

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: P190789

Luminaire Tested: **GAN-AF-01-LED-U-5MQ-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-01-LED-U-5MQ-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4413 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

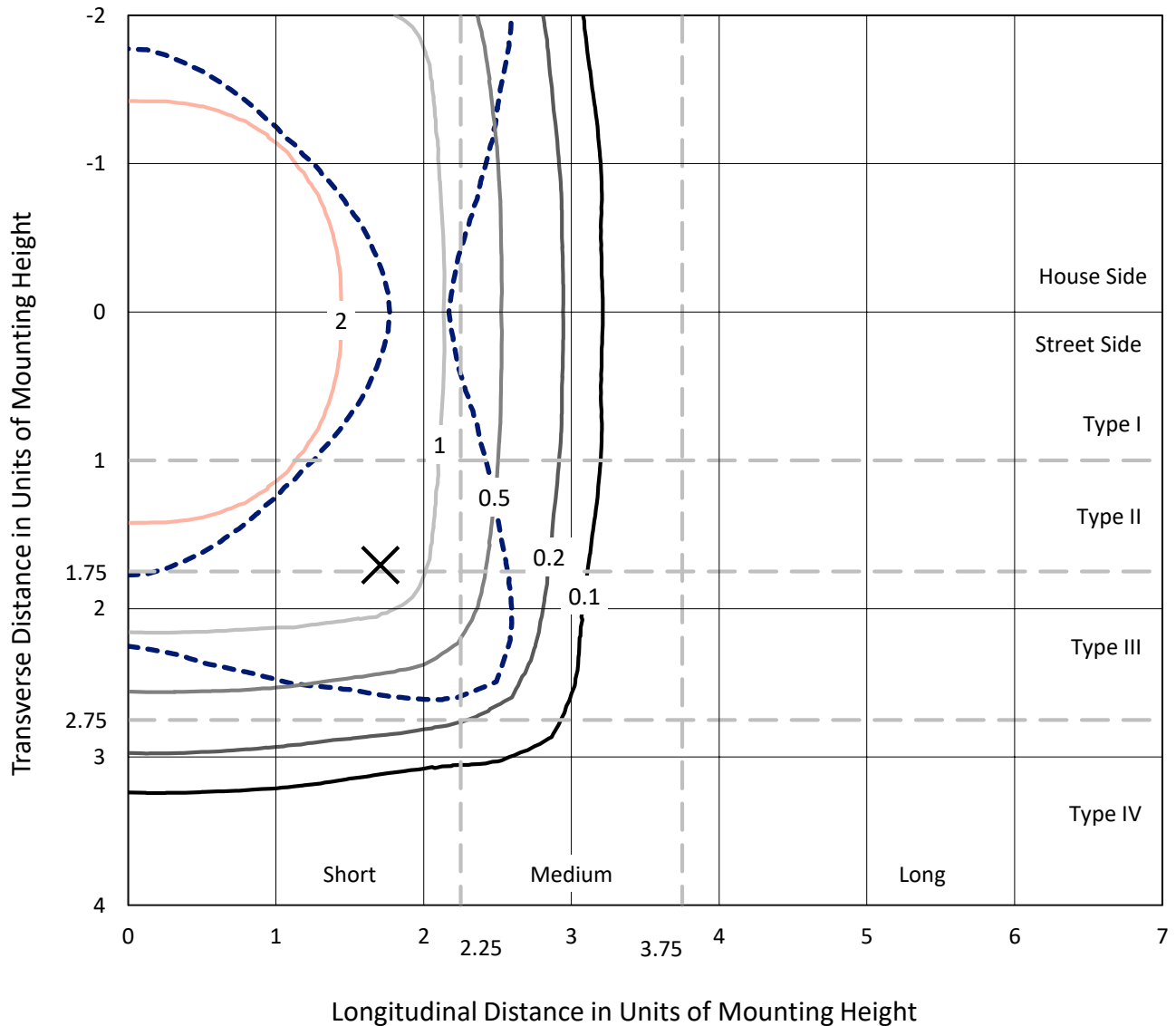
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

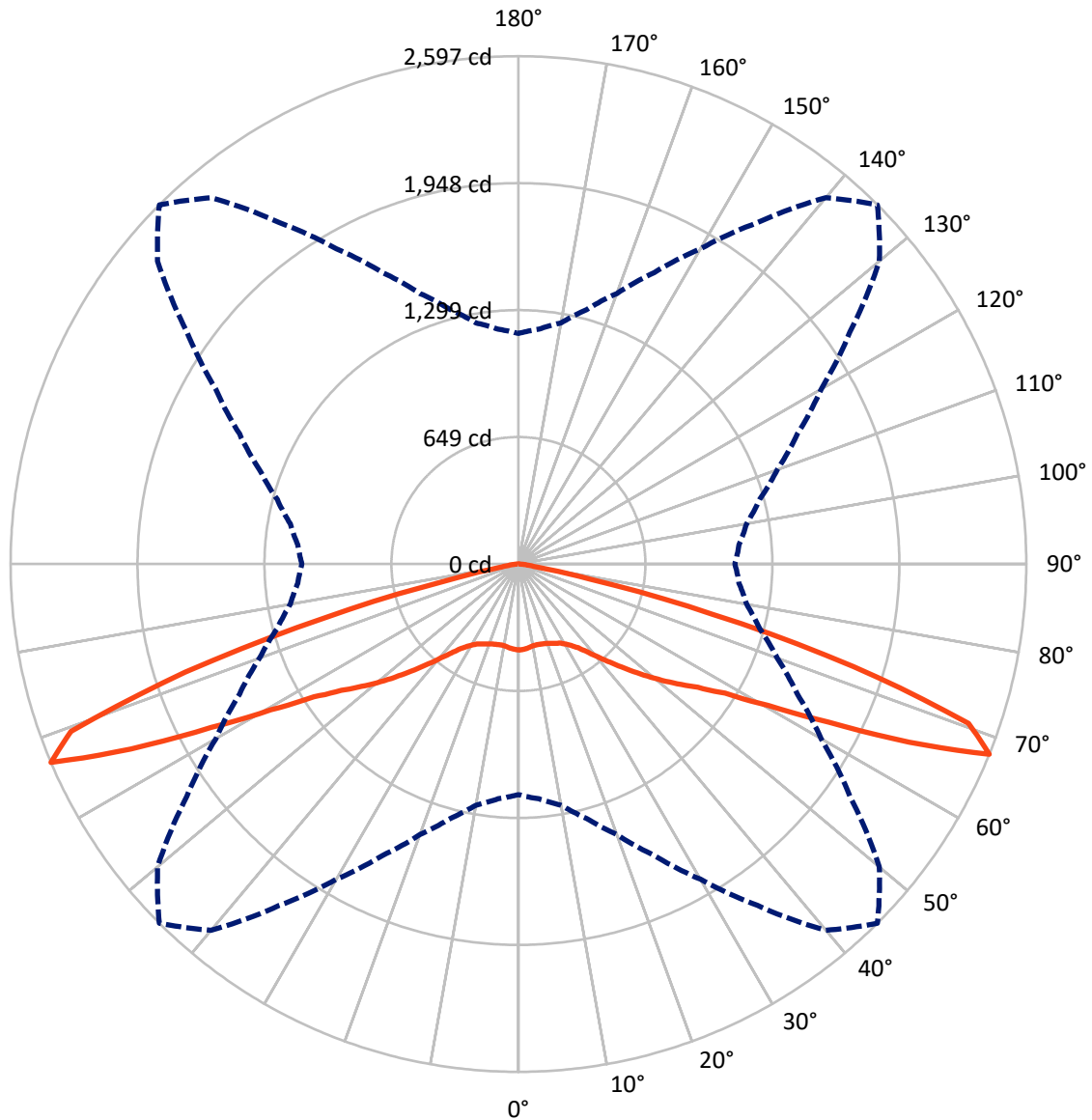
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.4 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2206.5 | 0.0 | 2206.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2206.5 | 0.0 | 2206.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 4413.0 | 0.0 | 4413.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 41.2 | 0.9 |
| 10°-20° | 119.4 | 2.7 |
| 20°-30° | 203.0 | 4.6 |
| 30°-40° | 331.9 | 7.5 |
| 40°-50° | 592.5 | 13.4 |
| 50°-60° | 999.0 | 22.6 |
| 60°-70° | 1550.4 | 35.1 |
| 70°-80° | 544.7 | 12.3 |
| 80°-90° | 30.8 | 0.7 |
| 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° | 4413.0 | 100.0 |
| 0°-180° | 4413.0 | 100.0 |

Coefficient of Utilization



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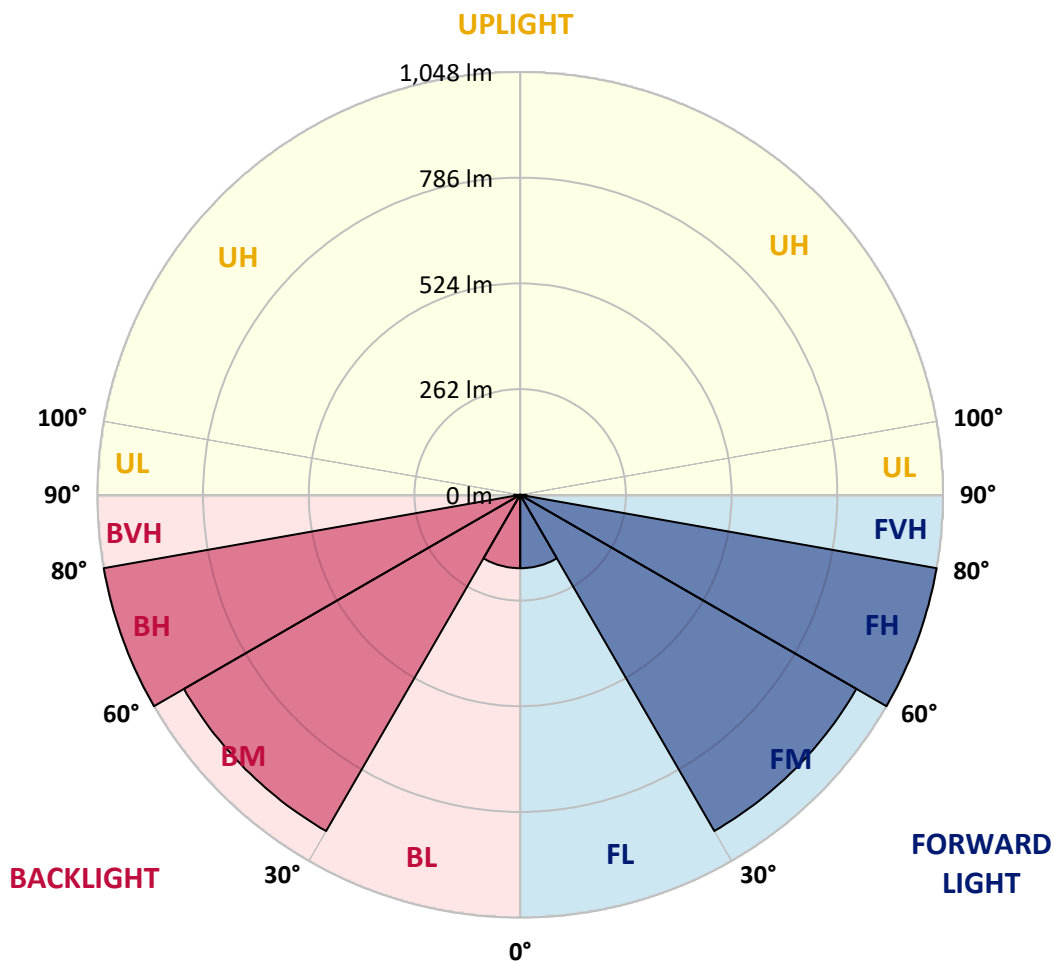
CATALOG NUMBER: GAN-AF-01-LED-U-5MQ-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 181.8 | 4.1 | | | |
