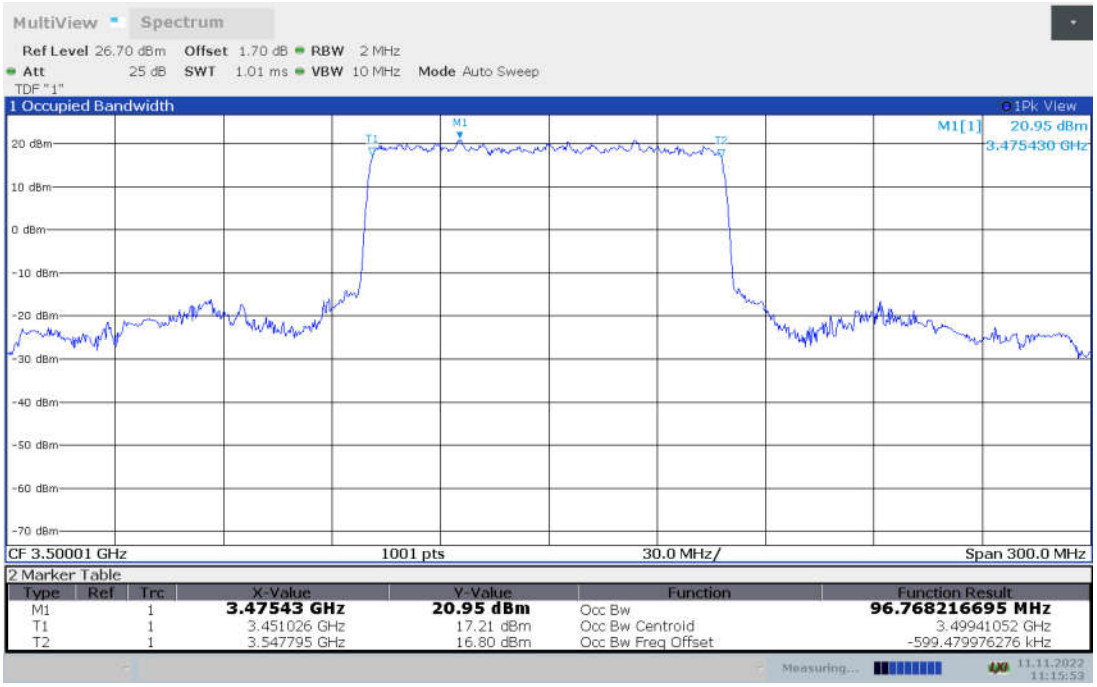
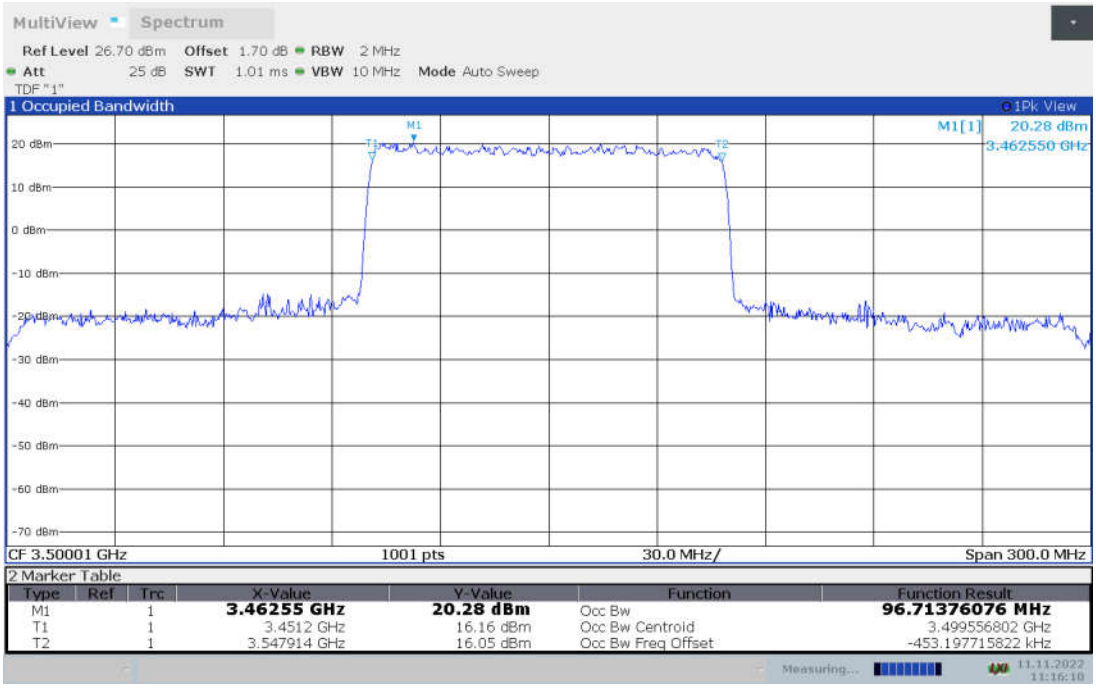
n78L,100MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3500.01	96.768	96.714	96.728	96.787	96.575	96.682	97.712	97.444	97.731

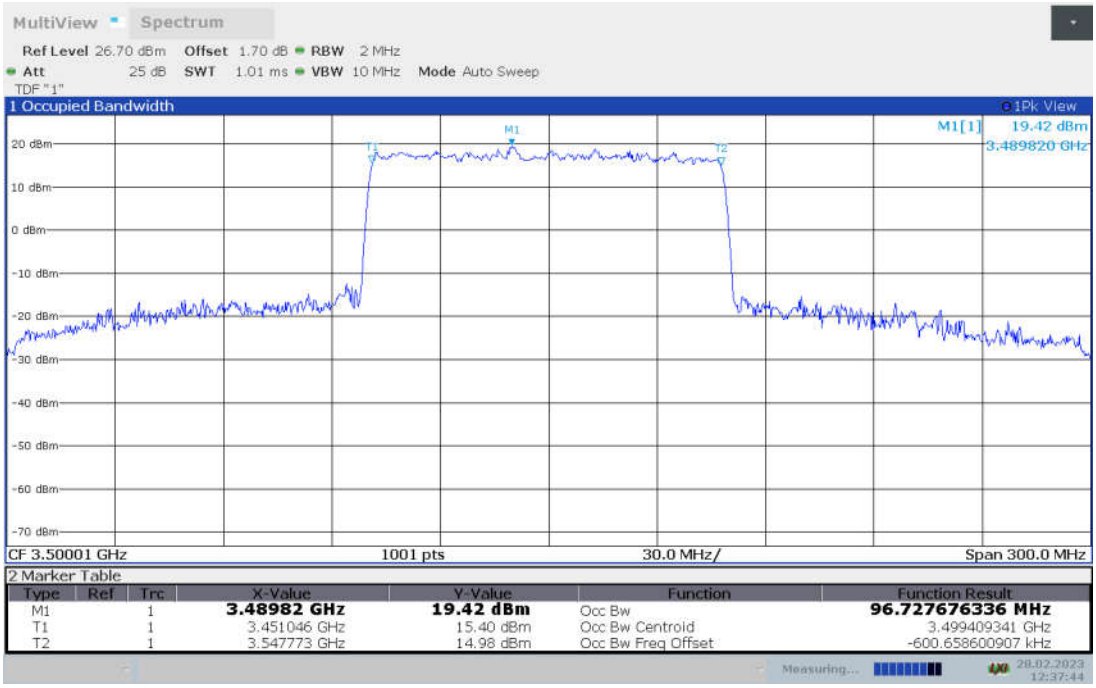
n78L,100MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



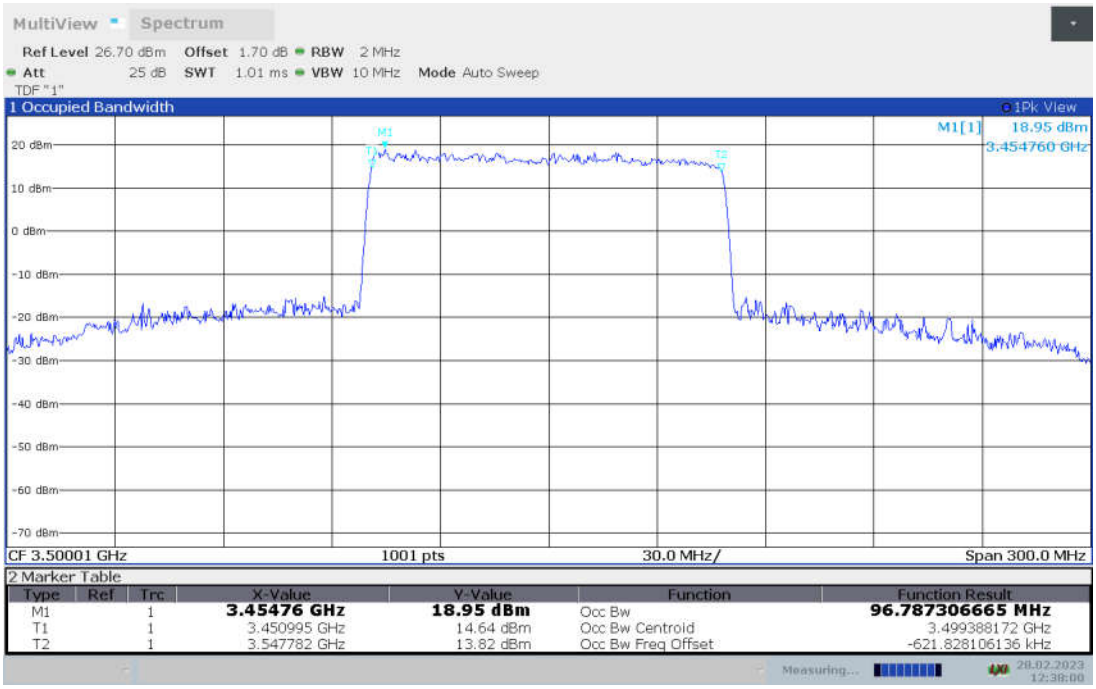
n78L,100MHz Bandwidth,DFT-s-QPSK (99% BW)



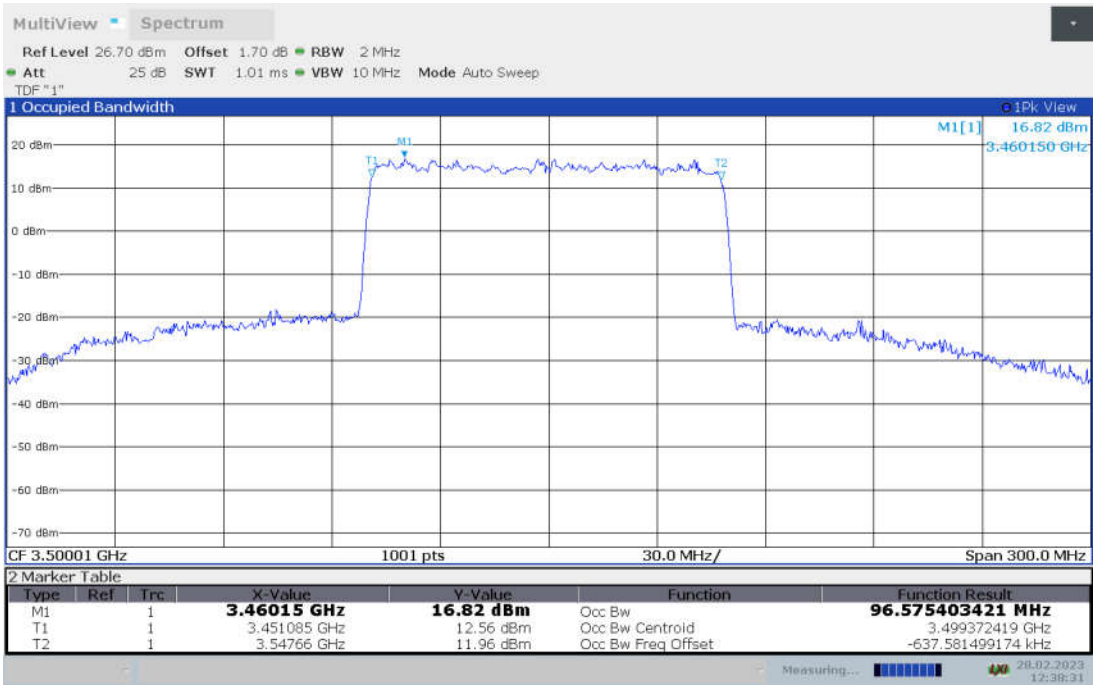
n78L,100MHz Bandwidth, DFT-s-16QAM (99% BW)



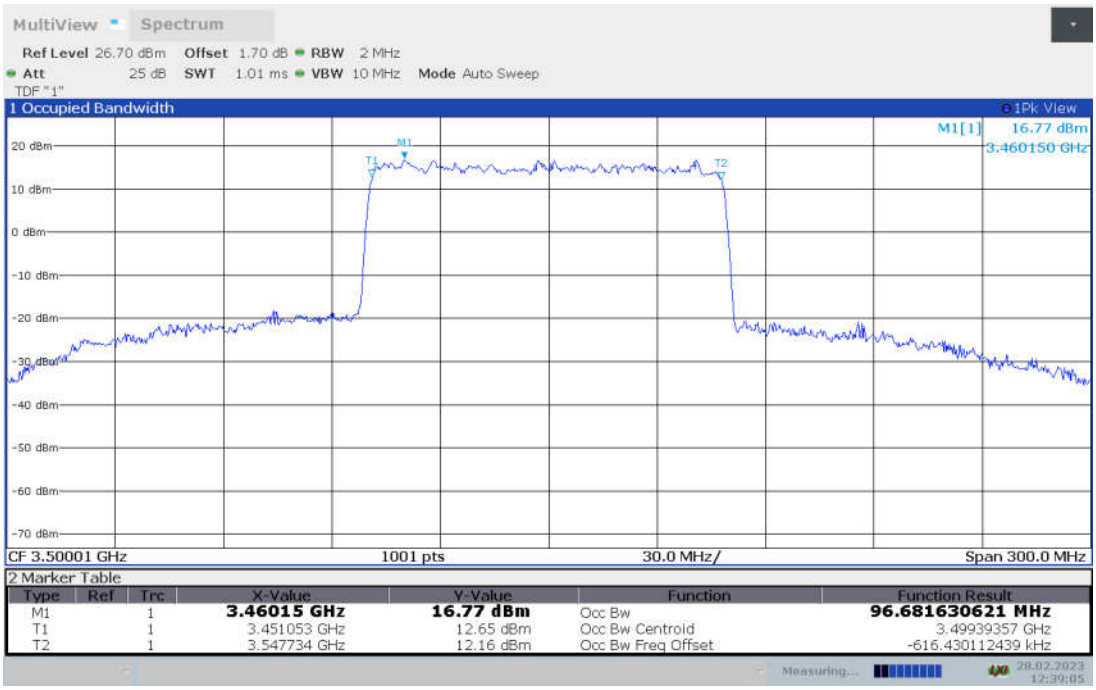
n78L,100MHz Bandwidth, DFT-s-64QAM (99% BW)



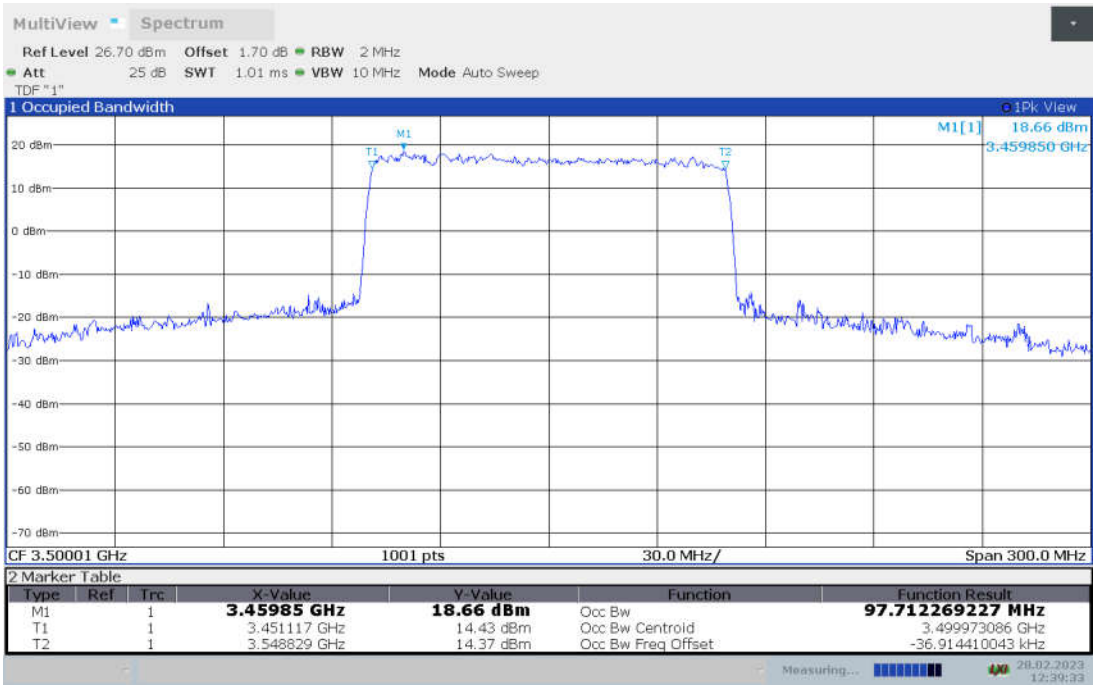
n78L,100MHz Bandwidth, DFT-s-256QAM (99% BW)



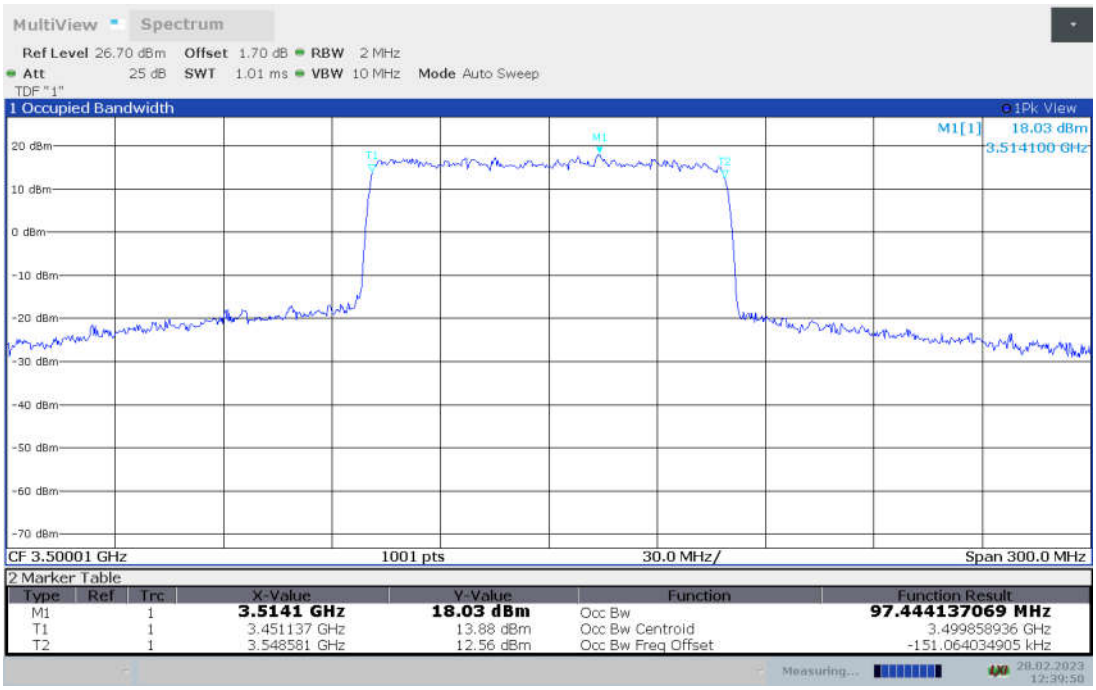
n78L,100MHz Bandwidth, CP-QPSK (99% BW)



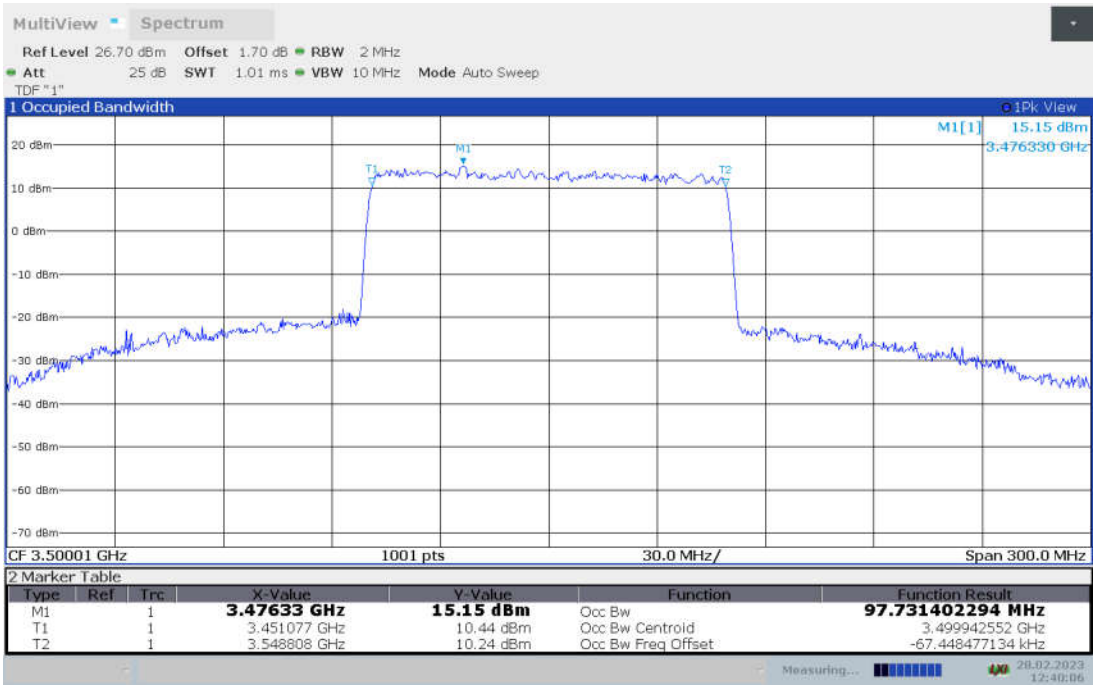
n78L,100MHz Bandwidth, CP-16QAM (99% BW)



n78L,100MHz Bandwidth, CP-64QAM (99% BW)



n78L,100MHz Bandwidth, CP-256QAM (99% BW)

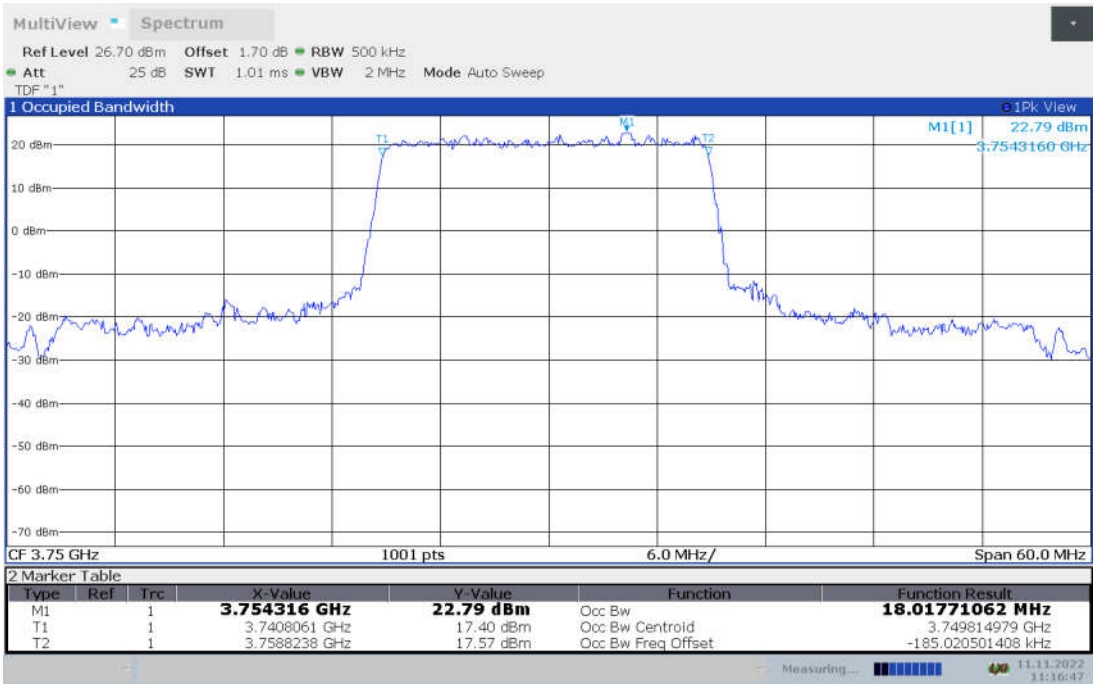


n78H

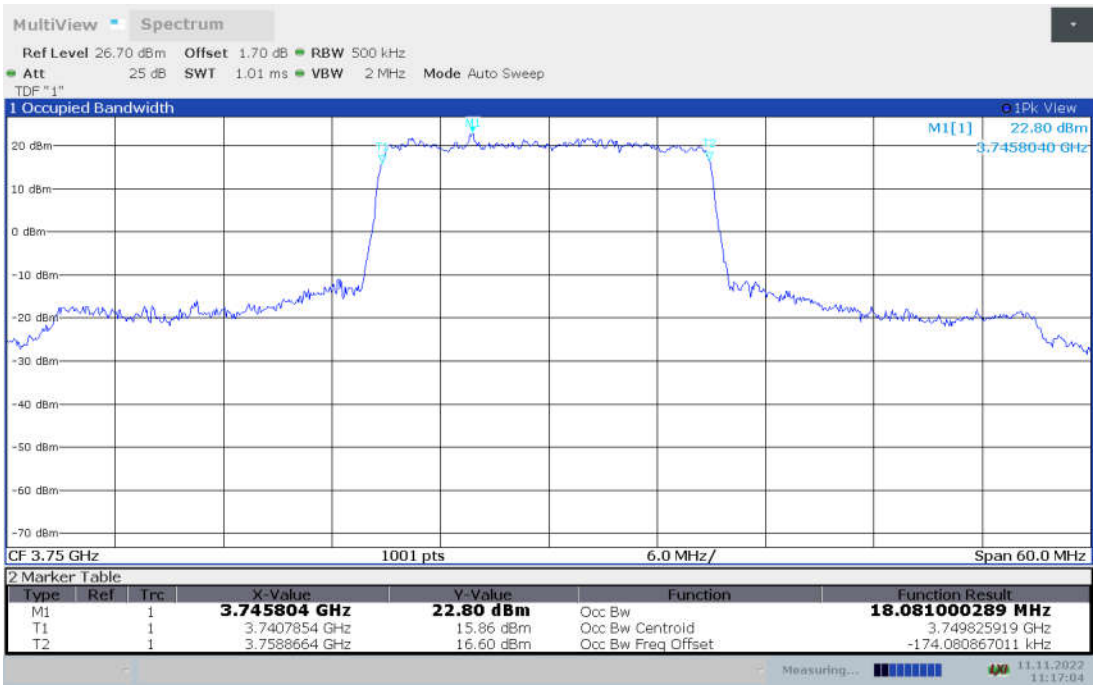
n78H,20MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3750	18.018	18.081	18.060	18.011	18.054	18.347	18.377	18.309	18.361

