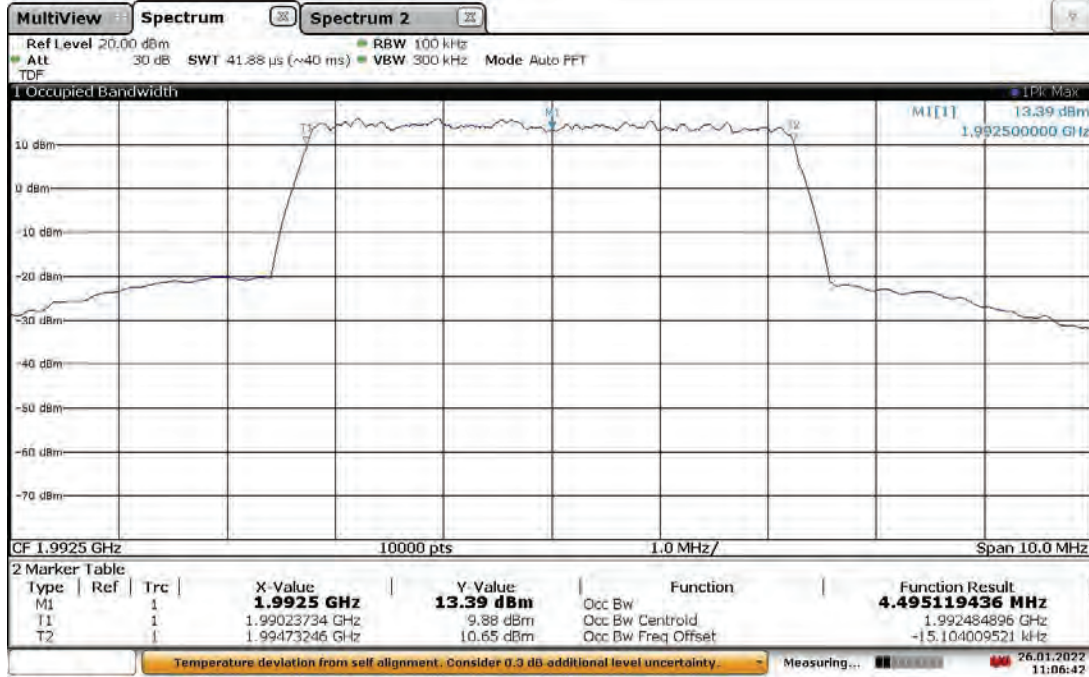
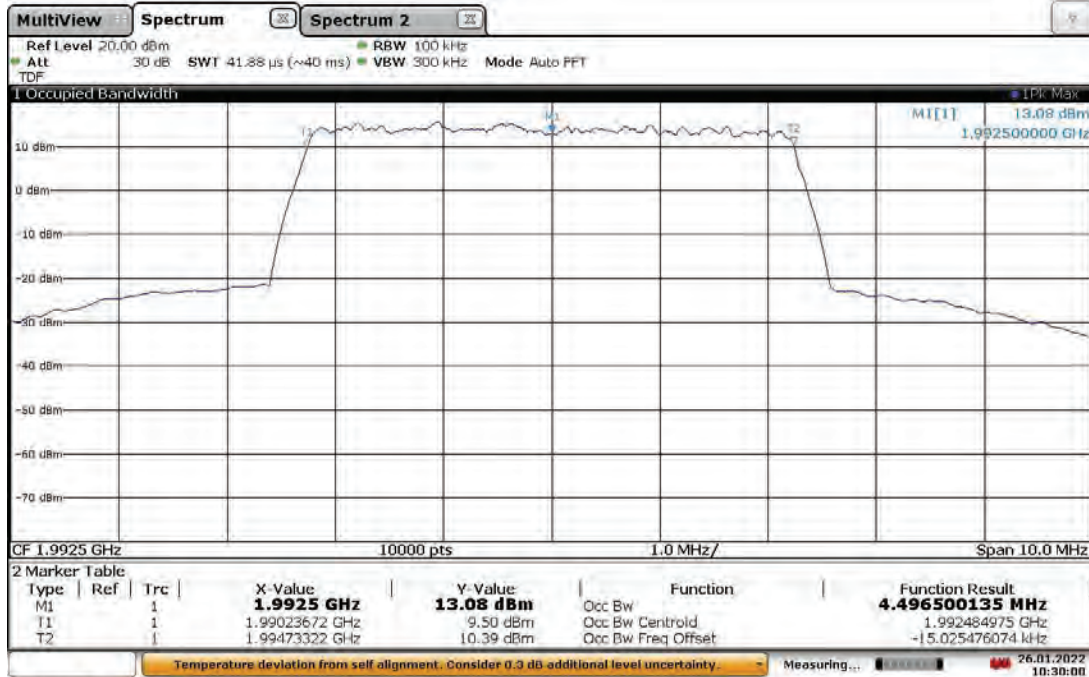


Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz High Channel 1992.5 MHz, 40 °C (5G nR)



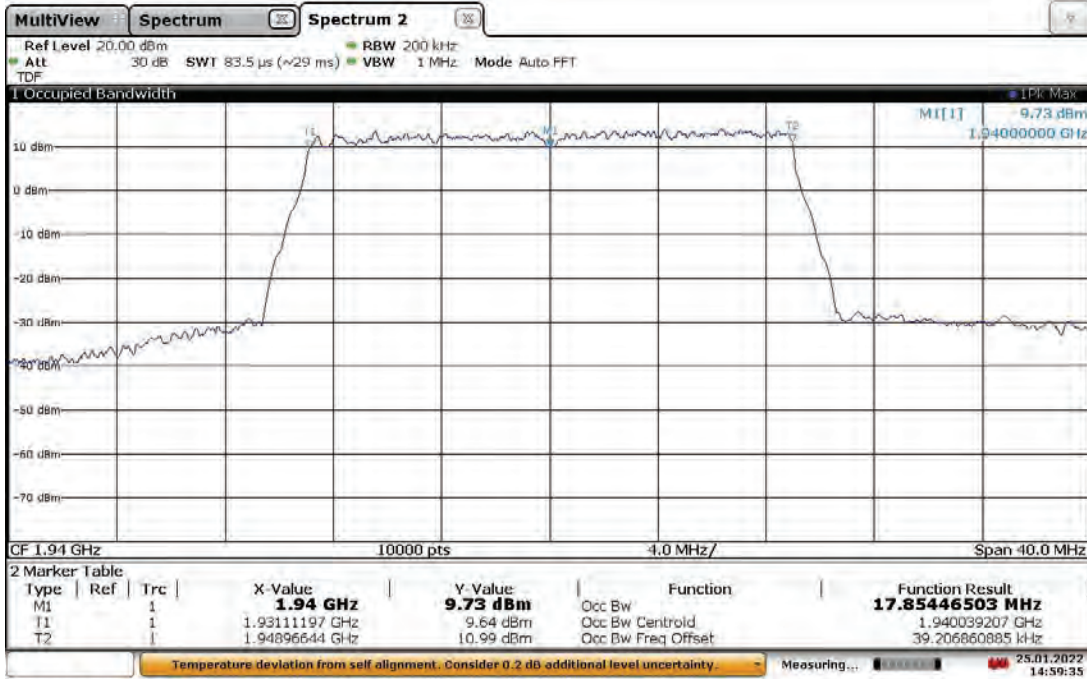
11:06:43 26.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz High Channel 1992.5 MHz, 50 °C (5G nR)



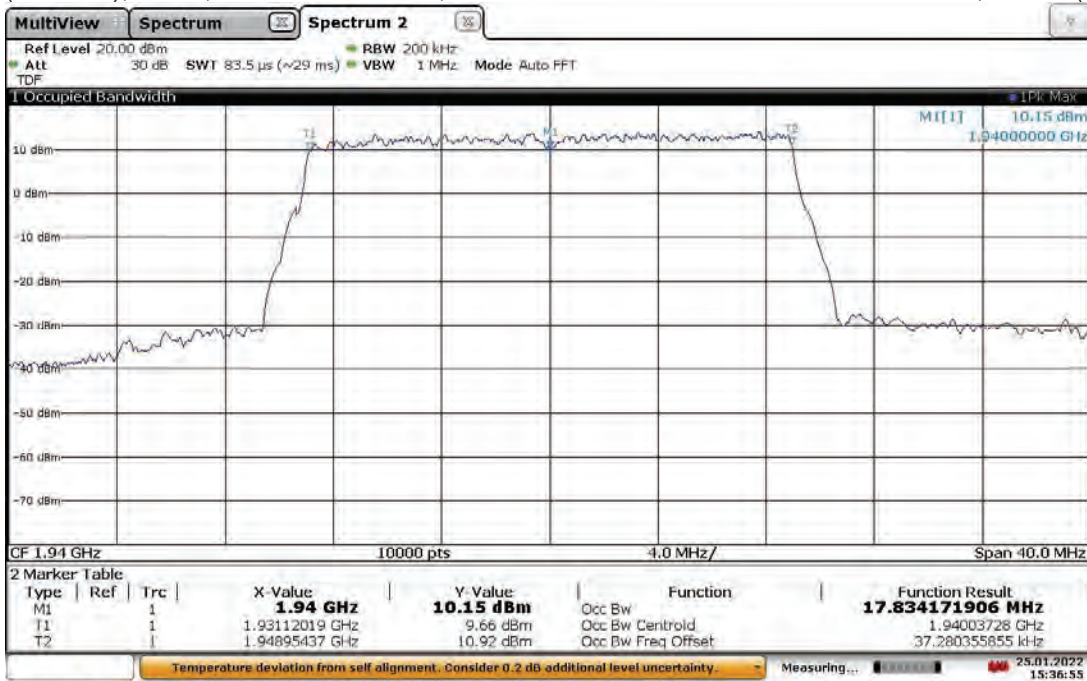
10:30:00 26.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz Low Channel 1940 MHz, 0 °C (5G nR)



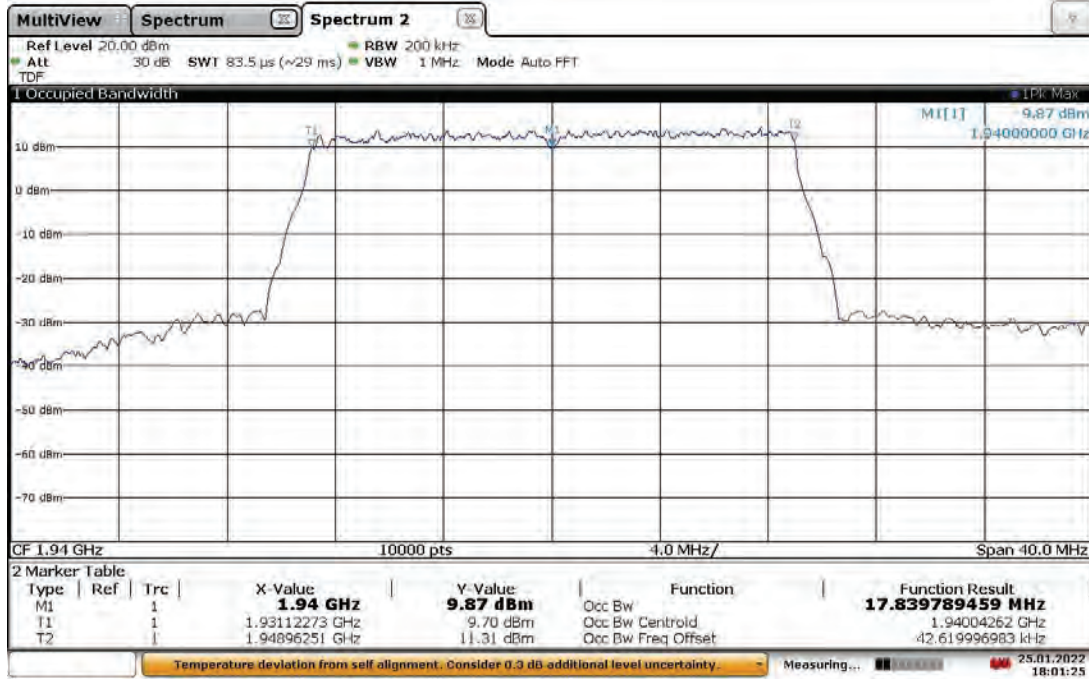
14:59:36 25.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz Low Channel 1940 MHz, -10 °C (5G nR)



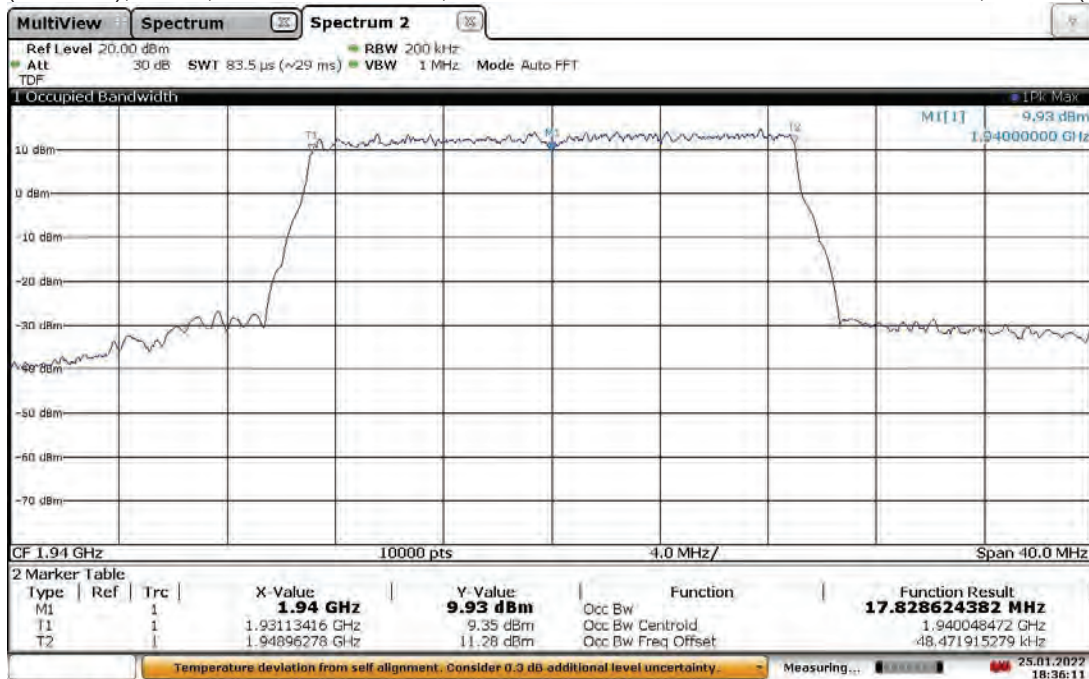
15:36:55 25.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz Low Channel 1940 MHz, -20 °C (5G nR)



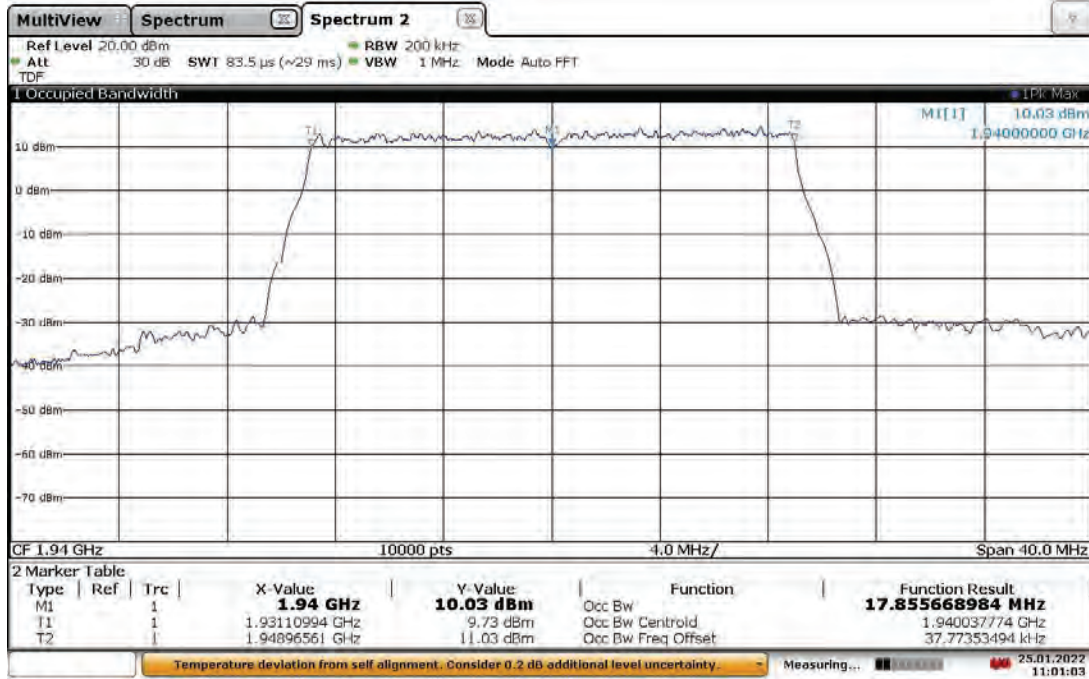
18:01:26 25.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz Low Channel 1940 MHz, -30 °C (5G nR)



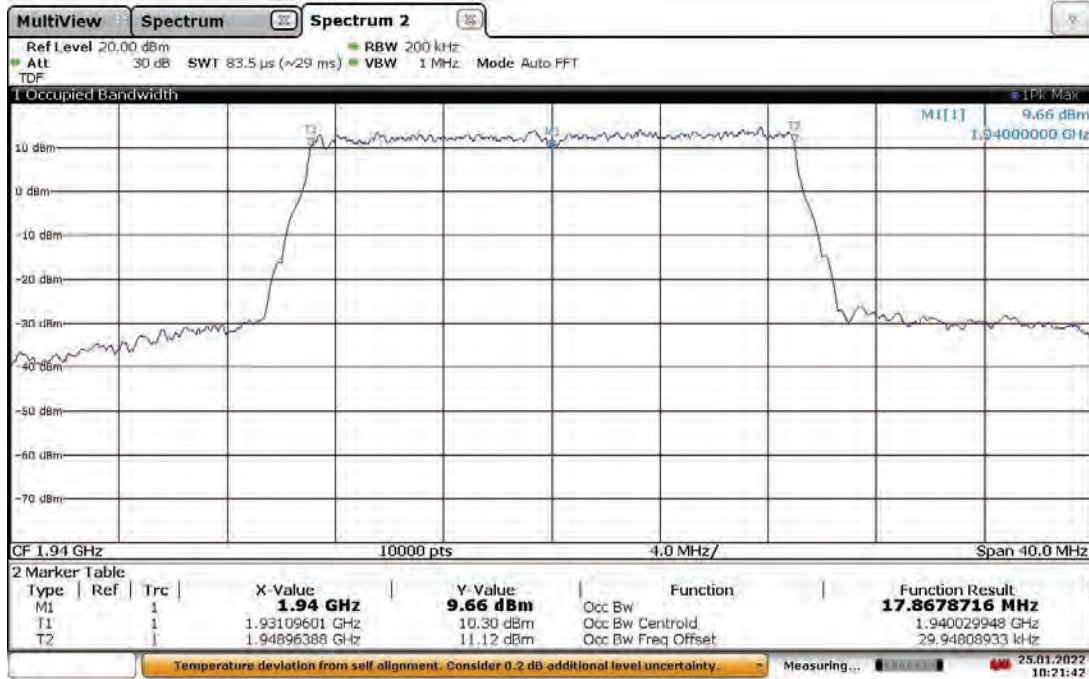
18:36:11 25.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz Low Channel 1940 MHz, 10 °C (5G nR)



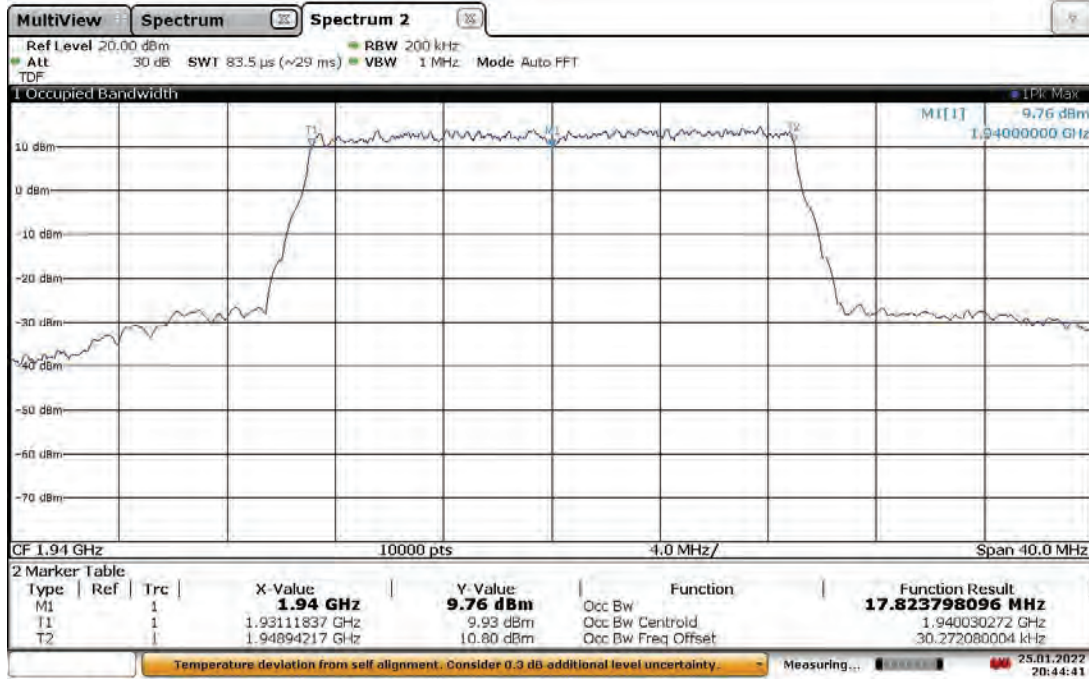
11:01:04 25.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz Low Channel 1940 MHz, 20 °C (5G nR)



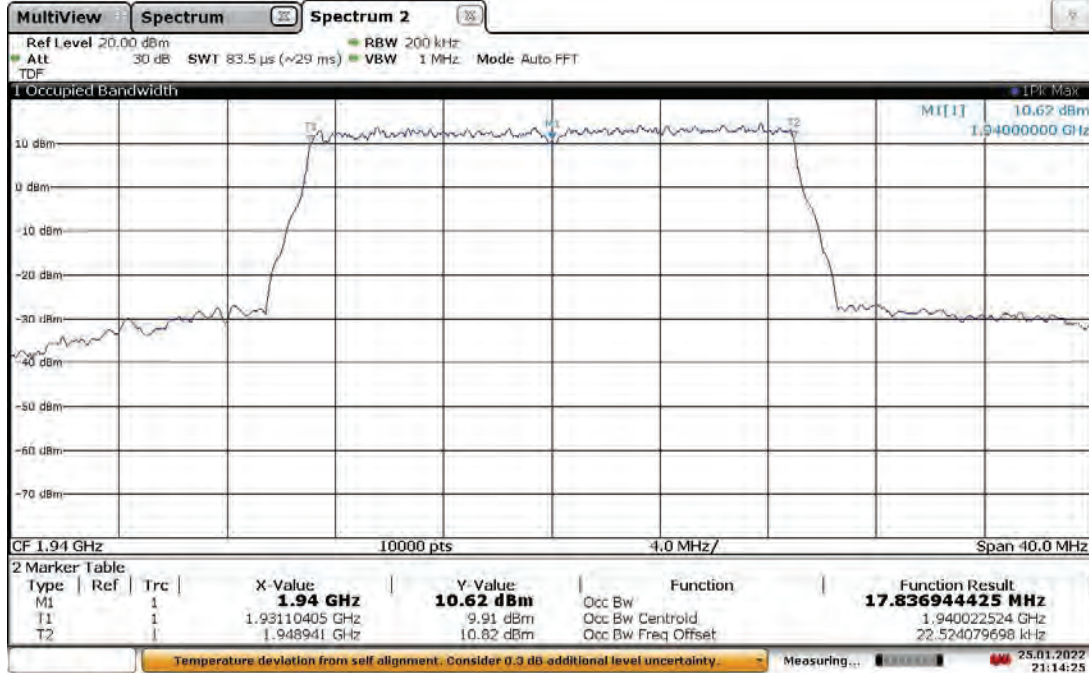
10:21:42 25.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz Low Channel 1940 MHz, 30 °C (5G nR)



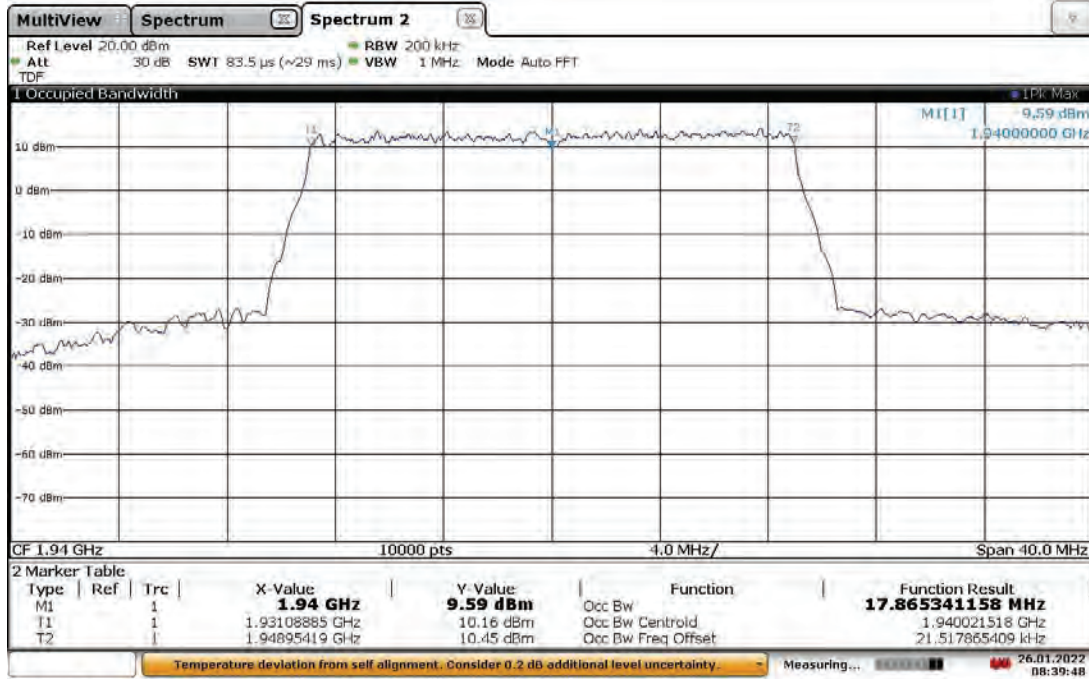
20:44:41 25.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz Low Channel 1940 MHz, 40 °C (5G nR)



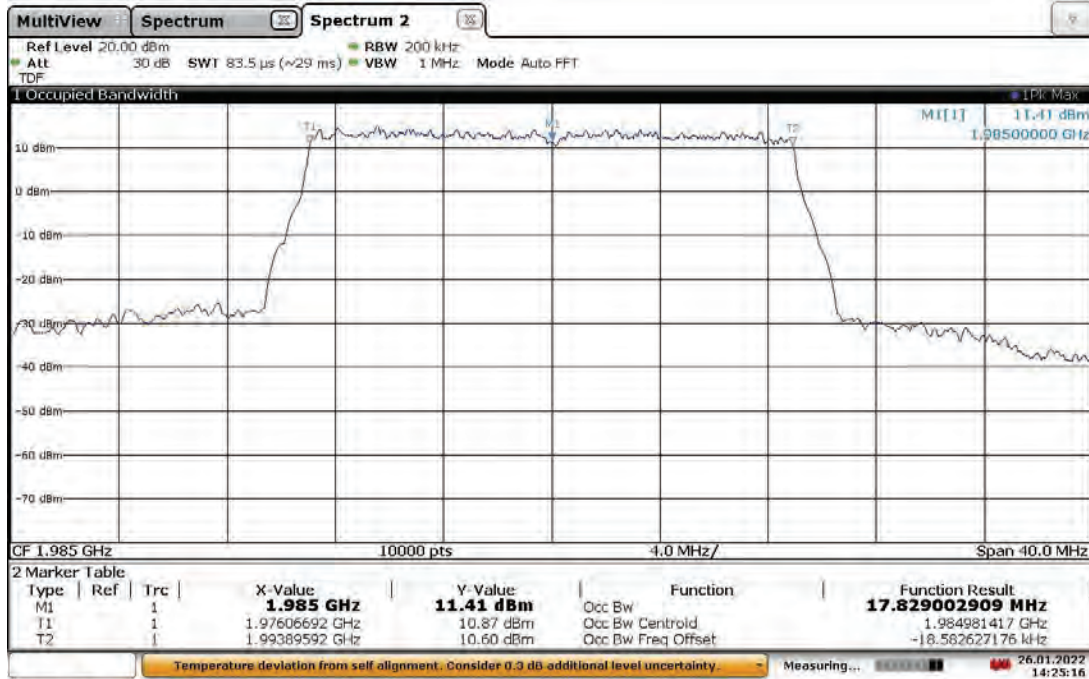
21:14:25 25.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz Low Channel 1940 MHz, 50 °C (5G nR)



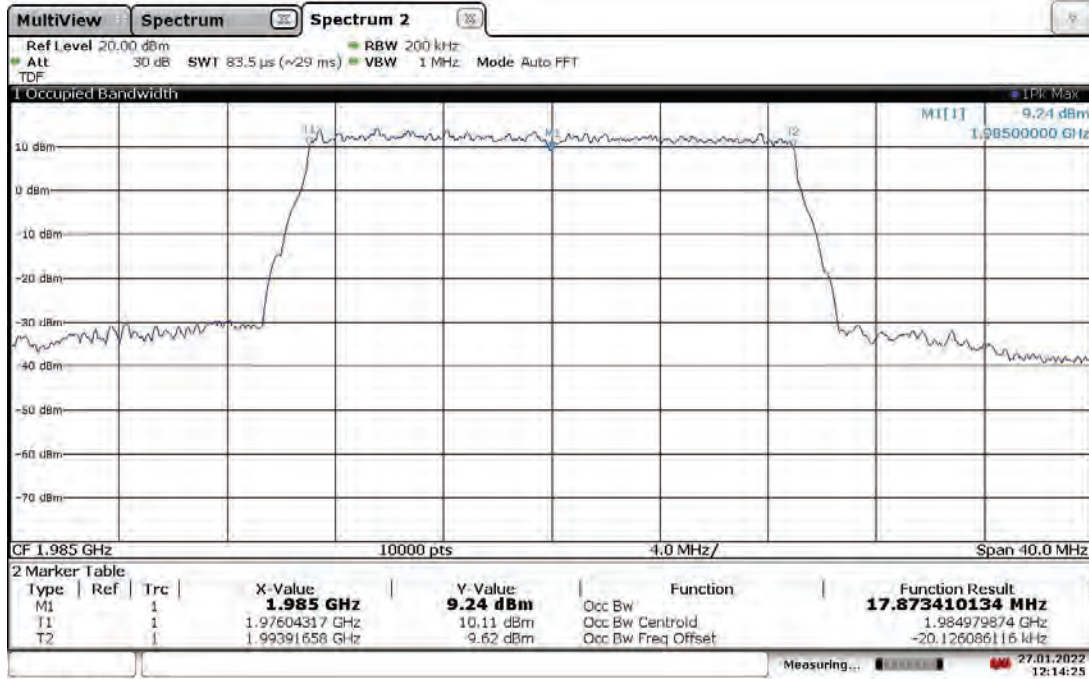
08:39:49 26.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz High Channel 1985 MHz, 0 °C (5G nR)



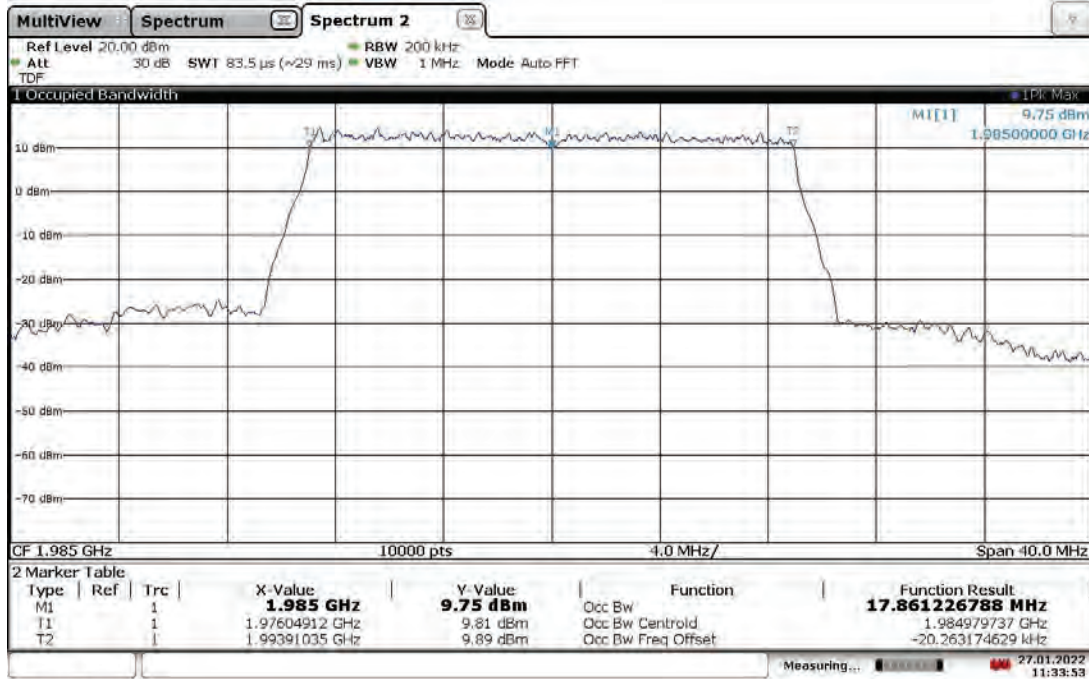
14:25:17 26.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz High Channel 1985 MHz, -10 °C (5G nR)



