

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: P397578

Luminaire Tested: **ARCH-S-PA1-100-760-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-100-760-U-T4W-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5700K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8300 lumens
Efficiency: N/A
Efficacy: 86.5 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): 96
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: 28.75 FT

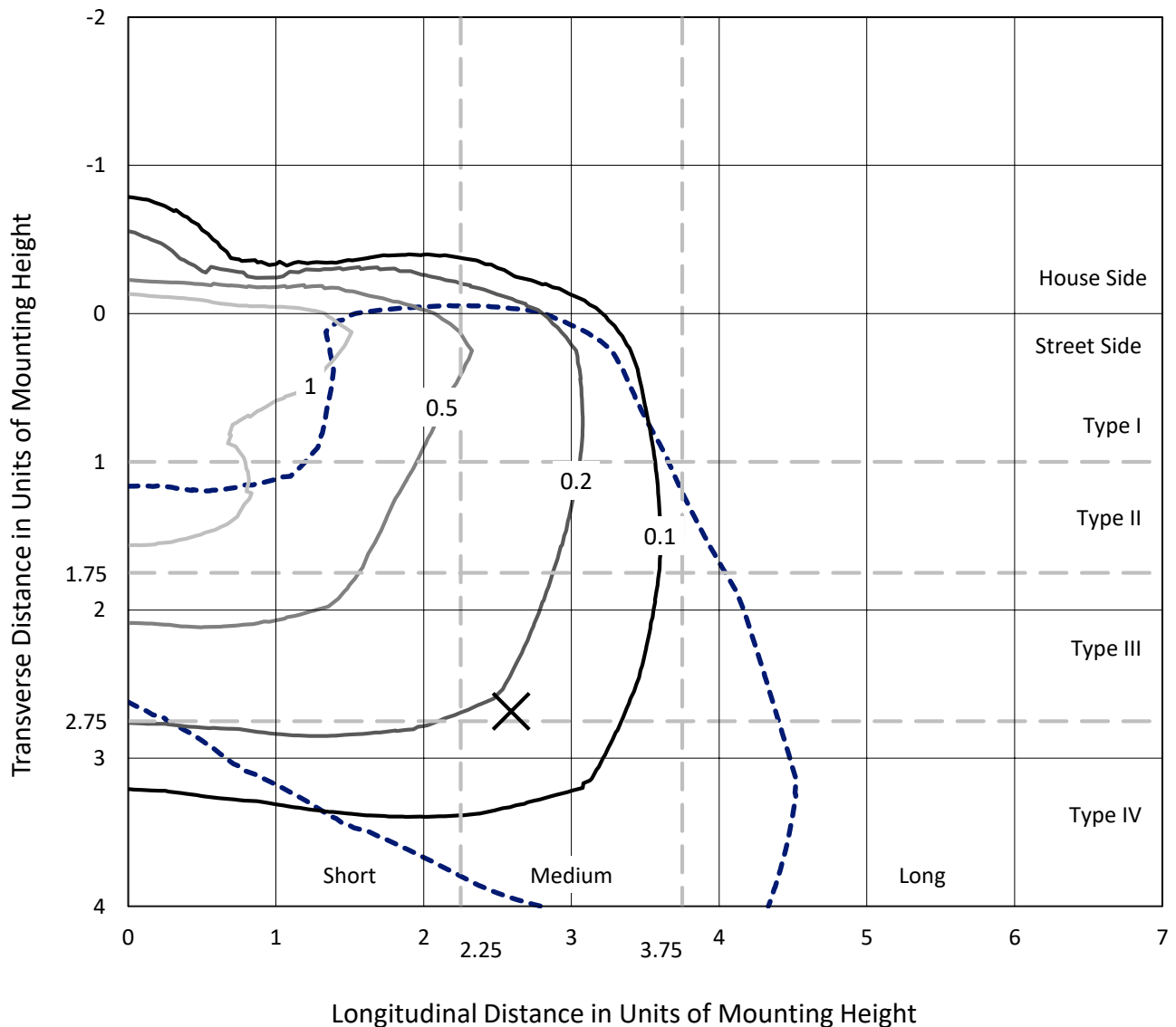


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

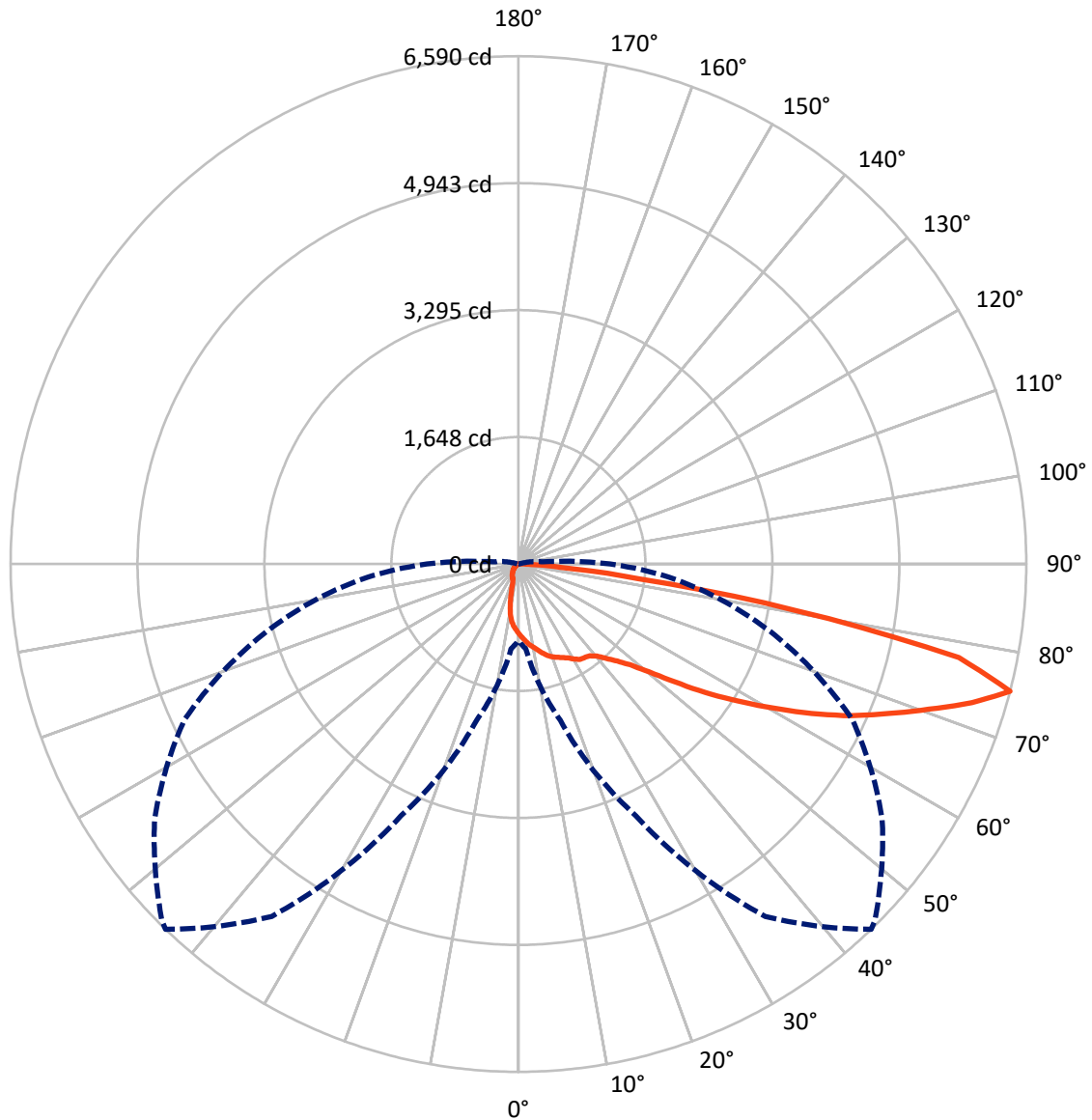


Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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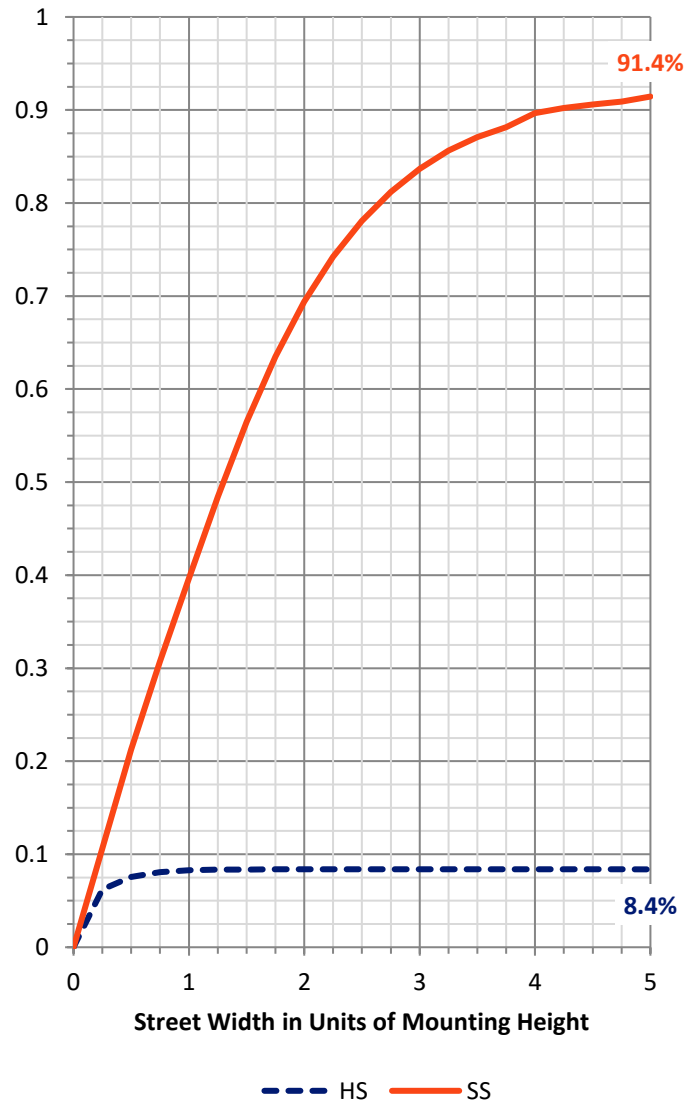
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 700.0 | 0.0 | 700.0 |
| | % Fixture | 8.4 | 0.0 | 8.4 |
| Street Side | Lumens | 7600.0 | 0.0 | 7600.0 |
| | % Fixture | 91.6 | 0.0 | 91.6 |
| Total | Lumens | 8300.0 | 0.0 | 8300.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 85.2 | 1.0 |
| 10°-20° | 238.7 | 2.9 |
| 20°-30° | 394.0 | 4.7 |
| 30°-40° | 571.8 | 6.9 |
| 40°-50° | 929.5 | 11.2 |
| 50°-60° | 1638.7 | 19.7 |
| 60°-70° | 2355.1 | 28.4 |
| 70°-80° | 1885.9 | 22.7 |
| 80°-90° | 200.9 | 2.4 |
