

6 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

6.1.1 Limit

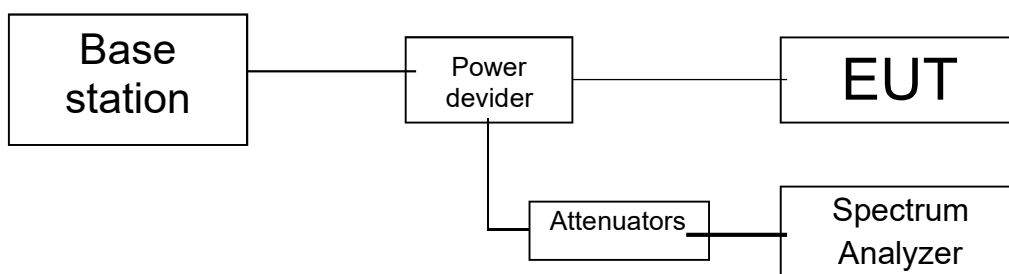
The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB (-13 dBm).

Band7: For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5 MHz.

6.1.2 Test procedure

1. The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
2. The resolution bandwidth of the spectrum analyzer was set at 100 kHz when below 1GHz, 1MHz when above 1 GHz; sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.
3. For the out of band: Set the RBW=100 kHz, VBW=300 kHz when below 1 GHz, RBW =1 MHz, VBW=3 MHz when above 1 GHz, Start=30MHz, Stop= 10th harmonic.
4. Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.
5. All model was tested and 16QAM was worst case and was record.

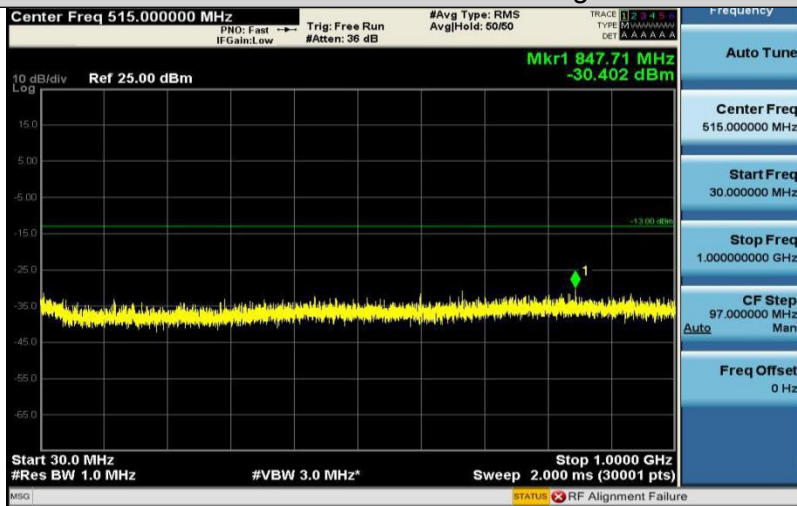
6.1.3 Test setup



6.1.4 Test results

Note: All mode has been tested, only worst data(Middle channel) was shown in this report.

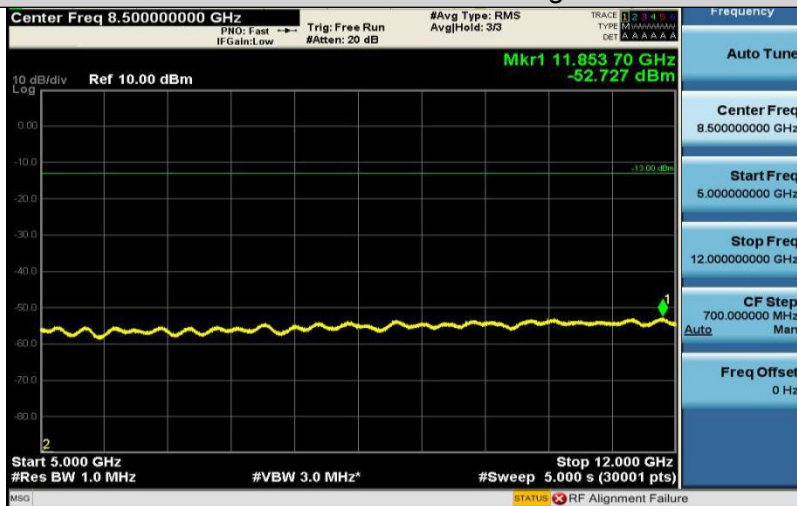
Band2-1.4MHz-16QAM-18900-1RB#0-Range1:30~1000MHz



