

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: P510163

Luminaire Tested: **VERD-M-CA4-220-727-U-T1**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510163
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-1)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-220-727-U-T1
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 1000mA LEDS AND TYPE I OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28031 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

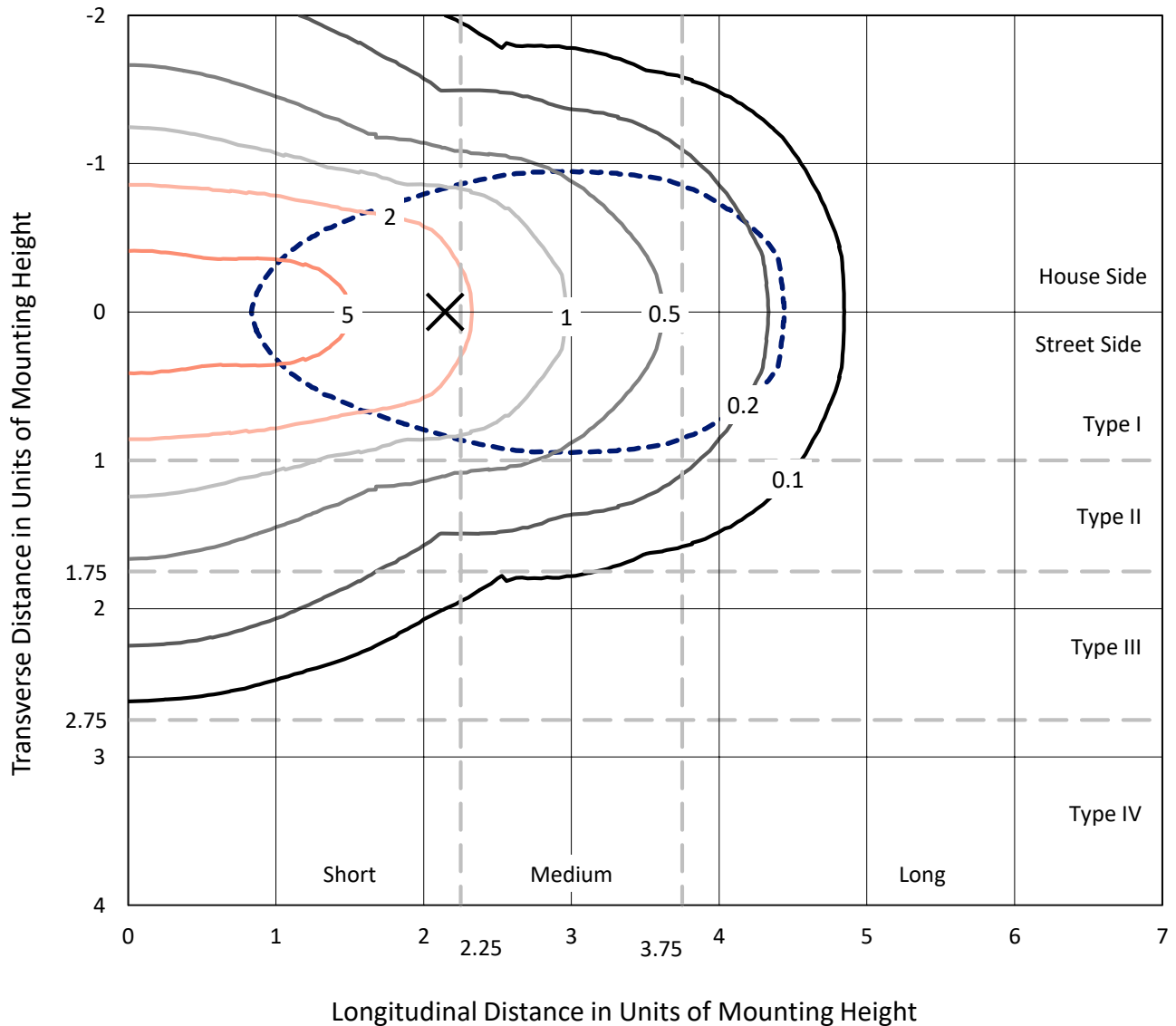
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

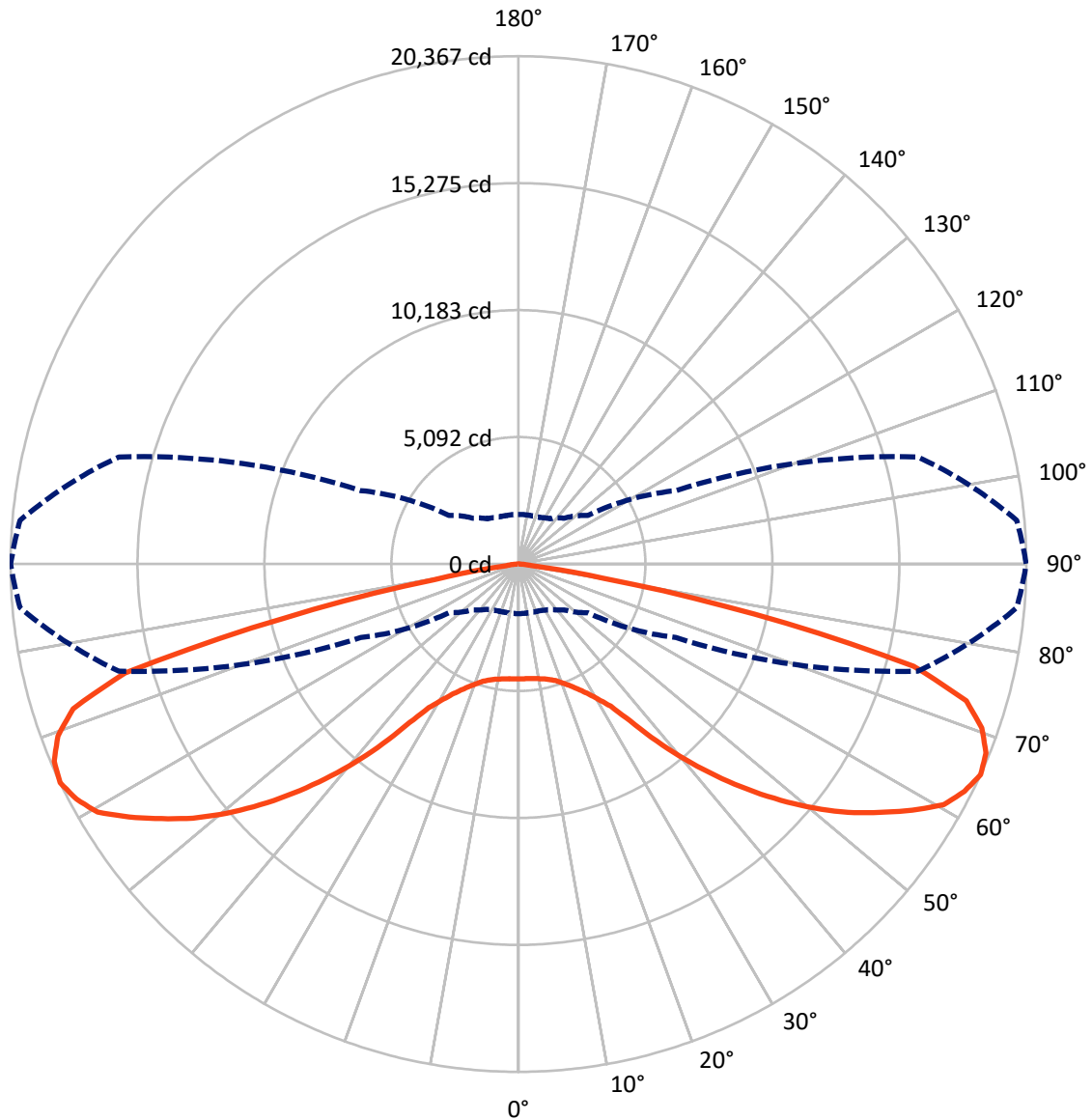
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 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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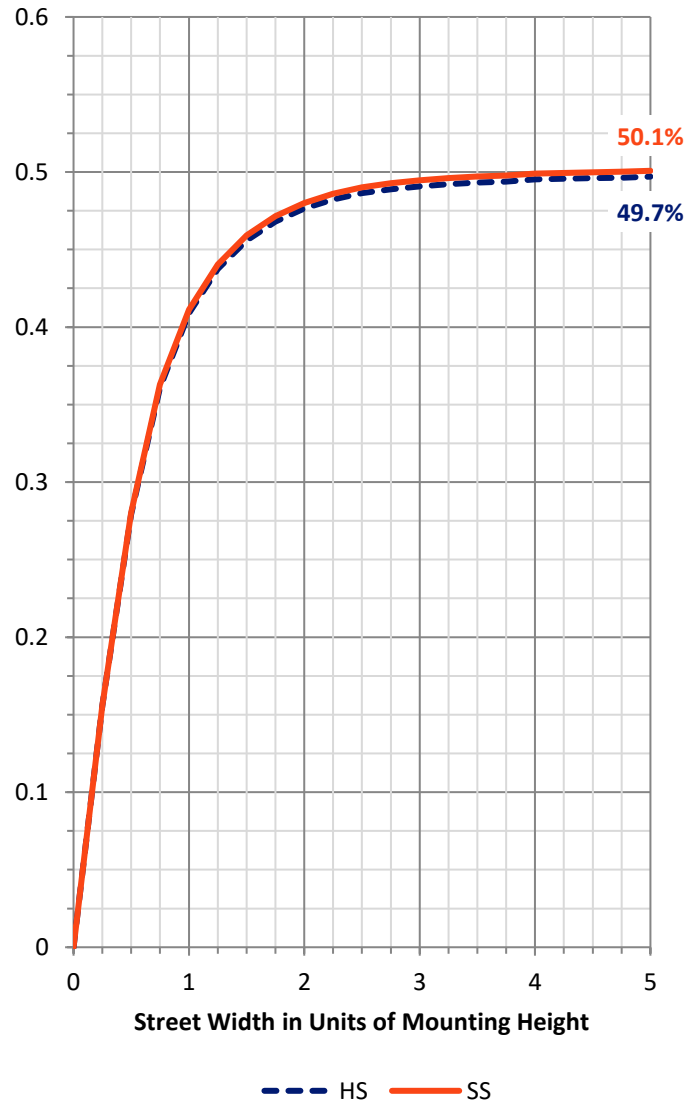
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 14015.5 | 0.0 | 14015.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 14015.5 | 0.0 | 14015.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 28031.0 | 0.0 | 28031.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 438.9 | 1.6 |
| 10°-20° | 1303.2 | 4.6 |
| 20°-30° | 2151.6 | 7.7 |
| 30°-40° | 3152.6 | 11.2 |
