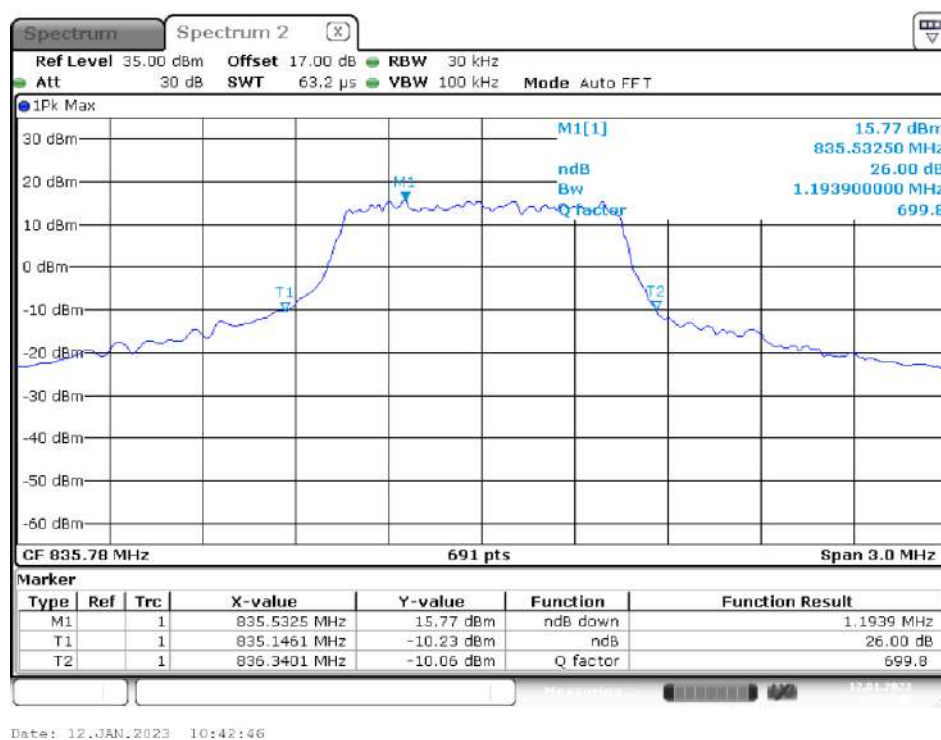
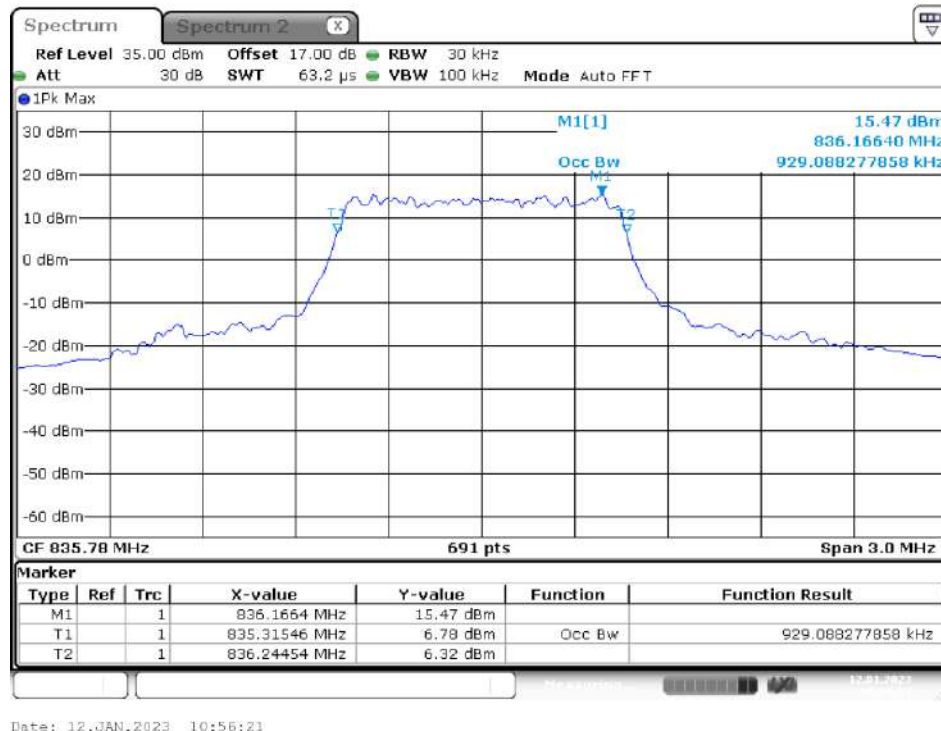
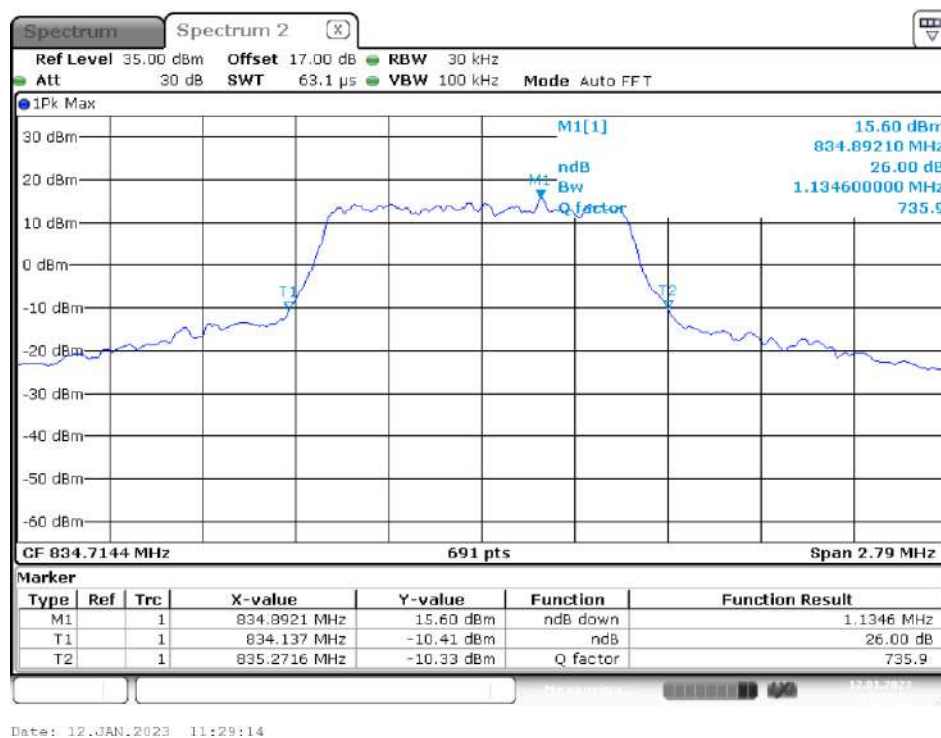
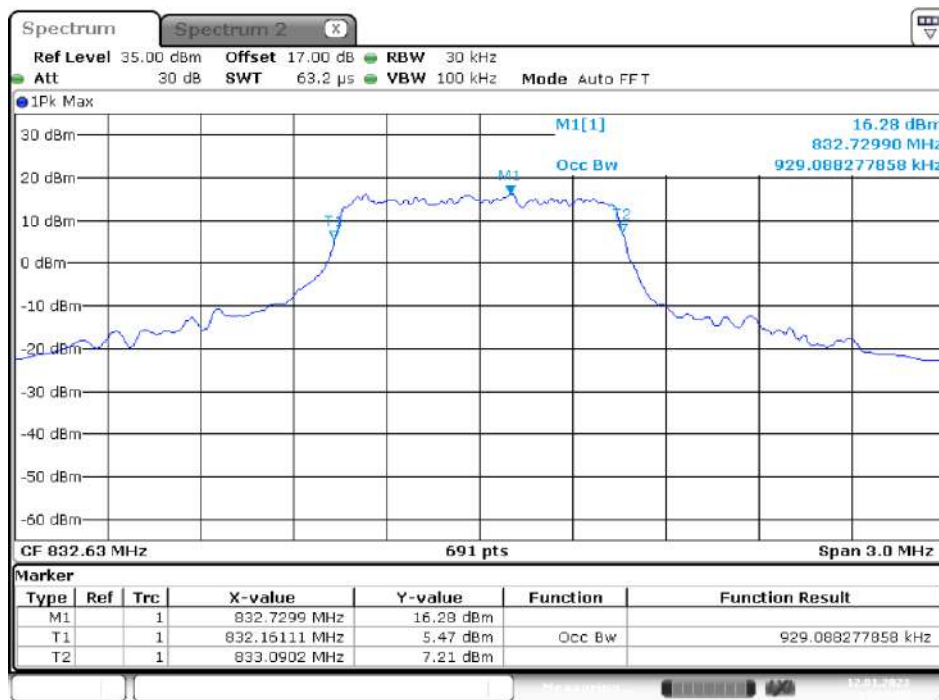
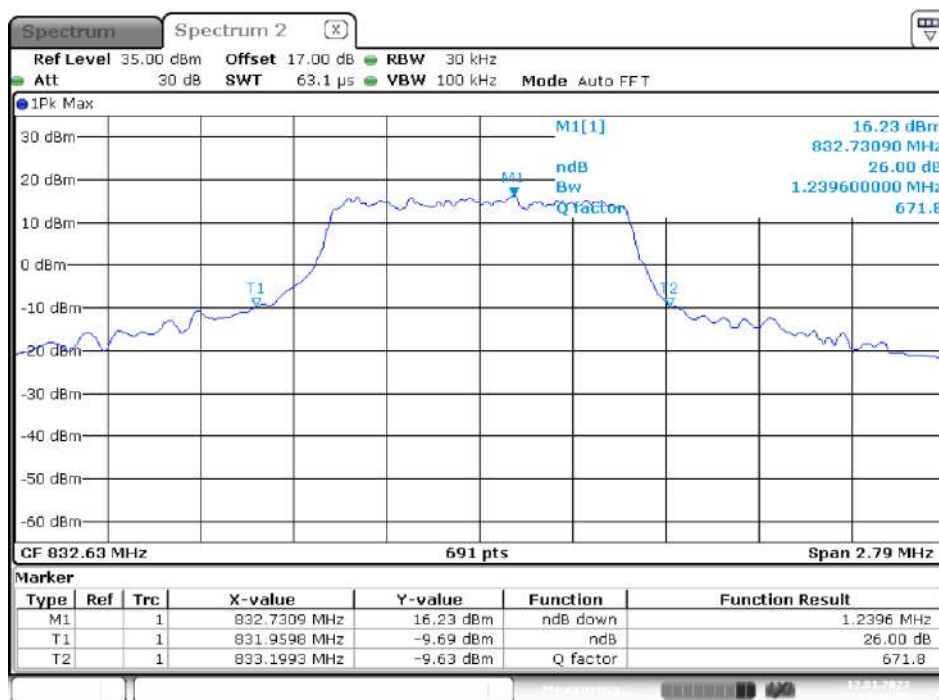


16-QAM (3.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

16-QAM (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

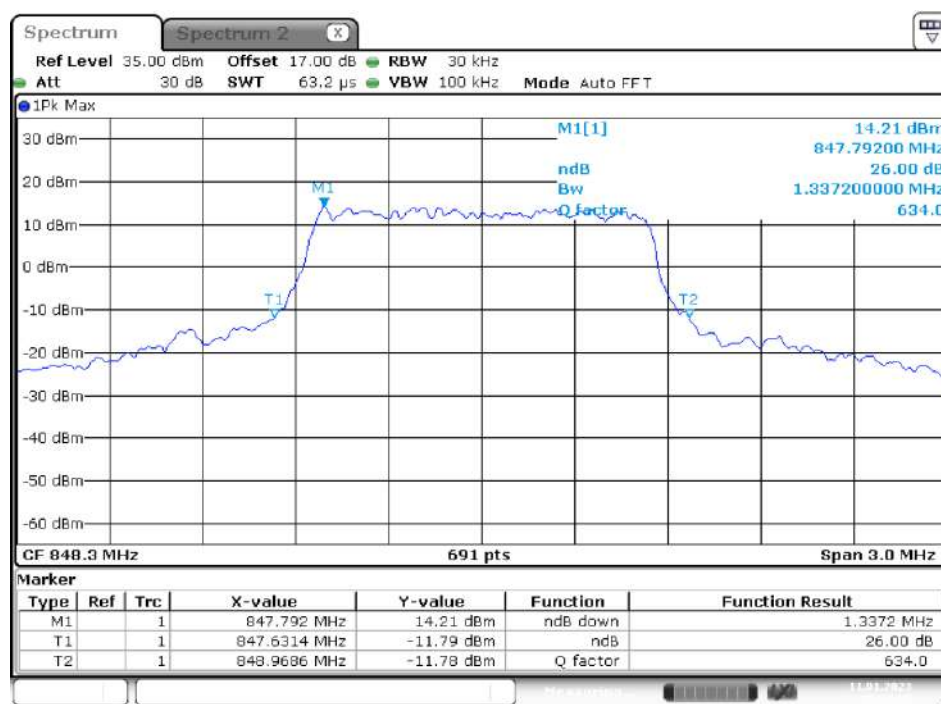
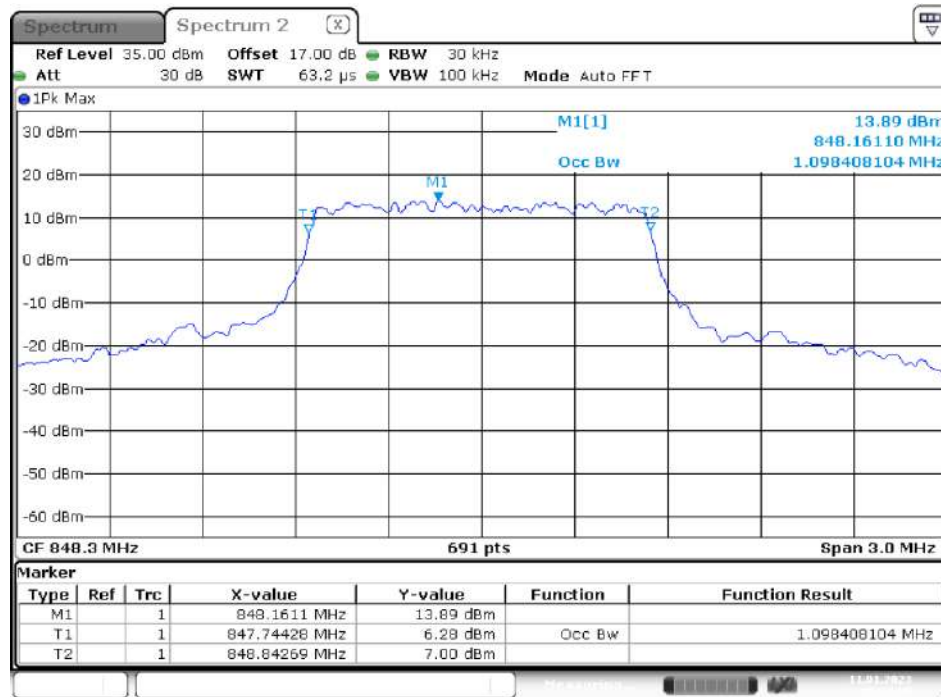
16-QAM (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

Date: 12.JAN.2023 11:35:58

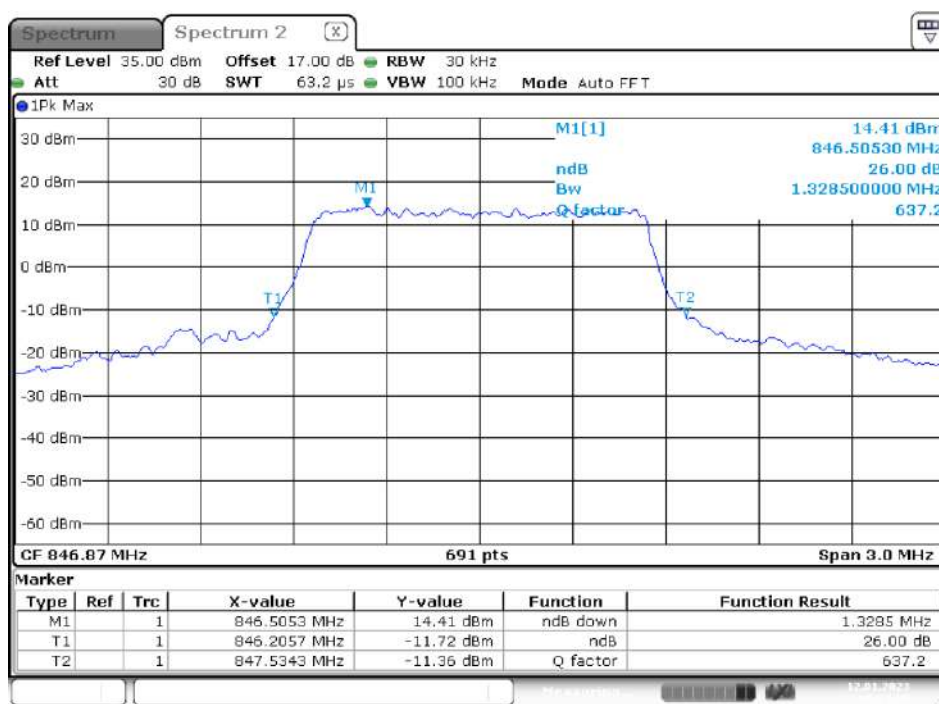
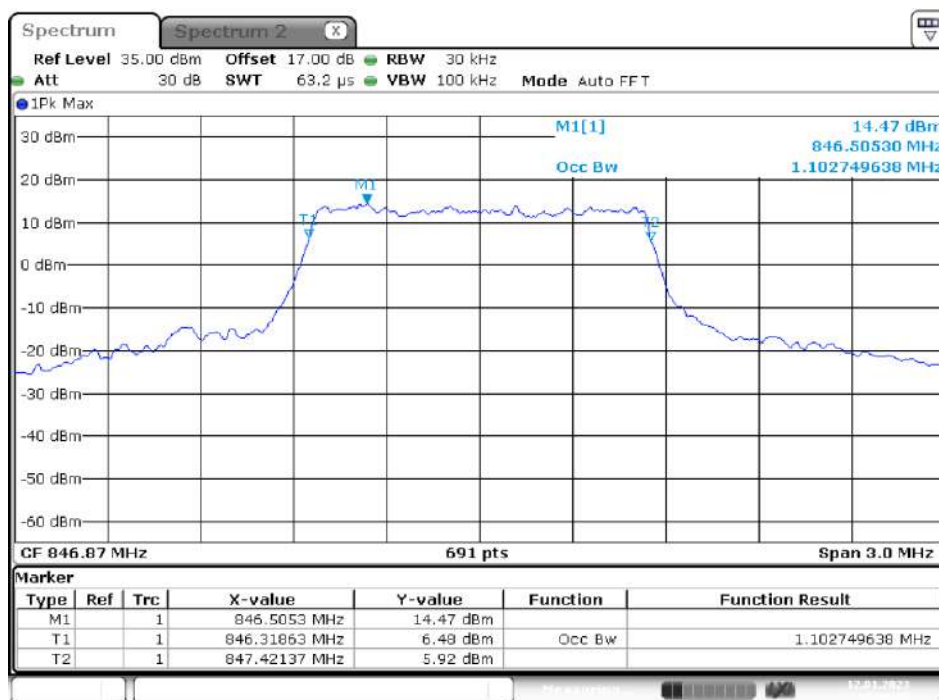


Date: 12.JAN.2023 11:36:23

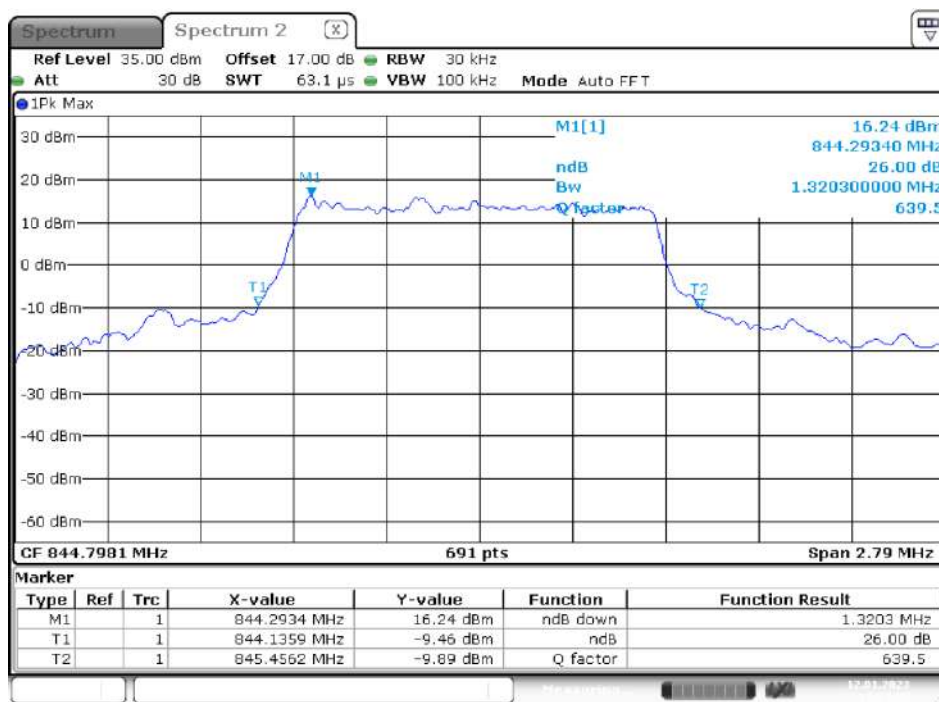
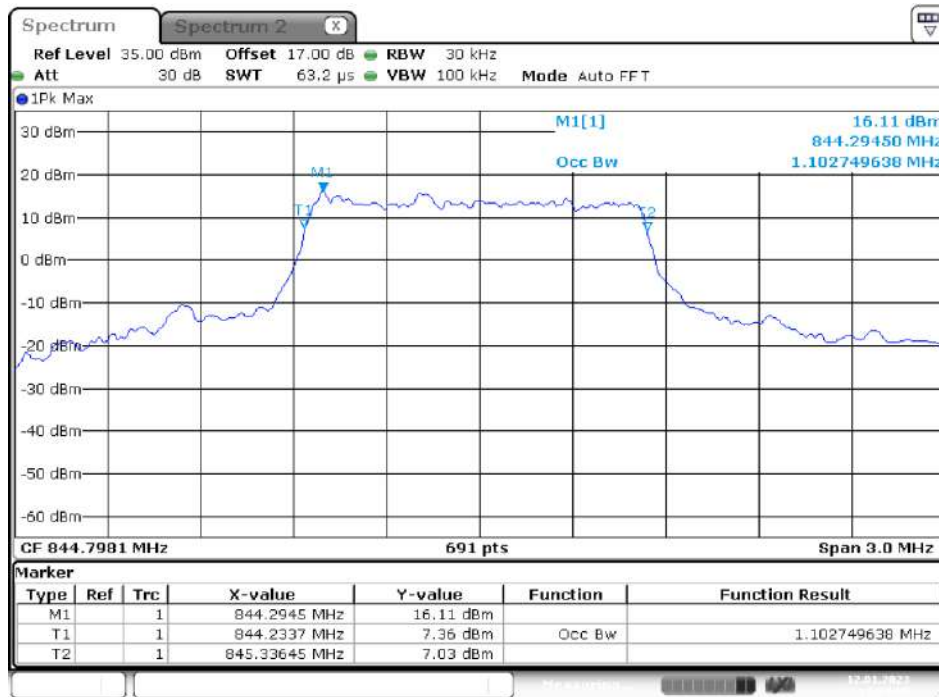
QPSK (1.4 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

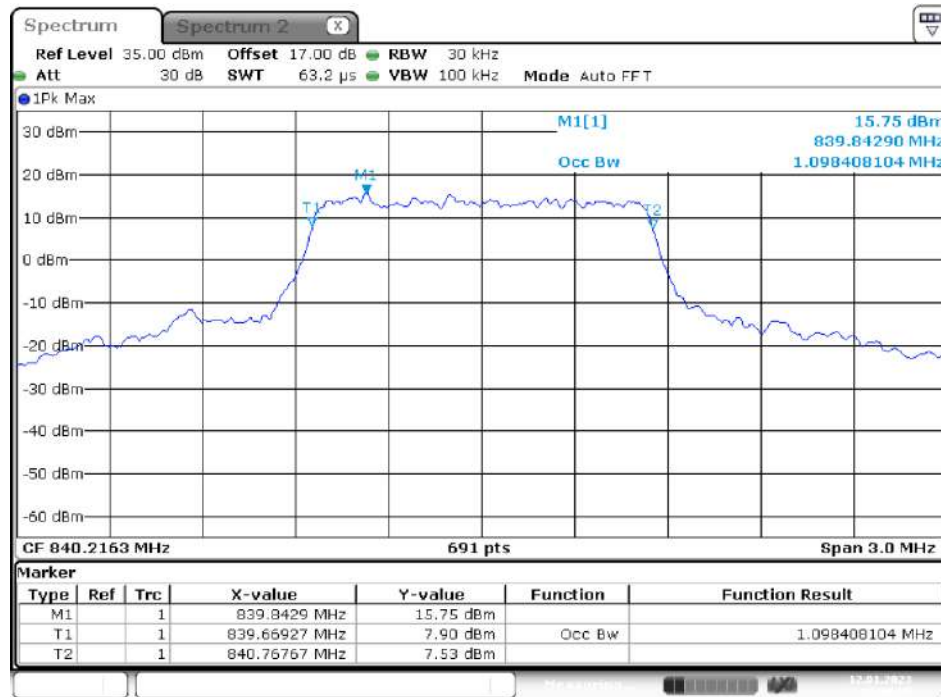


QPSK (3.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

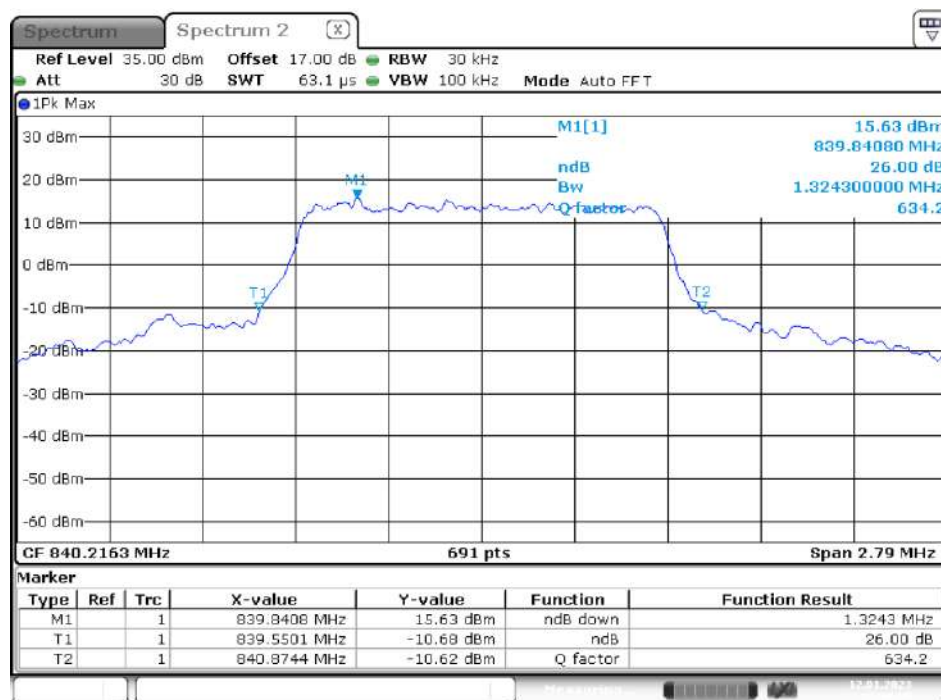


QPSK (5.0MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel



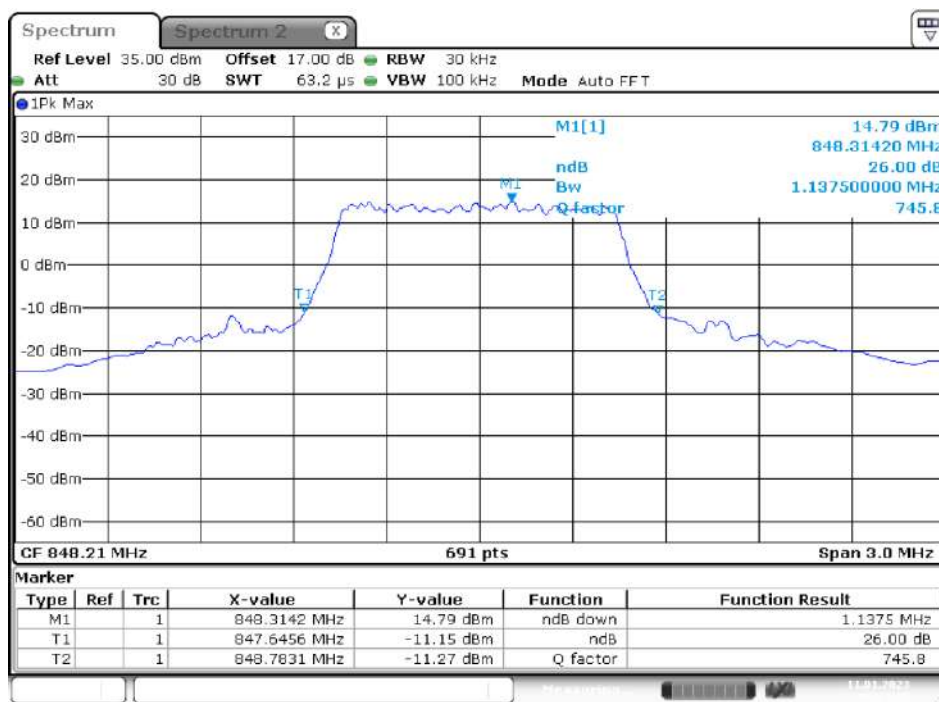
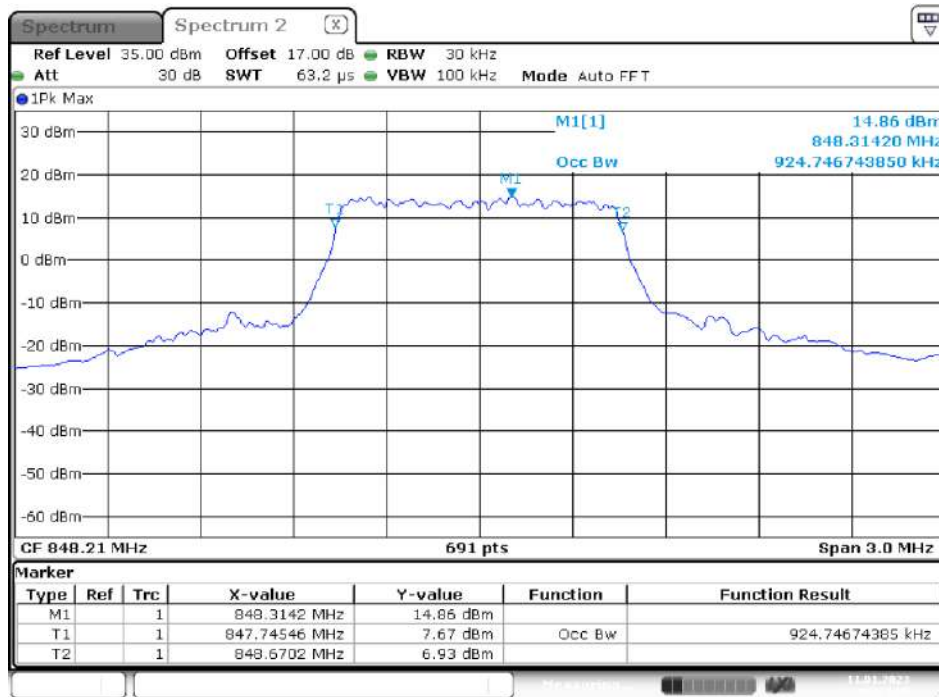
QPSK (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

Date: 12.JAN.2023 12:48:36

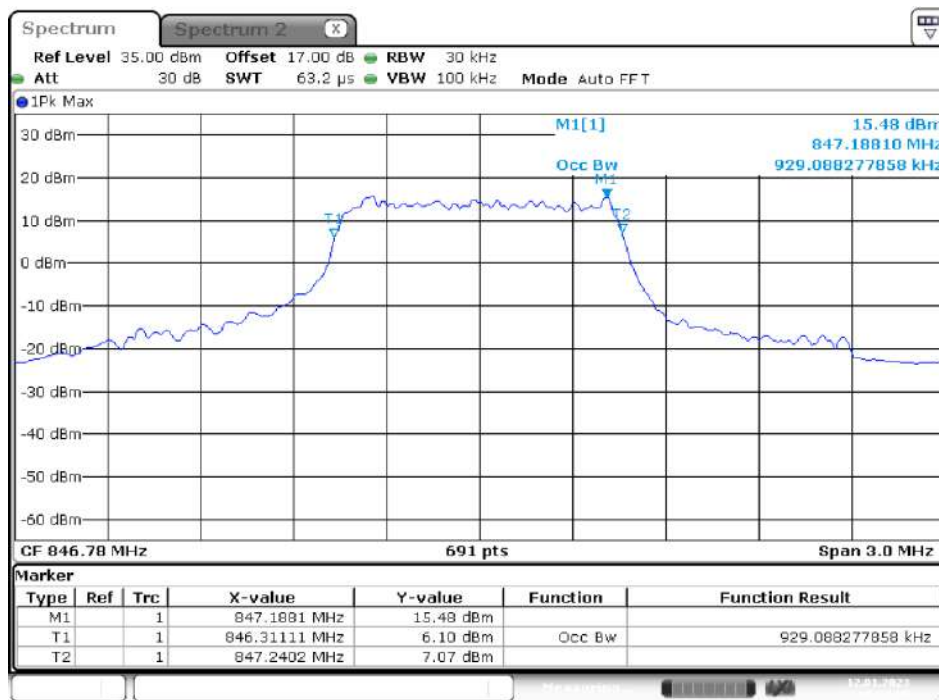


Date: 12.JAN.2023 12:48:08

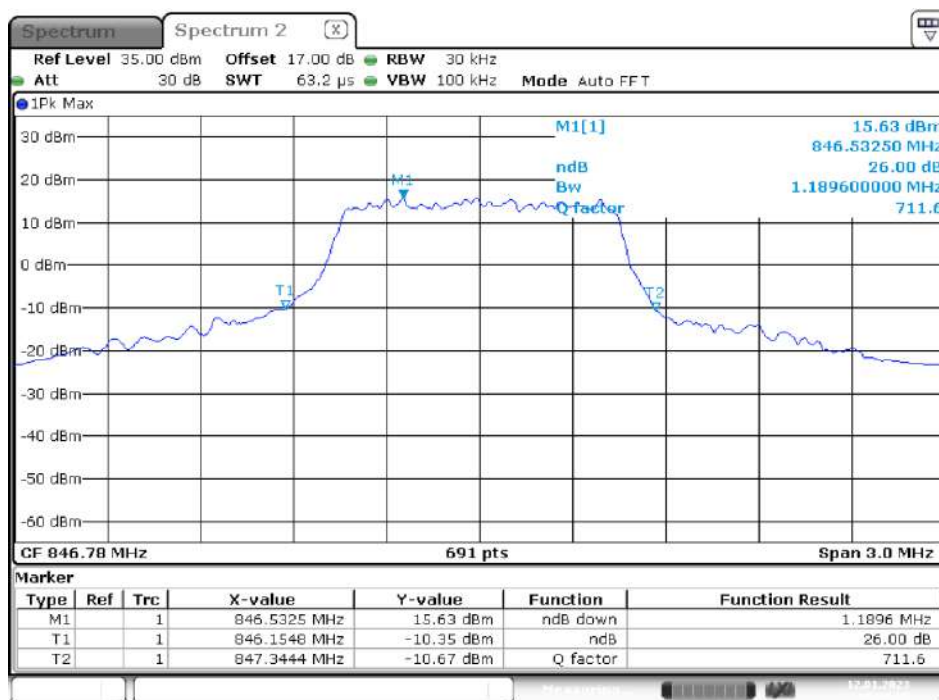
16-QAM (1.4 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel



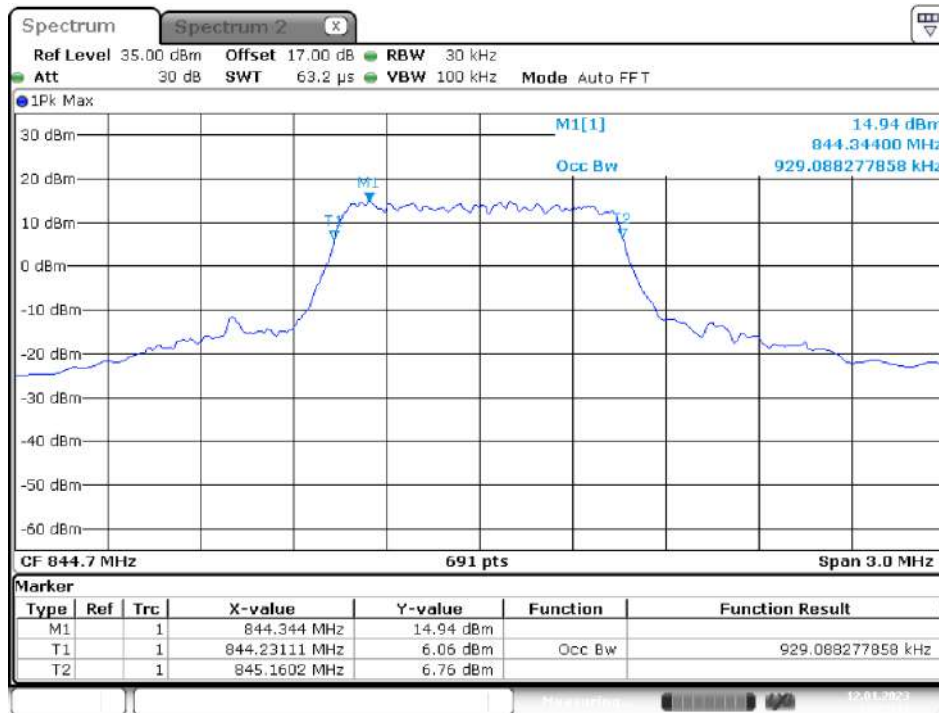
16-QAM (3.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel



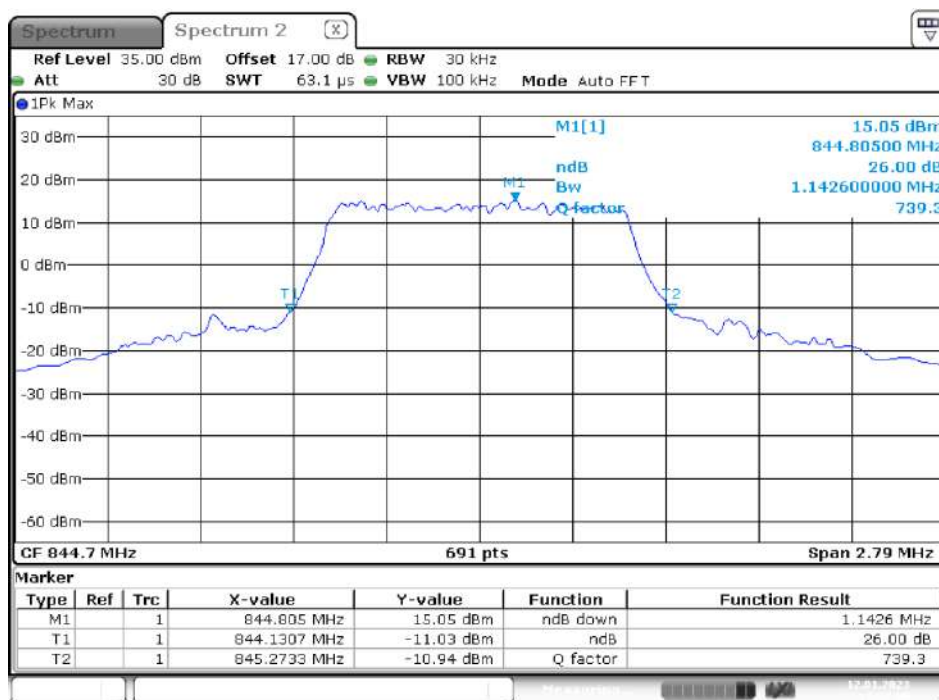
Date: 12.JAN.2023 10:57:38



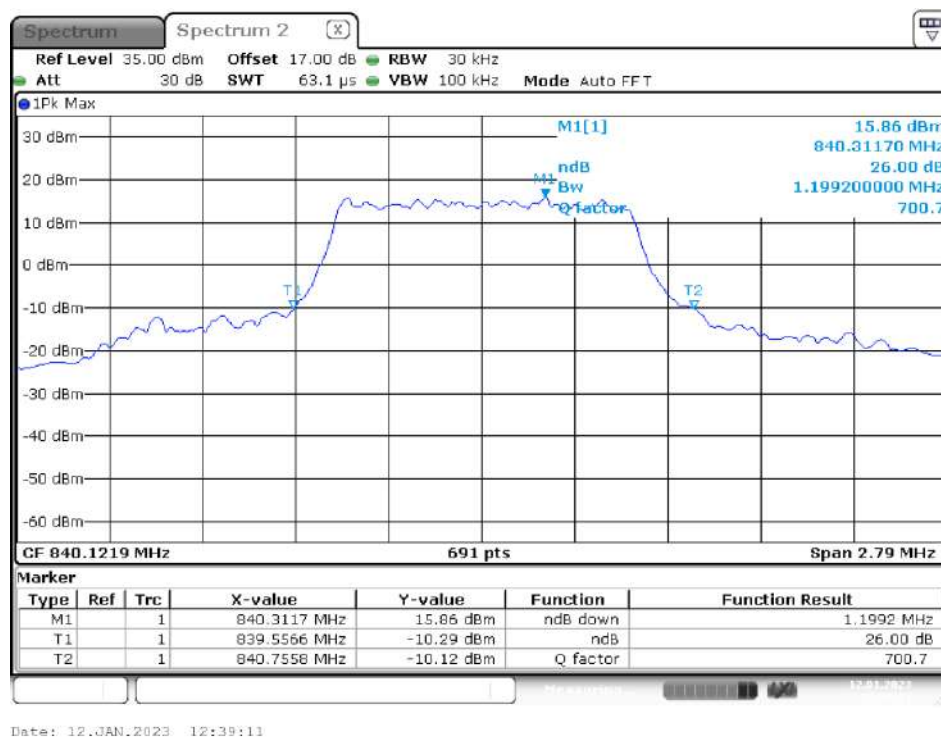
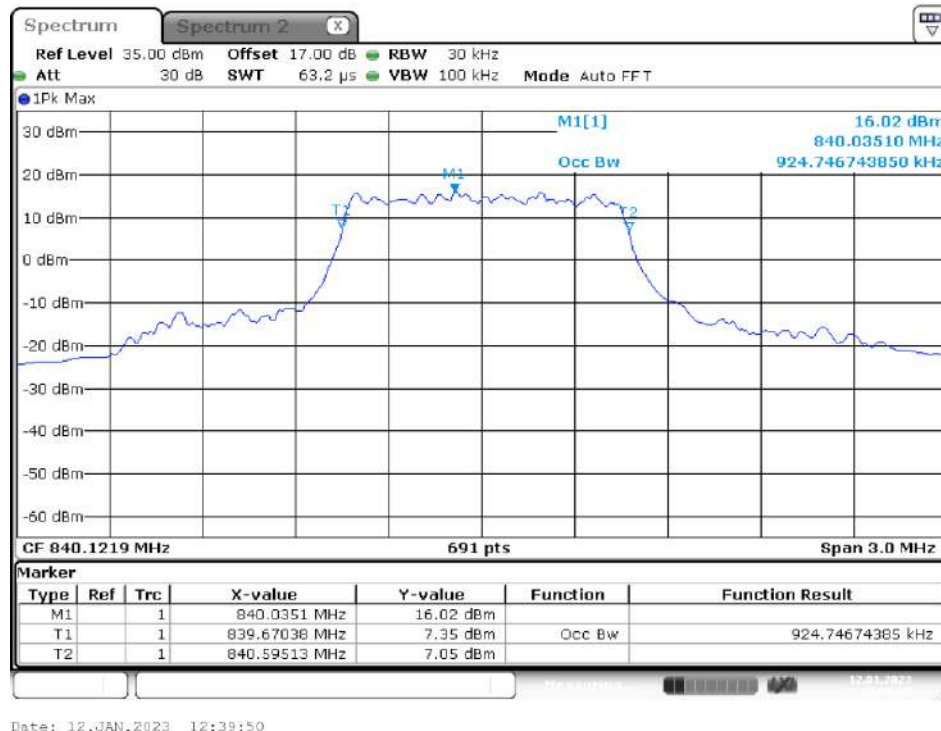
Date: 12.JAN.2023 10:45:25