| 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° | 8300.0 | 100.0 |
| 0°-180° | 8300.0 | 100.0 |



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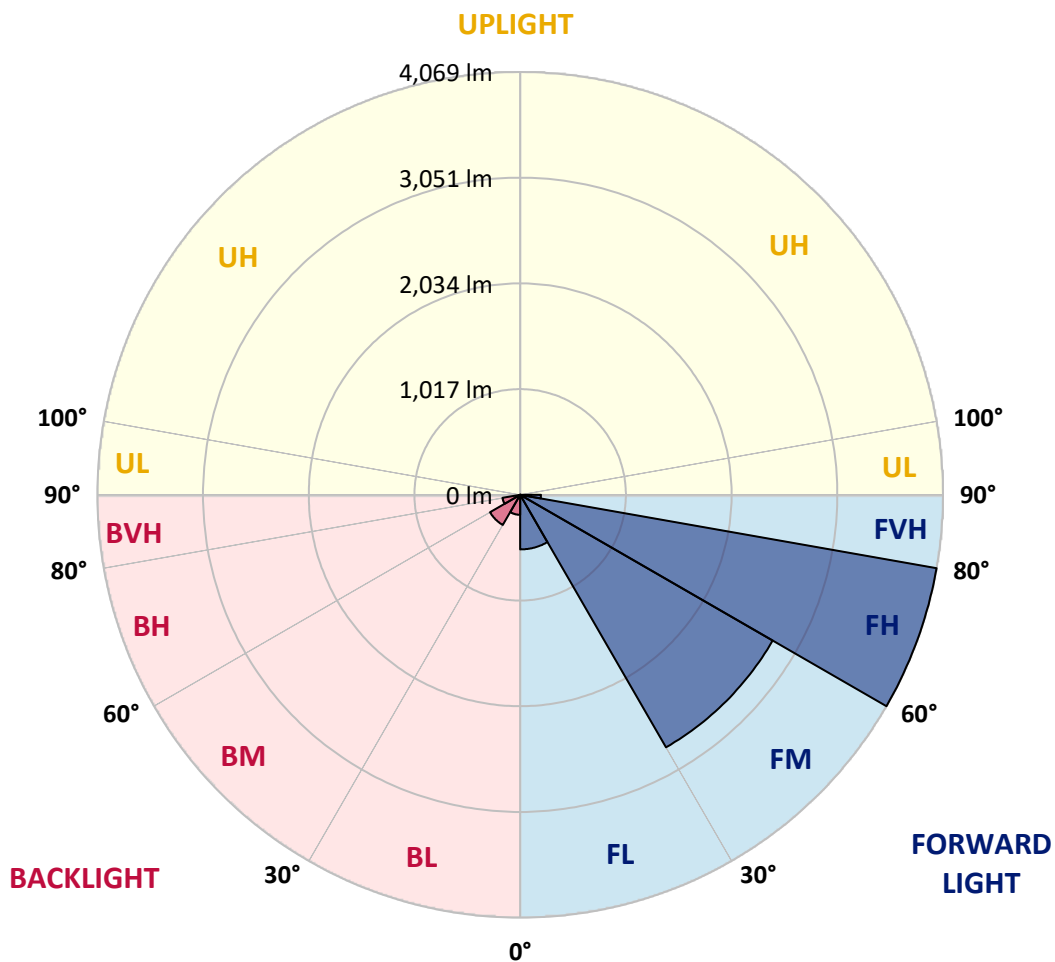
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 525.6 | 6.3 | | | |
| FM | (30°-60°) | 2805.5 | 33.8 | | | |
| FH | (60°-80°) | 4068.5 | 49.0 | | | G2/5000 |
| FVH | (80°-90°) | 200.4 | 2.4 | | | G2/225 |
| BL | (0°-30°) | 192.3 | 2.3 | B1/500 | | |
| BM | (30°-60°) | 334.6 | 4.0 | B1/1000 | | |
| BH | (60°-80°) | 172.6 | 2.1 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 0.5 | 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-G2

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 |
| 2.5° | 984.6 | 983.0 | 978.5 | 970.8 | 963.1 | 955.5 | 954.0 | 941.7 | 927.9 | 917.2 | 908.0 |
| 5° | 1071.9 | 1070.3 | 1062.7 | 1045.8 | 1029.0 | 1009.1 | 1007.5 | 978.5 | 952.4 | 923.3 | 898.8 |
| 7.5° | 1162.2 | 1159.1 | 1145.4 | 1119.3 | 1090.2 | 1059.6 | 1056.5 | 1013.7 | 975.4 | 937.1 | 901.9 |
| 10° | 1232.6 | 1229.6 | 1209.7 | 1179.0 | 1139.2 | 1101.0 | 1096.4 | 1052.0 | 1013.7 | 964.7 | 917.2 |
| 12.5° | 1301.5 | 1295.4 | 1269.4 | 1235.7 | 1186.7 | 1150.0 | 1145.4 | 1099.4 | 1053.5 | 1003.0 | 944.8 |
| 15° | 1365.9 | 1358.2 | 1333.7 | 1290.8 | 1238.8 | 1203.5 | 1200.5 | 1151.5 | 1104.0 | 1045.8 | 981.5 |
