

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: P509155

Luminaire Tested: **VERD-CA2-120-727-U-T1**

Issue Date: 3/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509155  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-CA2-120-727-U-T1  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1120mA LEDS AND TYPE I OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15455 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4

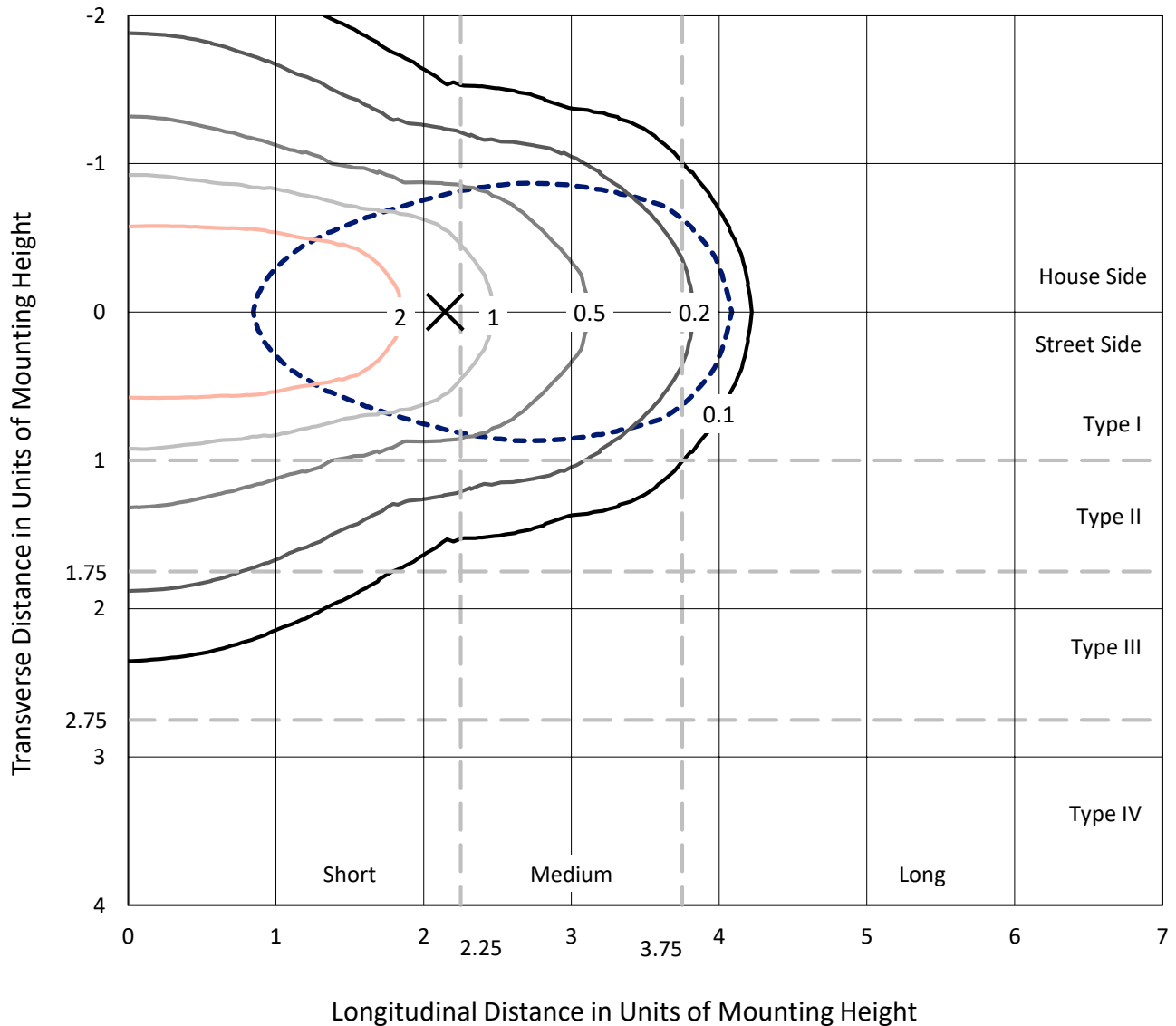
Input Watts (W): 122.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

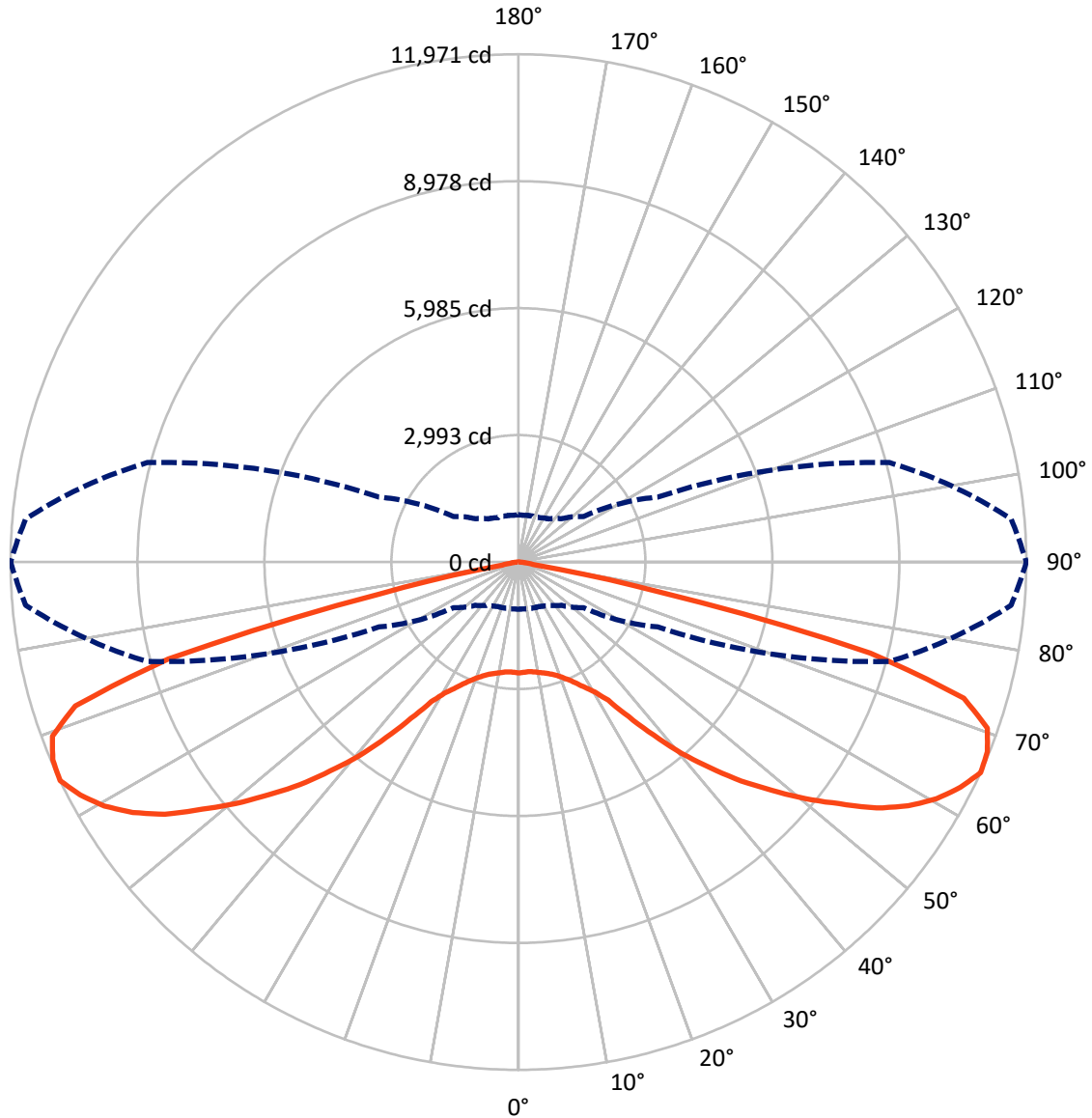
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc  
 Type I - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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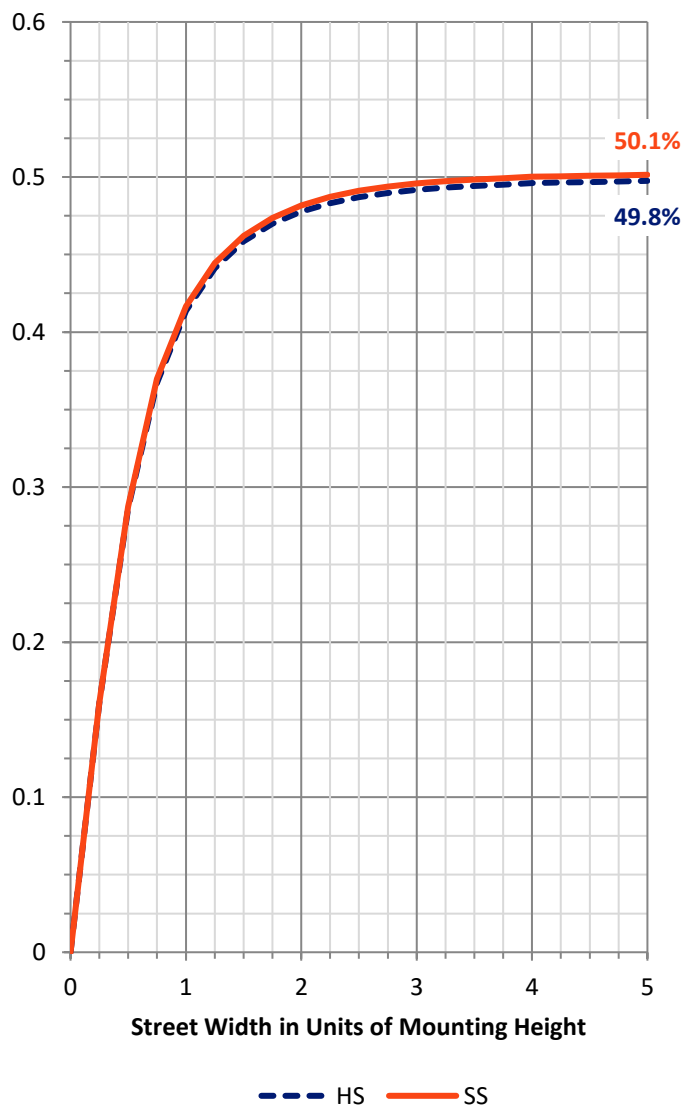
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7727.5   | 0.0    | 7727.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 7727.5   | 0.0    | 7727.5  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 15455.0  | 0.0    | 15455.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 248.0   | 1.6       |
| 10°-20°   | 738.7   | 4.8       |
| 20°-30°   | 1220.0  | 7.9       |
| 30°-40°   | 1800.7  | 11.7      |
| 40°-50°   | 2620.0  | 17.0      |
| 50°-60°   | 3353.8  | 21.7      |