16-QAM (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

Date: 12.JAN.2023 11:31:11

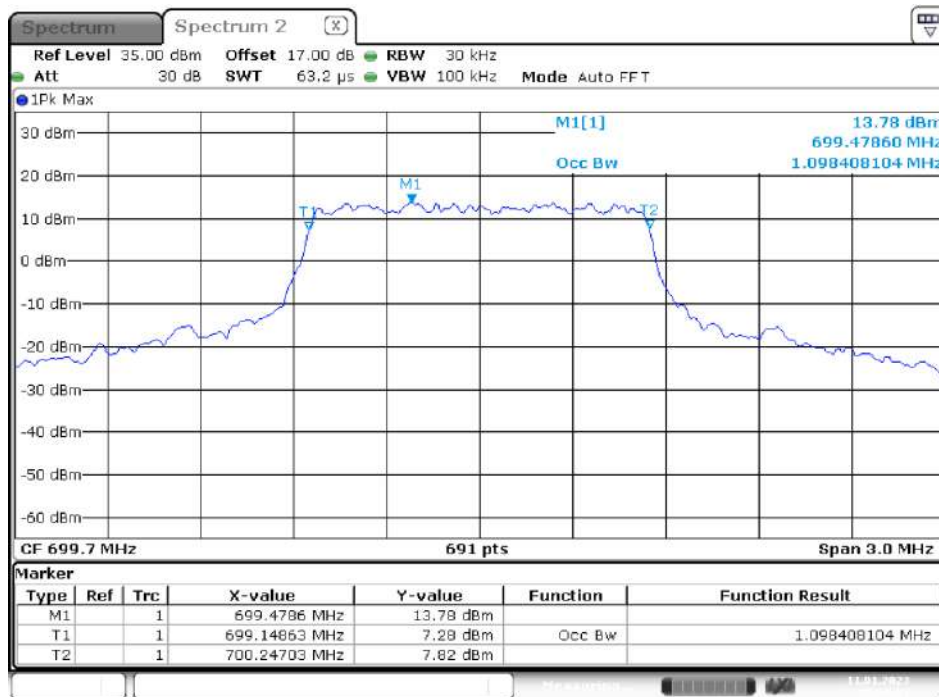


Date: 12.JAN.2023 11:32:00

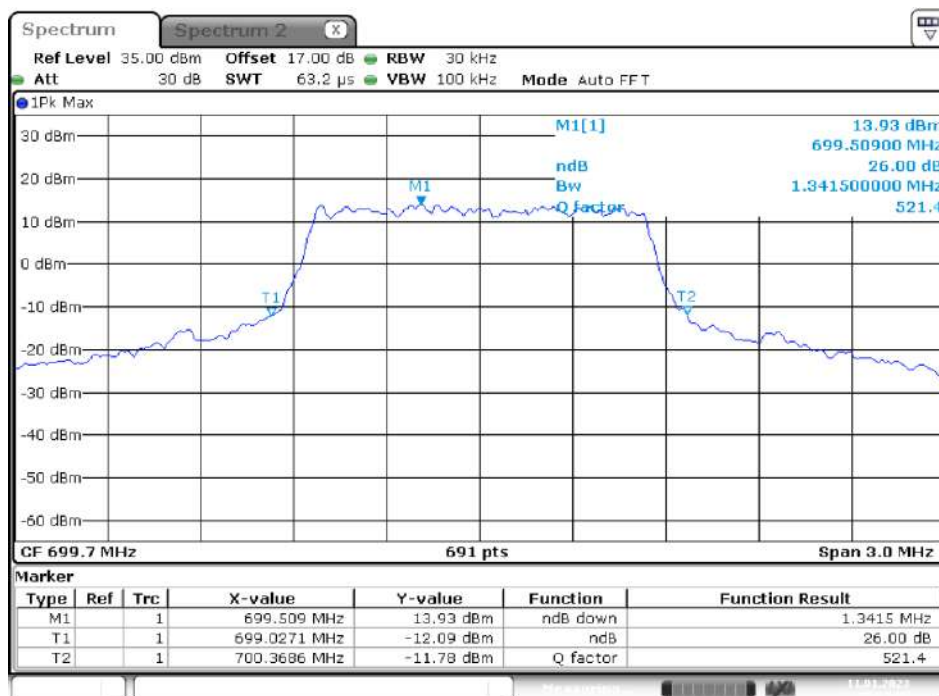
16-QAM (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

LTE Band 12

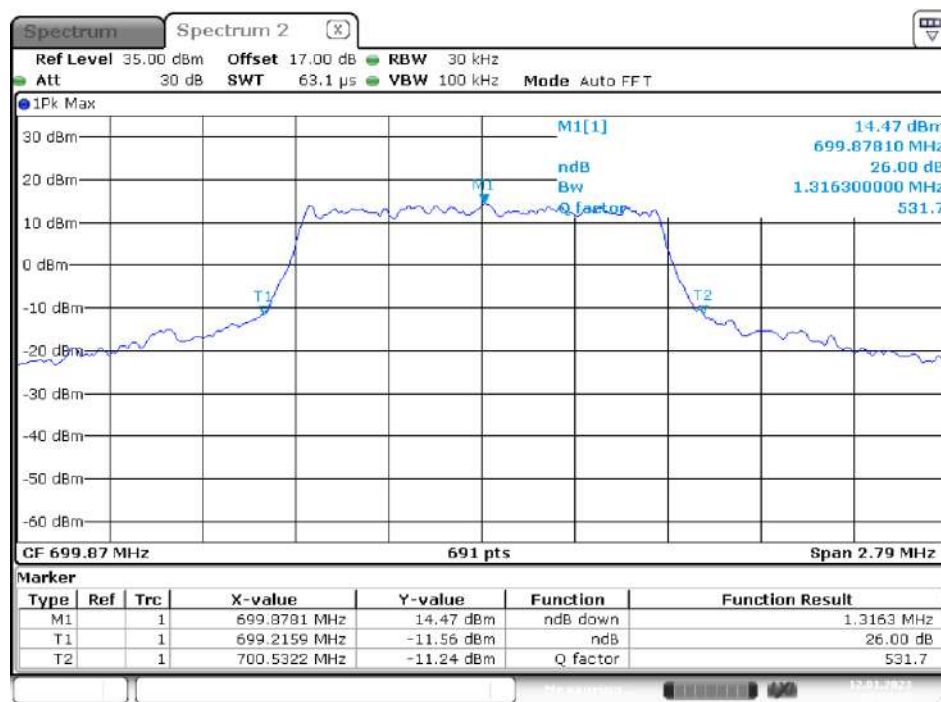
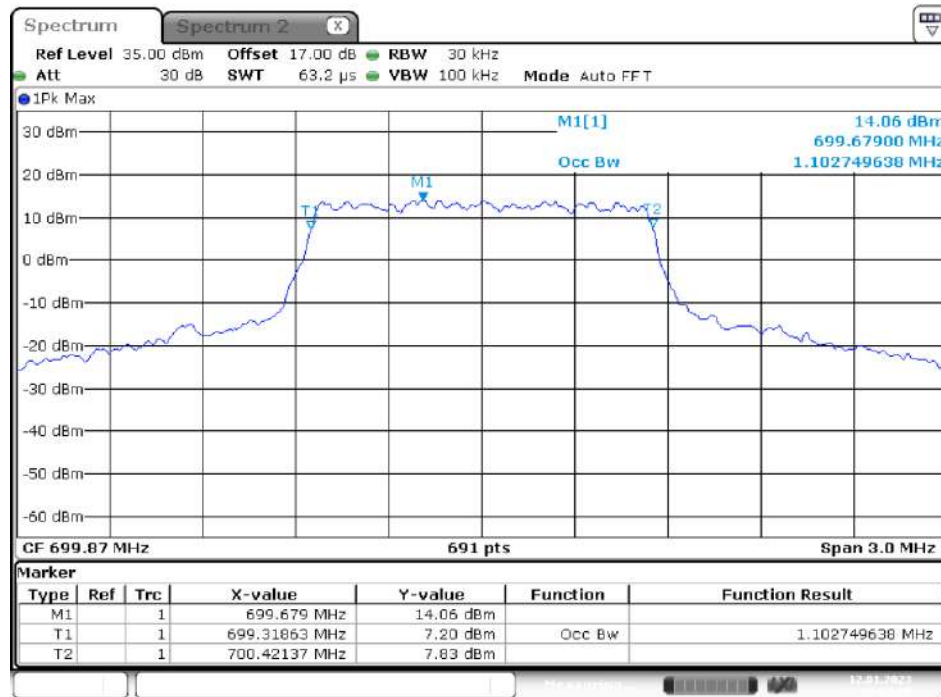
QPSK (1.4 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel

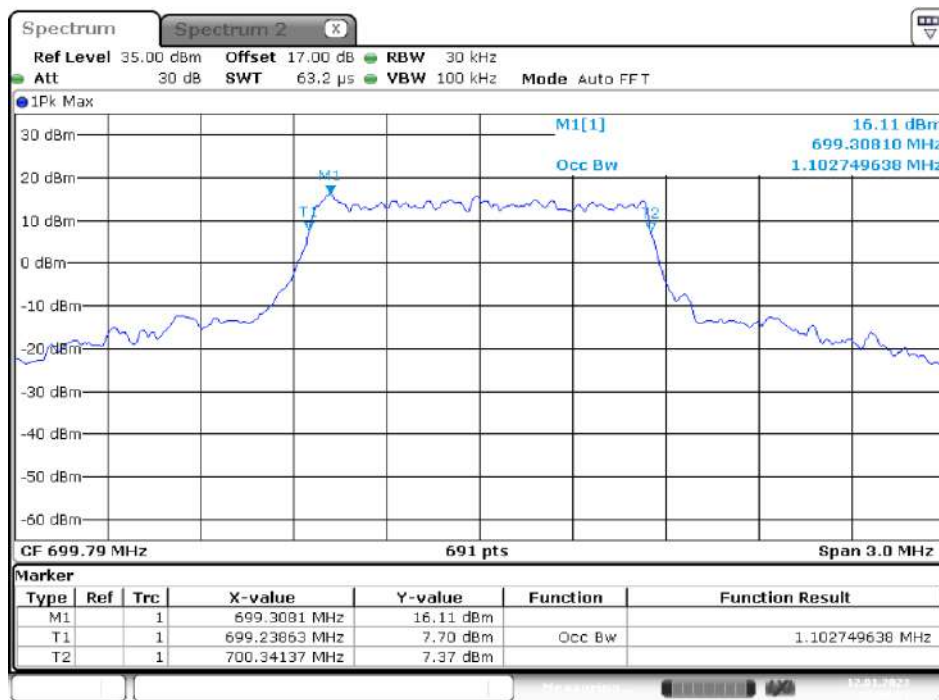


Date: 11.JAN.2023 15:16:21

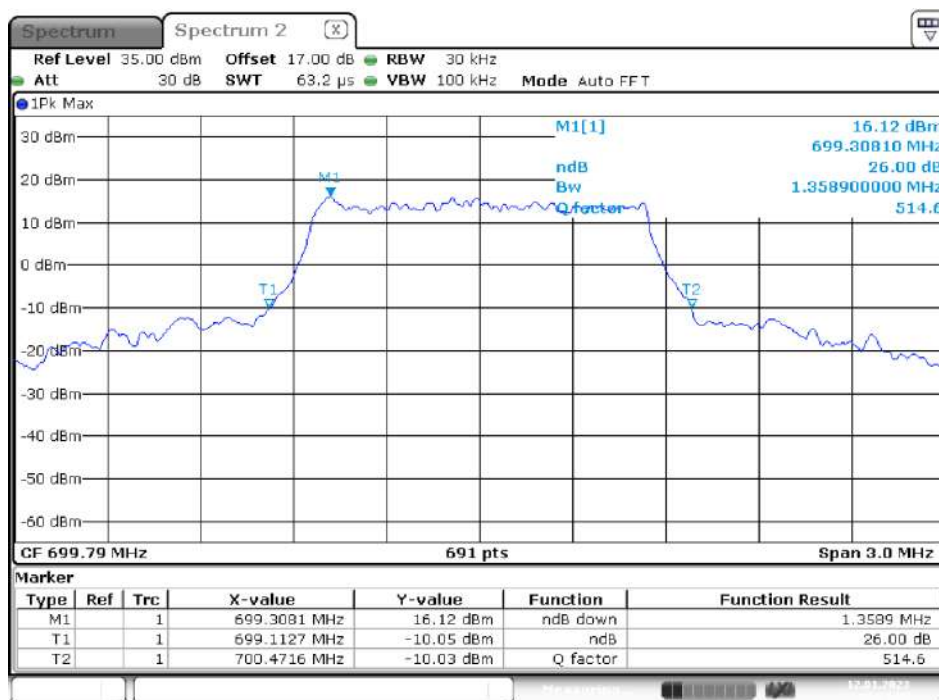


Date: 11.JAN.2023 15:15:52

QPSK (3.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel

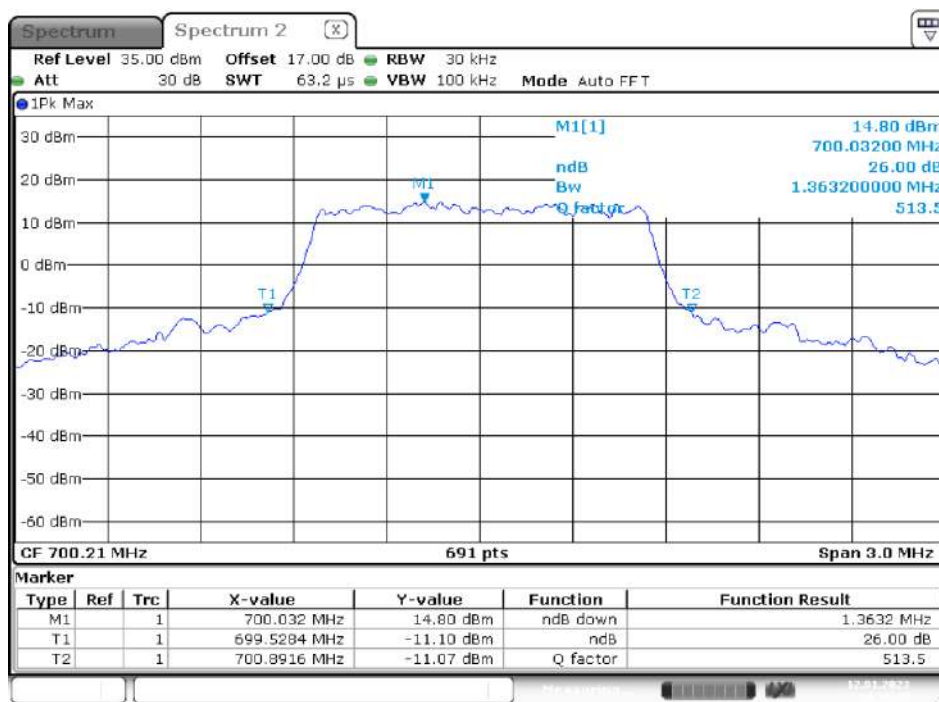
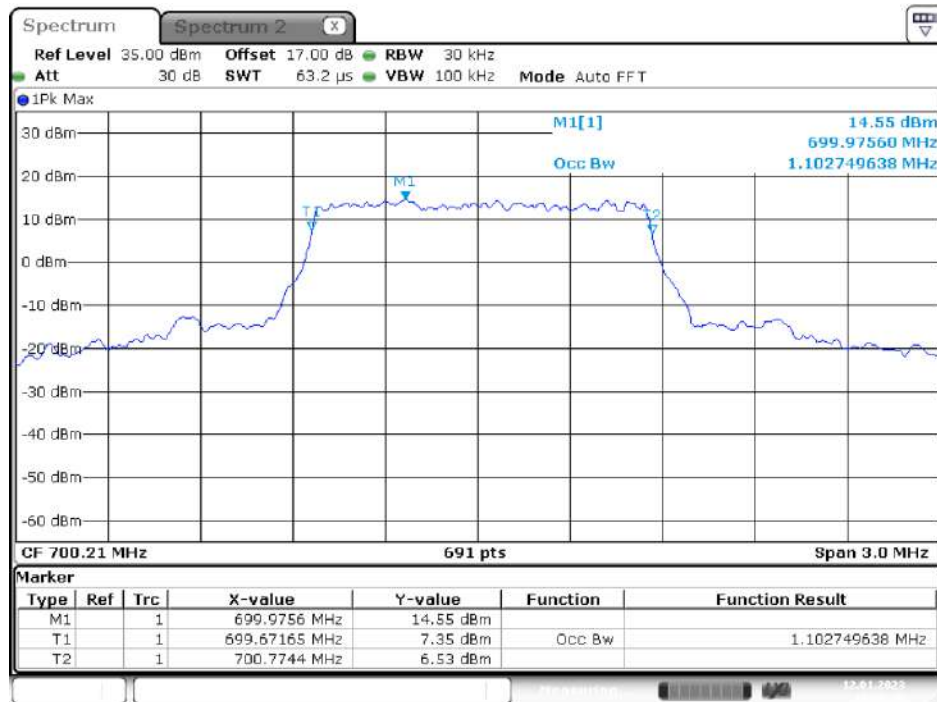
QPSK (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel

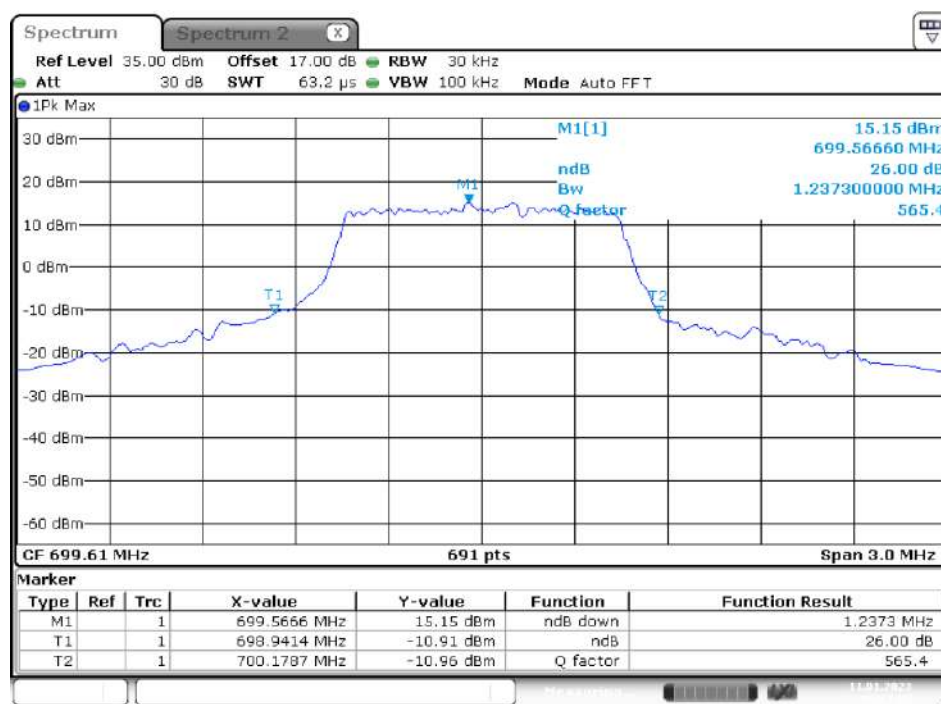
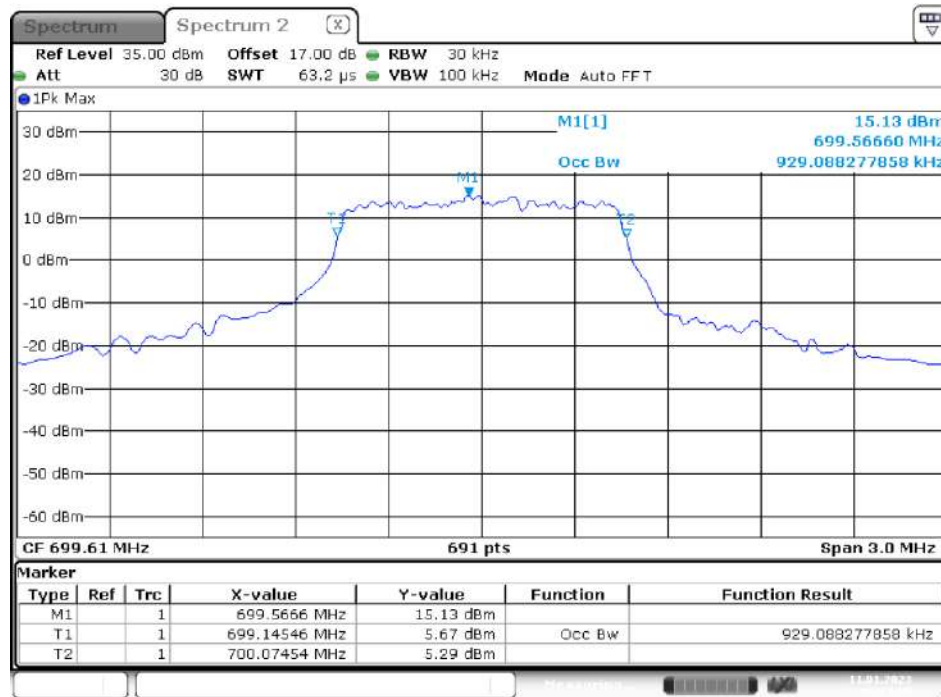
Date: 12.JAN.2023 13:50:51

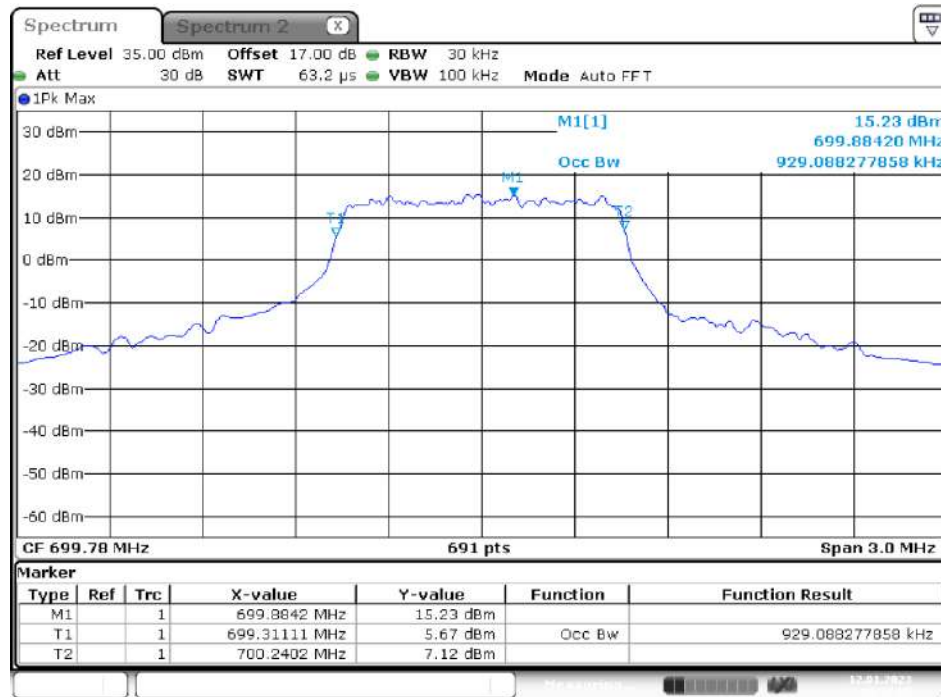


Date: 12.JAN.2023 13:51:23

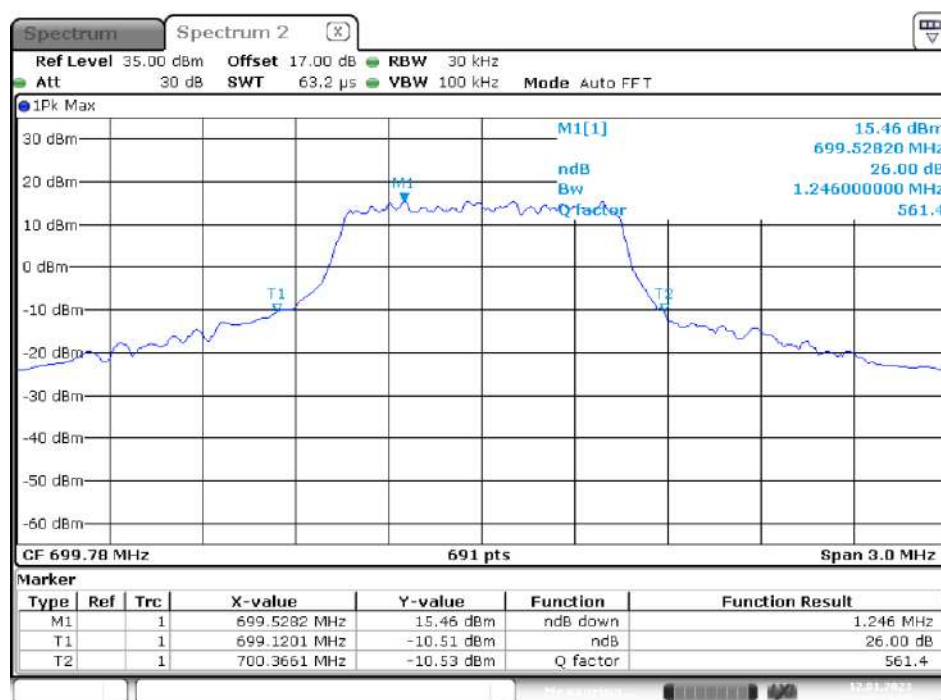
QPSK (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel



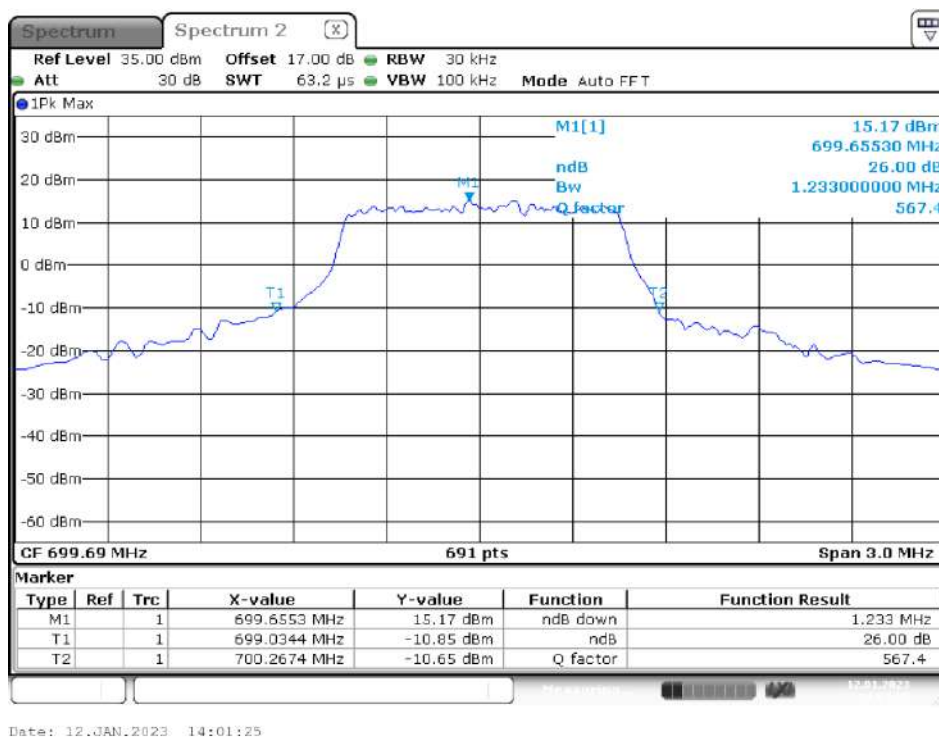
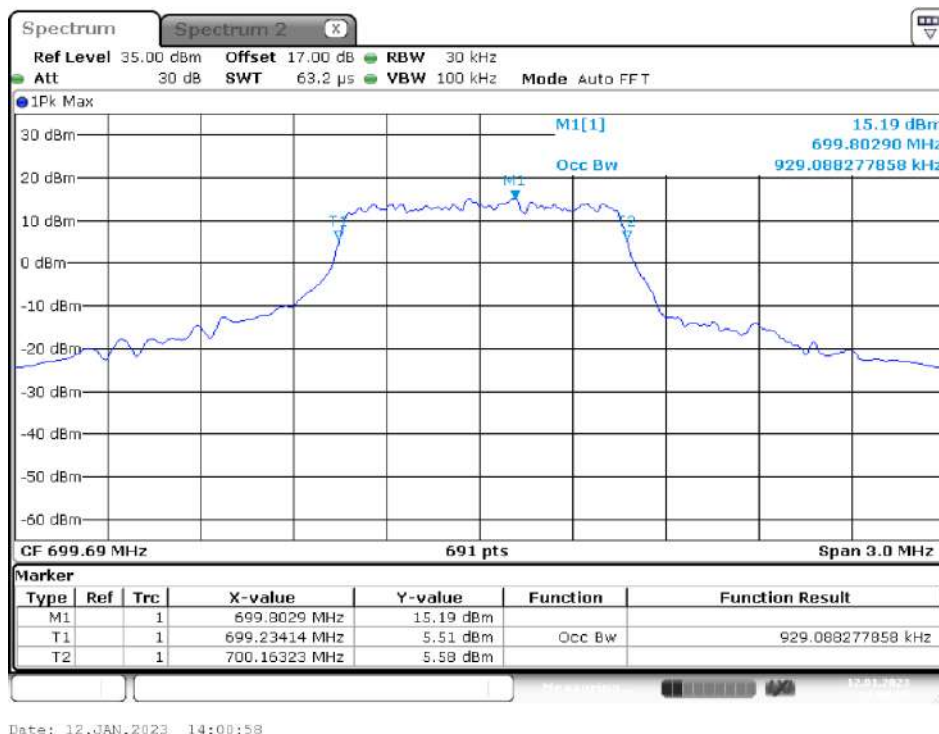
16-QAM (1.4 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel

16-QAM (3.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel

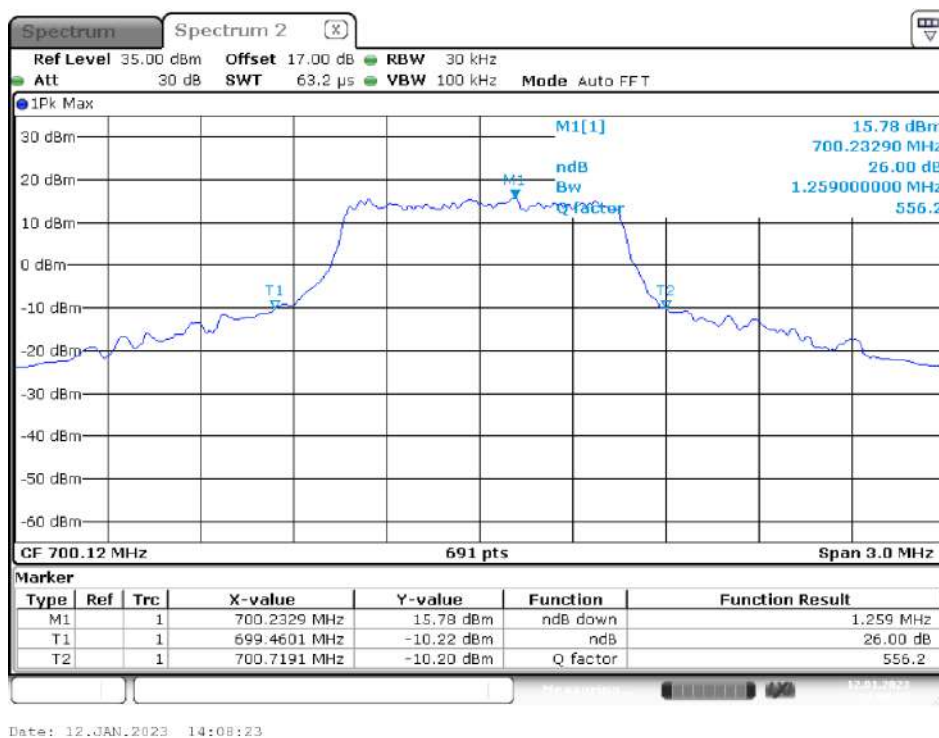
Date: 12.JAN.2023 13:12:05



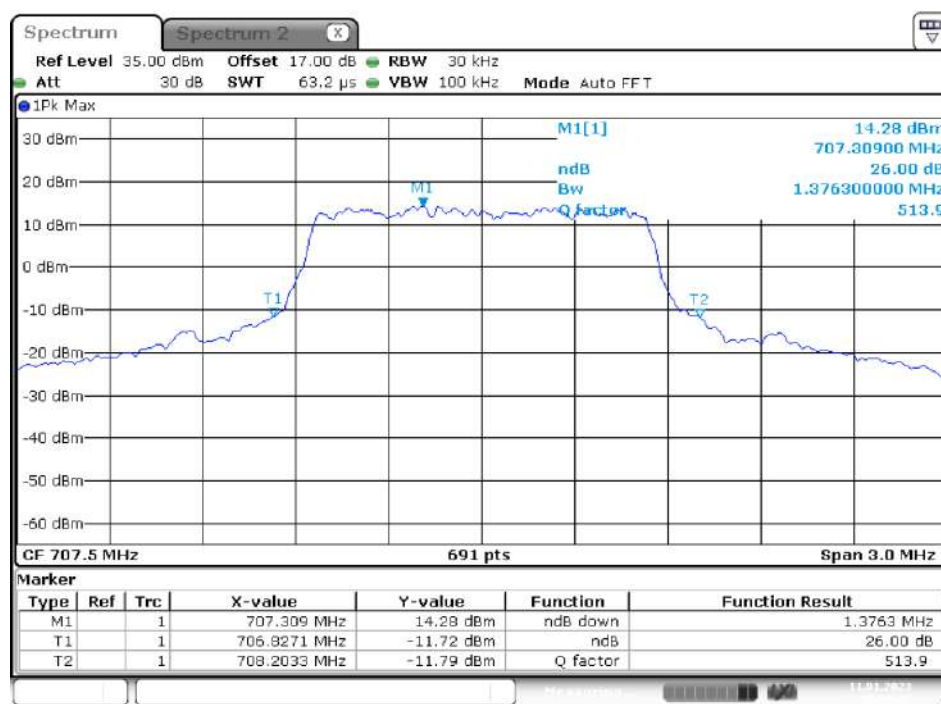
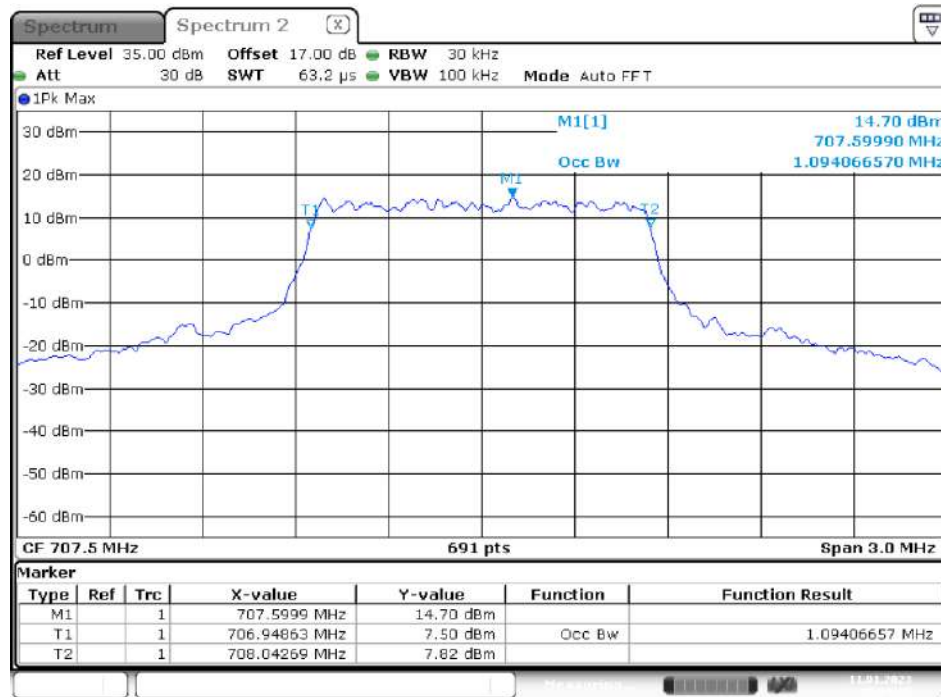
Date: 12.JAN.2023 13:11:35

16-QAM (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel

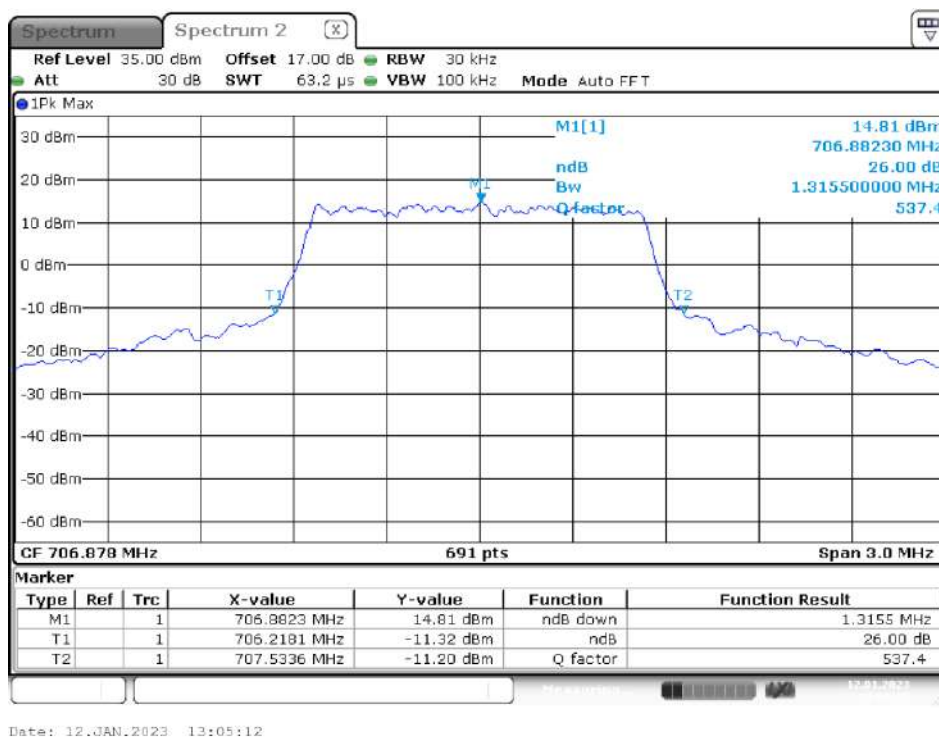
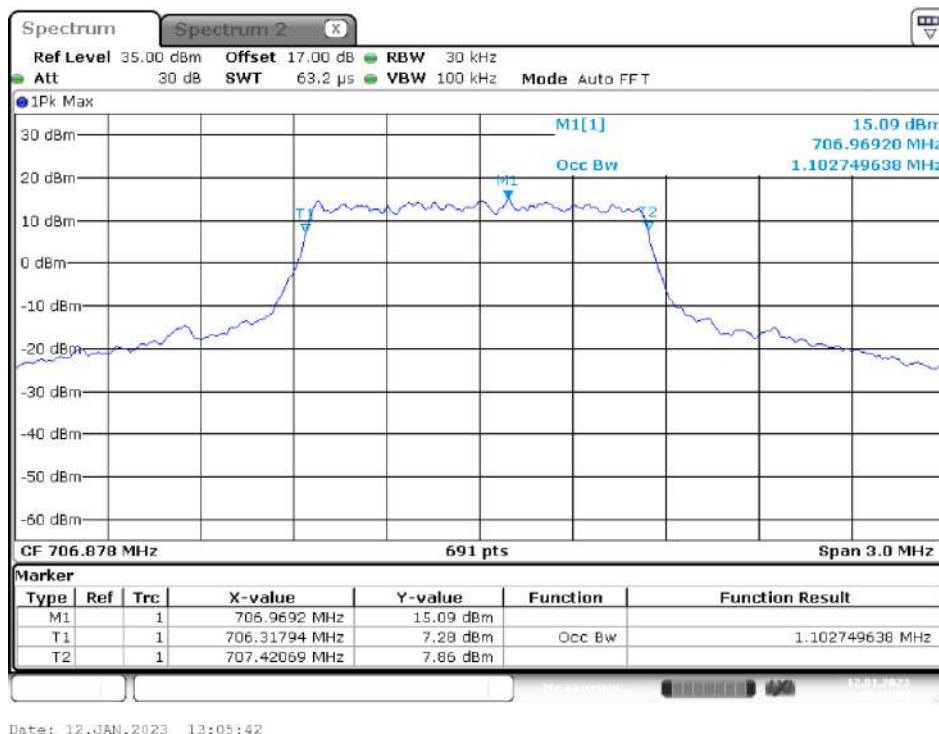
16-QAM (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel



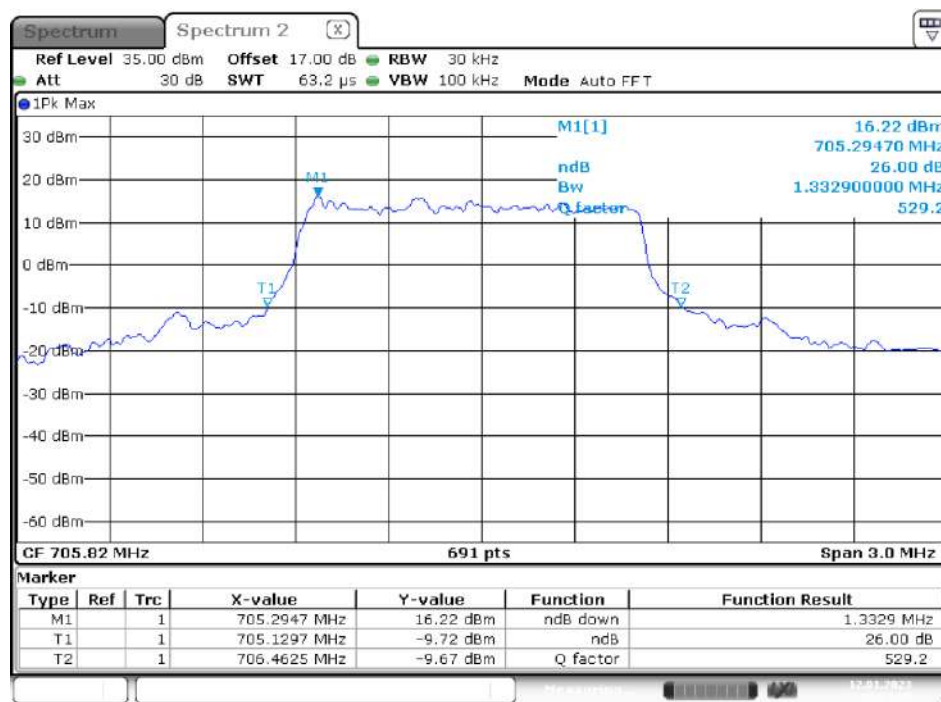
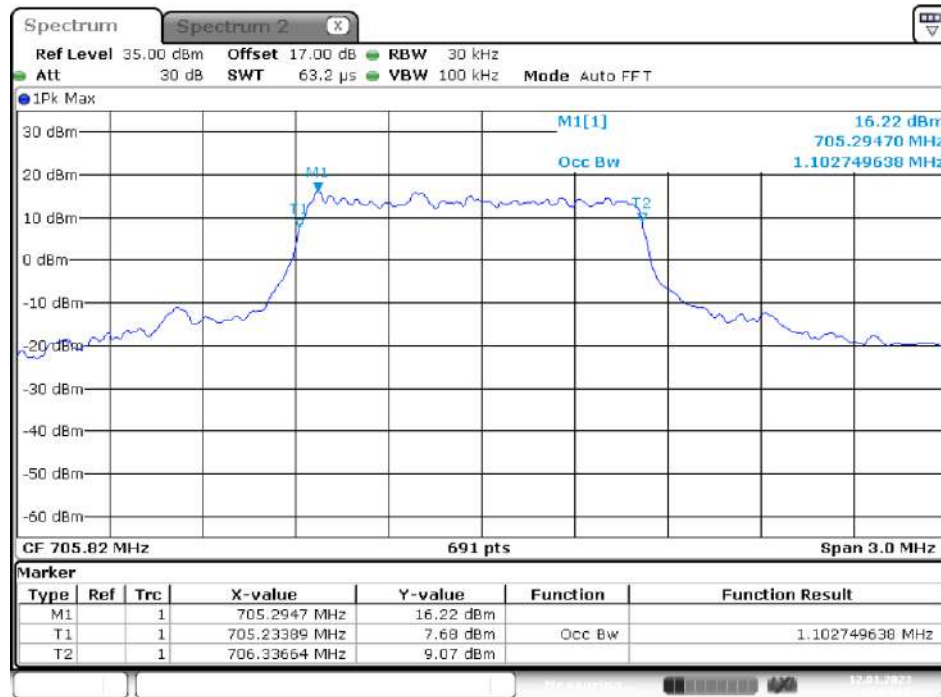
QPSK (1.4 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel



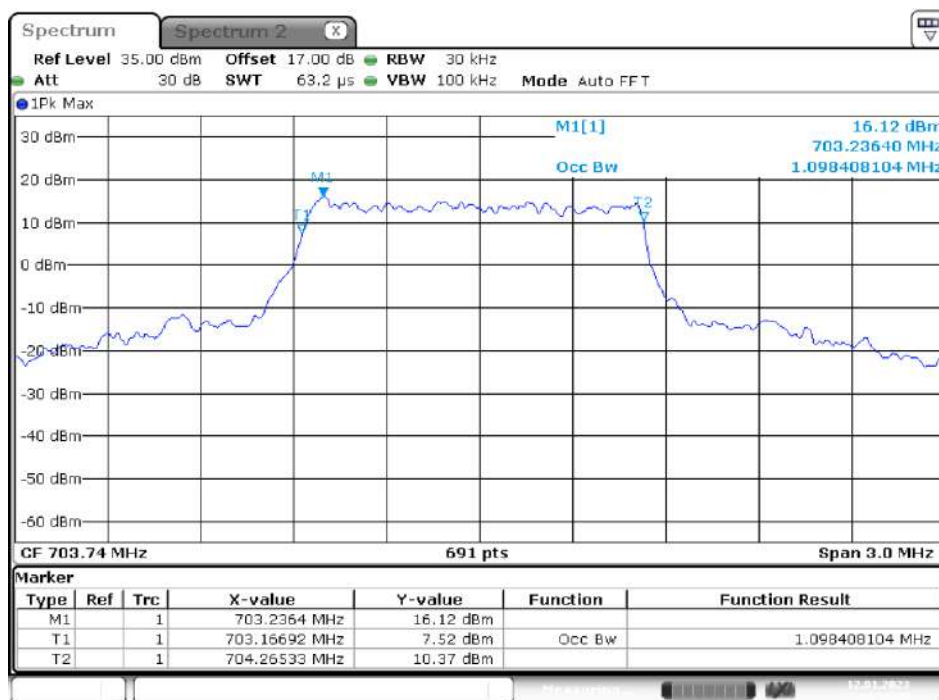
QPSK (3.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel



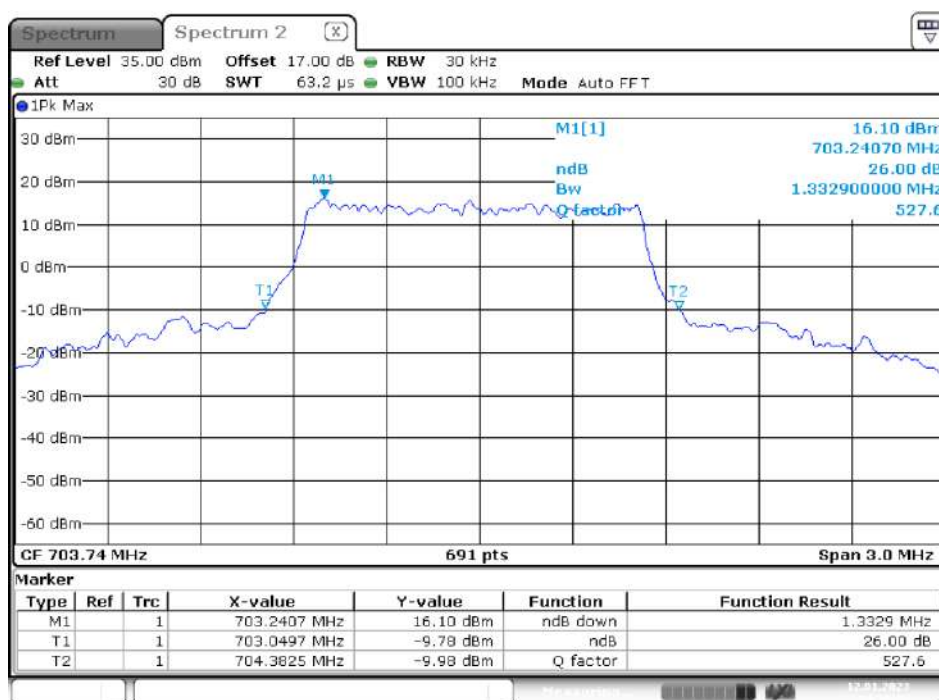
QPSK (5.0MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel



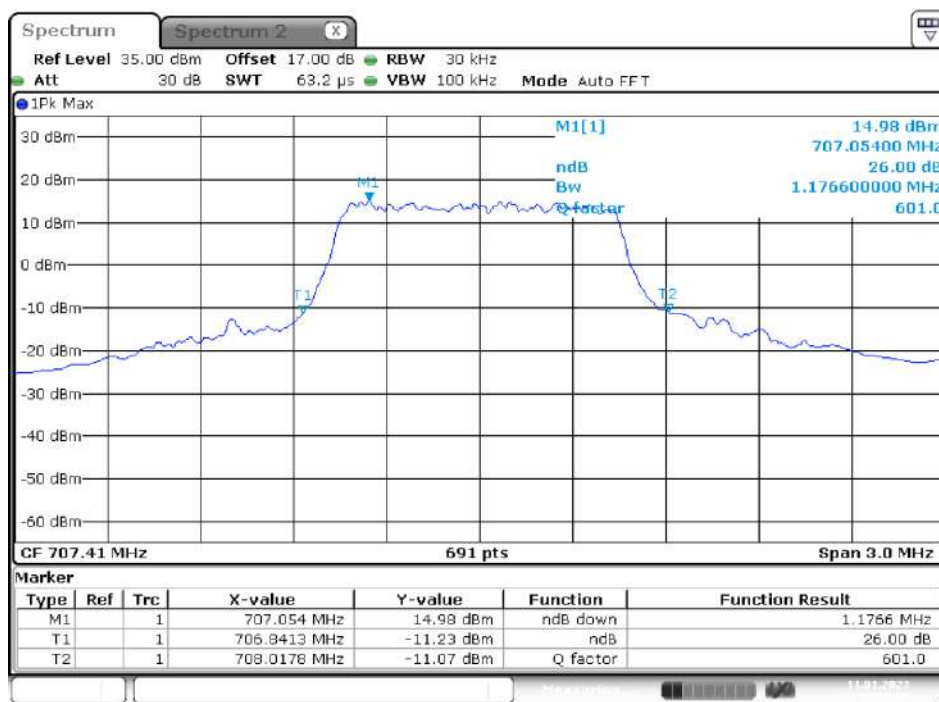
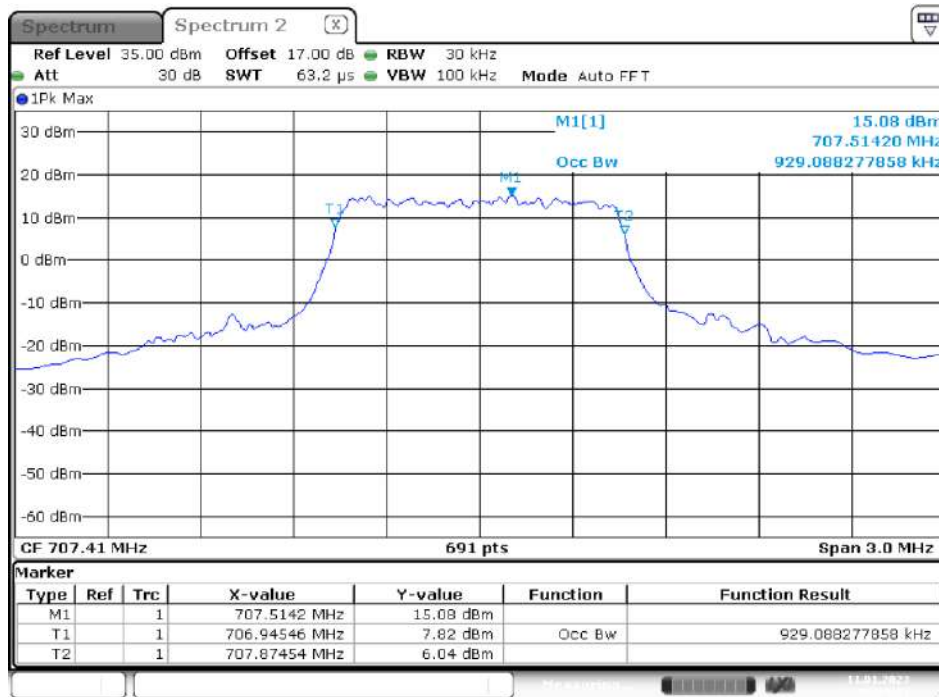
QPSK (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

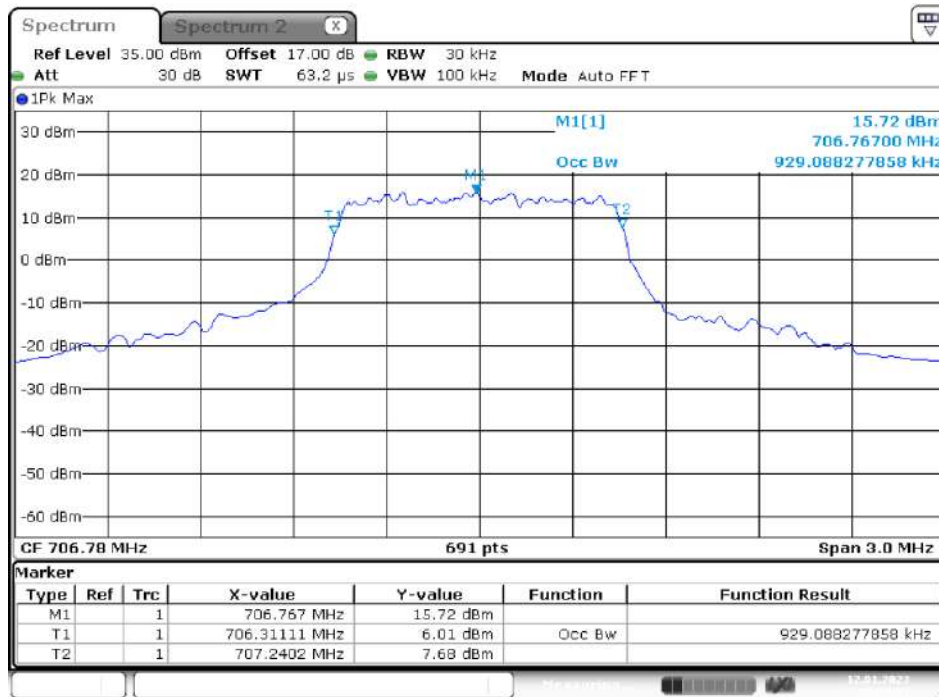


Date: 12.JAN.2023 14:18:44

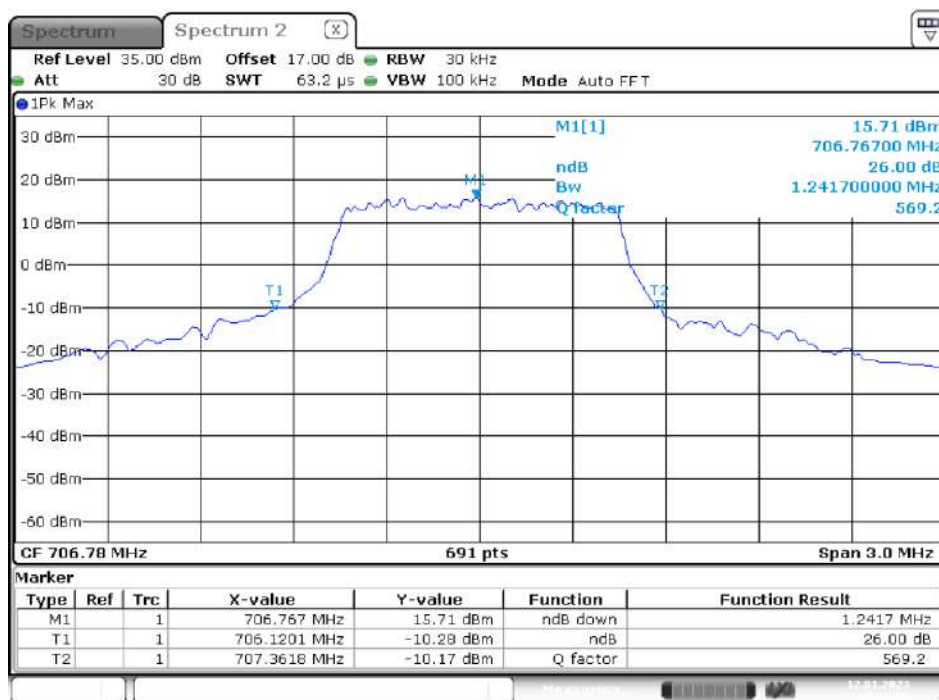


Date: 12.JAN.2023 14:18:14

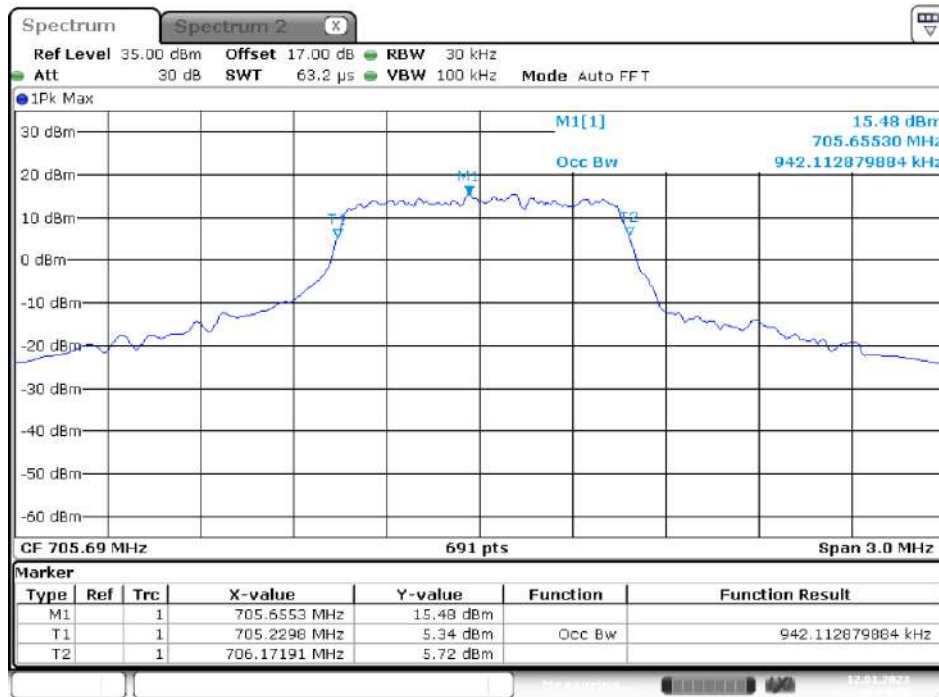
16-QAM (1.4 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

16-QAM (3.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

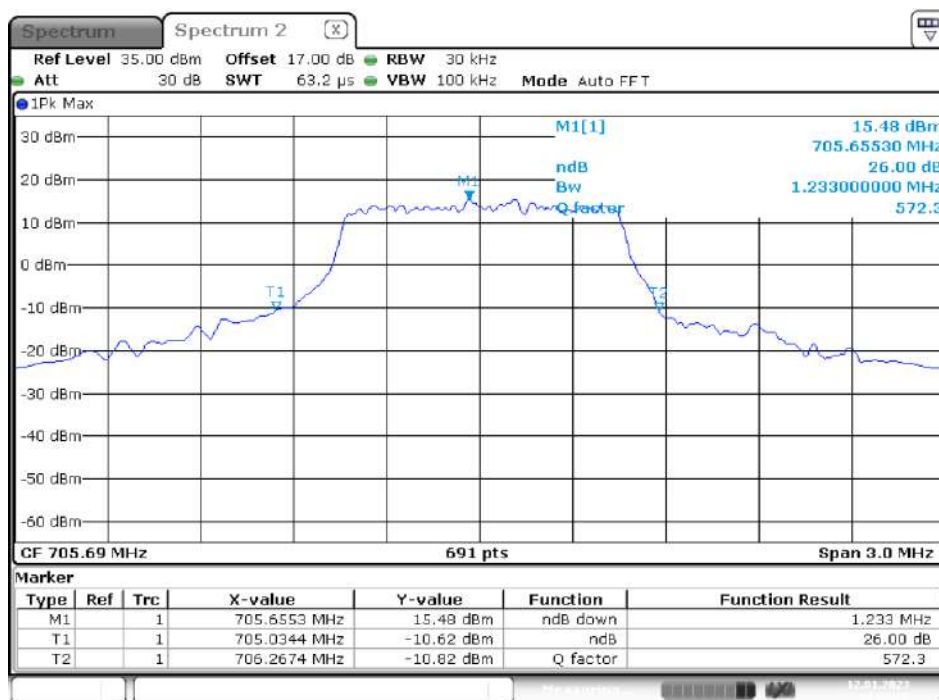
Date: 12.JAN.2023 13:34:51



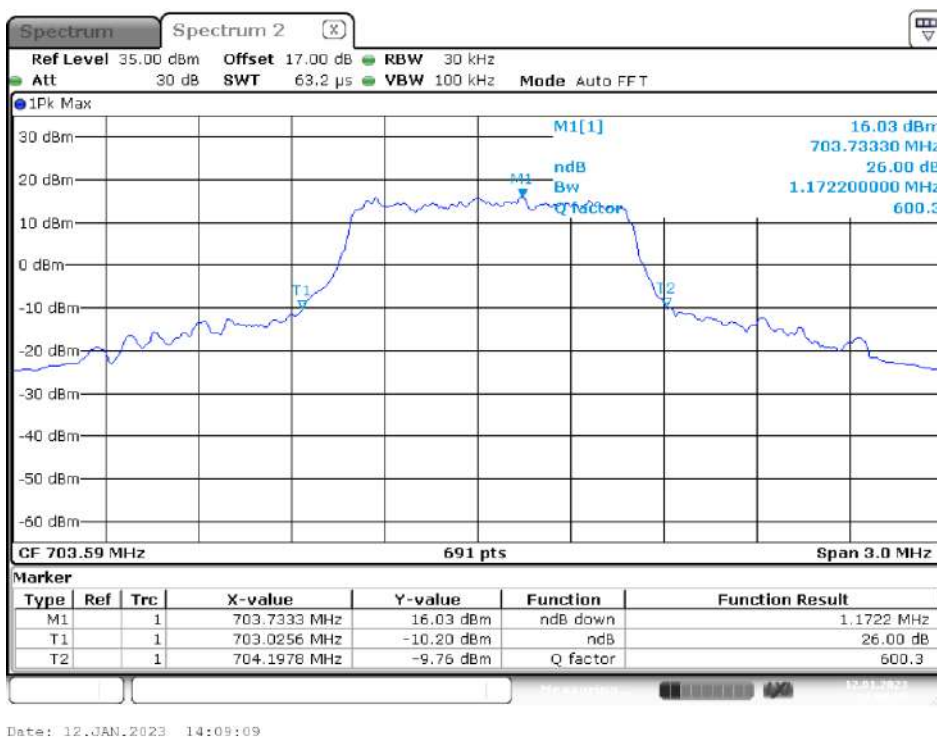
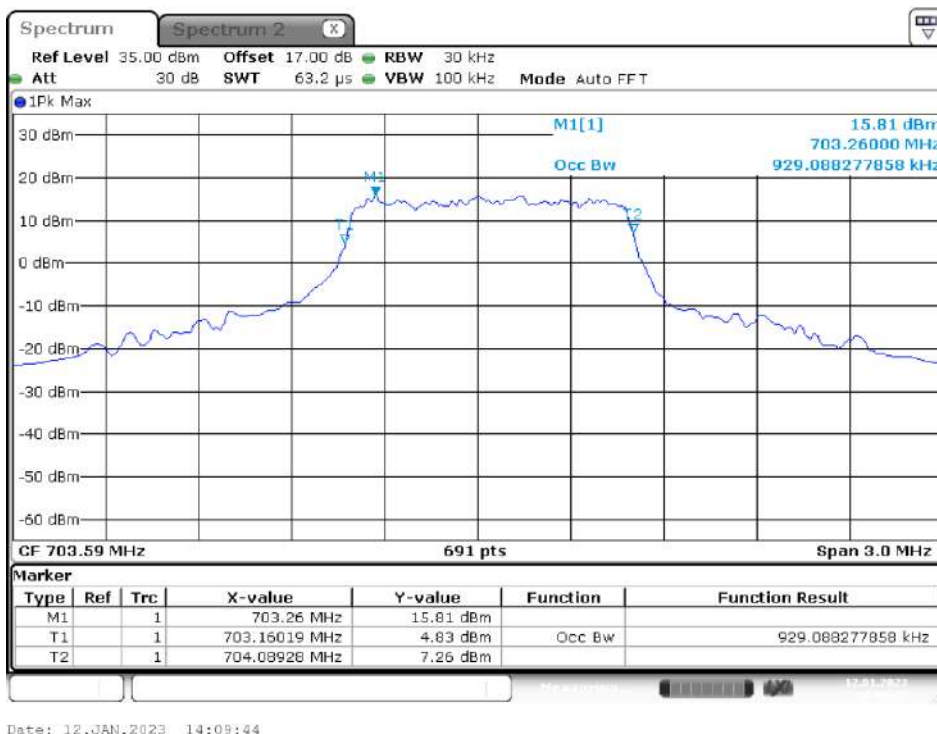
Date: 12.JAN.2023 13:35:30

16-QAM (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

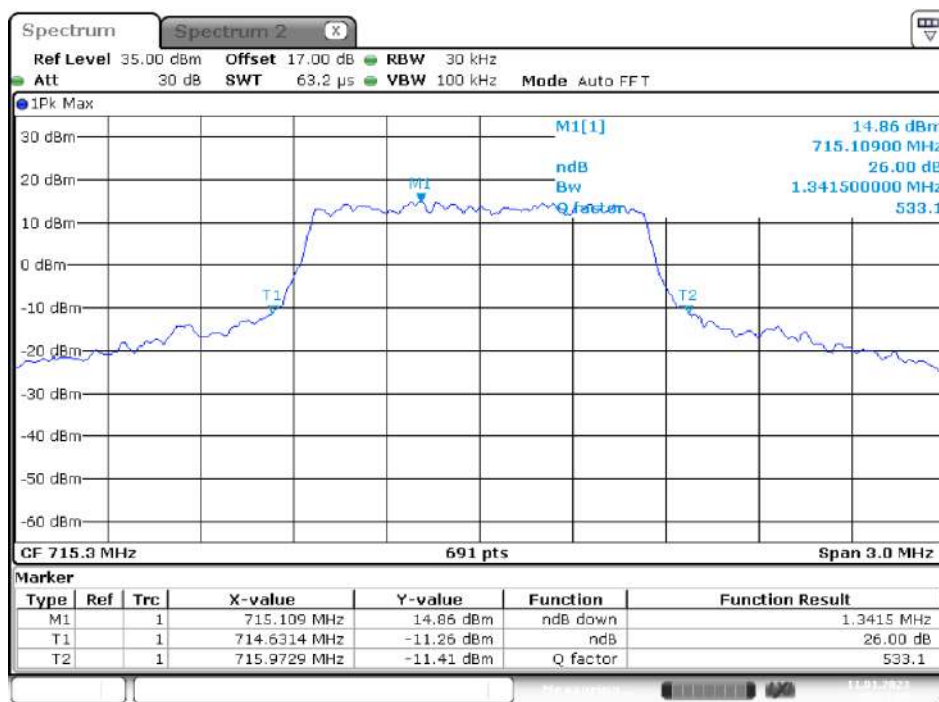
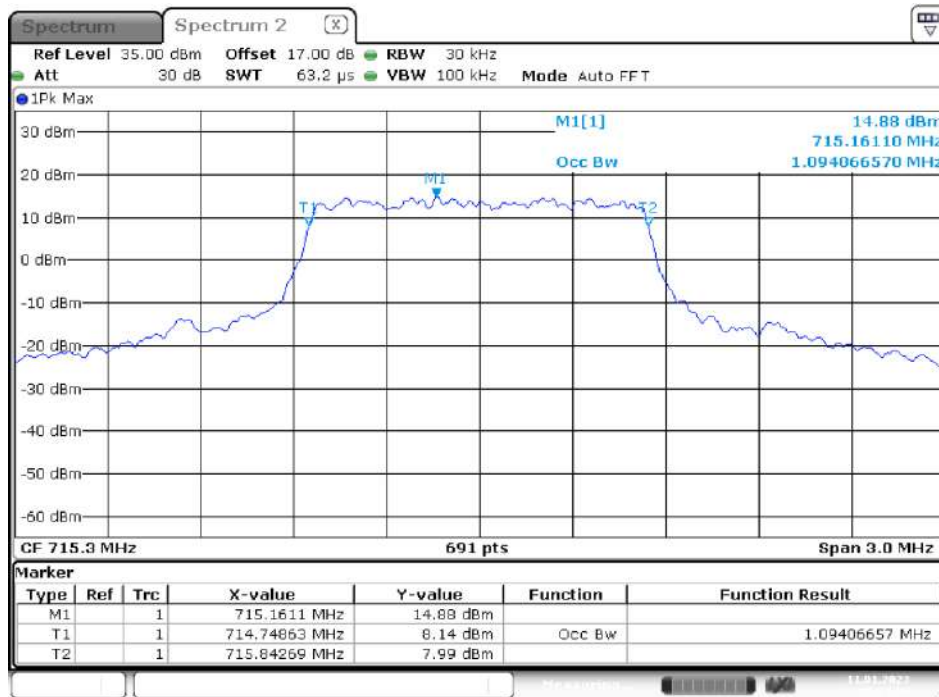
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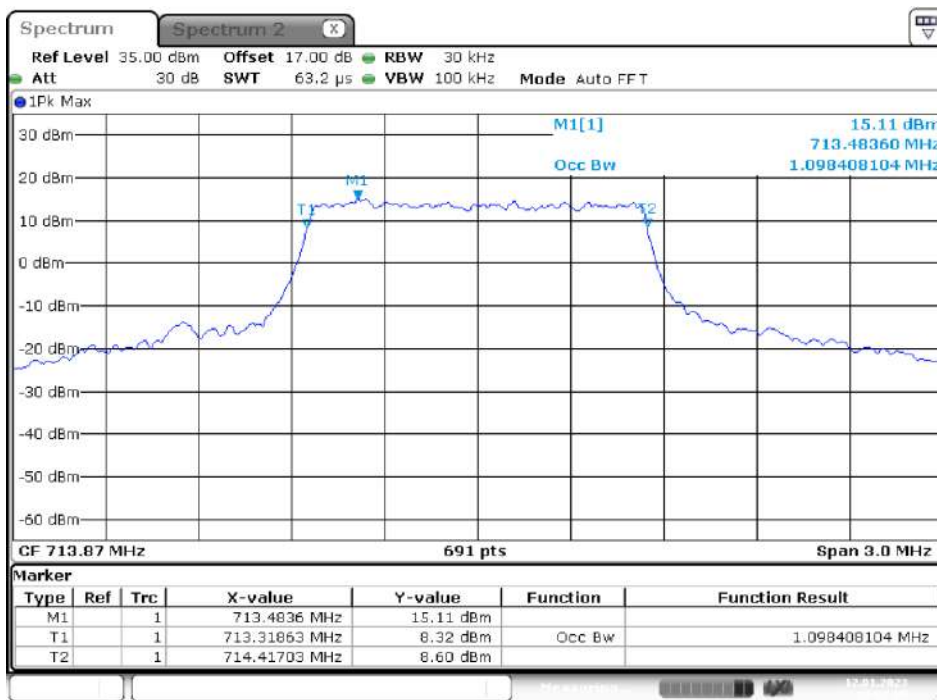
Date: 12.JAN.2023 14:02:17

16-QAM (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

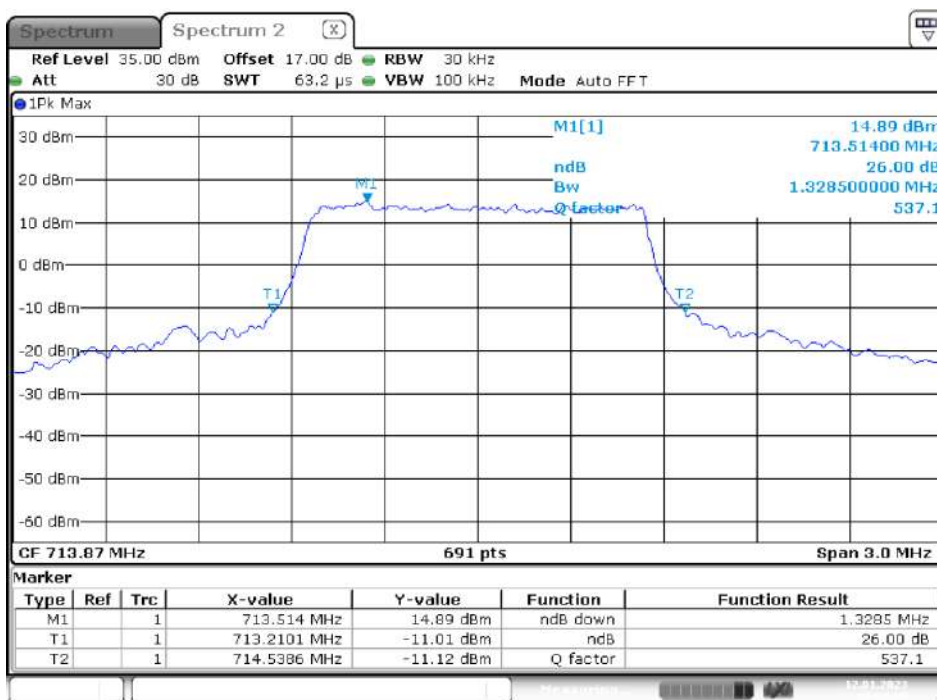
QPSK (1.4 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel



QPSK (3.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

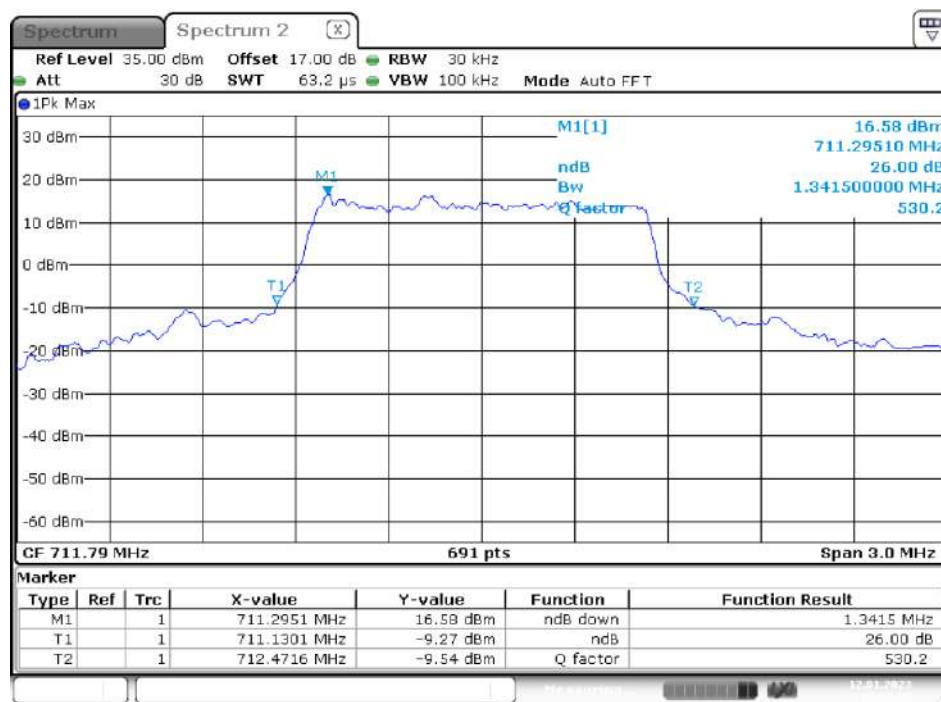
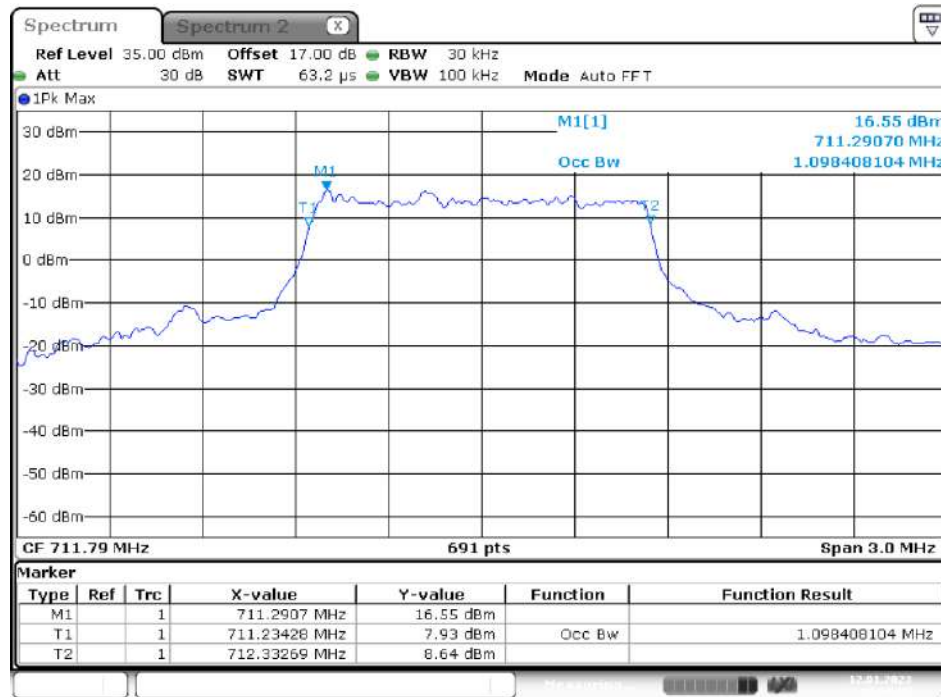


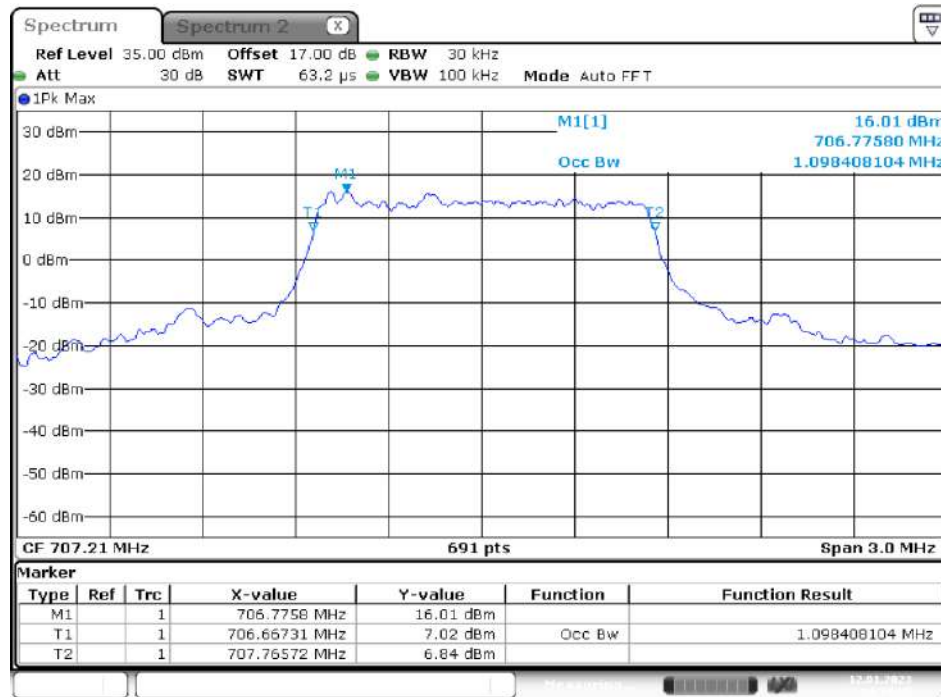
Date: 12.JAN.2023 13:07:10



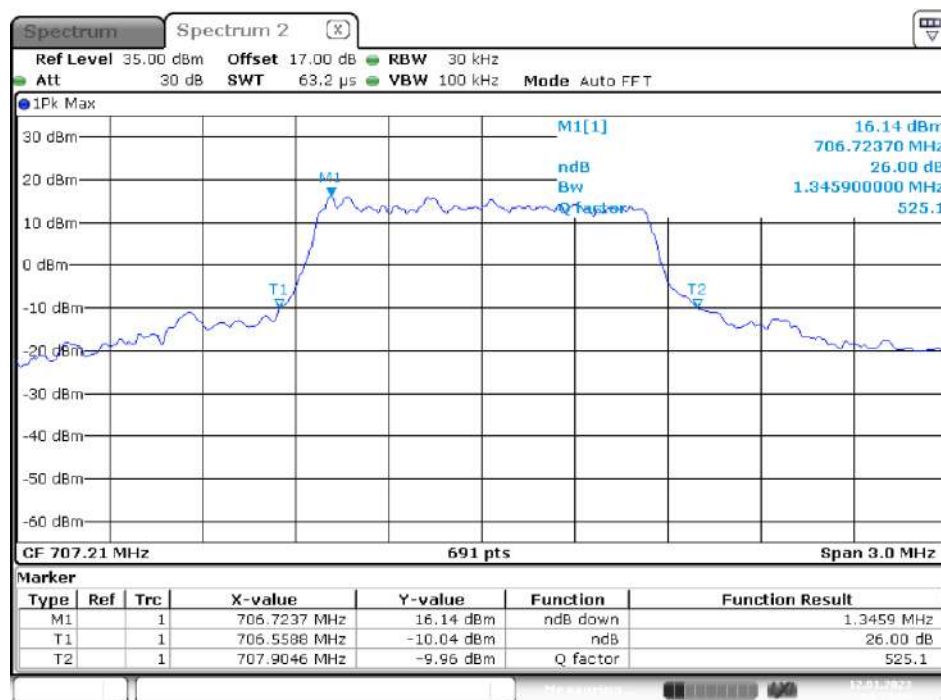
Date: 12.JAN.2023 13:07:31

QPSK (5.0MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel



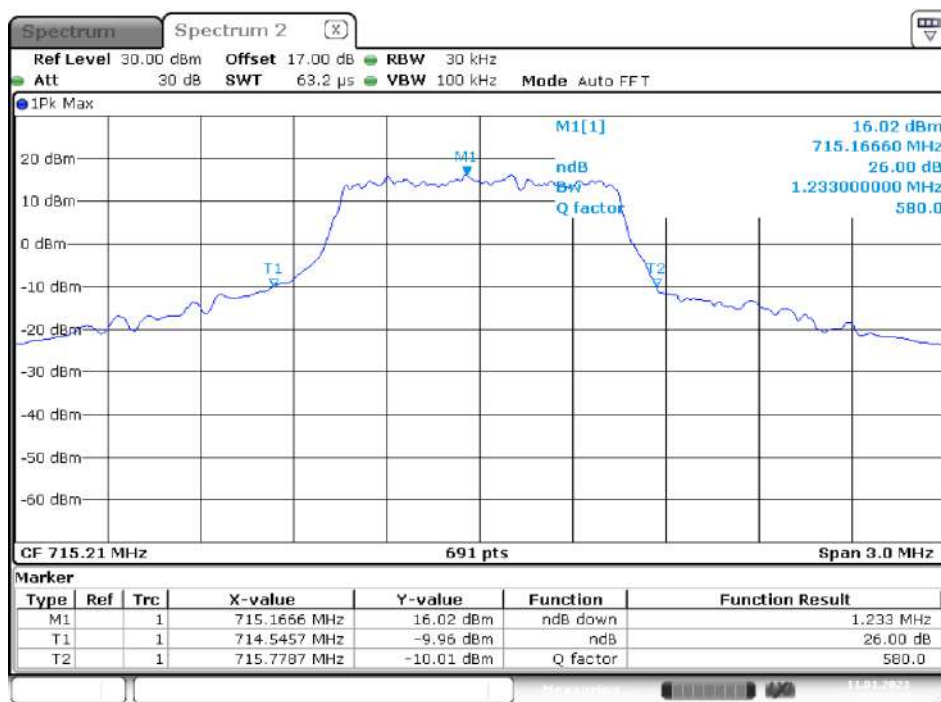
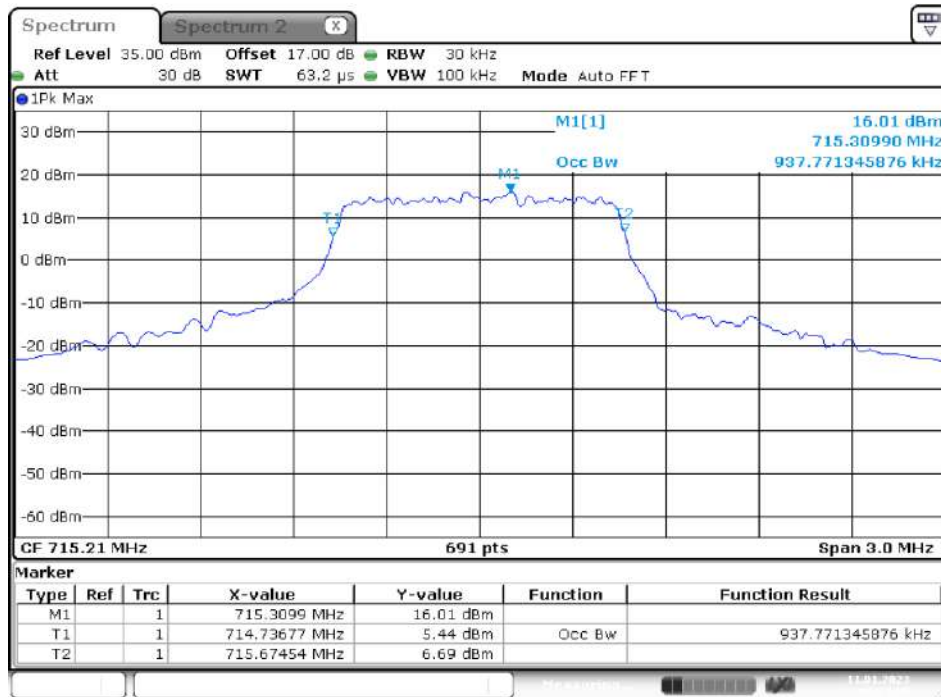
QPSK (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

Date: 12.JAN.2023 14:14:13

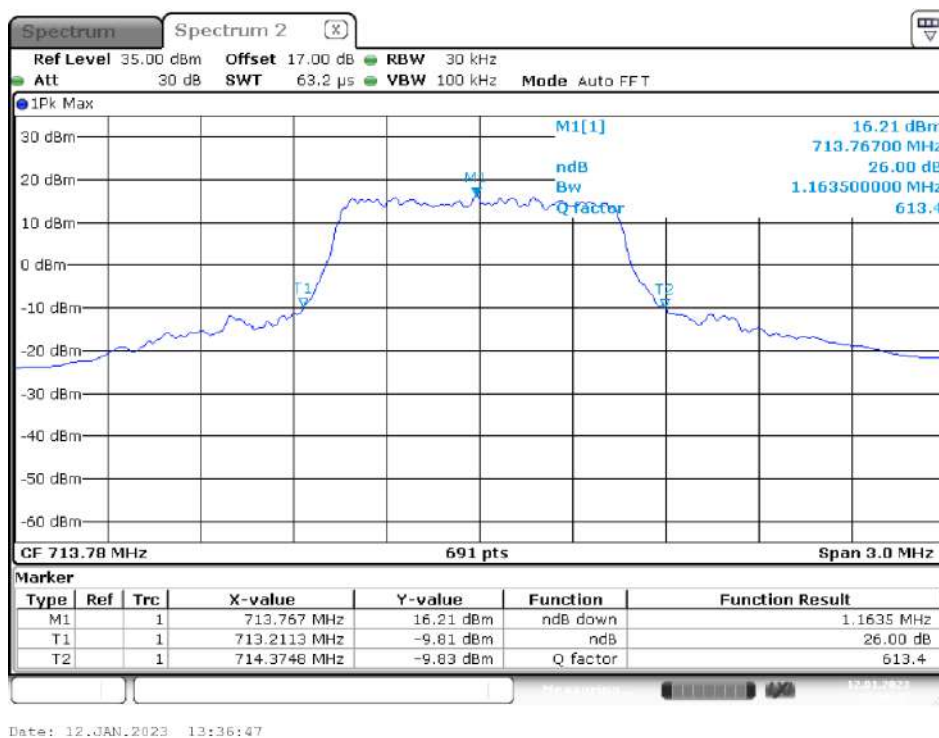
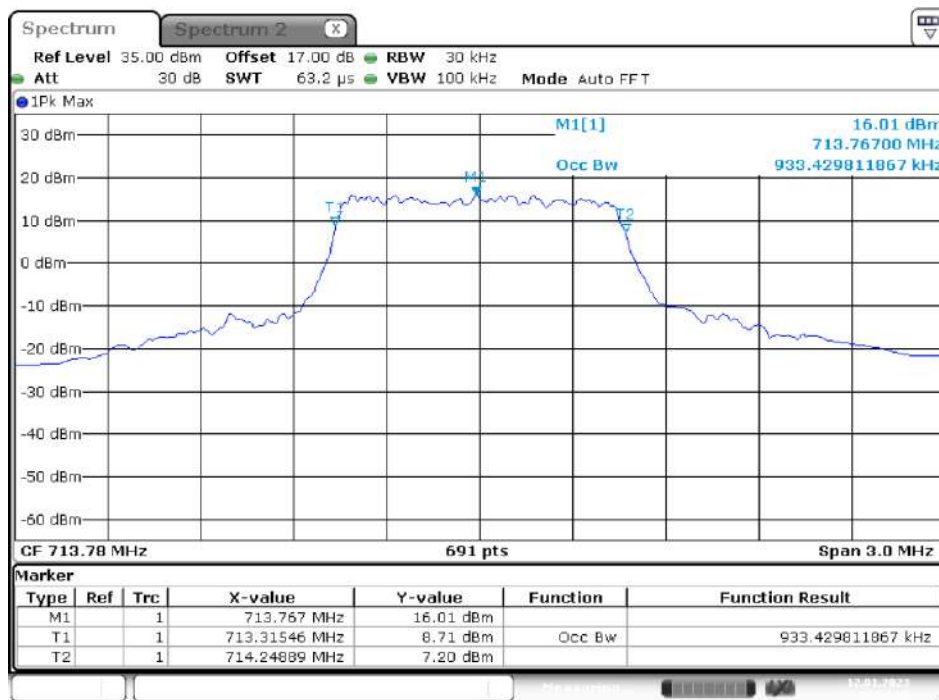


