

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: P398156

Luminaire Tested: **ARCH-S-PA1-90-827-U-5WQ**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398156
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-827-U-5WQ
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8761 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B3 - U0 - G2

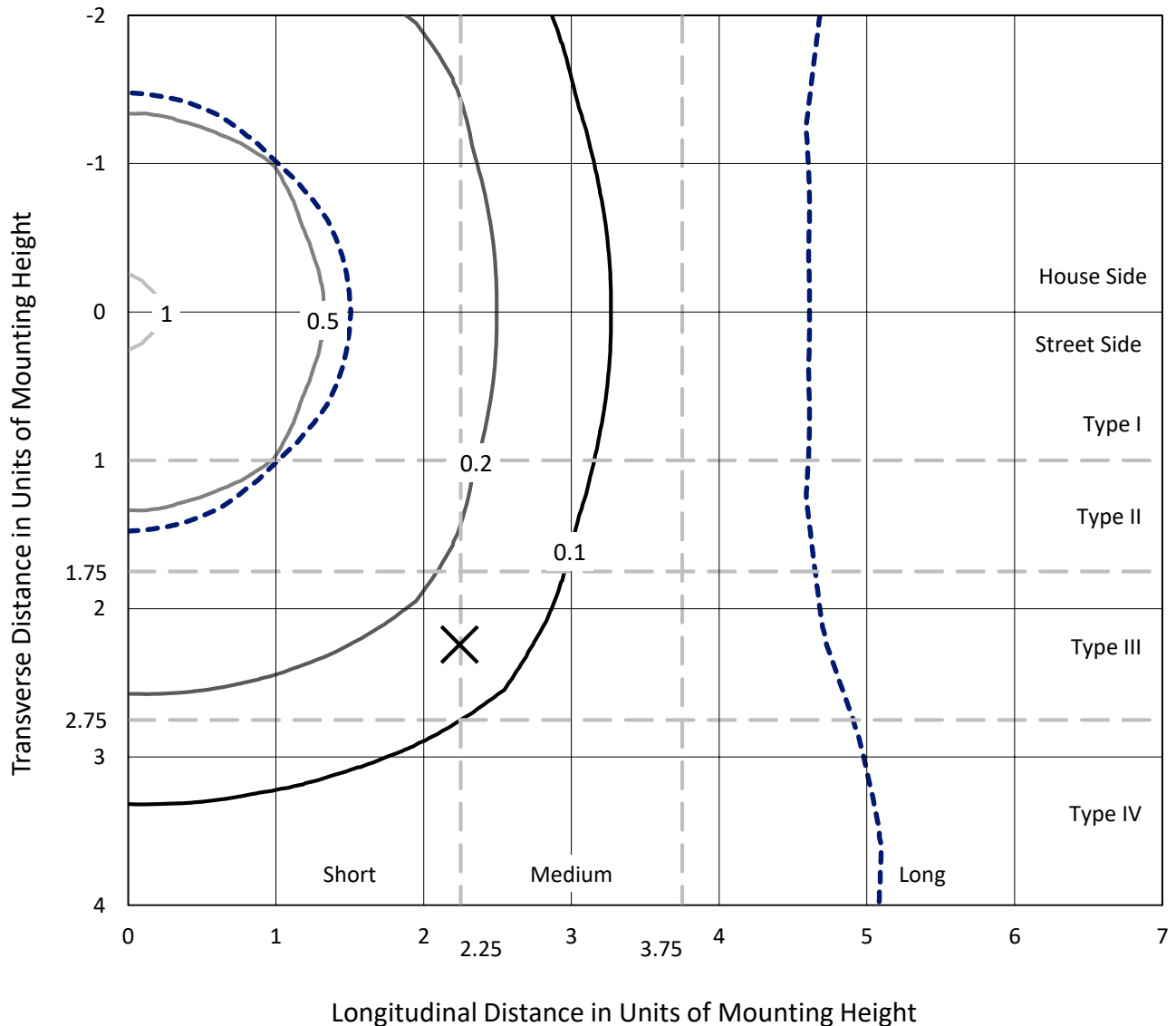
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

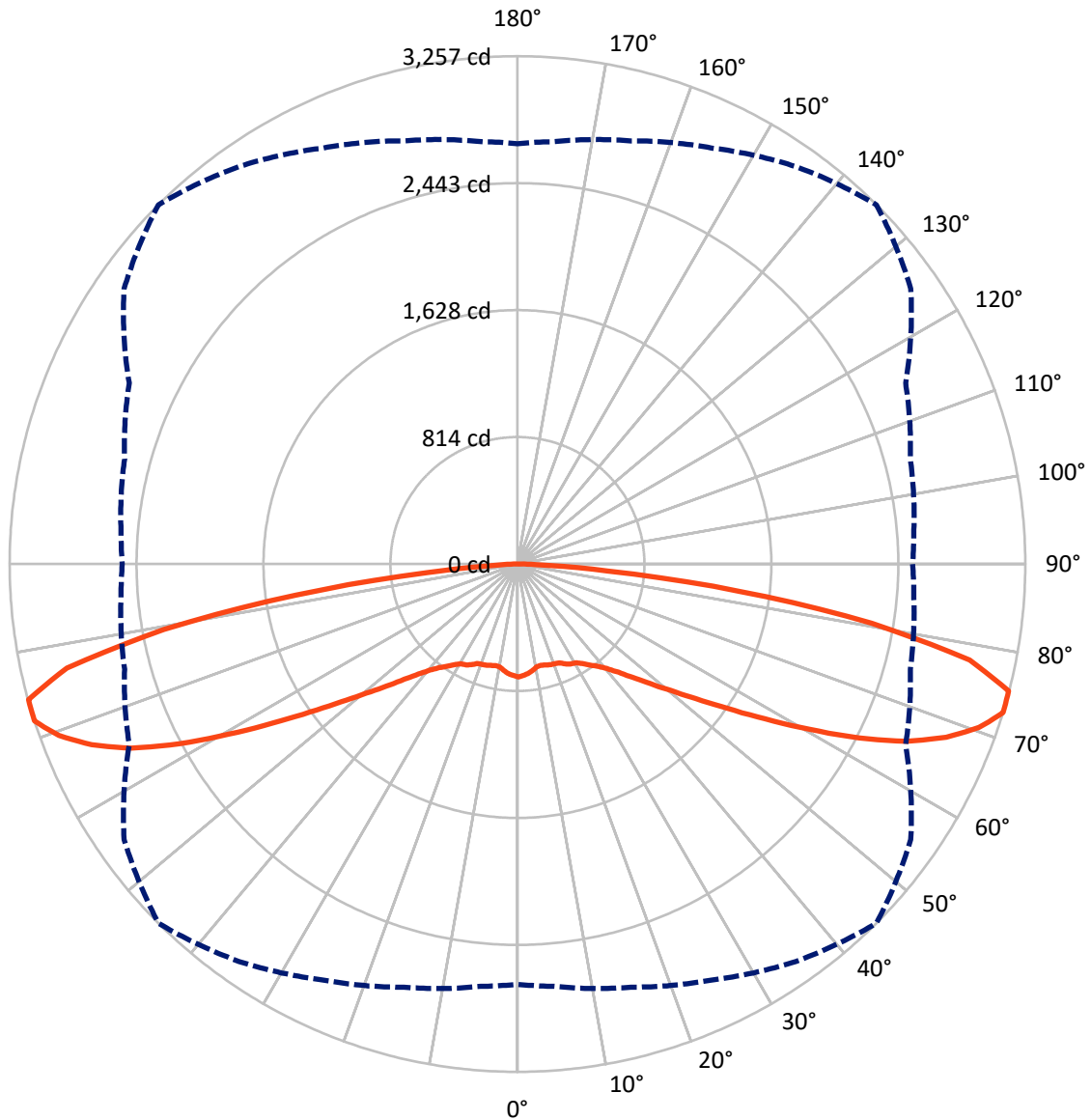
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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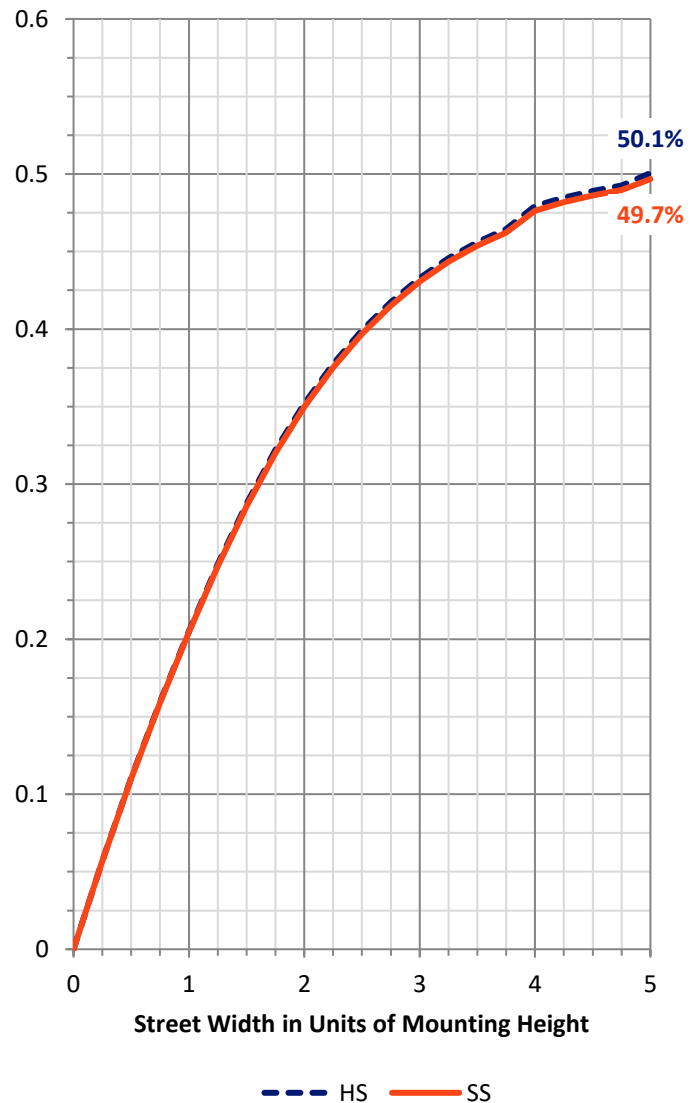
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 4380.5 | 0.0 | 4380.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 4380.5 | 0.0 | 4380.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 8761.0 | 0.0 | 8761.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 66.5 | 0.8 |
| 10°-20° | 193.0 | 2.2 |
| 20°-30° | 327.9 | 3.7 |
| 30°-40° | 500.1 | 5.7 |
| 40°-50° | 823.5 | 9.4 |
| 50°-60° | 1438.1 | 16.4 |
| 60°-70° | 2410.9 | 27.5 |
