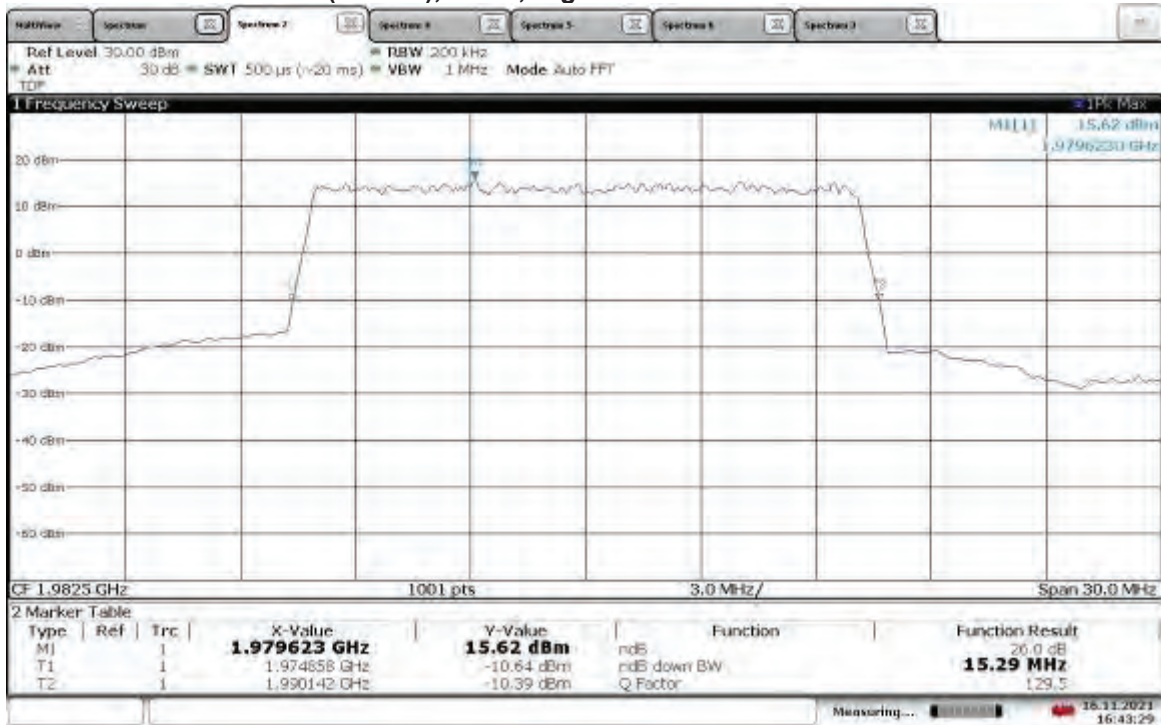
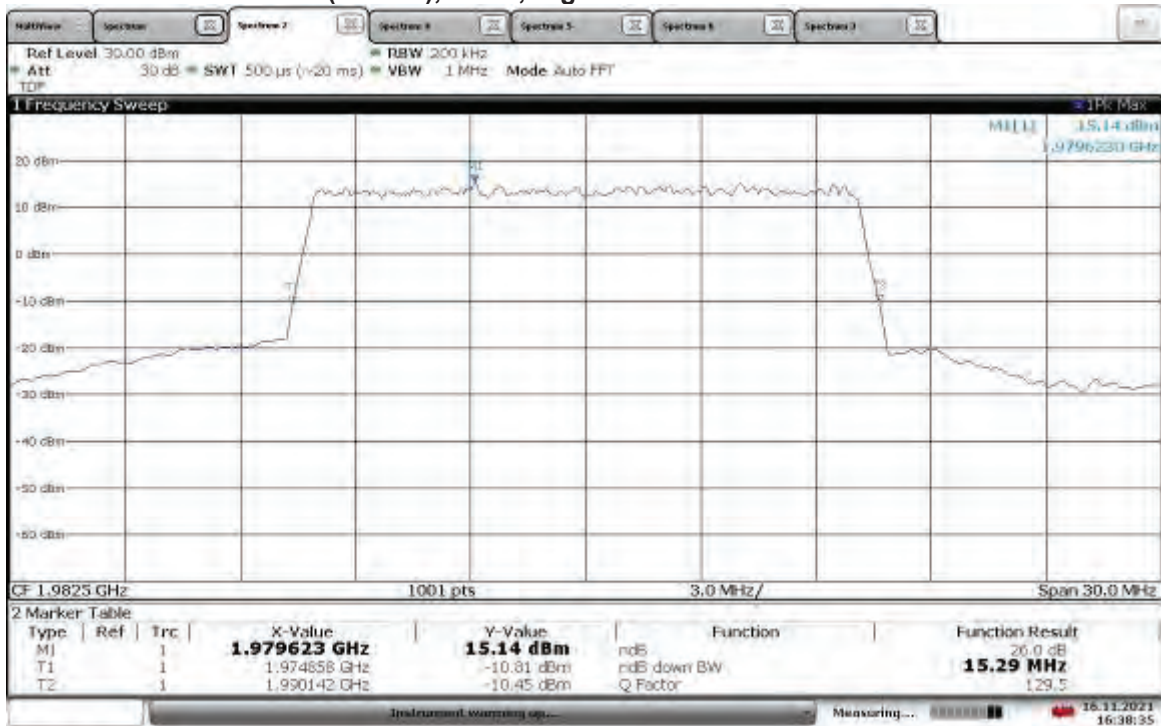


TM1.1-QPSK_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth



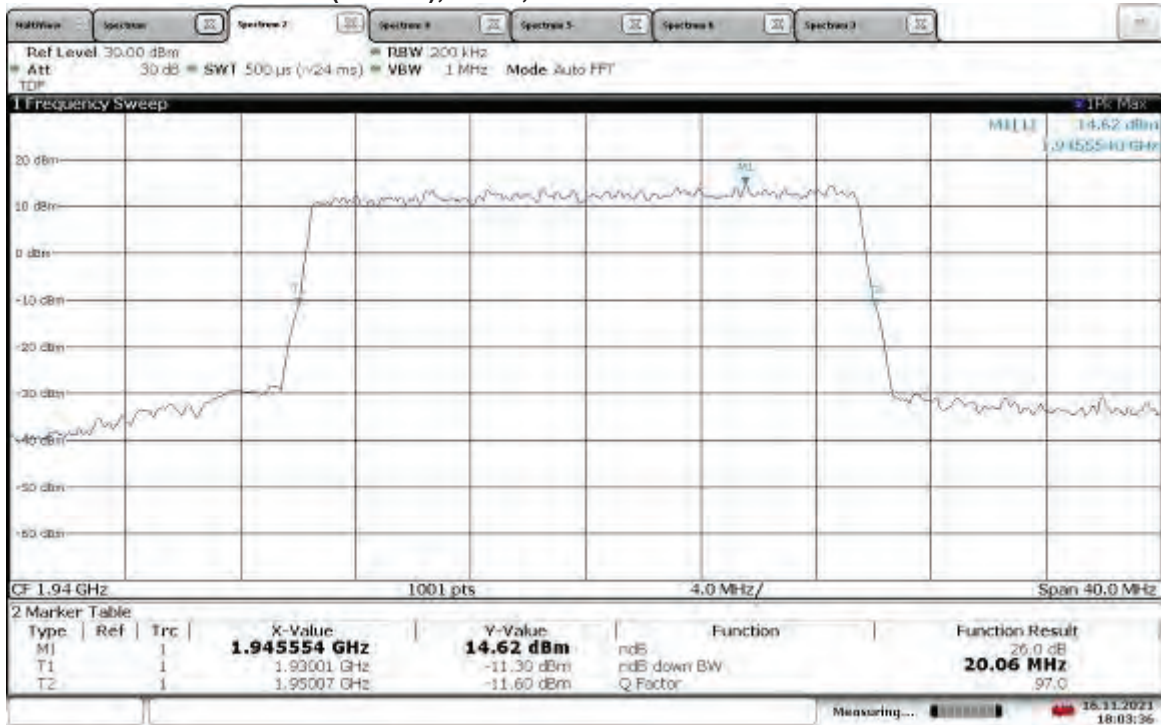
16:43:29 16.11.2021

TM1.1-QPSK_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth



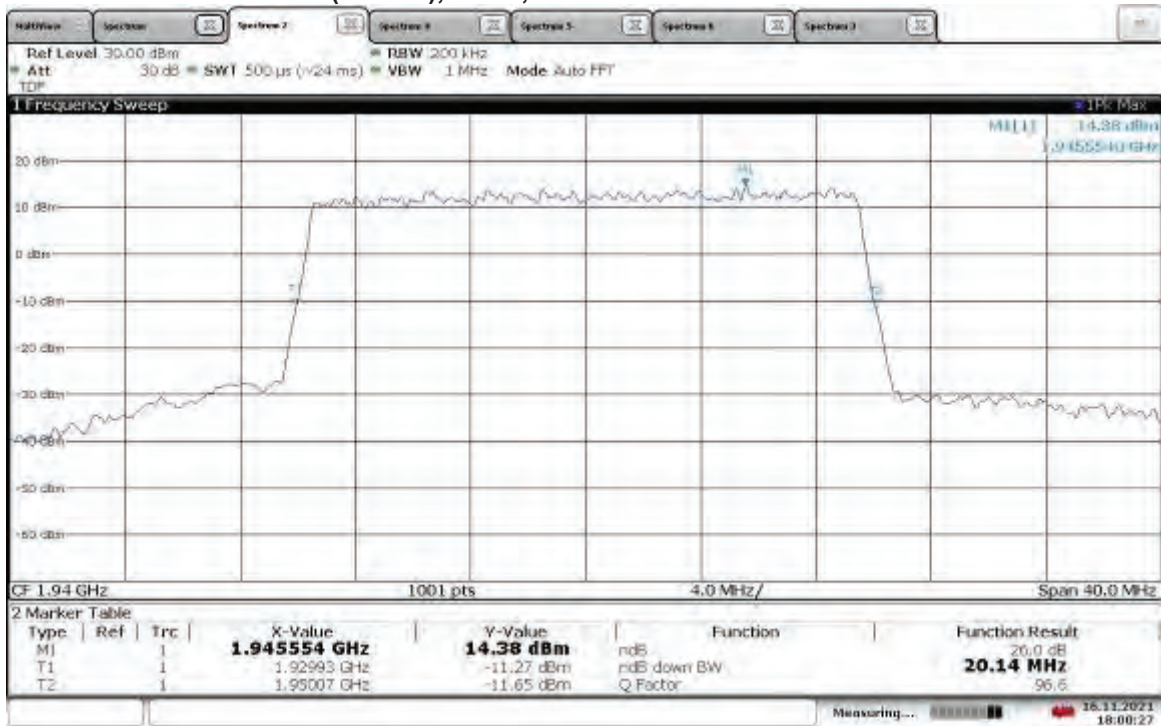
16:38:36 16.11.2021

TM1.1-QPSK_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



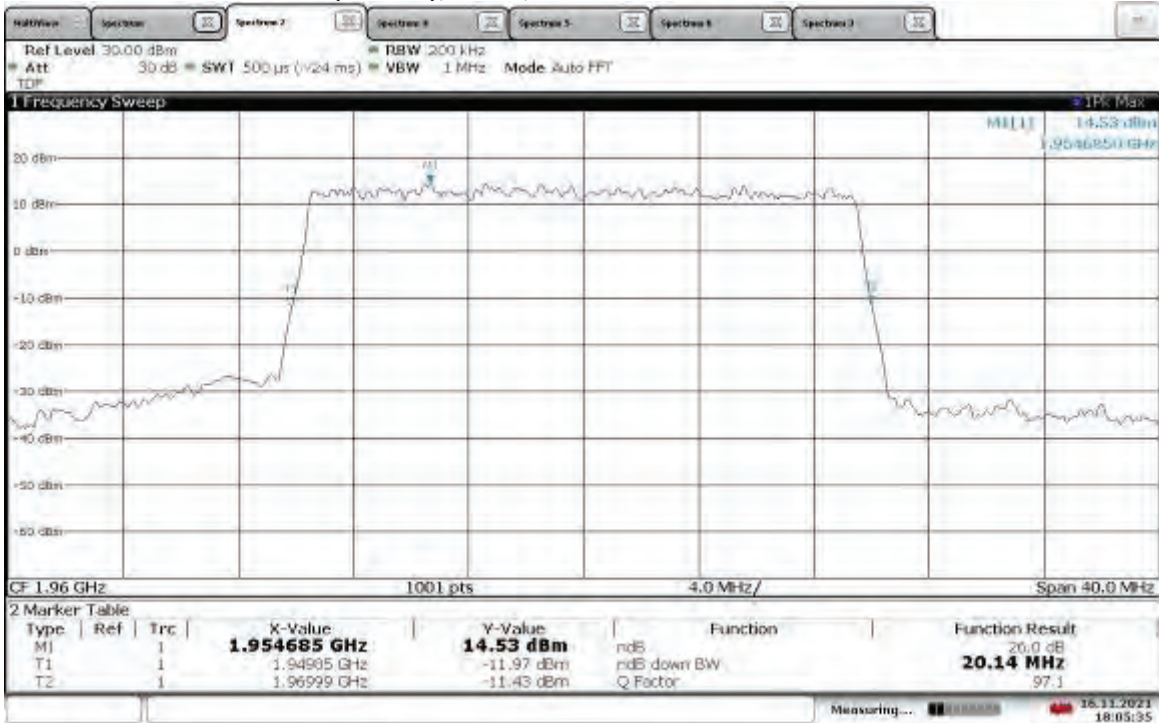
18:03:37 16.11.2021

TM1.1-QPSK_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



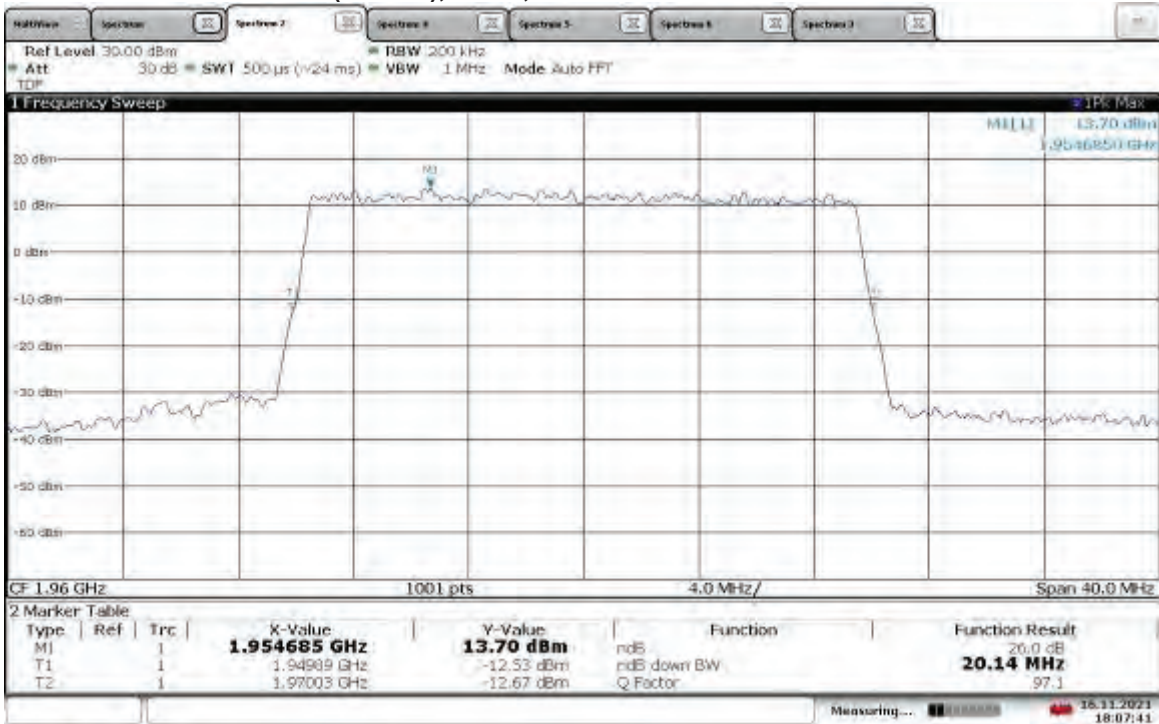
18:00:27 16.11.2021

TM1.1-QPSK_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth



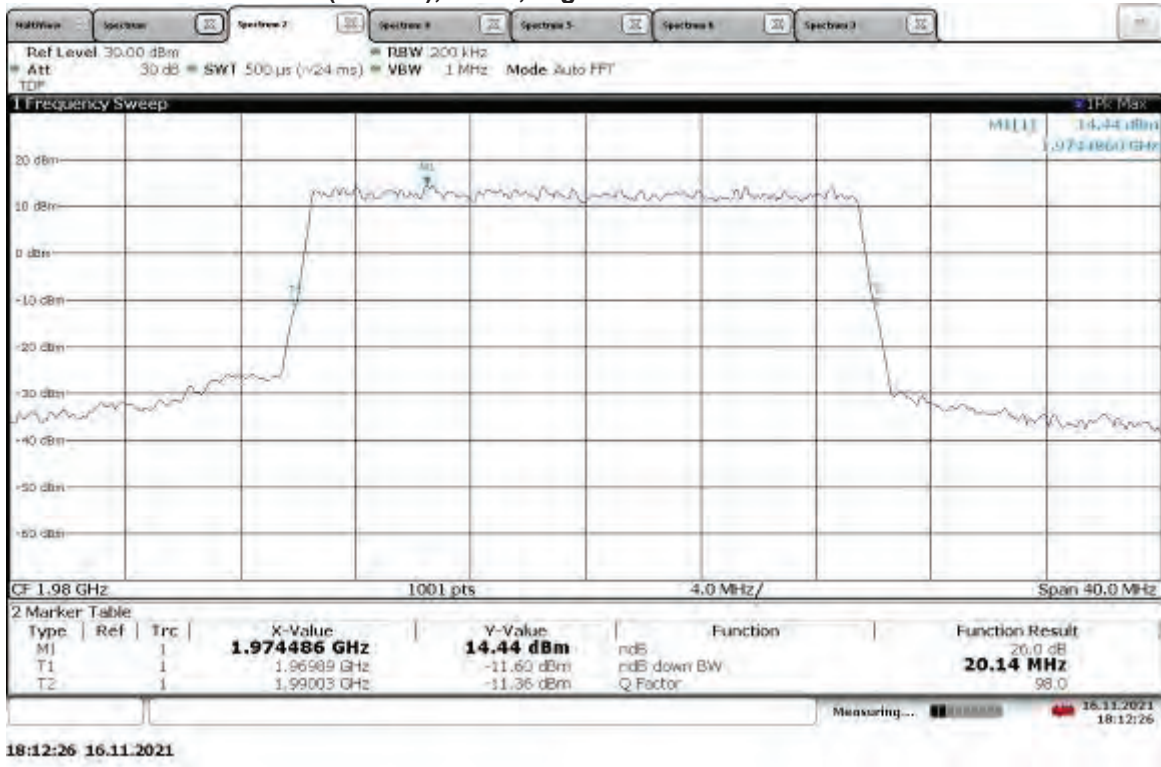
18:05:36 16.11.2021

TM1.1-QPSK_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth

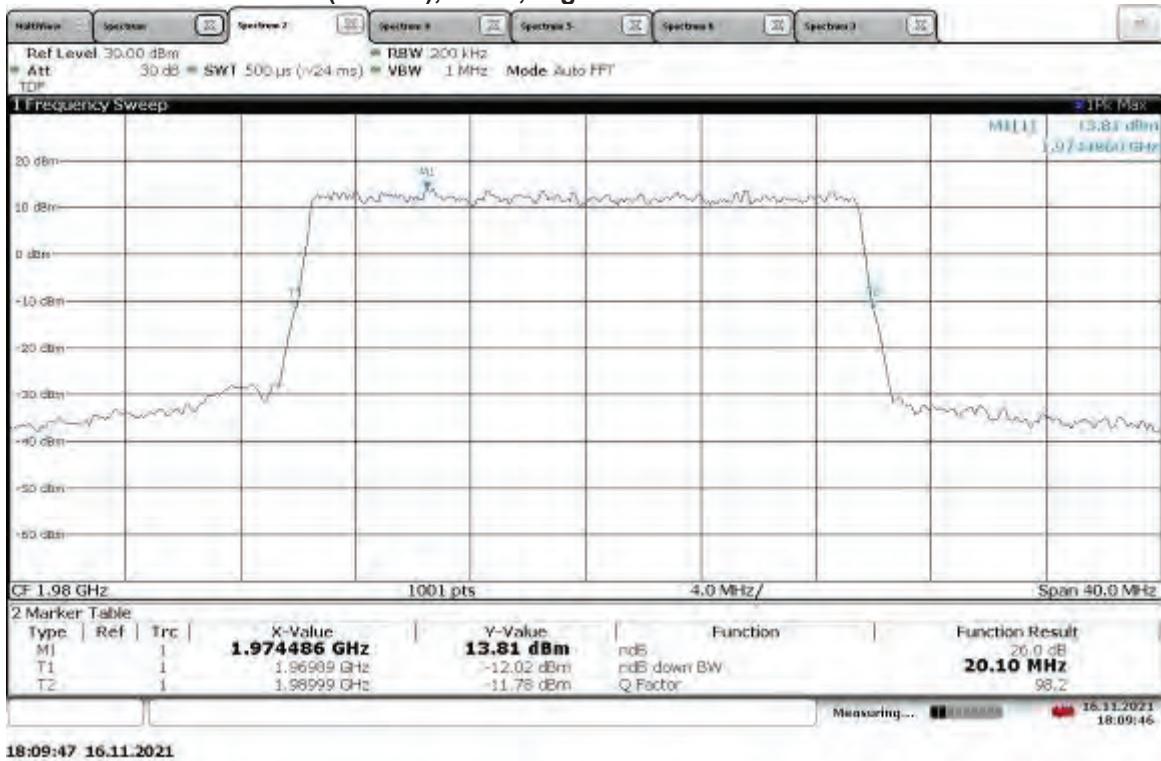


18:07:41 16.11.2021

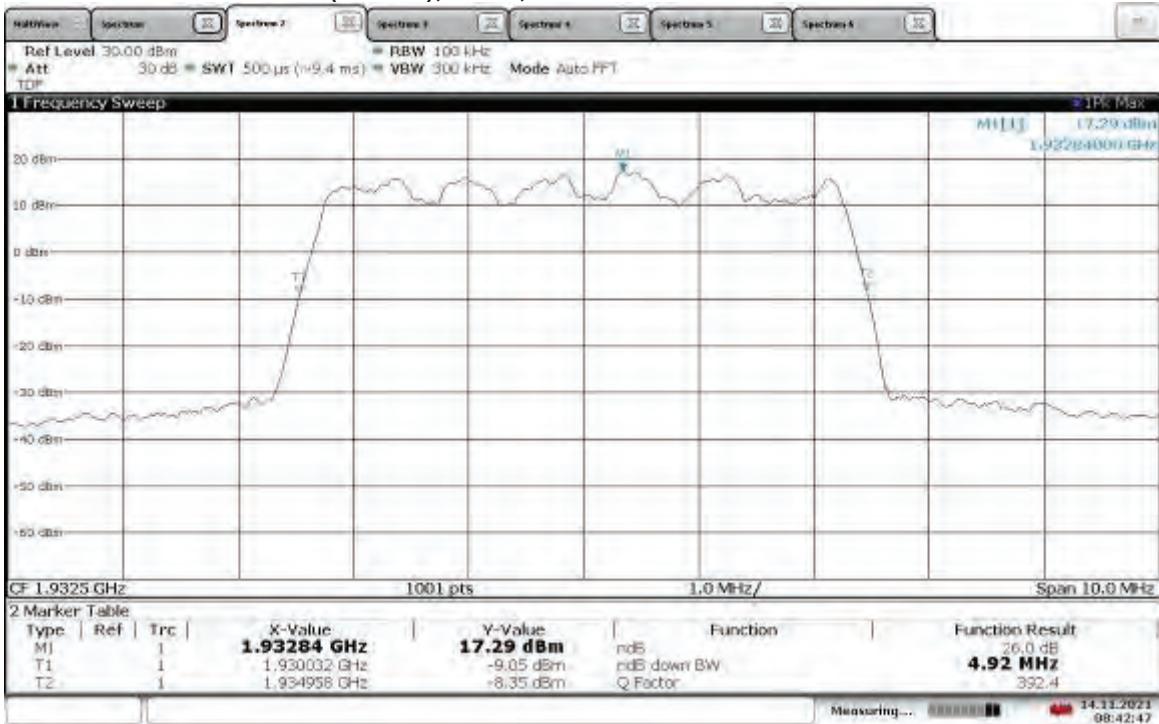
TM1.1-QPSK_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth