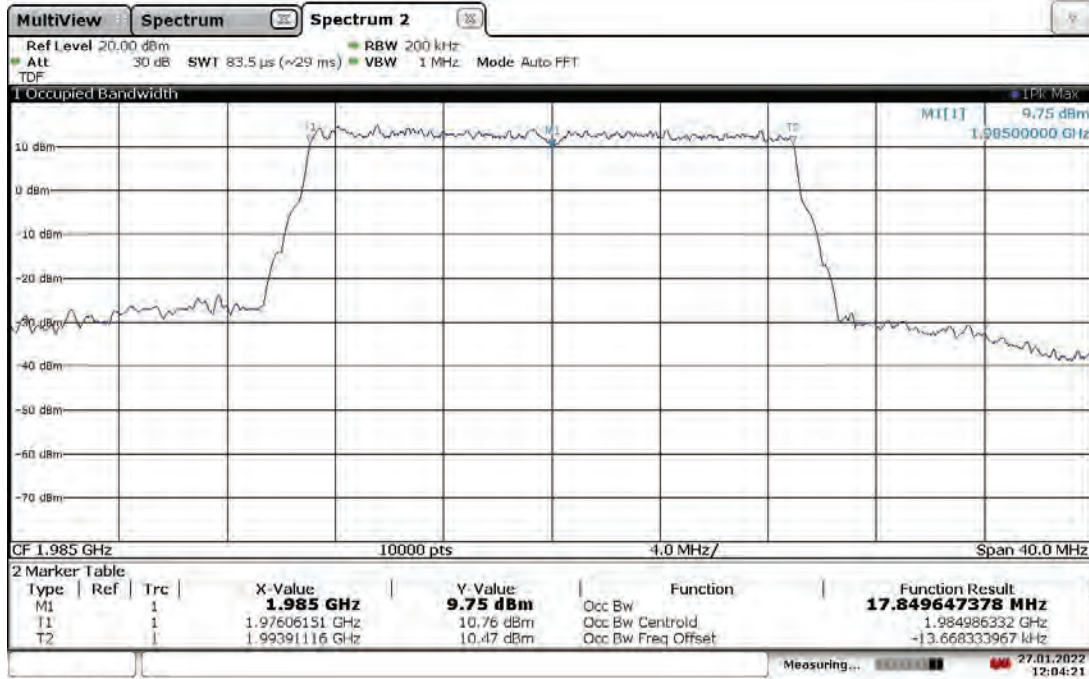
12:14:26 27.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz High Channel 1985 MHz, -20 °C (5G nR)



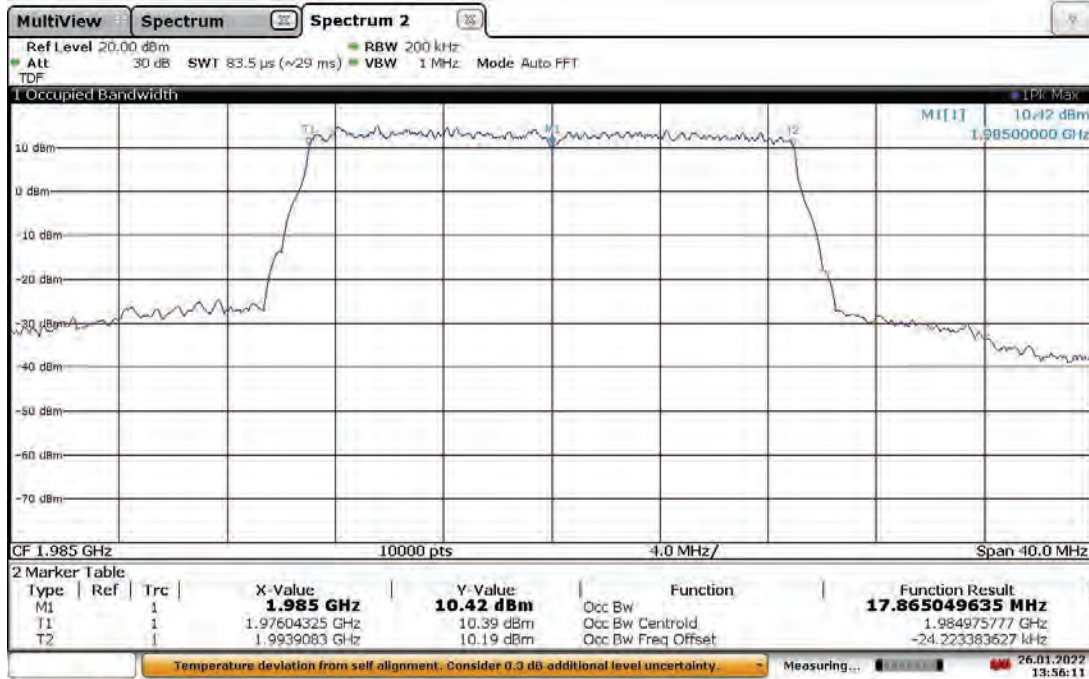
11:33:54 27.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz High Channel 1985 MHz, -30 °C (5G nR)



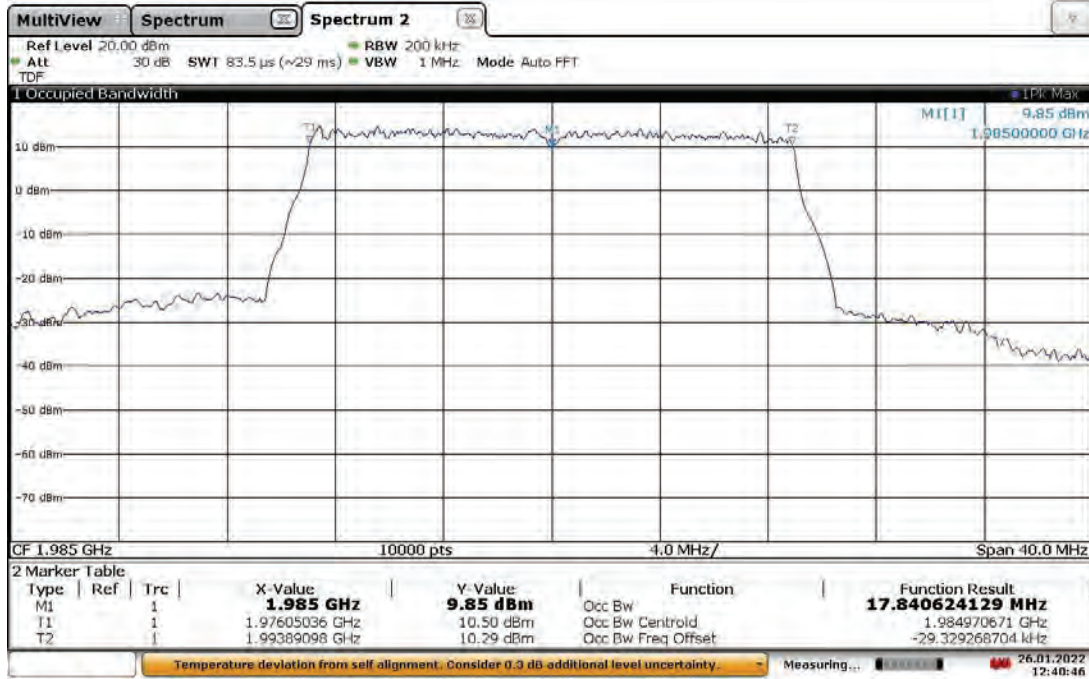
12:04:22 27.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz High Channel 1985 MHz, 10 °C (5G nR)



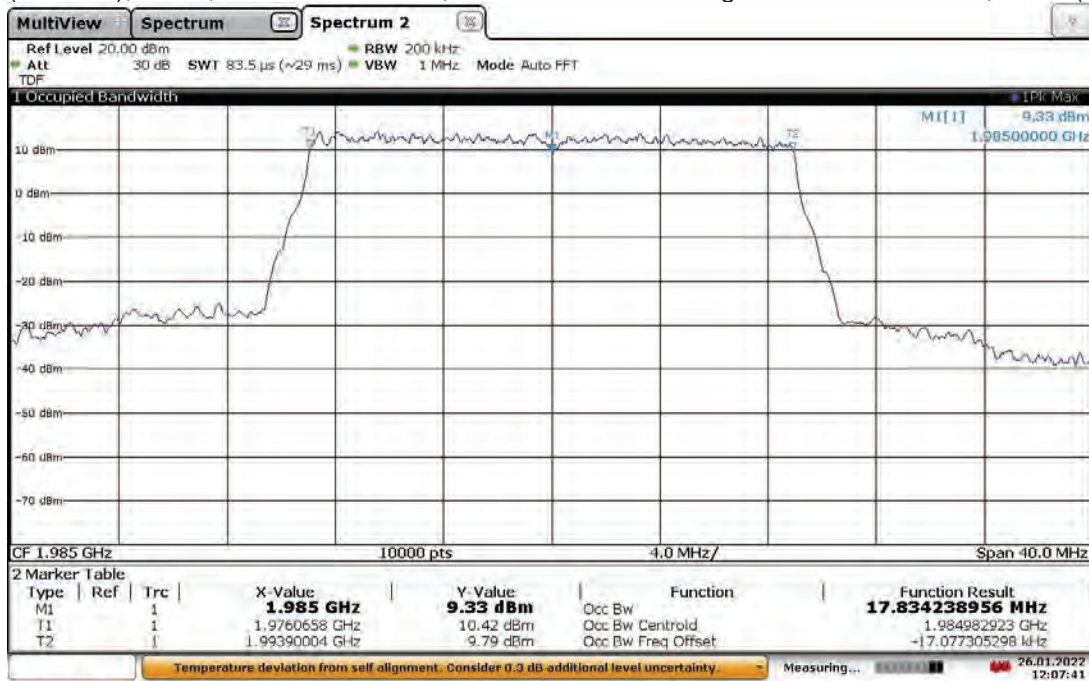
13:56:12 26.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz High Channel 1985 MHz, 20 °C (5G nR)



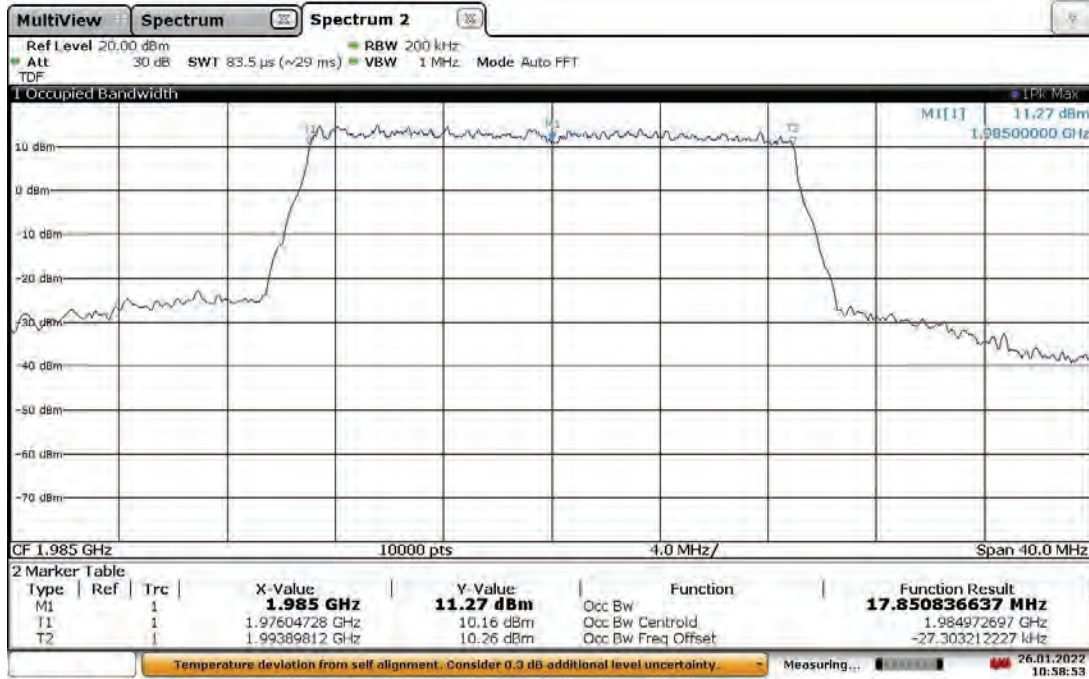
12:40:46 26.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz High Channel 1985 MHz, 30 °C (5G nR)



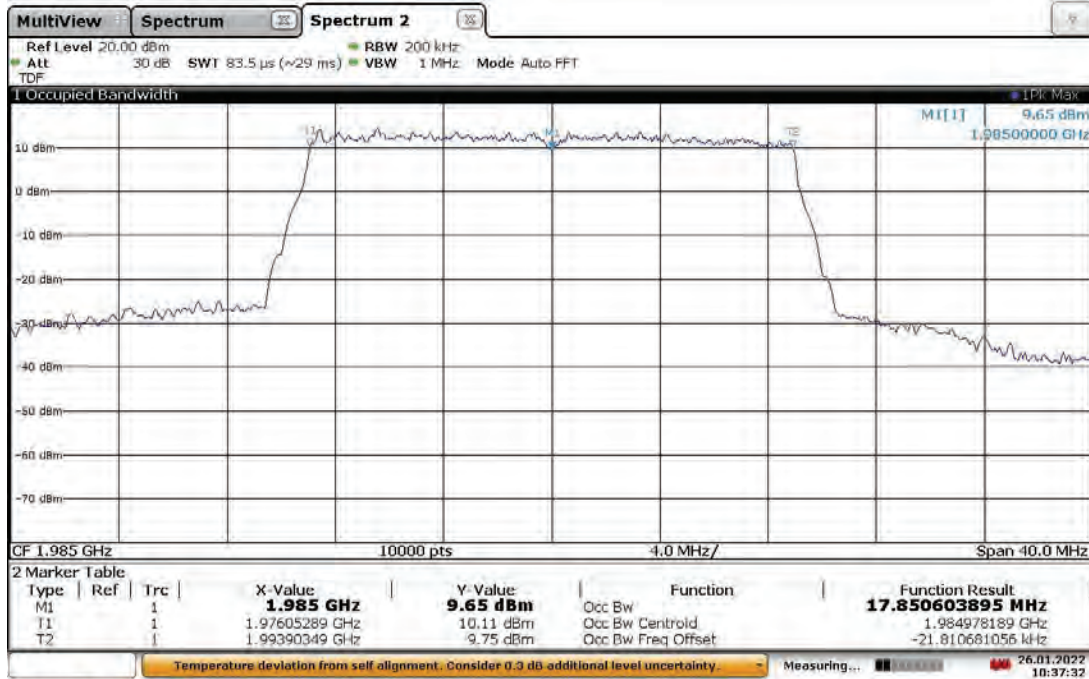
12:07:42 26.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz High Channel 1985 MHz, 40 °C (5G nR)



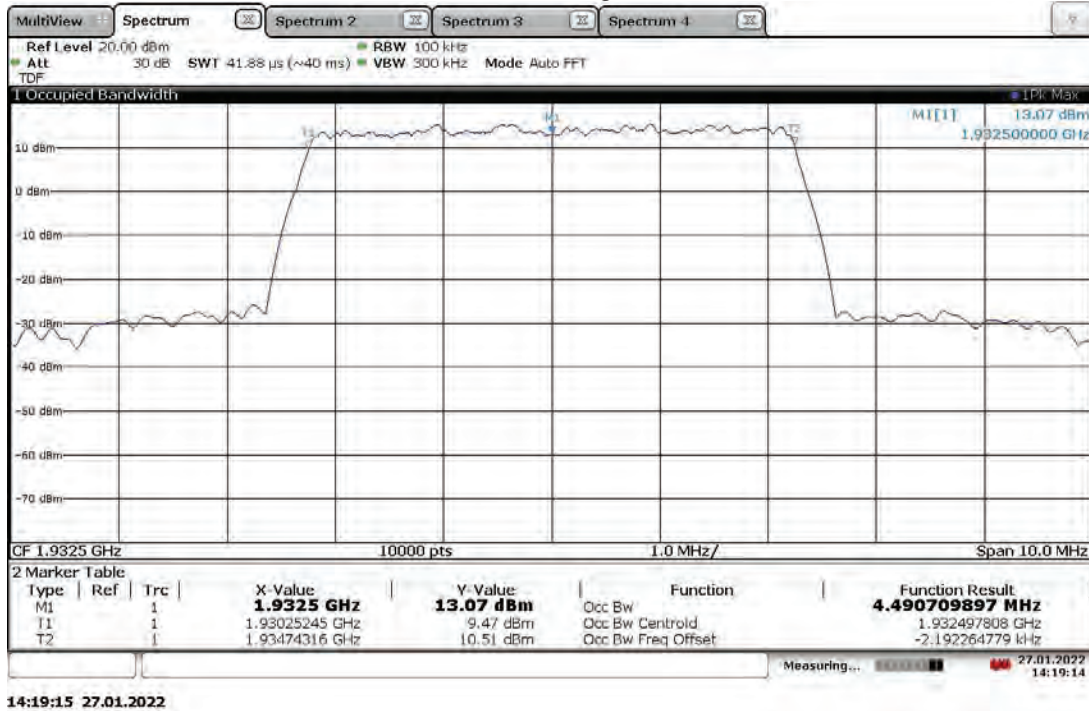
10:58:54 26.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz High Channel 1985 MHz, 50 °C (5G nR)

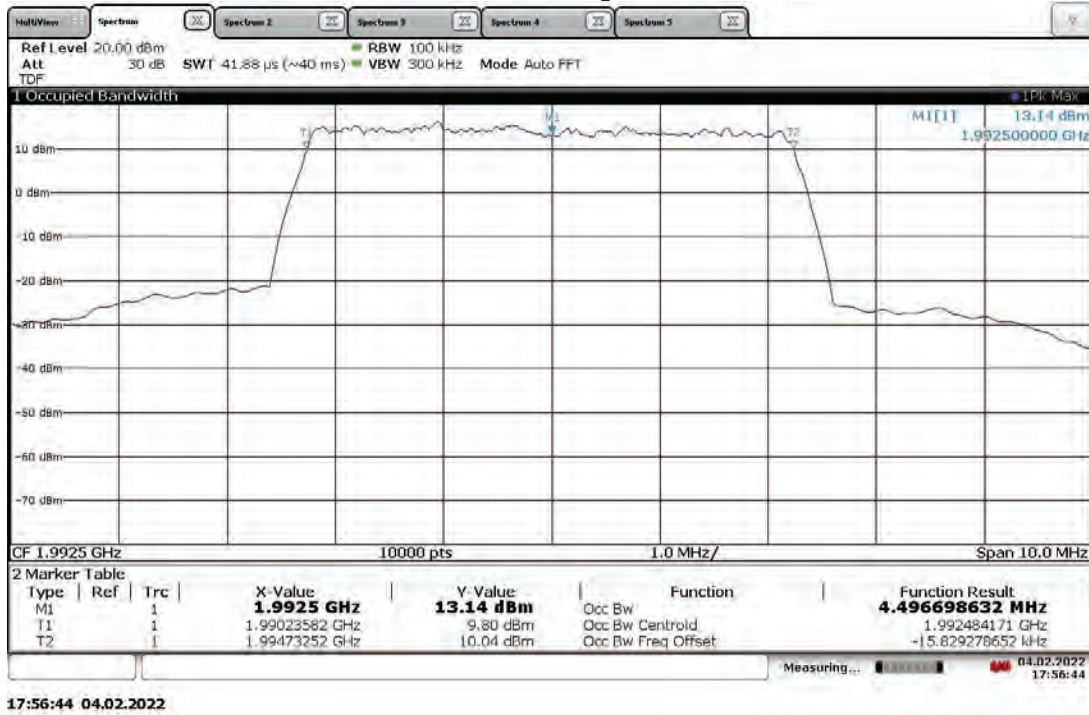


10:37:32 26.01.2022

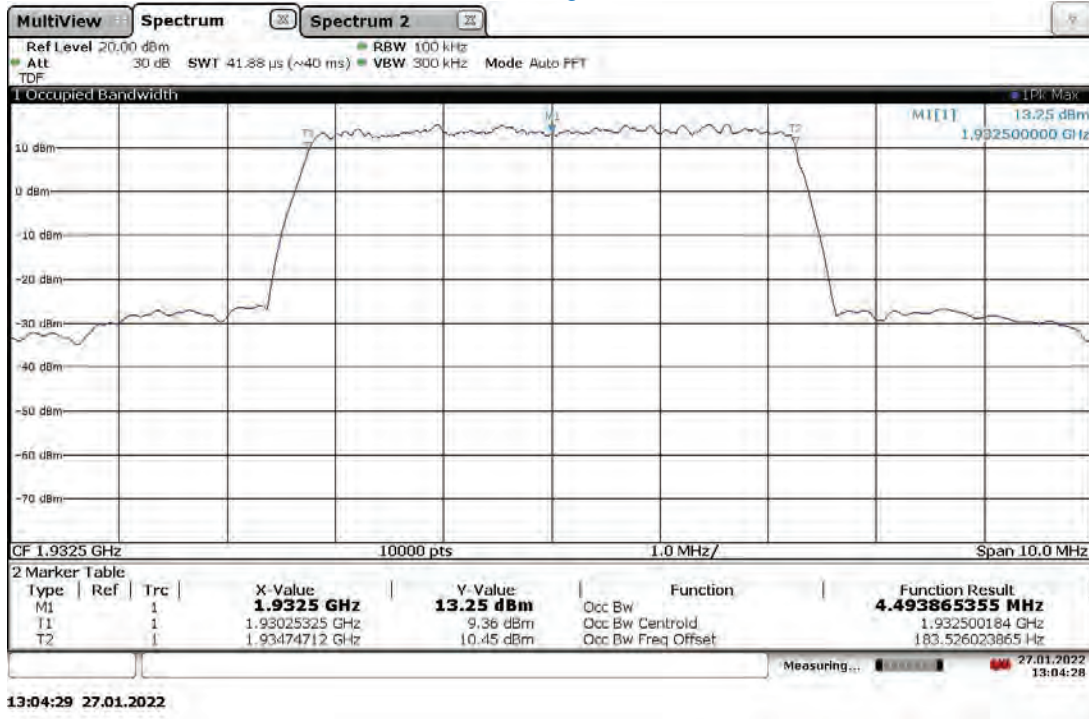
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, Low Channel 1932.5 MHz, (4G LTE)
Lower Extreme Voltage: 41.1VDC



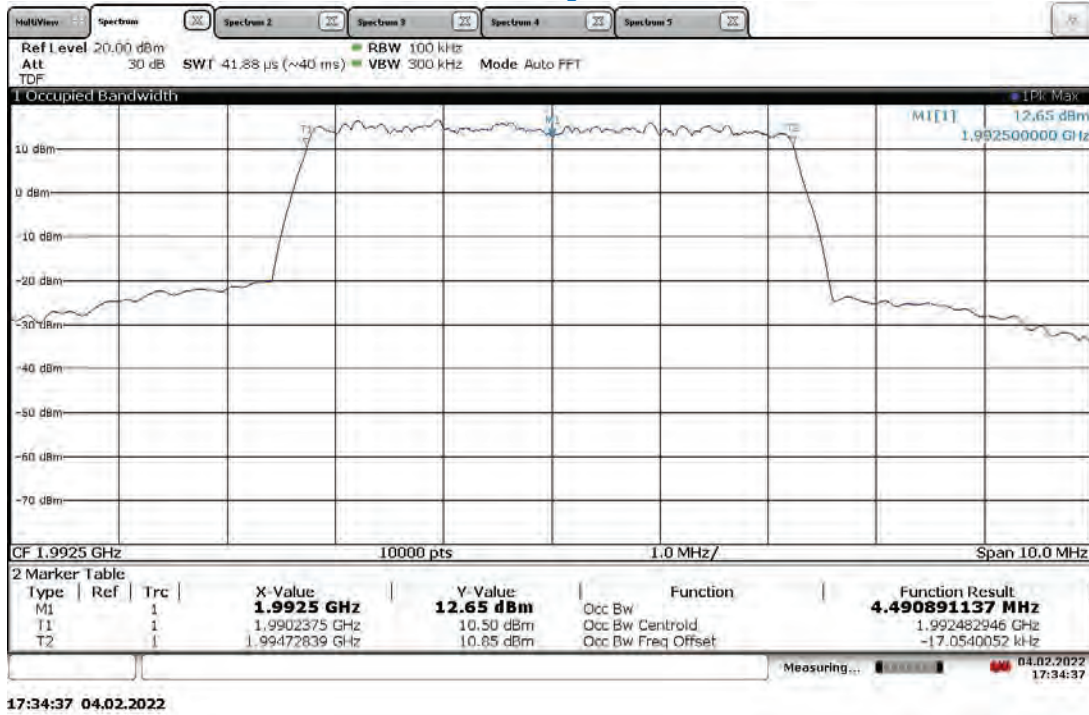
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, High Channel 1992.5 MHz (4G LTE)
Lower Extreme Voltage: 41.1VDC



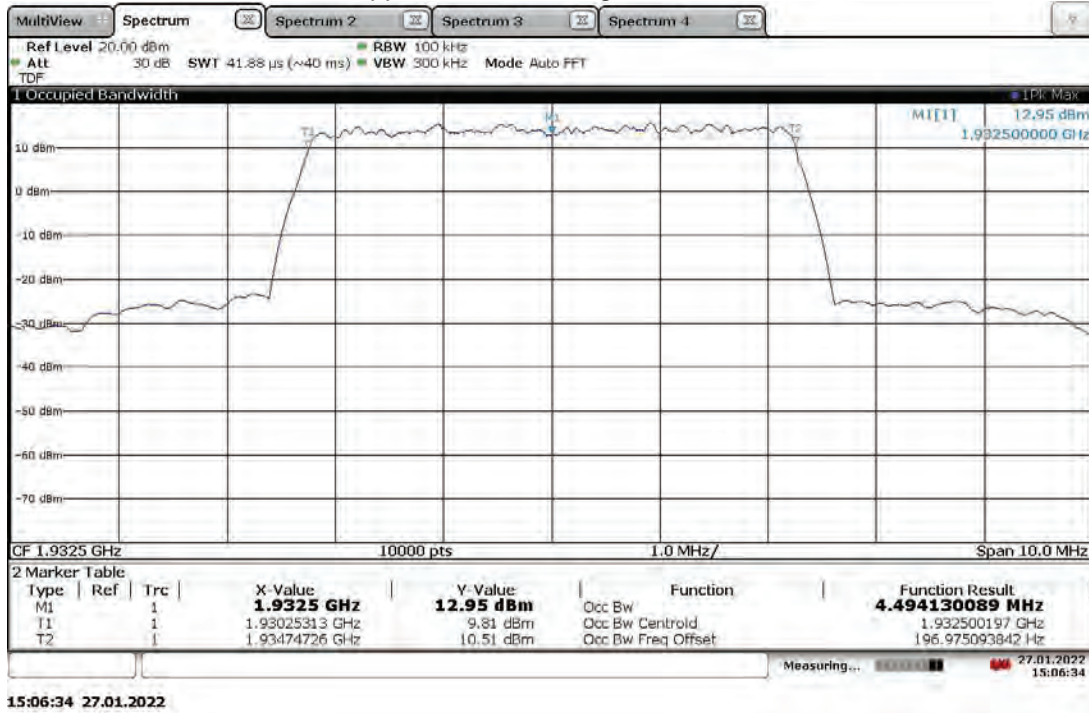
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, Low Channel 1932.5 MHz, (4G LTE)
Nominal Voltage: 48 VDC



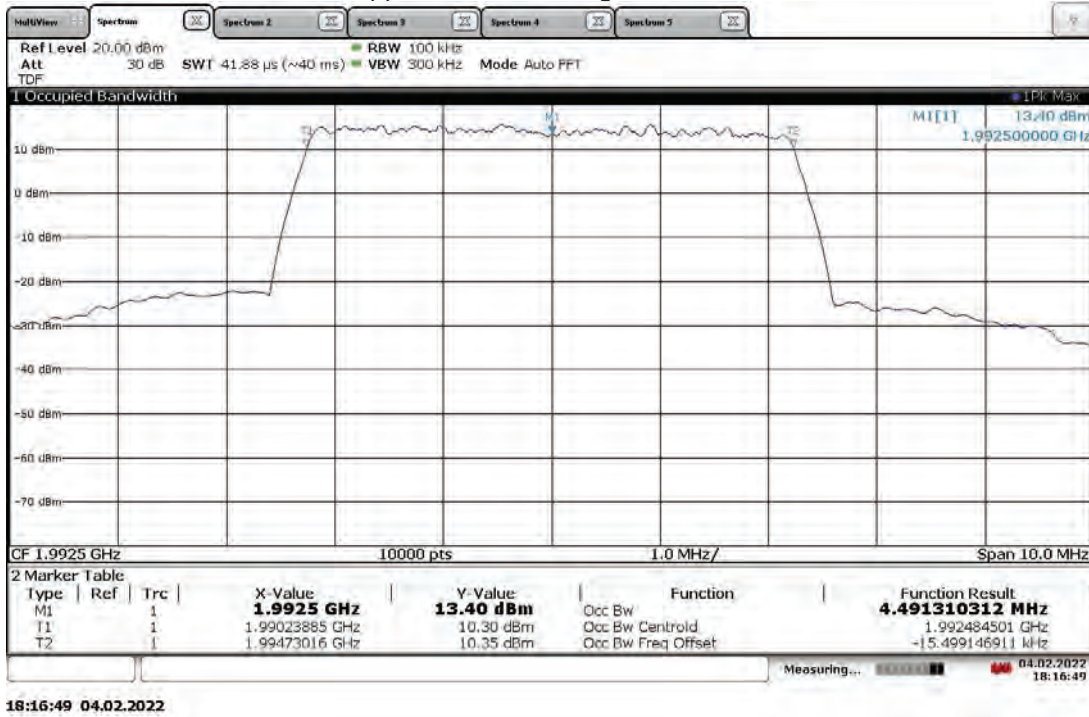
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, High Channel 1992.5 MHz (4G LTE)
Nominal Voltage: 48 VDC



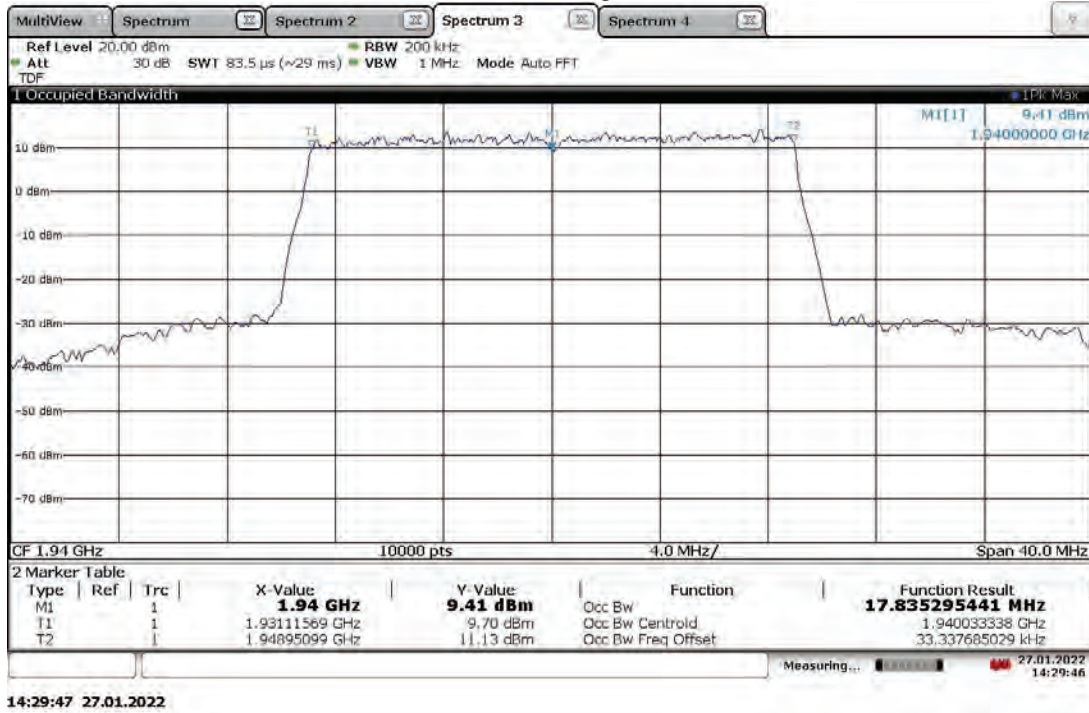
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, Low Channel 1932.5 MHz (4G LTE)
Upper Extreme Voltage: 57.0VDC



