

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: P157573

Luminaire Tested: **VST-F05-LED-E-U-5WQ-8030**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P157573  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33709)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VST-F05-LED-E-U-5WQ-8030  
Description: VENTUS LED SITE/ROADWAY LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE  
Light Source: (35) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 10999.7 lumens  
Efficiency: N/A  
Efficacy: 82.5 lumens/watt  
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 133.3  
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: 28.75 FT

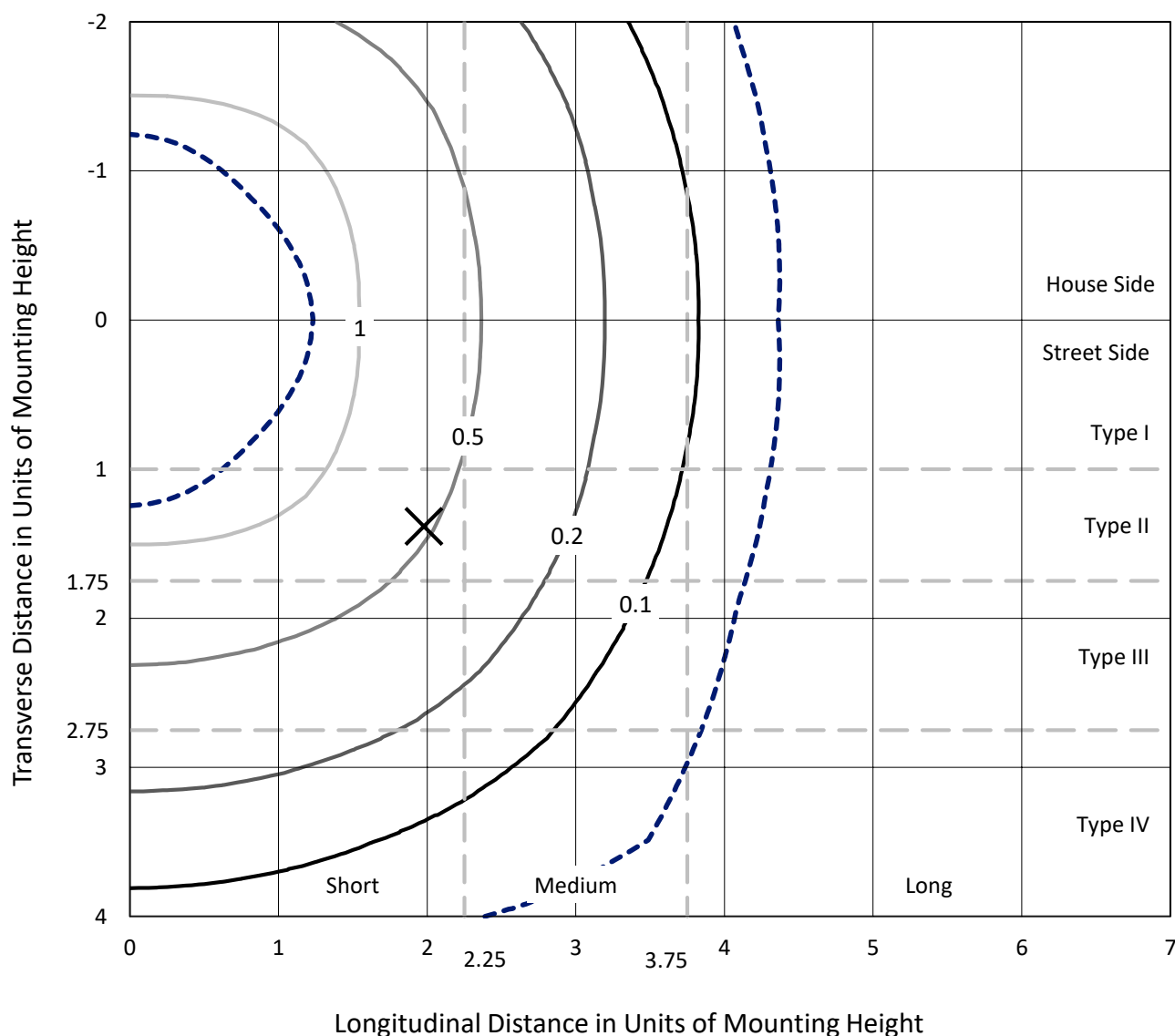


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

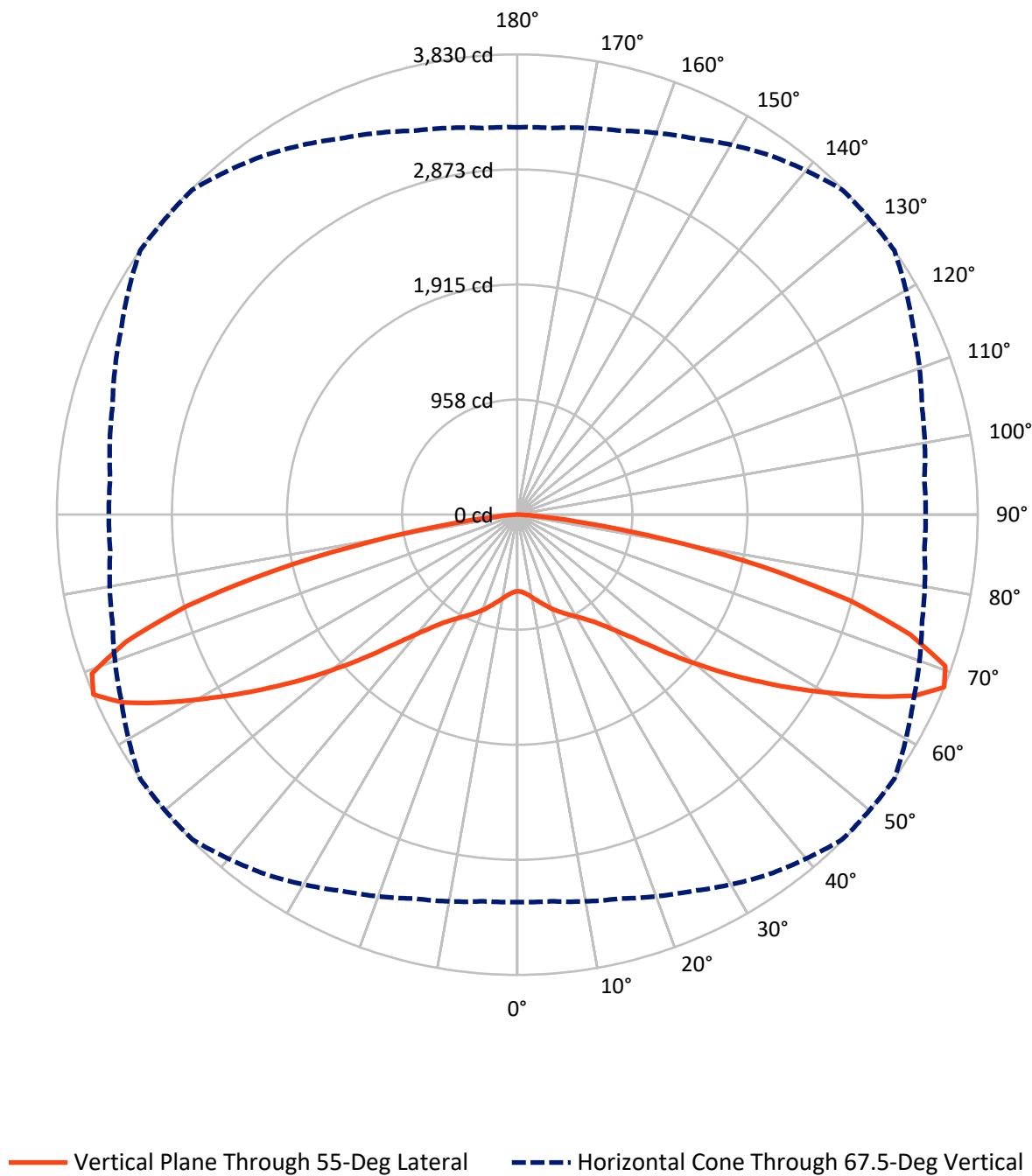


Based on 20 foot mounting height. Maximum calculated value = 1.7 fc  
 Type V - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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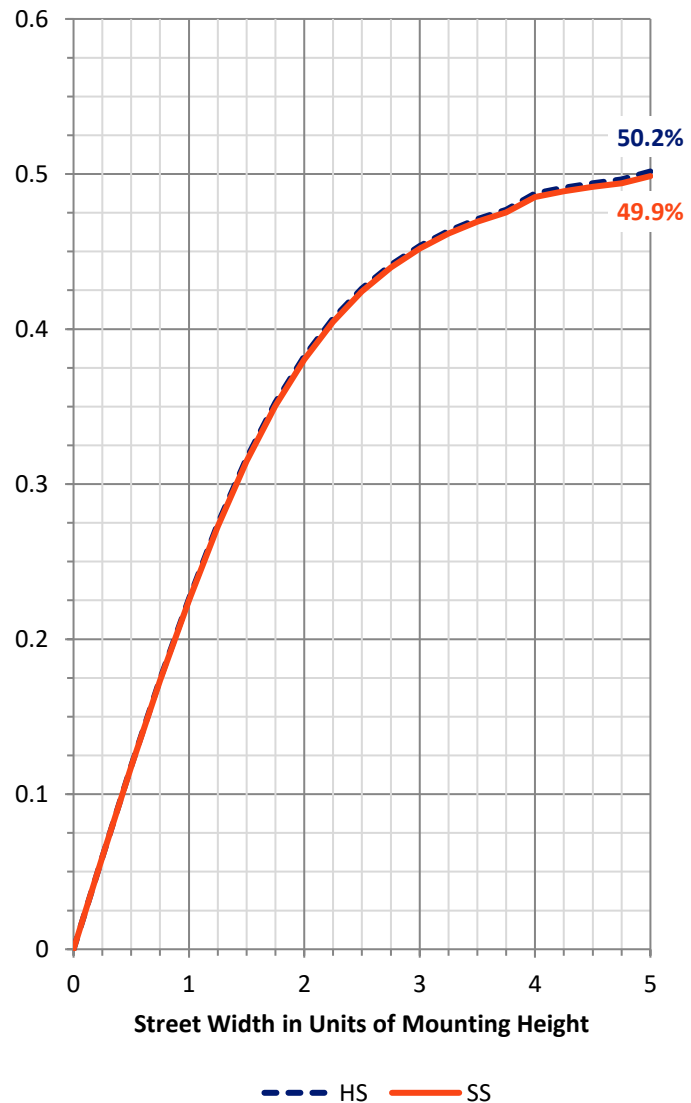
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5499.9   | 0.0    | 5499.9  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 5499.9   | 0.0    | 5499.9  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 10999.7  | 0.0    | 10999.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 64.0    | 0.6       |
