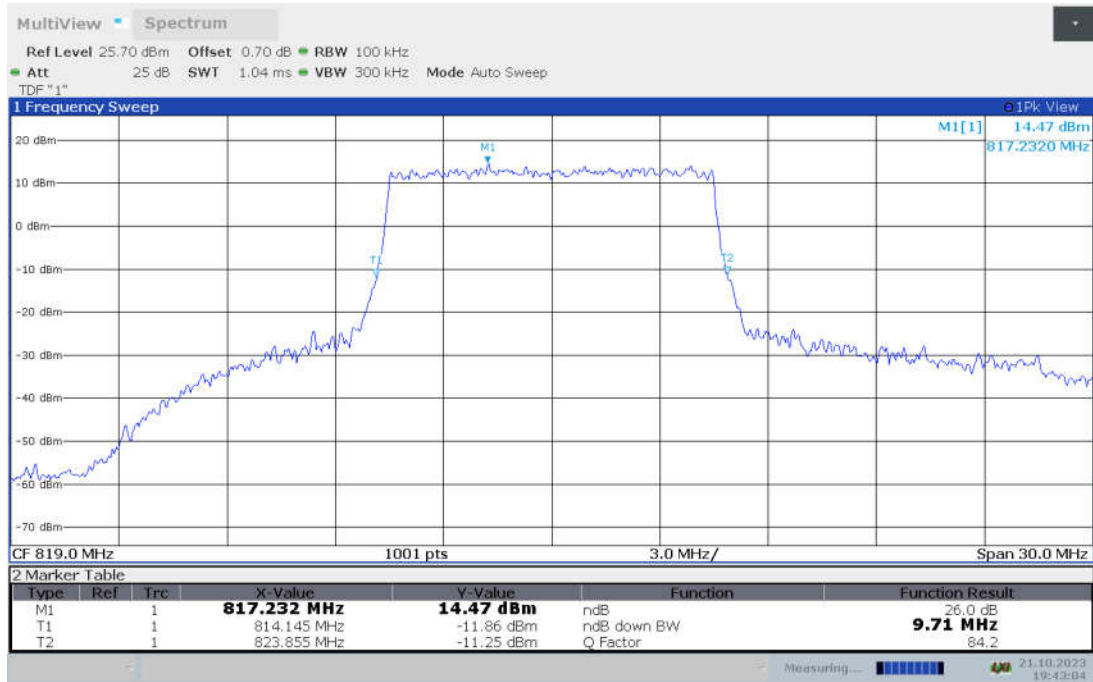




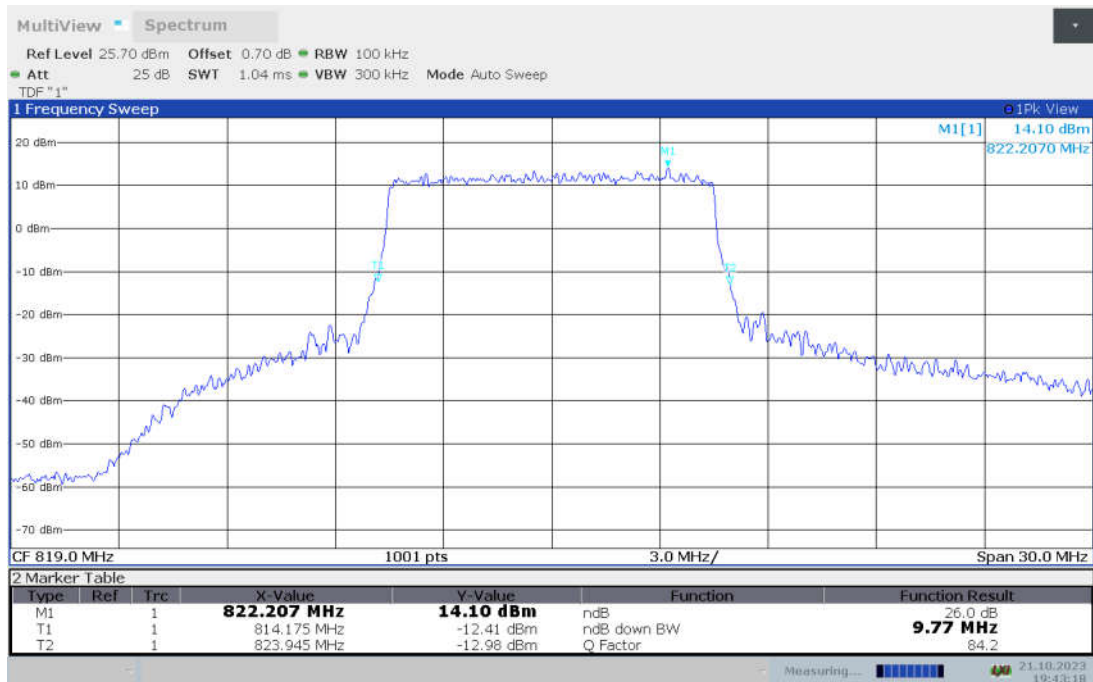
LTE band 26(814MHz-824MHz),10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
819	9.710	9.770

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



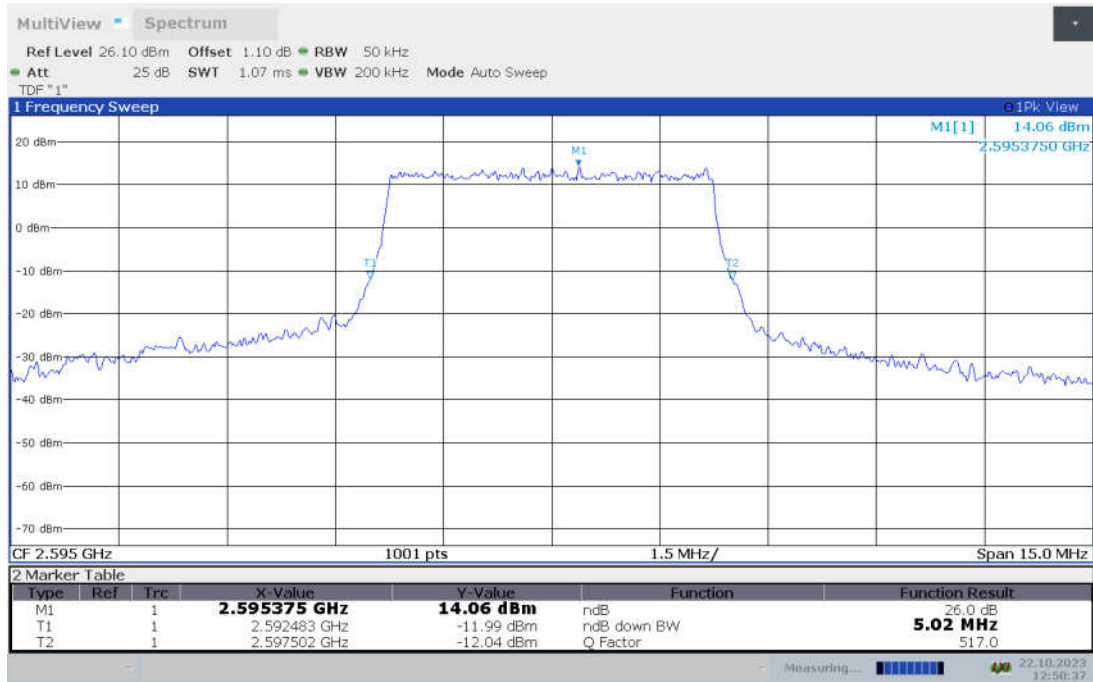
LTE band 26 , 10MHz Bandwidth, MID, 16QAM (-26dBc BW)



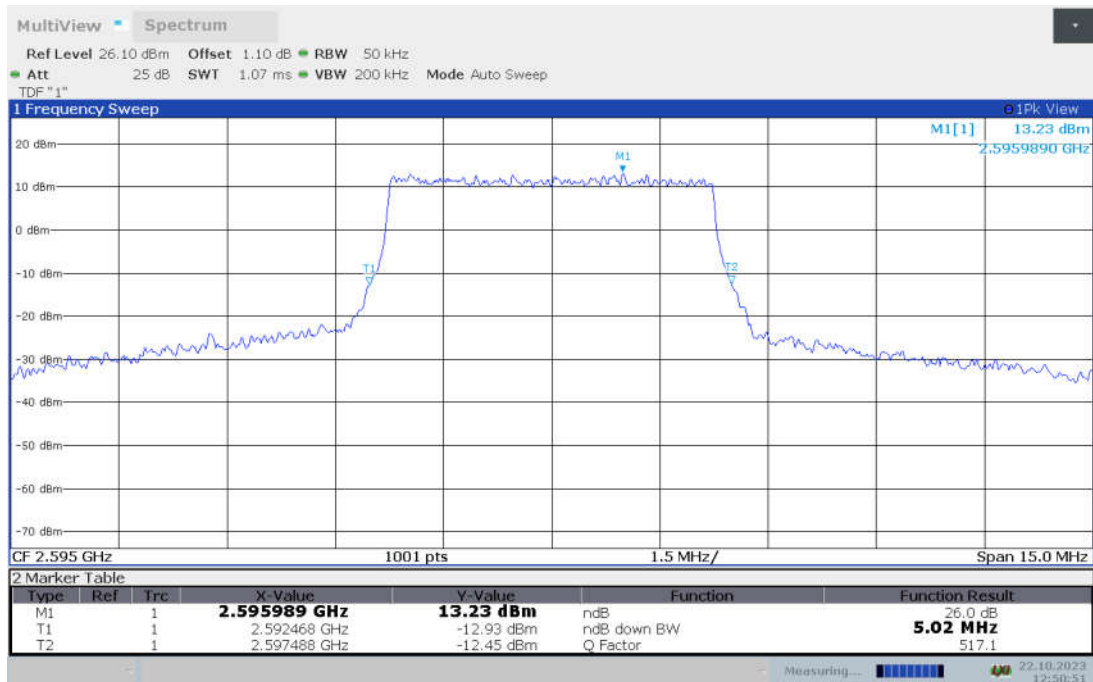
LTE band 38,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	5.020	5.020

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



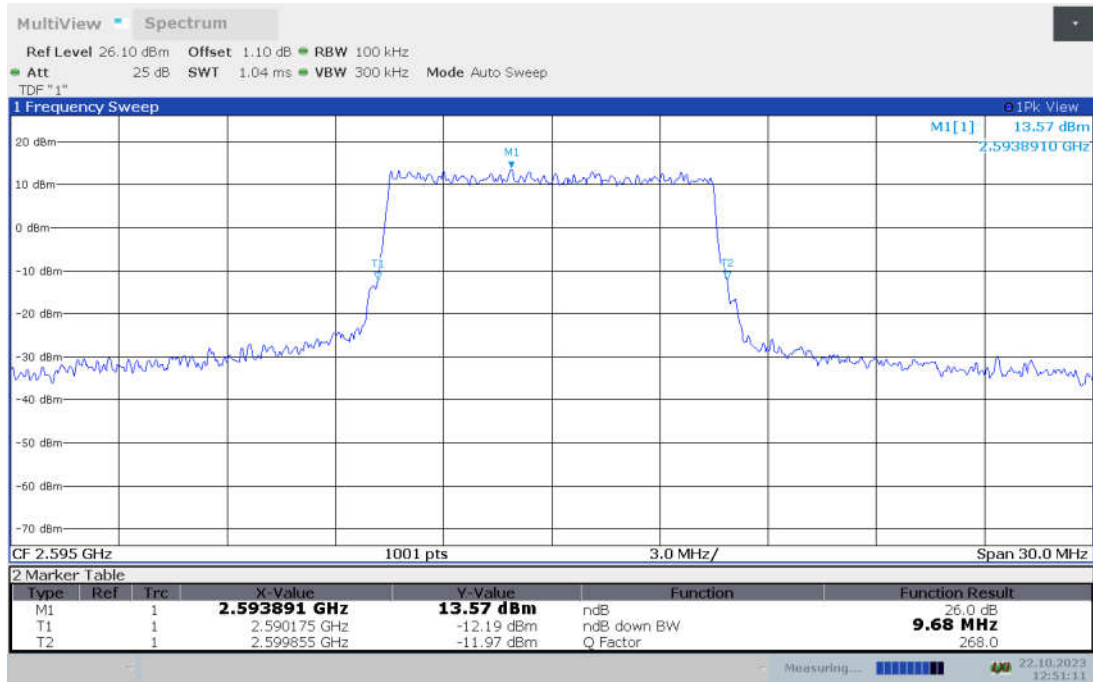
LTE band 38 , 5MHz Bandwidth, MID, 16QAM (-26dBc BW)



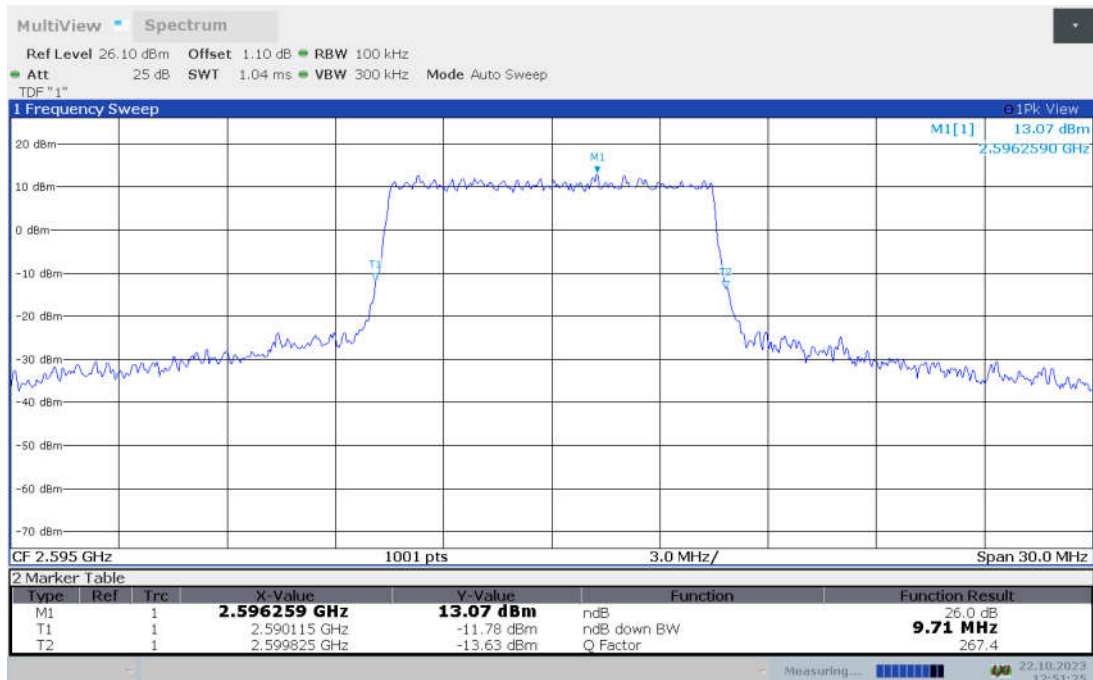
LTE band 38,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	9.680	9.710

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



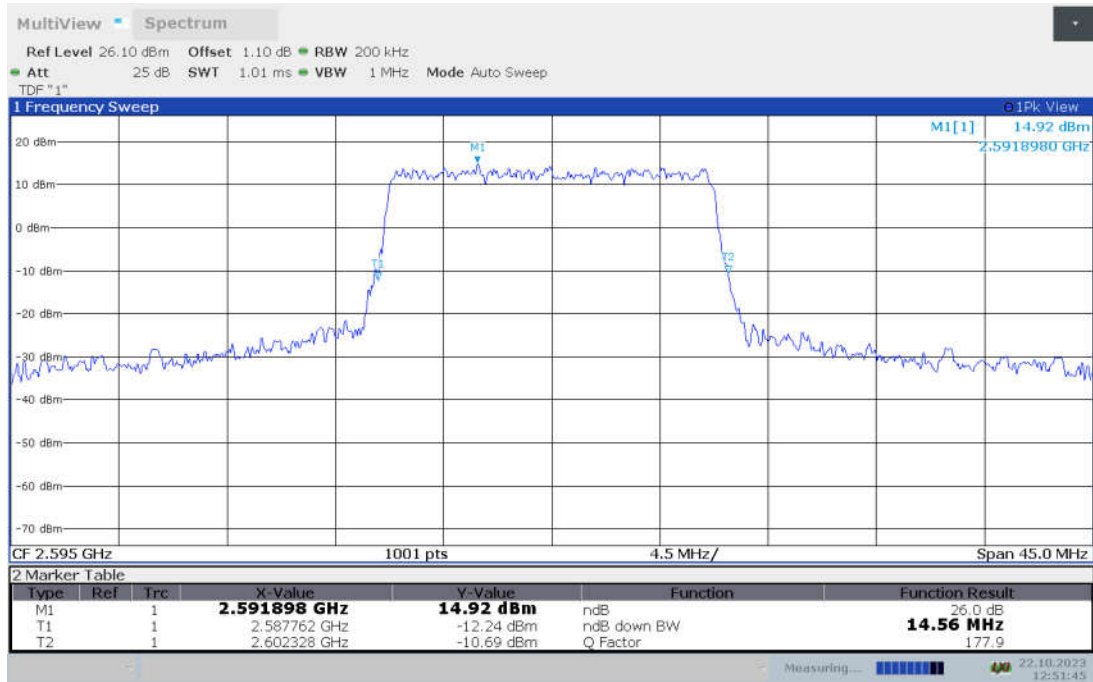
LTE band 38 , 10MHz Bandwidth, MID, 16QAM (-26dBc BW)



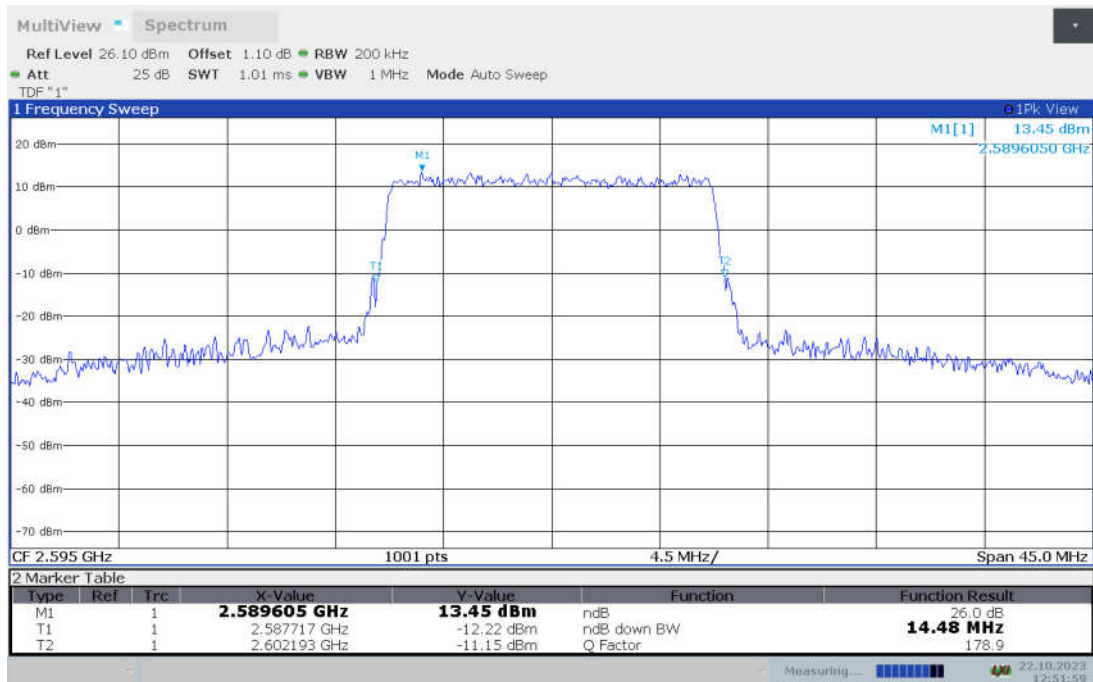
LTE band 38,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	14.565	14.476

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



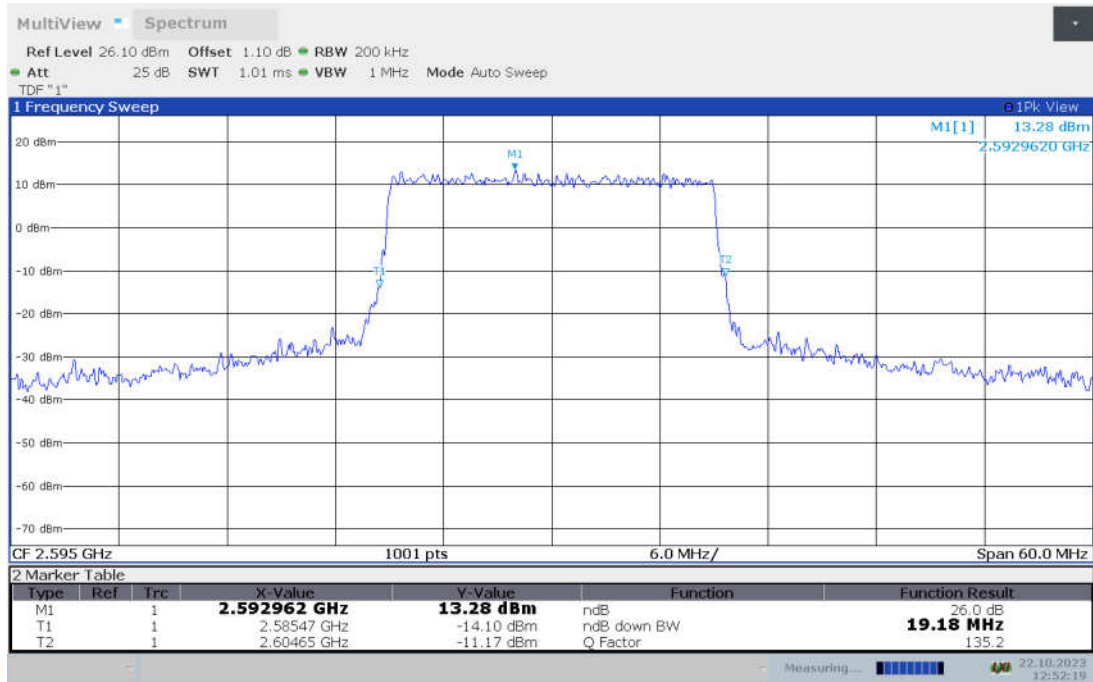
LTE band 38 , 15MHz Bandwidth, MID, 16QAM (-26dBc BW)



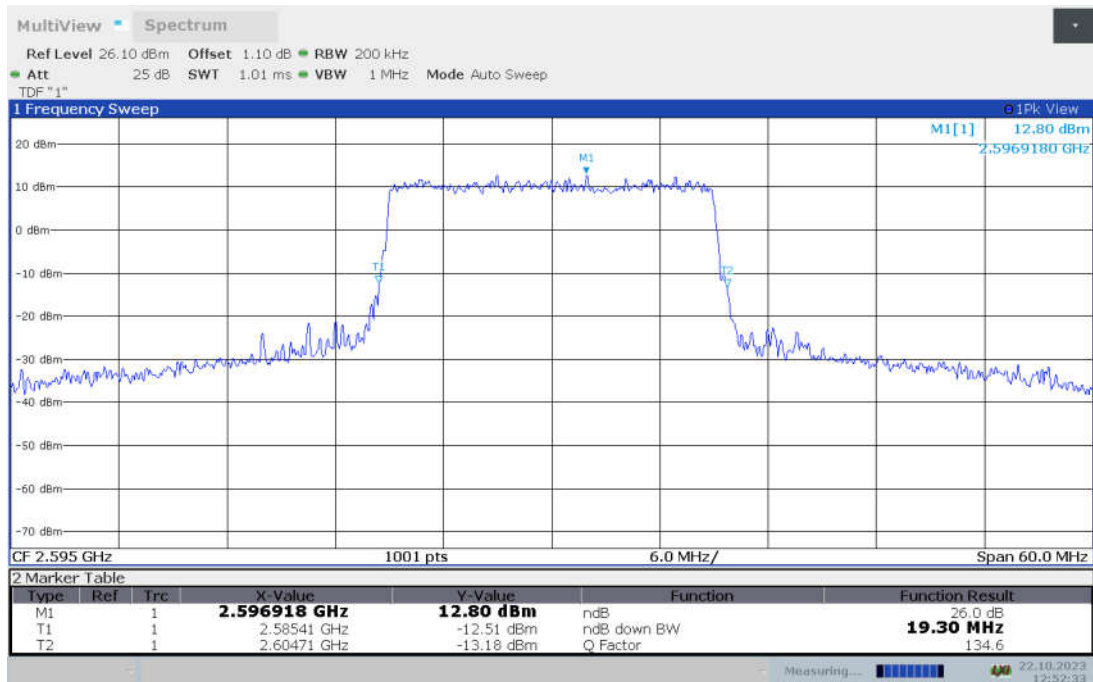
LTE band 38,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	19.181	19.301

