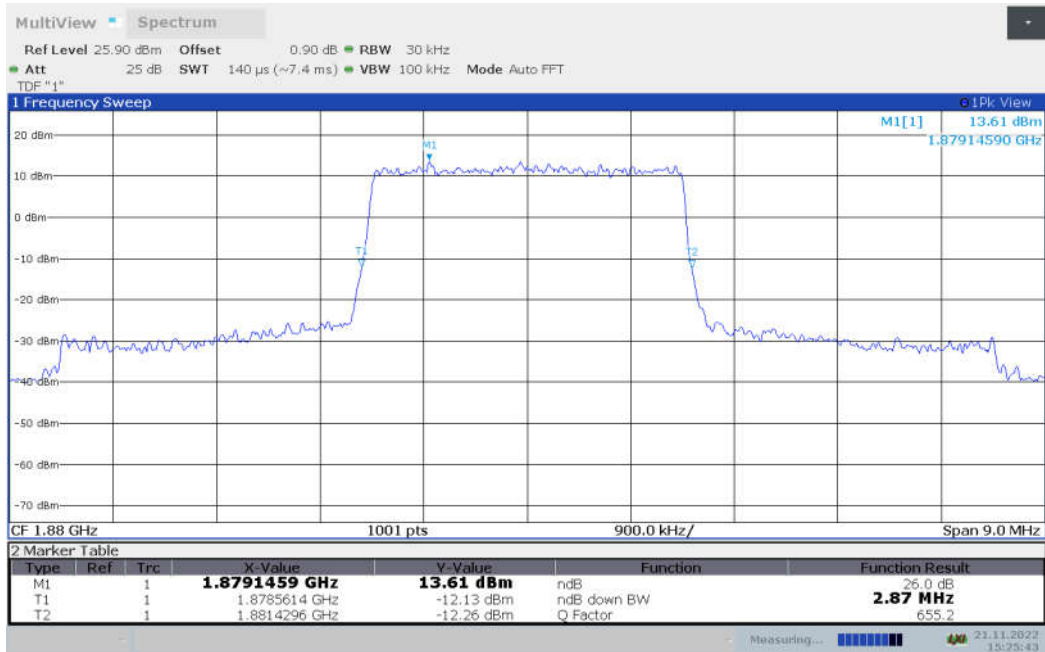




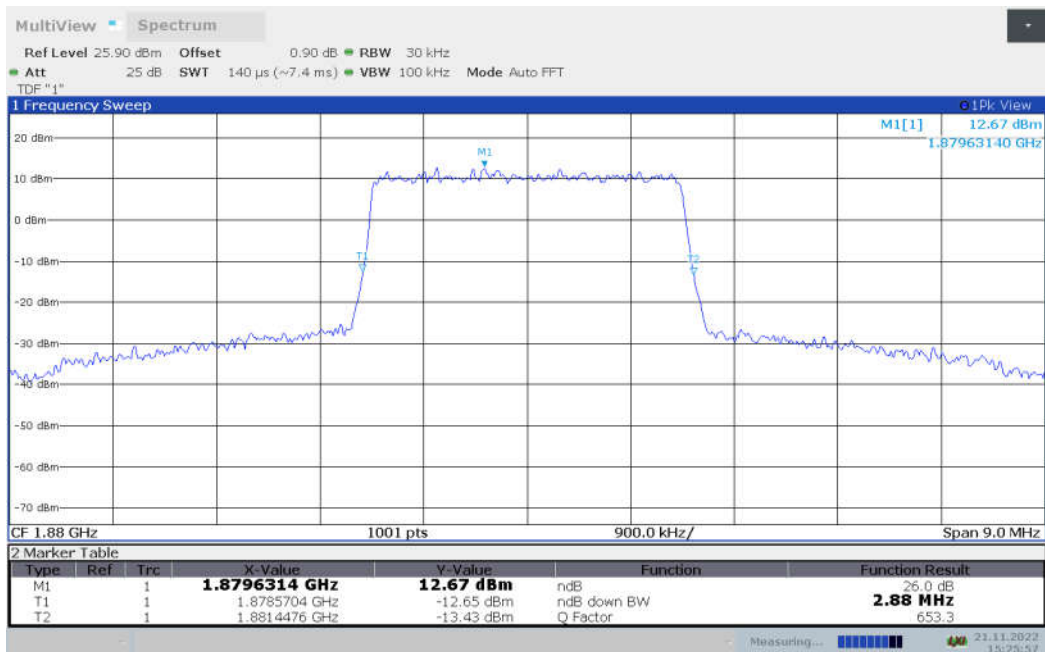
LTE band 2,3MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	2.868	2.877

LTE band 2 , 3MHz Bandwidth,QPSK (-26dBc BW)



LTE band 2 , 3MHz Bandwidth,16QAM (-26dBc BW)

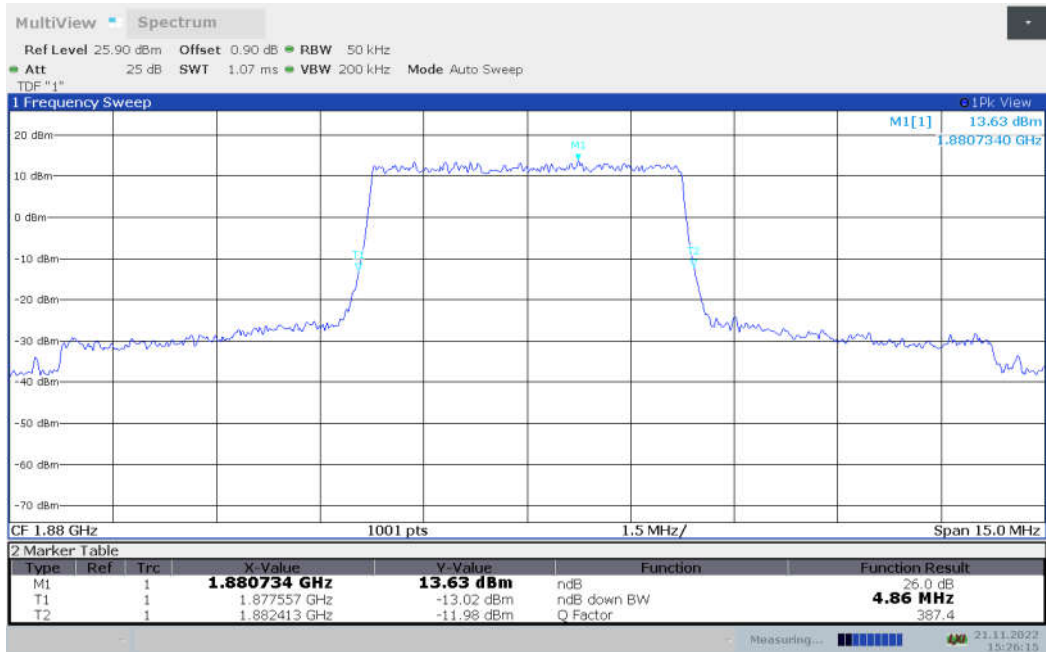




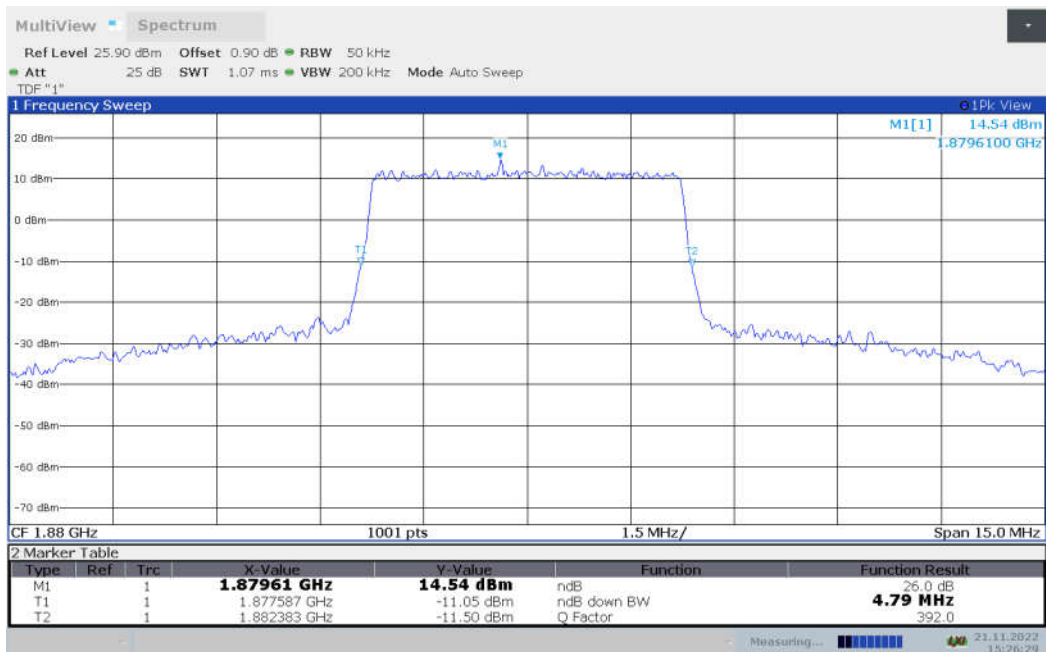
LTE band 2,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	4.855	4.795

LTE band 2 , 5MHz Bandwidth,QPSK (-26dBc BW)



LTE band 2 , 5MHz Bandwidth,16QAM (-26dBc BW)

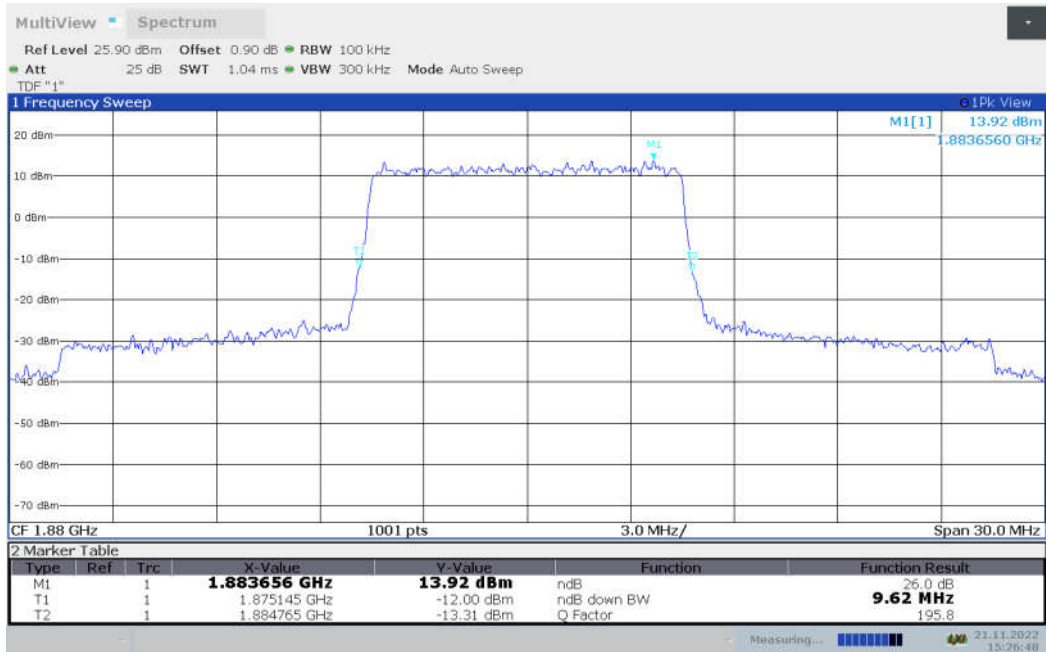




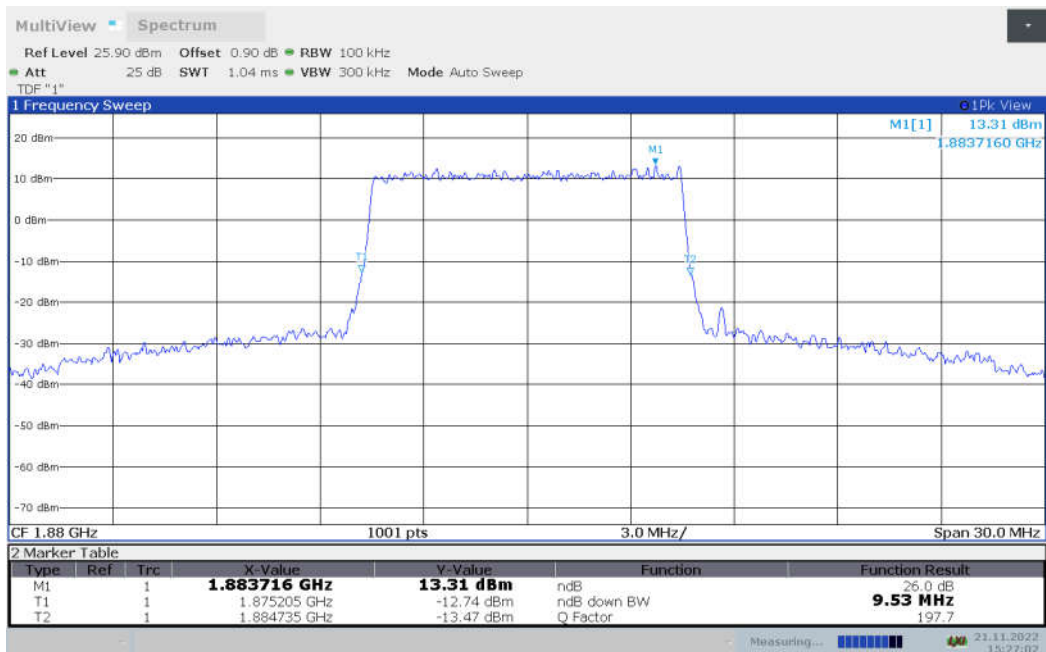
LTE band 2,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	9.620	9.530

LTE band 2 , 10MHz Bandwidth,QPSK (-26dBc BW)



LTE band 2 , 10MHz Bandwidth,16QAM (-26dBc BW)

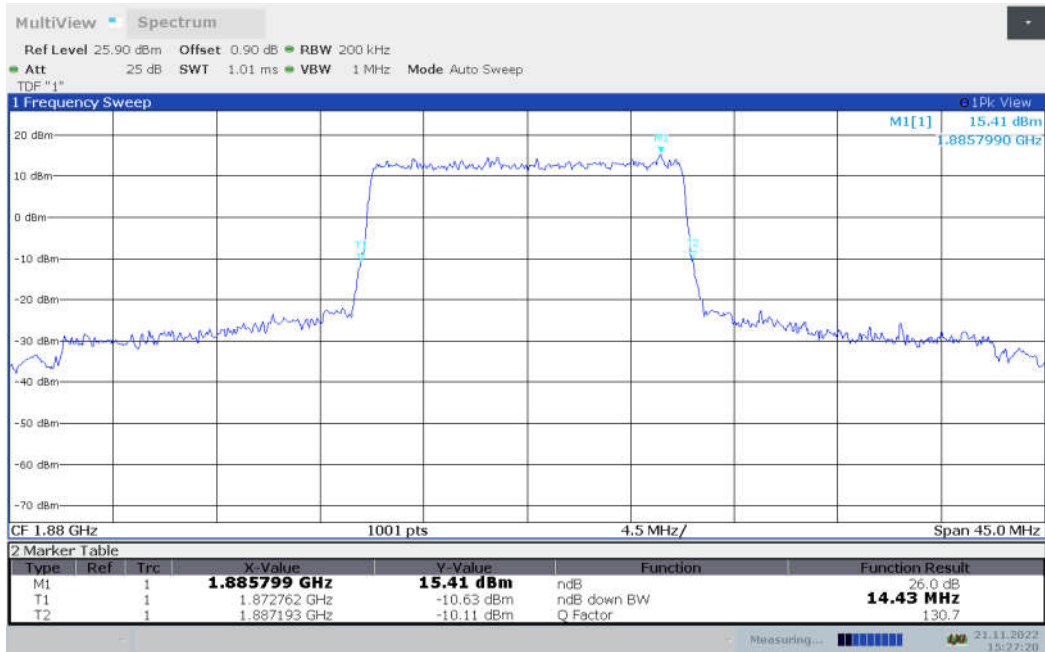




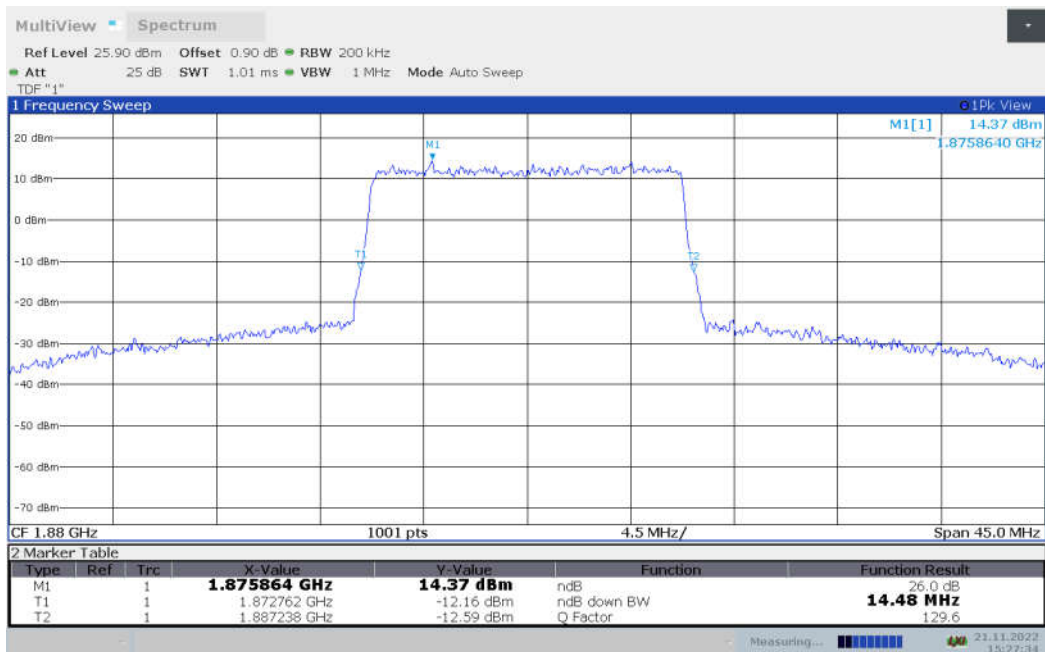
LTE band 2,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	14.431	14.476

LTE band 2 , 15MHz Bandwidth,QPSK (-26dBc BW)



LTE band 2 , 15MHz Bandwidth,16QAM (-26dBc BW)

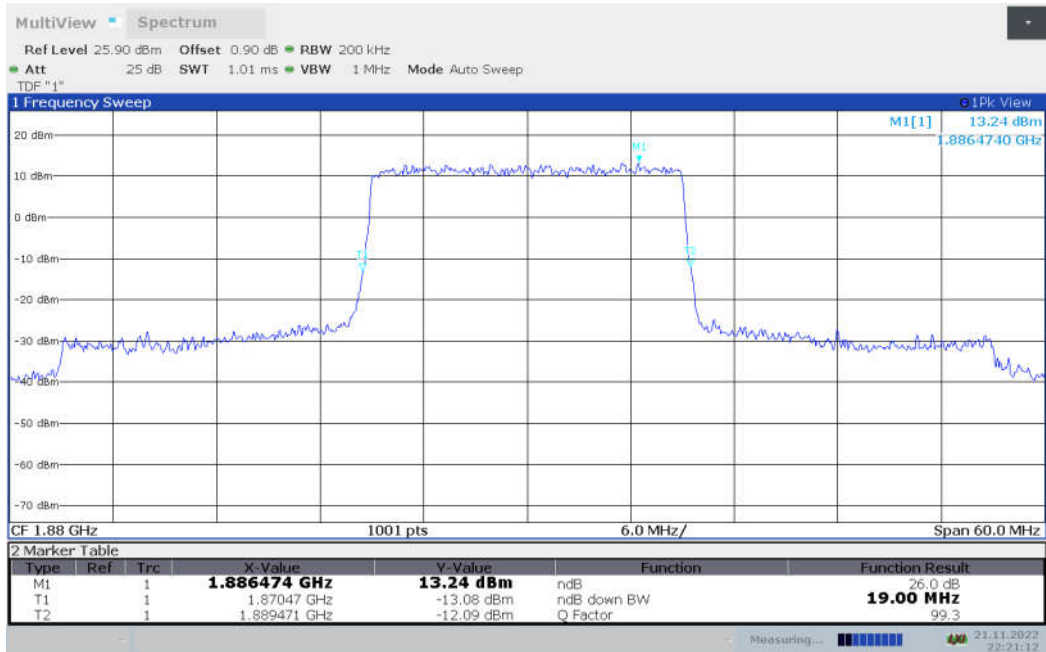




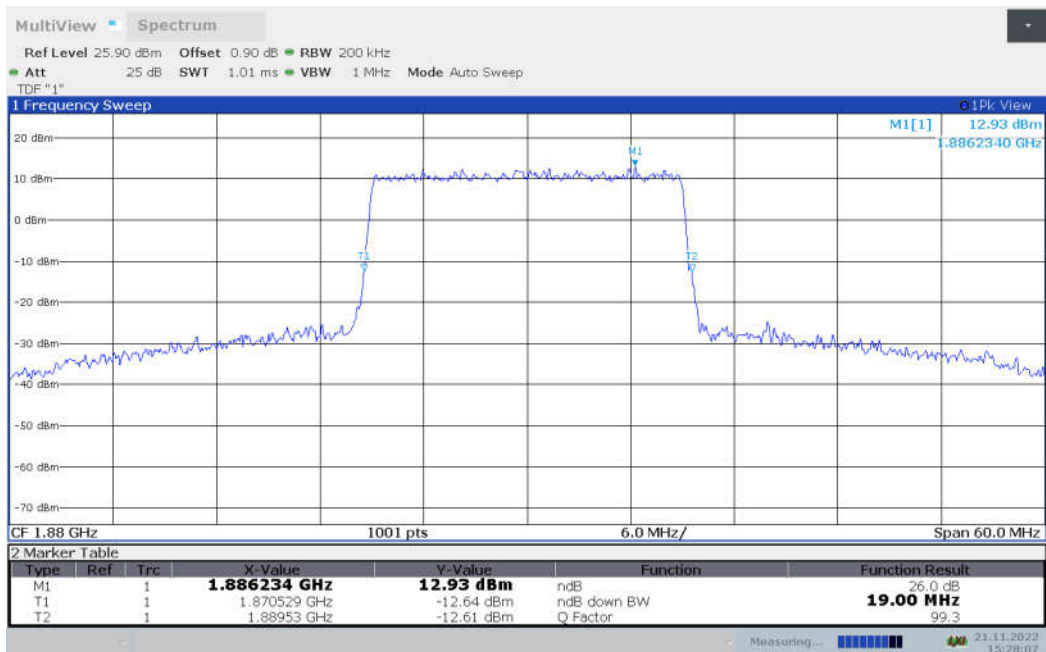
LTE band 2,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	19.001	19.001

LTE band 2 , 20MHz Bandwidth,QPSK (-26dBc BW)



LTE band 2 , 20MHz Bandwidth,16QAM (-26dBc BW)

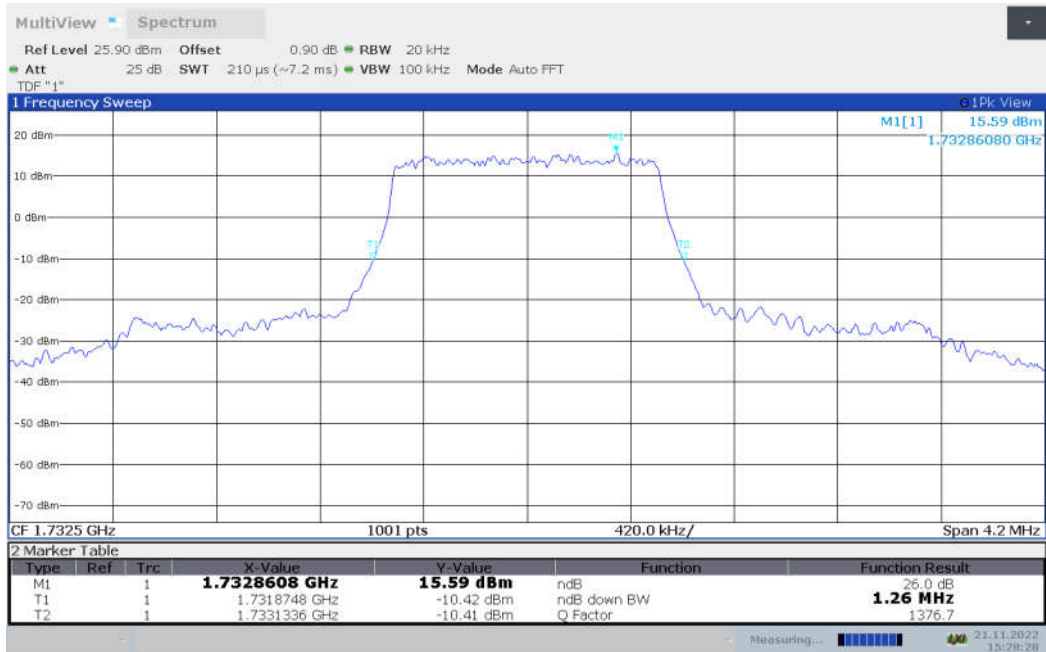




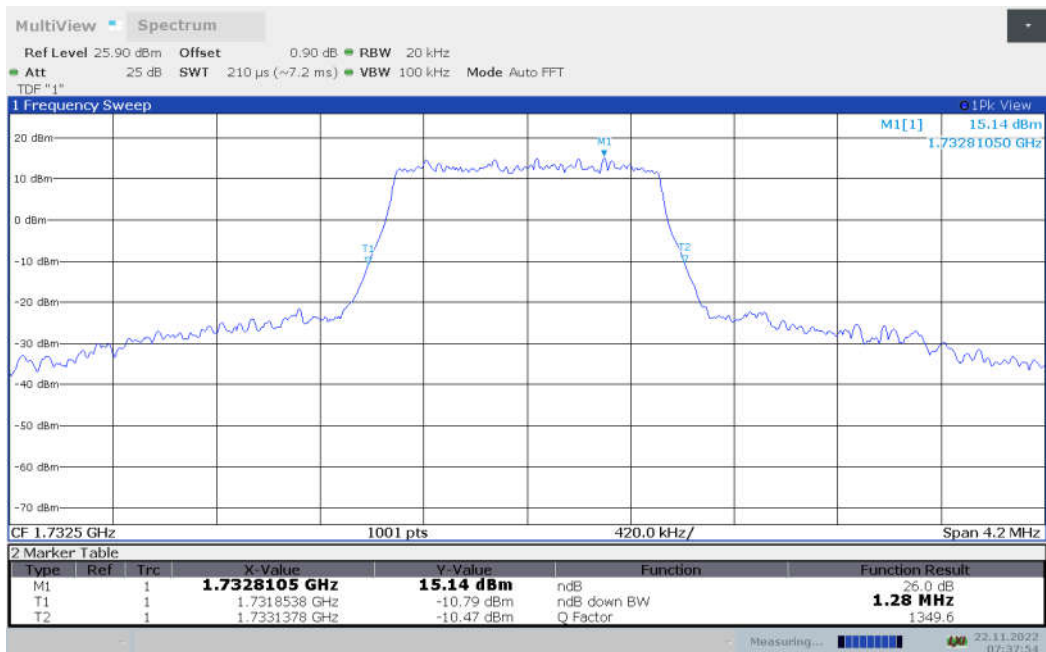
LTE band 4,1.4MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	1.259	1.284

