

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: P399938

Luminaire Tested: **ARCH-L-PA3-210-750-U-5WQ**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399938  
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-PA3-210-750-U-5WQ  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30833 lumens  
Efficiency: N/A  
Efficacy: 146.1 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

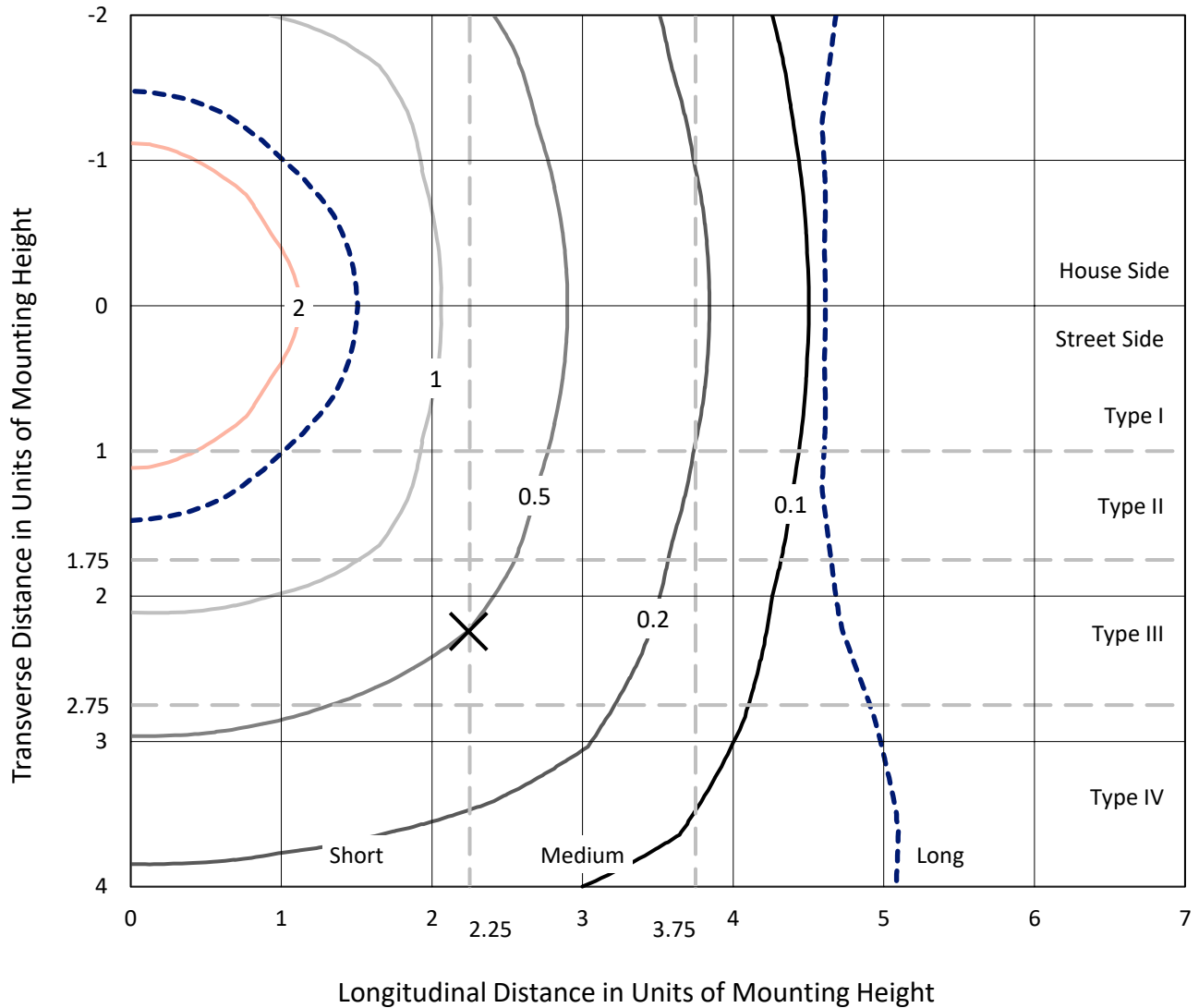
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

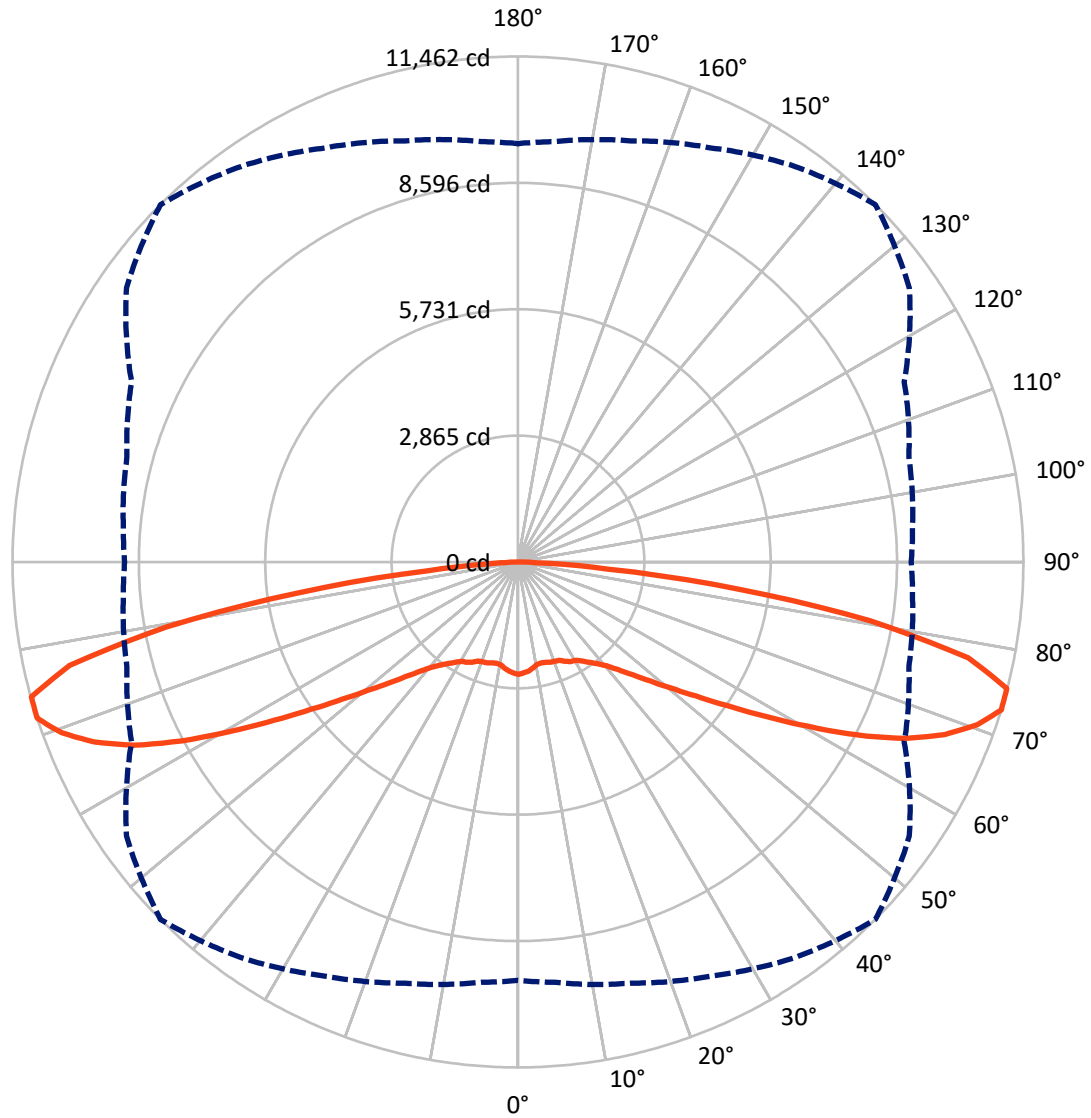
✕ Max cd  
 - - - 1/2 Max cd



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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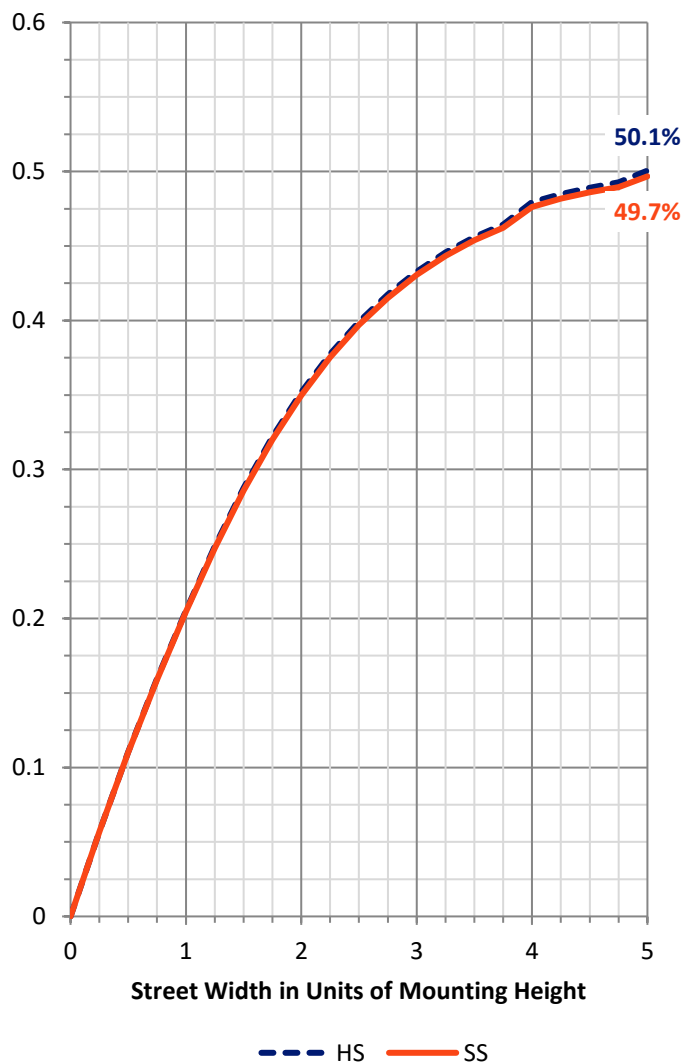
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 15416.5  | 0.0    | 15416.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 15416.5  | 0.0    | 15416.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 30833.0  | 0.0    | 30833.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 234.0   | 0.8       |
| 10°-20°   | 679.1   | 2.2       |
| 20°-30°   | 1153.9  | 3.7       |
| 30°-40°   | 1760.1  | 5.7       |
| 40°-50°   | 2898.2  | 9.4       |
| 50°-60°   | 5061.1  | 16.4      |
| 60°-70°   | 8485.0  | 27.5      |
| 70°-80°   | 9080.6  | 29.5      |
