

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: P400461

Luminaire Tested: **ARCH-L-PA3-280-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400461
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-PA3-280-827-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 1180mA 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: 21013 lumens
Efficiency: N/A
Efficacy: 75.3 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

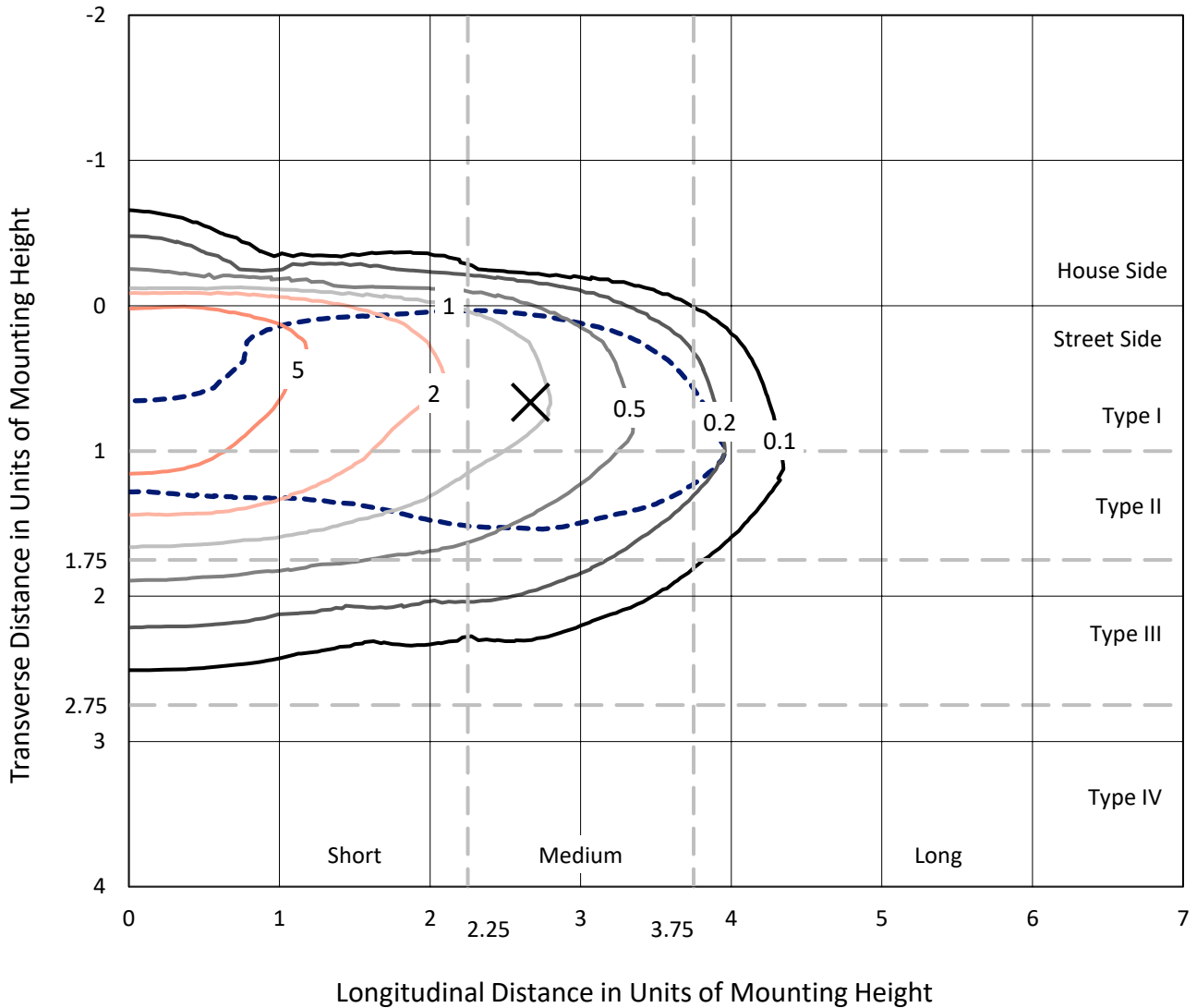
Input Watts (W): 279
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

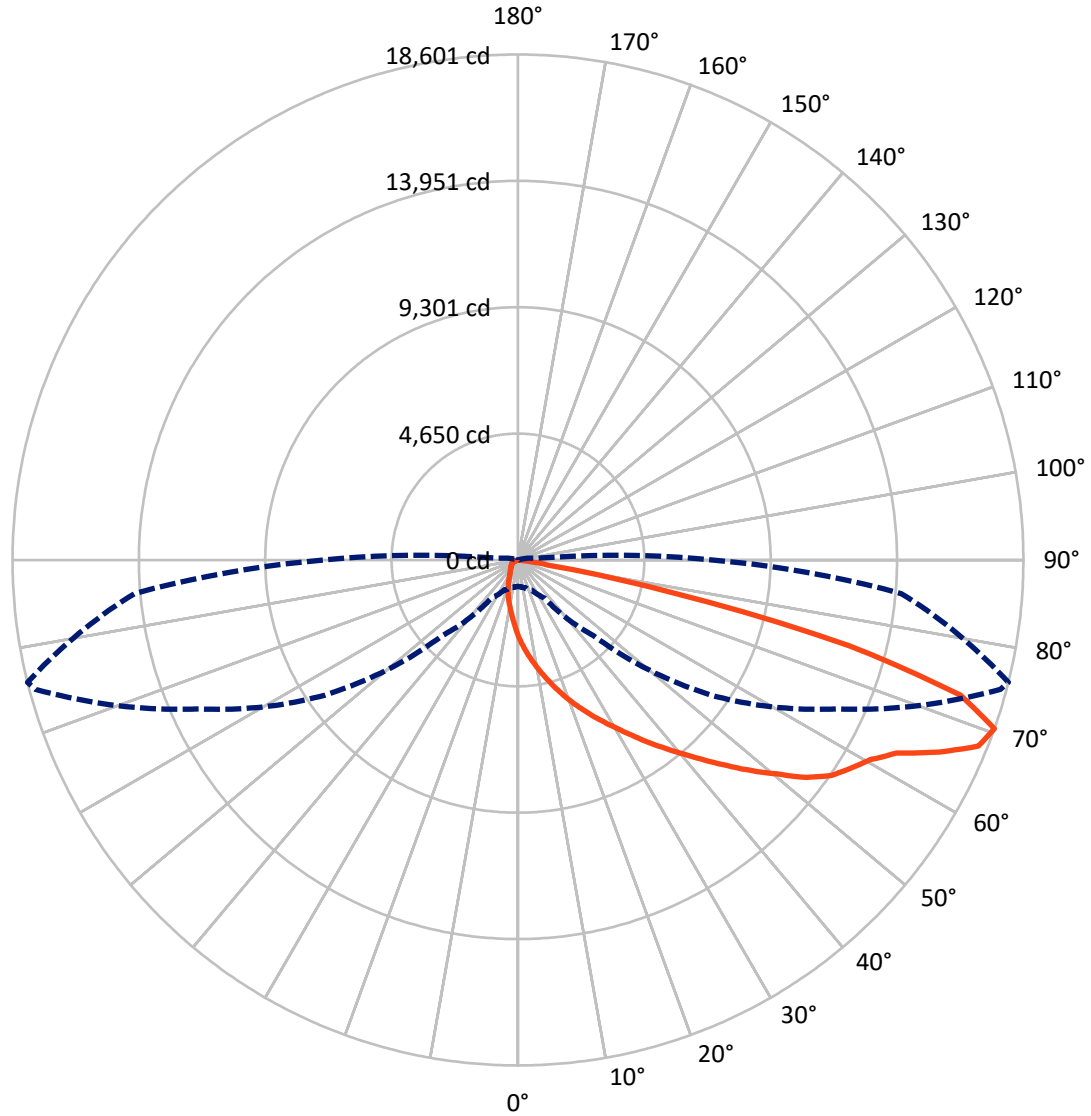
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 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 | 991.1 | 0.0 | 991.1 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 20022.0 | 0.0 | 20022.0 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 21013.0 | 0.0 | 21013.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 265.0 | 1.3 |
| 10°-20° | 855.2 | 4.1 |
| 20°-30° | 1592.7 | 7.6 |
| 30°-40° | 2817.2 | 13.4 |
| 40°-50° | 4308.1 | 20.5 |
| 50°-60° | 4884.4 | 23.2 |
| 60°-70° | 4187.1 | 19.9 |
| 70°-80° | 2028.0 | 9.7 |
| 80°-90° | 75.2 | 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° | 21013.0 | 100.0 |
| 0°-180° | 21013.0 | 100.0 |

Coefficient of Utilization



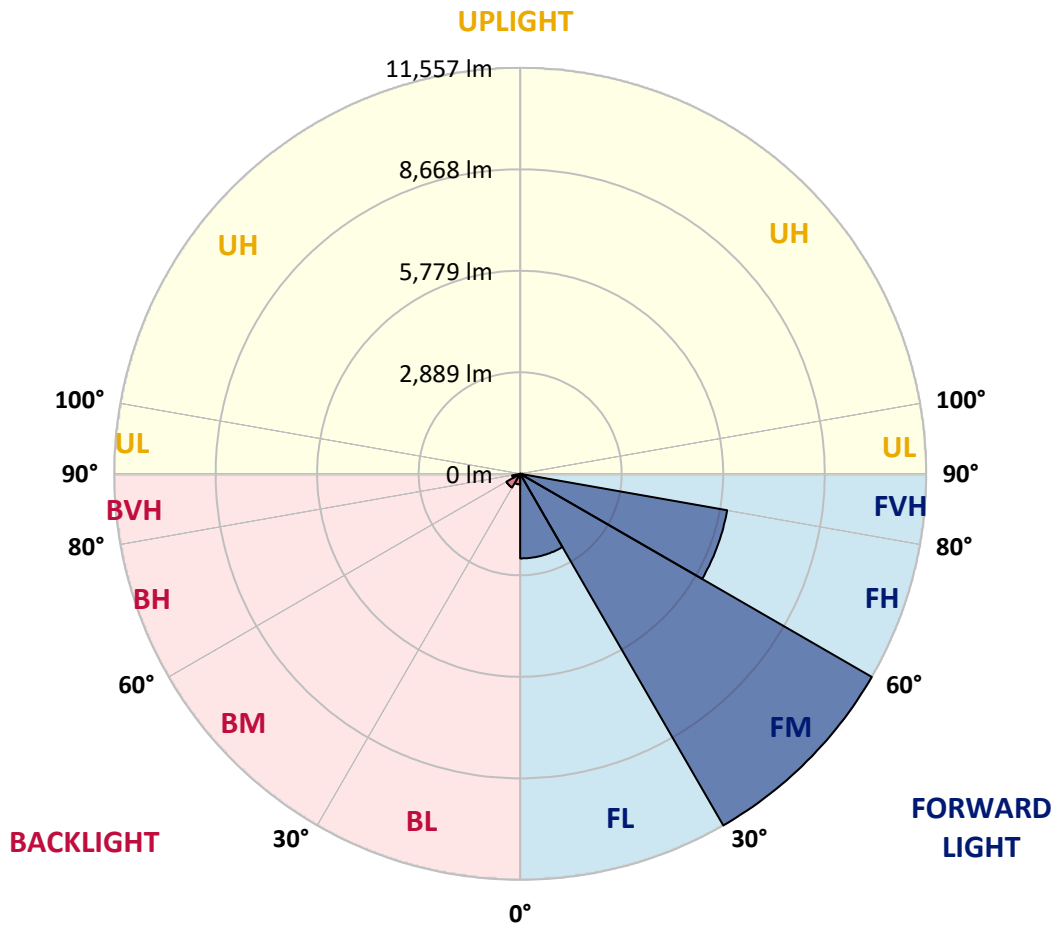
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2408.9 | 11.5 | | | |
| FM (30°-60°) | 11557.3 | 55.0 | | | |
| FH (60°-80°) | 5981.8 | 28.5 | | | G3/7500 |
