

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: P573462

Luminaire Tested: **ARCH-S-PA2-80-730-U-5WQ**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573462  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-80-730-U-5WQ  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11118 lumens  
Efficiency: N/A  
Efficacy: 134.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

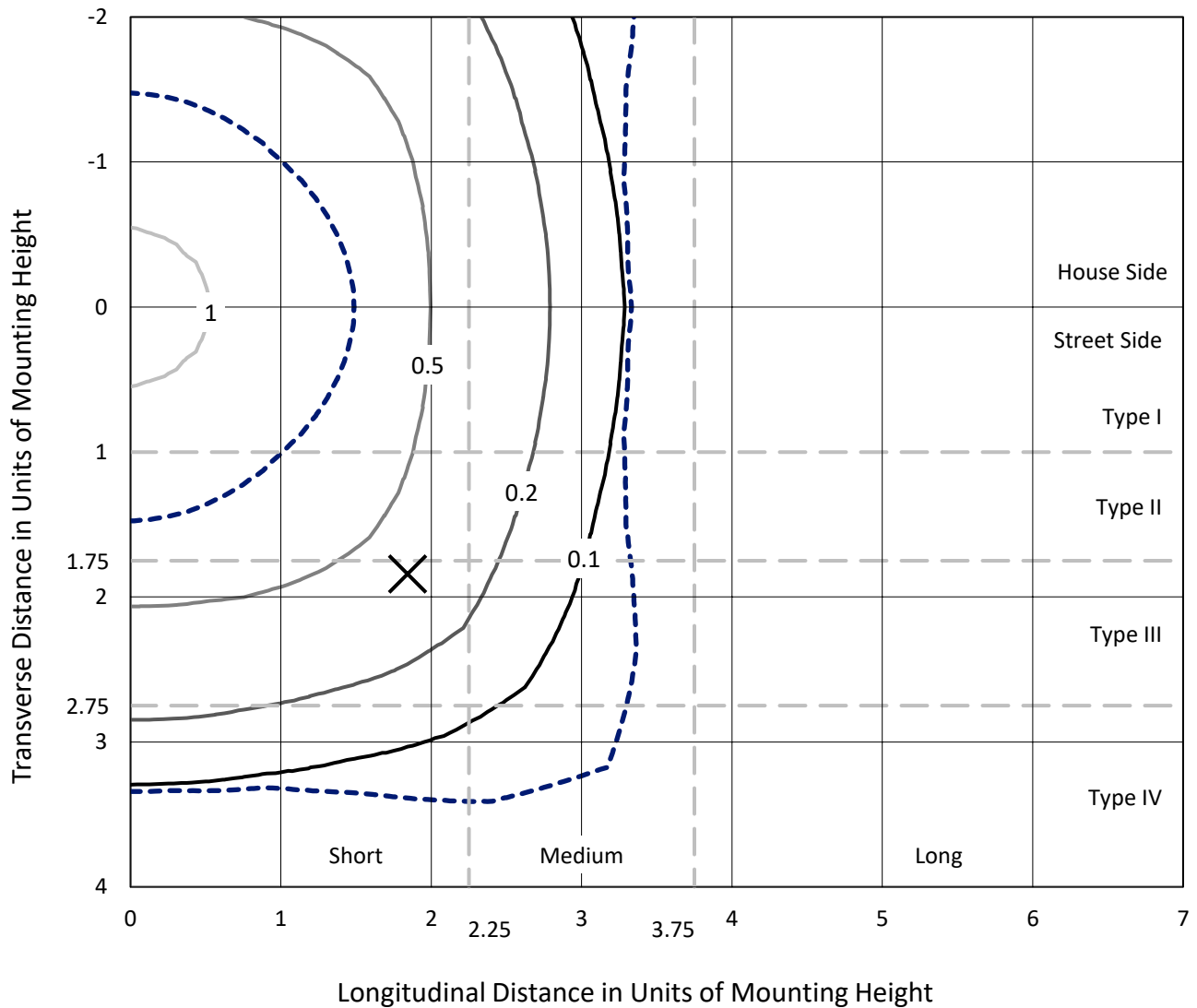
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P573462  
 CATALOG NUMBER: ARCH-S-PA2-80-730-U-5WQ

