

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: P510218

Luminaire Tested: **VERD-M-CA4-230-727-U-T5**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510218
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-8)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-230-727-U-T5
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 1050mA LEDS AND TYPE V OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28257 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

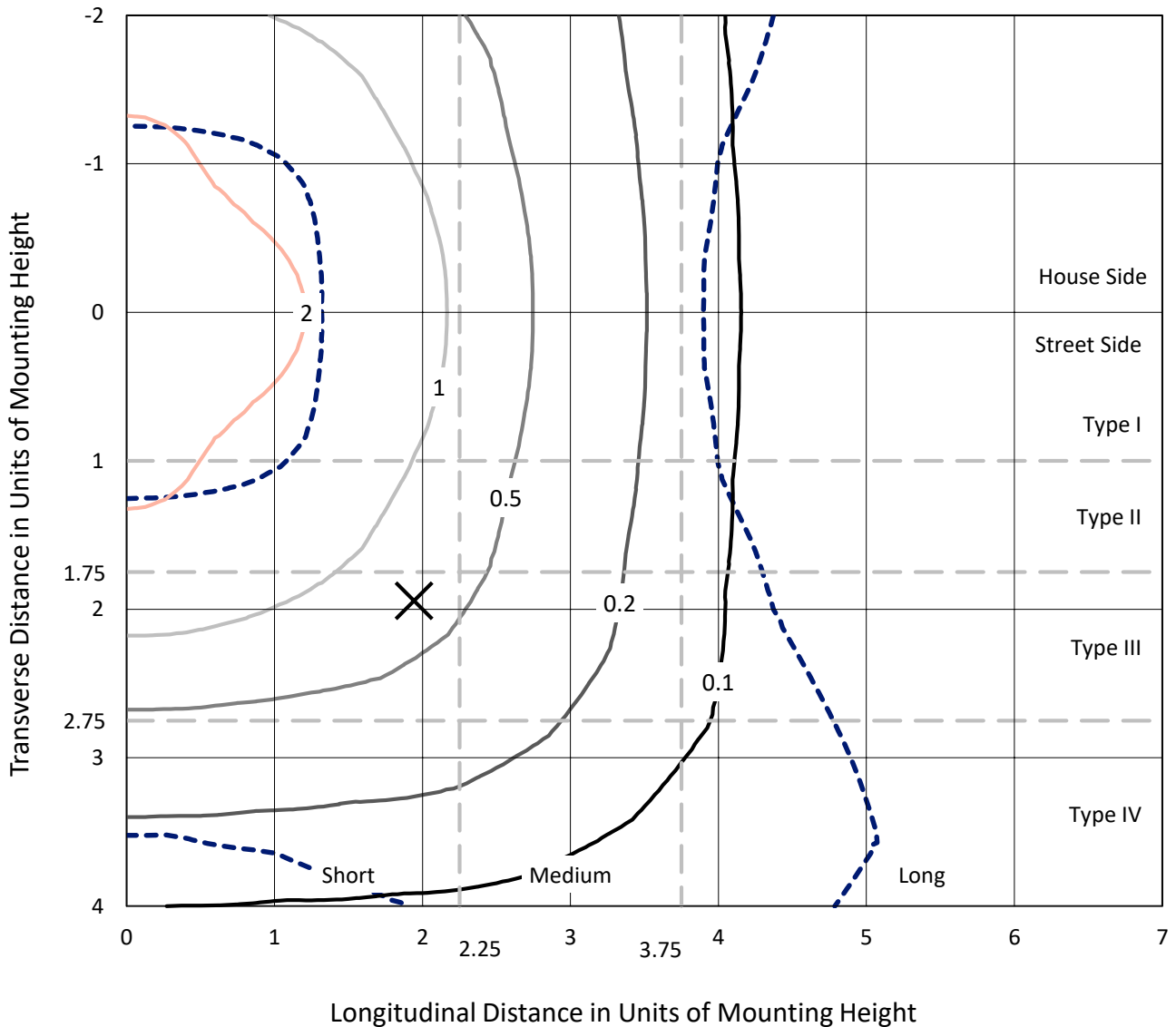
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

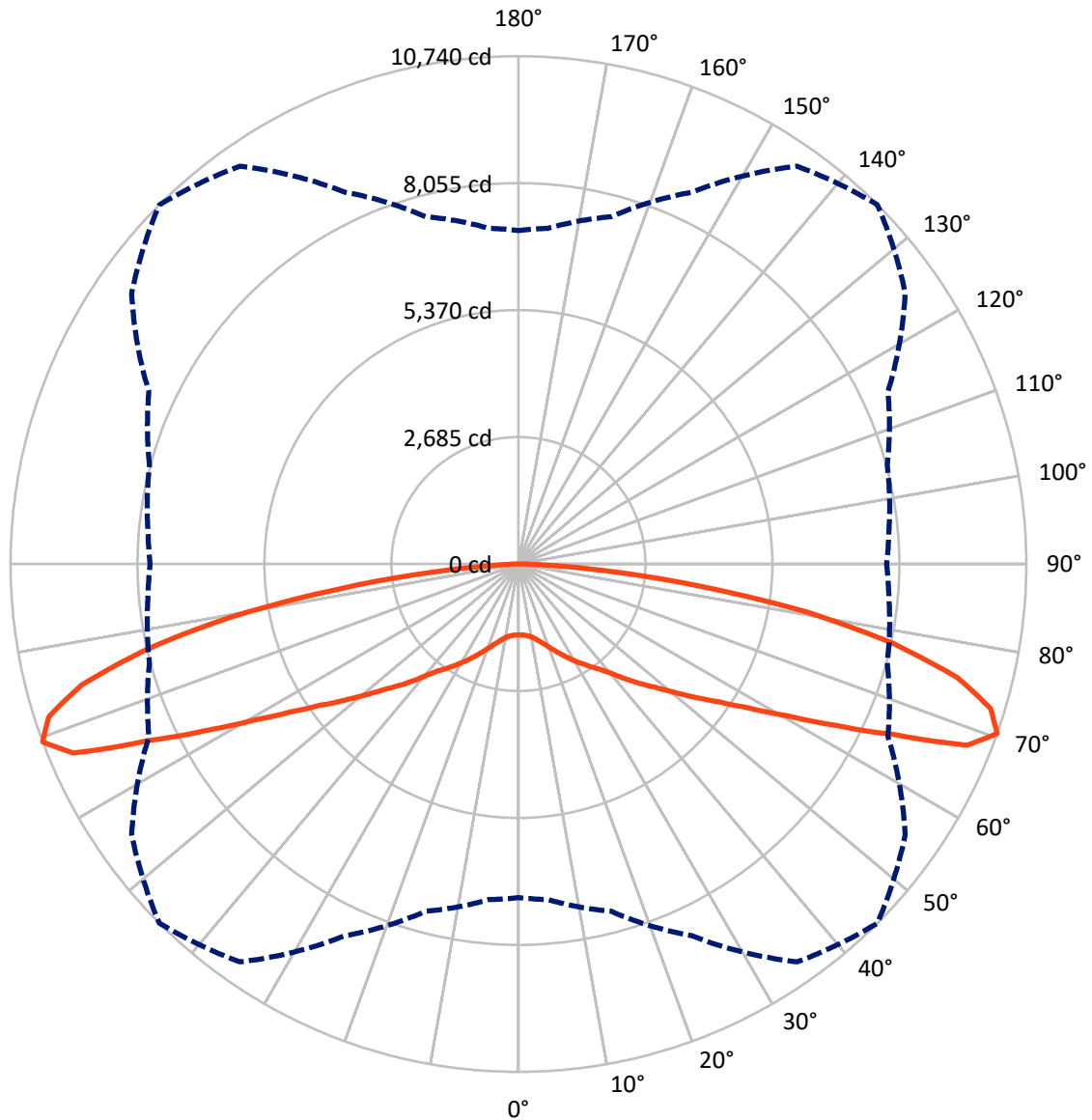
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type V - Short - N/A

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CATALOG NUMBER: VERD-M-CA4-230-727-U-T5

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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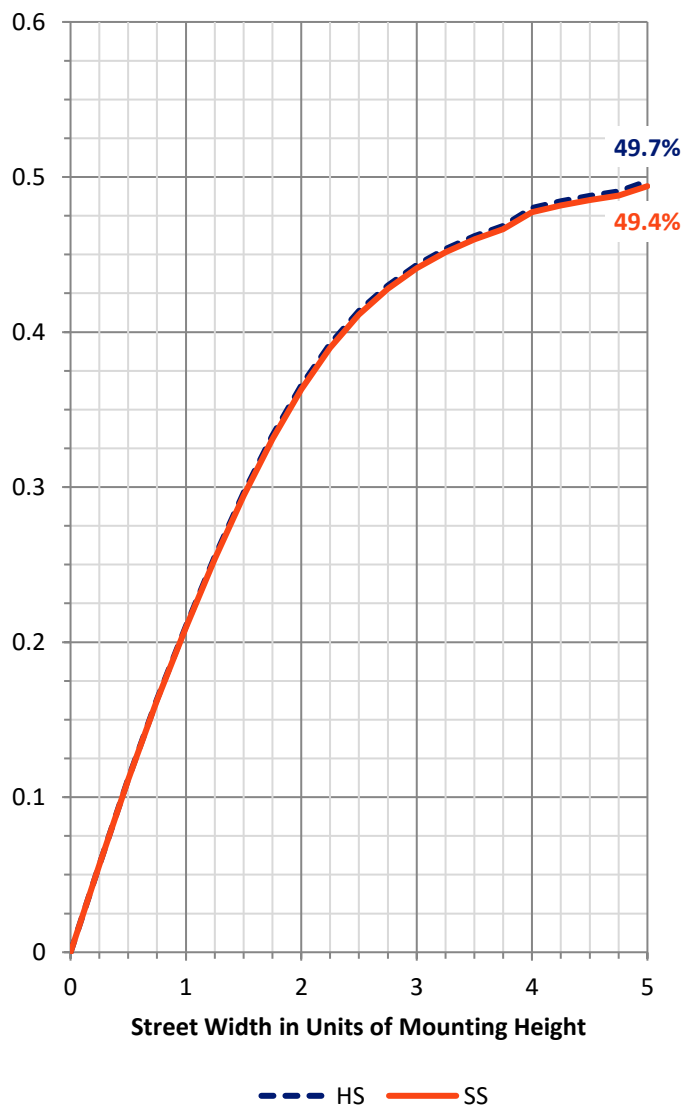
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 14128.5 | 0.0 | 14128.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 14128.5 | 0.0 | 14128.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 28257.0 | 0.0 | 28257.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 147.0 | 0.5 |
