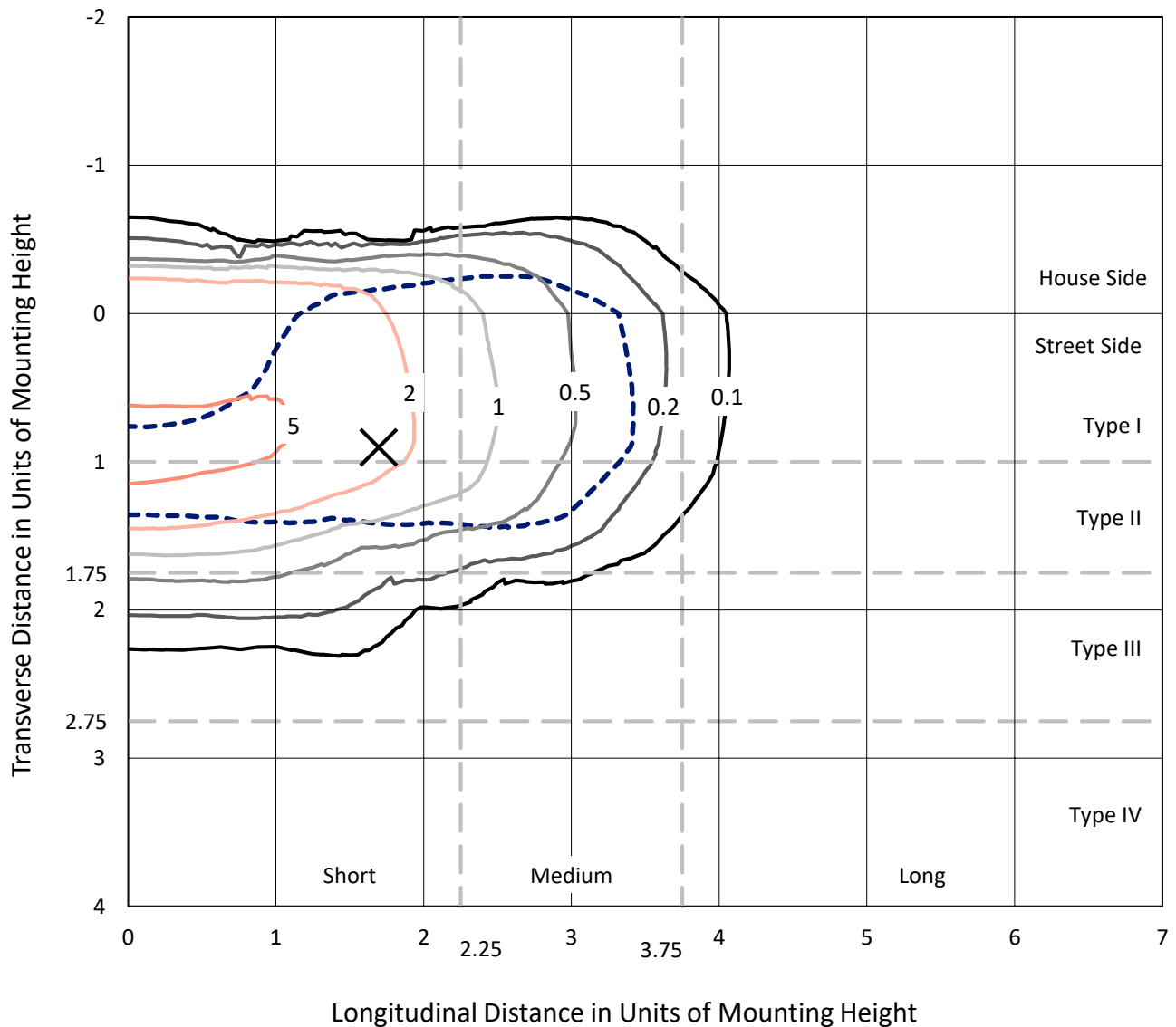
Input Watts (W): 31
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

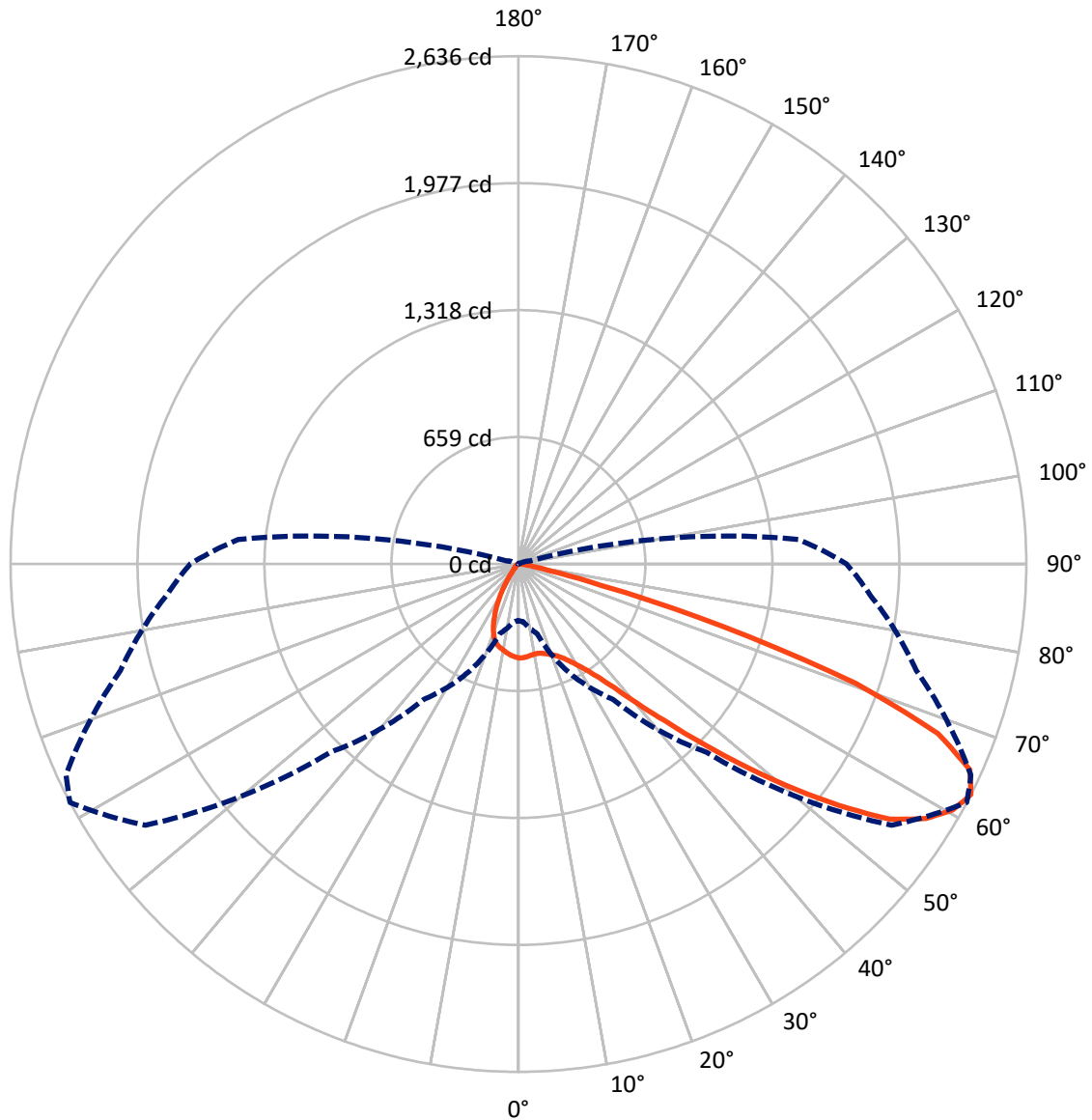
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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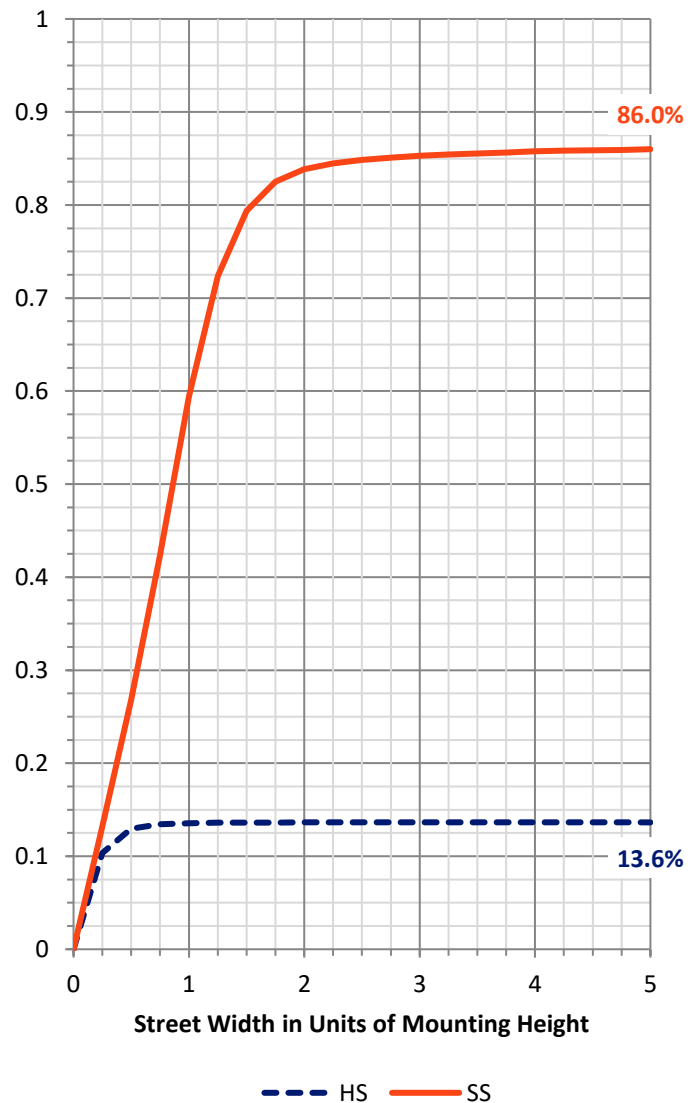
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 433.7 | 0.0 | 433.7 |
| | % Fixture | 13.8 | 0.0 | 13.8 |
| Street Side | Lumens | 2707.3 | 0.0 | 2707.3 |
| | % Fixture | 86.2 | 0.0 | 86.2 |
| Total | Lumens | 3141.0 | 0.0 | 3141.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 44.4 | 1.4 |
| 10°-20° | 111.6 | 3.6 |
| 20°-30° | 166.6 | 5.3 |
| 30°-40° | 317.4 | 10.1 |
| 40°-50° | 661.8 | 21.1 |
| 50°-60° | 879.2 | 28.0 |
| 60°-70° | 685.4 | 21.8 |
| 70°-80° | 259.1 | 8.2 |
| 80°-90° | 15.5 | 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° | 3141.0 | 100.0 |
| 0°-180° | 3141.0 | 100.0 |

Coefficient of Utilization



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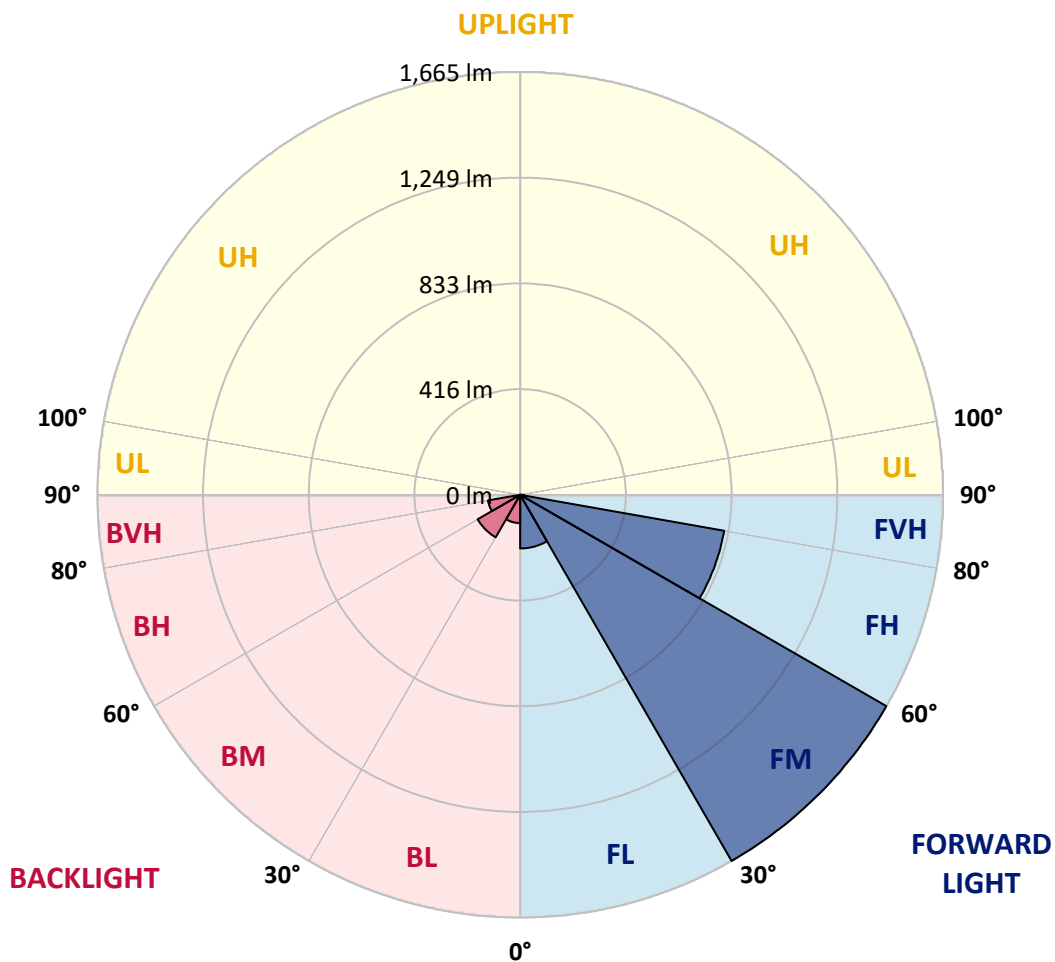
CATALOG NUMBER: ARCH-N-PA1-30-750-U-T2U-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 211.4 | 6.7 | | | |
| FM (30°-60°) | 1665.4 | 53.0 | | | |
