

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: P400406

Luminaire Tested: **ARCH-L-PA3-280-722-U-5WQ**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400406  
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-PA3-280-722-U-5WQ  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2200K, 1180mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27147 lumens  
Efficiency: N/A  
Efficacy: 97.3 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

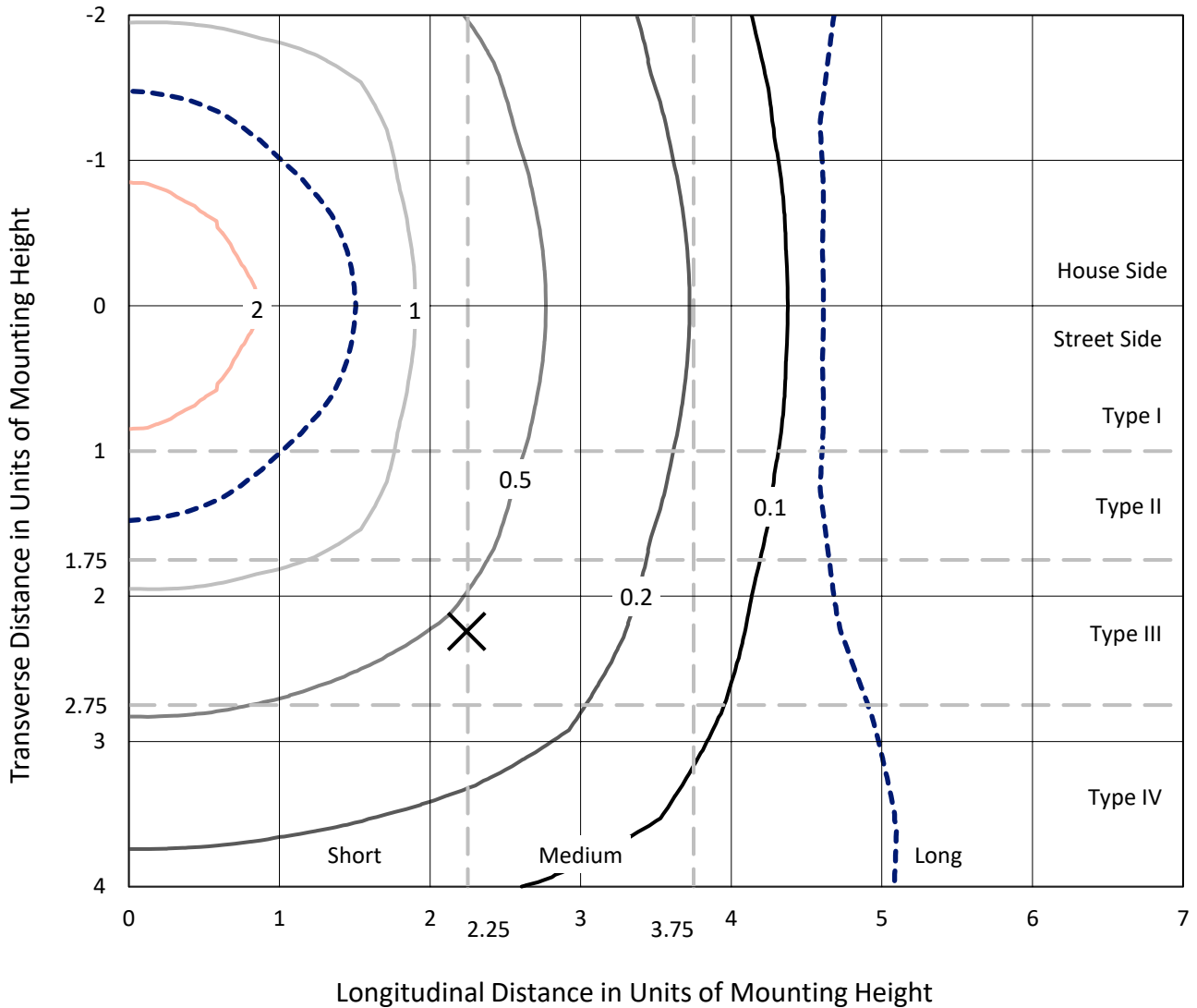
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

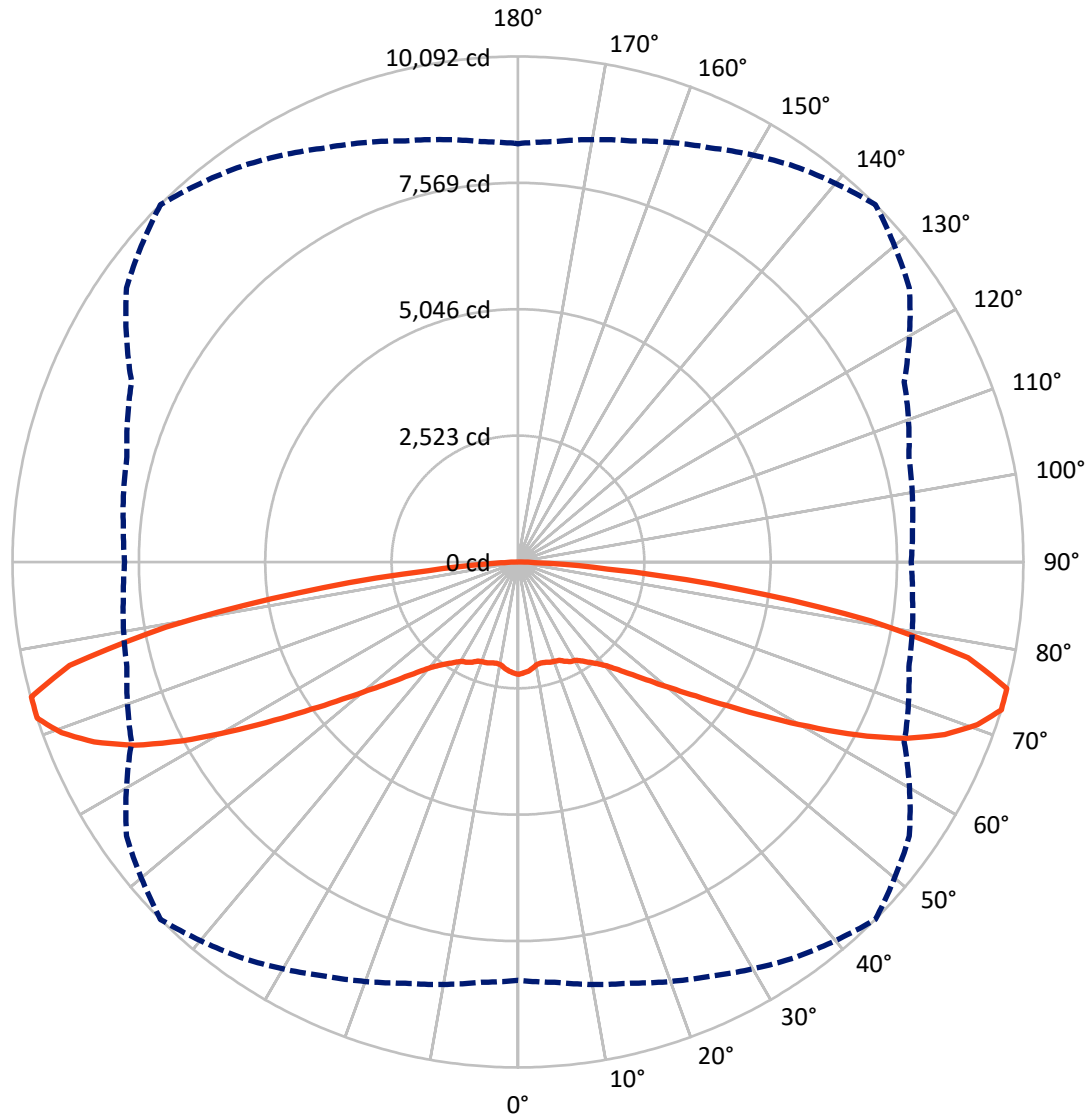
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.6 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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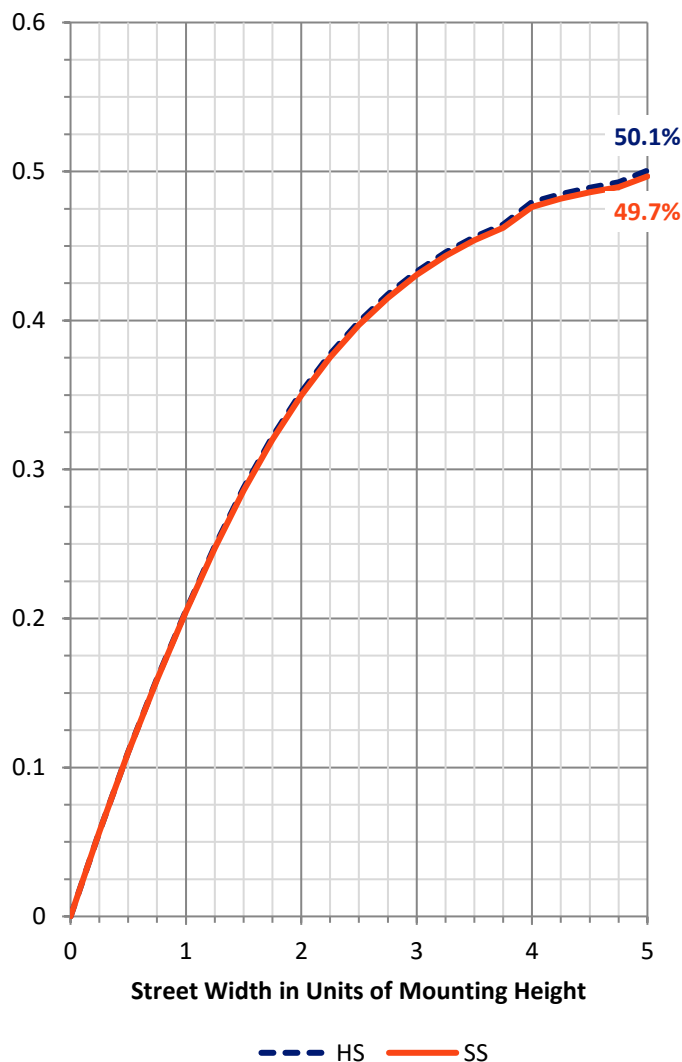
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 13573.5  | 0.0    | 13573.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 13573.5  | 0.0    | 13573.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 27147.0  | 0.0    | 27147.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 206.0   | 0.8       |
| 10°-20°   | 597.9   | 2.2       |
| 20°-30°   | 1016.0  | 3.7       |
| 30°-40°   | 1549.7  | 5.7       |
| 40°-50°   | 2551.7  | 9.4       |
| 50°-60°   | 4456.0  | 16.4      |
