

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: P400136

Luminaire Tested: **ARCH-L-PA3-240-730-U-5WQ**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400136  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-240-730-U-5WQ  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30801 lumens  
Efficiency: N/A  
Efficacy: 127.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G4

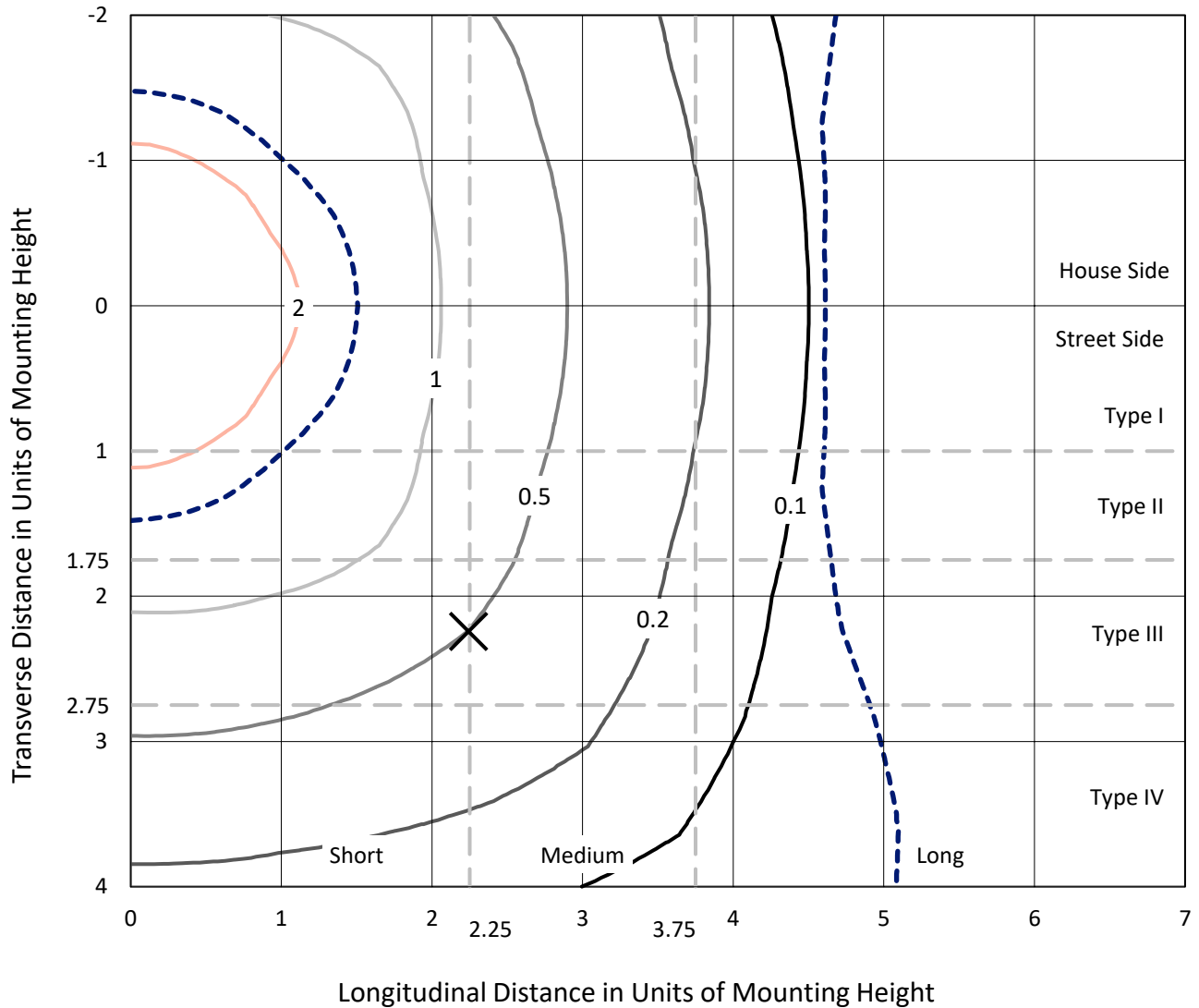
Input Watts (W): 242  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

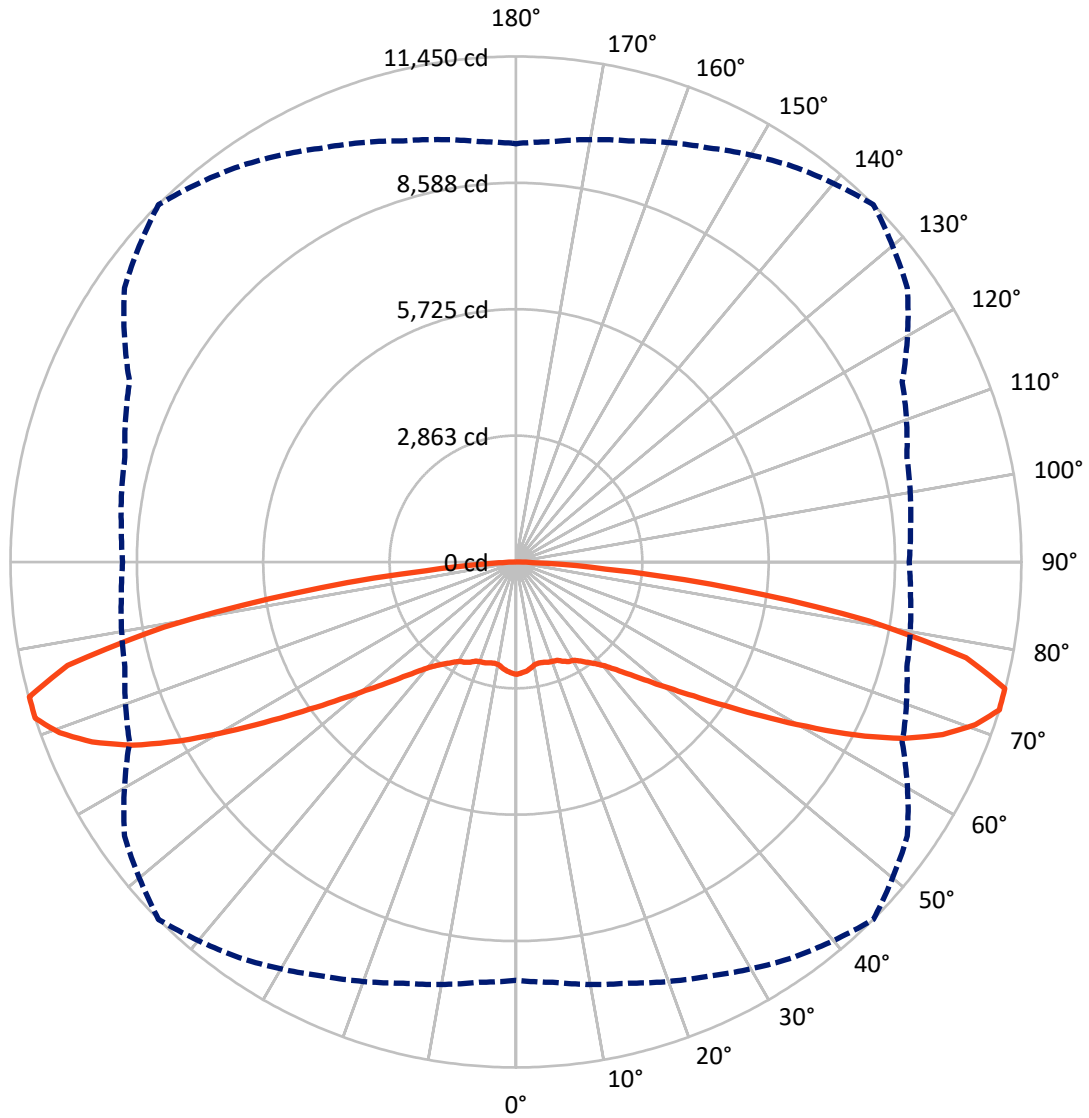
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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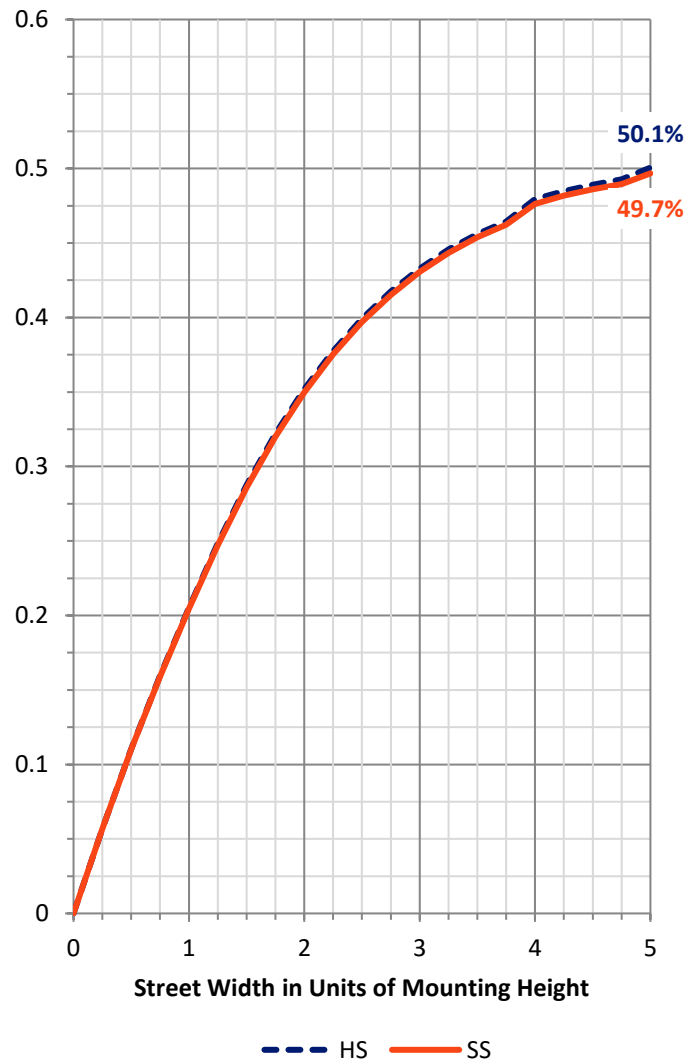
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 15400.5  | 0.0    | 15400.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 15400.5  | 0.0    | 15400.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 30801.0  | 0.0    | 30801.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 233.7   | 0.8       |
| 10°-20°   | 678.4   | 2.2       |
| 20°-30°   | 1152.7  | 3.7       |
| 30°-40°   | 1758.3  | 5.7       |
| 40°-50°   | 2895.2  | 9.4       |
| 50°-60°   | 5055.8  | 16.4      |
| 60°-70°   | 8476.2  | 27.5      |
| 70°-80°   | 9071.2  | 29.5      |
| 80°-90°   | 1479.5  | 4.8       |
