

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: P399826

Luminaire Tested: **ARCH-L-PA3-190-830-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399826
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-190-830-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 810mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16060 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

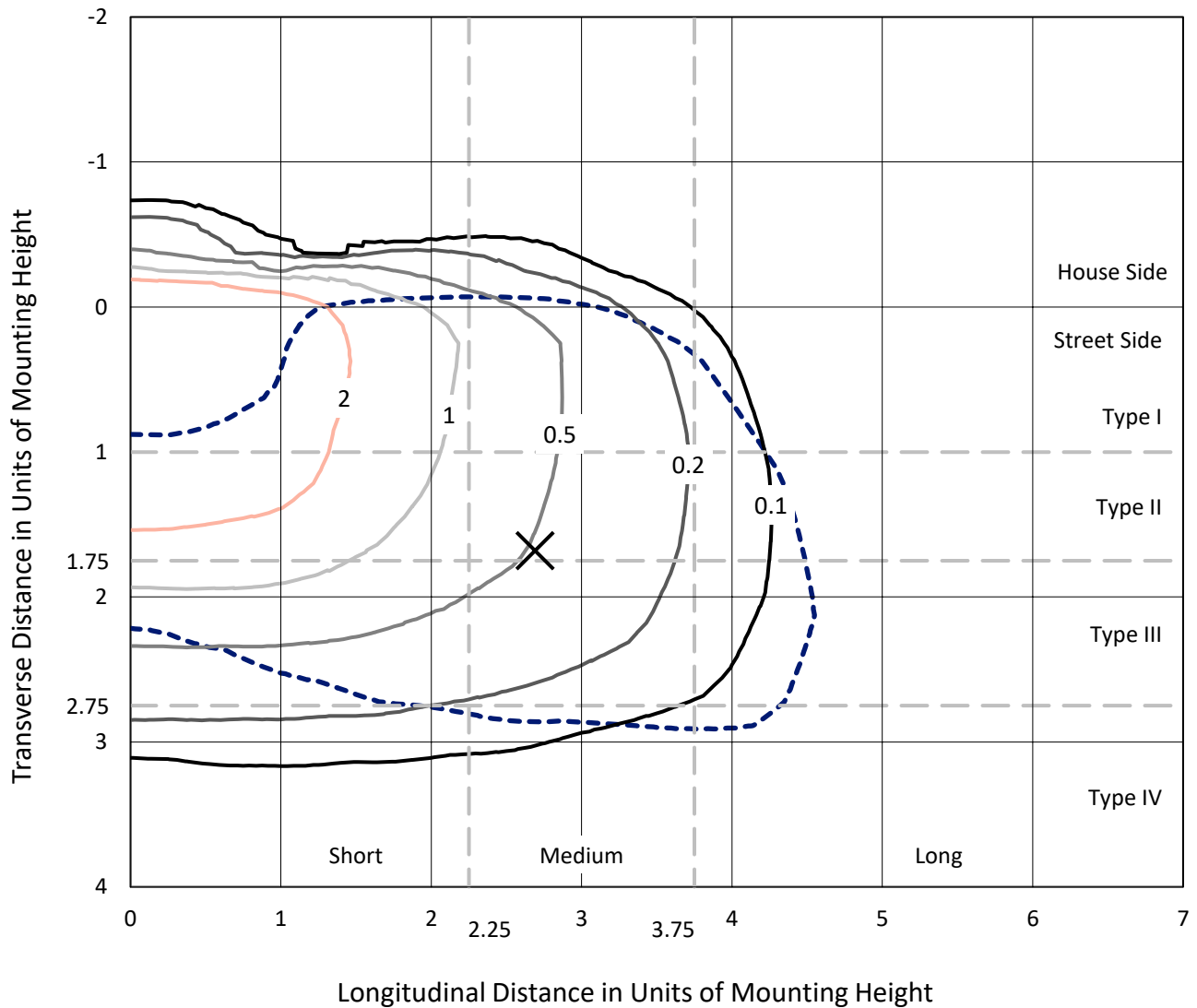
Input Watts (W): 189
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

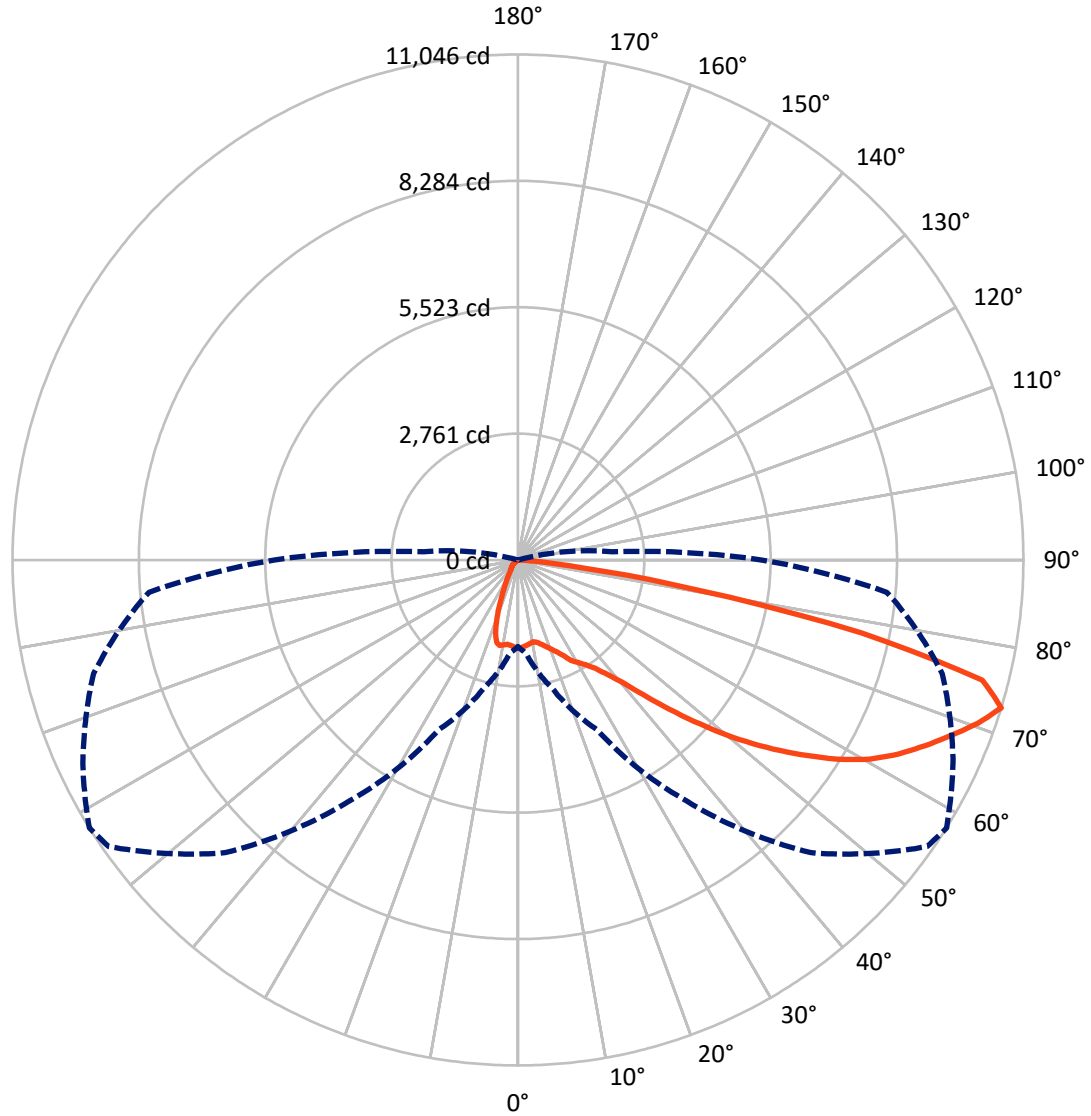
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type IV - Medium - N/A

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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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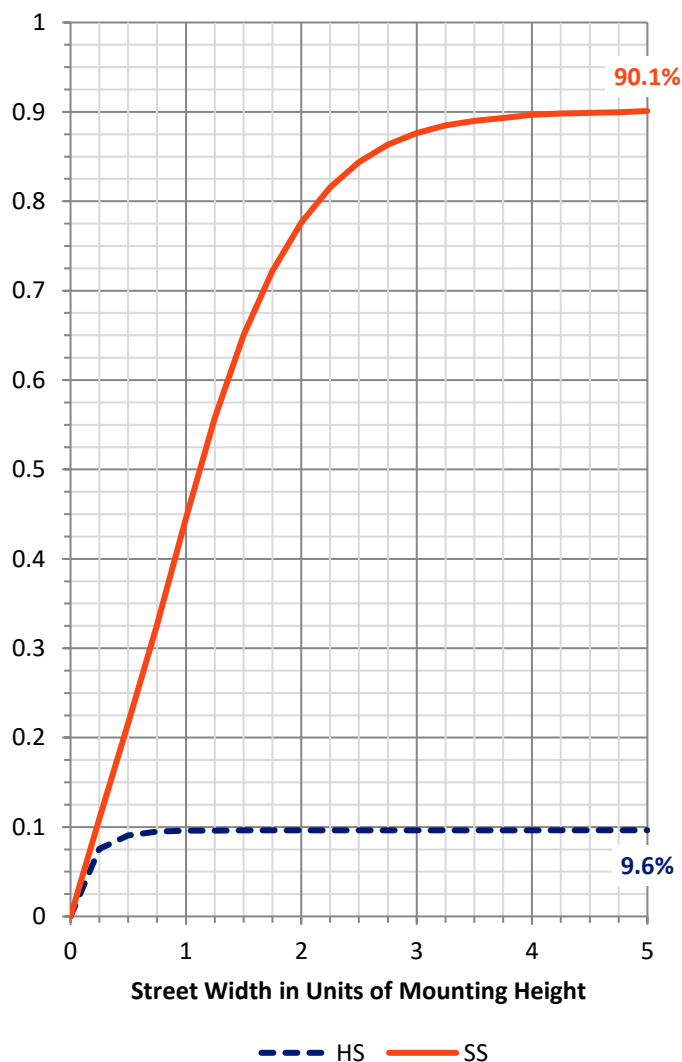
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1561.7 | 0.0 | 1561.7 |
| | % Fixture | 9.7 | 0.0 | 9.7 |
| Street Side | Lumens | 14498.3 | 0.0 | 14498.3 |
| | % Fixture | 90.3 | 0.0 | 90.3 |
| Total | Lumens | 16060.0 | 0.0 | 16060.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 176.9 | 1.1 |
| 10°-20° | 460.6 | 2.9 |
| 20°-30° | 723.6 | 4.5 |
| 30°-40° | 1248.0 | 7.8 |
| 40°-50° | 2374.4 | 14.8 |
| 50°-60° | 3760.3 | 23.4 |
| 60°-70° | 4387.8 | 27.3 |
| 70°-80° | 2748.1 | 17.1 |