| FH (60°-80°) | 815.8 | 26.0 | | | G1/1800 |
| FVH (80°-90°) | 14.8 | 0.5 | | | G1/100 |
| BL (0°-30°) | 111.2 | 3.5 | B1/500 | | |
| BM (30°-60°) | 193.1 | 6.1 | B0/220 | | |
| BH (60°-80°) | 128.6 | 4.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.7 | 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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 |
| 2.5° | 486.3 | 485.5 | 487.6 | 487.6 | 487.2 | 488.0 | 487.2 | 486.7 | 486.3 | 485.5 | 484.7 |
| 5° | 473.6 | 473.6 | 476.5 | 477.7 | 479.0 | 481.4 | 482.2 | 483.1 | 482.6 | 483.5 | 483.9 |
| 7.5° | 458.8 | 459.7 | 462.9 | 464.6 | 466.6 | 471.6 | 474.4 | 477.7 | 478.1 | 481.0 | 482.6 |
| 10° | 446.5 | 447.3 | 450.6 | 452.7 | 455.6 | 462.1 | 468.3 | 474.0 | 474.8 | 480.2 | 481.4 |
| 12.5° | 438.3 | 439.1 | 442.4 | 445.3 | 451.5 | 459.7 | 468.3 | 474.8 | 476.9 | 483.5 | 483.5 |
| 15° | 435.0 | 435.9 | 440.0 | 444.9 | 453.1 | 463.8 | 474.4 | 481.4 | 485.5 | 490.9 | 488.4 |
| 17.5° | 433.8 | 435.4 | 442.4 | 449.8 | 458.8 | 470.3 | 483.5 | 490.9 | 495.0 | 500.7 | 495.4 |
| 20° | 437.5 | 439.6 | 448.6 | 458.8 | 468.3 | 480.2 | 494.5 | 502.8 | 506.9 | 510.6 | 500.3 |