LTE band 4 , 1.4MHz Bandwidth,QPSK (-26dBc BW)



LTE band 4 , 1.4MHz Bandwidth,16QAM (-26dBc BW)

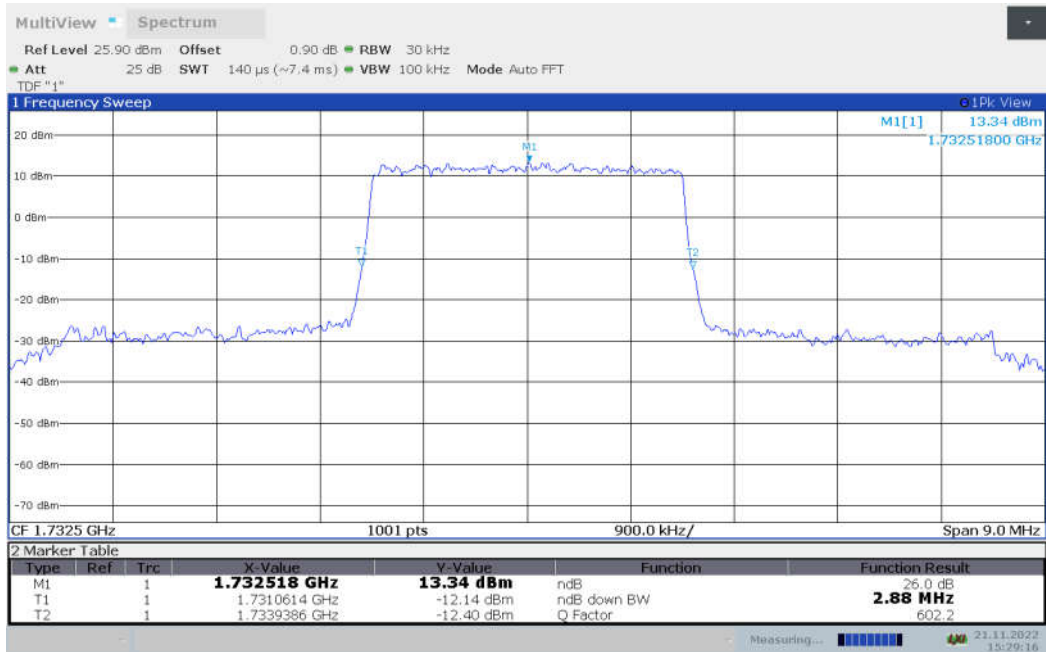




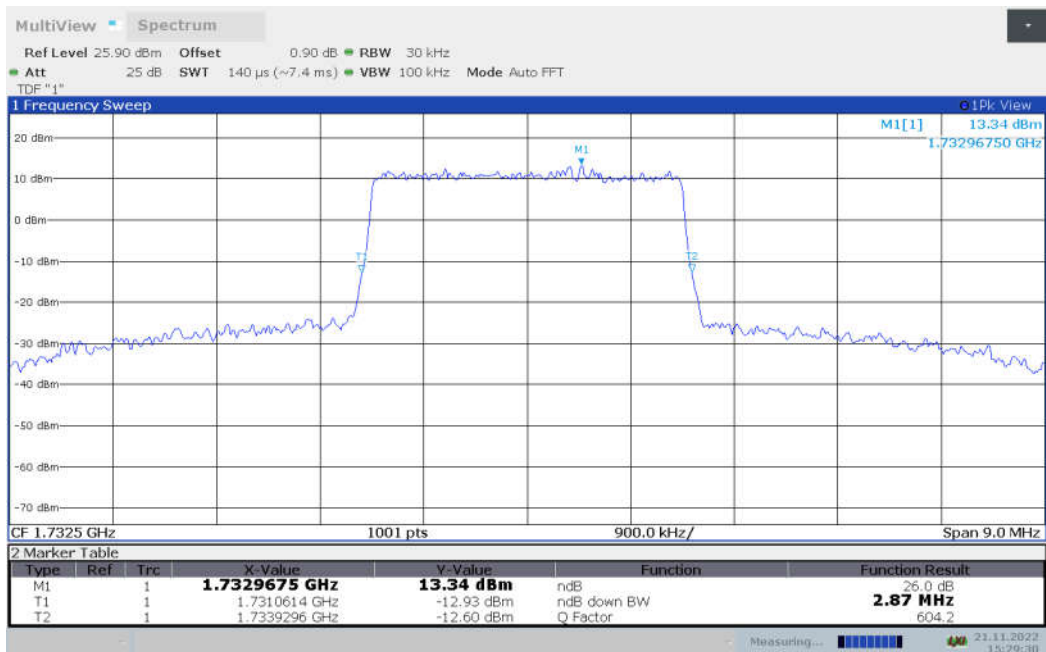
LTE band 4,3MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	2.877	2.868

LTE band 4 , 3MHz Bandwidth,QPSK (-26dBc BW)



LTE band 4 , 3MHz Bandwidth,16QAM (-26dBc BW)

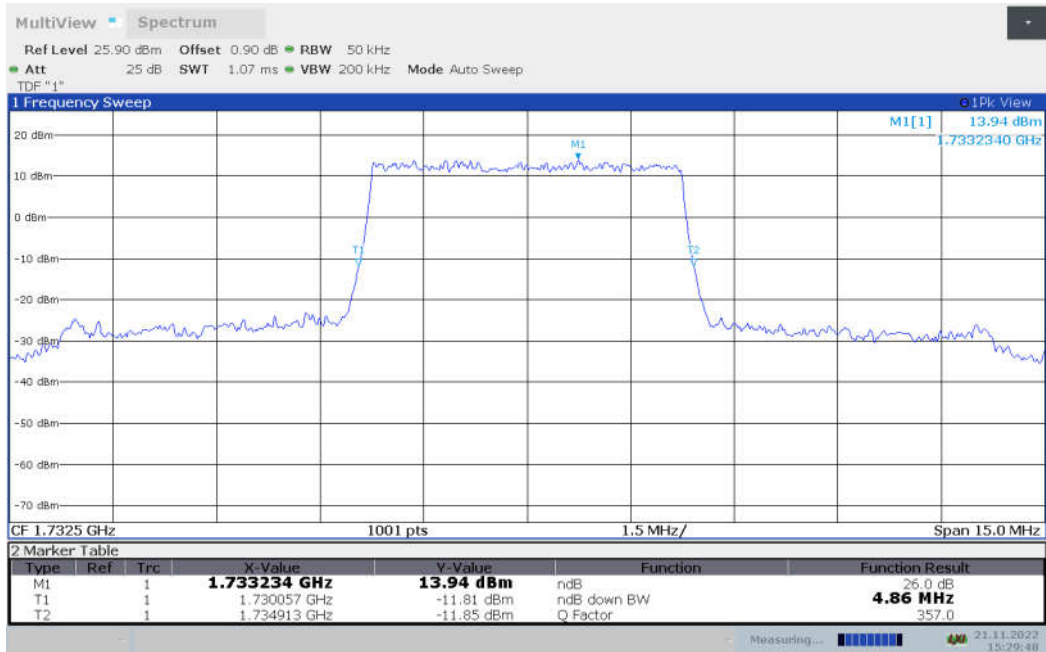




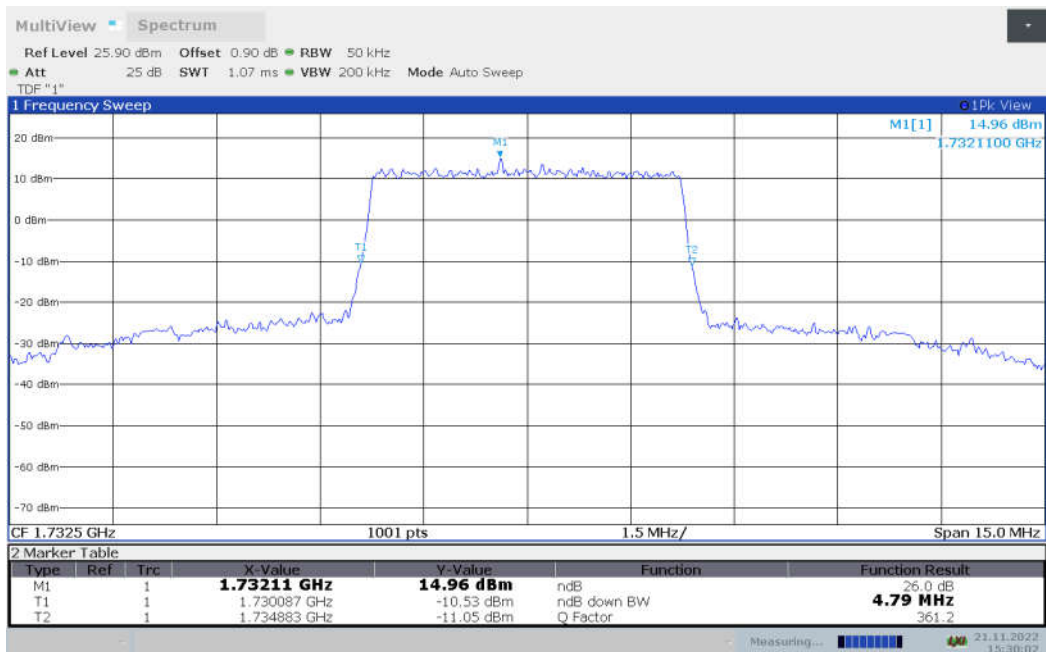
LTE band 4,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	4.855	4.795

LTE band 4 , 5MHz Bandwidth,QPSK (-26dBc BW)



LTE band 4 , 5MHz Bandwidth,16QAM (-26dBc BW)

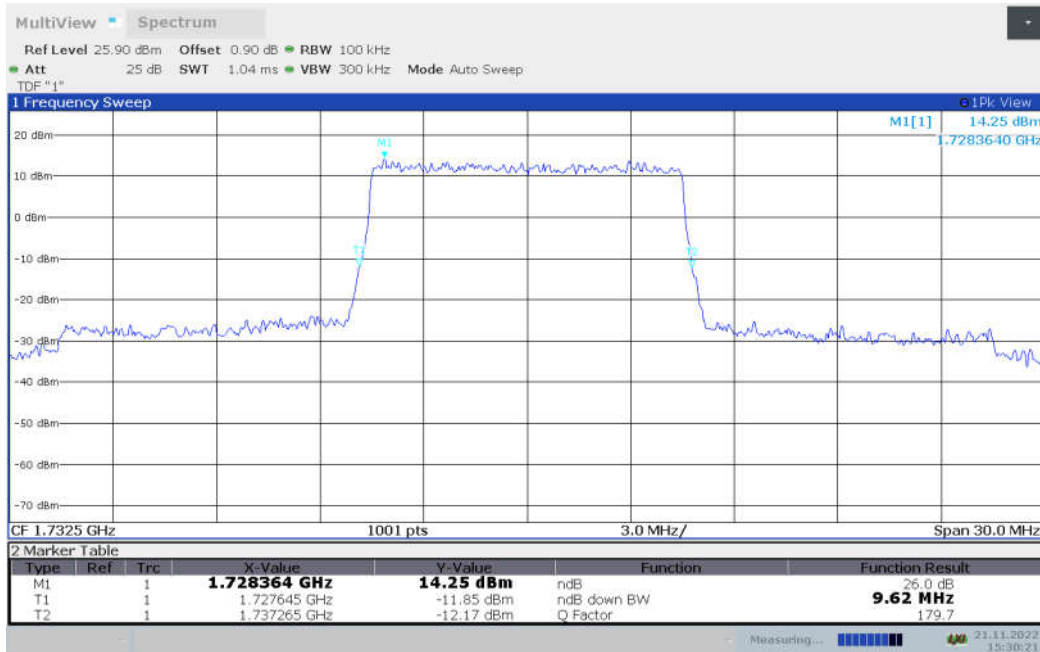




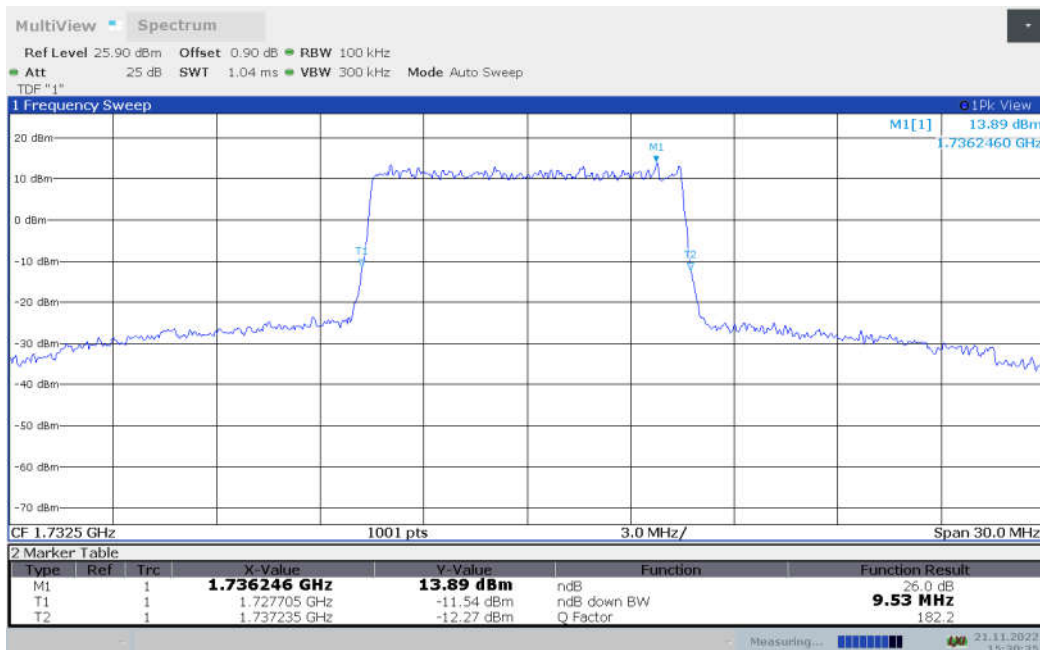
LTE band 4,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	9.620	9.530

LTE band 4 , 10MHz Bandwidth,QPSK (-26dBc BW)



LTE band 4 , 10MHz Bandwidth,16QAM (-26dBc BW)

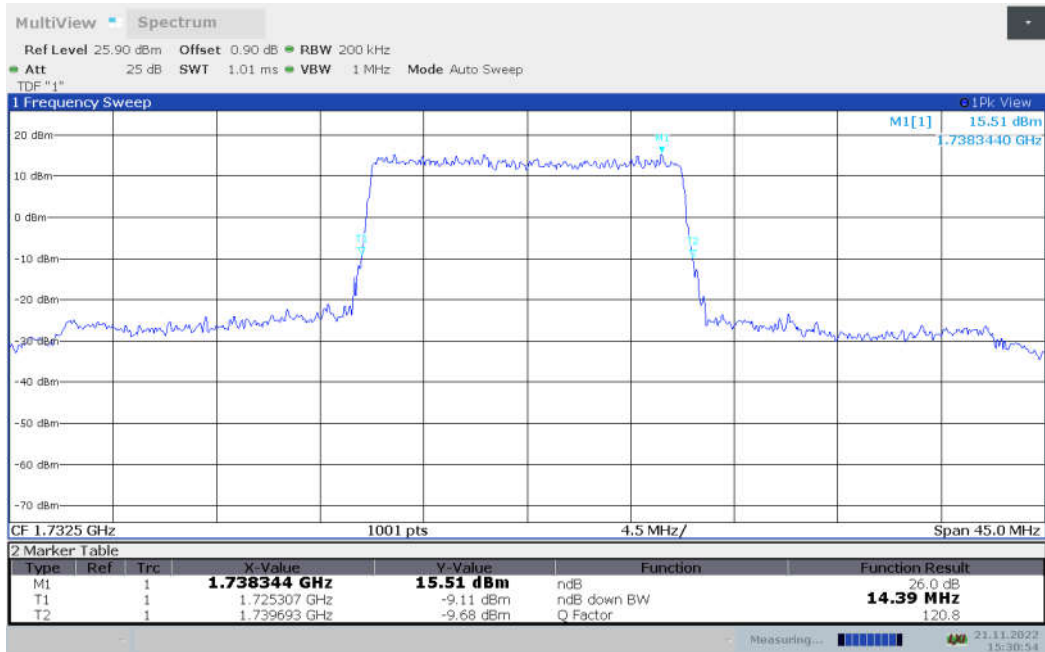




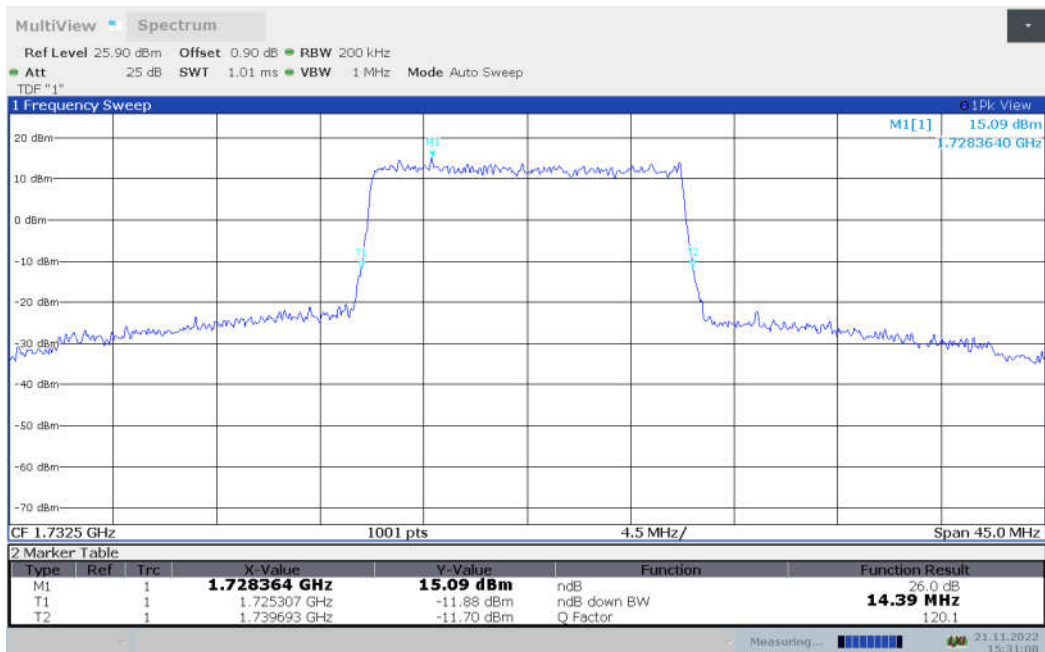
LTE band 4,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	14.386	14.386

LTE band 4 , 15MHz Bandwidth,QPSK (-26dBc BW)



LTE band 4 , 15MHz Bandwidth,16QAM (-26dBc BW)

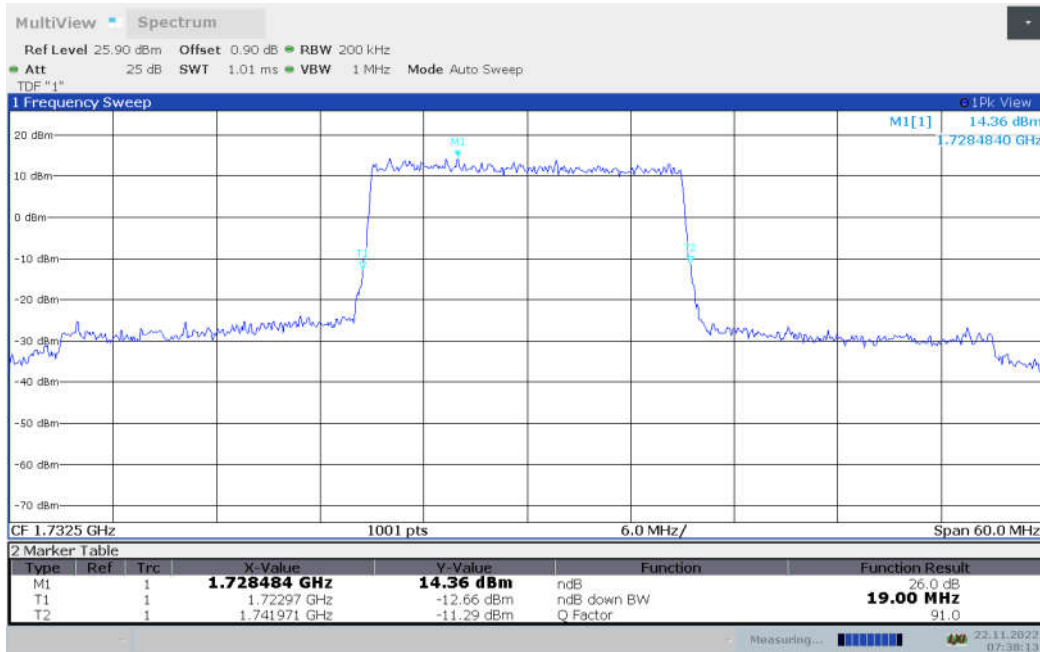




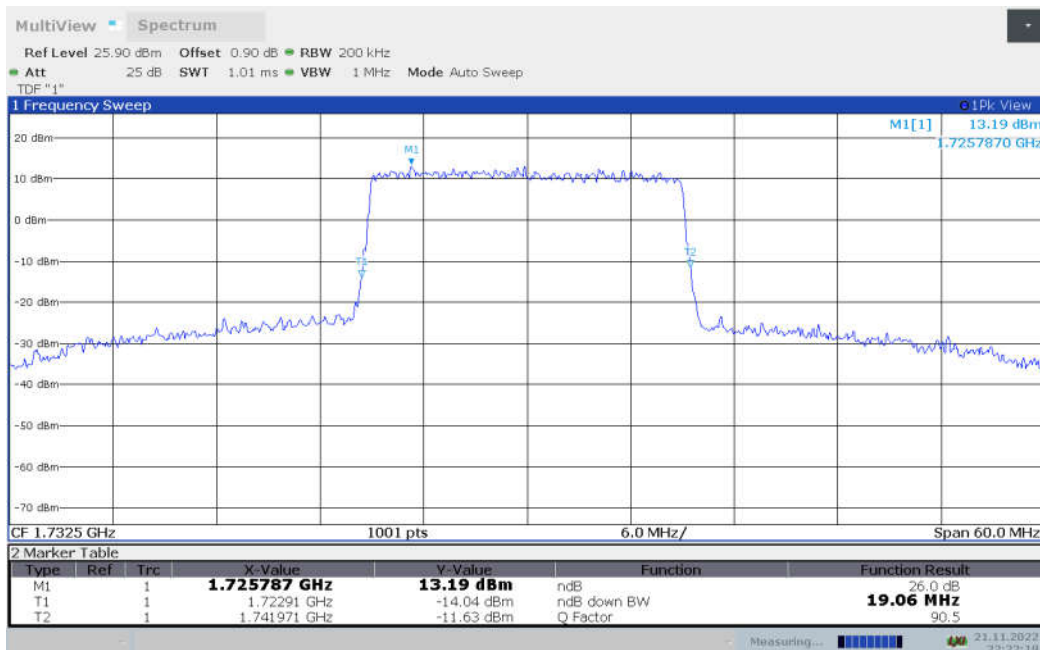
LTE band 4,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	19.001	19.061

LTE band 4 , 20MHz Bandwidth,QPSK (-26dBc BW)



LTE band 4 , 20MHz Bandwidth,16QAM (-26dBc BW)

