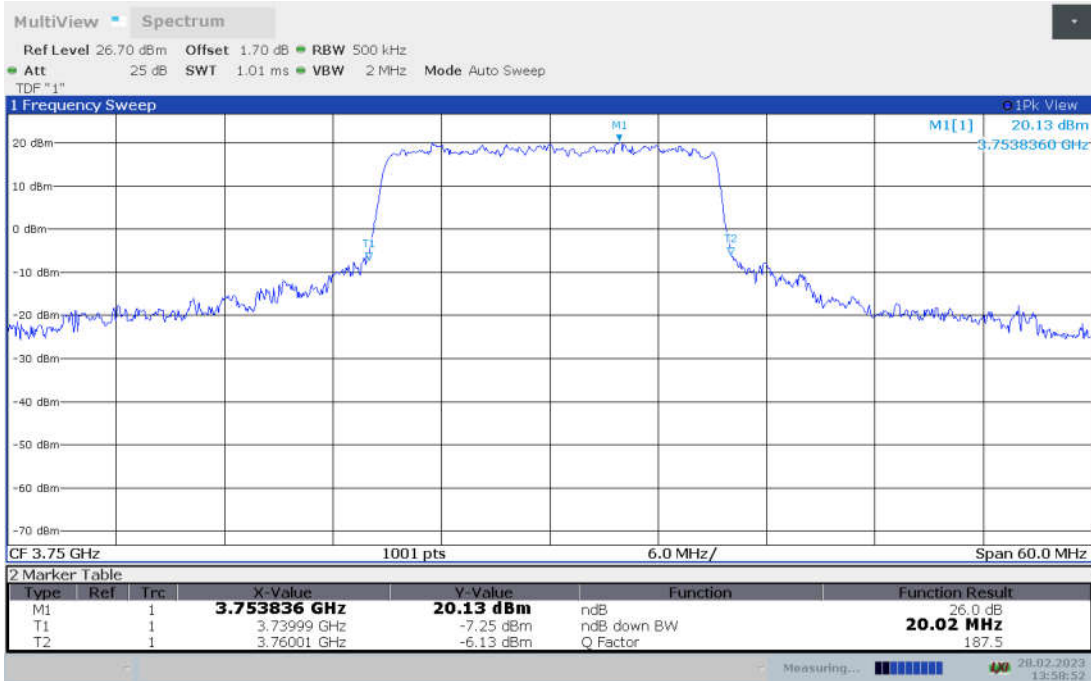
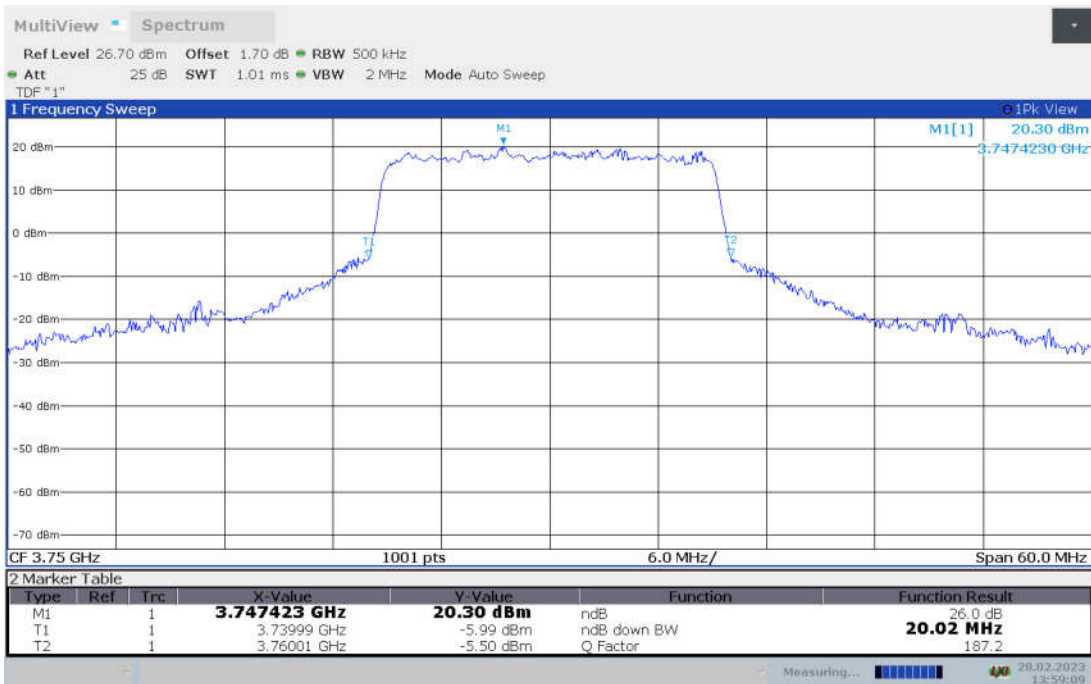


n78H,20MHz Bandwidth, CP-16QAM (-26dBc BW)

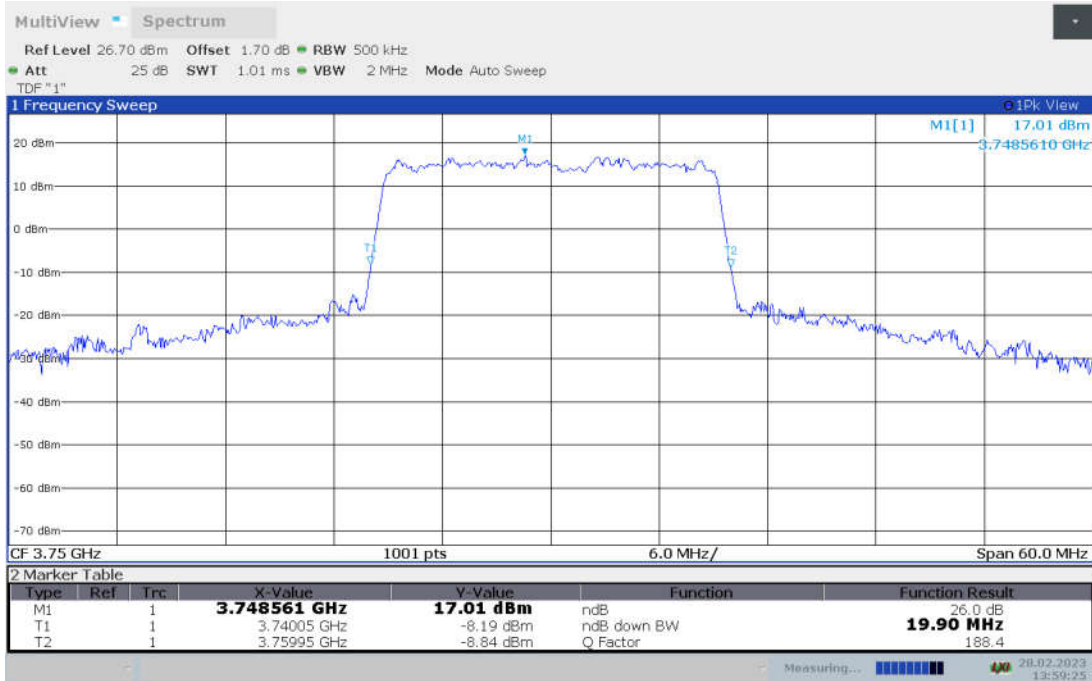


n78H,20MHz Bandwidth, CP-64QAM (-26dBc BW)





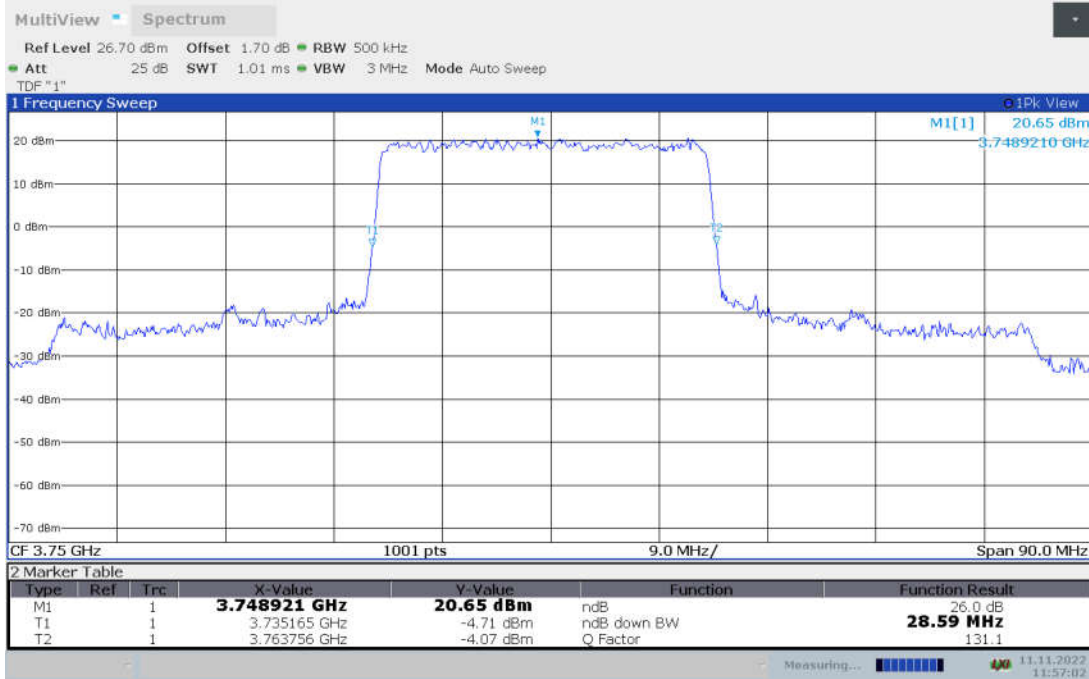
n78H,20MHz Bandwidth, CP-256QAM (-26dBc BW)



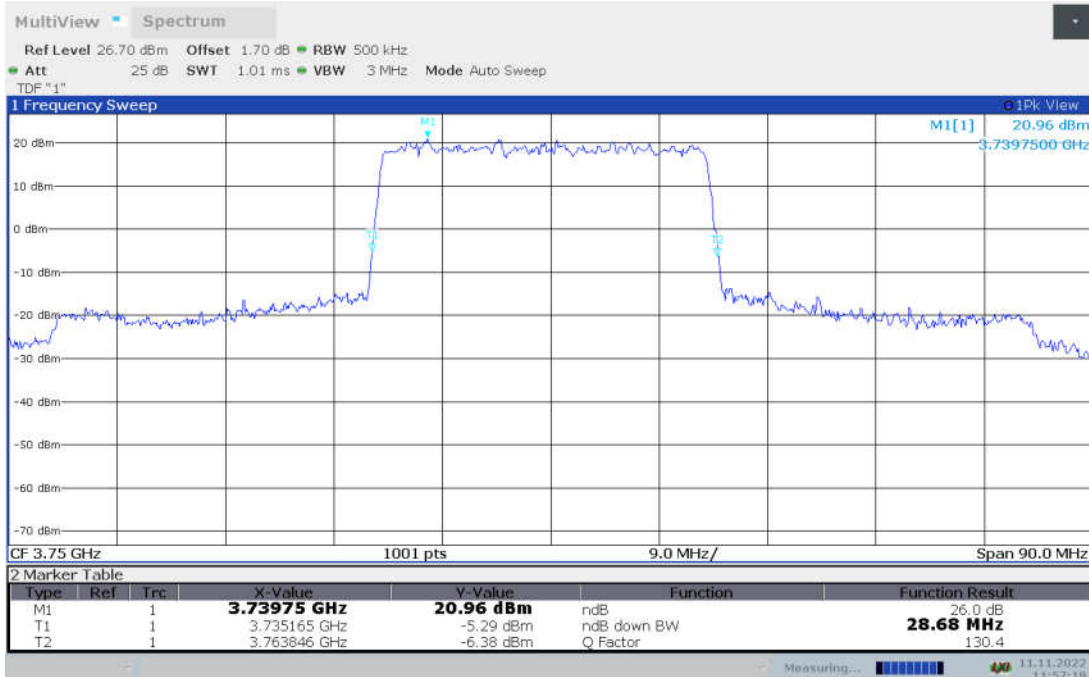
n78H,30MHz(-26dBc BW)

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
3750	28.59	28.68	28.68	28.59	28.77	29.58	29.49	29.49	29.58

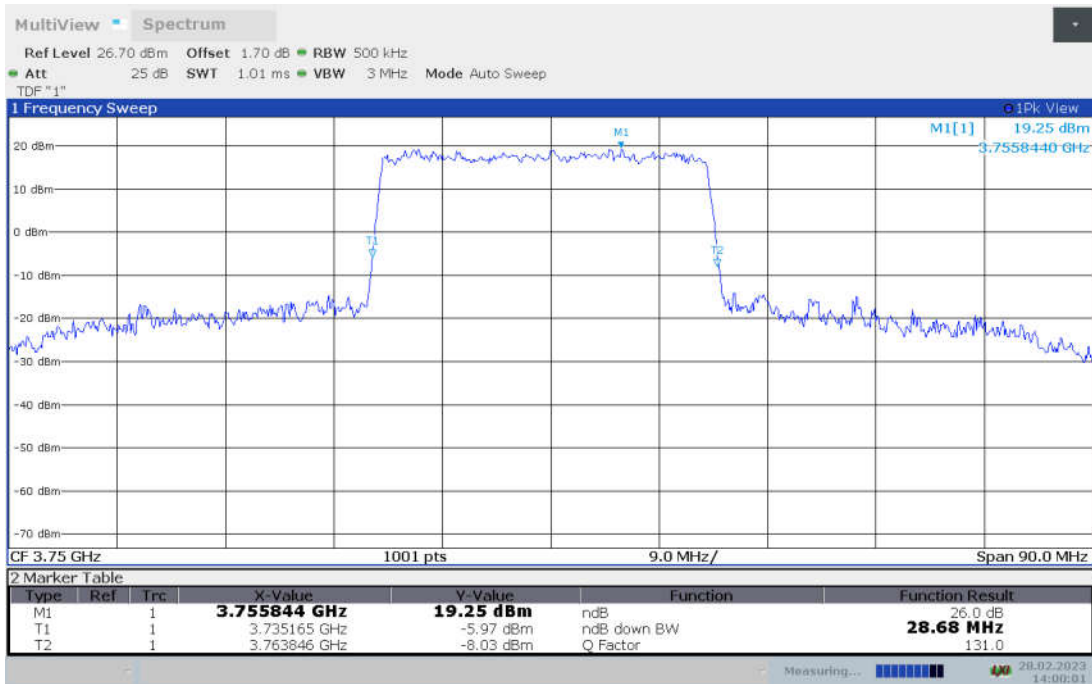
n78H,30MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



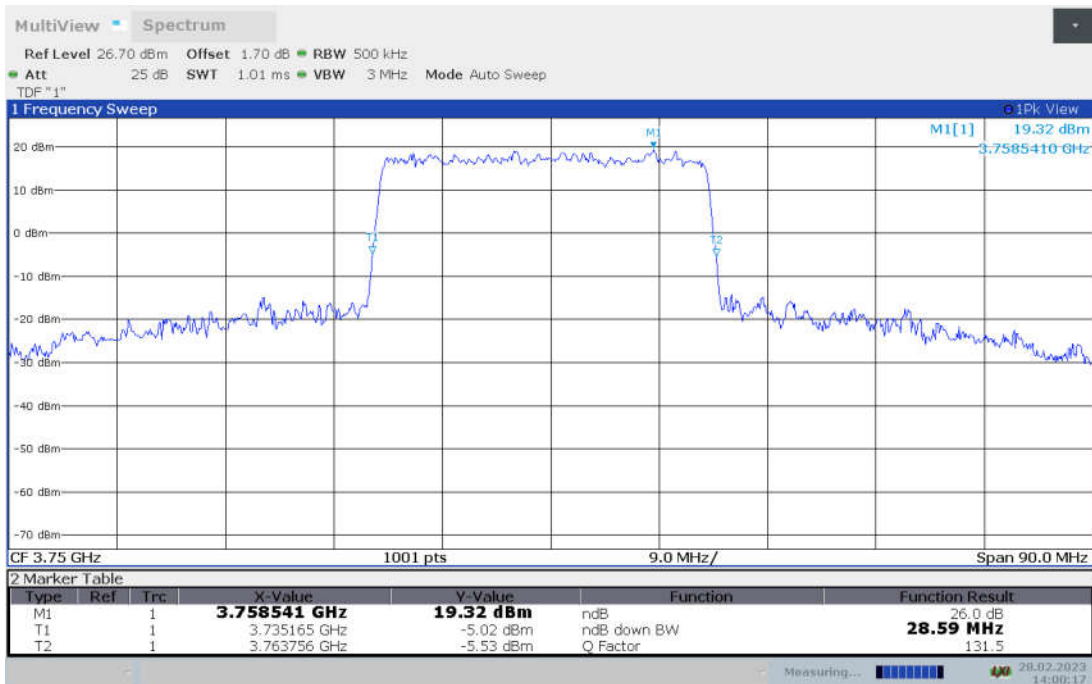
n78H,30MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



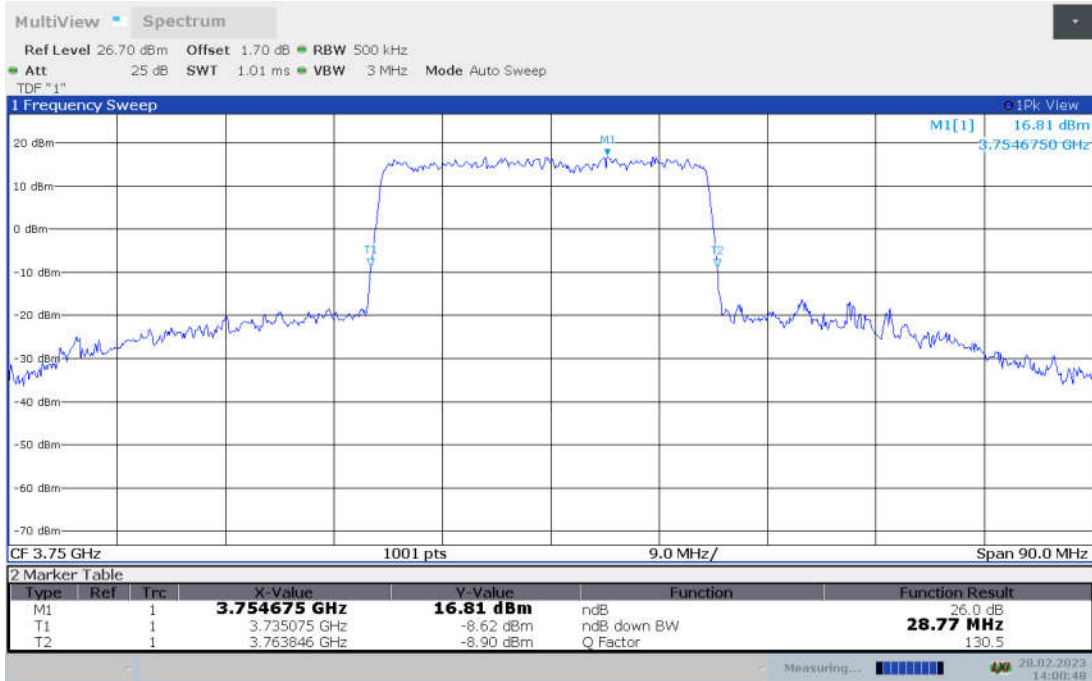
n78H,30MHz Bandwidth, DFT-s-16QAM (-26dBc BW)



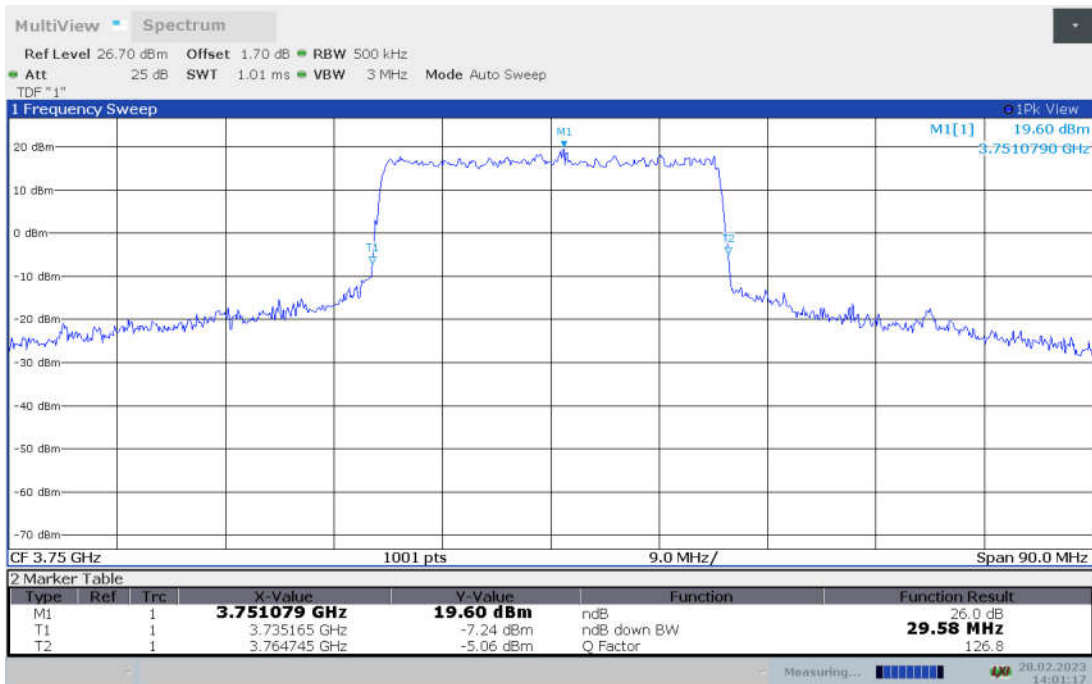
n78H,30MHz Bandwidth, DFT-s-64QAM (-26dBc BW)



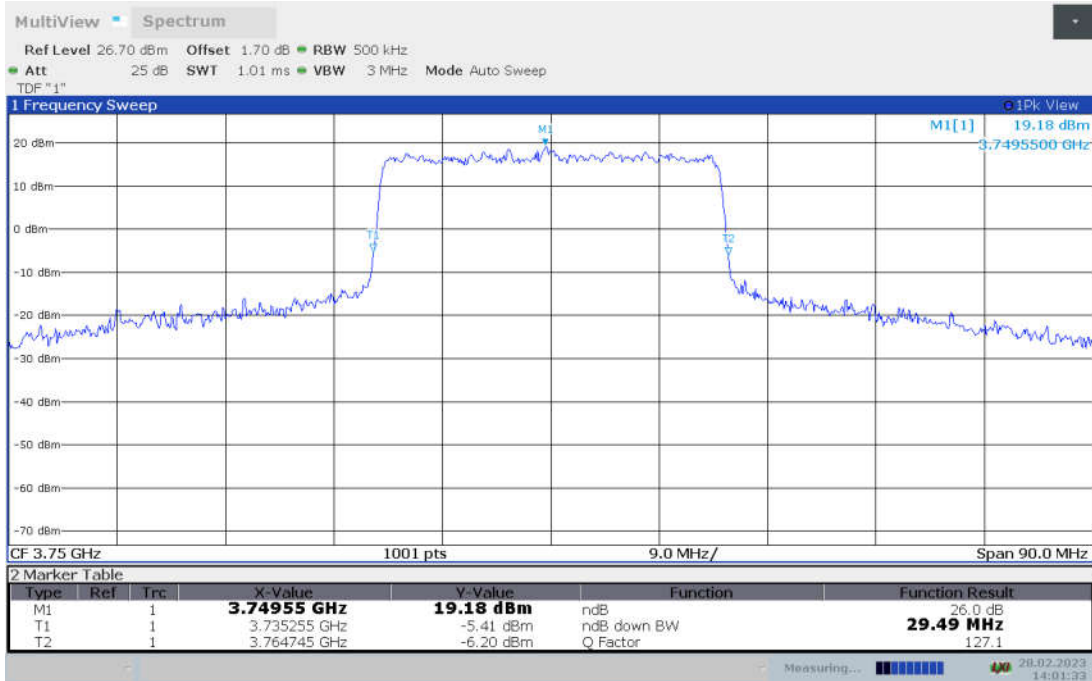
n78H,30MHz Bandwidth, DFT-s-256QAM (-26dBc BW)



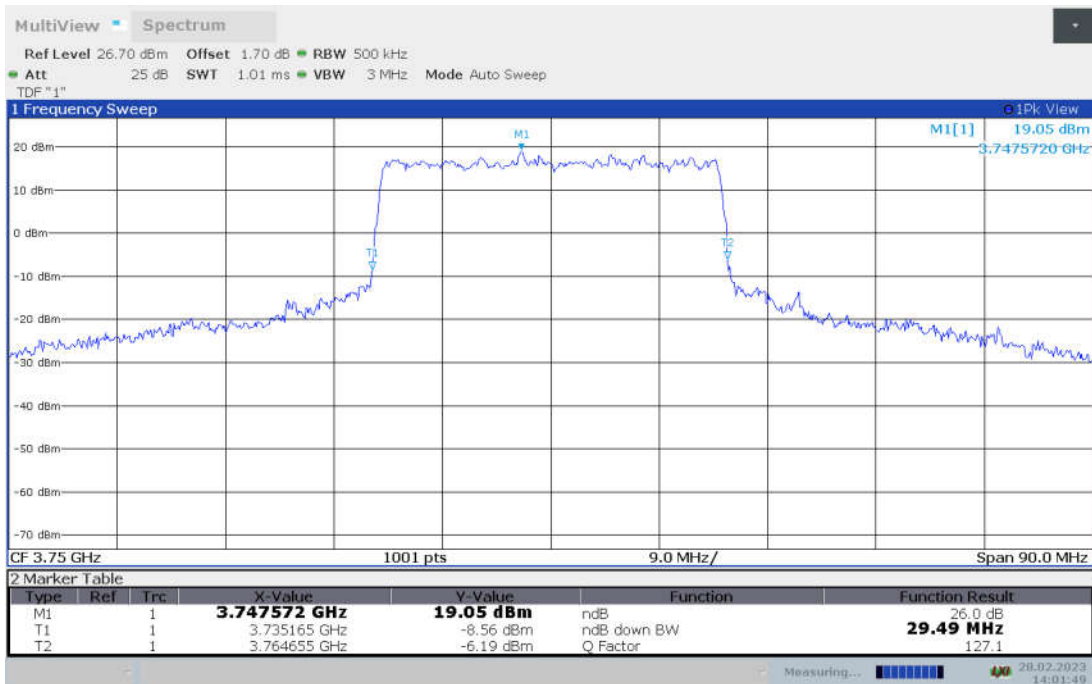
n78H,30MHz Bandwidth, CP-QPSK (-26dBc BW)



