

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: P199144

Luminaire Tested: **XNV-AF-01-LED-U-5WQ-8030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199144
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: XNV-AF-01-LED-U-5WQ-8030-1200
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5632 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G1

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

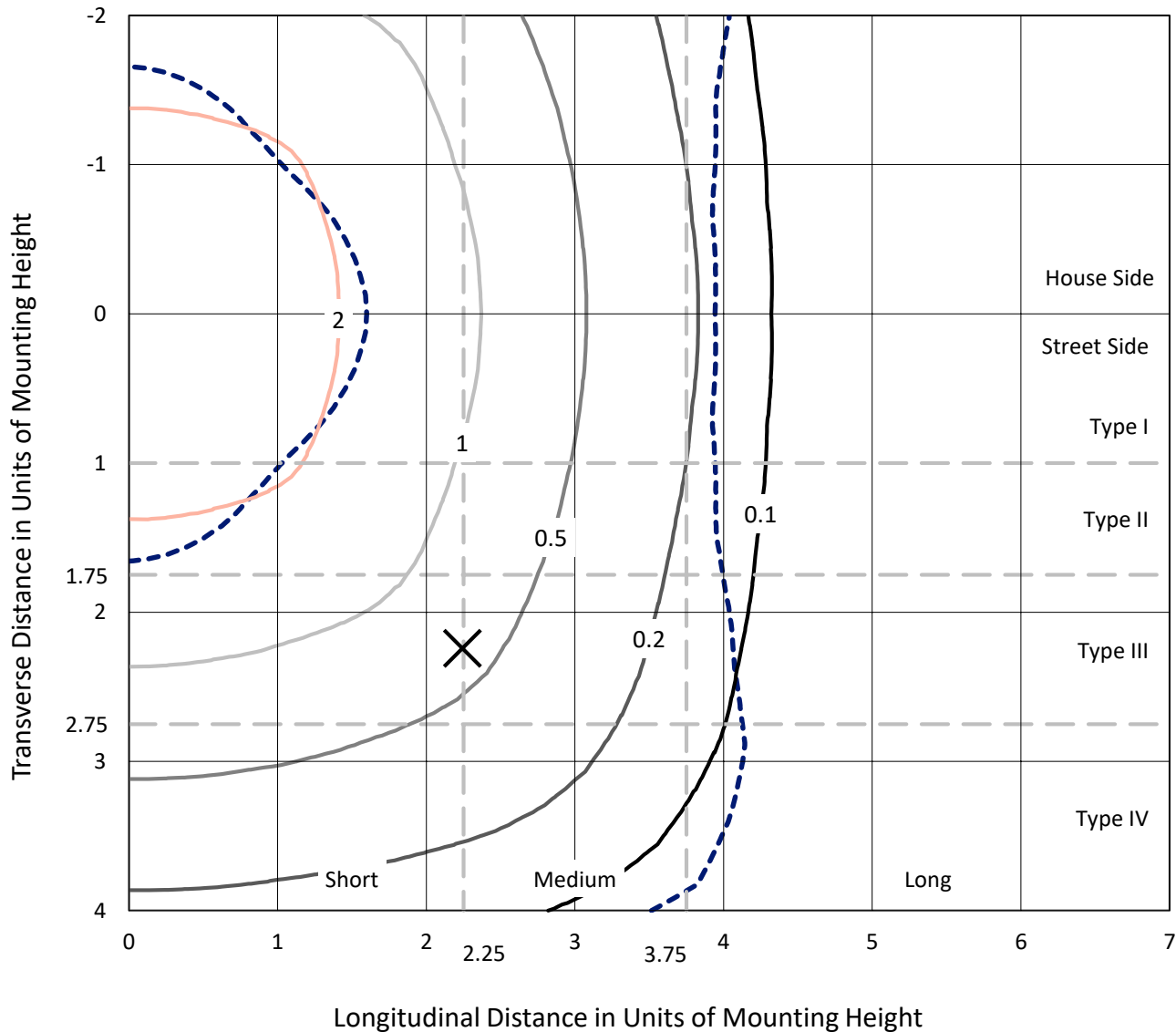


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Iso-Footcandle Lines of Horizontal Illumination

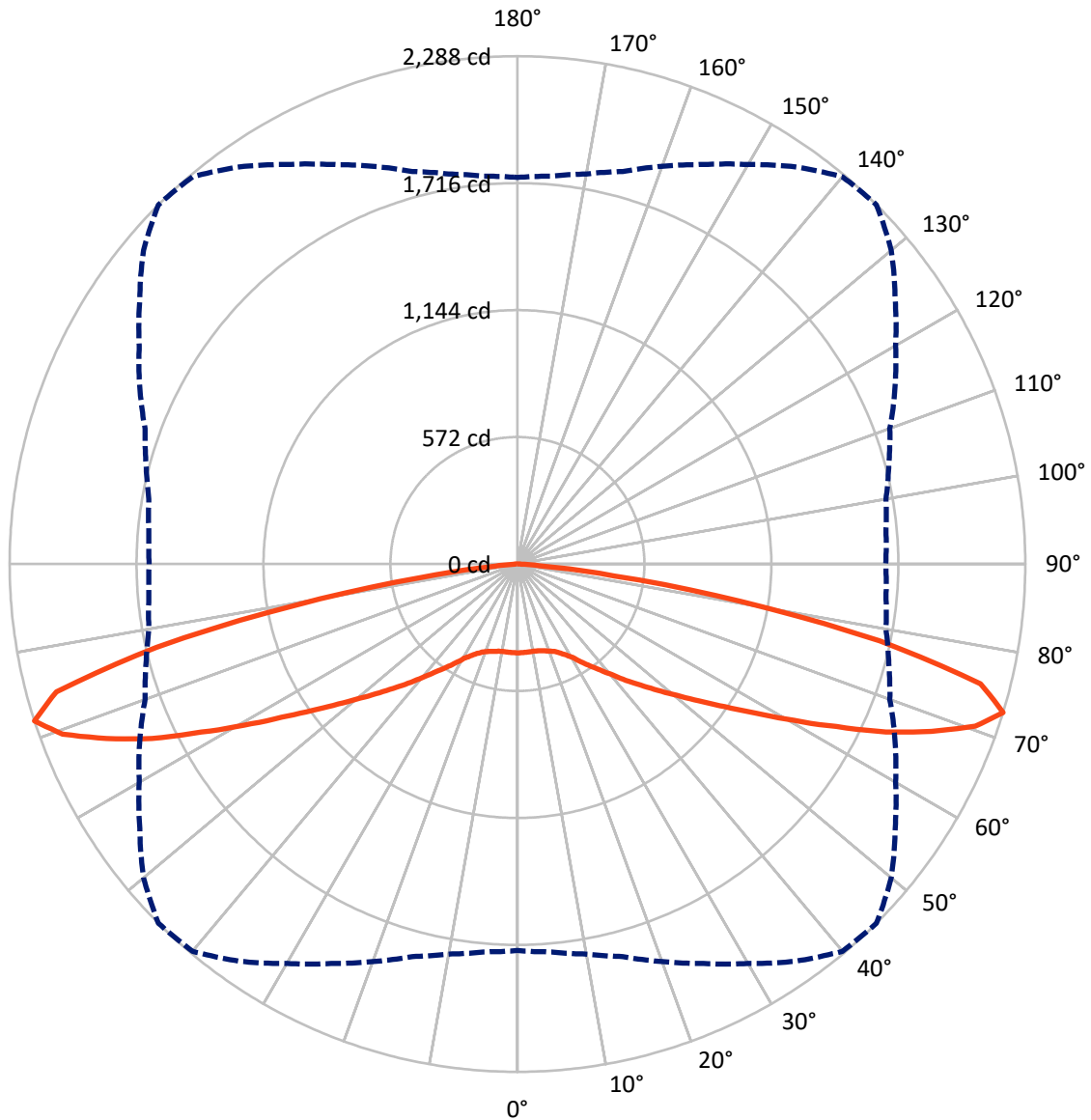
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 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 | 2816.0 | 0.0 | 2816.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2816.0 | 0.0 | 2816.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 5632.0 | 0.0 | 5632.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 38.2 | 0.7 |
| 10°-20° | 115.7 | 2.1 |
| 20°-30° | 208.8 | 3.7 |
| 30°-40° | 356.2 | 6.3 |
| 40°-50° | 606.4 | 10.8 |
| 50°-60° | 975.8 | 17.3 |
| 60°-70° | 1622.9 | 28.8 |
| 70°-80° | 1569.9 | 27.9 |
| 80°-90° | 138.2 | 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° | 5632.0 | 100.0 |
| 0°-180° | 5632.0 | 100.0 |



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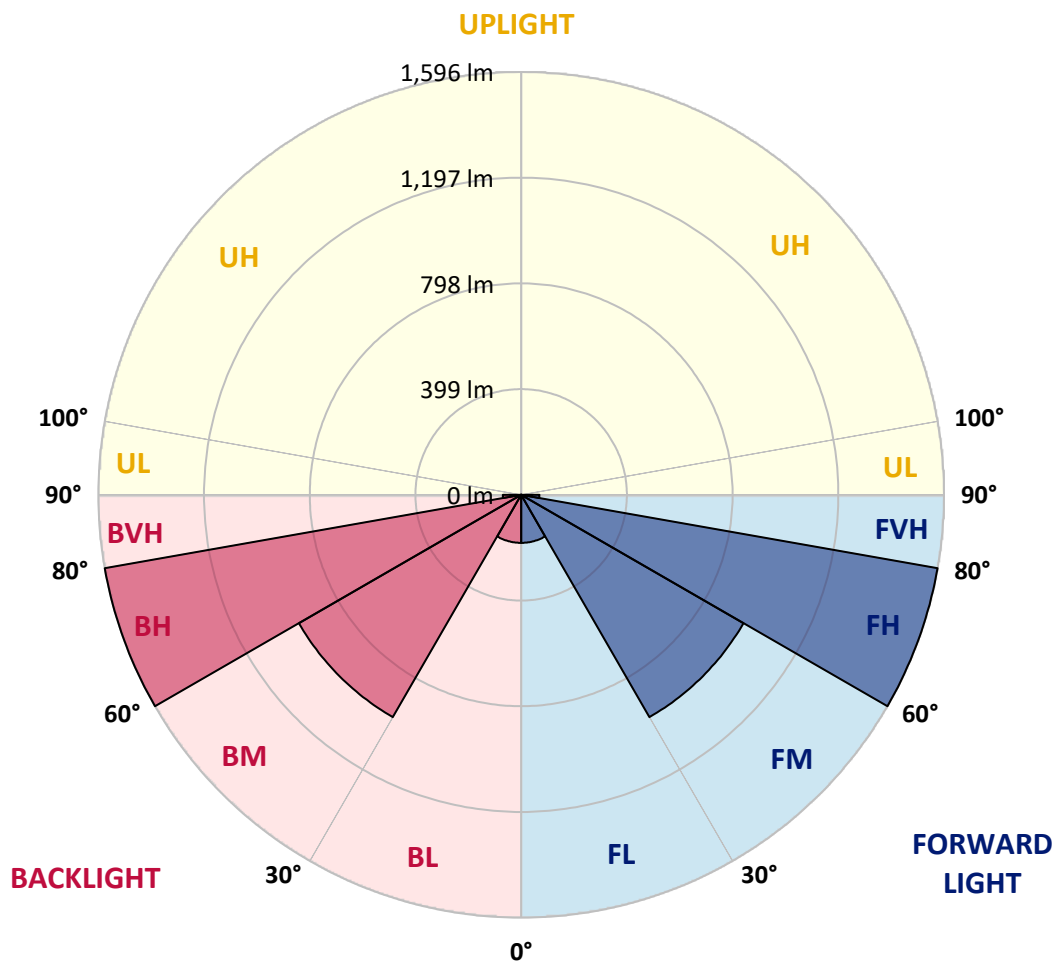
