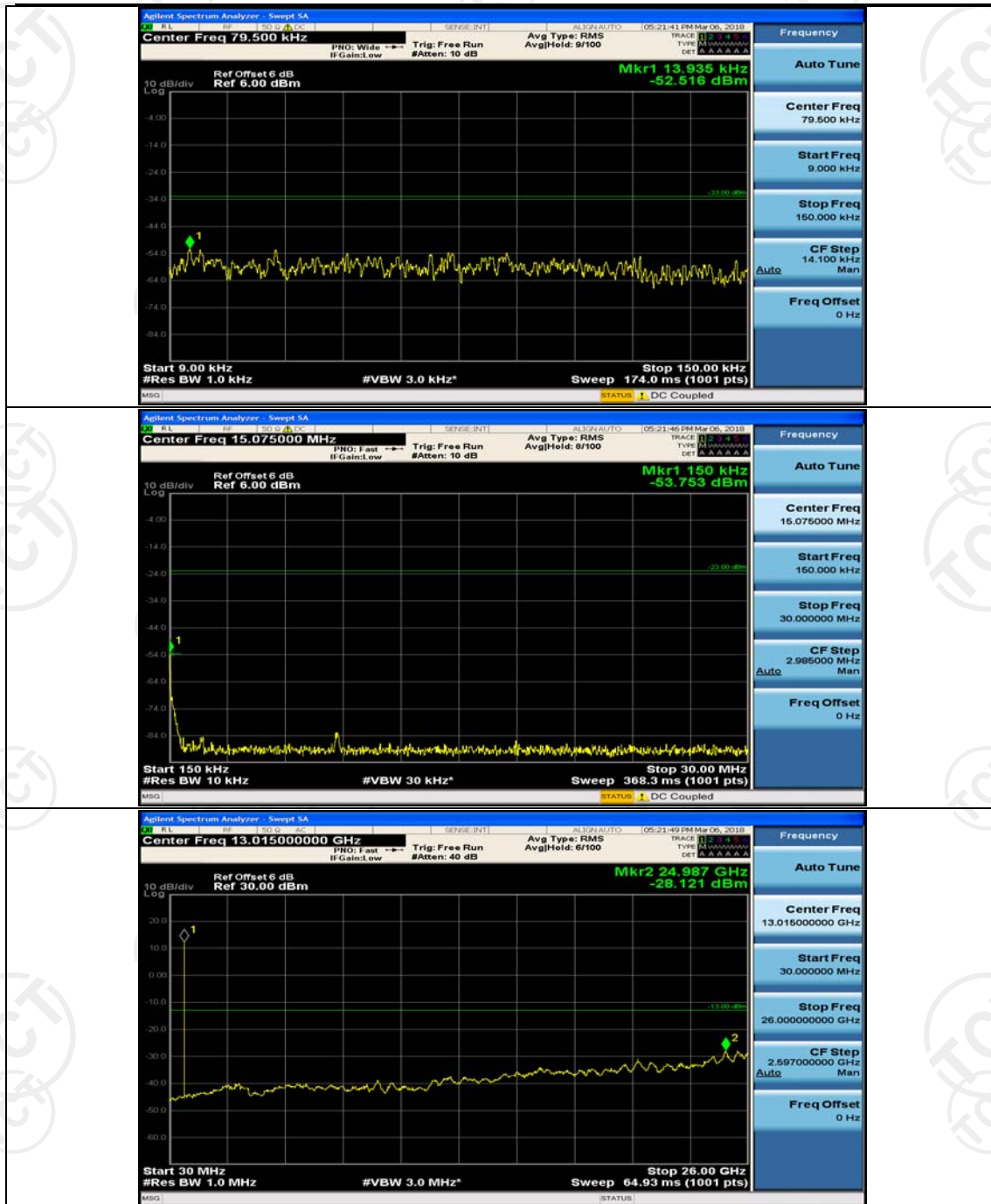
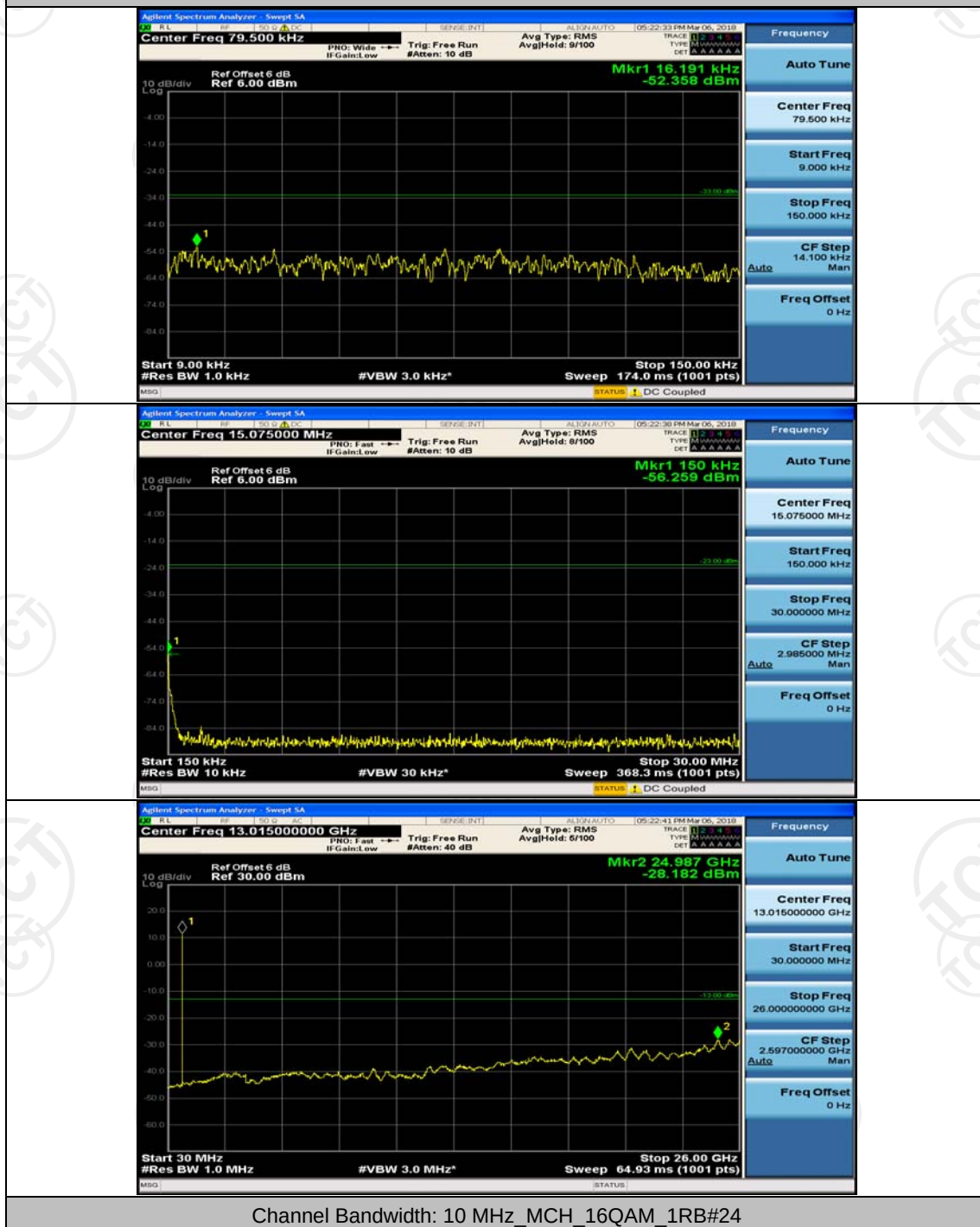
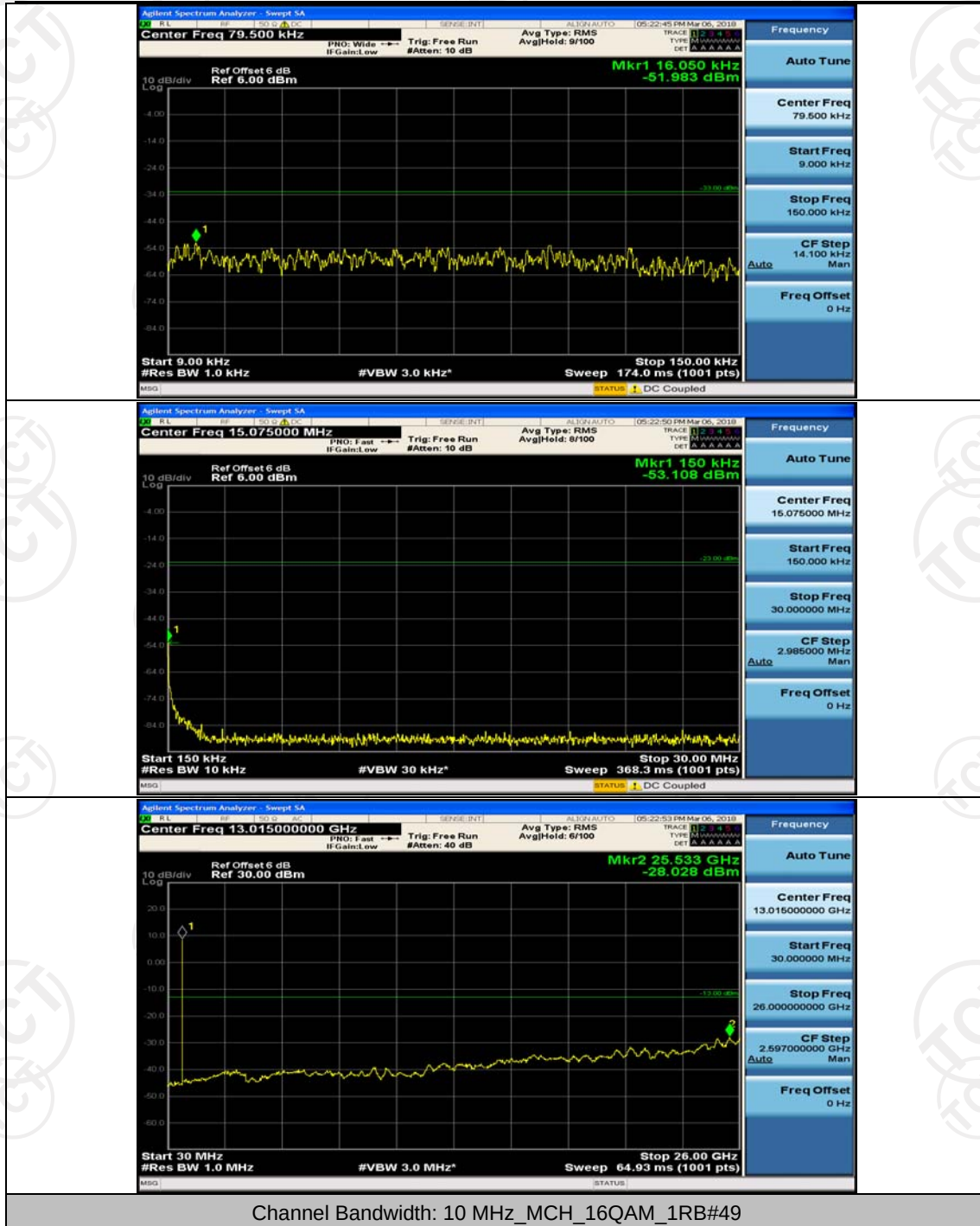
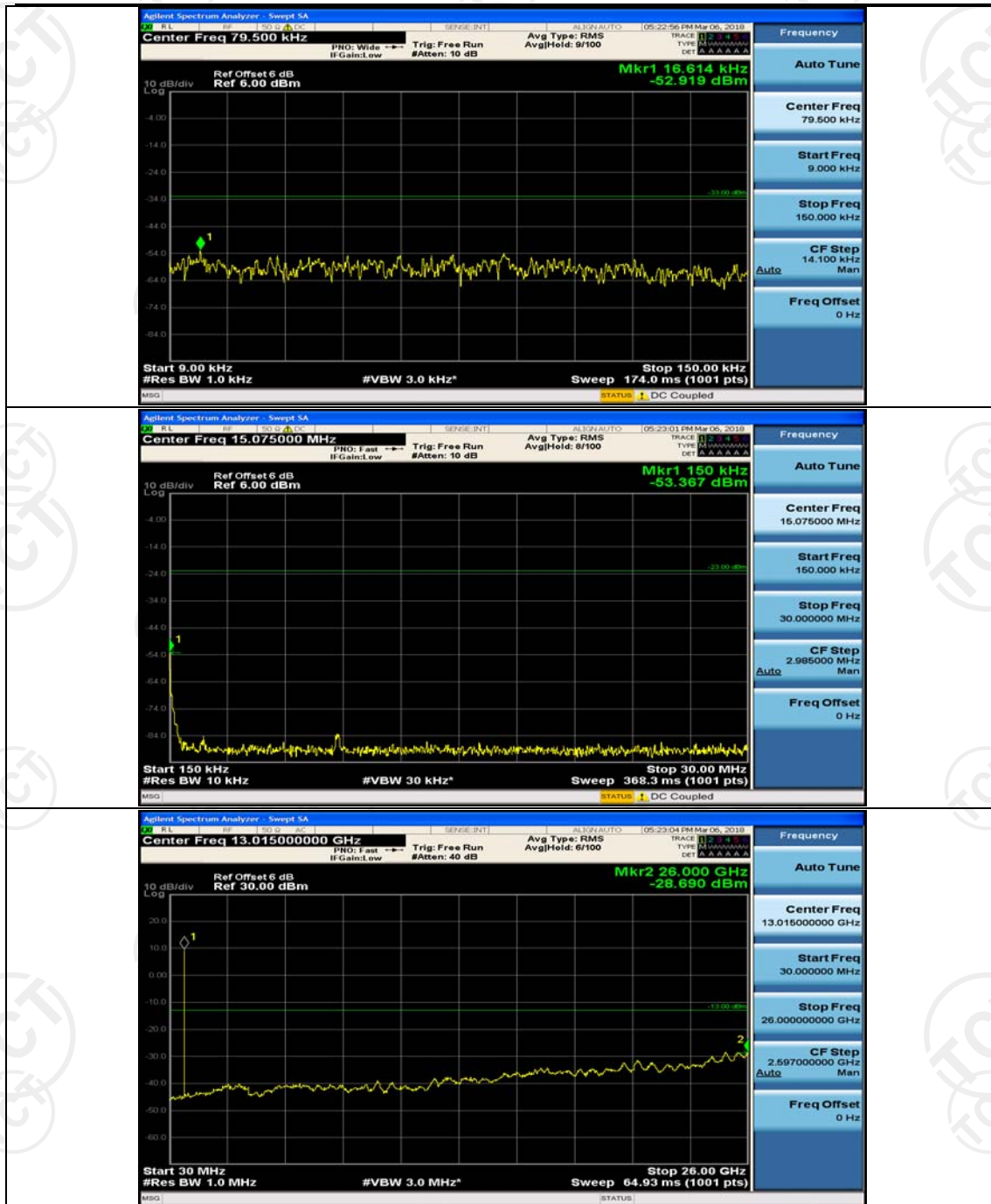




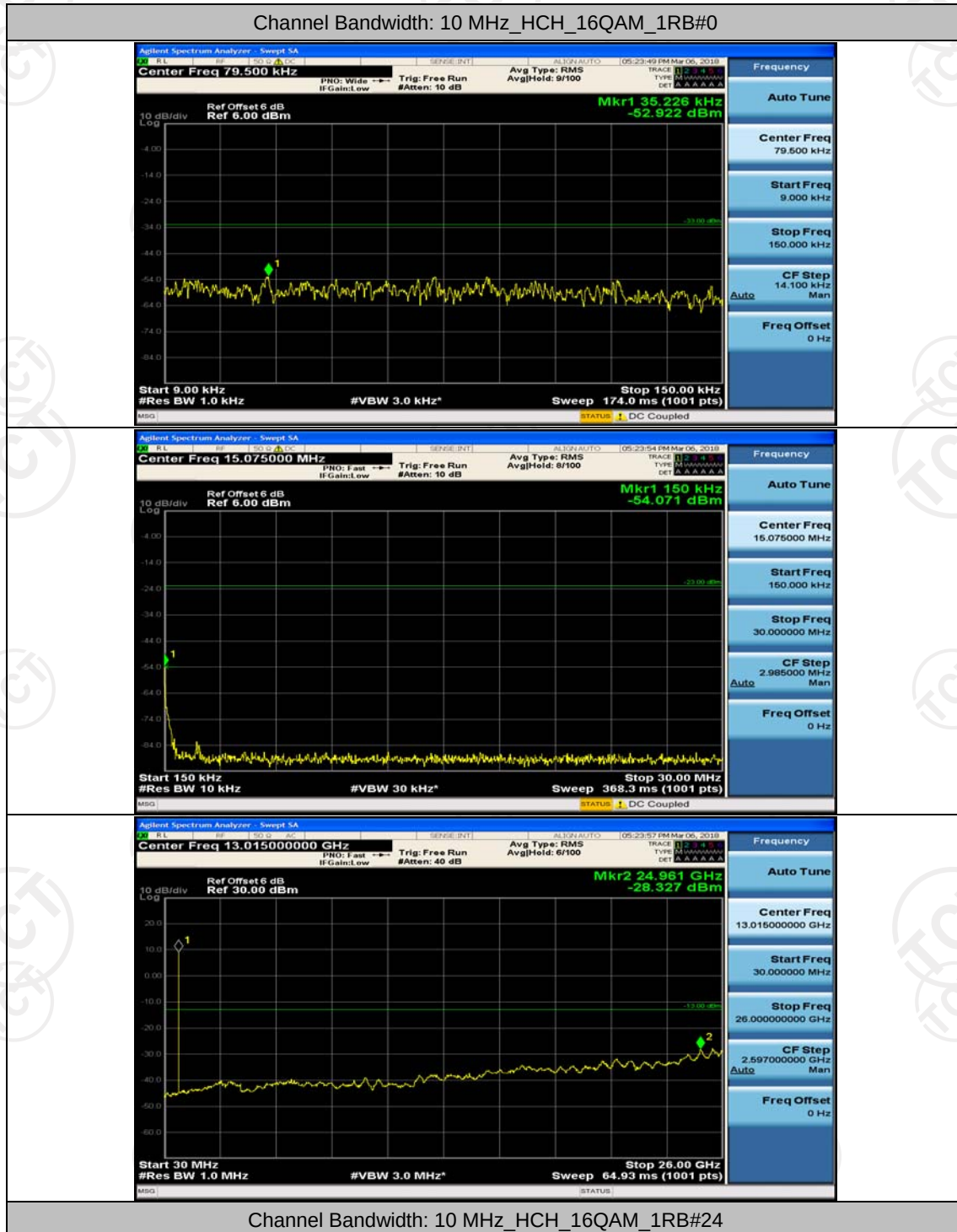
Channel Bandwidth: 10 MHz\_MCH\_16QAM\_1RB#0

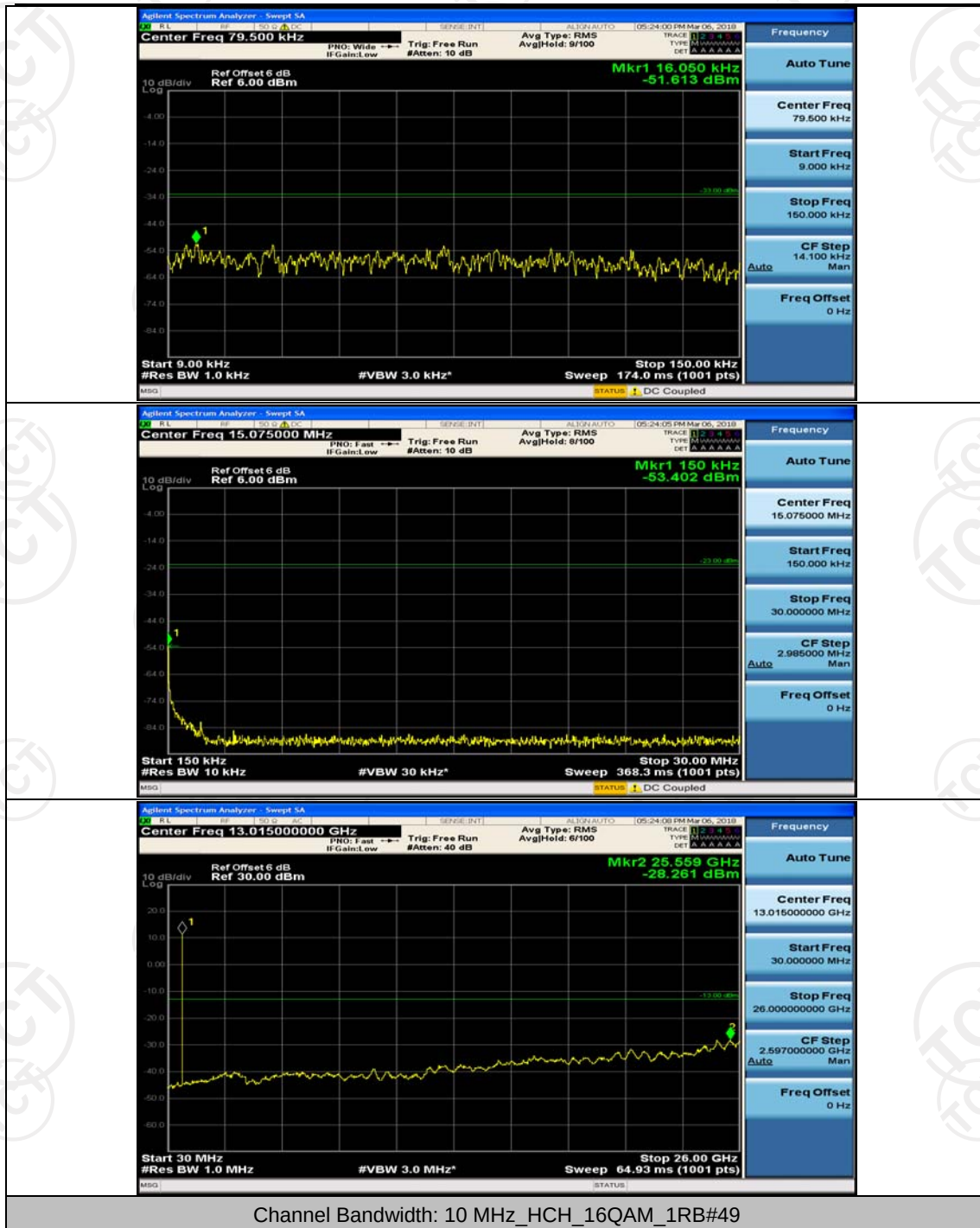


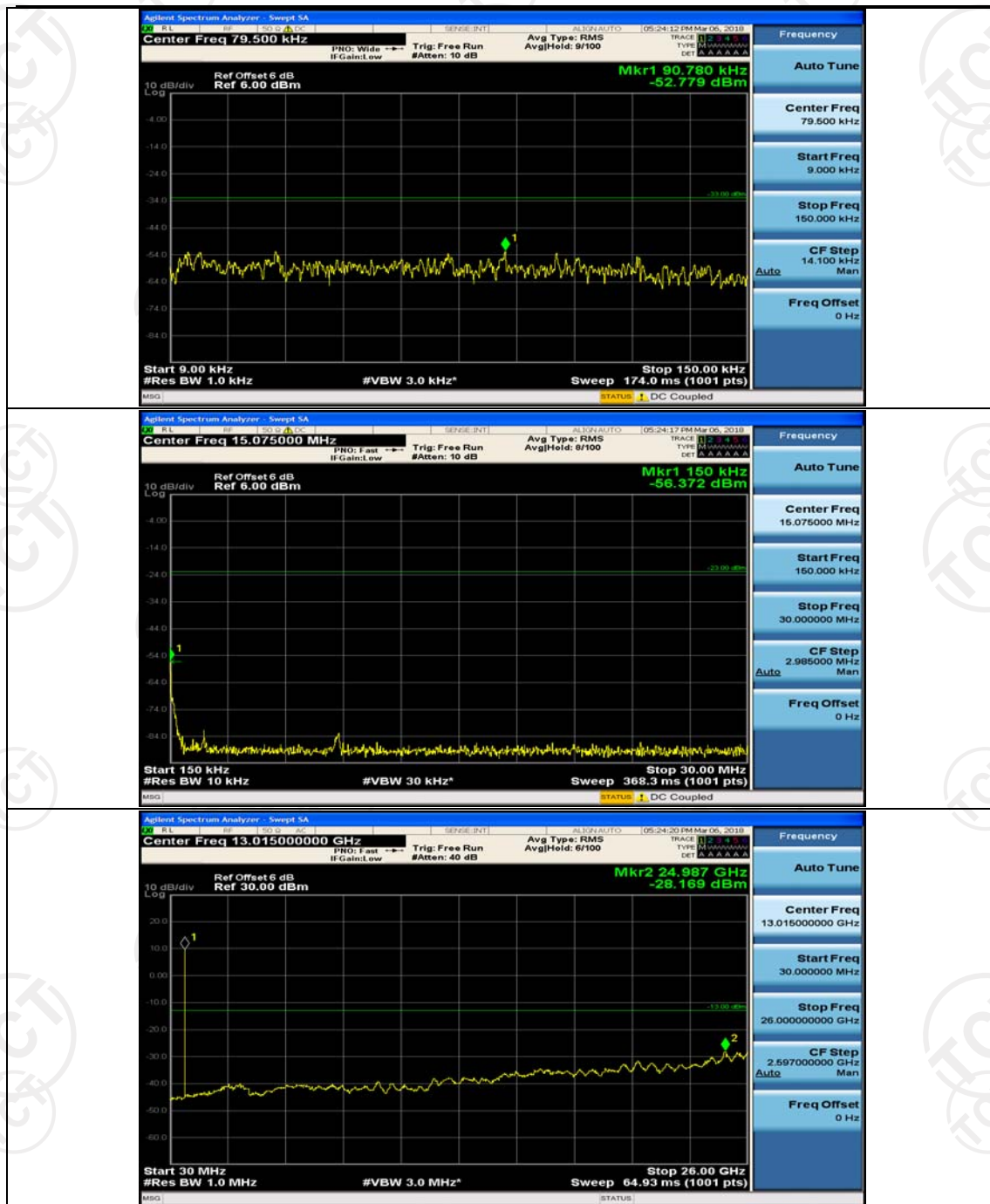












## Appendix F: Frequency Stability

### Test Result

**Channel Bandwidth: 1.4 MHz**

| Channel Bandwidth: 1.4 MHz |         |               |                  |                 |             |         |
|----------------------------|---------|---------------|------------------|-----------------|-------------|---------|
| Voltage                    |         |               |                  |                 |             |         |
| Modulation                 | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                       | LCH     | 4.8           | 25               | -0.000252       | ± 2.5       | PASS    |
|                            |         | 5.0           | 25               | -0.000225       | ± 2.5       | PASS    |
|                            |         | 5.1           | 25               | -0.000217       | ± 2.5       | PASS    |
|                            | MCH     | 4.8           | 25               | -0.000451       | ± 2.5       | PASS    |
|                            |         | 5.0           | 25               | 0.000040        | ± 2.5       | PASS    |
|                            |         | 5.1           | 25               | -0.000360       | ± 2.5       | PASS    |
|                            | HCH     | 4.8           | 25               | -0.000710       | ± 2.5       | PASS    |
|                            |         | 5.0           | 25               | 0.000400        | ± 2.5       | PASS    |
|                            |         | 5.1           | 25               | -0.000735       | ± 2.5       | PASS    |
| 16QAM                      | LCH     | 4.8           | 25               | -0.001780       | ± 2.5       | PASS    |
|                            |         | 5.0           | 25               | -0.001922       | ± 2.5       | PASS    |
|                            |         | 5.1           | 25               | -0.001627       | ± 2.5       | PASS    |