Band2-1.4MHz-16QAM-18900-1RB#0-Range2:1000~5000MHz



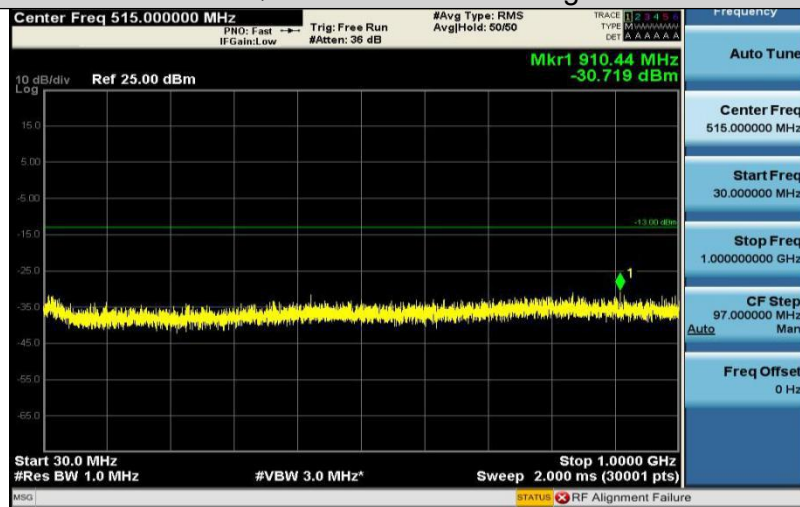
Band2-1.4MHz-16QAM-18900-1RB#0-Range3:5000~12000MHz



Band2-1.4MHz-16QAM-18900-1RB#0-Range4:12000~26500MHz



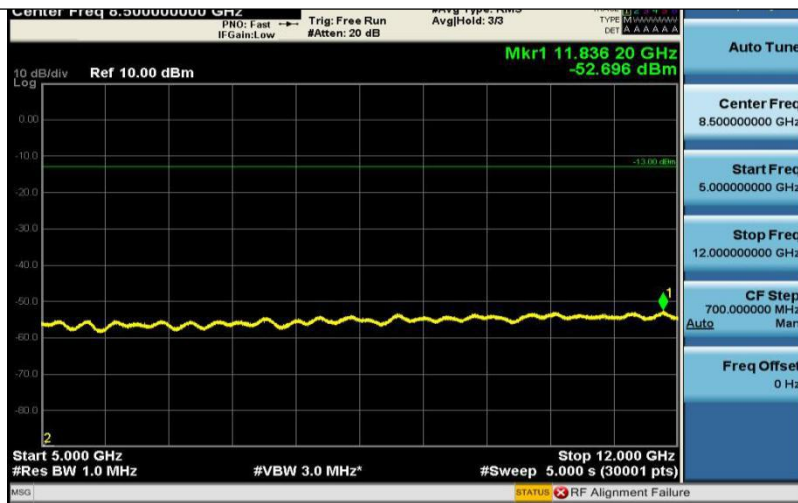
Band2-3MHz-16QAM-18900-1RB#0-Range1:30~1000MHz