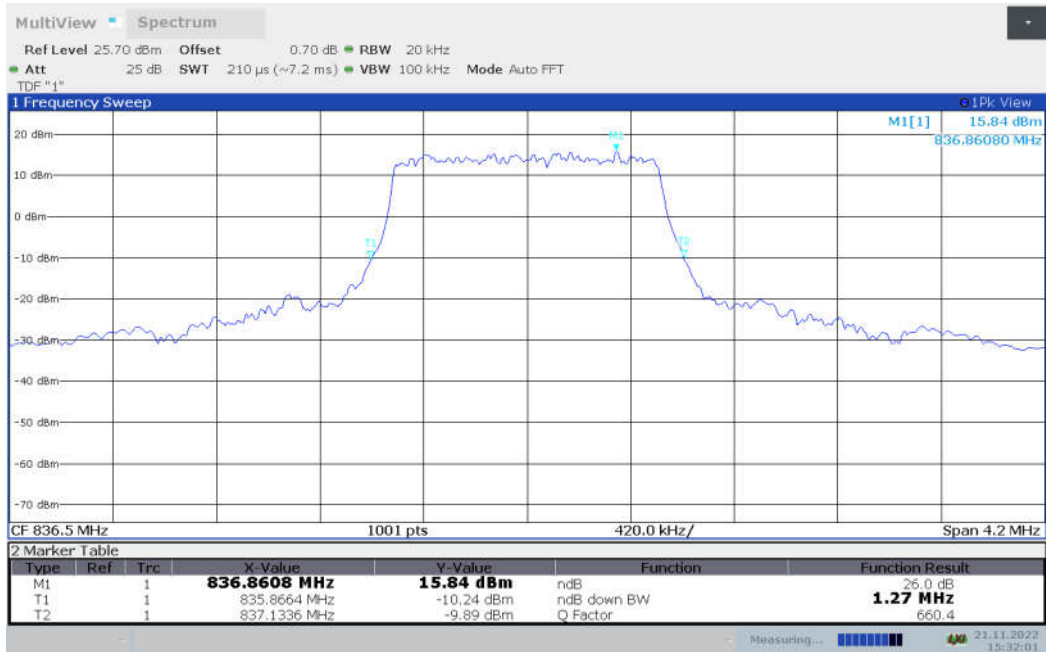




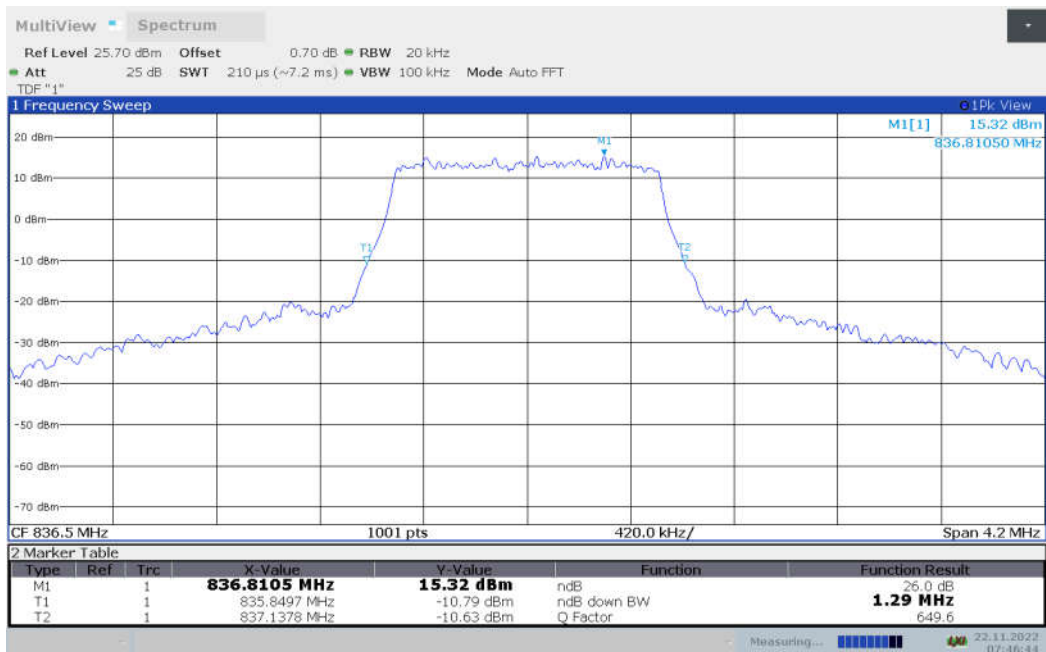
LTE band 5,1.4MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
836.5	1.267	1.288

LTE band 5 , 1.4MHz Bandwidth,QPSK (-26dBc BW)



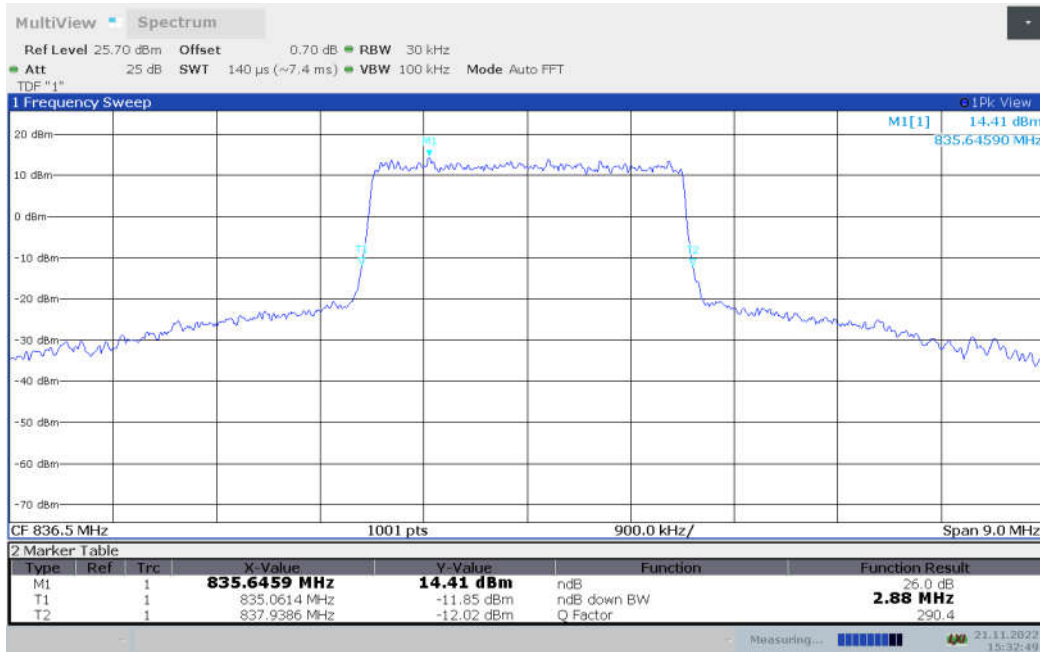
LTE band 5 , 1.4MHz Bandwidth,16QAM (-26dBc BW)



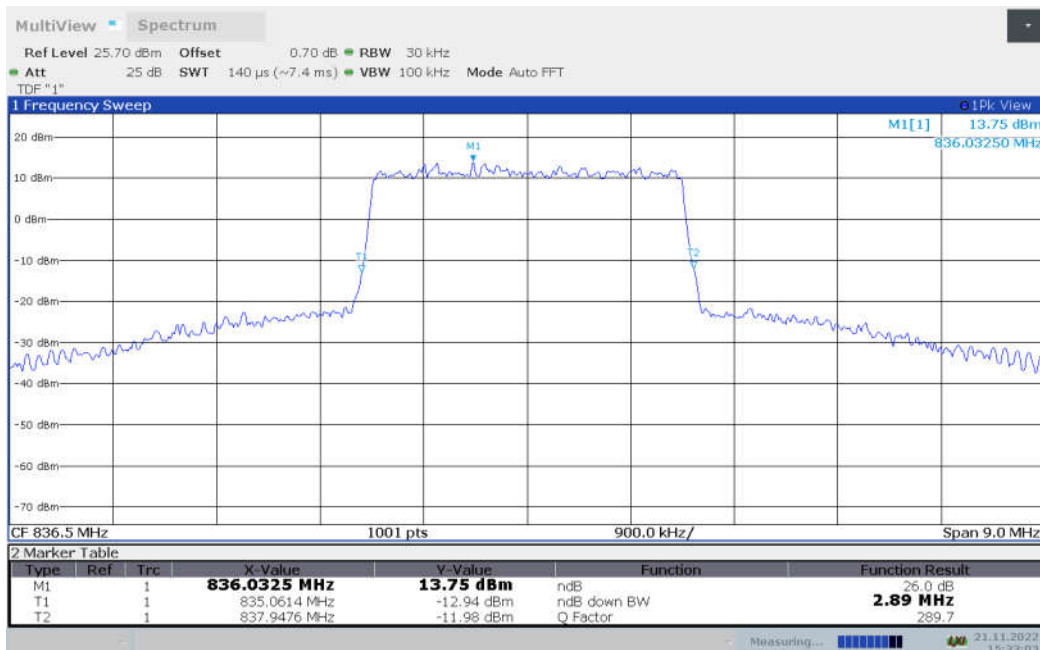
LTE band 5,3MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
836.5	2.877	2.886

LTE band 5 , 3MHz Bandwidth,QPSK (-26dBc BW)



LTE band 5 , 3MHz Bandwidth,16QAM (-26dBc BW)

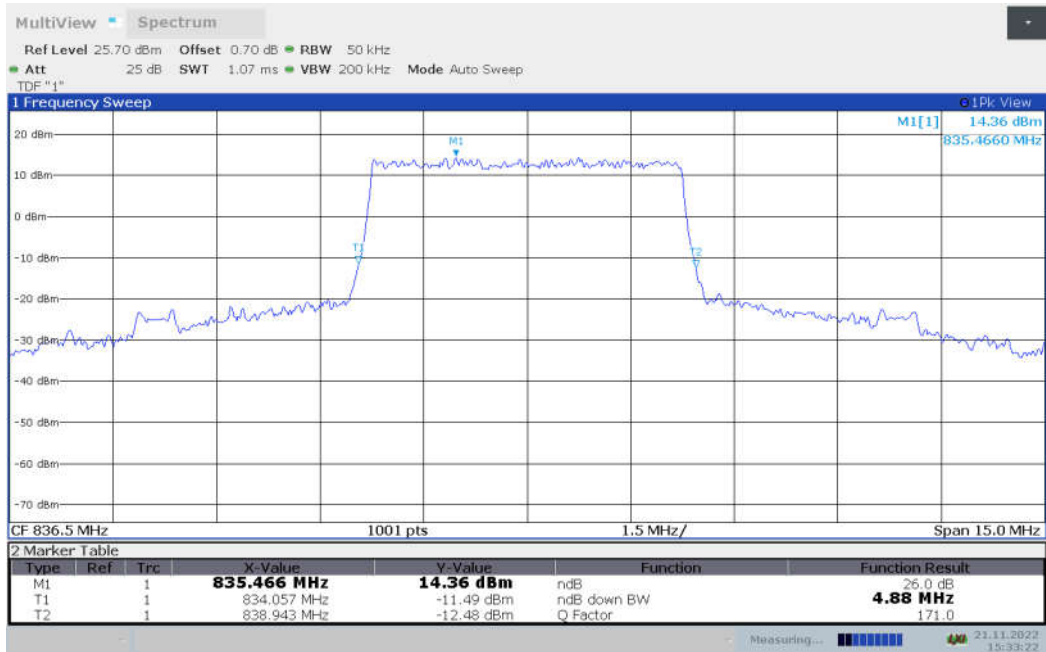




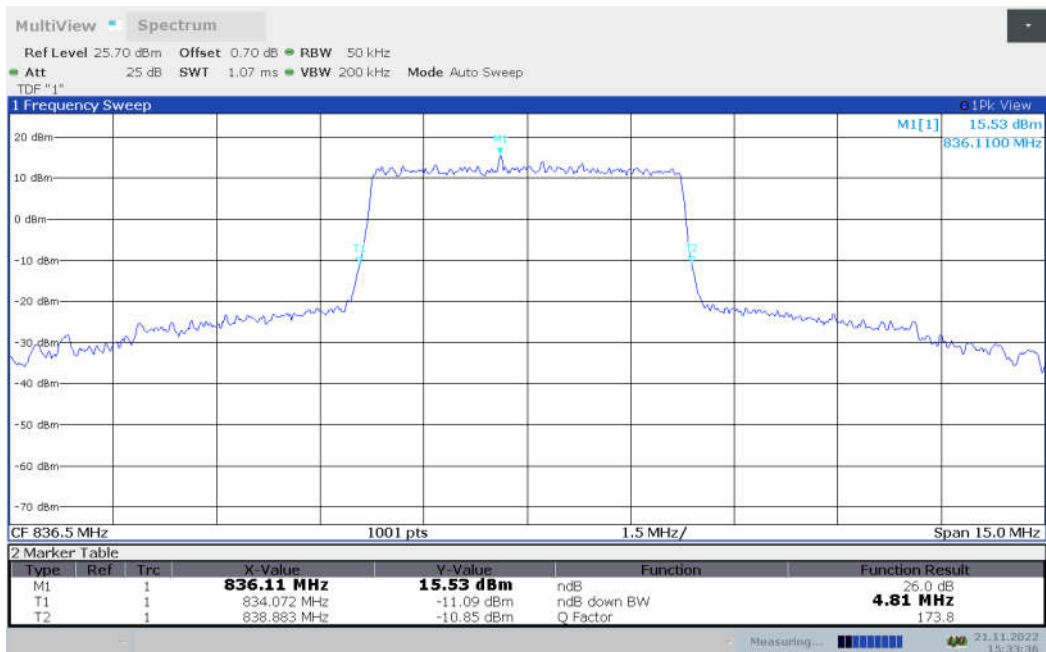
LTE band 5,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
836.5	4.885	4.810

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



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

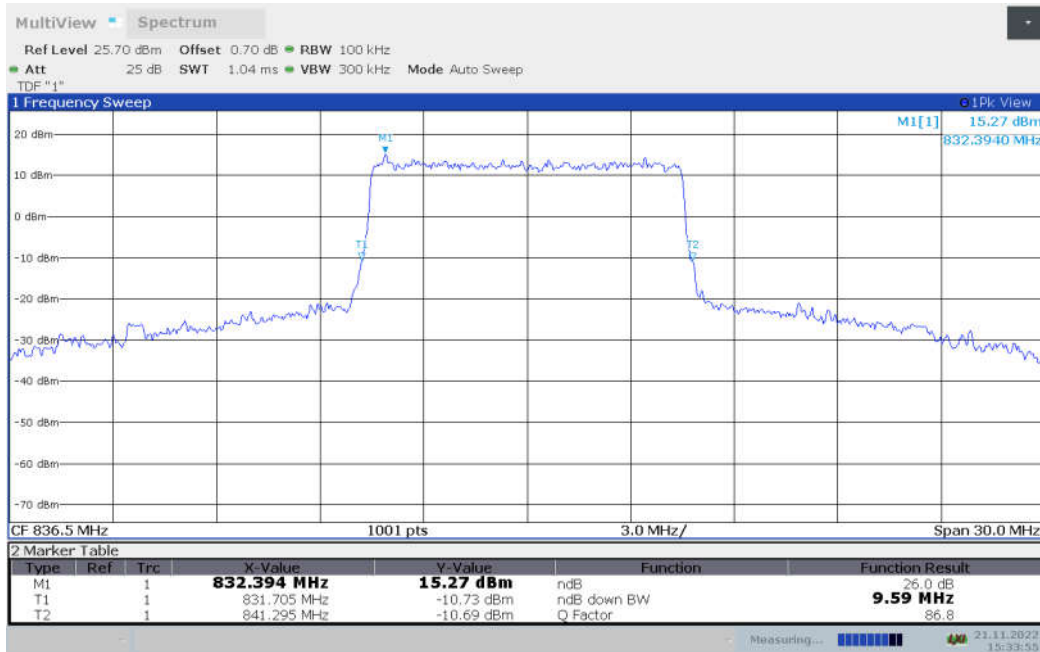




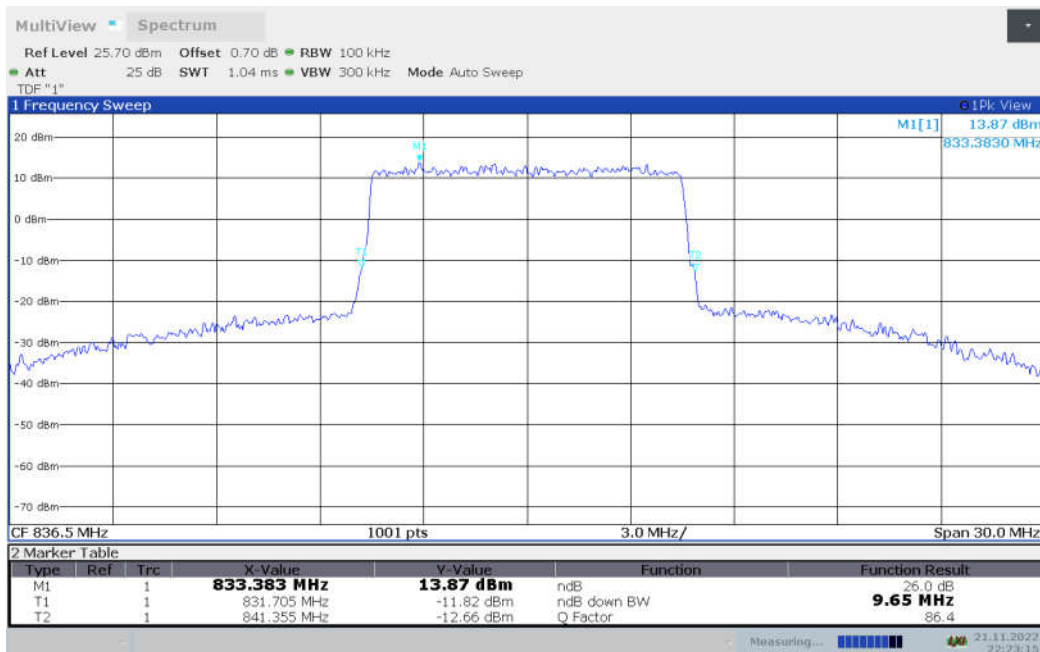
LTE band 5,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
836.5	9.590	9.650

LTE band 5 , 10MHz Bandwidth,QPSK (-26dBc BW)



LTE band 5 , 10MHz Bandwidth,16QAM (-26dBc BW)

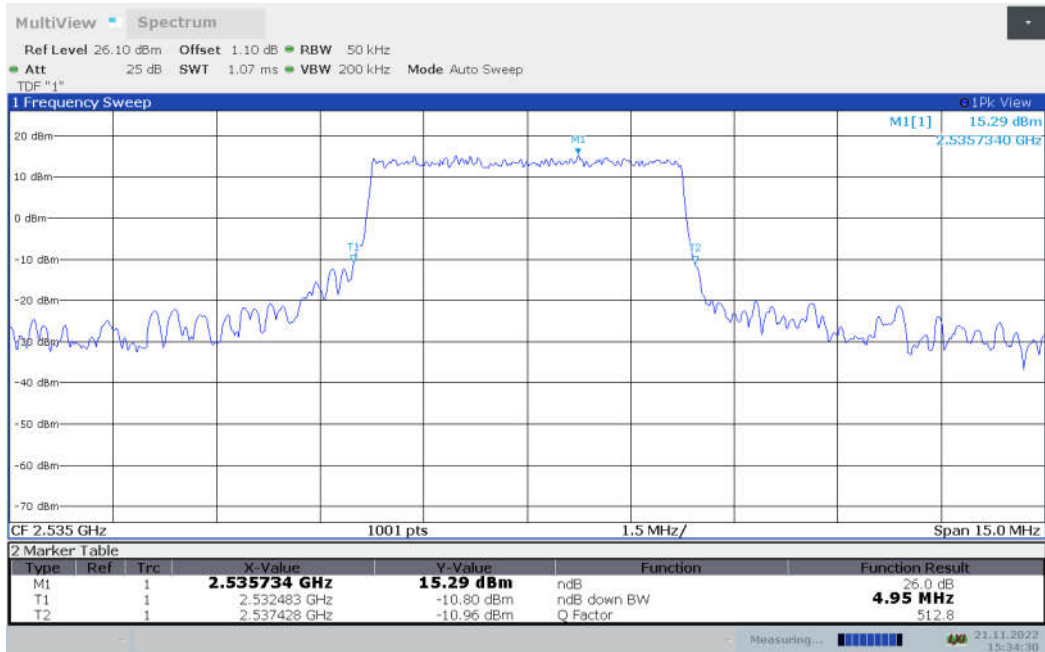




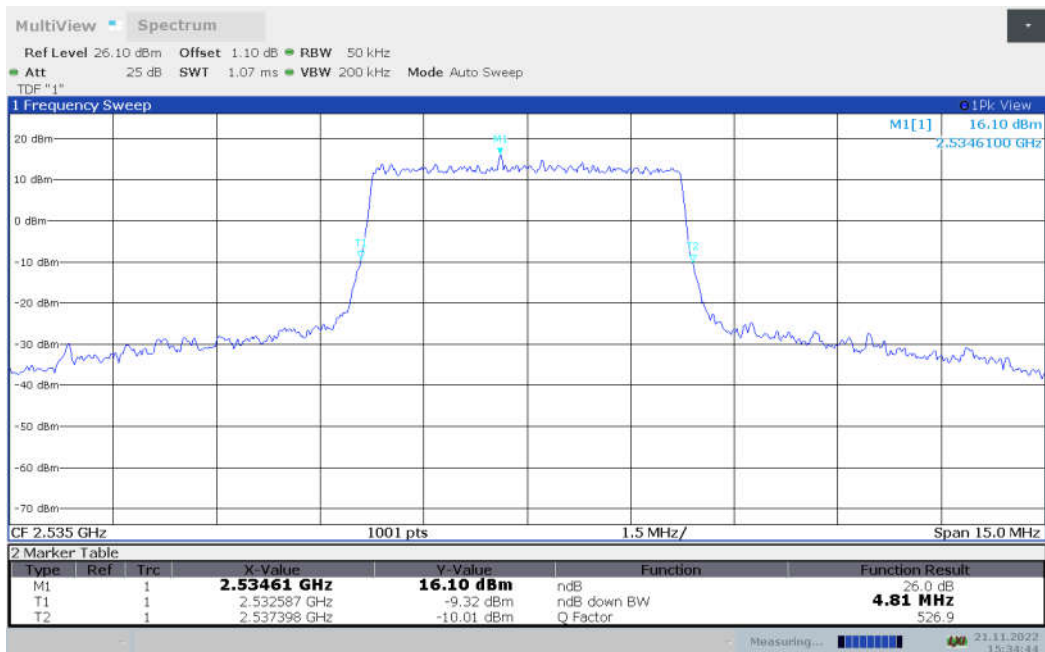
LTE band 7,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2535	4.945	4.810

LTE band 7 , 5MHz Bandwidth,QPSK (-26dBc BW)



LTE band 7 , 5MHz Bandwidth,16QAM (-26dBc BW)

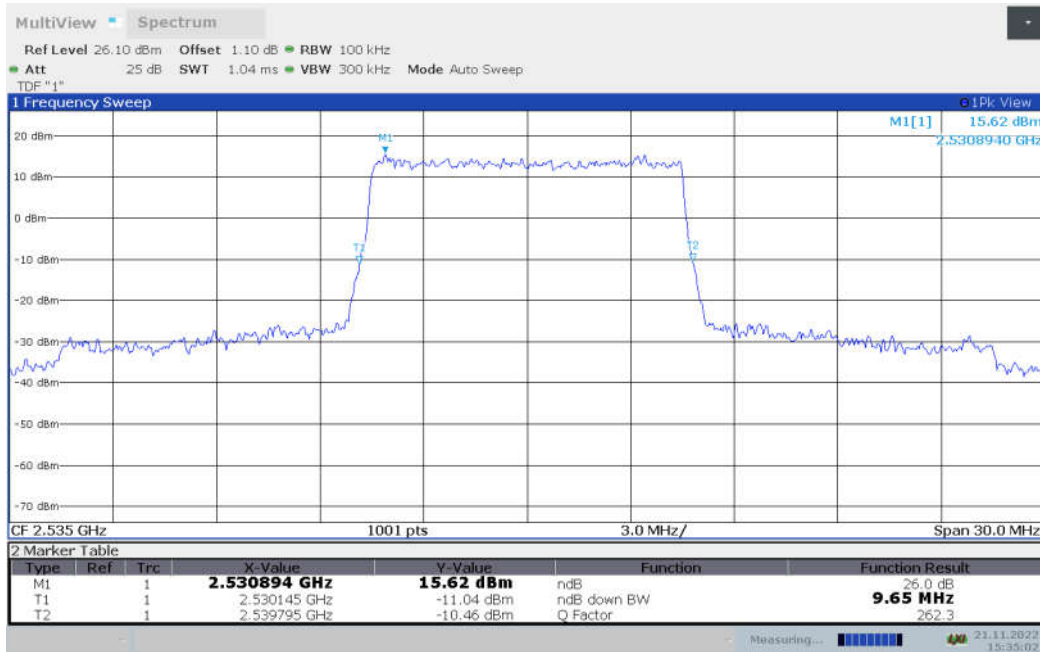




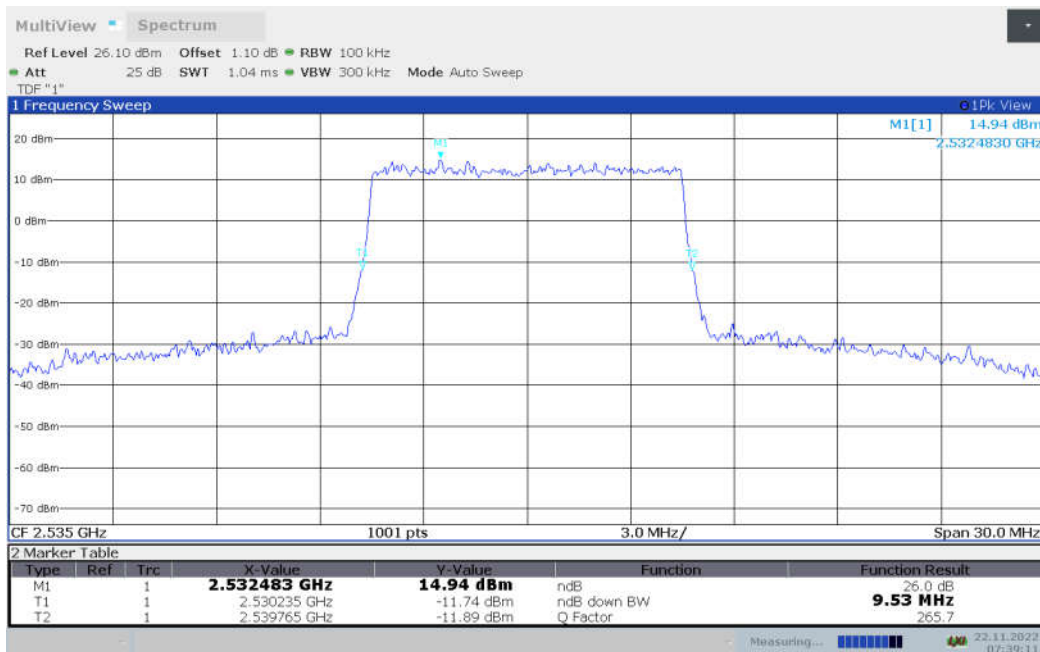
LTE band 7,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2535	9.650	9.530

