

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: P841153

Luminaire Tested: **ARCH4-140-727-U-5WQ**

Issue Date: 5/27/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P841153  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-140-727-U-5WQ  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22136 lumens  
Efficiency: N/A  
Efficacy: 156.7 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type V - Medium  
BUG Rating: B4 - U0 - G2

Input Watts (W): 141.3  
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



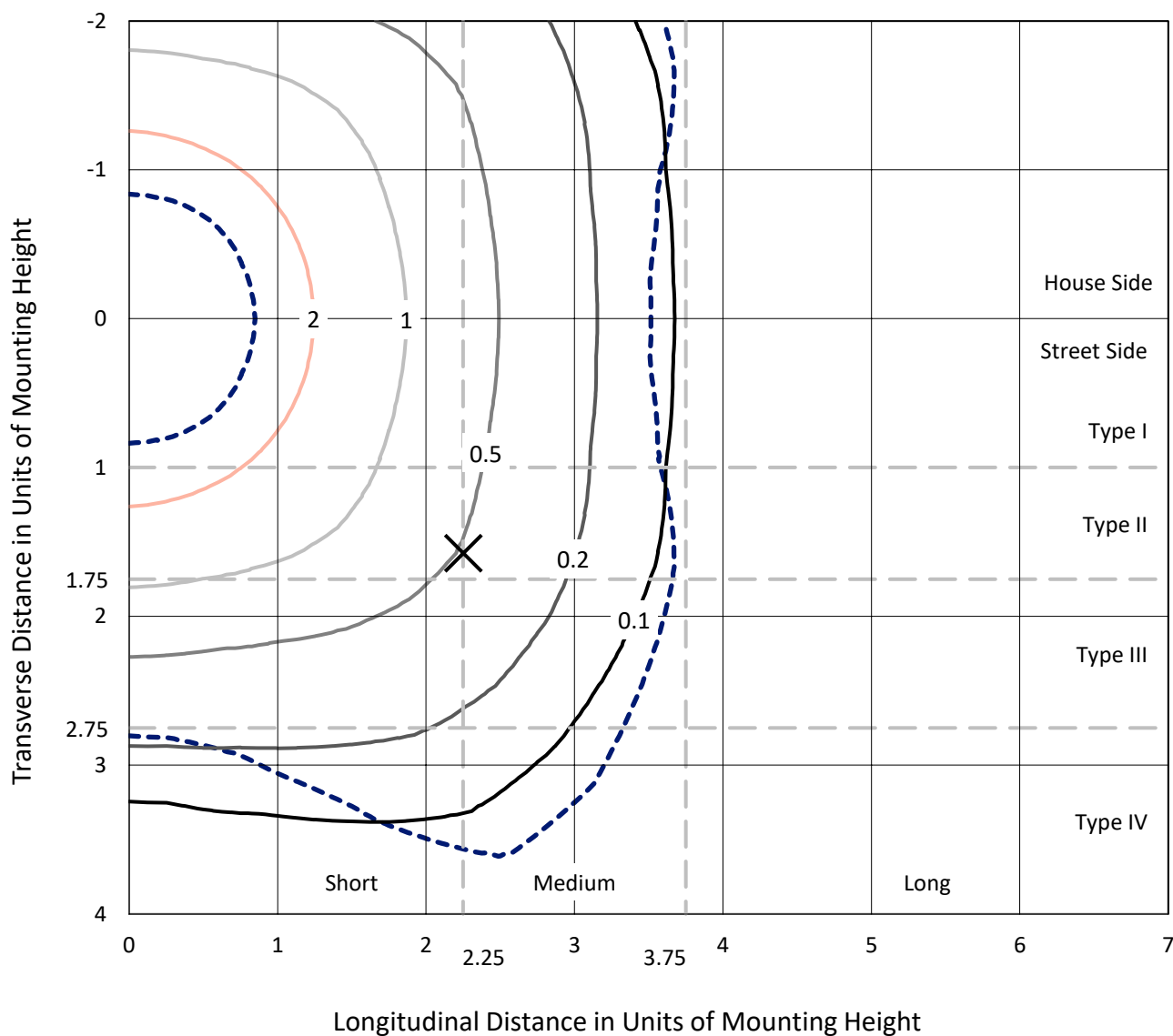
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

