

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: P316421

Luminaire Tested: **GAN-SA7D-727-U-5MQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P316421  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA7D-727-U-5MQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V  
MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 48214 lumens  
Efficiency: N/A  
Efficacy: 107.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G4

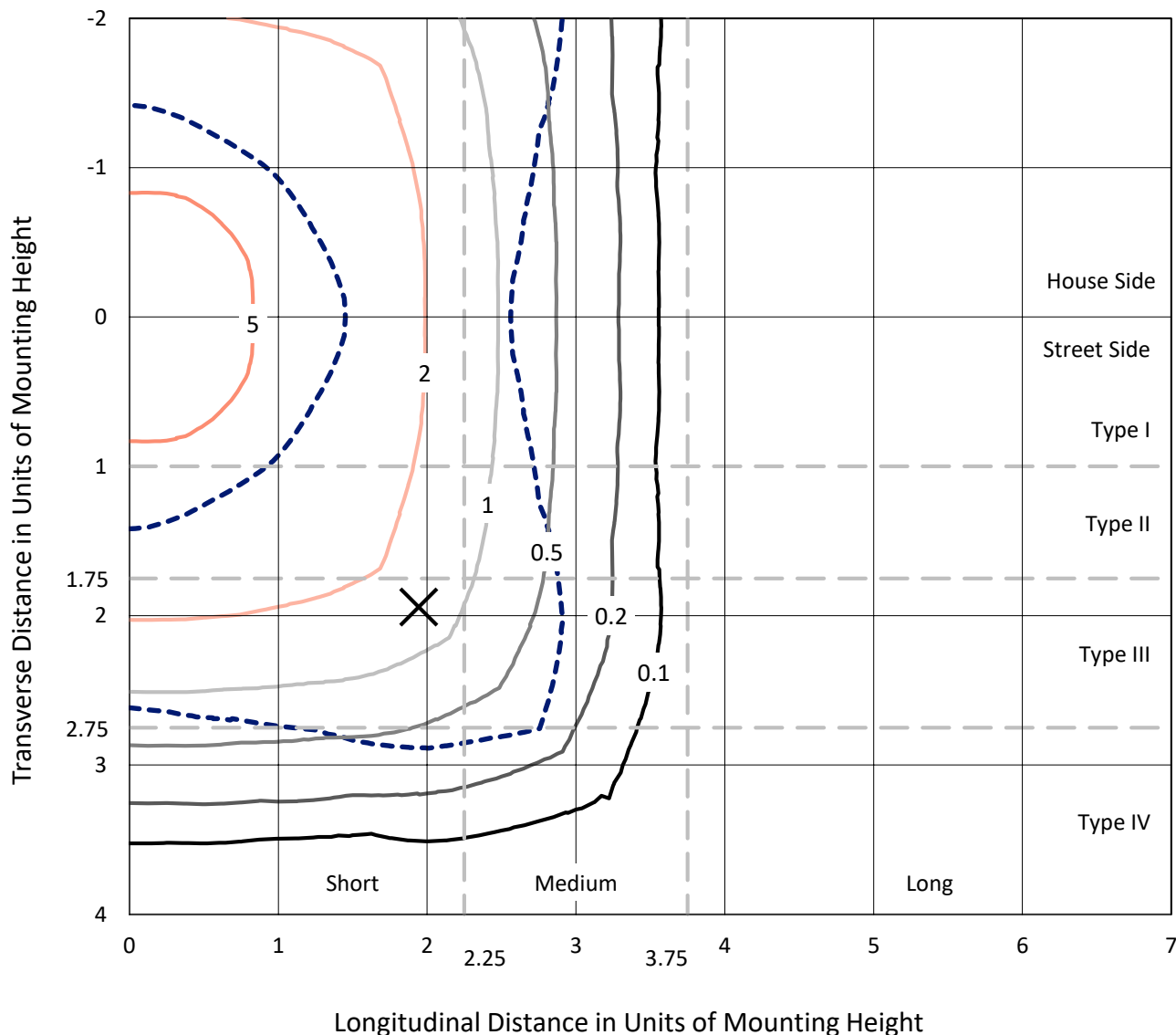
Input Watts (W): 448  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

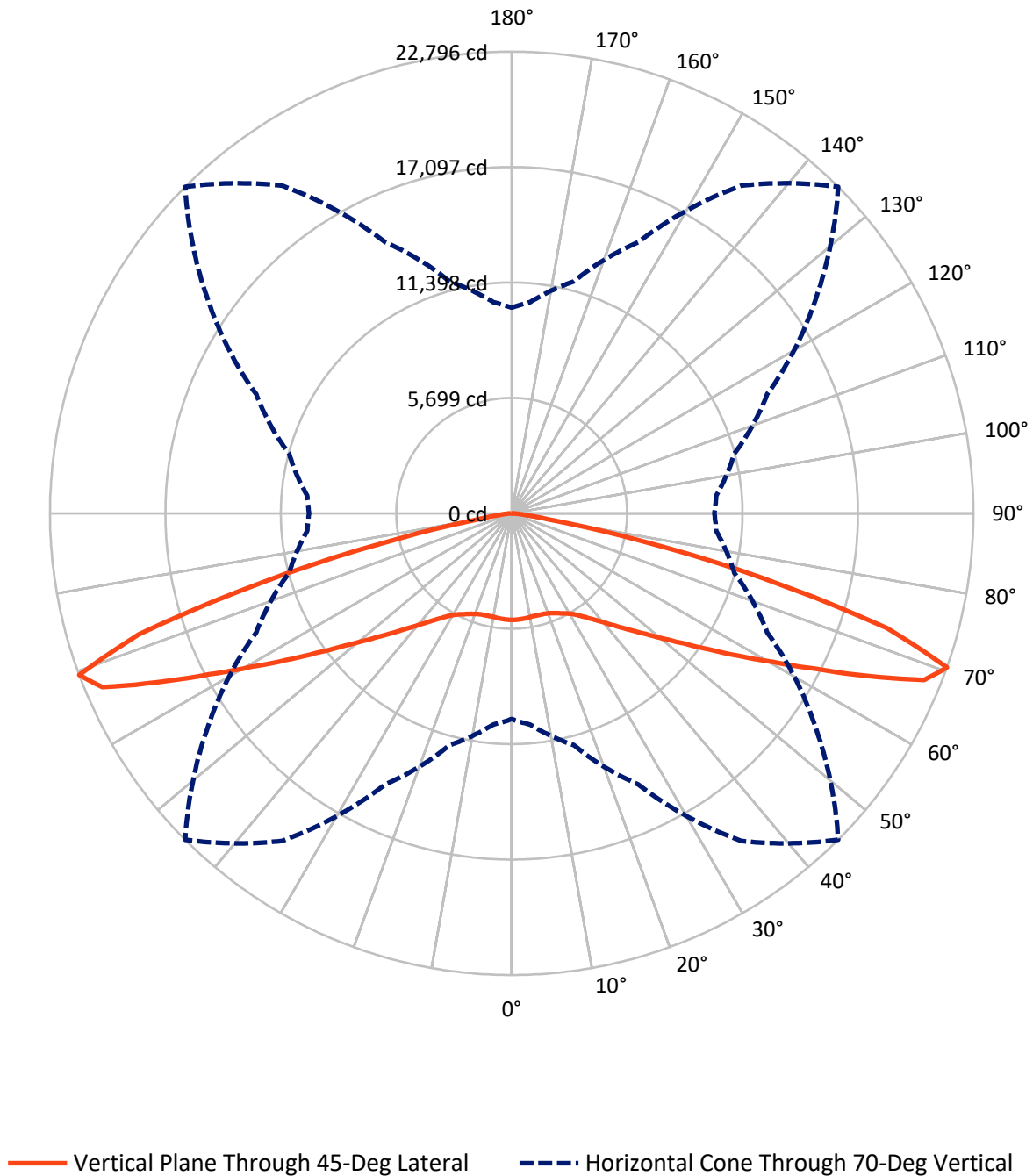
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc  
 Type V - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 24107.0  | 0.0    | 24107.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 24107.0  | 0.0    | 24107.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 48214.0  | 0.0    | 48214.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 498.7   | 1.0       |
| 10°-20°   | 1464.1  | 3.0       |
| 20°-30°   | 2492.4  | 5.2       |
| 30°-40°   | 3952.9  | 8.2       |
| 40°-50°   | 6432.6  | 13.3      |
| 50°-60°   | 10606.2 | 22.0      |
| 60°-70°   | 15570.2 | 32.3      |
| 70°-80°   | 6885.1  | 14.3      |
| 80°-90°   | 311.8   | 0.6       |
| 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°    | 48214.0 | 100.0     |
