

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: P348592

Luminaire Tested: **ARCH-N-PA1-30-730-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348592
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-30-730-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 560mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3995 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type III - Short - Semi-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

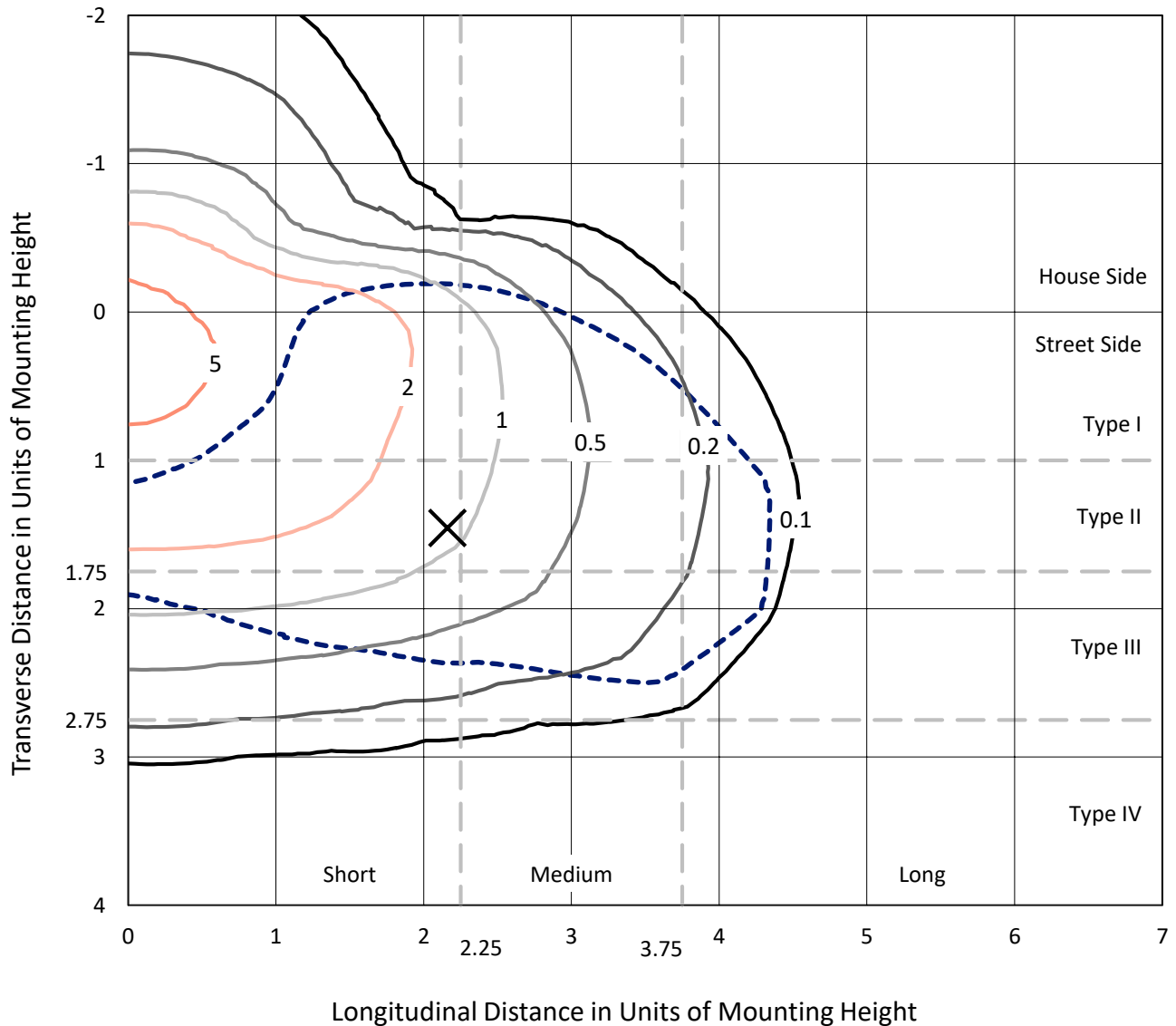


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

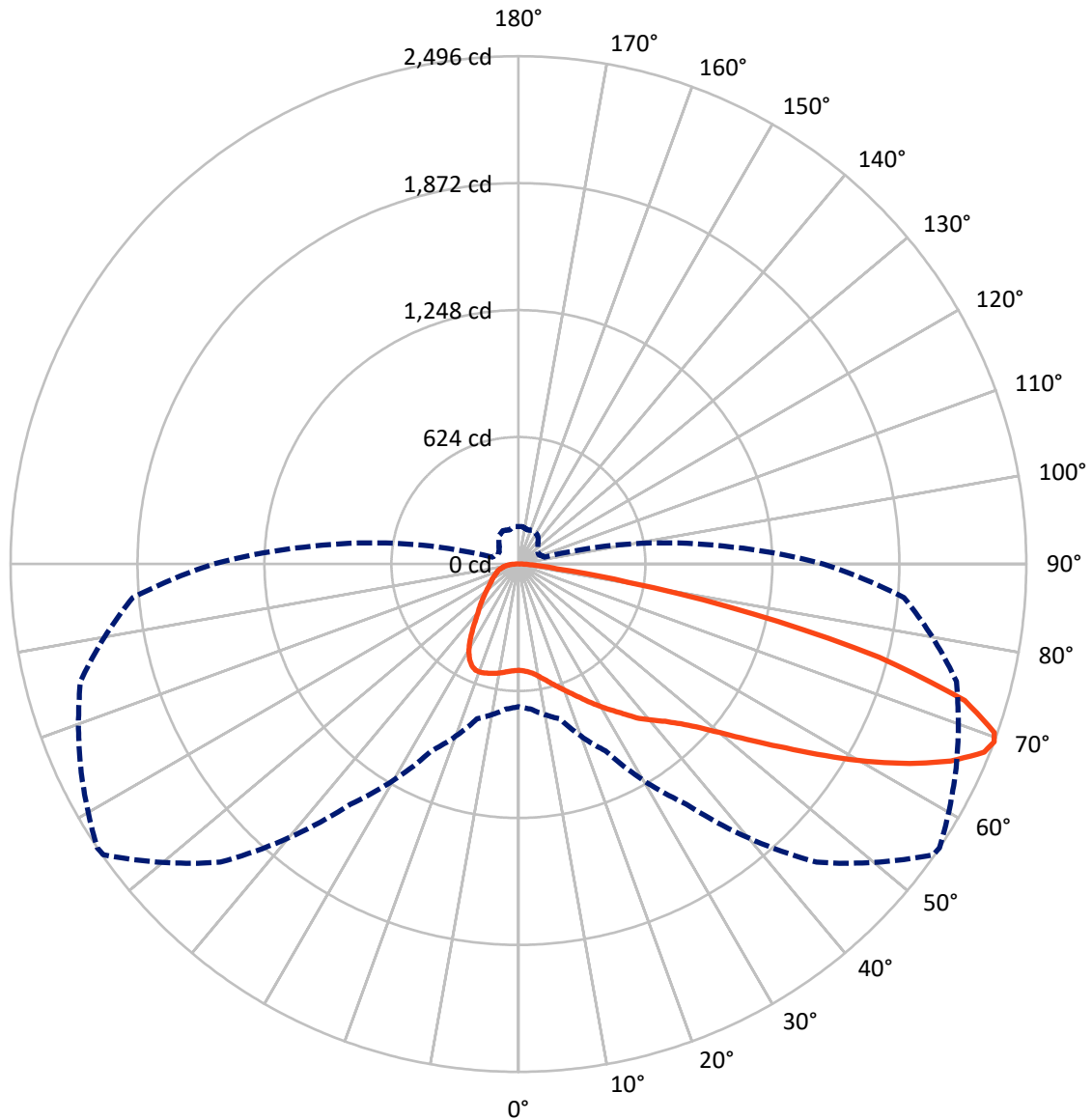


Based on 10 foot mounting height. Maximum calculated value = 5.7 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 889.7 | 0.0 | 889.7 |
| | % Fixture | 22.3 | 0.0 | 22.3 |
| Street Side | Lumens | 3105.3 | 0.0 | 3105.3 |
| | % Fixture | 77.7 | 0.0 | 77.7 |
| Total | Lumens | 3995.0 | 0.0 | 3995.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 51.3 | 1.3 |
| 10°-20° | 165.0 | 4.1 |
| 20°-30° | 287.9 | 7.2 |
| 30°-40° | 413.6 | 10.4 |
| 40°-50° | 572.4 | 14.3 |
| 50°-60° | 838.7 | 21.0 |
| 60°-70° | 1022.5 | 25.6 |
| 70°-80° | 565.3 | 14.2 |
| 80°-90° | 78.3 | 2.0 |
| 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° | 3995.0 | 100.0 |
| 0°-180° | 3995.0 | 100.0 |

Coefficient of Utilization



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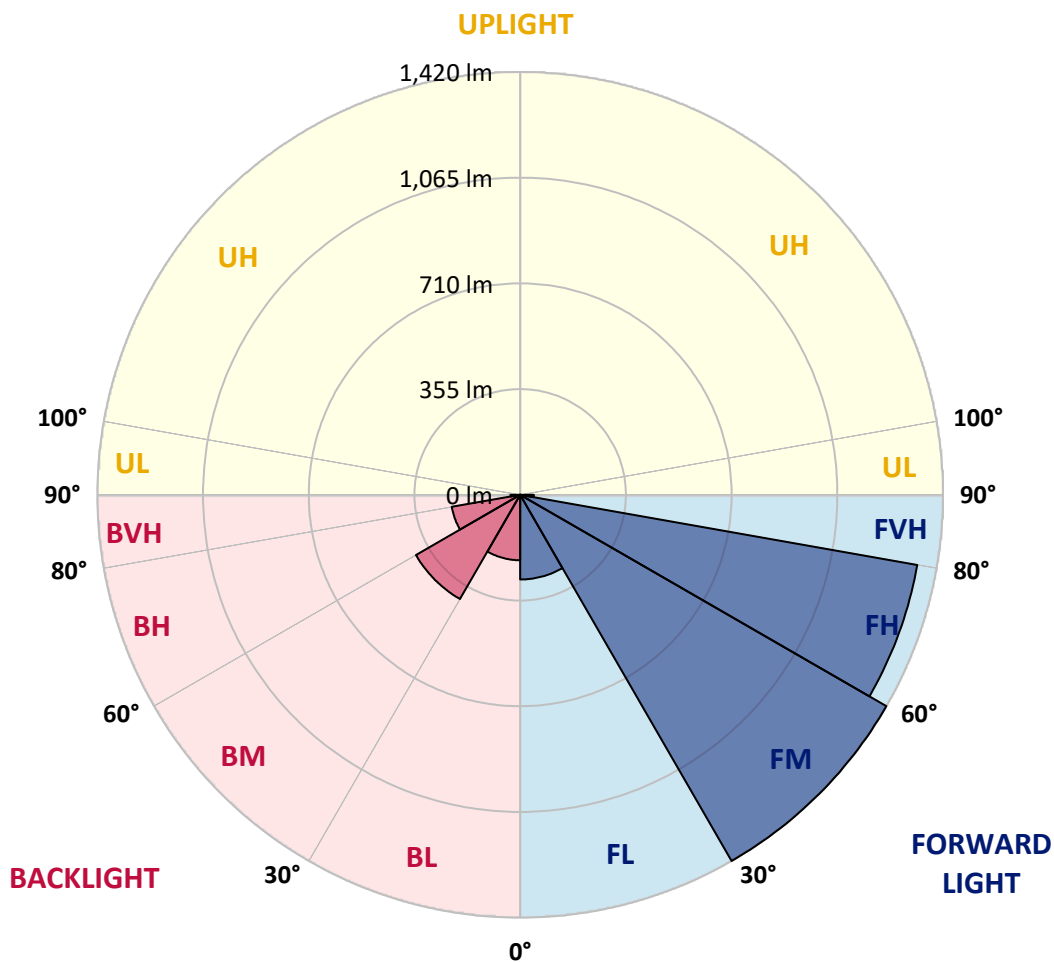
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 284.3 | 7.1 | | | |
| FM | (30°-60°) | 1420.4 | 35.6 | | | |
