

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: P399435

Luminaire Tested: **ARCH-L-PA3-140-750-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-140-750-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17937 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

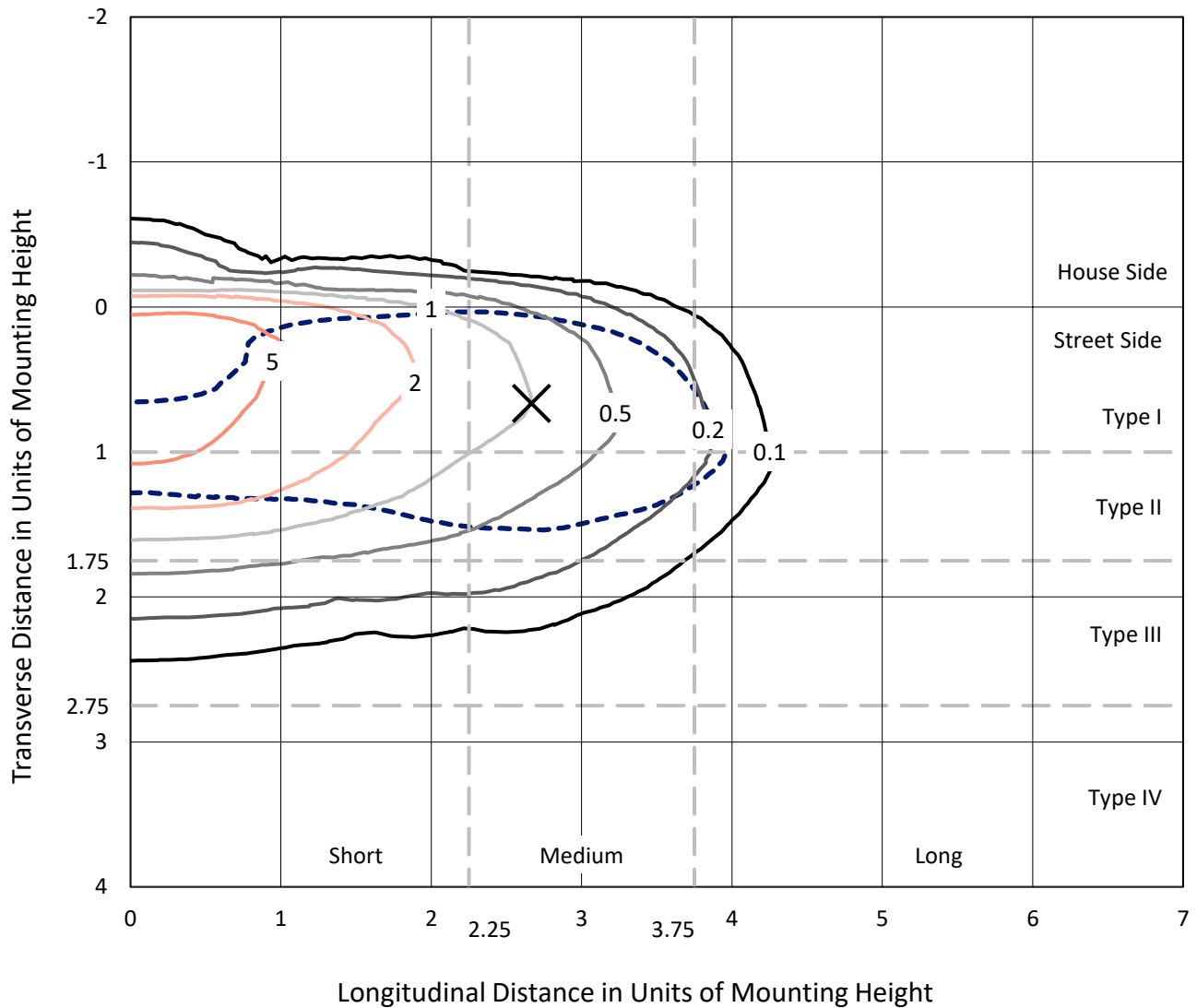
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

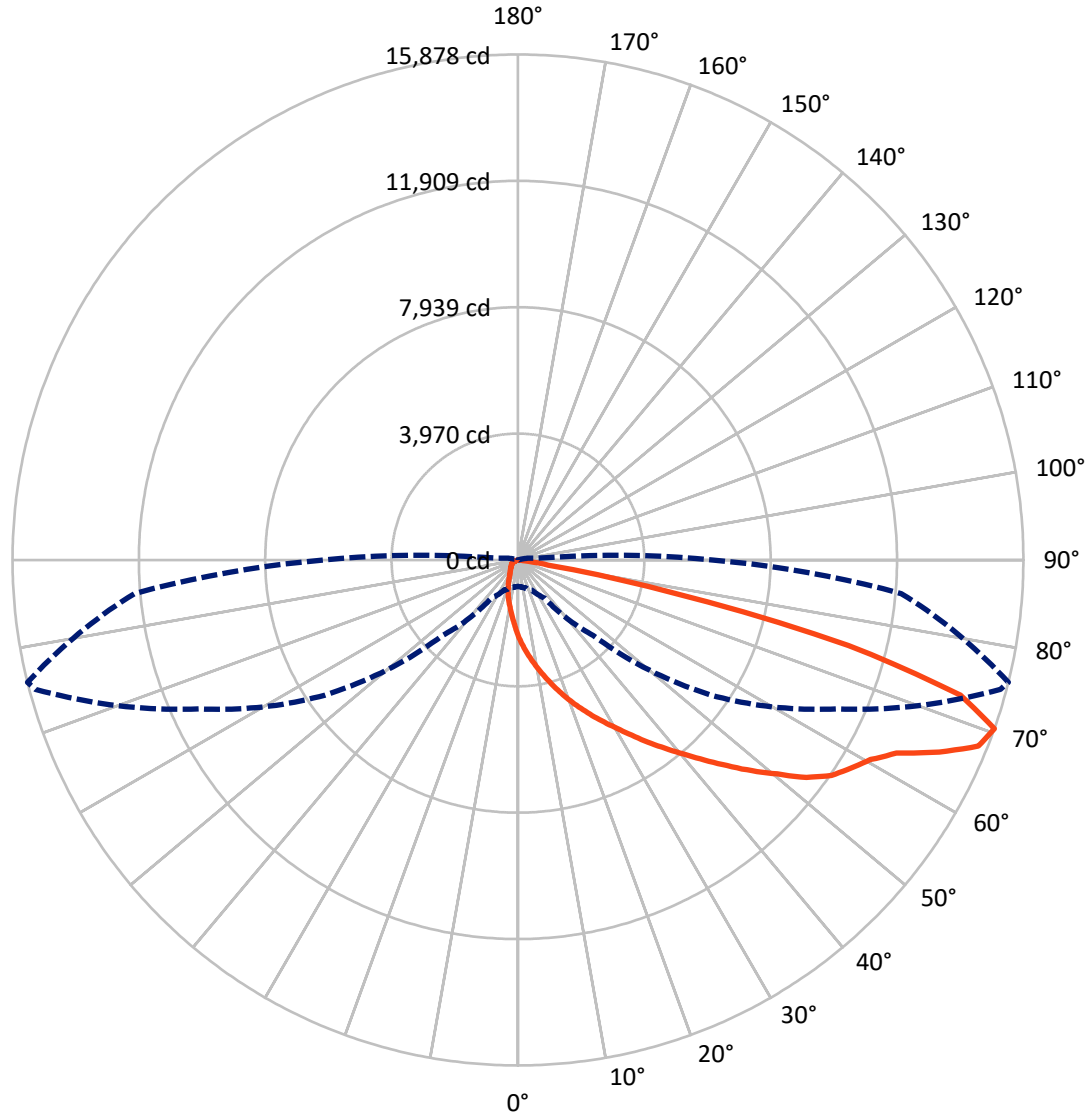
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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 | 846.0 | 0.0 | 846.0 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 17091.0 | 0.0 | 17091.0 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 17937.0 | 0.0 | 17937.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 226.2 | 1.3 |
| 10°-20° | 730.0 | 4.1 |
| 20°-30° | 1359.6 | 7.6 |
| 30°-40° | 2404.8 | 13.4 |
| 40°-50° | 3677.5 | 20.5 |
| 50°-60° | 4169.4 | 23.2 |
| 60°-70° | 3574.2 | 19.9 |
| 70°-80° | 1731.1 | 9.7 |
| 80°-90° | 64.2 | 0.4 |
| 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° | 17937.0 | 100.0 |
| 0°-180° | 17937.0 | 100.0 |

Coefficient of Utilization

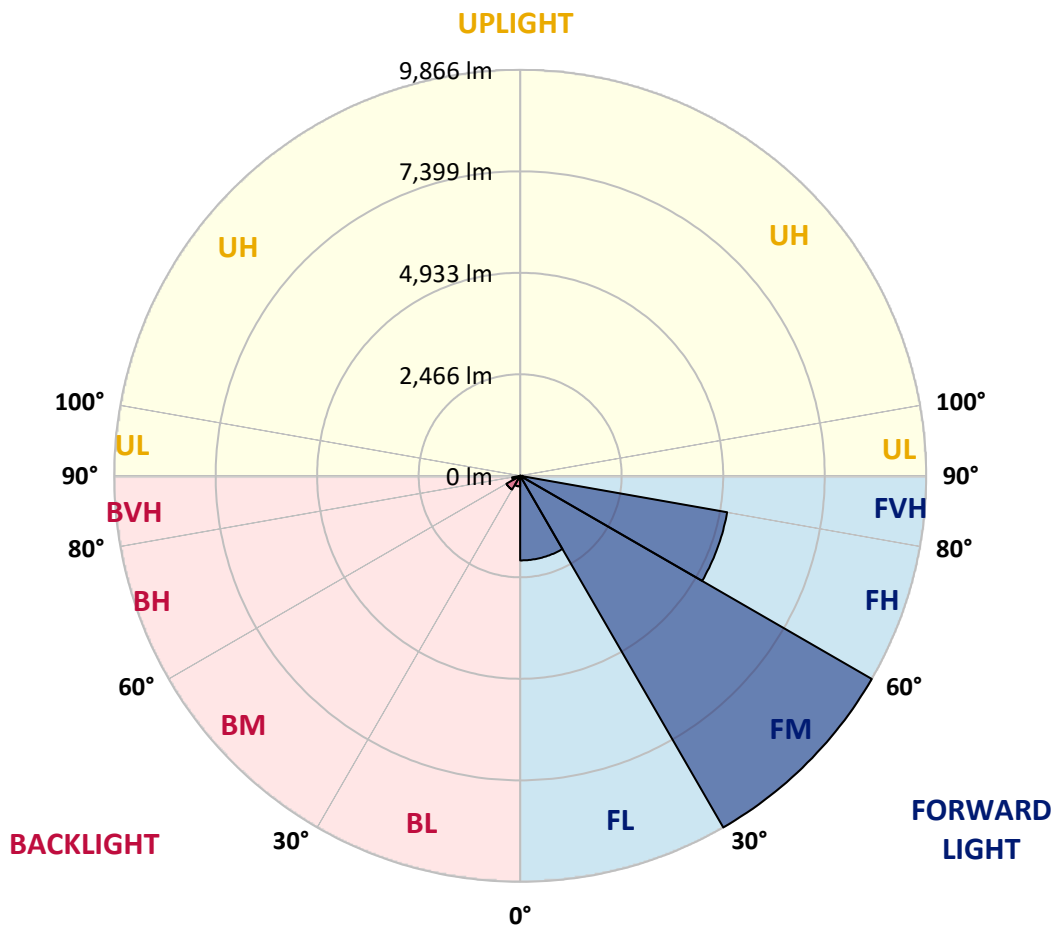


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2056.3 | 11.5 | | | |
| FM (30°-60°) | 9865.5 | 55.0 | | | |
| FH (60°-80°) | 5106.1 | 28.5 | | | G3/7500 |
| FVH (80°-90°) | 63.1 | 0.4 | | | G1/100 |
| BL (0°-30°) | 259.5 | 1.4 | B1/500 | | |
