

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: P399958

Luminaire Tested: **ARCH-L-PA3-210-827-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399958
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-210-827-U-T2R
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22137 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

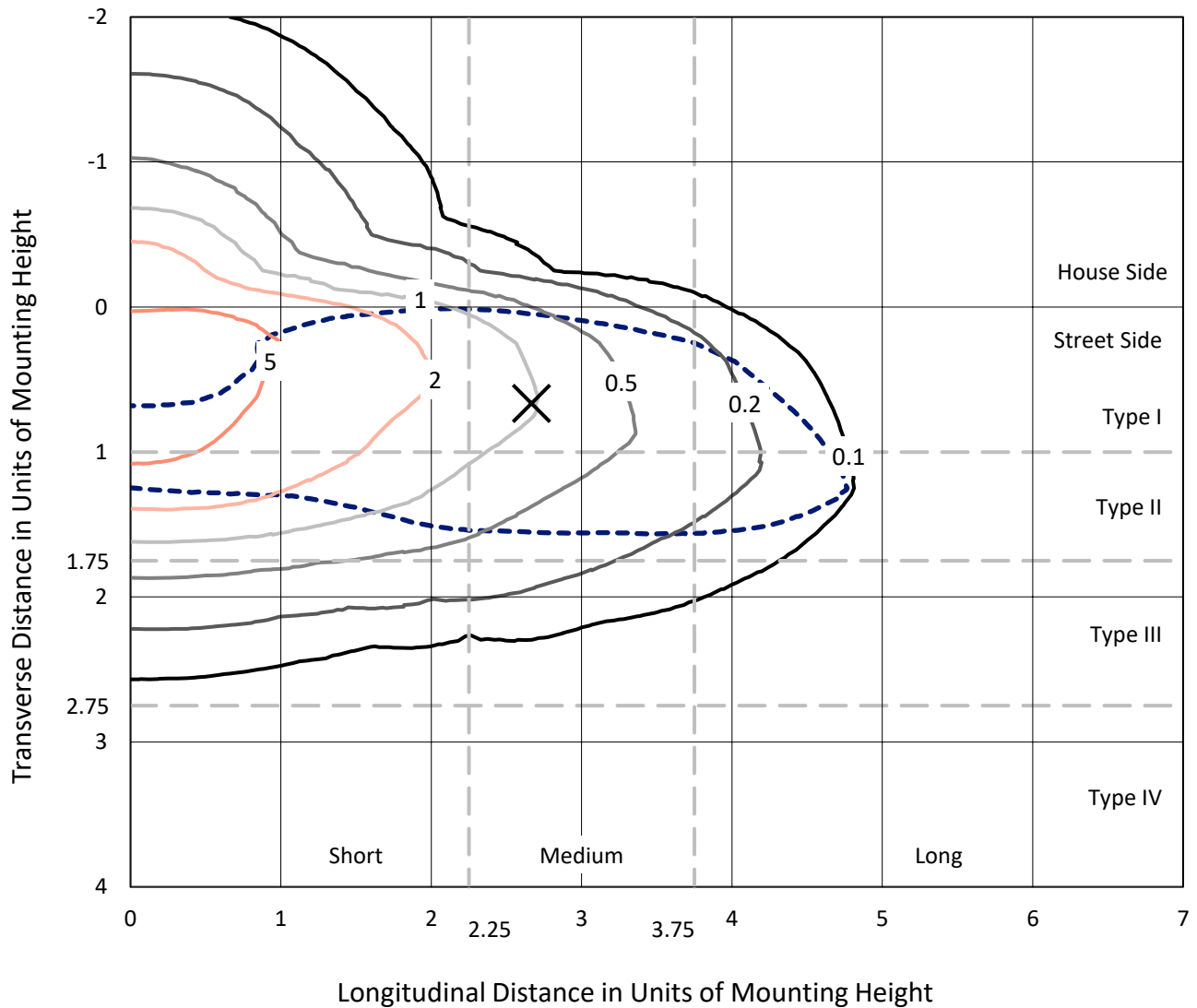
Input Watts (W): 211
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

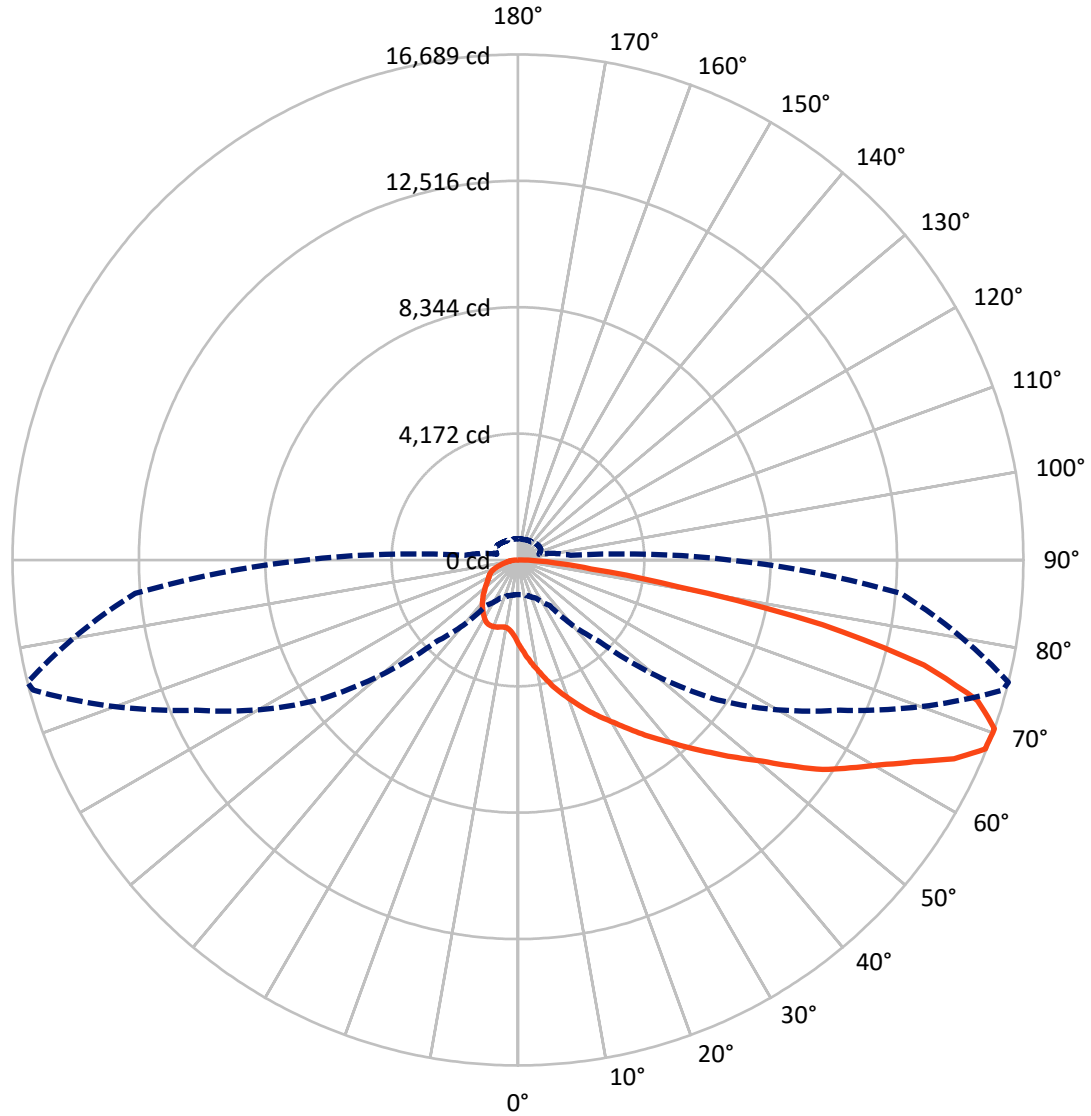
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3614.1 | 0.0 | 3614.1 |
| | % Fixture | 16.3 | 0.0 | 16.3 |
| Street Side | Lumens | 18522.9 | 0.0 | 18522.9 |
| | % Fixture | 83.7 | 0.0 | 83.7 |
| Total | Lumens | 22137.0 | 0.0 | 22137.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 287.6 | 1.3 |
| 10°-20° | 977.6 | 4.4 |
| 20°-30° | 1749.1 | 7.9 |
| 30°-40° | 2829.3 | 12.8 |
| 40°-50° | 4093.1 | 18.5 |
| 50°-60° | 4684.8 | 21.2 |
| 60°-70° | 4309.4 | 19.5 |
| 70°-80° | 2664.9 | 12.0 |
| 80°-90° | 541.1 | 2.4 |
| 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° | 22137.0 | 100.0 |
| 0°-180° | 22137.0 | 100.0 |

Coefficient of Utilization



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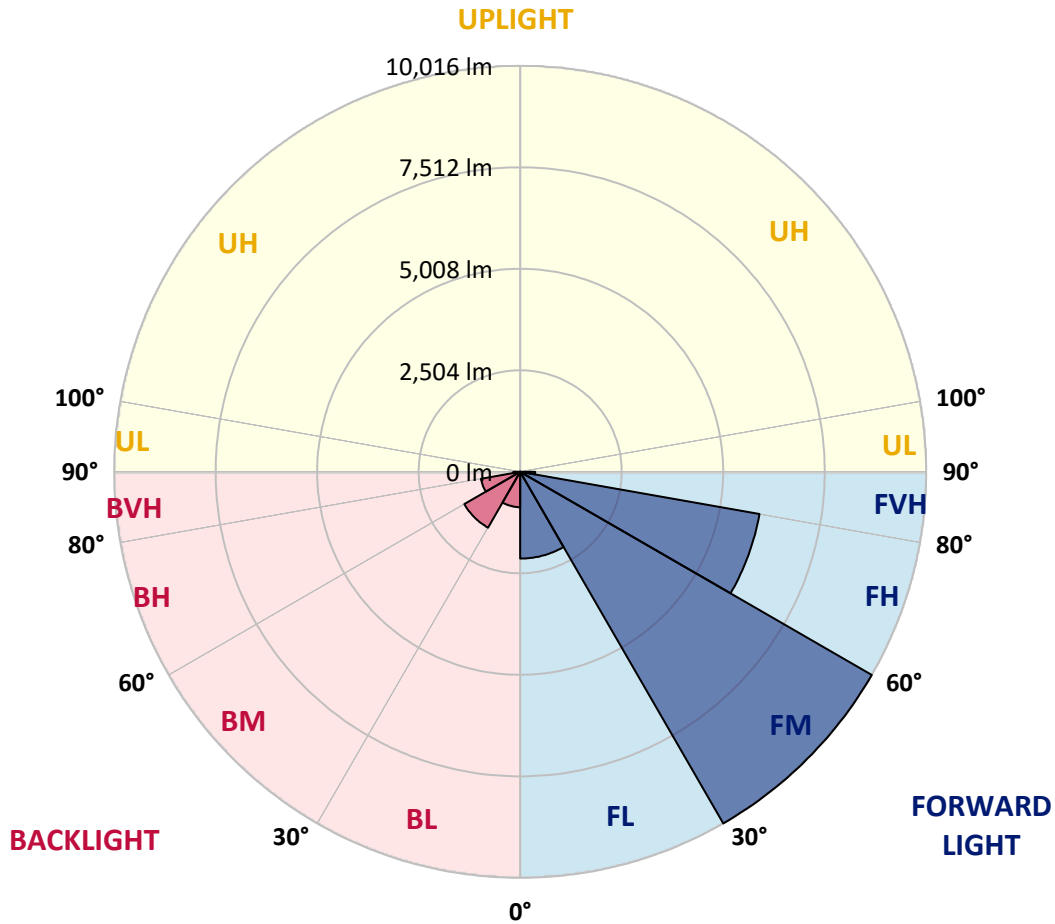
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2141.4 | 9.7 | | | |
| FM (30°-60°) | 10015.9 | 45.2 | | | |
| FH (60°-80°) | 5994.1 | 27.1 | | | G3/7500 |
| FVH (80°-90°) | 371.5 | 1.7 | | | G3/500 |
| BL (0°-30°) | 872.9 | 3.9 | B2/1000 | | |
| BM (30°-60°) | 1591.3 | 7.2 | B2/2500 | | |
