

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: P572940

Luminaire Tested: **ARCH-S-PA2-130-827-U-5WQ**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572940  
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-PA2-130-827-U-5WQ  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 1295mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12295 lumens  
Efficiency: N/A  
Efficacy: 93.4 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): 131.7  
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

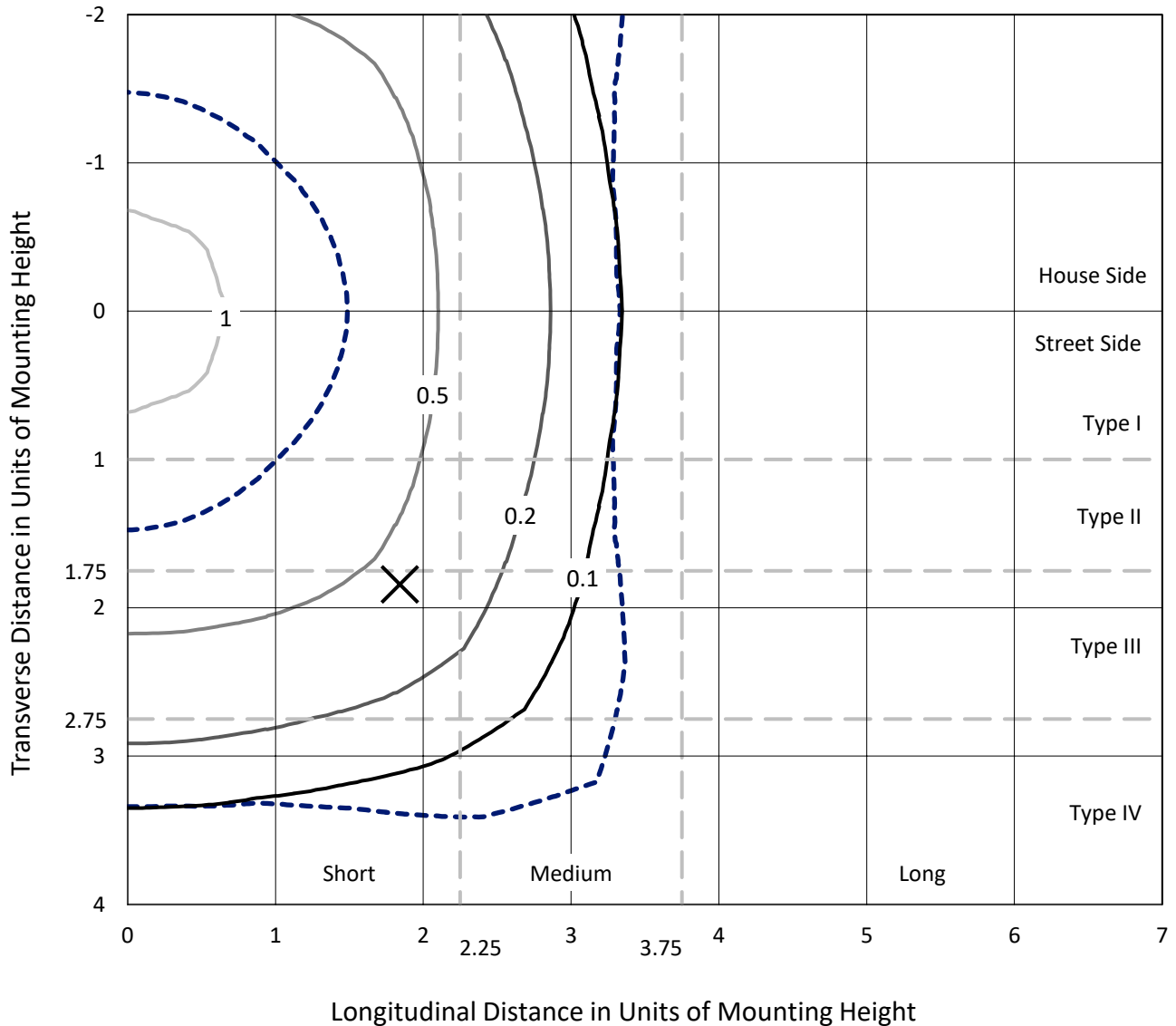




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### Iso-Footcandle Lines of Horizontal Illumination