| 10°-20° | 486.5 | 1.7 |
| 20°-30° | 973.0 | 3.4 |
| 30°-40° | 1692.9 | 6.0 |
| 40°-50° | 2945.4 | 10.4 |
| 50°-60° | 5128.2 | 18.1 |
| 60°-70° | 8305.5 | 29.4 |
| 70°-80° | 7125.2 | 25.2 |
| 80°-90° | 1453.4 | 5.1 |
| 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° | 28257.0 | 100.0 |
| 0°-180° | 28257.0 | 100.0 |

Coefficient of Utilization



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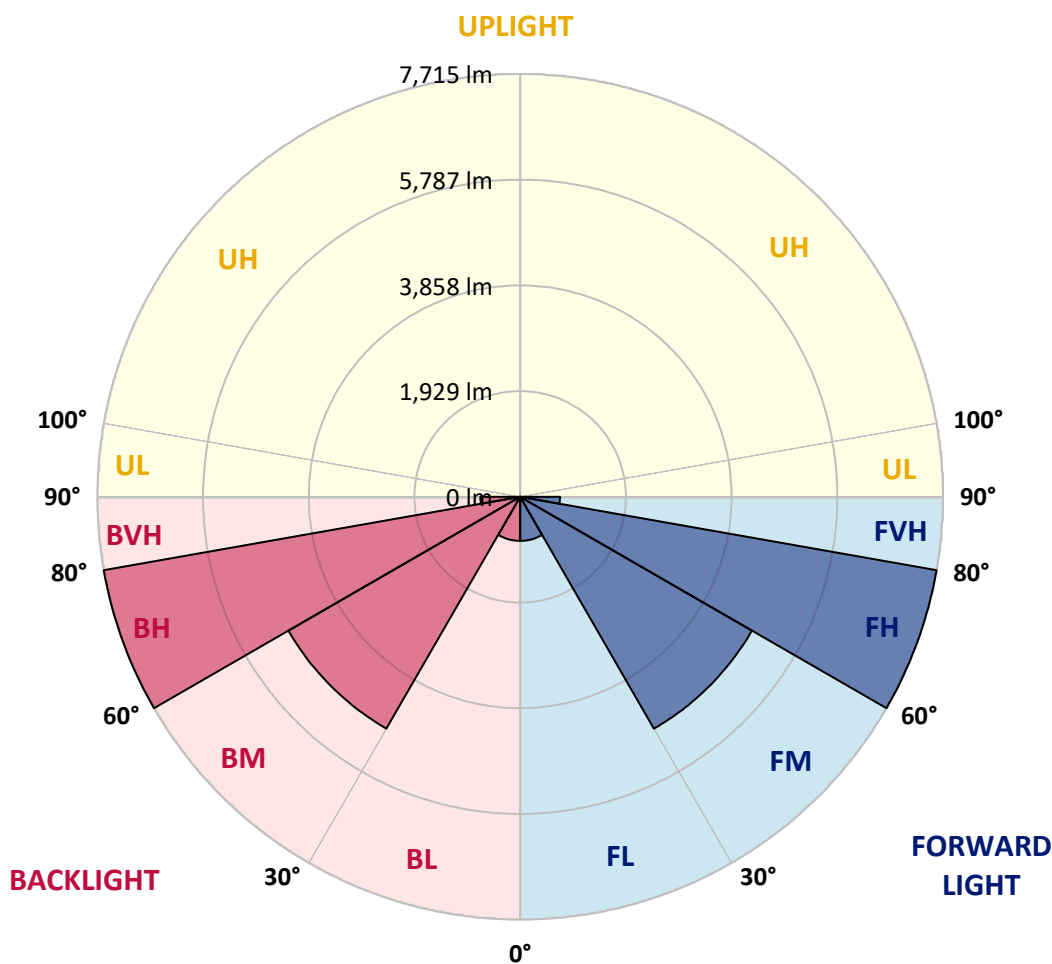
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 803.2 | 2.8 | | | |
| FM | (30°-60°) | 4883.2 | 17.3 | | | |
| FH | (60°-80°) | 7715.4 | 27.3 | | | G4/12000 |
| FVH | (80°-90°) | 726.7 | 2.6 | | | G4/750 |
| BL | (0°-30°) | 803.2 | 2.8 | B2/1000 | | |
| BM | (30°-60°) | 4883.2 | 17.3 | B3/5000 | | |
| BH | (60°-80°) | 7715.4 | 27.3 | B5 | | G4/12000 |
| BVH | (80°-90°) | 726.7 | 2.6 | | | 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° | 1502.9 | 1502.9 | 1502.9 | 1502.9 | 1502.9 | 1502.9 | 1502.9 | 1502.9 | 1502.9 | 1502.9 | 1502.9 |
| 2.5° | 1498.0 | 1506.7 | 1505.4 | 1502.9 | 1499.2 | 1499.2 | 1501.7 | 1510.4 | 1511.6 | 1511.6 | 1511.6 |
| 5° | 1515.3 | 1524.0 | 1522.8 | 1520.3 | 1516.6 | 1515.3 | 1517.8 | 1526.5 | 1527.7 | 1527.7 | 1529.0 |