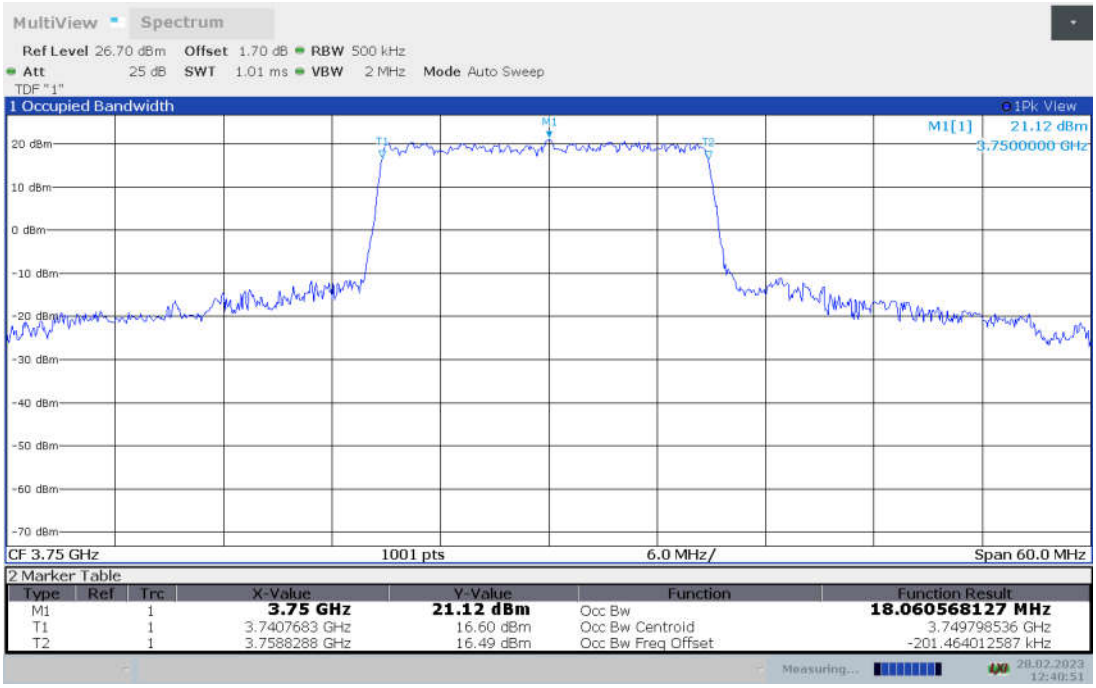
n78H,20MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



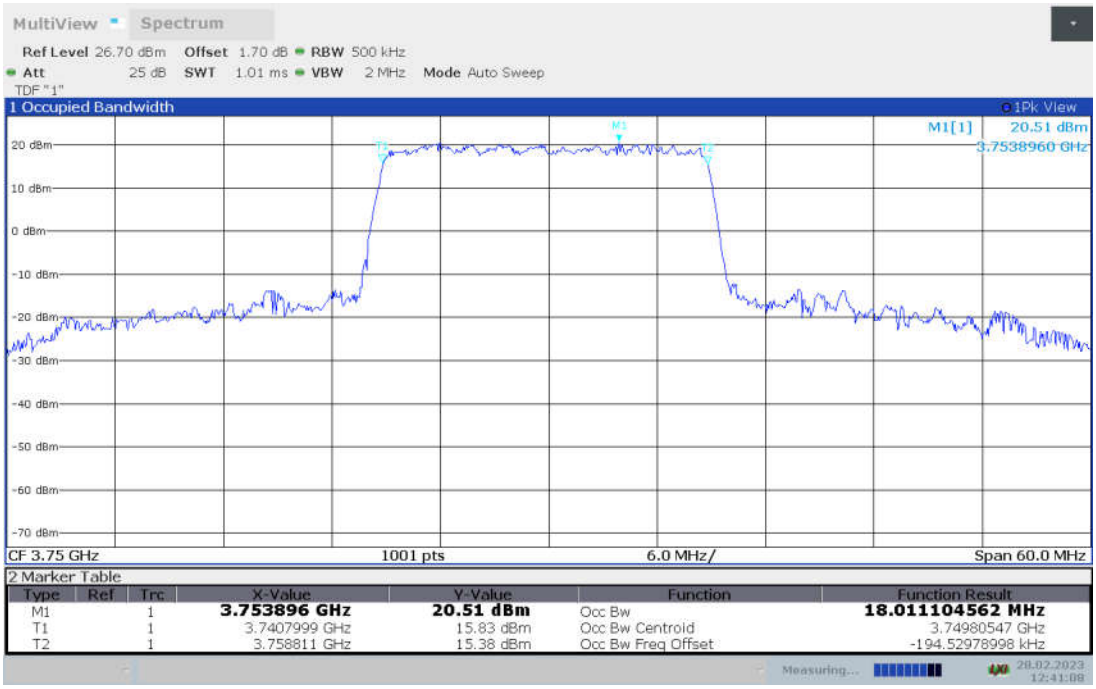
n78H,20MHz Bandwidth,DFT-s-QPSK (99% BW)



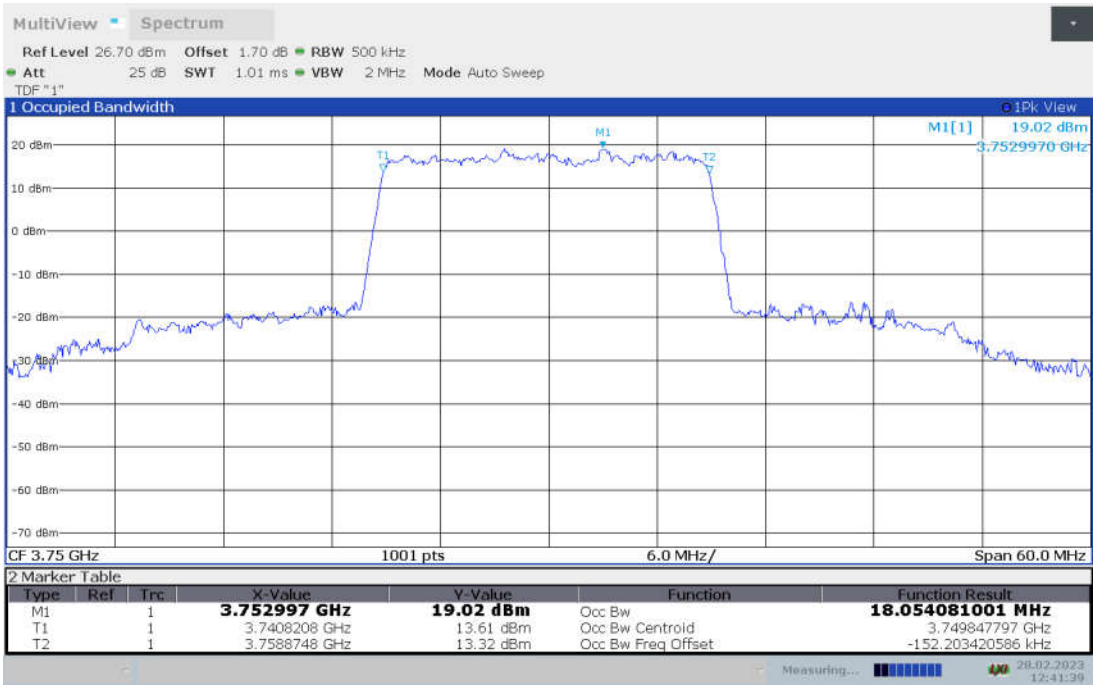
n78H,20MHz Bandwidth, DFT-s-16QAM (99% BW)



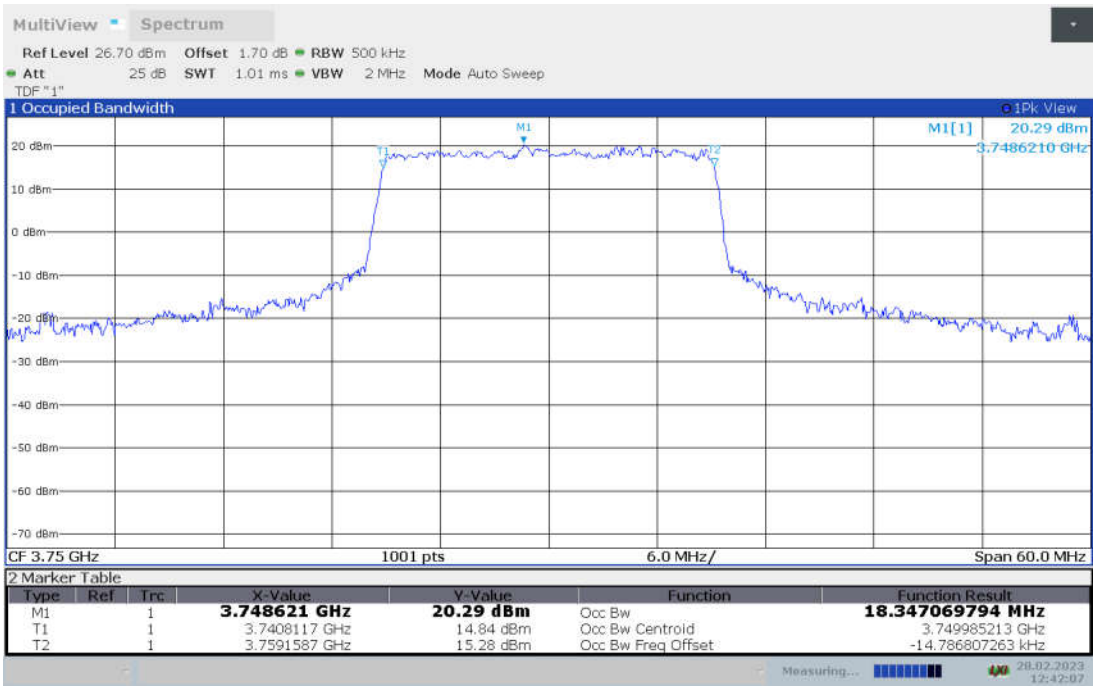
n78H,20MHz Bandwidth, DFT-s-64QAM (99% BW)



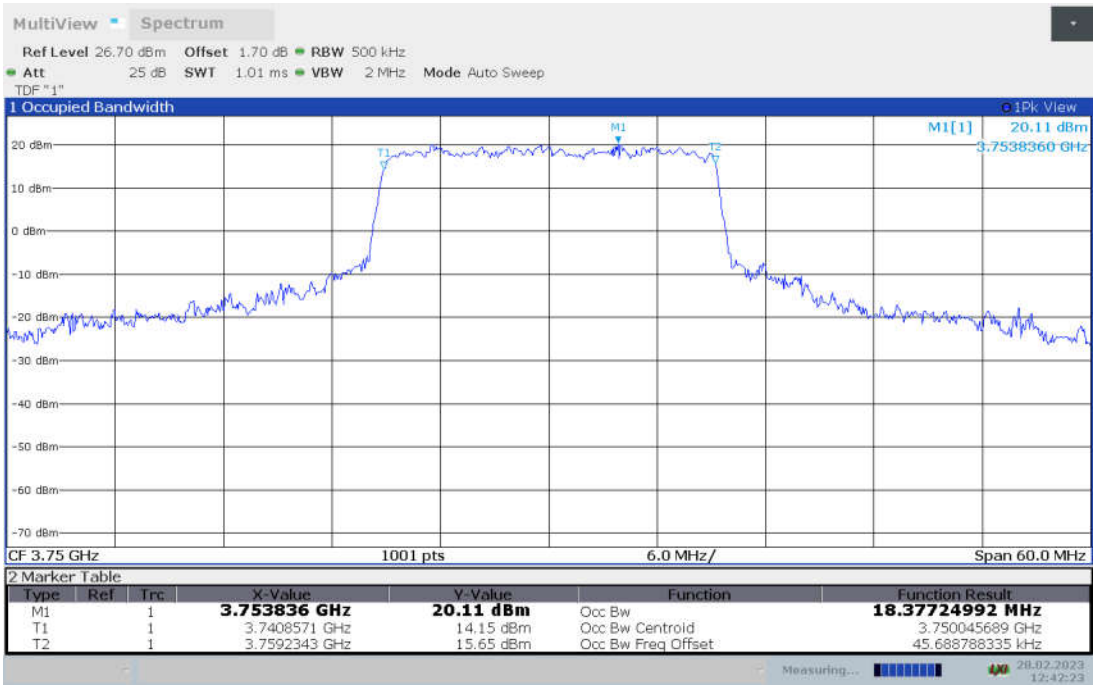
n78H,20MHz Bandwidth, DFT-s-256QAM (99% BW)



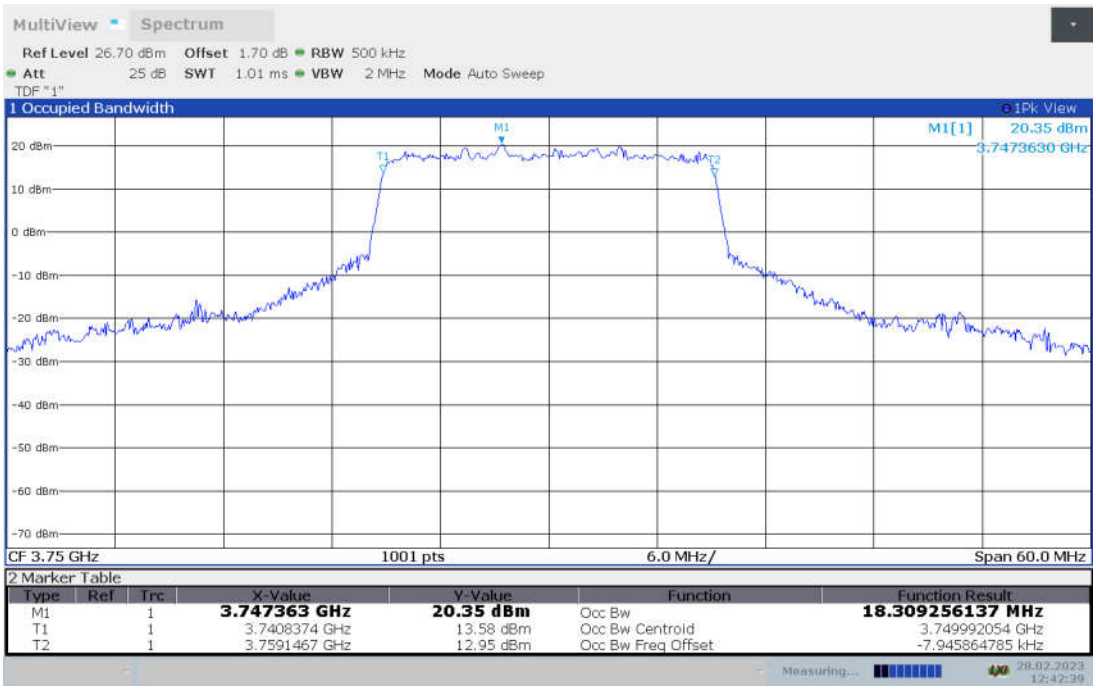
n78H,20MHz Bandwidth, CP-QPSK (99% BW)



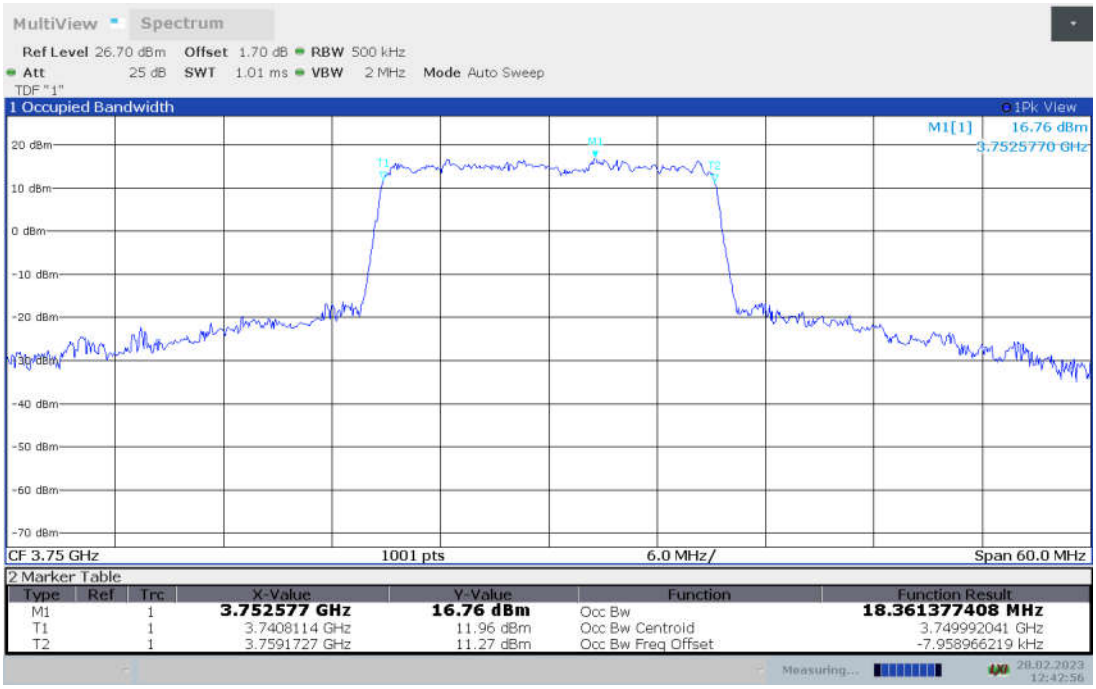
n78H,20MHz Bandwidth, CP-16QAM (99% BW)



n78H,20MHz Bandwidth, CP-64QAM (99% BW)



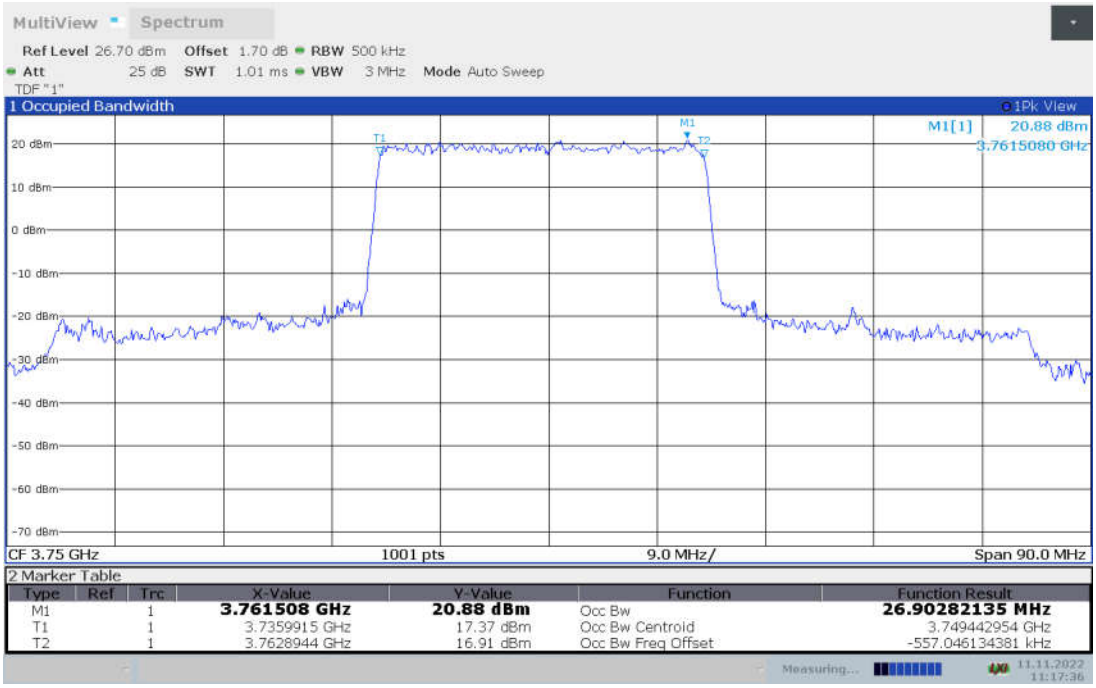
n78H,20MHz Bandwidth, CP-256QAM (99% BW)



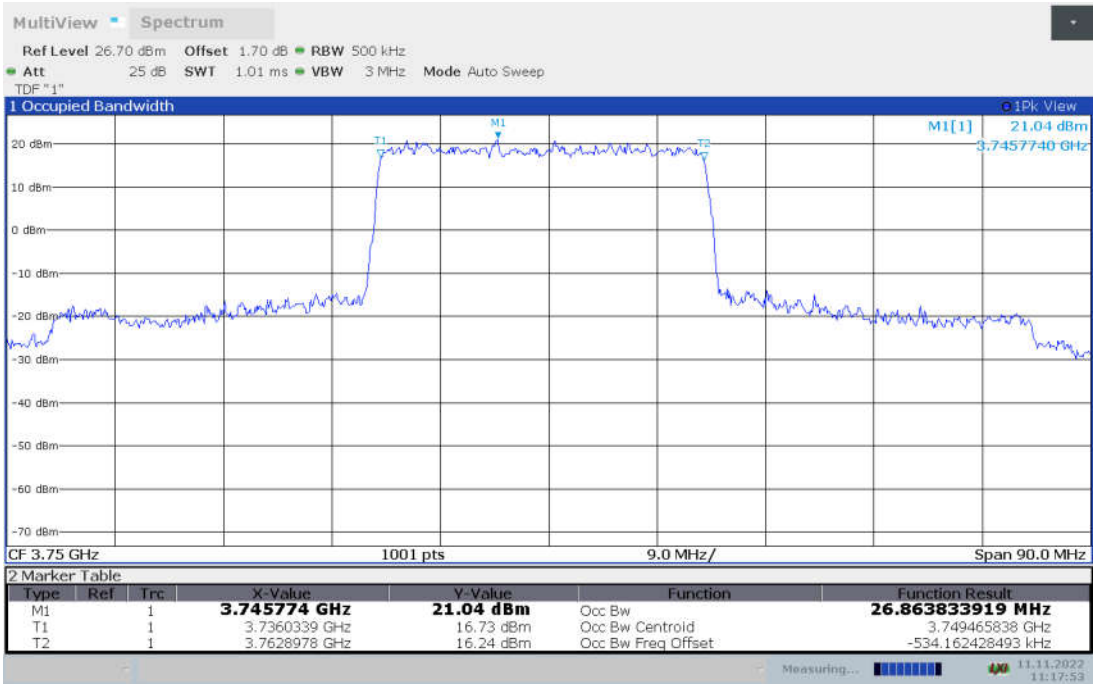
n78H,30MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3750	26.903	26.864	26.936	26.852	26.897	27.846	27.967	27.944	27.913

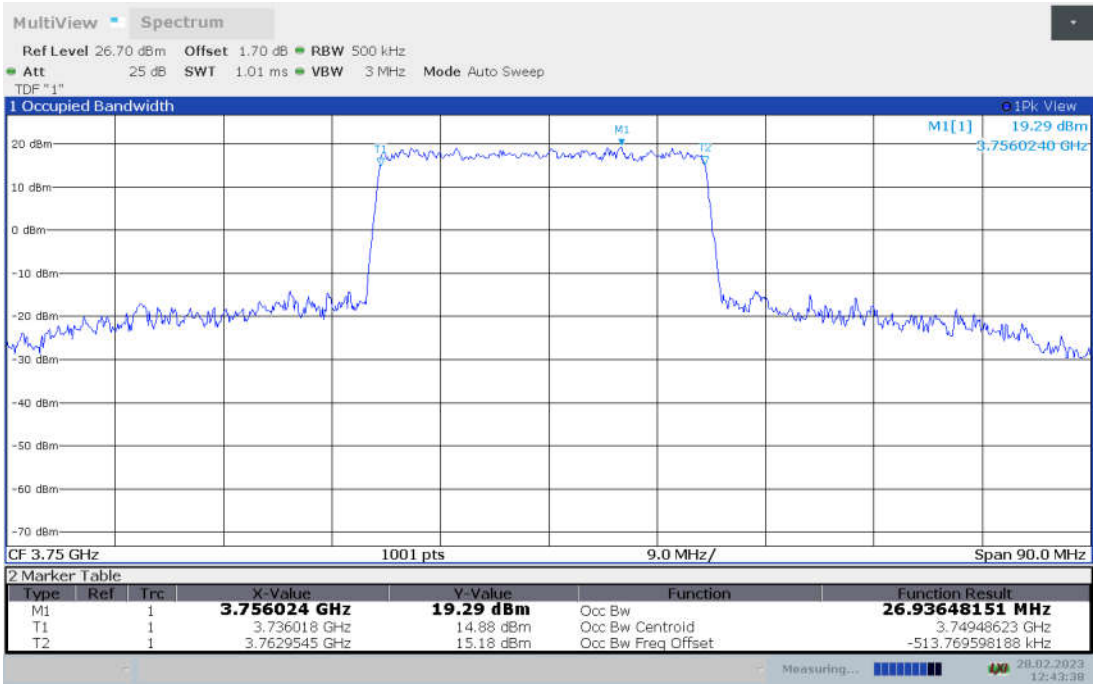
n78H,30MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



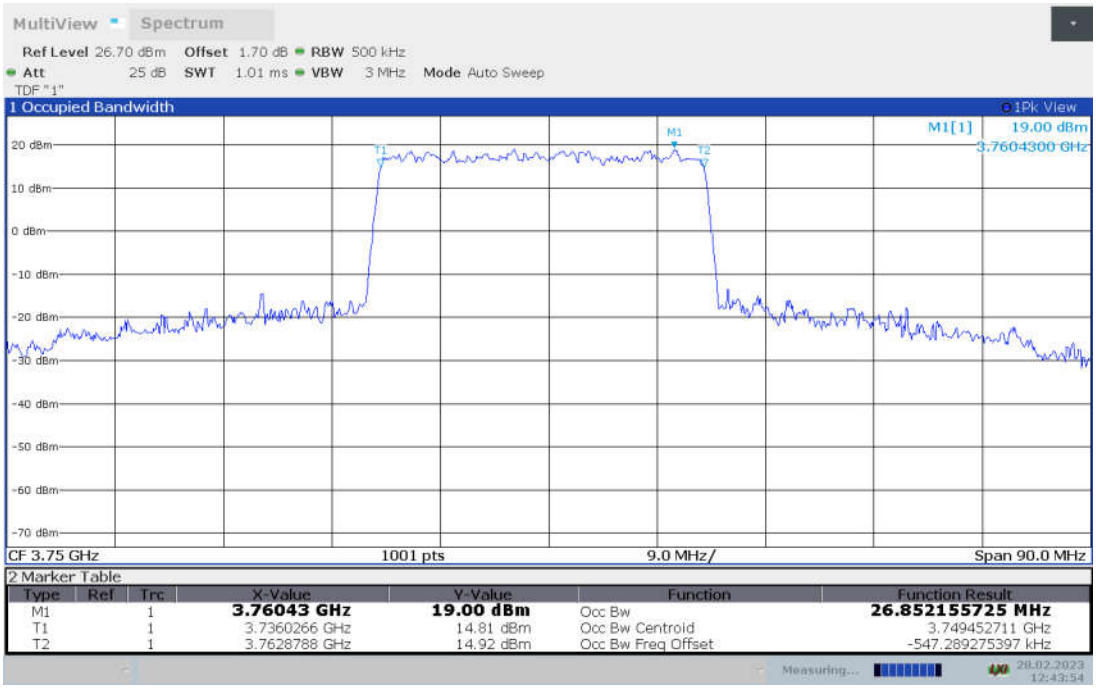
n78H,30MHz Bandwidth,DFT-s-QPSK (99% BW)



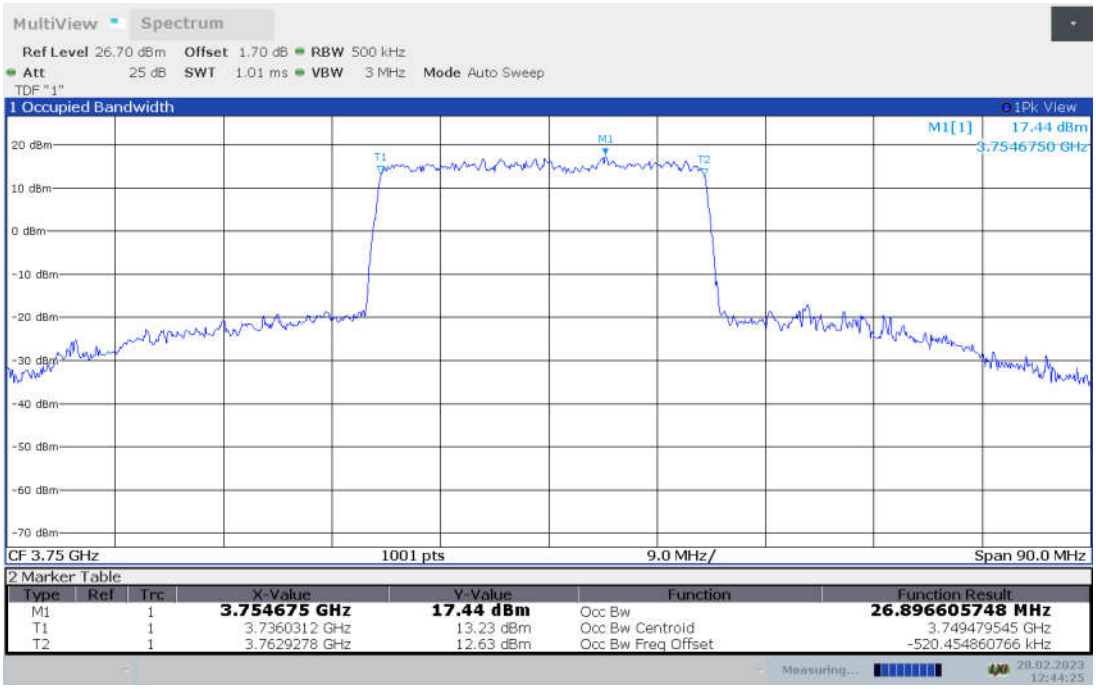
n78H,30MHz Bandwidth, DFT-s-16QAM (99% BW)