|                            | MCH     | 4.8           | 25               | -0.000620       | ± 2.5       | PASS    |
|                            |         | 5.0           | 25               | -0.000364       | ± 2.5       | PASS    |
|                            |         | 5.1           | 25               | -0.000853       | ± 2.5       | PASS    |
|                            | HCH     | 4.8           | 25               | -0.000650       | ± 2.5       | PASS    |
|                            |         | 5.0           | 25               | -0.000840       | ± 2.5       | PASS    |
|                            |         | 5.1           | 25               | -0.000284       | ± 2.5       | PASS    |
| Temperature                |         |               |                  |                 |             |         |
| Modulation                 | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                       | LCH     | 5             | 0                | -0.002165       | ± 2.5       | PASS    |
|                            |         | 5             | 10               | -0.002558       | ± 2.5       | PASS    |
|                            |         | 5             | 20               | -0.001533       | ± 2.5       | PASS    |
|                            |         | 5             | 30               | -0.000859       | ± 2.5       | PASS    |
|                            |         | 5             | 40               | -0.000961       | ± 2.5       | PASS    |
|                            |         | 5             | 45               | -0.000716       | ± 2.5       | PASS    |
|                            | MCH     | 5             | 0                | -0.002165       | ± 2.5       | PASS    |
|                            |         | 5             | 10               | 0.001240        | ± 2.5       | PASS    |
|                            |         | 5             | 20               | -0.000890       | ± 2.5       | PASS    |
|                            |         | 5             | 30               | -0.000607       | ± 2.5       | PASS    |
|                            |         | 5             | 40               | -0.000708       | ± 2.5       | PASS    |



|       |     |   |    |           |       |      |