### Iso-Footcandle Lines of Horizontal Illumination

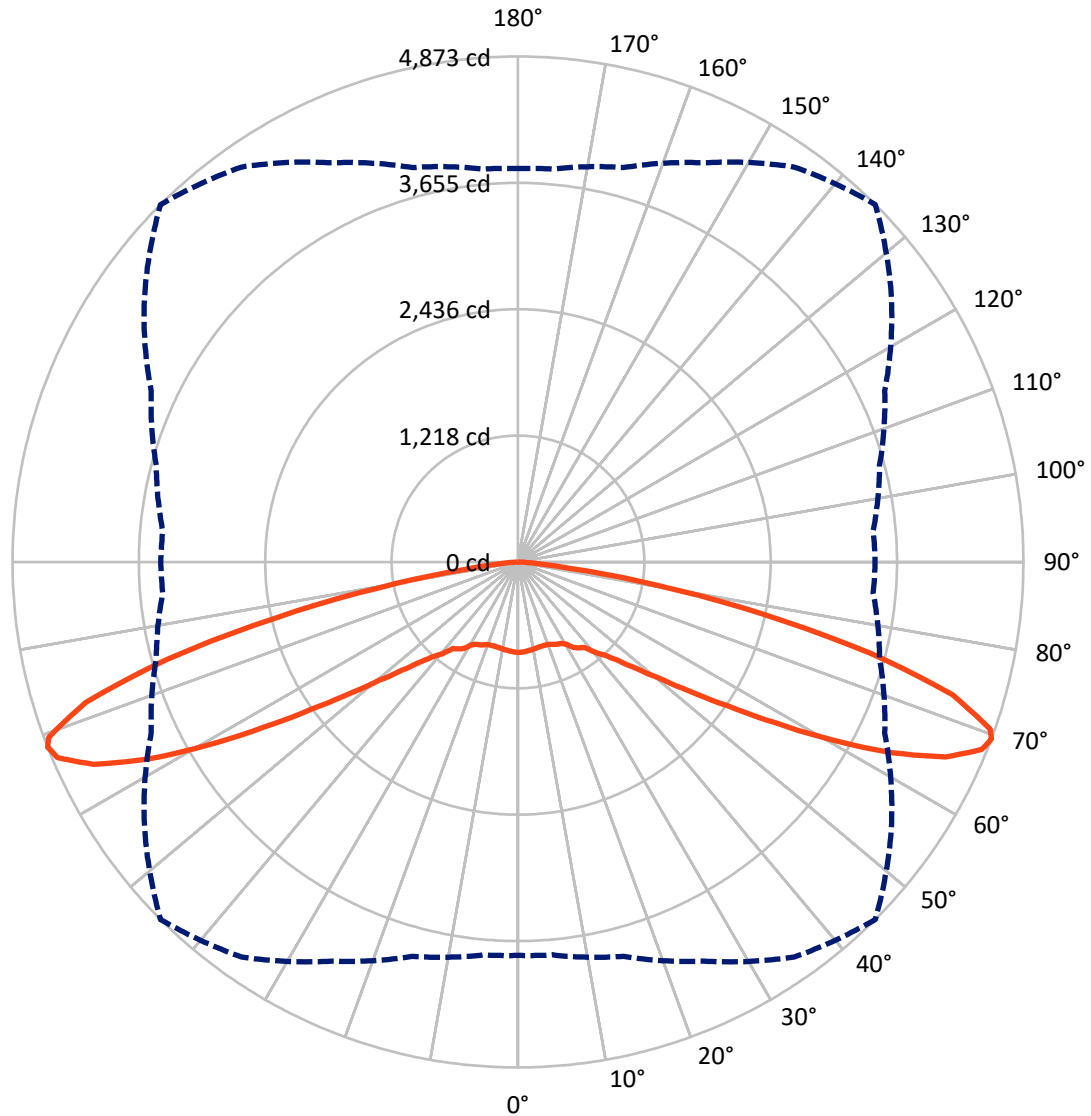
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.4 fc  
 Type V - Short - N/A