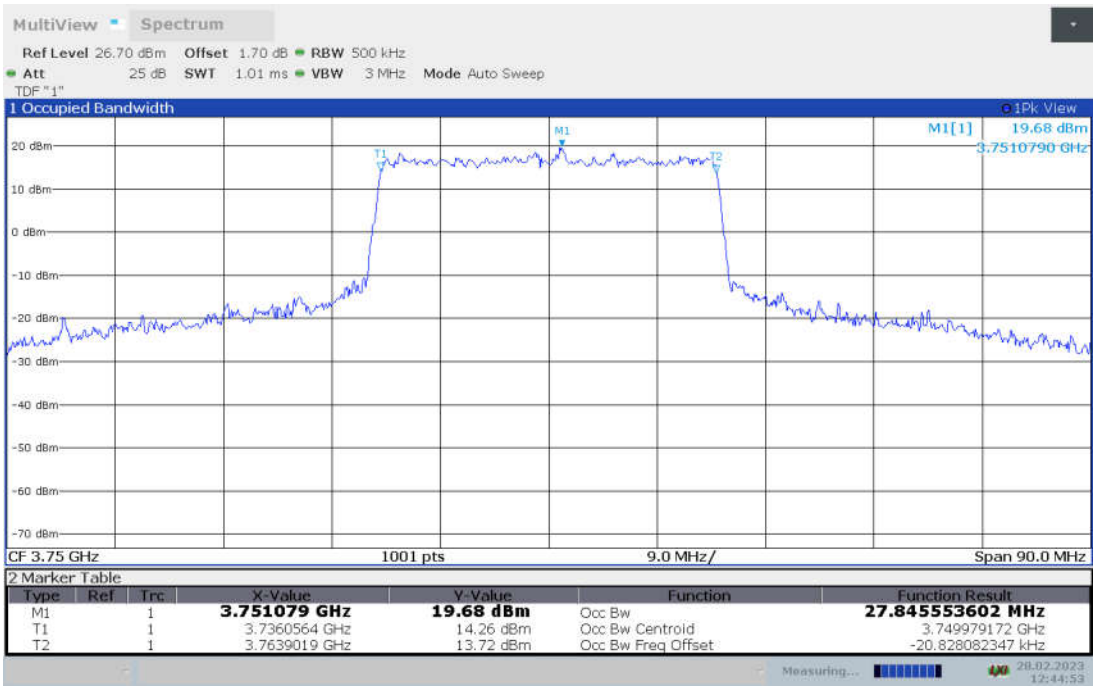
n78H,30MHz Bandwidth, DFT-s-64QAM (99% BW)



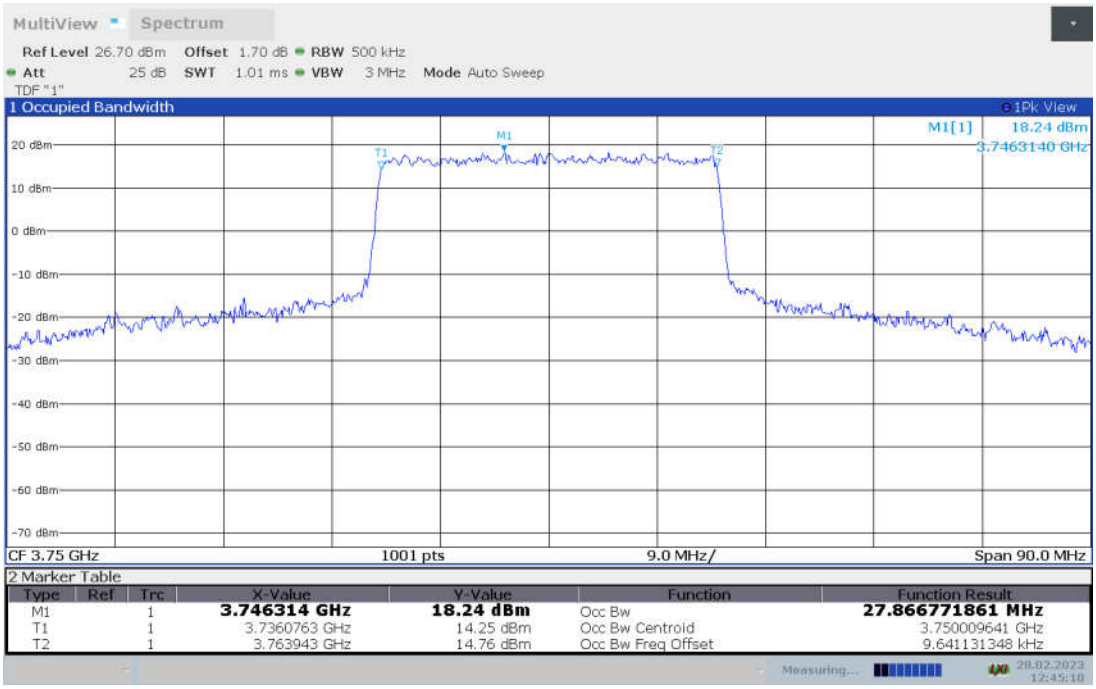
n78H,30MHz Bandwidth, DFT-s-256QAM (99% BW)



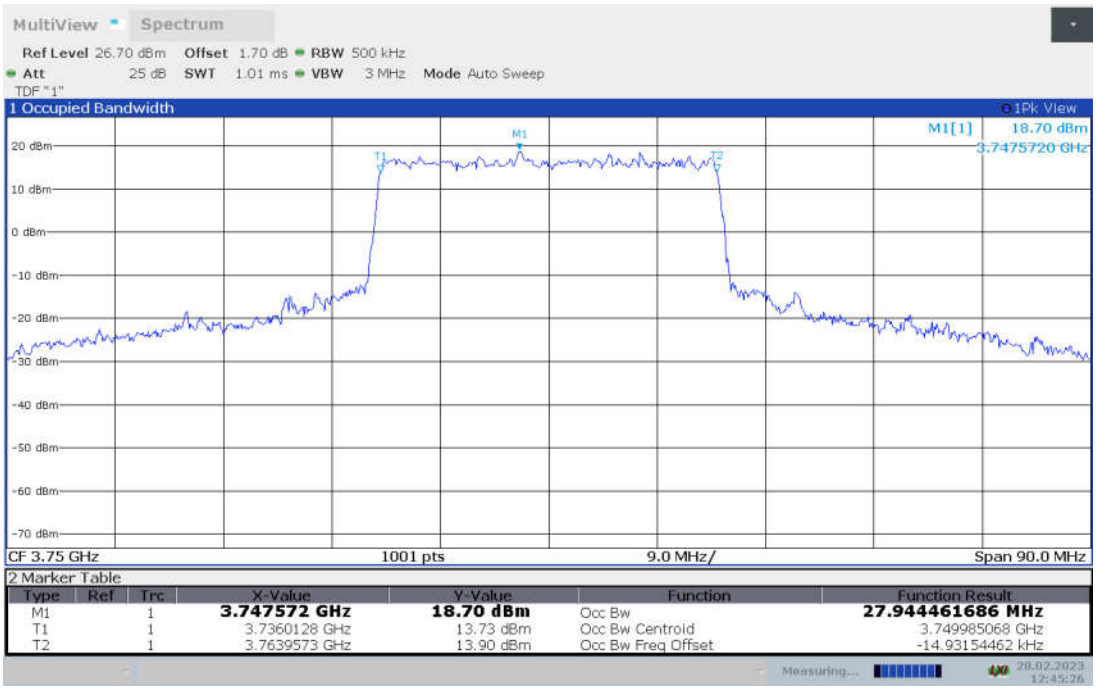
n78H,30MHz Bandwidth, CP-QPSK (99% BW)



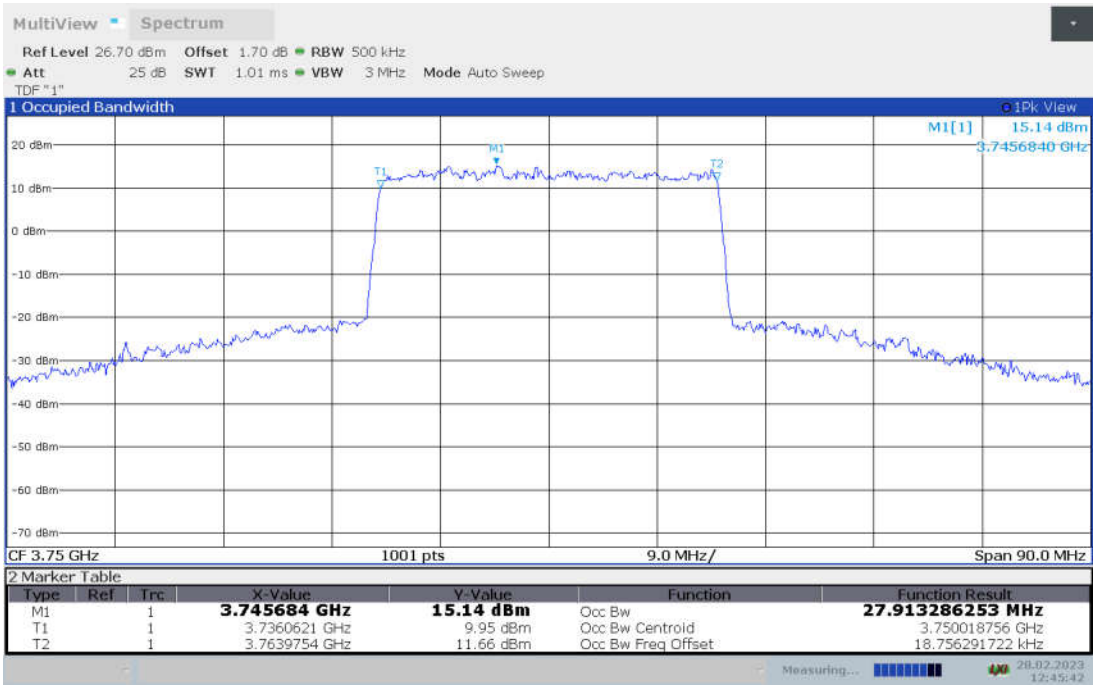
n78H,30MHz Bandwidth, CP-16QAM (99% BW)



n78H,30MHz Bandwidth, CP-64QAM (99% BW)



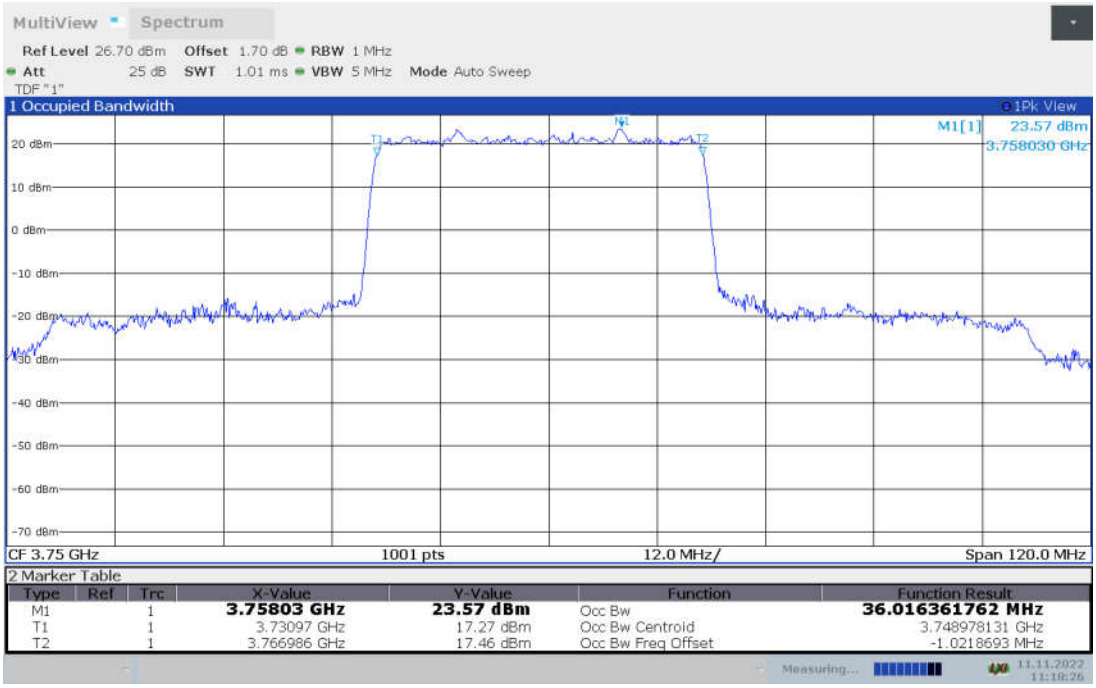
n78H,30MHz Bandwidth, CP-256QAM (99% BW)



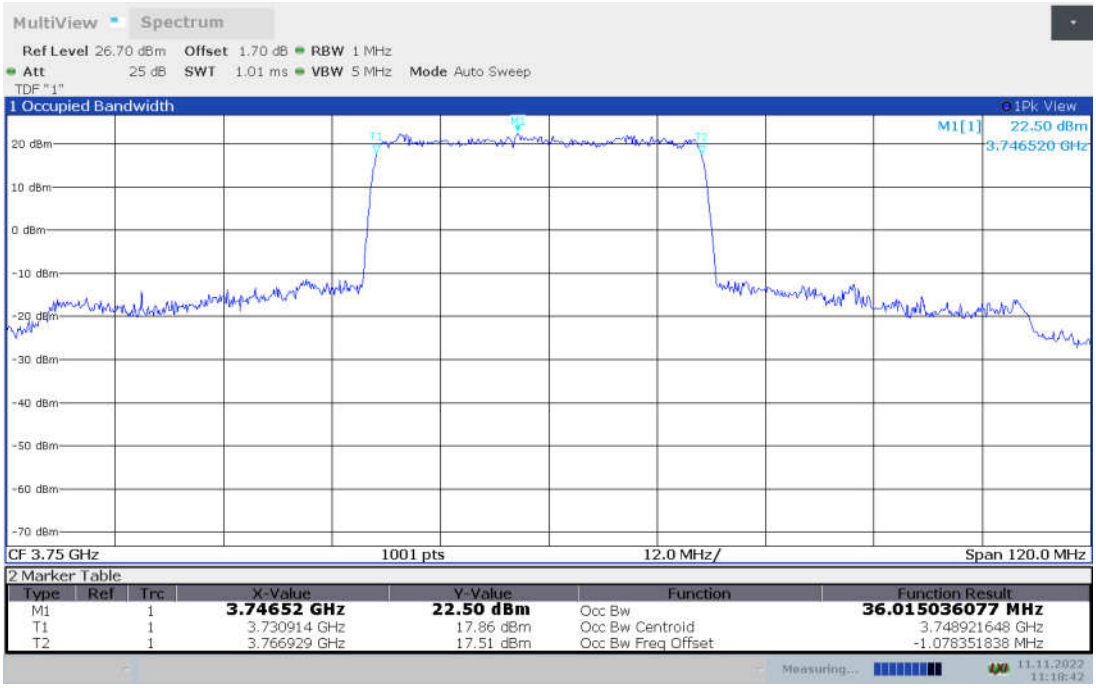
n78H,40MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3750	36.016	36.015	36.091	36.849	35.919	38.116	38.124	38.030	37.925

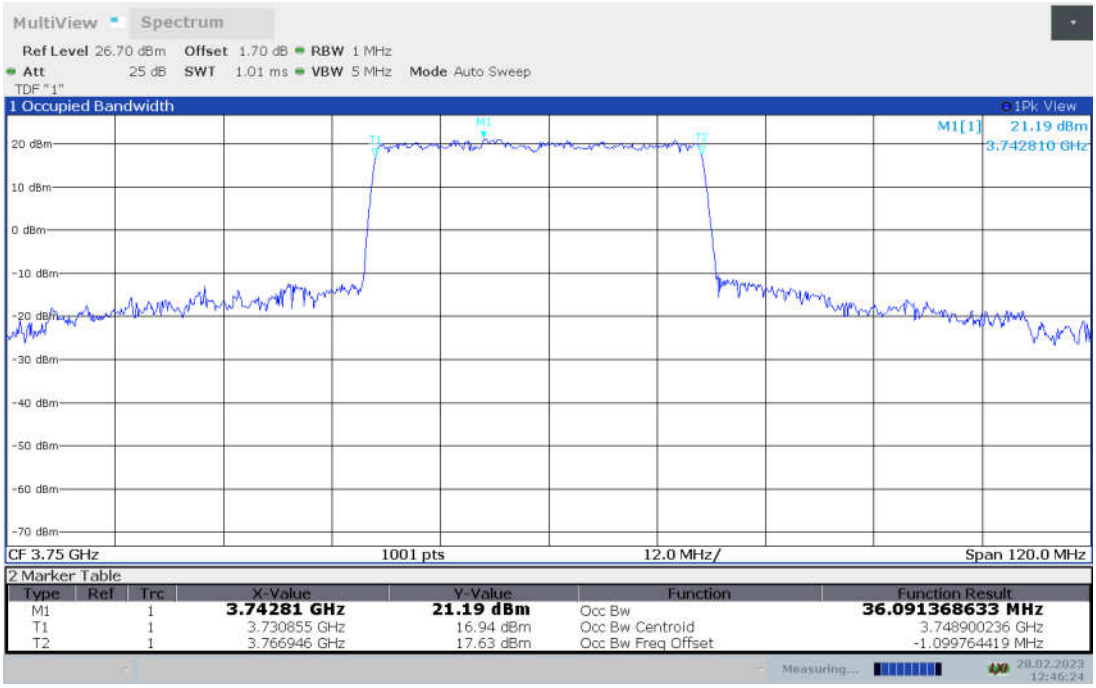
n78H,40MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



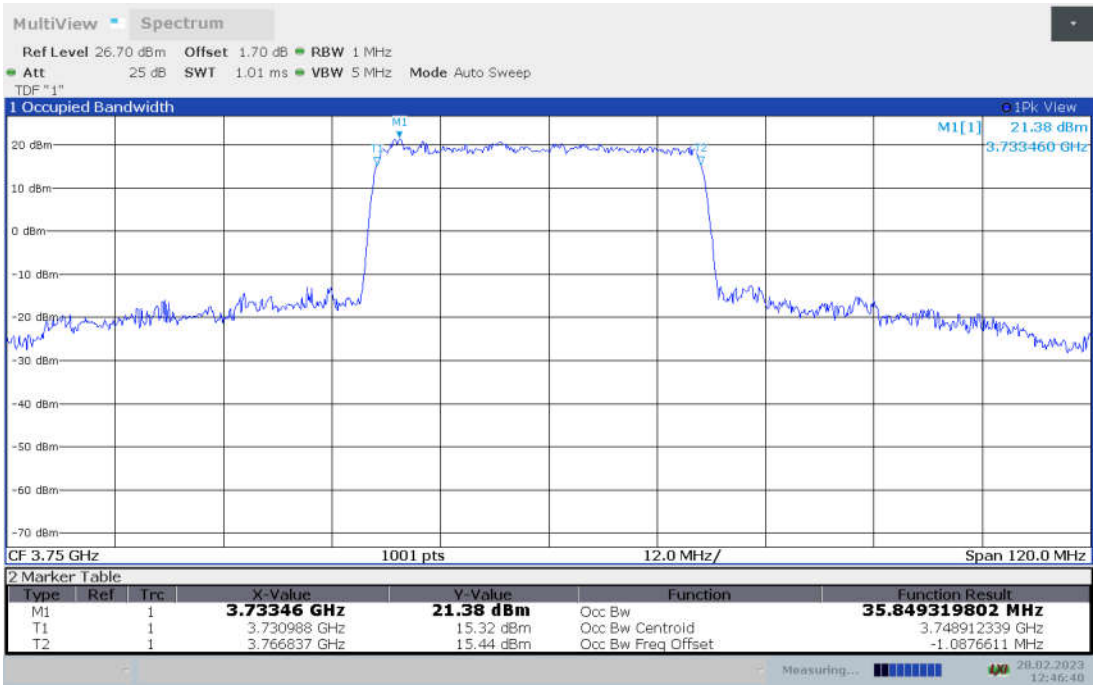
n78H,40MHz Bandwidth,DFT-s-QPSK (99% BW)



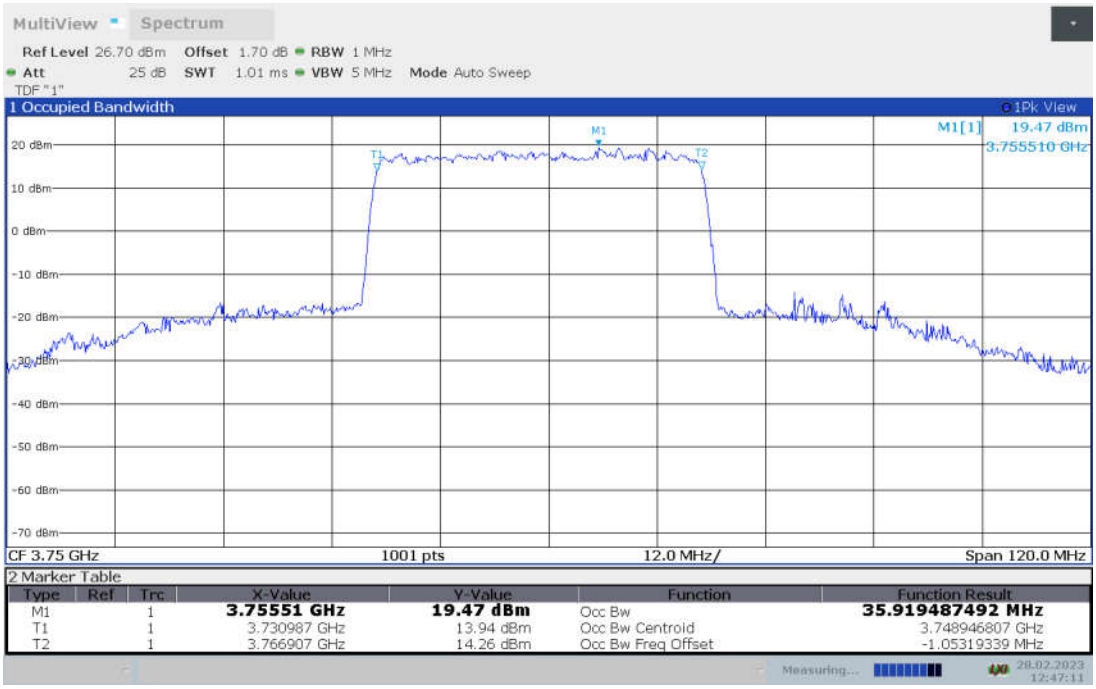
n78H,40MHz Bandwidth, DFT-s-16QAM (99% BW)



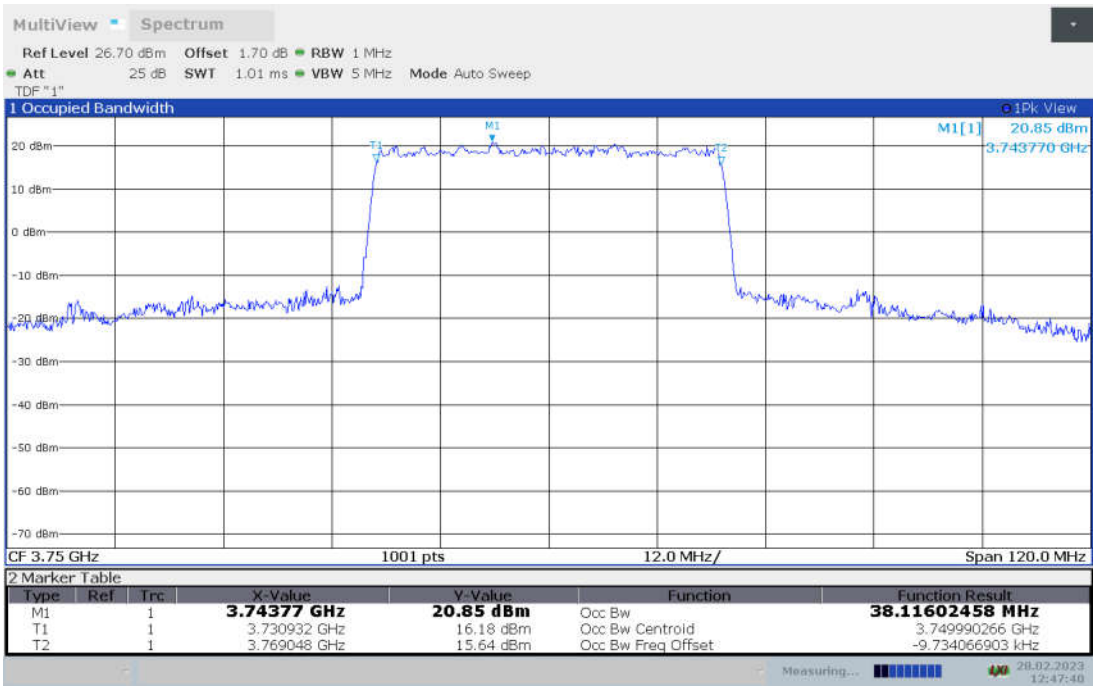
n78H,40MHz Bandwidth, DFT-s-64QAM (99% BW)



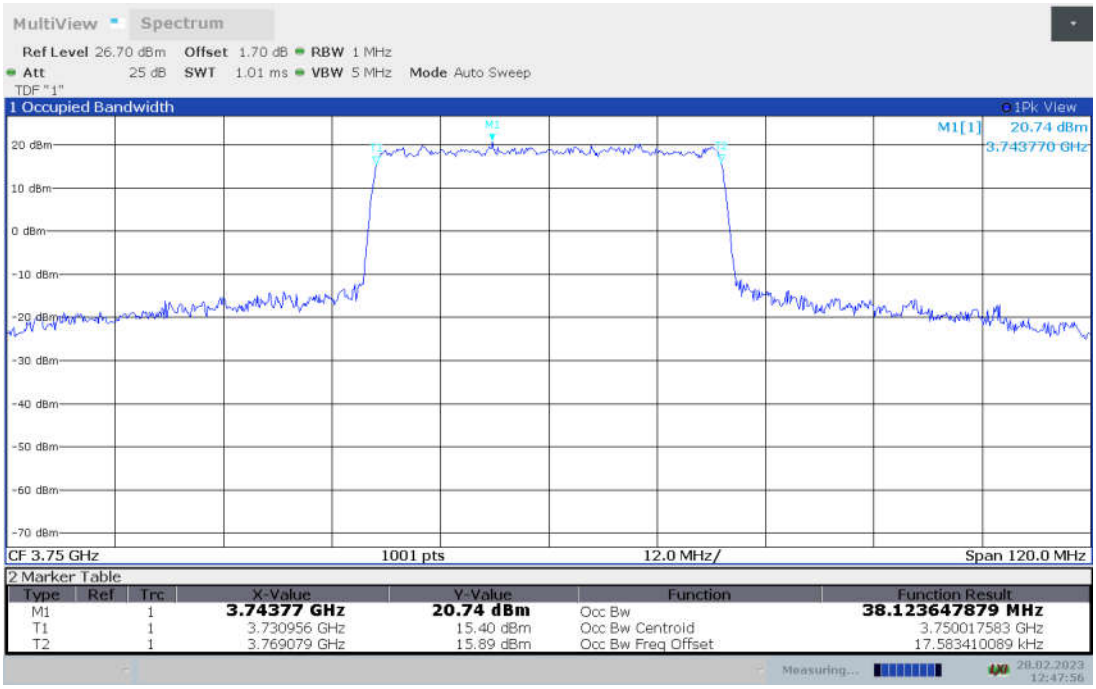
n78H,40MHz Bandwidth, DFT-s-256QAM (99% BW)



