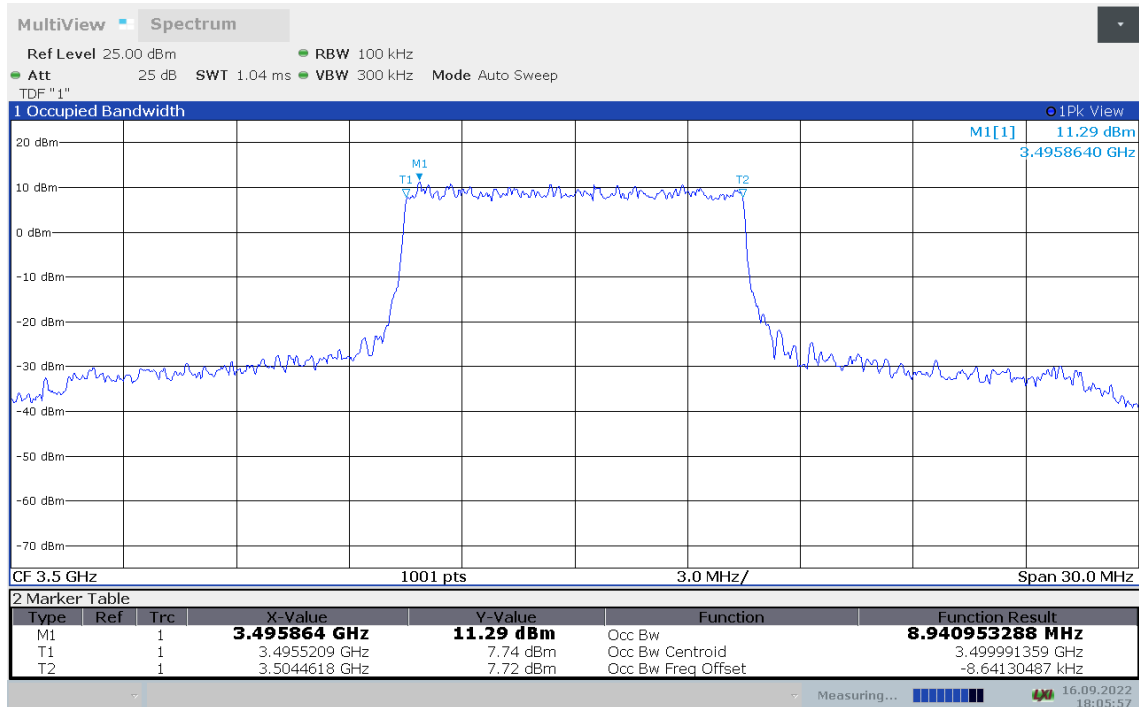
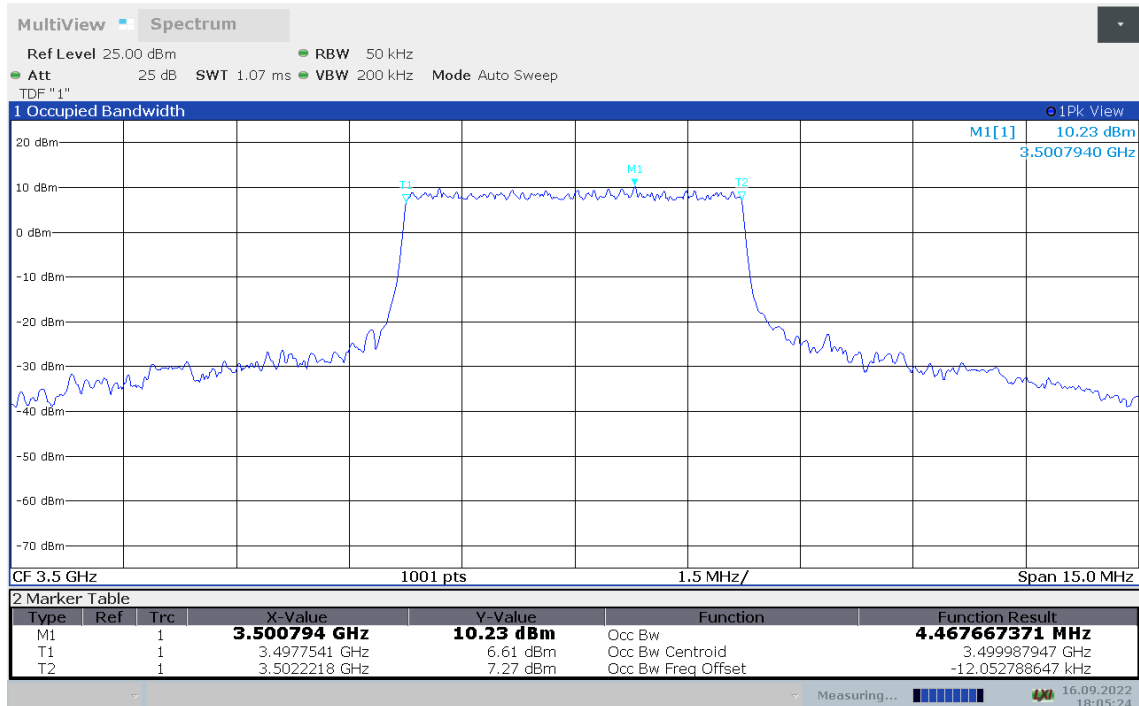


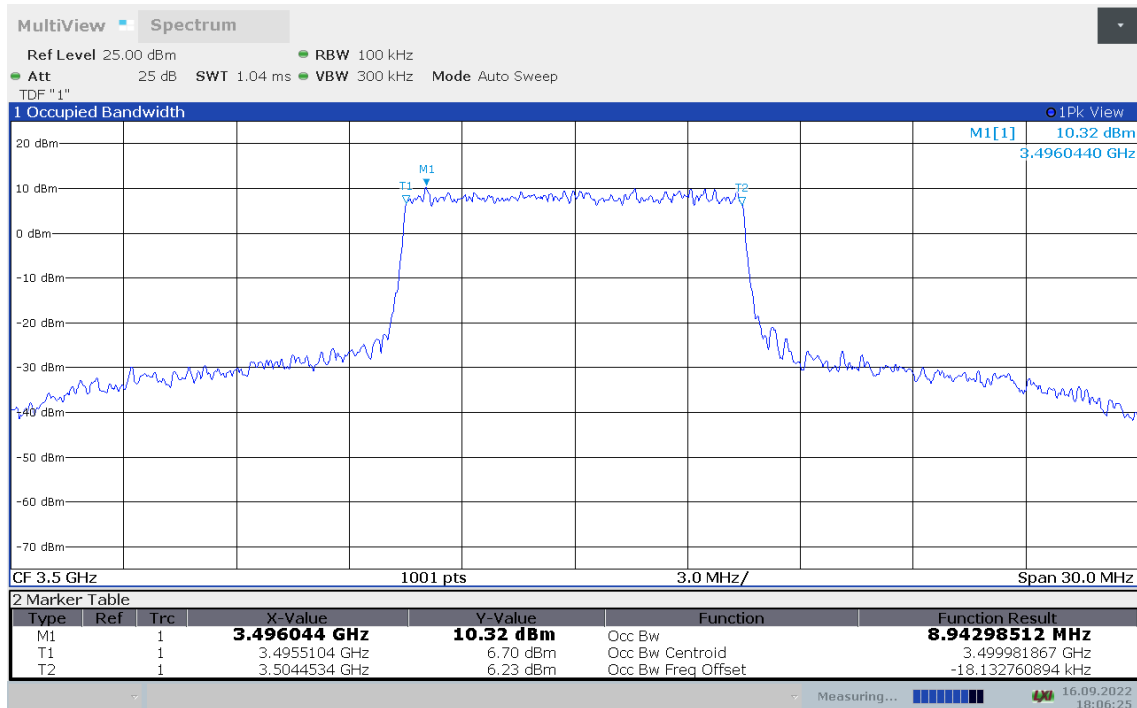
LTE band 42(3450MHz-3550MHz), 10MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
3500	QPSK	16QAM	64QAM
	8.941	4.468	8.943

LTE band 42(3450MHz-3550MHz), 10MHz Bandwidth, QPSK (99% BW)

LTE band 42(3450MHz-3550MHz), 10MHz Bandwidth, 16QAM (99% BW)


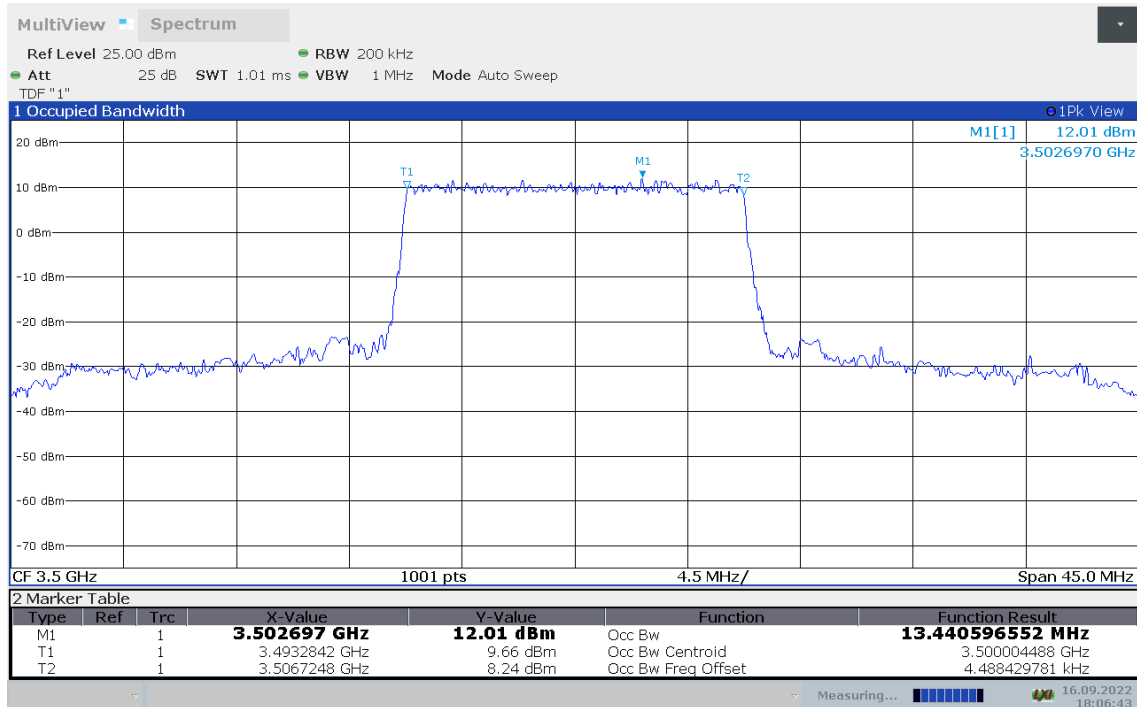
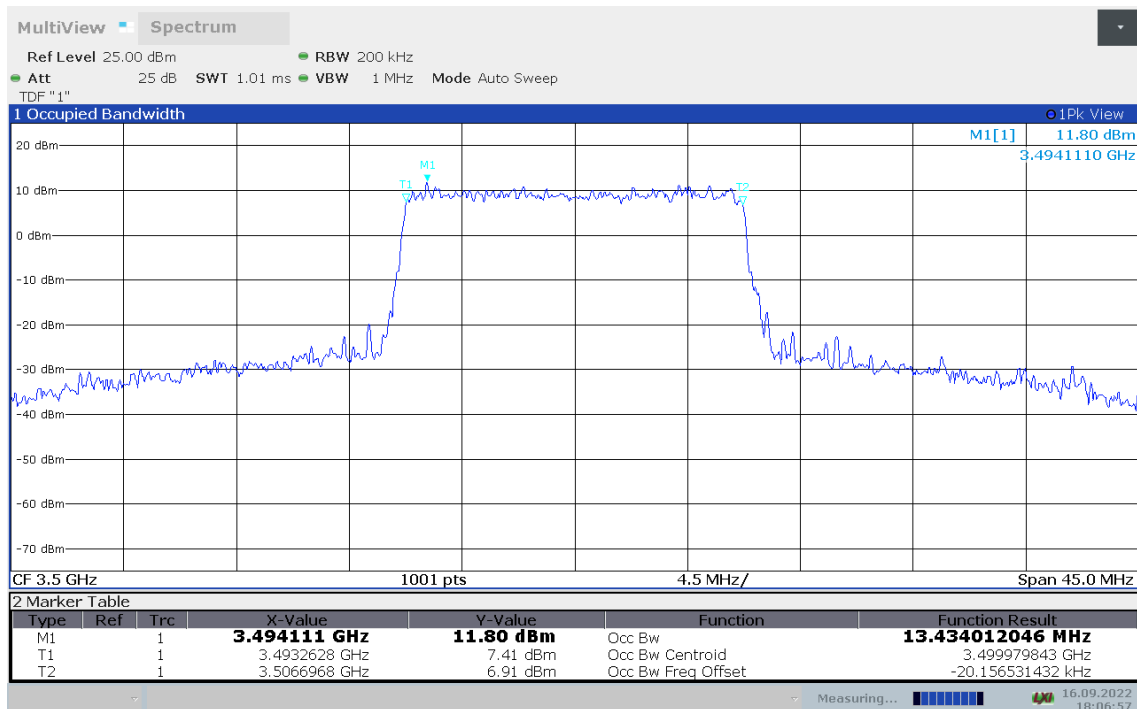


LTE Band 42(3450MHz-3550MHz), 10MHz Bandwidth, 64QAM (99% BW)

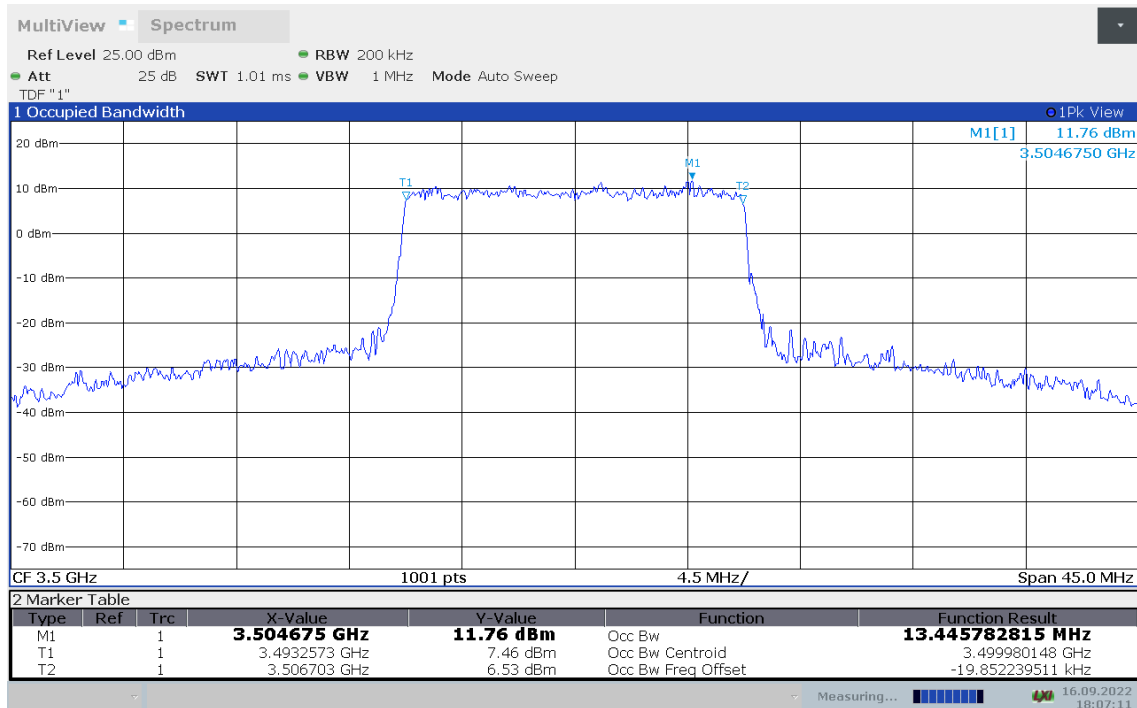


LTE band 42(3450MHz-3550MHz), 15MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
3500	QPSK	16QAM	64QAM
	13.441	13.434	13.446

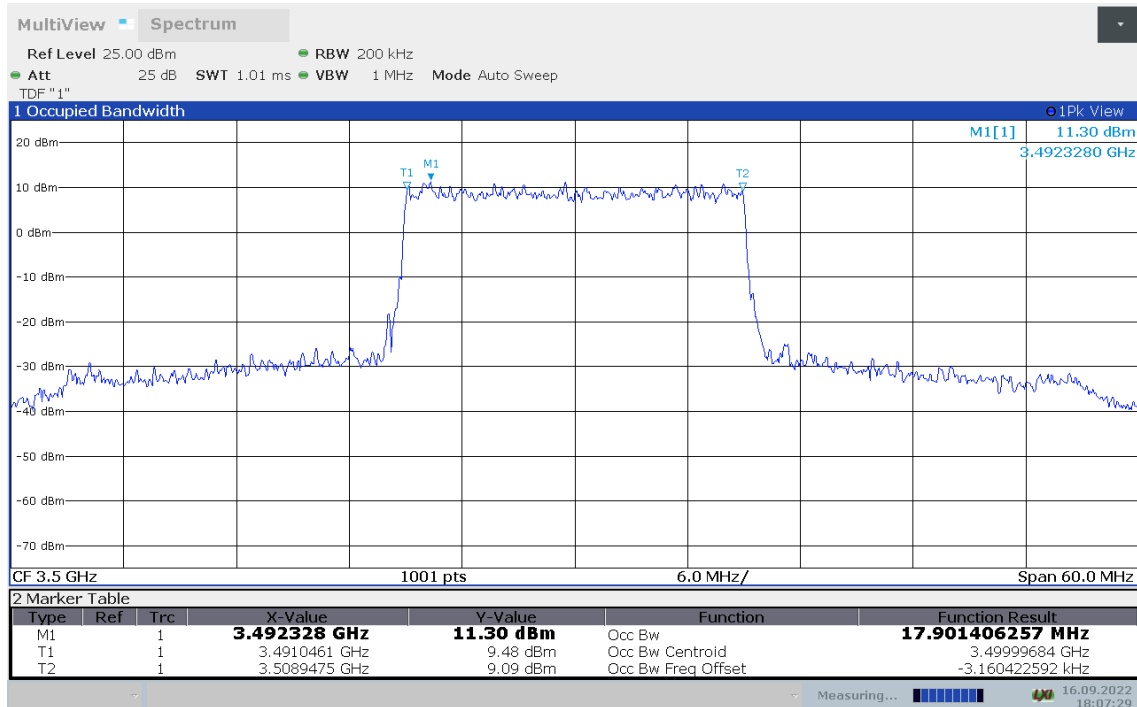
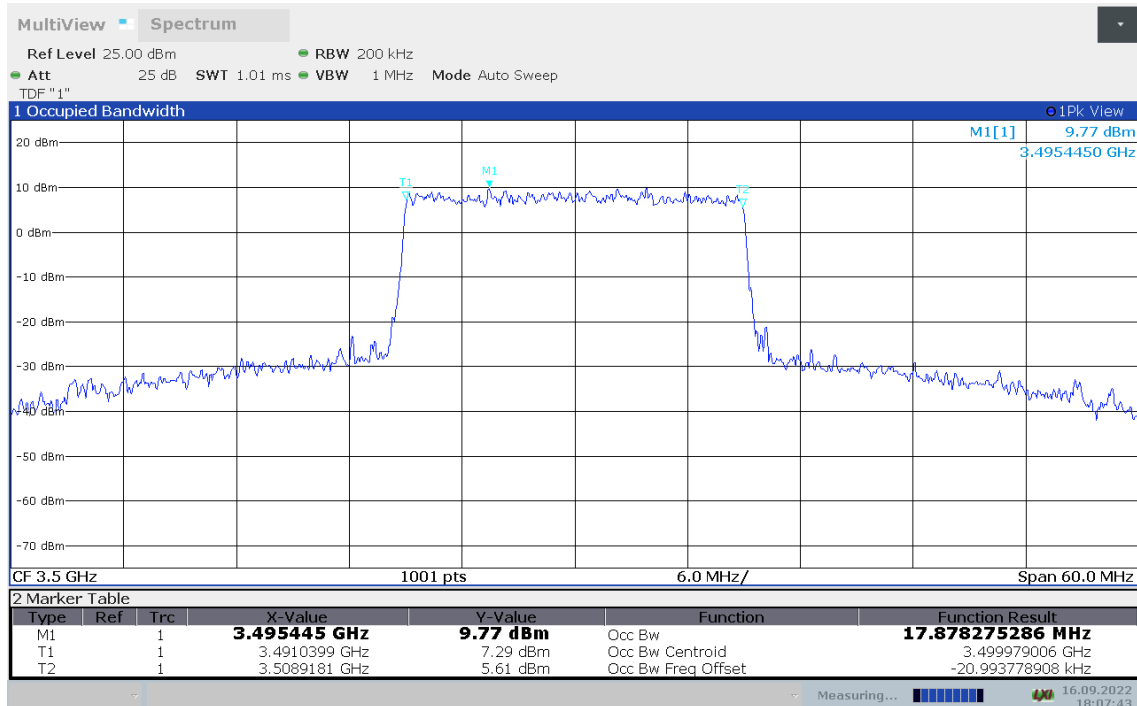
LTE band 42(3450MHz-3550MHz), 15MHz Bandwidth, QPSK (99% BW)

LTE band 42(3450MHz-3550MHz), 15MHz Bandwidth, 16QAM (99% BW)


LTE Band 42(3450MHz-3550MHz), 15MHz Bandwidth, 64QAM (99% BW)



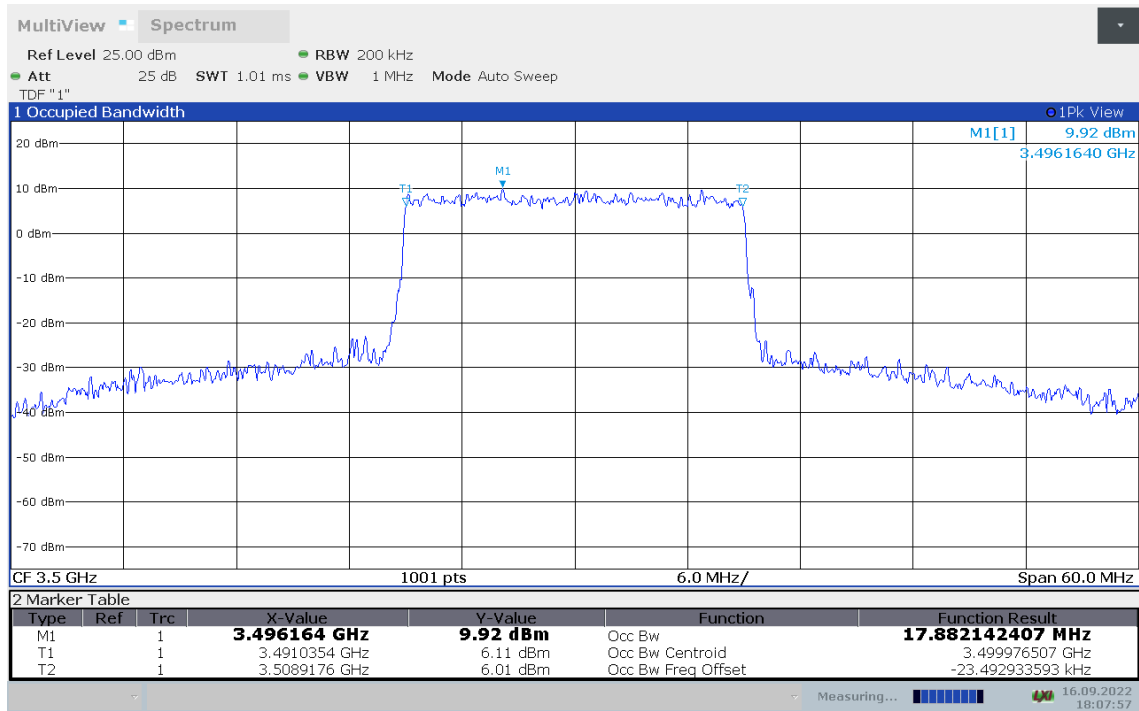
LTE band 42(3450MHz-3550MHz), 20MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
3500	QPSK	16QAM	64QAM
	17.901	17.878	17.882

LTE band 42(3450MHz-3550MHz), 20MHz Bandwidth, QPSK (99% BW)

LTE band 42(3450MHz-3550MHz), 20MHz Bandwidth, 16QAM (99% BW)




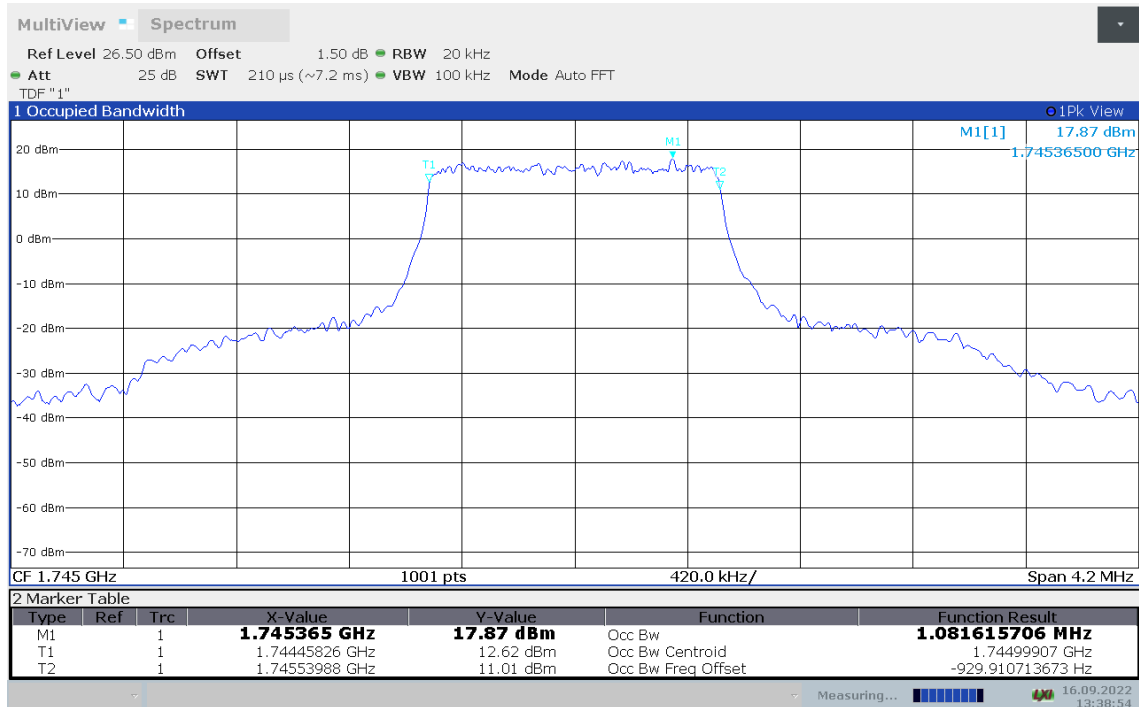
LTE Band 42(3450MHz-3550MHz), 20MHz Bandwidth, 64QAM (99% BW)



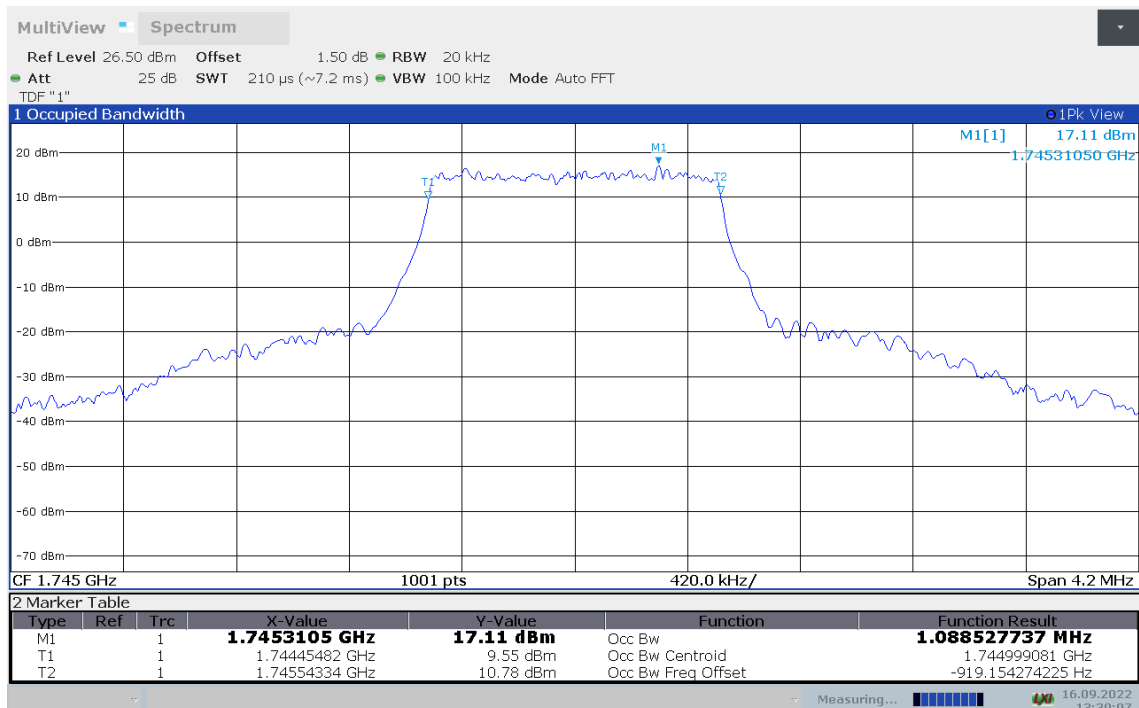
LTE band 66, 1.4MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	1.082	1.089	1.091

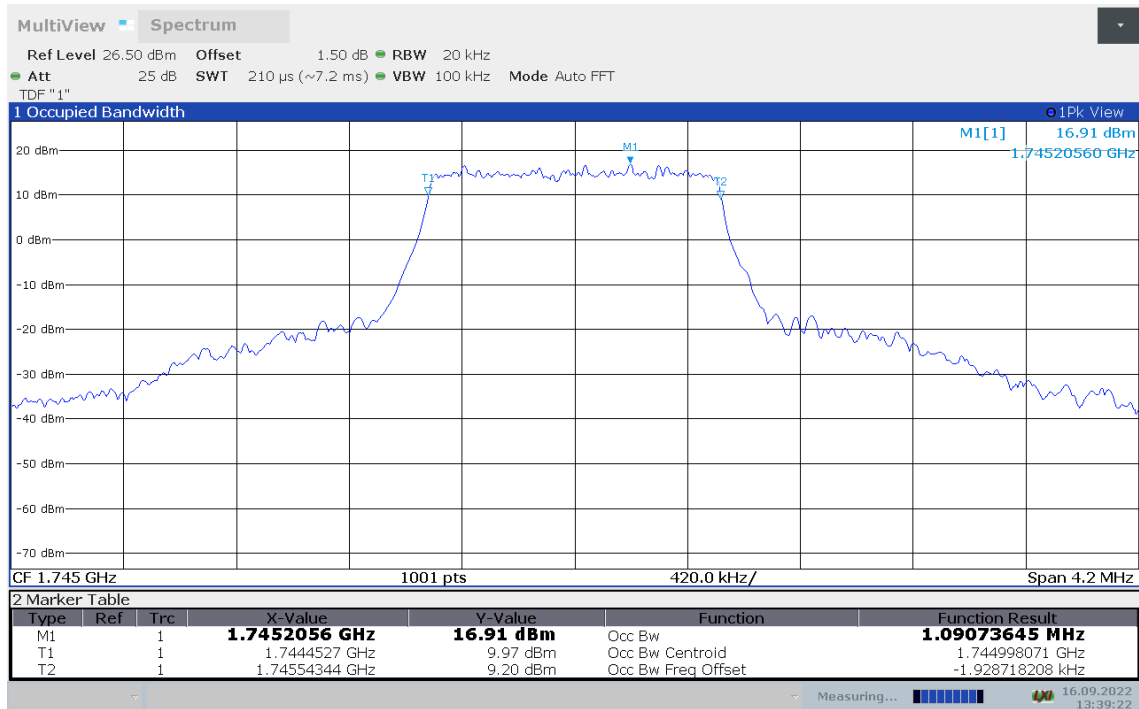
LTE band 66, 1.4MHz Bandwidth, QPSK (99% BW)



LTE band 66, 1.4MHz Bandwidth, 16QAM (99% BW)



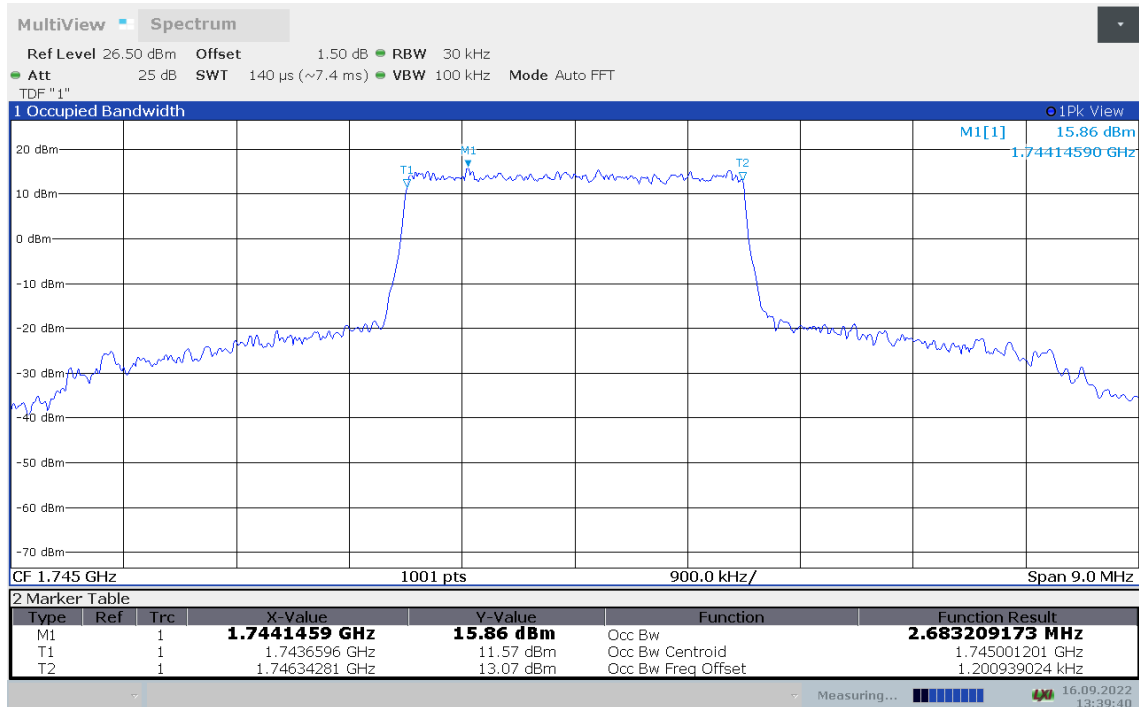
LTE Band 66, 1.4MHz Bandwidth, 64QAM (99% BW)



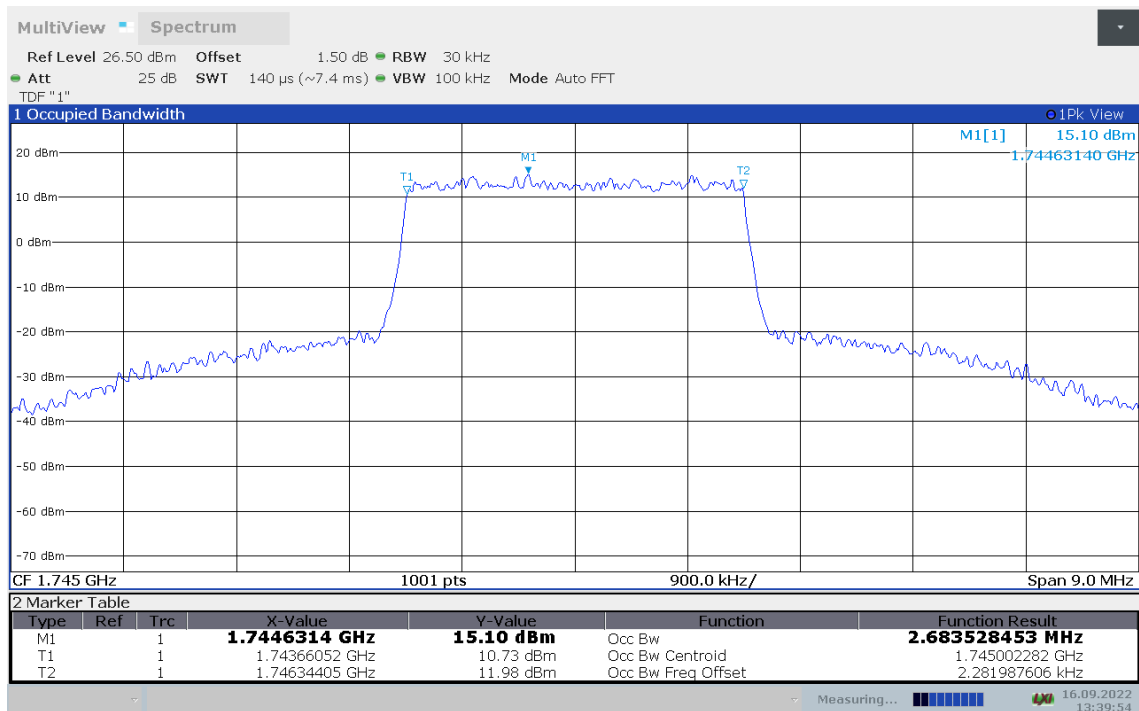
LTE band 66, 3MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	2.683	2.684	2.679

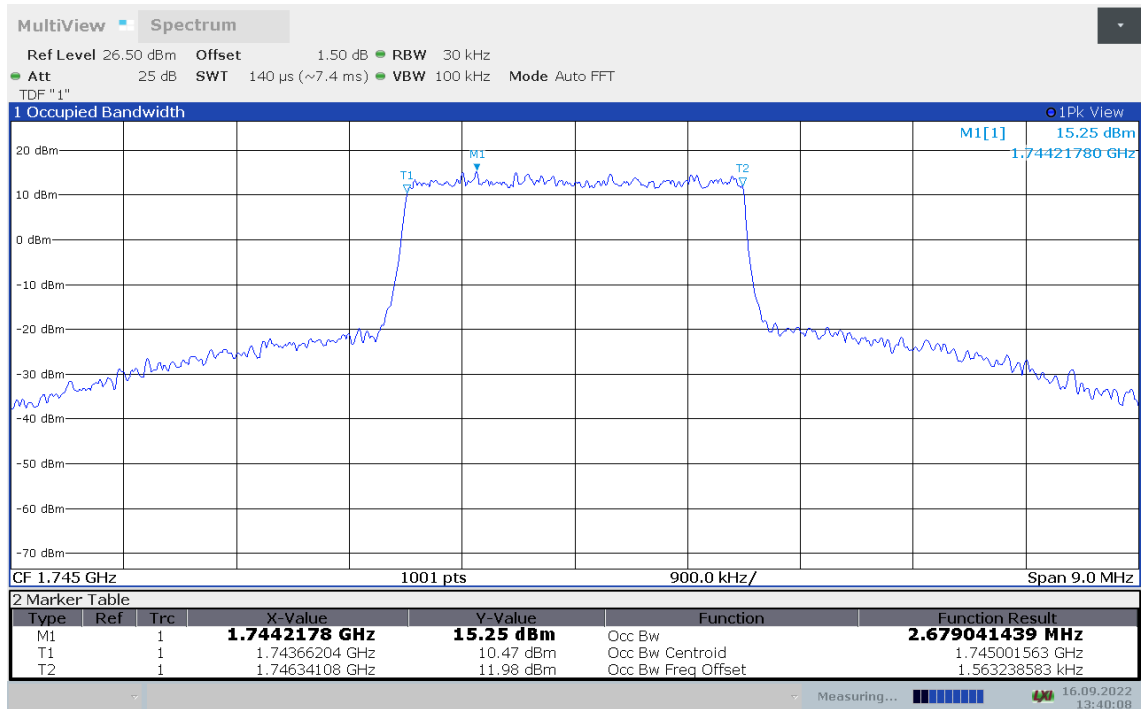
LTE band 66, 3MHz Bandwidth, QPSK (99% BW)



LTE band 66, 3MHz Bandwidth, 16QAM (99% BW)



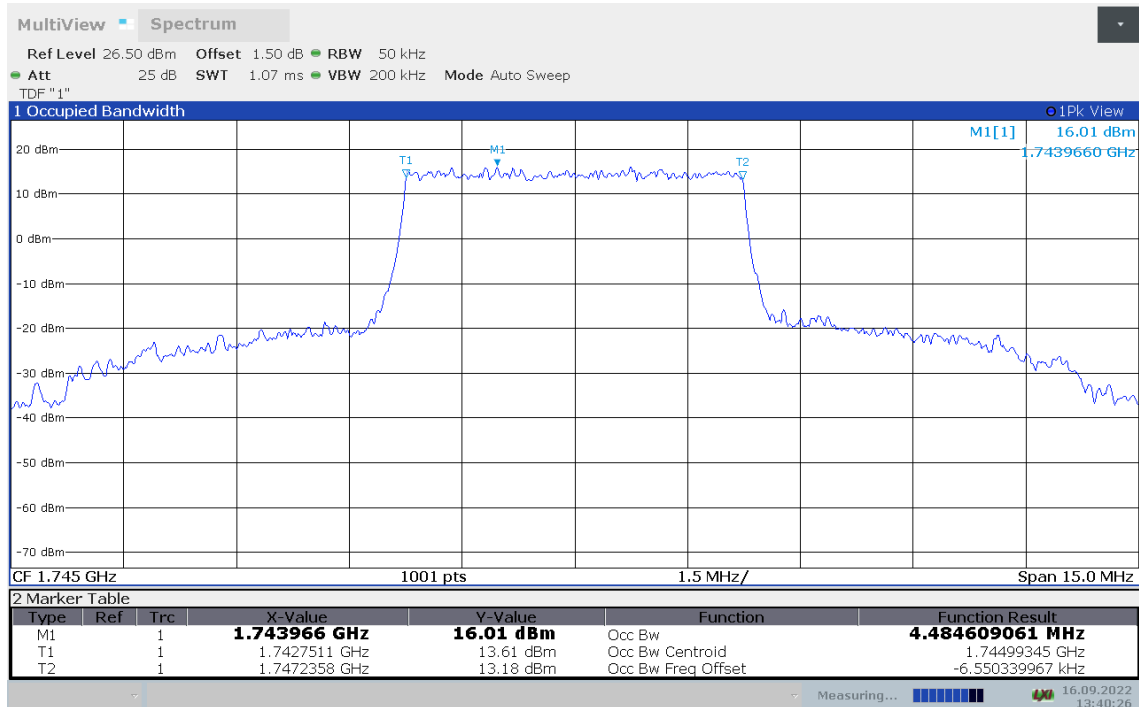
LTE Band 66, 3MHz Bandwidth, 64QAM (99% BW)



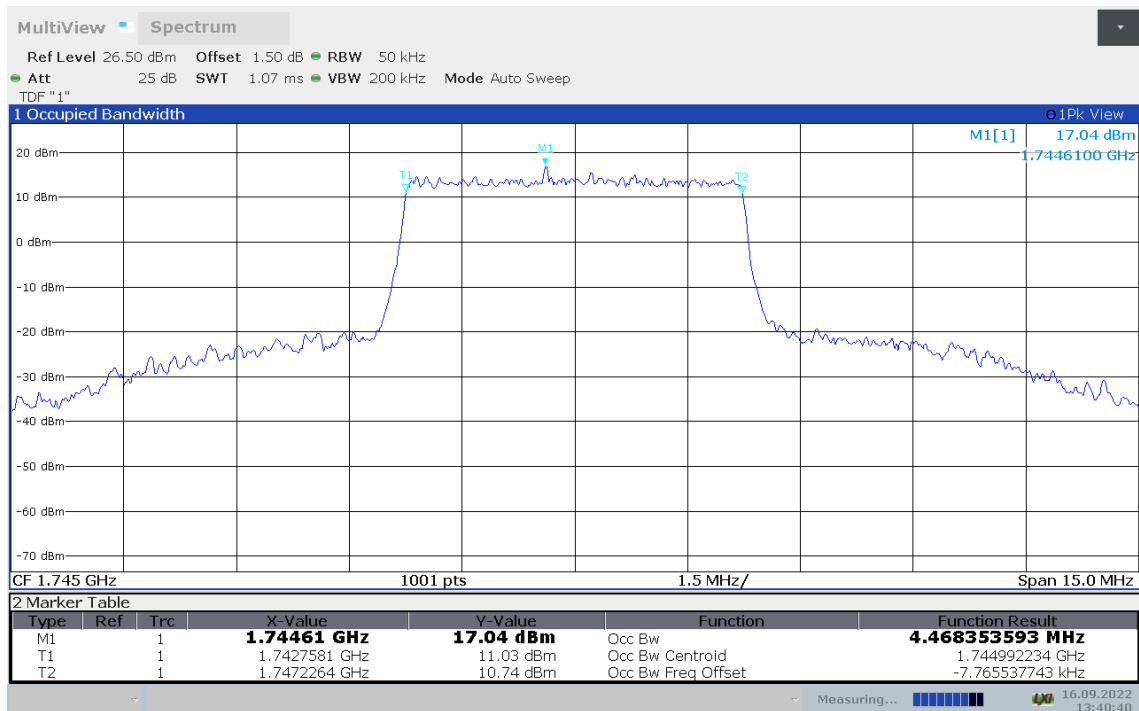
LTE band 66, 5MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	4.485	4.468	4.470

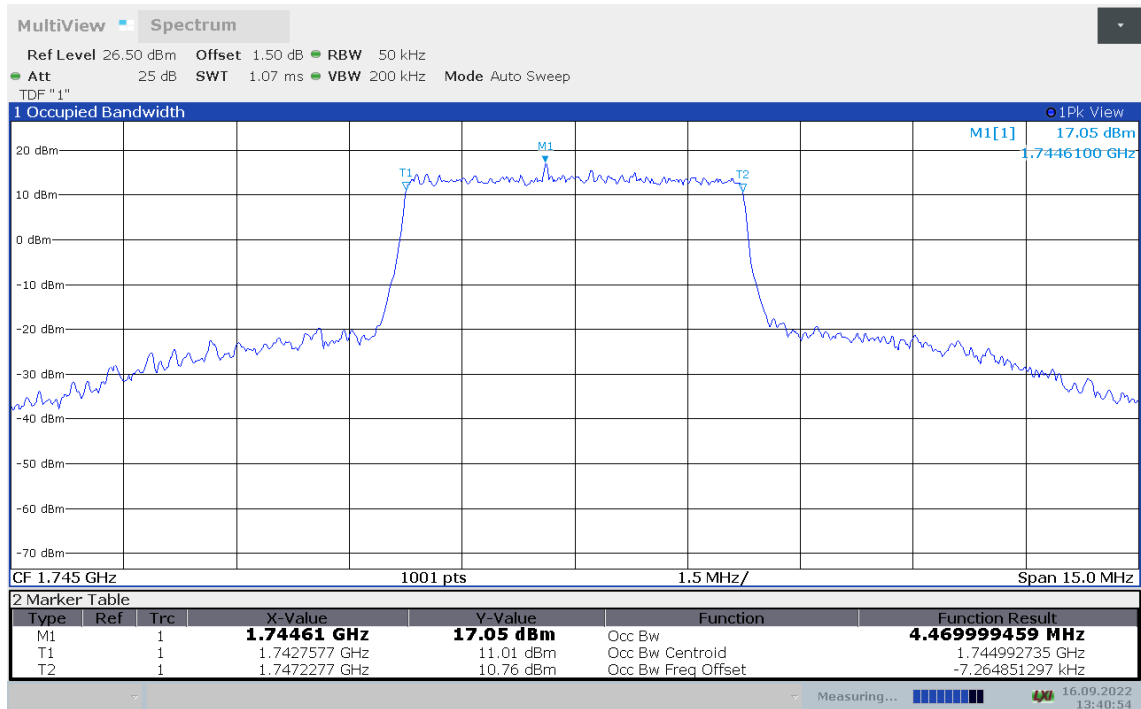
LTE band 66, 5MHz Bandwidth, QPSK (99% BW)



LTE band 66, 5MHz Bandwidth,16QAM (99% BW)