| 60°-70°   | 7470.6  | 27.5      |
| 70°-80°   | 7995.1  | 29.5      |
| 80°-90°   | 1304.0  | 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°    | 27147.0 | 100.0     |
| 0°-180°   | 27147.0 | 100.0     |



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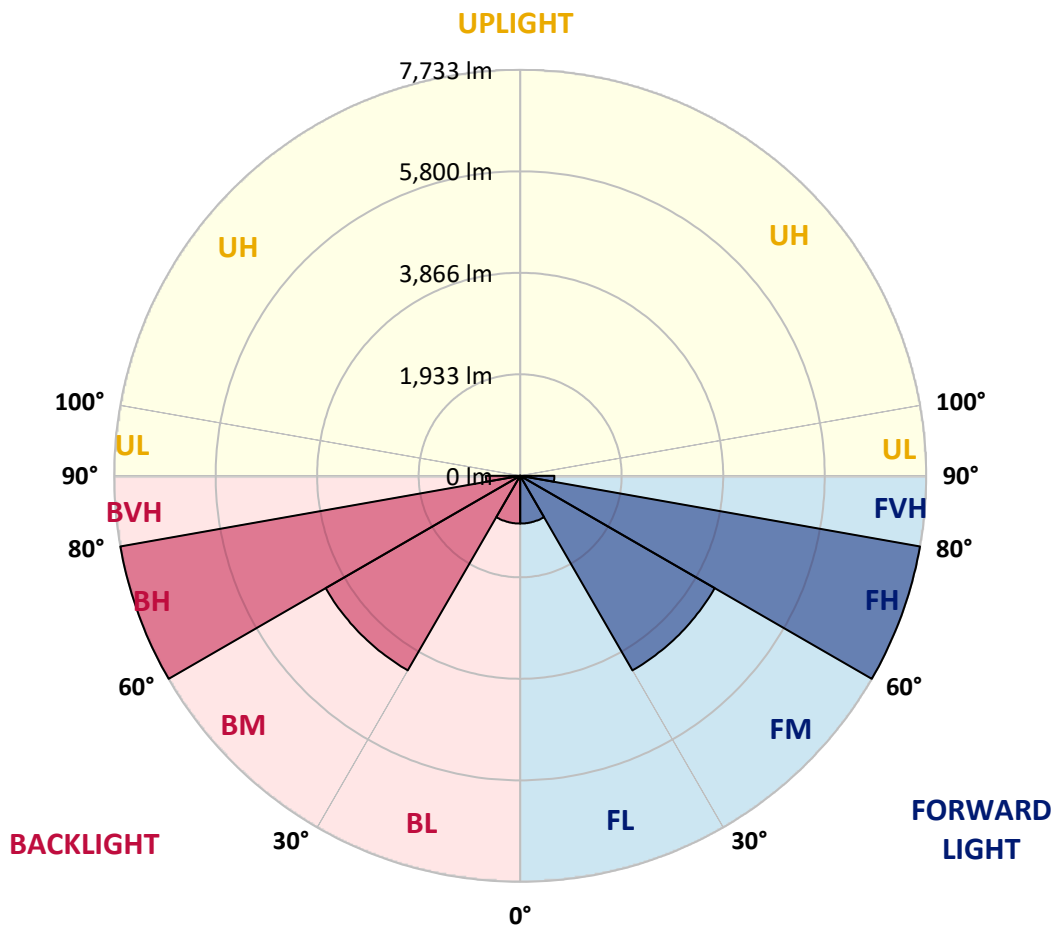
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|--------|-----------|-------------------------|------|----------|
|                |        |           | B                       | U    | G        |
| FL (0°-30°)    | 910.0  | 3.4       |                         |      |          |
| FM (30°-60°)   | 4278.7 | 15.8      |                         |      |          |
| FH (60°-80°)   | 7732.9 | 28.5      |                         |      | G4/12000 |
| FVH (80°-90°)  | 652.0  | 2.4       |                         |      | G4/750   |
| BL (0°-30°)    | 910.0  | 3.4       | B2/1000                 |      |          |
| BM (30°-60°)   | 4278.7 | 15.8      | B3/5000                 |      |          |
| BH (60°-80°)   | 7732.9 | 28.5      | B5                      |      | G4/12000 |
| BVH (80°-90°)  | 652.0  | 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°    | 2246.4 | 2246.4 | 2246.4 | 2246.4 | 2246.4 | 2246.4  | 2246.4 | 2246.4 | 2246.4 | 2246.4 | 2246.4 |