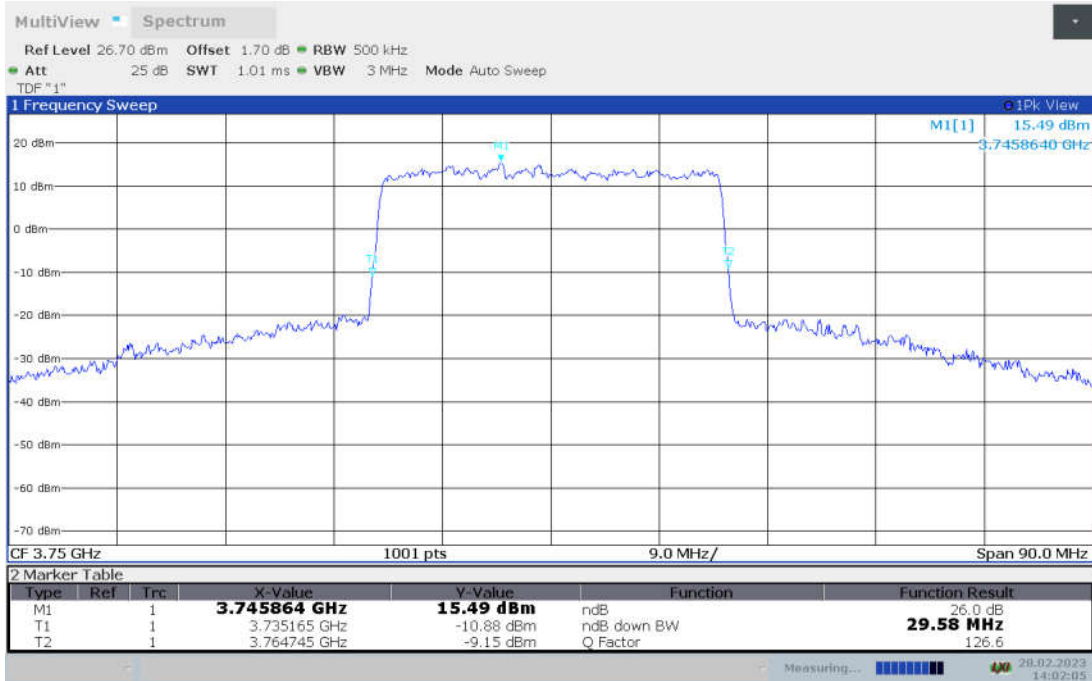
n78H,30MHz Bandwidth, CP-16QAM (-26dBc BW)



n78H,30MHz Bandwidth, CP-64QAM (-26dBc BW)



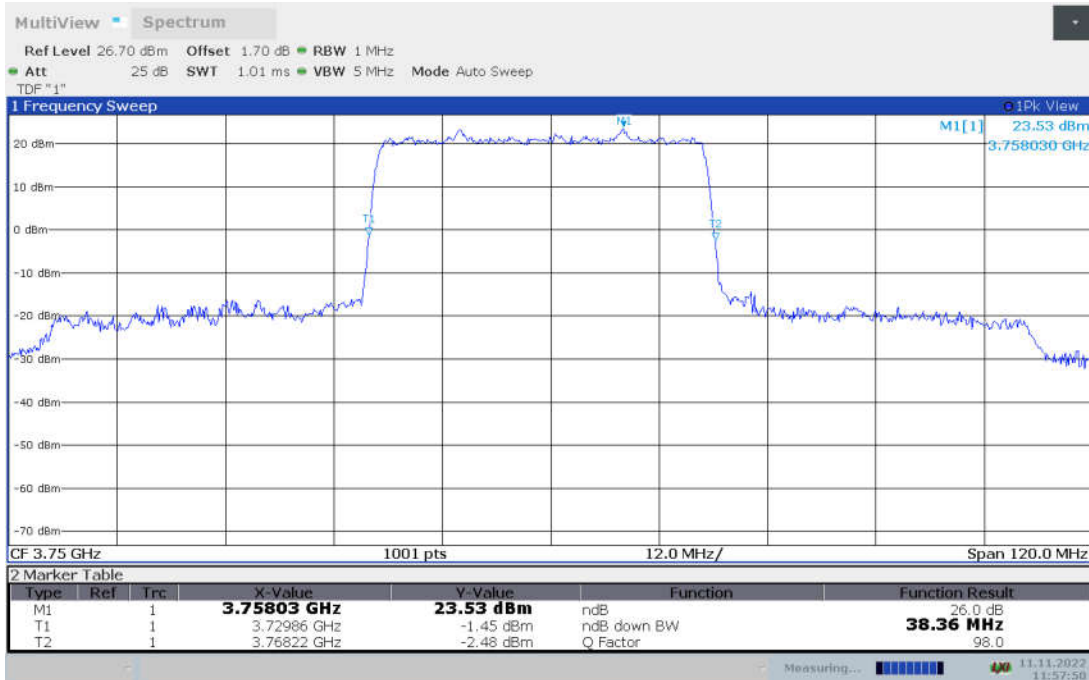
n78H,30MHz Bandwidth, CP-256QAM (-26dBc BW)



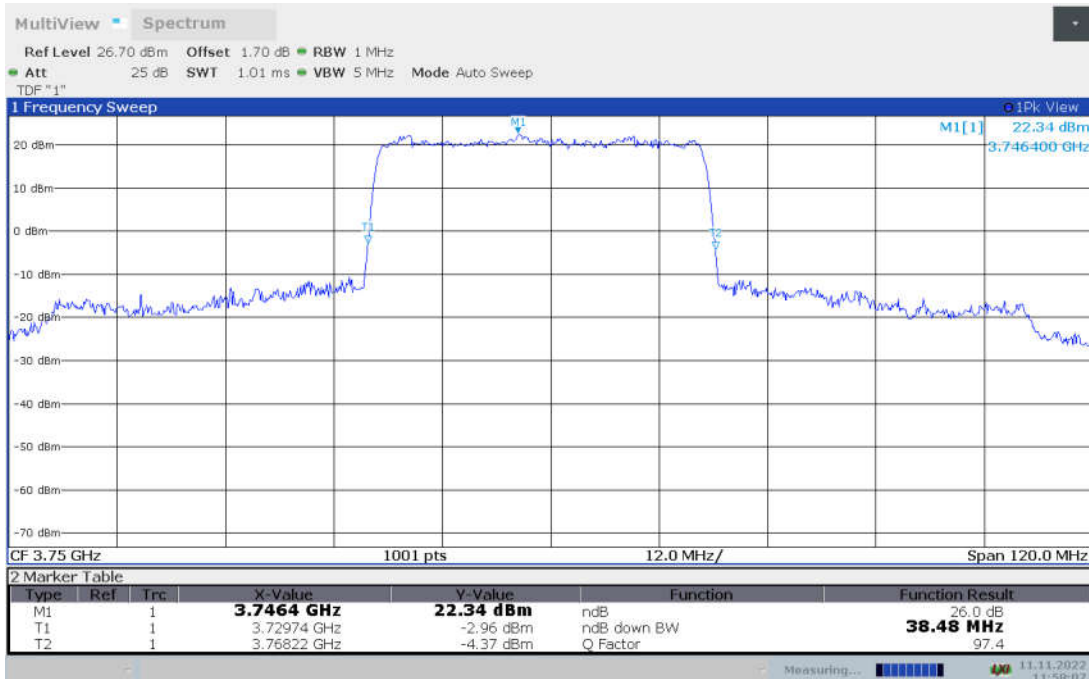
n78H,40MHz(-26dBc BW)

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
3750	38.36	38.48	38.48	38.48	38.36	40.52	40.40	40.40	40.64

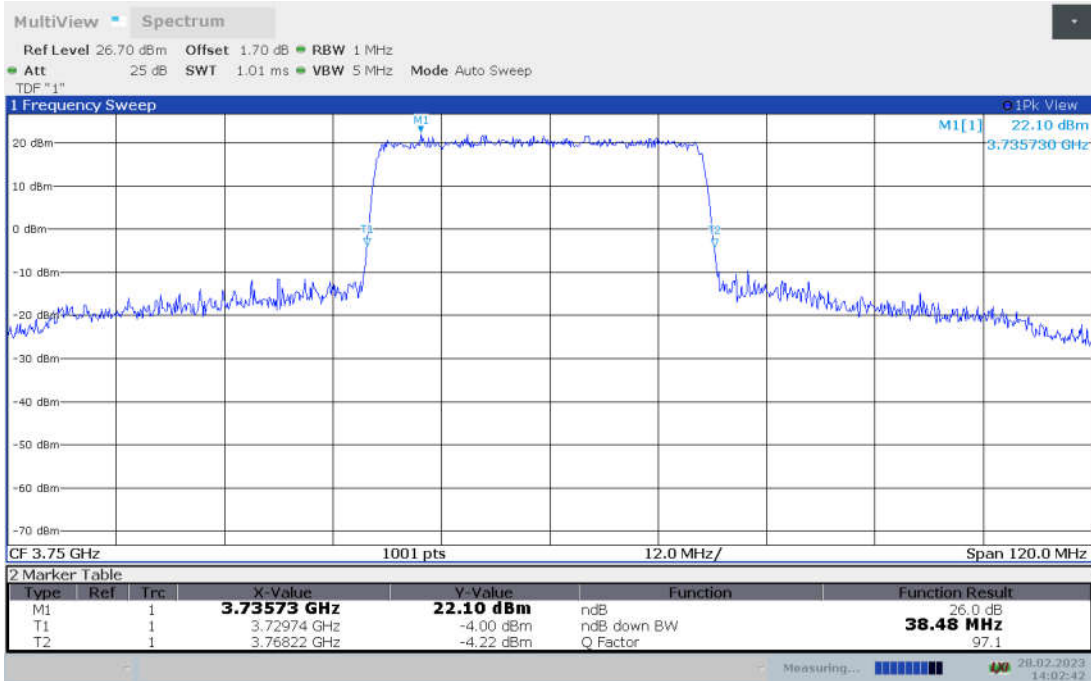
n78H,40MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



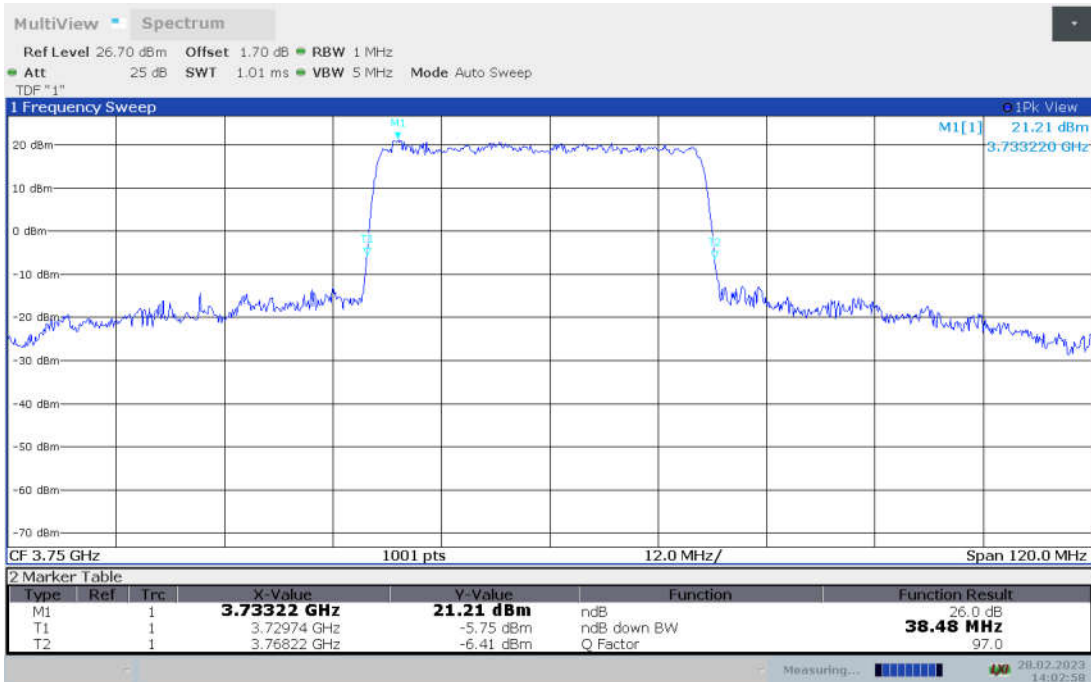
n78H,40MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



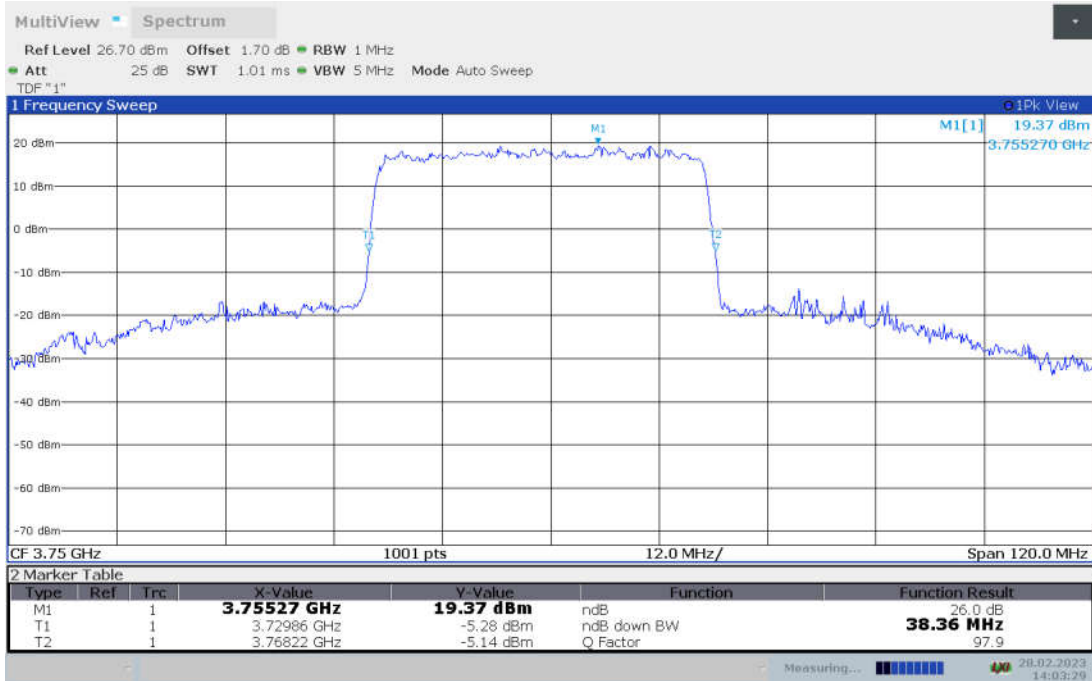
n78H,40MHz Bandwidth, DFT-s-16QAM (-26dBc BW)



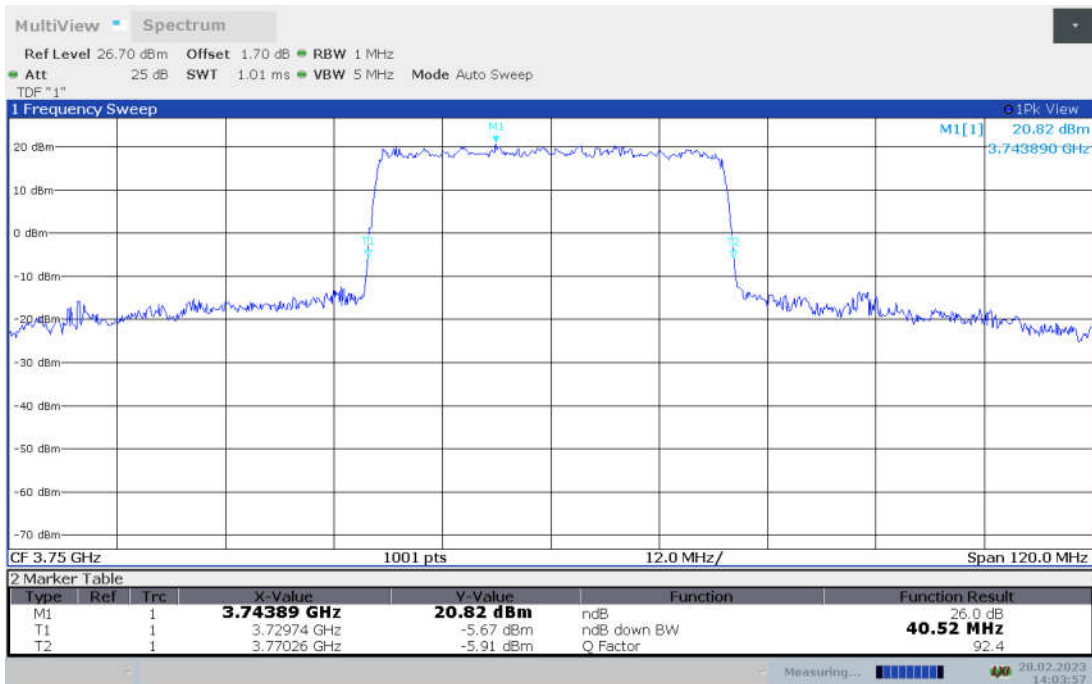
n78H,40MHz Bandwidth, DFT-s-64QAM (-26dBc BW)



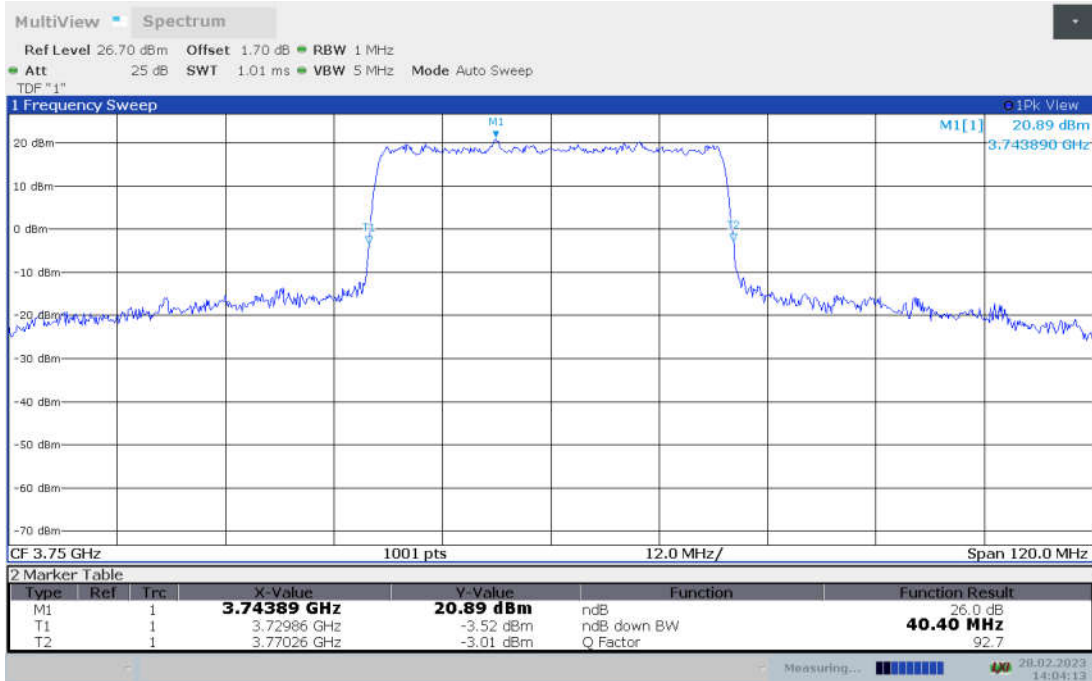
n78H,40MHz Bandwidth, DFT-s-256QAM (-26dBc BW)



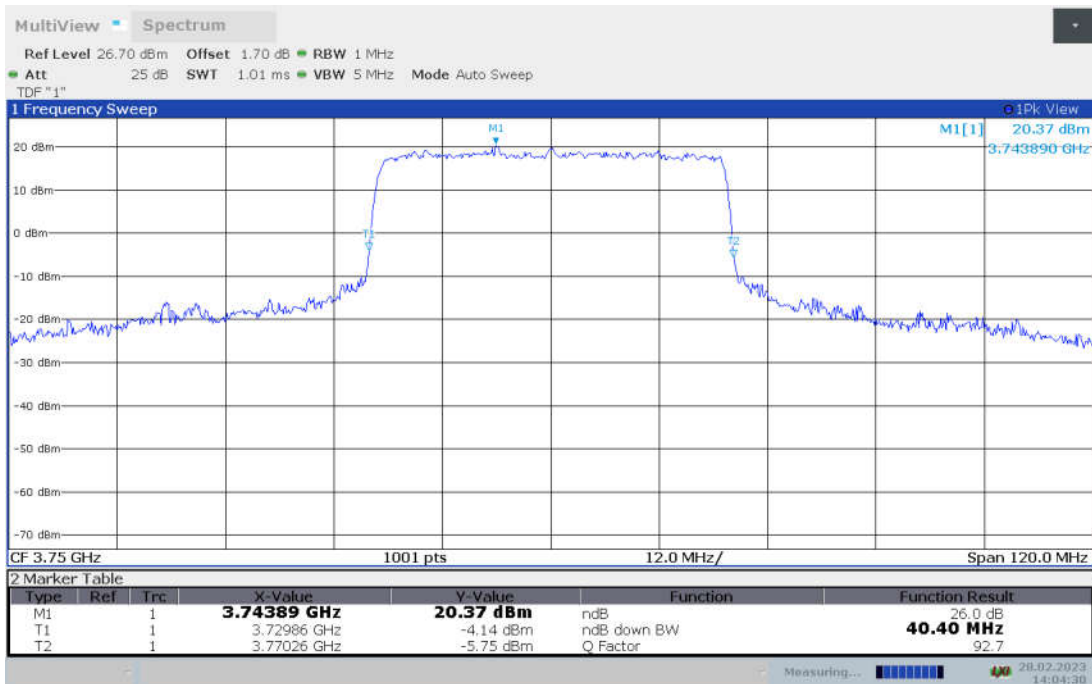
n78H,40MHz Bandwidth, CP-QPSK (-26dBc BW)



n78H,40MHz Bandwidth, CP-16QAM (-26dBc BW)

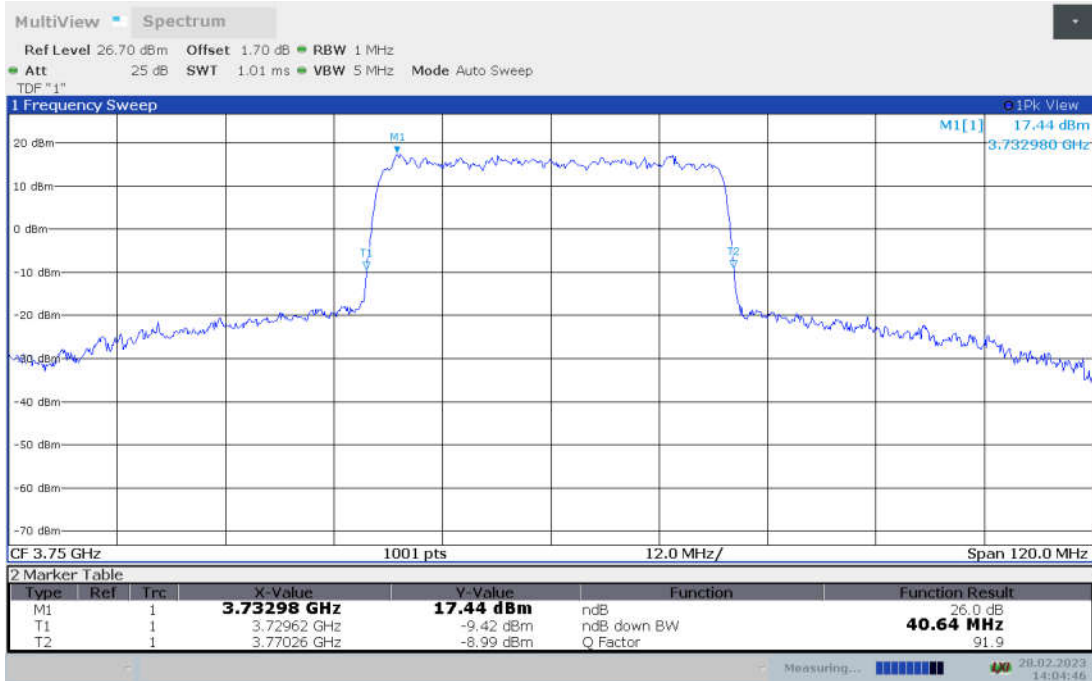


n78H,40MHz Bandwidth, CP-64QAM (-26dBc BW)





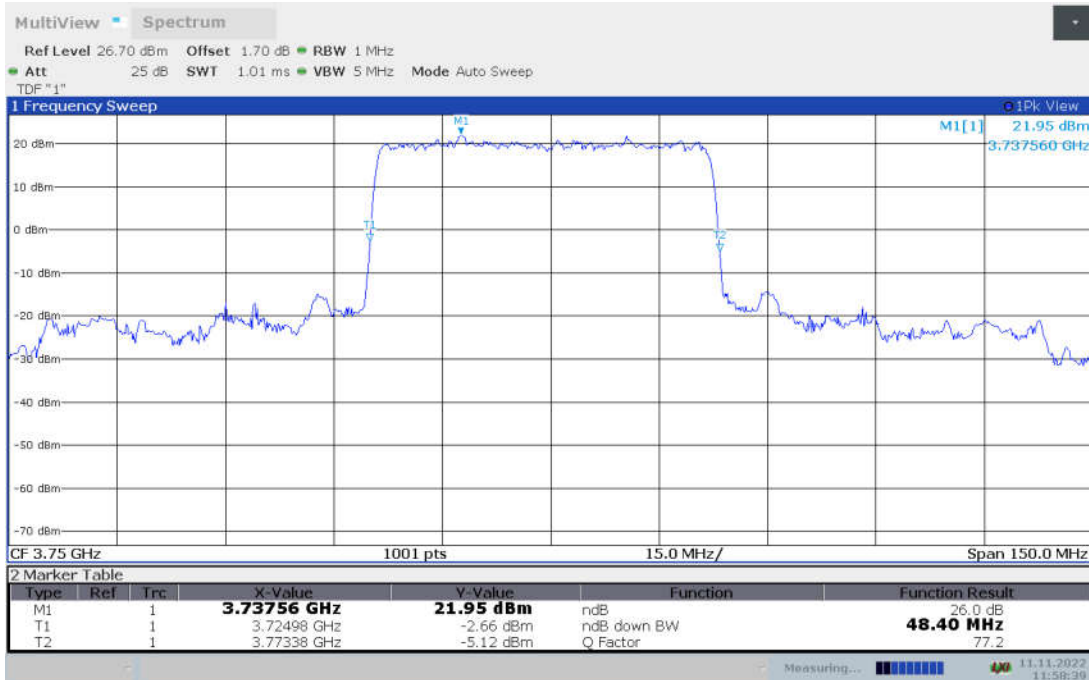
n78H,40MHz Bandwidth, CP-256QAM (-26dBc BW)