| 17.5° | 1410.3 | 1407.2 | 1378.1 | 1330.6 | 1280.1 | 1251.0 | 1247.9 | 1197.4 | 1150.0 | 1088.7 | 1019.8 |
| 20° | 1433.2 | 1433.2 | 1405.7 | 1353.6 | 1307.7 | 1287.8 | 1283.2 | 1235.7 | 1189.8 | 1131.6 | 1059.6 |
| 22.5° | 1437.8 | 1442.4 | 1421.0 | 1364.3 | 1330.6 | 1313.8 | 1310.7 | 1269.4 | 1225.0 | 1171.4 | 1104.0 |
| 25° | 1447.0 | 1447.0 | 1436.3 | 1375.0 | 1350.5 | 1345.9 | 1344.4 | 1307.7 | 1267.9 | 1214.3 | 1148.4 |
| 27.5° | 1457.7 | 1457.7 | 1450.1 | 1390.4 | 1381.2 | 1379.6 | 1378.1 | 1361.3 | 1329.1 | 1266.3 | 1200.5 |
| 30° | 1485.3 | 1486.8 | 1480.7 | 1421.0 | 1414.9 | 1431.7 | 1434.8 | 1425.6 | 1385.8 | 1307.7 | 1254.1 |
| 32.5° | 1554.2 | 1540.4 | 1523.6 | 1442.4 | 1453.1 | 1474.6 | 1476.1 | 1457.7 | 1414.9 | 1352.1 | 1318.4 |
| 35° | 1727.2 | 1646.1 | 1569.5 | 1460.8 | 1465.4 | 1486.8 | 1489.9 | 1488.4 | 1462.3 | 1408.7 | 1391.9 |
| 37.5° | 1888.0 | 1773.2 | 1664.4 | 1503.7 | 1488.4 | 1511.3 | 1517.4 | 1543.5 | 1523.6 | 1486.8 | 1491.4 |
| 40° | 1981.4 | 1937.0 | 1860.4 | 1621.6 | 1534.3 | 1569.5 | 1575.6 | 1615.4 | 1607.8 | 1592.5 | 1621.6 |
| 42.5° | 2269.3 | 2272.3 | 2189.7 | 1797.7 | 1618.5 | 1675.2 | 1682.8 | 1715.0 | 1725.7 | 1733.3 | 1803.8 |
