

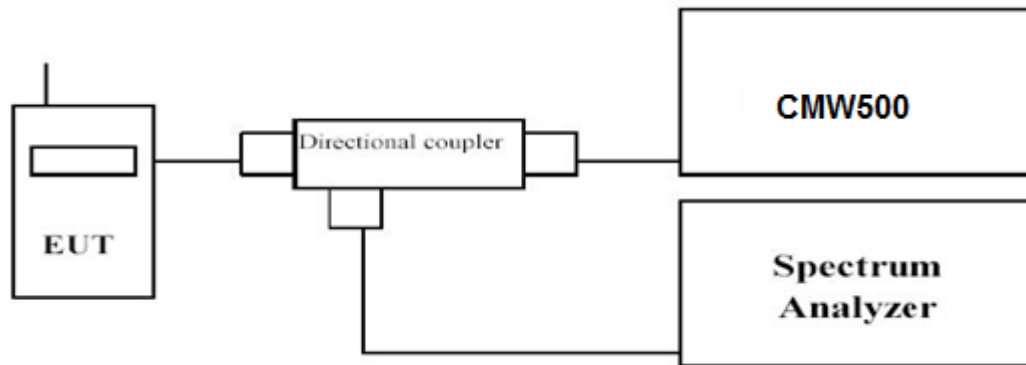


4.5 Spurious Emissions Antenna Port

LIMIT

Per FCC §24.238, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

TEST CONFIGURATION



TEST PROCEDURE

The EUT was setup according to EIA/TIA 603D.

- Place the EUT on a bench and set it in transmitting mode.
- Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMW500 by a Directional Couple.
- EUT Communicate with CMW500, then select a channel for testing.
- Add a correction factor to the display of spectrum, and then test.
- The resolution bandwidth of the spectrum analyzer was set sufficient scans were taken to show the out of band Emission if any up to 10^{th} harmonic.
- Please refer to following tables for test antenna conducted emissions.

Working Frequency	Sub range (GHz)	RBW	VBW	Sweep time (s)
LTE FDD Band 5	0.00015~0.03	10 KHz	30 KHz	Auto
	0.03~1	100 KHz	300 KHz	Auto
	1~3	1 MHz	3 MHz	Auto
	3~10	1 MHz	3 MHz	Auto

TEST RESULTS

Remark:

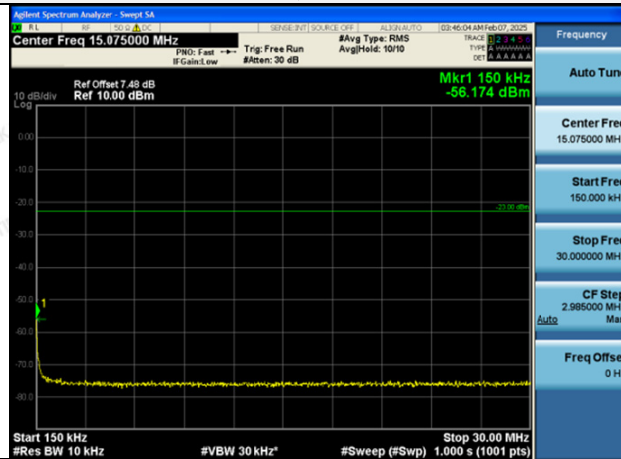
- We were tested all RB Configuration refer 3GPP TS136 521 for each Channel Bandwidth of LTE FDD Band 5; recorded worst case at the QPSK Mode for each Channel Bandwidth of LTE FDD Band 5.