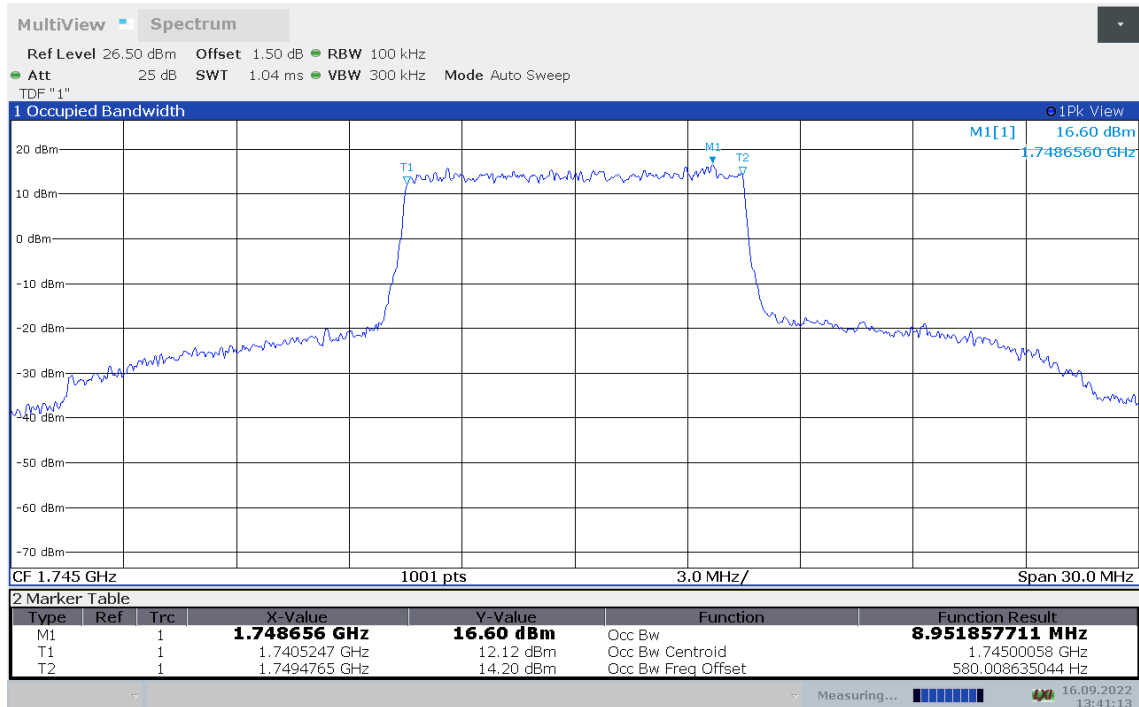
LTE Band 66, 5MHz Bandwidth,64QAM (99% BW)



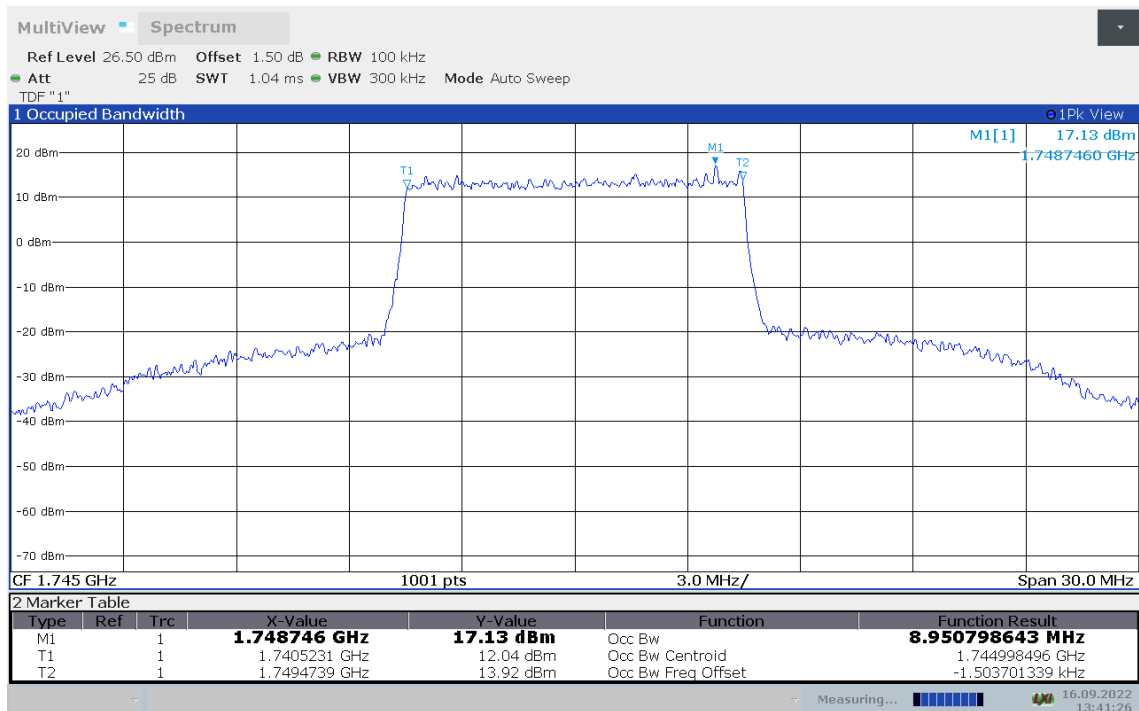
LTE band 66, 10MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	8.952	8.951	8.949

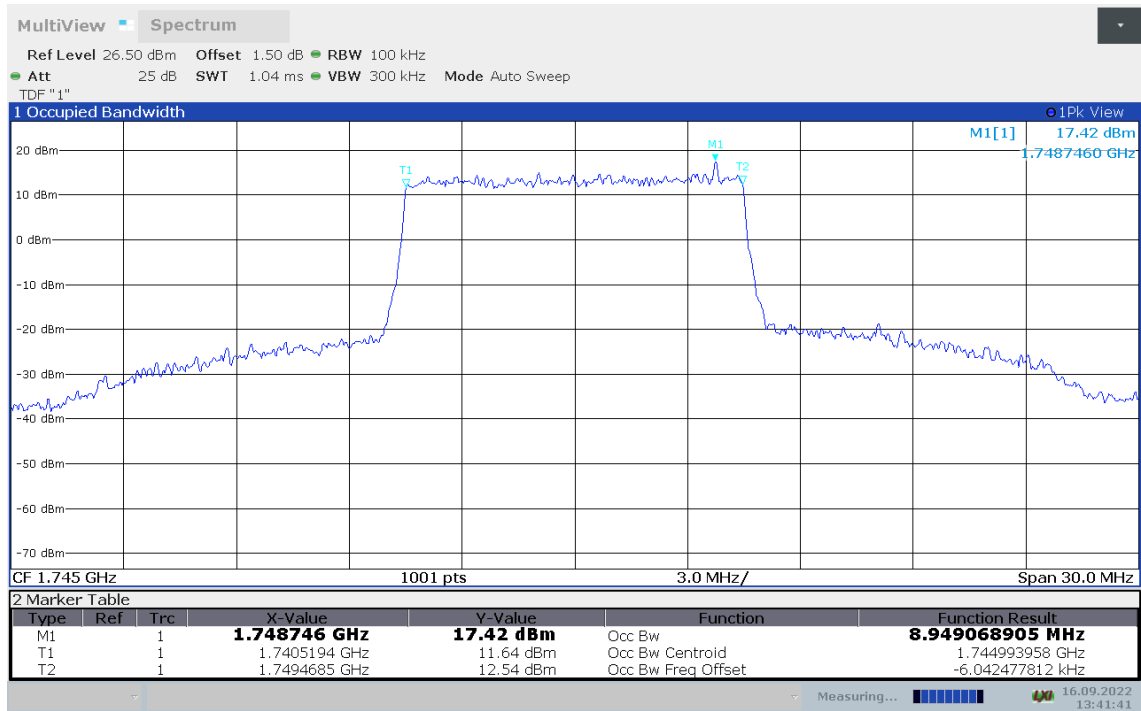
LTE band 66, 10MHz Bandwidth, QPSK (99% BW)



LTE band 66, 10MHz Bandwidth, 16QAM (99% BW)



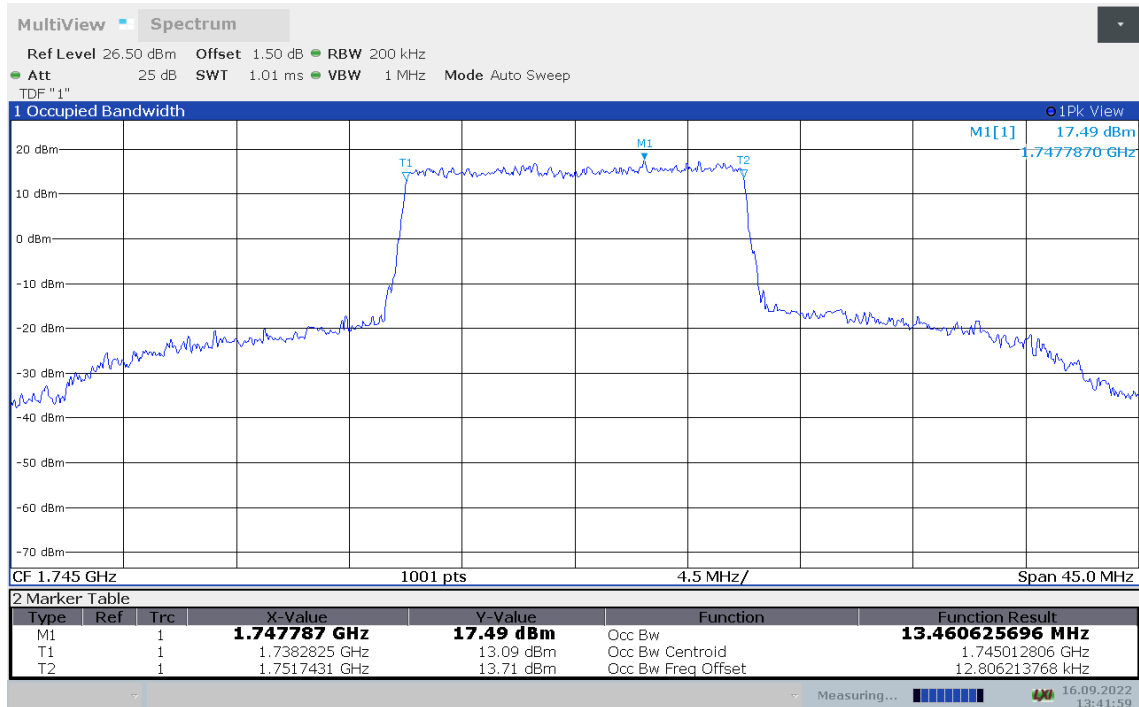
LTE Band 66, 10MHz Bandwidth, 64QAM (99% BW)



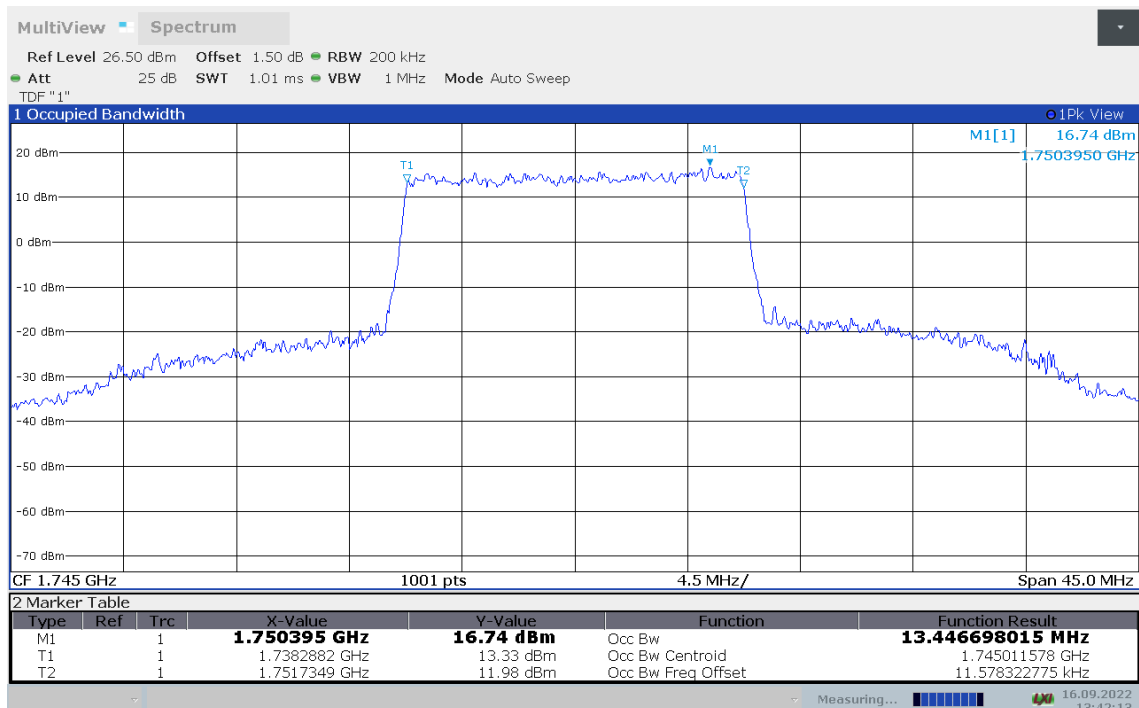
LTE band 66, 15MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	13.461	13.447	13.452

LTE band 66, 15MHz Bandwidth, QPSK (99% BW)

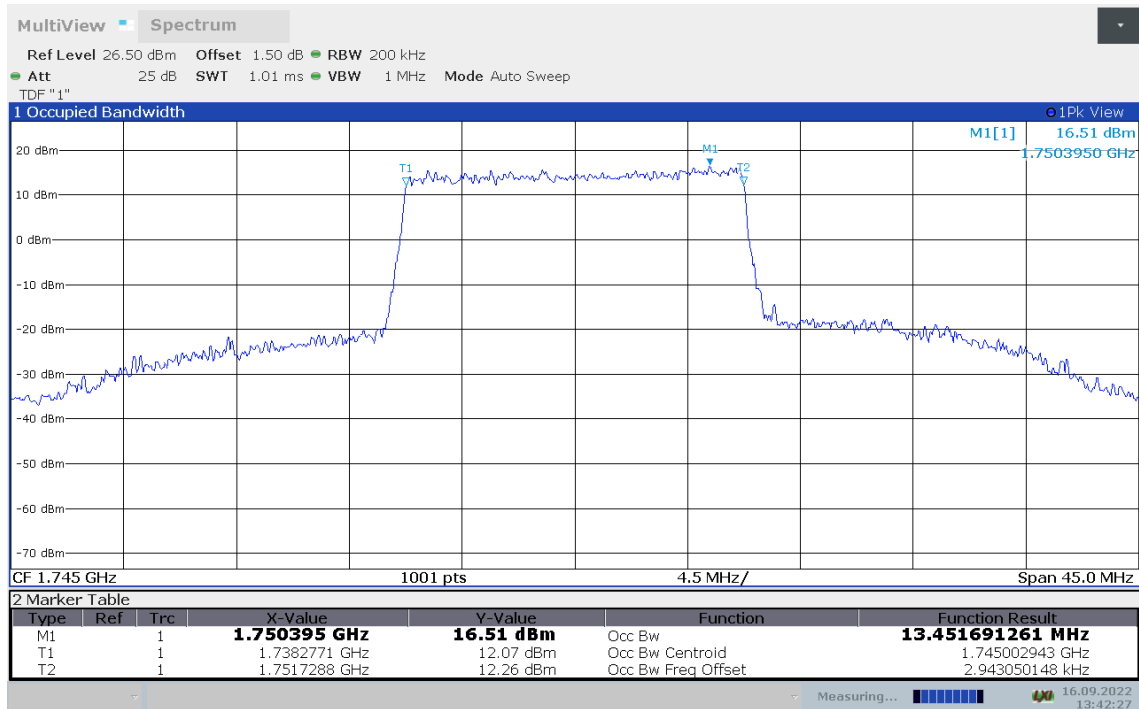


LTE band 66, 15MHz Bandwidth, 16QAM (99% BW)





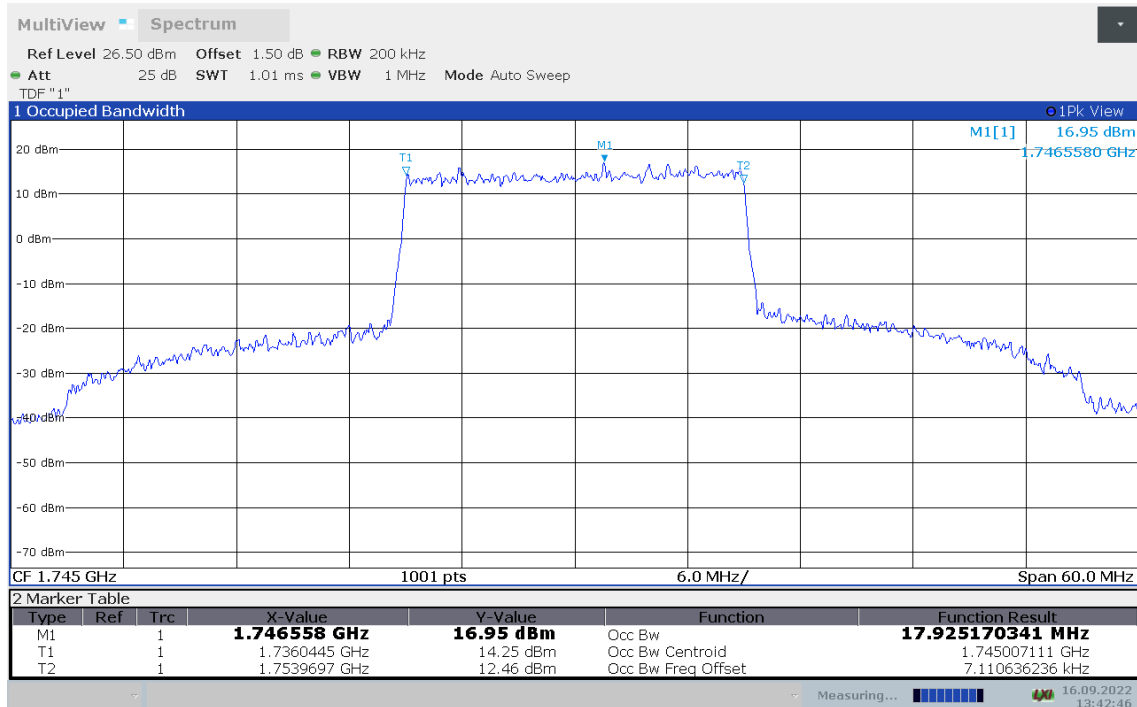
LTE Band 66, 15MHz Bandwidth, 64QAM (99% BW)



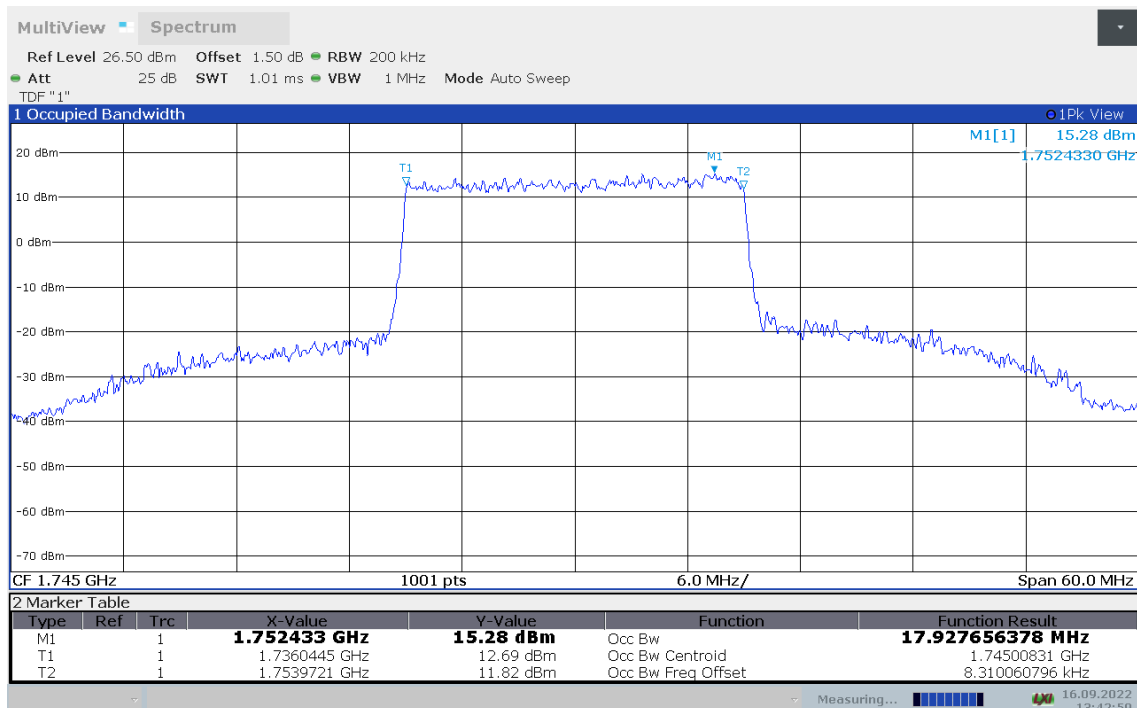
LTE band 66, 20MHz (99% BW)

Frequency(MHz)	Occupied Bandwidth (99% BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	17.925	17.928	17.940

LTE band 66, 20MHz Bandwidth, QPSK (99% BW)

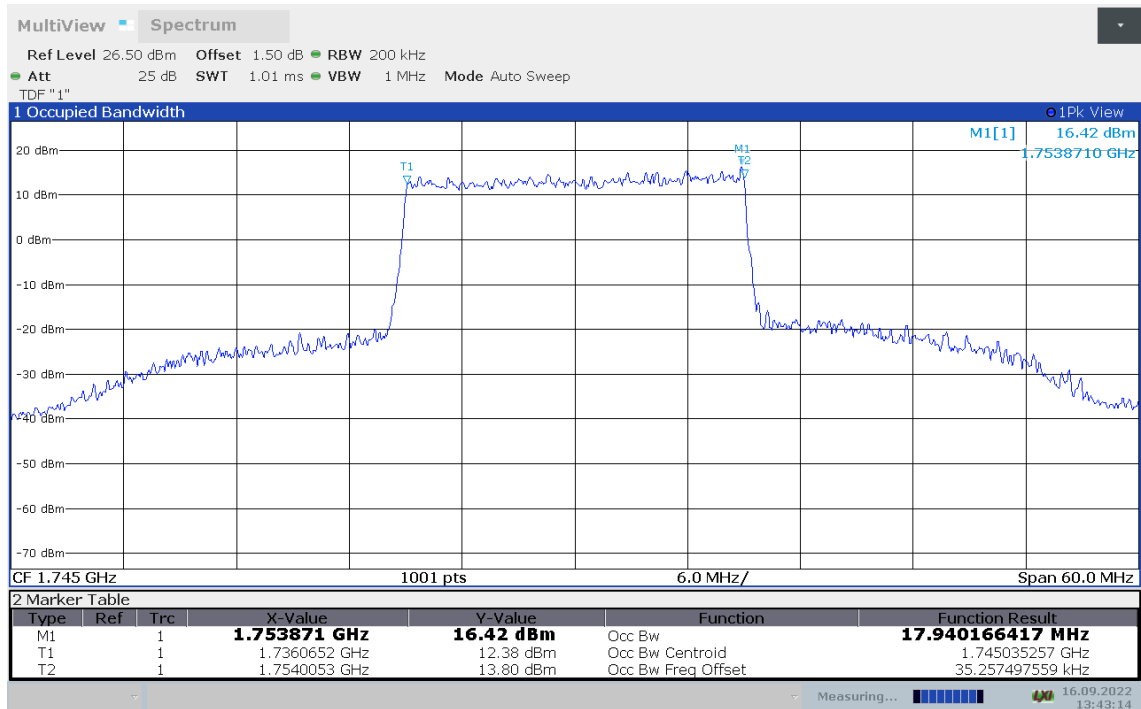


LTE band 66, 20MHz Bandwidth, 16QAM (99% BW)





LTE Band 66, 20MHz Bandwidth, 64QAM (99% BW)



A.5 EMISSION BANDWIDTH

Reference

FCC: CFR Part 2.1049, 22.917, 24.238, 27.53, 90.691, 96.41.

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.

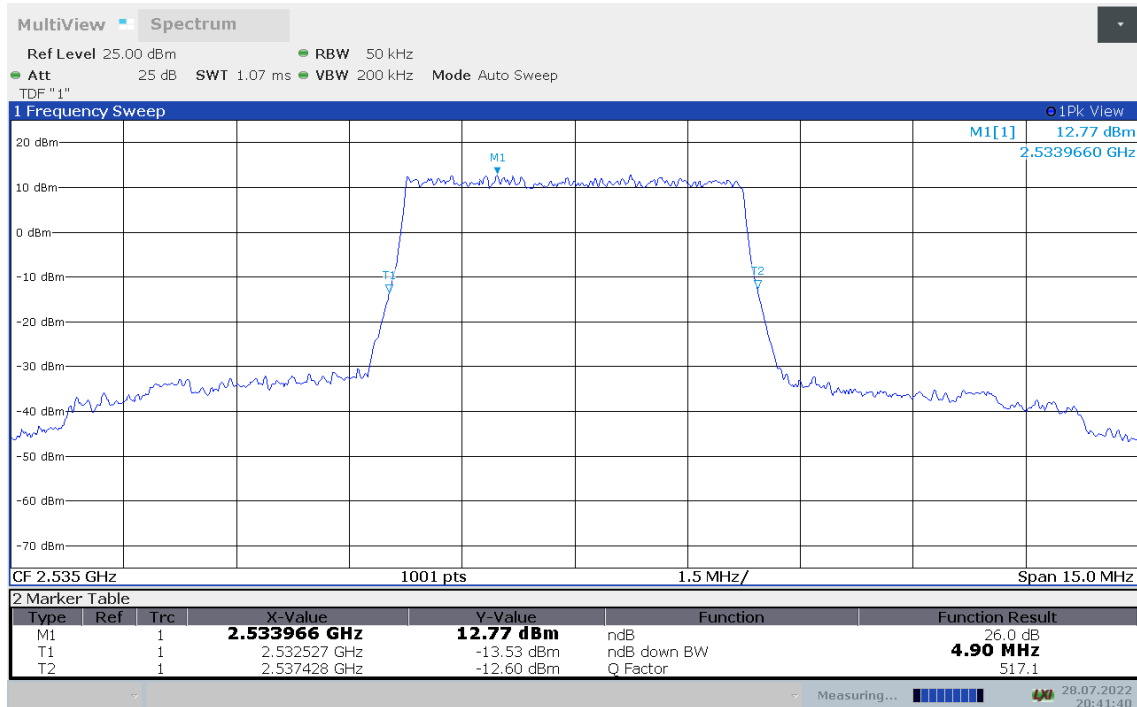
A.5.2 Emission Bandwidth Results

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.

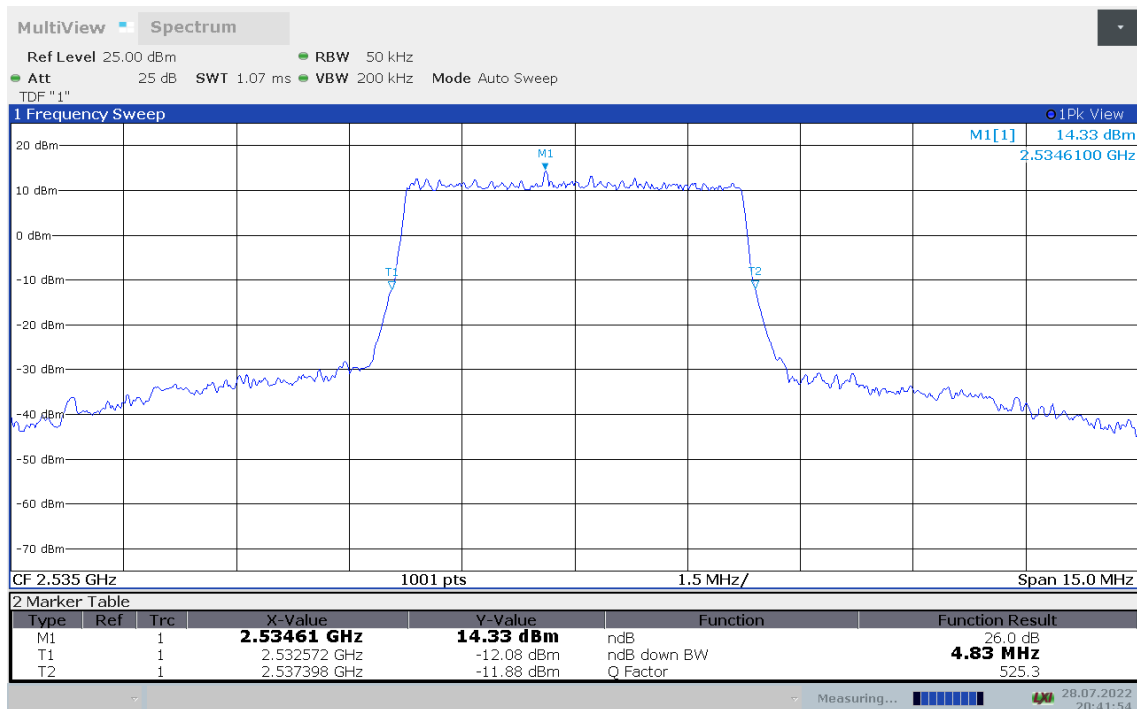
LTE band 7, 5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
2535.0	QPSK	16QAM	64QAM
	4.90	4.83	4.83

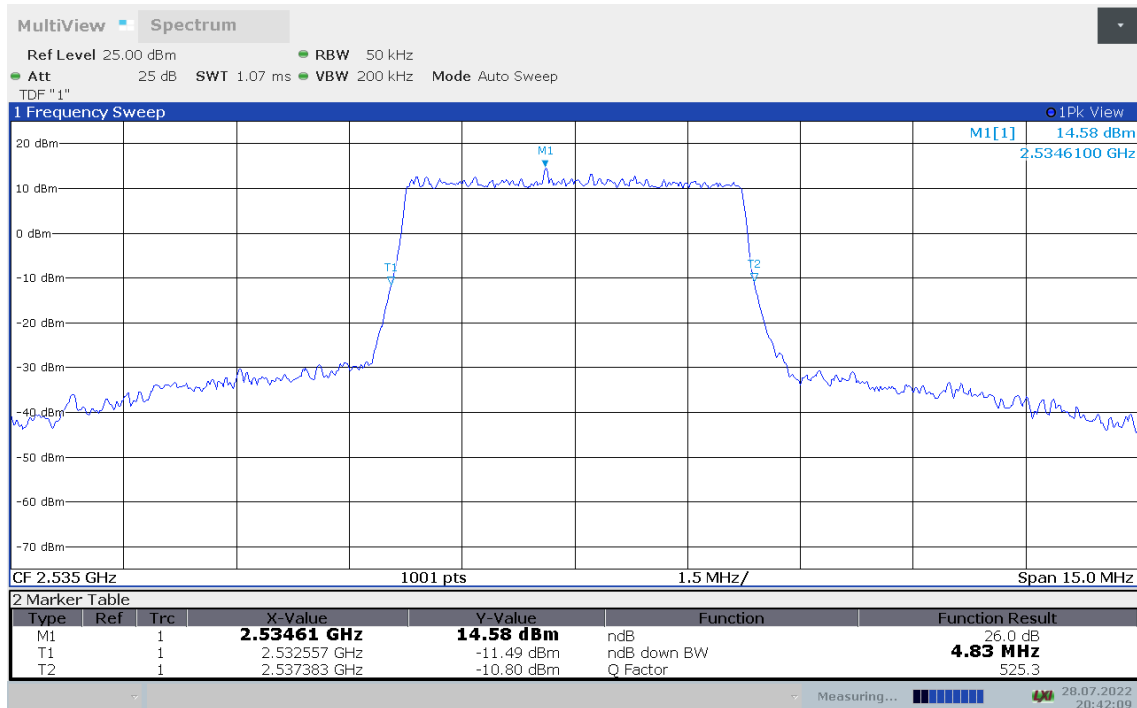
LTE band 7, 5MHz Bandwidth, QPSK (-26dBc BW)



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



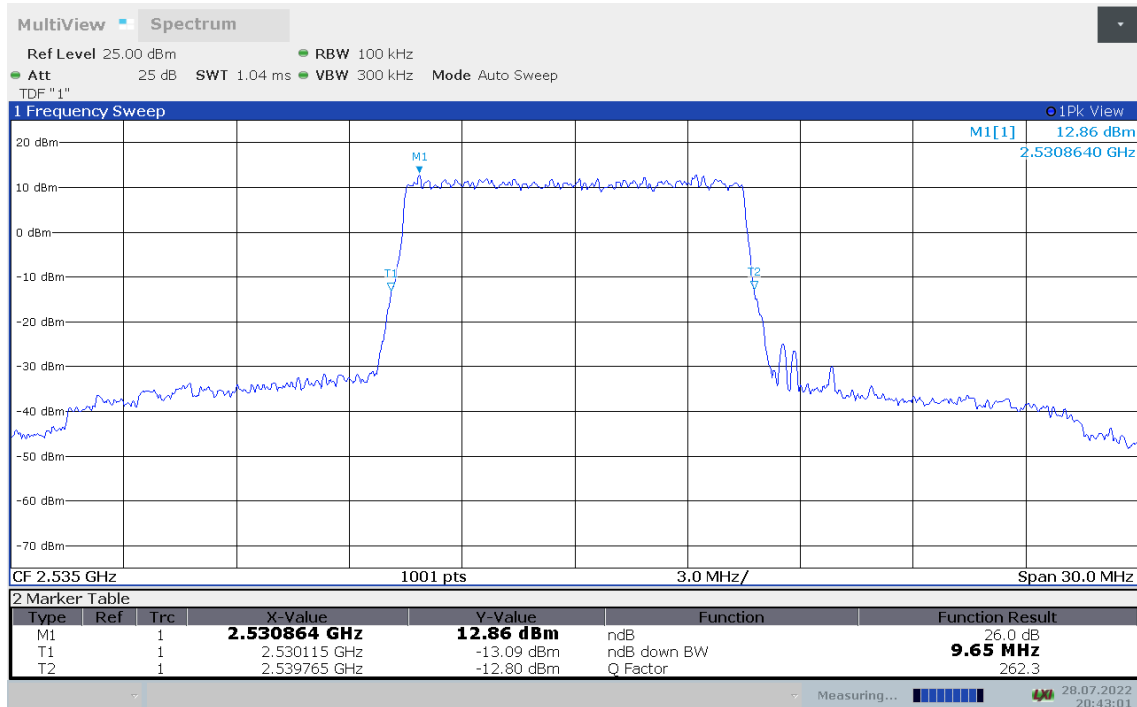
LTE band 7, 5MHz Bandwidth,64QAM (-26dBc BW)



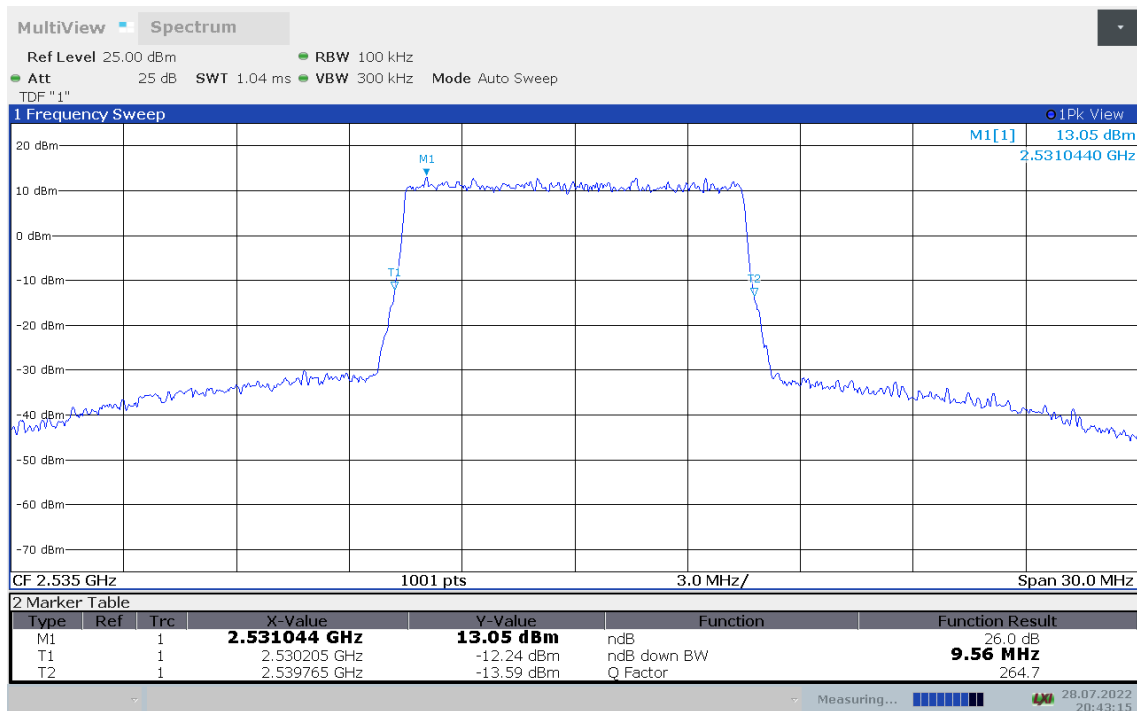
LTE band 7, 10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
2535.0	QPSK	16QAM	64QAM
	9.65	9.56	9.56

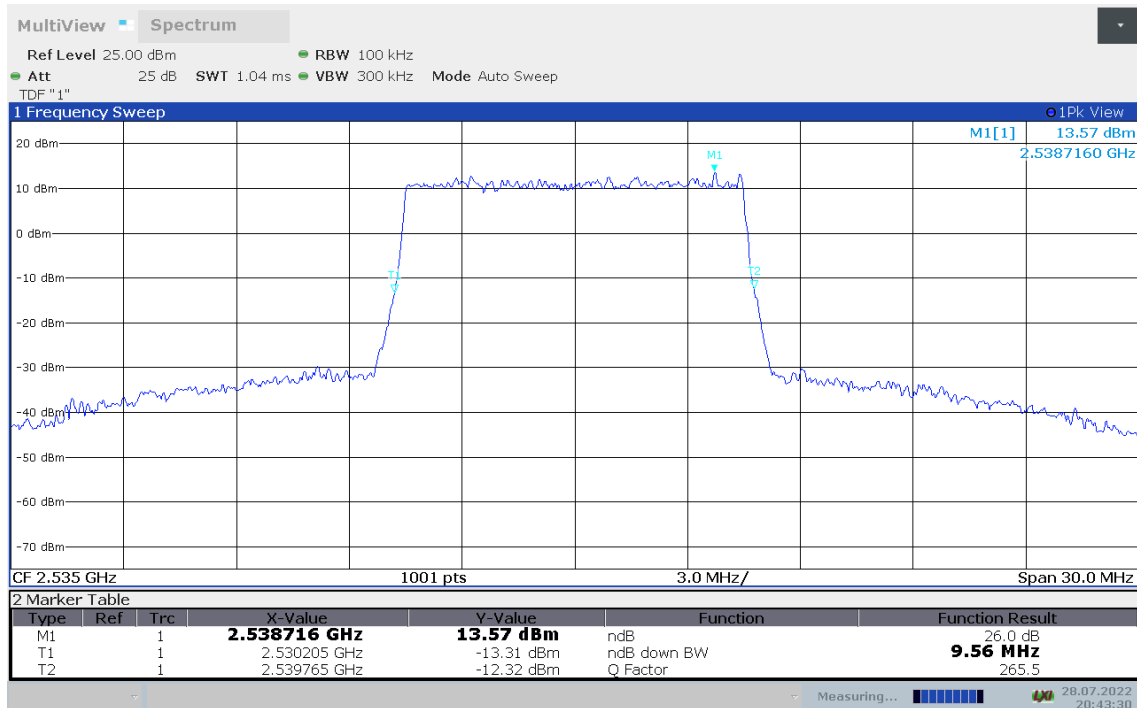
LTE band 7, 10MHz Bandwidth, QPSK (-26dBc BW)



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



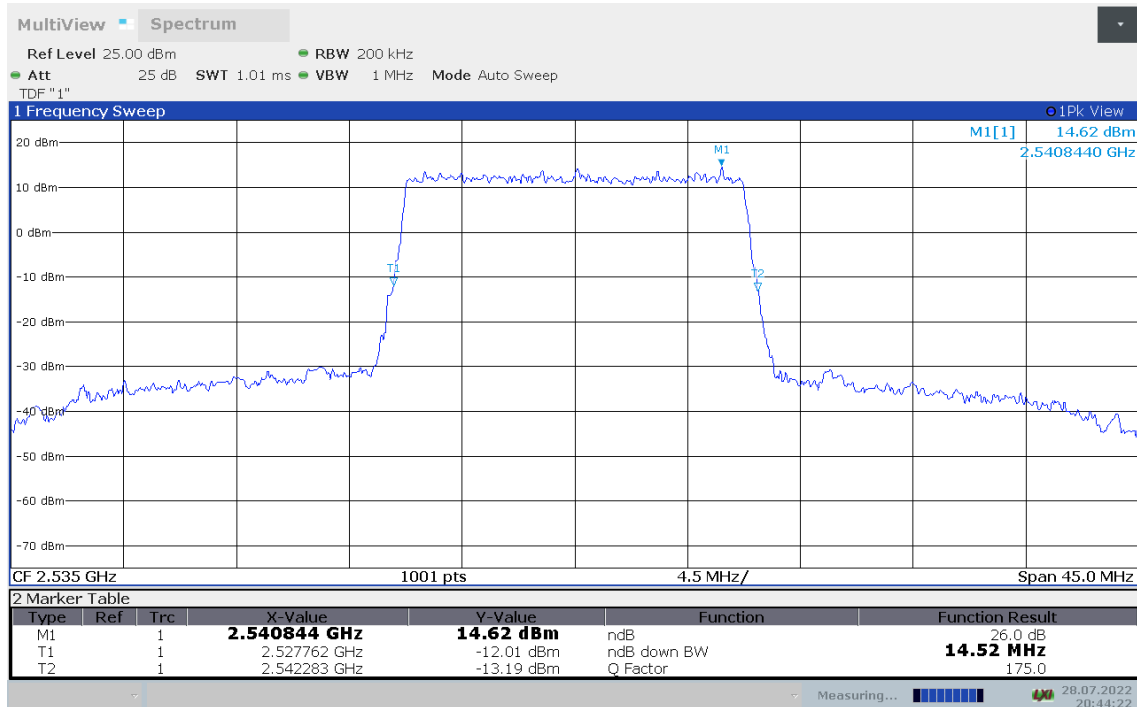
LTE band 7, 10MHz Bandwidth, 64QAM (-26dBc BW)



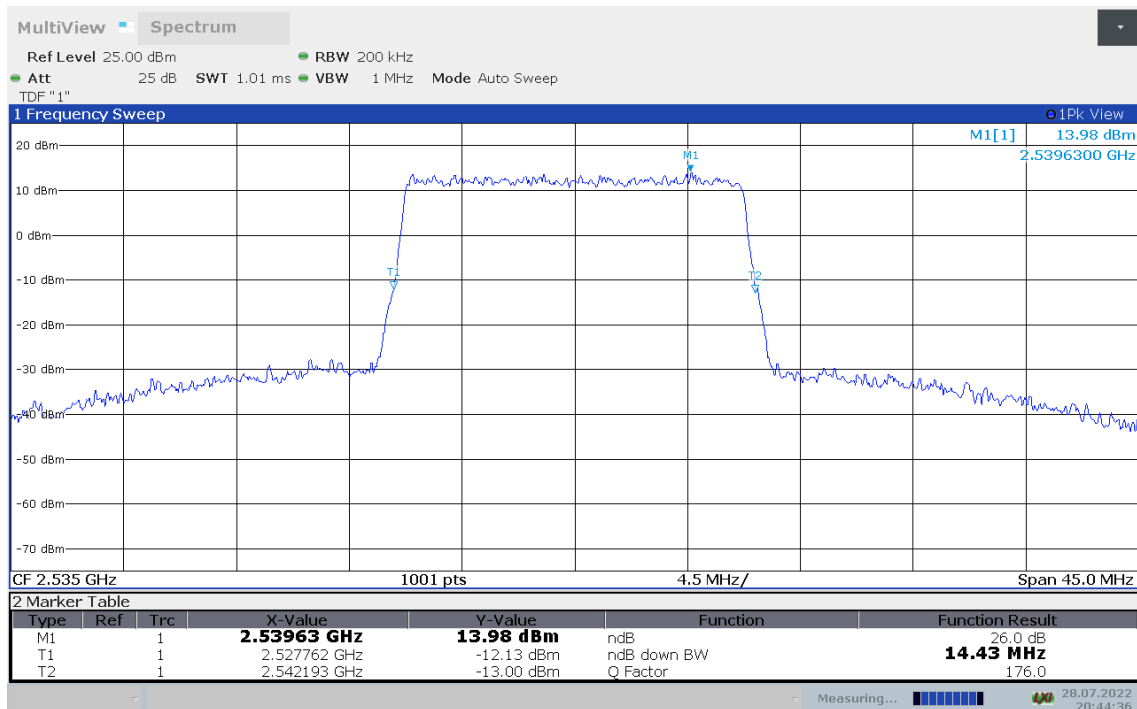
LTE band 7, 15MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
2535.0	QPSK	16QAM	64QAM
	14.52	14.43	14.43

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

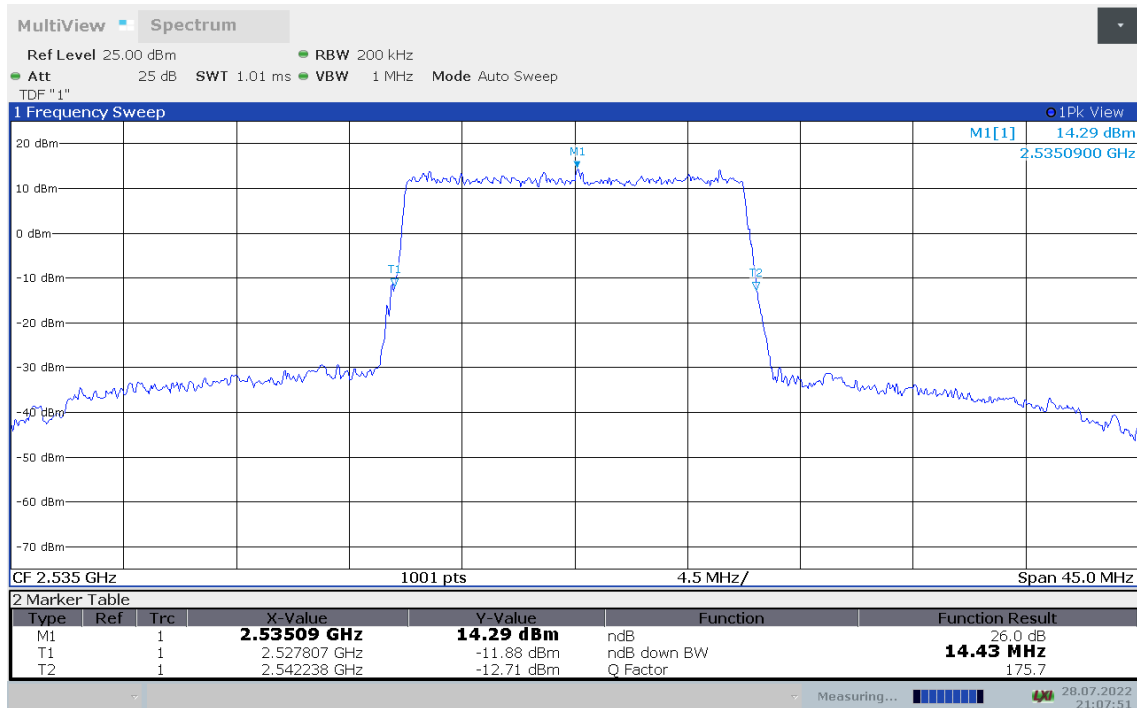


LTE band 7, 15MHz Bandwidth, 16QAM (-26dBc BW)





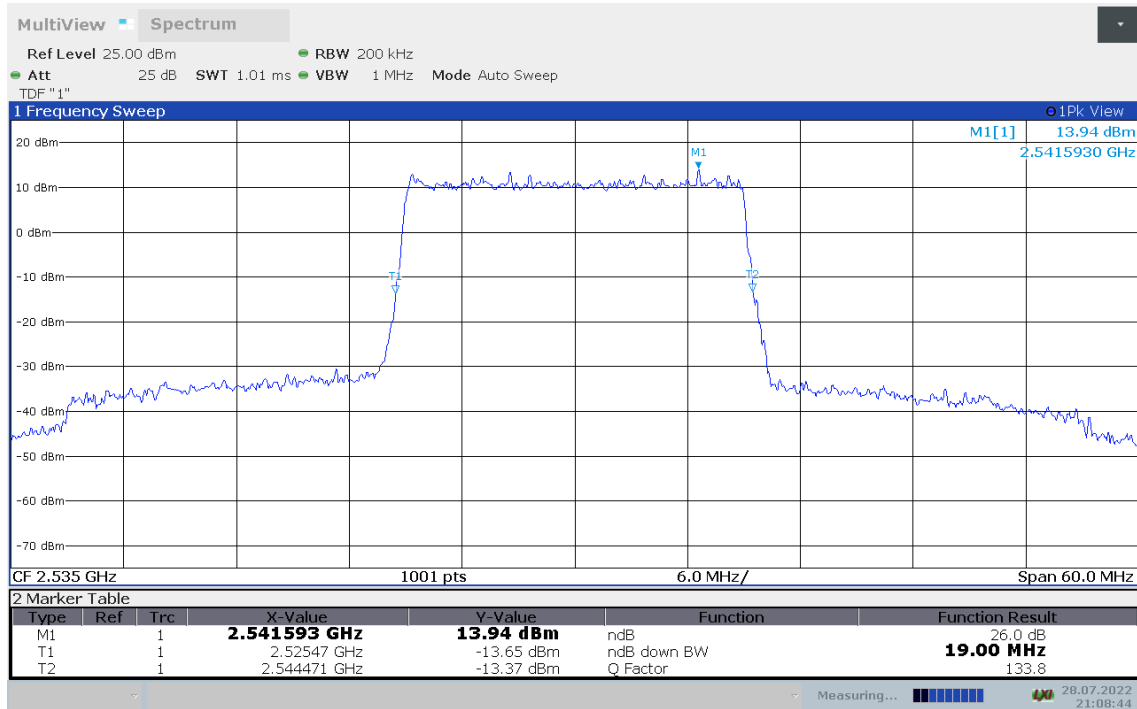
LTE band 7, 15MHz Bandwidth, 64QAM (-26dBc BW)