| 80°-90°   | 1481.0  | 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°    | 30833.0 | 100.0     |
| 0°-180°   | 30833.0 | 100.0     |

**Coefficient of Utilization**



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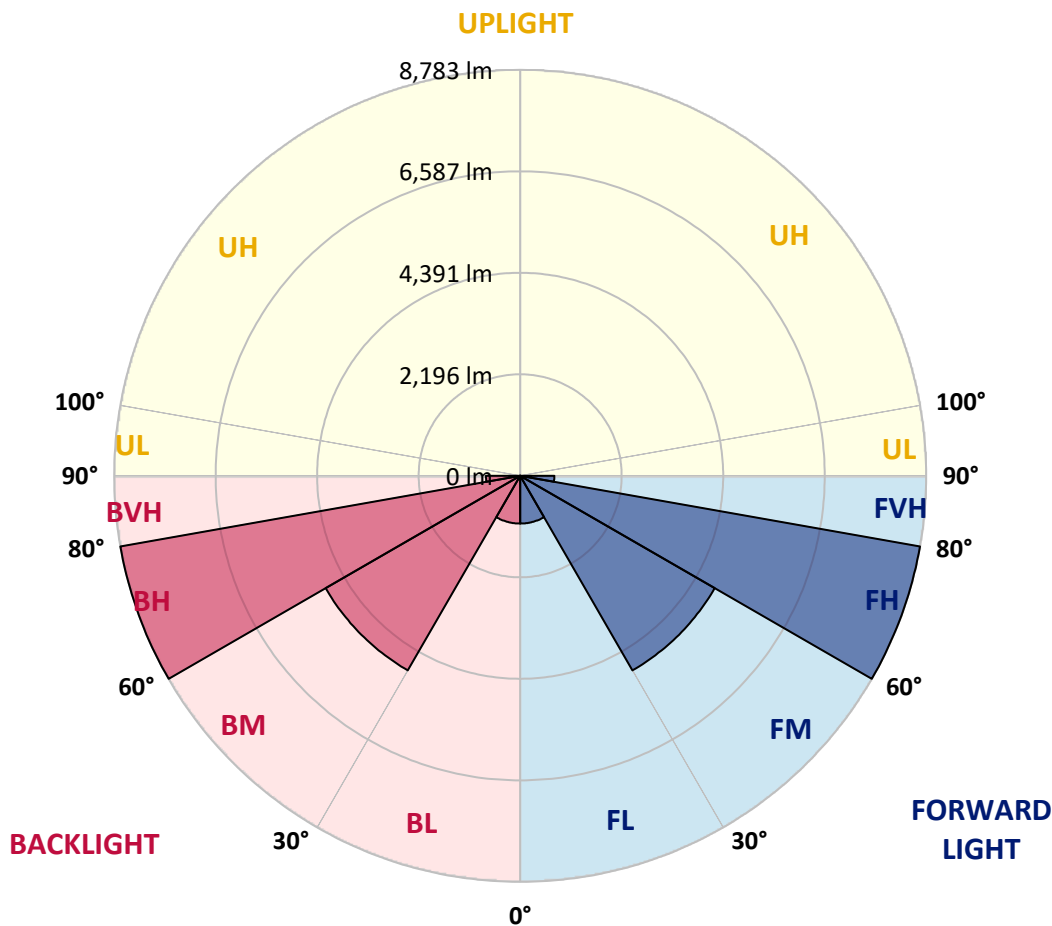
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 1033.5 | 3.4       |                         |      |          |
| FM (30°-60°)   | 4859.6 | 15.8      |                         |      |          |
| FH (60°-80°)   | 8782.8 | 28.5      |                         |      | G4/12000 |
| FVH (80°-90°)  | 740.5  | 2.4       |                         |      | G4/750   |
| BL (0°-30°)    | 1033.5 | 3.4       | B3/2500                 |      |          |
| BM (30°-60°)   | 4859.6 | 15.8      | B3/5000                 |      |          |
| BH (60°-80°)   | 8782.8 | 28.5      | B5                      |      | G4/12000 |
| BVH (80°-90°)  | 740.5  | 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°    | 2551.5 | 2551.5 | 2551.5 | 2551.5  | 2551.5  | 2551.5  | 2551.5  | 2551.5 | 2551.5 | 2551.5 | 2551.5 |
| 2.5°  | 2535.7 | 2535.7 | 2535.7 | 2531.8  | 2523.9  | 2520.0  | 2512.1  | 2516.0 | 2516.0 | 2516.0 | 2516.0 |
| 5°    | 2504.2 | 2504.2 | 2500.3 | 2496.3  | 2488.5  | 2484.5  | 2476.7  | 2484.5 | 2484.5 | 2484.5 | 2484.5 |