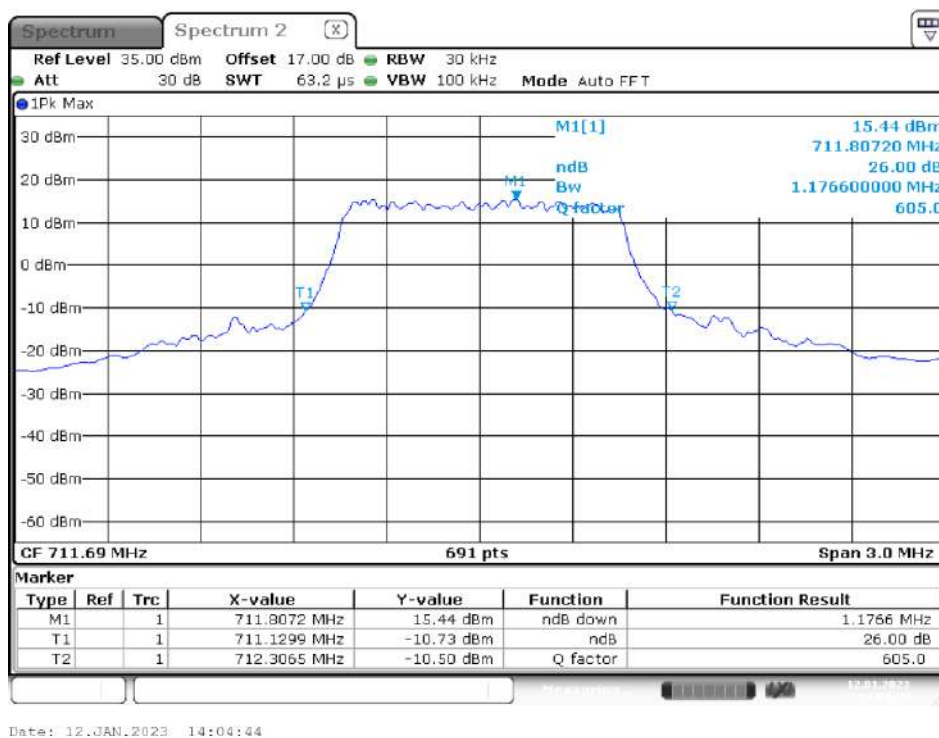
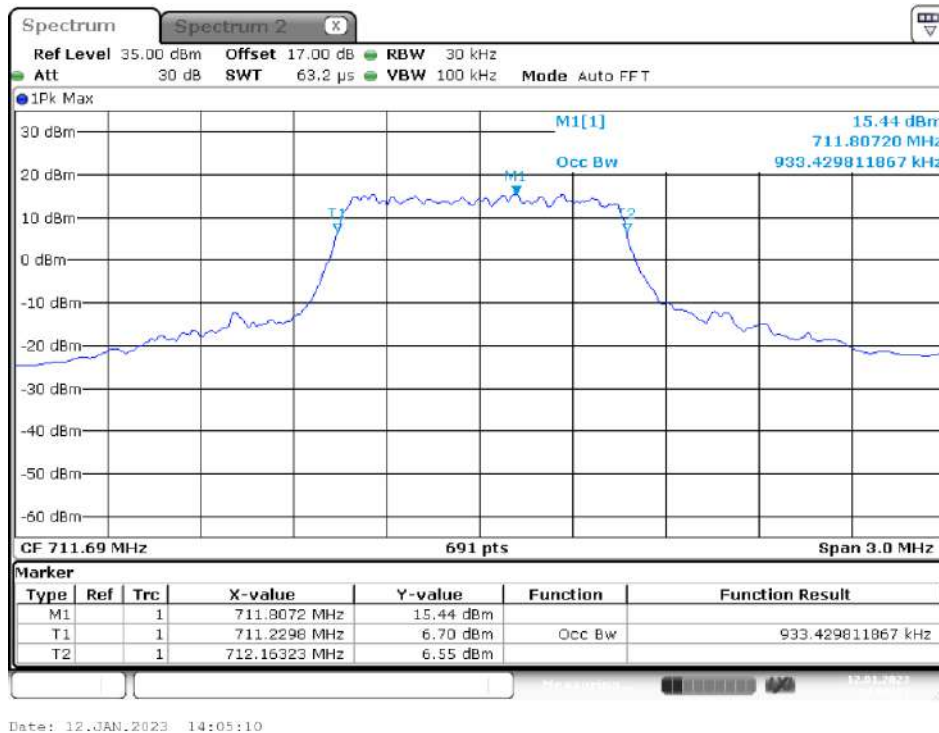
Date: 12.JAN.2023 14:13:35

16-QAM (1.4 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

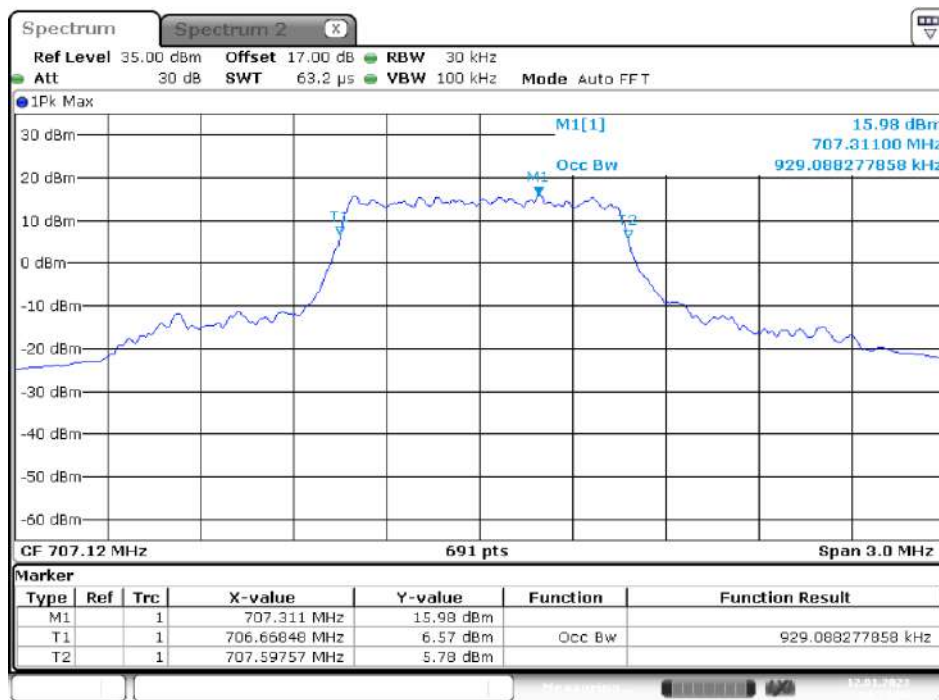


16-QAM (3.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

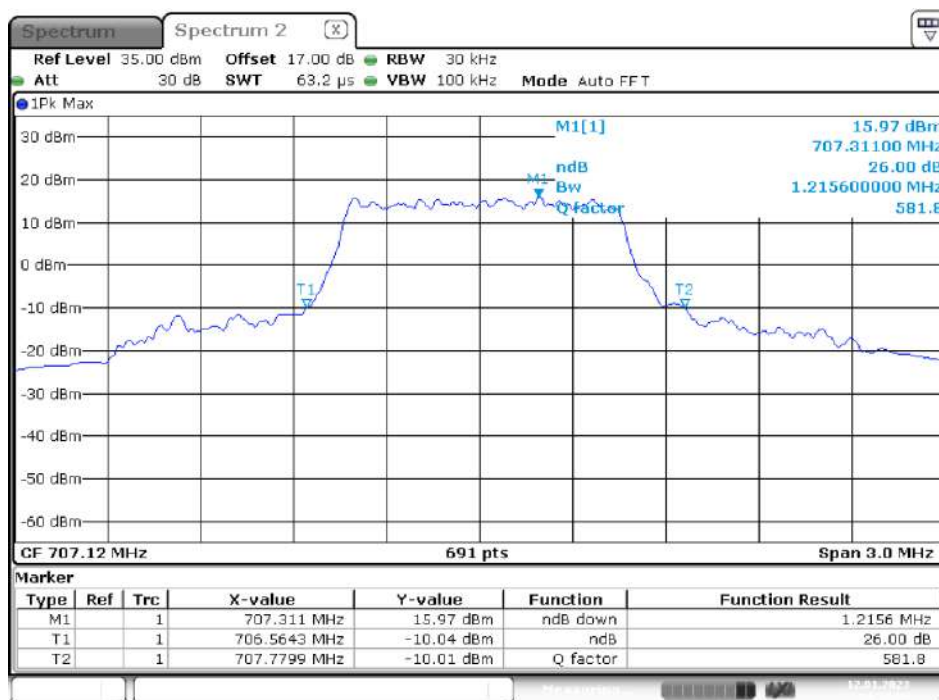


16-QAM (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

16-QAM (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel



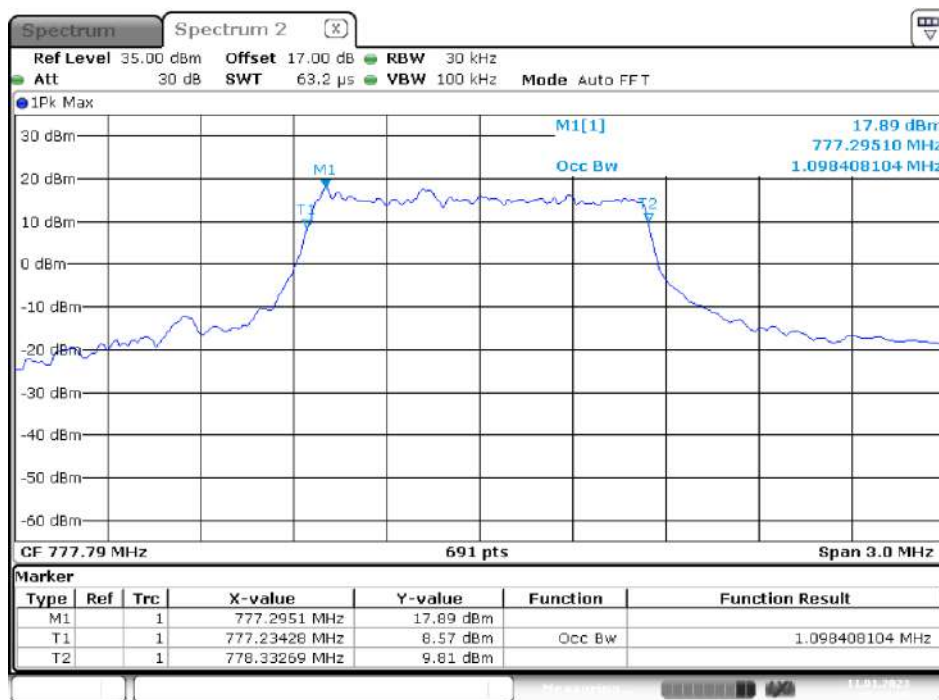
Date: 12.JAN.2023 14:11:54



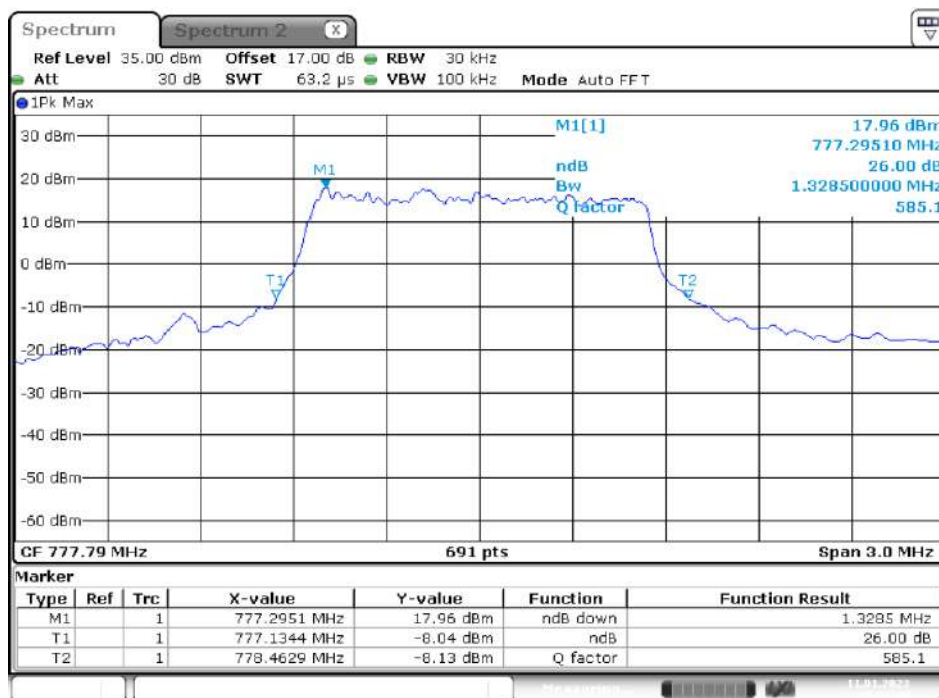
Date: 12.JAN.2023 14:12:24

LTE Band 13

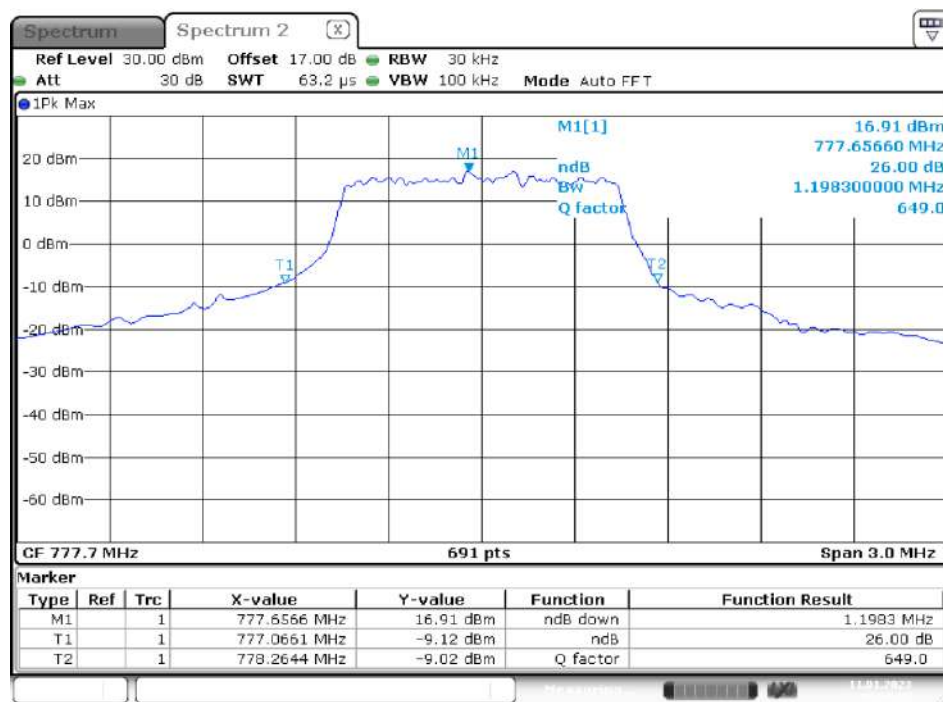
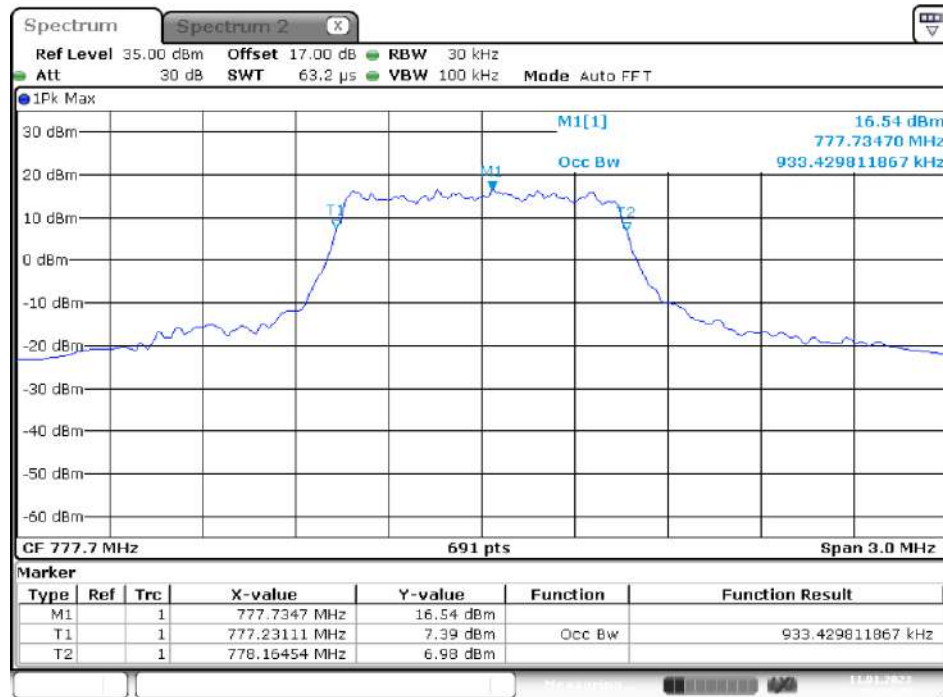
QPSK (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel



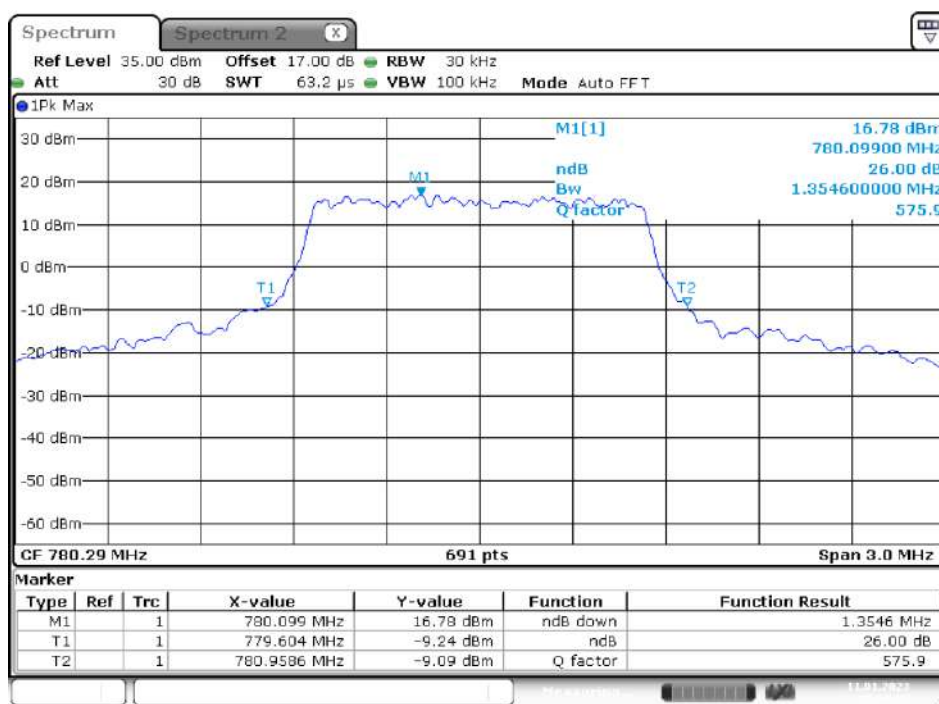
Date: 11.JAN.2023 15:32:20



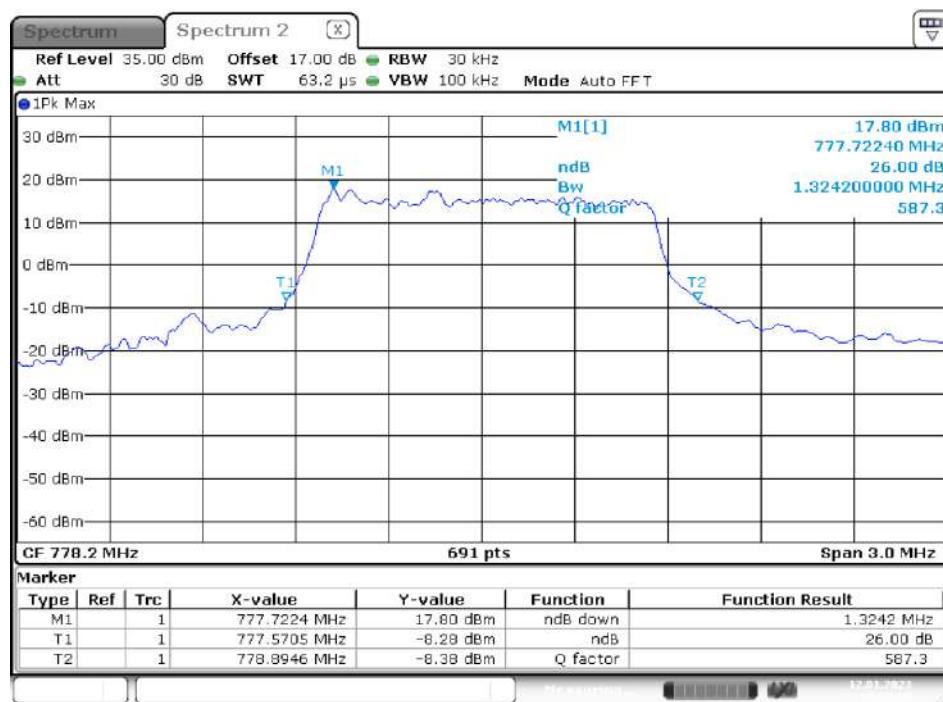
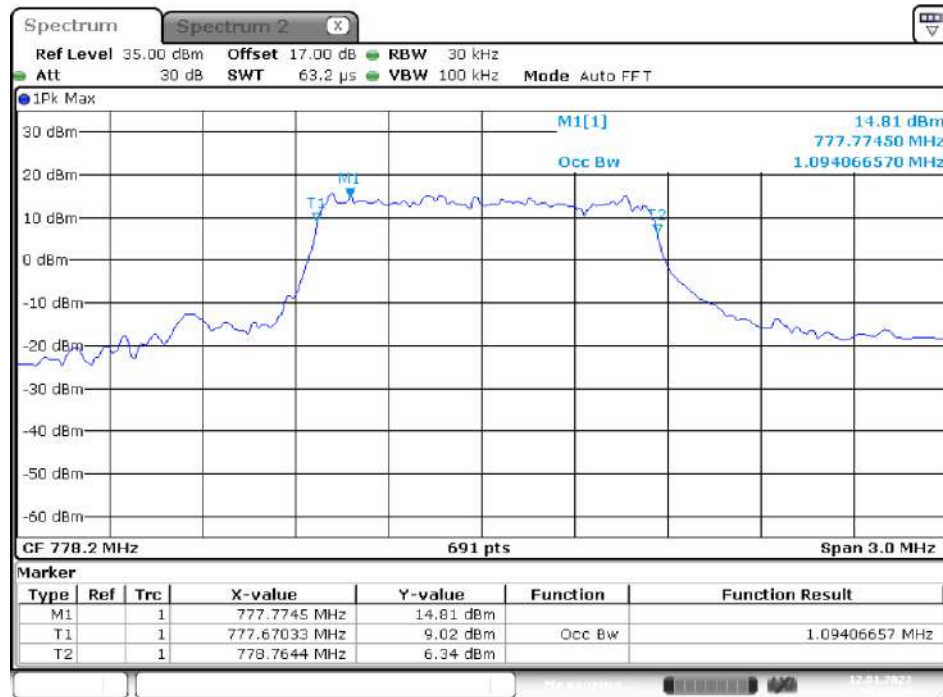
Date: 11.JAN.2023 15:31:40

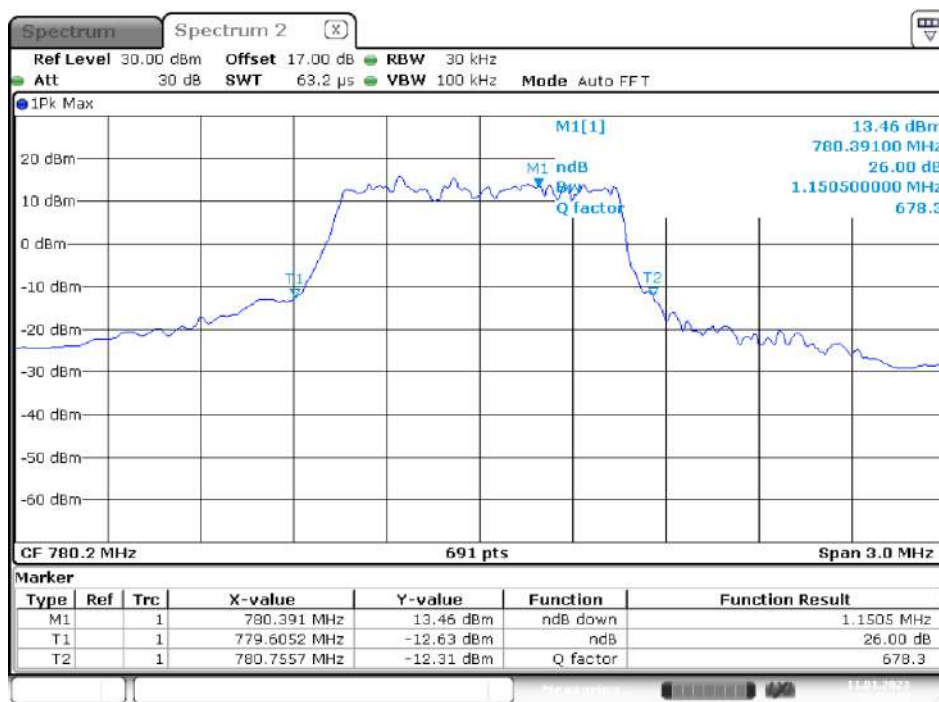
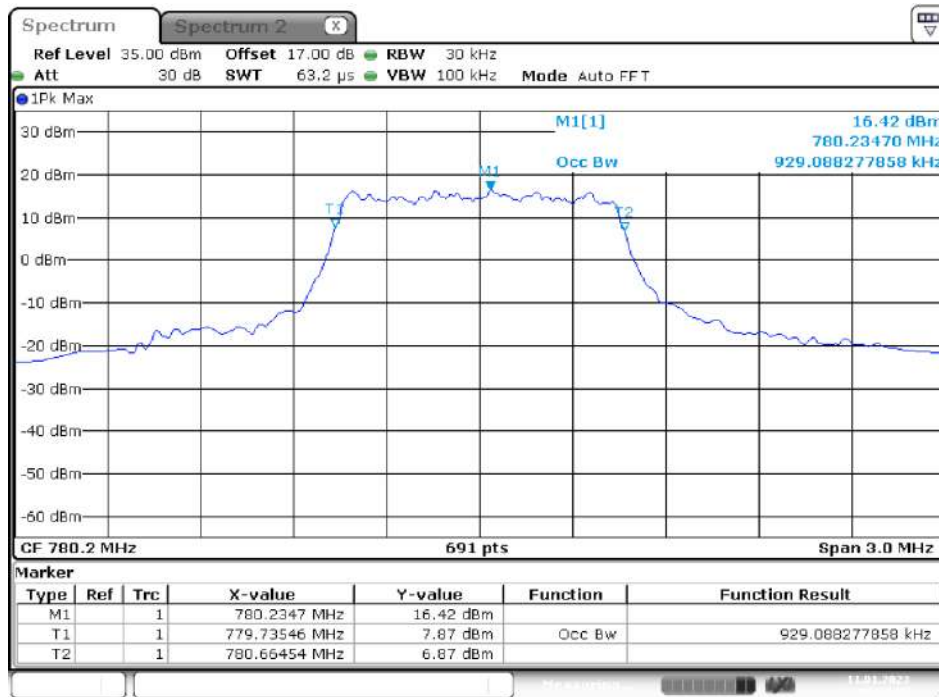
16-QAM (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Low channel

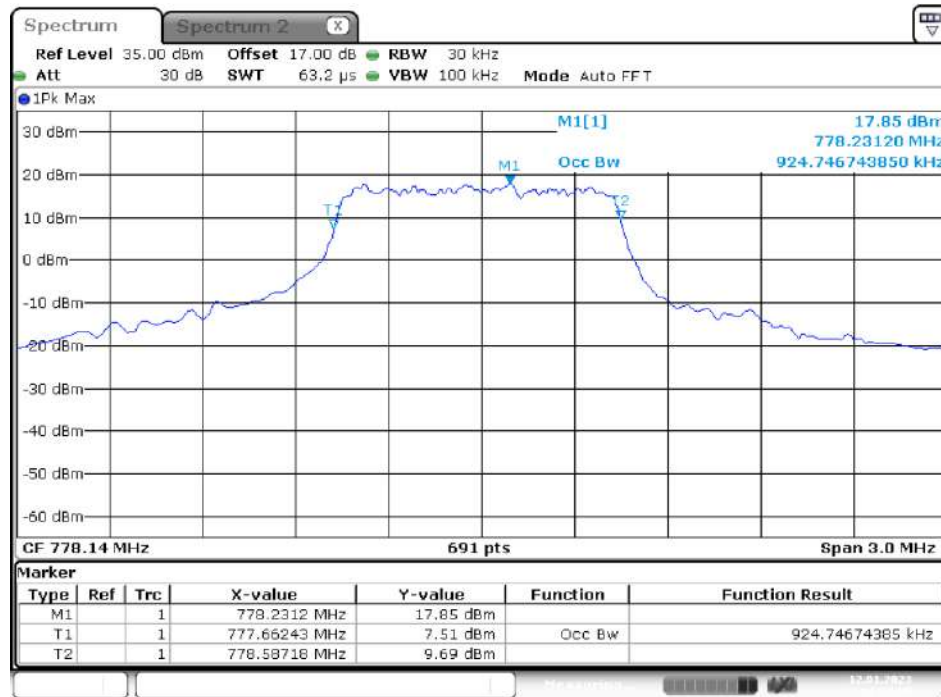
QPSK (5.0MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel



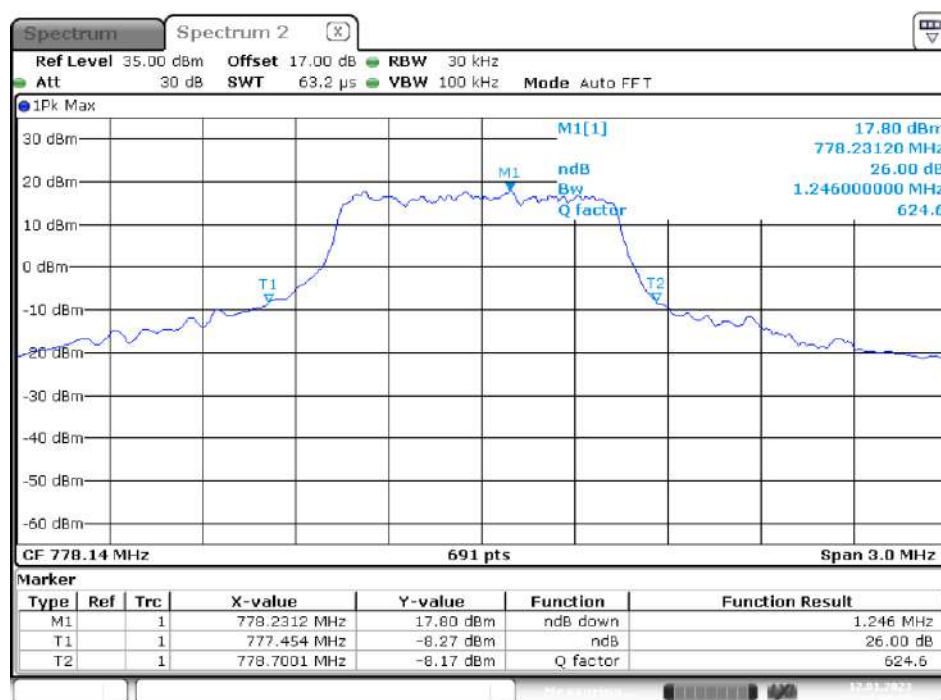
QPSK (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel



16-QAM (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

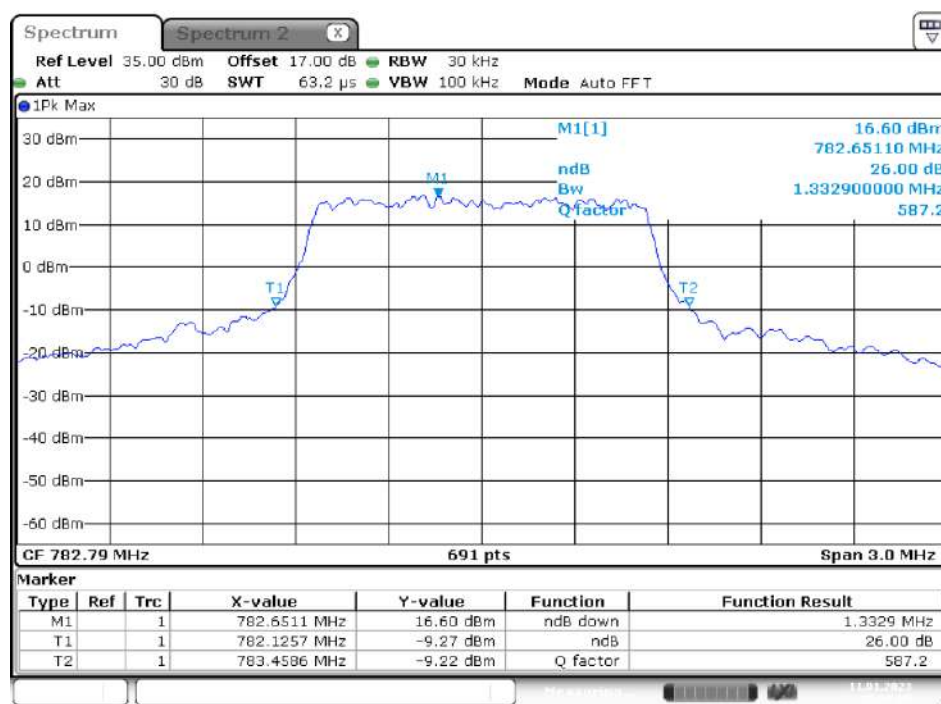
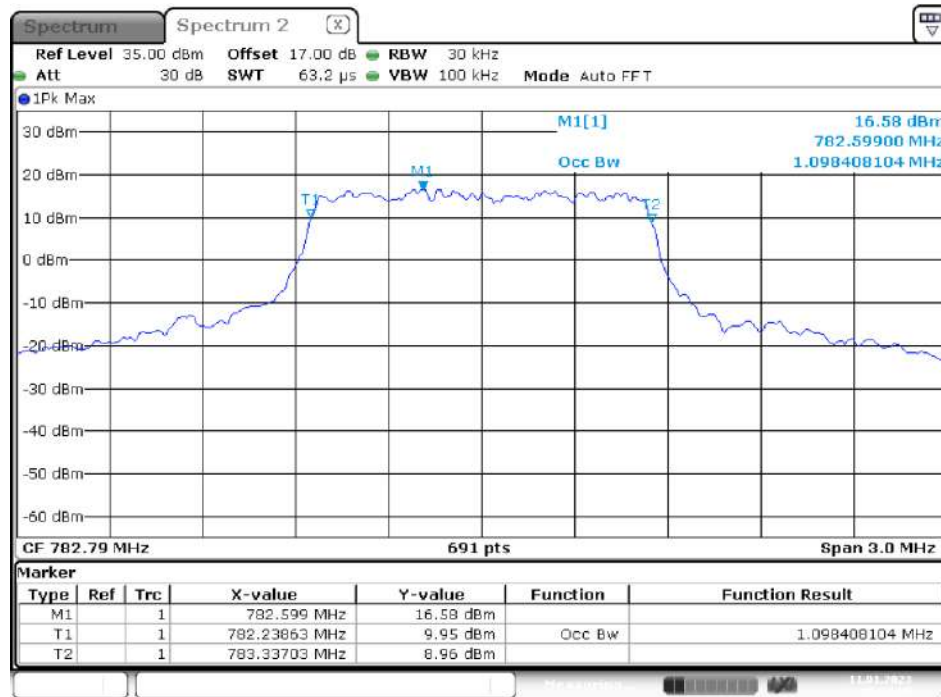
16-QAM (10.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, Middle channel

Date: 12.JAN.2023 14:27:36

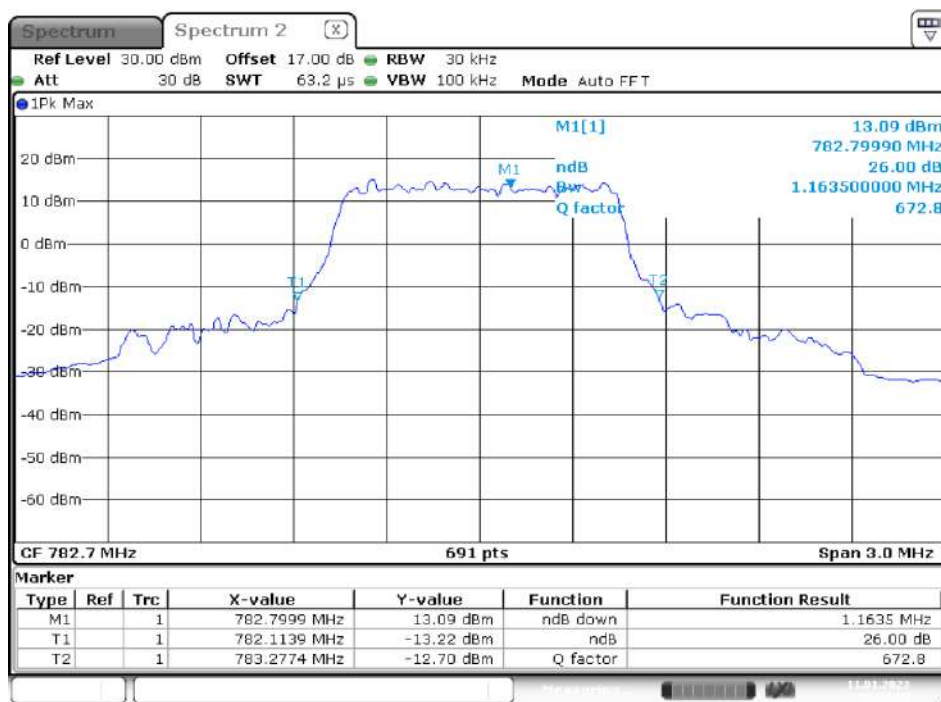
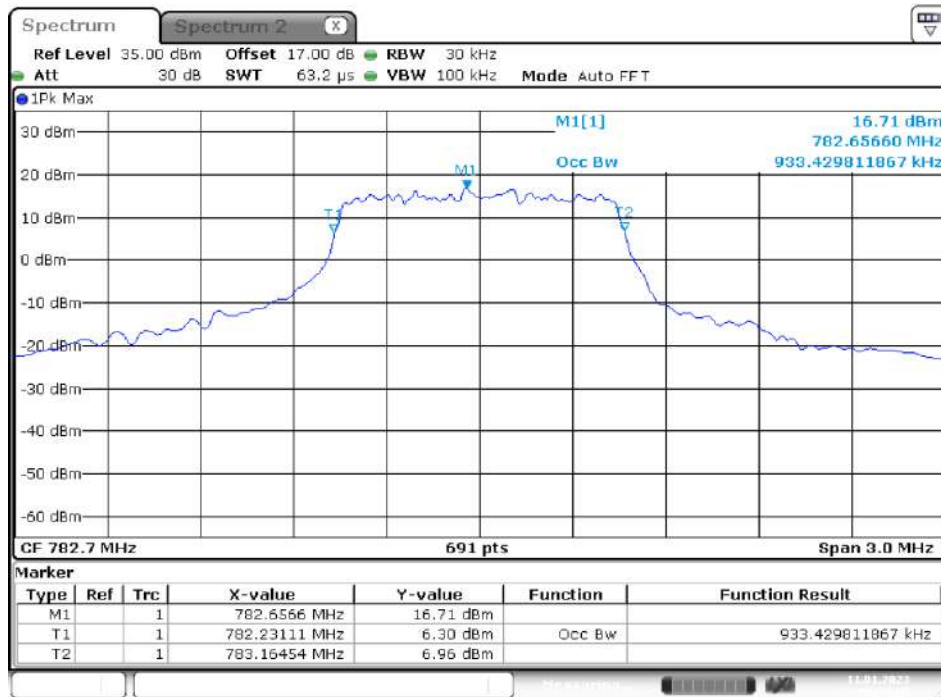


Date: 12.JAN.2023 14:28:09

QPSK (5.0MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel



16-QAM (5.0 MHz) - 99% Occupied & 26 dB Emissions Bandwidth, High channel

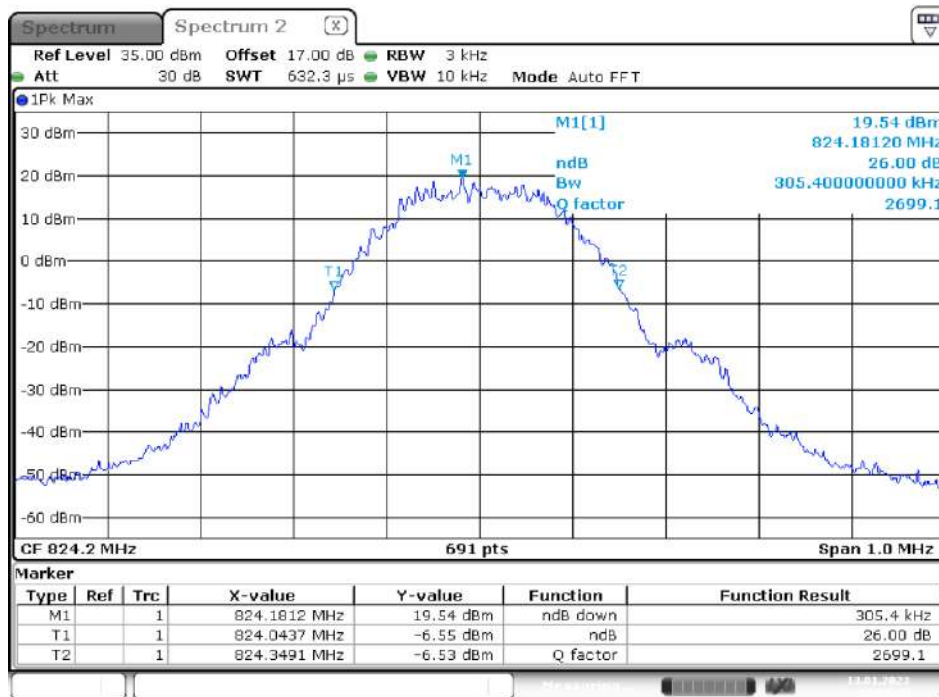
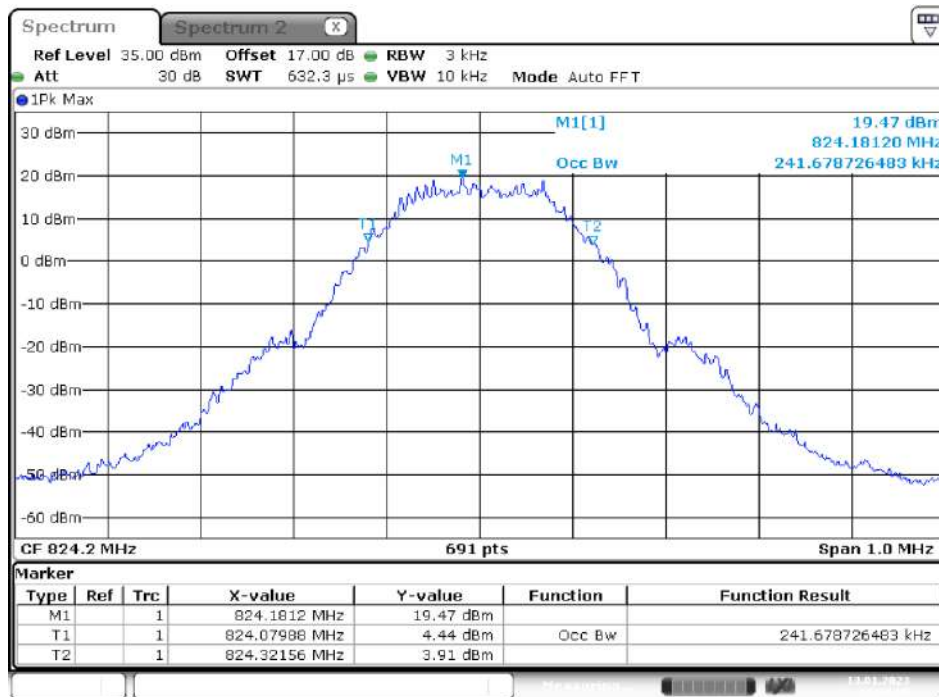