| 70°-80° | 2580.2 | 29.5 |
| 80°-90° | 420.8 | 4.8 |
| 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° | 8761.0 | 100.0 |
| 0°-180° | 8761.0 | 100.0 |



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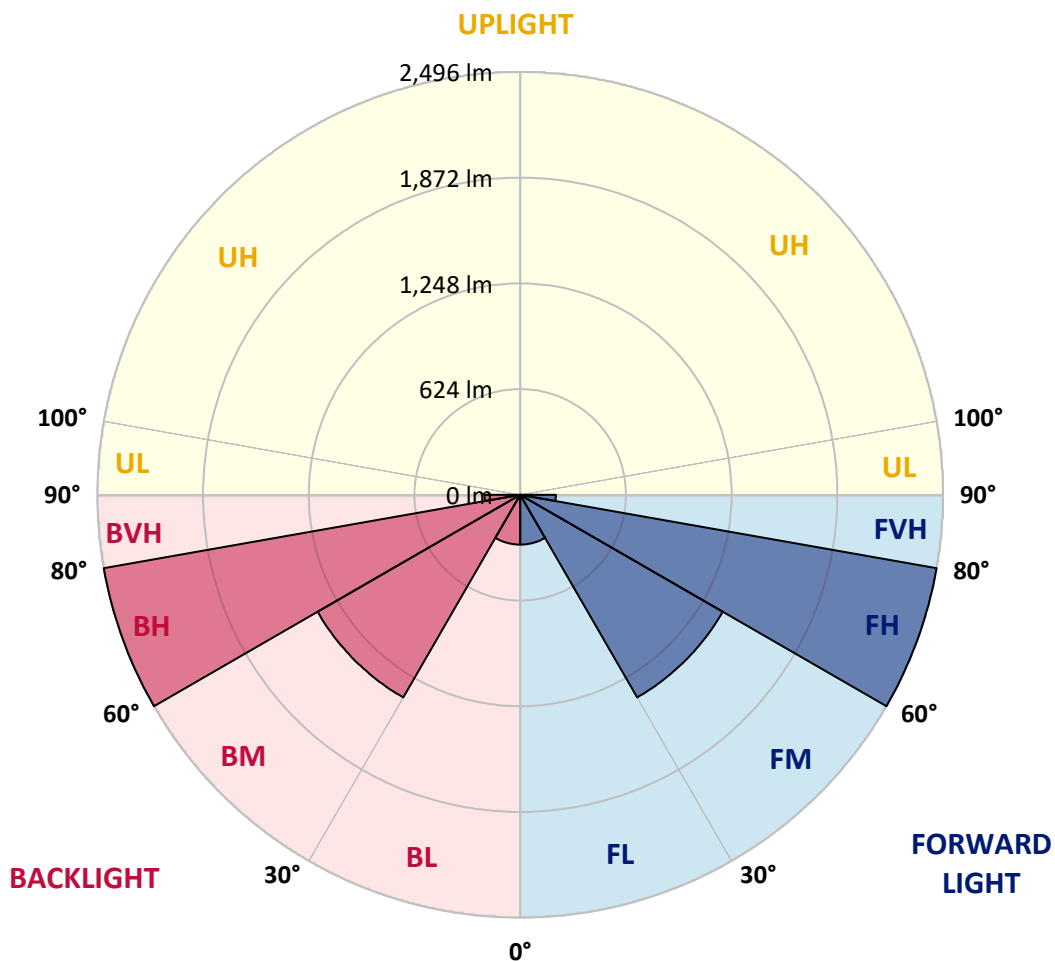
CATALOG NUMBER: ARCH-S-PA1-90-827-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 293.7 | 3.4 | | | |
| FM (30°-60°) | 1380.8 | 15.8 | | | |
| FH (60°-80°) | 2495.6 | 28.5 | | | G2/5000 |
| FVH (80°-90°) | 210.4 | 2.4 | | | G2/225 |
| BL (0°-30°) | 293.7 | 3.4 | B1/500 | | |
| BM (30°-60°) | 1380.8 | 15.8 | B2/2500 | | |
| BH (60°-80°) | 2495.6 | 28.5 | B3/2500 | | G2/5000 |
| BVH (80°-90°) | 210.4 | 2.4 | | | G2/225 |
| 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° | 725.0 | 725.0 | 725.0 | 725.0 | 725.0 | 725.0 | 725.0 | 725.0 | 725.0 | 725.0 | 725.0 |
| 2.5° | 720.5 | 720.5 | 720.5 | 719.4 | 717.2 | 716.0 | 713.8 | 714.9 | 714.9 | 714.9 | 714.9 |
| 5° | 711.6 | 711.6 | 710.4 | 709.3 | 707.1 | 706.0 | 703.7 | 706.0 | 706.0 | 706.0 | 706.0 |
| 7.5° | 694.8 | 695.9 | 695.9 | 694.8 | 691.4 | 690.3 | 686.9 | 688.1 | 688.1 | 689.2 | 688.1 |