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



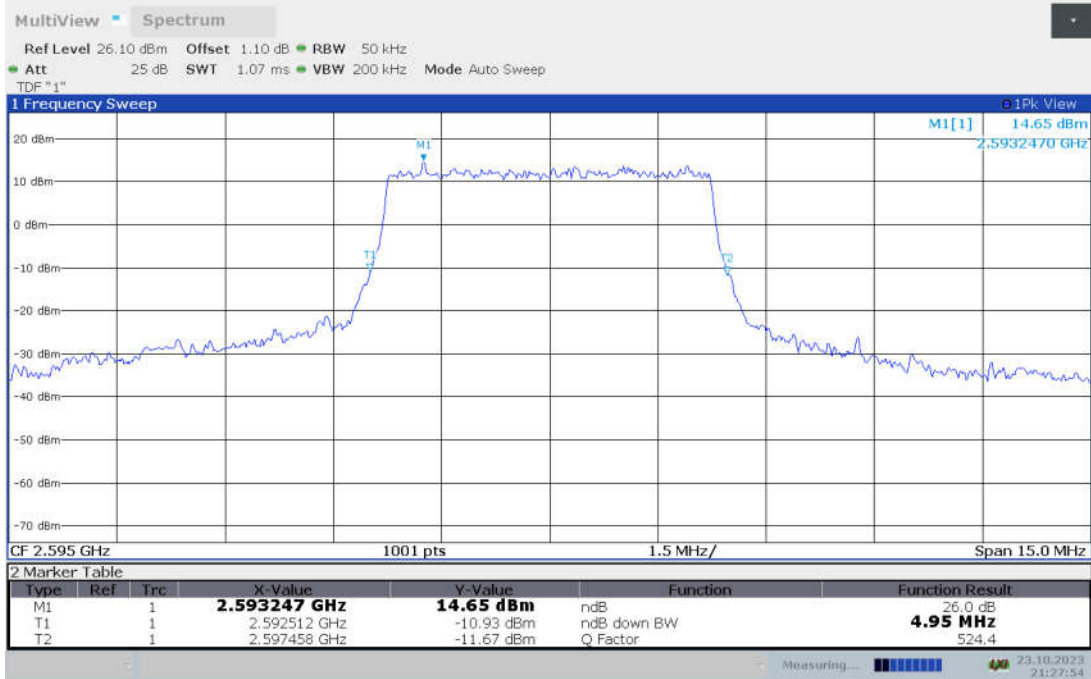
LTE band 38 , 20MHz Bandwidth, MID, 16QAM (-26dBc BW)



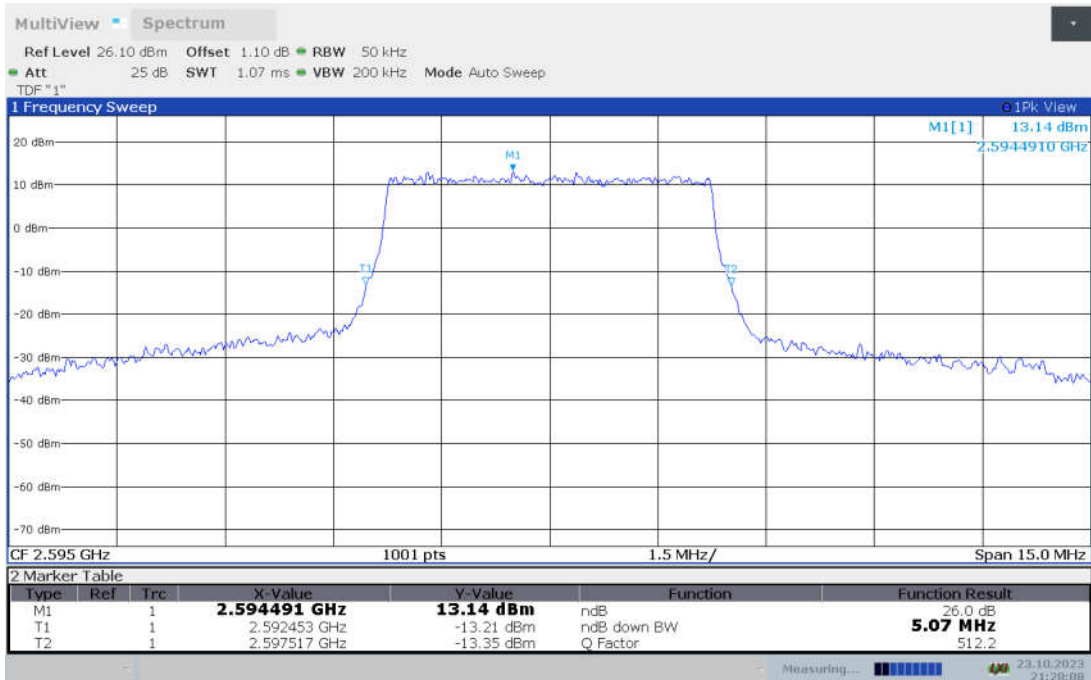
LTE band 41,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	4.945	5.065

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



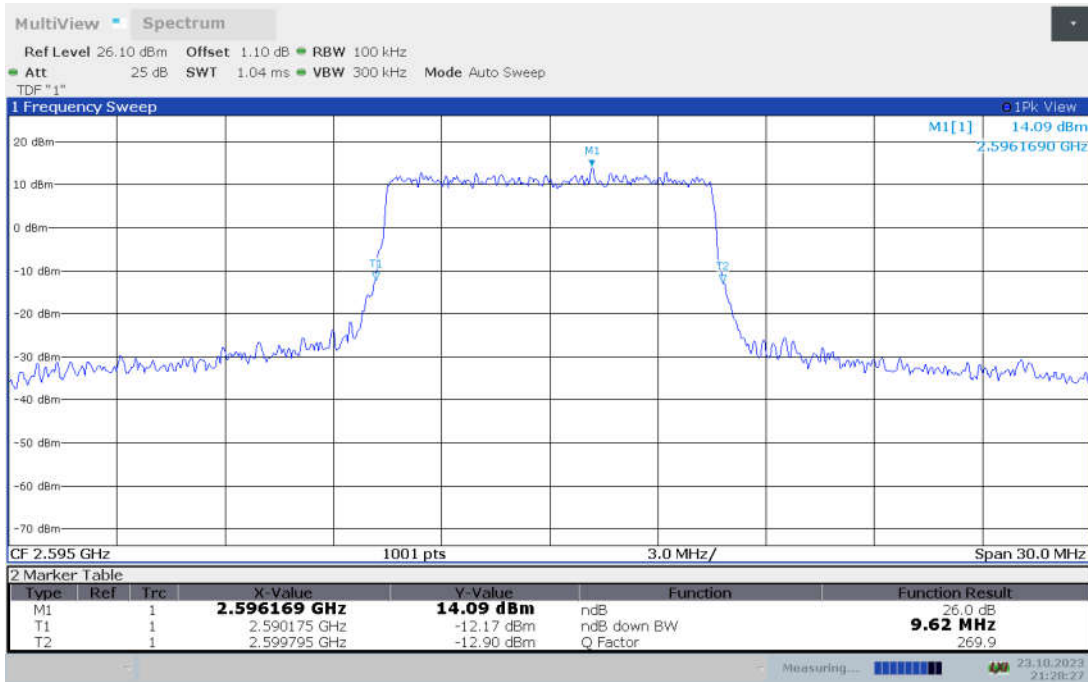
LTE band 41 , 5MHz Bandwidth, MID, 16QAM (-26dBc BW)



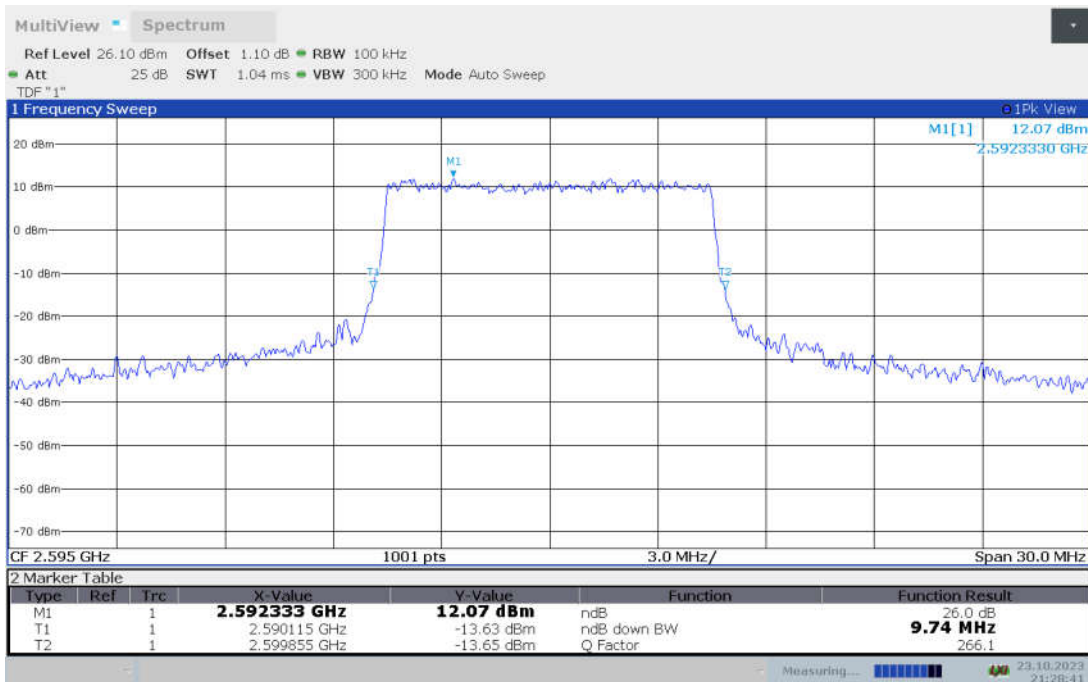
LTE band 41,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	9.620	9.740

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



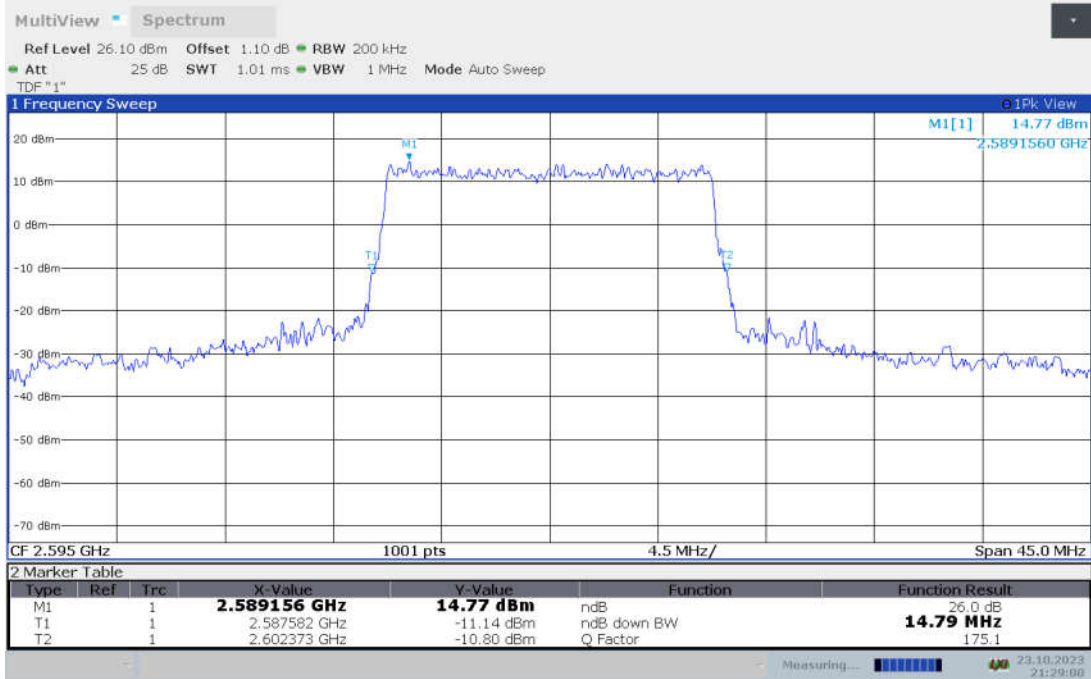
LTE band 41 , 10MHz Bandwidth, MID, 16QAM (-26dBc BW)



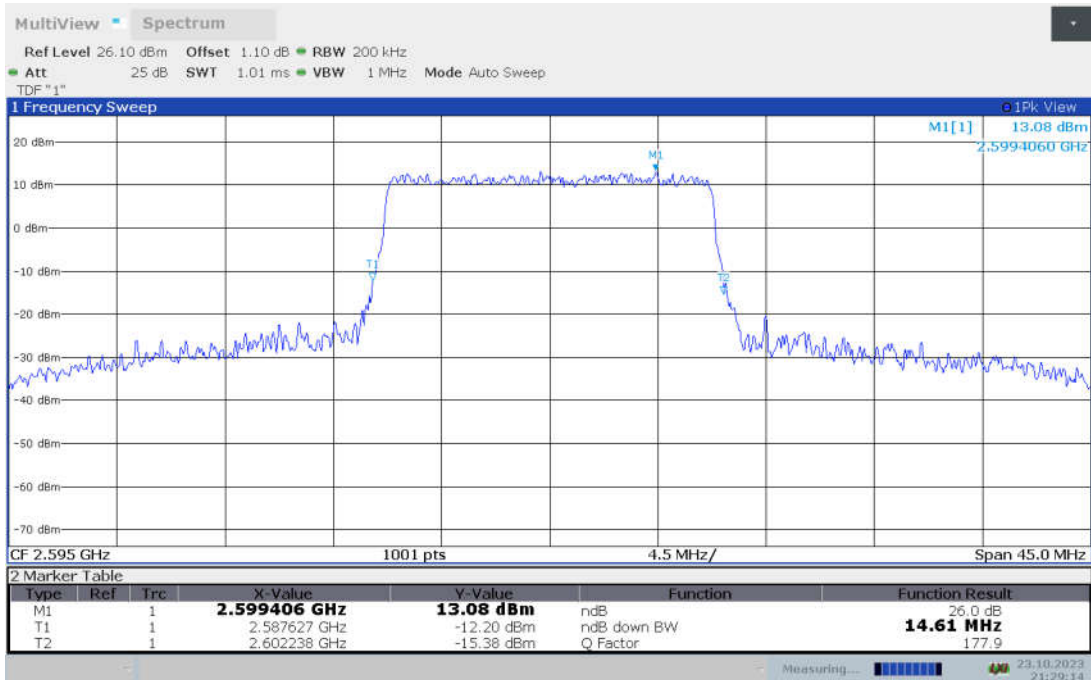
LTE band 41,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	14.790	14.610

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



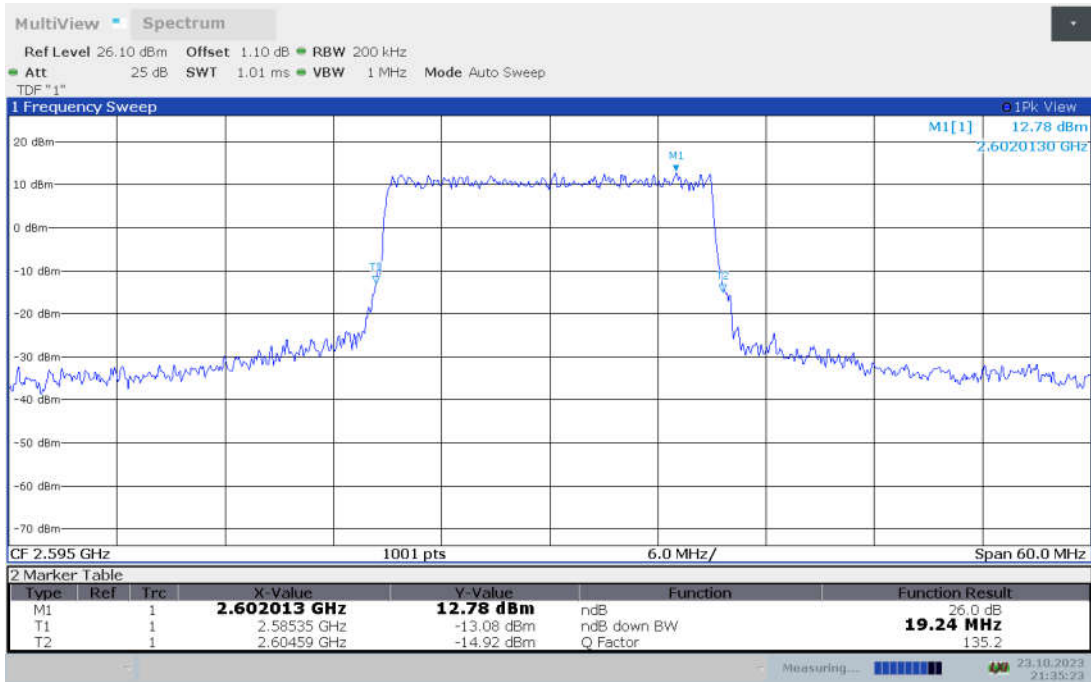
LTE band 41 , 15MHz Bandwidth, MID, 16QAM (-26dBc BW)



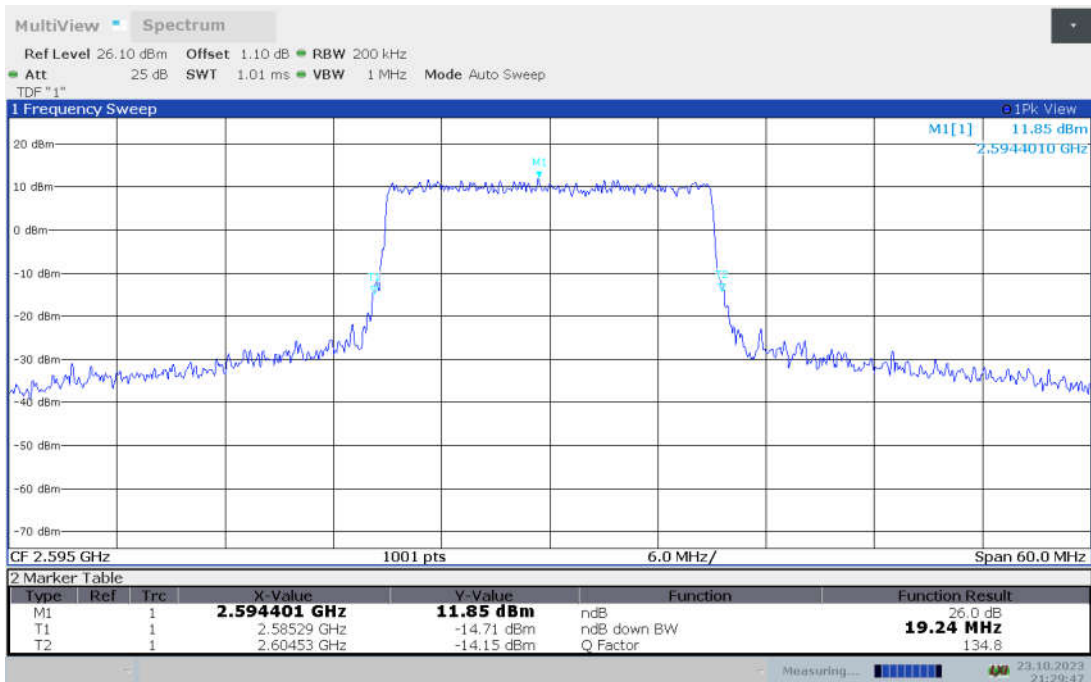
LTE band 41,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	19.241	19.241

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



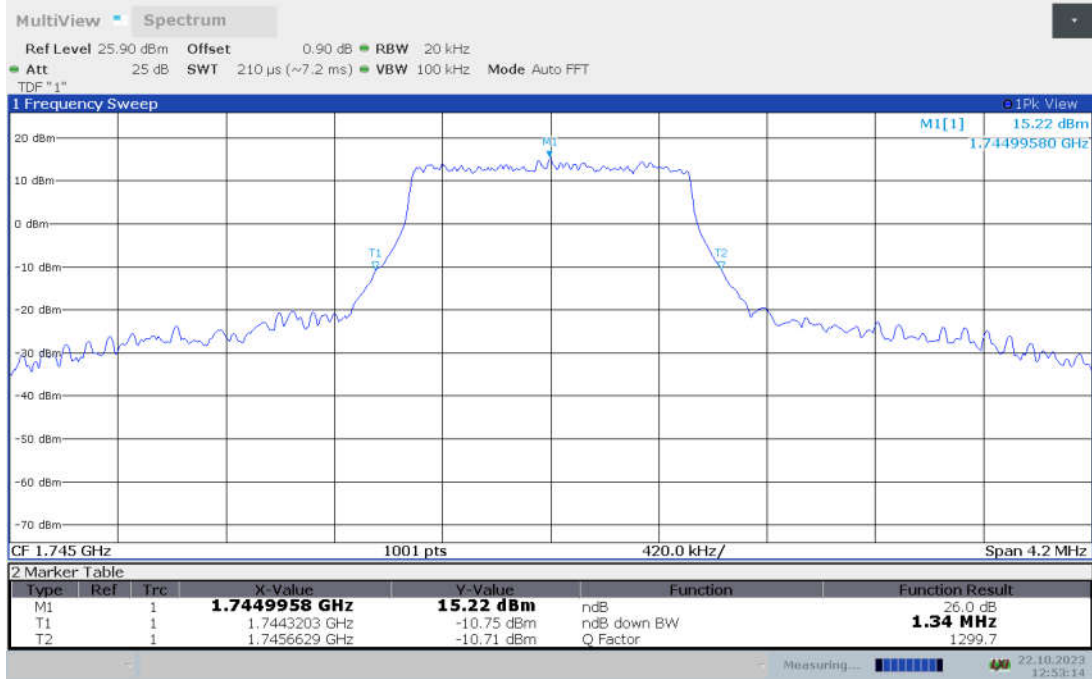
LTE band 41 , 20MHz Bandwidth, MID, 16QAM (-26dBc BW)



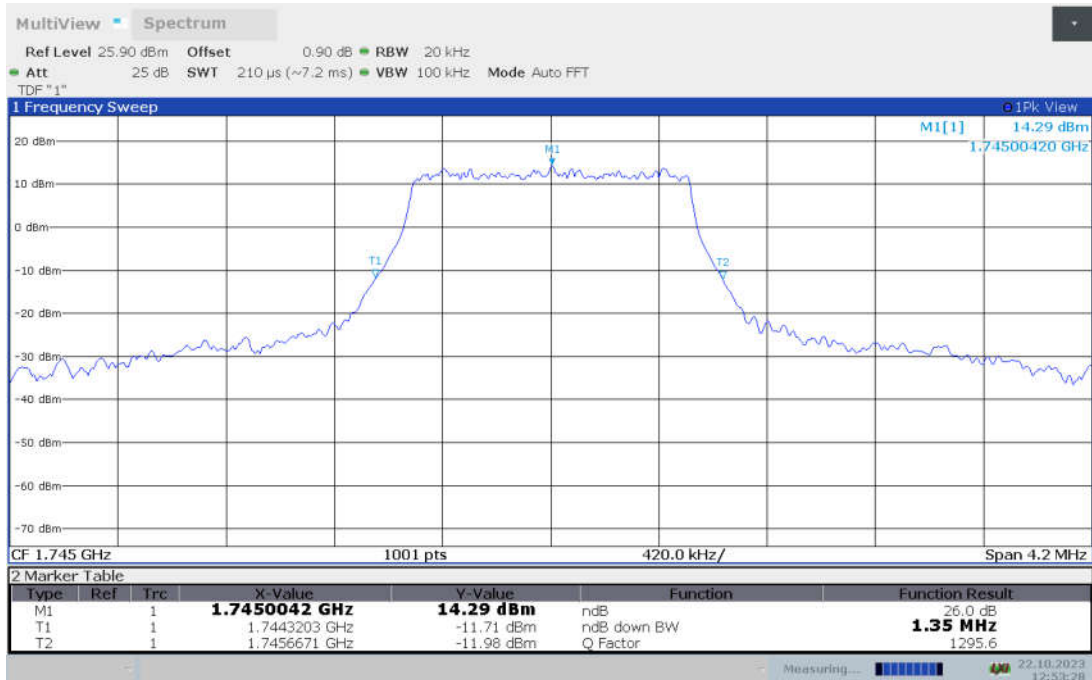
LTE band 66,1.4MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	1.343	1.347