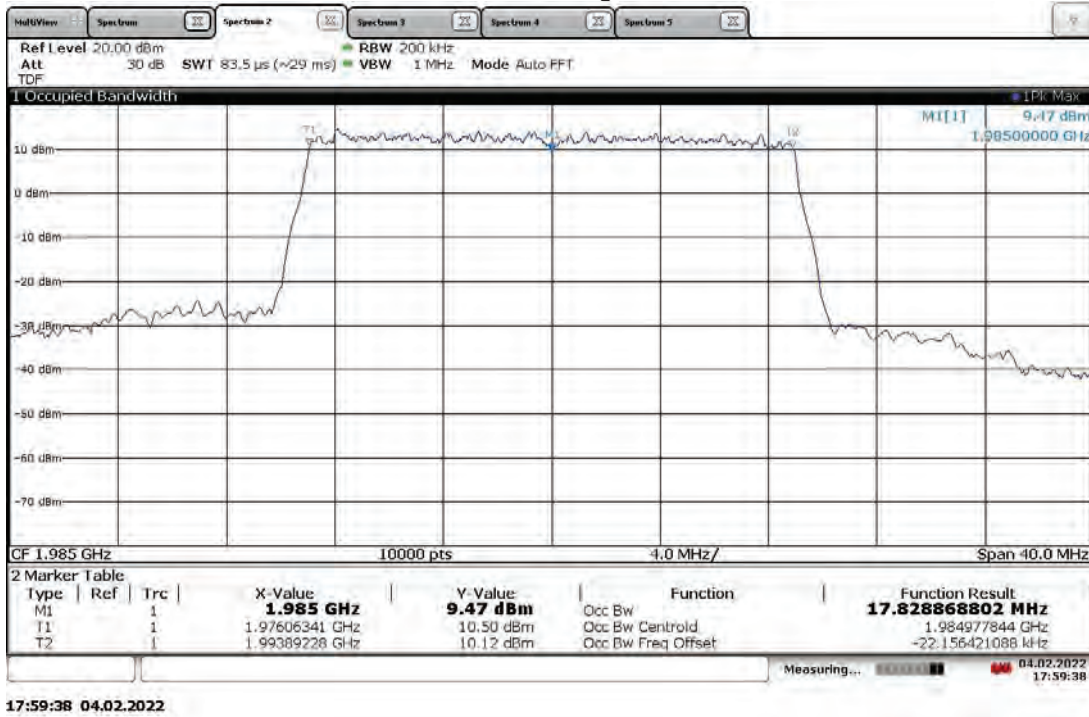
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, High Channel 1992.5 MHz (4G LTE)
Upper Extreme Voltage: 57.0VDC



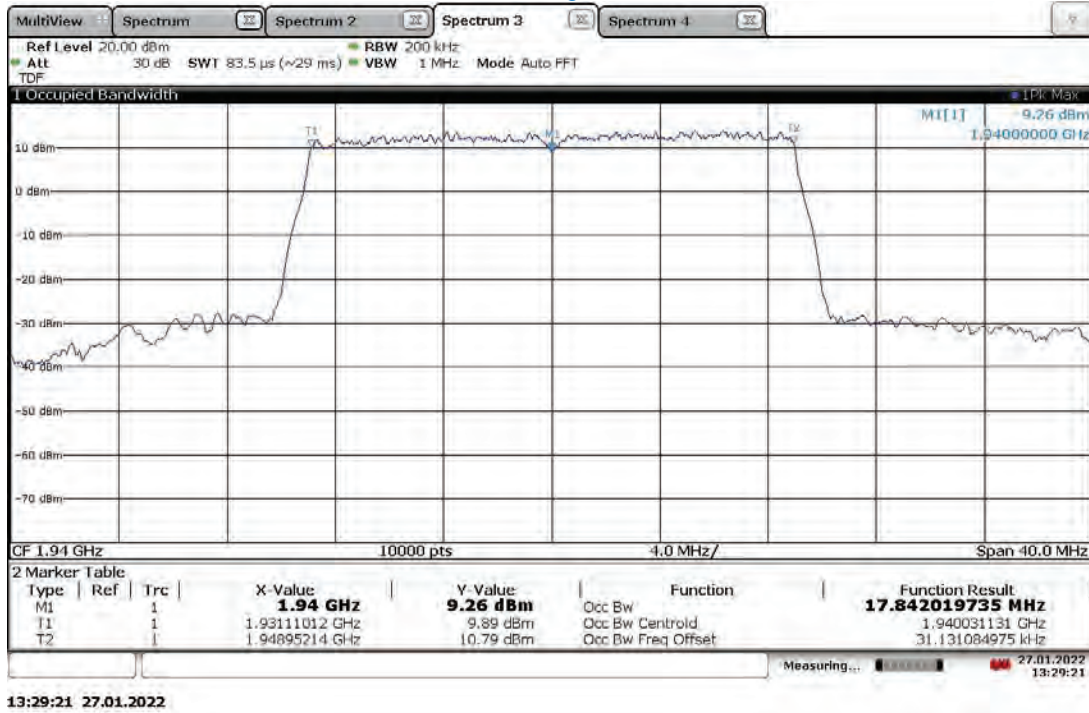
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, Low Channel 1940 MHz (4G LTE)
Lower Extreme Voltage: 41.1VDC



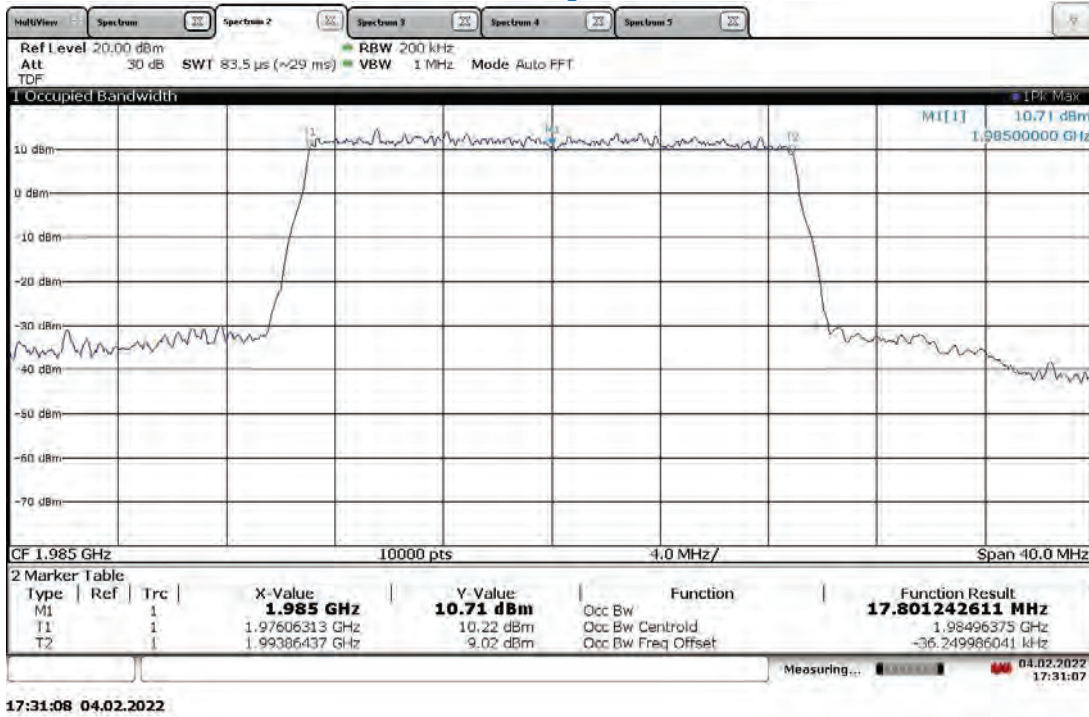
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, High Channel 1985 MHz (4G LTE)
Lower Extreme Voltage: 41.1VDC



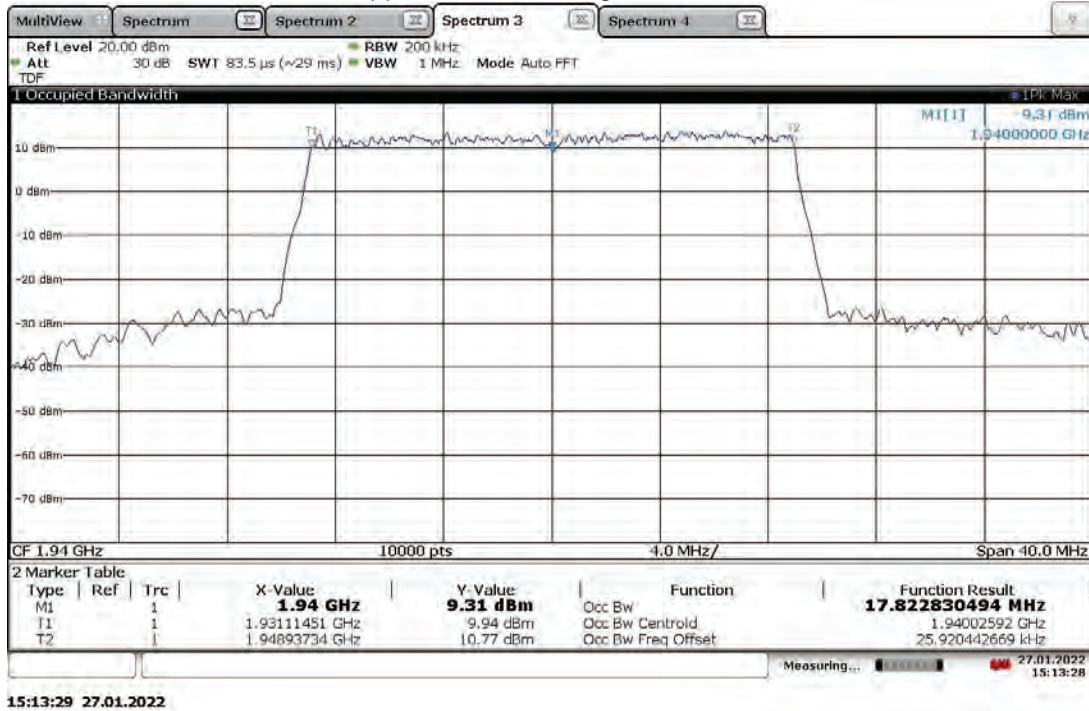
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, Low Channel 1940 MHz (4G LTE)
Nominal Voltage: 48 VDC



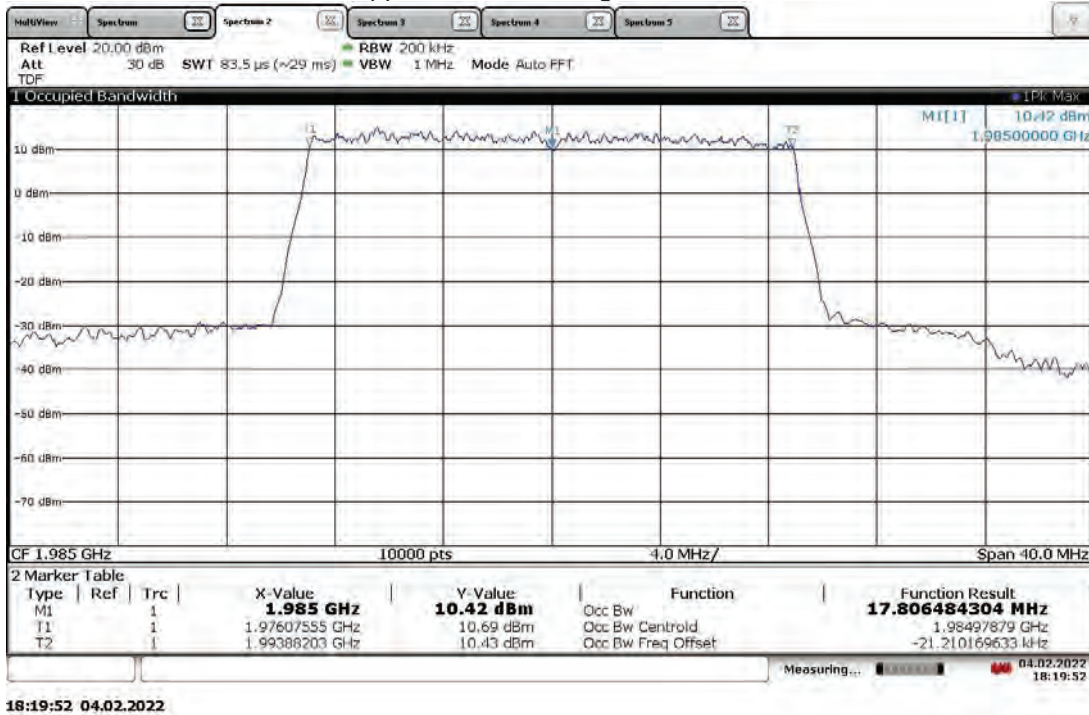
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, High Channel 1980 MHz (4G LTE)
Nominal Voltage: 48 VDC



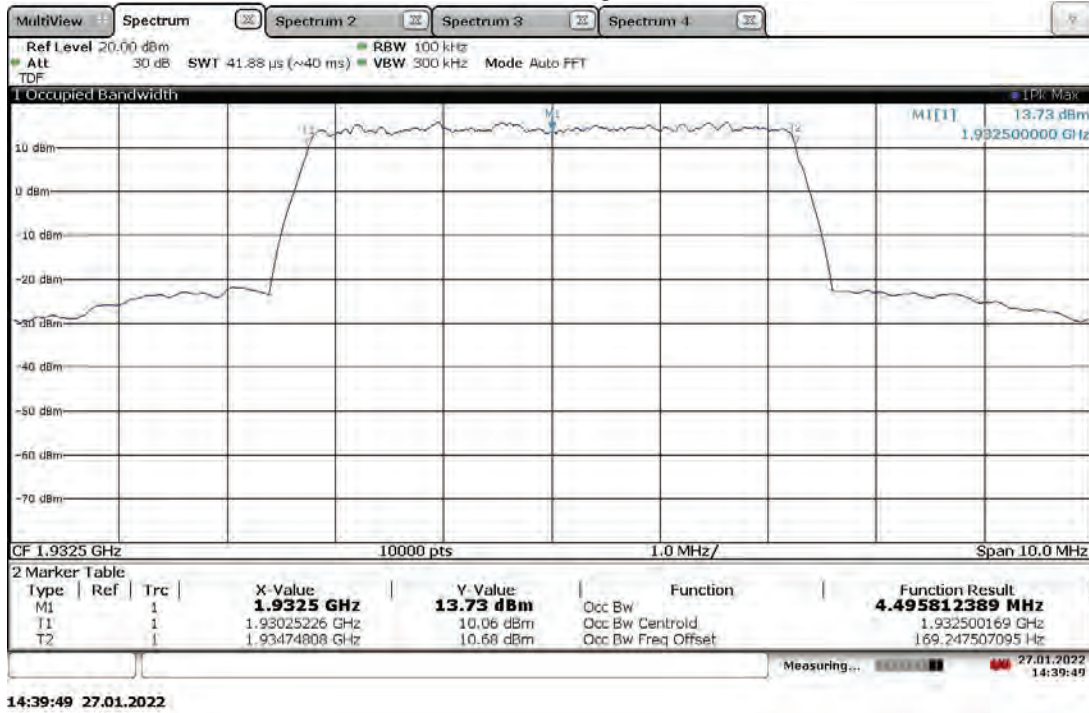
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, Low Channel 1940 MHz (4G LTE)
Upper Extreme Voltage: 57.0VDC



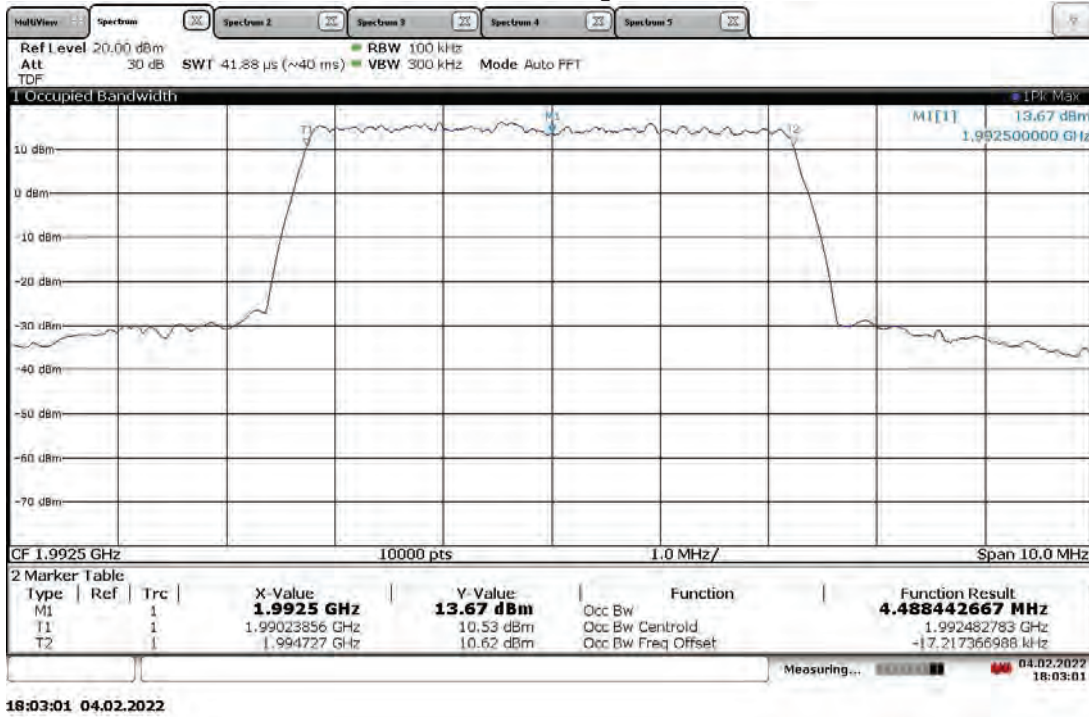
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, High 1985 MHz (4G LTE)
Upper Extreme Voltage: 57.0VDC



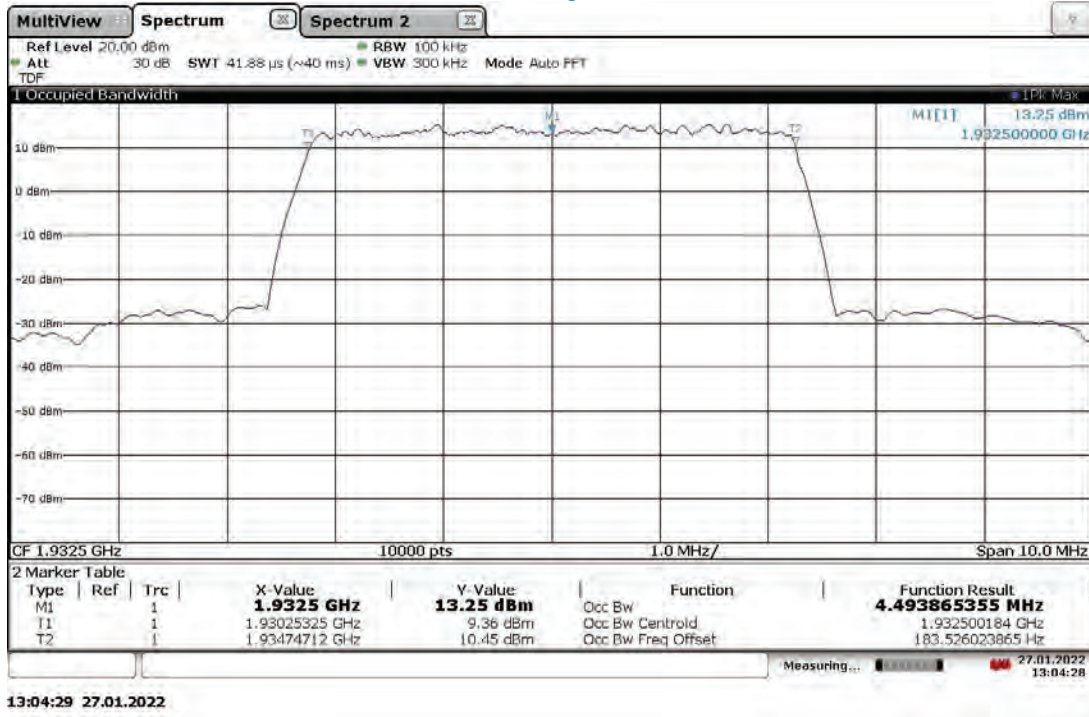
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, Low Channel 1932.5 MHz (5G nR)
Lower Extreme Voltage: 41.1VDC



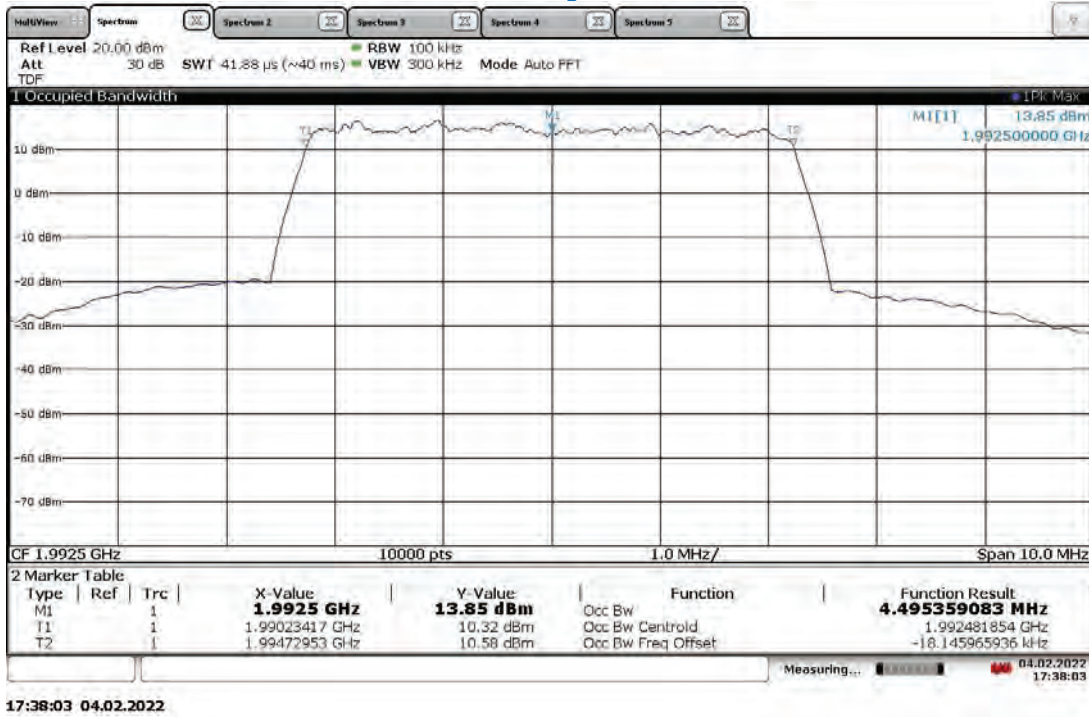
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, High Channel 1992.5 MHz (5G nR)
Lower Extreme Voltage: 41.1VDC



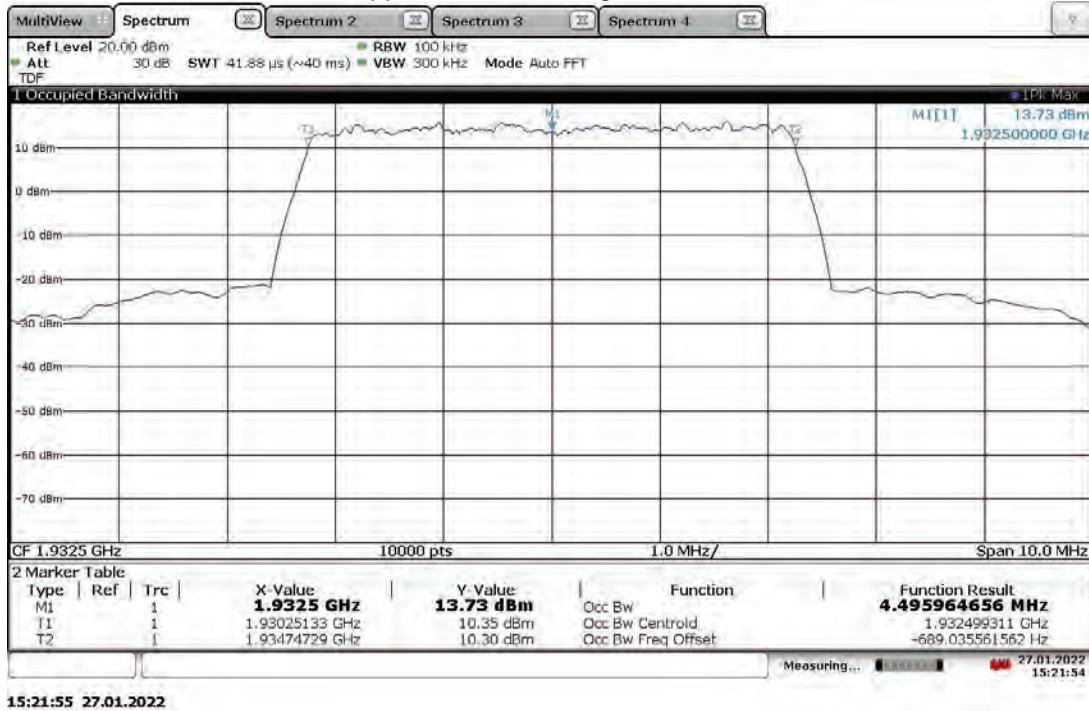
Slot 0 (Band 25ANT1, Modulation: QPSK, Bandwidth: 5 MHz, Low Channel 1932.5 MHz (5G nR)
Nominal Voltage: 48 VDC



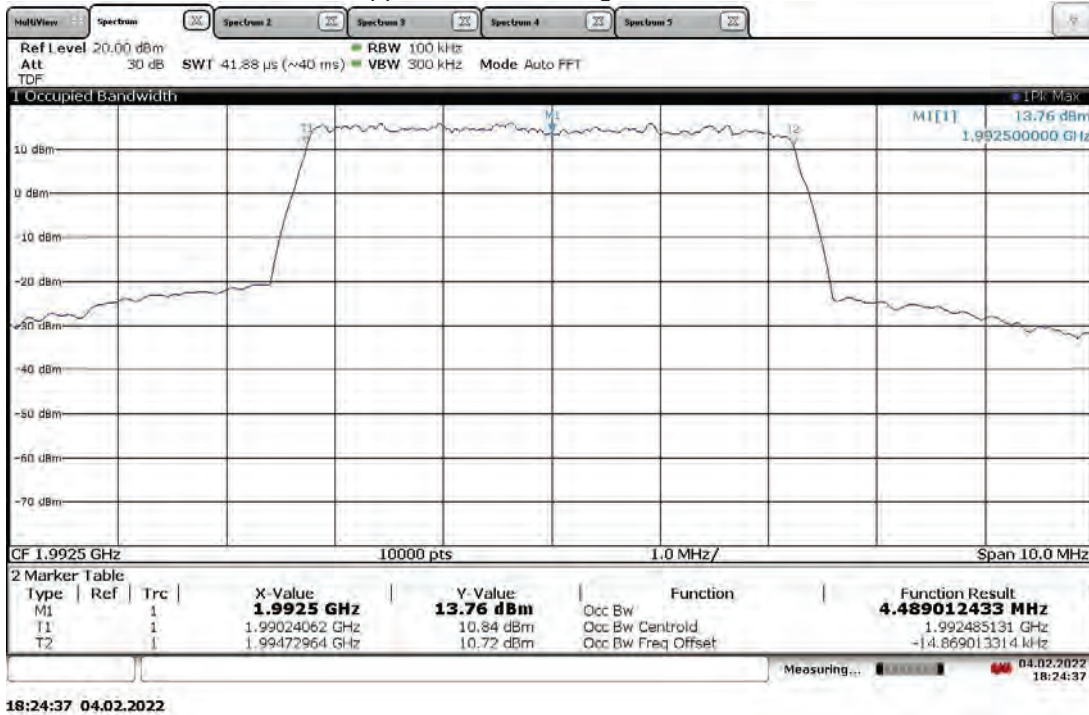
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, High Channel 1992.5 MHz (5G nR)
Nominal Voltage: 48 VDC



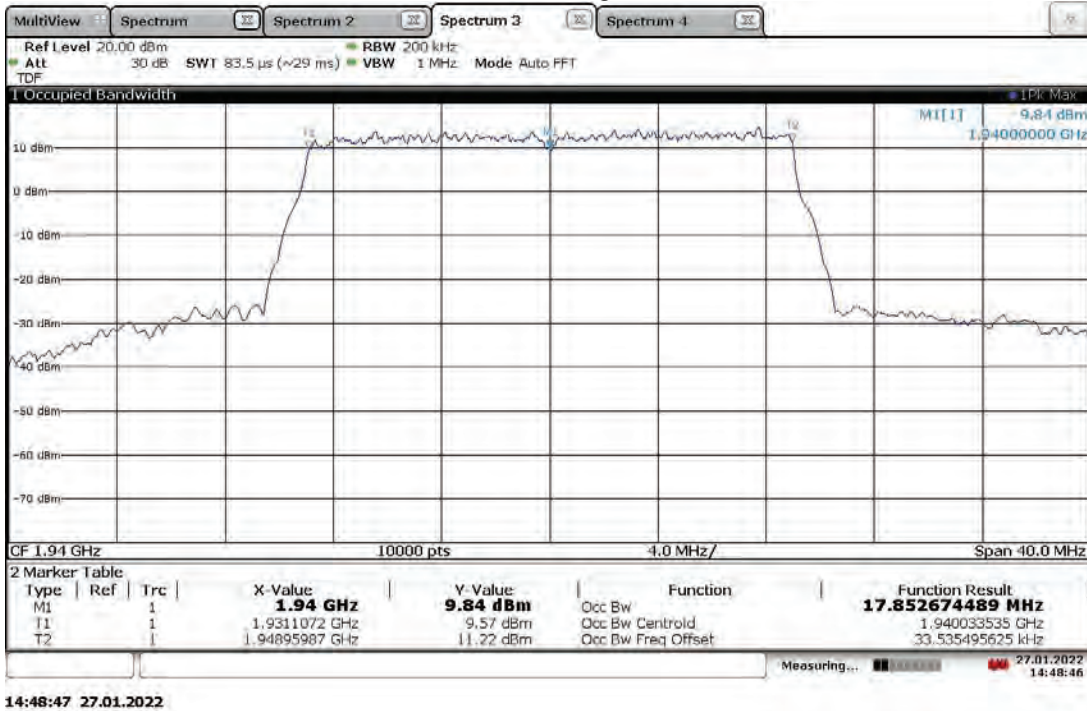
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, Low Channel 1932.5 MHz (5G nR)
Upper Extreme Voltage: 57.0VDC



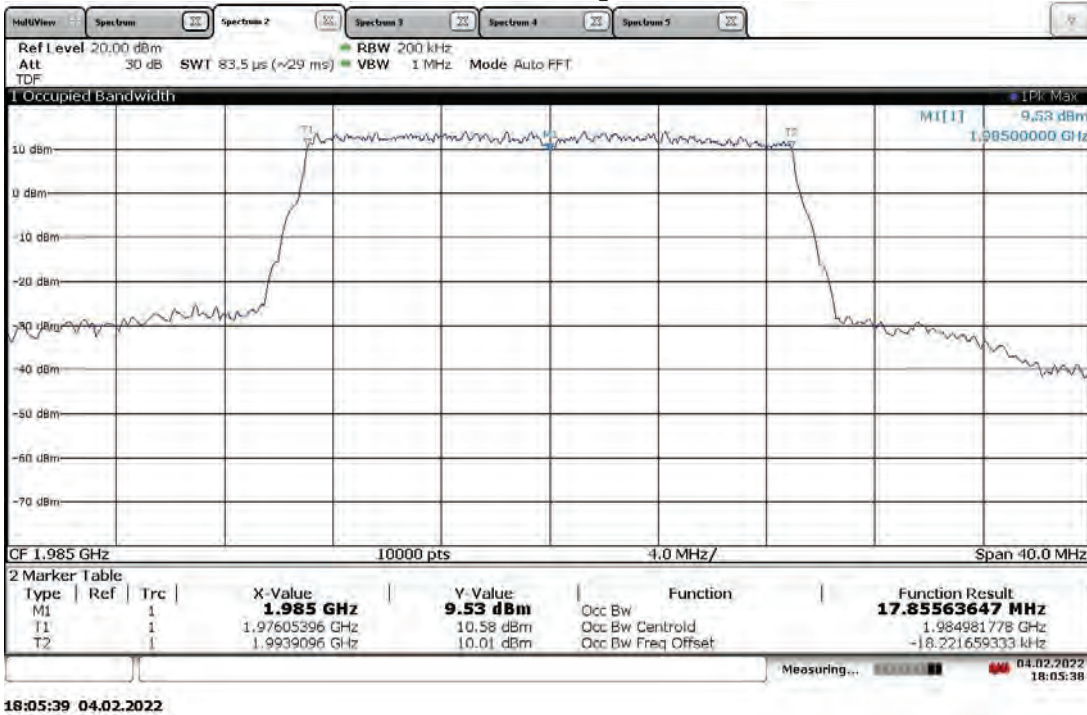
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 5 MHz, High Channel 1992.5 MHz (5G nR)
Upper Extreme Voltage: 57.0VDC