| 7.5°  | 2445.2 | 2449.1 | 2449.1 | 2445.2  | 2433.3  | 2429.4  | 2417.6  | 2421.5 | 2421.5 | 2425.5 | 2421.5 |
| 10°   | 2413.7 | 2413.7 | 2409.7 | 2390.0  | 2370.3  | 2362.5  | 2358.5  | 2370.3 | 2382.2 | 2394.0 | 2394.0 |
| 12.5° | 2413.7 | 2413.7 | 2405.8 | 2374.3  | 2346.7  | 2346.7  | 2346.7  | 2362.5 | 2386.1 | 2409.7 | 2413.7 |
| 15°   | 2425.5 | 2425.5 | 2409.7 | 2374.3  | 2358.5  | 2362.5  | 2362.5  | 2378.2 | 2405.8 | 2437.3 | 2441.2 |
| 17.5° | 2433.3 | 2433.3 | 2413.7 | 2378.2  | 2378.2  | 2390.0  | 2382.2  | 2394.0 | 2421.5 | 2457.0 | 2460.9 |
| 20°   | 2445.2 | 2445.2 | 2417.6 | 2390.0  | 2390.0  | 2401.8  | 2401.8  | 2413.7 | 2437.3 | 2472.7 | 2476.7 |
| 22.5° | 2468.8 | 2464.8 | 2437.3 | 2413.7  | 2413.7  | 2421.5  | 2429.4  | 2445.2 | 2464.8 | 2496.3 | 2504.2 |
| 25°   | 2496.3 | 2496.3 | 2472.7 | 2468.8  | 2476.7  | 2496.3  | 2492.4  | 2488.5 | 2496.3 | 2523.9 | 2535.7 |
| 27.5° | 2512.1 | 2512.1 | 2496.3 | 2508.2  | 2539.7  | 2555.4  | 2535.7  | 2520.0 | 2520.0 | 2547.5 | 2551.5 |
| 30°   | 2563.3 | 2559.3 | 2543.6 | 2551.5  | 2579.0  | 2586.9  | 2575.1  | 2555.4 | 2567.2 | 2598.7 | 2602.7 |
| 32.5° | 2649.9 | 2649.9 | 2626.3 | 2626.3  | 2646.0  | 2677.5  | 2638.1  | 2626.3 | 2642.0 | 2677.5 | 2681.4 |