| 45° | 2603.1 | 2613.8 | 2593.9 | 2114.6 | 1777.8 | 1796.1 | 1806.8 | 1849.7 | 1889.5 | 1938.5 | 2067.2 |
| 47.5° | 3004.3 | 2995.1 | 2921.6 | 2502.0 | 2054.9 | 1952.3 | 1960.0 | 2042.7 | 2111.6 | 2218.7 | 2402.5 |
| 50° | 3359.5 | 3382.5 | 3243.1 | 2863.4 | 2445.4 | 2198.8 | 2191.2 | 2272.3 | 2396.4 | 2546.4 | 2777.6 |
| 52.5° | 3717.8 | 3684.1 | 3495.8 | 3221.7 | 2907.8 | 2534.2 | 2511.2 | 2555.6 | 2730.2 | 2907.8 | 3145.1 |
| 55° | 3812.8 | 3815.8 | 3751.5 | 3613.7 | 3293.7 | 2941.5 | 2903.2 | 2900.1 | 3117.6 | 3238.5 | 3531.0 |
| 57.5° | 3999.6 | 4007.2 | 4022.5 | 4050.1 | 3898.5 | 3348.8 | 3309.0 | 3266.1 | 3477.4 | 3547.9 | 3918.4 |
| 60° | 4189.4 | 4198.6 | 4292.0 | 4440.6 | 4339.5 | 3788.3 | 3745.4 | 3644.3 | 3762.2 | 3857.2 | 4325.7 |
| 62.5° | 4164.9 | 4229.2 | 4500.3 | 4795.8 | 4783.6 | 4270.6 | 4217.0 | 3973.5 | 4048.6 | 4131.2 | 4699.3 |
| 65° | 3760.7 | 3829.6 | 4439.0 | 4893.8 | 5229.1 | 4746.8 | 4659.5 | 4313.5 | 4318.1 | 4417.6 | 5059.2 |
| 67.5° | 3399.3 | 3474.4 | 4056.2 | 4852.5 | 5523.1 | 5174.0 | 5083.7 | 4654.9 | 4583.0 | 4748.3 | 5252.1 |
| 70° | 3191.1 | 3266.1 | 3751.5 | 4723.8 | 5605.8 | 5647.2 | 5569.1 | 5045.4 | 4898.4 | 5050.0 | 5036.2 |
| 72.5° | 2497.4 | 2615.3 | 3362.6 | 4478.8 | 5694.6 | 6154.0 | 6092.7 | 5540.0 | 5166.4 | 4734.6 | 3834.2 |