| 80°-90° | 180.4 | 1.1 |
| 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° | 16060.0 | 100.0 |
| 0°-180° | 16060.0 | 100.0 |

Coefficient of Utilization



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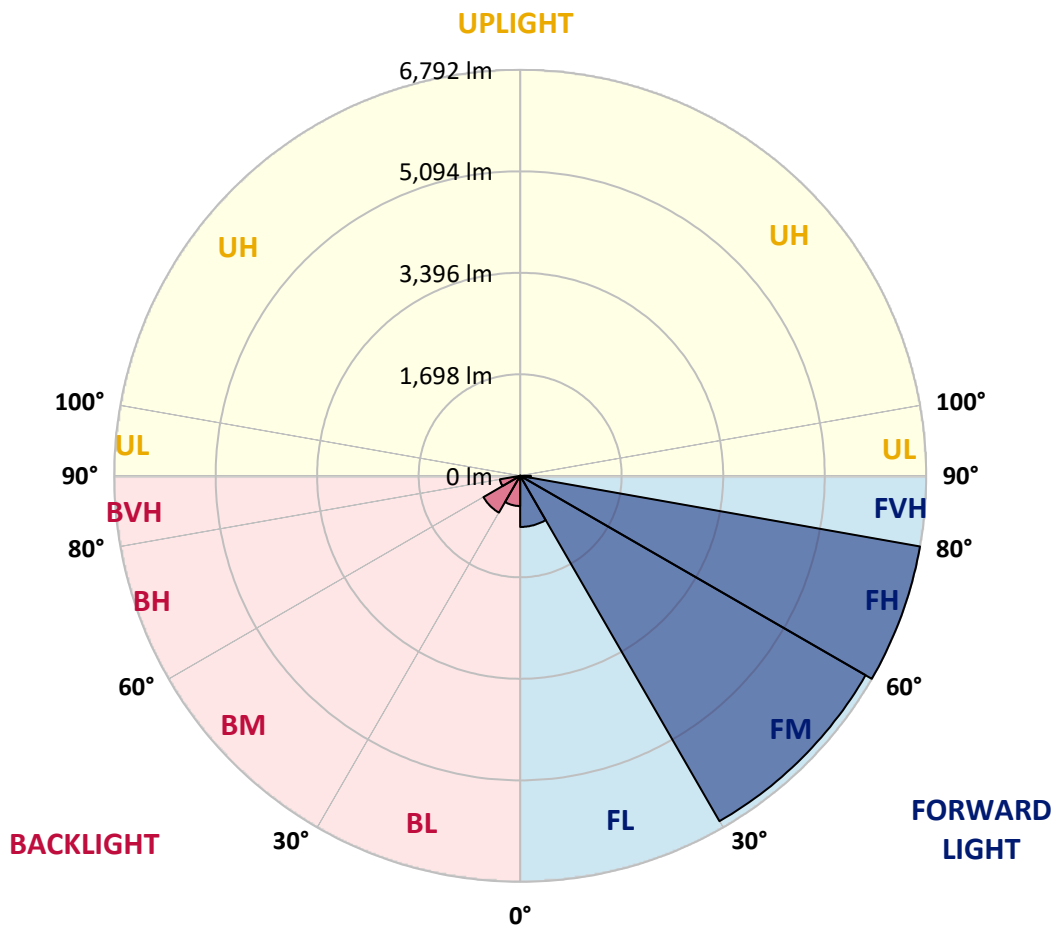
CATALOG NUMBER: ARCH-L-PA3-190-830-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 855.4 | 5.3 | | | |
| FM (30°-60°) | 6672.0 | 41.5 | | | |
| FH (60°-80°) | 6792.2 | 42.3 | | | G3/7500 |
| FVH (80°-90°) | 178.6 | 1.1 | | | G2/225 |
| BL (0°-30°) | 505.7 | 3.1 | B2/1000 | | |
| BM (30°-60°) | 710.6 | 4.4 | B1/1000 | | |
| BH (60°-80°) | 343.6 | 2.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.7 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|--------|
| 0° | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 |
| 2.5° | 1918.5 | 1909.9 | 1907.0 | 1904.1 | 1907.0 | 1909.9 | 1901.3 | 1909.9 | 1904.1 | 1907.0 | 1912.7 |
| 5° | 1849.6 | 1840.9 | 1838.1 | 1840.9 | 1849.6 | 1863.9 | 1869.7 | 1878.3 | 1878.3 | 1886.9 | 1889.8 |
| 7.5° | 1772.0 | 1766.3 | 1763.4 | 1769.1 | 1786.4 | 1818.0 | 1835.2 | 1846.7 | 1858.2 | 1875.4 | 1892.6 |
| 10° | 1728.9 | 1726.1 | 1723.2 | 1731.8 | 1749.0 | 1777.8 | 1800.7 | 1818.0 | 1861.0 | 1909.9 | 1941.5 |
| 12.5° | 1700.2 | 1700.2 | 1706.0 | 1723.2 | 1746.2 | 1769.1 | 1823.7 | 1846.7 | 1912.7 | 1987.4 | 2030.5 |
