

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: P199139

Luminaire Tested: **XNV2-AF-02-LED-U-5WQ-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199139
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24131)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-5WQ-8030-600
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6745 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G2

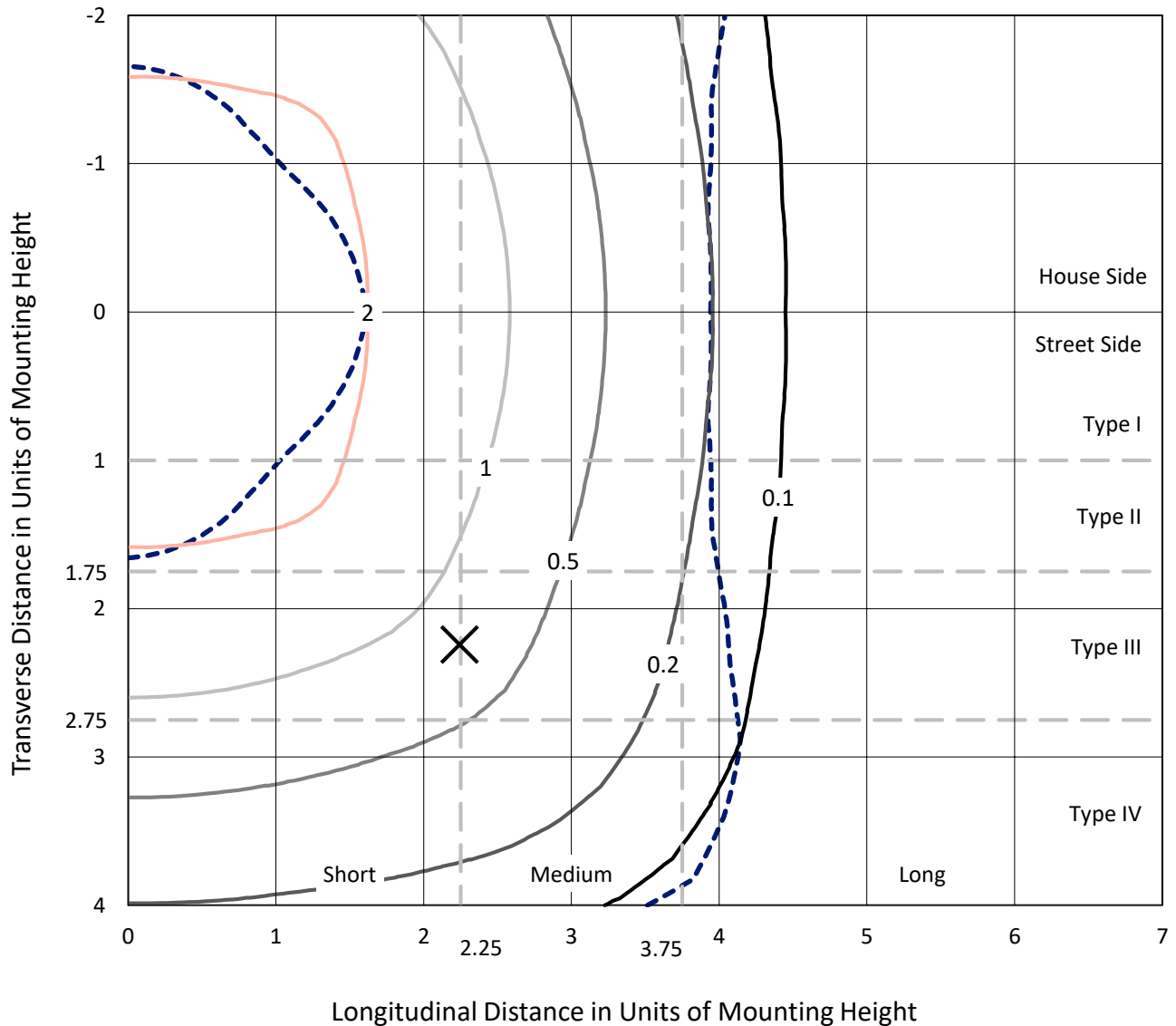
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

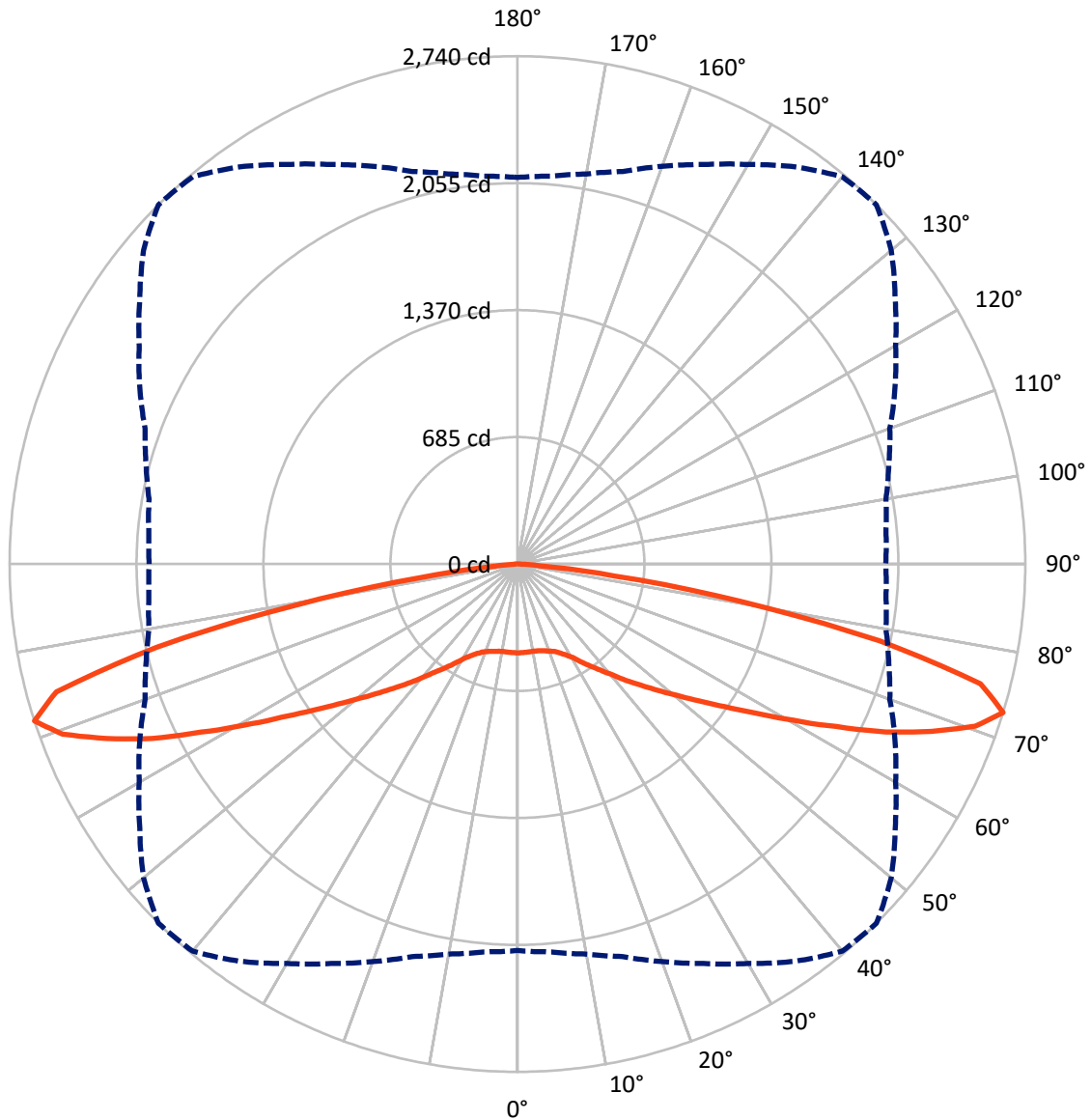


Based on 10 foot mounting height. Maximum calculated value = 4.8 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3372.5 | 0.0 | 3372.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 3372.5 | 0.0 | 3372.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 6745.0 | 0.0 | 6745.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 45.8 | 0.7 |
| 10°-20° | 138.5 | 2.1 |
| 20°-30° | 250.1 | 3.7 |
| 30°-40° | 426.5 | 6.3 |
| 40°-50° | 726.2 | 10.8 |
| 50°-60° | 1168.7 | 17.3 |
| 60°-70° | 1943.6 | 28.8 |
| 70°-80° | 1880.2 | 27.9 |
| 80°-90° | 165.5 | 2.5 |
| 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° | 6745.0 | 100.0 |
| 0°-180° | 6745.0 | 100.0 |

Coefficient of Utilization



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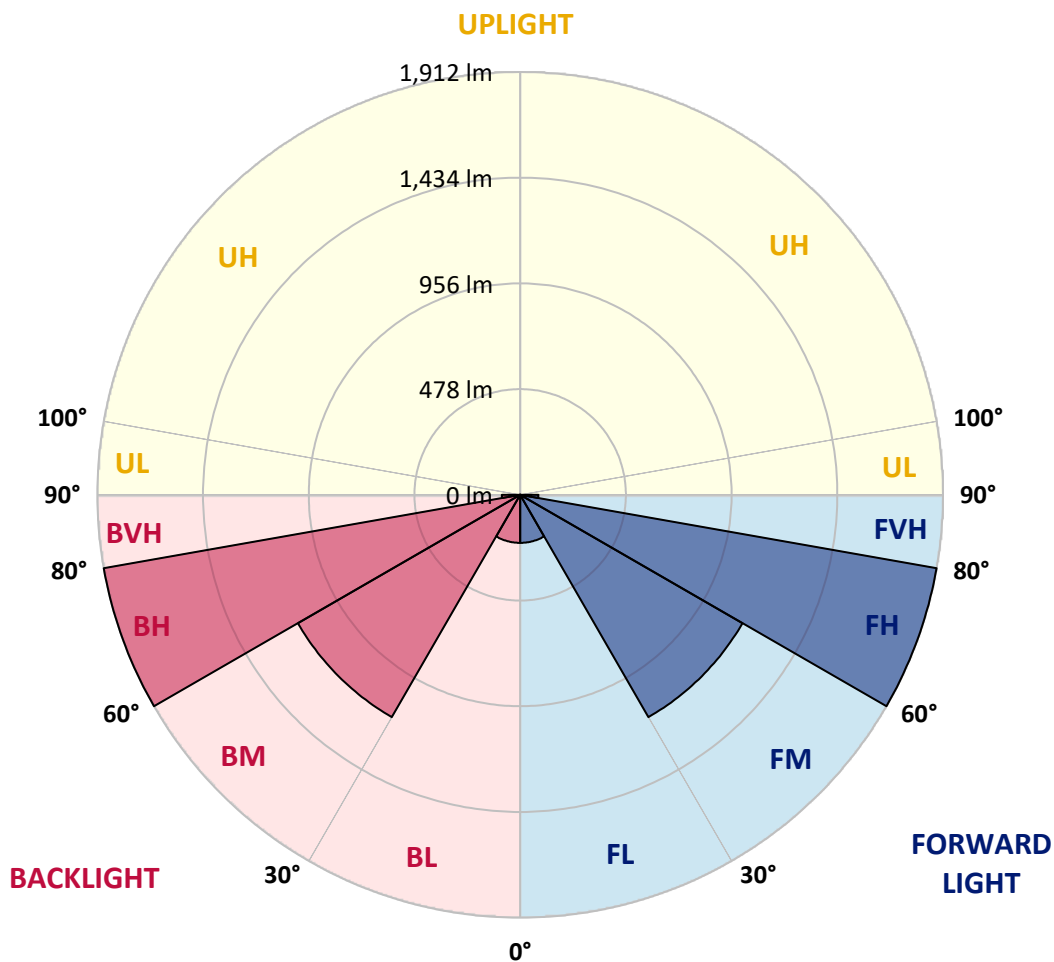
