

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: P572679

Luminaire Tested: **ARCH-S-PA2-100-750-U-5WQ**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572679  
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-PA2-100-750-U-5WQ  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1010mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14348 lumens  
Efficiency: N/A  
Efficacy: 139.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

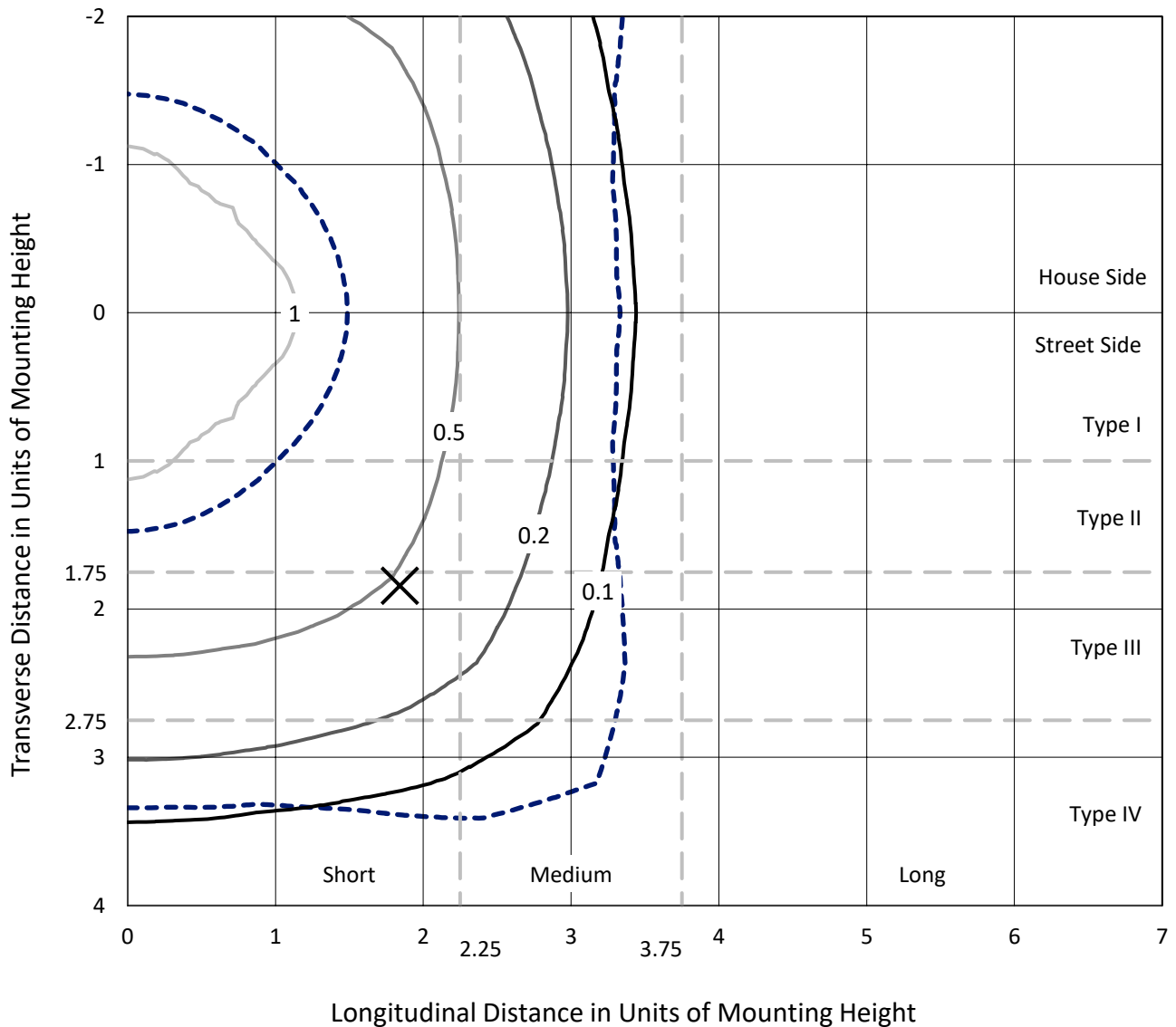
Input Watts (W): 103.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

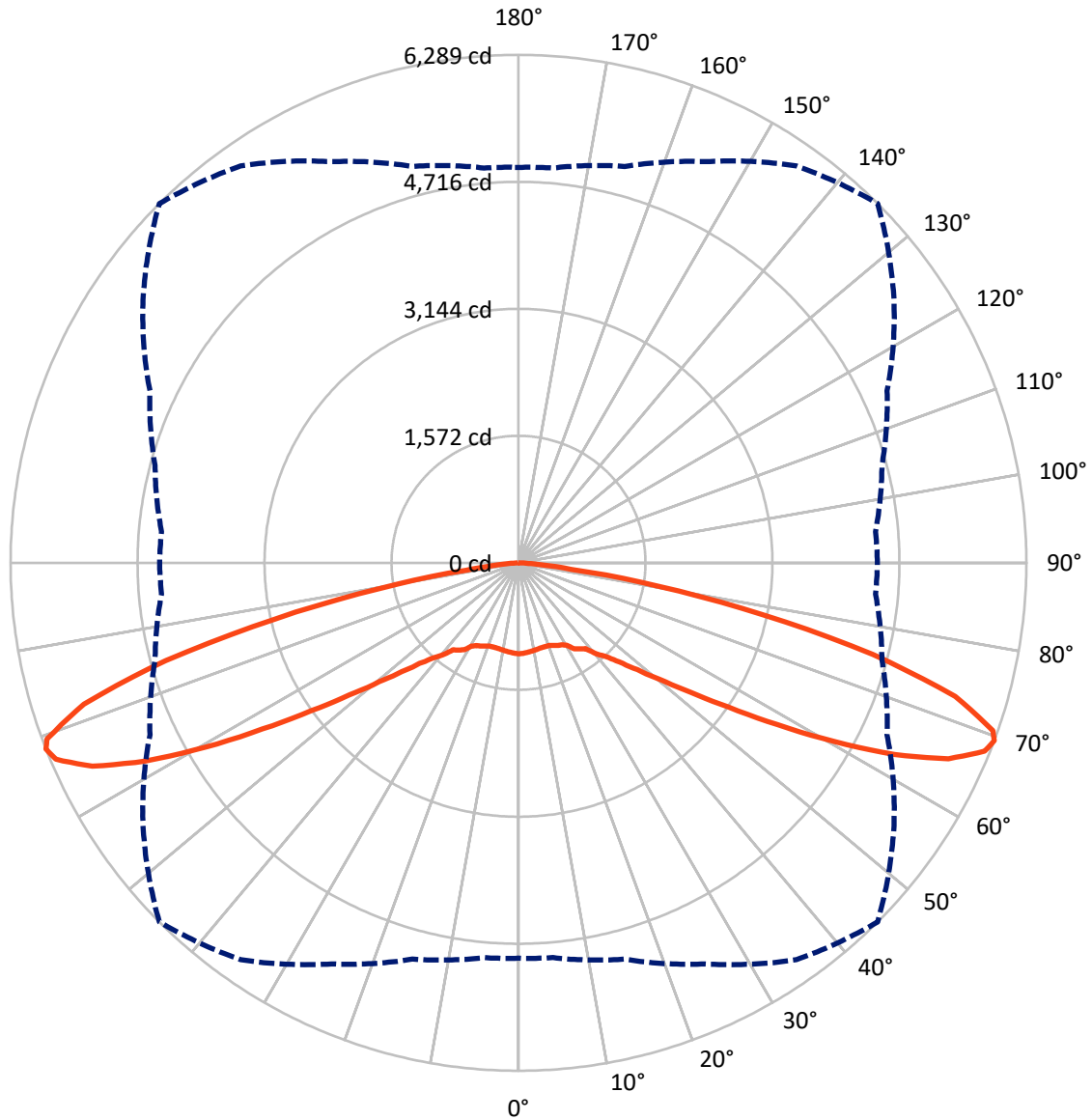
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 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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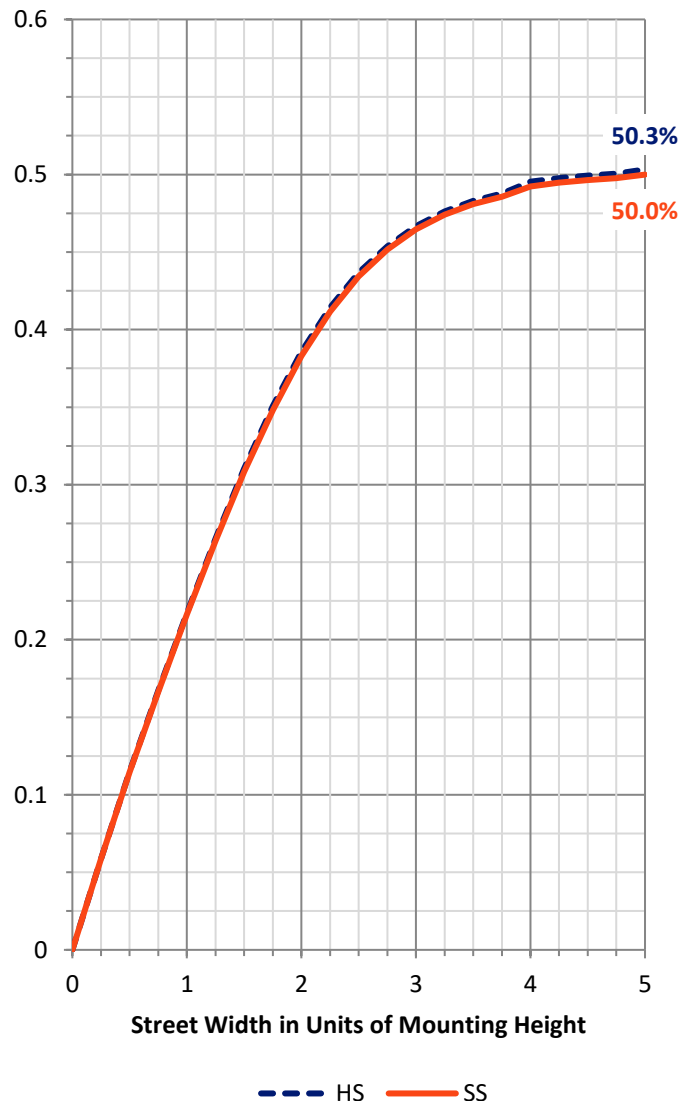
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7174.0   | 0.0    | 7174.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 7174.0   | 0.0    | 7174.0  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 14348.0  | 0.0    | 14348.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 106.1   | 0.7       |