| 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°    | 30801.0 | 100.0     |
| 0°-180°   | 30801.0 | 100.0     |



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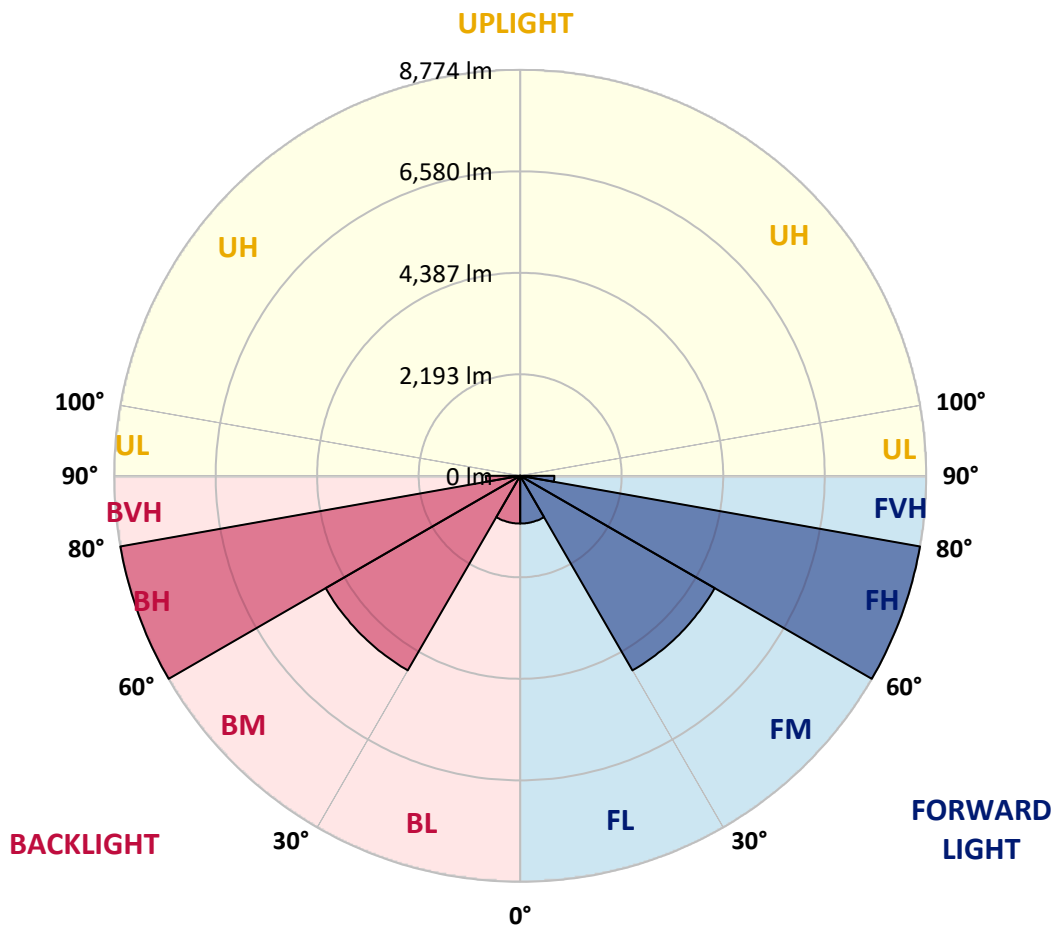
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 1032.4 | 3.4       |                         |      |          |
| FM (30°-60°)   | 4854.6 | 15.8      |                         |      |          |
| FH (60°-80°)   | 8773.7 | 28.5      |                         |      | G4/12000 |
| FVH (80°-90°)  | 739.8  | 2.4       |                         |      | G4/750   |
| BL (0°-30°)    | 1032.4 | 3.4       | B3/2500                 |      |          |
| BM (30°-60°)   | 4854.6 | 15.8      | B3/5000                 |      |          |
| BH (60°-80°)   | 8773.7 | 28.5      | B5                      |      | G4/12000 |
| BVH (80°-90°)  | 739.8  | 2.4       |                         |      | G4/750   |
| 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 Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°     | 35°     | 45°     | 55°     | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|---------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 2548.8 | 2548.8 | 2548.8 | 2548.8  | 2548.8  | 2548.8  | 2548.8  | 2548.8 | 2548.8 | 2548.8 | 2548.8 |