| 40°-50° | 4598.7 | 16.4 |
| 50°-60° | 5953.8 | 21.2 |
| 60°-70° | 6272.7 | 22.4 |
| 70°-80° | 3828.5 | 13.7 |
| 80°-90° | 331.0 | 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° | 28031.0 | 100.0 |
| 0°-180° | 28031.0 | 100.0 |



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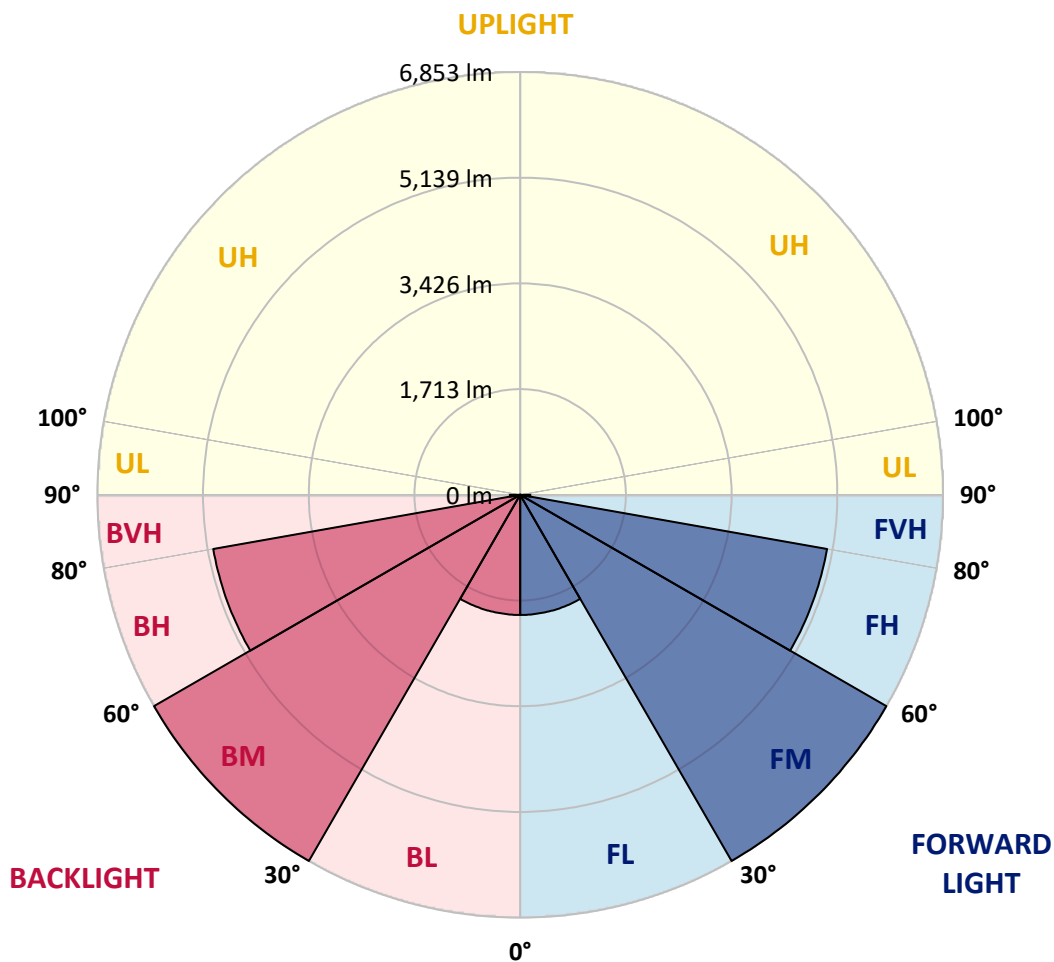
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1946.8 | 6.9 | | | |
| FM | (30°-60°) | 6852.6 | 24.4 | | | |
| FH | (60°-80°) | 5050.6 | 18.0 | | | G3/7500 |
| FVH | (80°-90°) | 165.5 | 0.6 | | | G2/225 |
| BL | (0°-30°) | 1946.8 | 6.9 | B3/2500 | | |
| BM | (30°-60°) | 6852.6 | 24.4 | B4/8500 | | |
| BH | (60°-80°) | 5050.6 | 18.0 | B5 | | G5 |
| BVH | (80°-90°) | 165.5 | 0.6 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G5

Type I Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 4611.7 | 4611.7 | 4611.7 | 4611.7 | 4611.7 | 4611.7 | 4611.7 | 4611.7 | 4611.7 | 4611.7 | 4611.7 |
| 2.5° | 4573.5 | 4610.5 | 4616.5 | 4601.0 | 4602.2 | 4599.8 | 4609.3 | 4612.9 | 4617.7 | 4610.5 | 4607.0 |
| 5° | 4566.4 | 4598.6 | 4604.6 | 4597.4 | 4607.0 | 4604.6 | 4609.3 | 4617.7 | 4616.5 | 4614.1 | 4614.1 |