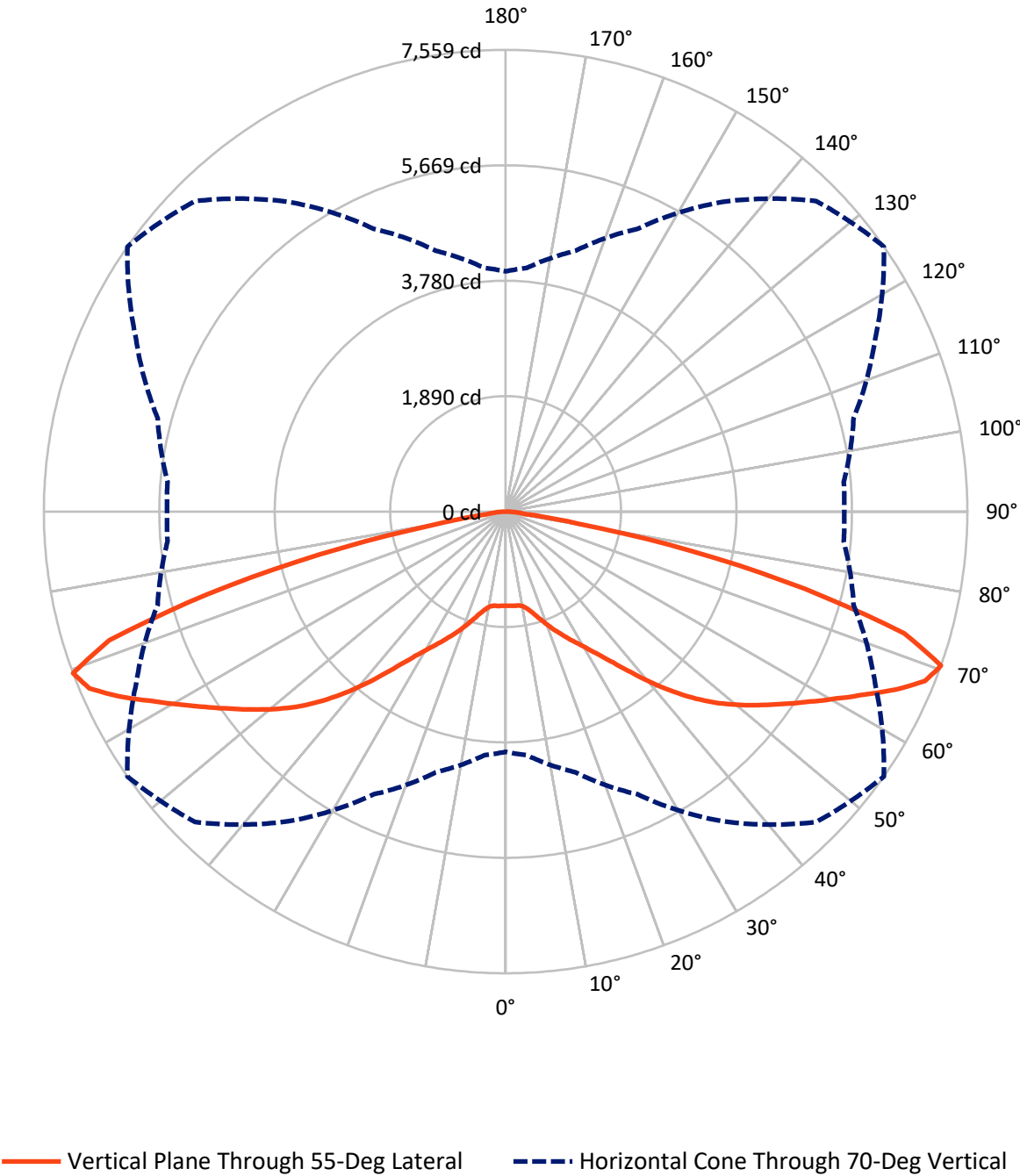
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc  
Type V - Medium - N/A