| FH | (60°-80°) | 1354.5 | 33.9 | | | G1/1800 |
| FVH | (80°-90°) | 46.1 | 1.2 | | | G1/100 |
| BL | (0°-30°) | 219.9 | 5.5 | B1/500 | | |
| BM | (30°-60°) | 404.3 | 10.1 | B1/1000 | | |
| BH | (60°-80°) | 233.3 | 5.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 32.2 | 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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 |
| 2.5° | 525.6 | 526.1 | 525.7 | 526.8 | 525.6 | 526.4 | 525.7 | 525.7 | 525.3 | 524.1 | 522.7 |
| 5° | 533.8 | 534.9 | 534.3 | 535.4 | 533.8 | 534.1 | 532.9 | 532.9 | 531.6 | 529.0 | 526.3 |
| 7.5° | 546.8 | 548.0 | 547.5 | 548.6 | 546.5 | 546.5 | 544.9 | 544.7 | 542.2 | 538.0 | 534.8 |
| 10° | 562.2 | 563.8 | 563.3 | 564.9 | 563.3 | 563.8 | 562.2 | 562.2 | 558.9 | 552.8 | 548.8 |
| 12.5° | 584.6 | 586.7 | 585.2 | 585.0 | 584.4 | 585.5 | 584.1 | 583.8 | 580.8 | 572.5 | 567.0 |
| 15° | 614.6 | 616.8 | 613.7 | 613.4 | 609.5 | 609.1 | 609.1 | 608.7 | 606.8 | 596.9 | 587.8 |
| 17.5° | 649.2 | 649.9 | 647.1 | 642.7 | 637.8 | 634.6 | 634.2 | 635.3 | 635.3 | 623.7 | 609.3 |
| 20° | 683.0 | 684.3 | 682.1 | 677.1 | 670.8 | 666.1 | 662.8 | 665.0 | 664.9 | 651.1 | 630.6 |
| 22.5° | 719.9 | 722.8 | 719.5 | 713.2 | 705.7 | 700.5 | 694.7 | 696.7 | 696.8 | 679.9 | 651.5 |
| 25° | 767.7 | 765.1 | 763.0 | 754.0 | 743.4 | 738.1 | 732.7 | 734.6 | 734.1 | 710.8 | 673.1 |
| 27.5° | 809.9 | 810.5 | 807.7 | 798.2 | 786.0 | 774.1 | 773.9 | 775.1 | 773.0 | 743.0 | 693.5 |
| 30° | 859.1 | 859.3 | 855.5 | 846.9 | 833.6 | 818.3 | 814.7 | 816.8 | 812.4 | 773.6 | 715.0 |
