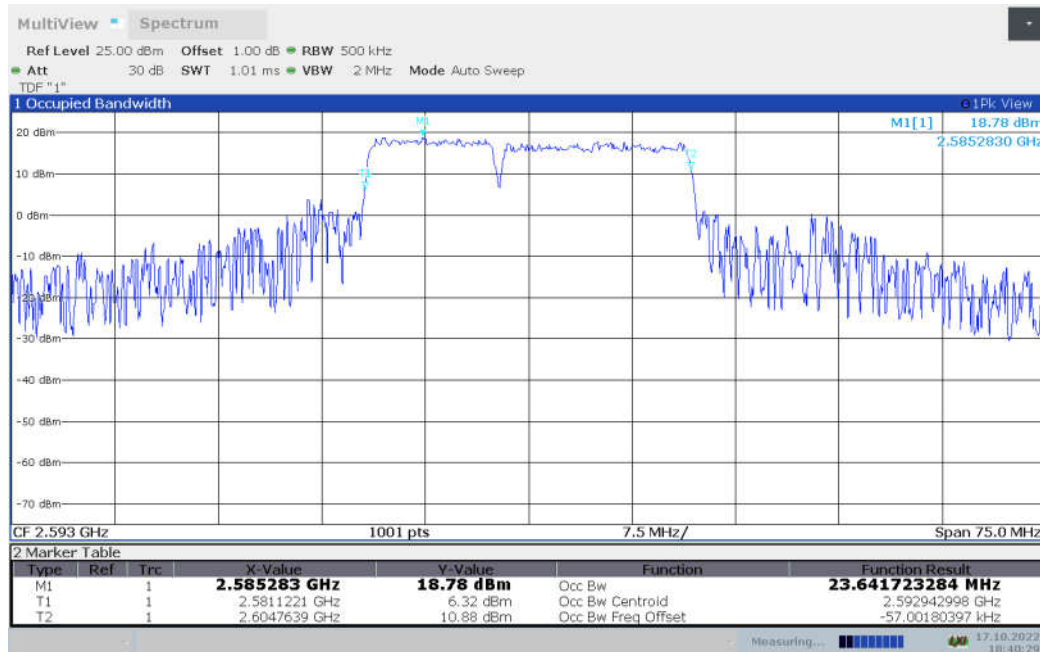




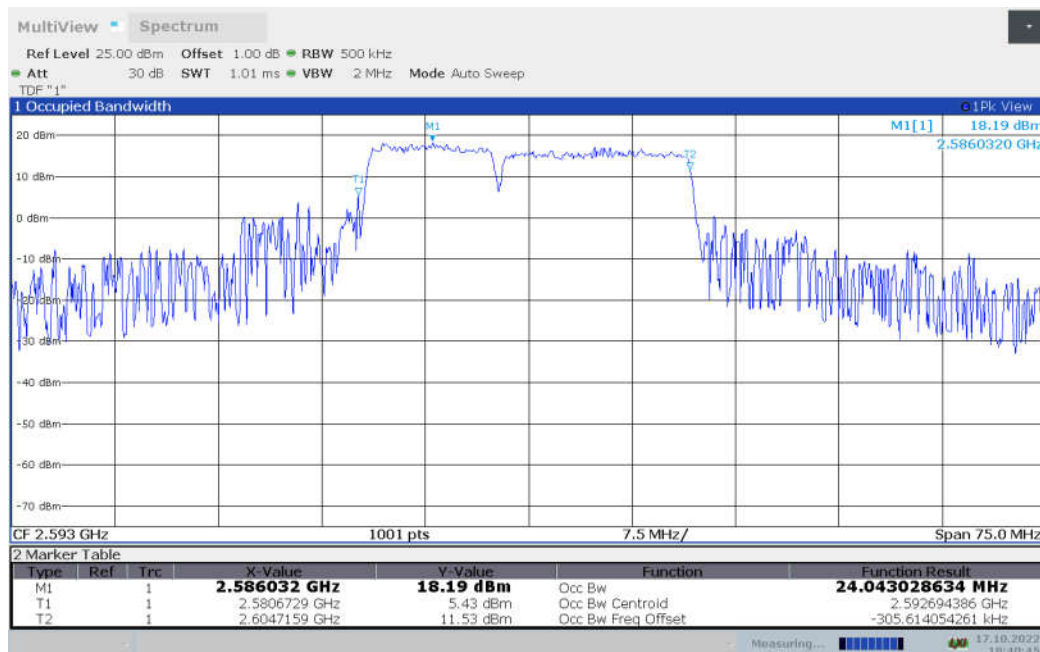
LTE band CA_41C,10MHz+15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2595	23.642	24.043

LTE band CA_41C , 10MHz+15MHz Bandwidth,QPSK (99% BW)



LTE band CA_41C , 10MHz+15MHz Bandwidth,16QAM (99% BW)

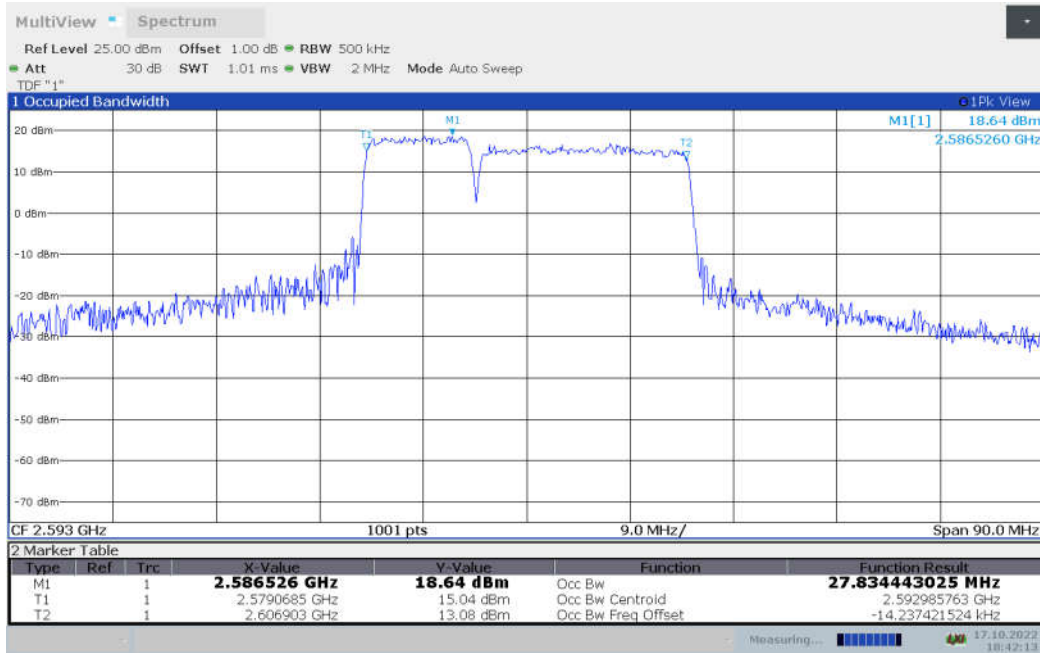




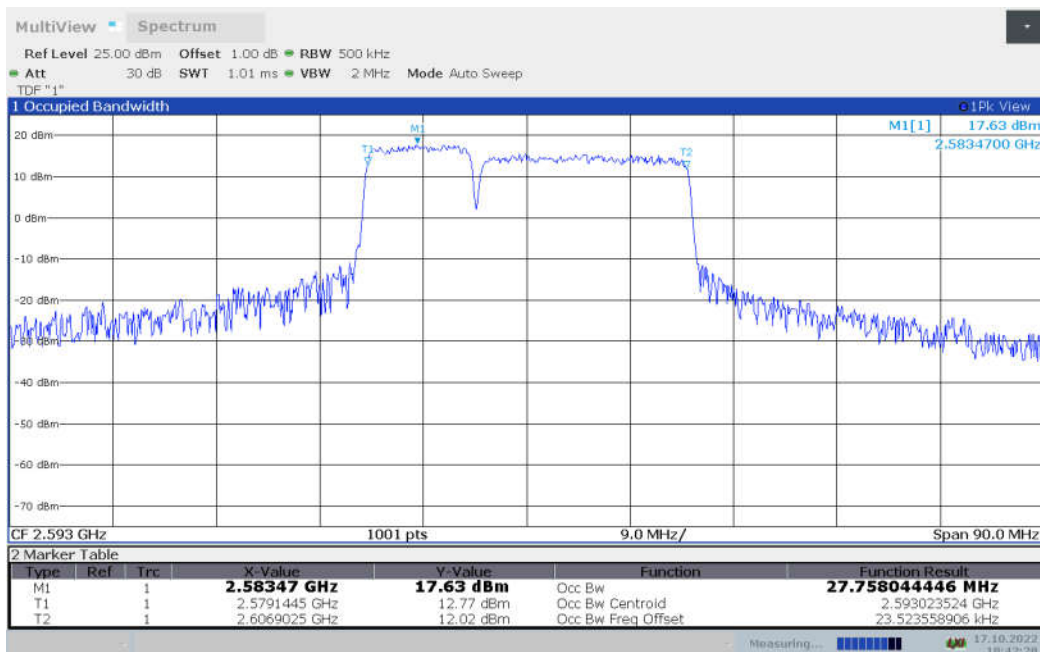
LTE band CA_41C,10MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2595	27.834	27.758

LTE band CA_41C , 10MHz+20MHz Bandwidth,QPSK (99% BW)



LTE band CA_41C , 10MHz+20MHz Bandwidth,16QAM (99% BW)

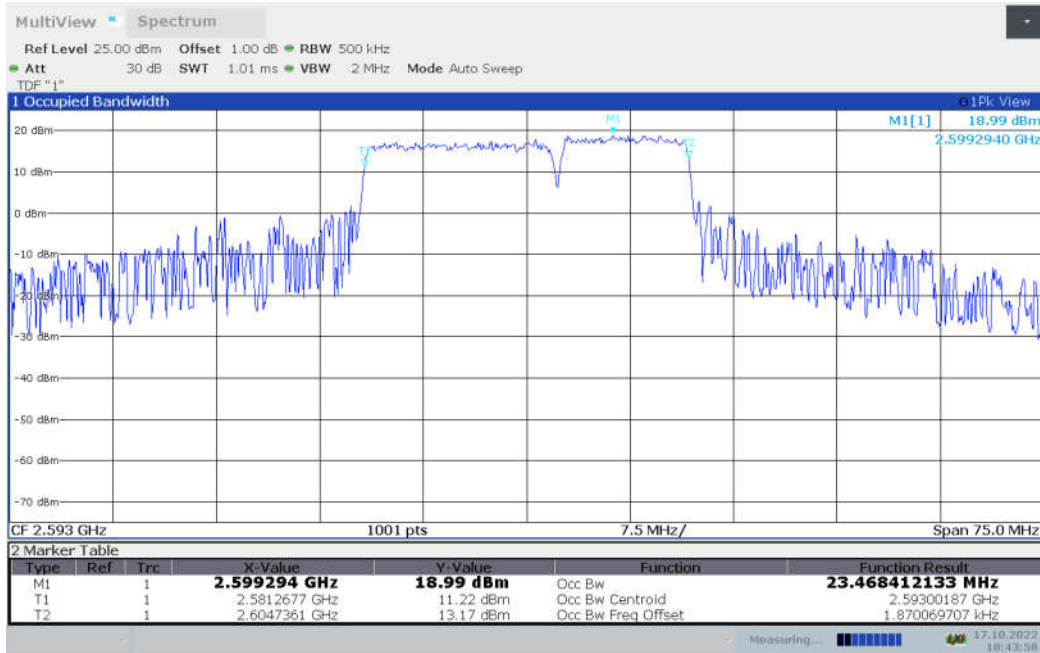




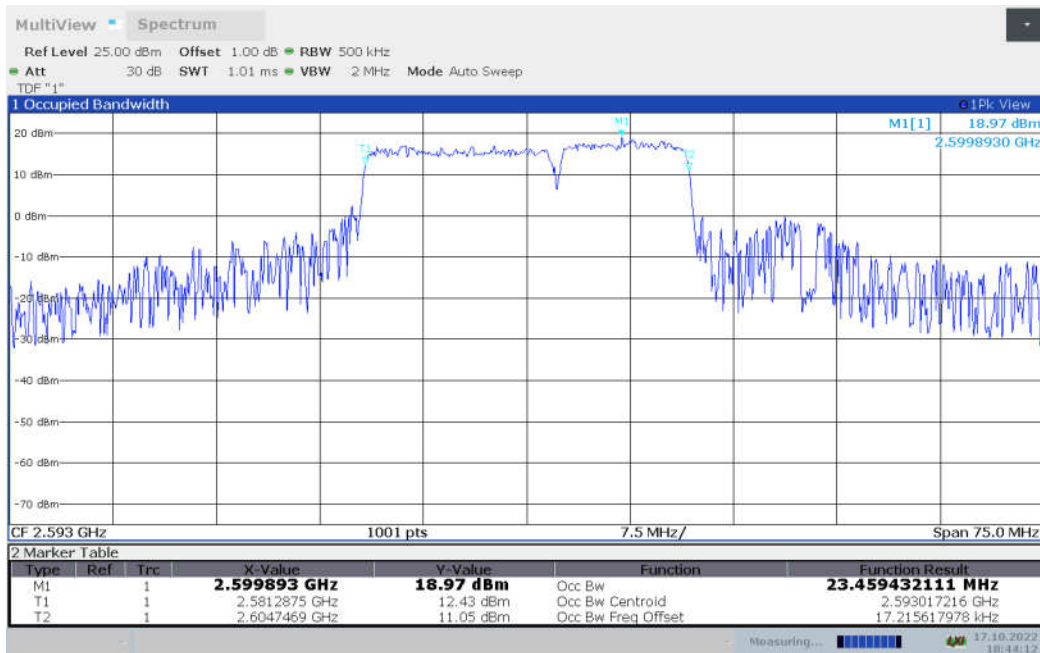
LTE band CA_41C,15MHz+10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2595	23.468	23.459

LTE band CA_41C , 15MHz+10MHz Bandwidth,QPSK (99% BW)



LTE band CA_41C , 15MHz+10MHz Bandwidth,16QAM (99% BW)

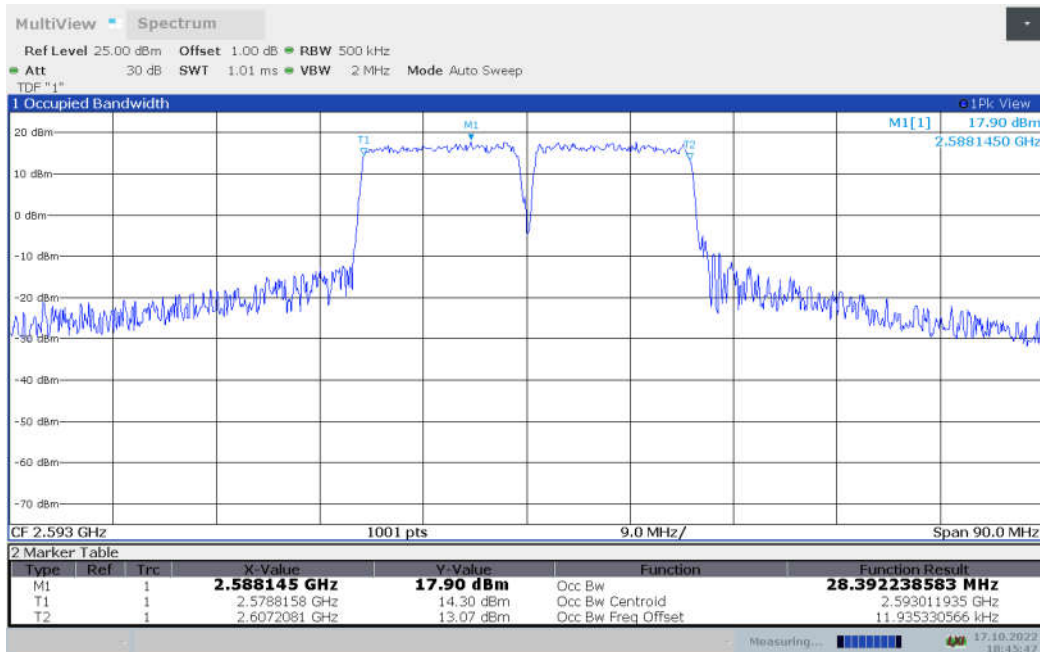




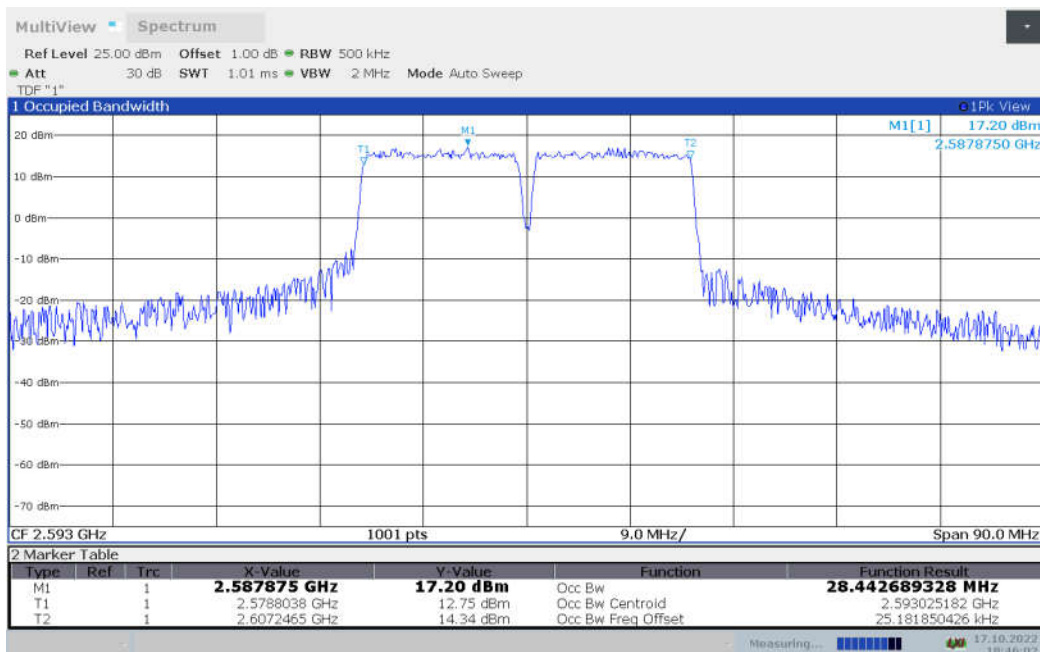
LTE band CA_41C,15MHz+15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2595	28.392	28.443

LTE band CA_41C , 15MHz+15MHz Bandwidth,QPSK (99% BW)



LTE band CA_41C , 15MHz+15MHz Bandwidth,16QAM (99% BW)