LTE FDD Band 5-1.4MHz Channel Bandwidth

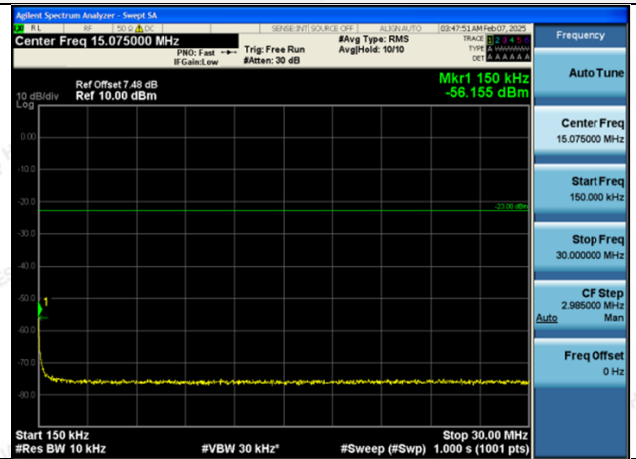
Low Channel

QPSK

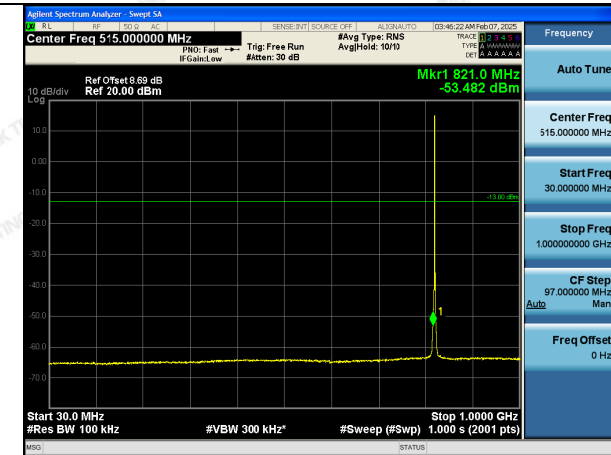


0.15MHz~30MHz

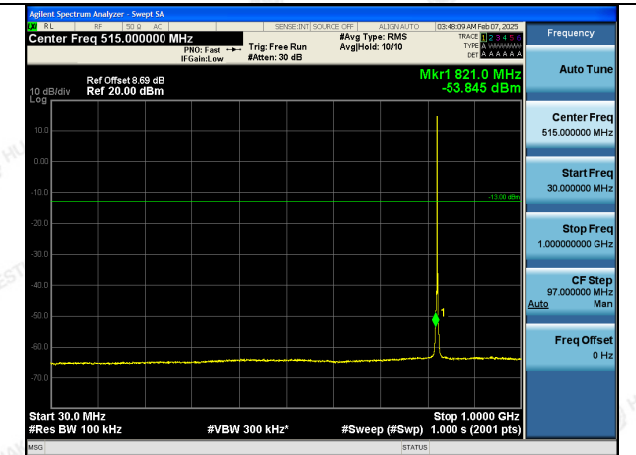