| 32.5° | 907.9 | 909.3 | 905.0 | 894.7 | 884.0 | 865.4 | 858.2 | 859.6 | 848.6 | 804.8 | 737.1 |
| 35° | 950.7 | 952.6 | 951.3 | 944.4 | 932.7 | 916.7 | 908.2 | 907.4 | 893.7 | 843.1 | 766.4 |
| 37.5° | 994.3 | 996.1 | 994.6 | 988.8 | 984.2 | 967.2 | 962.7 | 962.7 | 939.0 | 882.2 | 803.7 |
| 40° | 1039.2 | 1042.0 | 1040.2 | 1032.2 | 1028.2 | 1020.5 | 1009.6 | 1007.0 | 981.4 | 929.1 | 864.6 |
| 42.5° | 1080.9 | 1084.5 | 1091.6 | 1087.0 | 1078.8 | 1079.9 | 1058.1 | 1056.7 | 1038.0 | 998.5 | 940.9 |
| 45° | 1140.1 | 1145.3 | 1157.4 | 1153.8 | 1152.2 | 1146.1 | 1120.1 | 1118.9 | 1111.7 | 1091.8 | 1035.8 |
| 47.5° | 1204.6 | 1211.8 | 1233.7 | 1234.4 | 1252.1 | 1240.7 | 1205.3 | 1201.1 | 1202.7 | 1203.5 | 1151.5 |
| 50° | 1264.1 | 1271.9 | 1307.8 | 1324.8 | 1366.6 | 1369.1 | 1312.5 | 1308.7 | 1315.1 | 1334.1 | 1286.4 |
| 52.5° | 1311.6 | 1321.5 | 1366.3 | 1418.6 | 1490.3 | 1510.7 | 1444.5 | 1441.6 | 1446.4 | 1479.2 | 1438.9 |
| 55° | 1346.4 | 1357.1 | 1406.0 | 1501.2 | 1615.7 | 1651.6 | 1596.4 | 1593.7 | 1596.7 | 1638.4 | 1604.7 |
| 57.5° | 1354.5 | 1357.1 | 1428.0 | 1556.8 | 1721.5 | 1807.8 | 1782.4 | 1776.9 | 1762.0 | 1798.3 | 1787.7 |
| 60° | 1316.4 | 1326.8 | 1409.8 | 1576.4 | 1803.4 | 1961.8 | 1976.7 | 1969.8 | 1928.1 | 1957.9 | 1949.3 |
| 62.5° | 1239.0 | 1257.8 | 1342.0 | 1546.6 | 1835.5 | 2087.6 | 2167.3 | 2159.1 | 2087.2 | 2106.5 | 2065.5 |
| 65° | 1112.7 | 1120.7 | 1209.2 | 1444.1 | 1794.8 | 2168.1 | 2337.3 | 2333.2 | 2242.7 | 2212.6 | 2086.9 |