| 10°-20°   | 311.9   | 2.2       |
| 20°-30°   | 528.8   | 3.7       |
| 30°-40°   | 822.2   | 5.7       |
| 40°-50°   | 1411.5  | 9.8       |
| 50°-60°   | 2808.4  | 19.6      |
| 60°-70°   | 5002.7  | 34.9      |
| 70°-80°   | 3150.6  | 22.0      |
| 80°-90°   | 205.8   | 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°    | 14348.0 | 100.0     |
| 0°-180°   | 14348.0 | 100.0     |

**Coefficient of Utilization**



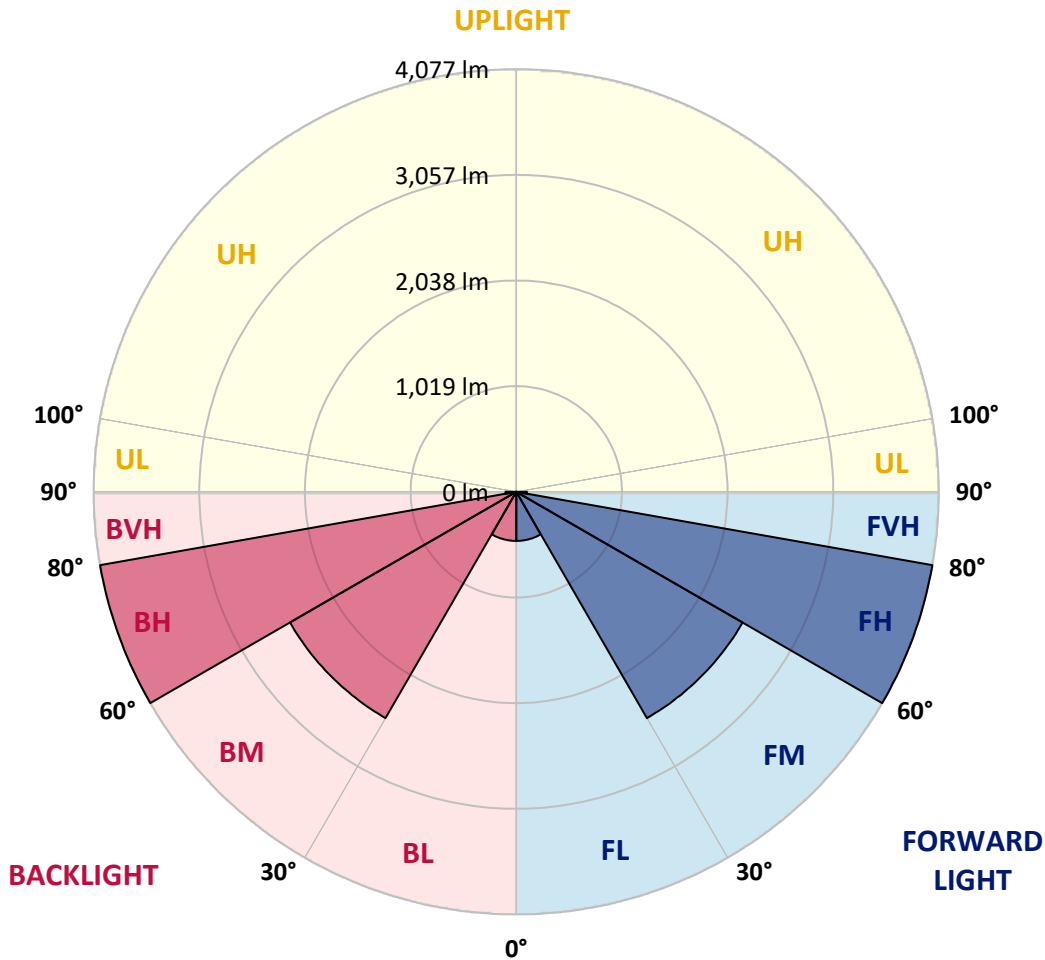
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 473.4  | 3.3       |                         |      |         |
| FM (30°-60°)   | 2521.1 | 17.6      |                         |      |         |
| FH (60°-80°)   | 4076.6 | 28.4      |                         |      | G2/5000 |
| FVH (80°-90°)  | 102.9  | 0.7       |                         |      | G2/225  |
| BL (0°-30°)    | 473.4  | 3.3       | B1/500                  |      |         |
| BM (30°-60°)   | 2521.1 | 17.6      | B3/5000                 |      |         |
| BH (60°-80°)   | 4076.6 | 28.4      | B4/5000                 |      | G2/5000 |