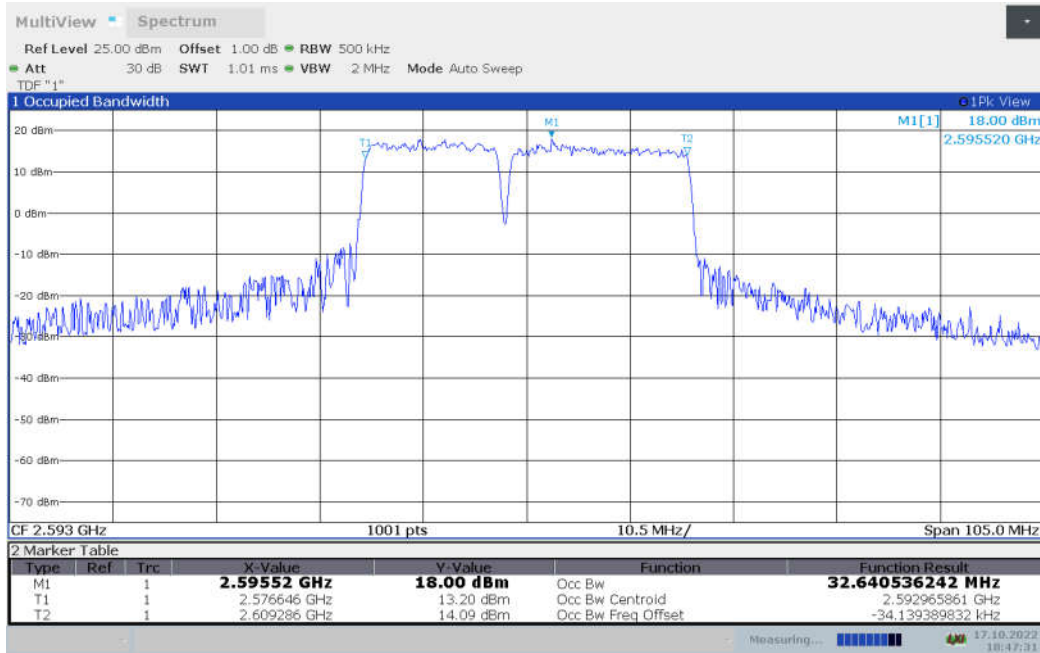




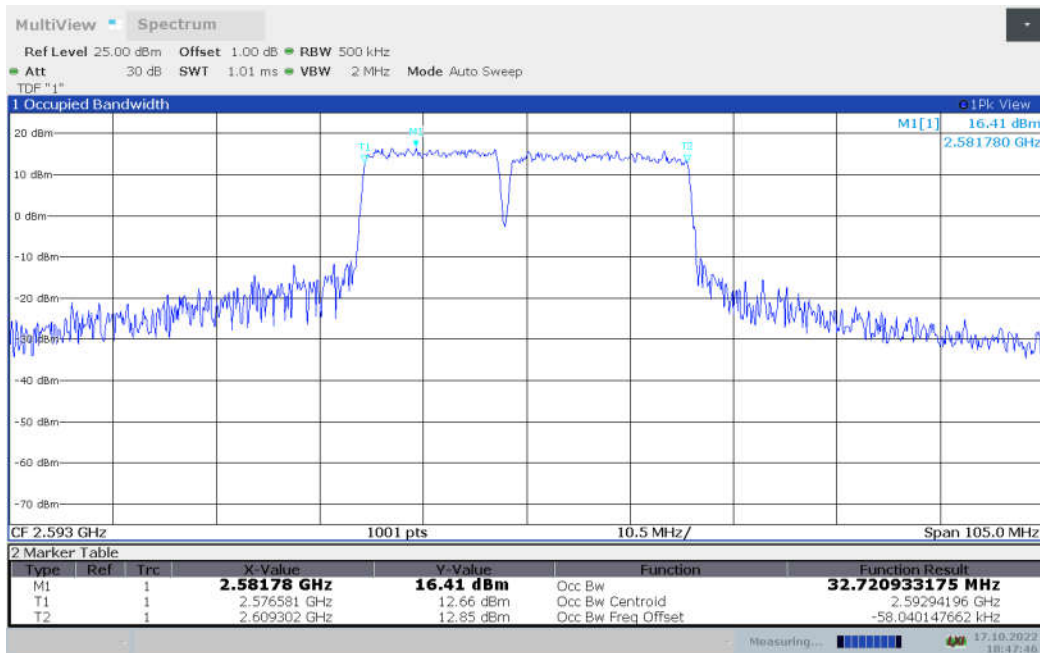
LTE band CA_41C,15MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2595	32.641	32.721

LTE band CA_41C , 15MHz+20MHz Bandwidth,QPSK (99% BW)



LTE band CA_41C , 15MHz+20MHz Bandwidth,16QAM (99% BW)

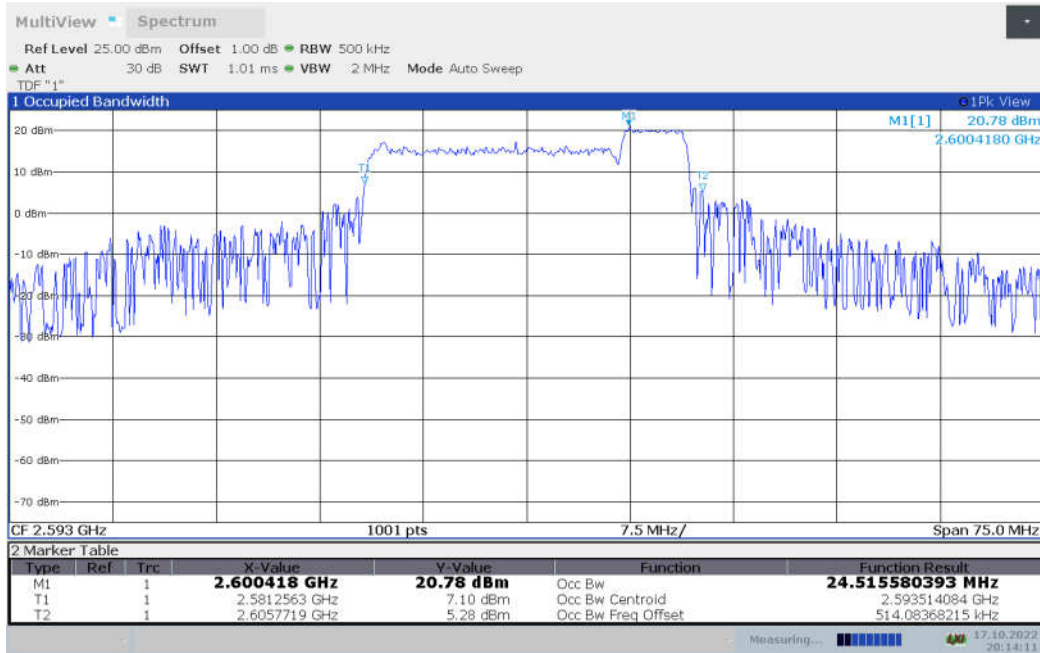




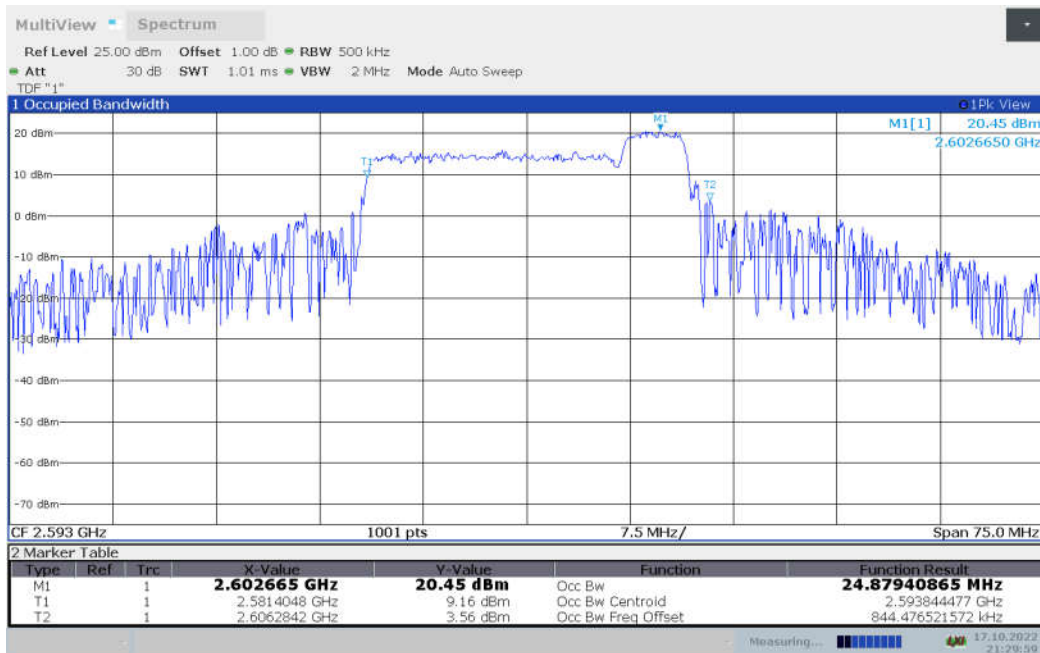
LTE band CA_41C,20MHz+5MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2595	24.516	24.879

LTE band CA_41C , 20MHz+5MHz Bandwidth,QPSK (99% BW)



LTE band CA_41C , 20MHz+5MHz Bandwidth,16QAM (99% BW)

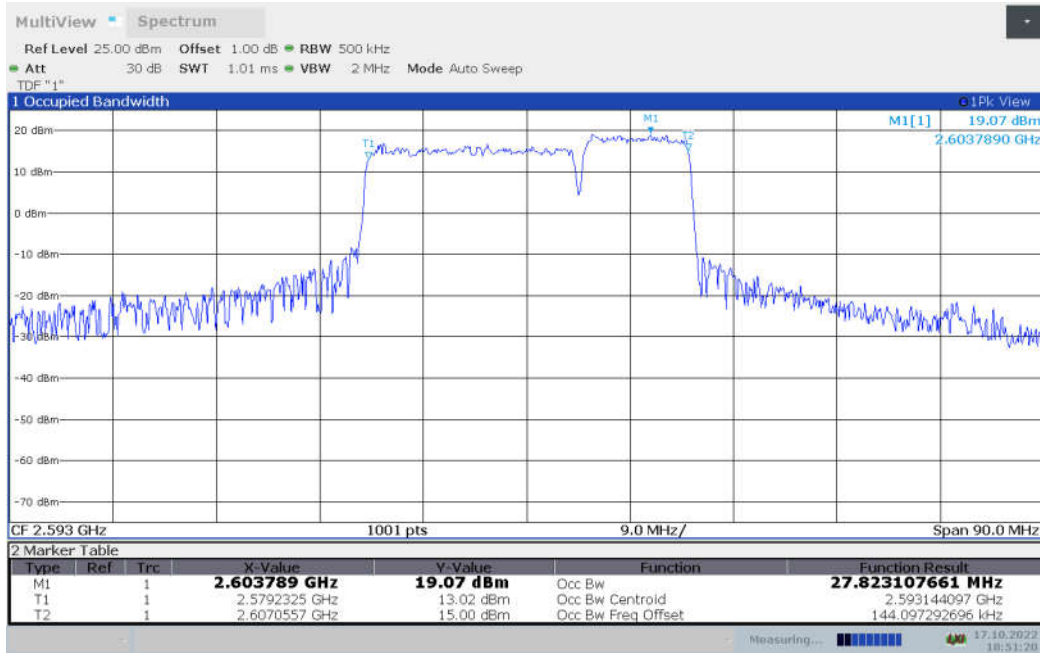




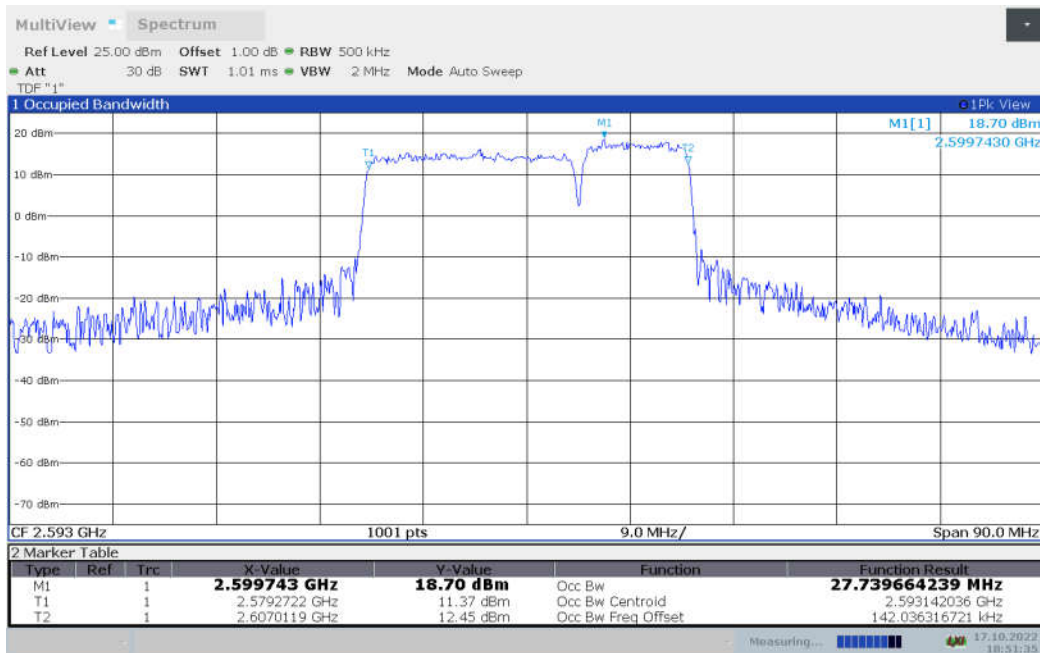
LTE band CA_41C,20MHz+10MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2595	27.823	27.740

LTE band CA_41C , 20MHz+10MHz Bandwidth,QPSK (99% BW)



LTE band CA_41C , 20MHz+10MHz Bandwidth,16QAM (99% BW)

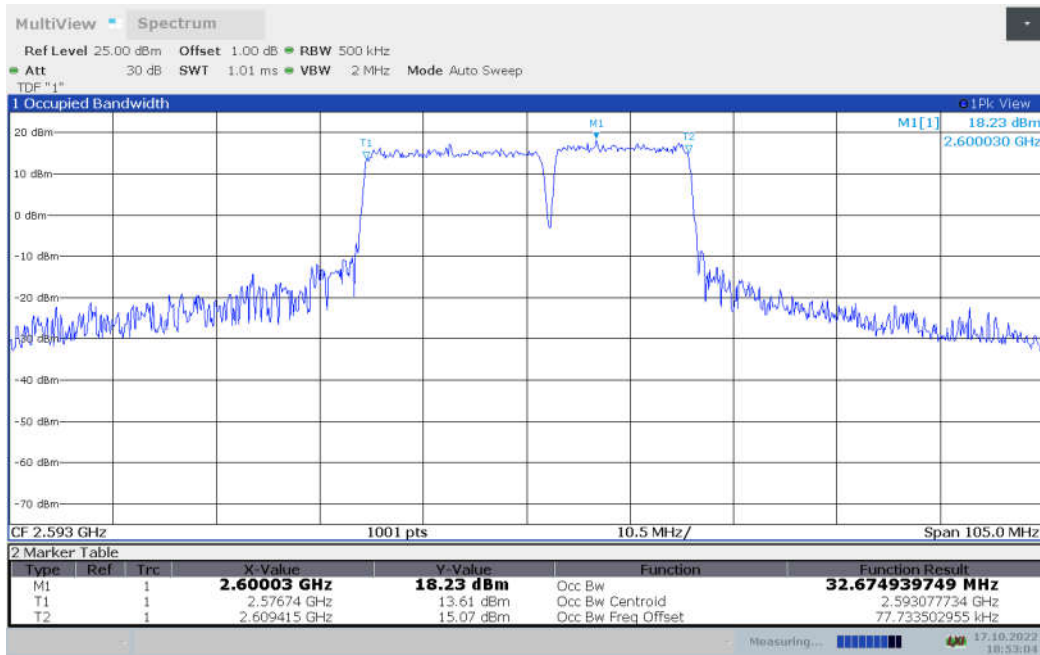




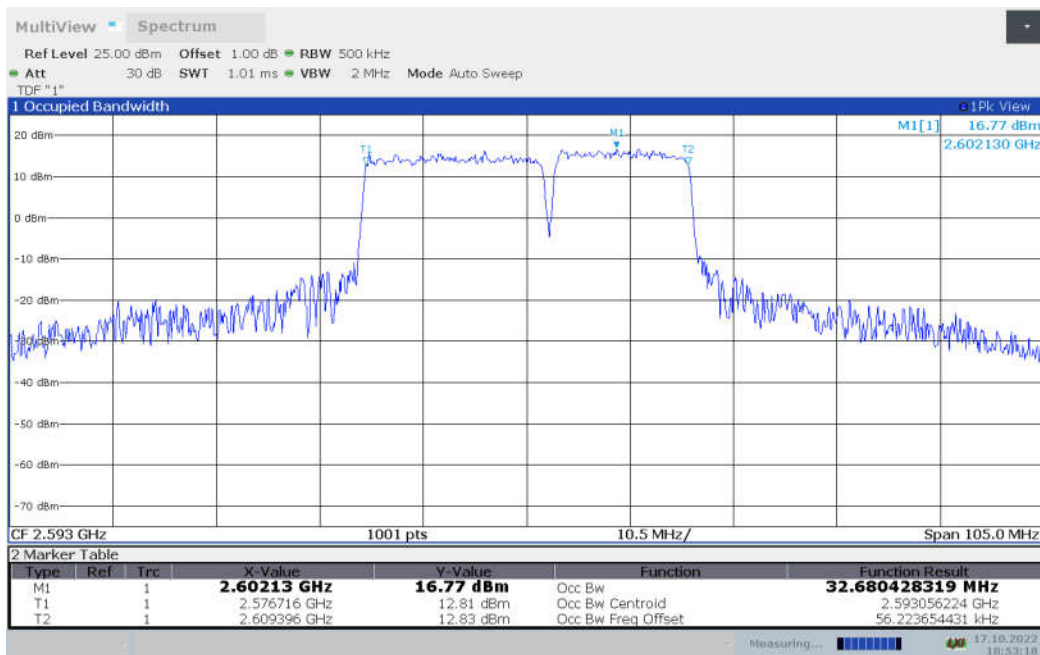
LTE band CA_41C,20MHz+15MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2595	32.675	32.680

LTE band CA_41C , 20MHz+15MHz Bandwidth,QPSK (99% BW)



LTE band CA_41C , 20MHz+15MHz Bandwidth,16QAM (99% BW)