Cellular Band

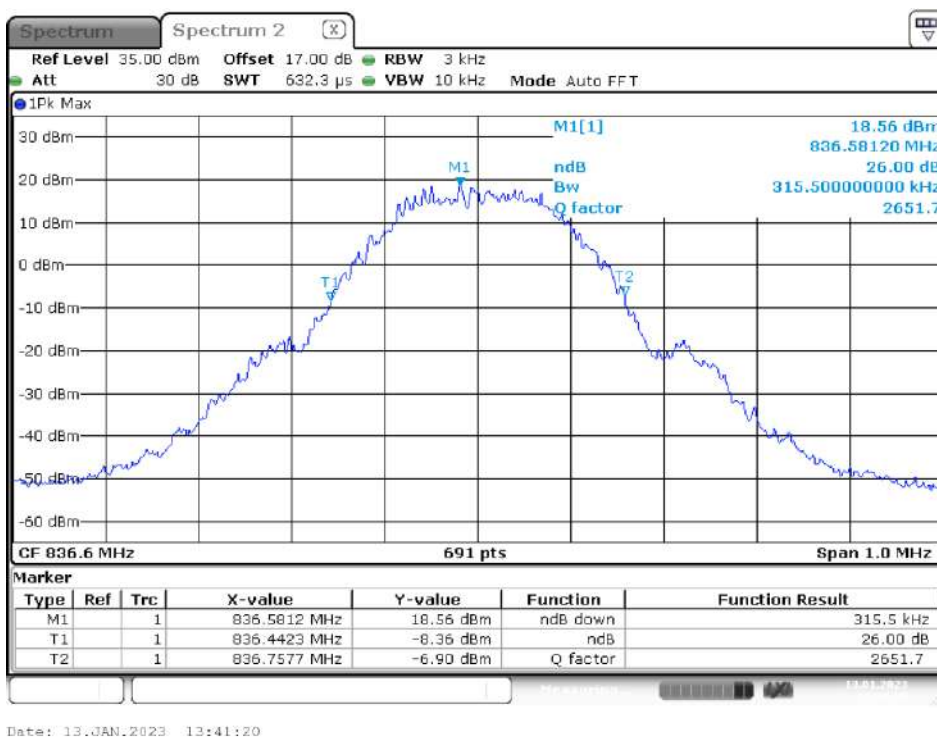
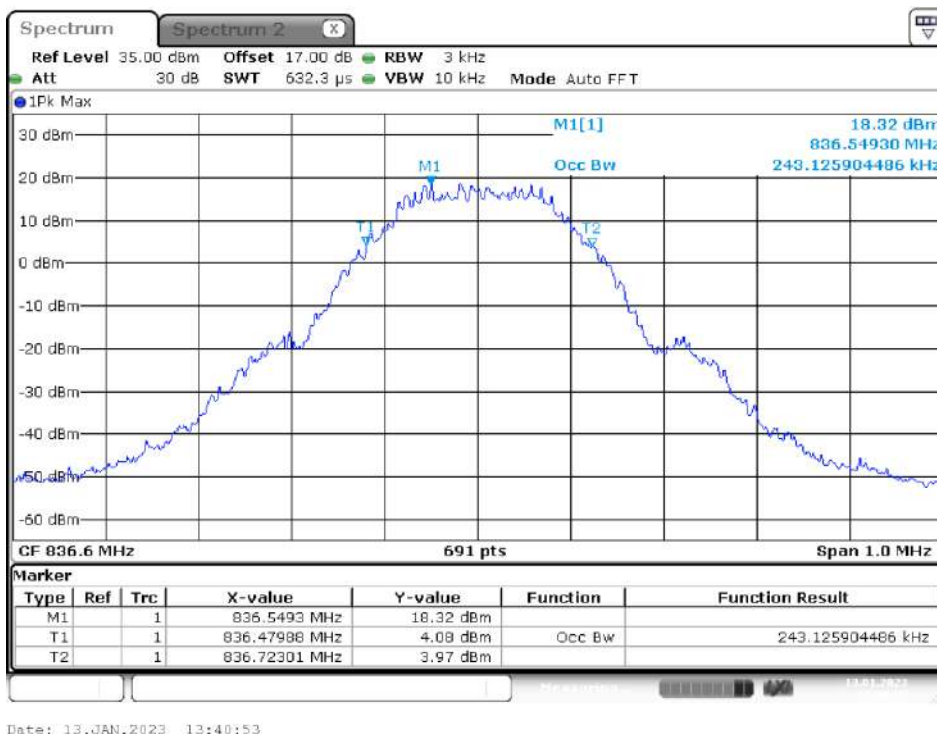
Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
GPRS	824.2	0.241	0.305
	836.6	0.243	0.315
	848.8	0.241	0.315

PCS Band

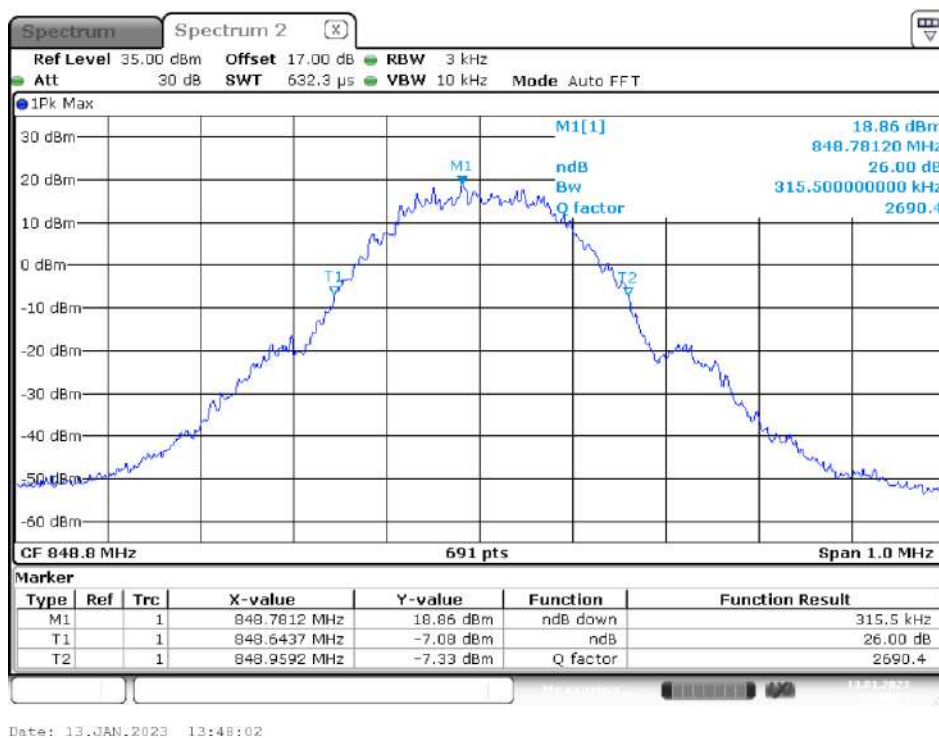
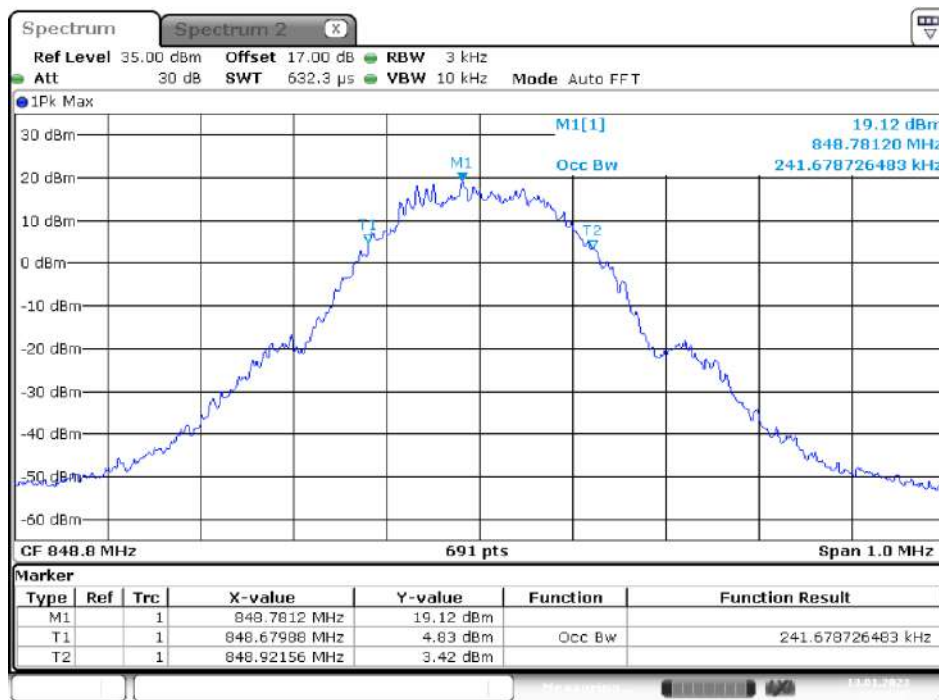
Mode	Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB Emission Bandwidth (MHz)
GPRS	1850.2	0.240	0.312
	1880.0	0.241	0.314
	1909.8	0.240	0.312

Cellular Band**99% Occupied & 26 dB Emissions Bandwidth for GPRS Low channel**

99% Occupied & 26 dB Emissions Bandwidth for GPRS Middle channel

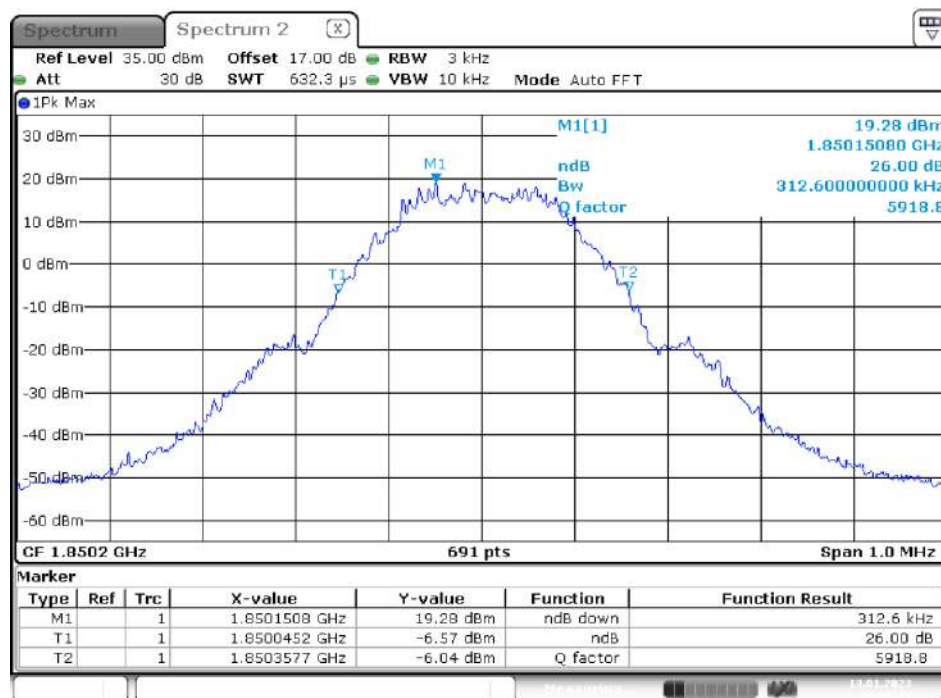
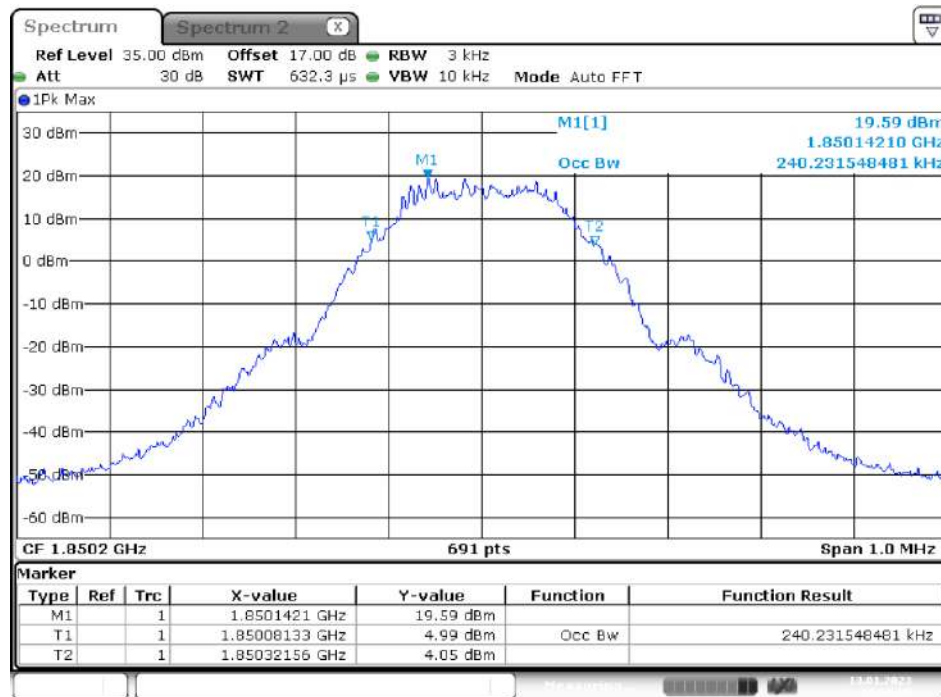


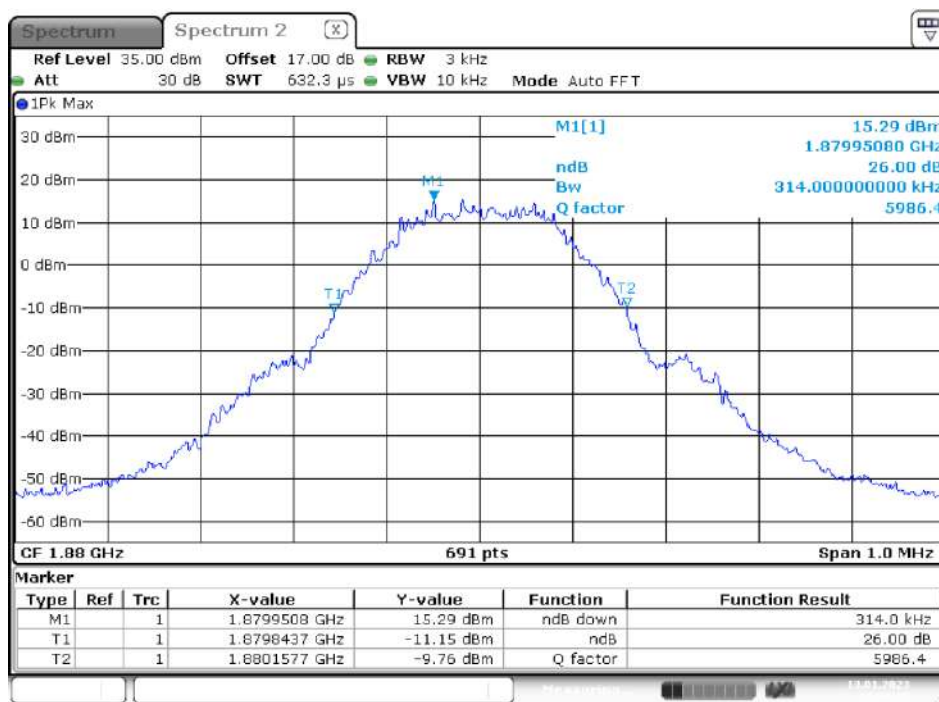
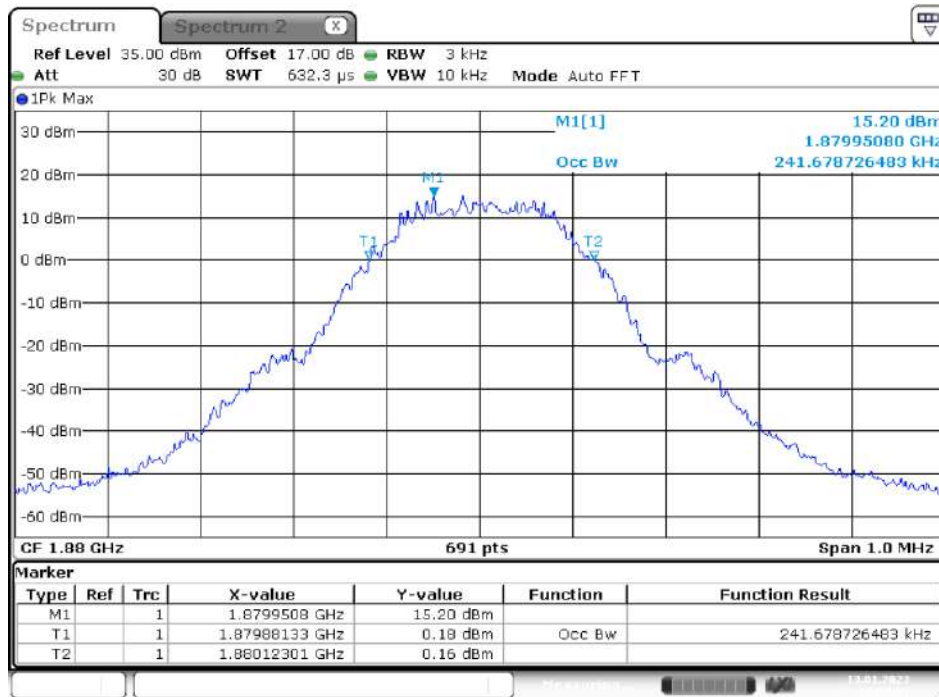
99% Occupied & 26 dB Emissions Bandwidth for GPRS High channel

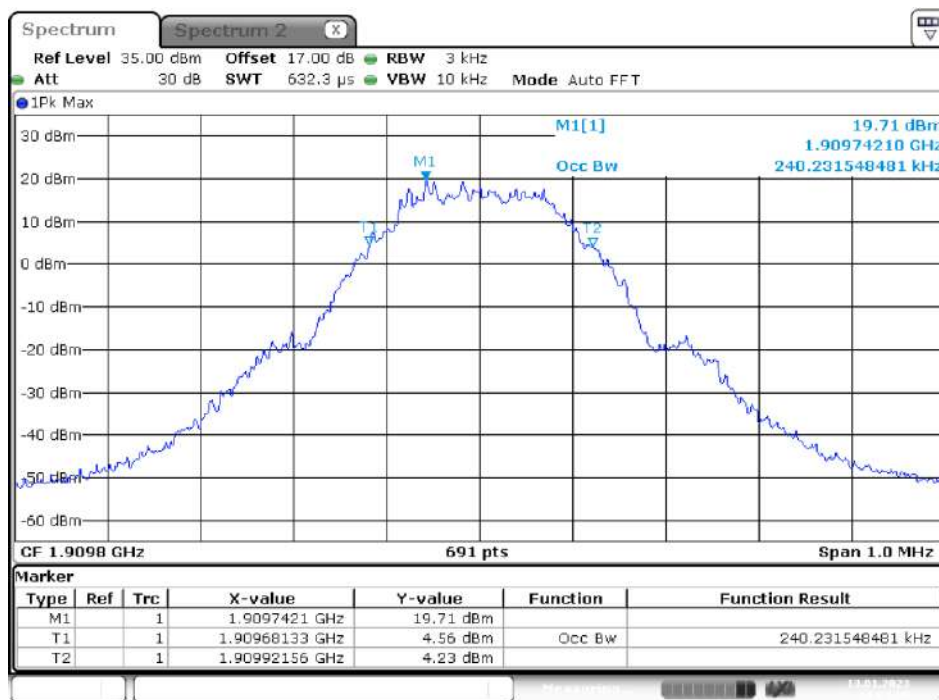


PCS Band

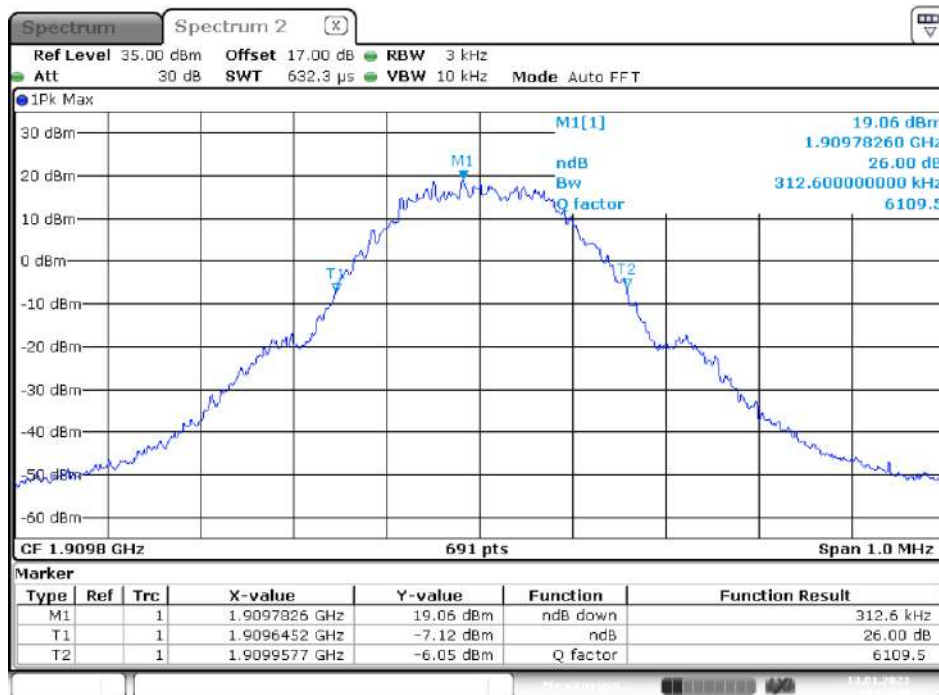
99% Occupied & 26 dB Emissions Bandwidth for GPRS Low channel



99% Occupied & 26 dB Emissions Bandwidth for GPRS Middle channel

99% Occupied & 26 dB Emissions Bandwidth for GPRS High channel

Date: 13.JAN.2023 14:01:20



Date: 13.JAN.2023 14:01:40

12.FCC§2.1051, §22.917(a) & §24.238(a) & §27.53 & RSS-130 ISSUE 2 CLAUSE 4.7 & RSS-132 ISSUE 3 CLAUSE 5.5 & RSS-133 ISSUE 6 CLAUSE 6.5 & RSS-139 ISSUE 3 CLAUSE 6.6– Spurious Emissions At Antenna Terminals

12.1 Applicable Standard

FCC § 2.1051, §22.917, § 24.238, § 27.53

IC RSS-130 Issue 2 clause 4.7 RSS-132 Issue 3 clause 5.5 RSS-133 Issue 6 clause 6.5 RSS-139 Issue 3 clause 6.6

12.2 Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.

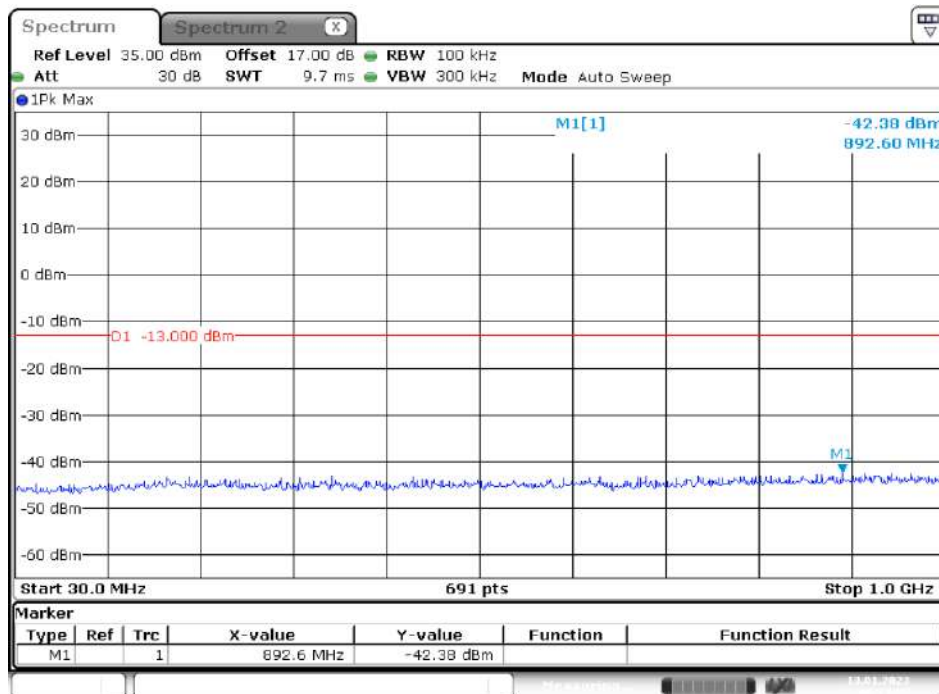
The resolution bandwidth of the spectrum analyzer was set at 100 kHz for below 1GHz & 1MHz for above 1GHz.

12.3 Test Results

(Worst case is Resource Block & RB offset: RB1#0)

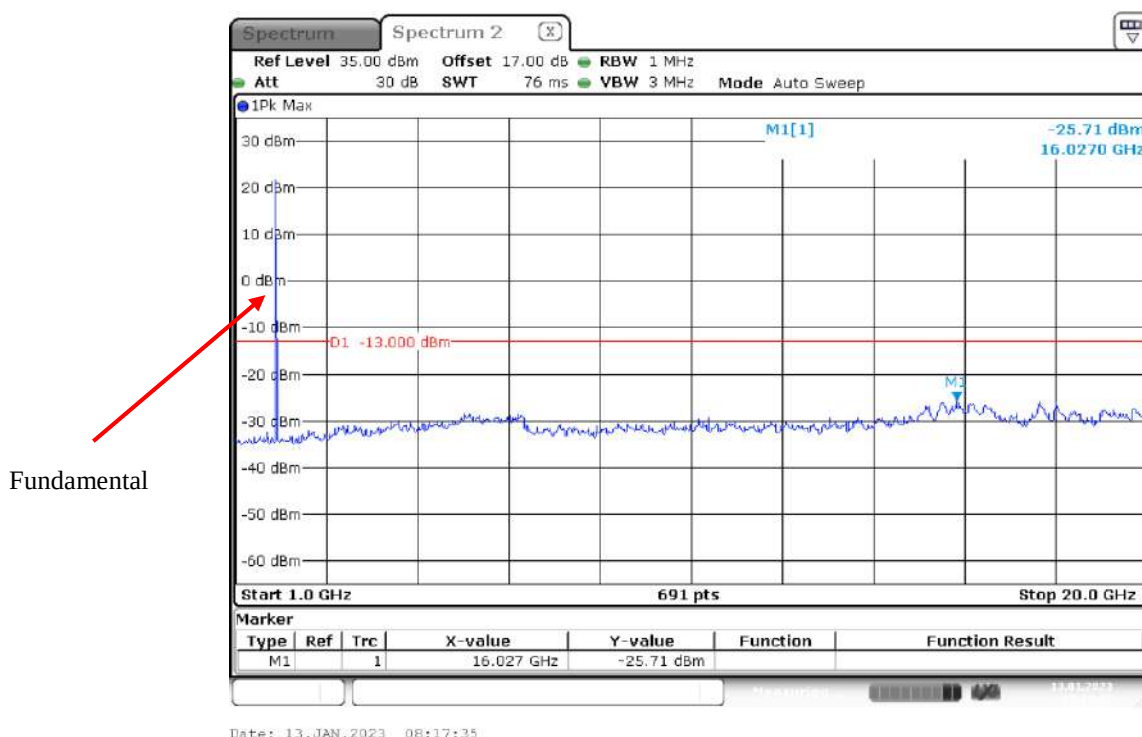
Please refer to the following plots

LTE Band 2 30 MHz – 1 GHz (1.4 MHz, QPSK, Low Channel)



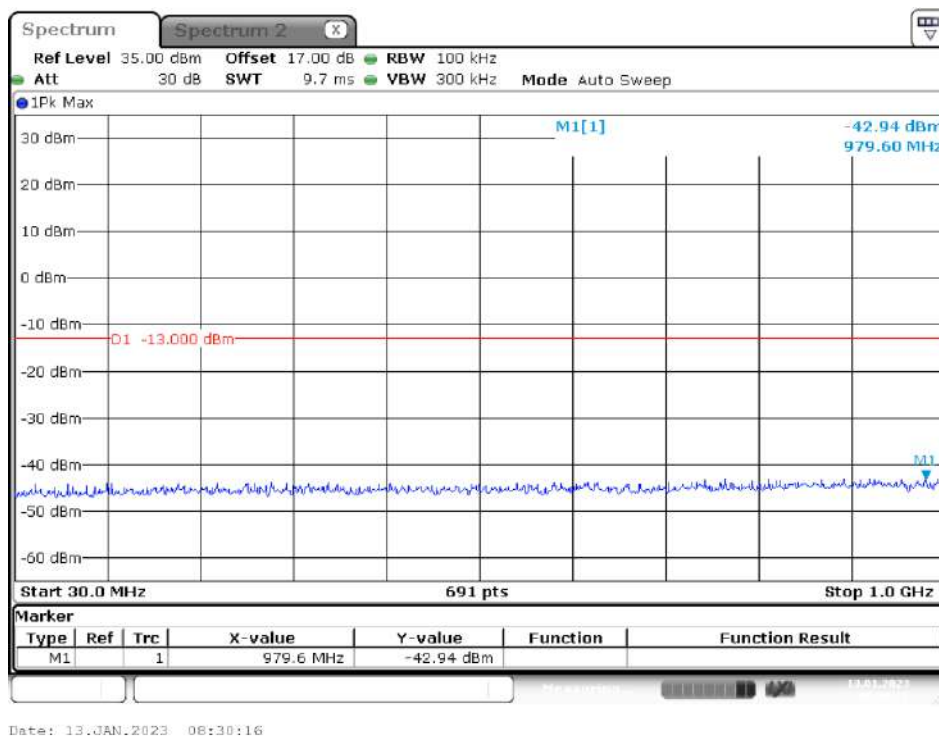
Date: 13.JAN.2023 08:17:57

1 GHz – 20 GHz (1.4 MHz, QPSK, Low Channel)

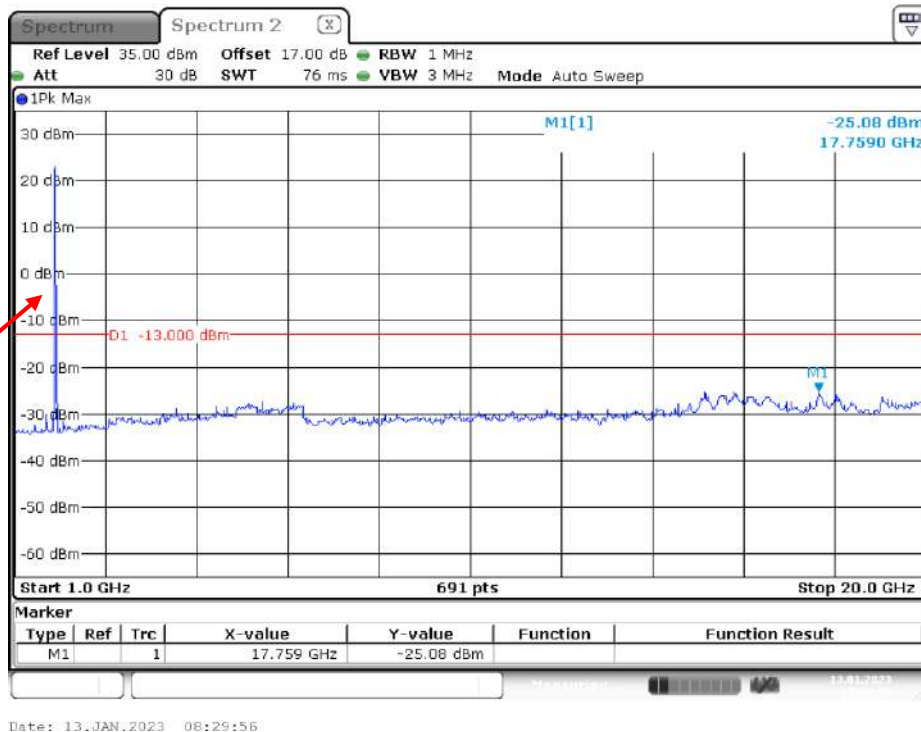


Date: 13.JAN.2023 08:17:35

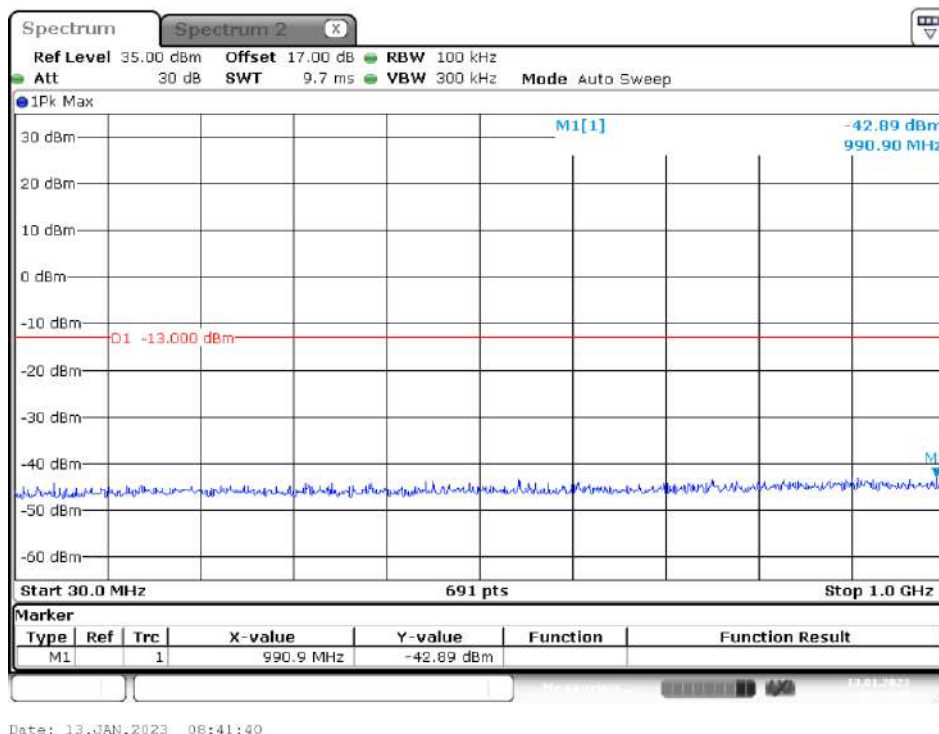
Note: It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (New Taipei Laboratory)