CATALOG NUMBER: XNV2-AF-02-LED-U-5WQ-8030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 217.2 | 3.2 | | | |
| FM (30°-60°) | 1160.7 | 17.2 | | | |
| FH (60°-80°) | 1911.9 | 28.3 | | | G2/5000 |
| FVH (80°-90°) | 82.7 | 1.2 | | | G1/100 |
| BL (0°-30°) | 217.2 | 3.2 | B1/500 | | |
| BM (30°-60°) | 1160.7 | 17.2 | B2/2500 | | |
| BH (60°-80°) | 1911.9 | 28.3 | B3/2500 | | G2/5000 |
| BVH (80°-90°) | 82.7 | 1.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 |
| 2.5° | 483.3 | 483.3 | 483.7 | 483.3 | 482.4 | 482.0 | 480.8 | 479.9 | 479.1 | 478.7 | 477.9 |
| 5° | 483.7 | 483.7 | 484.1 | 483.7 | 482.8 | 482.0 | 481.2 | 479.9 | 479.1 | 478.3 | 477.9 |
| 7.5° | 485.3 | 485.7 | 486.2 | 485.7 | 484.1 | 483.3 | 482.0 | 480.8 | 479.1 | 478.3 | 477.4 |
| 10° | 488.7 | 488.7 | 488.7 | 488.2 | 487.0 | 485.3 | 483.7 | 482.4 | 480.3 | 478.3 | 477.0 |
| 12.5° | 491.1 | 491.6 | 491.6 | 490.7 | 489.1 | 487.0 | 485.3 | 484.1 | 482.4 | 480.8 | 479.5 |
| 15° | 494.9 | 494.9 | 494.5 | 492.8 | 490.3 | 488.7 | 487.8 | 487.4 | 487.0 | 486.2 | 484.9 |
| 17.5° | 502.4 | 501.9 | 500.7 | 498.2 | 495.3 | 494.0 | 493.2 | 493.2 | 493.2 | 492.8 | 492.0 |
| 20° | 513.1 | 513.1 | 511.5 | 507.3 | 504.8 | 503.6 | 502.4 | 502.4 | 502.4 | 501.1 | 499.9 |
| 22.5° | 530.6 | 531.0 | 528.5 | 523.5 | 520.2 | 517.7 | 516.1 | 514.8 | 513.6 | 512.7 | 510.7 |