| FM | (30°-60°) | 961.7 | 21.8 | | | |
| FH | (60°-80°) | 1047.5 | 23.7 | | | G1/1800 |
| FVH | (80°-90°) | 15.4 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 181.8 | 4.1 | B1/500 | | |
| BM | (30°-60°) | 961.7 | 21.8 | B1/1000 | | |
| BH | (60°-80°) | 1047.5 | 23.7 | B3/2500 | | G1/1800 |
| BVH | (80°-90°) | 15.4 | 0.3 | | | 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° | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 |
| 2.5° | 438.1 | 438.5 | 438.5 | 438.5 | 438.3 | 438.3 | 437.9 | 438.3 | 438.1 | 437.5 | 437.7 |
| 5° | 434.5 | 434.9 | 434.9 | 434.7 | 435.3 | 435.1 | 434.5 | 434.9 | 434.7 | 434.3 | 434.5 |
| 7.5° | 429.2 | 429.8 | 429.8 | 429.6 | 430.3 | 430.0 | 429.6 | 429.8 | 429.8 | 429.2 | 429.2 |
| 10° | 423.3 | 423.7 | 423.7 | 423.5 | 424.5 | 424.5 | 424.3 | 424.9 | 425.1 | 424.5 | 424.1 |
| 12.5° | 417.9 | 418.5 | 418.5 | 419.3 | 420.3 | 420.7 | 421.8 | 422.5 | 423.3 | 423.1 | 422.3 |
| 15° | 414.6 | 415.0 | 415.8 | 416.9 | 418.5 | 419.9 | 421.6 | 423.3 | 424.9 | 425.3 | 424.1 |
| 17.5° | 412.6 | 413.2 | 414.4 | 415.8 | 418.1 | 420.5 | 422.9 | 425.3 | 427.6 | 428.4 | 427.0 |
| 20° | 411.9 | 412.4 | 413.6 | 416.0 | 419.1 | 422.7 | 426.2 | 429.0 | 432.1 | 433.1 | 432.1 |
| 22.5° | 413.2 | 414.0 | 415.4 | 418.3 | 422.3 | 427.0 | 431.1 | 434.9 | 438.7 | 440.6 | 439.2 |