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



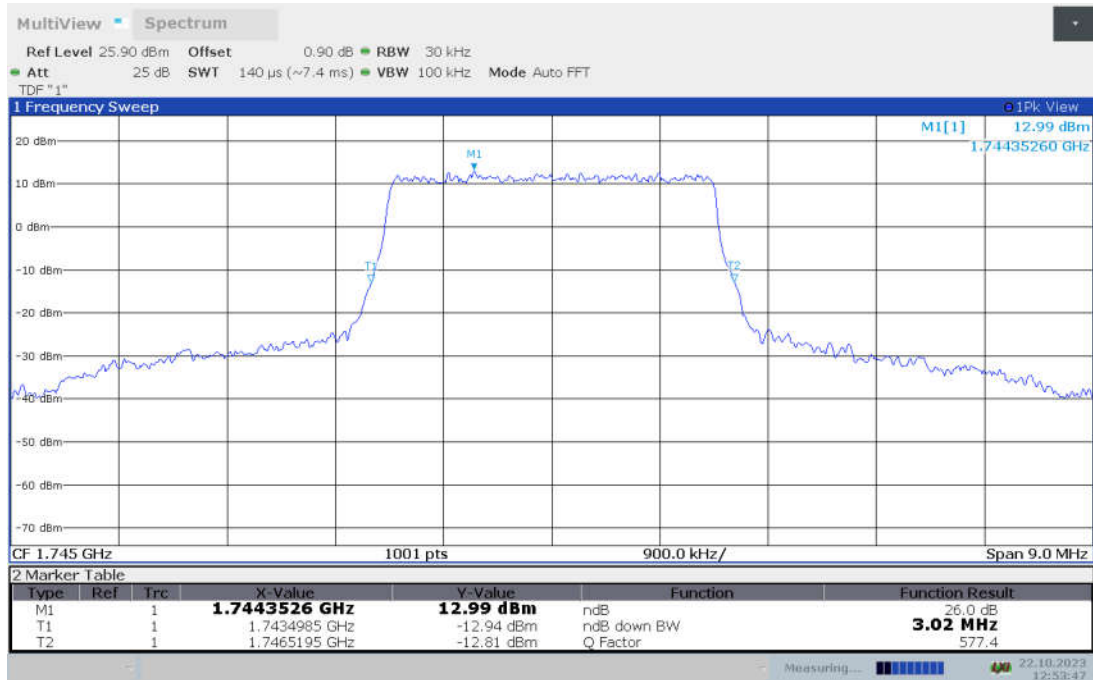
LTE band 66 , 1.4MHz Bandwidth, MID, 16QAM (-26dBc BW)



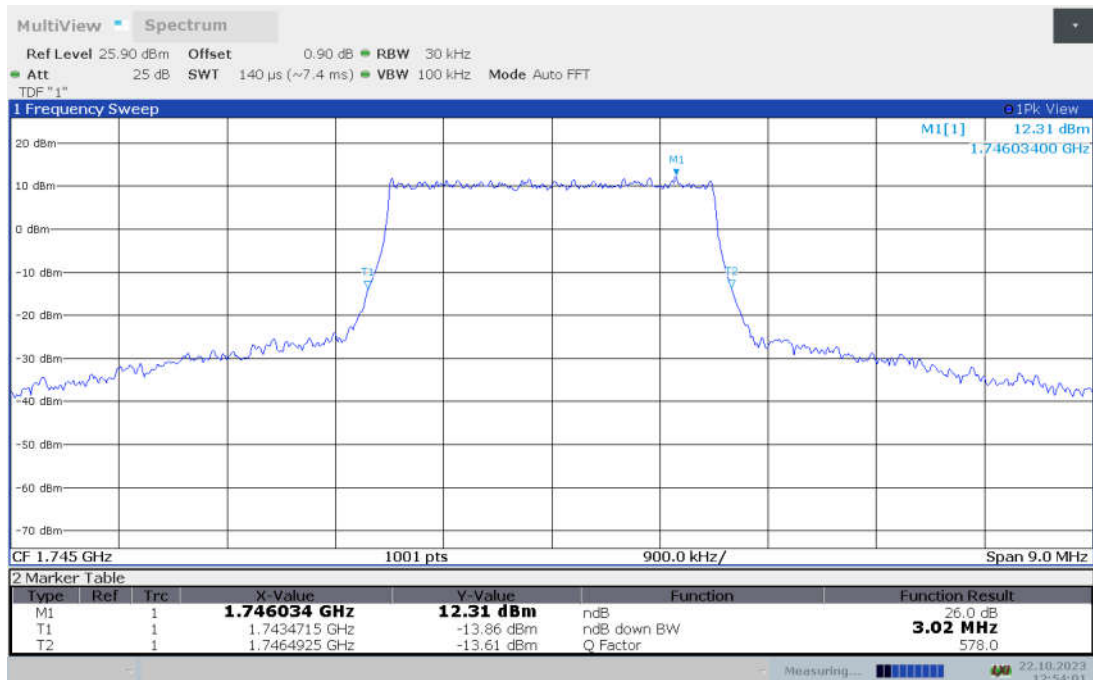
LTE band 66,3MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	3.021	3.021

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



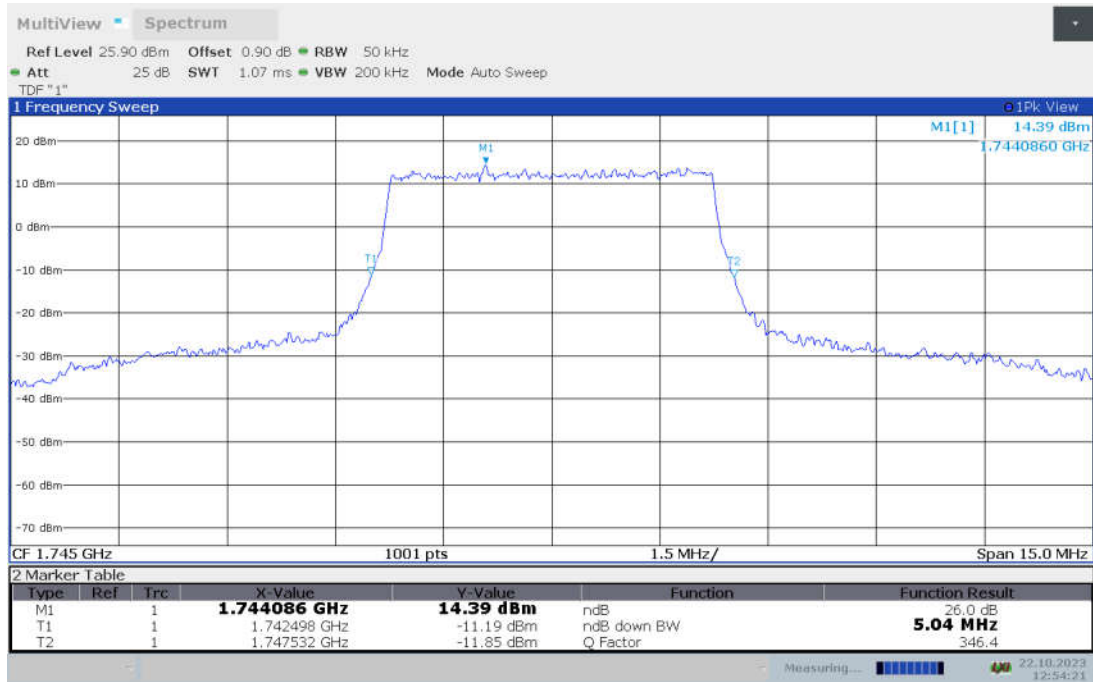
LTE band 66 , 3MHz Bandwidth, MID, 16QAM (-26dBc BW)



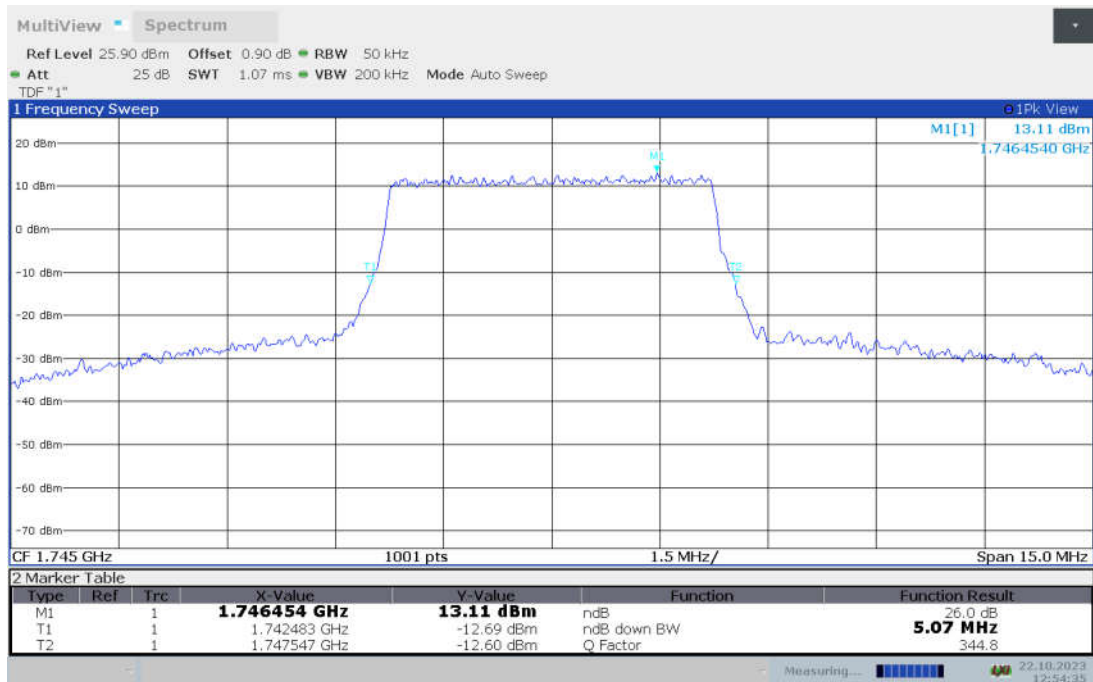
LTE band 66,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	5.035	5.065

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



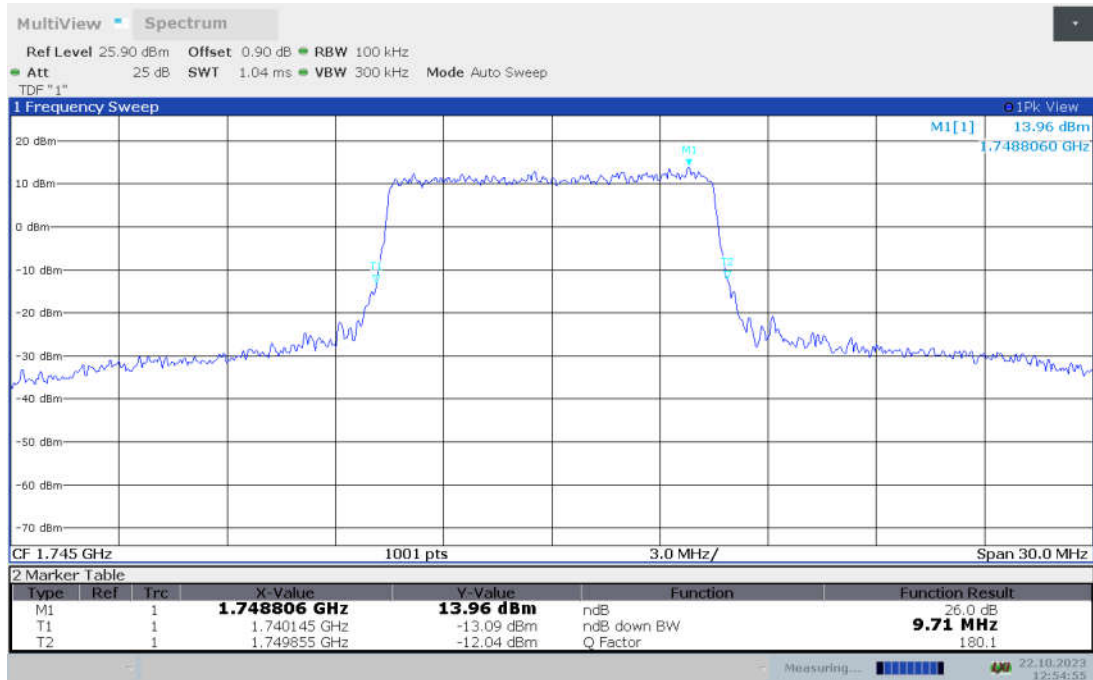
LTE band 66 , 5MHz Bandwidth, MID, 16QAM (-26dBc BW)



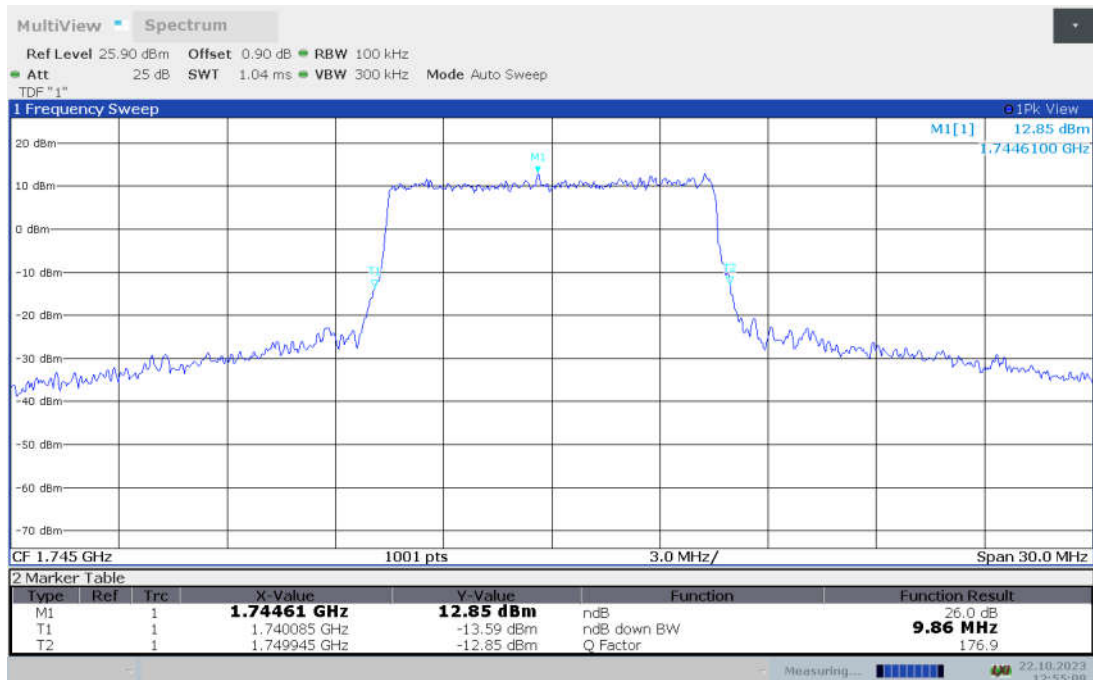
LTE band 66,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	9.710	9.860

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



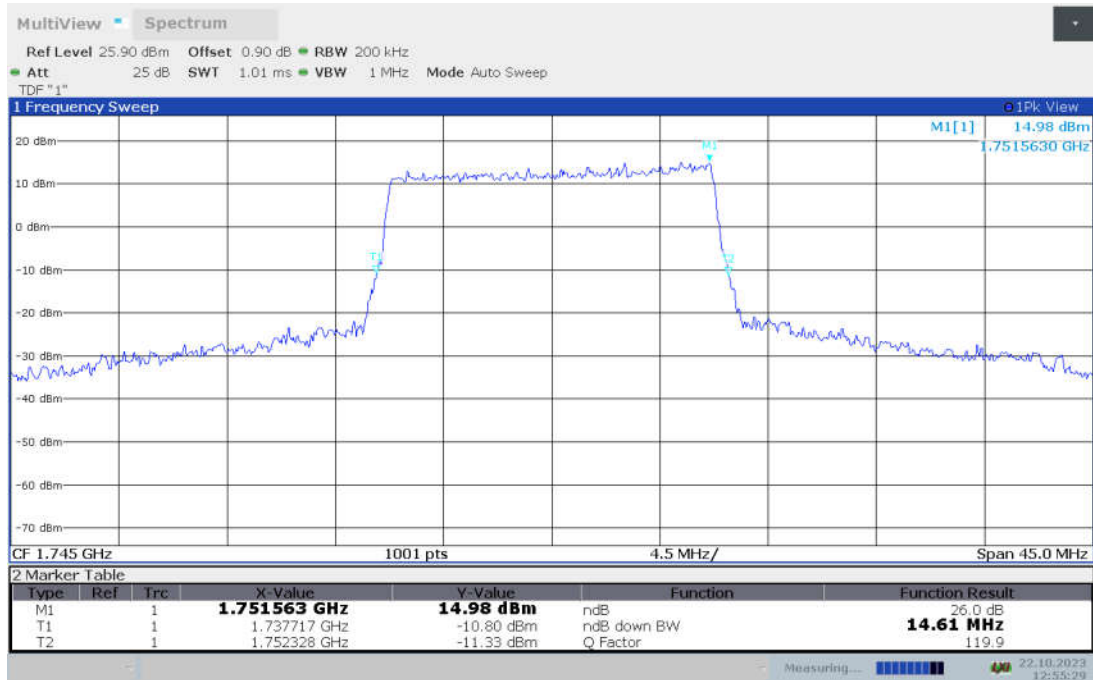
LTE band 66 , 10MHz Bandwidth, MID, 16QAM (-26dBc BW)



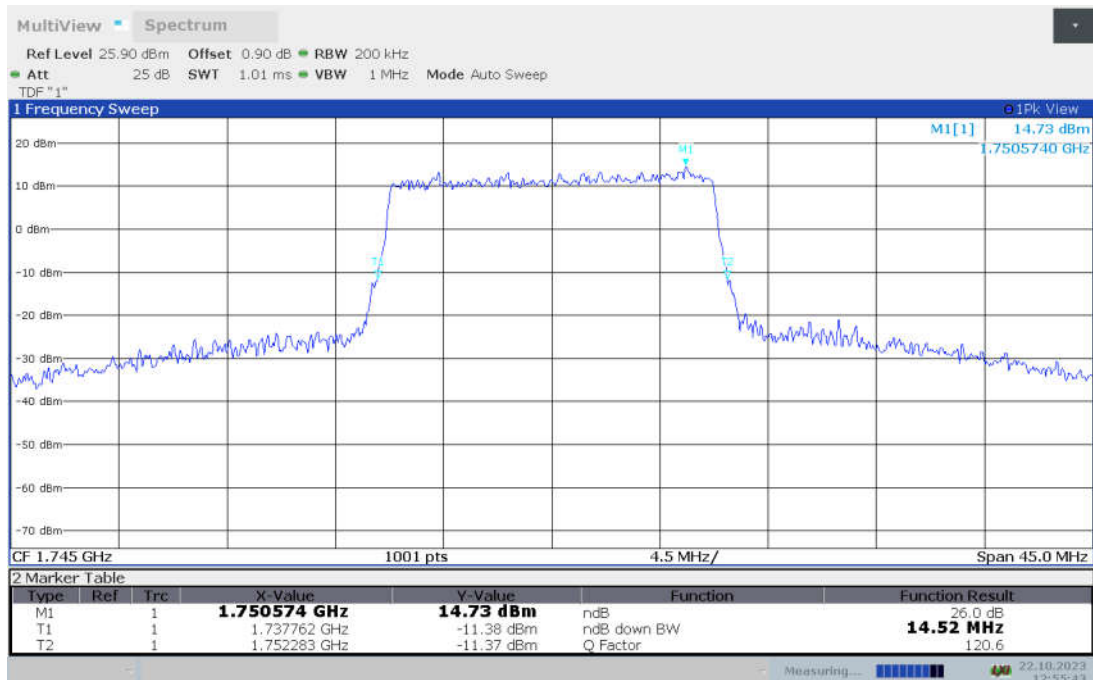
LTE band 66,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	14.610	14.520

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



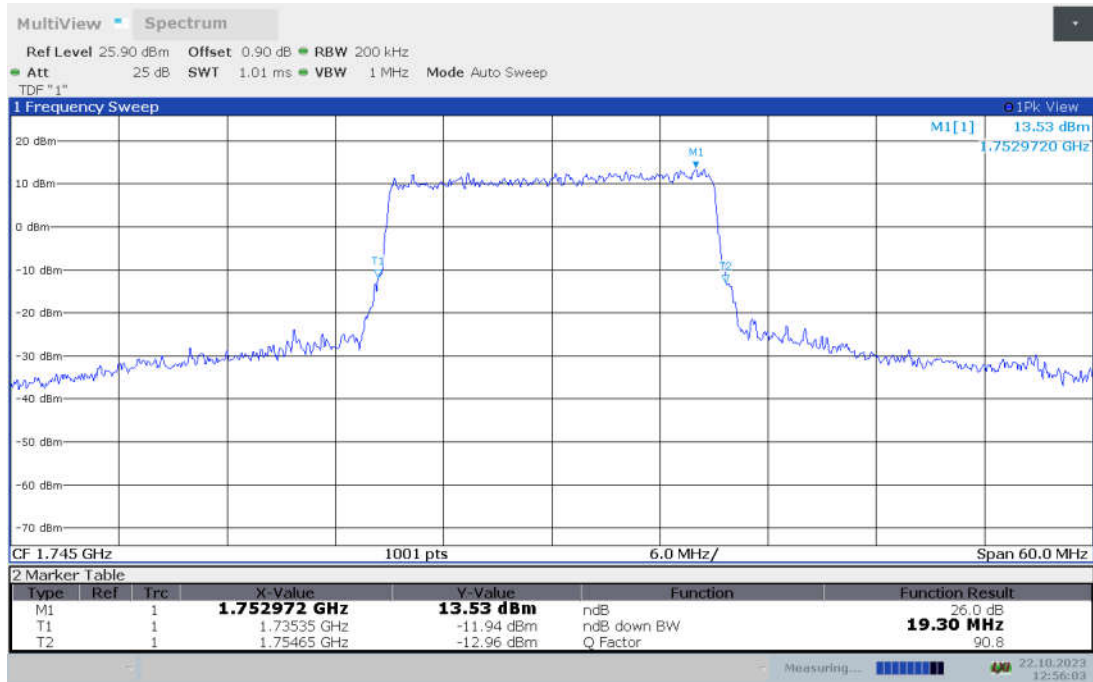
LTE band 66 , 15MHz Bandwidth, MID, 16QAM (-26dBc BW)



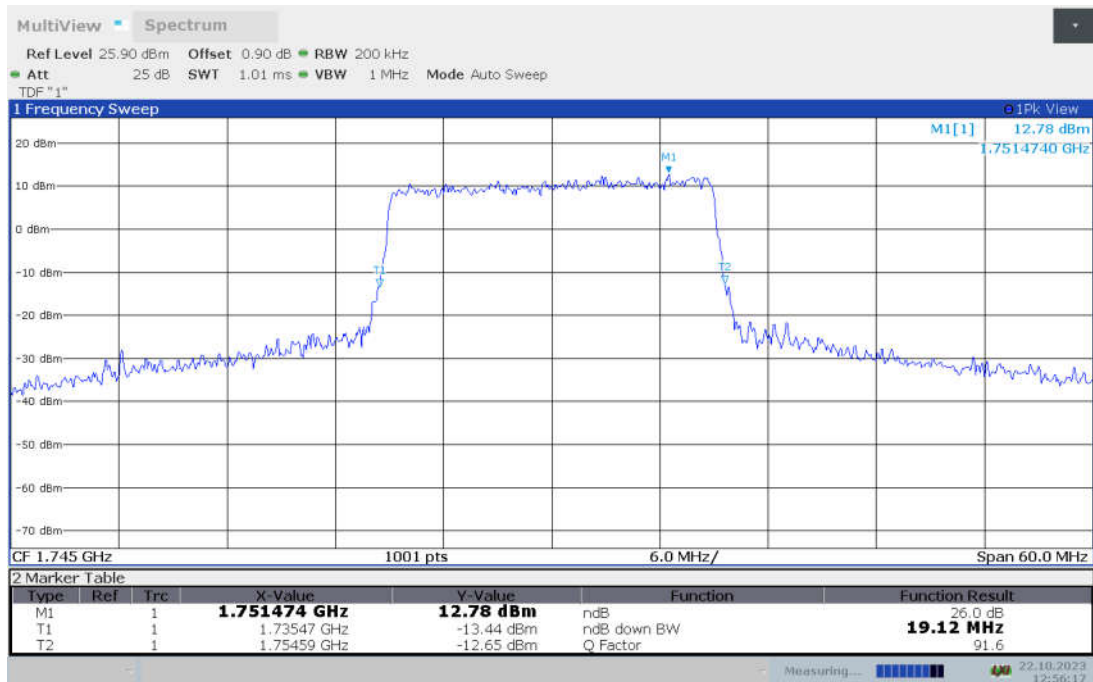
LTE band 66,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	19.301	19.121