| 2.5°  | 2533.1 | 2533.1 | 2533.1 | 2529.2  | 2521.3  | 2517.4  | 2509.5  | 2513.4 | 2513.4 | 2513.4 | 2513.4 |
| 5°    | 2501.6 | 2501.6 | 2497.7 | 2493.7  | 2485.9  | 2481.9  | 2474.1  | 2481.9 | 2481.9 | 2481.9 | 2481.9 |
| 7.5°  | 2442.6 | 2446.5 | 2446.5 | 2442.6  | 2430.8  | 2426.9  | 2415.1  | 2419.0 | 2419.0 | 2422.9 | 2419.0 |
| 10°   | 2411.1 | 2411.1 | 2407.2 | 2387.5  | 2367.9  | 2360.0  | 2356.1  | 2367.9 | 2379.7 | 2391.5 | 2391.5 |
| 12.5° | 2411.1 | 2411.1 | 2403.3 | 2371.8  | 2344.3  | 2344.3  | 2344.3  | 2360.0 | 2383.6 | 2407.2 | 2411.1 |
| 15°   | 2422.9 | 2422.9 | 2407.2 | 2371.8  | 2356.1  | 2360.0  | 2360.0  | 2375.7 | 2403.3 | 2434.7 | 2438.7 |
| 17.5° | 2430.8 | 2430.8 | 2411.1 | 2375.7  | 2375.7  | 2387.5  | 2379.7  | 2391.5 | 2419.0 | 2454.4 | 2458.3 |
| 20°   | 2442.6 | 2442.6 | 2415.1 | 2387.5  | 2387.5  | 2399.3  | 2399.3  | 2411.1 | 2434.7 | 2470.1 | 2474.1 |
| 22.5° | 2466.2 | 2462.3 | 2434.7 | 2411.1  | 2411.1  | 2419.0  | 2426.9  | 2442.6 | 2462.3 | 2493.7 | 2501.6 |
| 25°   | 2493.7 | 2493.7 | 2470.1 | 2466.2  | 2474.1  | 2493.7  | 2489.8  | 2485.9 | 2493.7 | 2521.3 | 2533.1 |
| 27.5° | 2509.5 | 2509.5 | 2493.7 | 2505.6  | 2537.0  | 2552.8  | 2533.1  | 2517.4 | 2517.4 | 2544.9 | 2548.8 |
| 30°   | 2560.6 | 2556.7 | 2541.0 | 2548.8  | 2576.4  | 2584.2  | 2572.4  | 2552.8 | 2564.6 | 2596.0 | 2600.0 |
