

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: P236715

Luminaire Tested: **ARCH-L-AF72-220-D-U-5WQ-7030**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P236715  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29597)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-220-D-U-5WQ-7030  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25975.3 lumens  
Efficiency: N/A  
Efficacy: 117.0 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

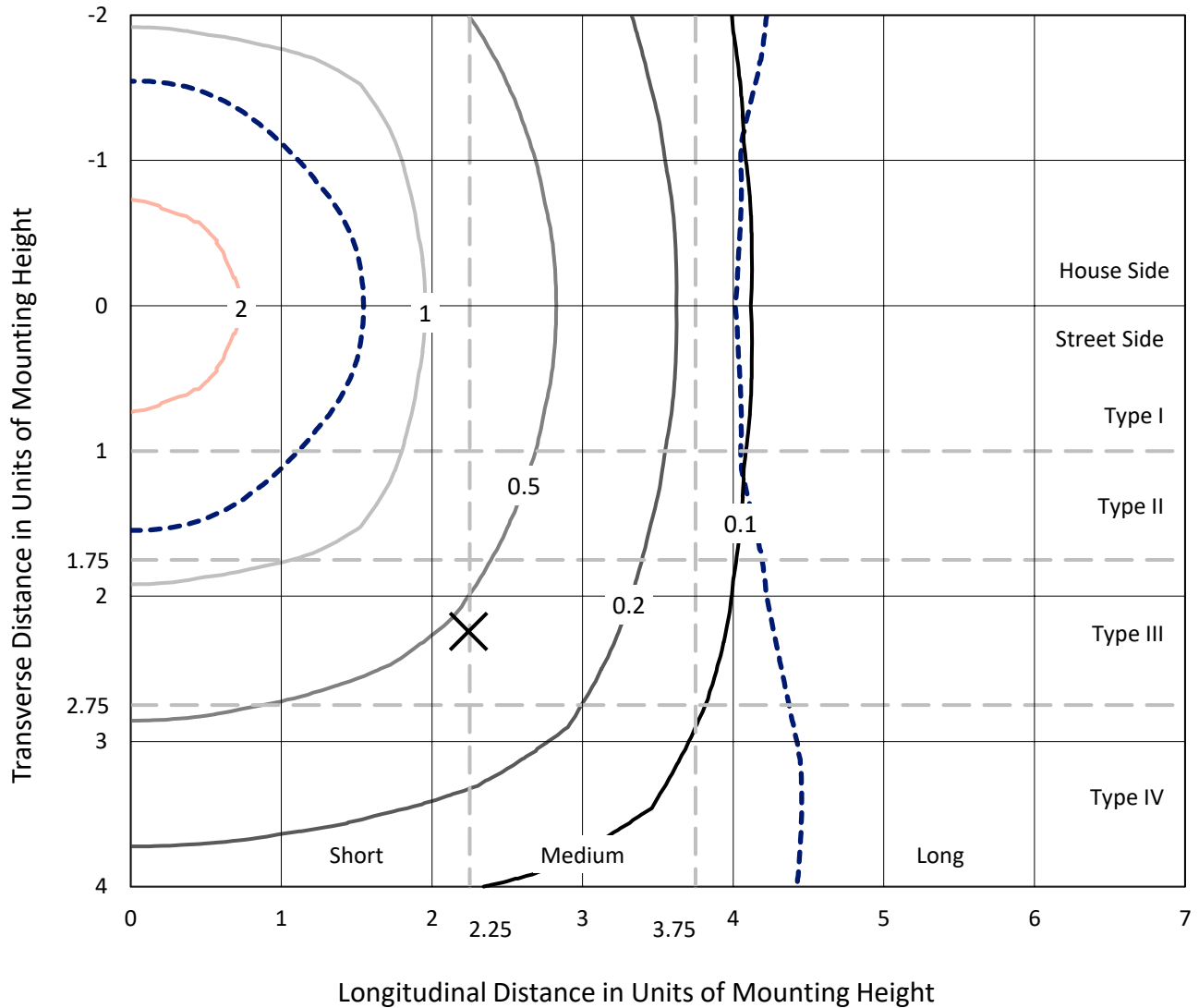
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

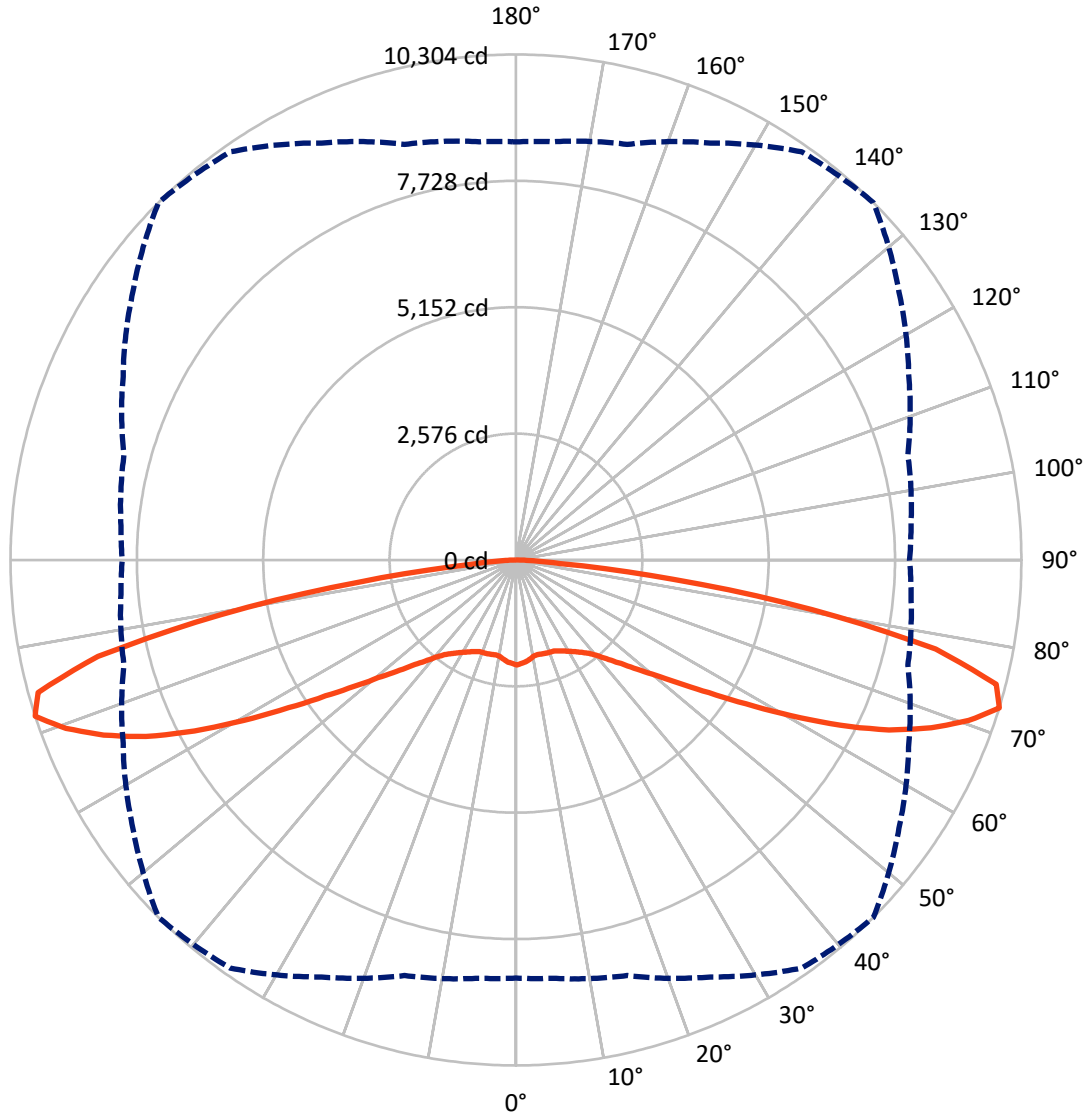
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type V - 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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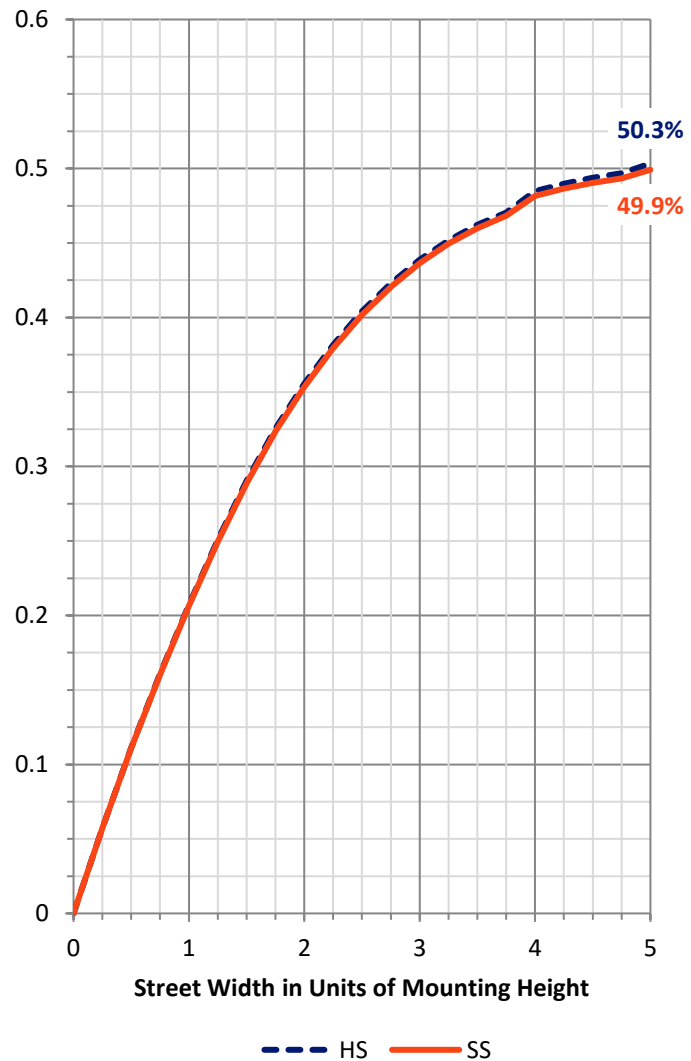
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 12987.6  | 0.0    | 12987.6 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 12987.6  | 0.0    | 12987.6 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 25975.3  | 0.0    | 25975.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 197.0   | 0.8       |
| 10°-20°   | 568.4   | 2.2       |
| 20°-30°   | 951.2   | 3.7       |
| 30°-40°   | 1461.5  | 5.6       |
| 40°-50°   | 2419.8  | 9.3       |