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



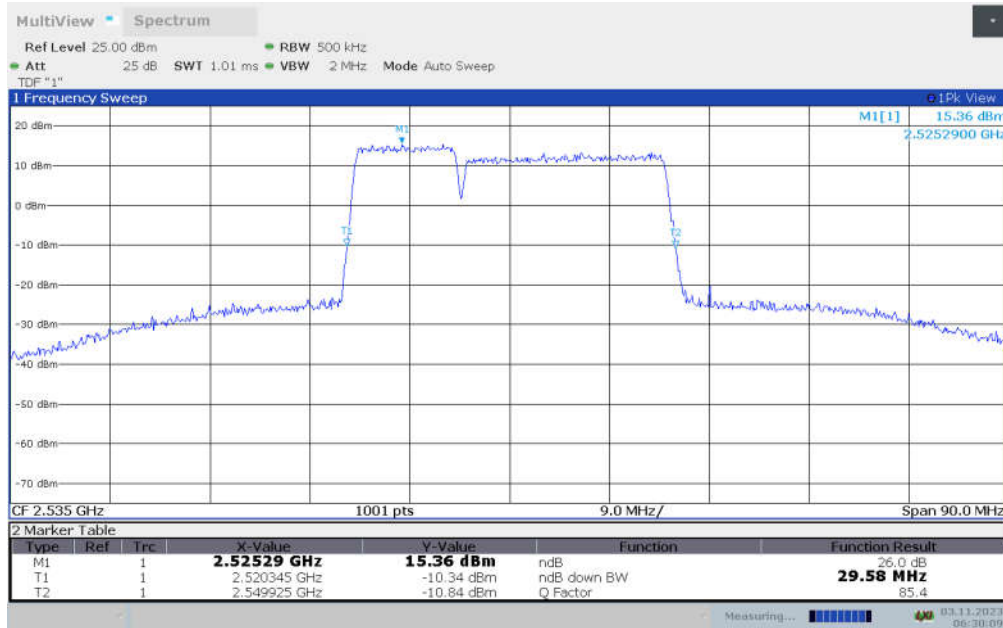
LTE band 66 , 20MHz Bandwidth, MID, 16QAM (-26dBc BW)



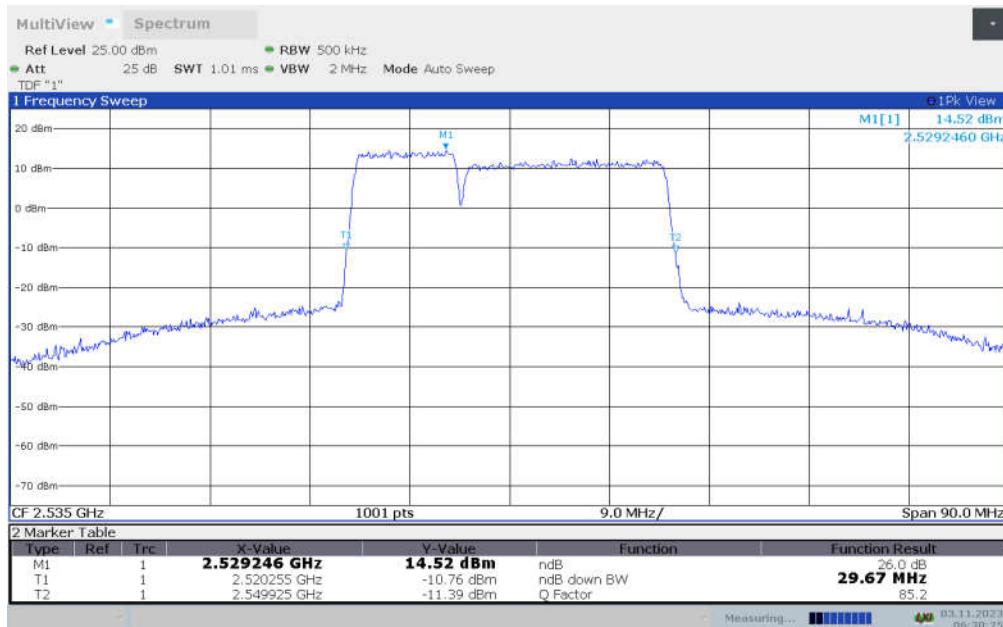
LTE CA_7C, 10MHz+20MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2535.0	29.580	29.670

LTE CA_7C , 10MHz+20MHz Bandwidth, QPSK (-26dBc BW)



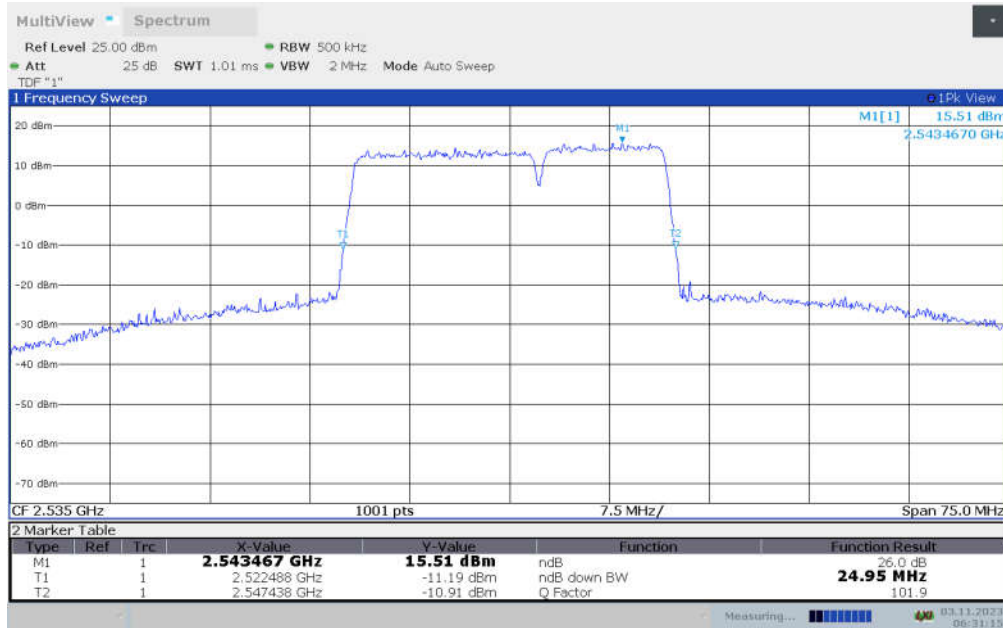
LTE CA_7C , 10MHz+20MHz Bandwidth, 16QAM (-26dBc BW)



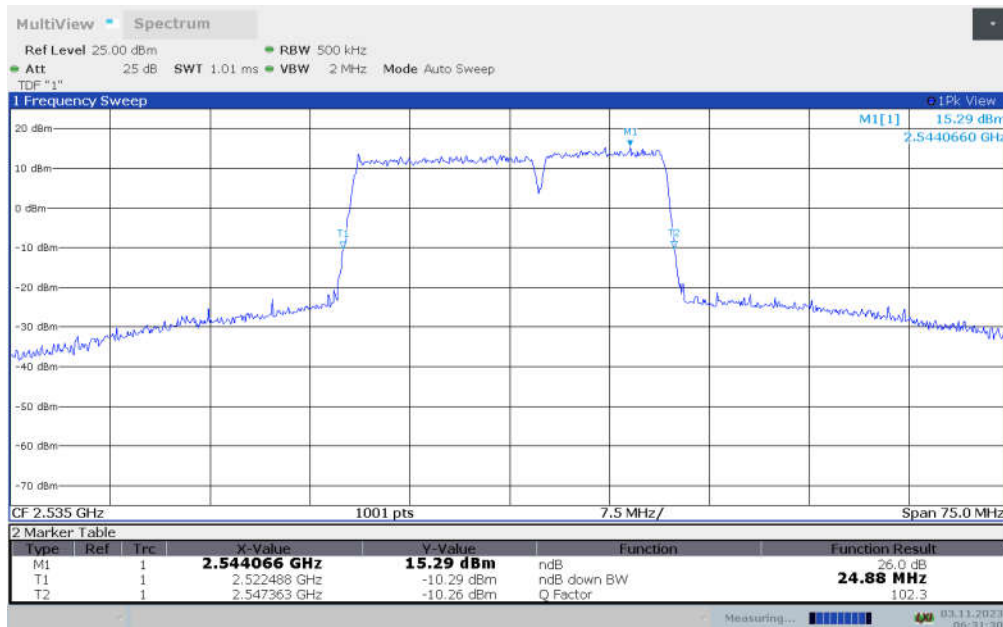
LTE CA_7C, 15MHz+10MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2535.0	24.950	24.875

LTE CA_7C , 15MHz+10MHz Bandwidth, QPSK (-26dBc BW)



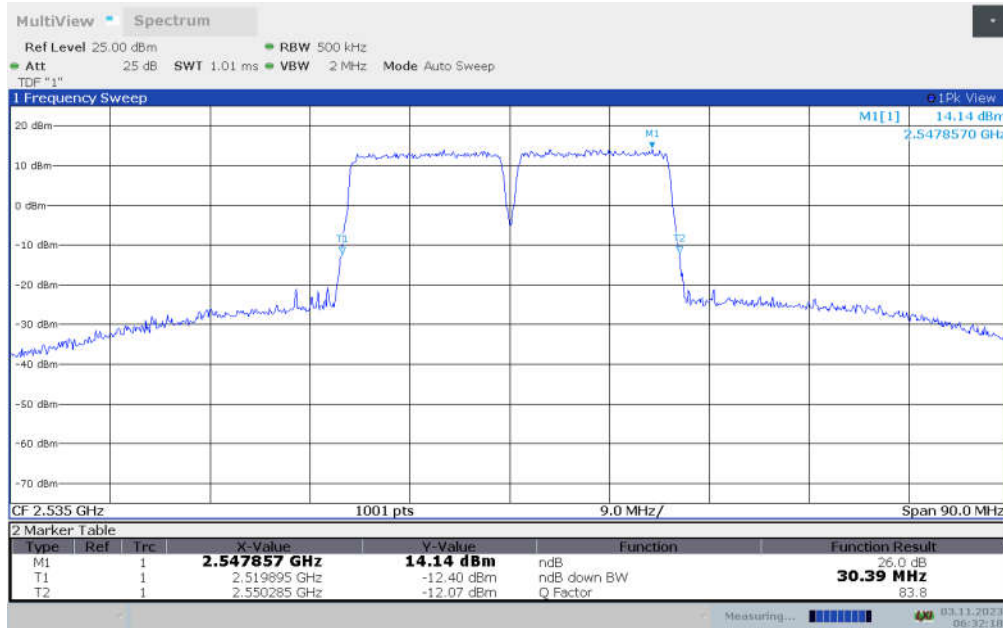
LTE CA_7C , 15MHz+10MHz Bandwidth, 16QAM (-26dBc BW)



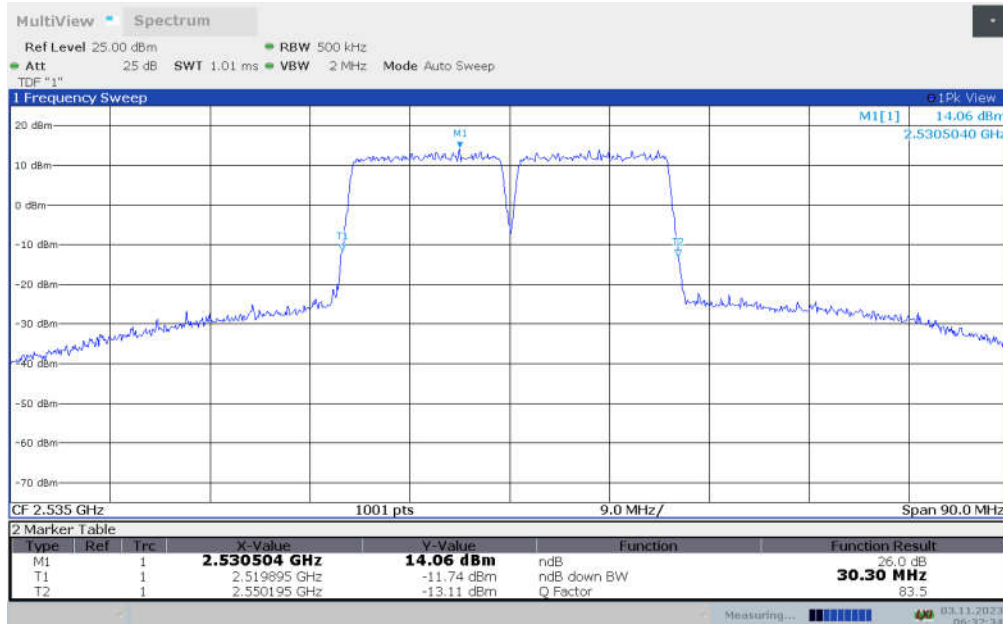
LTE CA_7C, 15MHz+15MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2535.0	30.390	30.300

LTE CA_7C , 15MHz+15MHz Bandwidth, QPSK (-26dBc BW)



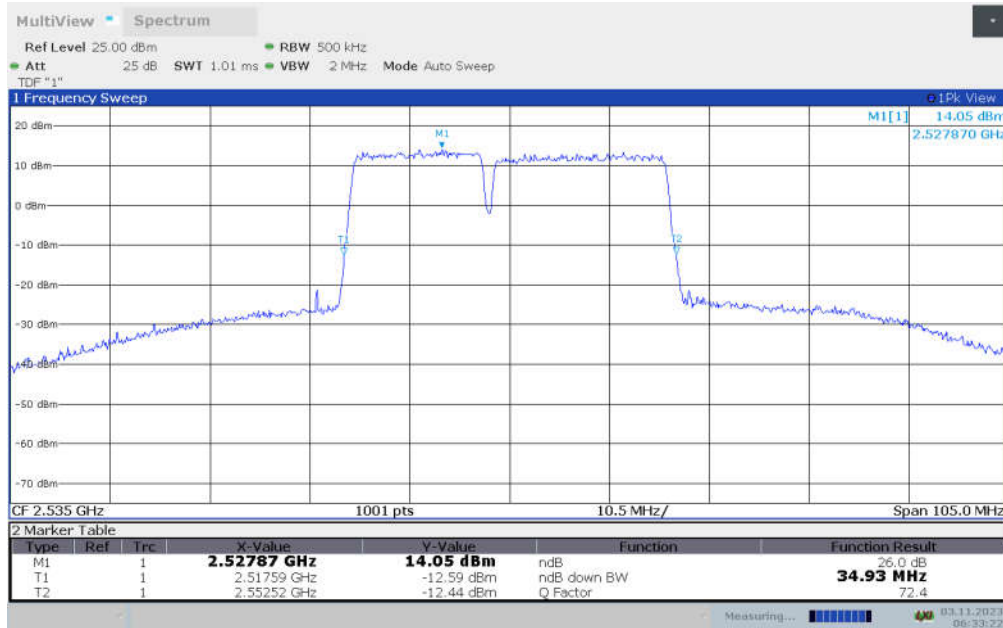
LTE CA_7C , 15MHz+15MHz Bandwidth, 16QAM (-26dBc BW)



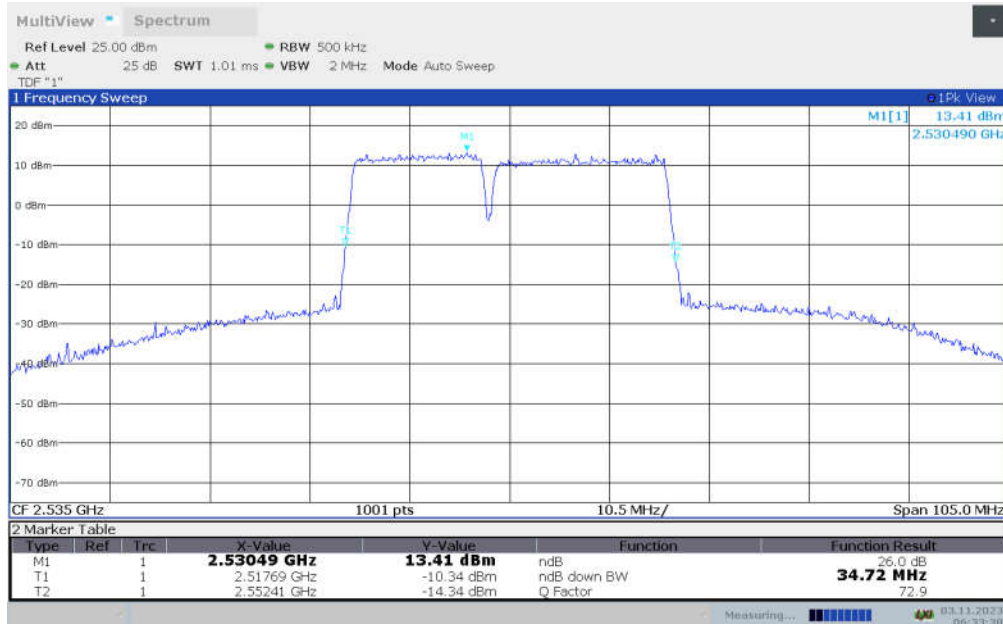
LTE CA_7C, 15MHz+20MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2535.0	34.930	34.720

LTE CA_7C , 15MHz+20MHz Bandwidth, QPSK (-26dBc BW)



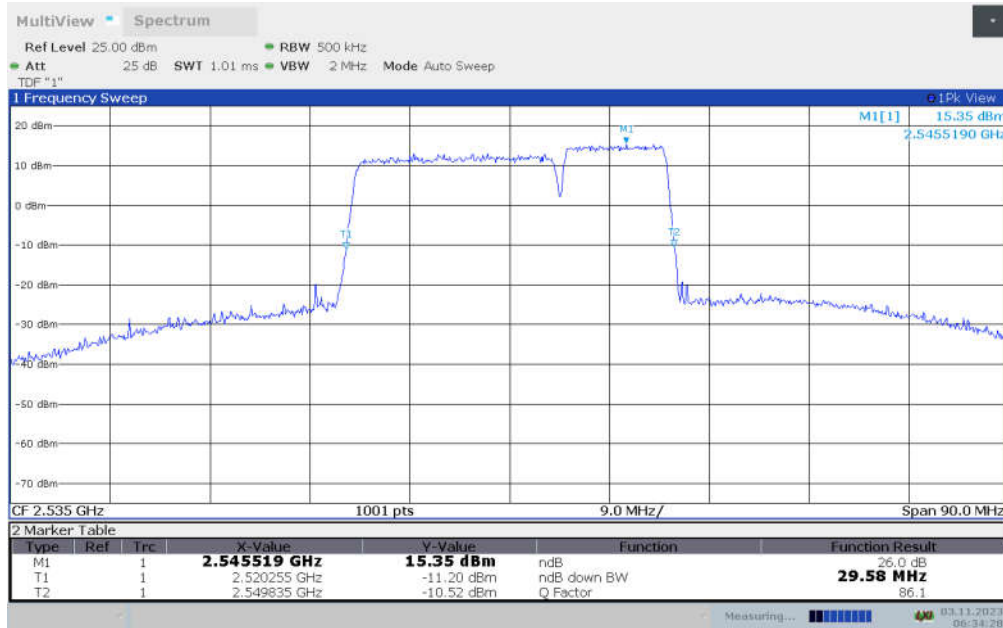
LTE CA_7C , 15MHz+20MHz Bandwidth, 16QAM (-26dBc BW)



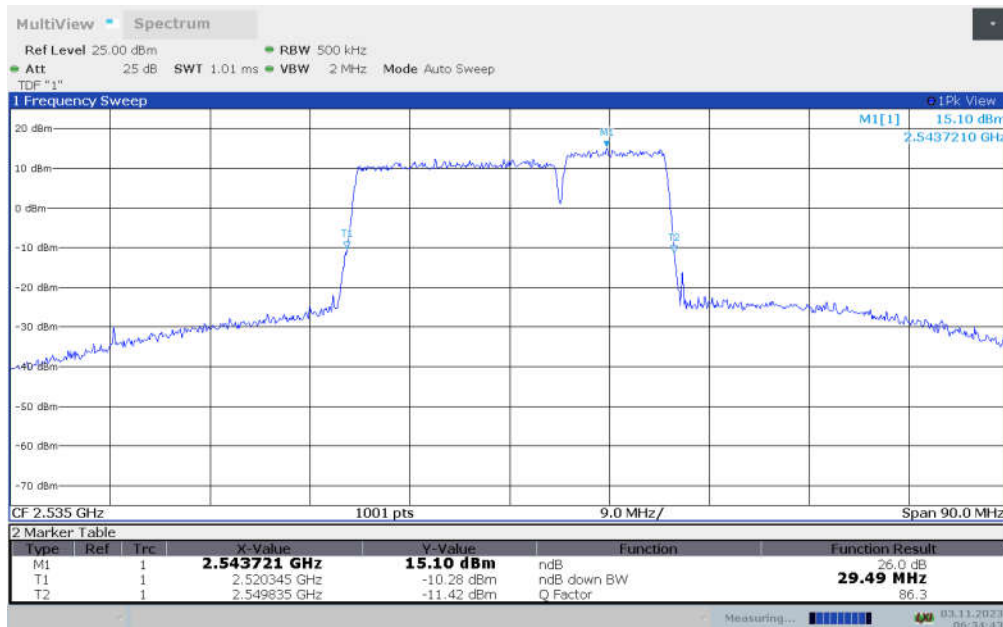
LTE CA_7C, 20MHz+10MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2535.0	29.580	29.491

LTE CA_7C , 20MHz+10MHz Bandwidth, QPSK (-26dBc BW)



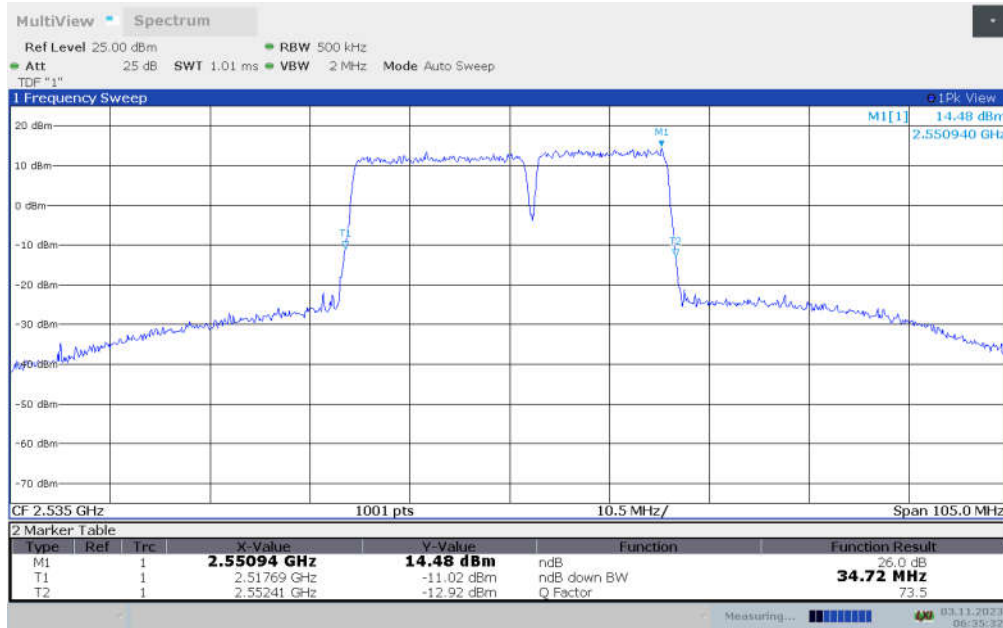
LTE CA_7C , 20MHz+10MHz Bandwidth, 16QAM (-26dBc BW)



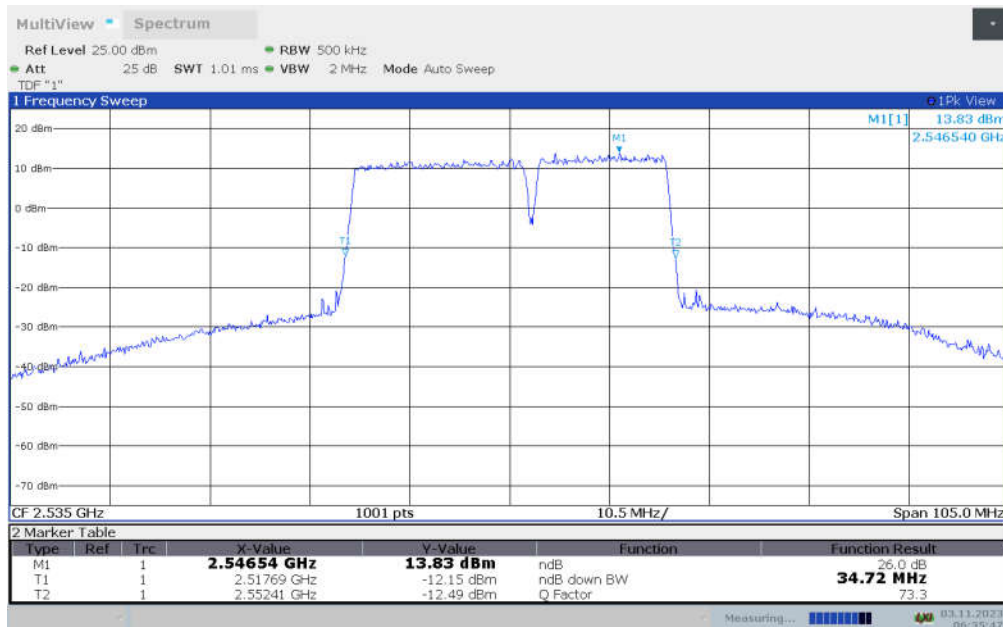
LTE CA_7C, 20MHz+15MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2535.0	34.720	34.720

LTE CA_7C , 20MHz+15MHz Bandwidth, QPSK (-26dBc BW)



