

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: P841333

Luminaire Tested: **ARCH4-160-750-U-5WQ**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841333  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-160-750-U-5WQ  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 26835 lumens  
Efficiency: N/A  
Efficacy: 167.0 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type V - Medium  
BUG Rating: B5 - U0 - G3

Input Watts (W): 160.7  
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

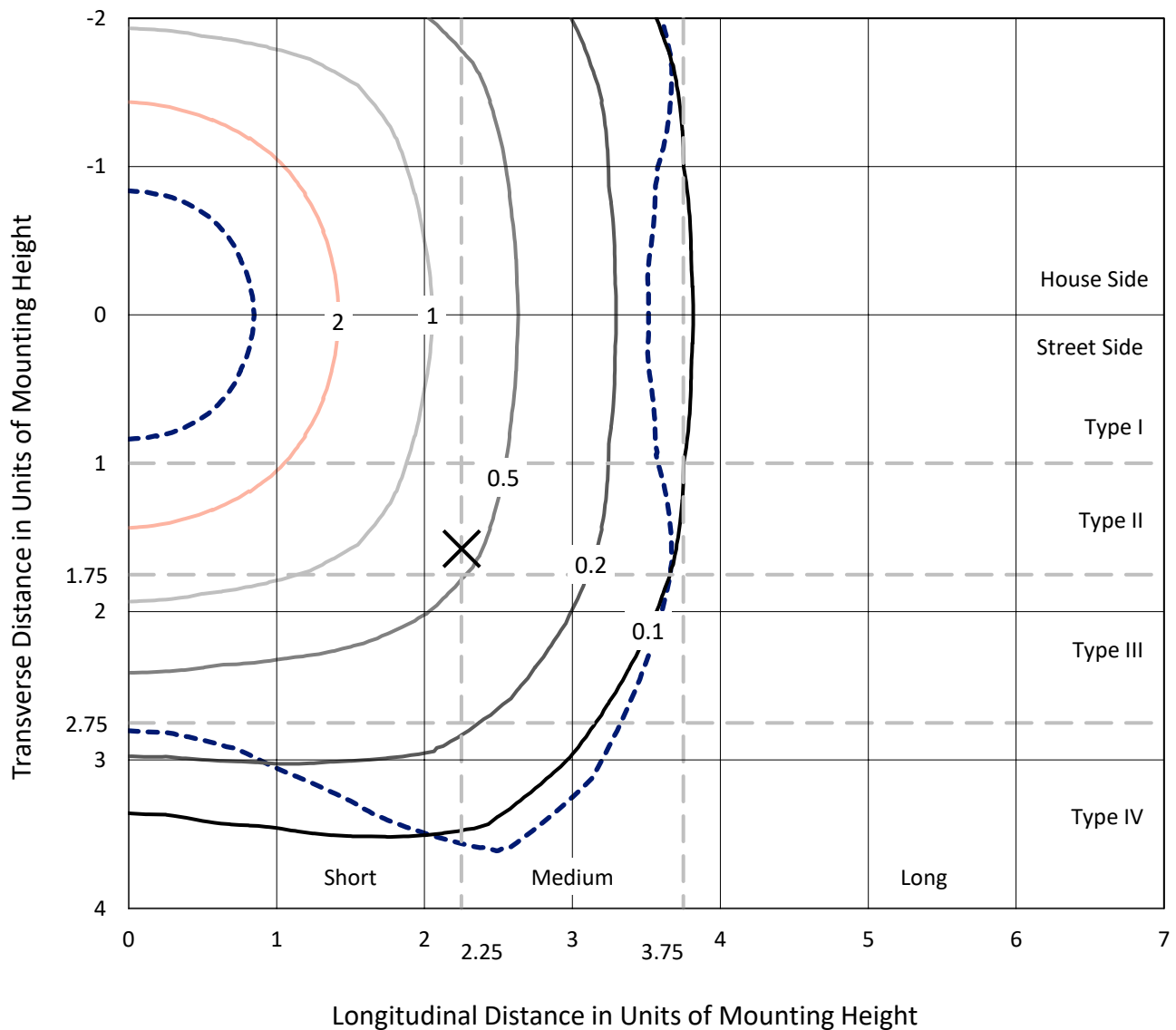


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## Iso-Footcandle Lines of Horizontal Illumination

