

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: P841720

Luminaire Tested: **ARCH4-220-722-U-5WQ**

Issue Date: 5/27/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P841720  
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: ARCH4-220-722-U-5WQ  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 870mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28834 lumens  
Efficiency: N/A  
Efficacy: 130.0 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): 221.8  
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

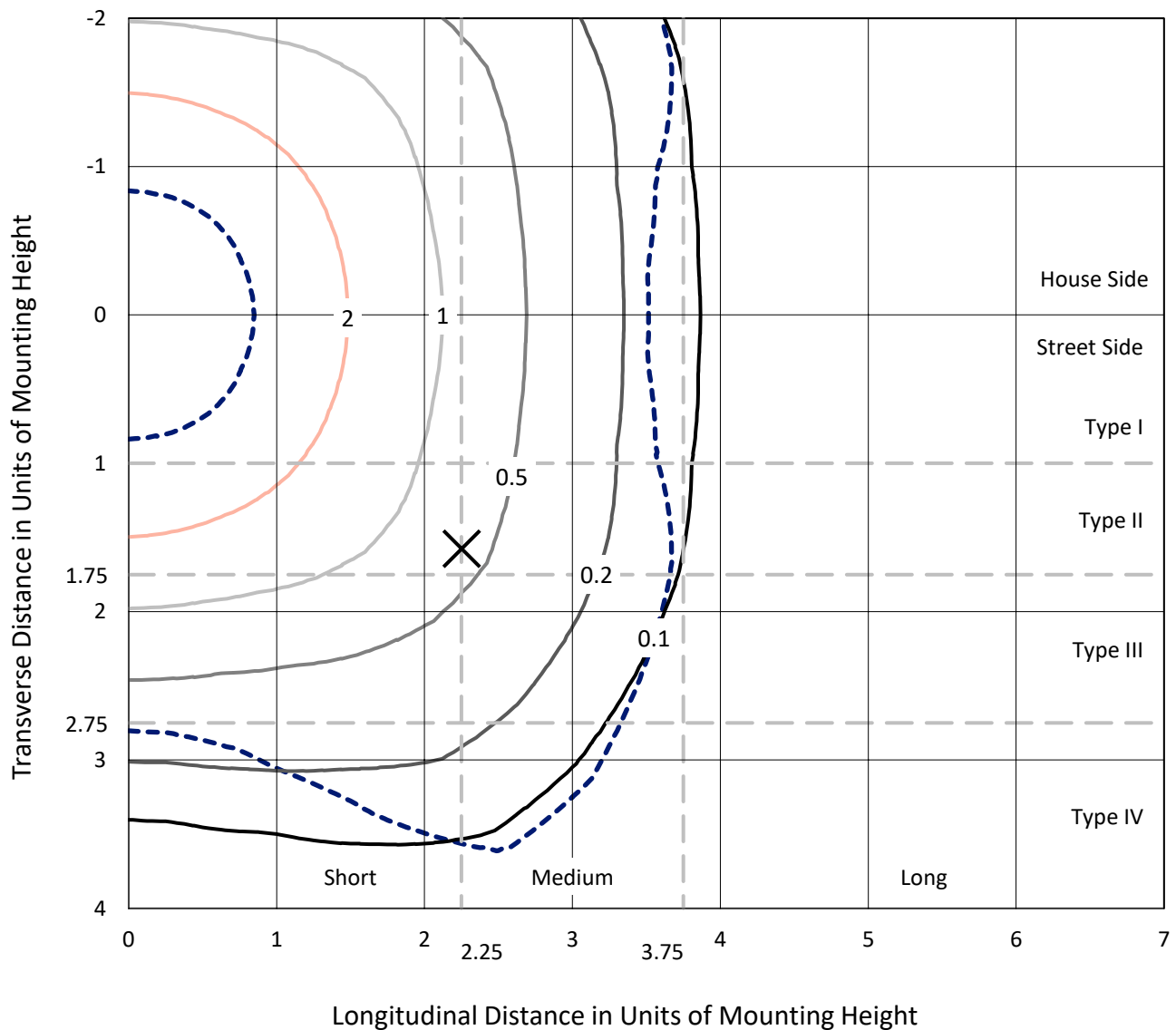


REPORT NUMBER: P841720

CATALOG NUMBER: ARCH4-220-722-U-5WQ

## Iso-Footcandle Lines of Horizontal Illumination

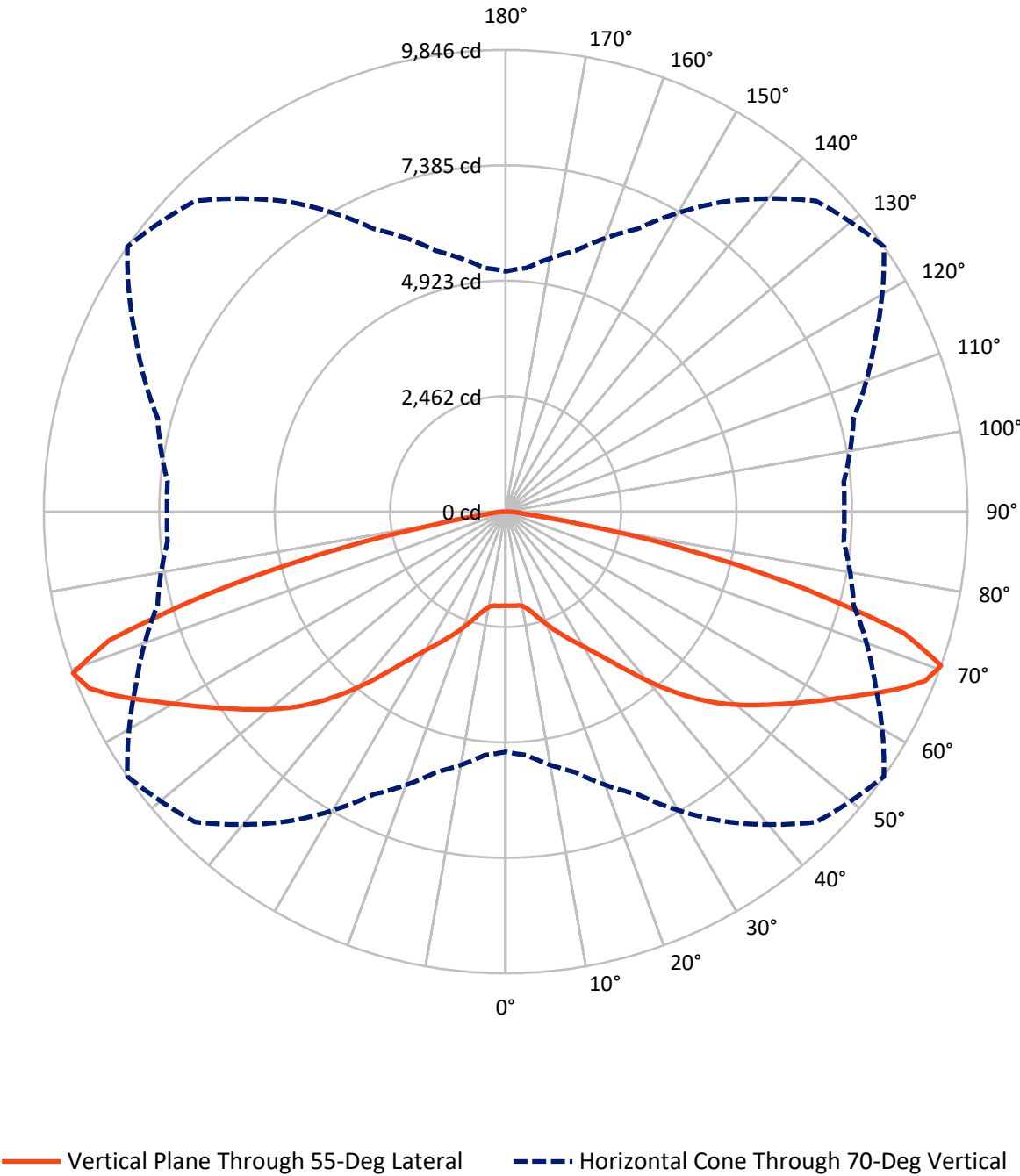
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 fc  
Type V - Medium - N/A

