

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: P348714

Luminaire Tested: **ARCH-N-PA1-60-740-U-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348714  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-60-740-U-5WQ  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7824 lumens  
Efficiency: N/A  
Efficacy: 126.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G2

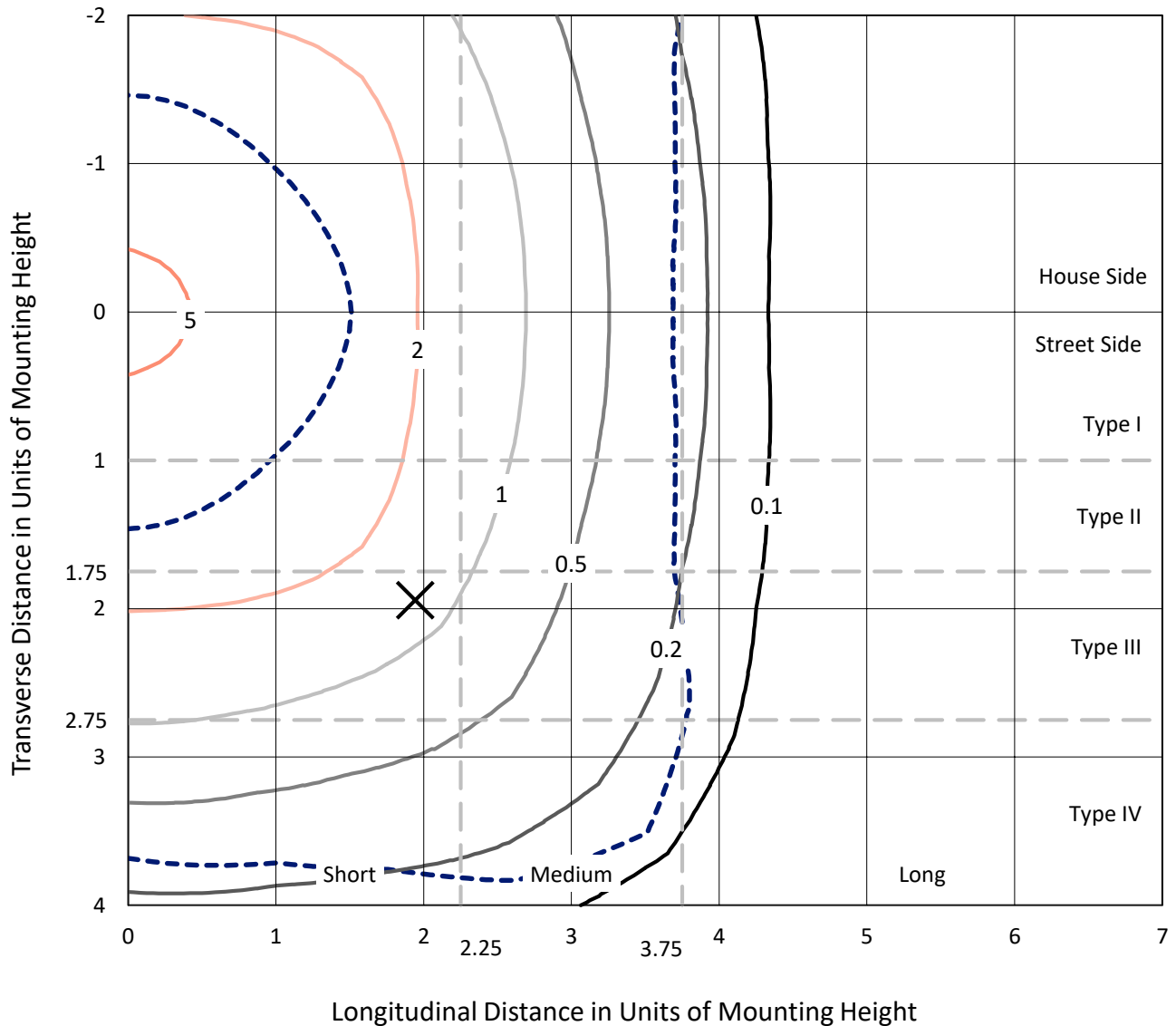
Input Watts (W): 62  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

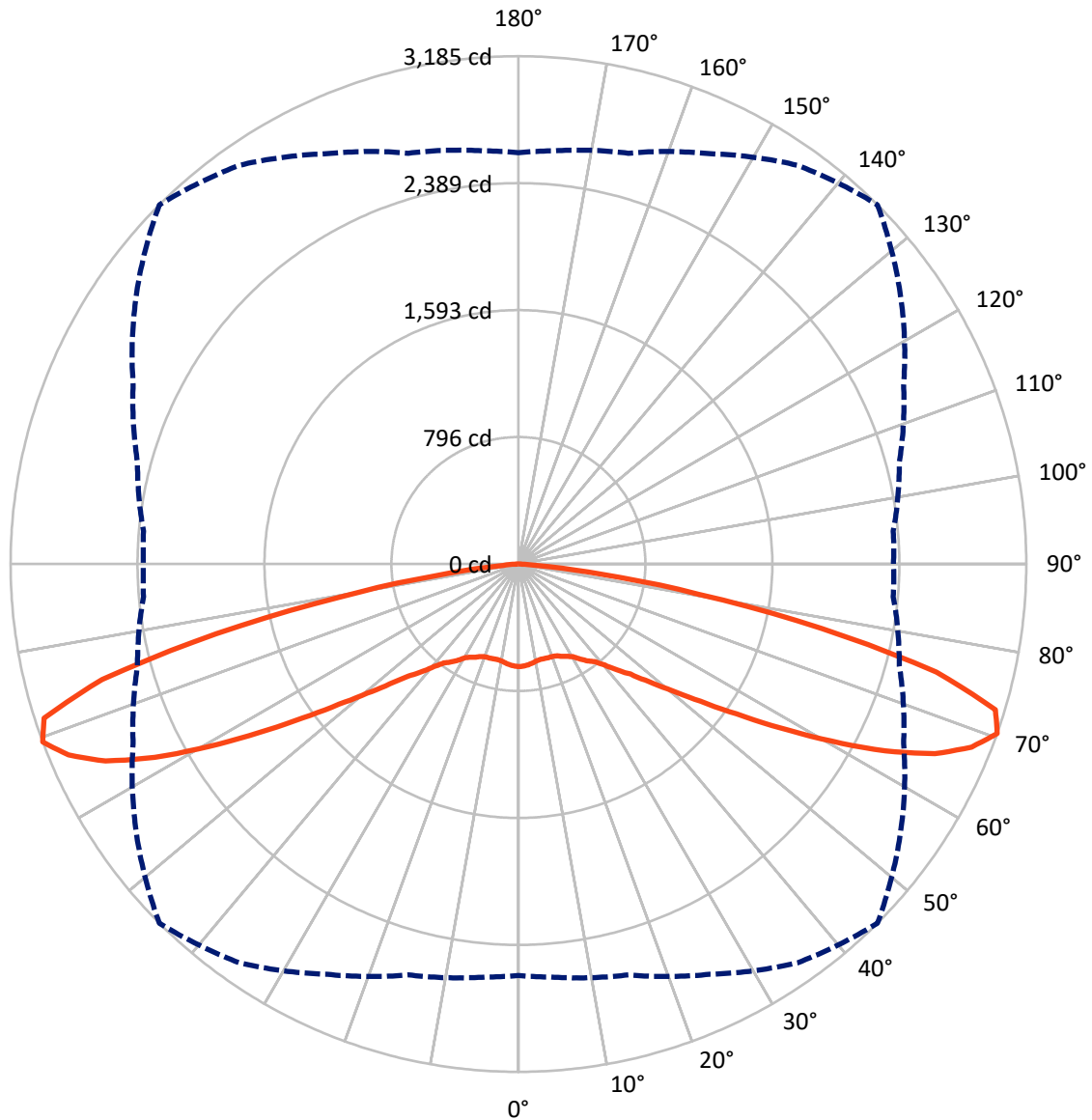


Based on 10 foot mounting height. Maximum calculated value = 6.4 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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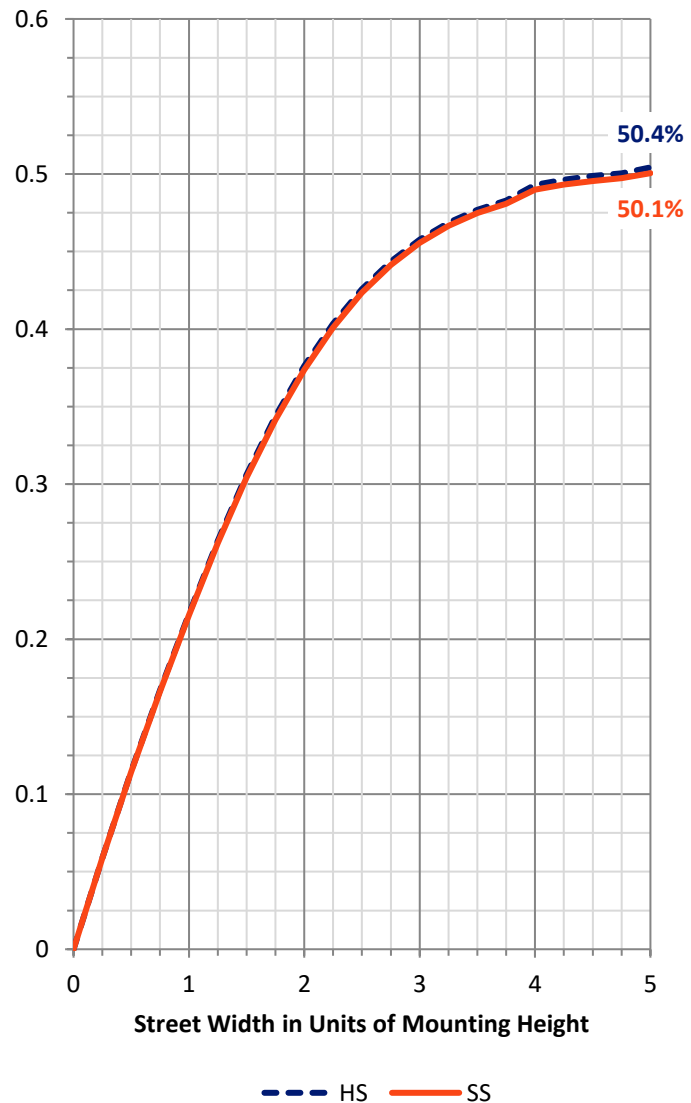
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 3912.0   | 0.0    | 3912.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 3912.0   | 0.0    | 3912.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 7824.0   | 0.0    | 7824.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 60.1   | 0.8       |
| 10°-20°   | 175.6  | 2.2       |
| 20°-30°   | 299.3  | 3.8       |
| 30°-40°   | 467.7  | 6.0       |
| 40°-50°   | 792.6  | 10.1      |
| 50°-60°   | 1445.4 | 18.5      |
