

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: P348597

Luminaire Tested: **ARCH-N-PA1-19-740-U-T3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348597
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-PA1-19-740-U-T3
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 370mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3012 lumens
Efficiency: N/A
Efficacy: 158.5 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): 19
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

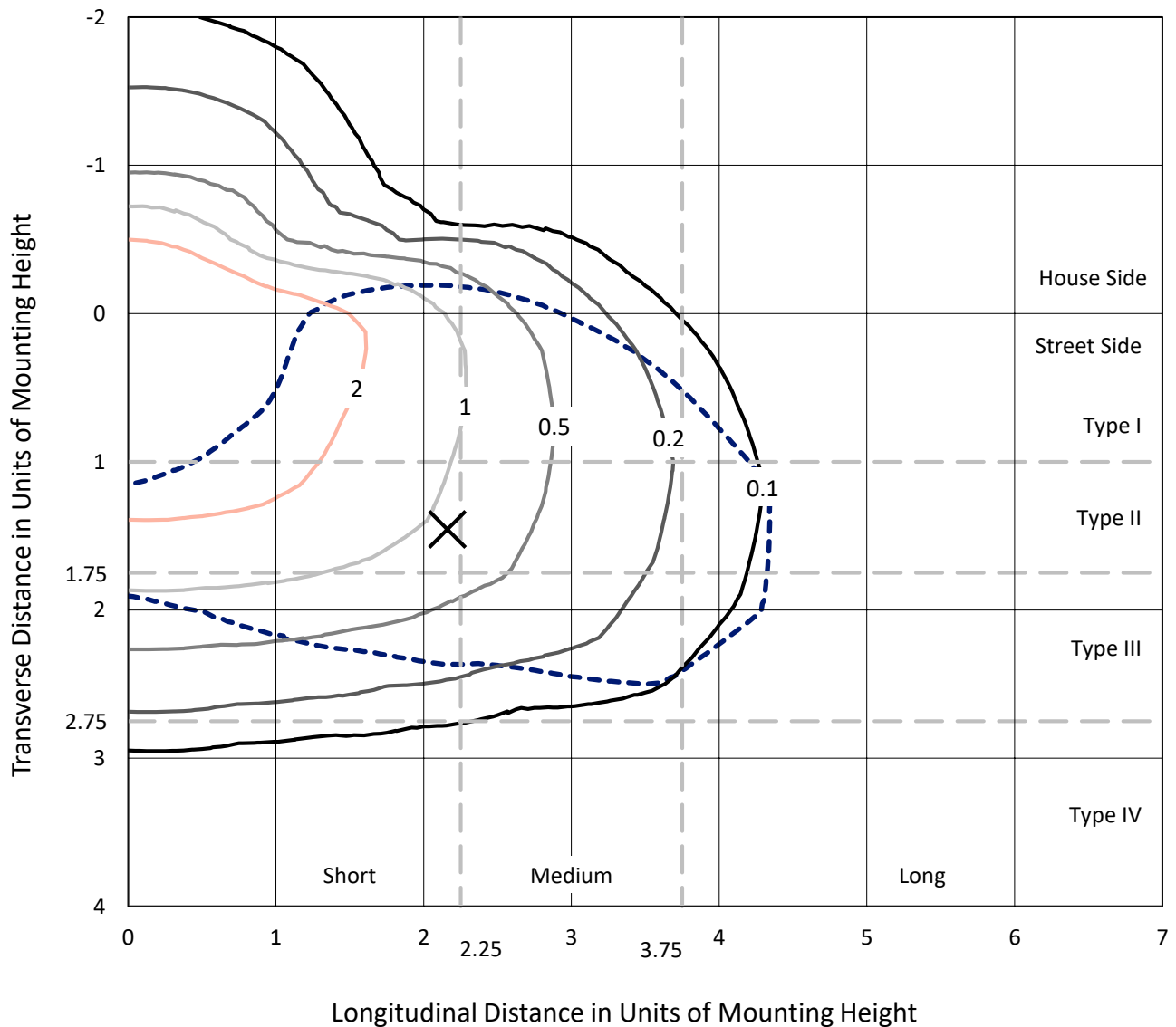


REPORT NUMBER: P348597

CATALOG NUMBER: ARCH-N-PA1-19-740-U-T3

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

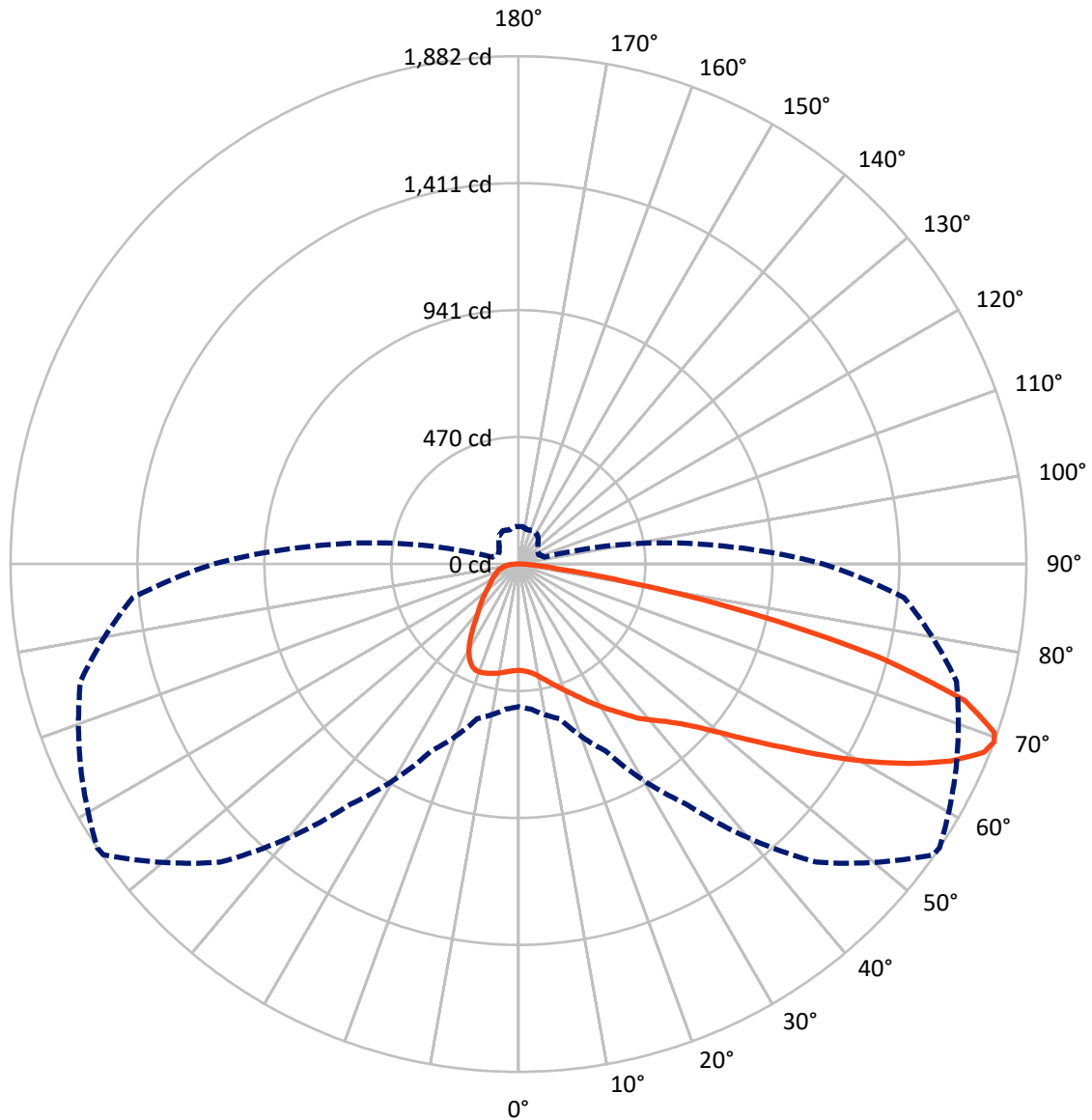


Based on 10 foot mounting height. Maximum calculated value = 4.3 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P348597

CATALOG NUMBER: ARCH-N-PA1-19-740-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P348597

CATALOG NUMBER: ARCH-N-PA1-19-740-U-T3

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 670.8 | 0.0 | 670.8 |
| | % Fixture | 22.3 | 0.0 | 22.3 |
| Street Side | Lumens | 2341.2 | 0.0 | 2341.2 |
| | % Fixture | 77.7 | 0.0 | 77.7 |
| Total | Lumens | 3012.0 | 0.0 | 3012.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 38.7 | 1.3 |
| 10°-20° | 124.4 | 4.1 |
| 20°-30° | 217.1 | 7.2 |
| 30°-40° | 311.8 | 10.4 |
| 40°-50° | 431.6 | 14.3 |
| 50°-60° | 632.3 | 21.0 |
| 60°-70° | 770.9 | 25.6 |
| 70°-80° | 426.2 | 14.2 |
| 80°-90° | 59.0 | 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° | 3012.0 | 100.0 |
| 0°-180° | 3012.0 | 100.0 |