| 60°-70°   | 3507.2  | 22.7      |
| 70°-80°   | 1892.1  | 12.2      |
| 80°-90°   | 74.5    | 0.5       |
| 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°    | 15455.0 | 100.0     |
| 0°-180°   | 15455.0 | 100.0     |

**Coefficient of Utilization**



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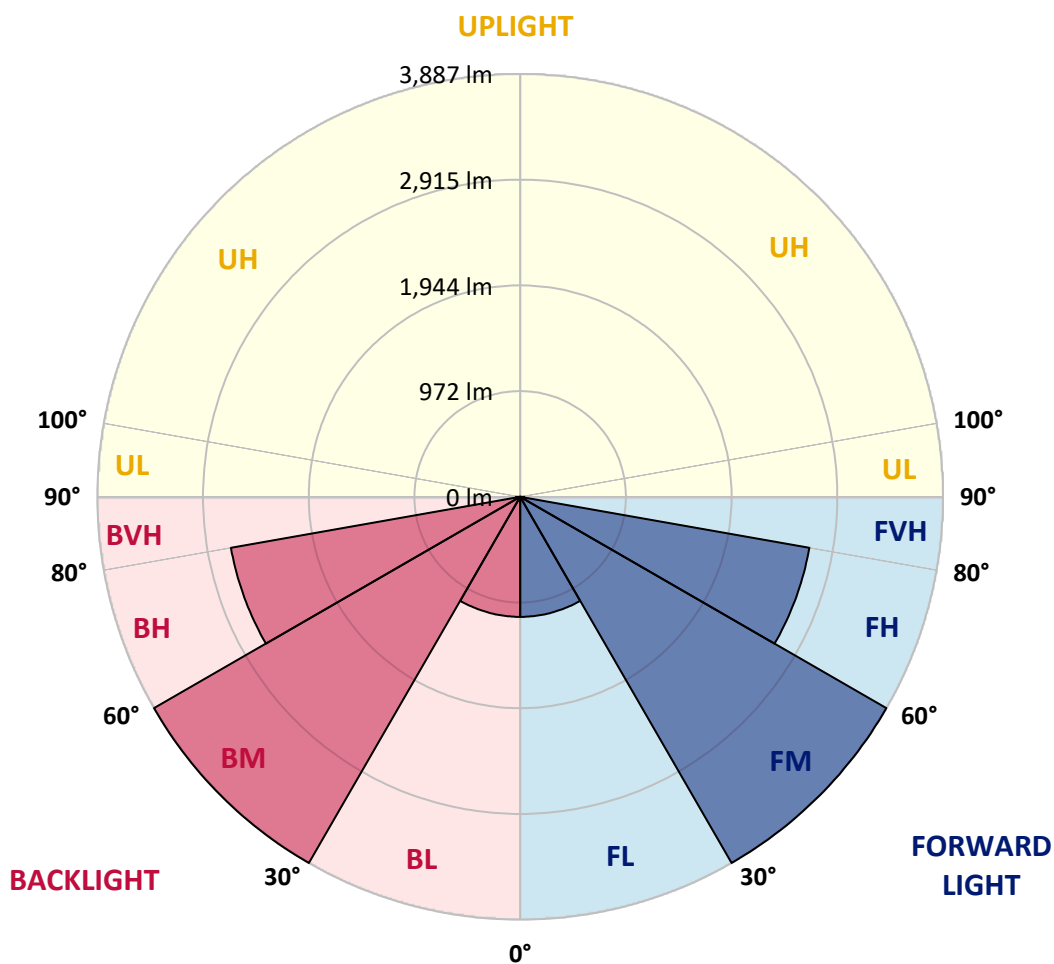
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1103.4 | 7.1       |                         |      |         |
| FM (30°-60°)   | 3887.2 | 25.2      |                         |      |         |
| FH (60°-80°)   | 2699.6 | 17.5      |                         |      | G2/5000 |
| FVH (80°-90°)  | 37.2   | 0.2       |                         |      | G1/100  |
| BL (0°-30°)    | 1103.4 | 7.1       | B3/2500                 |      |         |
| BM (30°-60°)   | 3887.2 | 25.2      | B3/5000                 |      |         |
| BH (60°-80°)   | 2699.6 | 17.5      | B4/5000                 |      | G4/5000 |
| BVH (80°-90°)  | 37.2   | 0.2       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G4**

Type I Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°     | 90°     |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 0°    | 2614.9 | 2614.9 | 2614.9 | 2614.9 | 2614.9 | 2614.9 | 2614.9 | 2614.9 | 2614.9 | 2614.9  | 2614.9  |