| 67.5° | 886.7 | 901.7 | 976.9 | 1229.8 | 1628.1 | 2158.6 | 2468.7 | 2468.3 | 2344.3 | 2252.0 | 2010.8 |
| 69° | 700.5 | 716.1 | 787.6 | 1013.1 | 1440.7 | 2071.8 | 2490.7 | 2495.6 | 2372.9 | 2228.0 | 1902.1 |
| 70° | 558.5 | 576.5 | 625.6 | 853.3 | 1274.3 | 1957.3 | 2472.4 | 2481.1 | 2367.4 | 2188.5 | 1801.8 |
| 72.5° | 237.7 | 252.3 | 287.2 | 439.8 | 776.6 | 1461.6 | 2260.6 | 2293.4 | 2239.8 | 2003.0 | 1489.1 |
| 75° | 103.8 | 108.3 | 124.1 | 179.3 | 344.8 | 795.5 | 1771.0 | 1831.5 | 1915.2 | 1693.1 | 1109.3 |
| 77.5° | 76.0 | 77.9 | 86.6 | 105.3 | 154.7 | 300.4 | 1138.8 | 1174.1 | 1381.2 | 1232.0 | 680.4 |
| 80° | 58.8 | 60.1 | 66.9 | 77.3 | 101.0 | 121.5 | 519.4 | 549.7 | 776.6 | 632.8 | 283.4 |
| 82.5° | 46.8 | 47.8 | 52.4 | 57.0 | 69.8 | 73.6 | 172.4 | 191.3 | 286.7 | 174.8 | 75.0 |
| 85° | 43.5 | 44.6 | 46.2 | 41.6 | 44.7 | 43.2 | 74.6 | 78.0 | 86.6 | 68.7 | 31.4 |
| 87.5° | 19.7 | 23.3 | 45.8 | 32.3 | 23.8 | 19.0 | 30.6 | 31.9 | 35.9 | 36.1 | 13.9 |
| 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° | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 | 522.3 |
| 2.5° | 523.5 | 523.1 | 523.8 | 522.1 | 524.2 | 524.1 | 523.4 | 523.7 | 525.0 | 524.9 | 525.0 |
| 5° | 526.7 | 526.4 | 527.2 | 526.0 | 528.5 | 529.3 | 529.4 | 530.7 | 532.2 | 532.6 | 532.6 |
| 7.5° | 534.7 | 534.7 | 535.1 | 533.4 | 535.1 | 534.9 | 534.3 | 535.5 | 537.0 | 537.1 | 537.0 |
| 10° | 548.4 | 548.6 | 547.9 | 543.6 | 542.2 | 538.5 | 535.1 | 535.2 | 537.1 | 538.7 | 539.1 |
| 12.5° | 565.8 | 565.2 | 562.2 | 554.4 | 548.6 | 541.0 | 537.4 | 537.3 | 539.2 | 540.5 | 540.9 |