16QAM



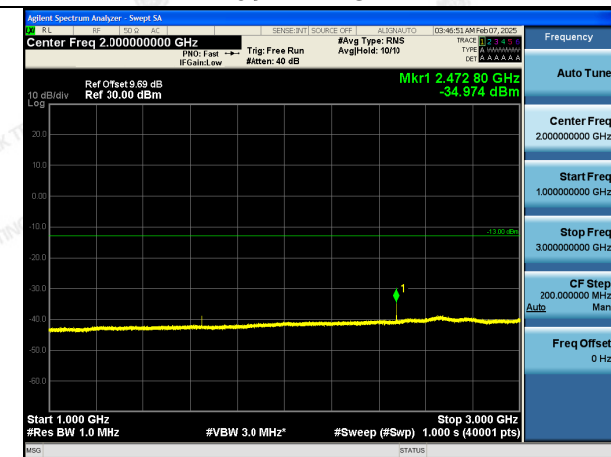
0.15MHz~30MHz



30MHz~1GHz



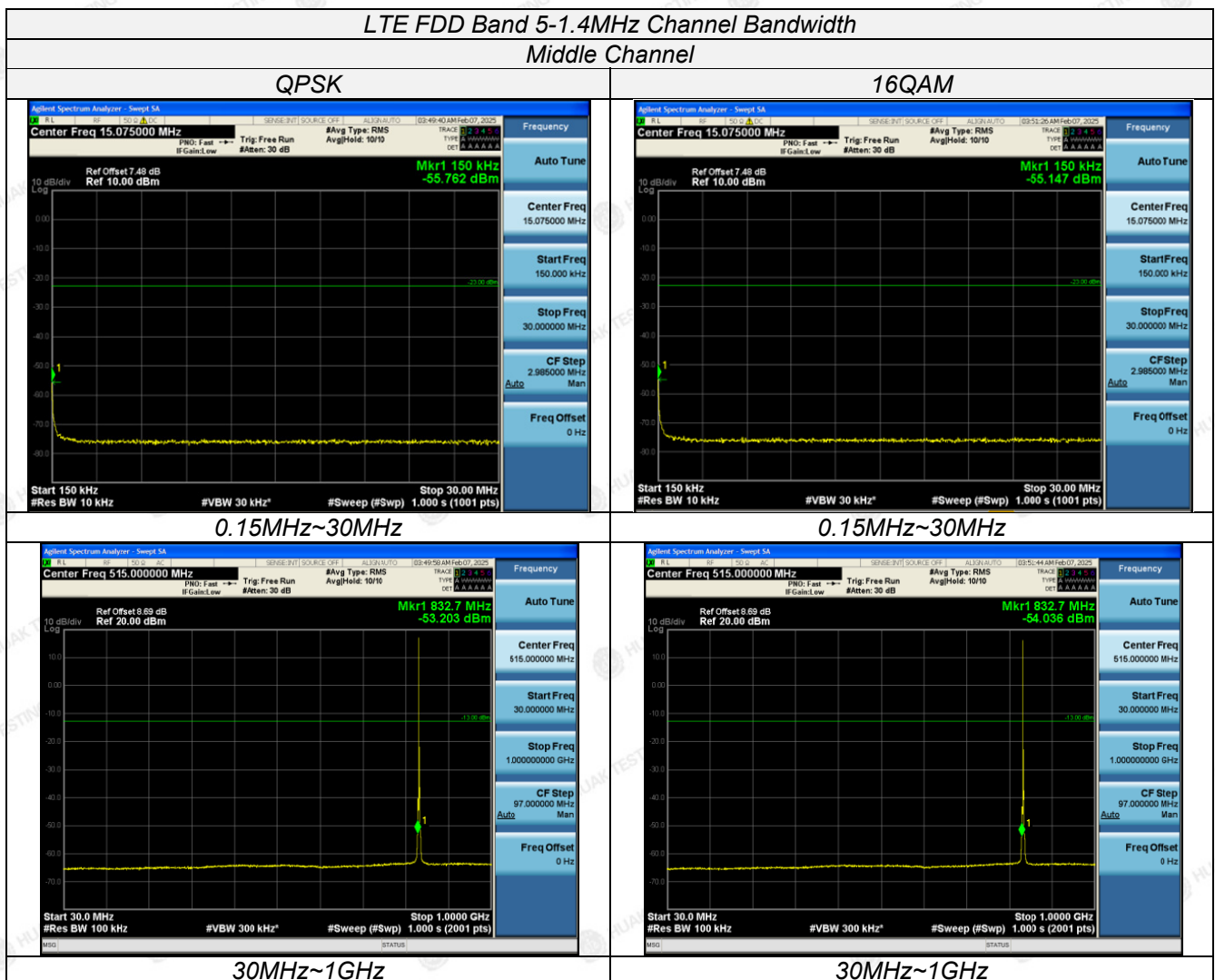
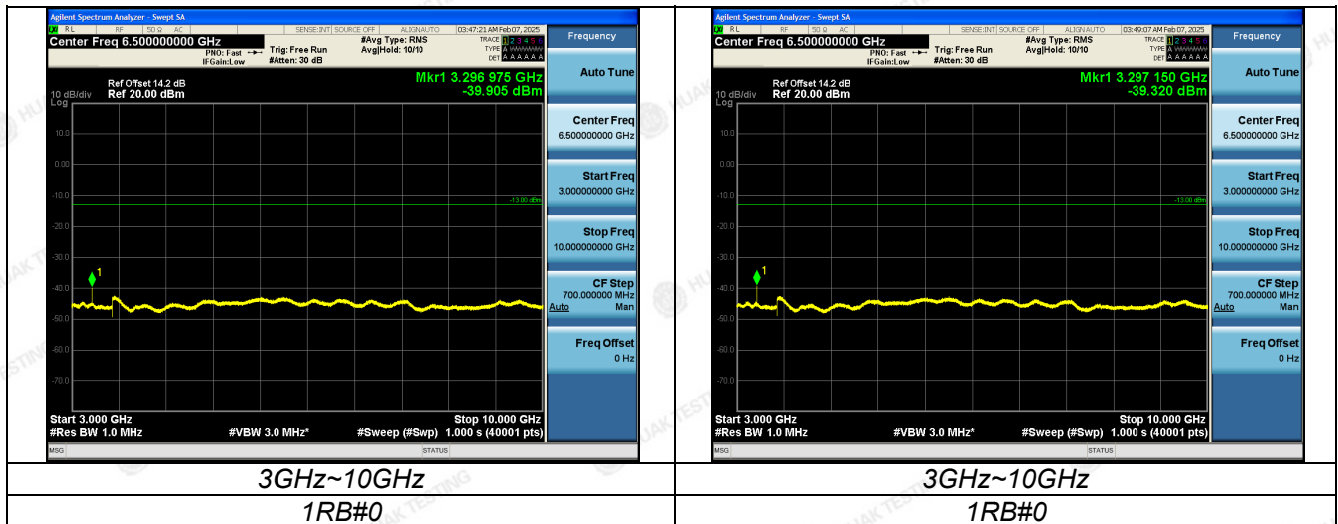
30MHz~1GHz