| 25° | 554.2 | 553.8 | 550.9 | 544.7 | 542.2 | 539.7 | 536.4 | 534.3 | 532.7 | 531.4 | 528.9 |
| 27.5° | 579.2 | 578.7 | 575.4 | 570.0 | 568.4 | 564.6 | 562.1 | 559.2 | 557.2 | 555.1 | 552.6 |
| 30° | 611.1 | 609.1 | 606.6 | 602.4 | 601.6 | 598.7 | 595.4 | 591.2 | 587.9 | 584.6 | 581.7 |
| 32.5° | 639.8 | 639.8 | 636.0 | 634.0 | 635.6 | 634.4 | 634.8 | 632.3 | 630.2 | 629.0 | 626.1 |
| 35° | 679.6 | 679.6 | 678.0 | 675.5 | 675.9 | 673.0 | 672.6 | 673.0 | 674.6 | 674.6 | 671.3 |
| 37.5° | 732.8 | 733.6 | 728.2 | 727.4 | 725.3 | 721.1 | 719.1 | 719.9 | 723.6 | 725.7 | 721.1 |
| 40° | 798.8 | 800.4 | 798.8 | 793.4 | 790.9 | 783.8 | 779.7 | 779.7 | 782.6 | 784.7 | 783.0 |
| 42.5° | 864.0 | 866.9 | 864.0 | 859.8 | 857.7 | 852.3 | 850.3 | 851.9 | 855.7 | 858.2 | 855.7 |
| 45° | 936.6 | 938.7 | 935.0 | 930.0 | 927.5 | 924.6 | 923.3 | 924.6 | 928.7 | 931.2 | 930.4 |
| 47.5° | 1008.0 | 1010.9 | 1006.4 | 1004.3 | 1004.3 | 1001.4 | 1004.7 | 1008.0 | 1011.8 | 1017.6 | 1015.1 |
| 50° | 1077.8 | 1081.5 | 1078.6 | 1079.0 | 1082.3 | 1087.7 | 1094.0 | 1100.6 | 1107.3 | 1113.5 | 1114.3 |
| 52.5° | 1140.1 | 1145.9 | 1146.3 | 1153.8 | 1164.1 | 1172.4 | 1189.9 | 1204.4 | 1220.2 | 1225.6 | 1223.1 |
| 55° | 1205.6 | 1213.5 | 1223.9 | 1235.5 | 1252.1 | 1269.2 | 1298.6 | 1324.8 | 1345.6 | 1358.4 | 1356.4 |