| 15° | 585.6 | 584.1 | 576.2 | 563.4 | 553.3 | 545.8 | 540.0 | 538.7 | 537.6 | 536.2 | 536.3 |
| 17.5° | 604.3 | 600.9 | 587.8 | 570.0 | 559.3 | 549.4 | 538.3 | 529.3 | 523.1 | 519.5 | 518.4 |
| 20° | 623.3 | 616.6 | 597.7 | 576.2 | 562.6 | 544.6 | 523.1 | 504.9 | 493.7 | 488.4 | 487.5 |
| 22.5° | 640.6 | 629.8 | 606.9 | 582.7 | 560.0 | 528.3 | 494.6 | 468.2 | 452.5 | 445.5 | 446.0 |
| 25° | 657.6 | 642.4 | 616.6 | 587.2 | 546.8 | 499.7 | 455.0 | 422.5 | 404.3 | 396.5 | 396.2 |
| 27.5° | 672.4 | 655.2 | 627.0 | 583.5 | 522.1 | 459.0 | 408.1 | 376.4 | 361.3 | 354.5 | 353.4 |
| 30° | 689.5 | 671.3 | 640.9 | 569.4 | 486.1 | 411.9 | 362.2 | 339.9 | 329.2 | 322.5 | 321.2 |
| 32.5° | 710.3 | 693.2 | 652.3 | 543.6 | 440.0 | 362.8 | 326.4 | 310.9 | 301.1 | 293.6 | 292.2 |
| 35° | 740.6 | 722.1 | 655.2 | 506.7 | 389.3 | 324.0 | 300.2 | 284.2 | 271.0 | 261.2 | 260.2 |
| 37.5° | 778.5 | 758.3 | 648.6 | 459.0 | 340.2 | 298.8 | 278.3 | 258.6 | 241.4 | 227.6 | 225.4 |
| 40° | 833.3 | 802.8 | 630.3 | 403.9 | 304.0 | 279.4 | 256.9 | 234.5 | 213.2 | 197.1 | 193.9 |
| 42.5° | 899.1 | 854.9 | 602.2 | 349.2 | 277.5 | 259.7 | 235.8 | 208.0 | 187.6 | 176.2 | 174.5 |
| 45° | 982.8 | 909.1 | 563.3 | 301.3 | 251.3 | 240.0 | 212.9 | 187.3 | 174.6 | 166.3 | 164.9 |
| 47.5° | 1078.3 | 970.0 | 522.4 | 262.3 | 229.1 | 221.6 | 194.6 | 178.1 | 168.0 | 161.4 | 160.2 |
| 50° | 1195.7 | 1038.7 | 479.1 | 230.4 | 206.9 | 199.4 | 185.9 | 173.0 | 165.0 | 159.9 | 158.7 |
| 52.5° | 1328.1 | 1116.1 | 447.8 | 205.2 | 188.4 | 183.0 | 181.4 | 170.2 | 163.8 | 159.9 | 158.7 |