REPORT NUMBER: P348597

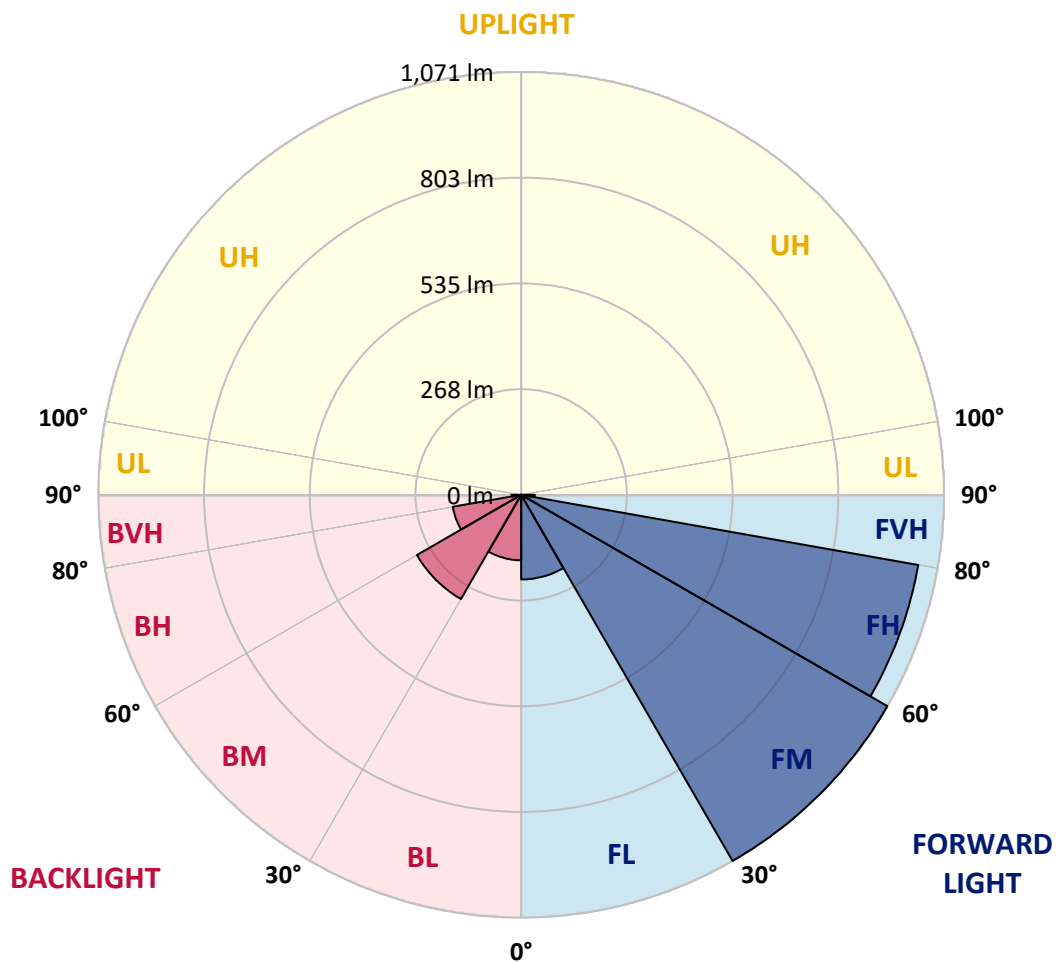
CATALOG NUMBER: ARCH-N-PA1-19-740-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 214.4 | 7.1 | | | |
| FM | (30°-60°) | 1070.9 | 35.6 | | | |
| FH | (60°-80°) | 1021.2 | 33.9 | | | G1/1800 |
| FVH | (80°-90°) | 34.8 | 1.2 | | | G1/100 |
| BL | (0°-30°) | 165.8 | 5.5 | B1/500 | | |
| BM | (30°-60°) | 304.8 | 10.1 | B1/1000 | | |
| BH | (60°-80°) | 175.9 | 5.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 24.3 | 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