| FVH (80°-90°) | 73.9 | 0.4 | | | G1/100 |
| BL (0°-30°) | 304.0 | 1.4 | B1/500 | | |
| BM (30°-60°) | 452.4 | 2.2 | B1/1000 | | |
| BH (60°-80°) | 233.4 | 1.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.3 | 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° | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 |
| 2.5° | 3844.8 | 3823.8 | 3802.8 | 3722.3 | 3648.8 | 3582.4 | 3456.4 | 3292.0 | 3145.1 | 3113.6 | 2942.2 |
| 5° | 4516.5 | 4492.0 | 4460.5 | 4380.0 | 4285.6 | 4173.6 | 3988.2 | 3736.3 | 3477.4 | 3421.4 | 3103.1 |
| 7.5° | 4971.2 | 4950.3 | 4904.8 | 4866.3 | 4771.8 | 4663.4 | 4457.0 | 4163.1 | 3806.3 | 3736.3 | 3288.5 |
| 10° | 5282.6 | 5268.6 | 5261.6 | 5230.1 | 5160.2 | 5072.7 | 4866.3 | 4558.4 | 4138.6 | 4058.2 | 3484.4 |
| 12.5° | 5394.6 | 5394.6 | 5429.5 | 5482.0 | 5492.5 | 5464.5 | 5275.6 | 4967.7 | 4488.5 | 4404.5 | 3715.3 |
| 15° | 5244.1 | 5261.6 | 5338.6 | 5506.5 | 5681.4 | 5796.9 | 5677.9 | 5391.1 | 4873.3 | 4782.3 | 3988.2 |
| 17.5° | 5202.1 | 5219.6 | 5272.1 | 5419.0 | 5653.4 | 5961.3 | 6020.8 | 5800.4 | 5237.1 | 5160.2 | 4268.1 |
| 20° | 5321.1 | 5338.6 | 5384.1 | 5510.0 | 5688.4 | 5999.8 | 6248.2 | 6195.7 | 5622.0 | 5541.5 | 4551.4 |
| 22.5° | 5604.5 | 5615.0 | 5615.0 | 5712.9 | 5870.3 | 6101.2 | 6391.6 | 6570.0 | 6017.3 | 5929.8 | 4831.3 |
| 25° | 6213.2 | 6192.2 | 6108.2 | 6059.3 | 6160.7 | 6349.6 | 6573.5 | 6898.9 | 6458.1 | 6339.1 | 5132.2 |
| 27.5° | 7010.8 | 7080.8 | 6877.9 | 6643.5 | 6566.5 | 6675.0 | 6828.9 | 7189.2 | 6884.9 | 6758.9 | 5405.0 |