| 57.5° | 1299.5 | 1307.4 | 1318.2 | 1337.3 | 1362.2 | 1385.4 | 1425.7 | 1466.4 | 1497.9 | 1517.4 | 1507.9 |
| 60° | 1421.1 | 1429.4 | 1443.5 | 1463.9 | 1496.3 | 1527.8 | 1583.0 | 1641.6 | 1690.6 | 1713.0 | 1695.5 |
| 62.5° | 1582.2 | 1590.1 | 1599.2 | 1626.2 | 1662.3 | 1703.0 | 1772.4 | 1847.5 | 1909.8 | 1931.4 | 1906.9 |
| 65° | 1811.8 | 1821.3 | 1824.2 | 1846.3 | 1881.5 | 1919.3 | 1994.1 | 2078.7 | 2149.7 | 2185.0 | 2136.0 |
| 67.5° | 2070.4 | 2074.2 | 2085.8 | 2111.5 | 2147.7 | 2181.7 | 2240.7 | 2320.8 | 2388.9 | 2408.4 | 2356.1 |
| 70° | 2222.0 | 2229.5 | 2249.8 | 2285.5 | 2328.7 | 2382.2 | 2446.6 | 2532.9 | 2610.2 | 2619.3 | 2552.9 |
| 72.5° | 2085.0 | 2100.3 | 2136.5 | 2192.1 | 2282.6 | 2377.7 | 2488.5 | 2616.0 | 2726.8 | 2739.7 | 2633.0 |
| 75° | 1672.3 | 1689.7 | 1732.9 | 1793.9 | 1901.1 | 2042.2 | 2202.5 | 2393.9 | 2559.9 | 2581.1 | 2439.9 |
| 77.5° | 891.4 | 913.0 | 975.6 | 1057.8 | 1210.6 | 1397.5 | 1590.5 | 1808.9 | 1950.0 | 1997.8 | 1896.1 |
| 80° | 224.6 | 236.2 | 266.5 | 314.7 | 418.1 | 568.8 | 735.3 | 970.2 | 1145.4 | 1219.8 | 1145.4 |
| 82.5° | 87.2 | 95.9 | 104.2 | 110.0 | 120.0 | 140.7 | 194.3 | 316.8 | 426.8 | 525.6 | 455.0 |
| 85° | 33.6 | 35.7 | 51.5 | 58.5 | 58.5 | 64.4 | 73.9 | 87.2 | 107.9 | 117.9 | 98.8 |
| 87.5° | 13.3 | 14.5 | 17.9 | 27.4 | 28.2 | 24.9 | 26.6 | 29.9 | 22.8 | 19.1 | 21.6 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 | 479.5 |