| 7.5° | 4528.2 | 4552.0 | 4571.1 | 4566.4 | 4568.8 | 4584.3 | 4601.0 | 4628.4 | 4641.6 | 4641.6 | 4639.2 |
| 10° | 4478.0 | 4503.1 | 4535.3 | 4528.2 | 4543.7 | 4575.9 | 4609.3 | 4638.0 | 4671.4 | 4678.6 | 4678.6 |
| 12.5° | 4424.3 | 4458.9 | 4490.0 | 4497.1 | 4532.9 | 4569.9 | 4630.8 | 4675.0 | 4713.2 | 4729.9 | 4728.7 |
| 15° | 4352.7 | 4382.5 | 4419.5 | 4445.8 | 4503.1 | 4583.1 | 4663.1 | 4731.1 | 4786.0 | 4808.7 | 4812.3 |
| 17.5° | 4257.2 | 4289.4 | 4328.8 | 4383.7 | 4484.0 | 4598.6 | 4722.8 | 4814.7 | 4898.2 | 4922.1 | 4922.1 |
| 20° | 4131.8 | 4166.4 | 4214.2 | 4298.9 | 4435.0 | 4614.1 | 4780.1 | 4924.5 | 5033.1 | 5089.3 | 5097.6 |
| 22.5° | 3937.2 | 3975.4 | 4053.0 | 4199.9 | 4378.9 | 4611.7 | 4848.1 | 5053.4 | 5217.0 | 5289.8 | 5298.2 |
| 25° | 3721.1 | 3770.1 | 3879.9 | 4073.3 | 4309.7 | 4609.3 | 4916.2 | 5199.1 | 5417.6 | 5529.8 | 5553.7 |
| 27.5° | 3530.1 | 3576.7 | 3711.6 | 3950.4 | 4245.2 | 4614.1 | 4984.2 | 5366.2 | 5681.4 | 5842.6 | 5862.9 |
| 30° | 3342.7 | 3384.5 | 3534.9 | 3819.0 | 4185.5 | 4620.1 | 5071.4 | 5558.4 | 5981.0 | 6227.0 | 6275.9 |
| 32.5° | 3188.7 | 3230.5 | 3376.1 | 3679.4 | 4112.7 | 4633.2 | 5182.4 | 5815.1 | 6397.7 | 6765.4 | 6796.4 |