| 15° | 1677.2 | 1677.2 | 1685.9 | 1717.4 | 1749.0 | 1803.6 | 1884.0 | 1909.9 | 1987.4 | 2079.3 | 2136.8 |
| 17.5° | 1660.0 | 1665.8 | 1671.5 | 1703.1 | 1763.4 | 1855.3 | 1950.1 | 1987.4 | 2082.2 | 2182.7 | 2245.9 |
| 20° | 1662.9 | 1668.6 | 1671.5 | 1703.1 | 1789.2 | 1915.6 | 2036.2 | 2079.3 | 2188.5 | 2294.7 | 2357.9 |
| 22.5° | 1680.1 | 1688.7 | 1691.6 | 1734.7 | 1835.2 | 1978.8 | 2133.9 | 2182.7 | 2300.5 | 2412.5 | 2461.3 |
| 25° | 1751.9 | 1757.7 | 1740.4 | 1777.8 | 1901.3 | 2076.4 | 2260.3 | 2311.9 | 2429.7 | 2533.1 | 2573.3 |
| 27.5° | 1996.0 | 2001.8 | 1907.0 | 1863.9 | 1952.9 | 2156.9 | 2415.3 | 2487.1 | 2633.6 | 2702.5 | 2708.3 |
| 30° | 2524.5 | 2530.2 | 2343.5 | 2139.6 | 2076.4 | 2225.8 | 2501.5 | 2602.0 | 2791.6 | 2869.1 | 2834.6 |
| 32.5° | 3205.1 | 3199.4 | 2943.8 | 2642.2 | 2369.4 | 2346.4 | 2625.0 | 2731.3 | 2938.0 | 3012.7 | 2986.9 |
| 35° | 3888.7 | 3897.3 | 3679.0 | 3225.2 | 2834.6 | 2573.3 | 2783.0 | 2906.4 | 3156.3 | 3262.6 | 3216.6 |
| 37.5° | 4356.8 | 4414.2 | 4319.5 | 3828.4 | 3406.2 | 2992.6 | 3038.6 | 3170.7 | 3483.7 | 3627.3 | 3529.7 |
| 40° | 5017.4 | 5003.0 | 4773.2 | 4411.4 | 4038.0 | 3613.0 | 3452.1 | 3515.3 | 3874.3 | 4066.7 | 3914.5 |
| 42.5° | 5904.8 | 5876.1 | 5485.5 | 5132.2 | 4715.8 | 4368.3 | 4040.9 | 4029.4 | 4322.3 | 4546.4 | 4325.2 |