| 75° | 995.3 | 1104.0 | 2099.3 | 3604.5 | 5582.9 | 6590.4 | 6542.9 | 5762.0 | 4782.0 | 3380.9 | 1963.0 |
| 77.5° | 300.1 | 321.6 | 583.4 | 1782.3 | 4093.0 | 5843.2 | 5827.8 | 4844.8 | 3384.0 | 1569.5 | 535.9 |
| 80° | 99.5 | 110.2 | 179.2 | 491.5 | 1868.1 | 3650.4 | 3719.3 | 3087.0 | 1537.4 | 359.8 | 108.7 |
| 82.5° | 41.3 | 45.9 | 90.3 | 197.5 | 661.5 | 1572.6 | 1549.6 | 1382.7 | 535.9 | 223.6 | 39.8 |
| 85° | 10.7 | 13.8 | 41.3 | 113.3 | 241.9 | 542.1 | 569.6 | 464.0 | 303.2 | 185.3 | 12.2 |
| 87.5° | 0.0 | 0.0 | 19.9 | 45.9 | 108.7 | 163.8 | 171.5 | 140.9 | 171.5 | 139.3 | 6.1 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 | 903.4 |
| 2.5° | 900.4 | 892.7 | 878.9 | 869.7 | 857.5 | 854.4 | 848.3 | 840.6 | 839.1 | 831.5 | 833.0 |
| 5° | 885.0 | 872.8 | 848.3 | 831.5 | 811.5 | 805.4 | 794.7 | 787.1 | 780.9 | 770.2 | 771.7 |
| 7.5° | 882.0 | 863.6 | 829.9 | 797.8 | 765.6 | 742.6 | 710.5 | 684.5 | 663.0 | 640.1 | 644.6 |
| 10° | 892.7 | 869.7 | 822.3 | 777.9 | 719.7 | 646.2 | 562.0 | 506.8 | 479.3 | 451.7 | 454.8 |
| 12.5° | 914.1 | 886.6 | 825.3 | 758.0 | 640.1 | 514.5 | 398.1 | 323.1 | 303.2 | 290.9 | 292.5 |
| 15° | 946.3 | 912.6 | 834.5 | 719.7 | 532.9 | 372.1 | 264.9 | 232.7 | 240.4 | 245.0 | 245.0 |