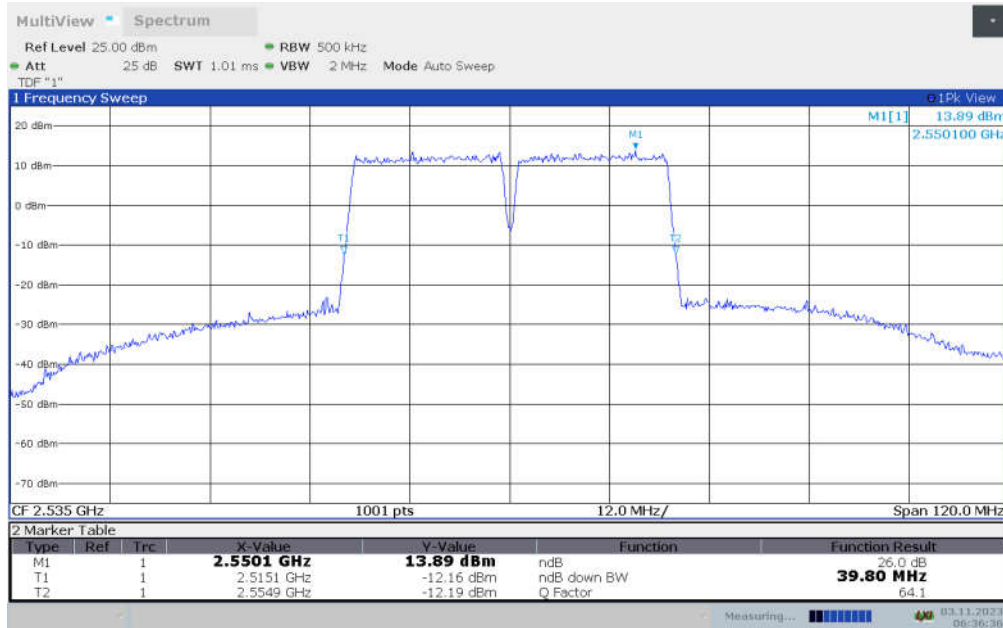
LTE CA_7C , 20MHz+15MHz Bandwidth, 16QAM (-26dBc BW)



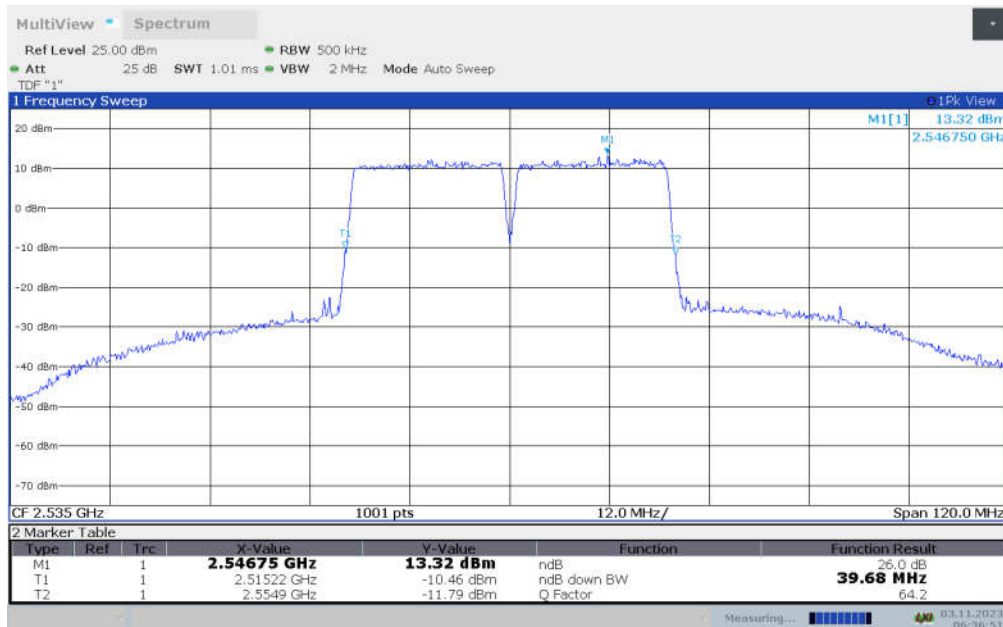
LTE CA_7C, 20MHz+20MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2535.0	39.800	39.680

LTE CA_7C , 20MHz+20MHz Bandwidth, QPSK (-26dBc BW)



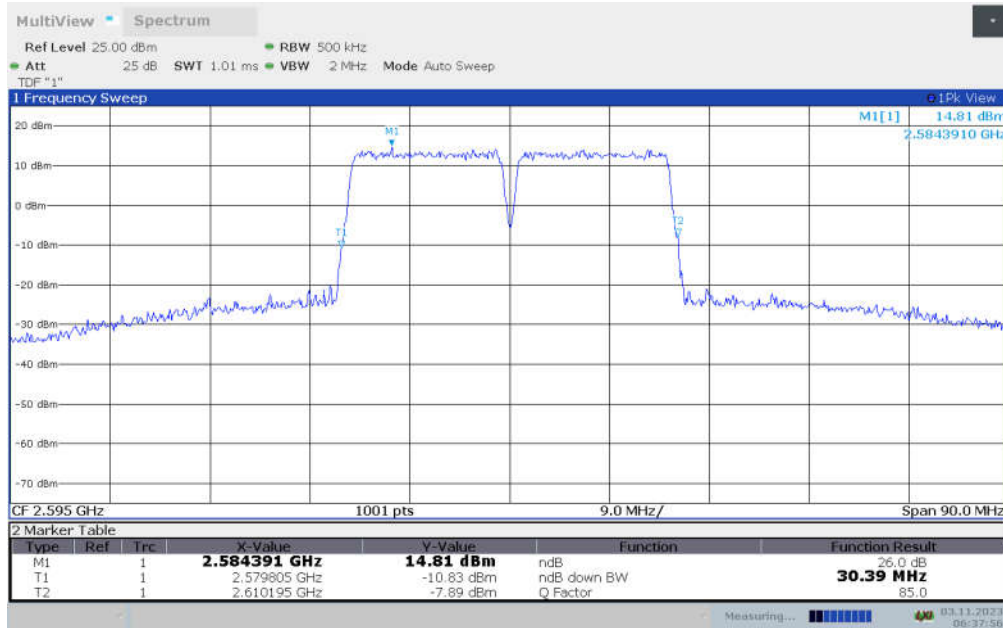
LTE CA_7C , 20MHz+20MHz Bandwidth, 16QAM (-26dBc BW)



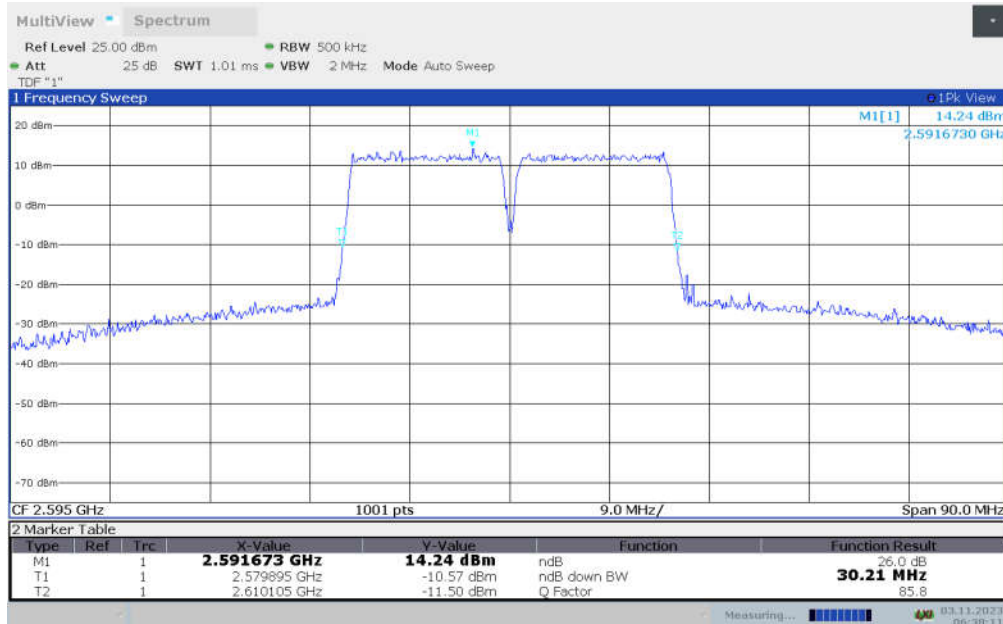
LTE CA_38C, 15MHz+15MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	30.390	30.210

LTE CA_38C , 15MHz+15MHz Bandwidth, QPSK (-26dBc BW)



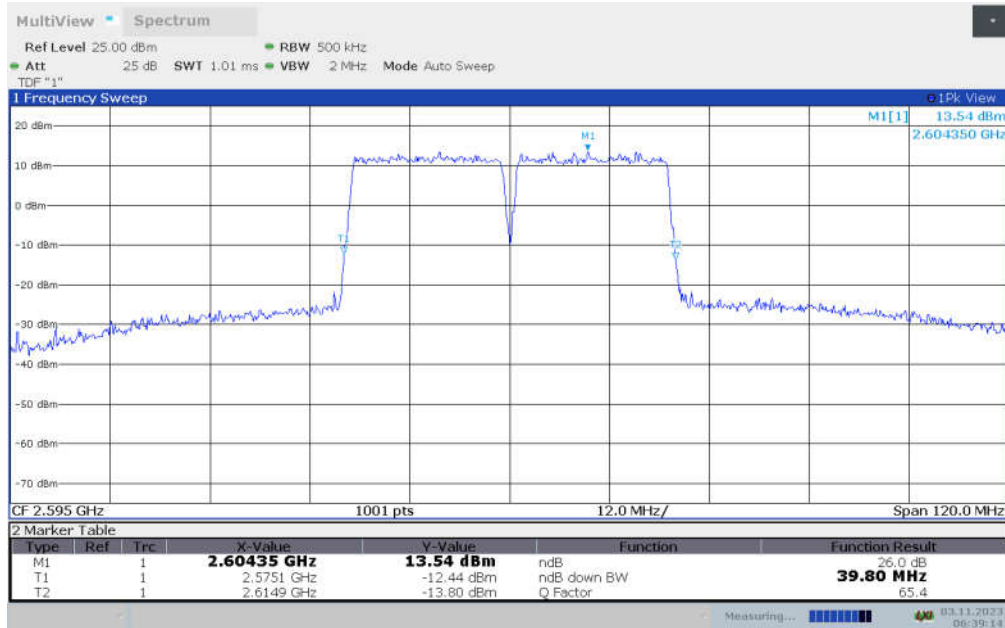
LTE CA_38C , 15MHz+15MHz Bandwidth, 16QAM (-26dBc BW)



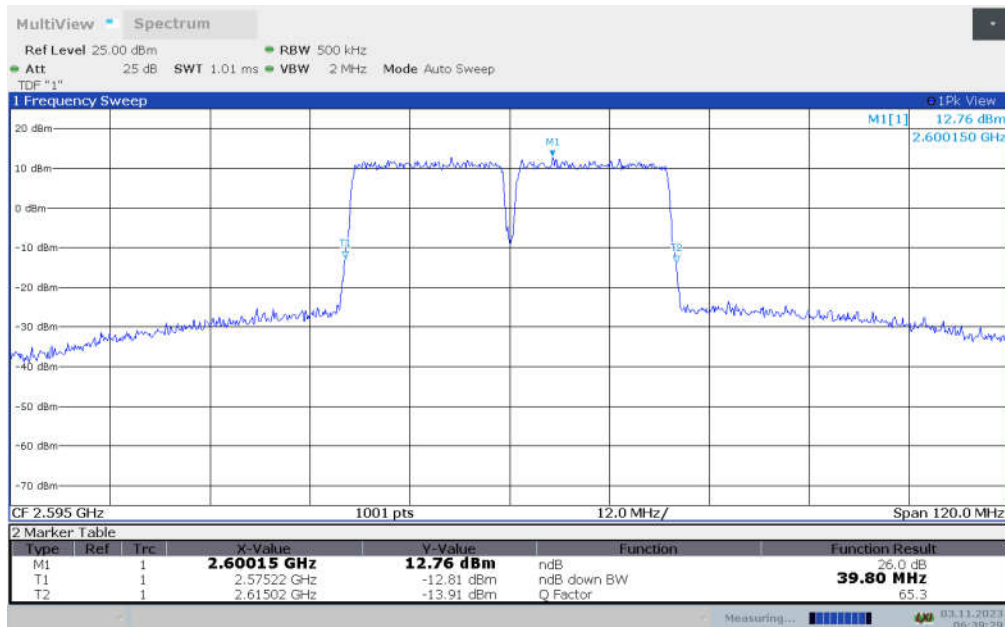
LTE CA_38C, 20MHz+20MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	39.800	39.800

LTE CA_38C , 20MHz+20MHz Bandwidth, QPSK (-26dBc BW)



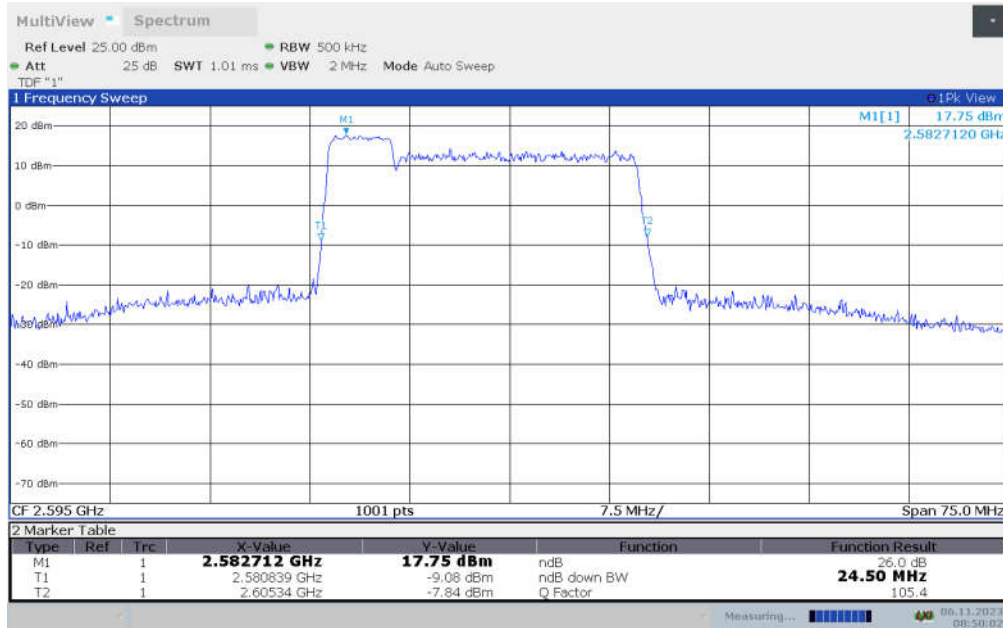
LTE CA_38C , 20MHz+20MHz Bandwidth, 16QAM (-26dBc BW)



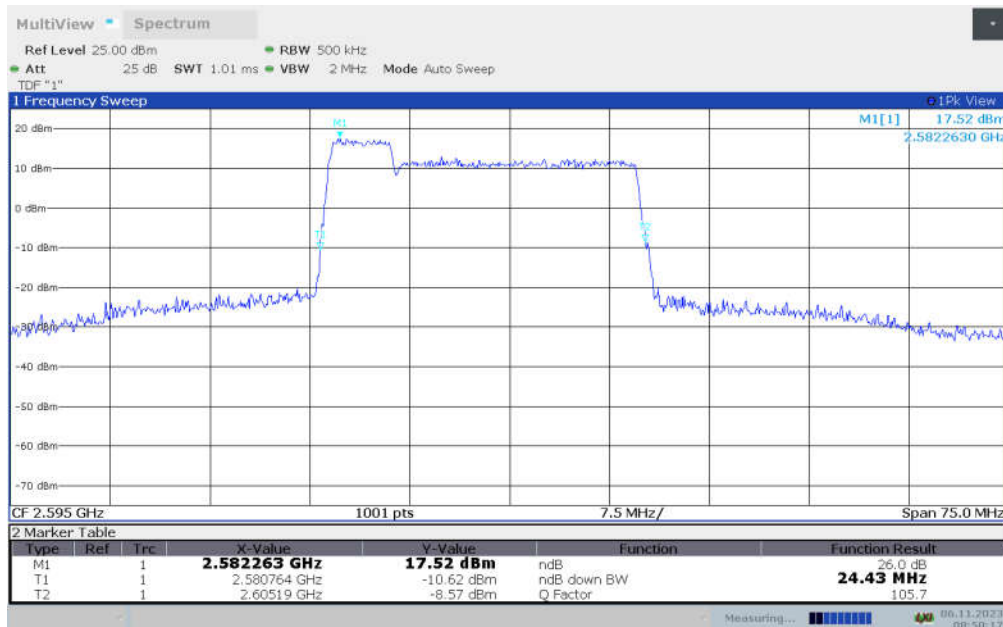
LTE CA_41C, 5MHz+20MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	24.500	24.426

LTE CA_41C , 5MHz+20MHz Bandwidth, QPSK (-26dBc BW)



LTE CA_41C , 5MHz+20MHz Bandwidth, 16QAM (-26dBc BW)

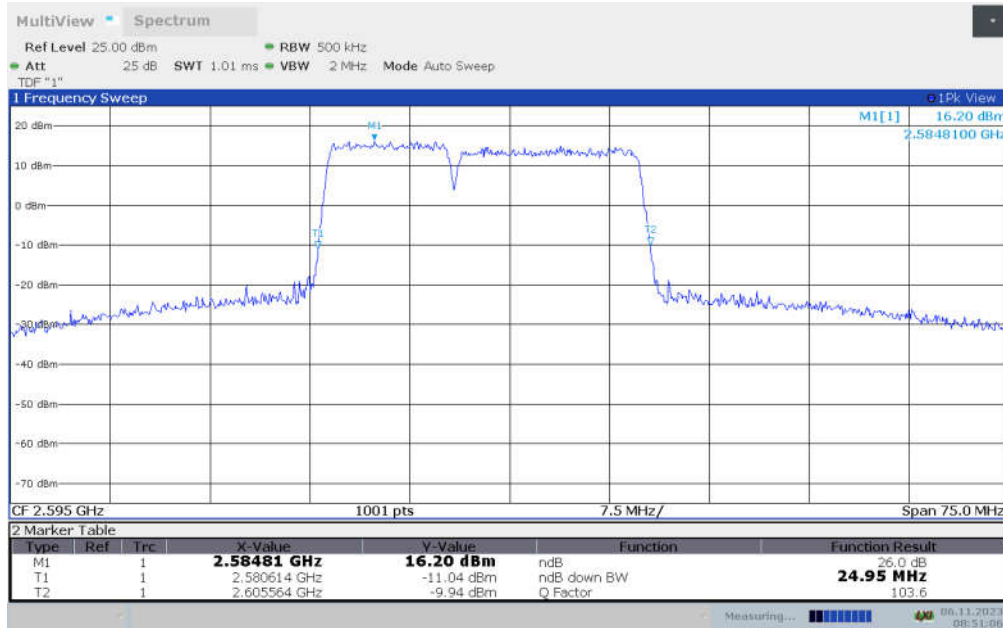




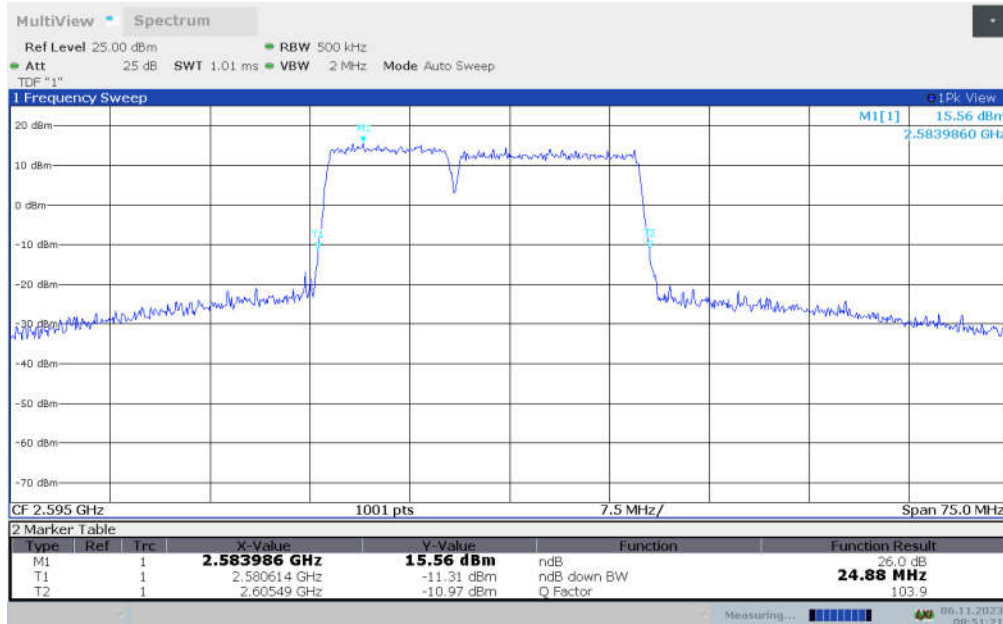
LTE CA_41C, 10MHz+15MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	24.950	24.875

LTE CA_41C , 10MHz+15MHz Bandwidth, QPSK (-26dBc BW)



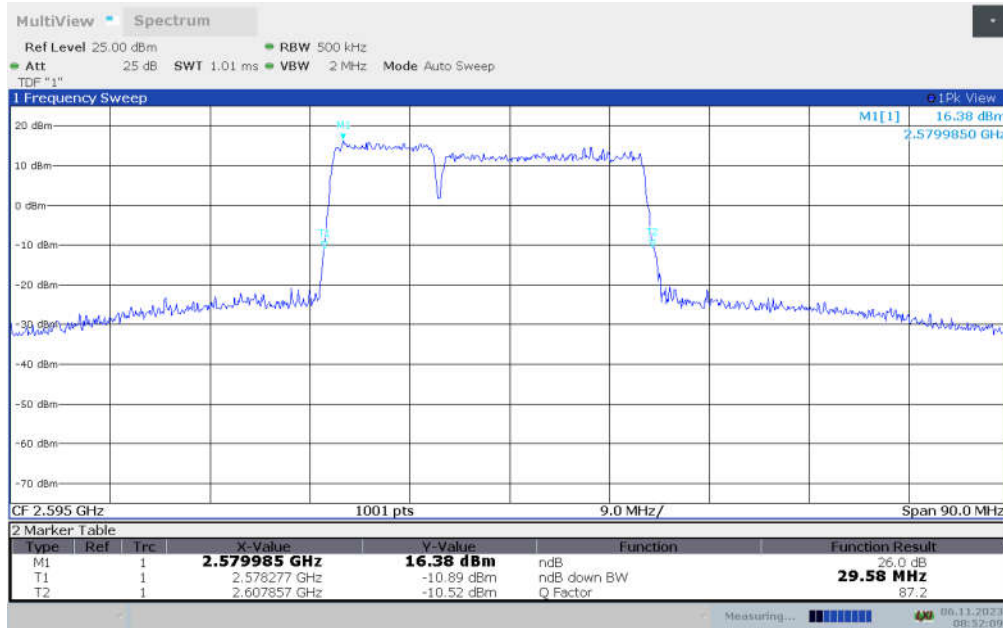
LTE CA_41C , 10MHz+15MHz Bandwidth, 16QAM (-26dBc BW)



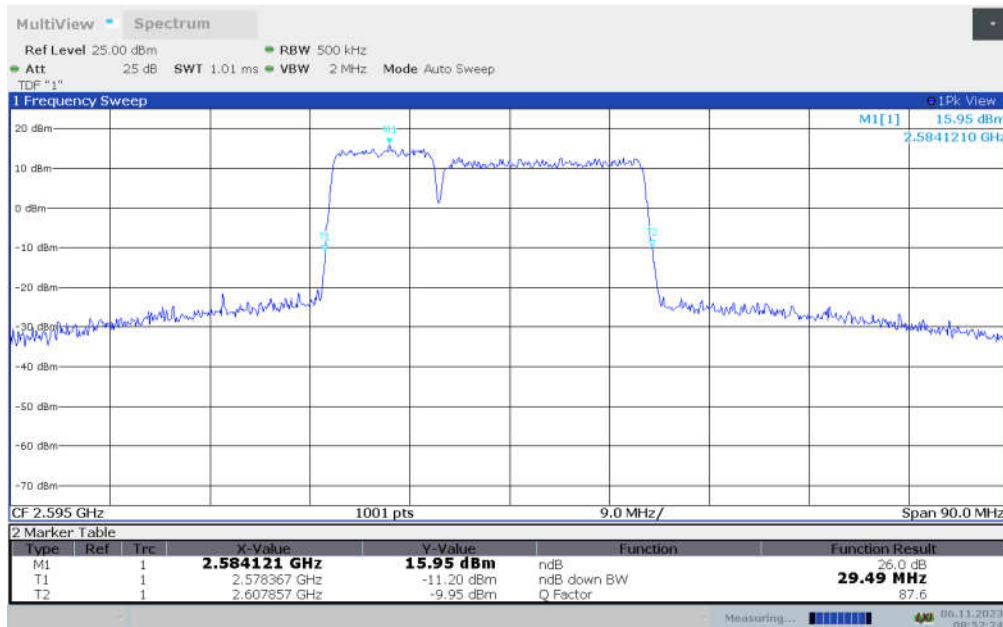
LTE CA_41C, 10MHz+20MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	29.580	29.491