LTE band 7 , 10MHz Bandwidth,QPSK (-26dBc BW)



LTE band 7 , 10MHz Bandwidth,16QAM (-26dBc BW)

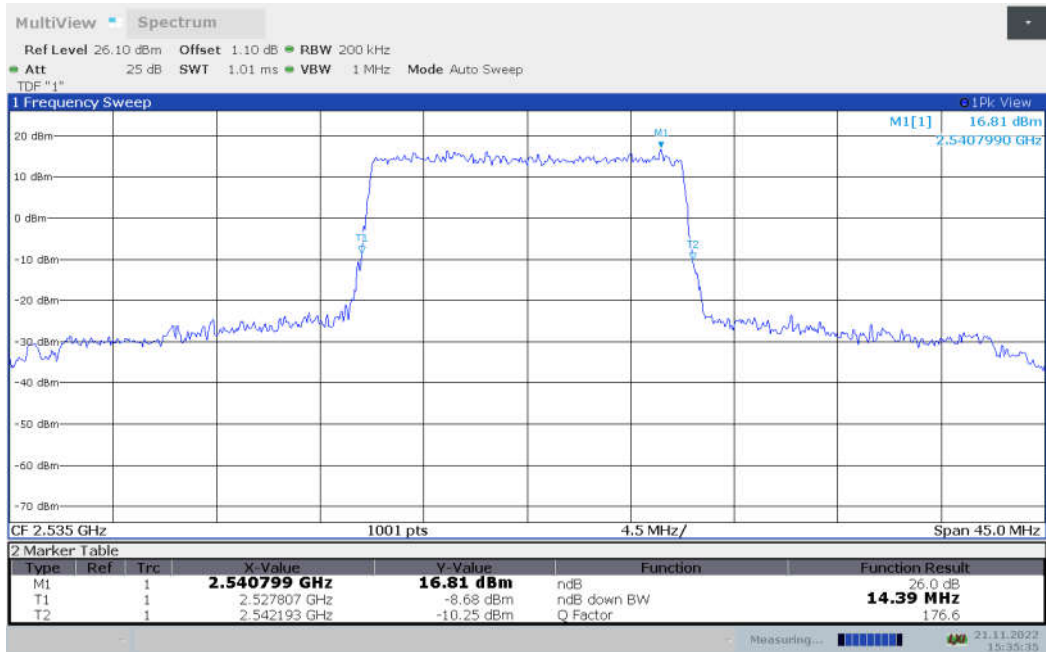




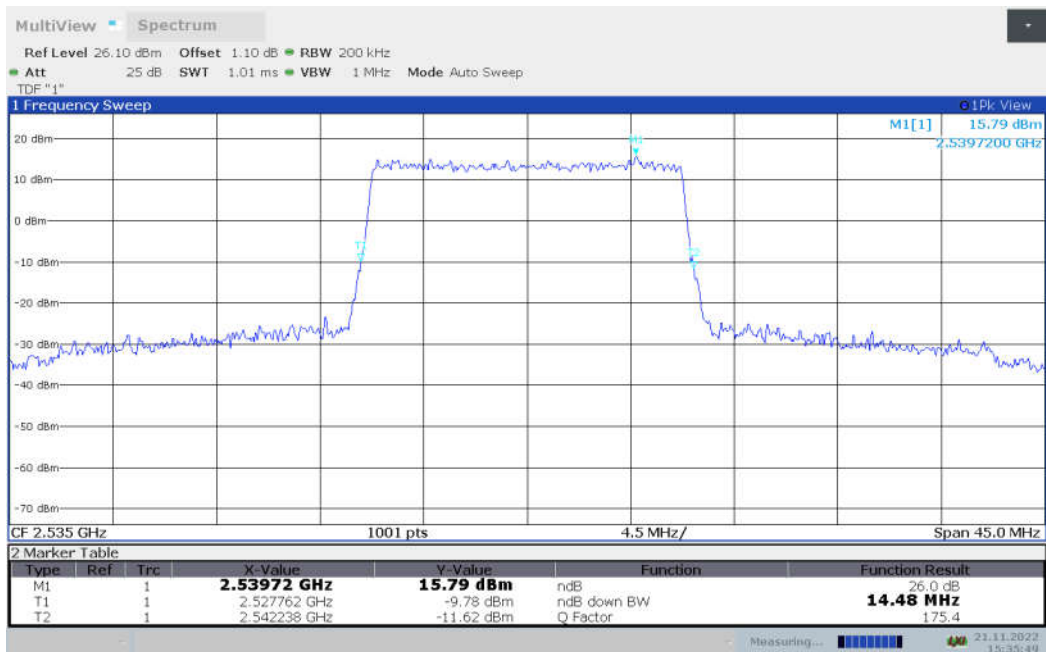
LTE band 7,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2535	14.386	14.476

LTE band 7 , 15MHz Bandwidth,QPSK (-26dBc BW)



LTE band 7 , 15MHz Bandwidth,16QAM (-26dBc BW)

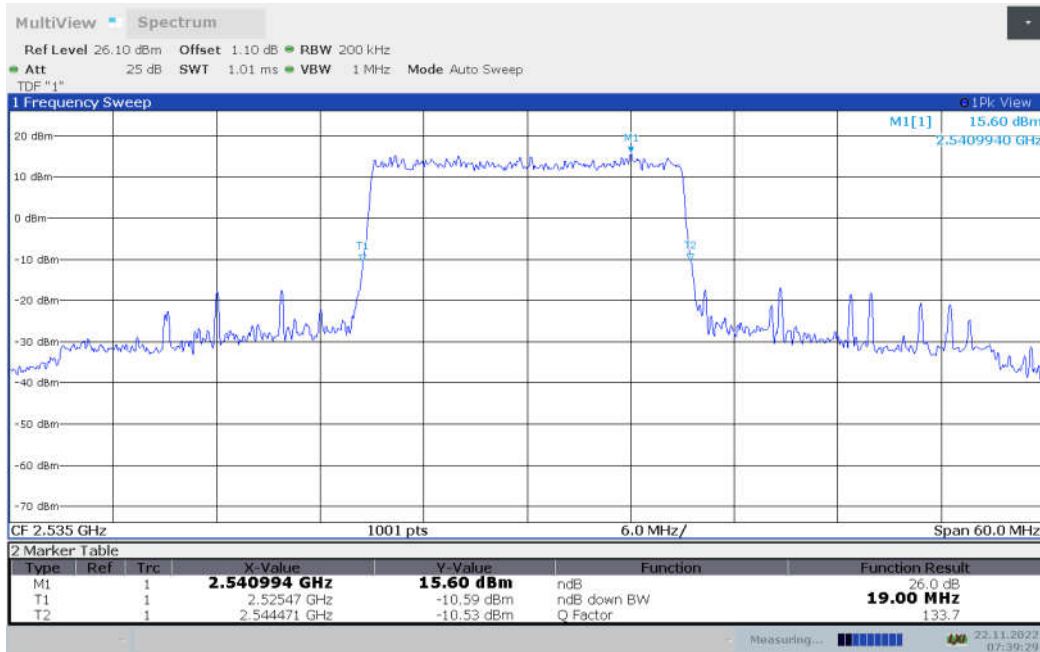




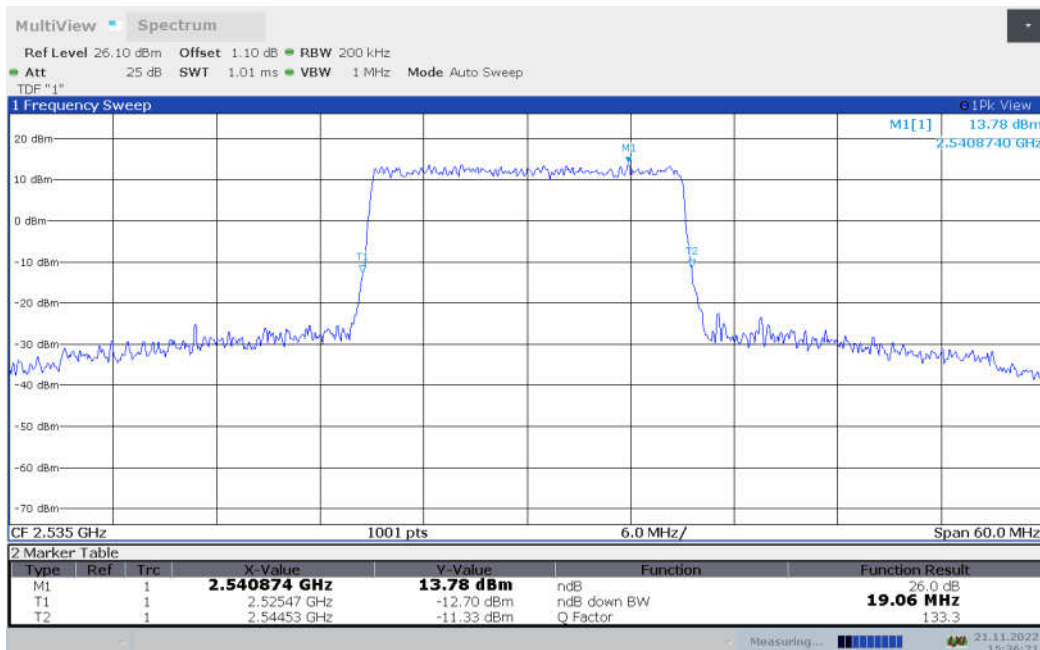
LTE band 7,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2535	19.001	19.061

LTE band 7 , 20MHz Bandwidth,QPSK (-26dBc BW)



LTE band 7 , 20MHz Bandwidth,16QAM (-26dBc BW)

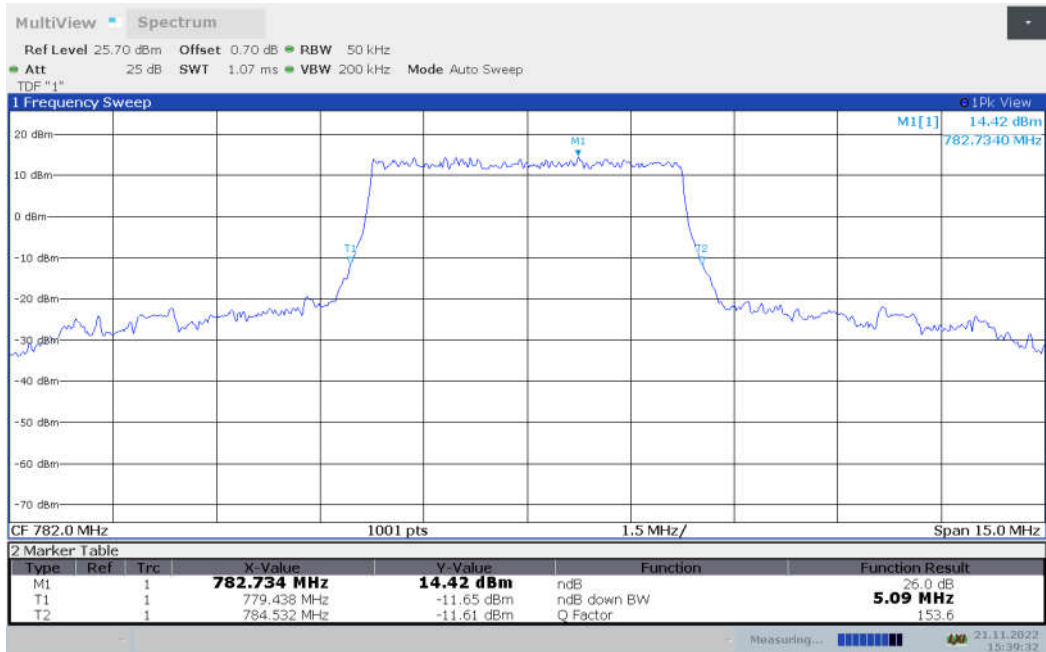




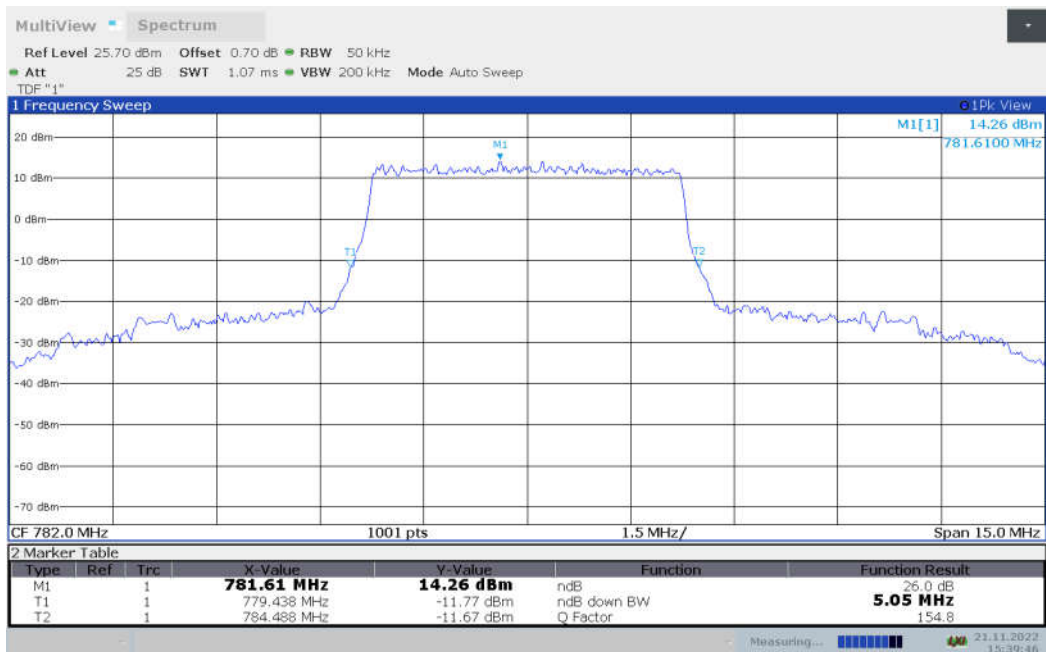
LTE band 13,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
782	5.095	5.050

LTE band 13 , 5MHz Bandwidth,QPSK (-26dBc BW)



LTE band 13 , 5MHz Bandwidth,16QAM (-26dBc BW)

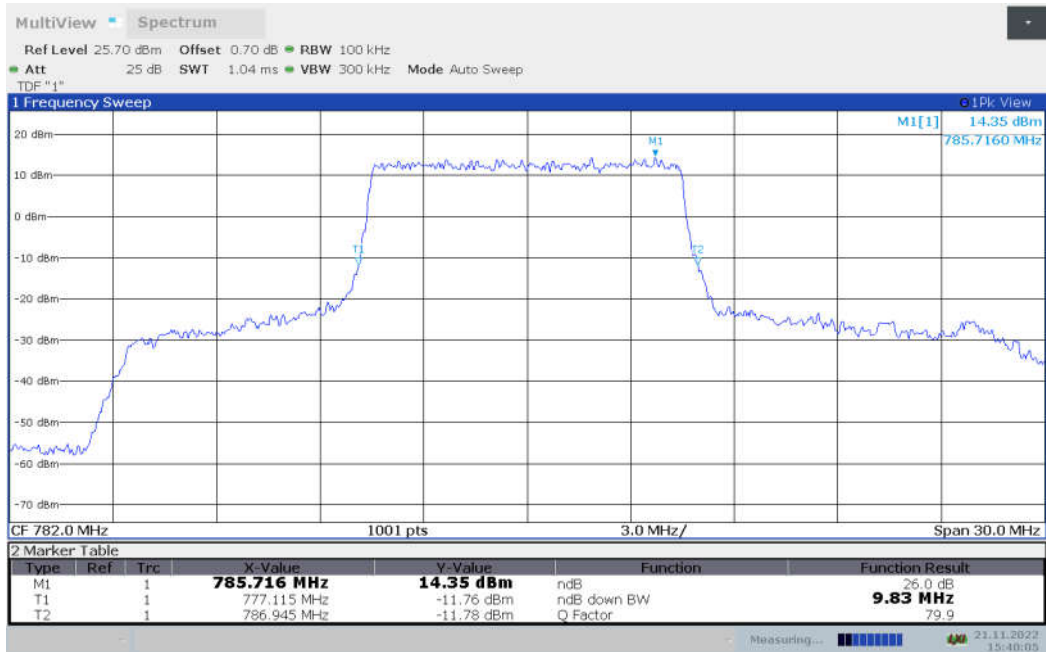




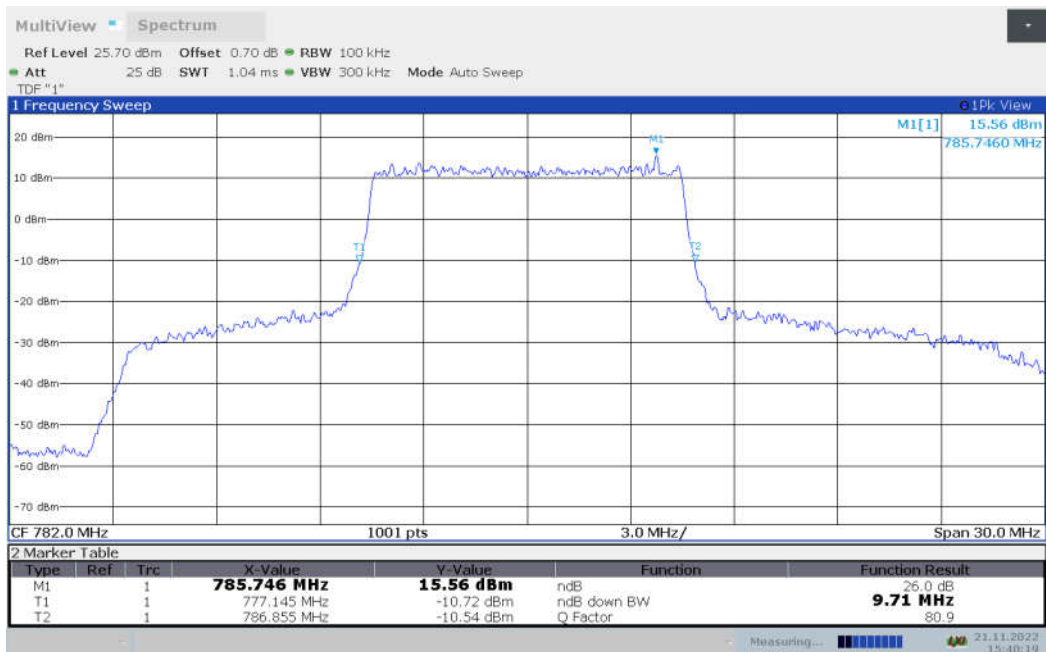
LTE band 13,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
782	9.830	9.710

LTE band 13 , 10MHz Bandwidth,QPSK (-26dBc BW)



LTE band 13 , 10MHz Bandwidth,16QAM (-26dBc BW)

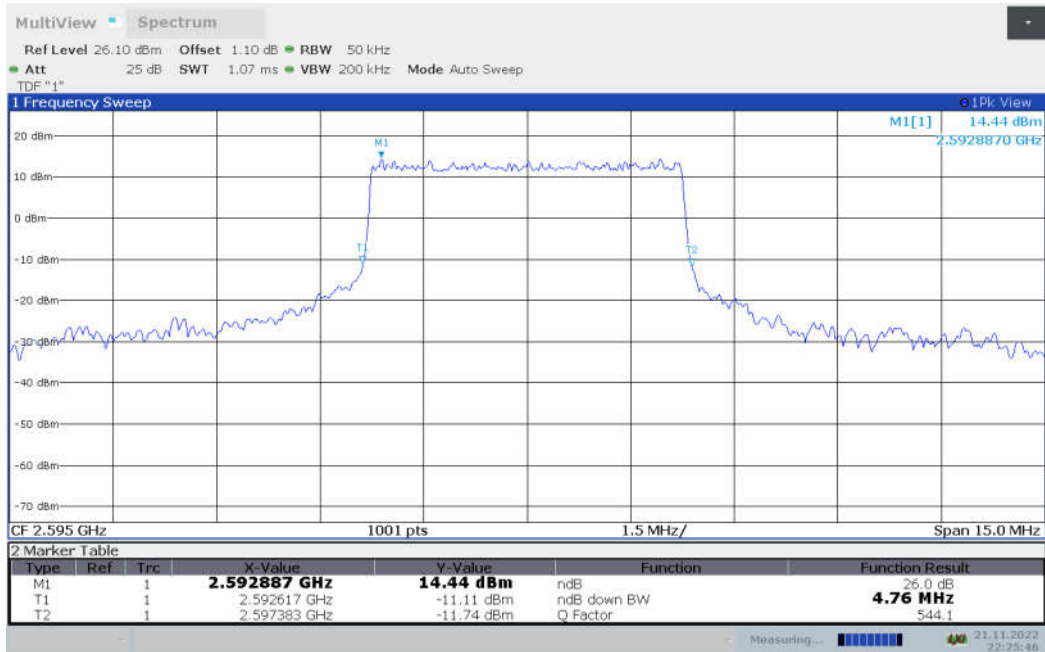




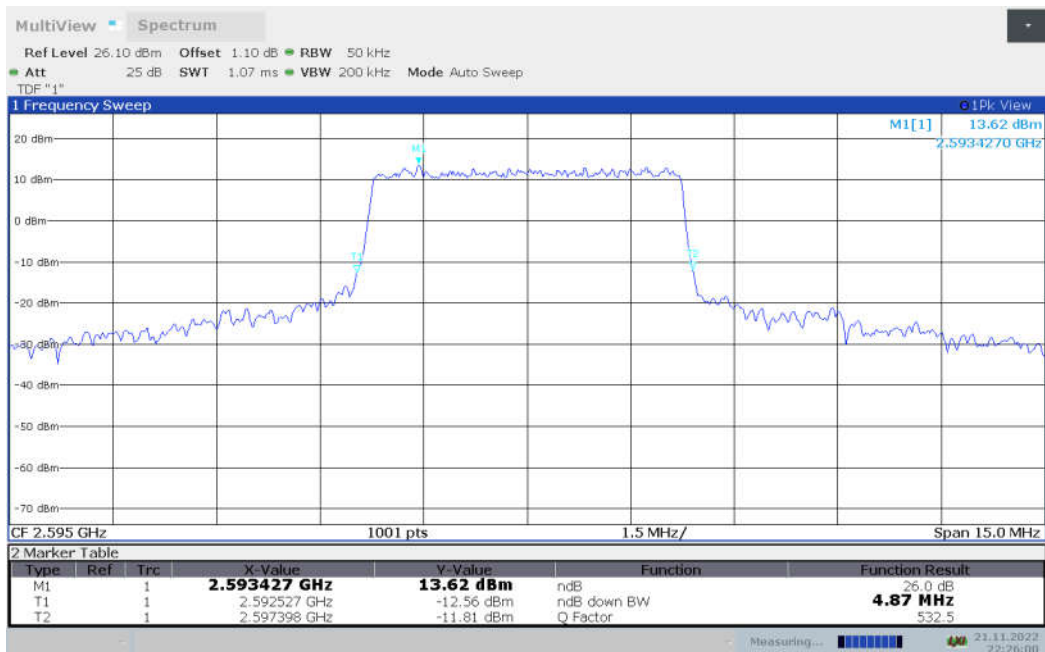
LTE band 38,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	4.765	4.870

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



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

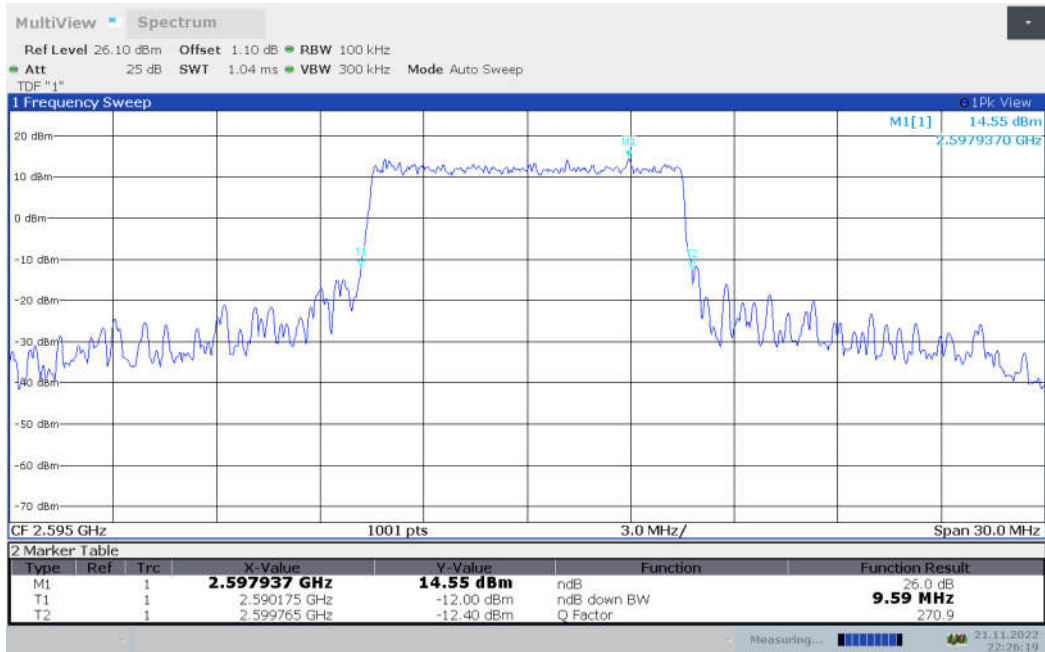




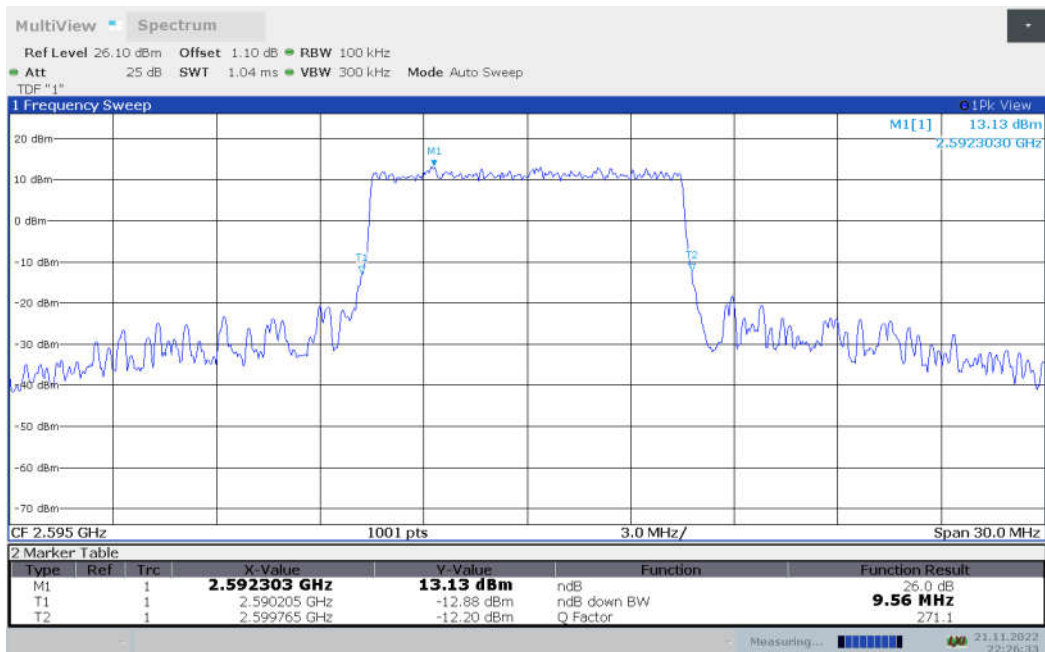
LTE band 38,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	9.590	9.560

