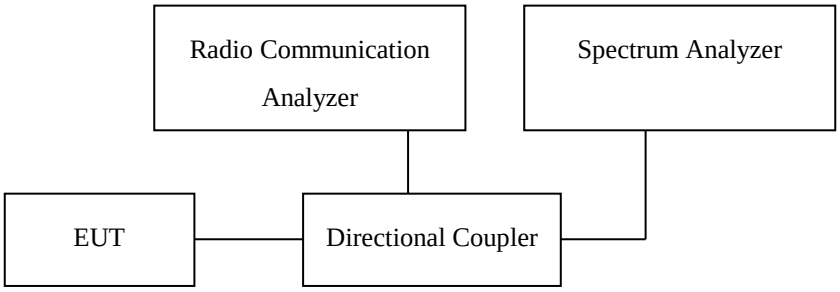
13. Conducted Spurious and Harmonic Emissions at Antenna Termianl

13.1 Operating environment

Temperature : 22 °C

Relative humidity : 45 % R.H.

13.2 Test set-up



(Configuration of conducted Emission measurement)

Conducted Spurious Emissions is tested in accordance with KDB971168 D01 Power Meas License Digital Systems v03, April 9, 2018, Section 6.

The EUT makes a call to the communication simulator. The power was measured with R&S Spectrum Analyzer. All measurements were done at 3 channels(low, middle and high operational range.)

The Conducted Spurious Emissions used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency.

Conducded spurious emissions

The EUT was setup to maximum output power. The 100 kHz RBW and 300 kHz VBW was used to scan from 30 MHz to 1 GHz. Also, the 1 MHz RBW and 3 MHz VBW was used to scan from 1 GHz to 20 GHz. The high, low and a middle channel were tested for out of band measurements.

13.3 Limits

Rule Part 24.238(a) specifies that “on any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log10 (P) dB.”

= P(W) – [43 + 10log(P)](dB)

= [30+10Log(P)] (dBm) - [43 + 10log(P)](dB)

= -13 dBm

Limit	-13 dBm

13.4 Test Date

January 15, 2024 ~ February 08, 2024

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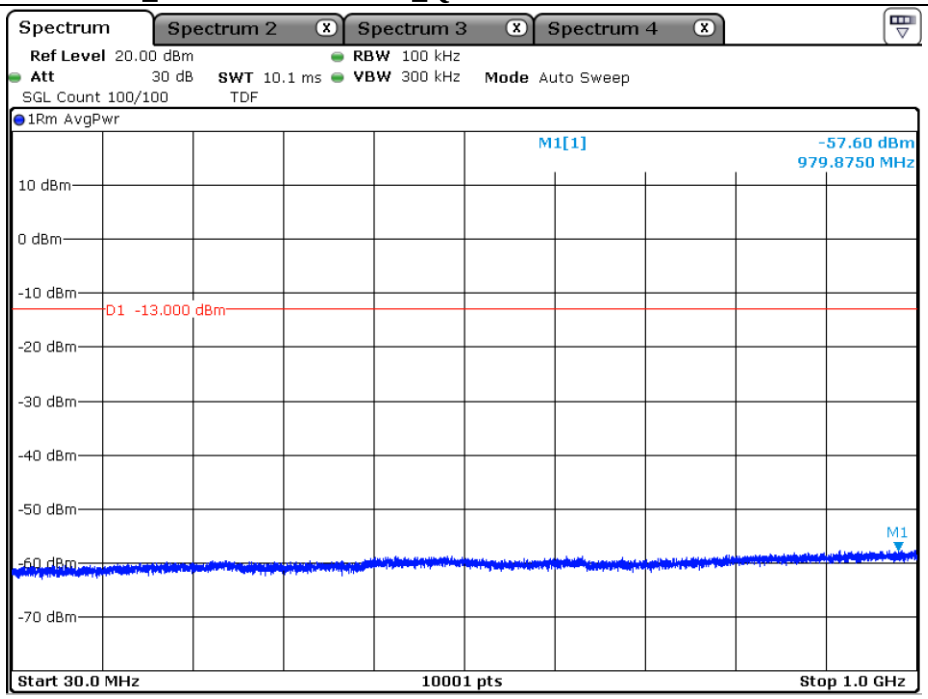
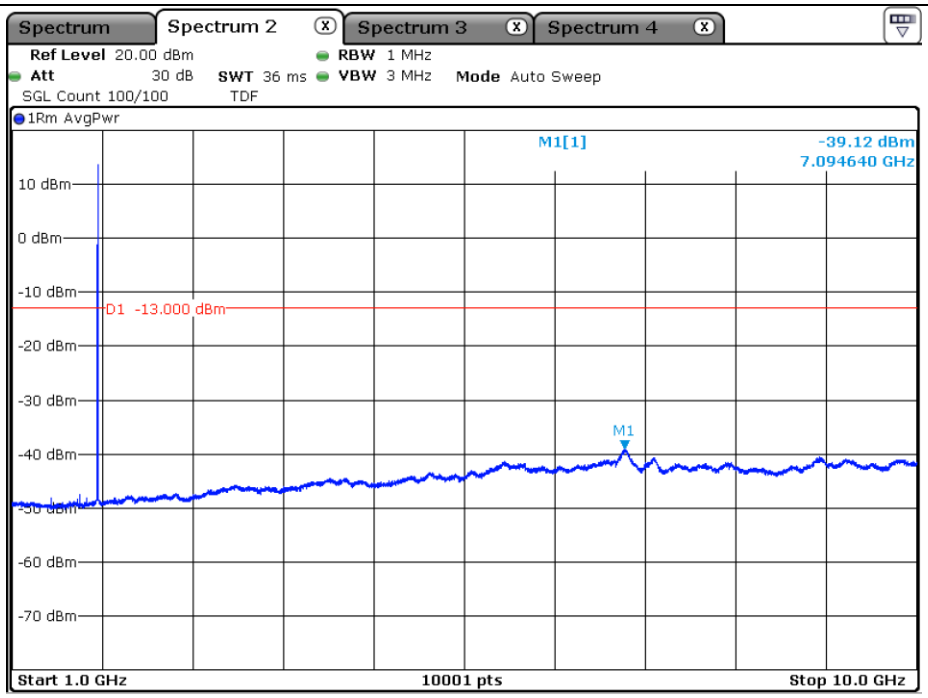
13.5 Test data

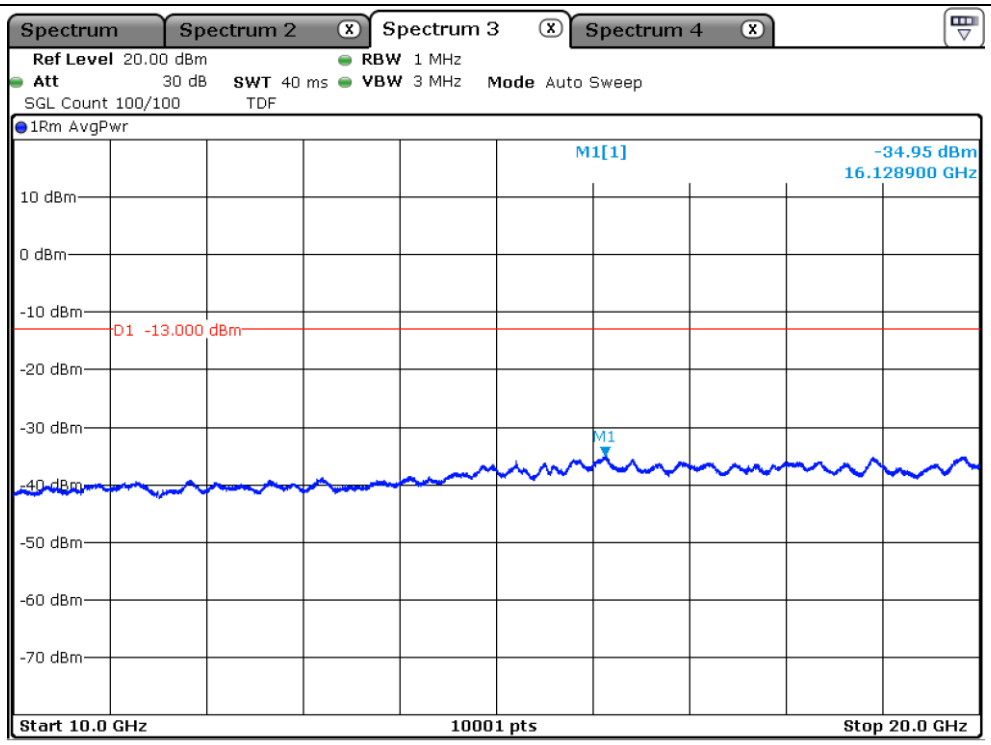
13.5.1 Test data for Band 2_Bandwidth 1.4 MHz_QPSK



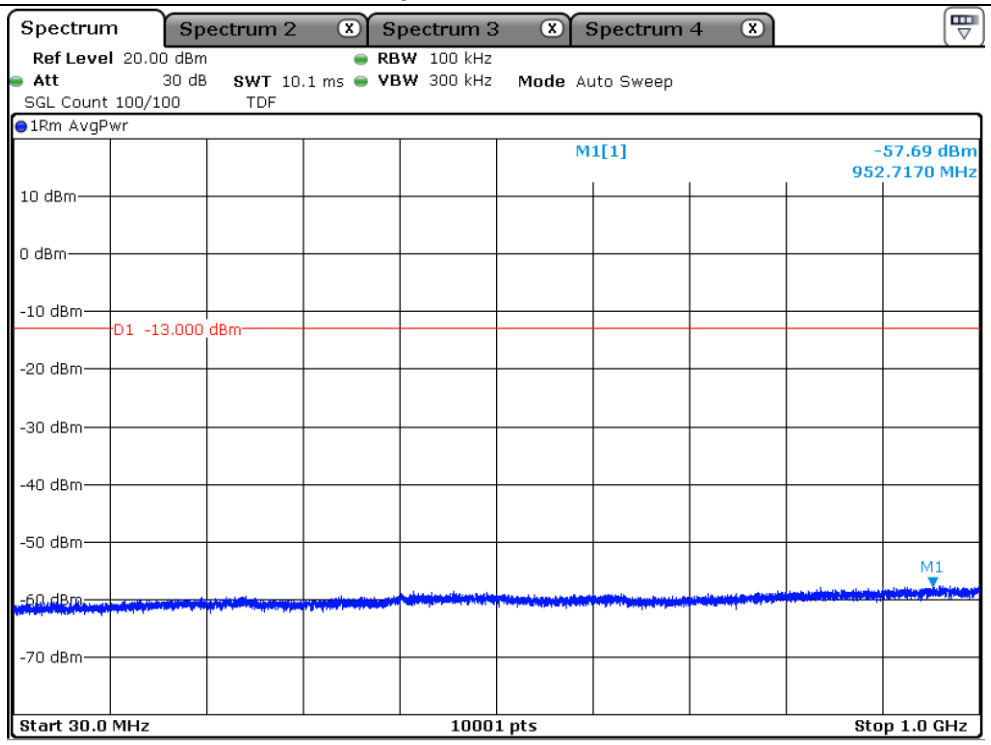
QPSK Low Channel



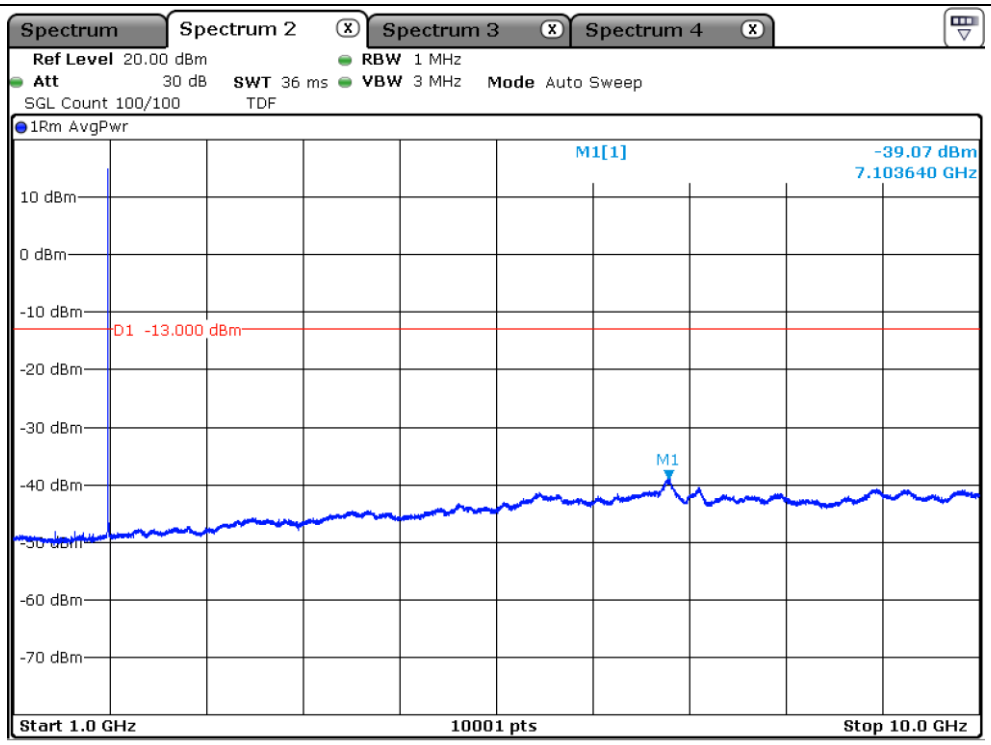
QPSK Low Channel



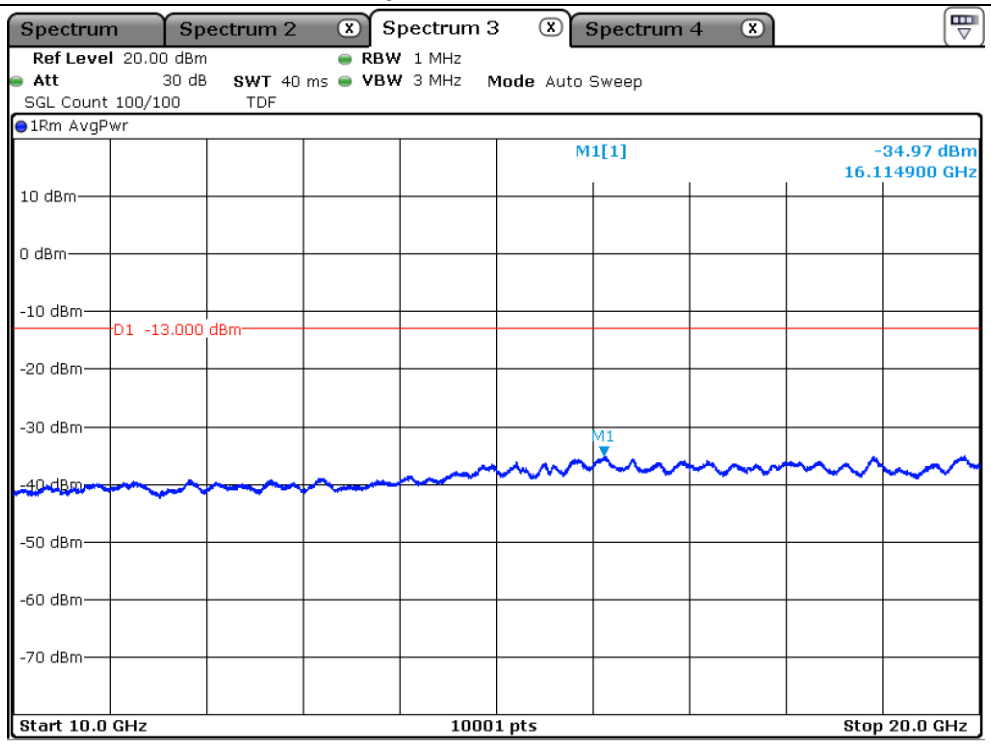
QPSK Low Channel



QPSK Middle Channel



QPSK Middle Channel



QPSK Middle Channel

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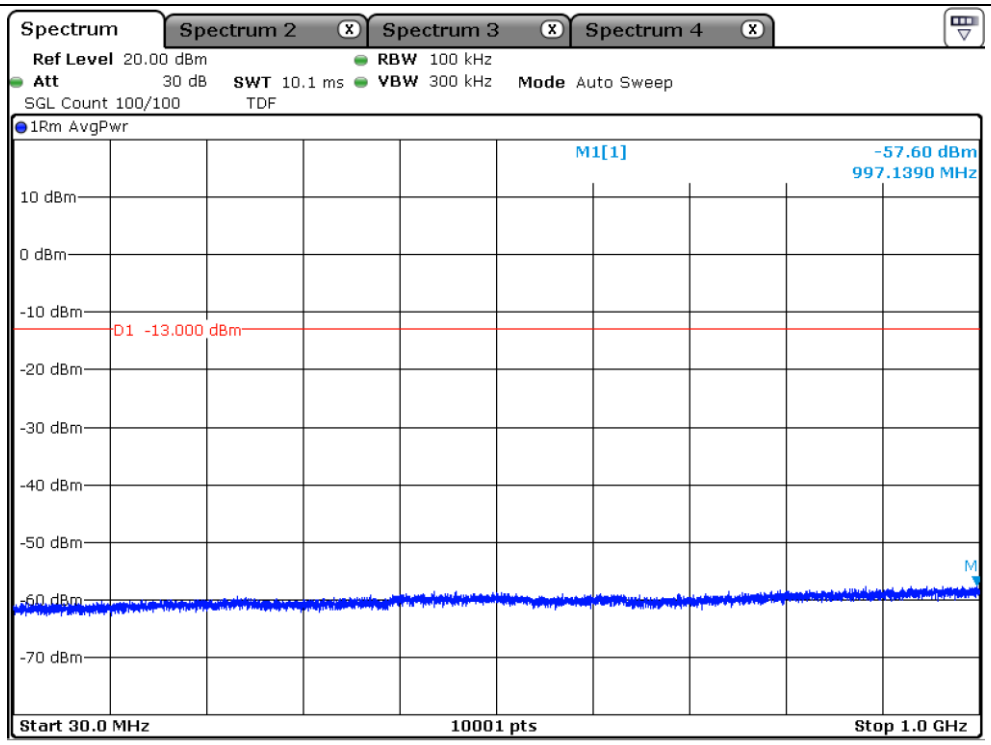
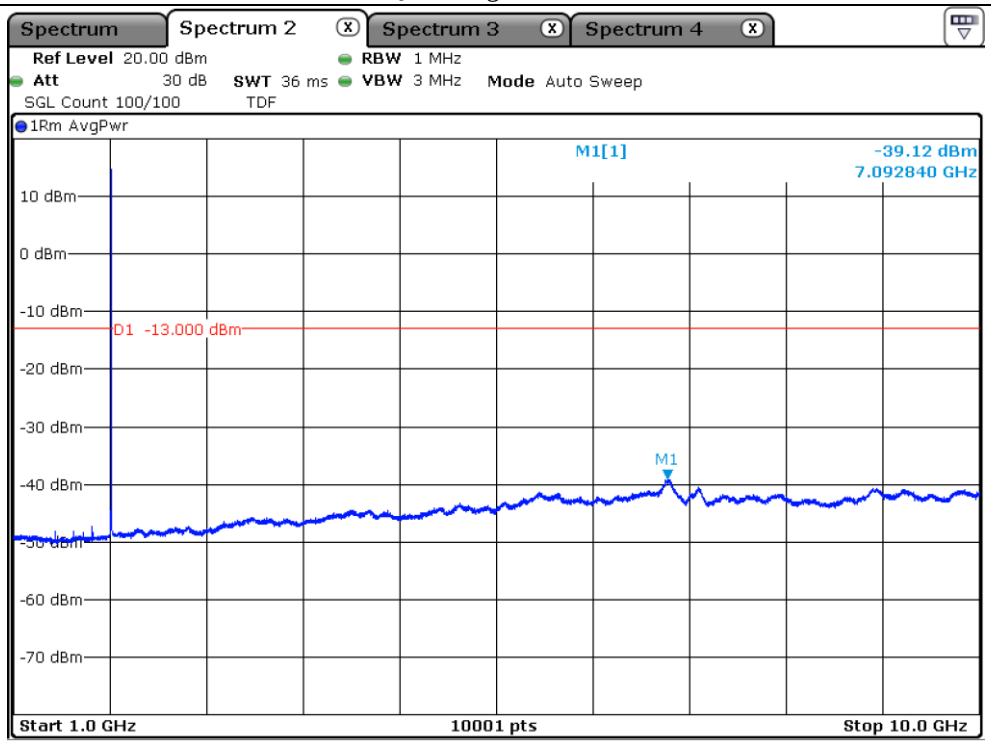


QPSK High Channel



QPSK High Channel

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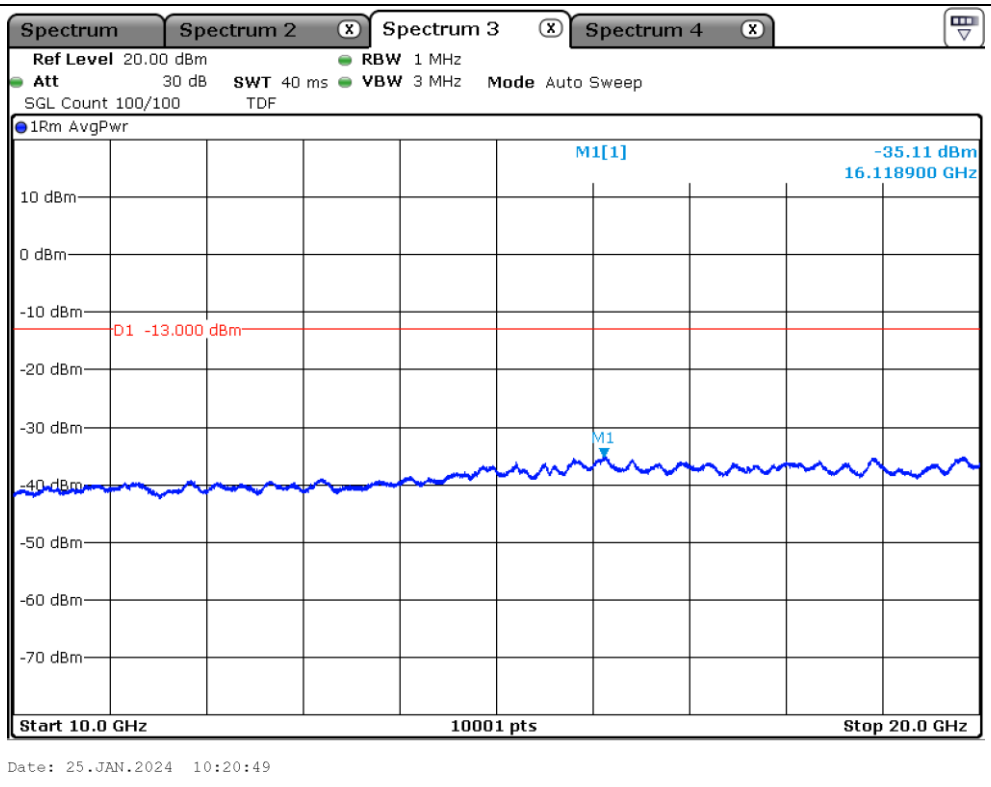
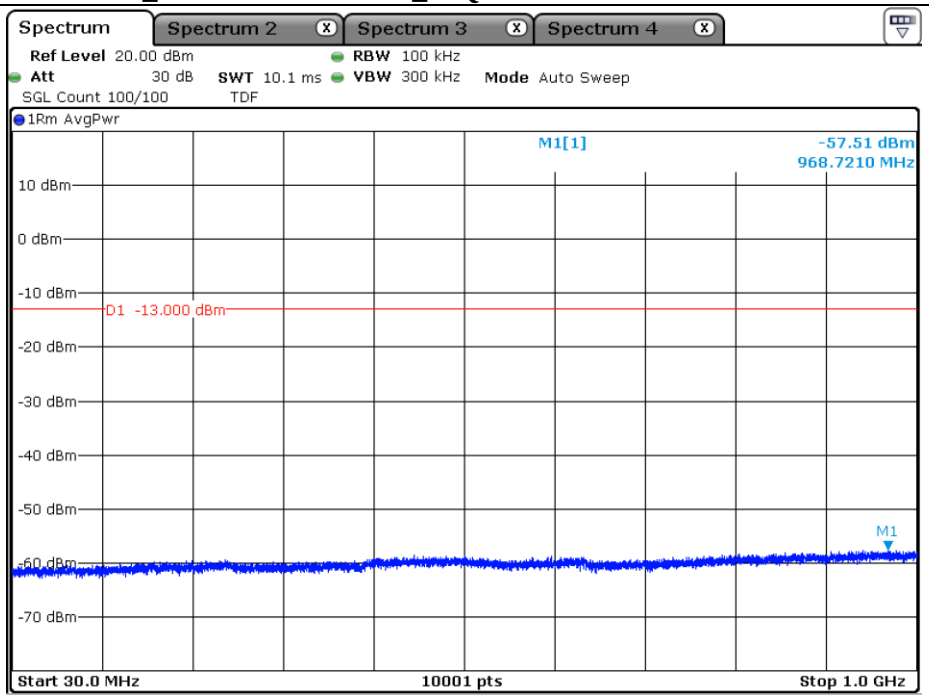
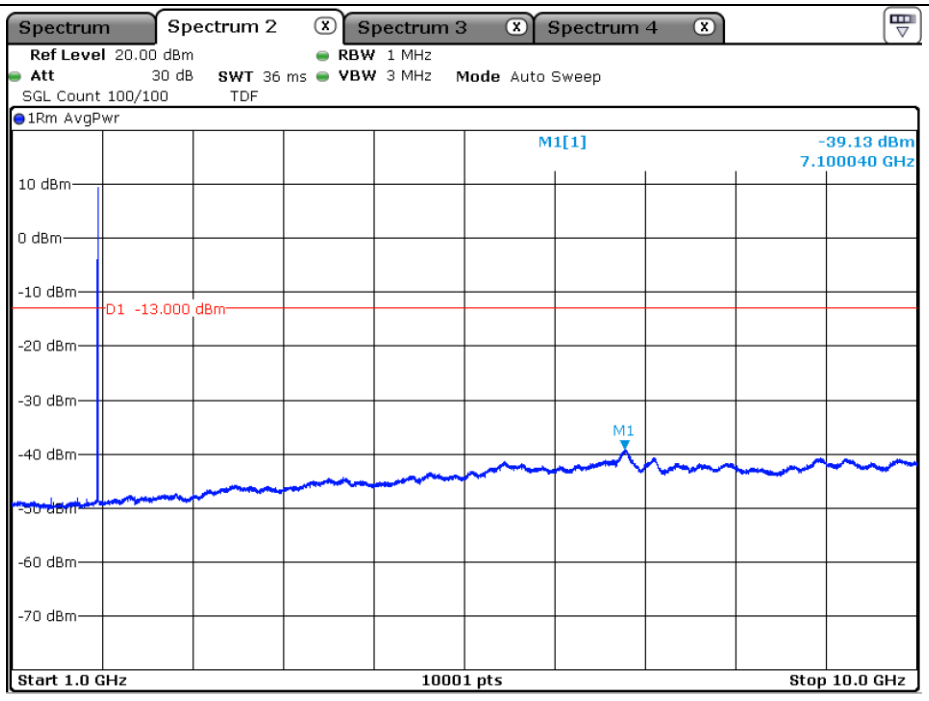