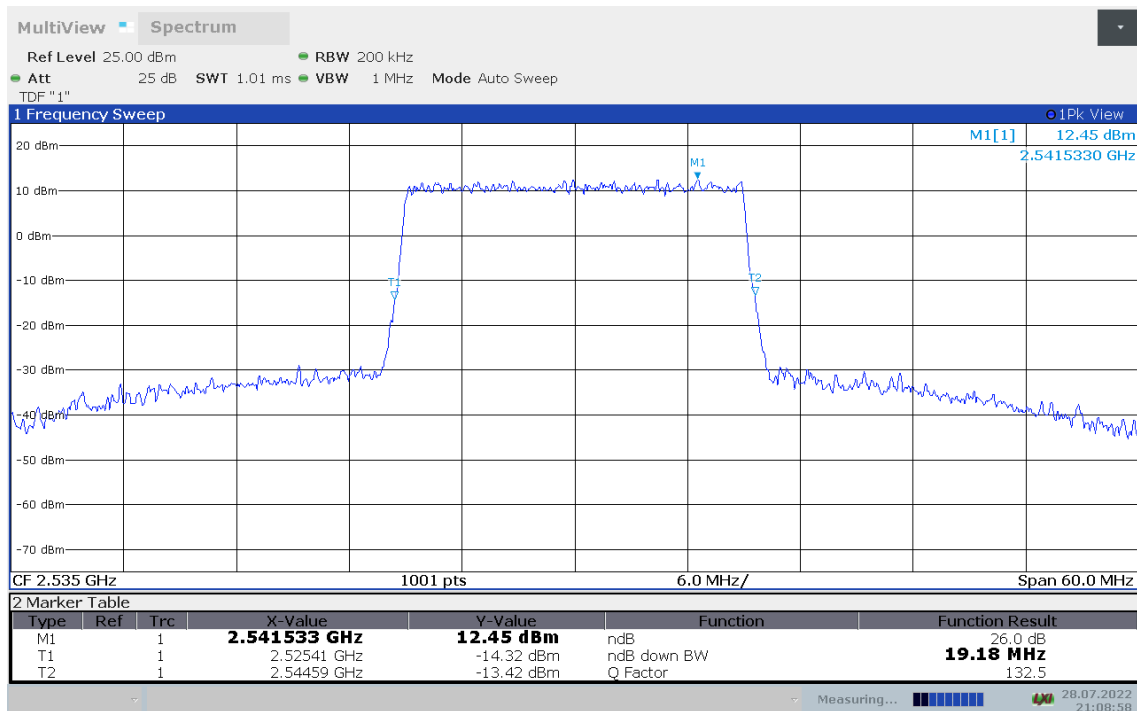
LTE band 7, 20MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
2535.0	QPSK	16QAM	64QAM
	19.00	19.18	19.06

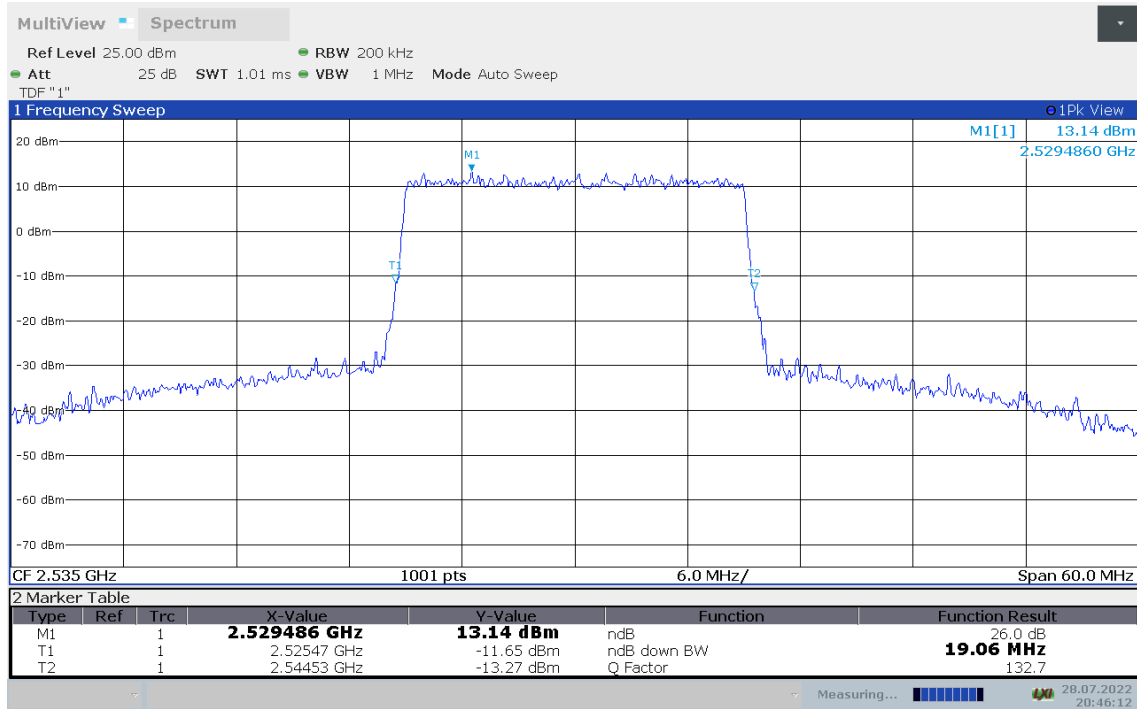
LTE band 7, 20MHz Bandwidth, QPSK (-26dBc BW)



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



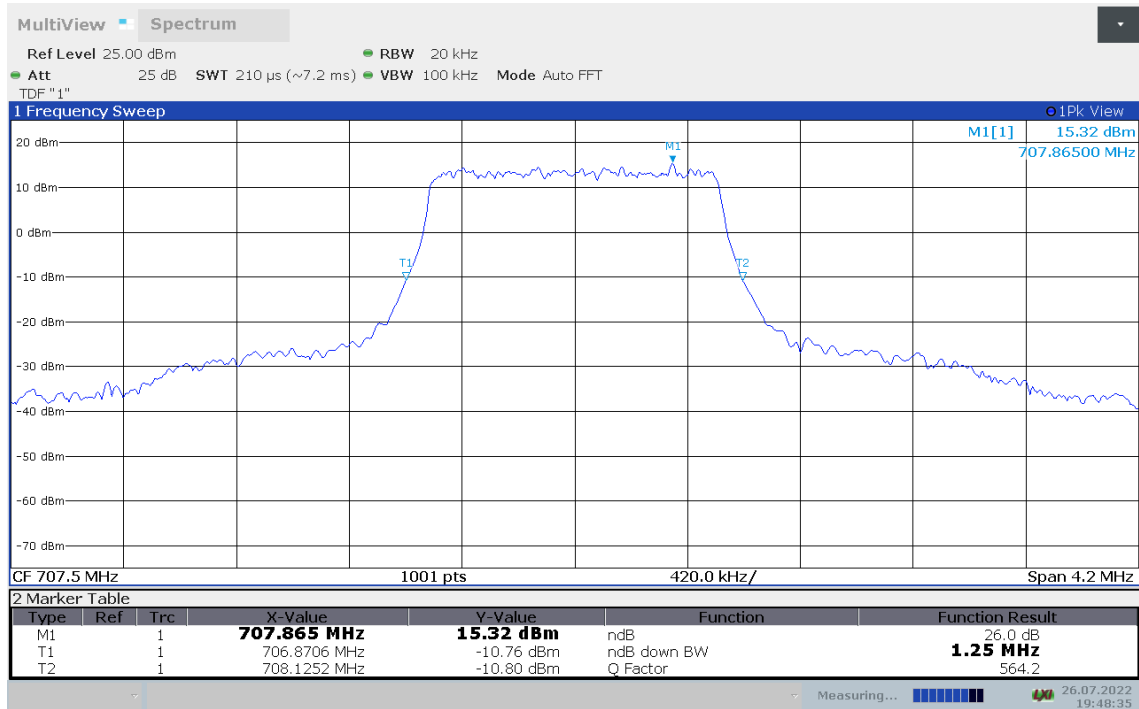
LTE band 7, 20MHz Bandwidth, 64QAM (-26dBc BW)



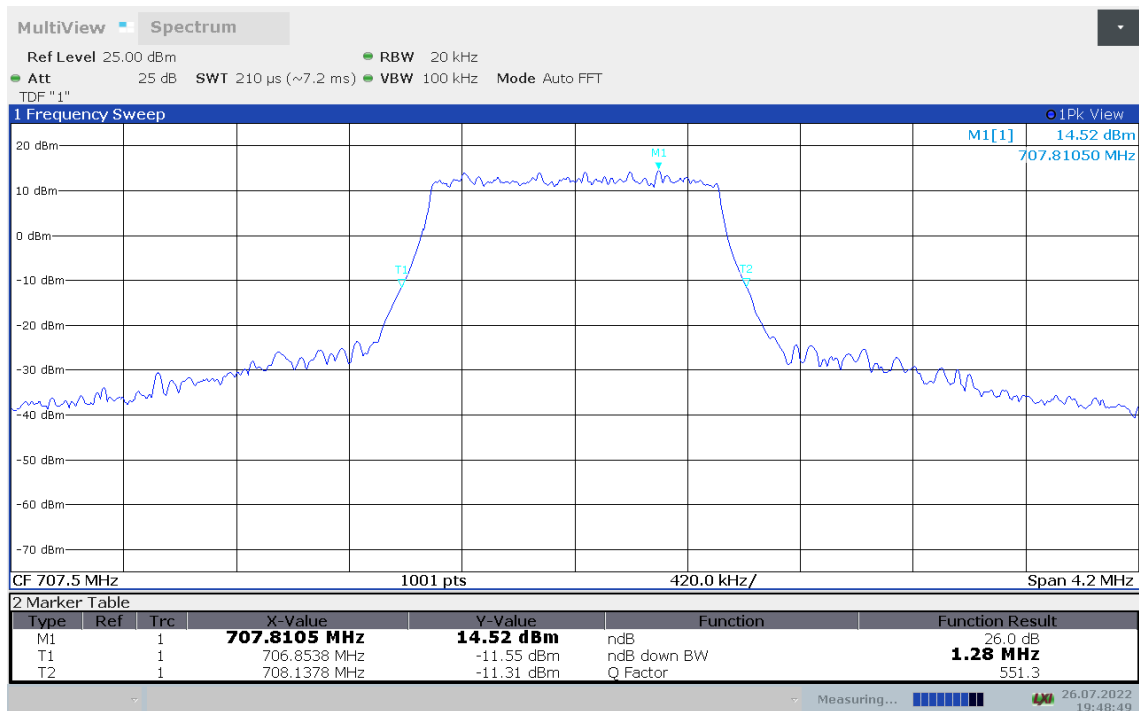
LTE band 12, 1.4MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	1.25	1.28	1.28

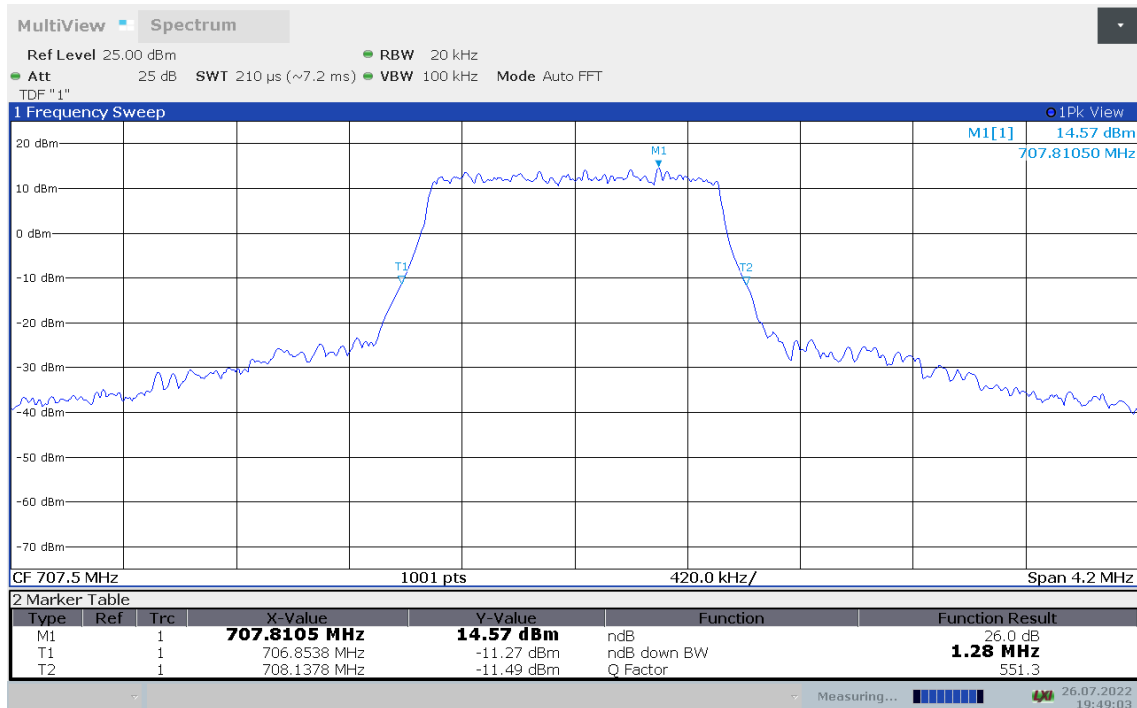
LTE band 12, 1.4MHz Bandwidth, QPSK (-26dBc BW)



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



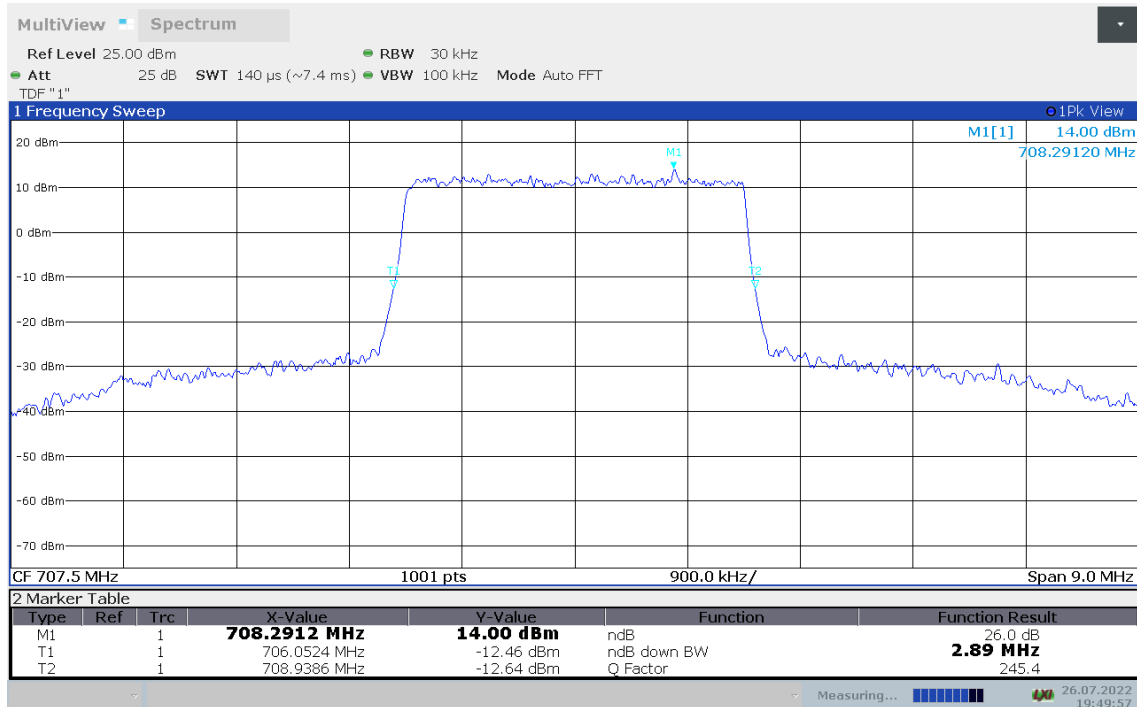
LTE band 12, 1.4MHz Bandwidth, 64QAM (-26dBc BW)



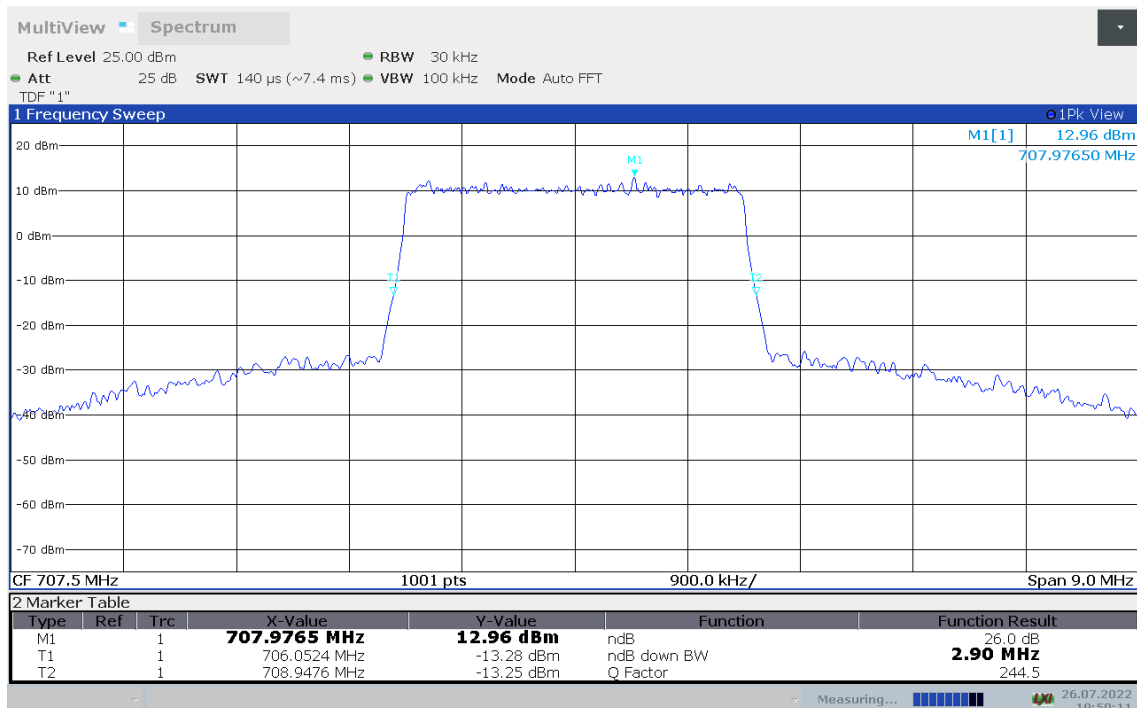
LTE band 12, 3MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	2.89	2.90	2.89

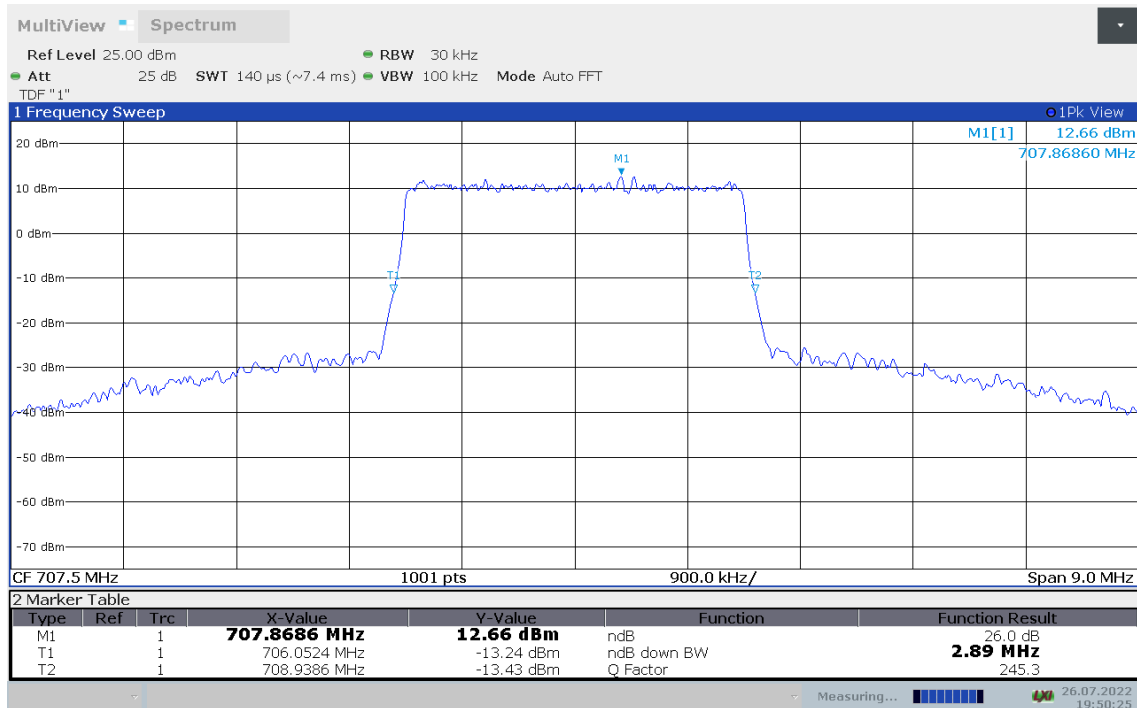
LTE band 12, 3MHz Bandwidth, QPSK (-26dBc BW)



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



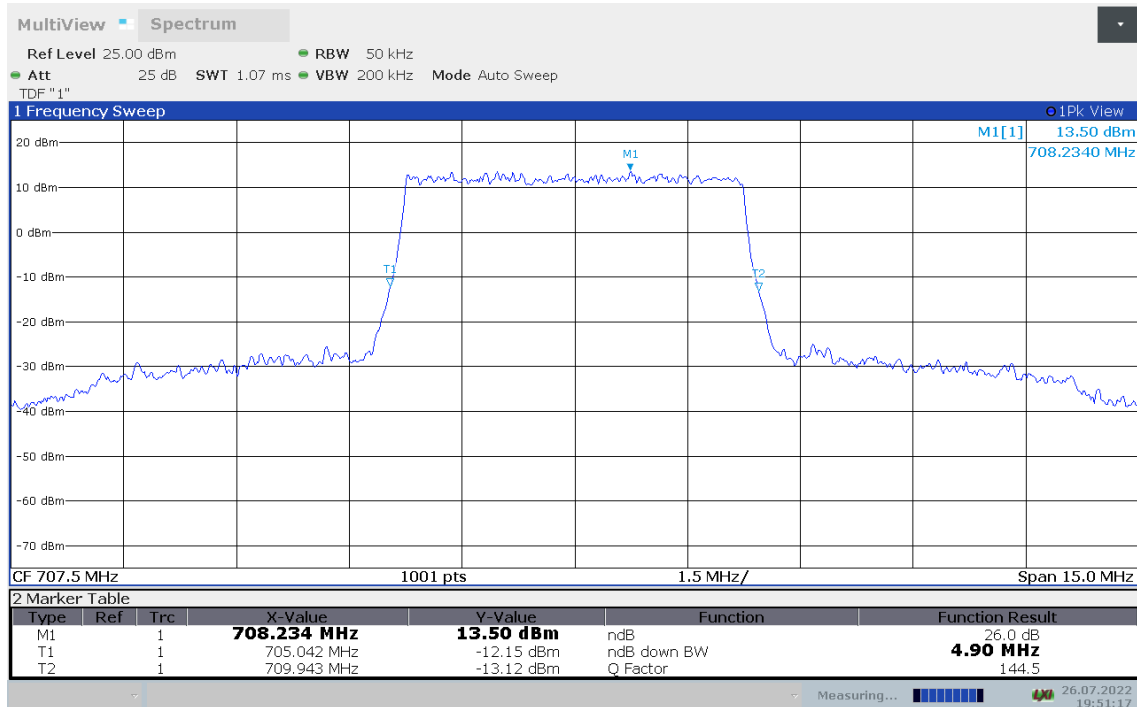
LTE band 12, 3MHz Bandwidth, 64QAM (-26dBc BW)



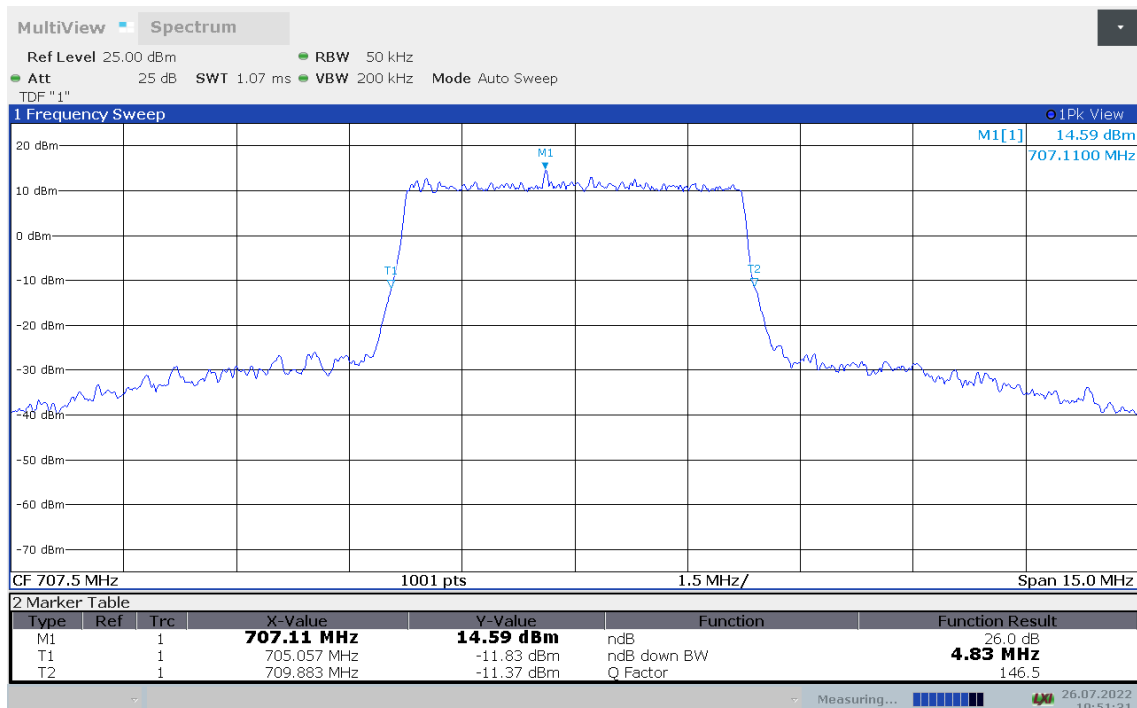
LTE band 12, 5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	4.90	4.83	4.83

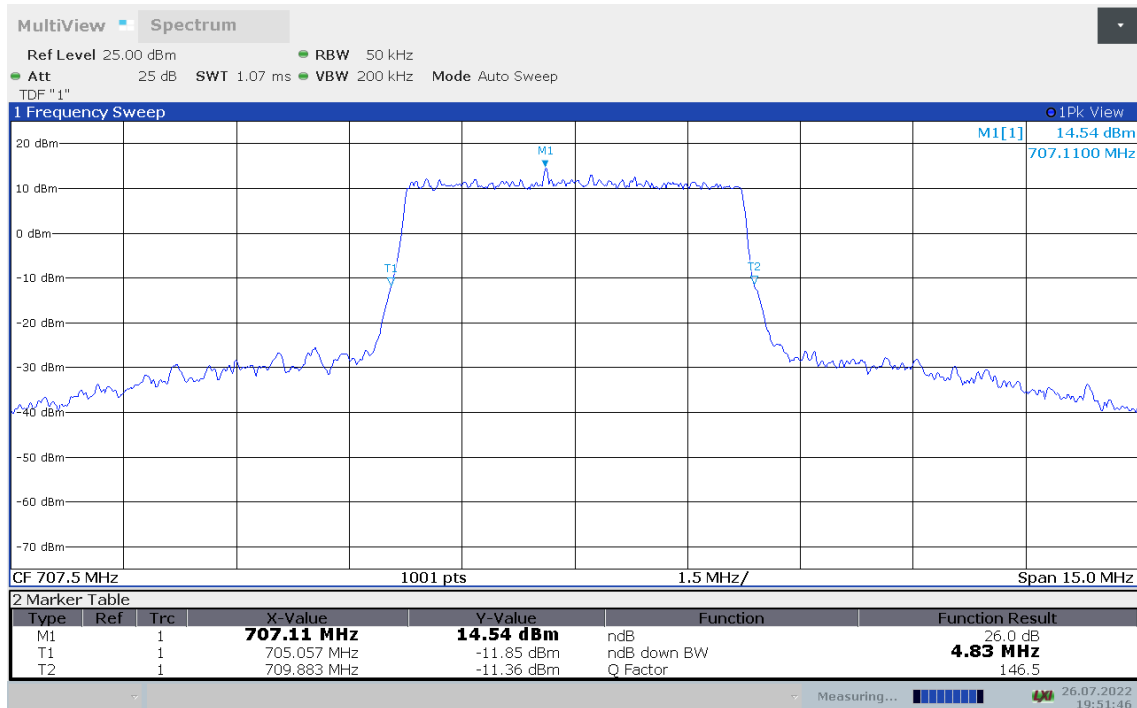
LTE band 12, 5MHz Bandwidth, QPSK (-26dBc BW)



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



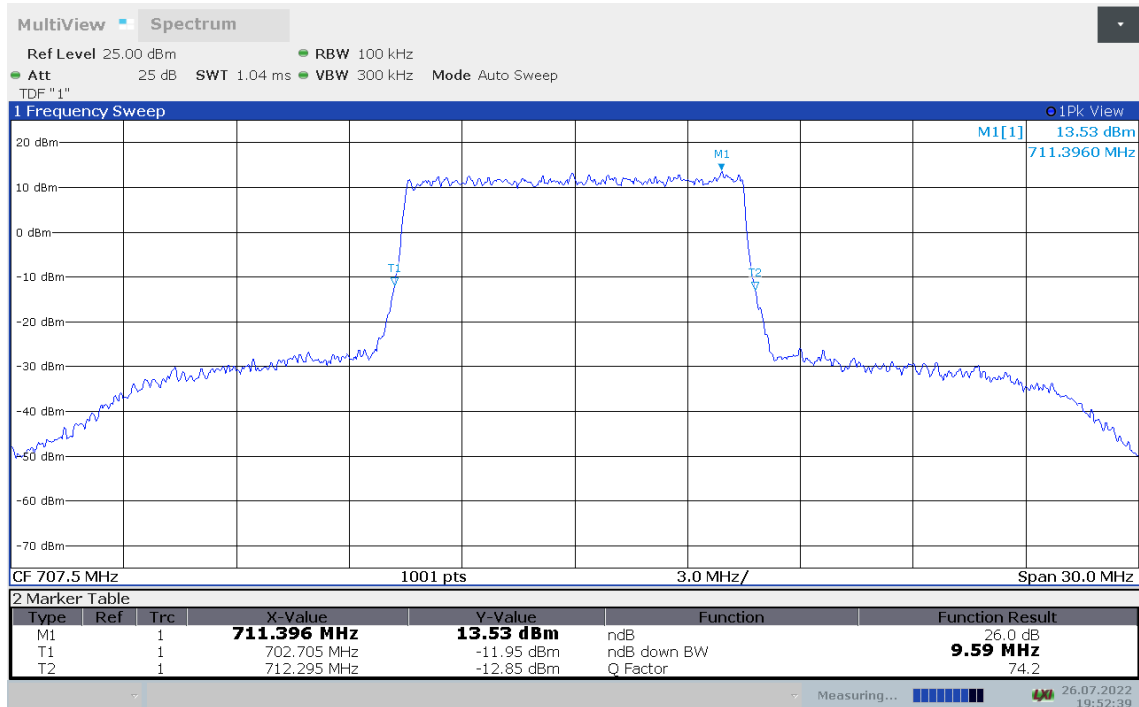
LTE band 12, 5MHz Bandwidth,64QAM (-26dBc BW)



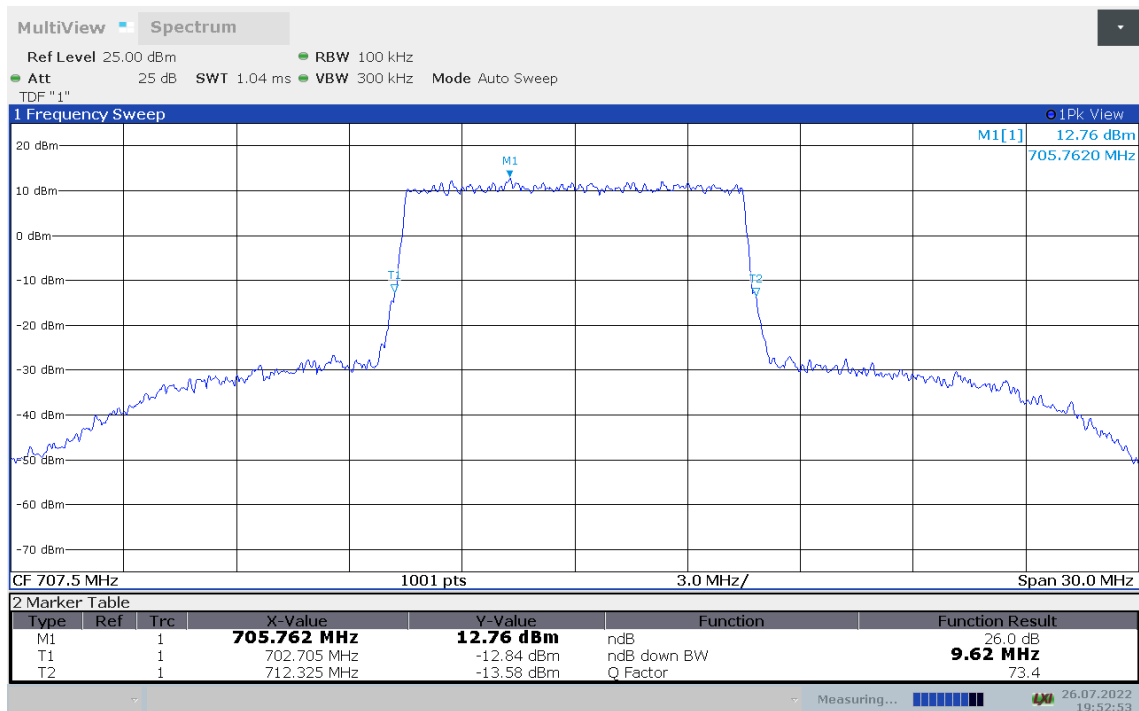
LTE band 12, 10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
707.5	QPSK	16QAM	64QAM
	9.59	9.62	9.56

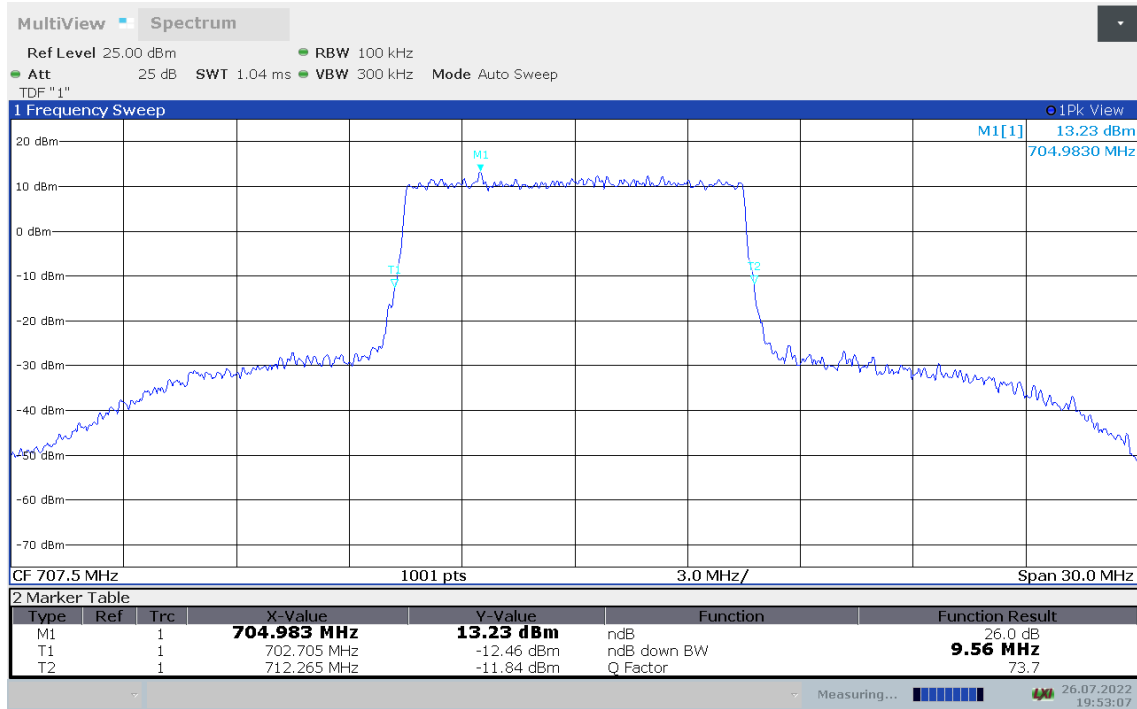
LTE band 12, 10MHz Bandwidth, QPSK (-26dBc BW)



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



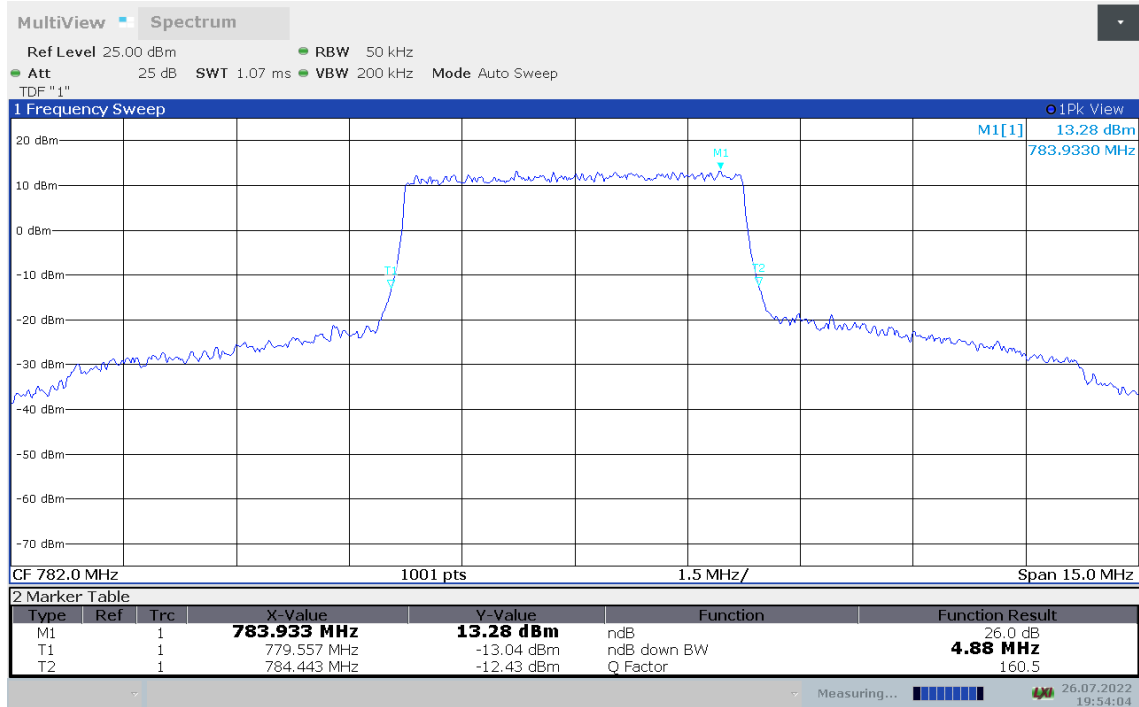
LTE band 12, 10MHz Bandwidth, 64QAM (-26dBc BW)



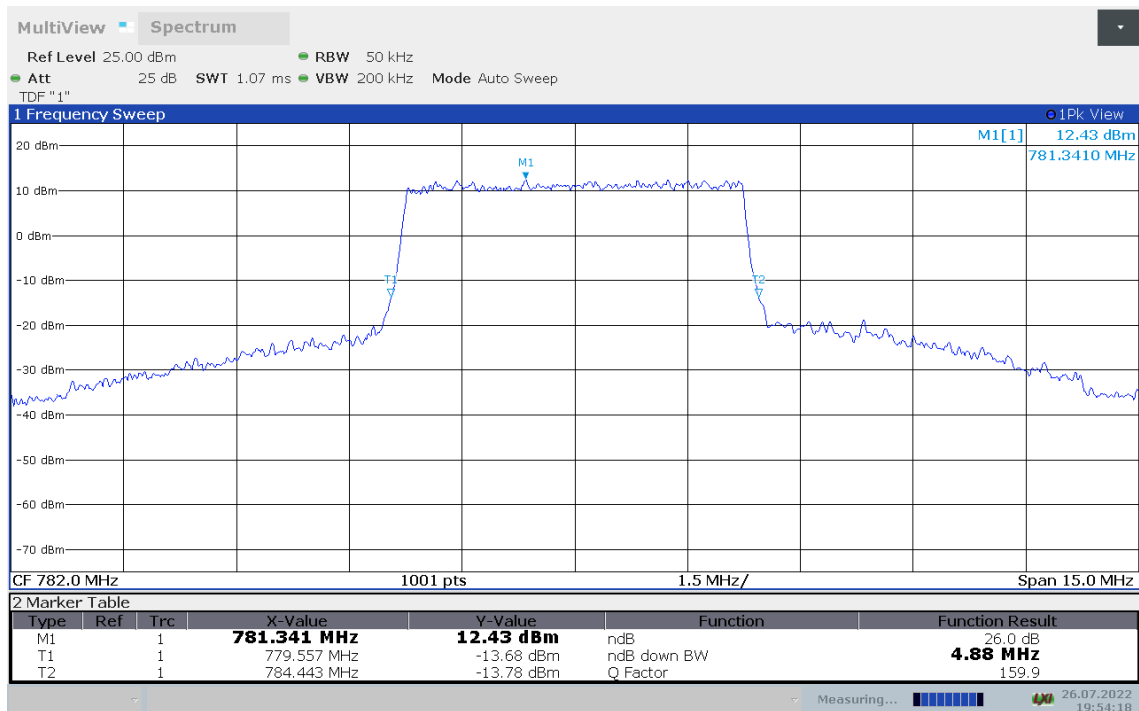
LTE band 13, 5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
782.0	QPSK	16QAM	64QAM
	4.88	4.88	4.88

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

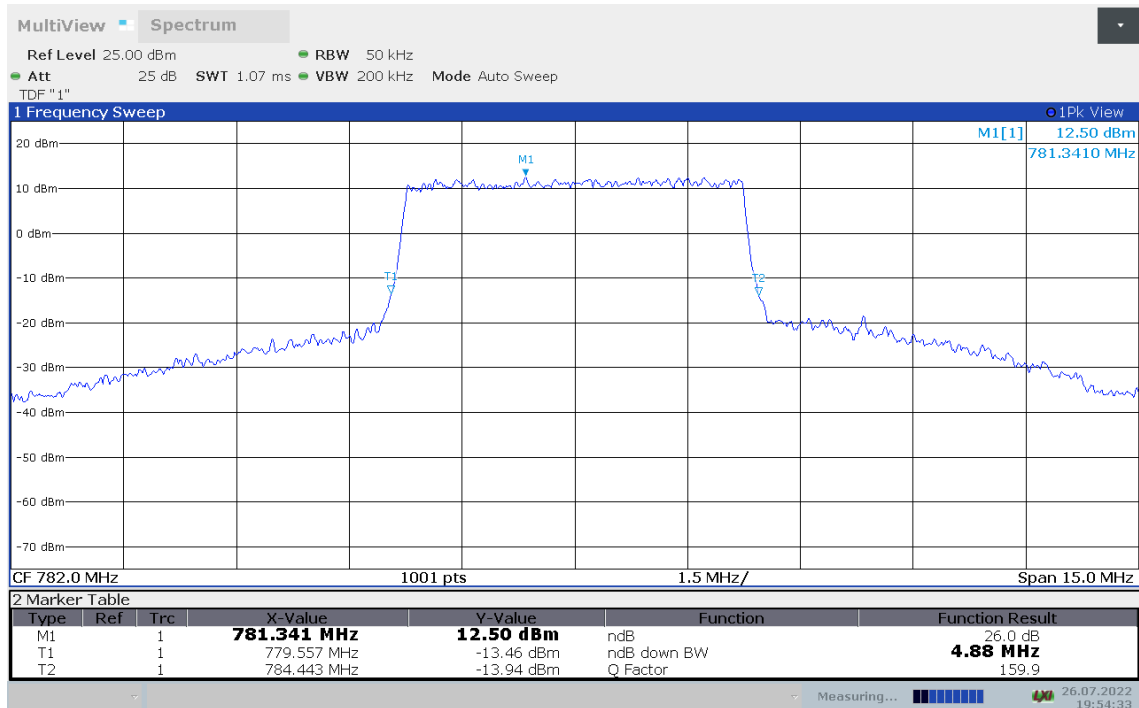


LTE band 13, 5MHz Bandwidth,16QAM (-26dBc BW)





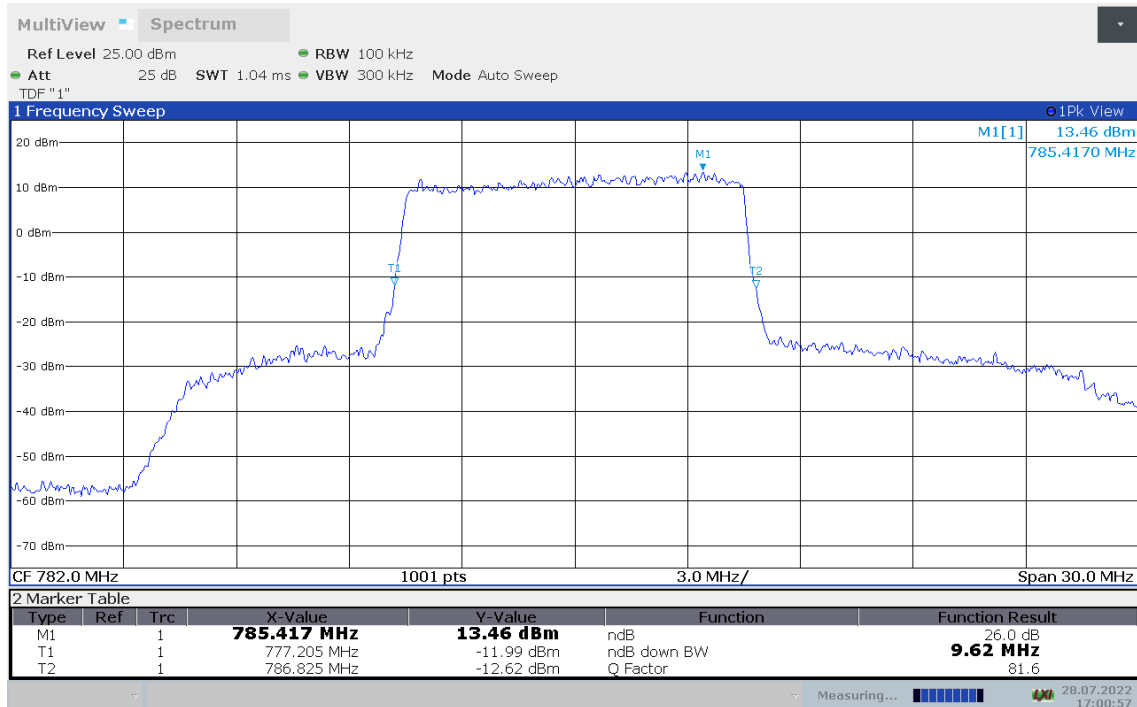
LTE band 13, 5MHz Bandwidth,64QAM (-26dBc BW)