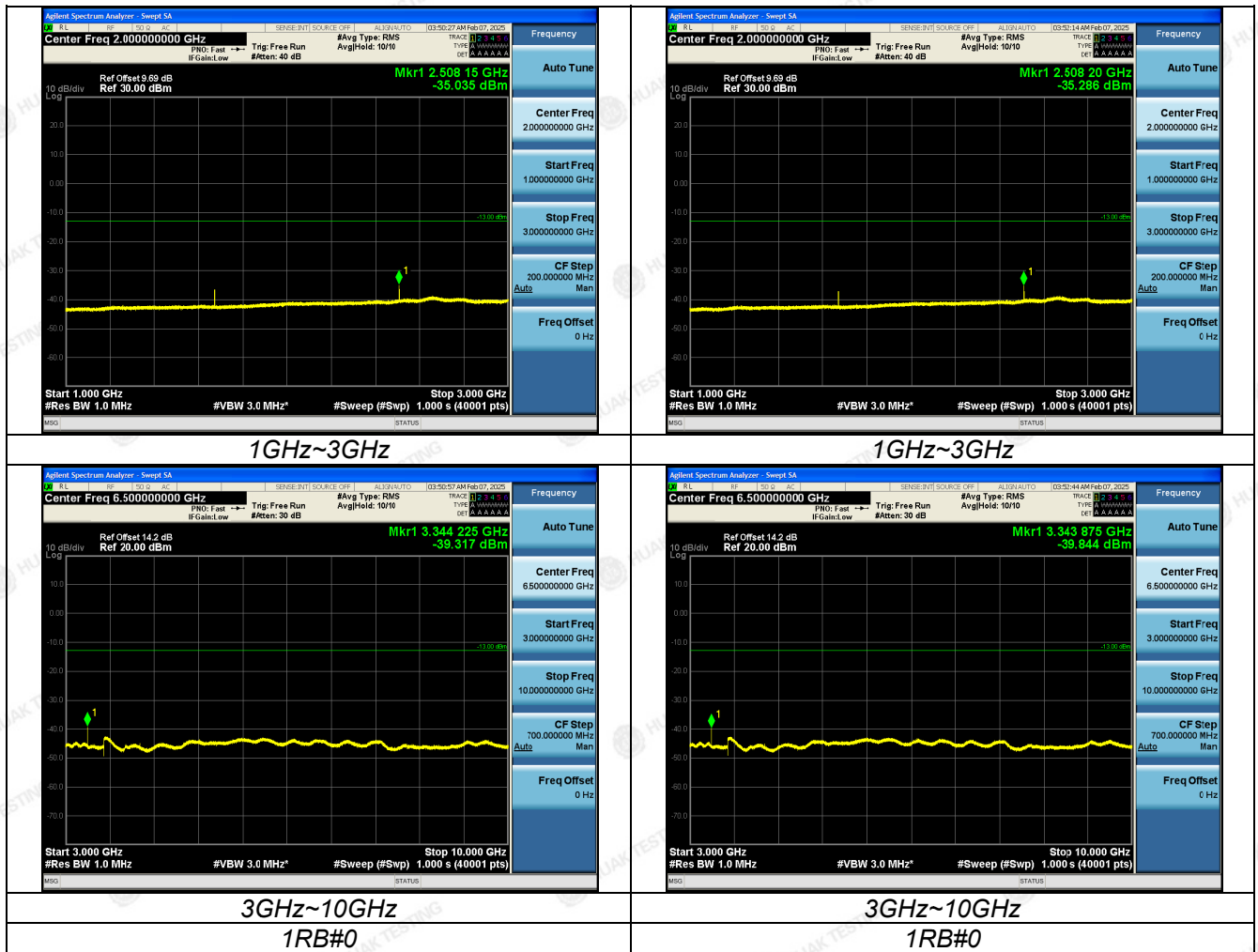


1GHz~3GHz



1GHz~3GHz

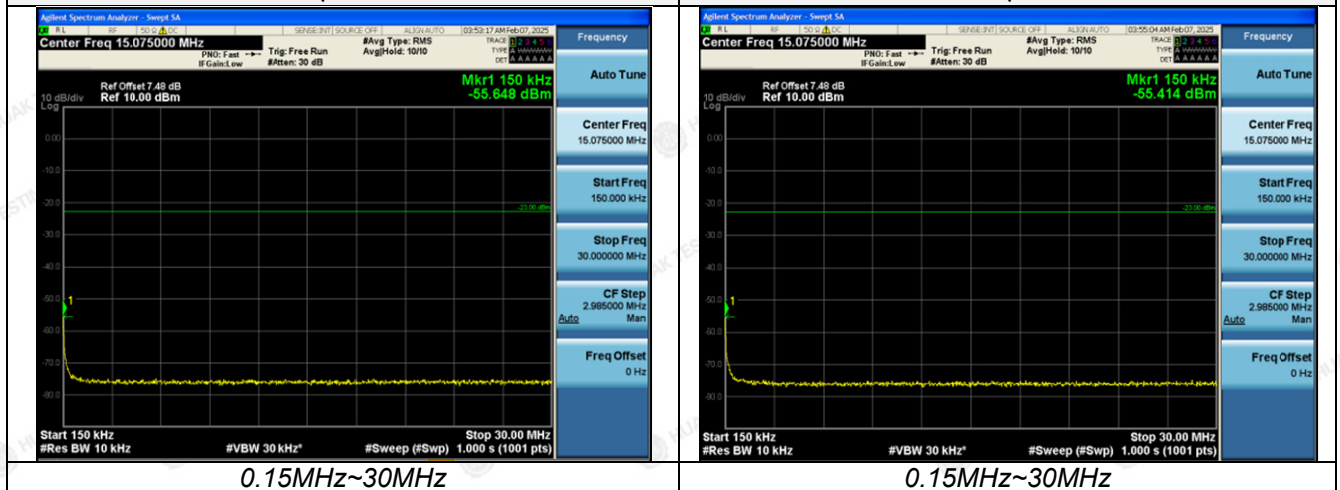


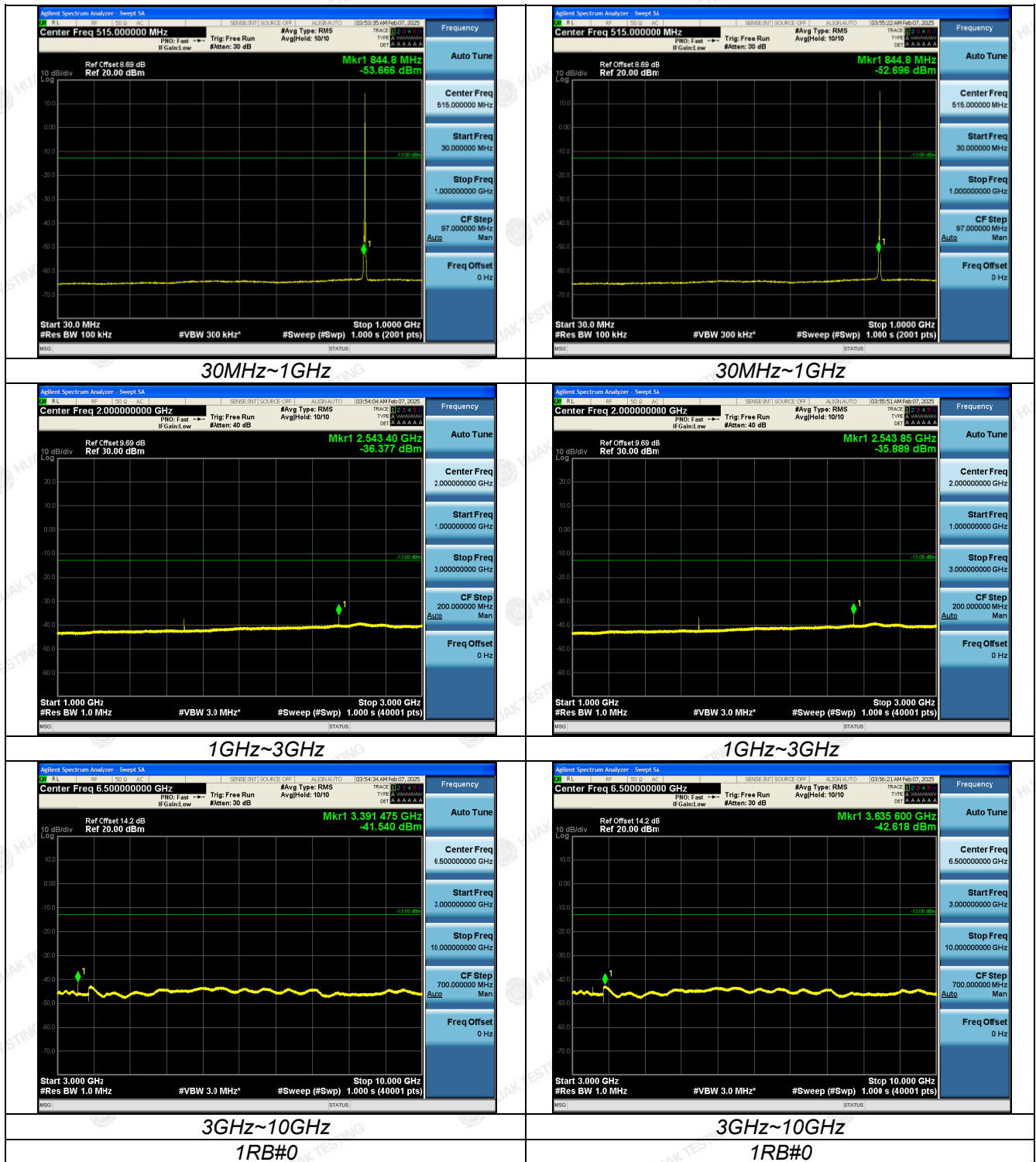


LTE FDD Band 5-1.4MHz Channel Bandwidth
High Channel

QPSK

16QAM





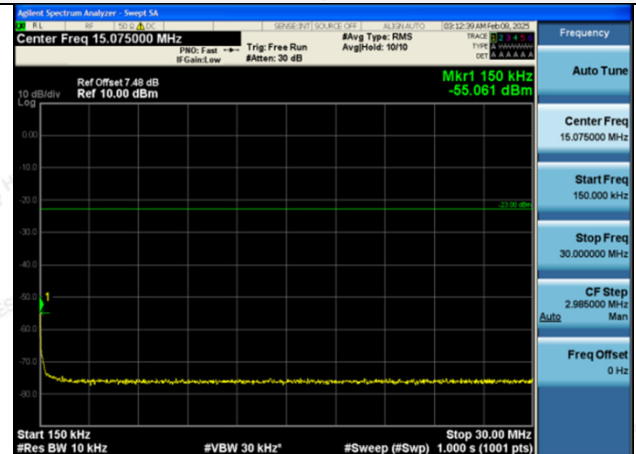
