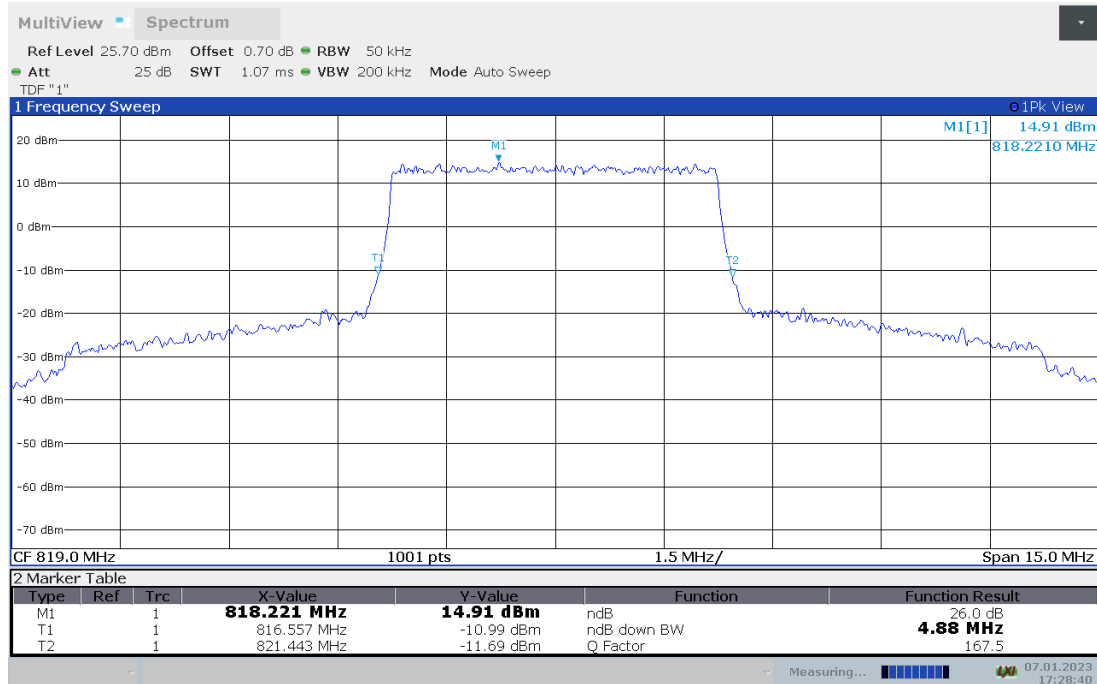


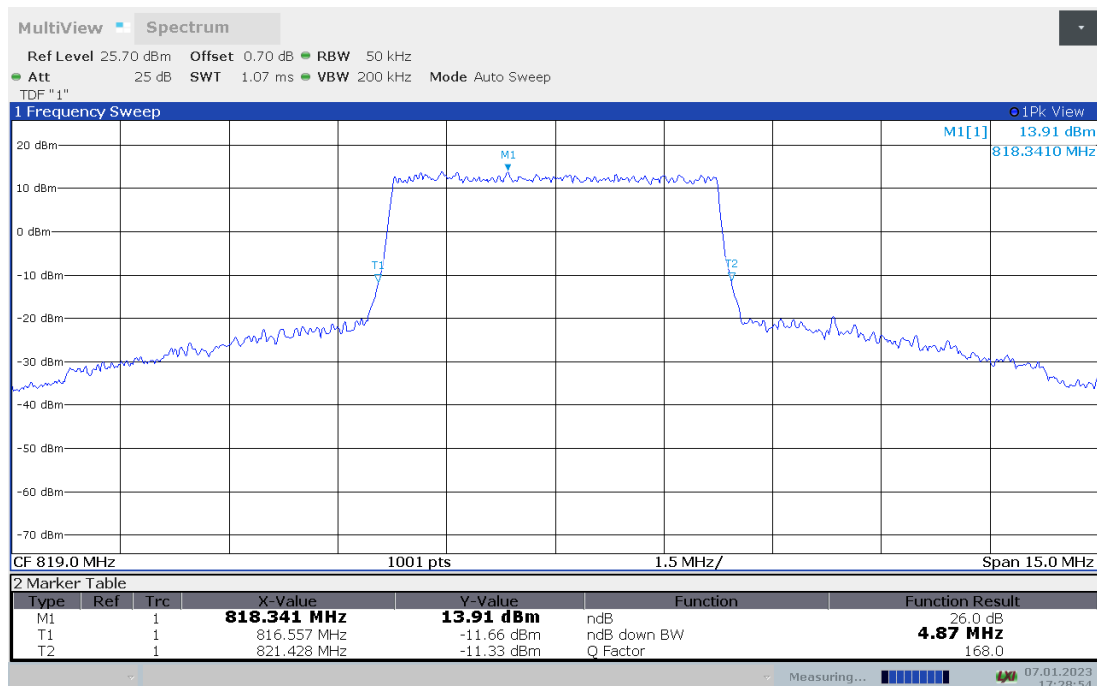
LTE band (814MHz-824MHz),5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
819	4.885	4.870

LTE band 26 , 5MHz Bandwidth,QPSK (-26dBc BW)



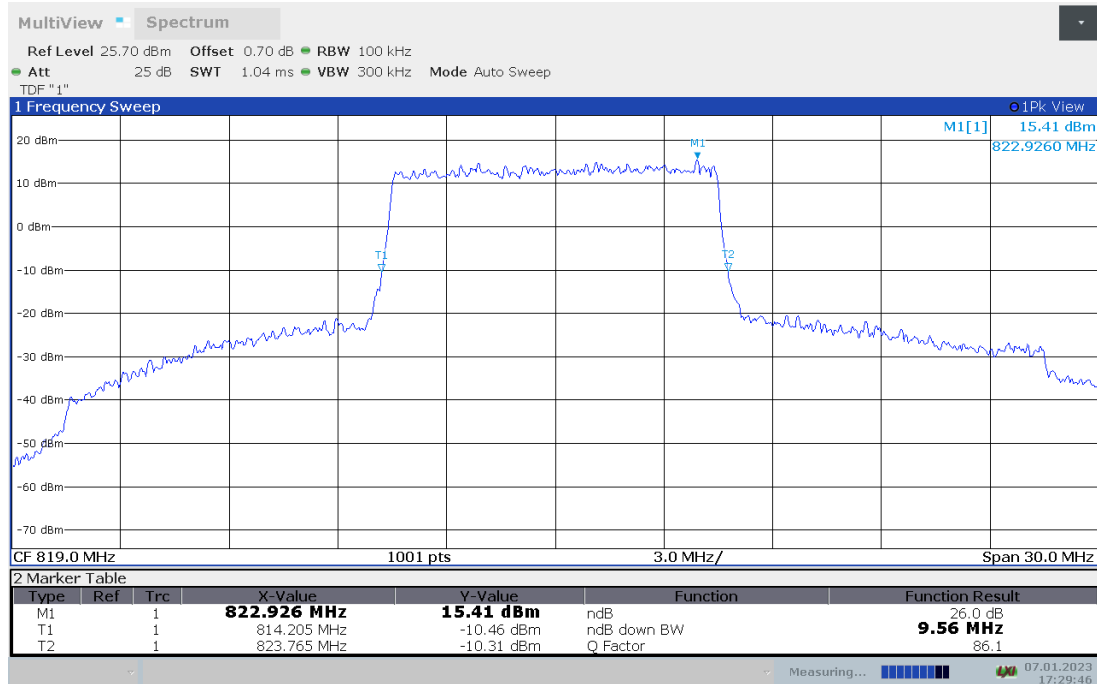
LTE band 26 , 5MHz Bandwidth,16QAM (-26dBc BW)



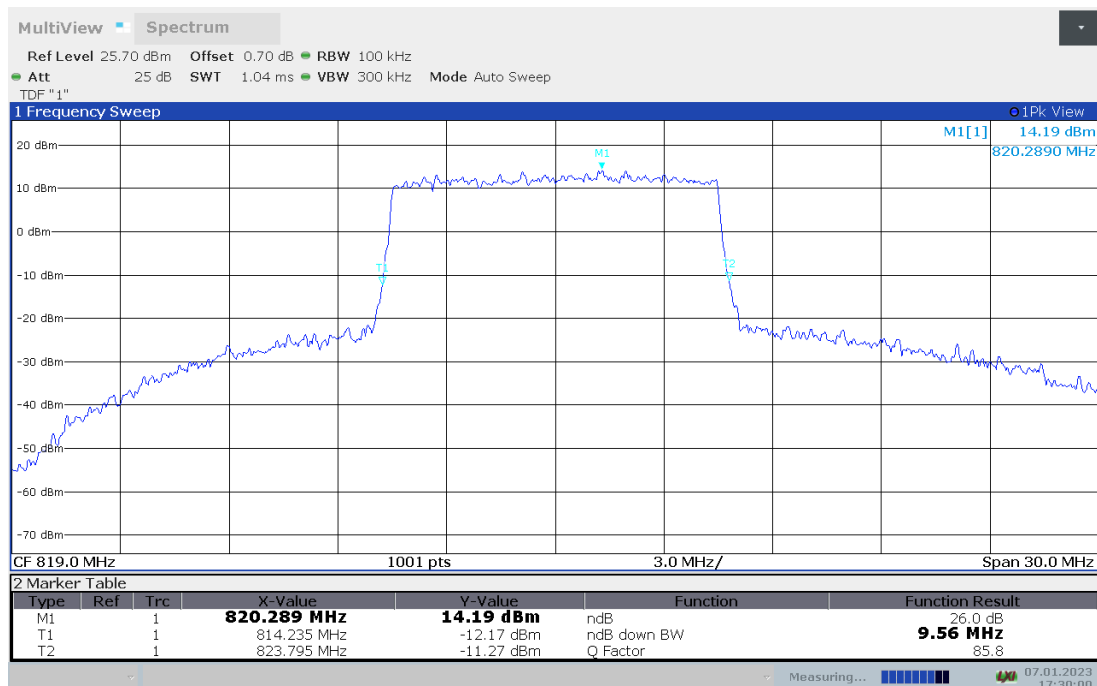
LTE band (814MHz-824MHz),10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
819	9.560	9.560

LTE band 26 , 10MHz Bandwidth,QPSK (-26dBc BW)



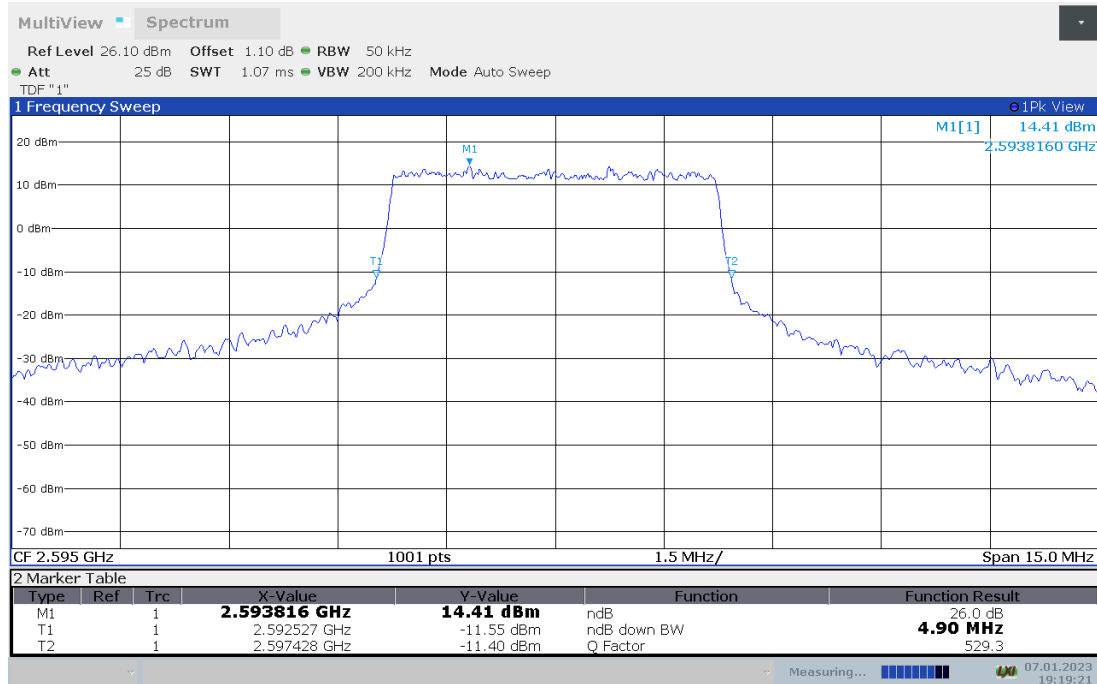
LTE band 26 , 10MHz Bandwidth,16QAM (-26dBc BW)



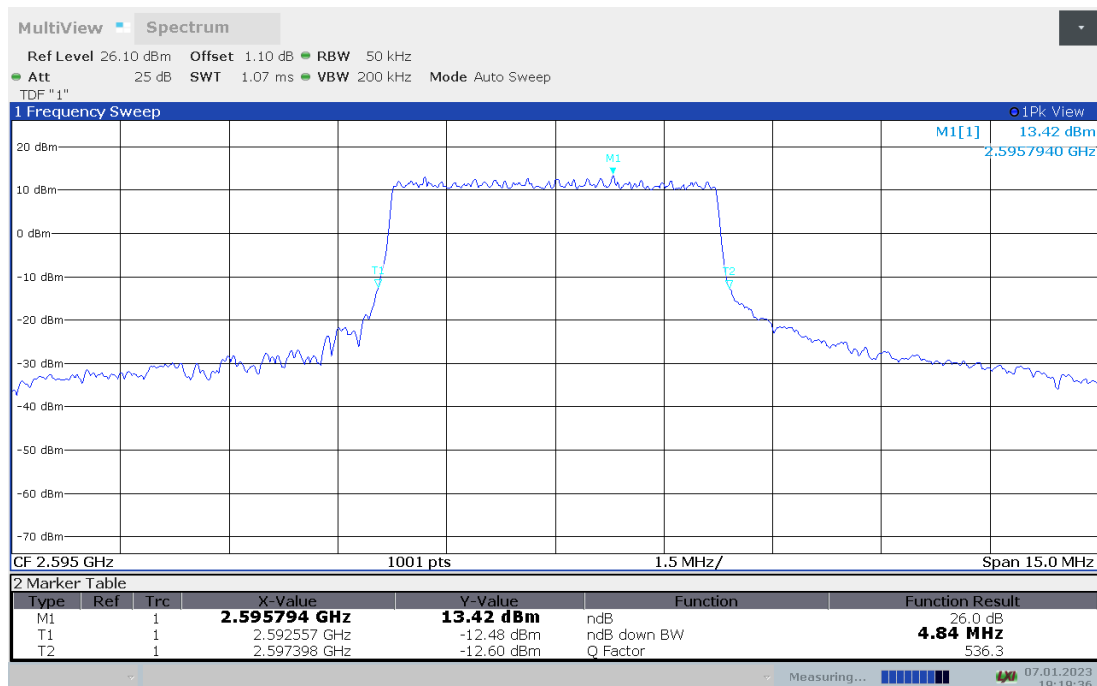
LTE band 38,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	4.900	4.840

LTE band 38 , 5MHz Bandwidth,QPSK (-26dBc BW)



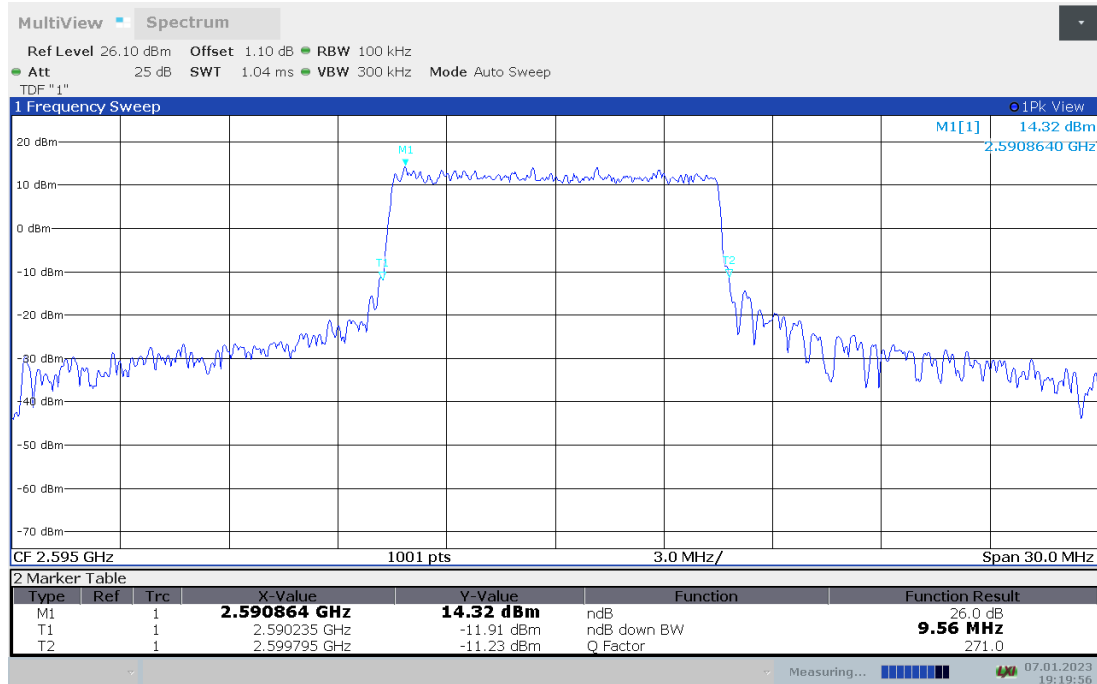
LTE band 38 , 5MHz Bandwidth,16QAM (-26dBc BW)



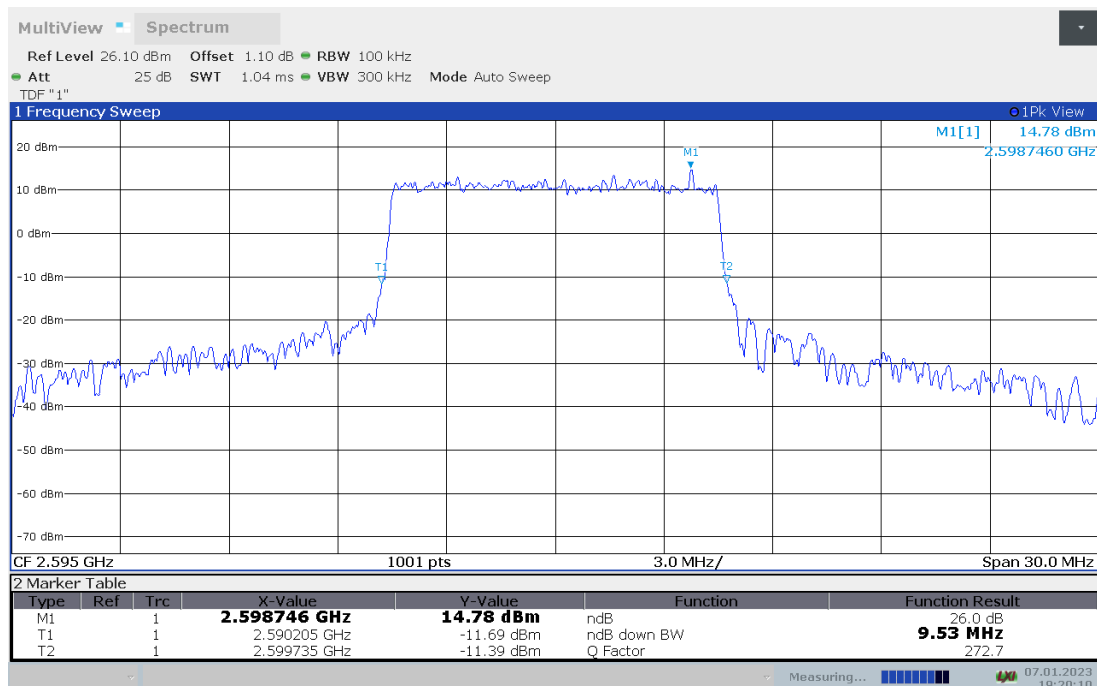
LTE band 38,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	9.560	9.530

LTE band 38 , 10MHz Bandwidth,QPSK (-26dBc BW)



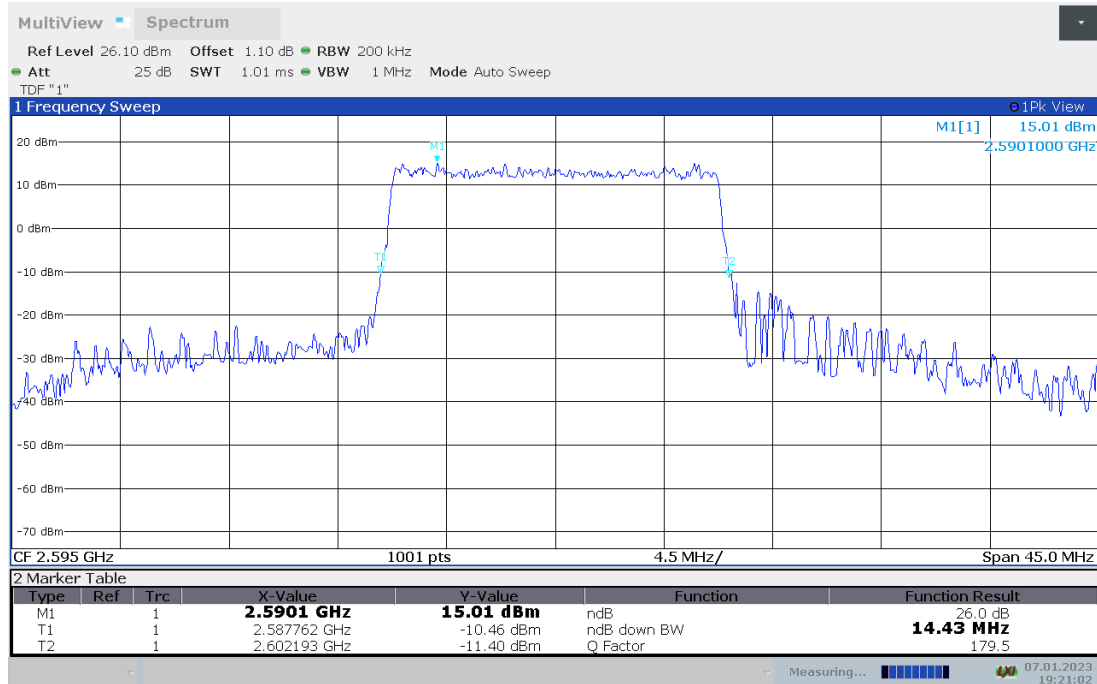
LTE band 38 , 10MHz Bandwidth,16QAM (-26dBc BW)



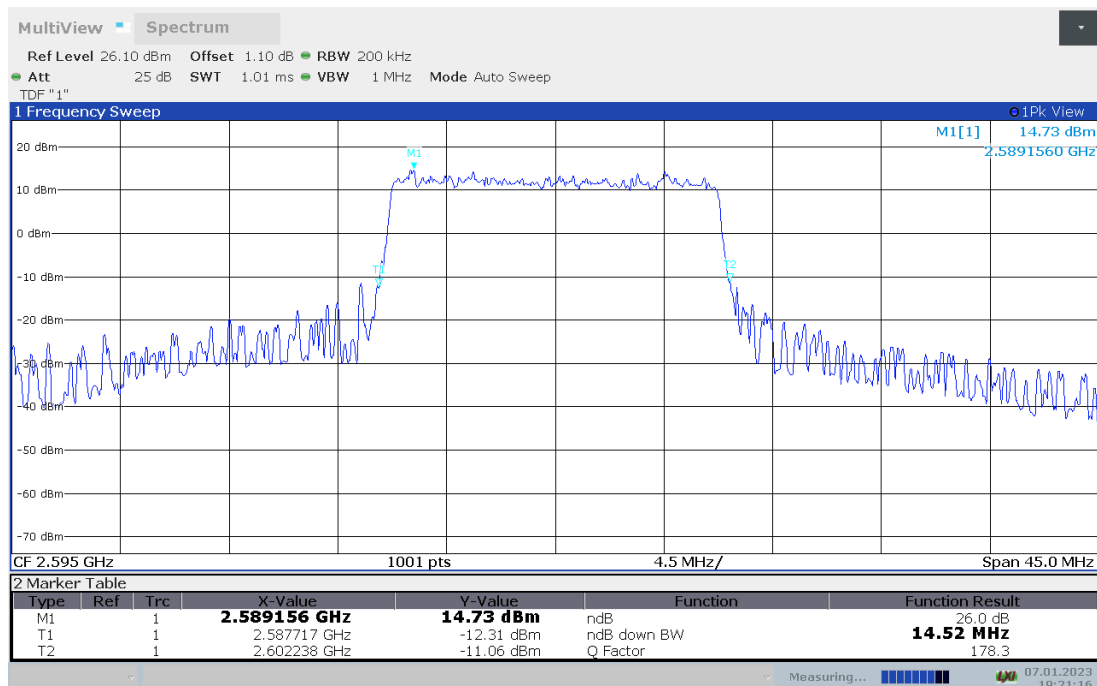
LTE band 38,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	14.431	14.520

LTE band 38 , 15MHz Bandwidth,QPSK (-26dBc BW)



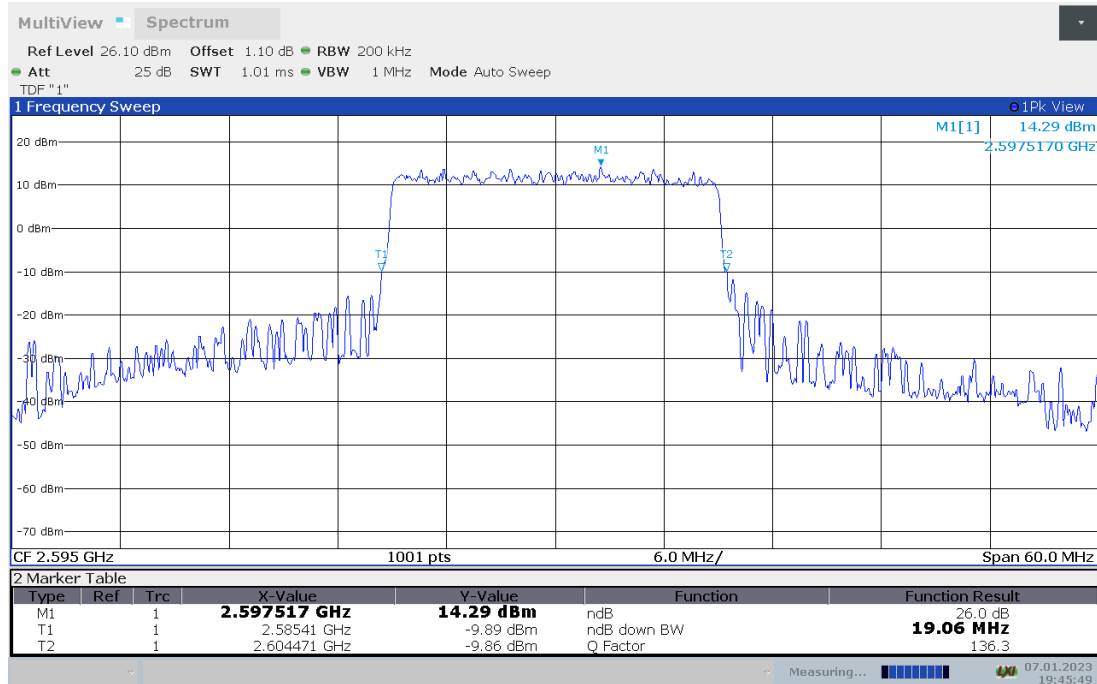
LTE band 38 , 15MHz Bandwidth,16QAM (-26dBc BW)



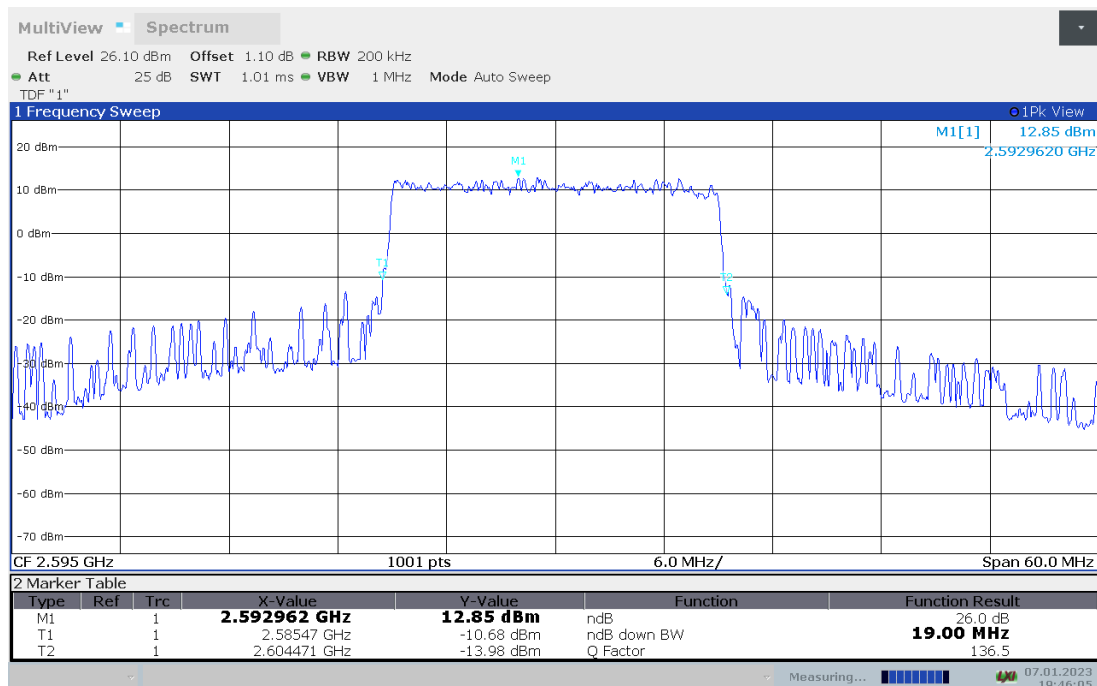
LTE band 38,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	19.061	19.001

LTE band 38 , 20MHz Bandwidth,QPSK (-26dBc BW)



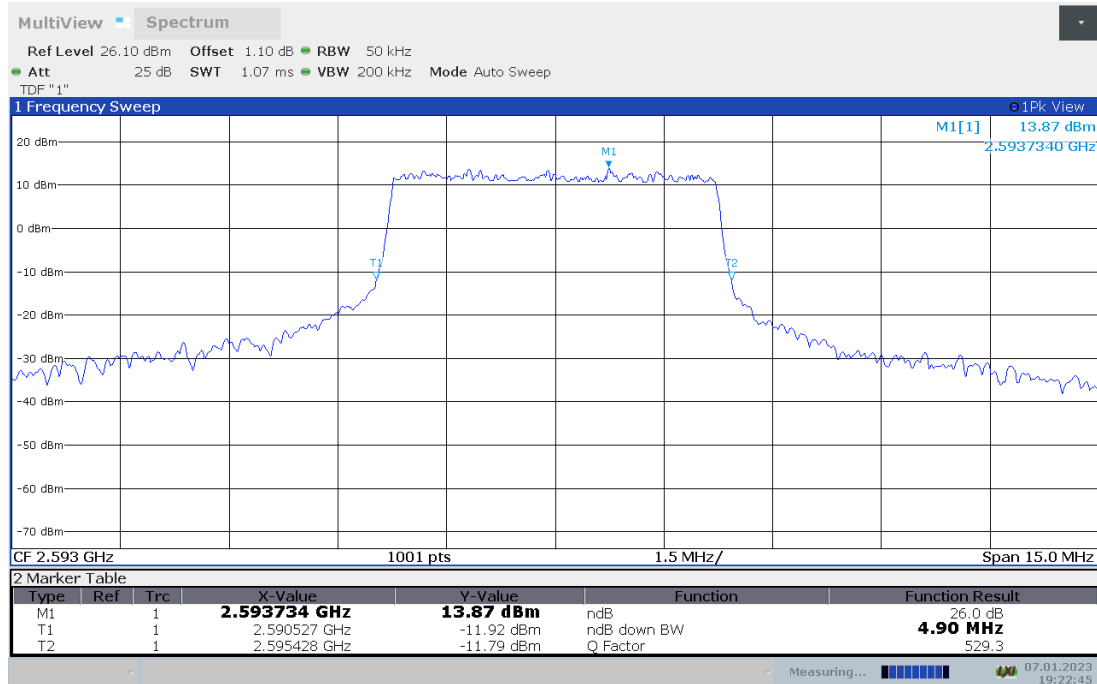
LTE band 38 , 20MHz Bandwidth,16QAM (-26dBc BW)



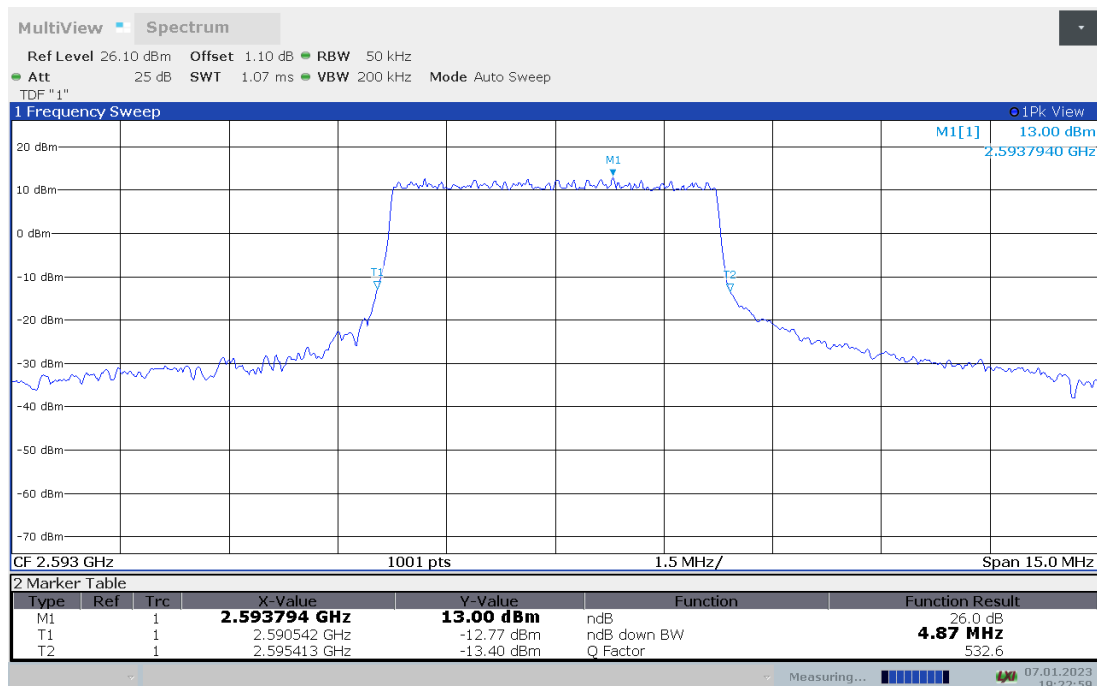
LTE band 41,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2593	4.900	4.870

LTE band 41 , 5MHz Bandwidth,QPSK (-26dBc BW)



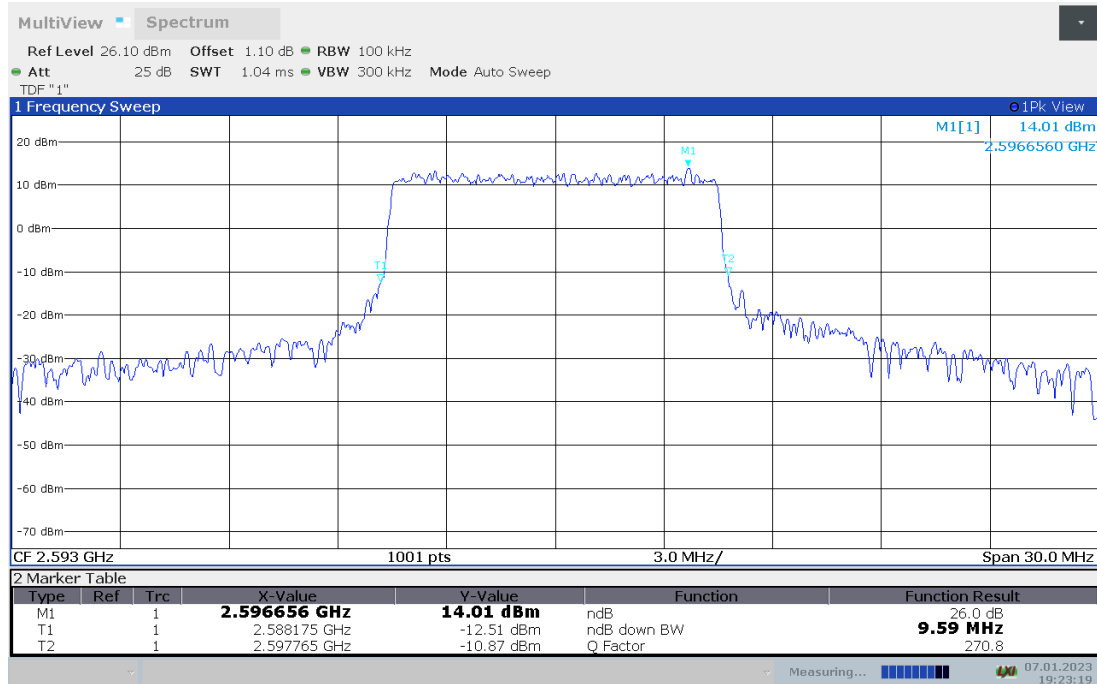
LTE band 41 , 5MHz Bandwidth,16QAM (-26dBc BW)



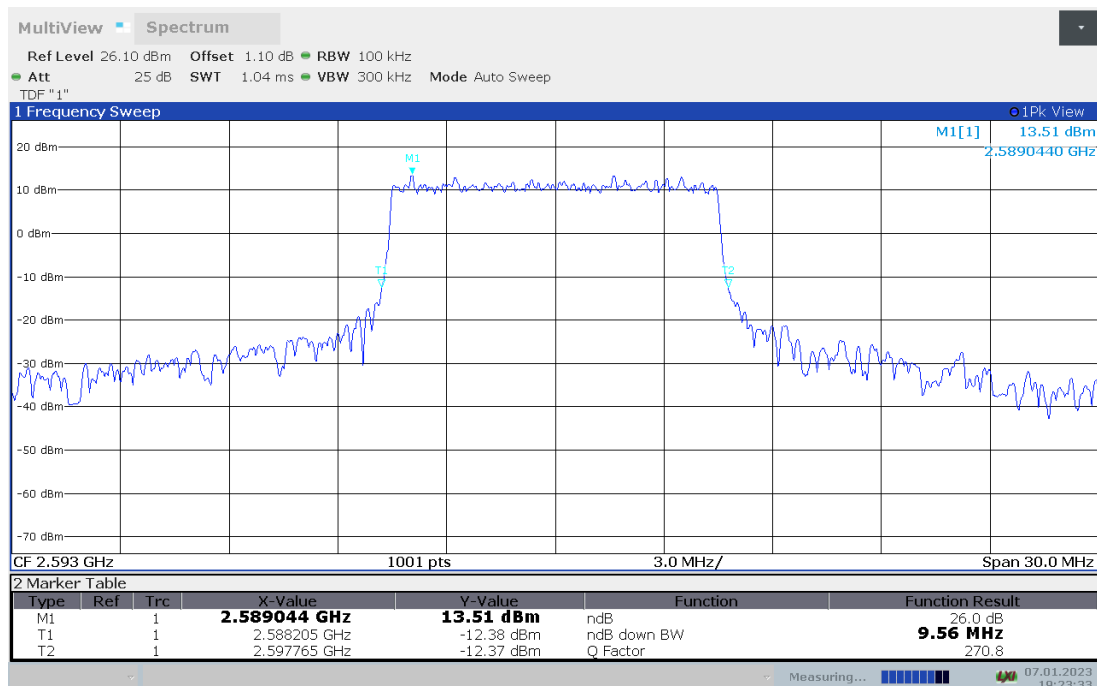
LTE band 41,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2593	9.590	9.560