Band2-3MHz-16QAM-18900-1RB#0-Range2:1000~5000MHz



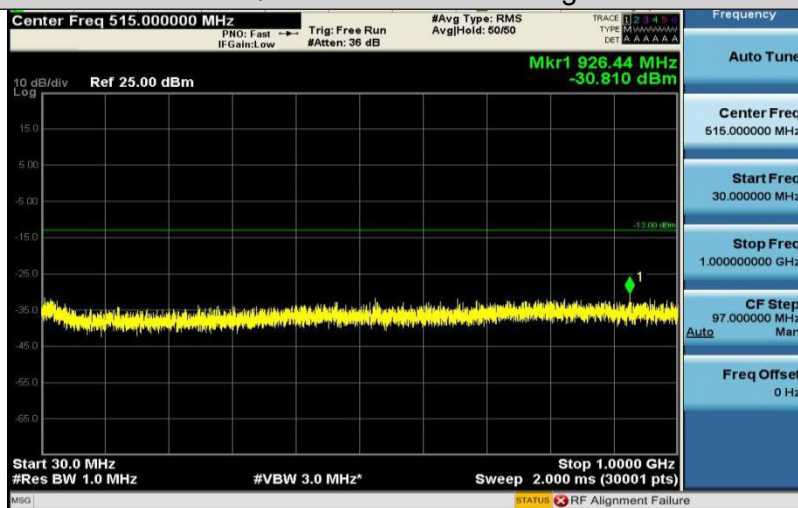
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Band2-3MHz-16QAM-18900-1RB#0-Range4:12000~26500MHz



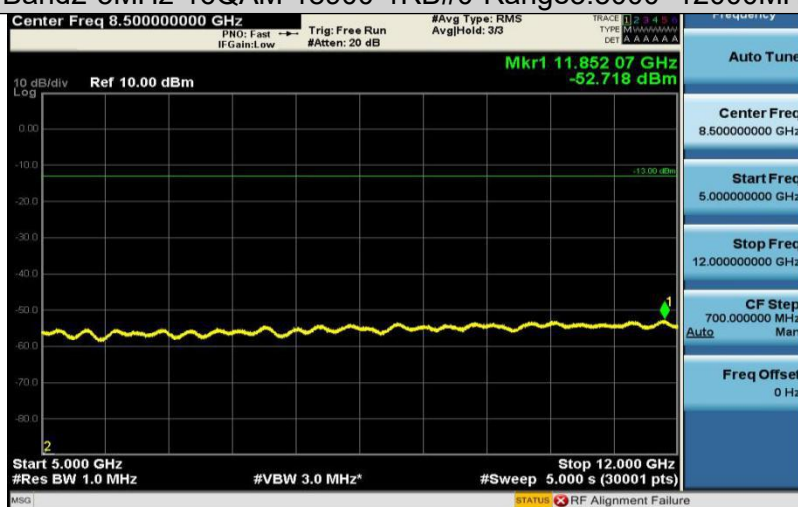
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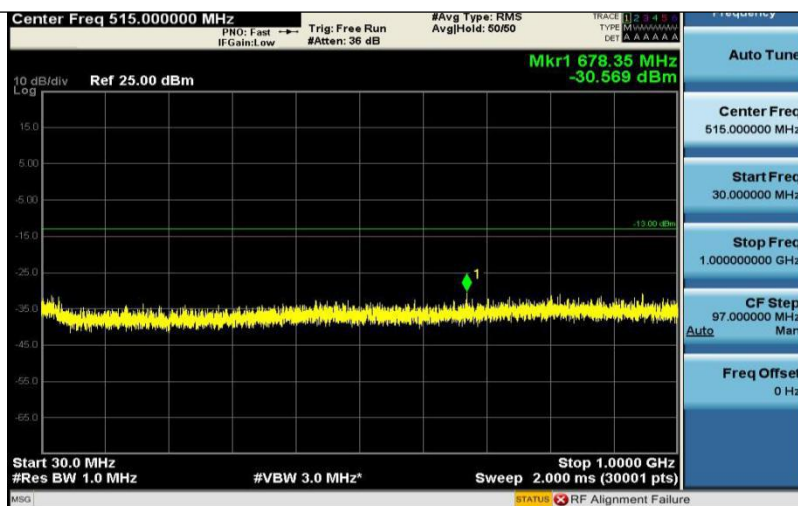
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Band2-5MHz-16QAM-18900-1RB#0-Range4:12000~26500MHz