| 22.5° | 450.6 | 453.9 | 461.7 | 473.2 | 480.6 | 495.0 | 509.3 | 518.8 | 523.3 | 522.9 | 509.3 |
| 25° | 482.2 | 486.3 | 490.0 | 496.2 | 499.5 | 516.7 | 531.9 | 541.3 | 544.6 | 543.4 | 527.8 |
| 27.5° | 556.9 | 562.3 | 549.1 | 535.6 | 528.2 | 544.2 | 561.0 | 570.9 | 573.8 | 571.3 | 547.5 |
| 30° | 682.9 | 683.3 | 653.4 | 610.7 | 579.1 | 577.4 | 598.0 | 611.1 | 611.1 | 606.2 | 575.4 |
| 32.5° | 866.4 | 853.2 | 815.5 | 740.0 | 668.6 | 631.2 | 646.8 | 659.5 | 659.5 | 653.4 | 618.1 |
| 35° | 1097.0 | 1087.2 | 1024.8 | 934.1 | 806.9 | 717.4 | 714.1 | 726.4 | 726.8 | 725.2 | 685.0 |
| 37.5° | 1331.8 | 1307.6 | 1255.4 | 1146.7 | 997.3 | 850.0 | 810.6 | 819.2 | 825.3 | 824.5 | 774.4 |
| 40° | 1550.1 | 1525.9 | 1482.0 | 1377.3 | 1231.2 | 1045.3 | 950.9 | 950.9 | 951.3 | 947.2 | 886.9 |
| 42.5° | 1721.7 | 1710.6 | 1677.8 | 1605.1 | 1492.3 | 1352.7 | 1140.1 | 1108.9 | 1102.4 | 1098.3 | 1019.1 |
| 45° | 1832.9 | 1821.4 | 1803.8 | 1788.6 | 1752.0 | 1702.0 | 1394.2 | 1312.5 | 1301.8 | 1261.6 | 1165.2 |
| 47.5° | 1839.1 | 1821.4 | 1833.3 | 1890.8 | 1973.3 | 1999.1 | 1707.7 | 1549.7 | 1521.4 | 1448.8 | 1311.7 |
| 50° | 1702.0 | 1703.6 | 1750.0 | 1889.5 | 2112.4 | 2259.7 | 2040.2 | 1810.7 | 1766.0 | 1620.7 | 1441.0 |