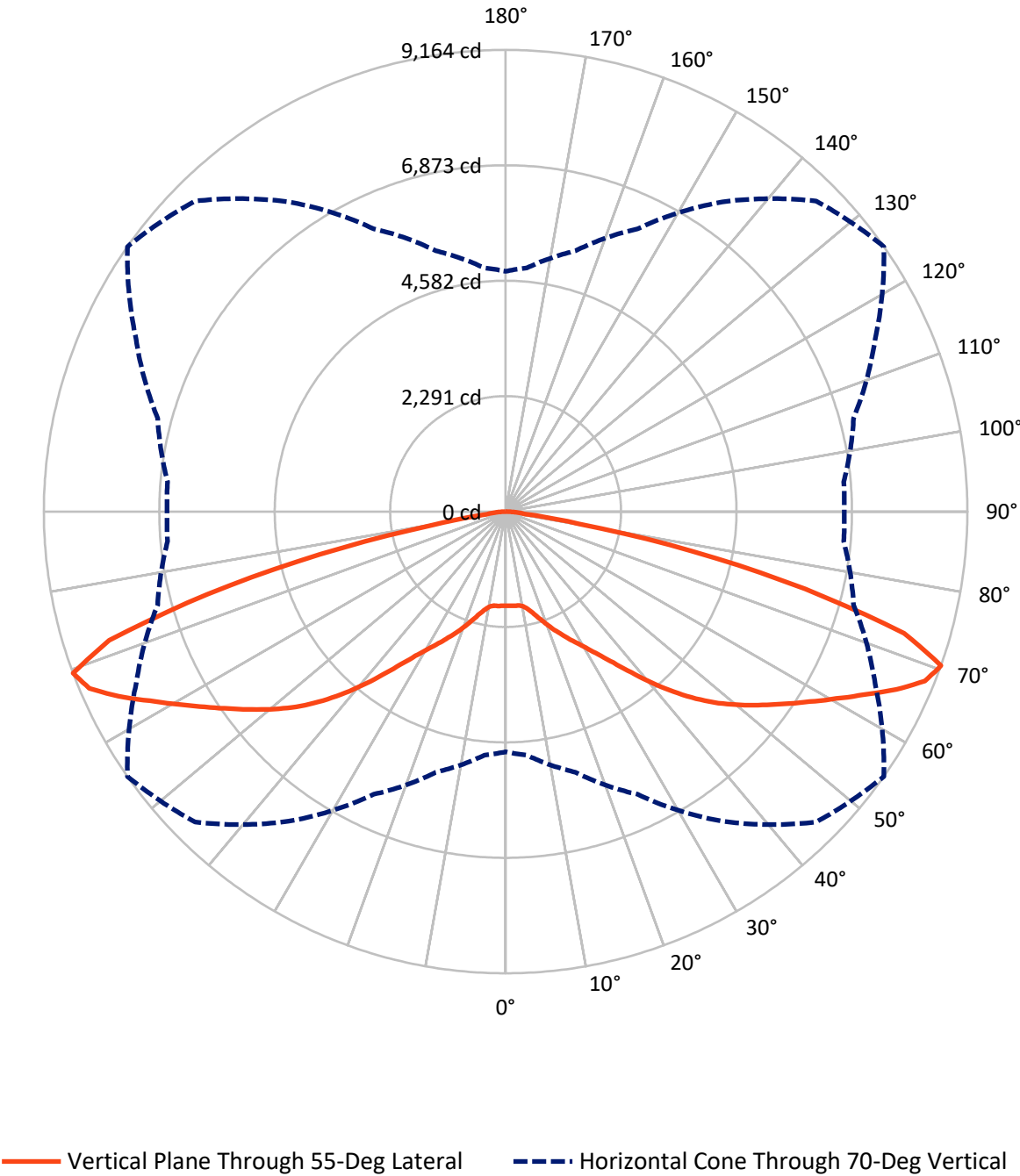
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
Type V - Medium - N/A

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Luminous Intensity Polar Plot