| 2.5°  | 2600.7 | 2610.2 | 2614.9 | 2613.3 | 2603.9 | 2603.9 | 2603.9 | 2603.9 | 2600.7 | 2599.1  | 2600.7  |
| 5°    | 2581.8 | 2589.7 | 2599.1 | 2594.4 | 2589.7 | 2594.4 | 2594.4 | 2594.4 | 2596.0 | 2596.0  | 2596.0  |
| 7.5°  | 2566.1 | 2577.1 | 2581.8 | 2588.1 | 2577.1 | 2589.7 | 2608.6 | 2611.7 | 2613.3 | 2613.3  | 2613.3  |
| 10°   | 2551.9 | 2561.4 | 2574.0 | 2572.4 | 2577.1 | 2596.0 | 2616.5 | 2640.1 | 2641.7 | 2646.4  | 2646.4  |
| 12.5° | 2517.3 | 2529.9 | 2544.0 | 2553.5 | 2559.8 | 2603.9 | 2624.3 | 2654.2 | 2677.9 | 2681.0  | 2682.6  |
| 15°   | 2474.8 | 2482.6 | 2498.4 | 2520.4 | 2553.5 | 2600.7 | 2646.4 | 2684.2 | 2721.9 | 2731.4  | 2731.4  |
| 17.5° | 2410.2 | 2419.7 | 2441.7 | 2473.2 | 2533.0 | 2610.2 | 2682.6 | 2733.0 | 2780.2 | 2794.4  | 2797.5  |
| 20°   | 2322.1 | 2339.4 | 2369.3 | 2424.4 | 2504.7 | 2616.5 | 2721.9 | 2797.5 | 2858.9 | 2890.4  | 2892.0  |
| 22.5° | 2216.6 | 2229.2 | 2282.7 | 2361.4 | 2474.8 | 2616.5 | 2762.9 | 2873.1 | 2958.1 | 3006.9  | 3011.6  |
| 25°   | 2101.7 | 2112.7 | 2182.0 | 2292.2 | 2437.0 | 2618.0 | 2803.8 | 2956.5 | 3088.7 | 3153.3  | 3159.6  |
| 27.5° | 1997.8 | 2008.8 | 2087.5 | 2221.3 | 2403.9 | 2622.8 | 2847.9 | 3058.8 | 3243.0 | 3329.6  | 3346.9  |
| 30°   | 1901.7 | 1906.5 | 1996.2 | 2144.2 | 2367.7 | 2625.9 | 2901.4 | 3170.6 | 3405.2 | 3545.3  | 3554.7  |