| 52.5° | 1450.0 | 1466.4 | 1538.2 | 1752.9 | 2119.0 | 2426.4 | 2329.5 | 2080.0 | 1991.3 | 1775.0 | 1532.1 |
| 55° | 1135.2 | 1150.0 | 1267.4 | 1499.6 | 1959.3 | 2450.2 | 2540.0 | 2337.7 | 2220.3 | 1882.6 | 1613.7 |
| 57.5° | 802.8 | 830.7 | 976.4 | 1189.8 | 1654.8 | 2268.3 | 2597.5 | 2492.0 | 2378.3 | 1987.2 | 1690.5 |
| 60° | 488.0 | 501.9 | 653.4 | 901.7 | 1247.2 | 1887.9 | 2530.2 | 2590.5 | 2498.6 | 2077.9 | 1762.3 |
| 62.5° | 293.4 | 301.7 | 374.3 | 621.0 | 858.2 | 1382.3 | 2363.6 | 2635.7 | 2590.5 | 2138.2 | 1831.3 |
| 65° | 173.6 | 178.9 | 213.0 | 375.1 | 571.7 | 847.9 | 2003.6 | 2573.7 | 2610.2 | 2190.4 | 1871.5 |
| 67.5° | 125.2 | 126.8 | 139.1 | 201.9 | 383.7 | 454.3 | 1393.3 | 2348.0 | 2484.6 | 2207.6 | 1847.7 |
| 70° | 107.9 | 110.0 | 121.9 | 142.0 | 271.7 | 268.0 | 725.2 | 1858.3 | 2106.2 | 2117.7 | 1747.1 |
| 72.5° | 81.7 | 85.4 | 105.1 | 133.4 | 194.9 | 190.4 | 273.3 | 1108.1 | 1429.9 | 1738.5 | 1506.2 |
| 75° | 55.4 | 57.5 | 78.0 | 113.3 | 152.3 | 142.0 | 143.2 | 444.9 | 699.3 | 1090.1 | 1035.1 |
| 77.5° | 34.9 | 36.5 | 47.6 | 81.3 | 130.5 | 100.1 | 101.4 | 158.0 | 252.4 | 462.1 | 443.7 |