| 50°-60°   | 4302.0  | 16.6      |
| 60°-70°   | 7526.3  | 29.0      |
| 70°-80°   | 7657.4  | 29.5      |
| 80°-90°   | 891.6   | 3.4       |
| 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°    | 25975.3 | 100.0     |
| 0°-180°   | 25975.3 | 100.0     |



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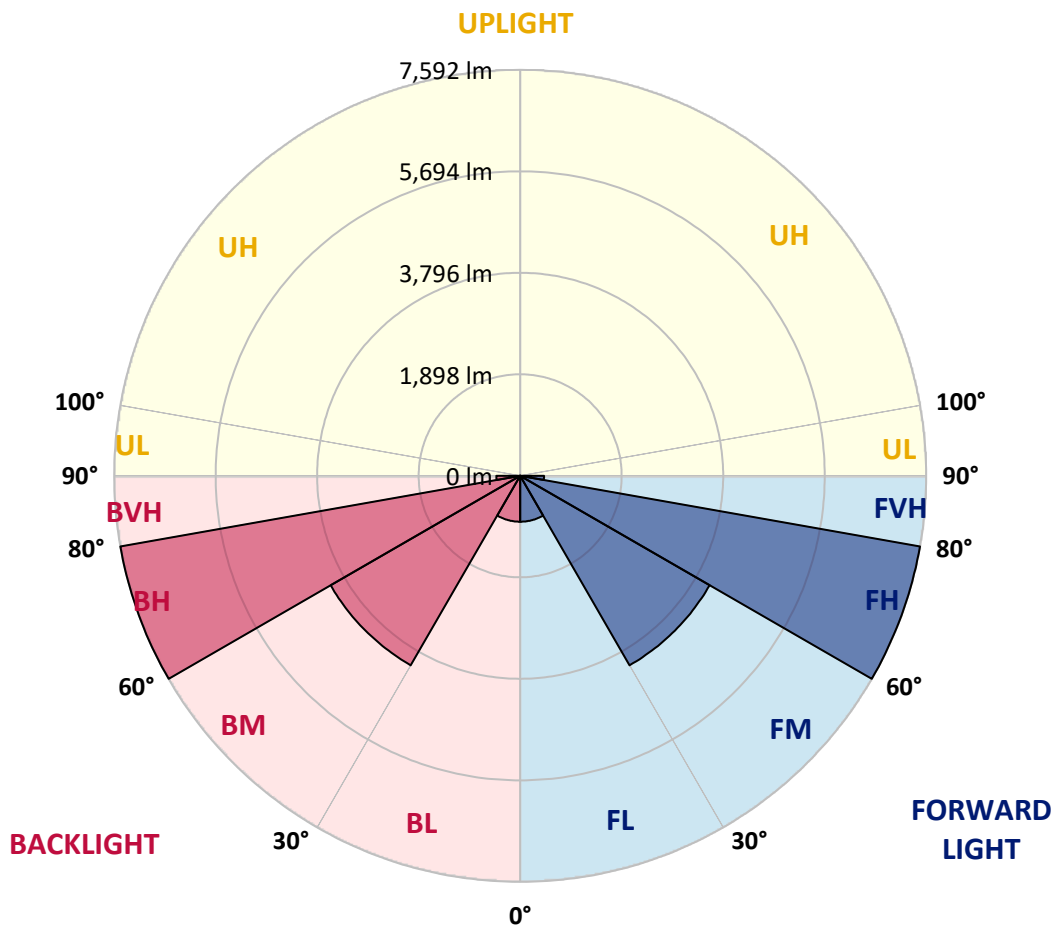
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 858.3  | 3.3       |                         |      |          |
| FM (30°-60°)   | 4091.7 | 15.8      |                         |      |          |
| FH (60°-80°)   | 7591.9 | 29.2      |                         |      | G4/12000 |
| FVH (80°-90°)  | 445.8  | 1.7       |                         |      | G3/500   |
| BL (0°-30°)    | 858.3  | 3.3       | B2/1000                 |      |          |
| BM (30°-60°)   | 4091.7 | 15.8      | B3/5000                 |      |          |
| BH (60°-80°)   | 7591.9 | 29.2      | B5                      |      | G4/12000 |
| BVH (80°-90°)  | 445.8  | 1.7       |                         |      | G3/500   |
| 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°    | 2140.9 | 2140.9 | 2140.9 | 2140.9 | 2140.9  | 2140.9  | 2140.9 | 2140.9 | 2140.9 | 2140.9 | 2140.9 |
| 2.5°  | 2121.2 | 2126.1 | 2116.3 | 2116.3 | 2116.3  | 2111.3  | 2116.3 | 2111.3 | 2116.3 | 2121.2 | 2121.2 |