| 25° | 418.7 | 419.5 | 421.4 | 424.9 | 429.4 | 434.3 | 438.9 | 443.4 | 446.9 | 448.7 | 447.6 |
| 27.5° | 428.8 | 429.8 | 432.1 | 435.7 | 440.6 | 445.9 | 450.9 | 454.6 | 457.5 | 458.1 | 456.8 |
| 30° | 444.1 | 446.3 | 448.9 | 453.0 | 458.7 | 463.1 | 468.2 | 471.5 | 474.9 | 474.9 | 473.8 |
| 32.5° | 467.8 | 470.0 | 472.8 | 476.7 | 481.2 | 486.0 | 490.5 | 493.4 | 497.1 | 497.3 | 494.8 |
| 35° | 503.3 | 504.3 | 506.8 | 509.2 | 513.2 | 517.5 | 521.4 | 523.1 | 526.2 | 526.4 | 524.2 |
| 37.5° | 550.1 | 550.3 | 552.0 | 552.8 | 556.5 | 561.1 | 564.8 | 566.0 | 568.9 | 568.5 | 566.2 |
| 40° | 604.8 | 605.8 | 606.4 | 607.6 | 611.4 | 615.9 | 619.8 | 620.4 | 623.5 | 622.9 | 620.0 |
| 42.5° | 667.9 | 668.3 | 671.8 | 673.6 | 677.2 | 679.4 | 684.4 | 685.0 | 688.5 | 686.9 | 683.7 |
| 45° | 738.7 | 742.4 | 745.6 | 749.3 | 753.1 | 755.8 | 759.6 | 758.8 | 761.3 | 758.8 | 757.0 |
| 47.5° | 813.1 | 815.8 | 823.2 | 828.8 | 835.1 | 837.4 | 842.8 | 840.4 | 842.8 | 839.3 | 838.7 |
| 50° | 895.2 | 899.9 | 906.1 | 912.7 | 919.3 | 923.0 | 930.1 | 927.0 | 930.3 | 927.0 | 925.3 |
| 52.5° | 976.0 | 977.1 | 990.9 | 1000.5 | 1009.9 | 1014.1 | 1018.3 | 1016.9 | 1017.1 | 1016.9 | 1015.1 |
| 55° | 1052.6 | 1055.5 | 1069.3 | 1082.3 | 1098.5 | 1110.5 | 1117.8 | 1117.0 | 1115.1 | 1113.4 | 1110.3 |
| 57.5° | 1139.2 | 1141.9 | 1157.8 | 1173.8 | 1192.2 | 1209.3 | 1224.2 | 1239.4 | 1245.2 | 1246.9 | 1240.2 |