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 181.3 | 3.2 | | | |
| FM | (30°-60°) | 969.2 | 17.2 | | | |
| FH | (60°-80°) | 1596.4 | 28.3 | | | G1/1800 |
| FVH | (80°-90°) | 69.1 | 1.2 | | | G1/100 |
| BL | (0°-30°) | 181.3 | 3.2 | B1/500 | | |
| BM | (30°-60°) | 969.2 | 17.2 | B1/1000 | | |
| BH | (60°-80°) | 1596.4 | 28.3 | B3/2500 | | G1/1800 |
| BVH | (80°-90°) | 69.1 | 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-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 |
| 2.5° | 403.5 | 403.5 | 403.9 | 403.5 | 402.8 | 402.5 | 401.4 | 400.7 | 400.0 | 399.7 | 399.0 |
| 5° | 403.9 | 403.9 | 404.2 | 403.9 | 403.2 | 402.5 | 401.8 | 400.7 | 400.0 | 399.4 | 399.0 |
| 7.5° | 405.2 | 405.6 | 405.9 | 405.6 | 404.2 | 403.5 | 402.5 | 401.4 | 400.0 | 399.4 | 398.7 |
| 10° | 408.0 | 408.0 | 408.0 | 407.7 | 406.6 | 405.2 | 403.9 | 402.8 | 401.1 | 399.4 | 398.3 |
| 12.5° | 410.1 | 410.4 | 410.4 | 409.8 | 408.4 | 406.6 | 405.2 | 404.2 | 402.8 | 401.4 | 400.4 |
| 15° | 413.2 | 413.2 | 412.9 | 411.5 | 409.4 | 408.0 | 407.3 | 407.0 | 406.6 | 405.9 | 404.9 |
| 17.5° | 419.5 | 419.1 | 418.1 | 416.0 | 413.6 | 412.5 | 411.8 | 411.8 | 411.8 | 411.5 | 410.8 |
| 20° | 428.5 | 428.5 | 427.1 | 423.6 | 421.5 | 420.5 | 419.5 | 419.5 | 419.5 | 418.4 | 417.4 |
| 22.5° | 443.0 | 443.4 | 441.3 | 437.1 | 434.4 | 432.3 | 430.9 | 429.9 | 428.8 | 428.1 | 426.4 |