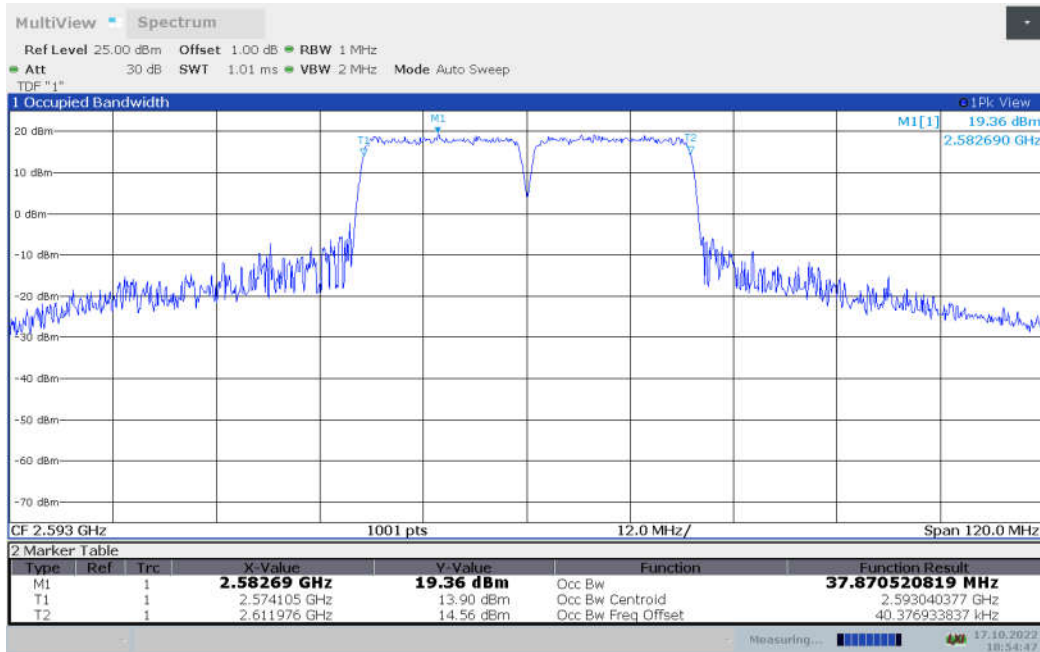




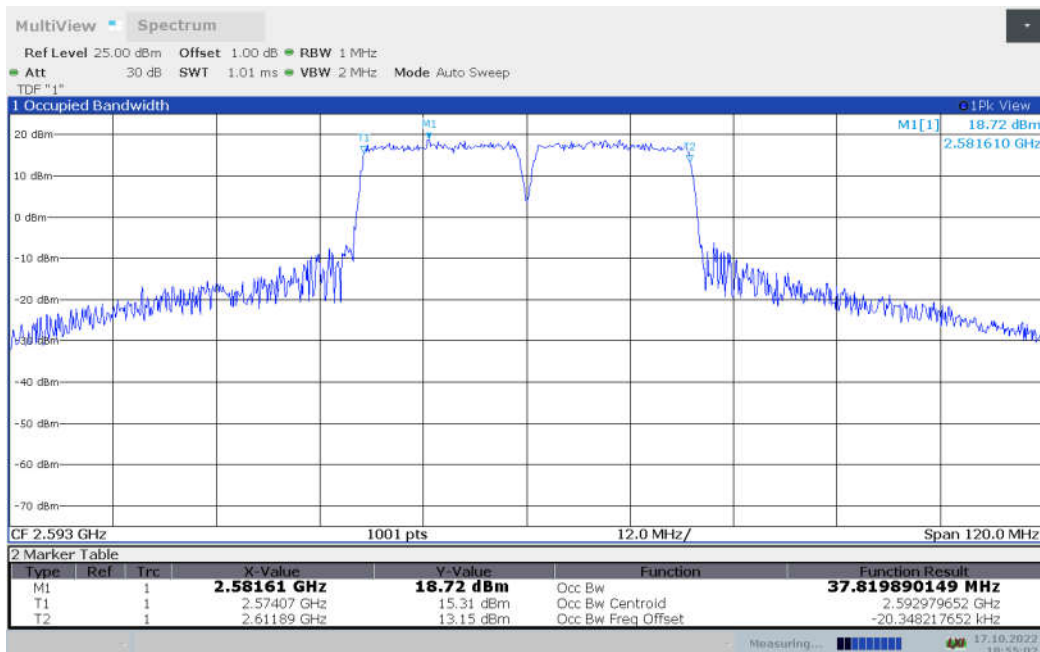
LTE band CA_41C,20MHz+20MHz(99%)

Frequency (MHz)	Occupied Bandwidth (99%) (MHz)	
	QPSK	16QAM
2595	37.871	37.820

LTE band CA_41C , 20MHz+20MHz Bandwidth,QPSK (99% BW)



LTE band CA_41C , 20MHz+20MHz Bandwidth,16QAM (99% BW)



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



A.5 EMISSION BANDWIDTH

Reference

FCC: CFR Part 2.1049, 22.917, 24.238, 27.53, 90.1215.

A.5.1 Measurement Procedure

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
- c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least $10\log(\text{OBW} / \text{RBW})$ below the reference level.
- d) Set the detection mode to peak, and the trace mode to max hold.
- e) Use the 26dB bandwidth function of the spectrum analyzer and report the measured bandwidth.

A.5.2 Emission Bandwidth Results

Similar to conducted emissions; Emission bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies. Table below lists the measured -26dBc BW. Spectrum analyzer plots are included on the following pages.

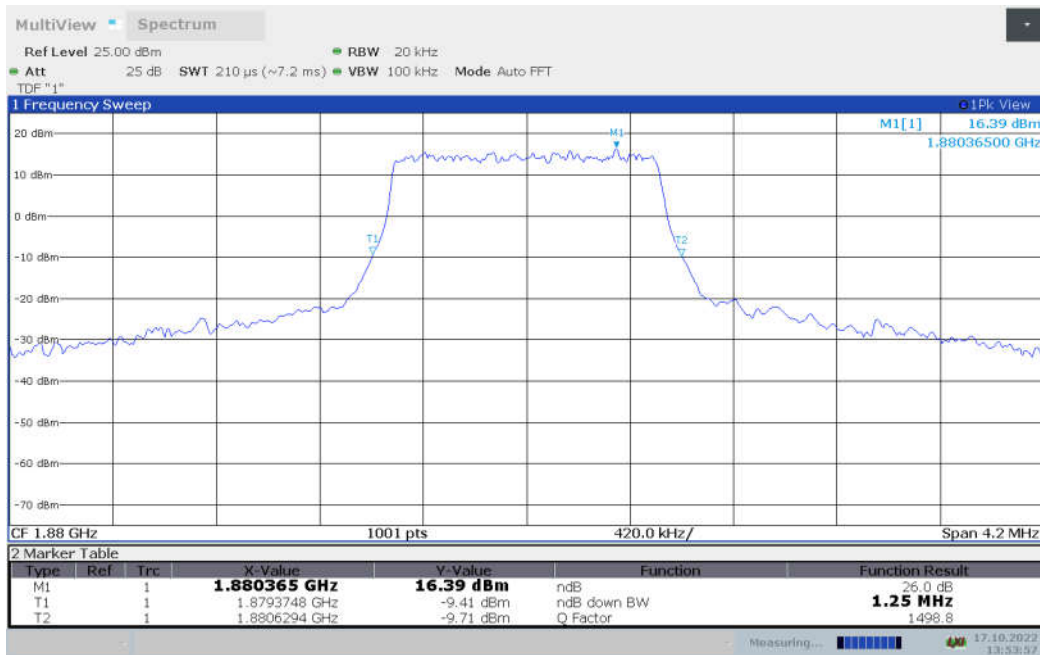


LTE band 2, 1.4MHz (-26dBc BW)

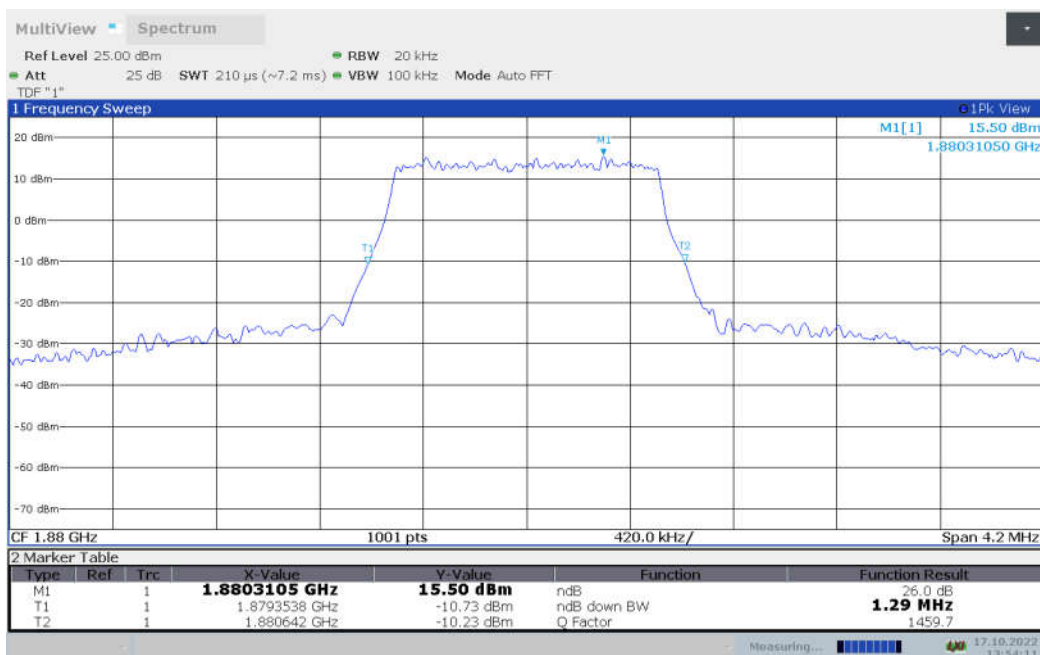
LTE band 2,1.4MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	1.254	1.288

LTE band 2 , 1.4MHz Bandwidth,QPSK (-26dBc BW)



LTE band 2 , 1.4MHz Bandwidth,16QAM (-26dBc BW)

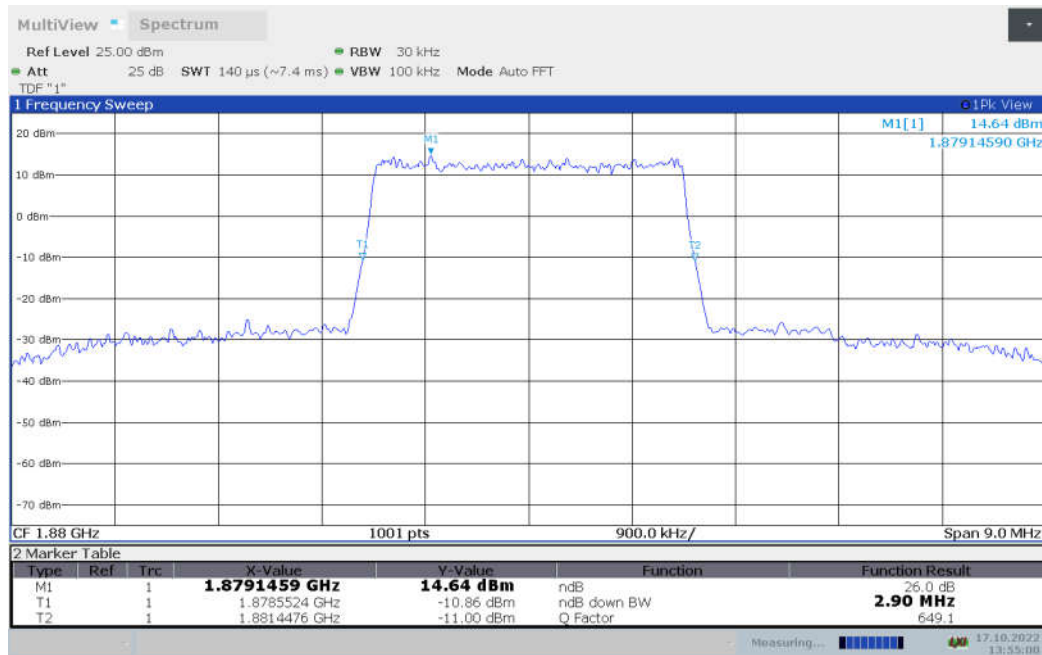




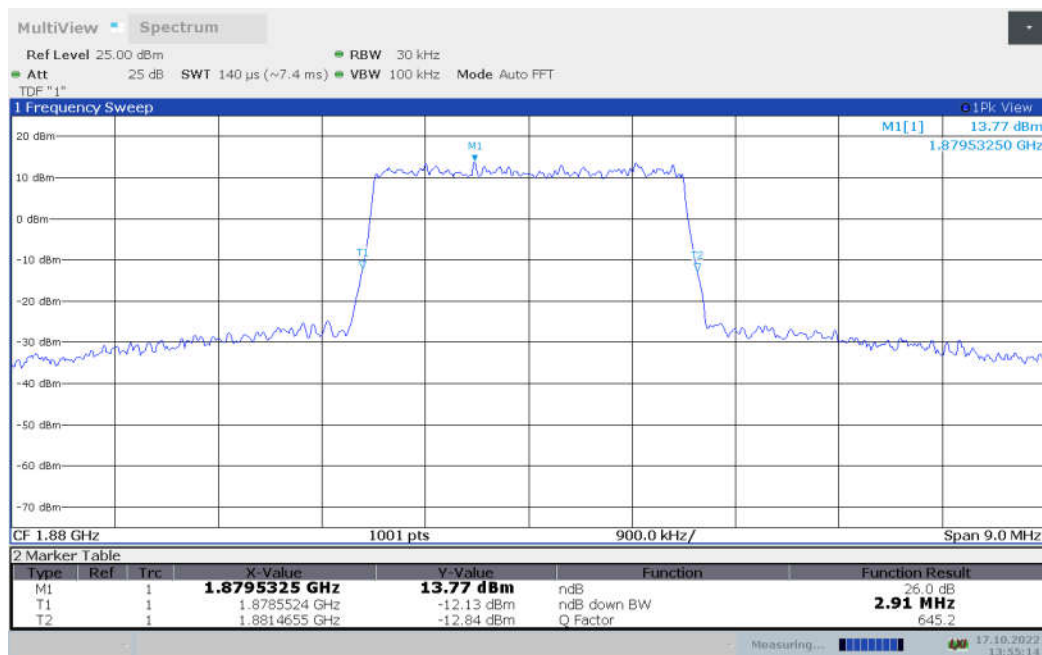
LTE band 2,3MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	2.895	2.913

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



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

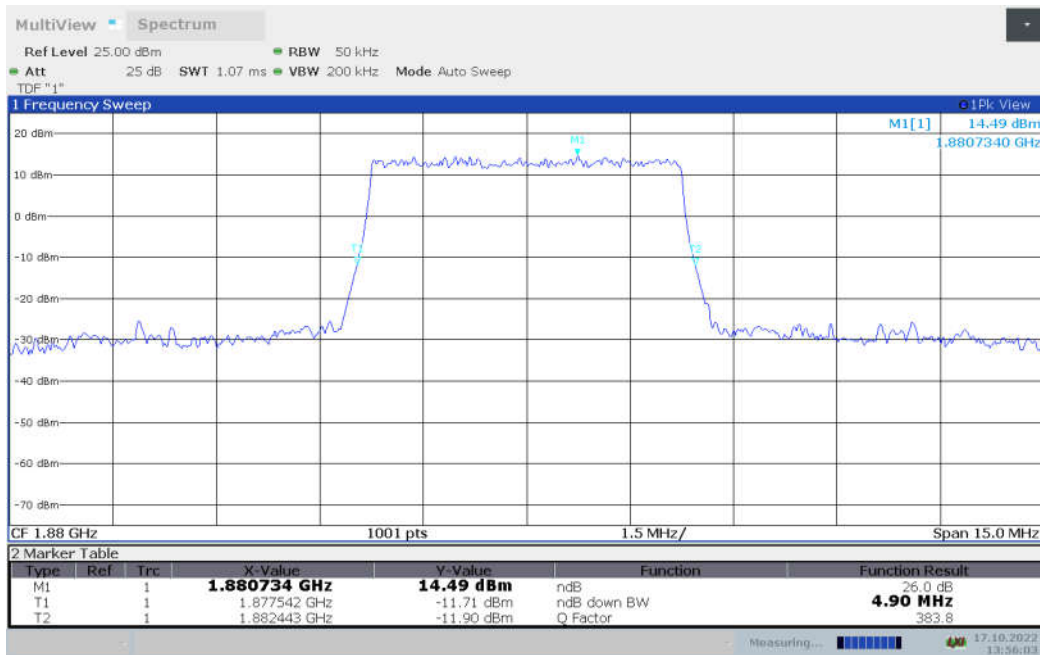




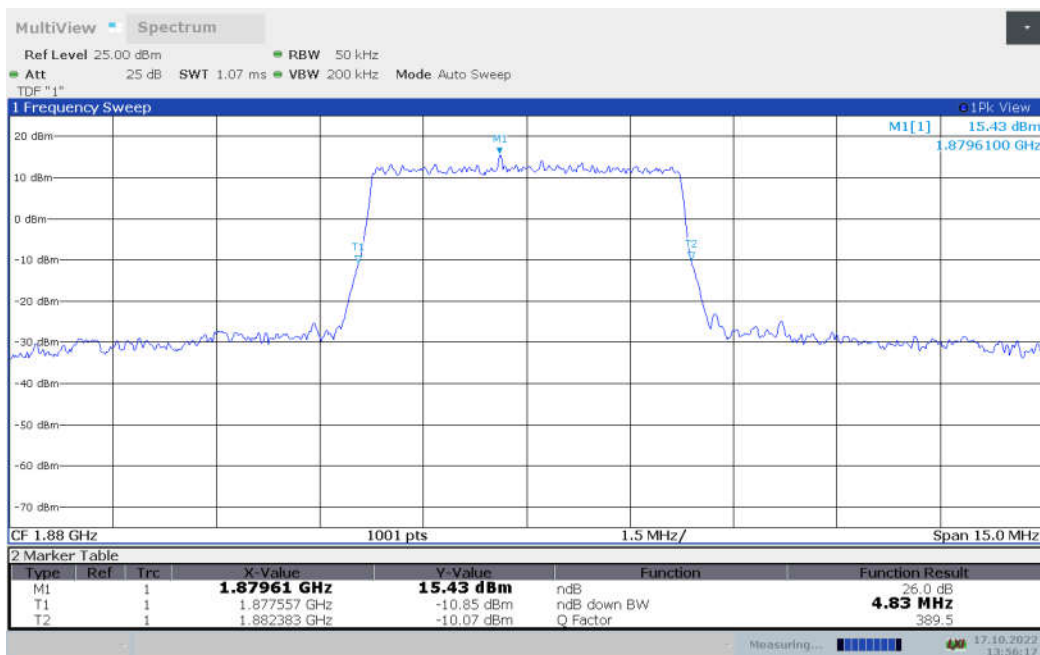
LTE band 2,5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	4.900	4.825