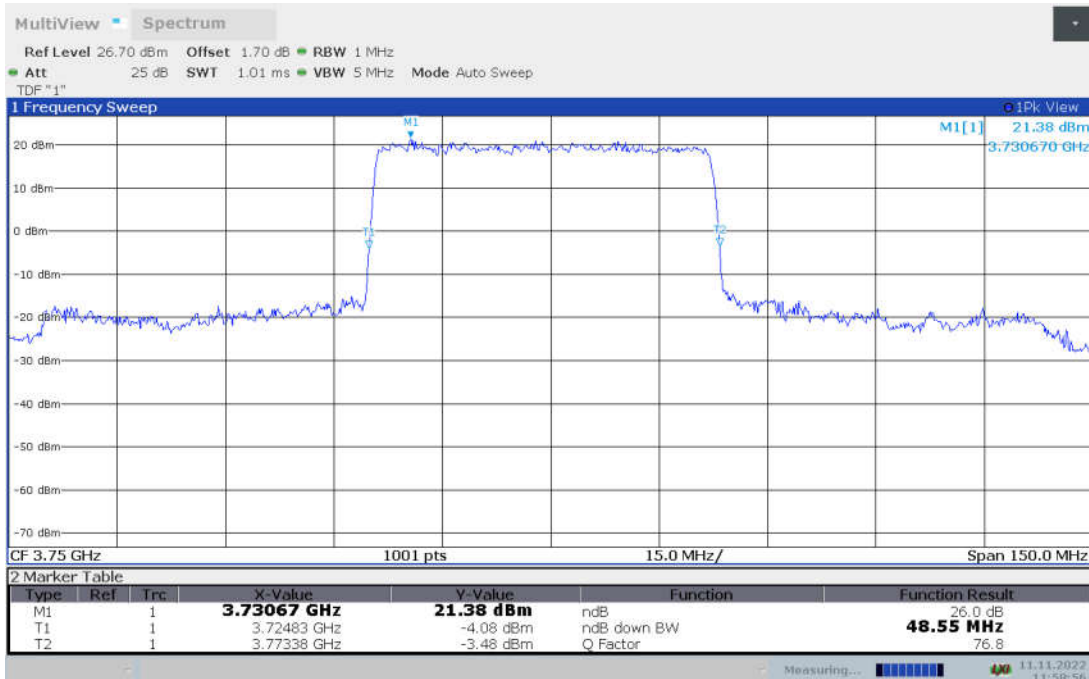
n78H,50MHz(-26dBc BW)

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
3750	48.40	48.55	48.40	48.40	48.40	53.35	53.35	53.35	50.35

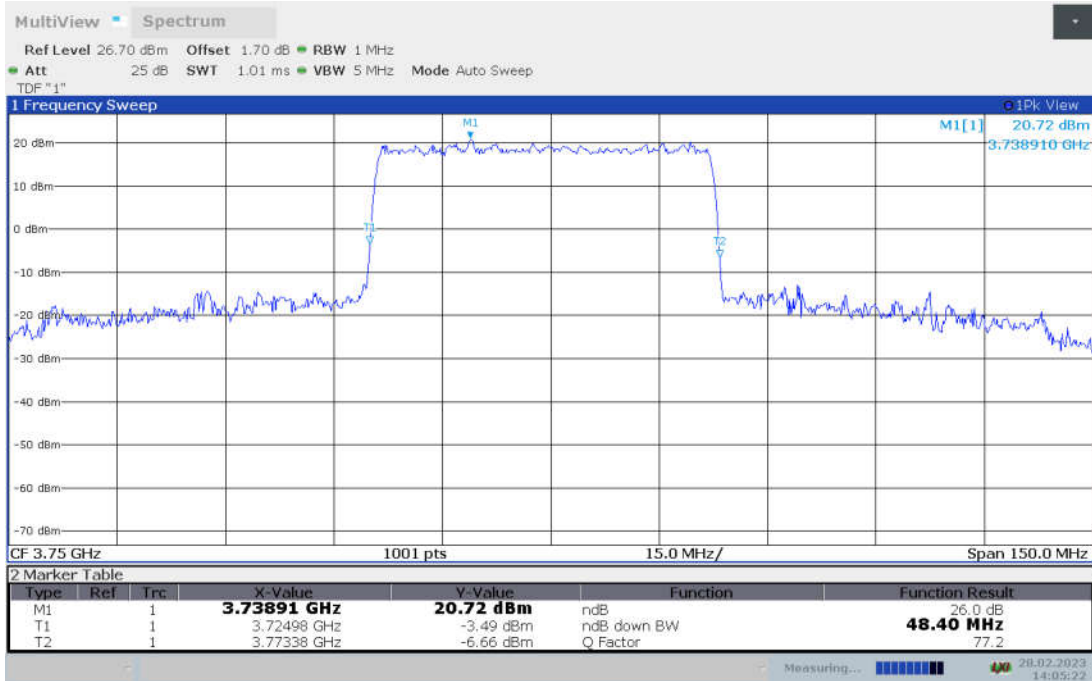
n78H,50MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



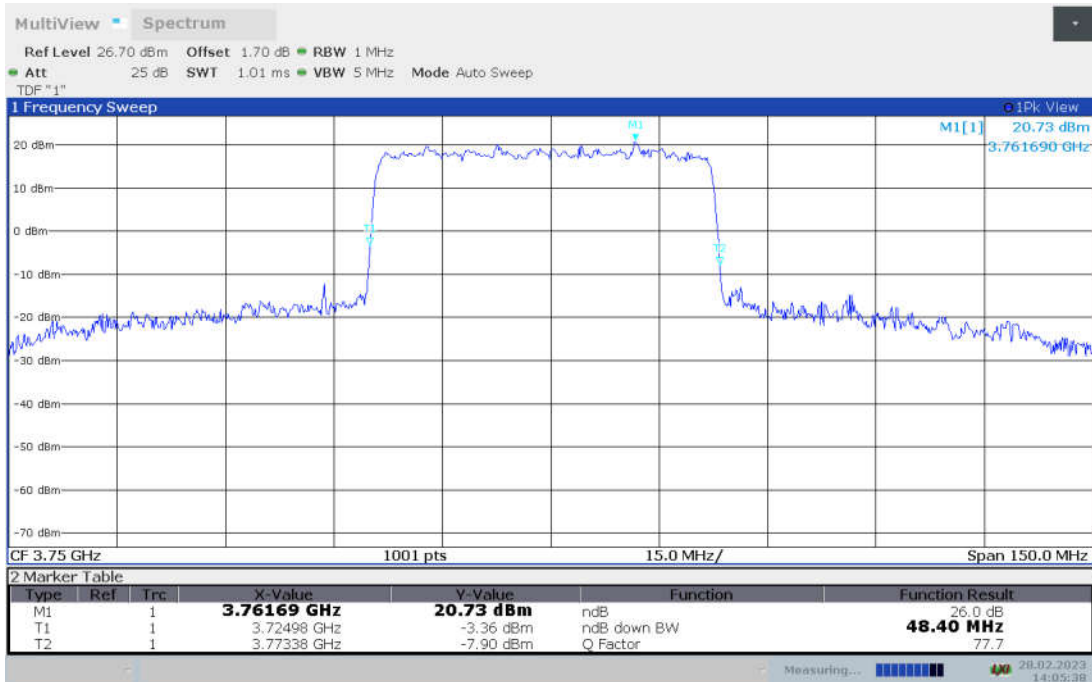
n78H,50MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



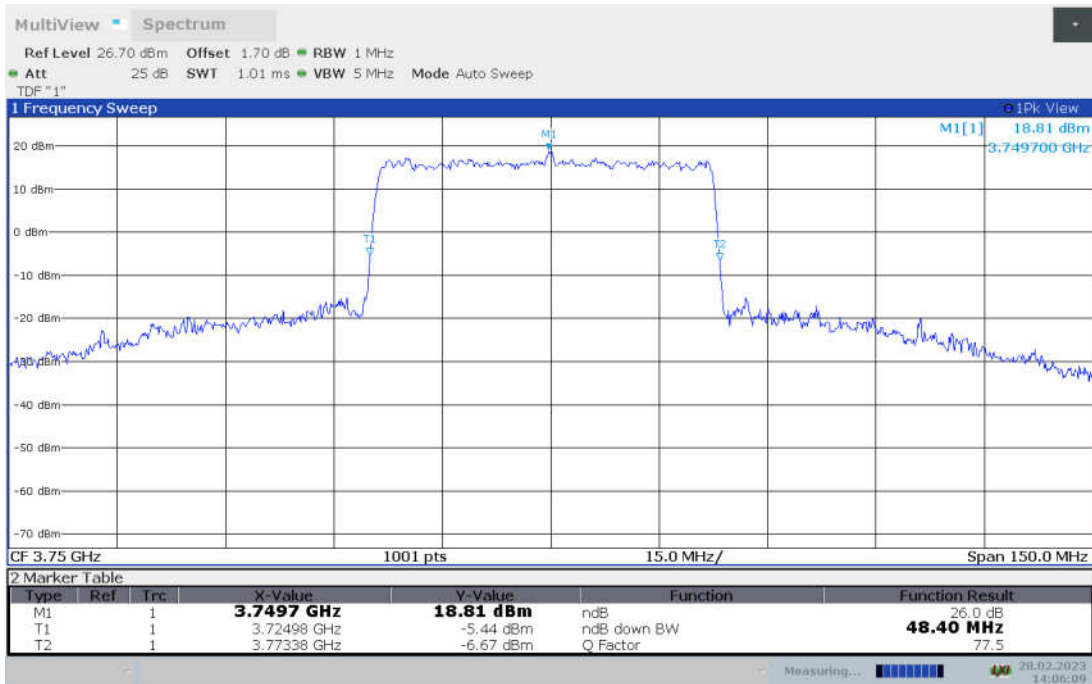
n78H,50MHz Bandwidth, DFT-s-16QAM (-26dBc BW)



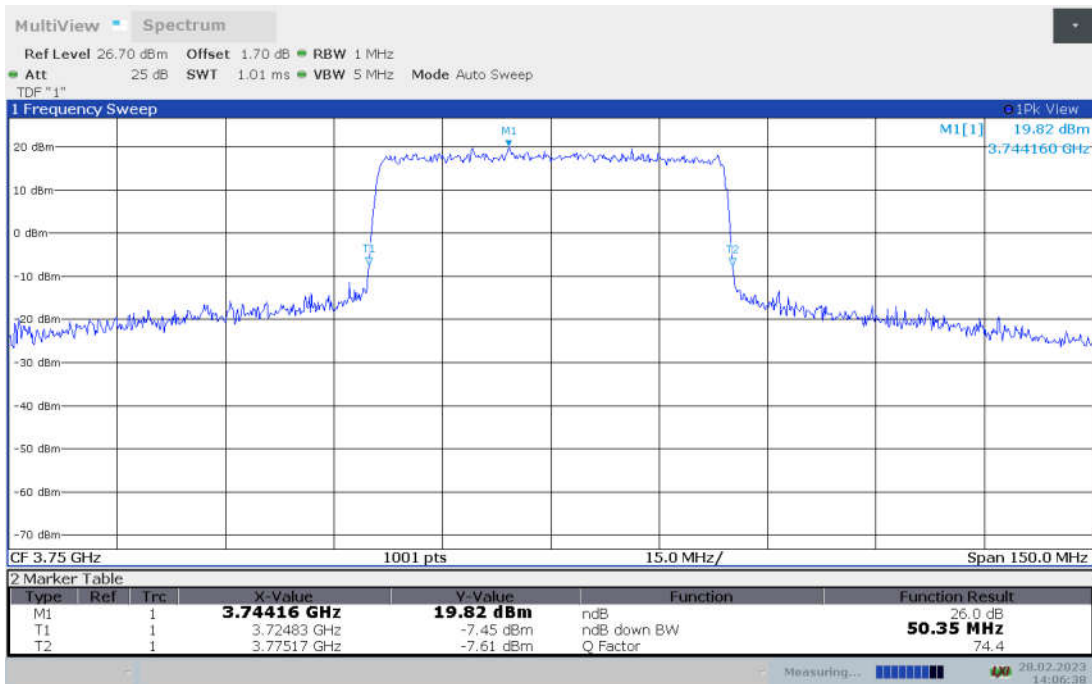
n78H,50MHz Bandwidth, DFT-s-64QAM (-26dBc BW)



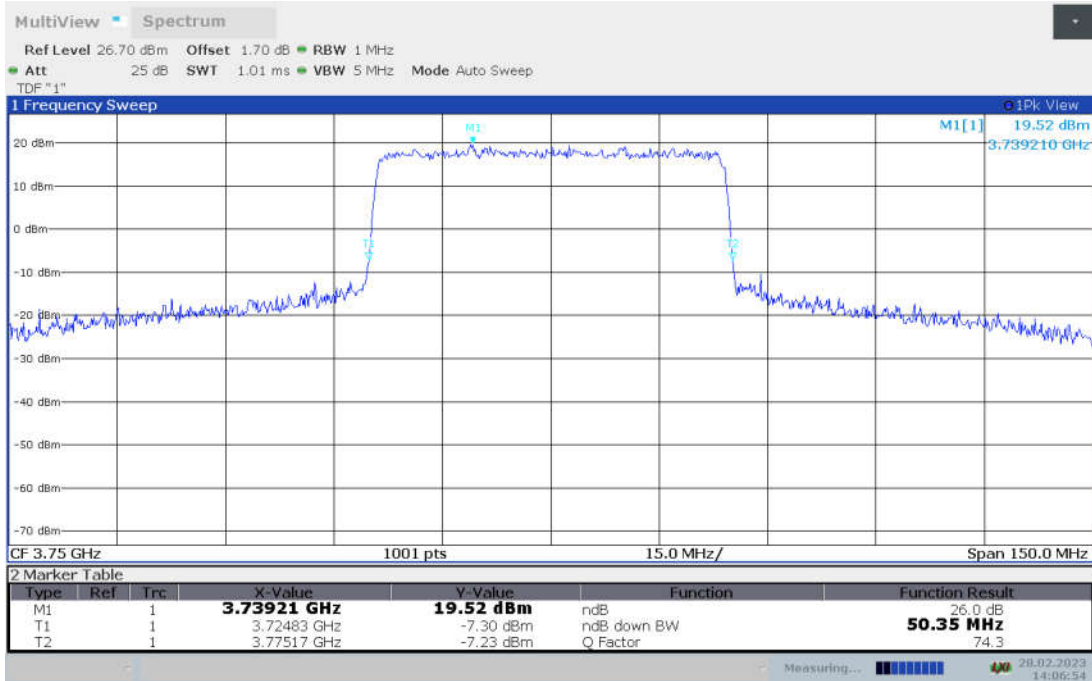
n78H,50MHz Bandwidth, DFT-s-256QAM (-26dBc BW)



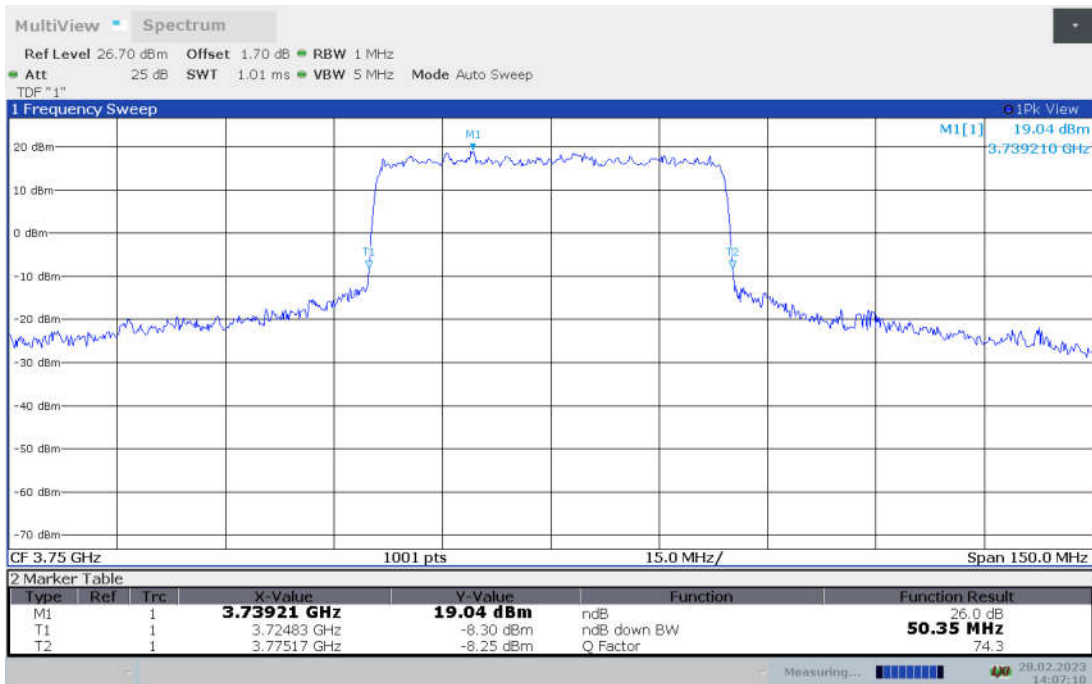
n78H,50MHz Bandwidth, CP-QPSK (-26dBc BW)



n78H,50MHz Bandwidth, CP-16QAM (-26dBc BW)

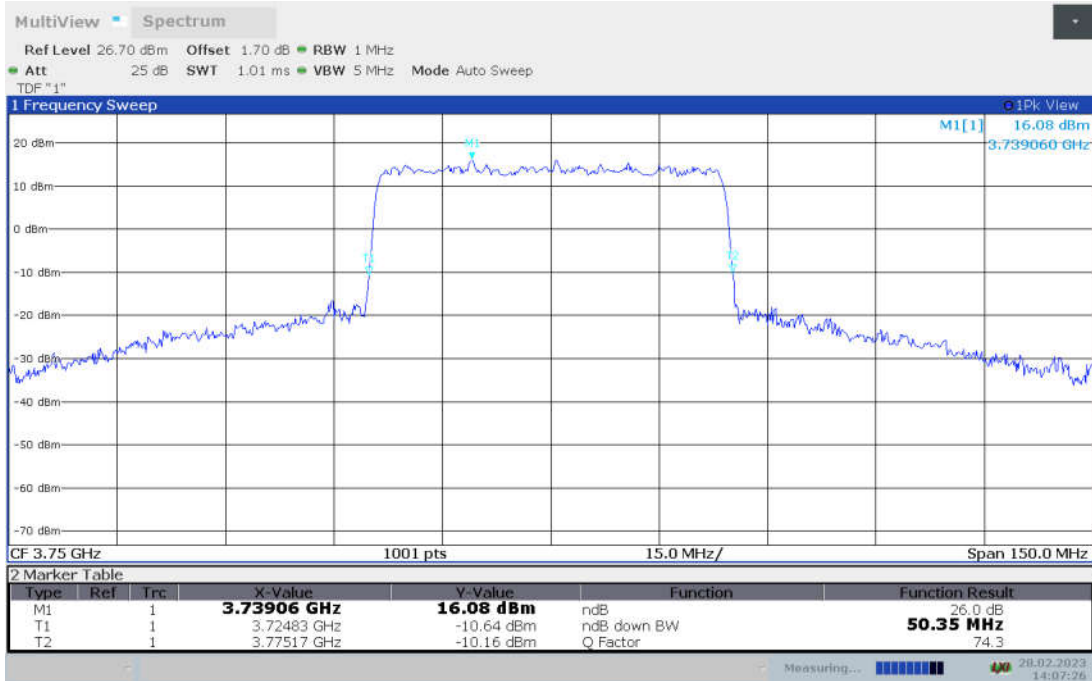


n78H,50MHz Bandwidth, CP-64QAM (-26dBc BW)





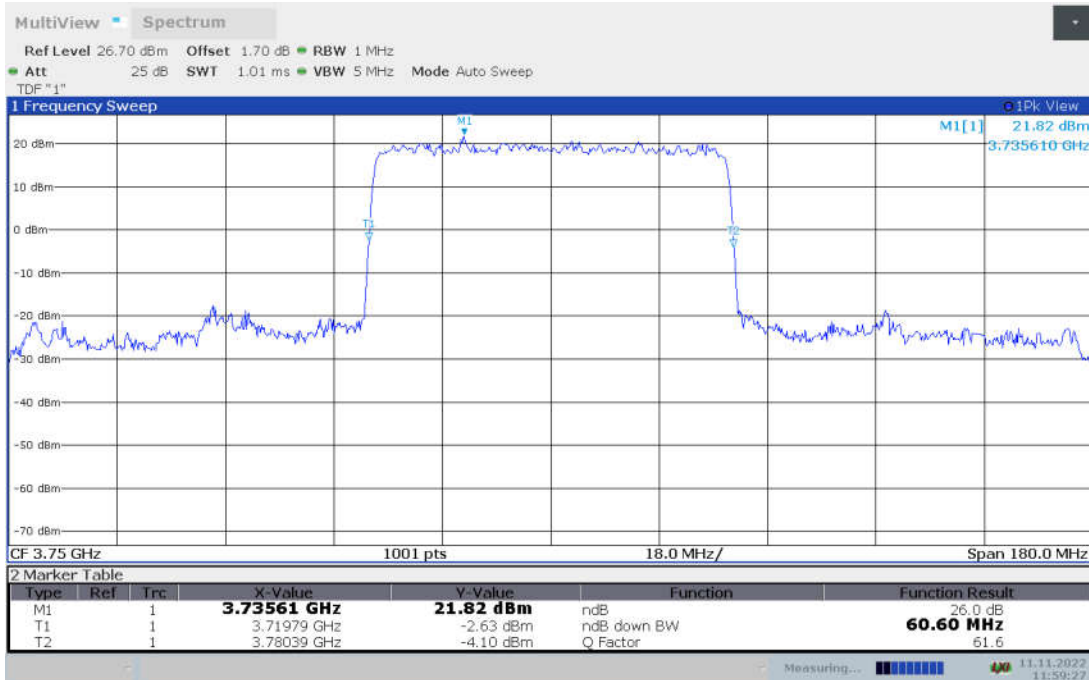
n78H,50MHz Bandwidth, CP-256QAM (-26dBc BW)



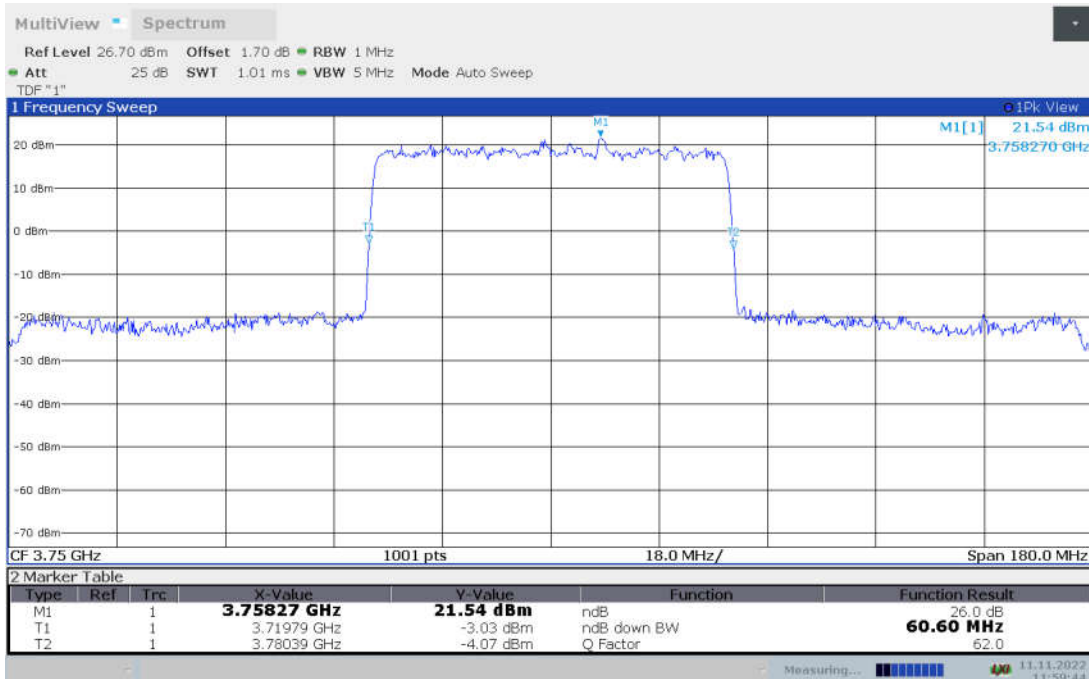
n78H,60MHz(-26dBc BW)

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
3750	60.60	60.60	60.96	60.96	60.78	60.78	60.78	60.78	60.78

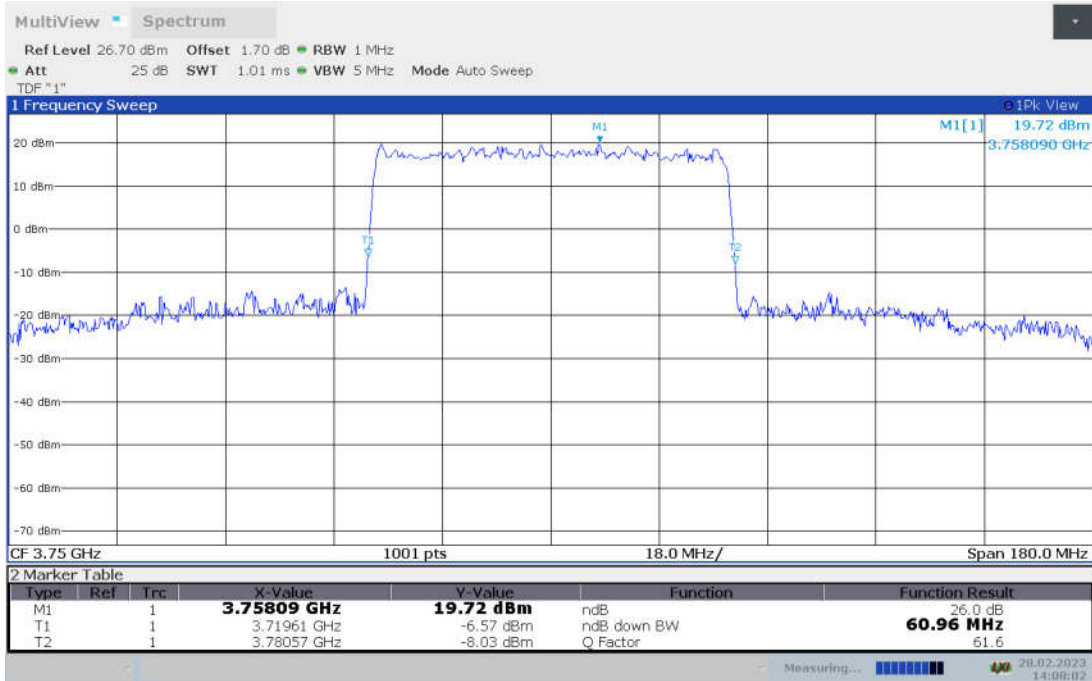
n78H,60MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



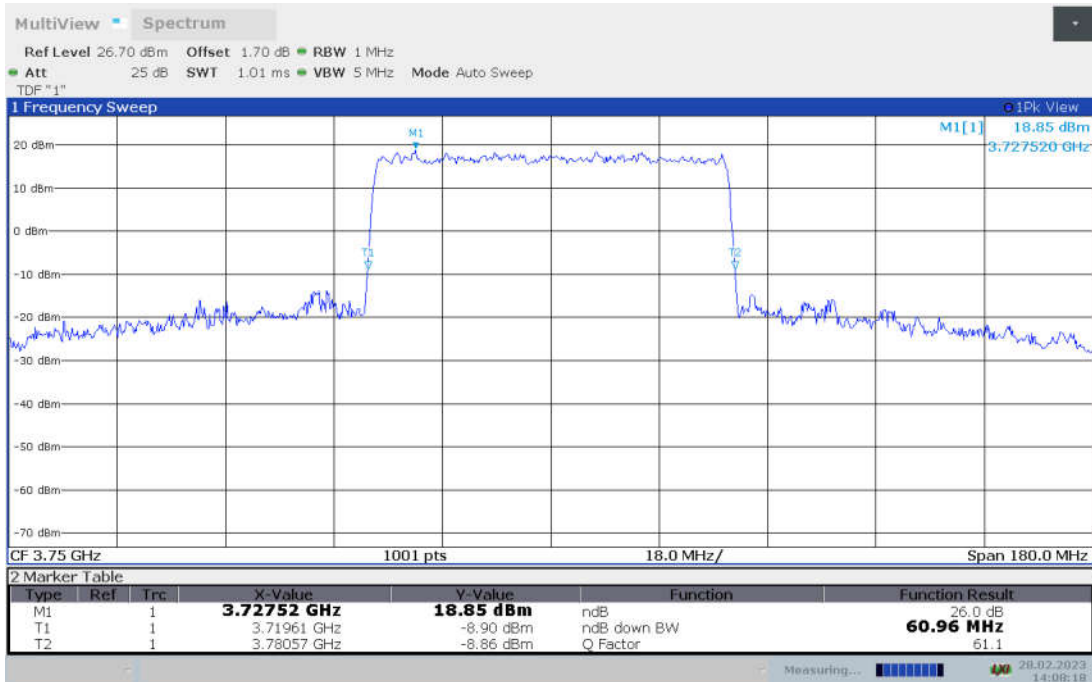
n78H,60MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



