

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: P836530

Luminaire Tested: **ARCH3-40-727-U-5WQ**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836530  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-40-727-U-5WQ  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 345mA LIGHTSQUARE WITH 40 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 6902 lumens  
Efficiency: N/A  
Efficacy: 158.3 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type V - Medium  
BUG Rating: B3 - U0 - G1

Input Watts (W): 43.6  
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

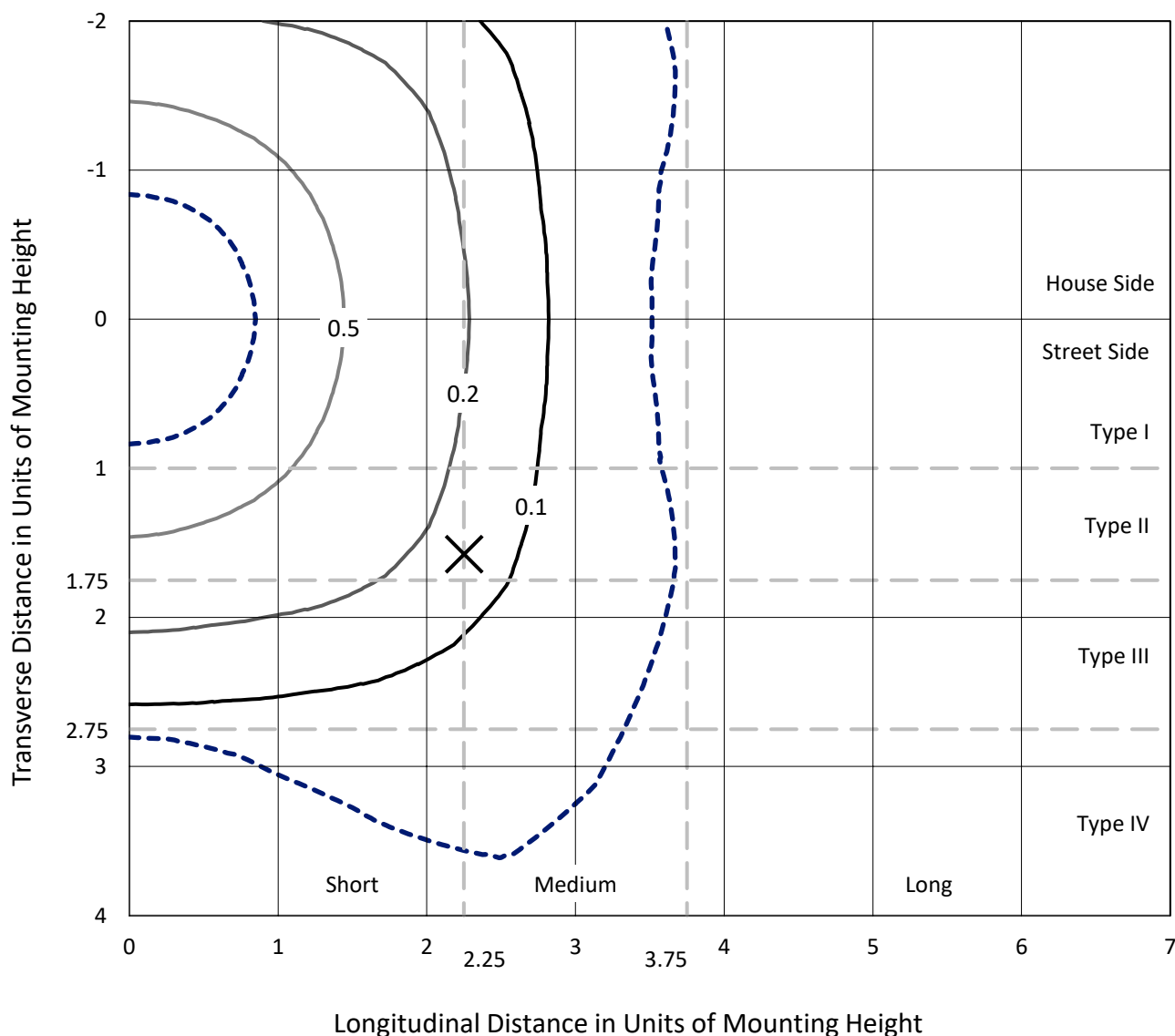


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## Iso-Footcandle Lines of Horizontal Illumination