| 7.5° | 1535.2 | 1545.1 | 1545.1 | 1543.9 | 1535.2 | 1535.2 | 1537.7 | 1548.8 | 1548.8 | 1551.3 | 1553.8 |
| 10° | 1568.7 | 1579.8 | 1583.5 | 1578.6 | 1573.6 | 1571.1 | 1573.6 | 1584.8 | 1583.5 | 1581.1 | 1582.3 |
| 12.5° | 1614.5 | 1625.7 | 1634.4 | 1633.1 | 1628.2 | 1625.7 | 1628.2 | 1634.4 | 1626.9 | 1617.0 | 1617.0 |
| 15° | 1671.6 | 1686.5 | 1696.4 | 1696.4 | 1702.6 | 1698.9 | 1695.1 | 1696.4 | 1685.2 | 1676.5 | 1676.5 |
| 17.5° | 1744.7 | 1757.1 | 1765.8 | 1773.3 | 1783.2 | 1783.2 | 1774.5 | 1772.0 | 1757.1 | 1749.7 | 1750.9 |
| 20° | 1834.0 | 1844.0 | 1856.4 | 1862.6 | 1882.4 | 1883.6 | 1868.8 | 1862.6 | 1847.7 | 1837.8 | 1840.2 |
| 22.5° | 1930.8 | 1948.1 | 1953.1 | 1971.7 | 1995.2 | 1996.5 | 1976.6 | 1963.0 | 1948.1 | 1940.7 | 1941.9 |
| 25° | 2047.3 | 2064.7 | 2061.0 | 2077.1 | 2113.0 | 2116.8 | 2094.4 | 2074.6 | 2062.2 | 2054.8 | 2057.2 |
| 27.5° | 2175.0 | 2192.4 | 2191.2 | 2191.2 | 2233.3 | 2249.4 | 2218.4 | 2197.4 | 2199.8 | 2186.2 | 2191.2 |
| 30° | 2311.4 | 2326.3 | 2335.0 | 2320.1 | 2361.1 | 2387.1 | 2337.5 | 2340.0 | 2338.7 | 2330.1 | 2328.8 |
| 32.5° | 2471.4 | 2485.1 | 2483.8 | 2473.9 | 2486.3 | 2523.5 | 2483.8 | 2496.2 | 2499.9 | 2501.2 | 2511.1 |