| BM (30°-60°) | 386.2 | 2.2 | B1/1000 | | |
| BH (60°-80°) | 199.2 | 1.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.1 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 |
| 2.5° | 3281.9 | 3264.0 | 3246.1 | 3177.4 | 3114.7 | 3058.0 | 2950.5 | 2810.1 | 2684.7 | 2657.8 | 2511.5 |
| 5° | 3855.3 | 3834.4 | 3807.5 | 3738.8 | 3658.2 | 3562.7 | 3404.4 | 3189.4 | 2968.4 | 2920.6 | 2648.8 |
| 7.5° | 4243.5 | 4225.6 | 4186.8 | 4153.9 | 4073.3 | 3980.7 | 3804.5 | 3553.7 | 3249.1 | 3189.4 | 2807.1 |
| 10° | 4509.3 | 4497.4 | 4491.4 | 4464.5 | 4404.8 | 4330.1 | 4153.9 | 3891.1 | 3532.8 | 3464.1 | 2974.4 |
| 12.5° | 4604.9 | 4604.9 | 4634.7 | 4679.5 | 4688.5 | 4664.6 | 4503.3 | 4240.5 | 3831.4 | 3759.7 | 3171.4 |
| 15° | 4476.5 | 4491.4 | 4557.1 | 4700.4 | 4849.7 | 4948.3 | 4846.8 | 4601.9 | 4159.9 | 4082.3 | 3404.4 |
| 17.5° | 4440.6 | 4455.6 | 4500.3 | 4625.8 | 4825.9 | 5088.6 | 5139.4 | 4951.3 | 4470.5 | 4404.8 | 3643.3 |
| 20° | 4542.2 | 4557.1 | 4595.9 | 4703.4 | 4855.7 | 5121.5 | 5333.5 | 5288.7 | 4799.0 | 4730.3 | 3885.2 |
| 22.5° | 4784.0 | 4793.0 | 4793.0 | 4876.6 | 5011.0 | 5208.1 | 5456.0 | 5608.3 | 5136.4 | 5061.8 | 4124.1 |
| 25° | 5303.7 | 5285.7 | 5214.1 | 5172.3 | 5258.9 | 5420.1 | 5611.3 | 5889.0 | 5512.7 | 5411.2 | 4380.9 |
| 27.5° | 5984.5 | 6044.3 | 5871.1 | 5671.0 | 5605.3 | 5697.9 | 5829.3 | 6136.8 | 5877.0 | 5769.5 | 4613.8 |
| 30° | 6907.3 | 6883.4 | 6656.5 | 6369.8 | 6086.1 | 6053.2 | 6098.0 | 6348.9 | 6241.4 | 6139.8 | 4873.6 |