| BH (60°-80°) | 980.3 | 4.4 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 169.7 | 0.8 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 |
| 2.5° | 3528.1 | 3501.9 | 3499.0 | 3458.2 | 3420.4 | 3318.5 | 3245.7 | 3117.6 | 2989.6 | 2986.6 | 2858.6 |
| 5° | 4078.3 | 4052.1 | 4037.5 | 3988.0 | 3924.0 | 3790.1 | 3659.1 | 3461.1 | 3242.8 | 3228.3 | 2986.6 |
| 7.5° | 4450.9 | 4427.6 | 4398.5 | 4378.1 | 4317.0 | 4197.6 | 4037.5 | 3801.7 | 3501.9 | 3472.8 | 3135.1 |
| 10° | 4701.2 | 4686.7 | 4680.8 | 4666.3 | 4628.4 | 4532.4 | 4378.1 | 4127.7 | 3761.0 | 3728.9 | 3292.3 |
| 12.5° | 4808.9 | 4803.1 | 4829.3 | 4870.0 | 4884.6 | 4846.8 | 4698.3 | 4462.5 | 4046.2 | 4011.3 | 3481.5 |
| 15° | 4683.7 | 4689.6 | 4756.5 | 4896.2 | 5044.7 | 5126.2 | 5038.9 | 4808.9 | 4369.4 | 4319.9 | 3702.7 |
| 17.5° | 4625.5 | 4634.3 | 4680.8 | 4814.7 | 5024.3 | 5277.6 | 5318.3 | 5137.9 | 4680.8 | 4611.0 | 3935.6 |
| 20° | 4727.4 | 4739.0 | 4774.0 | 4878.8 | 5024.3 | 5295.0 | 5507.5 | 5452.2 | 4986.5 | 4913.7 | 4159.8 |
| 22.5° | 4986.5 | 5001.0 | 4998.1 | 5065.1 | 5164.0 | 5350.4 | 5612.3 | 5749.2 | 5306.7 | 5225.2 | 4392.6 |
| 25° | 5539.6 | 5527.9 | 5428.9 | 5396.9 | 5423.1 | 5542.5 | 5752.1 | 6034.4 | 5641.4 | 5559.9 | 4637.2 |
| 27.5° | 6290.6 | 6276.0 | 6095.6 | 5932.5 | 5787.0 | 5839.4 | 5950.0 | 6264.4 | 5982.0 | 5888.9 | 4870.0 |
| 30° | 7094.0 | 7076.6 | 6867.0 | 6602.1 | 6278.9 | 6203.3 | 6188.7 | 6465.3 | 6325.5 | 6226.6 | 5117.5 |
| 32.5° | 7877.1 | 7862.5 | 7638.4 | 7329.8 | 6884.4 | 6657.4 | 6517.6 | 6689.4 | 6715.6 | 6619.5 | 5388.2 |