| 35° | 2653.7 | 2669.8 | 2652.5 | 2638.8 | 2640.1 | 2676.0 | 2646.3 | 2666.1 | 2685.9 | 2693.4 | 2693.4 |
| 37.5° | 2848.4 | 2857.1 | 2838.5 | 2817.4 | 2812.4 | 2832.3 | 2827.3 | 2859.6 | 2893.0 | 2911.6 | 2921.6 |
| 40° | 3100.1 | 3107.6 | 3071.6 | 3030.7 | 3023.2 | 3045.6 | 3051.8 | 3122.4 | 3173.3 | 3208.0 | 3214.2 |
| 42.5° | 3449.8 | 3448.6 | 3397.7 | 3322.1 | 3286.1 | 3320.8 | 3365.5 | 3447.3 | 3532.9 | 3540.3 | 3566.4 |
| 45° | 3900.0 | 3882.6 | 3816.9 | 3704.0 | 3613.5 | 3601.1 | 3654.4 | 3775.9 | 3871.4 | 3912.4 | 3928.5 |
| 47.5° | 4413.3 | 4393.5 | 4274.4 | 4099.6 | 3944.6 | 3896.2 | 3940.9 | 4093.4 | 4236.0 | 4295.5 | 4327.8 |
| 50° | 4986.2 | 4962.7 | 4842.4 | 4605.5 | 4347.6 | 4259.6 | 4286.8 | 4476.6 | 4642.7 | 4718.4 | 4775.4 |
| 52.5° | 5602.5 | 5598.8 | 5445.1 | 5172.2 | 4827.5 | 4684.9 | 4676.2 | 4904.4 | 5127.6 | 5228.0 | 5259.0 |
| 55° | 6263.5 | 6244.9 | 6107.2 | 5810.9 | 5411.6 | 5145.0 | 5146.2 | 5399.2 | 5672.0 | 5803.4 | 5818.3 |
| 57.5° | 6912.0 | 6904.6 | 6752.1 | 6499.1 | 6091.1 | 5740.2 | 5705.5 | 6041.5 | 6316.8 | 6424.7 | 6429.6 |
| 60° | 7524.6 | 7548.2 | 7468.8 | 7236.9 | 6908.3 | 6511.5 | 6460.7 | 6744.6 | 6979.0 | 7072.0 | 7105.5 |