TM1.1-QPSK_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth

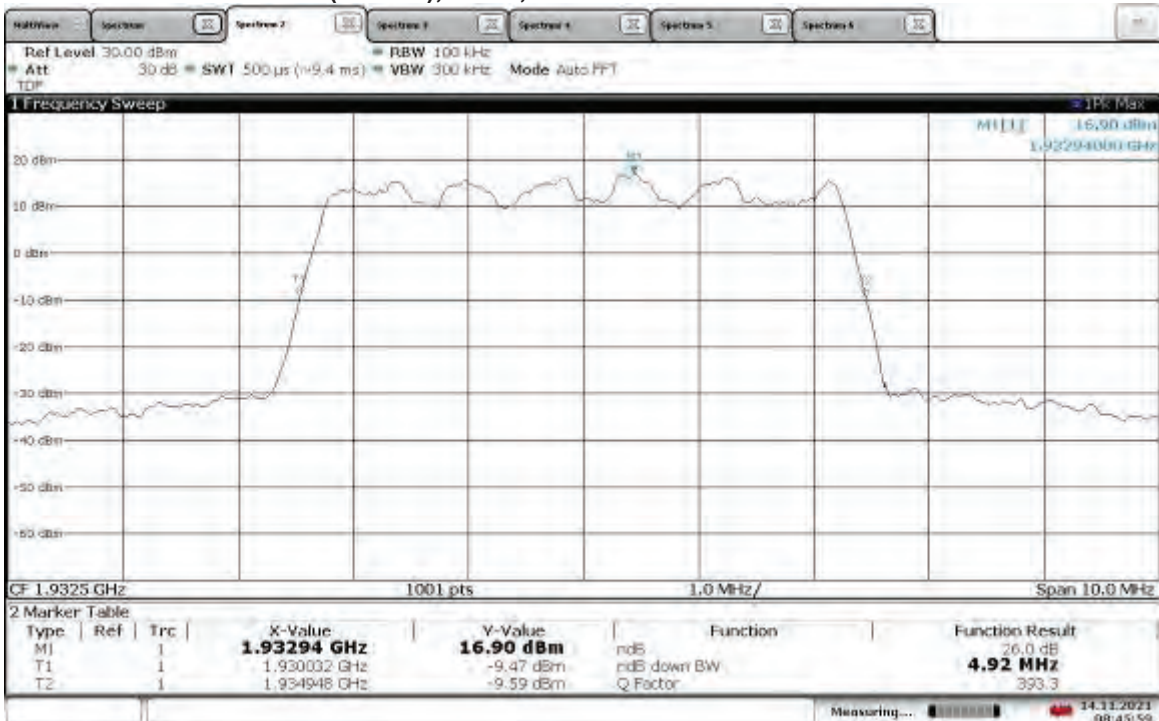


TM3.2-16QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



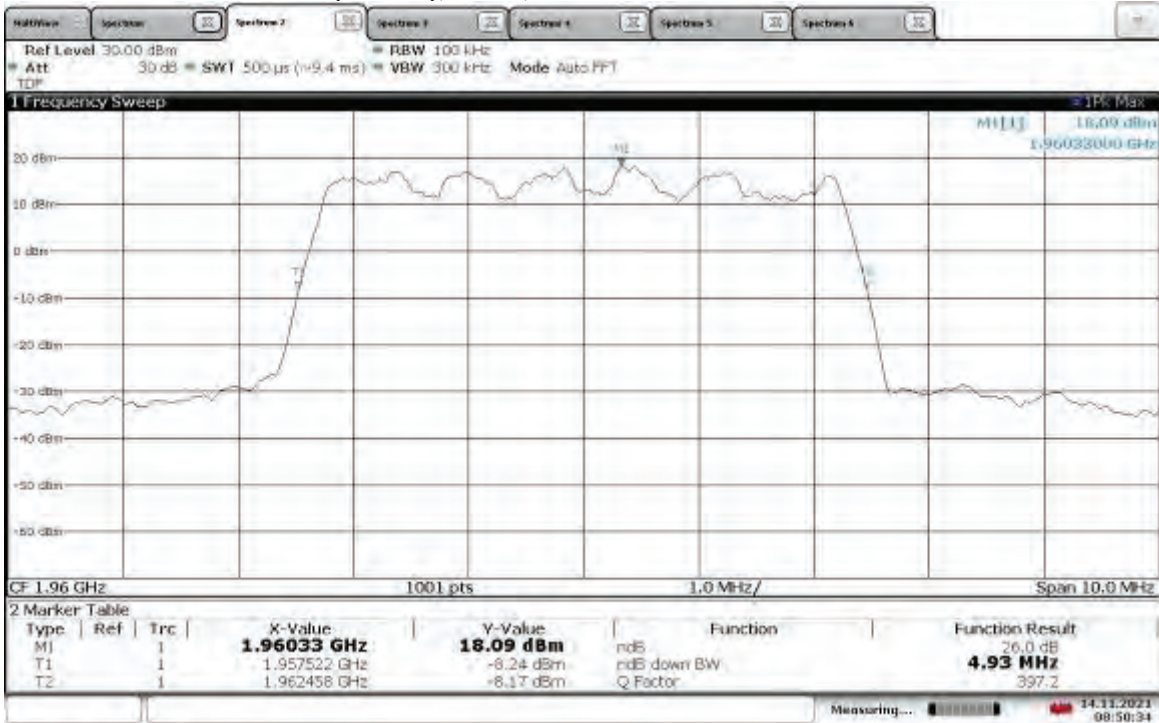
08:42:47 14.11.2021

TM3.2-16QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



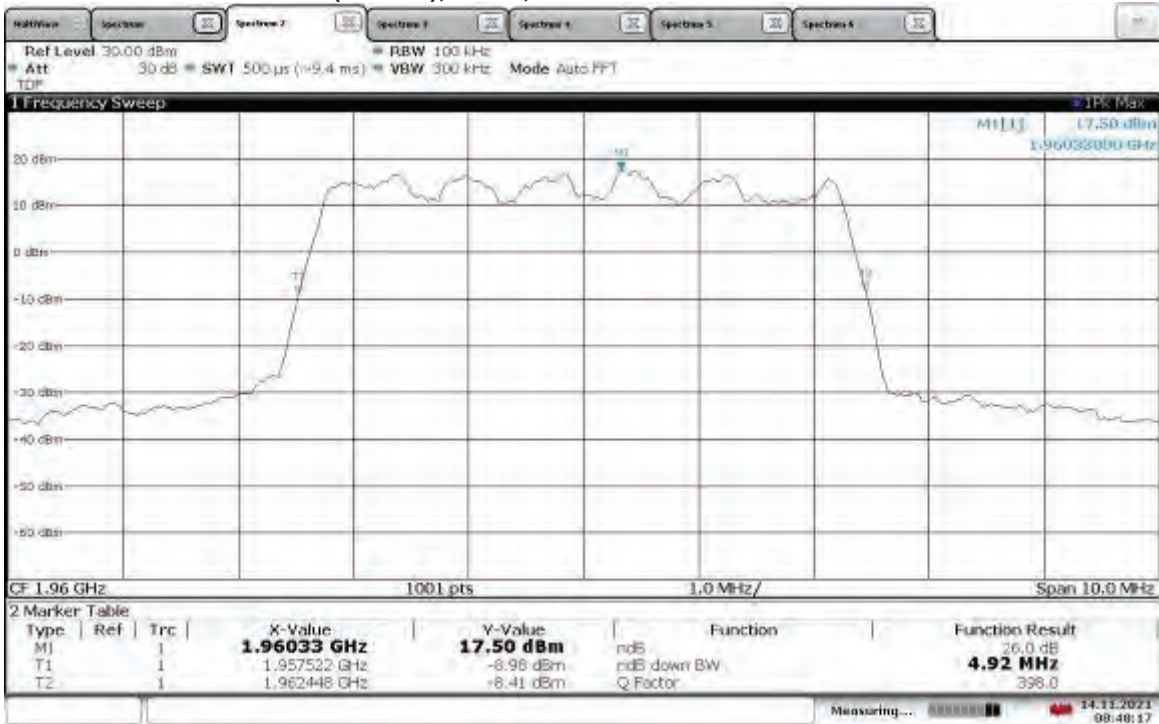
08:46:00 14.11.2021

TM3.2-16QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth



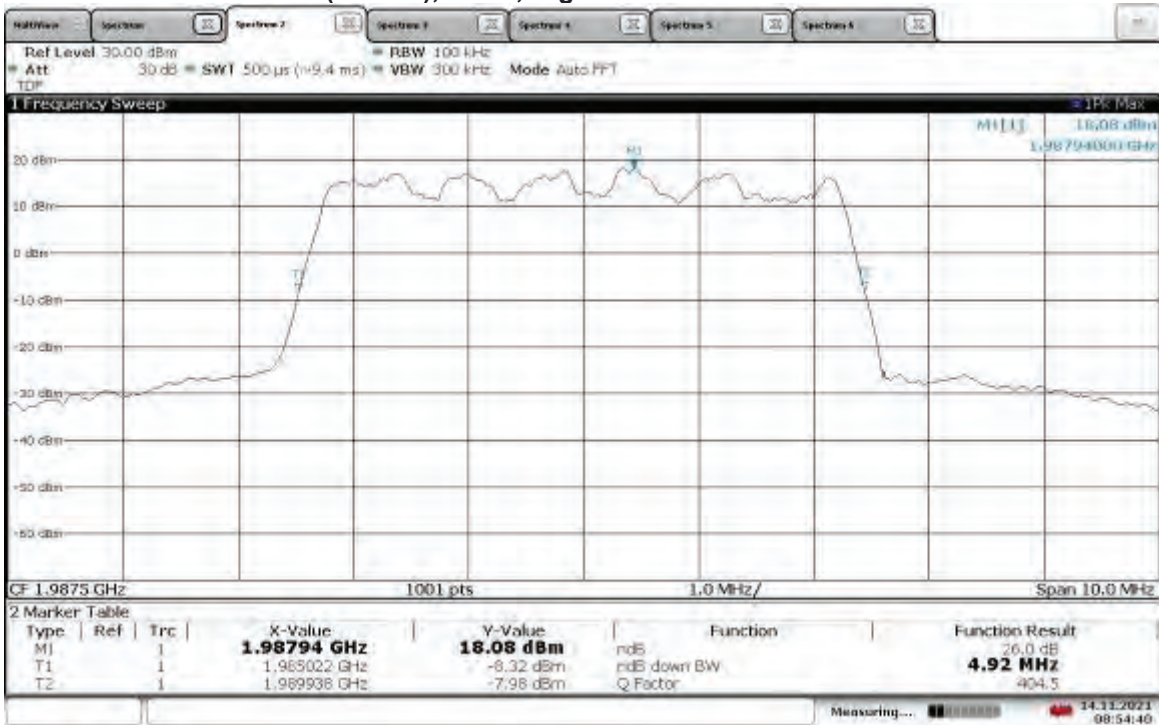
08:50:34 14.11.2021

TM3.2-16QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth



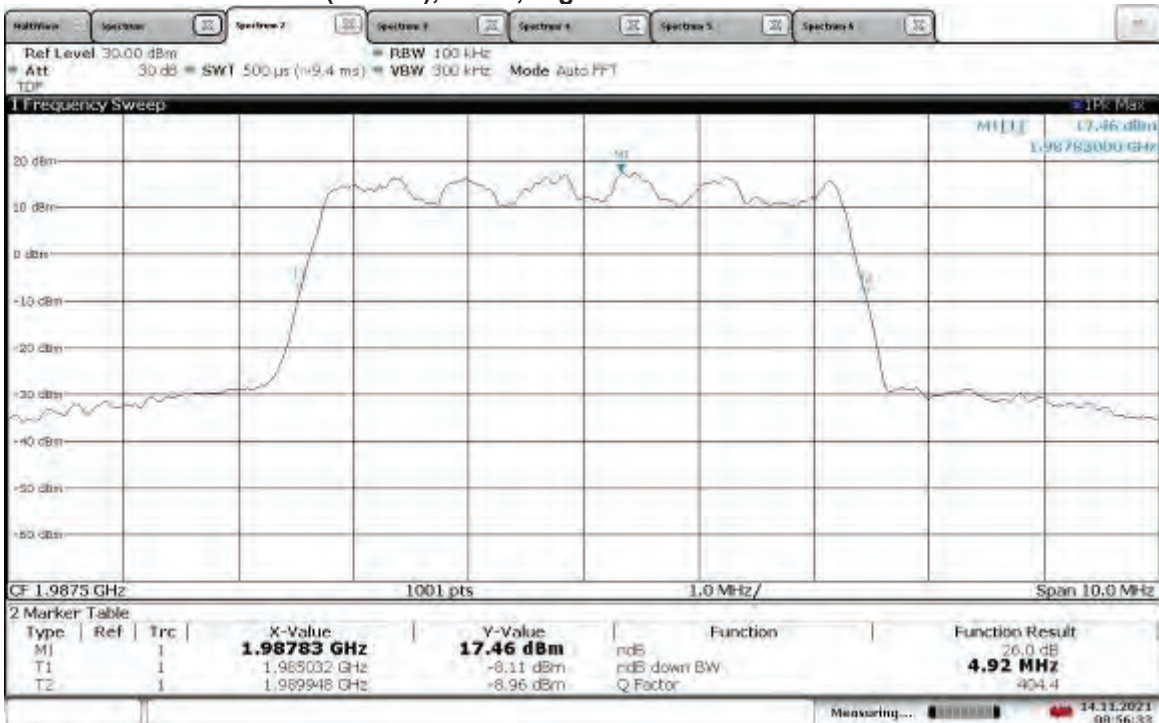
08:48:18 14.11.2021

TM3.2-16QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth



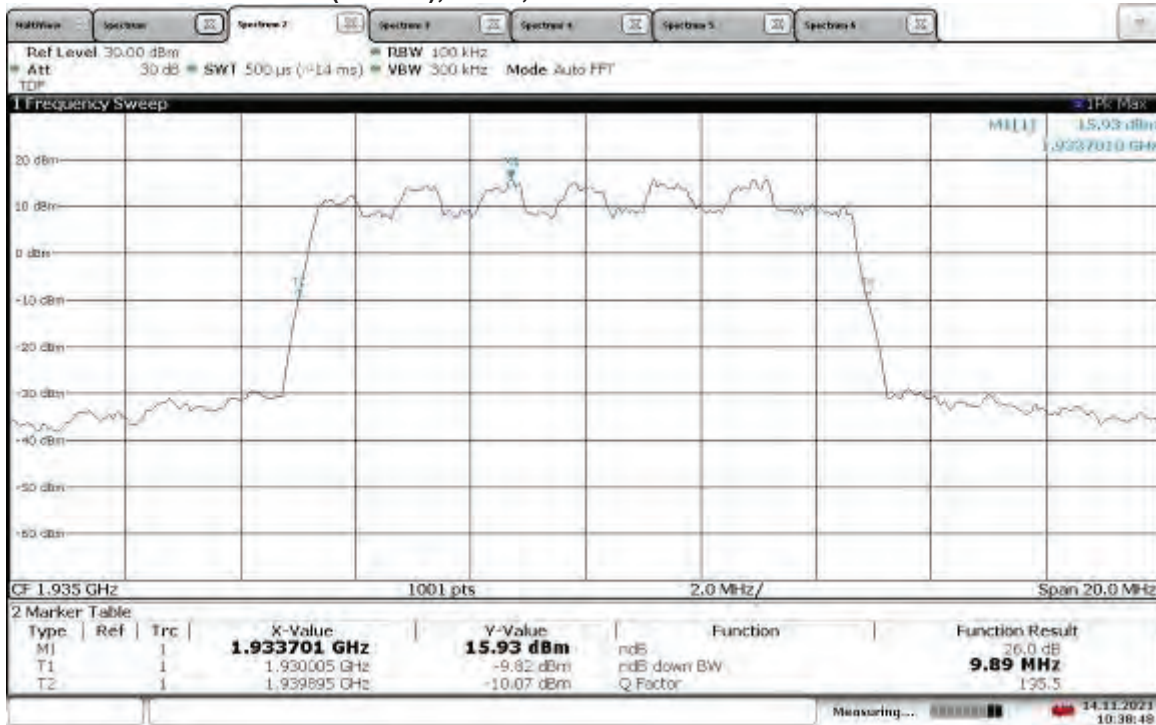
08:54:41 14.11.2021

TM3.2-16QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth



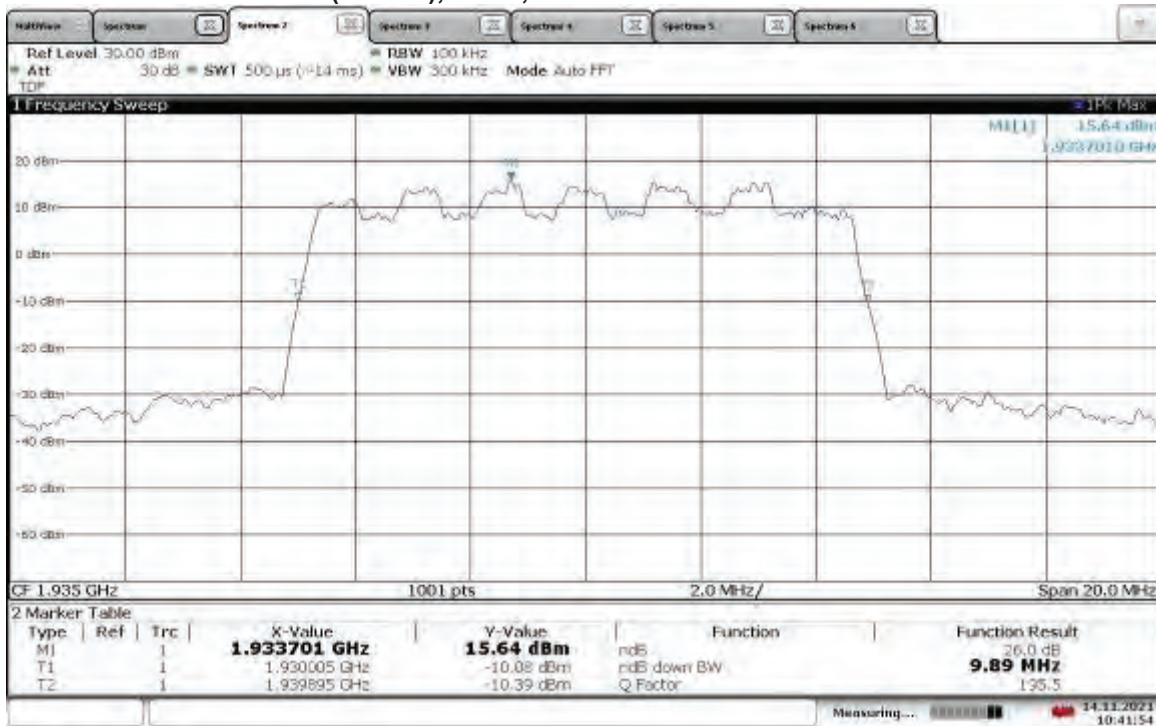
08:56:34 14.11.2021

TM3.2-16QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



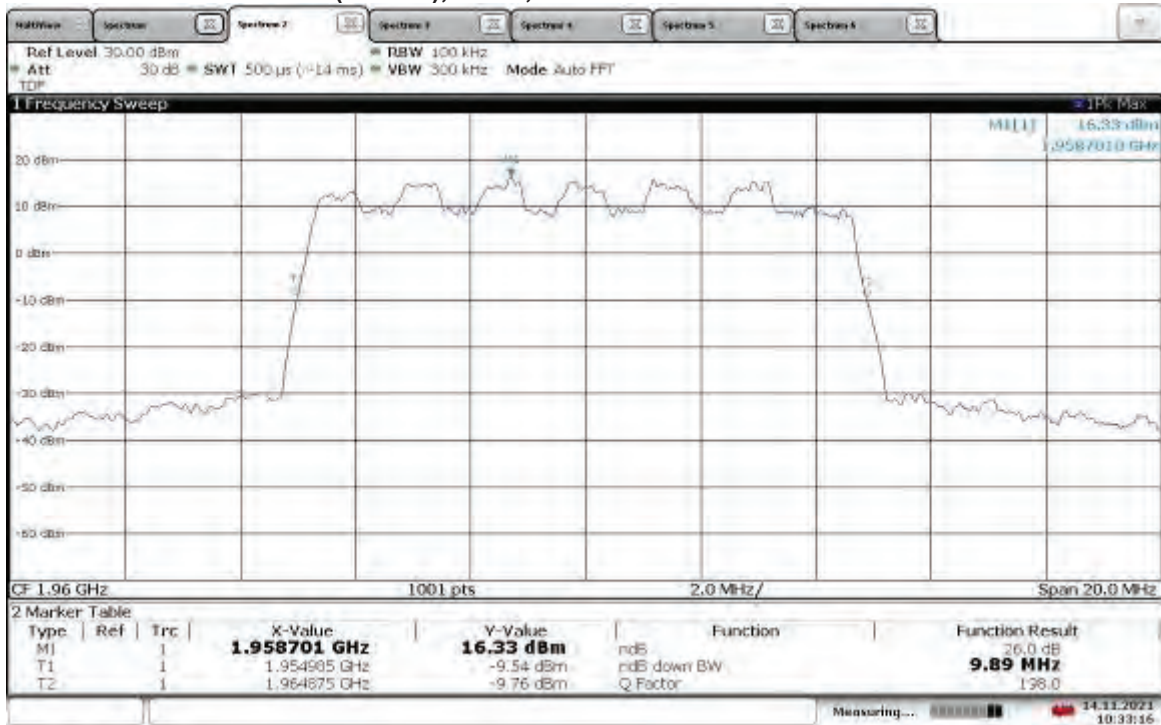
10:38:48 14.11.2021

TM3.2-16QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



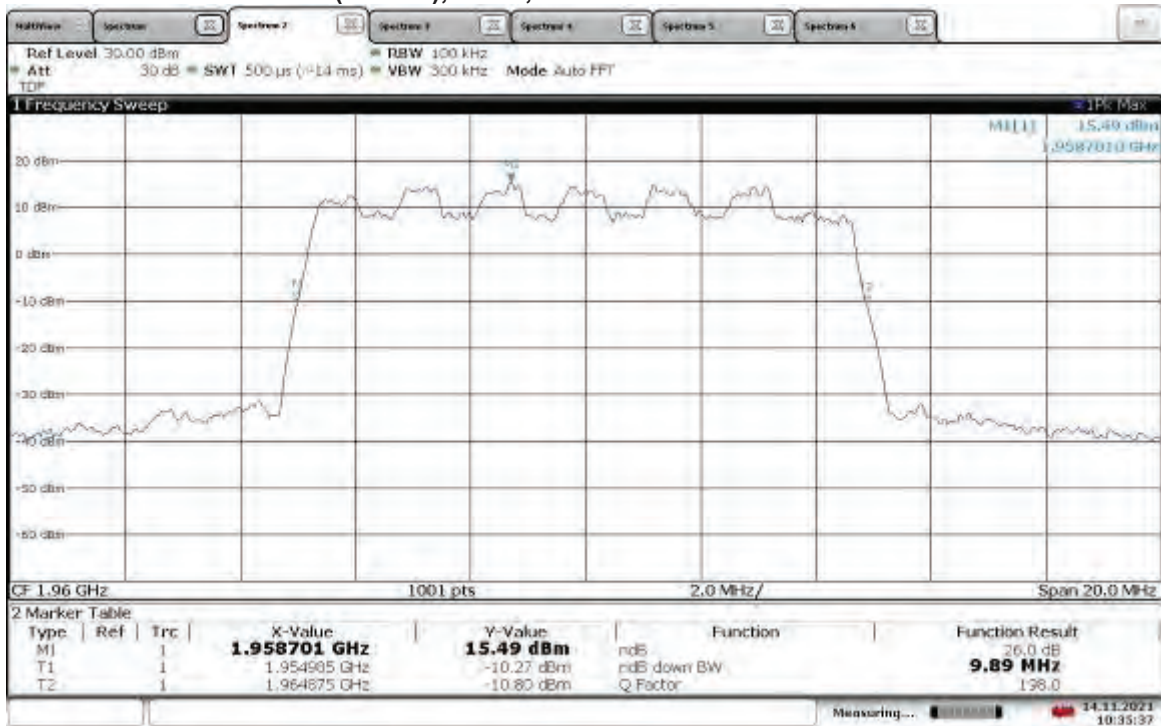
10:41:55 14.11.2021

TM3.2-16QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth



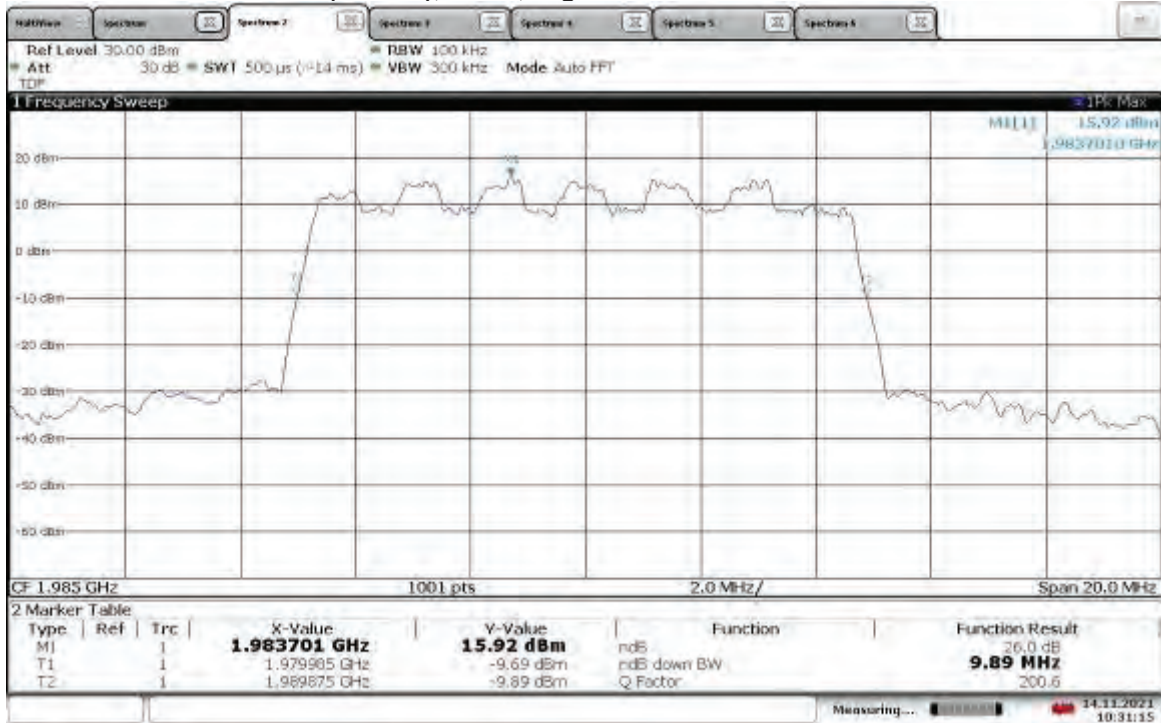
10:33:16 14.11.2021

TM3.2-16QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth



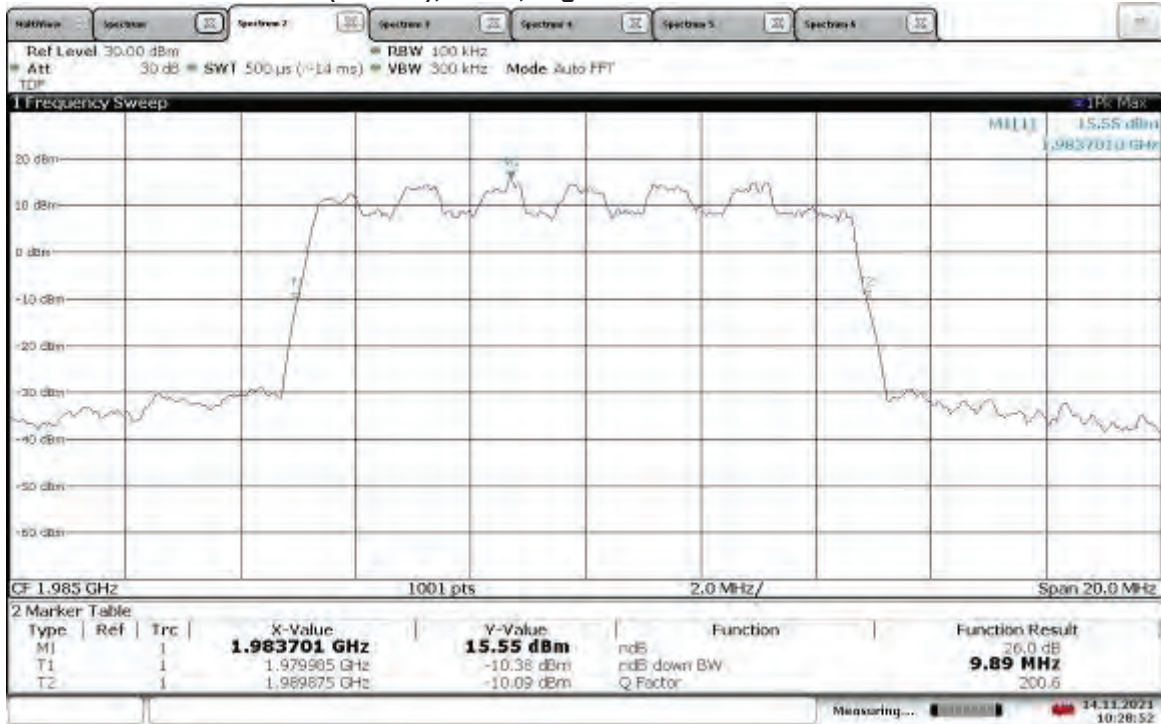
10:35:38 14.11.2021

**TM3.2-16QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth**



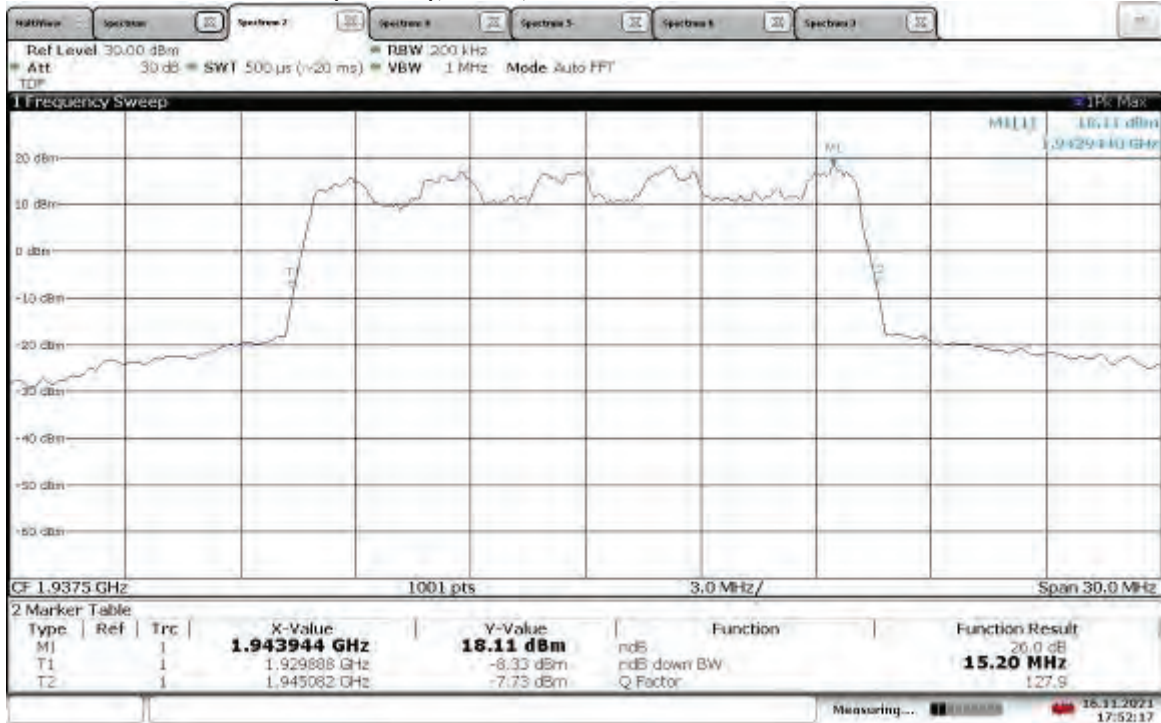
10:31:15 14.11.2021

**TM3.2-16QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth**



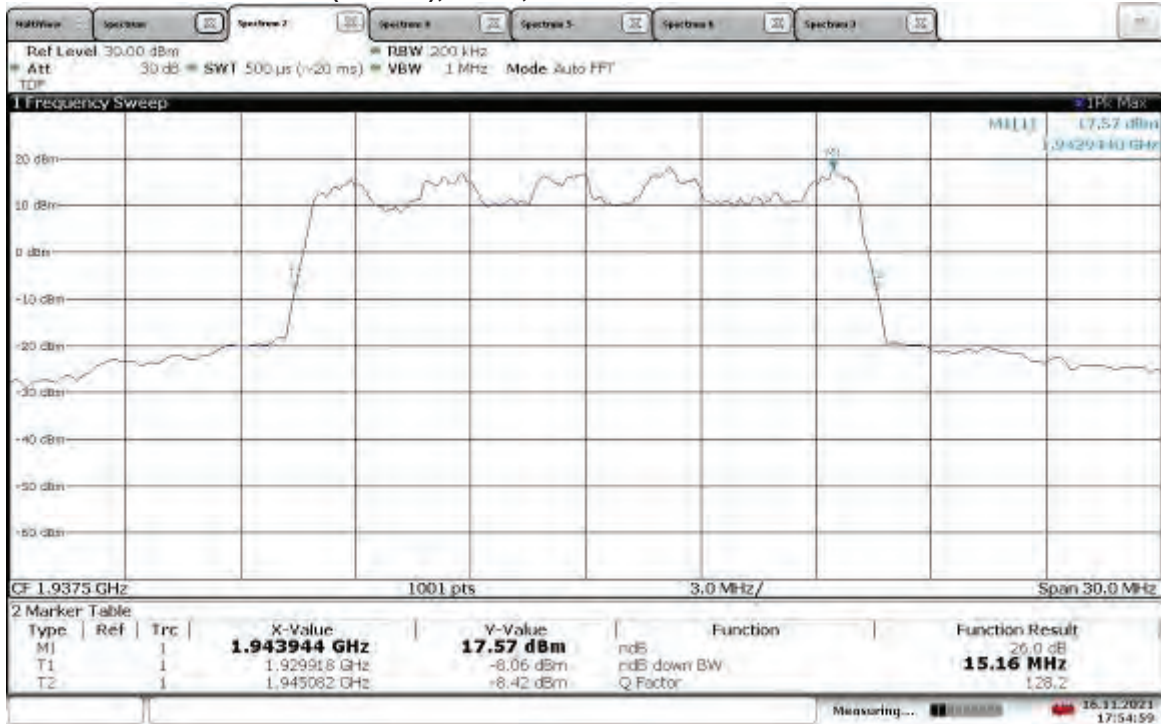
10:28:53 14.11.2021

TM3.2-16QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



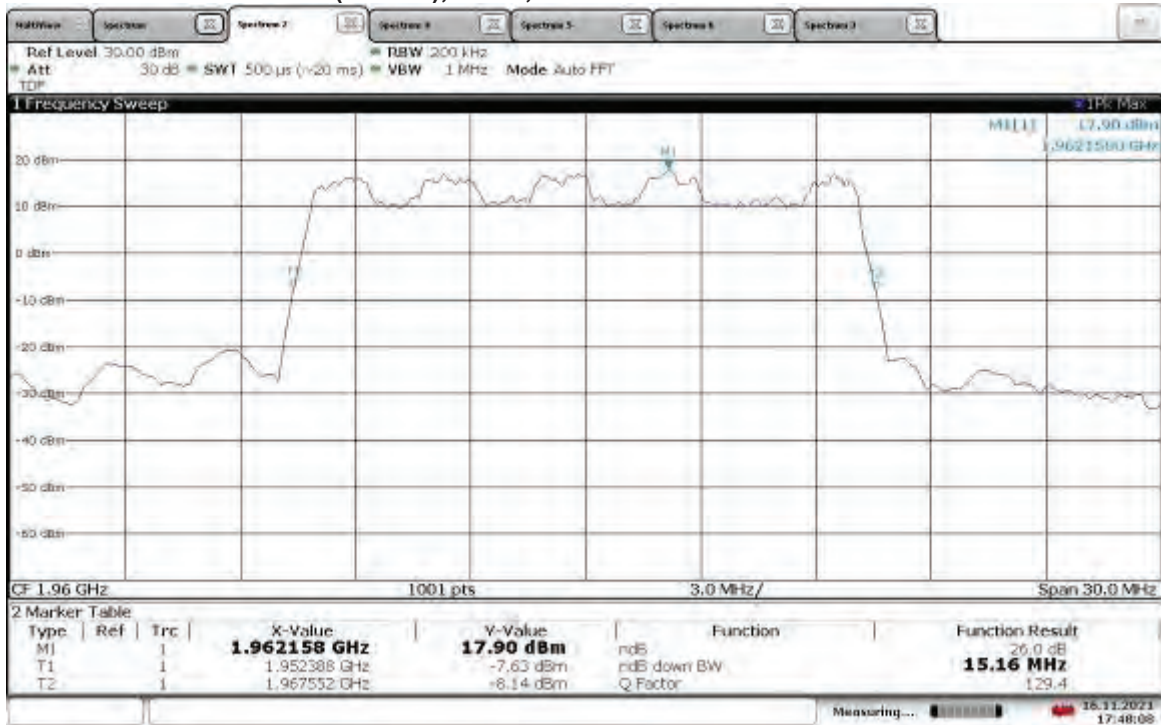
17:52:18 16.11.2021