LTE band 41 , 10MHz Bandwidth,QPSK (-26dBc BW)



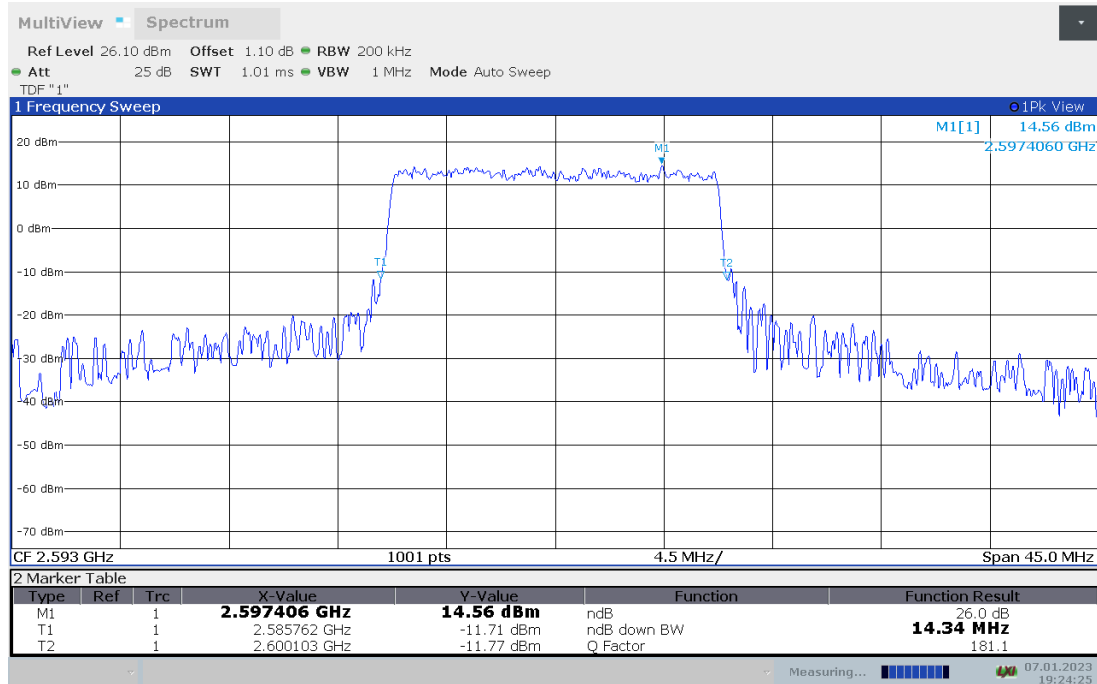
LTE band 41 , 10MHz Bandwidth,16QAM (-26dBc BW)



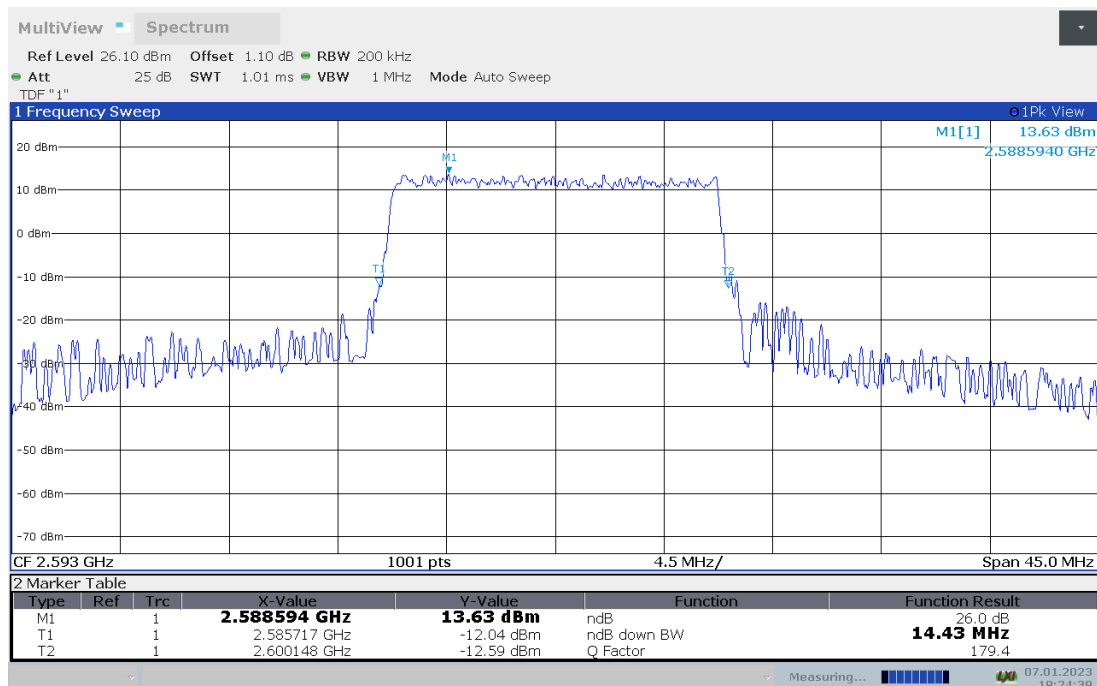
LTE band 41,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2593	14.341	14.431

LTE band 41 , 15MHz Bandwidth,QPSK (-26dBc BW)



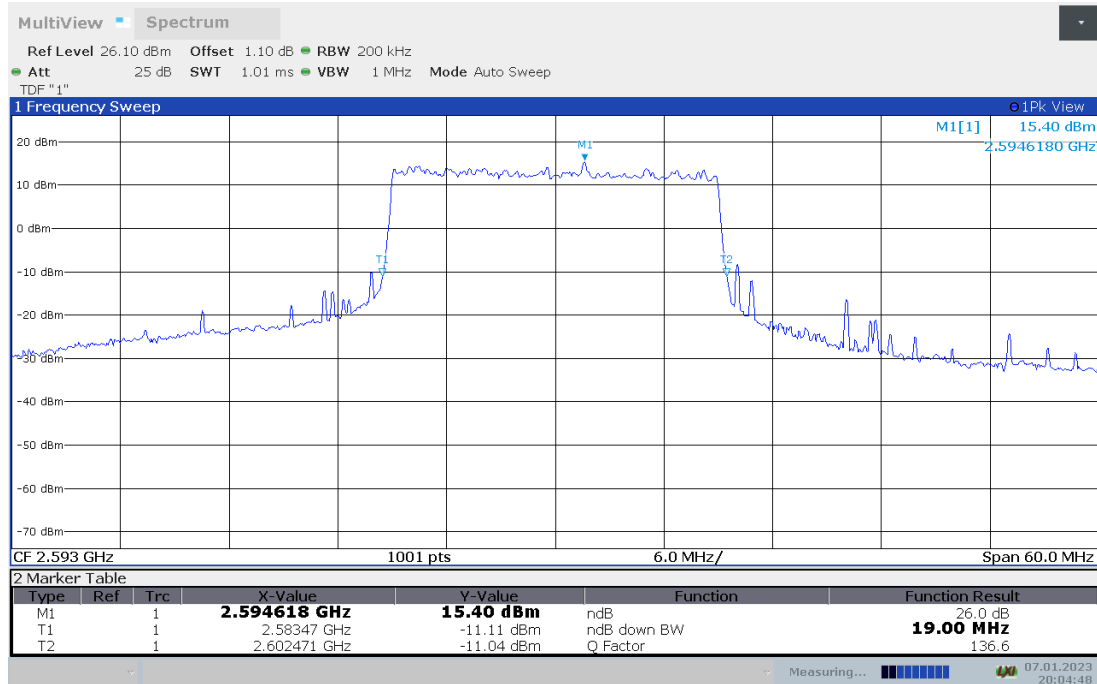
LTE band 41 , 15MHz Bandwidth,16QAM (-26dBc BW)



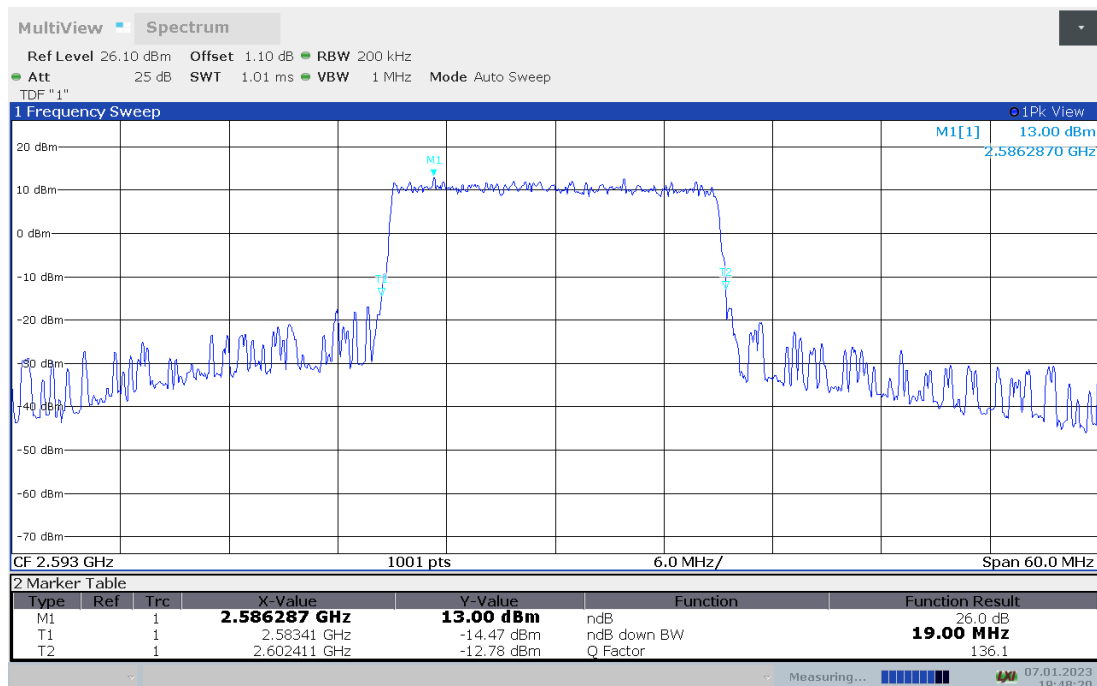
LTE band 41,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2593	19.001	19.001

LTE band 41 , 20MHz Bandwidth,QPSK (-26dBc BW)



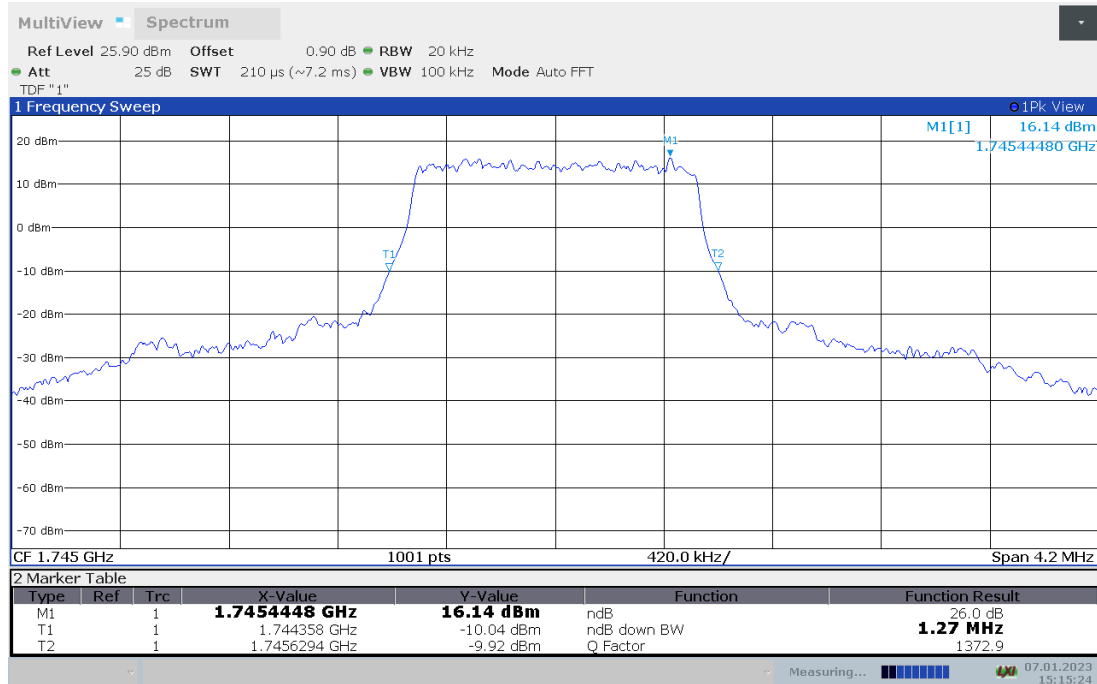
LTE band 41 , 20MHz Bandwidth,16QAM (-26dBc BW)



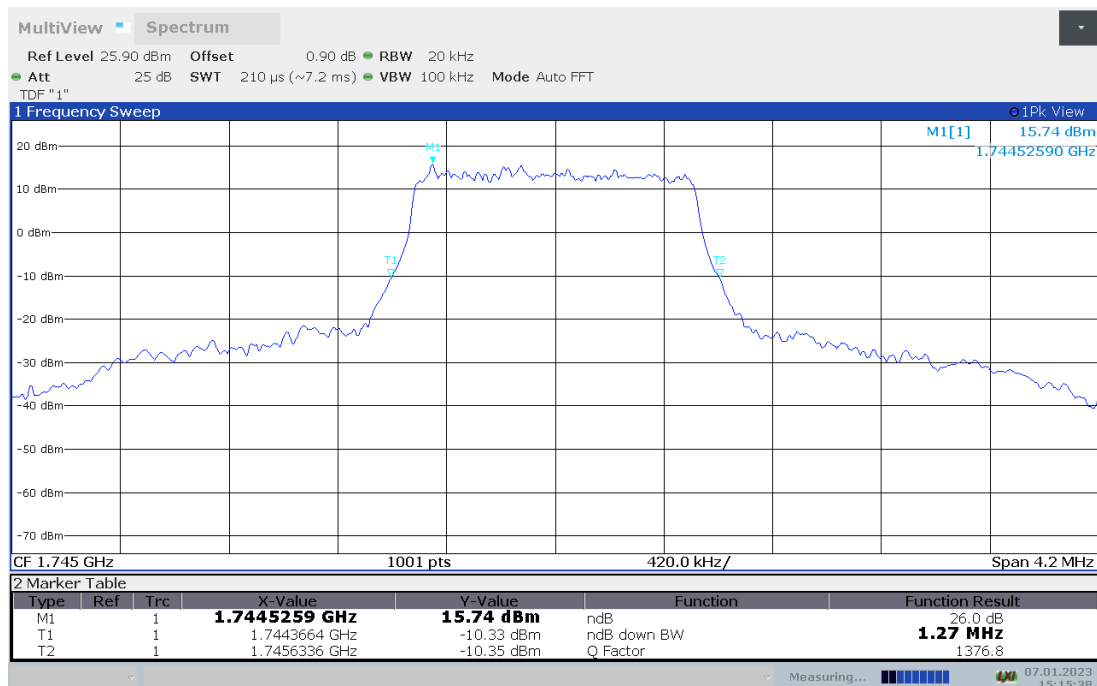
LTE band 66,1.4MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	1.271	1.267

LTE band 66 , 1.4MHz Bandwidth,QPSK (-26dBc BW)



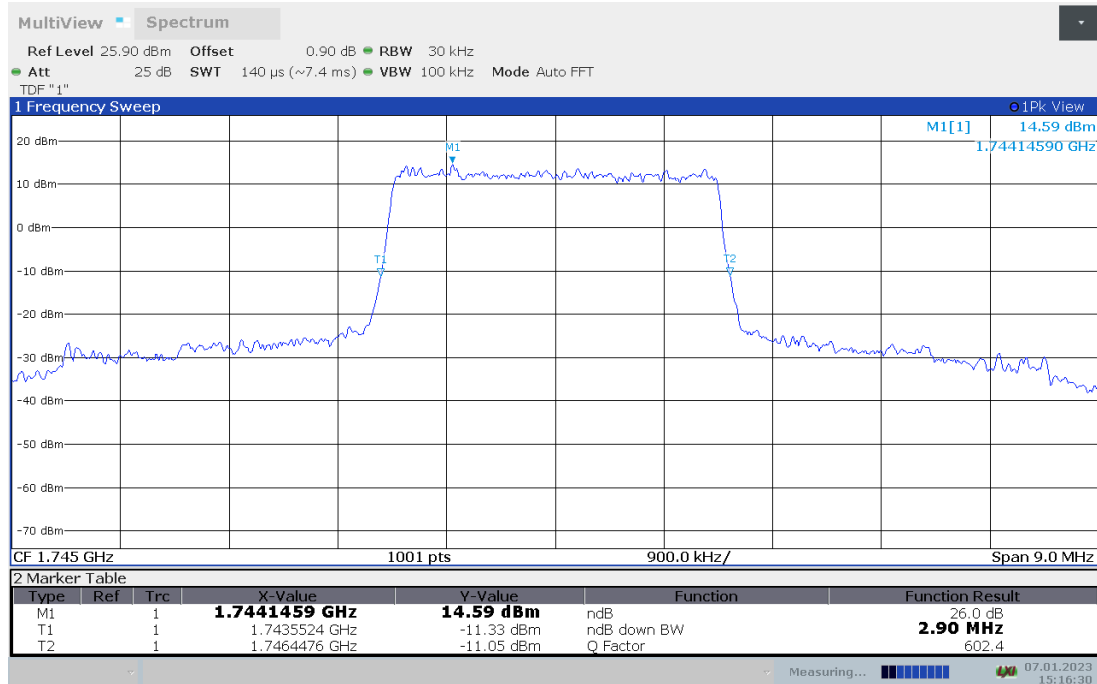
LTE band 66 , 1.4MHz Bandwidth,16QAM (-26dBc BW)



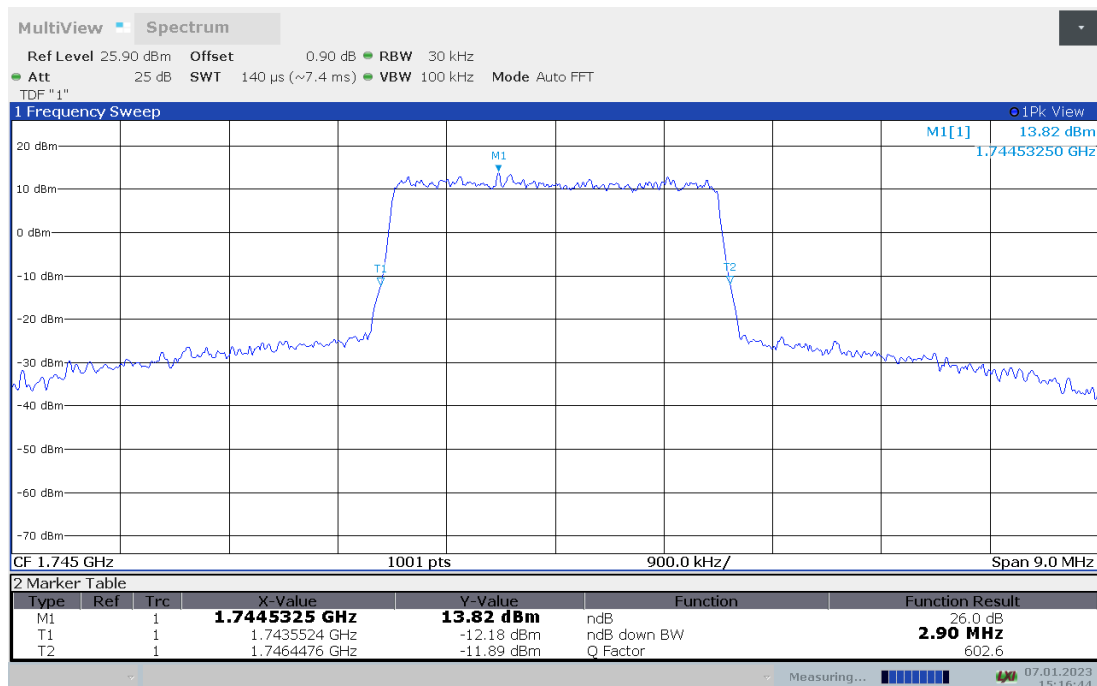
LTE band 66,3MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	2.895	2.895

LTE band 66 , 3MHz Bandwidth,QPSK (-26dBc BW)



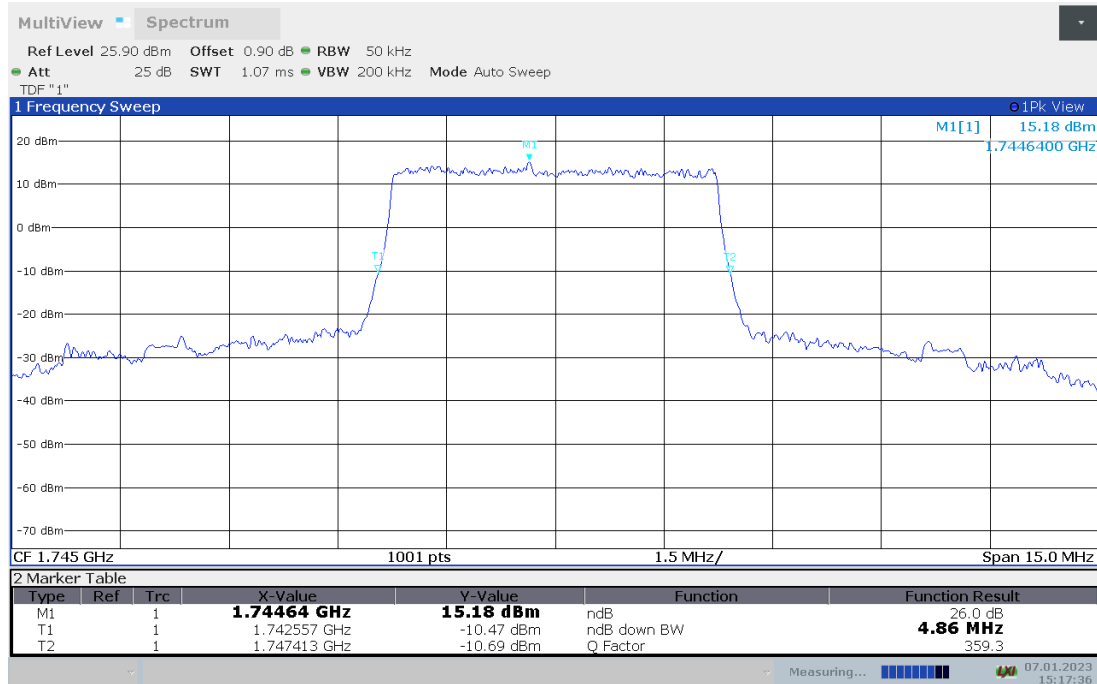
LTE band 66 , 3MHz Bandwidth,16QAM (-26dBc BW)



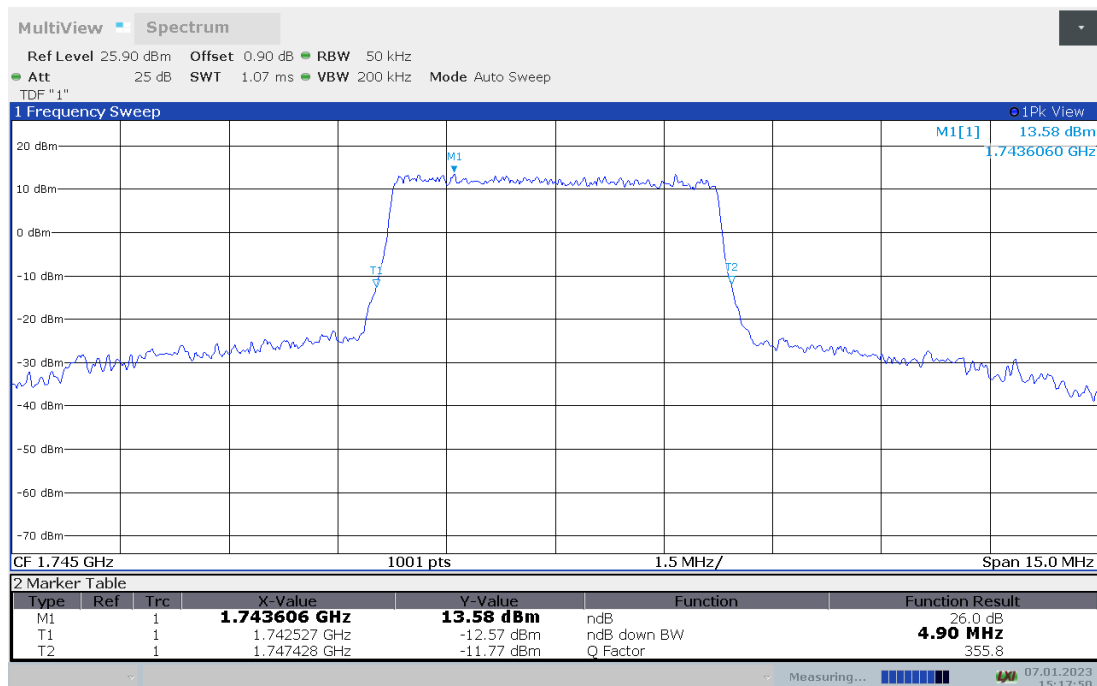
LTE band 66,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	4.855	4.900

LTE band 66 , 5MHz Bandwidth,QPSK (-26dBc BW)



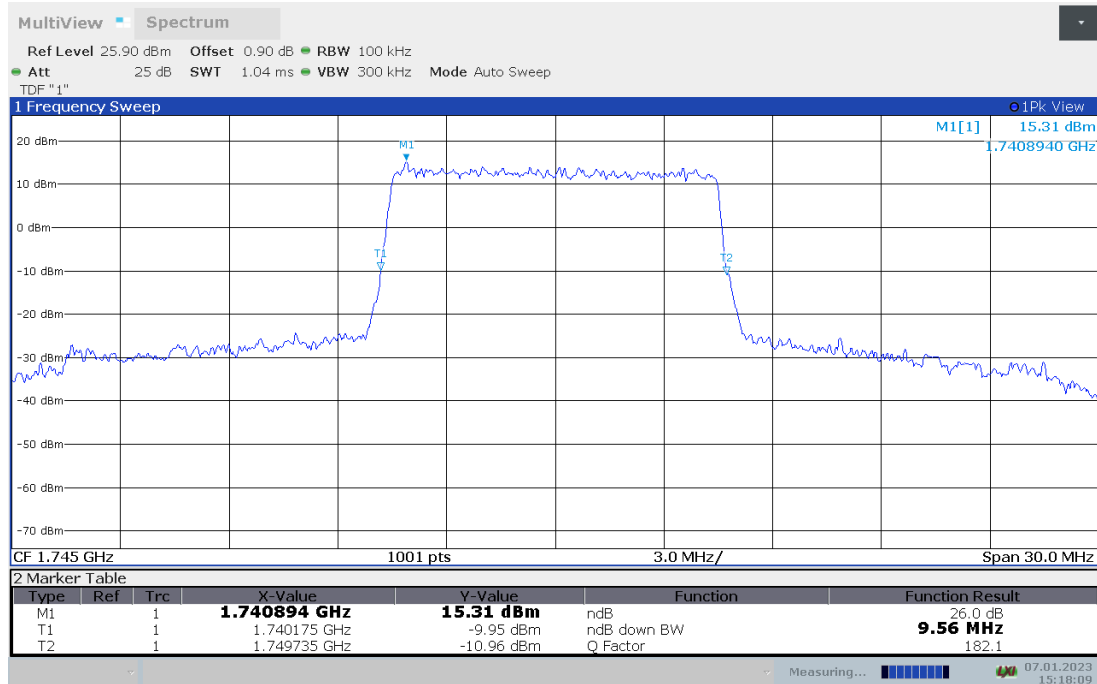
LTE band 66 , 5MHz Bandwidth,16QAM (-26dBc BW)



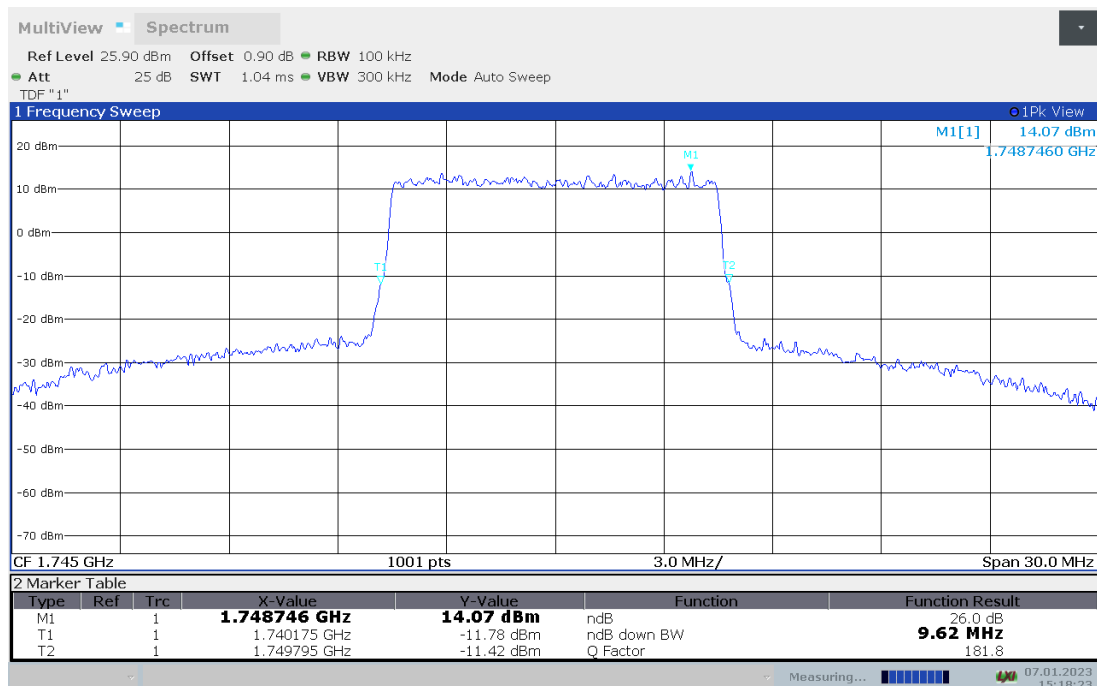
LTE band 66,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	9.560	9.620

LTE band 66 , 10MHz Bandwidth,QPSK (-26dBc BW)



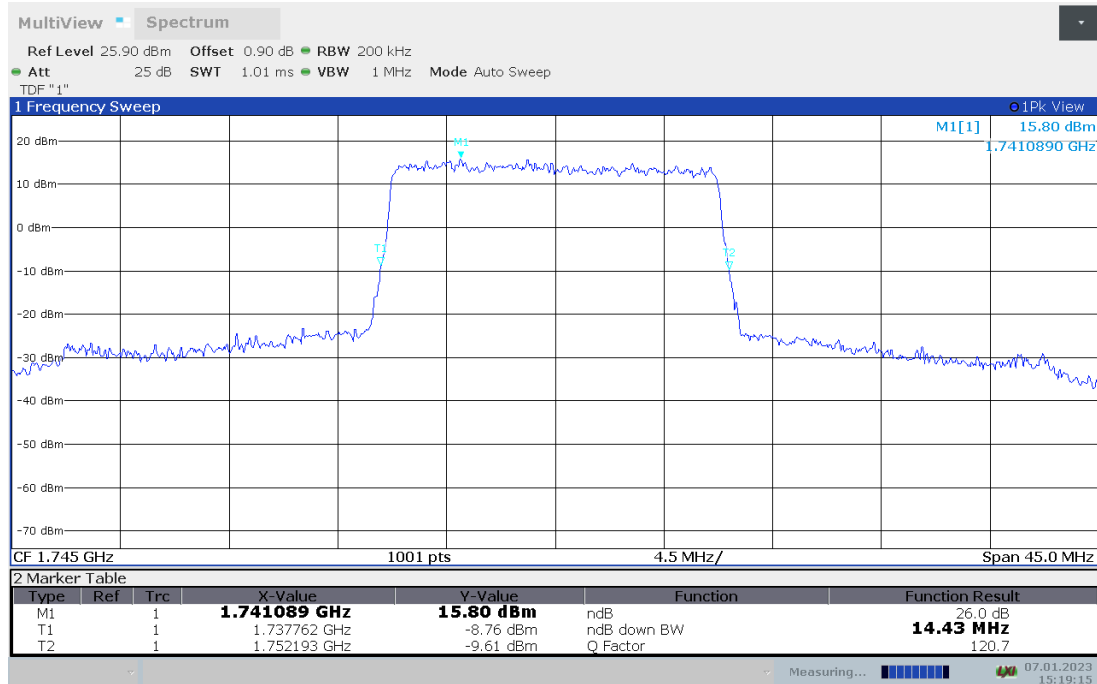
LTE band 66 , 10MHz Bandwidth,16QAM (-26dBc BW)



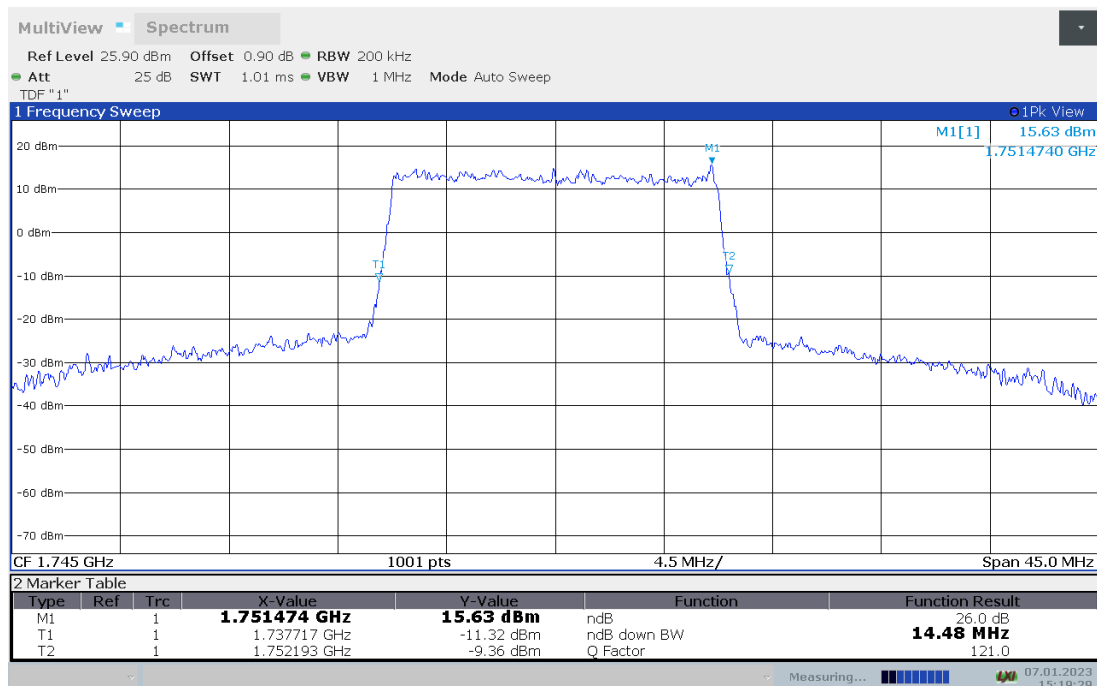
LTE band 66,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	14.431	14.476

LTE band 66 , 15MHz Bandwidth,QPSK (-26dBc BW)



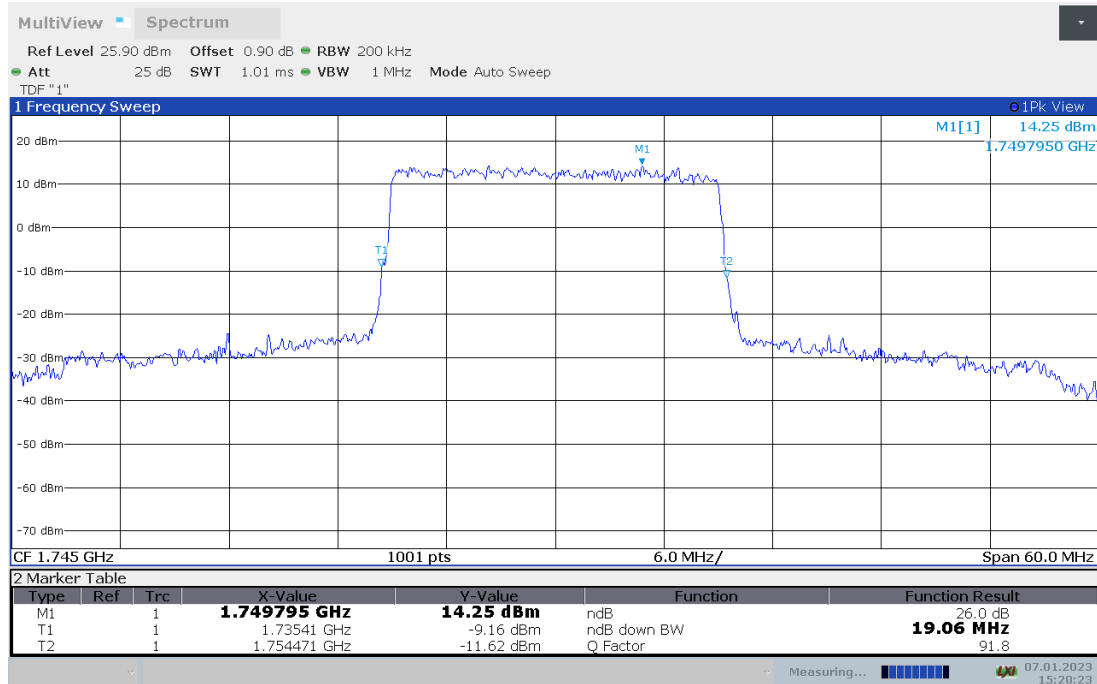
LTE band 66 , 15MHz Bandwidth,16QAM (-26dBc BW)