| 32.5° | 1812.0 | 1824.6 | 1908.0 | 2067.0 | 2325.2 | 2630.6 | 2972.3 | 3329.6 | 3664.9 | 3875.9  | 3883.8  |
| 35°   | 1731.7 | 1742.7 | 1826.2 | 1988.3 | 2268.5 | 2643.2 | 3049.4 | 3532.7 | 4041.2 | 4409.6  | 4471.0  |
| 37.5° | 1667.2 | 1678.2 | 1752.2 | 1904.9 | 2210.3 | 2640.1 | 3150.1 | 3779.9 | 4500.9 | 5083.4  | 5176.3  |
| 40°   | 1615.2 | 1627.8 | 1687.6 | 1826.2 | 2133.2 | 2616.5 | 3255.6 | 4047.5 | 5001.5 | 5793.4  | 5931.9  |
| 42.5° | 1571.1 | 1582.2 | 1634.1 | 1756.9 | 2049.7 | 2578.7 | 3350.1 | 4289.9 | 5484.8 | 6516.0  | 6626.2  |
| 45°   | 1520.8 | 1533.4 | 1583.7 | 1698.7 | 1972.6 | 2520.4 | 3413.1 | 4527.6 | 5974.4 | 7202.4  | 7359.8  |
| 47.5° | 1487.7 | 1495.6 | 1534.9 | 1642.0 | 1886.0 | 2429.1 | 3424.1 | 4696.1 | 6498.7 | 7928.1  | 8036.7  |
| 50°   | 1457.8 | 1456.2 | 1490.8 | 1585.3 | 1805.7 | 2312.6 | 3365.8 | 4826.8 | 6997.7 | 8605.0  | 8767.2  |
| 52.5° | 1415.3 | 1416.9 | 1445.2 | 1530.2 | 1727.0 | 2177.2 | 3227.3 | 4859.8 | 7510.9 | 9283.6  | 9459.9  |
| 55°   | 1364.9 | 1369.6 | 1396.4 | 1467.2 | 1646.7 | 2043.4 | 2991.1 | 4800.0 | 8063.5 | 9954.2  | 10237.6 |
| 57.5° | 1316.1 | 1313.0 | 1339.7 | 1402.7 | 1560.1 | 1908.0 | 2721.9 | 4647.3 | 8594.0 | 10659.5 | 10837.4 |
| 60°   | 1259.4 | 1262.6 | 1281.5 | 1333.4 | 1468.8 | 1764.8 | 2421.3 | 4382.8 | 8951.4 | 11204.2 | 11328.6 |