| 45° | 6709.0 | 6665.9 | 6398.8 | 6057.0 | 5600.4 | 5201.2 | 4758.9 | 4658.4 | 4862.3 | 5051.8 | 4793.3 |
| 47.5° | 7349.4 | 7277.6 | 7088.1 | 6907.1 | 6795.1 | 6174.8 | 5511.3 | 5359.1 | 5462.5 | 5603.2 | 5238.5 |
| 50° | 8107.6 | 7909.4 | 7633.7 | 7524.6 | 7757.2 | 7277.6 | 6235.1 | 6088.6 | 6082.9 | 6163.3 | 5698.0 |
| 52.5° | 8452.3 | 8093.3 | 7938.2 | 8030.1 | 8440.8 | 8302.9 | 7016.3 | 6806.6 | 6723.3 | 6731.9 | 6125.9 |
| 55° | 8035.8 | 7995.6 | 8078.9 | 8366.1 | 8903.2 | 8822.7 | 7765.8 | 7507.4 | 7383.9 | 7228.8 | 6536.6 |
| 57.5° | 7561.9 | 7685.4 | 8015.7 | 8564.3 | 9489.0 | 9365.5 | 8503.9 | 8211.0 | 7984.1 | 7628.0 | 6993.3 |
| 60° | 7125.4 | 7251.8 | 7797.4 | 8610.2 | 9810.7 | 9888.2 | 9118.6 | 8840.0 | 8503.9 | 8035.8 | 7495.9 |
| 62.5° | 6462.0 | 6559.6 | 7326.4 | 8544.2 | 9670.0 | 10192.7 | 9546.5 | 9336.8 | 9023.8 | 8423.5 | 8073.2 |
| 65° | 5715.3 | 5778.4 | 6536.6 | 8015.7 | 9394.3 | 10158.2 | 9899.7 | 9782.0 | 9477.6 | 8828.5 | 8644.7 |
| 67.5° | 4896.7 | 4971.4 | 5603.2 | 7065.1 | 8854.3 | 9997.4 | 10232.9 | 10221.4 | 9873.9 | 9276.5 | 9058.2 |
| 70° | 3954.7 | 3960.5 | 4483.2 | 5858.8 | 7912.3 | 9675.7 | 10646.4 | 10672.3 | 10253.0 | 9612.5 | 9075.5 |
| 72.5° | 1892.6 | 2047.7 | 2906.4 | 4089.7 | 6430.4 | 9043.9 | 10916.4 | 11045.7 | 10491.4 | 9601.0 | 8096.1 |