30 MHz – 1 GHz (3 MHz, QPSK, Low Channel)**1 GHz – 20 GHz (3 MHz, QPSK, Low Channel)**

Fundamental

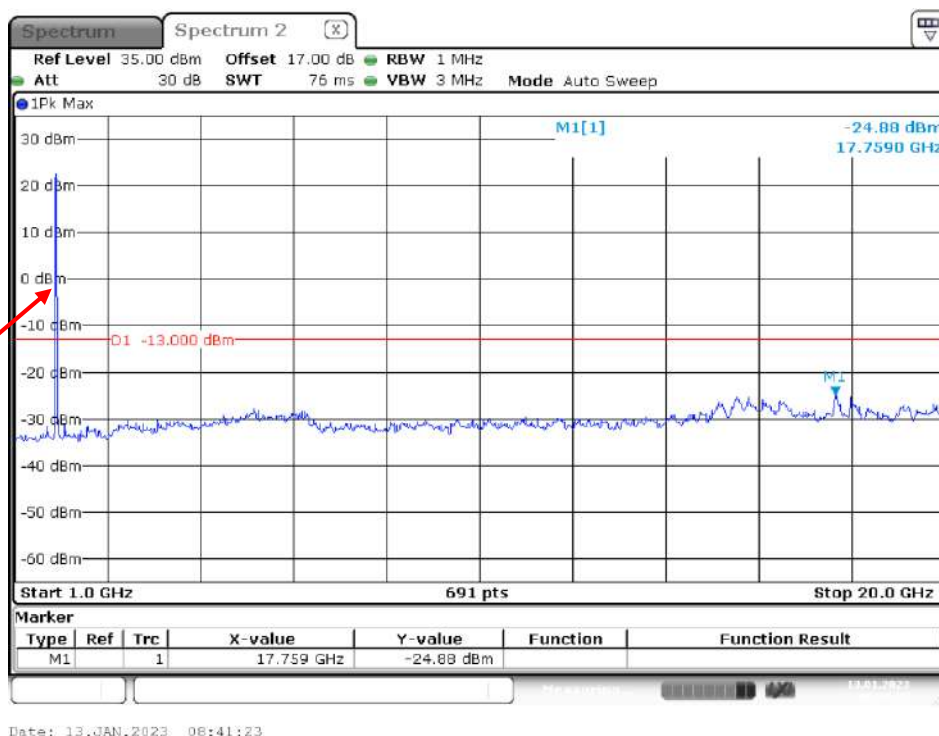


30 MHz – 1 GHz (5 MHz, QPSK, Low Channel)

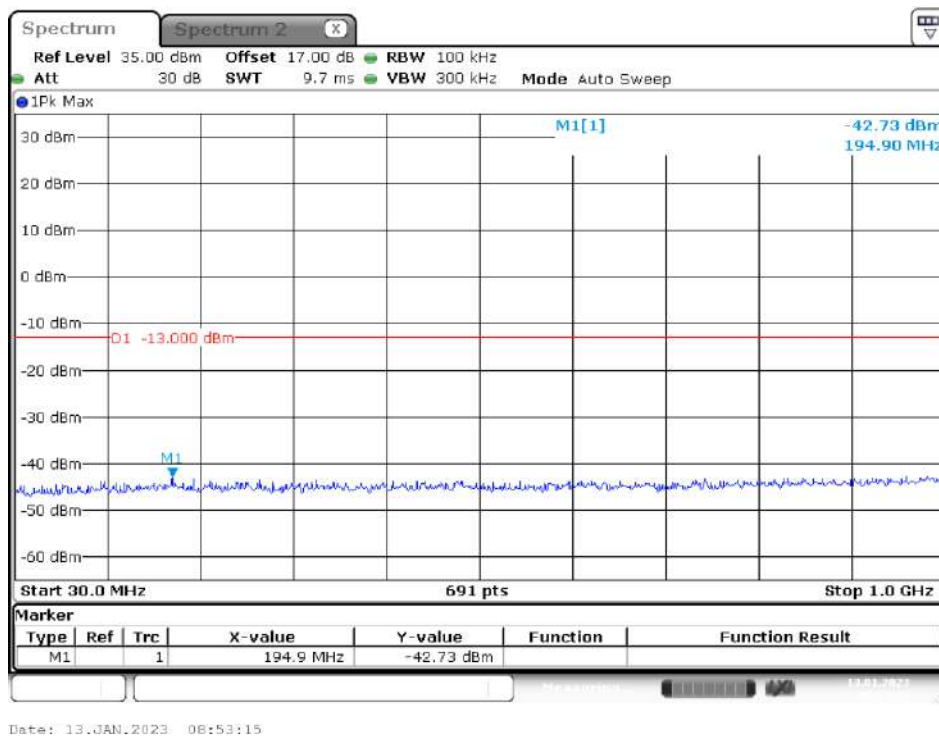


1 GHz – 20 GHz (5 MHz, QPSK, Low Channel)

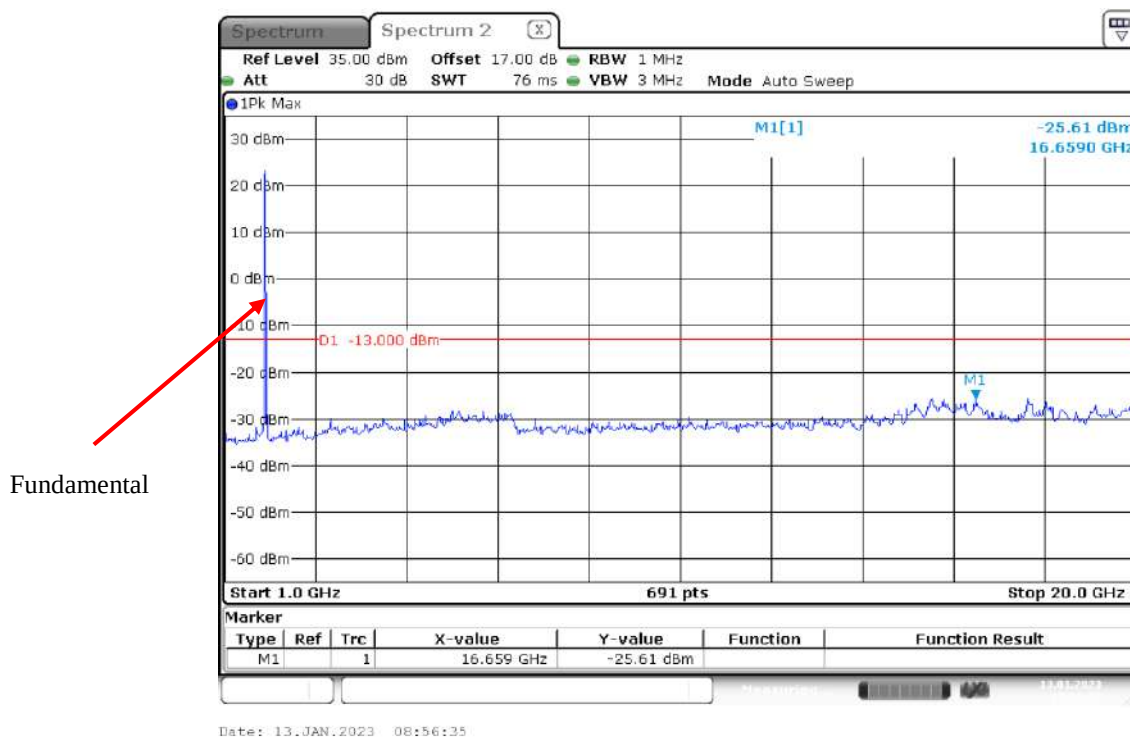
Fundamental

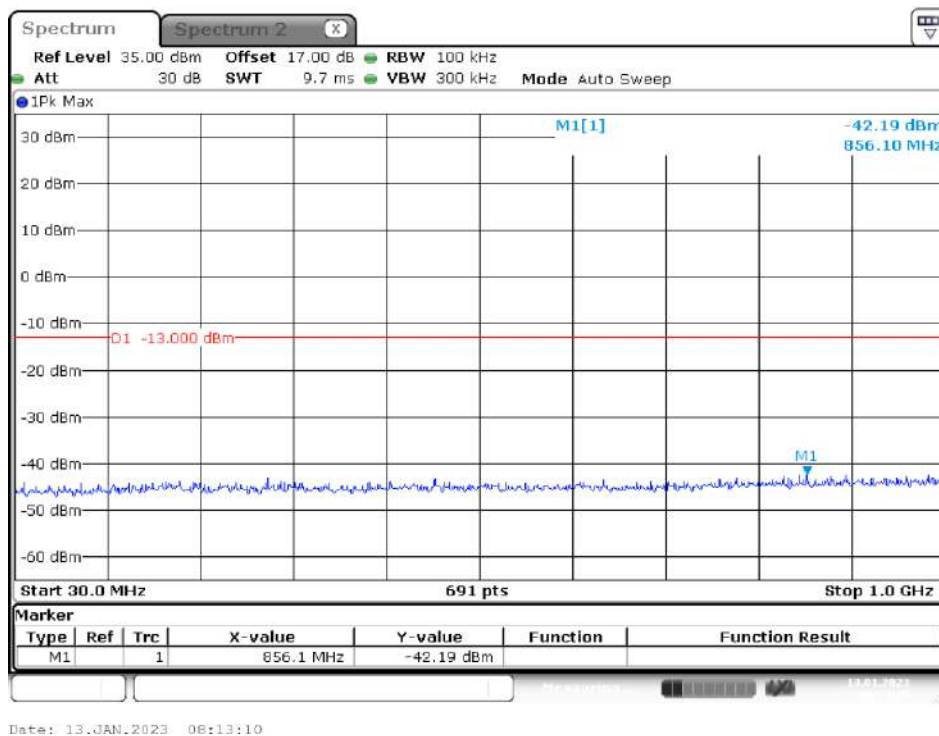


30 MHz – 1 GHz (10 MHz, QPSK, Low Channel)

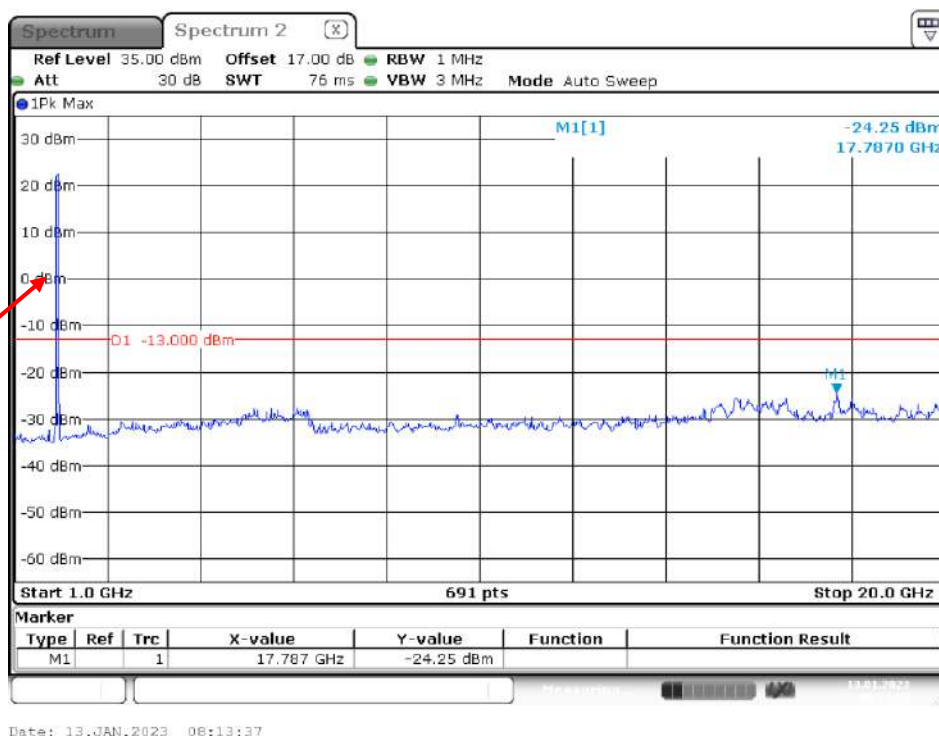


1 GHz – 20 GHz (10 MHz, QPSK, Low Channel)

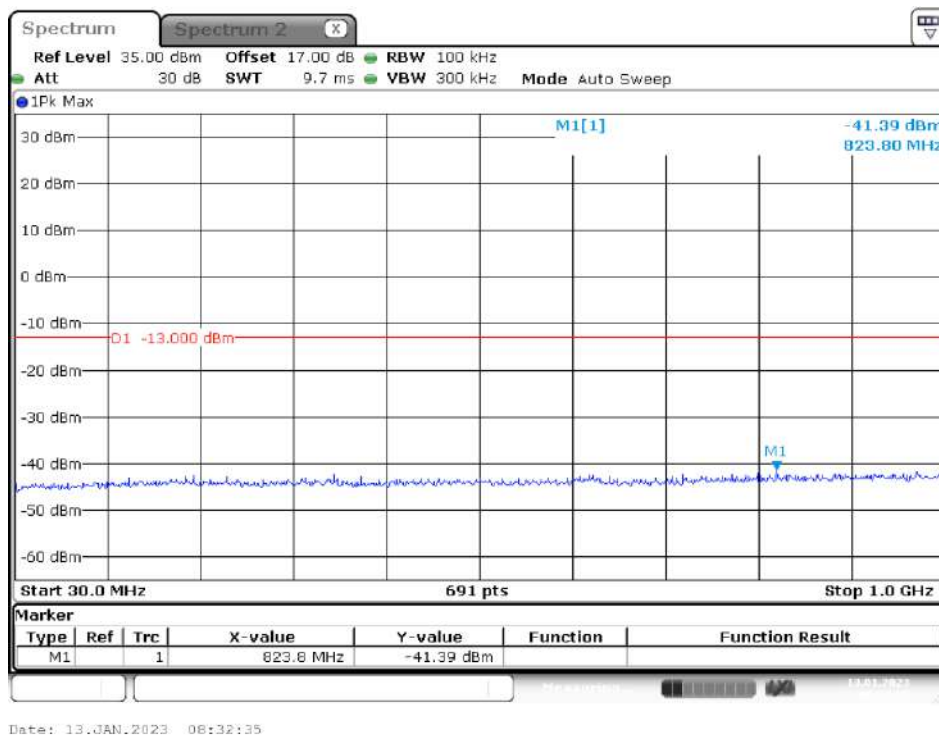


30 MHz – 1 GHz (1.4 MHz, QPSK, Middle Channel)**1 GHz – 20 GHz (1.4 MHz, QPSK, Middle Channel)**

Fundamental

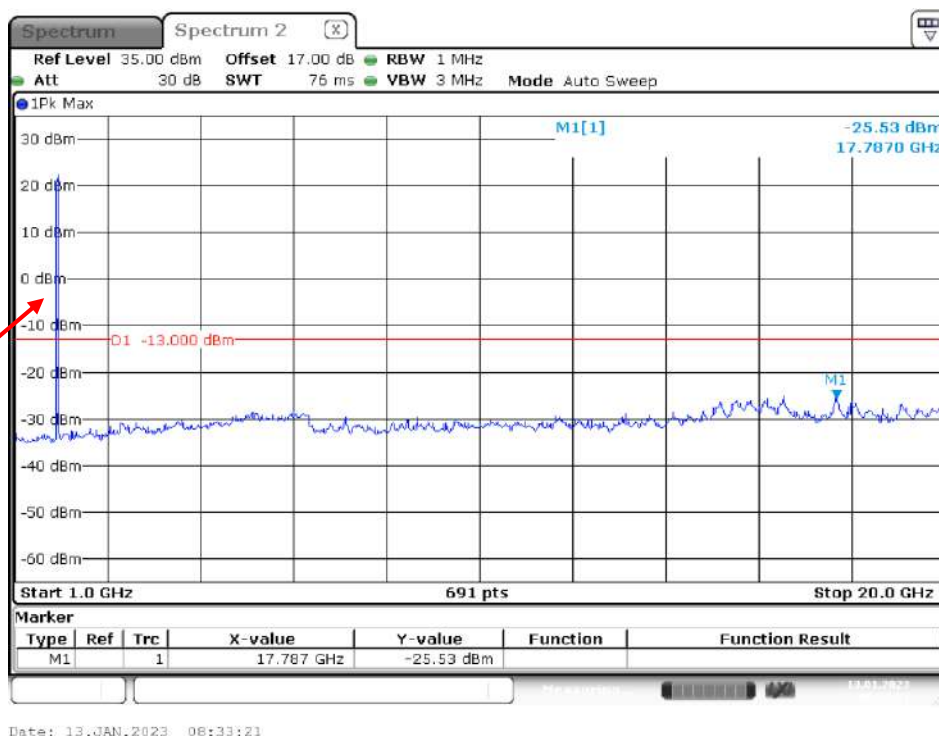


30 MHz – 1 GHz (3 MHz, QPSK, Middle Channel)

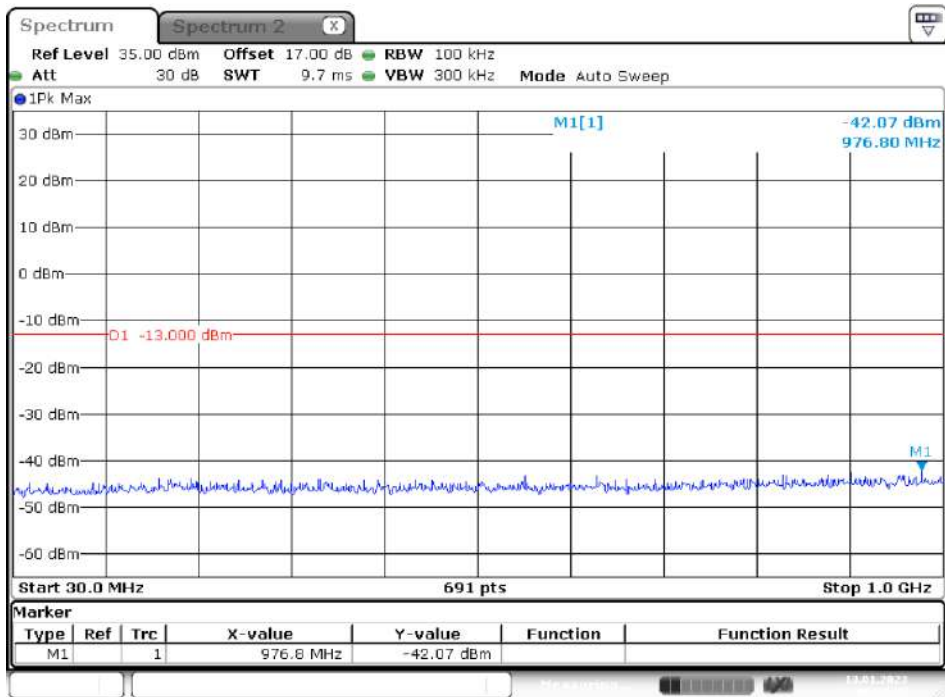


1 GHz – 20 GHz (3 MHz, QPSK, Middle Channel)

Fundamental

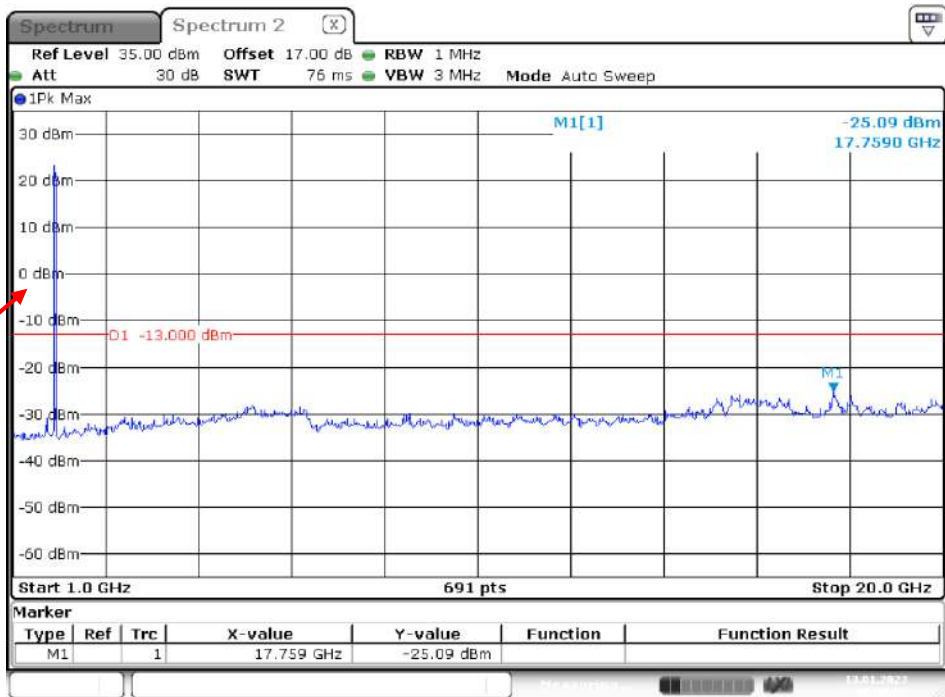


30 MHz – 1 GHz (5 MHz, QPSK, Middle Channel)



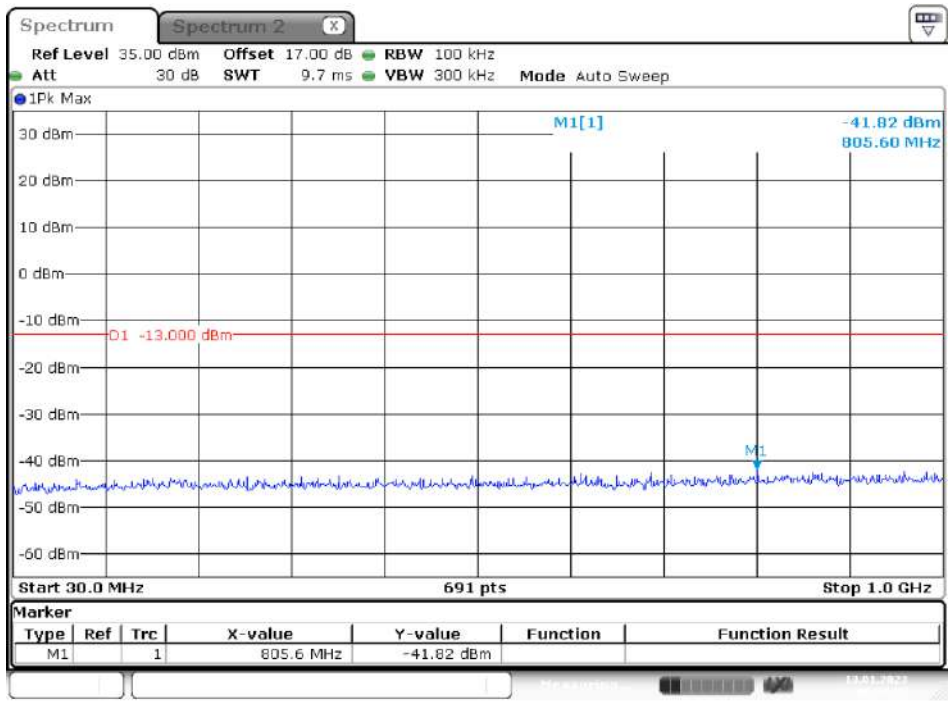
Date: 13.JAN.2023 08:47:43

1 GHz – 20 GHz (5 MHz, QPSK, Middle Channel)



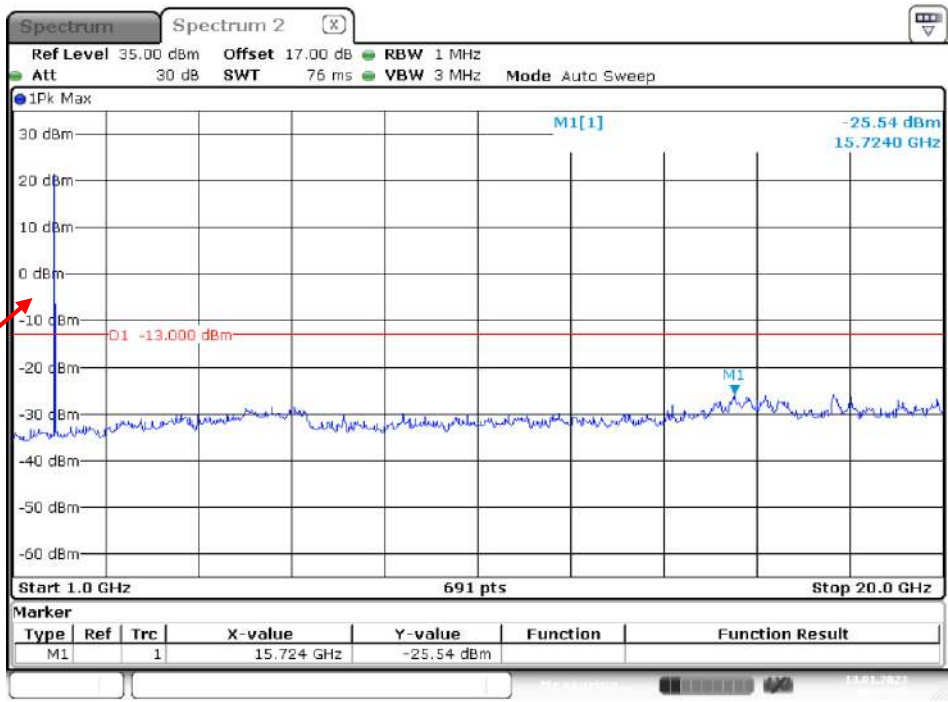
Fundamental

30 MHz – 1 GHz (10 MHz, QPSK, Middle Channel)



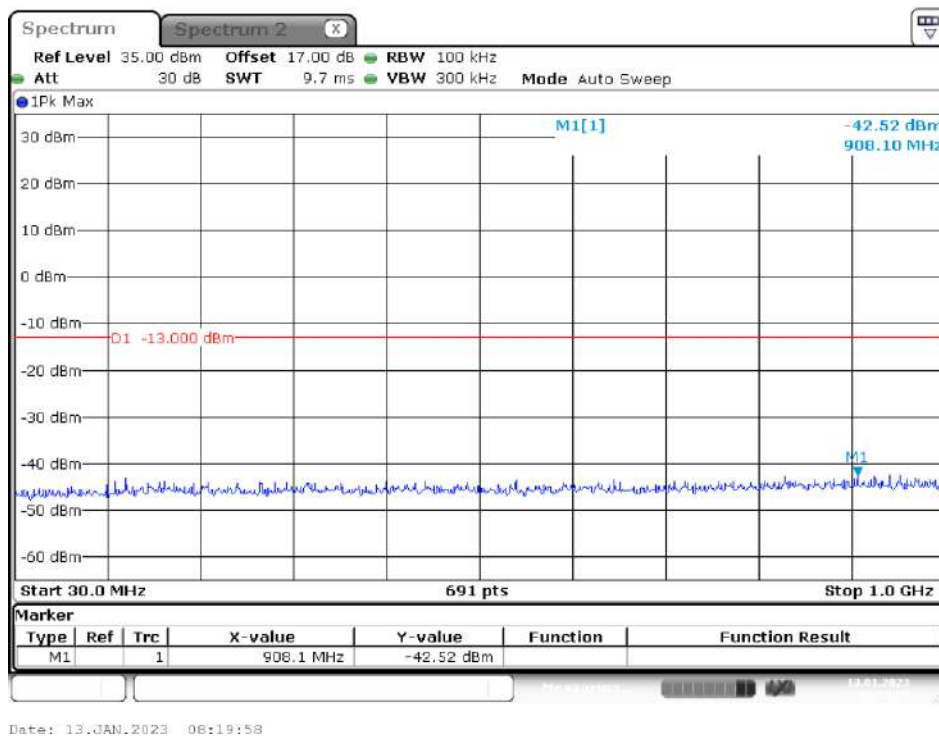
Date: 13.JAN.2023 08:59:04

1 GHz – 20 GHz (10 MHz, QPSK, Middle Channel)

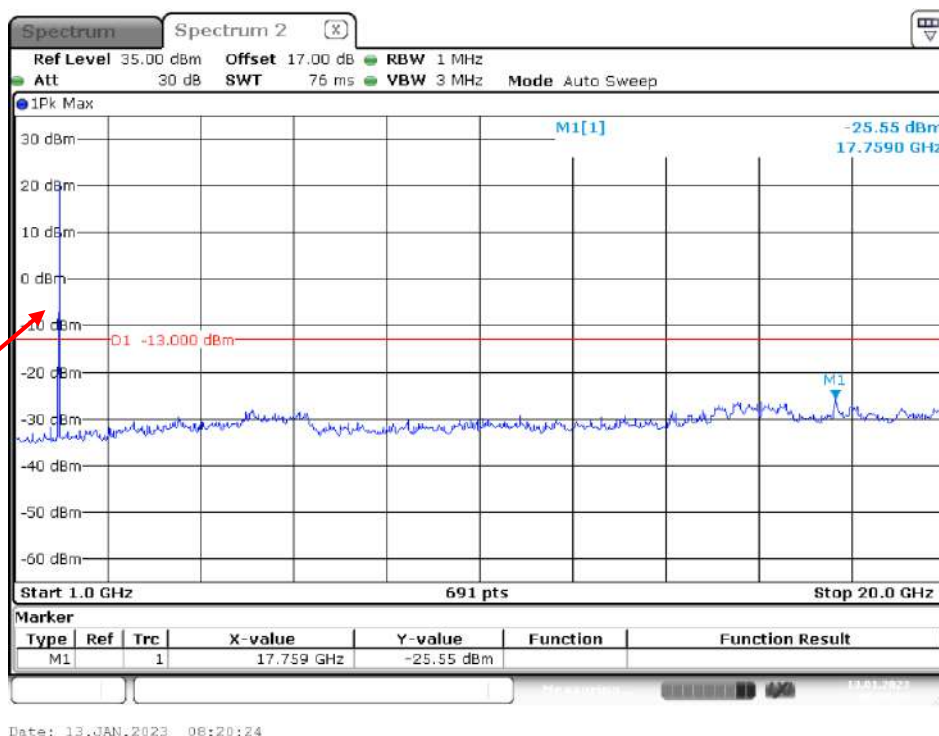


Date: 13.JAN.2023 08:58:39

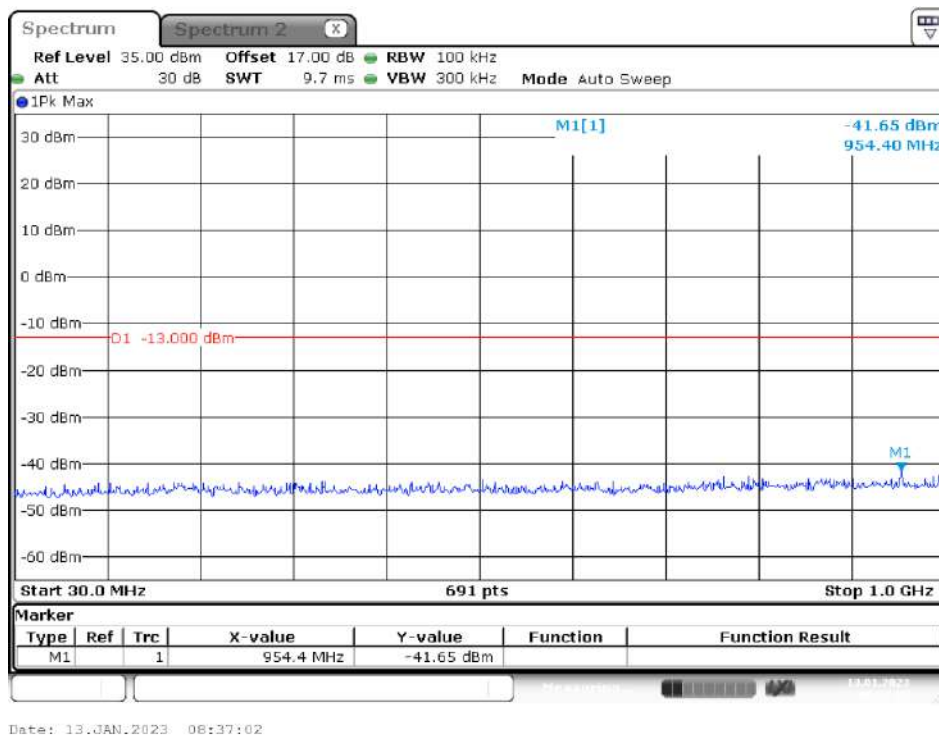
Fundamental

30 MHz – 1 GHz (1.4 MHz, QPSK, High Channel)**1 GHz – 20 GHz (1.4 MHz, QPSK, High Channel)**

Fundamental

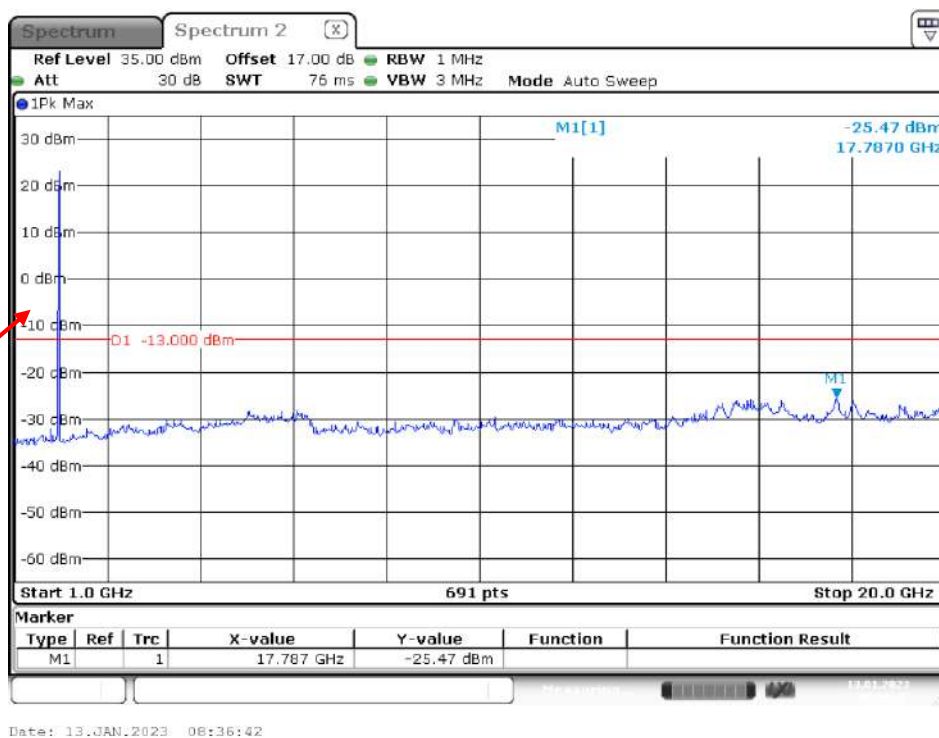


30 MHz – 1 GHz (3 MHz, QPSK, High Channel)

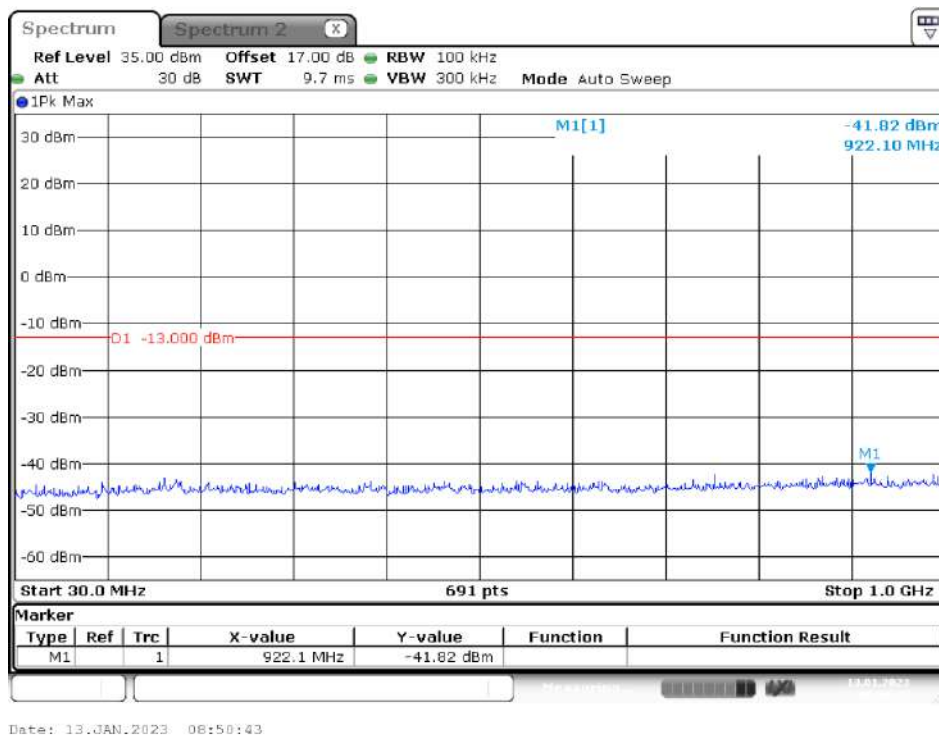


1 GHz – 20 GHz (3 MHz, QPSK, High Channel)

Fundamental

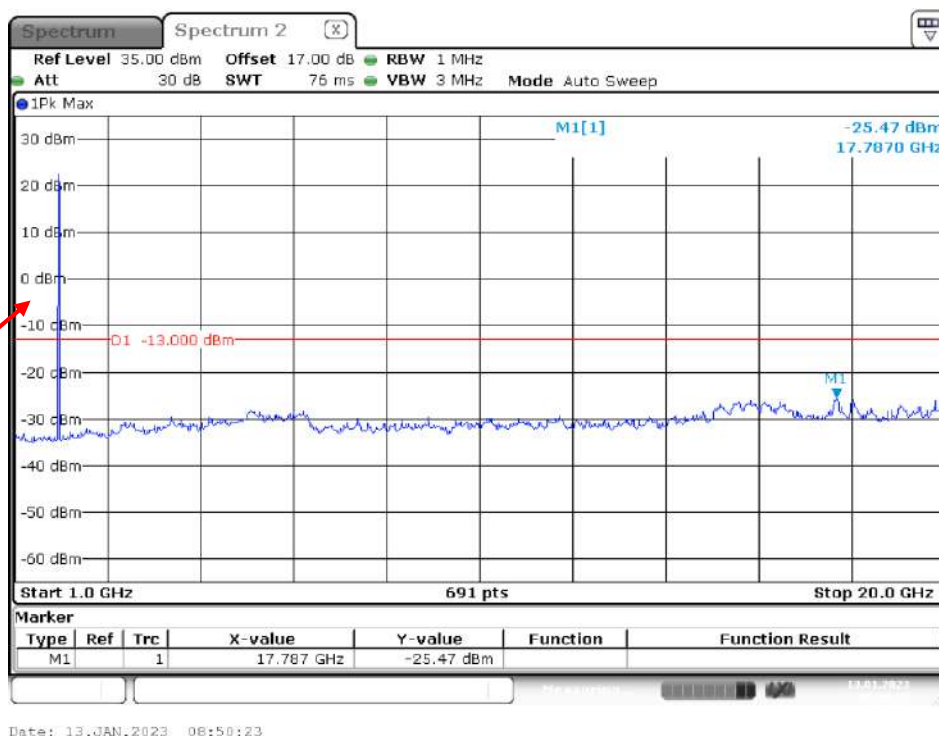


30 MHz – 1 GHz (5 MHz, QPSK, High Channel)

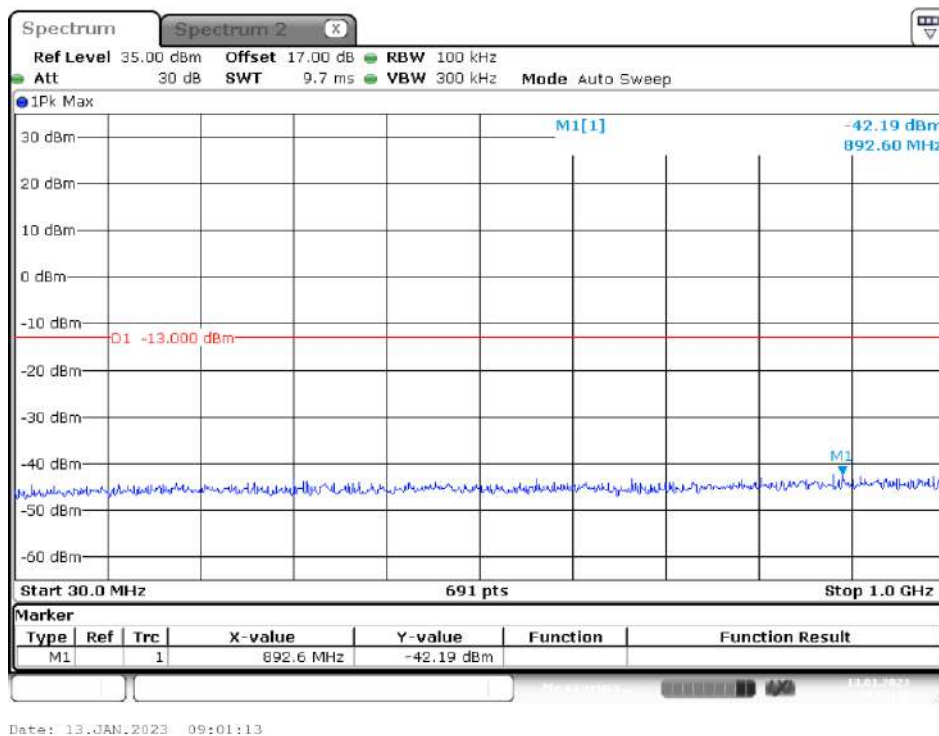


1 GHz – 20 GHz (5 MHz, QPSK, High Channel)

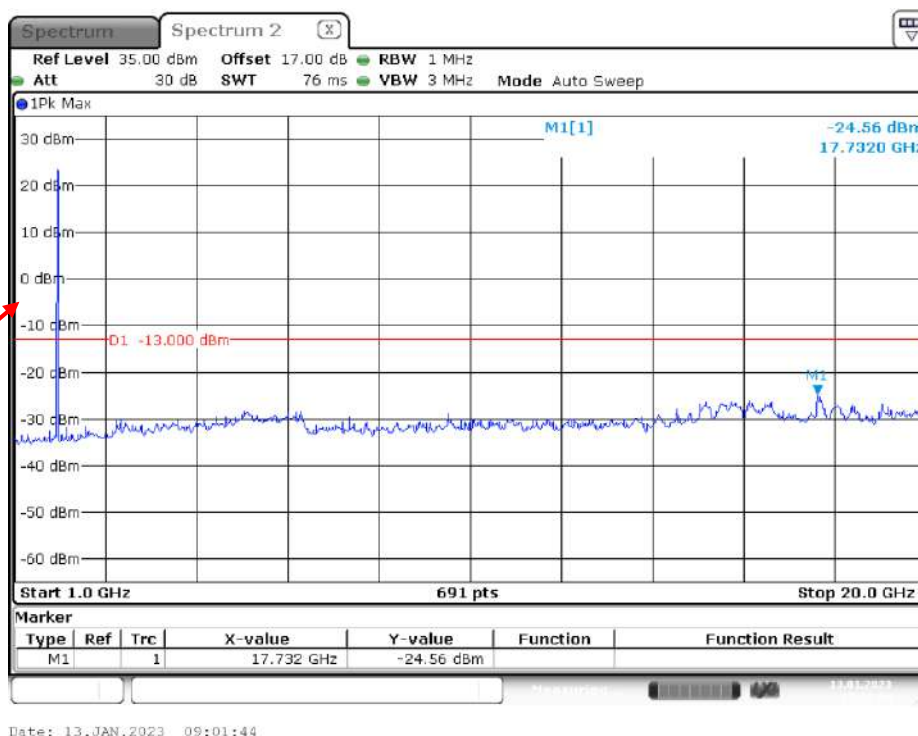
Fundamental



30 MHz – 1 GHz (10 MHz, QPSK, High Channel)

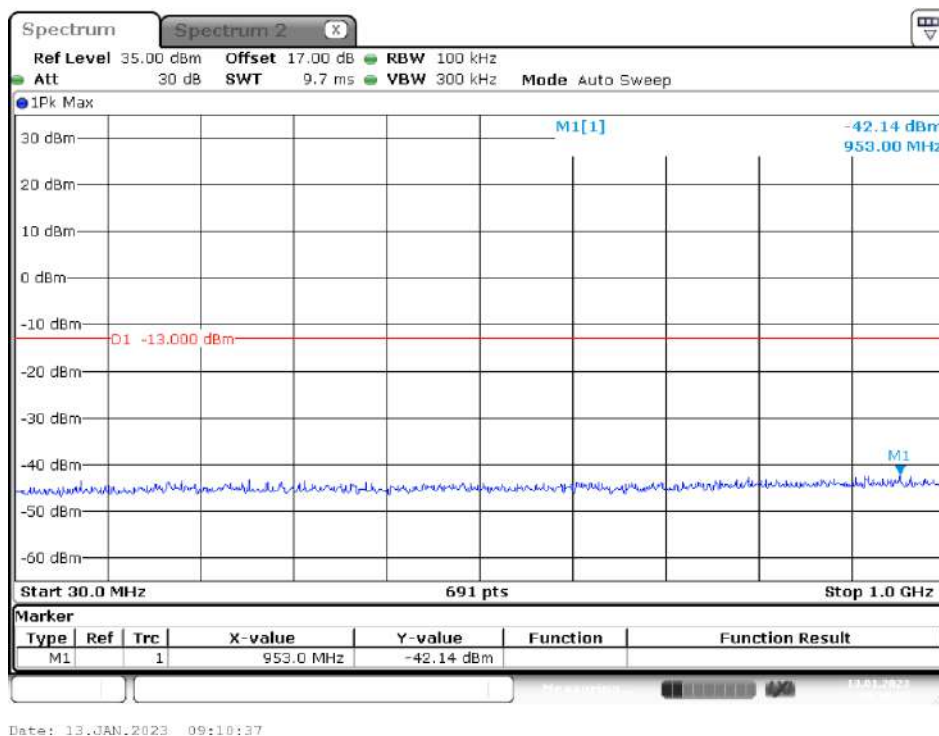


1 GHz – 20 GHz (10 MHz, QPSK, High Channel)



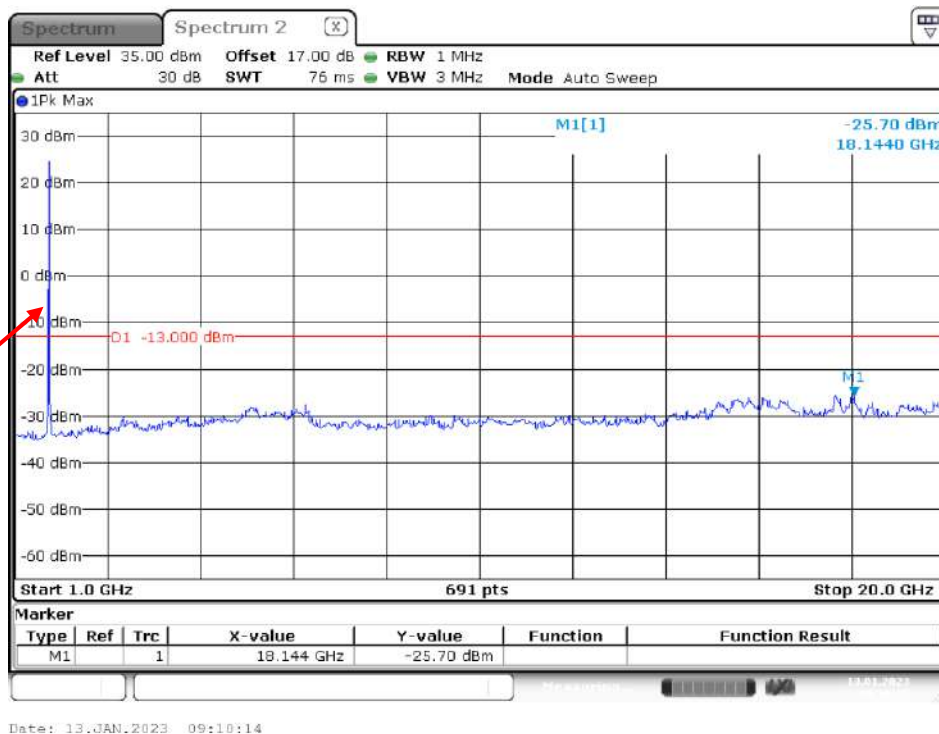
Fundamental

LTE Band 4 30 MHz – 1 GHz (1.4 MHz, QPSK, Low Channel)

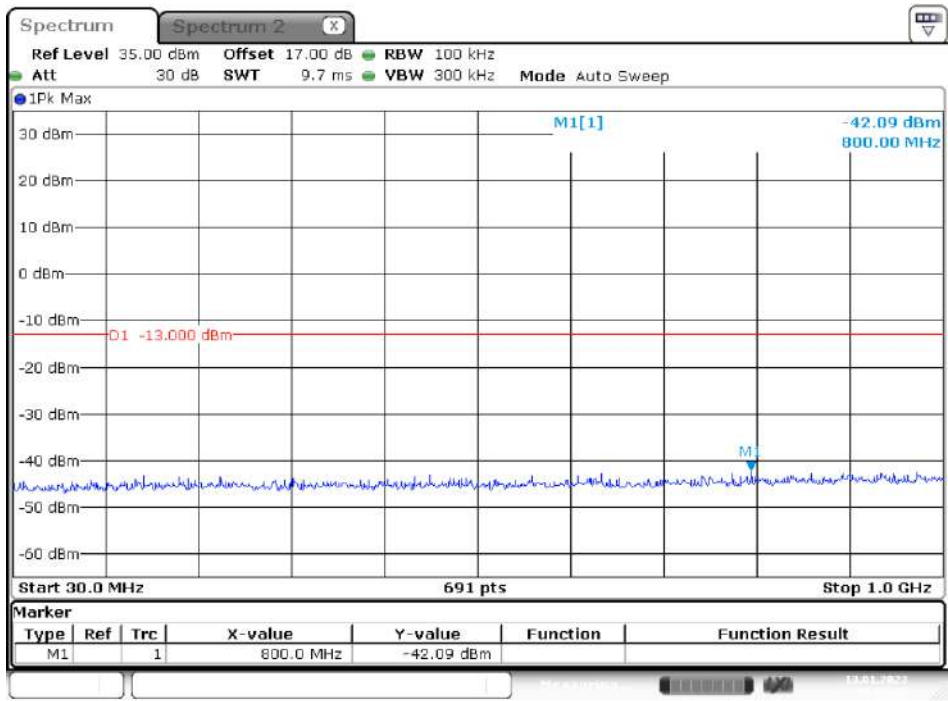


1 GHz – 20 GHz (1.4 MHz, QPSK, Low Channel)

Fundamental



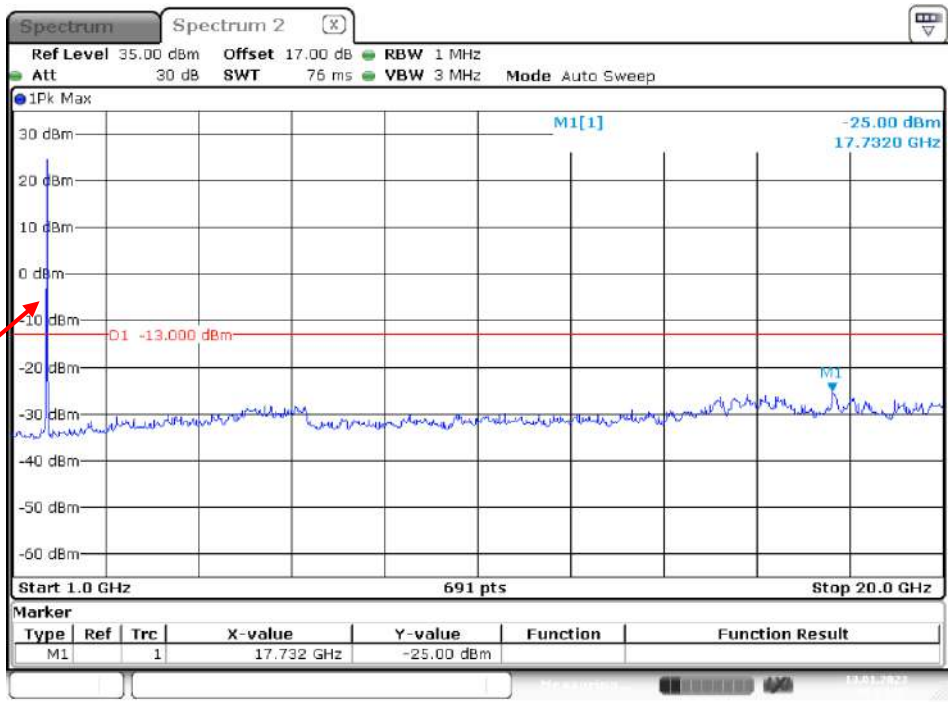
30 MHz – 1 GHz (3 MHz, QPSK, Low Channel)