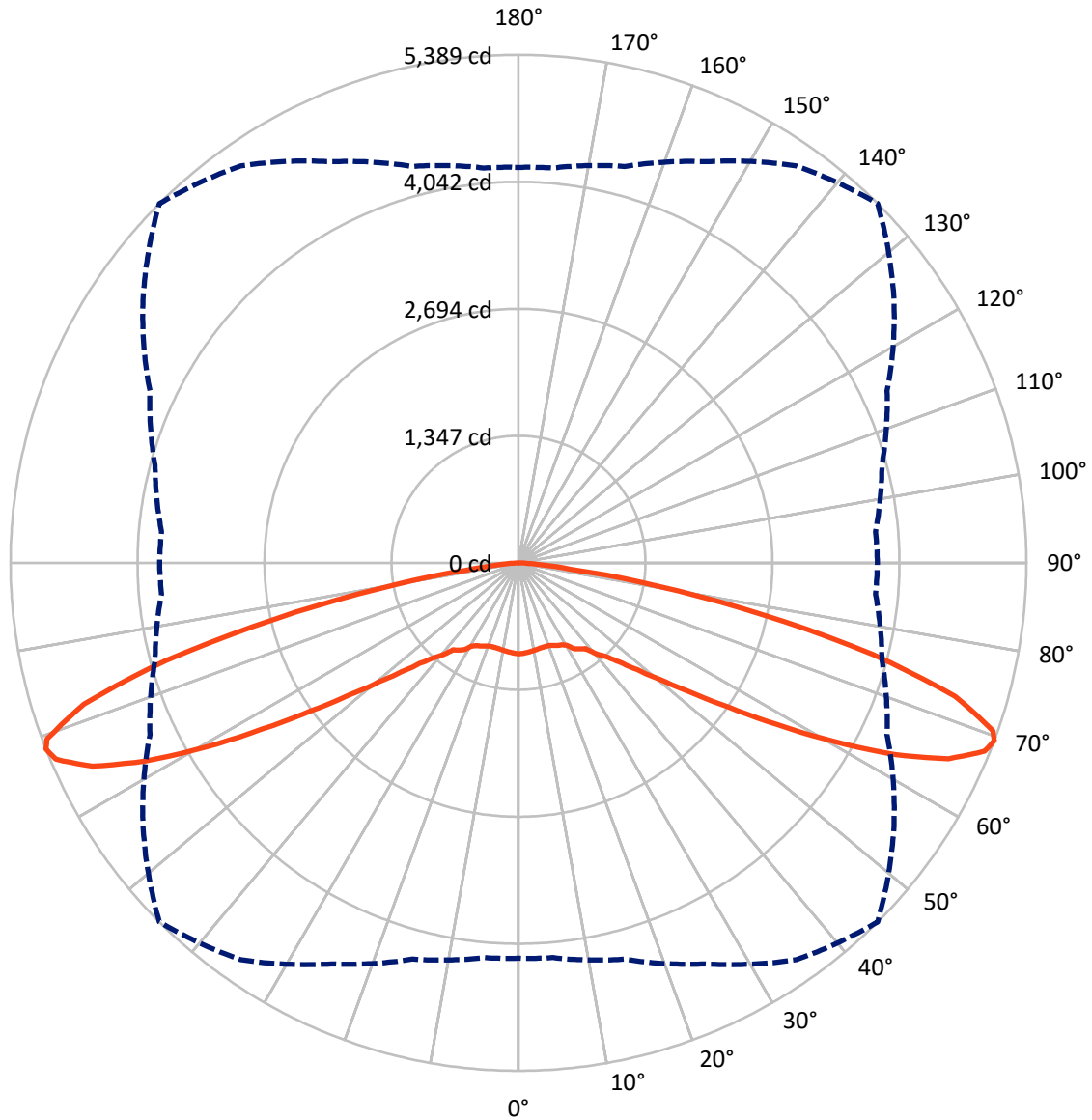
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