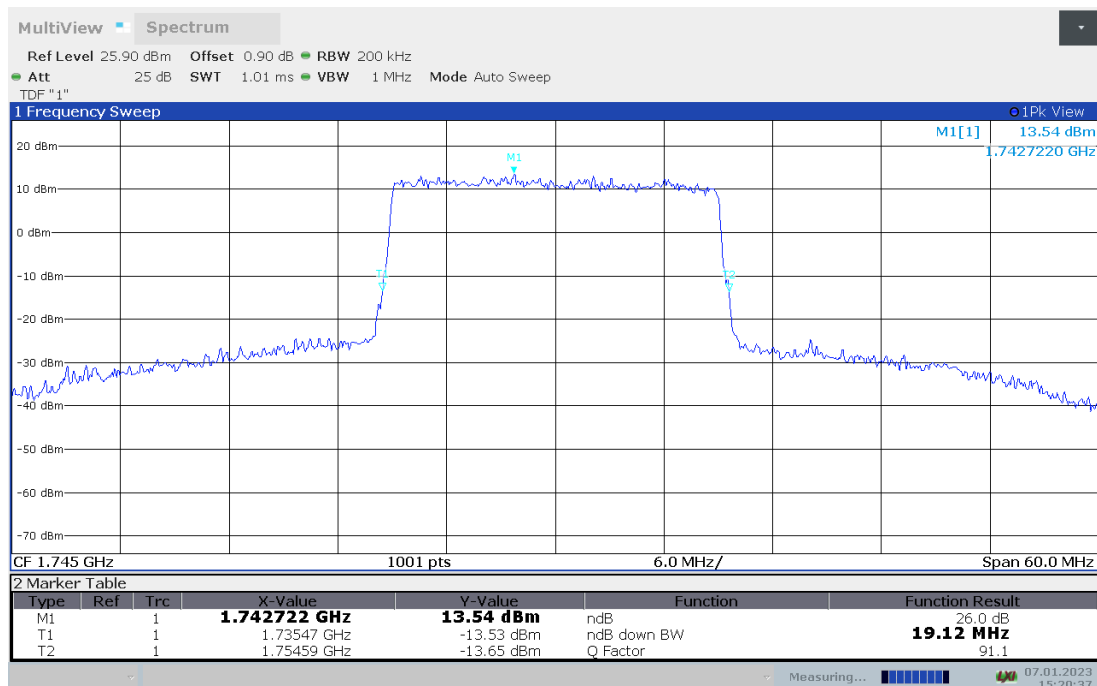
LTE band 66,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	19.061	19.121

LTE band 66 , 20MHz Bandwidth,QPSK (-26dBc BW)



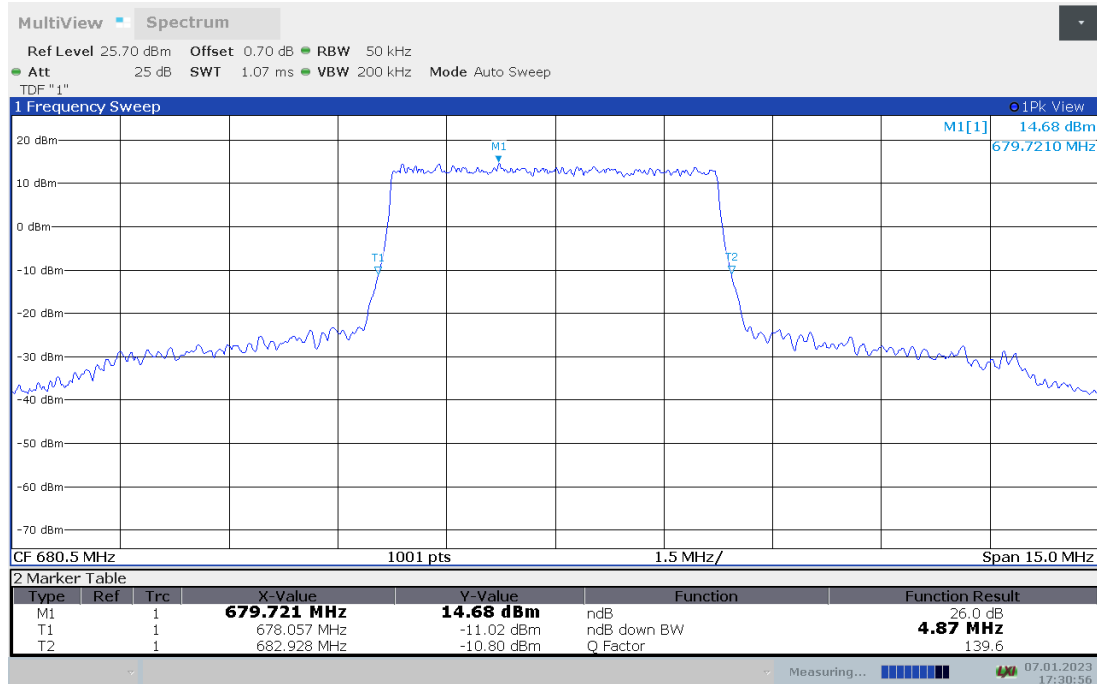
LTE band 66 , 20MHz Bandwidth,16QAM (-26dBc BW)



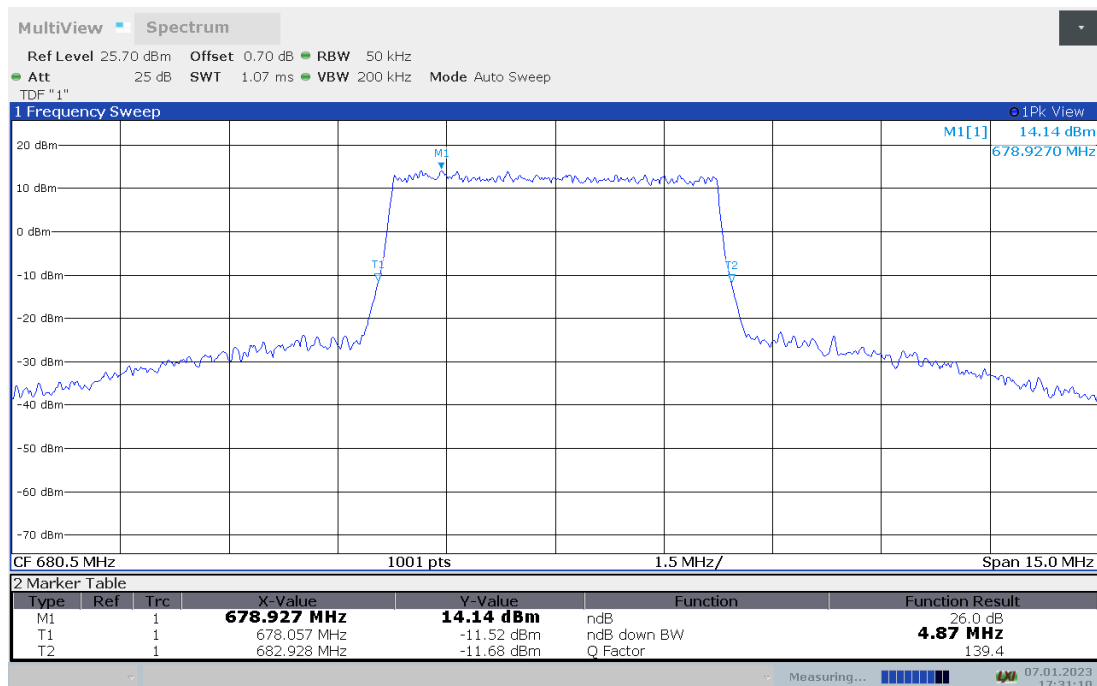
LTE band 71,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
680.5	4.870	4.870

LTE band 71 , 5MHz Bandwidth,QPSK (-26dBc BW)



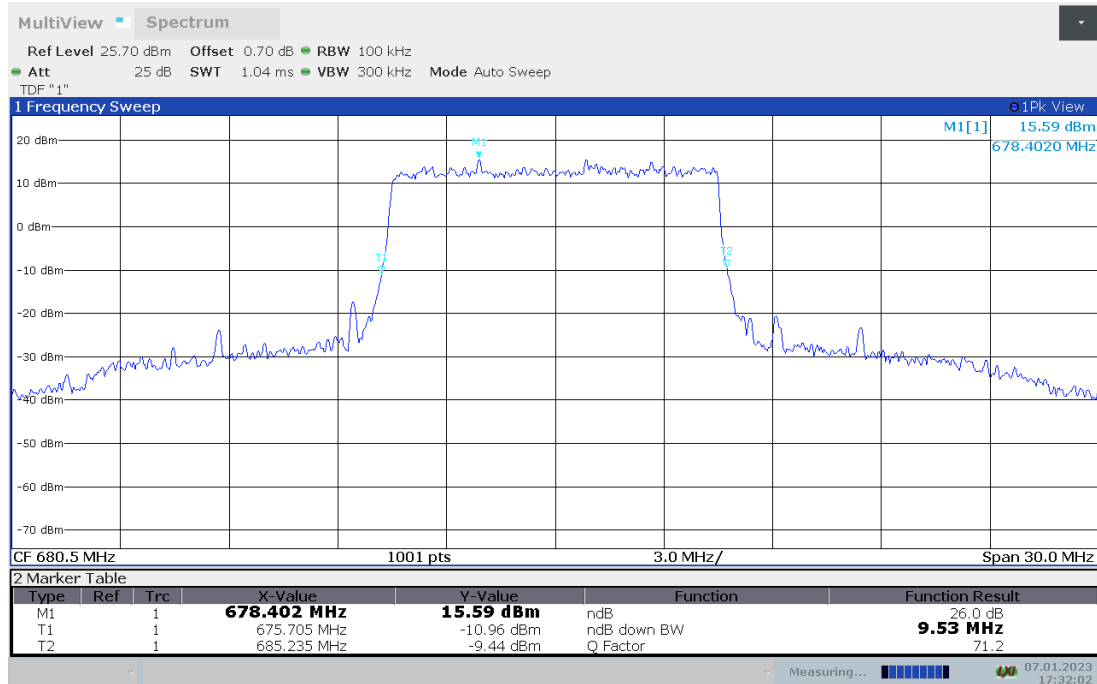
LTE band 71 , 5MHz Bandwidth,16QAM (-26dBc BW)



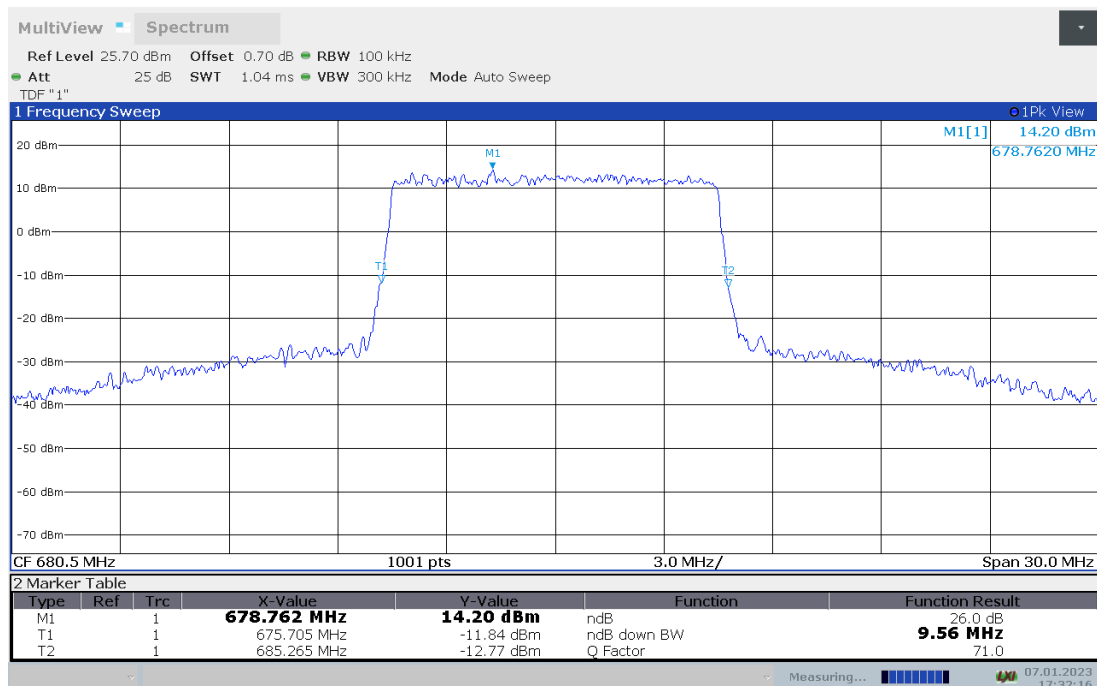
LTE band 71,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
680.5	9.530	9.560

LTE band 71 , 10MHz Bandwidth,QPSK (-26dBc BW)



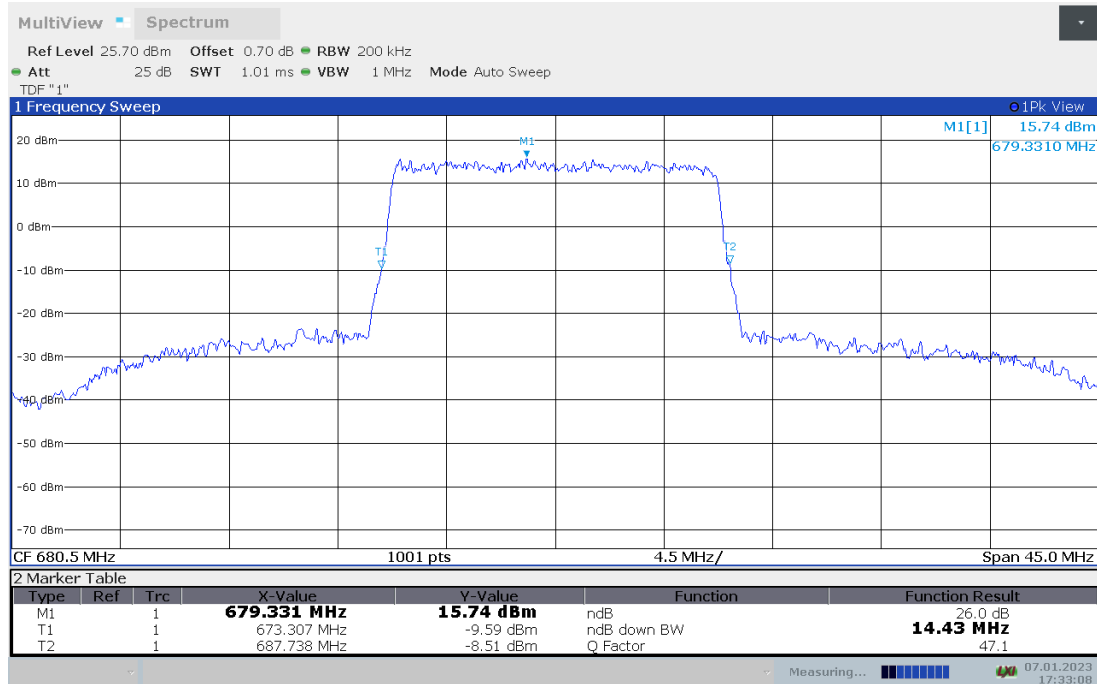
LTE band 71 , 10MHz Bandwidth,16QAM (-26dBc BW)



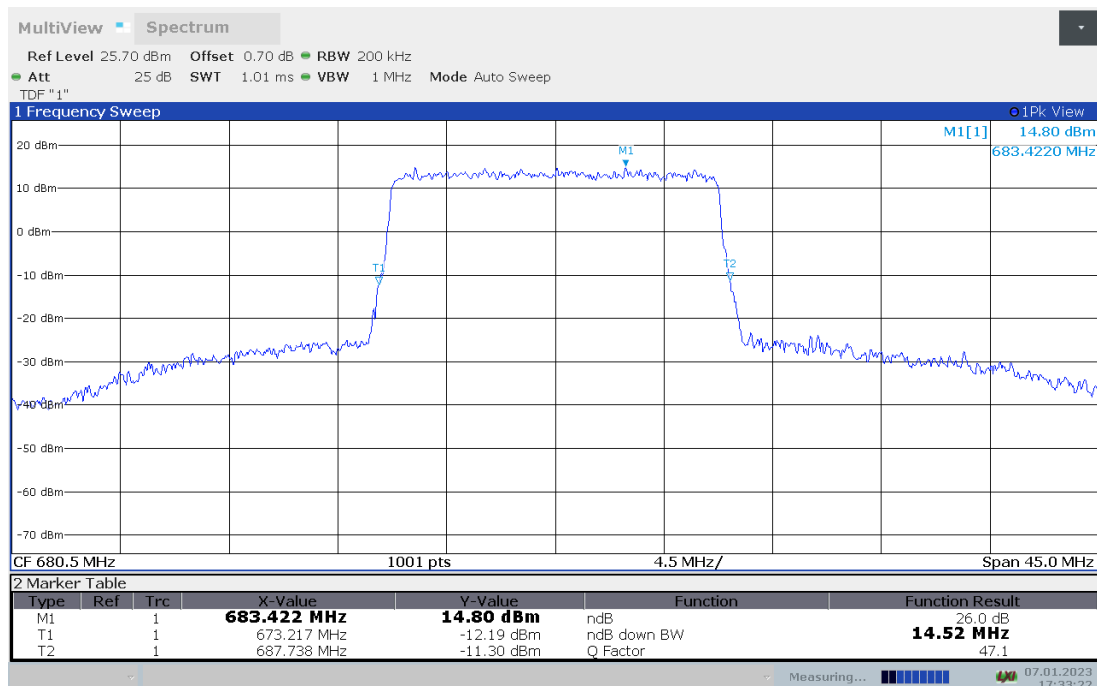
LTE band 71,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
680.5	14.431	14.520

LTE band 71 , 15MHz Bandwidth,QPSK (-26dBc BW)



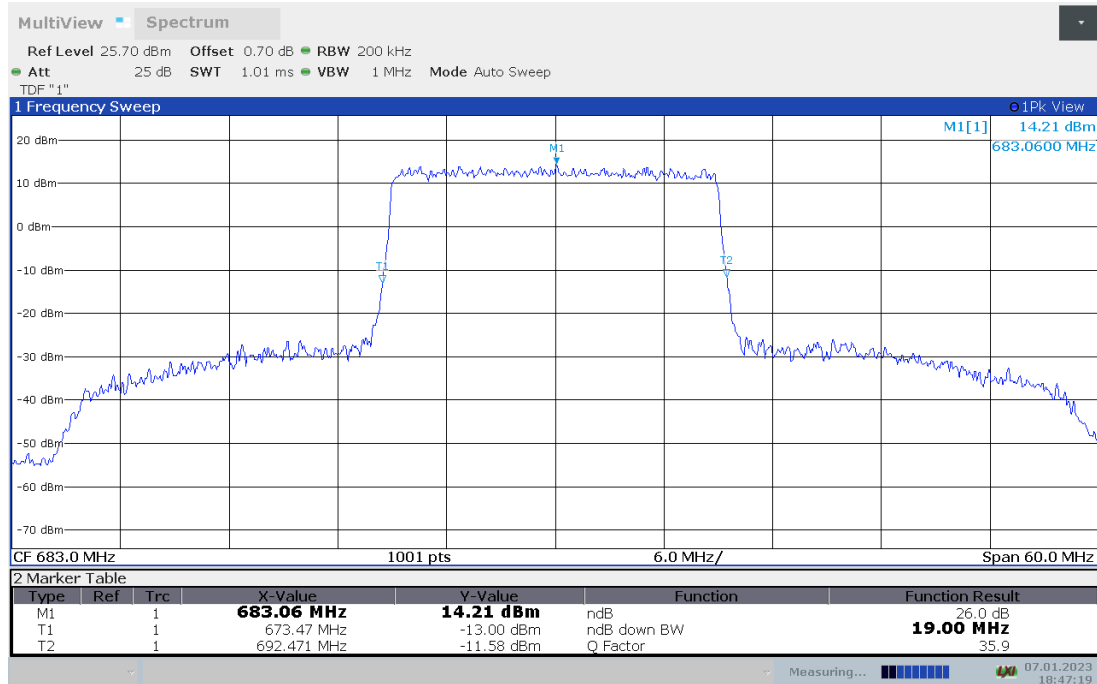
LTE band 71 , 15MHz Bandwidth,16QAM (-26dBc BW)



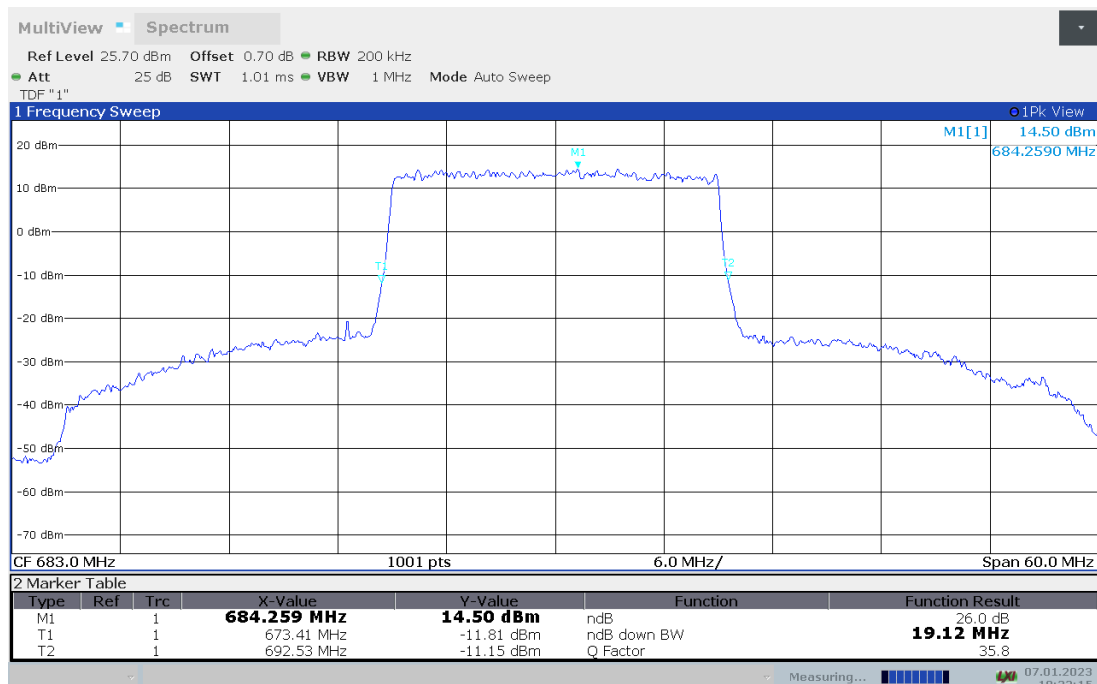
LTE band 71,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
683	19.001	19.121

LTE band 71 , 20MHz Bandwidth,QPSK (-26dBc BW)



LTE band 71 , 20MHz Bandwidth,16QAM (-26dBc BW)



Note: Expanded measurement uncertainty is $U = 3428 \text{ Hz}$, $k = 2$

A.5 BAND EDGE COMPLIANCE

A.5.1 Measurement limit

Part 22.917, Part 24.238 and Part 27.53(h) specify that 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.

Part 27.53(m) specifies 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 than $43+10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55+10 \log(P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43+10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Part 27.53(c) states for operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following: (1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43+10 \log(P)$ dB; (2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43+10 \log(P)$ dB; (4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65+10 \log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43+10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Part 90.691 states that out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows: For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50+10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed

from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz. For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

The spectrum analyzer readings are corrected by $[10 \log (1/\text{duty cycle})]$ for the non-continuous transmitting scenario.

A.5.2 Measurement Procedure

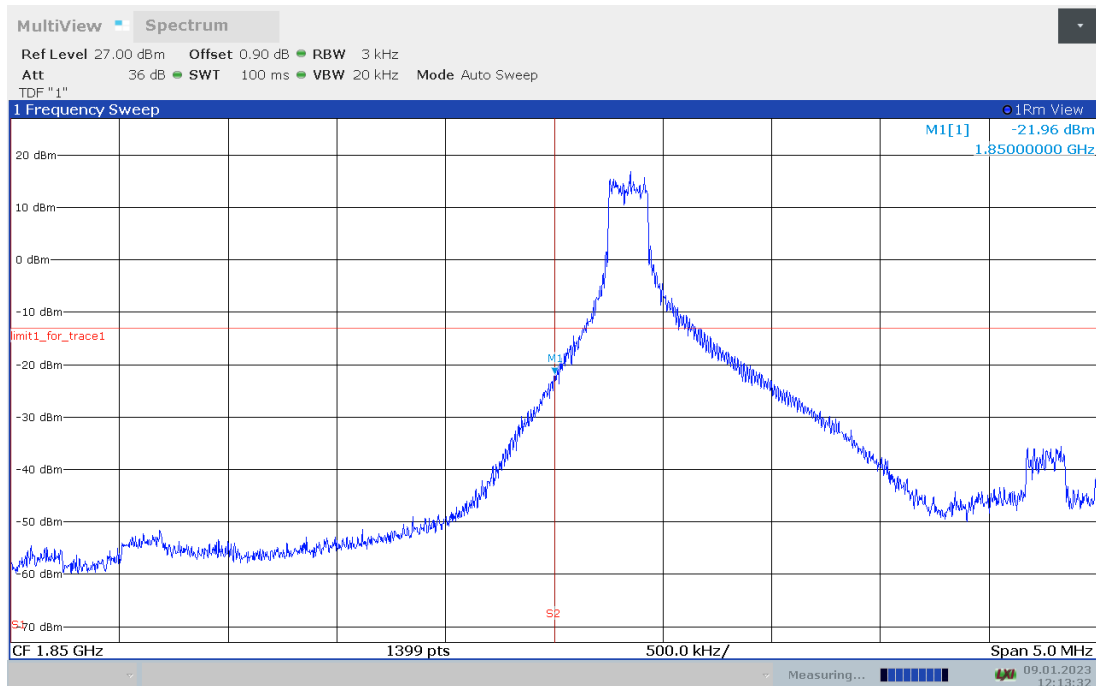
Only worst case result is given below

LTE band 2

OBW: 1RB-LOW_offset



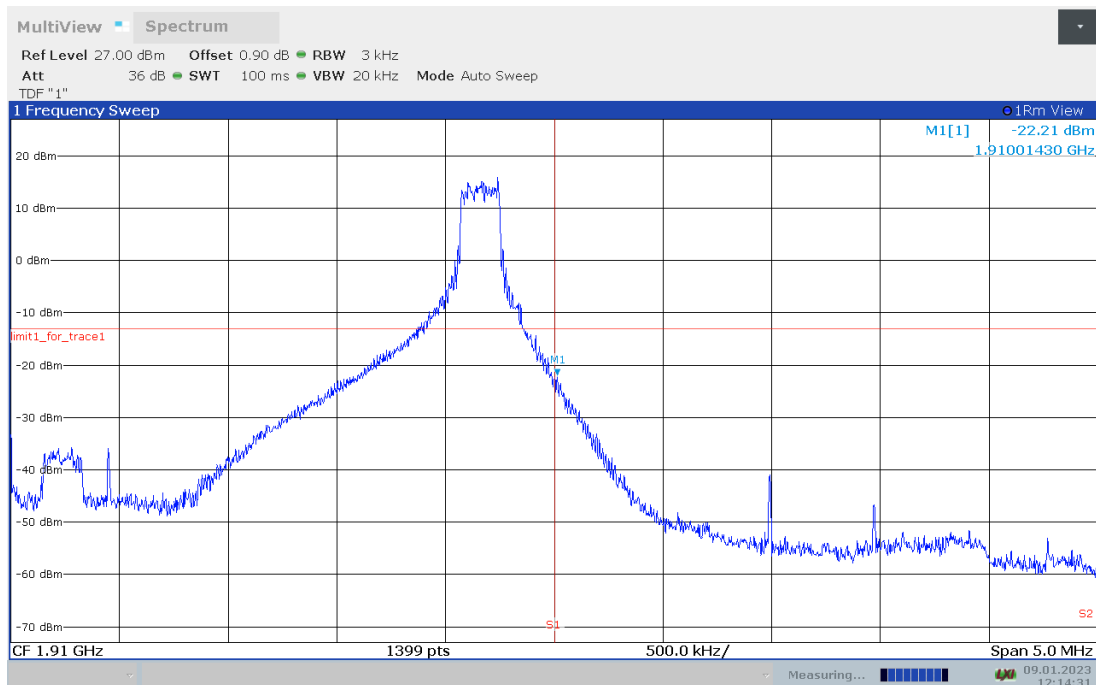
LOW BAND EDGE BLOCK-1RB-LOW_offset



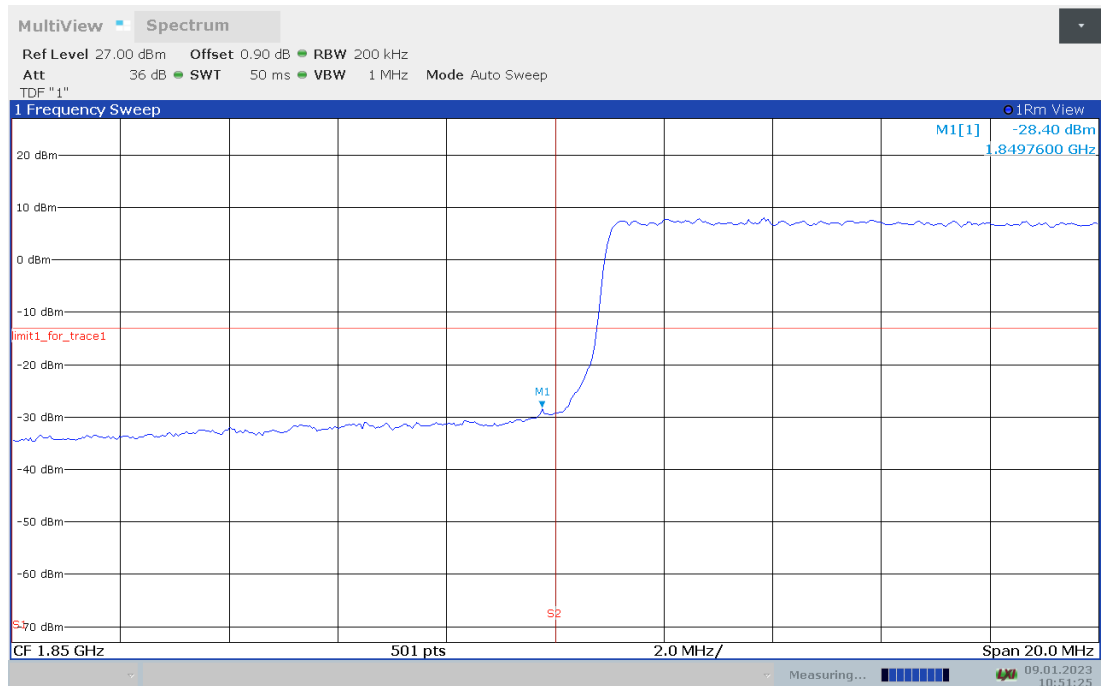
OBW: 1RB-HIGH_offset



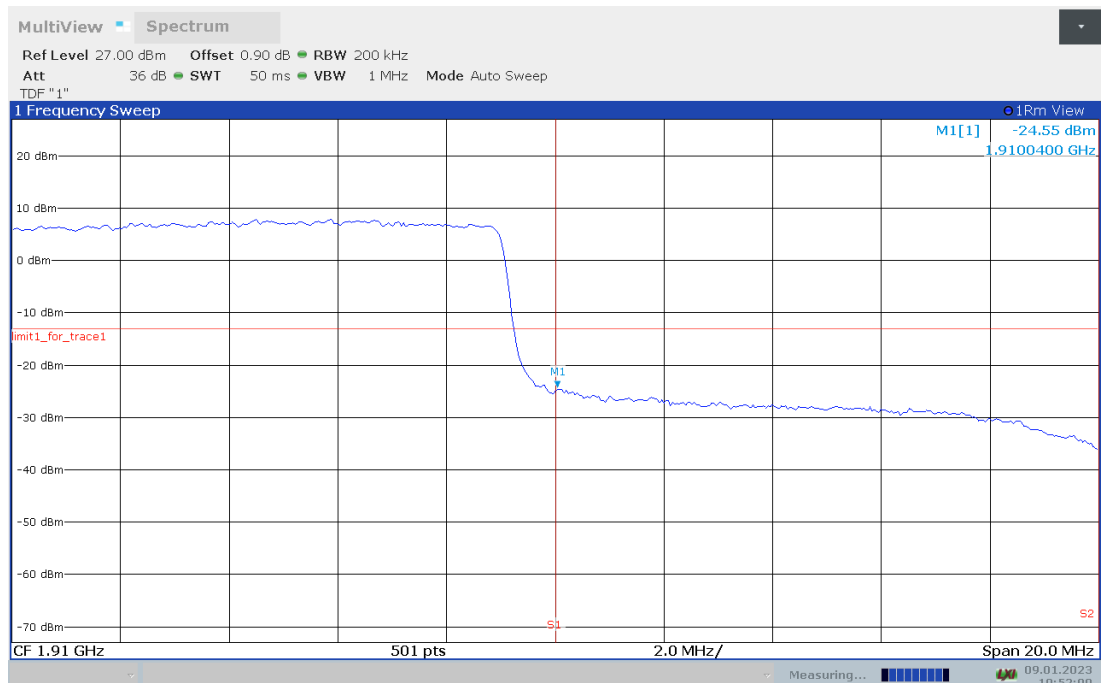
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-20M-100%RB



HIGH BAND EDGE BLOCK-20M-100%RB

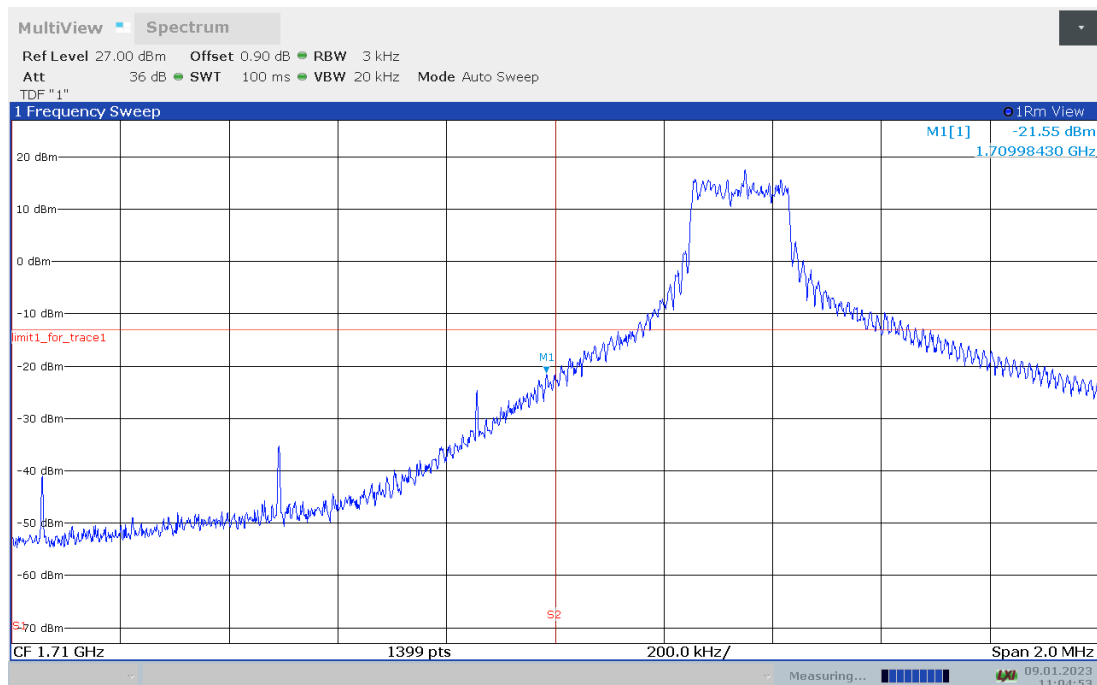


LTE band 4

OBW: 1RB-LOW_offset



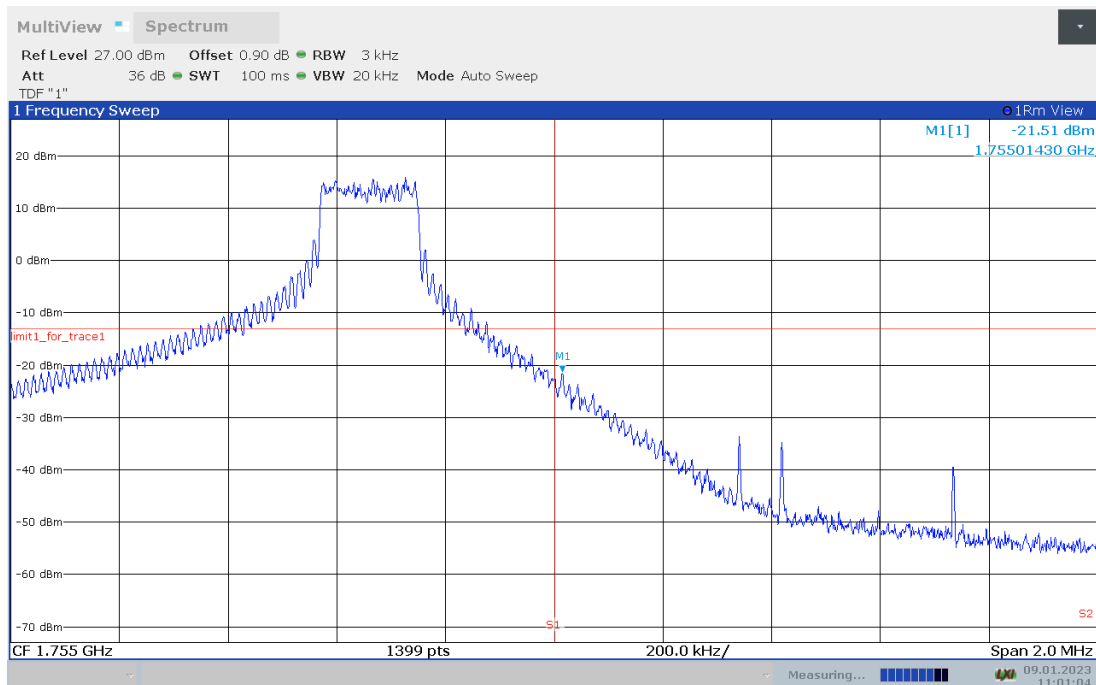
LOW BAND EDGE BLOCK-1RB-LOW_offset



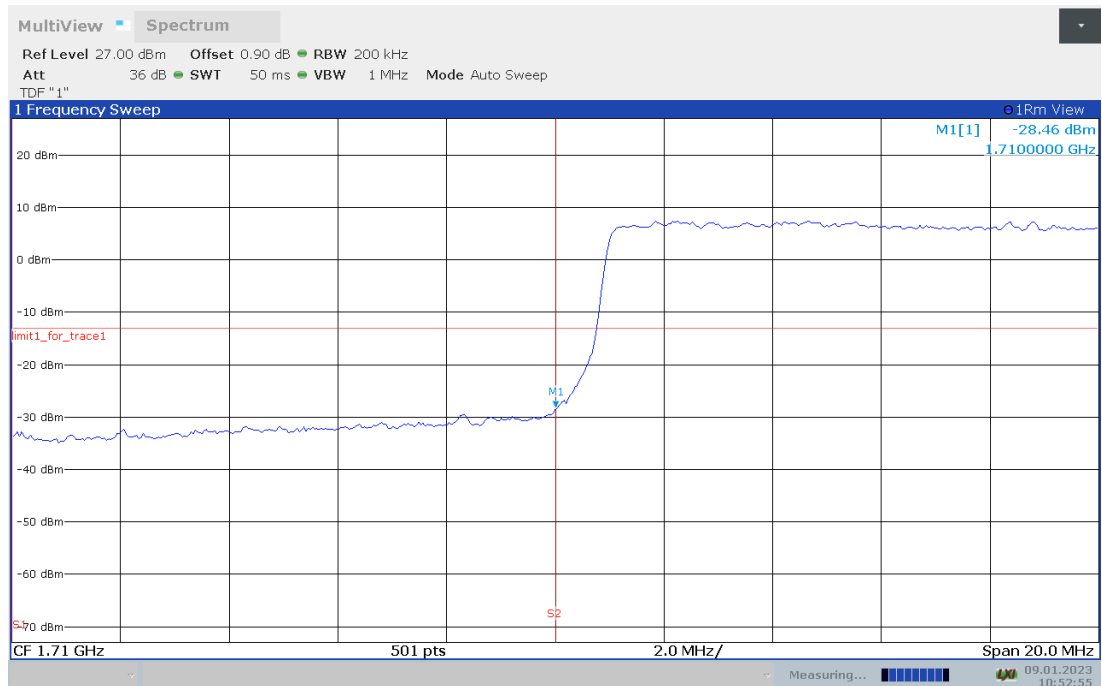
OBW: 1RB-HIGH_offset



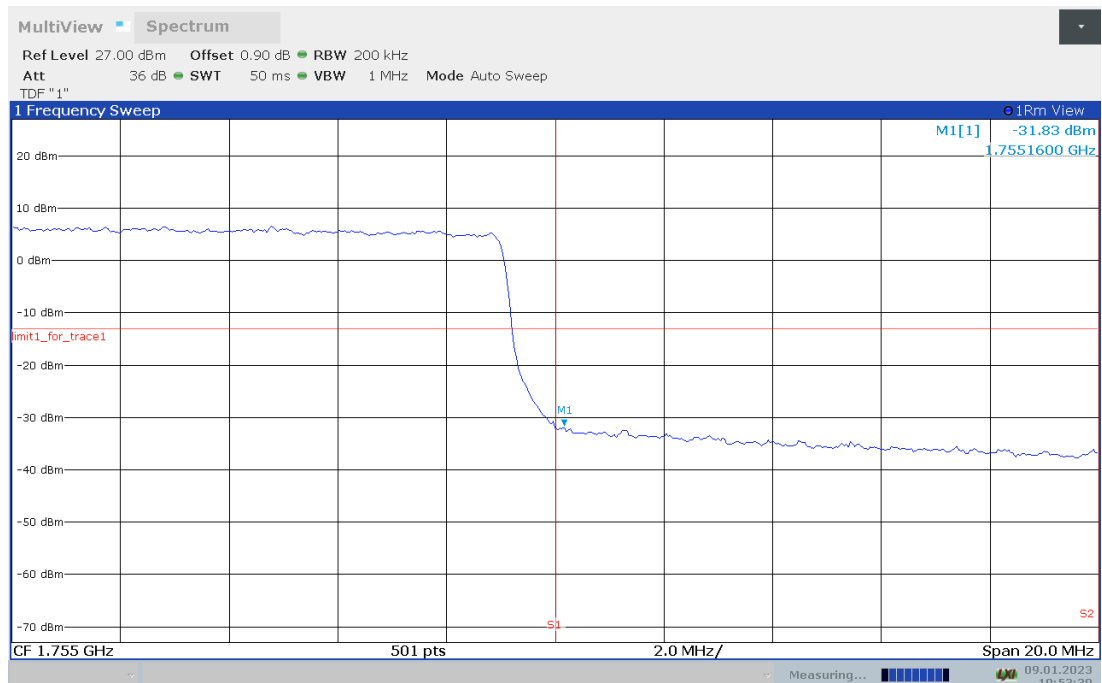
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-20M-100%RB