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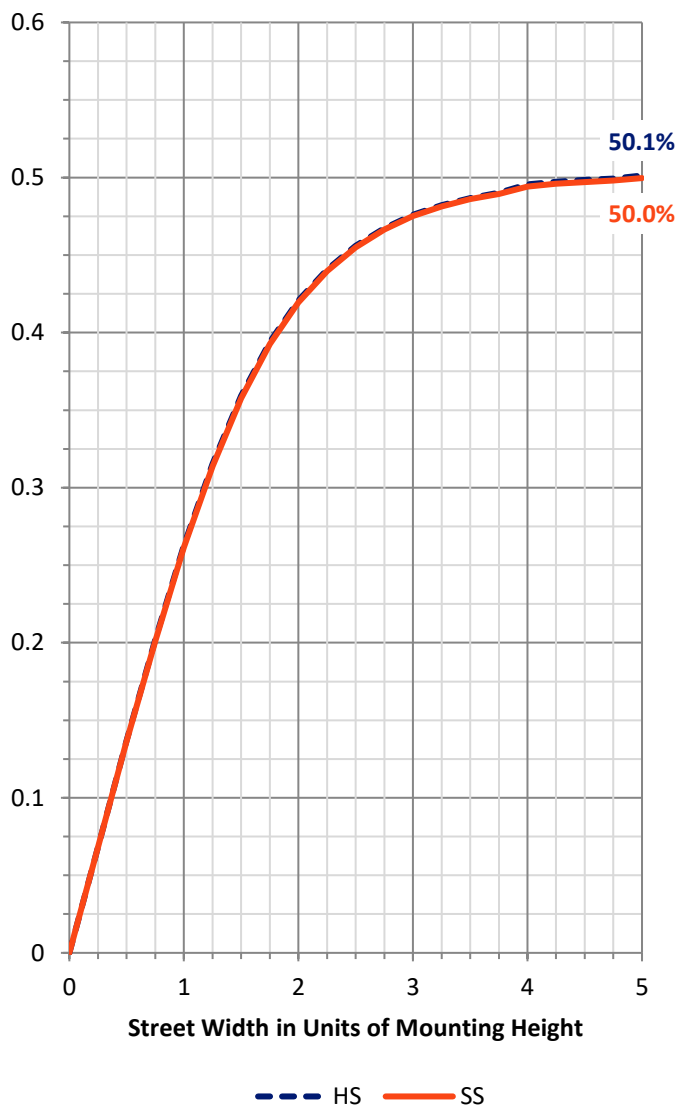
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 13417.5  | 0.0    | 13417.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 13417.5  | 0.0    | 13417.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 26835.0  | 0.0    | 26835.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 180.6   | 0.7       |
| 10°-20°   | 614.6   | 2.3       |
| 20°-30°   | 1277.1  | 4.8       |
| 30°-40°   | 2358.8  | 8.8       |
| 40°-50°   | 4143.8  | 15.4      |
| 50°-60°   | 5976.4  | 22.3      |
| 60°-70°   | 7314.4  | 27.3      |
| 70°-80°   | 4654.3  | 17.3      |
| 80°-90°   | 314.9   | 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°    | 26835.0 | 100.0     |
| 0°-180°   | 26835.0 | 100.0     |

**Coefficient of Utilization**



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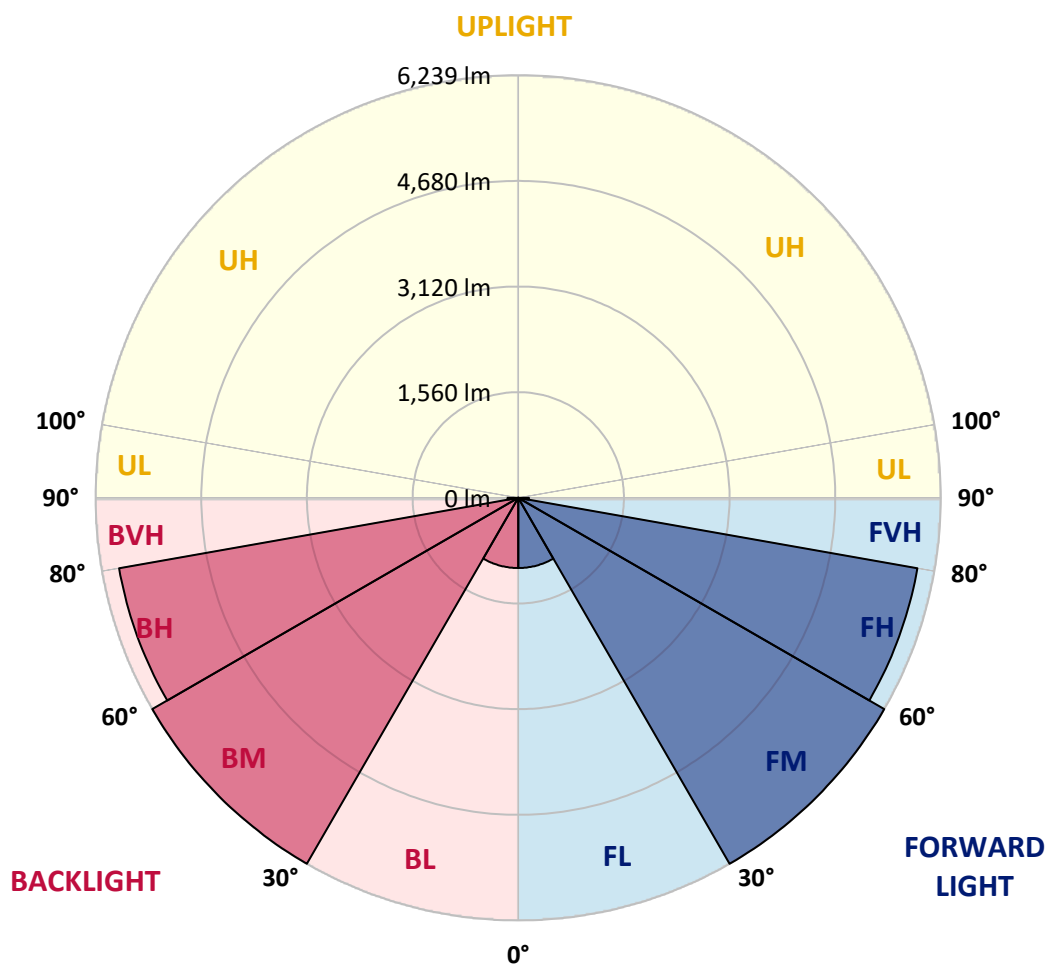
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1036.2 | 3.9       |                         |      |         |
| FM   | (30°-60°)   | 6239.5 | 23.3      |                         |      |         |
| FH   | (60°-80°)   | 5984.4 | 22.3      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 157.5  | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1036.2 | 3.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 6239.5 | 23.3      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 5984.4 | 22.3      | B5                      |      | G3/7500 |
| BVH  | (80°-90°)   | 157.5  | 0.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G3**