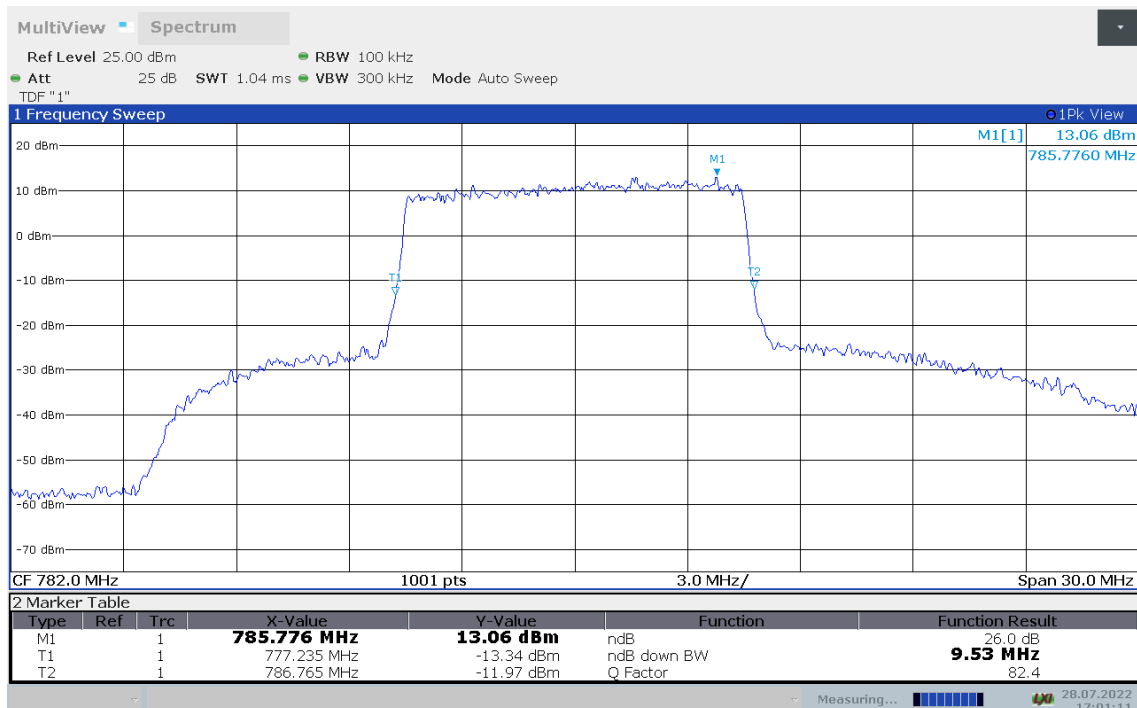
LTE band 13, 10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
782.0	QPSK	16QAM	64QAM
	9.62	9.53	9.47

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

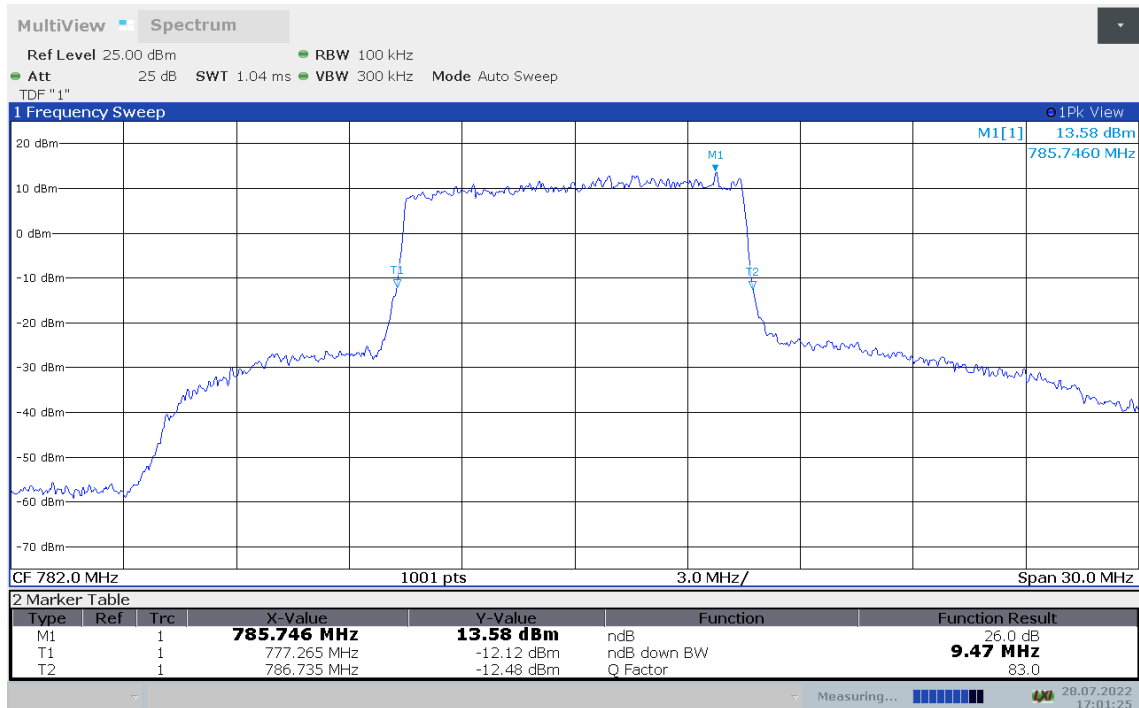


LTE band 13, 10MHz Bandwidth, 16QAM (-26dBc BW)





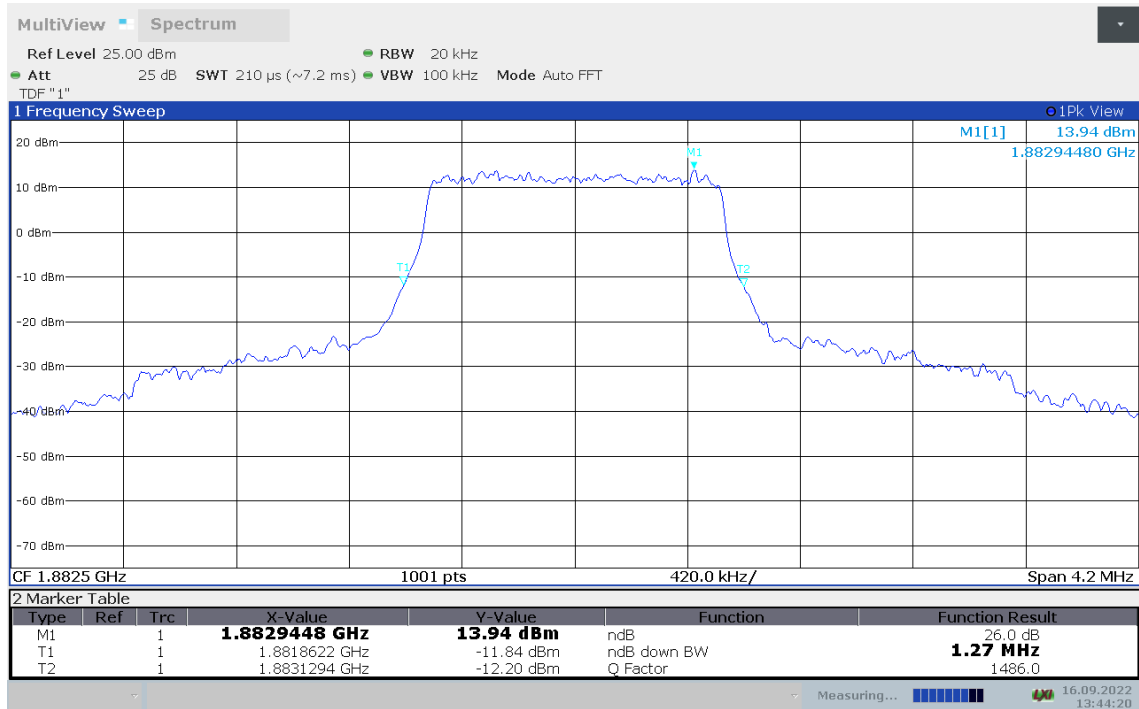
LTE band 13, 10MHz Bandwidth, 64QAM (-26dBc BW)



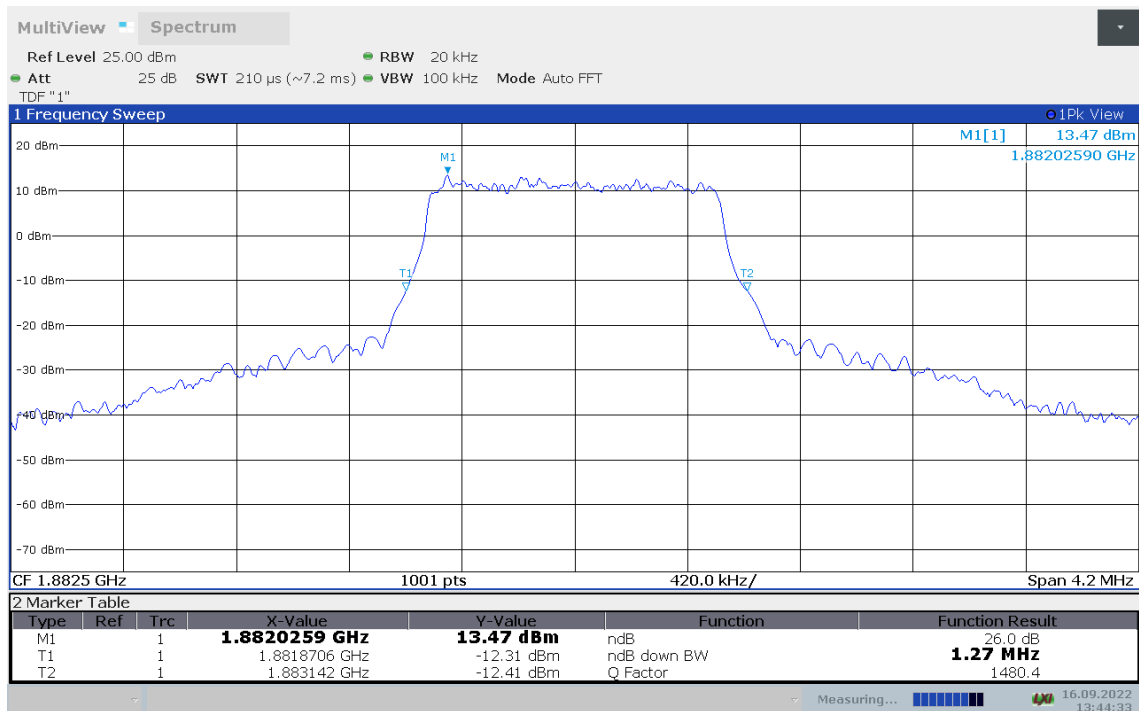
LTE band 25,1.4MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	1.27	1.27	1.27

LTE band 25,1.4MHz Bandwidth, QPSK (-26dBc BW)

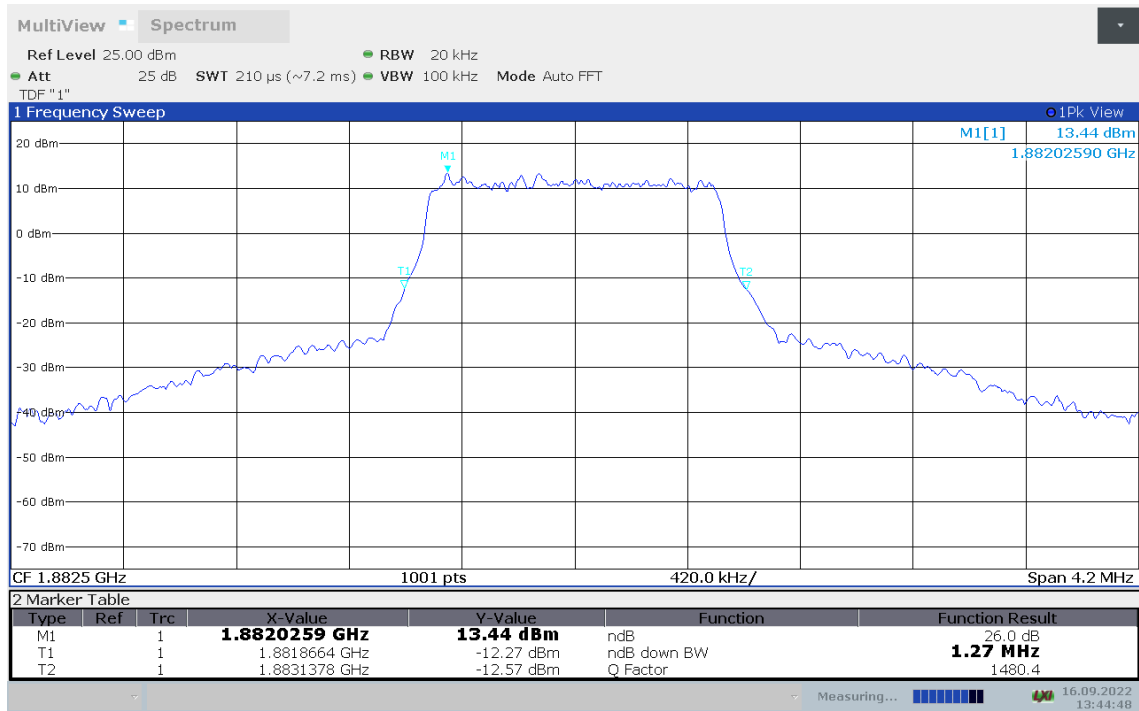


LTE band 25,1.4MHz Bandwidth, 16QAM (-26dBc BW)





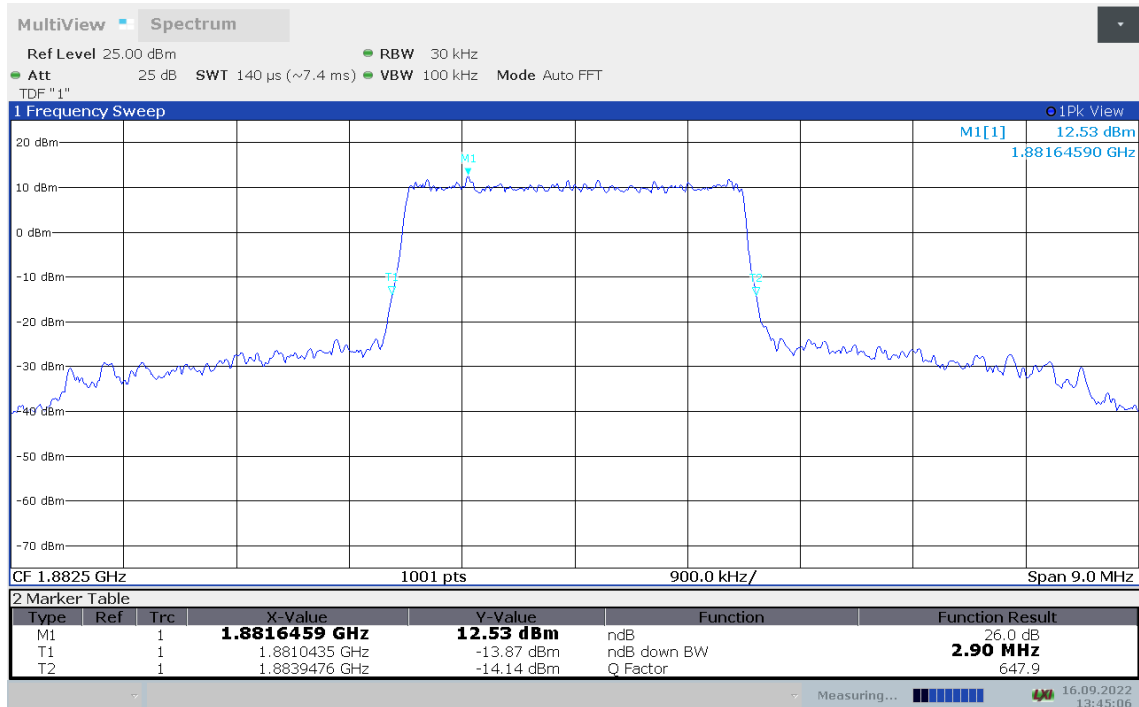
LTE band 25,1.4MHz Bandwidth, 64QAM (-26dBc BW)



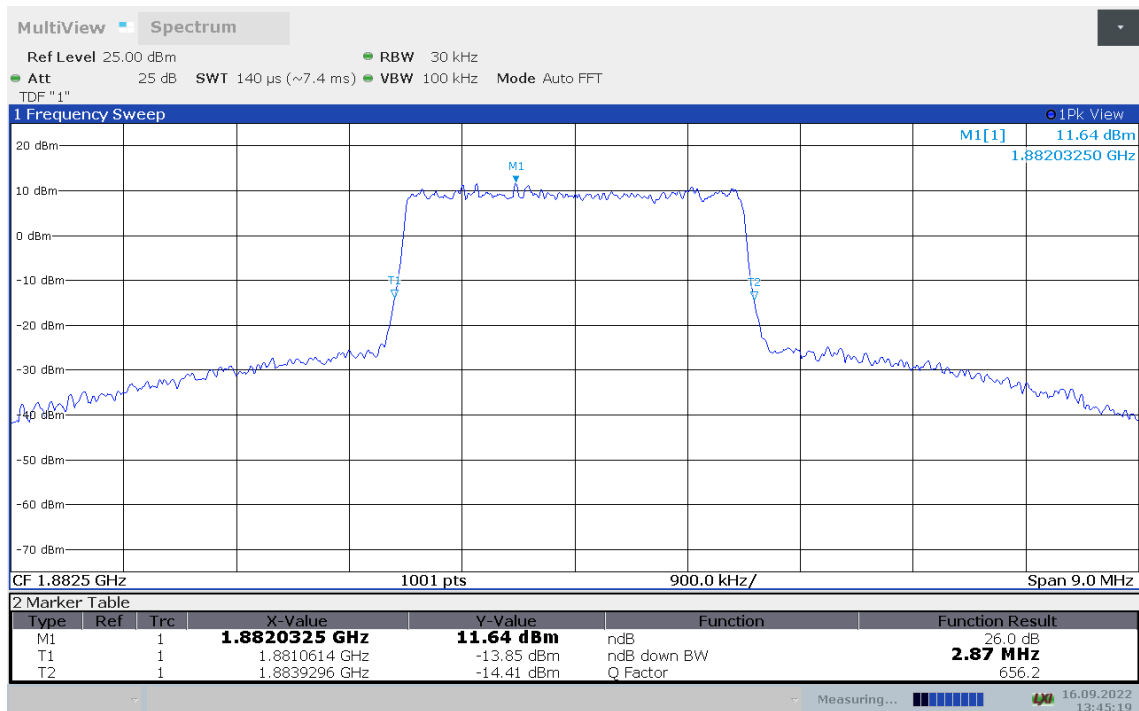
LTE band 25,3MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	2.90	2.87	2.90

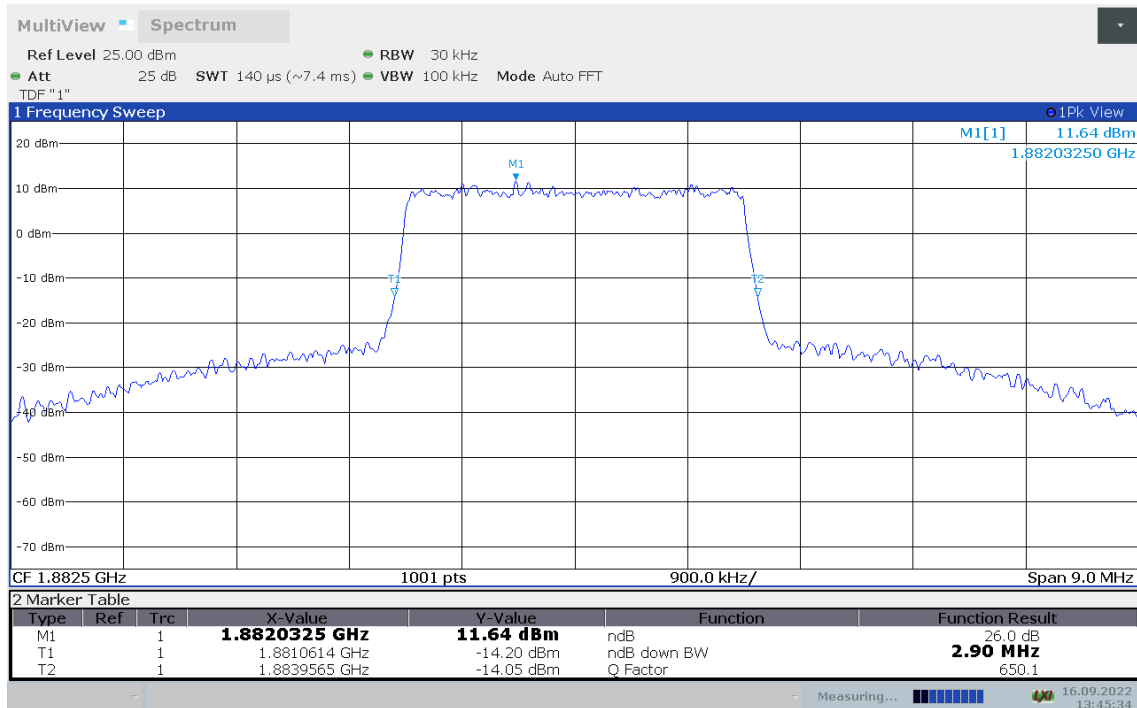
LTE band 25,3MHz Bandwidth, QPSK (-26dBc BW)



LTE band 25,3MHz Bandwidth, 16QAM (-26dBc BW)



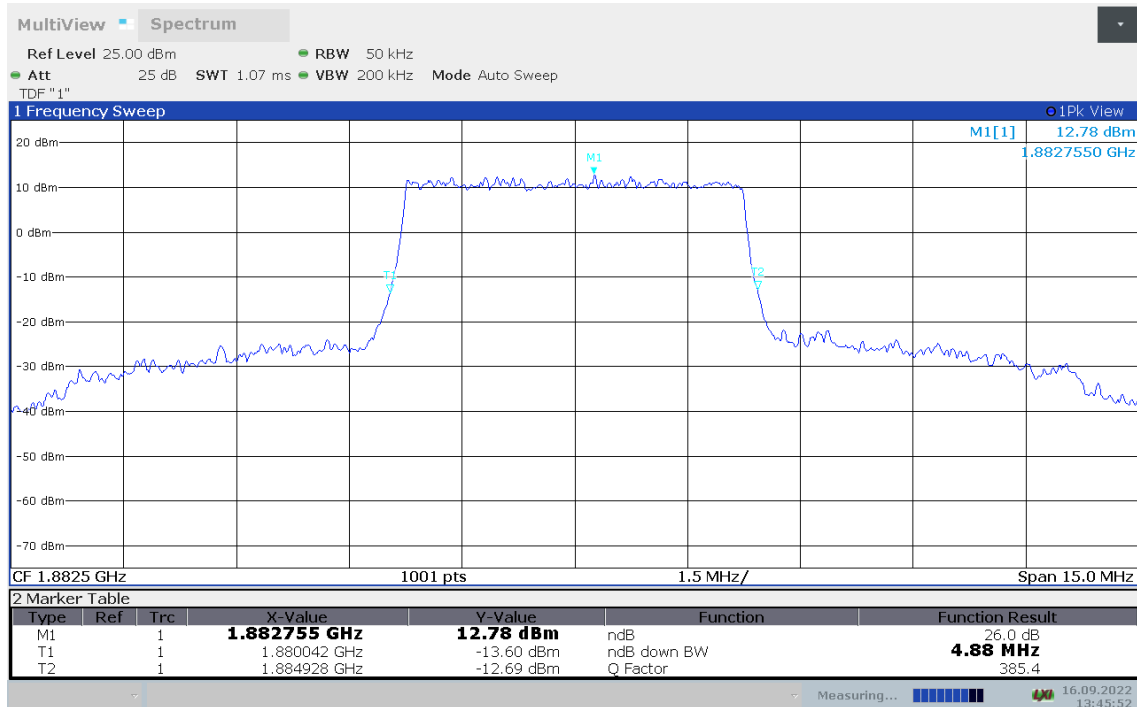
LTE band 25,3MHz Bandwidth, 64QAM (-26dBc BW)



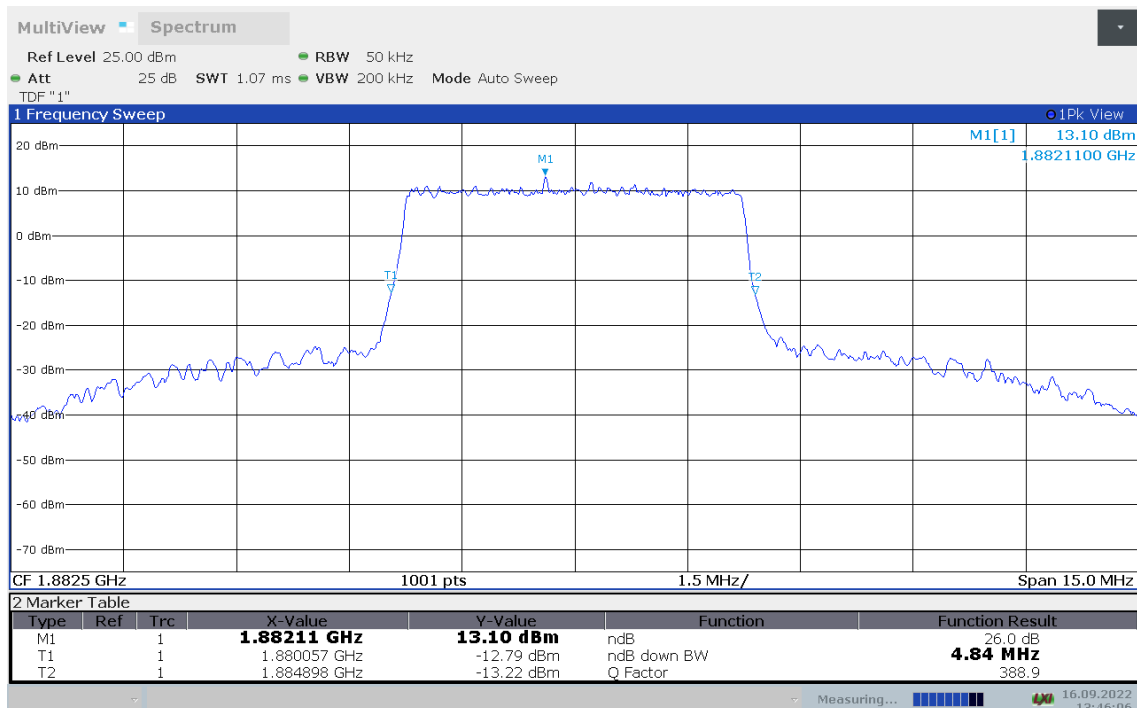
LTE band 25,5MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	4.88	4.84	4.83

LTE band 25,5MHz Bandwidth, QPSK (-26dBc BW)

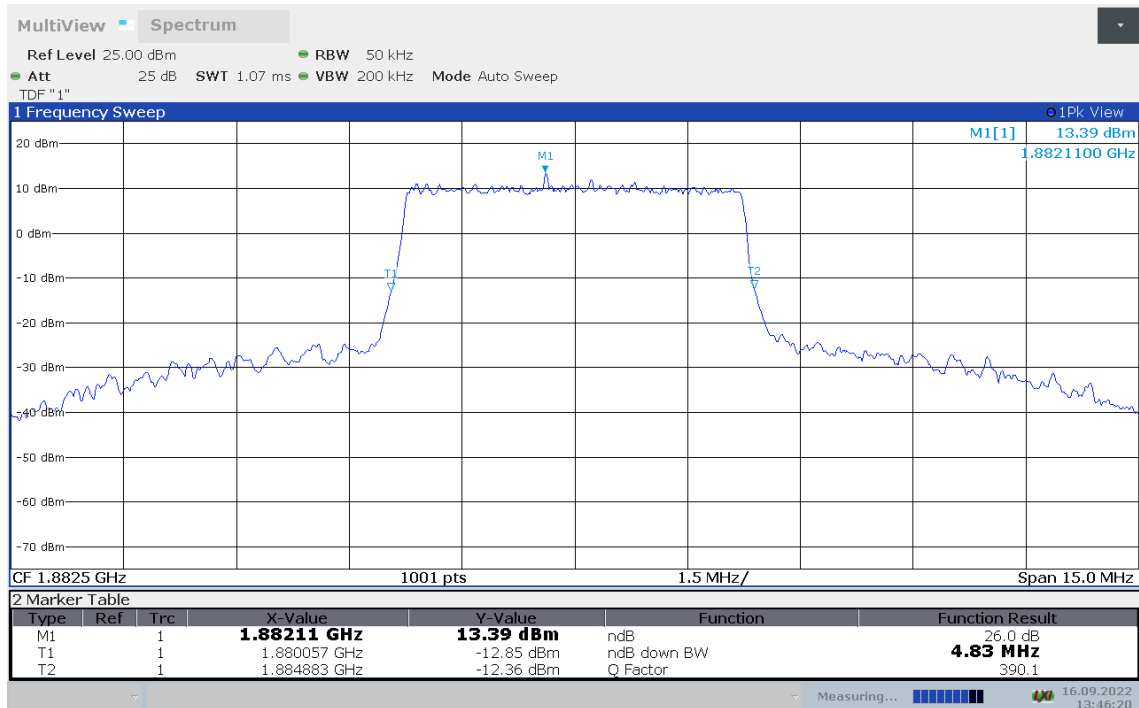


LTE band 25,5MHz Bandwidth, 16QAM (-26dBc BW)





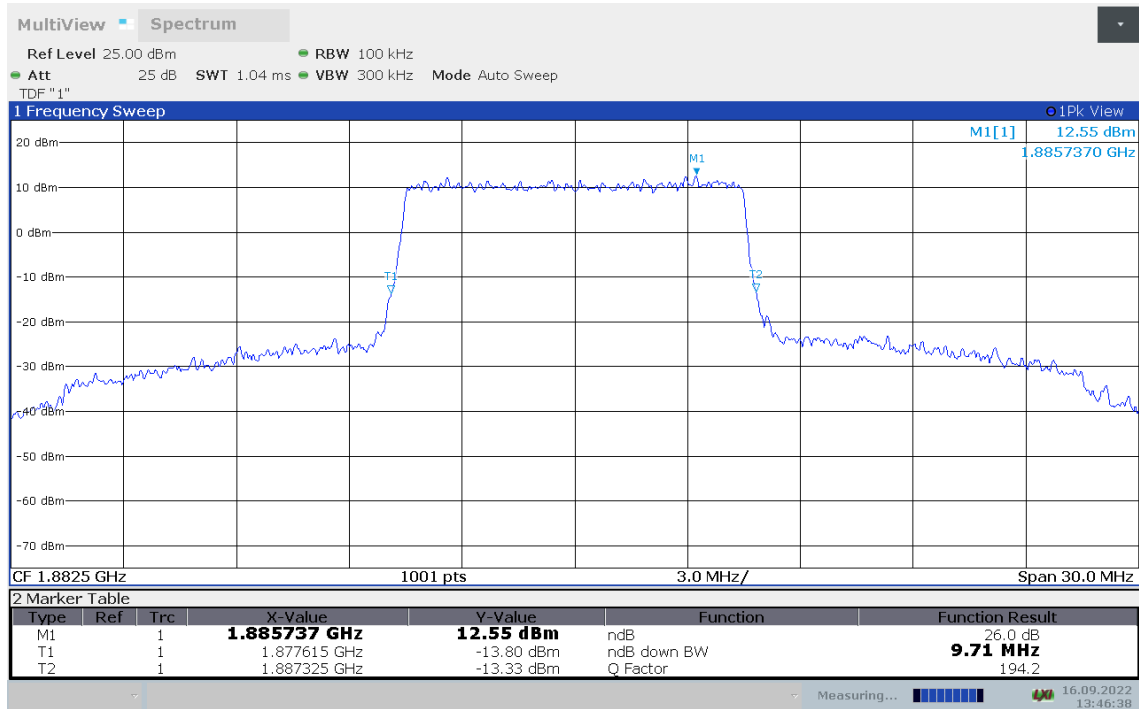
LTE band 25,5MHz Bandwidth, 64QAM (-26dBc BW)



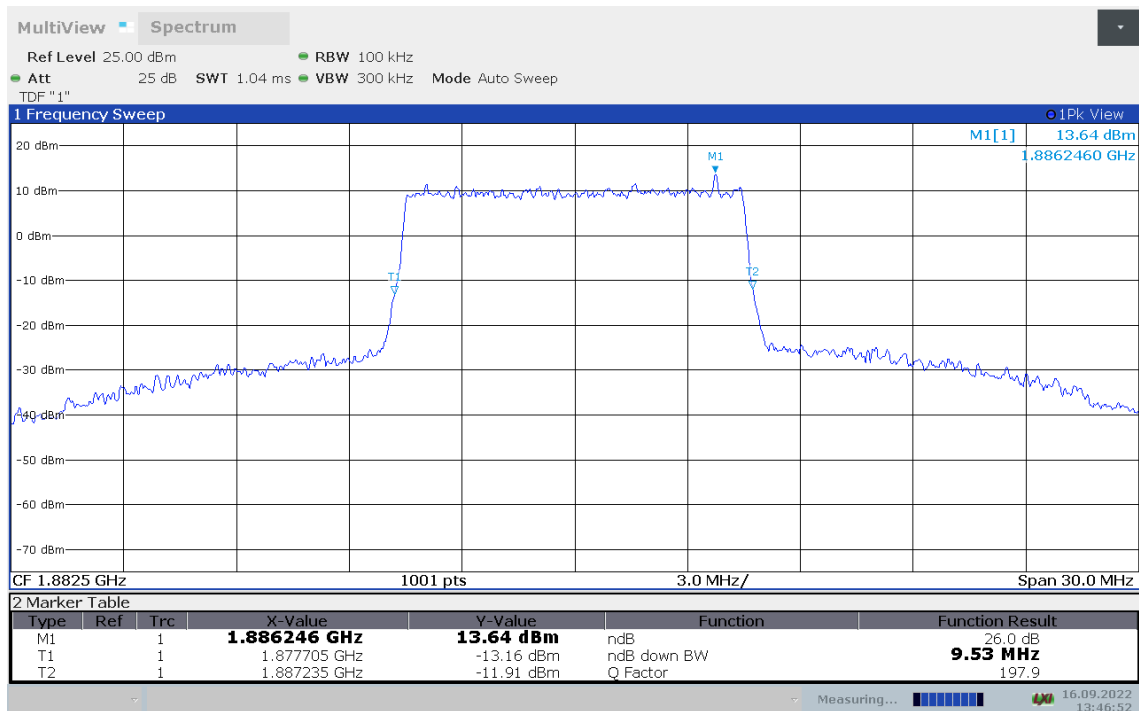
LTE band 25,10MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	9.71	9.53	9.53

LTE band 25,10MHz Bandwidth, QPSK (-26dBc BW)

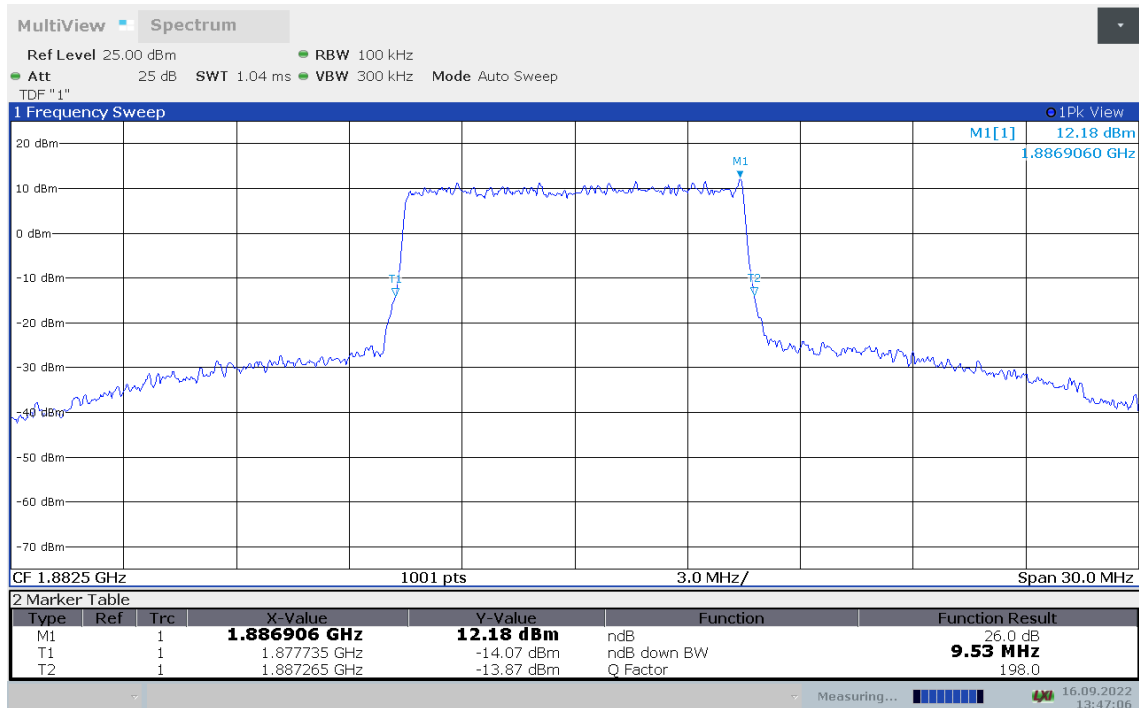


LTE band 25,10MHz Bandwidth, 16QAM (-26dBc BW)





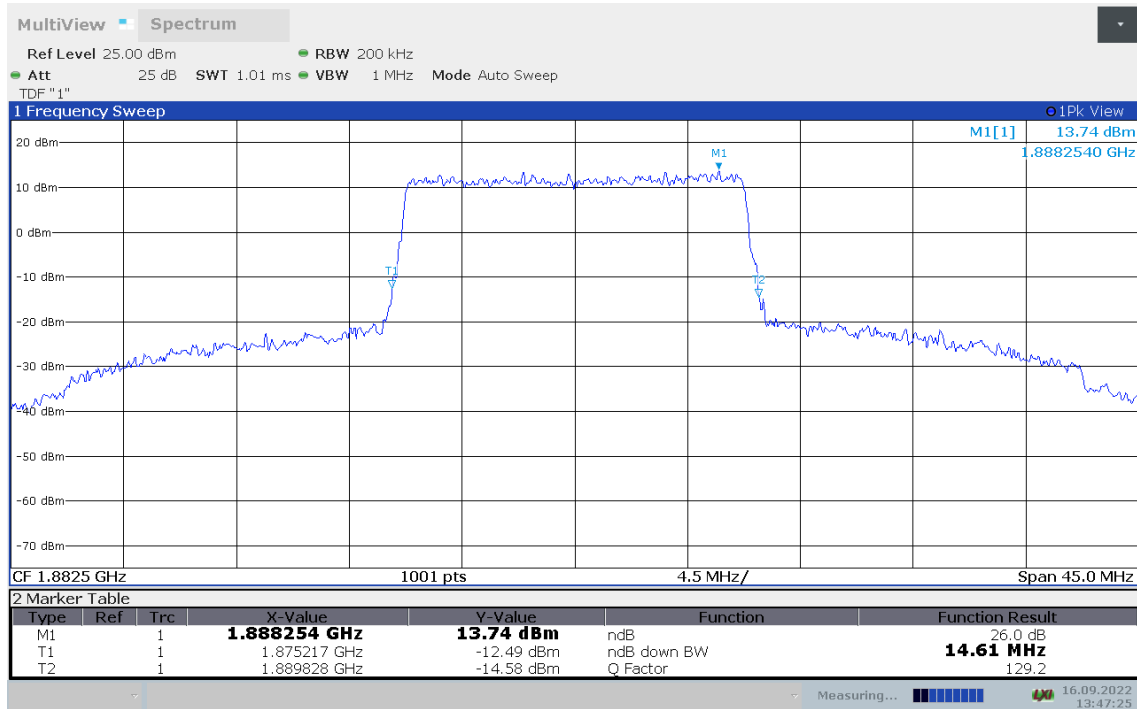
LTE band 25,10MHz Bandwidth, 64QAM (-26dBc BW)



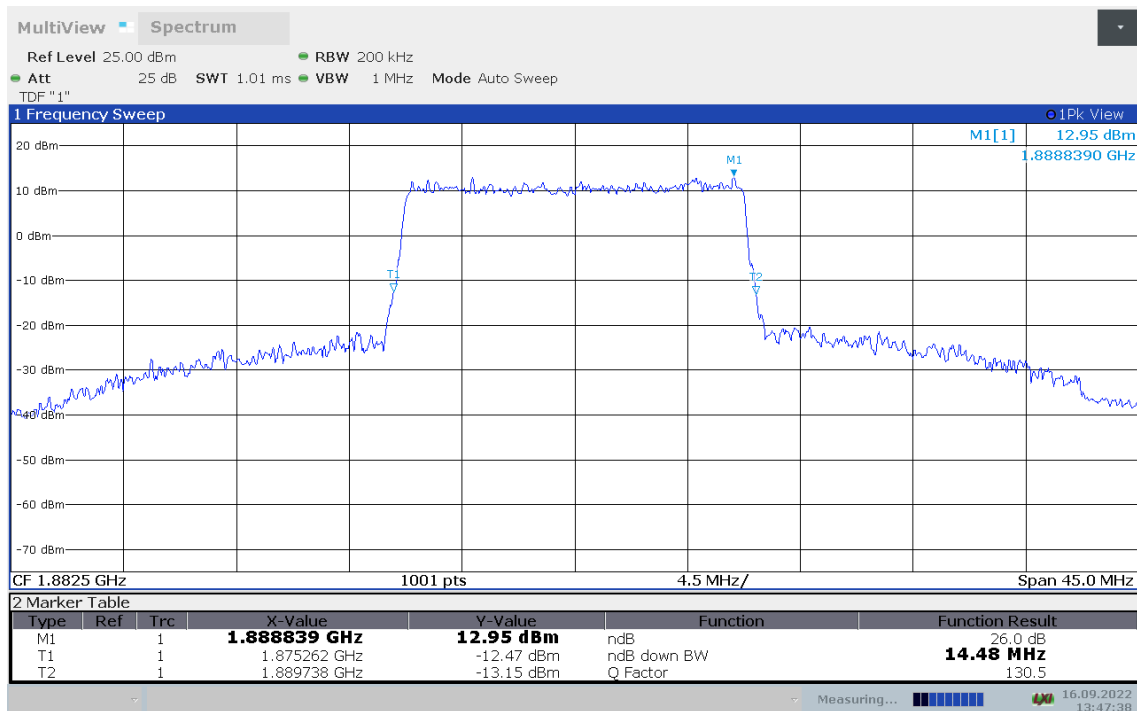
LTE band 25,15MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	14.61	14.48	14.52

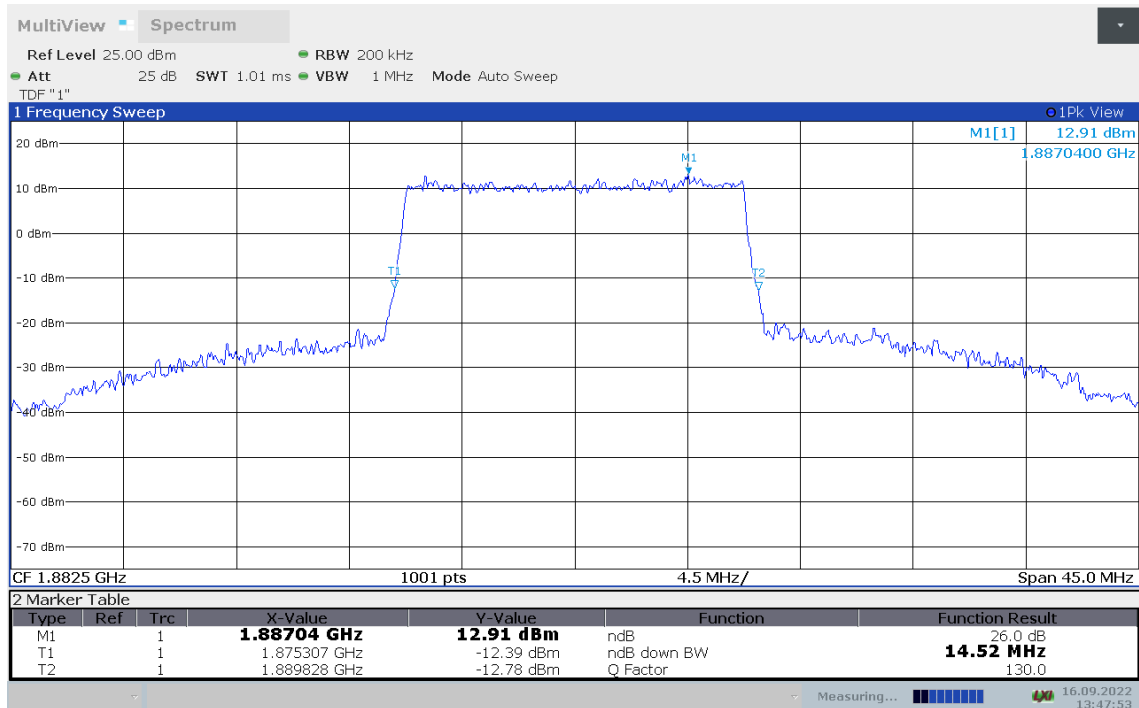
LTE band 25,15MHz Bandwidth, QPSK (-26dBc BW)



LTE band 25,15MHz Bandwidth, 16QAM (-26dBc BW)



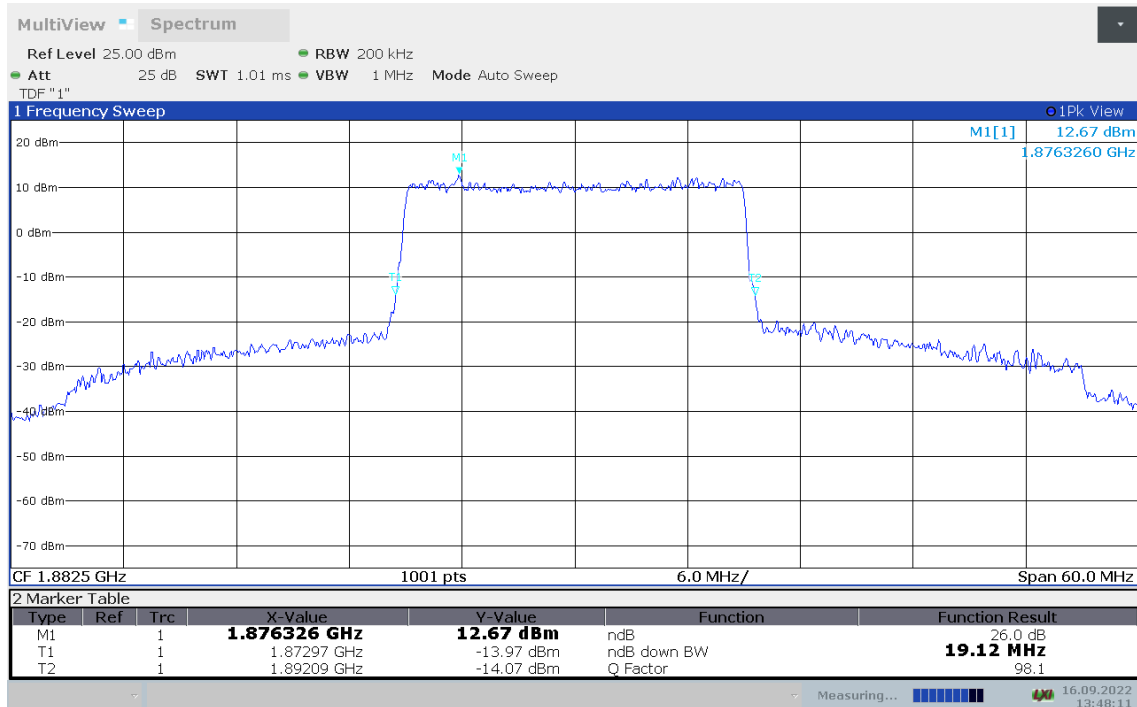
LTE band 25,15MHz Bandwidth, 64QAM (-26dBc BW)



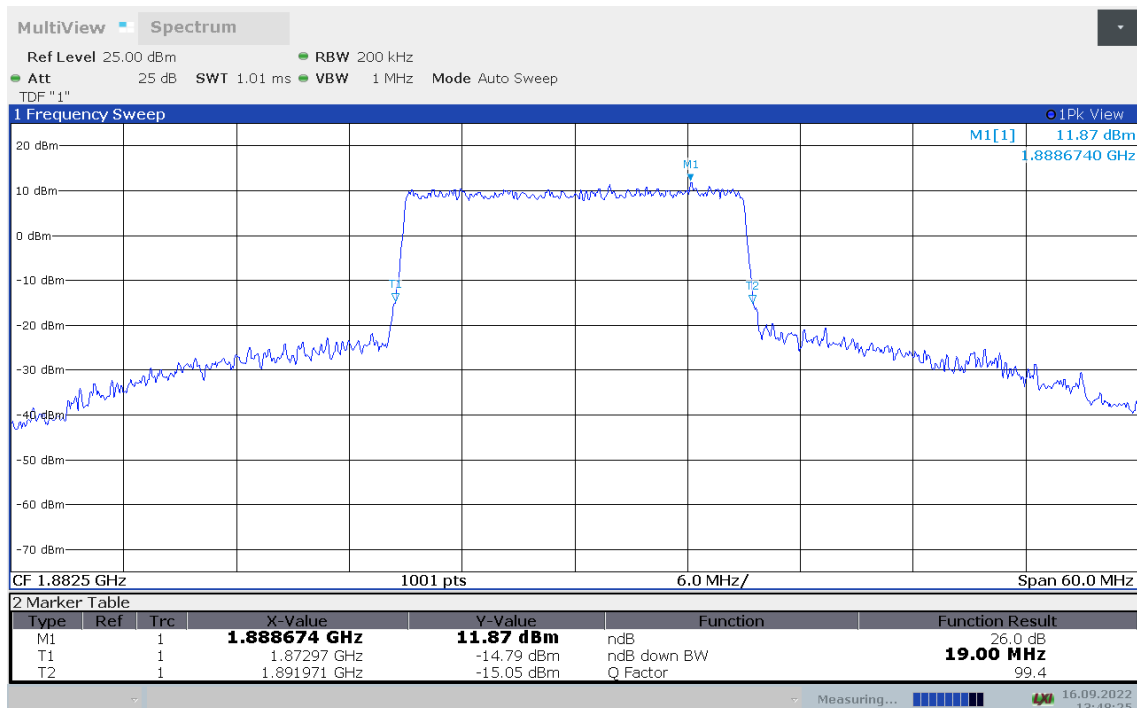
LTE band 25,20MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
1882.5	QPSK	16QAM	64QAM
	19.12	19.00	19.12