| 0°-180°   | 48214.0 | 100.0     |

**Coefficient of Utilization**



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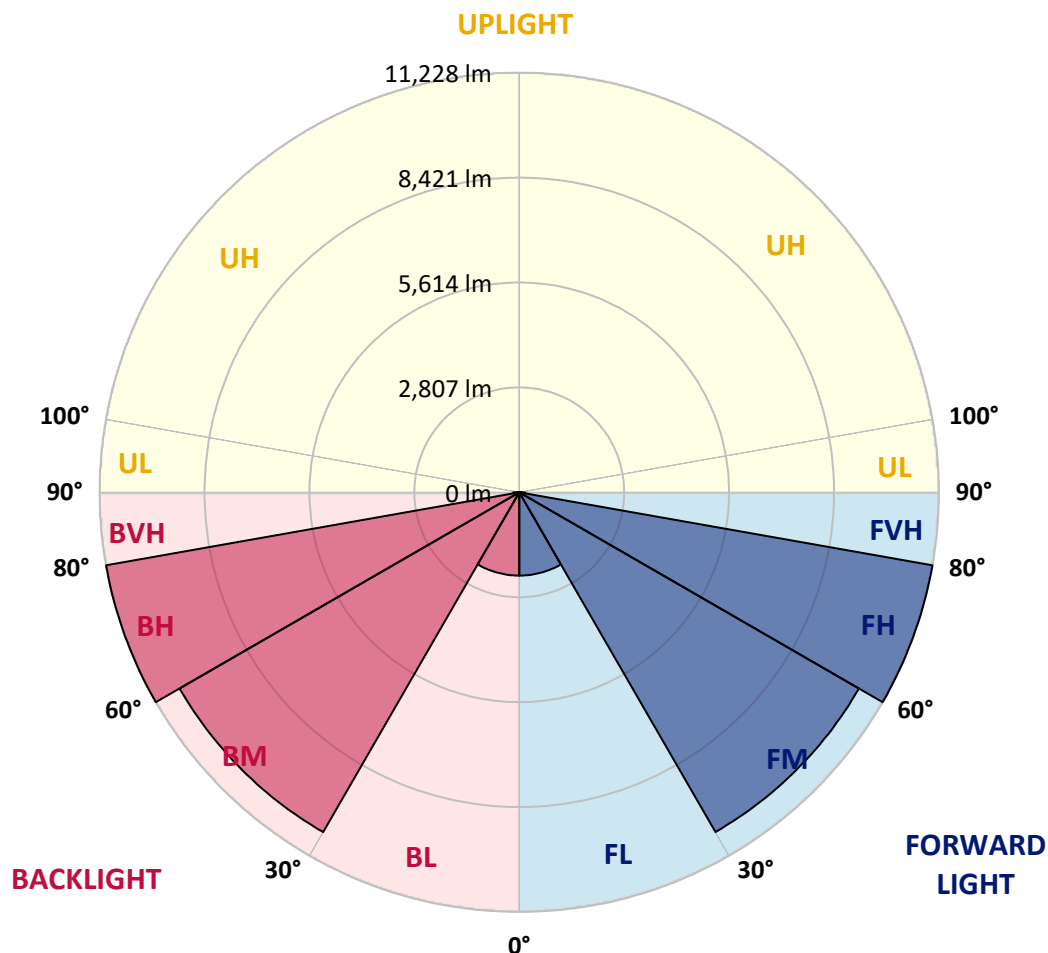
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2227.6  | 4.6       |                         |      |          |
| FM   | (30°-60°)   | 10495.9 | 21.8      |                         |      |          |
| FH   | (60°-80°)   | 11227.6 | 23.3      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 155.9   | 0.3       |                         |      | G2/225   |
| BL   | (0°-30°)    | 2227.6  | 4.6       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 10495.9 | 21.8      | B5                      |      |          |
| BH   | (60°-80°)   | 11227.6 | 23.3      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 155.9   | 0.3       |                         |      | 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 Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5265.7  | 5265.7  | 5265.7  | 5265.7  | 5265.7  | 5265.7  | 5265.7  | 5265.7  | 5265.7  | 5265.7  | 5265.7  |
| 2.5°  | 5257.7  | 5253.0  | 5264.1  | 5262.5  | 5253.0  | 5254.5  | 5254.5  | 5259.3  | 5259.3  | 5256.1  | 5256.1  |
| 5°    | 5238.6  | 5235.4  | 5248.2  | 5248.2  | 5238.6  | 5241.8  | 5245.0  | 5249.8  | 5248.2  | 5245.0  | 5243.4  |