|-------|-----|---|----|-----------|-------|------|
|       | HCH | 5 | 45 | 0.000485  | ± 2.5 | PASS |
|       |     | 5 | 0  | -0.004140 | ± 2.5 | PASS |
|       |     | 5 | 10 | -0.003310 | ± 2.5 | PASS |
|       |     | 5 | 20 | -0.001120 | ± 2.5 | PASS |
|       |     | 5 | 30 | -0.001680 | ± 2.5 | PASS |
|       |     | 5 | 40 | -0.001120 | ± 2.5 | PASS |
|       |     | 5 | 45 | -0.000320 | ± 2.5 | PASS |
| 16QAM | LCH | 5 | 0  | -0.004140 | ± 2.5 | PASS |
|       |     | 5 | 10 | -0.001041 | ± 2.5 | PASS |
|       |     | 5 | 20 | 0.000041  | ± 2.5 | PASS |
|       |     | 5 | 30 | -0.000450 | ± 2.5 | PASS |
|       |     | 5 | 40 | -0.001411 | ± 2.5 | PASS |
|       |     | 5 | 45 | -0.000736 | ± 2.5 | PASS |
|       | MCH | 5 | 0  | -0.001830 | ± 2.5 | PASS |
|       |     | 5 | 10 | -0.001154 | ± 2.5 | PASS |
|       |     | 5 | 20 | 0.000586  | ± 2.5 | PASS |
|       |     | 5 | 30 | -0.000667 | ± 2.5 | PASS |
|       |     | 5 | 40 | -0.001051 | ± 2.5 | PASS |
|       |     | 5 | 45 | -0.001638 | ± 2.5 | PASS |
|       | HCH | 5 | 0  | -0.001830 | ± 2.5 | PASS |
|       |     | 5 | 10 | -0.002310 | ± 2.5 | PASS |
|       |     | 5 | 20 | -0.000420 | ± 2.5 | PASS |
|       |     | 5 | 30 | -0.000960 | ± 2.5 | PASS |
|       |     | 5 | 40 | -0.000640 | ± 2.5 | PASS |
|       |     | 5 | 45 | -0.001940 | ± 2.5 | PASS |

Note: All bandwidth and modulation are tested, only the worst result is reported.

## Appendix G :Field Strength of Spurious Radiation Measurement Test Result

| <b>Bandwidth:</b>  | <b>1.4M</b>                                                                      |             | <b>Test channel:</b>      | <b>Lowest</b>  |
|--------------------|----------------------------------------------------------------------------------|-------------|---------------------------|----------------|
| <b>Modulation:</b> | <b>QPSK</b>                                                                      |             | <b>Temperature :</b>      | <b>23~24°C</b> |
| <b>RB #:</b>       | <b>1RB #0</b>                                                                    |             | <b>Relative Humidity:</b> | <b>46~48%</b>  |
| <b>Note:</b>       | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. |             |                           |                |