| 80° | 23.8 | 24.6 | 28.7 | 52.5 | 88.2 | 87.0 | 65.3 | 82.5 | 94.0 | 142.4 | 95.6 |
| 82.5° | 14.4 | 14.4 | 18.9 | 31.2 | 53.4 | 68.9 | 41.0 | 45.6 | 50.1 | 52.9 | 21.8 |
| 85° | 4.9 | 5.3 | 11.5 | 19.3 | 32.8 | 34.5 | 23.4 | 27.1 | 28.3 | 30.8 | 10.3 |
| 87.5° | 2.1 | 1.6 | 6.2 | 10.7 | 14.0 | 16.0 | 13.5 | 12.3 | 13.5 | 18.1 | 4.5 |
| 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° | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 | 488.0 |
| 2.5° | 485.1 | 483.5 | 483.5 | 483.1 | 480.6 | 479.4 | 478.1 | 474.8 | 476.9 | 474.4 | 472.8 |
| 5° | 482.6 | 481.4 | 479.4 | 477.3 | 471.6 | 466.6 | 464.6 | 460.5 | 460.1 | 456.8 | 455.1 |
| 7.5° | 482.2 | 479.4 | 476.1 | 469.1 | 460.5 | 452.7 | 445.7 | 438.7 | 435.9 | 432.2 | 430.1 |
| 10° | 480.2 | 476.5 | 470.3 | 459.3 | 446.5 | 434.2 | 418.6 | 399.3 | 385.0 | 376.8 | 375.5 |
| 12.5° | 480.6 | 476.5 | 467.0 | 450.6 | 433.8 | 406.7 | 364.9 | 320.9 | 284.8 | 269.6 | 267.2 |
| 15° | 483.9 | 479.4 | 465.0 | 442.8 | 414.1 | 354.6 | 277.8 | 210.5 | 163.8 | 146.9 | 143.2 |
| 17.5° | 488.0 | 480.2 | 460.5 | 431.8 | 376.3 | 275.0 | 174.8 | 110.4 | 84.1 | 74.7 | 73.1 |
| 20° | 490.4 | 479.8 | 453.1 | 414.9 | 318.9 | 183.9 | 95.2 | 64.8 | 57.0 | 55.0 | 54.2 |