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



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

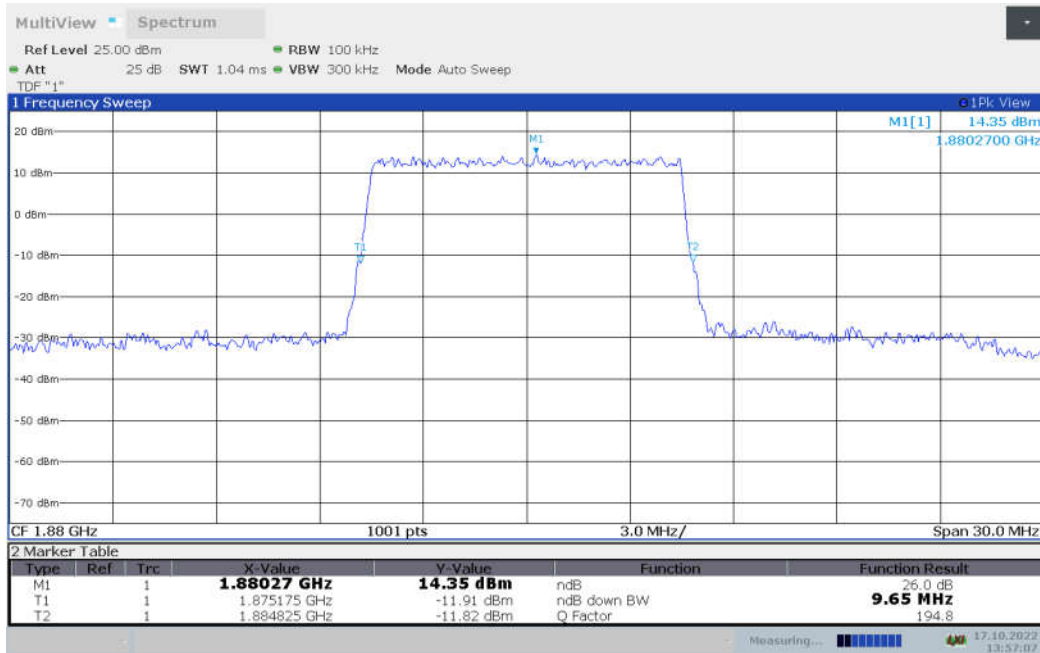




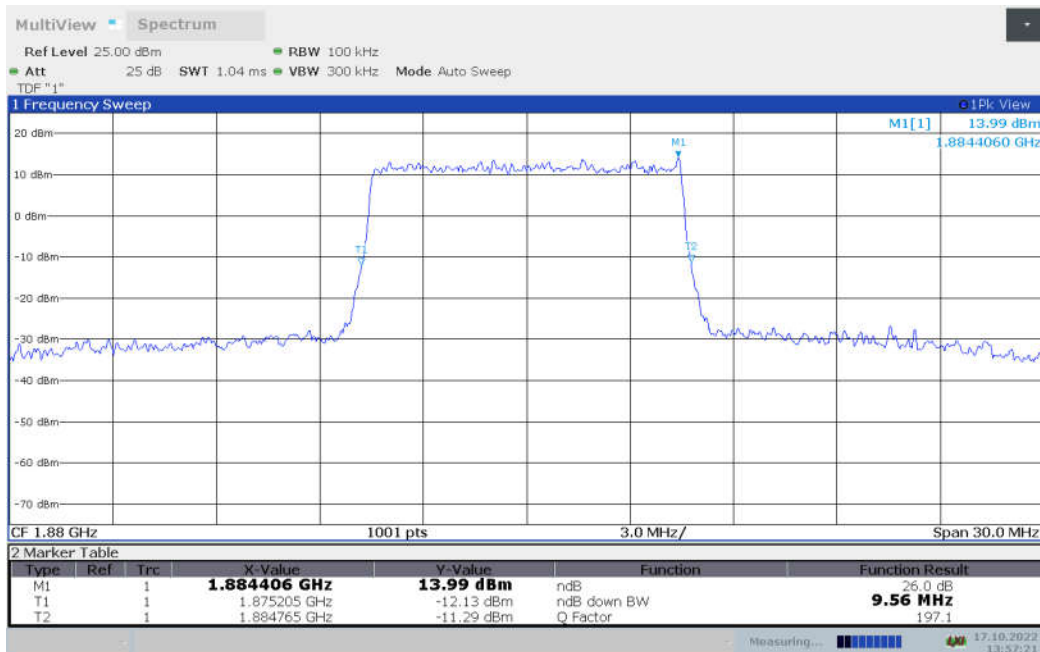
LTE band 2,10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	9.650	9.560

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



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

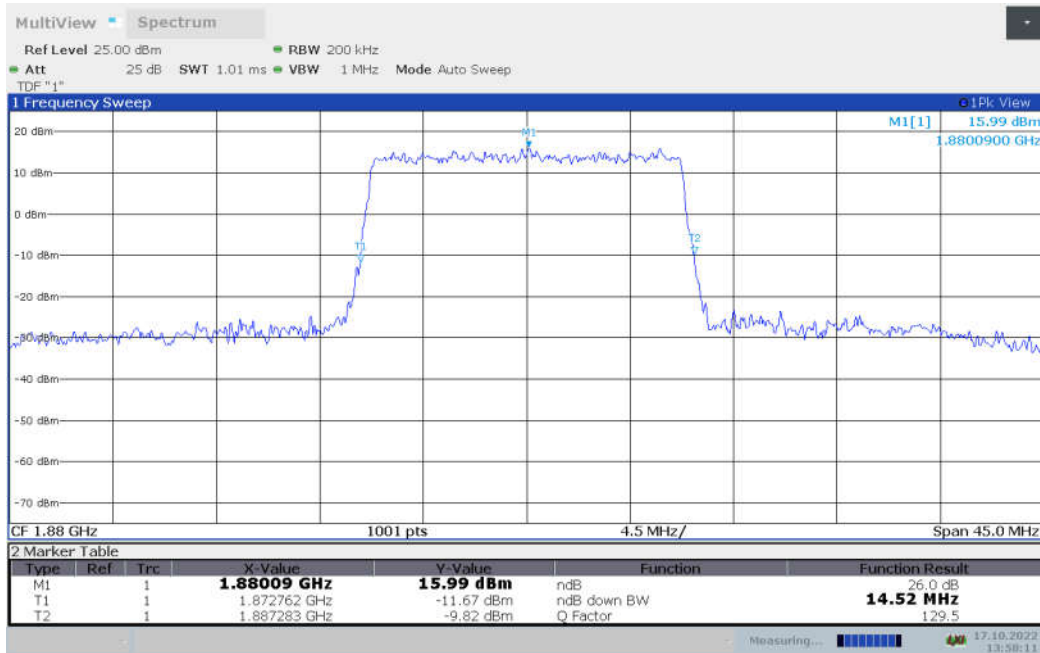




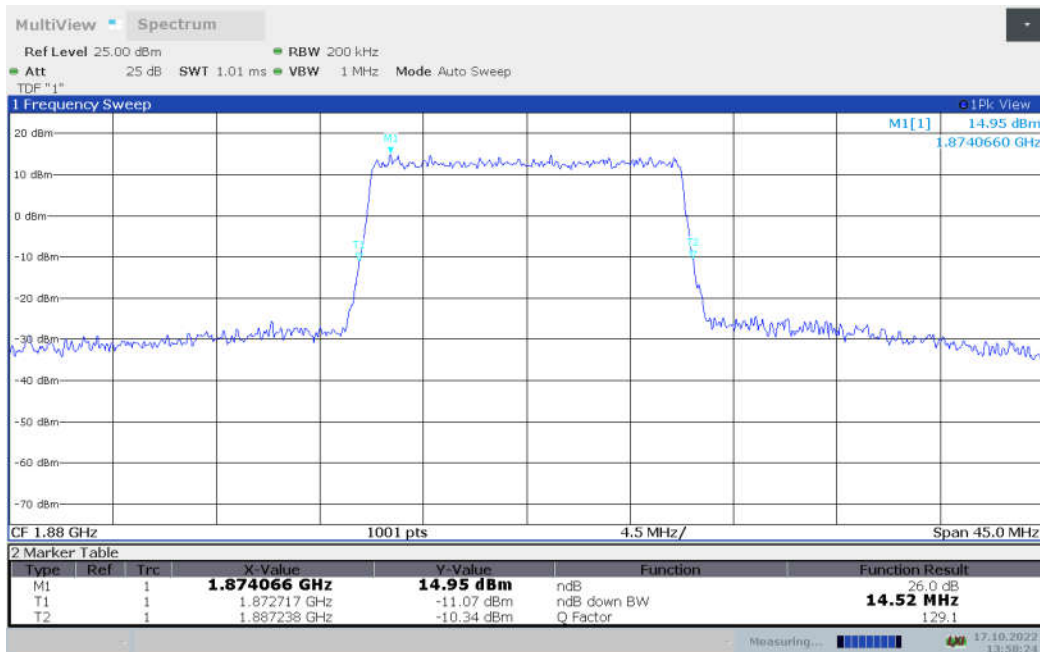
LTE band 2,15MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1880	14.520	14.520

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



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

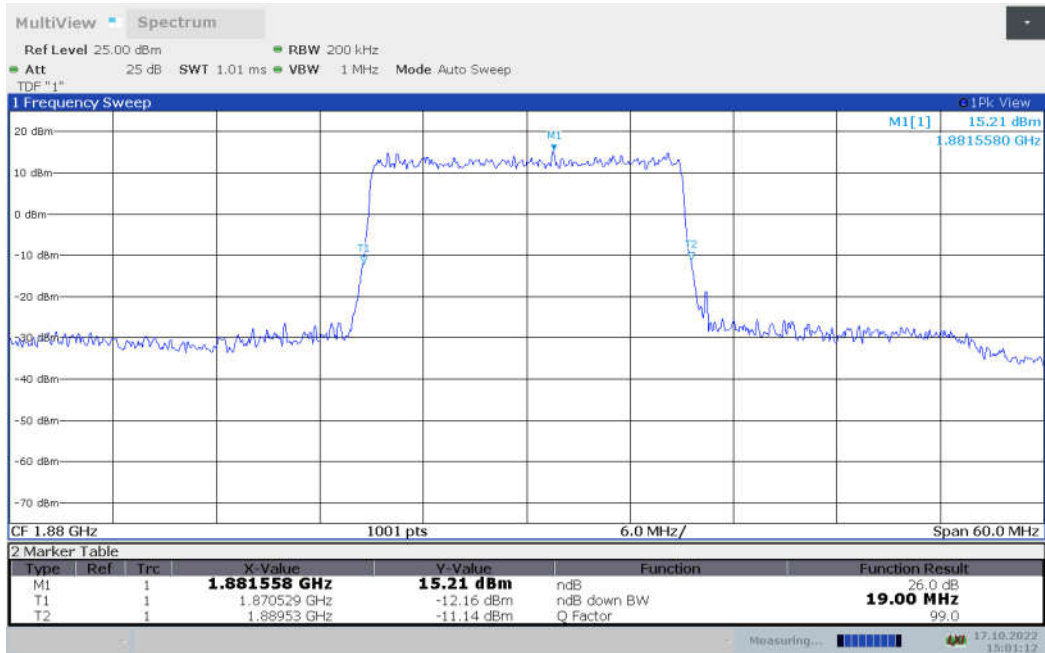




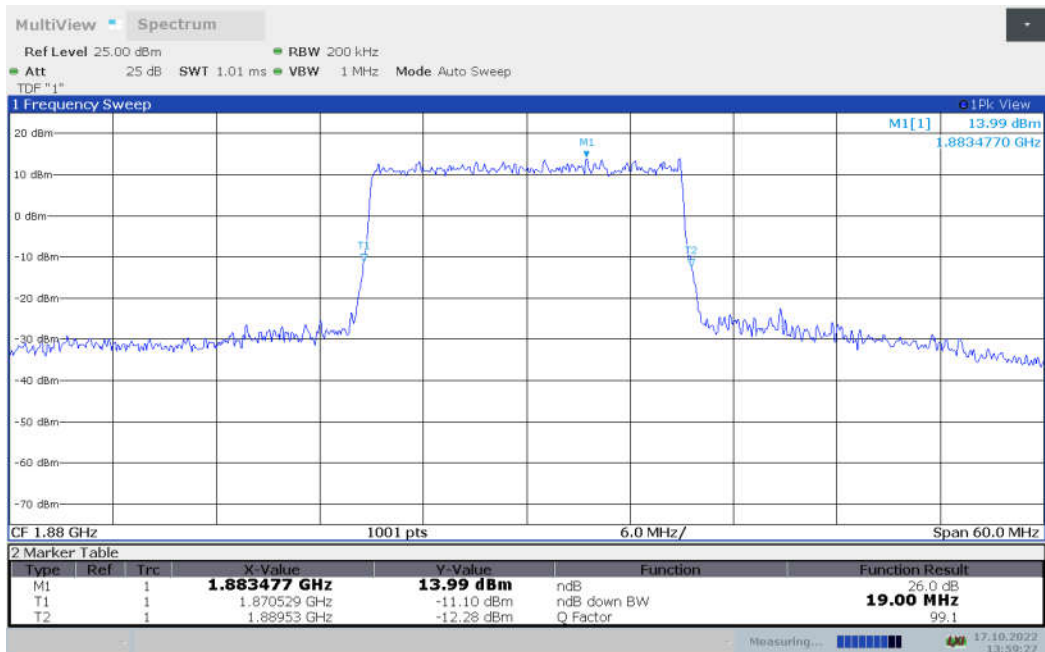
LTE band 2,20MHz (-26dBc BW)

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)

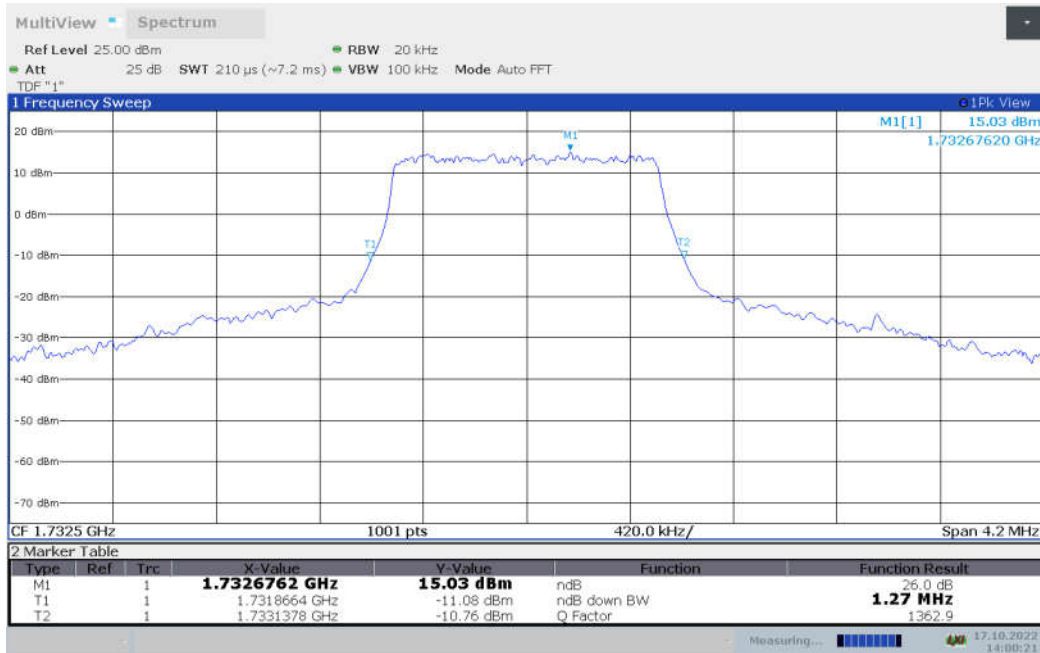




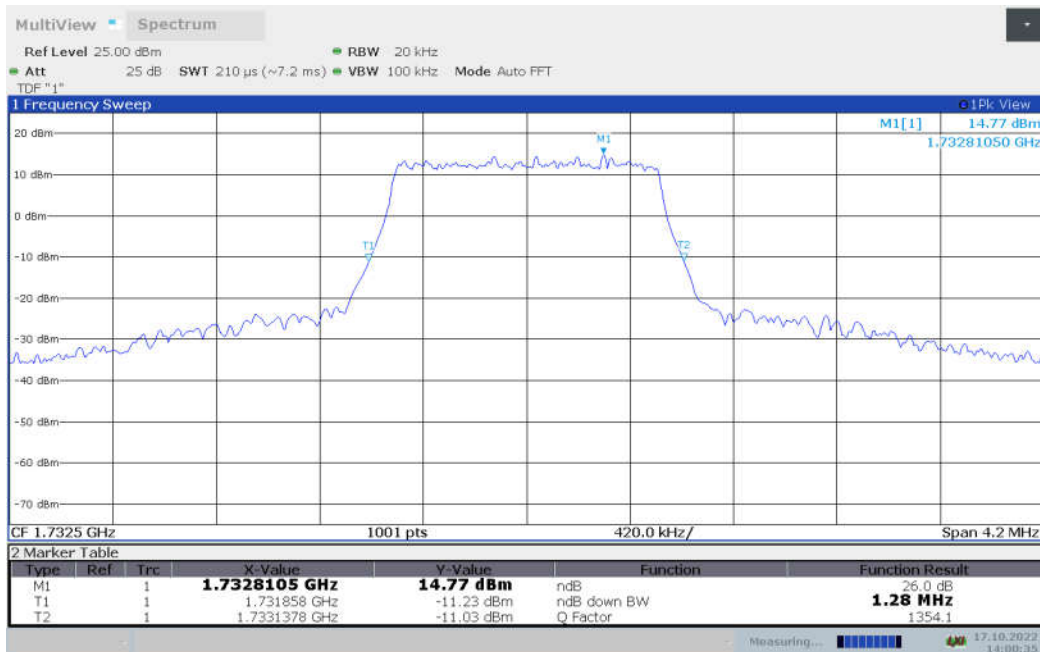
LTE band 4,1.4MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	1.271	1.280

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



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

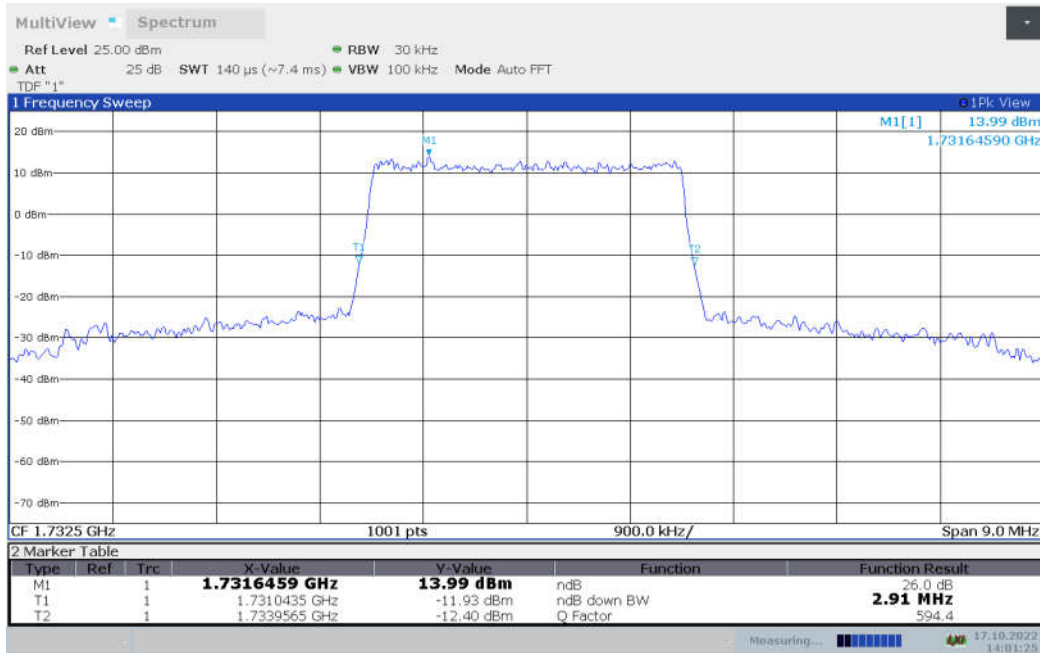




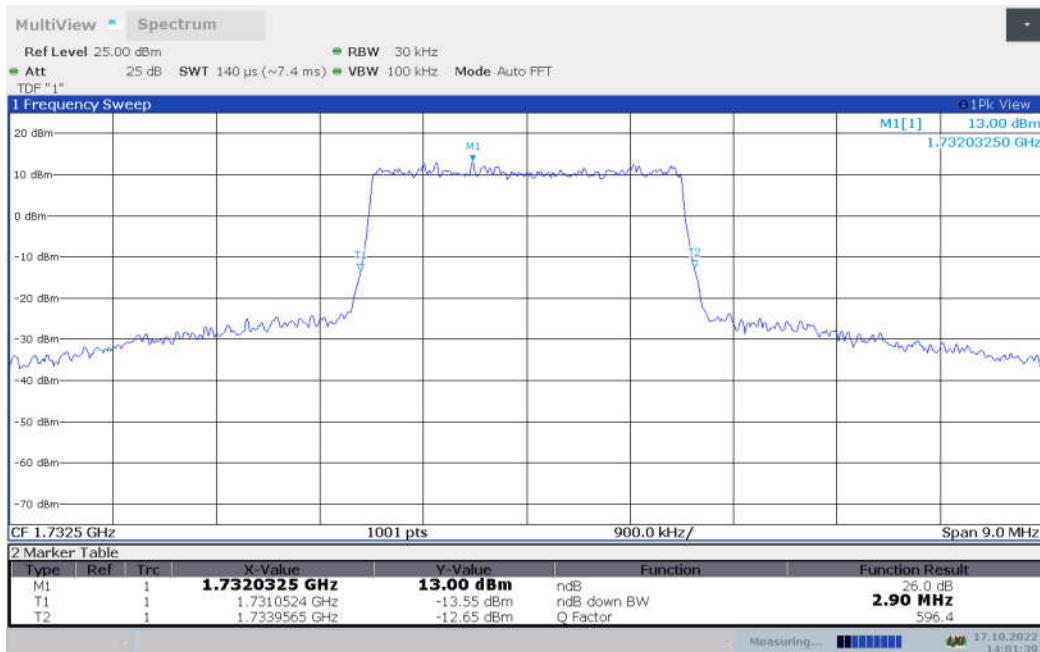
LTE band 4,3MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	2.913	2.904