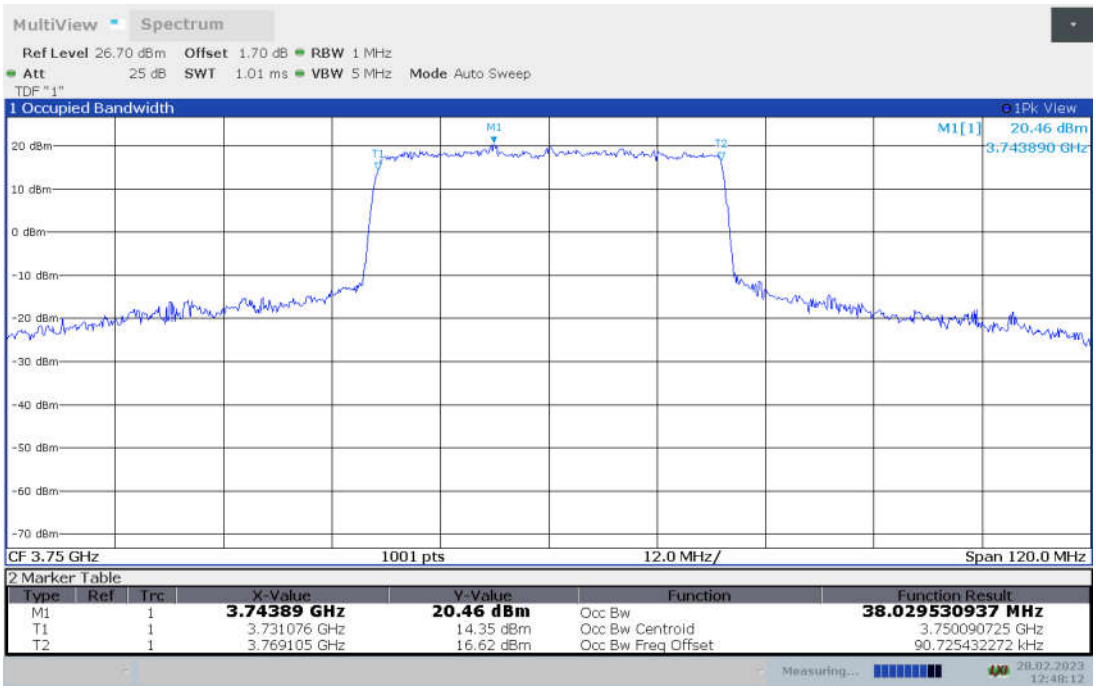
n78H,40MHz Bandwidth, CP-QPSK (99% BW)



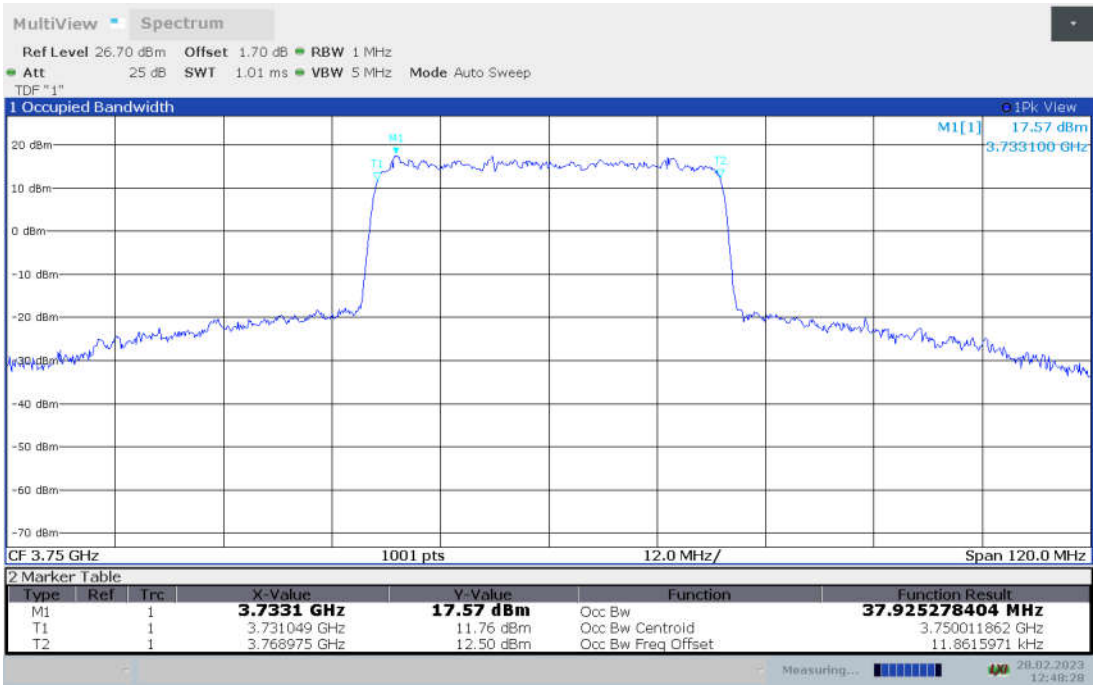
n78H,40MHz Bandwidth, CP-16QAM (99% BW)



n78H,40MHz Bandwidth, CP-64QAM (99% BW)



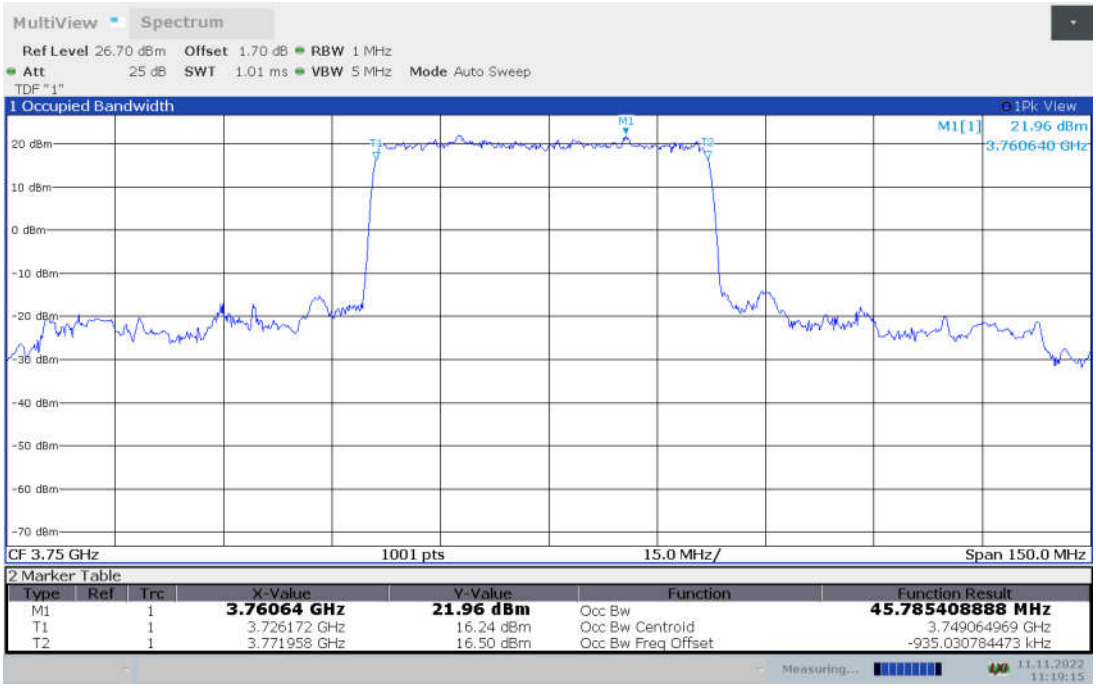
n78H,40MHz Bandwidth, CP-256QAM (99% BW)



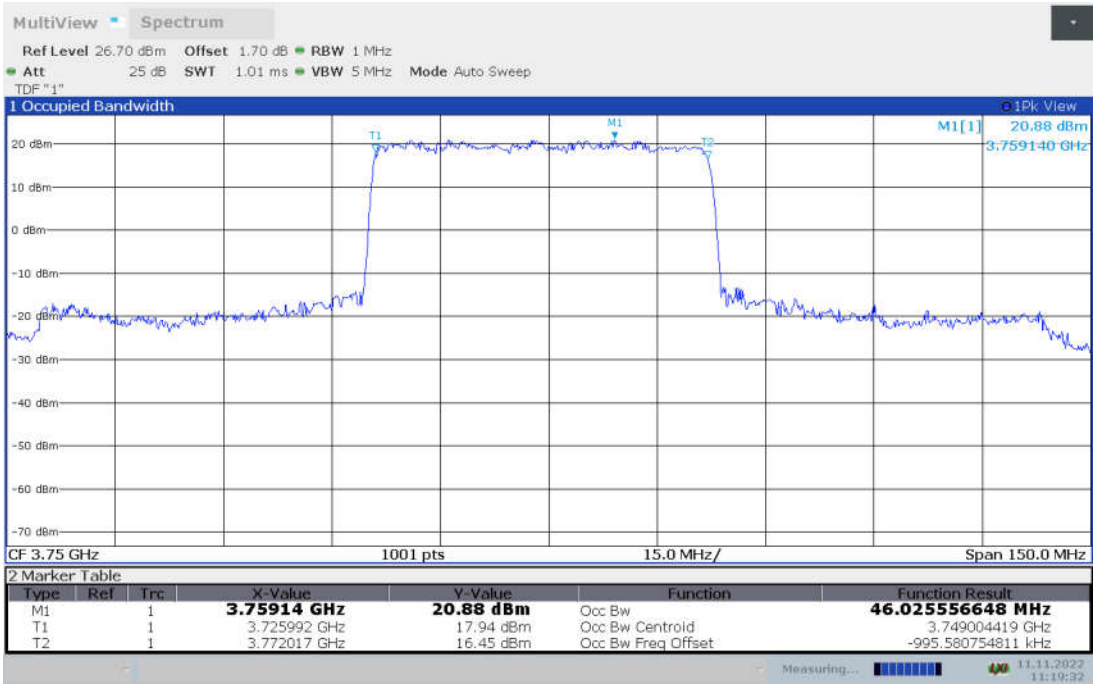
n78H,50MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3750	45.785	46.026	45.938	45.887	45.901	45.497	47.572	47.539	47.561

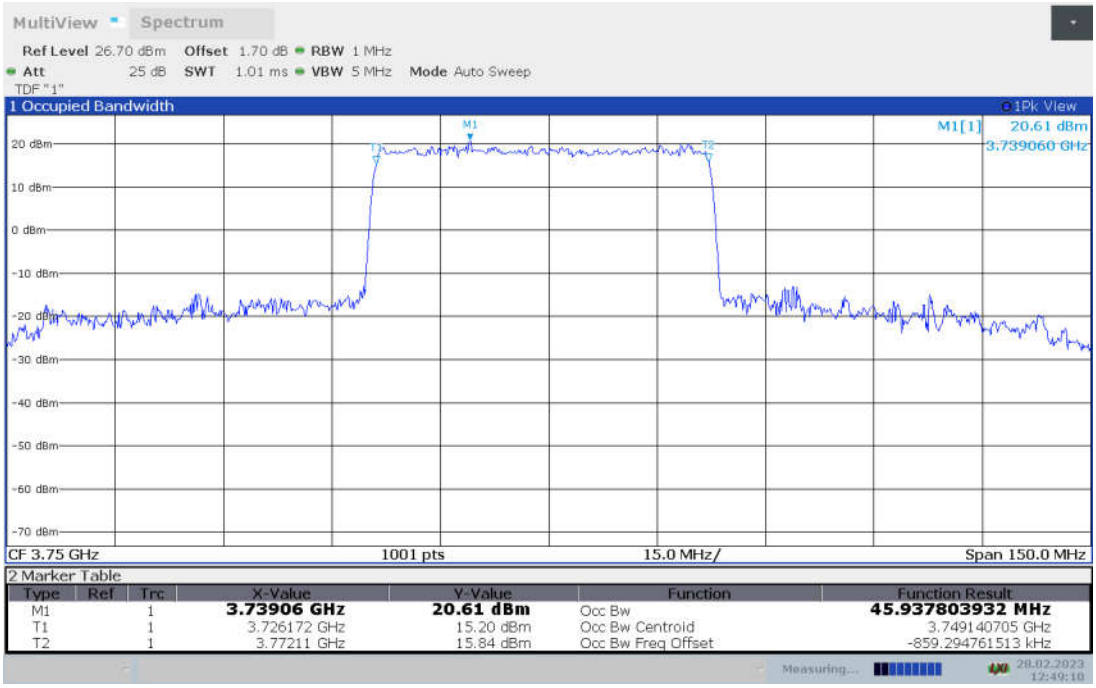
n78H,50MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



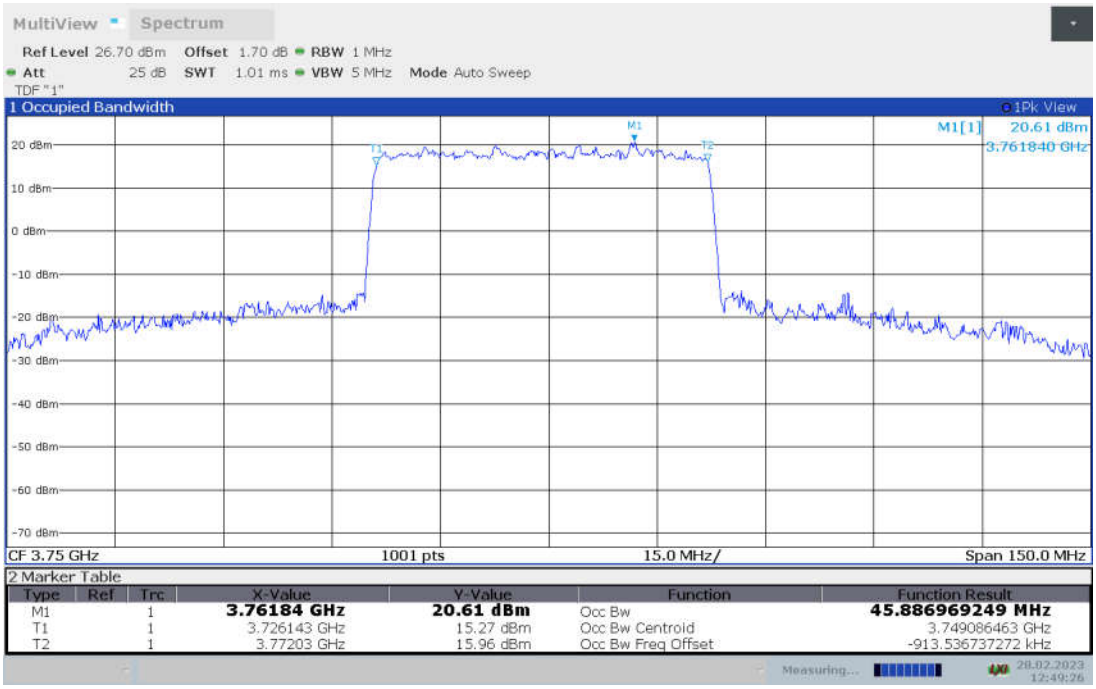
n78H,50MHz Bandwidth,DFT-s-QPSK (99% BW)



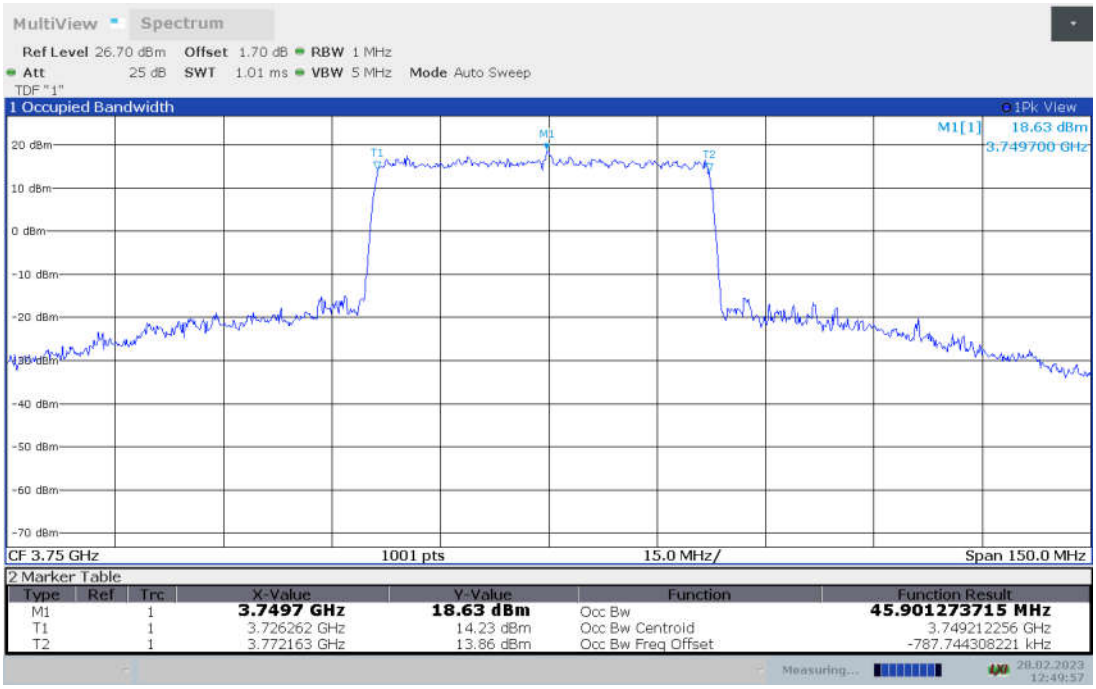
n78H,50MHz Bandwidth, DFT-s-16QAM (99% BW)



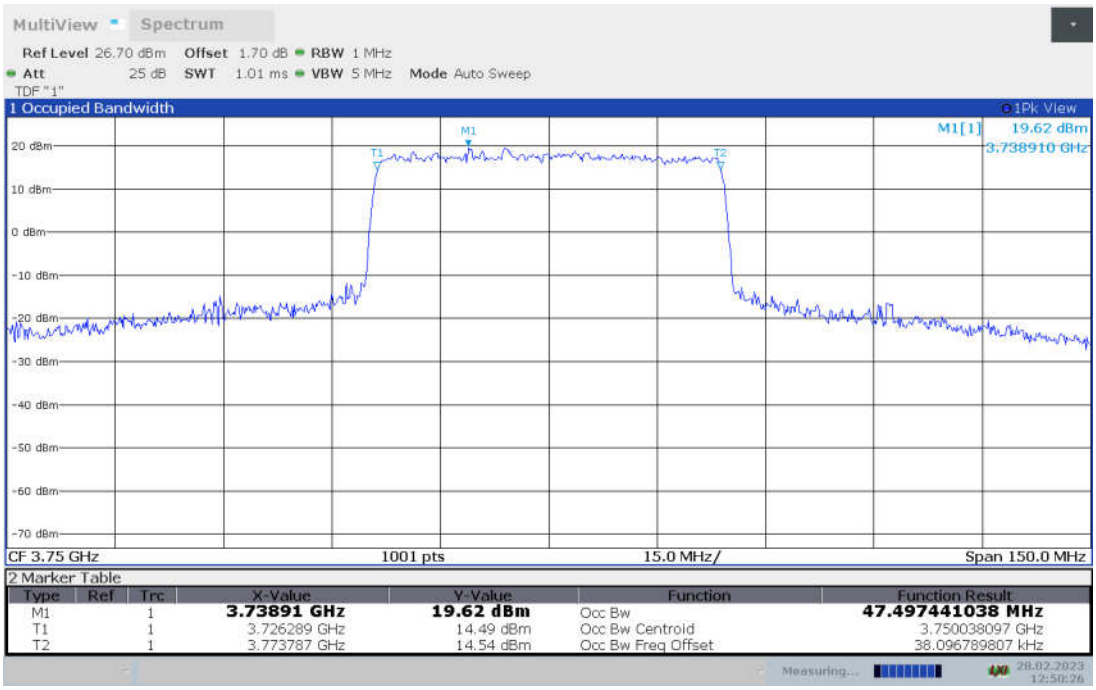
n78H,50MHz Bandwidth, DFT-s-64QAM (99% BW)



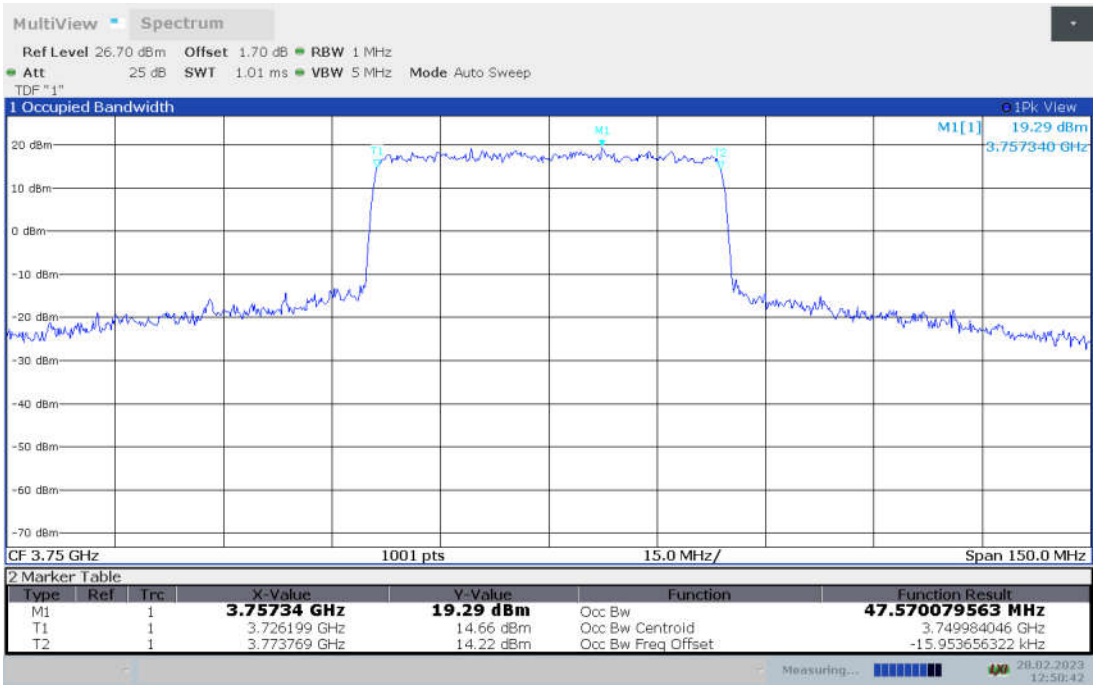
n78H,50MHz Bandwidth, DFT-s-256QAM (99% BW)



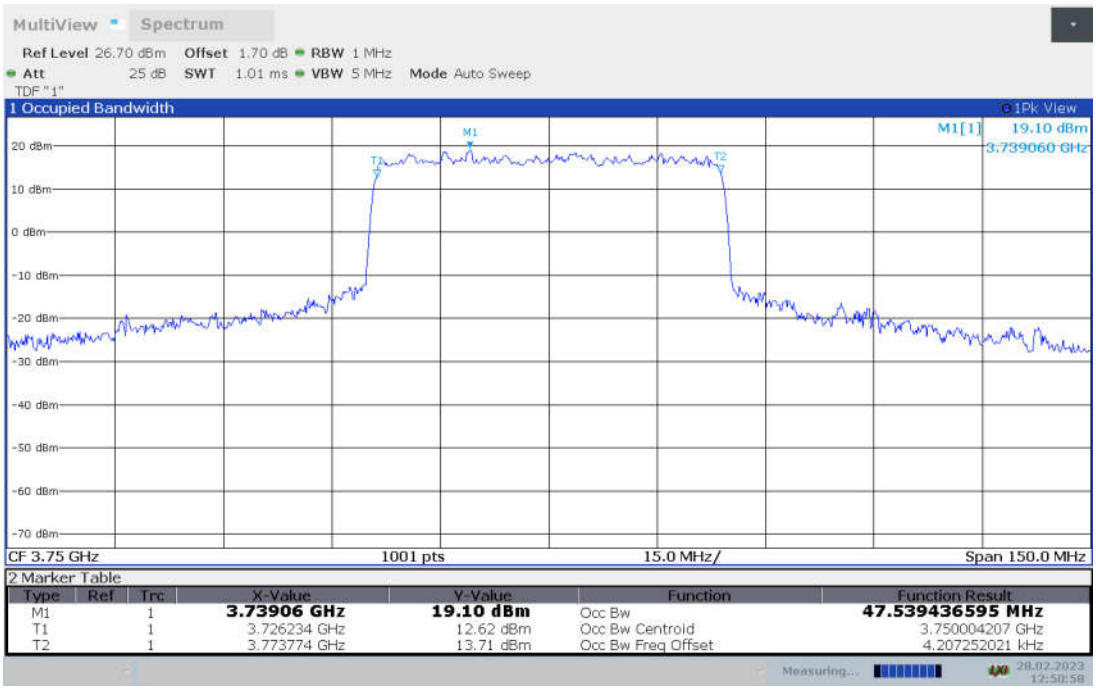
n78H,50MHz Bandwidth, CP-QPSK (99% BW)



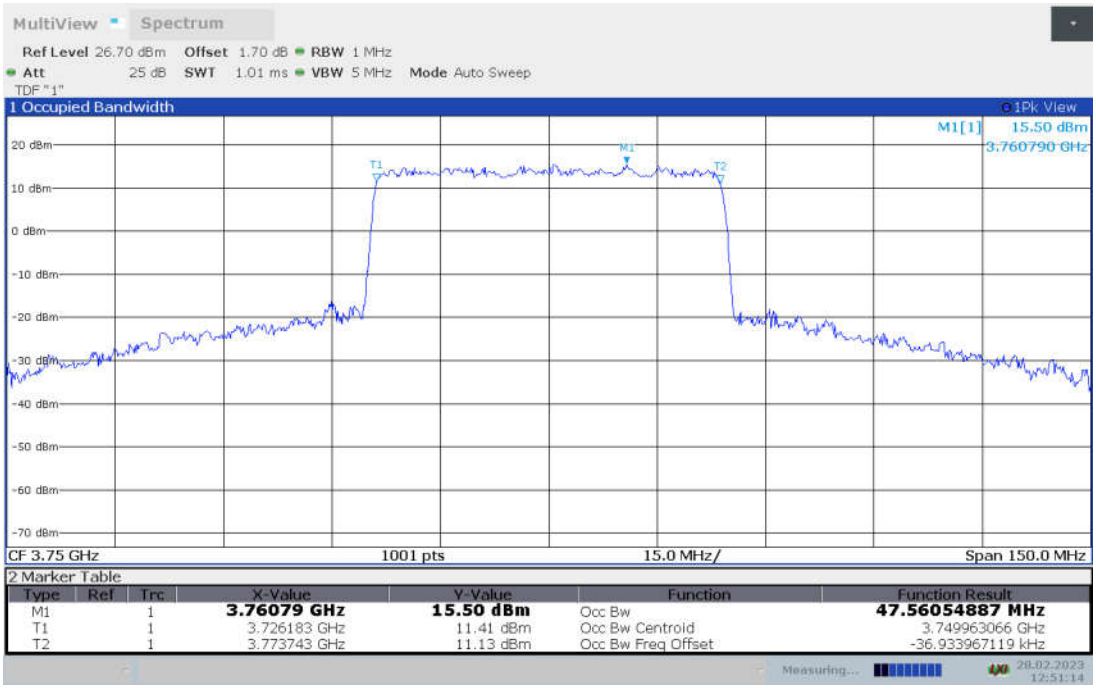
n78H,50MHz Bandwidth, CP-16QAM (99% BW)



n78H,50MHz Bandwidth, CP-64QAM (99% BW)



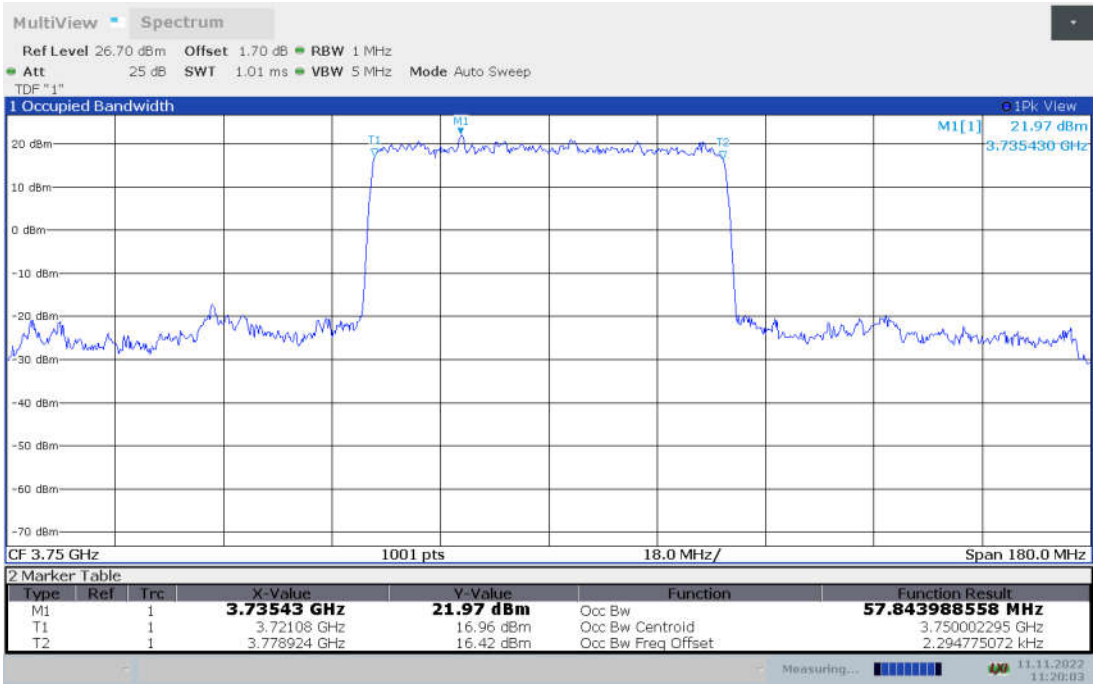
n78H,50MHz Bandwidth, CP-256QAM (99% BW)