| 2.5° | 477.4 | 477.0 | 476.2 | 476.6 | 476.2 | 476.2 | 476.2 | 476.2 |
| 5° | 477.0 | 477.0 | 476.2 | 476.2 | 476.2 | 476.6 | 476.2 | 476.2 |
| 7.5° | 476.6 | 476.2 | 475.4 | 475.0 | 475.0 | 474.5 | 474.5 | 474.5 |
| 10° | 475.8 | 475.0 | 474.1 | 473.7 | 473.7 | 472.9 | 472.9 | 472.9 |
| 12.5° | 477.9 | 476.6 | 475.8 | 475.4 | 475.4 | 475.4 | 475.8 | 475.8 |
| 15° | 483.7 | 481.2 | 479.9 | 479.5 | 479.9 | 480.8 | 481.2 | 481.6 |
| 17.5° | 489.9 | 487.4 | 485.3 | 484.5 | 484.9 | 486.2 | 487.4 | 488.2 |
| 20° | 497.8 | 495.7 | 493.2 | 492.4 | 492.4 | 494.0 | 494.9 | 496.1 |
| 22.5° | 509.0 | 507.3 | 505.3 | 504.0 | 503.2 | 505.3 | 506.5 | 507.3 |
| 25° | 526.8 | 525.2 | 523.5 | 522.3 | 521.9 | 523.9 | 524.8 | 525.2 |
| 27.5° | 550.5 | 548.9 | 548.0 | 547.6 | 546.4 | 547.2 | 548.4 | 548.0 |
| 30° | 581.2 | 582.5 | 581.2 | 581.2 | 579.2 | 580.0 | 579.2 | 578.3 |
| 32.5° | 622.3 | 621.1 | 617.4 | 614.9 | 612.0 | 612.0 | 610.7 | 609.5 |
| 35° | 663.4 | 659.3 | 657.2 | 658.5 | 657.2 | 658.0 | 656.0 | 653.9 |
| 37.5° | 712.0 | 709.5 | 709.1 | 712.8 | 712.0 | 712.8 | 712.8 | 709.9 |
| 40° | 776.4 | 774.7 | 777.6 | 783.8 | 786.3 | 785.9 | 786.7 | 783.0 |
| 42.5° | 850.3 | 847.4 | 848.6 | 854.0 | 856.9 | 857.7 | 857.3 | 854.0 |
| 45° | 924.2 | 925.0 | 925.0 | 930.8 | 933.7 | 935.4 | 932.5 | 931.2 |