| 30° | 8091.8 | 8063.8 | 7798.0 | 7462.1 | 7129.8 | 7091.3 | 7143.8 | 7437.6 | 7311.7 | 7192.7 | 5709.4 |
| 32.5° | 8980.4 | 9032.9 | 8753.0 | 8343.7 | 7846.9 | 7612.5 | 7556.6 | 7735.0 | 7766.5 | 7689.5 | 6069.7 |
| 35° | 9893.5 | 9949.5 | 9676.6 | 9221.8 | 8630.6 | 8238.8 | 8077.8 | 8102.3 | 8329.7 | 8231.8 | 6447.6 |
| 37.5° | 10712.1 | 10761.1 | 10491.7 | 10026.5 | 9435.2 | 8955.9 | 8725.0 | 8536.1 | 8875.5 | 8788.0 | 6846.4 |
| 40° | 11334.9 | 11341.9 | 11159.9 | 10743.6 | 10183.9 | 9687.1 | 9424.7 | 9053.9 | 9452.7 | 9393.2 | 7262.7 |
| 42.5° | 11775.7 | 11789.7 | 11656.7 | 11299.9 | 10782.1 | 10320.3 | 10106.9 | 9666.1 | 10117.4 | 10064.9 | 7745.5 |
| 45° | 11982.1 | 12006.6 | 11992.6 | 11663.7 | 11233.4 | 10834.6 | 10764.6 | 10316.8 | 10845.1 | 10796.1 | 8301.7 |
| 47.5° | 11786.2 | 11786.2 | 11964.6 | 11919.1 | 11523.8 | 11257.9 | 11338.4 | 10995.5 | 11635.7 | 11590.2 | 8868.5 |
| 50° | 10971.0 | 10981.5 | 11345.4 | 11866.6 | 11635.7 | 11576.3 | 11828.1 | 11660.2 | 12352.9 | 12380.9 | 9547.2 |
| 52.5° | 8830.0 | 8812.5 | 10040.4 | 11041.0 | 11558.8 | 11719.7 | 12279.4 | 12338.9 | 13213.5 | 13297.5 | 10222.4 |
| 55° | 6598.0 | 6587.5 | 7763.0 | 9578.7 | 11020.0 | 11646.2 | 12531.3 | 12944.1 | 13948.2 | 14000.7 | 10726.1 |
| 57.5° | 5223.1 | 5195.1 | 5842.4 | 7721.0 | 9802.6 | 11317.4 | 12541.8 | 13059.6 | 14357.5 | 14448.5 | 11215.9 |
| 60° | 4016.2 | 3991.7 | 4474.5 | 5744.4 | 8077.8 | 10442.8 | 12241.0 | 13066.6 | 14752.8 | 14913.7 | 11873.6 |
