

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: P842224

Luminaire Tested: **ARCH4-290-722-U-5WQ**

Issue Date: 5/27/2024

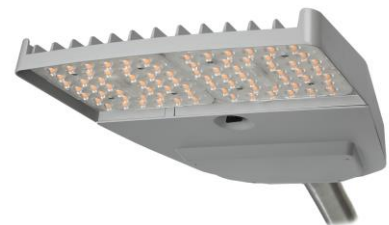
### Test Information

Test Method: LM-79-08  
Report Number: P842224  
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: ARCH4-290-722-U-5WQ  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 1120mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 35189 lumens  
Efficiency: N/A  
Efficacy: 121.5 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type V - Medium  
BUG Rating: B5 - U0 - G4

Input Watts (W): 289.7  
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

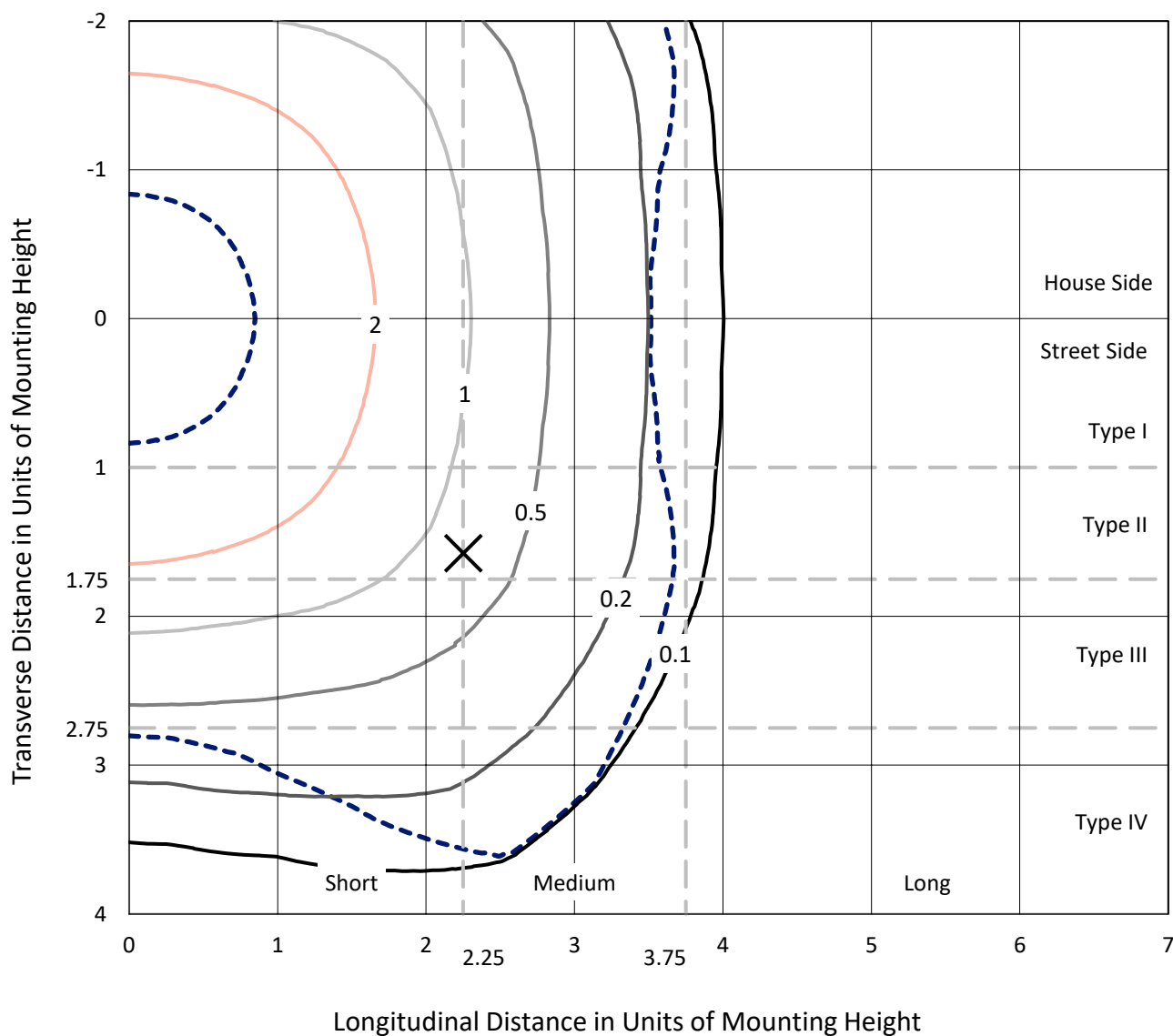


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## Iso-Footcandle Lines of Horizontal Illumination

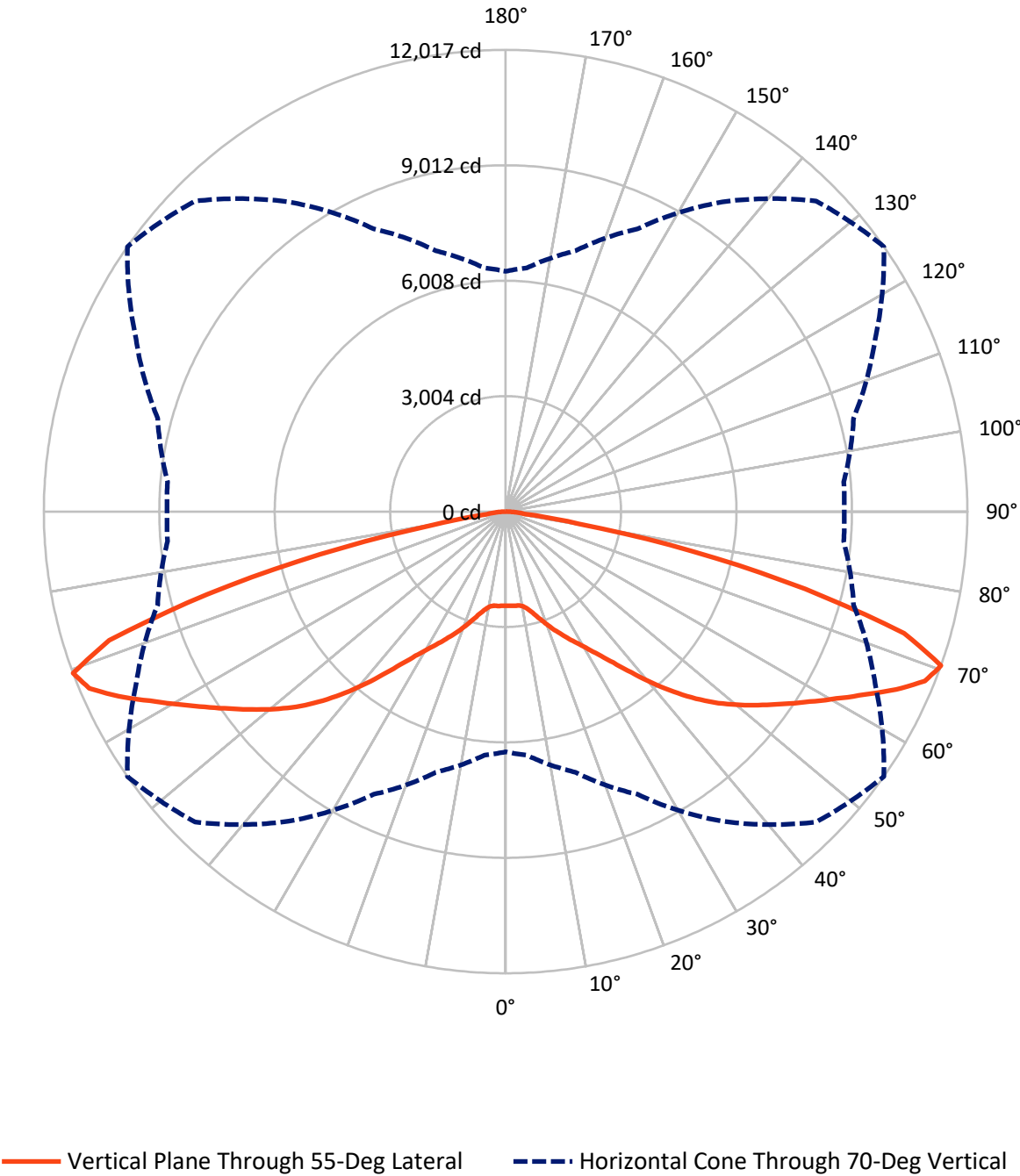
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.4 fc  
Type V - Medium - N/A