| 60° | 1256.0 | 1255.8 | 1276.9 | 1296.4 | 1322.8 | 1348.1 | 1380.6 | 1413.7 | 1451.7 | 1469.3 | 1445.9 |
| 62.5° | 1374.9 | 1379.8 | 1410.2 | 1444.7 | 1499.1 | 1552.1 | 1612.0 | 1670.8 | 1730.9 | 1779.8 | 1727.9 |
| 65° | 1360.7 | 1379.3 | 1424.7 | 1502.8 | 1603.3 | 1722.5 | 1851.6 | 1988.2 | 2111.6 | 2196.5 | 2101.2 |
| 67.5° | 1179.3 | 1205.9 | 1252.0 | 1346.9 | 1472.5 | 1644.6 | 1861.4 | 2131.5 | 2445.5 | 2597.3 | 2409.2 |
| 70° | 854.8 | 884.9 | 933.1 | 1025.9 | 1150.3 | 1313.9 | 1549.3 | 1873.5 | 2289.2 | 2442.2 | 2235.0 |
| 72.5° | 425.3 | 441.6 | 471.5 | 530.5 | 624.6 | 757.4 | 970.9 | 1282.6 | 1650.3 | 1790.8 | 1601.4 |
| 75° | 144.5 | 152.0 | 157.1 | 176.4 | 206.2 | 258.3 | 364.5 | 560.7 | 855.4 | 1025.5 | 843.2 |
| 77.5° | 83.4 | 83.6 | 87.1 | 90.5 | 95.5 | 101.3 | 115.5 | 151.6 | 262.2 | 372.4 | 271.3 |
| 80° | 54.0 | 53.8 | 56.7 | 59.2 | 62.7 | 65.6 | 66.4 | 70.2 | 81.0 | 96.0 | 85.8 |
| 82.5° | 28.0 | 31.5 | 37.7 | 41.2 | 47.7 | 48.9 | 47.3 | 45.8 | 48.5 | 50.3 | 51.6 |
| 85° | 15.4 | 13.4 | 20.0 | 26.0 | 28.8 | 29.3 | 29.3 | 27.6 | 28.6 | 28.0 | 30.5 |
| 87.5° | 7.1 | 6.4 | 7.9 | 12.8 | 13.6 | 11.6 | 12.2 | 10.7 | 7.7 | 7.5 | 8.5 |
| 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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CATALOG NUMBER: GAN-AF-01-LED-U-5MQ-600