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

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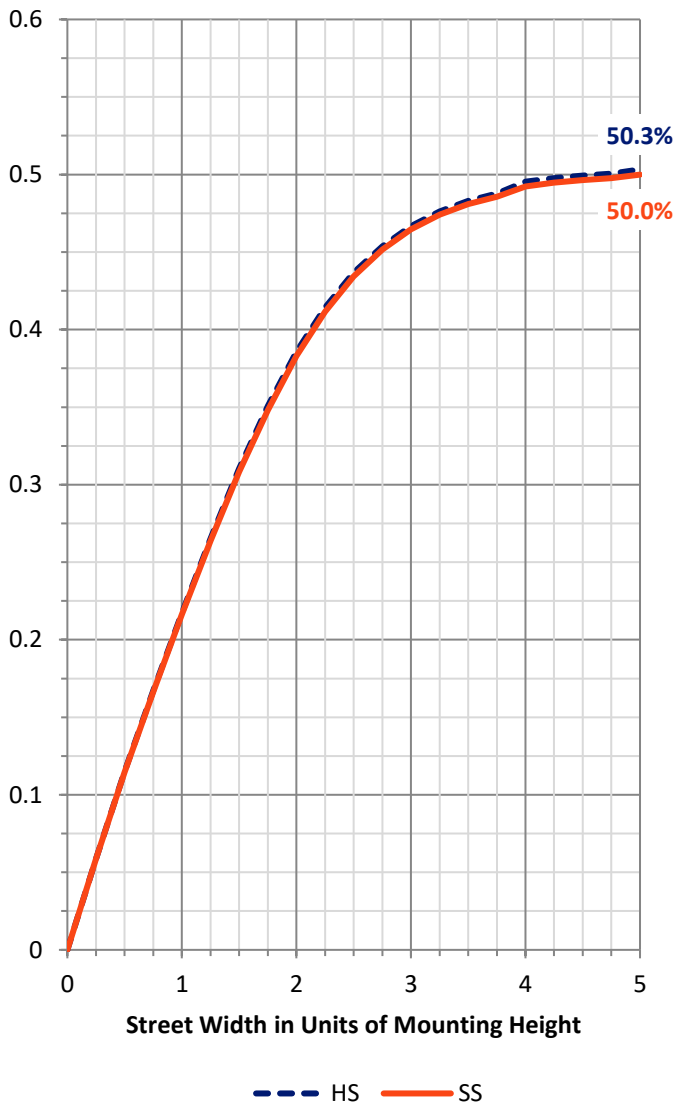
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6147.5   | 0.0    | 6147.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 6147.5   | 0.0    | 6147.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 12295.0  | 0.0    | 12295.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 90.9    | 0.7       |
| 10°-20°   | 267.2   | 2.2       |
| 20°-30°   | 453.2   | 3.7       |
| 30°-40°   | 704.6   | 5.7       |
| 40°-50°   | 1209.5  | 9.8       |
| 50°-60°   | 2406.5  | 19.6      |
| 60°-70°   | 4286.9  | 34.9      |
| 70°-80°   | 2699.8  | 22.0      |
| 80°-90°   | 176.3   | 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°    | 12295.0 | 100.0     |
| 0°-180°   | 12295.0 | 100.0     |



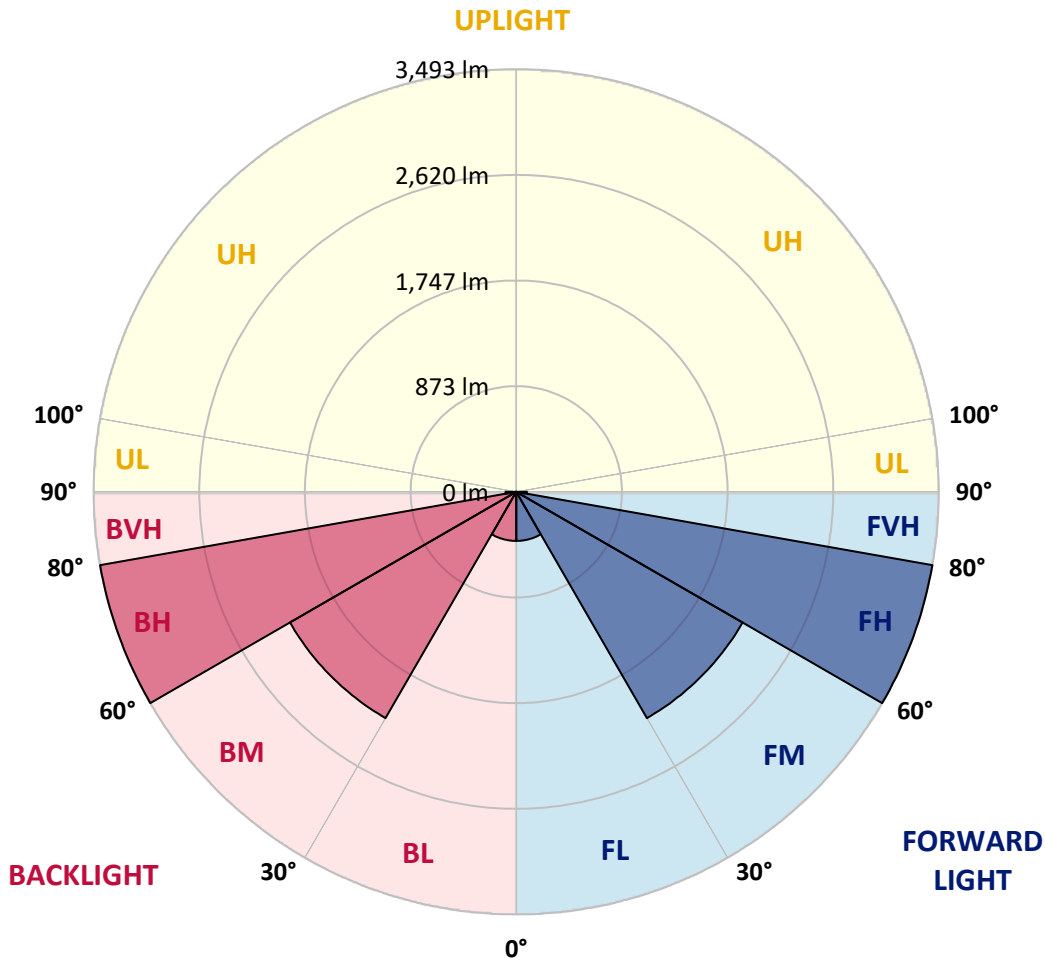
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 405.7  | 3.3       |                         |      |         |
| FM   | (30°-60°)   | 2160.3 | 17.6      |                         |      |         |
| FH   | (60°-80°)   | 3493.3 | 28.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 88.2   | 0.7       |                         |      | G1/100  |
| BL   | (0°-30°)    | 405.7  | 3.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 2160.3 | 17.6      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 3493.3 | 28.4      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 88.2   | 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