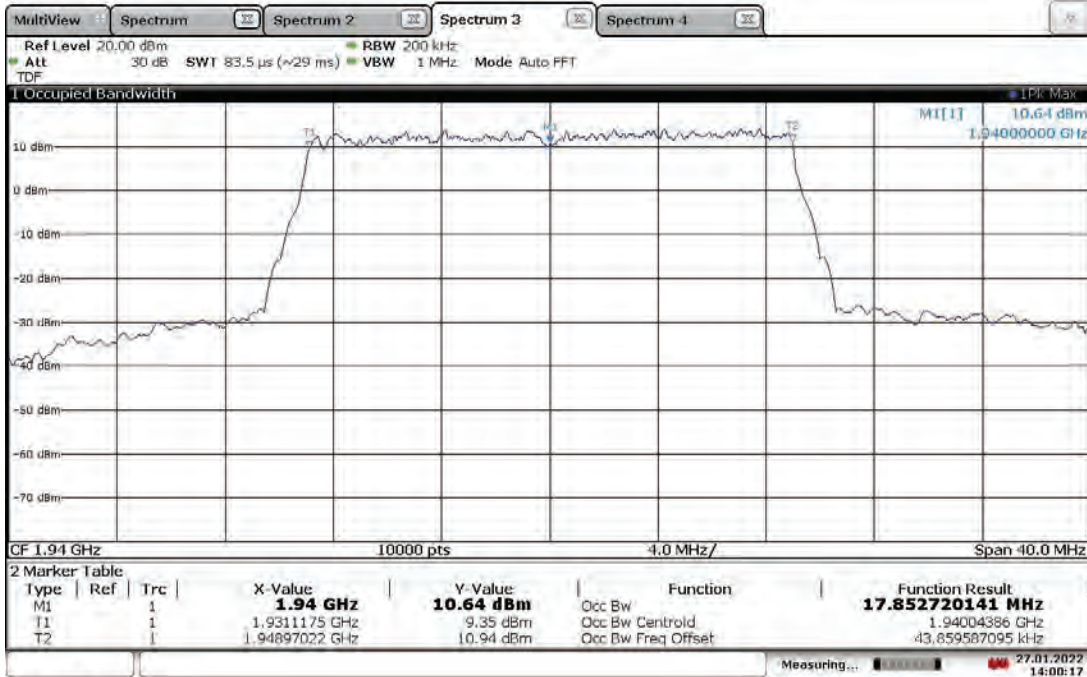
Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, Low Channel 1940 MHz (5G nR)
Power Extreme Voltage: 41.1VDC



Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, High Channel 1985 MHz (5G nR)
Lower Extreme Voltage: 41.1VDC

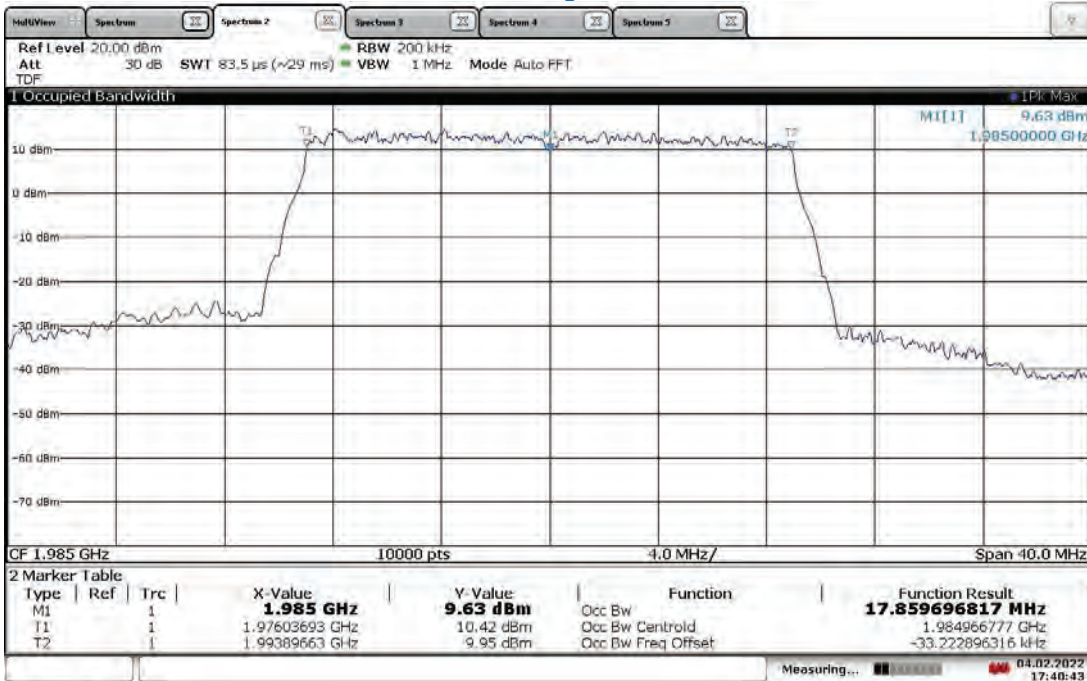


Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, Low Channel 1940 MHz (5G nR)
Nominal Voltage: 48 VDC



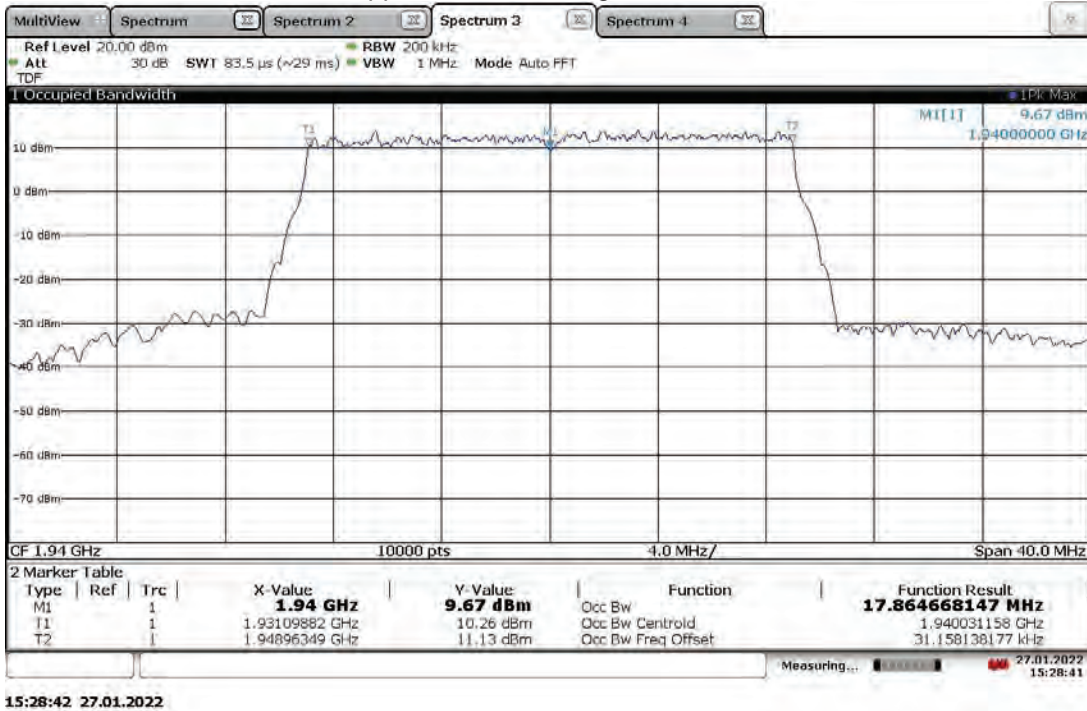
14:00:18 27.01.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, High Channel 1985 (5G nR)
Nominal Voltage: 48 VDC

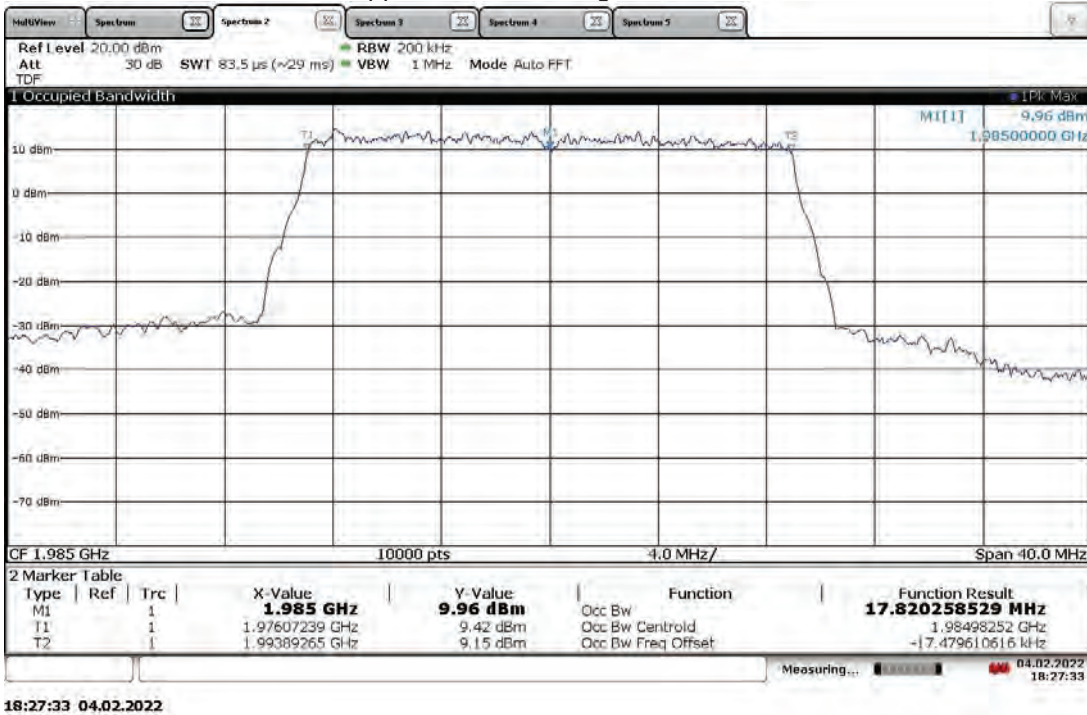


17:40:43 04.02.2022

Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, Low Channel 1940 MHz (5G nR)
Upper Extreme Voltage: 57.0VDC



Slot 0 (Band 25), ANT1, Modulation: QPSK, Bandwidth: 20 MHz, High Channel 1985 MHz (5G nR)
Upper Extreme Voltage: 57.0VDC



Intertek

Report Number: 104915434BOX-001c

Issued: 02/24/2022
Revised: 03/30/2022

Test Personnel: Kouma Sinn *KPS*
Supervising/Reviewing
Engineer:
(Where Applicable) N/A

Product Standard: FCC Part 24
Input Voltage: 48VDC (POE)

Pretest Verification w/
Ambient Signals or
BB Source: N/A

Test Date: 01/25/2023, 01/26/2022,
01/27/2022, 02/04/2022

Limit Applied: See report section 10.3

Ambient Temperature: 24, 24, 22, 24 °C

Relative Humidity: 17, 10, 17, 12 %

Atmospheric Pressure: 1002, 1014, 1022, 1010 mbars

Deviations, Additions, or Exclusions: None

11 Transmitter spurious emissions

11.1 Method

Tests are performed in accordance with ANSI C63.26 and CFR47 FCC Parts 2.1051, 2.1053, 2.1057, and 24

TEST SITE: EMC Lab & 10m ALSE

The EMC Lab has one Semi-anechoic Chamber and one Shielded Chamber. AC Mains Power is available at 120, 230, and 277 Single Phase; 208, 400, and 480 3-Phase. Large reference ground-planes are installed in the general lab area to facilitate EMC work not requiring a shielded environment.

The 10m ALSE is 13m (Length) x 21m (Depth) x 10m (Height) with the effective size in terms of space from the tips of the absorber is 12m (Length) x 20m (Depth) x 8.5m (Height). This chamber achieves broadband performance using a unique arrangement of hybrid and ferrite tile absorber. This chamber has a built in 3m diameter turntable (Embedded type). The metal structure of the table makes electrical connection around the entire circumference of the turntable to the ground plane with a metal brush type connection. The turntable is located on one end of the chamber and the antennas are mounted 3 and 10 meters away at the other end of the chamber on the adjustable an Antenna Mast. The antenna mast is a non-conductive bore sighted type with remote control of antenna height and polarization. The Antenna Mast and the turntable can be remotely controlled through the controller located in the adjacent Control room. A Styrofoam table 80 cm high is used for table-top equipment.

Measurement Uncertainty

Measurement	Frequency Range	Expanded Uncertainty (k=2)	Ucisp
Radiated Emissions, 10m	30-1000 MHz	4.6dB	6.3 dB
Radiated Emissions, 3m	30-1000 MHz	5.3 dB	6.3 dB
Radiated Emissions, 3m	1-6 GHz	4.5 dB	5.2 dB
Radiated Emissions, 3m	6-15 GHz	5.2 dB	5.5 dB
Radiated Emissions, 3m	15-18 GHz	5.0 dB	5.5 dB
Radiated Emissions, 3m	18-40 GHz	5.0 dB	5.5 dB

As shown in the table above our radiated emissions U_{lab} is less than the corresponding U_{CISPR} reference value in CISPR 16-4-2 Table 1, hence the compliance of the product is only based on the measured value, and no measurement uncertainty correction is required, based on CISPR 22 and CISPR 11 (for 2006 and later revisions) Clause 11.

Sample Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF - AG$$

Where

- FS = Field Strength in dB μ V/m
- RA = Receiver Amplitude (including preamplifier) in dB μ V
- CF = Cable Attenuation Factor in dB
- AF = Antenna Factor in dB
- AG = Amplifier Gain in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows.

Assume a receiver reading of 52.0 dB μ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted, giving a field strength of 32 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

RA = 52.0 dB μ V
 AF = 7.4 dB/m
 CF = 1.6 dB
 AG = 29.0 dB
 FS = 32 dB μ V/m

To convert from dB μ V to μ V or mV the following was used:

$UF = 10^{(NF / 20)}$ where UF = Net Reading in μ V
 NF = Net Reading in dB μ V

Example:

$FS = RA + AF + CF - AG = 52.0 + 7.4 + 1.6 - 29.0 = 32.0$
 $UF = 10^{(32 \text{ dB}\mu\text{V} / 20)} = 39.8 \mu\text{V/m}$

Alternately, when BAT-EMC Emission Software is used, the "Level" includes all losses and gains and is compared directly in the "Margin" column to the "Limit". The "Correction" includes Antenna Factor, Preamp, and Cable Loss. These are already accounted for in the "Level" column.

Intertek

Report Number: 104915434BOX-001c

Issued: 02/24/2022
Revised: 03/30/2022

11.2 Test Equipment Used:

Test equipment used for antenna port conducted test

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
CEN001'	DC-40GHz attenuator 20dB	Centric RF	C411-20	CEN001	01/22/2021	01/22/2022
CBLSHF204'	Cable, SMA - SMA, 9kHz -40GHz, (Cable Kit 5)	Huber + Suhner	Sucoflex 102EA	234714001	02/03/2021	02/03/2022
ROS005-1'	Signal and Spectrum Analyzer	Rohde and Shwartz	FSW43	100646	11/02/2021	11/02/2022
DAV005'	Weather Station	Davis	6250	MS191218083	02/07/2021	02/07/2022
DS40'	Temp, humidity, pressure gauge	Digi Sense	68000-49	181717625	11/09/2021	11/09/2022

Software Utilized:

Name	Manufacturer	Version
None	--	--

Test equipment used for radiated emissions, 9 kHz-30 MHz (02/14/2022 & 02/16/2022)

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DAV007'	Weather Station Vantage Vue	Davis	6250	MS191212003	03/20/2021	03/20/2022
145108'	EMI Test Receiver (20Hz - 40GHz)	Rohde & Schwarz	ESIB40	100209	06/22/2021	06/22/2022
145-420'	Receiver to floor cable	Utiflex	UFB311A-2-0591-70070	145-420	02/17/2021	02/17/2022
CBL051'	9kHz to 1GHz BNC/ BNC Cable	Belden	RG58A/U	none	04/16/2021	04/16/2022
ETS003'	9kHz-30MHz Active Loop Antenna	ETS Lindgren	6502	00143396	08/26/2021	08/26/2022
145-422'	10Amp Pre-amp to under floor	Utiflex	UFB311A-0-2756-70070	145-422	02/17/2021	02/17/2022
145-414'	Cables 145-400 145-403 145-405 145-409	Huber + Suhner	3m Track A cables	multiple	07/09/2021	07/09/2022

Test equipment used for Radiated emissions, 30-1000 MHz

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DAV007'	Weather Station Vantage Vue	Davis	6250	MS191212003	03/20/2021	03/20/2022
145108'	EMI Test Receiver (20Hz - 40GHz)	Rohde & Schwarz	ESIB40	100209	06/22/2021	06/22/2022
145-420'	Receiver to floor cable	Utiflex	UFB311A-2-0591-70070	145-420	02/17/2021	02/17/2022
PRE11'	50dB gain pre-amp	Pasternack	PRE11	PRE11	09/02/2021	09/02/2022
IW006'	DC-18GHz cable 8.4m long	Insulated Wire	2800-NPS	IW006	07/22/2021	07/22/2022
IW001'	2 meter cable	Insulated Wire	2801-NPS	001	09/23/2021	09/23/2022
145-406'	10m Track A In-floor Cable #1	Huber + Suhner	sucoflex 160-19220mm	001	07/22/2021	07/22/2022
145145'	Broadband Hybrid Antenna 30 MHz - 3 GHz	Sunol Sciences Corp.	JB3	A122313	06/09/2021	06/09/2022

Test equipment used for radiated emissions, 1-18 GHz

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DAV007'	Weather Station Vantage Vue	Davis	6250	MS191212003	03/20/2021	03/20/2022
IW003'	8.4 meter cable	Insulated Wire	2800-NPS	003	10/15/2021	10/15/2022
ETS002'	1-18GHz DRG Horn Antenna	ETS Lindgren	3117	00143260	08/24/2021	08/24/2022
145108'	EMI Test Receiver (20Hz - 40GHz)	Rohde & Schwarz	ESIB40	100209	06/22/2021	06/22/2022
145-420'	Receiver to floor cable	Utiflex	UFB311A-2-0591-70070	145-420	02/17/2021	02/17/2022
145-422'	10Amp Pre-amp to under floor	Utiflex	UFB311A-0-2756-70070	145-422	02/17/2021	02/17/2022
145-414'	Cables 145-400 145-403 145-405 145-409	Huber + Suhner	3m Track A cables	multiple	07/09/2021	07/09/2022
PRE12'	Pre-amplifier	Com Power	PAM-118A	18040117	12/06/2021	12/06/2022

Test equipment used for radiated emissions, 18-20 GHz (02/15/2022)

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DAV007'	Weather Station Vantage Vue	Davis	6250	MS191212003	03/20/2021	03/20/2022
PRE8'	PREAMPLIFIER 1- 40 GHz	MITEQ	NSP4000-NF	507145	12/27/2021	12/27/2022
REA006'	18GHz High Pass Filter	Reactel, Inc	7HS-18G/40G K11	(06)1	04/23/2021	04/23/2022
CBLHF2012-2M-2'	2m 9kHz-40GHz Coaxial Cable - SET2	Huber + Suhner	SF102	252675002	02/10/2022	02/10/2023
ETS004'	18-40GHz horn antenna	ets004	3116C	00218579	03/08/2021	03/08/2022
MEG002'	Cable,SMA-SMA,9KHz-40GHz, (Cable Kit 6)	Megaphase	TM40-K1K1-197	59006401001	12/06/2021	12/06/2022
ROS005-1'	Signal and Spectrum Analyzer	Rohde and Shwartz	FSW43	100646	11/02/2021	11/02/2022

Software Utilized:

Name	Manufacturer	Version
BAT-EMC	Nexio	3.18.0.16

11.3 Results:

The sample tested was found to Comply. Where a resolution bandwidth of less than 1 MHz was used (in some cases, 120 kHz or 100 kHz), more than 10 dB margin to the limit is shown. Since the two antenna ports transmit uncorrelated data streams and use cross polarized antennas, no adjustments to the test results were applied due to MIMO operation, per KDB 662911.

§24.238(a): 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.

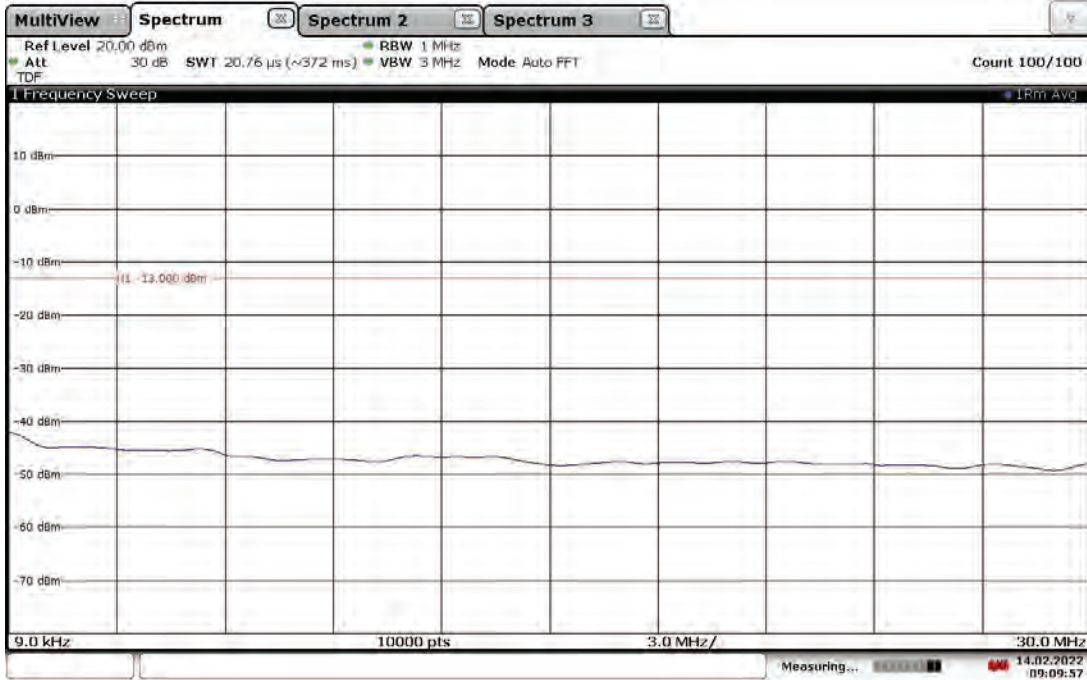
(b) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). 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.

11.4 Setup Photographs:

Confidential – Photos not included in this report

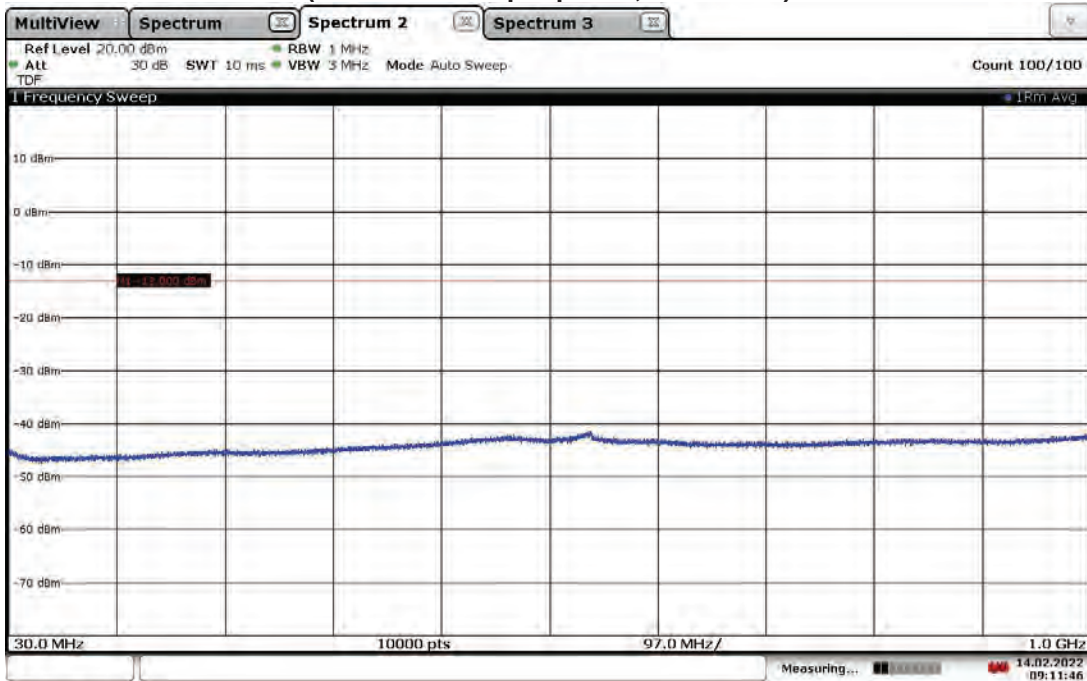
11.5 Plots/Data:

Antenna Port (ANT0) Conducted Emissions, 9 kHz-30 MHz
Band 25(4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.16 dBm)



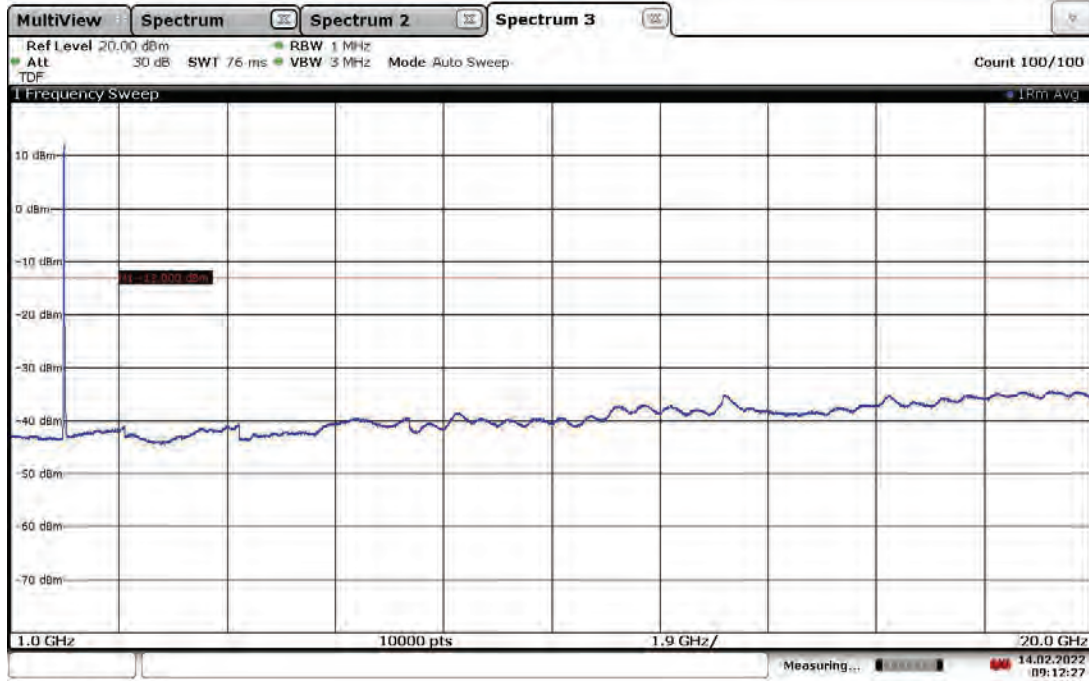
09:09:57 14.02.2022

Antenna Port (ANT0) Conducted Emissions, 30-1000 MHz
Band 25(4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.16 dBm)



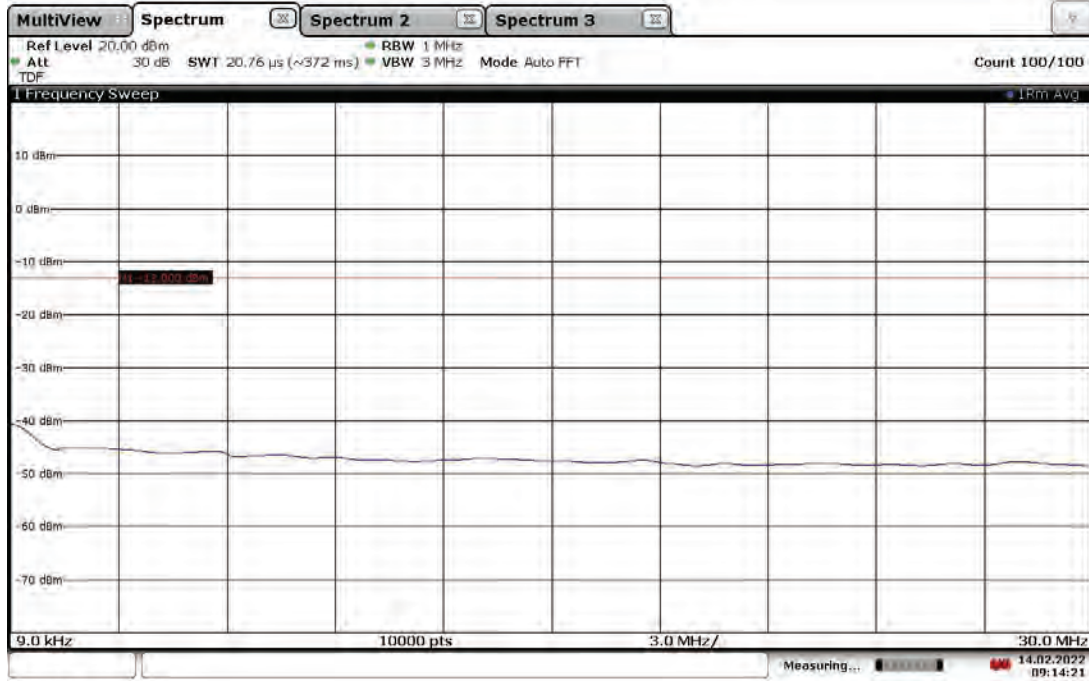
09:11:46 14.02.2022

Antenna Port (ANT0) Conducted Emissions, 1-20 GHz
Band 25(4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.16 dBm)



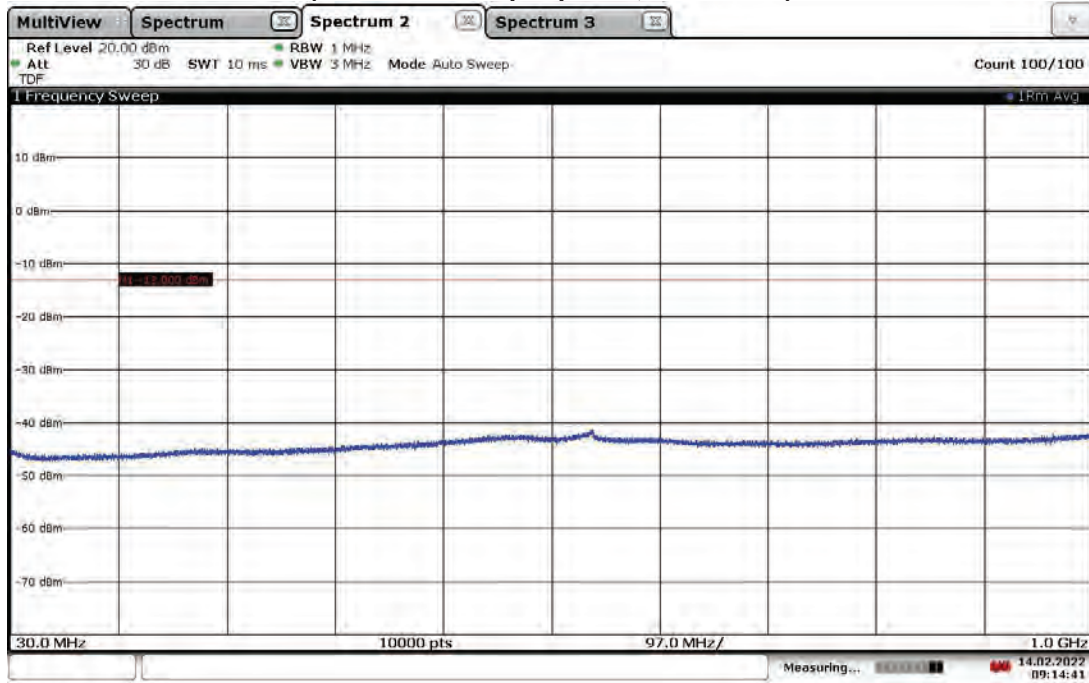
09:12:28 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 9 kHz-30 MHz
Band 25 (4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.16 dBm)



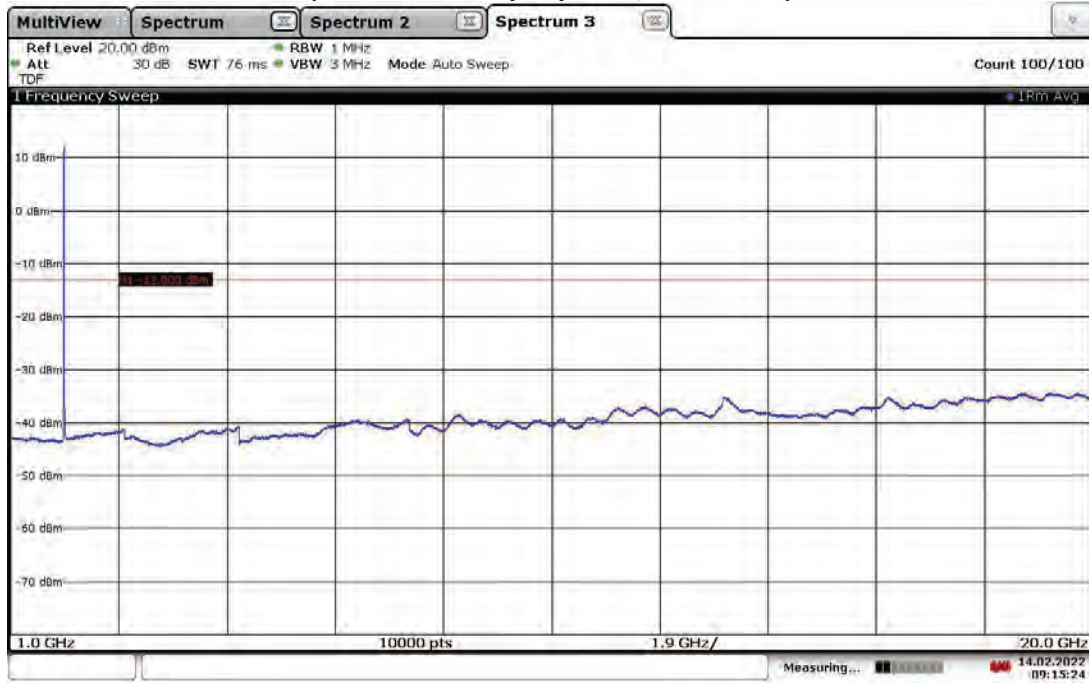
09:14:21 14.02.2022

**Antenna Port (ANT1) Conducted Emissions, 30-1000 MHz
Band 25 (4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.16 dBm)**