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



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

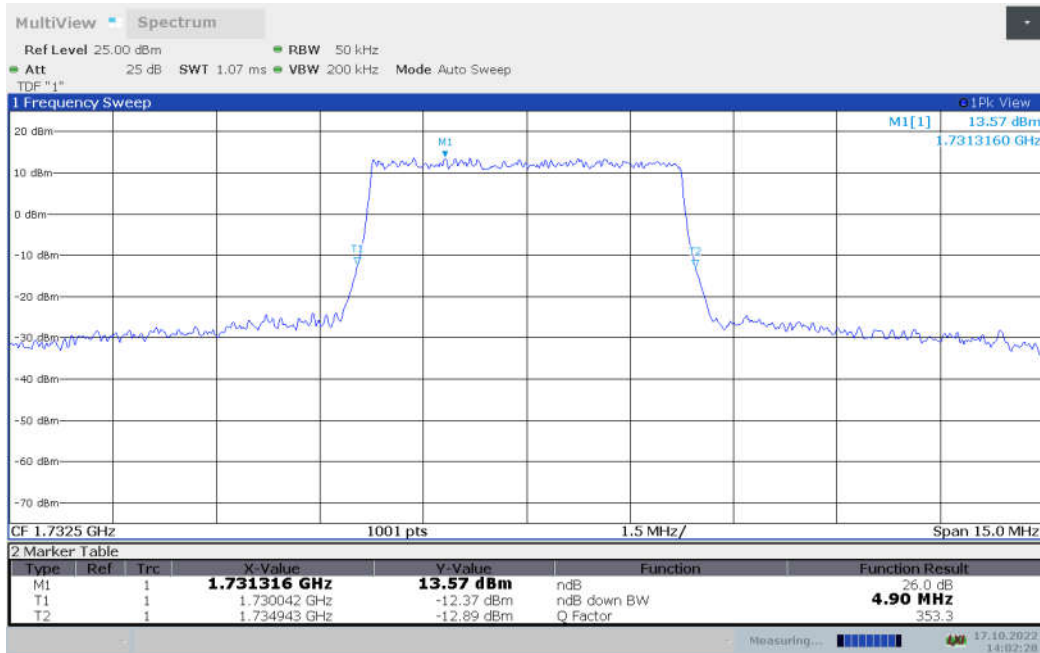




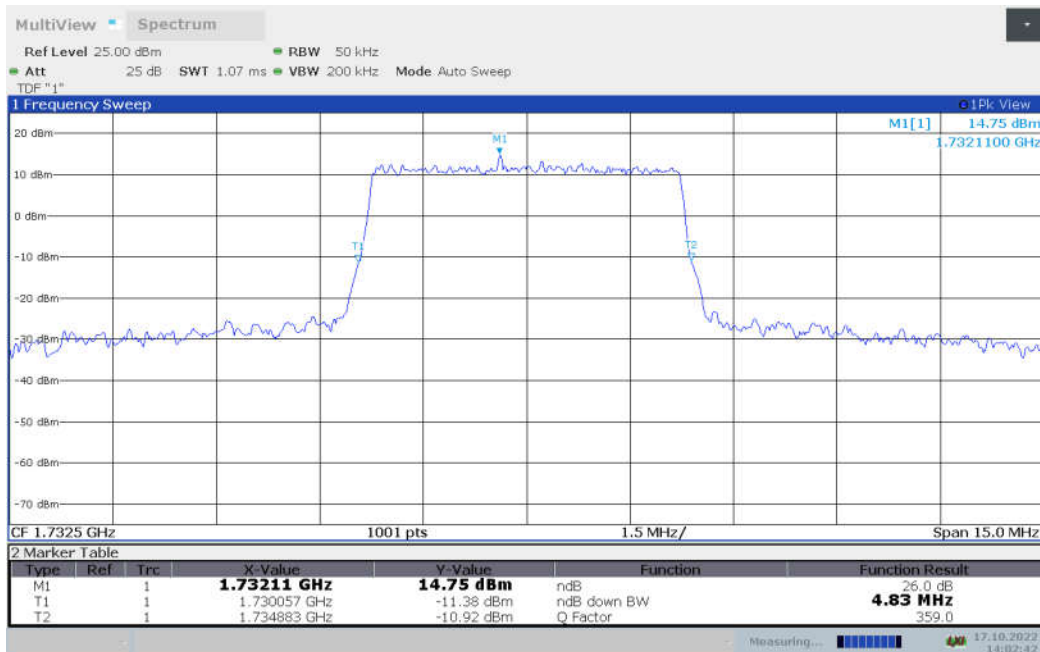
LTE band 4,5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	4.900	4.825

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



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

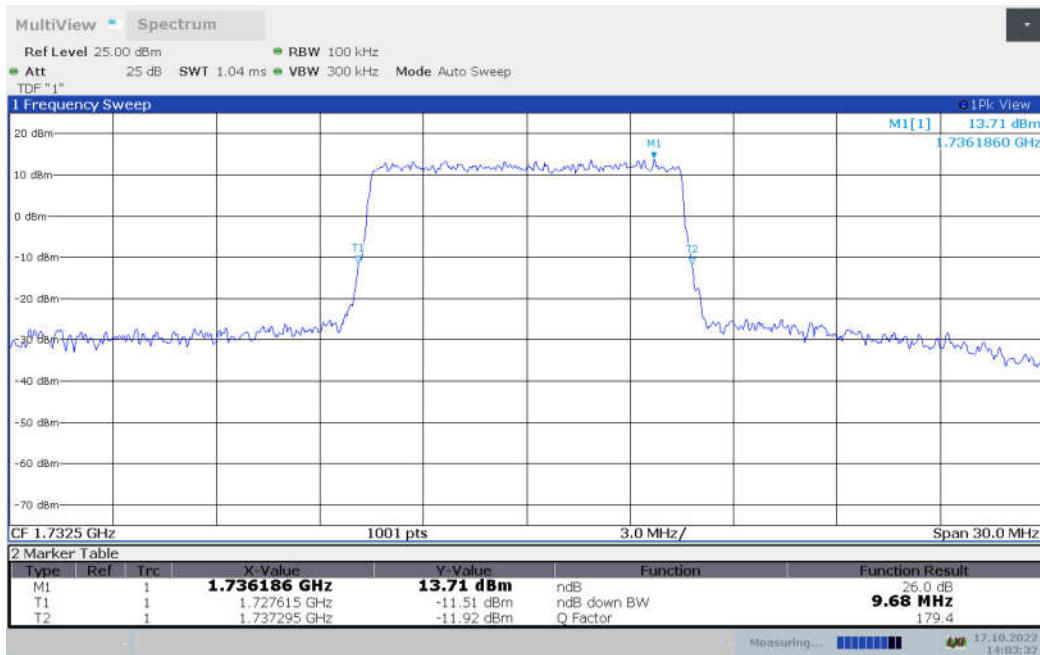




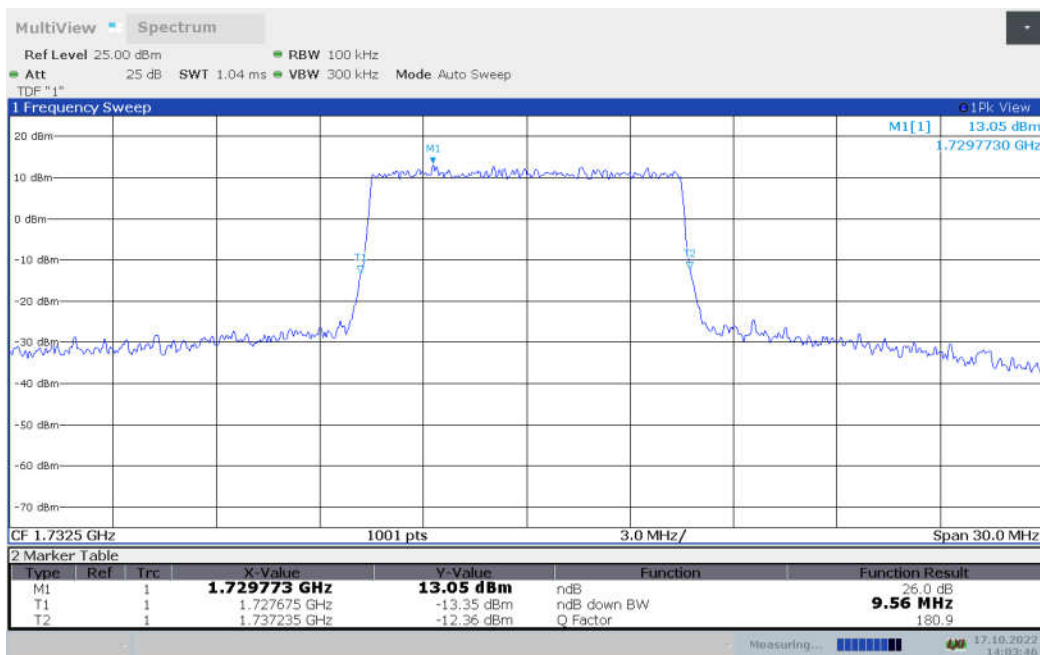
LTE band 4,10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	9.680	9.560

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



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

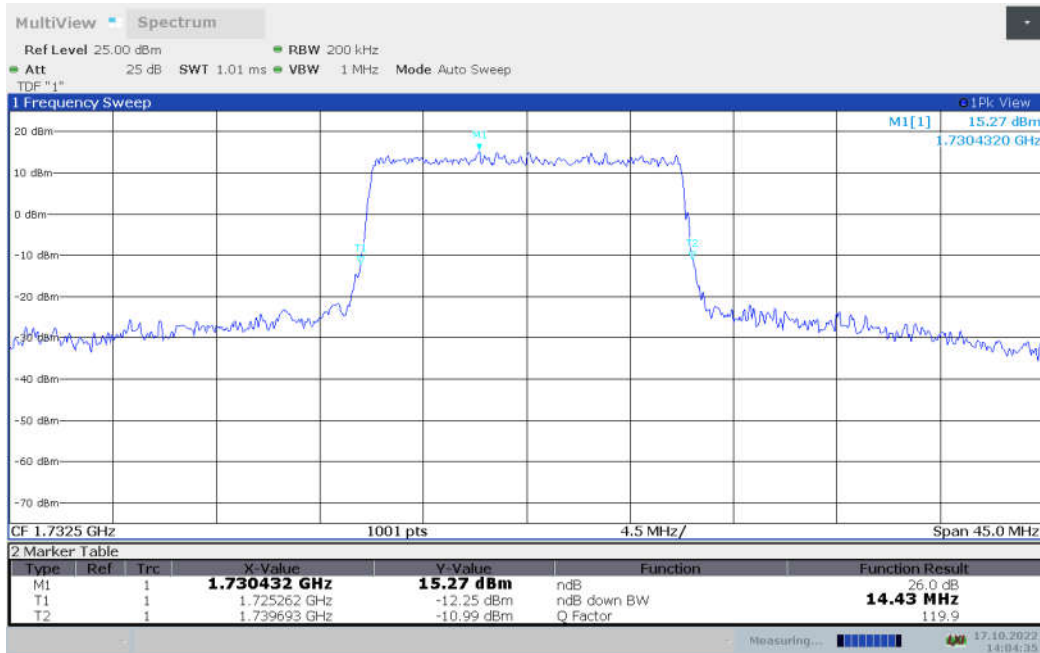




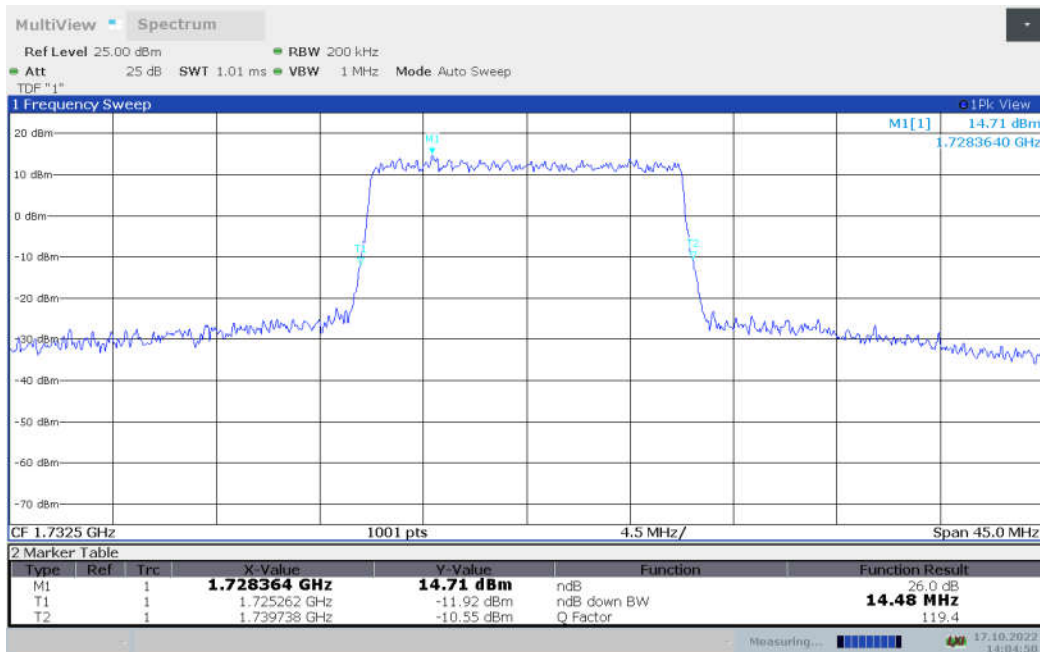
LTE band 4,15MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	14.431	14.476

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



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

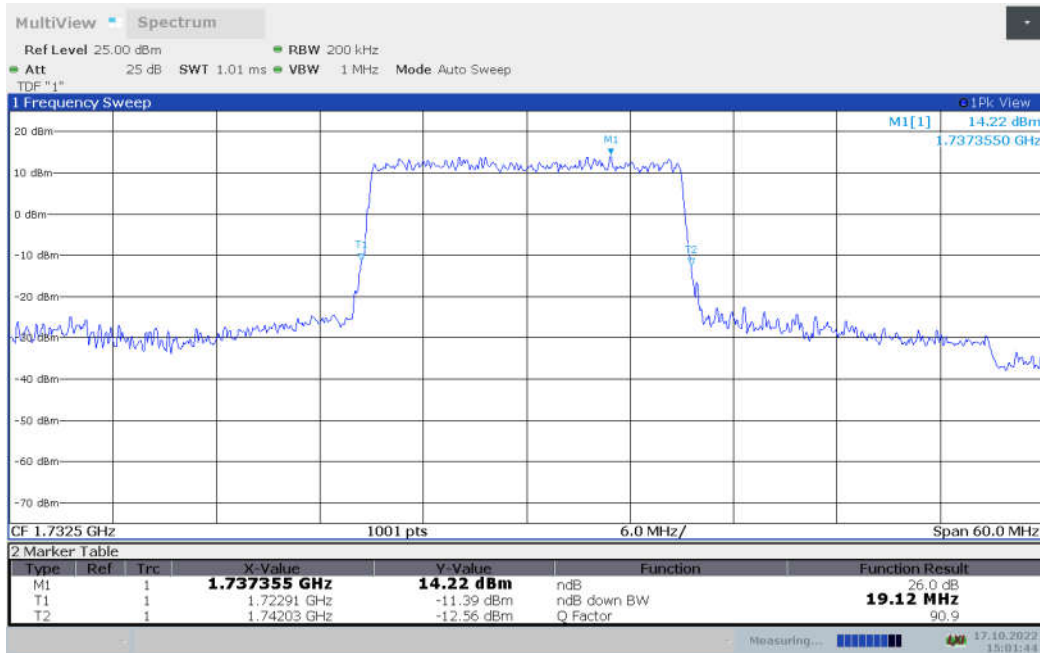




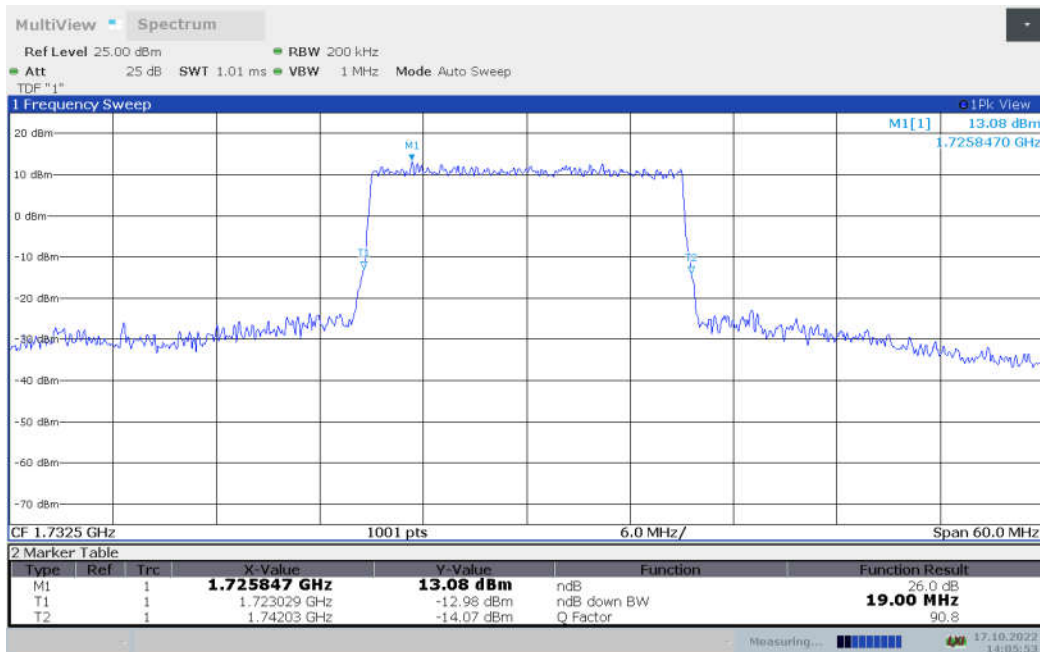
LTE band 4,20MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
1732.5	19.121	19.001