| 35°   | 2783.8 | 2783.8 | 2752.3 | 2736.5  | 2752.3  | 2795.6  | 2736.5  | 2732.6 | 2760.1 | 2799.5 | 2803.5 |
| 37.5° | 2953.1 | 2953.1 | 2933.4 | 2894.0  | 2898.0  | 2925.5  | 2874.3  | 2870.4 | 2921.6 | 2964.9 | 2964.9 |
| 40°   | 3165.7 | 3177.5 | 3157.8 | 3110.6  | 3094.8  | 3098.8  | 3059.4  | 3063.3 | 3122.4 | 3173.6 | 3173.6 |
| 42.5° | 3429.5 | 3437.4 | 3405.9 | 3370.5  | 3350.8  | 3339.0  | 3299.6  | 3307.5 | 3378.3 | 3445.3 | 3445.3 |
| 45°   | 3748.4 | 3752.4 | 3720.9 | 3677.6  | 3653.9  | 3646.1  | 3606.7  | 3626.4 | 3705.1 | 3776.0 | 3772.1 |
| 47.5° | 4106.8 | 4110.7 | 4079.2 | 4035.9  | 4020.1  | 4031.9  | 3992.6  | 3992.6 | 4063.4 | 4122.5 | 4114.6 |
| 50°   | 4512.3 | 4520.2 | 4484.8 | 4465.1  | 4453.3  | 4484.8  | 4437.5  | 4394.2 | 4441.4 | 4500.5 | 4492.6 |
| 52.5° | 4961.2 | 4980.9 | 4957.2 | 4965.1  | 5008.4  | 5047.8  | 4969.1  | 4874.6 | 4898.2 | 4937.6 | 4925.7 |
| 55°   | 5504.5 | 5528.2 | 5536.0 | 5563.6  | 5677.8  | 5744.7  | 5614.8  | 5457.3 | 5445.5 | 5449.4 | 5429.7 |
| 57.5° | 6114.9 | 6130.6 | 6181.8 | 6244.8  | 6481.0  | 6587.3  | 6382.6  | 6110.9 | 6024.3 | 5973.1 | 5961.3 |
| 60°   | 6729.1 | 6756.7 | 6882.7 | 7012.6  | 7374.8  | 7567.8  | 7252.8  | 6796.0 | 6611.0 | 6516.5 | 6496.8 |