| 62.5° | 2872.2 | 2900.2 | 3271.0 | 4121.1 | 6213.2 | 9207.8 | 11849.1 | 13164.5 | 15456.0 | 15637.9 | 12807.7 |
| 65° | 1938.1 | 1924.1 | 2232.0 | 2805.7 | 4418.5 | 7546.1 | 11247.4 | 13370.9 | 16722.4 | 17040.8 | 13927.2 |
| 67.5° | 1346.9 | 1357.4 | 1497.3 | 1826.2 | 2805.7 | 5793.4 | 10246.9 | 13486.4 | 18030.8 | 18279.2 | 14710.8 |
| 70° | 972.6 | 986.6 | 1063.5 | 1227.9 | 1714.2 | 3928.7 | 8662.1 | 12958.1 | 18384.2 | 18601.1 | 14165.1 |
| 72.5° | 640.2 | 668.2 | 783.6 | 871.1 | 1095.0 | 2459.4 | 6381.1 | 11163.4 | 16862.4 | 17023.3 | 11884.1 |
| 75° | 346.3 | 353.3 | 503.8 | 650.7 | 780.1 | 1532.3 | 3806.3 | 7528.6 | 12615.3 | 12562.8 | 7836.4 |
| 77.5° | 269.4 | 279.9 | 311.4 | 465.3 | 524.8 | 843.1 | 1504.3 | 3400.5 | 5975.3 | 5814.4 | 2672.8 |
| 80° | 164.4 | 171.4 | 216.9 | 276.4 | 367.3 | 489.8 | 440.8 | 923.6 | 1213.9 | 1137.0 | 391.8 |
| 82.5° | 98.0 | 105.0 | 129.4 | 230.9 | 290.4 | 230.9 | 153.9 | 223.9 | 227.4 | 223.9 | 98.0 |
| 85° | 17.5 | 17.5 | 91.0 | 160.9 | 153.9 | 66.5 | 91.0 | 73.5 | 66.5 | 70.0 | 21.0 |
| 87.5° | 0.0 | 0.0 | 35.0 | 49.0 | 70.0 | 24.5 | 35.0 | 17.5 | 17.5 | 17.5 | 10.5 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 | 2812.7 |
| 2.5° | 2837.2 | 2718.3 | 2473.4 | 2260.0 | 2046.6 | 1889.1 | 1770.2 | 1647.8 | 1605.8 | 1553.3 | 1525.3 |
| 5° | 2886.2 | 2651.8 | 2165.5 | 1777.2 | 1448.3 | 1196.5 | 1035.5 | 937.6 | 874.6 | 829.1 | 818.6 |