QPSK High Channel

13.5.2 Test data for Band 2_Bandwidth 1.4 MHz_16QAM



16QAM Low Channel



16QAM Low Channel

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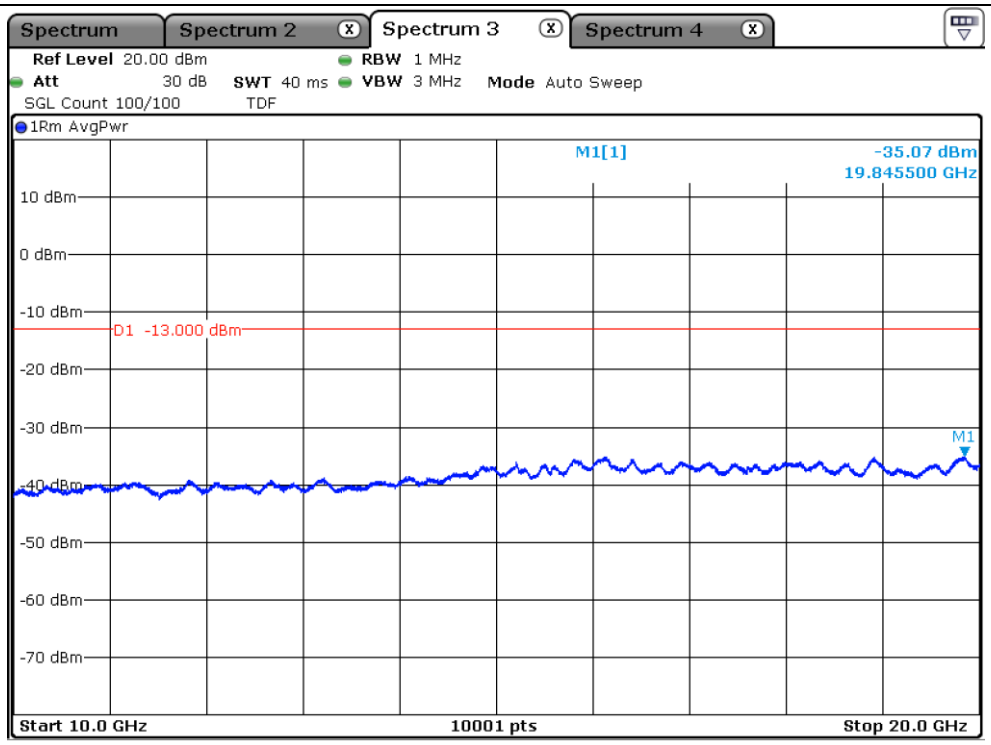
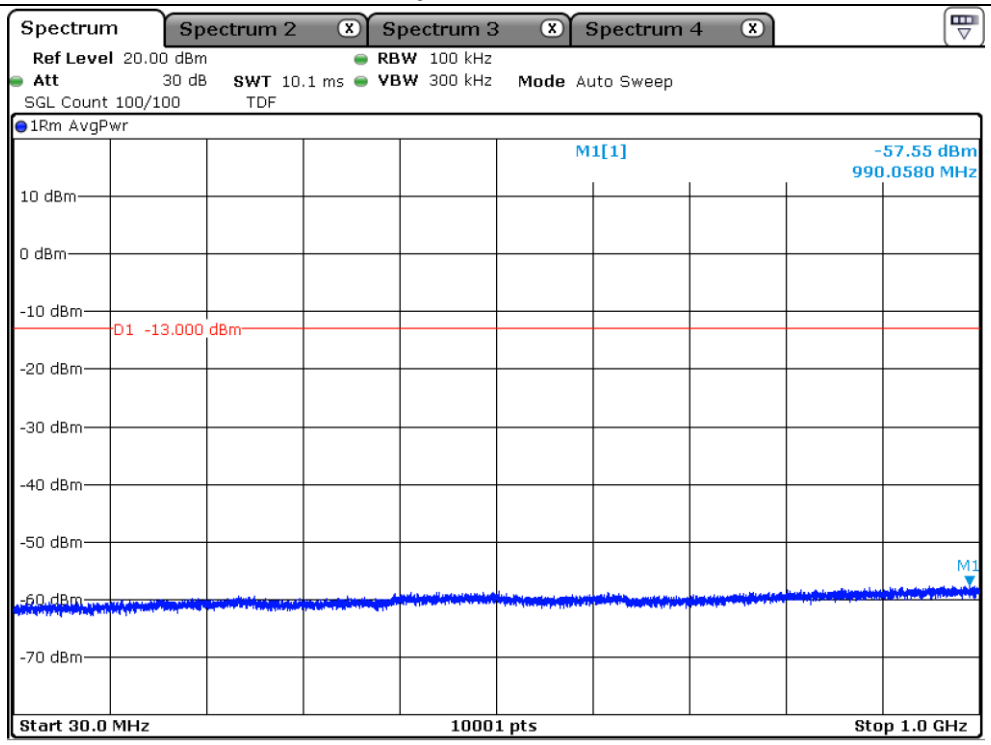
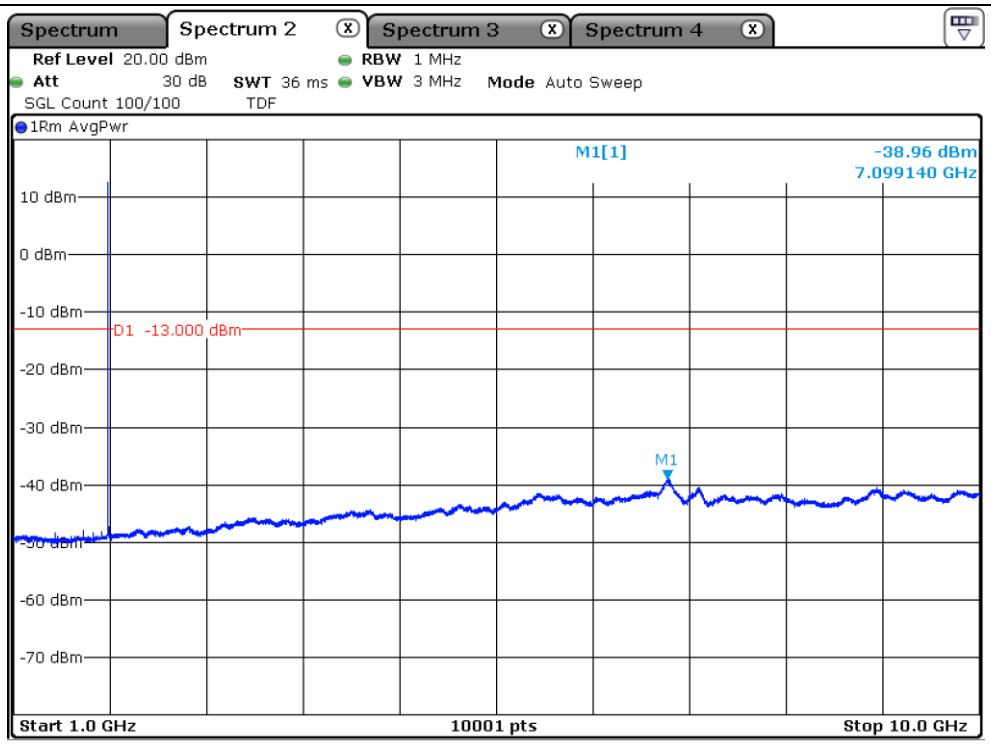


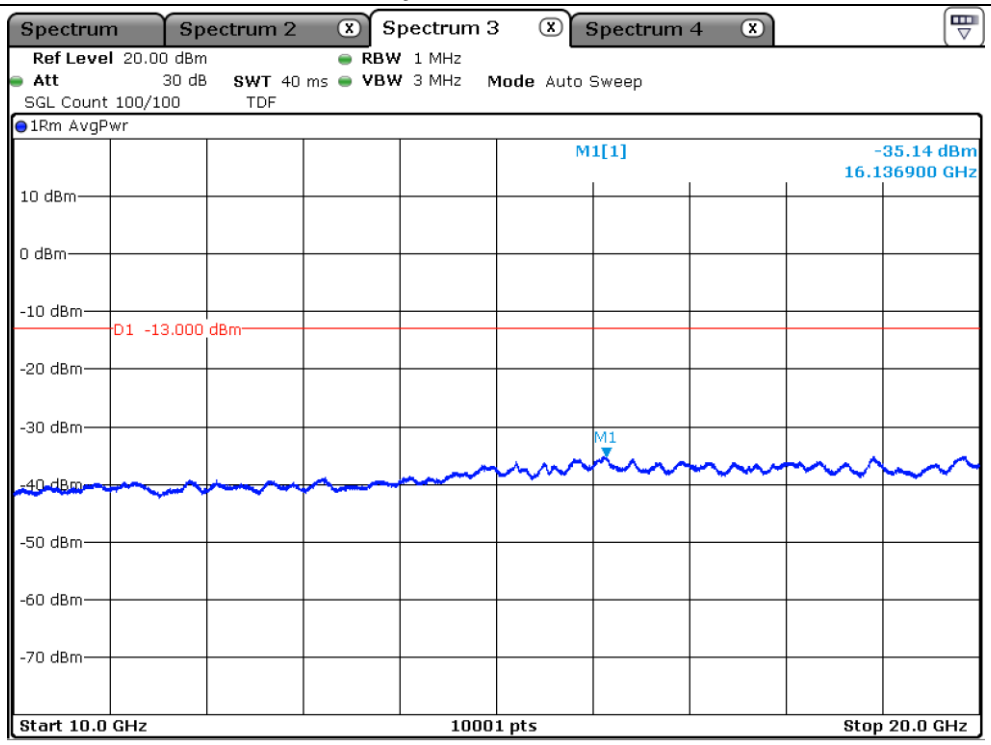
16QAM Low Channel



16QAM Middle Channel



16QAM Middle Channel



16QAM Middle Channel

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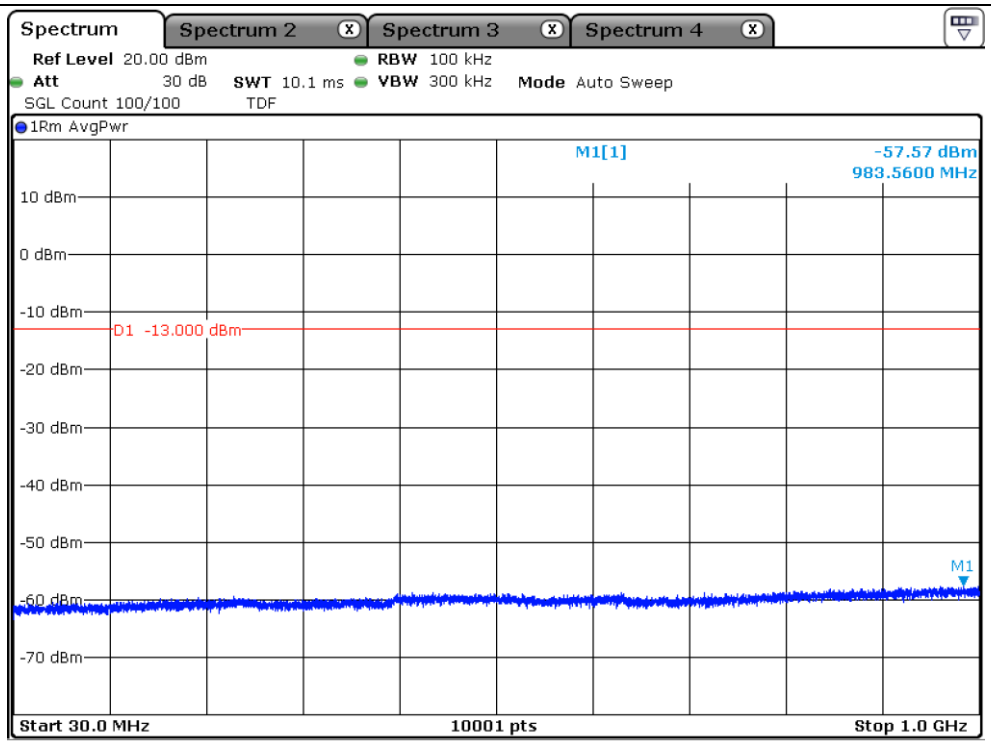
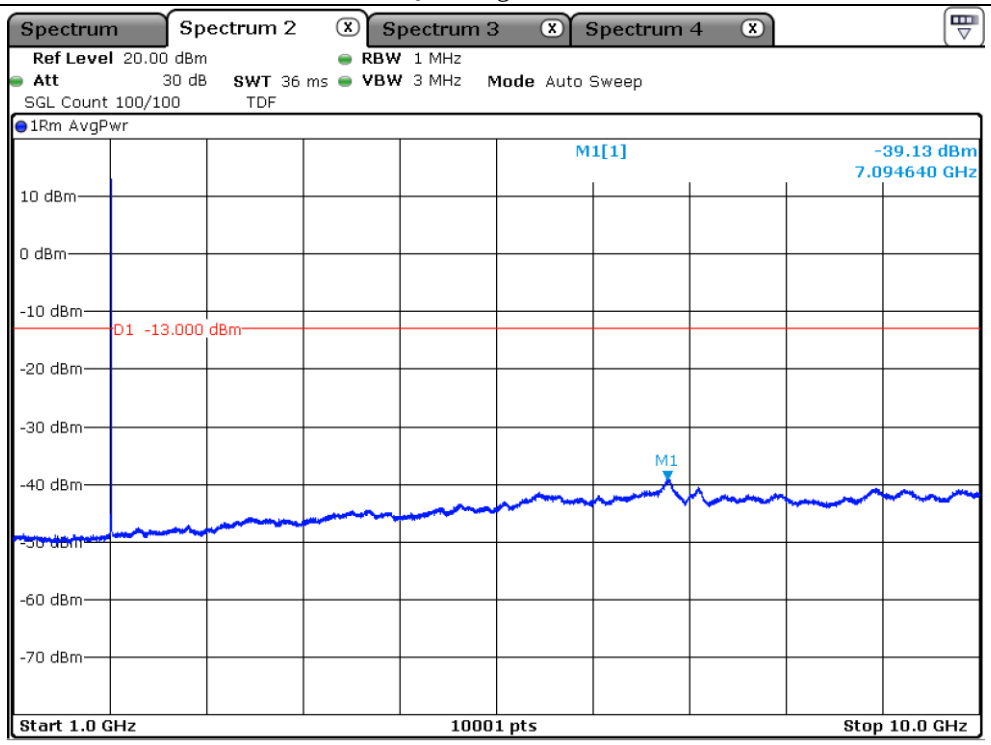


16QAM High Channel



16QAM High Channel

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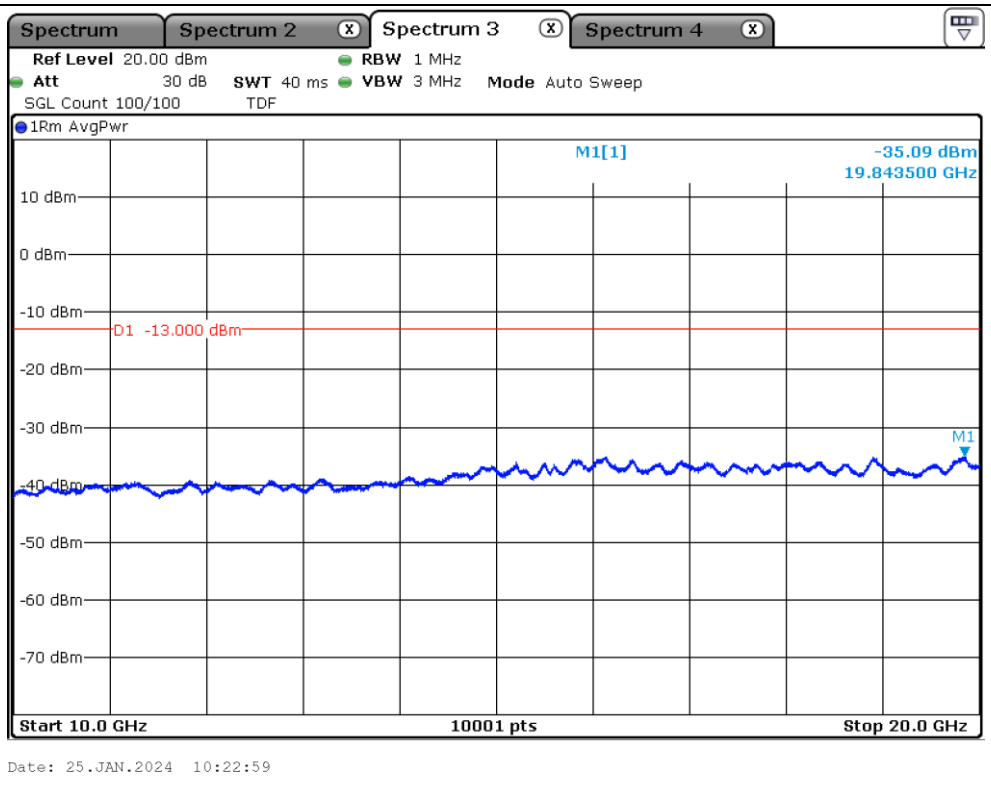
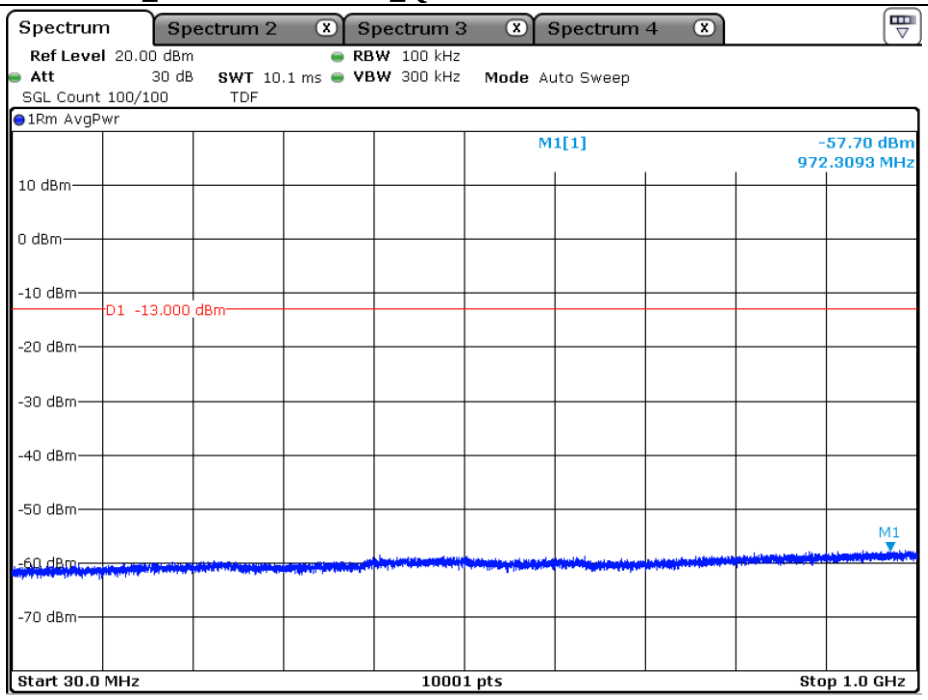
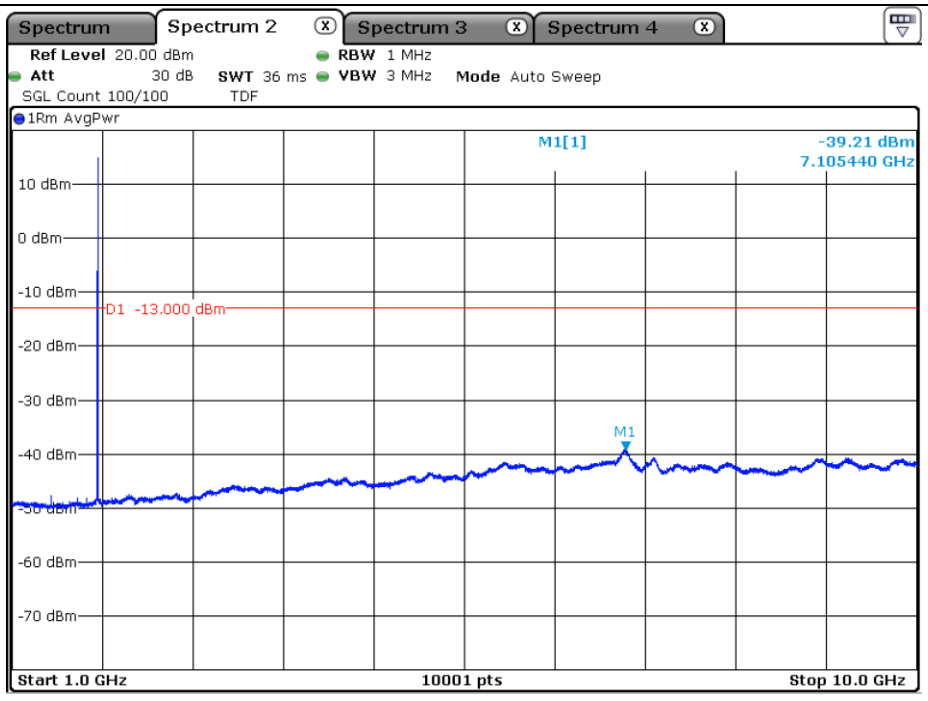


16QAM High Channel

13.5.3 Test data for Band 2_Bandwidth 3 MHz_QPSK



QPSK Low Channel



QPSK Low Channel

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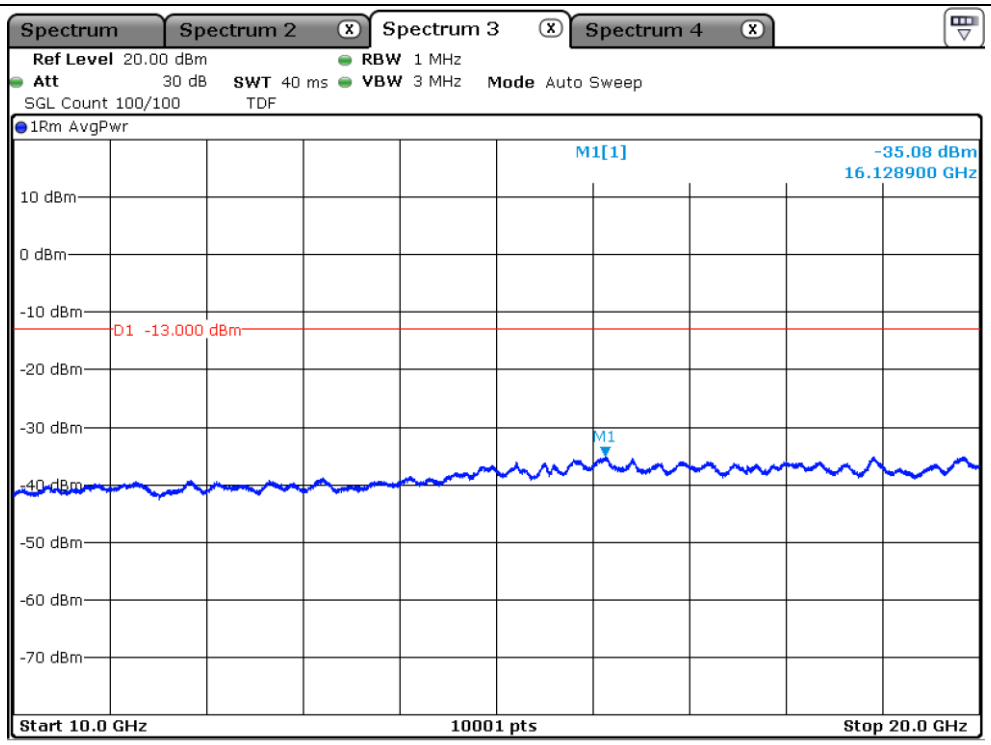
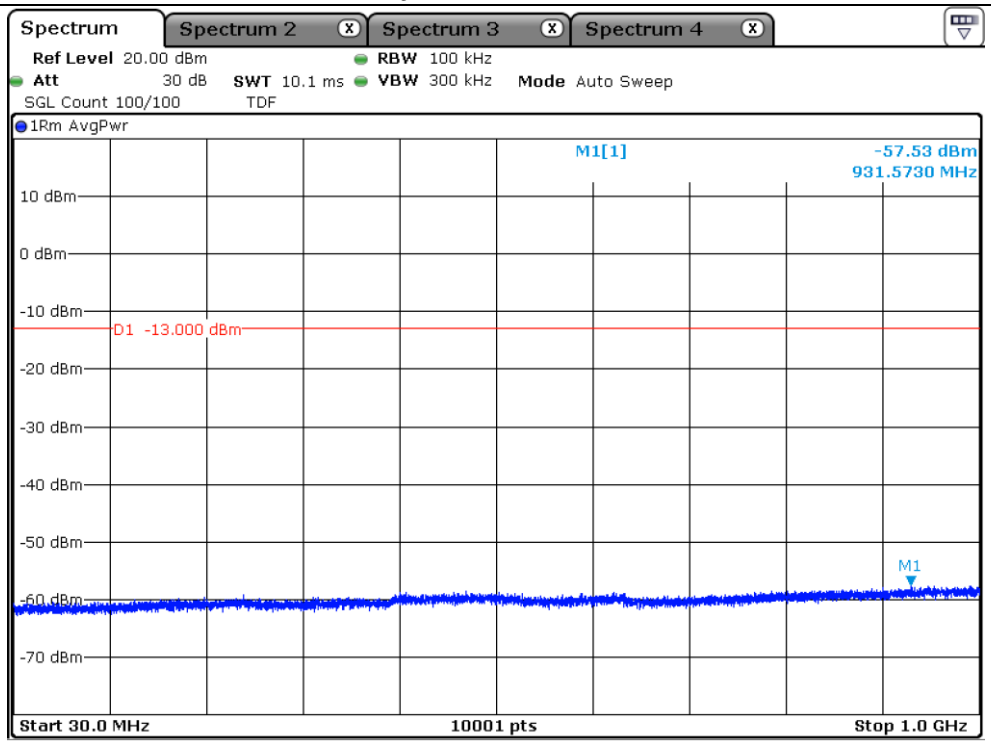