| 35° | 3053.8 | 3101.5 | 3229.3 | 3538.5 | 4016.0 | 4652.3 | 5322.1 | 6151.8 | 6994.6 | 7672.7 | 7708.5 |
| 37.5° | 2936.8 | 2975.0 | 3088.4 | 3389.3 | 3914.5 | 4655.9 | 5484.4 | 6546.9 | 7765.8 | 8767.4 | 9012.2 |
| 40° | 2859.2 | 2885.5 | 2972.6 | 3252.0 | 3780.8 | 4626.1 | 5670.6 | 6988.6 | 8625.4 | 10038.8 | 10318.2 |
| 42.5° | 2788.8 | 2812.6 | 2881.9 | 3125.4 | 3641.2 | 4568.8 | 5843.8 | 7442.3 | 9486.1 | 11337.7 | 11601.5 |
| 45° | 2704.0 | 2723.1 | 2793.5 | 3018.0 | 3505.1 | 4480.4 | 5987.0 | 7862.5 | 10376.7 | 12642.6 | 12890.9 |
| 47.5° | 2634.8 | 2649.1 | 2708.8 | 2921.3 | 3353.4 | 4338.3 | 6047.9 | 8243.3 | 11331.7 | 13849.5 | 14157.5 |
| 50° | 2587.0 | 2582.2 | 2634.8 | 2821.0 | 3198.2 | 4140.2 | 5996.6 | 8525.1 | 12338.1 | 15057.7 | 15389.5 |
| 52.5° | 2504.6 | 2509.4 | 2559.6 | 2717.1 | 3069.3 | 3895.4 | 5796.0 | 8723.2 | 13350.5 | 16160.8 | 16553.5 |
| 55° | 2419.9 | 2427.0 | 2466.4 | 2608.5 | 2933.2 | 3662.6 | 5424.7 | 8750.7 | 14409.4 | 17314.0 | 17581.4 |
| 57.5° | 2329.1 | 2332.7 | 2366.2 | 2491.5 | 2781.6 | 3421.5 | 4956.7 | 8576.4 | 15391.9 | 18371.7 | 18624.8 |
| 60° | 2249.2 | 2250.4 | 2273.0 | 2369.7 | 2613.3 | 3161.2 | 4412.4 | 8226.6 | 16183.4 | 19183.5 | 19595.4 |