| 10°-20°   | 218.9   | 2.0       |
| 20°-30°   | 420.8   | 3.8       |
| 30°-40°   | 689.4   | 6.3       |
| 40°-50°   | 1198.4  | 10.9      |
| 50°-60°   | 2139.1  | 19.4      |
| 60°-70°   | 3302.7  | 30.0      |
| 70°-80°   | 2673.5  | 24.3      |
| 80°-90°   | 292.9   | 2.7       |
| 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°    | 10999.7 | 100.0     |
| 0°-180°   | 10999.7 | 100.0     |

**Coefficient of Utilization**



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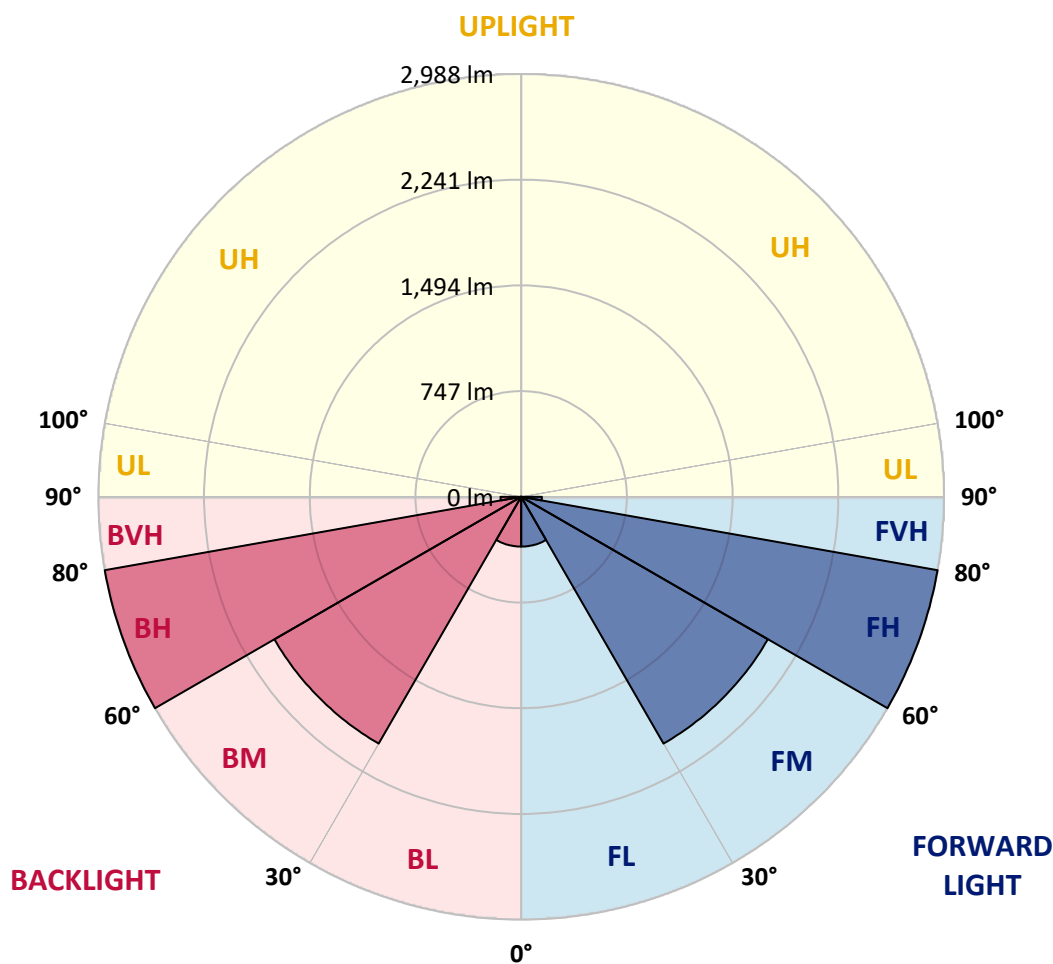
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 351.9  | 3.2       |                         |      |         |
| FM   | (30°-60°)   | 2013.5 | 18.3      |                         |      |         |
| FH   | (60°-80°)   | 2988.1 | 27.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 146.4  | 1.3       |                         |      | G2/225  |
| BL   | (0°-30°)    | 351.9  | 3.2       | B1/500                  |      |         |
| BM   | (30°-60°)   | 2013.5 | 18.3      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 2988.1 | 27.2      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 146.4  | 1.3       |                         |      | 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 Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 638.2  | 638.2  | 638.2  | 638.2  | 638.2  | 638.2  | 638.2  | 638.2  | 638.2  | 638.2  | 638.2  |