QPSK Low Channel



QPSK Middle Channel

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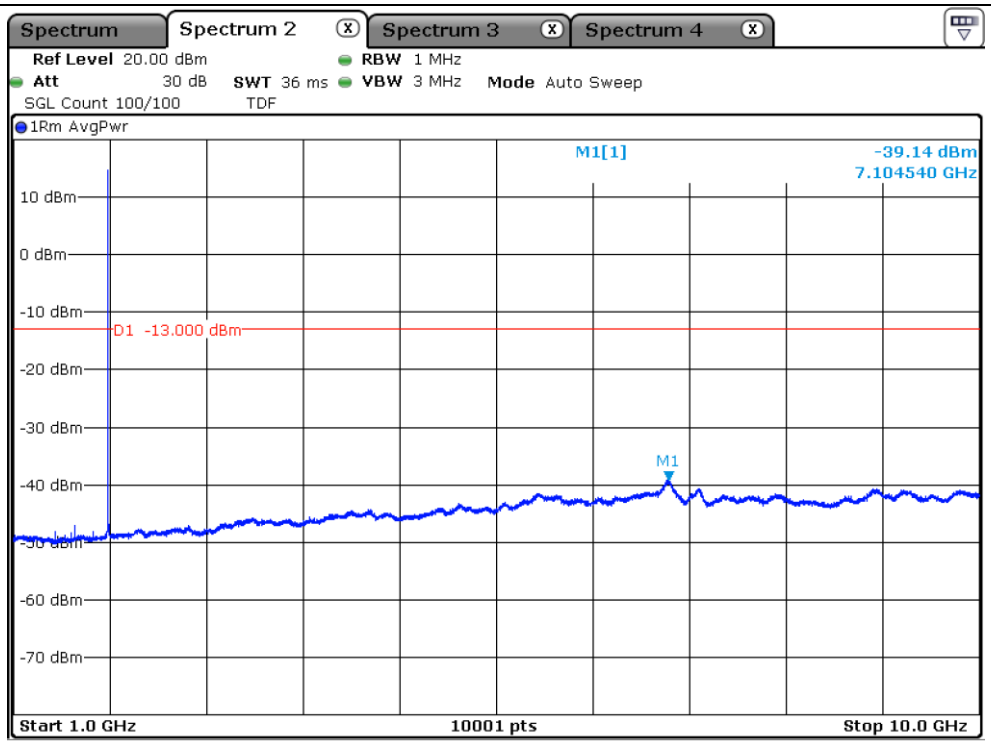
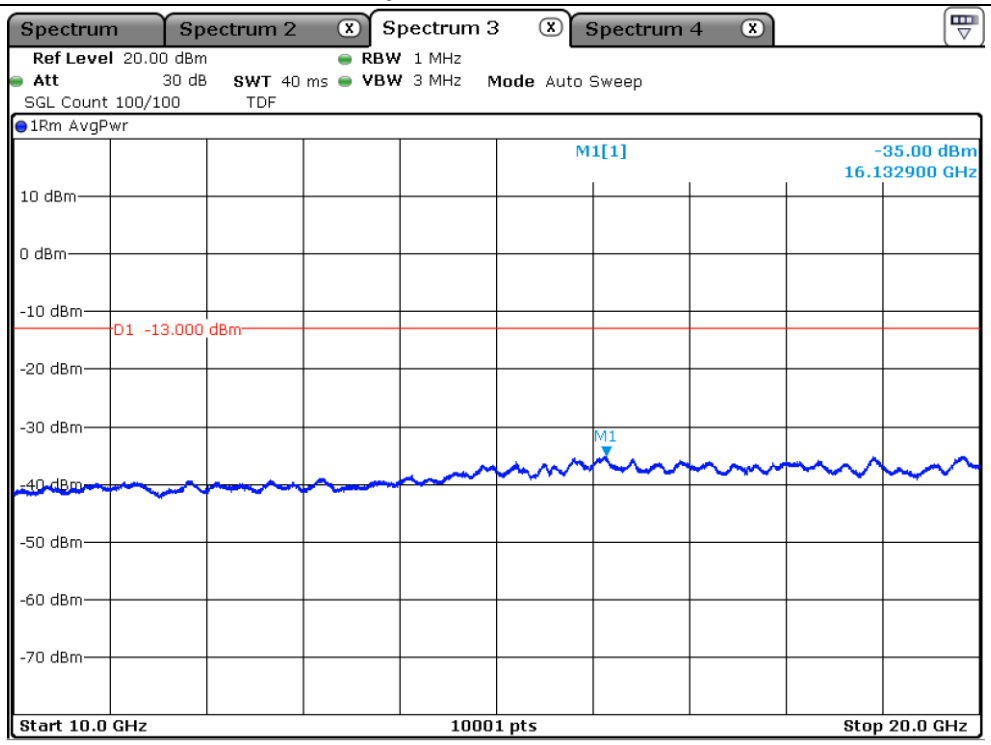


QPSK Middle Channel



QPSK Middle Channel

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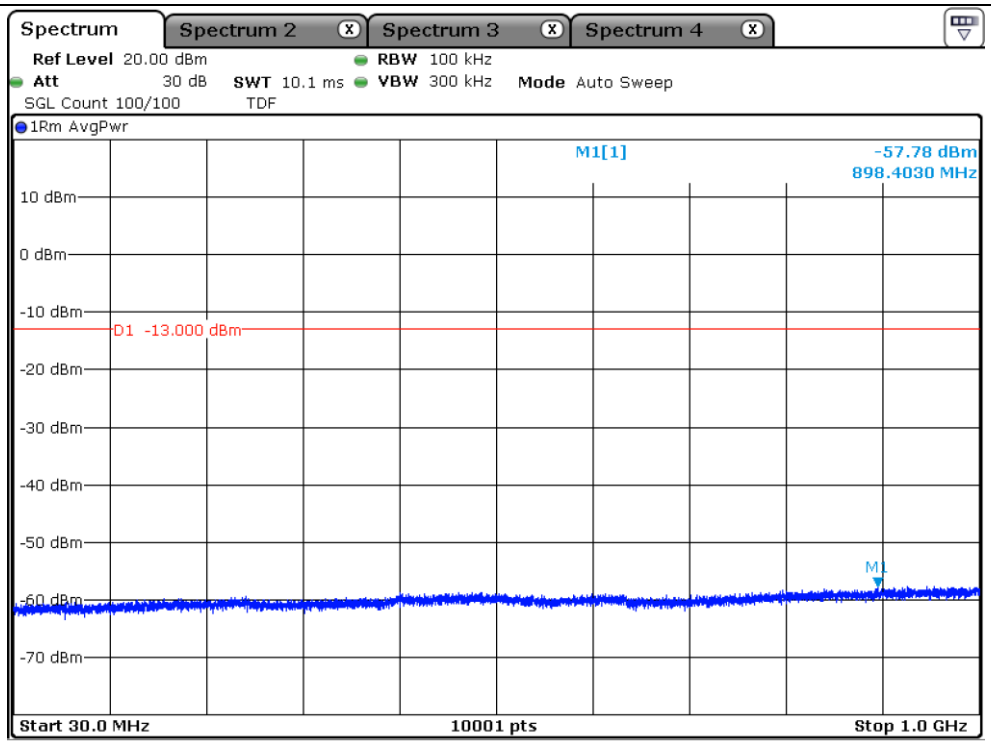
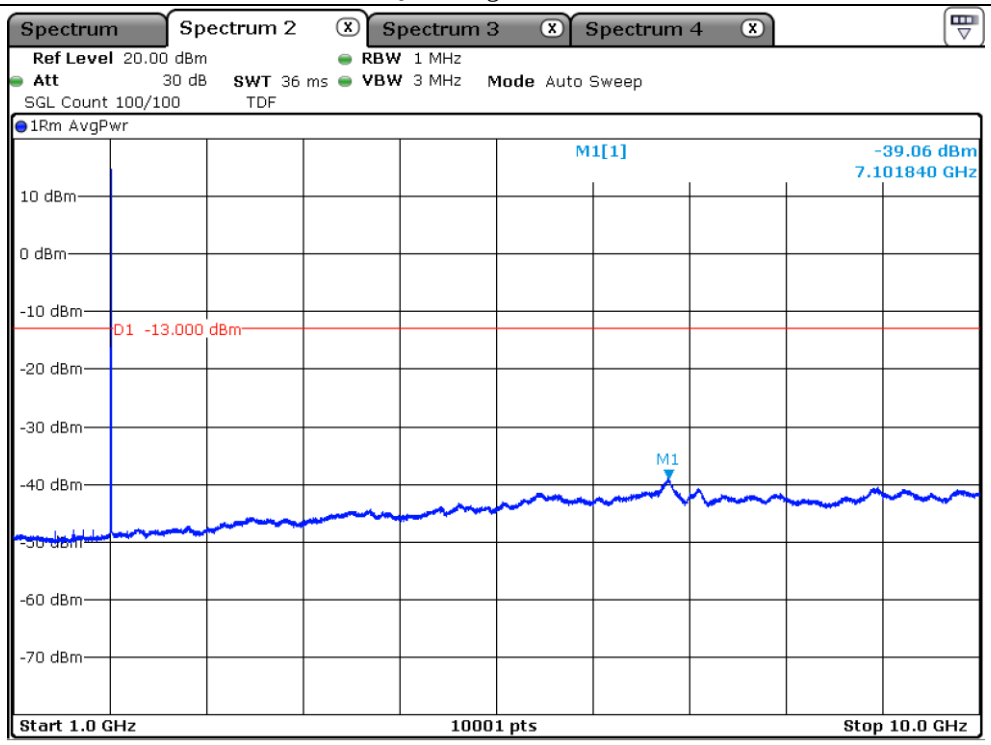


QPSK High Channel



QPSK High Channel

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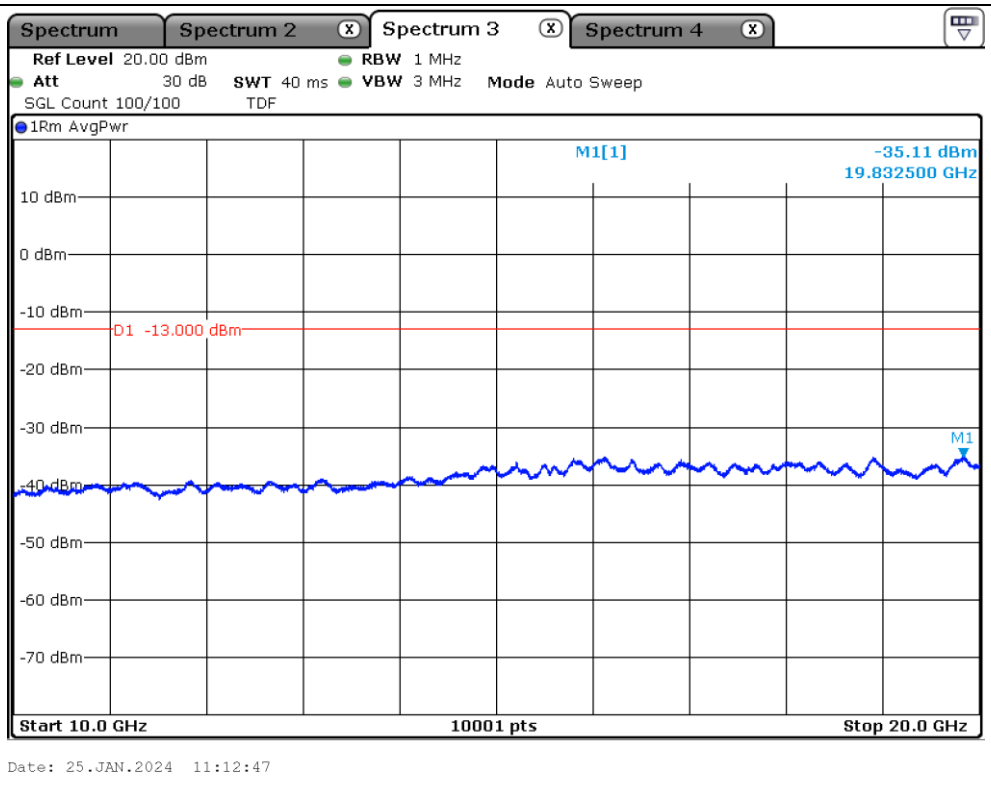
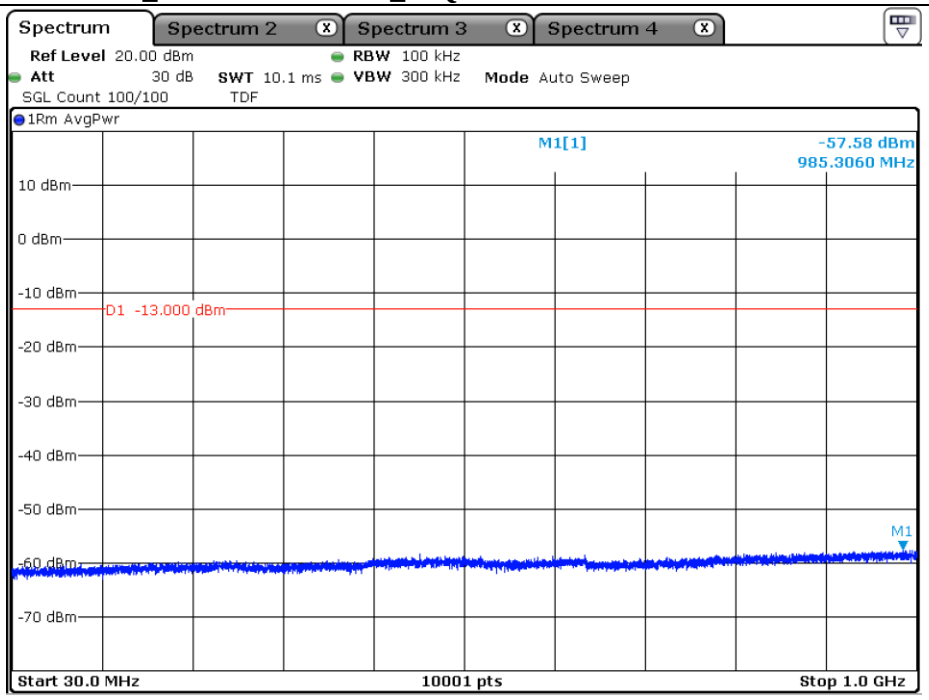
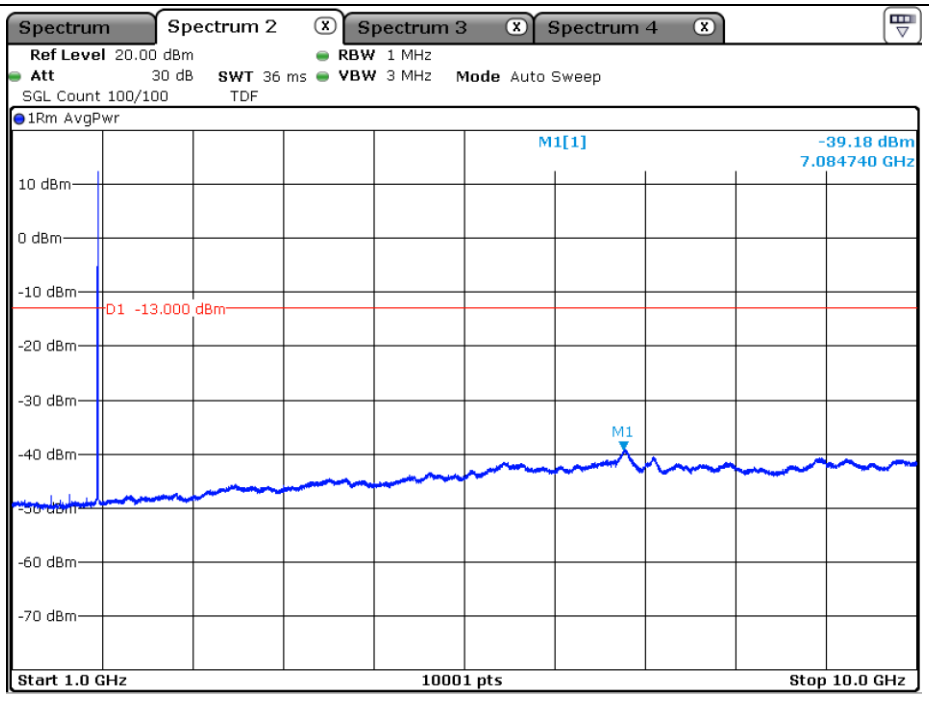


QPSK High Channel

13.5.4 Test data for Band 2_Bandwidth 3 MHz_16QAM



16QAM Low Channel



16QAM Low Channel

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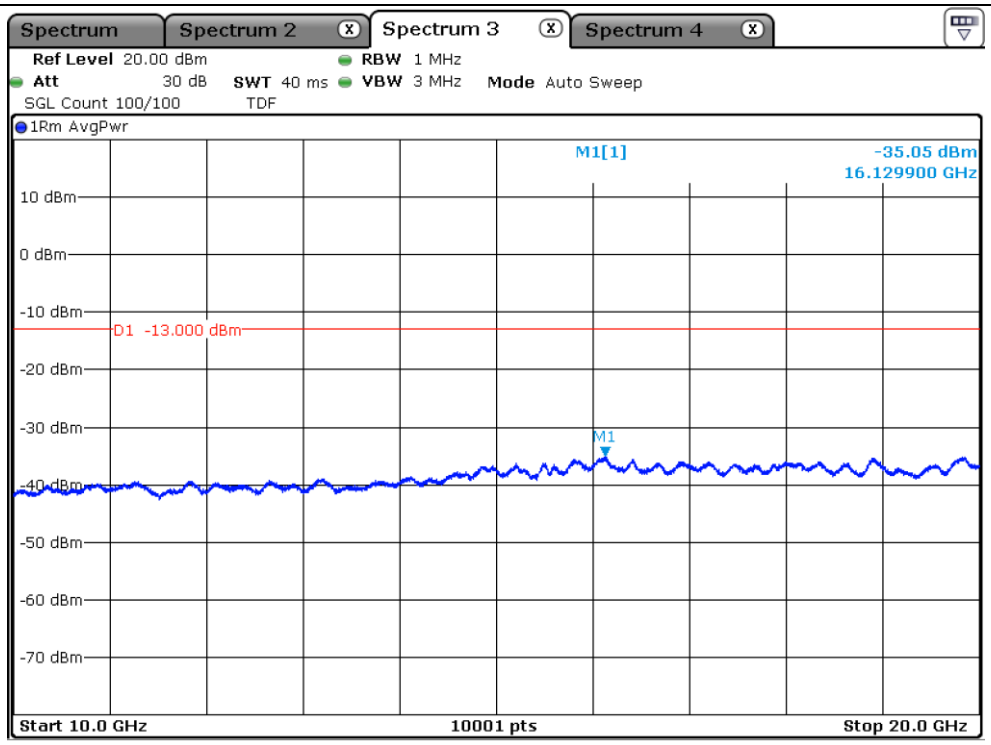
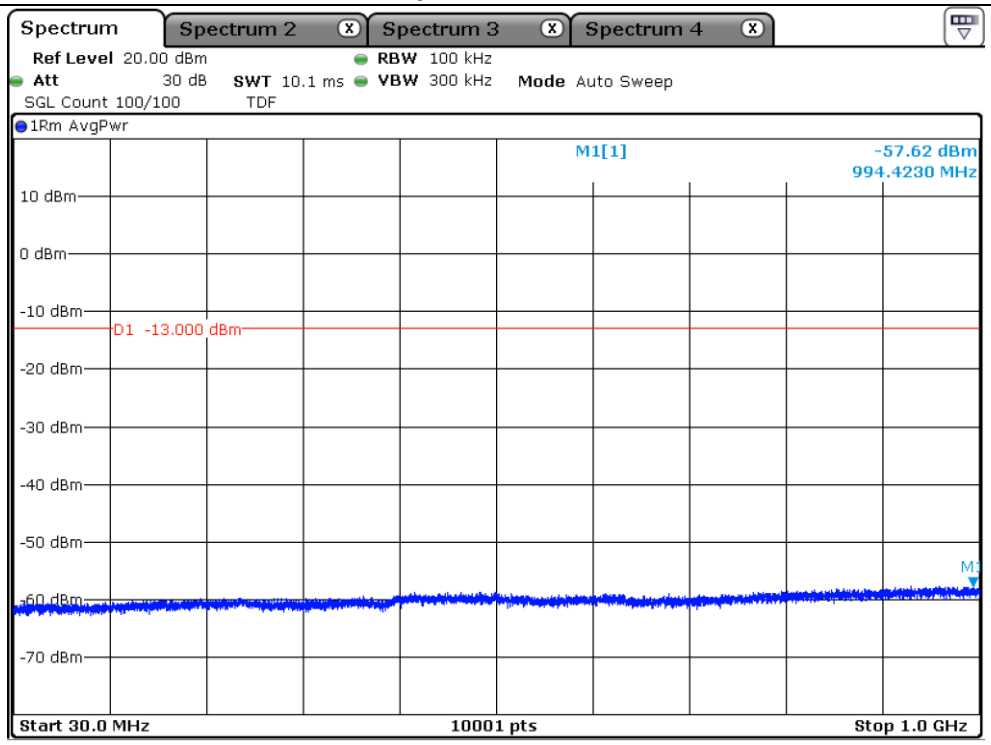
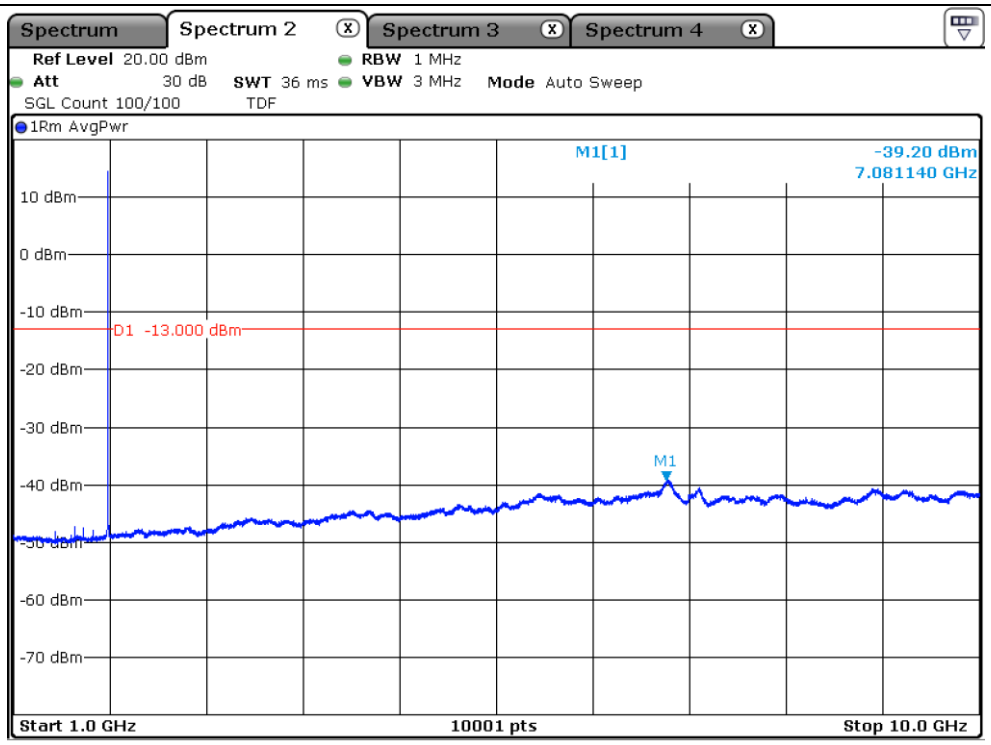