REPORT NUMBER: P573462  
CATALOG NUMBER: ARCH-S-PA2-80-730-U-5WQ

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P573462

CATALOG NUMBER: ARCH-S-PA2-80-730-U-5WQ

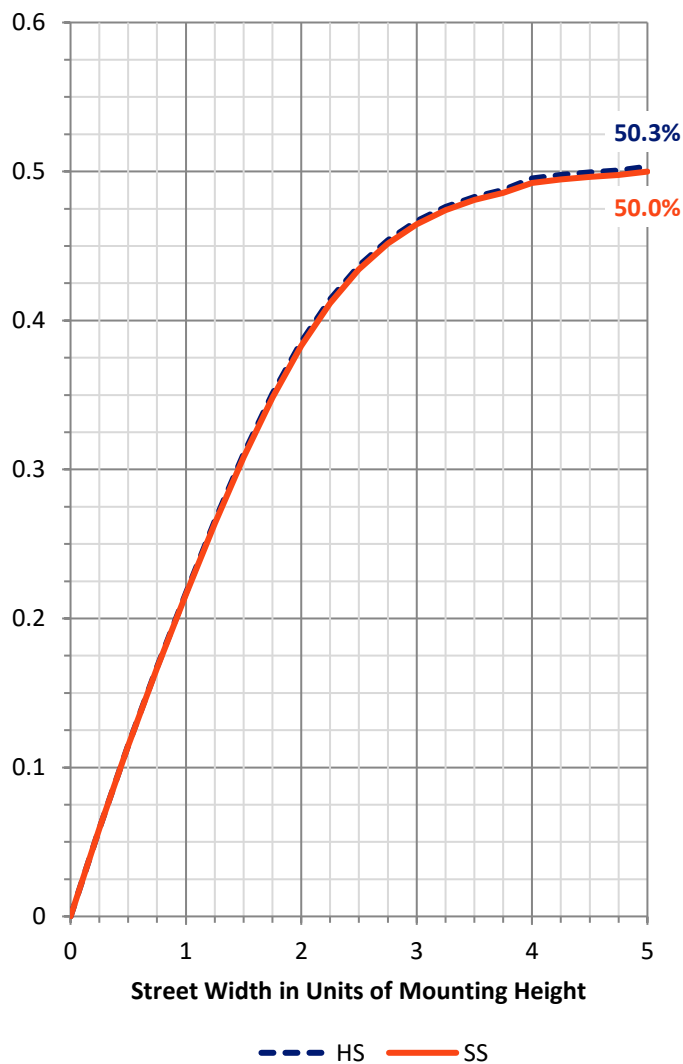
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5559.0   | 0.0    | 5559.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 5559.0   | 0.0    | 5559.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 11118.0  | 0.0    | 11118.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 82.2    | 0.7       |
| 10°-20°   | 241.7   | 2.2       |
| 20°-30°   | 409.8   | 3.7       |
| 30°-40°   | 637.1   | 5.7       |
| 40°-50°   | 1093.8  | 9.8       |
| 50°-60°   | 2176.1  | 19.6      |
| 60°-70°   | 3876.5  | 34.9      |
| 70°-80°   | 2441.4  | 22.0      |
| 80°-90°   | 159.4   | 1.4       |
| 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°    | 11118.0 | 100.0     |
| 0°-180°   | 11118.0 | 100.0     |

**Coefficient of Utilization**



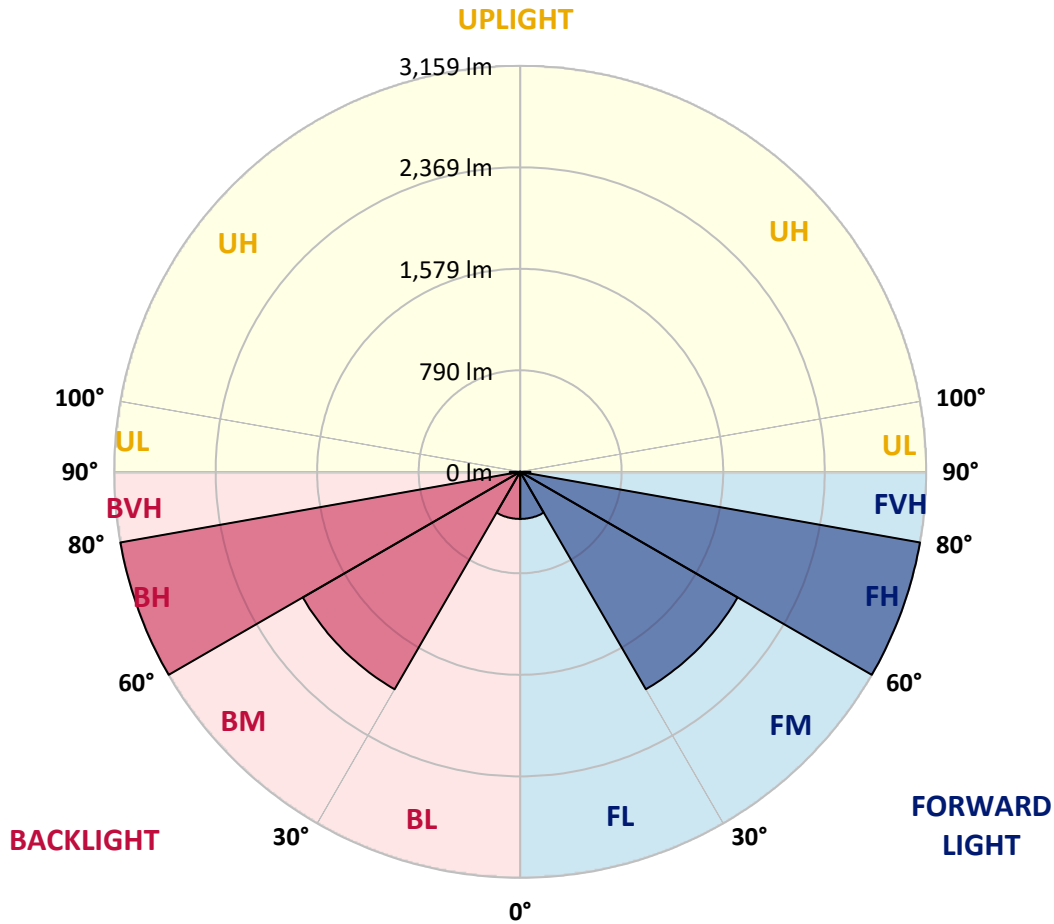
REPORT NUMBER: P573462  
 CATALOG NUMBER: ARCH-S-PA2-80-730-U-5WQ