| Frequency (MHz)    | Spurious Emission                                                                |             | Limit (dBm)               | Result         |
|                    | Polarization                                                                     | Level (dBm) |                           |                |
| 1399.4             | Vertical                                                                         | -31.50      | -13.00                    | PASS           |
| 2099.1             | V                                                                                | -40.42      |                           |                |
| -                  | V                                                                                | -           |                           |                |
| 1399.4             | Horizontal                                                                       | 32.38       |                           |                |
| 2099.1             | H                                                                                | -42.20      |                           |                |
| -                  | H                                                                                | -           |                           |                |
| <b>Bandwidth:</b>  | <b>1.4M</b>                                                                      |             | <b>Test channel:</b>      | <b>Middle</b>  |
| <b>Modulation:</b> | <b>QPSK</b>                                                                      |             | <b>Temperature :</b>      | <b>23~24°C</b> |
| <b>RB #:</b>       | <b>1RB #0</b>                                                                    |             | <b>Relative Humidity:</b> | <b>46~48%</b>  |
| <b>Note:</b>       | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. |             |                           |                |
| Frequency (MHz)    | Spurious Emission                                                                |             | Limit (dBm)               | Result         |
|                    | Polarization                                                                     | Level (dBm) |                           |                |
| 1415               | Vertical                                                                         | -32.29      | -13.00                    | PASS           |
| 2122.5             | V                                                                                | -41.54      |                           |                |
| -                  | V                                                                                | -           |                           |                |
| 1415               | Horizontal                                                                       | -32.17      |                           |                |
| 2122.5             | H                                                                                | -42.31      |                           |                |
| -                  | H                                                                                | -           |                           |                |
| <b>Bandwidth:</b>  | <b>1.4M</b>                                                                      |             | <b>Test channel:</b>      | <b>Highest</b> |
| <b>Modulation:</b> | <b>QPSK</b>                                                                      |             | <b>Temperature :</b>      | <b>23~24°C</b> |
| <b>RB #:</b>       | <b>1RB #0</b>                                                                    |             | <b>Relative Humidity:</b> | <b>46~48%</b>  |
| <b>Note:</b>       | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. |             |                           |                |
| Frequency (MHz)    | Spurious Emission                                                                |             | Limit (dBm)               | Result         |
|                    | Polarization                                                                     | Level (dBm) |                           |                |
| 1430.6             | Vertical                                                                         | -32.28      | -13.00                    | PASS           |
| 2145.9             | V                                                                                | -40.63      |                           |                |