LTE CA_41C , 10MHz+20MHz Bandwidth, QPSK (-26dBc BW)



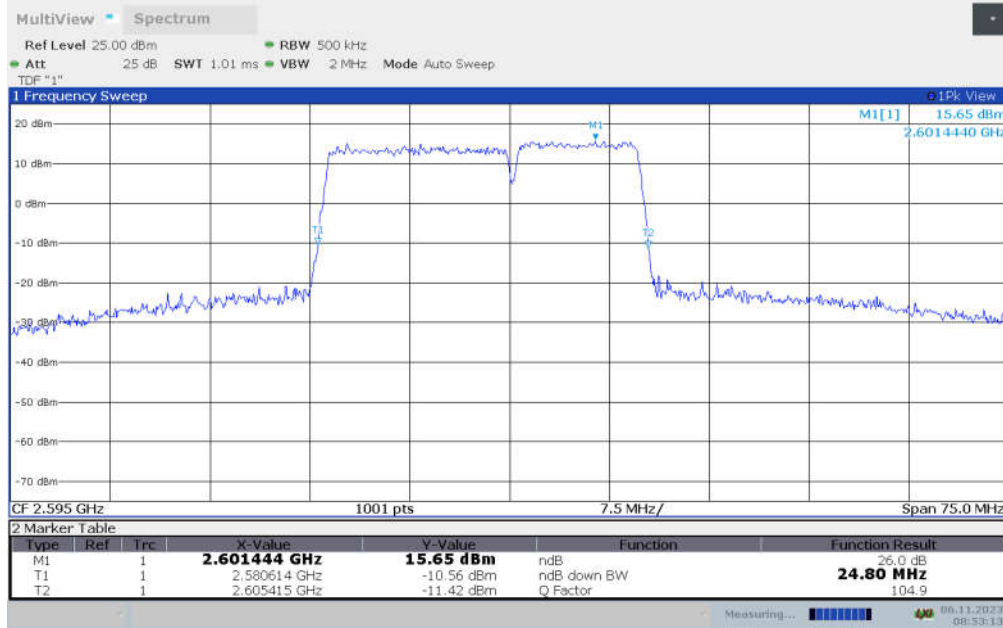
LTE CA_41C , 10MHz+20MHz Bandwidth, 16QAM (-26dBc BW)



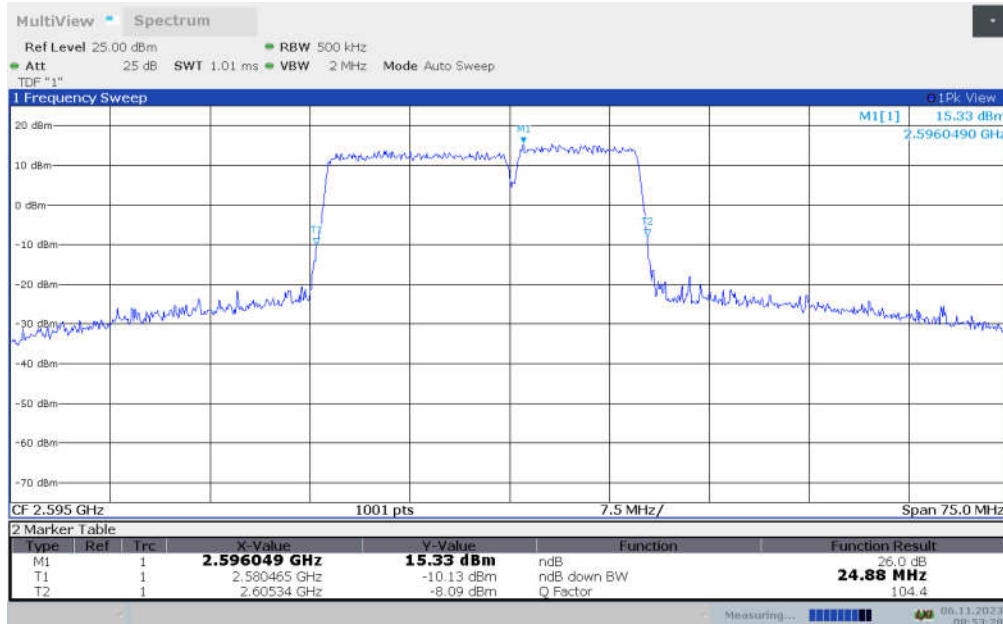
LTE CA_41C, 15MHz+10MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	24.800	24.875

LTE CA_41C , 15MHz+10MHz Bandwidth, QPSK (-26dBc BW)



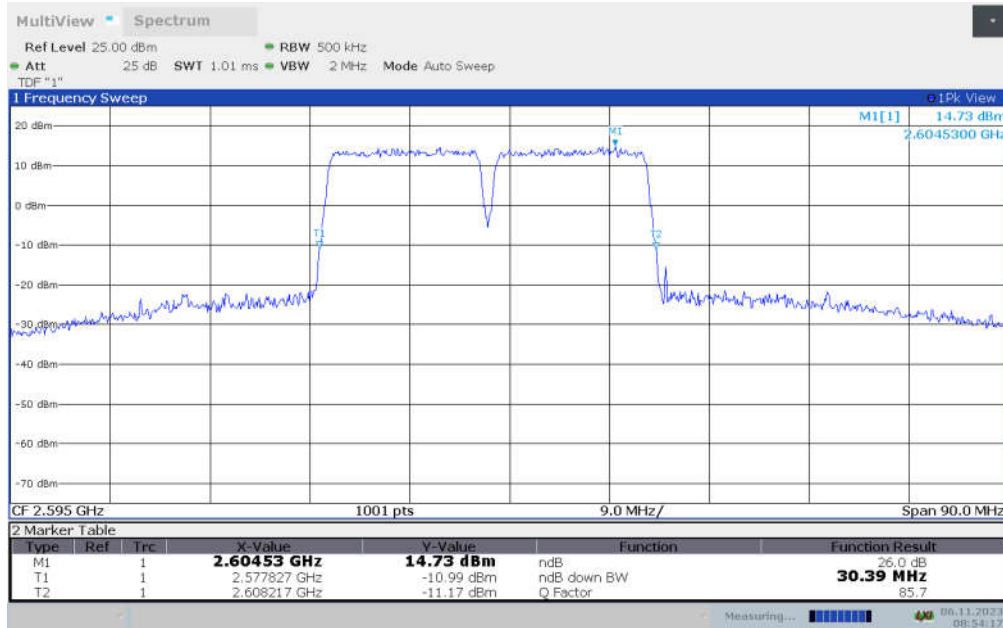
LTE CA_41C , 15MHz+10MHz Bandwidth, 16QAM (-26dBc BW)



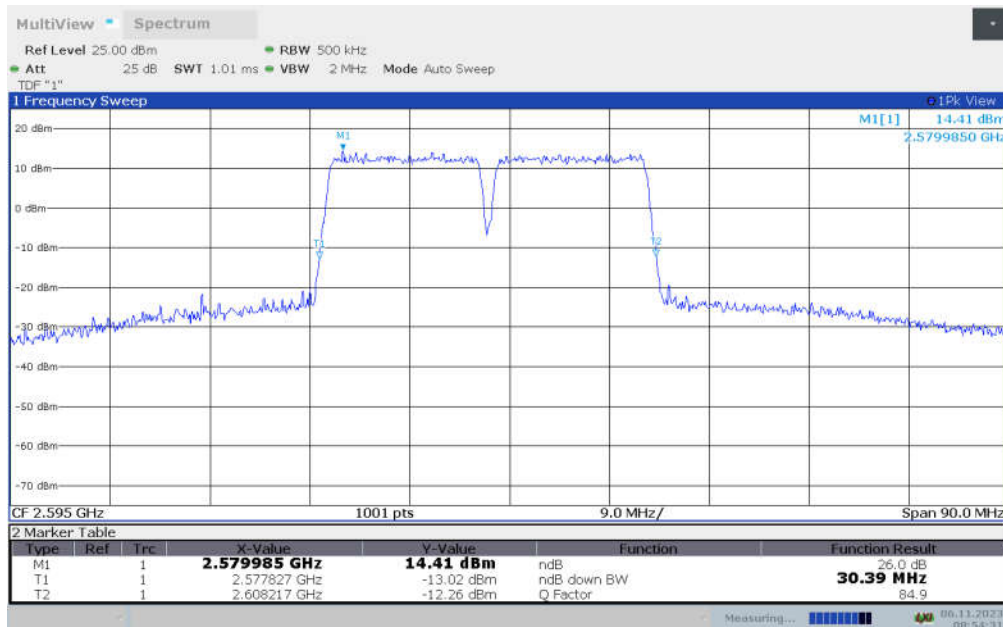
LTE CA_41C, 15MHz+15MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	30.390	30.390

LTE CA_41C , 15MHz+15MHz Bandwidth, QPSK (-26dBc BW)



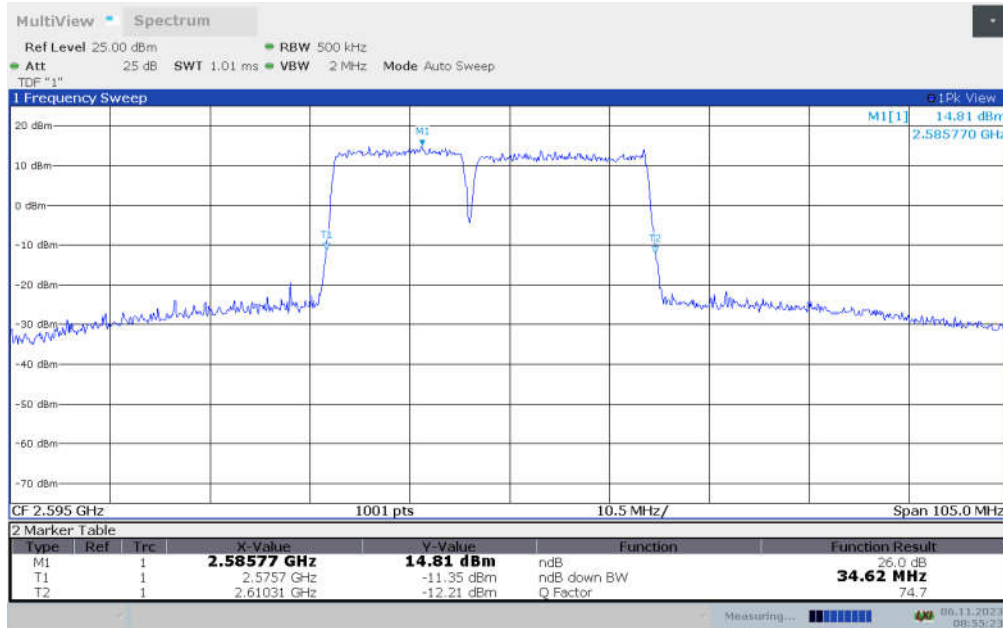
LTE CA_41C , 15MHz+15MHz Bandwidth, 16QAM (-26dBc BW)



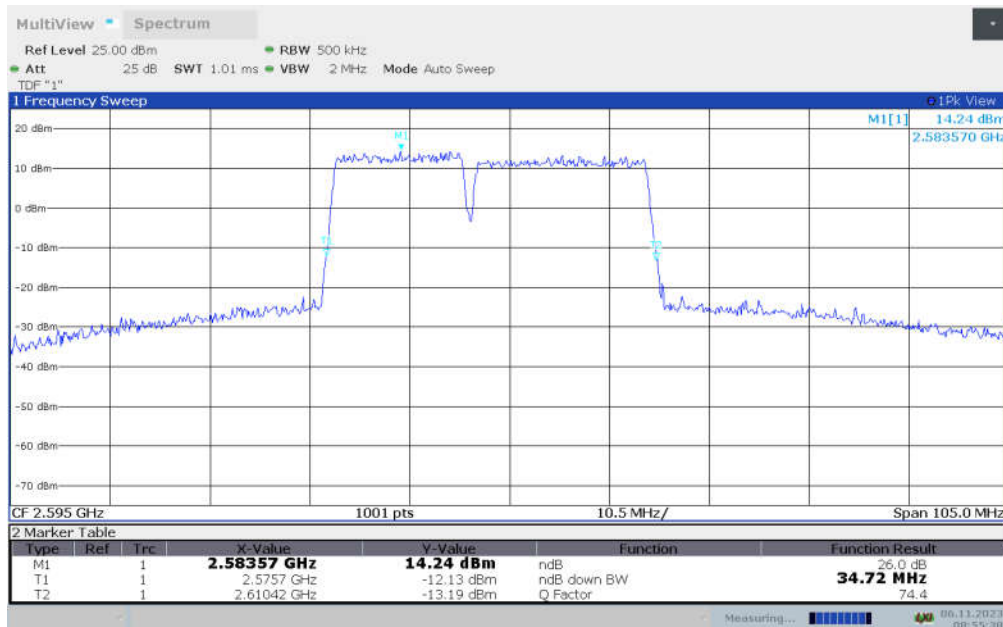
LTE CA_41C, 15MHz+20MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	34.620	34.720

LTE CA_41C , 15MHz+20MHz Bandwidth, QPSK (-26dBc BW)



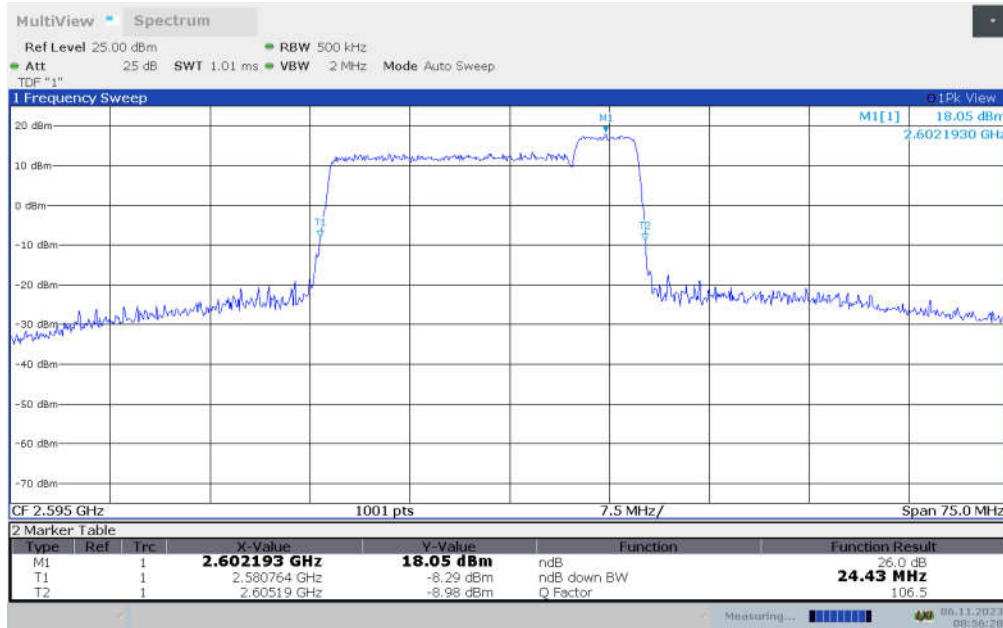
LTE CA_41C , 15MHz+20MHz Bandwidth, 16QAM (-26dBc BW)



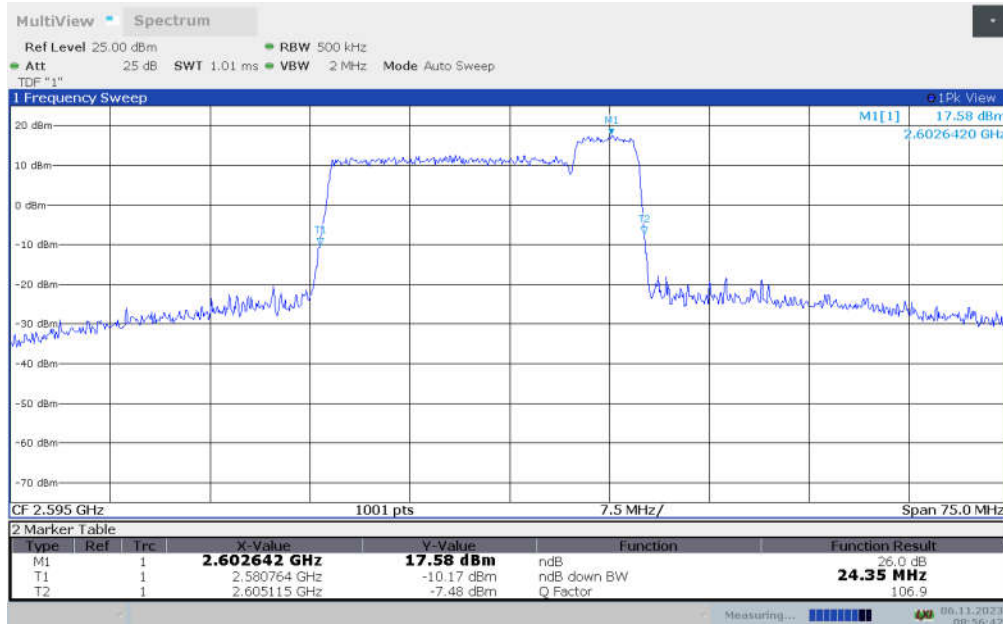
LTE CA_41C, 20MHz+5MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	24.426	24.351

LTE CA_41C , 20MHz+5MHz Bandwidth, QPSK (-26dBc BW)



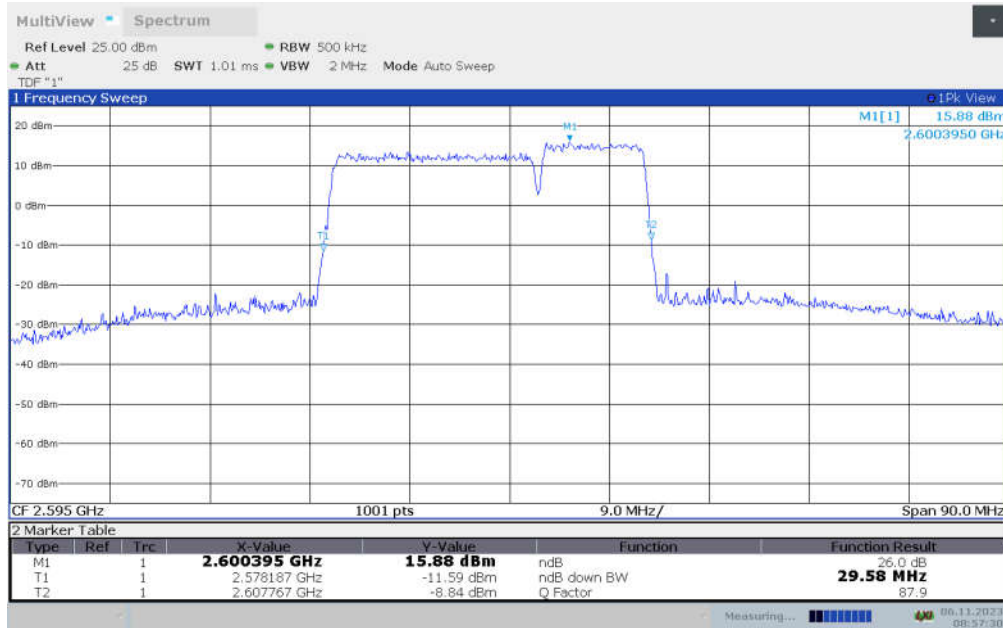
LTE CA_41C , 20MHz+5MHz Bandwidth, 16QAM (-26dBc BW)



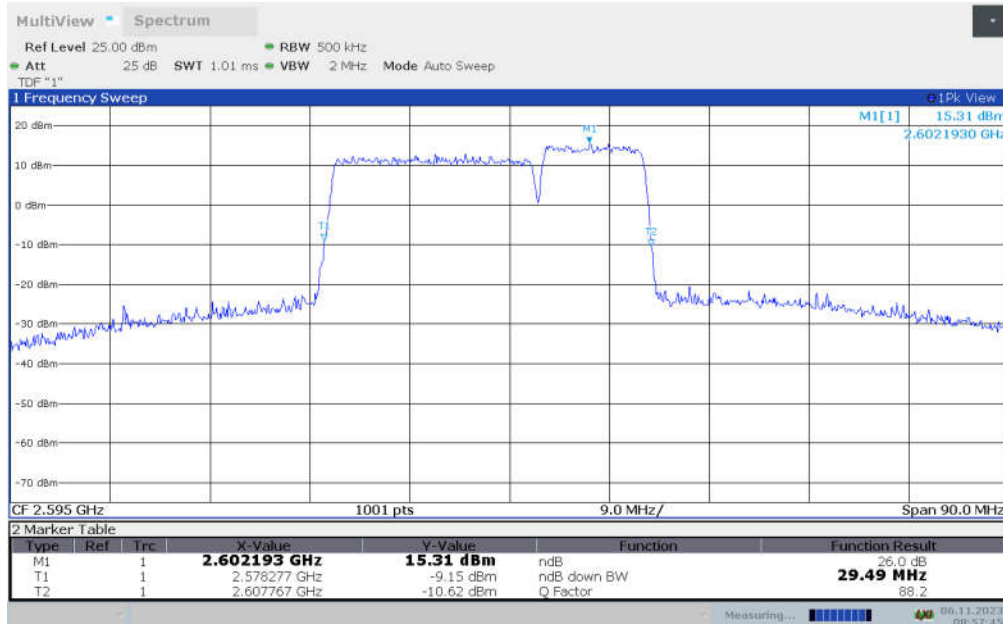
LTE CA_41C, 20MHz+10MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	29.580	29.491

LTE CA_41C , 20MHz+10MHz Bandwidth, QPSK (-26dBc BW)



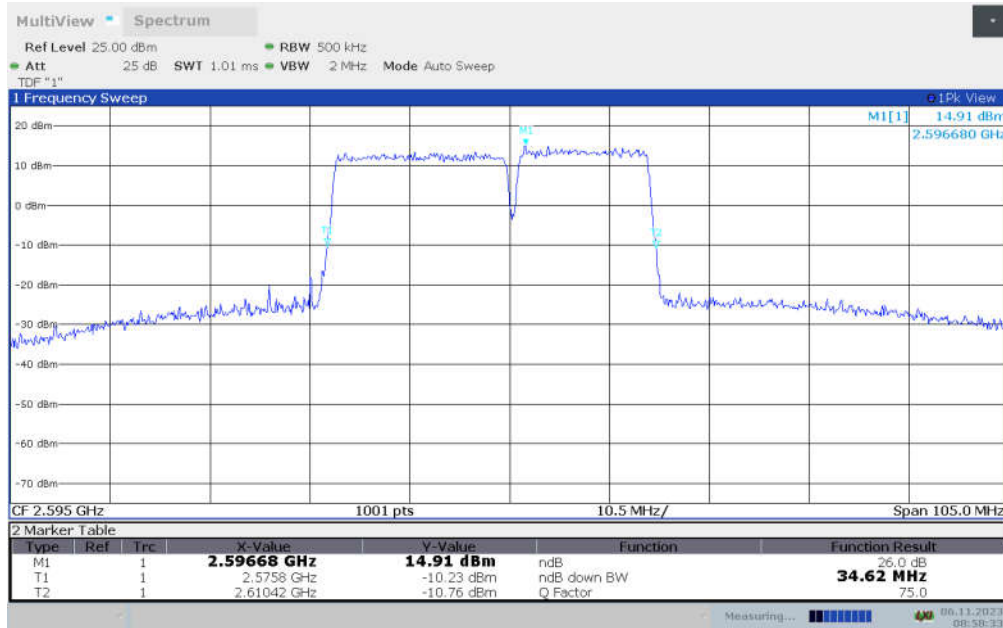
LTE CA_41C , 20MHz+10MHz Bandwidth, 16QAM (-26dBc BW)