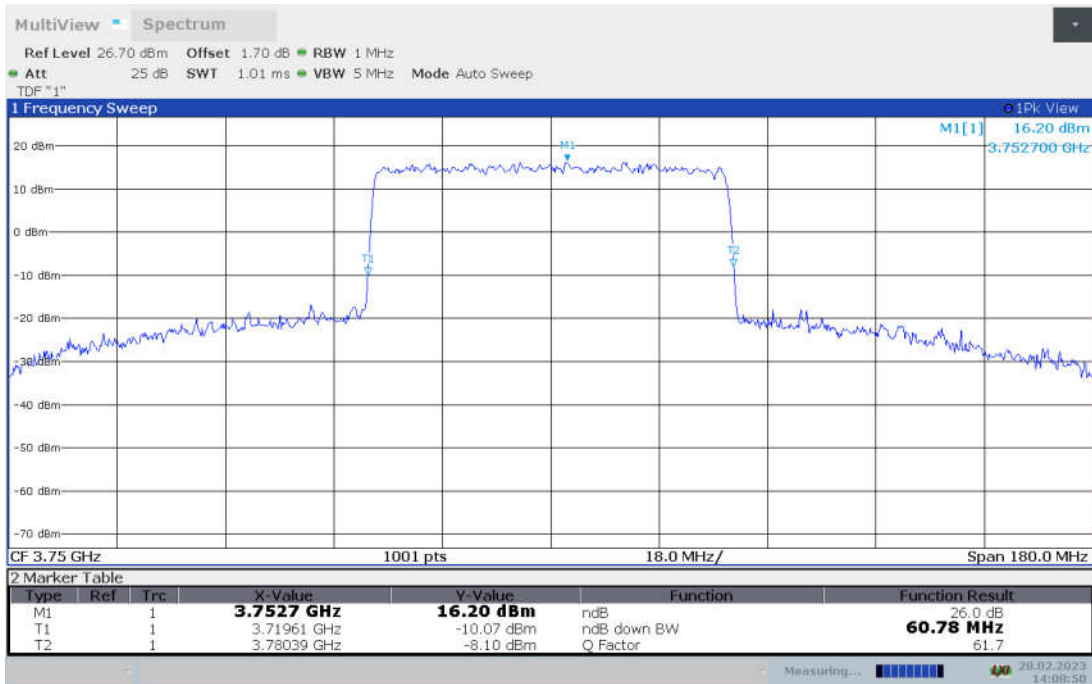
n78H,60MHz Bandwidth, DFT-s-16QAM (-26dBc BW)



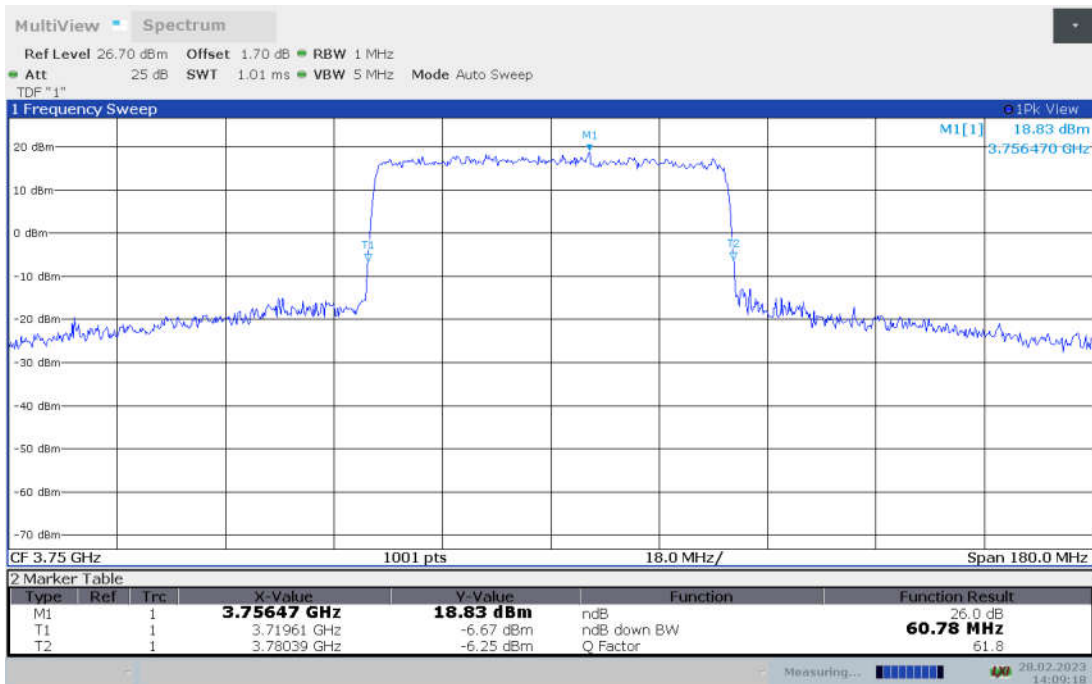
n78H,60MHz Bandwidth, DFT-s-64QAM (-26dBc BW)



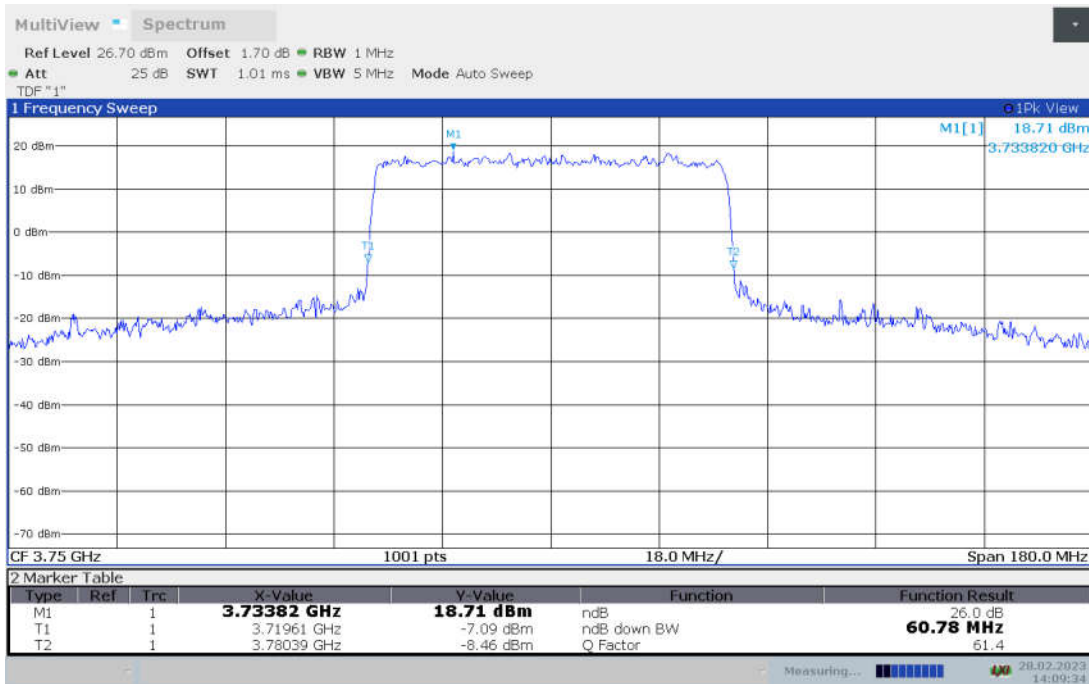
n78H,60MHz Bandwidth, DFT-s-256QAM (-26dBc BW)



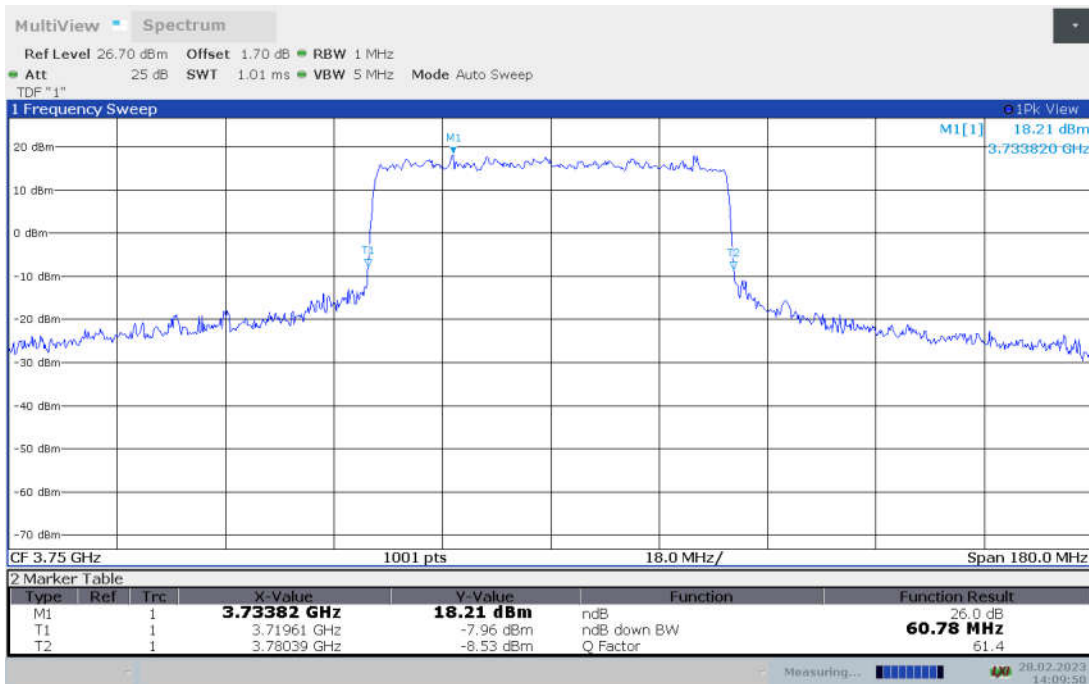
n78H,60MHz Bandwidth, CP-QPSK (-26dBc BW)



n78H,60MHz Bandwidth, CP-16QAM (-26dBc BW)

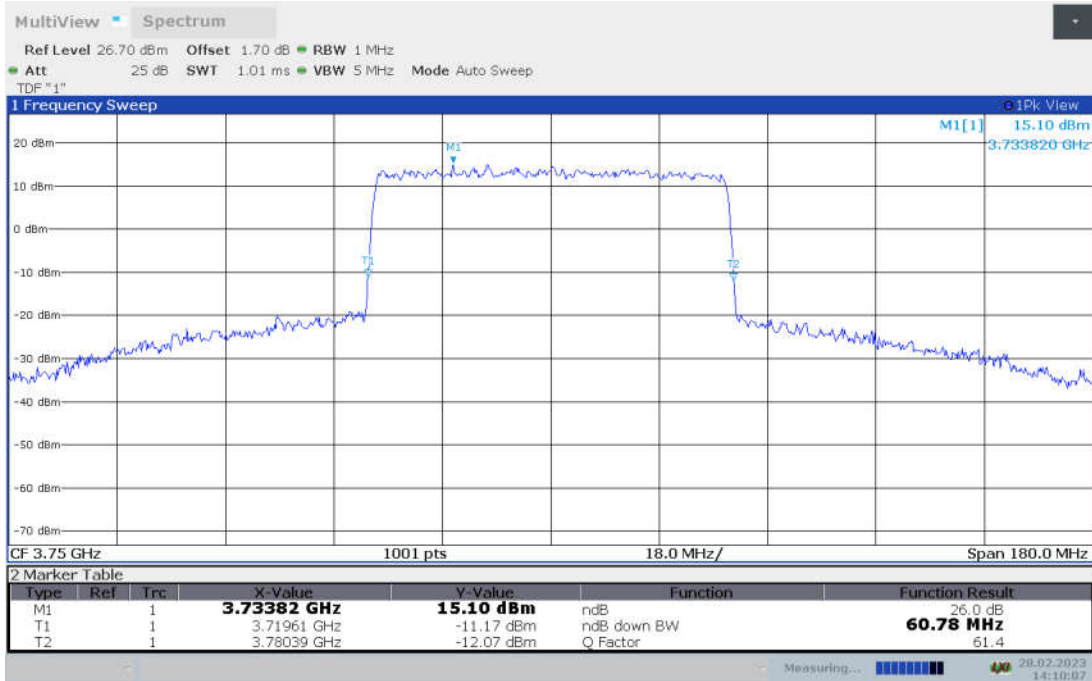


n78H,60MHz Bandwidth, CP-64QAM (-26dBc BW)





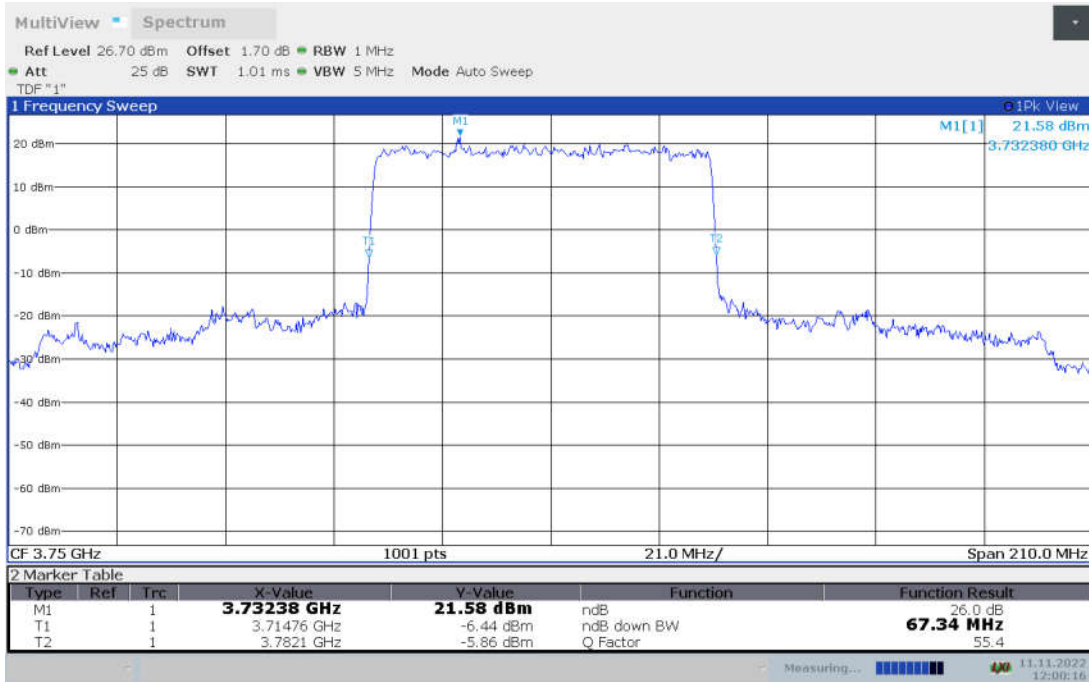
n78H,60MHz Bandwidth, CP-256QAM (-26dBc BW)



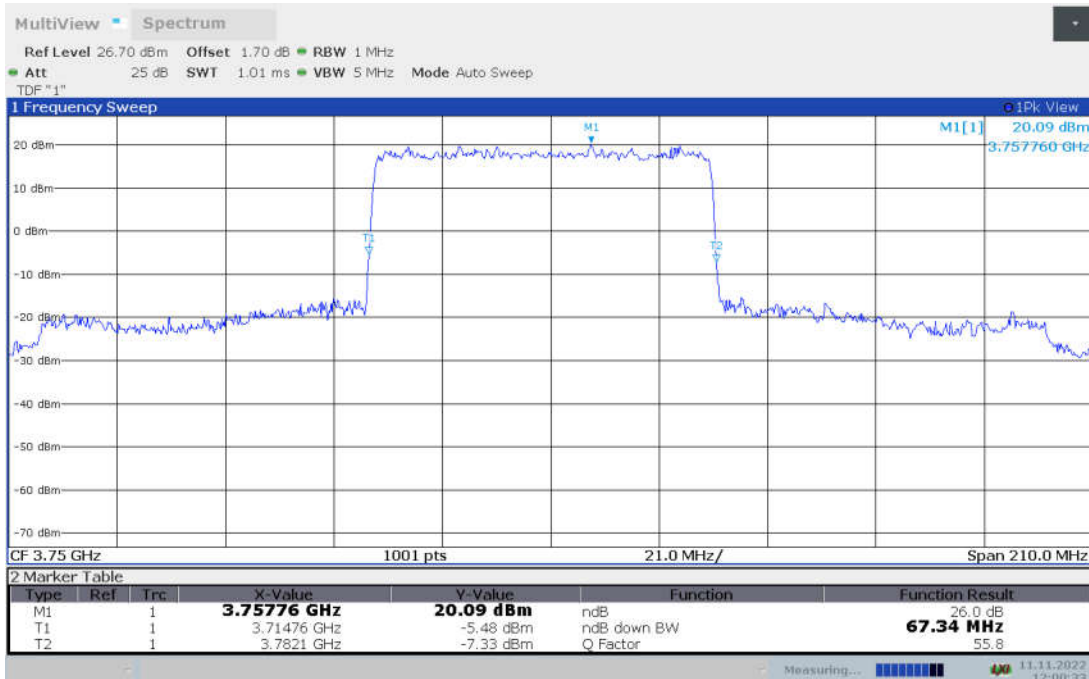
n78H,70MHz(-26dBc BW)

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
3750	67.34	67.34	67.13	67.34	67.34	70.91	70.49	70.49	70.49

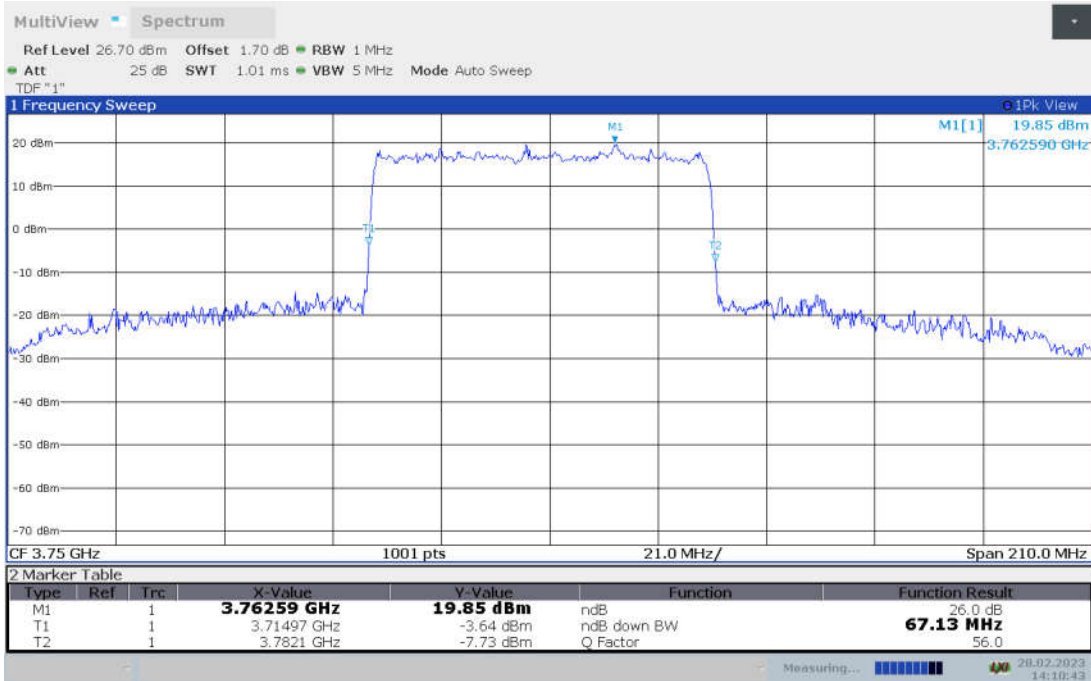
n78H,70MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



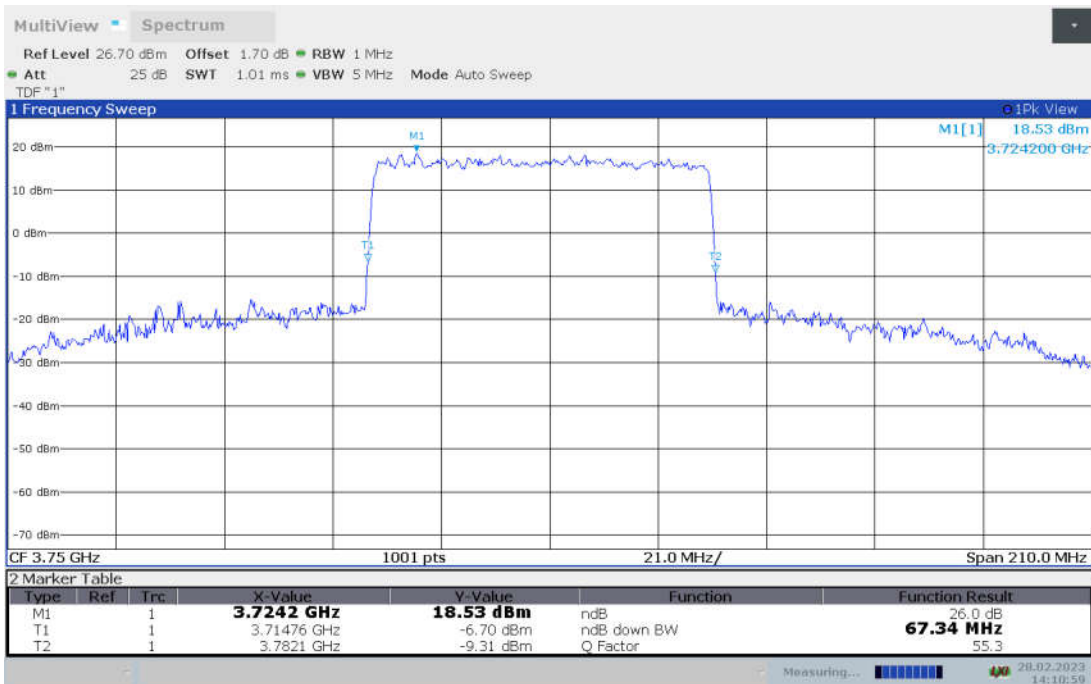
n78H,70MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



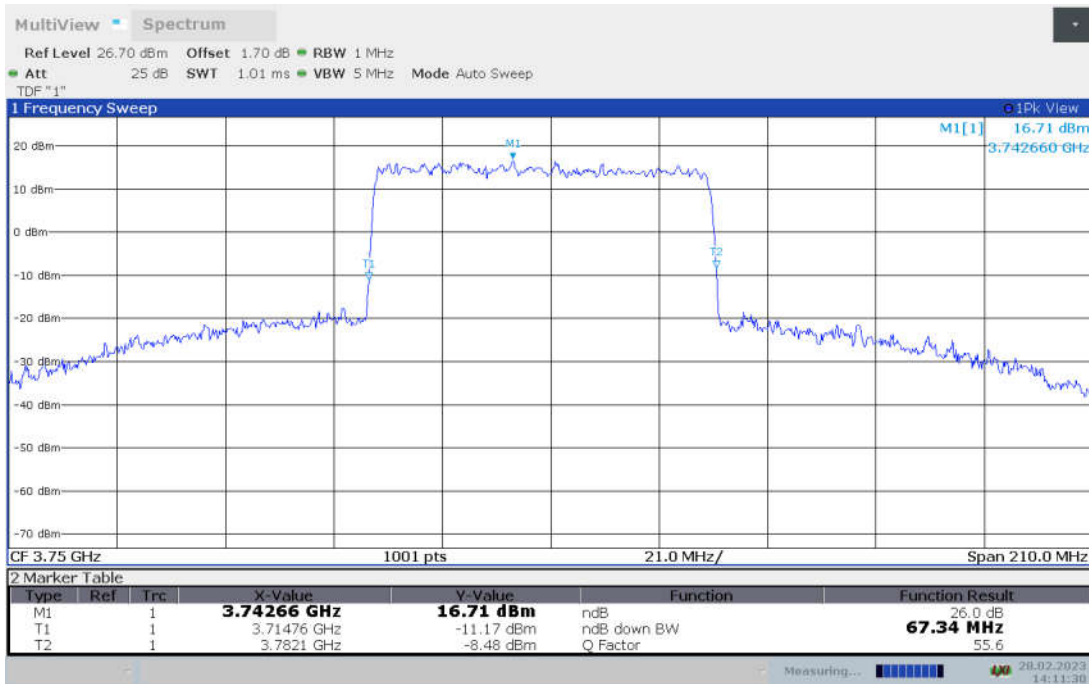
n78H,70MHz Bandwidth, DFT-s-16QAM (-26dBc BW)



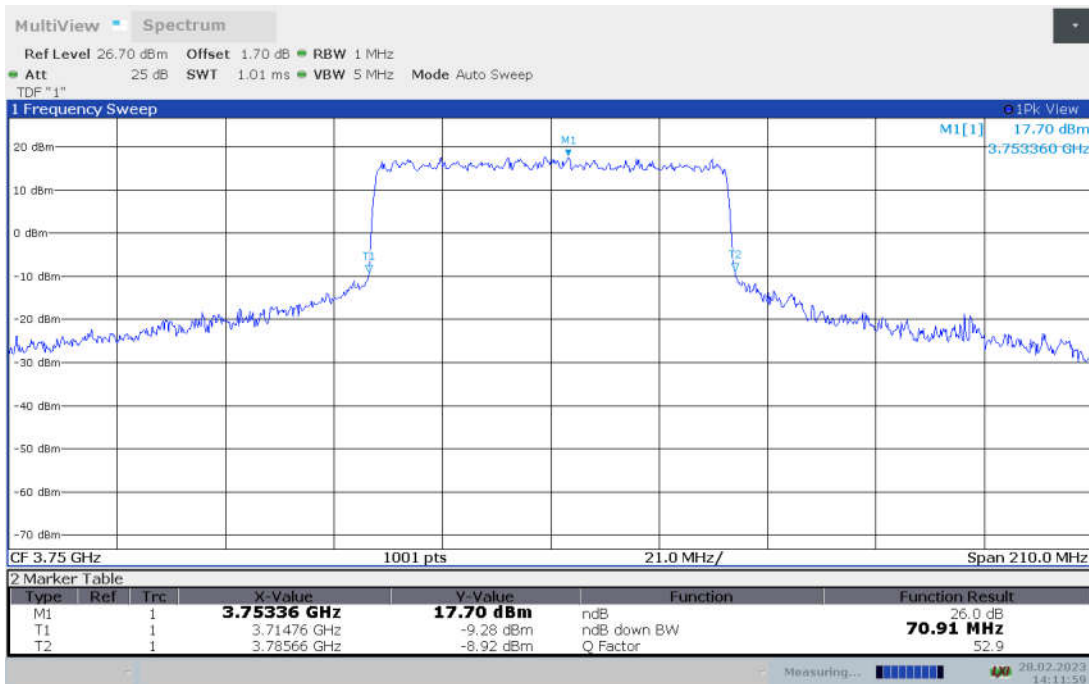
n78H,70MHz Bandwidth, DFT-s-64QAM (-26dBc BW)