REPORT NUMBER: P348597

CATALOG NUMBER: ARCH-N-PA1-19-740-U-T3

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 |
| 2.5° | 396.3 | 396.7 | 396.4 | 397.2 | 396.3 | 396.9 | 396.4 | 396.4 | 396.1 | 395.1 | 394.1 |
| 5° | 402.5 | 403.3 | 402.8 | 403.6 | 402.5 | 402.7 | 401.8 | 401.8 | 400.8 | 398.9 | 396.8 |
| 7.5° | 412.2 | 413.2 | 412.8 | 413.6 | 412.0 | 412.0 | 410.8 | 410.7 | 408.8 | 405.6 | 403.2 |
| 10° | 423.9 | 425.1 | 424.7 | 425.9 | 424.7 | 425.1 | 423.9 | 423.9 | 421.4 | 416.8 | 413.8 |
| 12.5° | 440.8 | 442.3 | 441.2 | 441.1 | 440.6 | 441.4 | 440.4 | 440.2 | 437.9 | 431.6 | 427.5 |
| 15° | 463.4 | 465.1 | 462.7 | 462.5 | 459.6 | 459.2 | 459.2 | 458.9 | 457.5 | 450.0 | 443.2 |
| 17.5° | 489.4 | 490.0 | 487.9 | 484.6 | 480.8 | 478.4 | 478.1 | 479.0 | 479.0 | 470.2 | 459.4 |
| 20° | 515.0 | 515.9 | 514.2 | 510.5 | 505.7 | 502.2 | 499.7 | 501.4 | 501.3 | 490.9 | 475.4 |
| 22.5° | 542.8 | 545.0 | 542.5 | 537.7 | 532.1 | 528.1 | 523.8 | 525.2 | 525.3 | 512.6 | 491.2 |
| 25° | 578.8 | 576.8 | 575.3 | 568.5 | 560.5 | 556.5 | 552.4 | 553.9 | 553.5 | 535.9 | 507.5 |
| 27.5° | 610.6 | 611.0 | 609.0 | 601.8 | 592.6 | 583.7 | 583.4 | 584.4 | 582.8 | 560.2 | 522.9 |
| 30° | 647.7 | 647.9 | 645.0 | 638.5 | 628.5 | 617.0 | 614.3 | 615.8 | 612.5 | 583.2 | 539.0 |
| 32.5° | 684.5 | 685.6 | 682.3 | 674.6 | 666.5 | 652.5 | 647.1 | 648.1 | 639.8 | 606.8 | 555.7 |
| 35° | 716.8 | 718.2 | 717.2 | 712.0 | 703.2 | 691.2 | 684.7 | 684.1 | 673.8 | 635.6 | 577.8 |
| 37.5° | 749.7 | 751.0 | 749.9 | 745.5 | 742.0 | 729.2 | 725.8 | 725.8 | 708.0 | 665.1 | 606.0 |
| 40° | 783.5 | 785.6 | 784.2 | 778.2 | 775.2 | 769.4 | 761.2 | 759.2 | 739.9 | 700.5 | 651.8 |
| 42.5° | 814.9 | 817.6 | 823.0 | 819.5 | 813.4 | 814.2 | 797.7 | 796.7 | 782.6 | 752.8 | 709.4 |
| 45° | 859.6 | 863.5 | 872.6 | 869.9 | 868.7 | 864.1 | 844.5 | 843.6 | 838.2 | 823.1 | 780.9 |