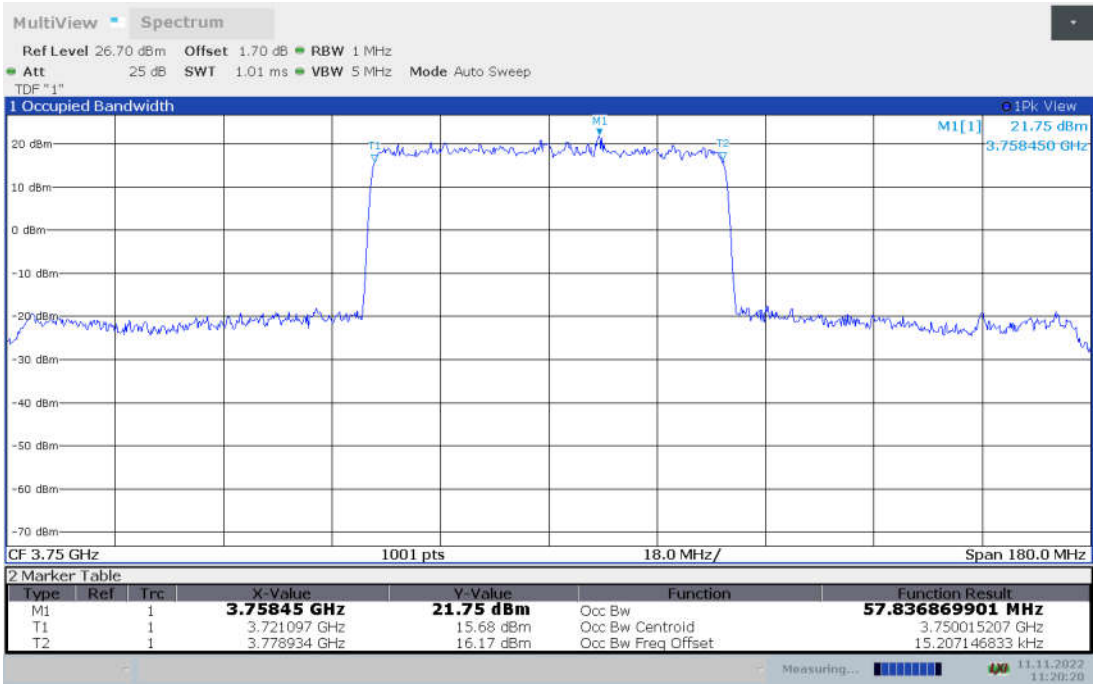
n78H,60MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3750	57.844	57.837	57.945	58.088	58.007	57.841	57.775	58.008	57.993

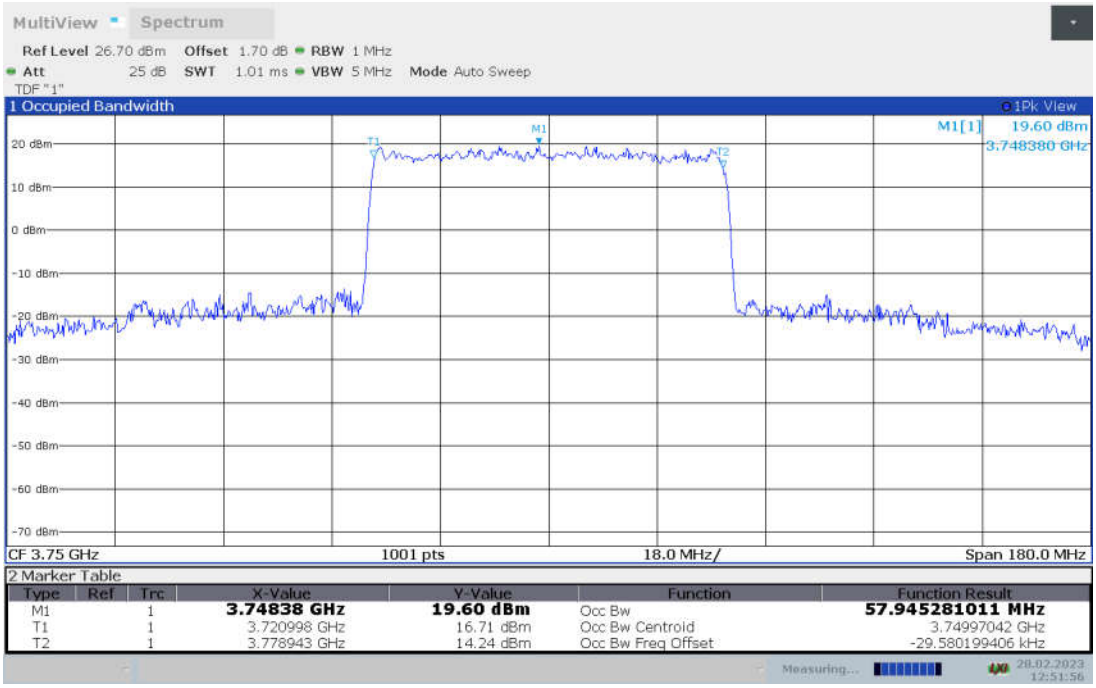
n78H,60MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



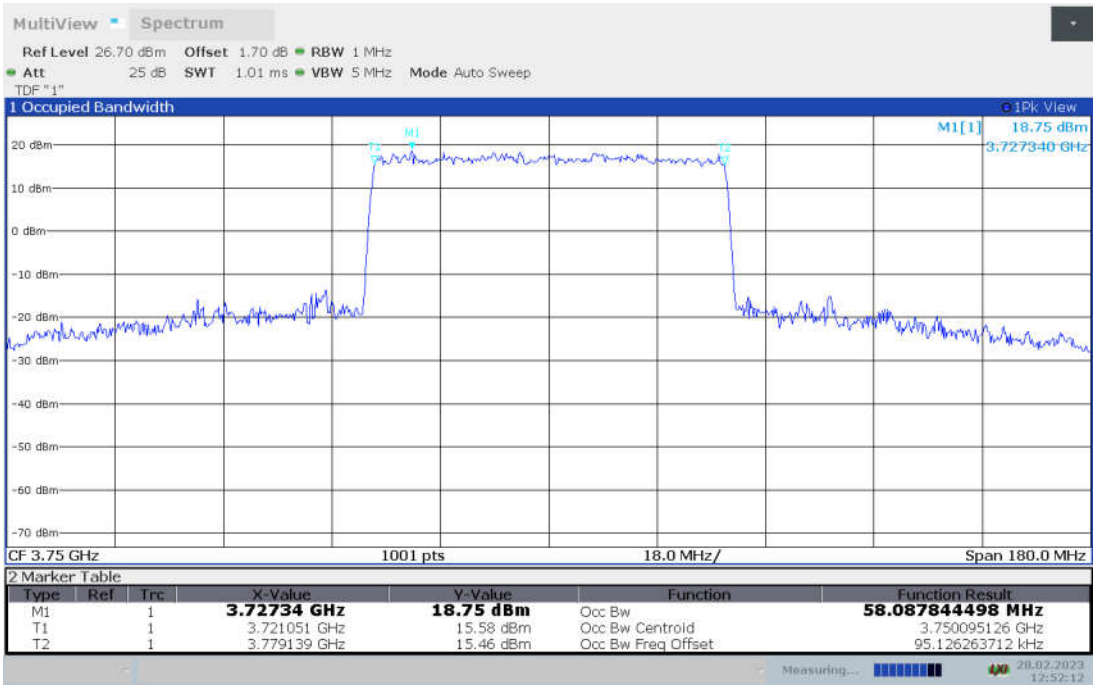
n78H,60MHz Bandwidth,DFT-s-QPSK (99% BW)



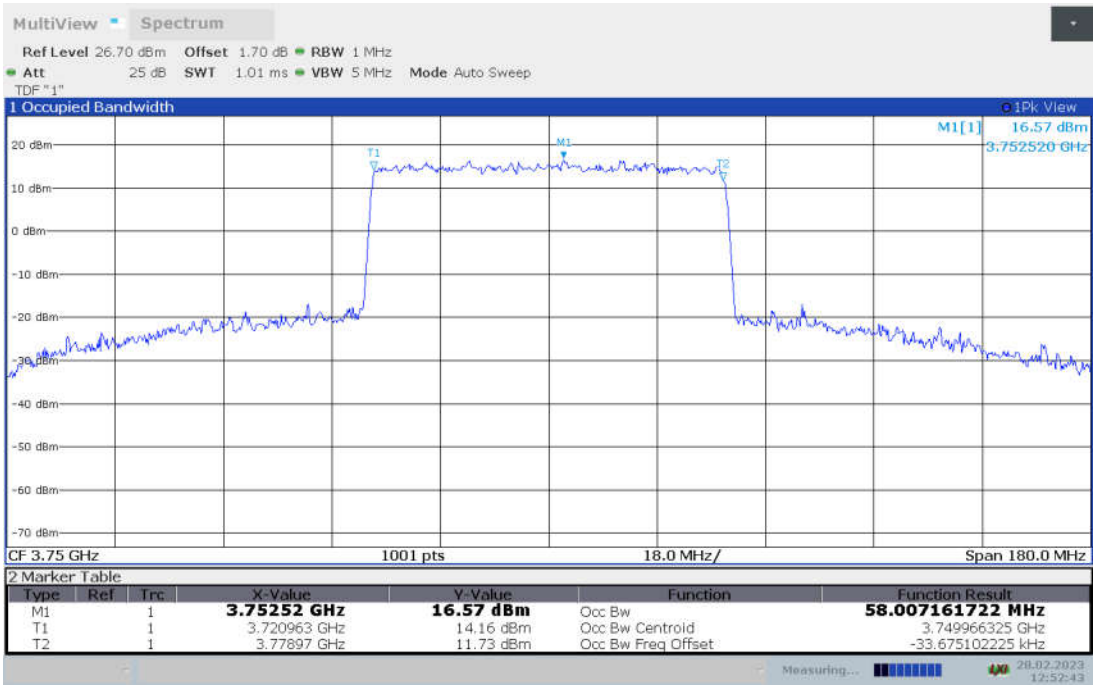
n78H,60MHz Bandwidth, DFT-s-16QAM (99% BW)



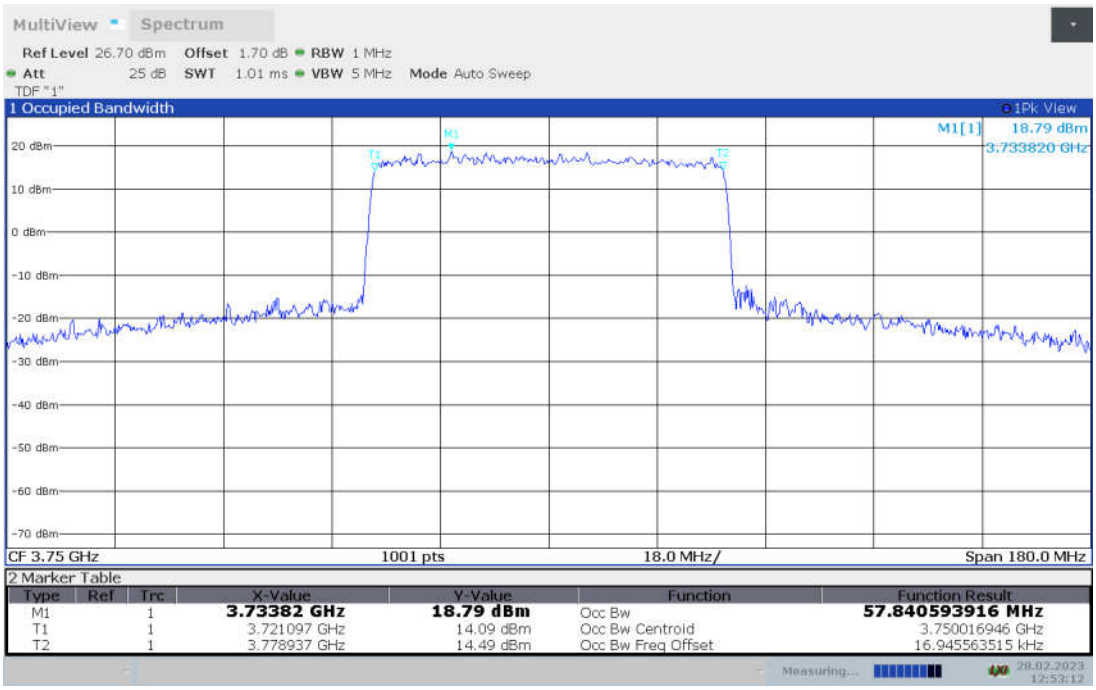
n78H,60MHz Bandwidth, DFT-s-64QAM (99% BW)



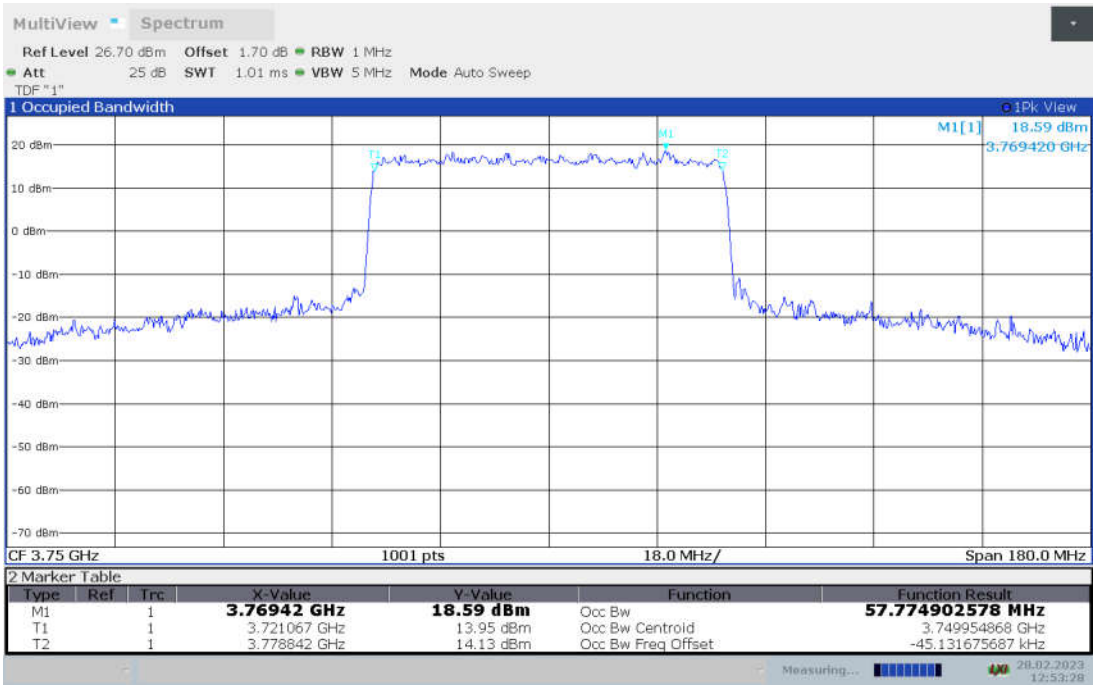
n78H,60MHz Bandwidth, DFT-s-256QAM (99% BW)



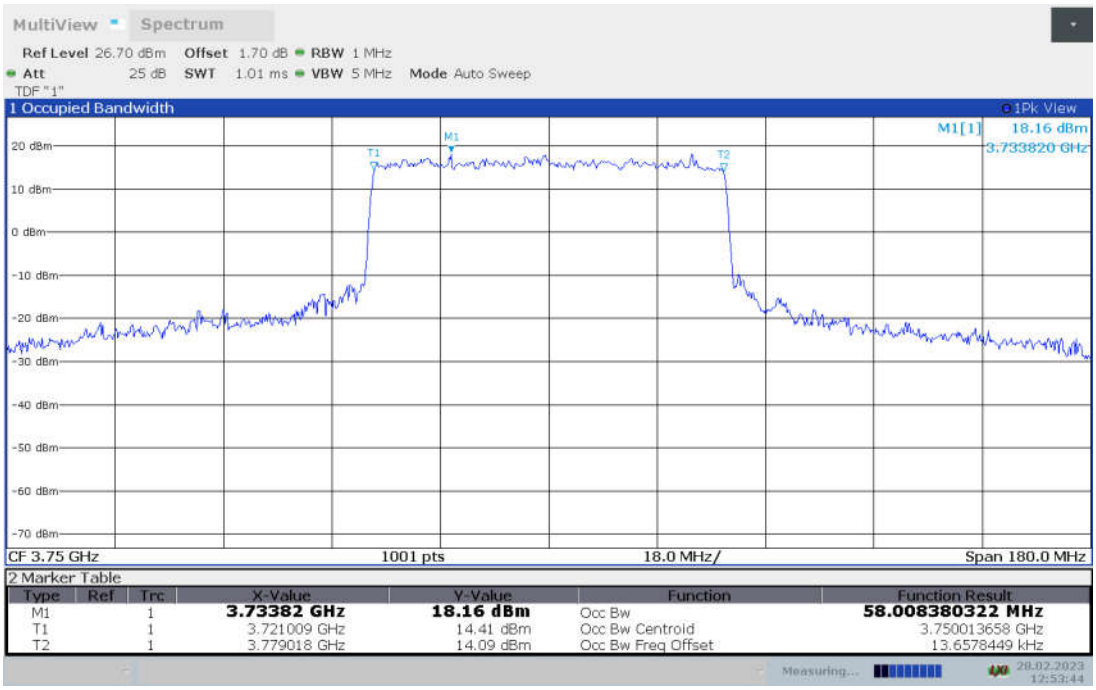
n78H,60MHz Bandwidth, CP-QPSK (99% BW)



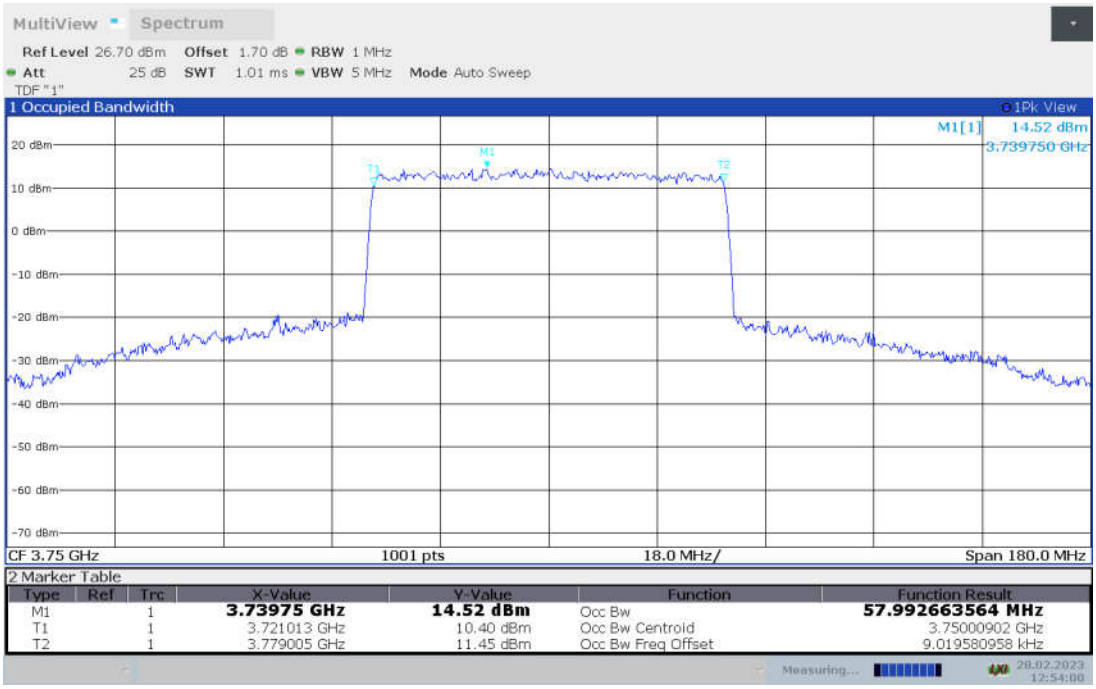
n78H,60MHz Bandwidth, CP-16QAM (99% BW)



n78H,60MHz Bandwidth, CP-64QAM (99% BW)



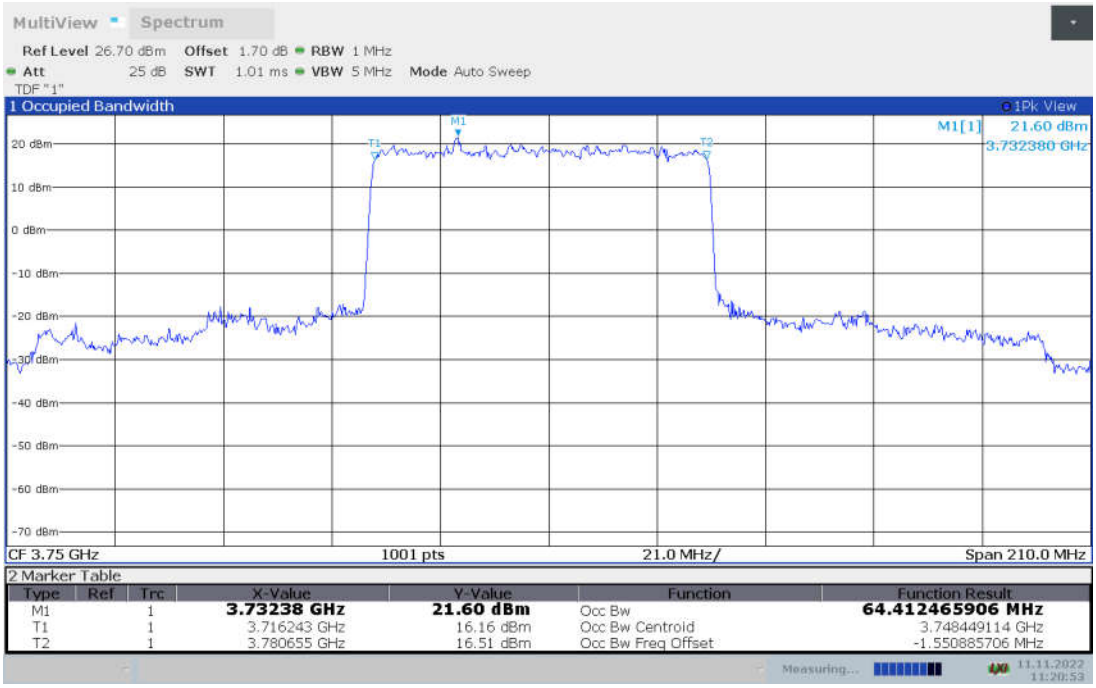
n78H,60MHz Bandwidth, CP-256QAM (99% BW)



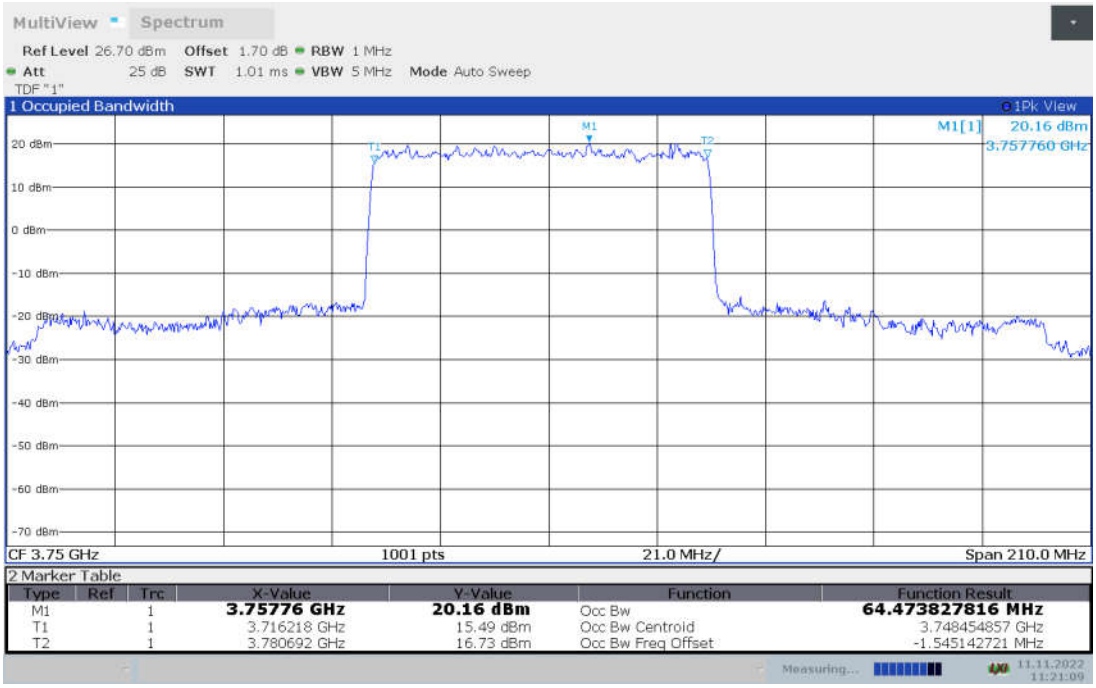
n78H,70MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3750	64.412	64.474	64.229	64.351	64.162	67.553	67.376	67.449	67.534

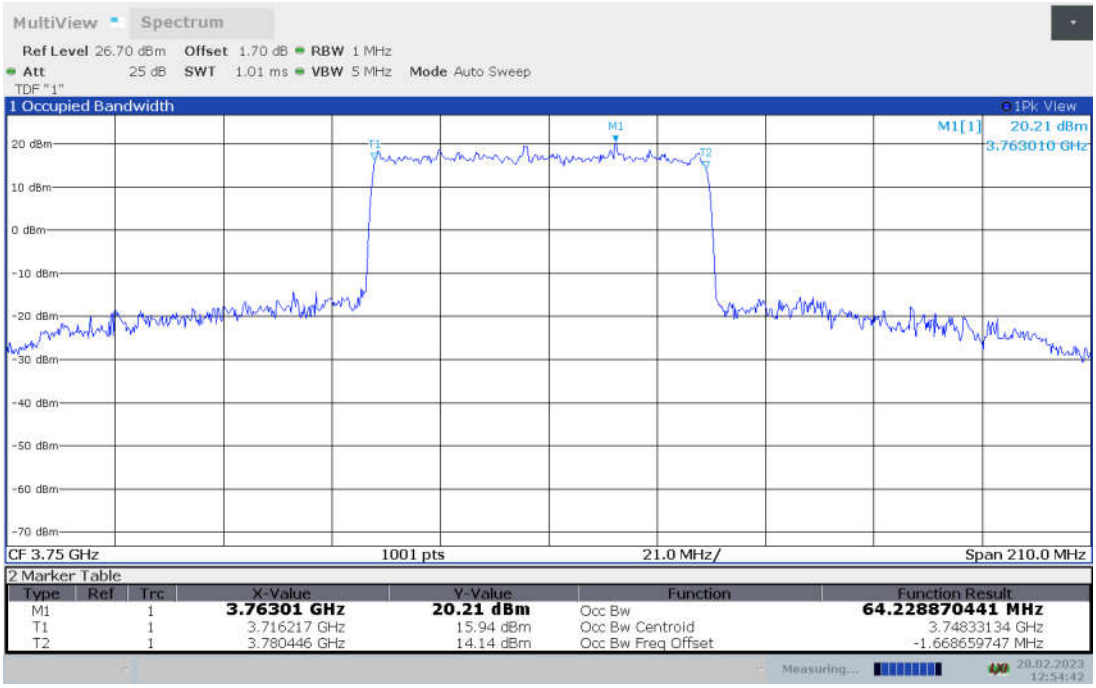
n78H,70MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