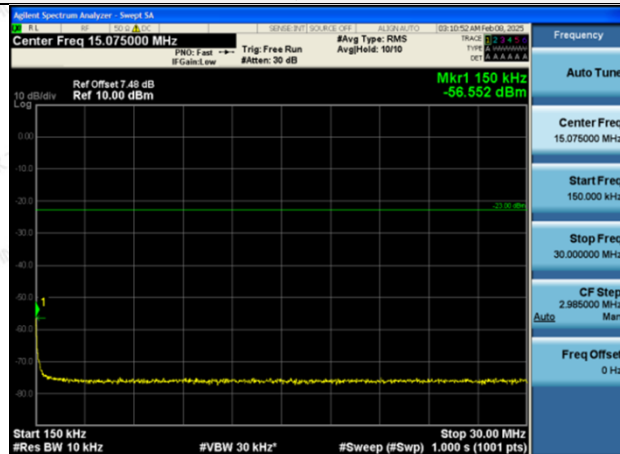


LTE FDD Band 5-3MHz Channel Bandwidth

Low Channel

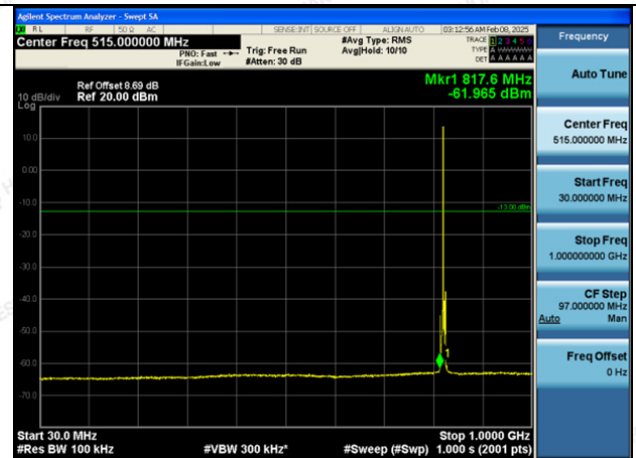
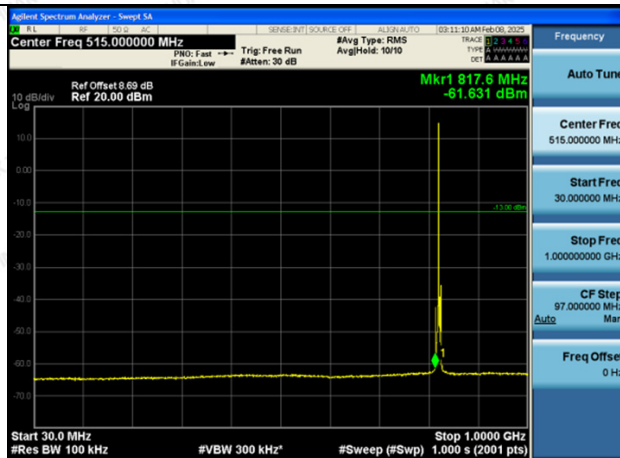
QPSK

16QAM



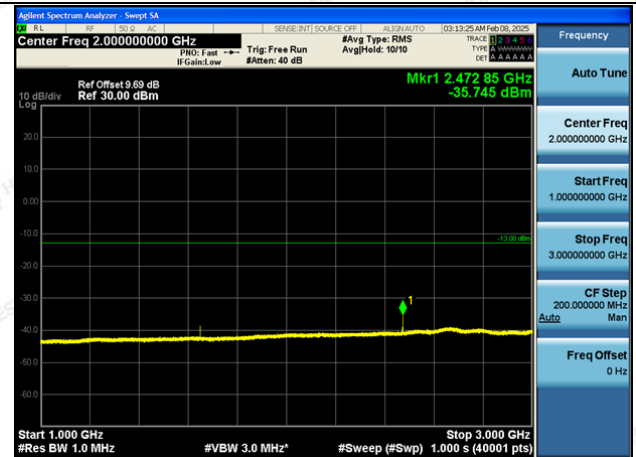
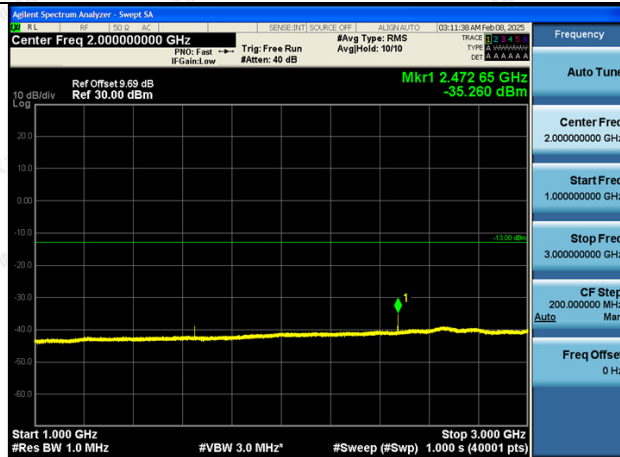
0.15MHz~30MHz