| 62.5° | 7347.3 | 7402.4 | 7607.1 | 7827.6  | 8355.3  | 8642.7  | 8158.4  | 7496.9 | 7229.2 | 7111.0 | 7079.5 |
| 65°   | 8063.9 | 8130.8 | 8378.9 | 8658.4  | 9245.1  | 9650.7  | 9064.0  | 8221.4 | 7934.0 | 7776.5 | 7737.1 |
| 67.5° | 8902.6 | 8973.4 | 9174.2 | 9485.3  | 10040.5 | 10438.2 | 9918.4  | 8961.6 | 8587.6 | 8386.8 | 8355.3 |
| 70°   | 9591.6 | 9654.6 | 9871.2 | 10186.2 | 10599.6 | 11052.4 | 10556.3 | 9552.2 | 9213.6 | 9071.9 | 9052.2 |
| 72.5° | 9485.3 | 9568.0 | 9886.9 | 10359.4 | 10950.0 | 11461.9 | 10835.9 | 9666.4 | 9178.2 | 8981.3 | 8918.3 |
| 75°   | 8284.4 | 8374.9 | 8752.9 | 9607.4  | 10686.2 | 11450.1 | 10430.3 | 8906.5 | 8331.6 | 8166.3 | 8134.8 |
| 77.5° | 5484.9 | 5571.5 | 6209.4 | 7556.0  | 9331.7  | 10434.2 | 9205.7  | 7461.5 | 6536.2 | 6138.5 | 6114.9 |
| 80°   | 2216.8 | 2327.0 | 2937.3 | 4366.6  | 6614.9  | 8111.1  | 6827.5  | 4776.1 | 3220.8 | 2598.7 | 2472.7 |
| 82.5° | 515.8  | 614.2  | 893.8  | 1610.4  | 3386.2  | 5051.7  | 3681.5  | 1783.7 | 1035.5 | 736.3  | 661.5  |
| 85°   | 216.6  | 220.5  | 381.9  | 523.7   | 1059.2  | 2039.6  | 1204.9  | 649.7  | 527.6  | 385.9  | 378.0  |
| 87.5° | 82.7   | 86.6   | 185.1  | 220.5   | 338.6   | 385.9   | 409.5   | 334.7  | 311.1  | 192.9  | 185.1  |
| 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)