| 7.5° | 2959.7 | 2599.3 | 1917.1 | 1392.4 | 1032.0 | 780.1 | 647.2 | 580.7 | 545.8 | 524.8 | 517.8 |
| 10° | 3047.1 | 2553.8 | 1672.2 | 1084.5 | 727.7 | 549.3 | 475.8 | 447.8 | 433.8 | 426.8 | 423.3 |
| 12.5° | 3169.6 | 2536.4 | 1465.8 | 836.1 | 549.3 | 451.3 | 412.8 | 395.3 | 384.8 | 374.3 | 370.8 |
| 15° | 3330.5 | 2543.3 | 1276.9 | 647.2 | 454.8 | 402.3 | 370.8 | 353.3 | 339.3 | 328.9 | 328.9 |
| 17.5° | 3498.4 | 2553.8 | 1091.5 | 524.8 | 412.8 | 367.3 | 332.3 | 307.9 | 297.4 | 286.9 | 283.4 |
| 20° | 3655.8 | 2550.3 | 913.1 | 447.8 | 374.3 | 328.9 | 293.9 | 269.4 | 251.9 | 241.4 | 241.4 |
| 22.5° | 3806.3 | 2529.4 | 745.2 | 402.3 | 342.8 | 290.4 | 251.9 | 227.4 | 213.4 | 202.9 | 202.9 |
| 25° | 3967.2 | 2487.4 | 608.7 | 367.3 | 304.4 | 255.4 | 216.9 | 192.4 | 181.9 | 171.4 | 171.4 |
| 27.5° | 4093.1 | 2417.4 | 496.8 | 335.8 | 269.4 | 220.4 | 185.4 | 164.4 | 153.9 | 146.9 | 146.9 |
| 30° | 4229.6 | 2316.0 | 412.8 | 300.9 | 234.4 | 188.9 | 157.4 | 139.9 | 129.4 | 125.9 | 125.9 |
| 32.5° | 4380.0 | 2204.0 | 353.3 | 265.9 | 199.4 | 160.9 | 132.9 | 122.4 | 111.9 | 108.5 | 108.5 |
| 35° | 4554.9 | 2106.0 | 318.4 | 230.9 | 174.9 | 136.4 | 115.4 | 105.0 | 98.0 | 98.0 | 98.0 |
| 37.5° | 4754.3 | 2004.6 | 286.9 | 202.9 | 150.4 | 115.4 | 98.0 | 94.5 | 91.0 | 87.5 | 87.5 |
| 40° | 4971.2 | 1896.1 | 258.9 | 178.4 | 129.4 | 98.0 | 84.0 | 84.0 | 80.5 | 80.5 | 80.5 |
| 42.5° | 5216.1 | 1801.7 | 234.4 | 157.4 | 111.9 | 84.0 | 73.5 | 73.5 | 70.0 | 70.0 | 70.0 |