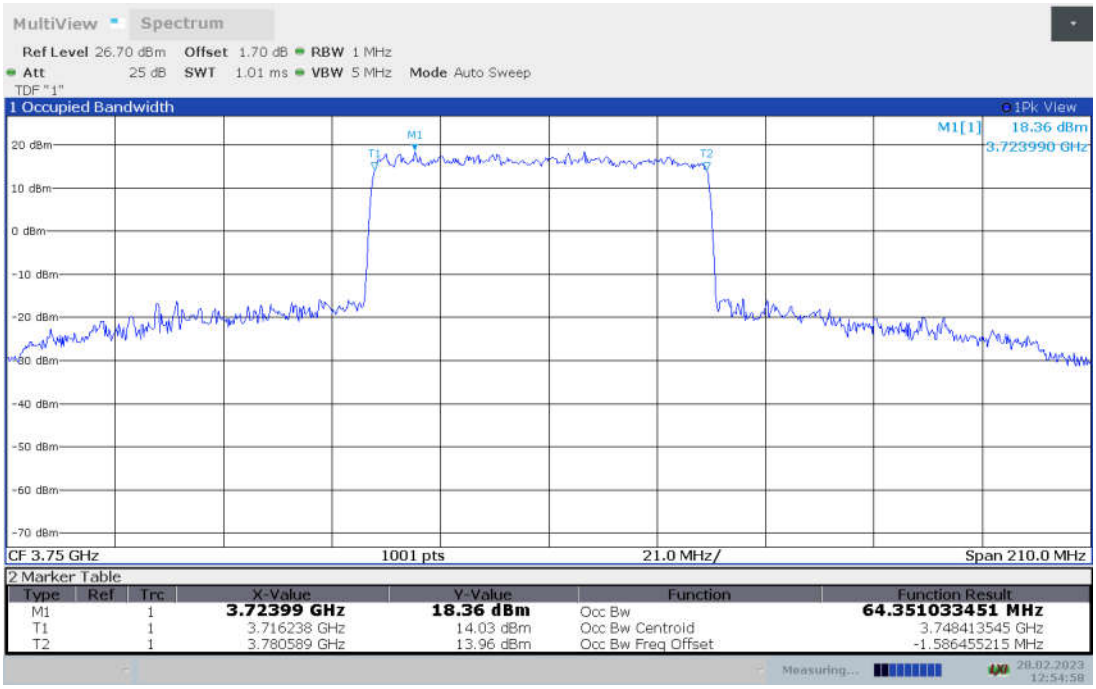
n78H,70MHz Bandwidth,DFT-s-QPSK (99% BW)



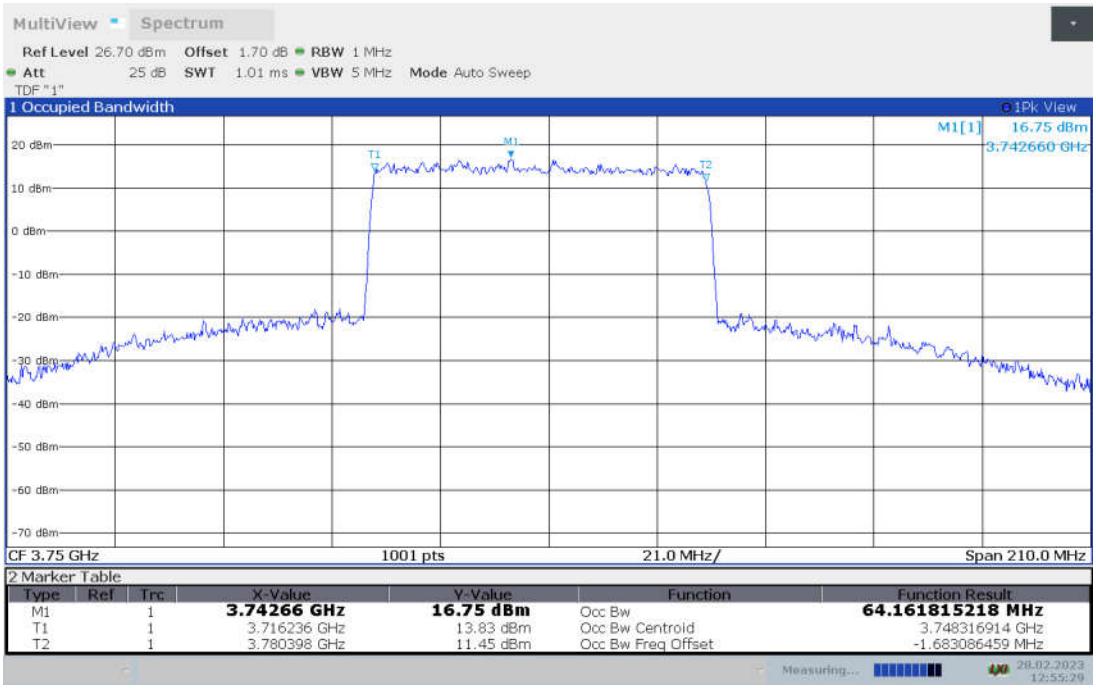
n78H,70MHz Bandwidth, DFT-s-16QAM (99% BW)



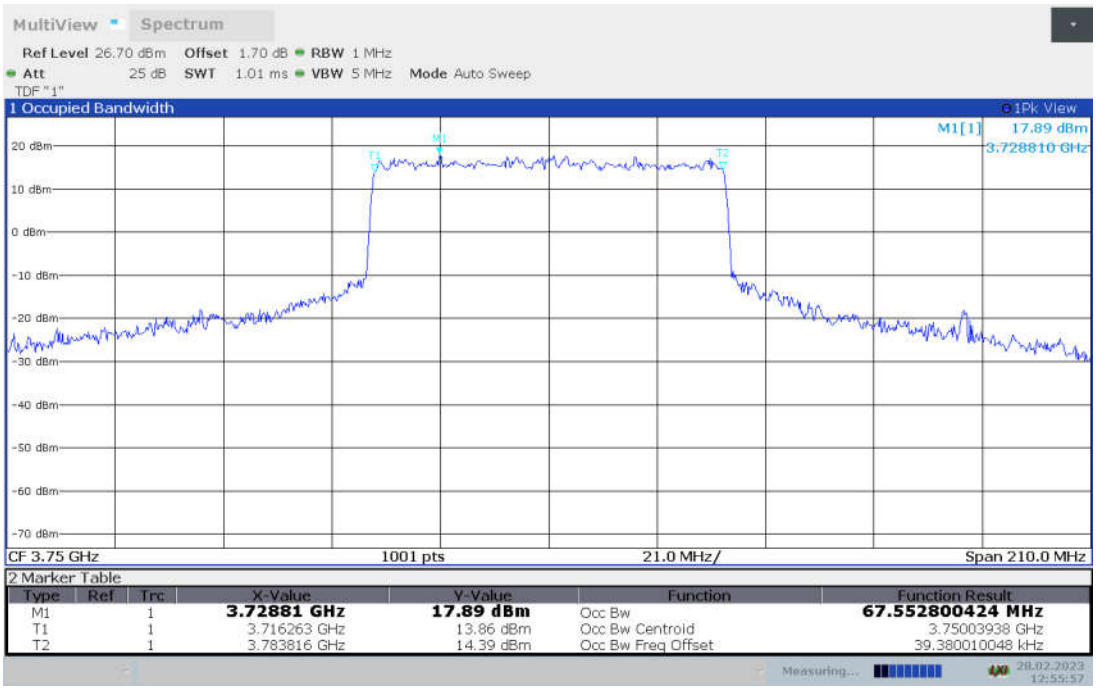
n78H,70MHz Bandwidth, DFT-s-64QAM (99% BW)



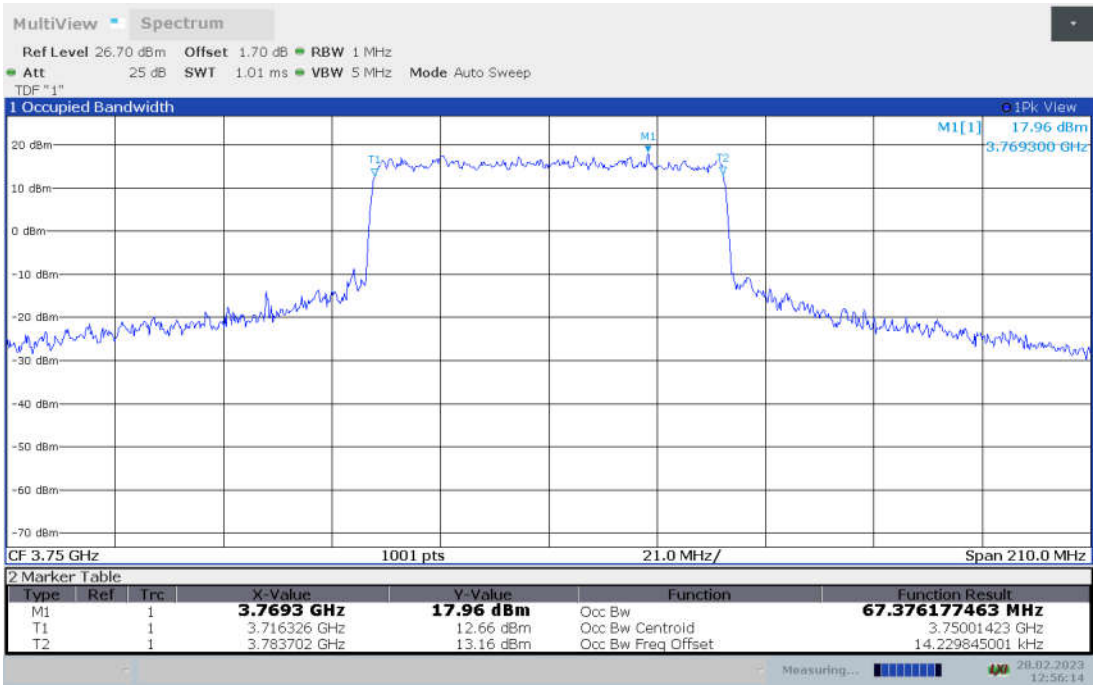
n78H,70MHz Bandwidth, DFT-s-256QAM (99% BW)



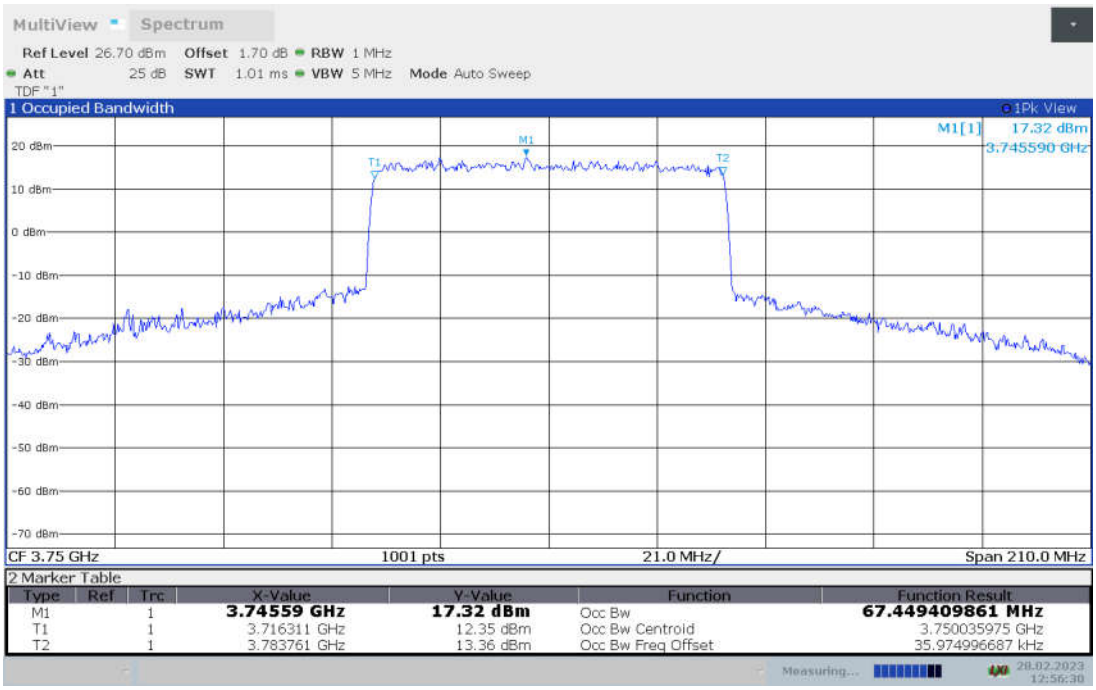
n78H,70MHz Bandwidth, CP-QPSK (99% BW)



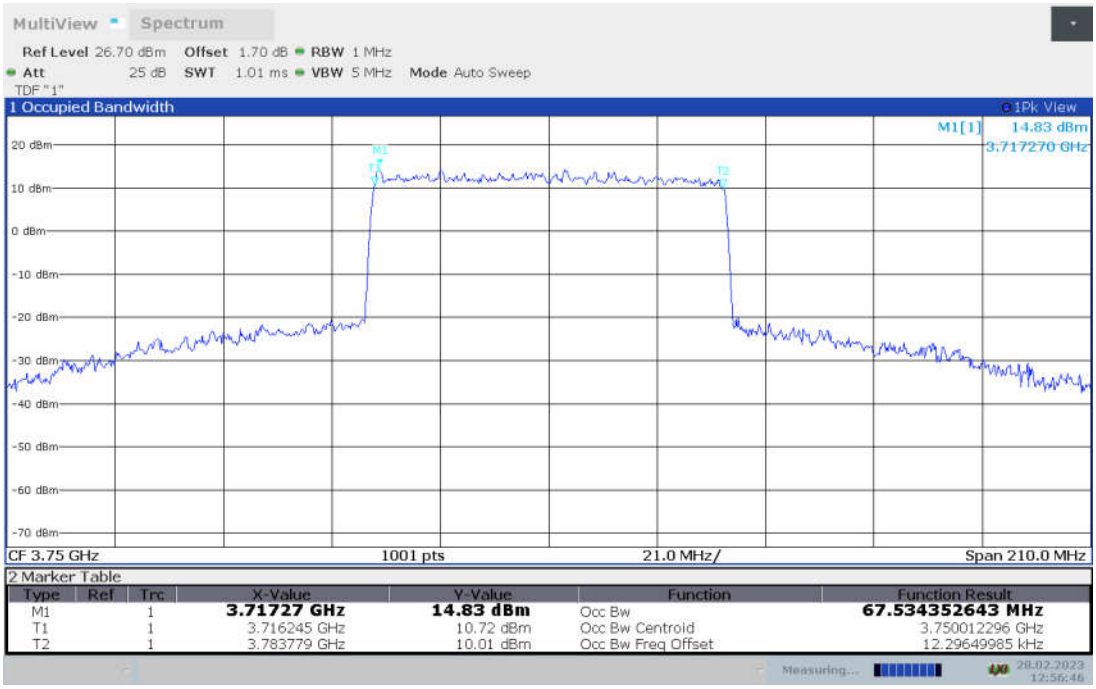
n78H,70MHz Bandwidth, CP-16QAM (99% BW)



n78H,70MHz Bandwidth, CP-64QAM (99% BW)



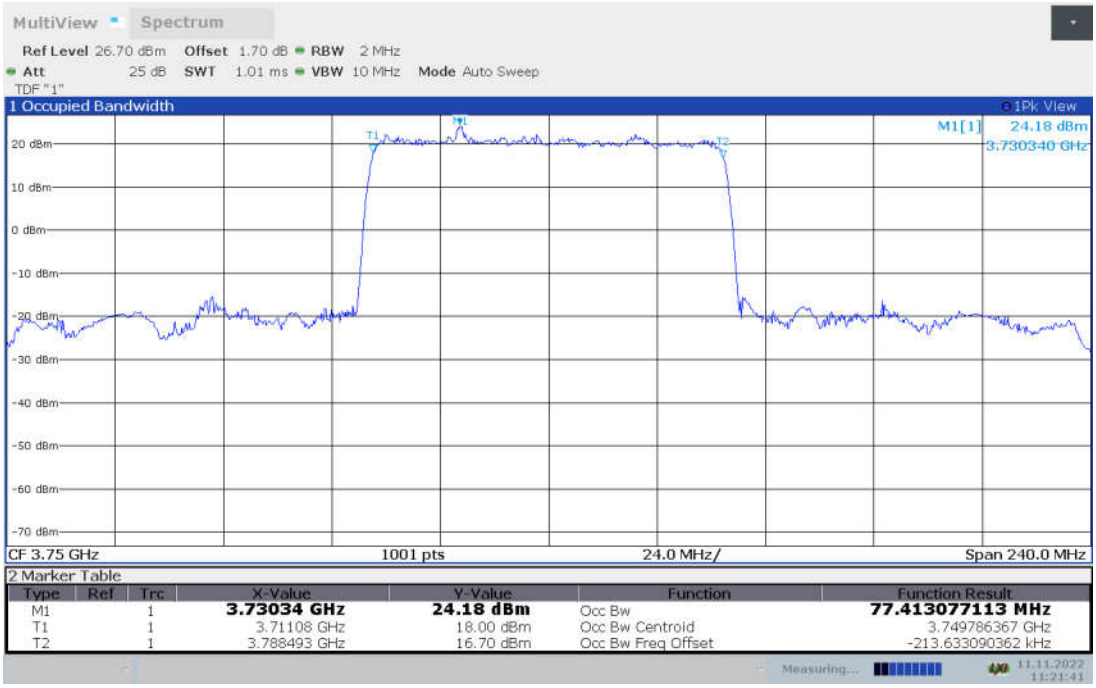
n78H,70MHz Bandwidth, CP-256QAM (99% BW)



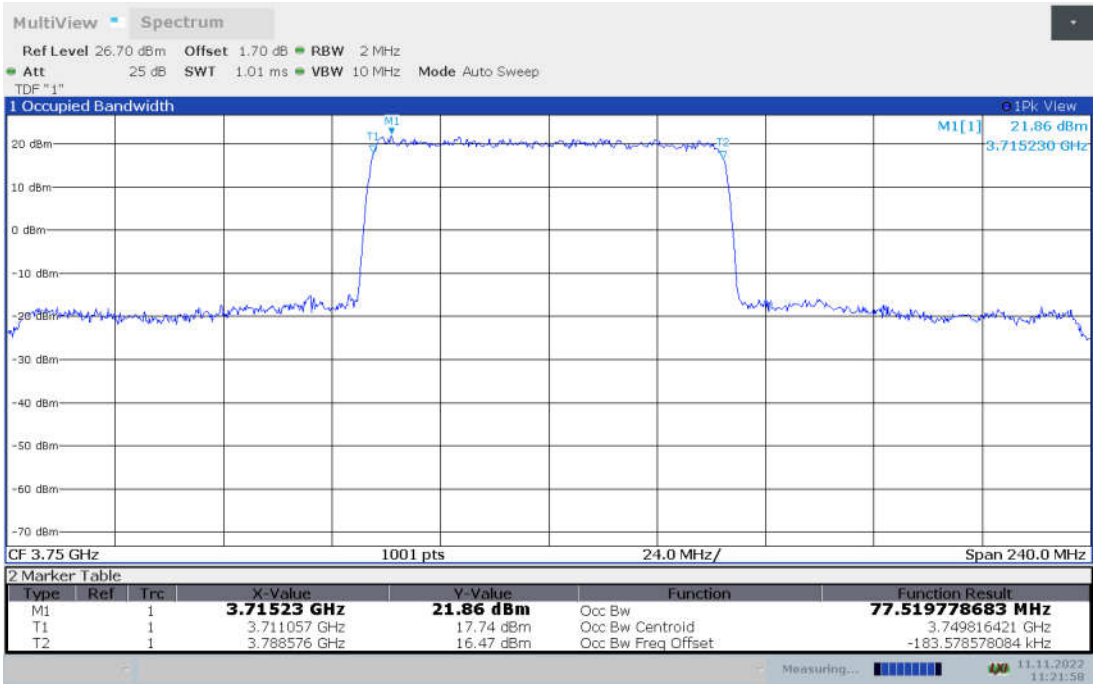
n78H,80MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3750	77.413	77.520	77.637	77.656	77.341	77.918	77.782	77.887	77.892

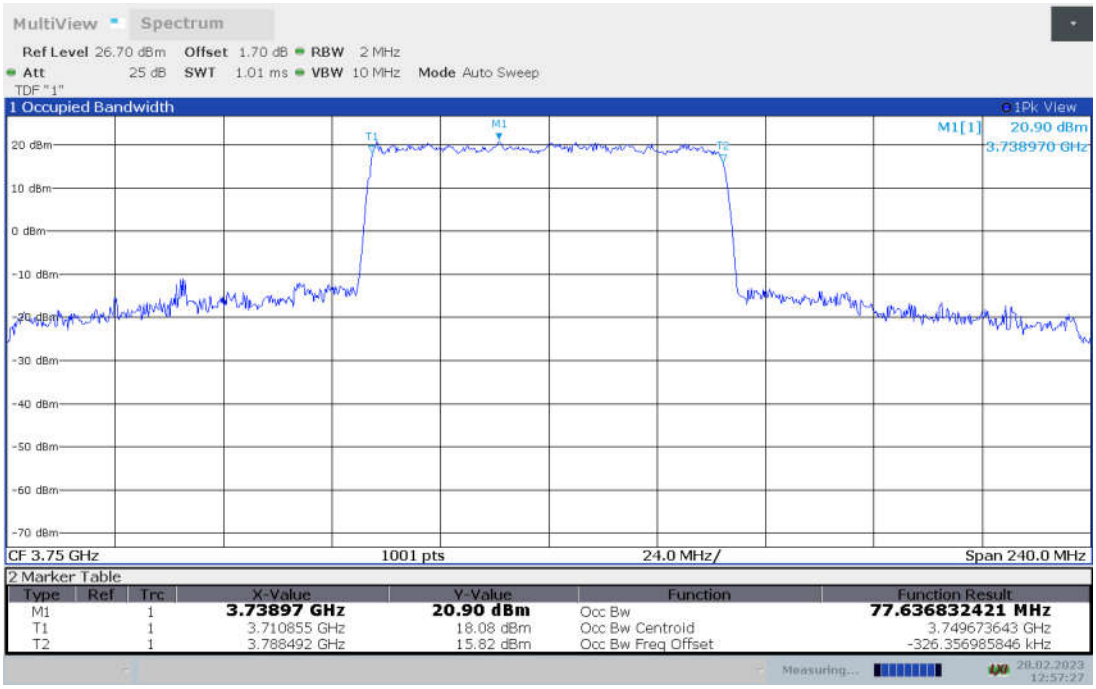
n78H,80MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



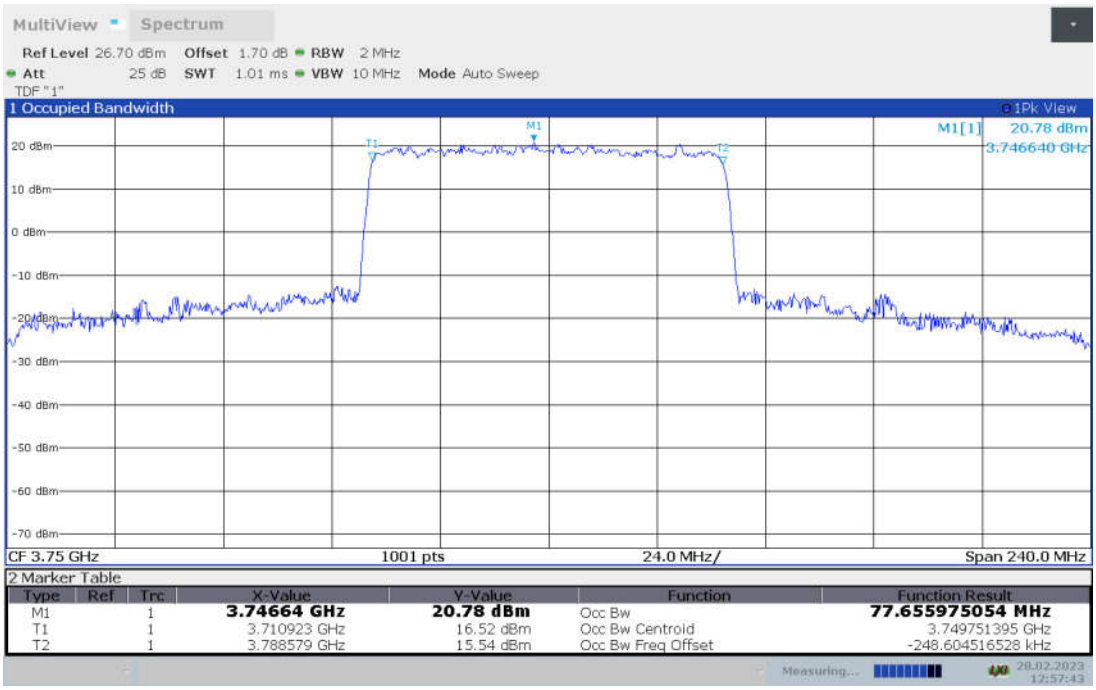
n78H,80MHz Bandwidth,DFT-s-QPSK (99% BW)



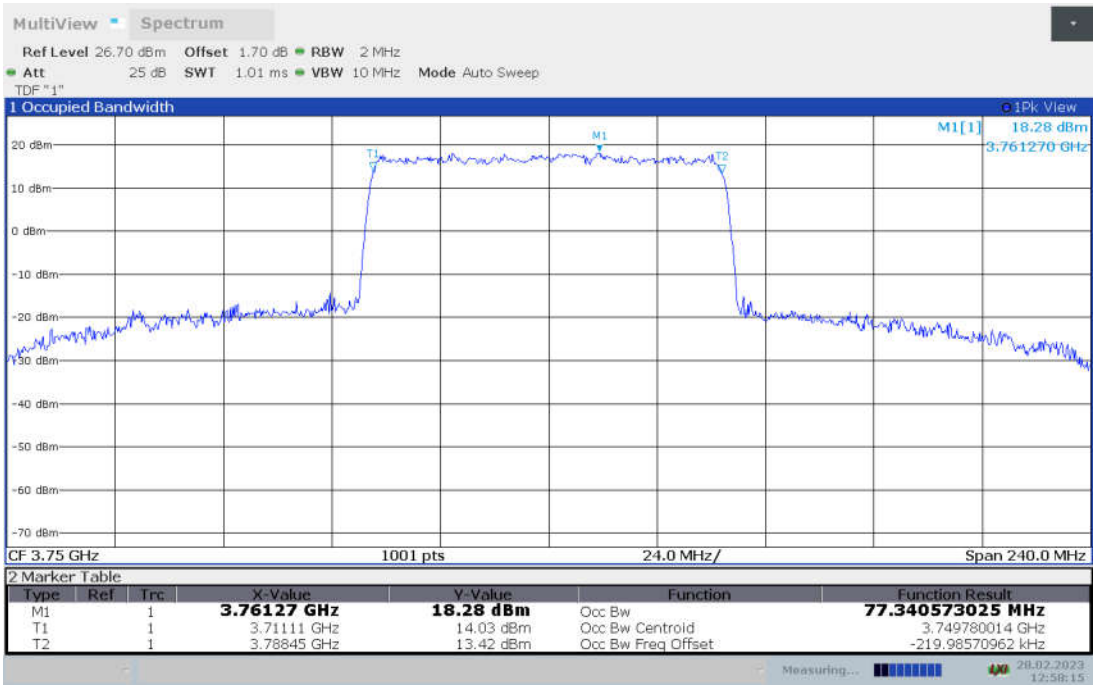
n78H,80MHz Bandwidth, DFT-s-16QAM (99% BW)