LTE band 25,20MHz Bandwidth, QPSK (-26dBc BW)

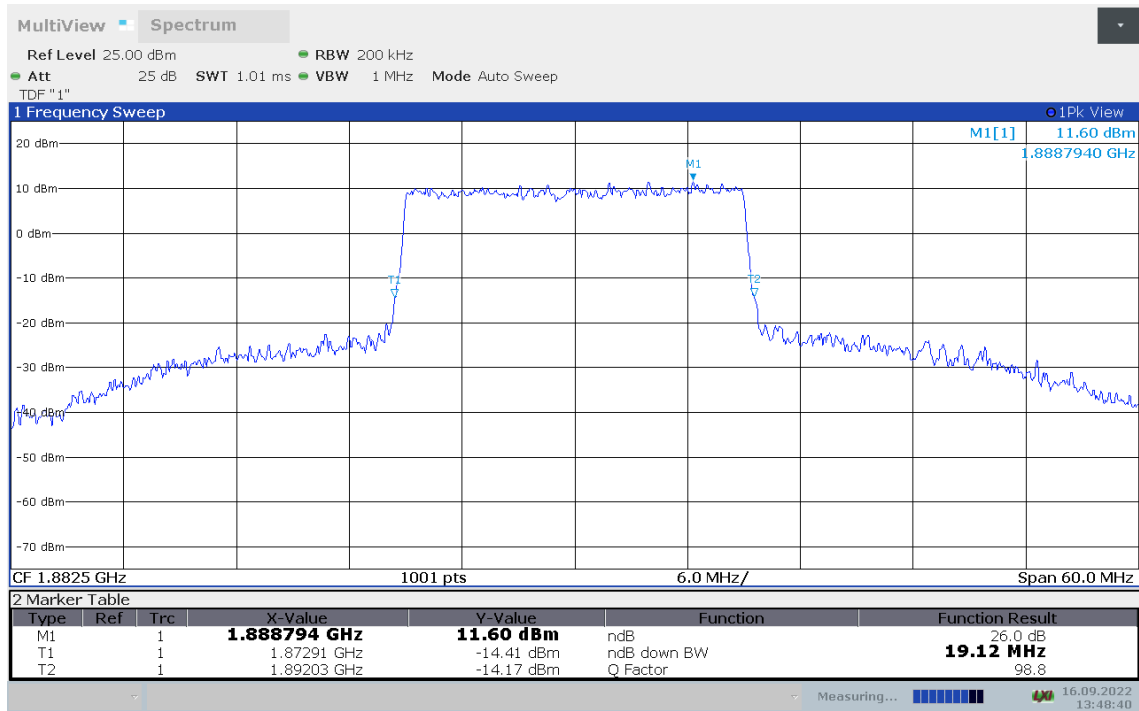


LTE band 25,20MHz Bandwidth, 16QAM (-26dBc BW)





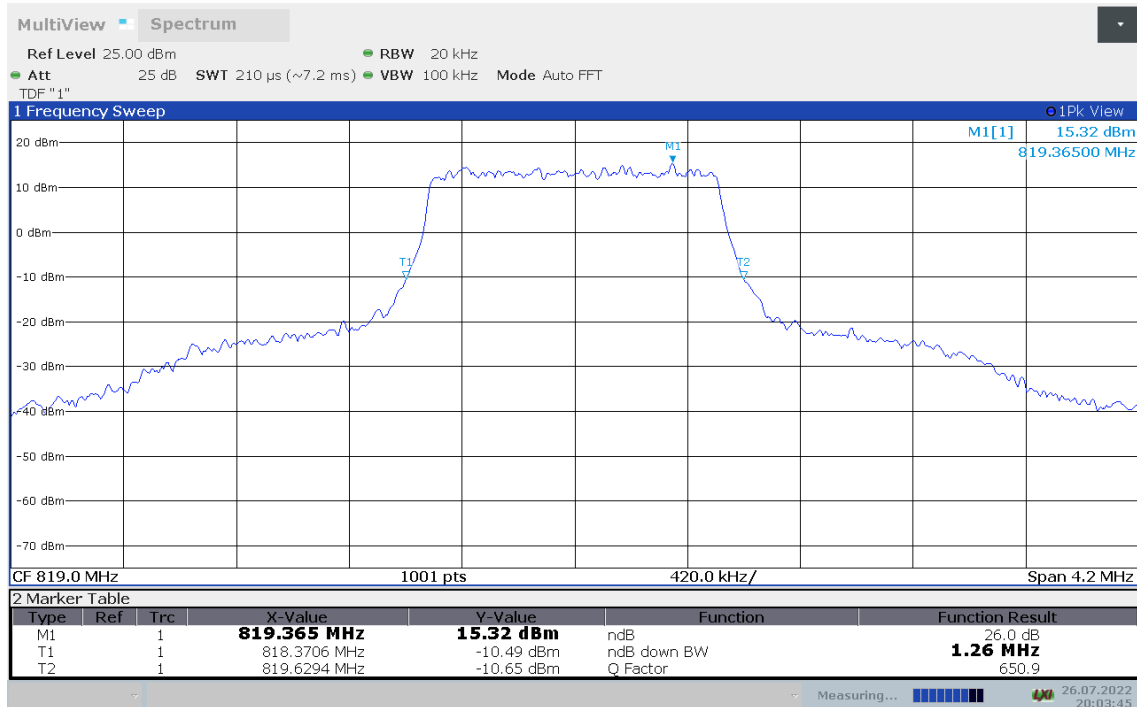
LTE band 25,20MHz Bandwidth, 64QAM (-26dBc BW)



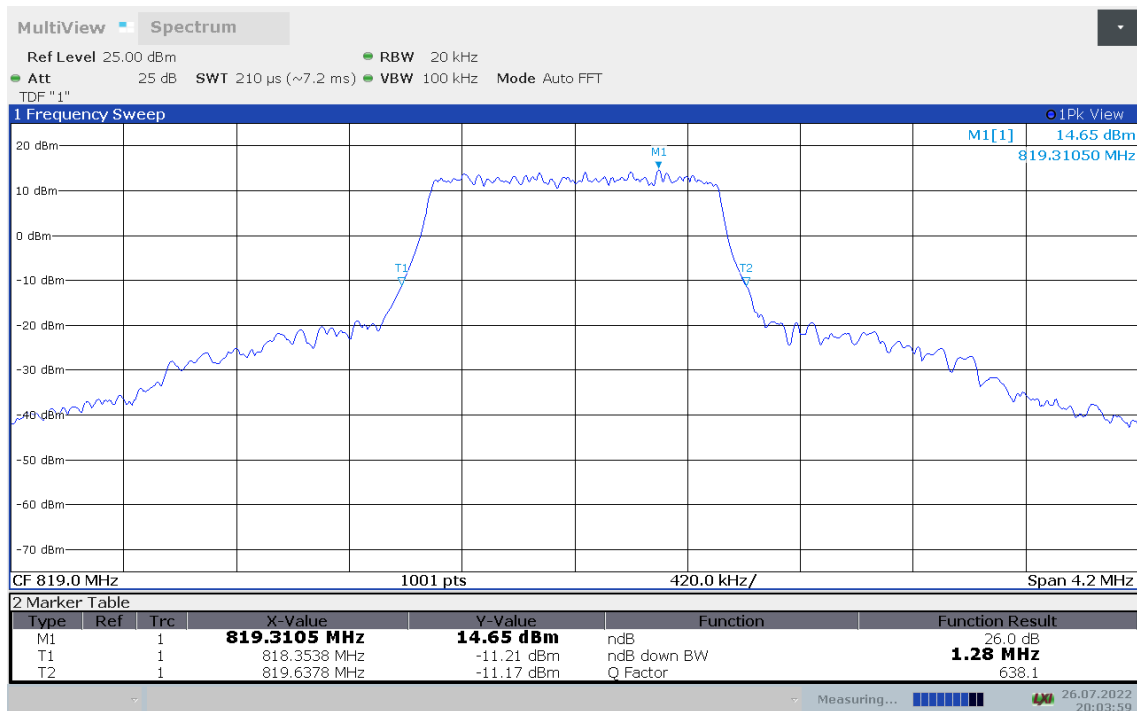
LTE band 26(814MHz-824MHz), 1.4MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
819.0	QPSK	16QAM	64QAM
	1.26	1.28	1.28

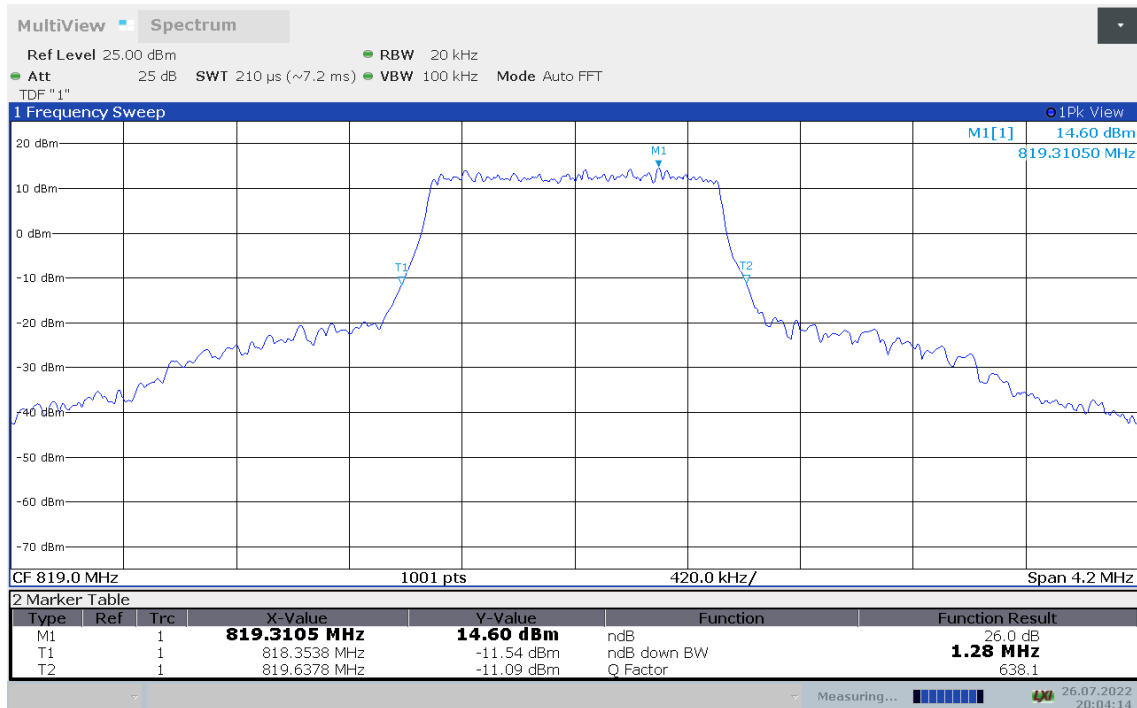
LTE band 26(814MHz-824MHz), 1.4MHz Bandwidth, QPSK (-26dBc BW)



LTE band 26(814MHz-824MHz), 1.4MHz Bandwidth, 16QAM (-26dBc BW)



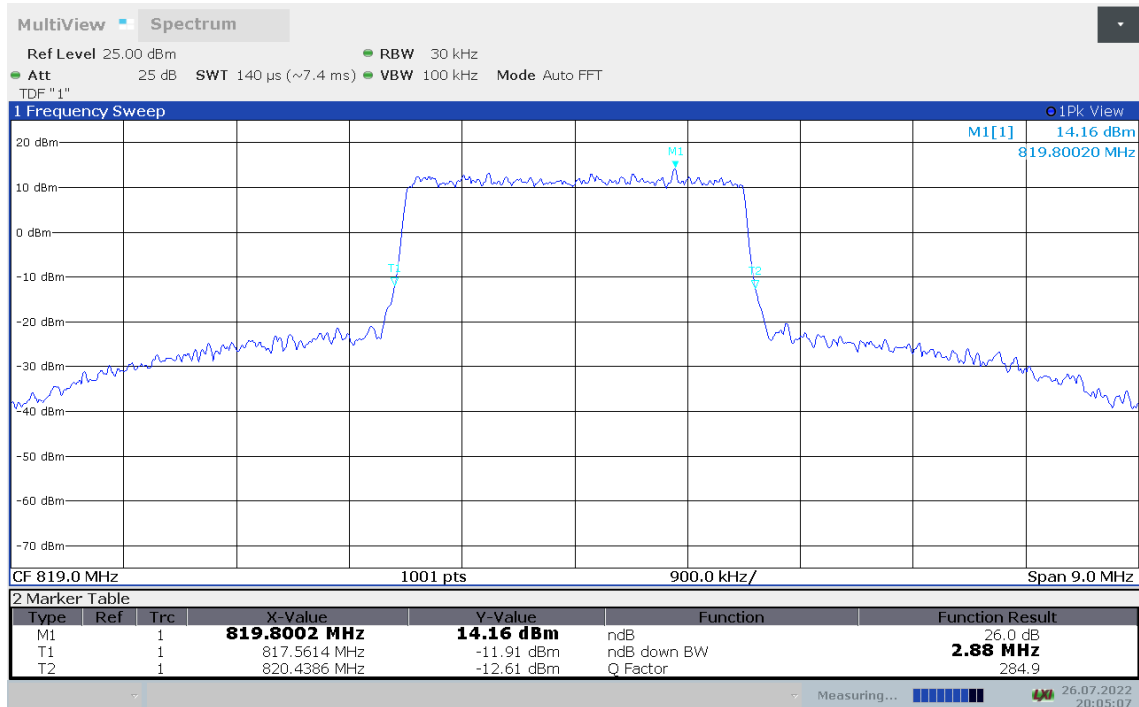
LTE band 26(814MHz-824MHz), 1.4MHz Bandwidth, 64QAM (-26dBc BW)



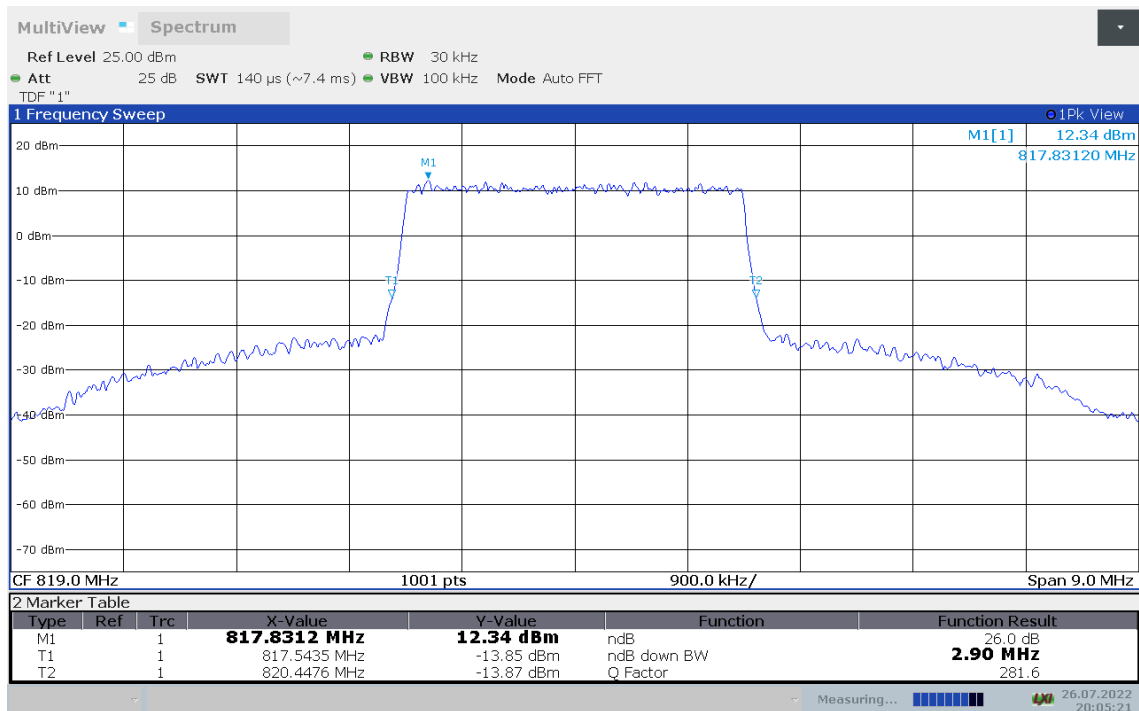
LTE band 26(814MHz-824MHz), 3MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
819.0	QPSK	16QAM	64QAM
	2.88	2.90	2.89

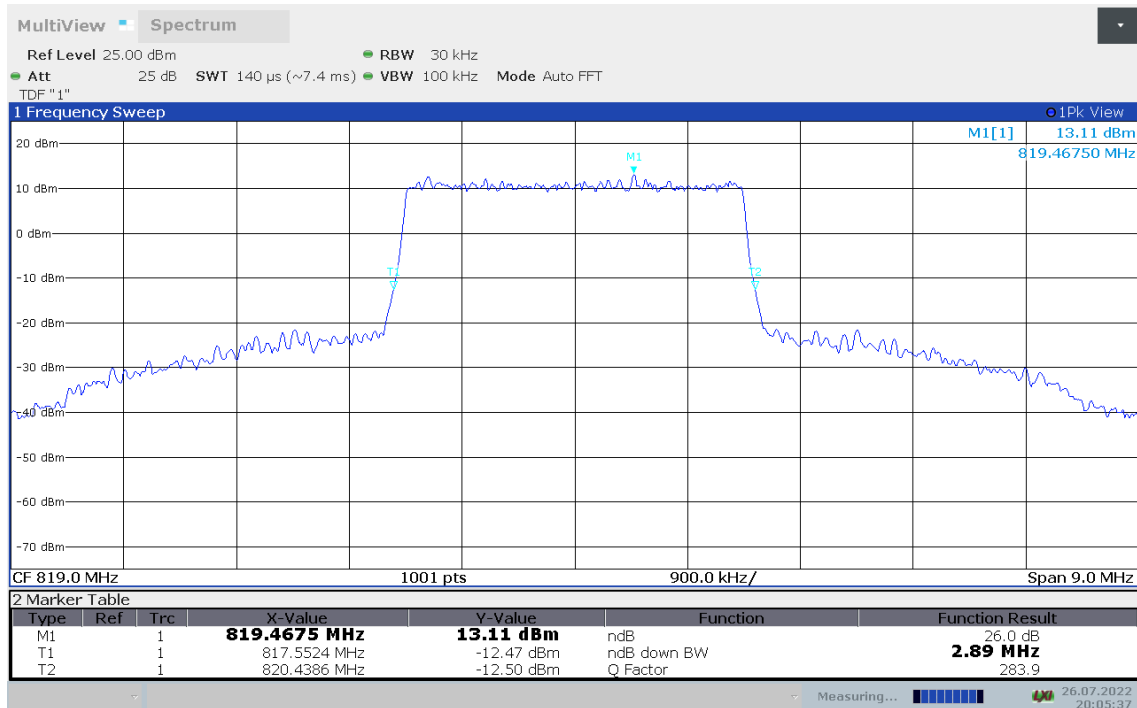
LTE band 26(814MHz-824MHz), 3MHz Bandwidth, QPSK (-26dBc BW)



LTE band 26(814MHz-824MHz), 3MHz Bandwidth, 16QAM (-26dBc BW)



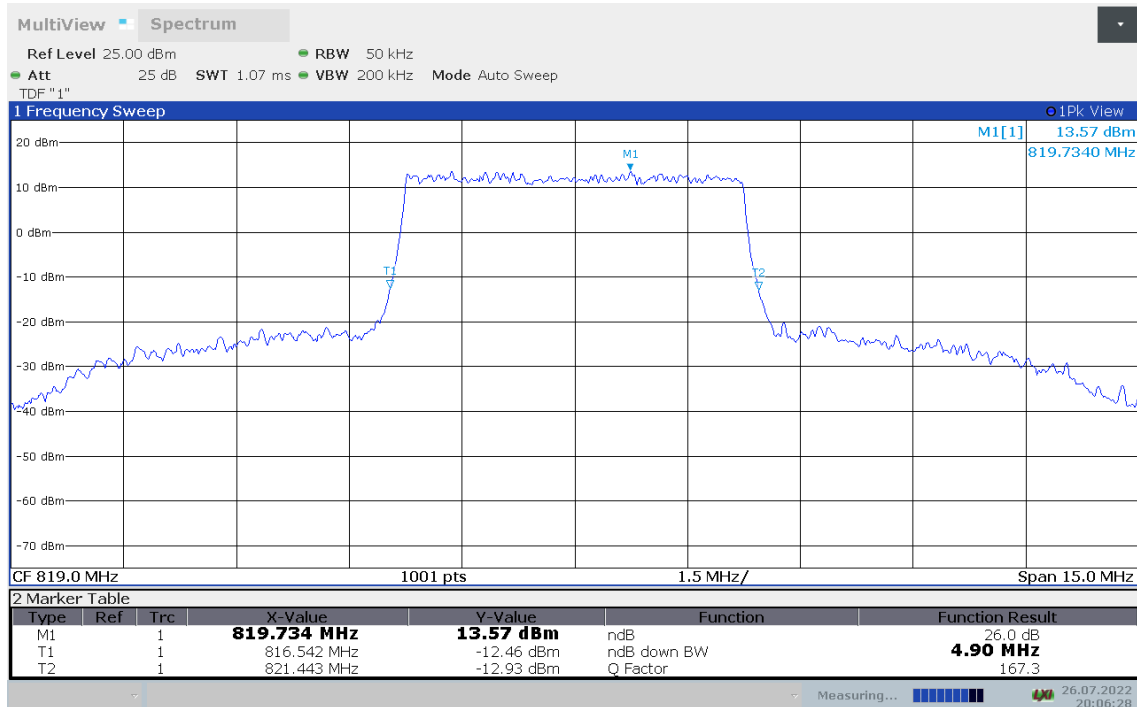
LTE band 26(814MHz-824MHz), 3MHz Bandwidth, 64QAM (-26dBc BW)



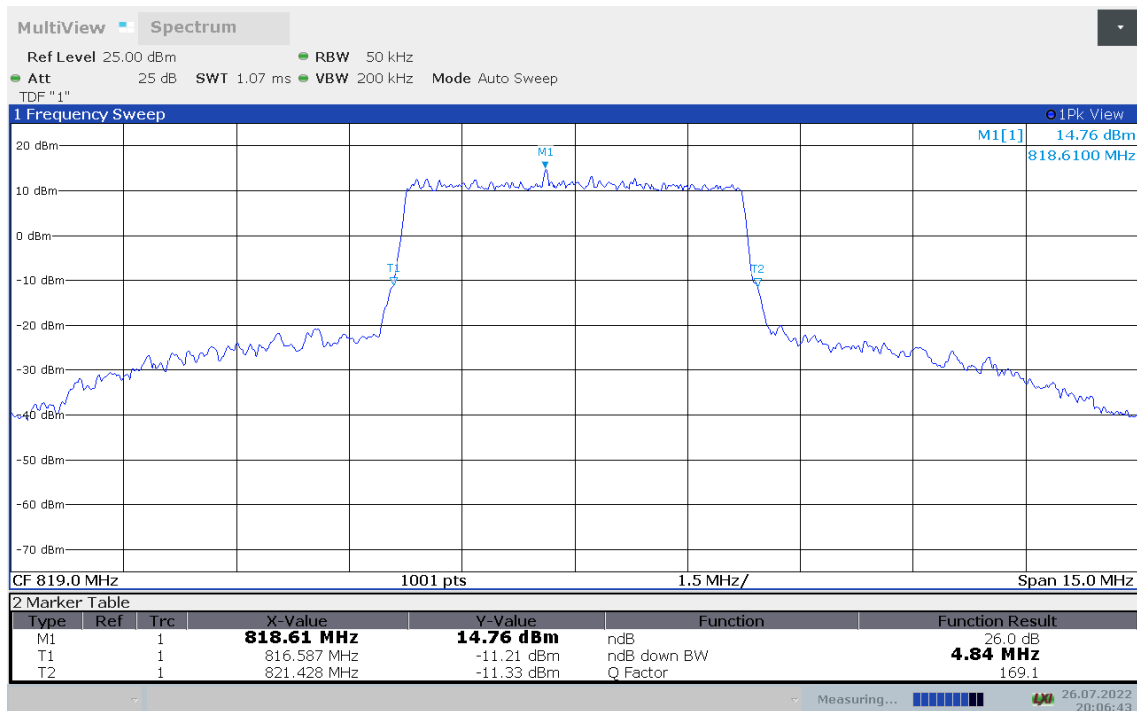
LTE band 26(814MHz-824MHz), 5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
819.0	QPSK	16QAM	64QAM
	4.90	4.84	4.86

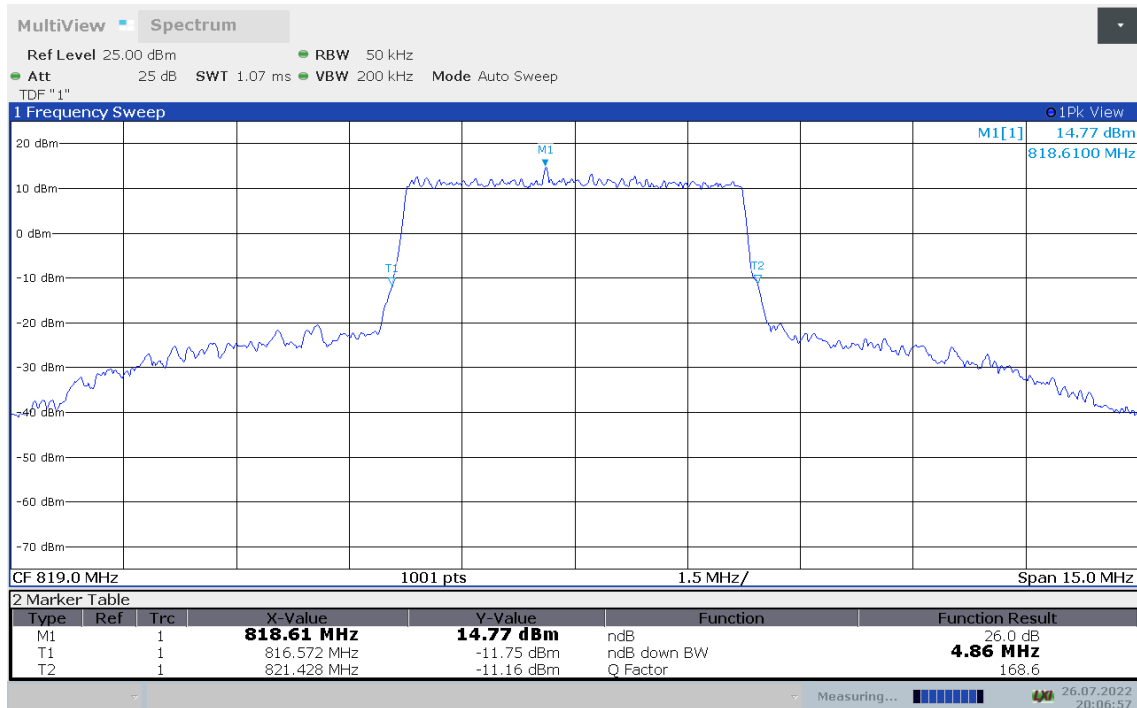
LTE band 26(814MHz-824MHz), 5MHz Bandwidth, QPSK (-26dBc BW)



LTE band 26(814MHz-824MHz), 5MHz Bandwidth,16QAM (-26dBc BW)



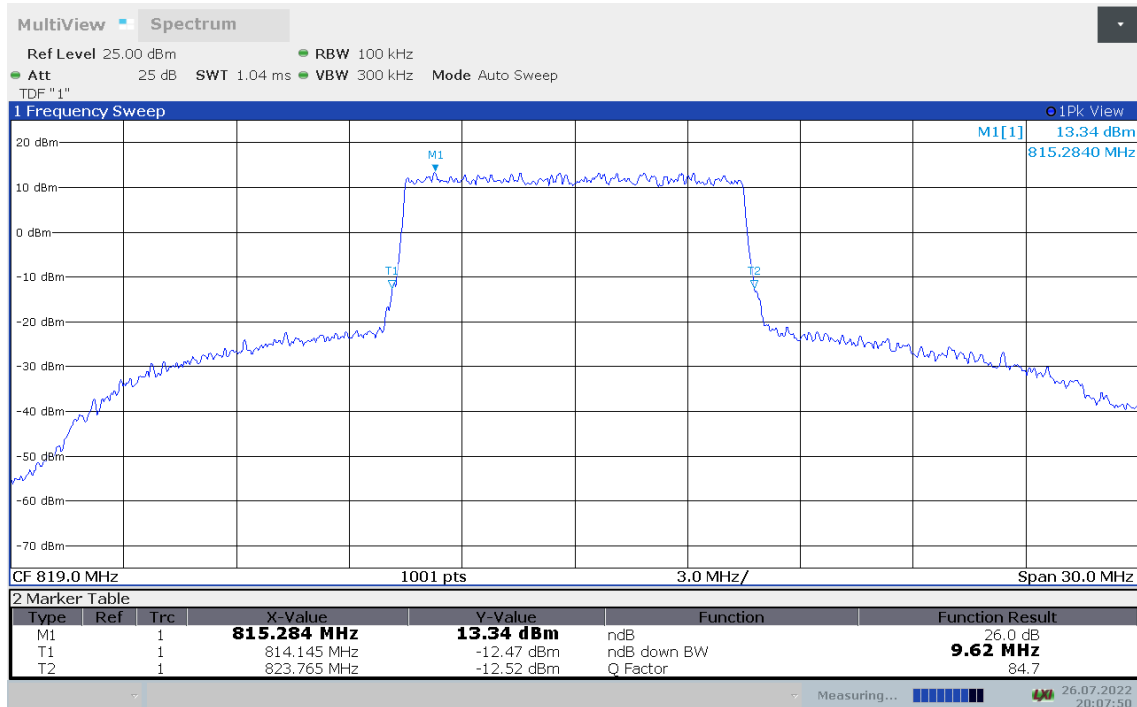
LTE band 26(814MHz-824MHz), 5MHz Bandwidth,64QAM (-26dBc BW)



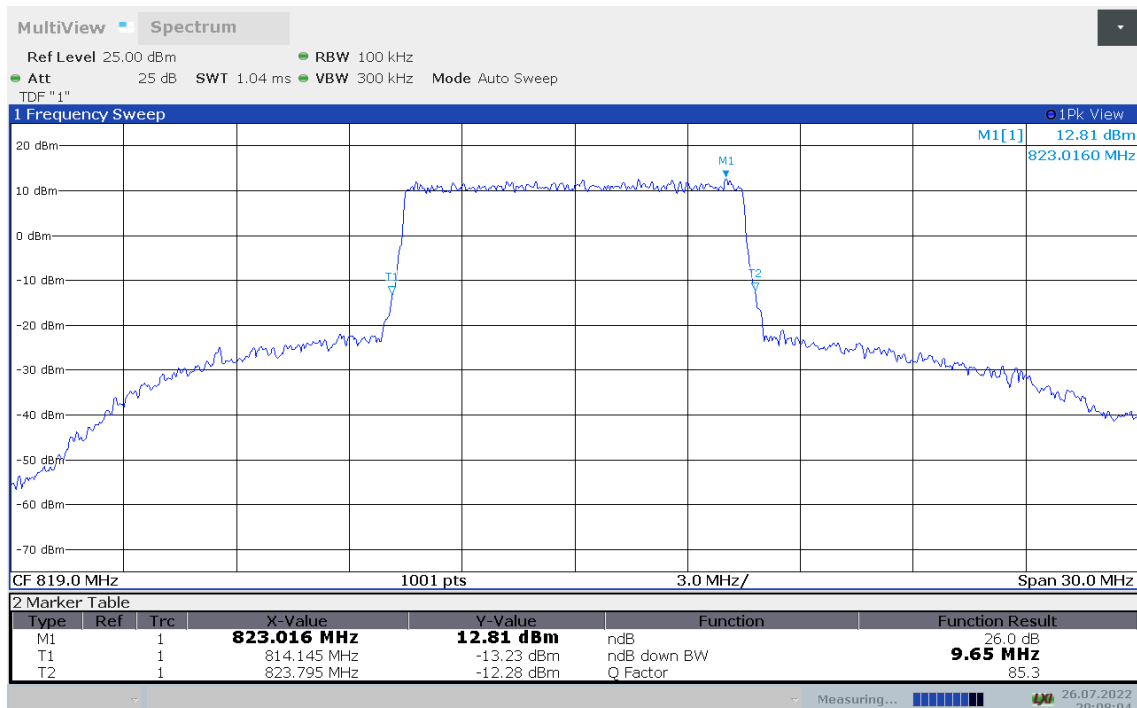
LTE band 26(814MHz-824MHz), 10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
819.0	QPSK	16QAM	64QAM
	9.62	9.65	9.59

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

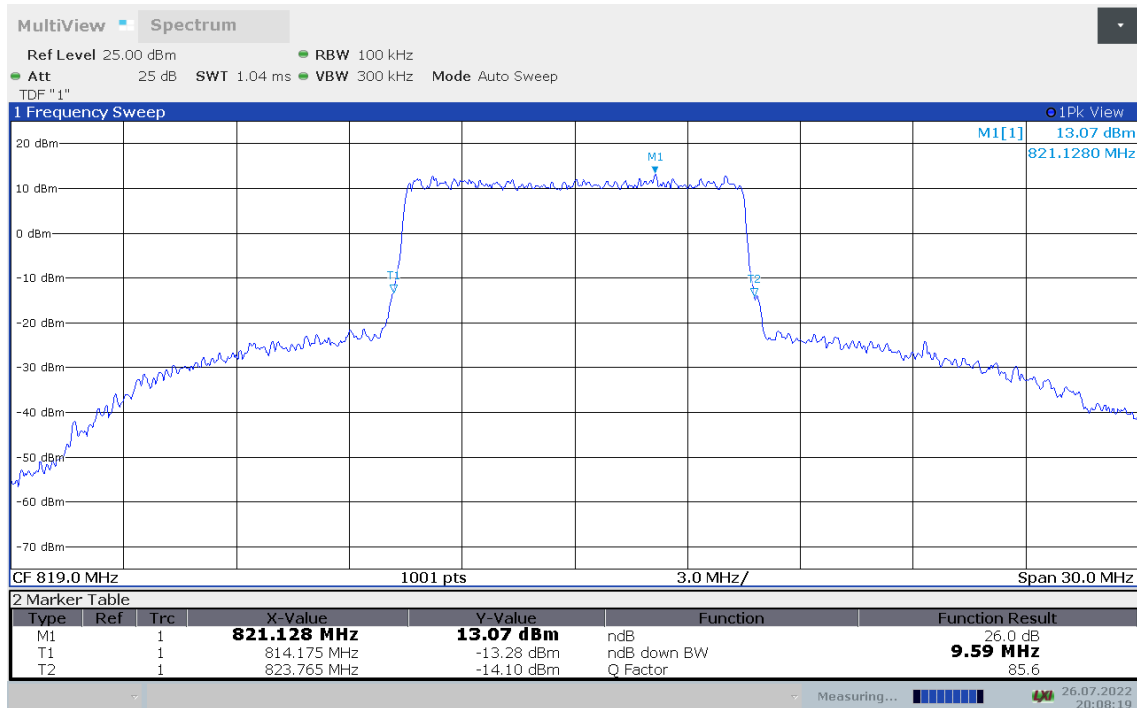


LTE band 26(814MHz-824MHz), 10MHz Bandwidth, 16QAM (-26dBc BW)





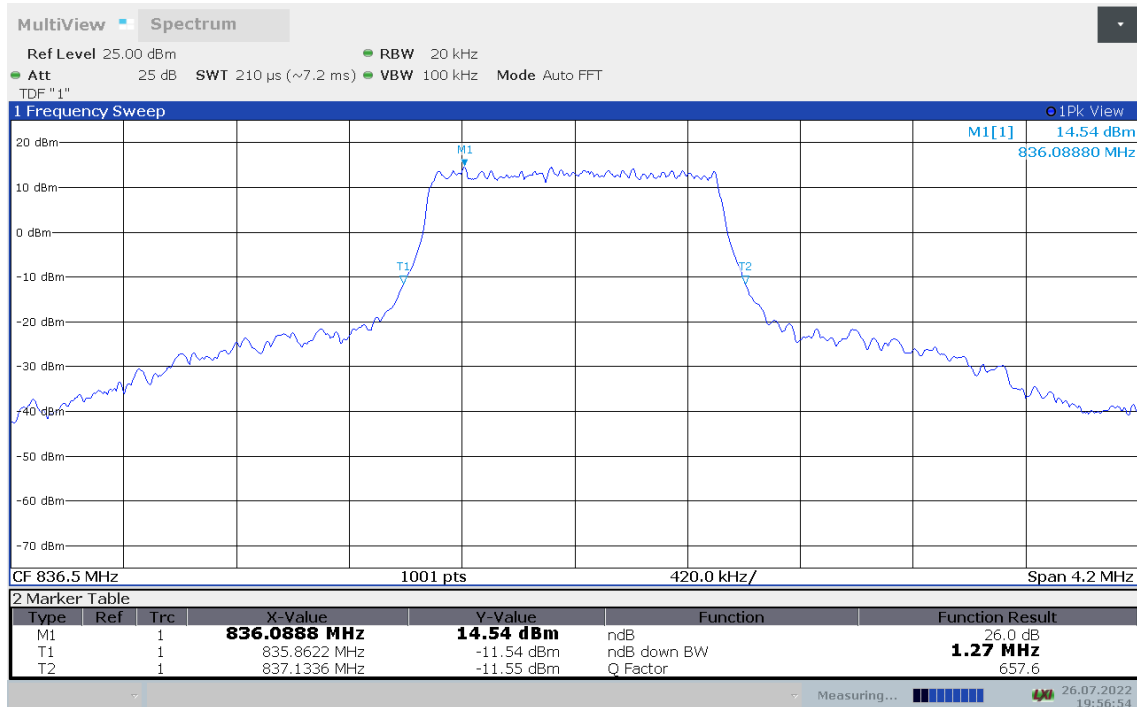
LTE band 26(814MHz-824MHz), 10MHz Bandwidth, 64QAM (-26dBc BW)



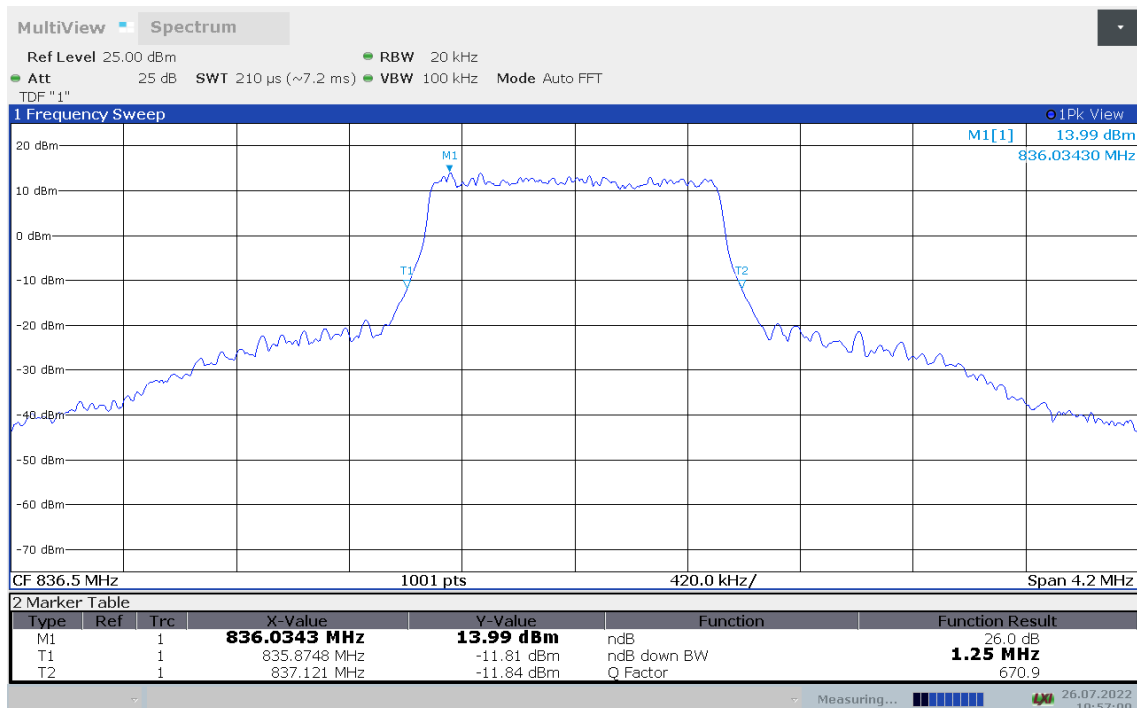
LTE band 26(824MHz-849MHz), 1.4MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	1.27	1.25	1.25

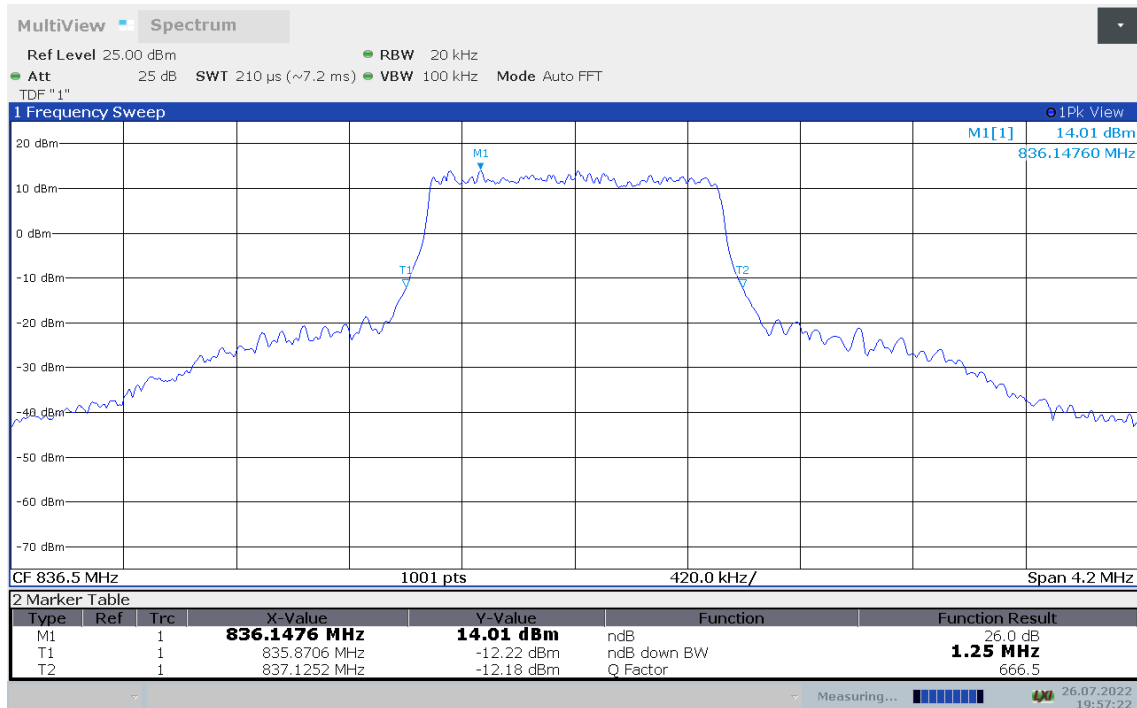
LTE band 26(824MHz-849MHz), 1.4MHz Bandwidth, QPSK (-26dBc BW)



LTE band 26(824MHz-849MHz), 1.4MHz Bandwidth, 16QAM (-26dBc BW)



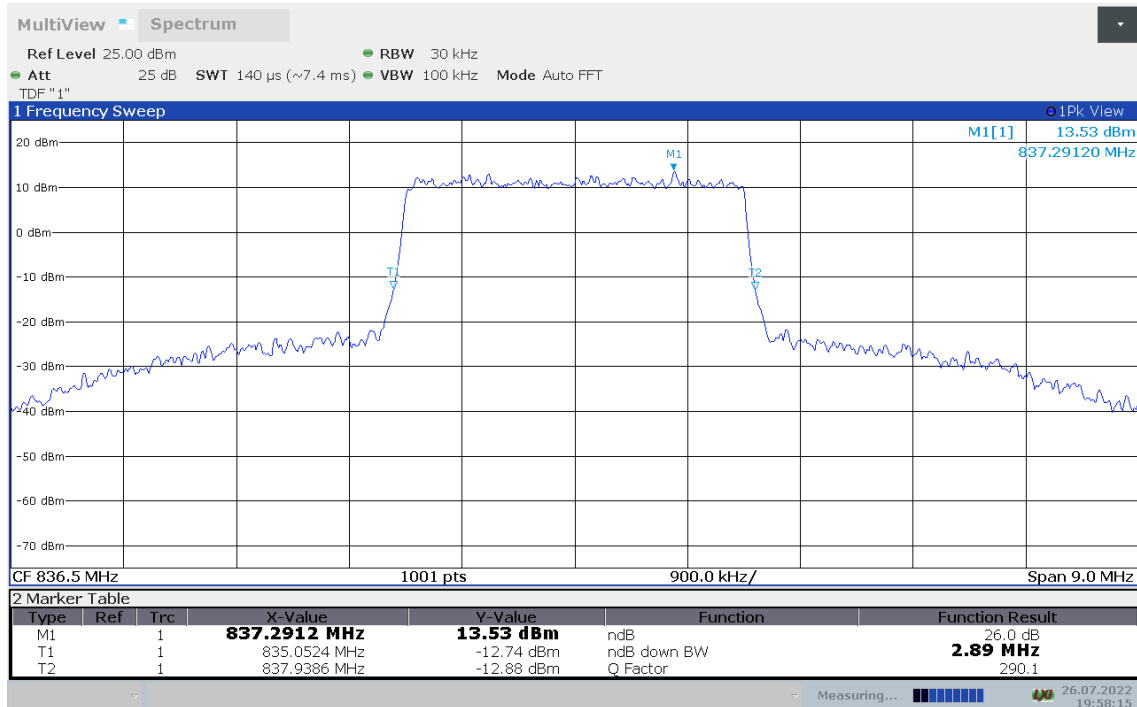
LTE band 26(824MHz-849MHz), 1.4MHz Bandwidth, 64QAM (-26dBc BW)



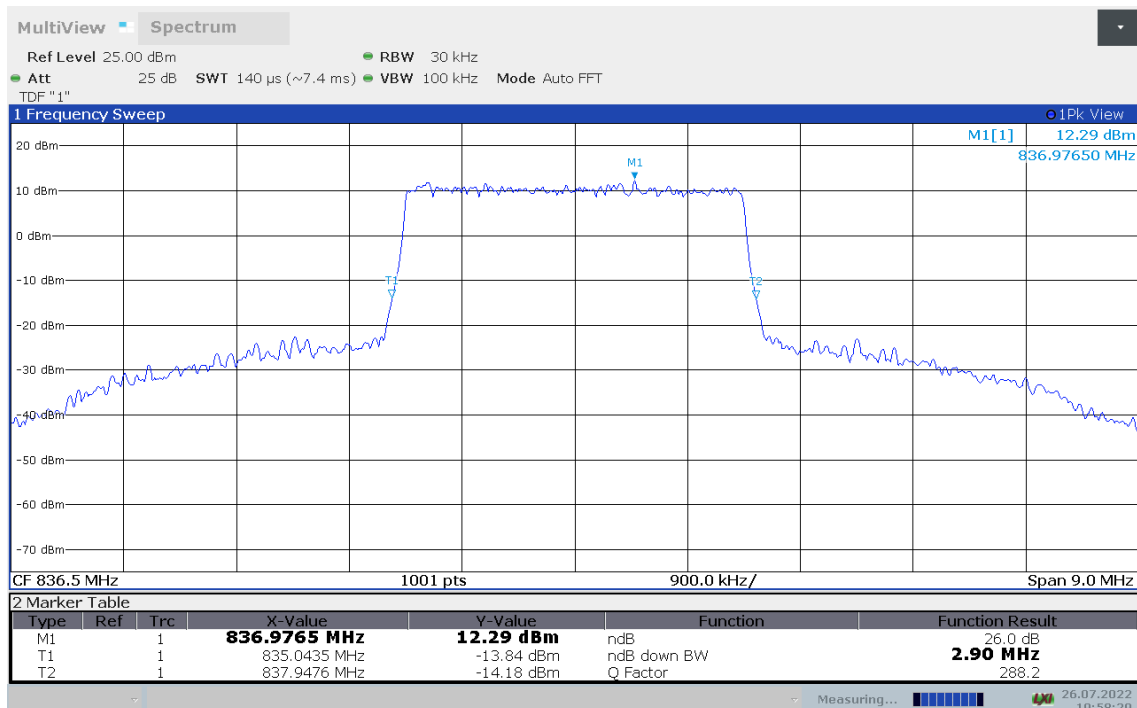
LTE band 26(824MHz-849MHz), 3MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	2.89	2.90	2.90