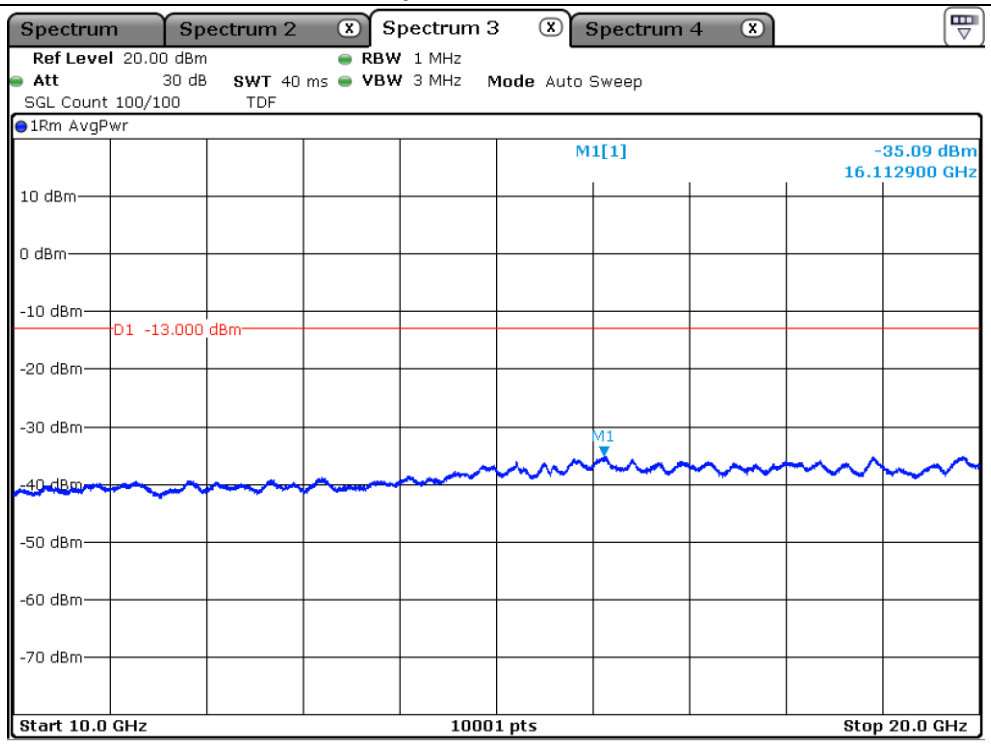
16QAM Low Channel



16QAM Middle Channel



16QAM Middle Channel



16QAM Middle Channel

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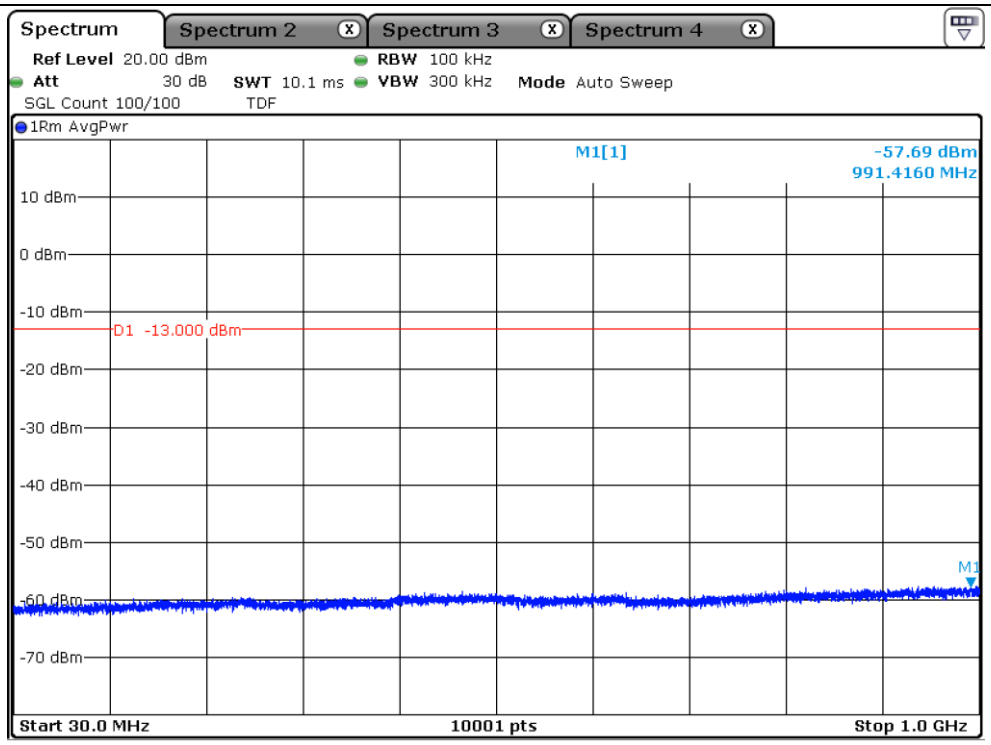
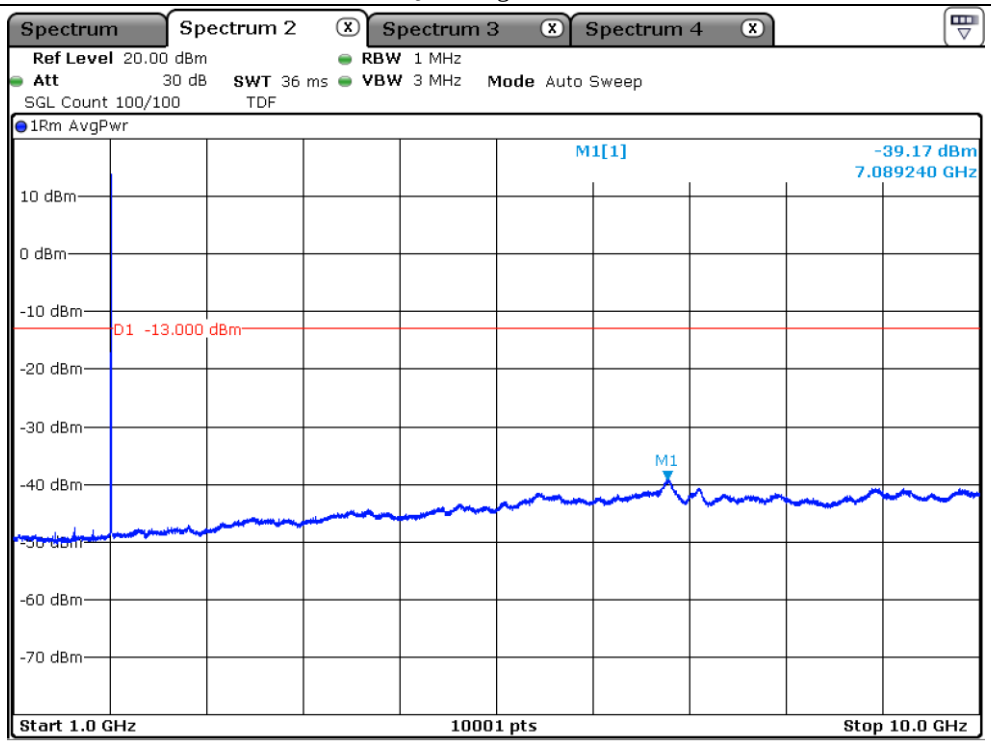


16QAM High Channel



16QAM High Channel

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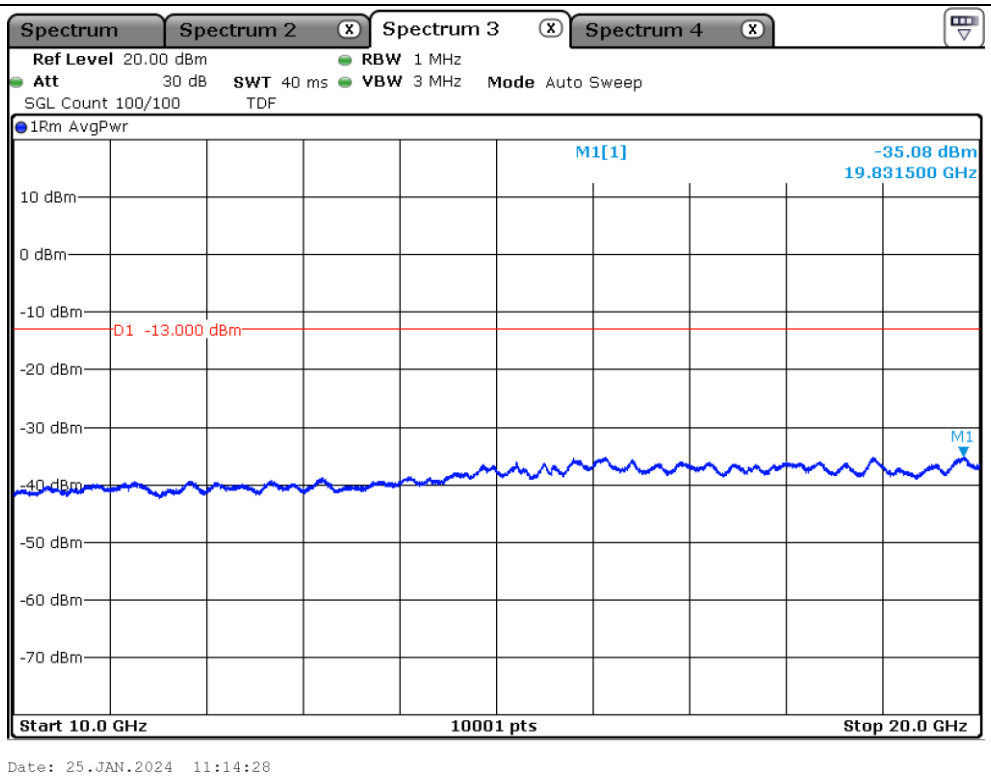

16QAM High Channel

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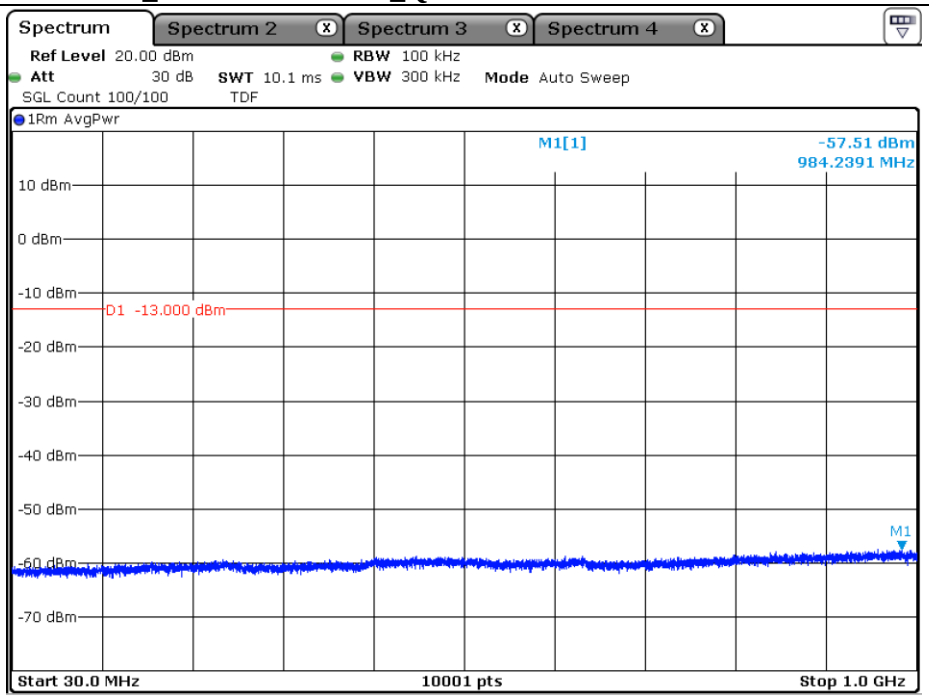
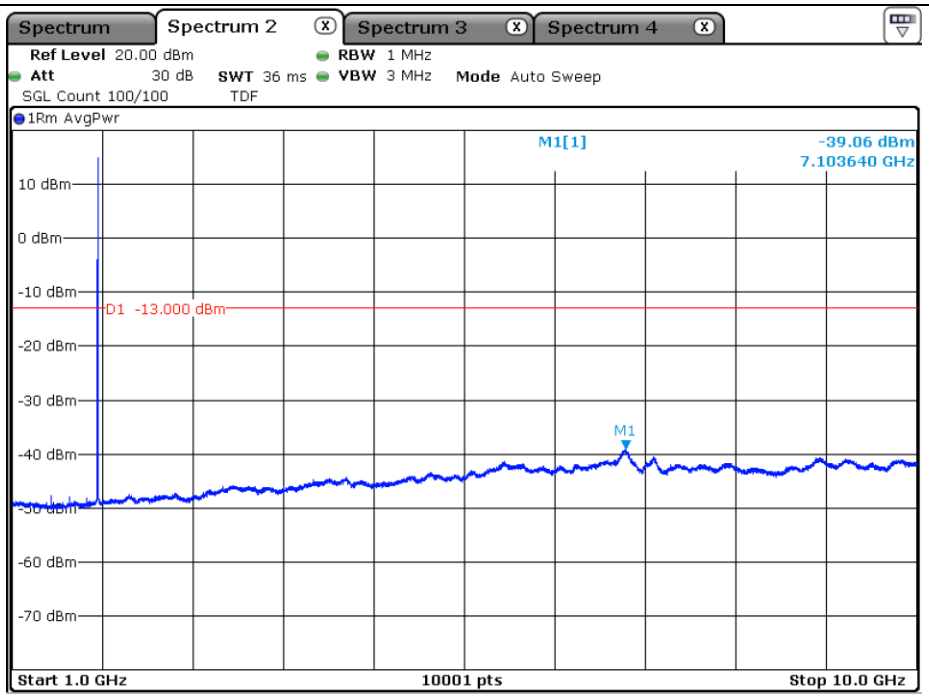
13.5.5 Test data for Band 2_Bandwidth 5 MHz_QPSK



QPSK Low Channel



QPSK Low Channel

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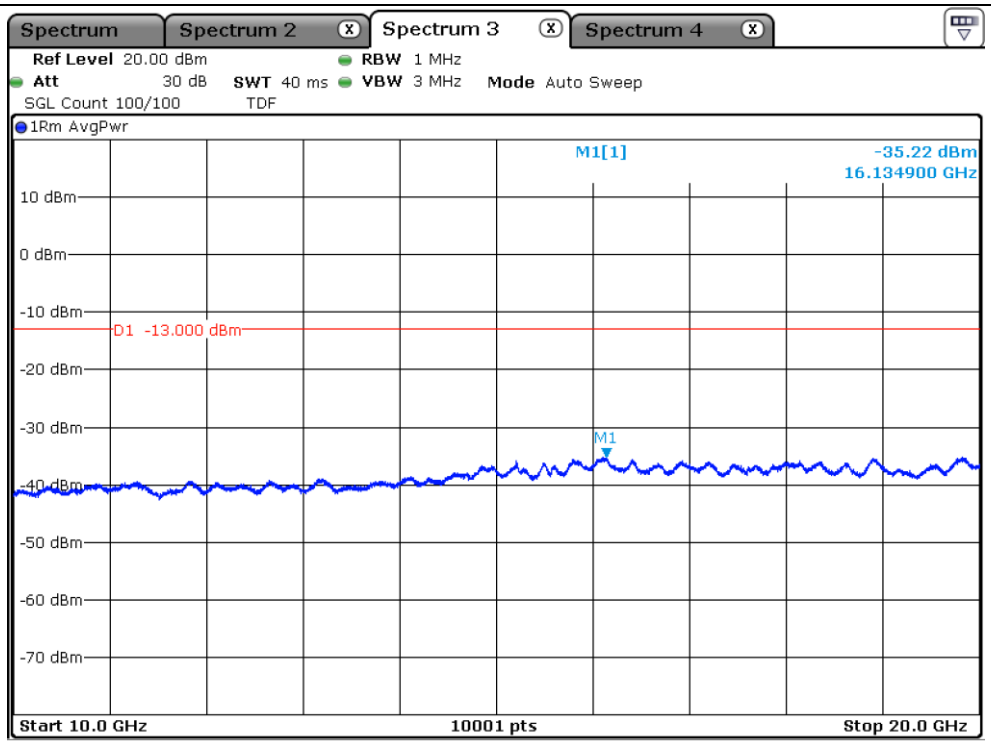
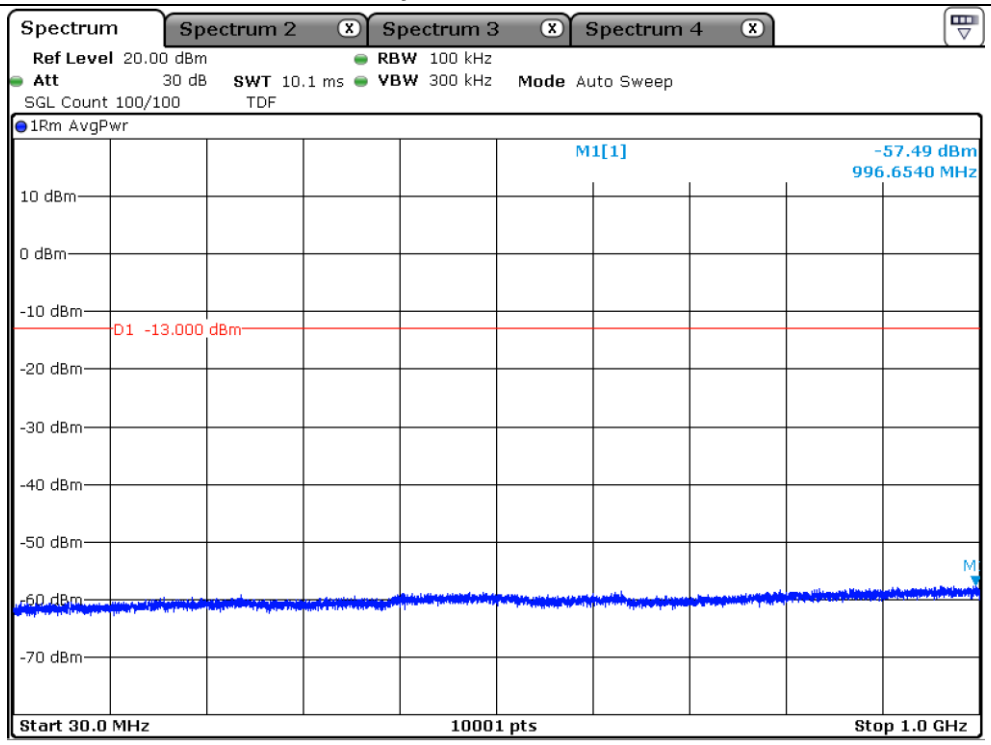


QPSK Low Channel



QPSK Middle Channel

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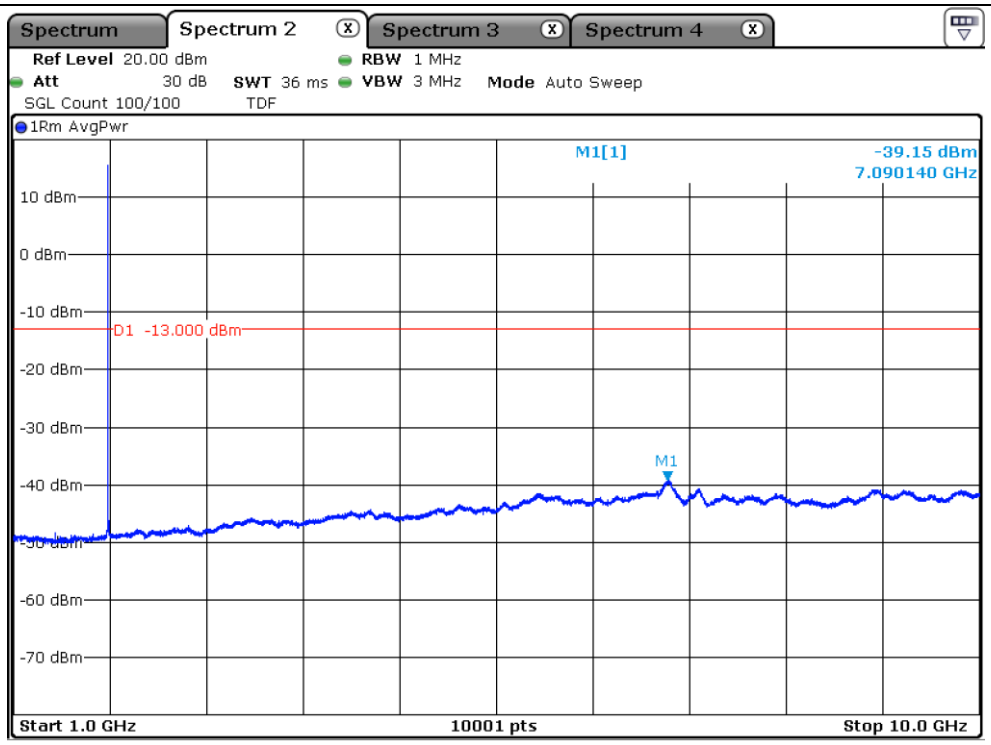
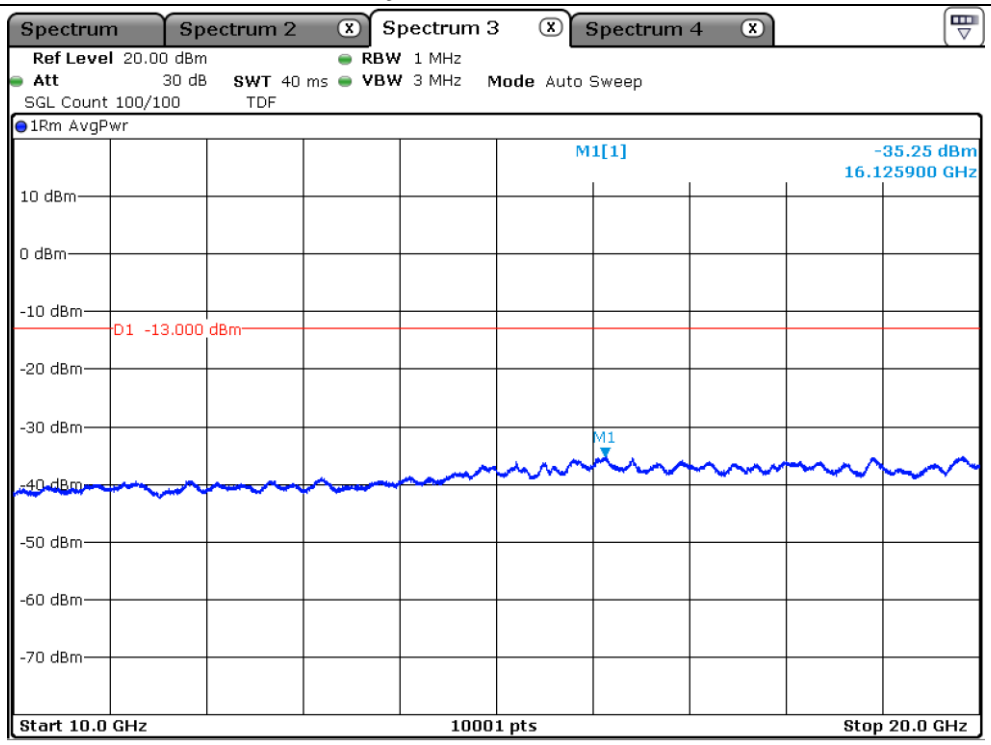


QPSK Middle Channel



QPSK Middle Channel

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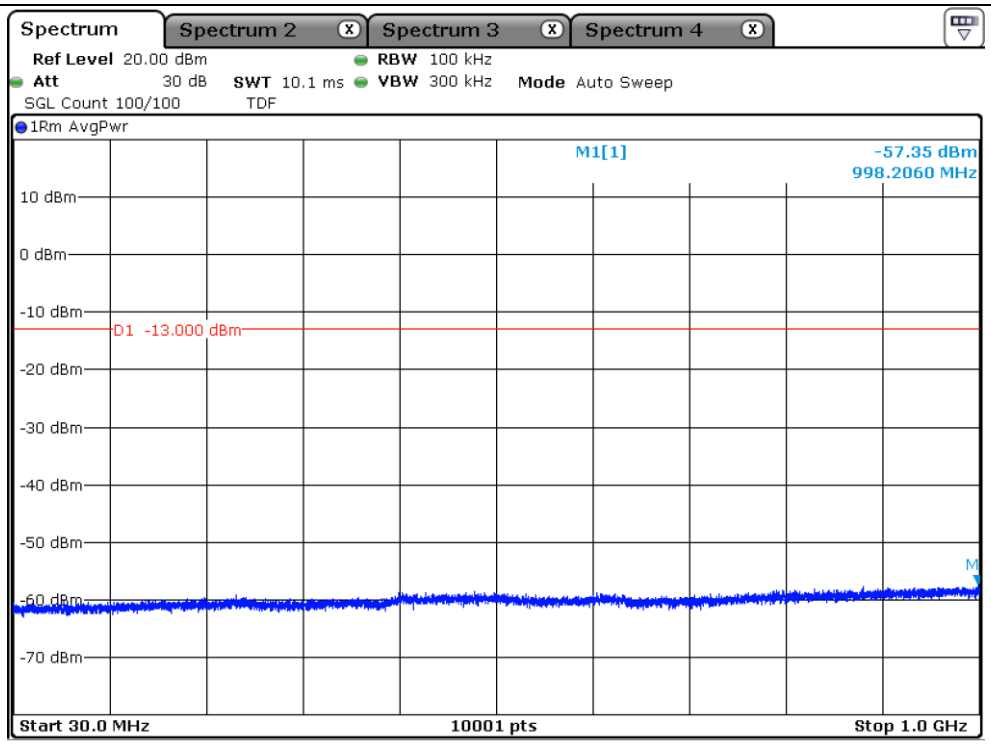
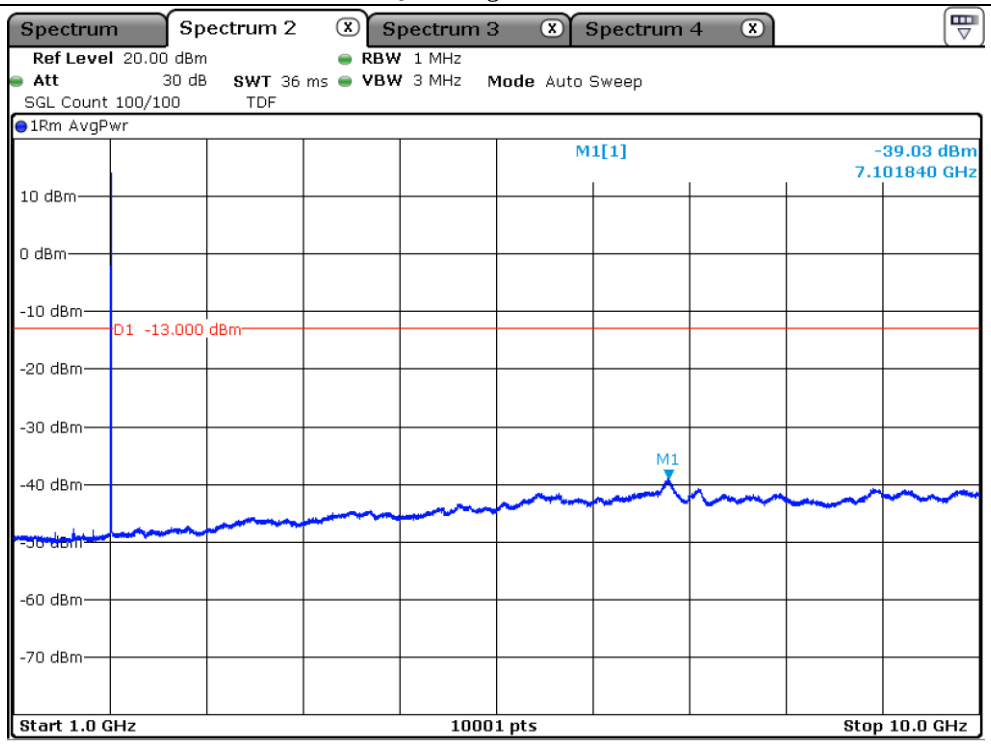
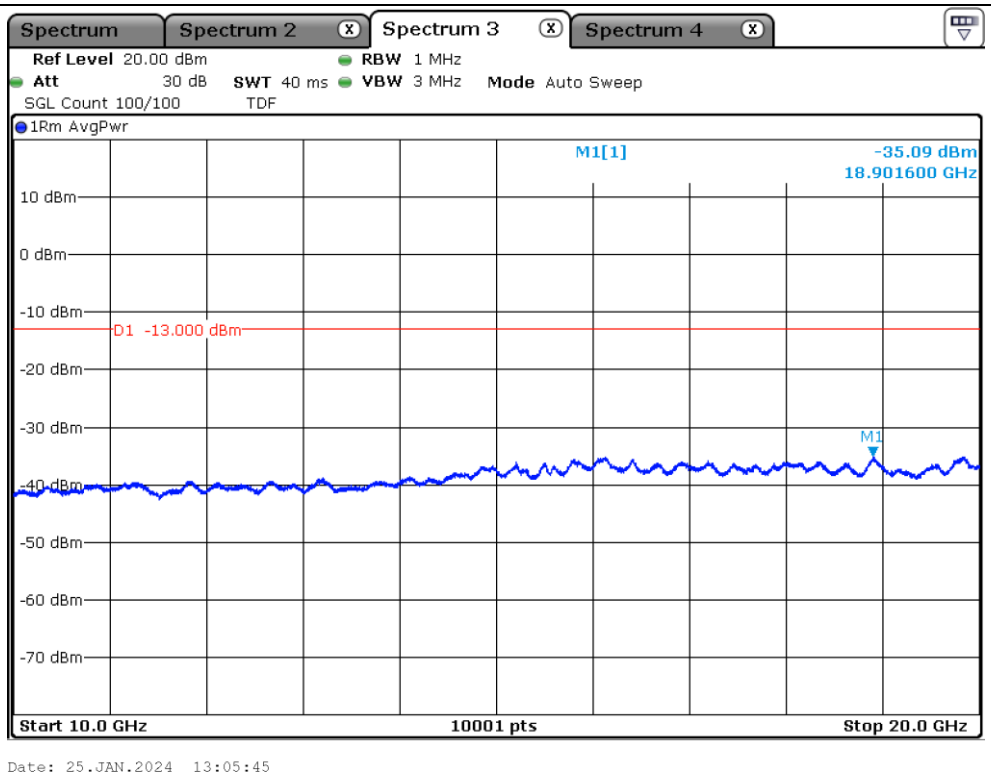