| BVH (80°-90°)  | 102.9  | 0.7       |                         |      | G2/225  |
| 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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CATALOG NUMBER: ARCH-S-PA2-100-750-U-5WQ

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1125.9 | 1125.9 | 1125.9 | 1125.9 | 1125.9 | 1125.9 | 1125.9 | 1125.9 | 1125.9 | 1125.9 | 1125.9 |
| 2.5°  | 1133.4 | 1129.7 | 1129.7 | 1125.9 | 1122.1 | 1122.1 | 1122.1 | 1118.4 | 1122.1 | 1122.1 | 1122.1 |
| 5°    | 1129.7 | 1125.9 | 1122.1 | 1118.4 | 1118.4 | 1114.6 | 1118.4 | 1114.6 | 1114.6 | 1114.6 | 1114.6 |
| 7.5°  | 1118.4 | 1118.4 | 1110.8 | 1110.8 | 1107.1 | 1107.1 | 1103.3 | 1103.3 | 1103.3 | 1099.6 | 1099.6 |
| 10°   | 1118.4 | 1114.6 | 1110.8 | 1103.3 | 1099.6 | 1099.6 | 1099.6 | 1095.8 | 1099.6 | 1099.6 | 1099.6 |
| 12.5° | 1118.4 | 1118.4 | 1107.1 | 1099.6 | 1092.0 | 1092.0 | 1092.0 | 1092.0 | 1099.6 | 1103.3 | 1103.3 |
| 15°   | 1125.9 | 1122.1 | 1110.8 | 1095.8 | 1088.3 | 1088.3 | 1088.3 | 1092.0 | 1099.6 | 1107.1 | 1107.1 |