| 25° | 462.8 | 462.4 | 460.0 | 454.8 | 452.7 | 450.7 | 447.9 | 446.2 | 444.8 | 443.7 | 441.6 |
| 27.5° | 483.6 | 483.2 | 480.5 | 476.0 | 474.6 | 471.5 | 469.4 | 467.0 | 465.2 | 463.5 | 461.4 |
| 30° | 510.3 | 508.6 | 506.5 | 503.0 | 502.3 | 499.9 | 497.1 | 493.6 | 490.9 | 488.1 | 485.7 |
| 32.5° | 534.2 | 534.2 | 531.1 | 529.4 | 530.7 | 529.7 | 530.0 | 528.0 | 526.2 | 525.2 | 522.8 |
| 35° | 567.5 | 567.5 | 566.1 | 564.0 | 564.4 | 561.9 | 561.6 | 561.9 | 563.3 | 563.3 | 560.6 |
| 37.5° | 611.9 | 612.5 | 608.0 | 607.3 | 605.6 | 602.1 | 600.4 | 601.1 | 604.2 | 606.0 | 602.1 |
| 40° | 667.0 | 668.4 | 667.0 | 662.5 | 660.4 | 654.5 | 651.0 | 651.0 | 653.5 | 655.2 | 653.8 |
| 42.5° | 721.4 | 723.8 | 721.4 | 717.9 | 716.2 | 711.7 | 710.0 | 711.3 | 714.5 | 716.5 | 714.5 |
| 45° | 782.1 | 783.8 | 780.7 | 776.5 | 774.4 | 772.0 | 771.0 | 772.0 | 775.5 | 777.6 | 776.9 |
| 47.5° | 841.7 | 844.1 | 840.3 | 838.6 | 838.6 | 836.1 | 838.9 | 841.7 | 844.8 | 849.7 | 847.6 |
| 50° | 899.9 | 903.1 | 900.6 | 901.0 | 903.7 | 908.3 | 913.5 | 919.0 | 924.5 | 929.7 | 930.4 |
| 52.5° | 951.9 | 956.8 | 957.1 | 963.4 | 972.0 | 979.0 | 993.5 | 1005.7 | 1018.8 | 1023.3 | 1021.3 |
| 55° | 1006.7 | 1013.3 | 1022.0 | 1031.7 | 1045.5 | 1059.7 | 1084.4 | 1106.2 | 1123.5 | 1134.3 | 1132.5 |