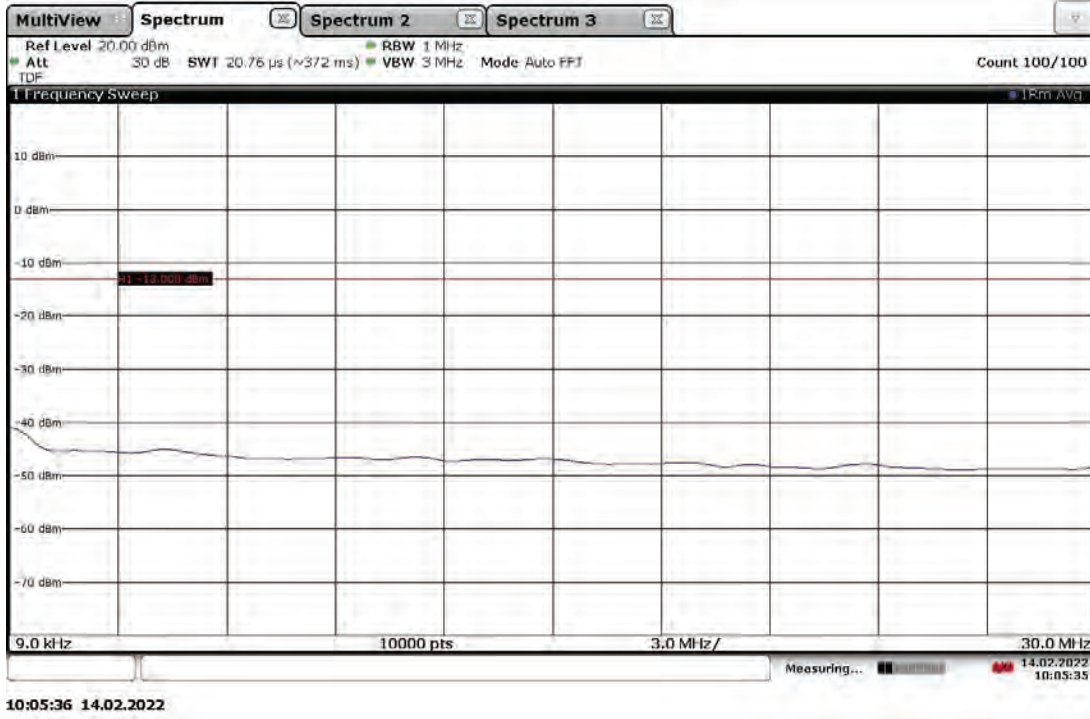
09:14:41 14.02.2022

**Antenna Port (ANT1) Conducted Emissions, 1-20 GHz
Band 25 (4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.16 dBm)**



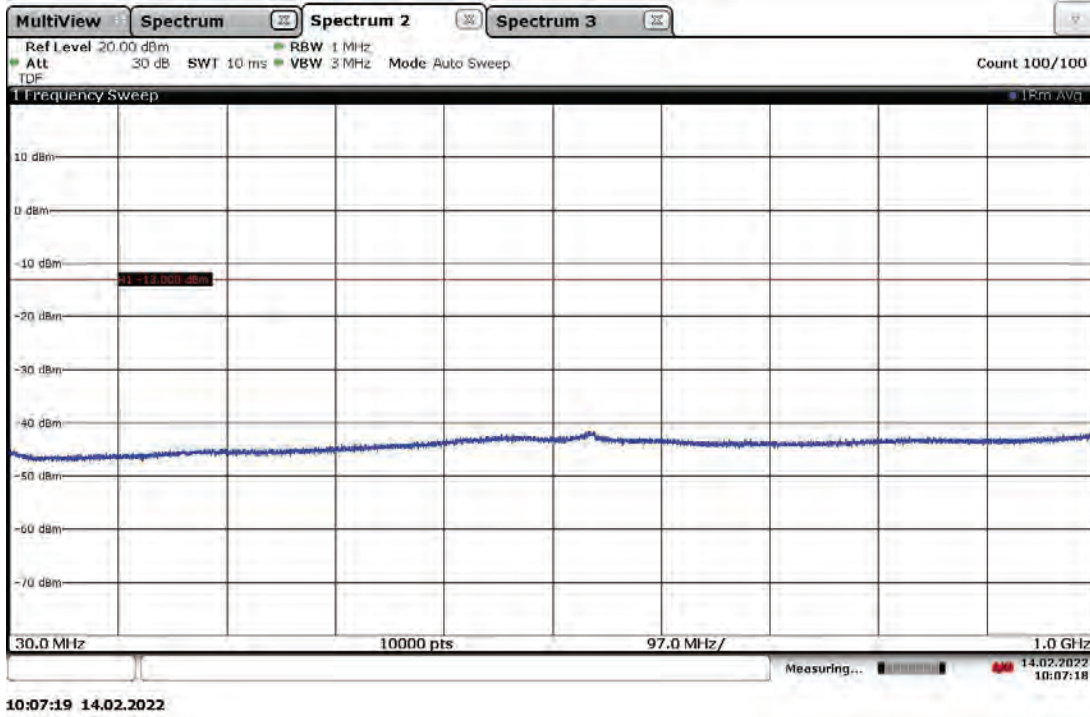
09:15:24 14.02.2022

**Antenna Port (ANT0) Conducted Emissions, 9 kHz-30 MHz
Band 25(4G LTE), Mid Channel 1962.5 MHz, BW 15 MHz, Modulation QPSK
(Worst-case output power, 22.79 dBm)**



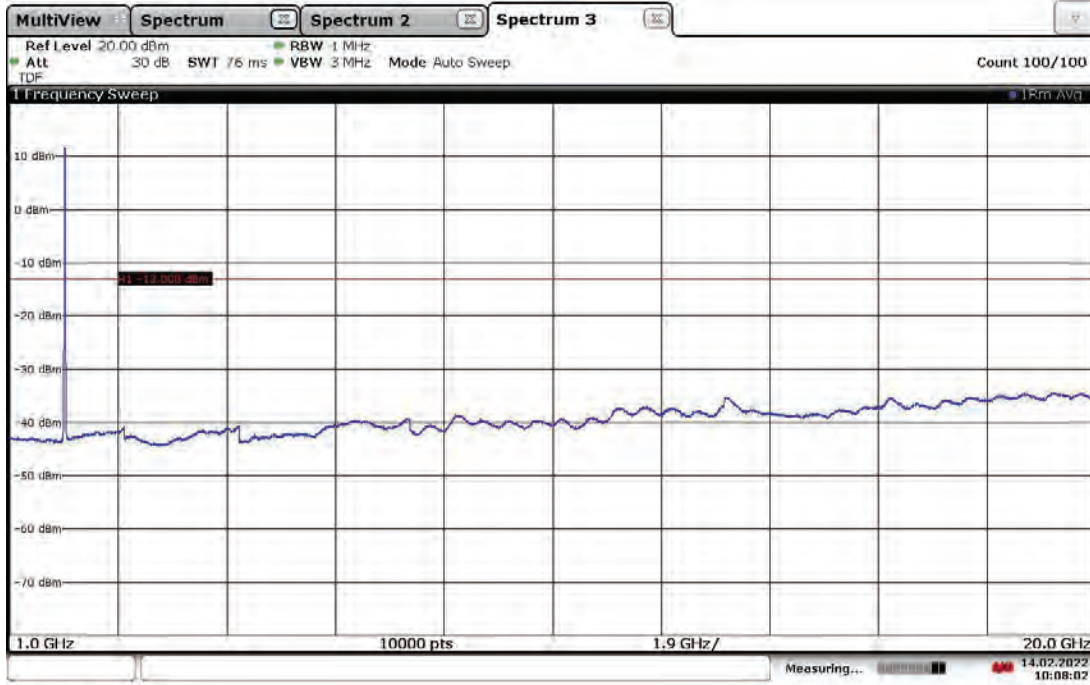
10:05:36 14.02.2022

**Antenna Port (ANT0) Conducted Emissions, 30 MHz-1000 MHz
Band 25(4G LTE), Mid Channel 1962.5 MHz, BW 15 MHz, Modulation QPSK
(Worst-case output power, 22.79 dBm)**



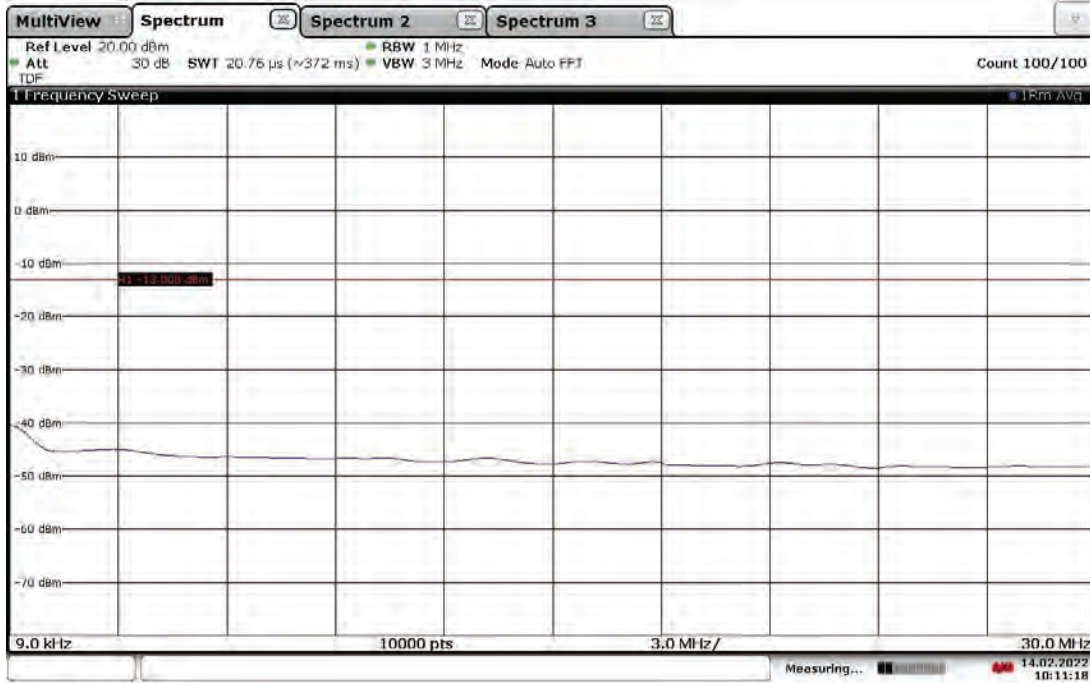
10:07:19 14.02.2022

Antenna Port (ANT0) Conducted Emissions, 1-20 GHz
Band 25(4G LTE), Mid Channel 1962.5 MHz, BW 15 MHz, Modulation QPSK
(Worst-case output power, 22.79 dBm)



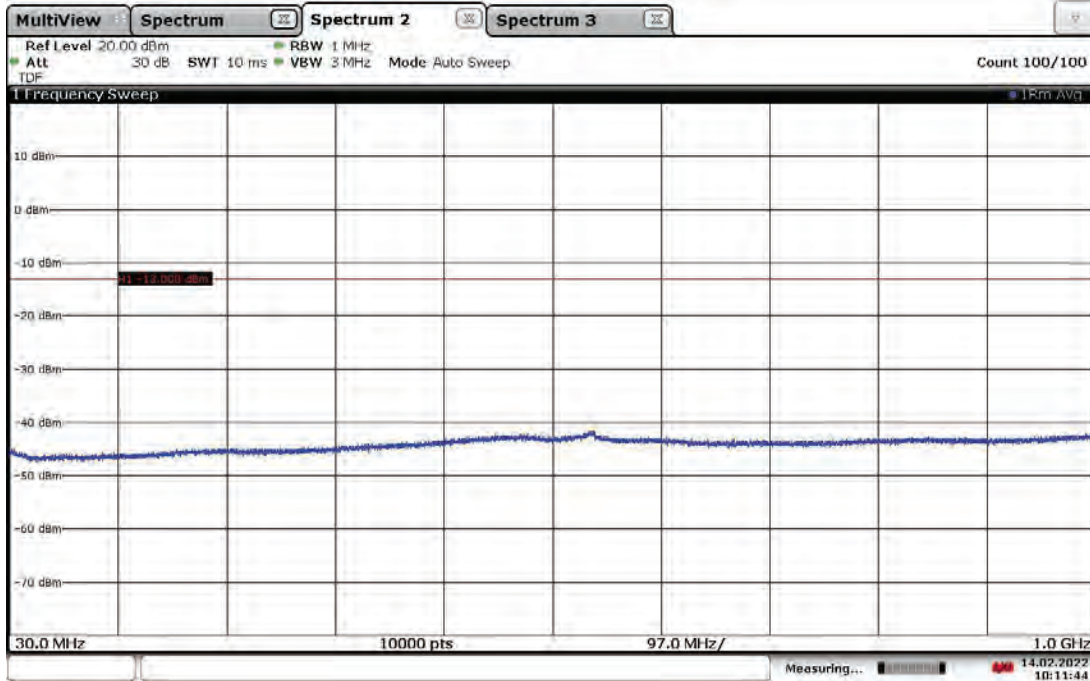
10:08:02 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 9 kHz-30 MHz
Band 25(4G LTE), Mid Channel 1962.5 MHz, BW 15 MHz, Modulation QPSK
(Worst-case output power, 22.79 dBm)



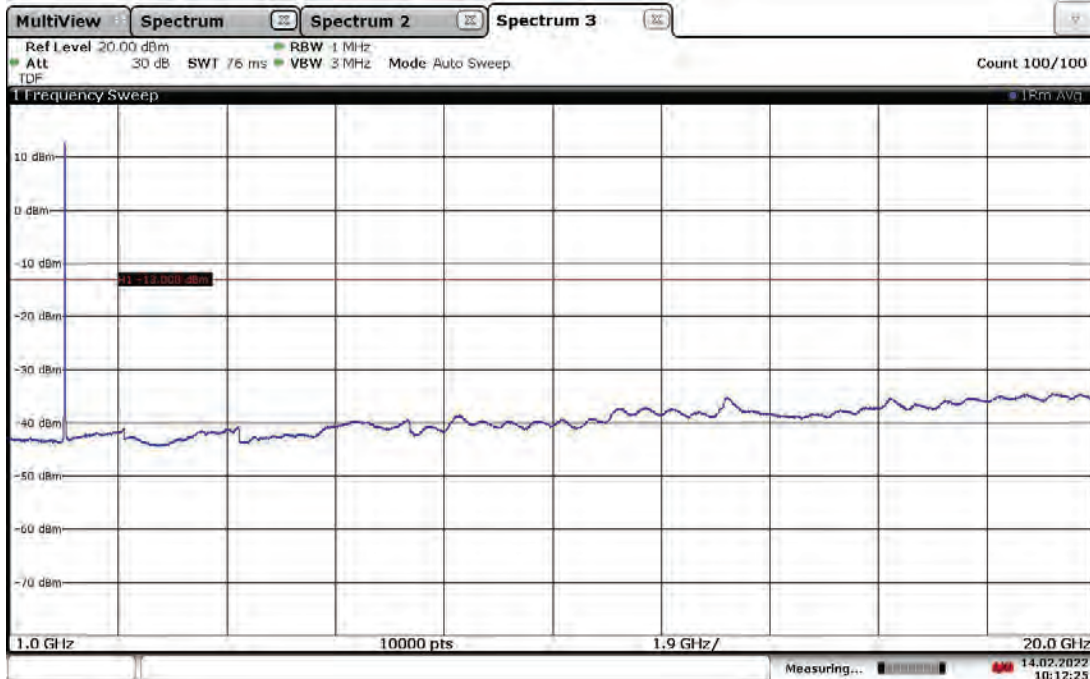
10:11:18 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 30 MHz-1 GHz
Band 25(4G LTE), Mid Channel 1962.5 MHz, BW 15 MHz, Modulation QPSK
(Worst-case output power, 22.79 dBm)



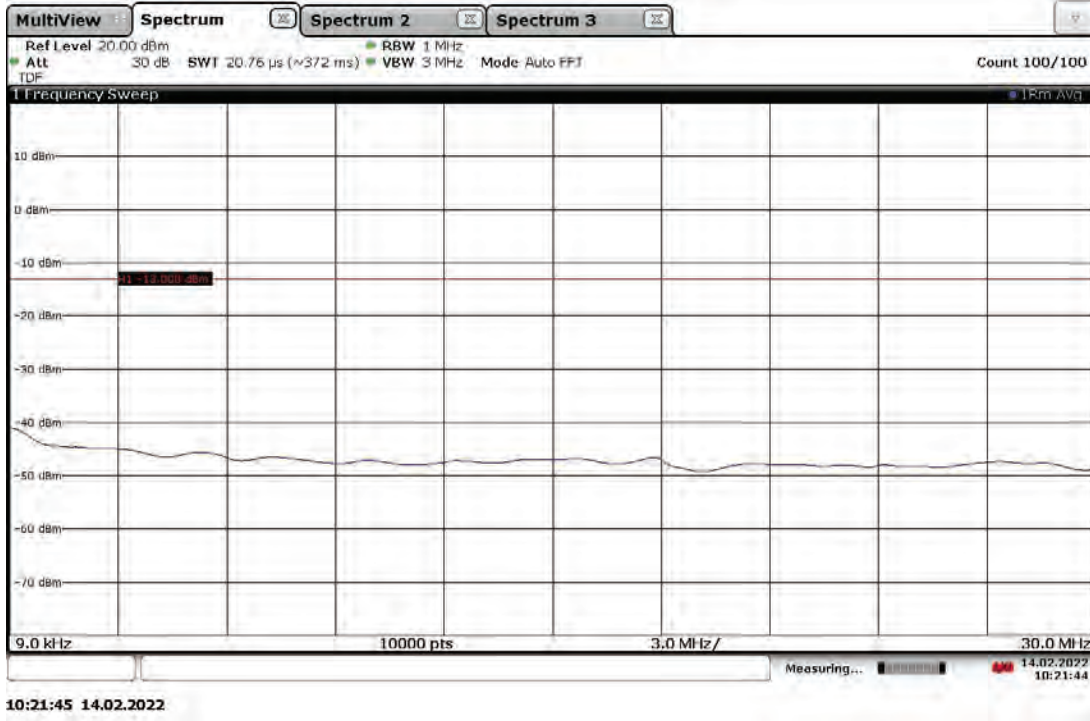
10:11:44 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 1-20 GHz
Band 25(4G LTE), Mid Channel 1962.5 MHz, BW 15 MHz, Modulation QPSK
(Worst-case output power, 22.79 dBm)

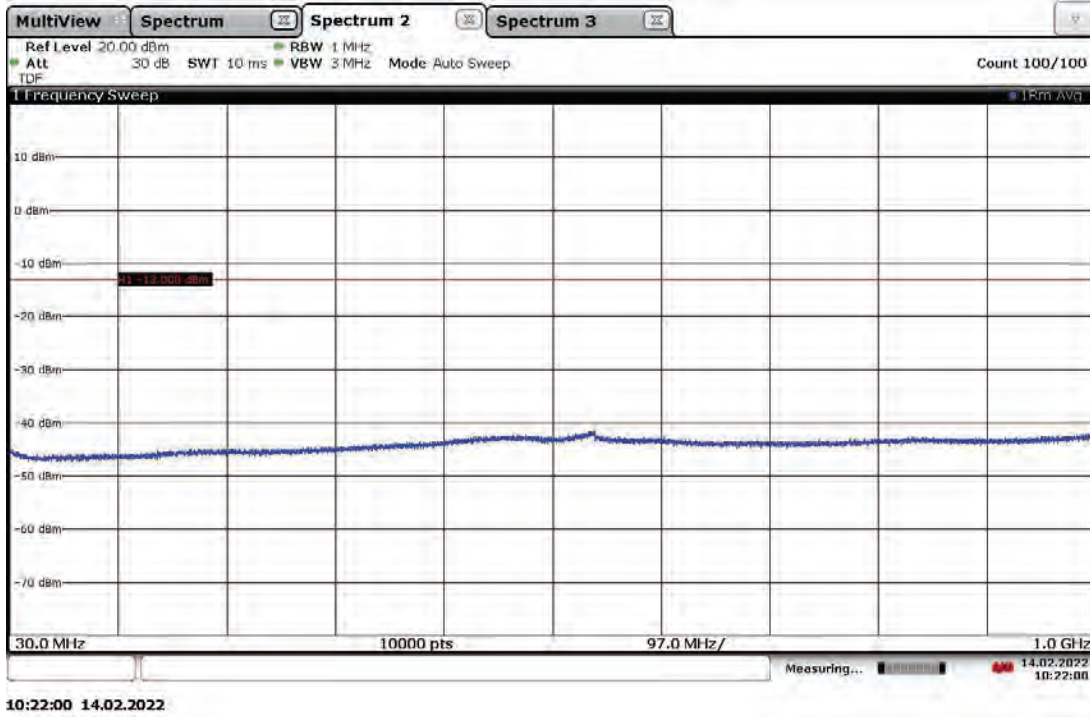


10:12:25 14.02.2022

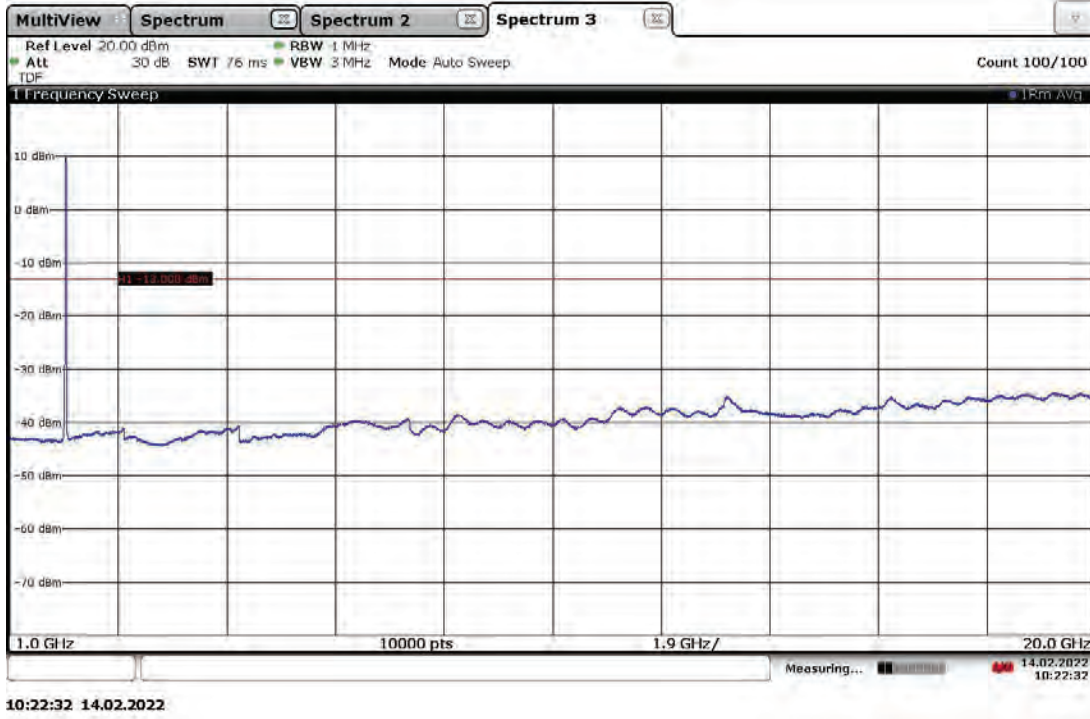
Antenna Port (ANT0) Conducted Emissions, 9 kHz-30 MHz
Band 25(4G LTE), High Channel 1985 MHz, BW 20 MHz, Modulation 64QAM
(Worst-case output power, 22.66 dBm)



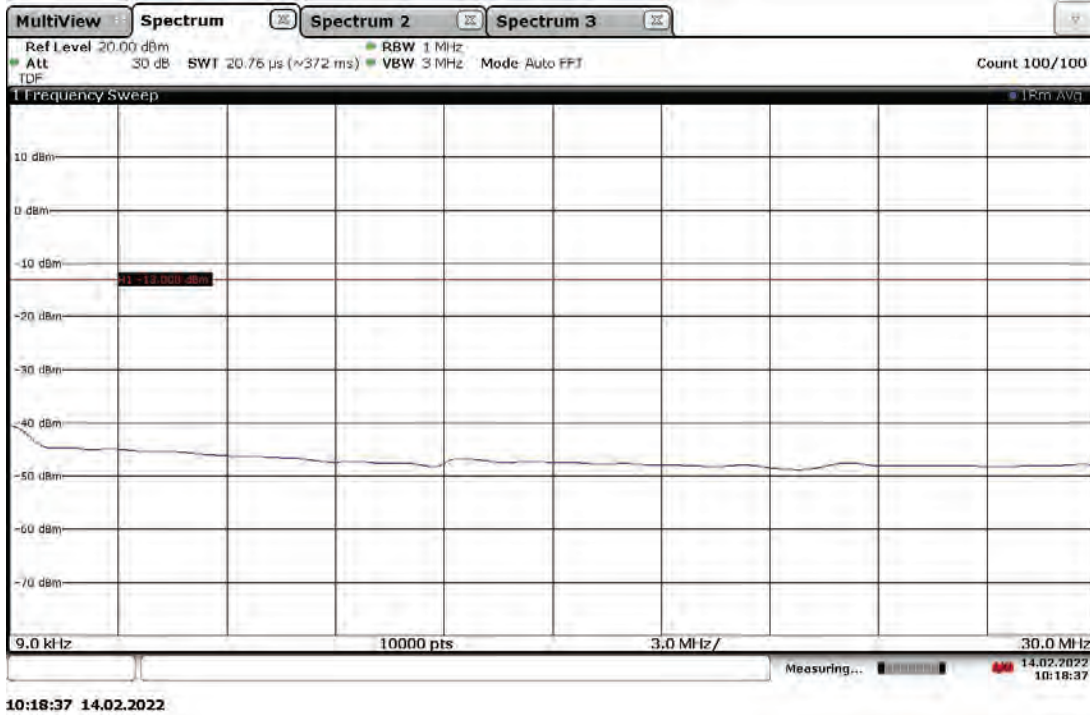
Antenna Port (ANT0) Conducted Emissions, 30 MHz-1 GHz
Band 25(4G LTE), High Channel 1985 MHz, BW 20 MHz, Modulation 64QAM
(Worst-case output power, 22.66 dBm)



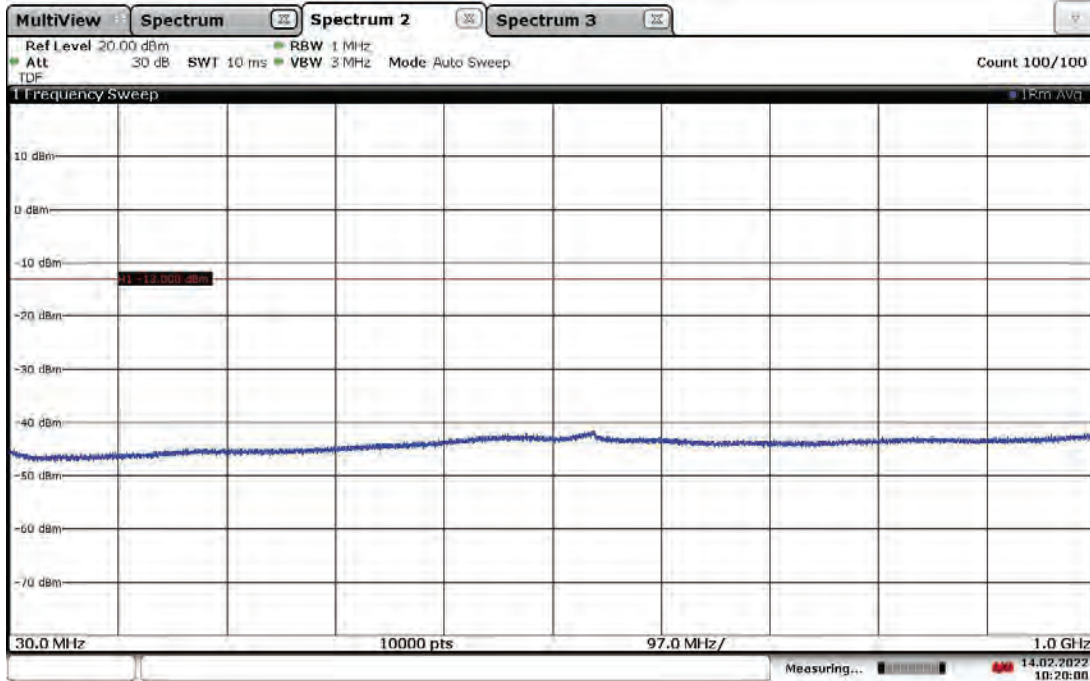
**Antenna Port (ANT0) Conducted Emissions, 1-20 GHz
Band 25(4G LTE), High Channel 1985 MHz, BW 20 MHz, Modulation 64QAM
(Worst-case output power, 22.66 dBm)**



**Antenna Port (ANT1) Conducted Emissions, 9 kHz-30 MHz
Band 25(4G LTE), High Channel 1985 MHz, BW 20 MHz, Modulation 64QAM
(Worst-case output power, 22.66 dBm)**

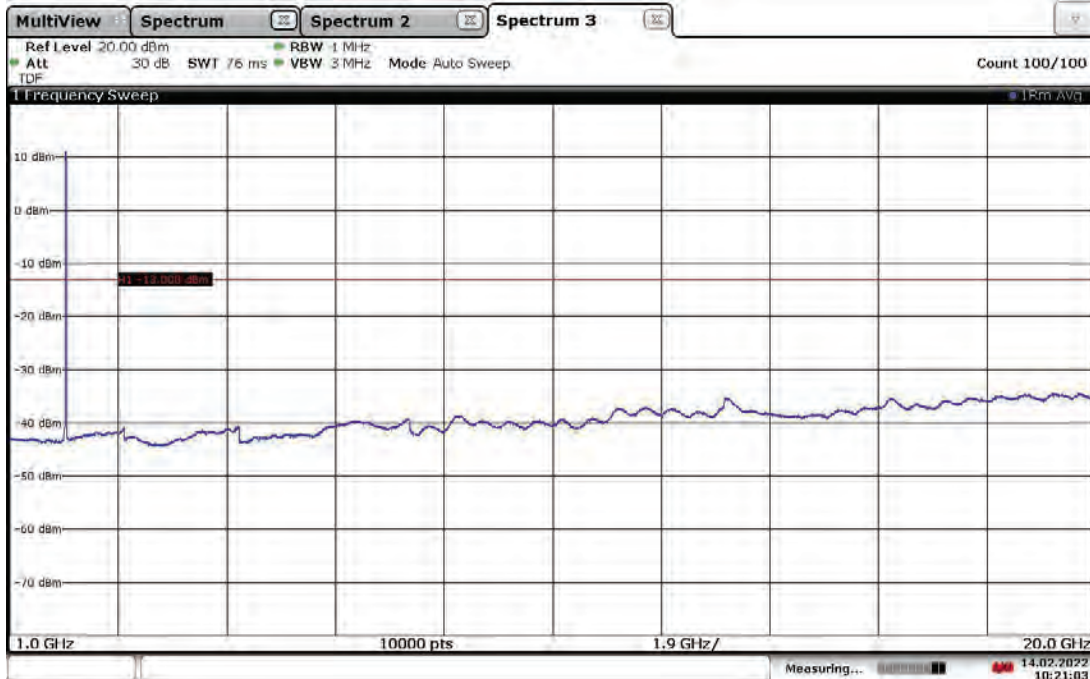


Antenna Port (ANT1) Conducted Emissions, 30 MHz-1 GHz
Band 25(4G LTE), High Channel 1985 MHz, BW 20 MHz, Modulation 64QAM
(Worst-case output power, 22.66 dBm)