| 5°    | 2101.4 | 2101.4 | 2091.5 | 2091.5 | 2091.5  | 2086.6  | 2091.5 | 2091.5 | 2096.4 | 2101.4 | 2101.4 |
| 7.5°  | 2057.0 | 2057.0 | 2052.0 | 2047.0 | 2042.0  | 2042.0  | 2047.0 | 2047.0 | 2052.0 | 2057.0 | 2057.0 |
| 10°   | 2032.2 | 2027.2 | 2017.4 | 2002.5 | 1997.6  | 1992.7  | 2002.5 | 2012.4 | 2027.2 | 2042.0 | 2037.1 |
| 12.5° | 2022.3 | 2017.4 | 1997.6 | 1982.7 | 1972.9  | 1977.8  | 1987.7 | 1997.6 | 2022.3 | 2037.1 | 2032.2 |
| 15°   | 2032.2 | 2022.3 | 1997.6 | 1972.9 | 1977.8  | 1987.7  | 1997.6 | 1997.6 | 2027.2 | 2042.0 | 2042.0 |
| 17.5° | 2032.2 | 2027.2 | 1997.6 | 1977.8 | 1982.7  | 1997.6  | 2002.5 | 1997.6 | 2022.3 | 2047.0 | 2047.0 |
| 20°   | 2037.1 | 2037.1 | 1997.6 | 1982.7 | 1987.7  | 2002.5  | 2007.4 | 2002.5 | 2022.3 | 2052.0 | 2052.0 |
| 22.5° | 2047.0 | 2042.0 | 2002.5 | 1992.7 | 2002.5  | 2012.4  | 2017.4 | 2012.4 | 2032.2 | 2057.0 | 2061.8 |
| 25°   | 2066.7 | 2057.0 | 2022.3 | 2017.4 | 2037.1  | 2052.0  | 2052.0 | 2042.0 | 2052.0 | 2076.7 | 2076.7 |
| 27.5° | 2091.5 | 2086.6 | 2047.0 | 2047.0 | 2071.8  | 2101.4  | 2086.6 | 2066.7 | 2076.7 | 2101.4 | 2101.4 |
| 30°   | 2136.0 | 2131.1 | 2091.5 | 2091.5 | 2126.1  | 2160.7  | 2126.1 | 2101.4 | 2116.3 | 2140.9 | 2146.0 |