0.15MHz~30MHz



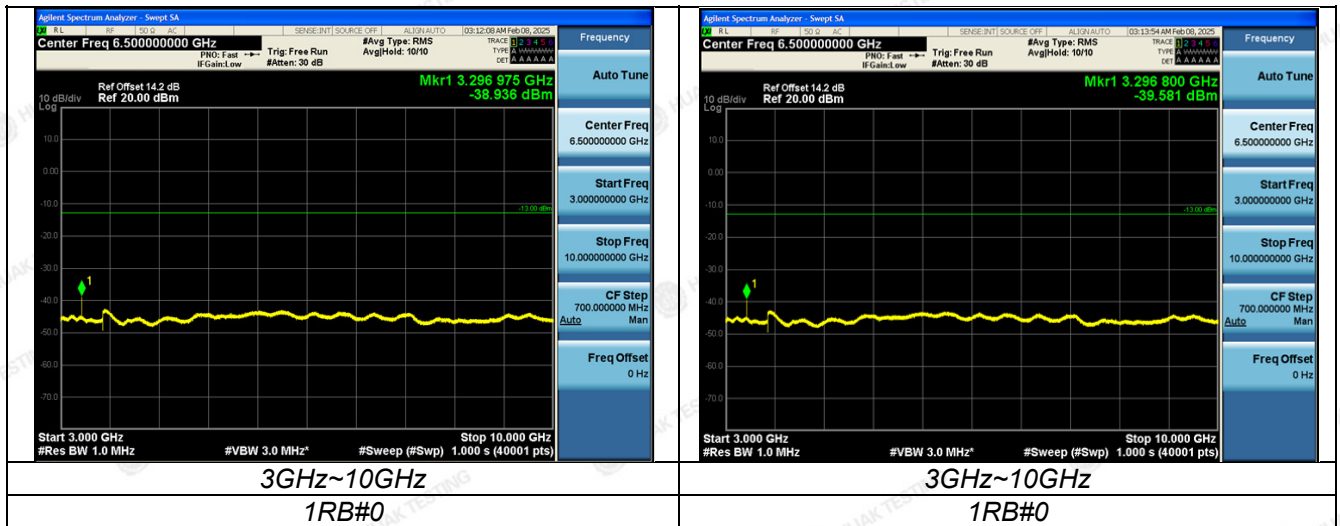
30MHz~1GHz

30MHz~1GHz



1GHz~3GHz

1GHz~3GHz



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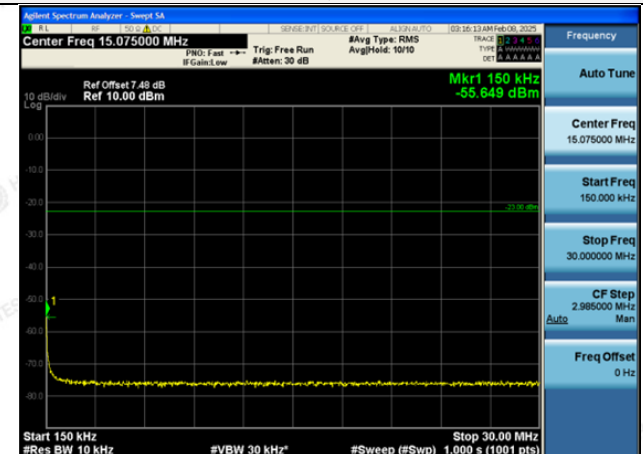
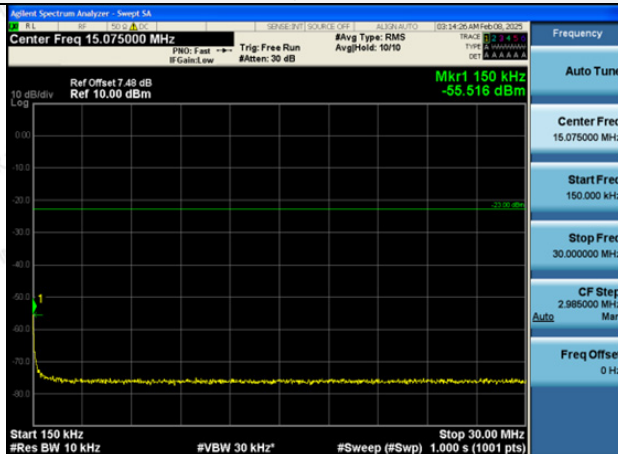


LTE FDD Band 5-3MHz Channel Bandwidth

Middle Channel

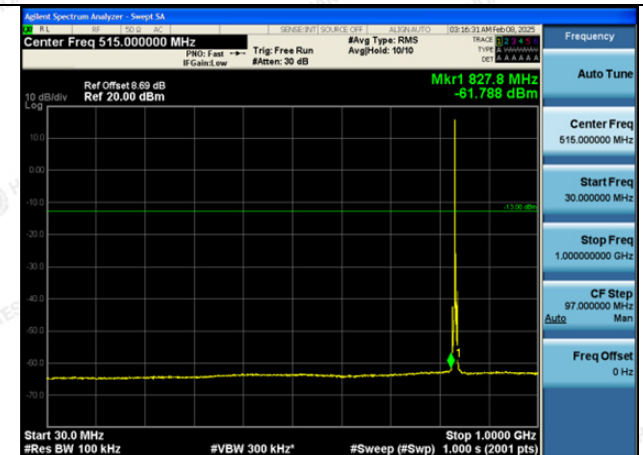
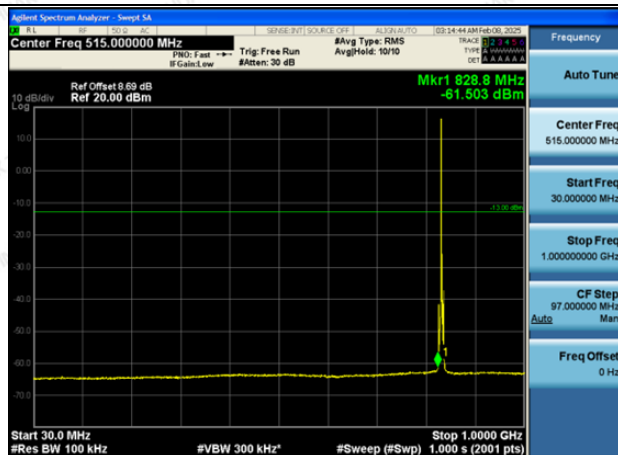
QPSK