TM3.2-16QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



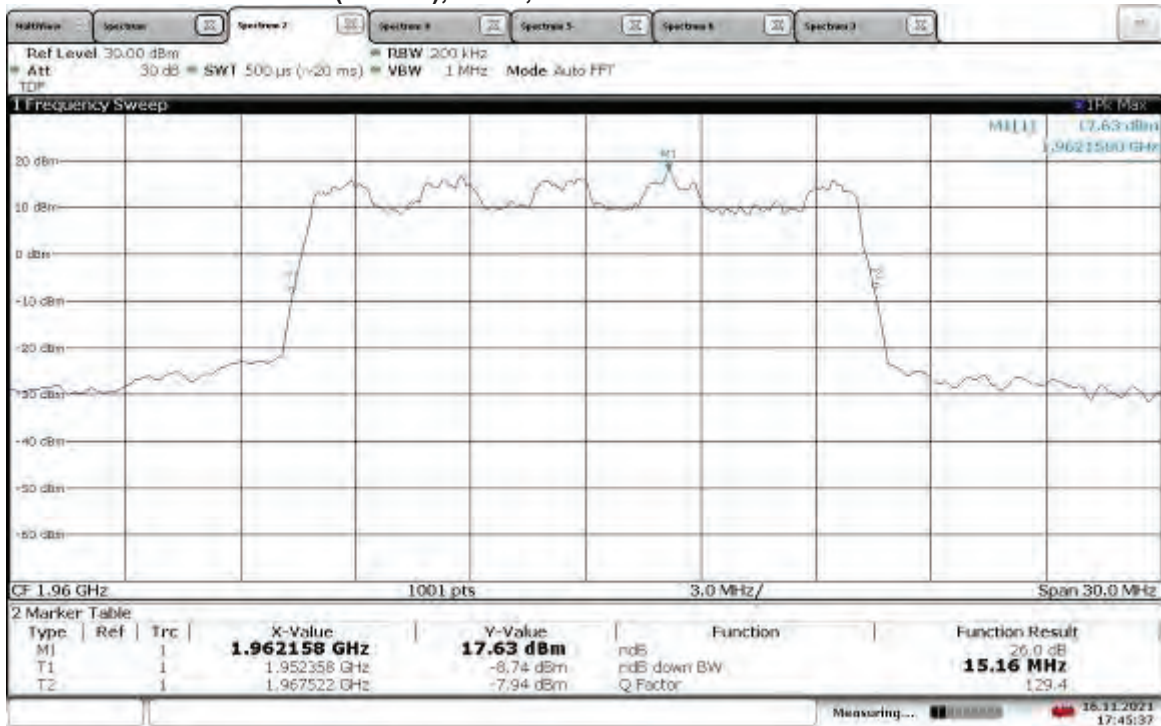
17:54:59 16.11.2021

TM3.2-16QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth



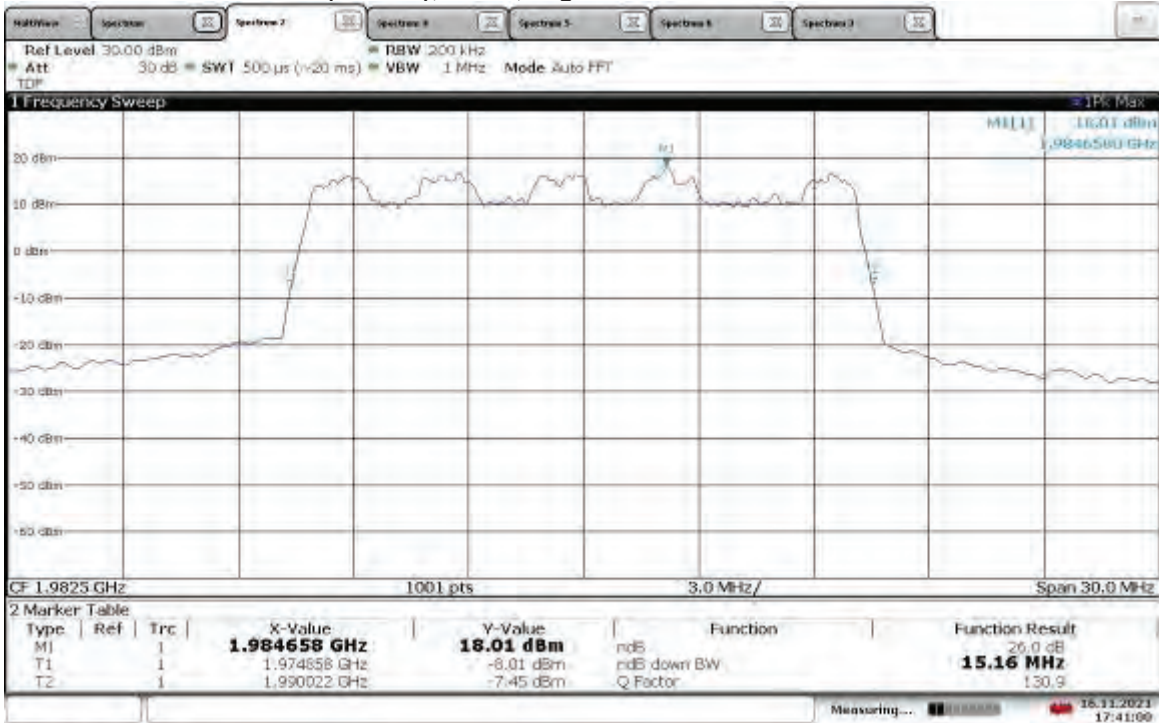
17:48:09 16.11.2021

TM3.2-16QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth



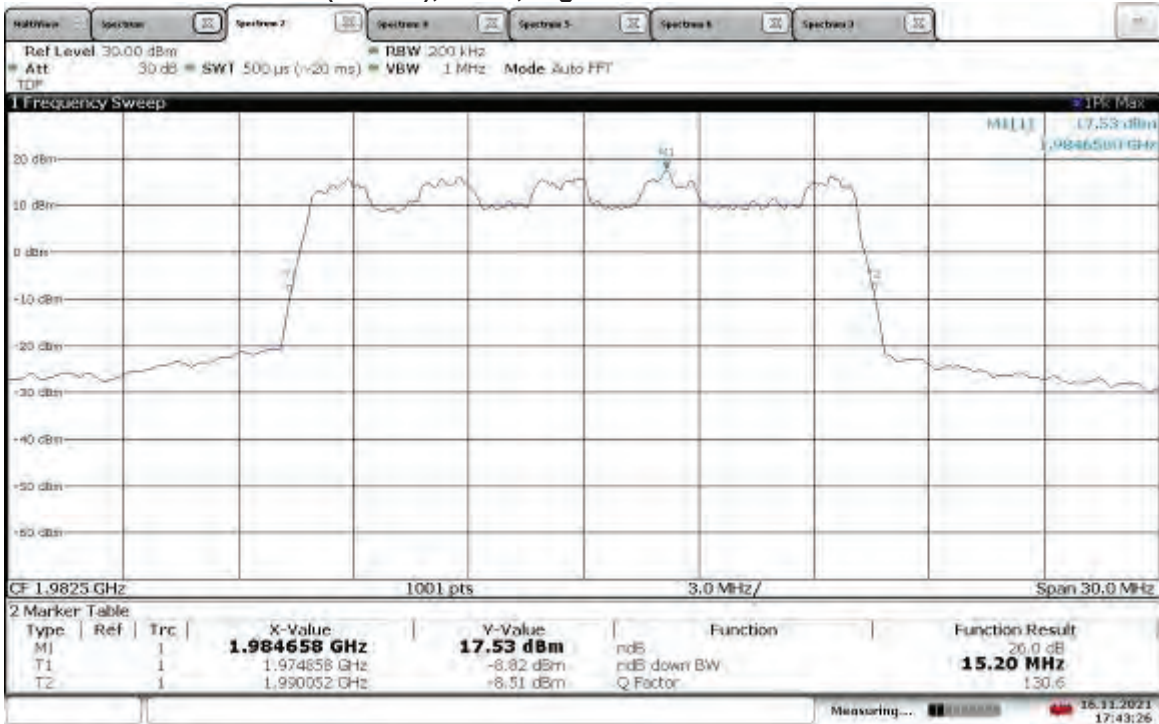
17:45:38 16.11.2021

TM3.2-16QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth



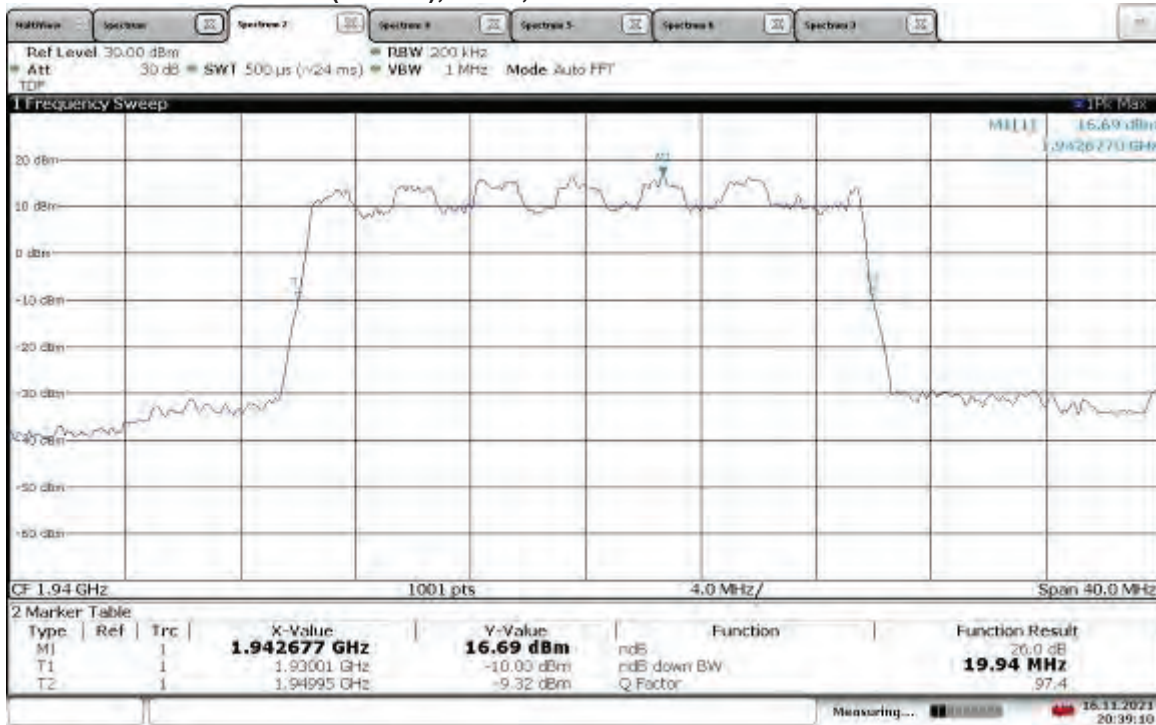
17:41:01 16.11.2021

TM3.2-16QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth



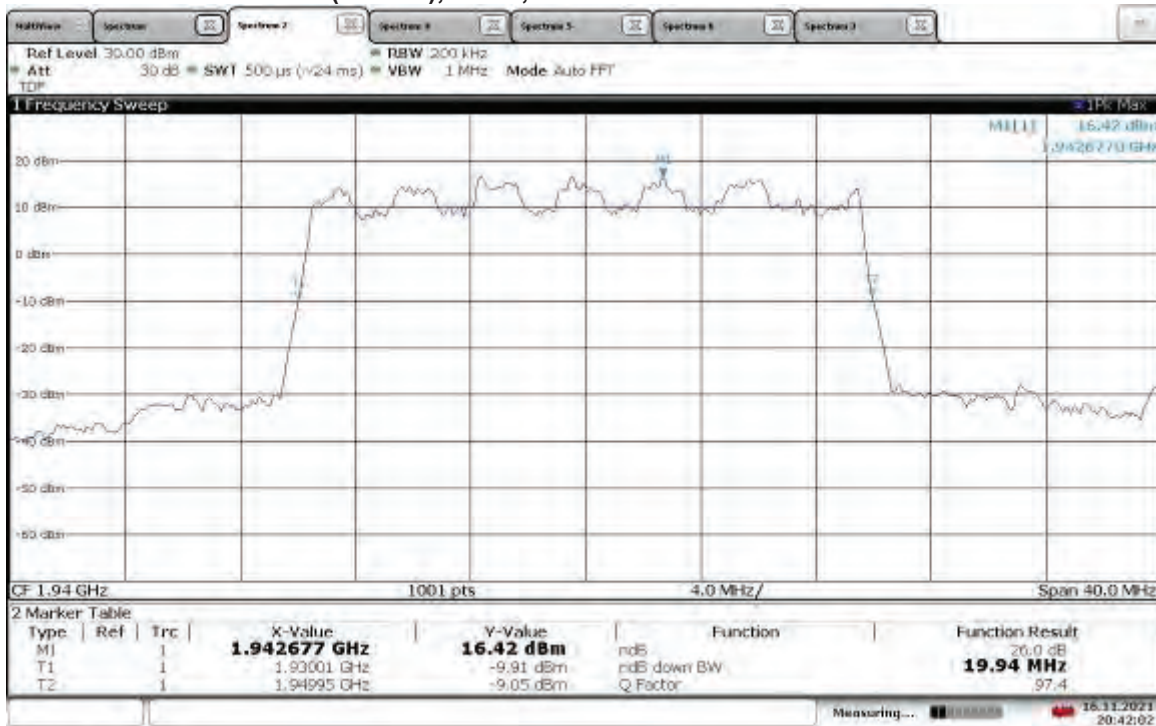
17:43:27 16.11.2021

TM3.2-16QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



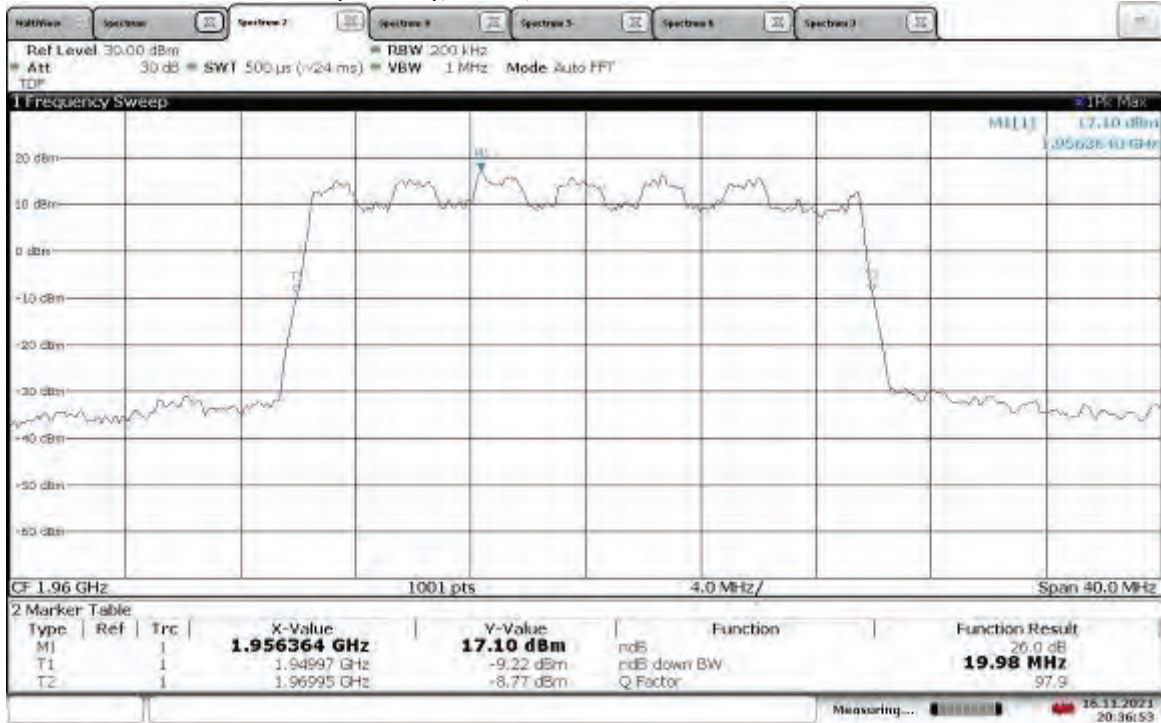
20:39:11 16.11.2021

TM3.2-16QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



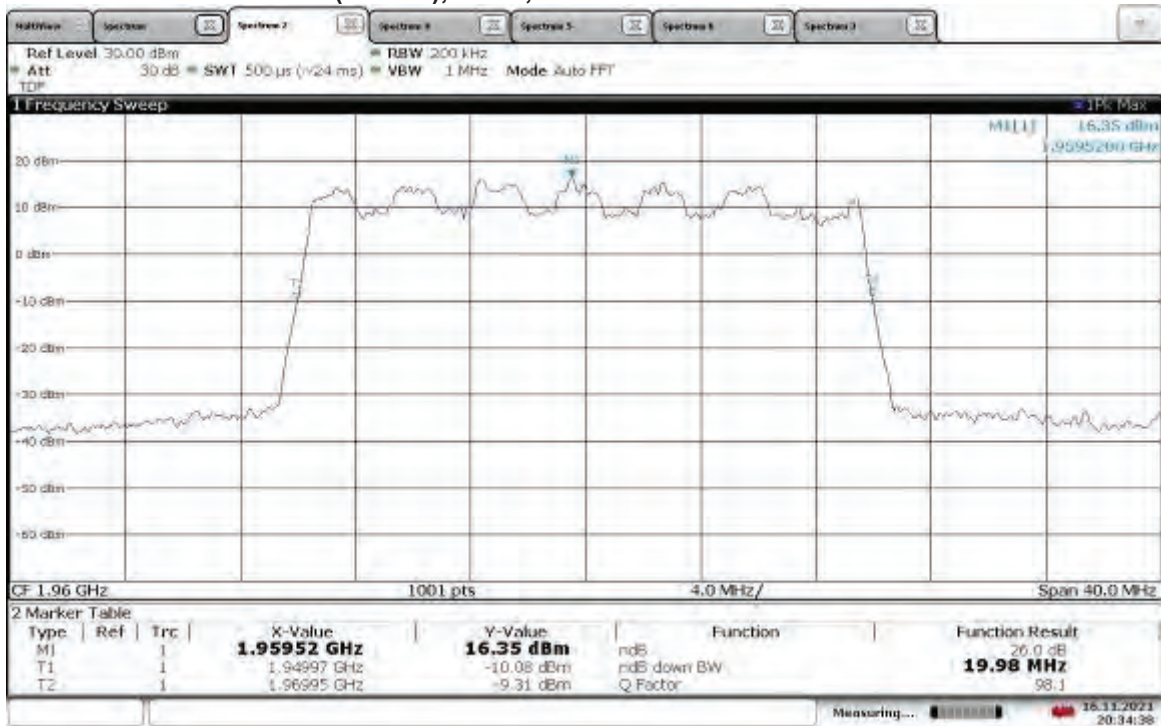
20:42:03 16.11.2021

**TM3.2-16QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth**



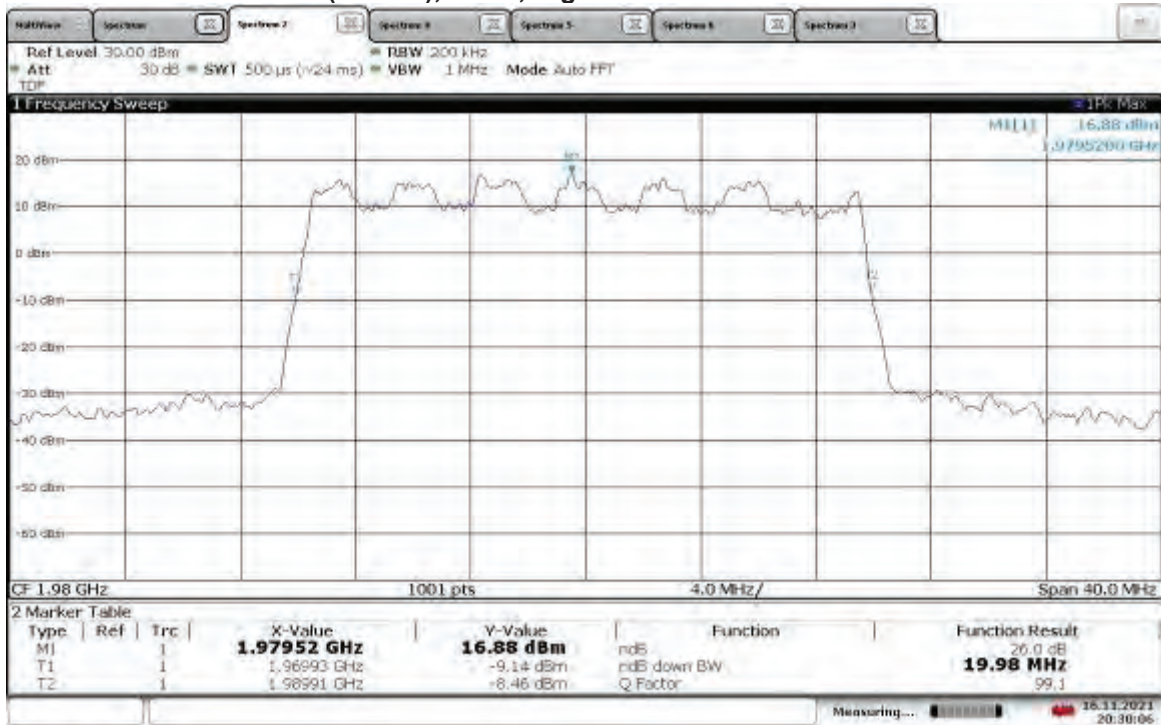
20:36:54 16.11.2021

**TM3.2-16QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth**



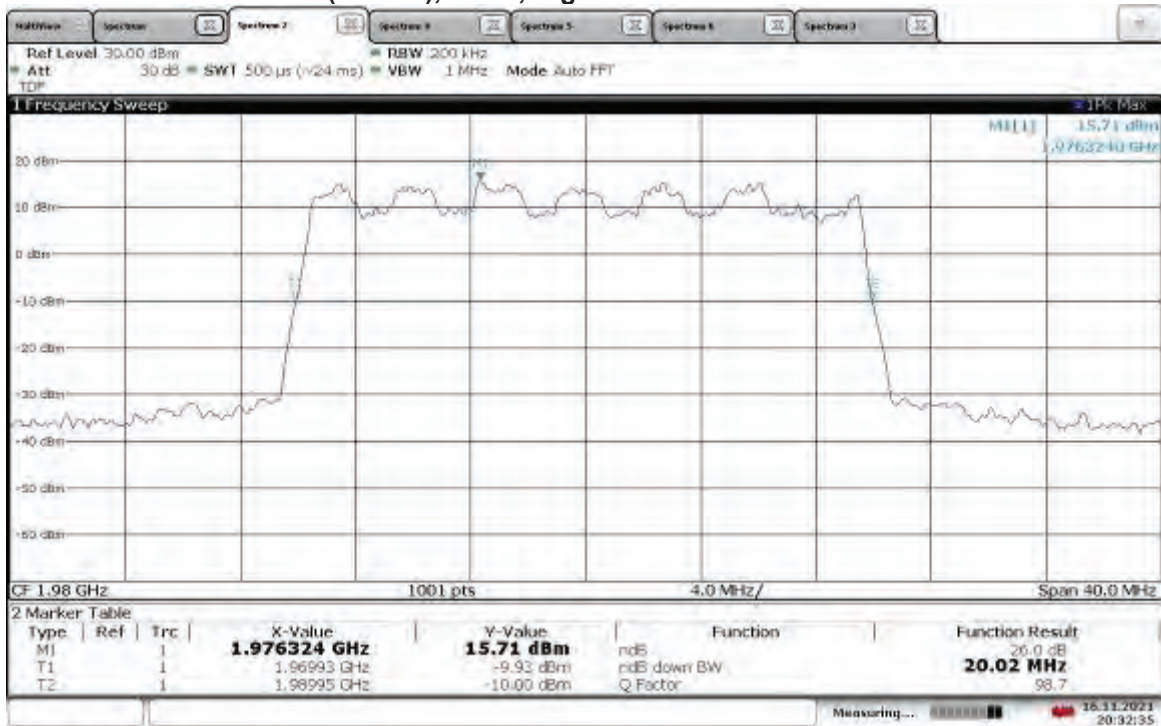
20:34:39 16.11.2021

TM3.2-16QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth



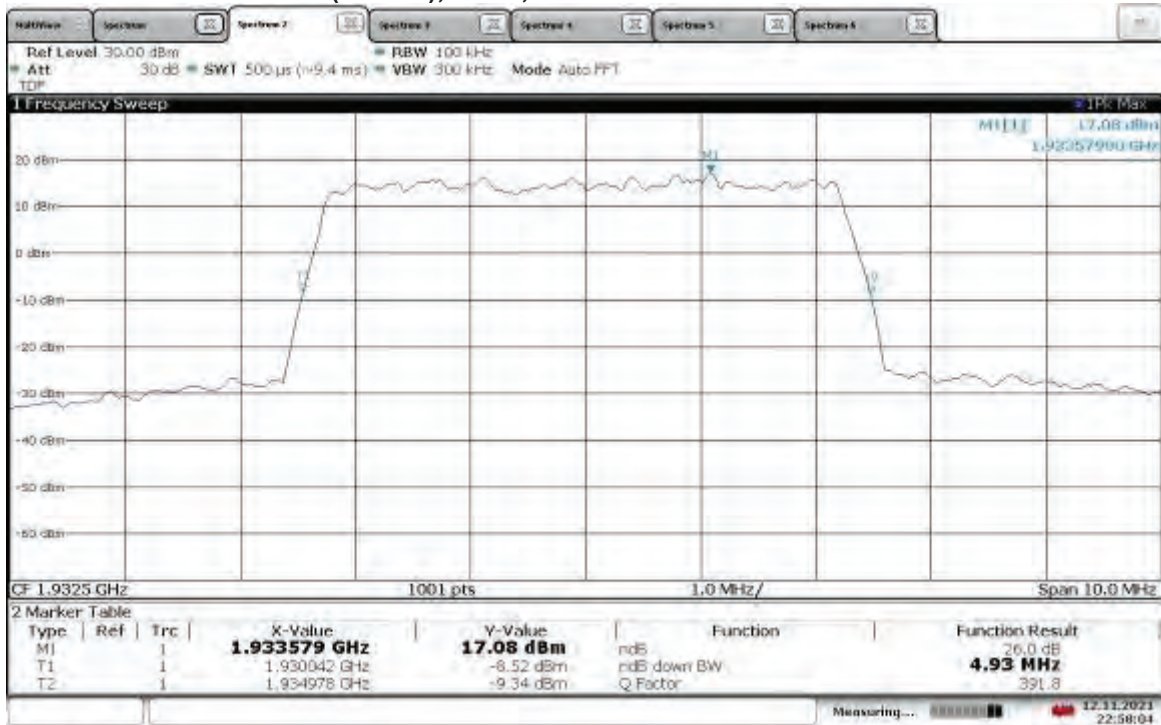
20:30:06 16.11.2021

TM3.2-16QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth



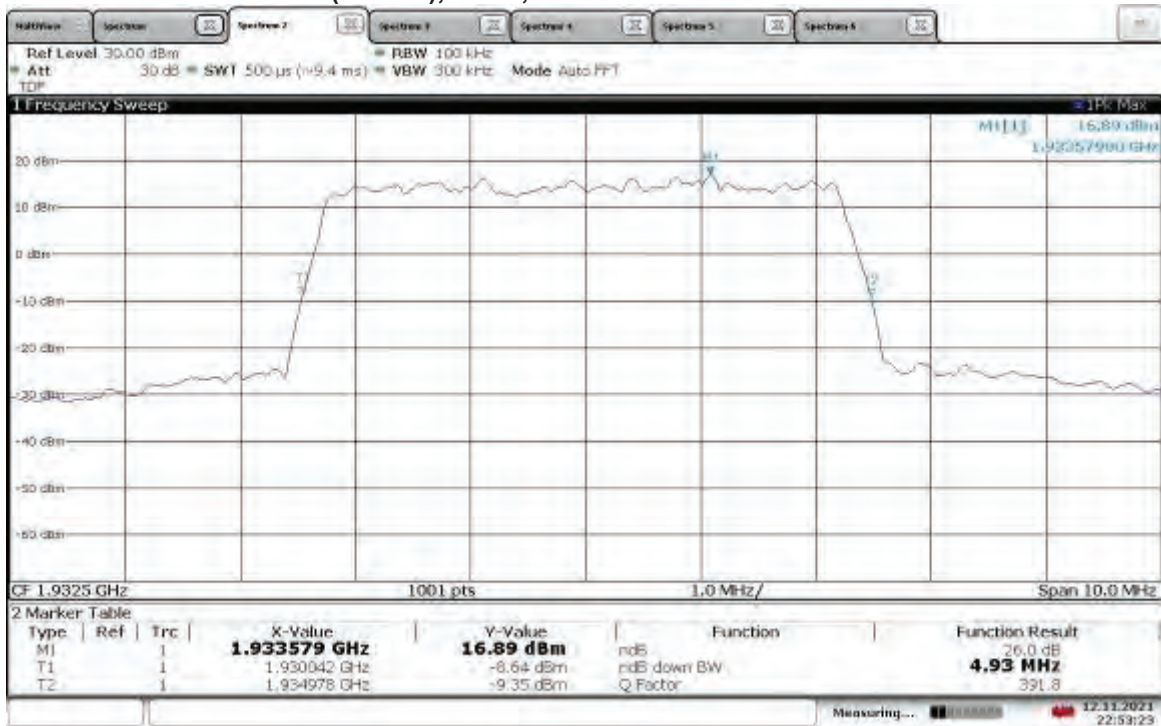
20:32:35 16.11.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



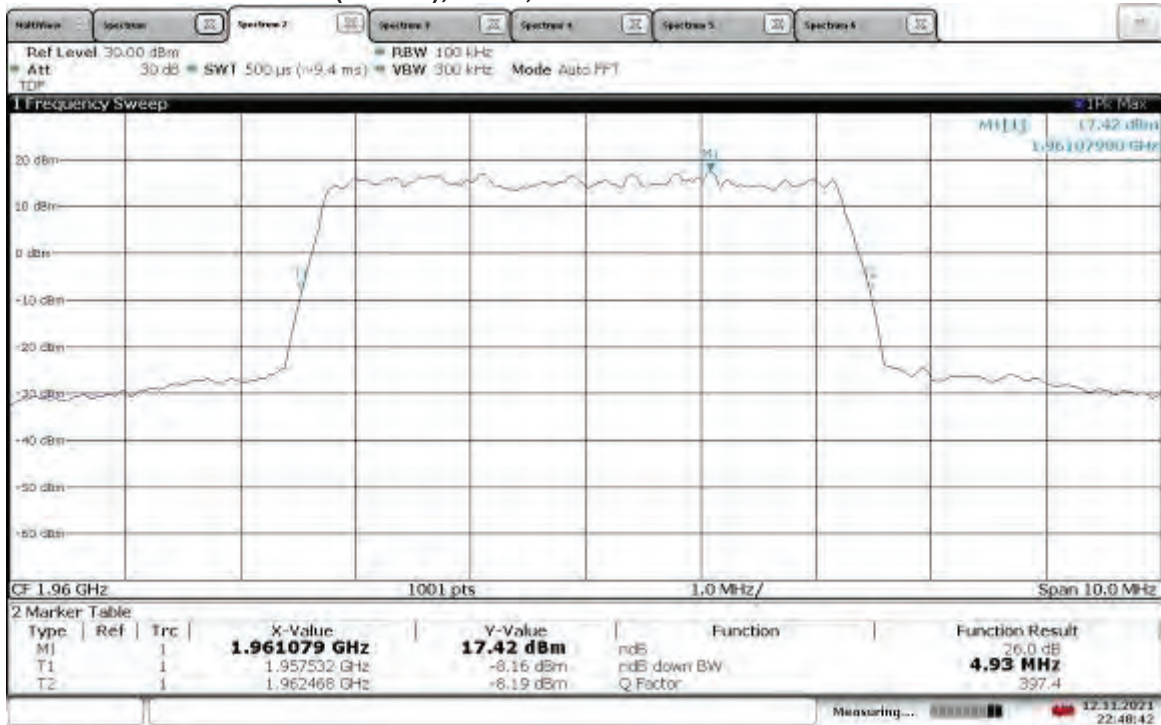
22:58:04 12.11.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



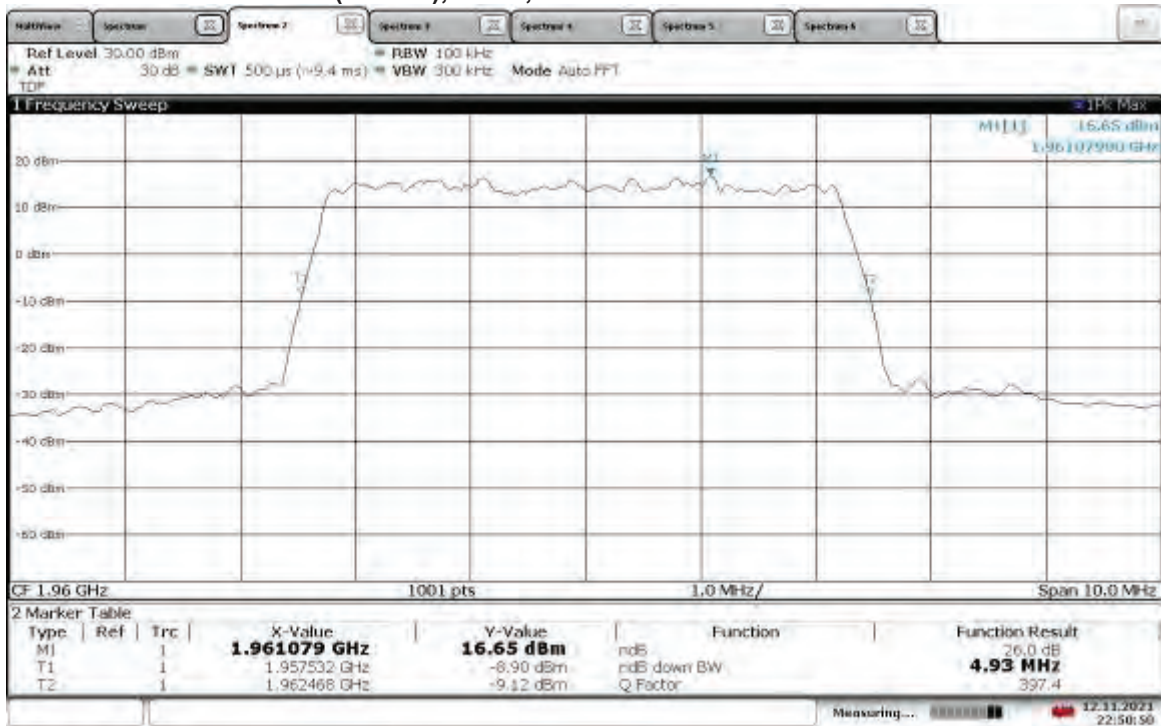
22:58:24 12.11.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth



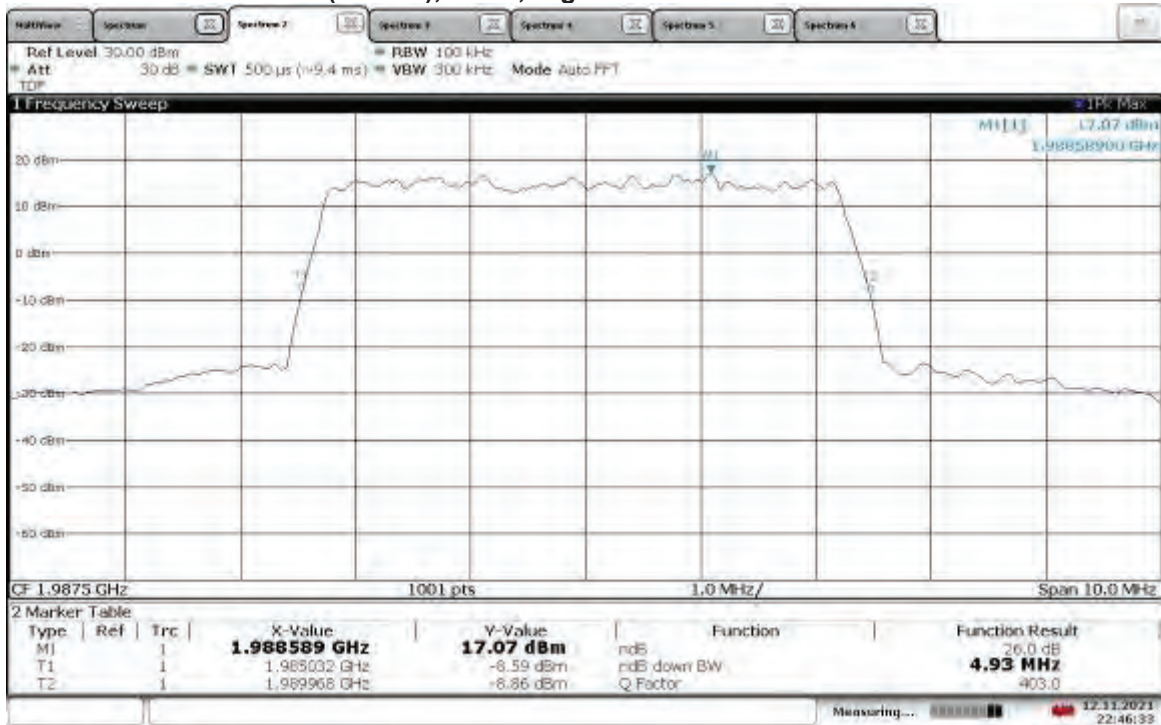
22:48:43 12.11.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth



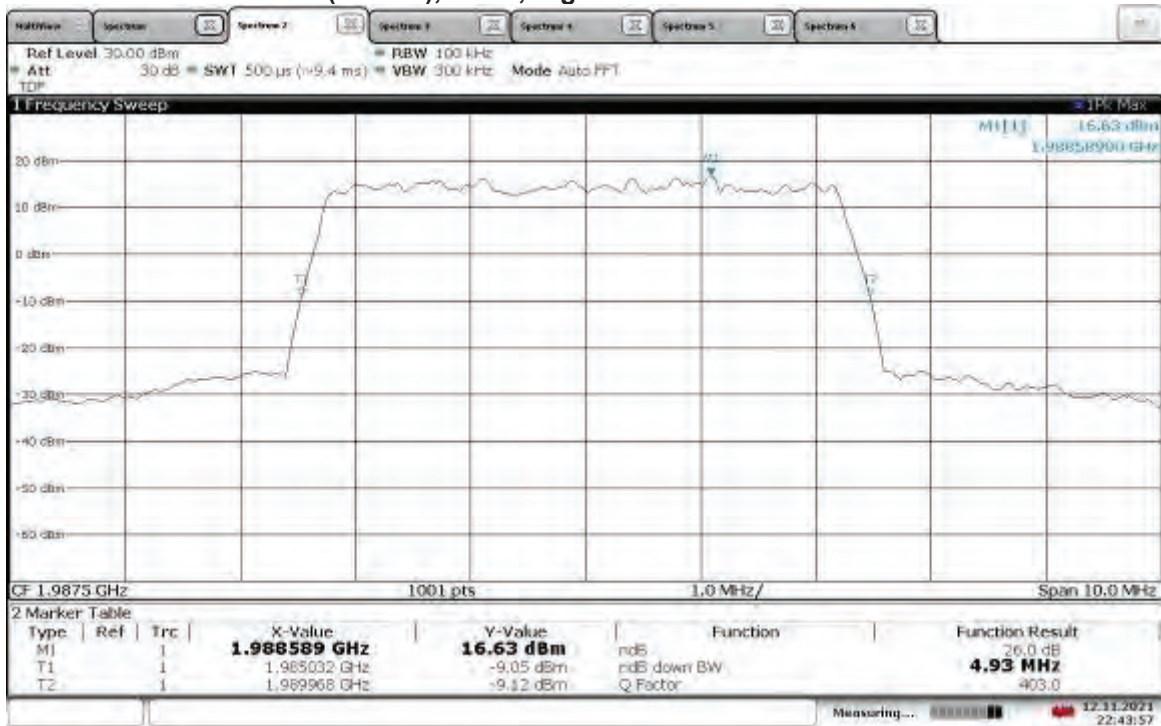
22:50:51 12.11.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth



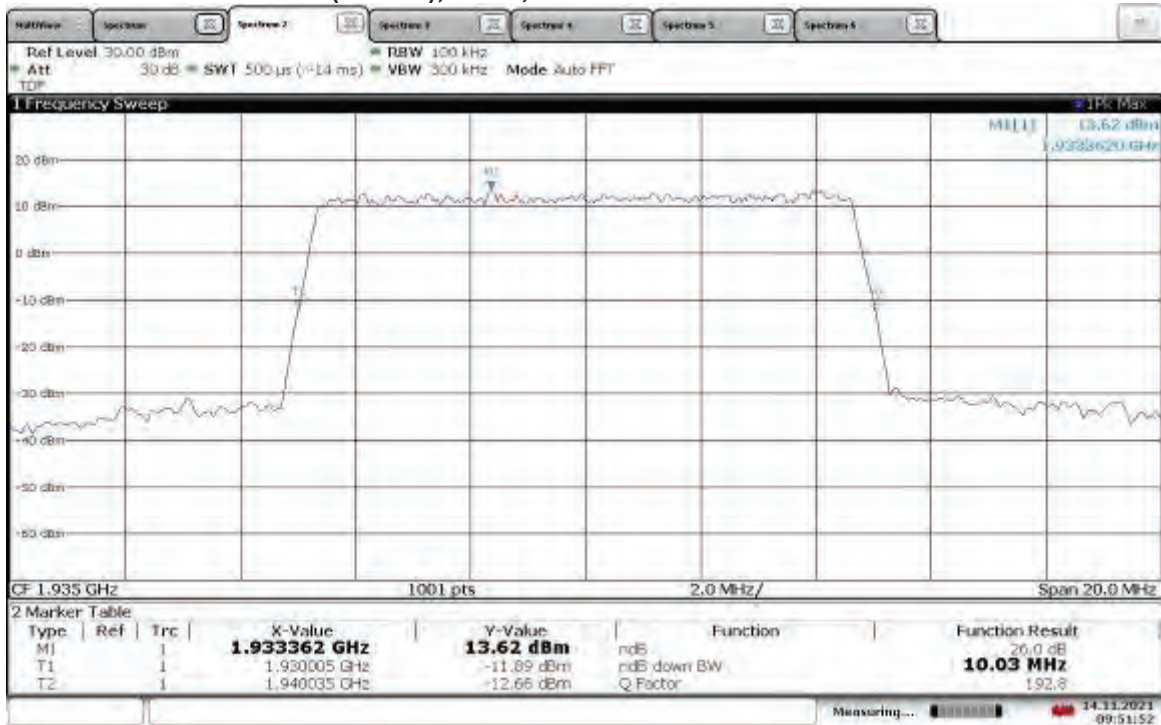
22:46:33 12.11.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth



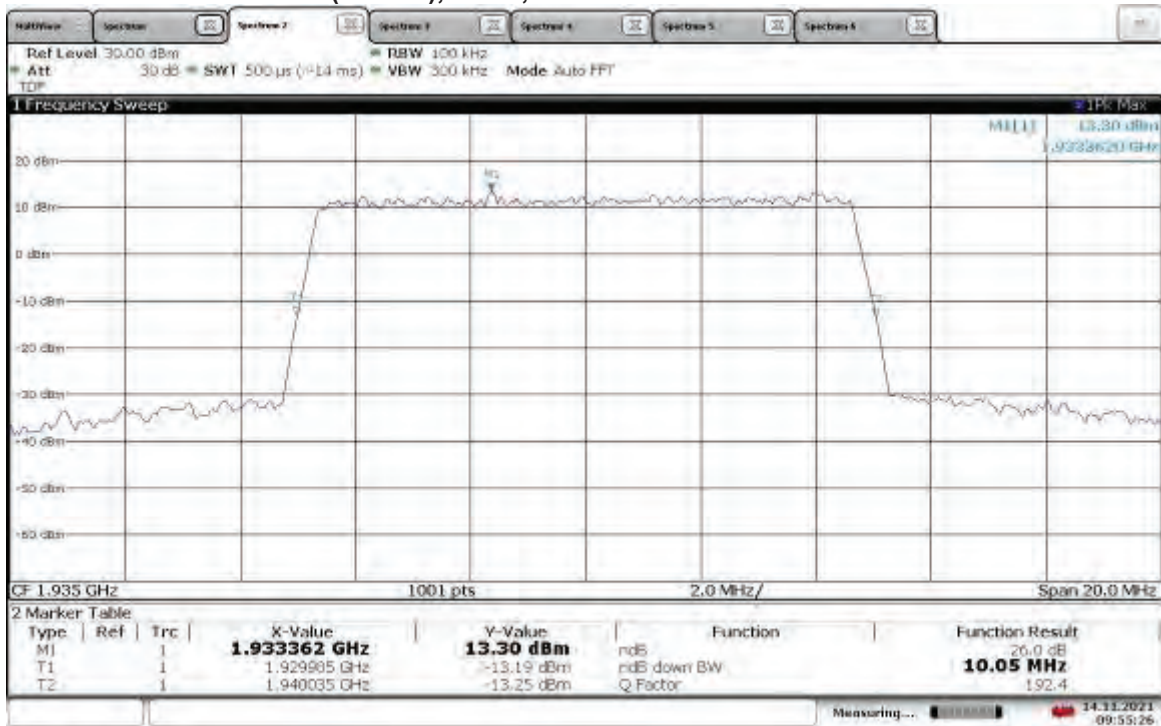
22:43:57 12.11.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



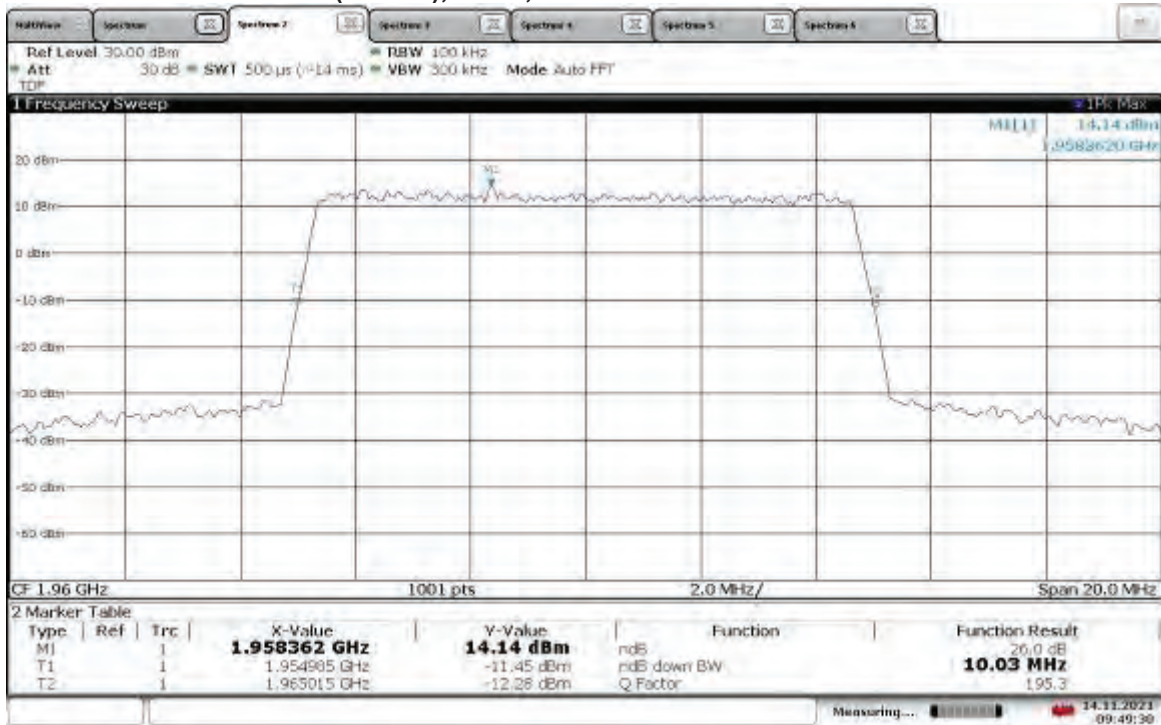
09:51:52 14.11.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



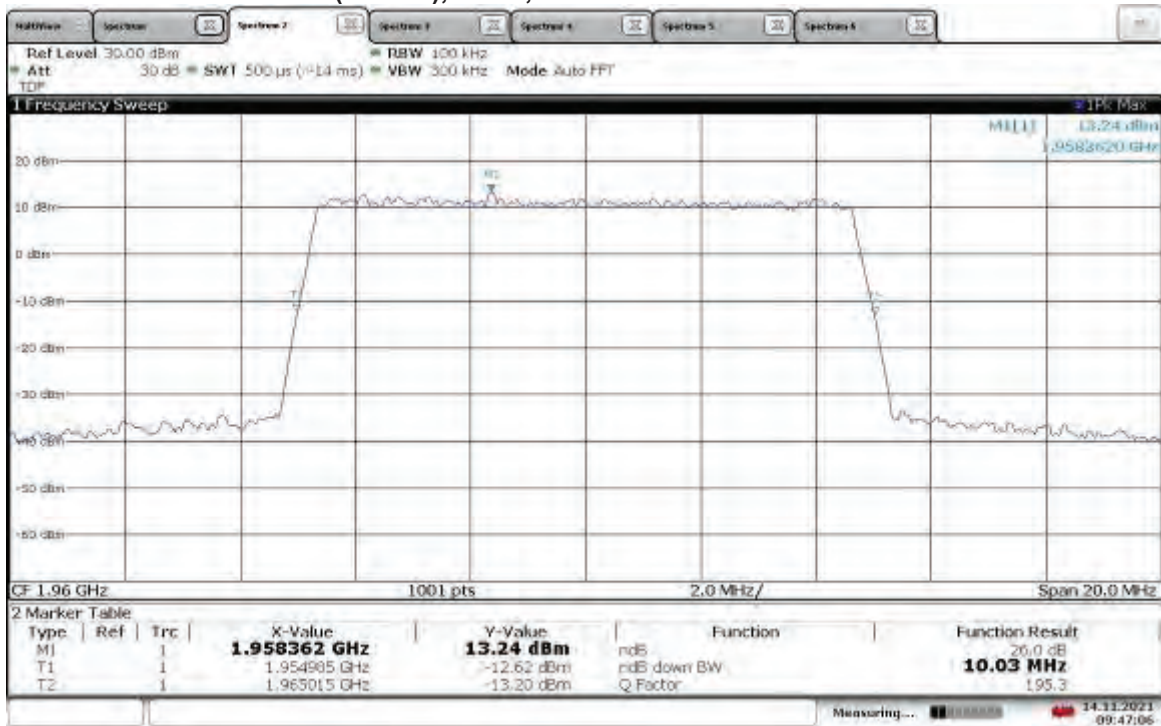
09:55:26 14.11.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth



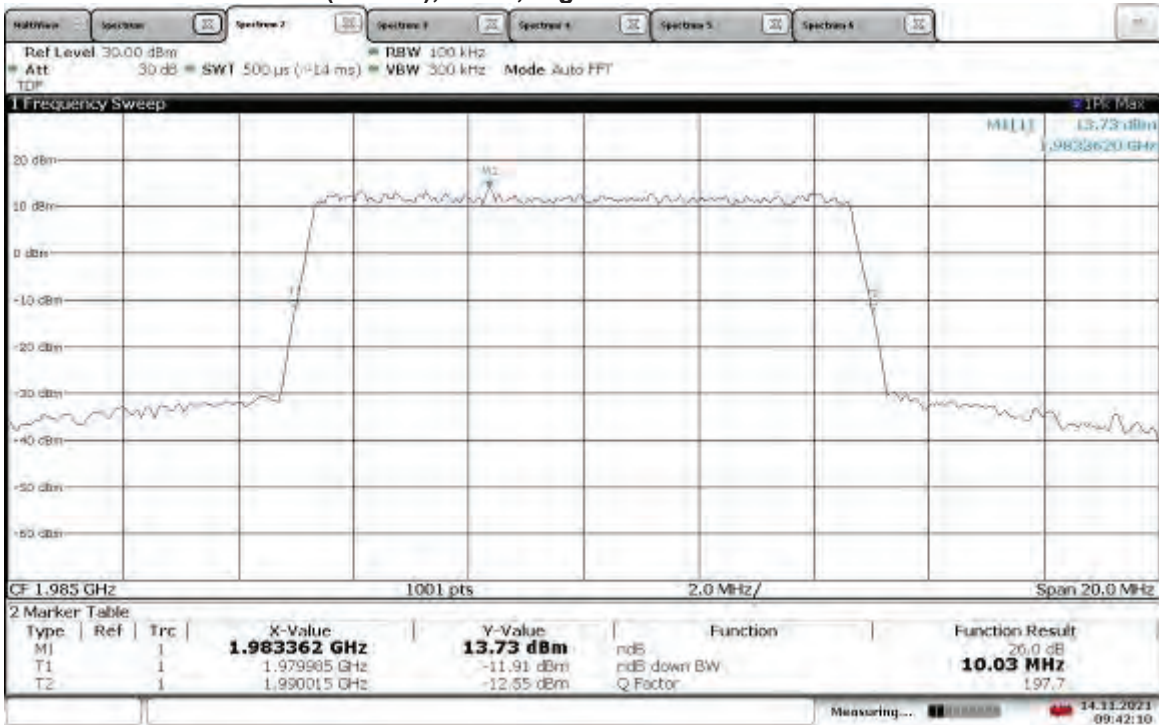
09:49:30 14.11.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth



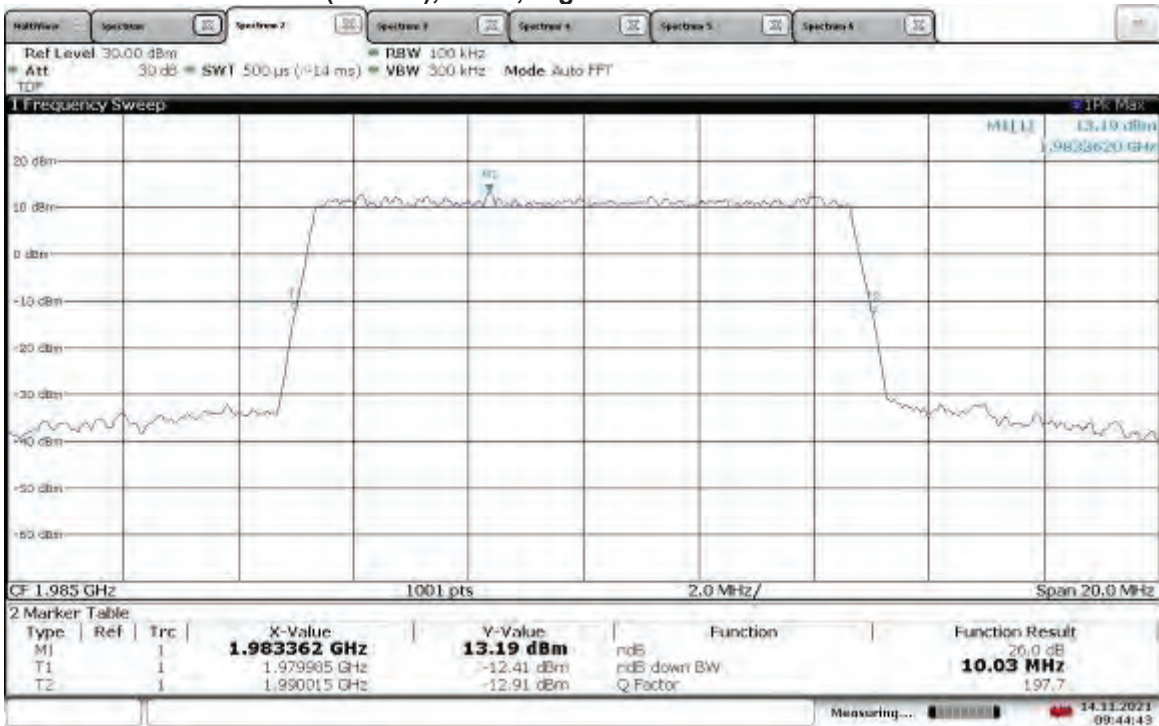
09:47:06 14.11.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth



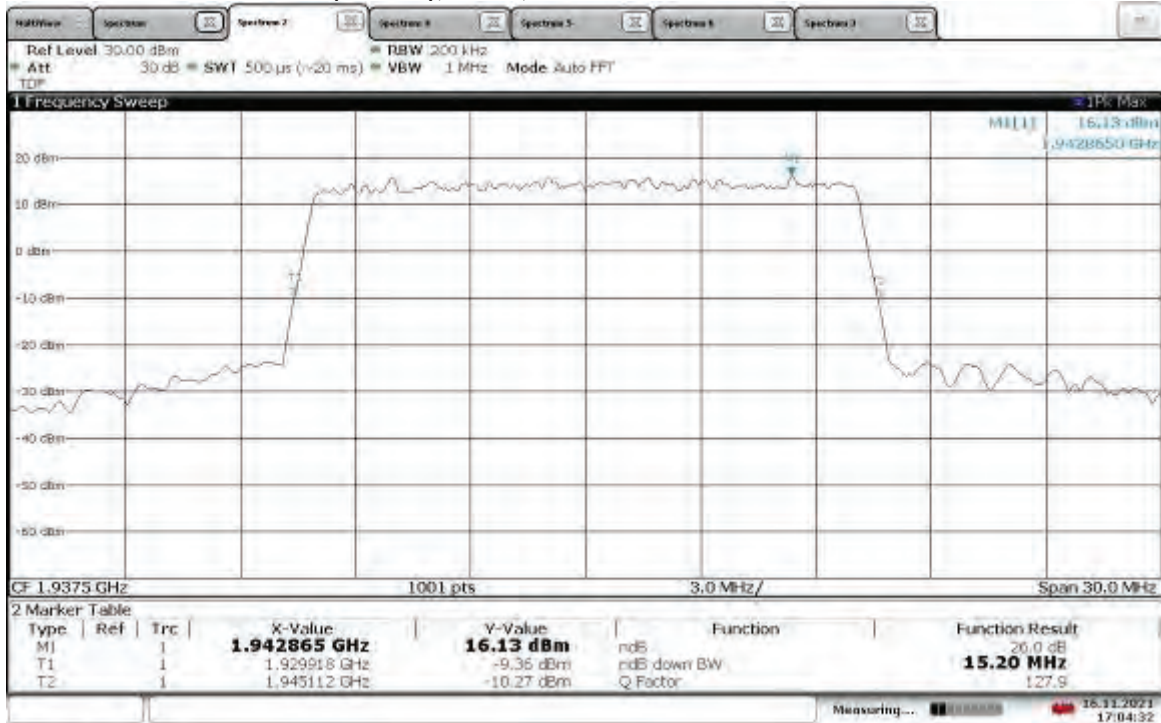
09:42:10 14.11.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth



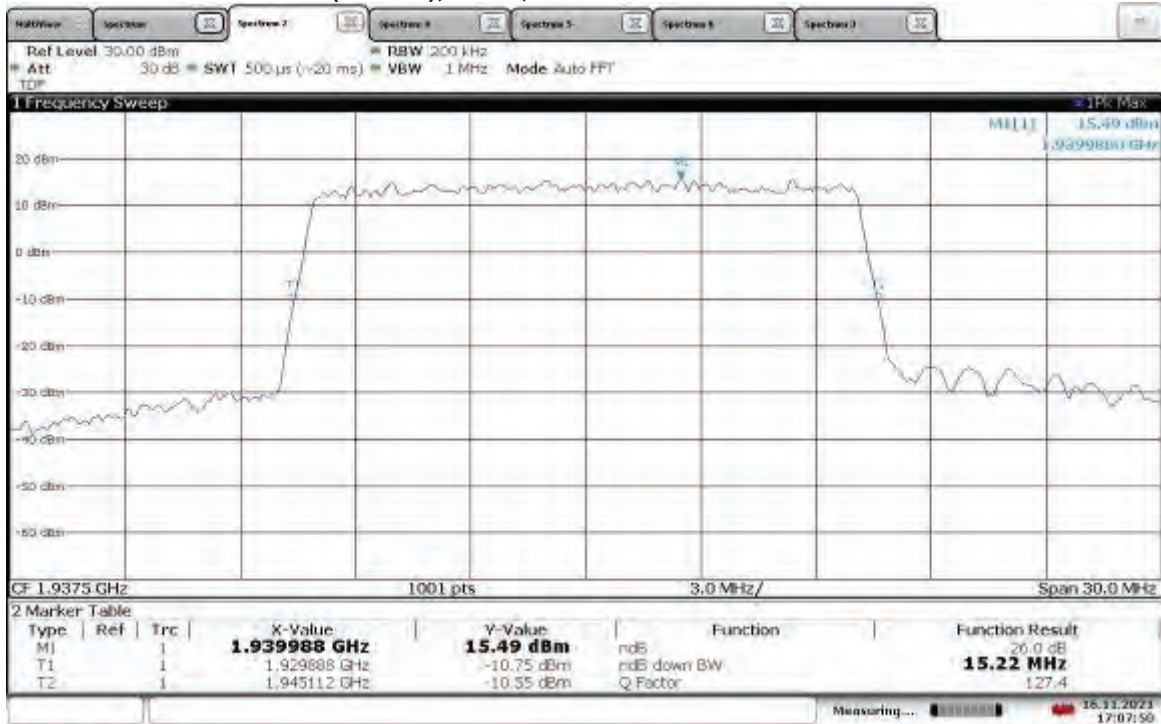
09:44:43 14.11.2021

**TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth**



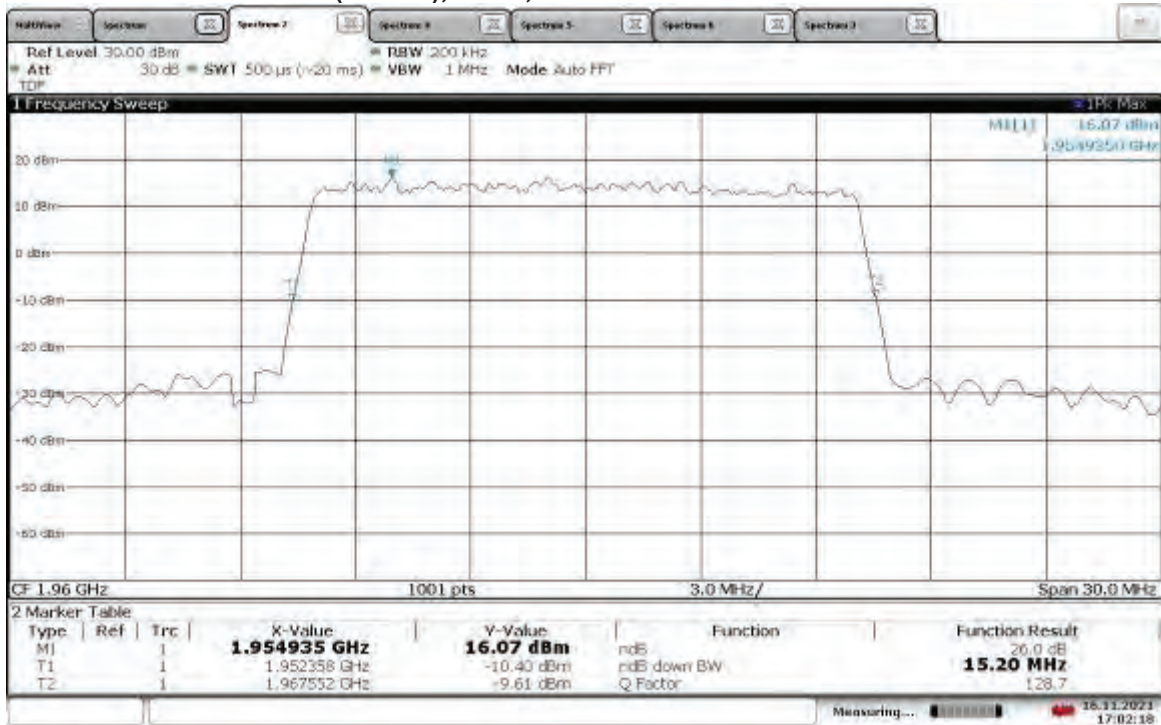
17:04:33 16.11.2021

**TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth**



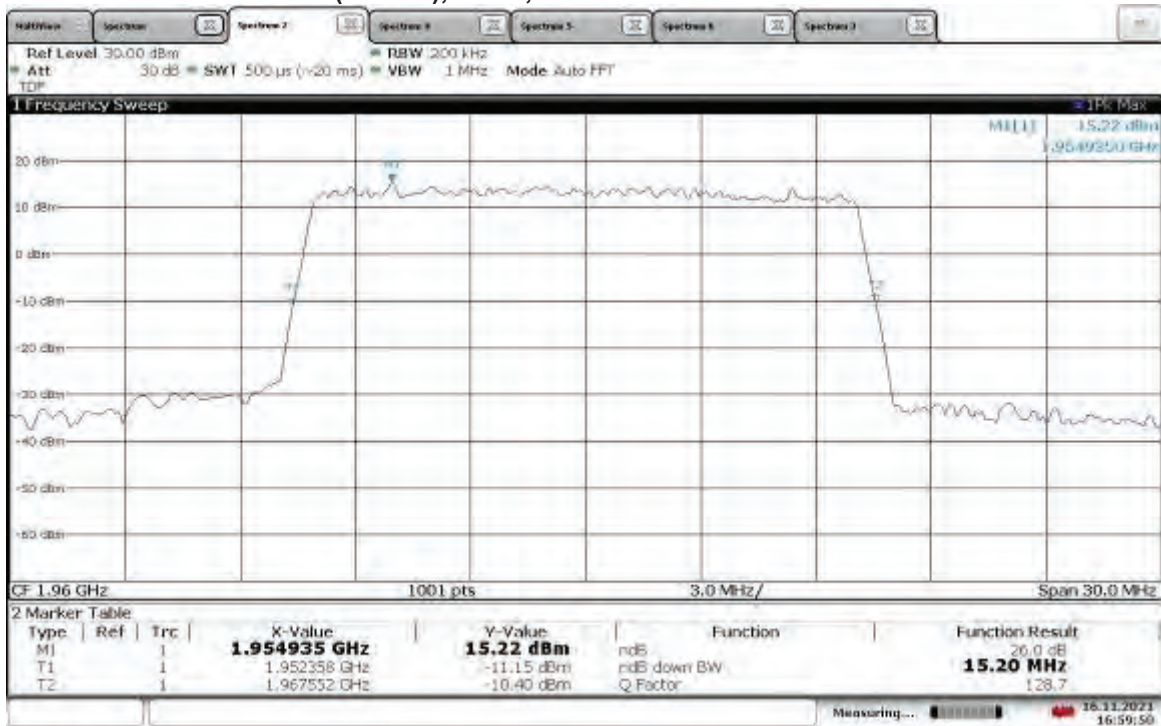
17:07:51 16.11.2021

**TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth**



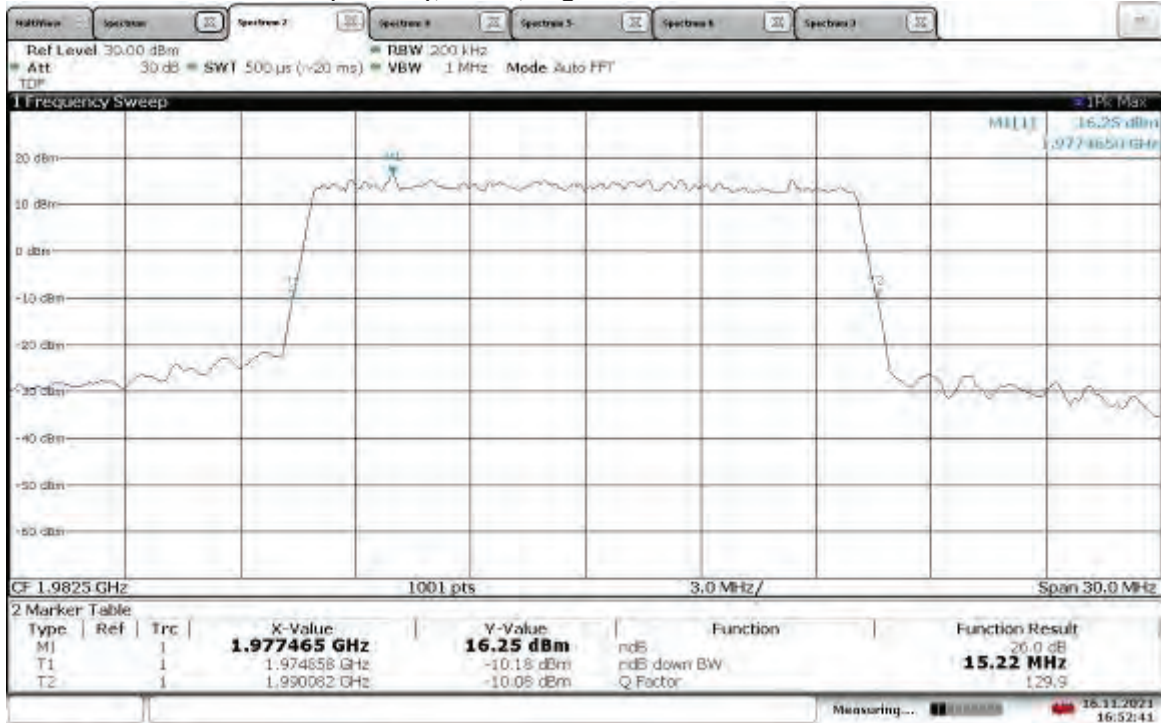
17:02:19 16.11.2021

**TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth**



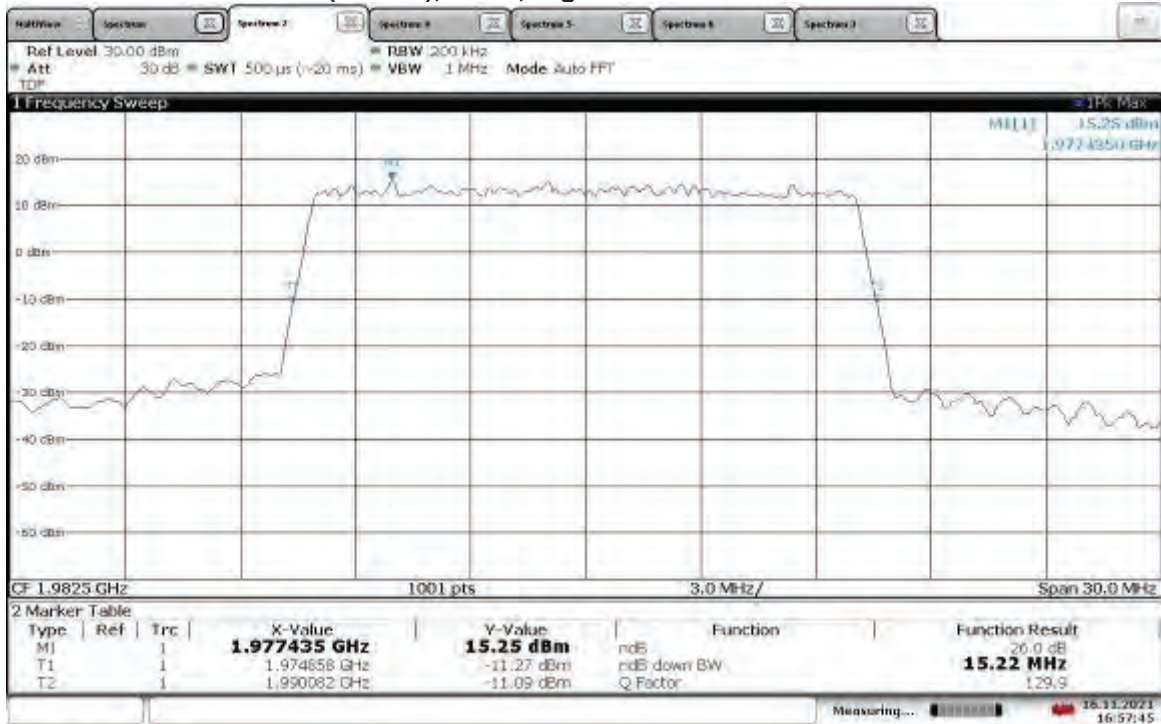
16:59:51 16.11.2021

**TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth**



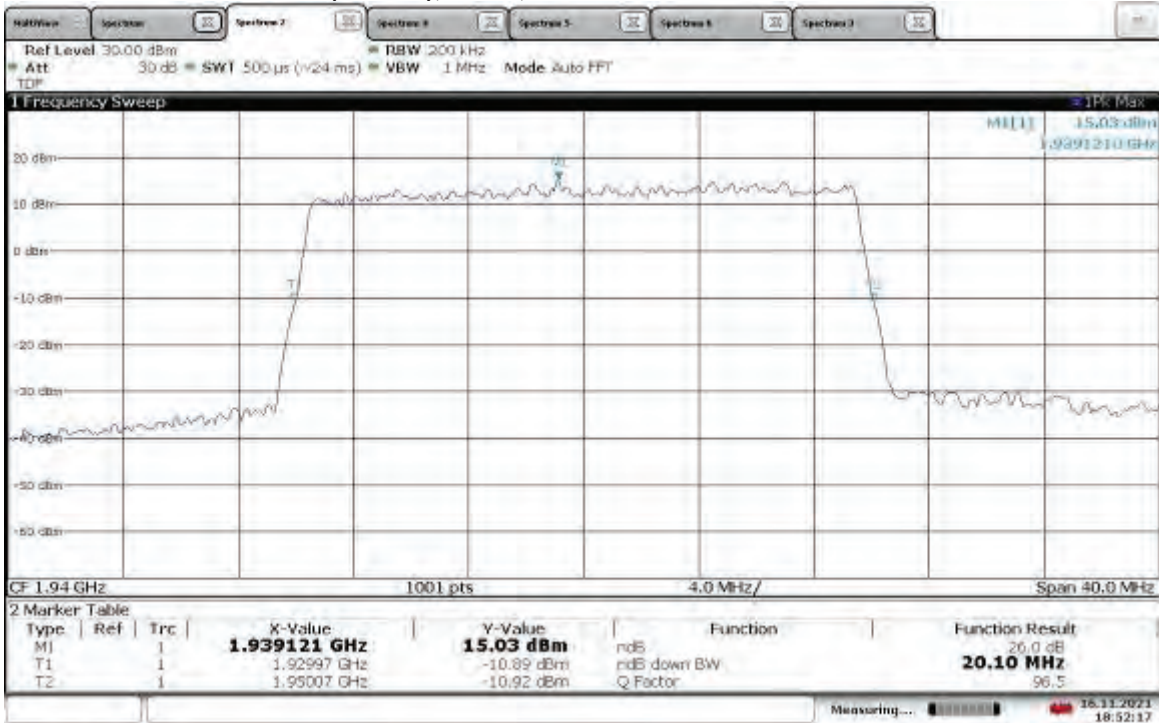
16:52:42 16.11.2021

**TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth**



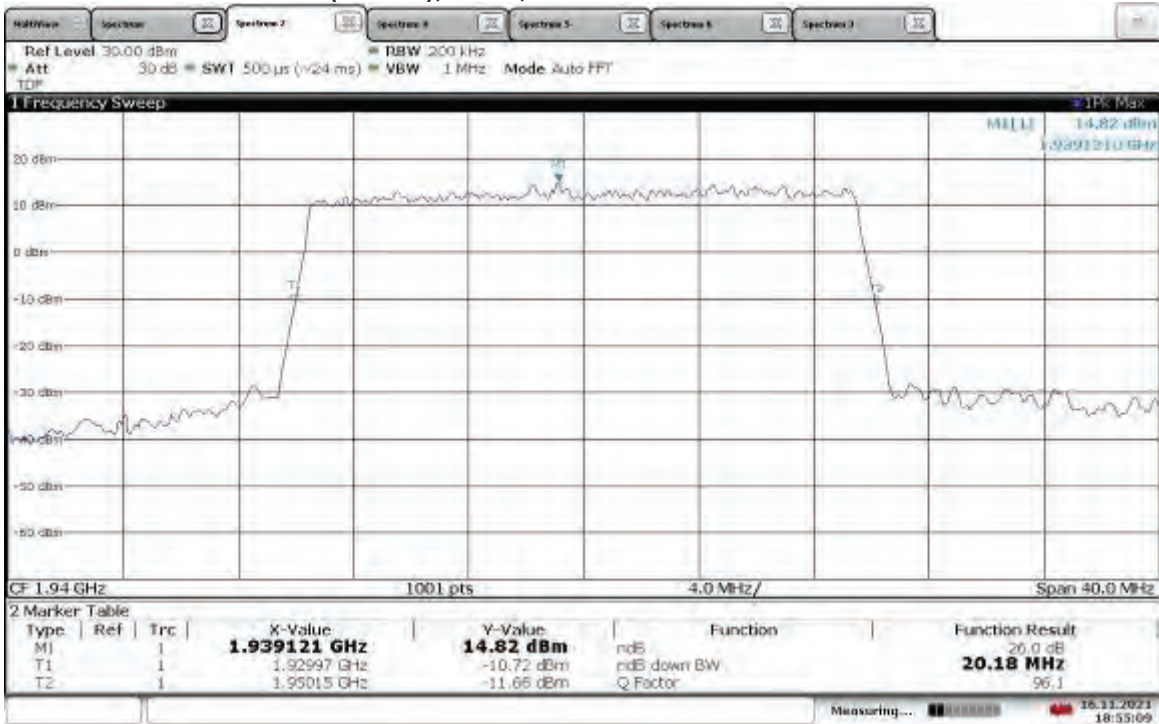
16:57:45 16.11.2021

TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



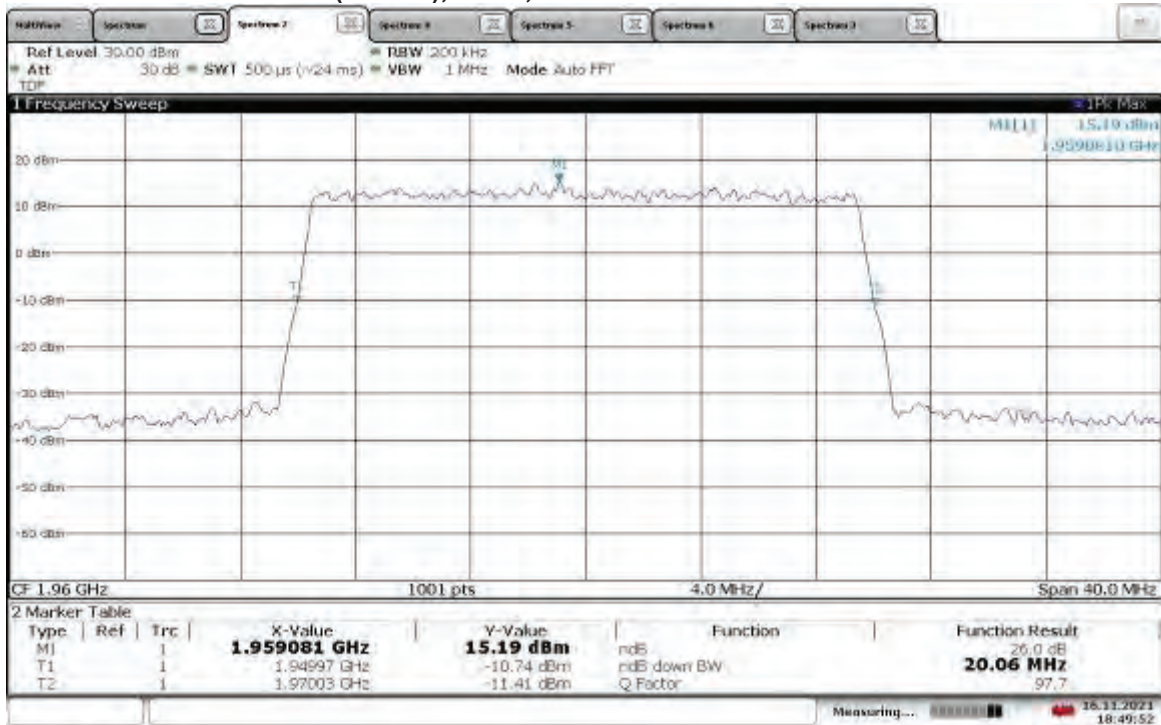
18:52:17 16.11.2021

TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



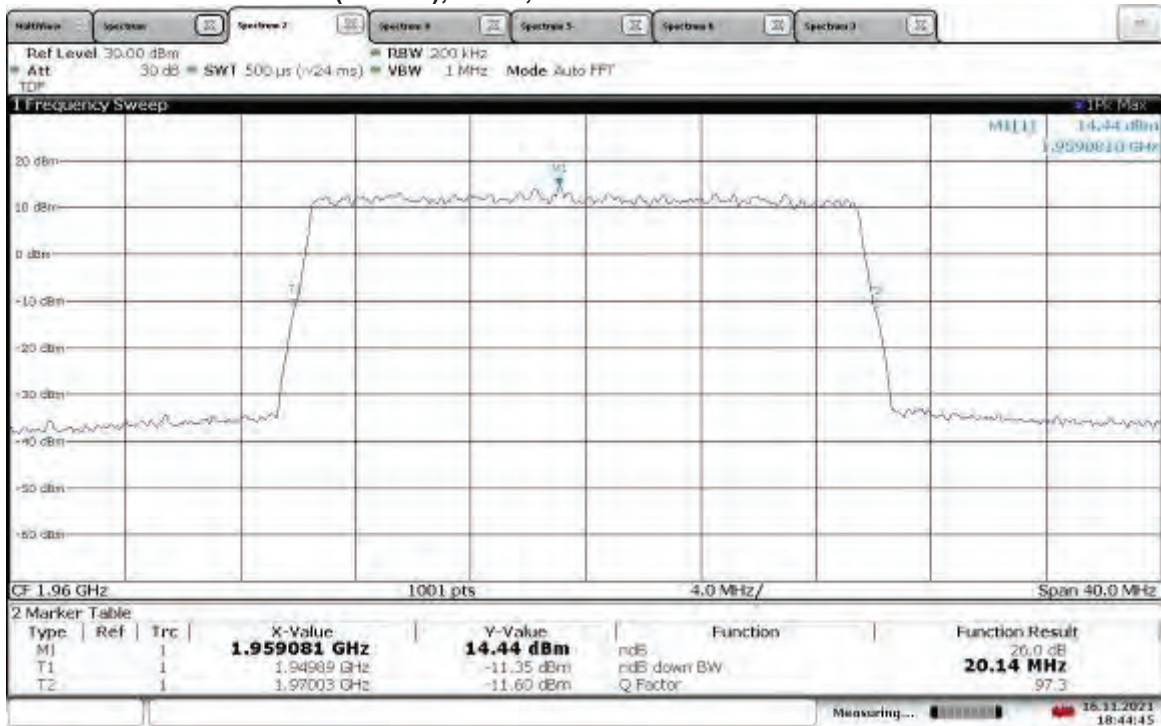
18:55:09 16.11.2021

**TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth**



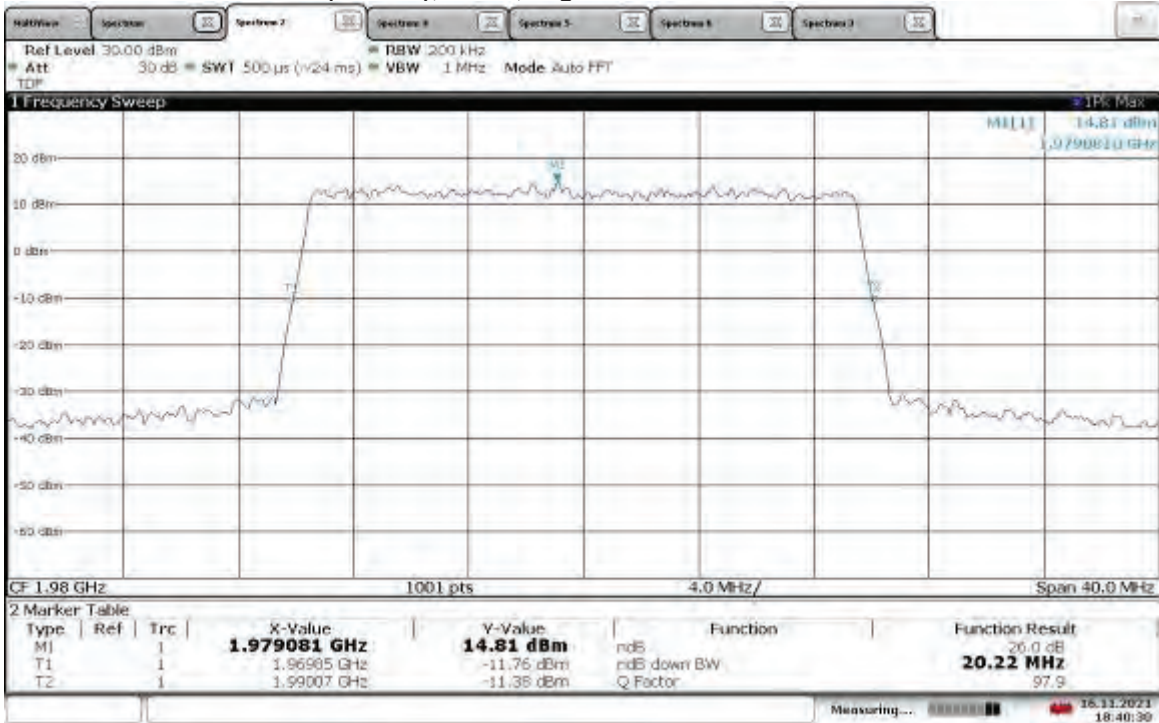
18:49:52 16.11.2021

**TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth**



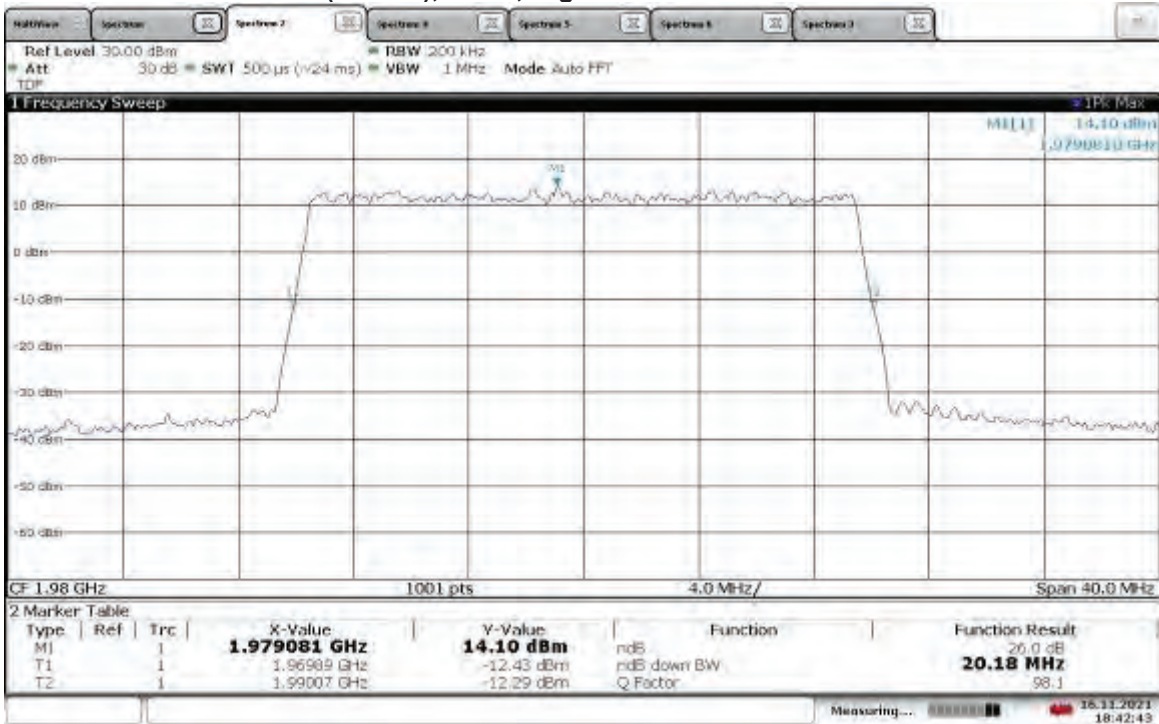
18:44:46 16.11.2021

**TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth**



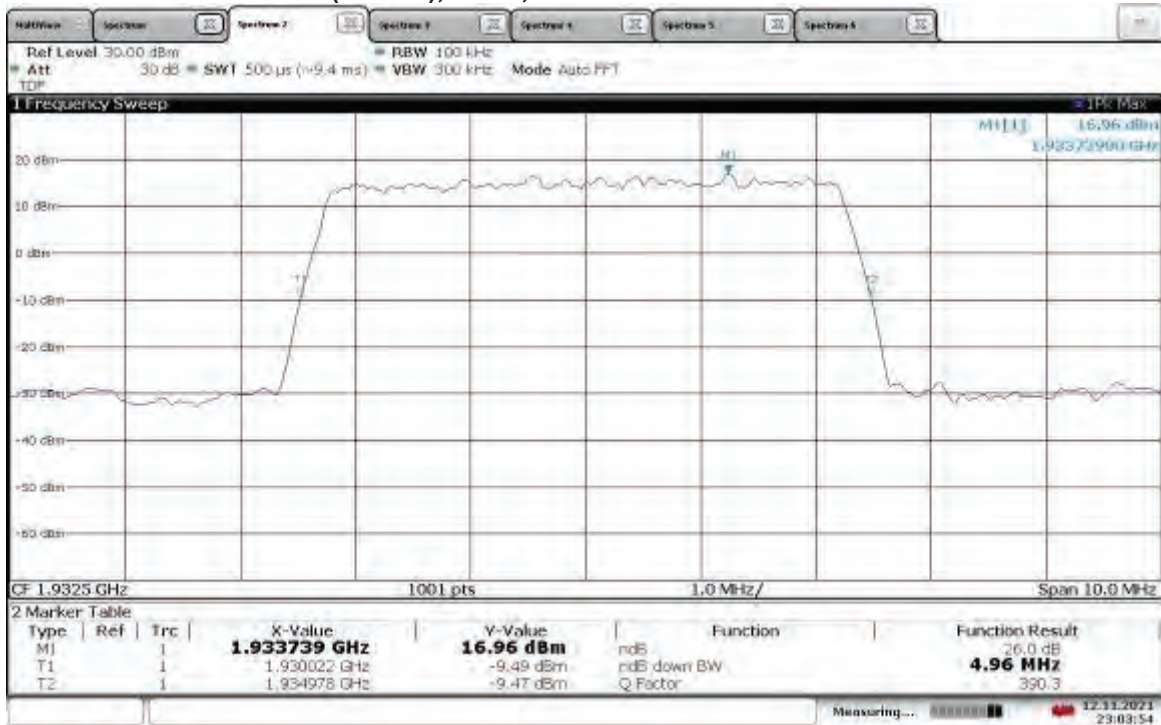
18:40:30 16.11.2021

**TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth**



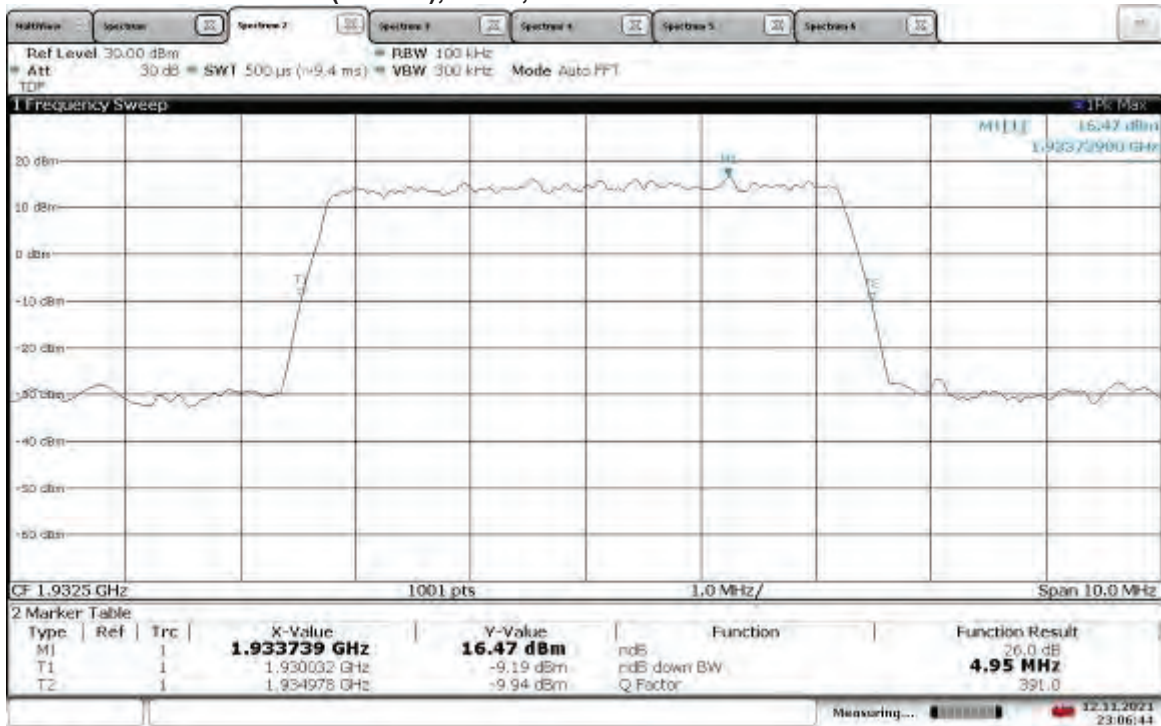
18:42:44 16.11.2021

**TM3.1a-256QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth**



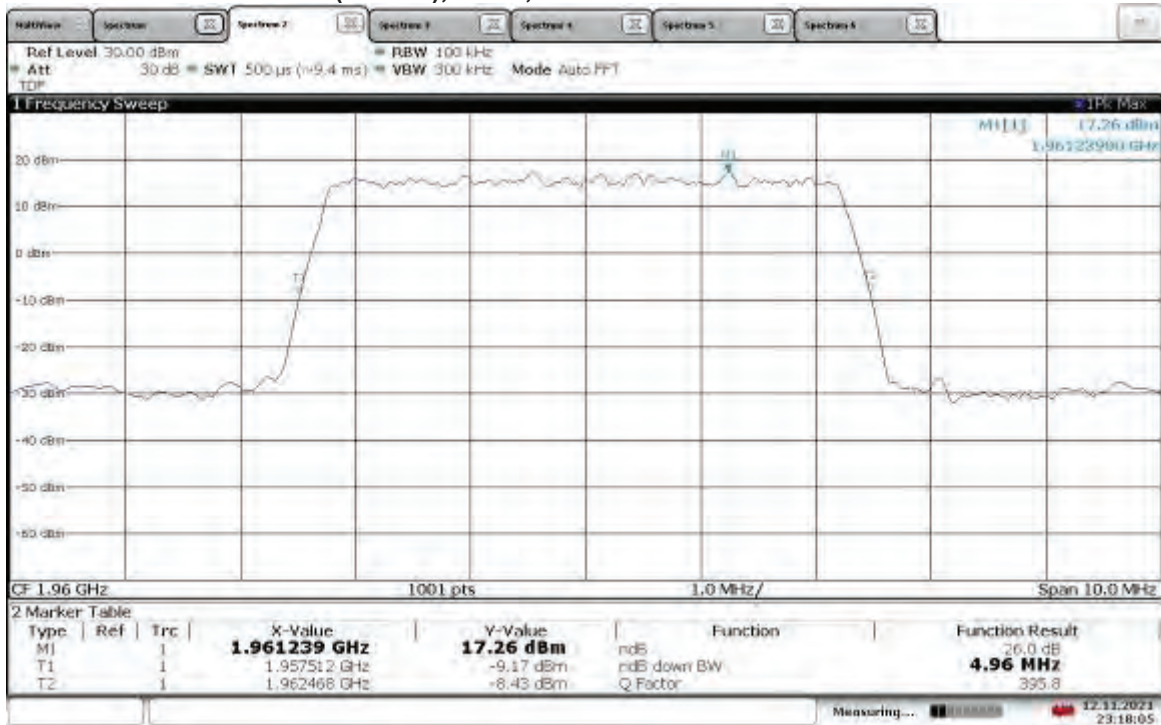
23:03:54 12.11.2021

**TM3.1a-256QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth**



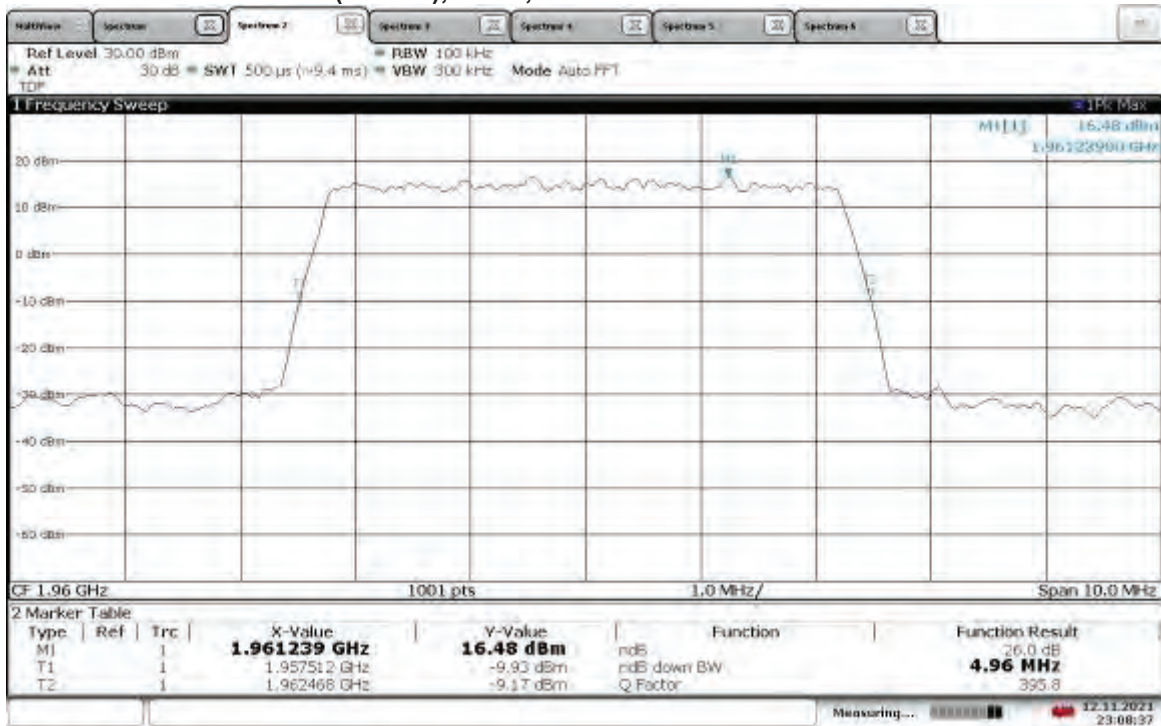
23:06:44 12.11.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth



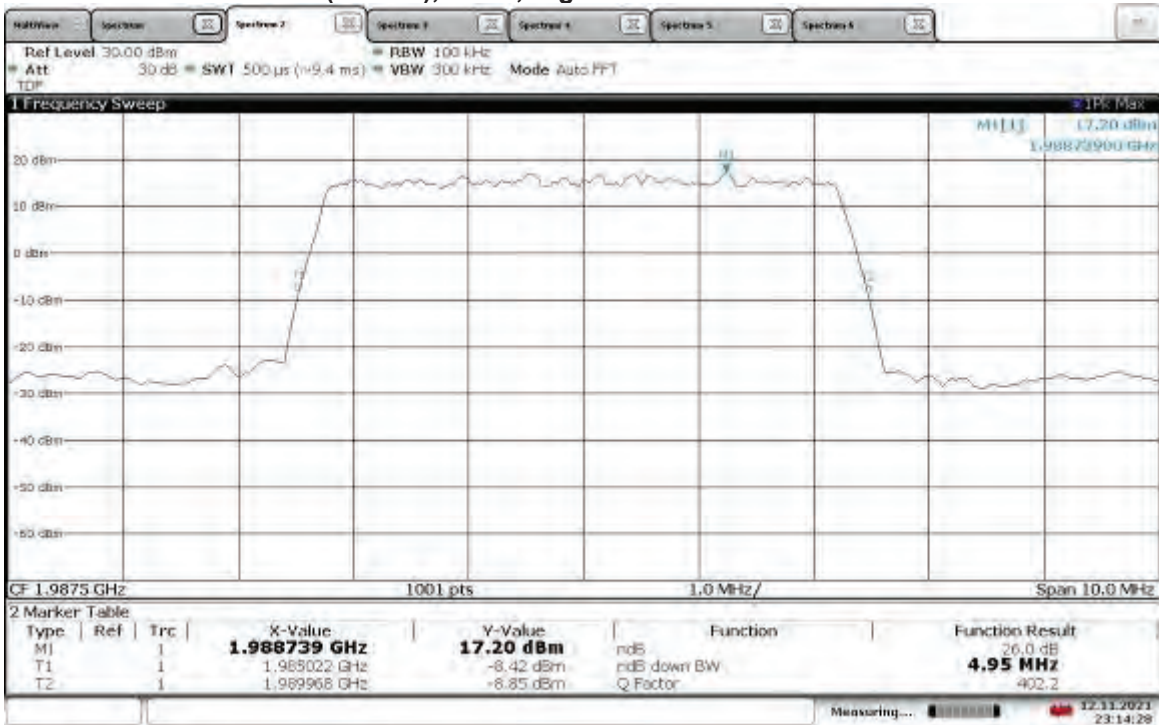
23:18:06 12.11.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth



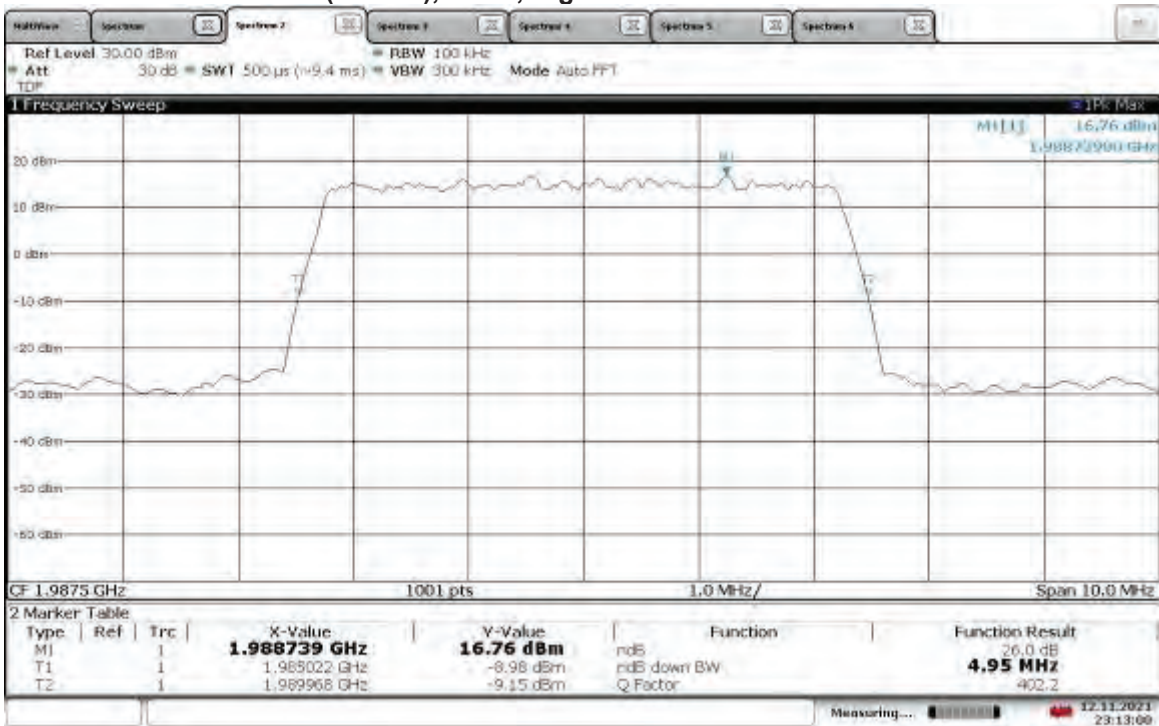
23:08:37 12.11.2021

**TM3.1a-256QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth**



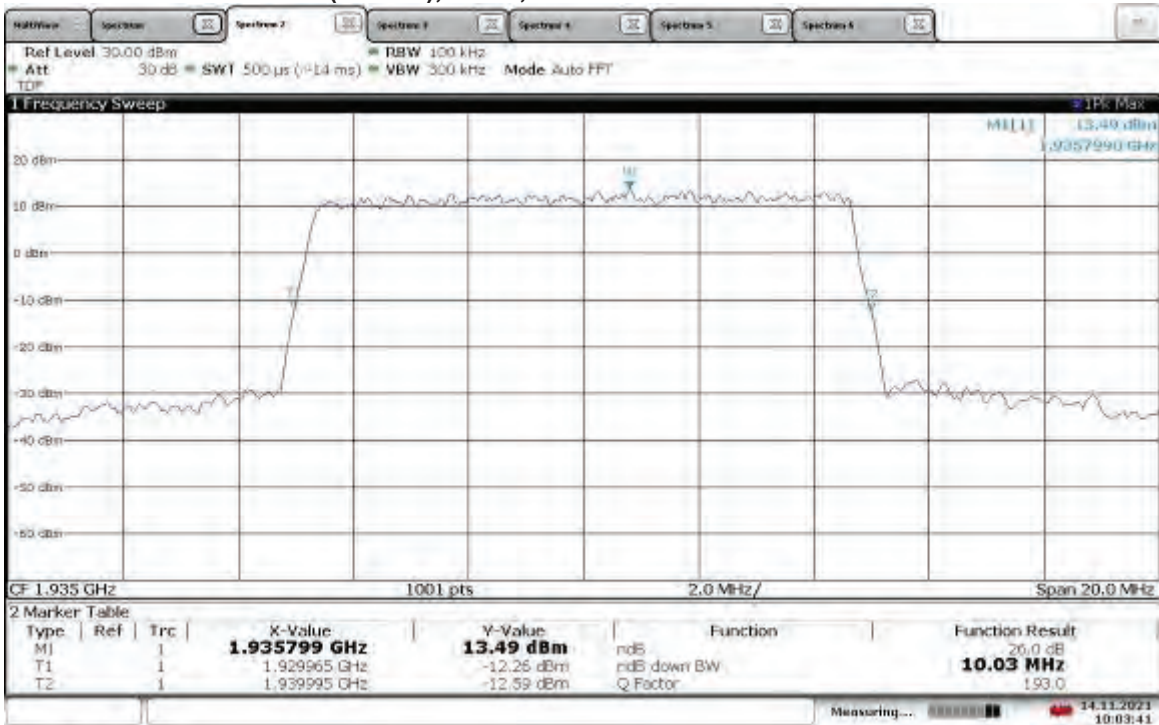
23:14:28 12.11.2021

**TM3.1a-256QAM_5 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth**



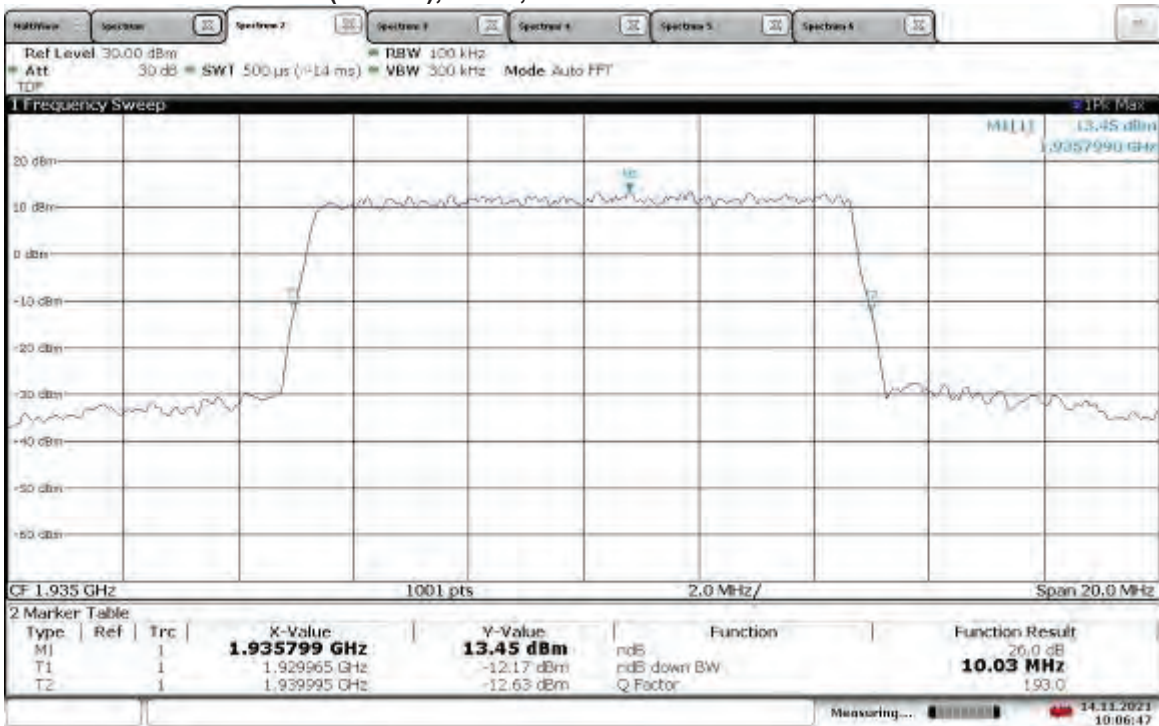
23:13:00 12.11.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



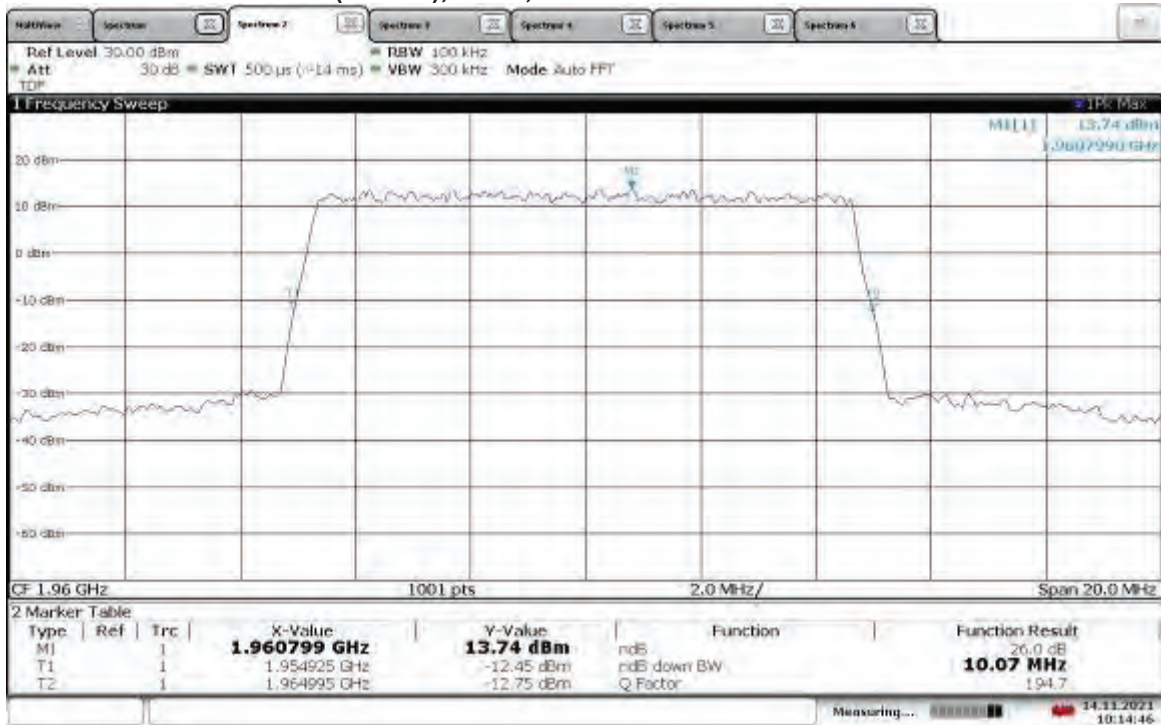
10:03:41 14.11.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



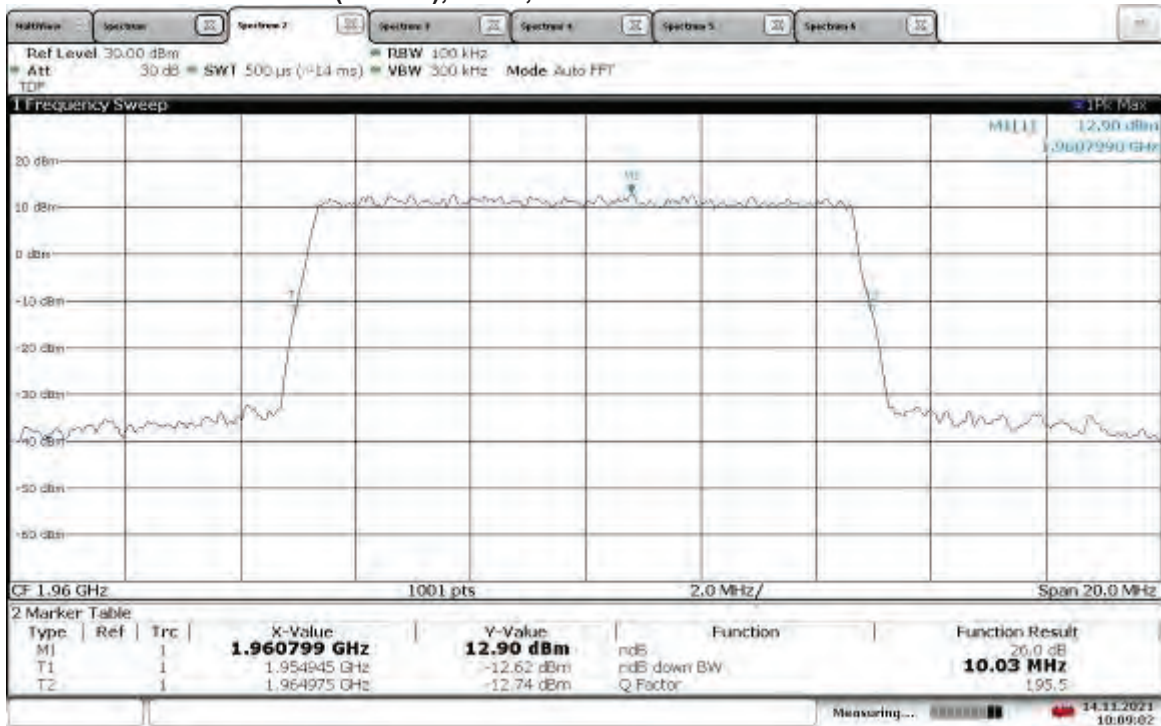
10:06:47 14.11.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth



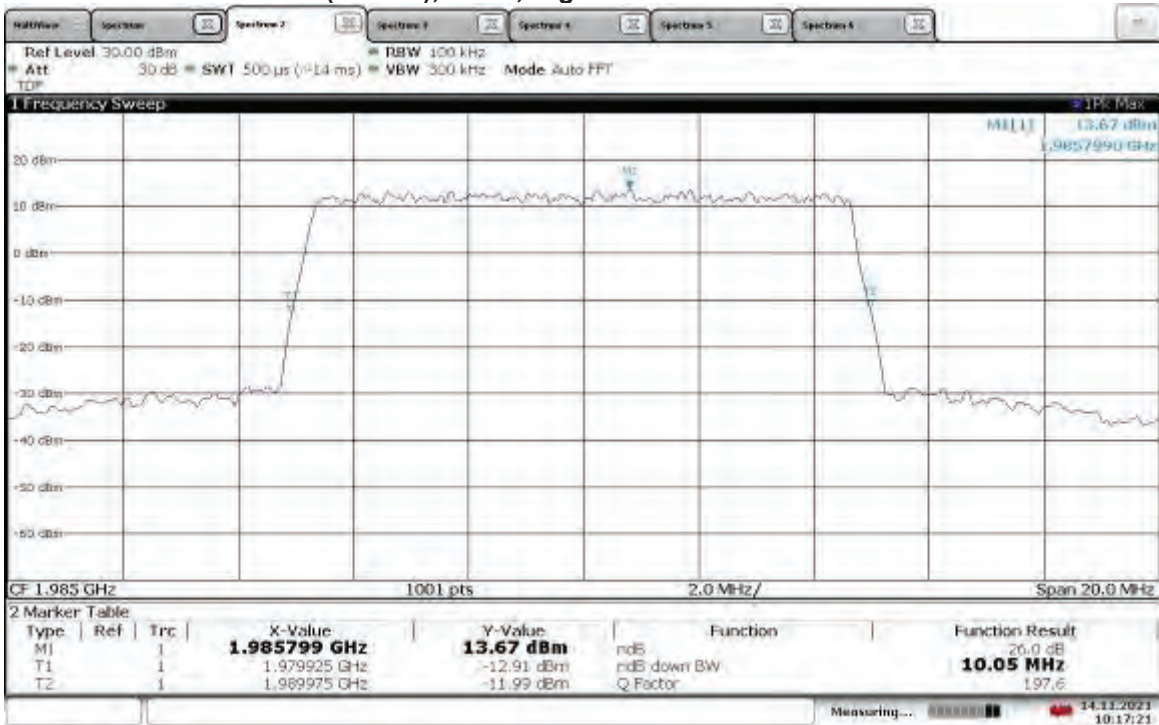
10:14:46 14.11.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth



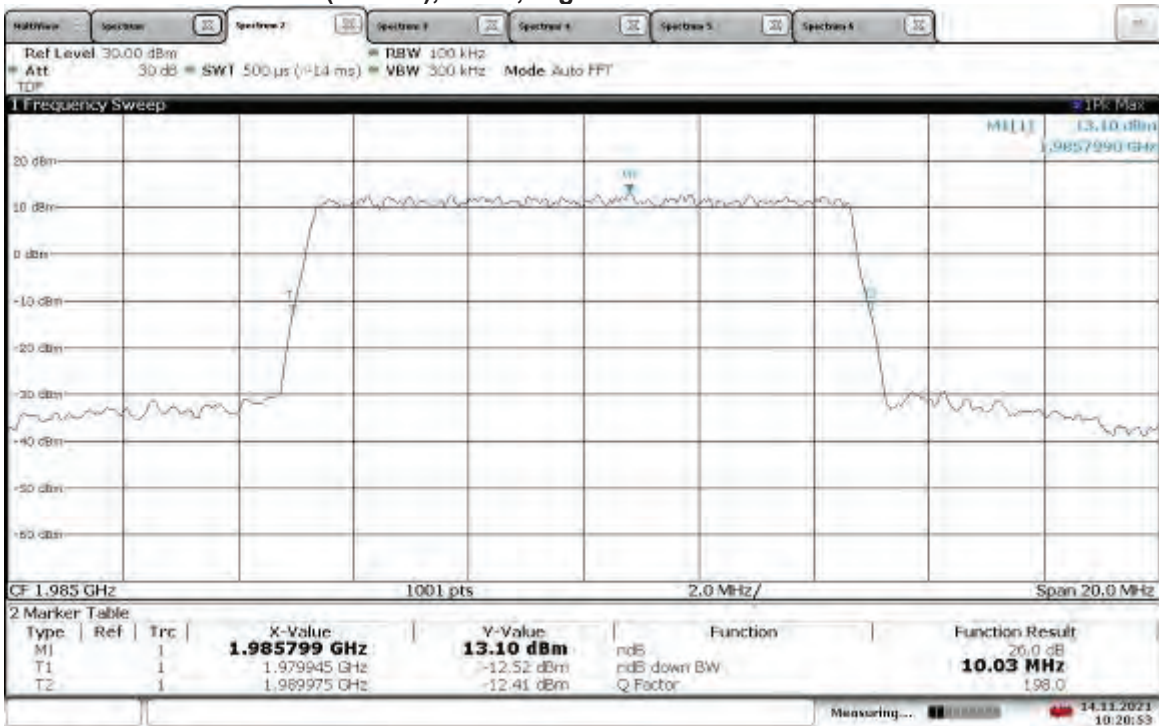
10:09:02 14.11.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth



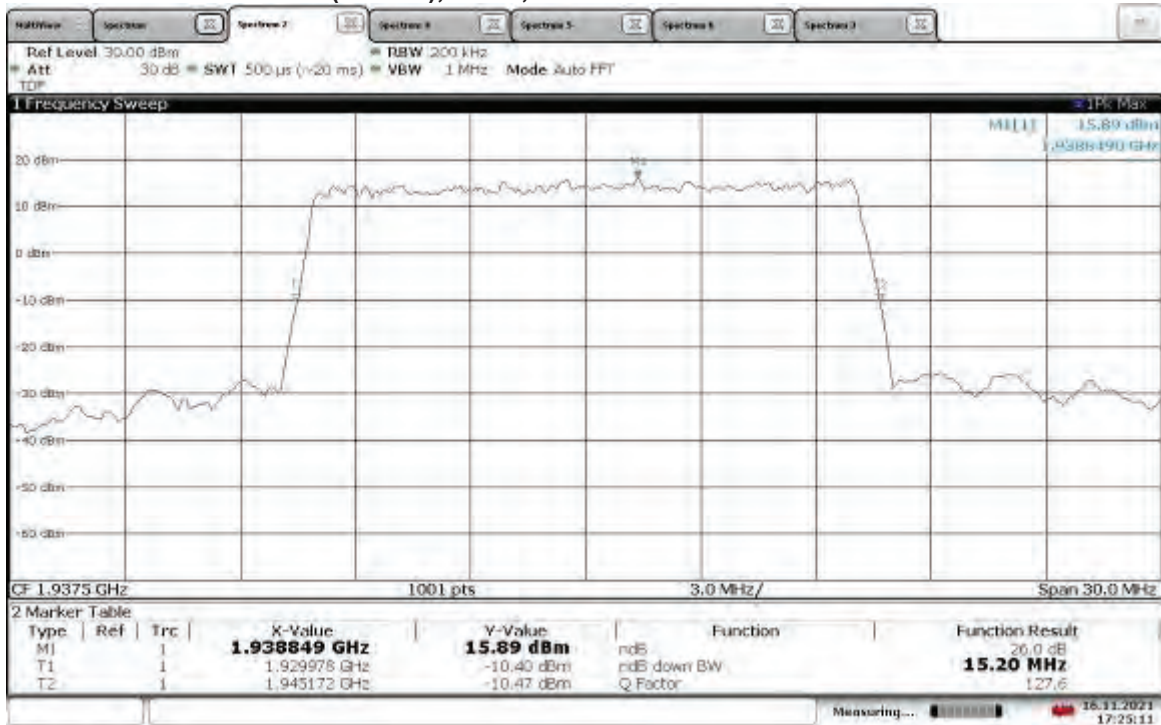
10:17:21 14.11.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth



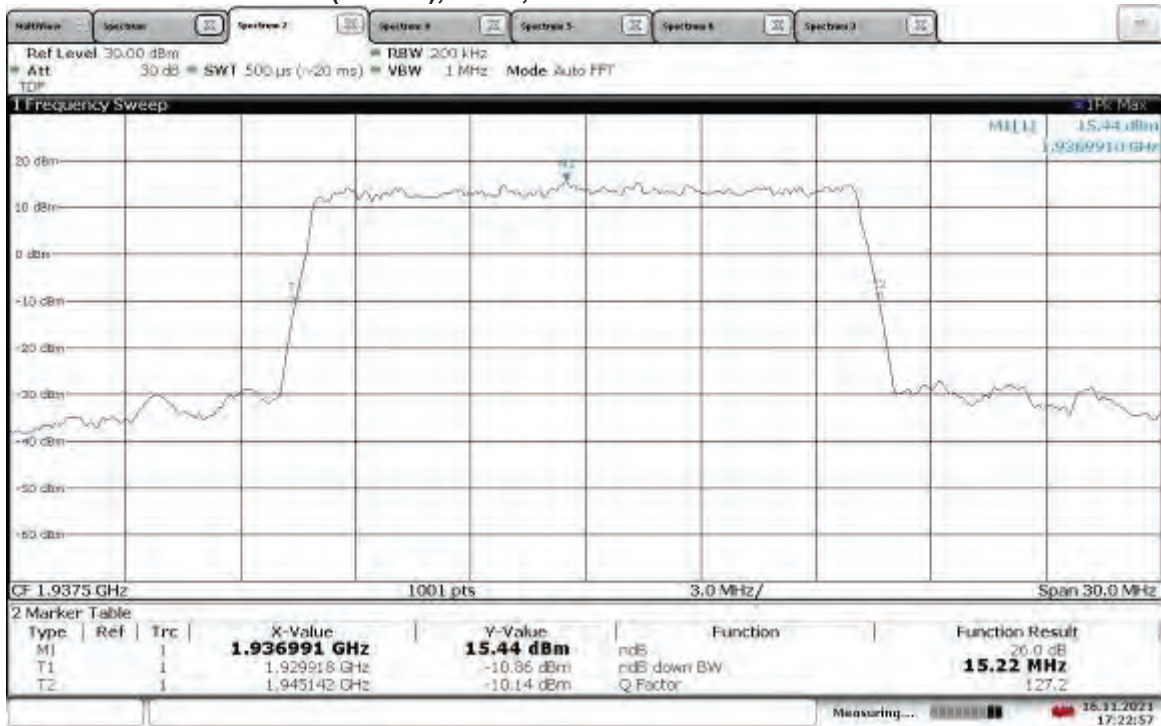
10:20:54 14.11.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



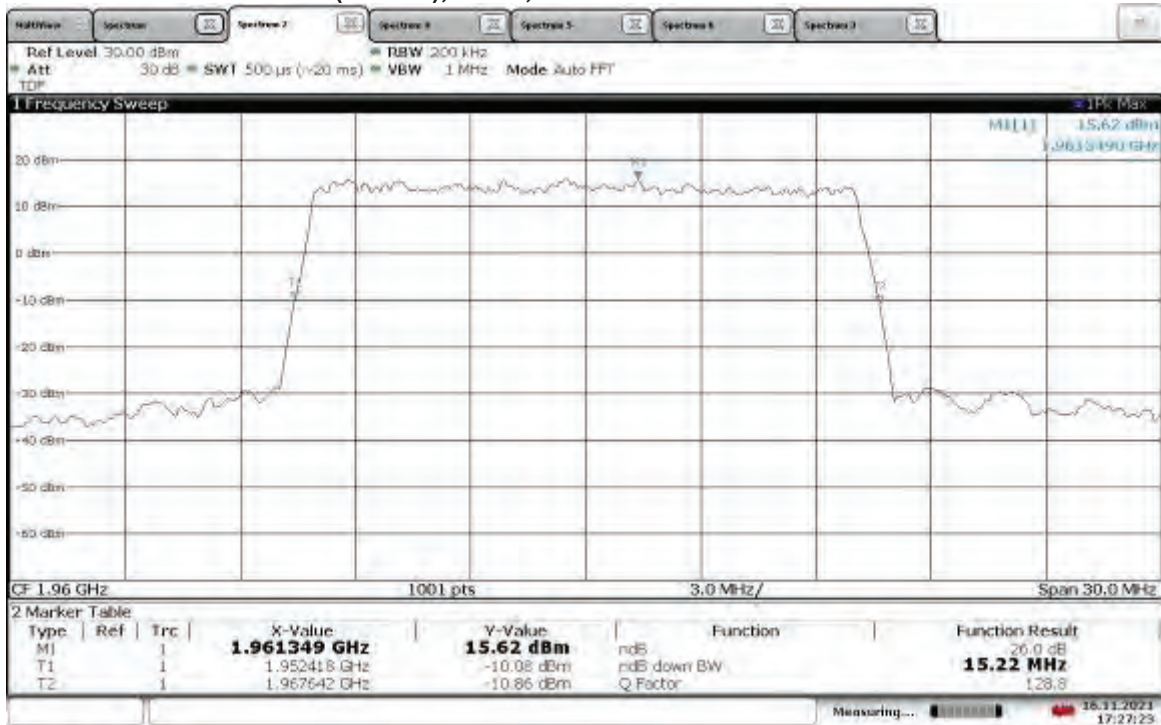
17:25:12 16.11.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



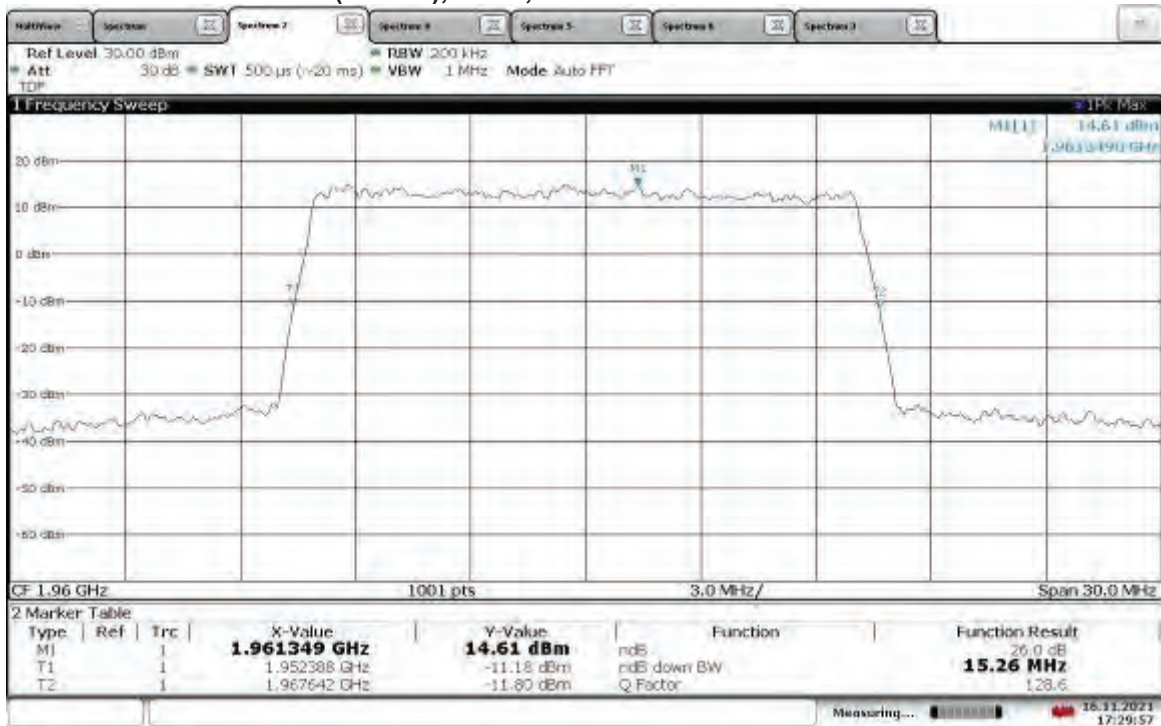
17:22:58 16.11.2021

**TM3.1a-256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth**



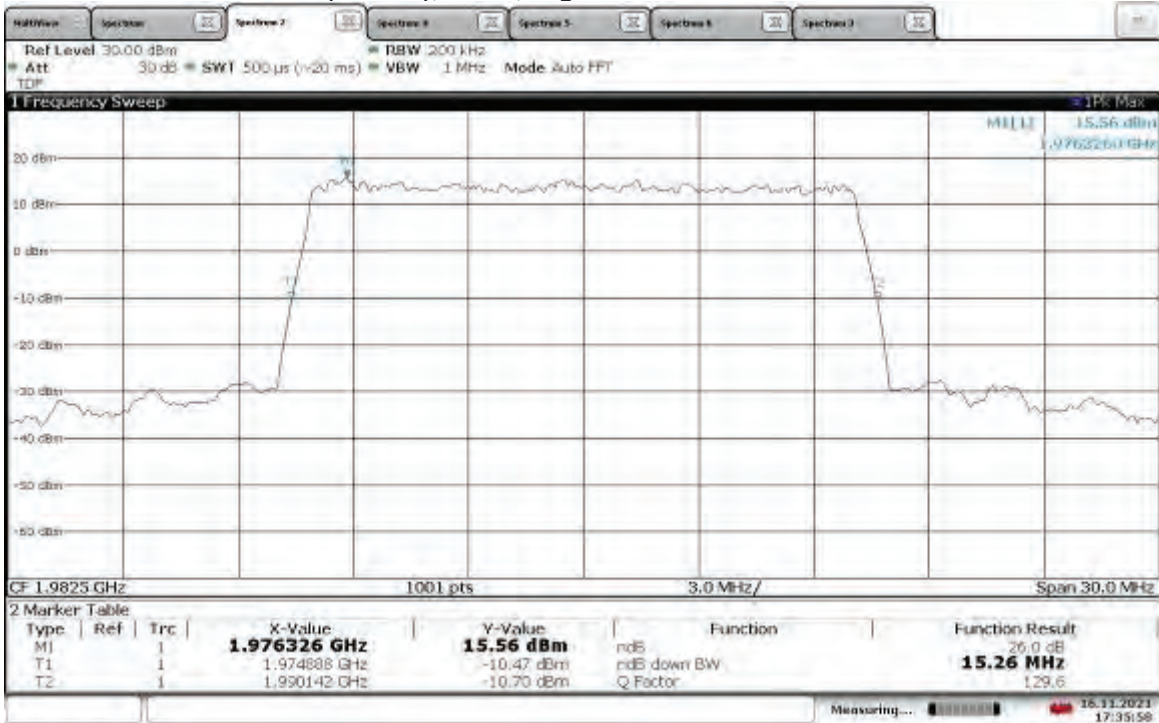
17:27:24 16.11.2021

**TM3.1a-256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth**



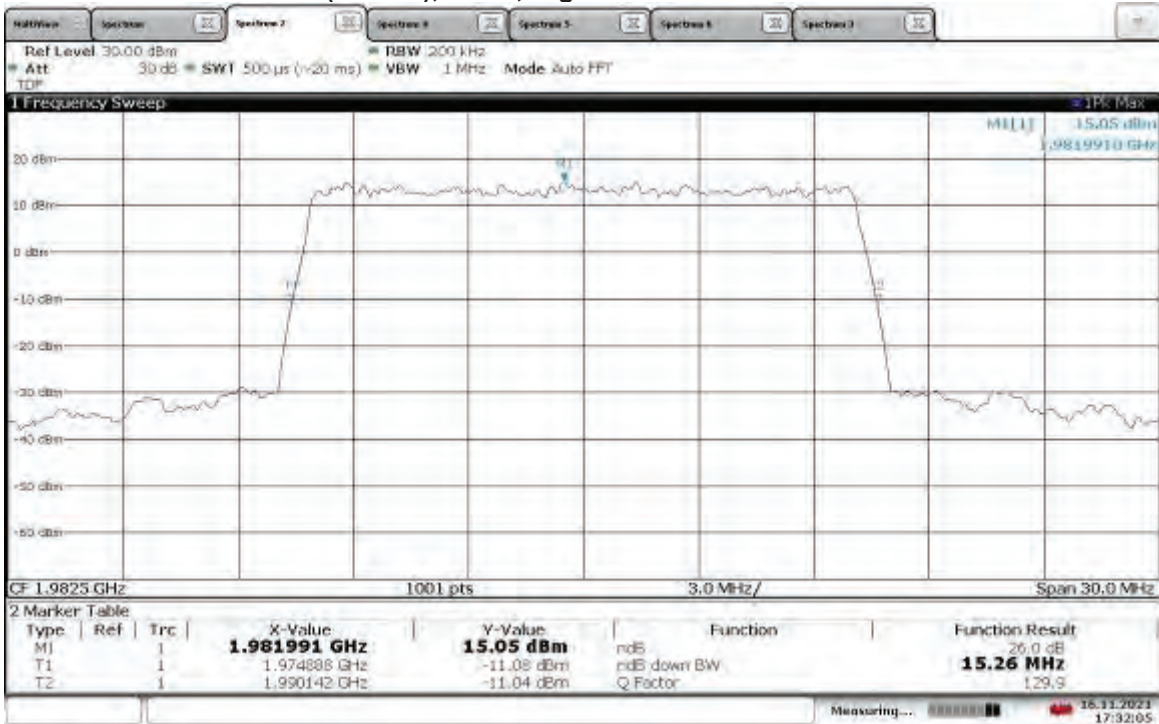
17:29:58 16.11.2021

**TM3.1a-256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth**



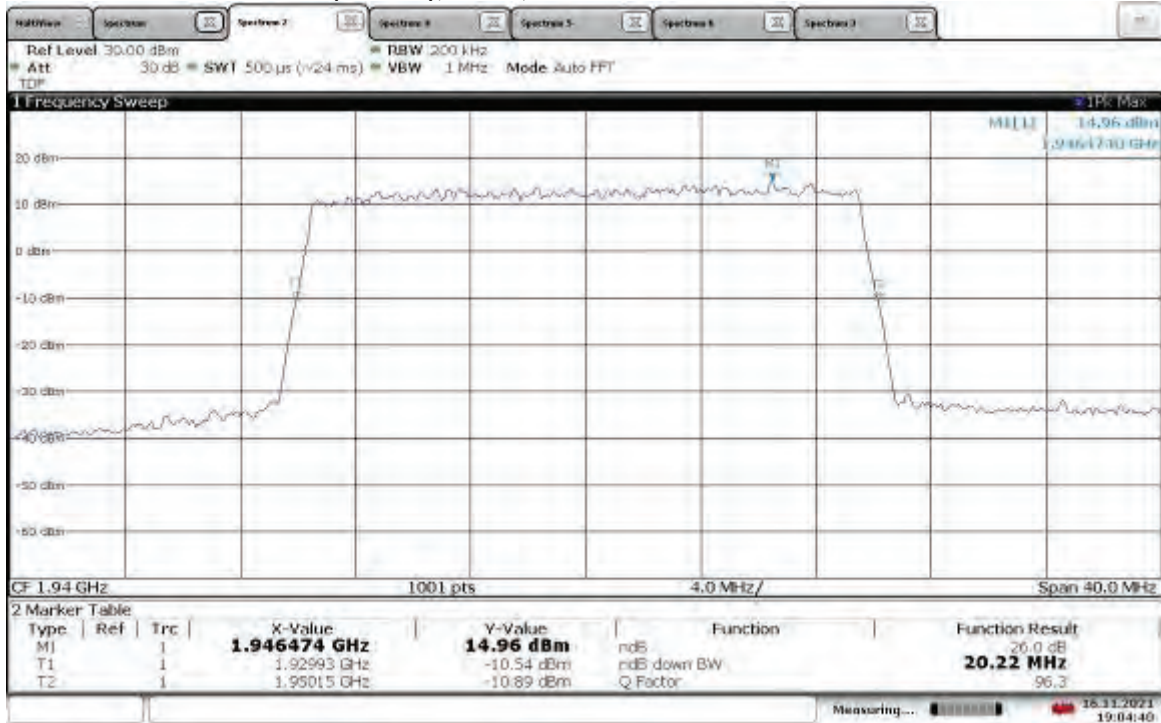
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**TM3.1a-256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth**