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Luminous Intensity Polar Plot



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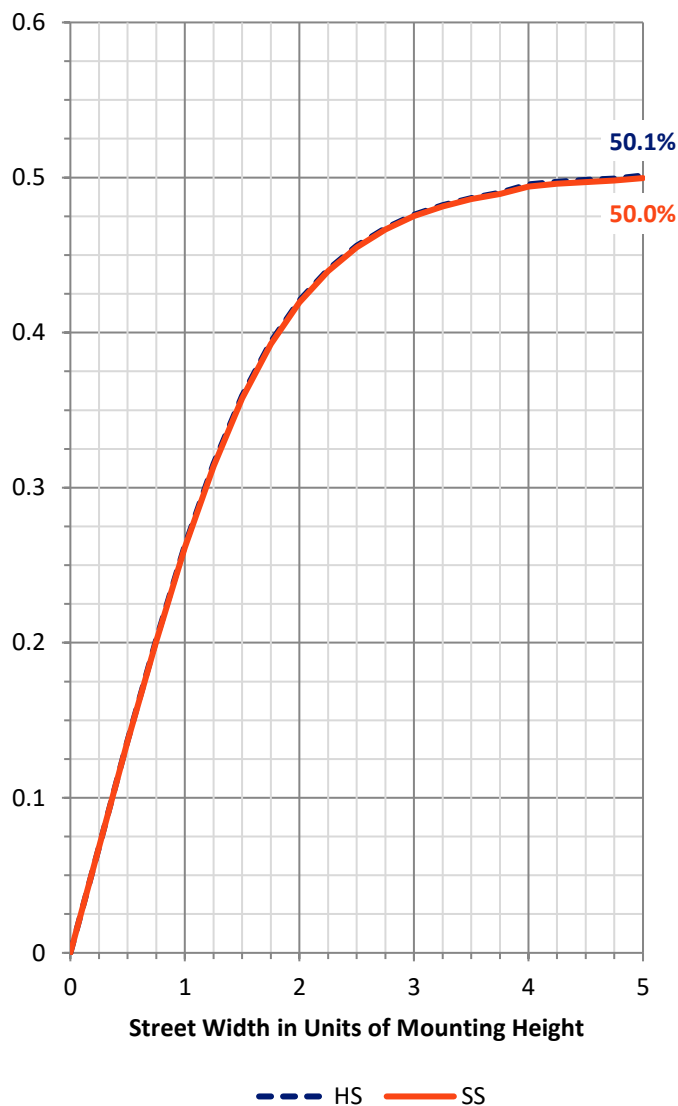
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 17594.5  | 0.0    | 17594.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 17594.5  | 0.0    | 17594.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 35189.0  | 0.0    | 35189.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 236.8   | 0.7       |
| 10°-20°   | 806.0   | 2.3       |
| 20°-30°   | 1674.7  | 4.8       |
| 30°-40°   | 3093.1  | 8.8       |
| 40°-50°   | 5433.8  | 15.4      |
| 50°-60°   | 7836.9  | 22.3      |
| 60°-70°   | 9591.5  | 27.3      |
| 70°-80°   | 6103.3  | 17.3      |
| 80°-90°   | 413.0   | 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°    | 35189.0 | 100.0     |
| 0°-180°   | 35189.0 | 100.0     |