| 35° | 8590.3 | 8590.3 | 8398.1 | 8031.3 | 7527.8 | 7184.3 | 6954.3 | 6965.9 | 7163.9 | 7053.3 | 5696.8 |
| 37.5° | 9224.8 | 9221.9 | 9012.3 | 8651.4 | 8168.2 | 7775.2 | 7489.9 | 7300.7 | 7591.8 | 7495.7 | 6019.9 |
| 40° | 9728.4 | 9708.1 | 9553.8 | 9239.4 | 8753.3 | 8363.2 | 8075.0 | 7693.7 | 8069.2 | 7981.9 | 6363.4 |
| 42.5° | 10095.2 | 10083.6 | 9978.8 | 9705.2 | 9242.3 | 8875.5 | 8677.6 | 8188.5 | 8610.6 | 8523.3 | 6765.1 |
| 45° | 10237.9 | 10261.1 | 10261.1 | 10002.1 | 9635.3 | 9300.5 | 9213.2 | 8732.9 | 9195.7 | 9108.4 | 7195.9 |
| 47.5° | 10007.9 | 10069.0 | 10194.2 | 10211.7 | 9888.5 | 9661.5 | 9690.6 | 9280.2 | 9798.3 | 9751.7 | 7667.5 |
| 50° | 9288.9 | 9402.4 | 9676.0 | 10170.9 | 9990.4 | 9938.0 | 10098.1 | 9839.1 | 10444.5 | 10430.0 | 8240.9 |
| 52.5° | 7434.6 | 7711.1 | 8564.1 | 9451.9 | 9920.6 | 10066.1 | 10502.8 | 10467.8 | 11277.1 | 11300.4 | 8989.1 |
| 55° | 5702.6 | 5807.4 | 6794.2 | 8305.0 | 9492.7 | 10025.4 | 10773.5 | 11082.0 | 12179.5 | 12208.6 | 9676.0 |
| 57.5° | 4611.0 | 4680.8 | 5219.4 | 6794.2 | 8517.5 | 9804.1 | 10986.0 | 11440.1 | 12872.3 | 12948.0 | 10287.3 |
| 60° | 3653.3 | 3755.1 | 4116.1 | 5199.0 | 7152.2 | 9271.4 | 11134.4 | 11838.9 | 13617.5 | 13731.0 | 11018.0 |
| 62.5° | 2715.9 | 2765.4 | 3106.0 | 3851.2 | 5661.8 | 8313.7 | 11055.8 | 12272.6 | 14531.5 | 14668.3 | 11897.1 |
| 65° | 1932.9 | 1976.5 | 2218.2 | 2739.2 | 4186.0 | 7018.3 | 10598.8 | 12595.7 | 15678.5 | 15818.2 | 12782.0 |
| 67.5° | 1446.7 | 1464.2 | 1601.0 | 1915.4 | 2820.7 | 5452.2 | 9673.1 | 12540.4 | 16516.8 | 16642.0 | 13137.2 |