16QAM



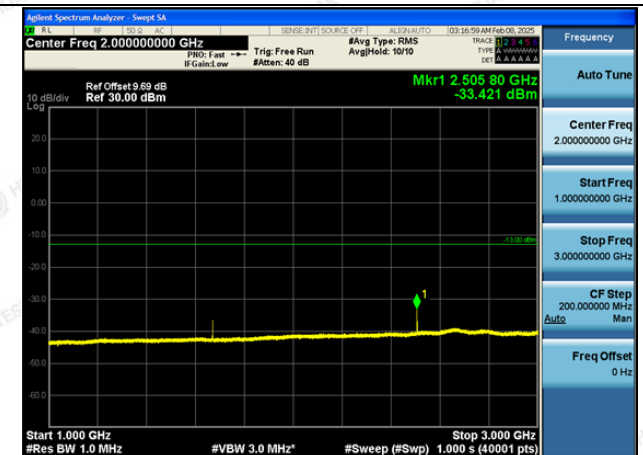
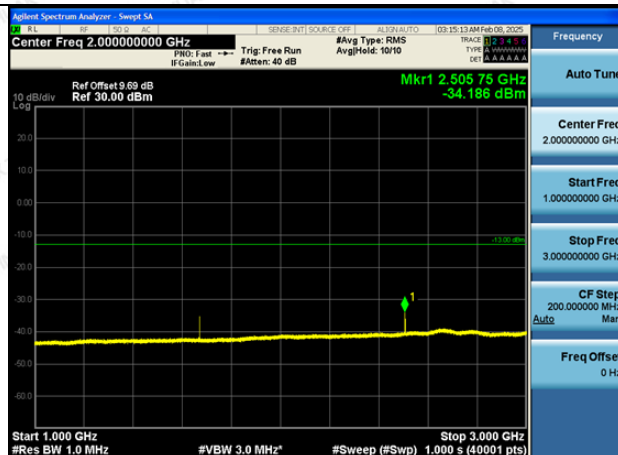
0.15MHz~30MHz

0.15MHz~30MHz



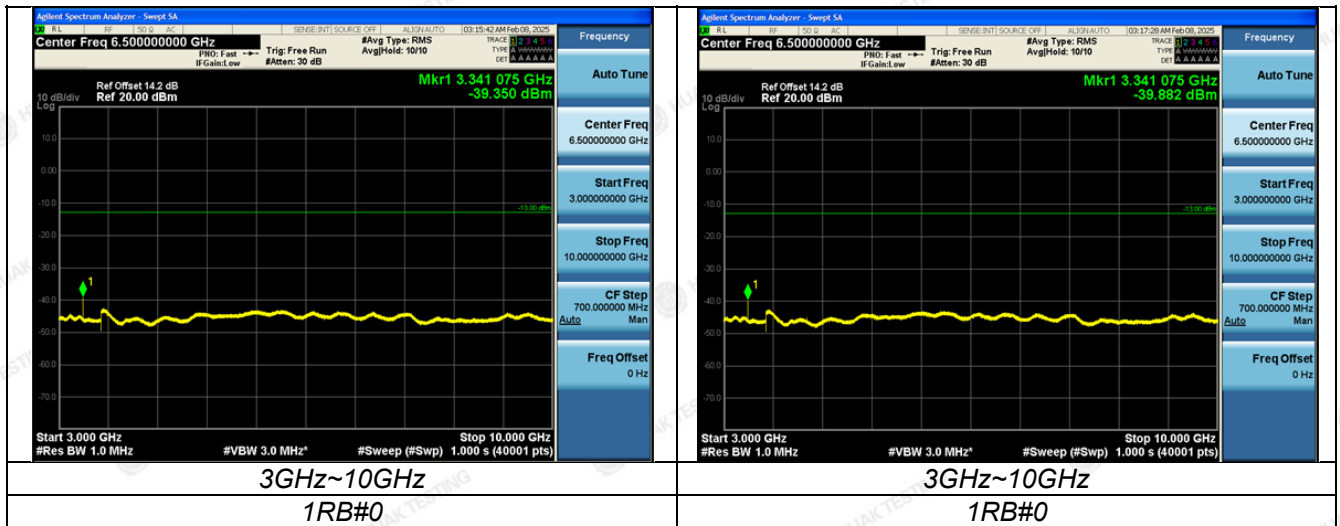
30MHz~1GHz

30MHz~1GHz



1GHz~3GHz

1GHz~3GHz



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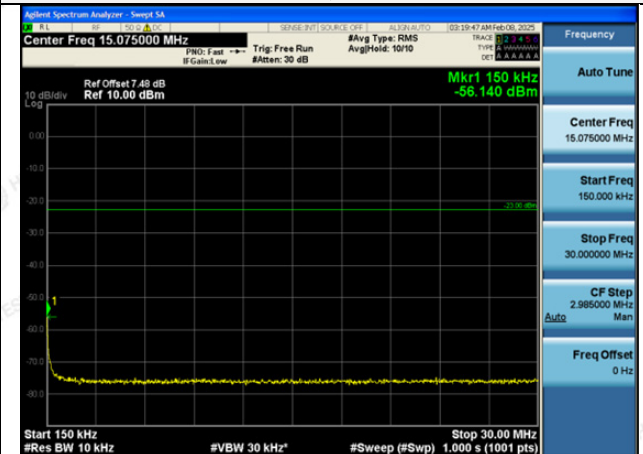
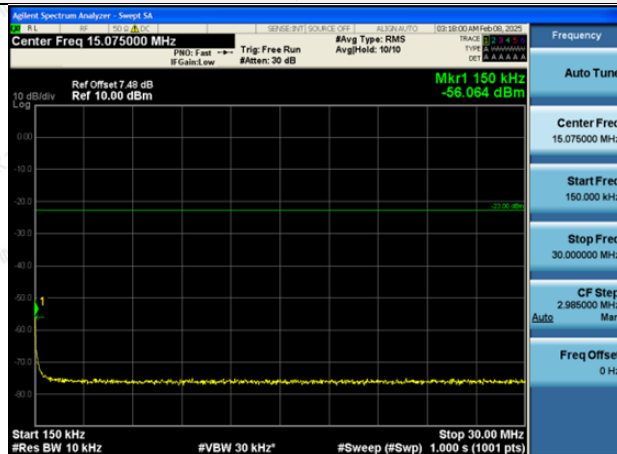