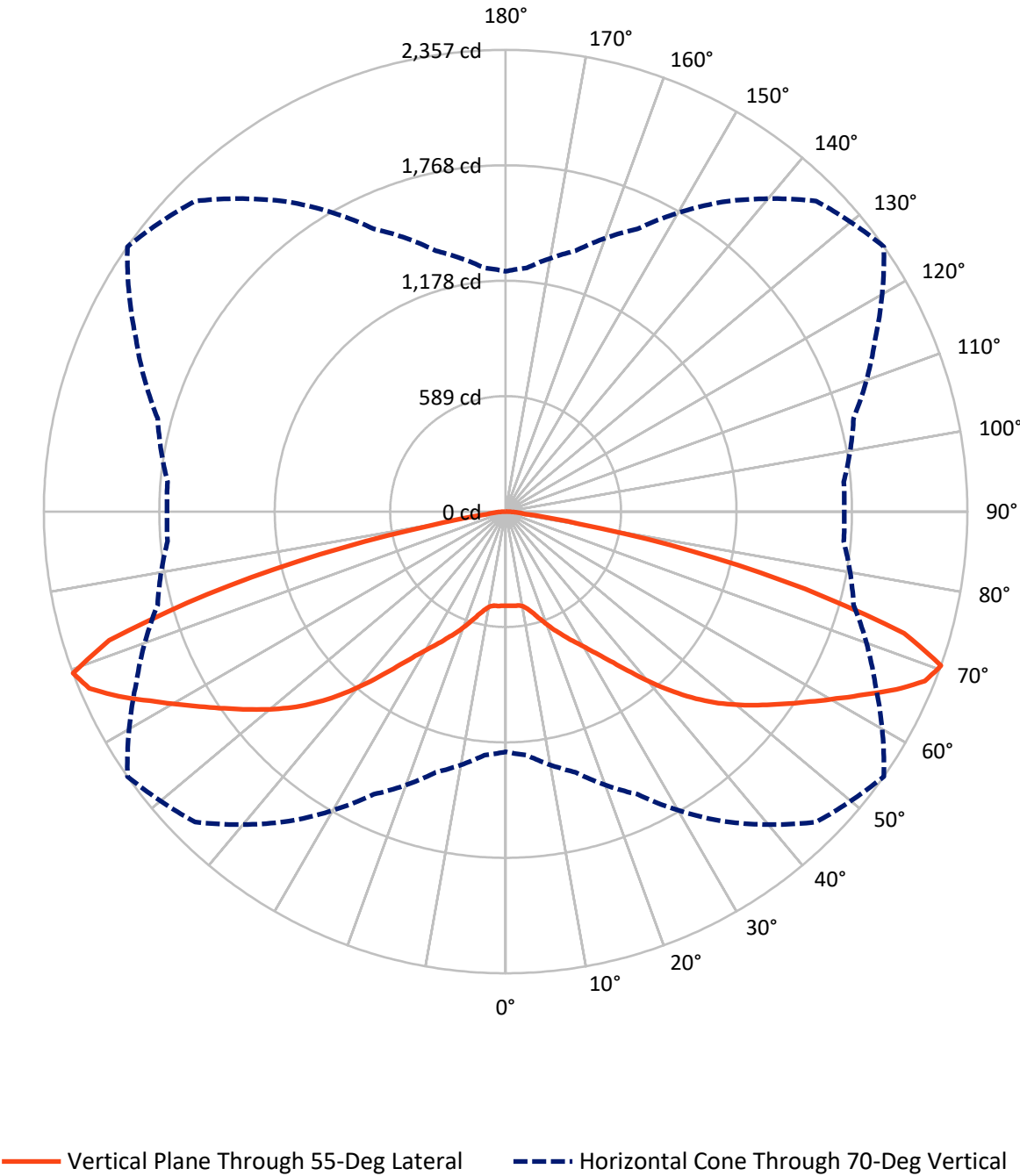
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
Type V - Medium - N/A

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Luminous Intensity Polar Plot