QPSK High Channel

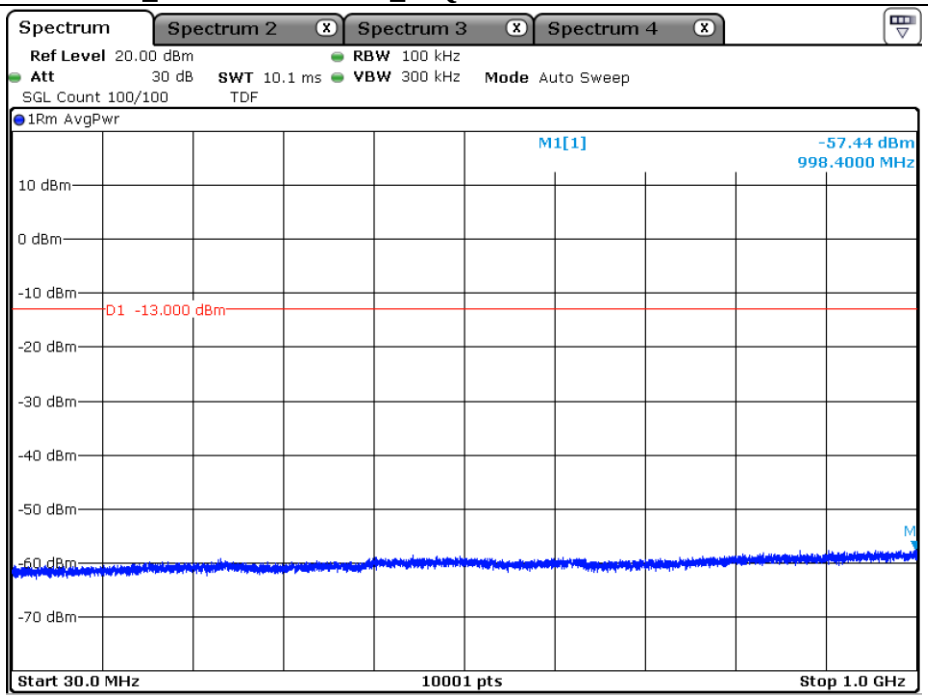


QPSK High Channel

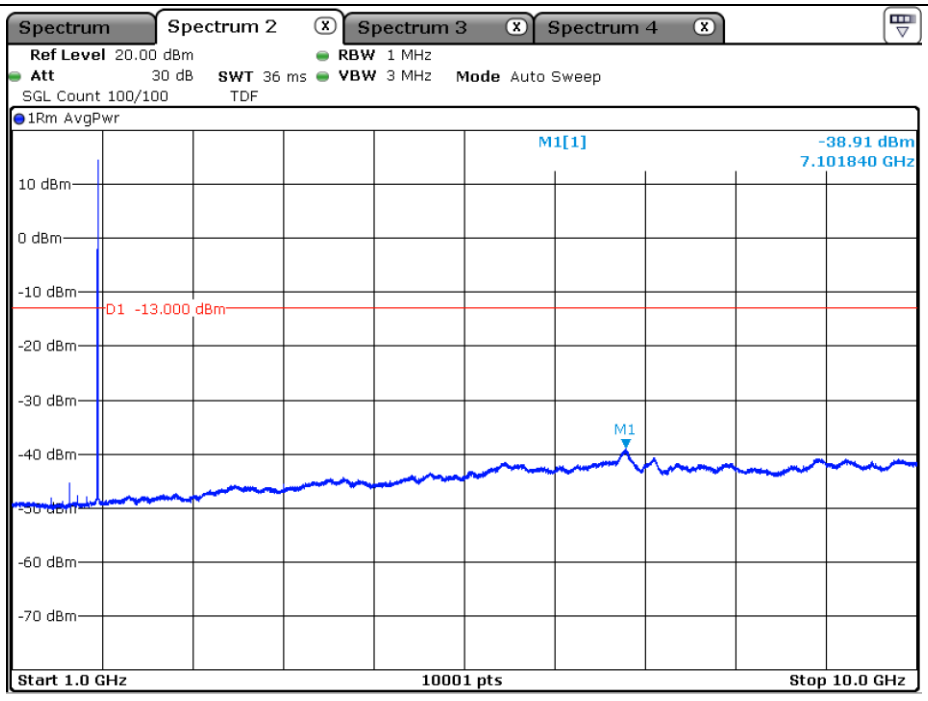


QPSK High Channel

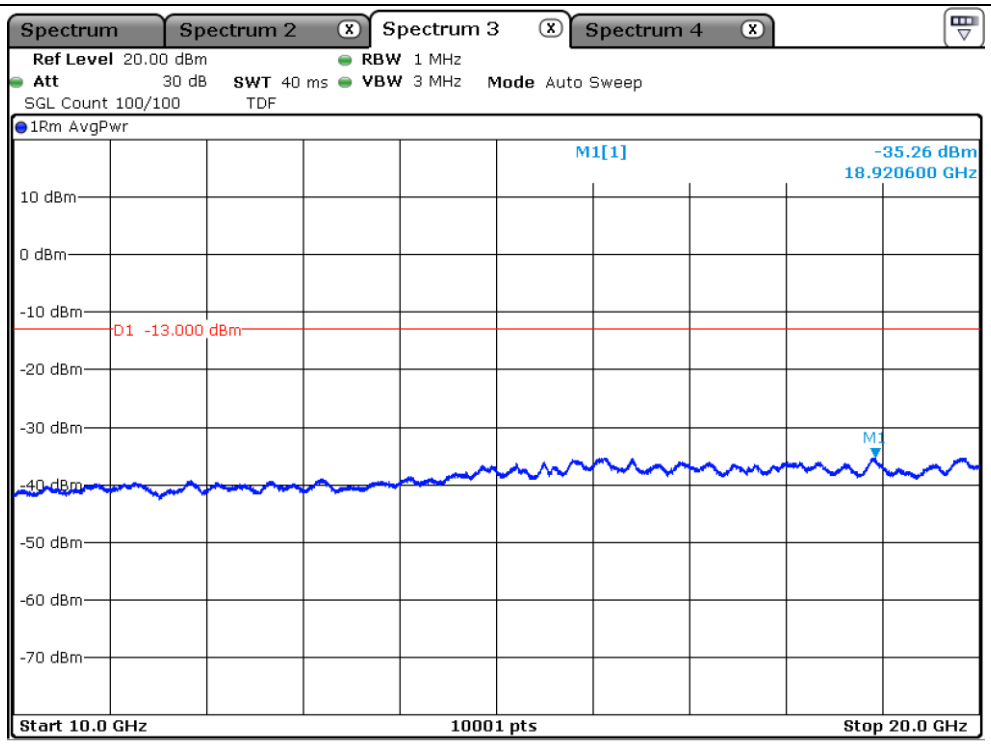
13.5.6 Test data for Band 2_Bandwidth 5 MHz_16QAM



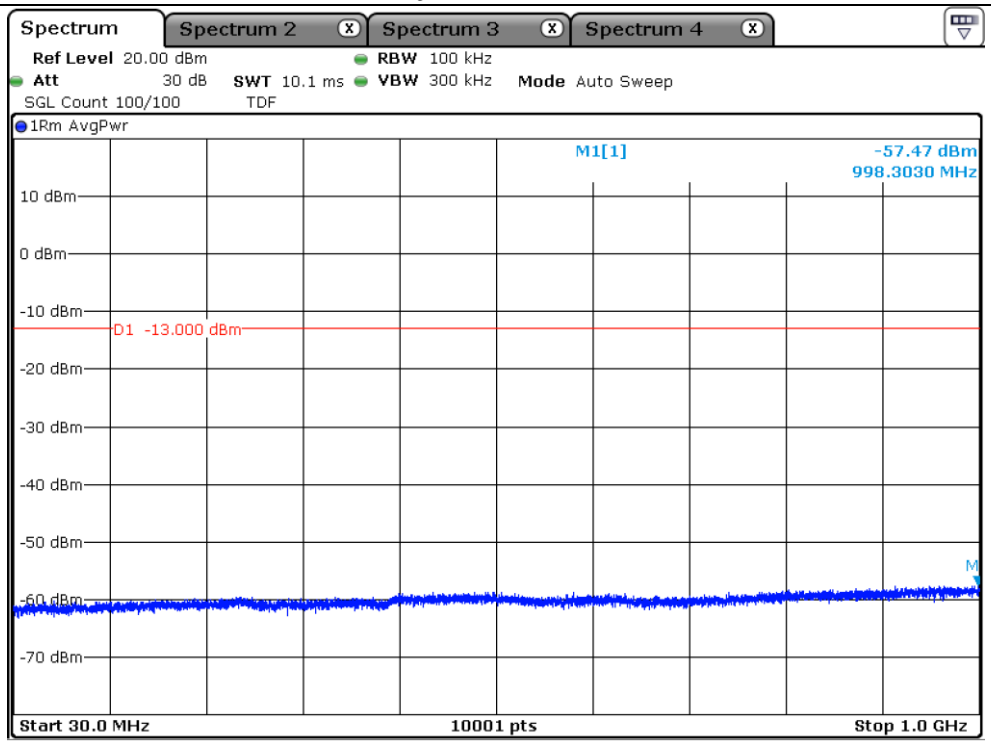
16QAM Low Channel



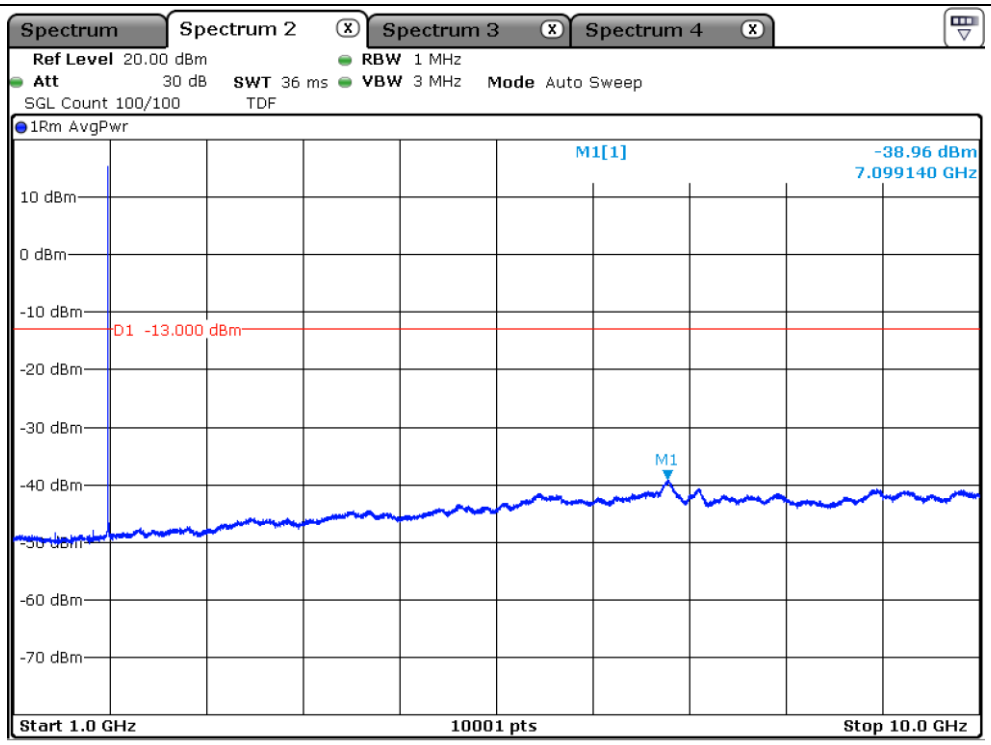
16QAM Low Channel



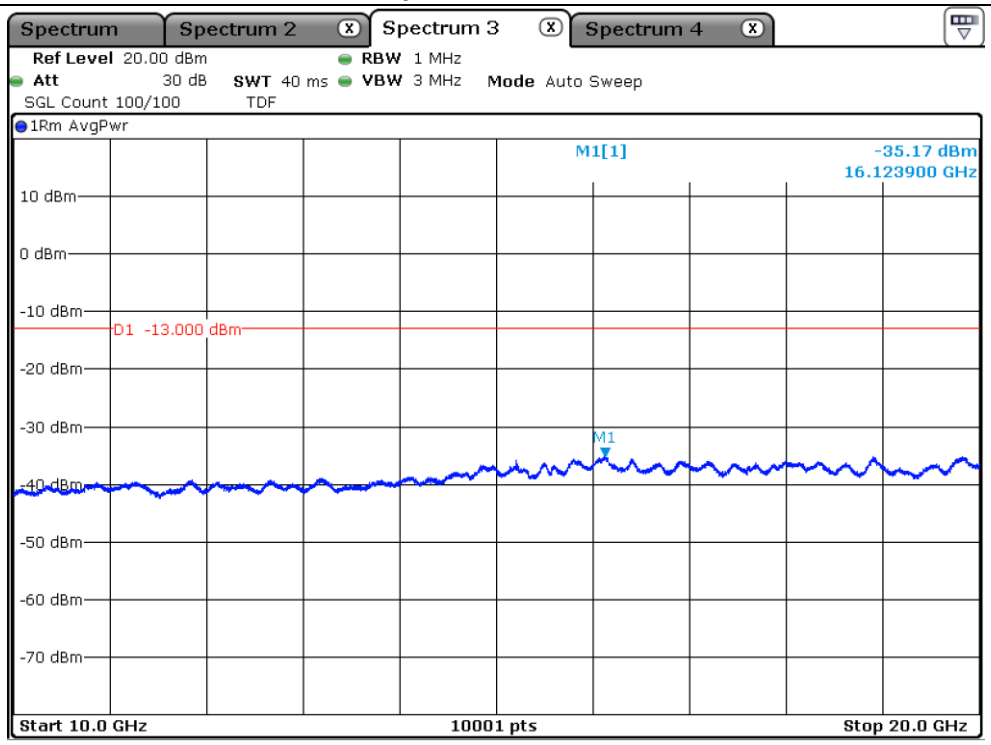
16QAM Low Channel



16QAM Middle Channel



16QAM Middle Channel



16QAM Middle Channel

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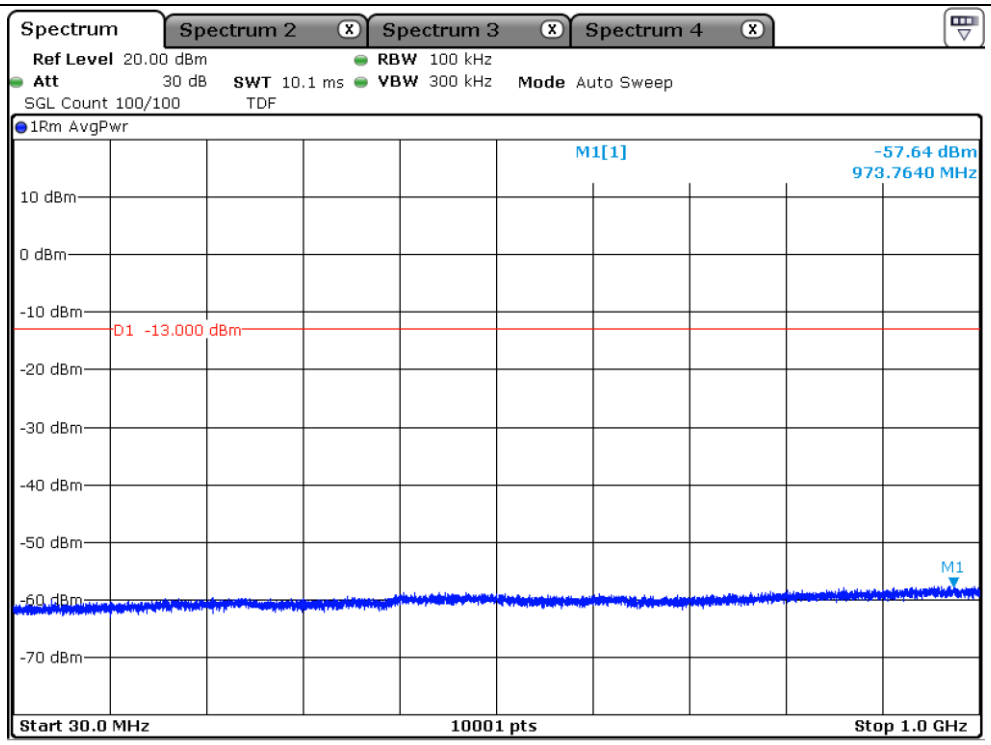
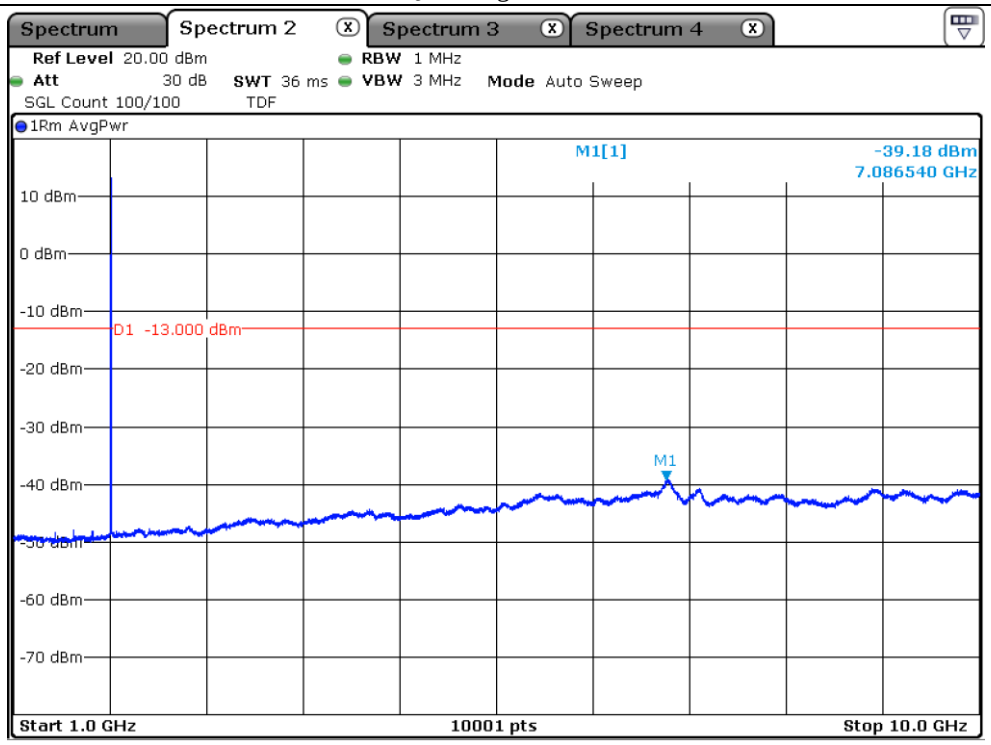


16QAM High Channel



16QAM High Channel

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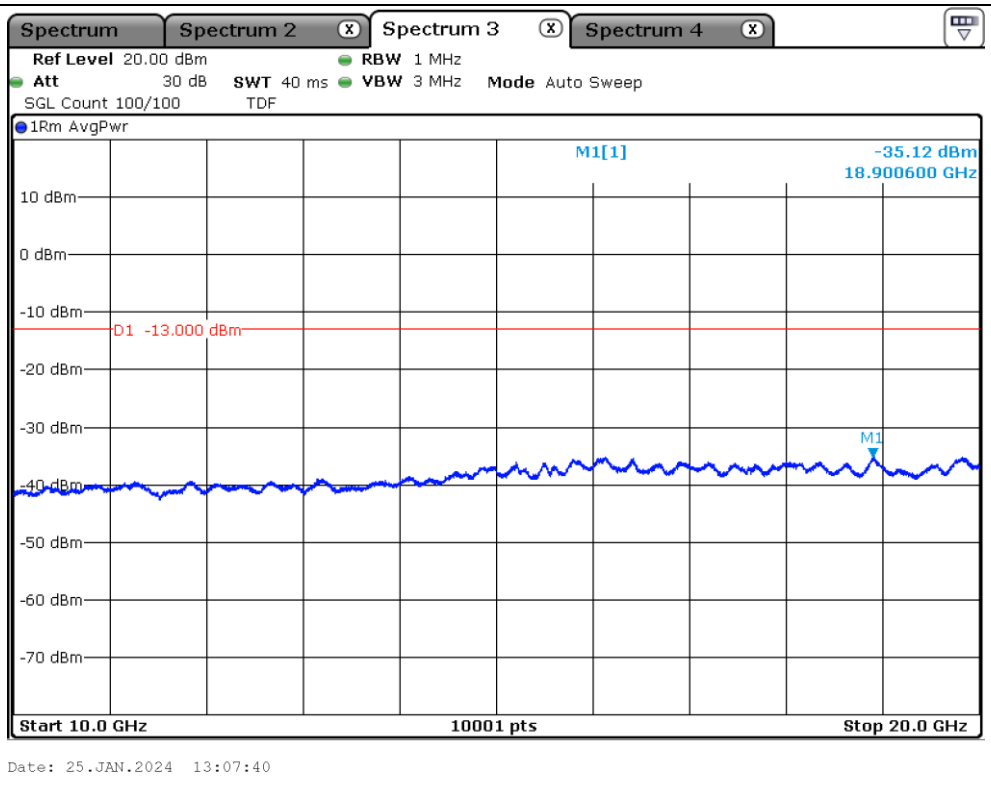

16QAM High Channel

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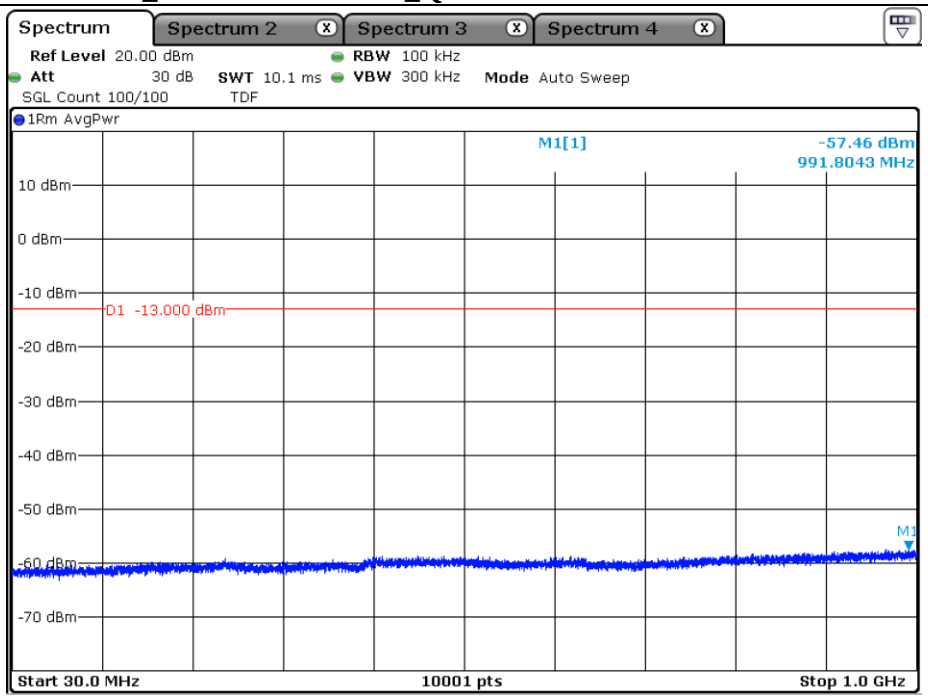
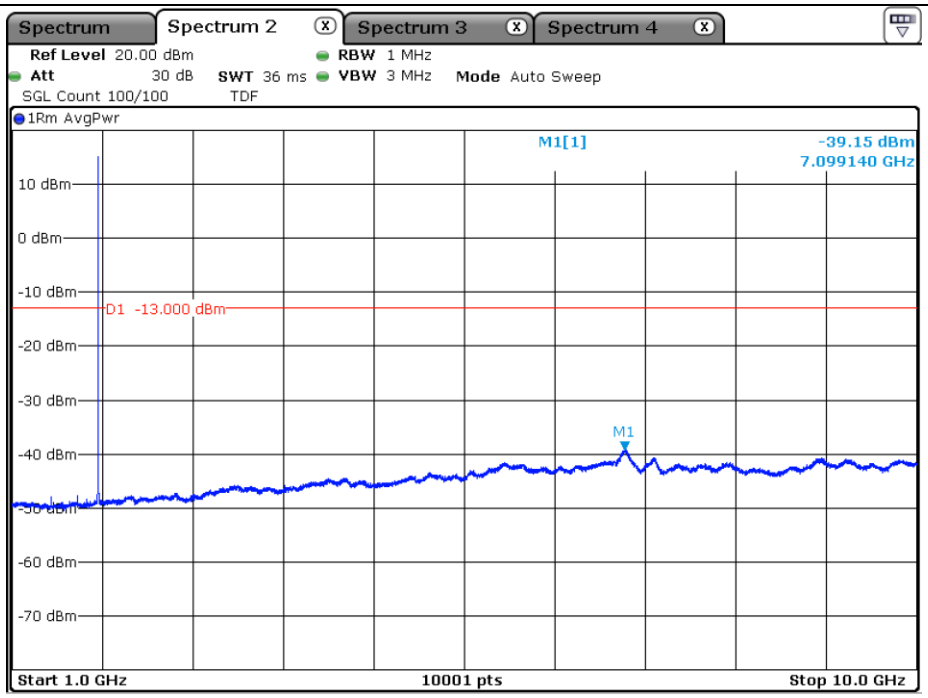
13.5.7 Test data for Band 2_Bandwidth 10 MHz_QPSK