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 366.8  | 3.3       |                         |      |         |
| FM (30°-60°)   | 1953.5 | 17.6      |                         |      |         |
| FH (60°-80°)   | 3158.9 | 28.4      |                         |      | G2/5000 |
| FVH (80°-90°)  | 79.7   | 0.7       |                         |      | G1/100  |
| BL (0°-30°)    | 366.8  | 3.3       | B1/500                  |      |         |
| BM (30°-60°)   | 1953.5 | 17.6      | B2/2500                 |      |         |
| BH (60°-80°)   | 3158.9 | 28.4      | B4/5000                 |      | G2/5000 |
| BVH (80°-90°)  | 79.7   | 0.7       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Short





REPORT NUMBER: P573462

CATALOG NUMBER: ARCH-S-PA2-80-730-U-5WQ

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 872.4  | 872.4  | 872.4  | 872.4  | 872.4  | 872.4  | 872.4  | 872.4  | 872.4  | 872.4  | 872.4  |
| 2.5°  | 878.3  | 875.4  | 875.4  | 872.4  | 869.5  | 869.5  | 869.5  | 866.6  | 869.5  | 869.5  | 869.5  |
| 5°    | 875.4  | 872.4  | 869.5  | 866.6  | 866.6  | 863.7  | 866.6  | 863.7  | 863.7  | 863.7  | 863.7  |
| 7.5°  | 866.6  | 866.6  | 860.8  | 860.8  | 857.9  | 857.9  | 854.9  | 854.9  | 854.9  | 852.0  | 852.0  |
| 10°   | 866.6  | 863.7  | 860.8  | 854.9  | 852.0  | 852.0  | 852.0  | 849.1  | 852.0  | 852.0  | 852.0  |
| 12.5° | 866.6  | 866.6  | 857.9  | 852.0  | 846.2  | 846.2  | 846.2  | 846.2  | 852.0  | 854.9  | 854.9  |
| 15°   | 872.4  | 869.5  | 860.8  | 849.1  | 843.3  | 843.3  | 843.3  | 846.2  | 852.0  | 857.9  | 857.9  |
| 17.5° | 875.4  | 869.5  | 857.9  | 846.2  | 843.3  | 843.3  | 843.3  | 846.2  | 854.9  | 860.8  | 863.7  |
| 20°   | 878.3  | 875.4  | 860.8  | 849.1  | 846.2  | 846.2  | 846.2  | 846.2  | 854.9  | 863.7  | 866.6  |
| 22.5° | 887.0  | 884.1  | 869.5  | 860.8  | 857.9  | 860.8  | 857.9  | 857.9  | 866.6  | 878.3  | 878.3  |
| 25°   | 898.7  | 892.9  | 878.3  | 872.4  | 872.4  | 878.3  | 878.3  | 872.4  | 881.2  | 890.0  | 892.9  |
| 27.5° | 919.1  | 913.3  | 898.7  | 892.9  | 890.0  | 890.0  | 890.0  | 890.0  | 895.8  | 910.4  | 910.4  |
| 30°   | 936.6  | 933.7  | 927.9  | 927.9  | 925.0  | 919.1  | 919.1  | 925.0  | 927.9  | 933.7  | 936.6  |
| 32.5° | 960.0  | 954.1  | 948.3  | 948.3  | 965.8  | 983.3  | 968.7  | 945.4  | 942.5  | 945.4  | 948.3  |
| 35°   | 1009.6 | 1003.8 | 989.2  | 980.4  | 997.9  | 1015.4 | 992.1  | 977.5  | 986.2  | 995.0  | 995.0  |