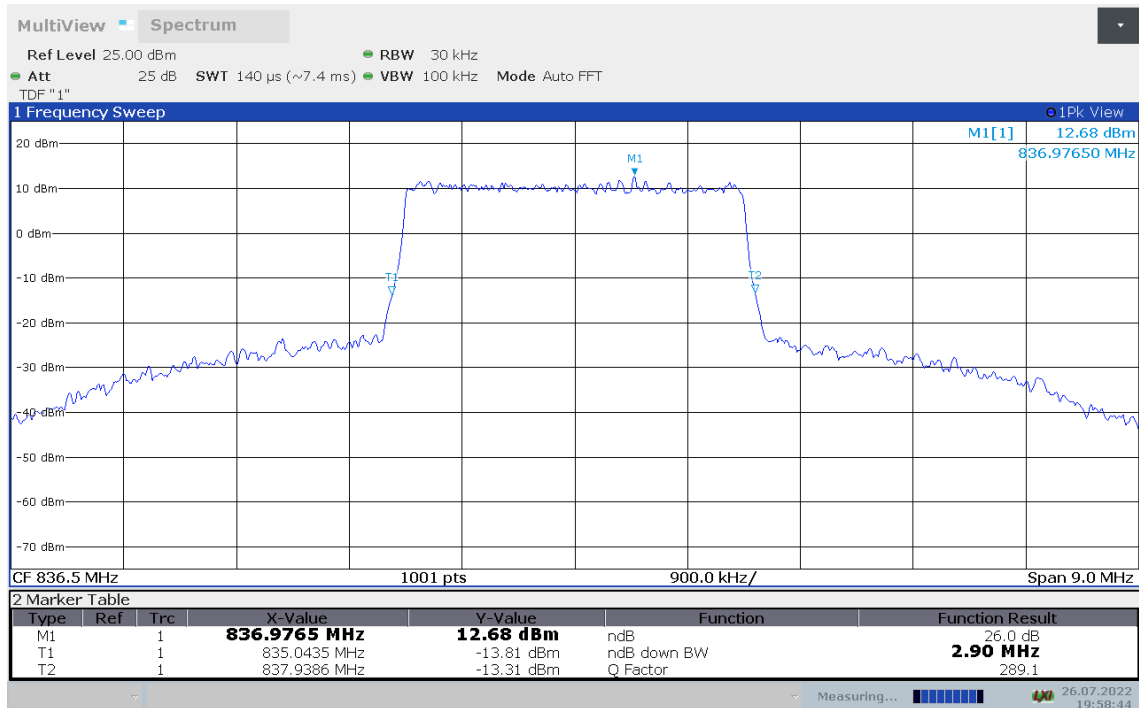
LTE band 26(824MHz-849MHz), 3MHz Bandwidth, QPSK (-26dBc BW)



LTE band 26(824MHz-849MHz), 3MHz Bandwidth, 16QAM (-26dBc BW)



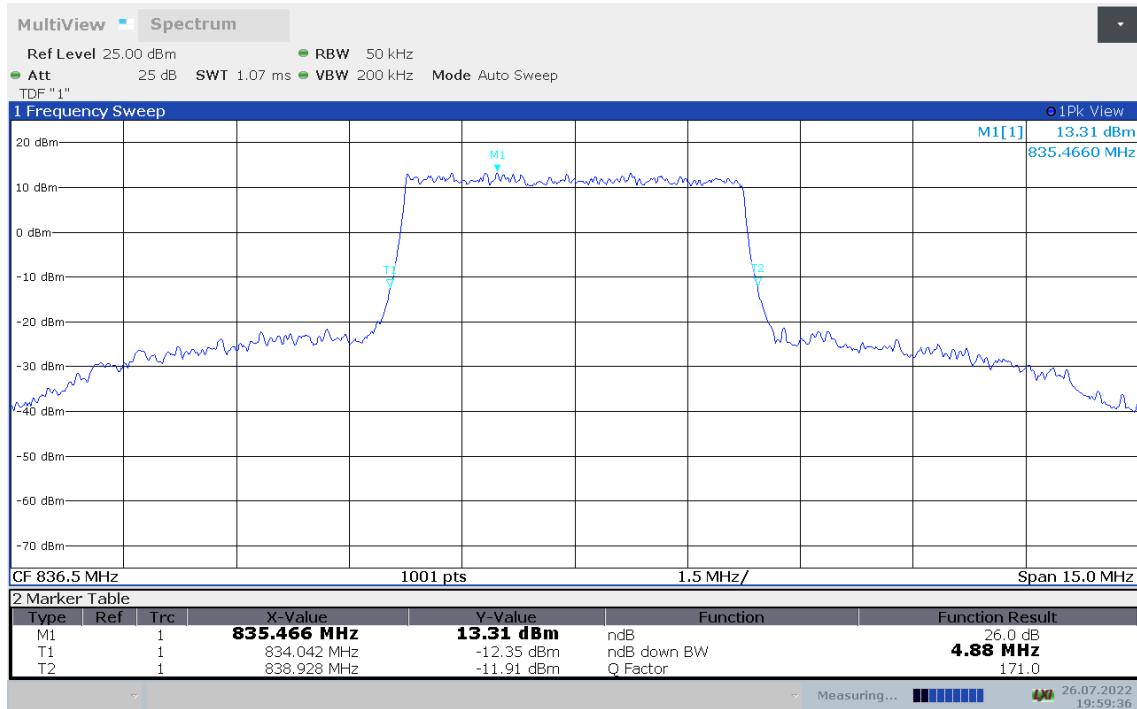
LTE band 26(824MHz-849MHz), 3MHz Bandwidth, 64QAM (-26dBc BW)



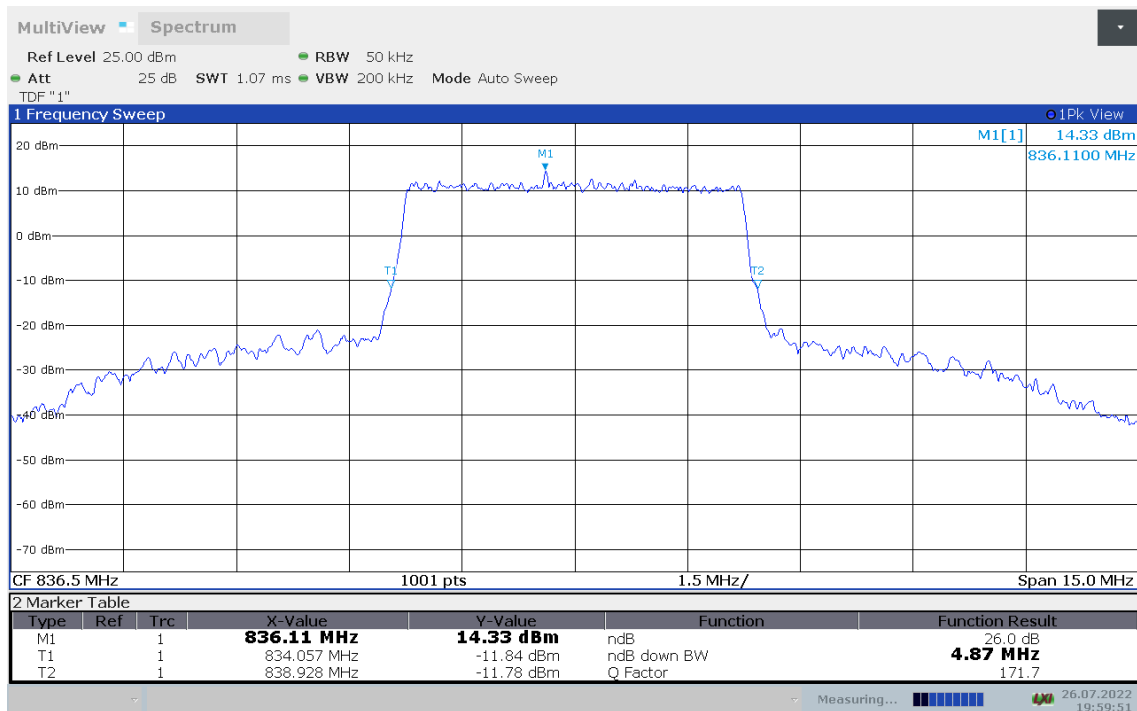
LTE band 26(824MHz-849MHz), 5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	4.88	4.87	4.86

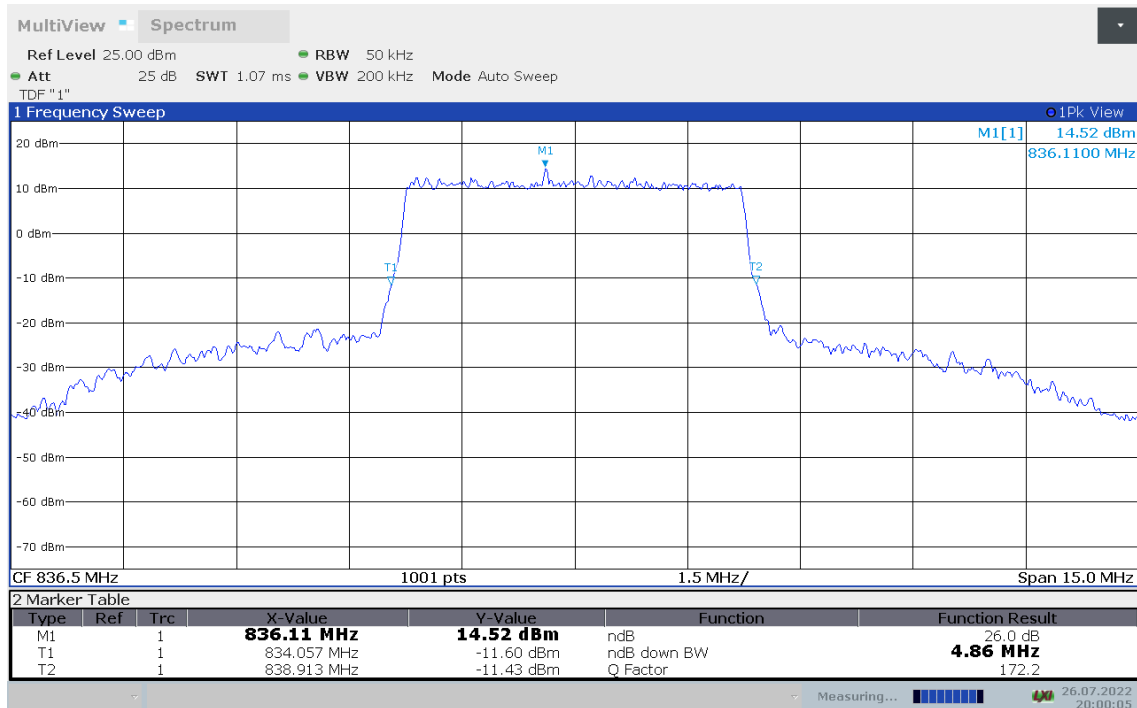
LTE band 26(824MHz-849MHz), 5MHz Bandwidth, QPSK (-26dBc BW)



LTE band 26(824MHz-849MHz), 5MHz Bandwidth,16QAM (-26dBc BW)

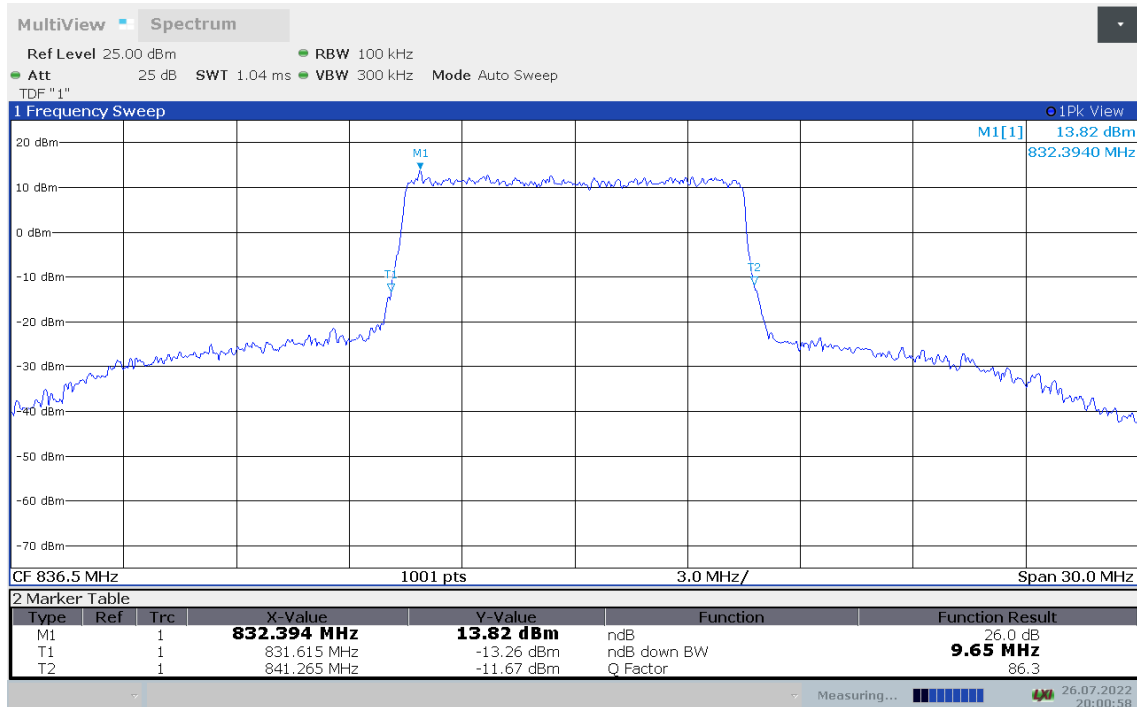
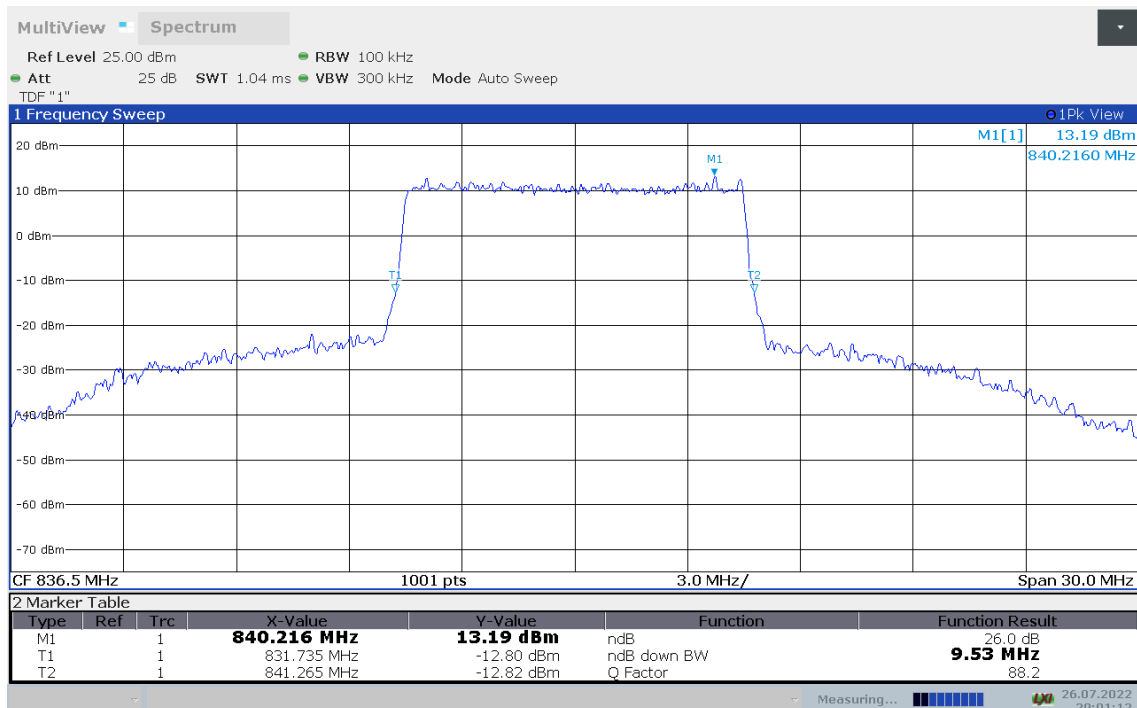


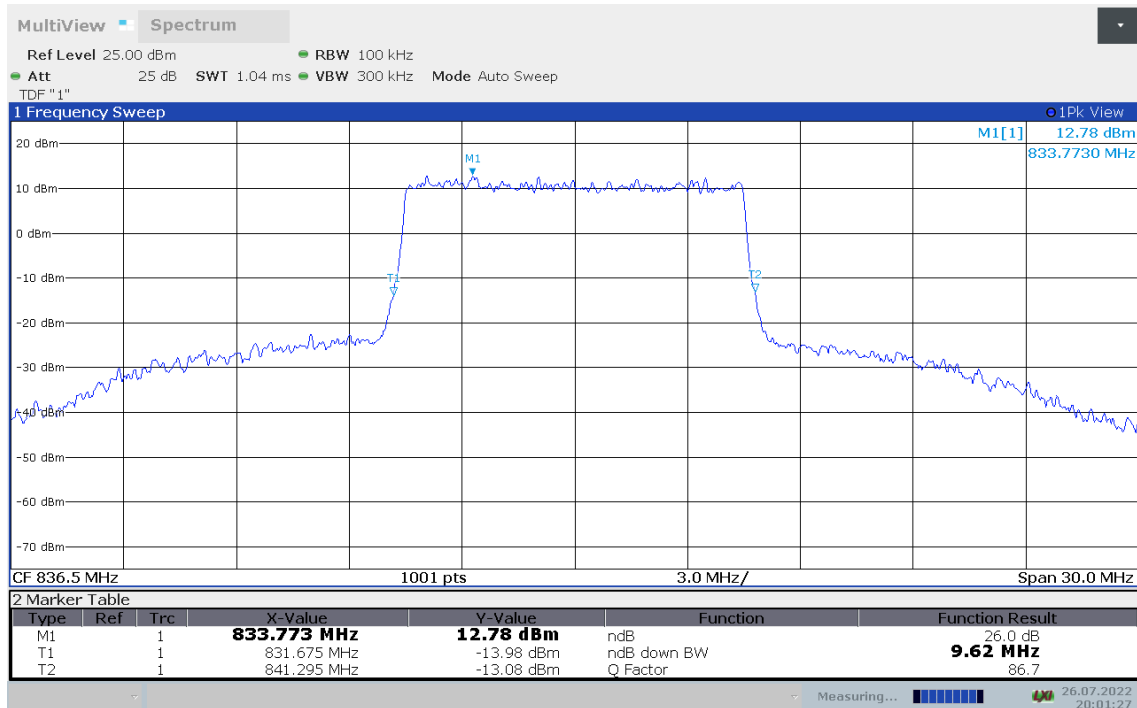
LTE band 26(824MHz-849MHz), 5MHz Bandwidth,64QAM (-26dBc BW)



LTE band 26(824MHz-849MHz), 10MHz (-26dBc BW)

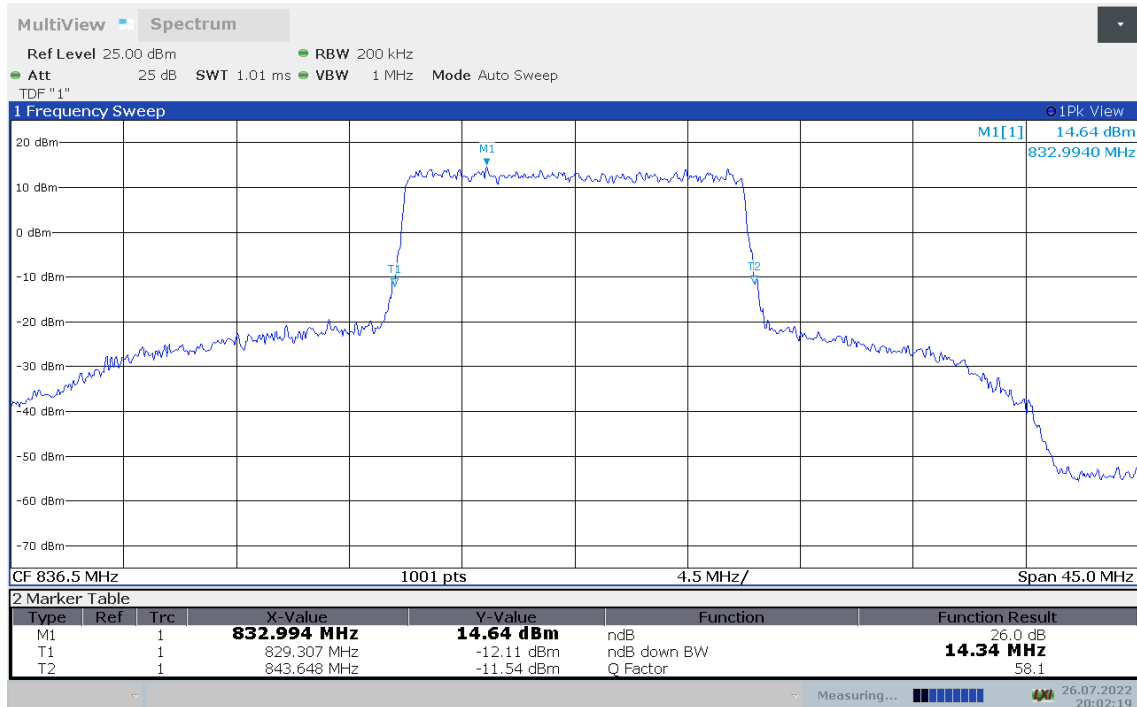
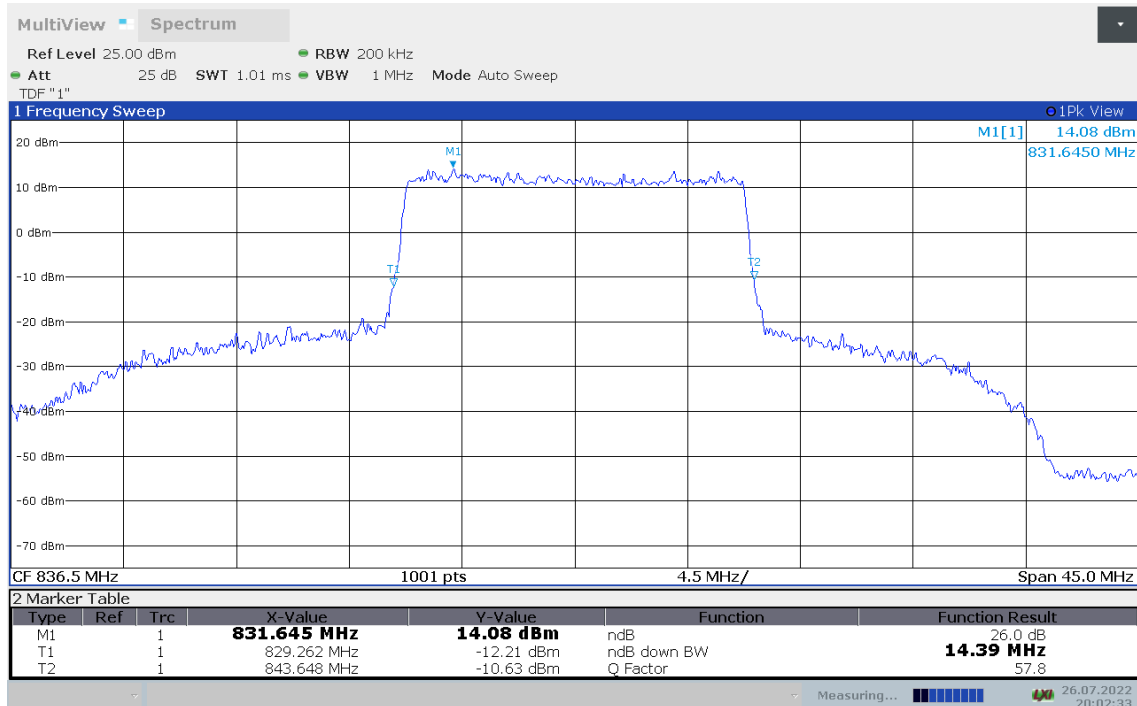
Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	9.65	9.53	9.62

LTE band 26(824MHz-849MHz), 10MHz Bandwidth, QPSK (-26dBc BW)

LTE band 26(824MHz-849MHz), 10MHz Bandwidth, 16QAM (-26dBc BW)


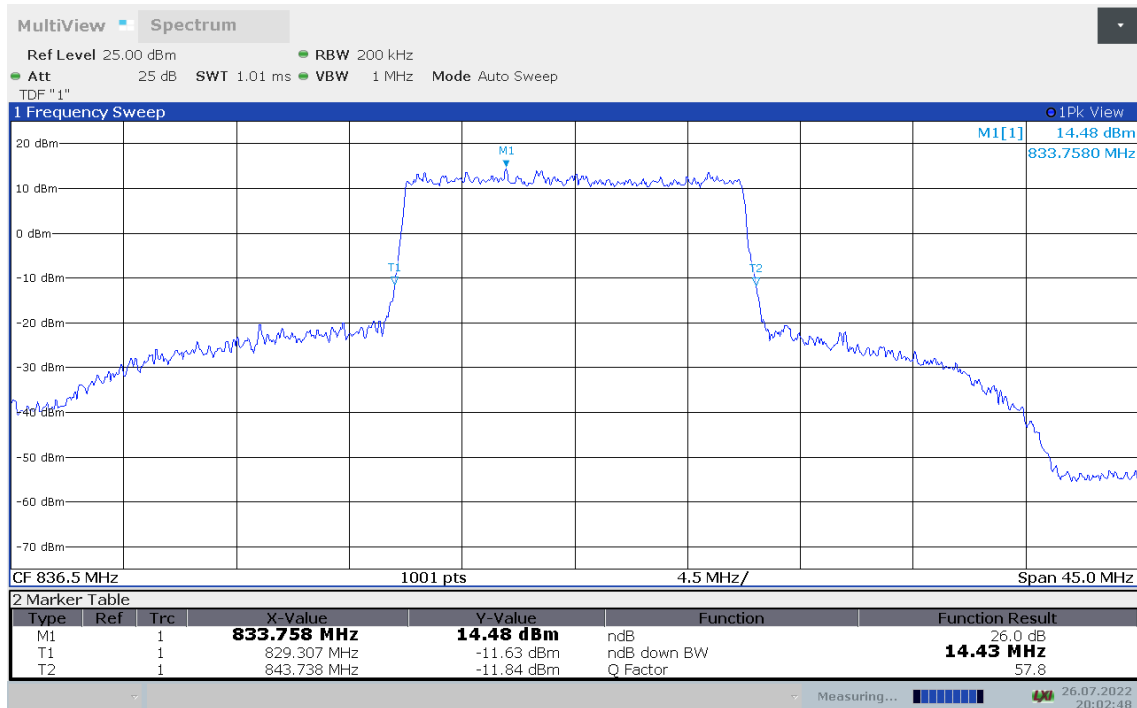
**LTE band 26(824MHz-849MHz), 10MHz Bandwidth, 64QAM (-26dBc BW)**

LTE band 26(824MHz-849MHz), 15MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
836.5	QPSK	16QAM	64QAM
	14.34	14.39	14.43

LTE band 26(824MHz-849MHz), 15MHz Bandwidth, QPSK (-26dBc BW)

LTE band 26(824MHz-849MHz), 15MHz Bandwidth, 16QAM (-26dBc BW)


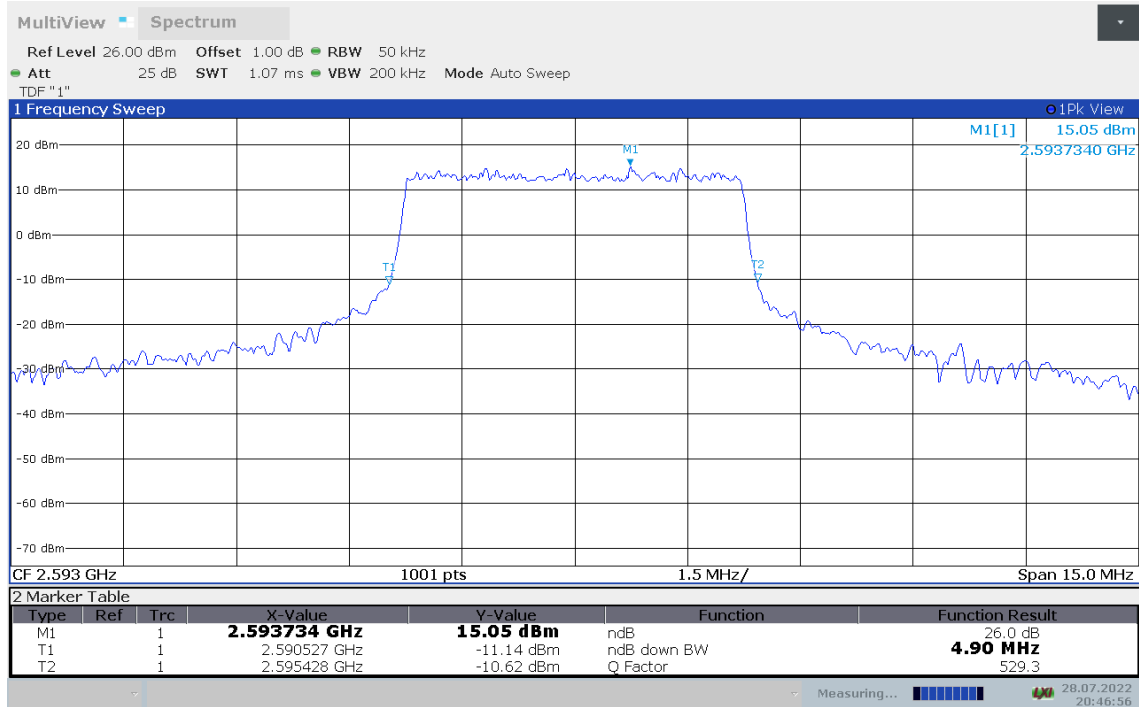
LTE band 26(824MHz-849MHz), 15MHz Bandwidth, 64QAM (-26dBc BW)



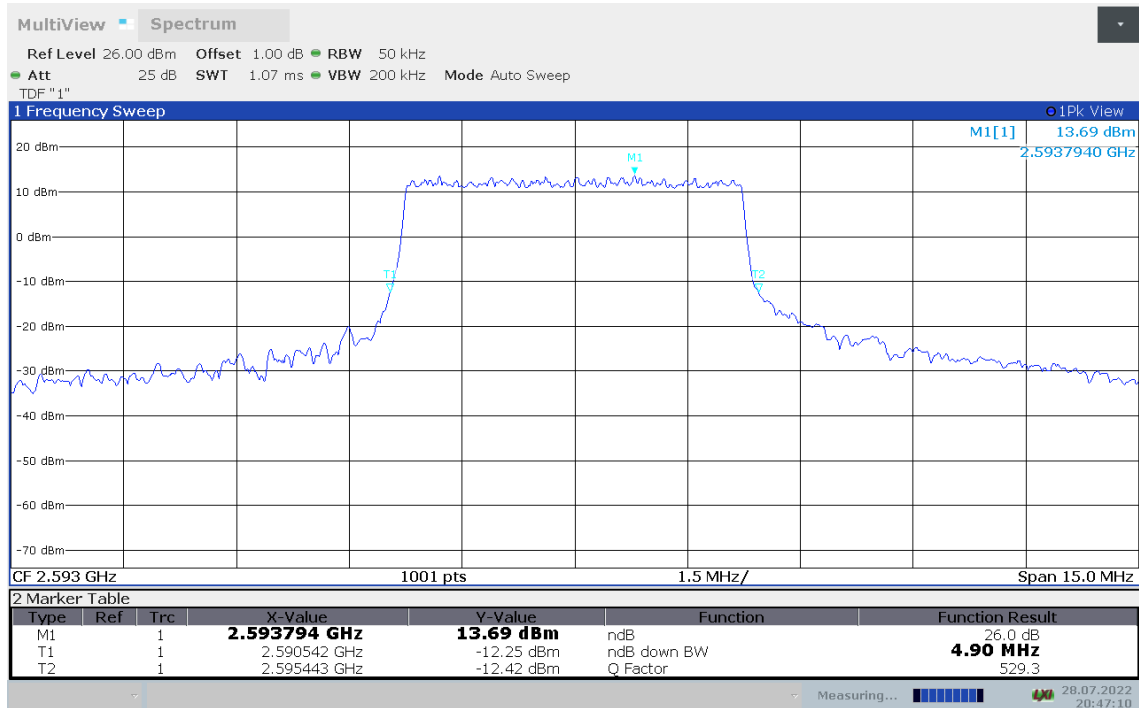
LTE band 41,5MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
2593	QPSK	16QAM	64QAM
	4.90	4.90	4.86

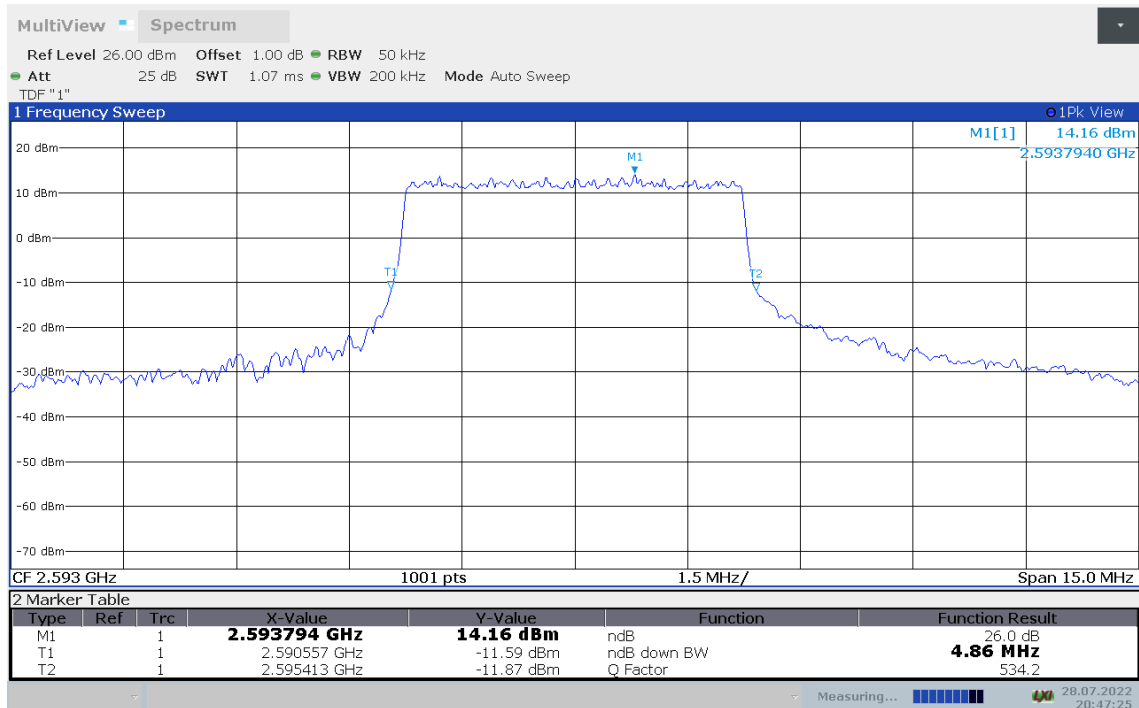
LTE band 41,5MHz Bandwidth, QPSK (-26dBc BW)



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



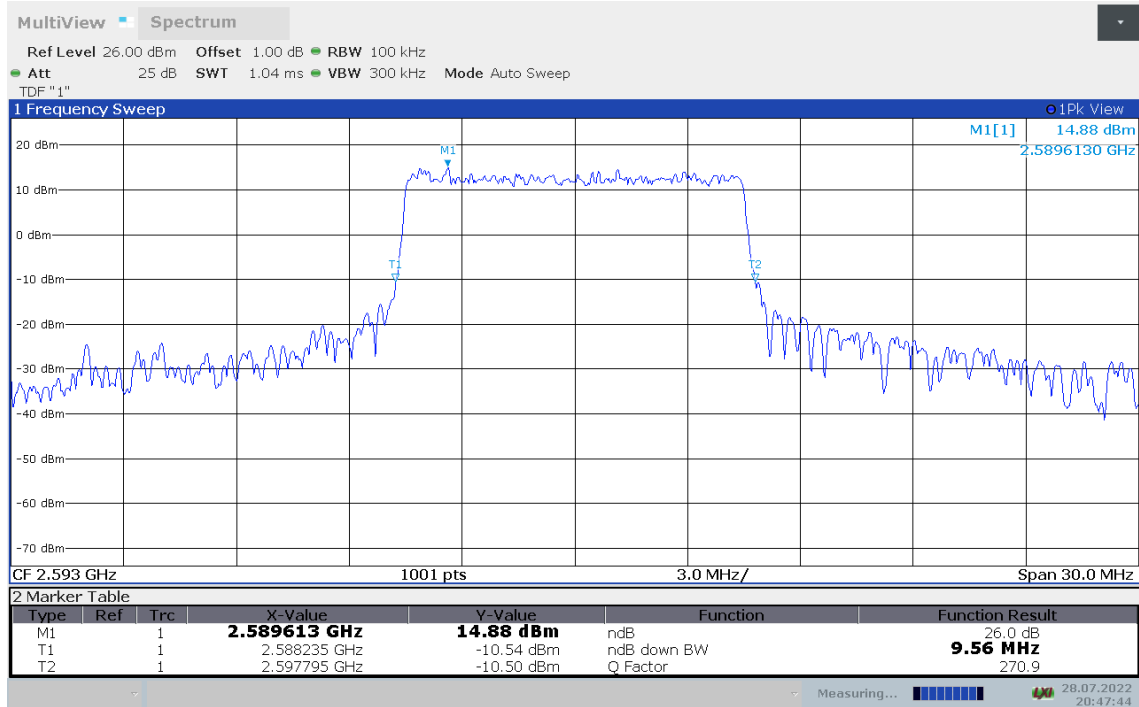
LTE band 41,5MHz Bandwidth,64QAM (-26dBc BW)



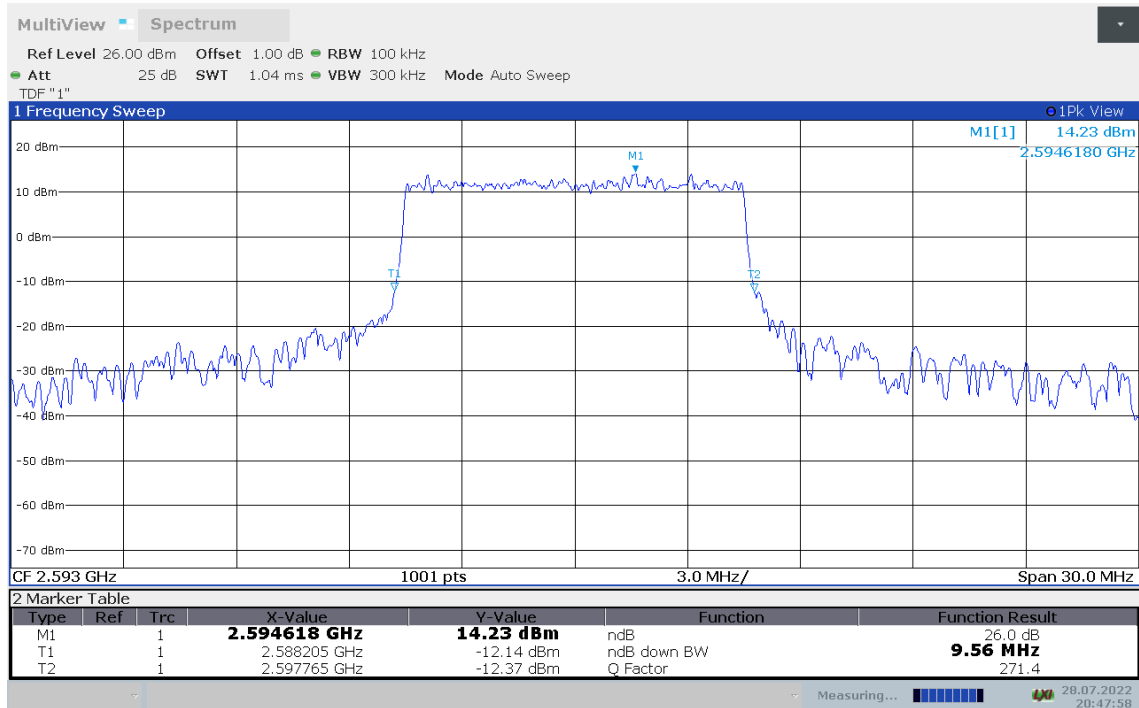
LTE band 41,10MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
2593	QPSK	16QAM	64QAM
	9.56	9.56	9.56

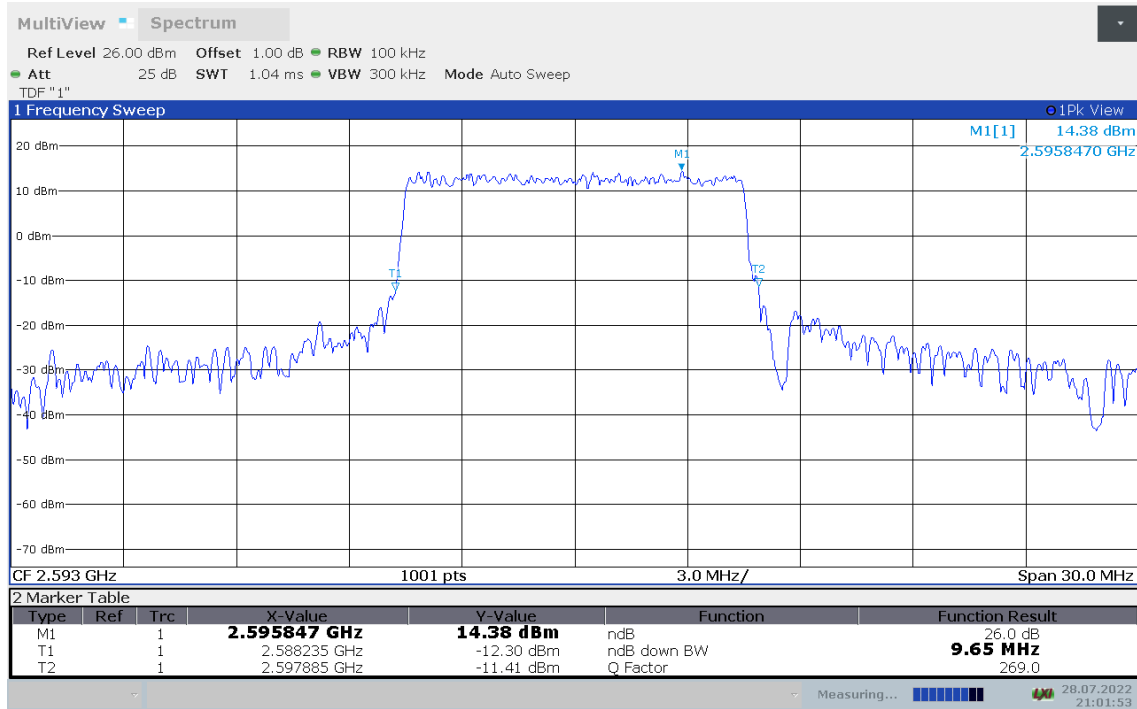
LTE band 41,10MHz Bandwidth, QPSK (-26dBc BW)



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



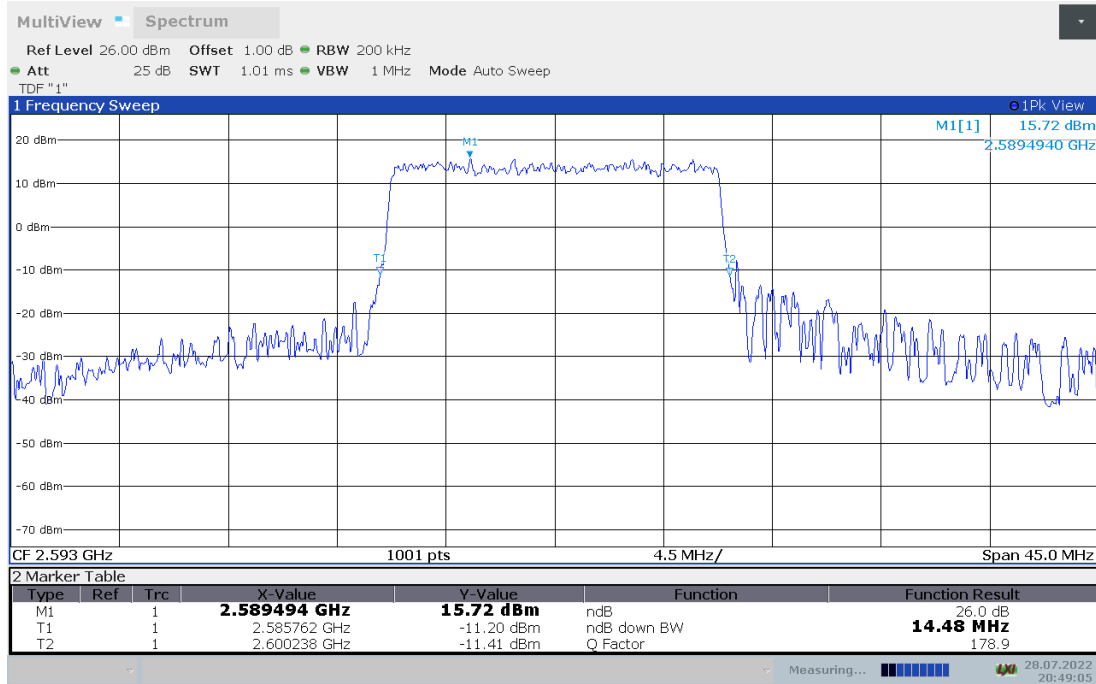
LTE band 41,10MHz Bandwidth, 64QAM (-26dBc BW)



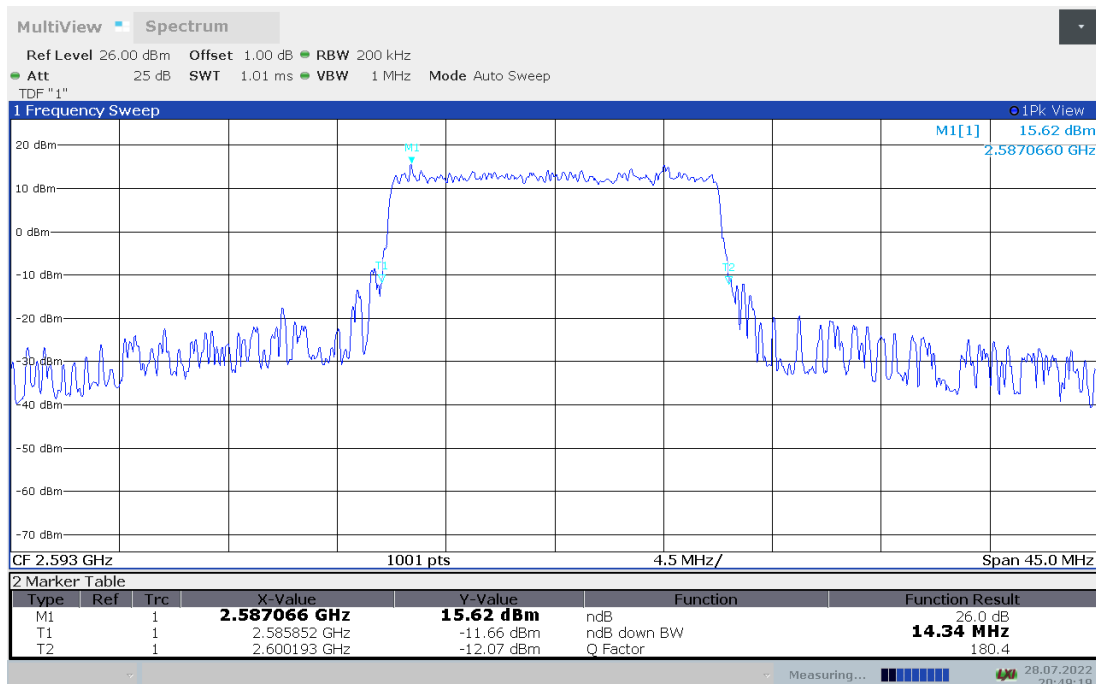
LTE band 41,15MHz(-26dBc)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
2593	QPSK	16QAM	64QAM
	14.48	14.34	14.43