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Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 11068.0  | 0.0    | 11068.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 11068.0  | 0.0    | 11068.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 22136.0  | 0.0    | 22136.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 149.0   | 0.7       |
| 10°-20°   | 507.0   | 2.3       |
| 20°-30°   | 1053.5  | 4.8       |
| 30°-40°   | 1945.7  | 8.8       |
| 40°-50°   | 3418.2  | 15.4      |
| 50°-60°   | 4929.9  | 22.3      |
| 60°-70°   | 6033.6  | 27.3      |
| 70°-80°   | 3839.3  | 17.3      |
| 80°-90°   | 259.8   | 1.2       |
| 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°    | 22136.0 | 100.0     |
| 0°-180°   | 22136.0 | 100.0     |

**Coefficient of Utilization**



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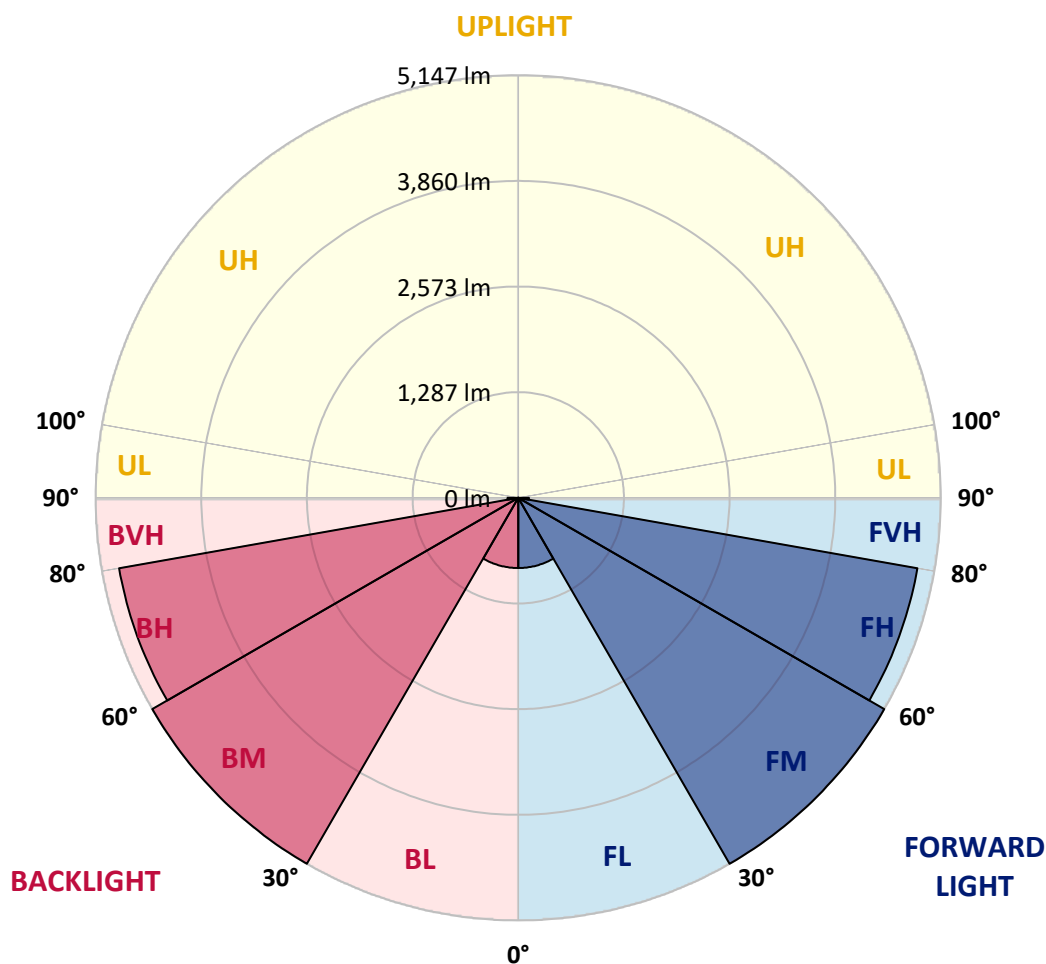
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 854.7  | 3.9       |                         |      |         |
| FM   | (30°-60°)   | 5146.9 | 23.3      |                         |      |         |
| FH   | (60°-80°)   | 4936.5 | 22.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 129.9  | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 854.7  | 3.9       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 5146.9 | 23.3      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 4936.5 | 22.3      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 129.9  | 0.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1543.1 | 1543.1 | 1543.1 | 1543.1 | 1543.1 | 1543.1 | 1543.1 | 1543.1 | 1543.1 | 1543.1 | 1543.1 |
| 2.5°  | 1563.7 | 1563.7 | 1559.5 | 1559.5 | 1551.3 | 1547.2 | 1543.1 | 1543.1 | 1539.0 | 1539.0 | 1534.9 |
| 5°    | 1571.9 | 1571.9 | 1571.9 | 1567.8 | 1563.7 | 1559.5 | 1551.3 | 1543.1 | 1539.0 | 1534.9 | 1530.7 |