| 2.5°  | 642.4  | 643.1  | 642.4  | 642.4  | 641.7  | 641.7  | 641.7  | 642.4  | 642.4  | 643.8  | 643.1  |
| 5°    | 655.6  | 656.3  | 654.9  | 656.3  | 656.3  | 657.0  | 656.3  | 655.6  | 656.3  | 657.0  | 654.9  |
| 7.5°  | 674.4  | 675.8  | 675.1  | 675.8  | 676.5  | 675.8  | 675.8  | 675.1  | 676.5  | 675.8  | 674.4  |
| 10°   | 698.8  | 700.2  | 699.5  | 700.9  | 701.6  | 702.3  | 702.3  | 700.9  | 700.2  | 700.2  | 699.5  |
| 12.5° | 728.1  | 728.1  | 728.1  | 730.2  | 731.6  | 733.0  | 732.3  | 730.9  | 728.8  | 729.5  | 726.7  |
| 15°   | 760.1  | 761.5  | 761.5  | 762.2  | 765.7  | 766.4  | 765.7  | 763.6  | 762.9  | 761.5  | 760.1  |
| 17.5° | 795.7  | 796.4  | 797.1  | 797.8  | 801.9  | 804.0  | 801.2  | 797.8  | 797.8  | 797.1  | 797.1  |
| 20°   | 832.6  | 831.9  | 833.3  | 834.7  | 837.5  | 839.6  | 838.9  | 835.4  | 832.6  | 834.7  | 834.0  |
| 22.5° | 866.7  | 867.4  | 868.1  | 870.2  | 875.1  | 875.8  | 873.7  | 870.9  | 867.4  | 868.1  | 868.1  |
| 25°   | 898.8  | 899.5  | 900.9  | 903.7  | 909.2  | 912.7  | 909.9  | 905.8  | 900.9  | 900.9  | 901.6  |
| 27.5° | 931.5  | 932.2  | 932.9  | 937.8  | 944.8  | 949.0  | 946.9  | 939.9  | 934.3  | 932.9  | 930.8  |