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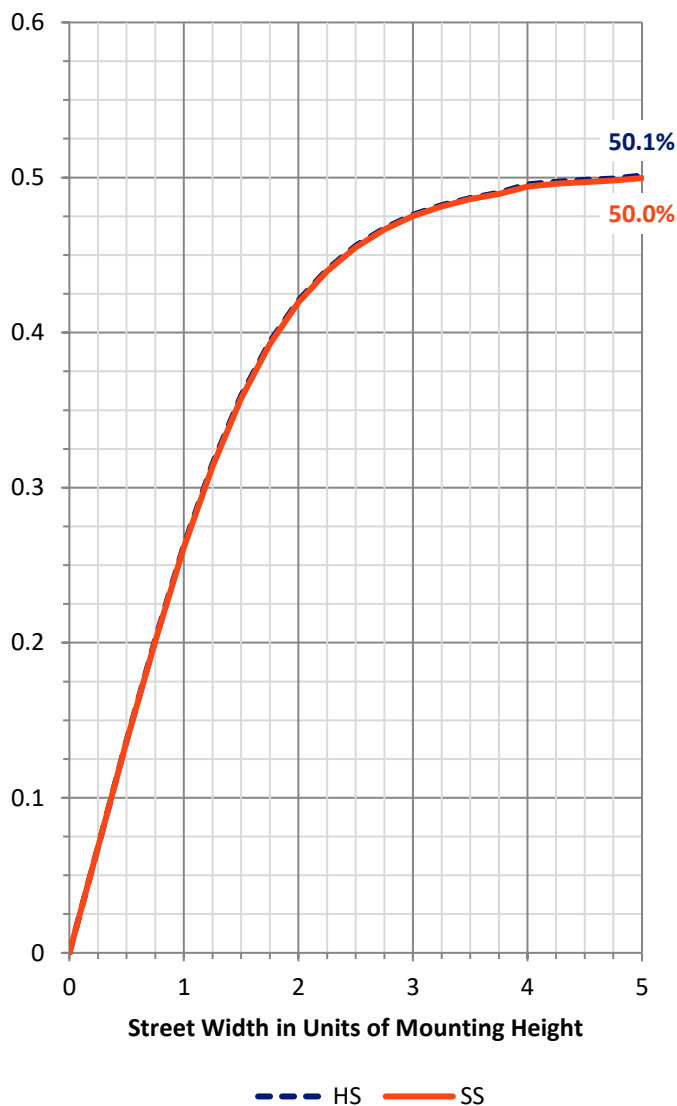
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 3451.0   | 0.0    | 3451.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 3451.0   | 0.0    | 3451.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 6902.0   | 0.0    | 6902.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 46.4   | 0.7       |
| 10°-20°   | 158.1  | 2.3       |
| 20°-30°   | 328.5  | 4.8       |
| 30°-40°   | 606.7  | 8.8       |
| 40°-50°   | 1065.8 | 15.4      |
| 50°-60°   | 1537.1 | 22.3      |
| 60°-70°   | 1881.3 | 27.3      |
| 70°-80°   | 1197.1 | 17.3      |
| 80°-90°   | 81.0   | 1.2       |
| 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°    | 6902.0 | 100.0     |
| 0°-180°   | 6902.0 | 100.0     |