| 62.5° | 8206.6 | 8214.1 | 8204.2 | 8033.0 | 7782.5 | 7514.7 | 7389.4 | 7534.5 | 7766.4 | 7843.3 | 7827.2 |
| 65° | 8694.0 | 8742.3 | 8855.2 | 8943.2 | 8889.9 | 8685.3 | 8520.4 | 8527.8 | 8573.7 | 8524.1 | 8520.4 |
| 67.5° | 8072.7 | 8178.1 | 8562.5 | 9181.3 | 9910.5 | 10229.2 | 9559.5 | 8811.8 | 8534.0 | 8354.2 | 8353.0 |
| 70° | 7053.4 | 7124.1 | 7604.0 | 8674.1 | 10271.3 | 10740.1 | 9984.9 | 8620.8 | 8076.4 | 7863.1 | 7787.5 |
| 72.5° | 6000.6 | 6056.4 | 6584.7 | 7677.1 | 9698.4 | 10438.7 | 9713.3 | 8060.3 | 7343.6 | 6873.6 | 6882.3 |
| 75° | 4997.4 | 4988.7 | 5388.0 | 6510.3 | 8584.9 | 9586.8 | 8994.1 | 7173.7 | 6153.1 | 5725.3 | 5676.9 |
| 77.5° | 3464.7 | 3544.1 | 3997.9 | 5145.0 | 6960.4 | 8112.4 | 8025.6 | 5905.1 | 4715.9 | 4259.6 | 4289.3 |
| 80° | 1815.4 | 1865.0 | 2403.2 | 3493.2 | 5092.9 | 6222.6 | 6108.5 | 4176.5 | 3046.8 | 2542.1 | 2446.6 |
| 82.5° | 756.4 | 788.7 | 1098.7 | 1887.4 | 3112.5 | 3872.7 | 3820.6 | 2545.8 | 1698.9 | 1183.0 | 1180.5 |
| 85° | 321.2 | 322.4 | 466.3 | 808.5 | 1571.1 | 1840.2 | 1476.9 | 1093.7 | 595.2 | 373.3 | 333.6 |
| 87.5° | 136.4 | 141.4 | 189.7 | 370.8 | 497.3 | 401.8 | 236.8 | 146.3 | 98.0 | 59.5 | 45.9 |
| 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)