| 30°   | 967.8  | 967.8  | 969.2  | 975.4  | 984.5  | 989.4  | 986.6  | 978.2  | 969.9  | 968.5  | 968.5  |
| 32.5° | 1013.8 | 1011.0 | 1013.1 | 1021.4 | 1031.2 | 1036.7 | 1034.7 | 1024.9 | 1014.4 | 1012.4 | 1012.4 |
| 35°   | 1068.8 | 1067.4 | 1068.8 | 1078.5 | 1090.4 | 1098.8 | 1093.9 | 1084.8 | 1073.7 | 1071.6 | 1070.2 |
| 37.5° | 1134.3 | 1135.0 | 1139.2 | 1150.3 | 1166.3 | 1176.8 | 1171.9 | 1157.3 | 1144.0 | 1144.0 | 1144.0 |
| 40°   | 1217.2 | 1218.6 | 1227.0 | 1243.7 | 1266.7 | 1275.7 | 1270.1 | 1252.0 | 1236.7 | 1231.1 | 1232.5 |
| 42.5° | 1330.1 | 1329.4 | 1342.6 | 1363.5 | 1390.7 | 1403.9 | 1394.9 | 1375.4 | 1353.1 | 1344.0 | 1344.7 |
| 45°   | 1463.1 | 1472.9 | 1486.8 | 1513.3 | 1547.4 | 1570.4 | 1554.4 | 1532.8 | 1499.4 | 1486.1 | 1485.4 |
| 47.5° | 1624.1 | 1634.5 | 1652.0 | 1695.9 | 1737.0 | 1764.8 | 1752.3 | 1716.8 | 1668.7 | 1649.9 | 1642.9 |
| 50°   | 1807.3 | 1820.6 | 1842.9 | 1899.3 | 1957.8 | 1989.2 | 1966.9 | 1920.2 | 1868.6 | 1840.1 | 1833.1 |
| 52.5° | 2013.6 | 2017.7 | 2051.2 | 2119.5 | 2191.9 | 2230.3 | 2205.2 | 2149.4 | 2083.2 | 2056.8 | 2037.3 |
| 55°   | 2242.1 | 2245.6 | 2283.9 | 2361.2 | 2443.5 | 2488.7 | 2456.7 | 2386.3 | 2325.0 | 2279.0 | 2283.2 |
| 57.5° | 2453.9 | 2464.4 | 2520.8 | 2611.4 | 2708.2 | 2763.3 | 2728.4 | 2653.9 | 2589.8 | 2537.5 | 2543.8 |