QPSK Low Channel



QPSK Low Channel

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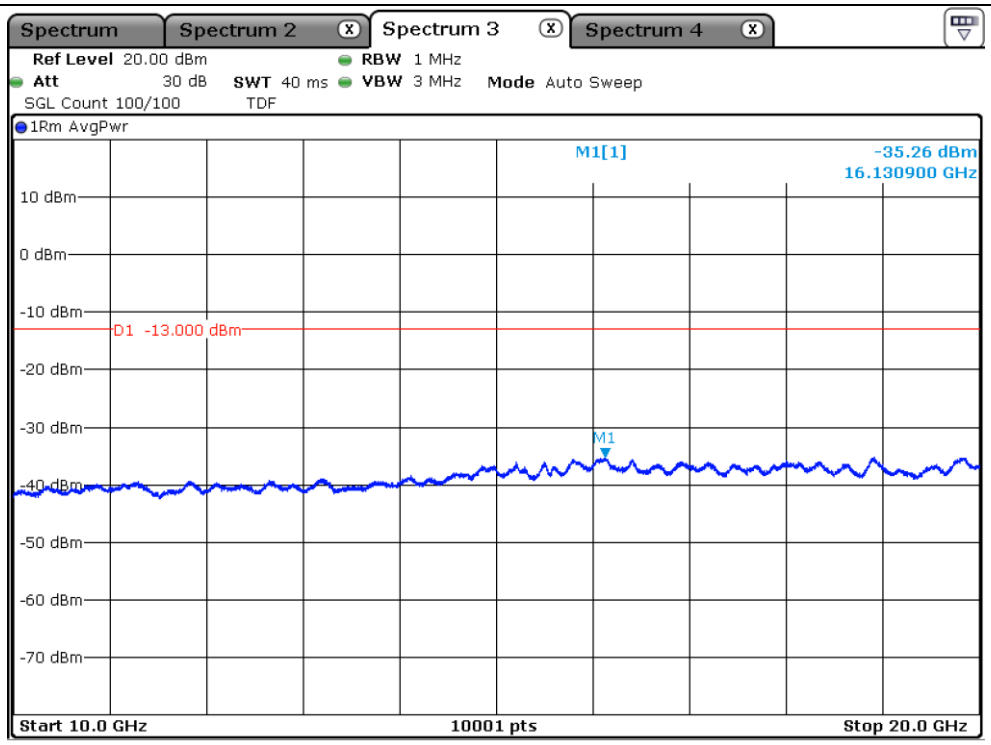
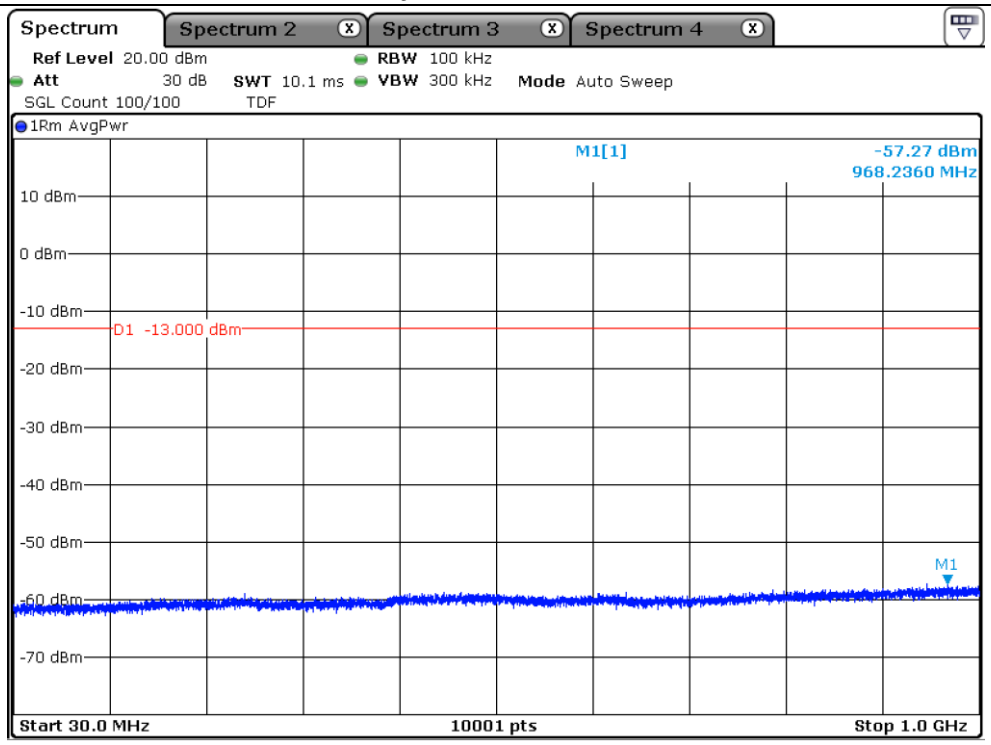
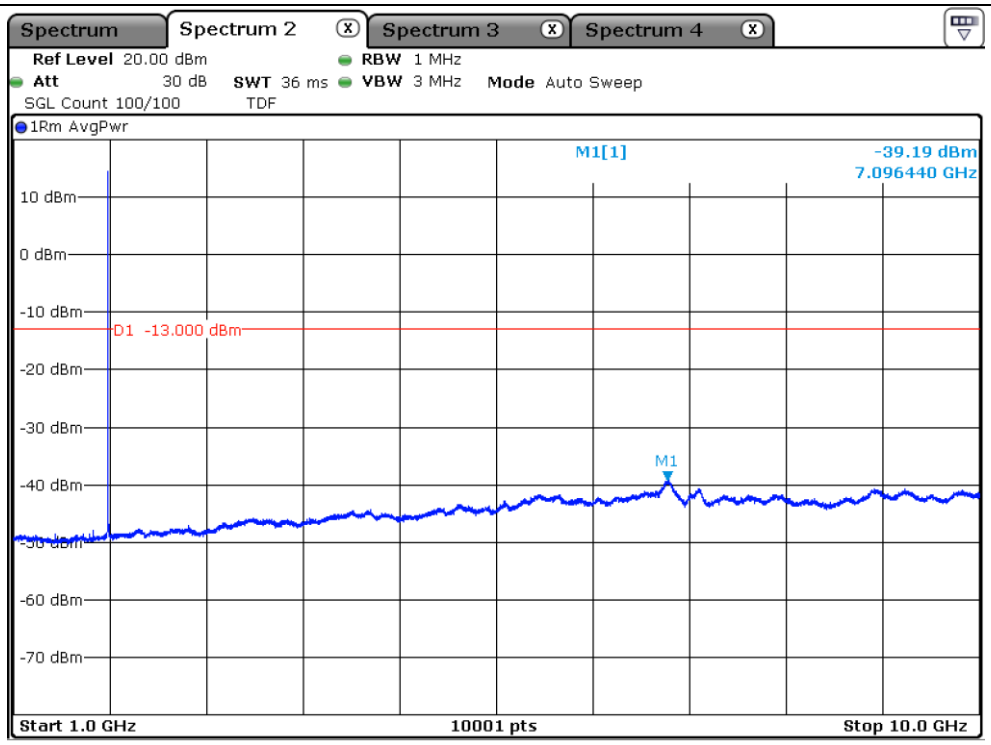


QPSK Low Channel

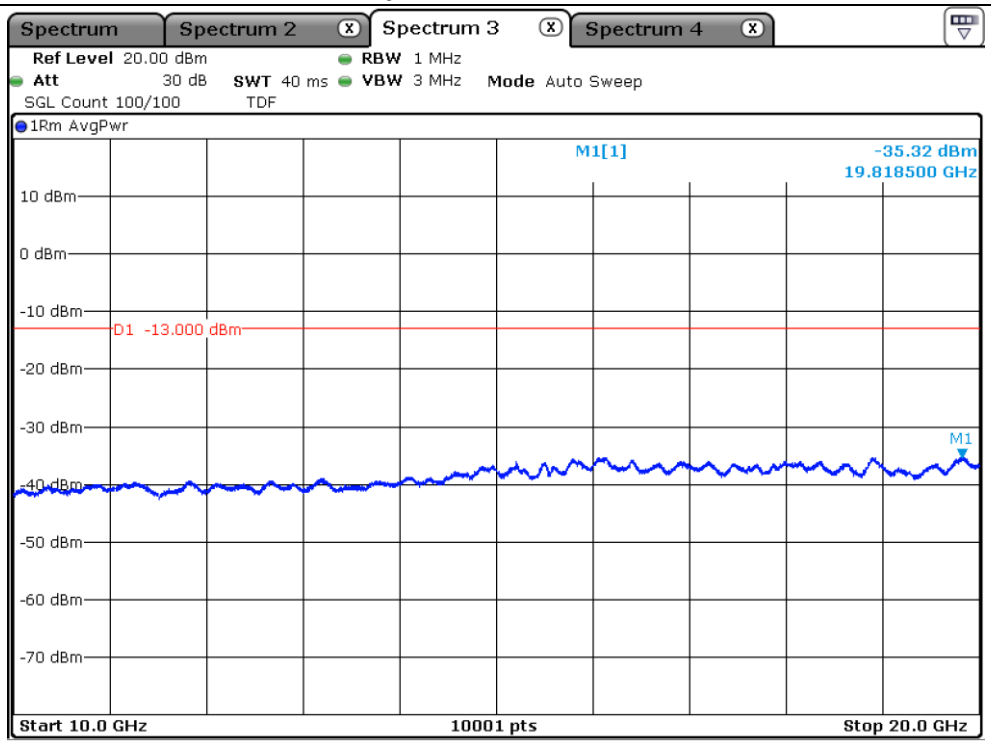


QPSK Middle Channel

It should not be reproduced except in full, without the written approval of ONETECH Corp. OTC-TRF-RF-001(0)



QPSK Middle Channel



QPSK Middle Channel

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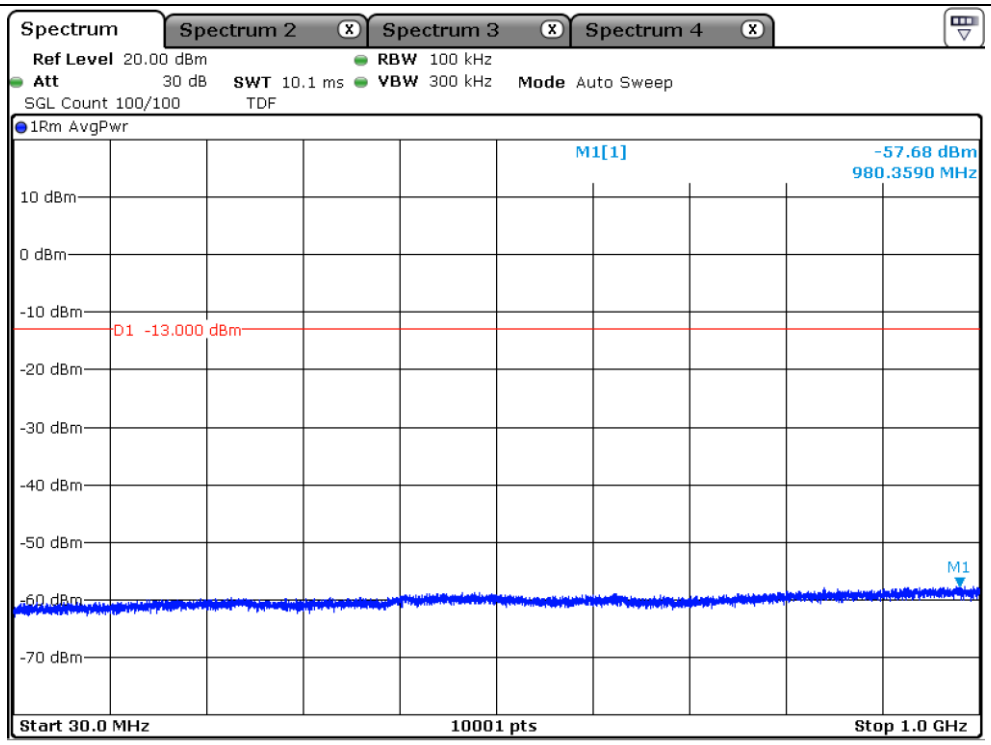
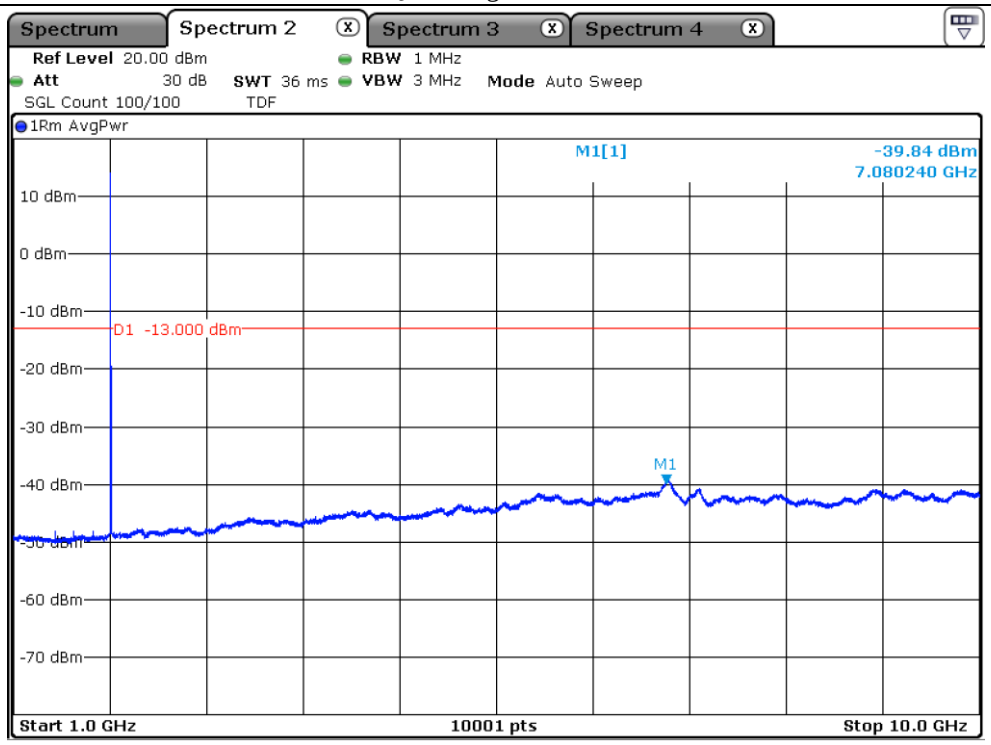


QPSK High Channel



QPSK High Channel

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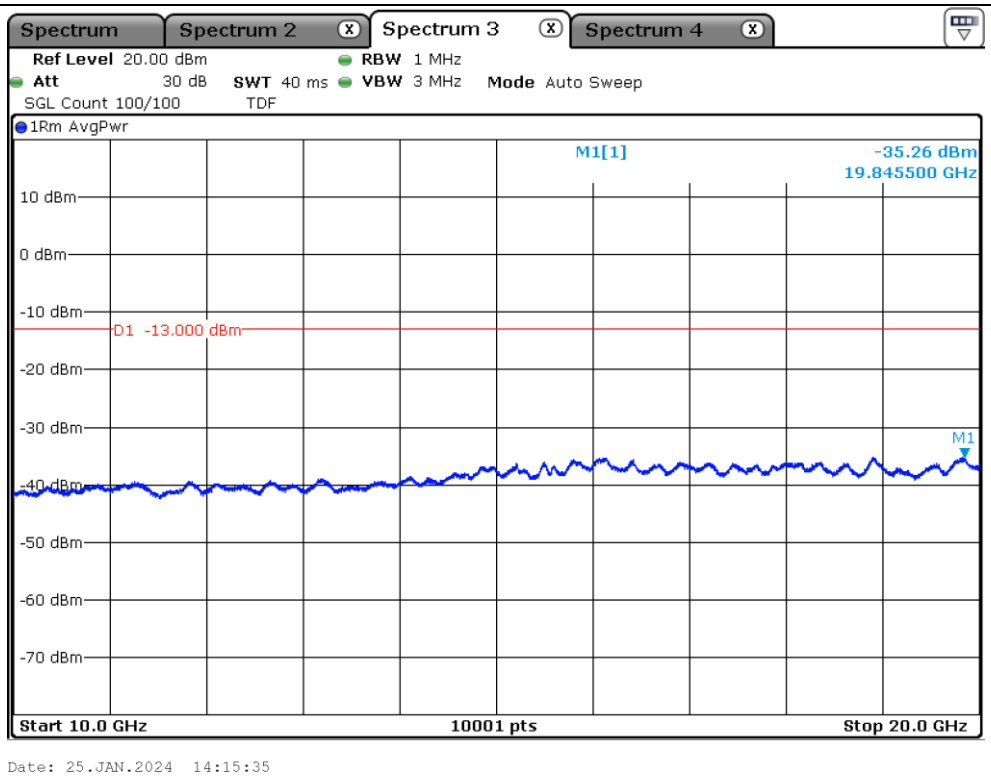
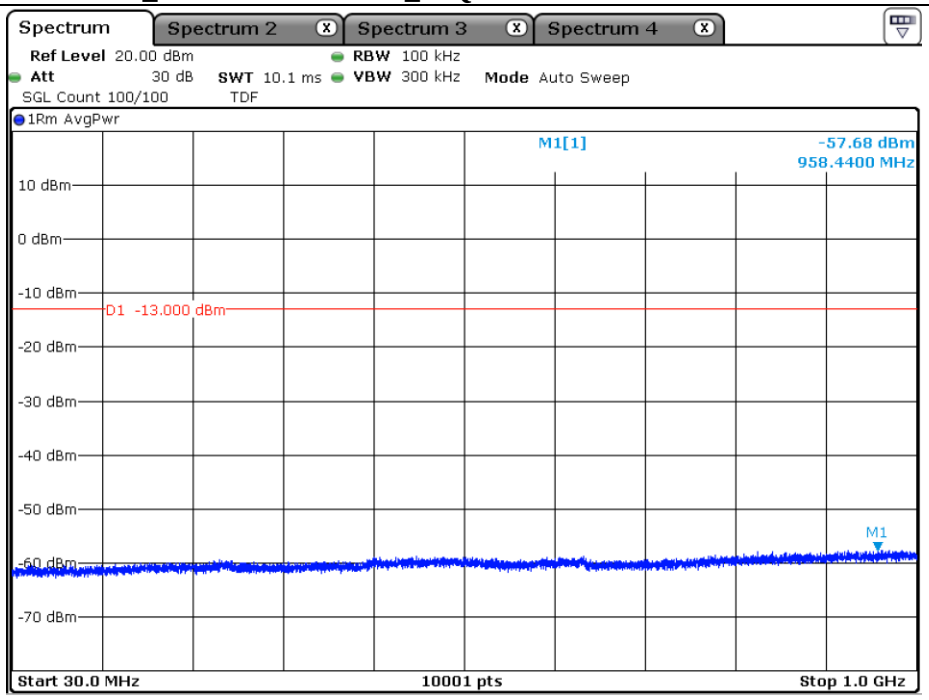
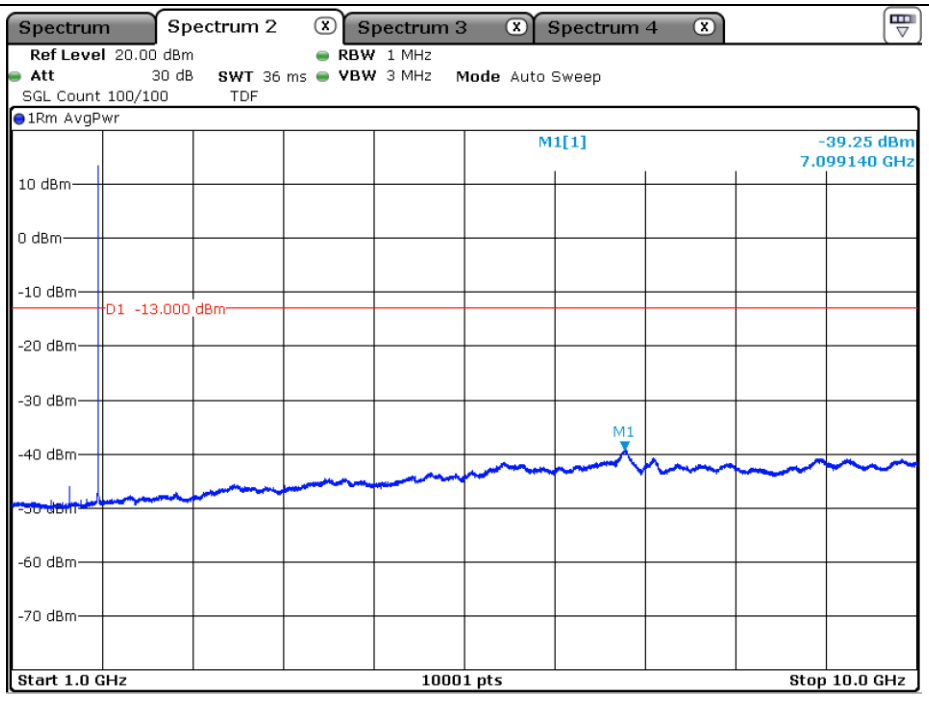


QPSK High Channel

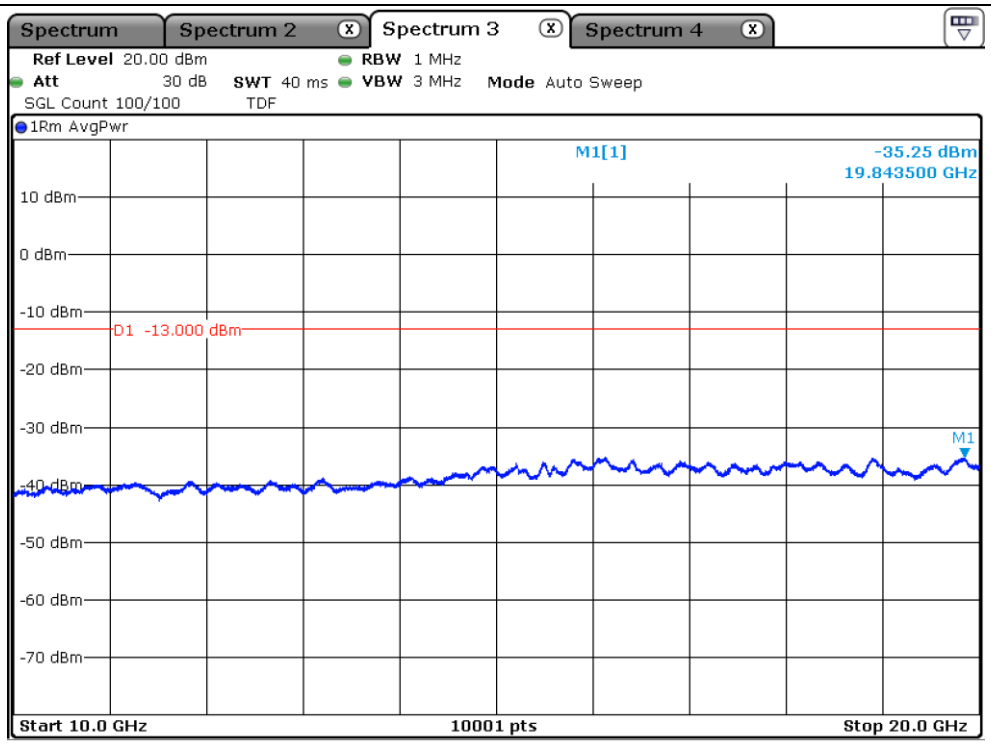
13.5.8 Test data for Band 2_Bandwidth 10 MHz_16QAM