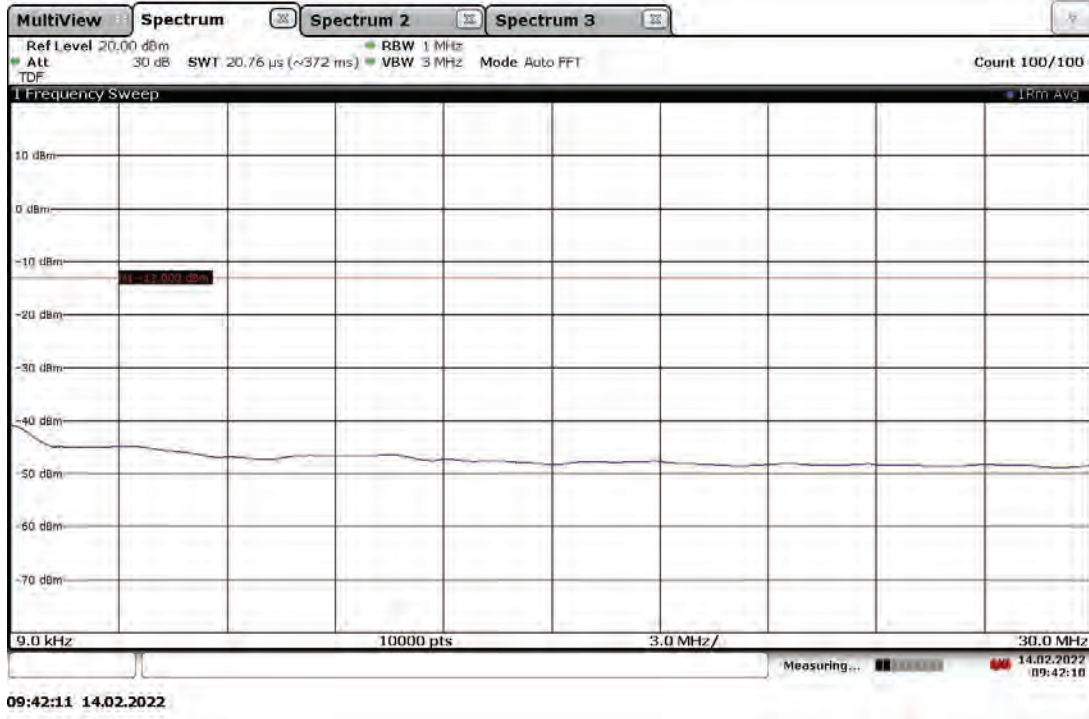
10:20:01 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 1-20 GHz
Band 25(4G LTE), High Channel 1985 MHz, BW 20 MHz, Modulation 64QAM
(Worst-case output power, 22.66 dBm)

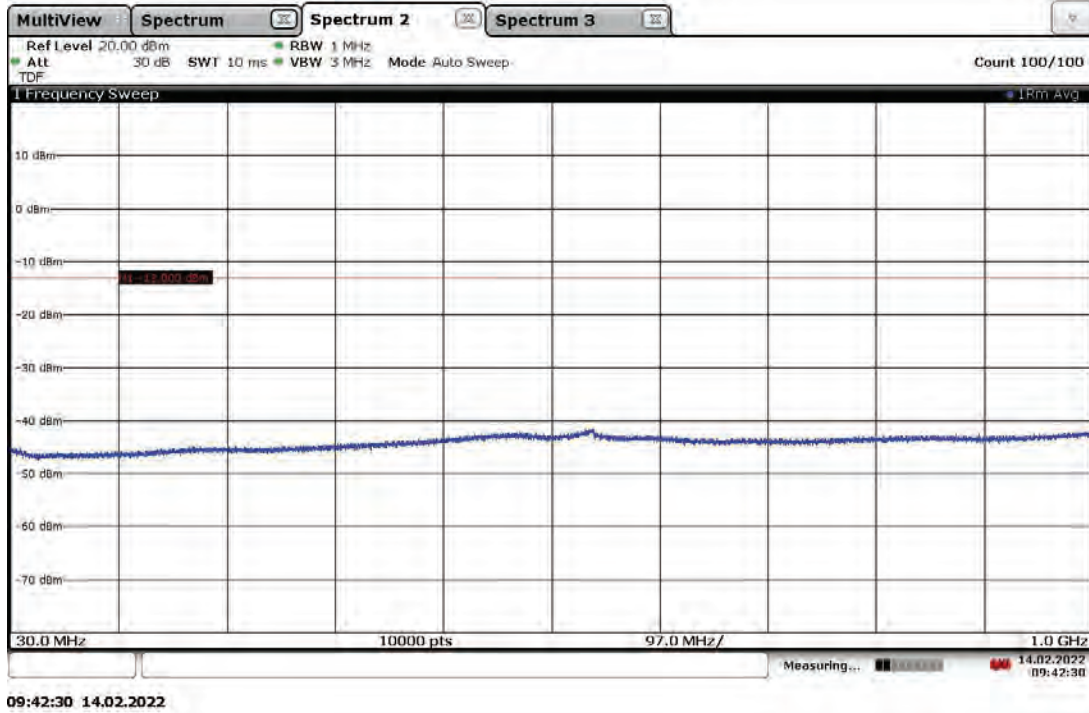


10:21:03 14.02.2022

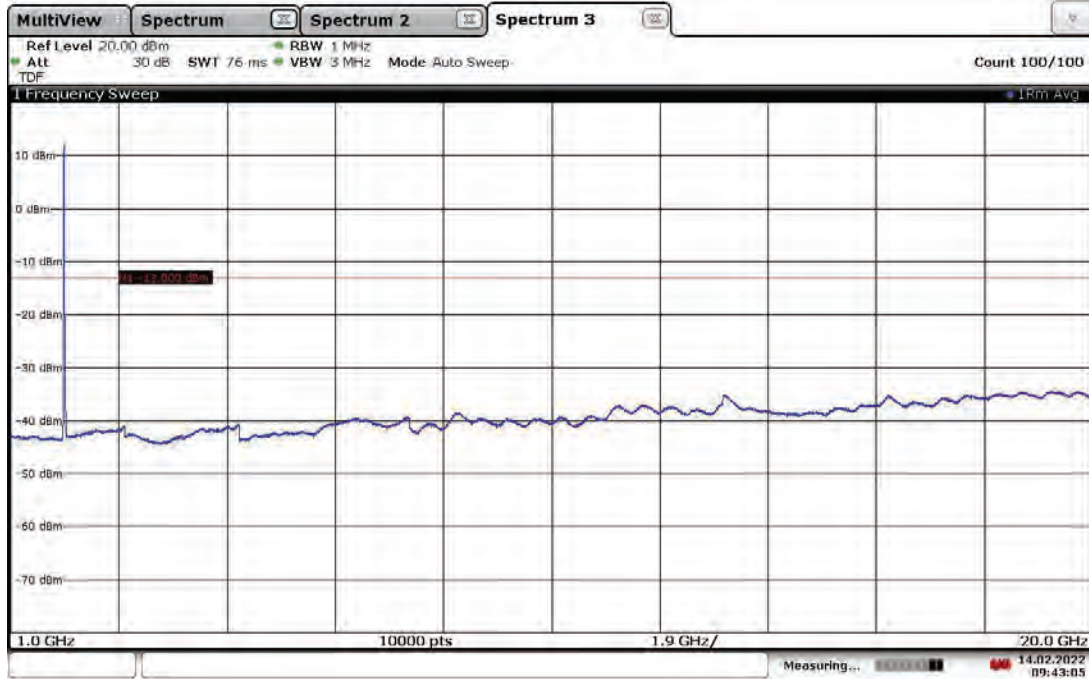
Antenna Port (ANT0) Conducted Emissions, 9 kHz-30 MHz
Band 25(5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.19 dBm)



Antenna Port (ANT0) Conducted Emissions, 30-1000 MHz
Band 25(5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.19 dBm)

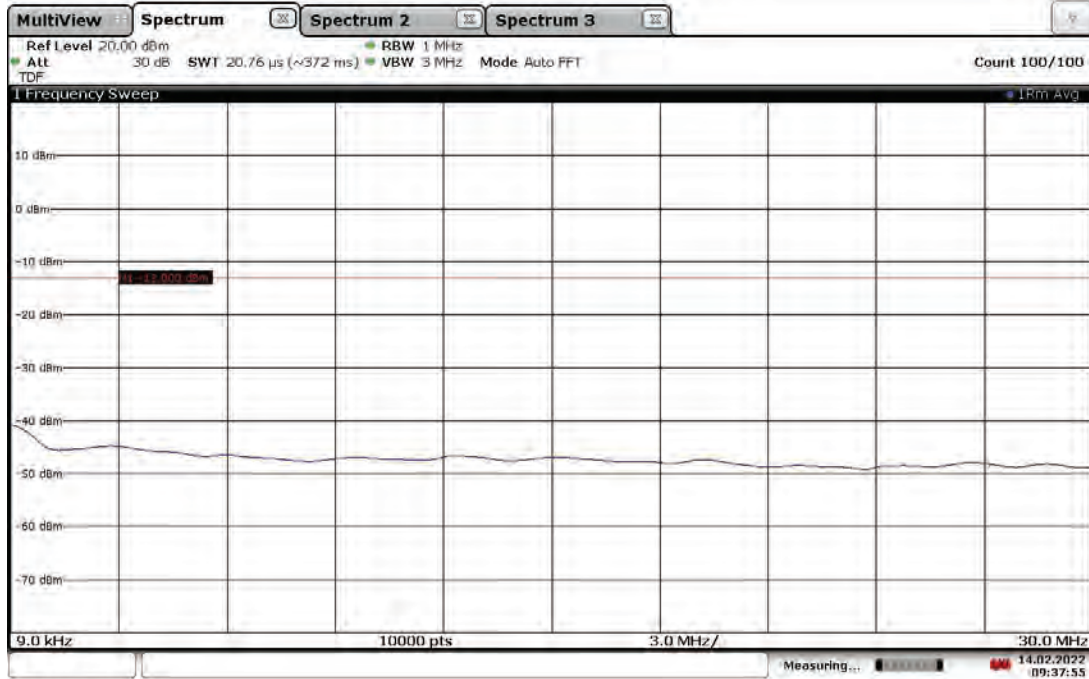


Antenna Port (ANT0) Conducted Emissions, 1-20 GHz
Band 25(5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.19 dBm)



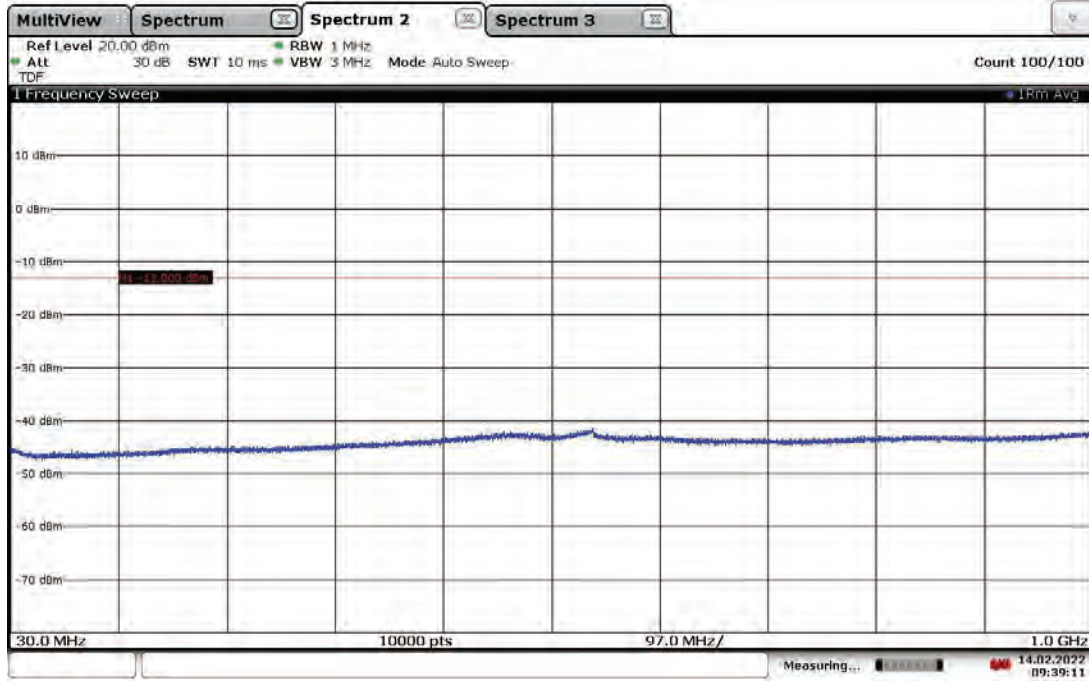
09:43:05 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 9 kHz-30 MHz
Band 25(5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.19 dBm)



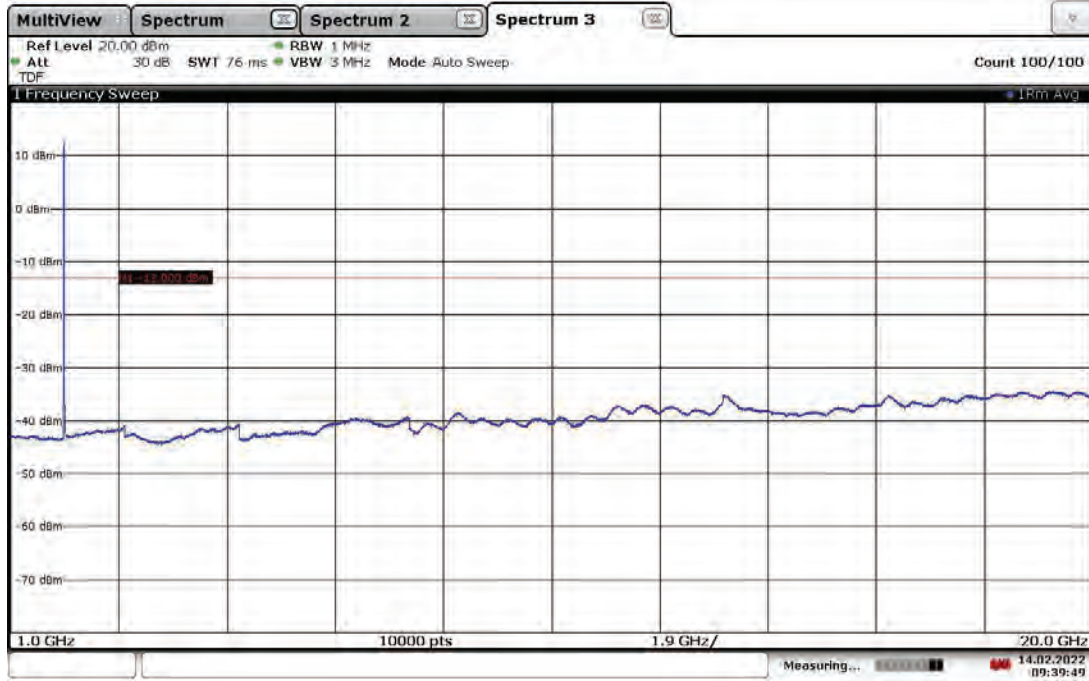
09:37:55 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 30-1000 MHz
Band 25(5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.19 dBm)



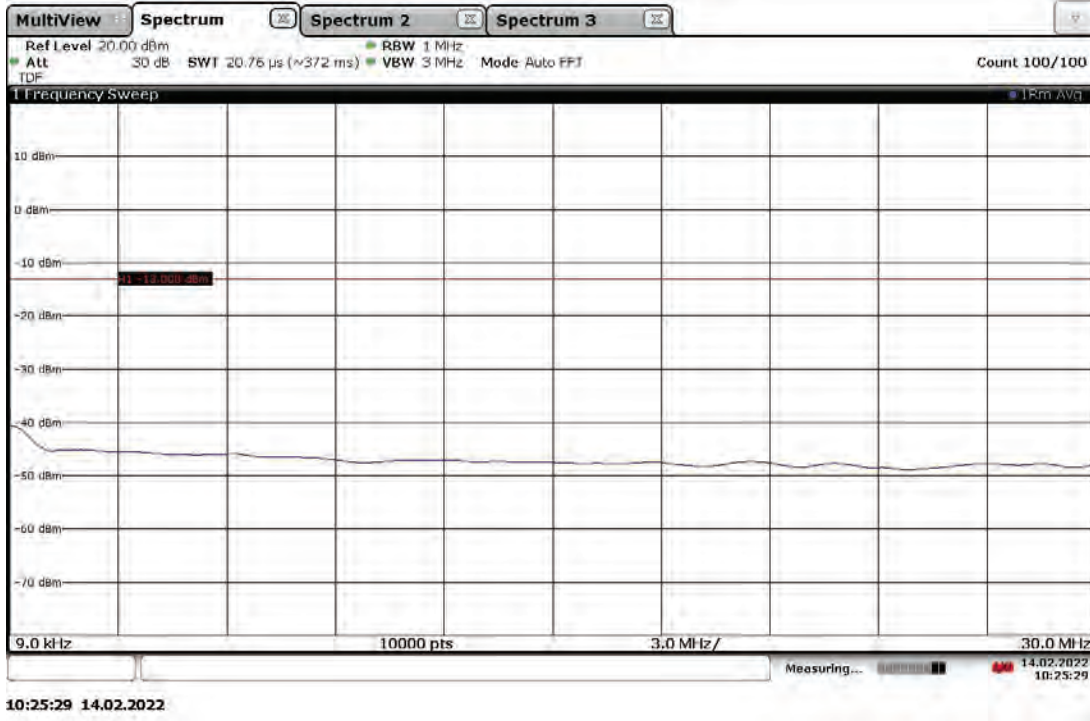
09:39:11 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 1-20 GHz
Band 25(5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.19 dBm)

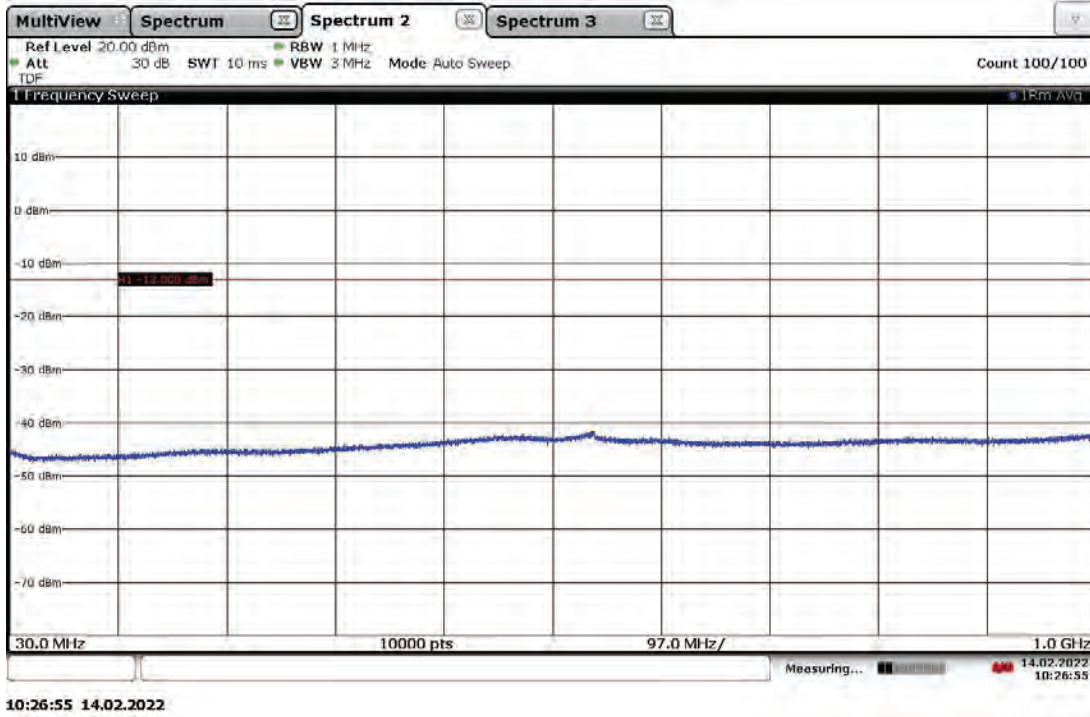


09:39:50 14.02.2022

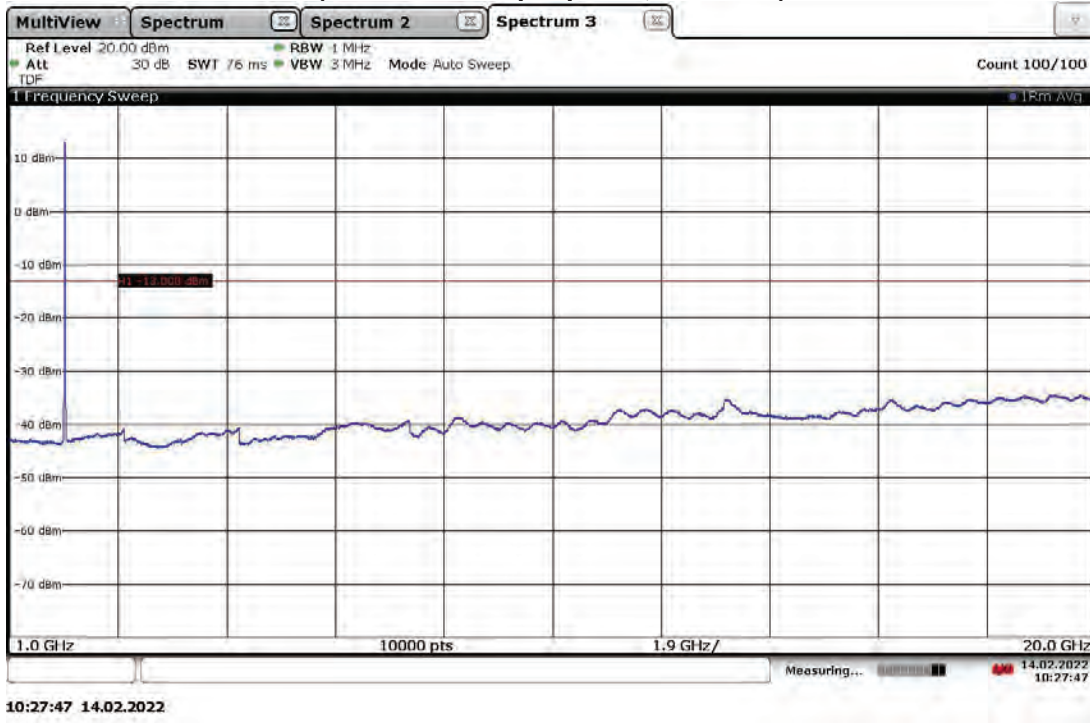
Antenna Port (ANT0) Conducted Emissions, 9 kHz-30 MHz
Band 25(5G nR), Mid Channel 1962.5 MHz, BW 10 MHz, Modulation 16QAM
(Worst-case output power, 23.1 dBm)



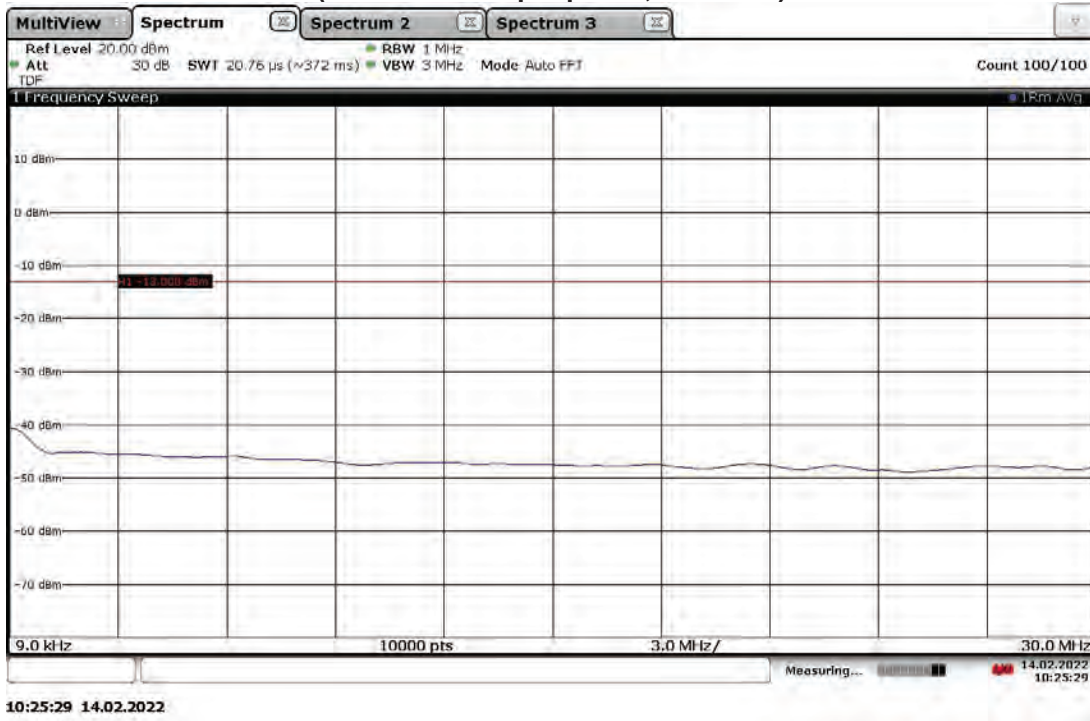
Antenna Port (ANT0) Conducted Emissions, 30 MHz-1 GHz
Band 25(5G nR), Mid Channel 1962.5 MHz, BW 10 MHz, Modulation 16QAM
(Worst-case output power, 23.1 dBm)



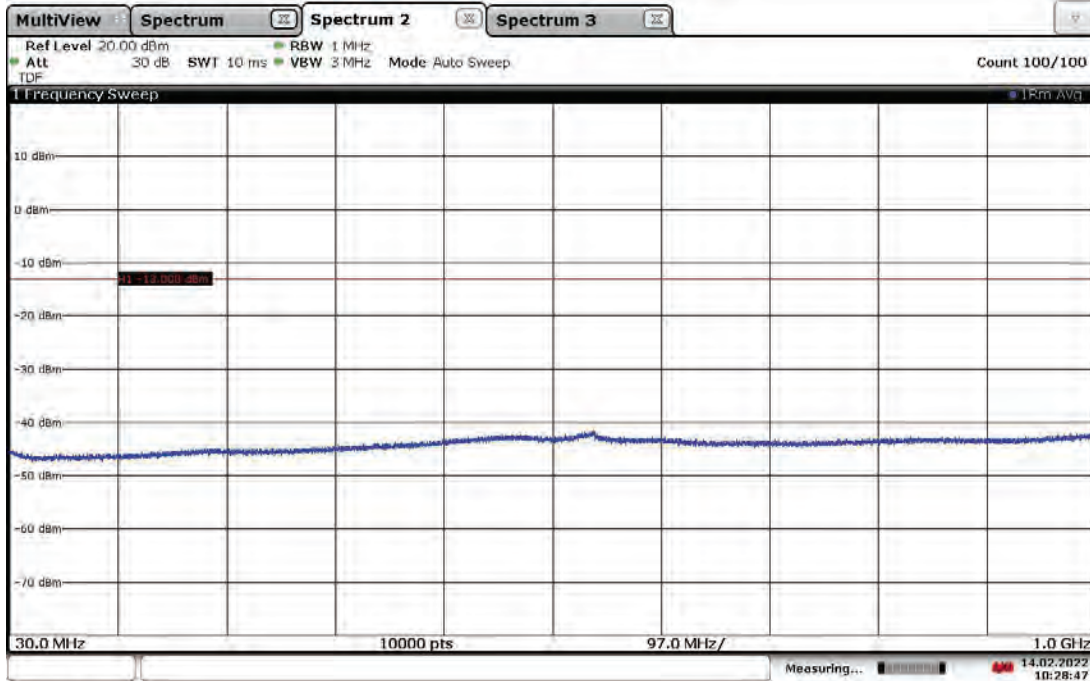
**Antenna Port (ANT0) Conducted Emissions, 1-20 GHz
Band 25(5G nR), Mid Channel 1962.5 MHz, BW 10 MHz, Modulation 16QAM
(Worst-case output power, 23.1 dBm)**



**Antenna Port (ANT1) Conducted Emissions, 9 kHz-30 MHz
Band 25(5G nR), Mid Channel 1962.5 MHz, BW 10 MHz, Modulation 16QAM
(Worst-case output power, 23.1 dBm)**

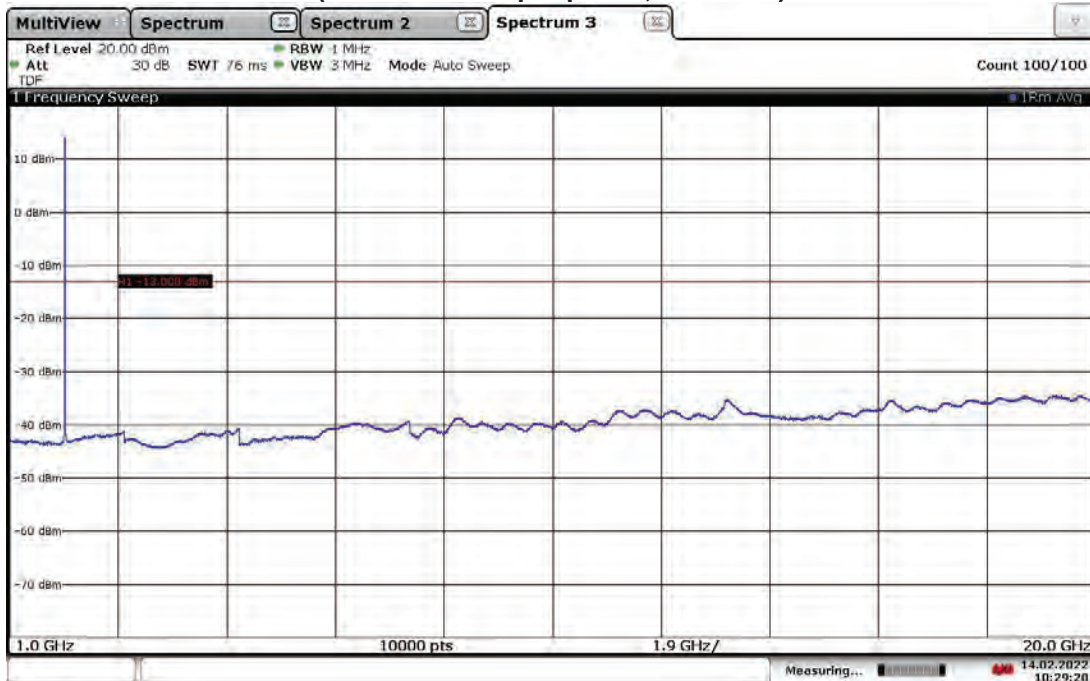


Antenna Port (ANT1) Conducted Emissions, 30 MHz-1 GHz
Band 25(5G nR), Mid Channel 1962.5 MHz, BW 10 MHz, Modulation 16QAM
(Worst-case output power, 23.1 dBm)



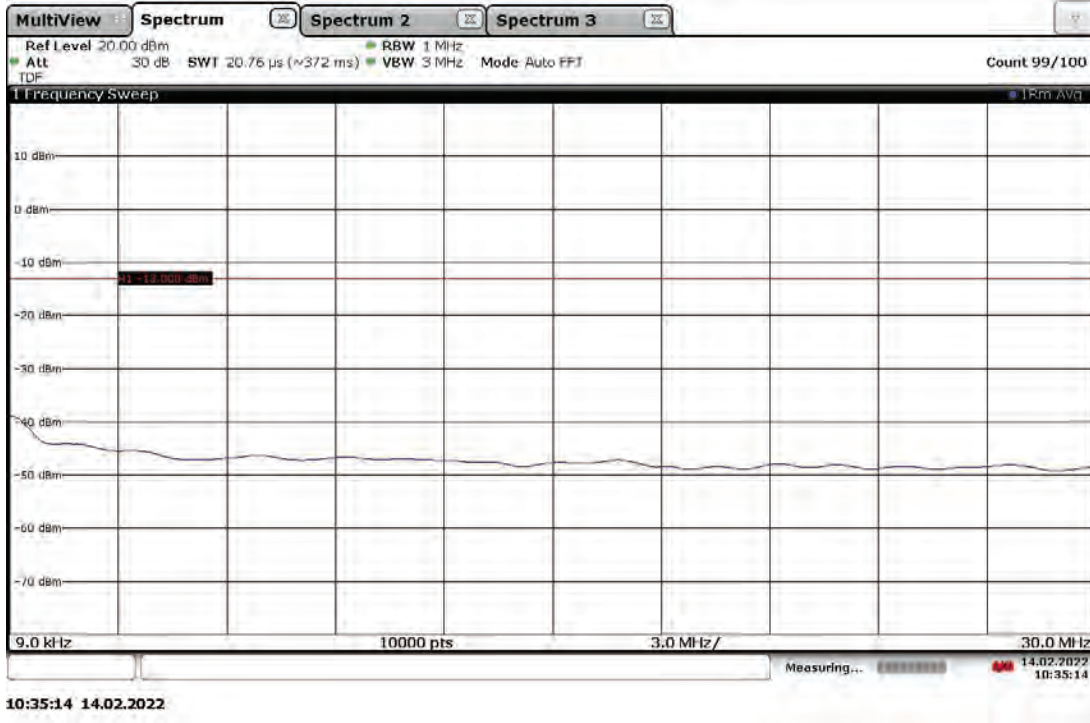
10:28:47 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 1-20 GHz
Band 25(5G nR), Mid Channel 1962.5 MHz, BW 10 MHz, Modulation 16QAM
(Worst-case output power, 23.1 dBm)