| 45° | 5482.0 | 1714.2 | 213.4 | 139.9 | 98.0 | 73.5 | 66.5 | 63.0 | 59.5 | 59.5 | 59.5 |
| 47.5° | 5796.9 | 1665.2 | 195.9 | 122.4 | 84.0 | 63.0 | 56.0 | 52.5 | 49.0 | 45.5 | 45.5 |
| 50° | 6199.2 | 1686.2 | 178.4 | 101.5 | 73.5 | 52.5 | 45.5 | 42.0 | 38.5 | 35.0 | 35.0 |
| 52.5° | 6517.5 | 1675.7 | 153.9 | 87.5 | 59.5 | 42.0 | 35.0 | 31.5 | 28.0 | 24.5 | 24.5 |
| 55° | 6748.4 | 1633.8 | 132.9 | 73.5 | 45.5 | 35.0 | 28.0 | 21.0 | 17.5 | 17.5 | 17.5 |
| 57.5° | 6975.8 | 1591.8 | 111.9 | 59.5 | 35.0 | 24.5 | 17.5 | 14.0 | 14.0 | 14.0 | 14.0 |
| 60° | 7329.2 | 1532.3 | 98.0 | 49.0 | 28.0 | 17.5 | 10.5 | 10.5 | 7.0 | 7.0 | 7.0 |
| 62.5° | 7759.5 | 1458.8 | 80.5 | 42.0 | 21.0 | 14.0 | 7.0 | 7.0 | 0.0 | 0.0 | 0.0 |
| 65° | 8231.8 | 1329.4 | 66.5 | 31.5 | 17.5 | 10.5 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 8123.3 | 1067.0 | 56.0 | 21.0 | 14.0 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 7185.7 | 720.7 | 45.5 | 17.5 | 10.5 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 5628.9 | 426.8 | 31.5 | 14.0 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 3603.4 | 213.4 | 21.0 | 10.5 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 1207.0 | 105.0 | 14.0 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 171.4 | 35.0 | 7.0 | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 38.5 | 14.0 | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 14.0 | 7.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 7.0 | 3.5 | 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)