| 60°   | 2680.3 | 2691.5 | 2750.7 | 2858.7 | 2989.7 | 3062.8 | 3017.6 | 2937.4 | 2871.2 | 2821.8 | 2815.5 |
| 62.5° | 2920.7 | 2927.0 | 2991.8 | 3088.6 | 3255.8 | 3373.6 | 3330.4 | 3241.9 | 3164.6 | 3115.8 | 3110.9 |
| 65°   | 3143.0 | 3151.3 | 3206.4 | 3312.3 | 3484.4 | 3656.5 | 3632.1 | 3509.5 | 3404.9 | 3334.6 | 3324.8 |
| 67.5° | 3223.8 | 3229.4 | 3306.7 | 3455.1 | 3653.0 | 3823.0 | 3830.0 | 3637.0 | 3485.1 | 3399.4 | 3397.3 |
| 70°   | 3129.0 | 3133.2 | 3232.2 | 3408.4 | 3660.6 | 3802.1 | 3777.0 | 3583.3 | 3396.6 | 3291.4 | 3280.9 |
| 72.5° | 2916.5 | 2917.2 | 3007.8 | 3157.6 | 3410.5 | 3526.2 | 3419.6 | 3313.0 | 3120.0 | 3041.3 | 3020.3 |
| 75°   | 2529.8 | 2530.5 | 2593.2 | 2692.9 | 2873.3 | 2979.9 | 2858.7 | 2761.2 | 2647.6 | 2600.9 | 2576.5 |
| 77.5° | 1739.7 | 1750.2 | 1815.0 | 1930.0 | 2127.8 | 2245.6 | 2086.7 | 1909.8 | 1840.8 | 1801.1 | 1777.4 |
| 80°   | 837.5  | 853.5  | 928.1  | 1041.6 | 1248.6 | 1436.7 | 1240.9 | 1022.8 | 888.3  | 779.0  | 798.5  |
| 82.5° | 223.7  | 226.4  | 290.5  | 417.3  | 581.8  | 682.8  | 554.6  | 388.1  | 244.6  | 164.4  | 150.5  |
| 85°   | 59.2   | 62.7   | 87.8   | 120.5  | 183.2  | 233.4  | 178.4  | 113.6  | 86.4   | 64.1   | 58.5   |
| 87.5° | 16.0   | 18.8   | 30.7   | 36.9   | 46.0   | 36.9   | 46.0   | 39.7   | 38.3   | 20.2   | 14.6   |
| 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)