| 57.5° | 1085.0 | 1091.6 | 1100.6 | 1116.6 | 1137.4 | 1156.8 | 1190.4 | 1224.4 | 1250.8 | 1267.0 | 1259.1 |
| 60° | 1186.6 | 1193.6 | 1205.3 | 1222.3 | 1249.4 | 1275.7 | 1321.8 | 1370.7 | 1411.6 | 1430.3 | 1415.8 |
| 62.5° | 1321.1 | 1327.7 | 1335.3 | 1357.9 | 1388.0 | 1422.0 | 1479.9 | 1542.6 | 1594.6 | 1612.7 | 1592.2 |
| 65° | 1512.8 | 1520.8 | 1523.2 | 1541.6 | 1571.1 | 1602.6 | 1665.0 | 1735.7 | 1795.0 | 1824.5 | 1783.6 |
| 67.5° | 1728.8 | 1731.9 | 1741.6 | 1763.1 | 1793.3 | 1821.7 | 1870.9 | 1937.8 | 1994.7 | 2011.0 | 1967.3 |
| 70° | 1855.3 | 1861.6 | 1878.6 | 1908.4 | 1944.4 | 1989.1 | 2042.9 | 2115.0 | 2179.5 | 2187.1 | 2131.6 |
| 72.5° | 1740.9 | 1753.8 | 1783.9 | 1830.4 | 1905.9 | 1985.3 | 2077.9 | 2184.3 | 2276.9 | 2287.6 | 2198.5 |
| 75° | 1396.3 | 1410.9 | 1447.0 | 1497.9 | 1587.4 | 1705.2 | 1839.0 | 1998.8 | 2137.5 | 2155.2 | 2037.3 |
| 77.5° | 744.3 | 762.3 | 814.7 | 883.3 | 1010.9 | 1166.9 | 1328.1 | 1510.4 | 1628.3 | 1668.1 | 1583.2 |
| 80° | 187.5 | 197.2 | 222.6 | 262.8 | 349.1 | 474.9 | 613.9 | 810.1 | 956.4 | 1018.5 | 956.4 |
| 82.5° | 72.8 | 80.1 | 87.0 | 91.9 | 100.2 | 117.5 | 162.2 | 264.5 | 356.4 | 438.9 | 379.9 |
| 85° | 28.1 | 29.8 | 43.0 | 48.9 | 48.9 | 53.7 | 61.7 | 72.8 | 90.1 | 98.5 | 82.5 |
| 87.5° | 11.1 | 12.1 | 14.9 | 22.9 | 23.6 | 20.8 | 22.2 | 25.0 | 19.1 | 15.9 | 18.0 |
| 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° | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 | 400.4 |