Type V Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1870.7 | 1870.7 | 1870.7 | 1870.7 | 1870.7 | 1870.7 | 1870.7 | 1870.7 | 1870.7 | 1870.7 | 1870.7 |
| 2.5°  | 1895.6 | 1895.6 | 1890.6 | 1890.6 | 1880.6 | 1875.6 | 1870.7 | 1870.7 | 1865.7 | 1865.7 | 1860.7 |
| 5°    | 1905.6 | 1905.6 | 1905.6 | 1900.6 | 1895.6 | 1890.6 | 1880.6 | 1870.7 | 1865.7 | 1860.7 | 1855.7 |
| 7.5°  | 1910.6 | 1910.6 | 1905.6 | 1905.6 | 1900.6 | 1895.6 | 1880.6 | 1865.7 | 1860.7 | 1855.7 | 1855.7 |
| 10°   | 1950.5 | 1945.5 | 1940.5 | 1930.5 | 1930.5 | 1930.5 | 1910.6 | 1895.6 | 1890.6 | 1890.6 | 1890.6 |
| 12.5° | 2045.2 | 2040.3 | 2030.3 | 2015.3 | 2015.3 | 2020.3 | 1990.4 | 1970.4 | 1970.4 | 1965.4 | 1965.4 |
| 15°   | 2184.9 | 2179.9 | 2170.0 | 2145.0 | 2140.0 | 2150.0 | 2105.1 | 2085.2 | 2085.2 | 2085.2 | 2080.2 |
| 17.5° | 2339.6 | 2329.6 | 2314.6 | 2294.7 | 2294.7 | 2294.7 | 2249.8 | 2224.8 | 2209.9 | 2209.9 | 2204.9 |
| 20°   | 2469.3 | 2464.3 | 2464.3 | 2459.3 | 2474.2 | 2474.2 | 2414.4 | 2374.5 | 2339.6 | 2319.6 | 2314.6 |
| 22.5° | 2584.0 | 2579.0 | 2589.0 | 2608.9 | 2638.9 | 2648.8 | 2579.0 | 2519.1 | 2464.3 | 2424.4 | 2414.4 |
| 25°   | 2738.6 | 2733.6 | 2728.7 | 2758.6 | 2808.5 | 2823.4 | 2748.6 | 2673.8 | 2618.9 | 2599.0 | 2589.0 |
| 27.5° | 2903.3 | 2908.2 | 2913.2 | 2943.2 | 2983.1 | 3008.0 | 2933.2 | 2863.3 | 2818.4 | 2788.5 | 2778.5 |
| 30°   | 3087.8 | 3097.8 | 3112.8 | 3157.7 | 3187.6 | 3197.6 | 3132.7 | 3082.8 | 3042.9 | 3018.0 | 3003.0 |
| 32.5° | 3322.3 | 3342.2 | 3362.2 | 3402.1 | 3417.1 | 3407.1 | 3377.2 | 3342.2 | 3312.3 | 3277.4 | 3272.4 |
| 35°   | 3671.5 | 3691.4 | 3686.4 | 3701.4 | 3706.4 | 3696.4 | 3681.4 | 3661.5 | 3646.5 | 3601.6 | 3596.6 |
| 37.5° | 4110.4 | 4130.4 | 4100.5 | 4085.5 | 4050.6 | 4055.6 | 4050.6 | 4065.6 | 4070.5 | 4025.6 | 4020.7 |
| 40°   | 4554.4 | 4574.4 | 4534.5 | 4494.6 | 4459.6 | 4444.7 | 4469.6 | 4519.5 | 4519.5 | 4489.6 | 4489.6 |
| 42.5° | 5028.3 | 5043.3 | 4978.4 | 4928.5 | 4883.7 | 4873.7 | 4888.6 | 4948.5 | 4963.5 | 4958.5 | 4958.5 |