| 60°-70°   | 2488.3 | 31.8      |
| 70°-80°   | 1950.4 | 24.9      |
| 80°-90°   | 144.6  | 1.8       |
| 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°    | 7824.0 | 100.0     |
| 0°-180°   | 7824.0 | 100.0     |



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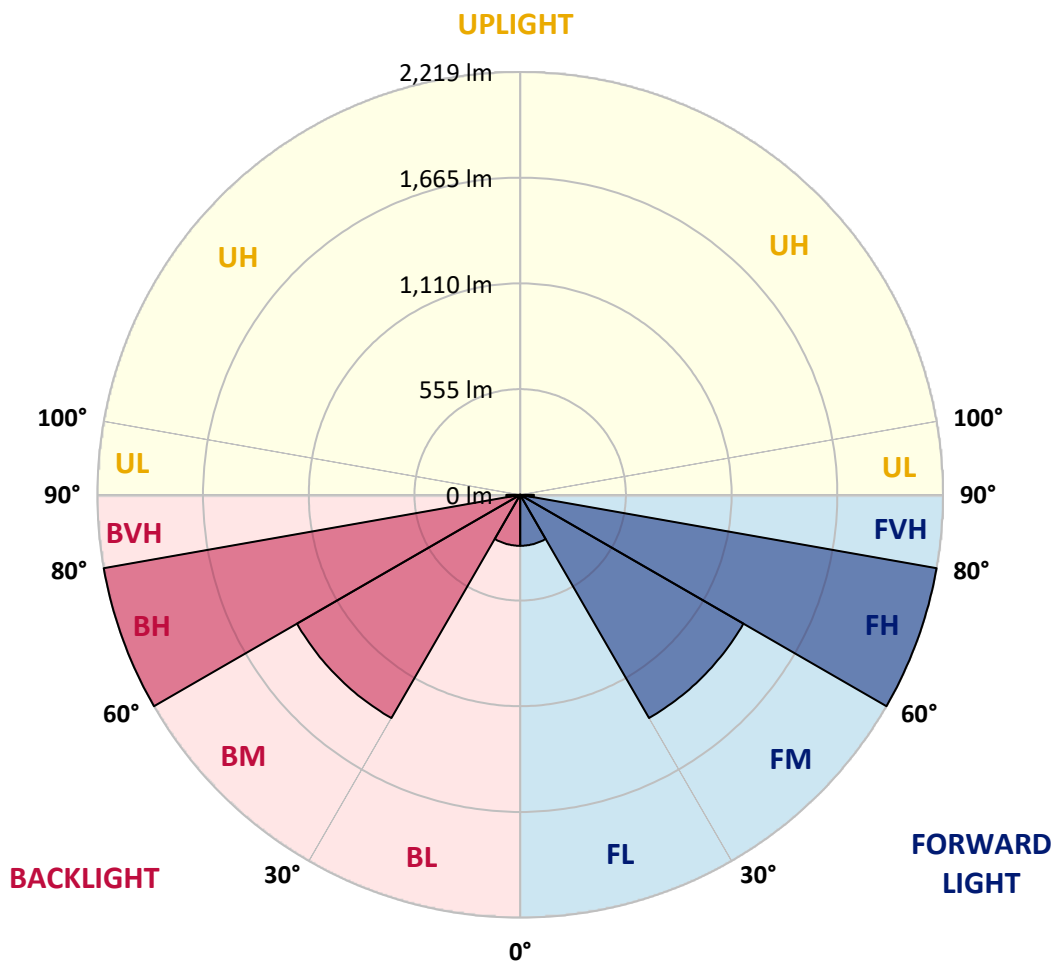
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 267.5  | 3.4       |                         |      |         |
| FM   | (30°-60°)   | 1352.8 | 17.3      |                         |      |         |
| FH   | (60°-80°)   | 2219.4 | 28.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 72.3   | 0.9       |                         |      | G1/100  |
| BL   | (0°-30°)    | 267.5  | 3.4       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1352.8 | 17.3      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 2219.4 | 28.4      | B3/2500                 |      | G2/5000 |
| BVH  | (80°-90°)   | 72.3   | 0.9       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 643.9  | 643.9  | 643.9  | 643.9  | 643.9  | 643.9  | 643.9  | 643.9  | 643.9  | 643.9  | 643.9  |
| 2.5°  | 641.1  | 641.8  | 641.1  | 641.6  | 640.3  | 640.8  | 640.8  | 640.8  | 640.6  | 640.8  | 640.3  |