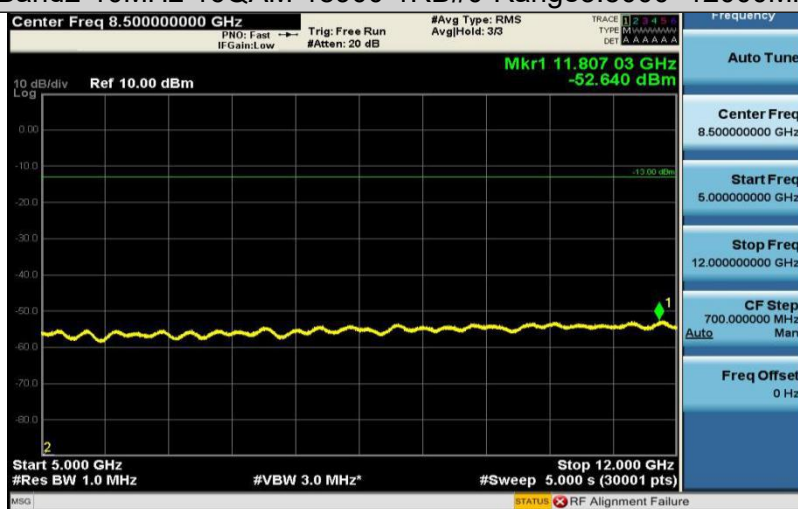
Band2-10MHz-16QAM-18900-1RB#0-Range1:30~1000MHz



Band2-10MHz-16QAM-18900-1RB#0-Range2:1000~5000MHz



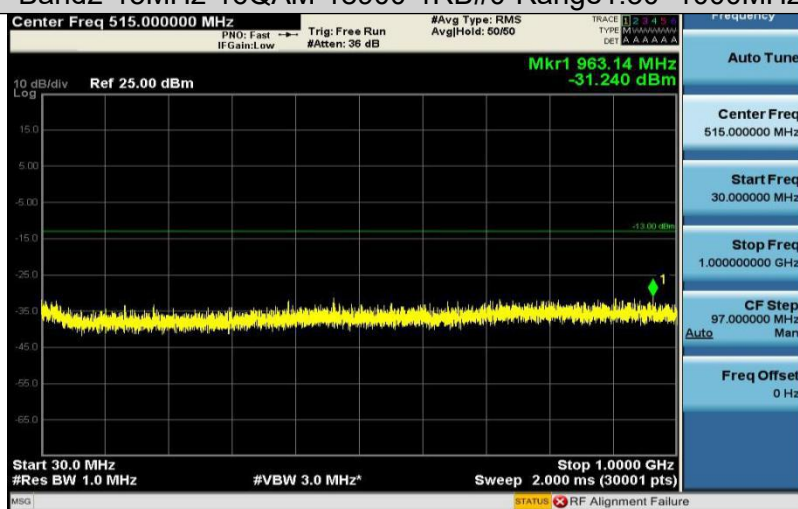
Band2-10MHz-16QAM-18900-1RB#0-Range3:5000~12000MHz