| 55° | 1470.7 | 1195.0 | 414.1 | 184.0 | 172.4 | 174.0 | 178.4 | 170.5 | 166.1 | 161.4 | 159.6 |
| 57.5° | 1613.4 | 1276.5 | 376.5 | 166.1 | 159.8 | 167.2 | 176.3 | 171.1 | 167.4 | 162.8 | 161.2 |
| 60° | 1726.2 | 1328.1 | 318.3 | 151.1 | 149.7 | 159.8 | 171.3 | 166.9 | 162.1 | 162.3 | 162.0 |
| 62.5° | 1778.9 | 1325.3 | 254.1 | 137.8 | 139.7 | 149.7 | 163.4 | 160.5 | 156.5 | 161.8 | 162.3 |
| 65° | 1749.3 | 1259.3 | 197.8 | 125.7 | 129.0 | 139.3 | 155.1 | 157.3 | 158.7 | 169.0 | 170.4 |
| 67.5° | 1625.2 | 1130.7 | 153.2 | 115.1 | 119.2 | 132.1 | 155.9 | 171.3 | 173.1 | 184.0 | 183.9 |
| 69° | 1496.8 | 1010.2 | 133.1 | 109.5 | 114.4 | 133.9 | 166.7 | 180.3 | 173.5 | 185.1 | 183.5 |
| 70° | 1389.2 | 914.8 | 122.3 | 105.8 | 112.2 | 137.1 | 173.8 | 180.2 | 171.5 | 181.4 | 178.6 |
| 72.5° | 1069.9 | 658.1 | 103.8 | 99.0 | 104.7 | 131.2 | 175.9 | 176.2 | 166.7 | 168.6 | 163.9 |
| 75° | 733.8 | 415.9 | 90.6 | 89.6 | 93.4 | 118.2 | 169.3 | 168.3 | 154.1 | 151.4 | 147.5 |
| 77.5° | 404.6 | 211.3 | 76.9 | 80.6 | 83.3 | 104.7 | 153.9 | 152.5 | 140.8 | 135.0 | 133.6 |
| 80° | 156.1 | 92.5 | 65.0 | 71.7 | 73.4 | 90.7 | 134.9 | 133.6 | 123.9 | 116.4 | 114.4 |
| 82.5° | 58.9 | 48.4 | 53.7 | 62.1 | 61.5 | 74.9 | 114.2 | 113.5 | 104.0 | 93.2 | 89.9 |
| 85° | 27.2 | 29.0 | 42.5 | 51.2 | 47.2 | 55.5 | 91.4 | 92.6 | 81.1 | 68.1 | 68.1 |
| 87.5° | 11.6 | 16.2 | 30.1 | 38.7 | 31.8 | 37.4 | 67.0 | 64.0 | 58.8 | 40.7 | 38.3 |
| 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)