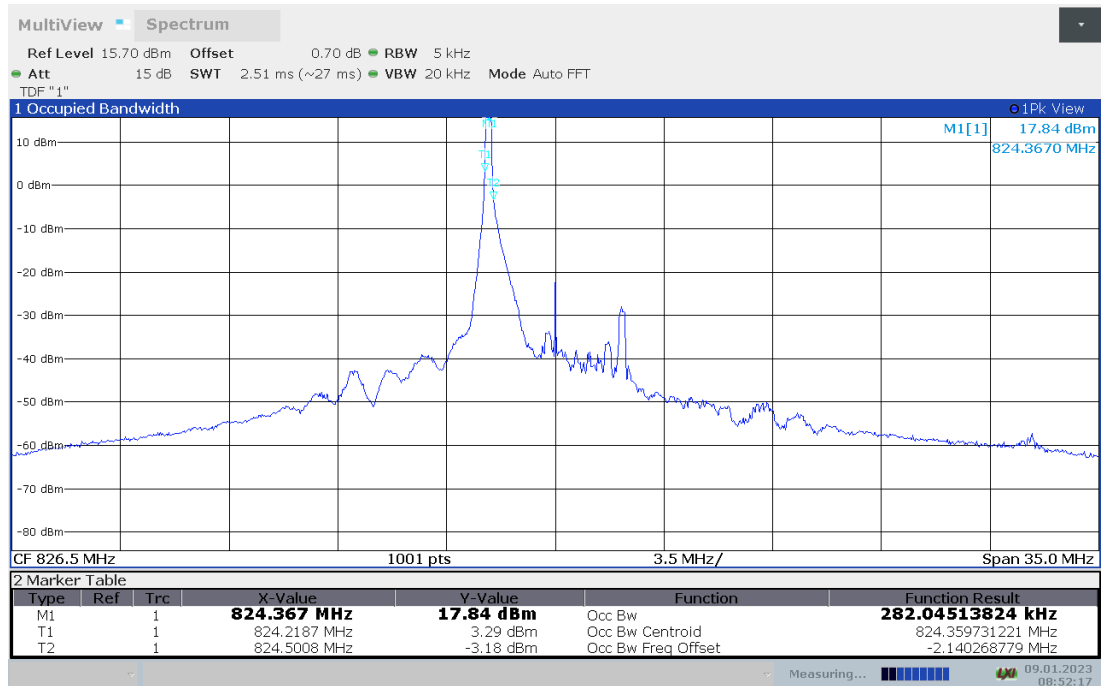


HIGH BAND EDGE BLOCK-20M-100%RB

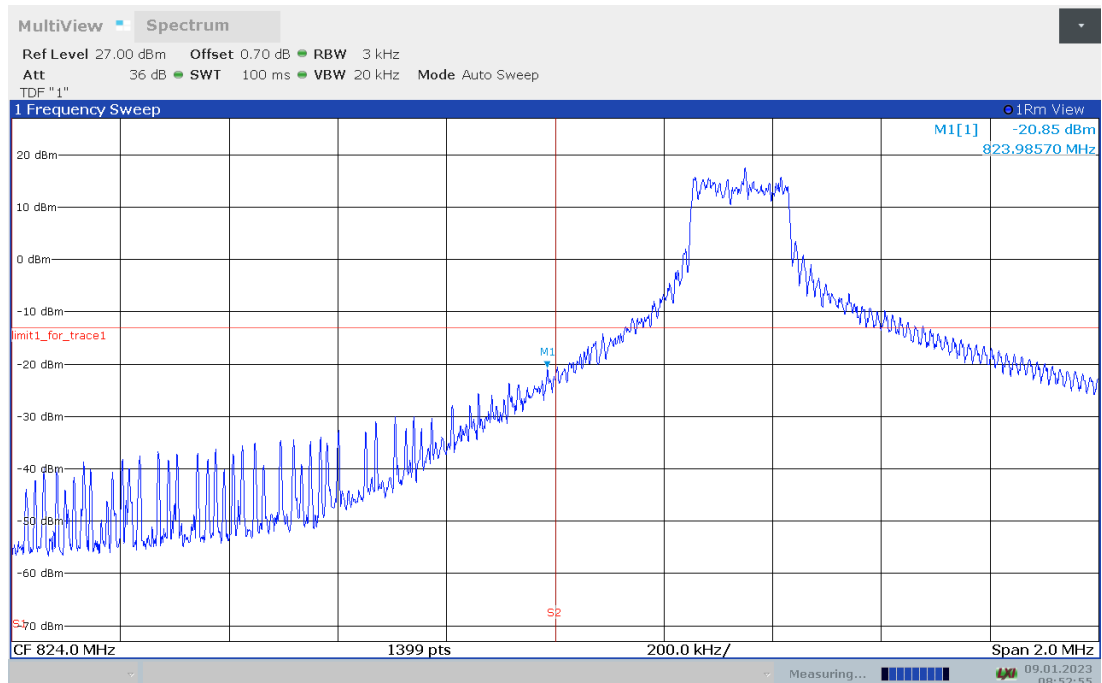


LTE band 5

OBW: 1RB-LOW_offset



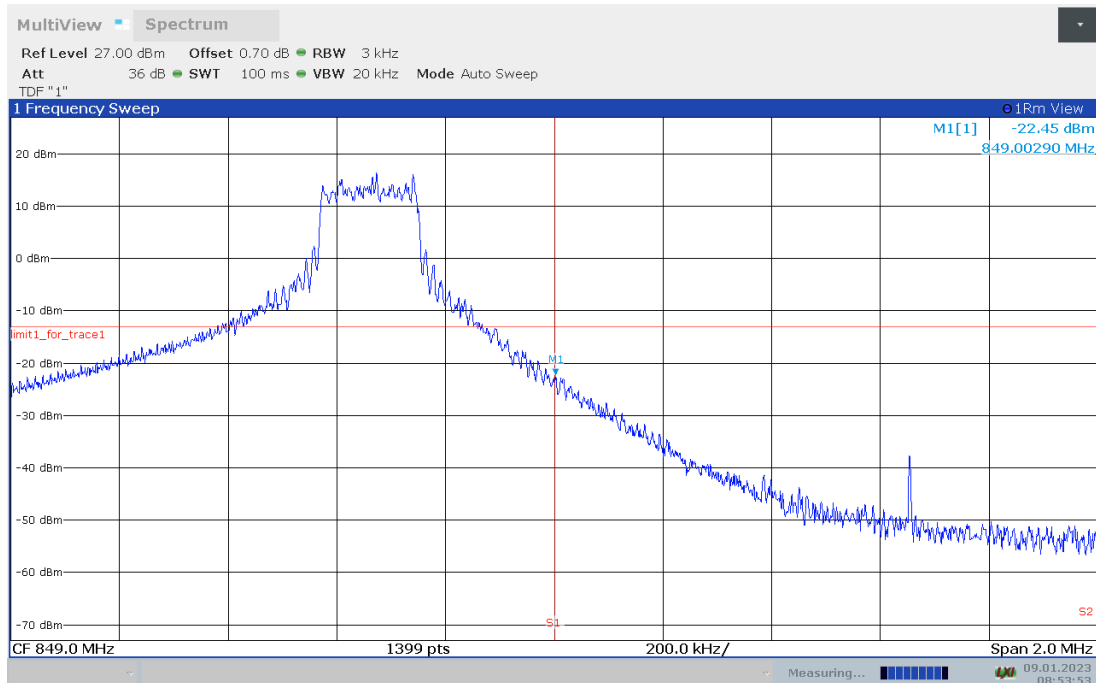
LOW BAND EDGE BLOCK-1RB-LOW_offset



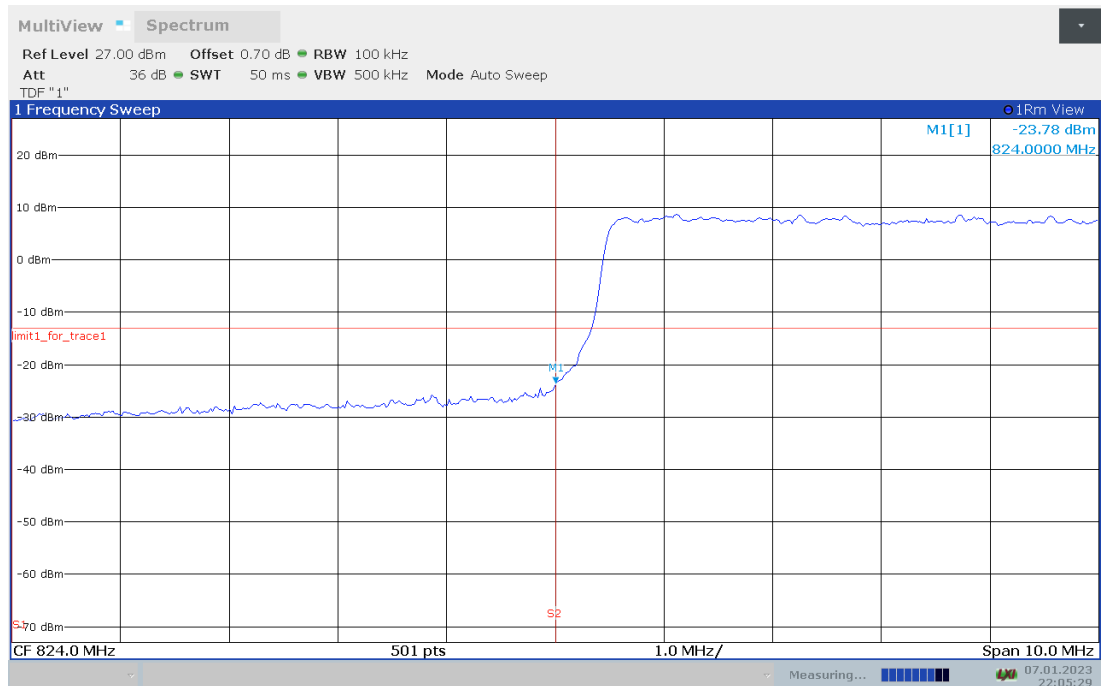
OBW: 1RB-HIGH_offset



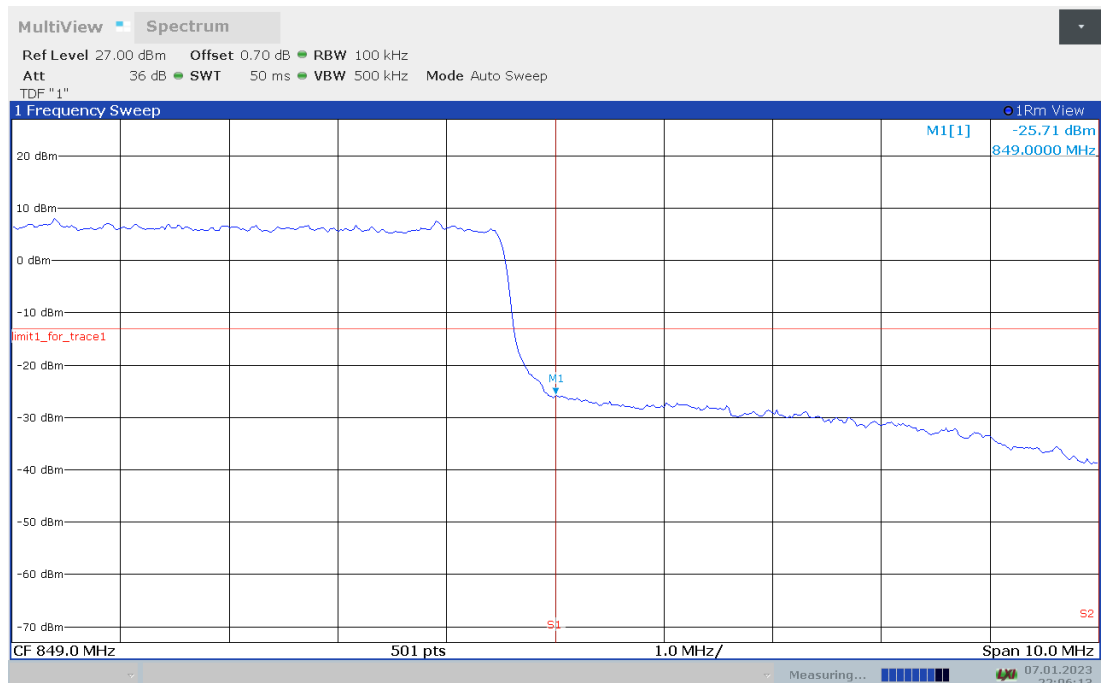
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-10M-100%RB

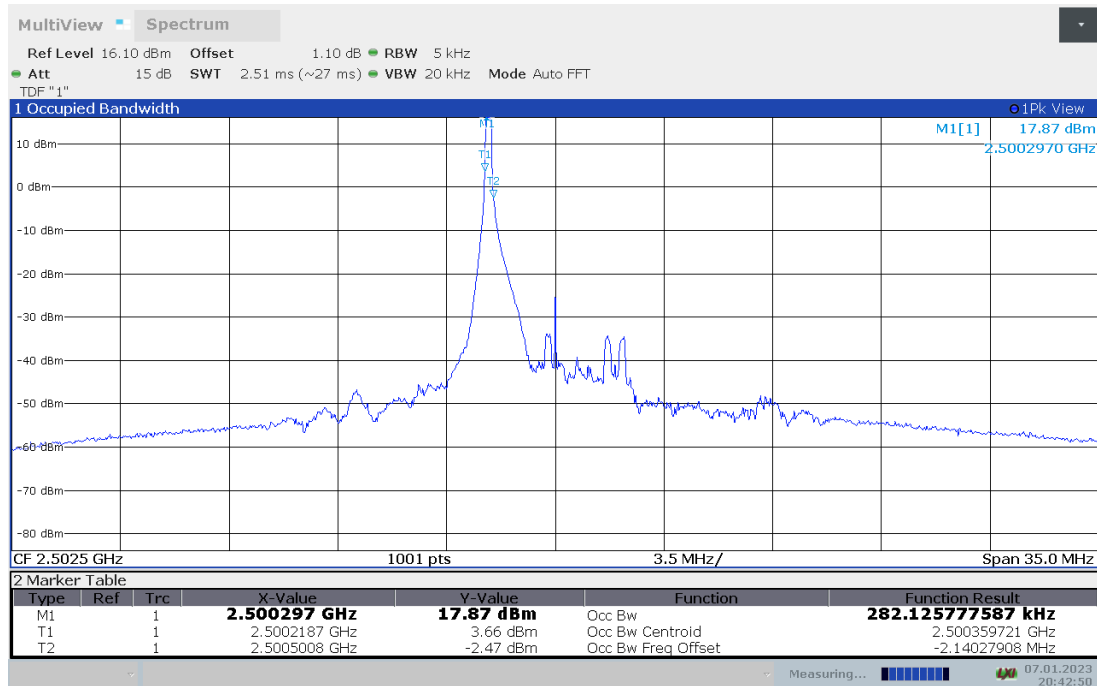


HIGH BAND EDGE BLOCK-10M-100%RB

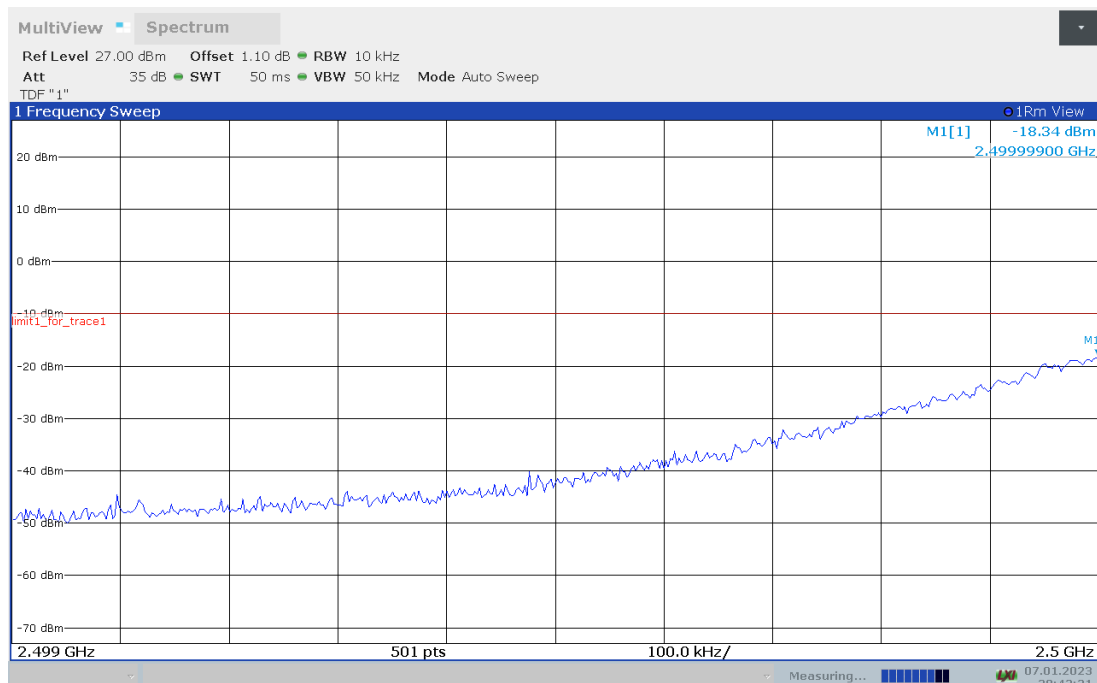


LTE band 7

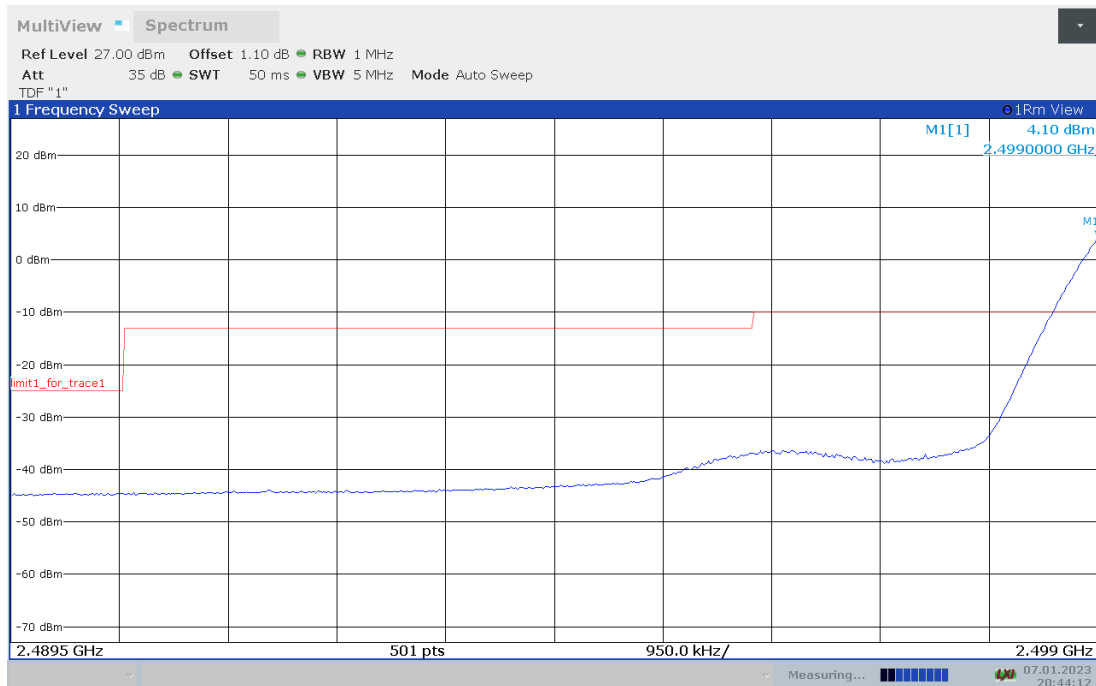
OBW: 1RB-LOW_offset



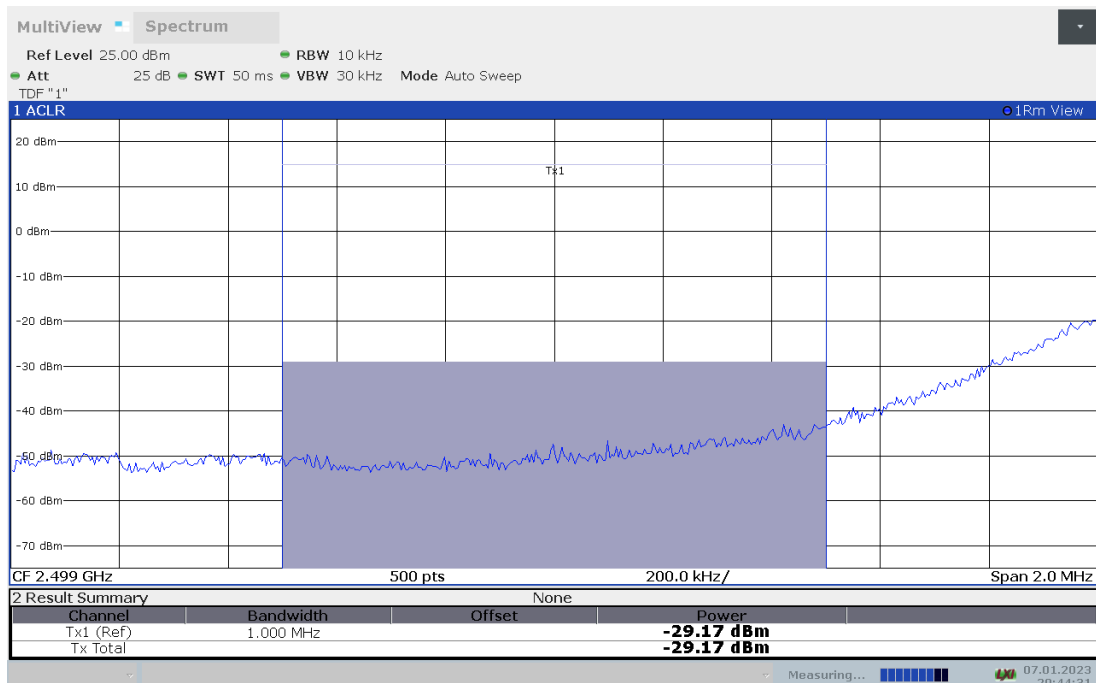
LOW BAND EDGE BLOCK-1RB-LOW_offset



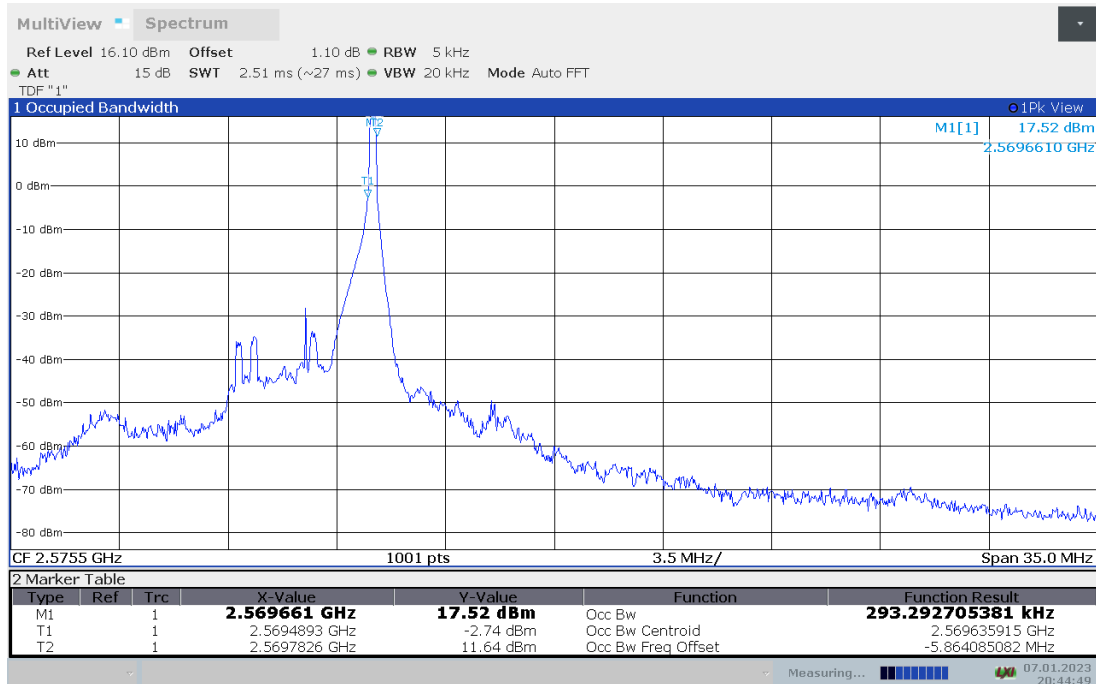
LOW BAND EDGE BLOCK-1RB-LOW_offset



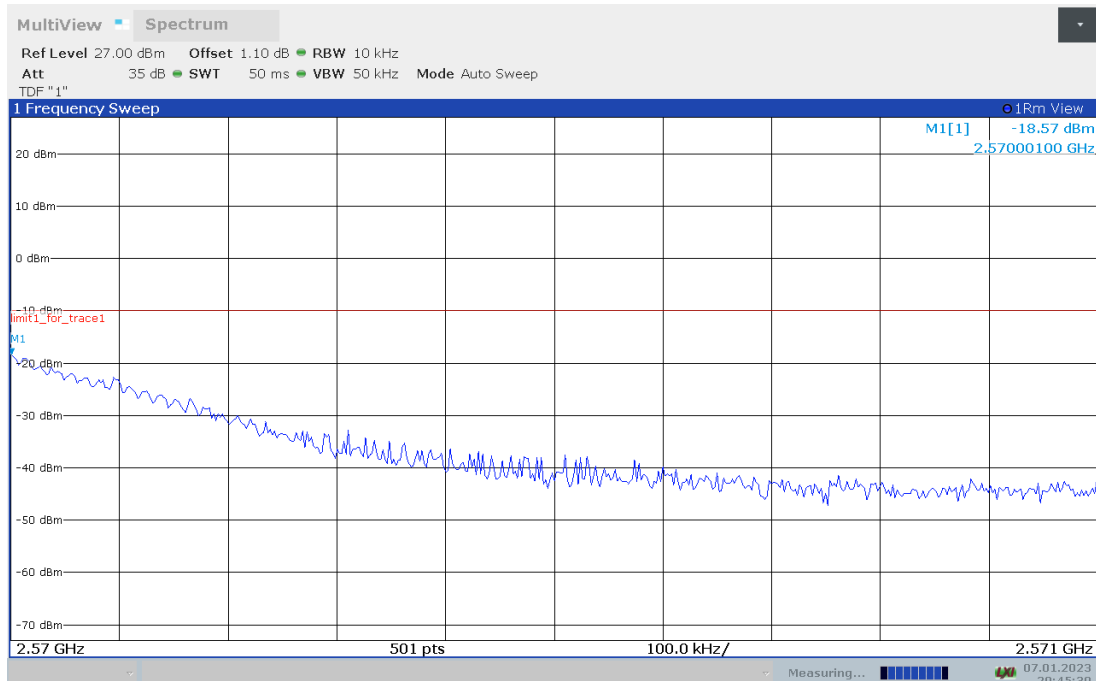
Channel power



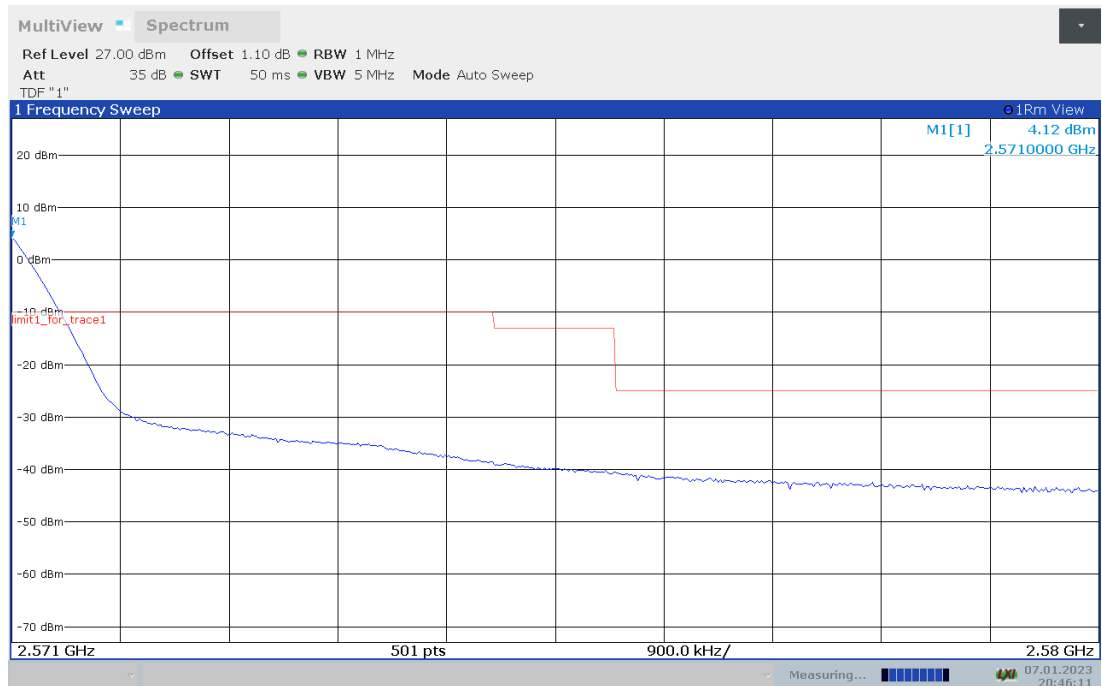
OBW: 1RB-HIGH_offset



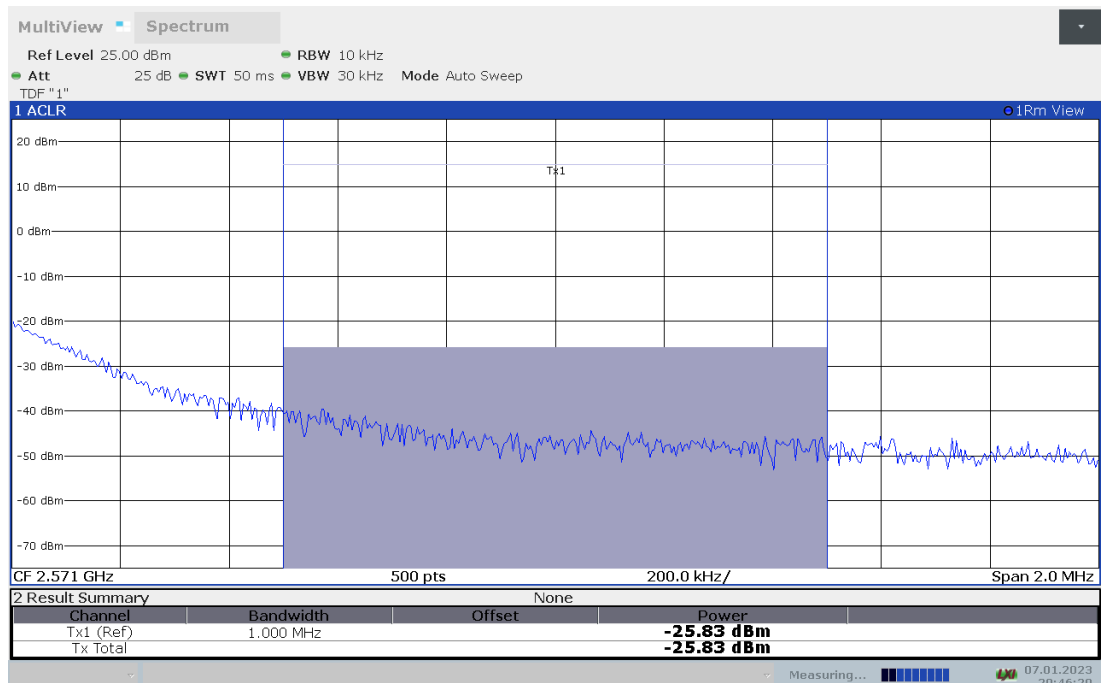
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



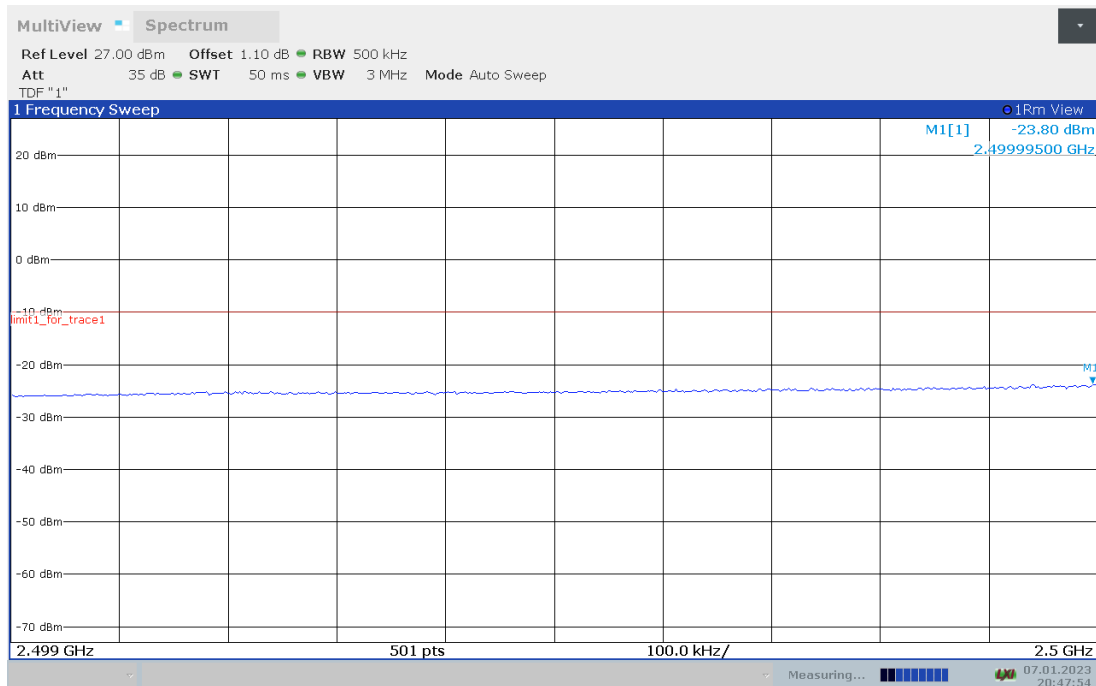
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