Band2-10MHz-16QAM-18900-1RB#0-Range4:12000~26500MHz



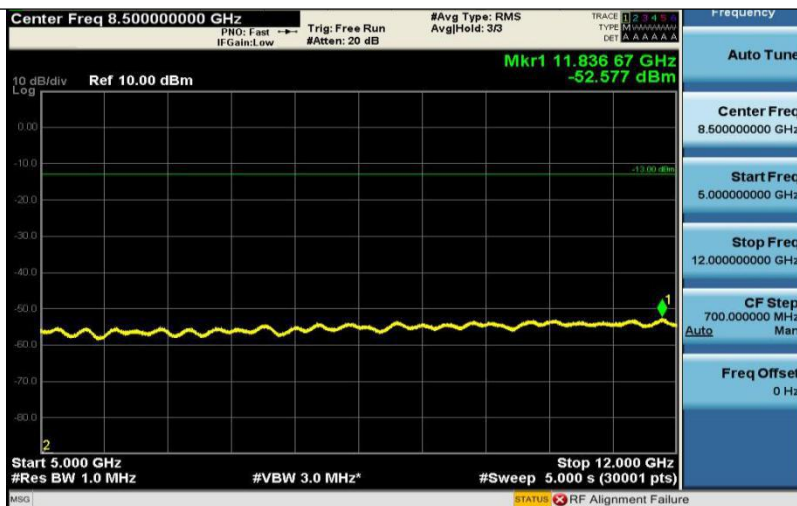
Band2-15MHz-16QAM-18900-1RB#0-Range1:30~1000MHz



Band2-15MHz-16QAM-18900-1RB#0-Range2:1000~5000MHz



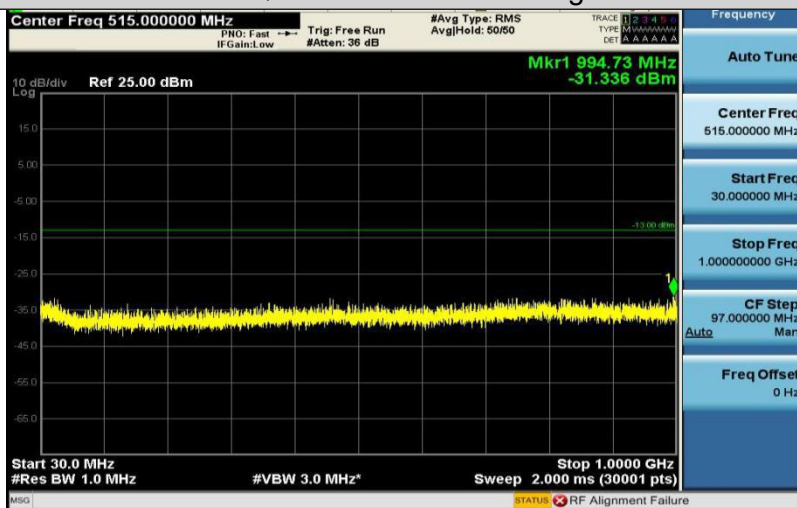
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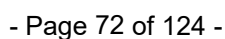
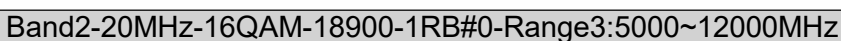
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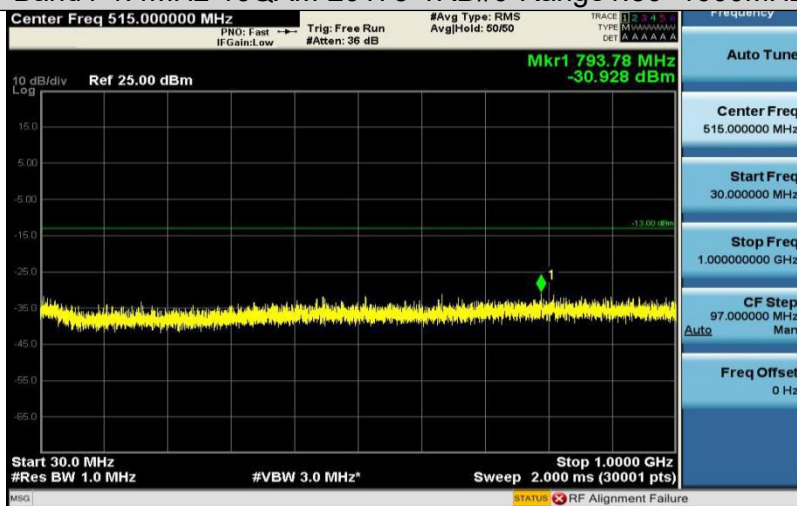
Band2-20MHz-16QAM-18900-1RB#0-Range1:30~1000MHz