| 7.5°  | 5214.7  | 5213.1  | 5225.8  | 5225.8  | 5219.4  | 5222.6  | 5219.4  | 5221.0  | 5217.8  | 5214.7  | 5209.9  |
| 10°   | 5174.8  | 5178.0  | 5189.1  | 5192.3  | 5192.3  | 5193.9  | 5190.7  | 5182.7  | 5178.0  | 5173.2  | 5168.4  |
| 12.5° | 5138.1  | 5136.5  | 5152.4  | 5160.4  | 5173.2  | 5187.5  | 5178.0  | 5155.6  | 5146.0  | 5136.5  | 5133.3  |
| 15°   | 5114.1  | 5115.7  | 5131.7  | 5146.0  | 5168.4  | 5198.7  | 5187.5  | 5152.4  | 5133.3  | 5122.1  | 5118.9  |
| 17.5° | 5109.3  | 5112.5  | 5133.3  | 5158.8  | 5182.7  | 5216.3  | 5209.9  | 5174.8  | 5142.9  | 5122.1  | 5117.3  |
| 20°   | 5120.5  | 5122.1  | 5154.0  | 5190.7  | 5232.2  | 5264.1  | 5249.8  | 5211.5  | 5168.4  | 5136.5  | 5128.5  |
| 22.5° | 5141.3  | 5147.6  | 5187.5  | 5245.0  | 5308.8  | 5351.9  | 5334.3  | 5268.9  | 5201.9  | 5162.0  | 5150.8  |
| 25°   | 5206.7  | 5208.3  | 5262.5  | 5340.7  | 5417.3  | 5466.8  | 5446.0  | 5353.5  | 5267.3  | 5222.6  | 5208.3  |
| 27.5° | 5342.3  | 5347.1  | 5401.4  | 5492.3  | 5557.7  | 5589.6  | 5576.9  | 5501.9  | 5428.5  | 5380.6  | 5385.4  |
| 30°   | 5538.6  | 5545.0  | 5605.6  | 5706.1  | 5746.0  | 5754.0  | 5750.8  | 5715.7  | 5648.7  | 5584.9  | 5589.6  |
| 32.5° | 5777.9  | 5781.1  | 5862.5  | 5953.5  | 5985.4  | 5991.8  | 5985.4  | 5953.5  | 5873.7  | 5787.5  | 5792.3  |