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



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

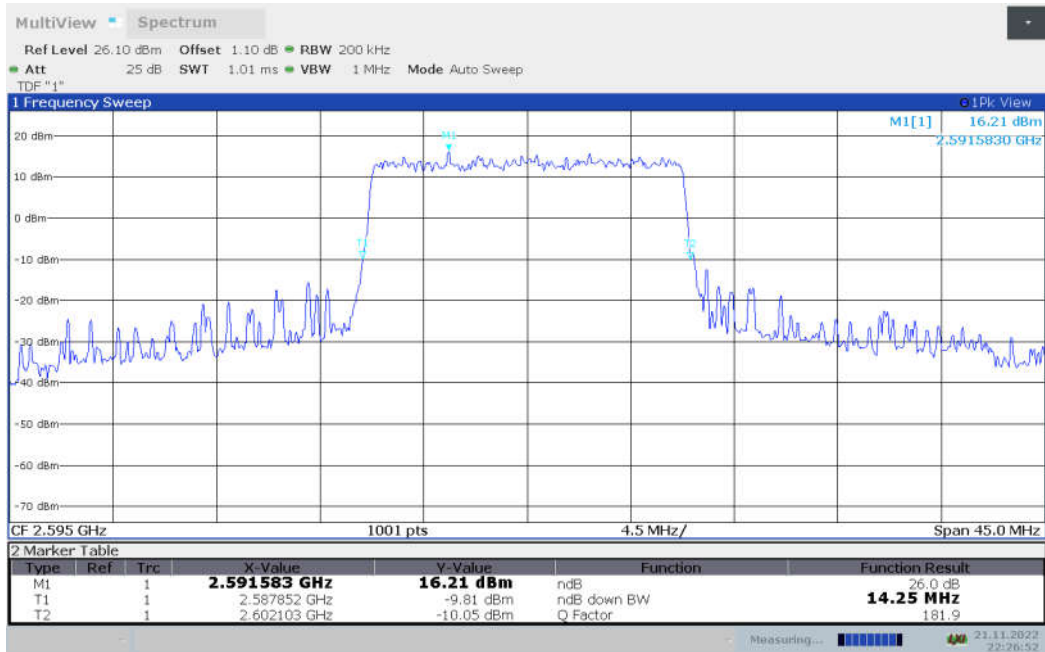




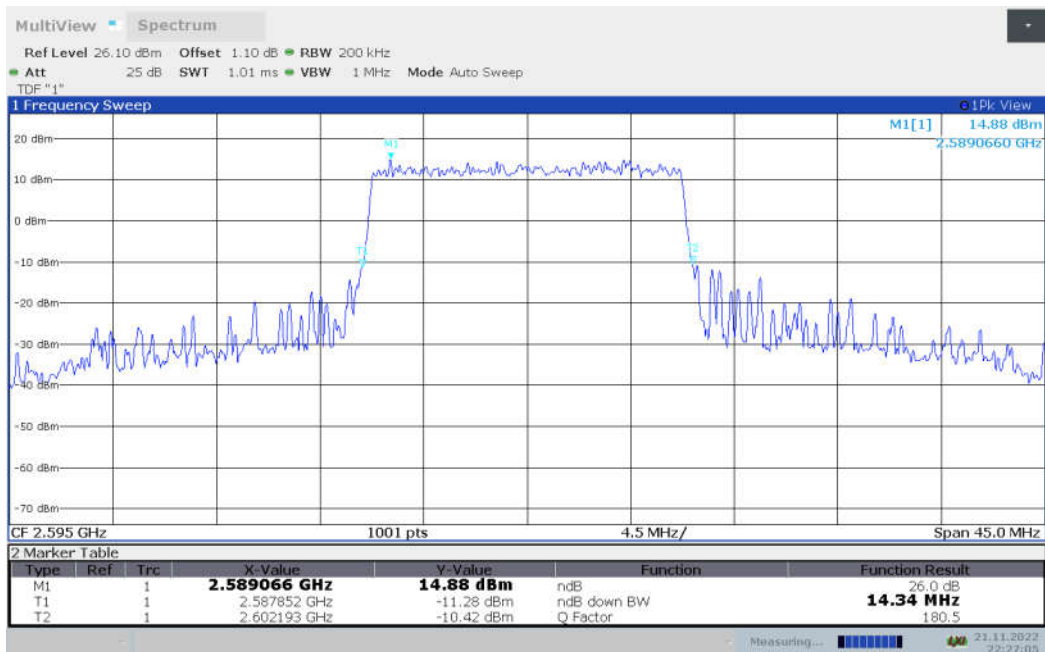
LTE band 38,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	14.251	14.341

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



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

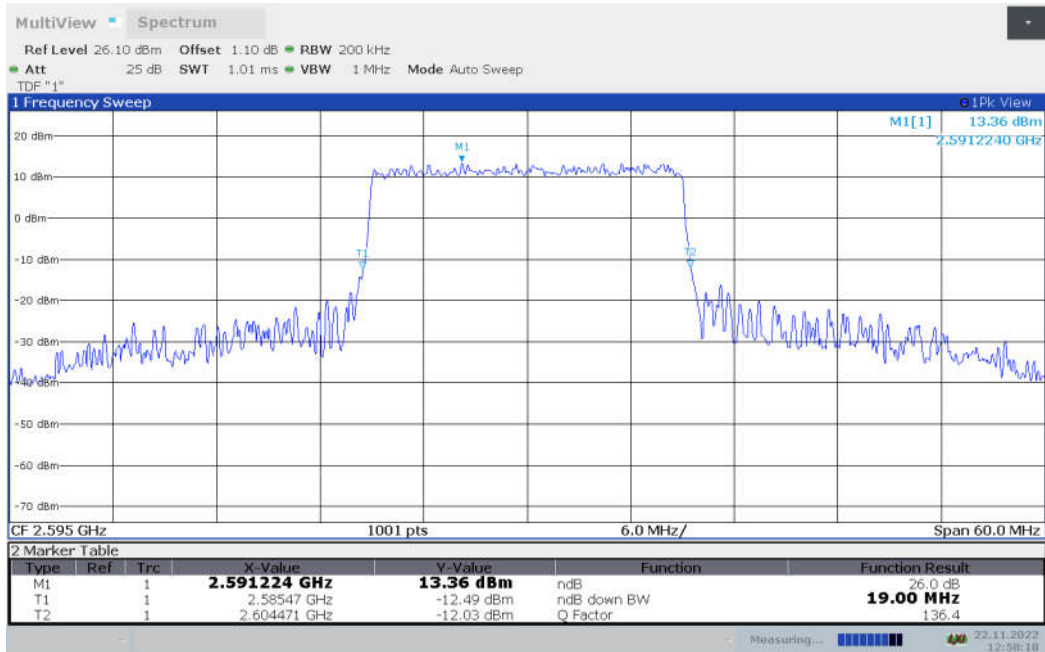




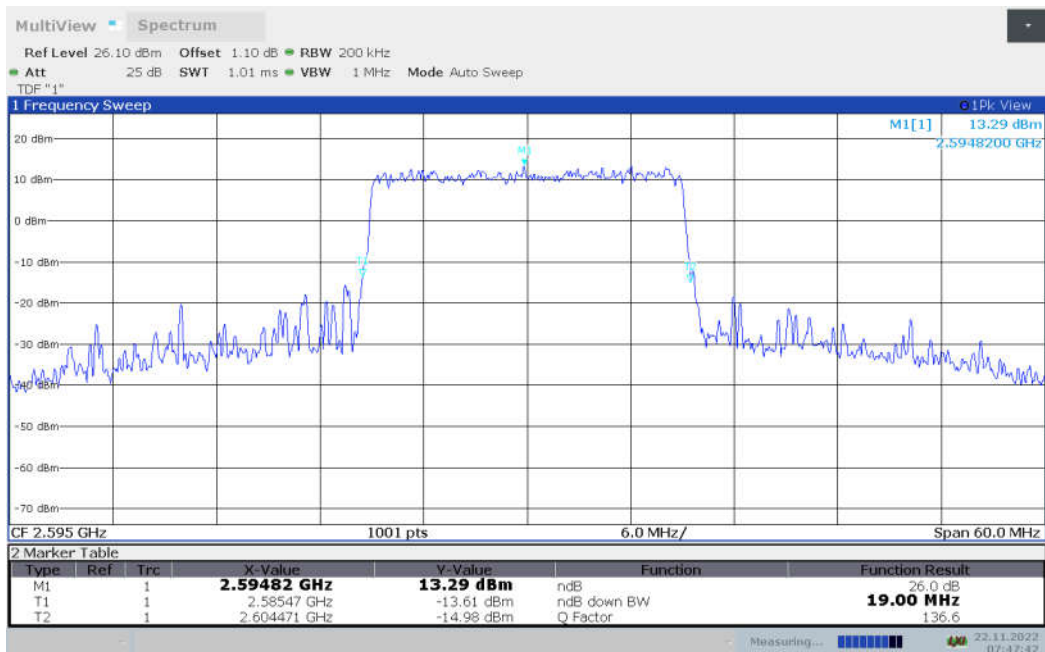
LTE band 38,20MHz(-26dBc BW)

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

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



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

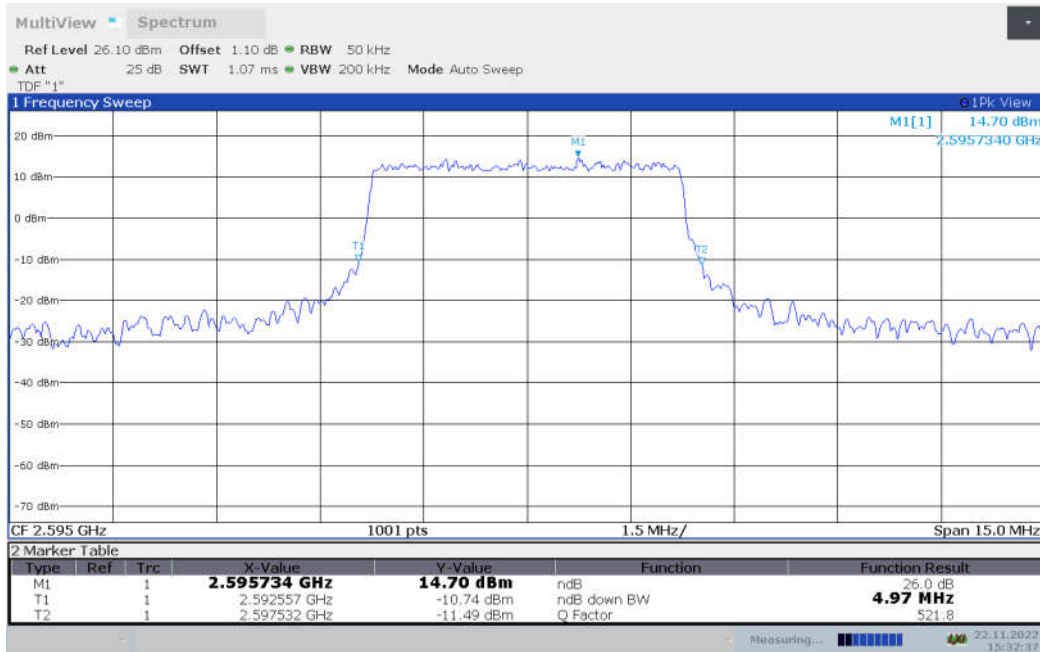




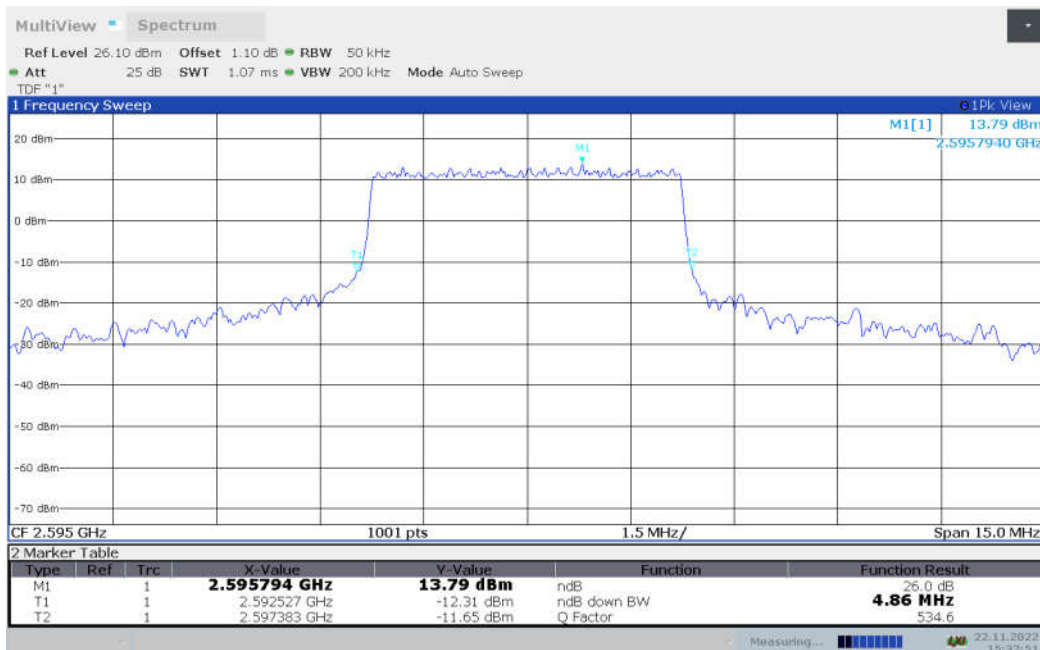
LTE band 41,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	4.975	4.855

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



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

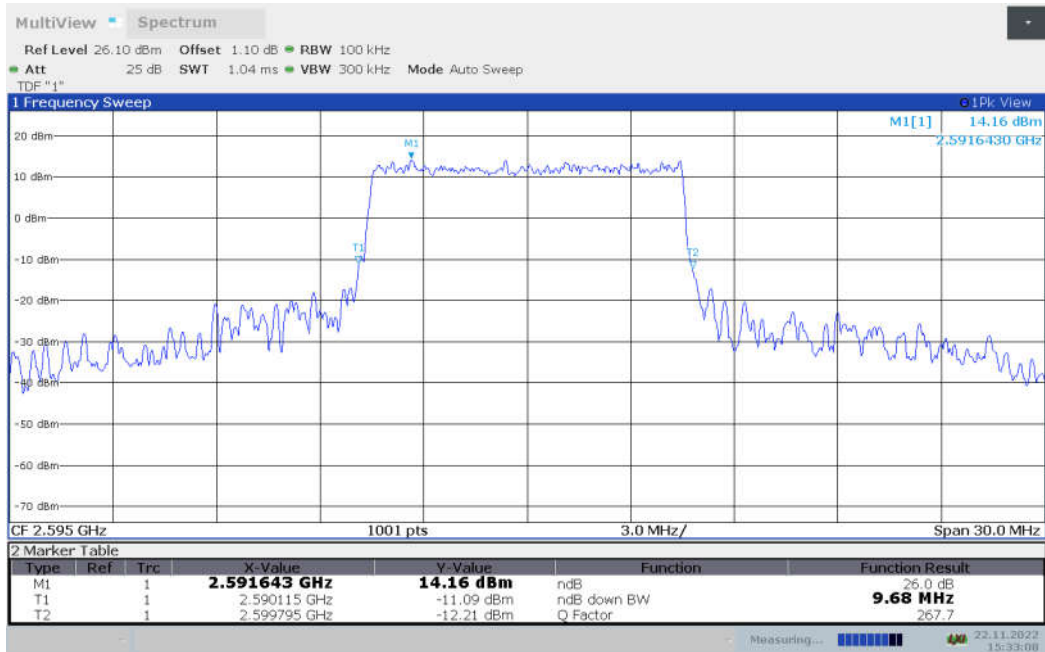




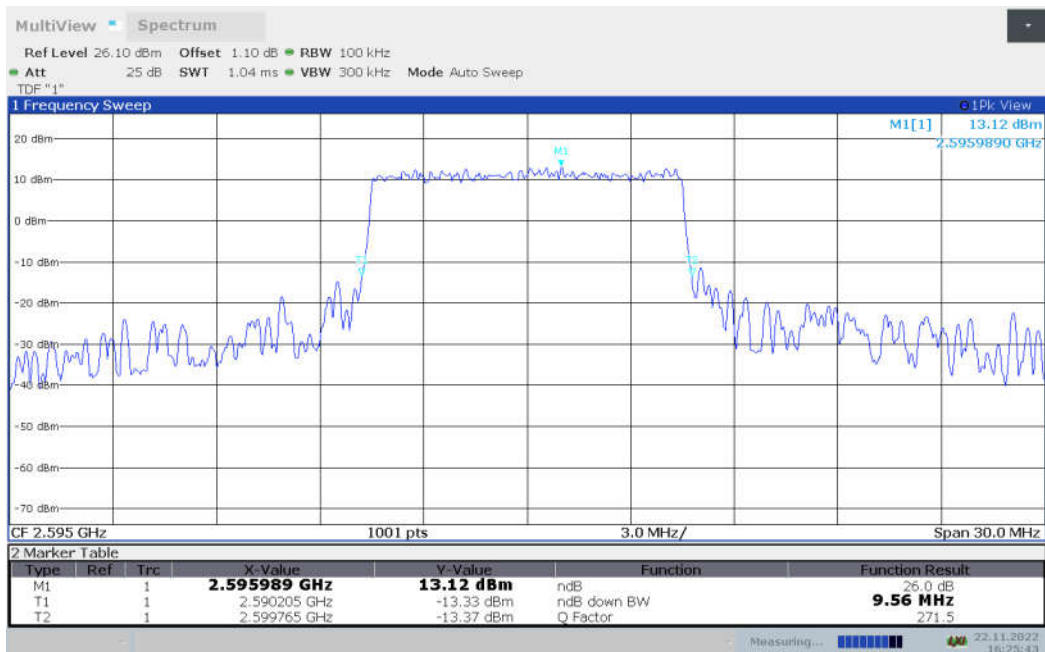
LTE band 41,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	9.680	9.560

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



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

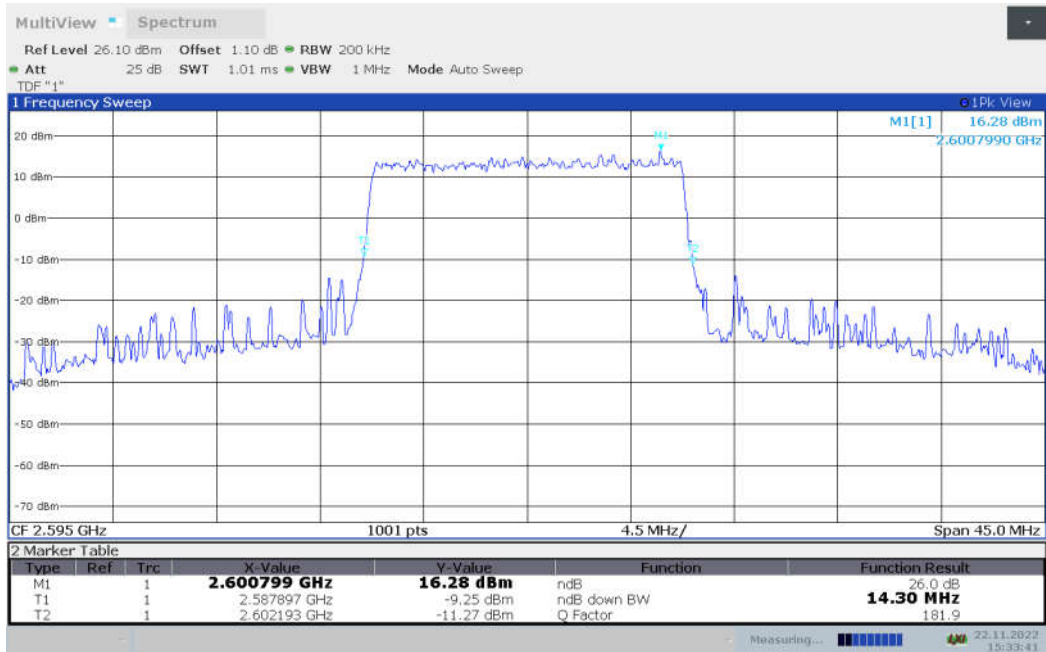




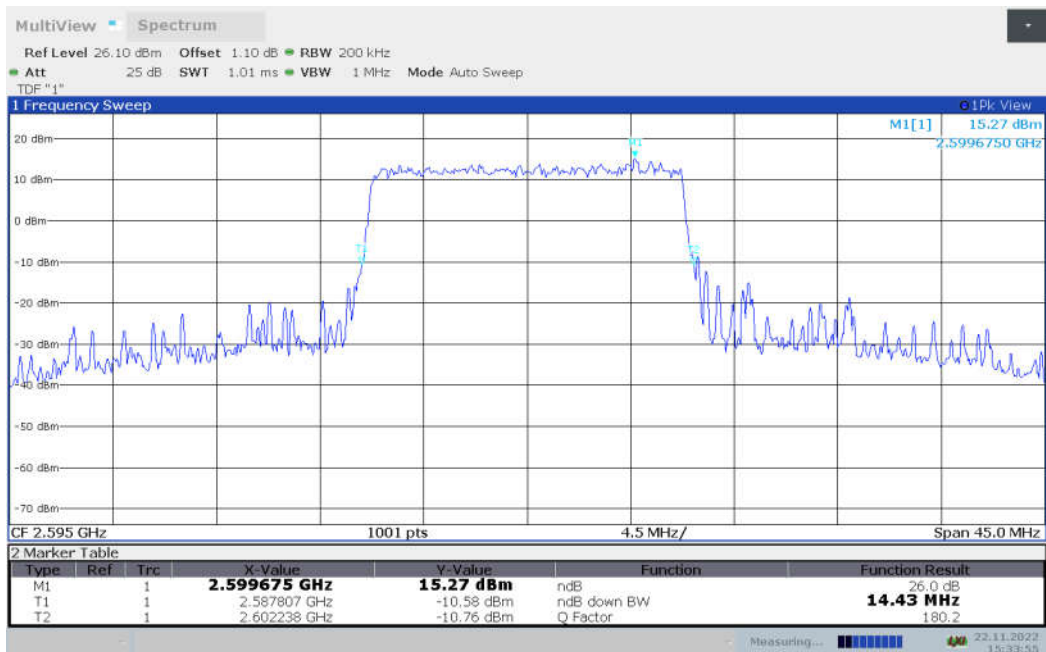
LTE band 41,15MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2595	14.296	14.431