**Coefficient of Utilization**



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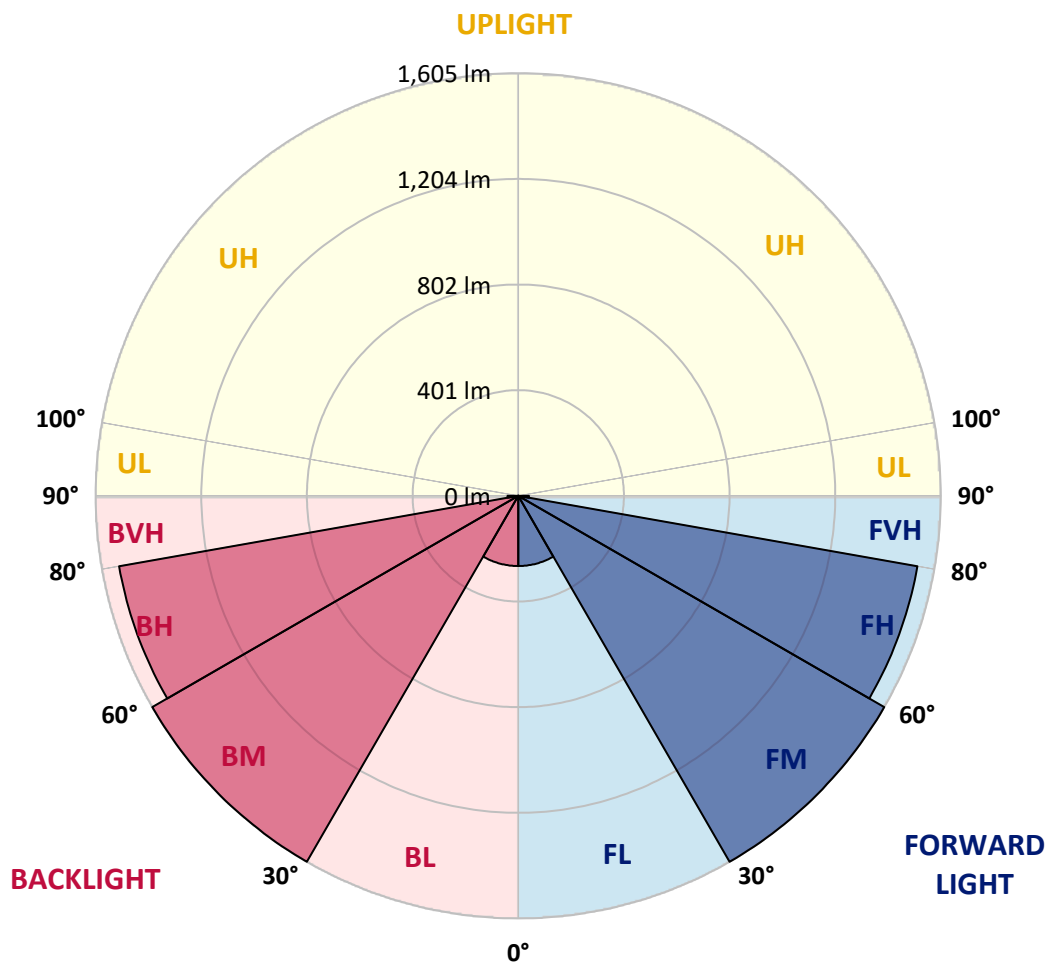
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 266.5  | 3.9       |                         |      |         |
| FM   | (30°-60°)   | 1604.8 | 23.3      |                         |      |         |
| FH   | (60°-80°)   | 1539.2 | 22.3      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 40.5   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 266.5  | 3.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1604.8 | 23.3      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1539.2 | 22.3      | B3/2500                 |      | G1/1800 |
| BVH  | (80°-90°)   | 40.5   | 0.6       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G1**