REPORT NUMBER: P841720  
CATALOG NUMBER: ARCH4-220-722-U-5WQ

Luminous Intensity Polar Plot



REPORT NUMBER: P841720

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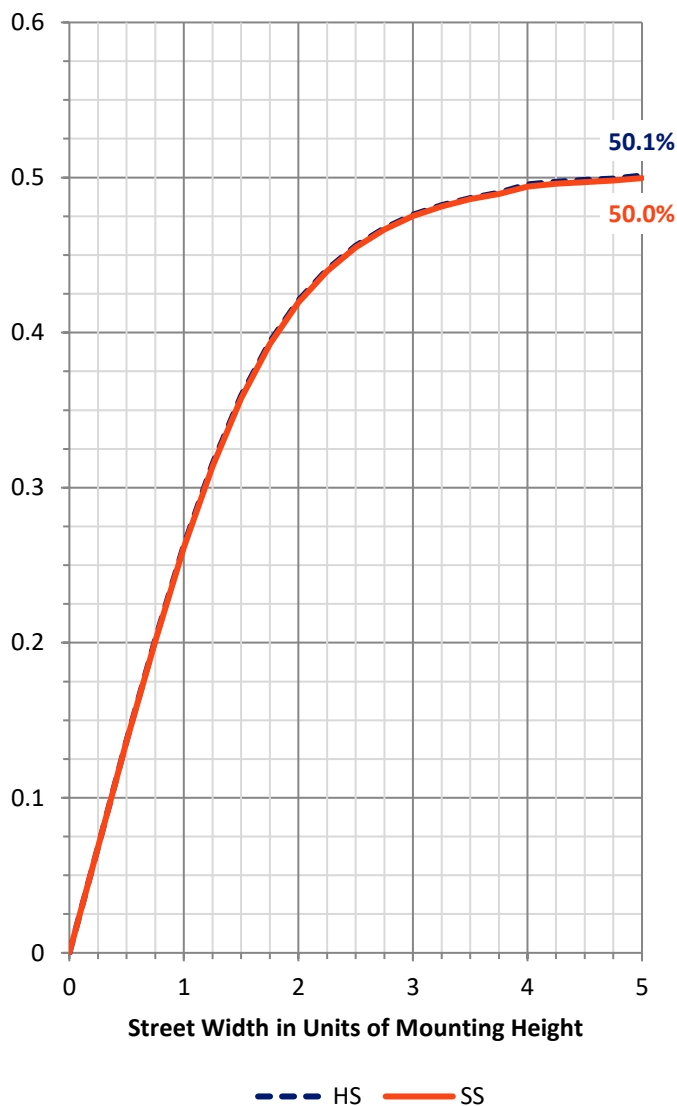
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 14417.0  | 0.0    | 14417.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 14417.0  | 0.0    | 14417.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 28834.0  | 0.0    | 28834.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 194.0   | 0.7       |
| 10°-20°   | 660.4   | 2.3       |
| 20°-30°   | 1372.3  | 4.8       |
| 30°-40°   | 2534.5  | 8.8       |
| 40°-50°   | 4452.5  | 15.4      |
| 50°-60°   | 6421.6  | 22.3      |
| 60°-70°   | 7859.3  | 27.3      |
| 70°-80°   | 5001.0  | 17.3      |
| 80°-90°   | 338.4   | 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°    | 28834.0 | 100.0     |
| 0°-180°   | 28834.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841720