| 7.5°  | 1576.0 | 1576.0 | 1571.9 | 1571.9 | 1567.8 | 1563.7 | 1551.3 | 1539.0 | 1534.9 | 1530.7 | 1530.7 |
| 10°   | 1608.9 | 1604.8 | 1600.7 | 1592.5 | 1592.5 | 1592.5 | 1576.0 | 1563.7 | 1559.5 | 1559.5 | 1559.5 |
| 12.5° | 1687.1 | 1683.0 | 1674.8 | 1662.4 | 1662.4 | 1666.5 | 1641.8 | 1625.4 | 1625.4 | 1621.3 | 1621.3 |
| 15°   | 1802.3 | 1798.2 | 1790.0 | 1769.4 | 1765.3 | 1773.5 | 1736.5 | 1720.0 | 1720.0 | 1720.0 | 1715.9 |
| 17.5° | 1929.9 | 1921.7 | 1909.3 | 1892.9 | 1892.9 | 1892.9 | 1855.8 | 1835.2 | 1822.9 | 1822.9 | 1818.8 |
| 20°   | 2036.9 | 2032.8 | 2032.8 | 2028.6 | 2041.0 | 2041.0 | 1991.6 | 1958.7 | 1929.9 | 1913.4 | 1909.3 |
| 22.5° | 2131.5 | 2127.4 | 2135.6 | 2152.1 | 2176.8 | 2185.0 | 2127.4 | 2078.0 | 2032.8 | 1999.8 | 1991.6 |
| 25°   | 2259.1 | 2255.0 | 2250.9 | 2275.5 | 2316.7 | 2329.0 | 2267.3 | 2205.6 | 2160.3 | 2143.9 | 2135.6 |
| 27.5° | 2394.9 | 2399.0 | 2403.1 | 2427.8 | 2460.7 | 2481.3 | 2419.6 | 2362.0 | 2324.9 | 2300.2 | 2292.0 |
| 30°   | 2547.1 | 2555.4 | 2567.7 | 2604.7 | 2629.4 | 2637.7 | 2584.2 | 2543.0 | 2510.1 | 2489.5 | 2477.2 |
| 32.5° | 2740.5 | 2757.0 | 2773.4 | 2806.4 | 2818.7 | 2810.5 | 2785.8 | 2757.0 | 2732.3 | 2703.5 | 2699.4 |
| 35°   | 3028.6 | 3045.0 | 3040.9 | 3053.3 | 3057.4 | 3049.1 | 3036.8 | 3020.3 | 3008.0 | 2971.0 | 2966.8 |
| 37.5° | 3390.7 | 3407.1 | 3382.4 | 3370.1 | 3341.3 | 3345.4 | 3341.3 | 3353.6 | 3357.8 | 3320.7 | 3316.6 |
| 40°   | 3756.9 | 3773.4 | 3740.4 | 3707.5 | 3678.7 | 3666.4 | 3687.0 | 3728.1 | 3728.1 | 3703.4 | 3703.4 |
| 42.5° | 4147.8 | 4160.2 | 4106.7 | 4065.5 | 4028.5 | 4020.3 | 4032.6 | 4082.0 | 4094.3 | 4090.2 | 4090.2 |
| 45°   | 4538.7 | 4530.5 | 4460.6 | 4419.4 | 4386.5 | 4365.9 | 4370.0 | 4407.1 | 4431.7 | 4444.1 | 4444.1 |
| 47.5° | 4839.1 | 4826.8 | 4769.2 | 4736.3 | 4715.7 | 4686.9 | 4686.9 | 4707.4 | 4719.8 | 4723.9 | 4723.9 |