| 45°   | 5502.2 | 5492.2 | 5407.4 | 5357.5 | 5317.6 | 5292.7 | 5297.7 | 5342.6 | 5372.5 | 5387.5 | 5387.5 |
| 47.5° | 5866.4 | 5851.4 | 5781.6 | 5741.7 | 5716.7 | 5681.8 | 5681.8 | 5706.7 | 5721.7 | 5726.7 | 5726.7 |
| 50°   | 6155.7 | 6140.7 | 6070.9 | 6065.9 | 6065.9 | 6050.9 | 6036.0 | 6031.0 | 6021.0 | 6026.0 | 6026.0 |
| 52.5° | 6405.1 | 6385.2 | 6335.3 | 6345.3 | 6390.1 | 6400.1 | 6380.2 | 6340.3 | 6300.4 | 6285.4 | 6290.4 |
| 55°   | 6674.5 | 6644.6 | 6604.7 | 6634.6 | 6724.4 | 6764.3 | 6734.3 | 6654.5 | 6584.7 | 6539.8 | 6539.8 |
| 57.5° | 6889.0 | 6854.1 | 6854.1 | 6938.9 | 7103.5 | 7183.3 | 7118.5 | 6968.8 | 6849.1 | 6799.2 | 6804.2 |
| 60°   | 6739.3 | 6709.4 | 6829.1 | 7203.3 | 7512.5 | 7647.2 | 7537.5 | 7273.1 | 7078.5 | 7018.7 | 7028.7 |
| 62.5° | 6445.0 | 6425.1 | 6574.7 | 7153.4 | 7881.7 | 8161.0 | 7996.4 | 7617.3 | 7328.0 | 7258.1 | 7258.1 |
| 65°   | 6011.0 | 6006.0 | 6215.6 | 6928.9 | 7966.5 | 8654.9 | 8515.2 | 7991.4 | 7617.3 | 7522.5 | 7542.5 |
| 67.5° | 5562.1 | 5562.1 | 5751.6 | 6544.8 | 7866.7 | 8864.4 | 8974.1 | 8330.6 | 7757.0 | 7522.5 | 7527.5 |
| 70°   | 4768.9 | 4853.7 | 5357.5 | 6190.6 | 7502.6 | 8714.7 | 9163.7 | 8091.2 | 7148.4 | 6734.3 | 6719.4 |
| 72.5° | 3142.7 | 3252.4 | 4255.1 | 5572.1 | 7143.4 | 8171.0 | 8270.8 | 7108.5 | 5936.2 | 5452.3 | 5427.4 |
| 75°   | 1895.6 | 1990.4 | 2758.6 | 4349.9 | 6280.4 | 6579.7 | 6140.7 | 5572.1 | 4434.7 | 4055.6 | 4055.6 |
| 77.5° | 558.7  | 623.6  | 1272.0 | 2758.6 | 4344.9 | 4324.9 | 3786.2 | 3282.4 | 2623.9 | 2229.8 | 2259.7 |
| 80°   | 329.2  | 339.2  | 414.0  | 1257.1 | 1800.8 | 1895.6 | 1461.6 | 912.9  | 912.9  | 678.4  | 658.5  |
| 82.5° | 254.4  | 254.4  | 264.4  | 314.3  | 434.0  | 483.9  | 369.1  | 314.3  | 359.2  | 304.3  | 289.3  |
| 85°   | 179.6  | 179.6  | 179.6  | 184.6  | 189.6  | 194.5  | 204.5  | 209.5  | 229.5  | 189.6  | 179.6  |
| 87.5° | 54.9   | 59.9   | 64.8   | 74.8   | 89.8   | 94.8   | 99.8   | 89.8   | 89.8   | 84.8   | 79.8   |
| 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)