| 2.5°  | 2232.6 | 2232.6 | 2232.6 | 2229.1 | 2222.2 | 2218.7  | 2211.8 | 2215.2 | 2215.2 | 2215.2 | 2215.2 |
| 5°    | 2204.8 | 2204.8 | 2201.4 | 2197.9 | 2191.0 | 2187.5  | 2180.6 | 2187.5 | 2187.5 | 2187.5 | 2187.5 |
| 7.5°  | 2152.8 | 2156.3 | 2156.3 | 2152.8 | 2142.4 | 2139.0  | 2128.6 | 2132.0 | 2132.0 | 2135.5 | 2132.0 |
| 10°   | 2125.1 | 2125.1 | 2121.6 | 2104.3 | 2087.0 | 2080.0  | 2076.6 | 2087.0 | 2097.4 | 2107.8 | 2107.8 |
| 12.5° | 2125.1 | 2125.1 | 2118.2 | 2090.4 | 2066.2 | 2066.2  | 2066.2 | 2080.0 | 2100.8 | 2121.6 | 2125.1 |
| 15°   | 2135.5 | 2135.5 | 2121.6 | 2090.4 | 2076.6 | 2080.0  | 2080.0 | 2093.9 | 2118.2 | 2145.9 | 2149.4 |
| 17.5° | 2142.4 | 2142.4 | 2125.1 | 2093.9 | 2093.9 | 2104.3  | 2097.4 | 2107.8 | 2132.0 | 2163.2 | 2166.7 |
| 20°   | 2152.8 | 2152.8 | 2128.6 | 2104.3 | 2104.3 | 2114.7  | 2114.7 | 2125.1 | 2145.9 | 2177.1 | 2180.6 |
| 22.5° | 2173.6 | 2170.2 | 2145.9 | 2125.1 | 2125.1 | 2132.0  | 2139.0 | 2152.8 | 2170.2 | 2197.9 | 2204.8 |
| 25°   | 2197.9 | 2197.9 | 2177.1 | 2173.6 | 2180.6 | 2197.9  | 2194.4 | 2191.0 | 2197.9 | 2222.2 | 2232.6 |
| 27.5° | 2211.8 | 2211.8 | 2197.9 | 2208.3 | 2236.0 | 2249.9  | 2232.6 | 2218.7 | 2218.7 | 2243.0 | 2246.4 |
| 30°   | 2256.8 | 2253.4 | 2239.5 | 2246.4 | 2270.7 | 2277.6  | 2267.2 | 2249.9 | 2260.3 | 2288.0 | 2291.5 |