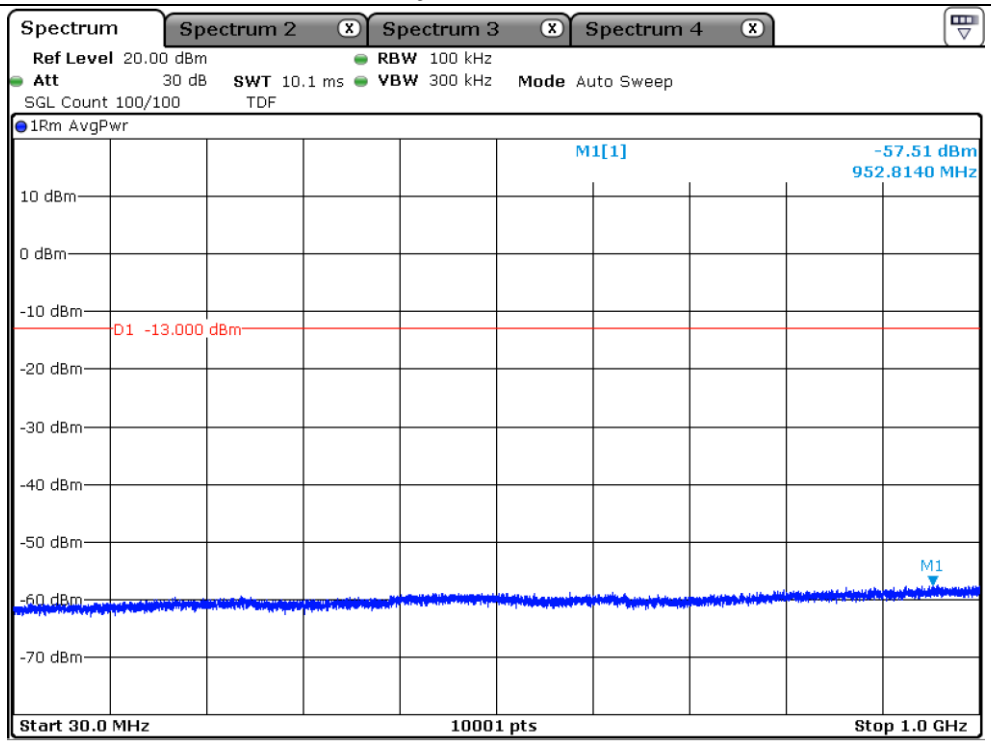
16QAM Low Channel



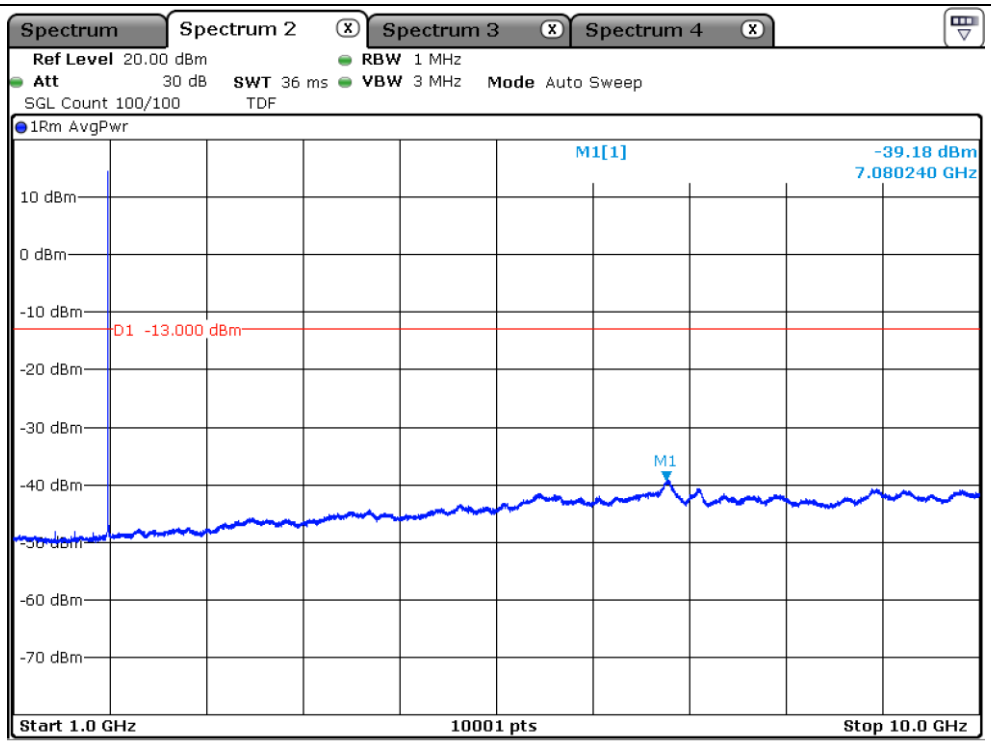
16QAM Low Channel



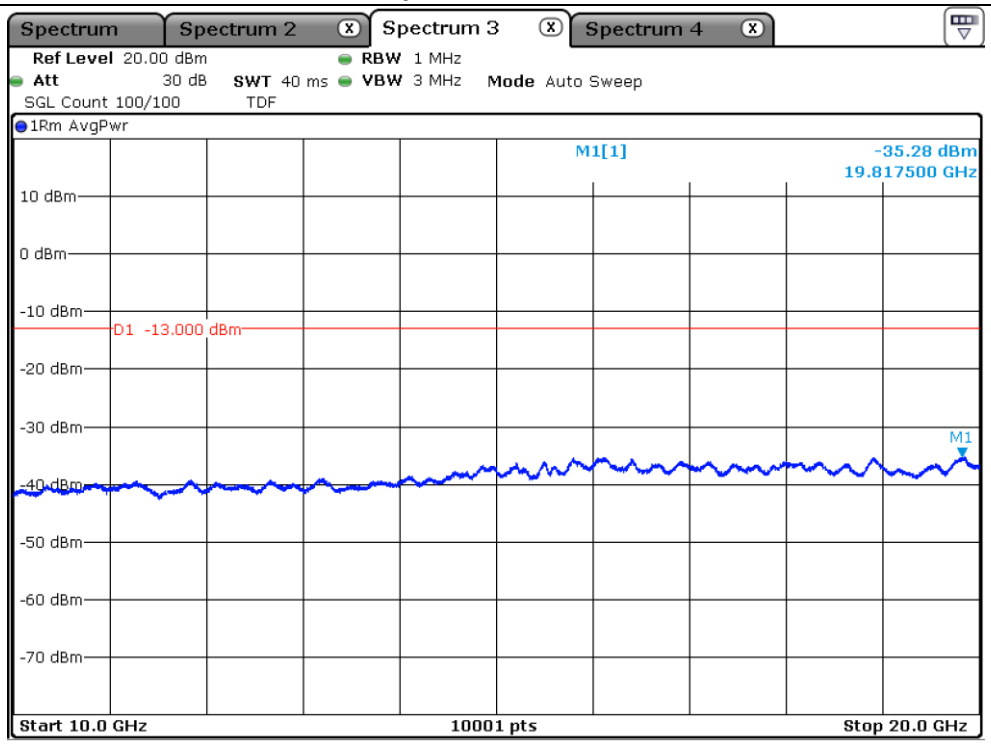
16QAM Low Channel



16QAM Middle Channel



16QAM Middle Channel



16QAM Middle Channel

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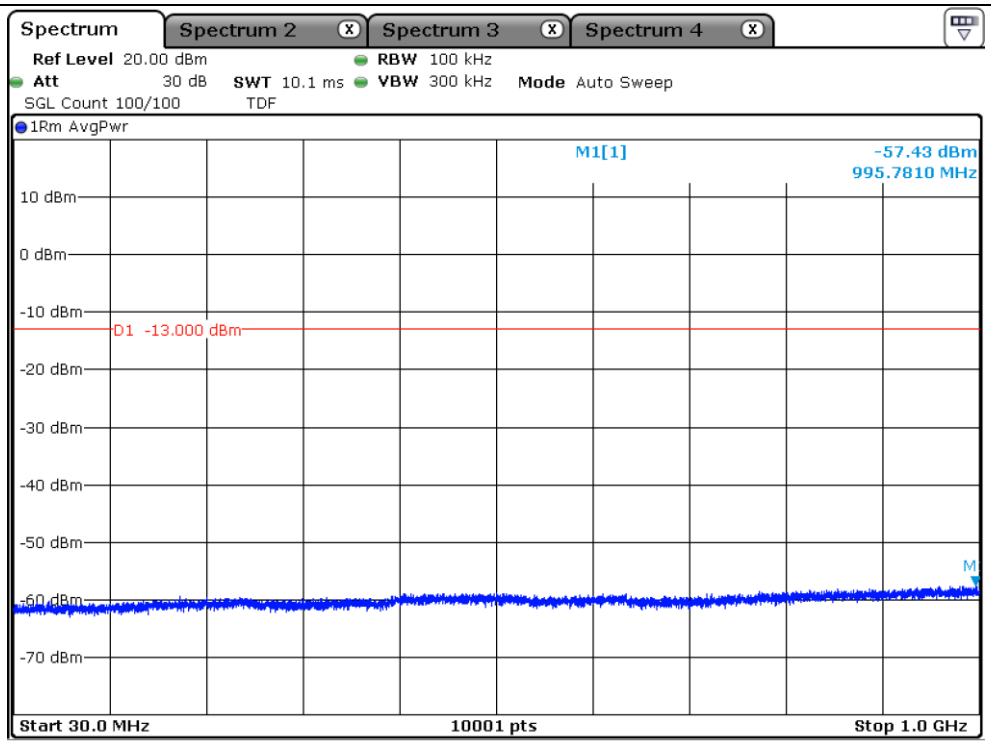
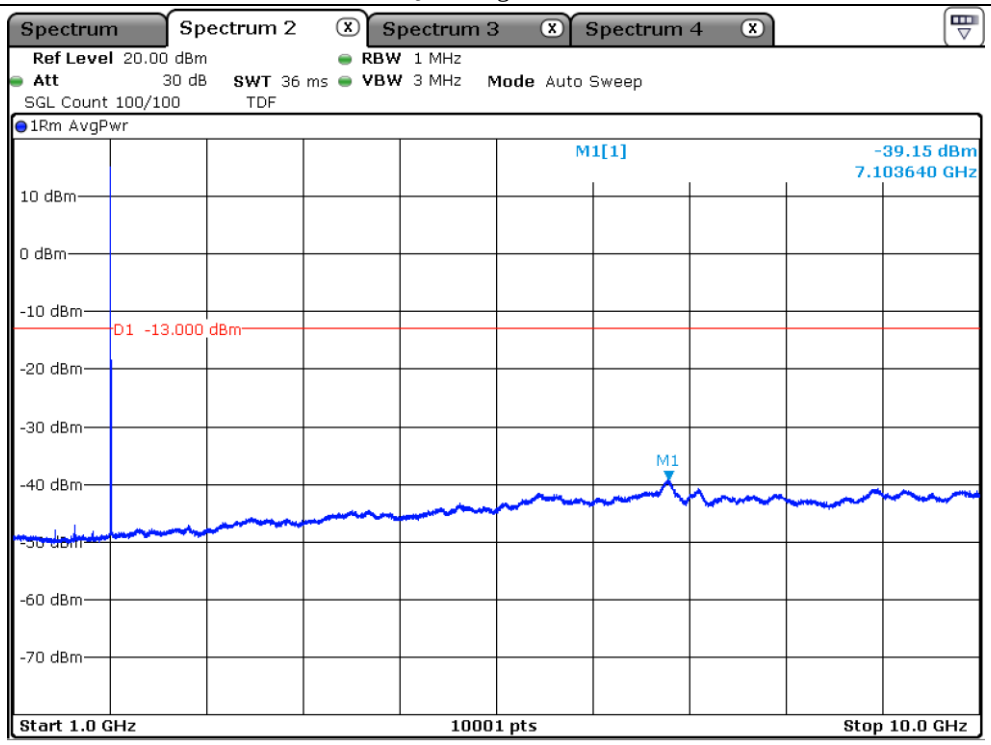


16QAM High Channel



16QAM High Channel

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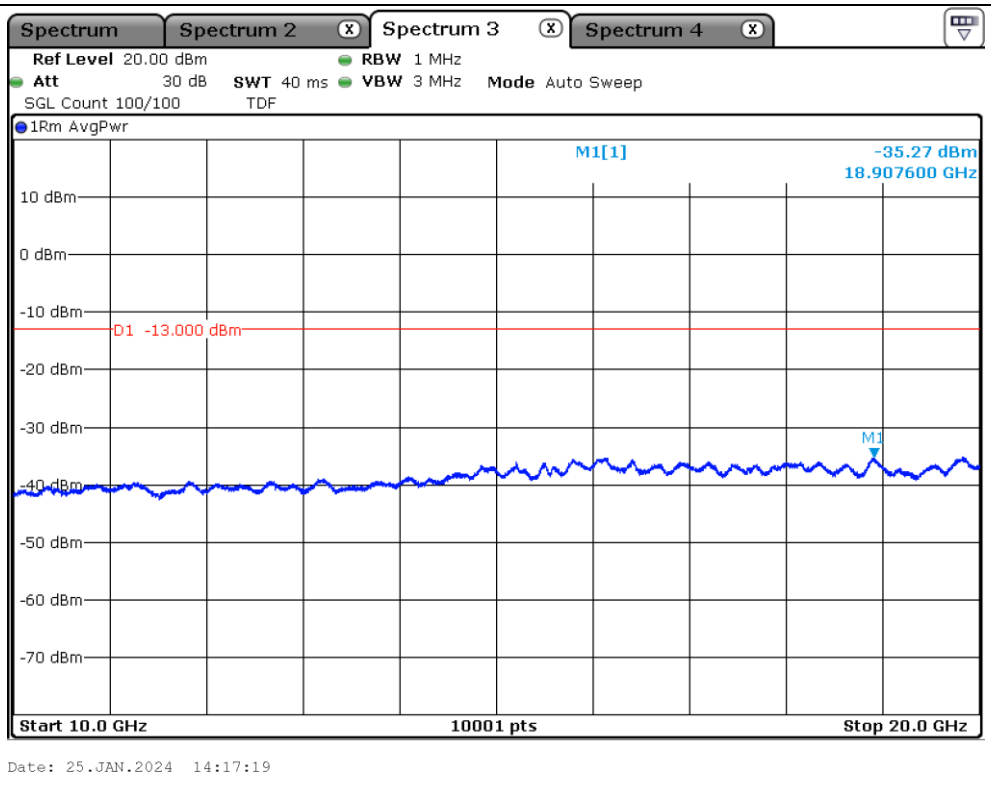

16QAM High Channel

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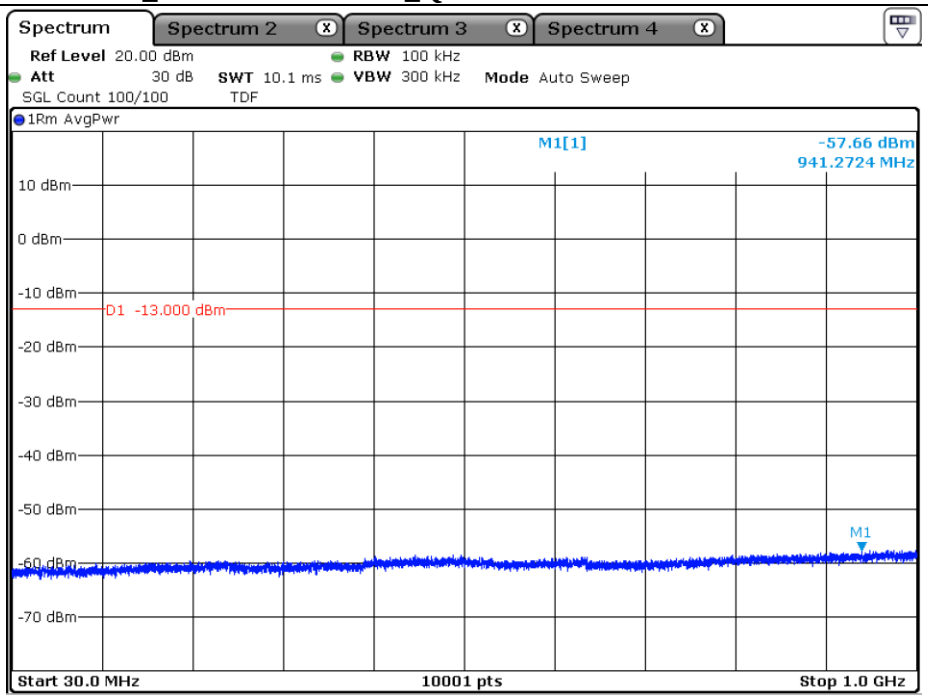
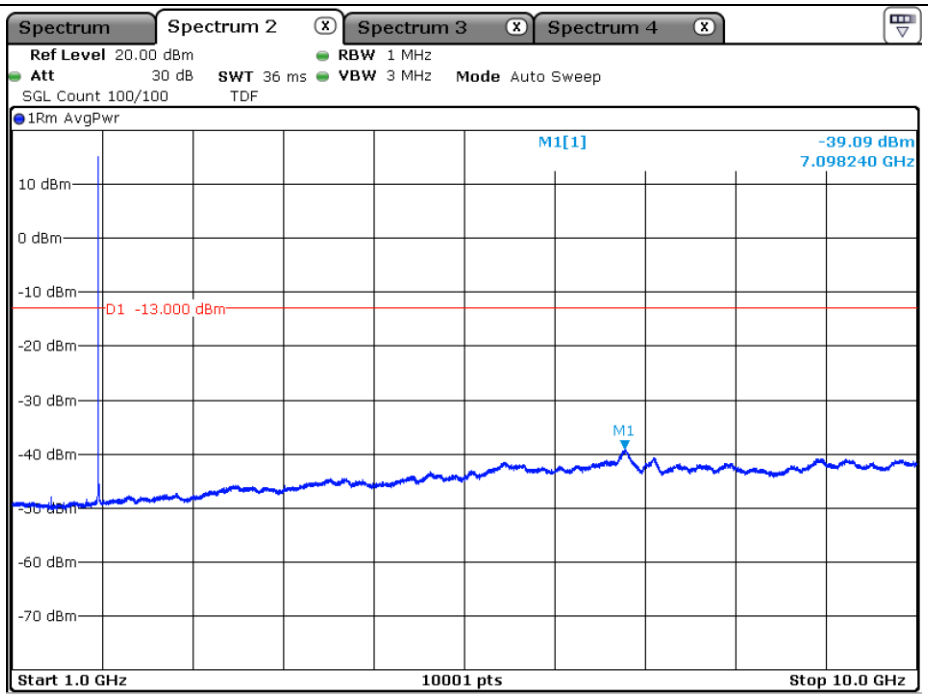
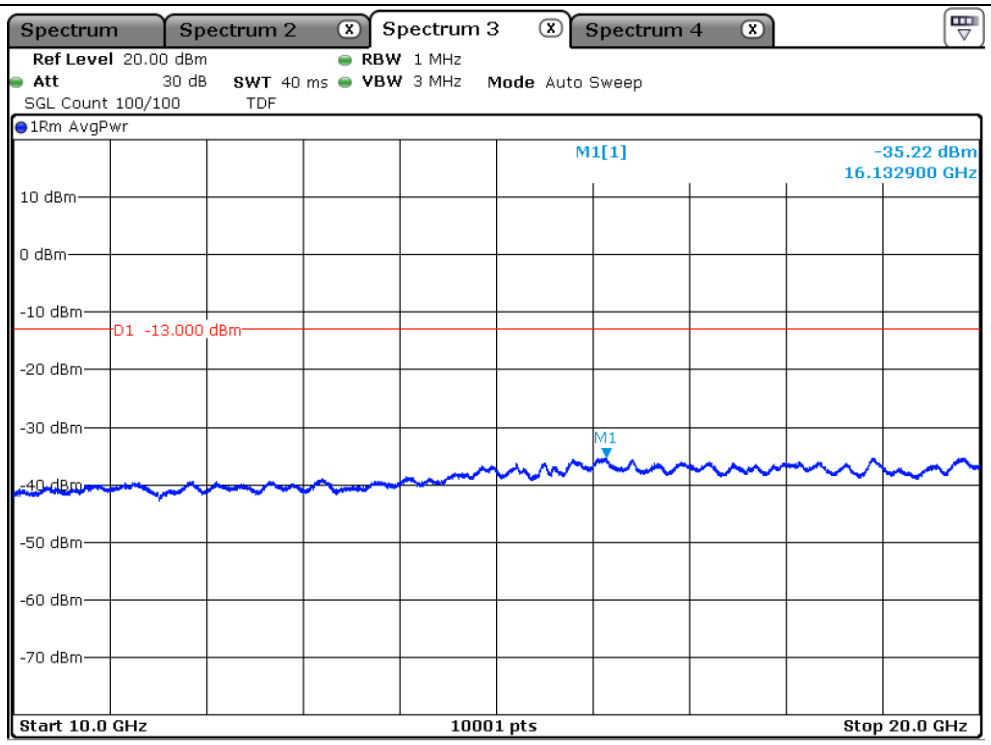
13.5.9 Test data for Band 2_Bandwidth 15 MHz_QPSK



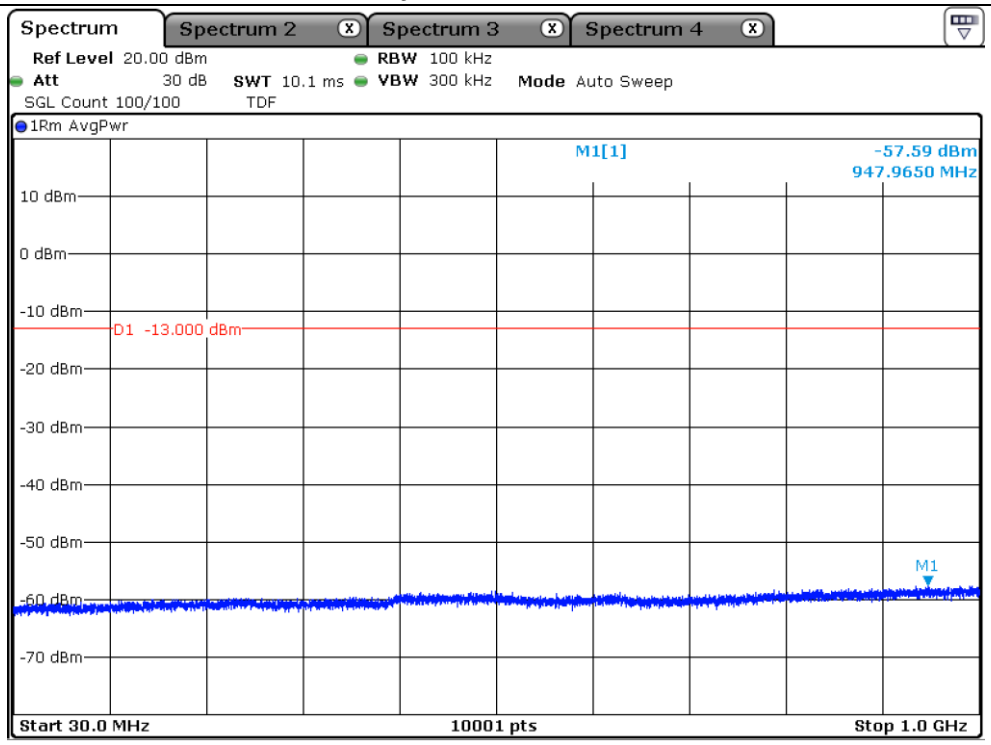
QPSK Low Channel



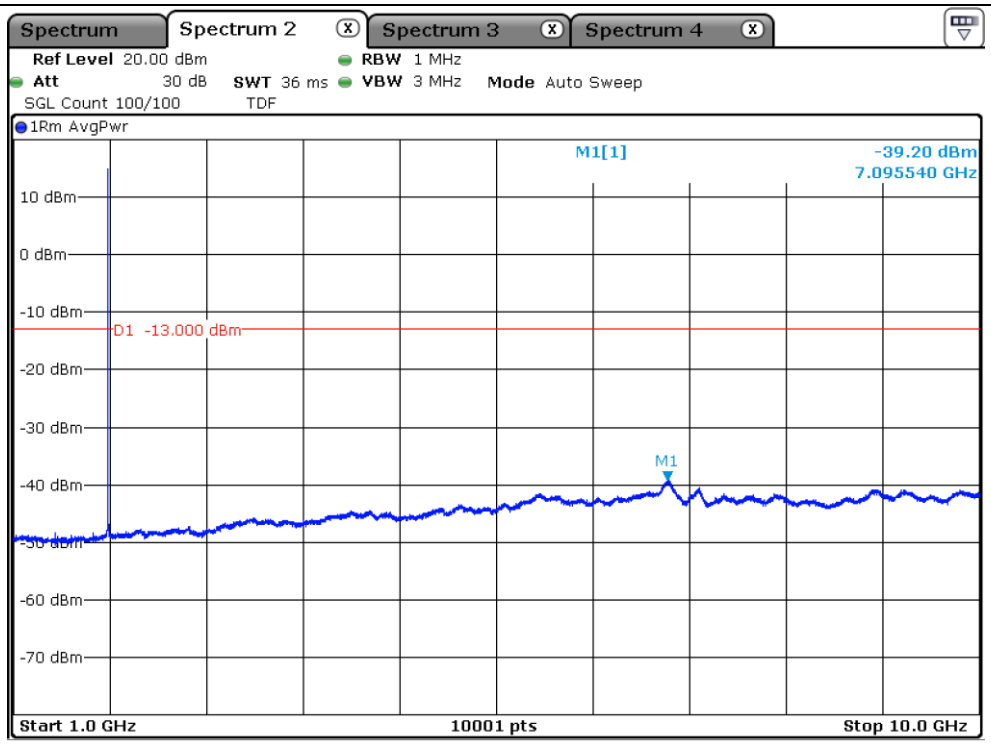
QPSK Low Channel



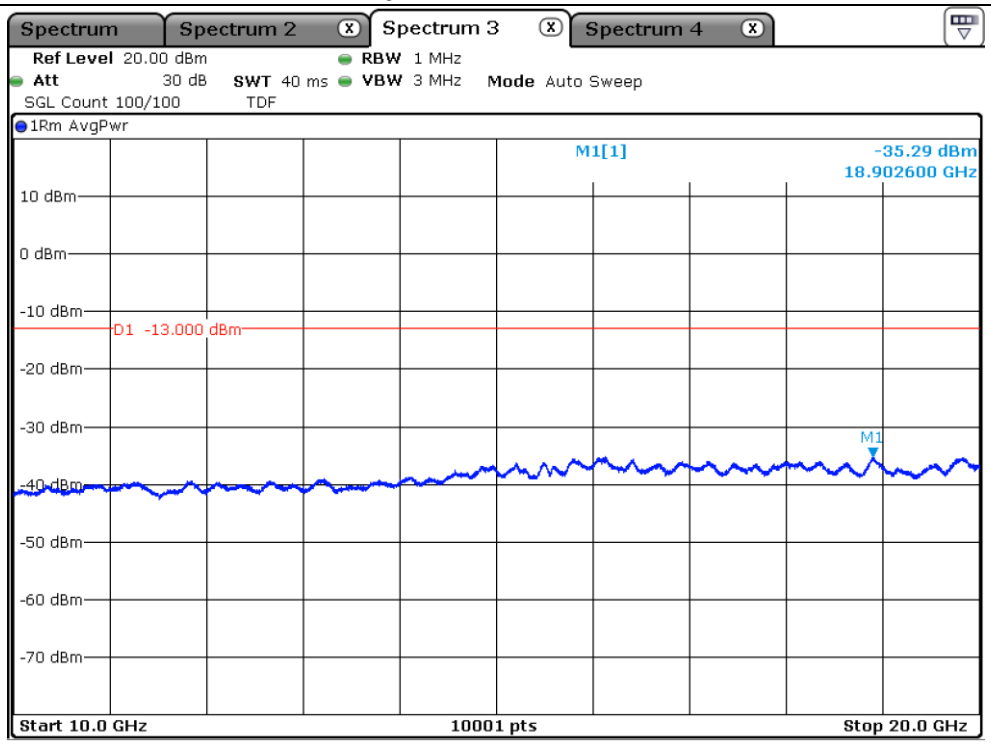
QPSK Low Channel



QPSK Middle Channel



QPSK Middle Channel



QPSK Middle Channel

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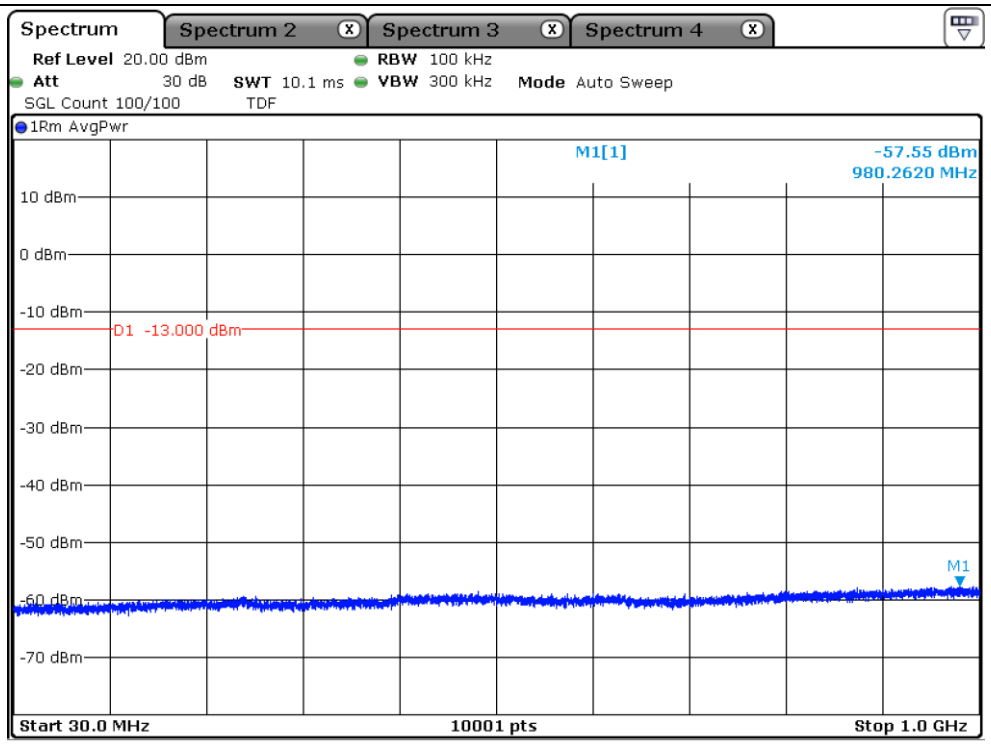
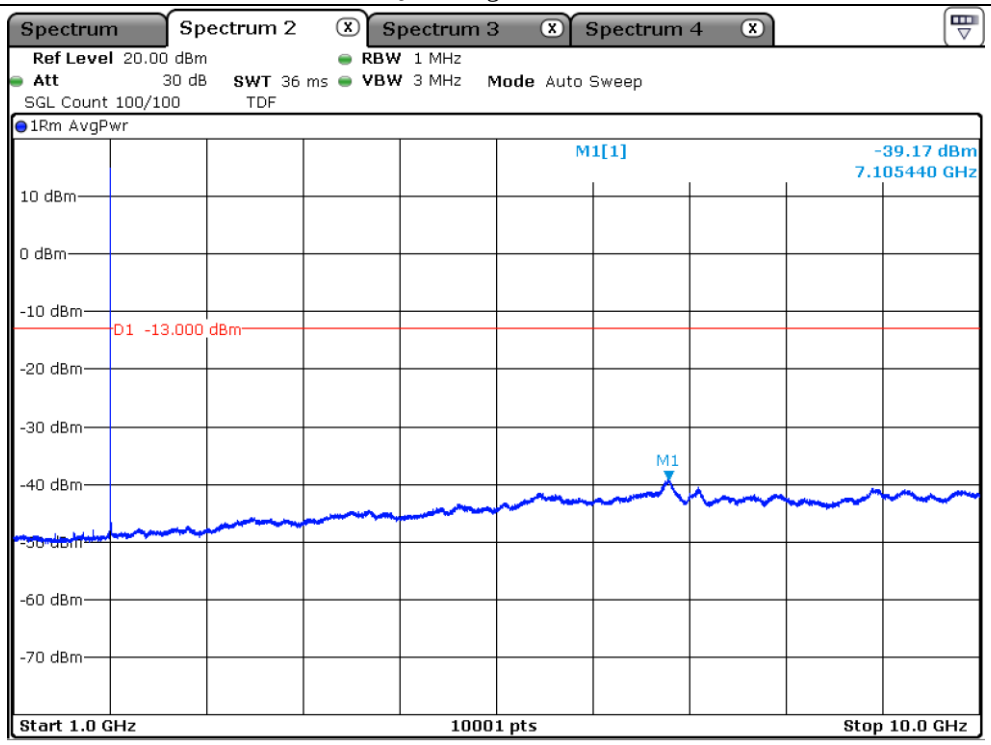