| 5°    | 635.4  | 635.9  | 634.9  | 635.4  | 634.6  | 635.4  | 635.6  | 635.4  | 634.9  | 635.1  | 634.1  |
| 7.5°  | 626.8  | 627.4  | 626.6  | 627.4  | 626.3  | 627.6  | 627.4  | 626.6  | 625.8  | 625.8  | 624.8  |
| 10°   | 622.2  | 622.4  | 620.4  | 619.6  | 617.3  | 617.8  | 618.6  | 619.3  | 620.1  | 621.7  | 621.4  |
| 12.5° | 622.4  | 622.4  | 619.3  | 616.0  | 612.6  | 613.4  | 614.7  | 617.5  | 620.6  | 623.5  | 623.7  |
| 15°   | 625.0  | 624.8  | 620.1  | 614.7  | 612.3  | 614.7  | 615.4  | 617.3  | 622.2  | 627.1  | 627.4  |
| 17.5° | 626.8  | 626.8  | 619.6  | 613.4  | 613.1  | 616.7  | 616.5  | 617.3  | 622.7  | 629.9  | 630.2  |
| 20°   | 630.2  | 630.2  | 620.9  | 614.2  | 614.2  | 618.0  | 618.3  | 619.6  | 625.0  | 633.0  | 634.3  |
| 22.5° | 637.7  | 638.0  | 628.1  | 622.7  | 623.2  | 625.5  | 626.3  | 628.4  | 633.3  | 642.1  | 643.7  |
| 25°   | 648.3  | 648.8  | 638.7  | 635.6  | 637.4  | 641.8  | 641.3  | 642.9  | 648.3  | 656.9  | 658.4  |
| 27.5° | 663.1  | 661.8  | 652.5  | 651.2  | 653.0  | 656.1  | 655.8  | 656.1  | 660.5  | 668.2  | 670.1  |
| 30°   | 682.2  | 681.7  | 675.0  | 675.7  | 675.0  | 673.9  | 674.2  | 676.3  | 678.6  | 684.8  | 686.6  |
| 32.5° | 700.9  | 701.4  | 697.2  | 701.1  | 706.8  | 710.7  | 704.7  | 699.0  | 696.5  | 699.8  | 701.4  |