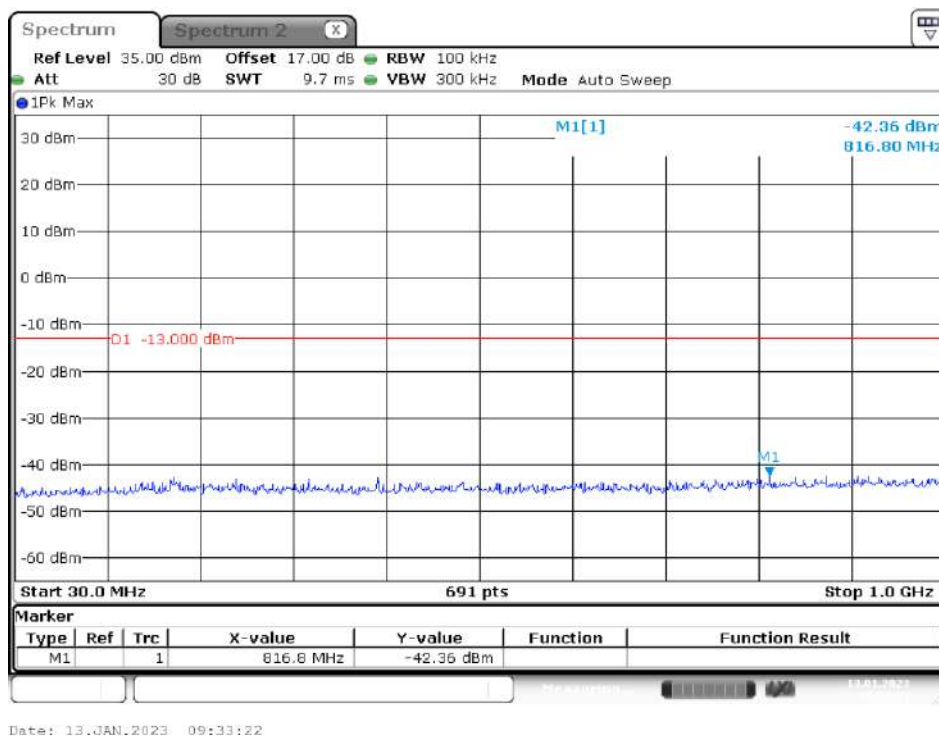
Date: 13.JAN.2023 09:22:46

1 GHz – 20 GHz (3 MHz, QPSK, Low Channel)

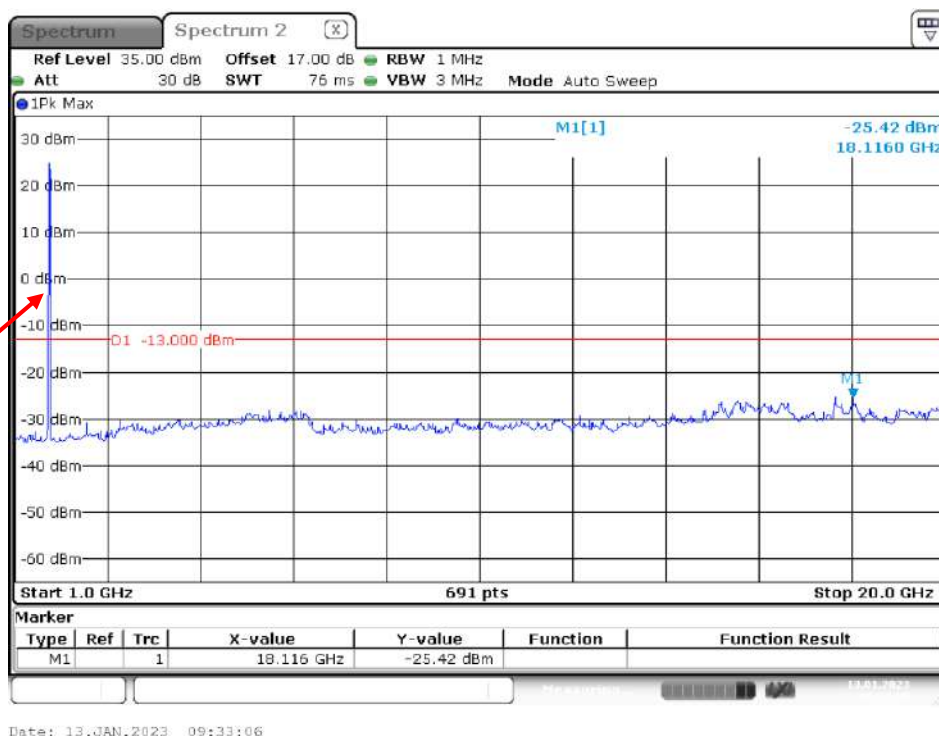
Fundamental

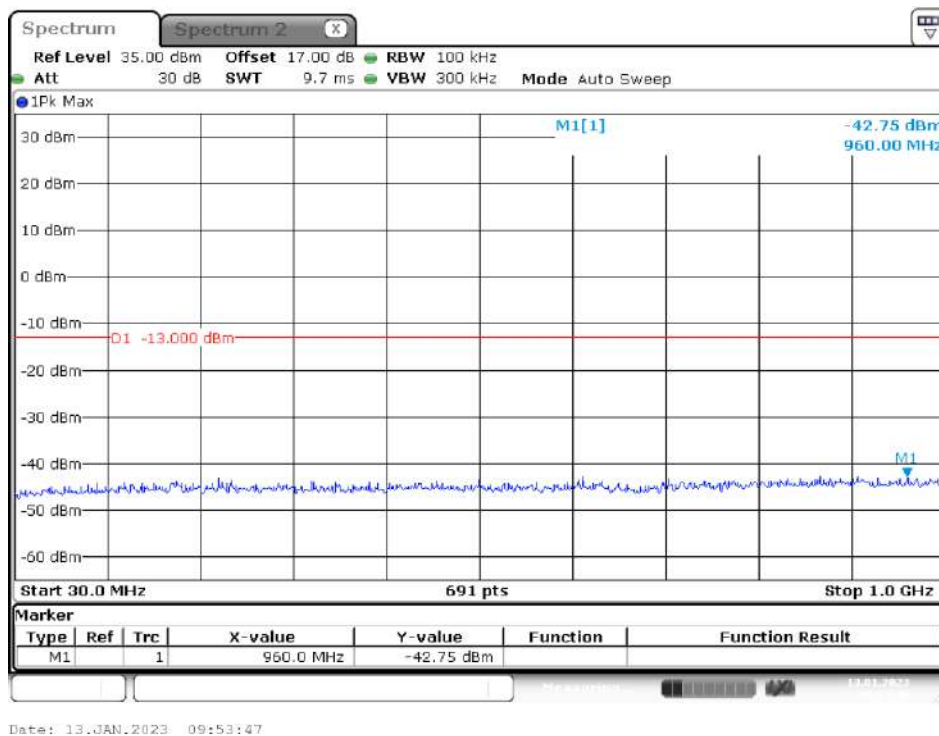
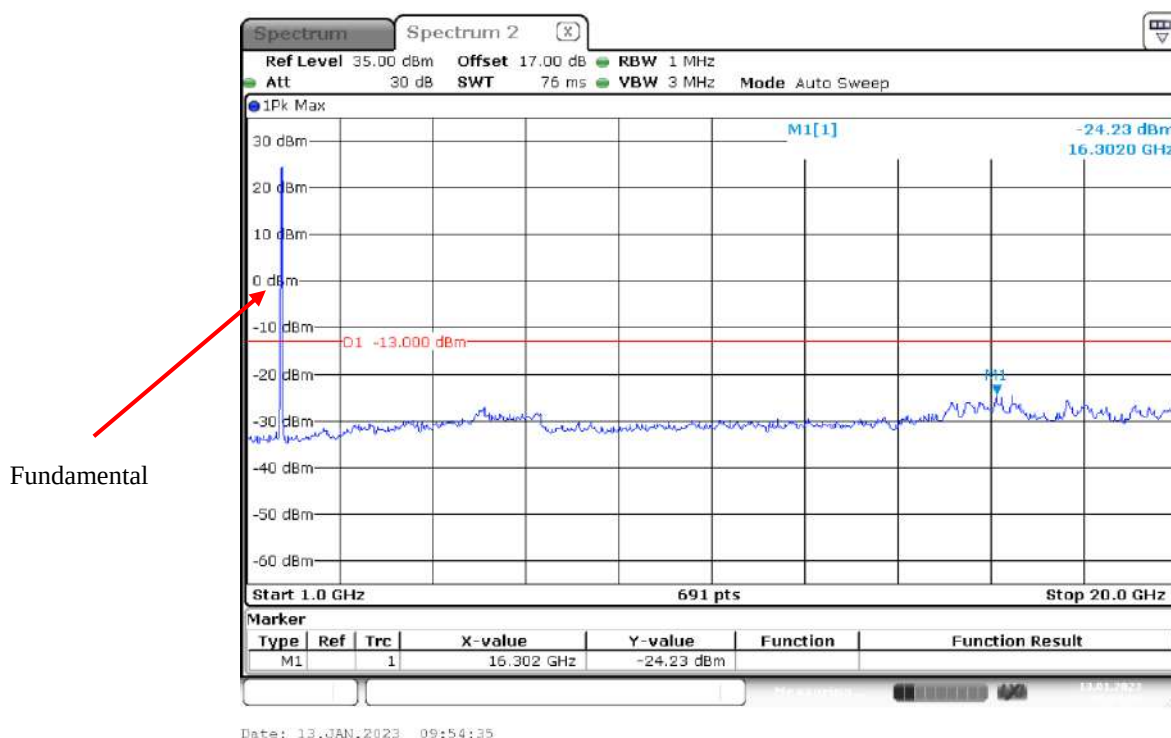


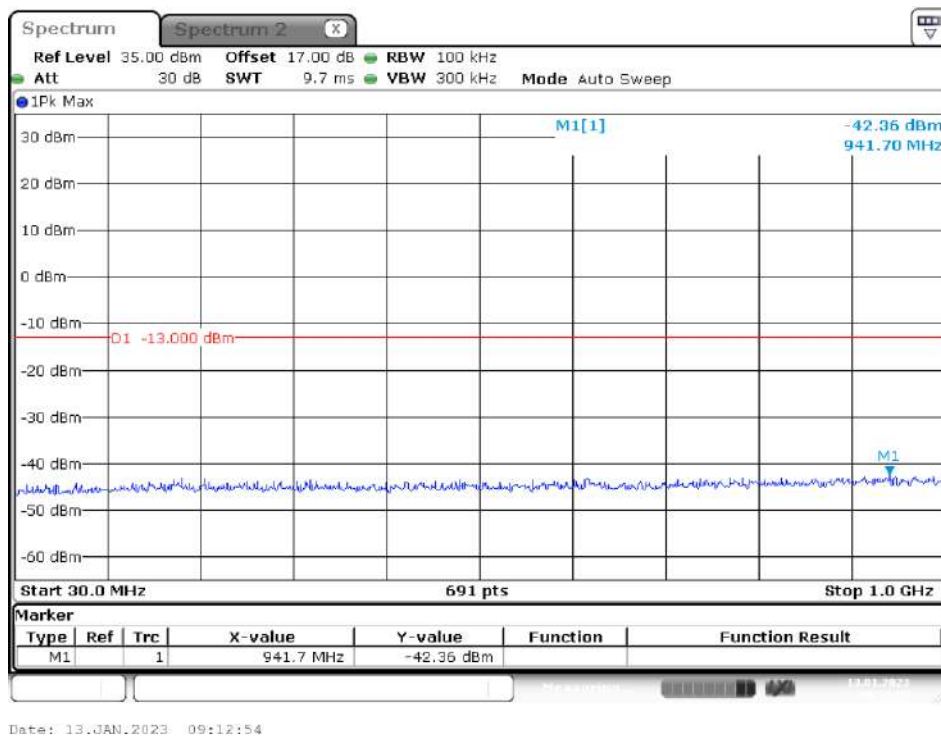
Date: 13.JAN.2023 09:23:08

30 MHz – 1 GHz (5 MHz, QPSK, Low Channel)**1 GHz – 20 GHz (5 MHz, QPSK, Low Channel)**

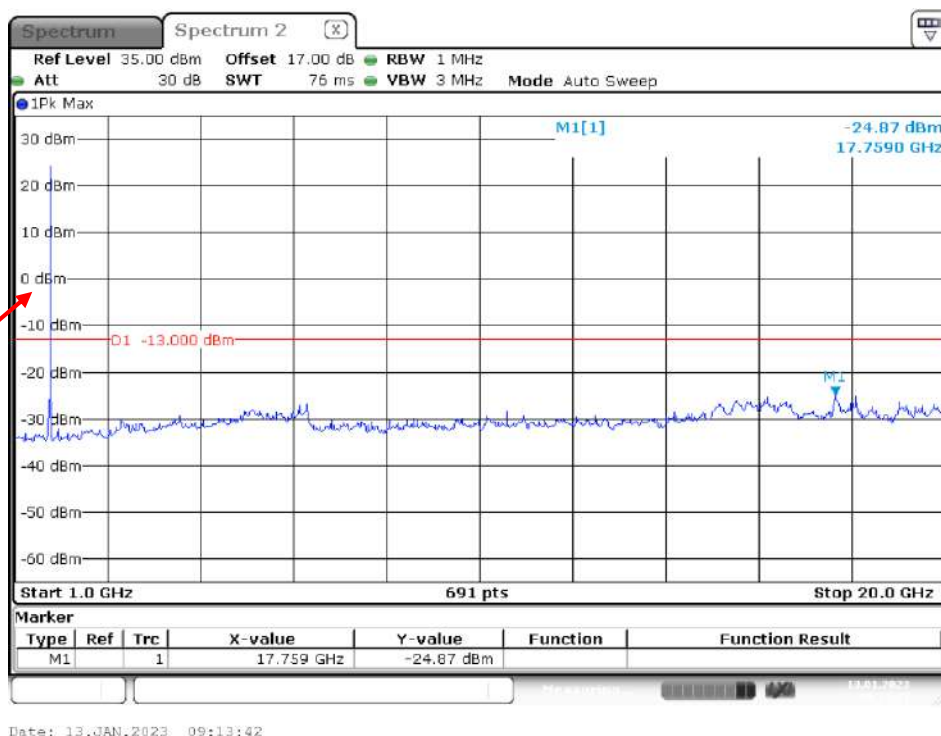
Fundamental



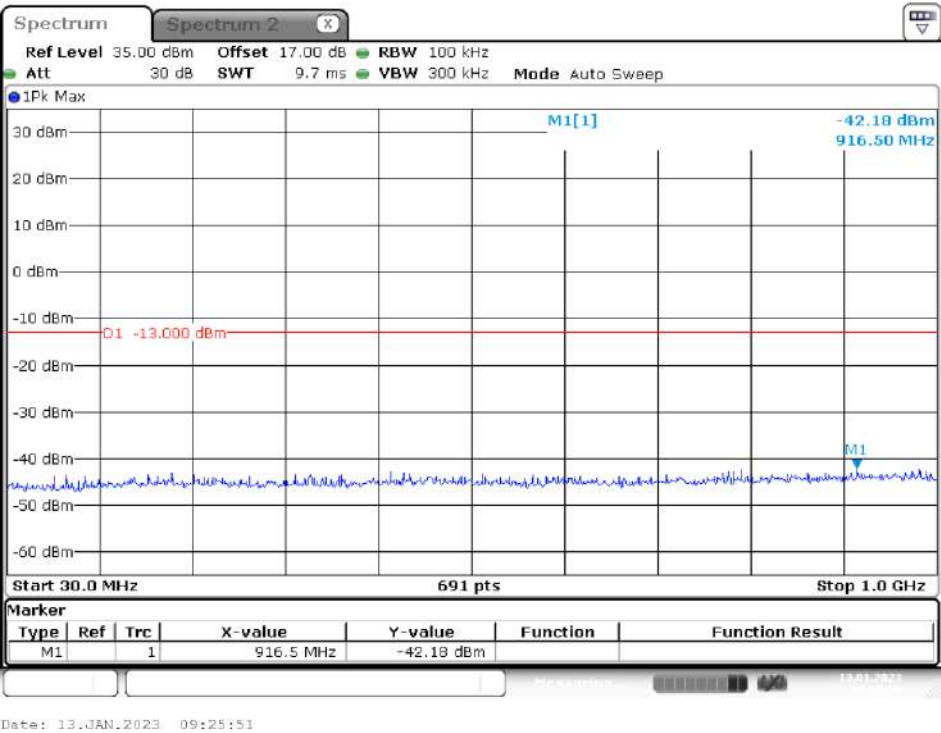
30 MHz – 1 GHz (10 MHz, QPSK, Low Channel)**1 GHz – 20 GHz (10 MHz, QPSK, Low Channel)**

30 MHz – 1 GHz (1.4 MHz, QPSK, Middle Channel)**1 GHz – 20 GHz (1.4 MHz, QPSK, Middle Channel)**

Fundamental

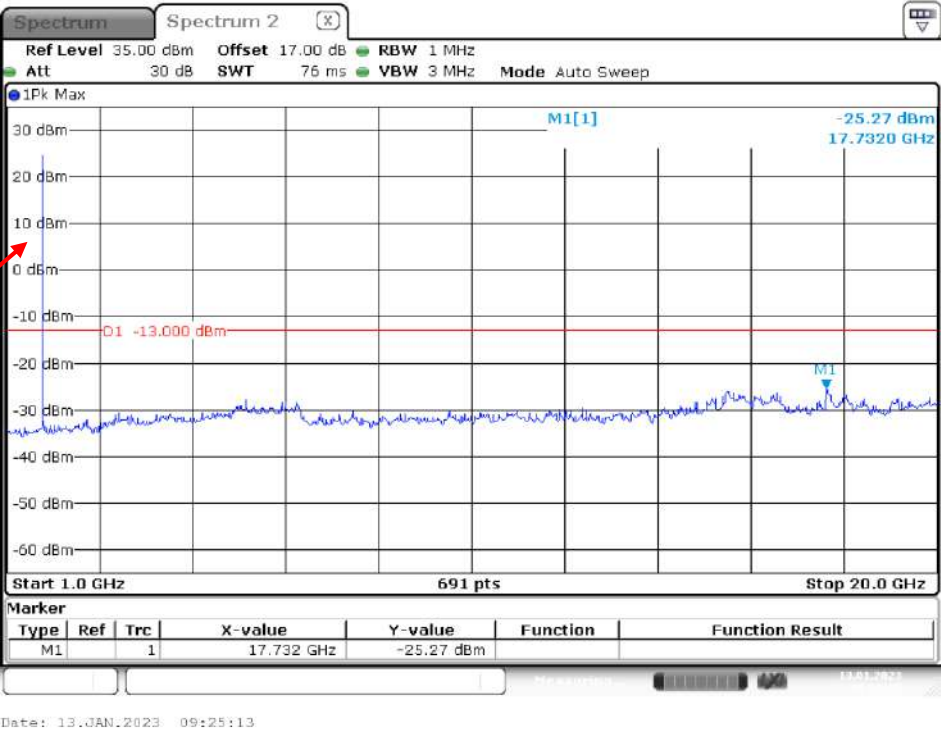


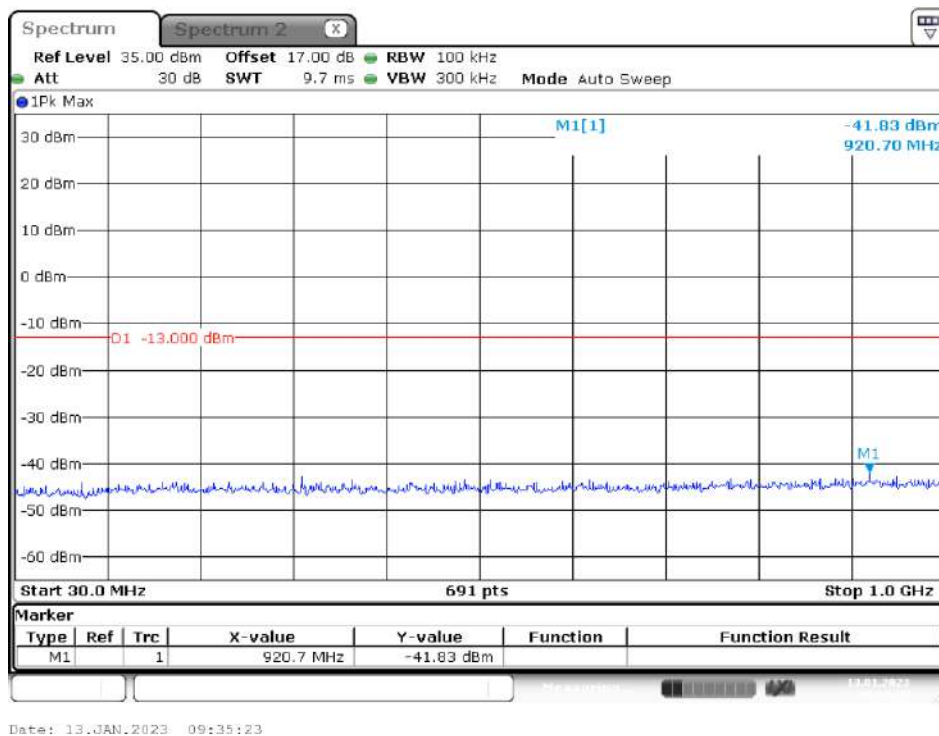
30 MHz – 1 GHz (3 MHz, QPSK, Middle Channel)



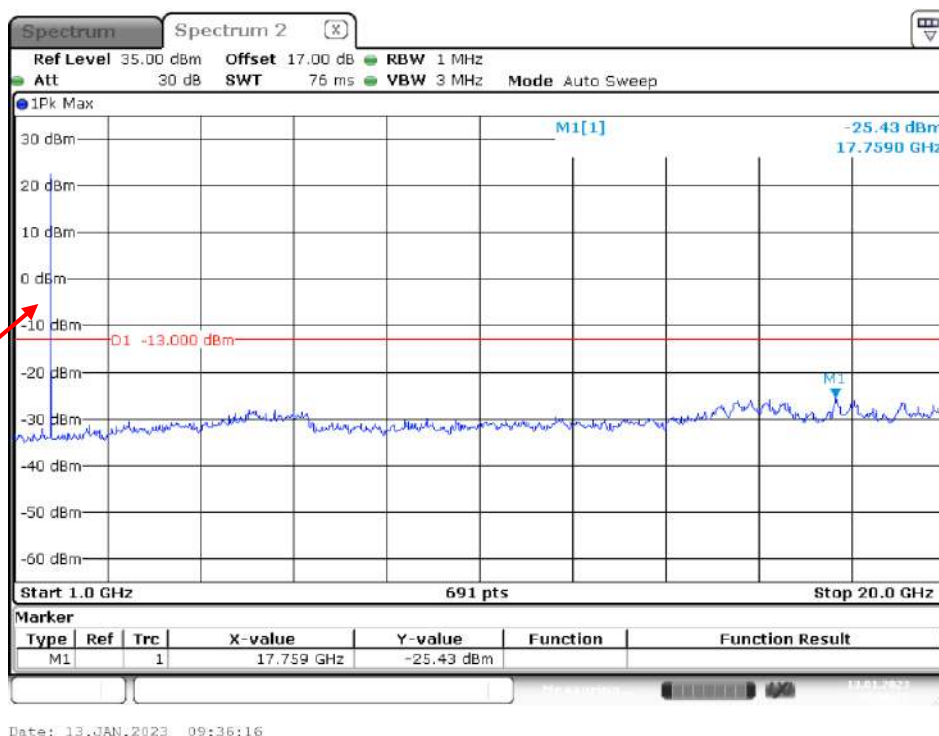
1 GHz – 20 GHz (3 MHz, QPSK, Middle Channel)

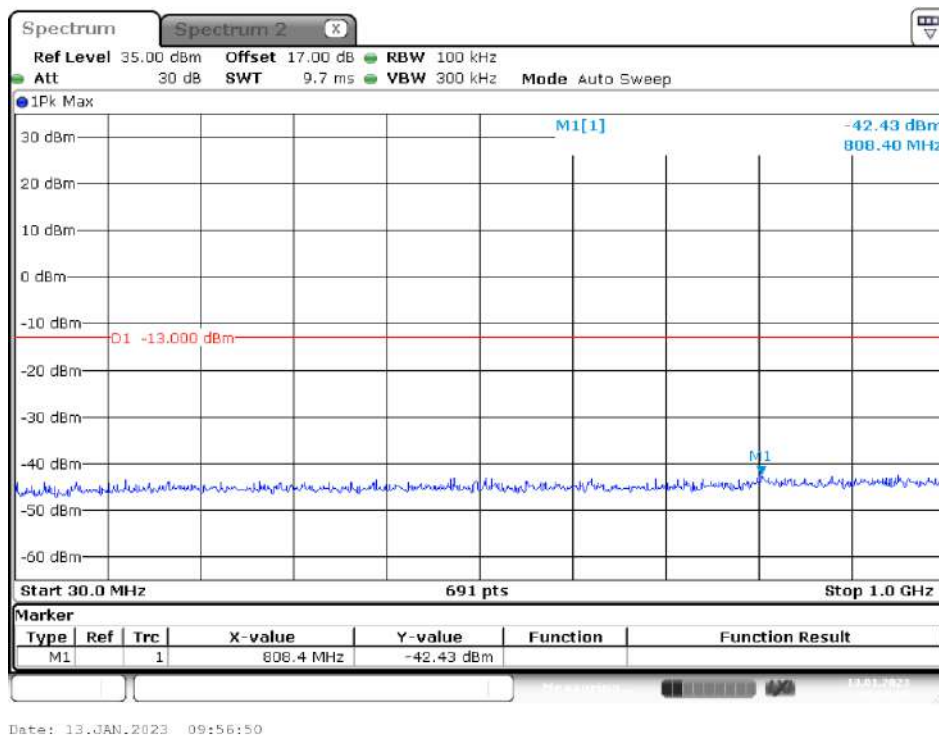
Fundamental



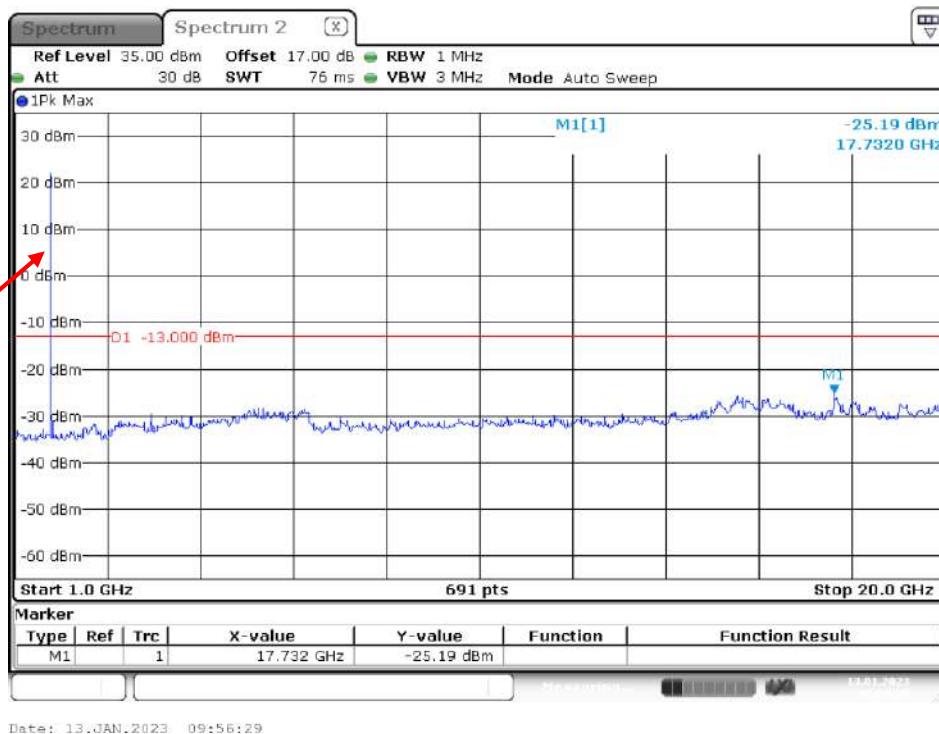
30 MHz – 1 GHz (5 MHz, QPSK, Middle Channel)**1 GHz – 20 GHz (5 MHz, QPSK, Middle Channel)**

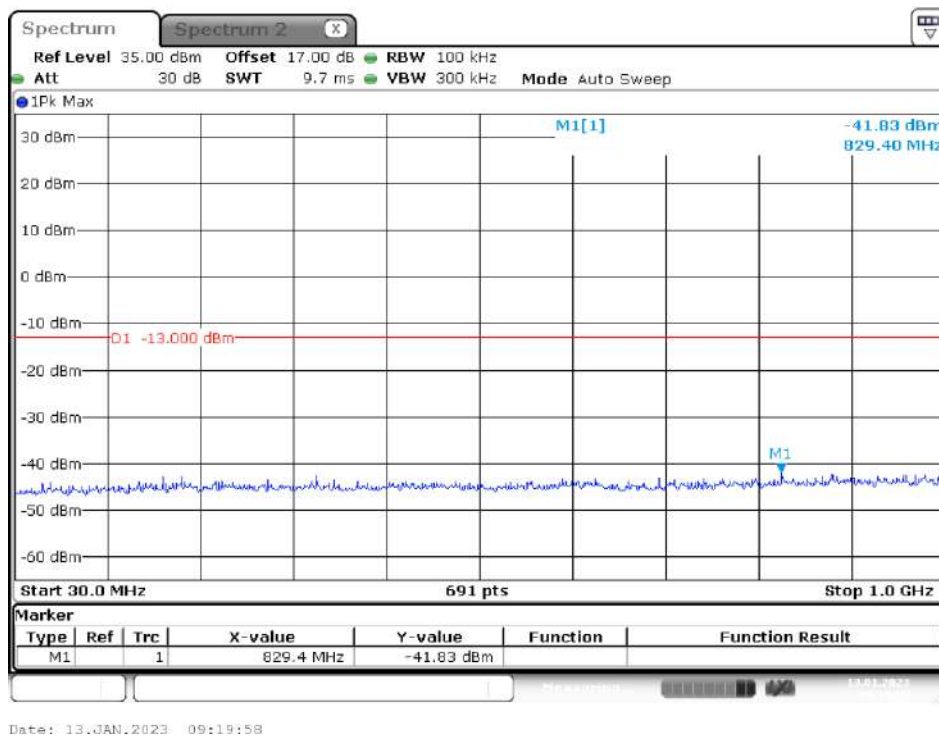
Fundamental



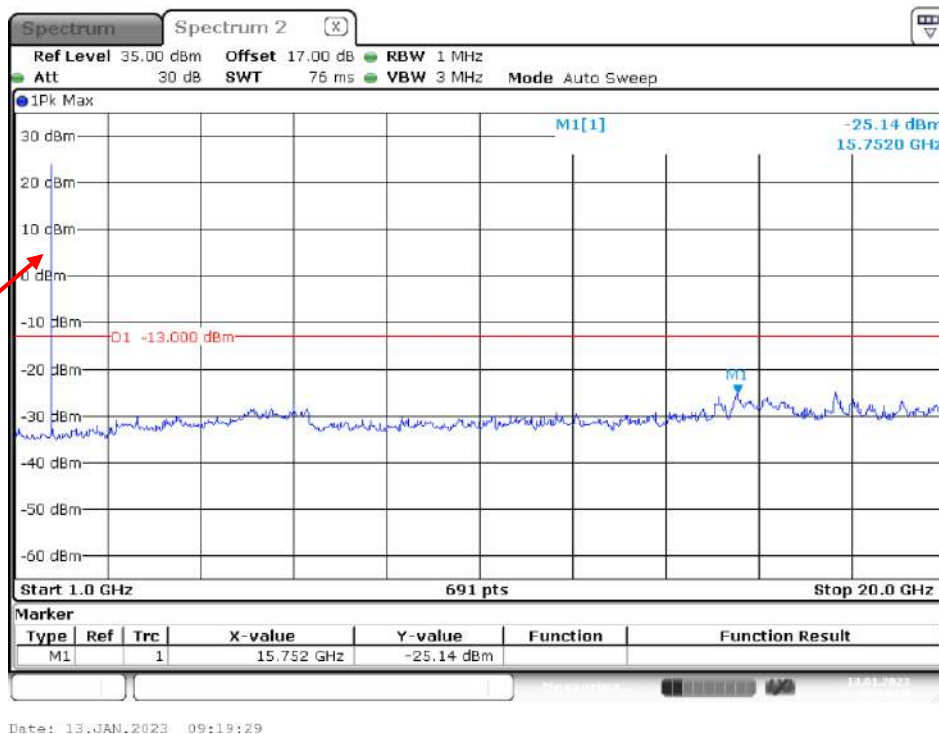
30 MHz – 1 GHz (10 MHz, QPSK, Middle Channel)**1 GHz – 20 GHz (10 MHz, QPSK, Middle Channel)**

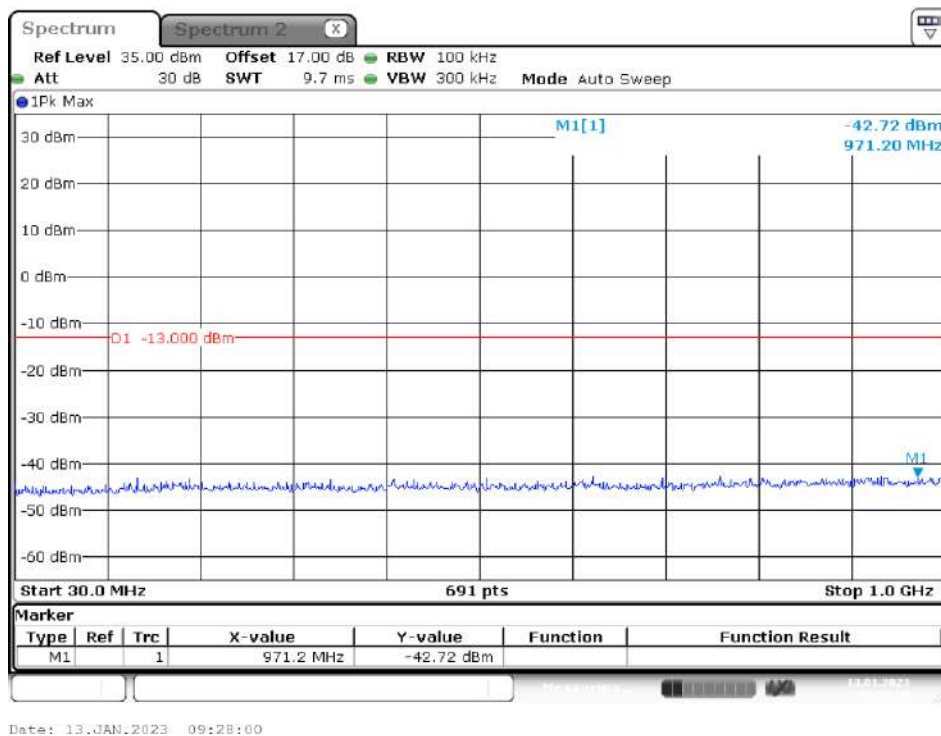
Fundamental



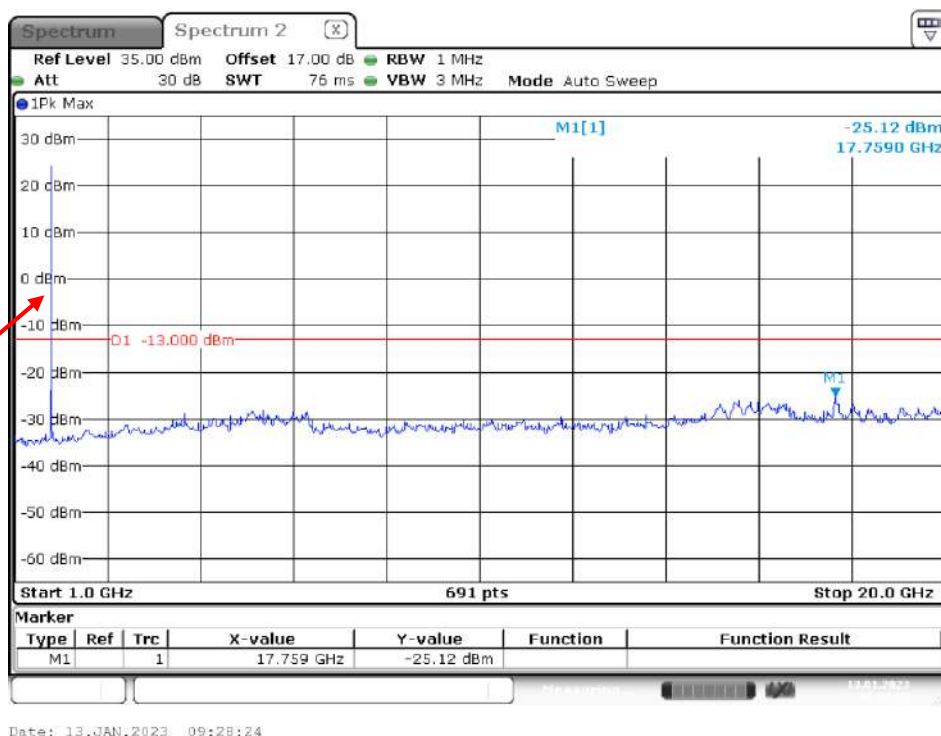
30 MHz – 1 GHz (1.4 MHz, QPSK, High Channel)**1 GHz – 20 GHz (1.4 MHz, QPSK, High Channel)**

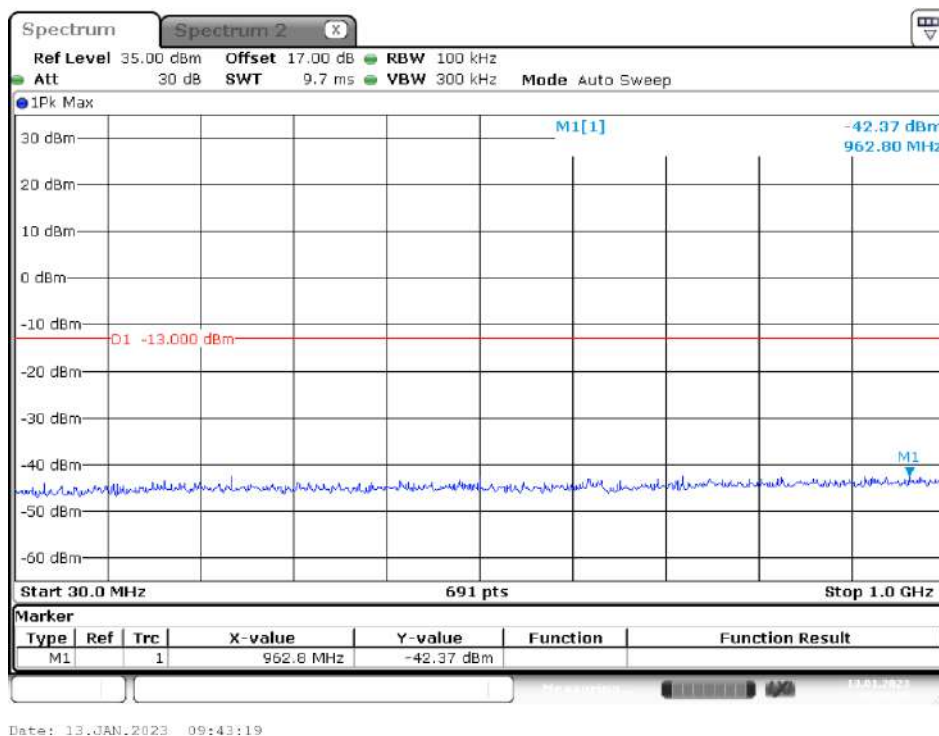
Fundamental



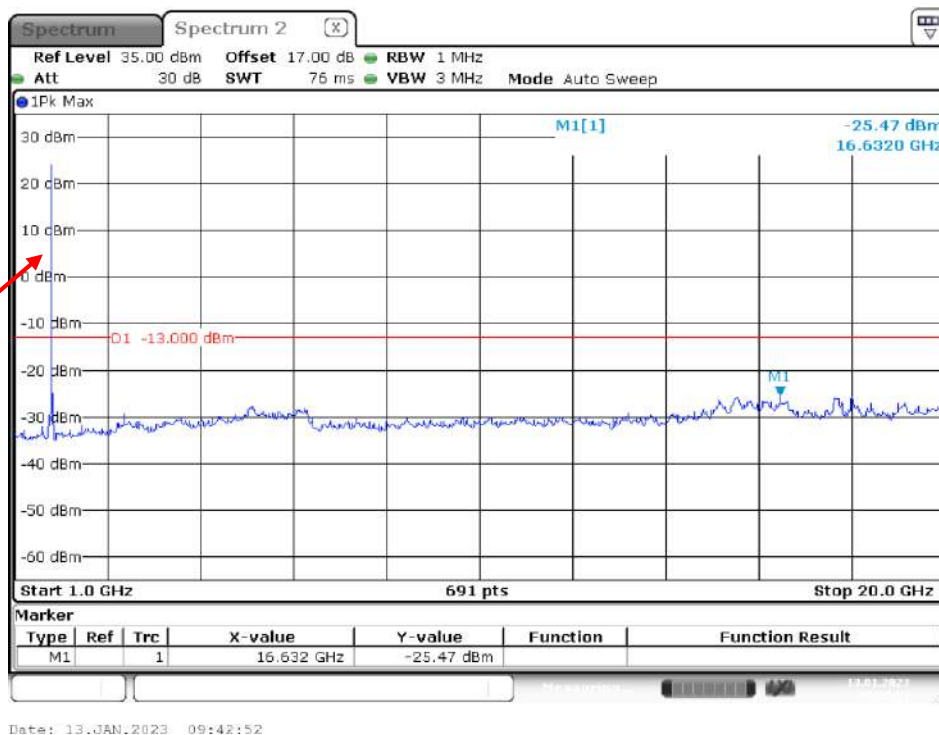
30 MHz – 1 GHz (3 MHz, QPSK, High Channel)**1 GHz – 20 GHz (3 MHz, QPSK, High Channel)**

Fundamental

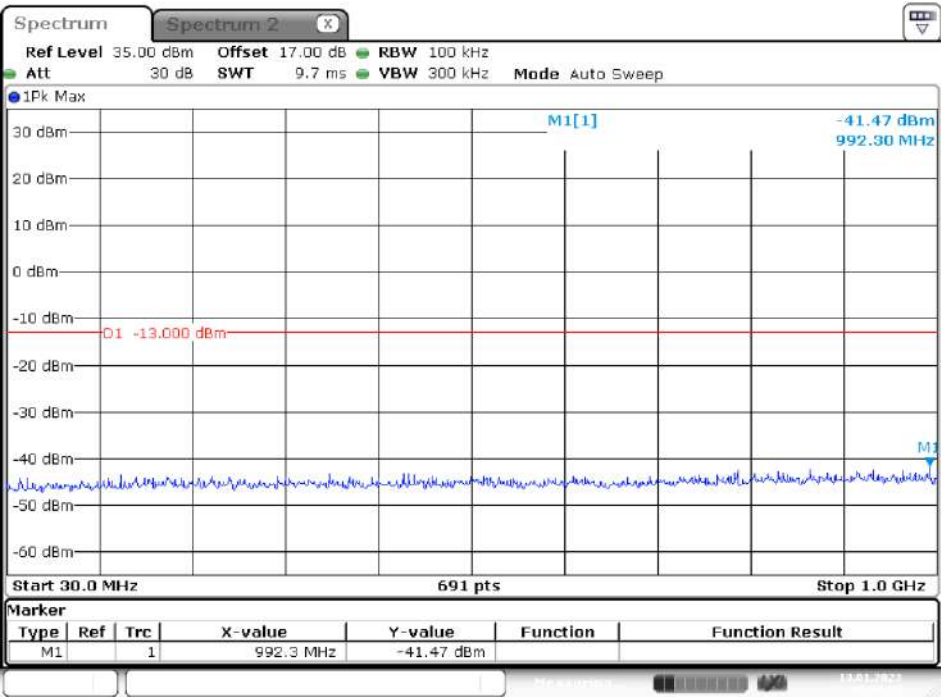


30 MHz – 1 GHz (5 MHz, QPSK, High Channel)**1 GHz – 20 GHz (5 MHz, QPSK, High Channel)**

Fundamental



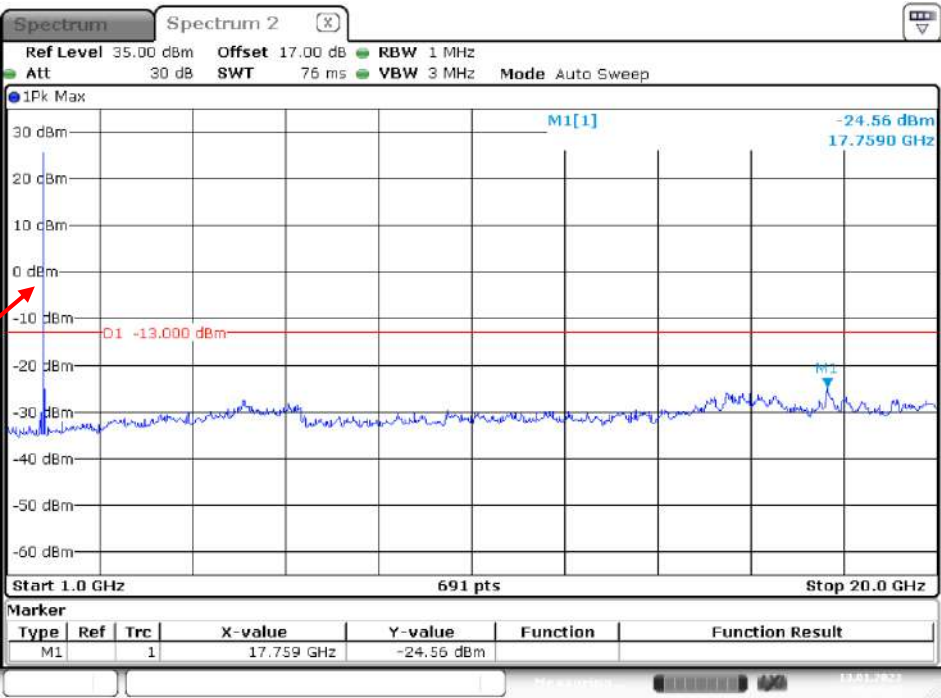
30 MHz – 1 GHz (10 MHz, QPSK, High Channel)