**Coefficient of Utilization**



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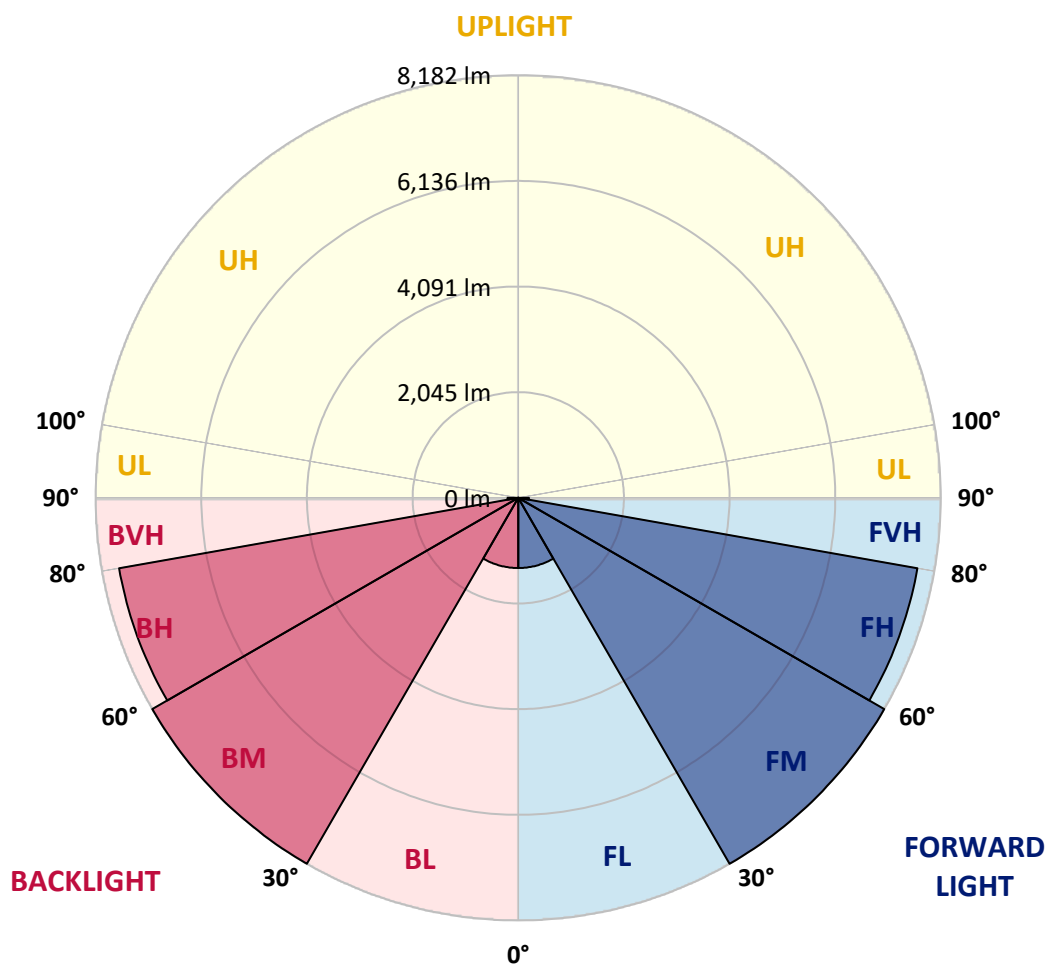
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1358.7 | 3.9       |                         |      |          |
| FM   | (30°-60°)   | 8181.9 | 23.3      |                         |      |          |
| FH   | (60°-80°)   | 7847.4 | 22.3      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 206.5  | 0.6       |                         |      | G2/225   |
| BL   | (0°-30°)    | 1358.7 | 3.9       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 8181.9 | 23.3      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 7847.4 | 22.3      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 206.5  | 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-G4**