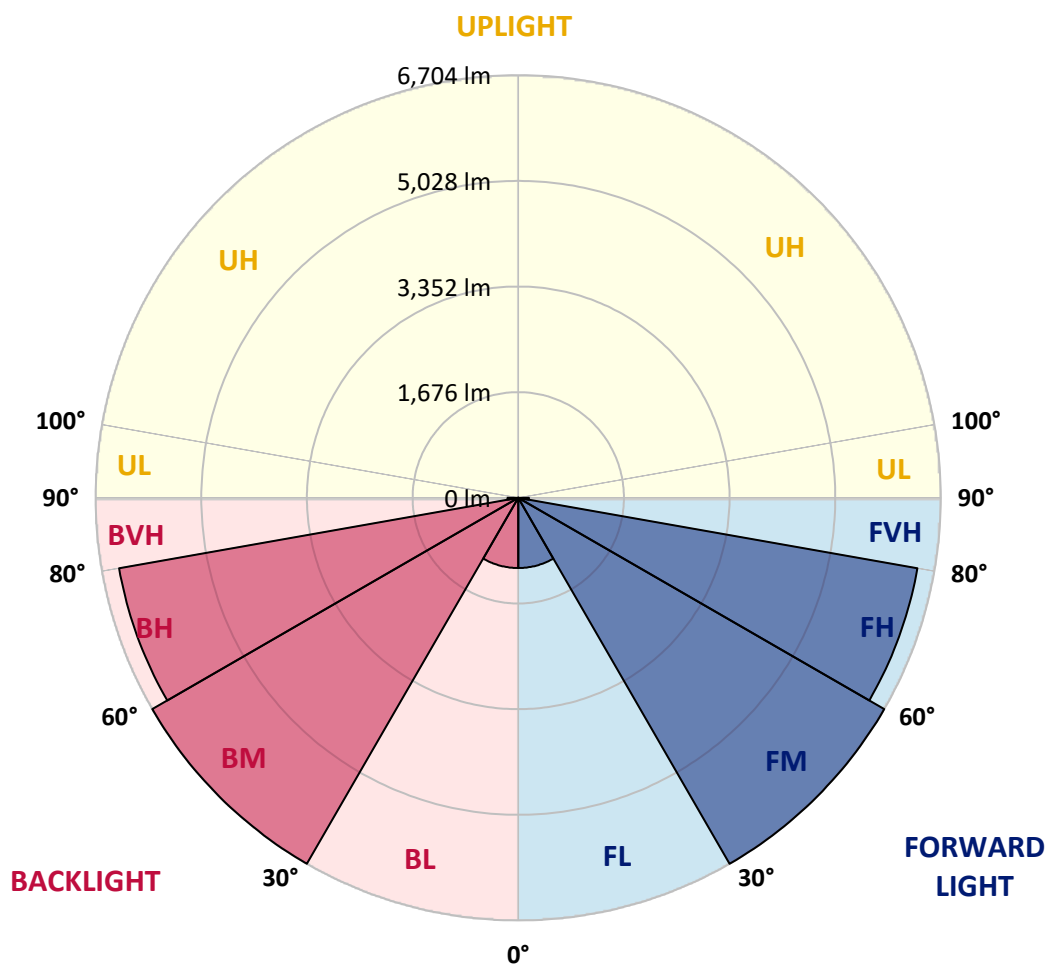
CATALOG NUMBER: ARCH4-220-722-U-5WQ

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1113.4 | 3.9       |                         |      |         |
| FM   | (30°-60°)   | 6704.3 | 23.3      |                         |      |         |
| FH   | (60°-80°)   | 6430.2 | 22.3      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 169.2  | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1113.4 | 3.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 6704.3 | 23.3      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 6430.2 | 22.3      | B5                      |      | G3/7500 |
| BVH  | (80°-90°)   | 169.2  | 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