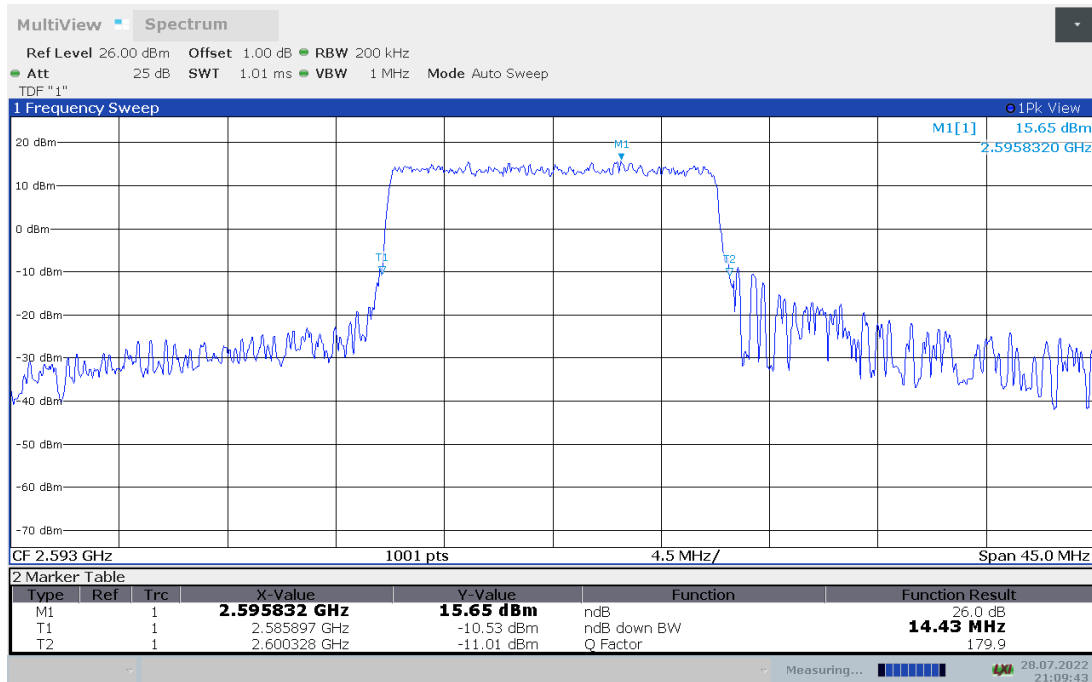
LTE band 41 , 15MHz Bandwidth,QPSK (-26dBc BW)



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



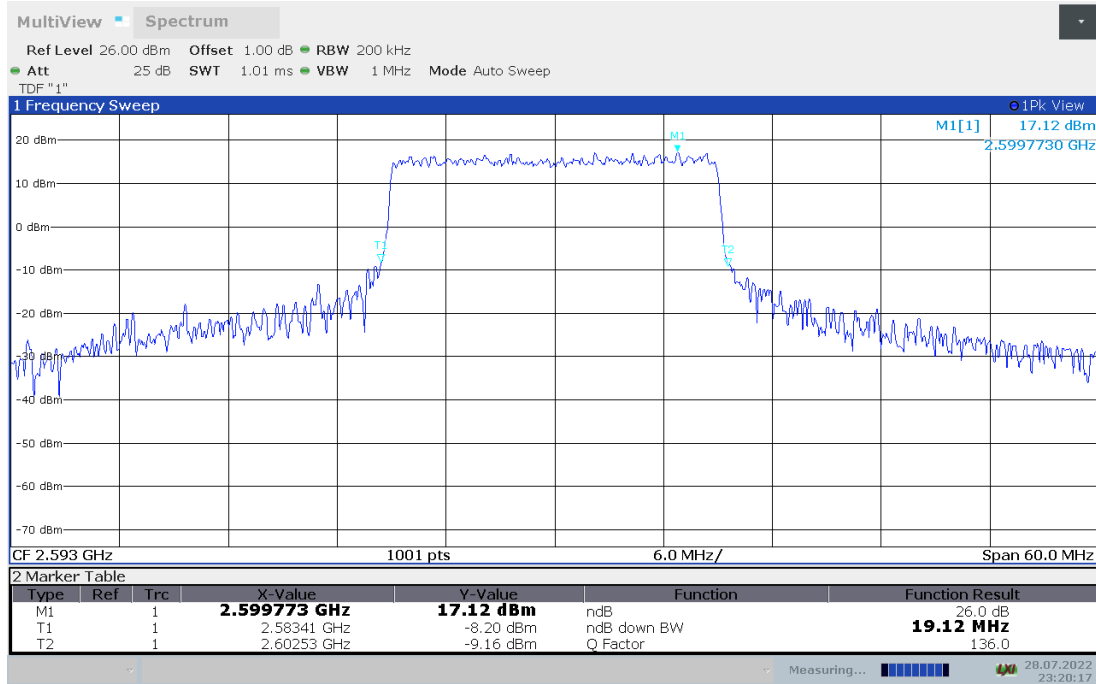
LTE band 41 , 15MHz Bandwidth,64QAM (-26dBc BW)



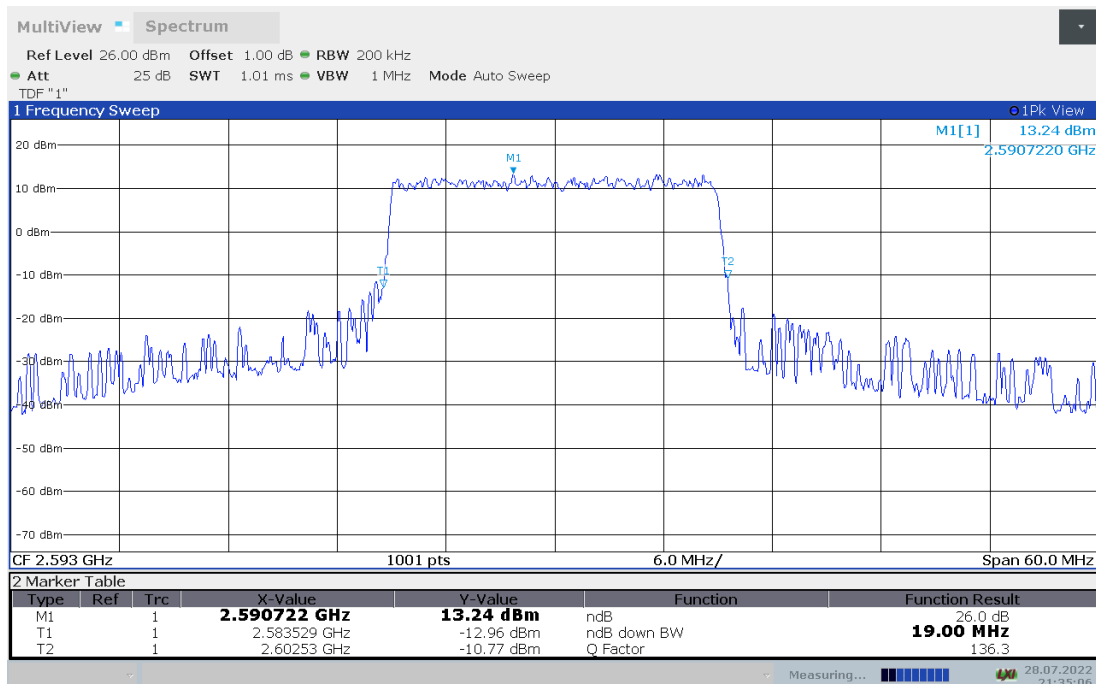
LTE band 41,20MHz(-26dBc)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
2593	QPSK	16QAM	64QAM
	19.12	19.00	19.30

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

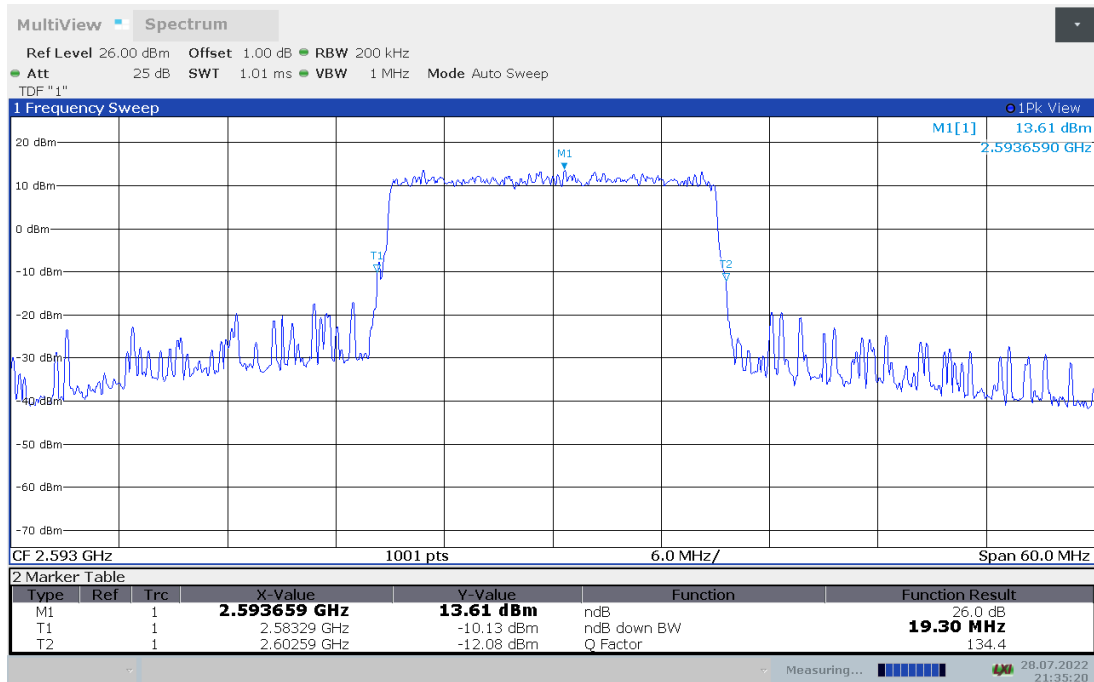


LTE band 41 , 20MHz Bandwidth,16QAM (-26dBc BW)



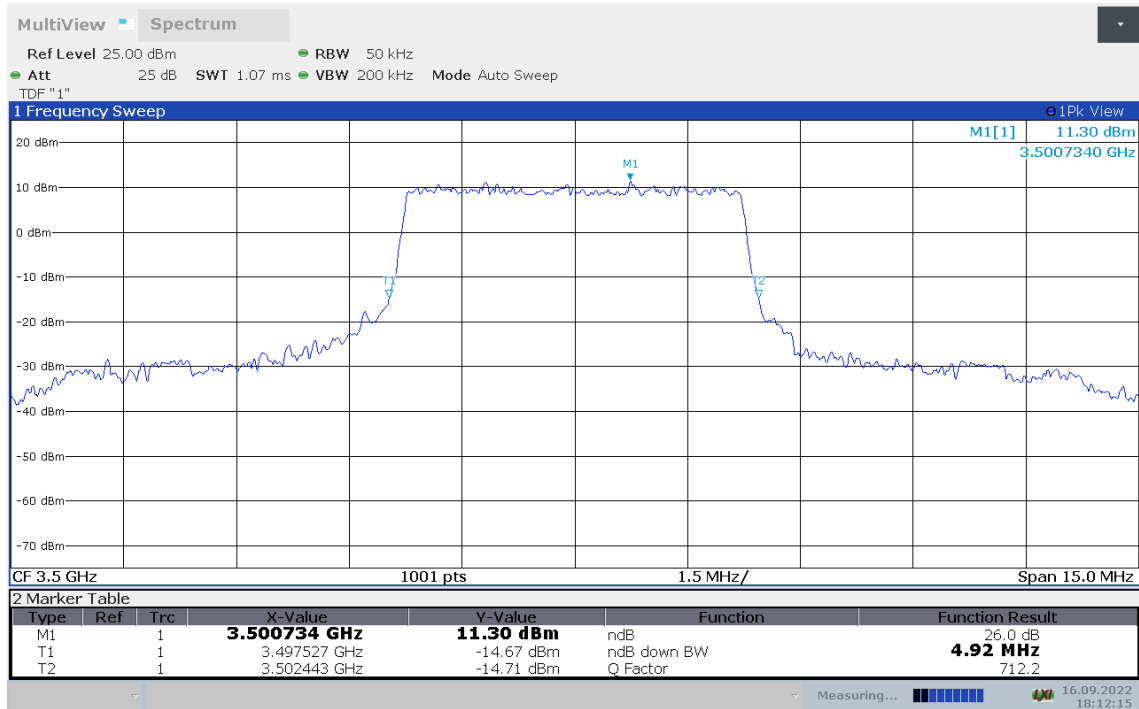
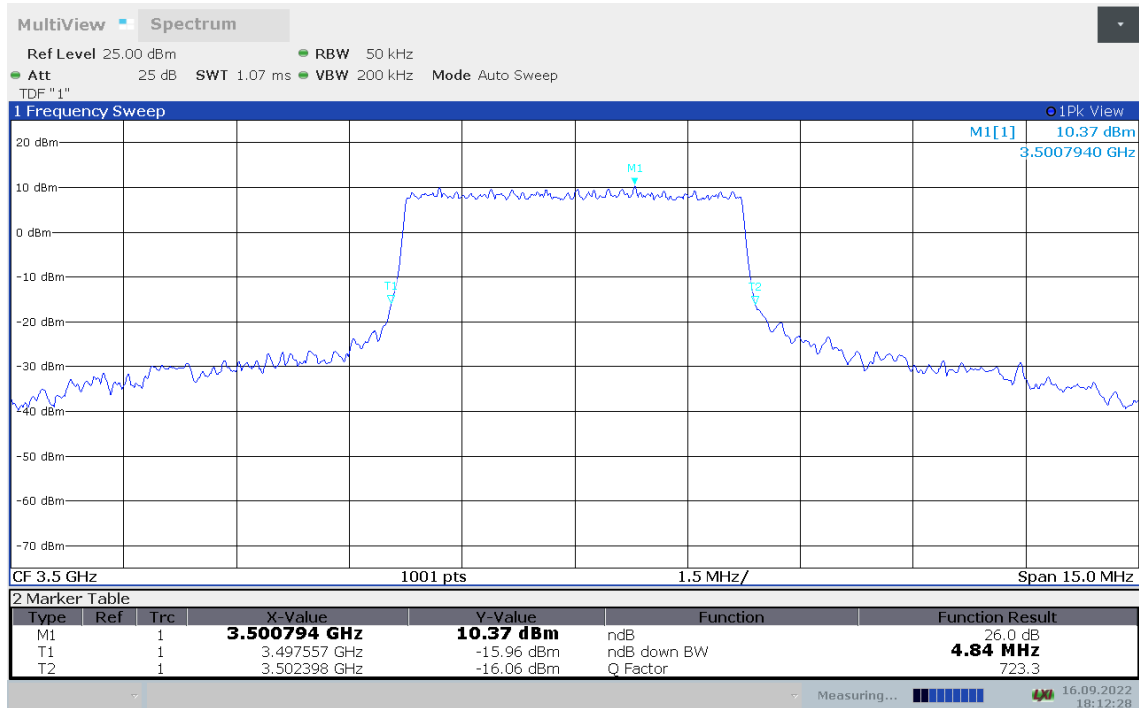


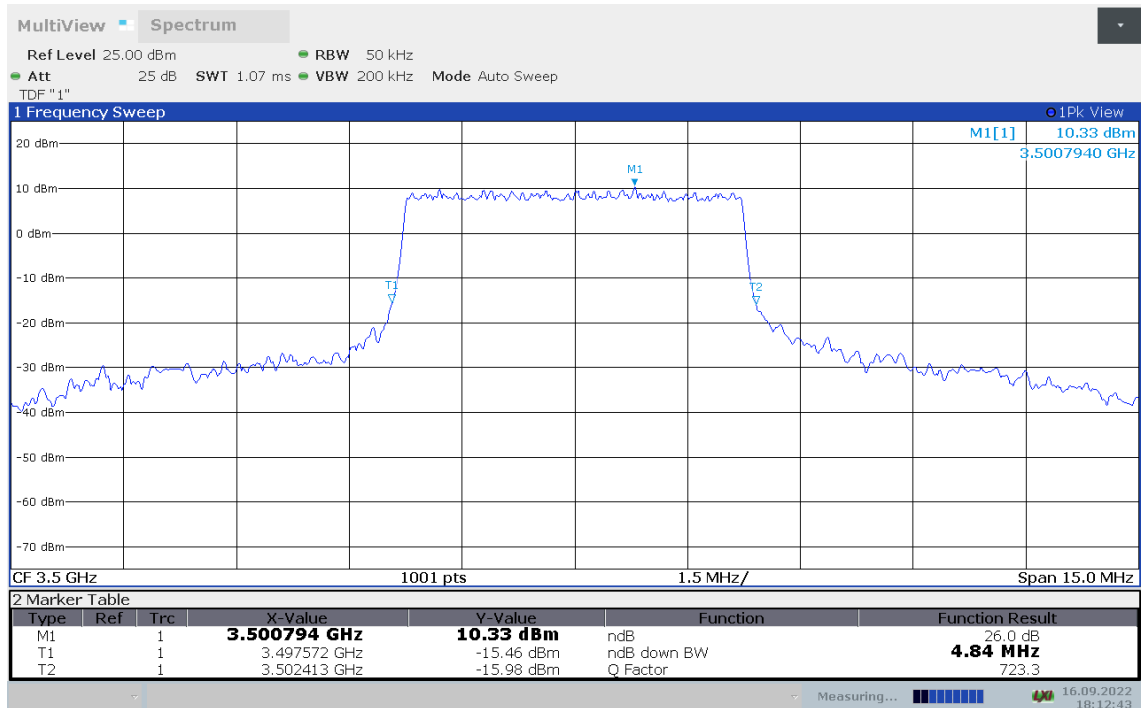
LTE band 41 , 20MHz Bandwidth,64QAM (-26dBc BW)



LTE band 42(3450MHz-3550MHz), 5MHz (-26dBc BW)

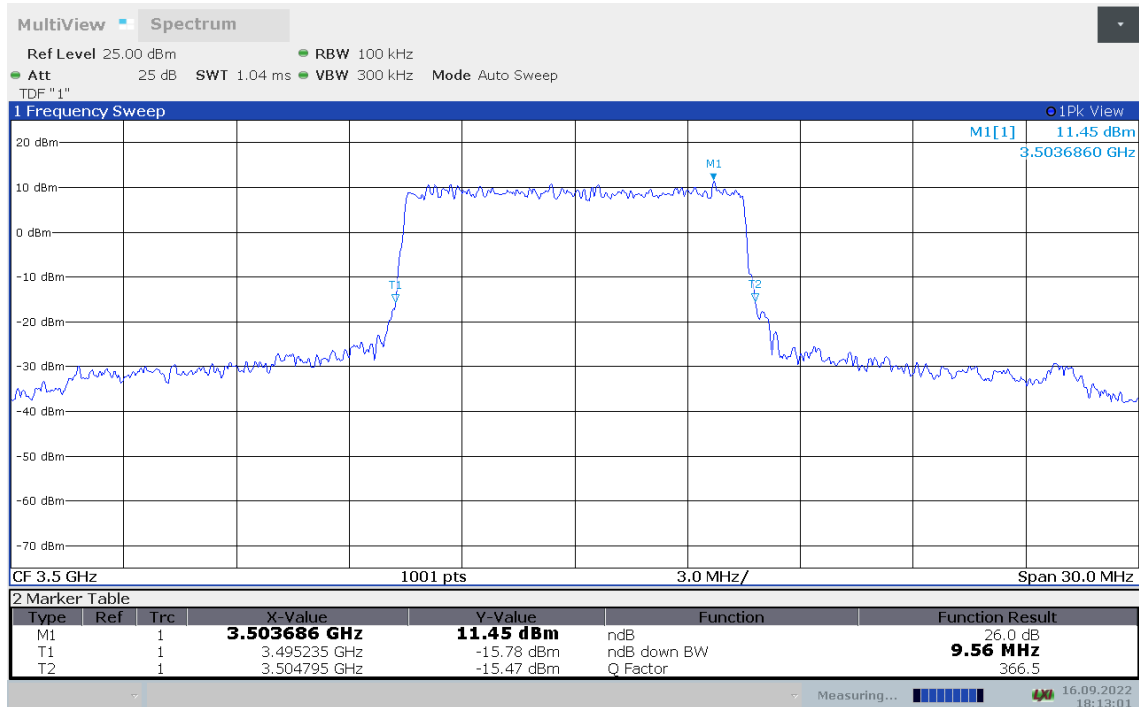
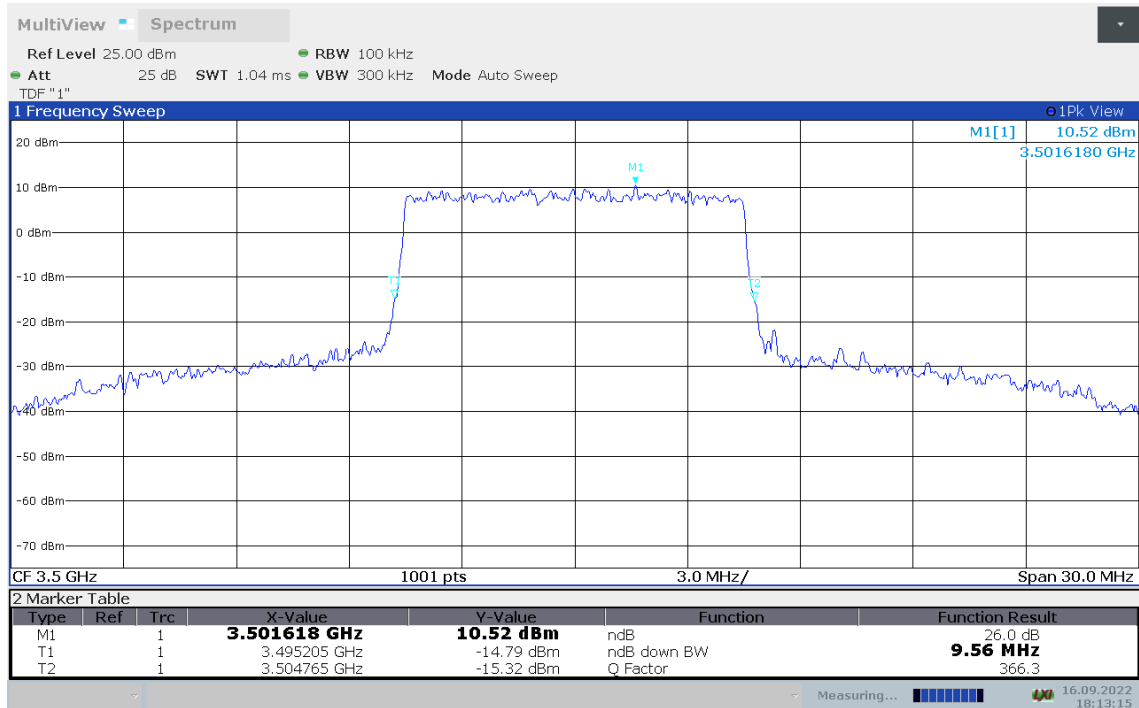
Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
3500	QPSK	16QAM	64QAM
	4.92	4.84	4.84

LTE band 42(3450MHz-3550MHz), 5MHz Bandwidth, QPSK (-26dBc BW)

LTE band 42(3450MHz-3550MHz), 5MHz Bandwidth,16QAM (-26dBc BW)


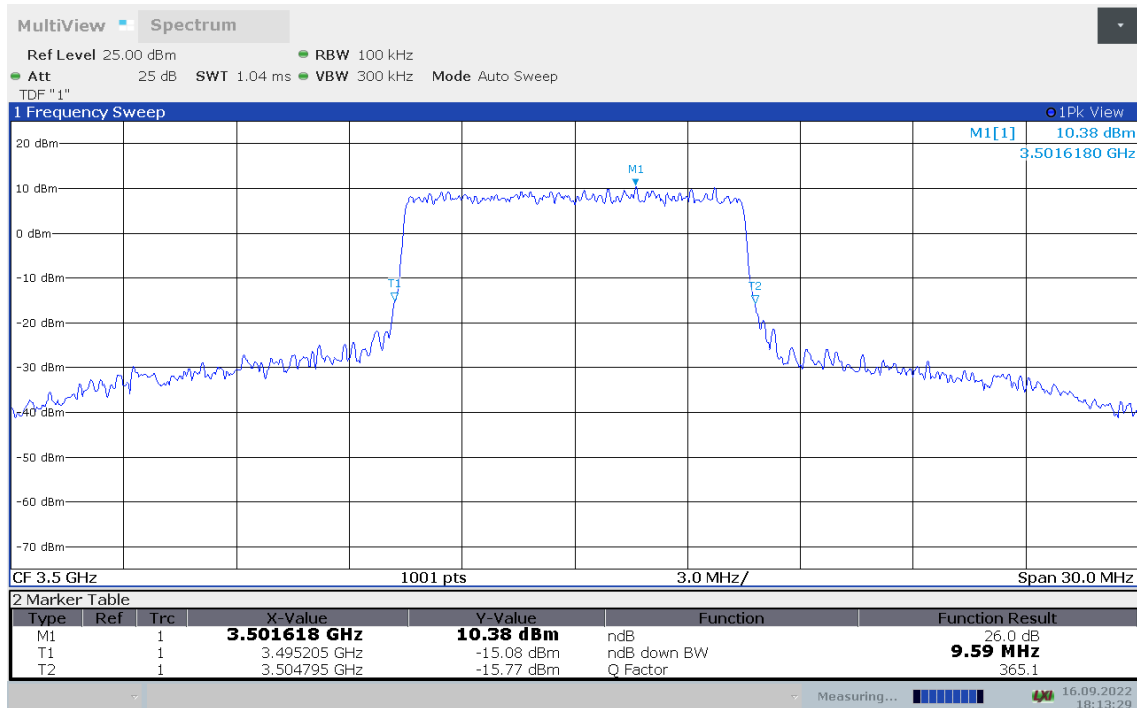
**LTE Band 42(3450MHz-3550MHz), 5MHz Bandwidth,64QAM (-26dBc BW)**

LTE band 42(3450MHz-3550MHz), 10MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
3500	QPSK	16QAM	64QAM
	9.56	9.56	9.59

LTE band 42(3450MHz-3550MHz), 10MHz Bandwidth, QPSK (-26dBc BW)

LTE band 42(3450MHz-3550MHz), 10MHz Bandwidth, 16QAM (-26dBc BW)


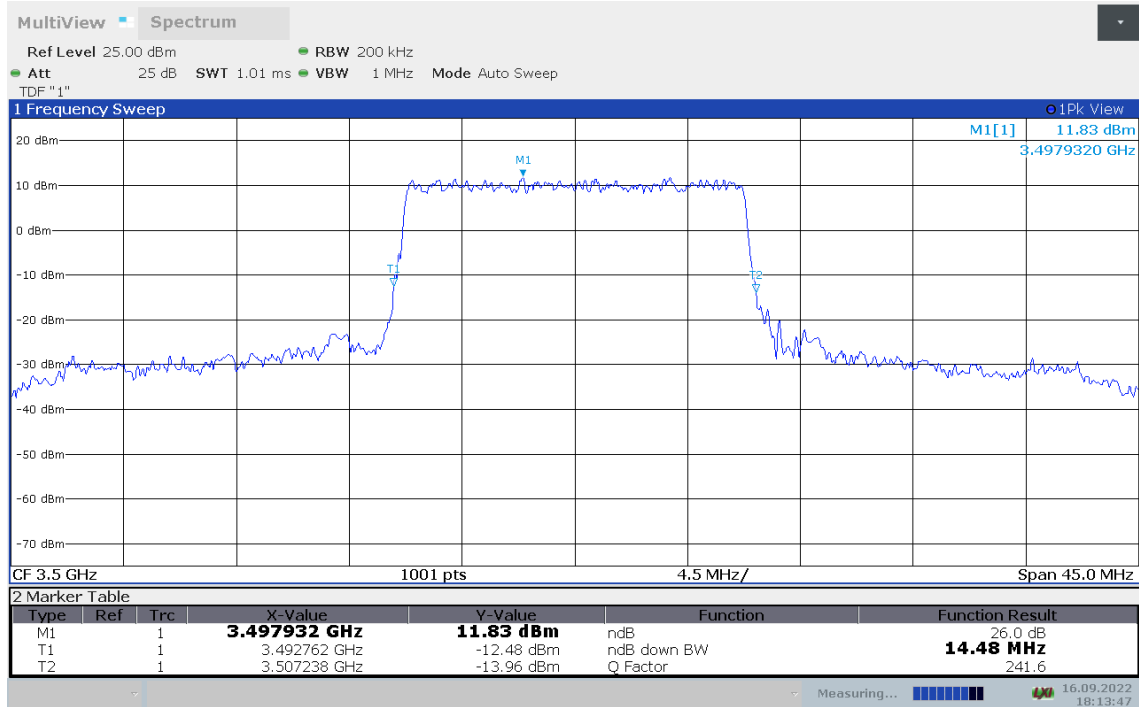
LTE Band 42(3450MHz-3550MHz), 10MHz Bandwidth, 64QAM (-26dBc BW)



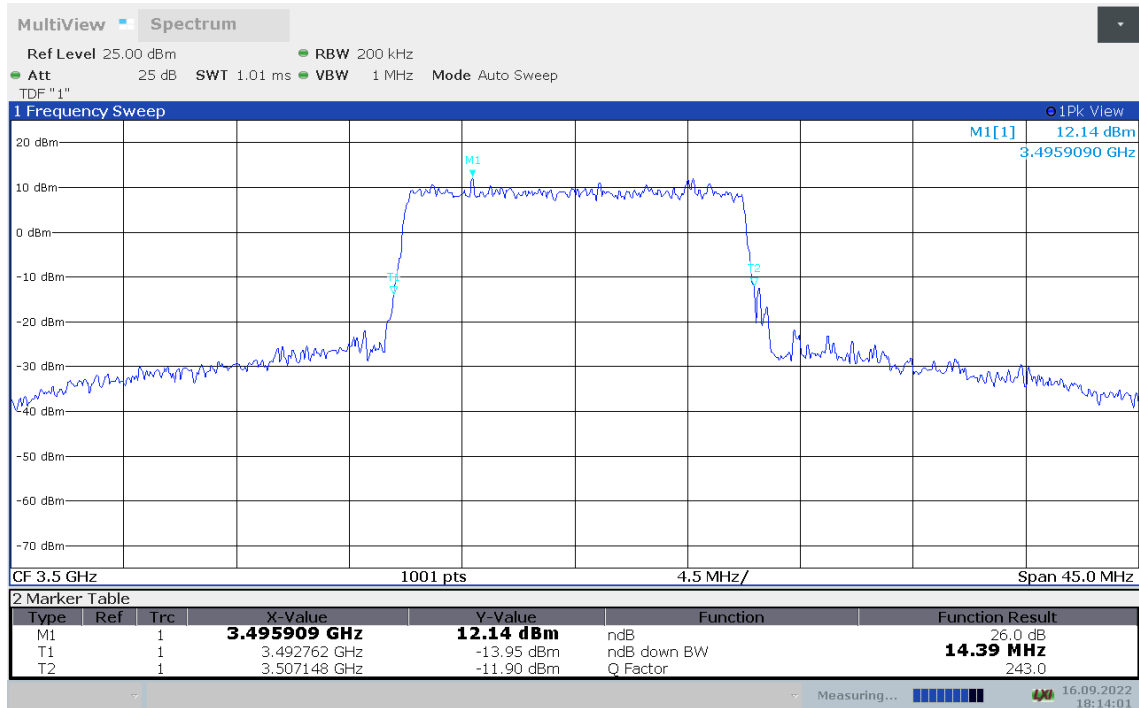
LTE band 42(3450MHz-3550MHz), 15MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
3500	QPSK	16QAM	64QAM
	14.48	14.39	14.48

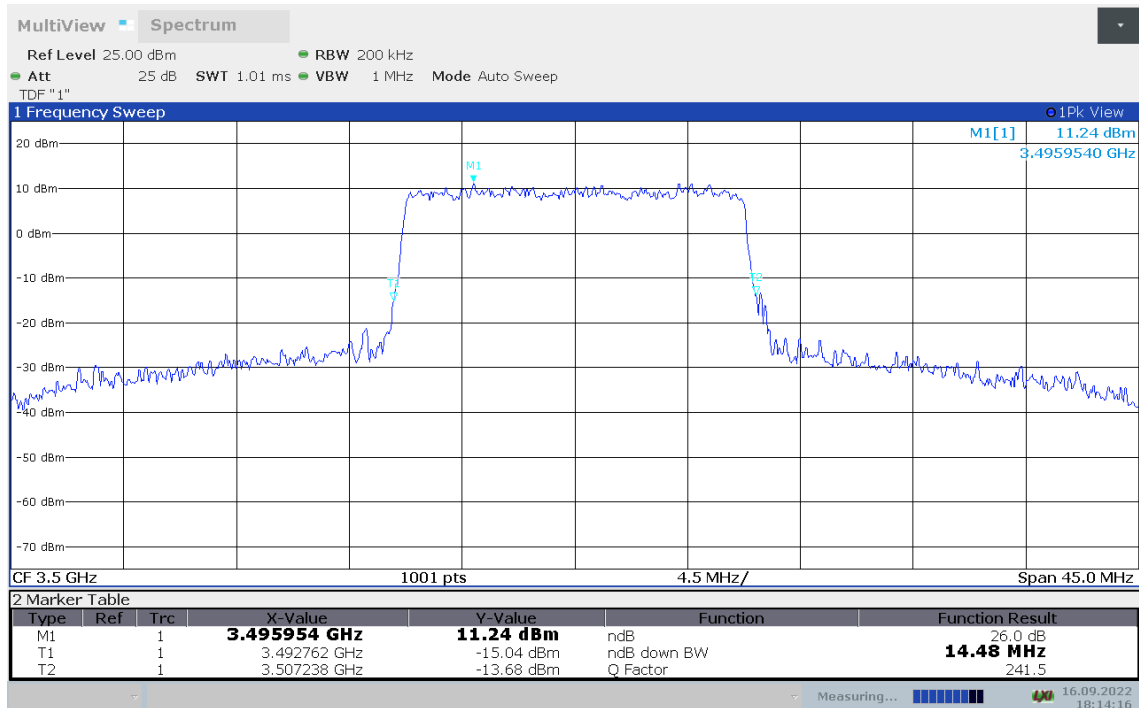
LTE band 42(3450MHz-3550MHz), 15MHz Bandwidth, QPSK (-26dBc BW)



LTE band 42(3450MHz-3550MHz), 15MHz Bandwidth, 16QAM (-26dBc BW)



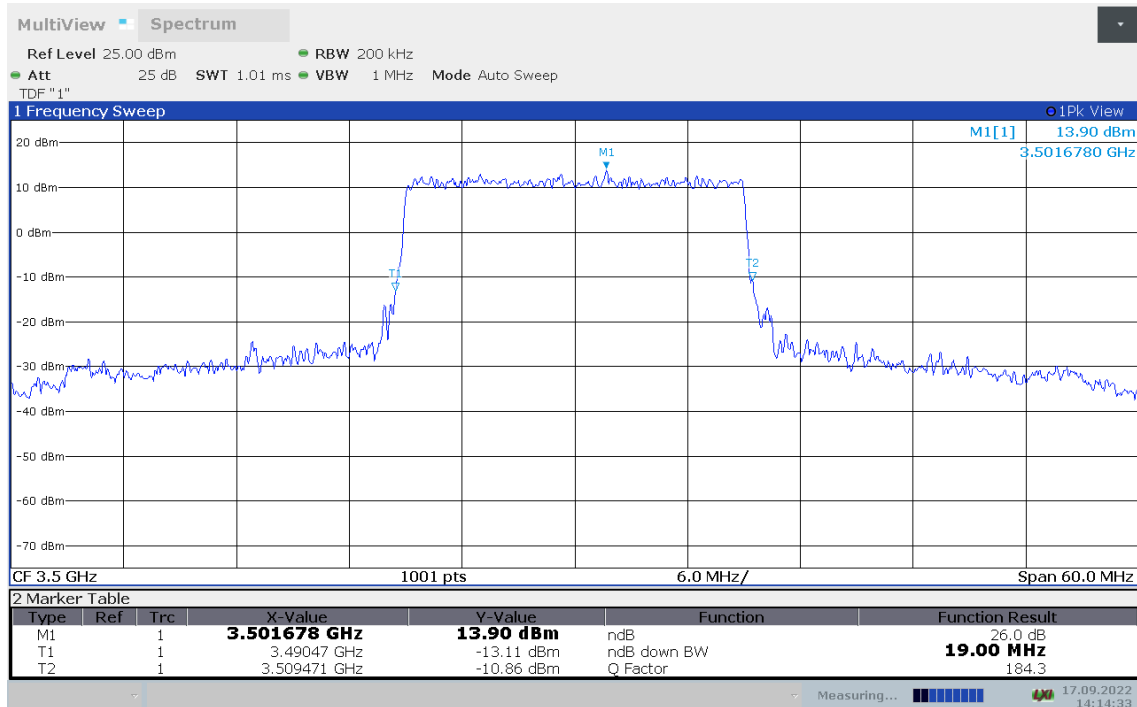
LTE Band 42(3450MHz-3550MHz), 15MHz Bandwidth, 64QAM (-26dBc BW)



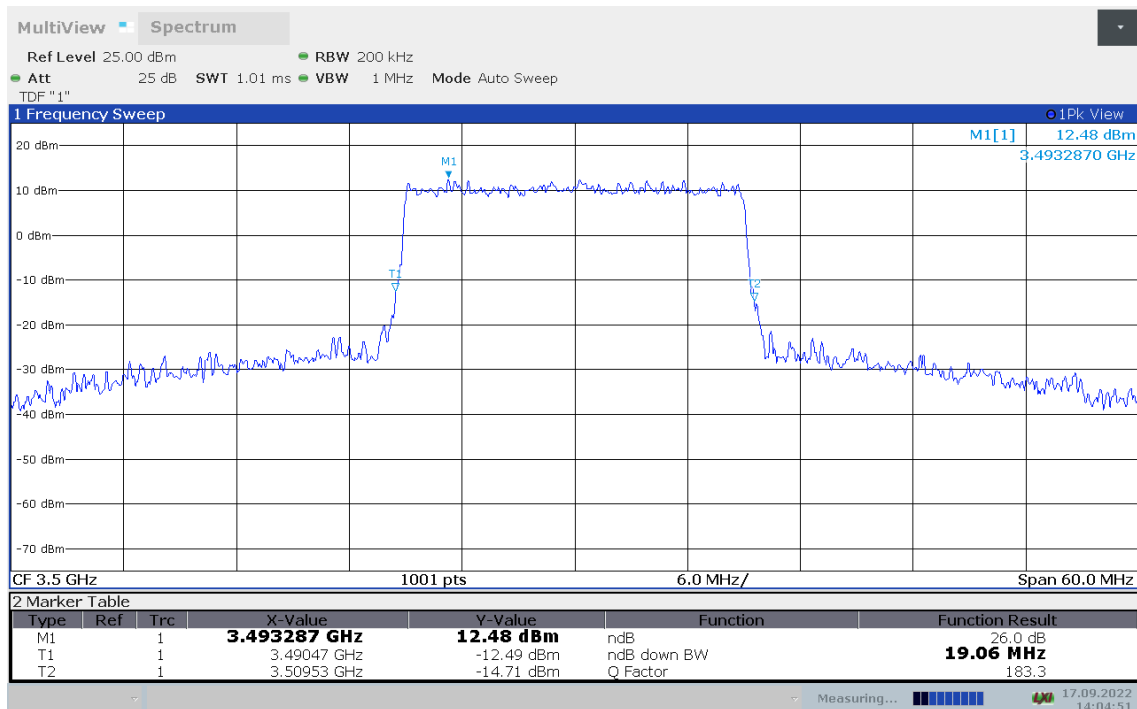
LTE band 42(3450MHz-3550MHz), 20MHz (-26dBc BW)

Frequency(MHz)	Occupied Bandwidth (-26dBc BW)(MHz)		
3500	QPSK	16QAM	64QAM
	19.00	19.06	19.00

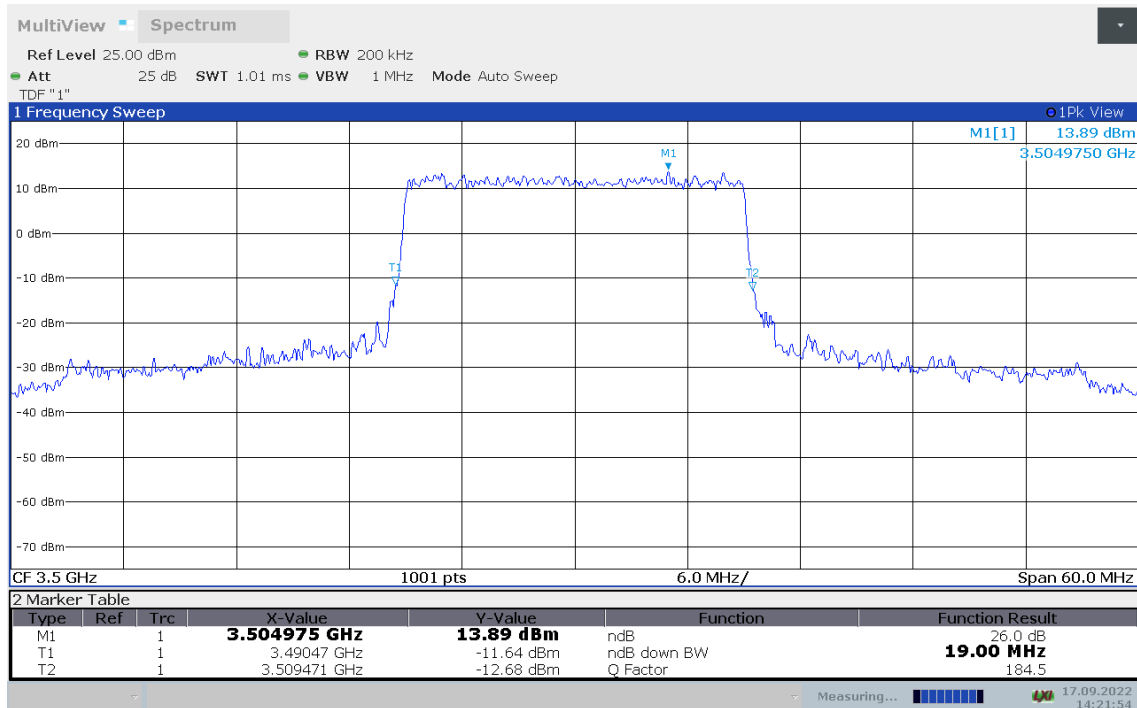
LTE band 42(3450MHz-3550MHz), 20MHz Bandwidth, QPSK (-26dBc BW)



LTE band 42(3450MHz-3550MHz), 20MHz Bandwidth, 16QAM (-26dBc BW)



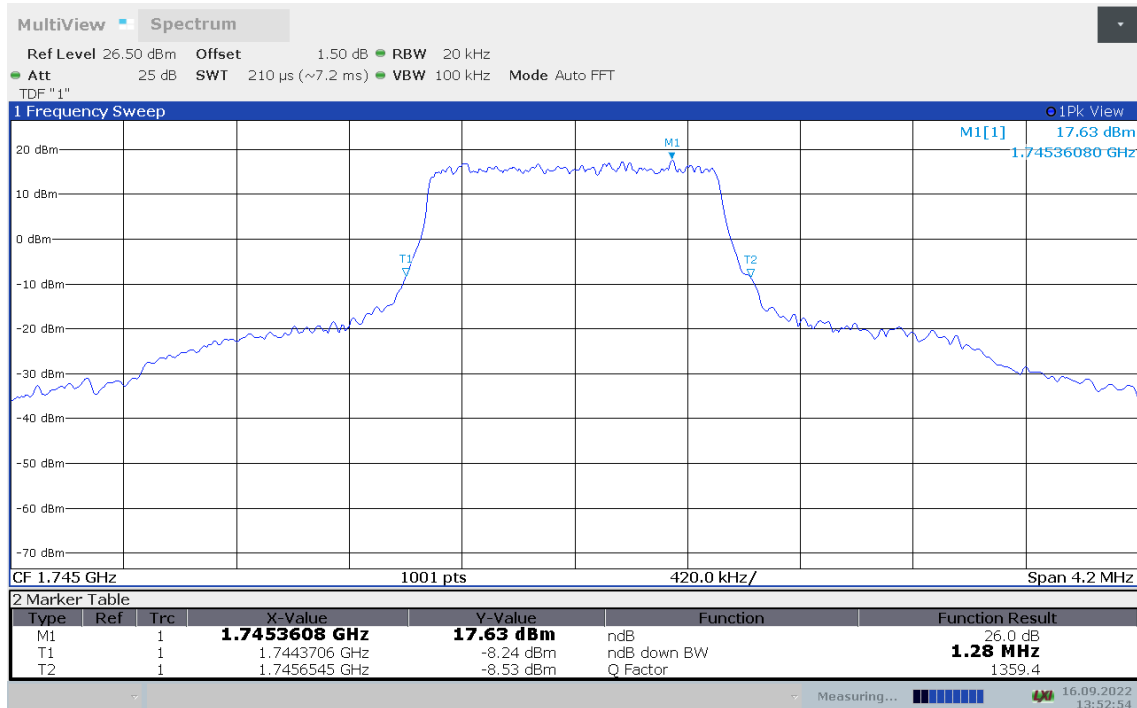
LTE Band 42(3450MHz-3550MHz), 20MHz Bandwidth, 64QAM (-26dBc BW)



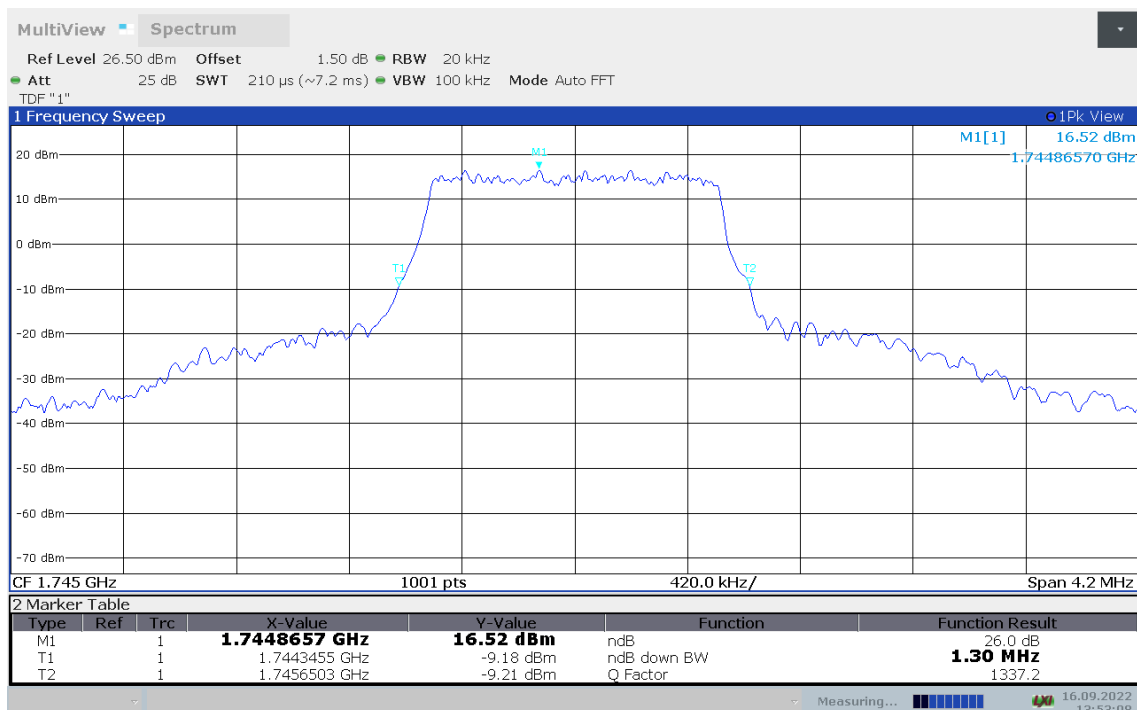
LTE band 66, 1.4MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	1.28	1.30	1.30

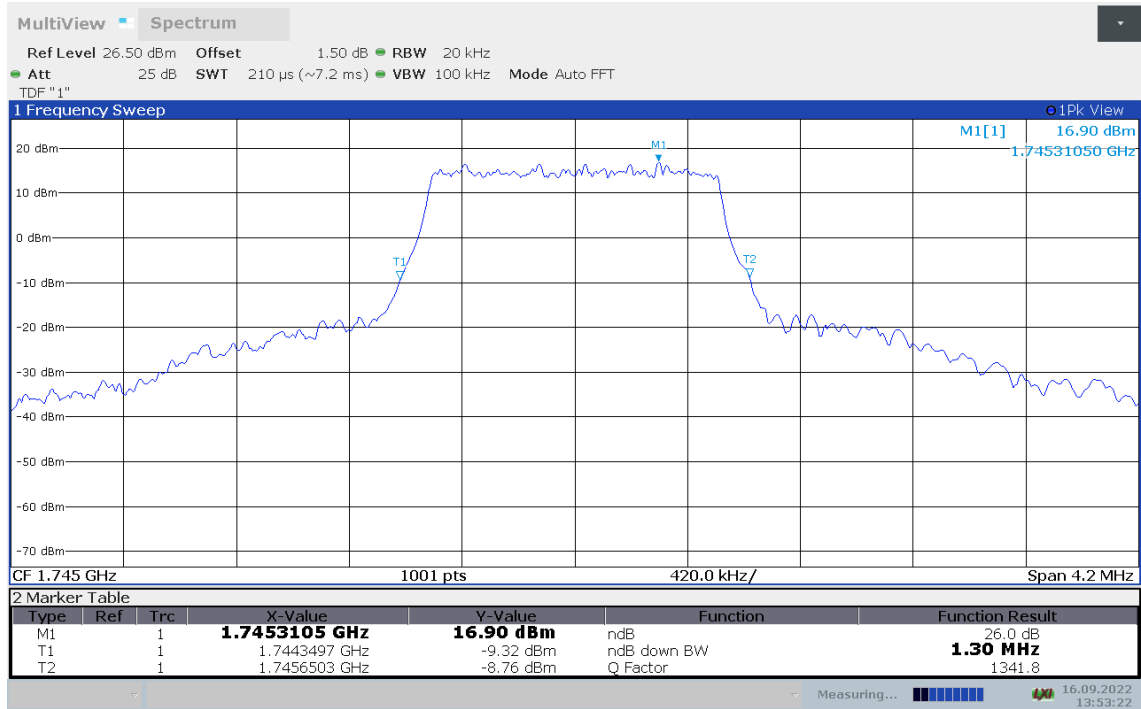
LTE band 66, 1.4MHz Bandwidth, QPSK (-26dBc BW)