| 17.5° | 1129.7 | 1122.1 | 1107.1 | 1092.0 | 1088.3 | 1088.3 | 1088.3 | 1092.0 | 1103.3 | 1110.8 | 1114.6 |
| 20°   | 1133.4 | 1129.7 | 1110.8 | 1095.8 | 1092.0 | 1092.0 | 1092.0 | 1092.0 | 1103.3 | 1114.6 | 1118.4 |
| 22.5° | 1144.7 | 1141.0 | 1122.1 | 1110.8 | 1107.1 | 1110.8 | 1107.1 | 1107.1 | 1118.4 | 1133.4 | 1133.4 |
| 25°   | 1159.8 | 1152.3 | 1133.4 | 1125.9 | 1125.9 | 1133.4 | 1133.4 | 1125.9 | 1137.2 | 1148.5 | 1152.3 |
| 27.5° | 1186.2 | 1178.6 | 1159.8 | 1152.3 | 1148.5 | 1148.5 | 1148.5 | 1148.5 | 1156.0 | 1174.9 | 1174.9 |
| 30°   | 1208.8 | 1205.0 | 1197.5 | 1197.5 | 1193.7 | 1186.2 | 1186.2 | 1193.7 | 1197.5 | 1205.0 | 1208.8 |
| 32.5° | 1238.9 | 1231.3 | 1223.8 | 1223.8 | 1246.4 | 1269.0 | 1250.2 | 1220.0 | 1216.3 | 1220.0 | 1223.8 |
| 35°   | 1302.9 | 1295.4 | 1276.5 | 1265.2 | 1287.8 | 1310.4 | 1280.3 | 1261.5 | 1272.8 | 1284.1 | 1284.1 |
| 37.5° | 1393.3 | 1389.5 | 1374.4 | 1351.8 | 1344.3 | 1348.1 | 1336.8 | 1351.8 | 1382.0 | 1404.6 | 1408.3 |
| 40°   | 1487.4 | 1483.6 | 1468.6 | 1457.3 | 1461.0 | 1479.9 | 1472.3 | 1457.3 | 1476.1 | 1491.2 | 1491.2 |