| 35°   | 6085.9  | 6095.5  | 6173.7  | 6261.4  | 6286.9  | 6299.7  | 6288.5  | 6247.1  | 6164.1  | 6079.5  | 6076.3  |
| 37.5° | 6465.7  | 6467.3  | 6548.6  | 6639.6  | 6671.5  | 6674.7  | 6661.9  | 6634.8  | 6531.1  | 6454.5  | 6449.7  |
| 40°   | 6906.1  | 6912.5  | 7008.2  | 7105.5  | 7118.3  | 7103.9  | 7121.5  | 7105.5  | 6998.6  | 6910.9  | 6925.2  |
| 42.5° | 7442.2  | 7456.6  | 7571.5  | 7667.2  | 7630.5  | 7622.5  | 7633.7  | 7638.5  | 7552.3  | 7445.4  | 7435.8  |
| 45°   | 8066.1  | 8078.9  | 8222.5  | 8299.1  | 8275.2  | 8222.5  | 8244.8  | 8283.1  | 8163.5  | 8031.0  | 8043.8  |
| 47.5° | 8777.8  | 8809.7  | 8962.9  | 9034.7  | 8975.7  | 8903.9  | 8946.9  | 9004.4  | 8864.0  | 8699.6  | 8691.6  |
| 50°   | 9569.2  | 9609.1  | 9813.4  | 9913.9  | 9854.9  | 9722.4  | 9794.2  | 9832.5  | 9629.9  | 9417.7  | 9400.1  |
| 52.5° | 10413.4 | 10453.3 | 10710.2 | 10917.6 | 10879.3 | 10673.5 | 10774.0 | 10734.1 | 10501.1 | 10215.5 | 10193.2 |
| 55°   | 11369.2 | 11385.1 | 11662.8 | 11997.9 | 12036.2 | 11884.6 | 11878.2 | 11812.8 | 11468.1 | 11137.8 | 11121.8 |
| 57.5° | 12352.1 | 12363.3 | 12722.3 | 13118.0 | 13298.3 | 13298.3 | 13119.6 | 12980.8 | 12522.8 | 12139.9 | 12100.0 |
| 60°   | 13413.2 | 13453.1 | 13850.4 | 14388.2 | 14809.4 | 14933.9 | 14618.0 | 14239.8 | 13741.9 | 13274.4 | 13228.1 |