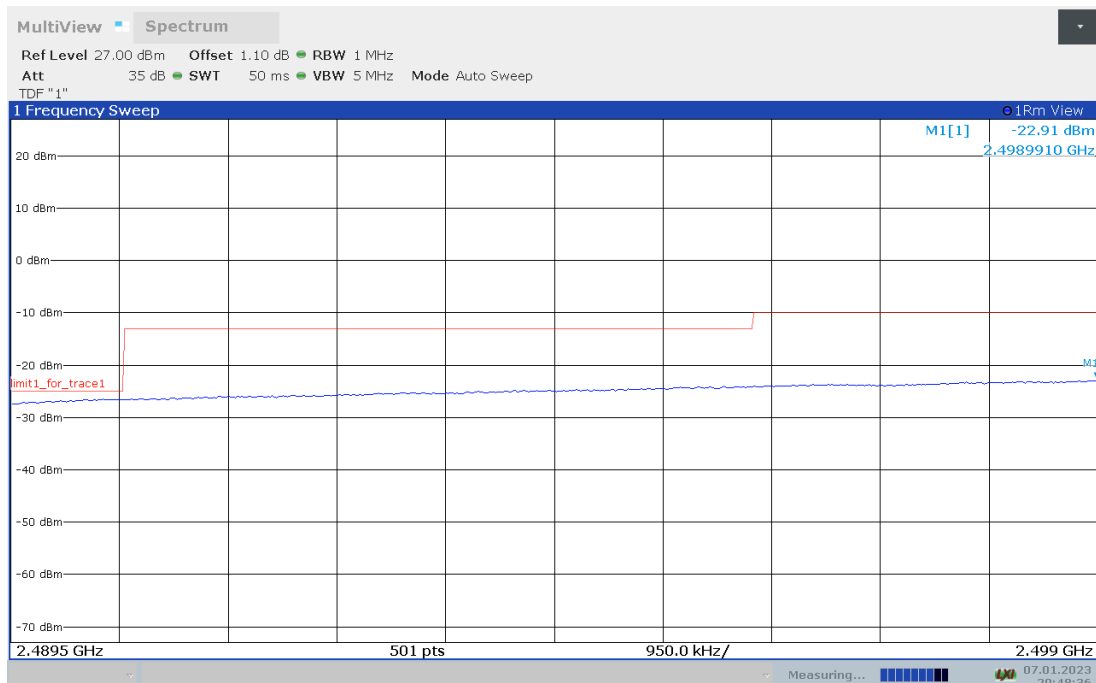
Channel power



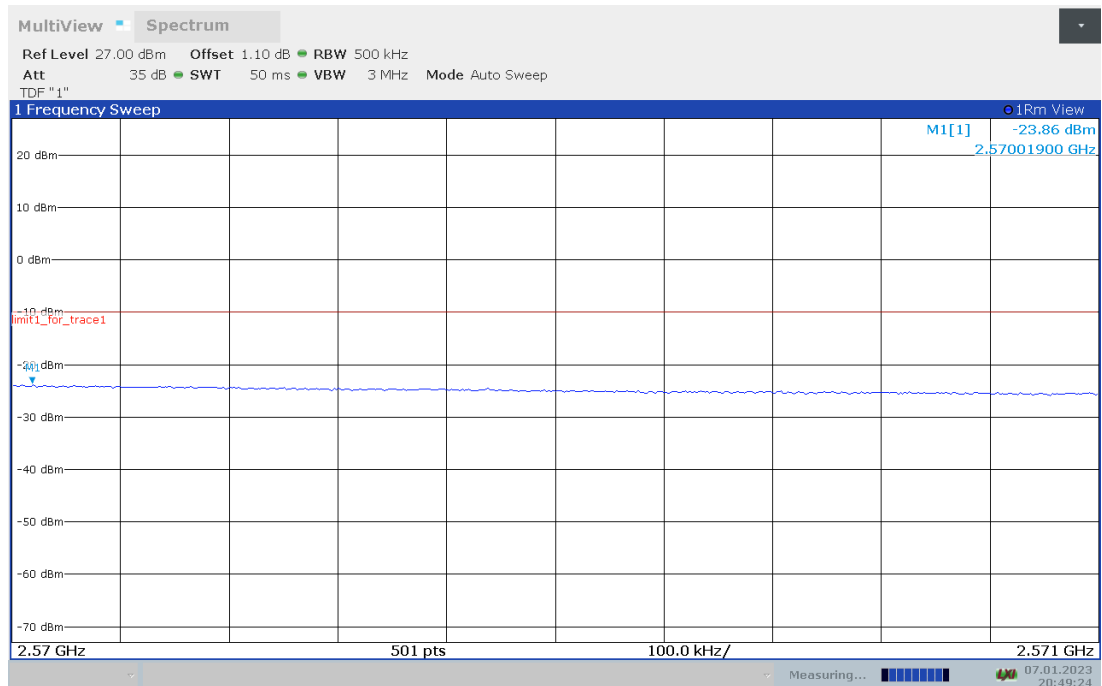
LOW BAND EDGE BLOCK-20M-100%RB



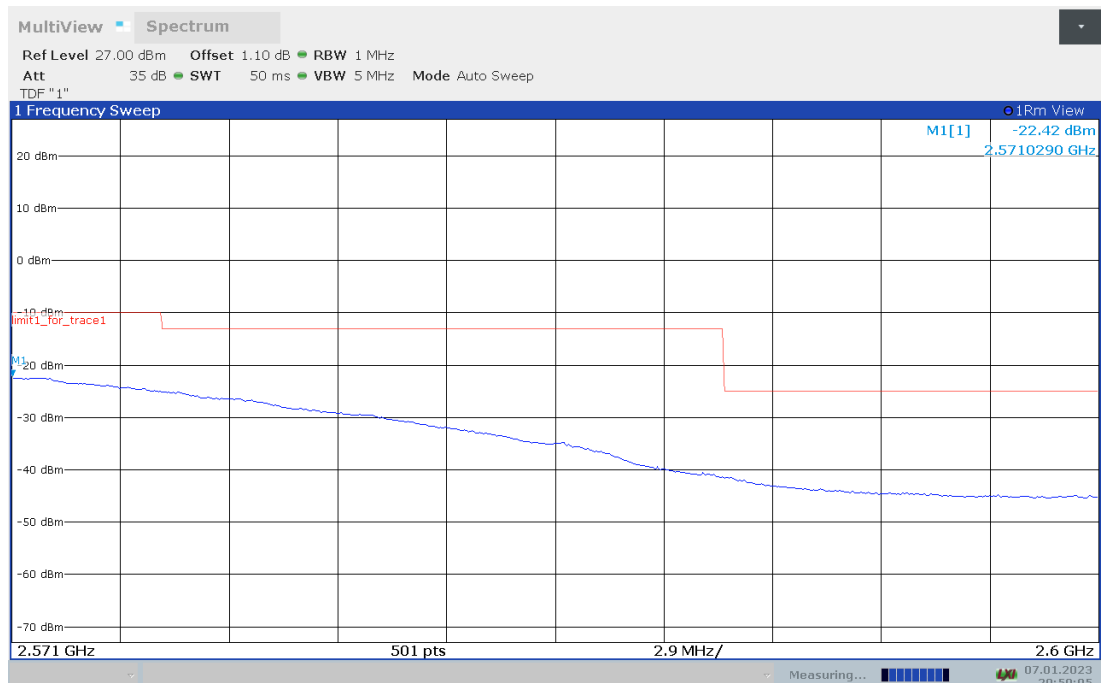
LOW BAND EDGE BLOCK-20M-100%RB



HIGH BAND EDGE BLOCK-20M-100%RB

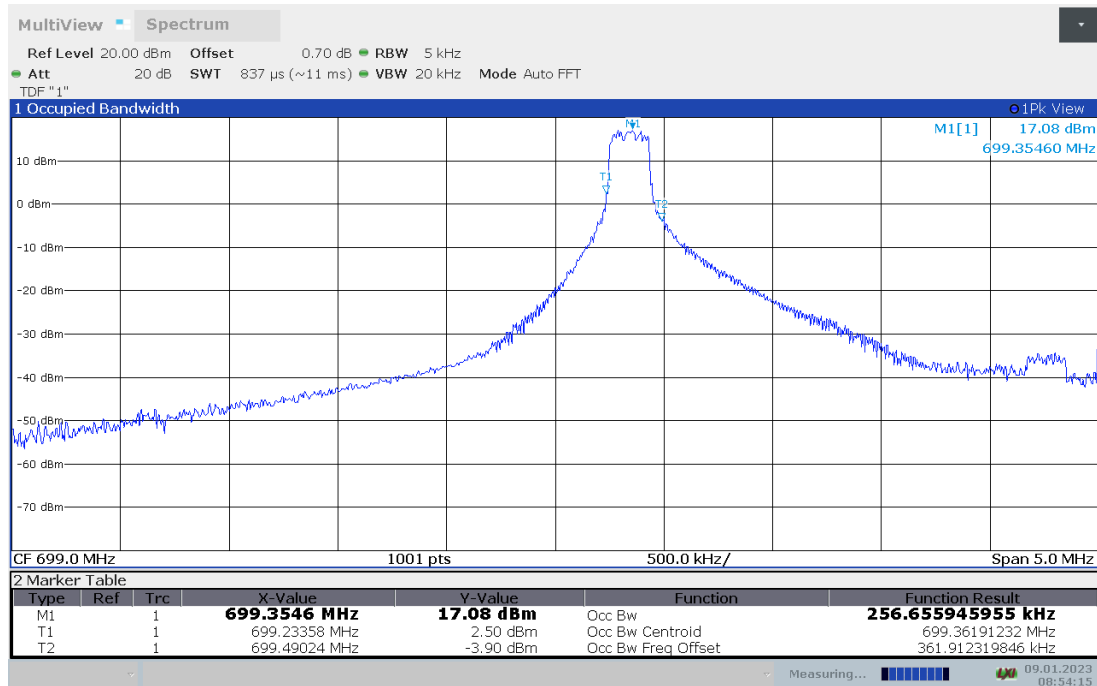


HIGH BAND EDGE BLOCK-20M-100%RB

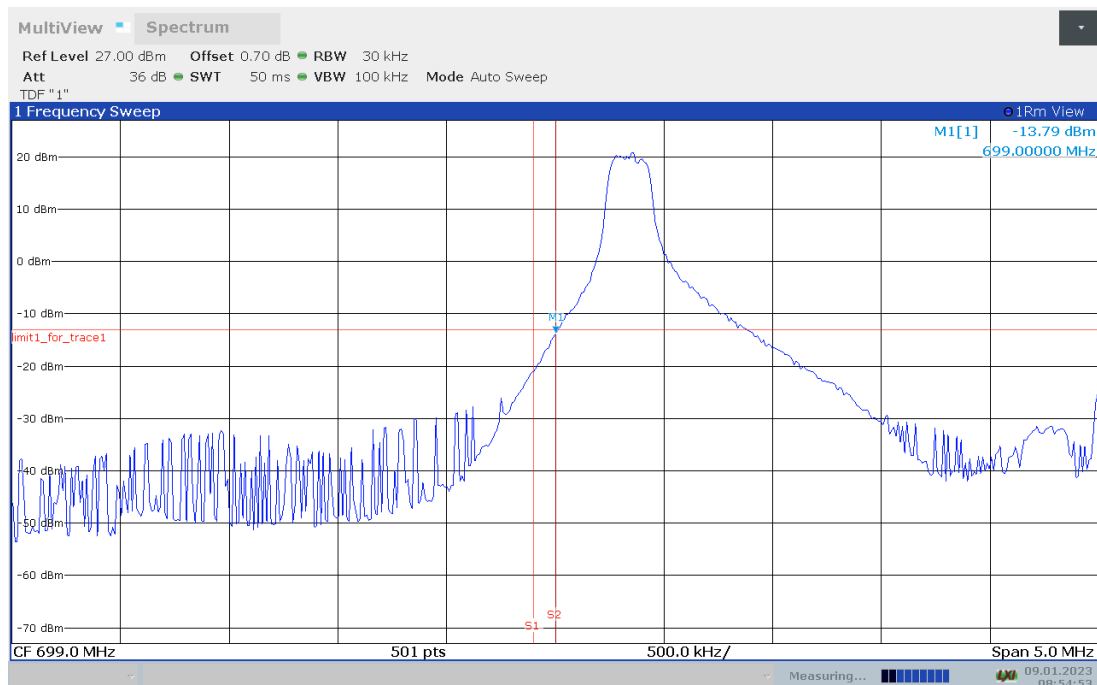


LTE band 12

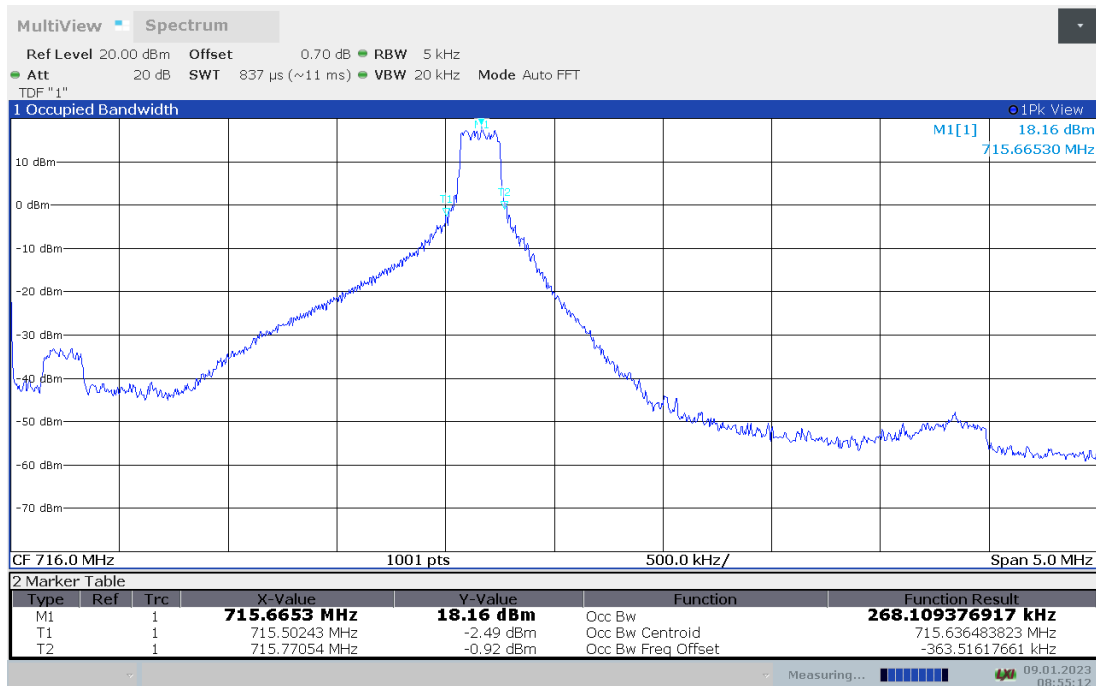
OBW: 1RB-LOW_offset



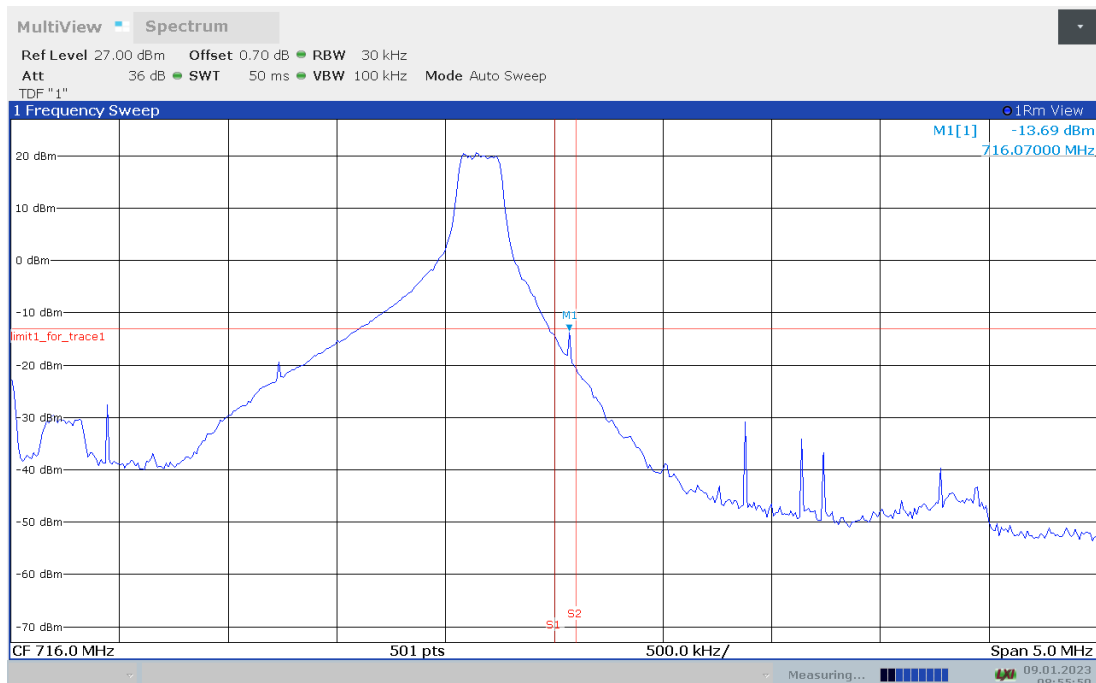
LOW BAND EDGE BLOCK-1RB-LOW_offset



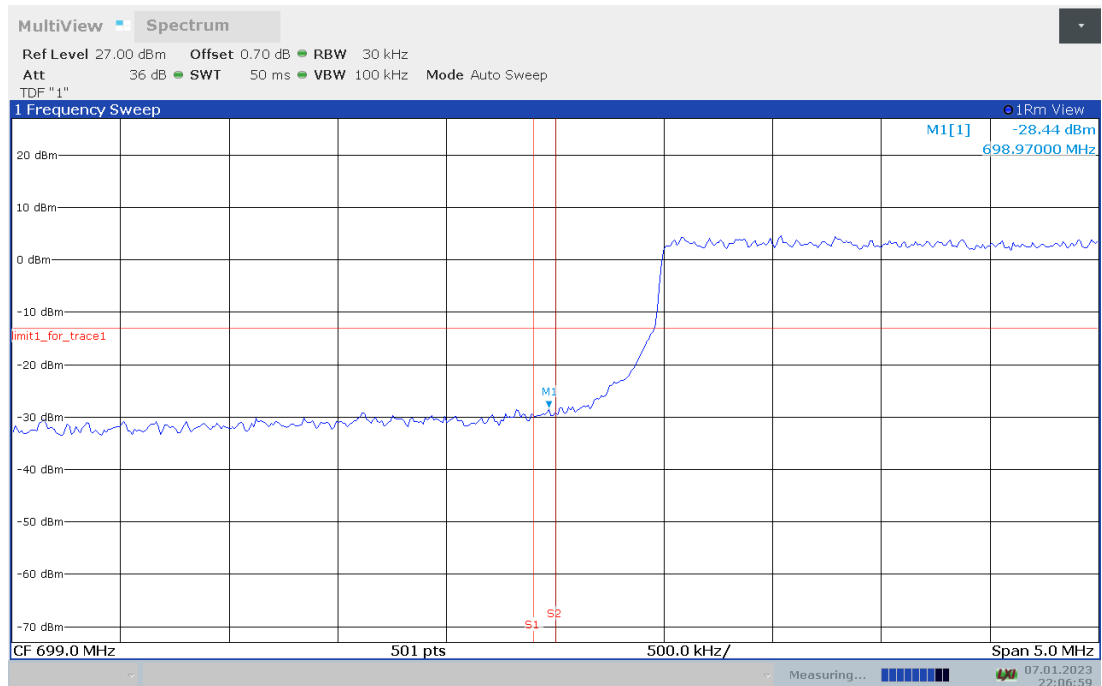
OBW: 1RB-HIGH_offset



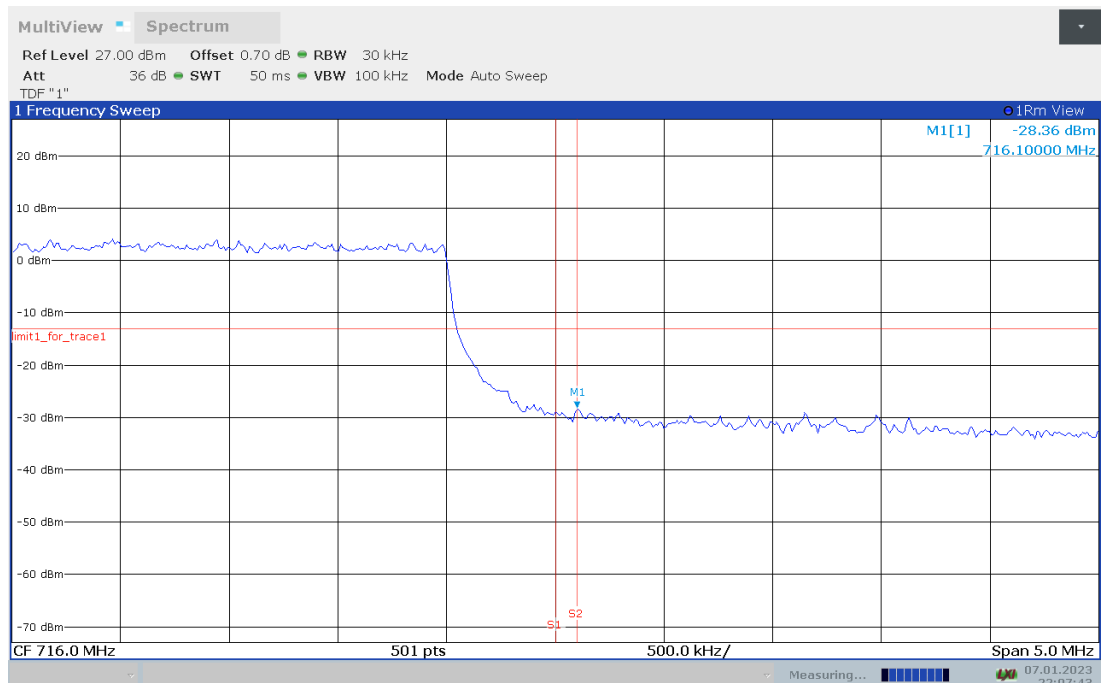
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-10M-100%RB

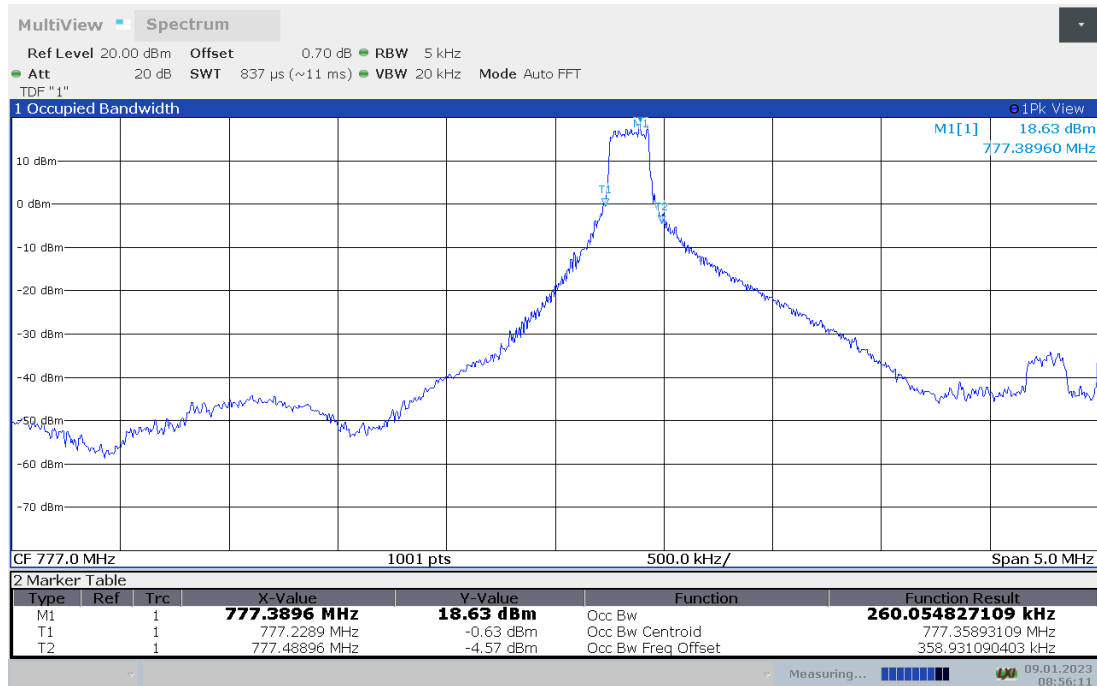


HIGH BAND EDGE BLOCK-10M-100%RB

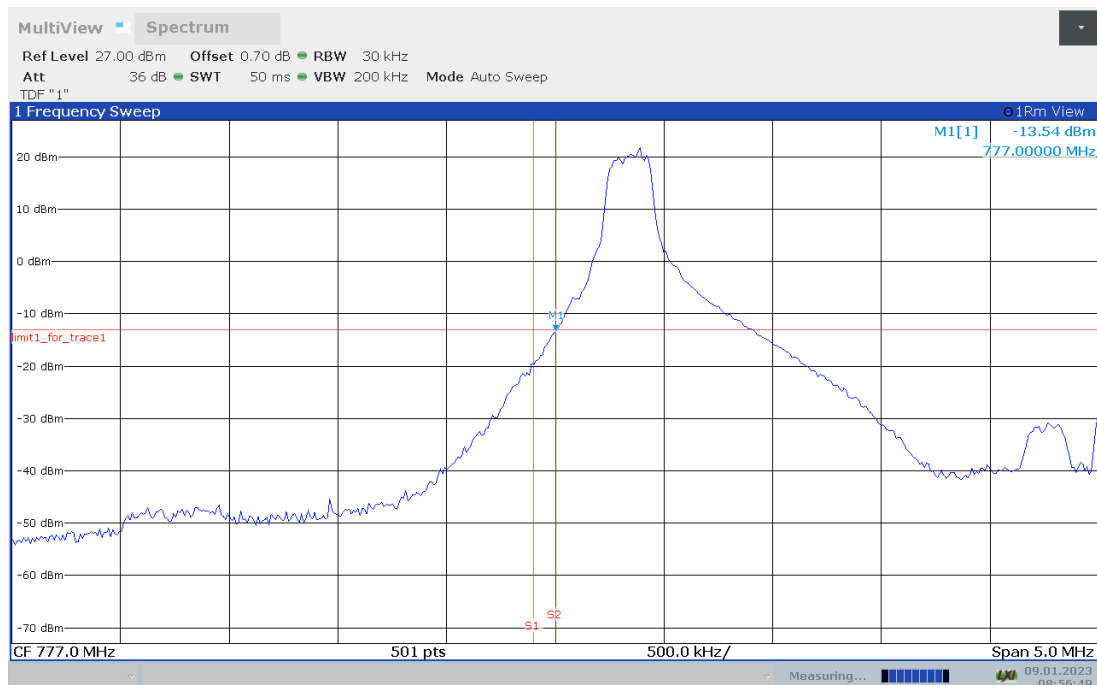


LTE band 13

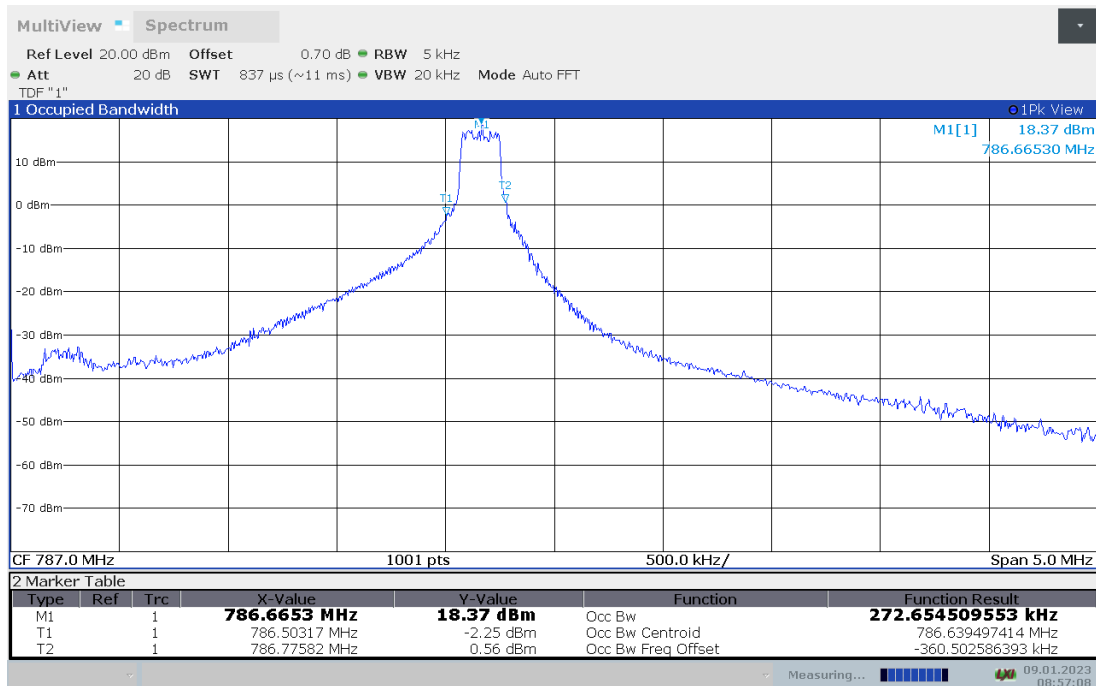
OBW: 1RB-LOW_offset



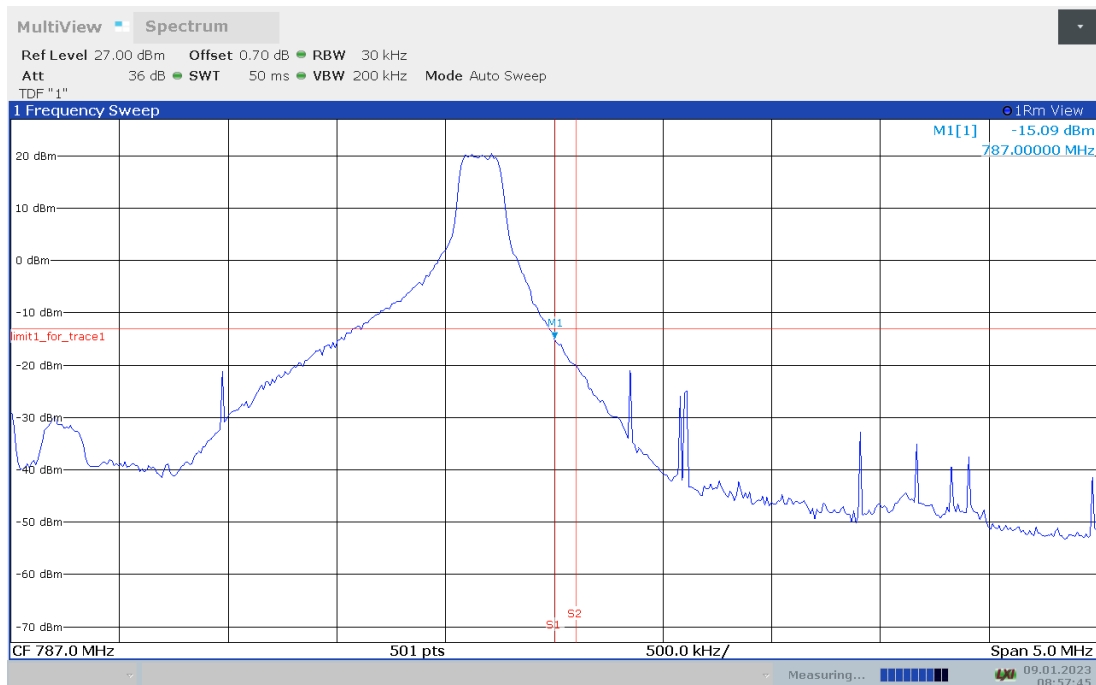
LOW BAND EDGE BLOCK-1RB-LOW_offset



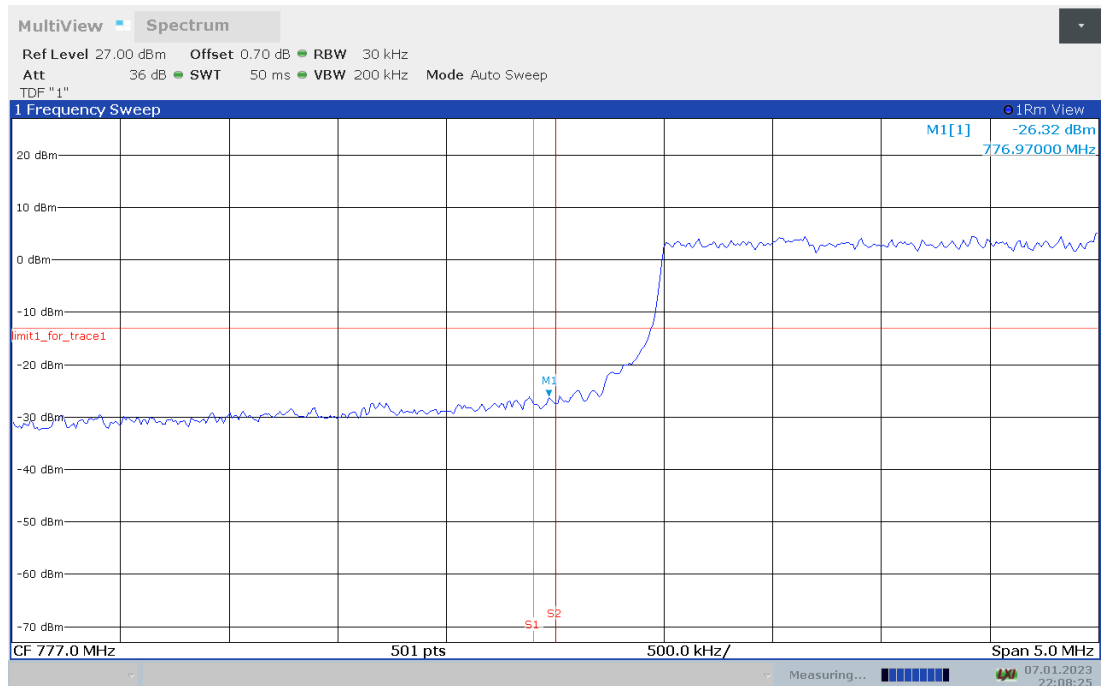
OBW: 1RB-HIGH_offset



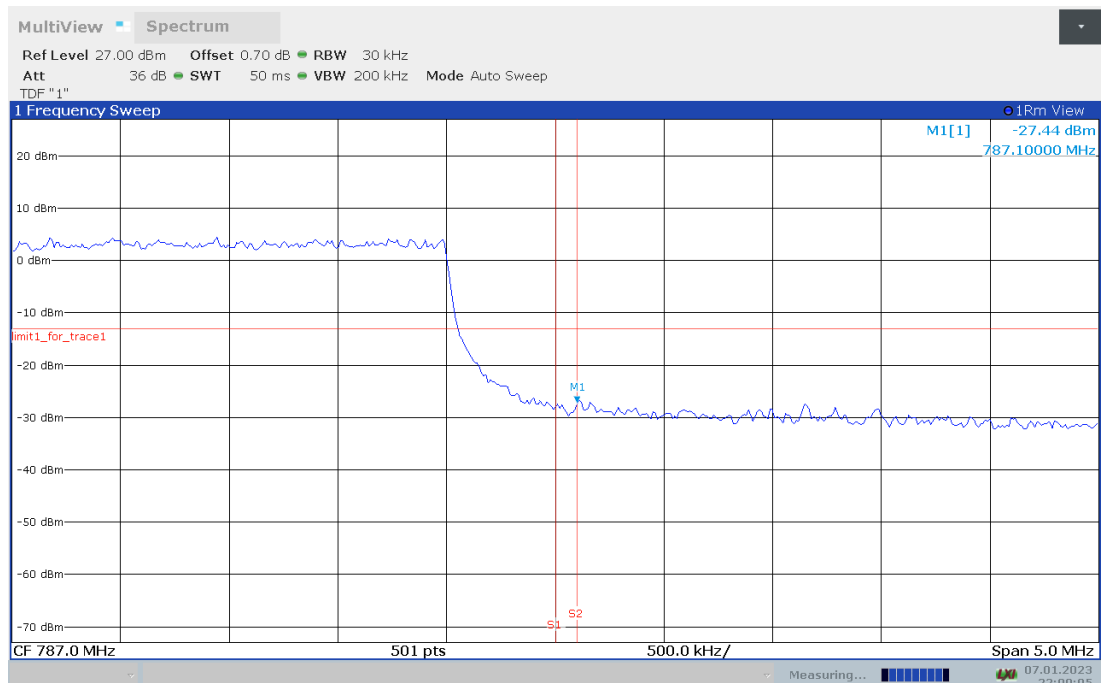
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-10M-100%RB