Band2-20MHz-16QAM-18900-1RB#0-Range2:1000~5000MHz



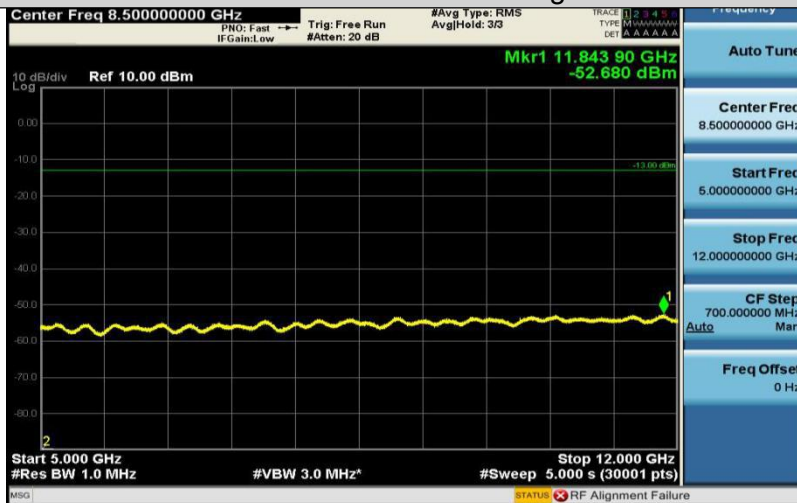
Band4-1.4MHz-16QAM-20175-1RB#0-Range1:30~1000MHz



Band4-1.4MHz-16QAM-20175-1RB#0-Range2:1000~5000MHz



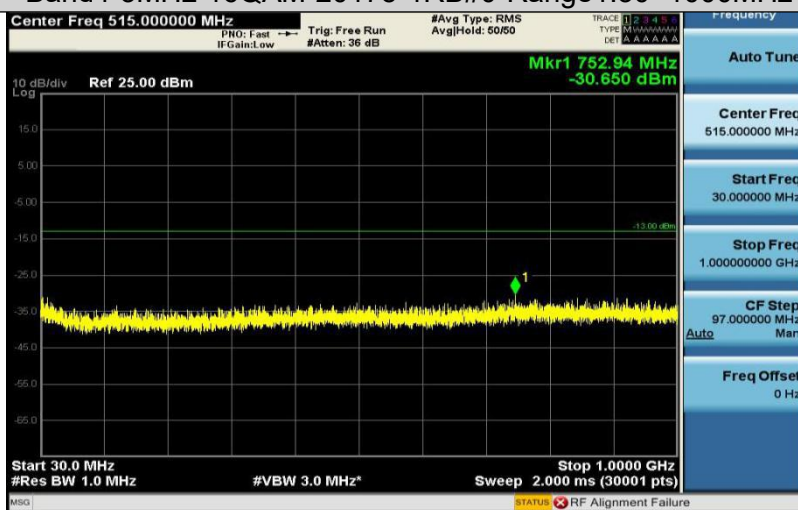
Band4-1.4MHz-16QAM-20175-1RB#0-Range3:5000~12000MHz