| 32.5° | 7665.8 | 7710.6 | 7471.7 | 7122.3 | 6698.3 | 6498.2 | 6450.4 | 6602.7 | 6629.6 | 6563.9 | 5181.2 |
| 35° | 8445.2 | 8493.0 | 8260.1 | 7871.9 | 7367.2 | 7032.7 | 6895.4 | 6916.3 | 7110.4 | 7026.8 | 5503.7 |
| 37.5° | 9144.0 | 9185.8 | 8955.9 | 8558.7 | 8054.0 | 7644.9 | 7447.8 | 7286.6 | 7576.2 | 7501.6 | 5844.2 |
| 40° | 9675.6 | 9681.6 | 9526.3 | 9170.9 | 8693.1 | 8269.1 | 8045.1 | 7728.5 | 8069.0 | 8018.2 | 6199.6 |
| 42.5° | 10051.9 | 10063.8 | 9950.3 | 9645.7 | 9203.8 | 8809.6 | 8627.4 | 8251.1 | 8636.4 | 8591.6 | 6611.7 |
| 45° | 10228.1 | 10249.0 | 10237.0 | 9956.3 | 9589.0 | 9248.6 | 9188.8 | 8806.6 | 9257.5 | 9215.7 | 7086.5 |
| 47.5° | 10060.8 | 10060.8 | 10213.1 | 10174.3 | 9836.9 | 9609.9 | 9678.6 | 9385.9 | 9932.4 | 9893.6 | 7570.3 |
| 50° | 9365.0 | 9374.0 | 9684.6 | 10129.5 | 9932.4 | 9881.7 | 10096.7 | 9953.3 | 10544.6 | 10568.5 | 8149.6 |
| 52.5° | 7537.4 | 7522.5 | 8570.7 | 9424.8 | 9866.7 | 10004.1 | 10481.9 | 10532.7 | 11279.2 | 11350.9 | 8726.0 |
| 55° | 5632.2 | 5623.2 | 6626.6 | 8176.5 | 9406.8 | 9941.4 | 10696.9 | 11049.3 | 11906.4 | 11951.2 | 9156.0 |
| 57.5° | 4458.5 | 4434.7 | 4987.1 | 6590.8 | 8367.6 | 9660.7 | 10705.9 | 11147.8 | 12255.8 | 12333.4 | 9574.1 |
| 60° | 3428.3 | 3407.4 | 3819.5 | 4903.5 | 6895.4 | 8914.1 | 10449.1 | 11153.8 | 12593.2 | 12730.6 | 10135.5 |
| 62.5° | 2451.7 | 2475.6 | 2792.2 | 3517.9 | 5303.7 | 7859.9 | 10114.6 | 11237.4 | 13193.5 | 13348.7 | 10932.8 |