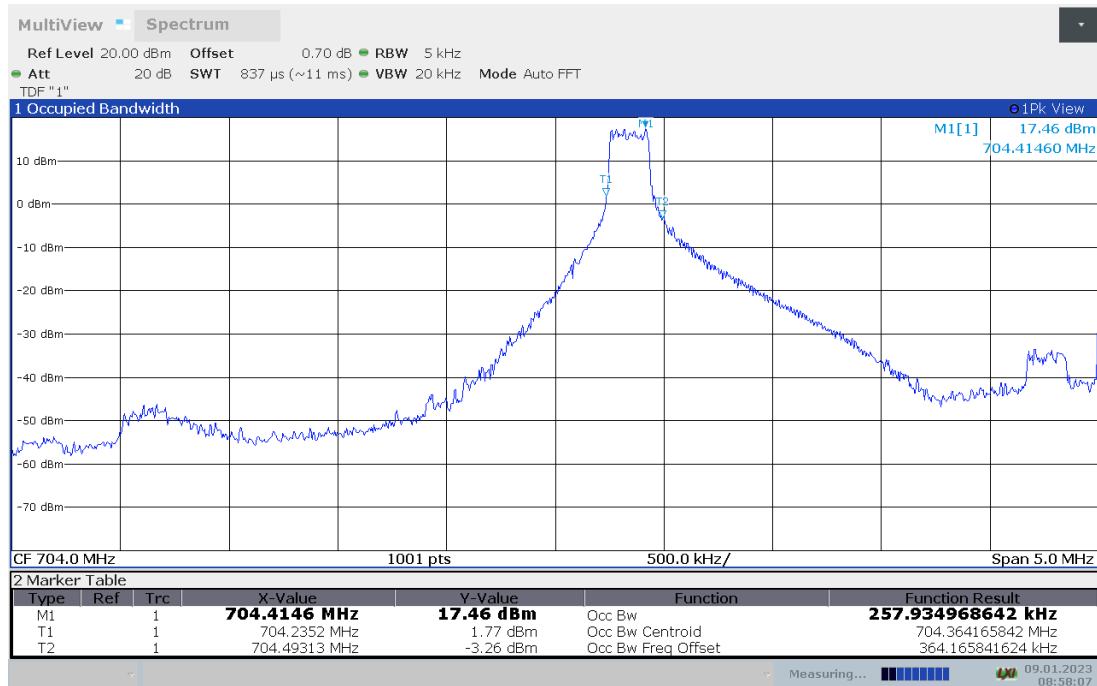


HIGH BAND EDGE BLOCK-10M-100%RB

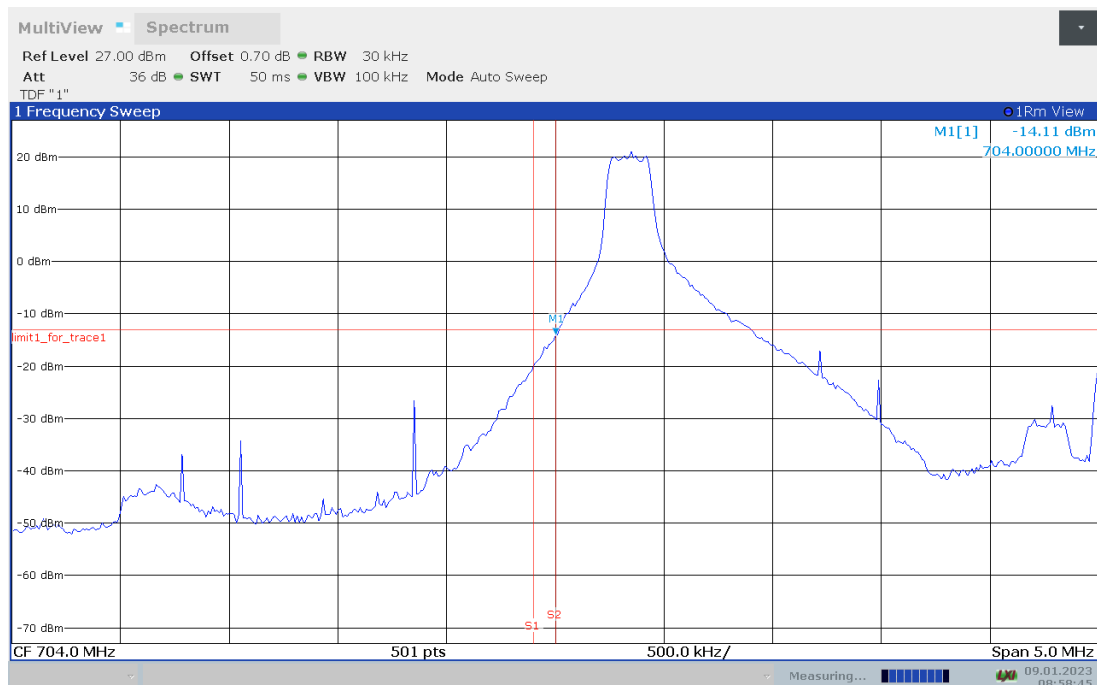


LTE band 17

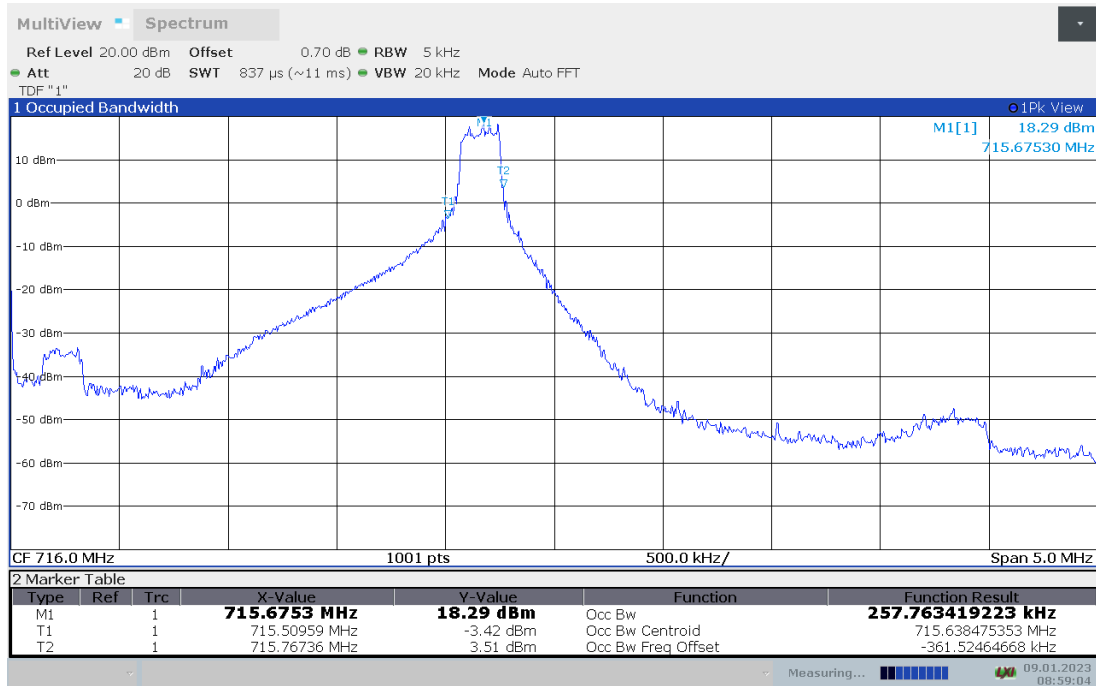
OBW: 1RB-LOW_offset



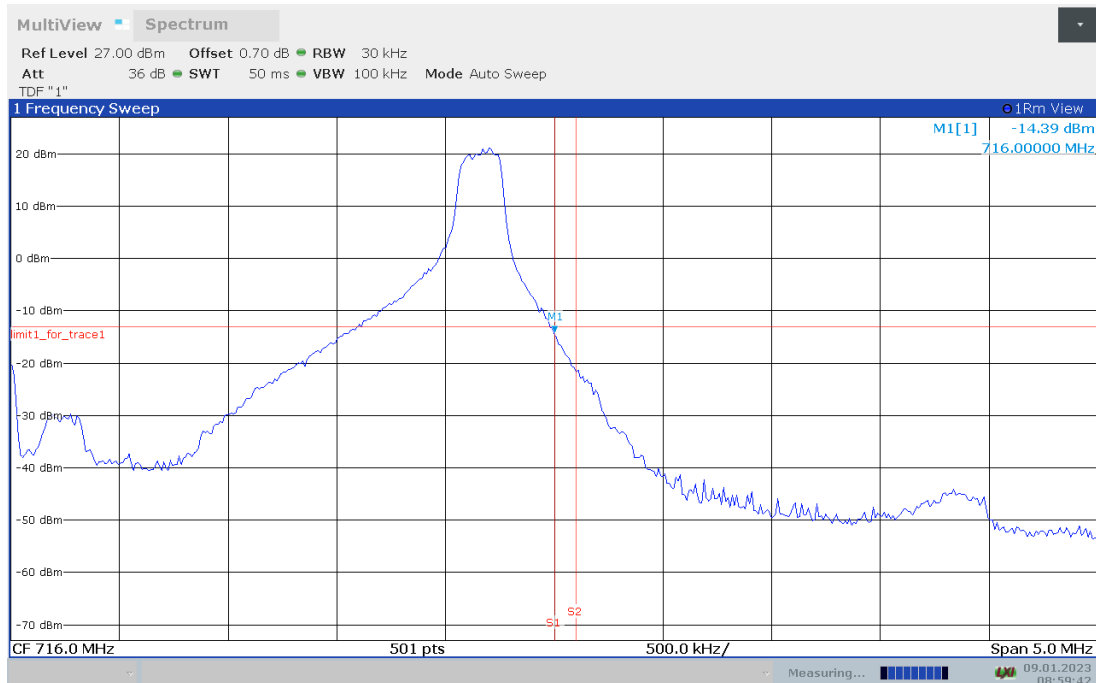
LOW BAND EDGE BLOCK-1RB-LOW_offset



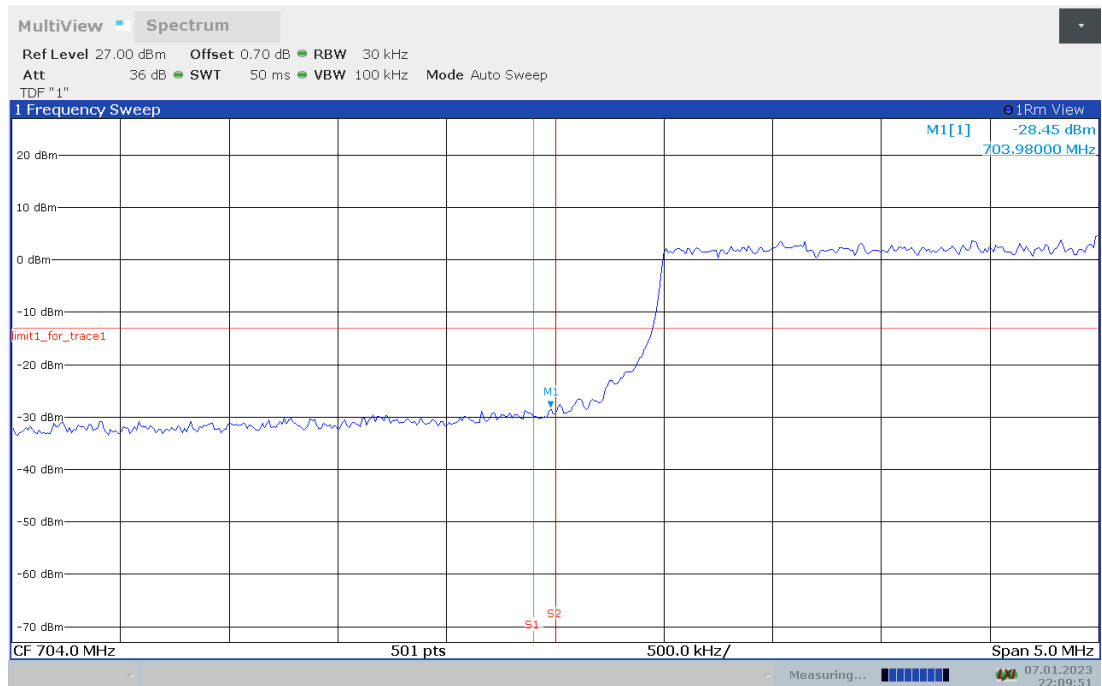
OBW: 1RB-HIGH_offset



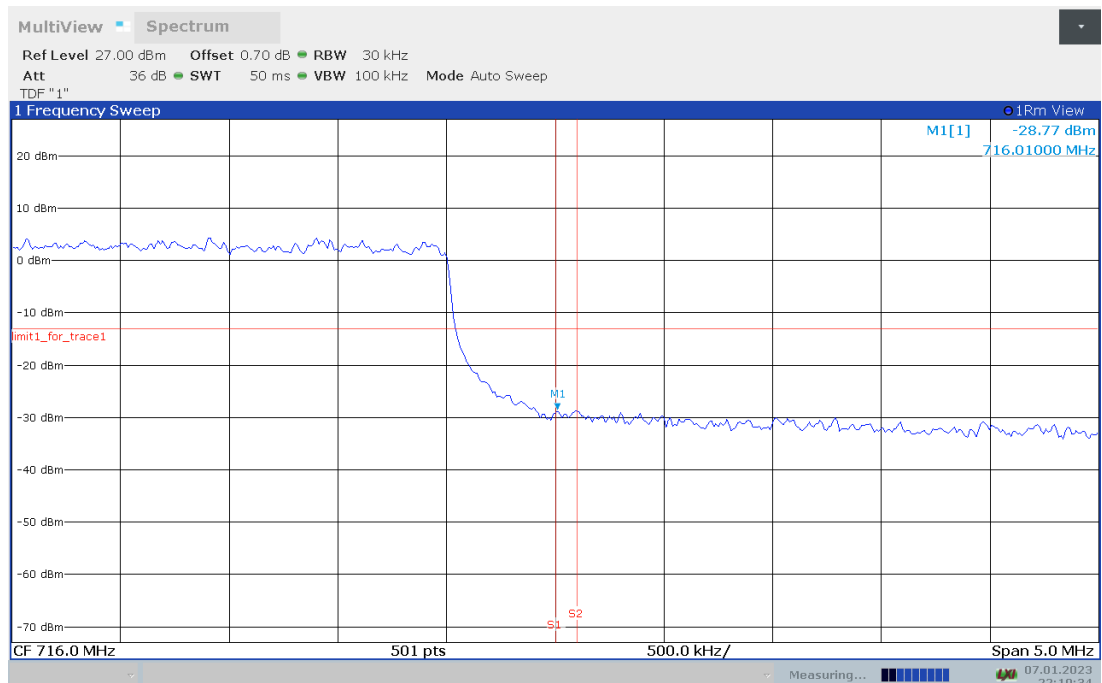
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-10M-100%RB



HIGH BAND EDGE BLOCK-10M-100%RB

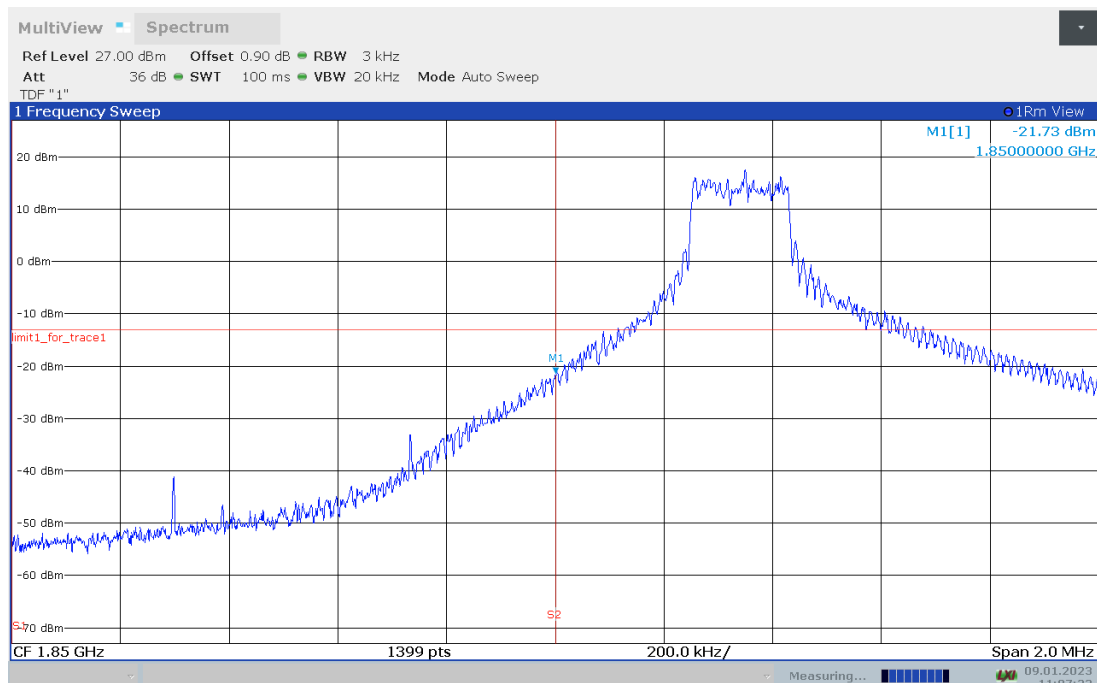


LTE band 25

OBW: 1RB-LOW_offset



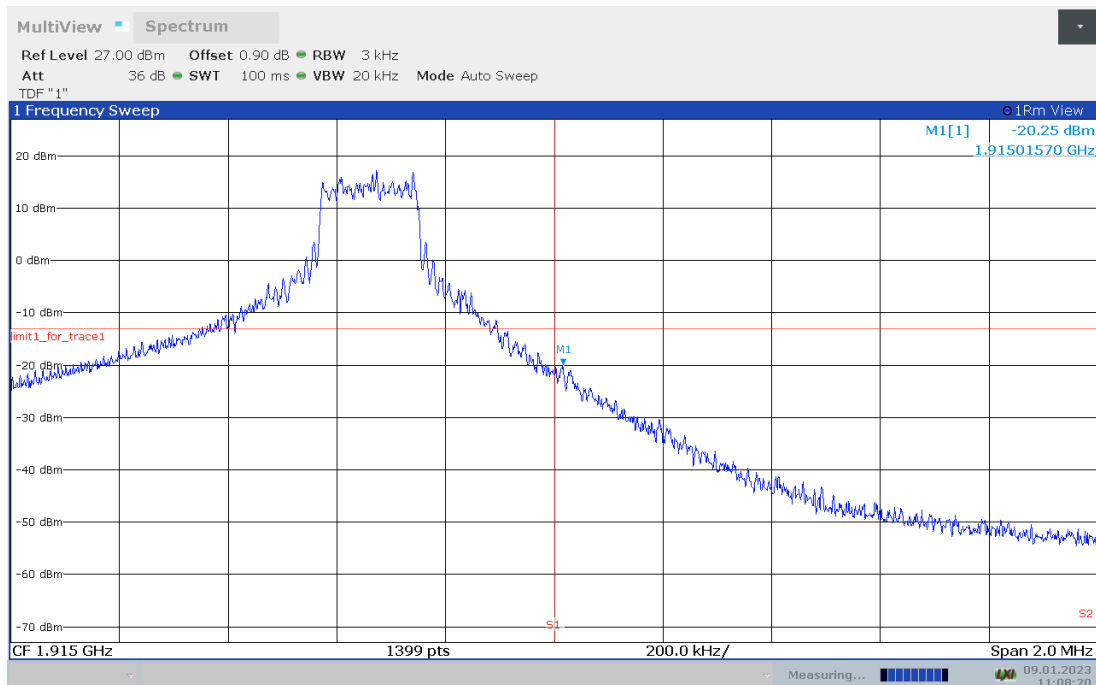
LOW BAND EDGE BLOCK-1RB-LOW_offset



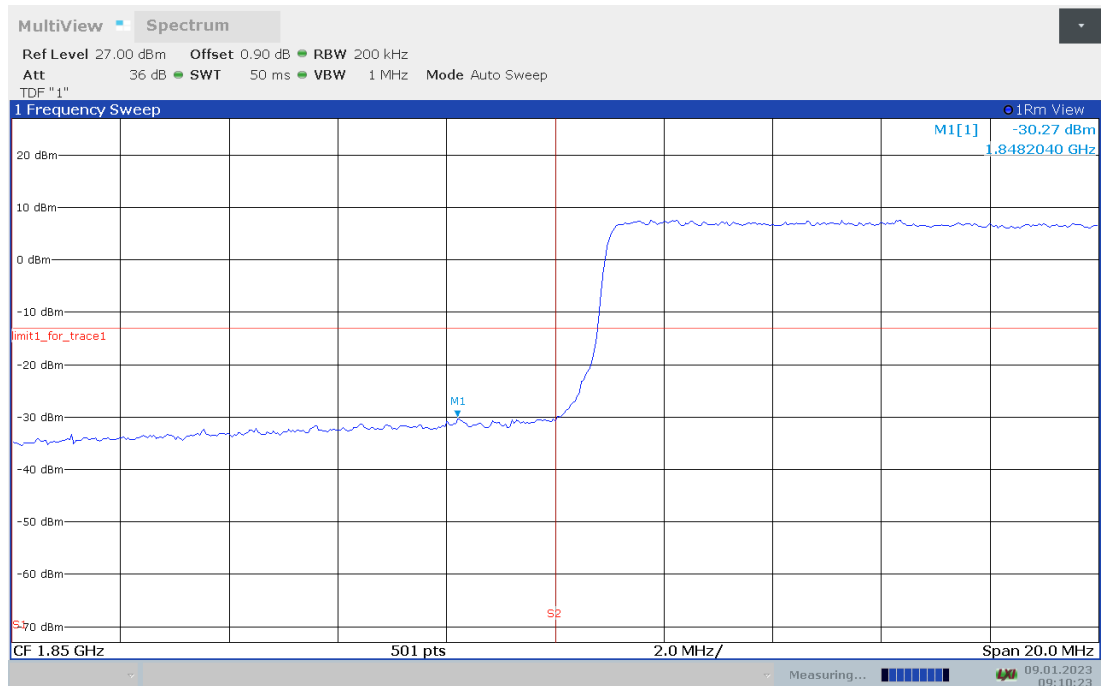
OBW: 1RB-HIGH_offset



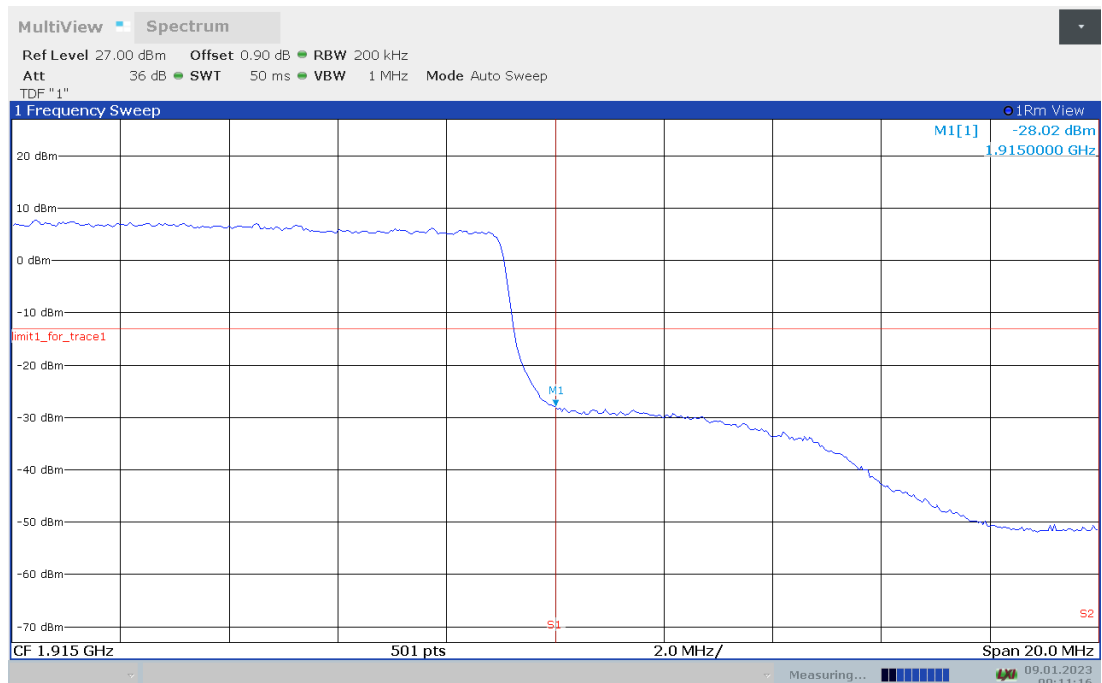
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-20M-100%RB



HIGH BAND EDGE BLOCK-20M-100%RB

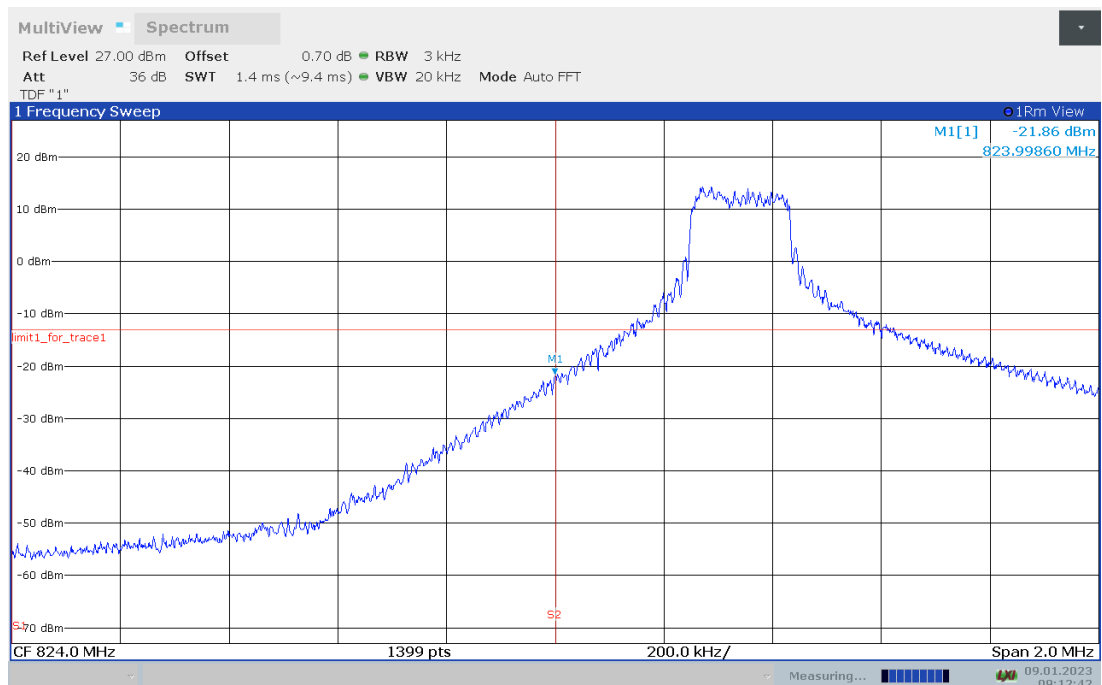


LTE band 26(824MHz-849MHz)

OBW: 1RB-LOW_offset



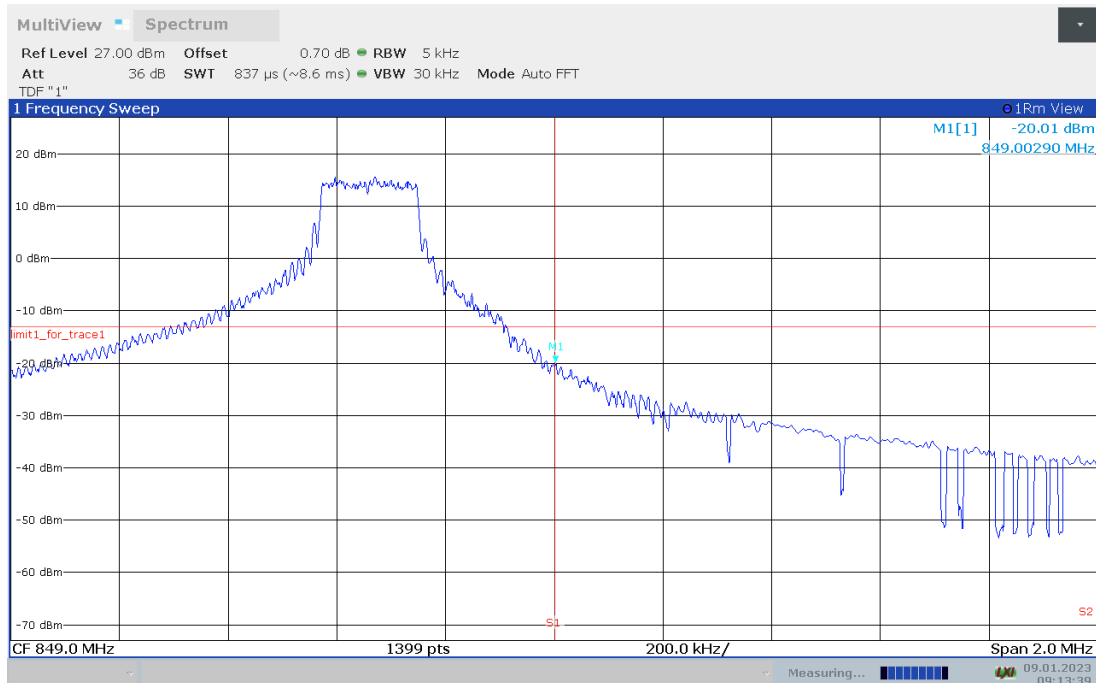
LOW BAND EDGE BLOCK-1RB-LOW_offset



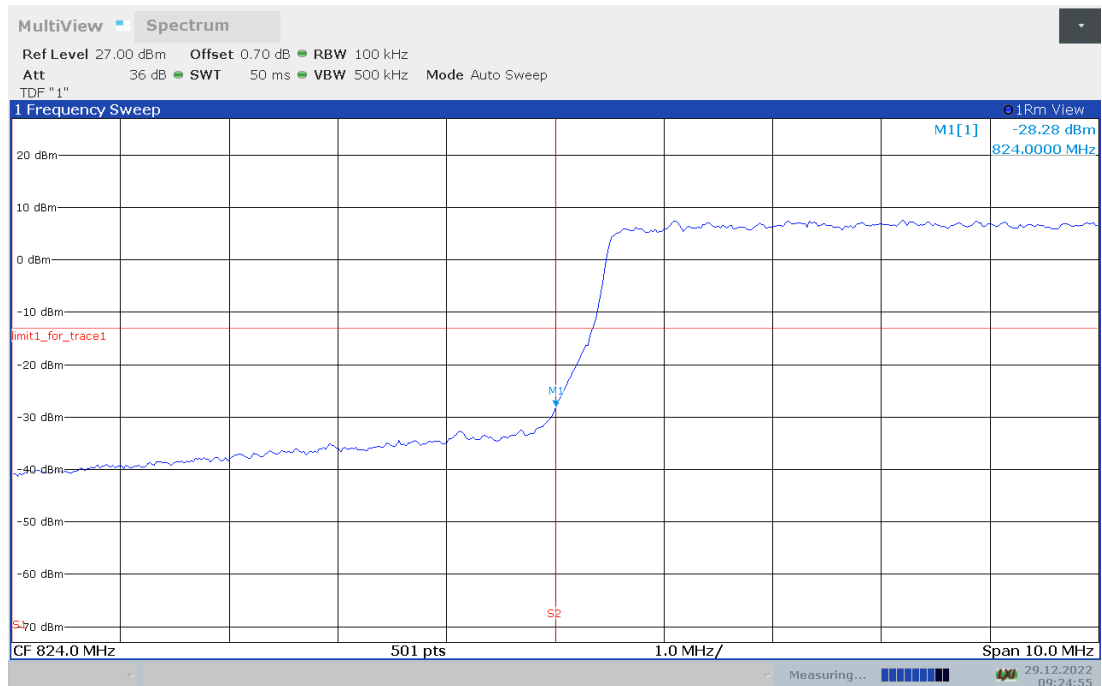
OBW: 1RB-HIGH_offset



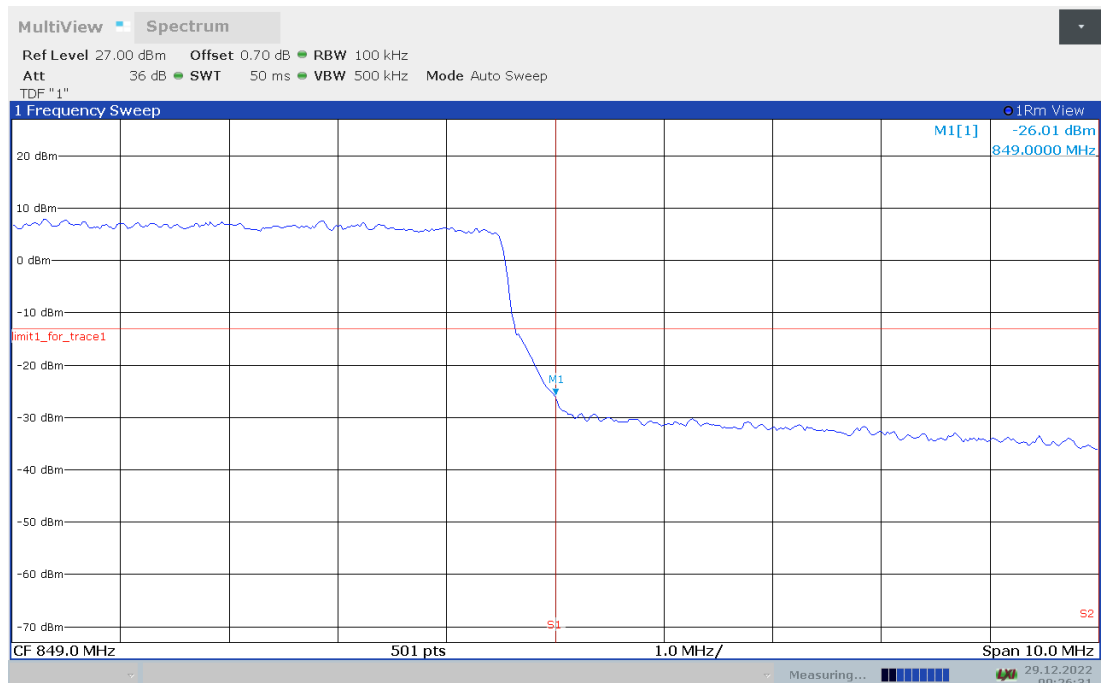
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-10M-100%RB

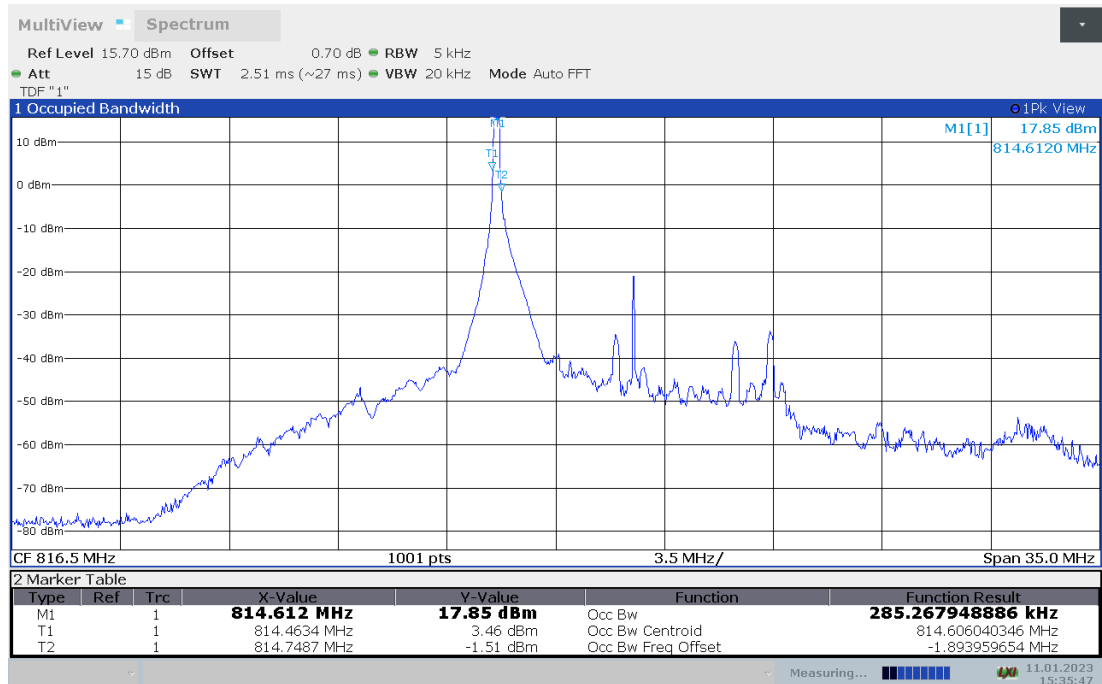


HIGH BAND EDGE BLOCK-10M-100%RB

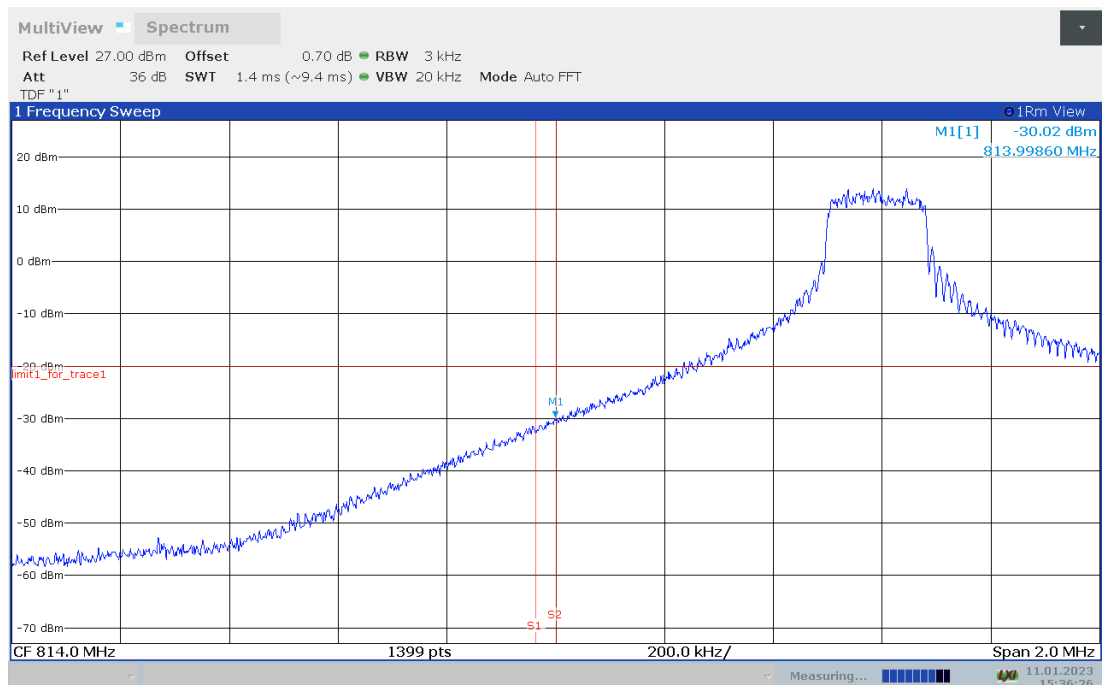


LTE band 26(814MHz-824MHz)