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



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

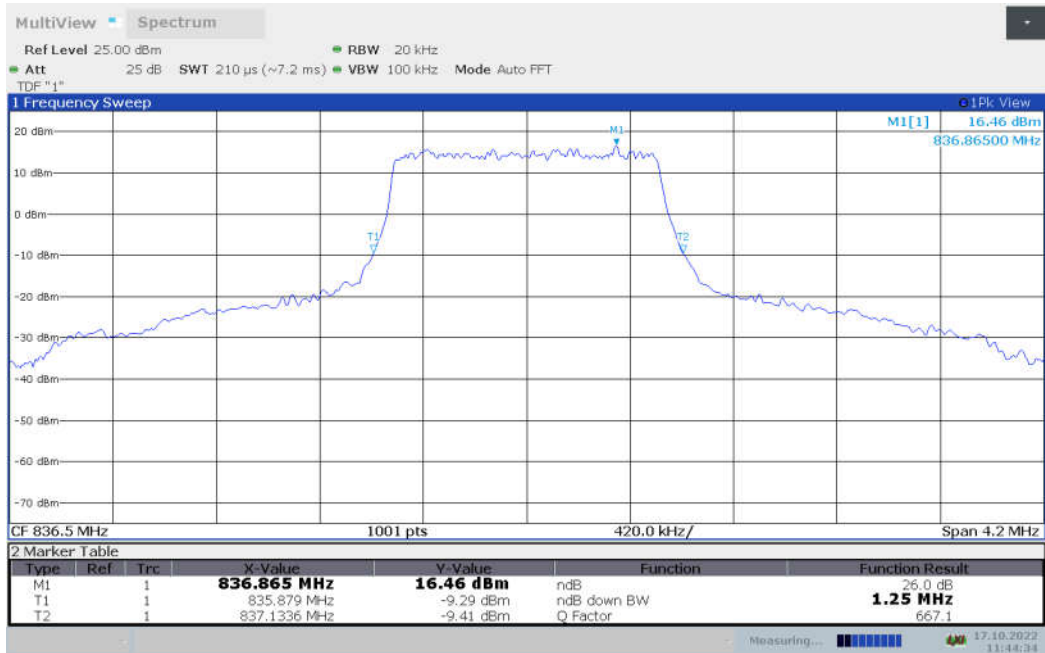




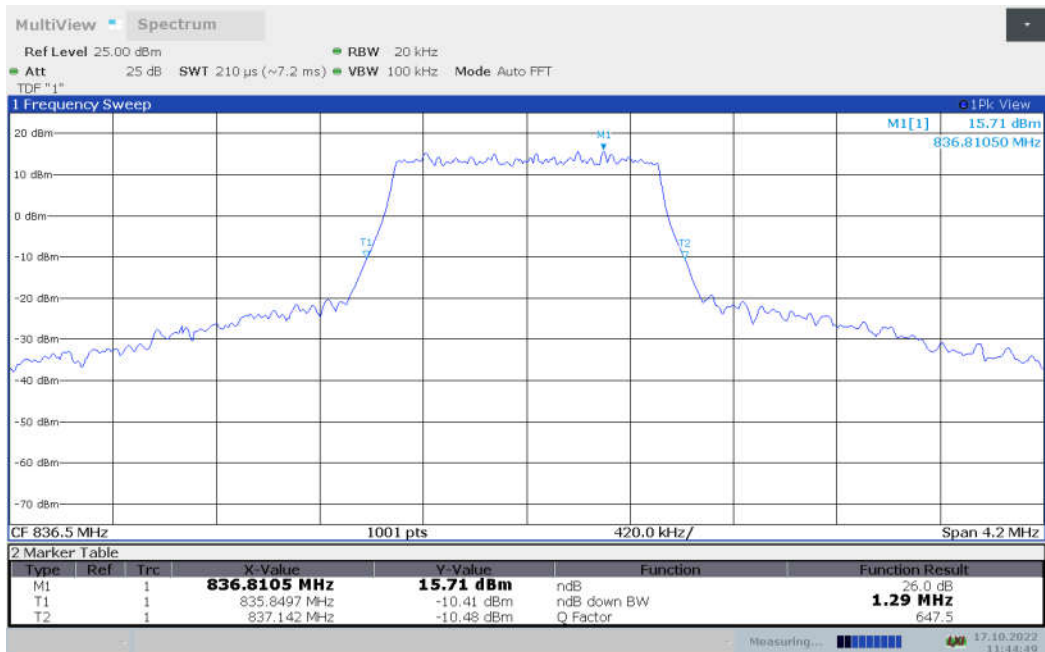
LTE band 5,1.4MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
836.5	1.254	1.292

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



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

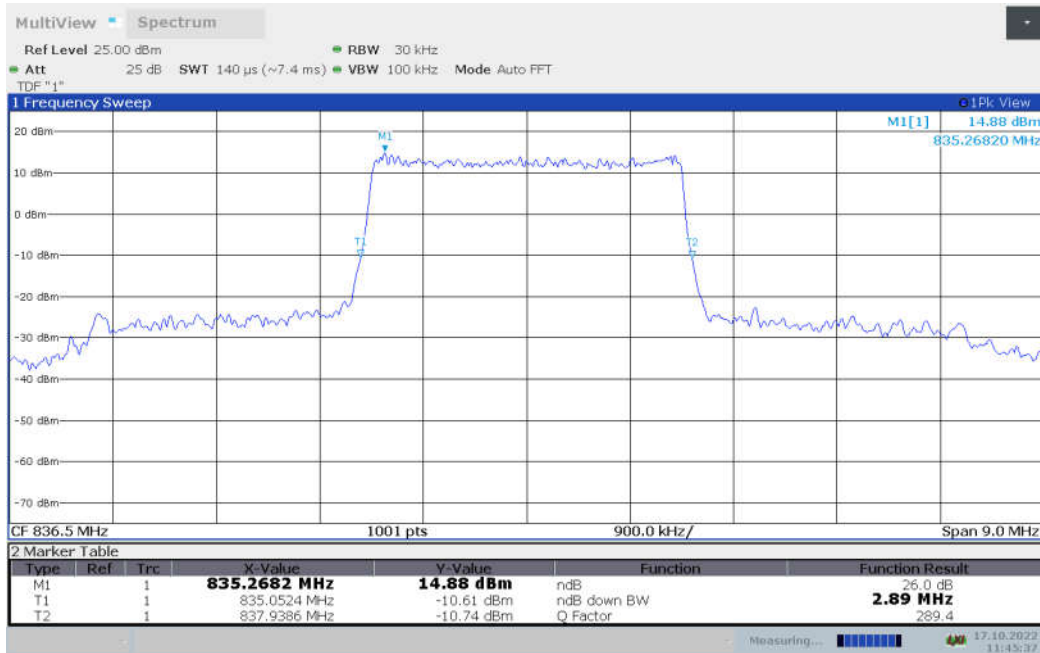




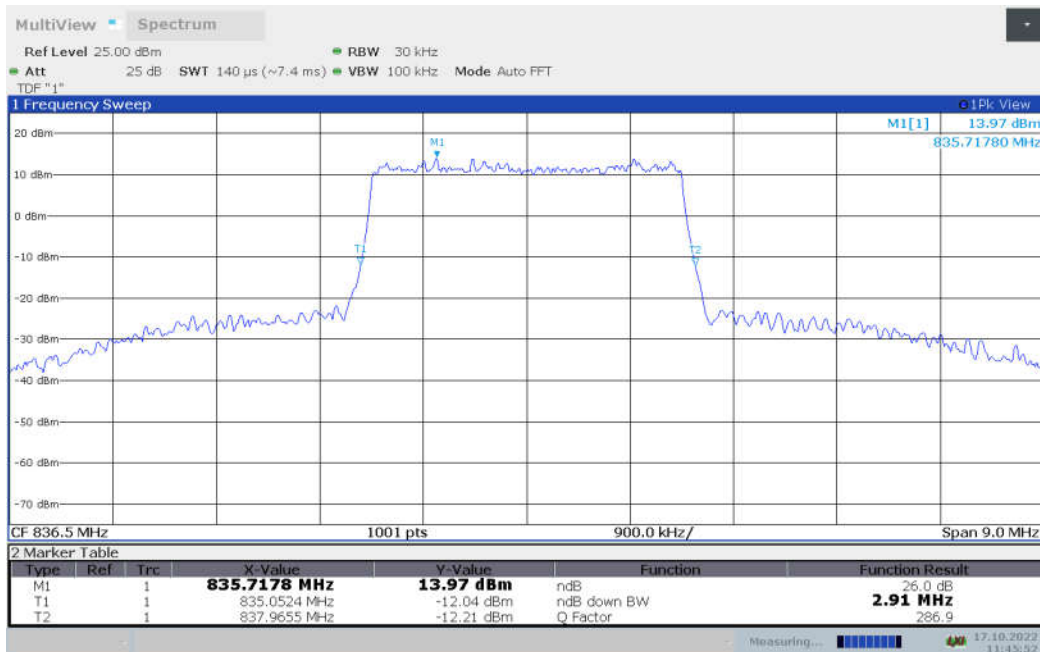
LTE band 5,3MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
836.5	2.886	2.913

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



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

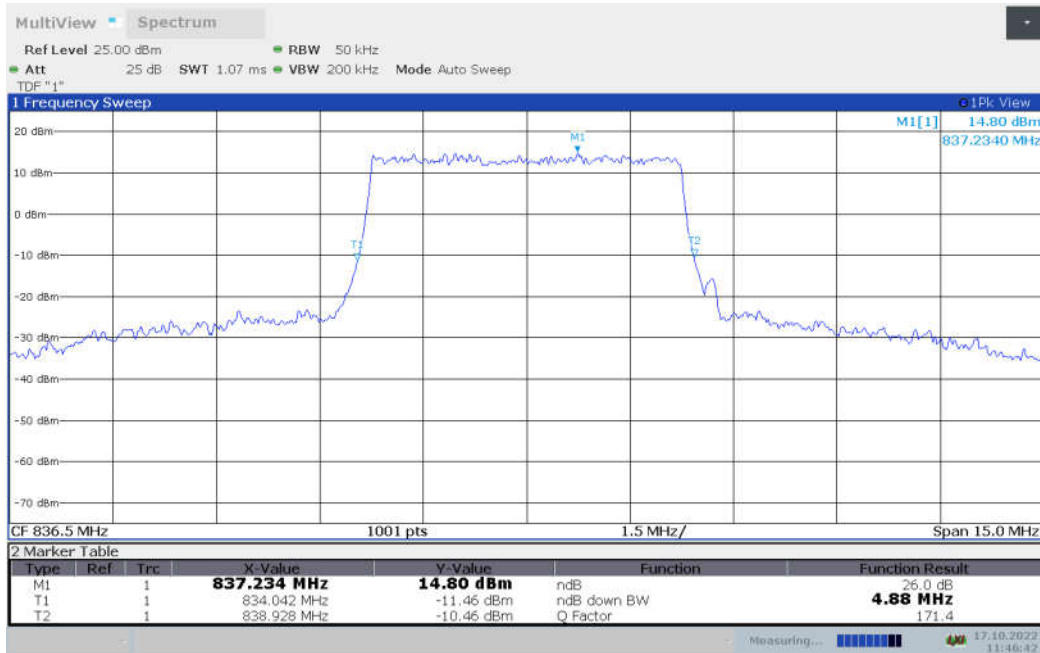




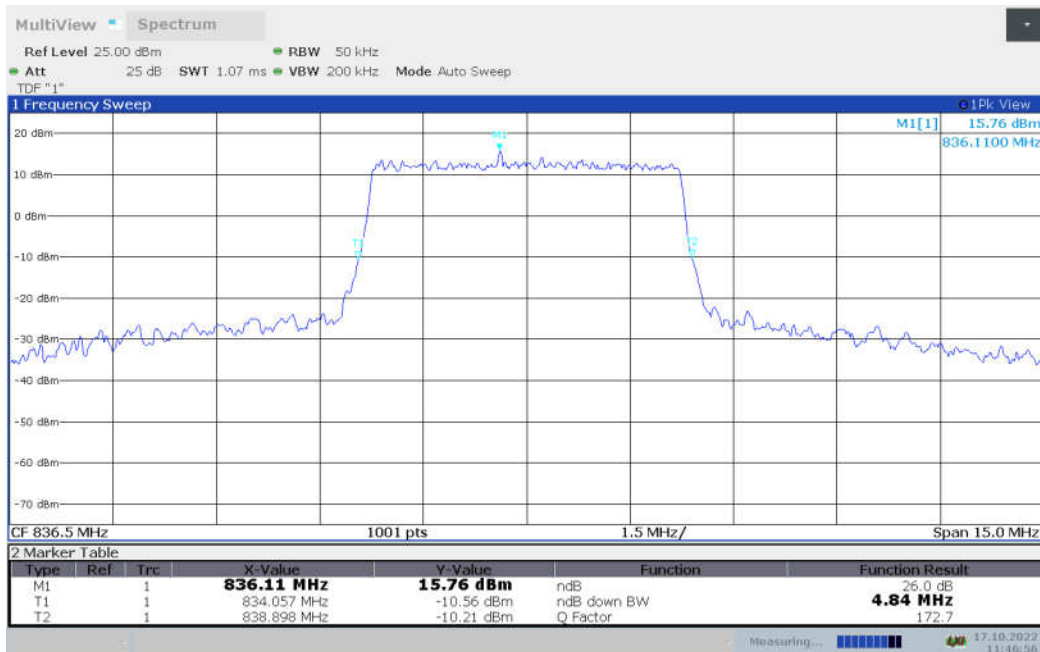
LTE band 5,5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
836.5	4.885	4.840

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



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

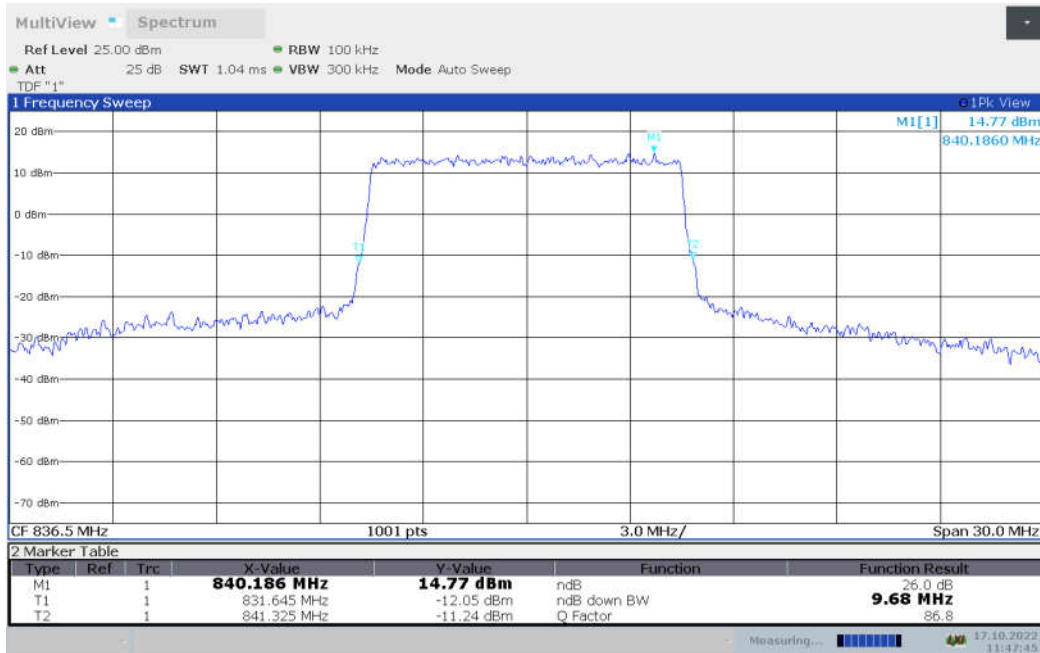




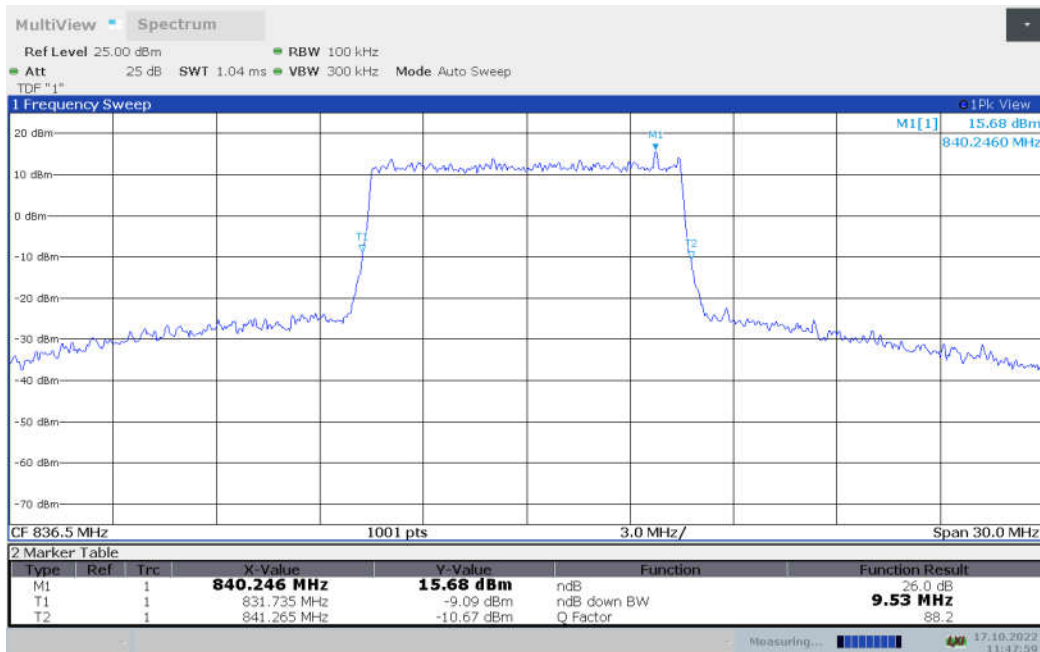
LTE band 5,10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
836.5	9.680	9.530