| 62.5° | 1194.9 | 1194.9 | 1212.2 | 1251.6 | 1363.3 | 1608.9 | 2133.2 | 4033.3 | 9152.9 | 11487.6 | 11693.8 |
| 65°   | 1113.0 | 1108.3 | 1127.2 | 1155.5 | 1240.5 | 1442.0 | 1870.3 | 3622.4 | 9053.7 | 11659.2 | 11970.9 |
| 67.5° | 1024.9 | 1015.4 | 1024.9 | 1037.5 | 1100.4 | 1262.6 | 1604.2 | 3250.9 | 8590.9 | 11549.0 | 11923.6 |
| 70°   | 909.9  | 897.3  | 902.1  | 902.1  | 944.6  | 1053.2 | 1344.4 | 2936.0 | 7534.5 | 11193.2 | 11725.3 |
| 72.5° | 744.6  | 739.9  | 747.8  | 741.5  | 773.0  | 845.4  | 1114.6 | 2553.5 | 6139.7 | 10339.9 | 10979.1 |
| 75°   | 453.4  | 459.7  | 484.9  | 529.0  | 557.3  | 612.4  | 815.5  | 2019.8 | 4648.9 | 7800.6  | 8564.1  |
| 77.5° | 188.9  | 211.0  | 233.0  | 240.9  | 272.4  | 266.1  | 368.4  | 916.2  | 1882.8 | 3106.1  | 3362.7  |
| 80°   | 63.0   | 64.5   | 143.3  | 159.0  | 174.7  | 143.3  | 140.1  | 307.0  | 538.4  | 455.0   | 382.6   |
| 82.5° | 37.8   | 40.9   | 78.7   | 85.0   | 74.0   | 77.1   | 81.9   | 103.9  | 100.8  | 163.7   | 185.8   |
| 85°   | 18.9   | 20.5   | 34.6   | 39.4   | 39.4   | 47.2   | 47.2   | 50.4   | 56.7   | 99.2    | 107.1   |
| 87.5° | 4.7    | 4.7    | 9.4    | 14.2   | 15.7   | 18.9   | 18.9   | 22.0   | 25.2   | 36.2    | 42.5    |
| 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)