| 35°   | 734.5  | 735.8  | 729.3  | 726.7  | 734.5  | 745.9  | 729.1  | 719.7  | 724.9  | 729.3  | 730.6  |
| 37.5° | 791.7  | 792.5  | 781.6  | 771.3  | 765.6  | 776.4  | 759.6  | 760.4  | 778.5  | 786.8  | 786.5  |
| 40°   | 856.9  | 857.2  | 849.9  | 840.9  | 831.0  | 833.6  | 826.9  | 829.0  | 840.9  | 848.4  | 850.4  |
| 42.5° | 934.6  | 933.8  | 922.4  | 909.5  | 906.6  | 909.2  | 897.8  | 896.3  | 910.0  | 923.4  | 923.7  |
| 45°   | 1035.2 | 1033.4 | 1018.7 | 1004.4 | 990.7  | 985.0  | 982.2  | 989.7  | 1008.6 | 1021.0 | 1021.3 |
| 47.5° | 1143.7 | 1138.8 | 1131.0 | 1119.6 | 1107.7 | 1102.0 | 1097.3 | 1101.0 | 1114.7 | 1119.6 | 1120.1 |
| 50°   | 1255.2 | 1256.3 | 1257.8 | 1253.4 | 1249.0 | 1247.2 | 1235.0 | 1228.0 | 1232.2 | 1223.1 | 1221.8 |
| 52.5° | 1387.5 | 1389.5 | 1404.6 | 1417.2 | 1424.7 | 1428.6 | 1405.6 | 1381.5 | 1368.1 | 1350.5 | 1345.3 |
| 55°   | 1543.5 | 1546.9 | 1568.9 | 1604.1 | 1640.3 | 1659.5 | 1617.8 | 1572.8 | 1531.1 | 1498.2 | 1487.6 |
| 57.5° | 1717.5 | 1723.4 | 1753.7 | 1821.2 | 1895.5 | 1940.8 | 1870.4 | 1788.6 | 1708.1 | 1660.8 | 1652.5 |
| 60°   | 1921.4 | 1927.1 | 1969.0 | 2065.8 | 2186.2 | 2254.2 | 2147.6 | 2013.8 | 1913.6 | 1868.3 | 1853.1 |