Date: 13.JAN.2023 09:58:22

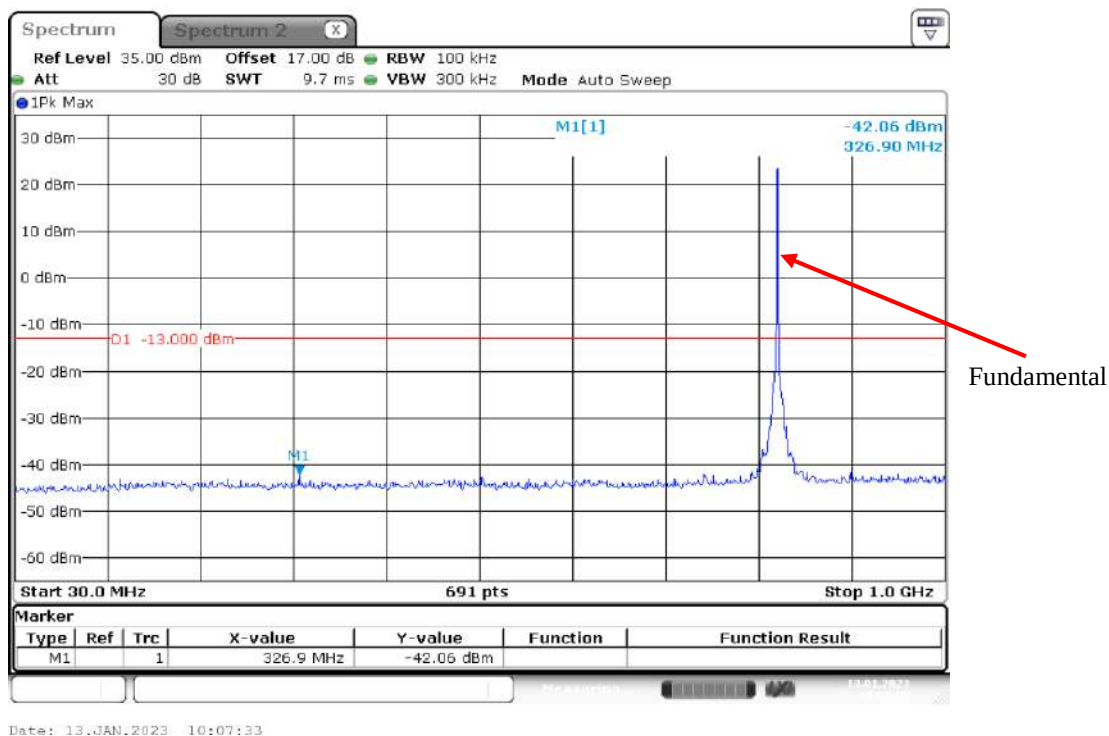
1 GHz – 20 GHz (10 MHz, QPSK, High Channel)

Fundamental

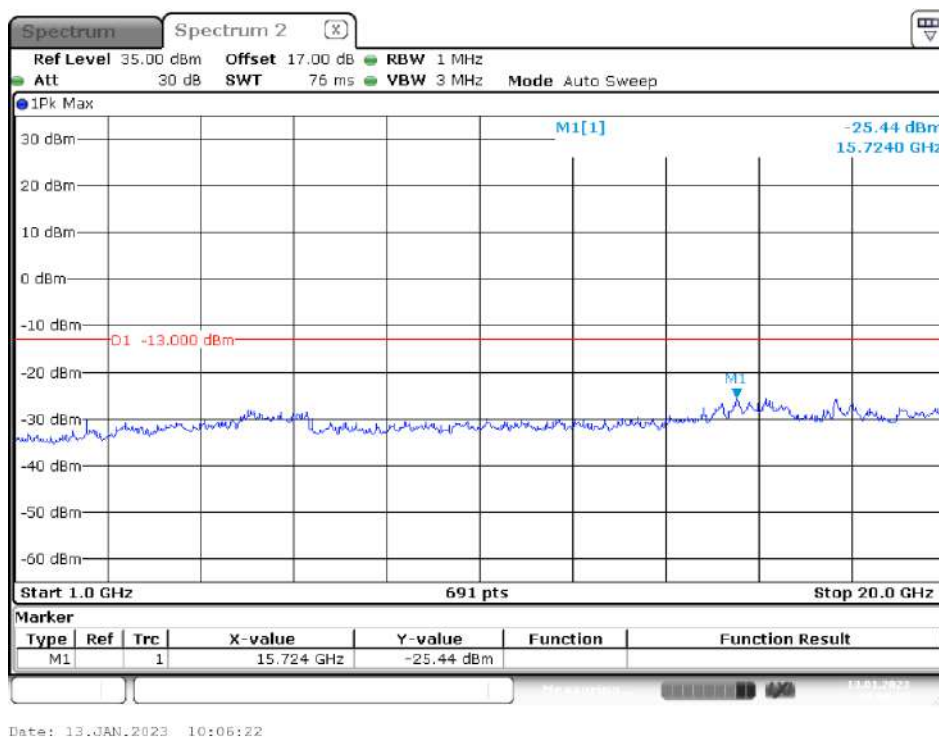


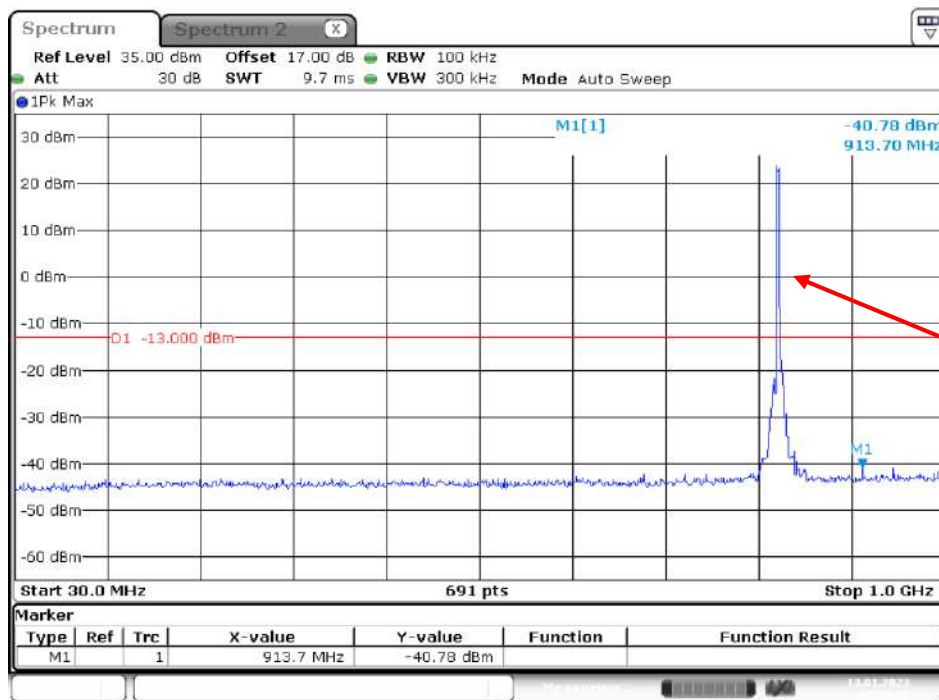
Date: 13.JAN.2023 09:58:44

LTE Band 5 30 MHz – 1 GHz (QPSK, 1.4 MHz, Low Channel)



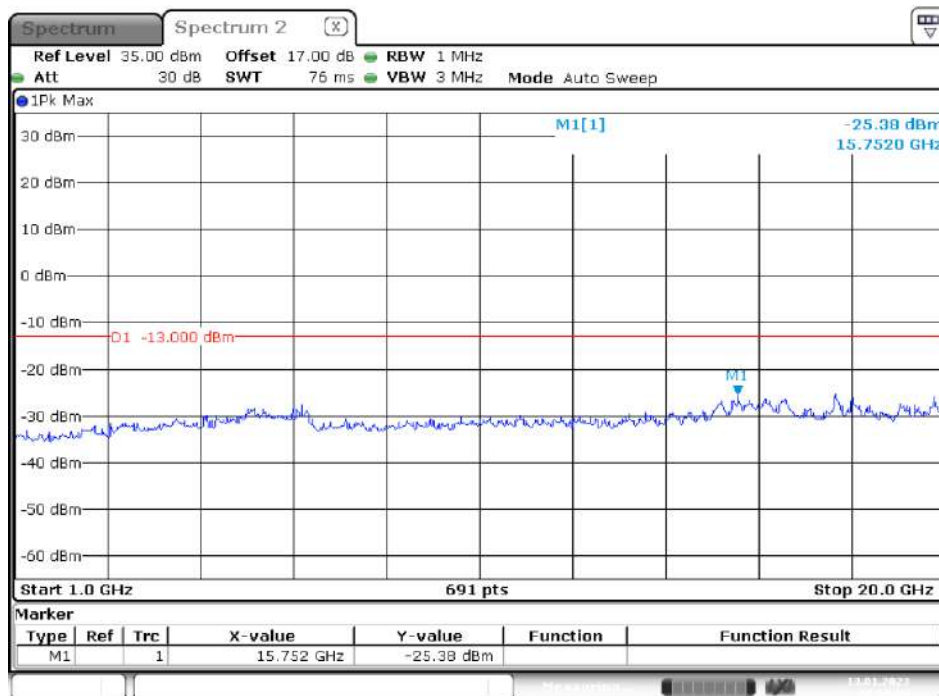
1 GHz – 20 GHz (QPSK, 1.4 MHz, Low Channel)



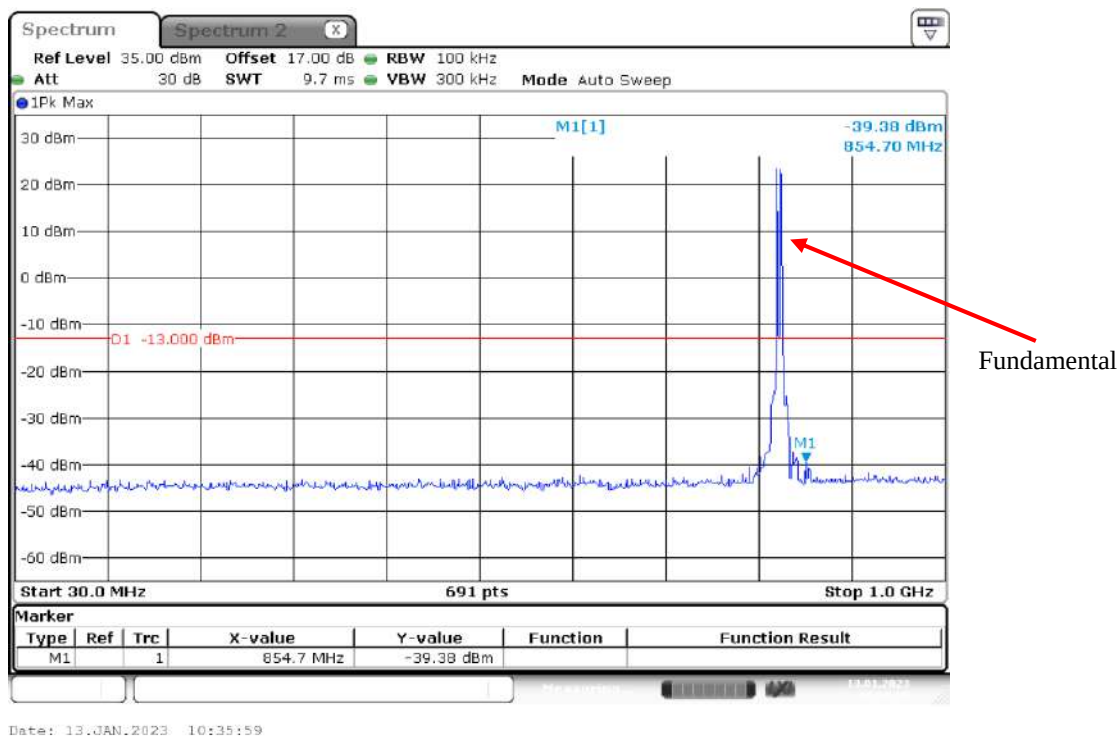
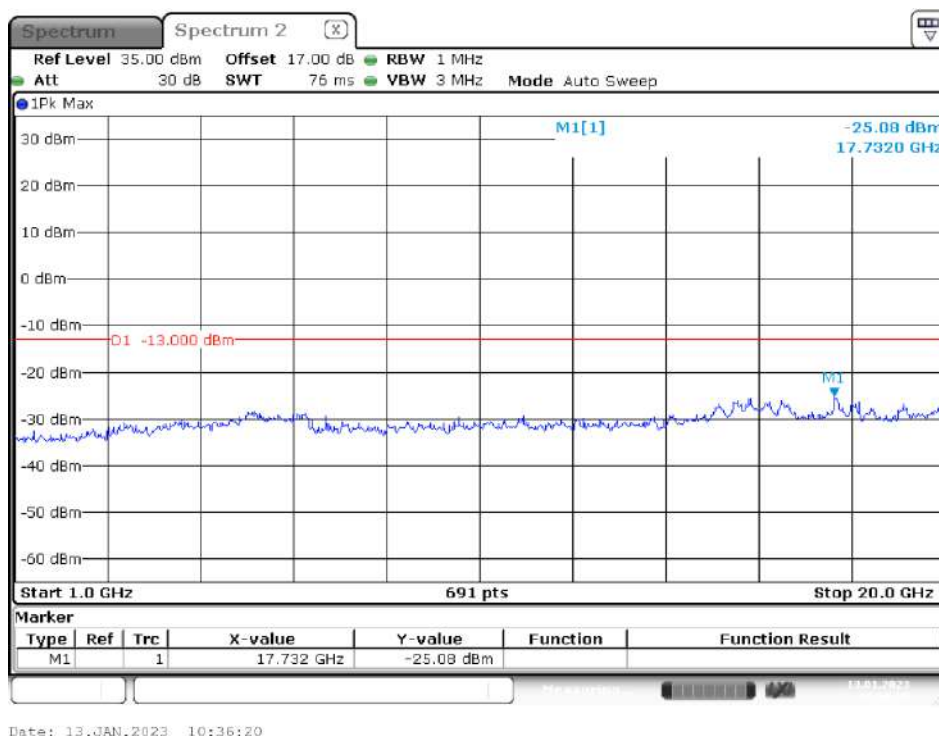
30 MHz – 1 GHz (QPSK, 3.0 MHz, Low Channel)

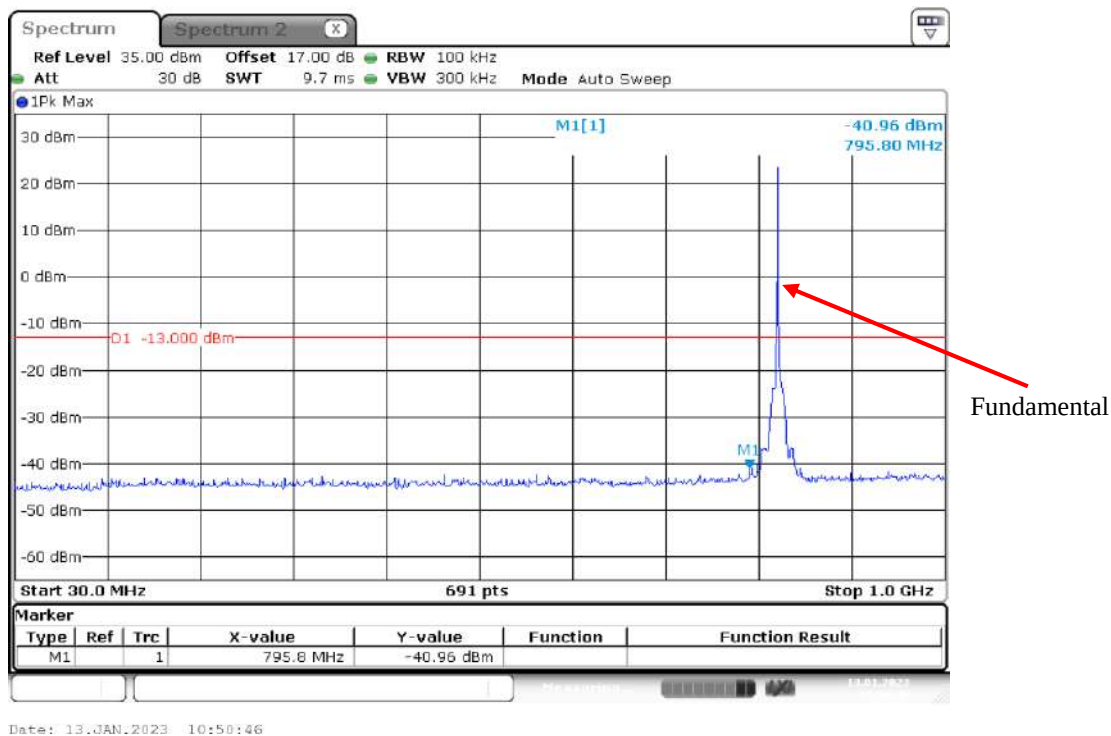
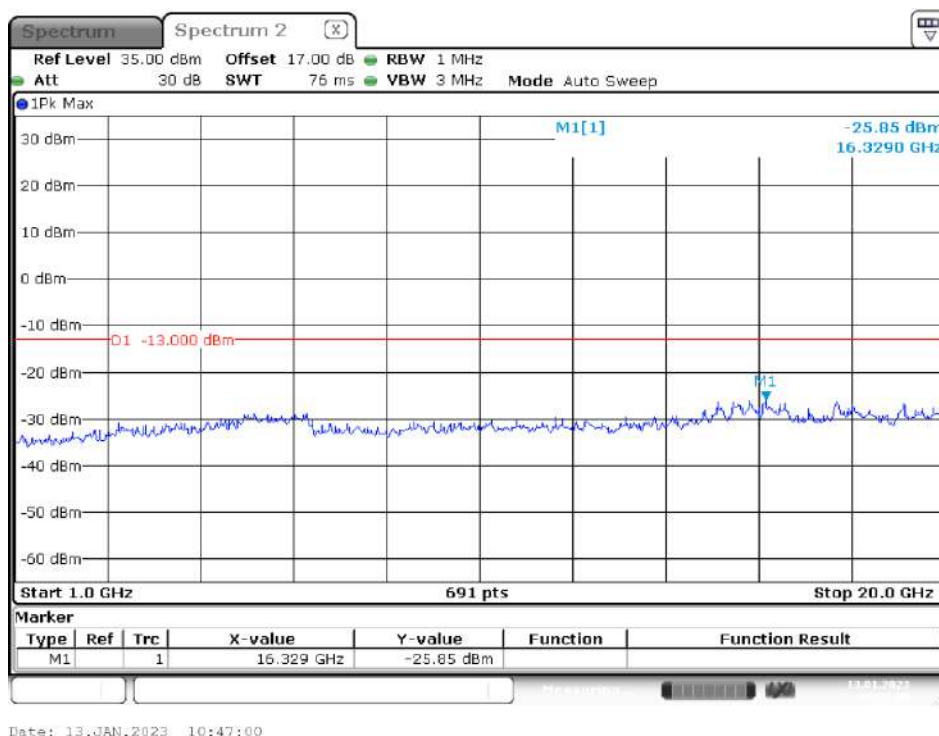
Date: 13.JAN.2023 10:26:05

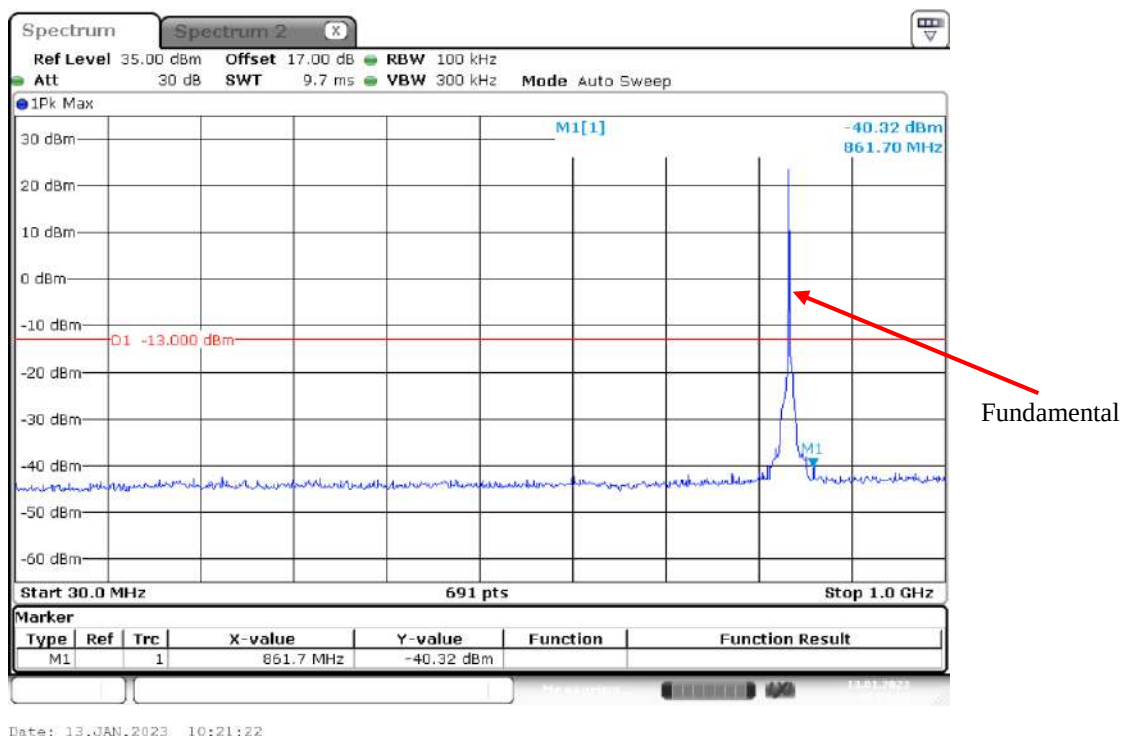
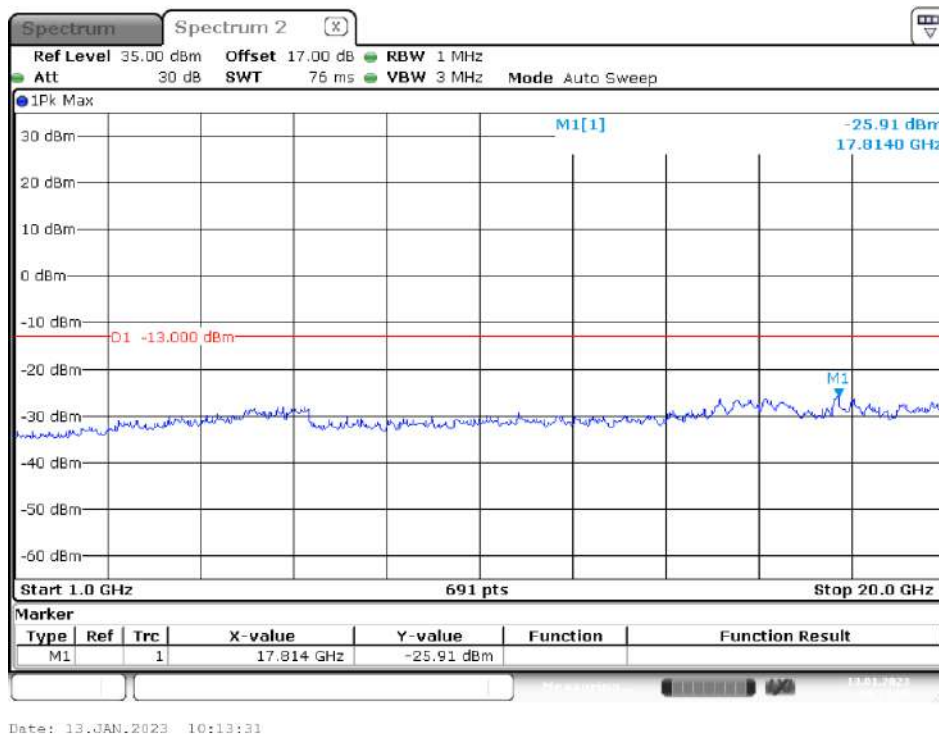
Fundamental

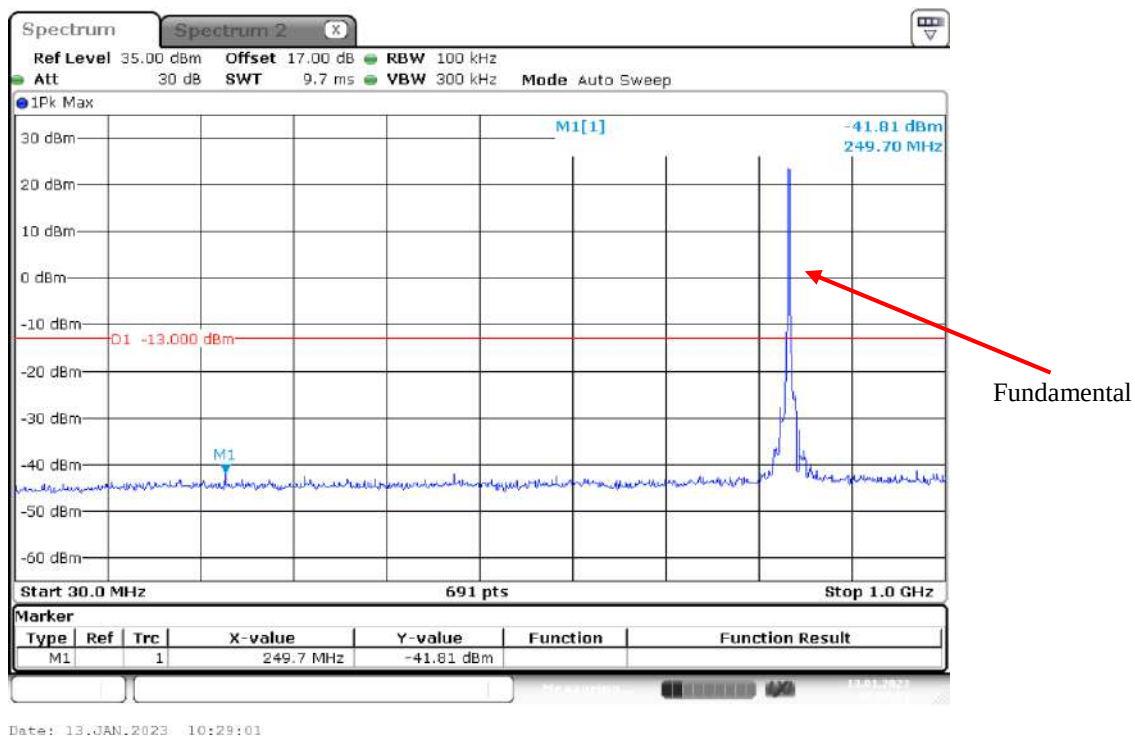
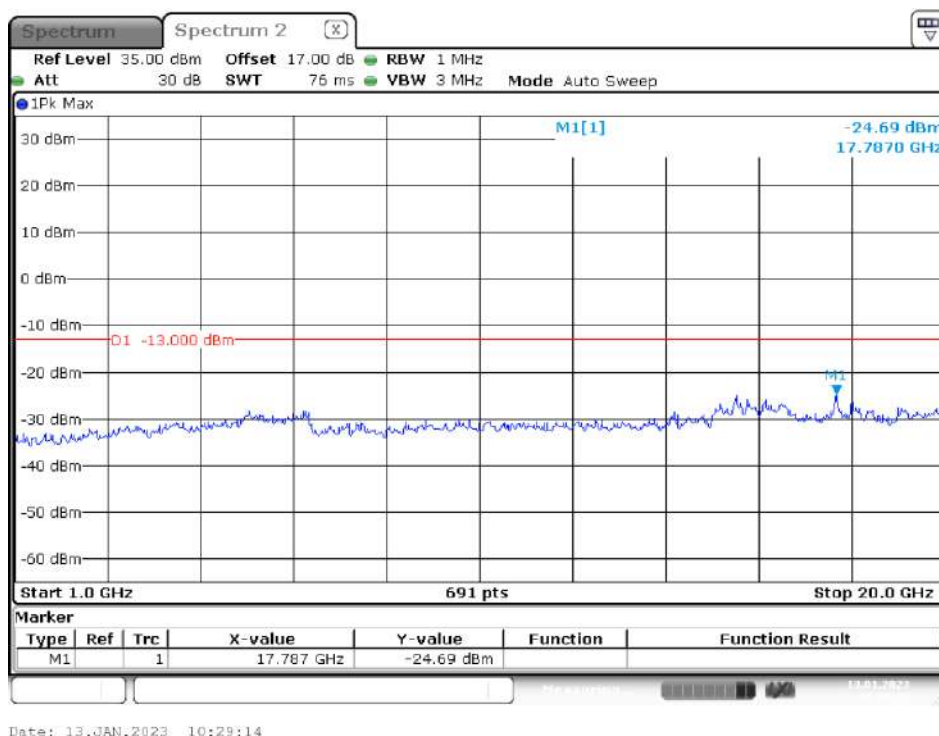
1 GHz – 20 GHz (QPSK, 3.0 MHz, Low Channel)

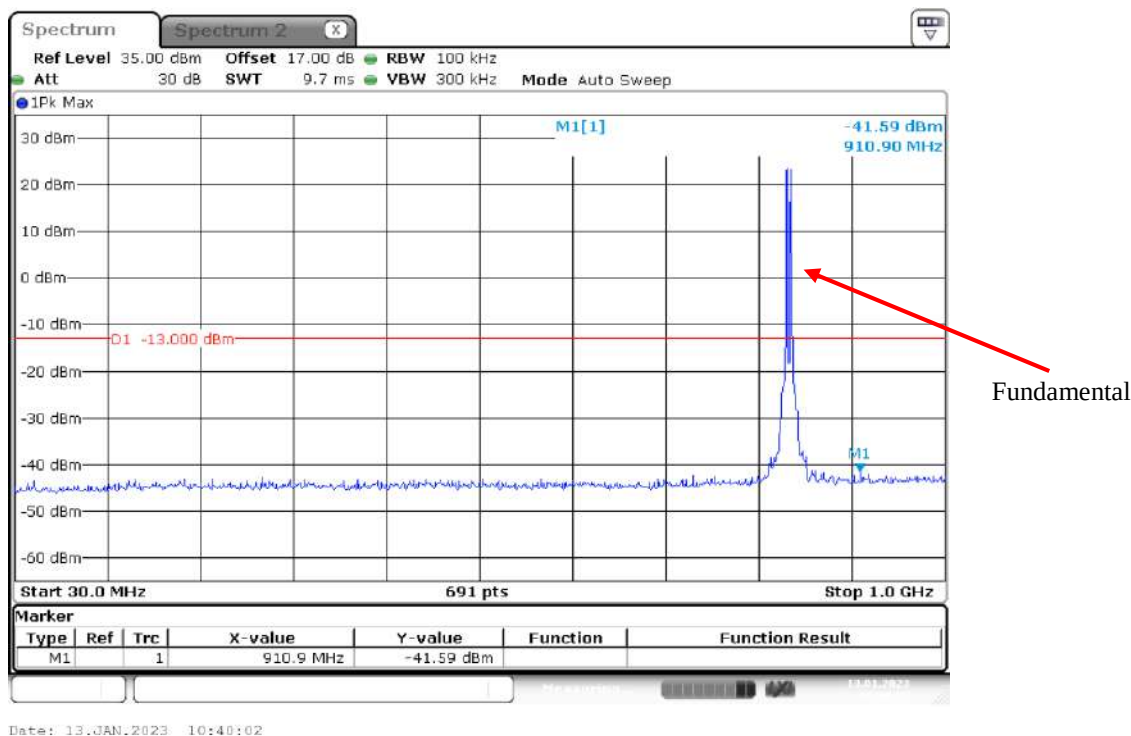
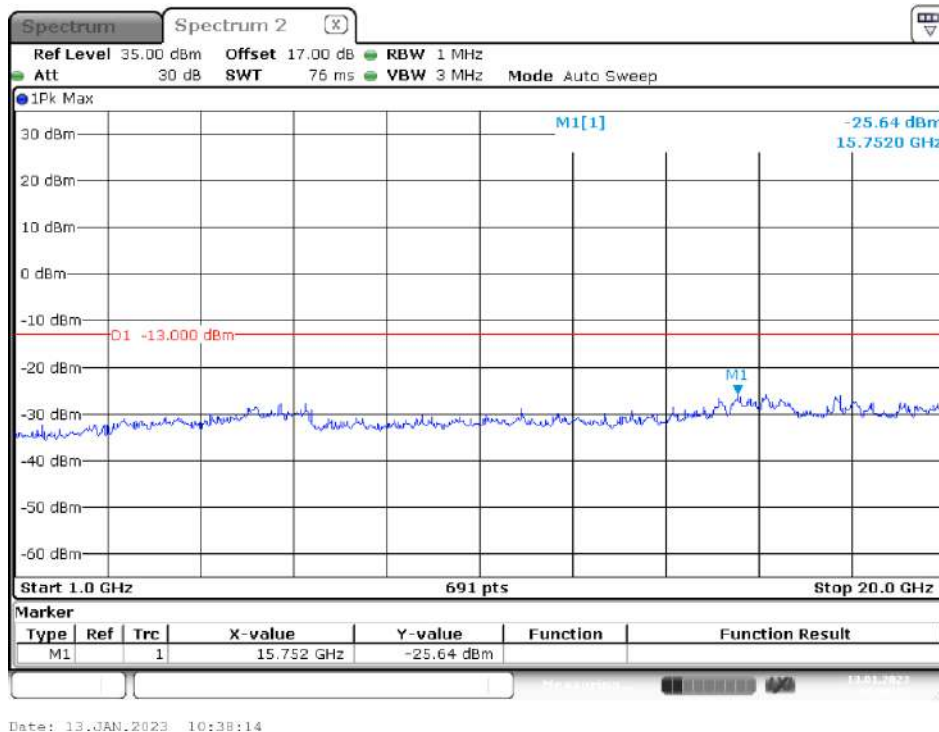
Date: 13.JAN.2023 10:26:24

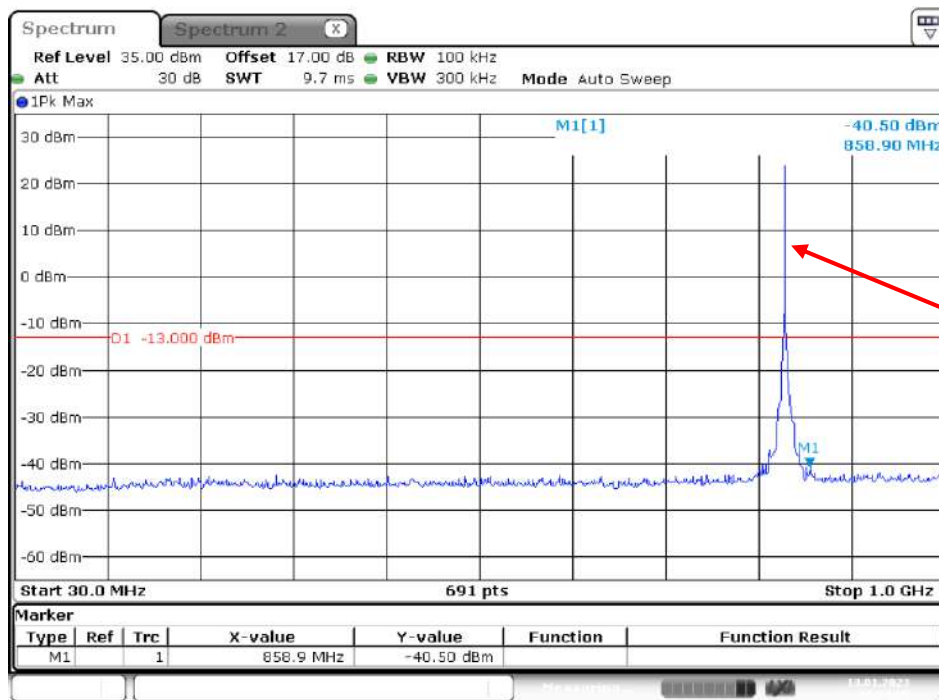
30 MHz – 1 GHz (QPSK, 5.0 MHz, Low Channel)**1 GHz – 20 GHz (QPSK, 5.0MHz, Low Channel)**

30 MHz – 1 GHz (QPSK, 10.0 MHz, Low Channel)**1 GHz – 20 GHz (QPSK, 10.0 MHz, Low Channel)**

30 MHz – 1 GHz (QPSK, 1.4 MHz, Middle Channel)**1 GHz –20 GHz (QPSK, 1.4 MHz, Middle Channel)**

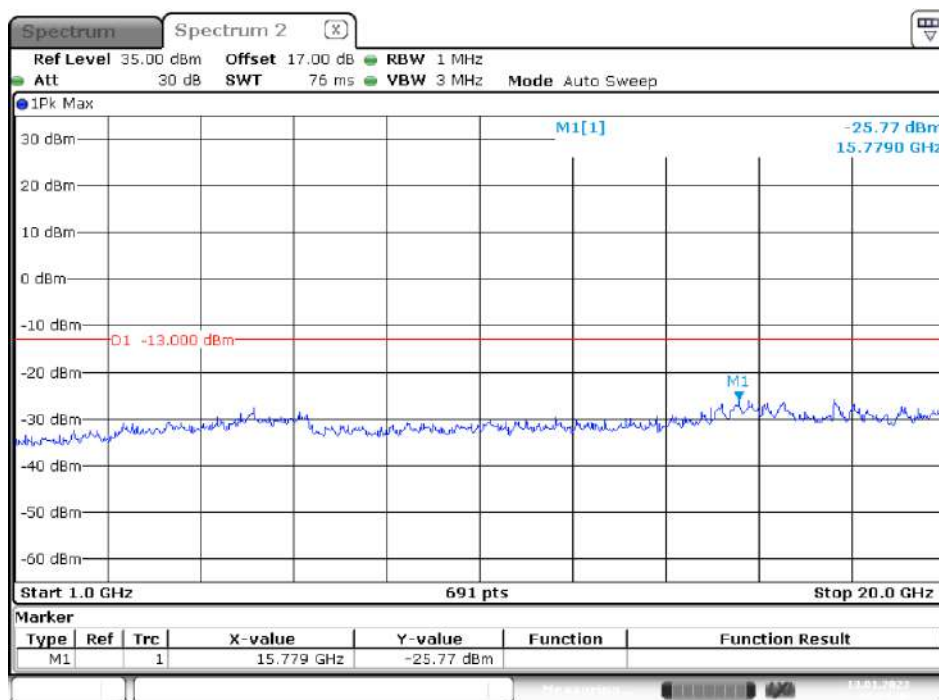
30 MHz – 1 GHz (QPSK, 3.0 MHz, Middle Channel)**1 GHz – 20 GHz (QPSK, 3.0 MHz, Middle Channel)**

30 MHz – 1 GHz (QPSK, 5.0 MHz, Middle Channel)**1 GHz – 20 GHz (QPSK, 5.0MHz, Middle Channel)**

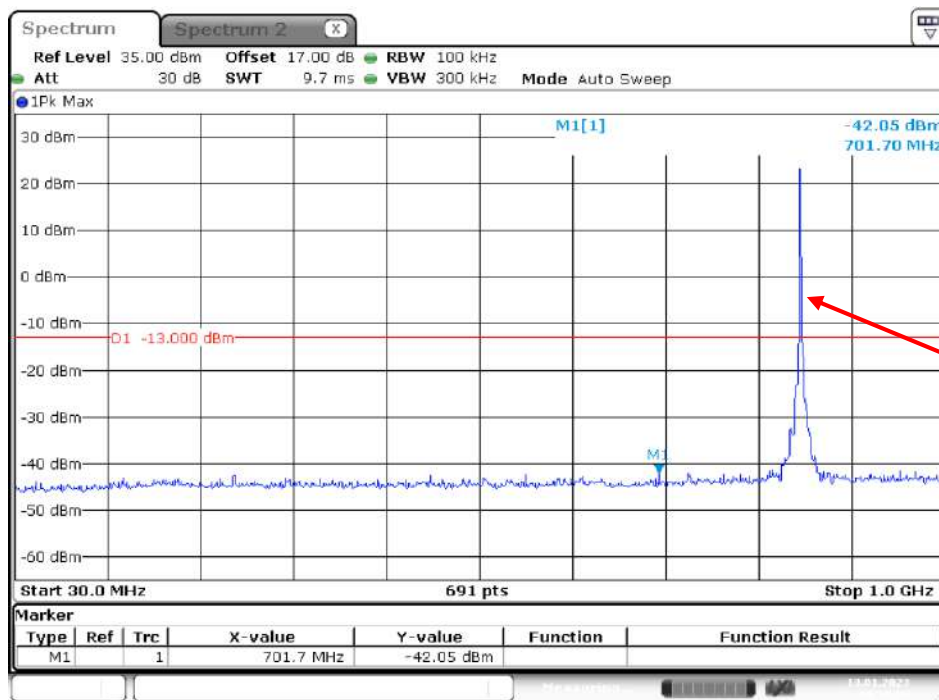
30 MHz – 1 GHz (QPSK, 10.0 MHz, Middle Channel)

Date: 13.JAN.2023 10:54:28

Fundamental

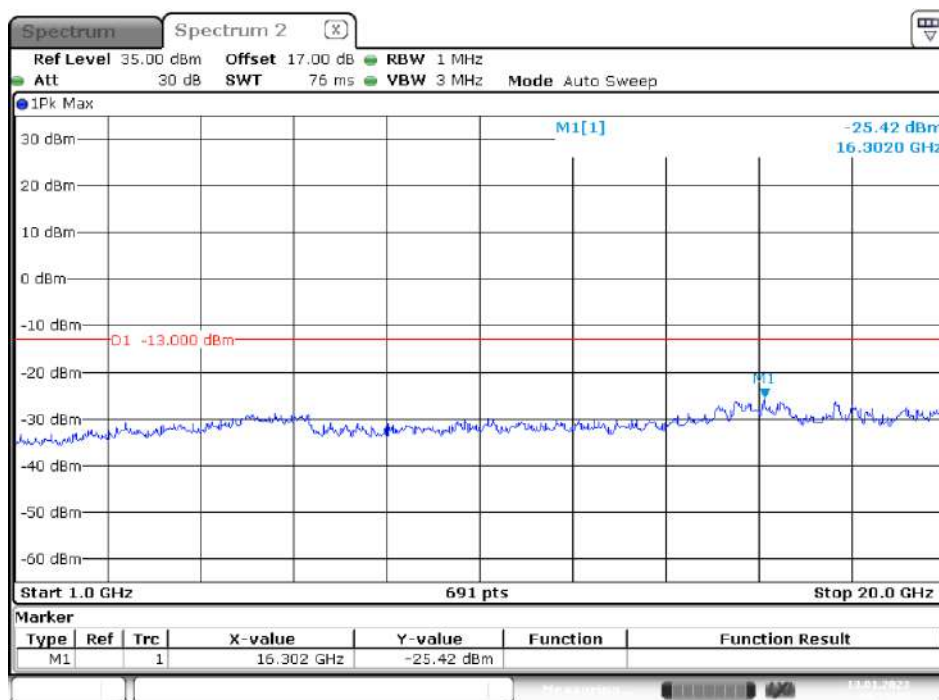
1 GHz – 20 GHz (QPSK, 10.0 MHz, Middle Channel)

Date: 13.JAN.2023 10:54:46

30 MHz – 1 GHz (QPSK, 1.4 MHz, High Channel)

Date: 13.JAN.2023 10:18:05

Fundamental

1 GHz – 20 GHz (QPSK, 1.4 MHz, High Channel)

Date: 13.JAN.2023 10:15:17