| 47.5° | 908.2 | 913.6 | 930.1 | 930.6 | 944.0 | 935.4 | 908.7 | 905.5 | 906.8 | 907.4 | 868.2 |
| 50° | 953.0 | 959.0 | 986.0 | 998.8 | 1030.3 | 1032.2 | 989.6 | 986.7 | 991.5 | 1005.9 | 969.9 |
| 52.5° | 988.8 | 996.3 | 1030.1 | 1069.6 | 1123.6 | 1139.0 | 1089.1 | 1086.9 | 1090.5 | 1115.2 | 1084.8 |
| 55° | 1015.1 | 1023.2 | 1060.0 | 1131.8 | 1218.2 | 1245.2 | 1203.6 | 1201.6 | 1203.8 | 1235.3 | 1209.9 |
| 57.5° | 1021.2 | 1023.2 | 1076.6 | 1173.7 | 1297.9 | 1363.0 | 1343.8 | 1339.7 | 1328.5 | 1355.8 | 1347.9 |
| 60° | 992.5 | 1000.4 | 1062.9 | 1188.5 | 1359.7 | 1479.1 | 1490.3 | 1485.1 | 1453.7 | 1476.1 | 1469.7 |
| 62.5° | 934.2 | 948.3 | 1011.8 | 1166.1 | 1383.9 | 1574.0 | 1634.0 | 1627.8 | 1573.6 | 1588.2 | 1557.2 |
| 65° | 838.9 | 844.9 | 911.6 | 1088.8 | 1353.1 | 1634.7 | 1762.2 | 1759.1 | 1690.9 | 1668.2 | 1573.4 |
| 67.5° | 668.5 | 679.8 | 736.5 | 927.2 | 1227.5 | 1627.5 | 1861.3 | 1861.0 | 1767.5 | 1697.8 | 1516.1 |
| 69° | 528.1 | 539.9 | 593.8 | 763.8 | 1086.2 | 1562.0 | 1877.9 | 1881.5 | 1789.1 | 1679.8 | 1434.1 |
| 70° | 421.1 | 434.7 | 471.7 | 643.3 | 960.7 | 1475.7 | 1864.1 | 1870.6 | 1784.9 | 1650.0 | 1358.4 |
| 72.5° | 179.2 | 190.2 | 216.5 | 331.6 | 585.5 | 1101.9 | 1704.4 | 1729.1 | 1688.7 | 1510.1 | 1122.7 |
| 75° | 78.2 | 81.7 | 93.6 | 135.2 | 259.9 | 599.7 | 1335.2 | 1380.9 | 1443.9 | 1276.5 | 836.3 |
| 77.5° | 57.3 | 58.7 | 65.3 | 79.4 | 116.6 | 226.5 | 858.6 | 885.2 | 1041.3 | 928.9 | 513.0 |
| 80° | 44.3 | 45.3 | 50.4 | 58.3 | 76.2 | 91.6 | 391.6 | 414.4 | 585.5 | 477.1 | 213.6 |
| 82.5° | 35.3 | 36.0 | 39.5 | 43.0 | 52.6 | 55.5 | 130.0 | 144.2 | 216.1 | 131.8 | 56.5 |
| 85° | 32.8 | 33.6 | 34.9 | 31.3 | 33.7 | 32.6 | 56.2 | 58.8 | 65.3 | 51.8 | 23.7 |
| 87.5° | 14.8 | 17.5 | 34.6 | 24.4 | 18.0 | 14.3 | 23.0 | 24.1 | 27.1 | 27.2 | 10.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P348597