| 65° | 1654.4 | 1642.5 | 1905.3 | 2395.0 | 3771.7 | 6441.4 | 9600.9 | 11413.6 | 14274.5 | 14546.3 | 11888.4 |
| 67.5° | 1149.7 | 1158.7 | 1278.1 | 1558.8 | 2395.0 | 4945.3 | 8746.9 | 11512.2 | 15391.4 | 15603.4 | 12557.4 |
| 70° | 830.2 | 842.1 | 907.8 | 1048.2 | 1463.3 | 3353.6 | 7394.1 | 11061.2 | 15693.0 | 15878.1 | 12091.5 |
| 72.5° | 546.5 | 570.4 | 668.9 | 743.6 | 934.7 | 2099.4 | 5447.0 | 9529.3 | 14394.0 | 14531.3 | 10144.5 |
| 75° | 295.6 | 301.6 | 430.0 | 555.5 | 665.9 | 1308.0 | 3249.1 | 6426.5 | 10768.6 | 10723.8 | 6689.3 |
| 77.5° | 229.9 | 238.9 | 265.8 | 397.2 | 447.9 | 719.7 | 1284.1 | 2902.7 | 5100.6 | 4963.2 | 2281.5 |
| 80° | 140.4 | 146.3 | 185.2 | 235.9 | 313.6 | 418.1 | 376.3 | 788.4 | 1036.2 | 970.5 | 334.5 |
| 82.5° | 83.6 | 89.6 | 110.5 | 197.1 | 247.9 | 197.1 | 131.4 | 191.1 | 194.1 | 191.1 | 83.6 |
| 85° | 14.9 | 14.9 | 77.6 | 137.4 | 131.4 | 56.7 | 77.6 | 62.7 | 56.7 | 59.7 | 17.9 |
| 87.5° | 0.0 | 0.0 | 29.9 | 41.8 | 59.7 | 20.9 | 29.9 | 14.9 | 14.9 | 14.9 | 9.0 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 | 2401.0 |
| 2.5° | 2421.9 | 2320.4 | 2111.3 | 1929.1 | 1747.0 | 1612.6 | 1511.1 | 1406.5 | 1370.7 | 1325.9 | 1302.0 |
| 5° | 2463.7 | 2263.6 | 1848.5 | 1517.0 | 1236.3 | 1021.3 | 883.9 | 800.3 | 746.6 | 707.8 | 698.8 |
| 7.5° | 2526.4 | 2218.8 | 1636.5 | 1188.5 | 881.0 | 665.9 | 552.5 | 495.7 | 465.9 | 447.9 | 442.0 |