| 17.5° | 980.0 | 941.7 | 842.2 | 650.8 | 411.9 | 260.3 | 215.9 | 212.8 | 223.6 | 234.3 | 234.3 |
| 20° | 1021.3 | 972.3 | 843.7 | 563.5 | 297.1 | 211.3 | 203.7 | 203.7 | 211.3 | 223.6 | 223.6 |
| 22.5° | 1061.1 | 1006.0 | 829.9 | 464.0 | 226.6 | 196.0 | 196.0 | 196.0 | 200.6 | 212.8 | 214.4 |
| 25° | 1108.6 | 1047.4 | 800.8 | 358.3 | 194.5 | 186.8 | 186.8 | 188.3 | 191.4 | 202.1 | 203.7 |
| 27.5° | 1159.1 | 1090.2 | 751.8 | 261.8 | 177.6 | 176.1 | 177.6 | 179.2 | 180.7 | 191.4 | 194.5 |
| 30° | 1217.3 | 1137.7 | 689.1 | 196.0 | 162.3 | 162.3 | 166.9 | 170.0 | 170.0 | 179.2 | 182.2 |
| 32.5° | 1284.7 | 1200.5 | 614.0 | 162.3 | 147.0 | 145.5 | 153.1 | 157.7 | 157.7 | 165.4 | 168.4 |
| 35° | 1368.9 | 1264.8 | 523.7 | 143.9 | 134.7 | 131.7 | 134.7 | 142.4 | 145.5 | 151.6 | 153.1 |
| 37.5° | 1480.7 | 1341.4 | 427.2 | 133.2 | 125.6 | 119.4 | 119.4 | 121.0 | 127.1 | 133.2 | 134.7 |
| 40° | 1623.1 | 1425.6 | 332.3 | 125.6 | 116.4 | 110.2 | 105.7 | 104.1 | 102.6 | 107.2 | 110.2 |
| 42.5° | 1802.3 | 1520.5 | 248.1 | 117.9 | 108.7 | 99.5 | 93.4 | 87.3 | 79.6 | 78.1 | 79.6 |
| 45° | 2031.9 | 1636.9 | 183.7 | 111.8 | 104.1 | 90.3 | 79.6 | 68.9 | 55.1 | 50.5 | 52.1 |
| 47.5° | 2303.0 | 1757.8 | 143.9 | 105.7 | 101.1 | 79.6 | 65.8 | 47.5 | 33.7 | 30.6 | 32.2 |