| -                  | V                                                                                | -           |                           |                |
| 1430.6             | Horizontal                                                                       | -32.27      |                           |                |
| 2145.9             | H                                                                                | -41.73      |                           |                |
| -                  | H                                                                                | -           |                           |                |

| <b>Bandwidth:</b>  | <b>1.4M</b>                                                                      |             | <b>Test channel:</b>      | <b>Lowest</b>  |
|--------------------|----------------------------------------------------------------------------------|-------------|---------------------------|----------------|
| <b>Modulation:</b> | <b>16QAM</b>                                                                     |             | <b>Temperature :</b>      | <b>23~24°C</b> |
| <b>RB #:</b>       | <b>1RB #0</b>                                                                    |             | <b>Relative Humidity:</b> | <b>46~48%</b>  |
| <b>Note:</b>       | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. |             |                           |                |
| Frequency (MHz)    | Spurious Emission                                                                |             | Limit (dBm)               | Result         |
|                    | Polarization                                                                     | Level (dBm) |                           |                |
| 1399.4             | Vertical                                                                         | -32.35      | -13.00                    | PASS           |
| 2099.1             | V                                                                                | -42.24      |                           |                |
| -                  | V                                                                                | -           |                           |                |
| 1399.4             | Horizontal                                                                       | -33.40      |                           |                |
| 2099.1             | H                                                                                | -39.35      |                           |                |
| -                  | H                                                                                | -           |                           |                |
| <b>Bandwidth:</b>  | <b>1.4M</b>                                                                      |             | <b>Test channel:</b>      | <b>Middle</b>  |
| <b>Modulation:</b> | <b>16QAM</b>                                                                     |             | <b>Temperature :</b>      | <b>23~24°C</b> |
| <b>RB #:</b>       | <b>1RB #0</b>                                                                    |             | <b>Relative Humidity:</b> | <b>46~48%</b>  |
| <b>Note:</b>       | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. |             |                           |                |
| Frequency (MHz)    | Spurious Emission                                                                |             | Limit (dBm)               | Result         |
|                    | Polarization                                                                     | Level (dBm) |                           |                |
| 1415               | Vertical                                                                         | -31.65      | -13.00                    | PASS           |
| 2122.5             | V                                                                                | -40.58      |                           |                |
| -                  | V                                                                                | -           |                           |                |
| 1415               | Horizontal                                                                       | -32.60      |                           |                |
| 2122.5             | H                                                                                | -42.82      |                           |                |
| -                  | H                                                                                | -           |                           |                |
| <b>Bandwidth:</b>  | <b>1.4M</b>                                                                      |             | <b>Test channel:</b>      | <b>Highest</b> |
| <b>Modulation:</b> | <b>16QAM</b>                                                                     |             | <b>Temperature :</b>      | <b>23~24°C</b> |
| <b>RB #:</b>       | <b>1RB #0</b>                                                                    |             | <b>Relative Humidity:</b> | <b>46~48%</b>  |
| <b>Note:</b>       | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. |             |                           |                |
| Frequency (MHz)    | Spurious Emission                                                                |             | Limit (dBm)               | Result         |
|                    | Polarization                                                                     | Level (dBm) |                           |                |
| 1430.6             | Vertical                                                                         | -31.54      | -13.00                    | PASS           |
| 2145.9             | V                                                                                | -42.21      |                           |                |
| -                  | V                                                                                | -           |                           |                |
| 1430.6             | Horizontal                                                                       | -32.54      |                           |                |
| 2145.9             | H                                                                                | -40.25      |                           |                |
| -                  | H                                                                                | -           |                           |                |

Note: All bandwidth and modulation are tested, only the worst result is reported.