| 75° | 433.7 | 448.0 | 847.2 | 1944.3 | 3770.9 | 6941.6 | 10241.5 | 10482.7 | 9911.2 | 8302.9 | 5703.8 |
| 77.5° | 158.0 | 166.6 | 238.4 | 568.7 | 1450.4 | 3587.1 | 7329.3 | 7682.6 | 7326.4 | 5367.7 | 2696.8 |
| 80° | 106.3 | 103.4 | 123.5 | 252.7 | 666.3 | 1016.7 | 3747.9 | 3957.6 | 3613.0 | 1832.3 | 646.2 |
| 82.5° | 54.6 | 57.4 | 86.2 | 140.7 | 448.0 | 353.3 | 1252.2 | 1361.3 | 1120.1 | 367.6 | 120.6 |
| 85° | 25.8 | 25.8 | 48.8 | 89.0 | 189.6 | 123.5 | 278.6 | 336.0 | 301.6 | 160.8 | 40.2 |
| 87.5° | 25.8 | 25.8 | 46.0 | 57.4 | 97.6 | 51.7 | 68.9 | 86.2 | 80.4 | 86.2 | 14.4 |
| 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° | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 | 1927.1 |
| 2.5° | 1912.7 | 1909.9 | 1907.0 | 1912.7 | 1909.9 | 1915.6 | 1915.6 | 1921.4 | 1921.4 | 1915.6 | 1912.7 |
| 5° | 1886.9 | 1881.2 | 1875.4 | 1875.4 | 1872.5 | 1878.3 | 1895.5 | 1909.9 | 1912.7 | 1904.1 | 1901.3 |
| 7.5° | 1889.8 | 1889.8 | 1884.0 | 1872.5 | 1852.4 | 1852.4 | 1852.4 | 1869.7 | 1878.3 | 1872.5 | 1869.7 |
| 10° | 1941.5 | 1944.3 | 1930.0 | 1904.1 | 1869.7 | 1838.1 | 1777.8 | 1688.7 | 1605.4 | 1582.5 | 1573.8 |
| 12.5° | 2030.5 | 2033.4 | 2004.6 | 1958.7 | 1886.9 | 1700.2 | 1470.5 | 1257.9 | 1094.2 | 1048.3 | 1039.7 |
| 15° | 2136.8 | 2139.6 | 2087.9 | 2013.3 | 1795.0 | 1361.3 | 1019.6 | 778.3 | 634.7 | 600.2 | 597.4 |