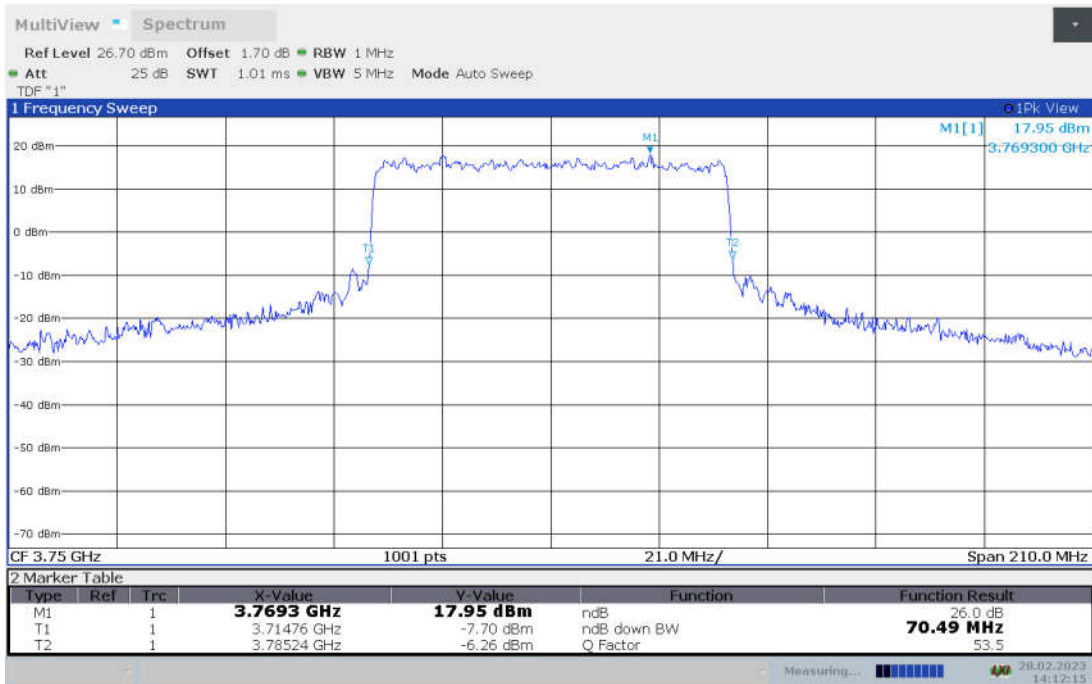
n78H,70MHz Bandwidth, DFT-s-256QAM (-26dBc BW)



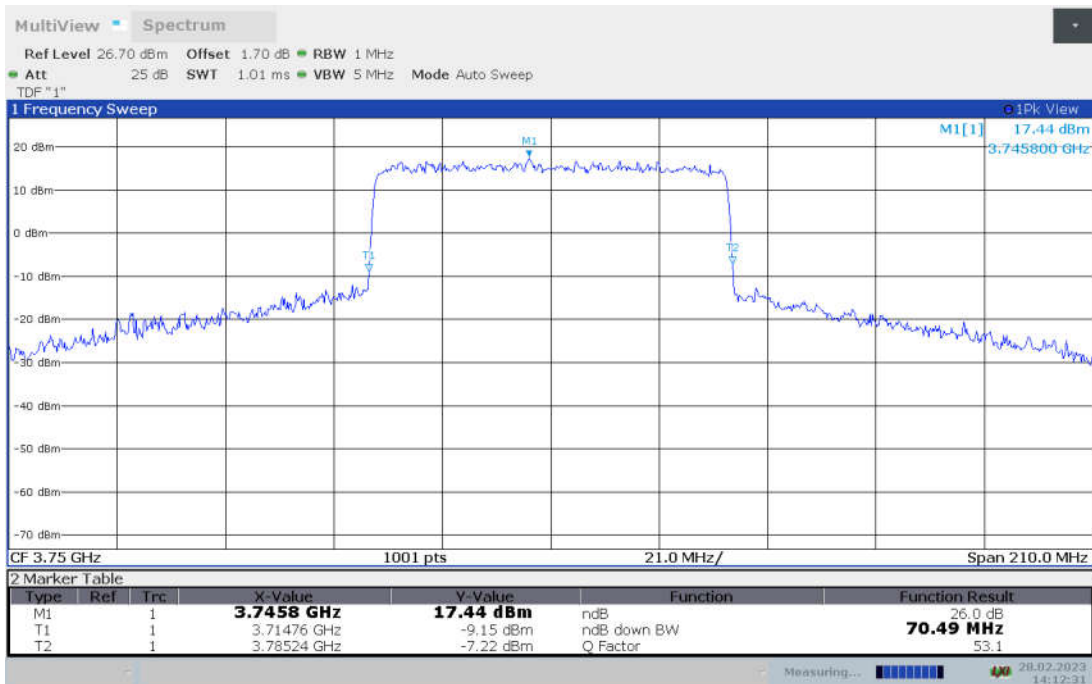
n78H,70MHz Bandwidth, CP-QPSK (-26dBc BW)



n78H,70MHz Bandwidth, CP-16QAM (-26dBc BW)

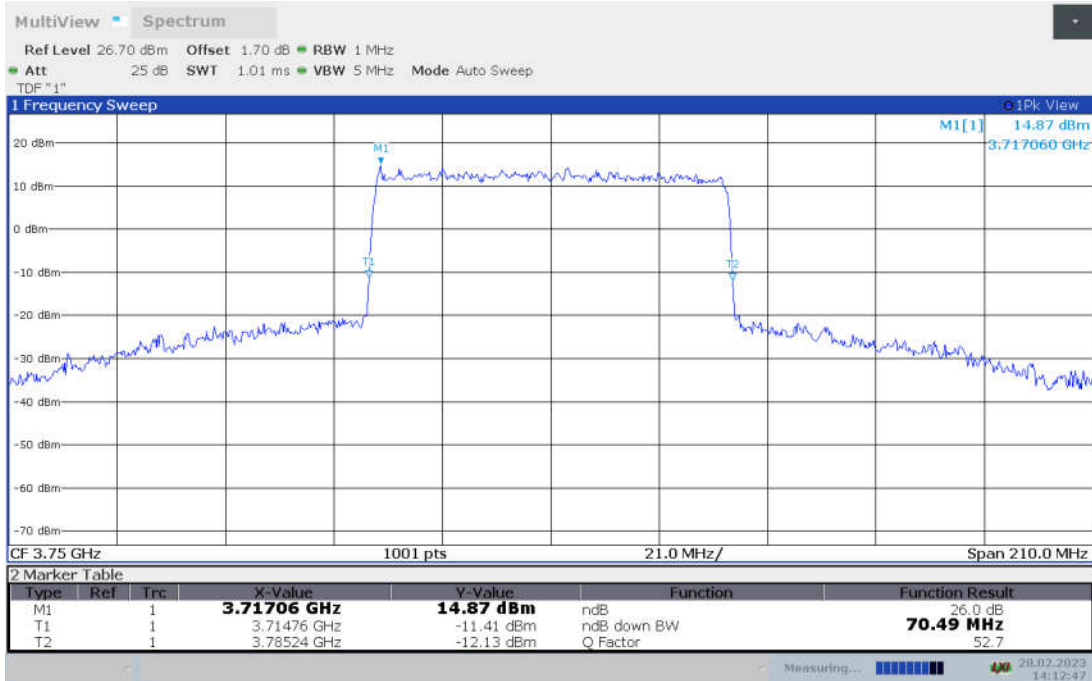


n78H,70MHz Bandwidth, CP-64QAM (-26dBc BW)





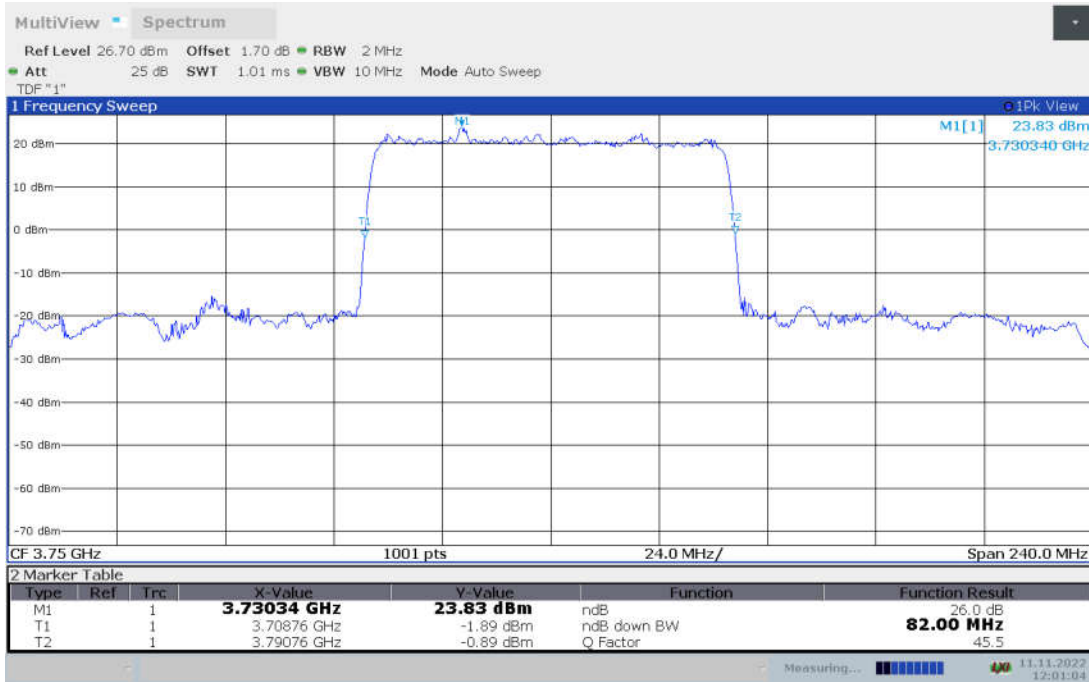
n78H,70MHz Bandwidth, CP-256QAM (-26dBc BW)



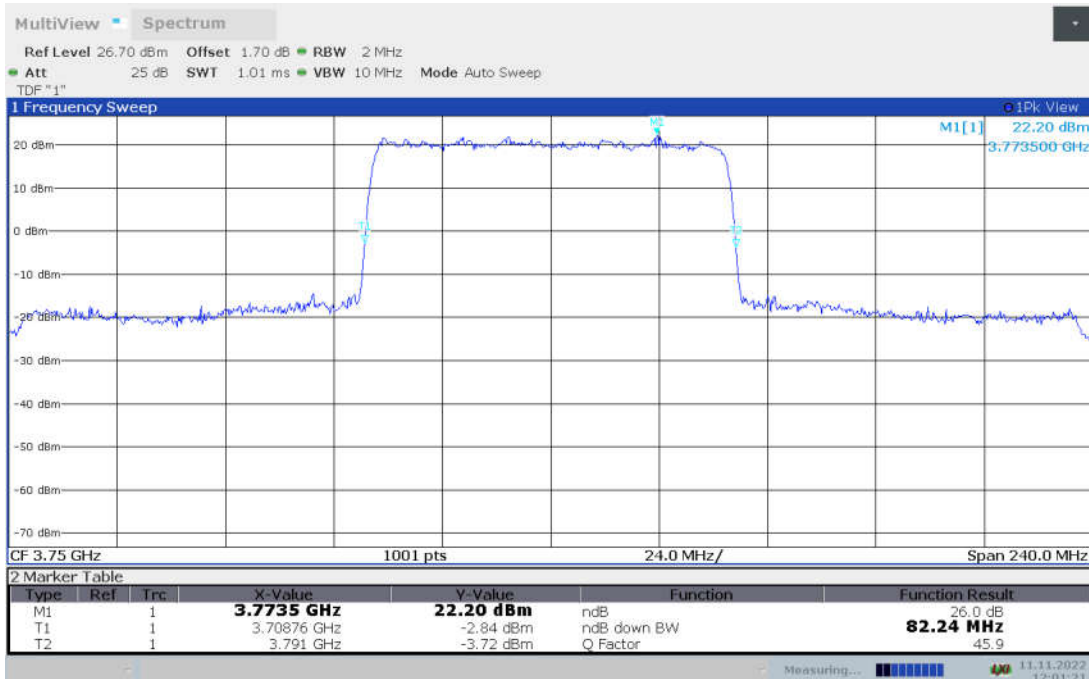
n78H,80MHz(-26dBc BW)

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
3750	82.00	82.24	82.48	82.24	82.48	82.72	82.96	82.72	82.72

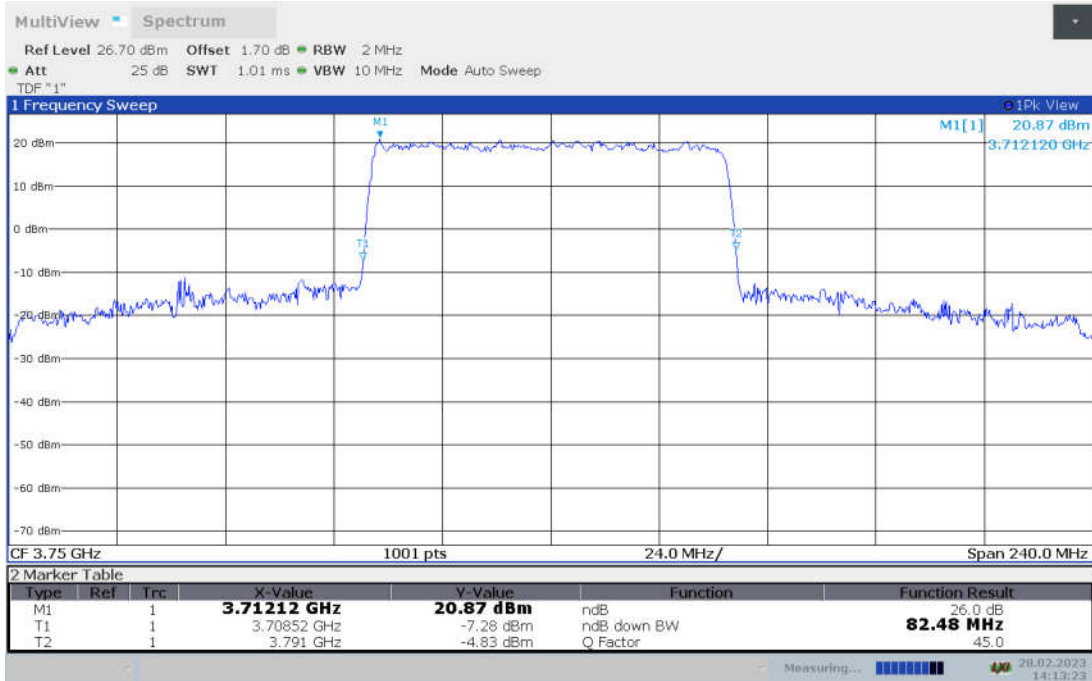
n78H,80MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



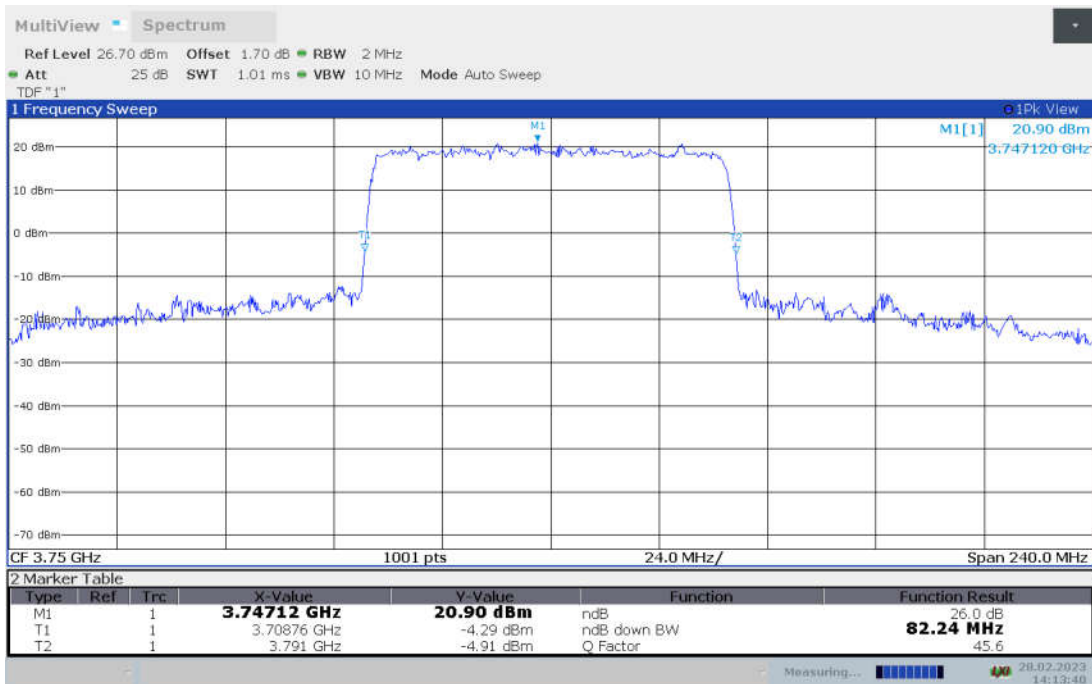
n78H,80MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



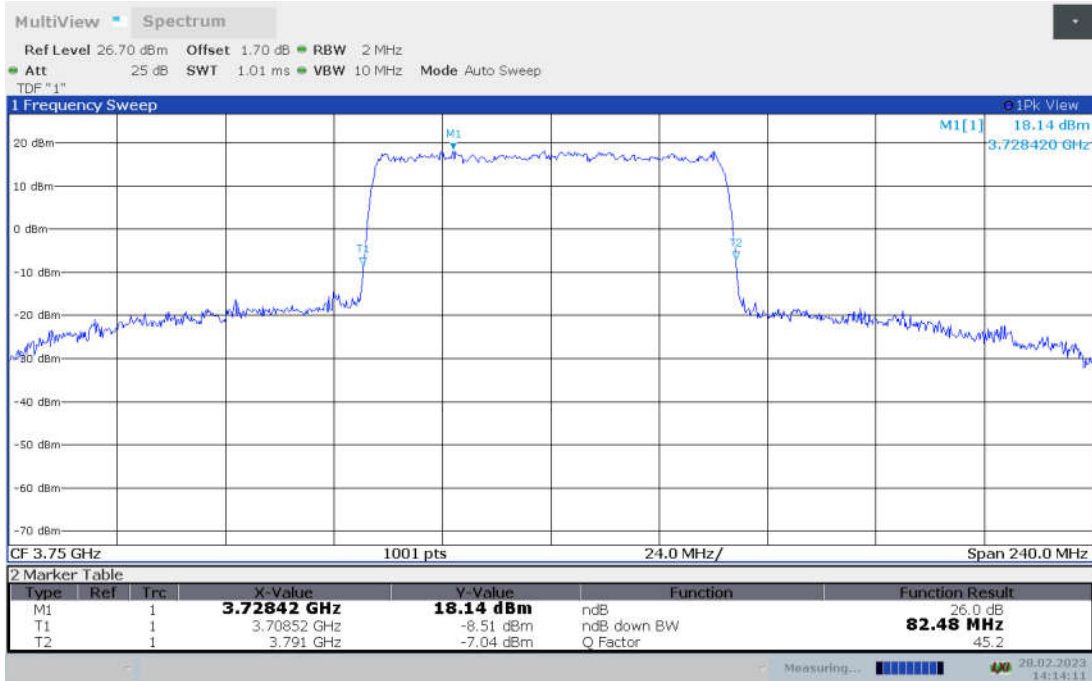
n78H,80MHz Bandwidth, DFT-s-16QAM (-26dBc BW)



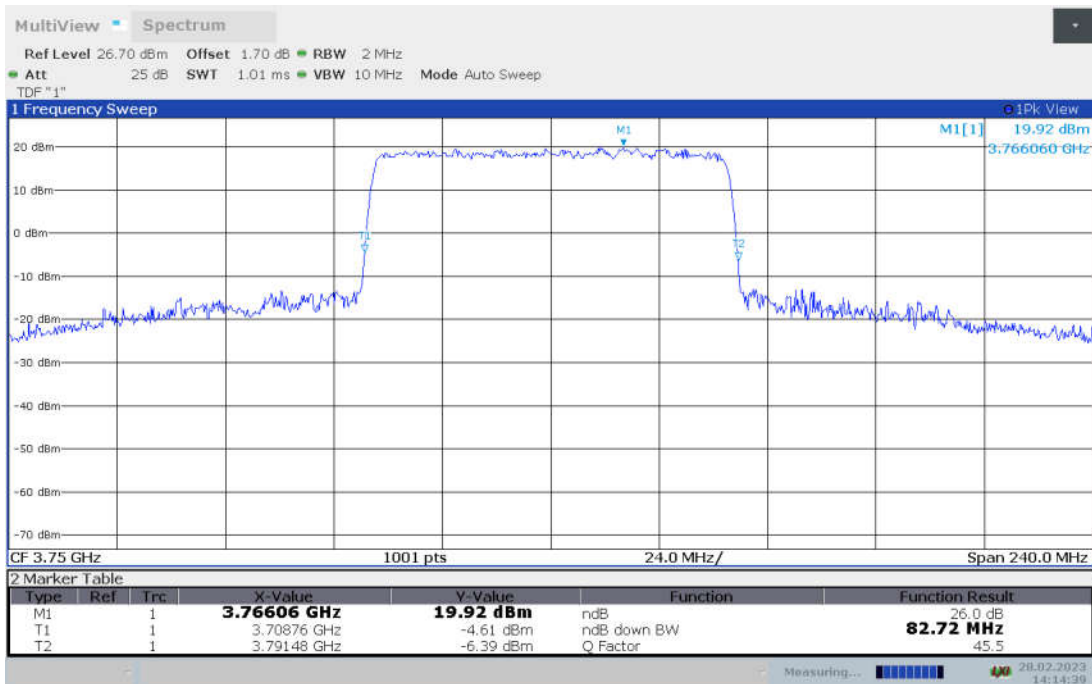
n78H,80MHz Bandwidth, DFT-s-64QAM (-26dBc BW)



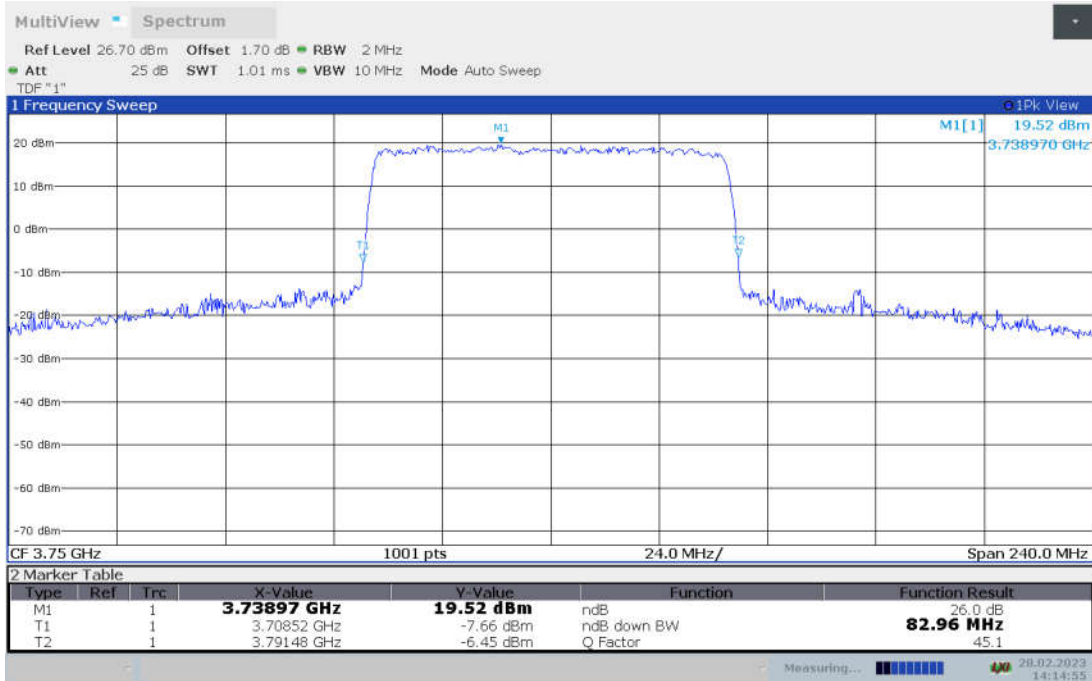
n78H,80MHz Bandwidth, DFT-s-256QAM (-26dBc BW)



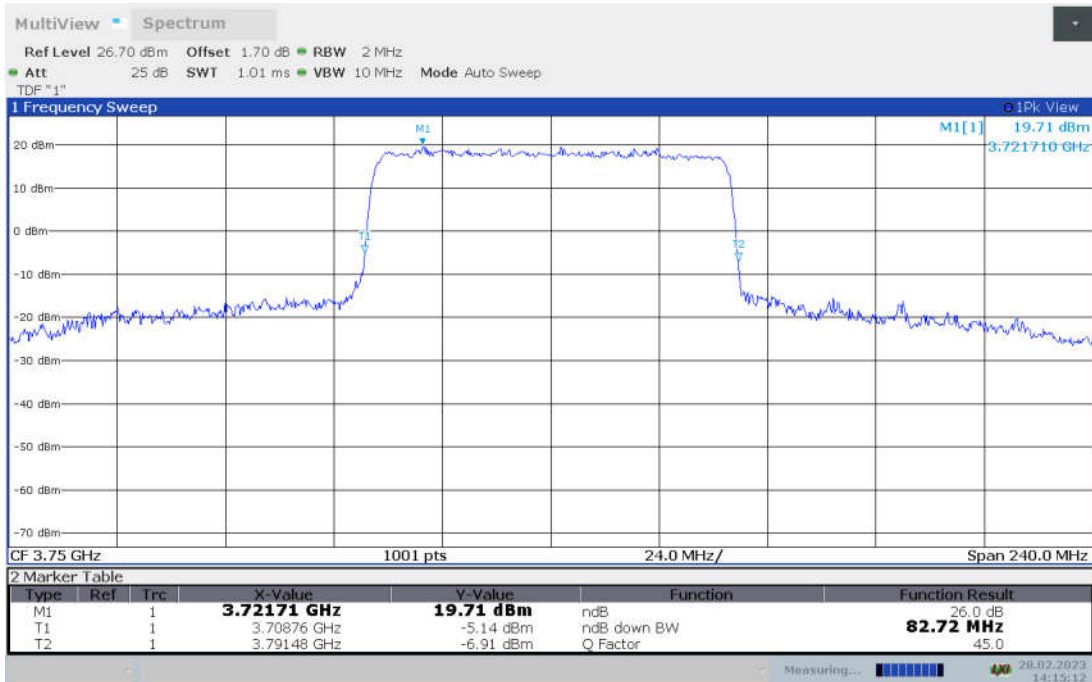
n78H,80MHz Bandwidth, CP-QPSK (-26dBc BW)



n78H,80MHz Bandwidth, CP-16QAM (-26dBc BW)