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



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

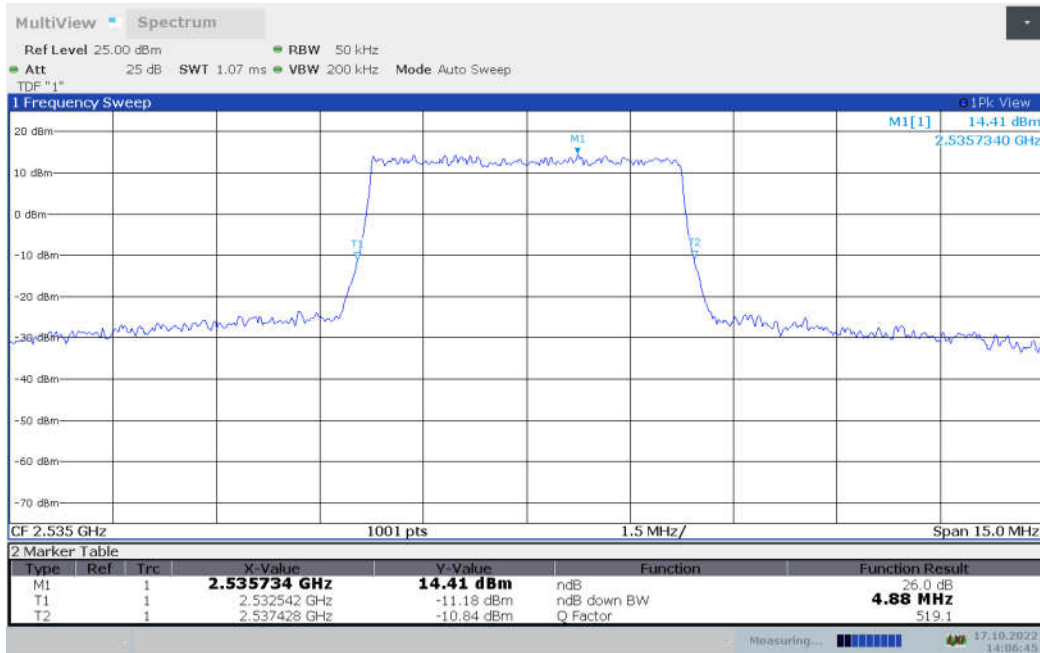




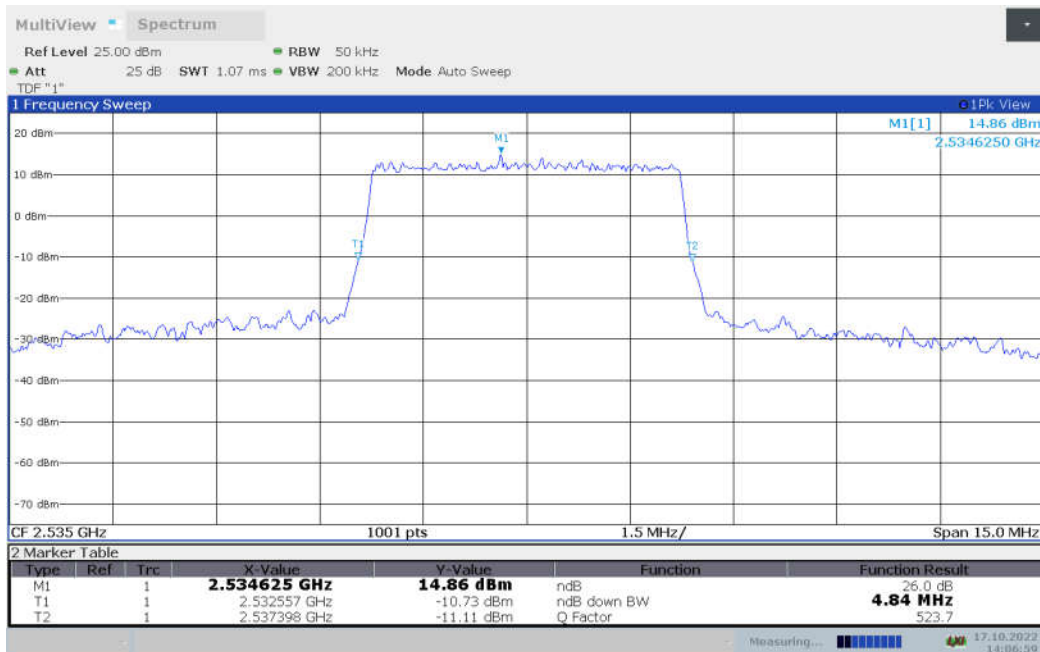
LTE band 7,5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2535	4.885	4.840

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



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

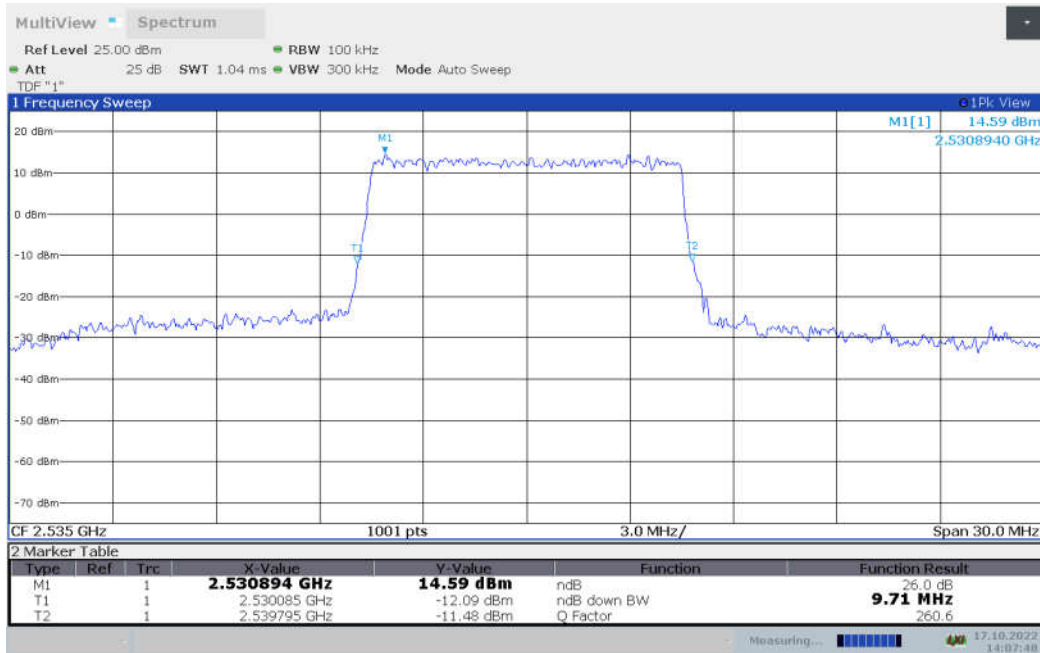




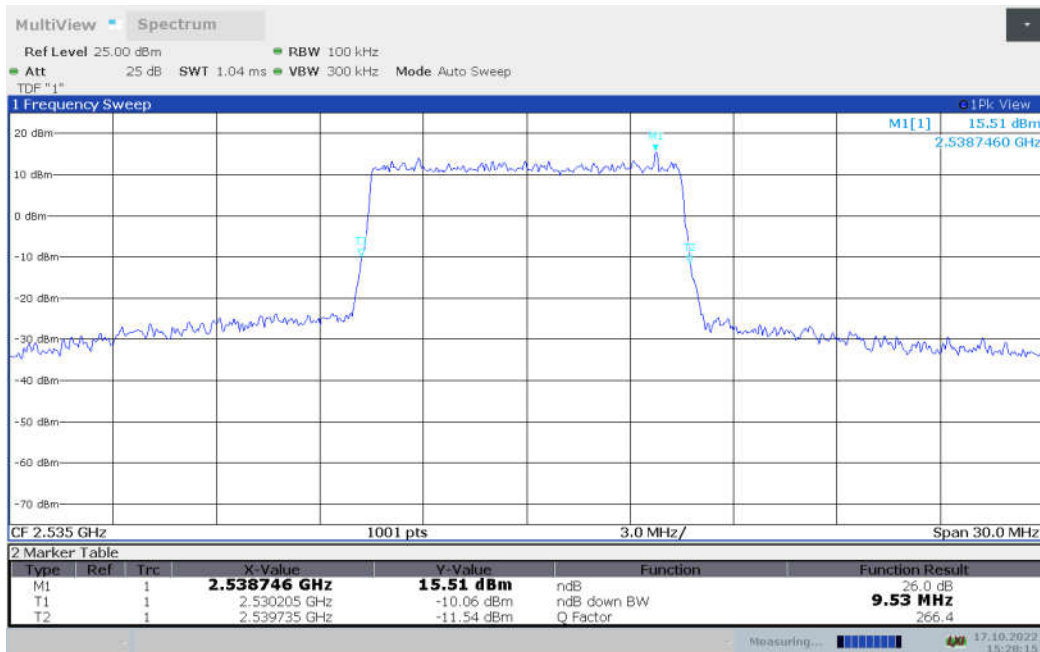
LTE band 7,10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2535	9.710	9.530

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



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

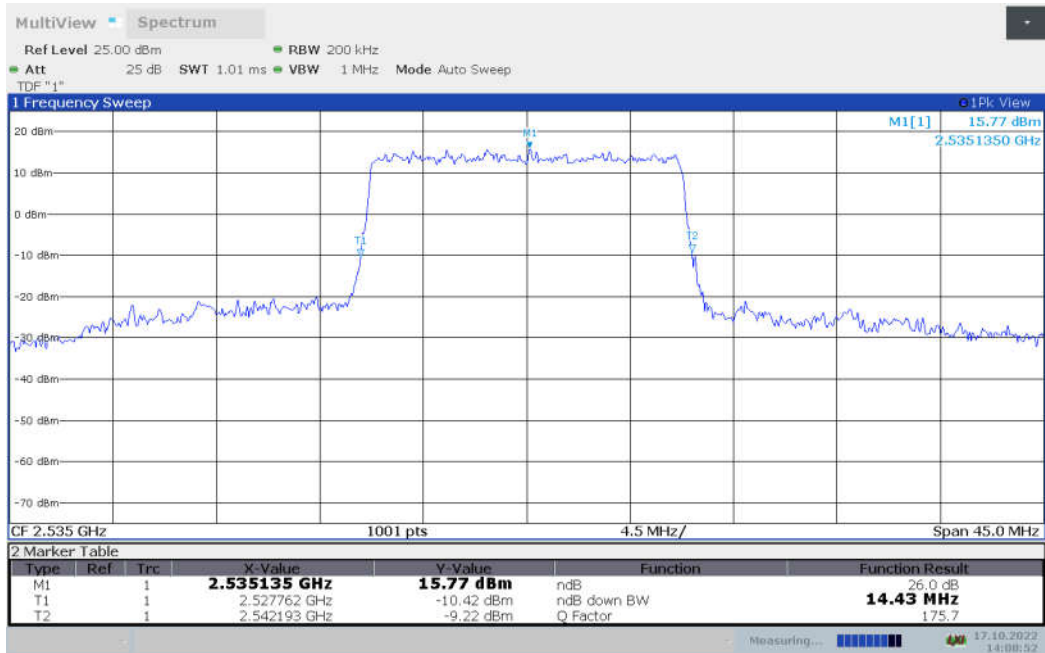




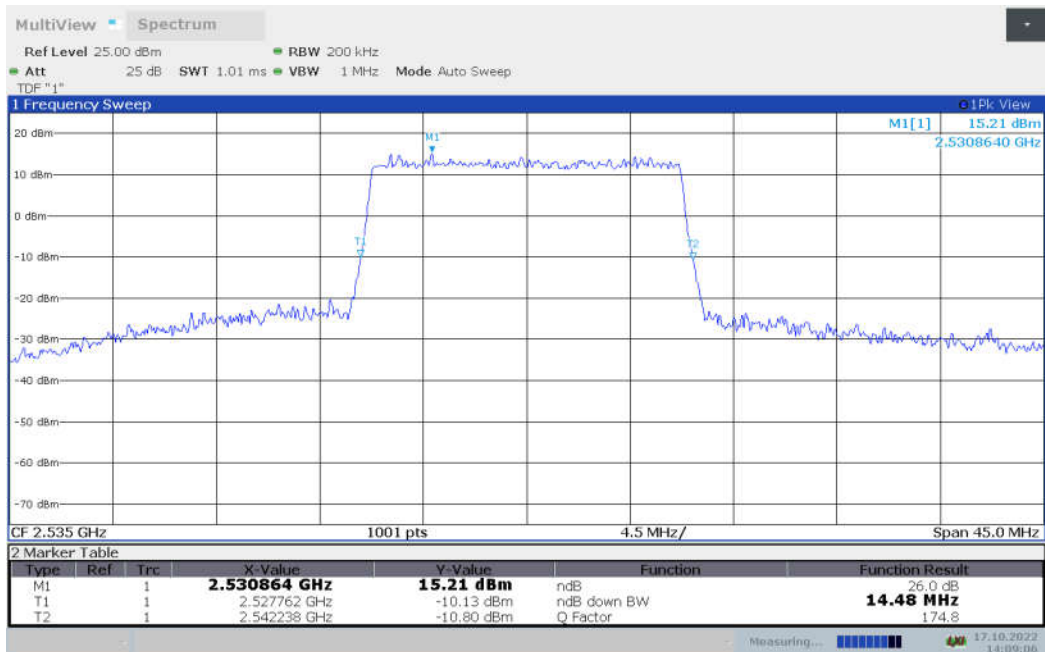
LTE band 7,15MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
2535	14.431	14.476

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



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

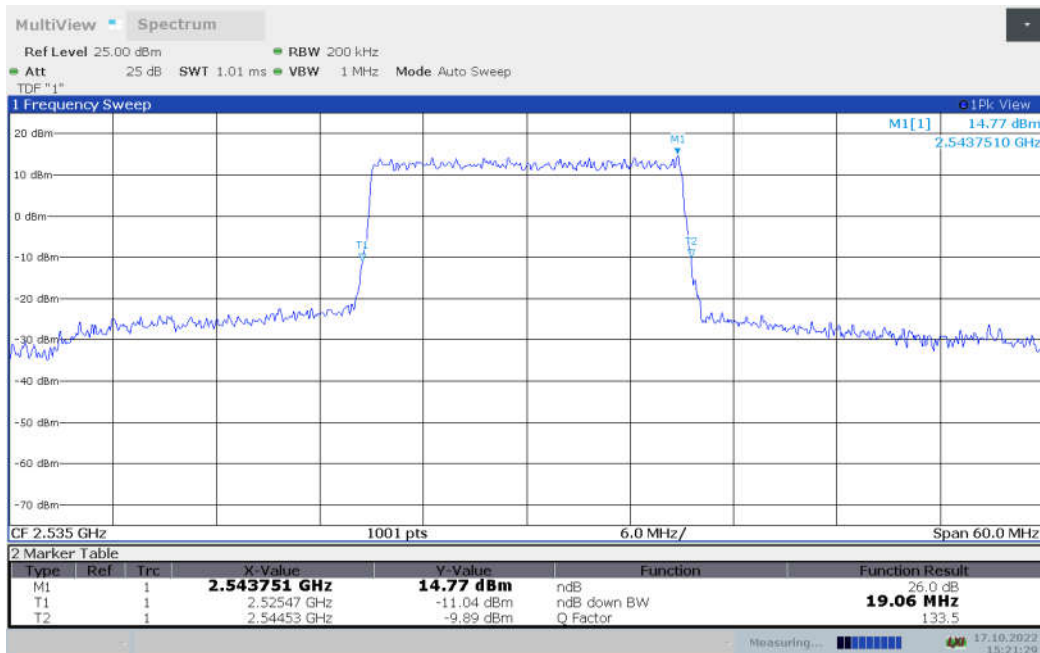




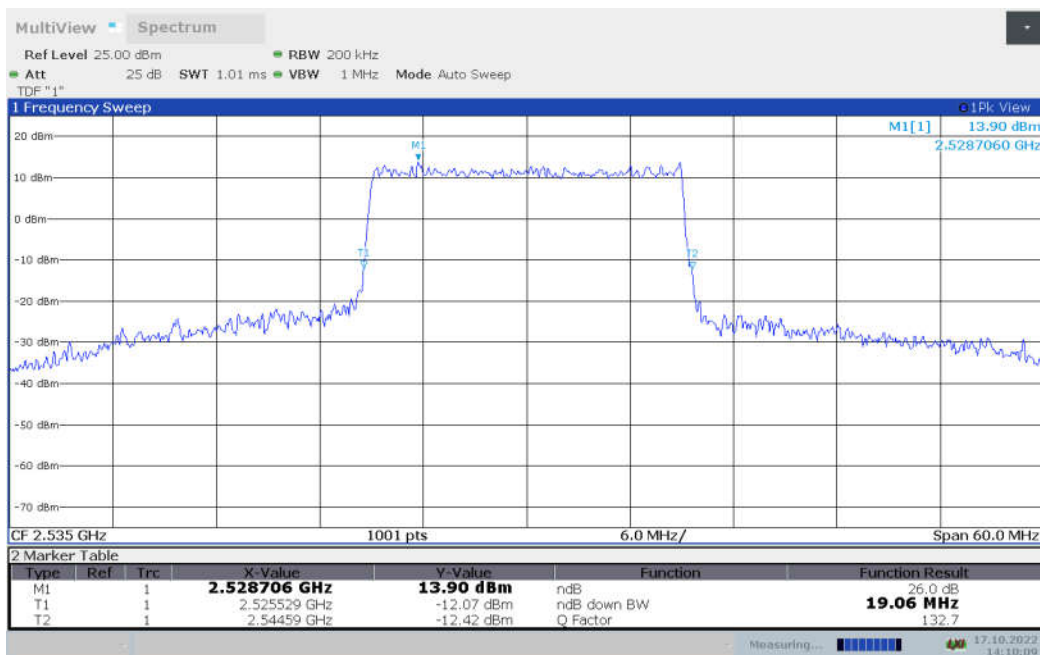
LTE band 7,20MHz (-26dBc BW)