| 32.5° | 2647.2 | 2647.2 | 2623.6 | 2623.6  | 2643.2  | 2674.7  | 2635.4  | 2623.6 | 2639.3 | 2674.7 | 2678.6 |
| 35°   | 2780.9 | 2780.9 | 2749.4 | 2733.7  | 2749.4  | 2792.7  | 2733.7  | 2729.8 | 2757.3 | 2796.6 | 2800.6 |
| 37.5° | 2950.0 | 2950.0 | 2930.4 | 2891.0  | 2895.0  | 2922.5  | 2871.4  | 2867.4 | 2918.6 | 2961.8 | 2961.8 |
| 40°   | 3162.4 | 3174.2 | 3154.6 | 3107.4  | 3091.6  | 3095.6  | 3056.2  | 3060.2 | 3119.2 | 3170.3 | 3170.3 |
| 42.5° | 3426.0 | 3433.8 | 3402.4 | 3367.0  | 3347.3  | 3335.5  | 3296.2  | 3304.0 | 3374.8 | 3441.7 | 3441.7 |
| 45°   | 3744.6 | 3748.5 | 3717.0 | 3673.8  | 3650.2  | 3642.3  | 3603.0  | 3622.6 | 3701.3 | 3772.1 | 3768.2 |
| 47.5° | 4102.5 | 4106.4 | 4075.0 | 4031.7  | 4016.0  | 4027.8  | 3988.4  | 3988.4 | 4059.2 | 4118.2 | 4110.4 |
| 50°   | 4507.6 | 4515.5 | 4480.1 | 4460.4  | 4448.6  | 4480.1  | 4432.9  | 4389.6 | 4436.8 | 4495.8 | 4488.0 |
| 52.5° | 4956.0 | 4975.7 | 4952.1 | 4960.0  | 5003.2  | 5042.6  | 4963.9  | 4869.5 | 4893.1 | 4932.4 | 4920.6 |
| 55°   | 5498.8 | 5522.4 | 5530.3 | 5557.8  | 5671.9  | 5738.8  | 5609.0  | 5451.6 | 5439.8 | 5443.8 | 5424.1 |
| 57.5° | 6108.5 | 6124.2 | 6175.4 | 6238.3  | 6474.3  | 6580.5  | 6376.0  | 6104.6 | 6018.0 | 5966.9 | 5955.1 |
| 60°   | 6722.1 | 6749.6 | 6875.5 | 7005.3  | 7367.2  | 7559.9  | 7245.2  | 6789.0 | 6604.1 | 6509.7 | 6490.0 |