| 32.5° | 2333.1 | 2333.1 | 2312.3 | 2312.3 | 2329.6 | 2357.4  | 2322.7 | 2312.3 | 2326.2 | 2357.4 | 2360.8 |
| 35°   | 2451.0 | 2451.0 | 2423.2 | 2409.4 | 2423.2 | 2461.4  | 2409.4 | 2405.9 | 2430.2 | 2464.8 | 2468.3 |
| 37.5° | 2600.1 | 2600.1 | 2582.7 | 2548.1 | 2551.5 | 2575.8  | 2530.7 | 2527.2 | 2572.3 | 2610.5 | 2610.5 |
| 40°   | 2787.3 | 2797.7 | 2780.3 | 2738.7 | 2724.9 | 2728.3  | 2693.7 | 2697.1 | 2749.1 | 2794.2 | 2794.2 |
| 42.5° | 3019.5 | 3026.5 | 2998.7 | 2967.5 | 2950.2 | 2939.8  | 2905.1 | 2912.1 | 2974.5 | 3033.4 | 3033.4 |
| 45°   | 3300.3 | 3303.8 | 3276.1 | 3237.9 | 3217.1 | 3210.2  | 3175.5 | 3192.9 | 3262.2 | 3324.6 | 3321.1 |
| 47.5° | 3615.8 | 3619.3 | 3591.5 | 3553.4 | 3539.5 | 3549.9  | 3515.3 | 3515.3 | 3577.7 | 3629.7 | 3622.7 |
| 50°   | 3972.9 | 3979.8 | 3948.6 | 3931.3 | 3920.9 | 3948.6  | 3907.0 | 3868.9 | 3910.5 | 3962.5 | 3955.5 |
| 52.5° | 4368.1 | 4385.4 | 4364.6 | 4371.6 | 4409.7 | 4444.4  | 4375.0 | 4291.8 | 4312.6 | 4347.3 | 4336.9 |
| 55°   | 4846.5 | 4867.3 | 4874.2 | 4898.5 | 4999.0 | 5058.0  | 4943.6 | 4804.9 | 4794.5 | 4798.0 | 4780.6 |
| 57.5° | 5383.8 | 5397.7 | 5442.8 | 5498.2 | 5706.2 | 5799.8  | 5619.6 | 5380.4 | 5304.1 | 5259.0 | 5248.6 |
| 60°   | 5924.7 | 5948.9 | 6059.9 | 6174.3 | 6493.2 | 6663.1  | 6385.7 | 5983.6 | 5820.6 | 5737.4 | 5720.1 |