| 42.5° | 1634.3 | 1619.2 | 1596.6 | 1566.5 | 1570.2 | 1585.3 | 1566.5 | 1581.5 | 1607.9 | 1634.3 | 1638.0 |
| 45°   | 1830.1 | 1815.0 | 1784.9 | 1758.5 | 1739.7 | 1747.2 | 1747.2 | 1773.6 | 1803.7 | 1833.8 | 1845.1 |
| 47.5° | 2040.9 | 2037.2 | 2007.1 | 1984.5 | 1965.6 | 1976.9 | 1976.9 | 1976.9 | 2025.9 | 2056.0 | 2056.0 |
| 50°   | 2300.8 | 2289.5 | 2289.5 | 2270.6 | 2263.1 | 2266.9 | 2251.8 | 2266.9 | 2289.5 | 2297.0 | 2285.7 |
| 52.5° | 2609.6 | 2598.3 | 2605.8 | 2613.3 | 2632.1 | 2658.5 | 2620.8 | 2617.1 | 2605.8 | 2594.5 | 2590.7 |
| 55°   | 2978.6 | 2989.9 | 3020.0 | 3069.0 | 3099.1 | 3151.8 | 3095.3 | 3027.5 | 2997.4 | 2967.3 | 2944.7 |
| 57.5° | 3419.2 | 3438.0 | 3483.2 | 3599.9 | 3727.9 | 3776.9 | 3679.0 | 3554.7 | 3449.3 | 3362.7 | 3381.5 |
| 60°   | 3995.3 | 3984.0 | 4059.3 | 4217.5 | 4398.2 | 4496.1 | 4341.7 | 4138.4 | 3968.9 | 3927.5 | 3938.8 |
| 62.5° | 4609.1 | 4631.7 | 4684.4 | 4895.3 | 5121.2 | 5226.6 | 5038.4 | 4737.1 | 4518.7 | 4405.7 | 4405.7 |
| 65°   | 4993.2 | 5008.2 | 5155.1 | 5452.6 | 5704.9 | 5848.0 | 5580.6 | 5143.8 | 4831.2 | 4643.0 | 4631.7 |