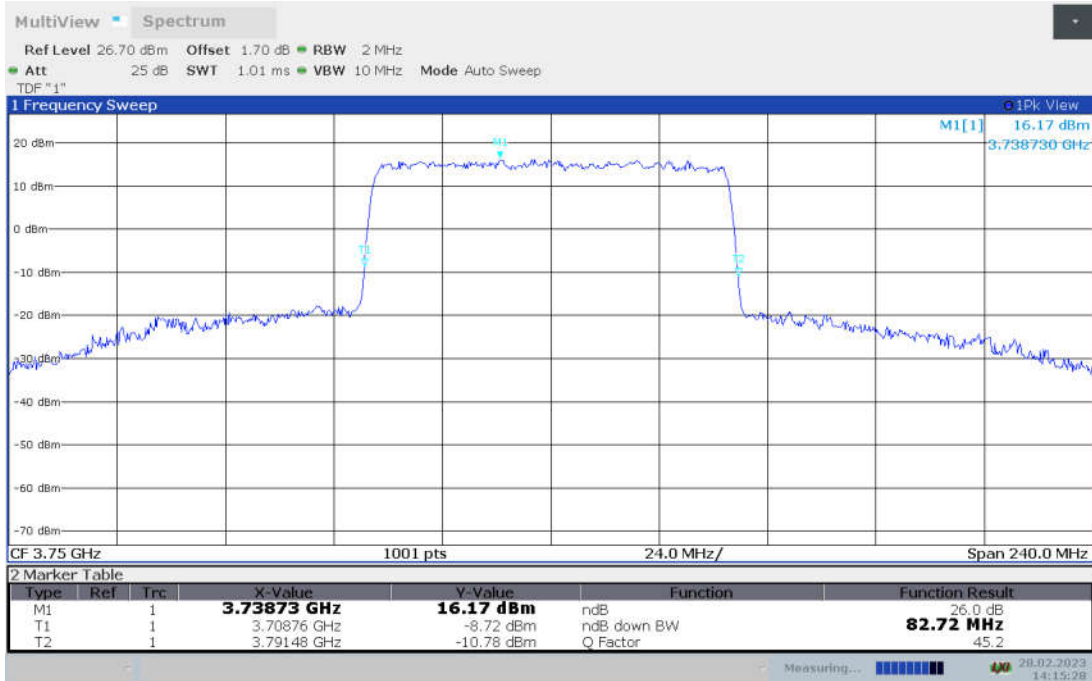


n78H,80MHz Bandwidth, CP-64QAM (-26dBc BW)





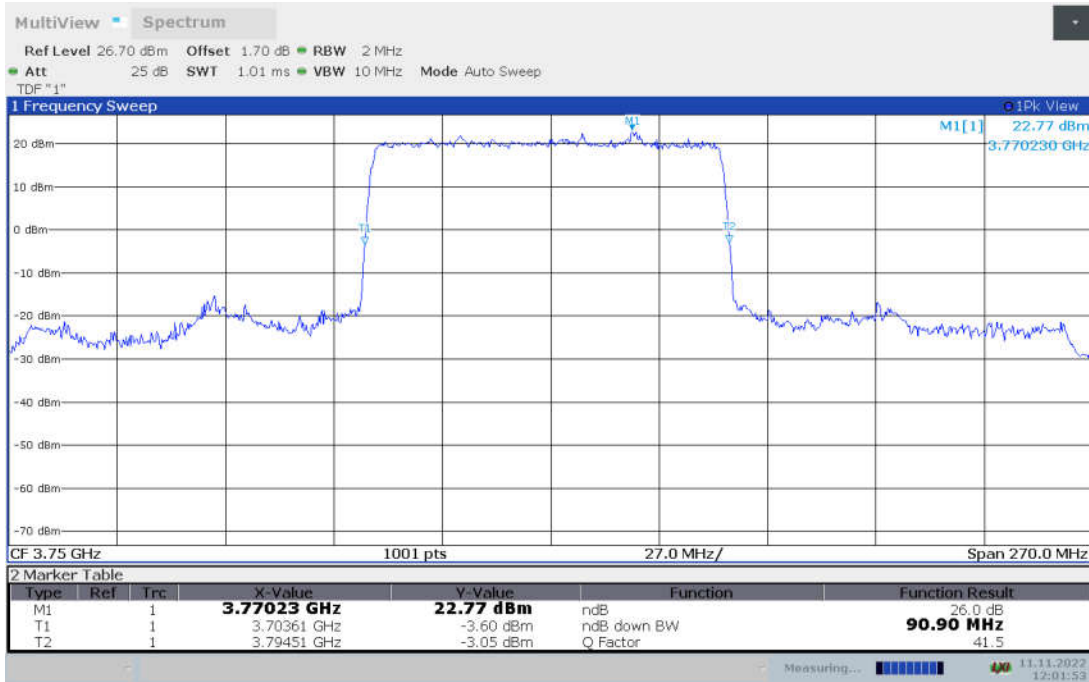
n78H,80MHz Bandwidth, CP-256QAM (-26dBc BW)



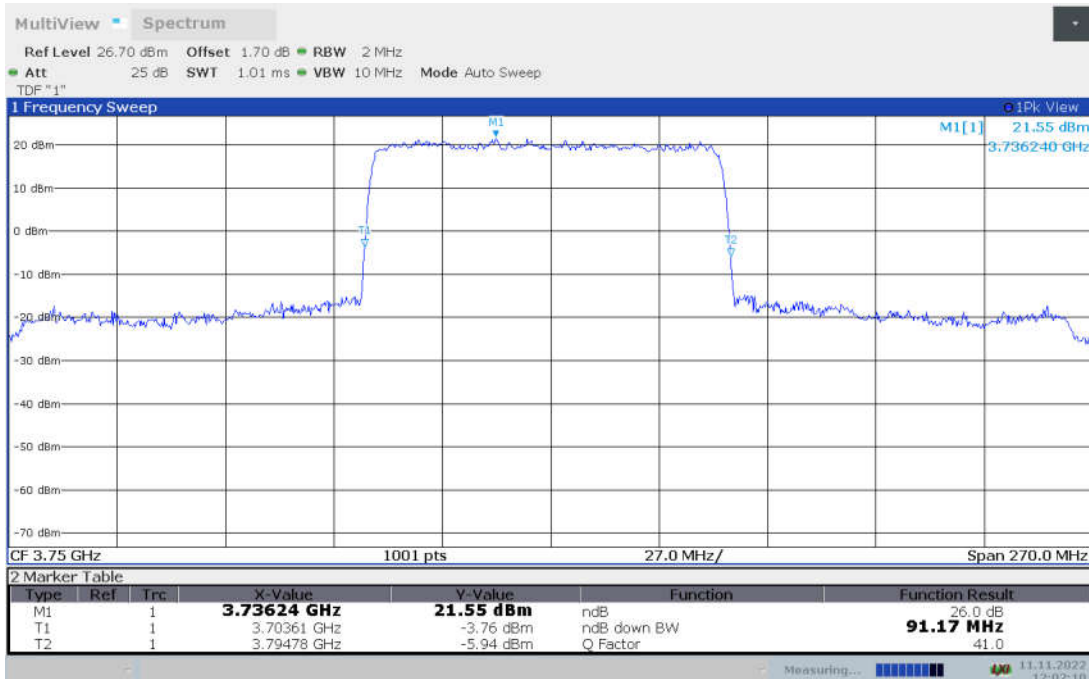
n78H,90MHz(-26dBc BW)

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
3750	90.90	91.17	90.90	90.90	90.90	92.79	92.79	92.79	92.79

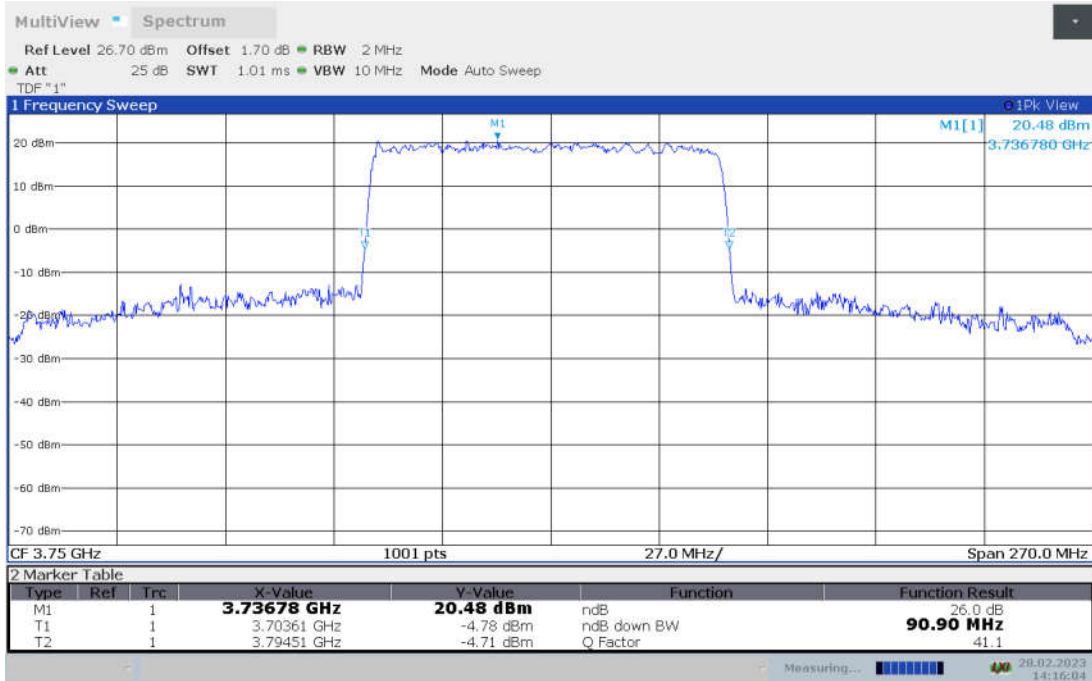
n78H,90MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



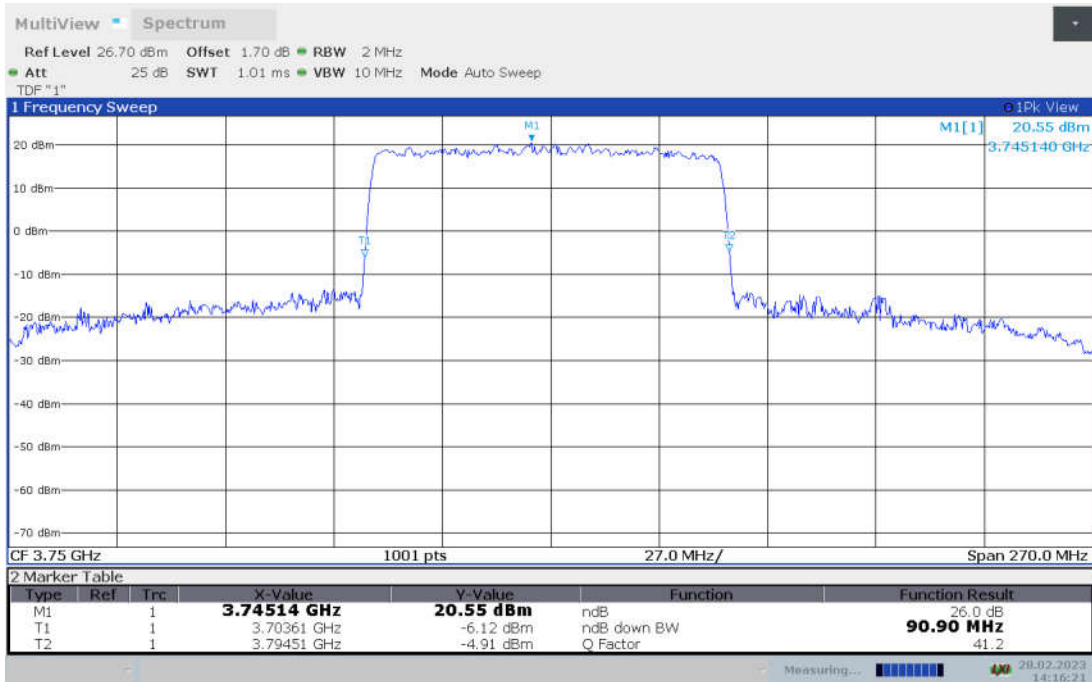
n78H,90MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



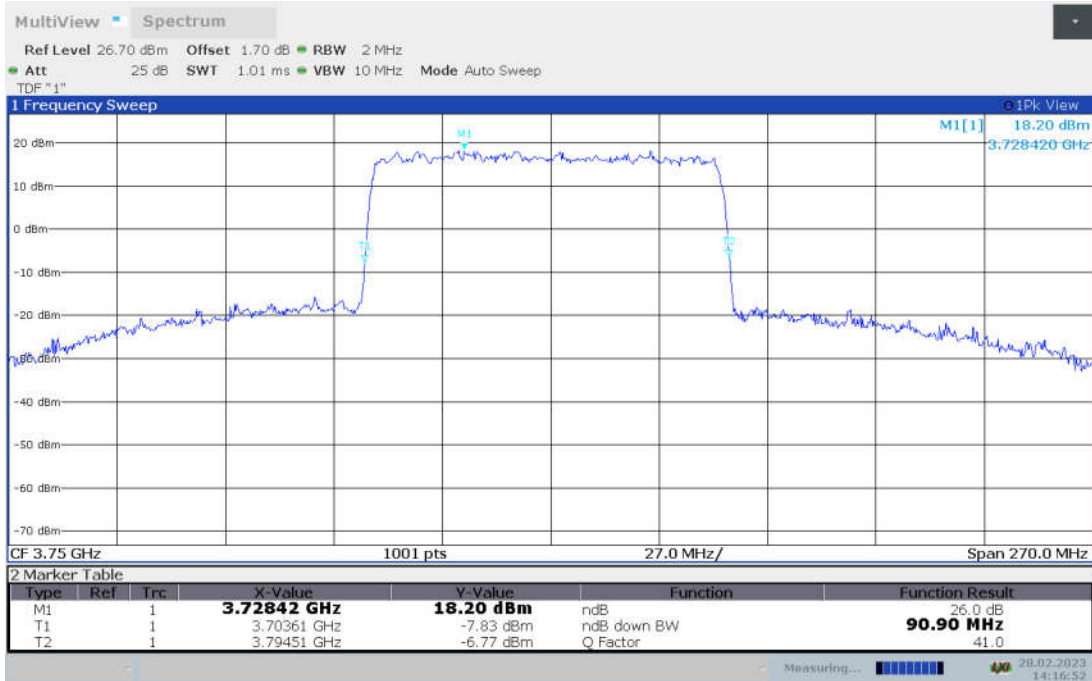
n78H,90MHz Bandwidth, DFT-s-16QAM (-26dBc BW)



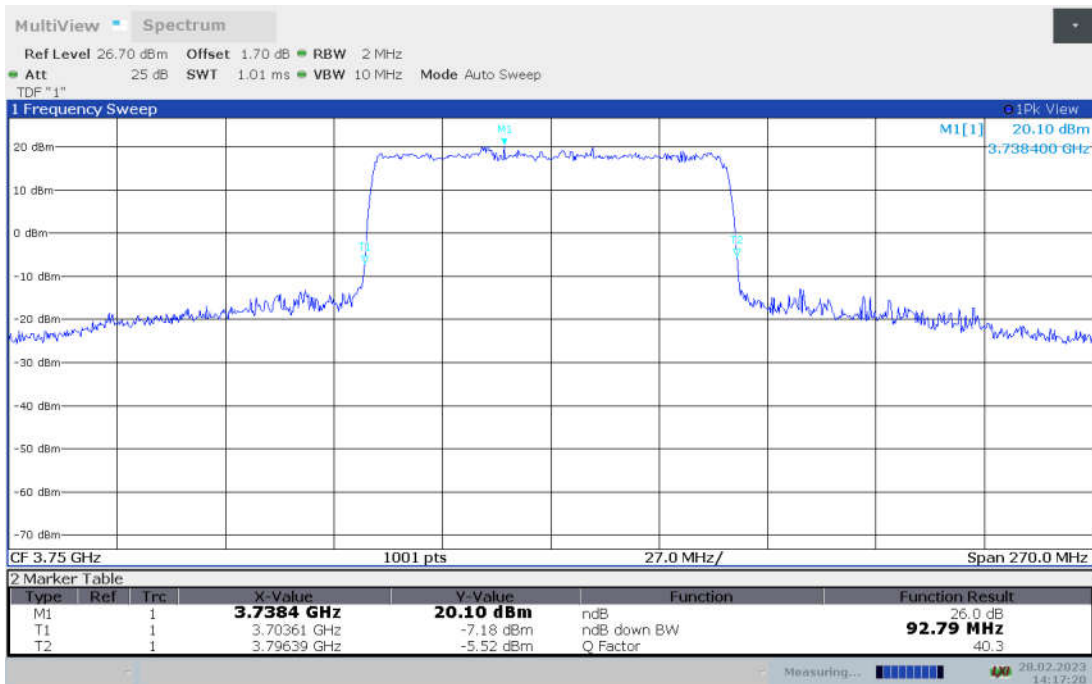
n78H,90MHz Bandwidth, DFT-s-64QAM (-26dBc BW)



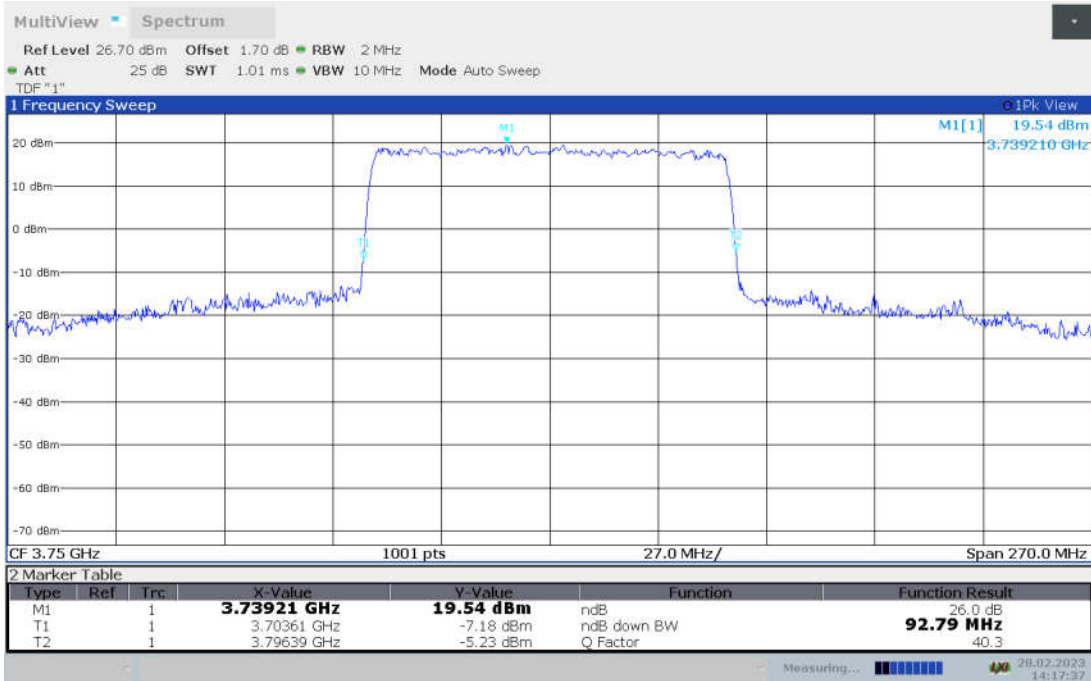
n78H,90MHz Bandwidth, DFT-s-256QAM (-26dBc BW)



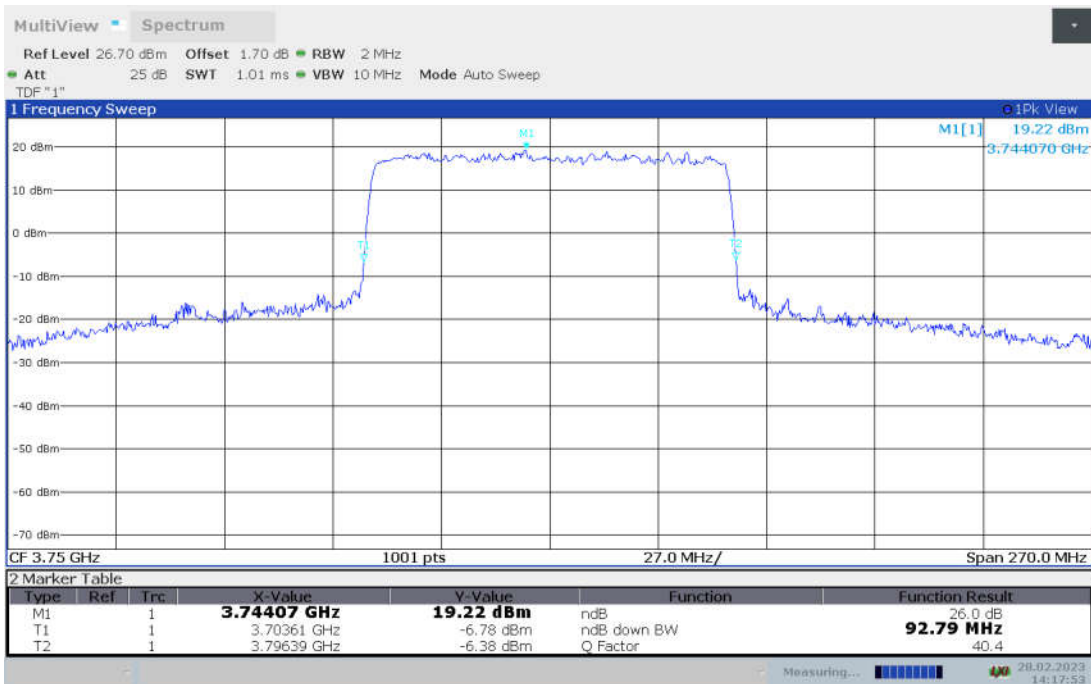
n78H,90MHz Bandwidth, CP-QPSK (-26dBc BW)



n78H,90MHz Bandwidth, CP-16QAM (-26dBc BW)

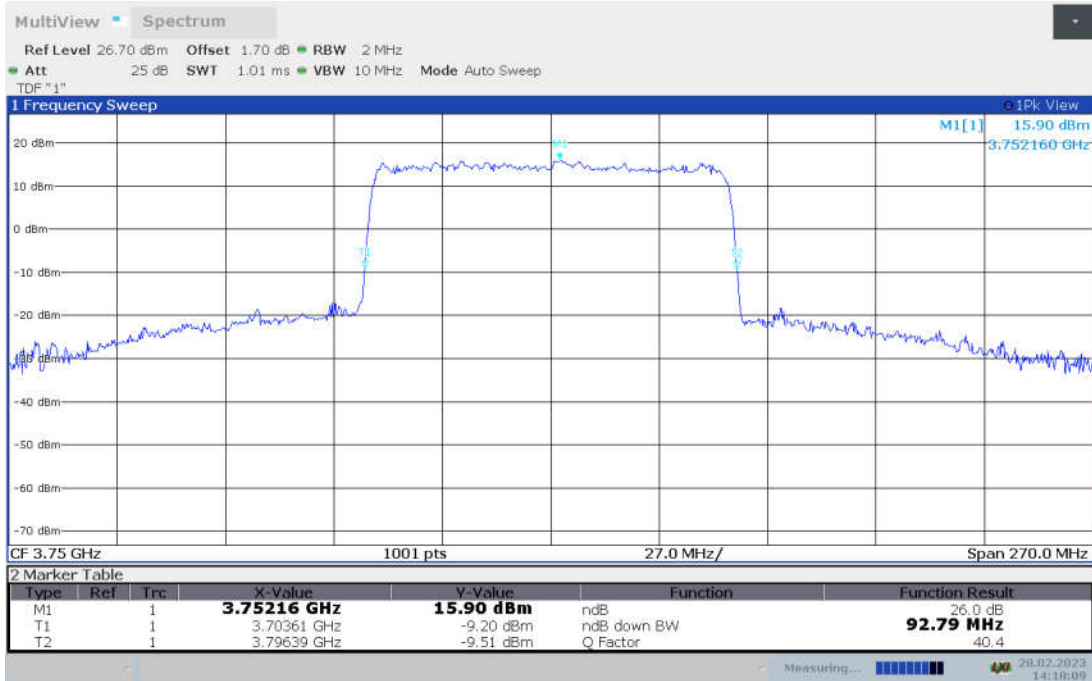


n78H,90MHz Bandwidth, CP-64QAM (-26dBc BW)





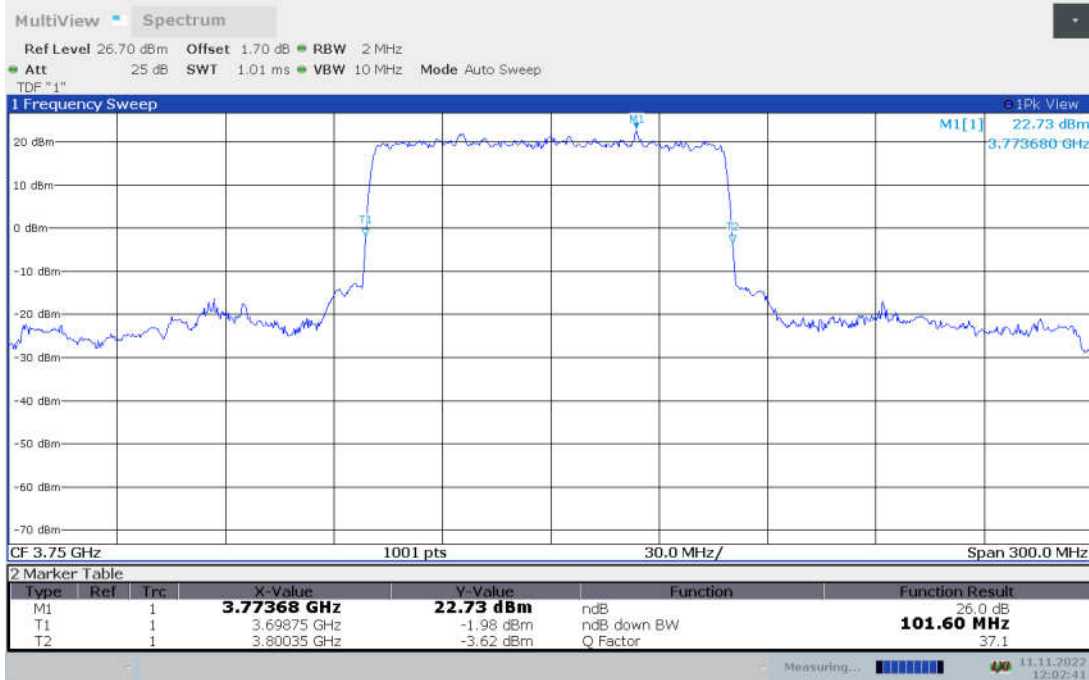
n78H,90MHz Bandwidth, CP-256QAM (-26dBc BW)