Type V Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 481.1  | 481.1  | 481.1  | 481.1  | 481.1  | 481.1  | 481.1  | 481.1  | 481.1  | 481.1  | 481.1  |
| 2.5°  | 487.5  | 487.5  | 486.3  | 486.3  | 483.7  | 482.4  | 481.1  | 481.1  | 479.9  | 479.9  | 478.6  |
| 5°    | 490.1  | 490.1  | 490.1  | 488.8  | 487.5  | 486.3  | 483.7  | 481.1  | 479.9  | 478.6  | 477.3  |
| 7.5°  | 491.4  | 491.4  | 490.1  | 490.1  | 488.8  | 487.5  | 483.7  | 479.9  | 478.6  | 477.3  | 477.3  |
| 10°   | 501.7  | 500.4  | 499.1  | 496.5  | 496.5  | 496.5  | 491.4  | 487.5  | 486.3  | 486.3  | 486.3  |
| 12.5° | 526.0  | 524.8  | 522.2  | 518.3  | 518.3  | 519.6  | 511.9  | 506.8  | 506.8  | 505.5  | 505.5  |
| 15°   | 562.0  | 560.7  | 558.1  | 551.7  | 550.4  | 553.0  | 541.4  | 536.3  | 536.3  | 536.3  | 535.0  |
| 17.5° | 601.7  | 599.2  | 595.3  | 590.2  | 590.2  | 590.2  | 578.6  | 572.2  | 568.4  | 568.4  | 567.1  |
| 20°   | 635.1  | 633.8  | 633.8  | 632.5  | 636.4  | 636.4  | 621.0  | 610.7  | 601.7  | 596.6  | 595.3  |
| 22.5° | 664.6  | 663.3  | 665.9  | 671.0  | 678.7  | 681.3  | 663.3  | 647.9  | 633.8  | 623.6  | 621.0  |
| 25°   | 704.4  | 703.1  | 701.8  | 709.5  | 722.3  | 726.2  | 706.9  | 687.7  | 673.6  | 668.5  | 665.9  |
| 27.5° | 746.7  | 748.0  | 749.3  | 757.0  | 767.2  | 773.7  | 754.4  | 736.5  | 724.9  | 717.2  | 714.6  |
| 30°   | 794.2  | 796.8  | 800.6  | 812.2  | 819.9  | 822.4  | 805.7  | 792.9  | 782.6  | 776.2  | 772.4  |
| 32.5° | 854.5  | 859.6  | 864.8  | 875.0  | 878.9  | 876.3  | 868.6  | 859.6  | 851.9  | 842.9  | 841.7  |
| 35°   | 944.3  | 949.4  | 948.2  | 952.0  | 953.3  | 950.7  | 946.9  | 941.7  | 937.9  | 926.3  | 925.1  |
| 37.5° | 1057.2 | 1062.3 | 1054.6 | 1050.8 | 1041.8 | 1043.1 | 1041.8 | 1045.7 | 1046.9 | 1035.4 | 1034.1 |
| 40°   | 1171.4 | 1176.5 | 1166.3 | 1156.0 | 1147.0 | 1143.2 | 1149.6 | 1162.4 | 1162.4 | 1154.7 | 1154.7 |
| 42.5° | 1293.3 | 1297.1 | 1280.5 | 1267.6 | 1256.1 | 1253.5 | 1257.4 | 1272.8 | 1276.6 | 1275.3 | 1275.3 |
| 45°   | 1415.2 | 1412.6 | 1390.8 | 1378.0 | 1367.7 | 1361.3 | 1362.6 | 1374.1 | 1381.8 | 1385.7 | 1385.7 |
| 47.5° | 1508.8 | 1505.0 | 1487.0 | 1476.8 | 1470.3 | 1461.4 | 1461.4 | 1467.8 | 1471.6 | 1472.9 | 1472.9 |
| 50°   | 1583.3 | 1579.4 | 1561.4 | 1560.2 | 1560.2 | 1556.3 | 1552.5 | 1551.2 | 1548.6 | 1549.9 | 1549.9 |
| 52.5° | 1647.4 | 1642.3 | 1629.4 | 1632.0 | 1643.6 | 1646.1 | 1641.0 | 1630.7 | 1620.5 | 1616.6 | 1617.9 |
| 55°   | 1716.7 | 1709.0 | 1698.7 | 1706.4 | 1729.5 | 1739.8 | 1732.1 | 1711.6 | 1693.6 | 1682.0 | 1682.0 |
| 57.5° | 1771.9 | 1762.9 | 1762.9 | 1784.7 | 1827.0 | 1847.6 | 1830.9 | 1792.4 | 1761.6 | 1748.8 | 1750.0 |
| 60°   | 1733.4 | 1725.7 | 1756.5 | 1852.7 | 1932.2 | 1966.9 | 1938.7 | 1870.7 | 1820.6 | 1805.2 | 1807.8 |
| 62.5° | 1657.7 | 1652.5 | 1691.0 | 1839.9 | 2027.2 | 2099.0 | 2056.7 | 1959.2 | 1884.8 | 1866.8 | 1866.8 |
| 65°   | 1546.0 | 1544.8 | 1598.6 | 1782.1 | 2049.0 | 2226.0 | 2190.1 | 2055.4 | 1959.2 | 1934.8 | 1939.9 |
| 67.5° | 1430.6 | 1430.6 | 1479.3 | 1683.3 | 2023.3 | 2279.9 | 2308.2 | 2142.7 | 1995.1 | 1934.8 | 1936.1 |
| 70°   | 1226.6 | 1248.4 | 1378.0 | 1592.2 | 1929.7 | 2241.4 | 2356.9 | 2081.1 | 1838.6 | 1732.1 | 1728.2 |
| 72.5° | 808.3  | 836.5  | 1094.4 | 1433.1 | 1837.3 | 2101.6 | 2127.3 | 1828.3 | 1526.8 | 1402.3 | 1395.9 |
| 75°   | 487.5  | 511.9  | 709.5  | 1118.8 | 1615.3 | 1692.3 | 1579.4 | 1433.1 | 1140.6 | 1043.1 | 1043.1 |
| 77.5° | 143.7  | 160.4  | 327.2  | 709.5  | 1117.5 | 1112.4 | 973.8  | 844.2  | 674.9  | 573.5  | 581.2  |
| 80°   | 84.7   | 87.2   | 106.5  | 323.3  | 463.2  | 487.5  | 375.9  | 234.8  | 234.8  | 174.5  | 169.4  |
| 82.5° | 65.4   | 65.4   | 68.0   | 80.8   | 111.6  | 124.5  | 94.9   | 80.8   | 92.4   | 78.3   | 74.4   |
| 85°   | 46.2   | 46.2   | 46.2   | 47.5   | 48.8   | 50.0   | 52.6   | 53.9   | 59.0   | 48.8   | 46.2   |
| 87.5° | 14.1   | 15.4   | 16.7   | 19.2   | 23.1   | 24.4   | 25.7   | 23.1   | 23.1   | 21.8   | 20.5   |
| 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)