| 22.5° | 496.6 | 481.0 | 446.9 | 388.7 | 246.7 | 110.8 | 60.3 | 50.5 | 46.0 | 43.5 | 43.1 |
| 25° | 509.3 | 489.2 | 447.3 | 354.6 | 172.8 | 66.9 | 48.8 | 41.0 | 36.9 | 34.5 | 33.7 |
| 27.5° | 527.8 | 504.0 | 455.1 | 312.3 | 106.7 | 50.5 | 40.6 | 33.2 | 28.7 | 26.7 | 26.3 |
| 30° | 551.2 | 522.0 | 464.2 | 257.3 | 66.5 | 42.3 | 32.8 | 25.9 | 22.6 | 21.3 | 20.9 |
| 32.5° | 588.1 | 553.2 | 472.0 | 192.5 | 46.0 | 34.9 | 25.9 | 20.5 | 18.5 | 17.2 | 17.2 |
| 35° | 649.3 | 607.0 | 484.7 | 128.9 | 36.5 | 27.9 | 20.9 | 16.8 | 15.2 | 14.4 | 14.4 |
| 37.5° | 735.5 | 683.7 | 490.9 | 80.0 | 30.0 | 21.8 | 16.8 | 14.0 | 12.7 | 11.9 | 11.9 |
| 40° | 840.5 | 776.9 | 482.2 | 49.7 | 25.0 | 17.6 | 14.0 | 11.9 | 10.7 | 10.3 | 10.3 |
| 42.5° | 961.6 | 884.0 | 455.1 | 35.3 | 20.9 | 14.4 | 11.9 | 10.3 | 9.4 | 9.0 | 9.0 |
| 45° | 1097.0 | 1001.4 | 406.3 | 29.5 | 17.6 | 12.3 | 10.3 | 8.6 | 8.2 | 7.8 | 7.8 |
| 47.5° | 1232.1 | 1120.4 | 343.1 | 25.4 | 14.8 | 10.3 | 8.6 | 7.4 | 7.0 | 6.6 | 6.6 |
| 50° | 1349.8 | 1224.7 | 276.2 | 22.2 | 12.3 | 9.0 | 7.4 | 6.2 | 5.7 | 5.3 | 5.3 |
| 52.5° | 1417.2 | 1286.6 | 213.8 | 18.5 | 10.7 | 7.8 | 5.7 | 4.9 | 4.5 | 4.1 | 4.1 |