| 62.5° | 2141.7 | 2141.7 | 2156.0 | 2237.2 | 2441.4 | 2892.6 | 3889.5 | 7684.6 | 16615.6 | 19775.6 | 20075.3 |
| 65° | 1987.7 | 1990.1 | 2004.4 | 2057.0 | 2215.7 | 2600.1 | 3398.8 | 6968.3 | 16589.3 | 20065.7 | 20366.6 |
| 67.5° | 1692.8 | 1686.9 | 1772.8 | 1858.8 | 1982.9 | 2304.1 | 2917.7 | 6265.2 | 15987.6 | 19941.6 | 20223.3 |
| 70° | 1226.1 | 1217.7 | 1267.8 | 1389.6 | 1689.3 | 1924.4 | 2479.6 | 5677.8 | 14259.0 | 19477.2 | 19711.2 |
| 72.5° | 1006.4 | 1011.2 | 1013.6 | 998.0 | 1130.5 | 1557.9 | 2071.3 | 4993.8 | 11765.1 | 18053.0 | 18781.2 |
| 75° | 796.3 | 784.3 | 797.5 | 809.4 | 845.2 | 913.3 | 1676.1 | 4158.1 | 9548.2 | 15137.6 | 16366.1 |
| 77.5° | 502.6 | 495.4 | 494.2 | 501.4 | 548.0 | 579.0 | 1026.7 | 3047.8 | 6643.6 | 9575.6 | 9656.8 |
| 80° | 349.8 | 348.6 | 349.8 | 359.3 | 374.9 | 382.0 | 569.5 | 1670.2 | 3345.1 | 3487.2 | 3425.1 |
| 82.5° | 248.3 | 240.0 | 232.8 | 250.7 | 242.3 | 235.2 | 342.6 | 765.2 | 902.5 | 614.8 | 499.0 |
| 85° | 123.0 | 125.4 | 106.3 | 134.9 | 126.5 | 123.0 | 133.7 | 145.6 | 134.9 | 251.9 | 285.3 |
| 87.5° | 34.6 | 33.4 | 37.0 | 43.0 | 41.8 | 47.8 | 43.0 | 46.6 | 54.9 | 95.5 | 94.3 |
| 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)