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 964.8  | 964.8  | 964.8  | 964.8  | 964.8  | 964.8  | 964.8  | 964.8  | 964.8  | 964.8  | 964.8  |
| 2.5°  | 971.3  | 968.0  | 968.0  | 964.8  | 961.6  | 961.6  | 961.6  | 958.4  | 961.6  | 961.6  | 961.6  |
| 5°    | 968.0  | 964.8  | 961.6  | 958.4  | 958.4  | 955.1  | 958.4  | 955.1  | 955.1  | 955.1  | 955.1  |
| 7.5°  | 958.4  | 958.4  | 951.9  | 951.9  | 948.7  | 948.7  | 945.4  | 945.4  | 945.4  | 942.2  | 942.2  |
| 10°   | 958.4  | 955.1  | 951.9  | 945.4  | 942.2  | 942.2  | 942.2  | 939.0  | 942.2  | 942.2  | 942.2  |
| 12.5° | 958.4  | 958.4  | 948.7  | 942.2  | 935.8  | 935.8  | 935.8  | 935.8  | 942.2  | 945.4  | 945.4  |
| 15°   | 964.8  | 961.6  | 951.9  | 939.0  | 932.5  | 932.5  | 932.5  | 935.8  | 942.2  | 948.7  | 948.7  |
| 17.5° | 968.0  | 961.6  | 948.7  | 935.8  | 932.5  | 932.5  | 932.5  | 935.8  | 945.4  | 951.9  | 955.1  |
| 20°   | 971.3  | 968.0  | 951.9  | 939.0  | 935.8  | 935.8  | 935.8  | 935.8  | 945.4  | 955.1  | 958.4  |
| 22.5° | 980.9  | 977.7  | 961.6  | 951.9  | 948.7  | 951.9  | 948.7  | 948.7  | 958.4  | 971.3  | 971.3  |
| 25°   | 993.8  | 987.4  | 971.3  | 964.8  | 964.8  | 971.3  | 971.3  | 964.8  | 974.5  | 984.2  | 987.4  |
| 27.5° | 1016.4 | 1010.0 | 993.8  | 987.4  | 984.2  | 984.2  | 984.2  | 984.2  | 990.6  | 1006.8 | 1006.8 |
| 30°   | 1035.8 | 1032.6 | 1026.1 | 1026.1 | 1022.9 | 1016.4 | 1016.4 | 1022.9 | 1026.1 | 1032.6 | 1035.8 |
| 32.5° | 1061.6 | 1055.2 | 1048.7 | 1048.7 | 1068.1 | 1087.4 | 1071.3 | 1045.5 | 1042.3 | 1045.5 | 1048.7 |
| 35°   | 1116.5 | 1110.0 | 1093.9 | 1084.2 | 1103.6 | 1122.9 | 1097.1 | 1081.0 | 1090.7 | 1100.3 | 1100.3 |
| 37.5° | 1193.9 | 1190.7 | 1177.8 | 1158.4 | 1152.0 | 1155.2 | 1145.5 | 1158.4 | 1184.2 | 1203.6 | 1206.8 |
| 40°   | 1274.6 | 1271.4 | 1258.4 | 1248.8 | 1252.0 | 1268.1 | 1261.7 | 1248.8 | 1264.9 | 1277.8 | 1277.8 |
| 42.5° | 1400.4 | 1387.5 | 1368.2 | 1342.3 | 1345.6 | 1358.5 | 1342.3 | 1355.2 | 1377.8 | 1400.4 | 1403.7 |
| 45°   | 1568.2 | 1555.3 | 1529.5 | 1506.9 | 1490.8 | 1497.2 | 1497.2 | 1519.8 | 1545.6 | 1571.4 | 1581.1 |