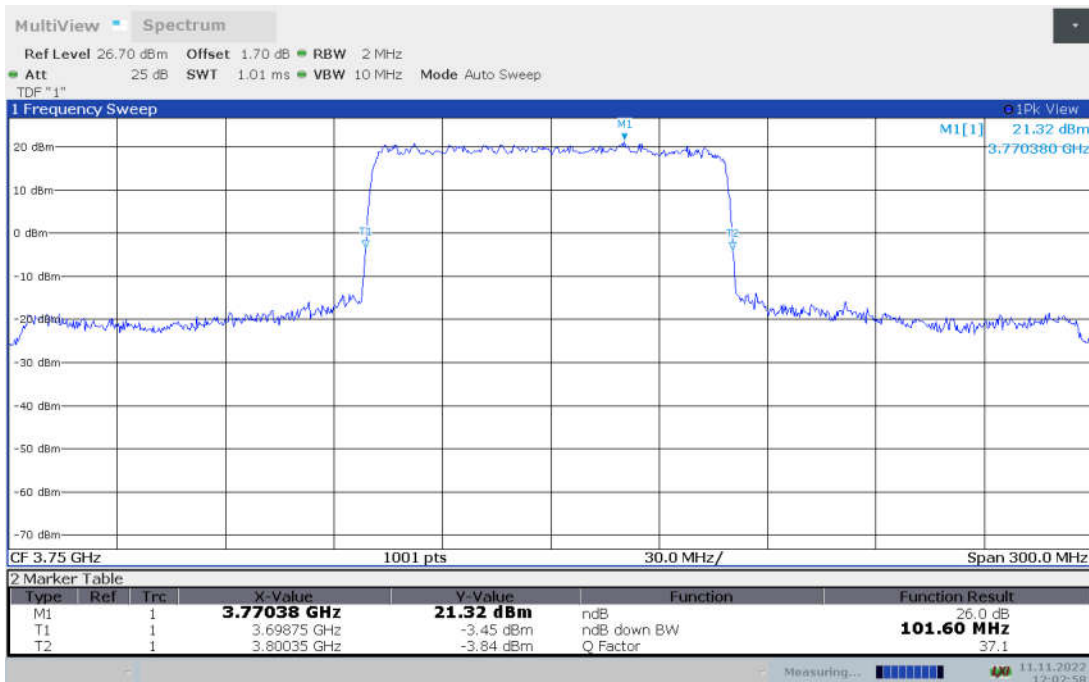
n78H,100MHz(-26dBc BW)

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
3750	101.60	101.60	101.60	101.90	101.90	101.90	103.10	103.10	103.10

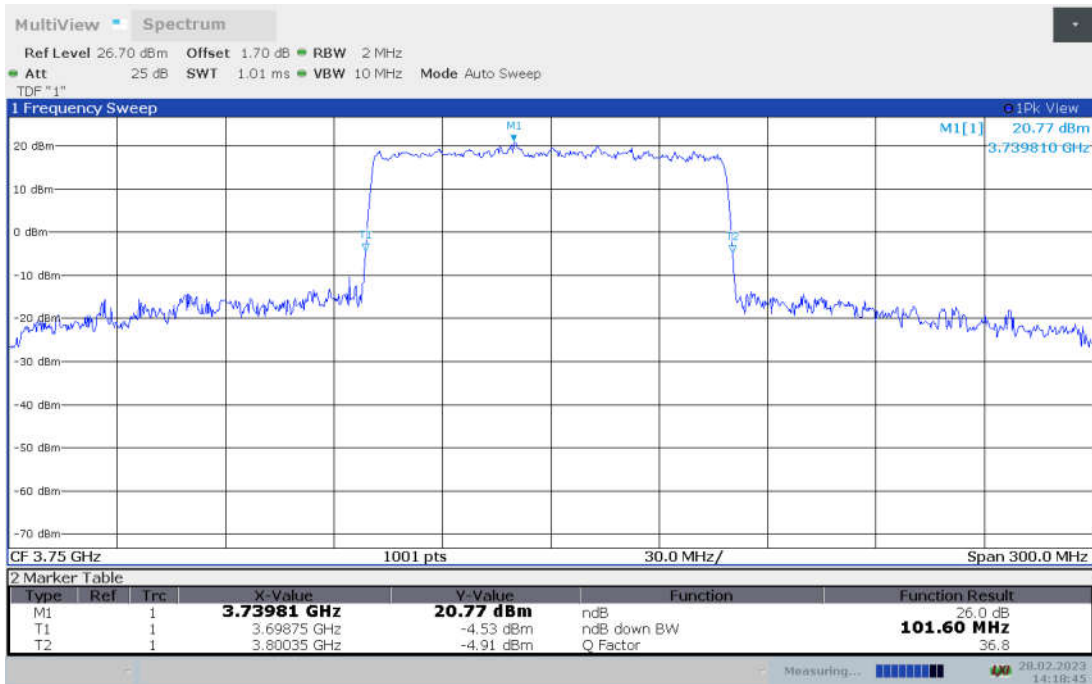
n78H,100MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



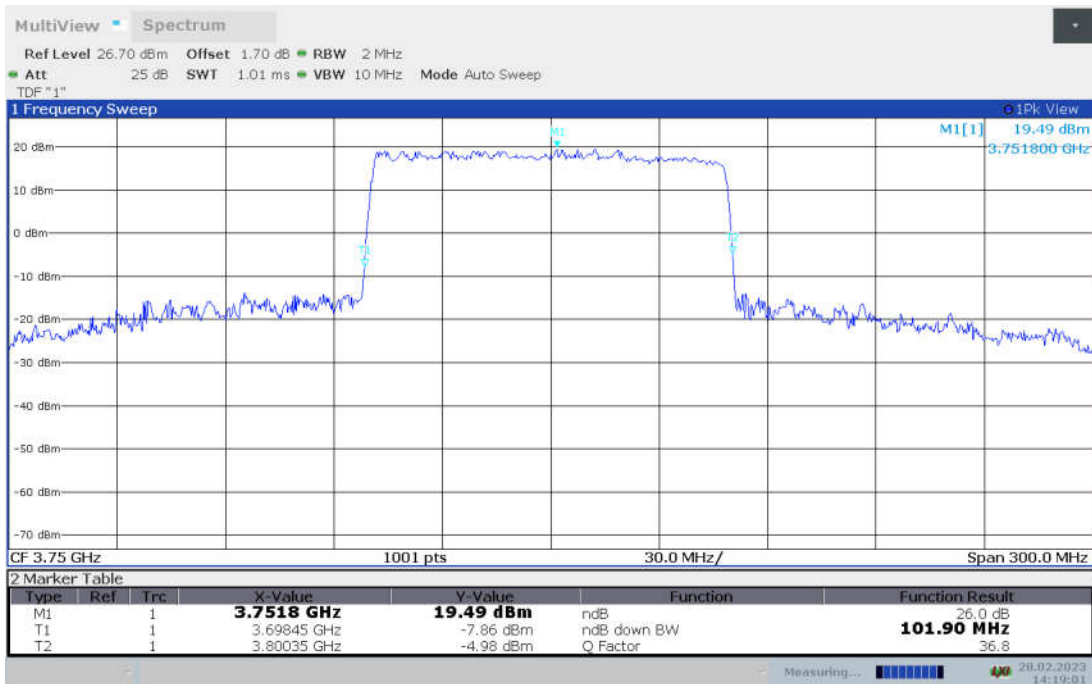
n78H,100MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



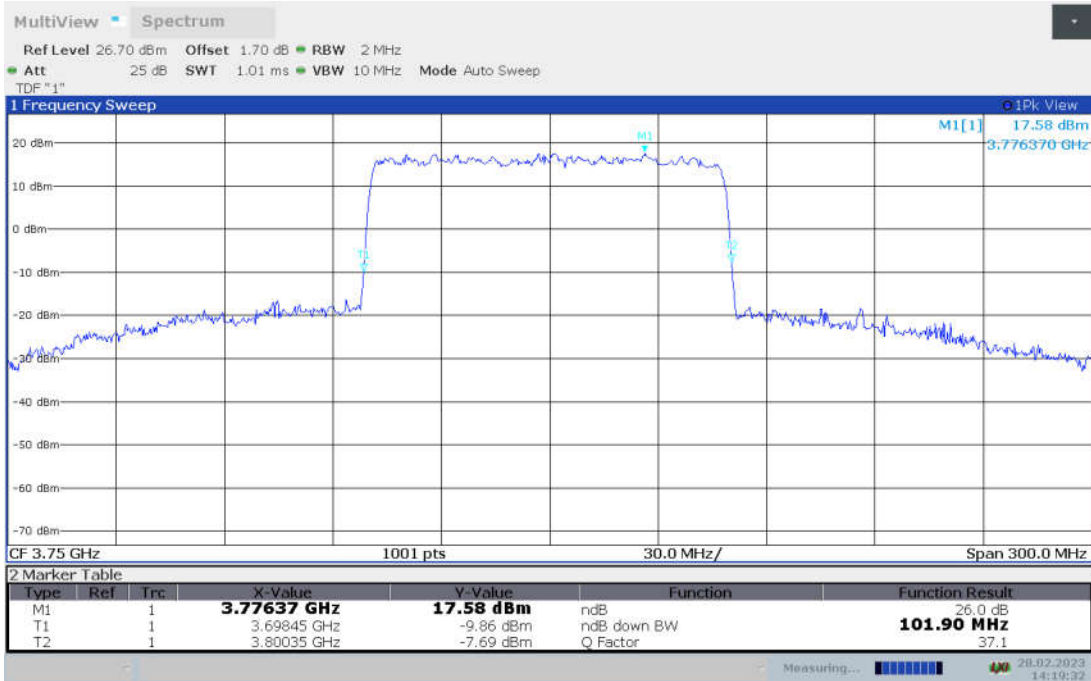
n78H, 100MHz Bandwidth, DFT-s-16QAM (-26dBc BW)



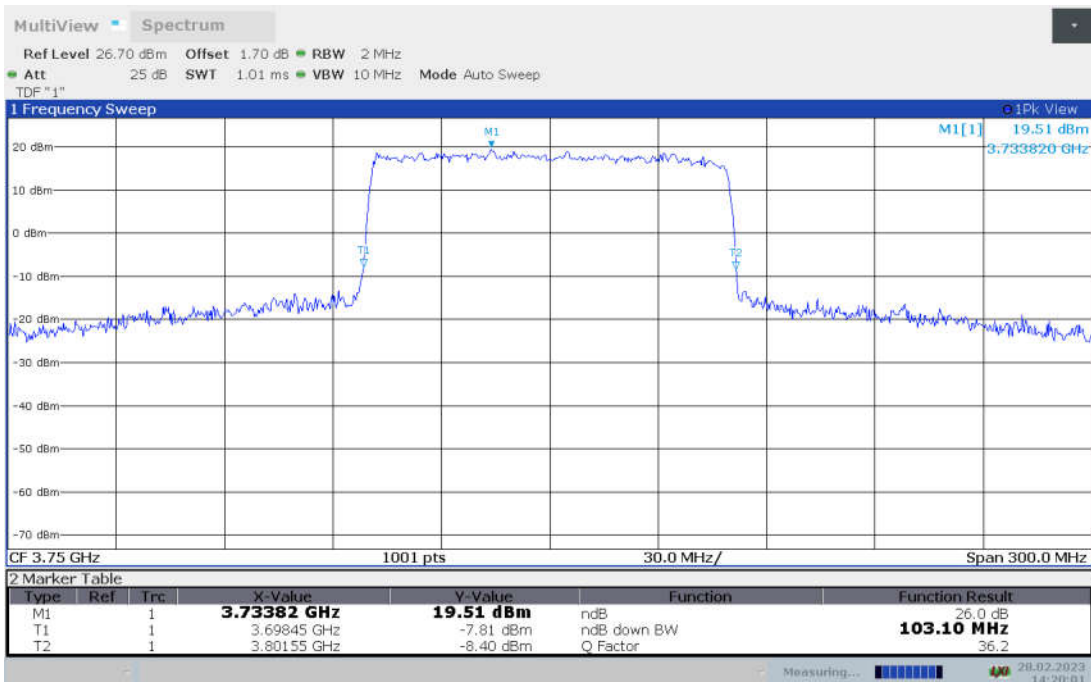
n78H, 100MHz Bandwidth, DFT-s-64QAM (-26dBc BW)



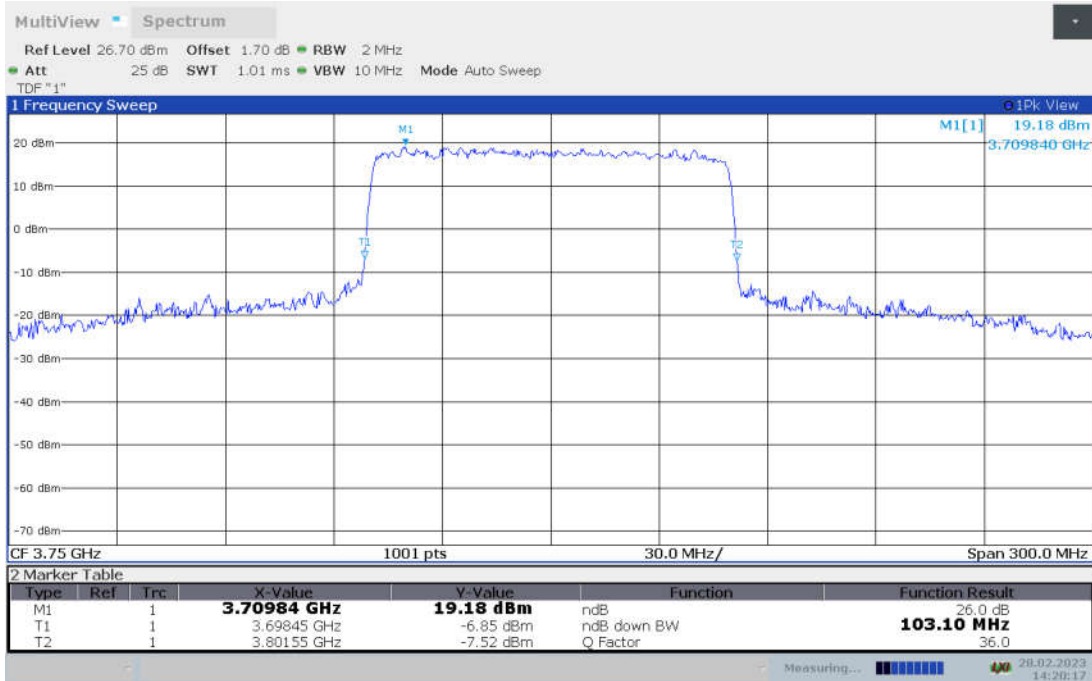
n78H, 100MHz Bandwidth, DFT-s-256QAM (-26dBc BW)



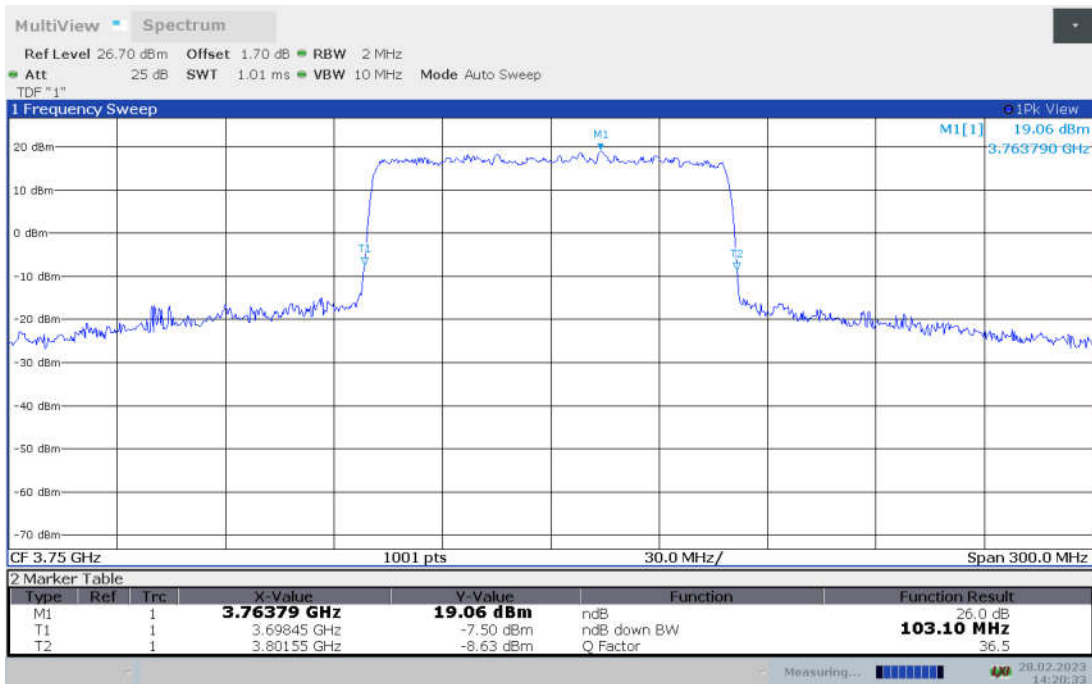
n78H, 100MHz Bandwidth, CP-QPSK (-26dBc BW)



n78H,100MHz Bandwidth, CP-16QAM (-26dBc BW)

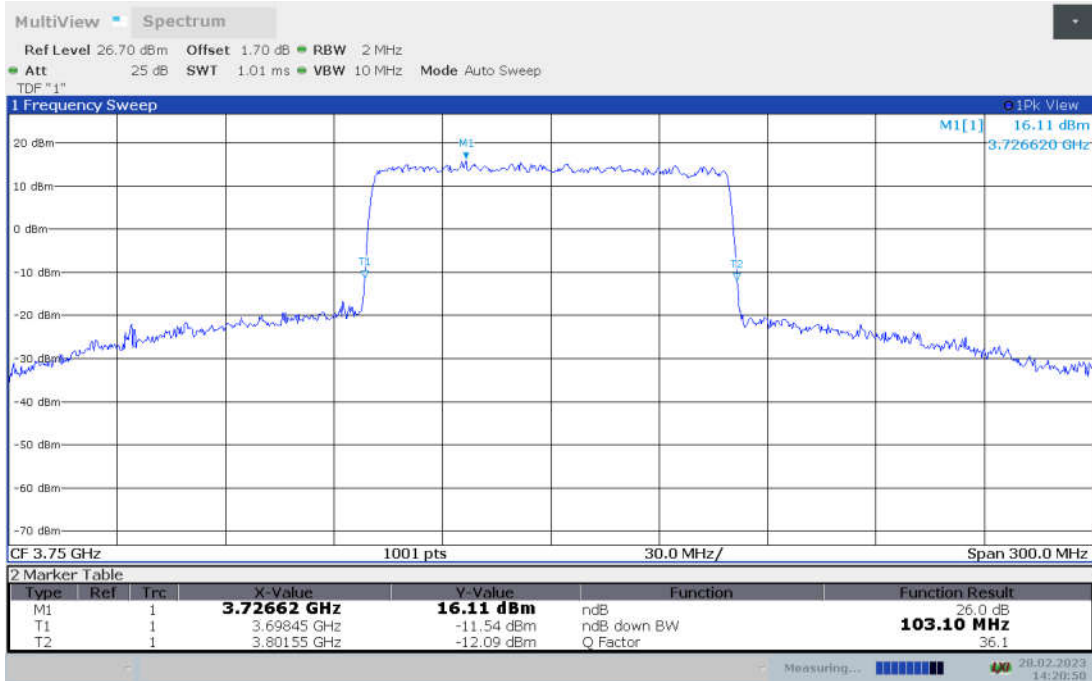


n78H,100MHz Bandwidth, CP-64QAM (-26dBc BW)





n78H,100MHz Bandwidth, CP-256QAM (-26dBc BW)





A.6 BAND EDGE COMPLIANCE

Reference

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

A.6.1 Measurement limit

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

Part 24.238 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 27.53(n) states for base station operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with the provisions of this paragraph (n)(1) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz 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, but limited to a maximum of 200 kHz. 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. Notwithstanding the channel edge requirement of -13 dBm per megahertz, for base station operations in the 3450-3550 MHz band, the conducted power of any emission below 3440 MHz or above 3560 MHz shall not exceed -25 dBm/MHz, and the conducted power of emissions below 3430 MHz or above 3570 MHz shall not exceed -40 dBm/MHz.

Part 27.53(l) states for base station operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.



Compliance with this paragraph (l)(1) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz 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. 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.6.2 Measurement Procedure

The testing follows ANSI C63.26

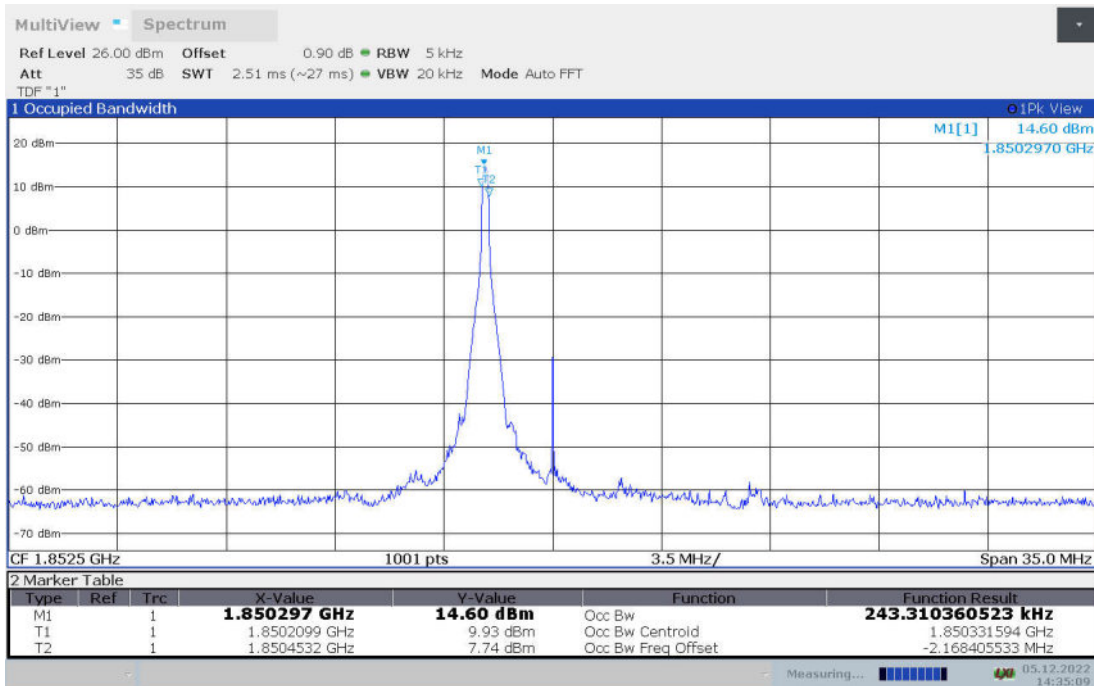
- a) The EUT was connected to spectrum analyzer and system simulator via a power divider.
- b) The band edges of low and high channels for the highest RF powers were measured.
- c) Set RBW \geq 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
- d) Set spectrum analyzer with 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