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

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



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

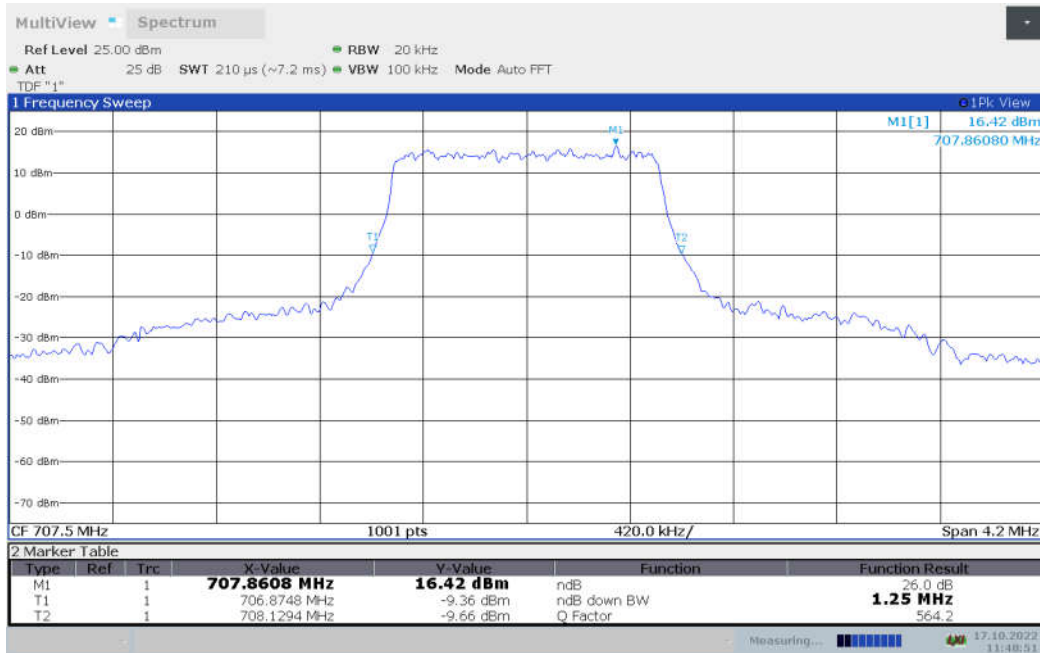




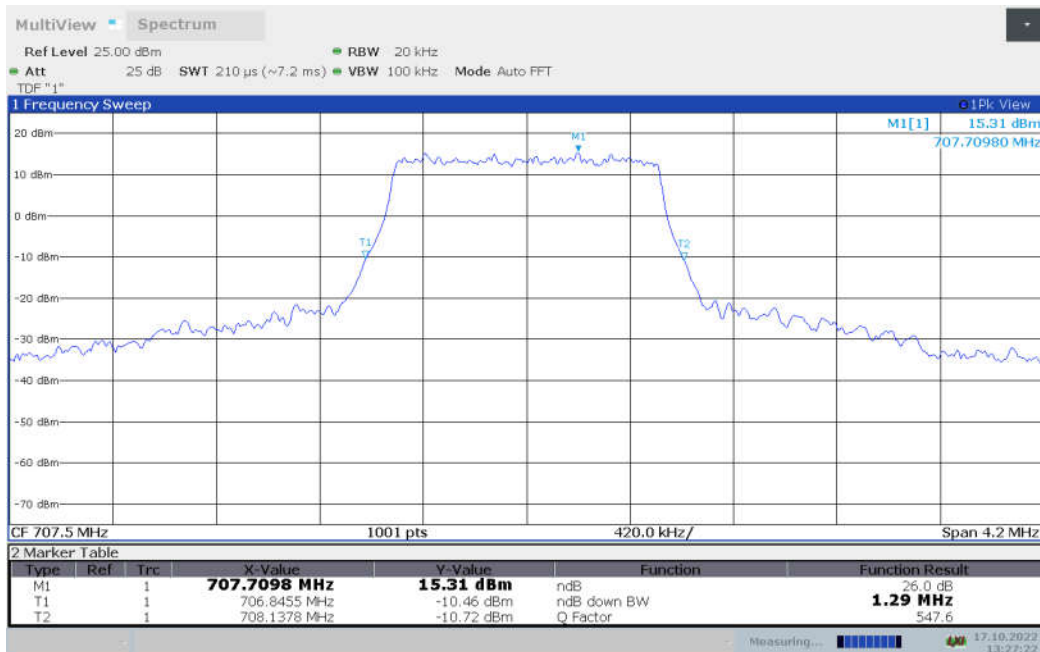
LTE band 12,1.4MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
707.5	1.254	1.292

LTE band 12 , 1.4MHz Bandwidth,QPSK (-26dBc BW)



LTE band 12 , 1.4MHz Bandwidth,16QAM (-26dBc BW)

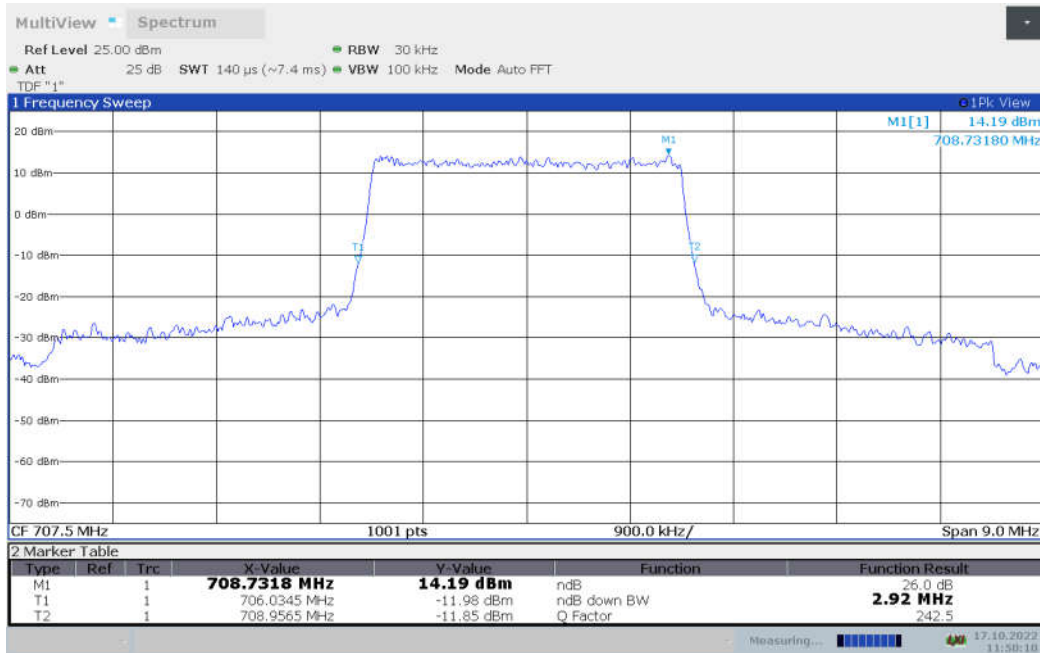




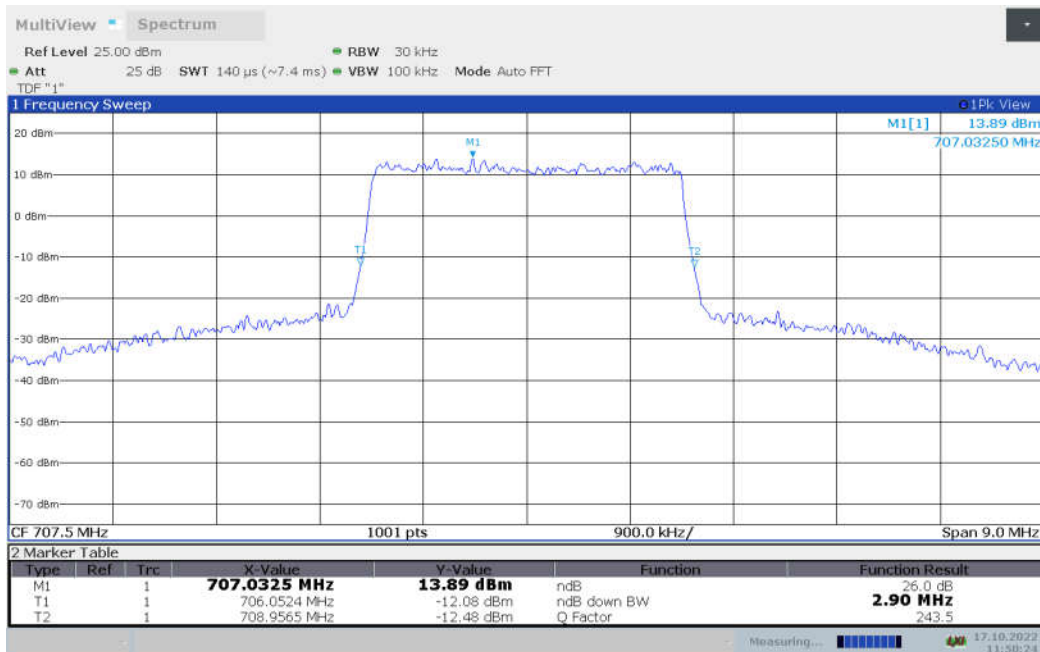
LTE band 12,3MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
707.5	2.922	2.904

LTE band 12 , 3MHz Bandwidth,QPSK (-26dBc BW)



LTE band 12 , 3MHz Bandwidth,16QAM (-26dBc BW)

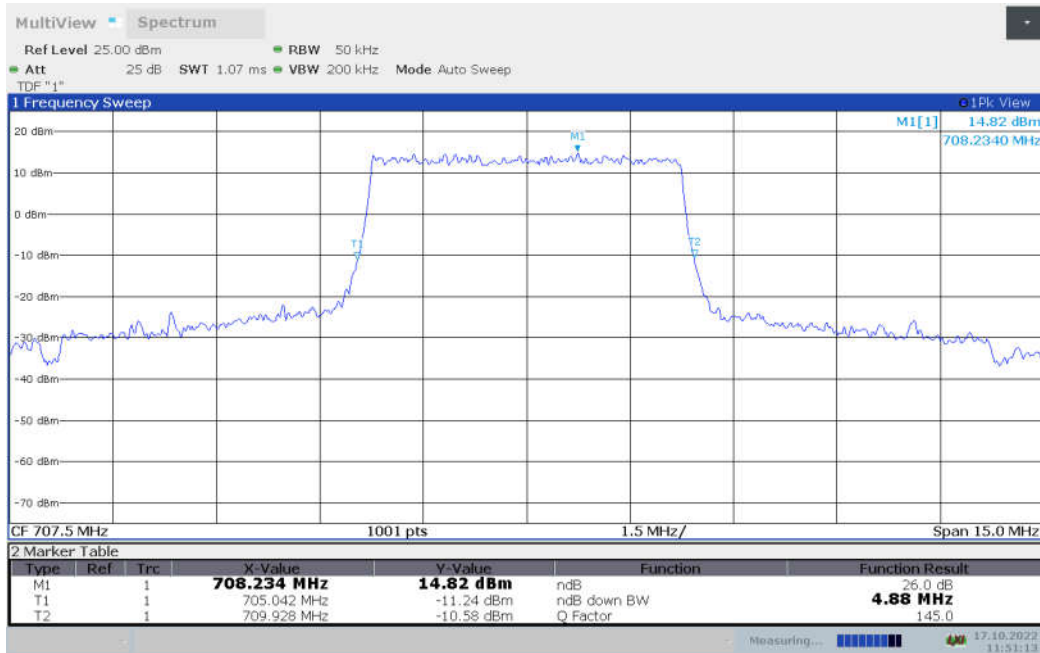




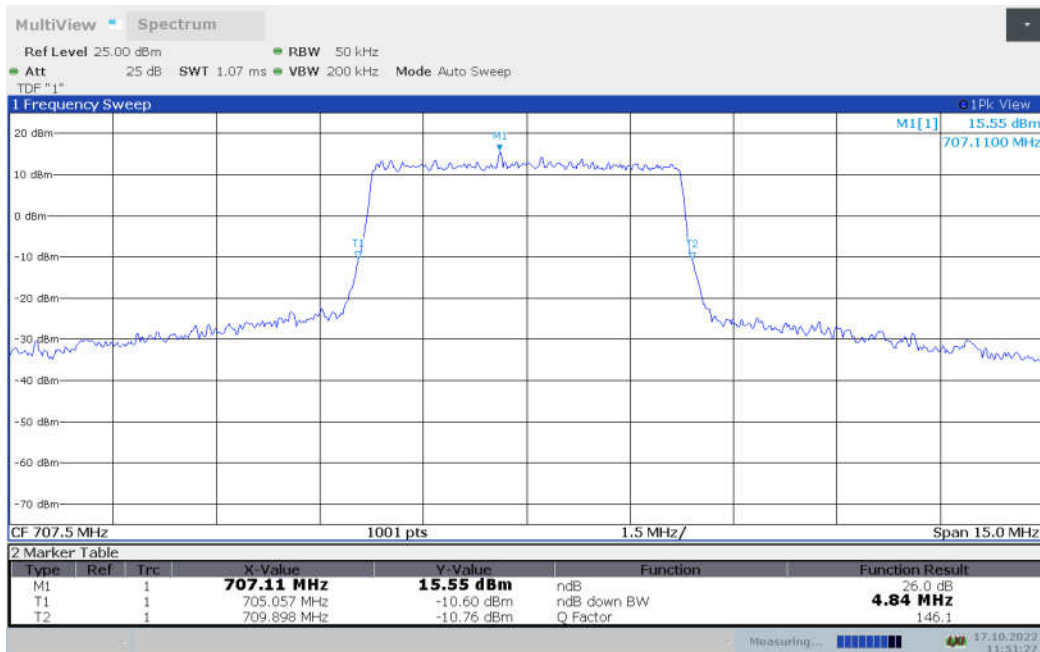
LTE band 12,5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
707.5	4.885	4.840

LTE band 12 , 5MHz Bandwidth,QPSK (-26dBc BW)



LTE band 12 , 5MHz Bandwidth,16QAM (-26dBc BW)

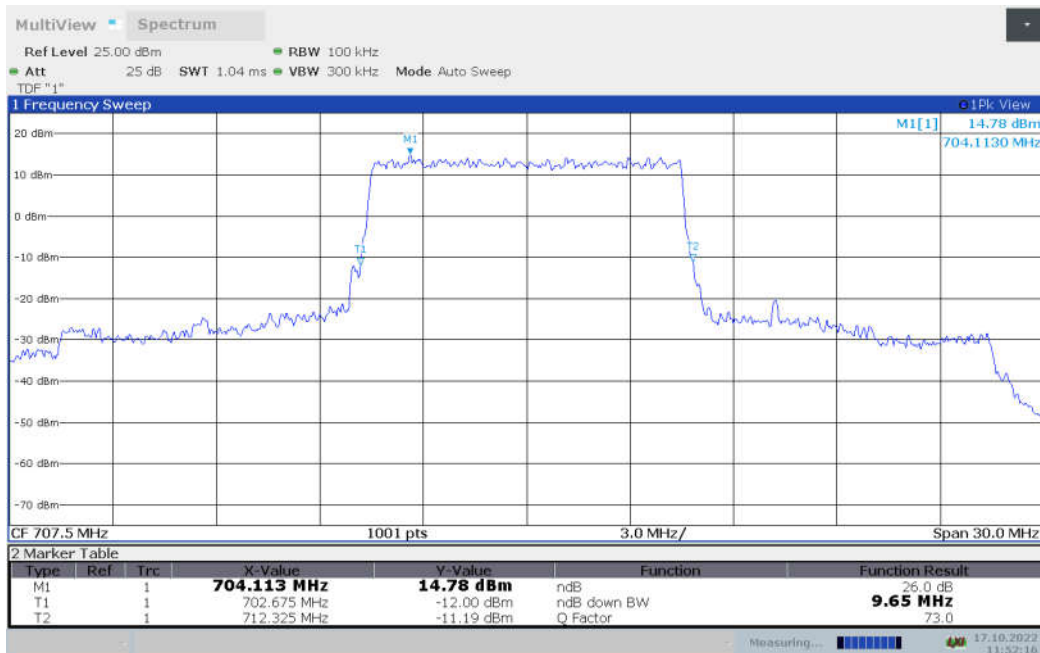




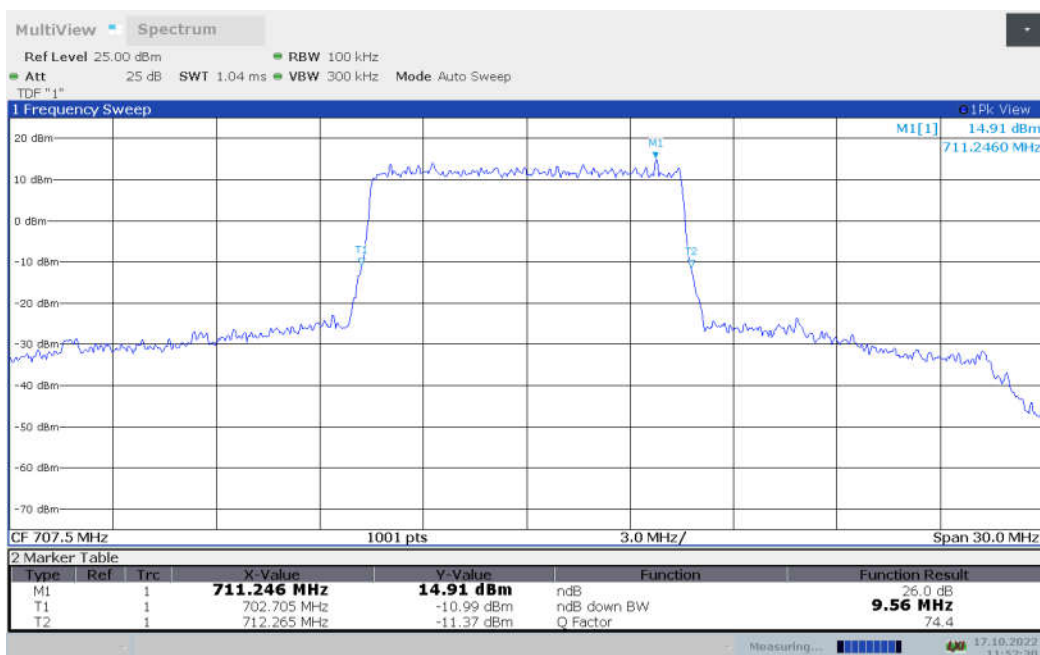
LTE band 12,10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
707.5	9.650	9.560

LTE band 12 , 10MHz Bandwidth,QPSK (-26dBc BW)



LTE band 12 , 10MHz Bandwidth,16QAM (-26dBc BW)

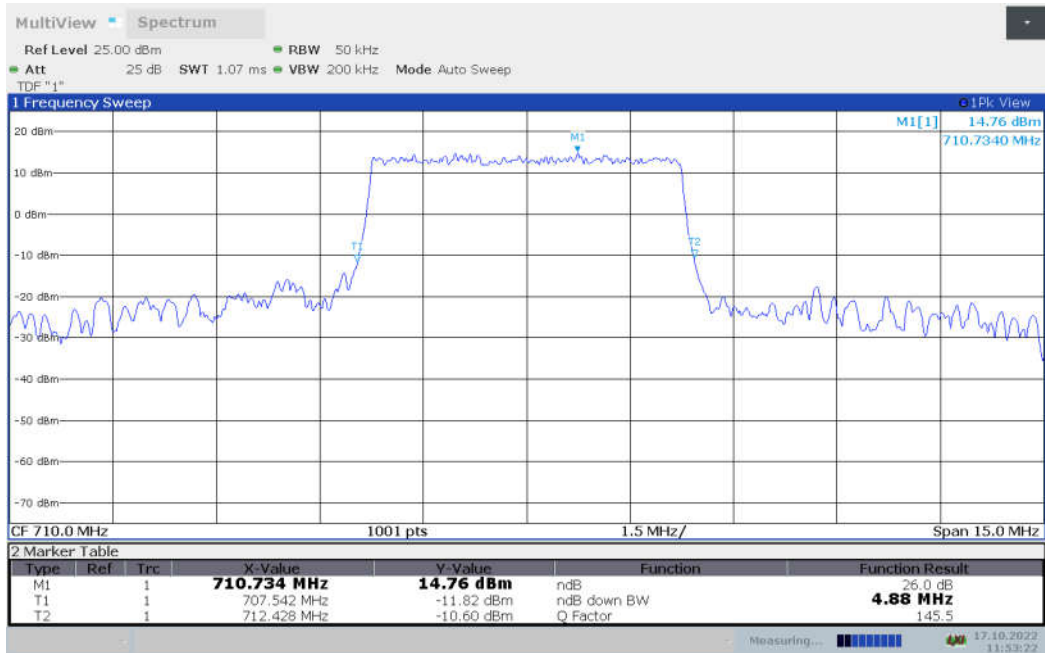




LTE band 17,5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)	
	QPSK	16QAM
710	4.885	4.810

LTE band 17 , 5MHz Bandwidth,QPSK (-26dBc BW)



LTE band 17 , 5MHz Bandwidth,16QAM (-26dBc BW)