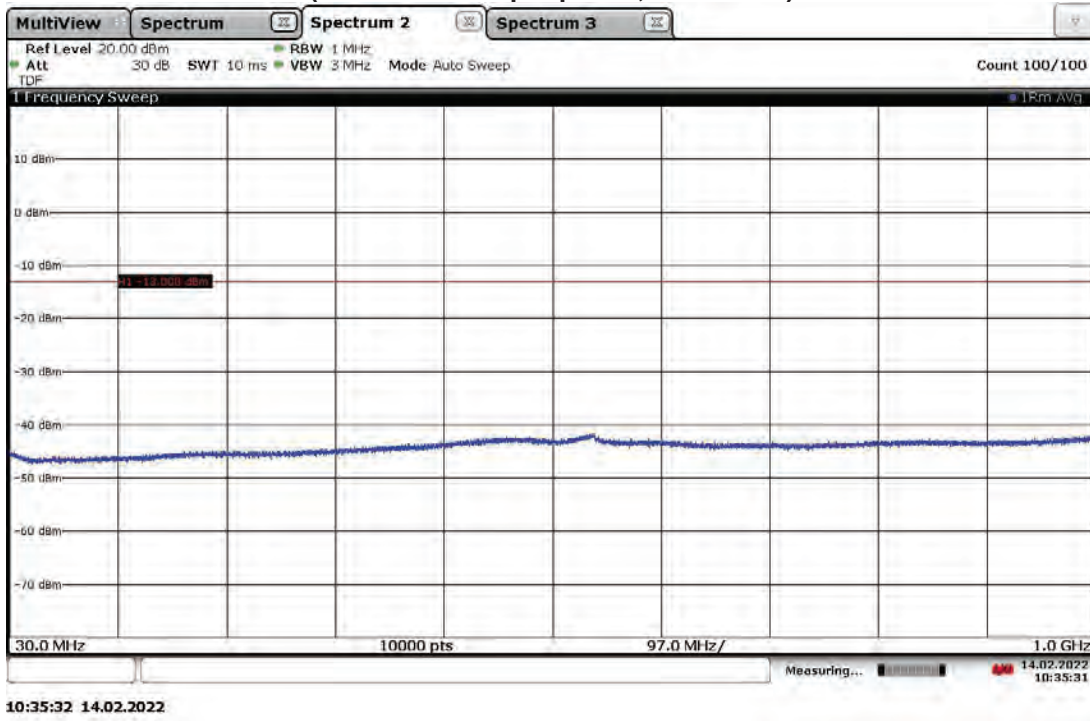


10:29:20 14.02.2022

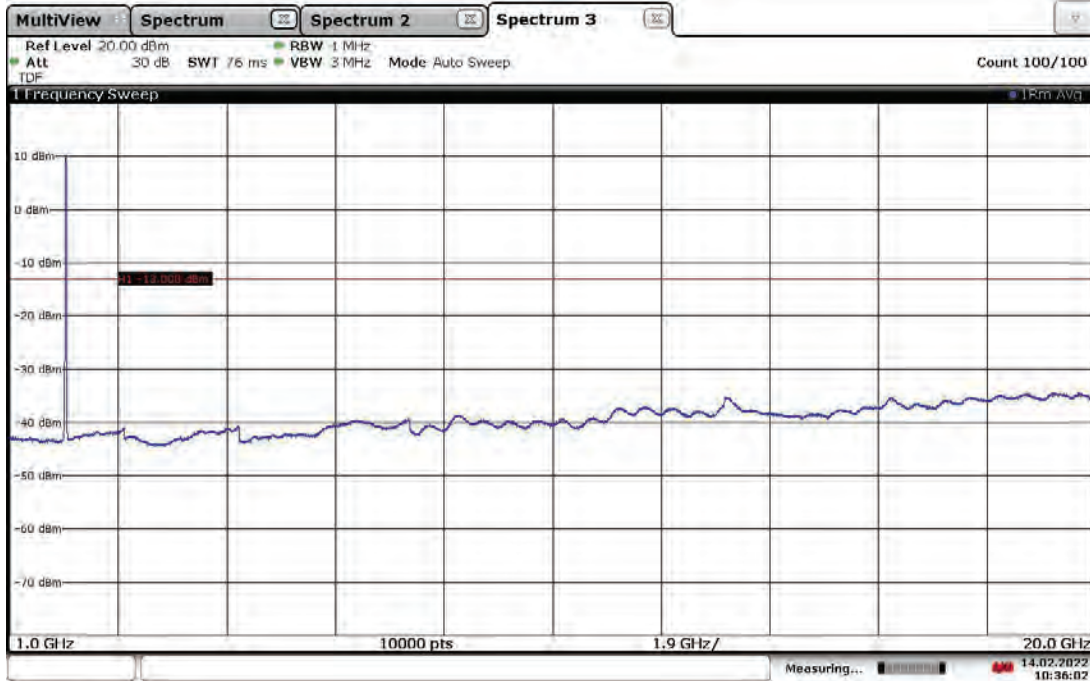
**Antenna Port (ANT0) Conducted Emissions, 9 kHz-30 MHz
Band 25(5G nR), High Channel 1985 MHz, BW 20 MHz, Modulation QPSK
(Worst-case output power, 22.92 dBm)**



**Antenna Port (ANT0) Conducted Emissions, 30 MHz-1 GHz
Band 25(5G nR), High Channel 1985 MHz, BW 20 MHz, Modulation QPSK
(Worst-case output power, 22.92 dBm)**

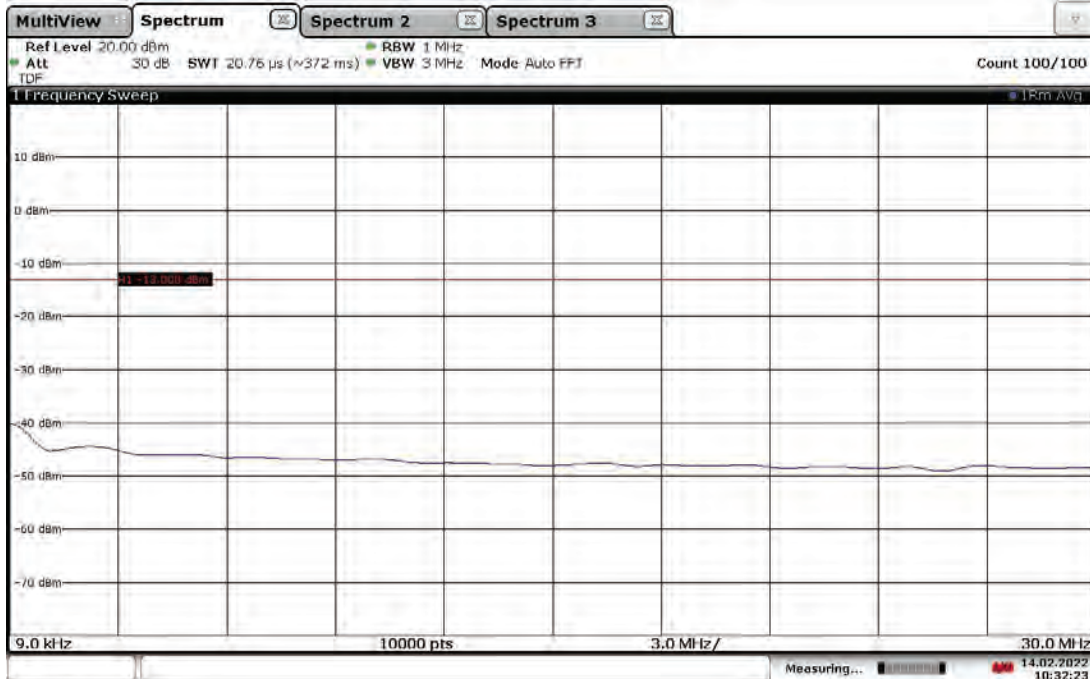


Antenna Port (ANT0) Conducted Emissions, 1-20 GHz
Band 25(5G nR), High Channel 1985 MHz, BW 20 MHz, Modulation QPSK
(Worst-case output power, 22.92 dBm)



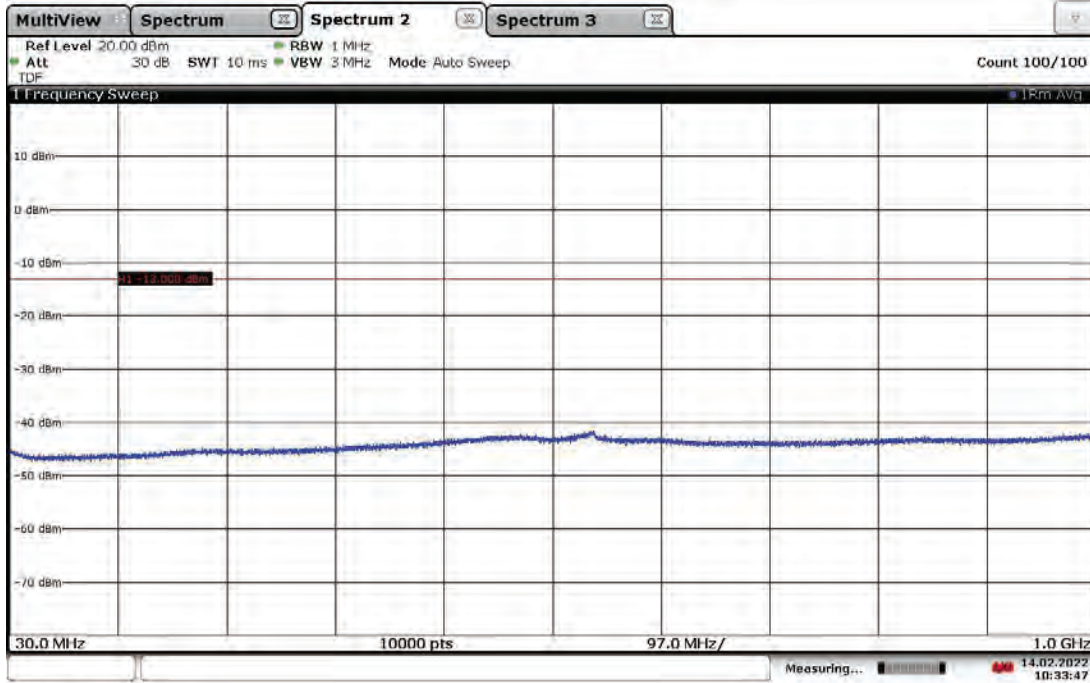
10:36:02 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 9 kHz-30 MHz
Band 25(5G nR), High Channel 1985 MHz, BW 20 MHz, Modulation QPSK
(Worst-case output power, 22.92 dBm)



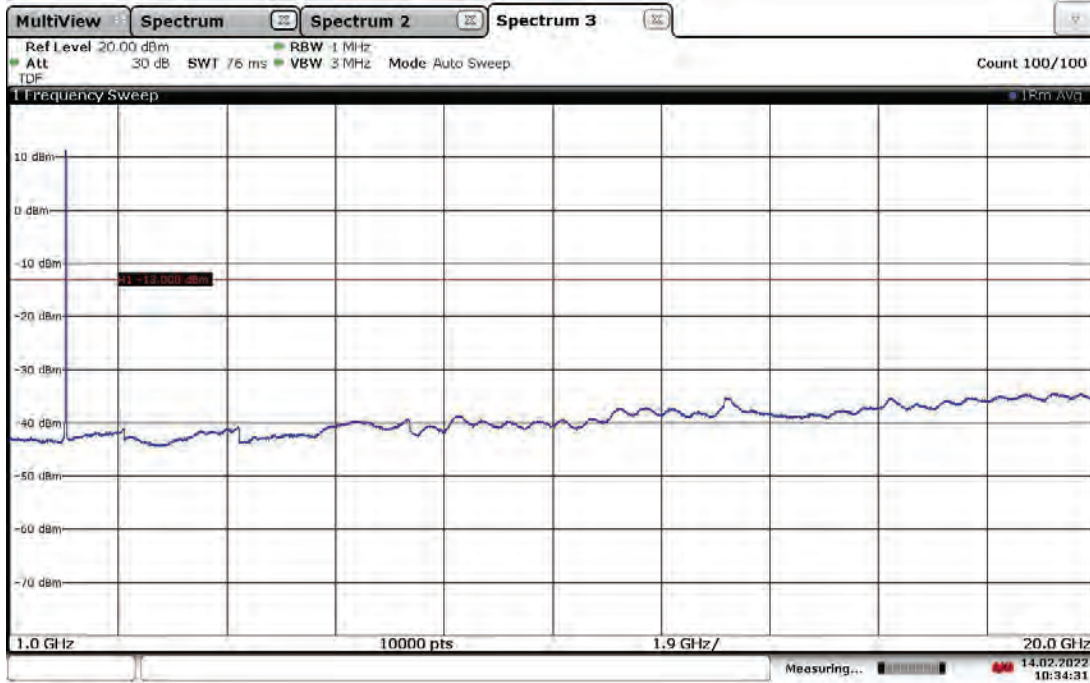
10:32:23 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 30 MHz-1 GHz
Band 25(5G nR), High Channel 1985 MHz, BW 20 MHz, Modulation QPSK
(Worst-case output power, 22.92 dBm)



10:33:47 14.02.2022

Antenna Port (ANT1) Conducted Emissions, 1-20 GHz
Band 25(5G nR), High Channel 1985 MHz, BW 20 MHz, Modulation QPSK
(Worst-case output power, 22.92 dBm)



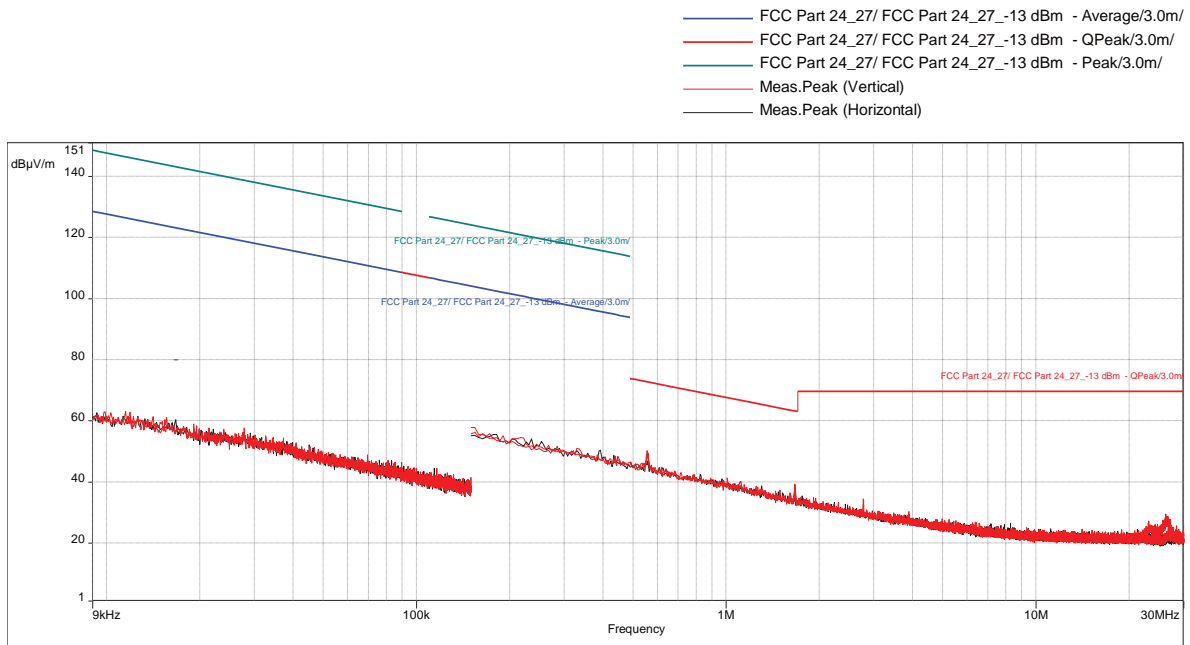
10:34:31 14.02.2022

Radiated Emissions, 9 kHz-30 MHz
Band 25(4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.16 dBm)

Test Information:

Date and Time	2/16/2022 6:22:07 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	25 C
Humidity	14 %
Atmospheric Pressure	1022 mbar
Comments	Scan 1: Band 25(4G LTE), Low Cjh. 1937.5MHz, 15MHz BW, 16QAM Mod, (worst-case output pwr 23.16 dBm) RE 9kHz-30MHz Loop antenna, Electric Field, 3M Location (FCC Part 18)

Graph:

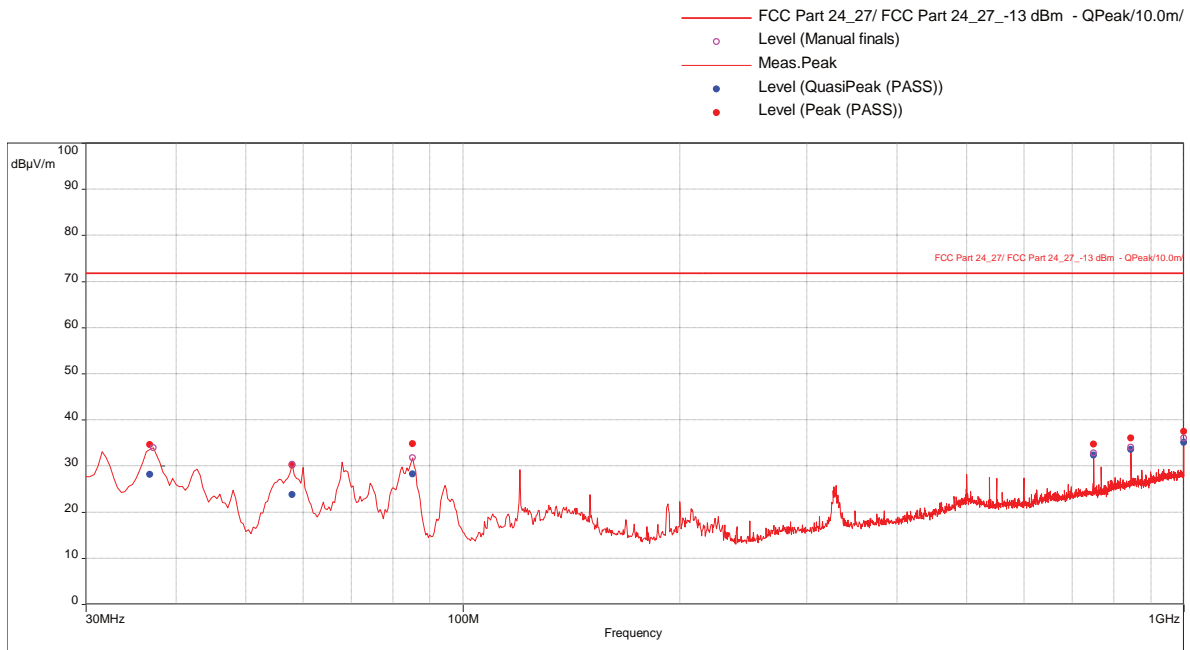


Results: No emission was detected.

Radiated Emissions, 30-1000 MHz Band 25(4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM (Worst-case output power, 23.16 dBm)

Test Information:

Date and Time	2/7/2022 7:35:48 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	22 %
Atmospheric Pressure	1011 mbar
Comments	Scan 1: Band 25 & 25 (4G LTE), Low 1937.5MHz, 15MHz-16QAM (Worst-case output pwer, 23.16 dBm), RE 30-1000MHz SA mode

Graph:

Results:

EIRP Peak (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
36.94736842	34.56	-50.14	-13	-37.14	140.00	2.78	Vertical	120000.00	-17.06
57.90526316	30.11	-54.59	-13	-41.59	0.00	2.24	Vertical	120000.00	-25.81
85.38947368	34.79	-49.91	-13	-36.91	234.00	2.23	Vertical	120000.00	-25.31
750	34.72	-49.98	-13	-36.98	213.00	3.90	Horizontal	120000.00	-8.57
844.8	36.02	-48.68	-13	-35.68	148.00	1.40	Horizontal	120000.00	-6.69
1000	37.48	-47.22	-13	-34.22	132.00	1.00	Horizontal	120000.00	-4.73

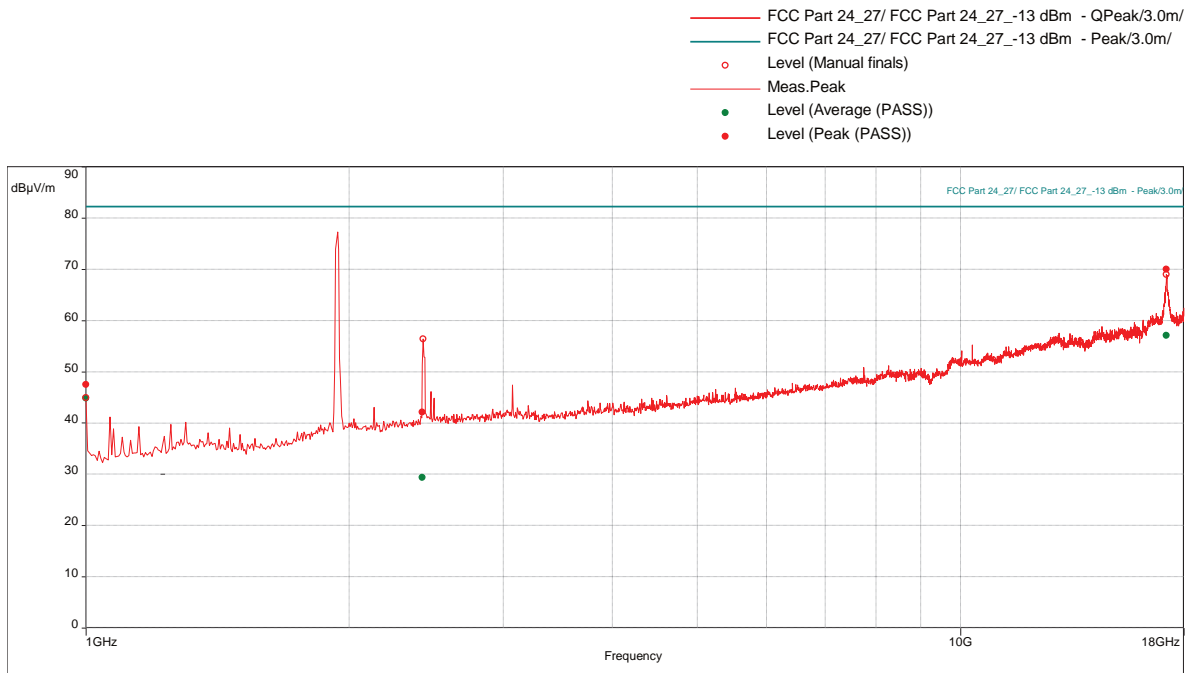
Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak } (dB\mu V/m) + 20 * \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

Radiated Emissions, 1-18 GHz Band 25(4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM (Worst-case output power, 23.16 dBm)

Test Information:

Date and Time	2/8/2022 8:25:04 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	20 C
Humidity	29 %
Atmospheric Pressure	1000 mbar
Comments	Scan 19: Band 25 and 25 (4G LTE), Low 1937.5MHz, 15MHz-16QAM (Worst-case output pwer, 23.16dBm), RE 1-18 GHz SA mode

Graph:

Results:

EIRP Peak (PASS) (3)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1000	47.52	-47.68	-13	-34.68	133.00	1.07	Horizontal	1000000.00	-8.14
2426.578947	42.10	-53.1	-13	-40.1	105.00	1.00	Horizontal	1000000.00	-2.39
17194.21053	70.00	-25.2	-13	-12.2	147.00	1.09	Horizontal	1000000.00	33.88

Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak } (dB\mu V/m) + 20 * \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

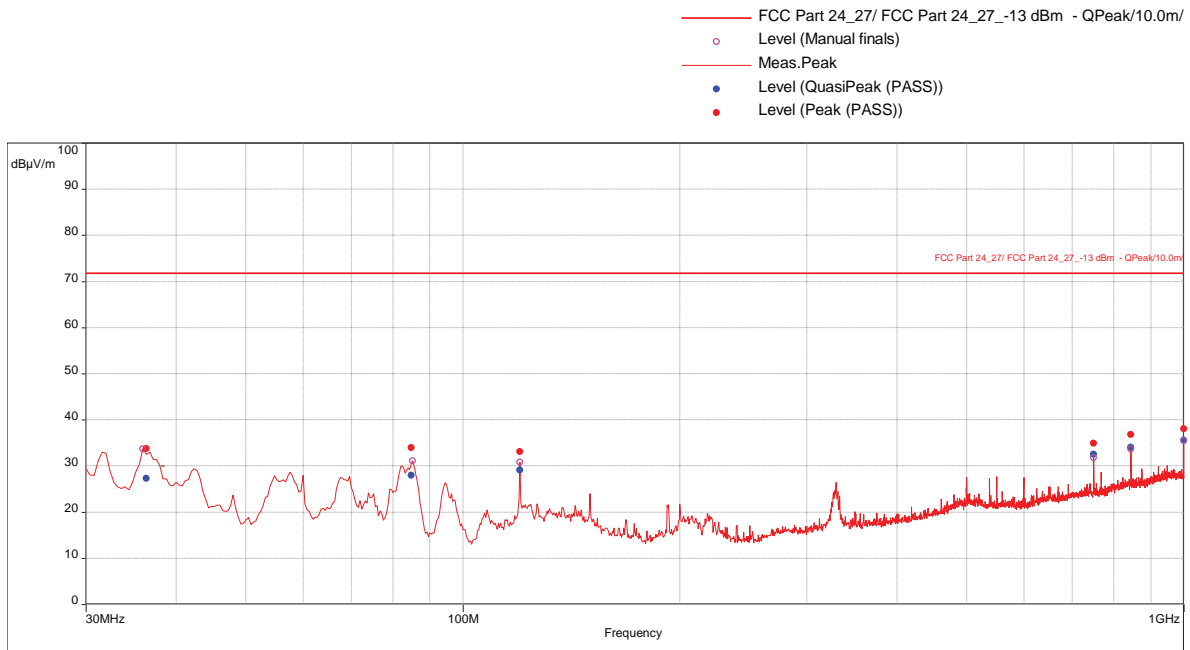
**Radiated Emissions, 18-22 GHz
Band 25(4G LTE), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.16 dBm)**

Manual scan was performed at 10 cm from the EUT with no emission was detected.

Radiated Emissions, 30-1000 MHz Band 25(4G LTE), Mid Channel 1962.5 MHz, BW 15 MHz, Modulation QPSK (Worst-case output power, 22.79 dBm)

Test Information:

Date and Time	2/7/2022 8:48:38 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	22 %
Atmospheric Pressure	1011 mbar
Comments	Scan 3: Band 25(4G LTE), Mid 1962.5MHz, 15MHz-QPSK (Worst-case output pwer, 22.79 dBm), RE 30-1000MHz SA mode

Graph:

Results:

EIRP Peak (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
36.41052632	33.79	-50.91	-13	-37.91	53.00	2.85	Vertical	120000.00	-16.71
84.78947368	33.90	-50.8	-13	-37.8	258.00	3.65	Vertical	120000.00	-25.31
120	33.12	-51.58	-13	-38.58	322.00	1.62	Vertical	120000.00	-18.46
750	34.86	-49.84	-13	-36.84	215.00	4.00	Horizontal	120000.00	-8.57
844.8	36.78	-47.92	-13	-34.92	148.00	1.35	Horizontal	120000.00	-6.69
1000	38.00	-46.7	-13	-33.7	127.00	1.00	Horizontal	120000.00	-4.73

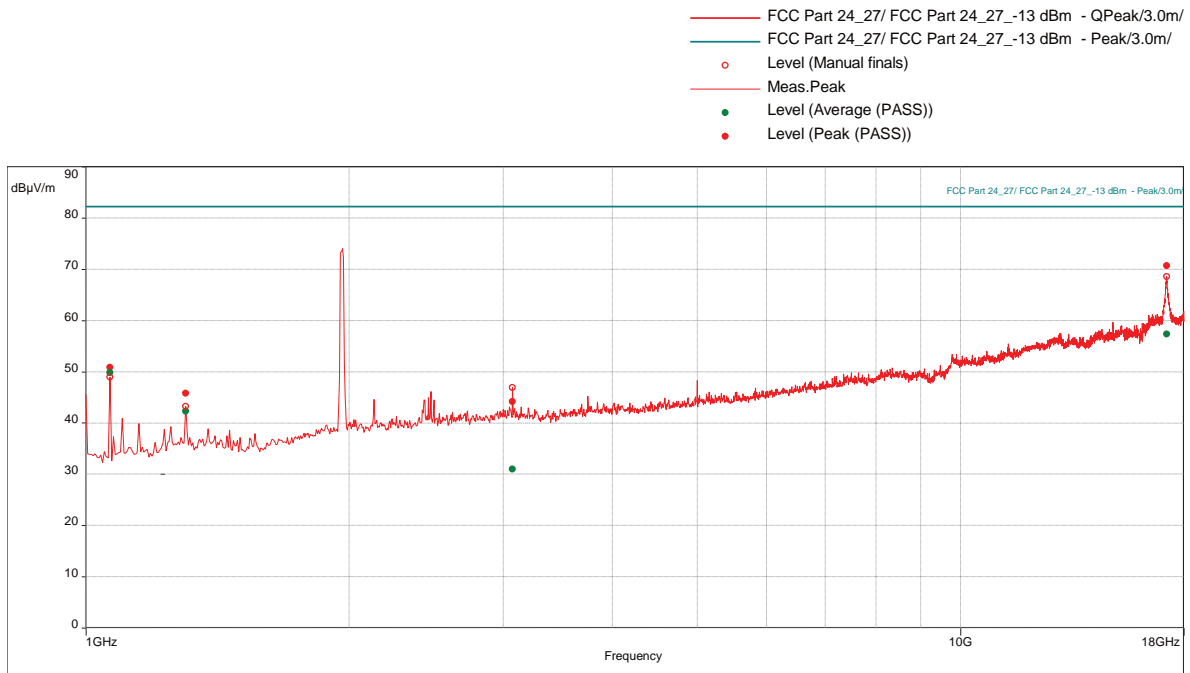
Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak } (dB\mu V/m) + 20 * \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

Radiated Emissions, 1-18 GHz Band 25(4G LTE), Mid Channel 1962.5 MHz, BW 15 MHz, Modulation QPSK (Worst-case output power, 22.79 dBm)

Test Information:

Date and Time	2/8/2022 6:28:32 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	20 C
Humidity	29 %
Atmospheric Pressure	1000 mbar
Comments	Scan 17: Band 25(4G LTE), Mid 1962.5MHz, 15MHz-QPSK (Worst-case output power, 22.79dBm), RE 1-18 GHz SA mode

Graph:

Results:

EIRP Peak (PASS) (4)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1066.578947	50.85	-44.35	-13	-31.35	162.00	1.65	Horizontal	1000000.00	-8.96
1300	45.77	-49.43	-13	-36.43	155.00	1.60	Horizontal	1000000.00	-6.74
3075.263158	44.15	-51.05	-13	-38.05	0.00	1.90	Horizontal	1000000.00	-0.75
17204.73684	70.70	-24.5	-13	-11.5	45.00	1.35	Vertical	1000000.00	34.03

Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak (dB}\mu\text{V/m)} + 20 \cdot \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

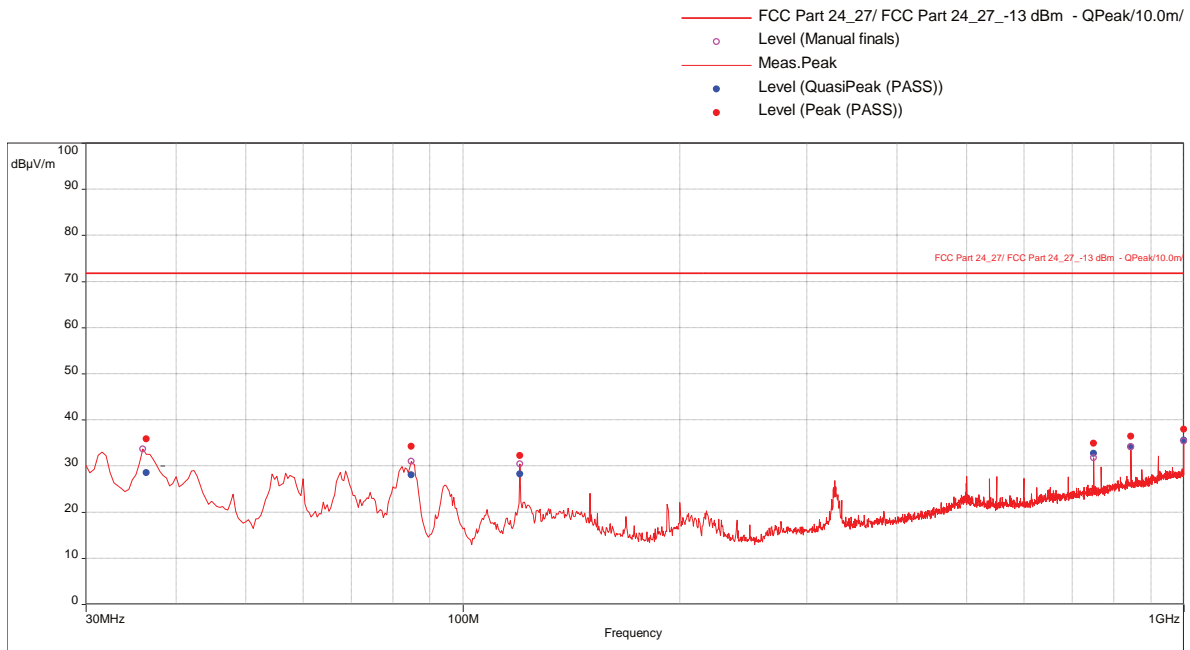
**Radiated Emissions, 18-20 GHz
Band 25(4G LTE), Mid Channel 1962.5 MHz, BW 15 MHz, Modulation QPSK
(Worst-case output power, 22.79 dBm)**

Manual scan was performed at 10 cm from the EUT with no emission was detected.