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



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

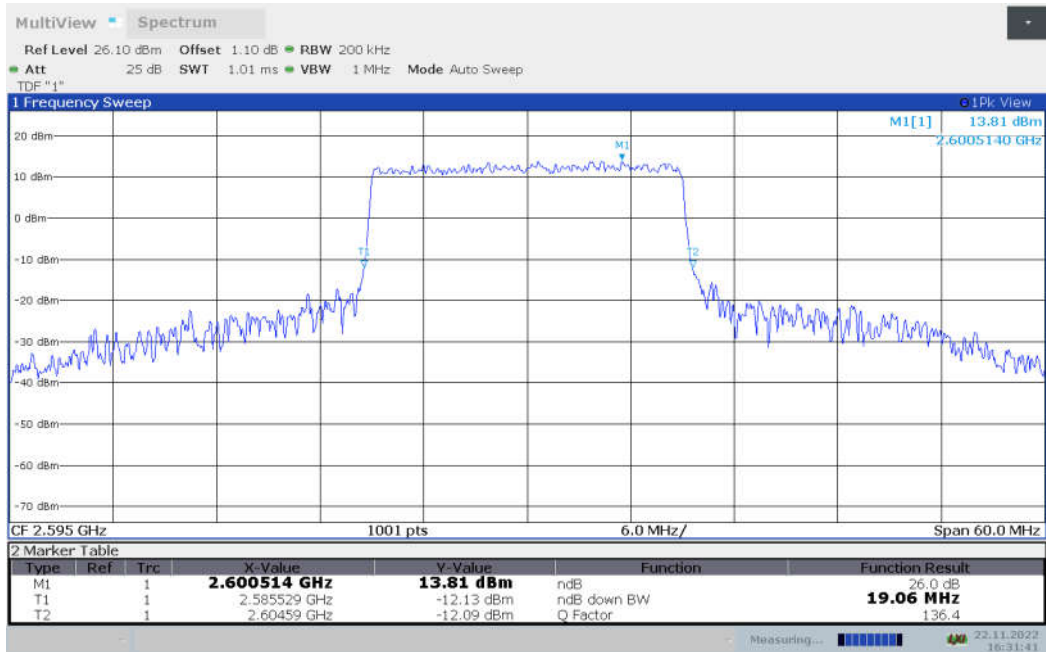




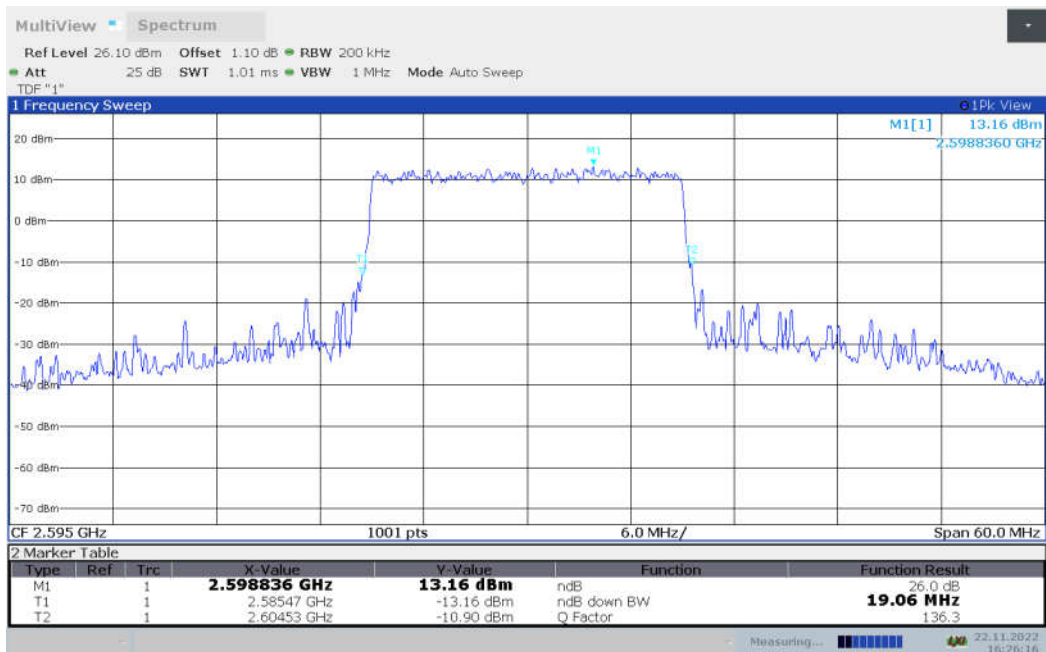
LTE band 41,20MHz(-26dBc BW)

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

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



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

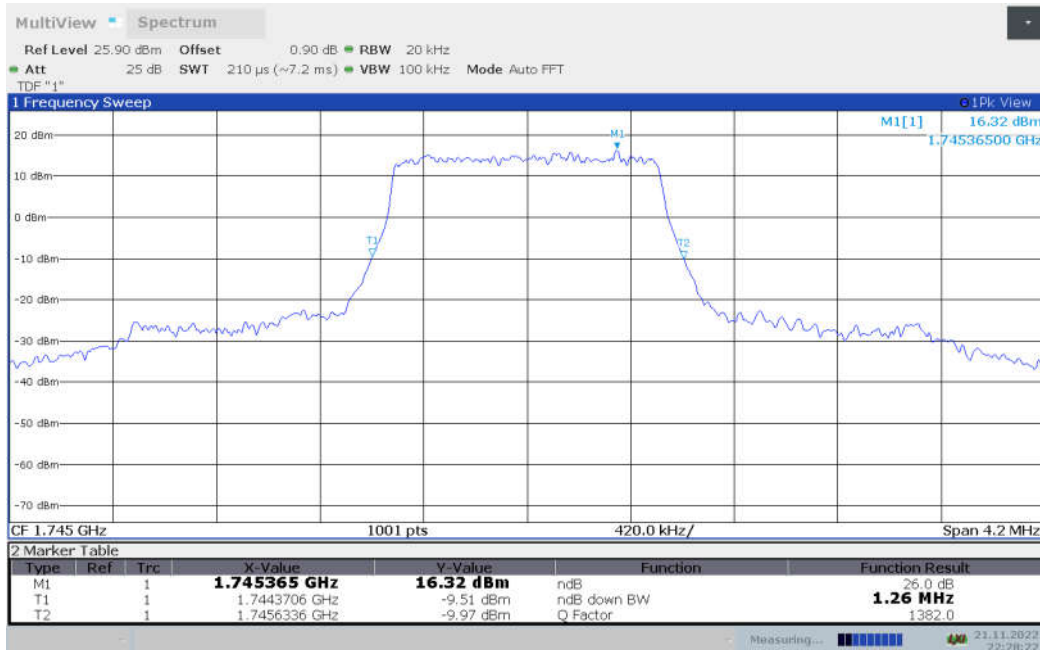




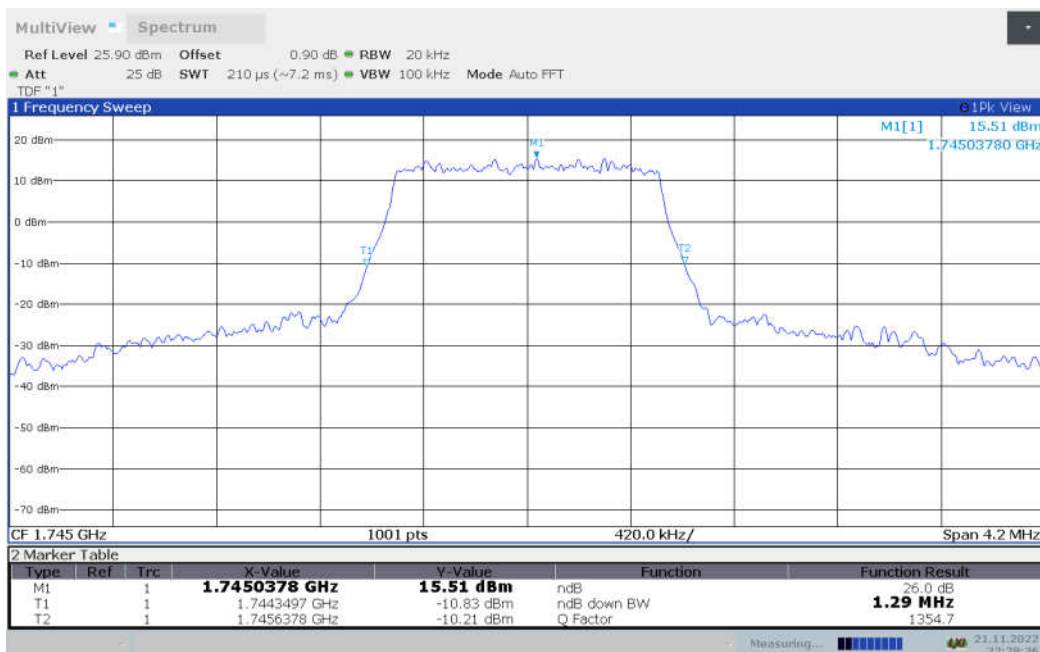
LTE band 66,1.4MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	1.263	1.288

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



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

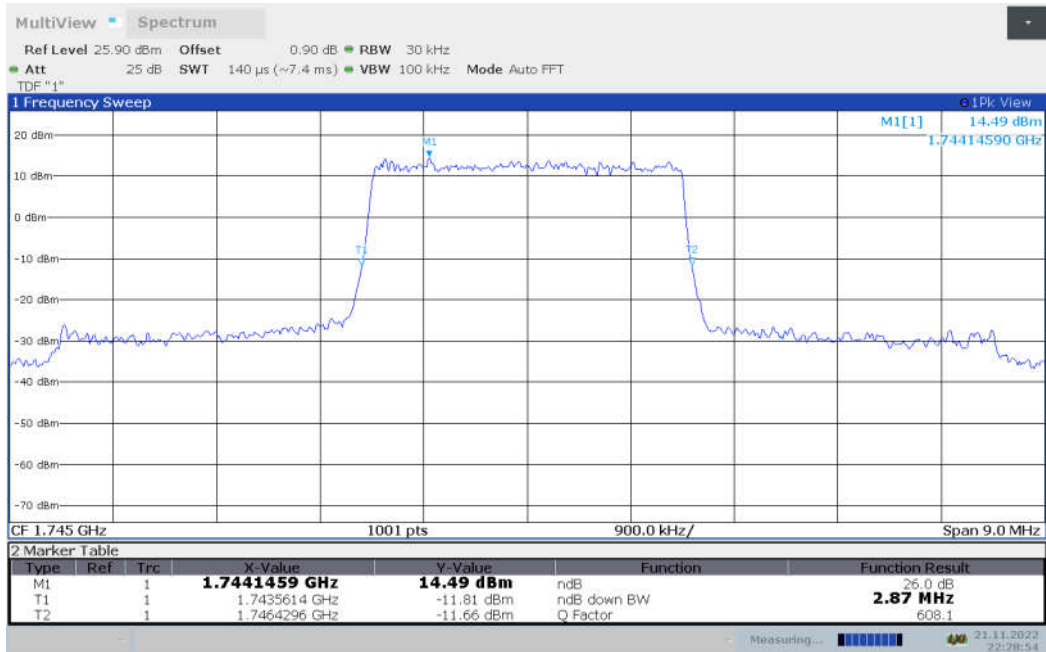




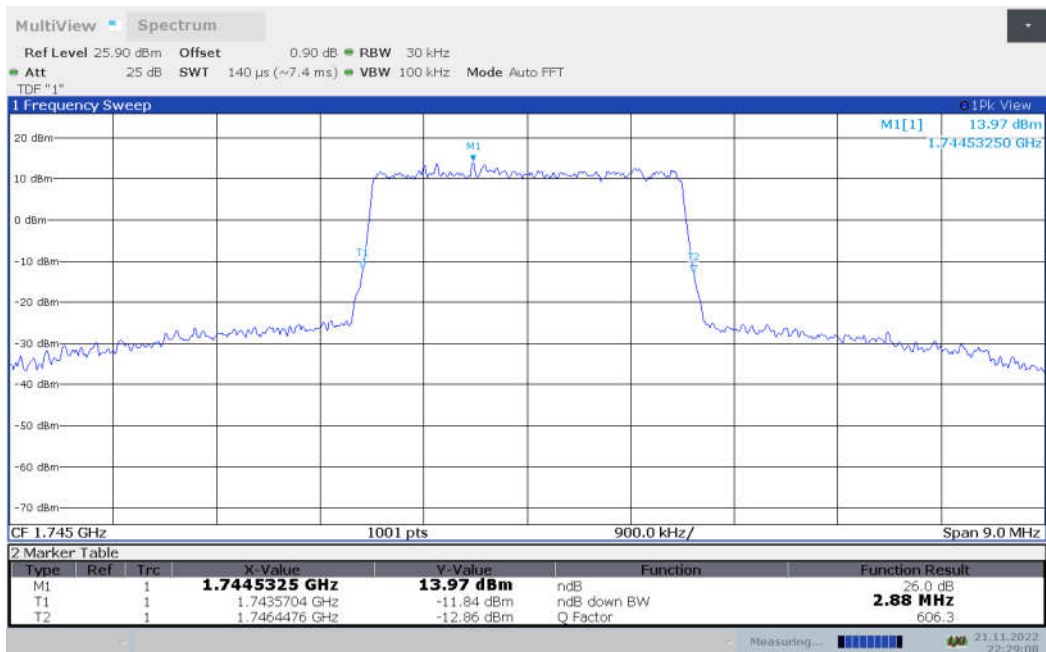
LTE band 66,3MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	2.868	2.877

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



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

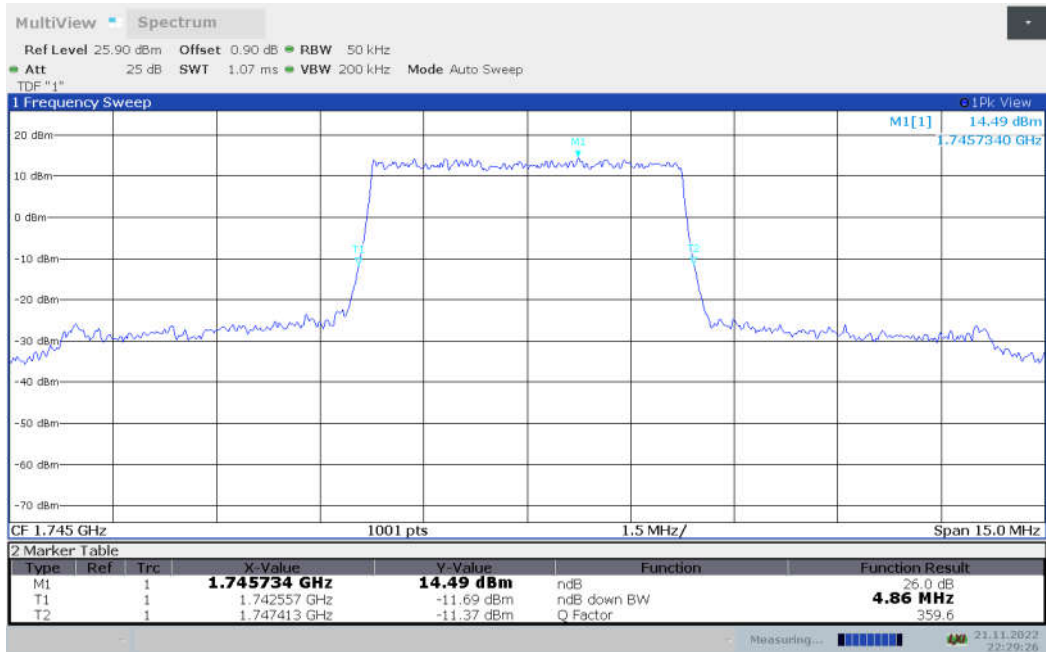




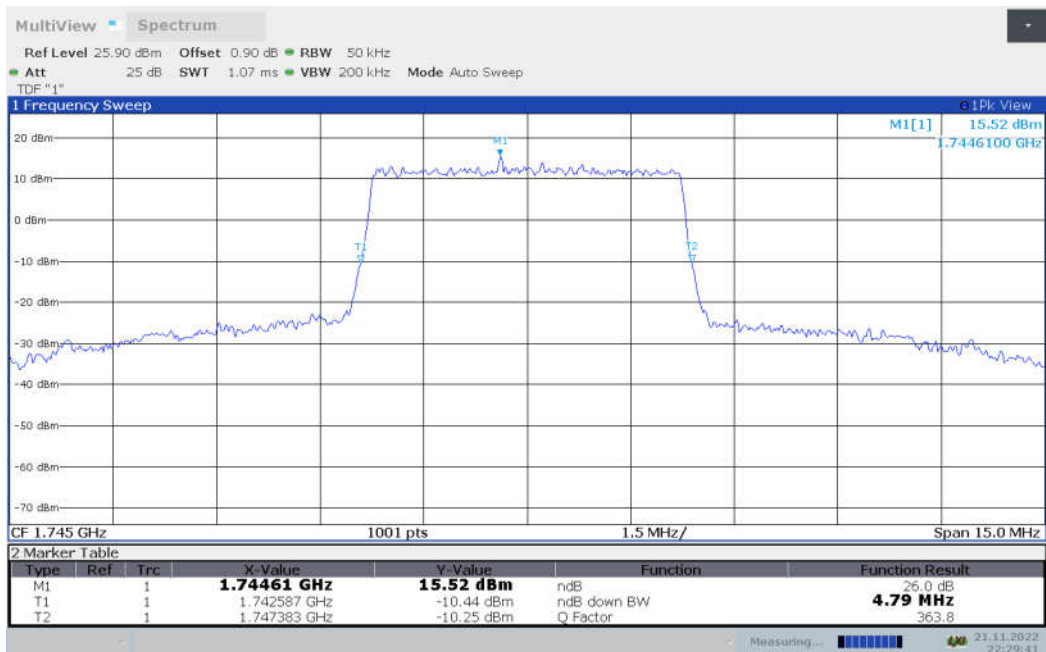
LTE band 66,5MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	4.855	4.795

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



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

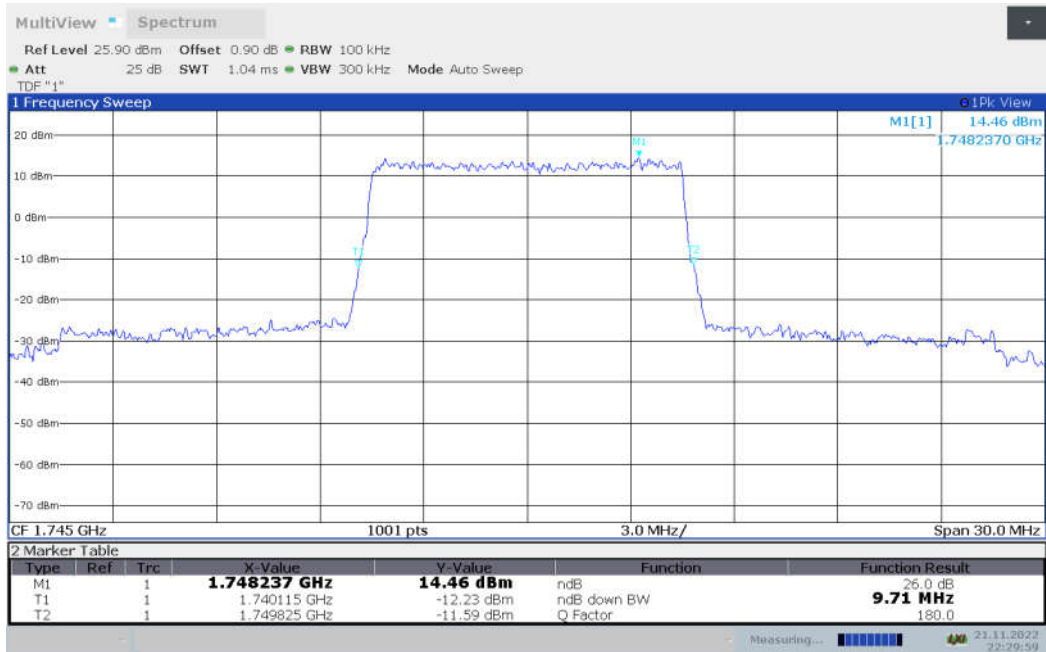




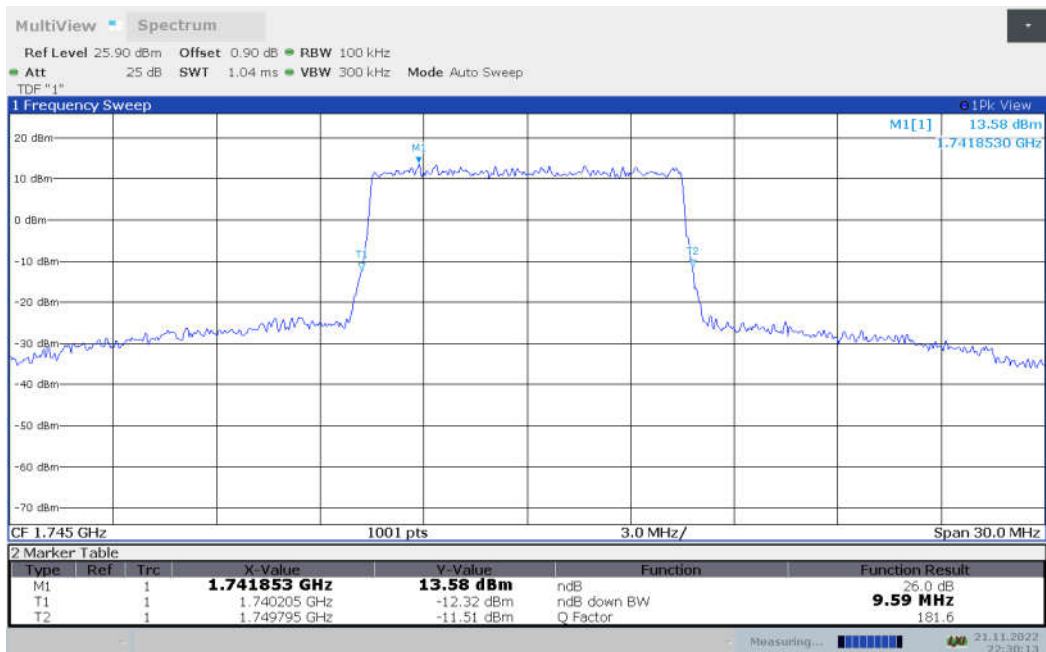
LTE band 66,10MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	9.710	9.590

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



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

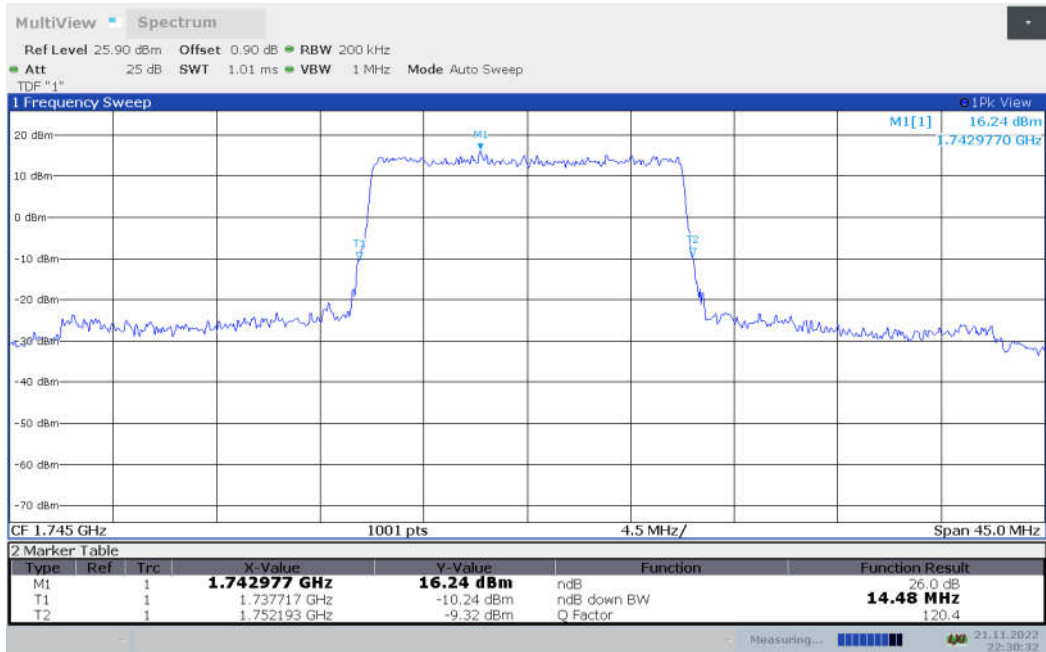




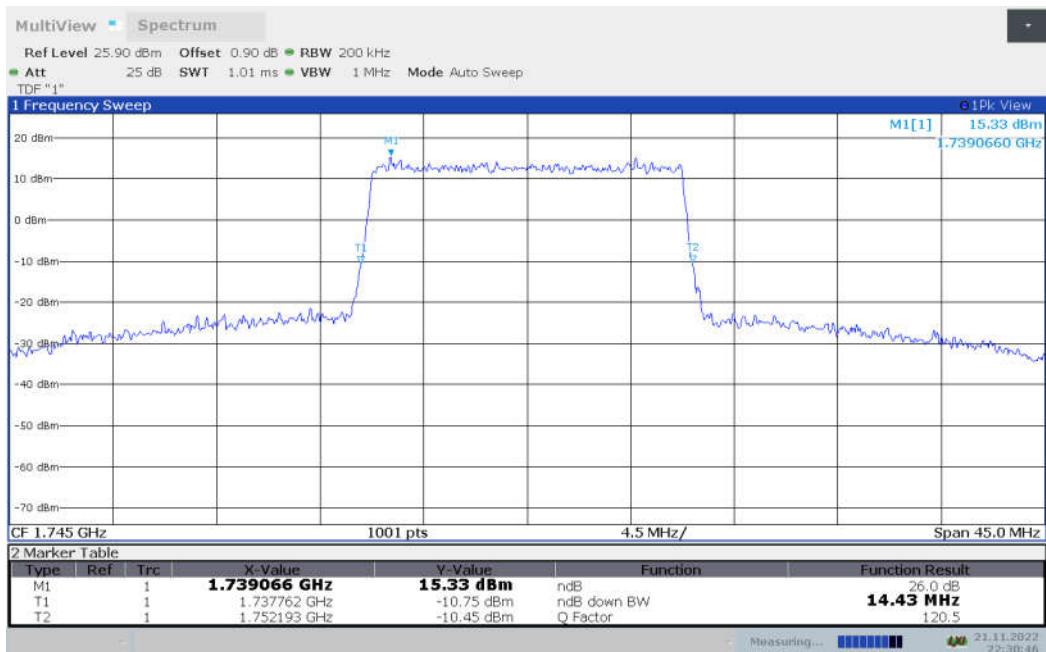
LTE band 66,15MHz(-26dBc BW)

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

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



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

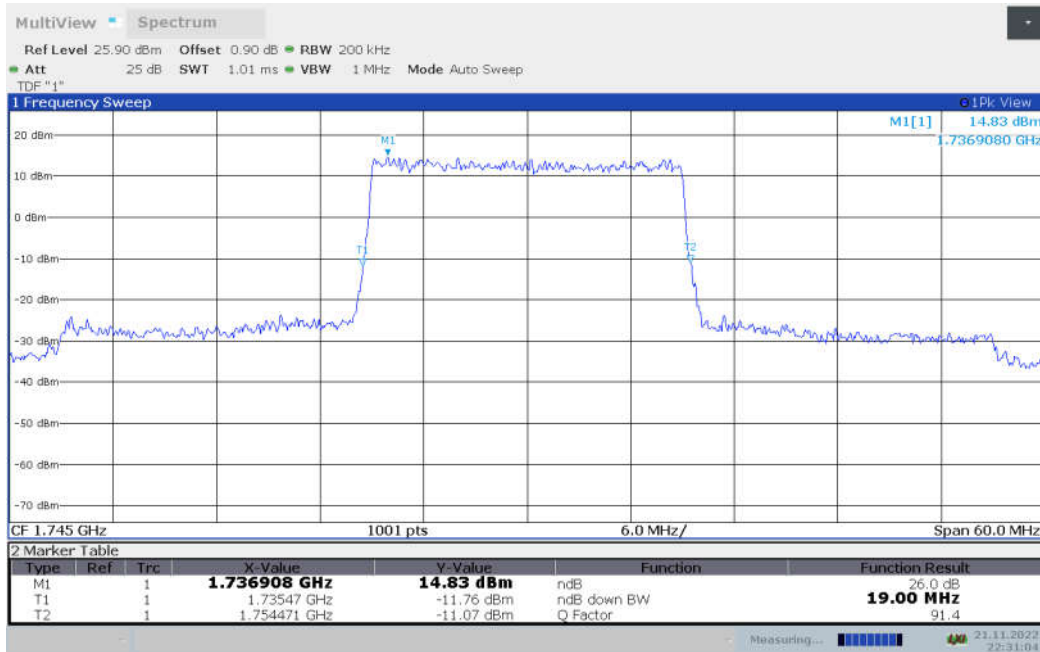




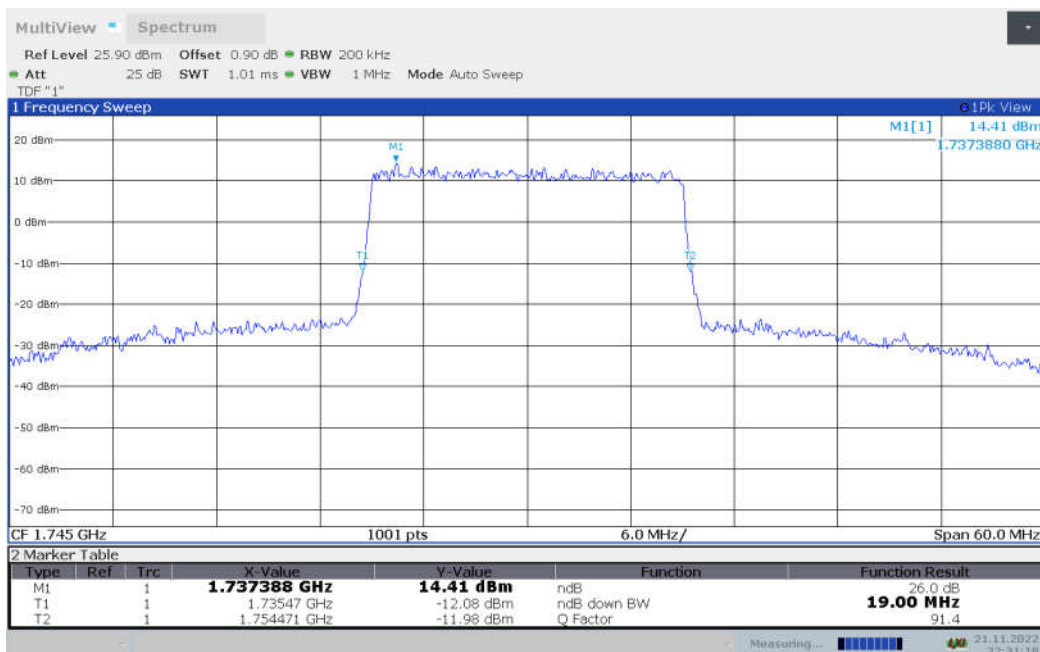
LTE band 66,20MHz(-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1745	19.001	19.001

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



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



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



A.6 BAND EDGE COMPLIANCE

Reference

FCC: CFR Part 2.1051, 22.917, 24.238, 27.53.