| 70° | 1144.0 | 1149.8 | 1216.8 | 1385.6 | 1833.9 | 3795.9 | 8051.7 | 11728.3 | 16577.9 | 16688.6 | 12688.9 |
| 72.5° | 949.0 | 946.1 | 983.9 | 1065.4 | 1277.9 | 2401.5 | 5964.6 | 10220.4 | 15792.0 | 15867.7 | 11437.2 |
| 75° | 783.0 | 788.9 | 815.1 | 861.6 | 975.2 | 1583.6 | 3865.8 | 8153.6 | 13931.9 | 13850.4 | 9597.4 |
| 77.5° | 657.9 | 655.0 | 666.6 | 707.4 | 788.9 | 1138.2 | 2264.7 | 5891.8 | 10325.2 | 10284.4 | 6299.3 |
| 80° | 529.8 | 535.6 | 553.1 | 588.0 | 663.7 | 867.5 | 1339.0 | 3676.5 | 5539.6 | 5391.1 | 3009.9 |
| 82.5° | 355.1 | 410.4 | 445.4 | 486.1 | 573.5 | 640.4 | 850.0 | 1868.8 | 2477.2 | 2439.4 | 1365.2 |
| 85° | 168.8 | 224.1 | 331.8 | 378.4 | 465.8 | 401.7 | 576.4 | 890.8 | 1240.1 | 1225.5 | 492.0 |
| 87.5° | 34.9 | 34.9 | 177.6 | 212.5 | 288.2 | 171.7 | 320.2 | 387.2 | 599.7 | 561.8 | 200.9 |
| 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° | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 | 2768.3 |
| 2.5° | 2782.9 | 2704.3 | 2547.1 | 2421.9 | 2293.8 | 2221.1 | 2130.8 | 2087.2 | 2078.4 | 2055.1 | 2072.6 |
| 5° | 2832.4 | 2678.1 | 2381.2 | 2186.1 | 2055.1 | 1991.1 | 1959.1 | 1947.4 | 1944.5 | 1938.7 | 1938.7 |
| 7.5° | 2899.3 | 2663.5 | 2276.4 | 2078.4 | 1994.0 | 1973.6 | 1982.4 | 1999.8 | 2002.7 | 2008.6 | 2005.7 |
| 10° | 2980.8 | 2666.4 | 2218.2 | 2052.2 | 2011.5 | 2014.4 | 2043.5 | 2066.8 | 2078.4 | 2087.2 | 2084.3 |
| 12.5° | 3094.4 | 2701.4 | 2209.4 | 2069.7 | 2052.2 | 2063.9 | 2093.0 | 2116.3 | 2127.9 | 2130.8 | 2130.8 |