| 47.5° | 1007.6 | 1008.9 | 1006.0 | 1009.7 | 1010.5 | 1013.4 | 1010.9 | 1008.9 |
| 50° | 1103.9 | 1099.4 | 1092.7 | 1094.0 | 1094.0 | 1093.1 | 1090.2 | 1087.7 |
| 52.5° | 1211.5 | 1201.1 | 1188.6 | 1184.5 | 1179.9 | 1175.3 | 1169.5 | 1165.0 |
| 55° | 1333.9 | 1316.1 | 1293.7 | 1283.3 | 1274.6 | 1264.2 | 1250.9 | 1246.3 |
| 57.5° | 1475.9 | 1445.2 | 1415.3 | 1396.6 | 1374.2 | 1360.5 | 1343.5 | 1342.7 |
| 60° | 1644.5 | 1603.0 | 1550.2 | 1522.4 | 1500.0 | 1483.8 | 1470.9 | 1466.0 |
| 62.5° | 1839.2 | 1767.8 | 1710.9 | 1681.0 | 1654.9 | 1644.9 | 1628.7 | 1630.8 |
| 65° | 2038.9 | 1966.2 | 1911.0 | 1886.9 | 1862.4 | 1855.8 | 1840.9 | 1846.3 |
| 67.5° | 2255.2 | 2195.4 | 2134.8 | 2112.4 | 2090.0 | 2083.3 | 2068.0 | 2072.5 |
| 70° | 2449.1 | 2373.1 | 2304.2 | 2260.2 | 2222.0 | 2191.3 | 2171.7 | 2163.9 |
| 72.5° | 2487.7 | 2356.1 | 2247.7 | 2137.7 | 2074.2 | 2018.5 | 1995.7 | 1987.0 |
| 75° | 2235.3 | 2031.0 | 1876.6 | 1747.4 | 1676.0 | 1595.1 | 1586.4 | 1574.3 |
| 77.5° | 1738.7 | 1506.2 | 1319.4 | 1153.3 | 1057.4 | 958.6 | 924.6 | 898.8 |
| 80° | 1037.1 | 797.1 | 617.8 | 433.0 | 353.3 | 284.4 | 267.4 | 249.5 |
| 82.5° | 371.2 | 237.9 | 160.3 | 125.0 | 111.7 | 103.0 | 96.3 | 87.6 |
| 85° | 89.7 | 75.6 | 71.4 | 64.8 | 63.9 | 54.4 | 38.6 | 34.5 |
| 87.5° | 28.6 | 26.2 | 26.6 | 25.3 | 26.6 | 19.9 | 16.2 | 14.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)