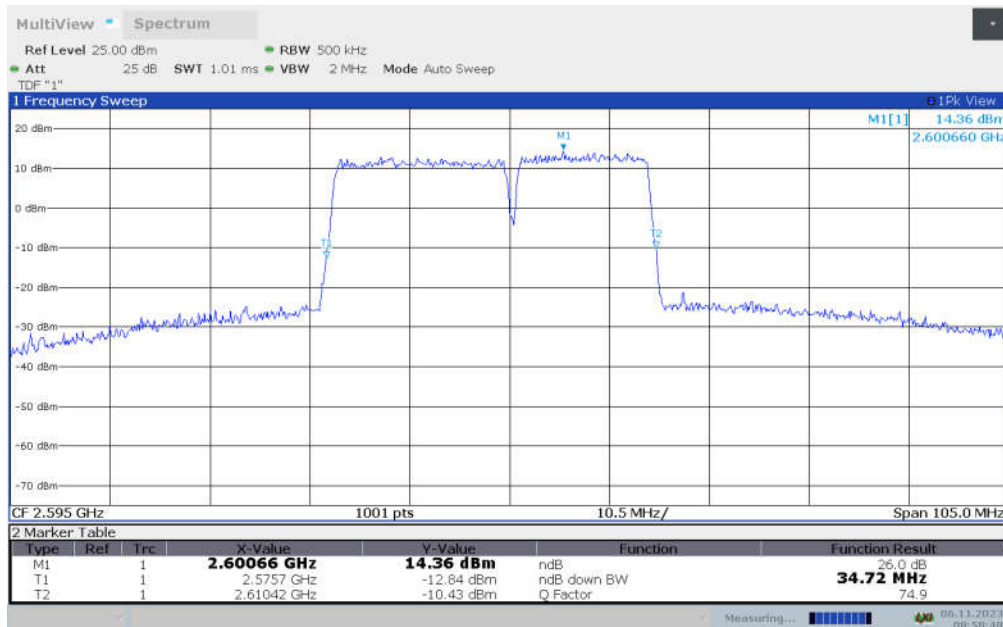
LTE CA_41C, 20MHz+15MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	34.620	34.720

LTE CA_41C , 20MHz+15MHz Bandwidth, QPSK (-26dBc BW)



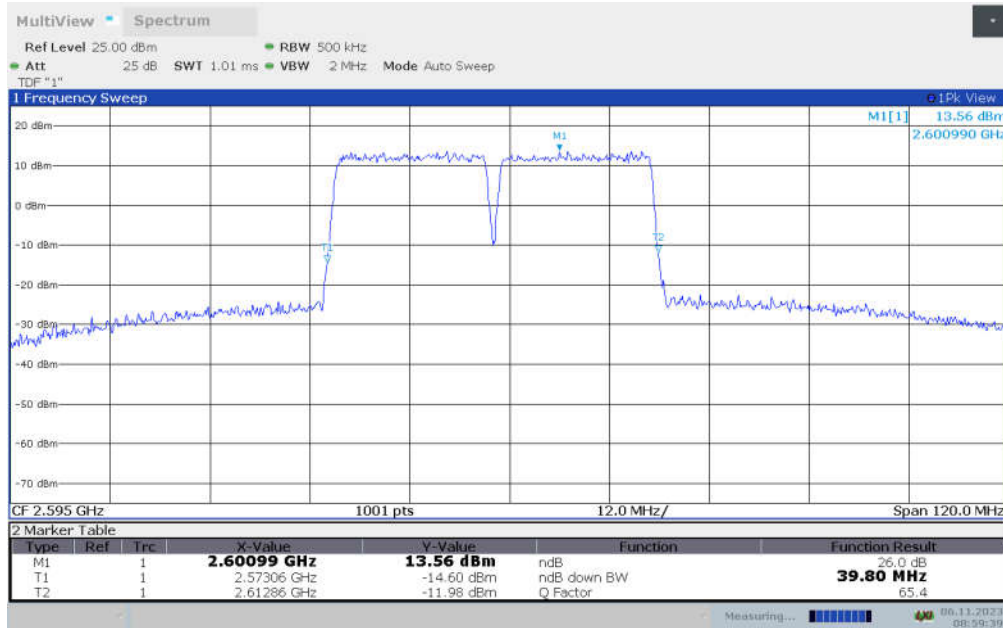
LTE CA_41C , 20MHz+15MHz Bandwidth, 16QAM (-26dBc BW)



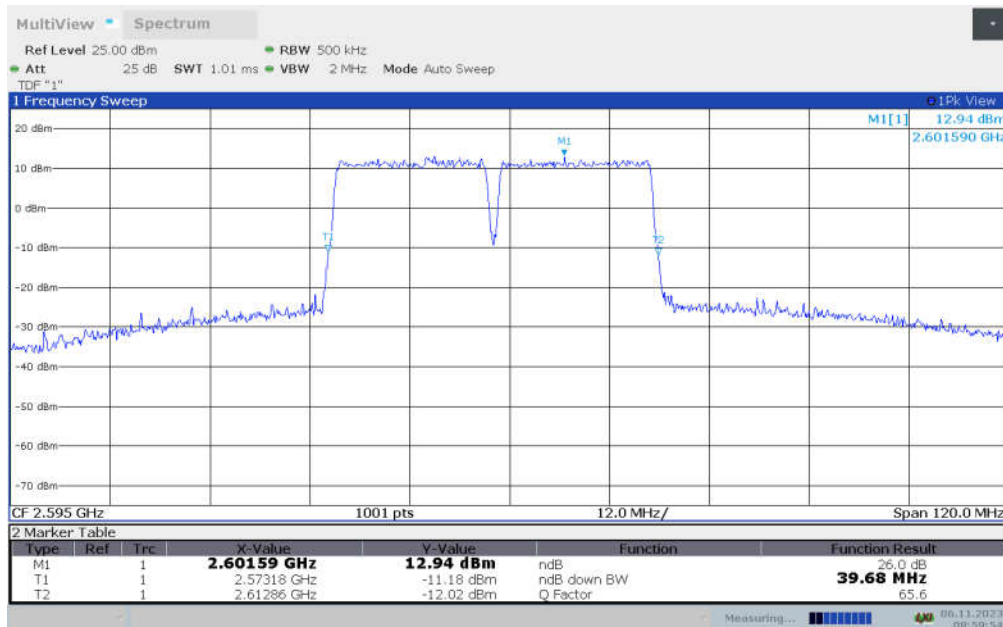
LTE CA_41C, 20MHz+20MHz(-26dBc BW)

Frequency (MHz)	Occupied Bandwidth (-26dBc BW) (MHz)	
	QPSK	16QAM
2595.0	39.800	39.680

LTE CA_41C , 20MHz+20MHz Bandwidth, QPSK (-26dBc BW)



LTE CA_41C , 20MHz+20MHz Bandwidth, 16QAM (-26dBc BW)



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

A.6 BAND EDGE COMPLIANCE

A.6.1 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(c) specifies 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; 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; 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; Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed; Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

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 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.

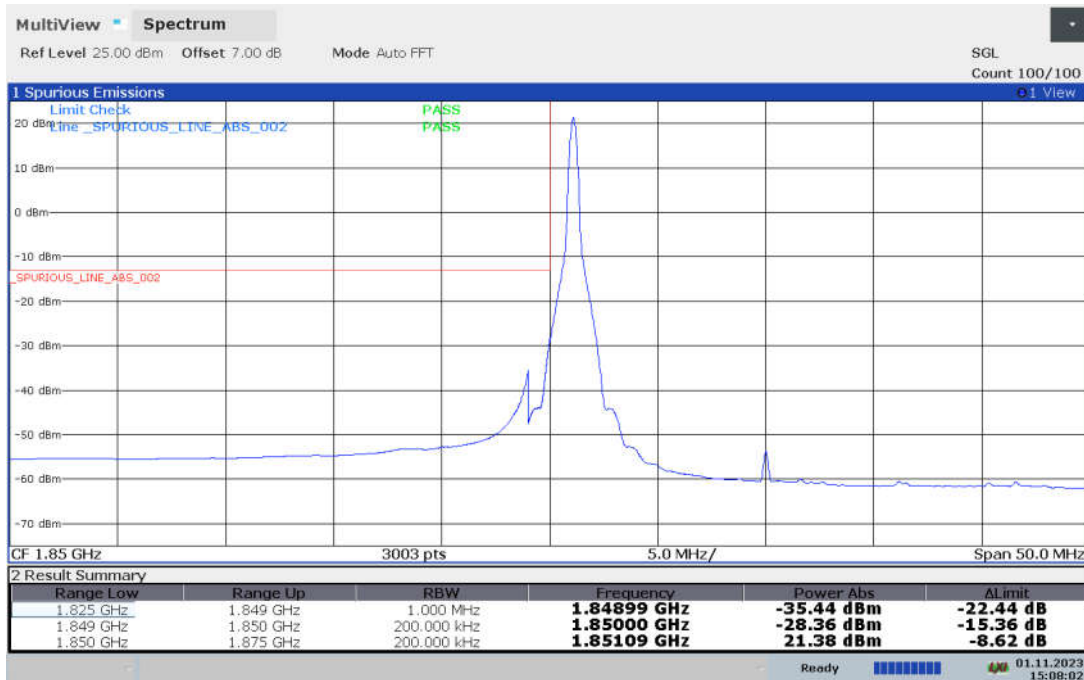
The spectrum analyzer readings are corrected by $[10 \log (1/\text{duty cycle})]$ for the non-continuous transmitting scenario.