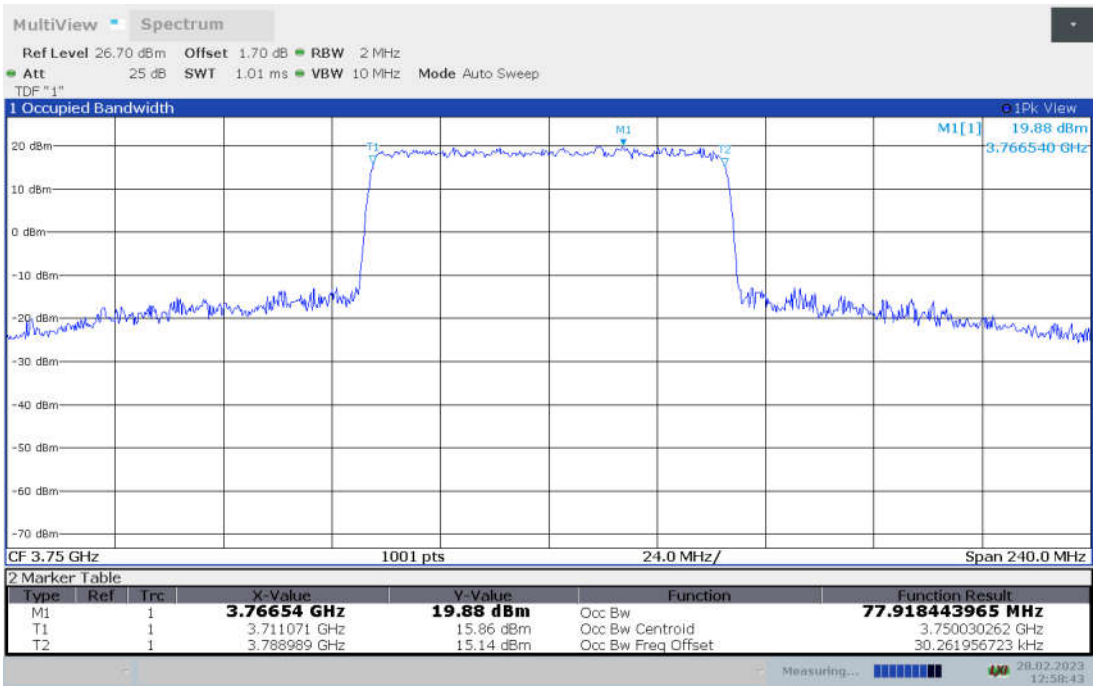
n78H,80MHz Bandwidth, DFT-s-64QAM (99% BW)



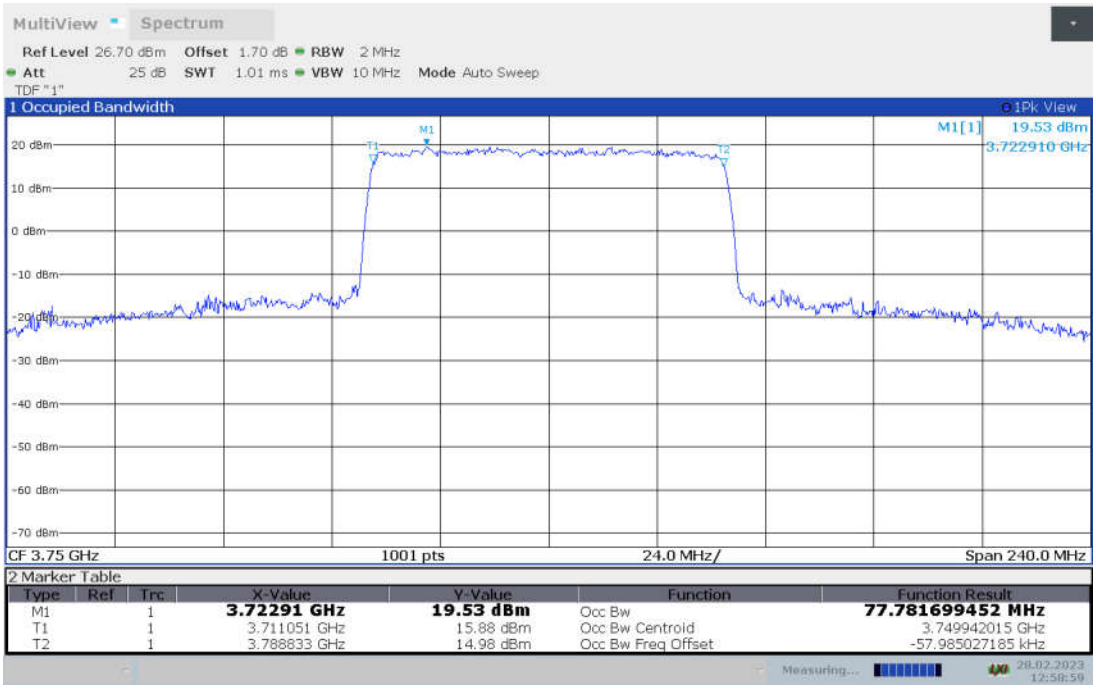
n78H,80MHz Bandwidth, DFT-s-256QAM (99% BW)



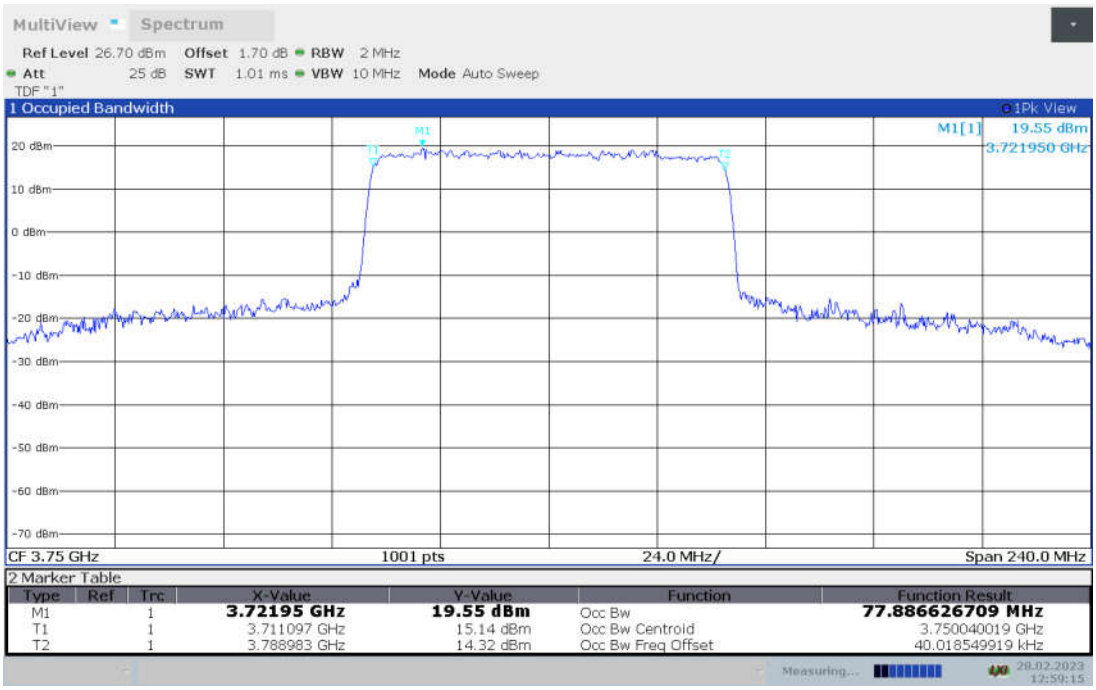
n78H,80MHz Bandwidth, CP-QPSK (99% BW)



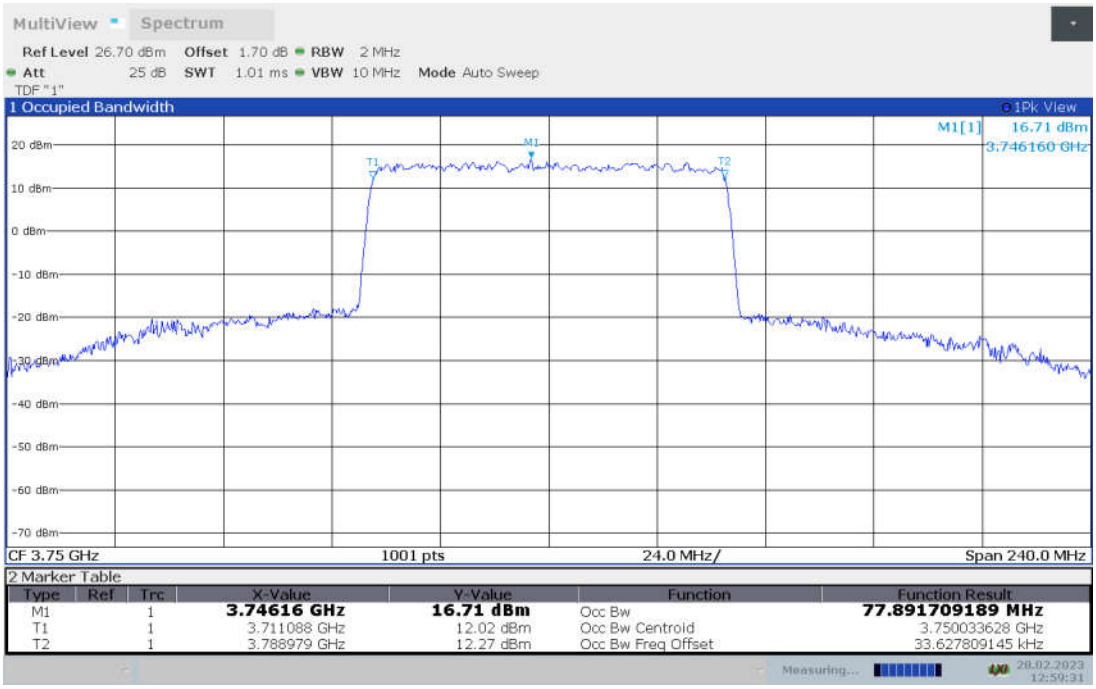
n78H,80MHz Bandwidth, CP-16QAM (99% BW)



n78H,80MHz Bandwidth, CP-64QAM (99% BW)



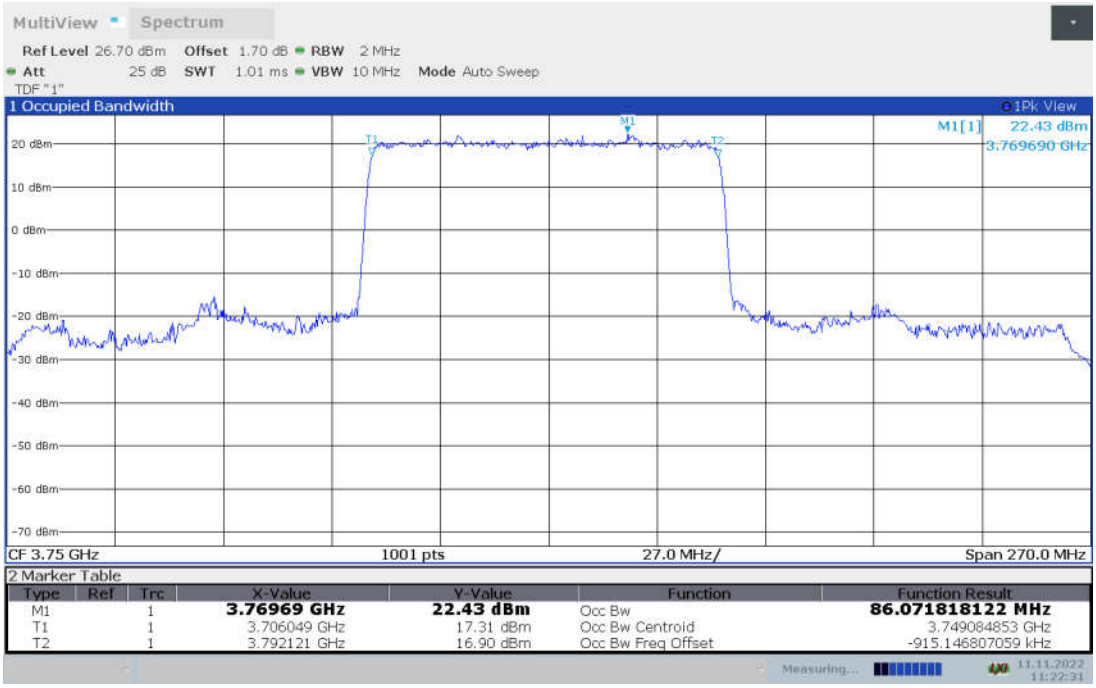
n78H,80MHz Bandwidth, CP-256QAM (99% BW)



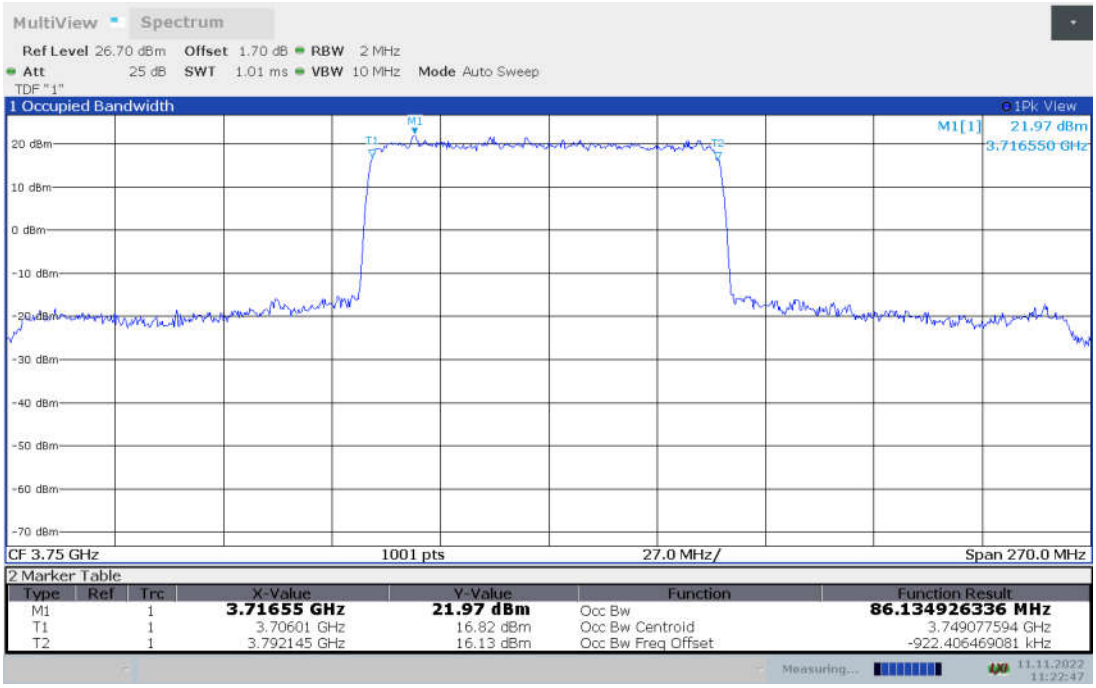
n78H,90MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3750	86.072	86.135	86.078	85.987	85.907	87.771	87.813	87.799	87.550

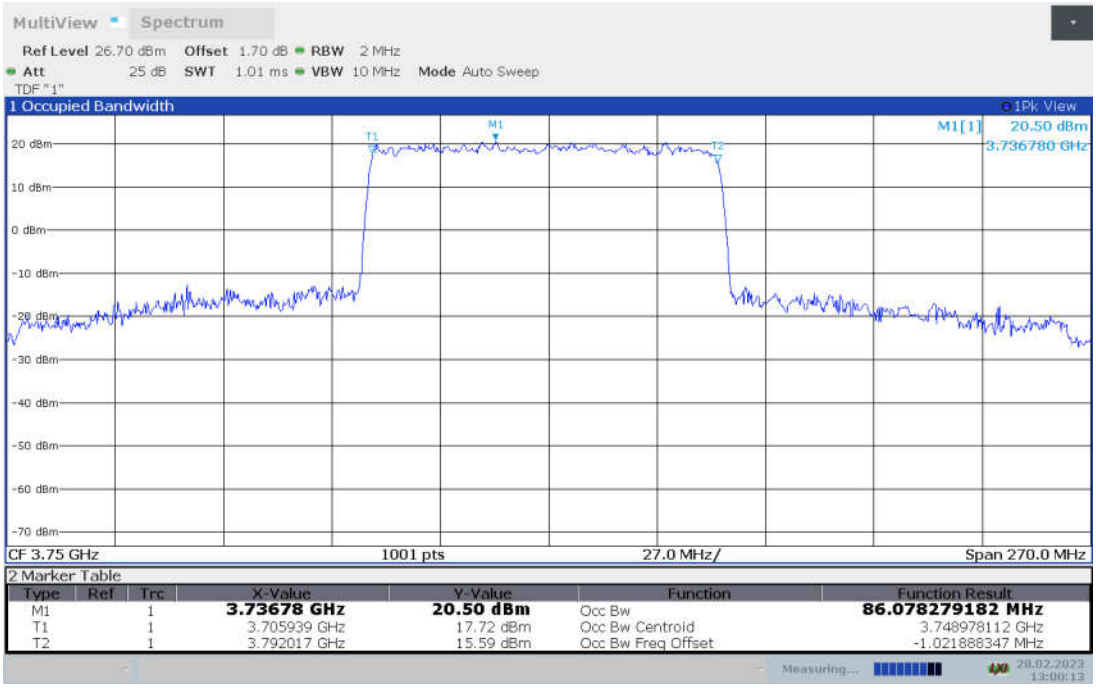
n78H,90MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



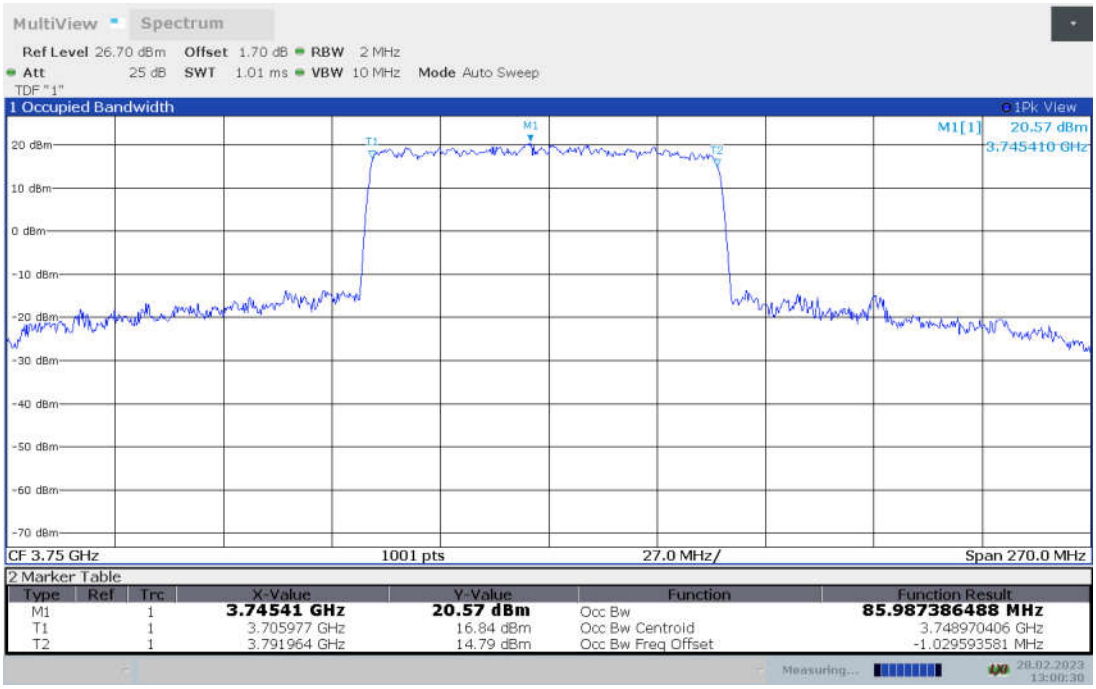
n78H,90MHz Bandwidth,DFT-s-QPSK (99% BW)



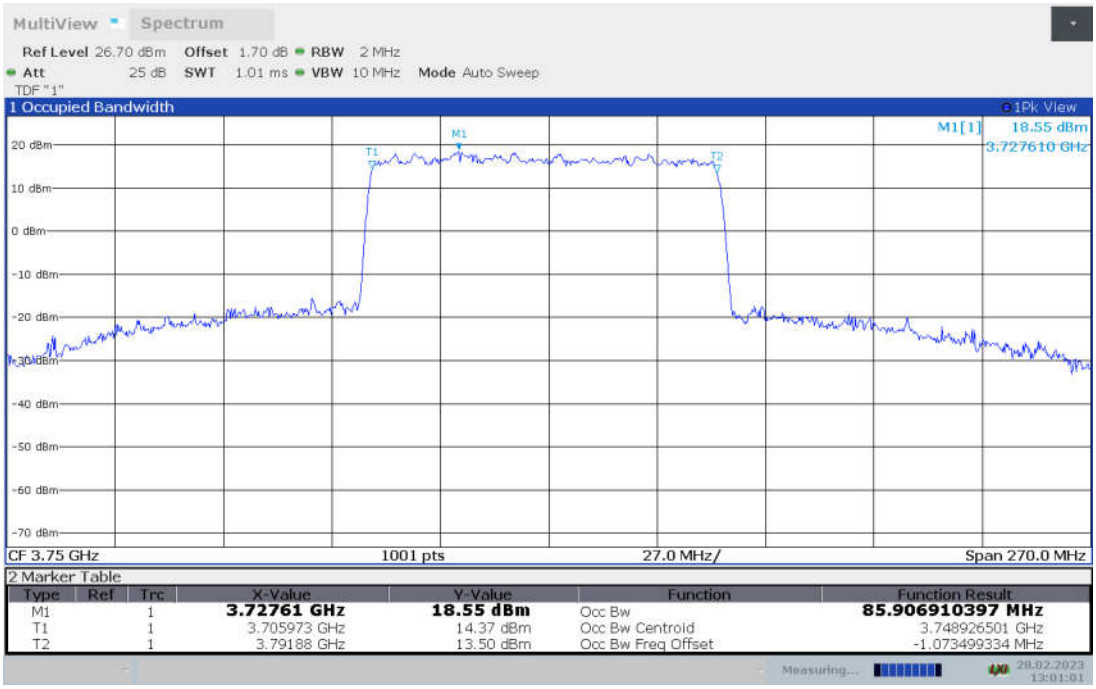
n78H,90MHz Bandwidth, DFT-s-16QAM (99% BW)



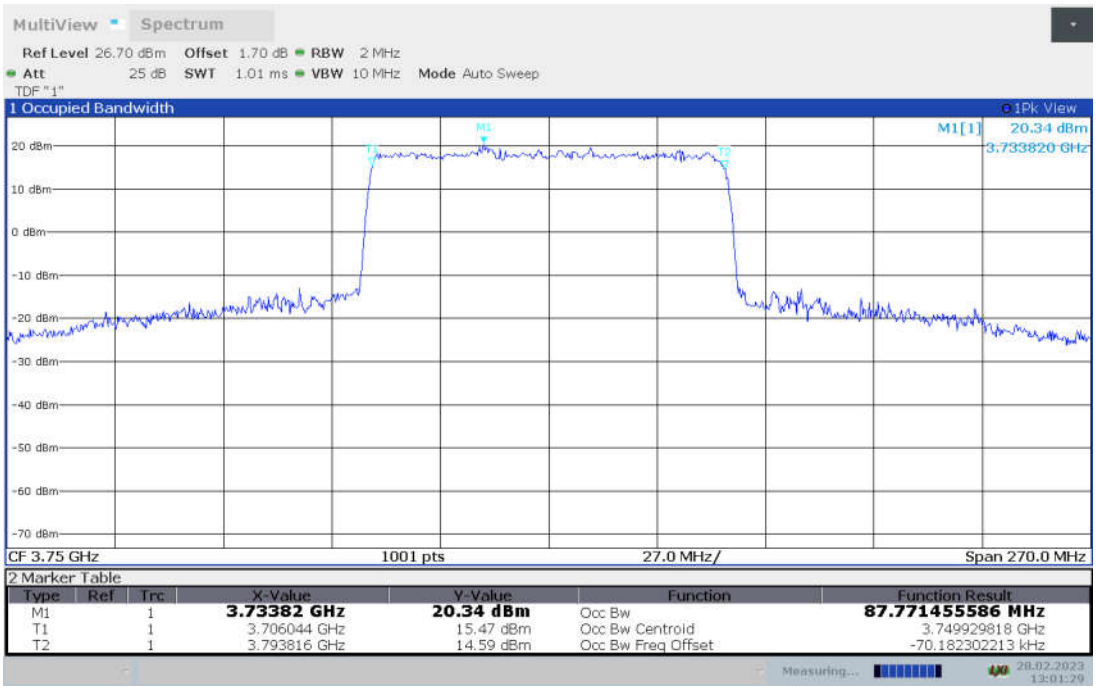
n78H,90MHz Bandwidth, DFT-s-64QAM (99% BW)



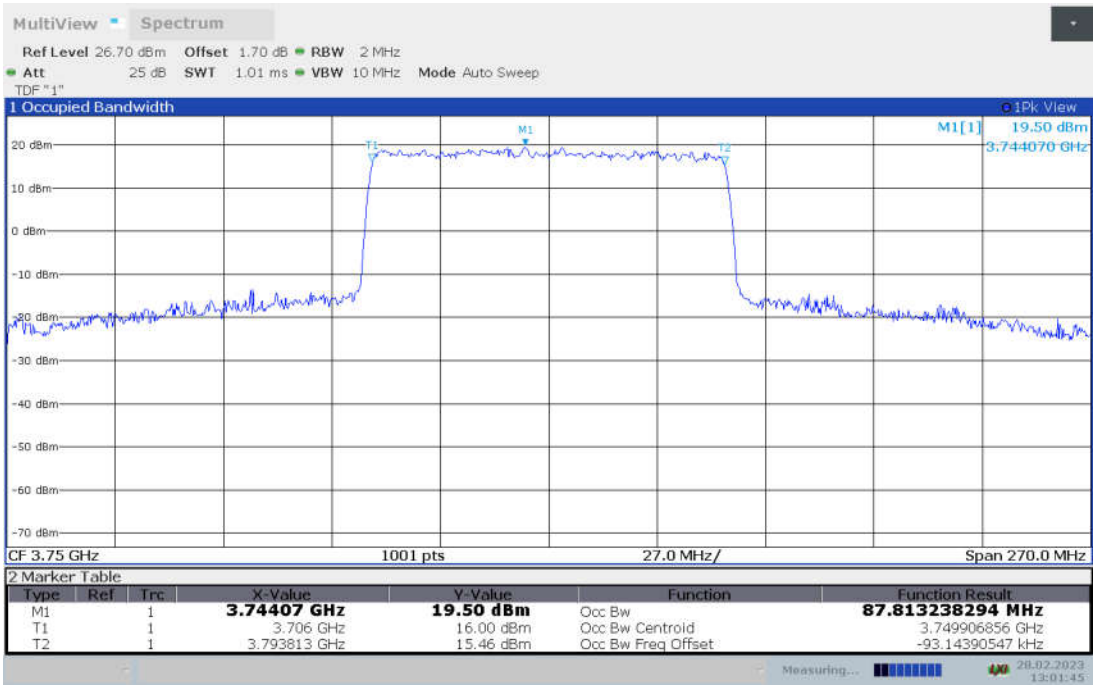
n78H,90MHz Bandwidth, DFT-s-256QAM (99% BW)



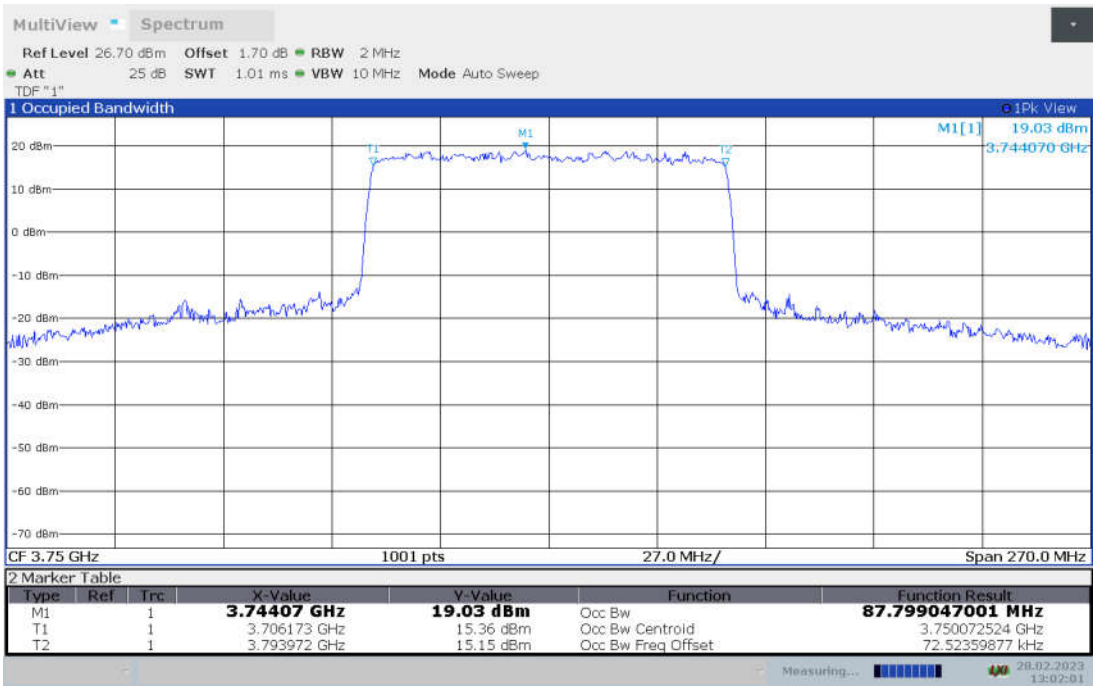
n78H,90MHz Bandwidth, CP-QPSK (99% BW)