| 55° | 1489.8 | 1338.4 | 159.7 | 15.6 | 8.6 | 6.6 | 4.5 | 3.7 | 3.3 | 2.9 | 2.9 |
| 57.5° | 1557.5 | 1384.7 | 118.6 | 12.7 | 7.4 | 4.9 | 3.7 | 2.9 | 2.5 | 2.1 | 2.1 |
| 60° | 1623.2 | 1424.1 | 87.8 | 10.3 | 6.2 | 4.1 | 2.9 | 2.1 | 1.6 | 1.2 | 1.2 |
| 62.5° | 1703.2 | 1460.2 | 64.4 | 8.2 | 5.3 | 2.9 | 2.1 | 1.2 | 0.8 | 0.4 | 0.4 |
| 65° | 1762.7 | 1478.7 | 48.4 | 6.2 | 4.5 | 2.1 | 1.2 | 0.8 | 0.0 | 0.0 | 0.0 |
| 67.5° | 1762.3 | 1443.0 | 35.3 | 4.5 | 3.3 | 1.6 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 1679.8 | 1334.7 | 24.6 | 3.7 | 2.5 | 1.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 1440.5 | 1055.6 | 16.0 | 2.5 | 2.1 | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 972.3 | 536.0 | 9.4 | 2.1 | 1.6 | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 415.7 | 210.5 | 4.9 | 1.2 | 1.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 87.0 | 50.9 | 2.1 | 0.8 | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 14.8 | 7.4 | 0.8 | 0.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 3.7 | 2.1 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.6 | 0.8 | 0.4 | 0.4 | 0.0 | 0.0 | 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)