LTE FDD Band 5-3MHz Channel Bandwidth

High Channel

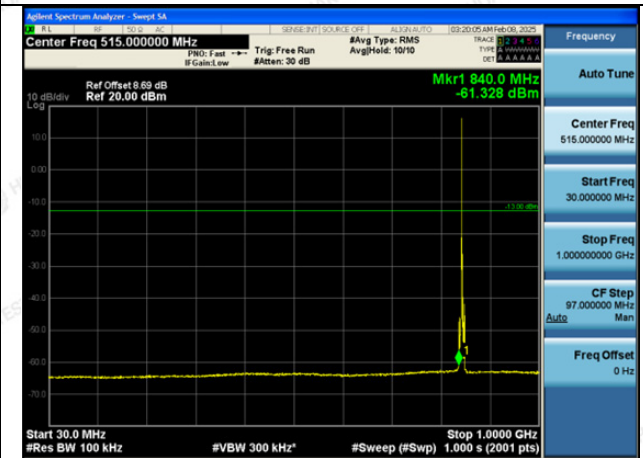
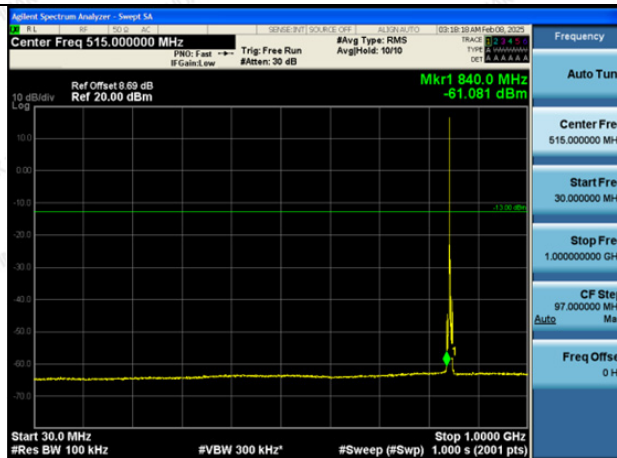
QPSK

16QAM



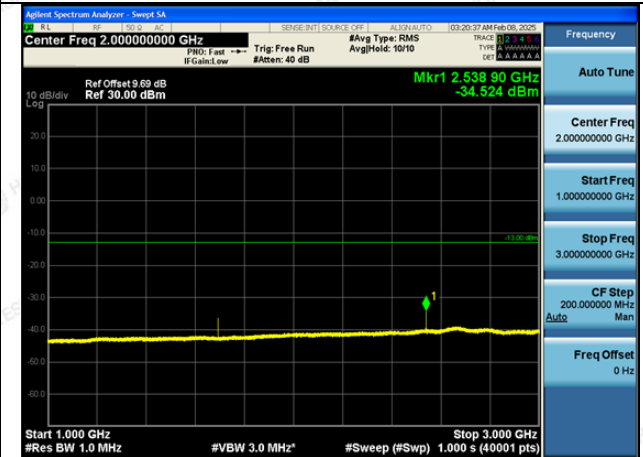
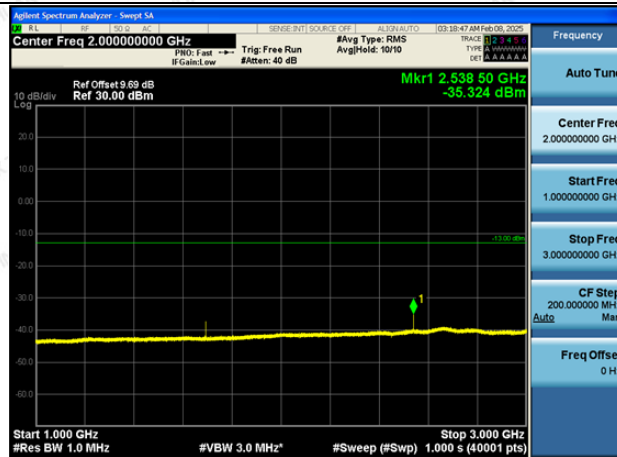
0.15MHz~30MHz

0.15MHz~30MHz



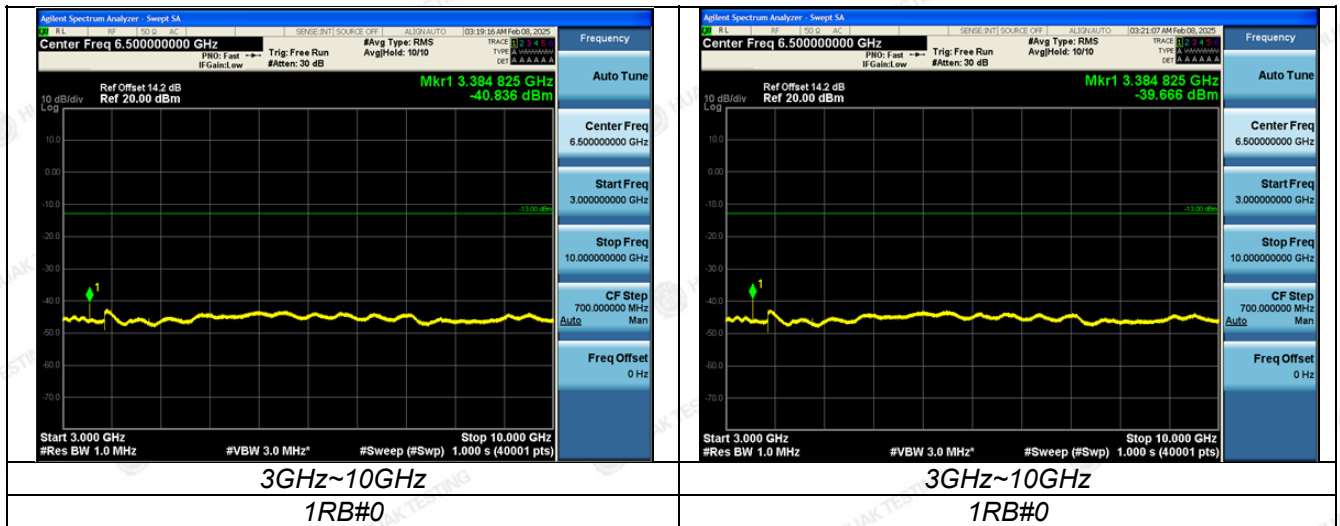
30MHz~1GHz

30MHz~1GHz



1GHz~3GHz

1GHz~3GHz



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