A.6.2 Measurement result

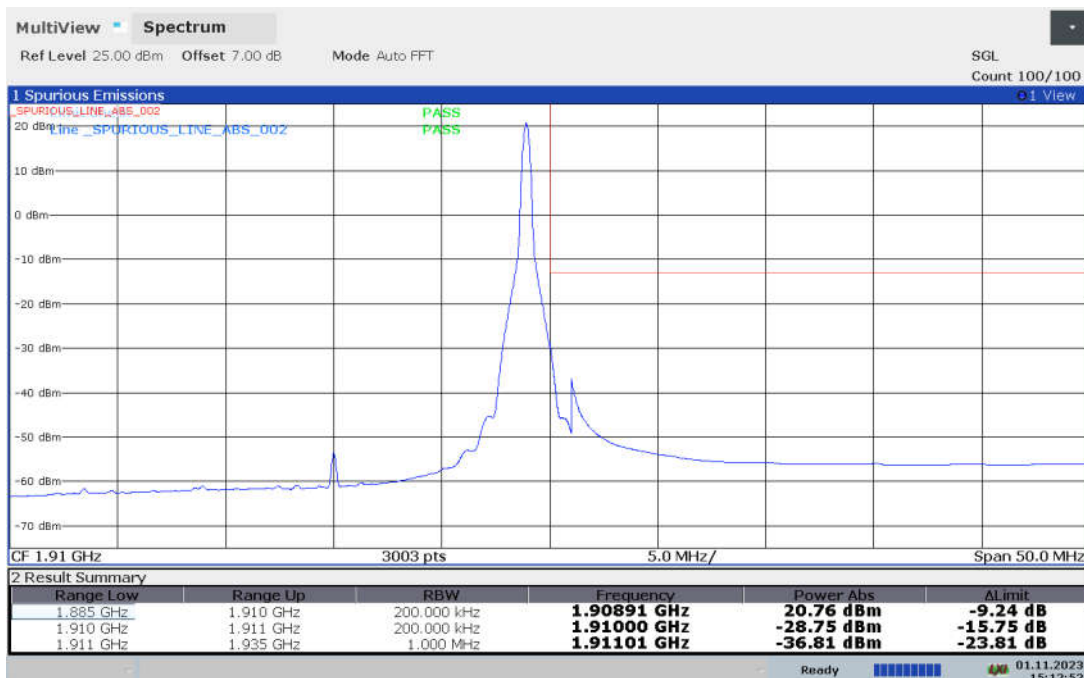
Only worst case result is given below

LTE band 2

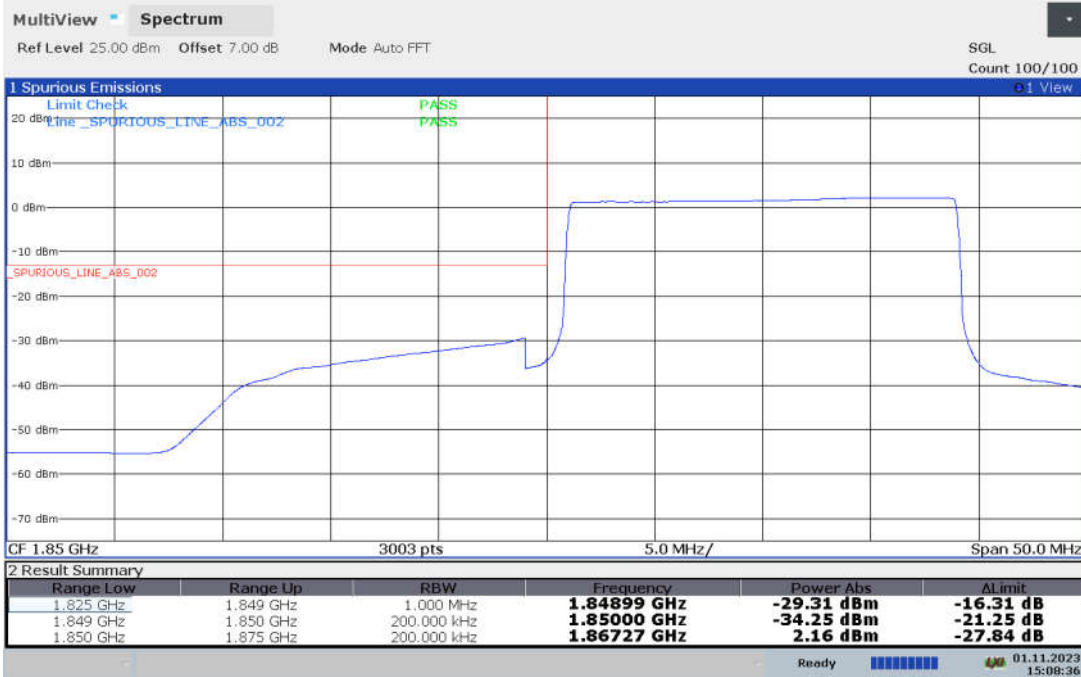
LOW BAND EDGE BLOCK-1RB-low_offset



HIGH BAND EDGE BLOCK-1RB-high_offset



LOW BAND EDGE BLOCK-20MHz-100%RB



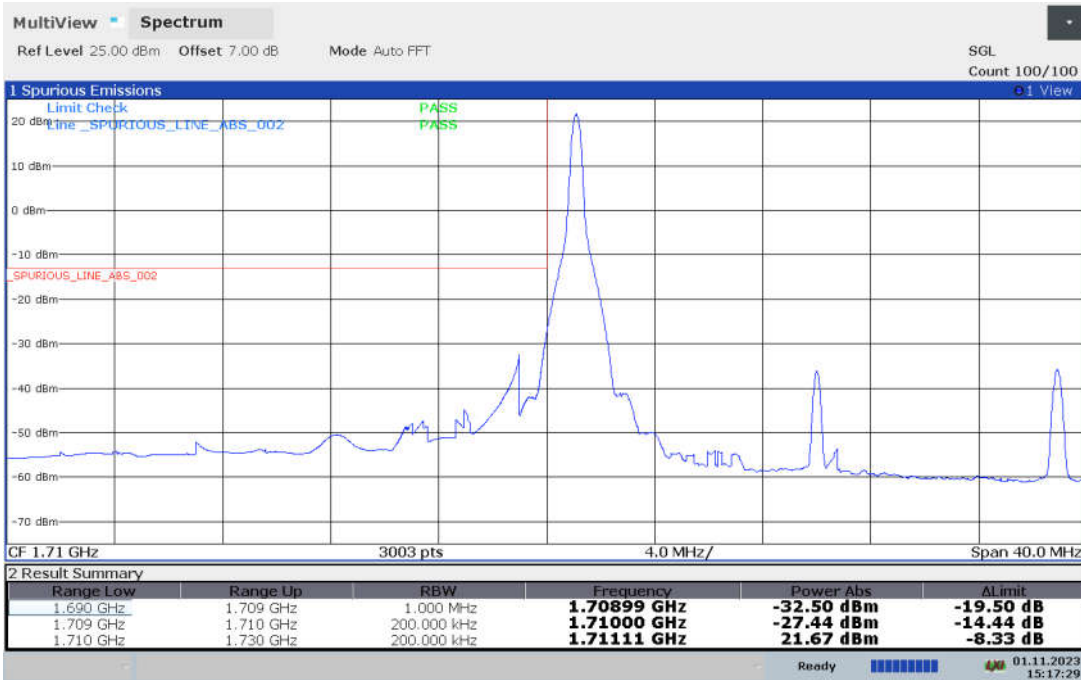
HIGH BAND EDGE BLOCK-20MHz-100%RB



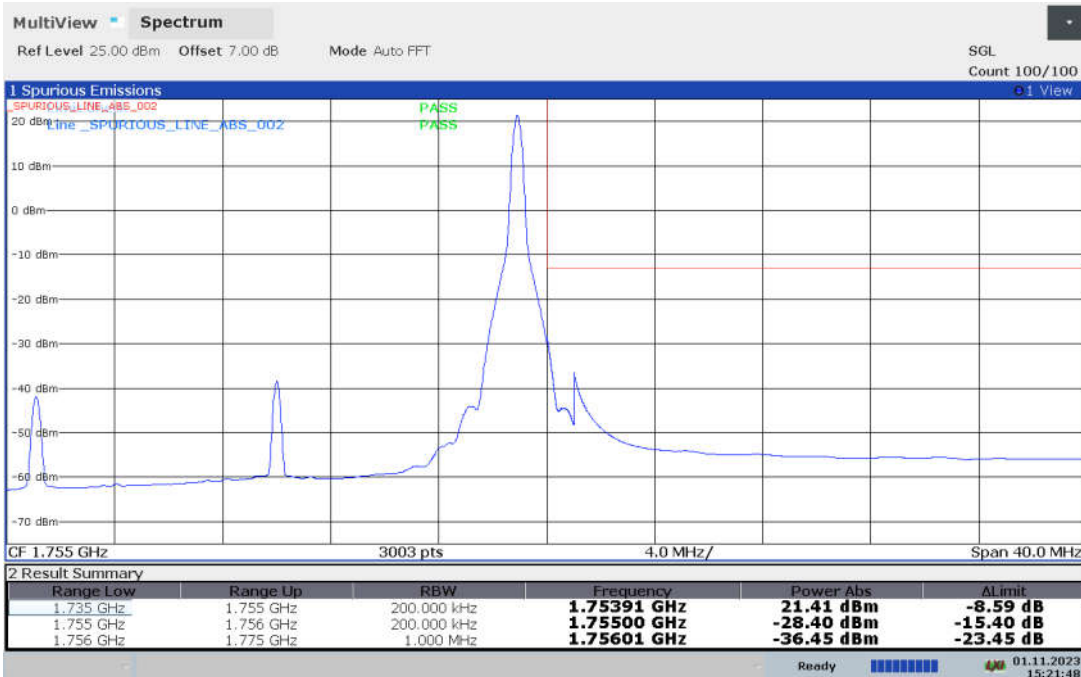


LTE band 4

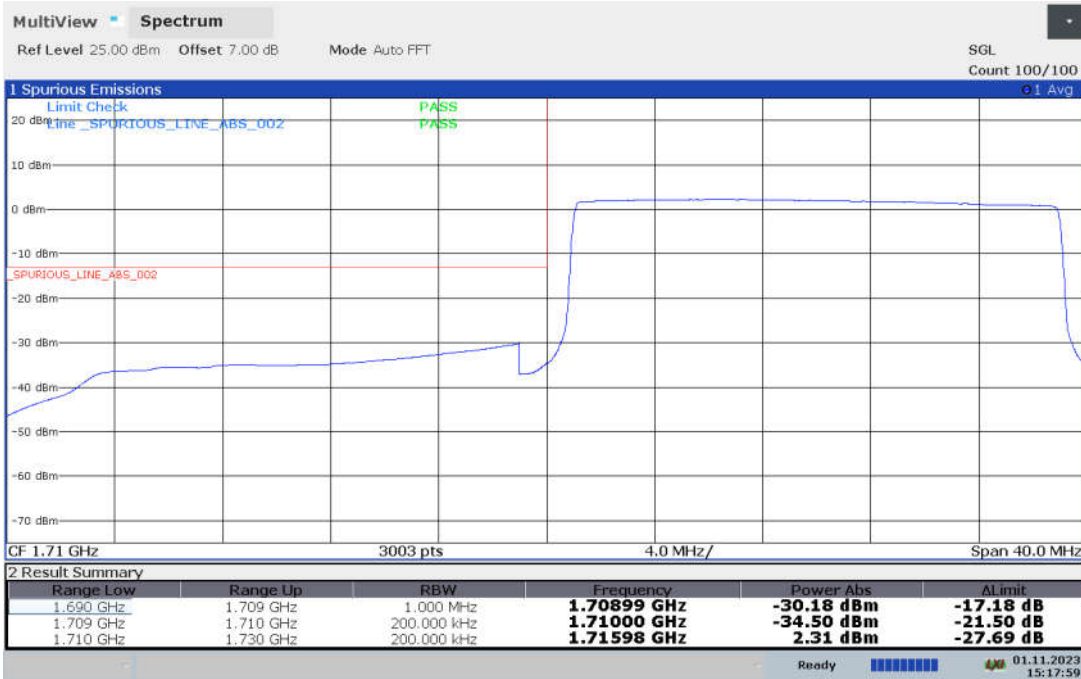
LOW BAND EDGE BLOCK-1RB-low_offset



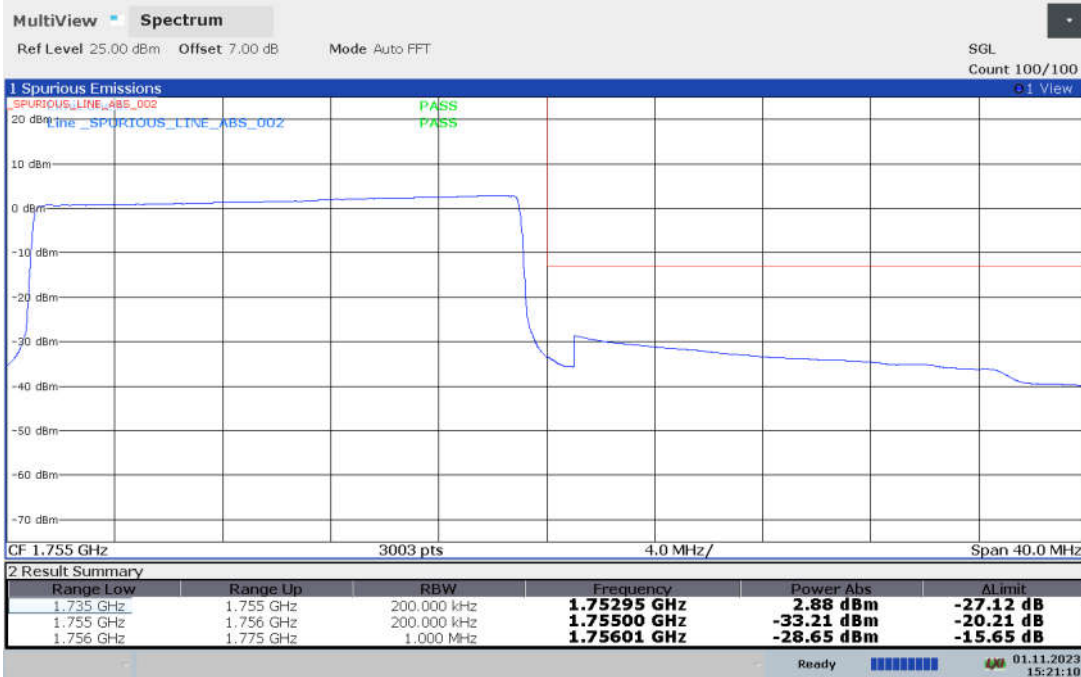
HIGH BAND EDGE BLOCK-1RB-high_offset



LOW BAND EDGE BLOCK-20MHz-100%RB



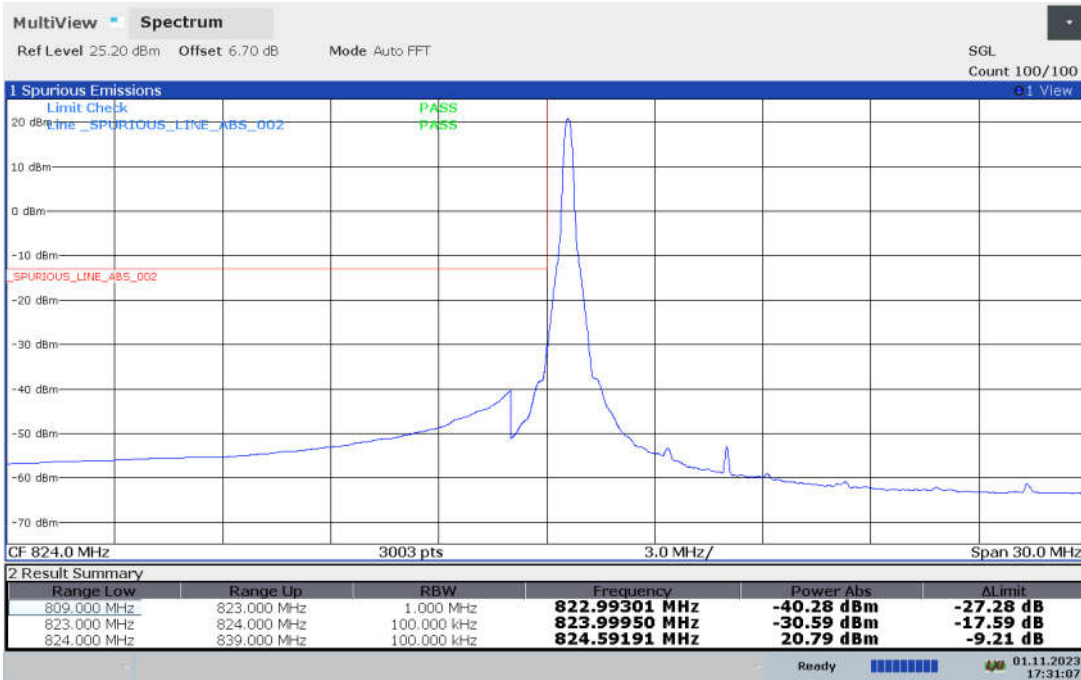
HIGH BAND EDGE BLOCK-20MHz-100%RB



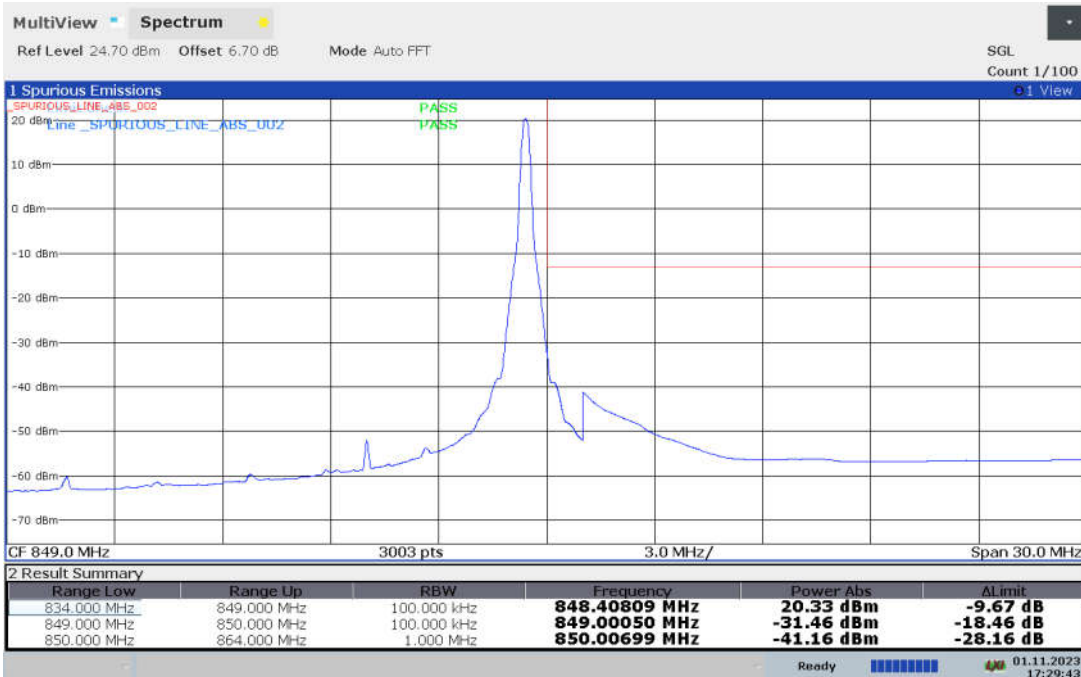


LTE band 5

LOW BAND EDGE BLOCK-1RB-low_offset

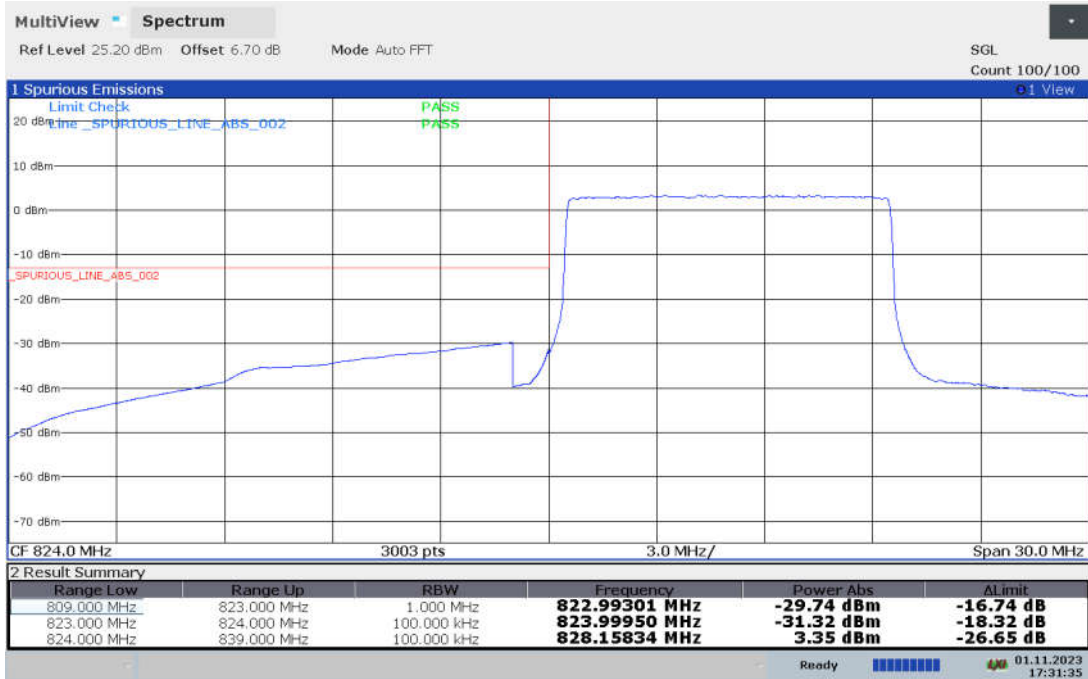


HIGH BAND EDGE BLOCK-1RB-high_offset

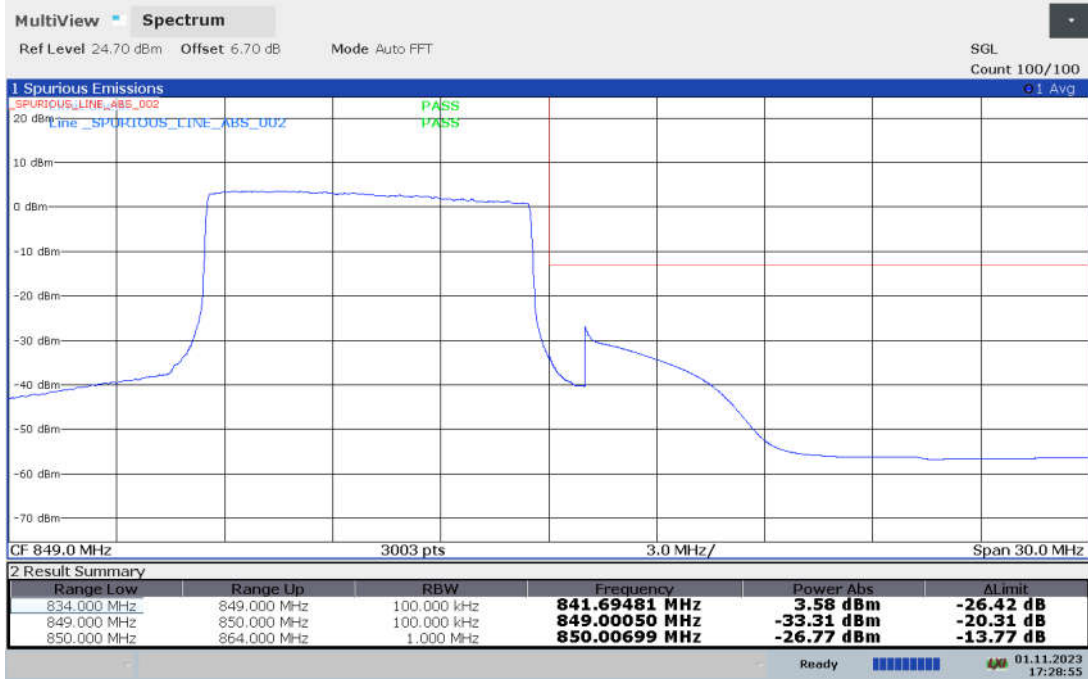




LOW BAND EDGE BLOCK-20MHz-100%RB



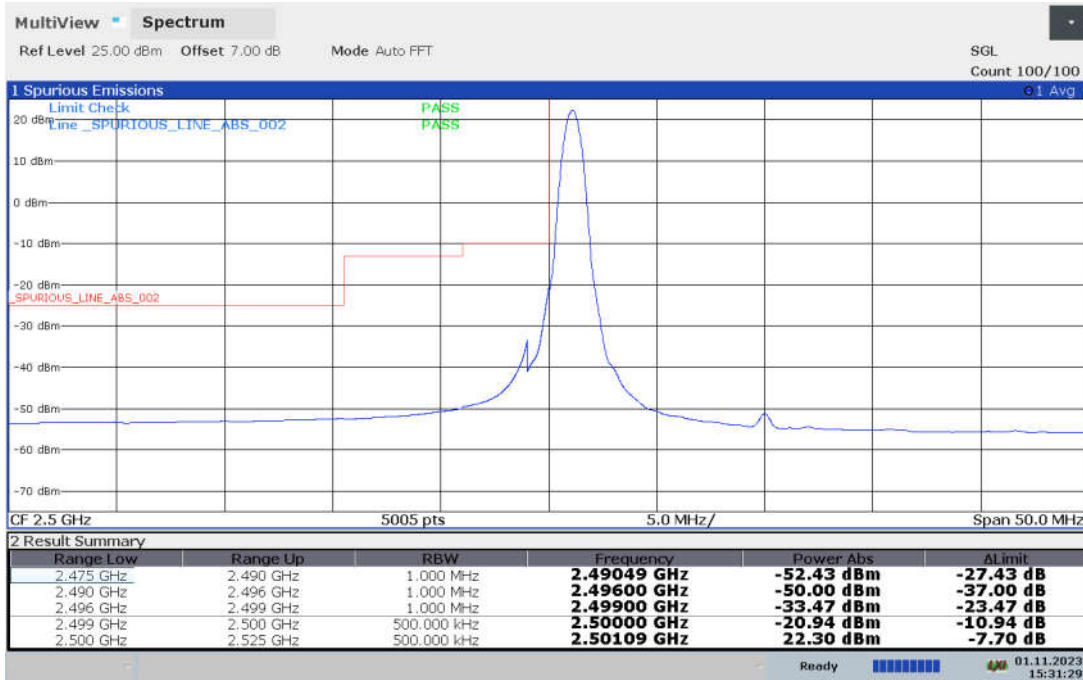
HIGH BAND EDGE BLOCK-20MHz-100%RB



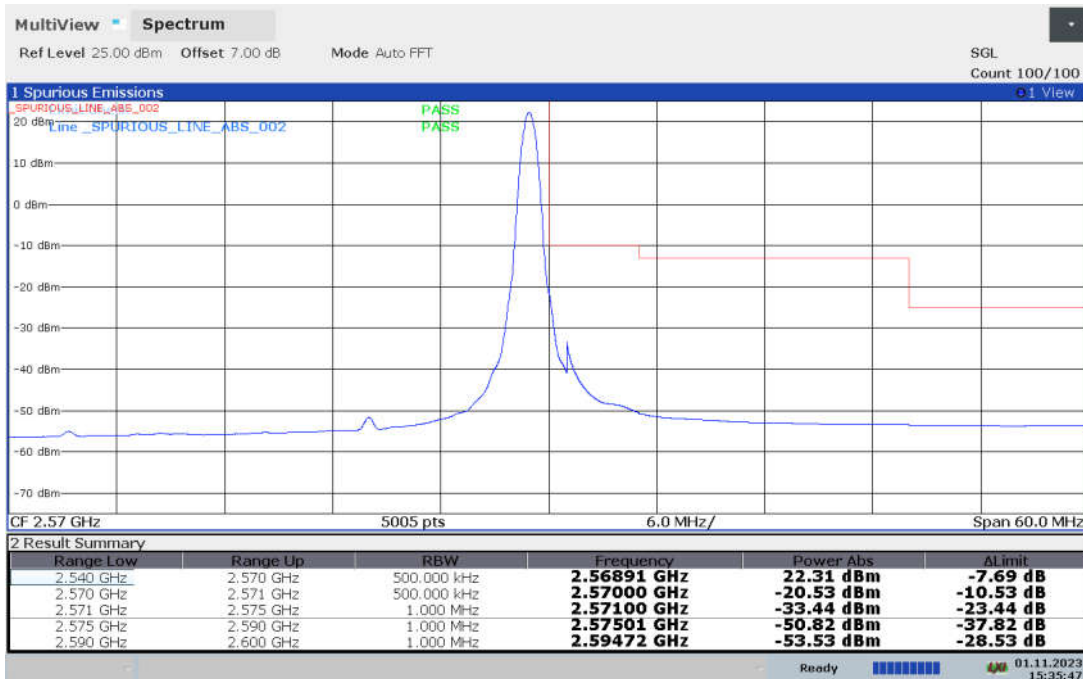


LTE band 7

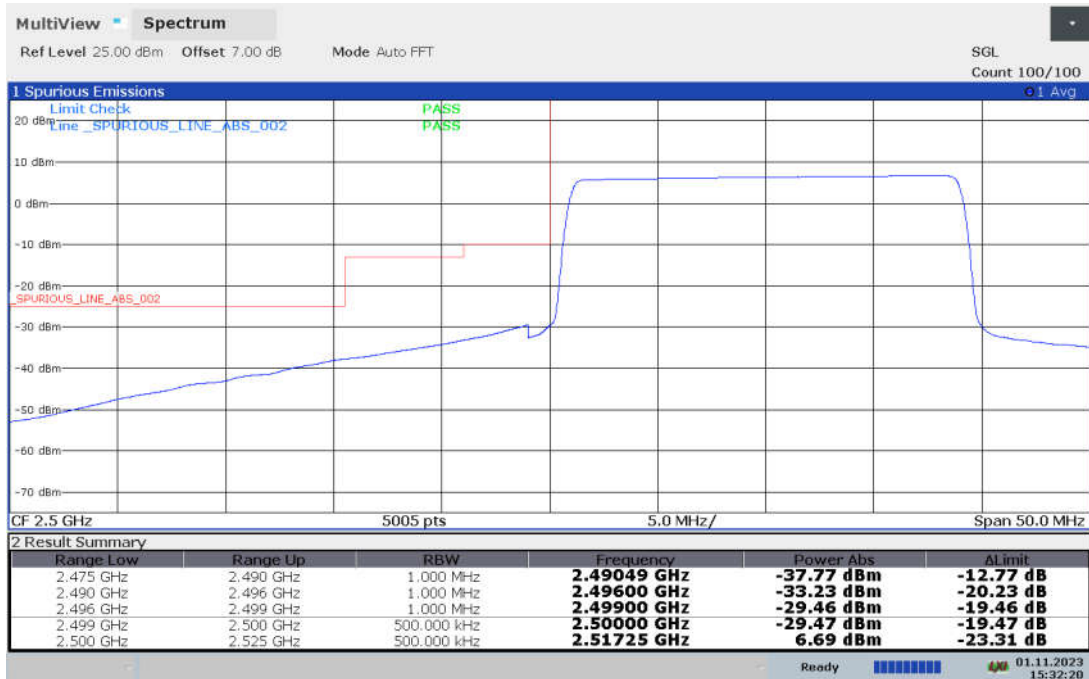
LOW BAND EDGE BLOCK-1RB-low_offset



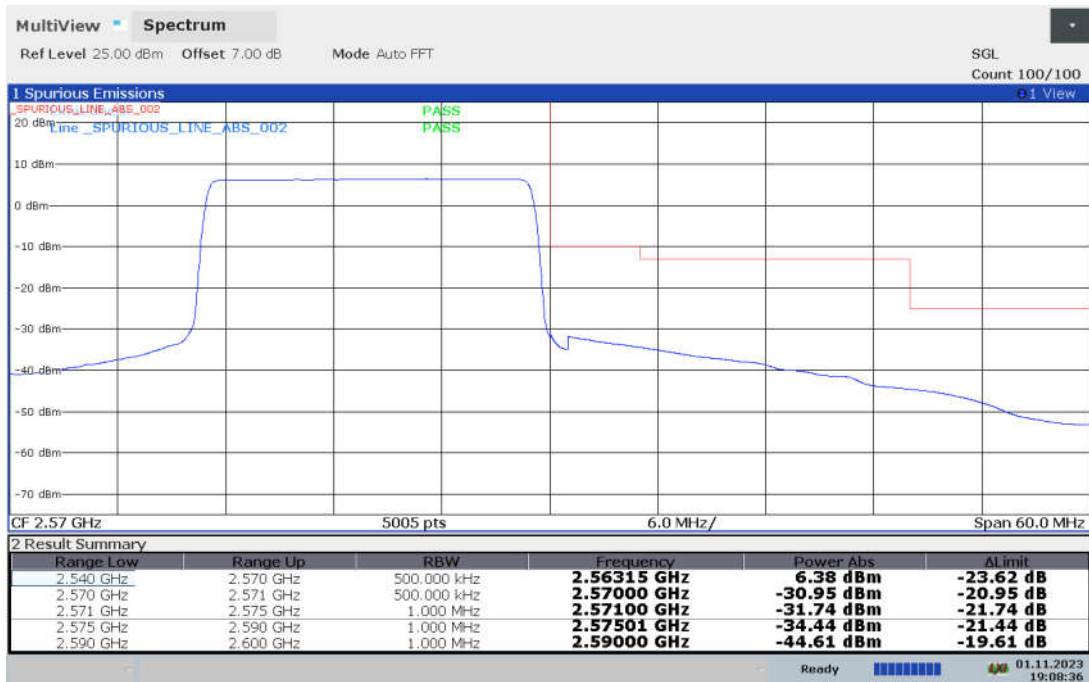
HIGH BAND EDGE BLOCK-1RB-high_offset



LOW BAND EDGE BLOCK-20MHz-100%RB

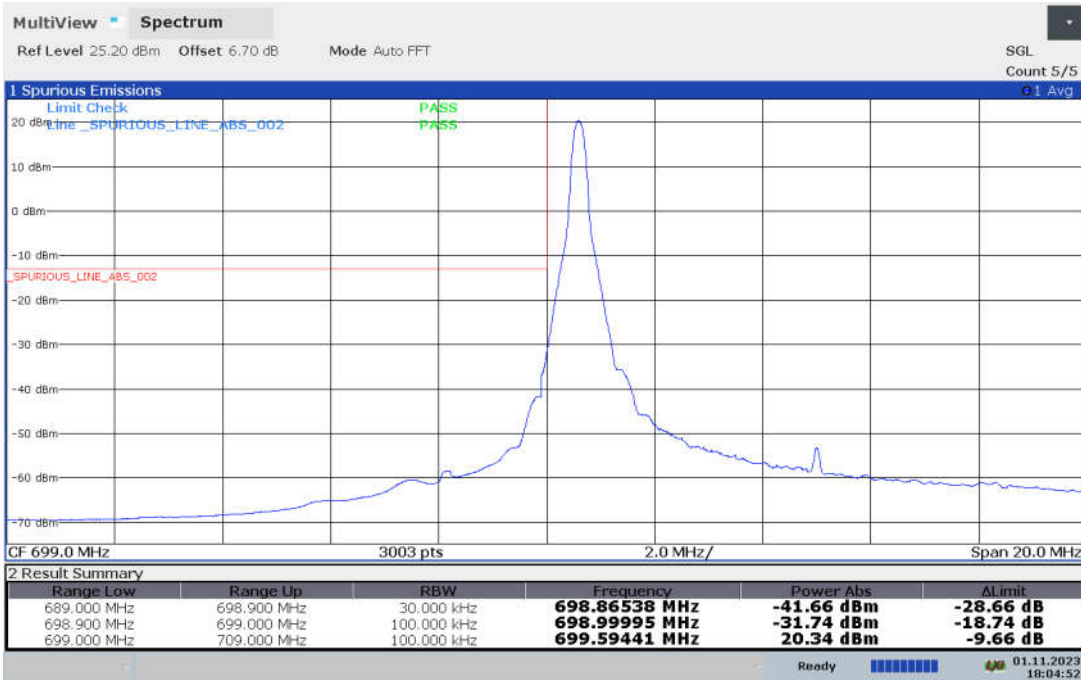


HIGH BAND EDGE BLOCK-20MHz-100%RB

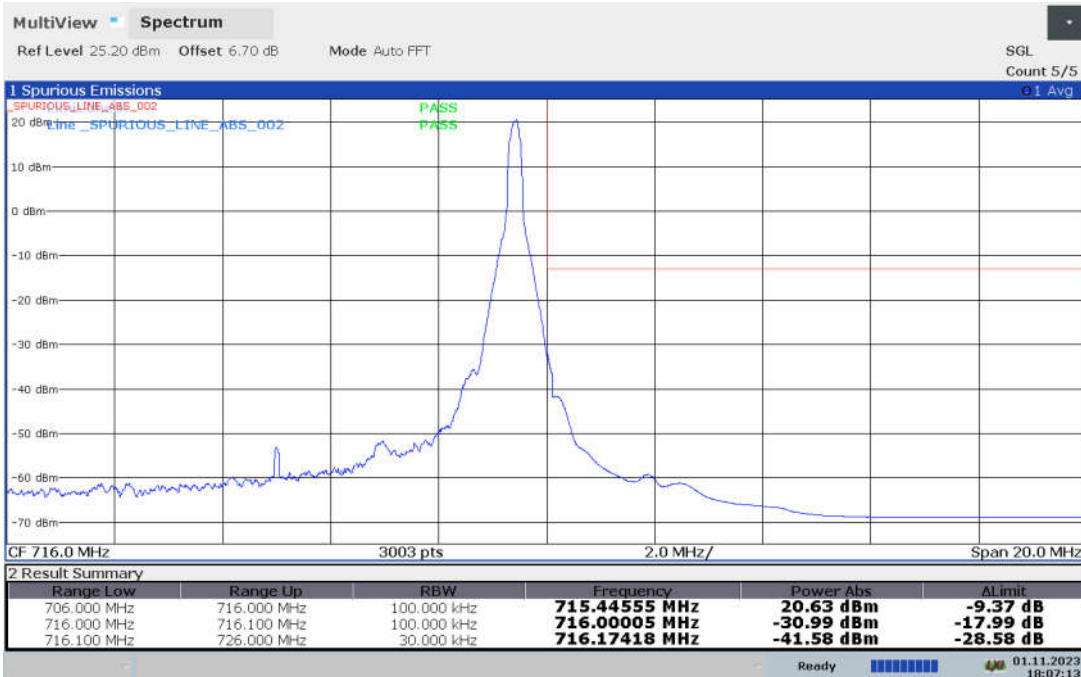


LTE band 12

LOW BAND EDGE BLOCK-1RB-low_offset

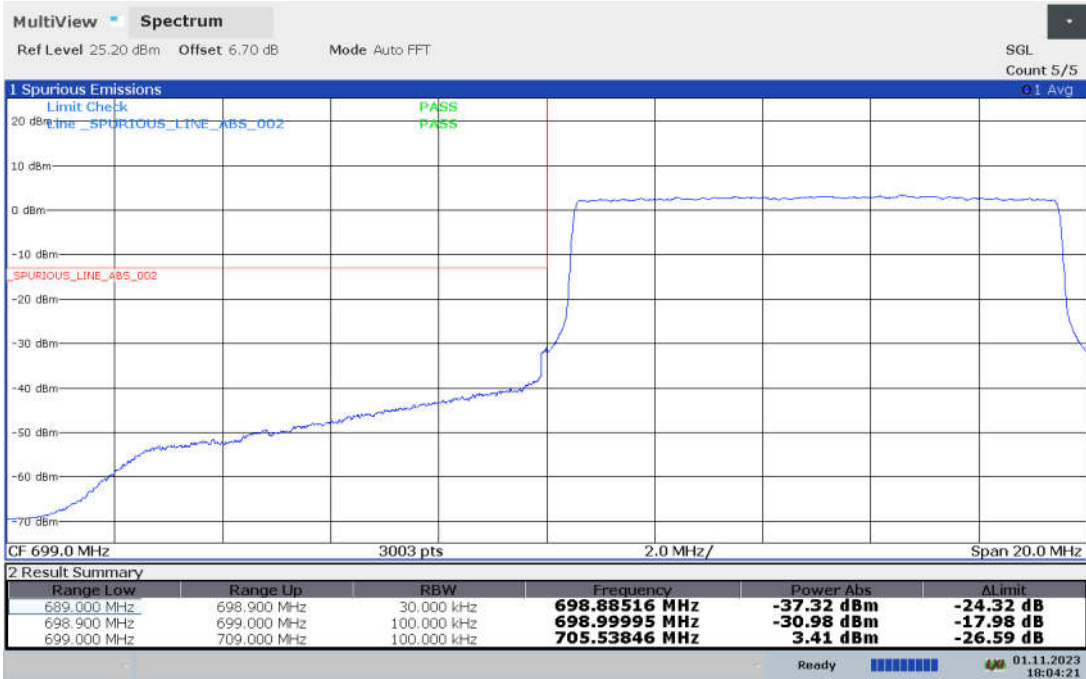


HIGH BAND EDGE BLOCK-1RB-high_offset





LOW BAND EDGE BLOCK-20MHz-100%RB



HIGH BAND EDGE BLOCK-20MHz-100%RB