| 37.5° | 1079.6 | 1076.7 | 1065.0 | 1047.5 | 1041.7 | 1044.6 | 1035.8 | 1047.5 | 1070.9 | 1088.4 | 1091.3 |
| 40°   | 1152.6 | 1149.6 | 1138.0 | 1129.2 | 1132.1 | 1146.7 | 1140.9 | 1129.2 | 1143.8 | 1155.5 | 1155.5 |
| 42.5° | 1266.4 | 1254.7 | 1237.2 | 1213.8 | 1216.8 | 1228.4 | 1213.8 | 1225.5 | 1245.9 | 1266.4 | 1269.3 |
| 45°   | 1418.1 | 1406.4 | 1383.1 | 1362.7 | 1348.1 | 1353.9 | 1353.9 | 1374.3 | 1397.7 | 1421.0 | 1429.8 |
| 47.5° | 1581.5 | 1578.6 | 1555.2 | 1537.7 | 1523.1 | 1531.9 | 1531.9 | 1531.9 | 1569.8 | 1593.2 | 1593.2 |
| 50°   | 1782.8 | 1774.1 | 1774.1 | 1759.5 | 1753.6 | 1756.6 | 1744.9 | 1756.6 | 1774.1 | 1779.9 | 1771.2 |
| 52.5° | 2022.1 | 2013.3 | 2019.2 | 2025.0 | 2039.6 | 2060.0 | 2030.8 | 2027.9 | 2019.2 | 2010.4 | 2007.5 |
| 55°   | 2308.0 | 2316.8 | 2340.1 | 2378.1 | 2401.4 | 2442.3 | 2398.5 | 2346.0 | 2322.6 | 2299.3 | 2281.8 |
| 57.5° | 2649.4 | 2664.0 | 2699.0 | 2789.5 | 2888.7 | 2926.6 | 2850.8 | 2754.5 | 2672.8 | 2605.7 | 2620.3 |
| 60°   | 3095.9 | 3087.1 | 3145.5 | 3268.0 | 3408.1 | 3484.0 | 3364.3 | 3206.8 | 3075.4 | 3043.4 | 3052.1 |
| 62.5° | 3571.5 | 3589.0 | 3629.8 | 3793.2 | 3968.3 | 4050.0 | 3904.1 | 3670.7 | 3501.5 | 3413.9 | 3413.9 |
| 65°   | 3869.1 | 3880.8 | 3994.6 | 4225.1 | 4420.6 | 4531.5 | 4324.3 | 3985.8 | 3743.6 | 3597.7 | 3589.0 |
| 67.5° | 3912.9 | 3924.6 | 4052.9 | 4347.6 | 4668.6 | 4823.3 | 4464.4 | 4023.8 | 3740.7 | 3562.7 | 3556.9 |
| 69°   | 3793.2 | 3802.0 | 3936.2 | 4245.5 | 4648.2 | 4872.9 | 4397.2 | 3901.2 | 3609.4 | 3437.3 | 3443.1 |
| 70°   | 3621.1 | 3656.1 | 3758.2 | 4073.4 | 4540.2 | 4829.1 | 4274.7 | 3764.1 | 3460.6 | 3323.5 | 3300.1 |
| 72.5° | 2839.1 | 2862.4 | 3031.7 | 3422.7 | 4052.9 | 4382.7 | 3755.3 | 3186.3 | 2877.0 | 2734.1 | 2769.1 |
| 75°   | 1607.8 | 1601.9 | 1817.8 | 2378.1 | 3125.1 | 3510.2 | 2955.8 | 2293.5 | 1844.1 | 1671.9 | 1695.3 |
| 77.5° | 612.8  | 639.0  | 784.9  | 1219.7 | 1963.7 | 2398.5 | 1960.8 | 1225.5 | 857.9  | 668.2  | 636.1  |
| 80°   | 198.4  | 210.1  | 277.2  | 443.5  | 837.4  | 1353.9 | 916.2  | 472.7  | 297.6  | 224.7  | 210.1  |
| 82.5° | 78.8   | 87.5   | 105.0  | 148.8  | 283.0  | 510.6  | 309.3  | 172.2  | 128.4  | 105.0  | 96.3   |
| 85°   | 43.8   | 40.9   | 55.4   | 67.1   | 96.3   | 145.9  | 105.0  | 81.7   | 70.0   | 49.6   | 46.7   |
| 87.5° | 14.6   | 14.6   | 23.3   | 23.3   | 26.3   | 23.3   | 26.3   | 29.2   | 29.2   | 17.5   | 14.6   |
| 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)