REPORT NUMBER: P841720

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2010.0 | 2010.0 | 2010.0 | 2010.0 | 2010.0 | 2010.0 | 2010.0 | 2010.0 | 2010.0 | 2010.0 | 2010.0 |
| 2.5°  | 2036.8 | 2036.8 | 2031.4 | 2031.4 | 2020.7 | 2015.4 | 2010.0 | 2010.0 | 2004.6 | 2004.6 | 1999.3 |
| 5°    | 2047.5 | 2047.5 | 2047.5 | 2042.2 | 2036.8 | 2031.4 | 2020.7 | 2010.0 | 2004.6 | 1999.3 | 1993.9 |
| 7.5°  | 2052.9 | 2052.9 | 2047.5 | 2047.5 | 2042.2 | 2036.8 | 2020.7 | 2004.6 | 1999.3 | 1993.9 | 1993.9 |
| 10°   | 2095.8 | 2090.4 | 2085.0 | 2074.3 | 2074.3 | 2074.3 | 2052.9 | 2036.8 | 2031.4 | 2031.4 | 2031.4 |
| 12.5° | 2197.6 | 2192.2 | 2181.5 | 2165.4 | 2165.4 | 2170.8 | 2138.6 | 2117.2 | 2117.2 | 2111.8 | 2111.8 |
| 15°   | 2347.7 | 2342.3 | 2331.6 | 2304.8 | 2299.4 | 2310.2 | 2261.9 | 2240.5 | 2240.5 | 2240.5 | 2235.1 |
| 17.5° | 2513.8 | 2503.1 | 2487.0 | 2465.6 | 2465.6 | 2465.6 | 2417.4 | 2390.6 | 2374.5 | 2374.5 | 2369.1 |
| 20°   | 2653.2 | 2647.8 | 2647.8 | 2642.5 | 2658.6 | 2658.6 | 2594.2 | 2551.4 | 2513.8 | 2492.4 | 2487.0 |
| 22.5° | 2776.5 | 2771.1 | 2781.8 | 2803.3 | 2835.4 | 2846.2 | 2771.1 | 2706.8 | 2647.8 | 2605.0 | 2594.2 |
| 25°   | 2942.6 | 2937.3 | 2931.9 | 2964.1 | 3017.7 | 3033.8 | 2953.4 | 2873.0 | 2814.0 | 2792.6 | 2781.8 |
| 27.5° | 3119.5 | 3124.9 | 3130.2 | 3162.4 | 3205.3 | 3232.1 | 3151.7 | 3076.6 | 3028.4 | 2996.2 | 2985.5 |
| 30°   | 3317.8 | 3328.6 | 3344.6 | 3392.9 | 3425.0 | 3435.8 | 3366.1 | 3312.5 | 3269.6 | 3242.8 | 3226.7 |
| 32.5° | 3569.8 | 3591.2 | 3612.6 | 3655.5 | 3671.6 | 3660.9 | 3628.7 | 3591.2 | 3559.0 | 3521.5 | 3516.2 |
| 35°   | 3945.0 | 3966.4 | 3961.0 | 3977.1 | 3982.5 | 3971.8 | 3955.7 | 3934.2 | 3918.2 | 3869.9 | 3864.6 |
| 37.5° | 4416.6 | 4438.1 | 4405.9 | 4389.8 | 4352.3 | 4357.7 | 4352.3 | 4368.4 | 4373.8 | 4325.5 | 4320.2 |
| 40°   | 4893.7 | 4915.1 | 4872.2 | 4829.4 | 4791.8 | 4775.8 | 4802.6 | 4856.2 | 4856.2 | 4824.0 | 4824.0 |
| 42.5° | 5402.9 | 5419.0 | 5349.3 | 5295.7 | 5247.4 | 5236.7 | 5252.8 | 5317.1 | 5333.2 | 5327.8 | 5327.8 |
| 45°   | 5912.1 | 5901.4 | 5810.2 | 5756.6 | 5713.8 | 5687.0 | 5692.3 | 5740.6 | 5772.7 | 5788.8 | 5788.8 |
| 47.5° | 6303.4 | 6287.3 | 6212.2 | 6169.4 | 6142.6 | 6105.0 | 6105.0 | 6131.8 | 6147.9 | 6153.3 | 6153.3 |
| 50°   | 6614.2 | 6598.2 | 6523.1 | 6517.8 | 6517.8 | 6501.7 | 6485.6 | 6480.2 | 6469.5 | 6474.9 | 6474.9 |
| 52.5° | 6882.2 | 6860.8 | 6807.2 | 6817.9 | 6866.2 | 6876.9 | 6855.4 | 6812.6 | 6769.7 | 6753.6 | 6759.0 |
| 55°   | 7171.7 | 7139.5 | 7096.6 | 7128.8 | 7225.3 | 7268.2 | 7236.0 | 7150.2 | 7075.2 | 7027.0 | 7027.0 |
| 57.5° | 7402.2 | 7364.6 | 7364.6 | 7455.8 | 7632.6 | 7718.4 | 7648.7 | 7487.9 | 7359.3 | 7305.7 | 7311.0 |
| 60°   | 7241.4 | 7209.2 | 7337.8 | 7739.8 | 8072.2 | 8216.9 | 8099.0 | 7814.9 | 7605.8 | 7541.5 | 7552.2 |
| 62.5° | 6925.1 | 6903.7 | 7064.5 | 7686.2 | 8468.8 | 8769.0 | 8592.1 | 8184.7 | 7873.8 | 7798.8 | 7798.8 |
| 65°   | 6458.8 | 6453.4 | 6678.6 | 7445.0 | 8559.9 | 9299.6 | 9149.5 | 8586.7 | 8184.7 | 8082.9 | 8104.3 |
| 67.5° | 5976.4 | 5976.4 | 6180.1 | 7032.3 | 8452.7 | 9524.7 | 9642.6 | 8951.2 | 8334.8 | 8082.9 | 8088.2 |
| 70°   | 5124.2 | 5215.3 | 5756.6 | 6651.8 | 8061.4 | 9363.9 | 9846.3 | 8693.9 | 7680.9 | 7236.0 | 7219.9 |
| 72.5° | 3376.8 | 3494.7 | 4572.1 | 5987.1 | 7675.5 | 8779.7 | 8886.9 | 7638.0 | 6378.4 | 5858.5 | 5831.7 |
| 75°   | 2036.8 | 2138.6 | 2964.1 | 4673.9 | 6748.2 | 7069.8 | 6598.2 | 5987.1 | 4765.0 | 4357.7 | 4357.7 |
| 77.5° | 600.3  | 670.0  | 1366.8 | 2964.1 | 4668.6 | 4647.1 | 4068.2 | 3526.9 | 2819.4 | 2395.9 | 2428.1 |
| 80°   | 353.8  | 364.5  | 444.9  | 1350.7 | 1935.0 | 2036.8 | 1570.5 | 980.9  | 980.9  | 729.0  | 707.5  |
| 82.5° | 273.4  | 273.4  | 284.1  | 337.7  | 466.3  | 519.9  | 396.6  | 337.7  | 385.9  | 327.0  | 310.9  |
| 85°   | 193.0  | 193.0  | 193.0  | 198.3  | 203.7  | 209.0  | 219.8  | 225.1  | 246.6  | 203.7  | 193.0  |
| 87.5° | 59.0   | 64.3   | 69.7   | 80.4   | 96.5   | 101.8  | 107.2  | 96.5   | 96.5   | 91.1   | 85.8   |
| 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)