Type V Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 55°     | 65°     | 75°     | 85°    | 90°    |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|--------|--------|
| 0°    | 2453.0 | 2453.0 | 2453.0 | 2453.0 | 2453.0  | 2453.0  | 2453.0  | 2453.0  | 2453.0  | 2453.0 | 2453.0 |
| 2.5°  | 2485.7 | 2485.7 | 2479.2 | 2479.2 | 2466.1  | 2459.5  | 2453.0  | 2453.0  | 2446.5  | 2446.5 | 2439.9 |
| 5°    | 2498.8 | 2498.8 | 2498.8 | 2492.3 | 2485.7  | 2479.2  | 2466.1  | 2453.0  | 2446.5  | 2439.9 | 2433.4 |
| 7.5°  | 2505.3 | 2505.3 | 2498.8 | 2498.8 | 2492.3  | 2485.7  | 2466.1  | 2446.5  | 2439.9  | 2433.4 | 2433.4 |
| 10°   | 2557.7 | 2551.1 | 2544.6 | 2531.5 | 2531.5  | 2531.5  | 2505.3  | 2485.7  | 2479.2  | 2479.2 | 2479.2 |
| 12.5° | 2682.0 | 2675.4 | 2662.3 | 2642.7 | 2642.7  | 2649.2  | 2610.0  | 2583.8  | 2583.8  | 2577.3 | 2577.3 |
| 15°   | 2865.1 | 2858.6 | 2845.5 | 2812.8 | 2806.2  | 2819.3  | 2760.4  | 2734.3  | 2734.3  | 2734.3 | 2727.7 |
| 17.5° | 3067.9 | 3054.8 | 3035.2 | 3009.0 | 3009.0  | 3009.0  | 2950.1  | 2917.4  | 2897.8  | 2897.8 | 2891.3 |
| 20°   | 3238.0 | 3231.4 | 3231.4 | 3224.9 | 3244.5  | 3244.5  | 3166.0  | 3113.7  | 3067.9  | 3041.7 | 3035.2 |
| 22.5° | 3388.4 | 3381.9 | 3395.0 | 3421.1 | 3460.4  | 3473.5  | 3381.9  | 3303.4  | 3231.4  | 3179.1 | 3166.0 |
| 25°   | 3591.2 | 3584.7 | 3578.1 | 3617.4 | 3682.8  | 3702.4  | 3604.3  | 3506.2  | 3434.2  | 3408.0 | 3395.0 |
| 27.5° | 3807.1 | 3813.6 | 3820.1 | 3859.4 | 3911.7  | 3944.4  | 3846.3  | 3754.7  | 3695.9  | 3656.6 | 3643.5 |
| 30°   | 4049.1 | 4062.2 | 4081.8 | 4140.7 | 4179.9  | 4193.0  | 4108.0  | 4042.6  | 3990.2  | 3957.5 | 3937.9 |
| 32.5° | 4356.5 | 4382.7 | 4408.9 | 4461.2 | 4480.8  | 4467.7  | 4428.5  | 4382.7  | 4343.5  | 4297.7 | 4291.1 |
| 35°   | 4814.4 | 4840.6 | 4834.1 | 4853.7 | 4860.2  | 4847.1  | 4827.5  | 4801.3  | 4781.7  | 4722.9 | 4716.3 |
| 37.5° | 5390.1 | 5416.2 | 5377.0 | 5357.4 | 5311.6  | 5318.1  | 5311.6  | 5331.2  | 5337.7  | 5278.9 | 5272.3 |
| 40°   | 5972.3 | 5998.4 | 5946.1 | 5893.8 | 5848.0  | 5828.3  | 5861.0  | 5926.5  | 5926.5  | 5887.2 | 5887.2 |