| 62.5° | 2164.2 | 2164.7 | 2216.2 | 2329.3 | 2488.2 | 2582.9 | 2438.5 | 2259.7 | 2156.4 | 2101.8 | 2087.0 |
| 65°   | 2425.3 | 2426.6 | 2479.9 | 2602.1 | 2766.4 | 2869.4 | 2706.4 | 2520.0 | 2393.7 | 2313.2 | 2301.8 |
| 67.5° | 2609.8 | 2615.3 | 2671.4 | 2818.4 | 2972.2 | 3065.1 | 2896.3 | 2685.7 | 2539.7 | 2443.7 | 2434.1 |
| 70°   | 2580.3 | 2601.5 | 2667.5 | 2839.1 | 3052.9 | 3185.4 | 2927.1 | 2666.0 | 2473.4 | 2360.1 | 2352.1 |
| 72.5° | 2250.3 | 2291.0 | 2379.0 | 2604.1 | 2946.0 | 3128.5 | 2759.2 | 2387.8 | 2169.9 | 2073.3 | 2058.8 |
| 75°   | 1532.4 | 1598.4 | 1731.2 | 2056.0 | 2516.9 | 2708.7 | 2322.8 | 1903.8 | 1698.8 | 1565.3 | 1555.4 |
| 77.5° | 683.3  | 698.3  | 866.5  | 1240.5 | 1736.9 | 1945.2 | 1687.7 | 1245.4 | 934.8  | 745.6  | 705.8  |
| 80°   | 190.5  | 192.8  | 257.3  | 462.0  | 869.3  | 1142.9 | 933.3  | 485.3  | 272.8  | 192.3  | 181.2  |
| 82.5° | 60.6   | 65.7   | 80.2   | 119.8  | 292.2  | 521.5  | 300.0  | 129.4  | 92.1   | 73.5   | 66.3   |
| 85°   | 29.5   | 29.2   | 40.6   | 48.7   | 74.5   | 115.4  | 79.5   | 60.0   | 52.5   | 34.9   | 31.6   |
| 87.5° | 12.4   | 12.7   | 18.9   | 17.1   | 21.7   | 18.6   | 25.6   | 26.9   | 28.2   | 15.5   | 13.5   |
| 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)