| 10° | 685.8 | 685.8 | 684.7 | 679.1 | 673.5 | 671.3 | 670.2 | 673.5 | 676.9 | 680.2 | 680.2 |
| 12.5° | 685.8 | 685.8 | 683.6 | 674.6 | 666.8 | 666.8 | 666.8 | 671.3 | 678.0 | 684.7 | 685.8 |
| 15° | 689.2 | 689.2 | 684.7 | 674.6 | 670.2 | 671.3 | 671.3 | 675.8 | 683.6 | 692.5 | 693.7 |
| 17.5° | 691.4 | 691.4 | 685.8 | 675.8 | 675.8 | 679.1 | 676.9 | 680.2 | 688.1 | 698.1 | 699.3 |
| 20° | 694.8 | 694.8 | 686.9 | 679.1 | 679.1 | 682.5 | 682.5 | 685.8 | 692.5 | 702.6 | 703.7 |
| 22.5° | 701.5 | 700.4 | 692.5 | 685.8 | 685.8 | 688.1 | 690.3 | 694.8 | 700.4 | 709.3 | 711.6 |
| 25° | 709.3 | 709.3 | 702.6 | 701.5 | 703.7 | 709.3 | 708.2 | 707.1 | 709.3 | 717.2 | 720.5 |
| 27.5° | 713.8 | 713.8 | 709.3 | 712.7 | 721.6 | 726.1 | 720.5 | 716.0 | 716.0 | 723.9 | 725.0 |
| 30° | 728.3 | 727.2 | 722.7 | 725.0 | 732.8 | 735.1 | 731.7 | 726.1 | 729.5 | 738.4 | 739.5 |
| 32.5° | 753.0 | 753.0 | 746.2 | 746.2 | 751.8 | 760.8 | 749.6 | 746.2 | 750.7 | 760.8 | 761.9 |
| 35° | 791.0 | 791.0 | 782.0 | 777.6 | 782.0 | 794.3 | 777.6 | 776.4 | 784.3 | 795.5 | 796.6 |