A.6.1 Measurement limit

Part 22.917 For operations in the 824–849MHz band, the FCC limit is $43 + 10 \log (P)$ dB below the transmitter power(P) in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

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 that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. 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.

A.6.2 Measurement Procedure

The testing follows ANSI C63.26

- a) The EUT was connected to spectrum analyzer and system simulator via a power divider.
- b) The band edges of low and high channels for the highest RF powers were measured.
- c) Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- d) Set spectrum analyzer with RMS detector.
- e) The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- f) Checked that all the results comply with the emission limit line.

A.6.3 Measurement result

Only worst case result is given below

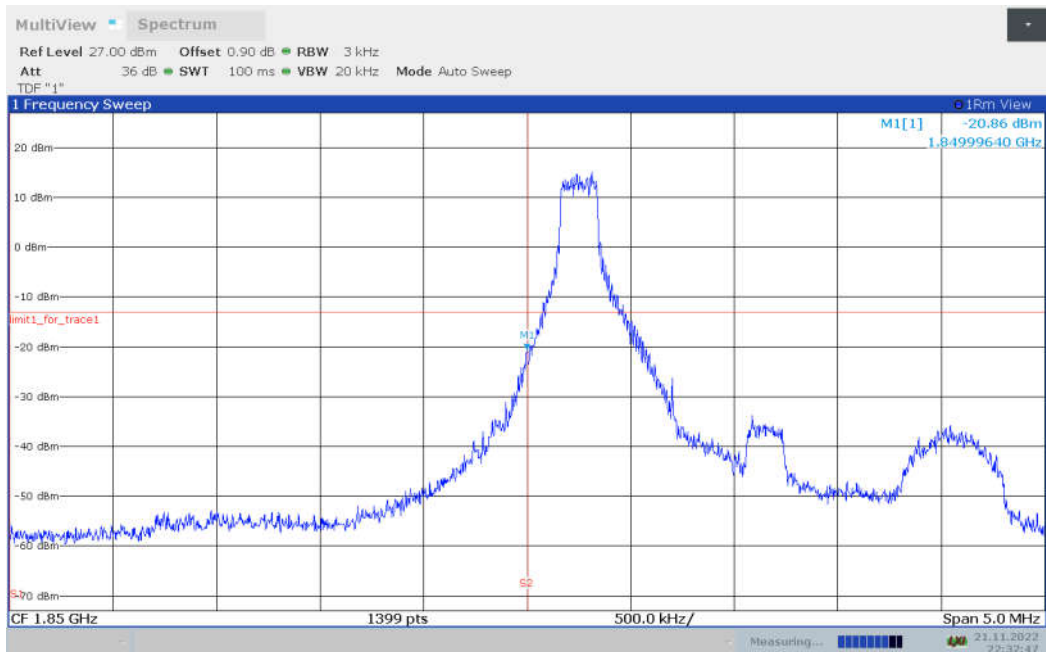


LTE band 2

OBW: 1RB-LOW_offset

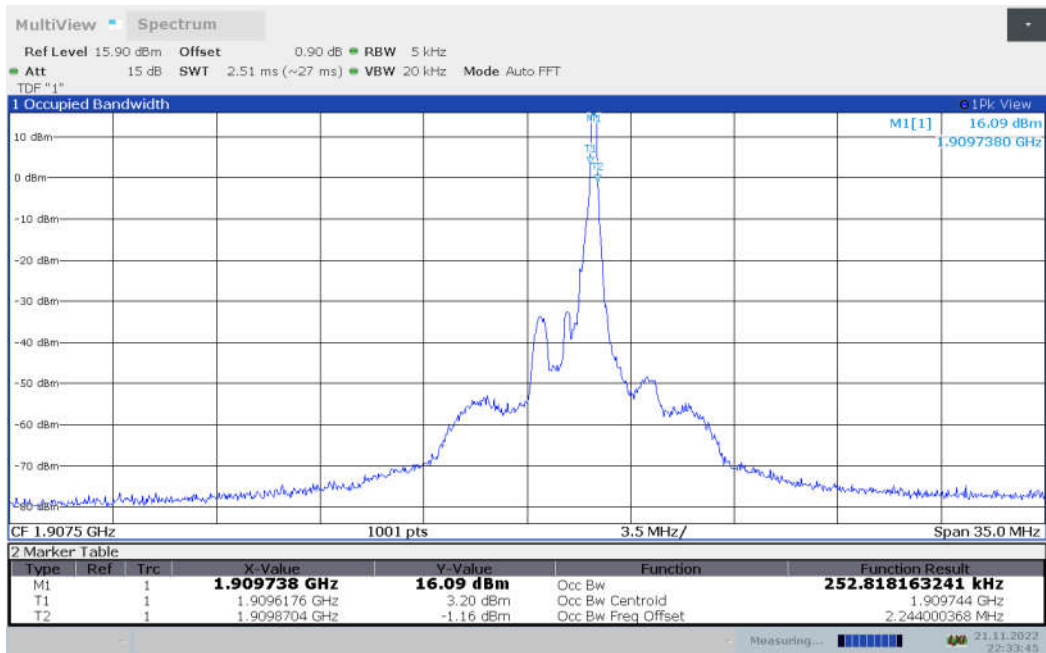


LOW BAND EDGE BLOCK-1RB-LOW_offset

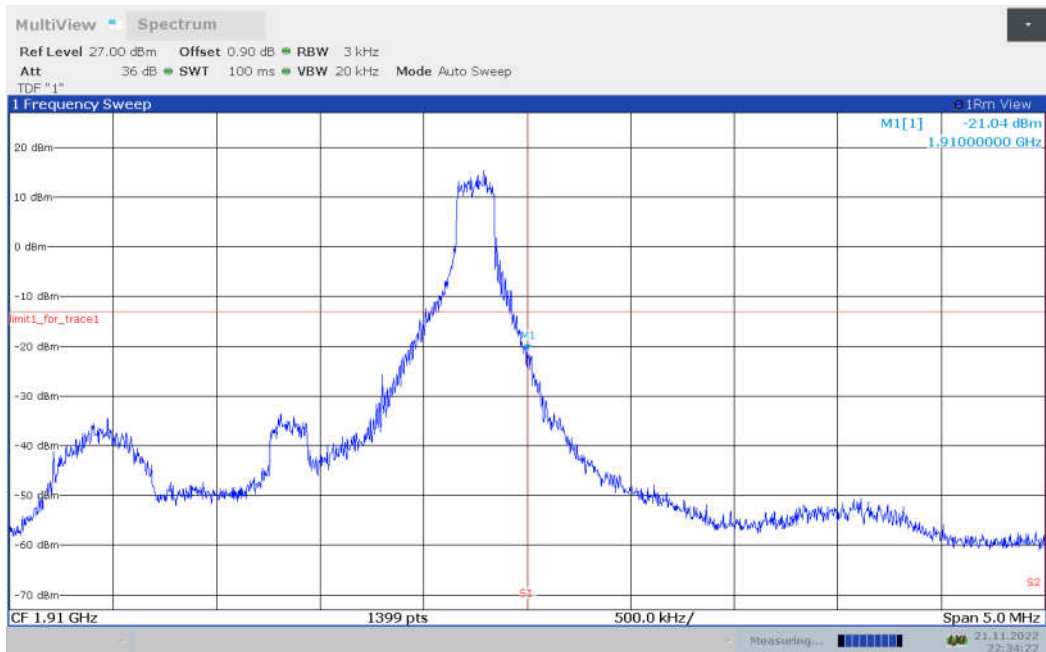




OBW: 1RB-HIGH_offset

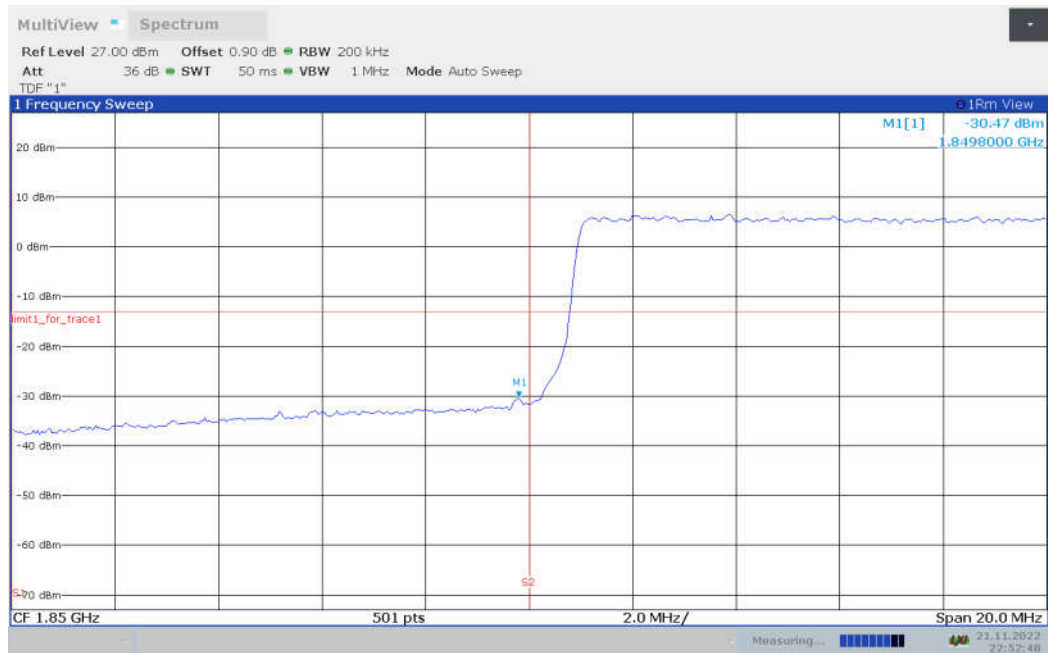


HIGH BAND EDGE BLOCK-1RB-HIGH_offset

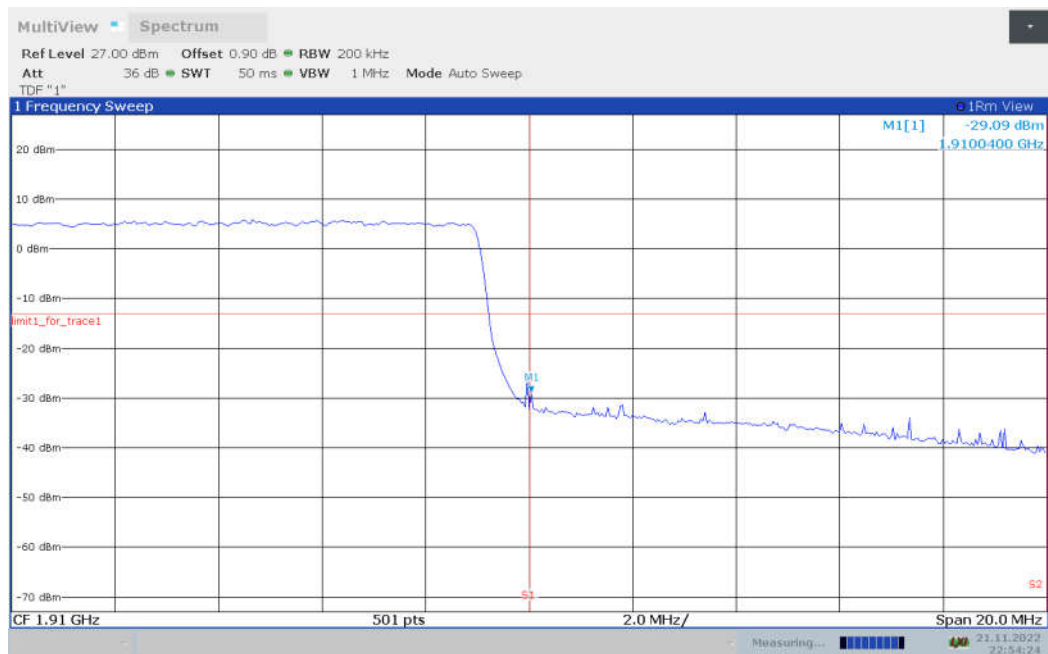




LOW BAND EDGE BLOCK-20M-100%RB



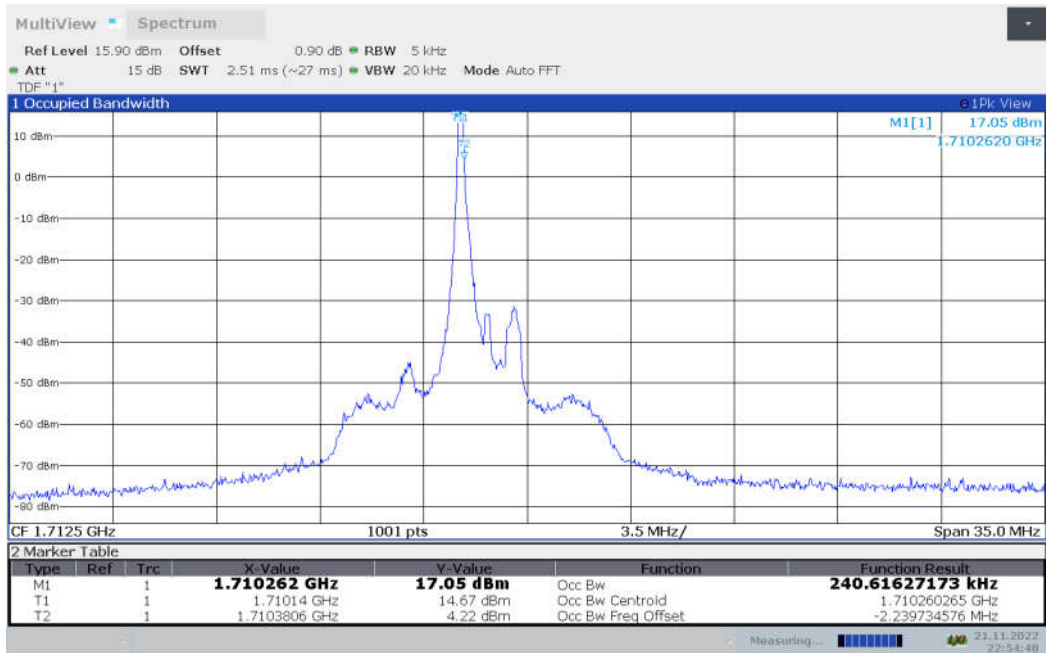