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



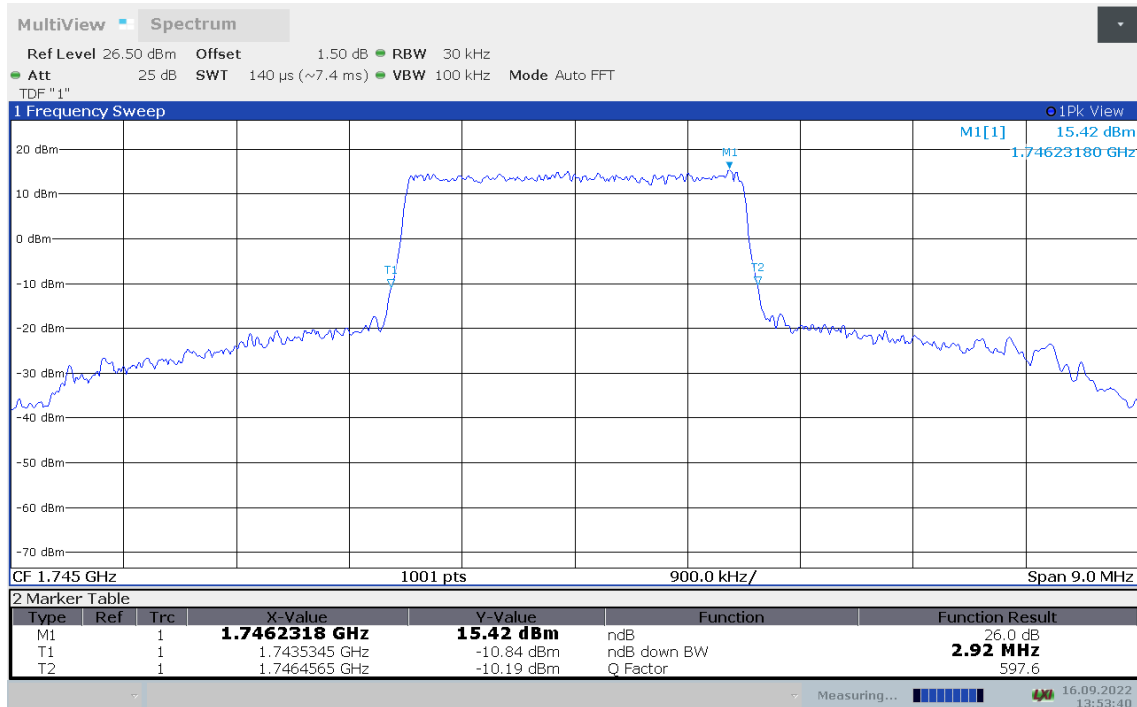
LTE band 66, 1.4MHz Bandwidth, 64QAM (-26dBc BW)



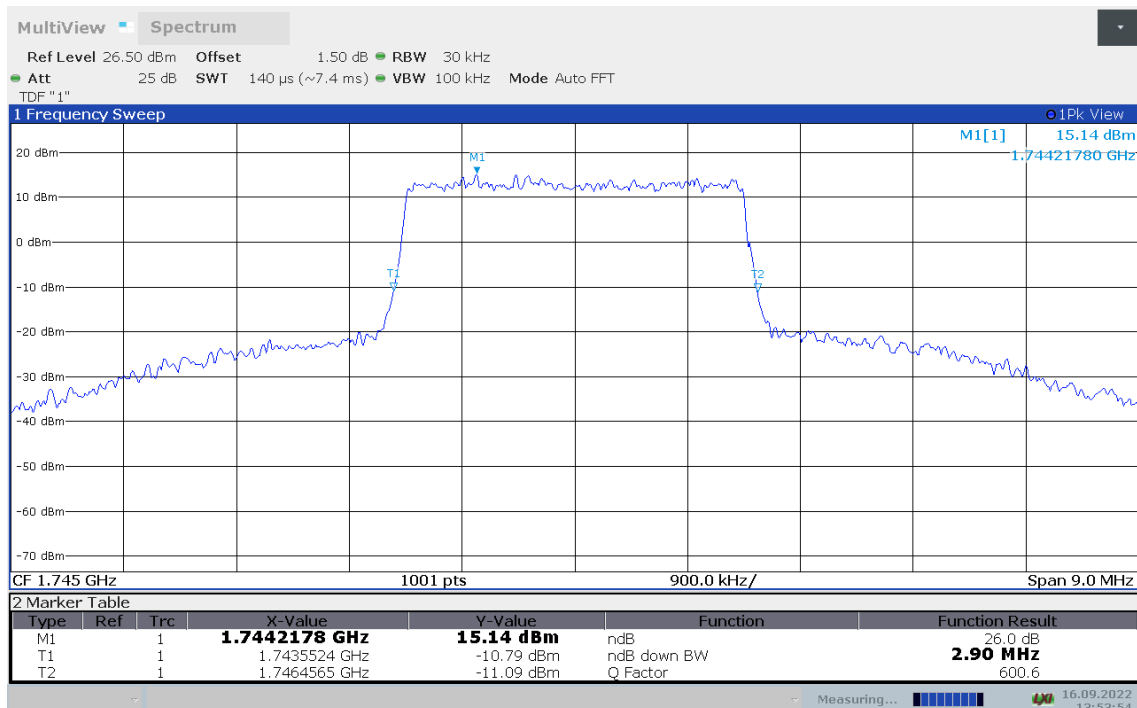
LTE band 66, 3MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	2.92	2.90	2.88

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

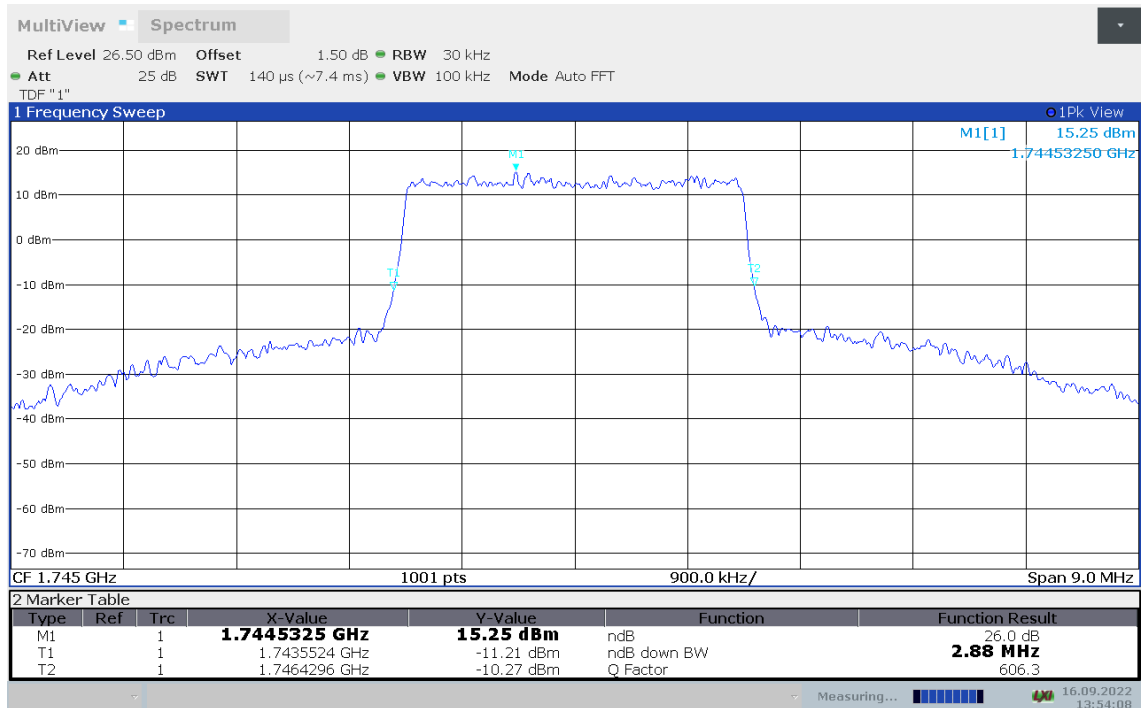


LTE band 66, 3MHz Bandwidth, 16QAM (-26dBc BW)





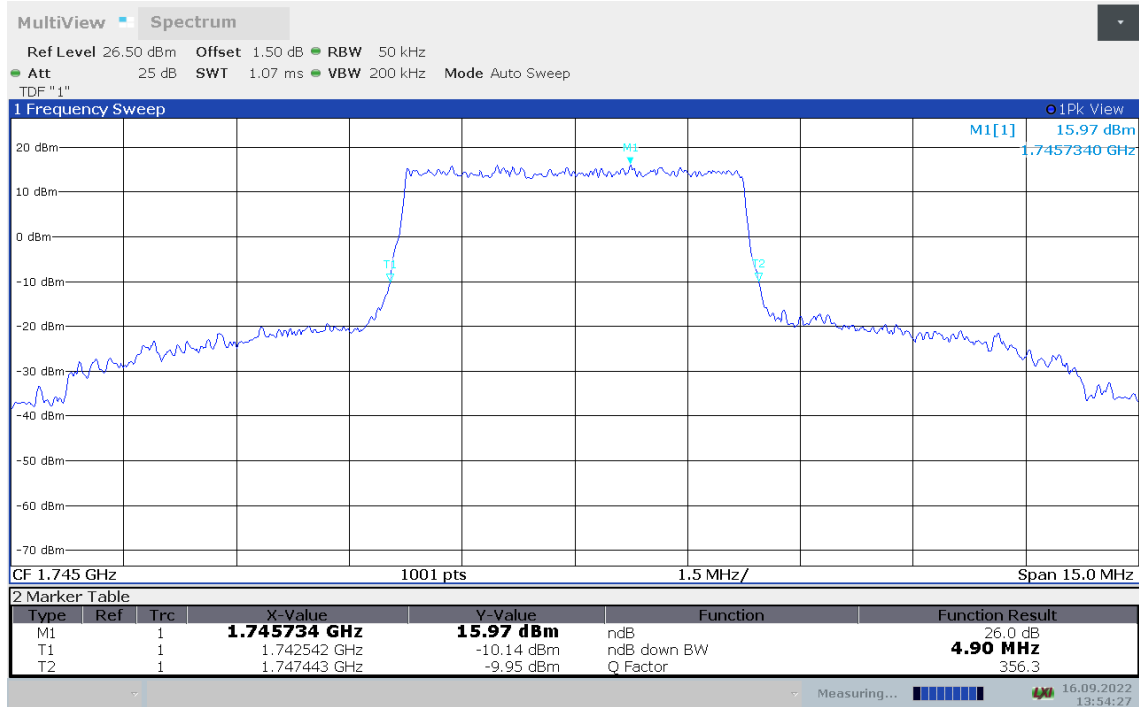
LTE band 66, 3MHz Bandwidth, 64QAM (-26dBc BW)



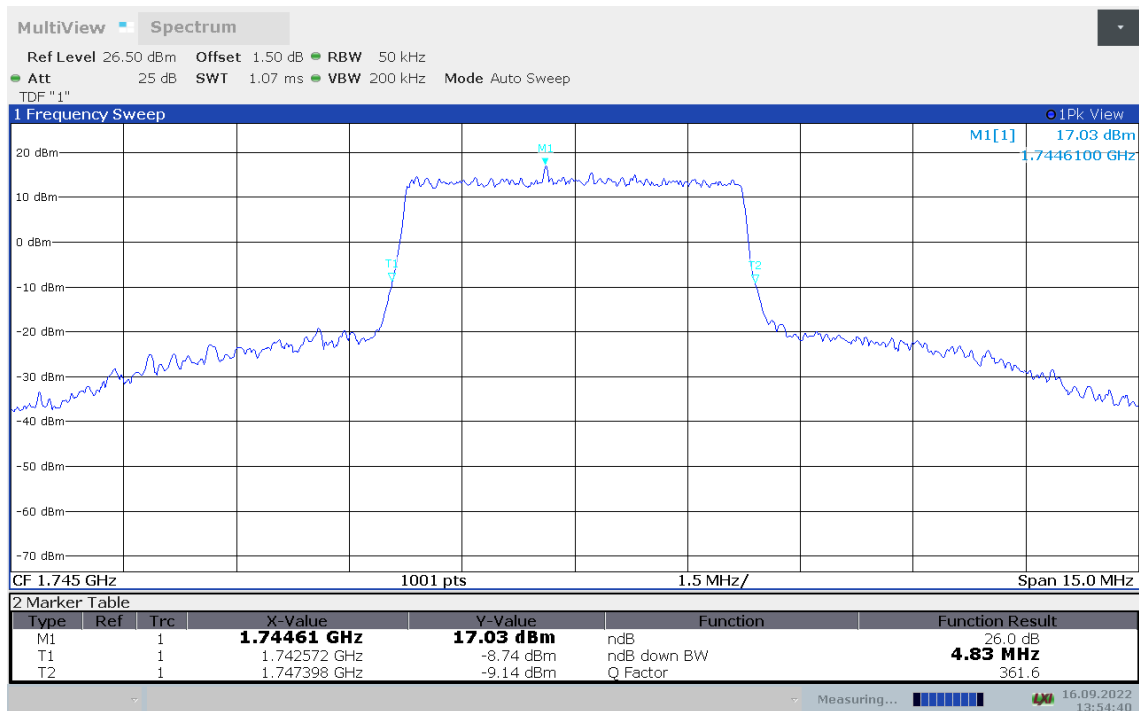
LTE band 66, 5MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	4.90	4.83	4.84

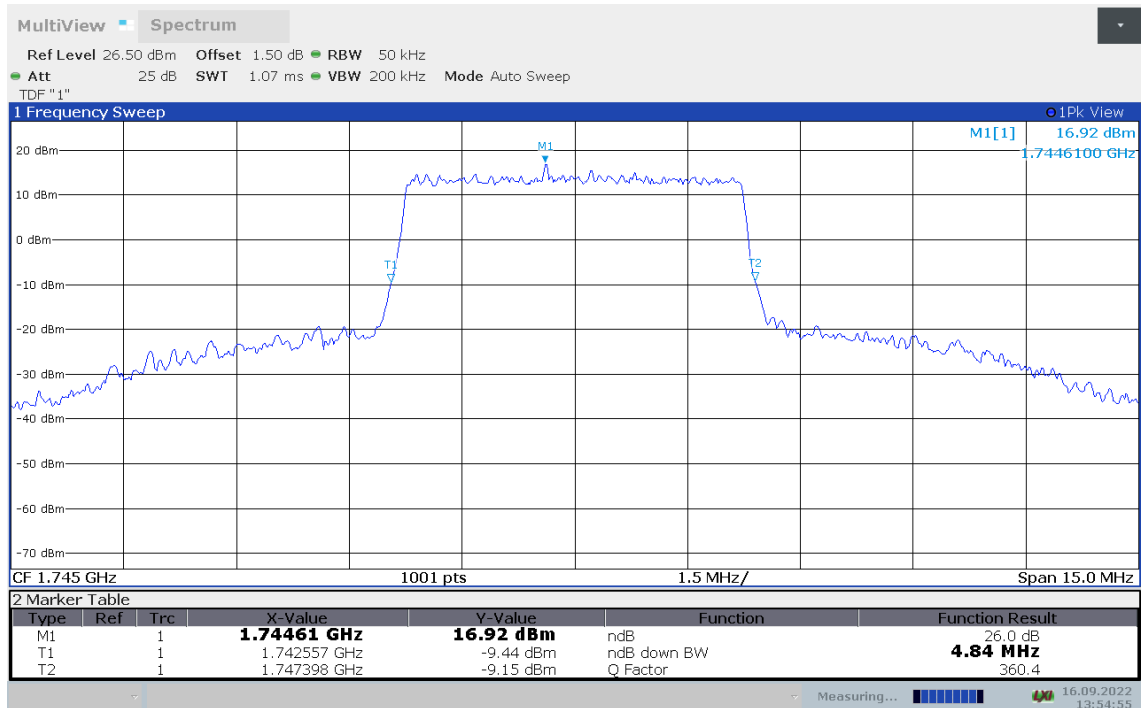
LTE band 66, 5MHz Bandwidth, QPSK (-26dBc BW)



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



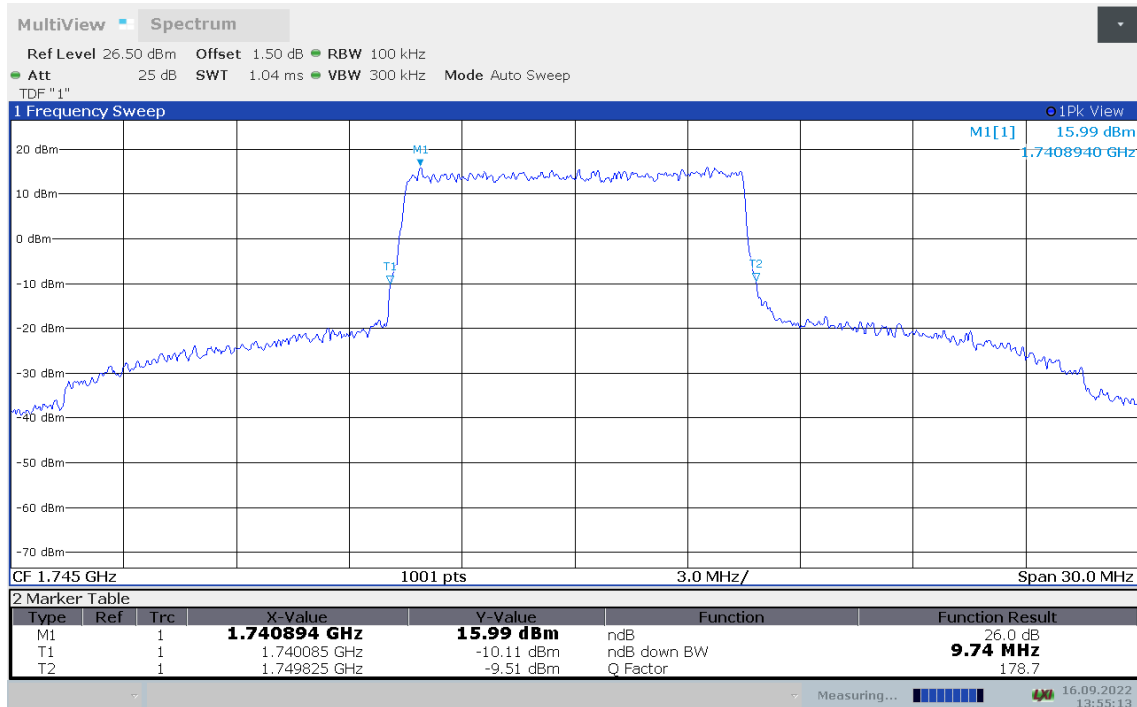
LTE band 66, 5MHz Bandwidth,64QAM (-26dBc BW)



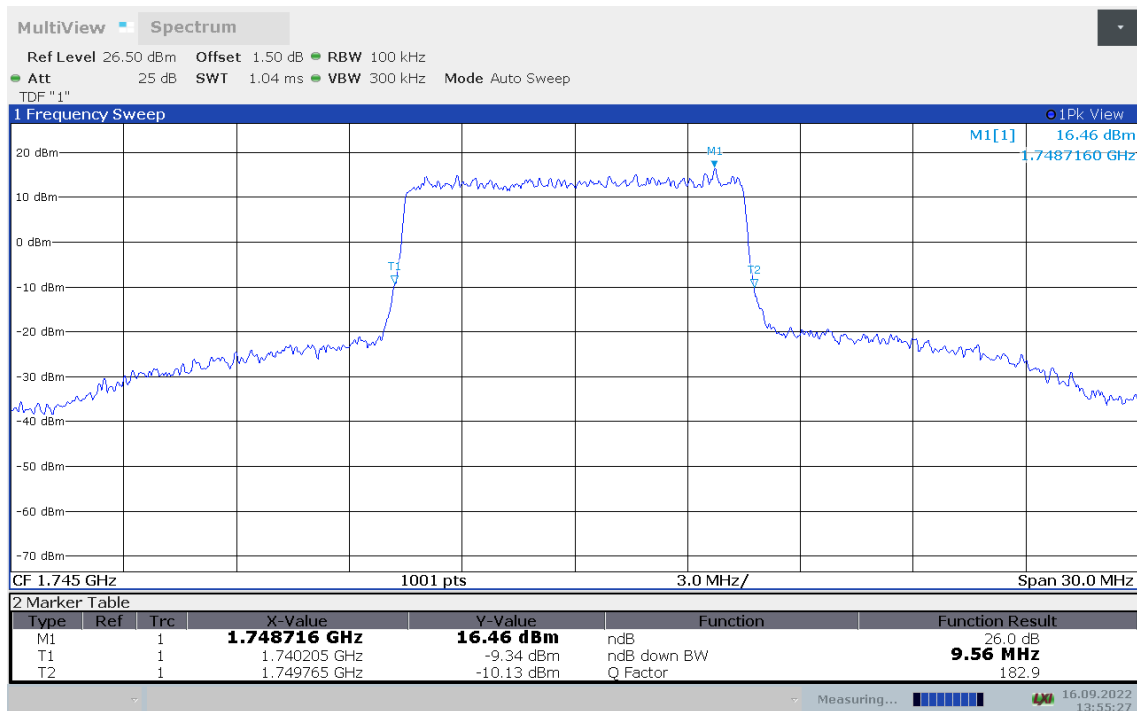
LTE band 66, 10MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	9.74	9.56	9.68

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

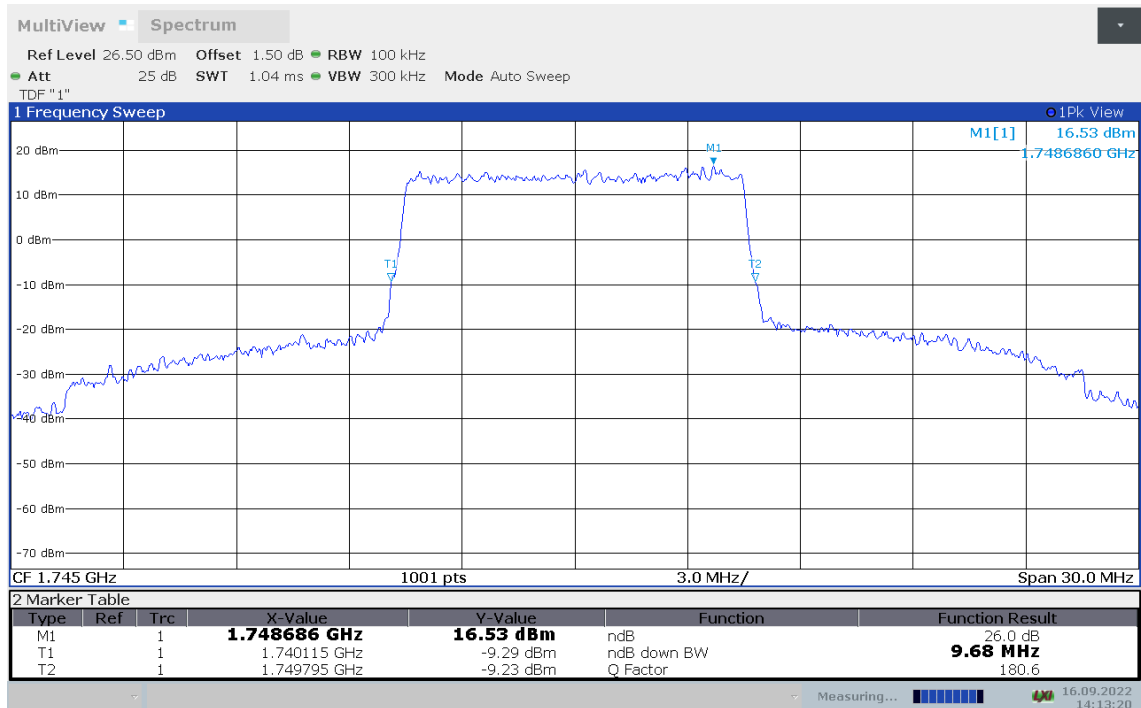


LTE band 66, 10MHz Bandwidth, 16QAM (-26dBc BW)





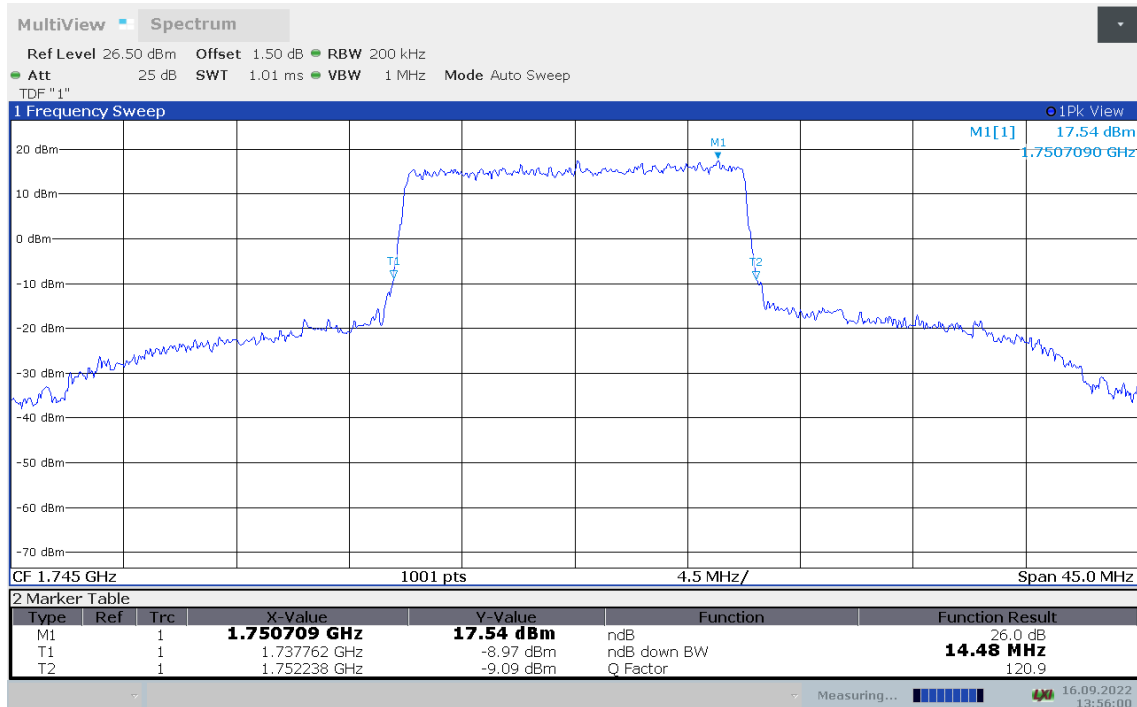
LTE band 66, 10MHz Bandwidth, 64QAM (-26dBc BW)



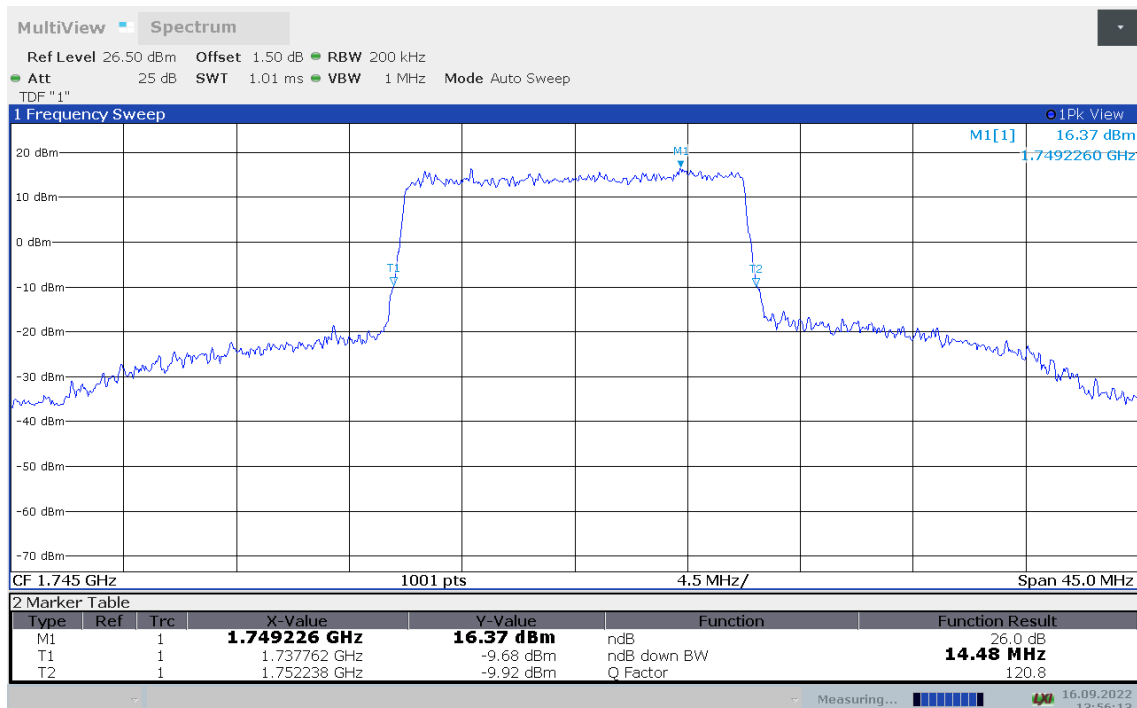
LTE band 66, 15MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	14.48	14.48	14.48

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

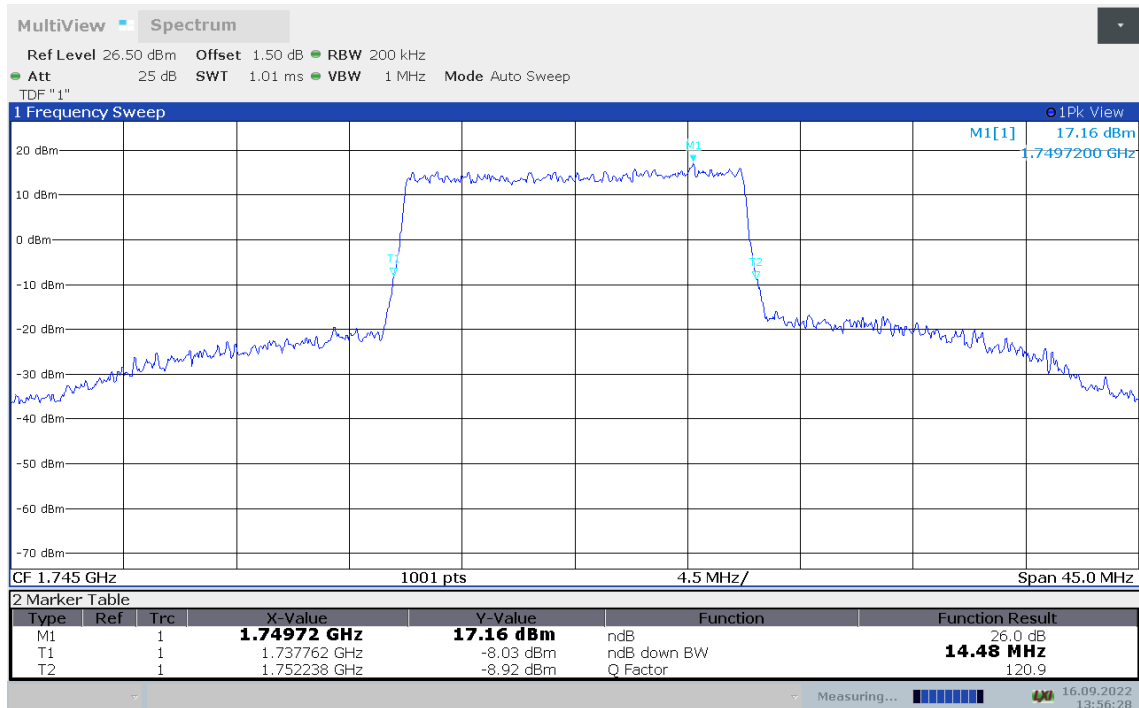


LTE band 66, 15MHz Bandwidth, 16QAM (-26dBc BW)





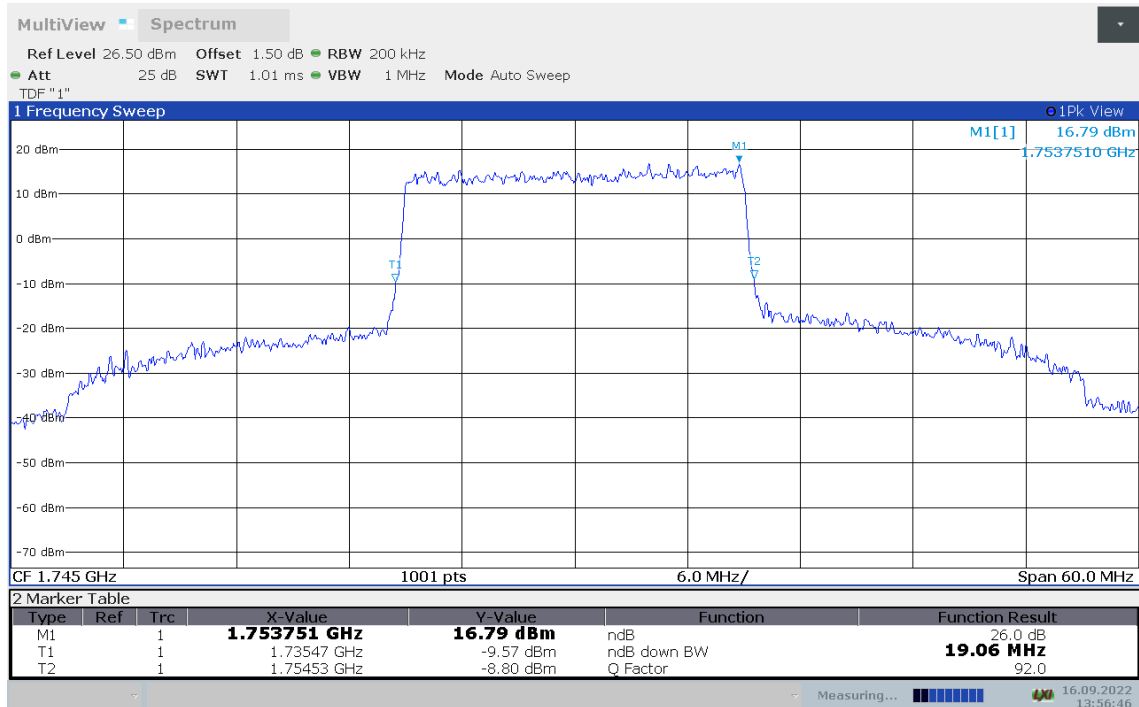
LTE band 66, 15MHz Bandwidth, 64QAM (-26dBc BW)



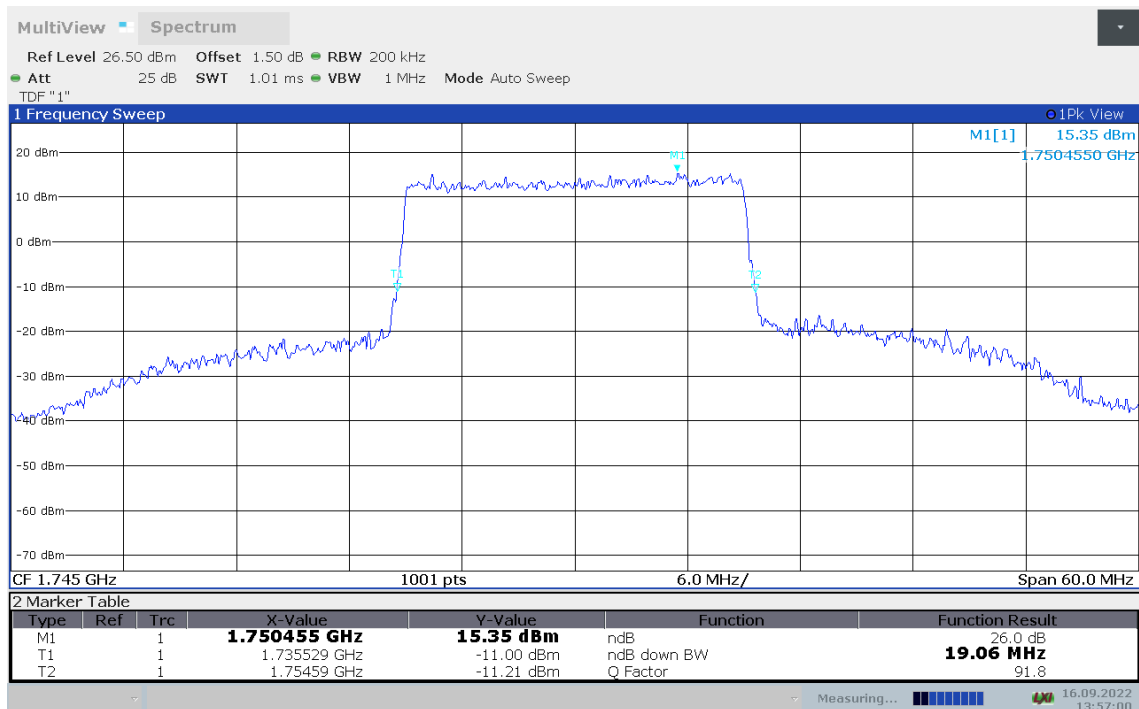
LTE band 66, 20MHz (-26dBc BW)

Frequency(MHz)	Emission Bandwidth (-26dBc BW)(MHz)		
1745.0	QPSK	16QAM	64QAM
	19.06	19.06	19.00

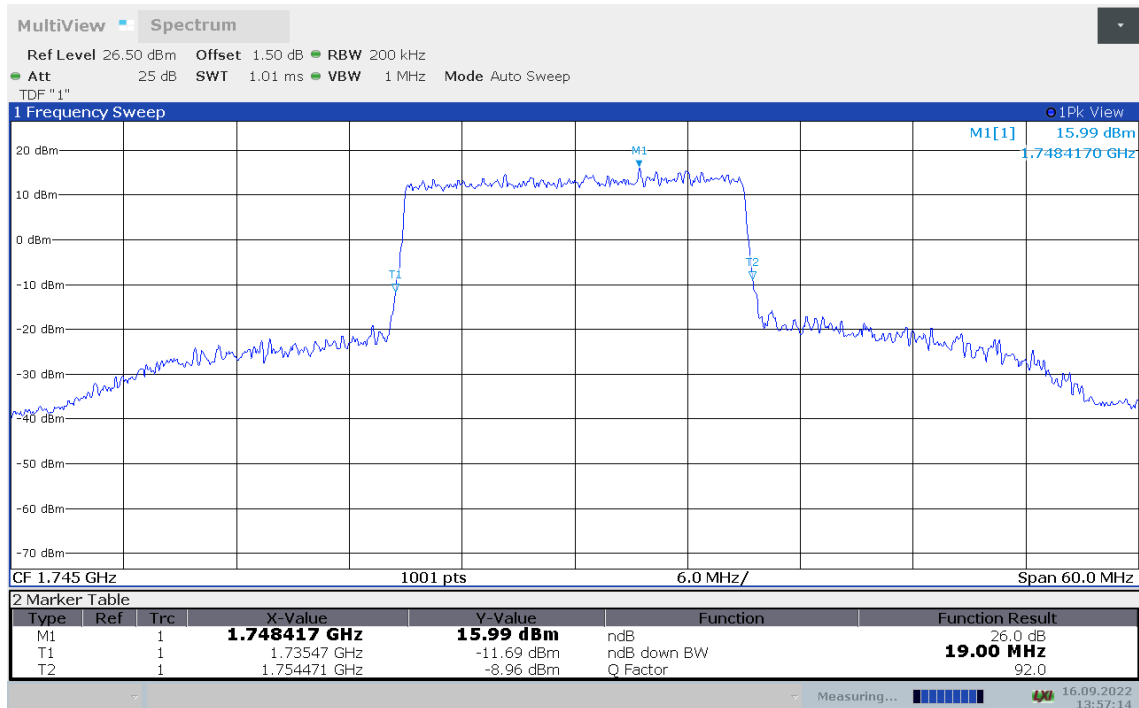
LTE band 66, 20MHz Bandwidth, QPSK (-26dBc BW)



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



LTE band 66, 20MHz Bandwidth, 64QAM (-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, 90.691, 96.41.

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 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.

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.

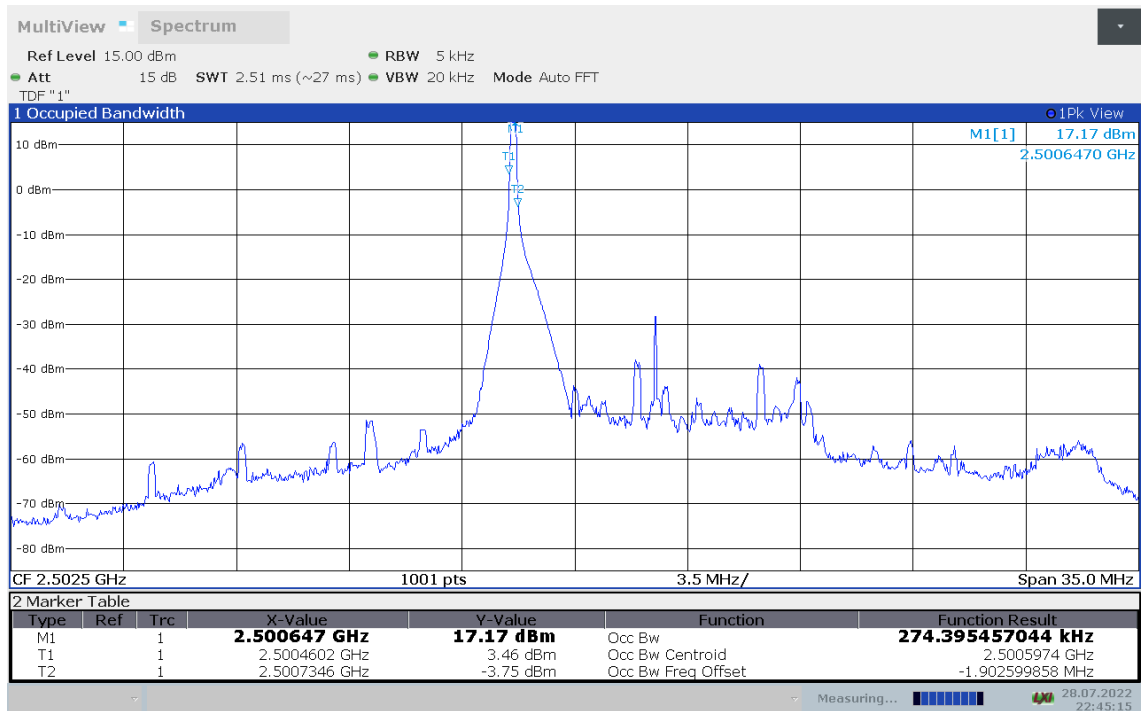
A.6.3 Measurement result

Only worst case result is given below

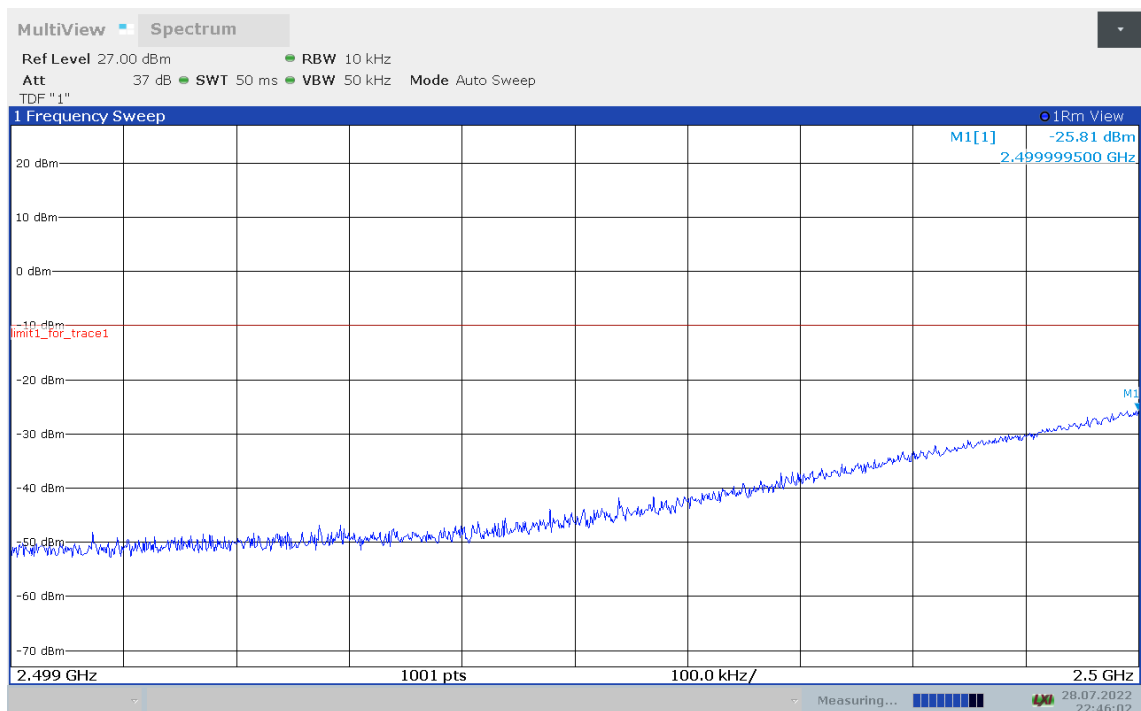


LTE band 7

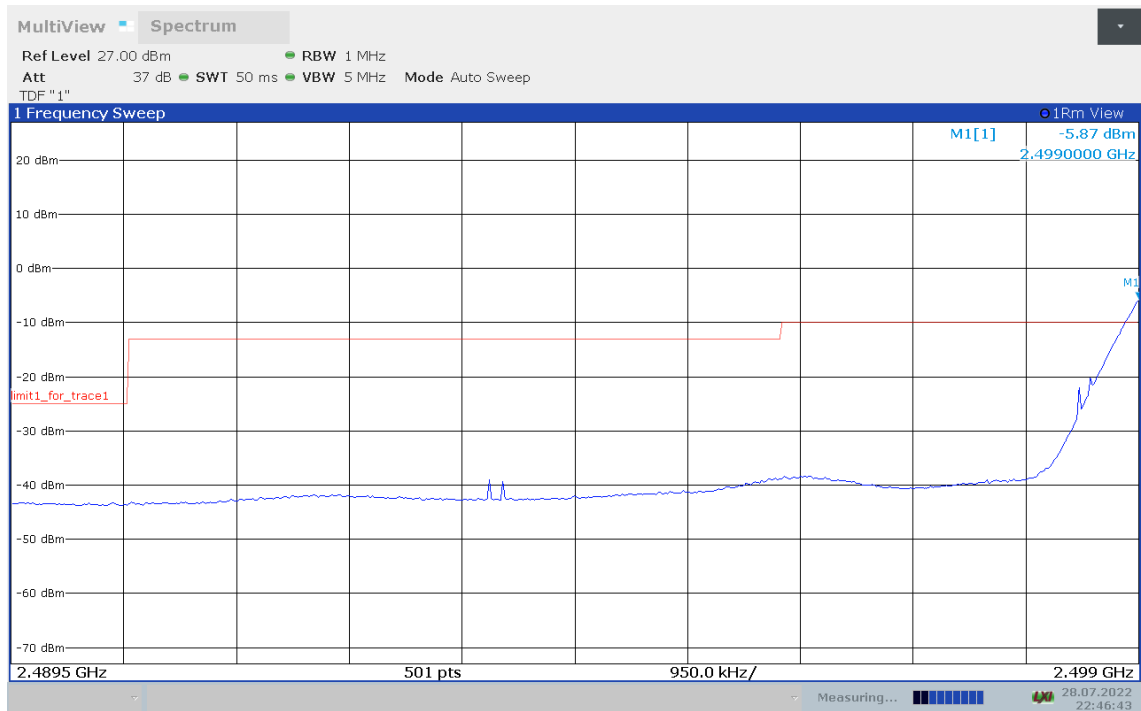
OBW: 1RB-LOW_offset



LOW BAND EDGE BLOCK-1RB-LOW_offset



LOW BAND EDGE BLOCK-1RB-LOW_offset



Channel Power