| 17.5° | 2245.9 | 2240.1 | 2162.6 | 2019.0 | 1522.2 | 965.0 | 620.3 | 496.9 | 459.5 | 450.9 | 453.8 |
| 20° | 2352.2 | 2334.9 | 2228.7 | 1912.7 | 1171.8 | 631.8 | 453.8 | 425.1 | 416.4 | 410.7 | 410.7 |
| 22.5° | 2449.8 | 2415.3 | 2283.2 | 1703.1 | 821.4 | 453.8 | 404.9 | 399.2 | 387.7 | 379.1 | 376.2 |
| 25° | 2547.5 | 2498.6 | 2317.7 | 1430.2 | 551.4 | 396.3 | 382.0 | 370.5 | 356.1 | 344.6 | 341.8 |
| 27.5° | 2665.2 | 2596.3 | 2300.5 | 1085.6 | 413.6 | 367.6 | 356.1 | 338.9 | 318.8 | 301.6 | 295.8 |
| 30° | 2777.2 | 2699.7 | 2202.8 | 749.6 | 353.3 | 338.9 | 321.7 | 295.8 | 270.0 | 249.9 | 244.1 |
| 32.5° | 2917.9 | 2828.9 | 2027.6 | 491.1 | 307.3 | 295.8 | 278.6 | 247.0 | 212.5 | 189.6 | 183.8 |
| 35° | 3119.0 | 3018.5 | 1803.6 | 344.6 | 270.0 | 249.9 | 226.9 | 192.4 | 155.1 | 137.9 | 135.0 |
| 37.5° | 3400.4 | 3265.4 | 1522.2 | 278.6 | 238.4 | 209.7 | 175.2 | 140.7 | 114.9 | 100.5 | 97.6 |
| 40° | 3745.1 | 3538.3 | 1209.1 | 247.0 | 212.5 | 175.2 | 132.1 | 100.5 | 83.3 | 71.8 | 71.8 |
| 42.5° | 4118.4 | 3793.9 | 890.3 | 226.9 | 186.7 | 143.6 | 97.6 | 71.8 | 60.3 | 54.6 | 51.7 |
| 45° | 4503.3 | 4020.8 | 600.2 | 209.7 | 163.7 | 109.1 | 68.9 | 48.8 | 40.2 | 40.2 | 37.3 |
| 47.5° | 4902.5 | 4173.0 | 387.7 | 189.6 | 137.9 | 80.4 | 46.0 | 34.5 | 28.7 | 28.7 | 28.7 |