| 37.5° | 839.1 | 839.1 | 833.5 | 822.3 | 823.4 | 831.3 | 816.7 | 815.6 | 830.1 | 842.5 | 842.5 |
| 40° | 899.5 | 902.9 | 897.3 | 883.9 | 879.4 | 880.5 | 869.3 | 870.4 | 887.2 | 901.8 | 901.8 |
| 42.5° | 974.5 | 976.7 | 967.8 | 957.7 | 952.1 | 948.7 | 937.6 | 939.8 | 959.9 | 979.0 | 979.0 |
| 45° | 1065.1 | 1066.2 | 1057.3 | 1045.0 | 1038.2 | 1036.0 | 1024.8 | 1030.4 | 1052.8 | 1072.9 | 1071.8 |
| 47.5° | 1166.9 | 1168.0 | 1159.1 | 1146.8 | 1142.3 | 1145.7 | 1134.5 | 1134.5 | 1154.6 | 1171.4 | 1169.1 |
| 50° | 1282.1 | 1284.4 | 1274.3 | 1268.7 | 1265.4 | 1274.3 | 1260.9 | 1248.6 | 1262.0 | 1278.8 | 1276.6 |
| 52.5° | 1409.7 | 1415.3 | 1408.6 | 1410.8 | 1423.1 | 1434.3 | 1411.9 | 1385.1 | 1391.8 | 1403.0 | 1399.6 |
| 55° | 1564.1 | 1570.8 | 1573.0 | 1580.9 | 1613.3 | 1632.3 | 1595.4 | 1550.7 | 1547.3 | 1548.4 | 1542.8 |
| 57.5° | 1737.5 | 1742.0 | 1756.5 | 1774.4 | 1841.5 | 1871.8 | 1813.6 | 1736.4 | 1711.8 | 1697.2 | 1693.9 |
| 60° | 1912.0 | 1919.9 | 1955.7 | 1992.6 | 2095.5 | 2150.3 | 2060.8 | 1931.0 | 1878.5 | 1851.6 | 1846.0 |
| 62.5° | 2087.7 | 2103.3 | 2161.5 | 2224.2 | 2374.1 | 2455.8 | 2318.2 | 2130.2 | 2054.1 | 2020.6 | 2011.6 |