| 2.5° | 398.7 | 398.3 | 397.6 | 398.0 | 397.6 | 397.6 | 397.6 | 397.6 |
| 5° | 398.3 | 398.3 | 397.6 | 397.6 | 397.6 | 398.0 | 397.6 | 397.6 |
| 7.5° | 398.0 | 397.6 | 396.9 | 396.6 | 396.6 | 396.2 | 396.2 | 396.2 |
| 10° | 397.3 | 396.6 | 395.9 | 395.5 | 395.5 | 394.8 | 394.8 | 394.8 |
| 12.5° | 399.0 | 398.0 | 397.3 | 396.9 | 396.9 | 396.9 | 397.3 | 397.3 |
| 15° | 403.9 | 401.8 | 400.7 | 400.4 | 400.7 | 401.4 | 401.8 | 402.1 |
| 17.5° | 409.1 | 407.0 | 405.2 | 404.6 | 404.9 | 405.9 | 407.0 | 407.7 |
| 20° | 415.6 | 413.9 | 411.8 | 411.1 | 411.1 | 412.5 | 413.2 | 414.3 |
| 22.5° | 425.0 | 423.6 | 421.9 | 420.8 | 420.2 | 421.9 | 422.9 | 423.6 |
| 25° | 439.9 | 438.5 | 437.1 | 436.1 | 435.8 | 437.5 | 438.2 | 438.5 |
| 27.5° | 459.7 | 458.3 | 457.6 | 457.2 | 456.2 | 456.9 | 457.9 | 457.6 |
| 30° | 485.3 | 486.4 | 485.3 | 485.3 | 483.6 | 484.3 | 483.6 | 482.9 |
| 32.5° | 519.6 | 518.6 | 515.5 | 513.4 | 511.0 | 511.0 | 509.9 | 508.9 |
| 35° | 554.0 | 550.5 | 548.8 | 549.8 | 548.8 | 549.5 | 547.7 | 546.0 |
| 37.5° | 594.5 | 592.4 | 592.1 | 595.2 | 594.5 | 595.2 | 595.2 | 592.8 |
| 40° | 648.3 | 646.9 | 649.3 | 654.5 | 656.6 | 656.2 | 656.9 | 653.8 |
| 42.5° | 710.0 | 707.5 | 708.6 | 713.1 | 715.5 | 716.2 | 715.9 | 713.1 |
| 45° | 771.7 | 772.4 | 772.4 | 777.2 | 779.6 | 781.0 | 778.6 | 777.6 |