| 50° | 5298.8 | 4253.4 | 275.7 | 172.3 | 112.0 | 54.6 | 34.5 | 25.8 | 23.0 | 23.0 | 23.0 |
| 52.5° | 5586.0 | 4201.7 | 221.1 | 149.3 | 86.2 | 40.2 | 25.8 | 20.1 | 17.2 | 17.2 | 17.2 |
| 55° | 5835.9 | 4112.7 | 192.4 | 129.2 | 63.2 | 28.7 | 20.1 | 17.2 | 14.4 | 14.4 | 14.4 |
| 57.5° | 6091.5 | 3997.8 | 172.3 | 109.1 | 46.0 | 20.1 | 14.4 | 11.5 | 11.5 | 11.5 | 11.5 |
| 60° | 6324.1 | 3802.5 | 149.3 | 86.2 | 31.6 | 14.4 | 11.5 | 8.6 | 8.6 | 8.6 | 8.6 |
| 62.5° | 6551.0 | 3635.9 | 129.2 | 66.1 | 23.0 | 11.5 | 5.7 | 5.7 | 2.9 | 2.9 | 2.9 |
| 65° | 6680.2 | 3411.9 | 103.4 | 43.1 | 14.4 | 8.6 | 2.9 | 2.9 | 0.0 | 0.0 | 0.0 |
| 67.5° | 6640.0 | 3144.8 | 71.8 | 25.8 | 8.6 | 5.7 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 6361.4 | 2785.8 | 43.1 | 14.4 | 8.6 | 5.7 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 5327.5 | 2062.1 | 25.8 | 11.5 | 5.7 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 3558.4 | 947.8 | 14.4 | 8.6 | 2.9 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 1628.4 | 284.3 | 8.6 | 5.7 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 327.4 | 74.7 | 5.7 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 68.9 | 14.4 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 14.4 | 5.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 5.7 | 2.9 | 0.0 | 0.0 | 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)