Band4-1.4MHz-16QAM-20175-1RB#0-Range4:12000~26500MHz



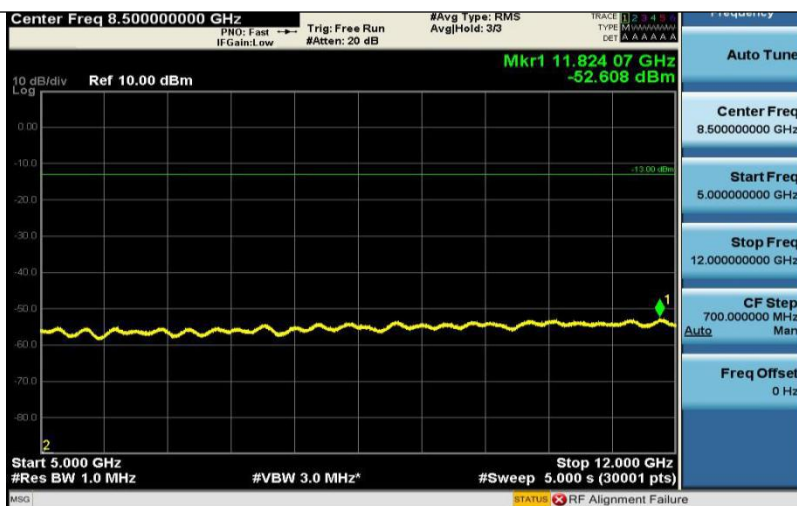
Band4-3MHz-16QAM-20175-1RB#0-Range1:30~1000MHz



Band4-3MHz-16QAM-20175-1RB#0-Range2:1000~5000MHz



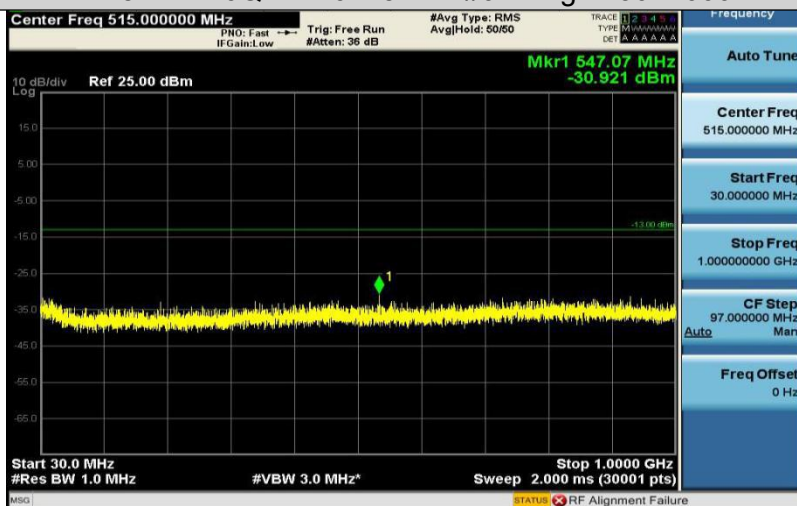
Band4-3MHz-16QAM-20175-1RB#0-Range3:5000~12000MHz



Band4-3MHz-16QAM-20175-1RB#0-Range4:12000~26500MHz



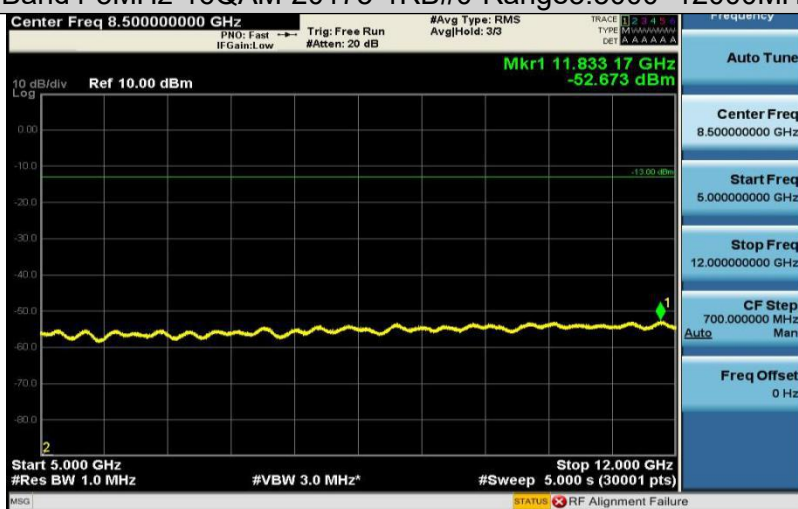
Band4-5MHz-16QAM-20175-1RB#0-Range1:30~1000MHz