CATALOG NUMBER: ARCH-N-PA1-19-740-U-T3

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 | 393.8 |
| 2.5° | 394.7 | 394.4 | 394.9 | 393.7 | 395.2 | 395.1 | 394.6 | 394.8 | 395.8 | 395.7 | 395.8 |
| 5° | 397.1 | 396.9 | 397.5 | 396.6 | 398.4 | 399.1 | 399.2 | 400.1 | 401.2 | 401.6 | 401.6 |
| 7.5° | 403.1 | 403.1 | 403.4 | 402.2 | 403.4 | 403.3 | 402.8 | 403.7 | 404.9 | 405.0 | 404.9 |
| 10° | 413.5 | 413.6 | 413.1 | 409.9 | 408.8 | 406.0 | 403.4 | 403.5 | 405.0 | 406.1 | 406.4 |
| 12.5° | 426.6 | 426.1 | 423.9 | 418.0 | 413.6 | 407.9 | 405.2 | 405.1 | 406.5 | 407.5 | 407.8 |
| 15° | 441.5 | 440.4 | 434.4 | 424.8 | 417.1 | 411.5 | 407.2 | 406.1 | 405.3 | 404.3 | 404.4 |
| 17.5° | 455.6 | 453.0 | 443.2 | 429.8 | 421.7 | 414.2 | 405.8 | 399.1 | 394.4 | 391.7 | 390.9 |
| 20° | 469.9 | 464.9 | 450.6 | 434.4 | 424.2 | 410.6 | 394.4 | 380.7 | 372.2 | 368.2 | 367.5 |
| 22.5° | 483.0 | 474.8 | 457.6 | 439.3 | 422.2 | 398.3 | 372.9 | 353.0 | 341.2 | 335.9 | 336.3 |
| 25° | 495.8 | 484.4 | 464.9 | 442.7 | 412.2 | 376.8 | 343.0 | 318.5 | 304.9 | 298.9 | 298.7 |
| 27.5° | 507.0 | 494.0 | 472.7 | 439.9 | 393.7 | 346.0 | 307.7 | 283.8 | 272.4 | 267.3 | 266.5 |
| 30° | 519.8 | 506.1 | 483.2 | 429.3 | 366.5 | 310.6 | 273.1 | 256.3 | 248.2 | 243.1 | 242.2 |
| 32.5° | 535.5 | 522.6 | 491.8 | 409.9 | 331.7 | 273.5 | 246.1 | 234.4 | 227.0 | 221.3 | 220.3 |
| 35° | 558.3 | 544.4 | 494.0 | 382.0 | 293.5 | 244.3 | 226.3 | 214.3 | 204.3 | 196.9 | 196.2 |
| 37.5° | 587.0 | 571.7 | 489.0 | 346.0 | 256.5 | 225.3 | 209.8 | 195.0 | 182.0 | 171.6 | 170.0 |
| 40° | 628.3 | 605.2 | 475.2 | 304.5 | 229.2 | 210.6 | 193.7 | 176.8 | 160.7 | 148.6 | 146.2 |
| 42.5° | 677.9 | 644.6 | 454.1 | 263.2 | 209.2 | 195.8 | 177.7 | 156.8 | 141.4 | 132.8 | 131.6 |
| 45° | 741.0 | 685.4 | 424.7 | 227.1 | 189.5 | 181.0 | 160.5 | 141.2 | 131.7 | 125.3 | 124.3 |
| 47.5° | 813.0 | 731.3 | 393.9 | 197.8 | 172.8 | 167.1 | 146.7 | 134.3 | 126.7 | 121.7 | 120.8 |
| 50° | 901.5 | 783.1 | 361.2 | 173.7 | 156.0 | 150.3 | 140.2 | 130.4 | 124.4 | 120.6 | 119.6 |
| 52.5° | 1001.3 | 841.5 | 337.6 | 154.7 | 142.0 | 138.0 | 136.8 | 128.4 | 123.5 | 120.6 | 119.6 |
| 55° | 1108.8 | 901.0 | 312.2 | 138.7 | 130.0 | 131.2 | 134.5 | 128.6 | 125.2 | 121.7 | 120.4 |
| 57.5° | 1216.4 | 962.4 | 283.9 | 125.2 | 120.5 | 126.1 | 132.9 | 129.0 | 126.2 | 122.7 | 121.5 |
| 60° | 1301.5 | 1001.3 | 240.0 | 113.9 | 112.9 | 120.5 | 129.2 | 125.9 | 122.2 | 122.3 | 122.1 |
| 62.5° | 1341.2 | 999.2 | 191.5 | 103.9 | 105.3 | 112.9 | 123.2 | 121.0 | 118.0 | 122.0 | 122.3 |
| 65° | 1318.9 | 949.4 | 149.1 | 94.7 | 97.2 | 105.0 | 116.9 | 118.6 | 119.6 | 127.4 | 128.5 |
| 67.5° | 1225.3 | 852.5 | 115.5 | 86.7 | 89.9 | 99.6 | 117.6 | 129.2 | 130.5 | 138.7 | 138.6 |
| 69° | 1128.5 | 761.6 | 100.3 | 82.6 | 86.2 | 101.0 | 125.7 | 135.9 | 130.8 | 139.6 | 138.3 |
| 70° | 1047.4 | 689.7 | 92.2 | 79.8 | 84.6 | 103.3 | 131.1 | 135.8 | 129.3 | 136.8 | 134.7 |
| 72.5° | 806.6 | 496.2 | 78.2 | 74.6 | 79.0 | 98.9 | 132.6 | 132.8 | 125.7 | 127.1 | 123.6 |
| 75° | 553.3 | 313.6 | 68.3 | 67.5 | 70.5 | 89.1 | 127.6 | 126.9 | 116.2 | 114.1 | 111.2 |
| 77.5° | 305.1 | 159.3 | 58.0 | 60.8 | 62.8 | 79.0 | 116.0 | 115.0 | 106.1 | 101.8 | 100.8 |
| 80° | 117.7 | 69.7 | 49.0 | 54.1 | 55.3 | 68.4 | 101.7 | 100.8 | 93.4 | 87.8 | 86.2 |
| 82.5° | 44.4 | 36.5 | 40.5 | 46.8 | 46.4 | 56.4 | 86.1 | 85.6 | 78.4 | 70.2 | 67.8 |
| 85° | 20.5 | 21.9 | 32.1 | 38.6 | 35.6 | 41.8 | 68.9 | 69.8 | 61.1 | 51.4 | 51.4 |
| 87.5° | 8.7 | 12.2 | 22.7 | 29.2 | 24.0 | 28.2 | 50.5 | 48.2 | 44.3 | 30.7 | 28.8 |
| 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)