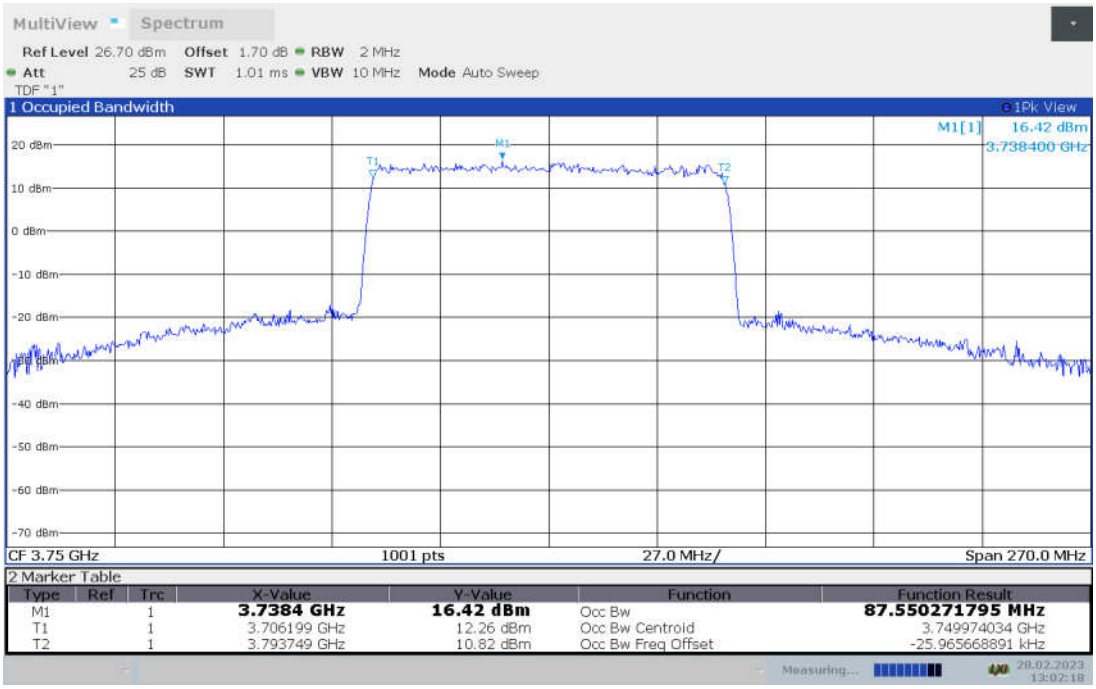
n78H,90MHz Bandwidth, CP-16QAM (99% BW)



n78H,90MHz Bandwidth, CP-64QAM (99% BW)



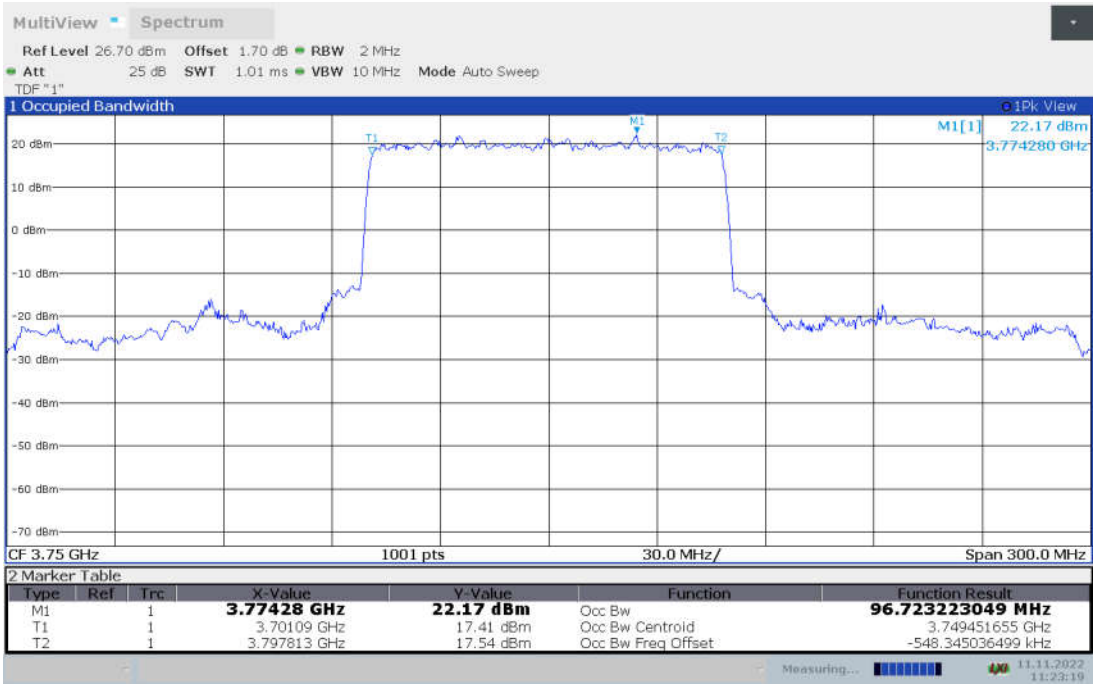
n78H,90MHz Bandwidth, CP-256QAM (99% BW)



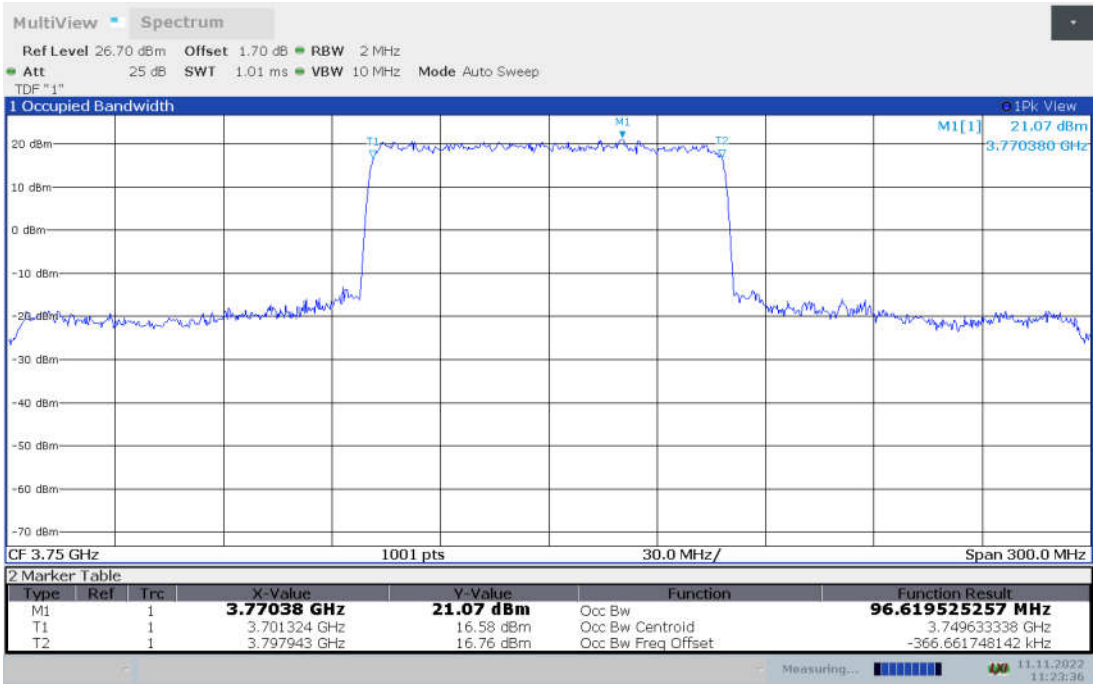
n78H,100MHz(99% BW)

Frequency (MHz)	Occupied Bandwidth (99% BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3750	96.723	96.620	96.677	96.807	96.598	97.808	97.611	97.434	97.606

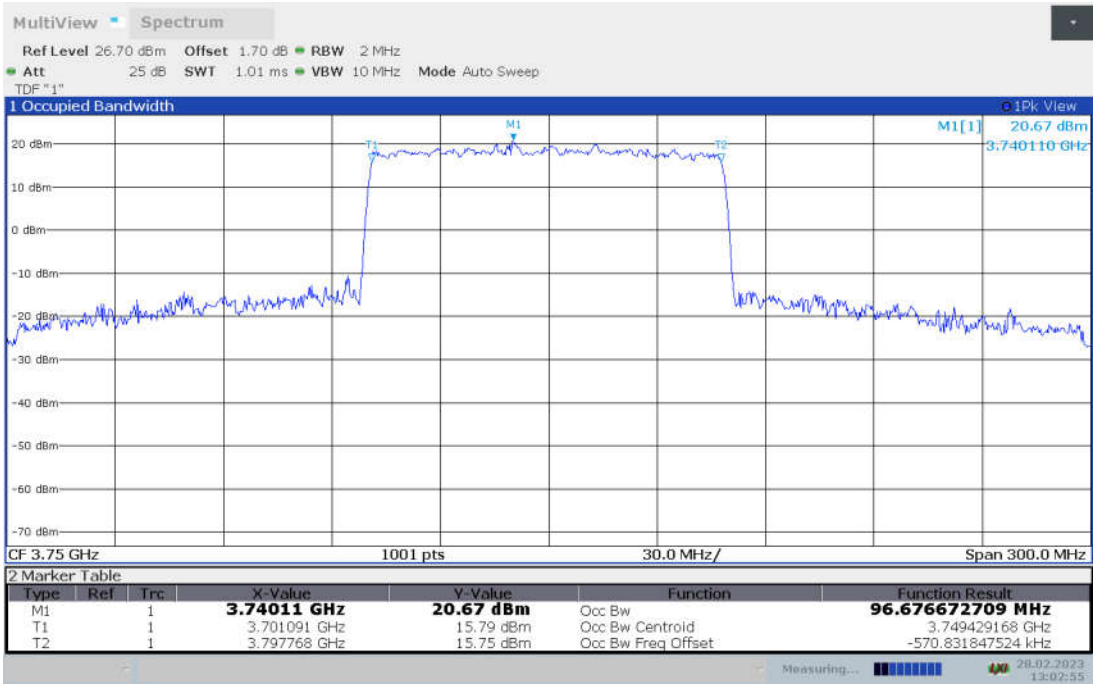
n78H,100MHz Bandwidth,DFT-s-pi/2 BPSK (99% BW)



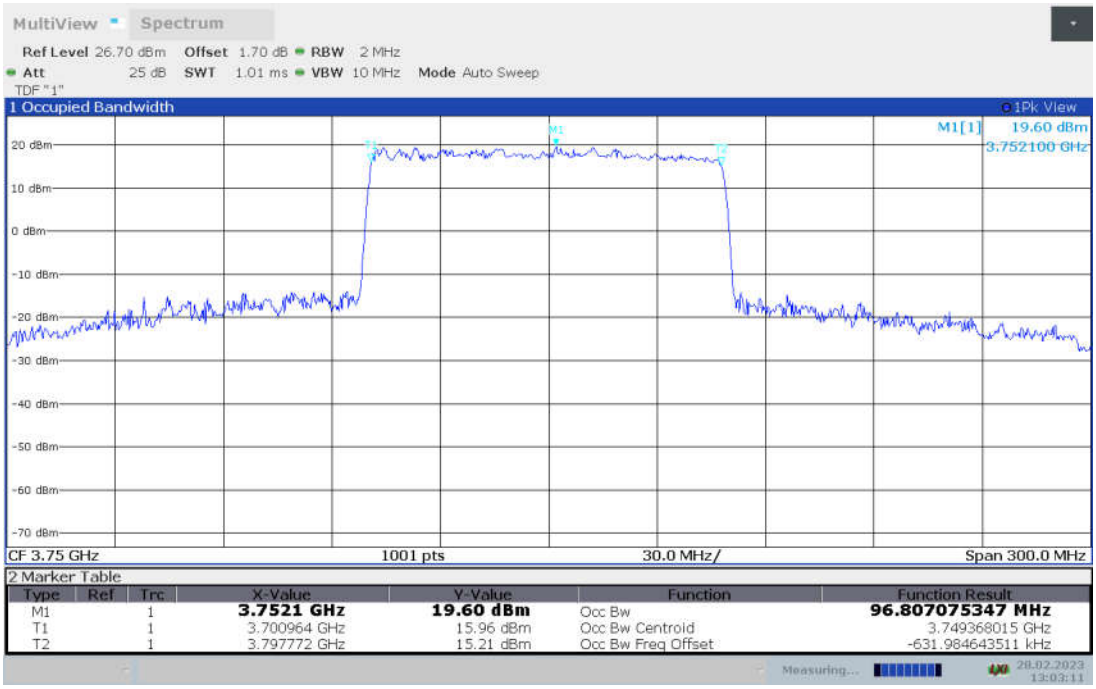
n78H,100MHz Bandwidth,DFT-s-QPSK (99% BW)



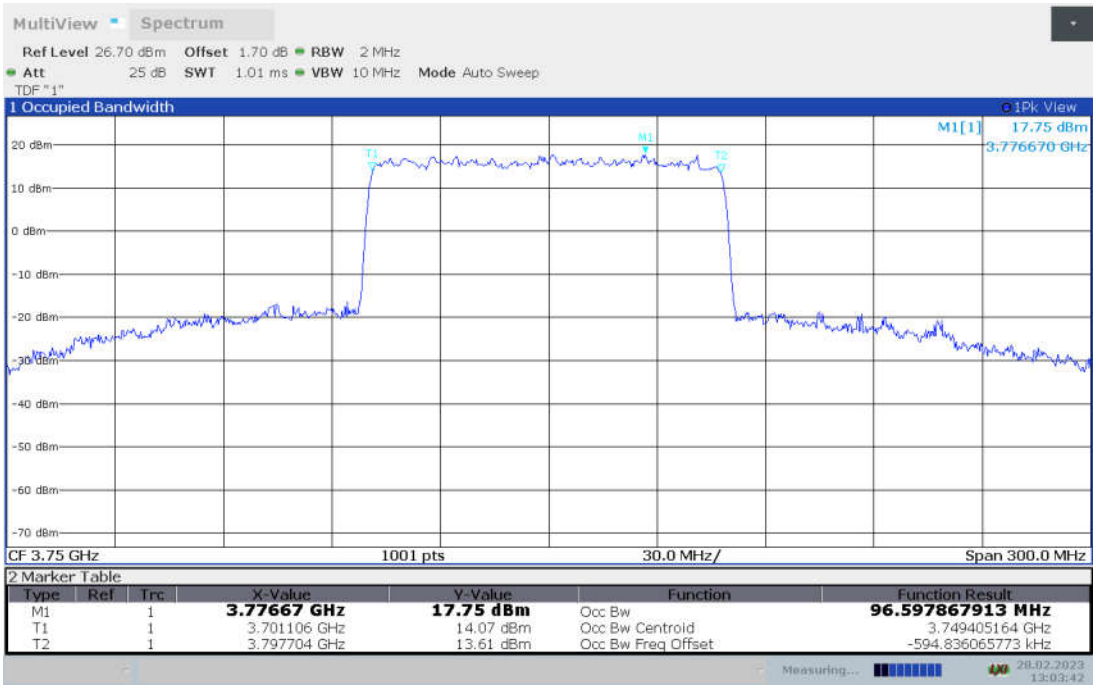
n78H,100MHz Bandwidth, DFT-s-16QAM (99% BW)



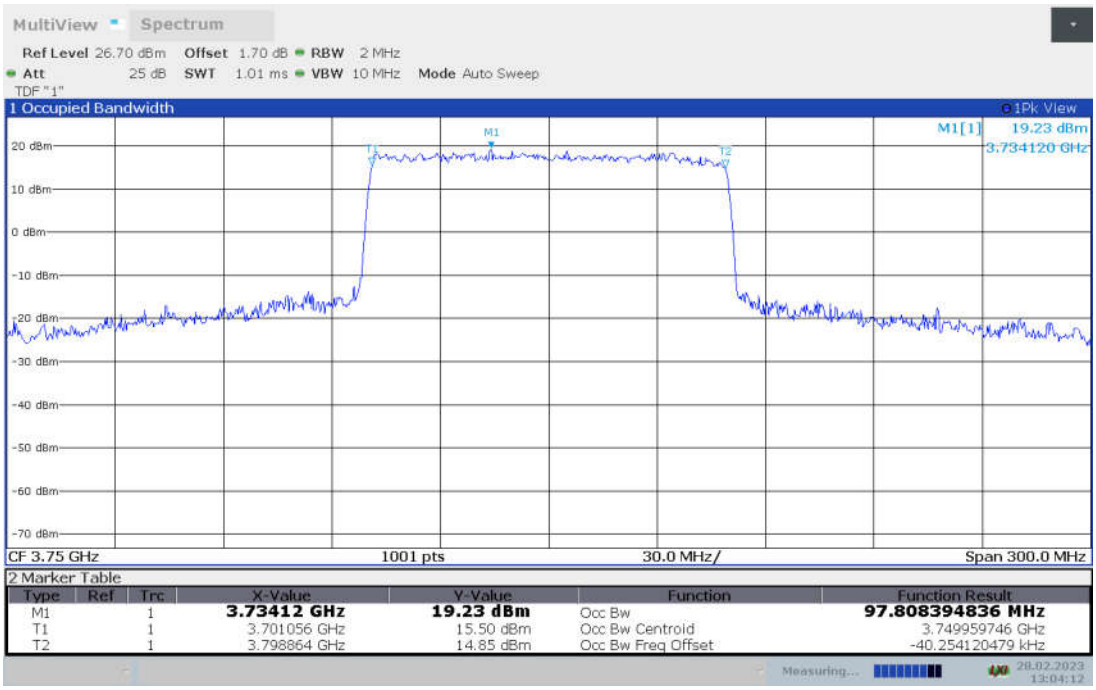
n78H,100MHz Bandwidth, DFT-s-64QAM (99% BW)



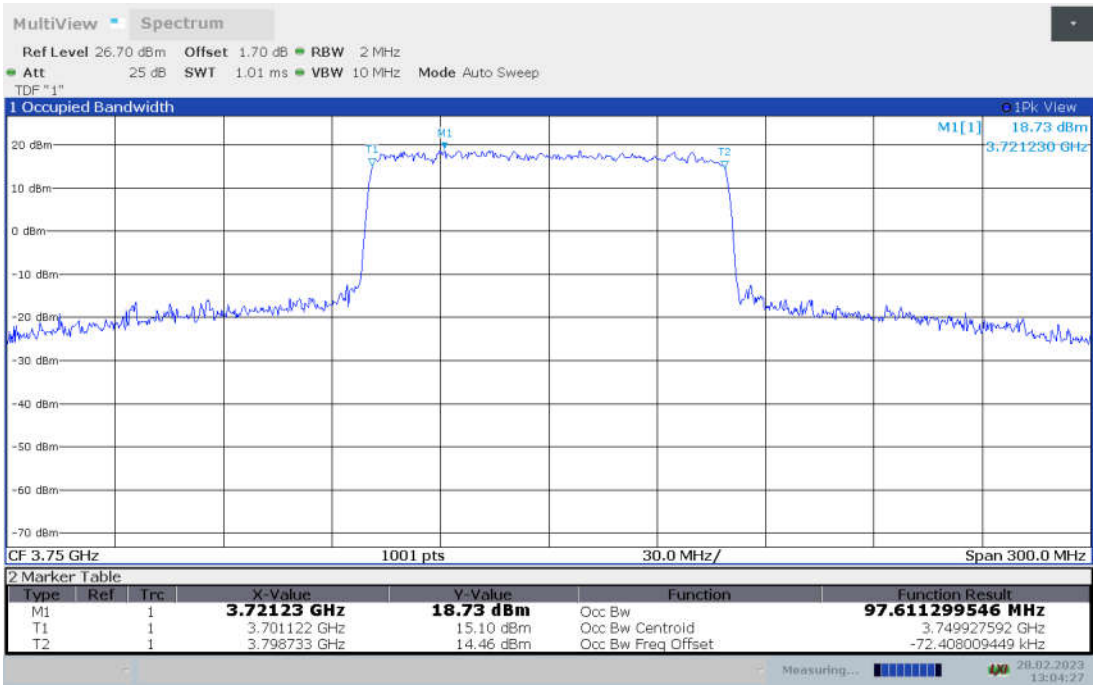
n78H,100MHz Bandwidth, DFT-s-256QAM (99% BW)



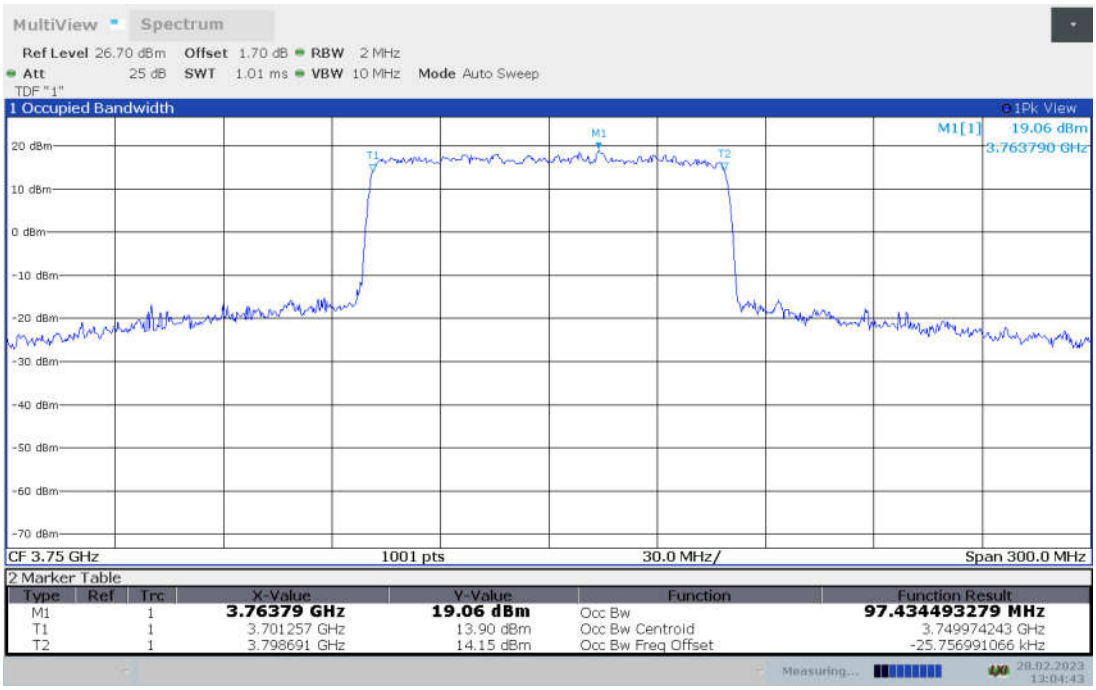
n78H,100MHz Bandwidth, CP-QPSK (99% BW)



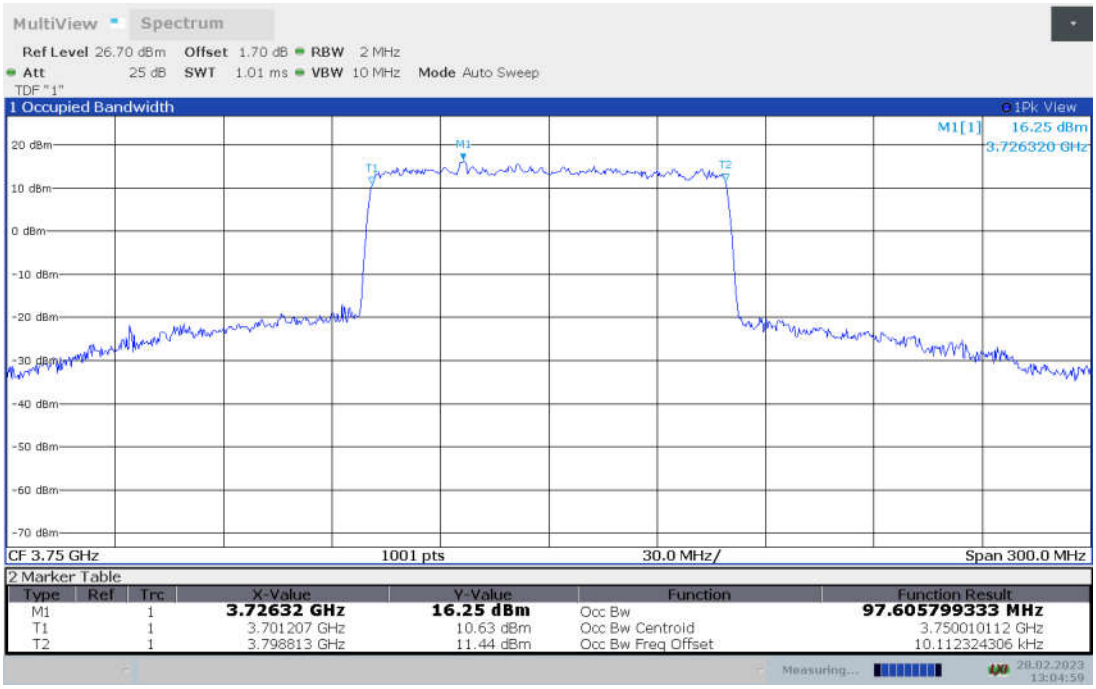
n78H,100MHz Bandwidth, CP-16QAM (99% BW)



n78H,100MHz Bandwidth, CP-64QAM (99% BW)



n78H,100MHz Bandwidth, CP-256QAM (99% BW)



A.5 EMISSION BANDWIDTH

Reference

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

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 10log (OBW / 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.5.2Emission Bandwidth Results

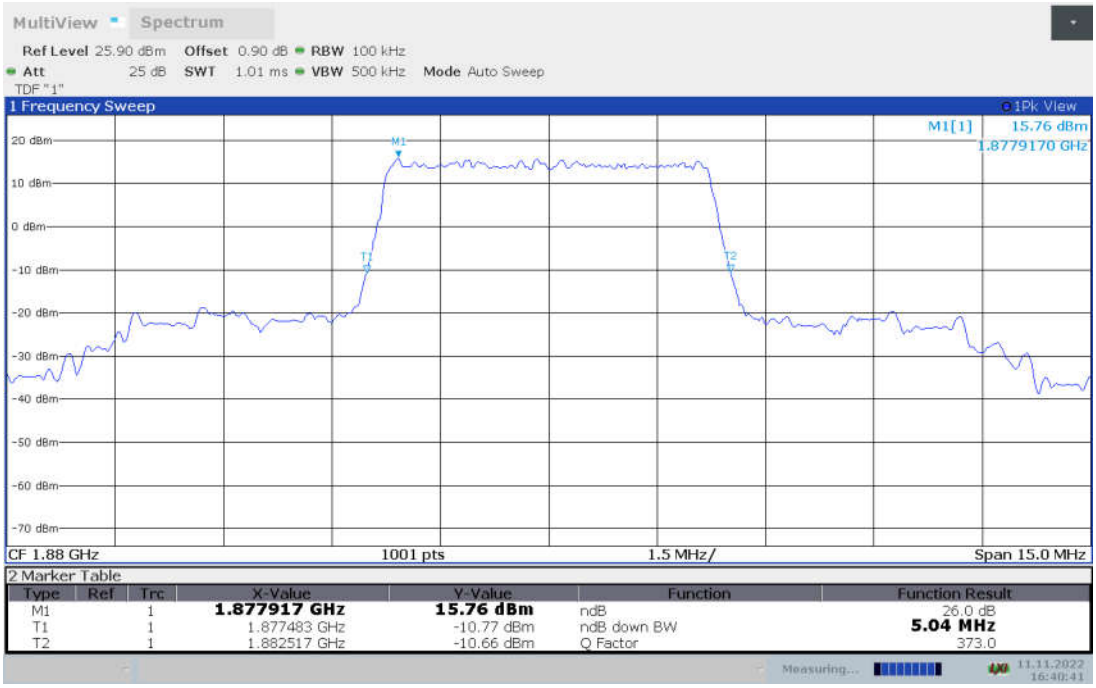
Similar to conducted emissions; Emission bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies. Table below lists the measured -26dBc BW. Spectrum analyzer plots are included on the following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

n2

n2,5MHz(-26dBc BW)

Frequency (MHz)	Emission Bandwidth (-26dBc BW) (MHz)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
1880	5.04	5.02	5.04	5.05	5.04	5.07	5.05	5.09	5.09

n2,5MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n2,5MHz Bandwidth,DFT-s-QPSK (-26dBc BW)