Band4-5MHz-16QAM-20175-1RB#0-Range2:1000~5000MHz



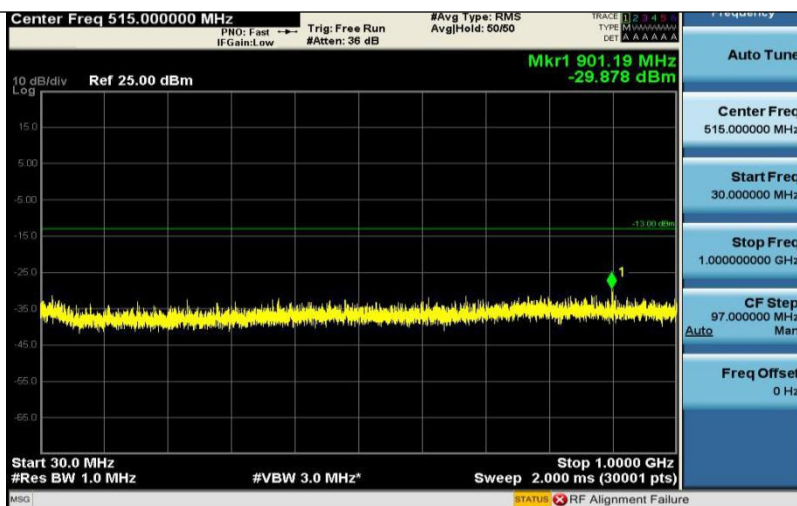
Band4-5MHz-16QAM-20175-1RB#0-Range3:5000~12000MHz



Band4-5MHz-16QAM-20175-1RB#0-Range4:12000~26500MHz



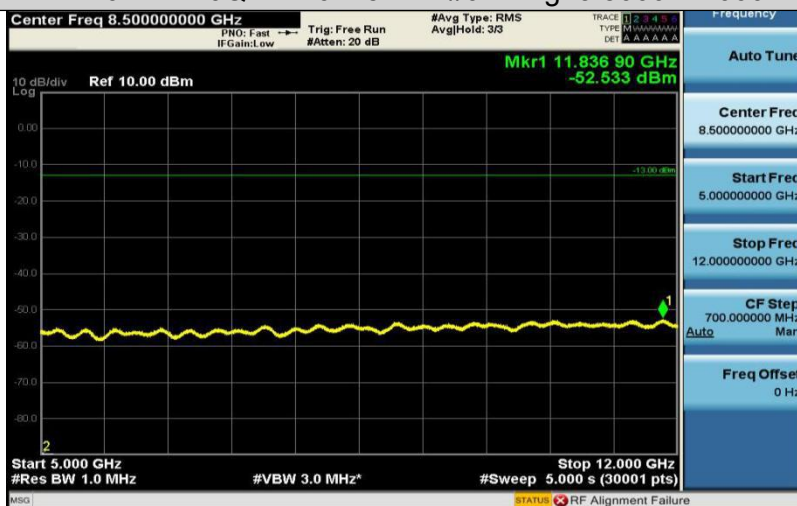
Band4-10MHz-16QAM-20175-1RB#0-Range1:30~1000MHz



Band4-10MHz-16QAM-20175-1RB#0-Range2:1000~5000MHz



Band4-10MHz-16QAM-20175-1RB#0-Range3:5000~12000MHz



Band4-10MHz-16QAM-20175-1RB#0-Range4:12000~26500MHz