| 62.5° | 7339.6 | 7394.7 | 7599.3 | 7819.5  | 8346.6  | 8633.7  | 8149.9  | 7489.1 | 7221.6 | 7103.6 | 7072.2 |
| 65°   | 8055.5 | 8122.4 | 8370.2 | 8649.5  | 9235.5  | 9640.7  | 9054.6  | 8212.9 | 7925.7 | 7768.4 | 7729.1 |
| 67.5° | 8893.3 | 8964.1 | 9164.7 | 9475.5  | 10030.1 | 10427.3 | 9908.1  | 8952.3 | 8578.7 | 8378.1 | 8346.6 |
| 70°   | 9581.7 | 9644.6 | 9860.9 | 10175.6 | 10588.6 | 11040.9 | 10545.3 | 9542.3 | 9204.1 | 9062.5 | 9042.8 |
| 72.5° | 9475.5 | 9558.1 | 9876.7 | 10348.7 | 10938.7 | 11450.0 | 10824.6 | 9656.4 | 9168.7 | 8972.0 | 8909.1 |
| 75°   | 8275.8 | 8366.3 | 8743.9 | 9597.4  | 10675.1 | 11438.2 | 10419.5 | 8897.3 | 8323.0 | 8157.8 | 8126.3 |
| 77.5° | 5479.2 | 5565.7 | 6202.9 | 7548.1  | 9322.1  | 10423.4 | 9196.2  | 7453.7 | 6529.4 | 6132.1 | 6108.5 |
| 80°   | 2214.5 | 2324.6 | 2934.3 | 4362.1  | 6608.0  | 8102.7  | 6820.4  | 4771.2 | 3217.5 | 2596.0 | 2470.1 |
| 82.5° | 515.3  | 613.6  | 892.9  | 1608.7  | 3382.7  | 5046.5  | 3677.7  | 1781.8 | 1034.5 | 735.5  | 660.8  |
| 85°   | 216.3  | 220.3  | 381.5  | 523.1   | 1058.1  | 2037.5  | 1203.6  | 649.0  | 527.1  | 385.5  | 377.6  |
| 87.5° | 82.6   | 86.5   | 184.9  | 220.3   | 338.3   | 385.5   | 409.1   | 334.3  | 310.7  | 192.7  | 184.9  |
| 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)