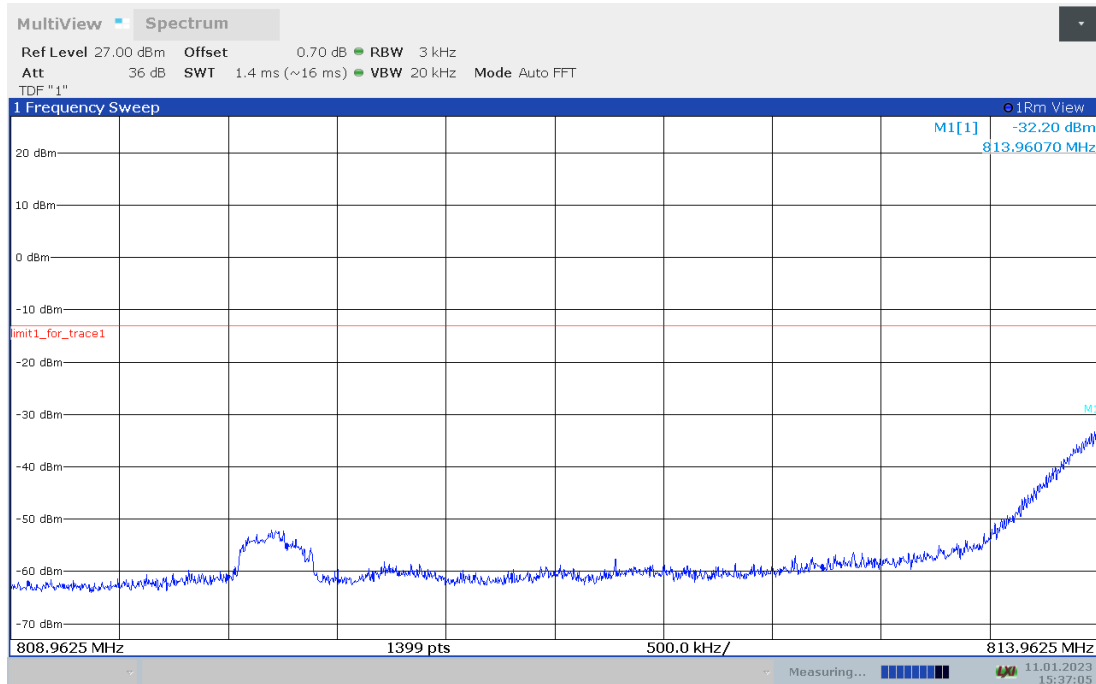
OBW: 1RB-LOW_offset



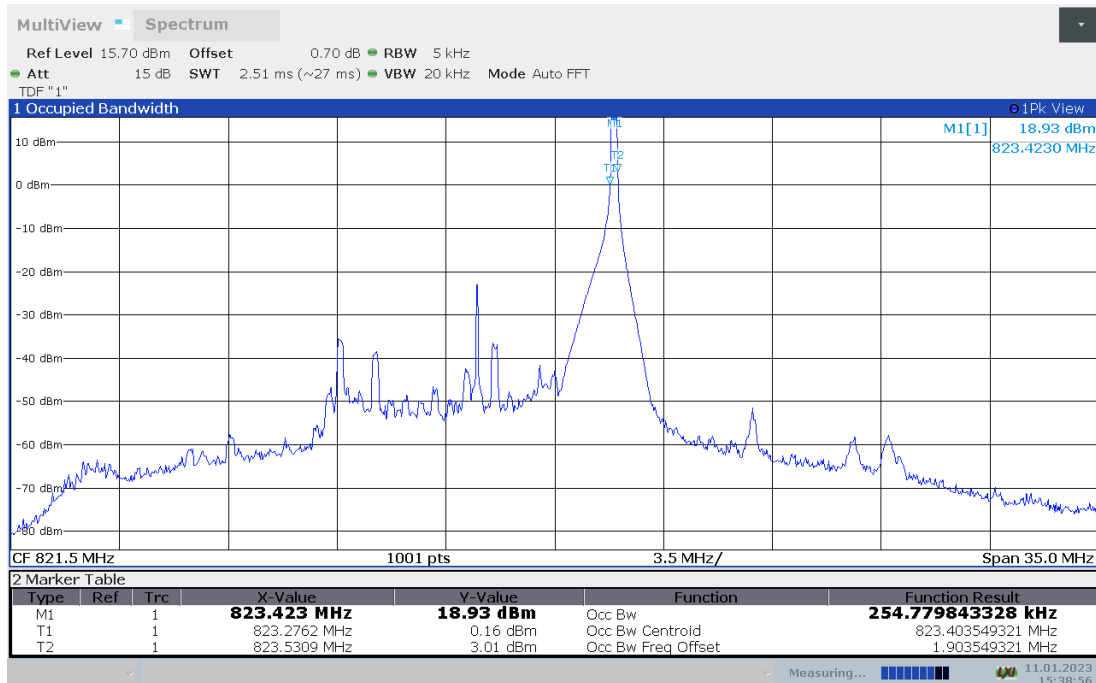
LOW BAND EDGE BLOCK-1RB-LOW_offset



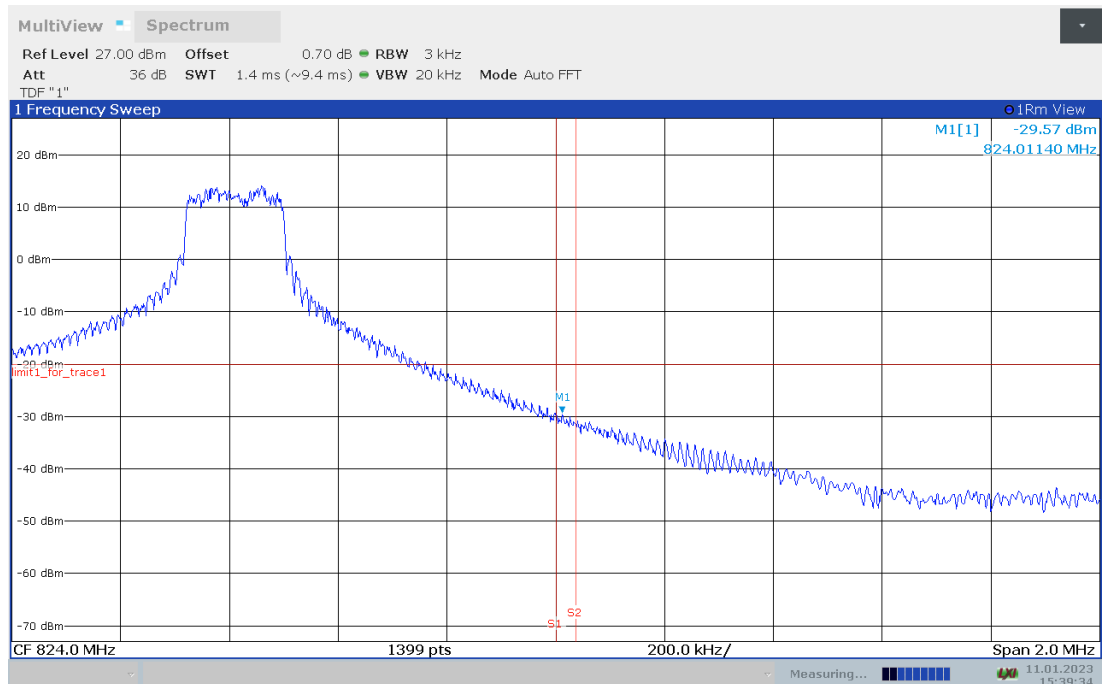
LOW BAND EDGE BLOCK-1RB-LOW_offset



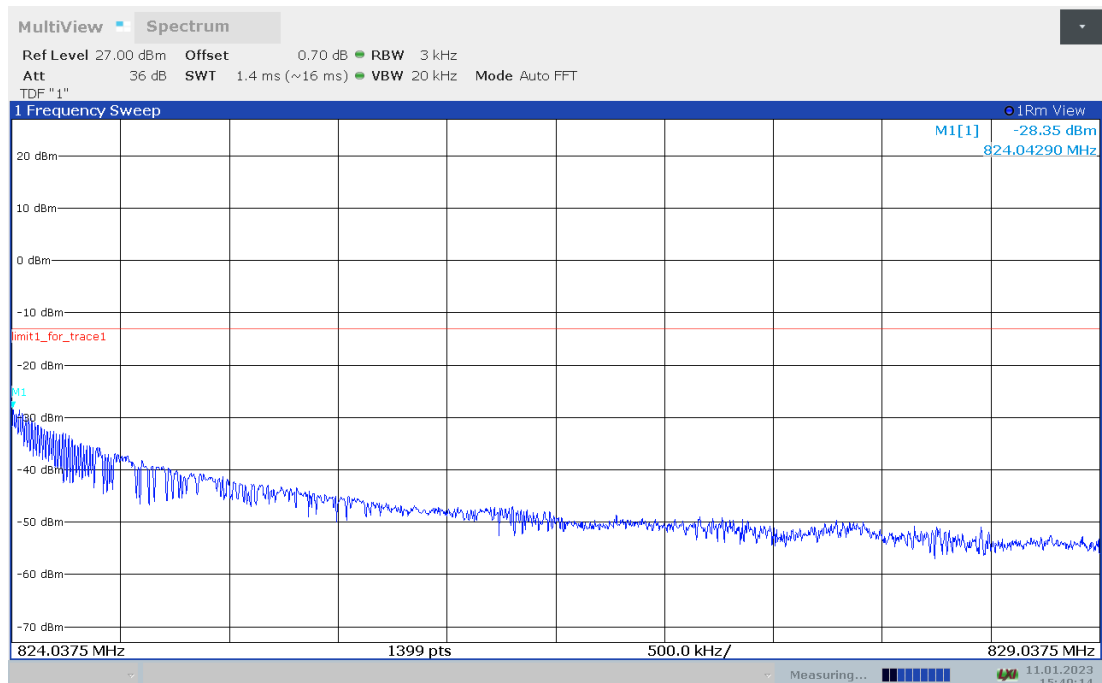
OBW: 1RB-HIGH_offset



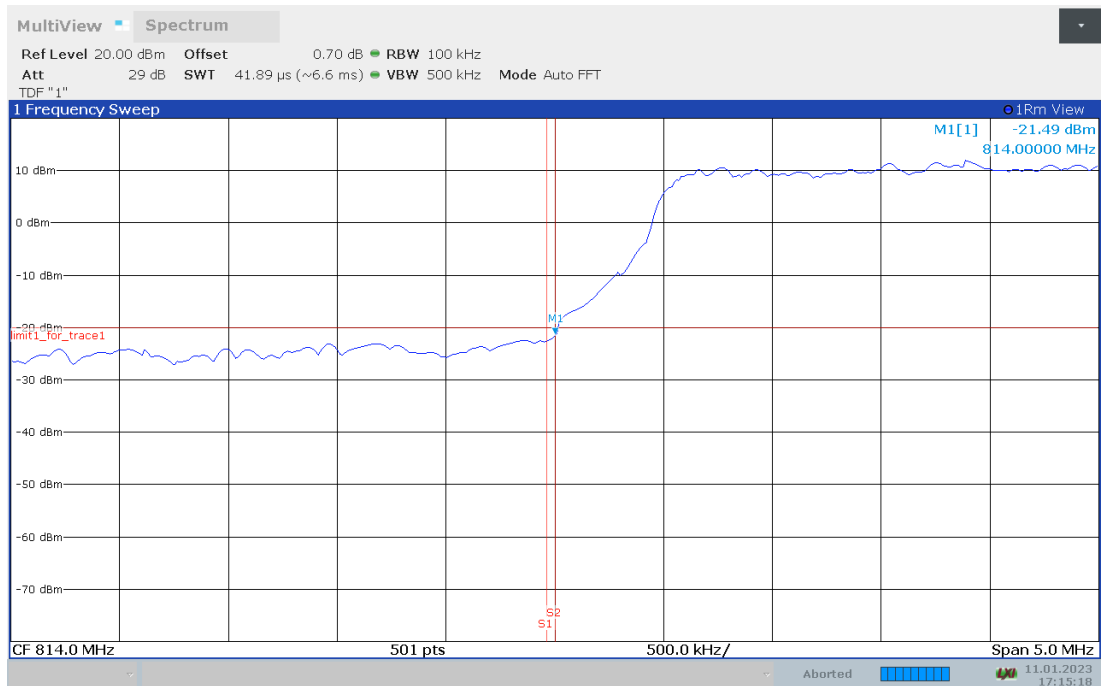
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



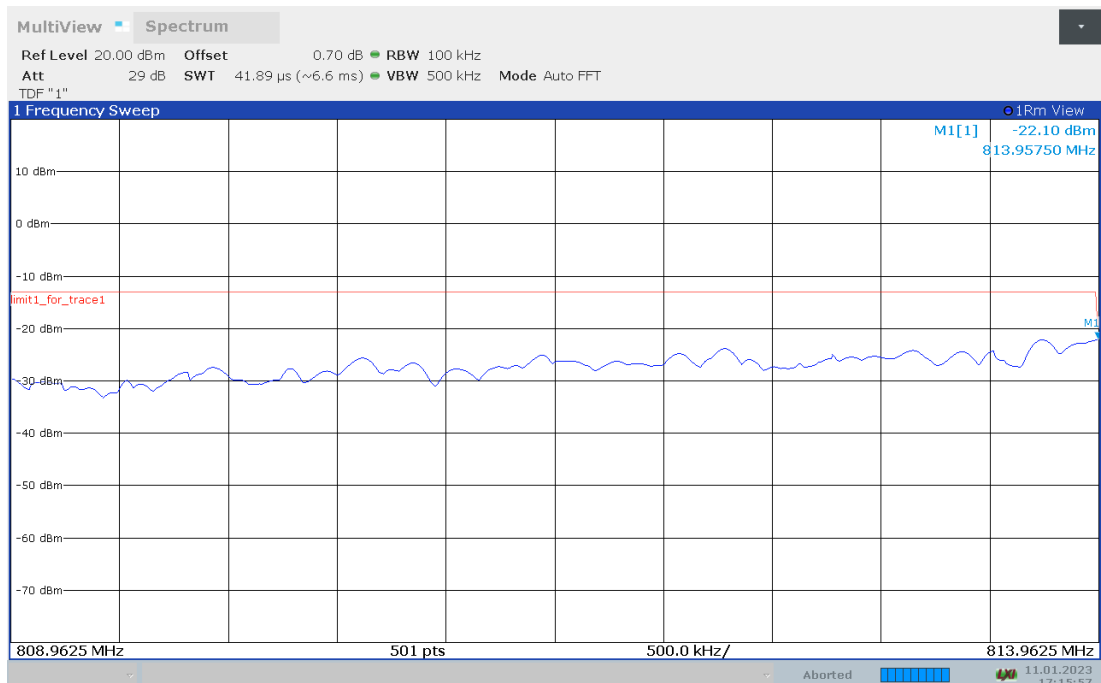
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



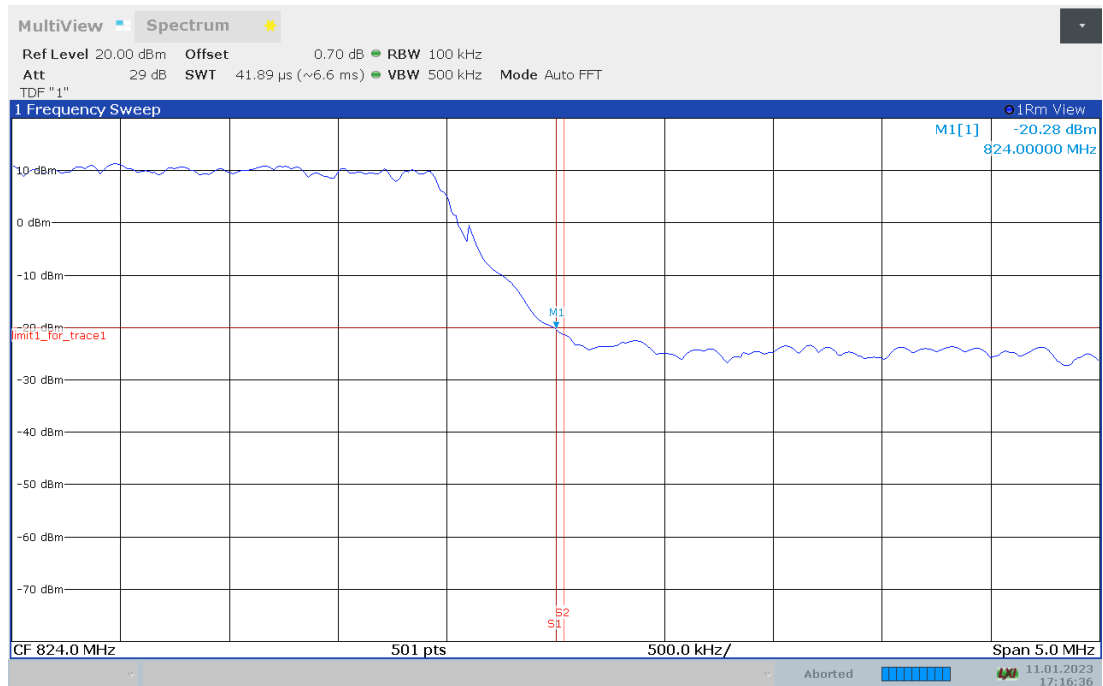
LOW BAND EDGE BLOCK-10M-100%RB



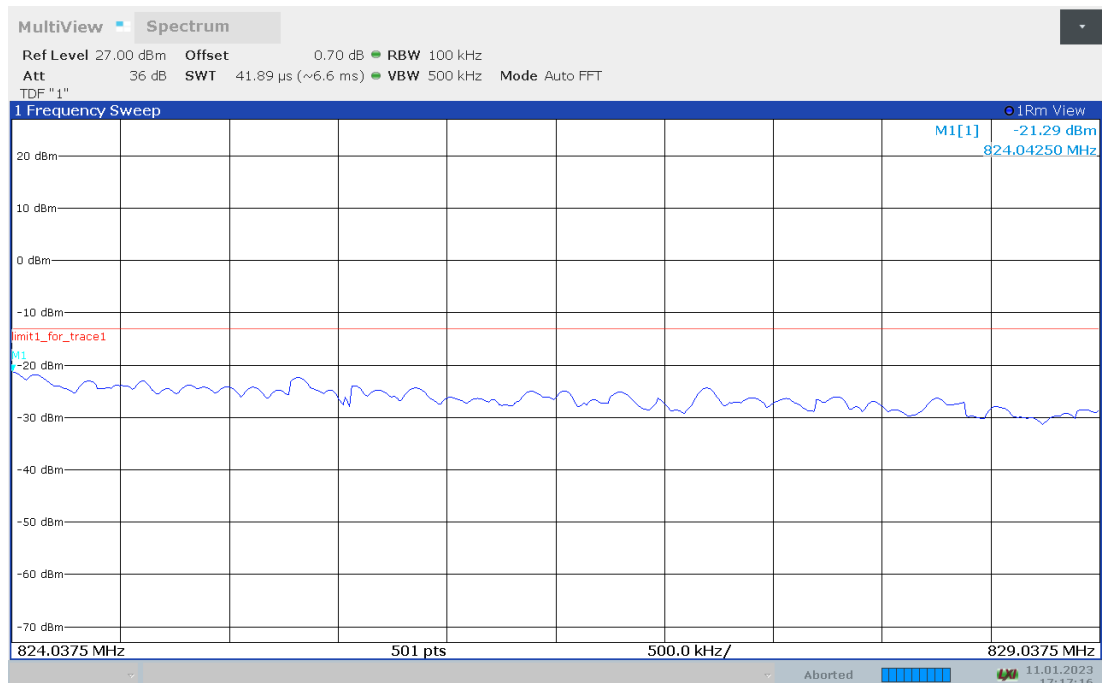
LOW BAND EDGE BLOCK-10M-100%RB



HIGH BAND EDGE BLOCK-10M-100%RB

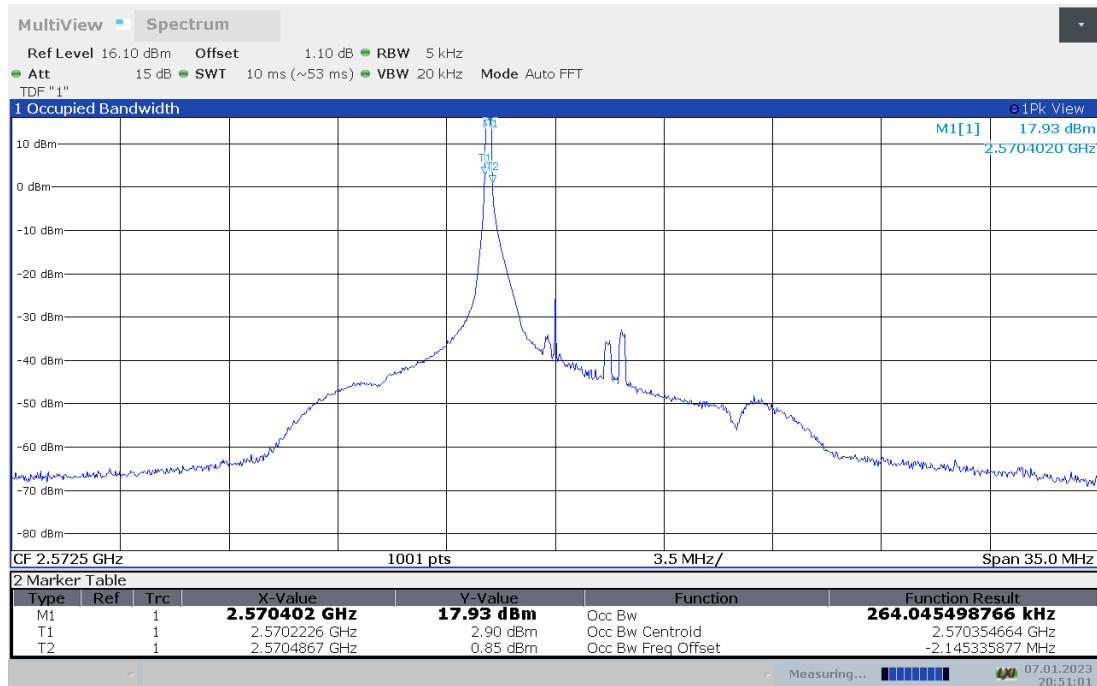


HIGH BAND EDGE BLOCK-10M-100%RB

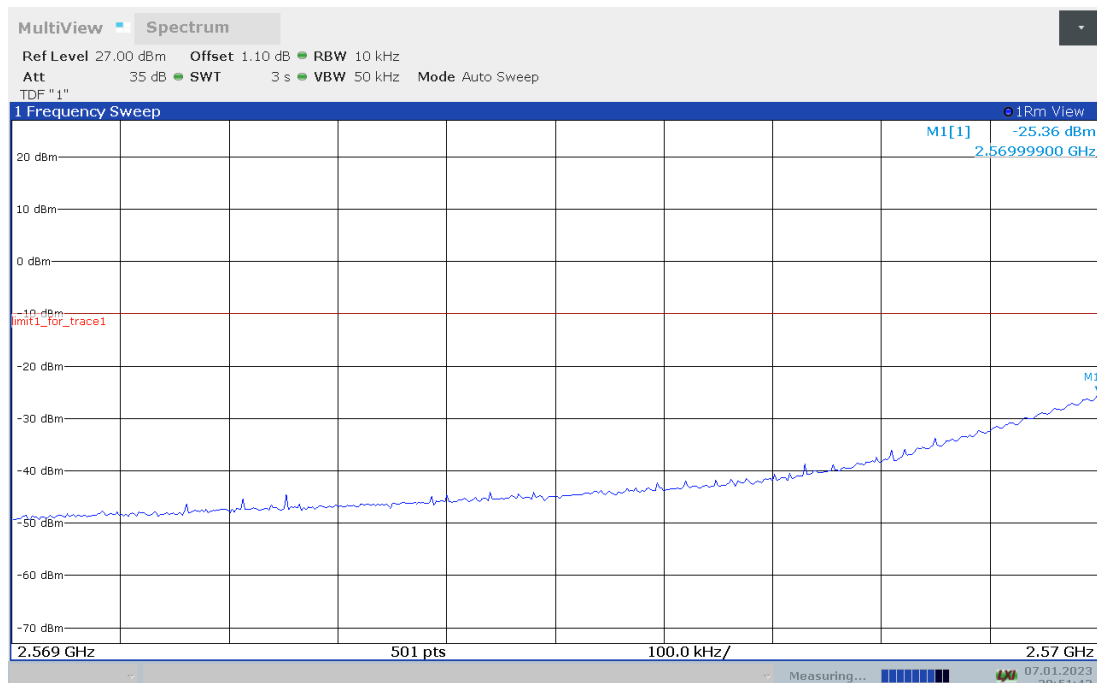


LTE band 38

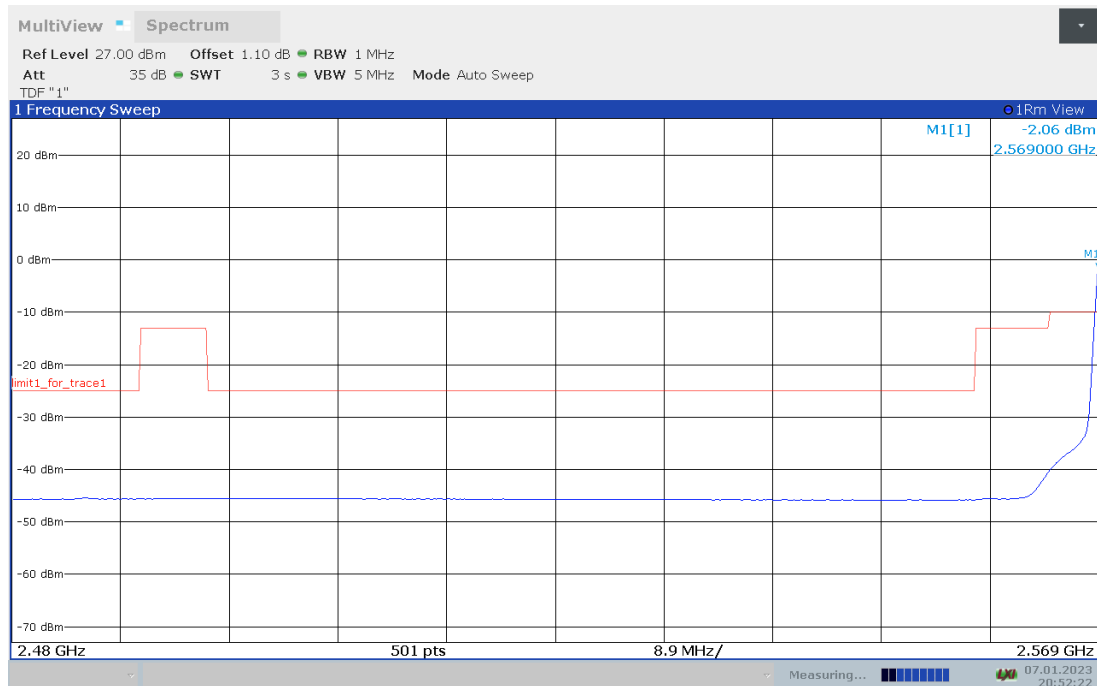
OBW: 1RB-LOW_offset



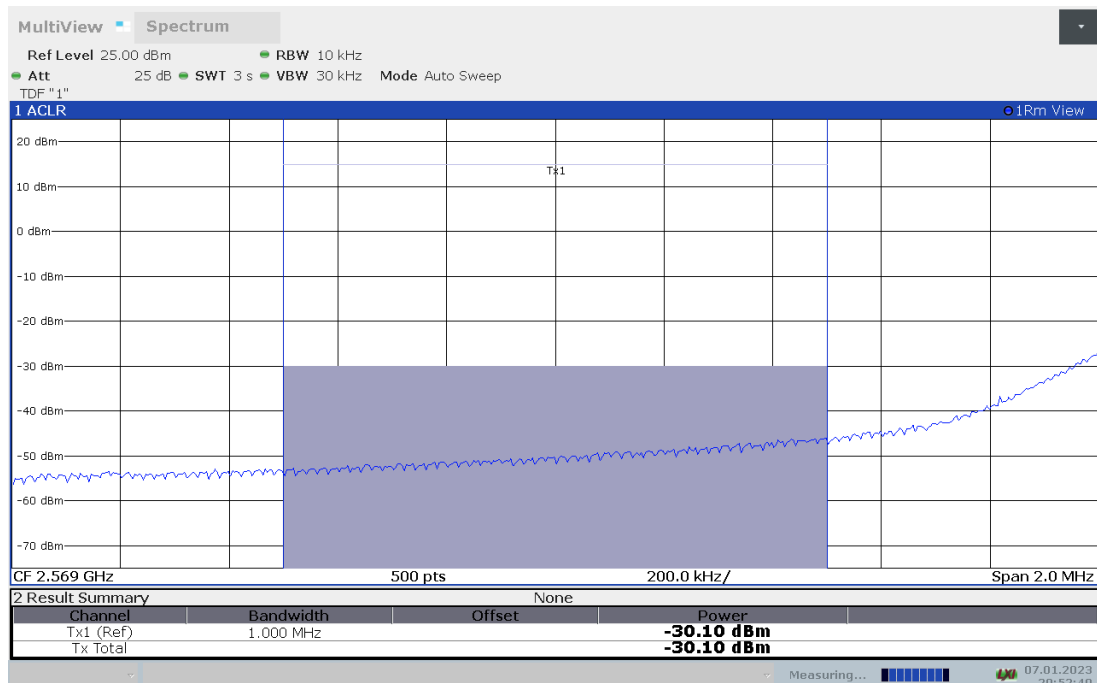
LOW BAND EDGE BLOCK-1RB-LOW_offset



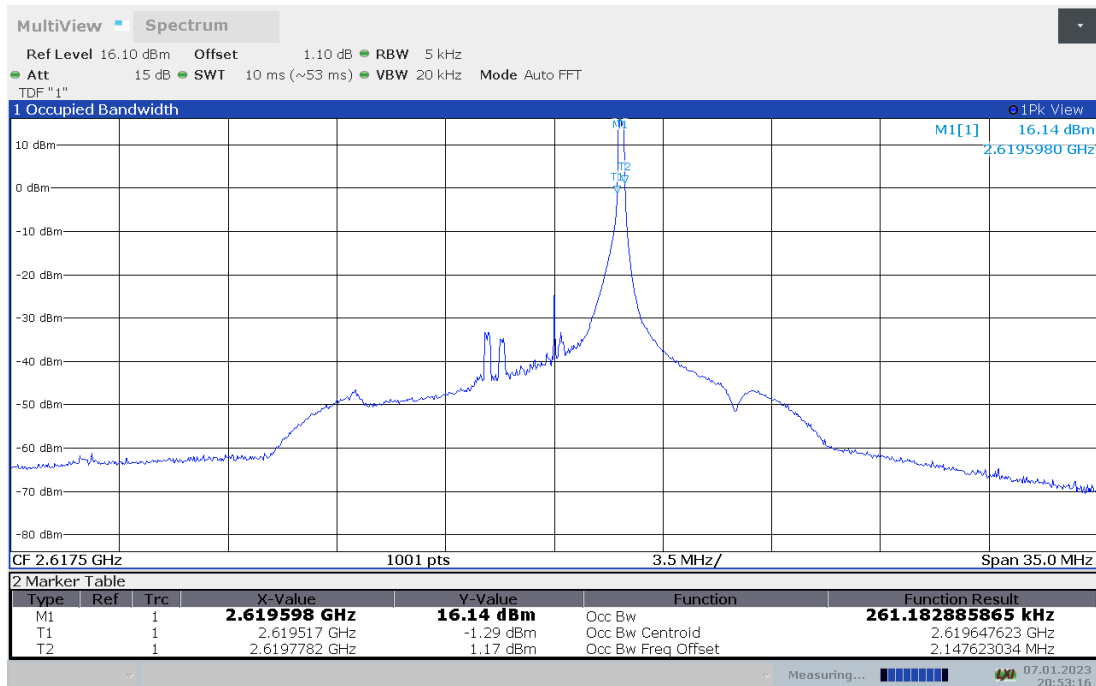
LOW BAND EDGE BLOCK-1RB-LOW_offset



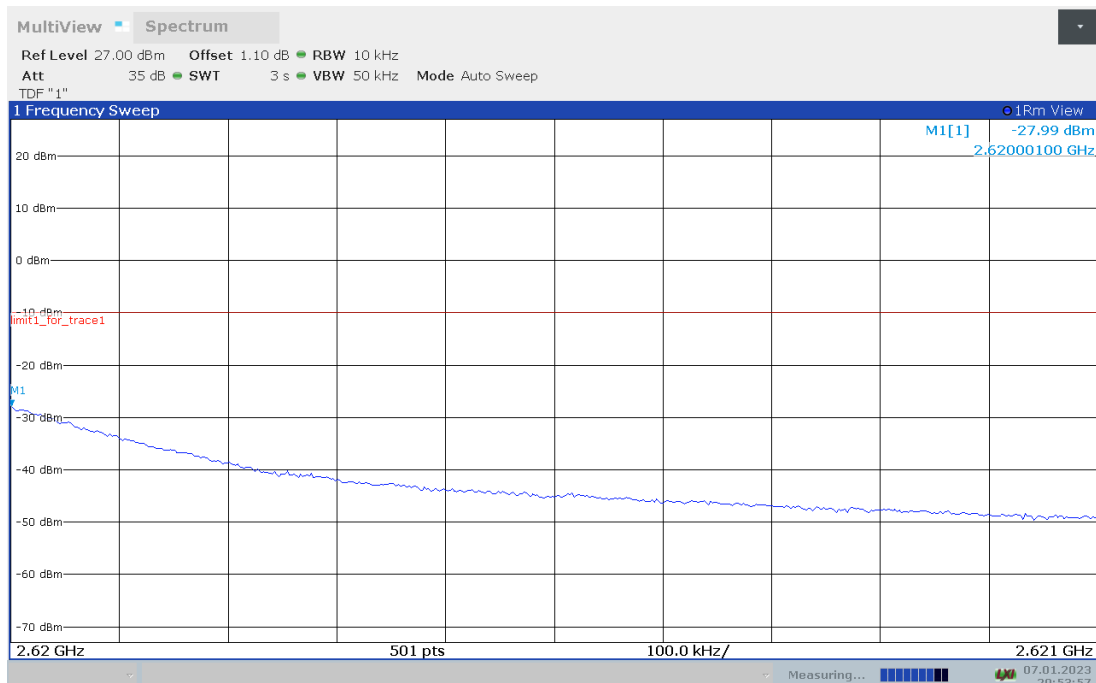
Channel power



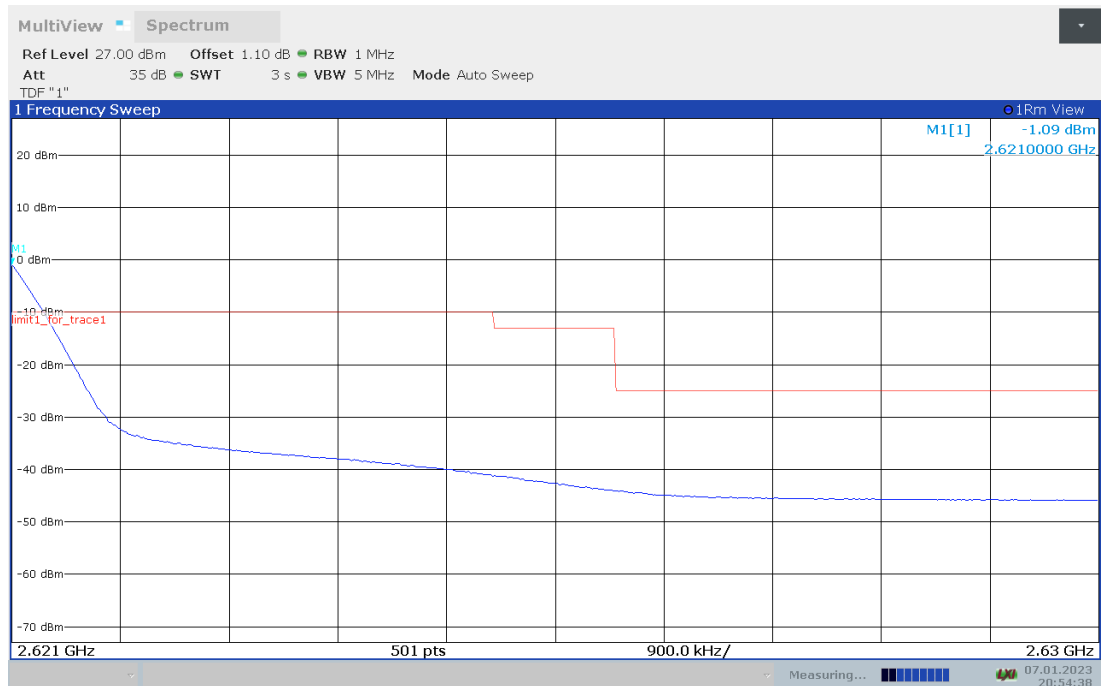
OBW: 1RB-HIGH_offset



HIGH BAND EDGE BLOCK-1RB-HIGH_offset



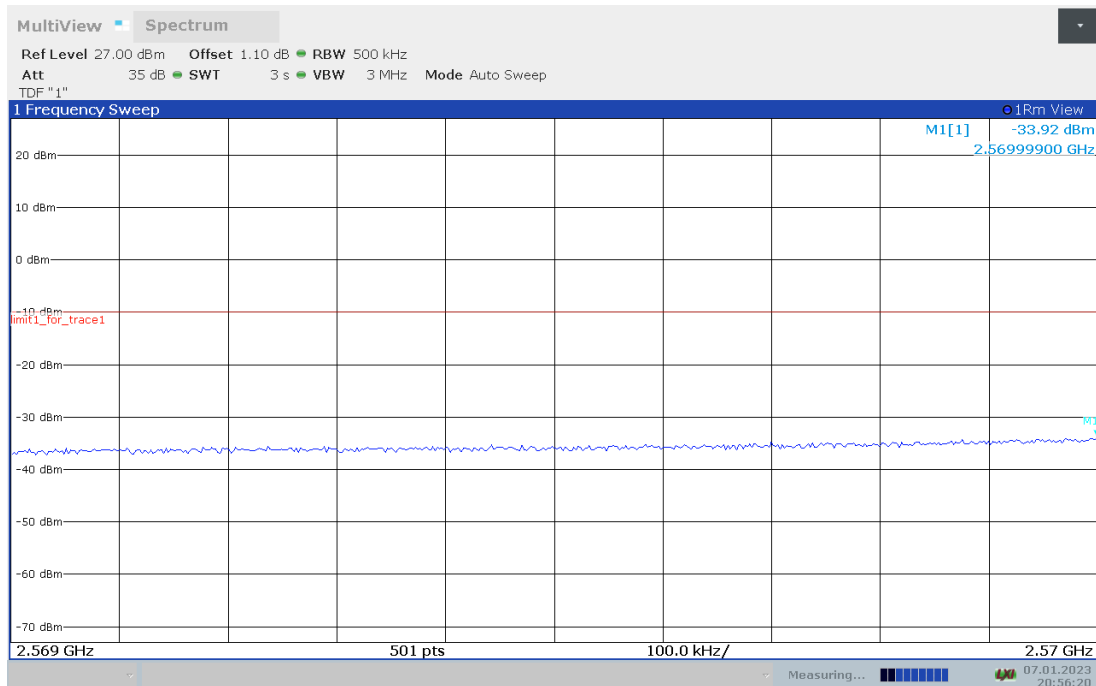
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