| 10° | 2601.1 | 2180.0 | 1427.4 | 925.8 | 621.1 | 468.8 | 406.1 | 382.2 | 370.3 | 364.3 | 361.3 |
| 12.5° | 2705.6 | 2165.1 | 1251.3 | 713.7 | 468.8 | 385.2 | 352.4 | 337.5 | 328.5 | 319.5 | 316.5 |
| 15° | 2843.0 | 2171.0 | 1090.0 | 552.5 | 388.2 | 343.4 | 316.5 | 301.6 | 289.7 | 280.7 | 280.7 |
| 17.5° | 2986.3 | 2180.0 | 931.7 | 447.9 | 352.4 | 313.6 | 283.7 | 262.8 | 253.8 | 244.9 | 241.9 |
| 20° | 3120.7 | 2177.0 | 779.4 | 382.2 | 319.5 | 280.7 | 250.8 | 229.9 | 215.0 | 206.1 | 206.1 |
| 22.5° | 3249.1 | 2159.1 | 636.1 | 343.4 | 292.7 | 247.9 | 215.0 | 194.1 | 182.2 | 173.2 | 173.2 |
| 25° | 3386.5 | 2123.3 | 519.6 | 313.6 | 259.8 | 218.0 | 185.2 | 164.2 | 155.3 | 146.3 | 146.3 |
| 27.5° | 3494.0 | 2063.5 | 424.1 | 286.7 | 229.9 | 188.1 | 158.3 | 140.4 | 131.4 | 125.4 | 125.4 |
| 30° | 3610.4 | 1976.9 | 352.4 | 256.8 | 200.1 | 161.3 | 134.4 | 119.5 | 110.5 | 107.5 | 107.5 |
| 32.5° | 3738.8 | 1881.4 | 301.6 | 227.0 | 170.2 | 137.4 | 113.5 | 104.5 | 95.6 | 92.6 | 92.6 |
| 35° | 3888.2 | 1797.8 | 271.8 | 197.1 | 149.3 | 116.5 | 98.5 | 89.6 | 83.6 | 83.6 | 83.6 |
| 37.5° | 4058.4 | 1711.1 | 244.9 | 173.2 | 128.4 | 98.5 | 83.6 | 80.6 | 77.6 | 74.7 | 74.7 |
| 40° | 4243.5 | 1618.6 | 221.0 | 152.3 | 110.5 | 83.6 | 71.7 | 71.7 | 68.7 | 68.7 | 68.7 |
| 42.5° | 4452.6 | 1537.9 | 200.1 | 134.4 | 95.6 | 71.7 | 62.7 | 62.7 | 59.7 | 59.7 | 59.7 |
| 45° | 4679.5 | 1463.3 | 182.2 | 119.5 | 83.6 | 62.7 | 56.7 | 53.8 | 50.8 | 50.8 | 50.8 |