| 32.5° | 2200.3 | 2200.3 | 2165.7 | 2155.8 | 2215.1  | 2230.0  | 2215.1 | 2165.7 | 2175.6 | 2210.2 | 2210.2 |
| 35°   | 2309.0 | 2299.2 | 2264.6 | 2259.6 | 2318.9  | 2314.0  | 2309.0 | 2264.6 | 2274.4 | 2314.0 | 2314.0 |
| 37.5° | 2452.5 | 2447.5 | 2417.9 | 2403.0 | 2432.6  | 2412.9  | 2422.9 | 2403.0 | 2427.7 | 2457.5 | 2462.3 |
| 40°   | 2635.5 | 2630.5 | 2605.8 | 2585.9 | 2595.9  | 2566.2  | 2576.2 | 2585.9 | 2610.6 | 2630.5 | 2635.5 |
| 42.5° | 2862.8 | 2862.8 | 2838.1 | 2803.5 | 2788.8  | 2773.9  | 2773.9 | 2793.6 | 2818.4 | 2843.0 | 2843.0 |
| 45°   | 3144.7 | 3144.7 | 3115.0 | 3080.4 | 3035.9  | 3011.1  | 3021.1 | 3040.9 | 3070.5 | 3100.2 | 3110.1 |
| 47.5° | 3476.0 | 3476.0 | 3436.4 | 3401.8 | 3357.3  | 3327.6  | 3327.6 | 3337.6 | 3382.0 | 3406.8 | 3421.6 |
| 50°   | 3846.8 | 3831.9 | 3792.4 | 3757.9 | 3733.1  | 3693.5  | 3698.5 | 3693.5 | 3733.1 | 3767.7 | 3777.6 |
| 52.5° | 4232.4 | 4227.6 | 4188.0 | 4178.1 | 4193.0  | 4173.1  | 4173.1 | 4123.7 | 4138.5 | 4158.3 | 4153.4 |
| 55°   | 4712.2 | 4697.3 | 4662.6 | 4682.5 | 4741.8  | 4771.5  | 4761.5 | 4682.5 | 4637.9 | 4647.8 | 4642.9 |
| 57.5° | 5236.2 | 5221.4 | 5211.4 | 5270.8 | 5404.3  | 5528.0  | 5503.3 | 5320.3 | 5236.2 | 5241.1 | 5246.1 |
| 60°   | 5770.2 | 5770.2 | 5799.9 | 5948.2 | 6235.0  | 6437.8  | 6363.6 | 6057.0 | 5908.6 | 5879.0 | 5869.1 |