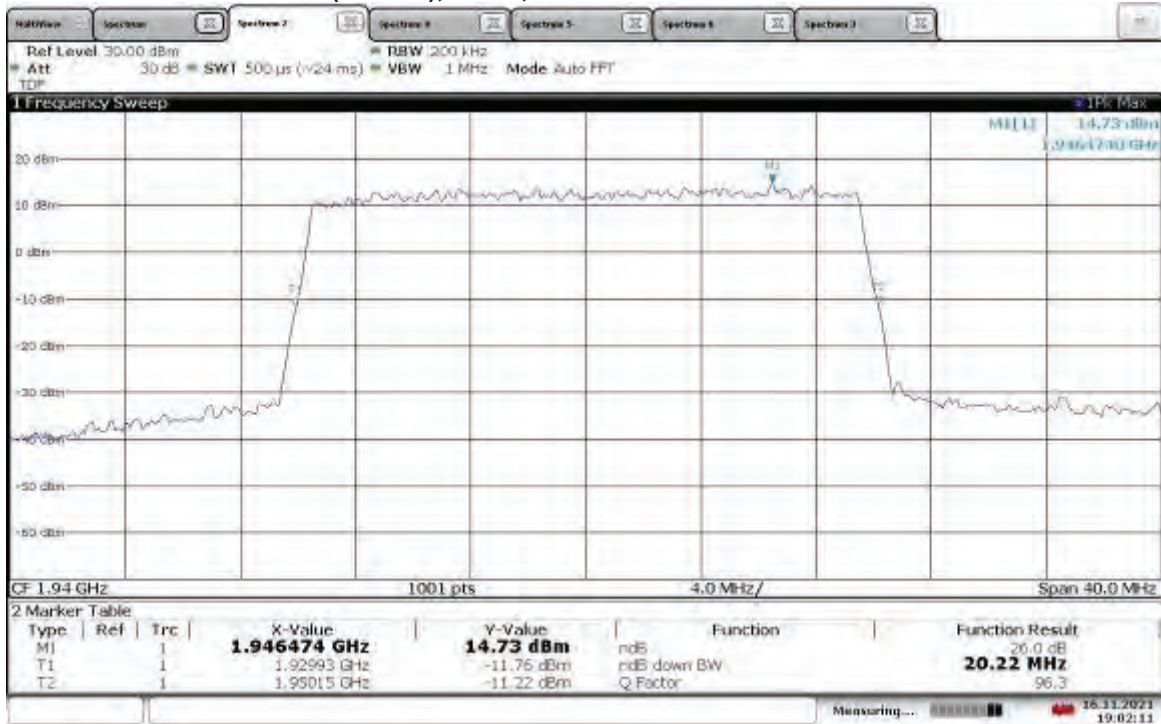
17:32:06 16.11.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 26dB Bandwidth



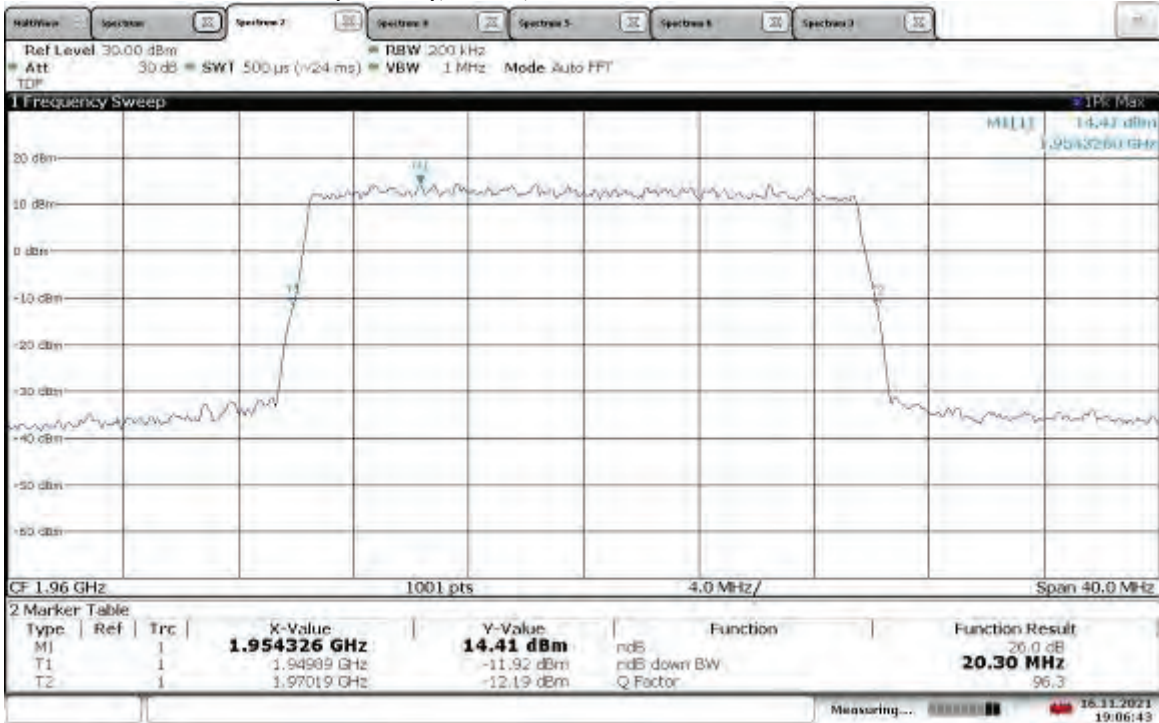
19:04:40 16.11.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 26dB Bandwidth



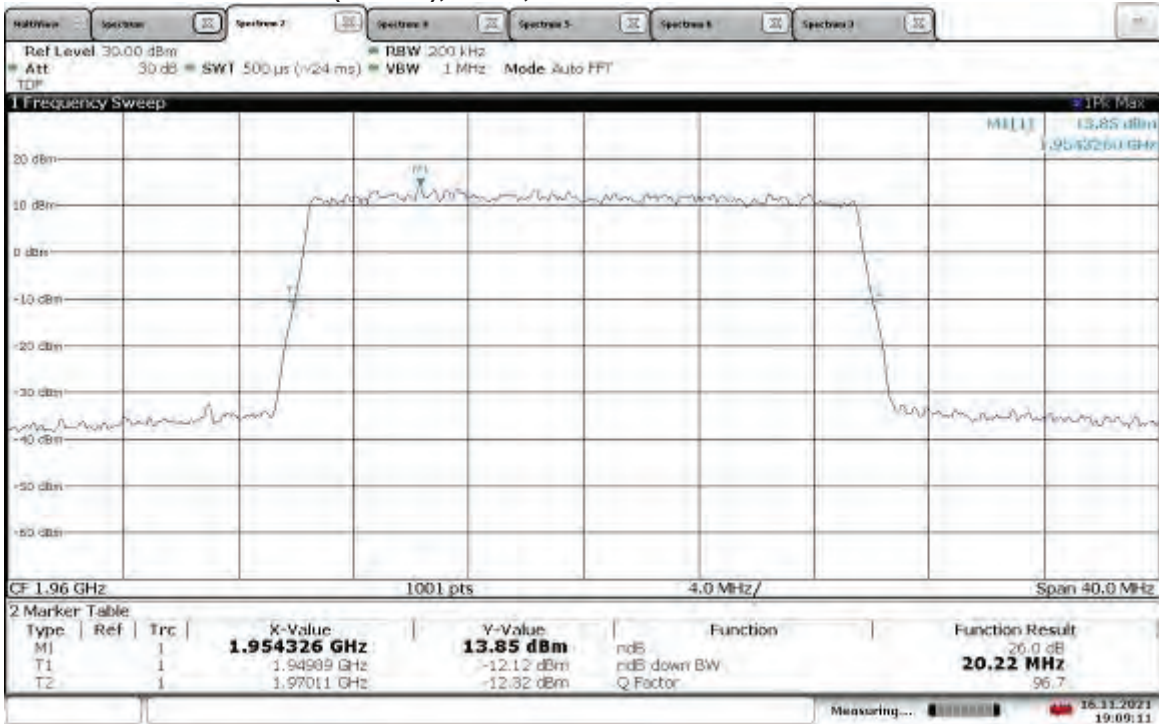
19:02:11 16.11.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 26dB Bandwidth



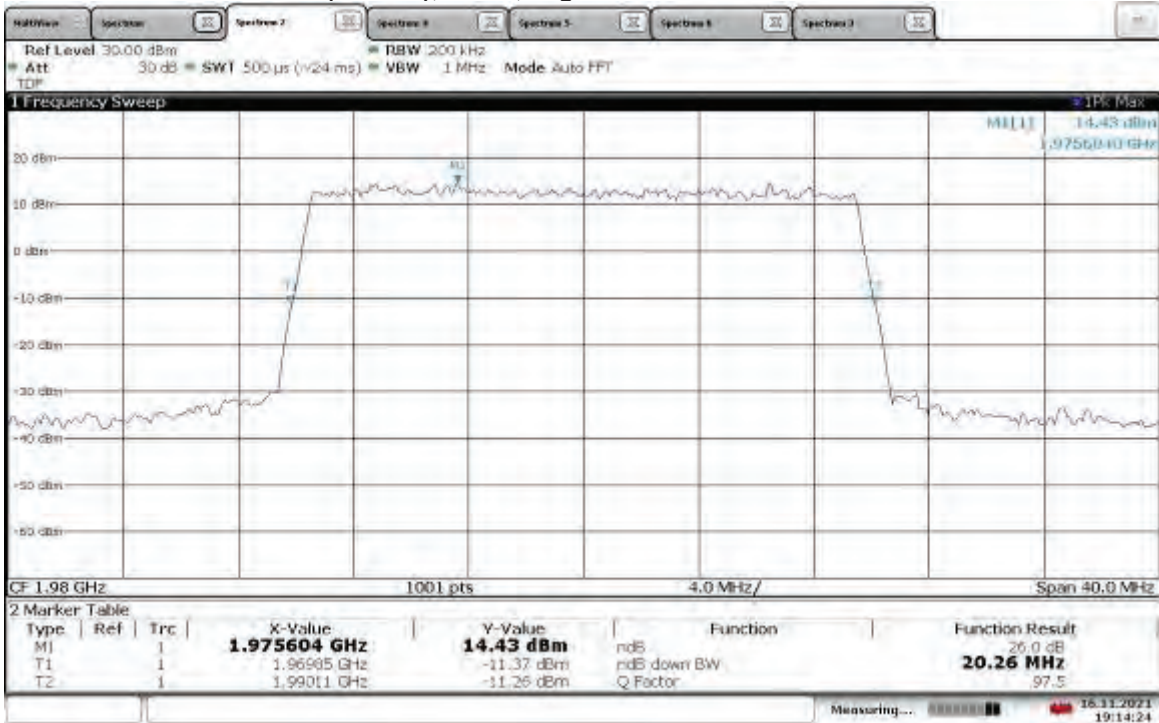
19:06:43 16.11.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 26dB Bandwidth



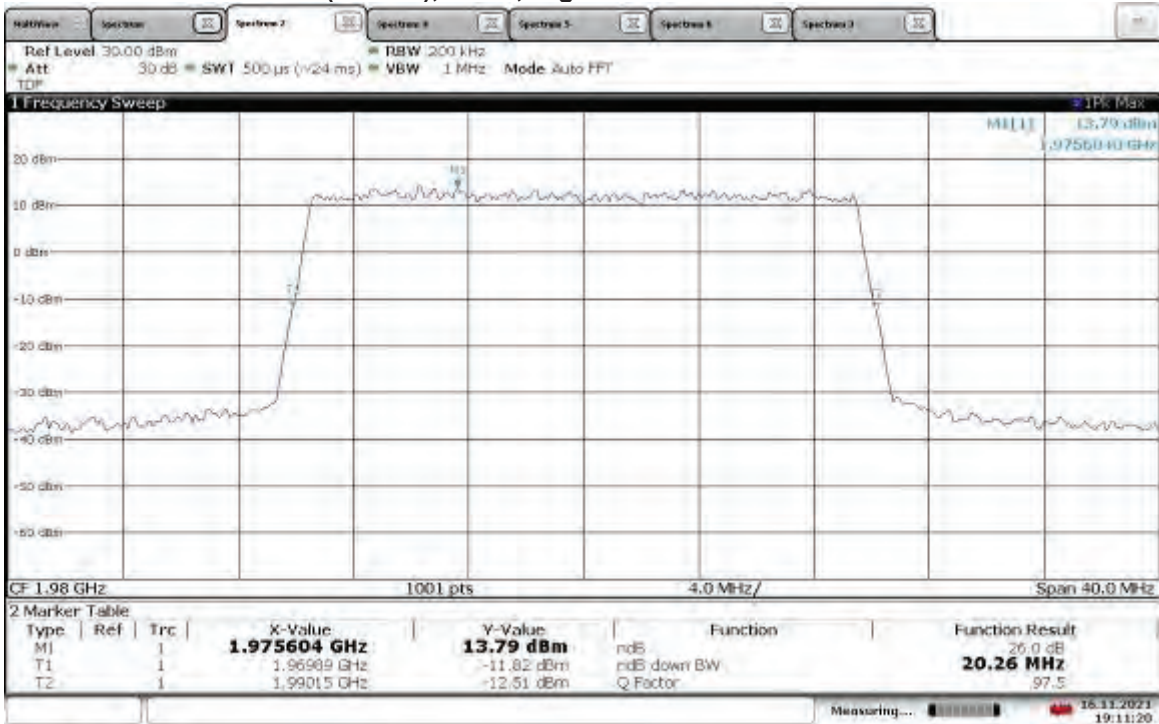
19:09:11 16.11.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 26dB Bandwidth



19:14:24 16.11.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 26dB Bandwidth



19:11:21 16.11.2021

Intertek

Report Number: 104844468BOX-001

Issued: 12/03/2021
Revised: 02/07/2022

Test Personnel: Vathana Ven *VJV*
Supervising/Reviewing
Engineer:
(Where Applicable) Kouma Sinn *KPS*

Test Date: 11/12/2021, 11/14/2021, 11/16/2021

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

Limit Applied: See report section 8.3

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

Ambient Temperature: 23, 22, 23 °C

Relative Humidity: 42, 28, 42, 47 %

Atmospheric Pressure: 1004, 1002, 1009 mbars

Deviations, Additions, or Exclusions: None

9 Band Edge Compliance

9.1 Method

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

9.2 Test Equipment Used:

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

Software Utilized:

Name	Manufacturer	Version
None	--	--

9.3 Results:

The sample tested was found to Comply.

§24.238(a)(b) 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.

Intertek

Report Number: 104844468BOX-001

Issued: 12/03/2021

Revised: 02/07/2022

Slot 0 (Band 2), Bandwidth: 5 MHz, Modulation: TM1.1-QPSK

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1932.50	ANT0	-31.18
		ANT1	-30.51
High	1987.50	ANT0	-28.26
		ANT1	-28.93

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM1.1-QPSK

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1935.00	ANT0	-31.98
		ANT1	-31.05
High	1985.00	ANT0	-31.02
		ANT1	-31.11

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM1.1-QPSK

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1937.50	ANT0	-32.21
		ANT1	-32.39
High	1982.50	ANT0	-26.05
		ANT1	-26.16

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM1.1-QPSK

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1940	ANT0	-34.89
		ANT1	-34.68
High	1980	ANT0	-28.46
		ANT1	-28.75

Slot 0 (Band 2), Bandwidth: 5 MHz, Modulation: TM3.2-16QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1932.50	ANT0	-32.74
		ANT1	-31.98
High	1987.50	ANT0	-30.12
		ANT1	-31.61

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM3.2-16QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1935.00	ANT0	-32.08
		ANT1	-31.63
High	1985.00	ANT0	-33.28
		ANT1	-33.23

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM3.2-16QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1937.50	ANT0	-31.08
		ANT1	-31.20
High	1982.50	ANT0	-26.64
		ANT1	-26.99

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.2-16QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1940.00	ANT0	-33.16
		ANT1	-33.04
High	1980.00	ANT0	-26.69
		ANT1	-27.16

Intertek

Report Number: 104844468BOX-001

Issued: 12/03/2021

Revised: 02/07/2022

Slot 0 (Band 2), Bandwidth: 5 MHz, Modulation: TM3.1-64QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1932.50	ANT0	-32.48
		ANT1	-31.05
High	1987.50	ANT0	-31.17
		ANT1	-31.21

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM3.1-64QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1935.00	ANT0	-33.18
		ANT1	-32.84
High	1985.00	ANT0	-32.74
		ANT1	-32.62

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM3.1-64QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1937.50	ANT0	-32.70
		ANT1	-32.82
High	1982.50	ANT0	-36.35
		ANT1	-26.79

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.1-64QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1940.00	ANT0	-33.18
		ANT1	-33.22
High	1980.00	ANT0	-29.33
		ANT1	-29.55

Slot 0 (Band 2), Bandwidth: 5 MHz, Modulation: TM3.1a-256QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1932.50	ANT0	-32.18
		ANT1	-33.06
High	1987.50	ANT0	-30.36
		ANT1	-30.32

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM3.1a-256QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1935.00	ANT0	-32.39
		ANT1	-32.10
High	1985.00	ANT0	-31.92
		ANT1	-32.22

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM3.1a-256QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1937.00	ANT0	-34.09
		ANT1	-34.35
High	1982.50	ANT0	-26.41
		ANT1	-26.62

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.1a-256QAM

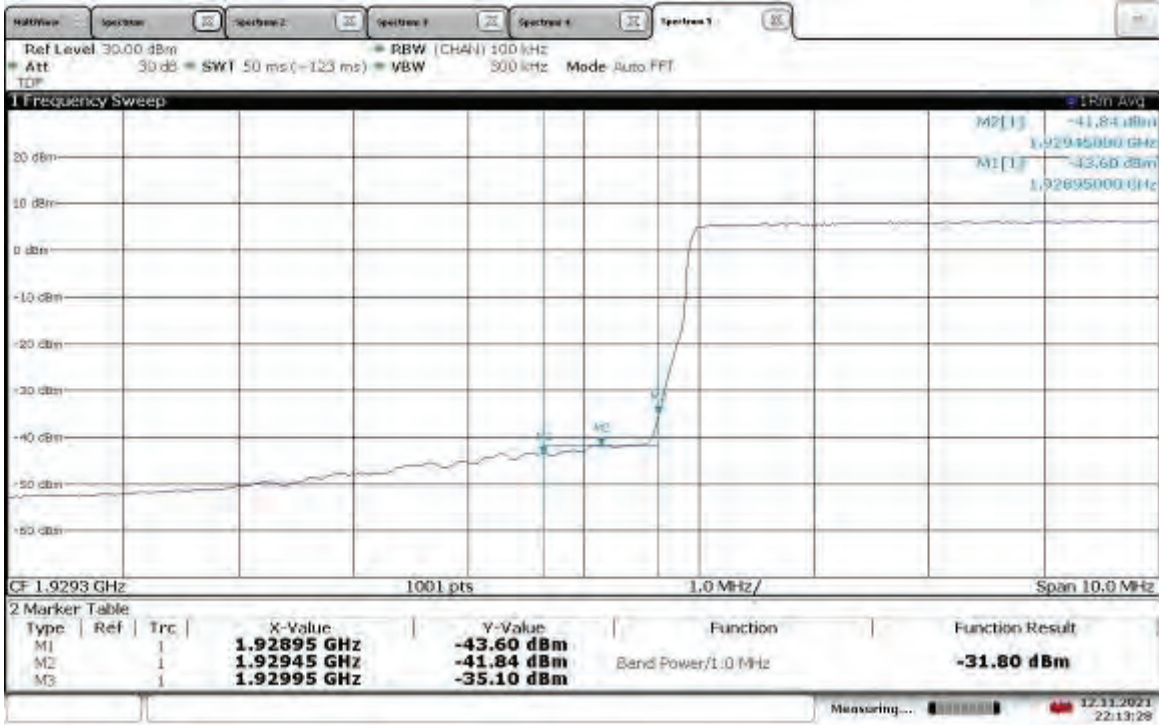
Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1940.50	ANT0	-33.88
		ANT1	-33.84
High	1980.00	ANT0	-25.70
		ANT1	-25.92

9.4 Setup Photograph:

Confidential – Test setup photo not included in this report

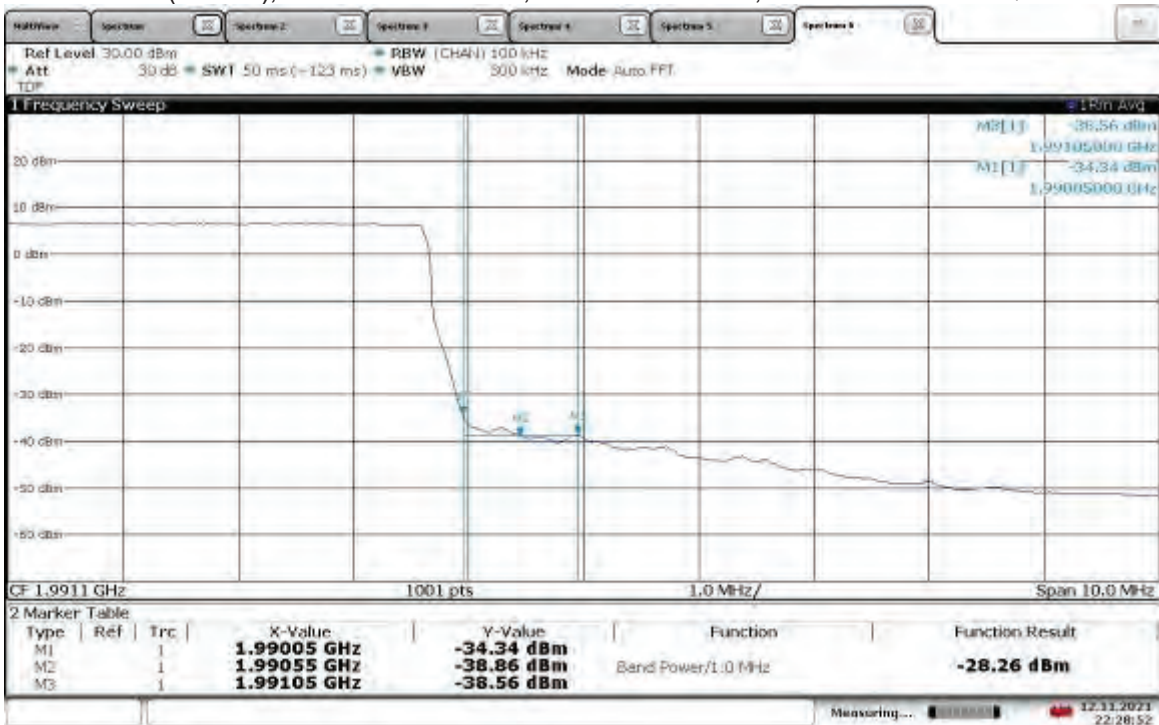
9.5 Plots/Data:

Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM1.1-QPSK



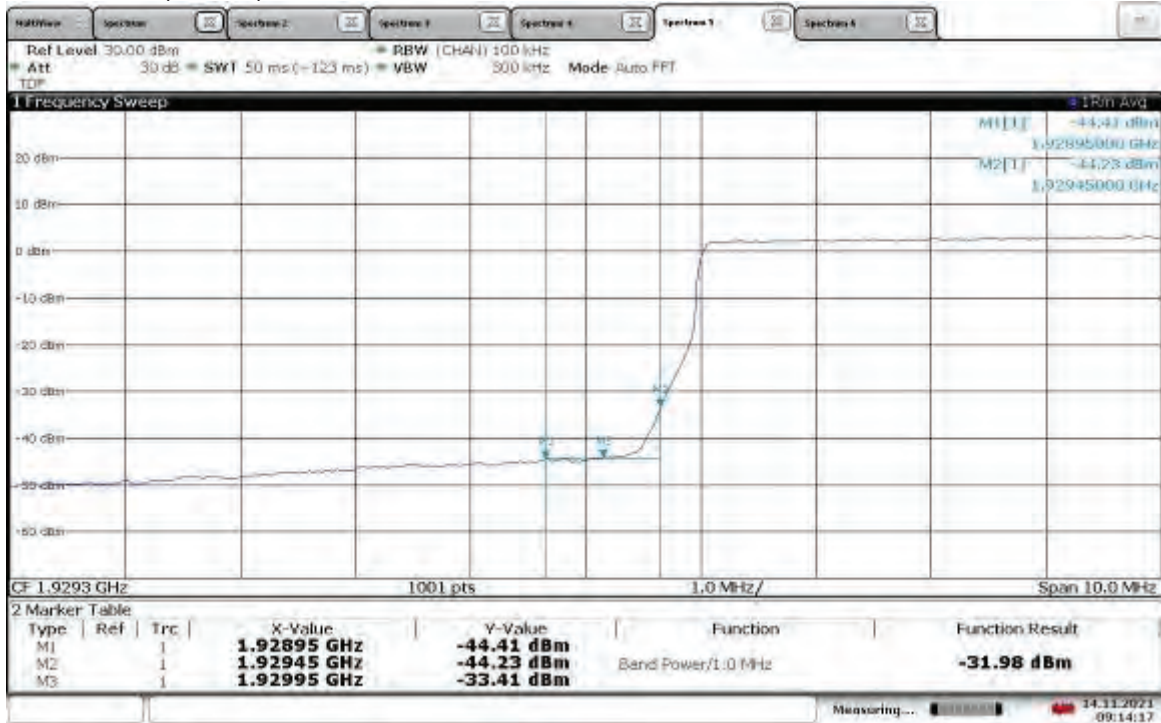
22:13:29 12.11.2021

Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM1.1-QPSK



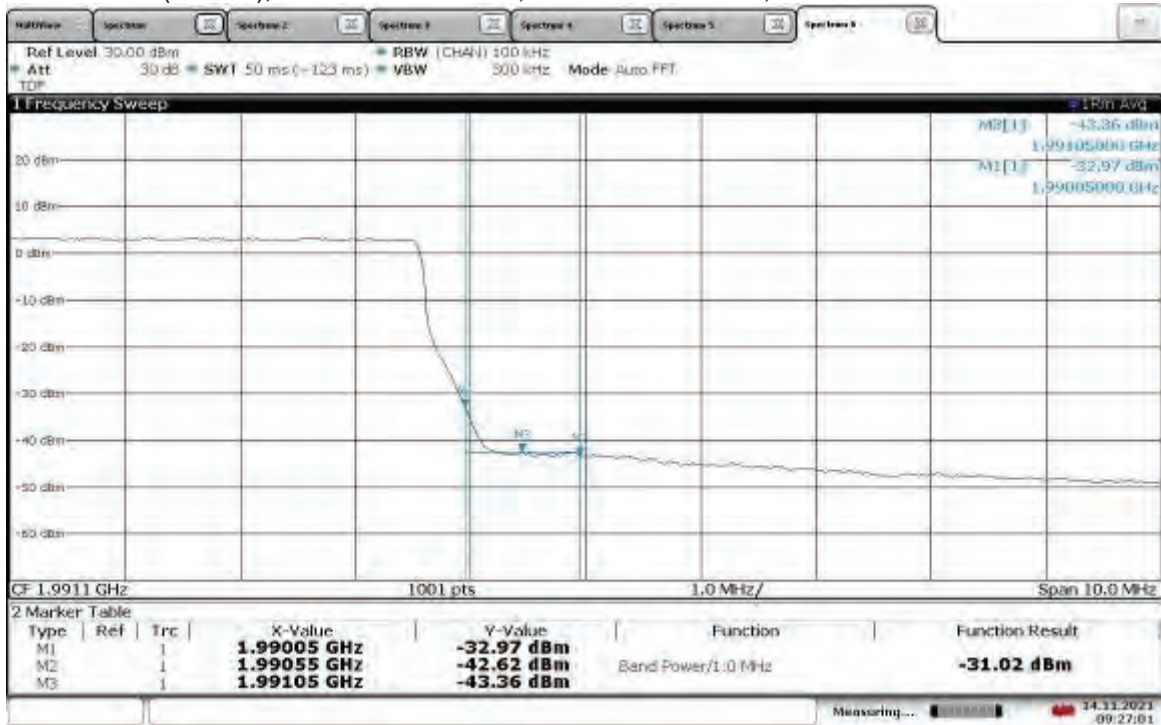
22:28:52 12.11.2021

Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM1.1-QPSK



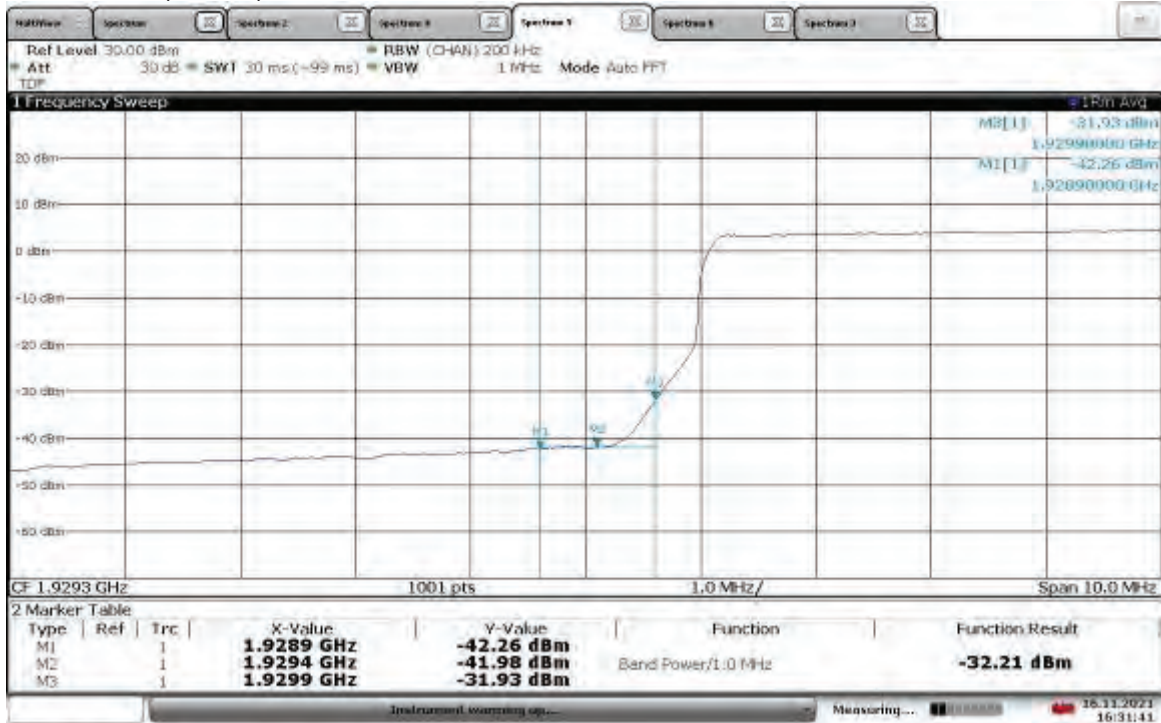
09:14:17 14.11.2021

Band Edge Compliant, Upper Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM1.1-QPSK