Radiated Emissions, 30-1000 MHz Band 25(4G LTE), High Channel 1985 MHz, BW 20 MHz, Modulation 64QAM (Worst-case output power, 22.66 dBm)

Test Information:

Date and Time	2/7/2022 9:19:41 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	22 %
Atmospheric Pressure	1011 mbar
Comments	Scan 4: Band 25(4G LTE), High 1985MHz, 20MHz-64QAM (Worst-case output pwr, 22.66dBm), RE 30-1000MHz SA mode

Graph:

Results:

EIRP Peak (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
36.50526316	35.82	-48.88	-13	-35.88	10.00	1.29	Vertical	120000.00	-16.77
84.76842105	34.27	-50.43	-13	-37.43	286.00	1.52	Vertical	120000.00	-25.31
120	32.22	-52.48	-13	-39.48	206.00	2.02	Vertical	120000.00	-18.46
750	34.89	-49.81	-13	-36.81	220.00	3.84	Horizontal	120000.00	-8.57
844.8	36.38	-48.32	-13	-35.32	148.00	1.36	Horizontal	120000.00	-6.69
1000	37.89	-46.81	-13	-33.81	125.00	1.00	Horizontal	120000.00	-4.73

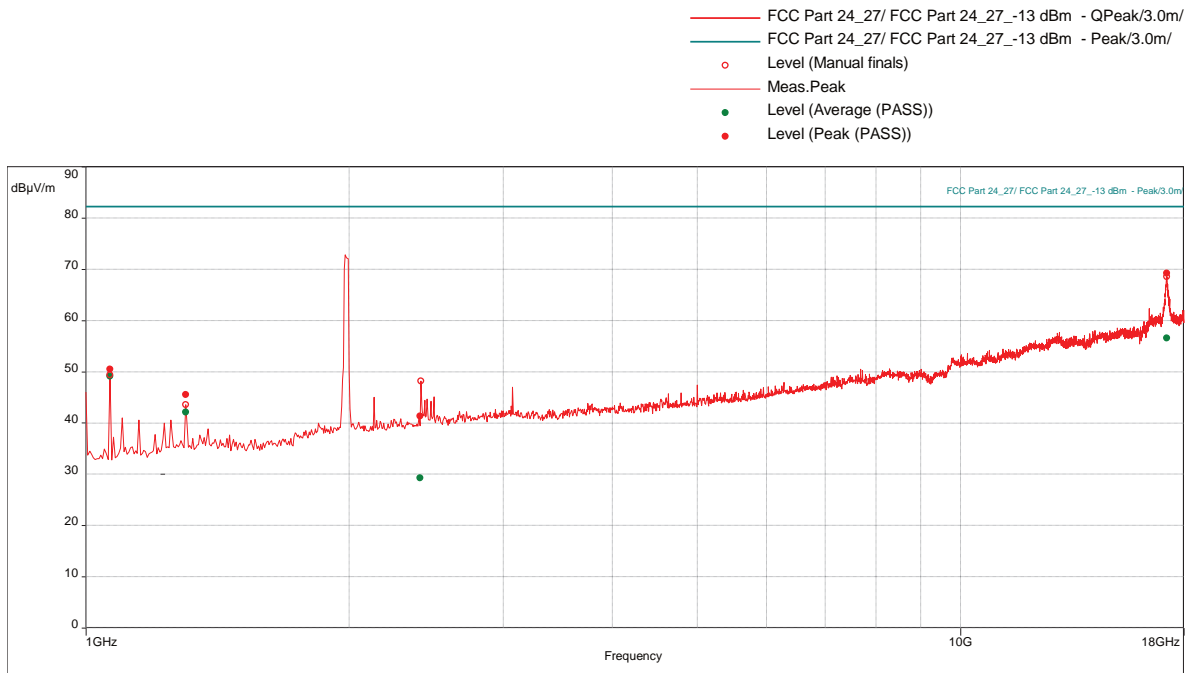
Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak } (dB\mu V/m) + 20 * \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

Radiated Emissions, 1-18 GHz Band 25(4G LTE), High Channel 1985 MHz, BW 20 MHz, Modulation 64QAM (Worst-case output power, 22.66 dBm)

Test Information:

Date and Time	2/8/2022 7:43:11 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	20 C
Humidity	29 %
Atmospheric Pressure	1000 mbar
Comments	Scan 18: Band 25(4G LTE), High 1985MHz, 20MHz-64QAM (Worst-case output power, 22.66dBm), RE 1-18 GHz SA mode

Graph:

Results:

EIRP Peak (PASS) (4)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1066.578947	50.48	-44.72	-13	-31.72	155.00	1.60	Horizontal	1000000.00	-8.96
1300	45.48	-49.72	-13	-36.72	163.00	1.65	Horizontal	1000000.00	-6.74
2411.842105	41.32	-53.88	-13	-40.88	280.00	3.10	Vertical	1000000.00	-2.50
17216.57895	69.20	-26.00	-13	-13	67.00	3.69	Horizontal	1000000.00	33.21

Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak (dB}\mu\text{V/m)} + 20 \cdot \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

**Radiated Emissions, 18-20 GHz
Band 25(4G LTE), High Channel 1985 MHz, BW 20 MHz, Modulation 64QAM
(Worst-case output power, 22.66 dBm)**

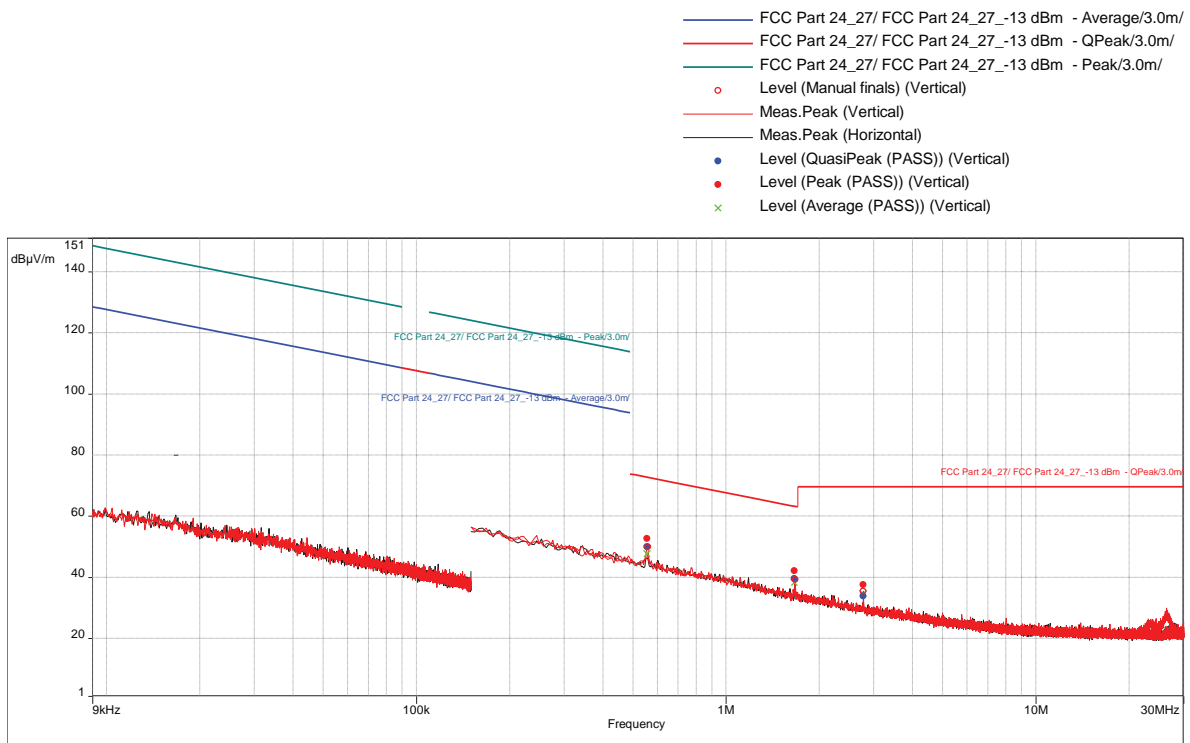
Manual scan was performed at 10 cm from the EUT with no emission was detected.

Radiated Emissions, 9 kHz-30 MHz Band 25(5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM (Worst-case output power, 23.19 dBm)

Test Information:

Date and Time	2/16/2022 6:33:30 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	25 C
Humidity	14 %
Atmospheric Pressure	1022 mbar
Comments	Scan 2: Band 25(4G nR), Low Ch. 1937.5MHz, 15MHz BW, 16QAM Mod, (worst-case output pwr 23.19 dBm) RE 9kHz-30MHz Loop antenna, Electric Field, 3M Location (FCC Part 18)

Graph:



Results:

EIRP Peak (PASS) (3)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
0.5547631579	52.57	-42.63	-13	-29.63	183.00	2.00	Vertical	9000.00	11.13
1.663894737	42.08	-53.12	-13	-40.12	171.00	2.00	Vertical	9000.00	11.60
2.7735	37.46	-57.74	-13	-44.74	178.00	2.00	Vertical	9000.00	11.54

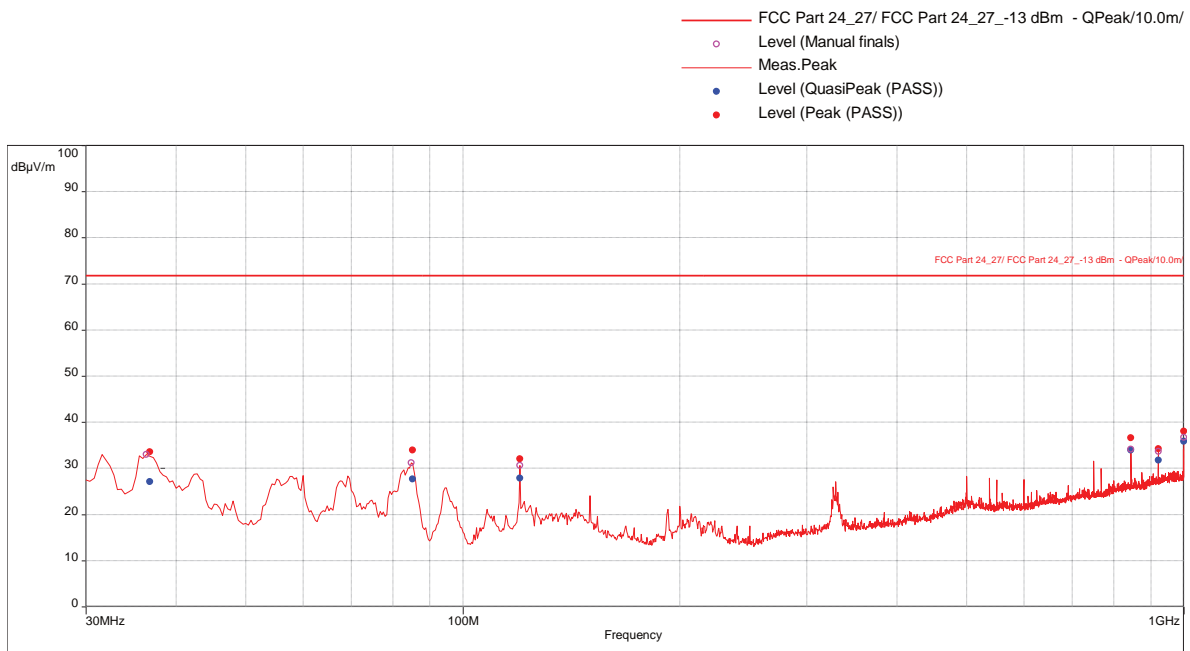
Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak } (dB\mu V/m) + 20 * \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

Radiated Emissions, 30-1000 MHz Band 25(5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM (Worst-case output power, 23.19 dBm)

Test Information:

Date and Time	2/7/2022 8:07:11 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	22 %
Atmospheric Pressure	1011 mbar
Comments	Scan 2: Band 25 & 25 (5G nR), Low 1937.5MHz, 15MHz-16QAM (Worst-case output pwer, 23.19 dBm), RE 30-1000MHz SA mode

Graph:

Results:
EIRP Peak (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
36.84210526	33.57	-51.13	-13	-38.13	46.00	1.96	Vertical	120000.00	-16.99
85.05263158	33.95	-50.75	-13	-37.75	243.00	2.91	Vertical	120000.00	-25.30
120	32.06	-52.64	-13	-39.64	228.00	1.36	Vertical	120000.00	-18.46
844.8	36.64	-48.06	-13	-35.06	149.00	1.29	Horizontal	120000.00	-6.69
921.6	34.24	-50.46	-13	-37.46	135.00	1.00	Horizontal	120000.00	-5.69
1000	38.06	-46.64	-13	-33.64	126.00	1.00	Horizontal	120000.00	-4.73

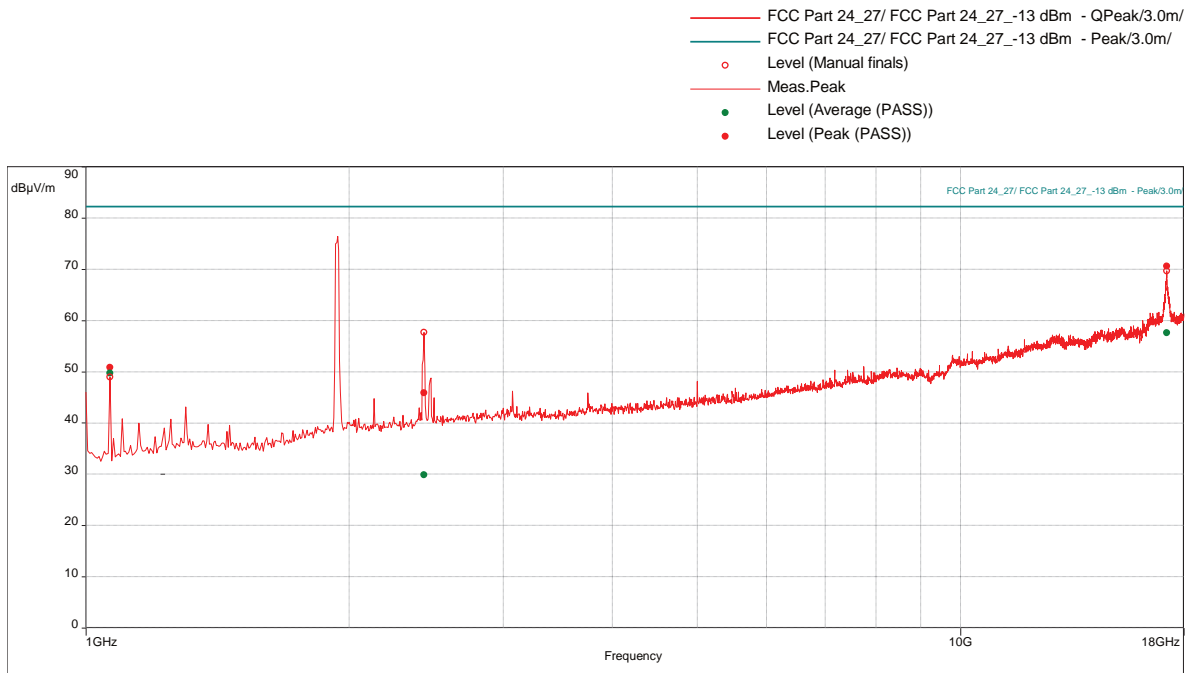
Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak } (dB\mu V/m) + 20 * \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

Radiated Emissions, 1-18 GHz Band 25(5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM (Worst-case output power, 23.19 dBm)

Test Information:

Date and Time	2/8/2022 9:16:11 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	20 C
Humidity	29 %
Atmospheric Pressure	1000 mbar
Comments	Scan 20: Band 25 and 25 (5G nR), Low 1937.5MHz, 15MHz-16QAM (Worst-case output pwer, 23.19dBm), RE 1-18 GHz SA mode

Graph:

Results:

EIRP Peak (PASS) (3)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1066.578947	50.85	-44.35	-13	-31.35	162.00	1.65	Horizontal	1000000.00	-8.96
2435	45.84	-49.36	-13	-36.36	322.00	2.85	Vertical	1000000.00	-2.33
17200.26316	70.62	-24.58	-13	-11.58	4.00	1.30	Vertical	1000000.00	34.36

Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak } (dB\mu V/m) + 20 * \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

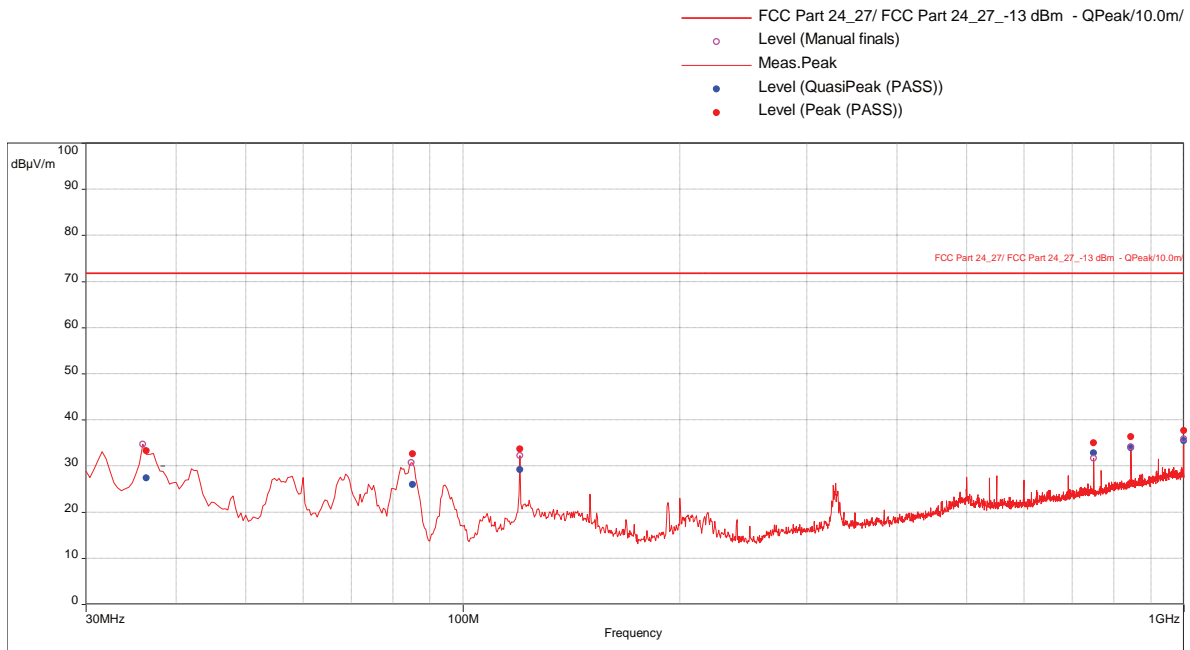
**Radiated Emissions, 18-22 GHz
Band 25 (5G nR), Low Channel 1937.5 MHz, BW 15 MHz, Modulation 16QAM
(Worst-case output power, 23.19 dBm)**

Manual scan was performed at 10 cm from the EUT with no emission was detected.

Radiated Emissions, 30-1000 MHz Band 25(5G nR), Mid Channel 1962.5 MHz, BW 10 MHz, Modulation 16QAM (Worst-case output power, 23.14 dBm)

Test Information:

Date and Time	2/7/2022 9:55:50 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	24 C
Humidity	22 %
Atmospheric Pressure	1011 mbar
Comments	Scan 5: Band 25(5G nR), Mid 1962.5Hz, 10MHz-16QAM (Worst-case output pwer, 23.14dBm), RE 30-1000MHz SA mode

Graph:

Results:

EIRP Peak (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
36.25263158	33.31	-61.89	-13	-48.89	0.00	2.96	Vertical	120000.00	-16.61
85.17894737	32.61	-62.59	-13	-49.59	25.00	3.35	Vertical	120000.00	-25.31
120	33.61	-61.59	-13	-48.59	112.00	1.87	Vertical	120000.00	-18.46
750	34.96	-60.24	-13	-47.24	221.00	3.86	Horizontal	120000.00	-8.57
844.8	36.31	-58.89	-13	-45.89	149.00	1.00	Horizontal	120000.00	-6.69
1000	37.69	-57.51	-13	-44.51	125.00	1.00	Horizontal	120000.00	-4.73

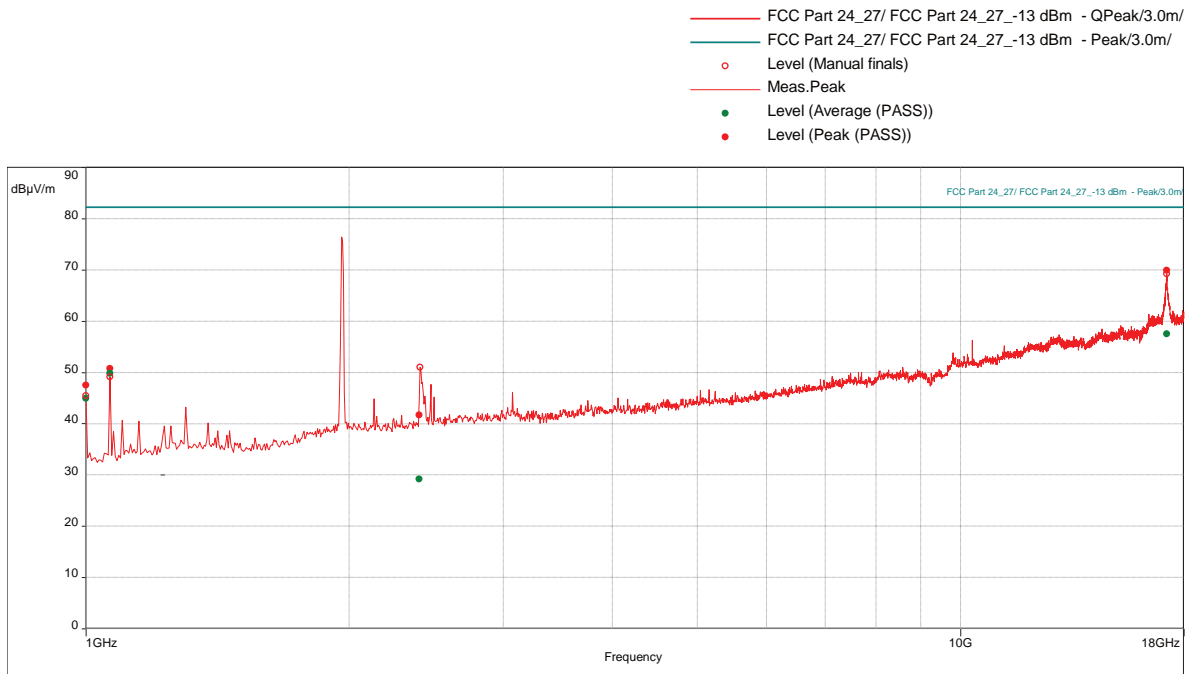
Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak } (dB\mu V/m) + 20 * \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

Radiated Emissions, 1-18 GHz Band 25(5G nR), Mid Channel 1962.5 MHz, BW 10 MHz, Modulation 16QAM (Worst-case output power, 23.14 dBm)

Test Information:

Date and Time	2/8/2022 4:56:34 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	20 C
Humidity	29 %
Atmospheric Pressure	1000 mbar
Comments	Scan 15: Band 25(5G nR), Mid 1962.5MHz, 10MHz-16QAM (Worst-case output pwer, 23..1dBm), RE 1-18 GHz SA mode

Graph:

Results:

EIRP Peak (PASS) (4)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1000	47.52	-47.68	-13	-34.68	133.00	1.00	Horizontal	1000000.00	-8.14
1066.578947	50.75	-44.45	-13	-31.45	162.00	1.60	Horizontal	1000000.00	-8.96
2406.052632	41.67	-53.53	-13	-40.53	38.00	1.50	Vertical	1000000.00	-2.56
17202.36842	69.93	-25.27	-13	-12.27	17.00	2.10	Horizontal	1000000.00	34.20

Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak (dB}\mu\text{V/m)} + 20 * \text{Log}(d) - 104.8$, where d is the measurement distance (in the far field region) in meter.

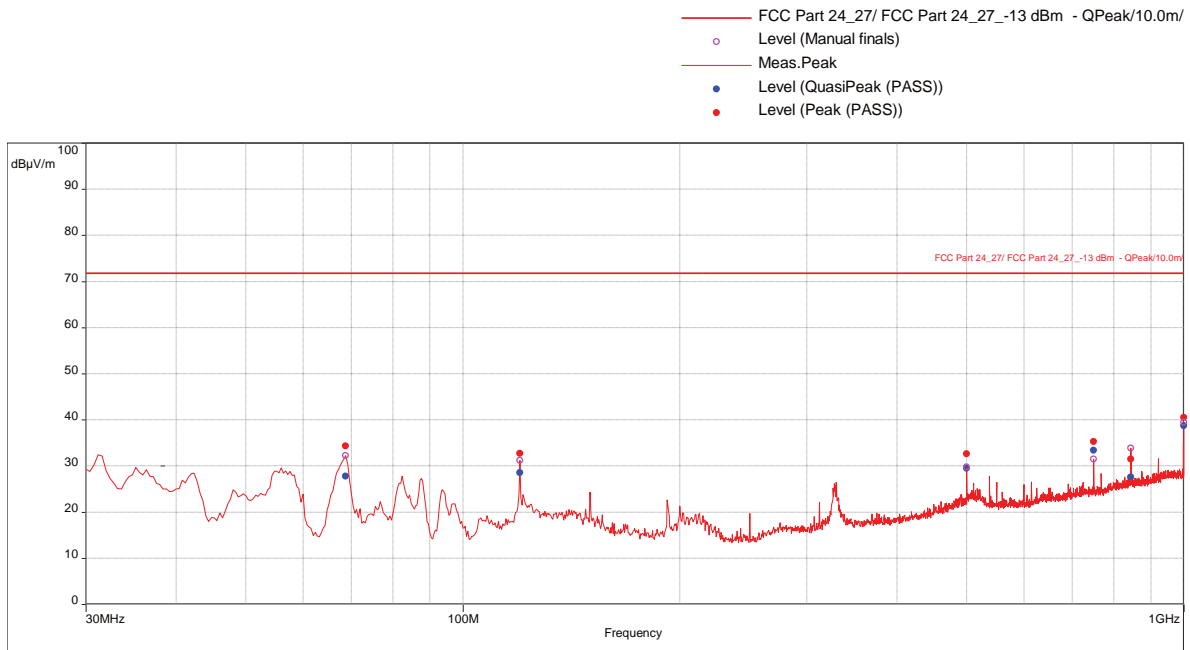
**Radiated Emissions, 18-20 GHz
Band 25(5G nR), Mid Channel 1962.5 MHz, BW 10 MHz, Modulation 16QAM
(Worst-case output power, 23.14 dBm)**

Manual scan was performed at 10 cm from the EUT with no emission was detected.

Radiated Emissions, 30-1000 MHz Band 25(5G nR), High Channel 1985 MHz, BW 20 MHz, Modulation QPSK (Worst-case output power, 22.92 dBm)

Test Information:

Date and Time	2/8/2022 8:54:28 AM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	20 C
Humidity	29 %
Atmospheric Pressure	1000 mbar
Comments	Scan 6: Band 25(5G nR), High 1985MHz, 20MHz-QPSK (Worst-case output pwer, 22.92dBm), RE 30-1000MHz SA mode

Graph:

Results:
EIRP Peak (PASS) (6)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
68.76842105	34.29	-60.91	-13.00	-47.91	143.00	2.07	Vertical	120000.00	-24.84
120	32.73	-62.47	-13.00	-49.47	53.00	1.30	Vertical	120000.00	-18.46
500	32.61	-62.59	-13.00	-49.59	211.00	1.00	Vertical	120000.00	-12.84
750	35.32	-59.88	-13.00	-46.88	68.00	1.80	Horizontal	120000.00	-8.57
844.8	31.43	-63.77	-13.00	-50.77	189.00	3.90	Horizontal	120000.00	-6.69
1000	40.49	-54.71	-13.00	-41.71	127.00	1.00	Horizontal	120000.00	-4.73

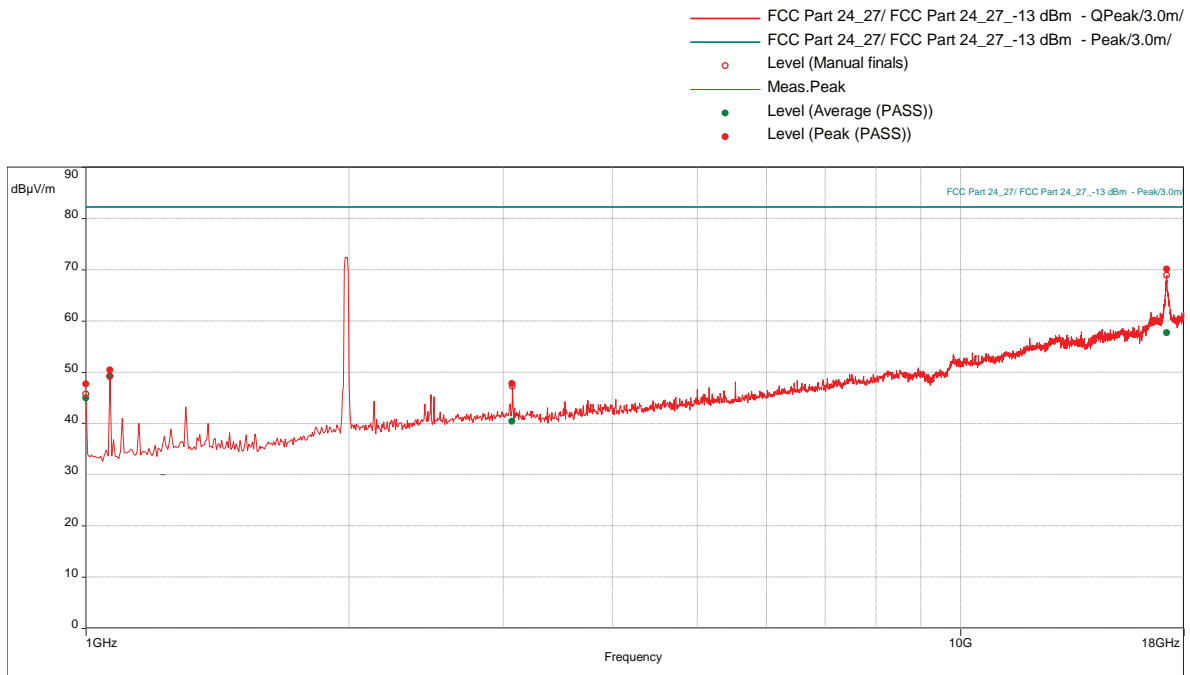
Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak } (dB\mu V/m) + 20 * \text{Log}(d) - 104.7$, where d is the measurement distance (in the far field region) in meter.

Radiated Emissions, 1-18 GHz Band 25(5G nR), High Channel 1985 MHz, BW 20 MHz, Modulation QPSK (Worst-case output power, 22.92 dBm)

Test Information:

Date and Time	2/8/2022 5:41:37 PM
Client and Project Number	CommScope
Engineer	Kouma Sinn
Temperature	20 C
Humidity	29 %
Atmospheric Pressure	1000 mbar
Comments	Scan 16: Band 25(5G nR), High 1985MHz, 20MHz-QPSK (Worst-case output pwer, 22.92dBm), RE 1-18 GHz SA mode

Graph:

Results:

EIRP Peak (PASS) (4)

Frequency (MHz)	Peak Level (dBµV/m)	EIRP Level (dBm)	Limit (dBm)	EIRP Margin (dB)	Azimuth (°)	Height (m)	Pol.	RBW (Hz)	Correction (dB)
1000	47.67	-47.53	-13	-34.53	134.00	1.00	Horizontal	1000000.00	-8.14
1066.578947	50.39	-44.81	-13	-31.81	154.00	1.65	Horizontal	1000000.00	-8.96
3072.105263	47.71	-47.49	-13	-34.49	170.00	1.20	Horizontal	1000000.00	-0.72
17202.36842	70.05	-25.15	-13	-12.15	185.00	2.80	Horizontal	1000000.00	34.20

Notes:

The level in EIRP (dBm) is calculated from the peak readings as, $EIRP (dBm) = E \text{ Peak (dB}\mu\text{V/m)} + 20 * \text{Log}(d) - 104.7$, where d is the measurement distance (in the far field region) in meter.

**Radiated Emissions, 18-22 GHz
Band 25(5G nR), High Channel 1985 MHz, BW 20 MHz, Modulation QPSK
(Worst-case output power, 22.92 dBm)**

Manual scan was performed at 10 cm from the EUT with no emission was detected.

Test Personnel: Supervising/Reviewing Engineer: (Where Applicable)	Kouma Sinn <i>KPS</i>	Test Date:	02/07/2022, 02/08/2022, 02/14/2022, 02/16/2022
Product Standard: Input Voltage:	FCC Part 24 48 VDC (POE)	Limit Applied:	See report section 11.3
Pretest Verification w/ Ambient Signals or BB Source:	N/A	Ambient Temperature:	24, 20, 23, 25 °C
		Relative Humidity:	22, 29, 13, 14 %
		Atmospheric Pressure:	1011, 1000, 1005, 1022 mbars

Deviations, Additions, or Exclusions: None

12 Revision History

Revision Level	Date	Report Number	Prepared By	Reviewed By	Notes
0	2/24/2022	104915434BOX-001c	KPS <i>KPS</i>	VFV <i>VFV</i>	Original Issue
1	03/30/2022	104915434BOX-001c	KPS <i>KPS</i>	VFV <i>VFV</i>	1) Changed report from 'Class II Permissive Change' to Full Compliance' report on page 2. 2) Changed the conducted output power to EIRP power in Section 6.3