| 62.5° | 14357.9 | 14404.1 | 15012.1 | 15813.1 | 16489.7 | 16942.9 | 16170.5 | 15554.6 | 14648.3 | 13898.3 | 13810.5 |
| 65°   | 14477.5 | 14602.0 | 15487.6 | 16938.1 | 18452.4 | 19357.1 | 17876.3 | 16358.8 | 14707.3 | 13665.3 | 13576.0 |
| 67.5° | 13221.7 | 13432.4 | 14629.1 | 16887.0 | 20016.1 | 21958.0 | 18966.2 | 15899.3 | 13647.8 | 12495.7 | 12396.8 |
| 70°   | 10159.6 | 10466.0 | 11846.3 | 14771.1 | 19746.4 | 22795.8 | 18283.2 | 13919.1 | 11378.7 | 10138.9 | 10000.1 |
| 72.5° | 5573.7  | 5699.7  | 6941.2  | 10115.0 | 15830.7 | 19371.5 | 15249.8 | 10292.1 | 7545.9  | 6140.1  | 5907.2  |
| 75°   | 1768.0  | 1812.7  | 2444.6  | 4139.2  | 8954.9  | 12830.8 | 9687.3  | 5051.9  | 2781.3  | 2050.4  | 2026.5  |
| 77.5° | 785.1   | 789.9   | 884.0   | 1207.9  | 3084.4  | 6500.8  | 3705.2  | 1375.5  | 947.8   | 828.2   | 855.3   |
| 80°   | 496.3   | 496.3   | 547.3   | 598.4   | 839.3   | 1887.7  | 1002.1  | 654.2   | 558.5   | 518.6   | 529.8   |
| 82.5° | 237.8   | 263.3   | 355.8   | 383.0   | 461.1   | 635.1   | 513.8   | 427.6   | 373.4   | 277.6   | 258.5   |
| 85°   | 156.4   | 130.8   | 225.0   | 253.7   | 268.1   | 304.8   | 298.4   | 282.4   | 244.1   | 138.8   | 154.8   |
| 87.5° | 70.2    | 67.0    | 116.5   | 106.9   | 100.5   | 76.6    | 114.9   | 142.0   | 137.2   | 68.6    | 68.6    |
| 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)