QPSK High Channel



QPSK High Channel

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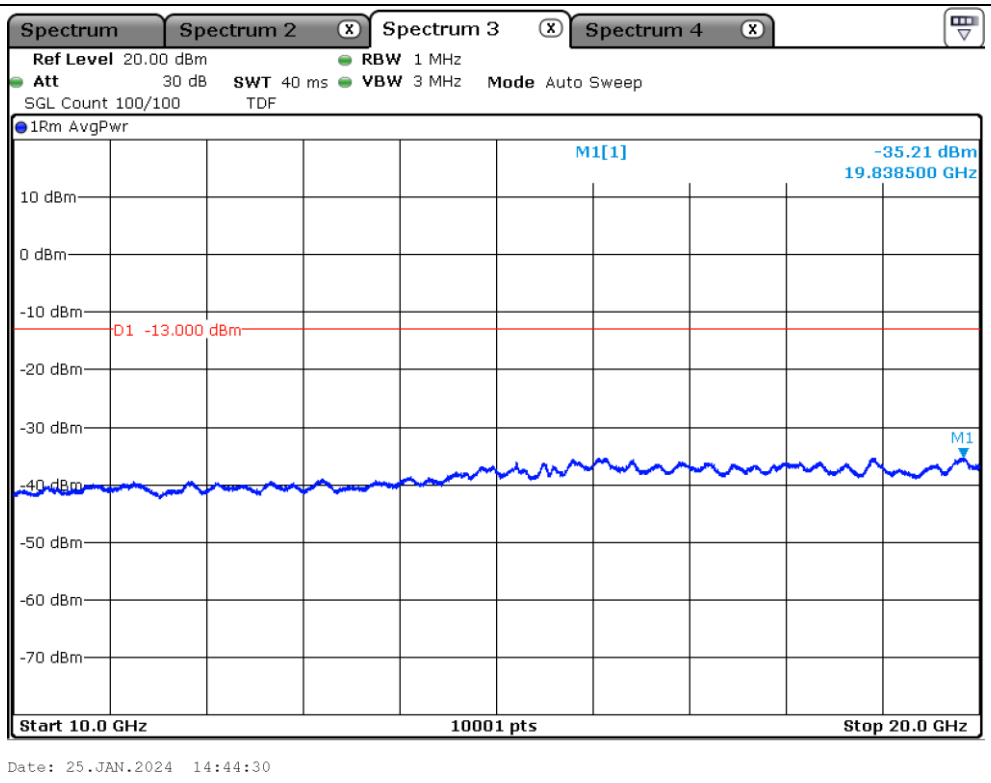
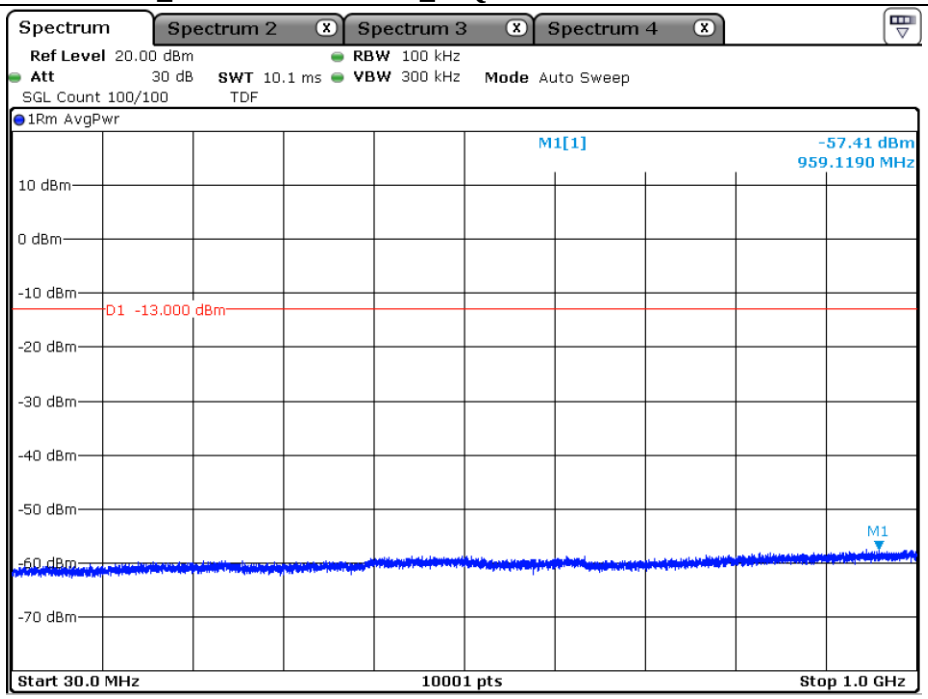
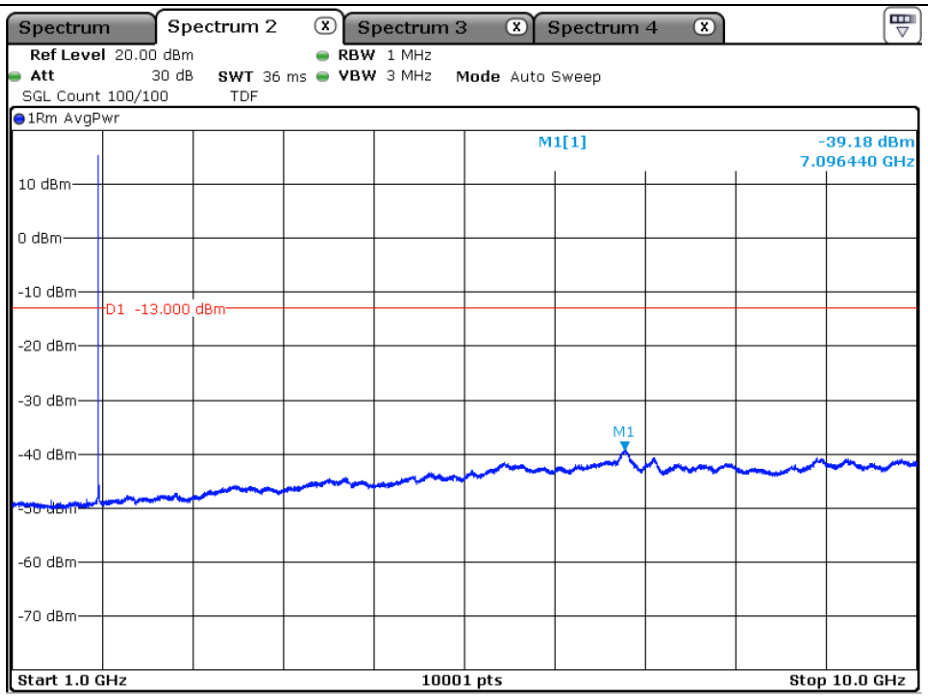


QPSK High Channel

13.5.10 Test data for Band 2_Bandwidth 15 MHz_16QAM



16QAM Low Channel



16QAM Low Channel

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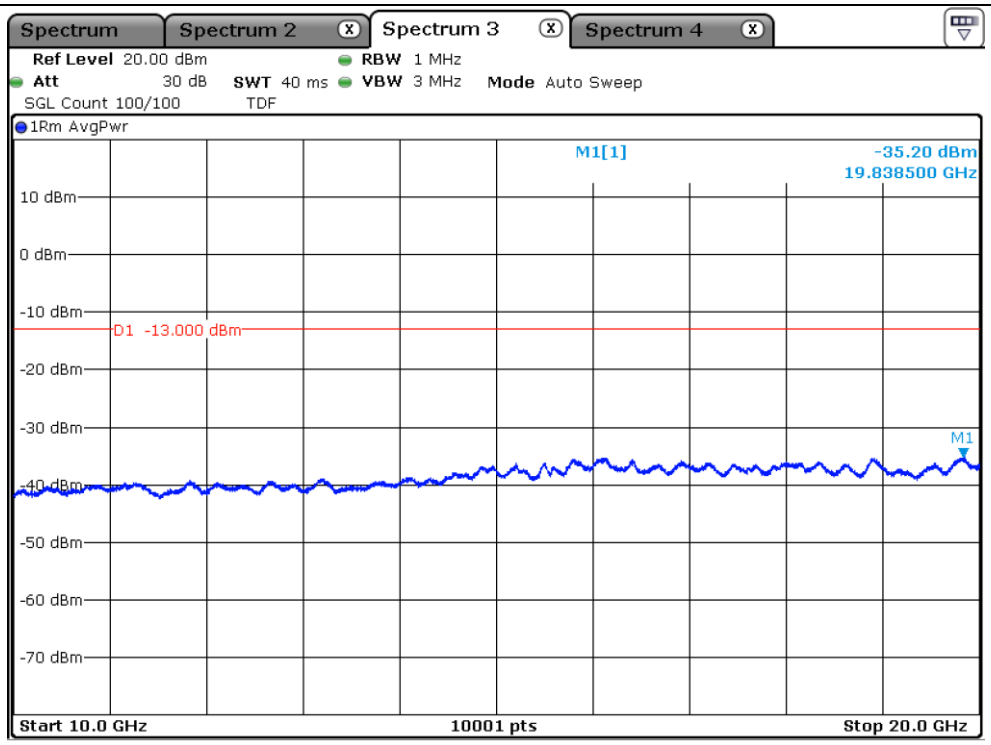
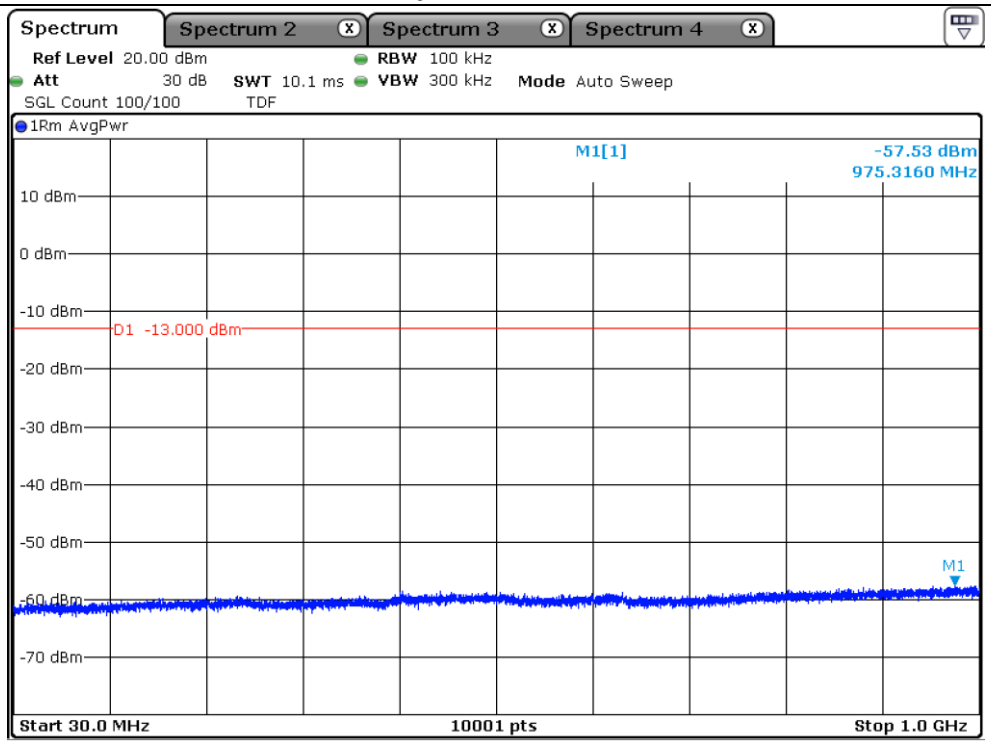
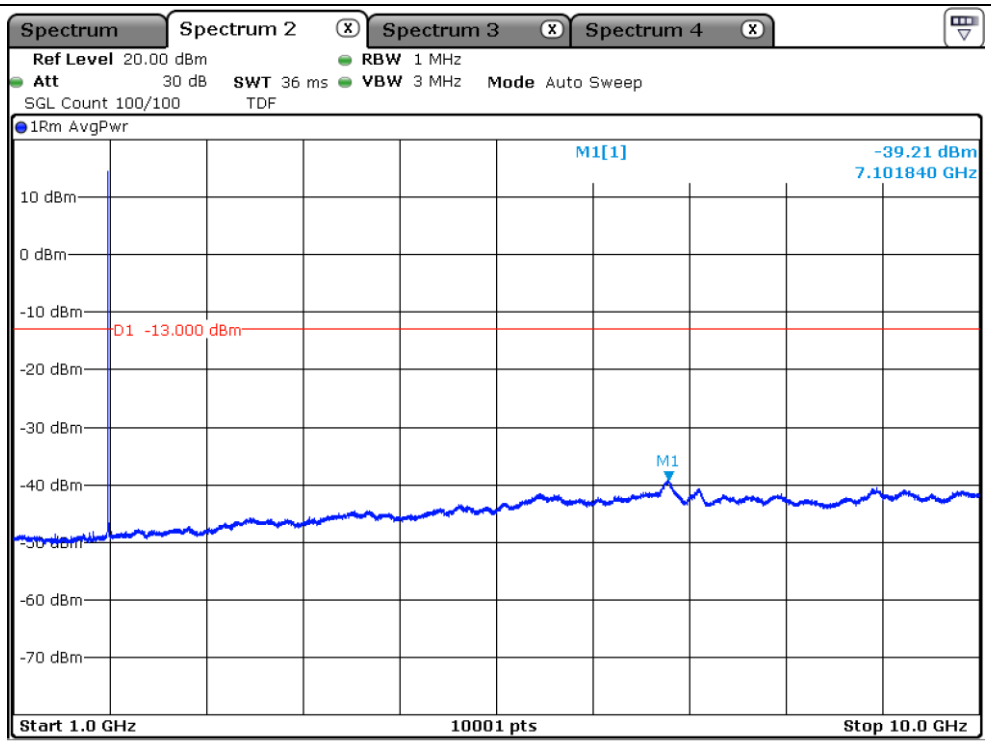


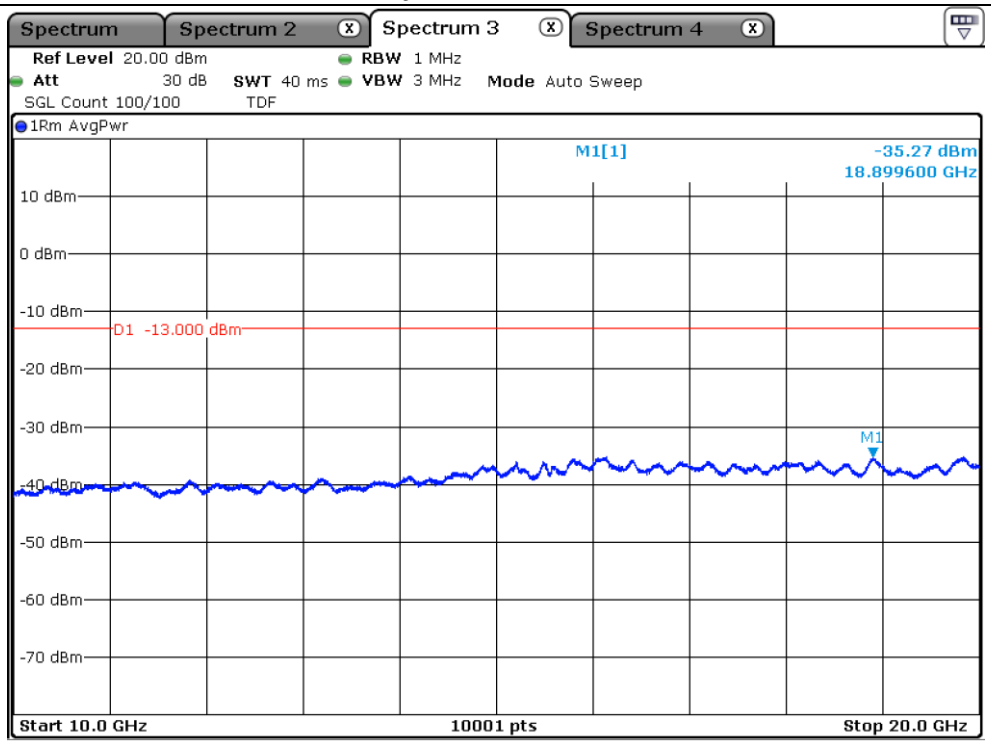
16QAM Low Channel



16QAM Middle Channel



16QAM Middle Channel



16QAM Middle Channel

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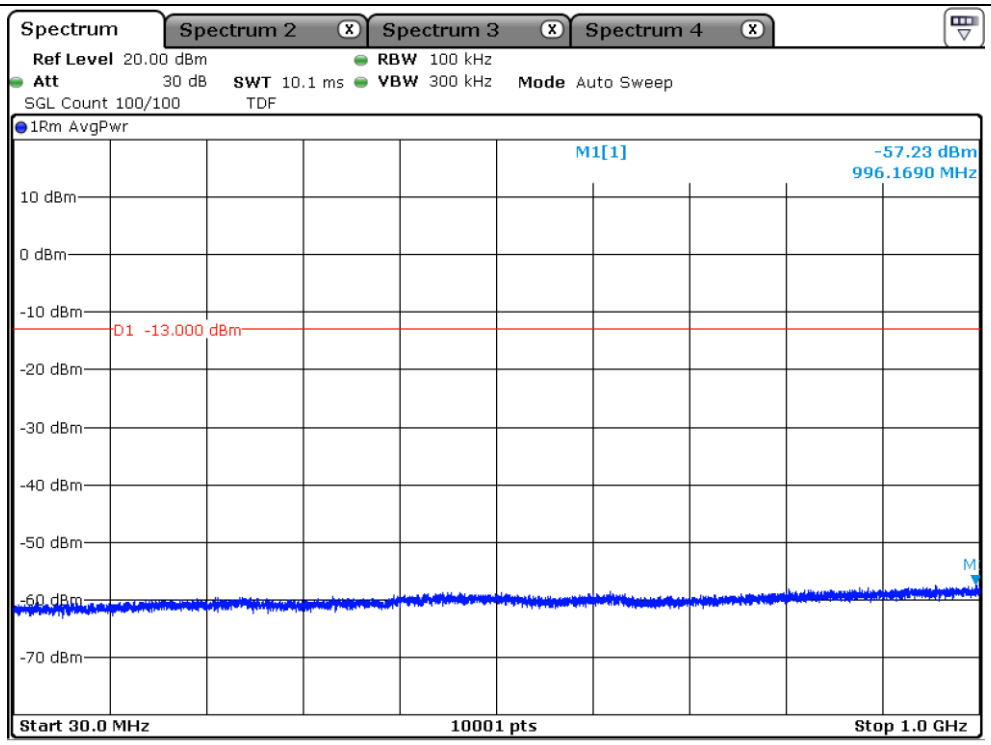
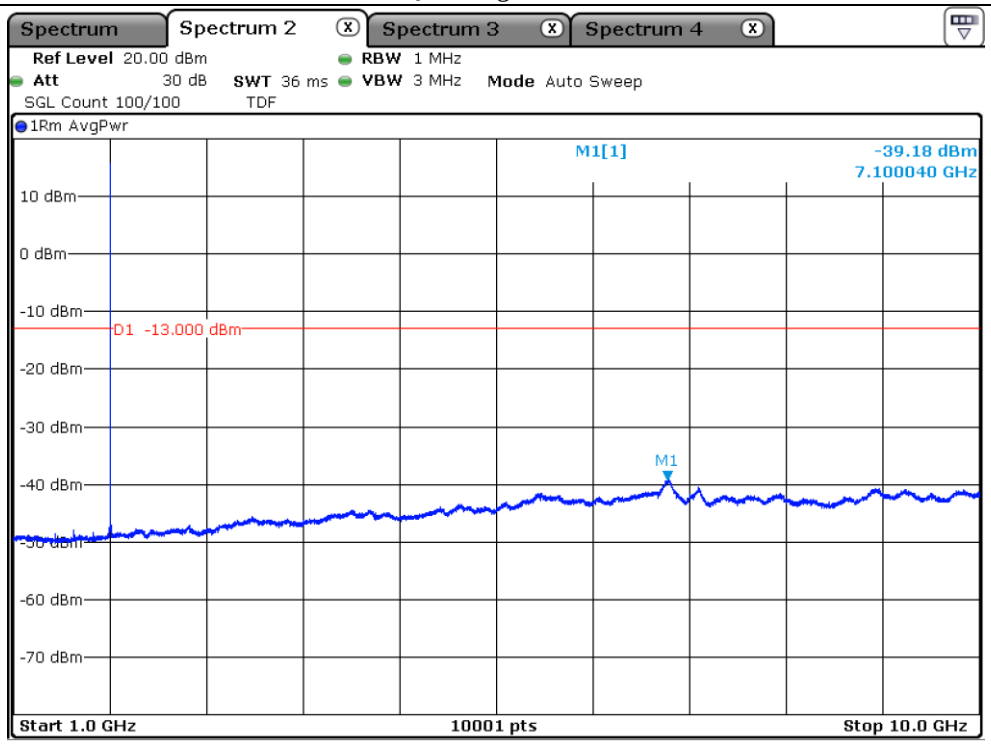


16QAM High Channel



16QAM High Channel

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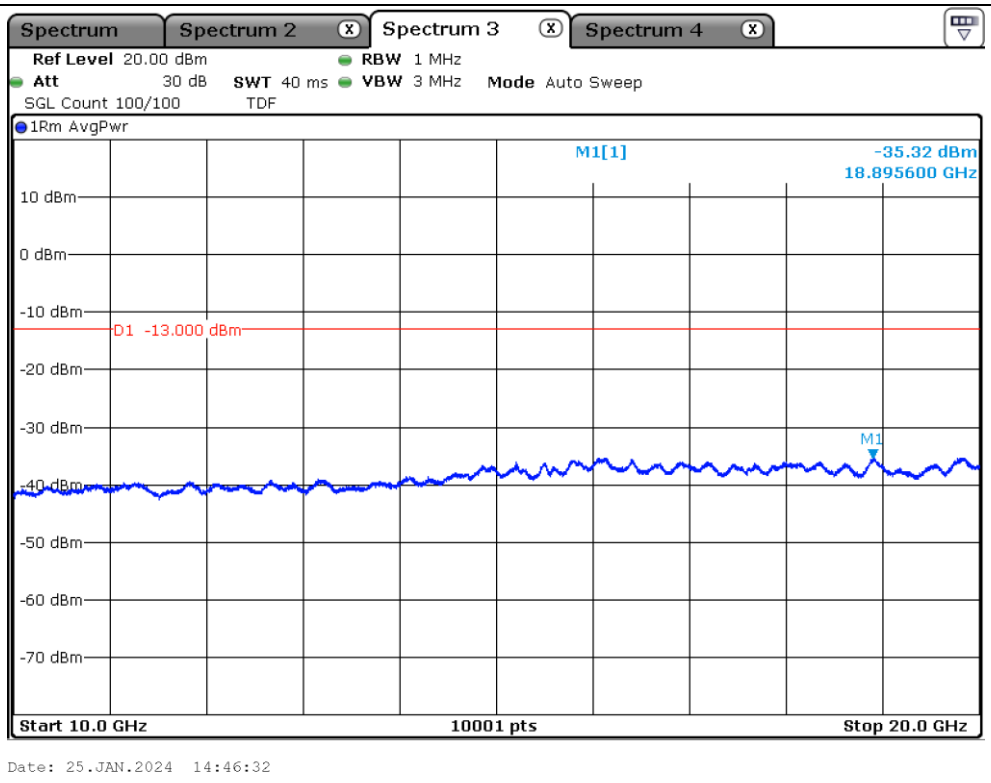

16QAM High Channel

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