| 15° | 3242.8 | 2774.1 | 2229.8 | 2107.5 | 2093.0 | 2101.7 | 2119.2 | 2127.9 | 2130.8 | 2127.9 | 2127.9 |
| 17.5° | 3405.8 | 2861.5 | 2258.9 | 2130.8 | 2107.5 | 2098.8 | 2093.0 | 2084.3 | 2066.8 | 2055.1 | 2055.1 |
| 20° | 3563.0 | 2940.1 | 2273.5 | 2127.9 | 2087.2 | 2052.2 | 2017.3 | 1973.6 | 1944.5 | 1921.2 | 1921.2 |
| 22.5° | 3720.2 | 3012.8 | 2273.5 | 2095.9 | 2031.9 | 1964.9 | 1892.1 | 1822.3 | 1778.6 | 1749.5 | 1749.5 |
| 25° | 3886.1 | 3082.7 | 2256.0 | 2040.6 | 1944.5 | 1848.5 | 1749.5 | 1662.2 | 1618.5 | 1589.4 | 1583.6 |
| 27.5° | 4025.9 | 3123.5 | 2209.4 | 1962.0 | 1836.8 | 1714.6 | 1601.0 | 1510.8 | 1478.8 | 1452.6 | 1452.6 |
| 30° | 4174.3 | 3149.7 | 2122.1 | 1860.1 | 1714.6 | 1574.8 | 1458.4 | 1385.6 | 1350.7 | 1312.8 | 1309.9 |
| 32.5° | 4340.2 | 3167.1 | 2023.1 | 1752.4 | 1589.4 | 1440.9 | 1342.0 | 1283.7 | 1208.0 | 1167.3 | 1161.5 |
| 35° | 4532.4 | 3190.4 | 1918.3 | 1630.1 | 1464.2 | 1330.3 | 1272.1 | 1176.0 | 1103.3 | 1068.3 | 1065.4 |
| 37.5° | 4736.1 | 3207.9 | 1804.8 | 1522.4 | 1350.7 | 1257.5 | 1199.3 | 1085.8 | 1021.7 | 969.4 | 963.5 |
| 40° | 4951.5 | 3207.9 | 1688.4 | 1417.6 | 1260.4 | 1225.5 | 1114.9 | 1013.0 | 905.3 | 879.1 | 873.3 |
| 42.5° | 5190.2 | 3202.1 | 1571.9 | 1315.8 | 1176.0 | 1152.7 | 1065.4 | 957.7 | 902.4 | 879.1 | 873.3 |
| 45° | 5443.5 | 3181.7 | 1461.3 | 1199.3 | 1088.7 | 1042.1 | 975.2 | 946.1 | 922.8 | 922.8 | 922.8 |
| 47.5° | 5731.7 | 3164.2 | 1336.1 | 1094.5 | 1024.7 | 972.3 | 922.8 | 905.3 | 902.4 | 911.1 | 919.9 |
| 50° | 6101.4 | 3158.4 | 1231.3 | 1018.8 | 975.2 | 914.0 | 908.2 | 893.7 | 896.6 | 896.6 | 896.6 |