| 47.5° | 4948.3 | 1421.5 | 167.2 | 104.5 | 71.7 | 53.8 | 47.8 | 44.8 | 41.8 | 38.8 | 38.8 |
| 50° | 5291.7 | 1439.4 | 152.3 | 86.6 | 62.7 | 44.8 | 38.8 | 35.8 | 32.8 | 29.9 | 29.9 |
| 52.5° | 5563.5 | 1430.4 | 131.4 | 74.7 | 50.8 | 35.8 | 29.9 | 26.9 | 23.9 | 20.9 | 20.9 |
| 55° | 5760.6 | 1394.6 | 113.5 | 62.7 | 38.8 | 29.9 | 23.9 | 17.9 | 14.9 | 14.9 | 14.9 |
| 57.5° | 5954.7 | 1358.8 | 95.6 | 50.8 | 29.9 | 20.9 | 14.9 | 11.9 | 11.9 | 11.9 | 11.9 |
| 60° | 6256.3 | 1308.0 | 83.6 | 41.8 | 23.9 | 14.9 | 9.0 | 9.0 | 6.0 | 6.0 | 6.0 |
| 62.5° | 6623.6 | 1245.3 | 68.7 | 35.8 | 17.9 | 11.9 | 6.0 | 6.0 | 0.0 | 0.0 | 0.0 |
| 65° | 7026.8 | 1134.8 | 56.7 | 26.9 | 14.9 | 9.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 6934.2 | 910.8 | 47.8 | 17.9 | 11.9 | 6.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 6133.9 | 615.2 | 38.8 | 14.9 | 9.0 | 6.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 4805.0 | 364.3 | 26.9 | 11.9 | 6.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 3075.9 | 182.2 | 17.9 | 9.0 | 6.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 1030.3 | 89.6 | 11.9 | 6.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 146.3 | 29.9 | 6.0 | 3.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 32.8 | 11.9 | 3.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 11.9 | 6.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 6.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)