| 67.5° | 5049.6 | 5064.7 | 5230.4 | 5610.7 | 6024.9 | 6224.5 | 5761.3 | 5192.7 | 4827.5 | 4597.8 | 4590.2 |
| 69°   | 4895.3 | 4906.6 | 5079.8 | 5478.9 | 5998.6 | 6288.5 | 5674.7 | 5034.6 | 4658.0 | 4435.9 | 4443.4 |
| 70°   | 4673.1 | 4718.3 | 4850.1 | 5256.8 | 5859.2 | 6232.0 | 5516.6 | 4857.6 | 4466.0 | 4289.0 | 4258.9 |
| 72.5° | 3663.9 | 3694.0 | 3912.4 | 4417.0 | 5230.4 | 5655.9 | 4846.3 | 4112.0 | 3712.9 | 3528.4 | 3573.5 |
| 75°   | 2074.8 | 2067.3 | 2346.0 | 3069.0 | 4032.9 | 4530.0 | 3814.5 | 2959.7 | 2379.8 | 2157.7 | 2187.8 |
| 77.5° | 790.8  | 824.7  | 1012.9 | 1574.0 | 2534.2 | 3095.3 | 2530.5 | 1581.5 | 1107.1 | 862.3  | 820.9  |
| 80°   | 256.1  | 271.1  | 357.7  | 572.4  | 1080.7 | 1747.2 | 1182.4 | 610.0  | 384.1  | 290.0  | 271.1  |
| 82.5° | 101.7  | 113.0  | 135.6  | 192.0  | 365.3  | 659.0  | 399.2  | 222.2  | 165.7  | 135.6  | 124.3  |
| 85°   | 56.5   | 52.7   | 71.5   | 86.6   | 124.3  | 188.3  | 135.6  | 105.4  | 90.4   | 64.0   | 60.2   |
| 87.5° | 18.8   | 18.8   | 30.1   | 30.1   | 33.9   | 30.1   | 33.9   | 37.7   | 37.7   | 22.6   | 18.8   |
| 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)