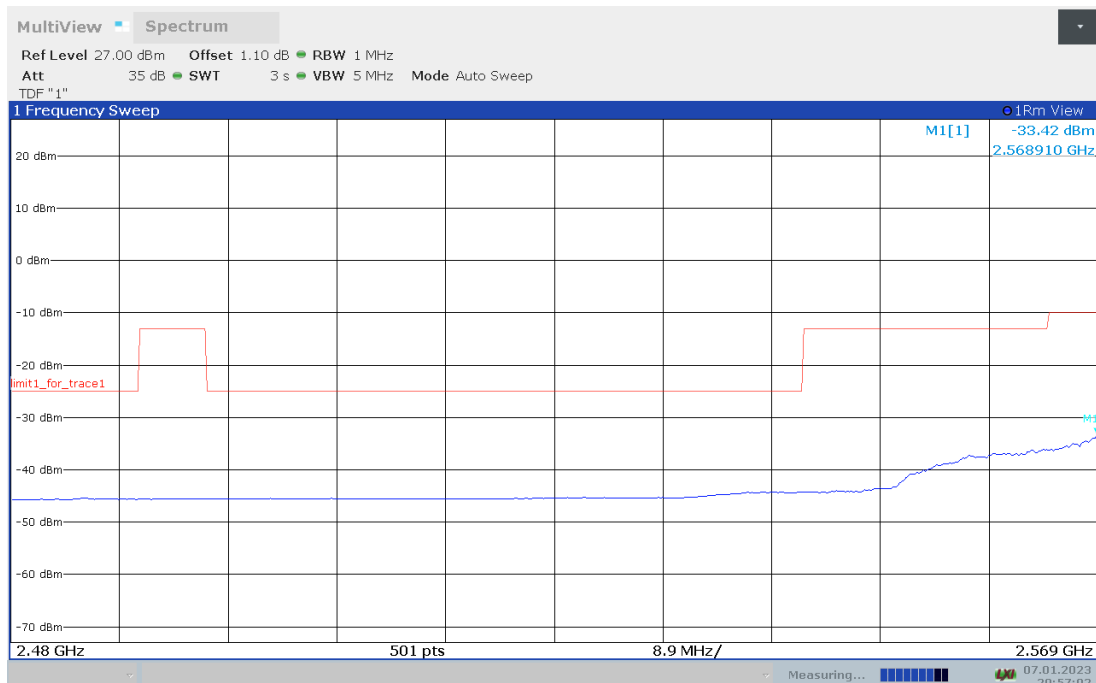
Channel power



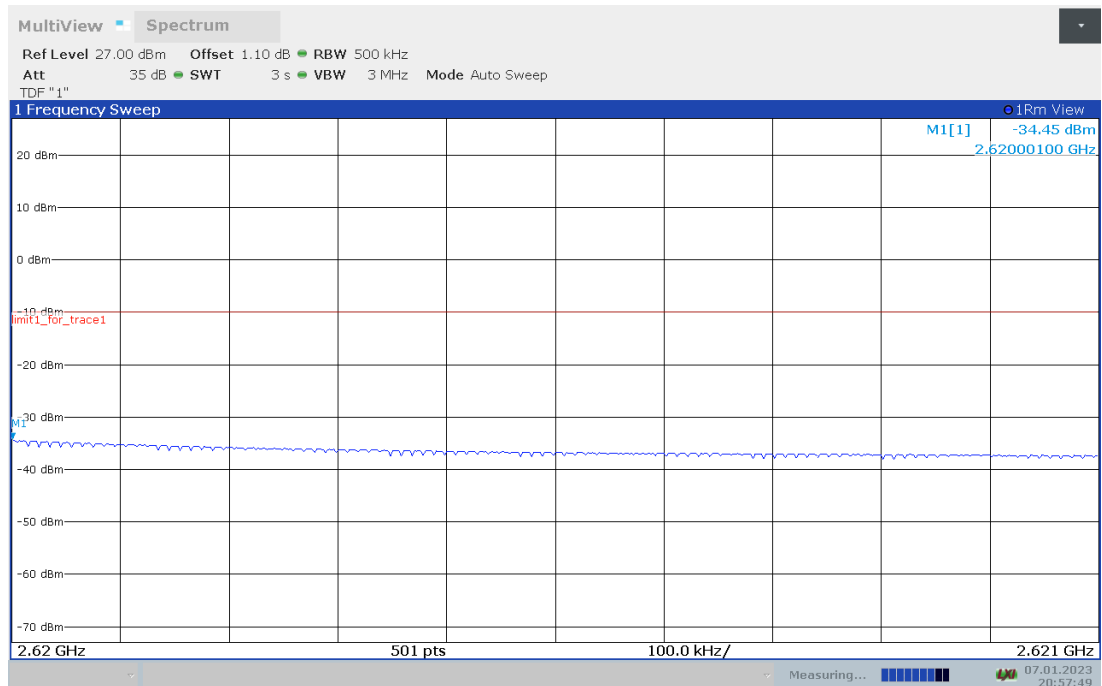
LOW BAND EDGE BLOCK-20M-100%RB



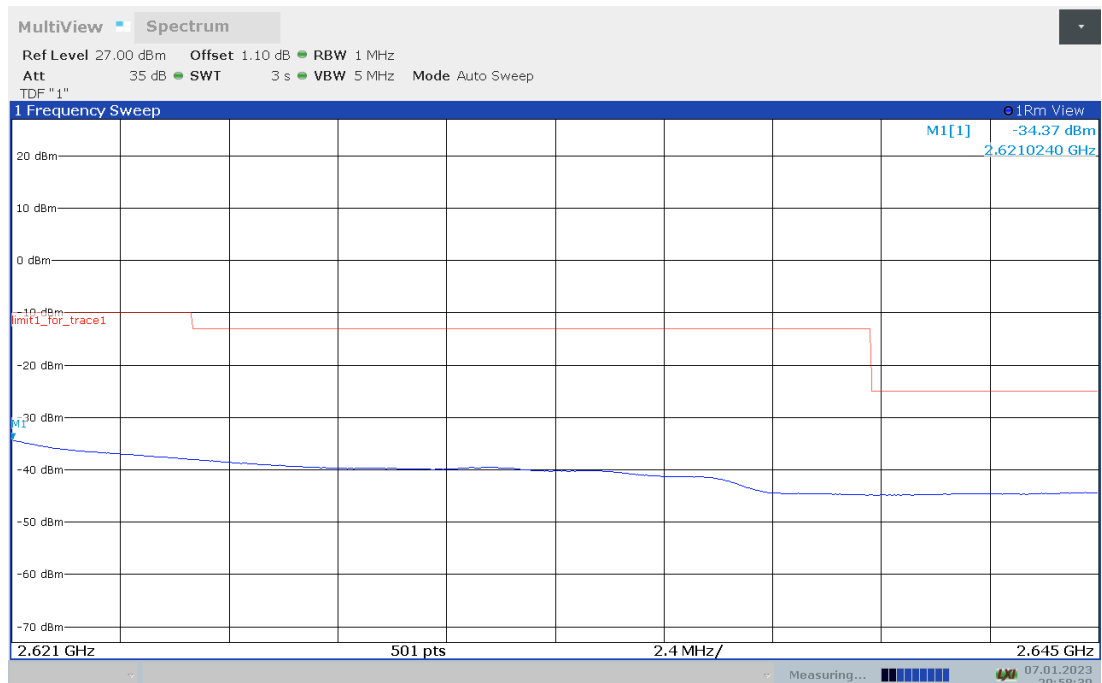
LOW BAND EDGE BLOCK-20M-100%RB



HIGH BAND EDGE BLOCK-20M-100%RB

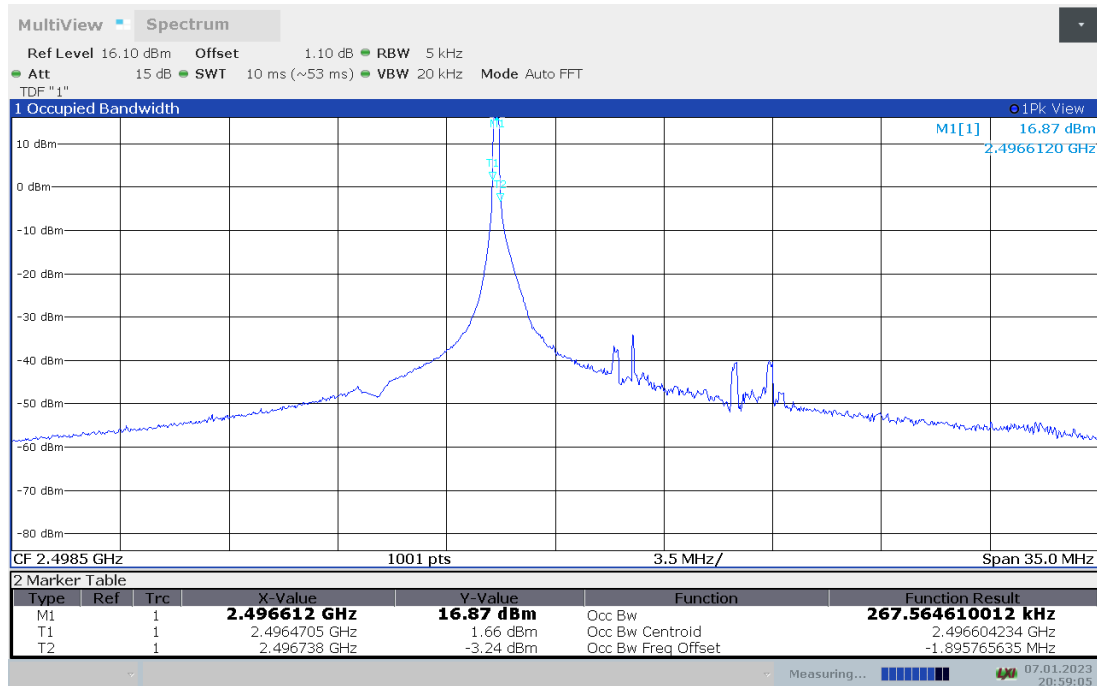


HIGH BAND EDGE BLOCK-20M-100%RB

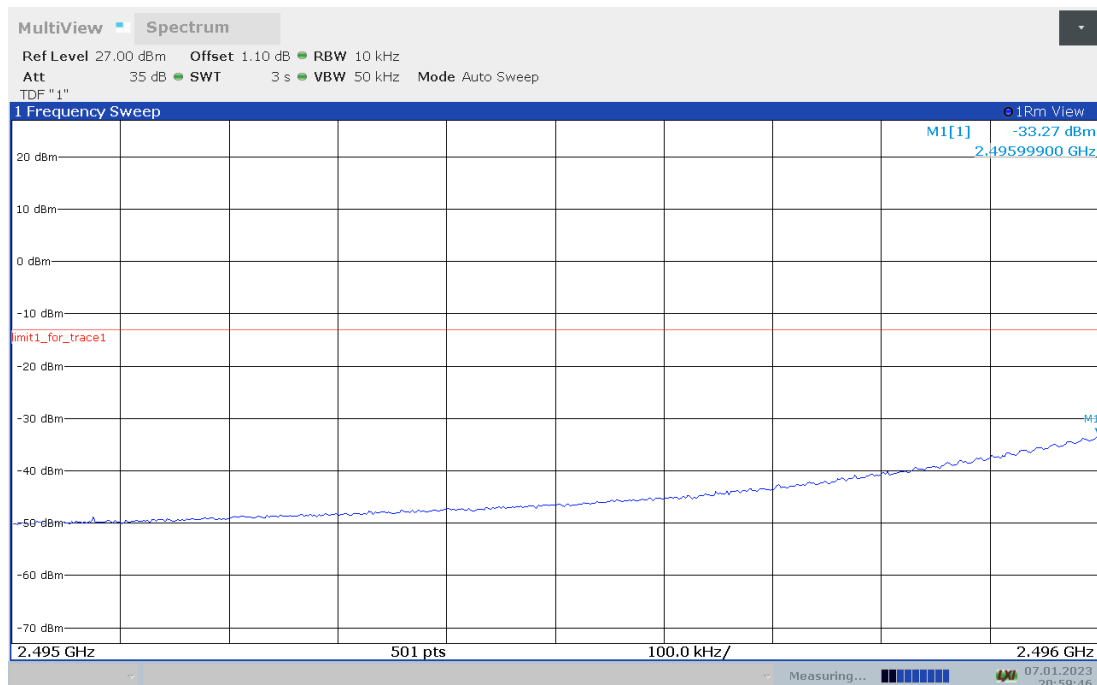


LTE band 41

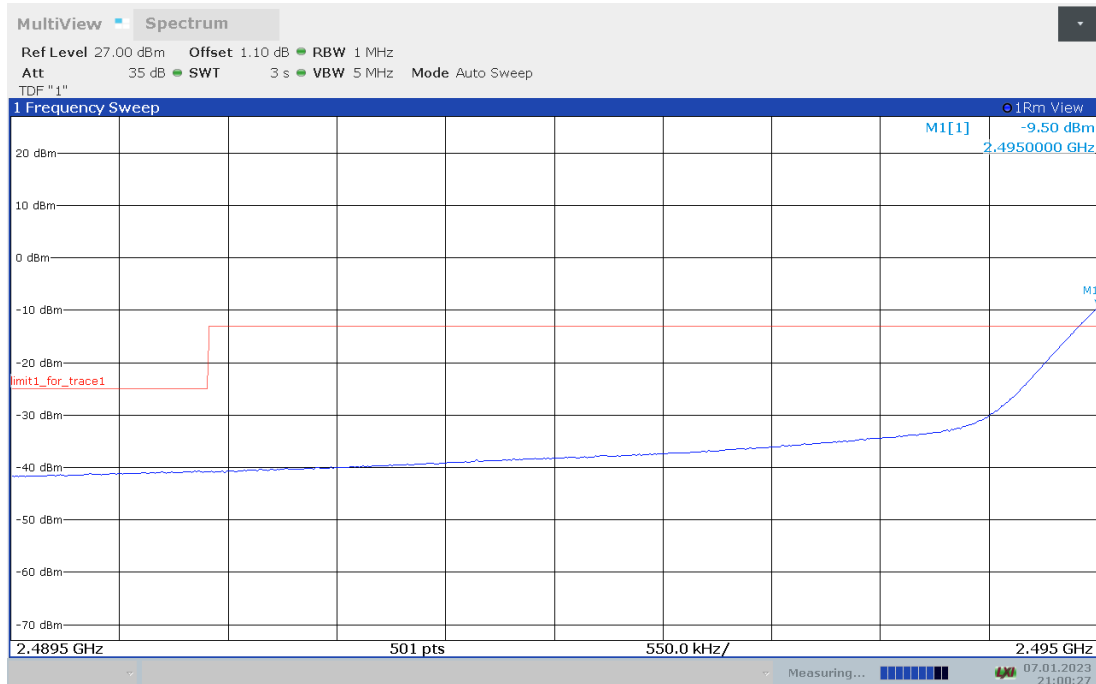
OBW: 1RB-LOW_offset



LOW BAND EDGE BLOCK-1RB-LOW_offset



LOW BAND EDGE BLOCK-1RB-LOW_offset



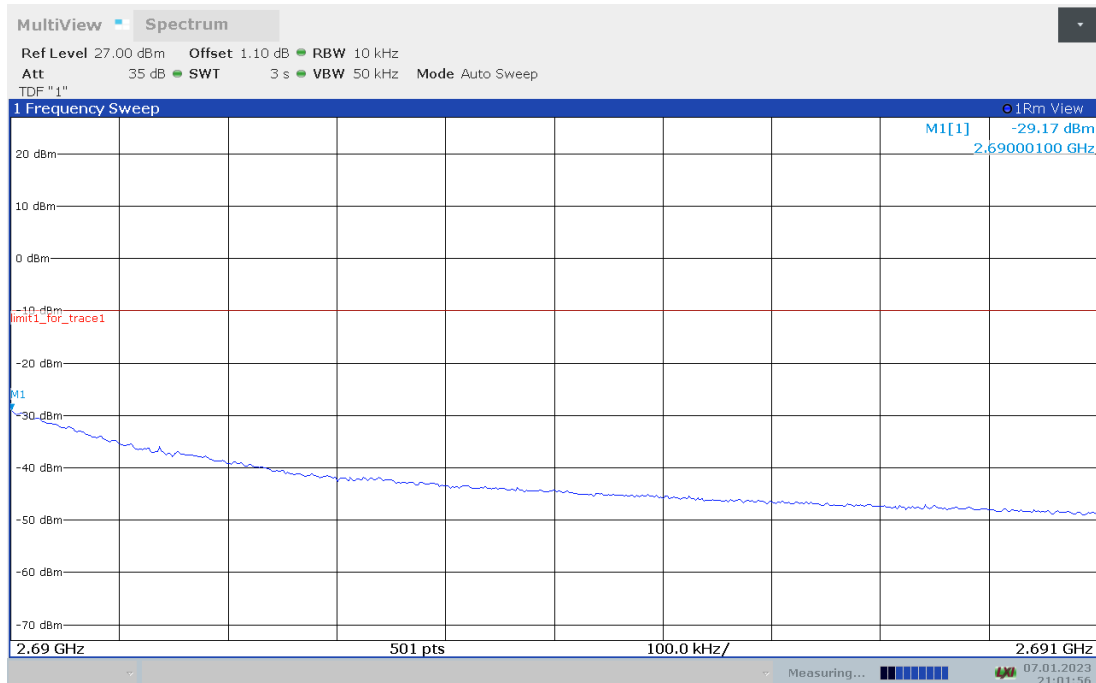
Channel power



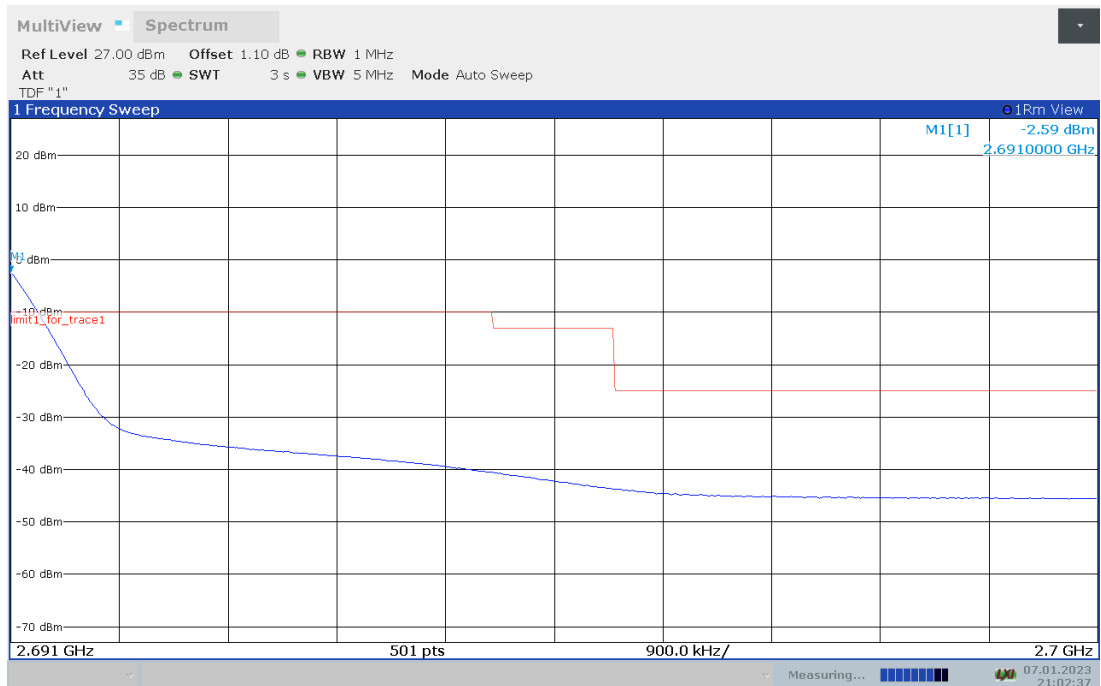
OBW: 1RB-HIGH_offset



HIGH BAND EDGE BLOCK-1RB-HIGH_offset



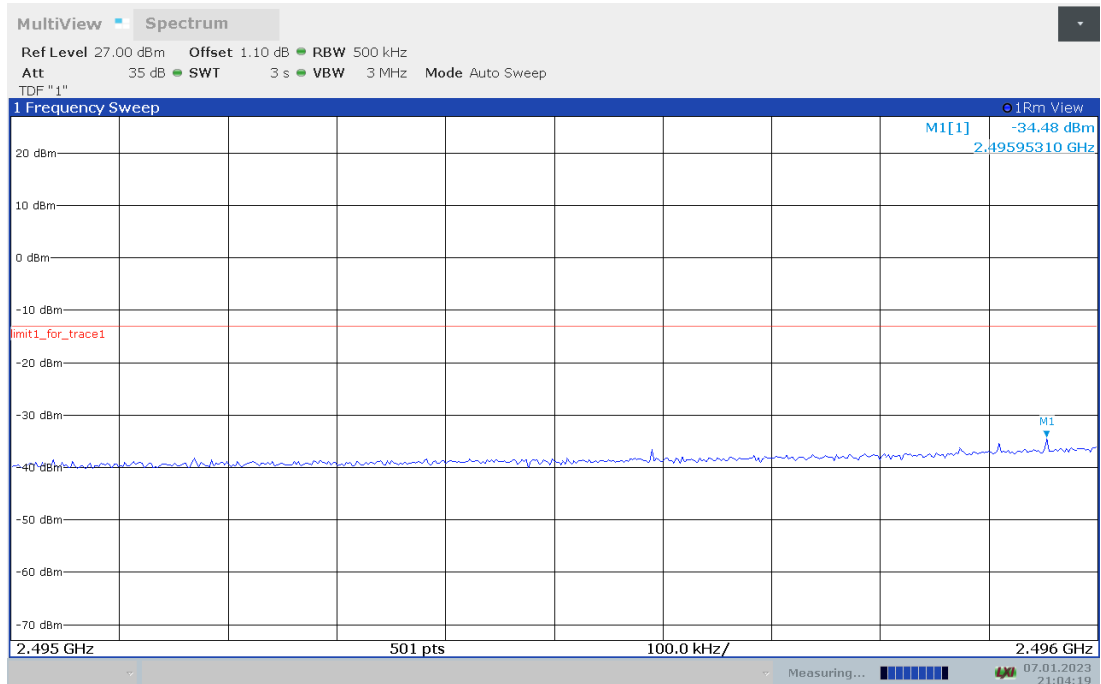
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



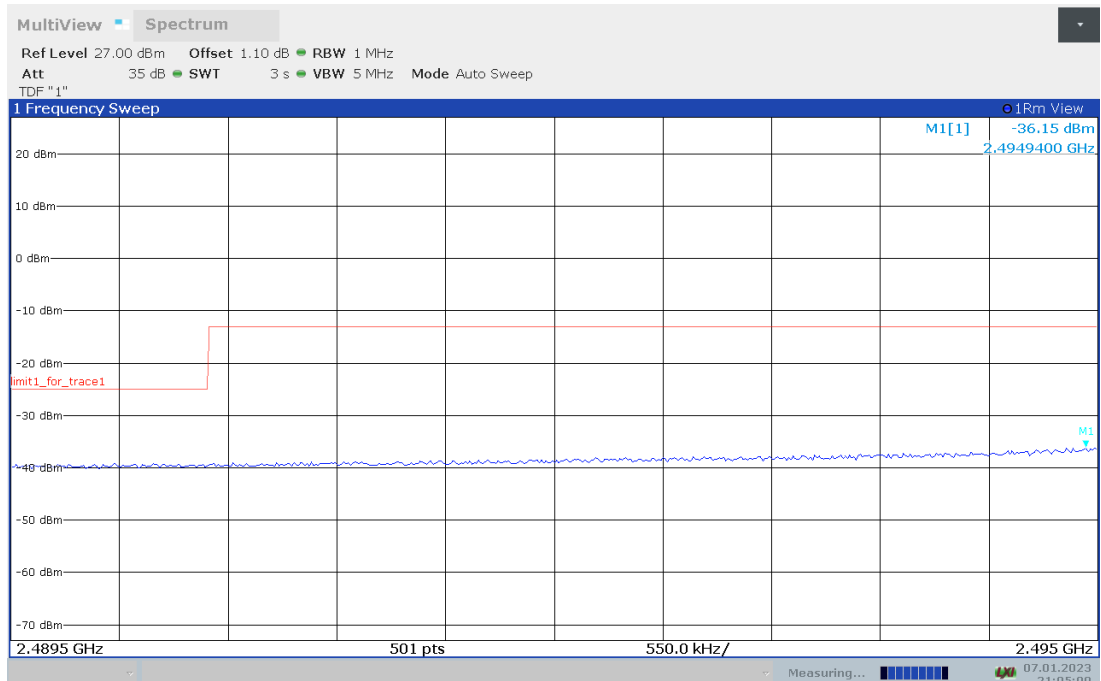
Channel power



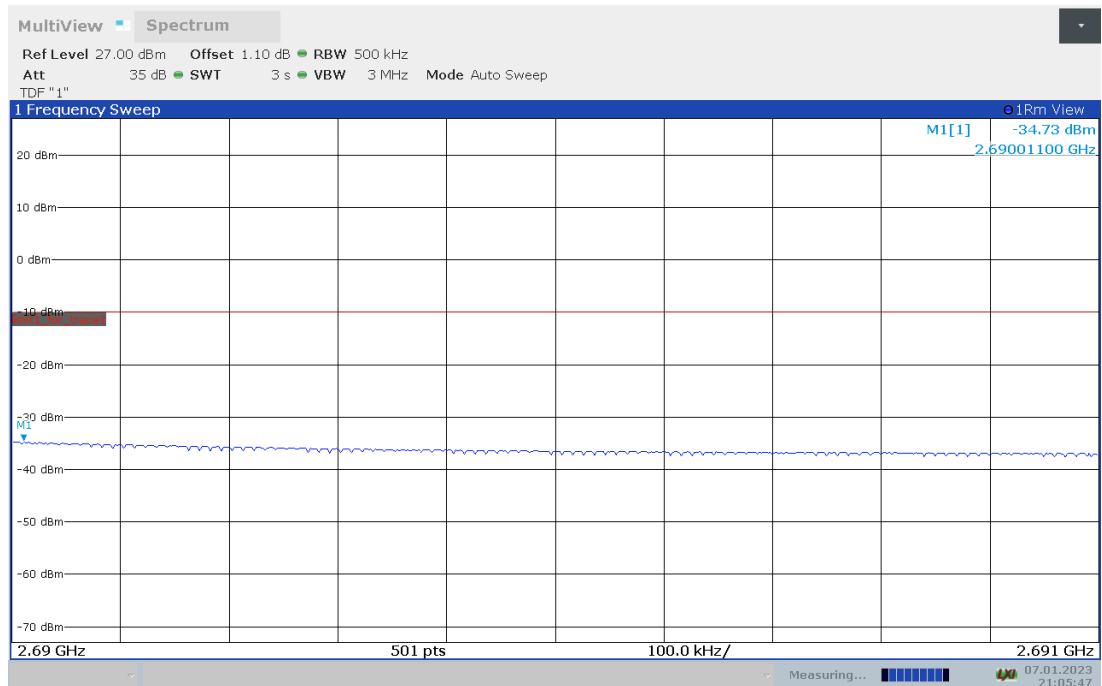
LOW BAND EDGE BLOCK-20M-100%RB



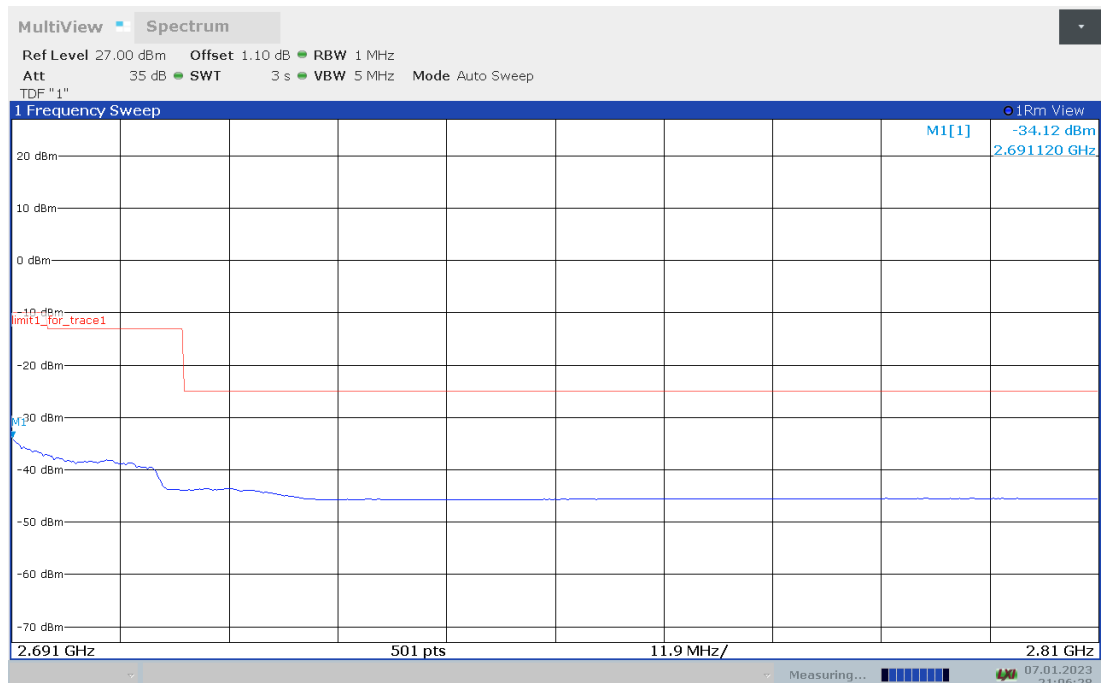
LOW BAND EDGE BLOCK-20M-100%RB



HIGH BAND EDGE BLOCK-20M-100%RB



HIGH BAND EDGE BLOCK-20M-100%RB

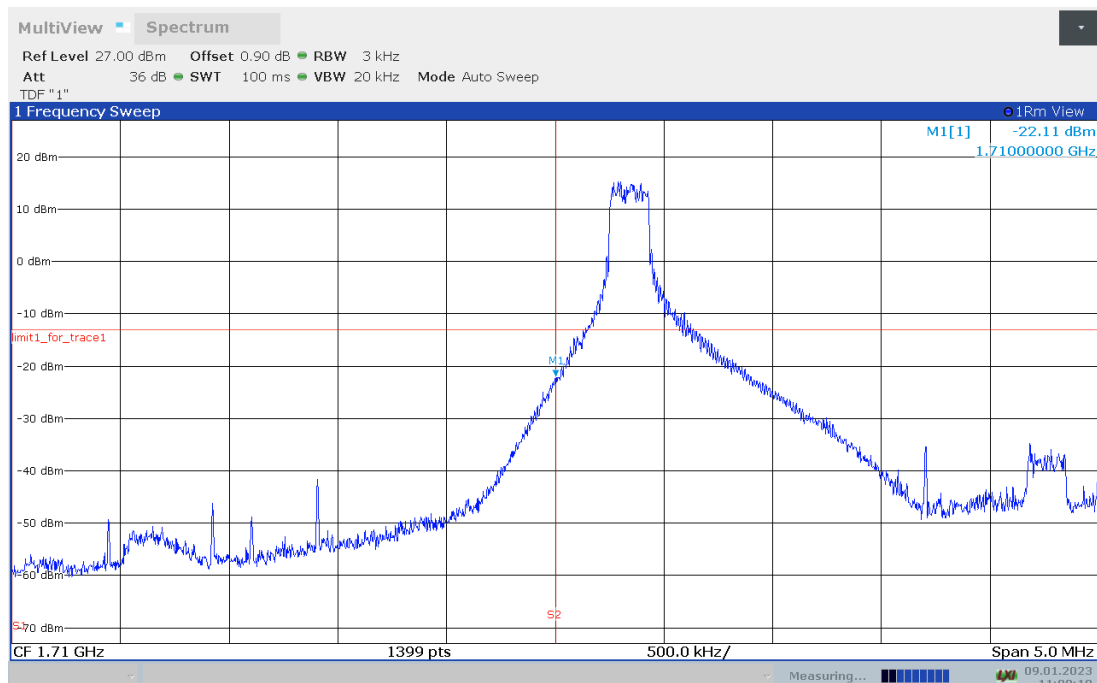


LTE band 66

OBW: 1RB-LOW_offset



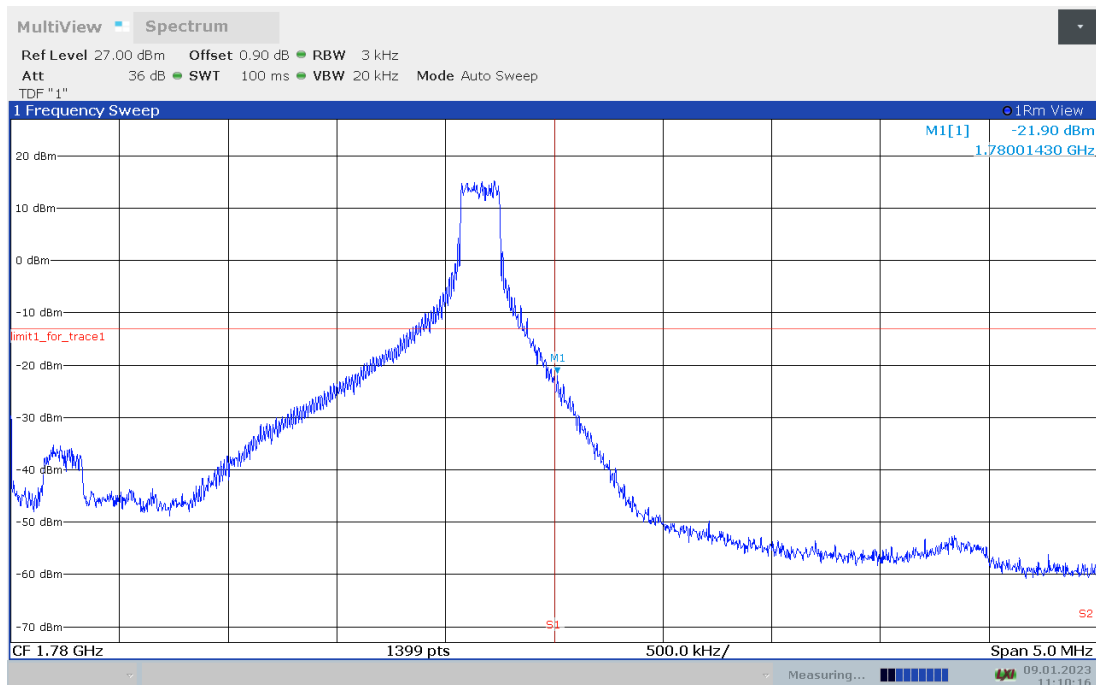
LOW BAND EDGE BLOCK-1RB-LOW_offset



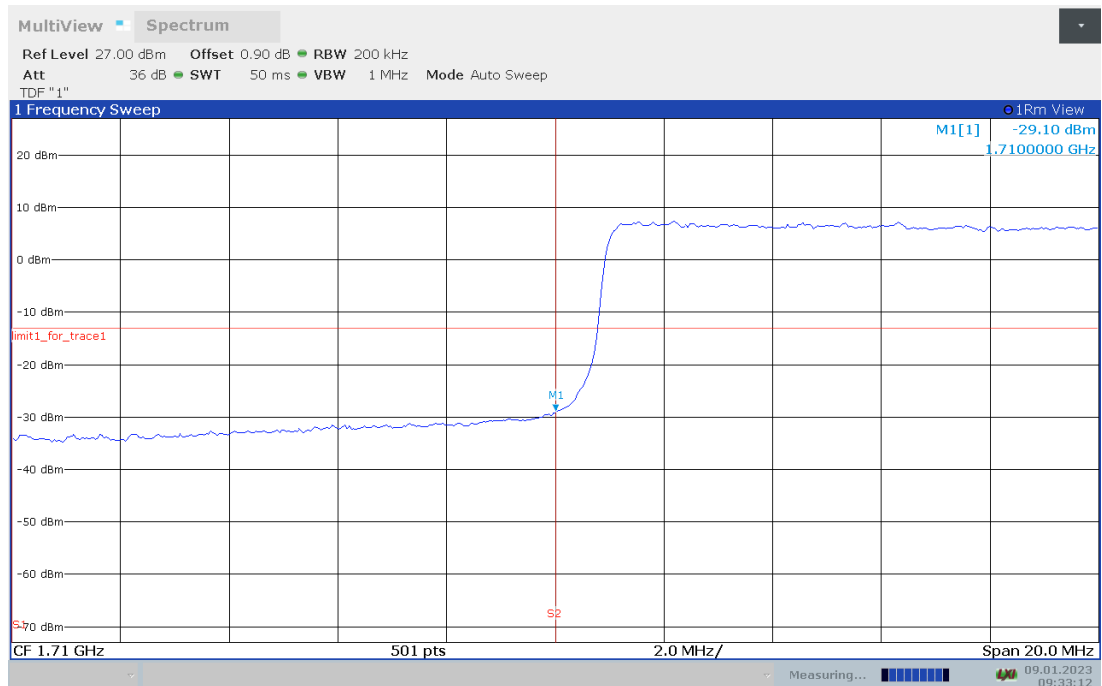
OBW: 1RB-HIGH_offset



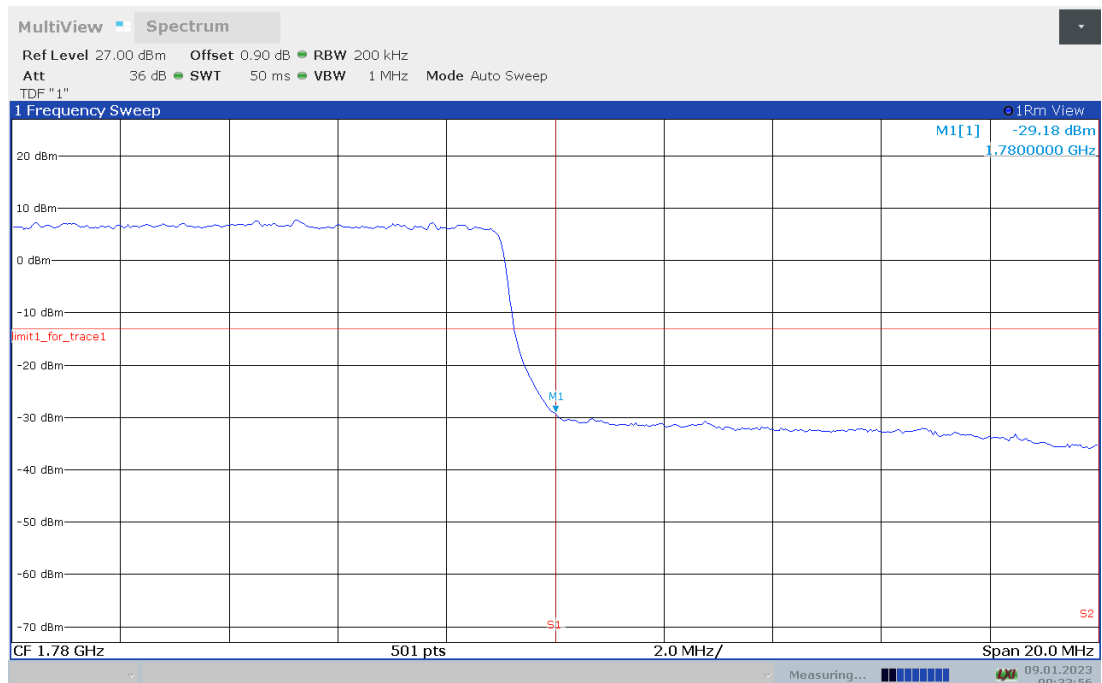
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-20M-100%RB

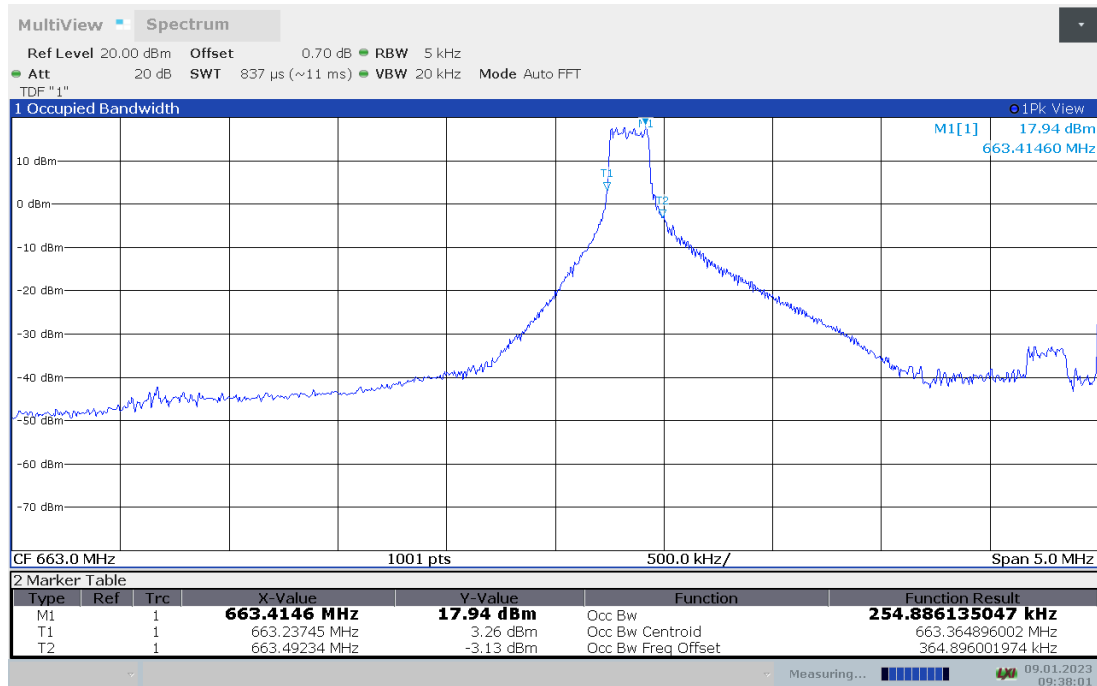


HIGH BAND EDGE BLOCK-20M-100%RB



LTE band 71

OBW: 1RB-LOW_offset



LOW BAND EDGE BLOCK-1RB-LOW_offset