| 65° | 2291.3 | 2310.3 | 2380.8 | 2460.2 | 2626.9 | 2742.2 | 2575.5 | 2336.1 | 2254.4 | 2209.6 | 2198.4 |
| 67.5° | 2529.6 | 2549.7 | 2606.8 | 2695.2 | 2852.9 | 2965.9 | 2818.3 | 2546.4 | 2440.1 | 2383.0 | 2374.1 |
| 70° | 2725.4 | 2743.3 | 2804.8 | 2894.3 | 3011.8 | 3140.5 | 2999.5 | 2714.2 | 2618.0 | 2577.7 | 2572.1 |
| 72.5° | 2695.2 | 2718.7 | 2809.3 | 2943.6 | 3111.4 | 3256.8 | 3078.9 | 2746.7 | 2607.9 | 2552.0 | 2534.1 |
| 75° | 2354.0 | 2379.7 | 2487.1 | 2729.9 | 3036.4 | 3253.5 | 2963.7 | 2530.7 | 2367.4 | 2320.4 | 2311.4 |
| 77.5° | 1558.5 | 1583.1 | 1764.3 | 2147.0 | 2651.6 | 2964.8 | 2615.8 | 2120.1 | 1857.2 | 1744.2 | 1737.5 |
| 80° | 629.9 | 661.2 | 834.6 | 1240.7 | 1879.6 | 2304.7 | 1940.0 | 1357.1 | 915.2 | 738.4 | 702.6 |
| 82.5° | 146.6 | 174.5 | 254.0 | 457.6 | 962.2 | 1435.4 | 1046.1 | 506.8 | 294.2 | 209.2 | 188.0 |
| 85° | 61.5 | 62.7 | 108.5 | 148.8 | 301.0 | 579.5 | 342.4 | 184.6 | 149.9 | 109.6 | 107.4 |
| 87.5° | 23.5 | 24.6 | 52.6 | 62.7 | 96.2 | 109.6 | 116.4 | 95.1 | 88.4 | 54.8 | 52.6 |
| 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)