HIGH BAND EDGE BLOCK-20M-100%RB



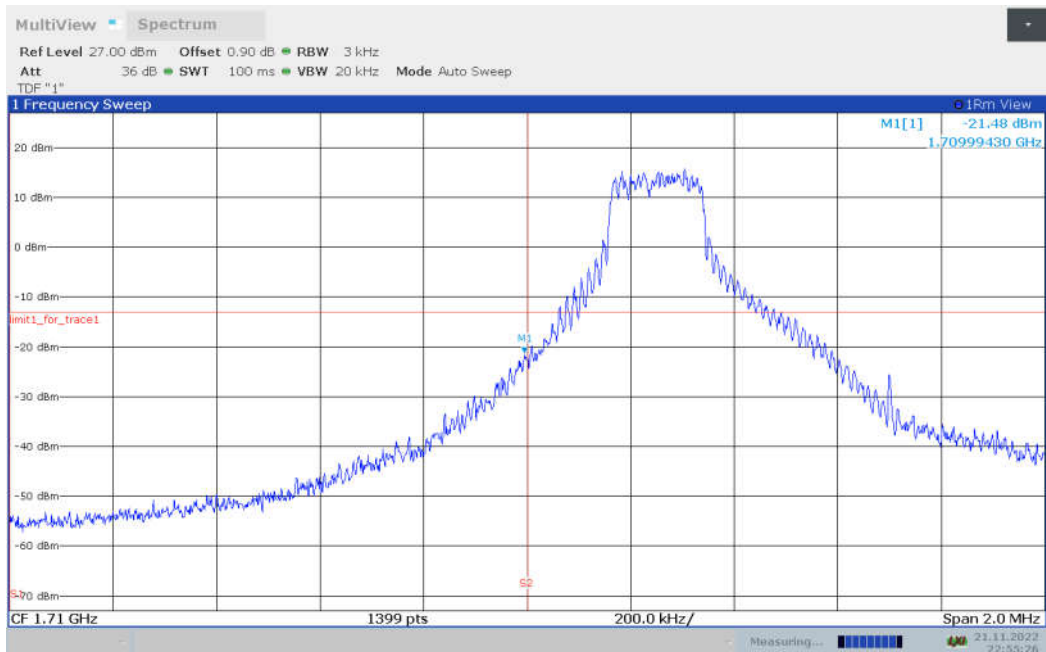


LTE band 4

OBW: 1RB-LOW_offset



LOW BAND EDGE BLOCK-1RB-LOW_offset

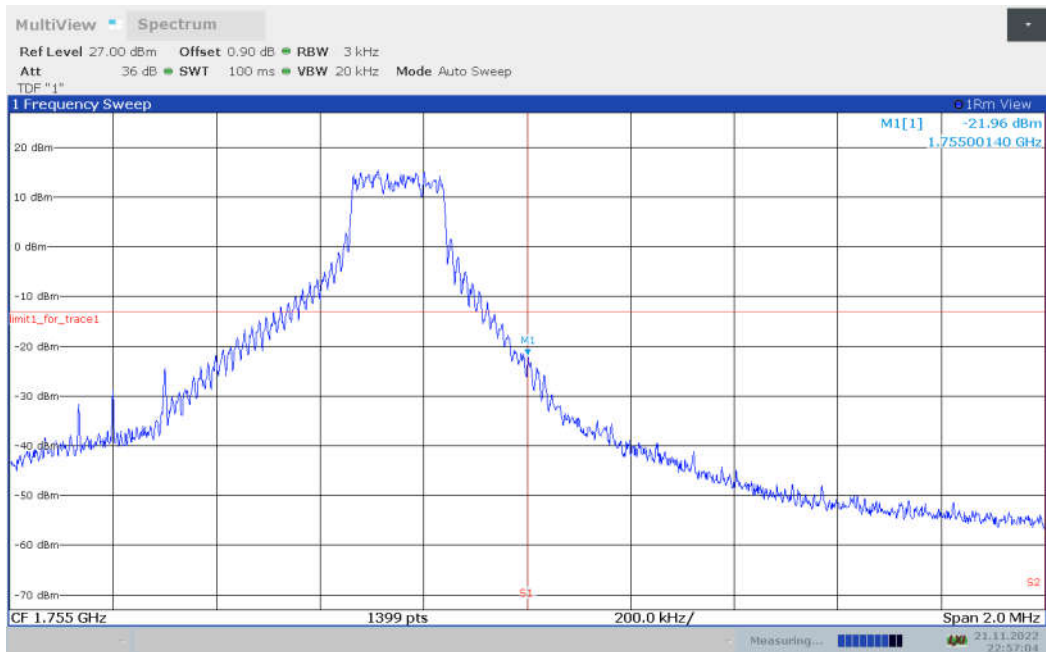




OBW: 1RB-HIGH_offset

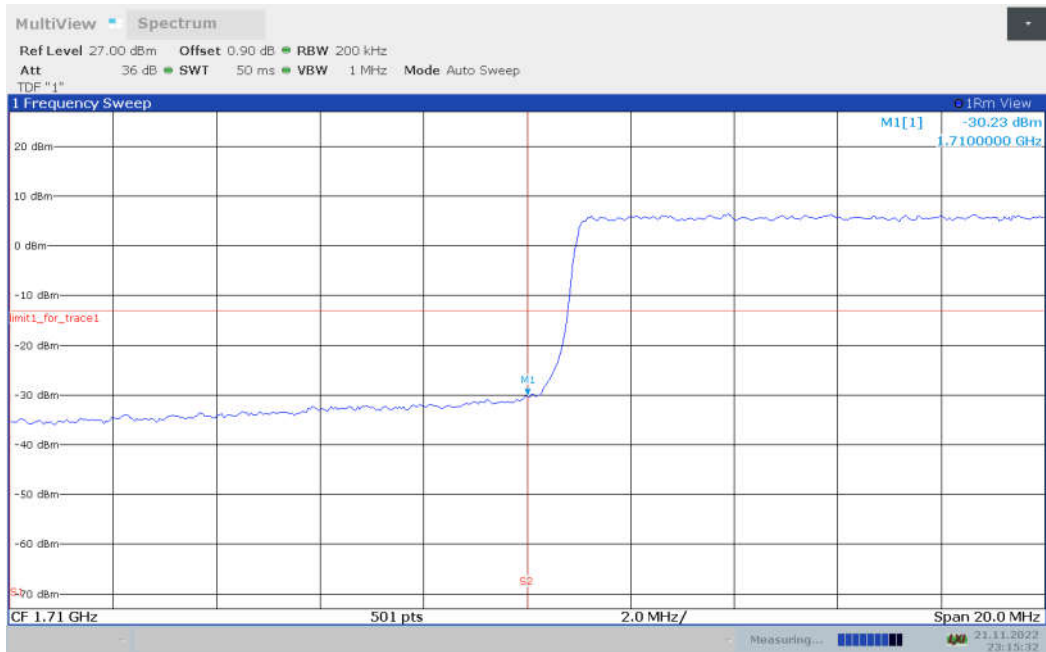


HIGH BAND EDGE BLOCK-1RB-HIGH_offset

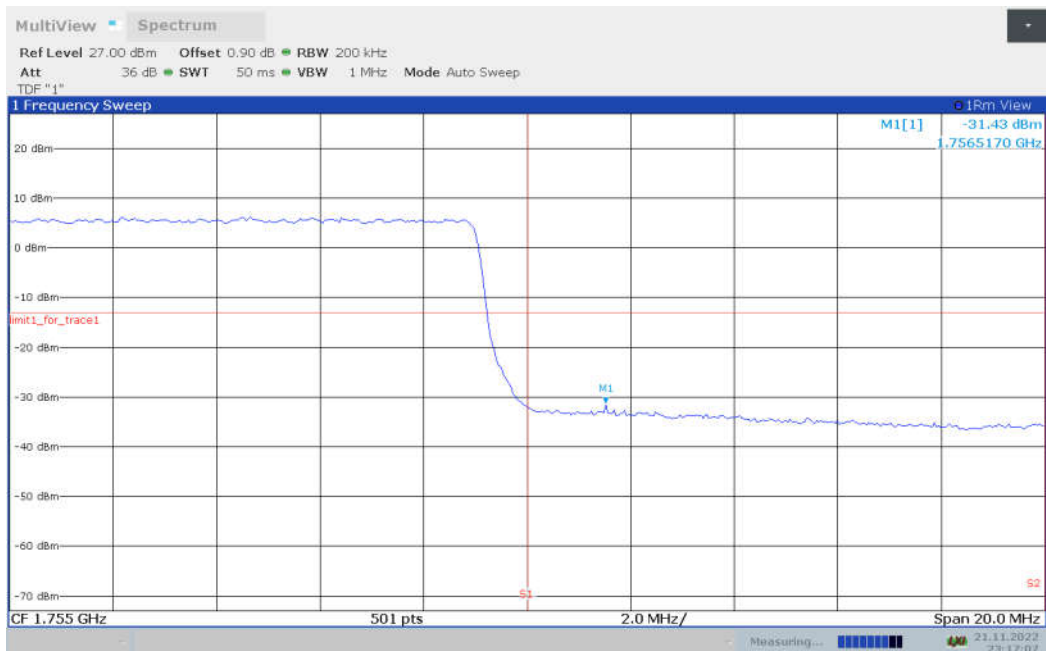




LOW BAND EDGE BLOCK-20M-100%RB



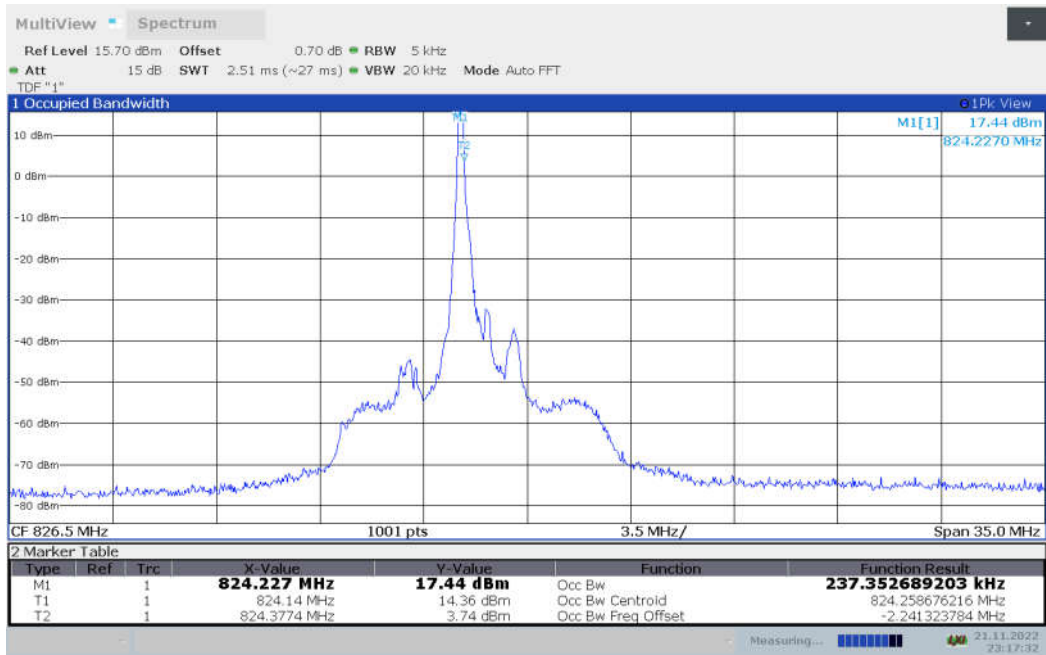
HIGH BAND EDGE BLOCK-20M-100%RB



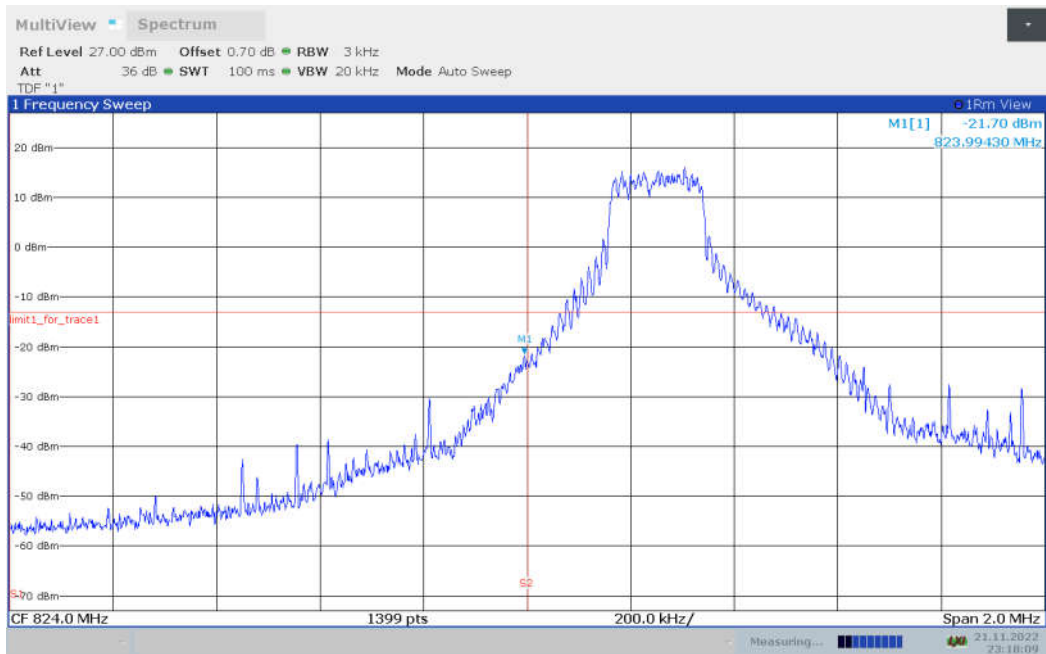


LTE band 5

OBW: 1RB-LOW_offset



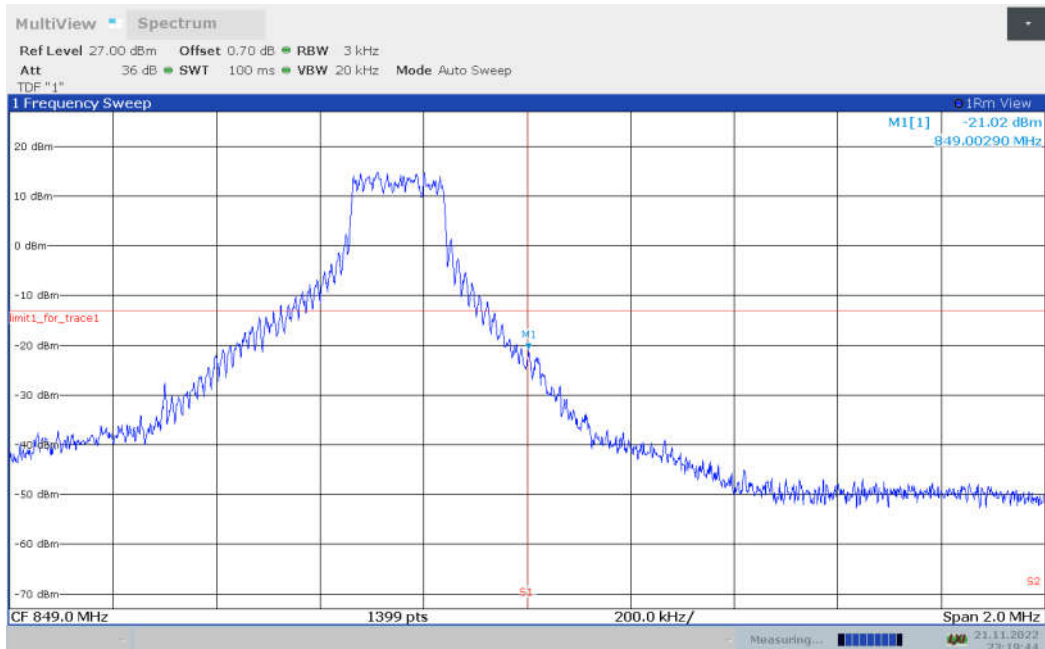
LOW BAND EDGE BLOCK-1RB-LOW_offset



OBW: 1RB-HIGH_offset

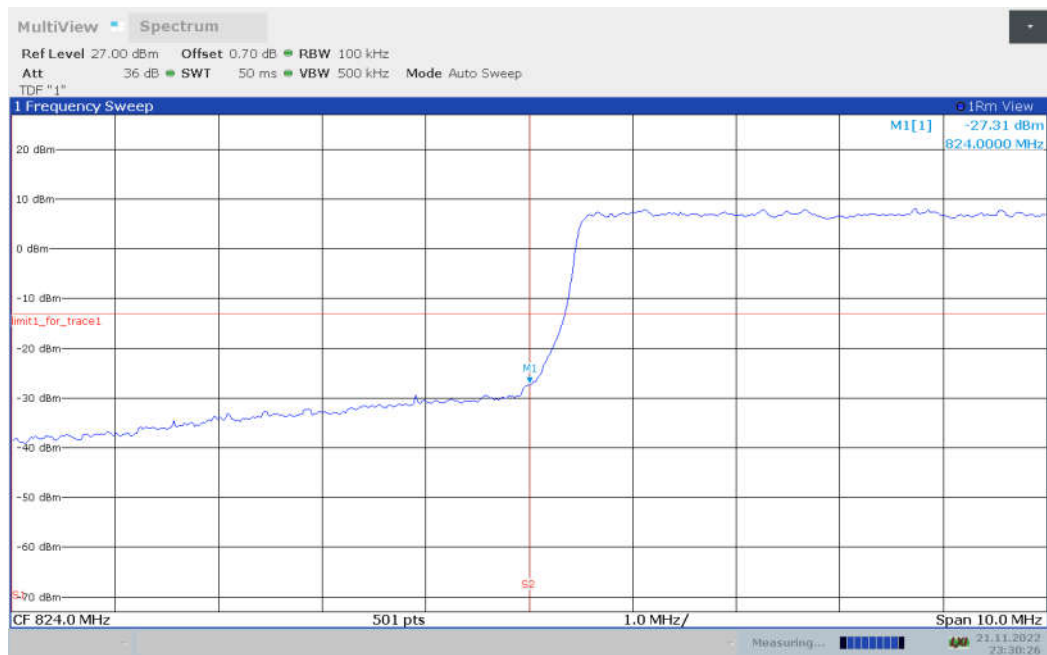


HIGH BAND EDGE BLOCK-1RB-HIGH_offset

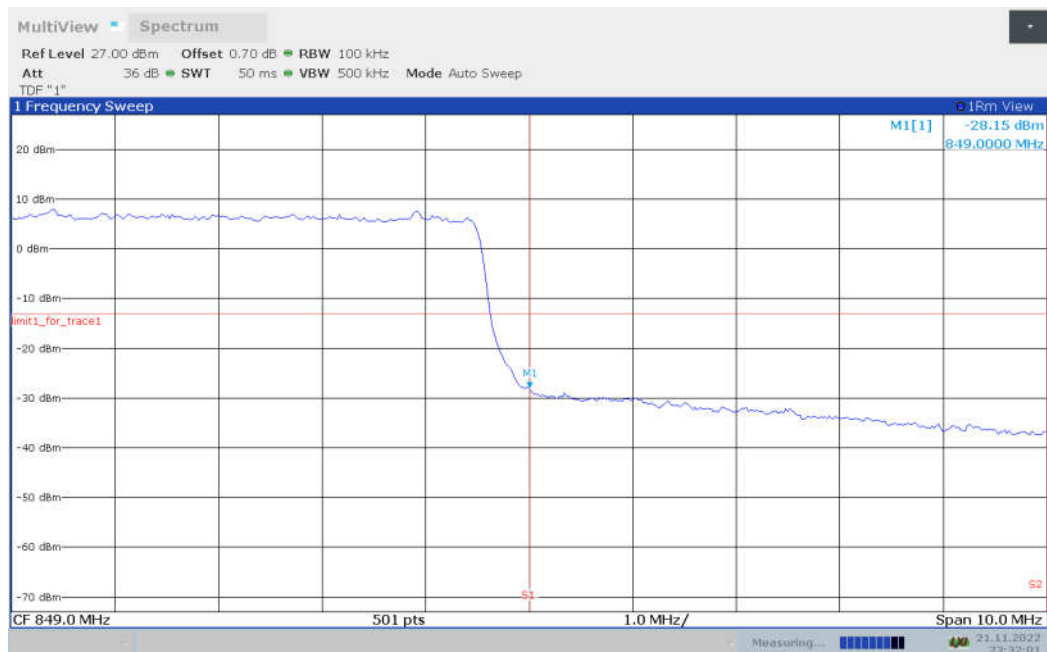




LOW BAND EDGE BLOCK-10M-100%RB



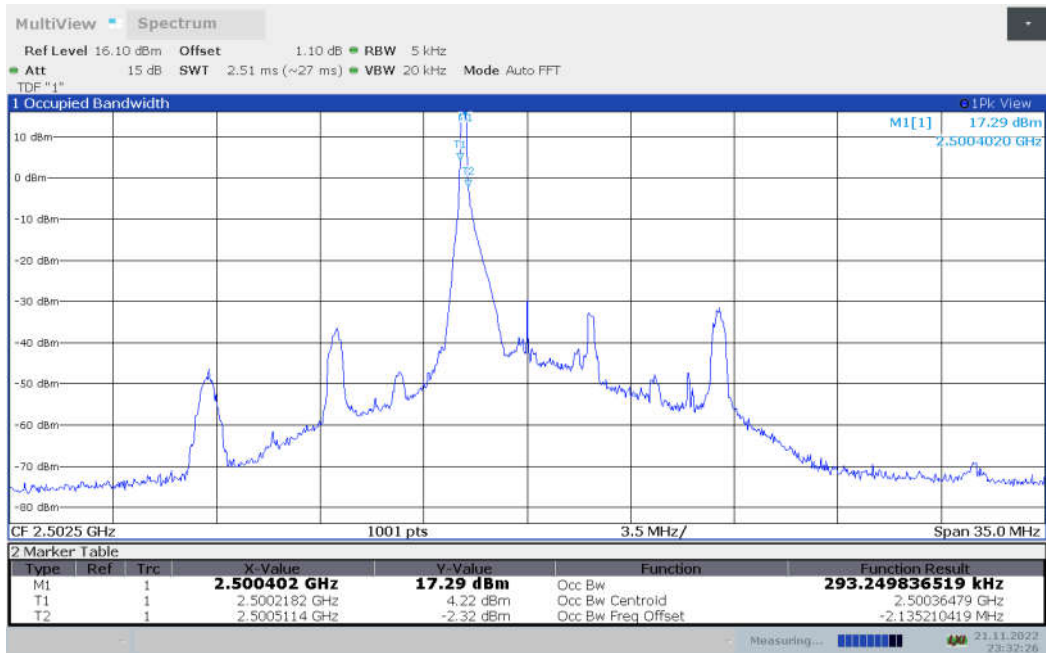
HIGH BAND EDGE BLOCK-10M-100%RB



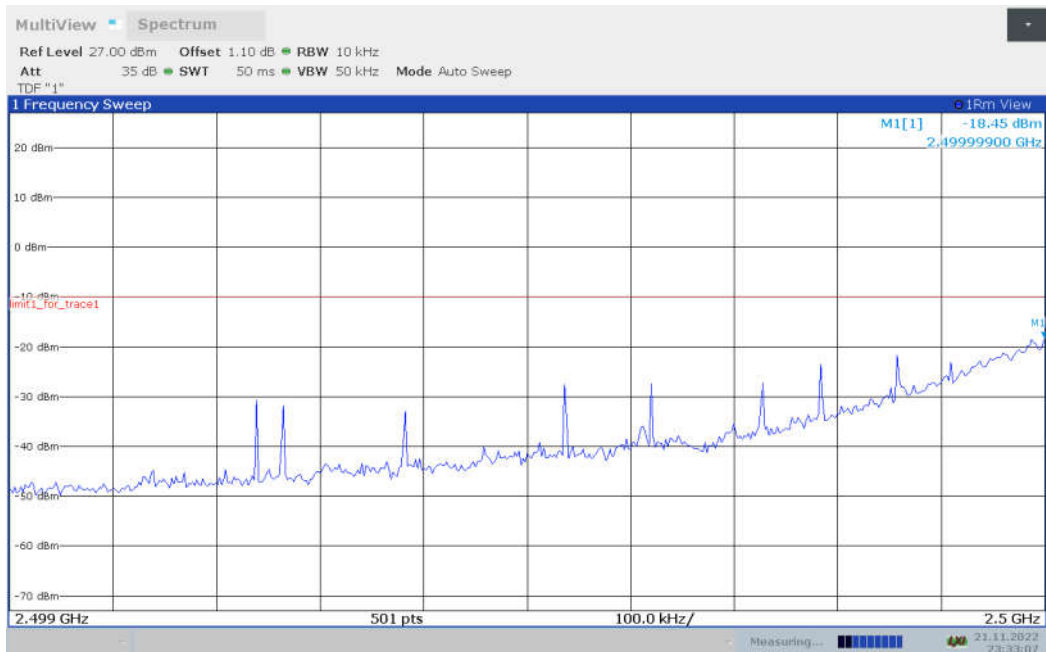


LTE band 7

OBW: 1RB-LOW_offset

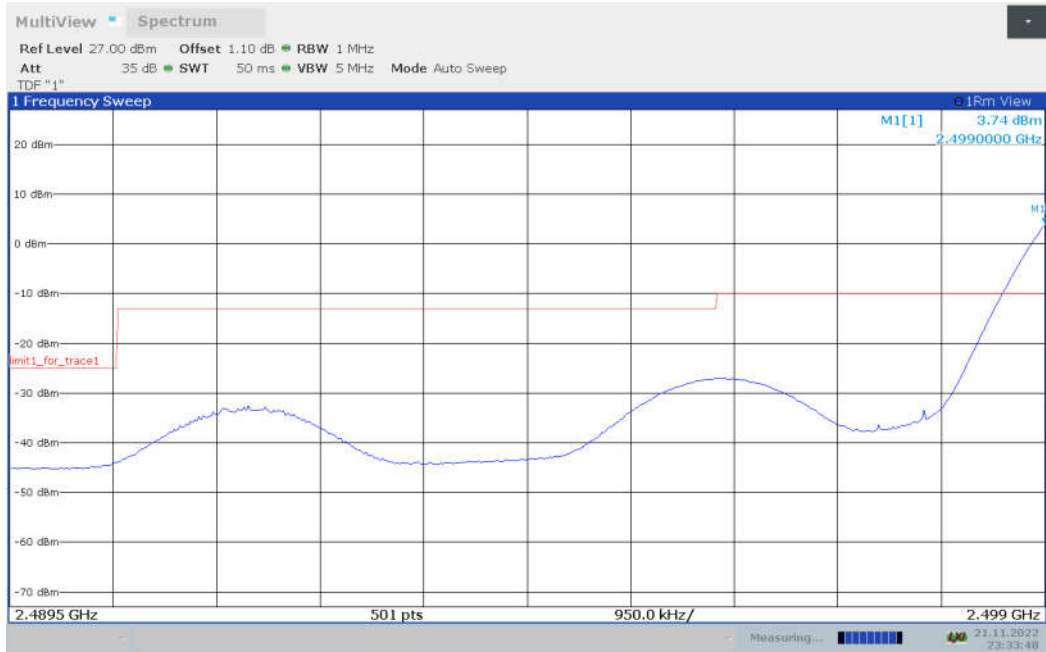


LOW BAND EDGE BLOCK-1RB-LOW_offset

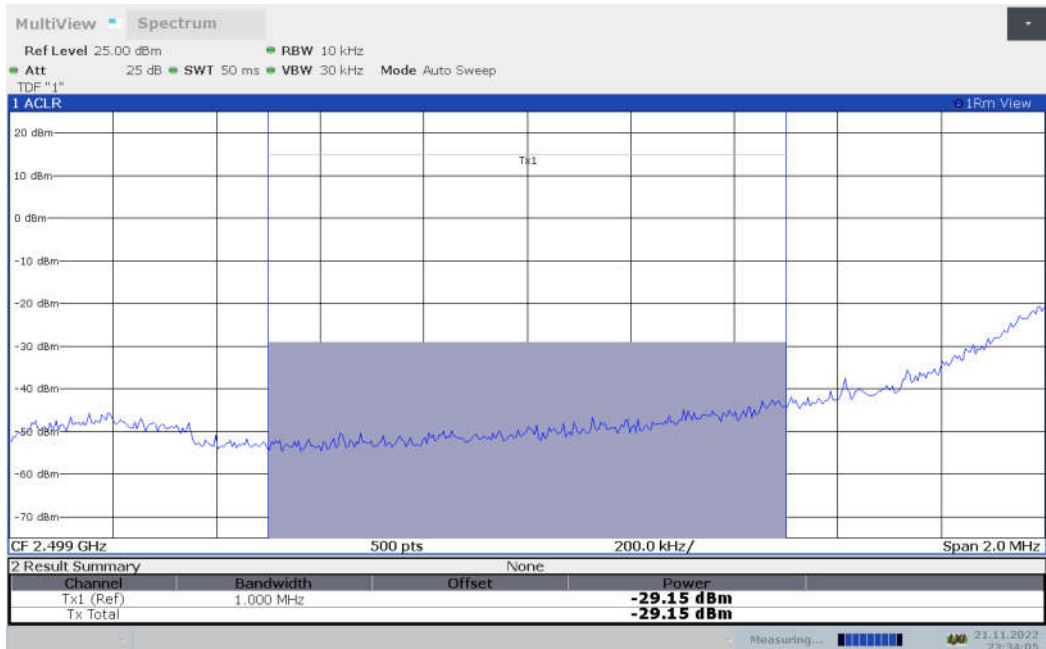




LOW BAND EDGE BLOCK-1RB-LOW_offset

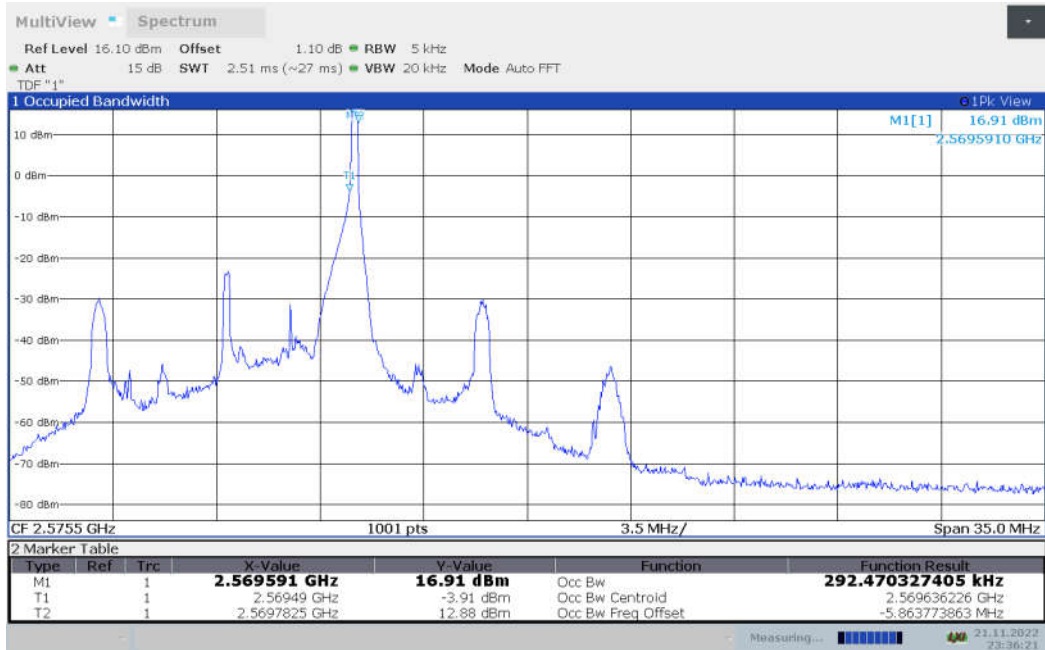


Channel power

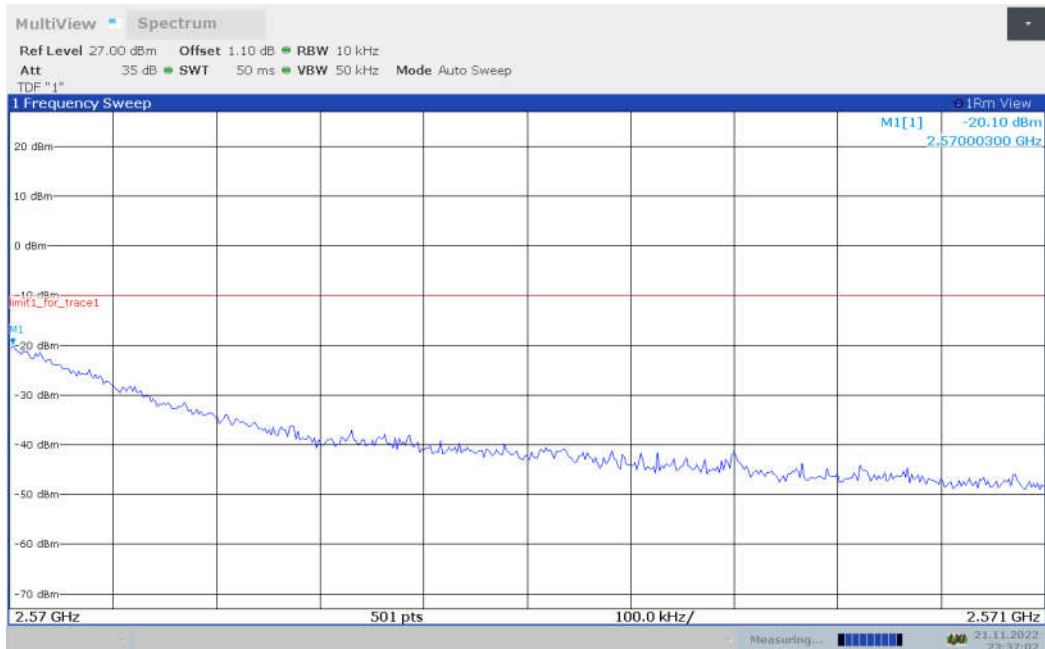




OBW: 1RB-HIGH_offset



HIGH BAND EDGE BLOCK-1RB-HIGH_offset



HIGH BAND EDGE BLOCK-1RB-HIGH_offset