| 42.5° | 6593.7 | 6613.3 | 6528.3 | 6462.9 | 6404.0  | 6390.9  | 6410.5  | 6489.0  | 6508.6  | 6502.1 | 6502.1 |
| 45°   | 7215.1 | 7202.0 | 7090.8 | 7025.4 | 6973.1  | 6940.4  | 6946.9  | 7005.8  | 7045.0  | 7064.7 | 7064.7 |
| 47.5° | 7692.6 | 7673.0 | 7581.4 | 7529.1 | 7496.4  | 7450.6  | 7450.6  | 7483.3  | 7502.9  | 7509.5 | 7509.5 |
| 50°   | 8072.0 | 8052.4 | 7960.8 | 7954.3 | 7954.3  | 7934.7  | 7915.0  | 7908.5  | 7895.4  | 7901.9 | 7901.9 |
| 52.5° | 8399.1 | 8372.9 | 8307.5 | 8320.6 | 8379.5  | 8392.5  | 8366.4  | 8314.1  | 8261.7  | 8242.1 | 8248.6 |
| 55°   | 8752.3 | 8713.1 | 8660.7 | 8700.0 | 8817.7  | 8870.1  | 8830.8  | 8726.2  | 8634.6  | 8575.7 | 8575.7 |
| 57.5° | 9033.6 | 8987.8 | 8987.8 | 9099.0 | 9314.9  | 9419.5  | 9334.5  | 9138.3  | 8981.3  | 8915.9 | 8922.4 |
| 60°   | 8837.4 | 8798.1 | 8955.1 | 9445.7 | 9851.3  | 10027.9 | 9884.0  | 9537.3  | 9282.2  | 9203.7 | 9216.8 |
| 62.5° | 8451.4 | 8425.3 | 8621.5 | 9380.3 | 10335.3 | 10701.6 | 10485.8 | 9988.6  | 9609.2  | 9517.7 | 9517.7 |
| 65°   | 7882.3 | 7875.8 | 8150.5 | 9085.9 | 10446.5 | 11349.2 | 11166.1 | 10479.2 | 9988.6  | 9864.4 | 9890.5 |
| 67.5° | 7293.6 | 7293.6 | 7542.2 | 8582.2 | 10315.7 | 11624.0 | 11767.9 | 10924.1 | 10171.8 | 9864.4 | 9870.9 |
| 70°   | 6253.5 | 6364.7 | 7025.4 | 8117.8 | 9838.2  | 11427.7 | 12016.5 | 10610.1 | 9373.8  | 8830.8 | 8811.2 |
| 72.5° | 4121.0 | 4265.0 | 5579.8 | 7306.7 | 9367.2  | 10714.7 | 10845.6 | 9321.4  | 7784.2  | 7149.7 | 7117.0 |
| 75°   | 2485.7 | 2610.0 | 3617.4 | 5704.1 | 8235.6  | 8628.0  | 8052.4  | 7306.7  | 5815.3  | 5318.1 | 5318.1 |
| 77.5° | 732.6  | 817.7  | 1668.0 | 3617.4 | 5697.5  | 5671.3  | 4964.9  | 4304.2  | 3440.7  | 2924.0 | 2963.2 |
| 80°   | 431.7  | 444.8  | 542.9  | 1648.4 | 2361.4  | 2485.7  | 1916.6  | 1197.1  | 1197.1  | 889.6  | 863.5  |
| 82.5° | 333.6  | 333.6  | 346.7  | 412.1  | 569.1   | 634.5   | 484.1   | 412.1   | 471.0   | 399.0  | 379.4  |
| 85°   | 235.5  | 235.5  | 235.5  | 242.0  | 248.6   | 255.1   | 268.2   | 274.7   | 300.9   | 248.6  | 235.5  |
| 87.5° | 72.0   | 78.5   | 85.0   | 98.1   | 117.7   | 124.3   | 130.8   | 117.7   | 117.7   | 111.2  | 104.7  |
| 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)