| 62.5° | 6468.9 | 6517.5 | 6697.7 | 6891.9 | 7356.4 | 7609.5  | 7183.1 | 6600.7 | 6364.9 | 6260.9 | 6233.2 |
| 65°   | 7099.9 | 7158.8 | 7377.2 | 7623.4 | 8139.9 | 8497.0  | 7980.4 | 7238.5 | 6985.5 | 6846.8 | 6812.1 |
| 67.5° | 7838.3 | 7900.7 | 8077.5 | 8351.4 | 8840.2 | 9190.3  | 8732.7 | 7890.3 | 7560.9 | 7384.1 | 7356.4 |
| 70°   | 8445.0 | 8500.4 | 8691.1 | 8968.4 | 9332.5 | 9731.1  | 9294.3 | 8410.3 | 8112.2 | 7987.4 | 7970.0 |
| 72.5° | 8351.4 | 8424.2 | 8705.0 | 9121.0 | 9641.0 | 10091.7 | 9540.5 | 8510.8 | 8081.0 | 7907.6 | 7852.2 |
| 75°   | 7294.0 | 7373.7 | 7706.6 | 8458.8 | 9408.7 | 10081.3 | 9183.4 | 7841.8 | 7335.6 | 7190.0 | 7162.3 |
| 77.5° | 4829.2 | 4905.4 | 5467.0 | 6652.7 | 8216.2 | 9186.8  | 8105.2 | 6569.5 | 5754.8 | 5404.6 | 5383.8 |
| 80°   | 1951.8 | 2048.8 | 2586.2 | 3844.6 | 5824.1 | 7141.5  | 6011.3 | 4205.1 | 2835.8 | 2288.0 | 2177.1 |
| 82.5° | 454.1  | 540.8  | 786.9  | 1417.9 | 2981.4 | 4447.8  | 3241.4 | 1570.4 | 911.8  | 648.3  | 582.4  |
| 85°   | 190.7  | 194.1  | 336.3  | 461.1  | 932.6  | 1795.8  | 1060.8 | 572.0  | 464.5  | 339.7  | 332.8  |
| 87.5° | 72.8   | 76.3   | 162.9  | 194.1  | 298.1  | 339.7   | 360.5  | 294.7  | 273.9  | 169.9  | 162.9  |
| 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)