| 50° | 2590.8 | 1874.2 | 122.5 | 98.0 | 94.9 | 68.9 | 47.5 | 29.1 | 19.9 | 19.9 | 21.4 |
| 52.5° | 2835.8 | 1940.1 | 111.8 | 91.9 | 85.7 | 56.7 | 30.6 | 16.8 | 12.2 | 12.2 | 13.8 |
| 55° | 3073.2 | 1975.3 | 104.1 | 85.7 | 73.5 | 39.8 | 16.8 | 10.7 | 7.7 | 7.7 | 7.7 |
| 57.5° | 3318.2 | 1990.6 | 94.9 | 78.1 | 58.2 | 24.5 | 9.2 | 6.1 | 4.6 | 4.6 | 4.6 |
| 60° | 3535.6 | 1961.5 | 81.2 | 64.3 | 38.3 | 12.2 | 4.6 | 4.6 | 3.1 | 1.5 | 1.5 |
| 62.5° | 3717.8 | 1906.4 | 56.7 | 45.9 | 23.0 | 6.1 | 3.1 | 1.5 | 0.0 | 0.0 | 0.0 |
| 65° | 3829.6 | 1817.6 | 36.7 | 30.6 | 13.8 | 4.6 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 3797.4 | 1650.7 | 23.0 | 19.9 | 6.1 | 3.1 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 3426.9 | 1353.6 | 16.8 | 12.2 | 4.6 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 2469.9 | 915.7 | 12.2 | 7.7 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 1188.2 | 326.2 | 7.7 | 6.1 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 290.9 | 72.0 | 4.6 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 64.3 | 13.8 | 3.1 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 21.4 | 6.1 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 7.7 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 4.6 | 1.5 | 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)