| 47.5° | 1748.9 | 1745.7 | 1719.9 | 1700.5 | 1684.4 | 1694.1 | 1694.1 | 1694.1 | 1736.0 | 1761.8 | 1761.8 |
| 50°   | 1971.6 | 1961.9 | 1961.9 | 1945.7 | 1939.3 | 1942.5 | 1929.6 | 1942.5 | 1961.9 | 1968.3 | 1958.7 |
| 52.5° | 2236.2 | 2226.5 | 2232.9 | 2239.4 | 2255.5 | 2278.1 | 2245.8 | 2242.6 | 2232.9 | 2223.3 | 2220.0 |
| 55°   | 2552.4 | 2562.1 | 2587.9 | 2629.8 | 2655.6 | 2700.8 | 2652.4 | 2594.3 | 2568.5 | 2542.7 | 2523.3 |
| 57.5° | 2929.9 | 2946.1 | 2984.8 | 3084.8 | 3194.5 | 3236.5 | 3152.6 | 3046.1 | 2955.7 | 2881.5 | 2897.6 |
| 60°   | 3423.6 | 3413.9 | 3478.5 | 3614.0 | 3768.9 | 3852.8 | 3720.5 | 3546.2 | 3401.0 | 3365.5 | 3375.2 |
| 62.5° | 3949.6 | 3968.9 | 4014.1 | 4194.8 | 4388.4 | 4478.8 | 4317.4 | 4059.3 | 3872.1 | 3775.3 | 3775.3 |
| 65°   | 4278.7 | 4291.6 | 4417.5 | 4672.4 | 4888.6 | 5011.2 | 4782.1 | 4407.8 | 4140.0 | 3978.6 | 3968.9 |
| 67.5° | 4327.1 | 4340.0 | 4482.0 | 4807.9 | 5162.9 | 5333.9 | 4937.0 | 4449.7 | 4136.7 | 3939.9 | 3933.4 |
| 69°   | 4194.8 | 4204.5 | 4352.9 | 4695.0 | 5140.3 | 5388.7 | 4862.8 | 4314.2 | 3991.5 | 3801.1 | 3807.6 |
| 70°   | 4004.4 | 4043.2 | 4156.1 | 4504.6 | 5020.9 | 5340.3 | 4727.2 | 4162.5 | 3827.0 | 3675.3 | 3649.5 |
| 72.5° | 3139.7 | 3165.5 | 3352.6 | 3785.0 | 4482.0 | 4846.6 | 4152.9 | 3523.6 | 3181.6 | 3023.5 | 3062.2 |
| 75°   | 1778.0 | 1771.5 | 2010.3 | 2629.8 | 3455.9 | 3881.8 | 3268.7 | 2536.3 | 2039.3 | 1848.9 | 1874.8 |
| 77.5° | 677.6  | 706.7  | 868.0  | 1348.8 | 2171.6 | 2652.4 | 2168.4 | 1355.2 | 948.7  | 738.9  | 703.4  |
| 80°   | 219.4  | 232.3  | 306.5  | 490.5  | 926.1  | 1497.2 | 1013.2 | 522.7  | 329.1  | 248.5  | 232.3  |
| 82.5° | 87.1   | 96.8   | 116.2  | 164.6  | 313.0  | 564.7  | 342.0  | 190.4  | 142.0  | 116.2  | 106.5  |
| 85°   | 48.4   | 45.2   | 61.3   | 74.2   | 106.5  | 161.3  | 116.2  | 90.3   | 77.4   | 54.9   | 51.6   |
| 87.5° | 16.1   | 16.1   | 25.8   | 25.8   | 29.0   | 25.8   | 29.0   | 32.3   | 32.3   | 19.4   | 16.1   |
| 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)