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 | 439.8 |
| 2.5° | 437.7 | 437.9 | 437.9 | 438.5 | 438.7 | 439.2 | 439.6 | 439.8 |
| 5° | 434.3 | 434.9 | 434.5 | 435.1 | 435.1 | 435.5 | 435.5 | 435.7 |
| 7.5° | 429.2 | 429.8 | 429.8 | 429.8 | 429.6 | 430.3 | 430.3 | 430.3 |
| 10° | 423.9 | 424.3 | 424.1 | 423.7 | 423.3 | 423.9 | 423.7 | 423.5 |
| 12.5° | 422.3 | 421.4 | 420.5 | 420.1 | 419.3 | 419.5 | 418.9 | 418.9 |
| 15° | 423.3 | 421.6 | 420.1 | 419.5 | 418.7 | 418.3 | 417.9 | 418.1 |
| 17.5° | 426.0 | 423.7 | 422.0 | 420.9 | 419.9 | 419.3 | 418.5 | 418.7 |
| 20° | 430.7 | 428.0 | 425.3 | 423.3 | 421.6 | 420.5 | 419.9 | 419.7 |
| 22.5° | 437.5 | 433.7 | 429.8 | 426.8 | 424.3 | 422.9 | 422.3 | 422.0 |
| 25° | 445.5 | 441.2 | 436.7 | 433.3 | 430.9 | 429.0 | 427.8 | 427.8 |
| 27.5° | 455.4 | 451.9 | 447.8 | 443.9 | 441.6 | 439.8 | 438.9 | 438.5 |
| 30° | 472.1 | 468.8 | 465.5 | 461.7 | 458.9 | 457.1 | 455.6 | 454.4 |
| 32.5° | 493.4 | 490.7 | 488.0 | 485.2 | 482.6 | 480.2 | 477.9 | 476.9 |
| 35° | 523.3 | 521.4 | 519.6 | 516.3 | 515.3 | 513.8 | 512.6 | 511.6 |
| 37.5° | 564.8 | 564.0 | 564.0 | 560.5 | 559.8 | 559.1 | 557.9 | 558.1 |
| 40° | 619.2 | 620.0 | 619.0 | 617.8 | 617.1 | 615.5 | 615.5 | 616.9 |
| 42.5° | 683.5 | 684.1 | 686.4 | 684.4 | 686.5 | 684.6 | 683.3 | 684.4 |
| 45° | 758.2 | 760.5 | 764.9 | 762.8 | 764.2 | 760.9 | 756.6 | 756.8 |