| 50°   | 5077.8 | 5065.4 | 5007.8 | 5003.7 | 5003.7 | 4991.4 | 4979.0 | 4974.9 | 4966.7 | 4970.8 | 4970.8 |
| 52.5° | 5283.5 | 5267.1 | 5225.9 | 5234.2 | 5271.2 | 5279.4 | 5263.0 | 5230.0 | 5197.1 | 5184.8 | 5188.9 |
| 55°   | 5505.7 | 5481.0 | 5448.1 | 5472.8 | 5546.9 | 5579.8 | 5555.1 | 5489.3 | 5431.7 | 5394.6 | 5394.6 |
| 57.5° | 5682.7 | 5653.9 | 5653.9 | 5723.8 | 5859.6 | 5925.5 | 5872.0 | 5748.5 | 5649.8 | 5608.6 | 5612.7 |
| 60°   | 5559.2 | 5534.5 | 5633.3 | 5941.9 | 6197.0 | 6308.1 | 6217.6 | 5999.5 | 5839.0 | 5789.7 | 5797.9 |
| 62.5° | 5316.5 | 5300.0 | 5423.4 | 5900.8 | 6501.5 | 6732.0 | 6596.2 | 6283.5 | 6044.8 | 5987.2 | 5987.2 |
| 65°   | 4958.5 | 4954.3 | 5127.2 | 5715.6 | 6571.5 | 7139.4 | 7024.1 | 6592.1 | 6283.5 | 6205.3 | 6221.7 |
| 67.5° | 4588.1 | 4588.1 | 4744.5 | 5398.8 | 6489.2 | 7312.2 | 7402.7 | 6871.9 | 6398.7 | 6205.3 | 6209.4 |
| 70°   | 3933.8 | 4003.8 | 4419.4 | 5106.6 | 6188.8 | 7188.7 | 7559.1 | 6674.4 | 5896.7 | 5555.1 | 5542.8 |
| 72.5° | 2592.4 | 2682.9 | 3510.0 | 4596.3 | 5892.5 | 6740.2 | 6822.5 | 5863.7 | 4896.7 | 4497.6 | 4477.0 |
| 75°   | 1563.7 | 1641.8 | 2275.5 | 3588.2 | 5180.7 | 5427.6 | 5065.4 | 4596.3 | 3658.1 | 3345.4 | 3345.4 |
| 77.5° | 460.9  | 514.4  | 1049.3 | 2275.5 | 3584.1 | 3567.6 | 3123.2 | 2707.6 | 2164.4 | 1839.4 | 1864.1 |
| 80°   | 271.6  | 279.8  | 341.5  | 1037.0 | 1485.5 | 1563.7 | 1205.7 | 753.0  | 753.0  | 559.6  | 543.2  |
| 82.5° | 209.9  | 209.9  | 218.1  | 259.2  | 358.0  | 399.1  | 304.5  | 259.2  | 296.3  | 251.0  | 238.7  |
| 85°   | 148.1  | 148.1  | 148.1  | 152.3  | 156.4  | 160.5  | 168.7  | 172.8  | 189.3  | 156.4  | 148.1  |
| 87.5° | 45.3   | 49.4   | 53.5   | 61.7   | 74.1   | 78.2   | 82.3   | 74.1   | 74.1   | 70.0   | 65.8   |
| 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)