| 47.5° | 841.3 | 842.4 | 840.0 | 843.1 | 843.8 | 846.2 | 844.1 | 842.4 |
| 50° | 921.8 | 918.0 | 912.4 | 913.5 | 913.5 | 912.8 | 910.3 | 908.3 |
| 52.5° | 1011.6 | 1002.9 | 992.5 | 989.0 | 985.2 | 981.4 | 976.5 | 972.7 |
| 55° | 1113.8 | 1098.9 | 1080.2 | 1071.5 | 1064.2 | 1055.6 | 1044.5 | 1040.7 |
| 57.5° | 1232.4 | 1206.7 | 1181.8 | 1166.2 | 1147.4 | 1136.0 | 1121.8 | 1121.1 |
| 60° | 1373.1 | 1338.5 | 1294.4 | 1271.2 | 1252.5 | 1239.0 | 1228.2 | 1224.1 |
| 62.5° | 1535.7 | 1476.1 | 1428.6 | 1403.6 | 1381.8 | 1373.5 | 1359.9 | 1361.7 |
| 65° | 1702.4 | 1641.8 | 1595.7 | 1575.6 | 1555.1 | 1549.6 | 1537.1 | 1541.6 |
| 67.5° | 1883.1 | 1833.1 | 1782.5 | 1763.8 | 1745.1 | 1739.5 | 1726.7 | 1730.5 |
| 70° | 2045.0 | 1981.5 | 1924.0 | 1887.2 | 1855.3 | 1829.7 | 1813.4 | 1806.8 |
| 72.5° | 2077.2 | 1967.3 | 1876.8 | 1785.0 | 1731.9 | 1685.5 | 1666.4 | 1659.1 |
| 75° | 1866.4 | 1695.9 | 1566.9 | 1459.1 | 1399.5 | 1331.9 | 1324.6 | 1314.5 |
| 77.5° | 1451.8 | 1257.7 | 1101.7 | 963.0 | 882.9 | 800.4 | 772.0 | 750.5 |
| 80° | 866.0 | 665.6 | 515.8 | 361.6 | 295.0 | 237.5 | 223.2 | 208.3 |
| 82.5° | 309.9 | 198.6 | 133.8 | 104.3 | 93.3 | 86.0 | 80.4 | 73.1 |
| 85° | 74.9 | 63.1 | 59.6 | 54.1 | 53.4 | 45.4 | 32.2 | 28.8 |
| 87.5° | 23.9 | 21.8 | 22.2 | 21.1 | 22.2 | 16.6 | 13.5 | 12.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)