| 47.5° | 842.0 | 844.0 | 845.9 | 844.4 | 844.7 | 838.9 | 833.3 | 831.9 |
| 50° | 929.0 | 929.9 | 930.9 | 928.8 | 929.2 | 923.0 | 916.5 | 916.7 |
| 52.5° | 1015.1 | 1019.0 | 1023.1 | 1017.5 | 1016.3 | 1009.2 | 1000.1 | 996.5 |
| 55° | 1113.6 | 1119.0 | 1114.4 | 1104.8 | 1095.3 | 1085.8 | 1073.8 | 1071.7 |
| 57.5° | 1234.9 | 1225.6 | 1211.0 | 1192.9 | 1179.7 | 1166.3 | 1154.1 | 1149.1 |
| 60° | 1403.8 | 1368.6 | 1342.2 | 1315.5 | 1298.6 | 1282.2 | 1266.1 | 1263.8 |
| 62.5° | 1642.4 | 1581.7 | 1529.2 | 1473.8 | 1428.6 | 1393.2 | 1365.0 | 1357.0 |
| 65° | 1941.6 | 1798.0 | 1673.6 | 1557.5 | 1456.7 | 1380.6 | 1332.7 | 1311.6 |
| 67.5° | 2070.2 | 1786.9 | 1573.6 | 1408.8 | 1276.9 | 1184.8 | 1133.0 | 1107.2 |
| 70° | 1819.2 | 1481.8 | 1249.9 | 1084.9 | 964.7 | 866.5 | 819.7 | 792.1 |
| 72.5° | 1251.6 | 942.6 | 745.4 | 608.5 | 512.4 | 430.3 | 397.7 | 395.4 |
| 75° | 561.9 | 372.1 | 256.6 | 197.6 | 166.4 | 144.7 | 138.0 | 132.9 |
| 77.5° | 157.3 | 116.3 | 103.7 | 97.0 | 90.5 | 83.0 | 80.2 | 80.8 |
| 80° | 76.5 | 72.2 | 69.4 | 65.2 | 59.2 | 53.0 | 50.1 | 51.4 |
| 82.5° | 50.7 | 50.1 | 52.0 | 48.9 | 40.4 | 34.3 | 28.8 | 26.4 |
| 85° | 30.9 | 31.3 | 31.8 | 32.0 | 27.2 | 19.0 | 13.0 | 14.6 |
| 87.5° | 12.2 | 14.0 | 15.2 | 15.9 | 14.8 | 9.1 | 7.3 | 7.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)