| 62.5° | 6319.1 | 6333.9 | 6398.2 | 6645.3 | 7085.5  | 7421.7  | 7233.8 | 6798.6 | 6576.2 | 6516.9 | 6497.1 |
| 65°   | 6956.9 | 6971.8 | 7065.7 | 7372.3 | 7955.7  | 8356.2  | 8034.8 | 7624.4 | 7312.9 | 7189.3 | 7169.5 |
| 67.5° | 7881.5 | 7891.5 | 7965.5 | 8262.3 | 8811.1  | 9132.4  | 8801.2 | 8435.4 | 8099.1 | 7955.7 | 7945.8 |
| 70°   | 8712.3 | 8722.0 | 8786.4 | 9177.0 | 9681.4  | 9795.1  | 9429.2 | 8964.4 | 8613.4 | 8499.6 | 8479.8 |
| 72.5° | 8524.3 | 8559.0 | 8771.6 | 9379.7 | 10155.9 | 10304.4 | 9533.0 | 8835.8 | 8272.1 | 8084.2 | 8024.9 |
| 75°   | 7149.7 | 7204.1 | 7540.3 | 8455.1 | 9691.2  | 10111.5 | 8919.9 | 7639.3 | 6798.6 | 6437.8 | 6343.8 |
| 77.5° | 4173.1 | 4375.9 | 4954.4 | 6126.2 | 7891.5  | 8746.9  | 7347.5 | 5592.2 | 4178.1 | 3584.8 | 3386.9 |
| 80°   | 1142.2 | 1250.9 | 1671.2 | 2818.4 | 4949.5  | 6126.2  | 4687.3 | 2566.2 | 1384.5 | 1038.3 | 964.2  |
| 82.5° | 361.0  | 479.6  | 608.1  | 810.9  | 1943.1  | 3228.7  | 1740.5 | 756.5  | 593.4  | 489.5  | 435.1  |
| 85°   | 192.9  | 207.7  | 341.2  | 395.5  | 583.5   | 904.8   | 538.9  | 395.5  | 355.9  | 262.1  | 247.3  |
| 87.5° | 98.9   | 103.8  | 192.9  | 192.9  | 257.1   | 212.6   | 232.4  | 212.6  | 202.6  | 128.6  | 113.7  |
| 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)