| 52.5° | 6549.7 | 3106.0 | 1132.4 | 963.5 | 925.7 | 852.9 | 870.4 | 884.9 | 890.8 | 887.8 | 884.9 |
| 55° | 6878.6 | 3012.8 | 1047.9 | 925.7 | 890.8 | 829.6 | 852.9 | 876.2 | 882.0 | 873.3 | 873.3 |
| 57.5° | 7175.5 | 2881.9 | 981.0 | 896.6 | 867.5 | 815.1 | 841.3 | 864.6 | 858.7 | 855.8 | 852.9 |
| 60° | 7516.1 | 2756.7 | 928.6 | 882.0 | 844.2 | 809.2 | 832.5 | 847.1 | 838.4 | 832.5 | 829.6 |
| 62.5° | 7885.8 | 2634.4 | 890.8 | 882.0 | 826.7 | 806.3 | 823.8 | 829.6 | 812.2 | 806.3 | 806.3 |
| 65° | 8057.5 | 2442.3 | 850.0 | 882.0 | 818.0 | 800.5 | 806.3 | 800.5 | 783.0 | 783.0 | 780.1 |
| 67.5° | 7775.2 | 2125.0 | 797.6 | 870.4 | 829.6 | 791.8 | 780.1 | 771.4 | 751.0 | 751.0 | 745.2 |
| 70° | 6995.0 | 1746.6 | 721.9 | 832.5 | 832.5 | 788.9 | 745.2 | 724.8 | 701.5 | 710.3 | 698.6 |
| 72.5° | 5976.2 | 1385.6 | 628.8 | 768.5 | 815.1 | 786.0 | 707.4 | 675.3 | 655.0 | 663.7 | 646.2 |
| 75° | 4840.9 | 1074.1 | 518.2 | 666.6 | 771.4 | 771.4 | 669.5 | 625.9 | 602.6 | 602.6 | 582.2 |
| 77.5° | 3085.6 | 794.7 | 422.1 | 553.1 | 692.8 | 751.0 | 637.5 | 570.5 | 535.6 | 526.9 | 512.3 |
| 80° | 1528.3 | 558.9 | 346.4 | 439.6 | 590.9 | 704.5 | 614.2 | 506.5 | 457.0 | 439.6 | 413.4 |
| 82.5° | 812.2 | 387.2 | 276.5 | 343.5 | 471.6 | 634.6 | 585.1 | 436.6 | 375.5 | 349.3 | 320.2 |
| 85° | 363.9 | 238.7 | 221.2 | 262.0 | 358.0 | 521.1 | 526.9 | 358.0 | 288.2 | 343.5 | 253.3 |
| 87.5° | 133.9 | 107.7 | 107.7 | 133.9 | 206.7 | 218.3 | 372.6 | 230.0 | 183.4 | 125.2 | 99.0 |
| 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)