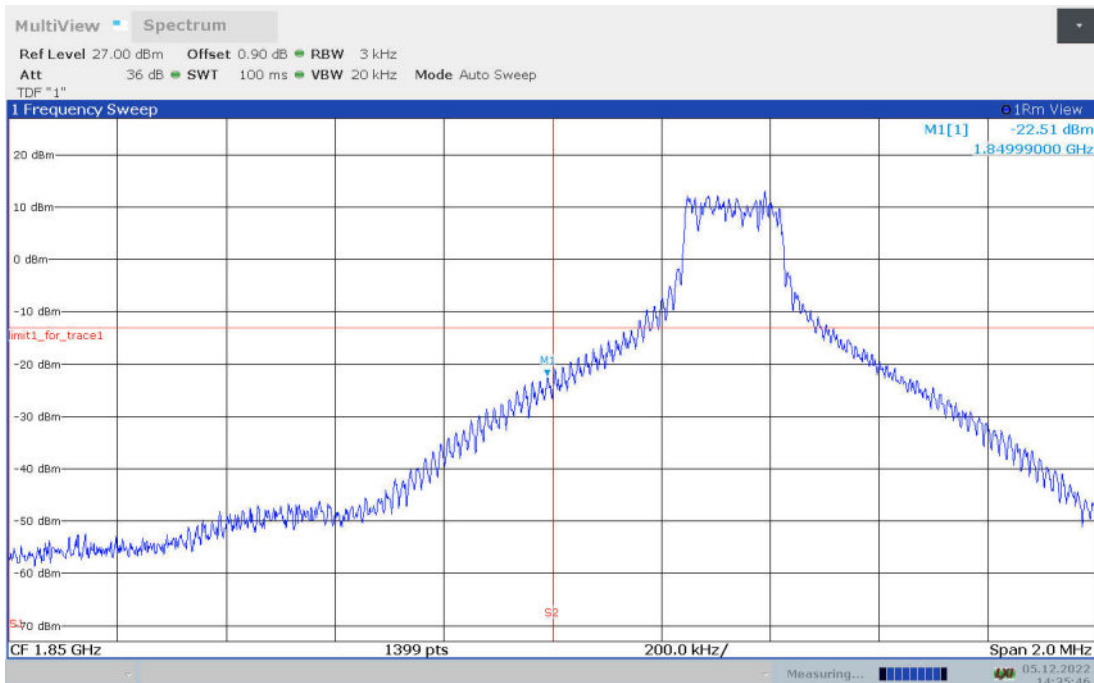
Only worst case result is given below

n2

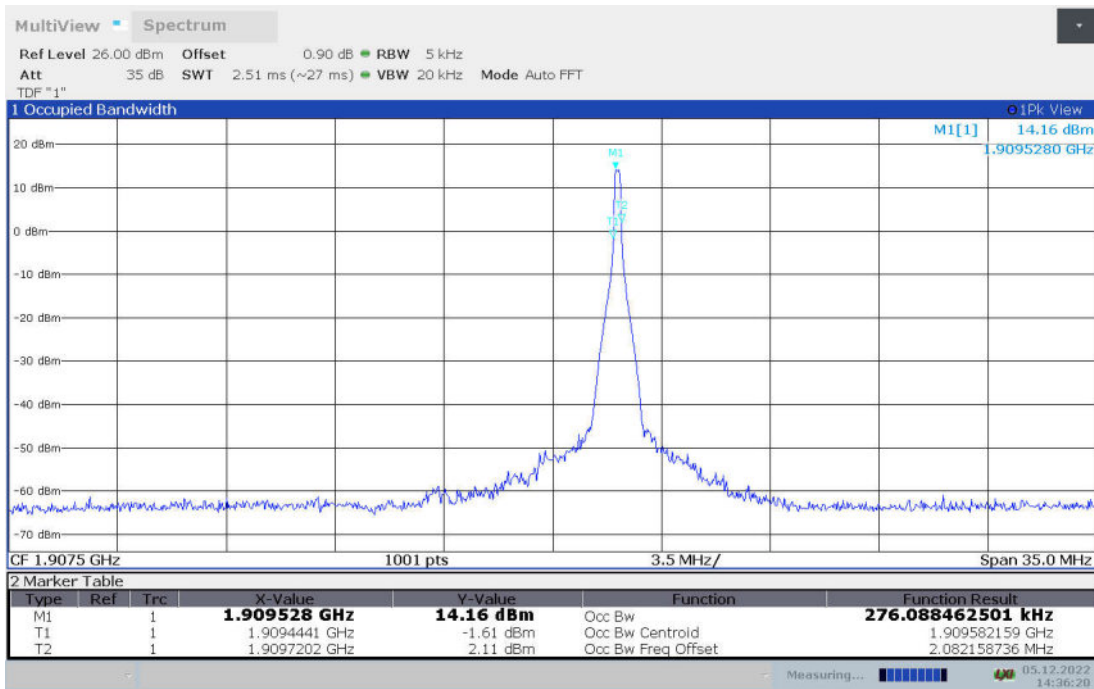
OBW: 1RB-LOW_offset



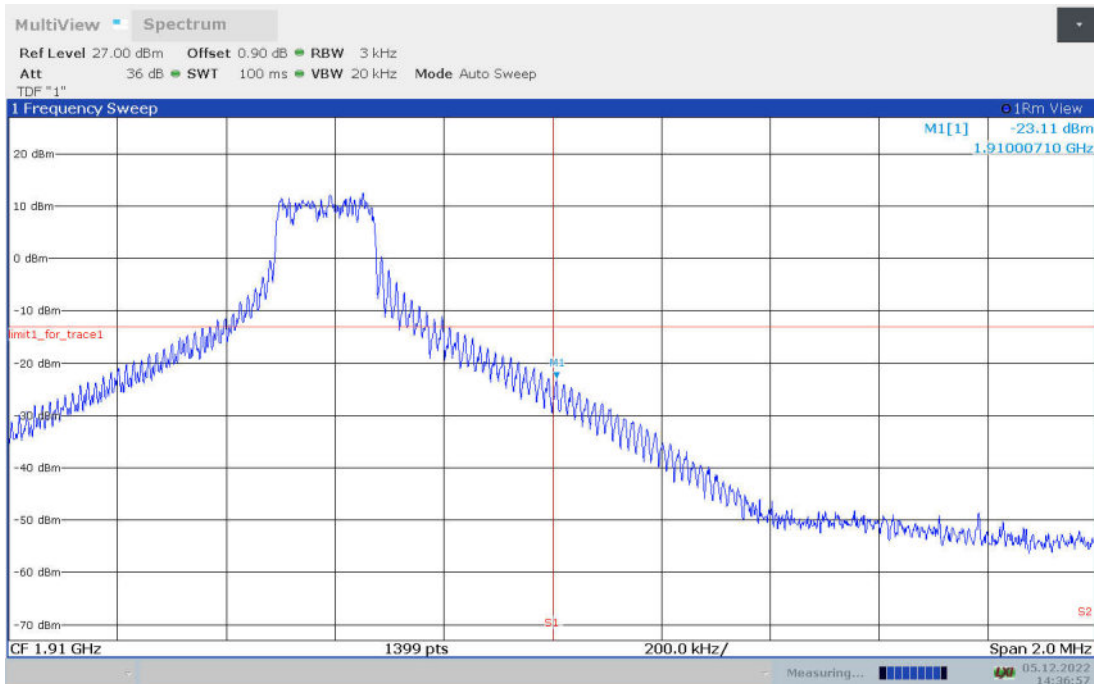
LOW BAND EDGE BLOCK-1RB-LOW_offset



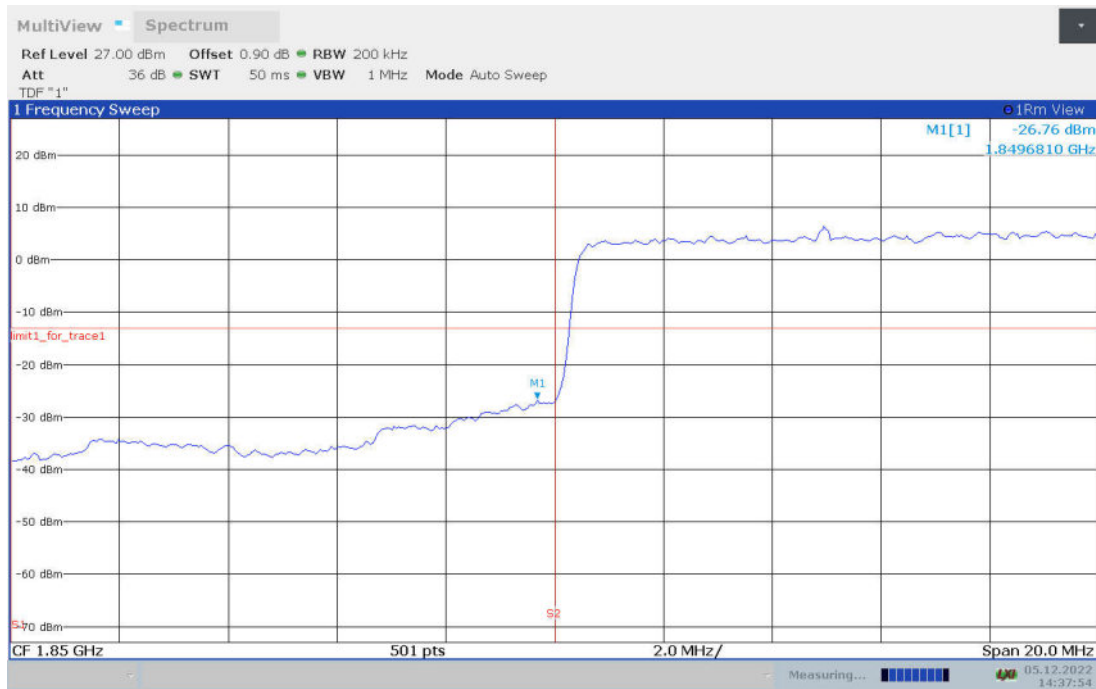
OBW: 1RB-HIGH_offset



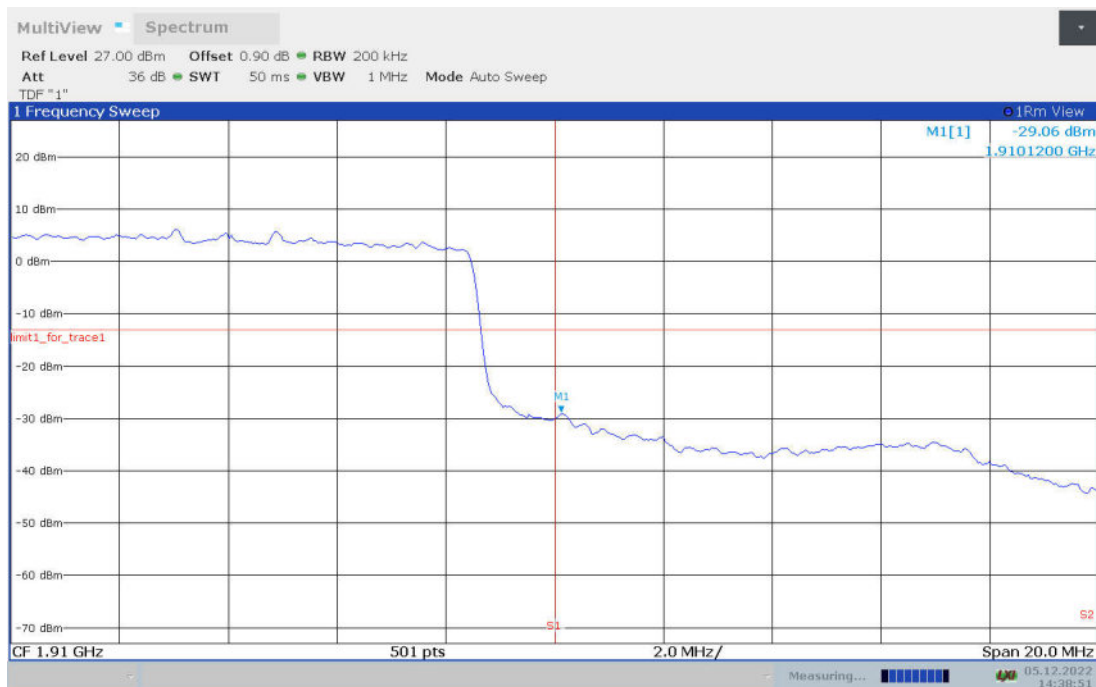
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-20M-100%RB

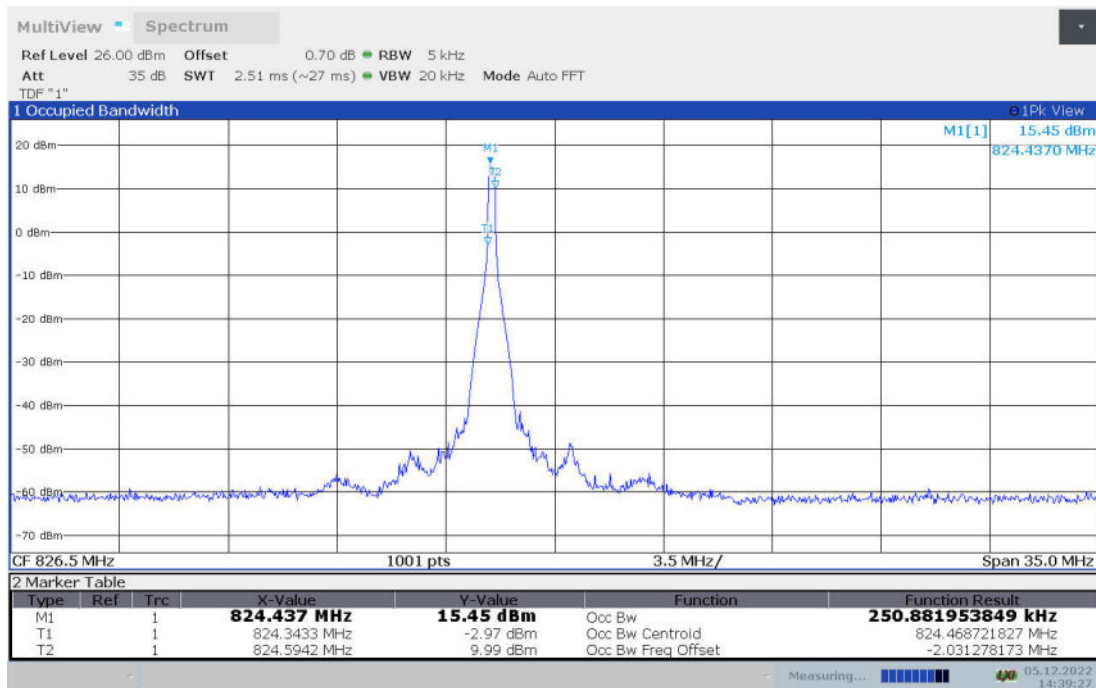


HIGH BAND EDGE BLOCK-20M-100%RB

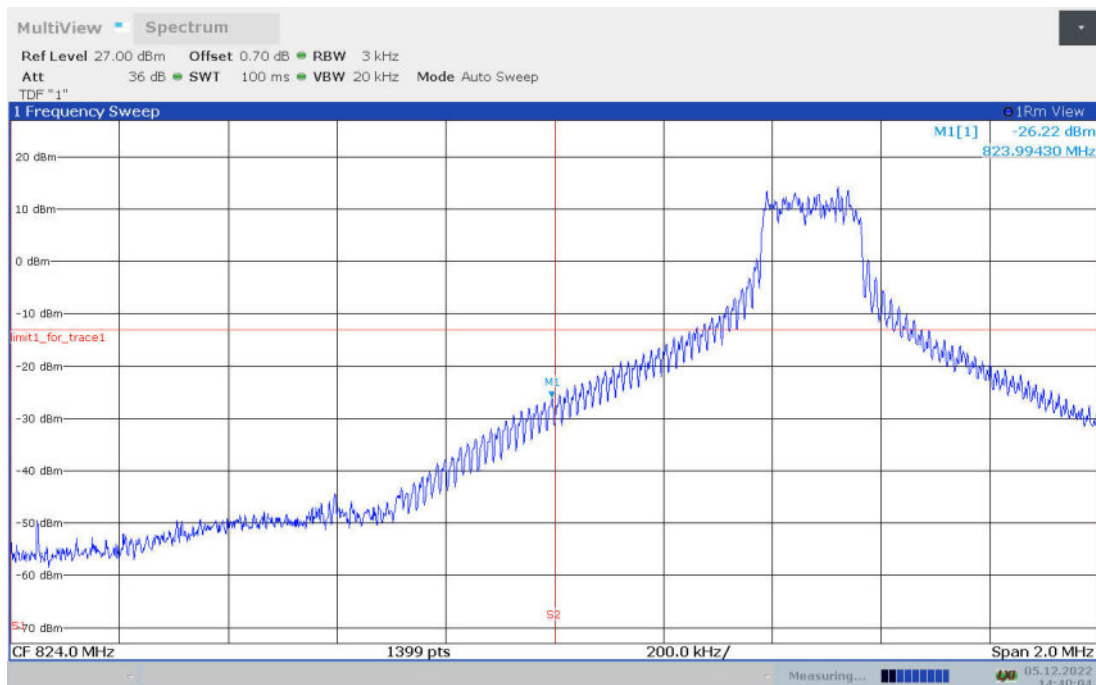


n5

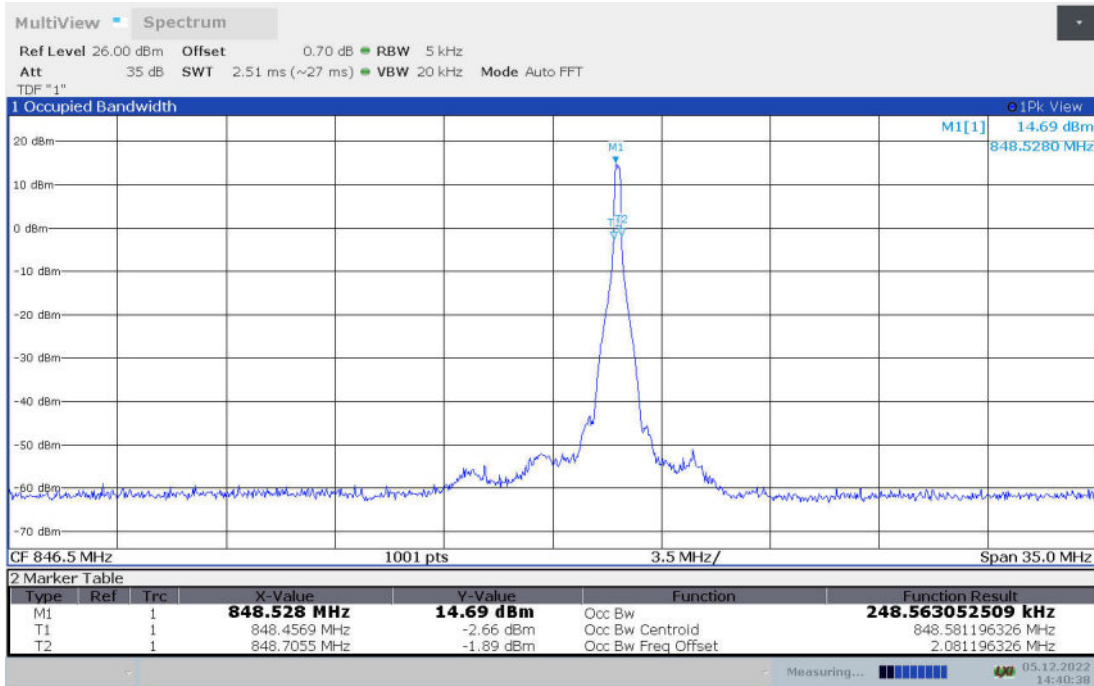
OBW: 1RB-LOW_offset



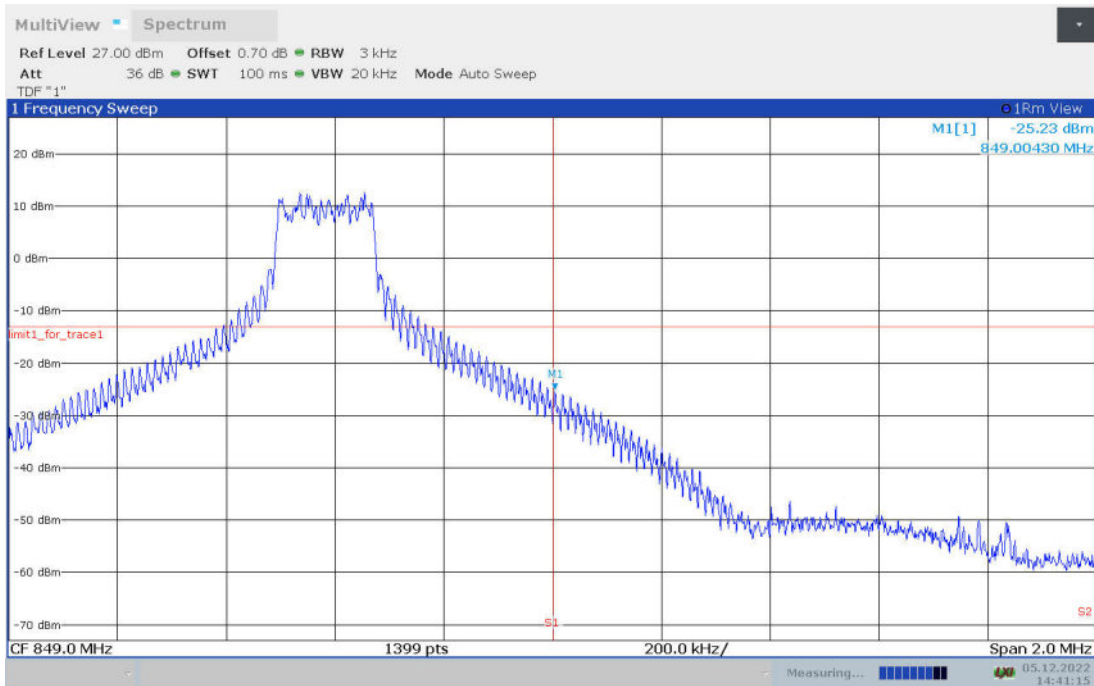
LOW BAND EDGE BLOCK-1RB-LOW_offset



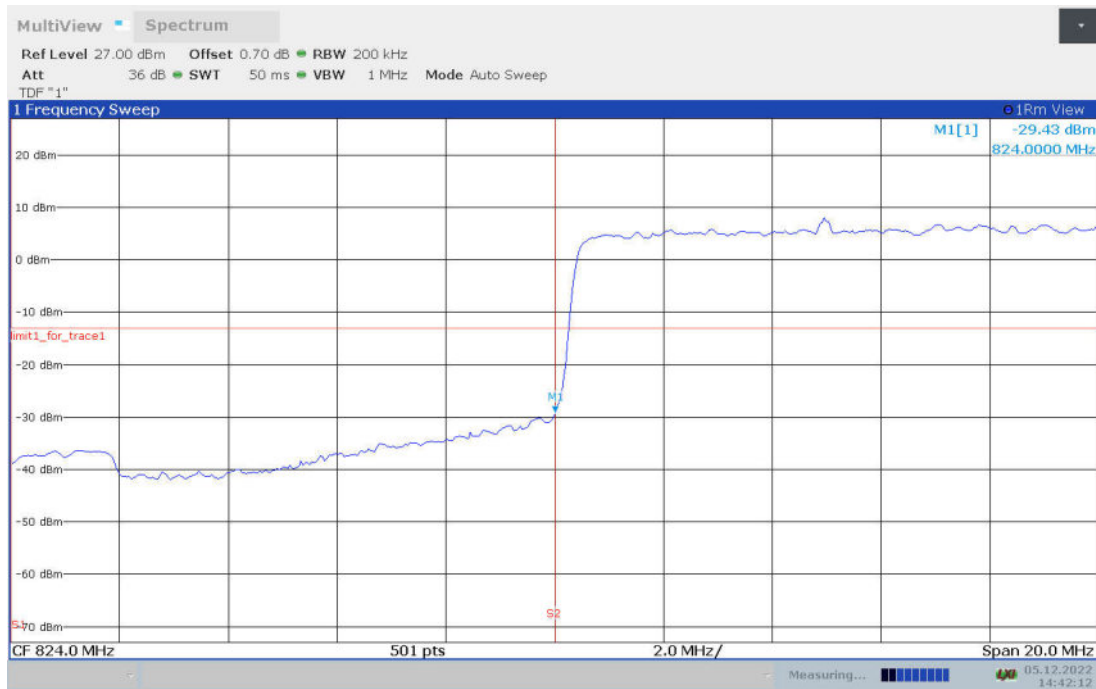
OBW: 1RB-HIGH_offset



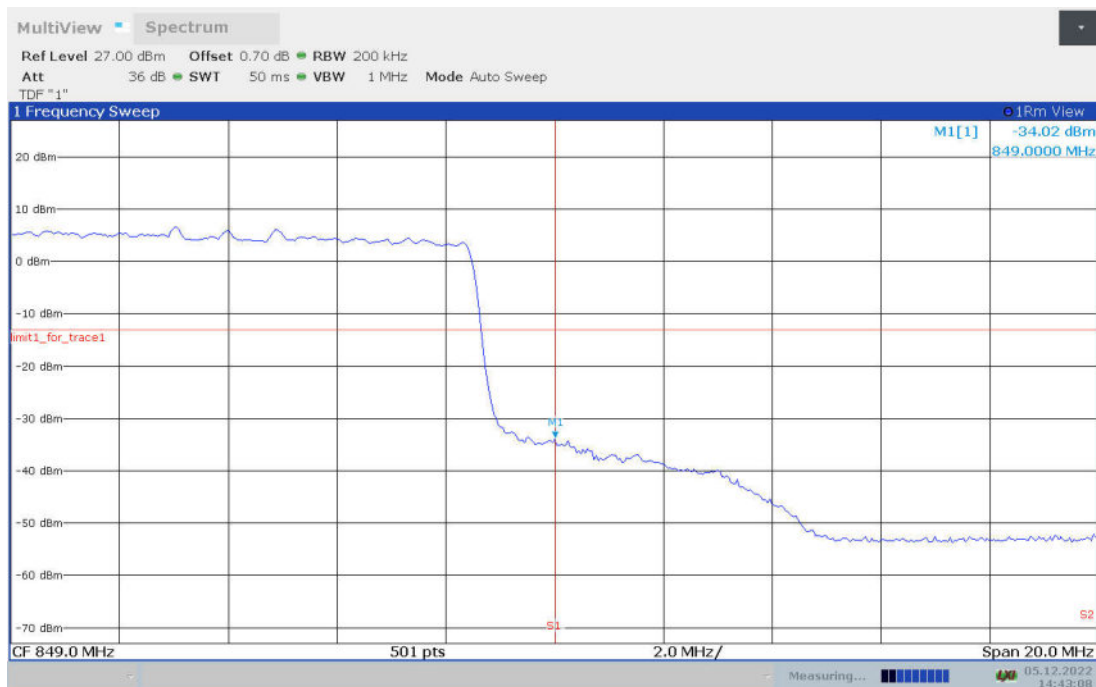
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



LOW BAND EDGE BLOCK-20M-100%RB

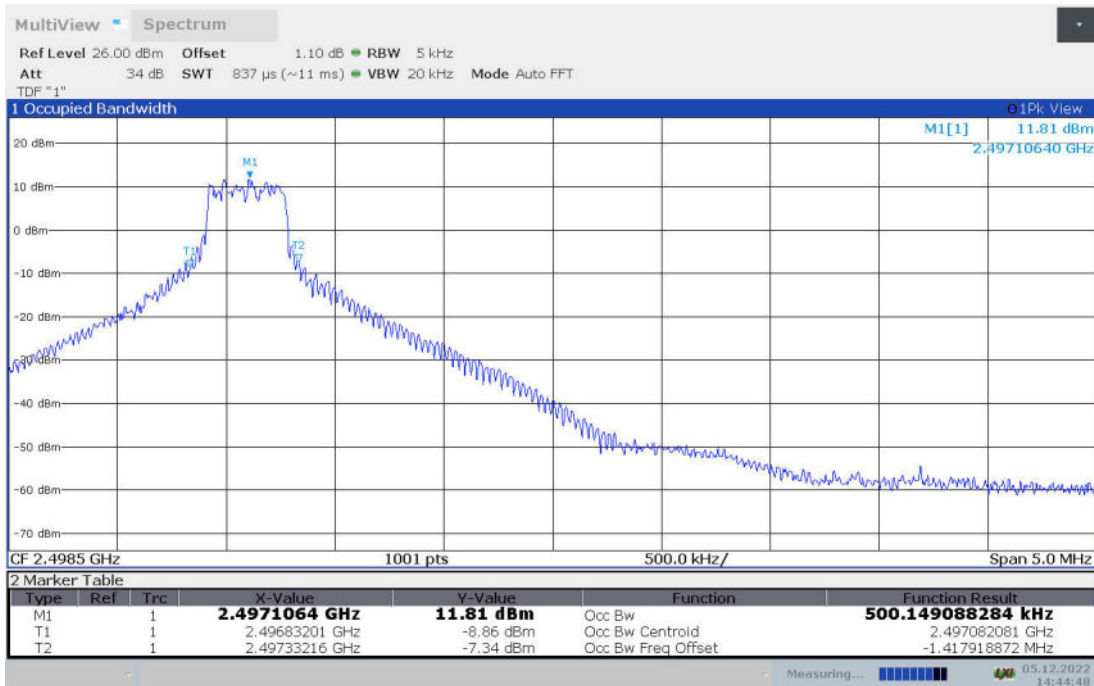


HIGH BAND EDGE BLOCK-20M-100%RB

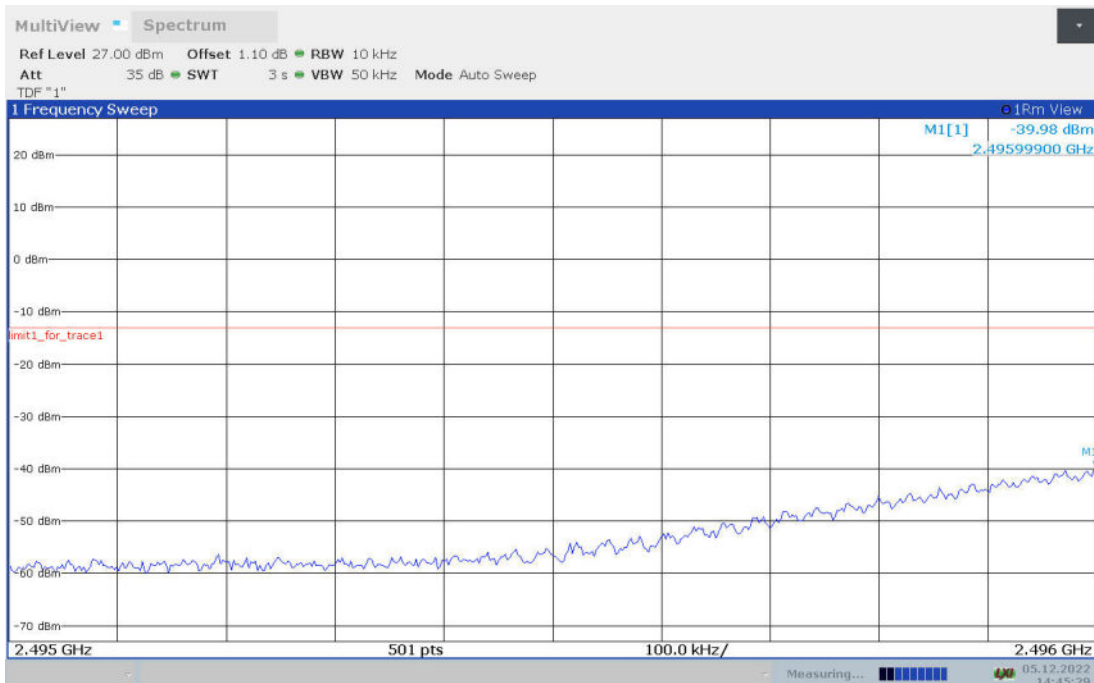


n41

OBW: 1RB-LOW_offset



LOW BAND EDGE BLOCK-1RB-LOW_offset



LOW BAND EDGE BLOCK-1RB-LOW_offset