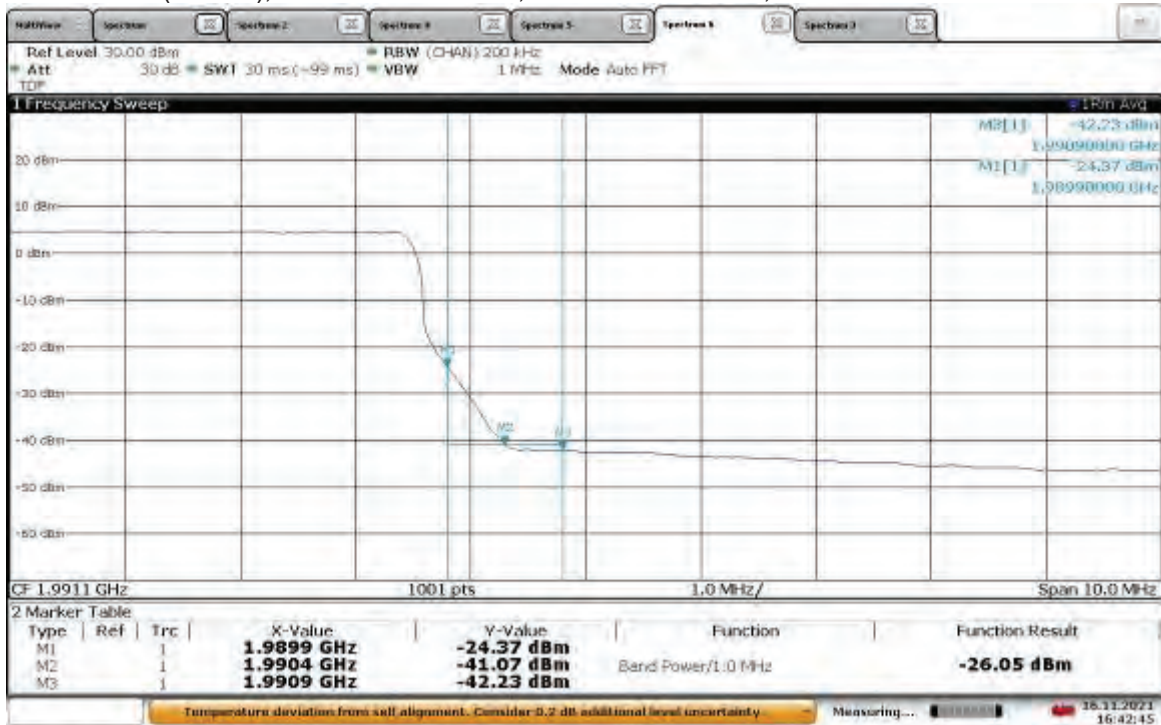
09:27:02 14.11.2021

Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM1.1-QPSK



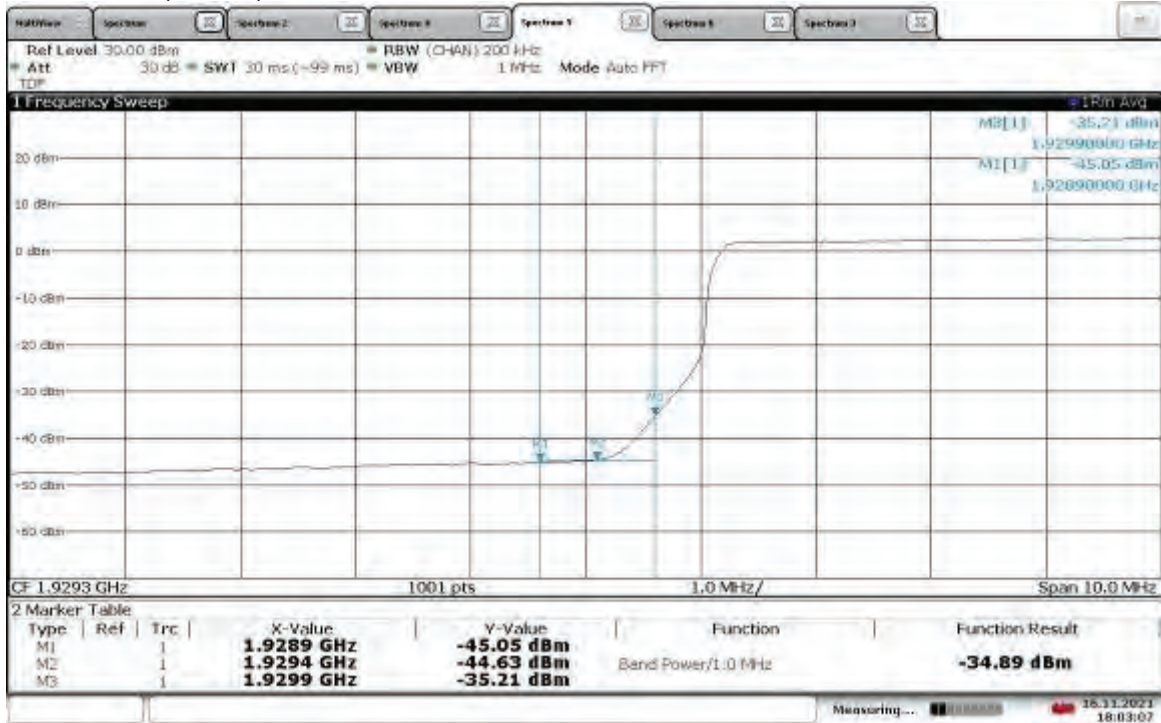
16:31:41 16.11.2021

Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM1.1-QPSK



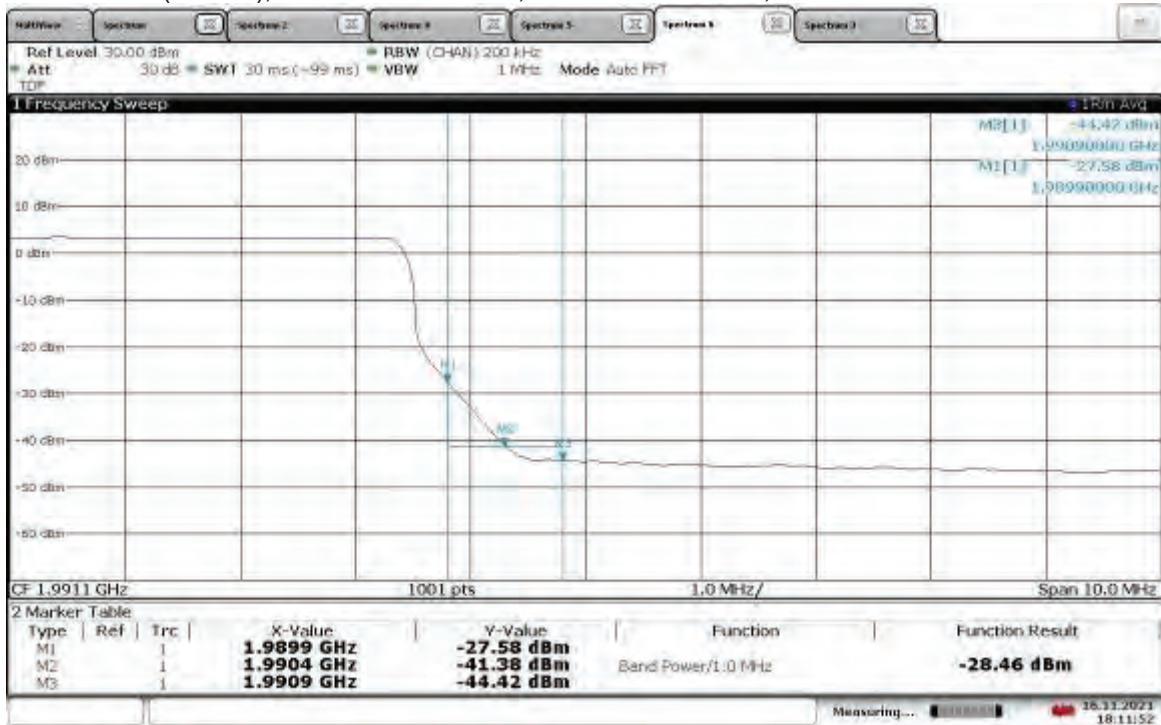
16:42:46 16.11.2021

Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM1.1-QPSK



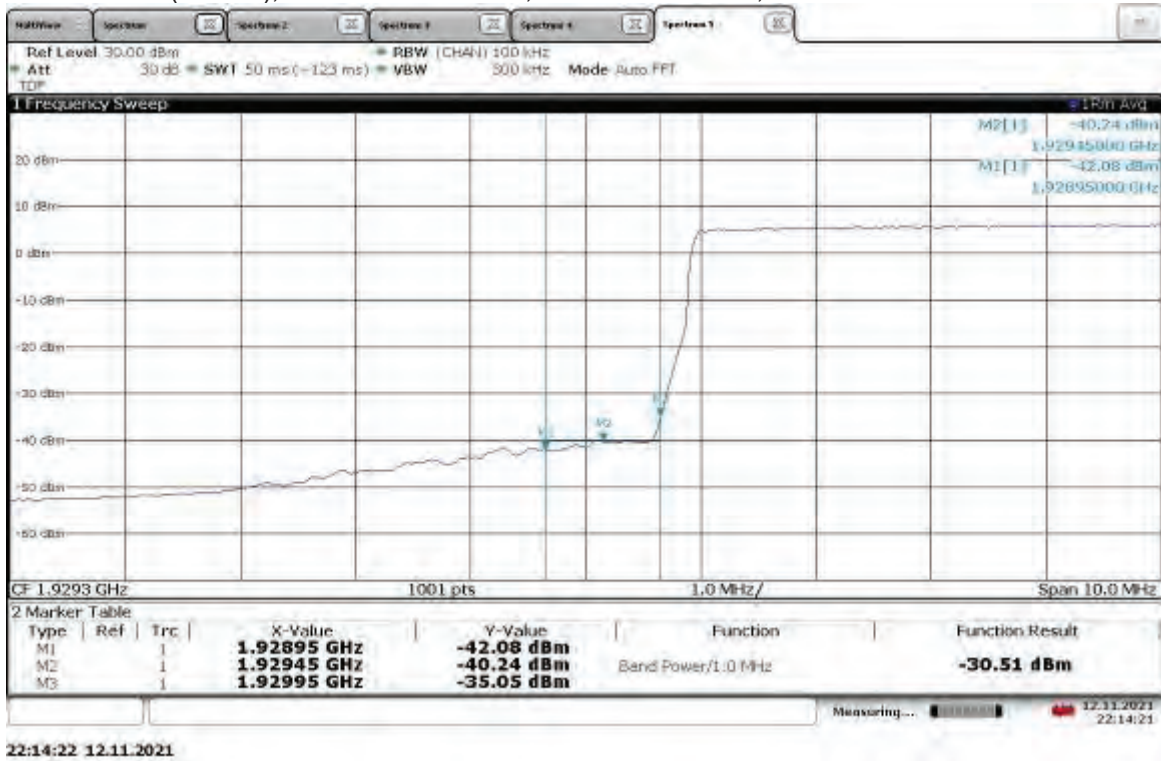
18:03:07 16.11.2021

Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM1.1-QPSK

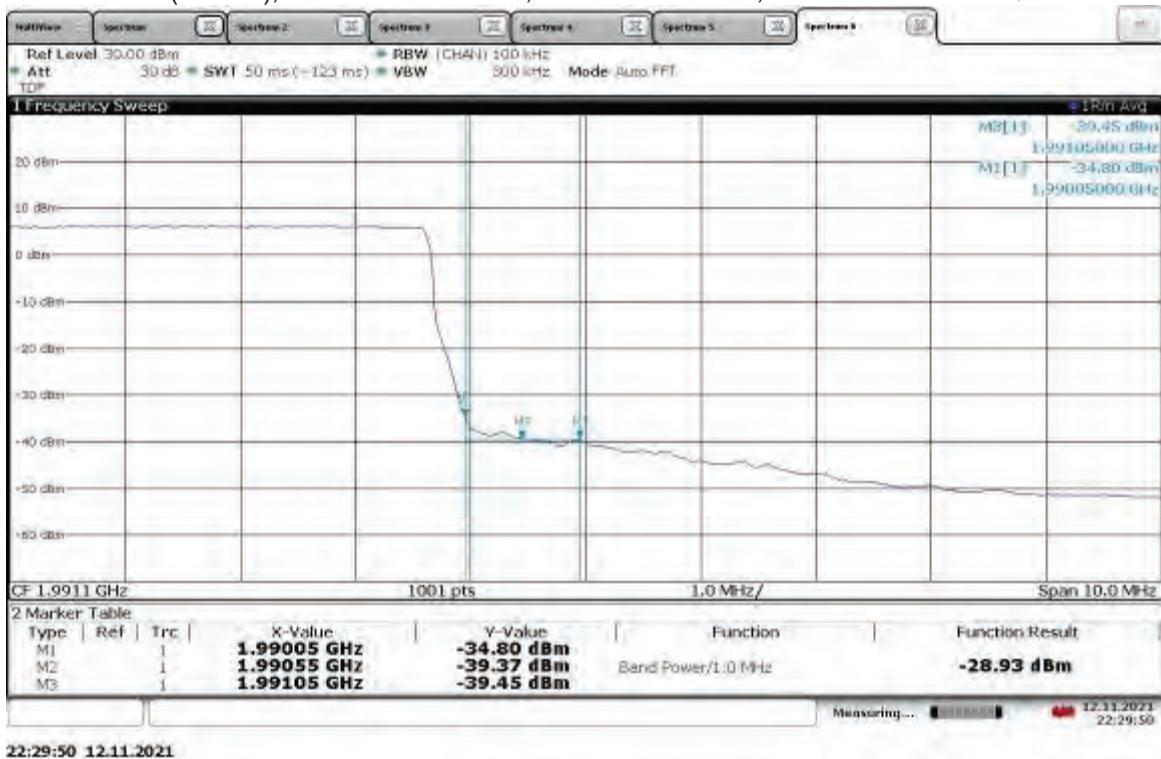


18:11:53 16.11.2021

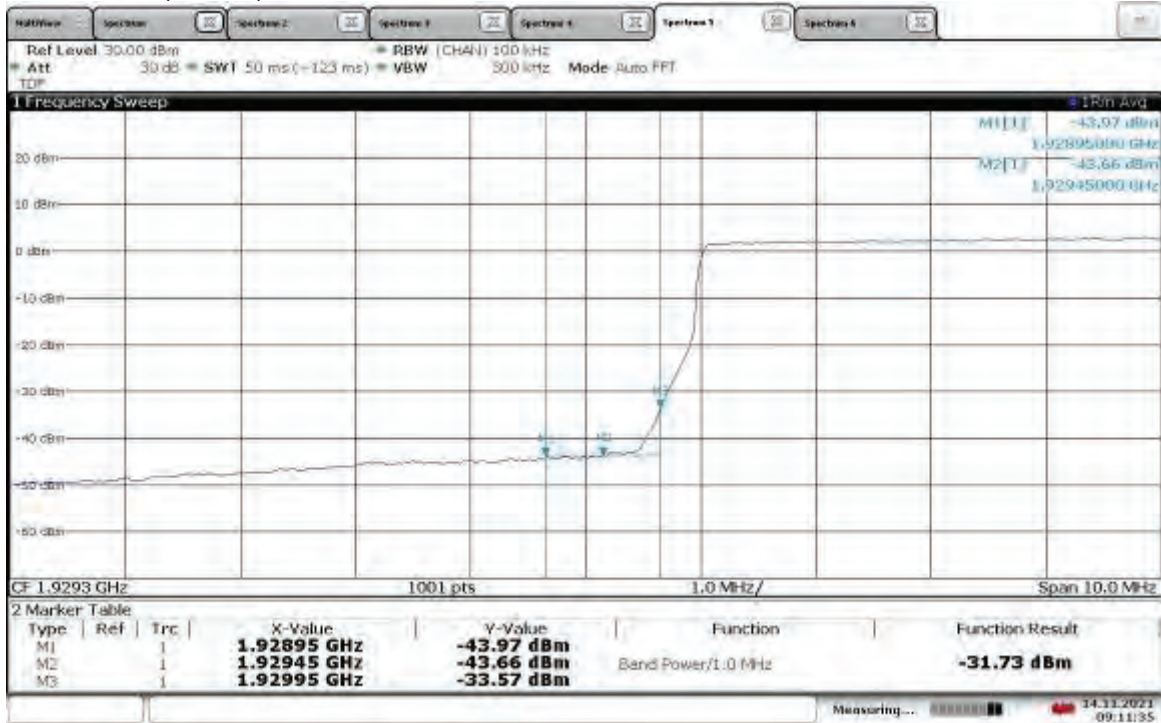
Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM1.1-QPSK



Band Edge Compliant, Lower Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM1.1-QPSK

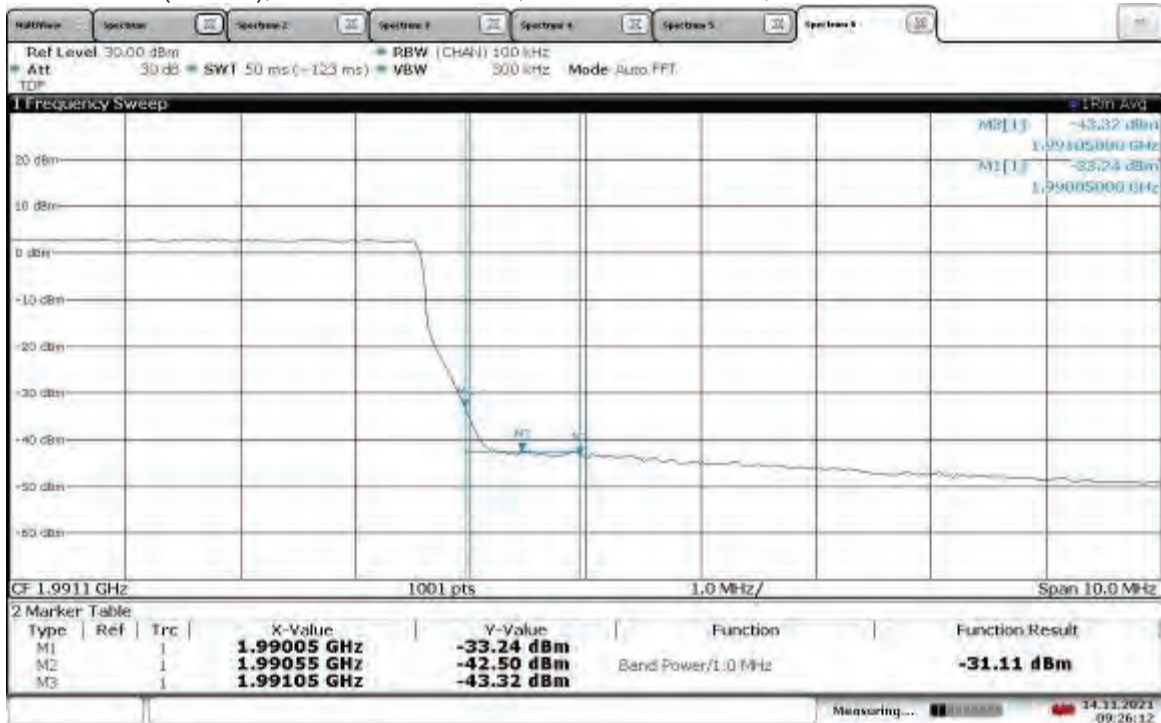


Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM1.1-QPSK



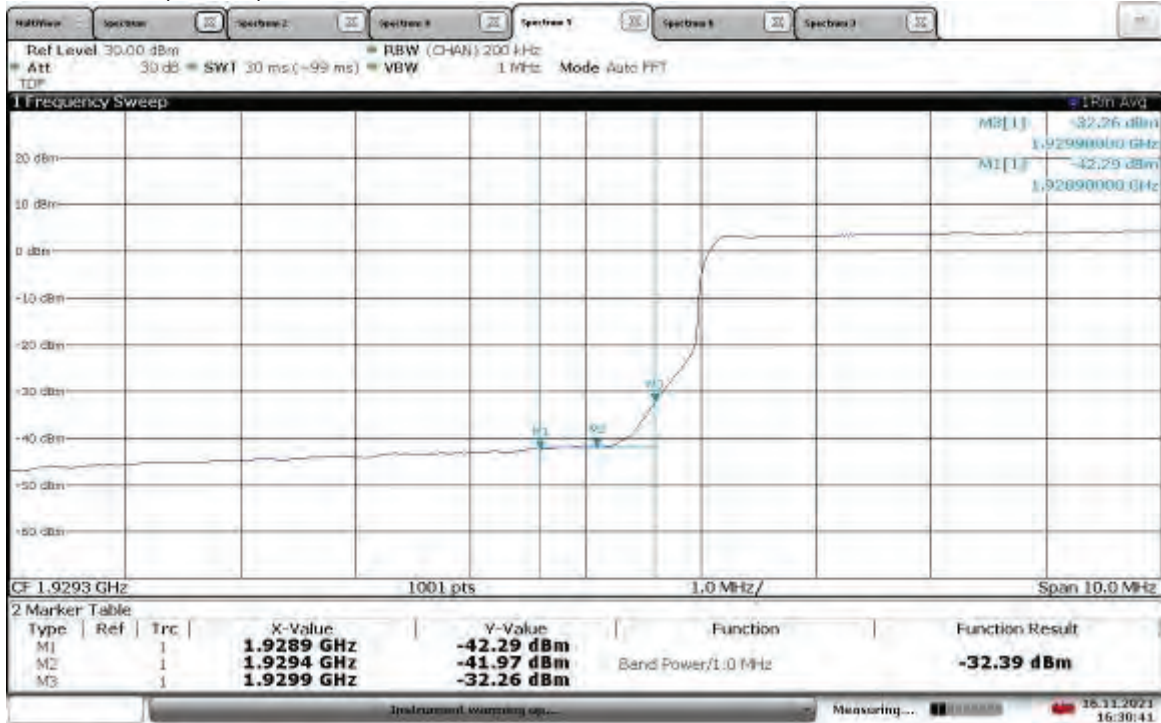
09:11:35 14.11.2021

Band Edge Compliant, Lower Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM1.1-QPSK



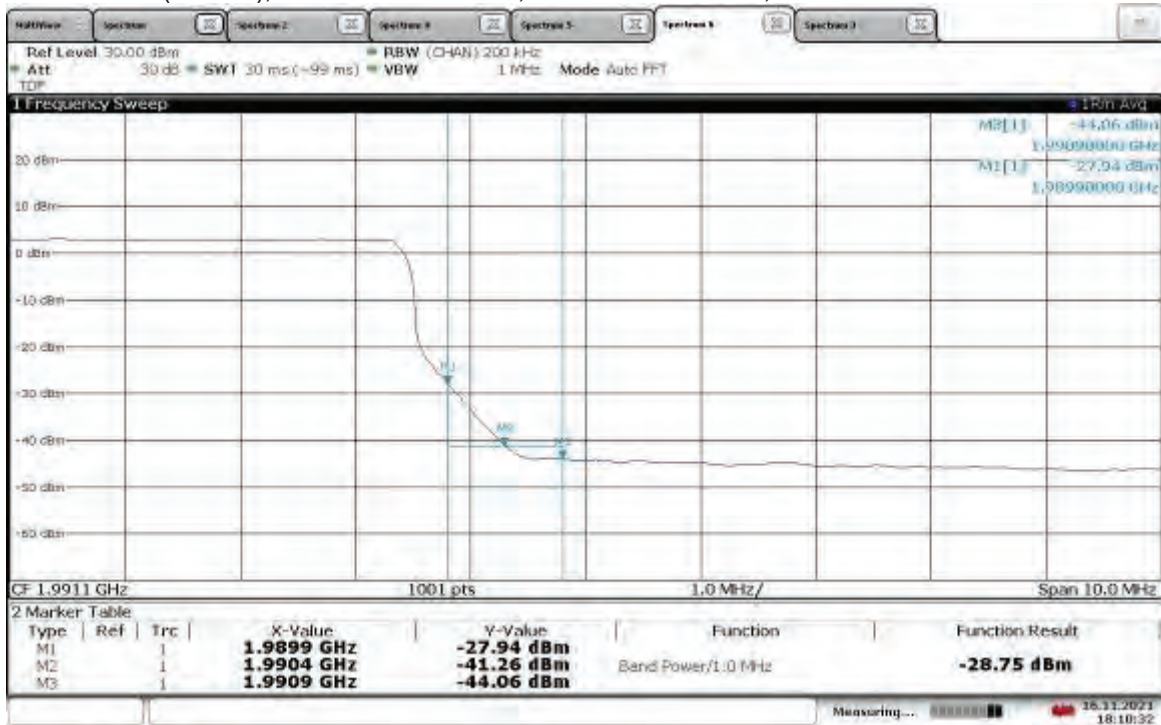
09:26:12 14.11.2021

Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM1.1-QPSK



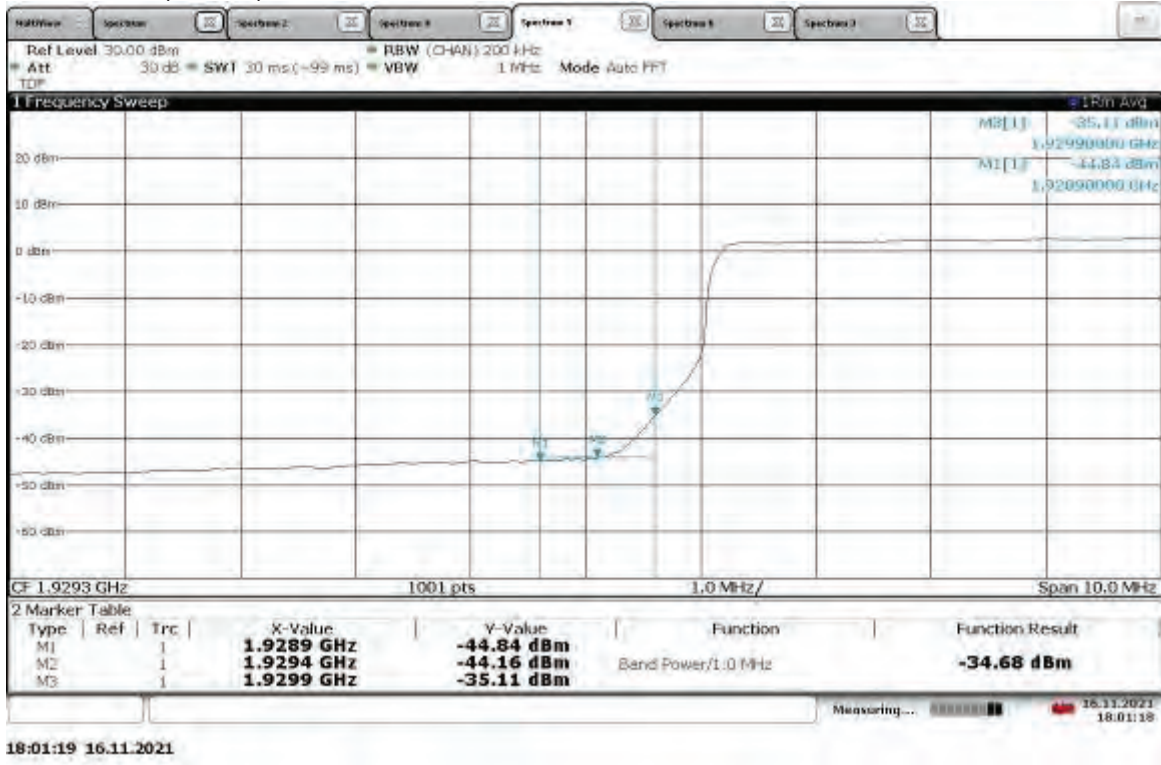
16:30:42 16.11.2021

Band Edge Compliant, Lower Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM1.1-QPSK

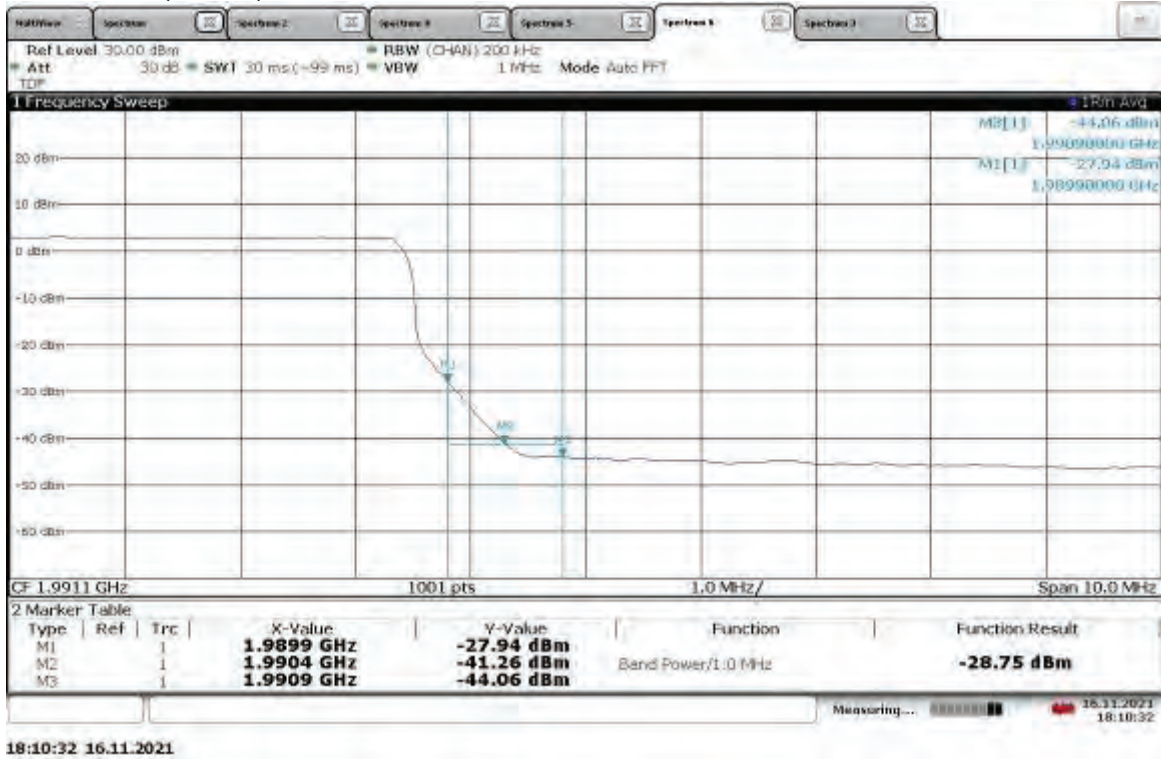


18:10:32 16.11.2021

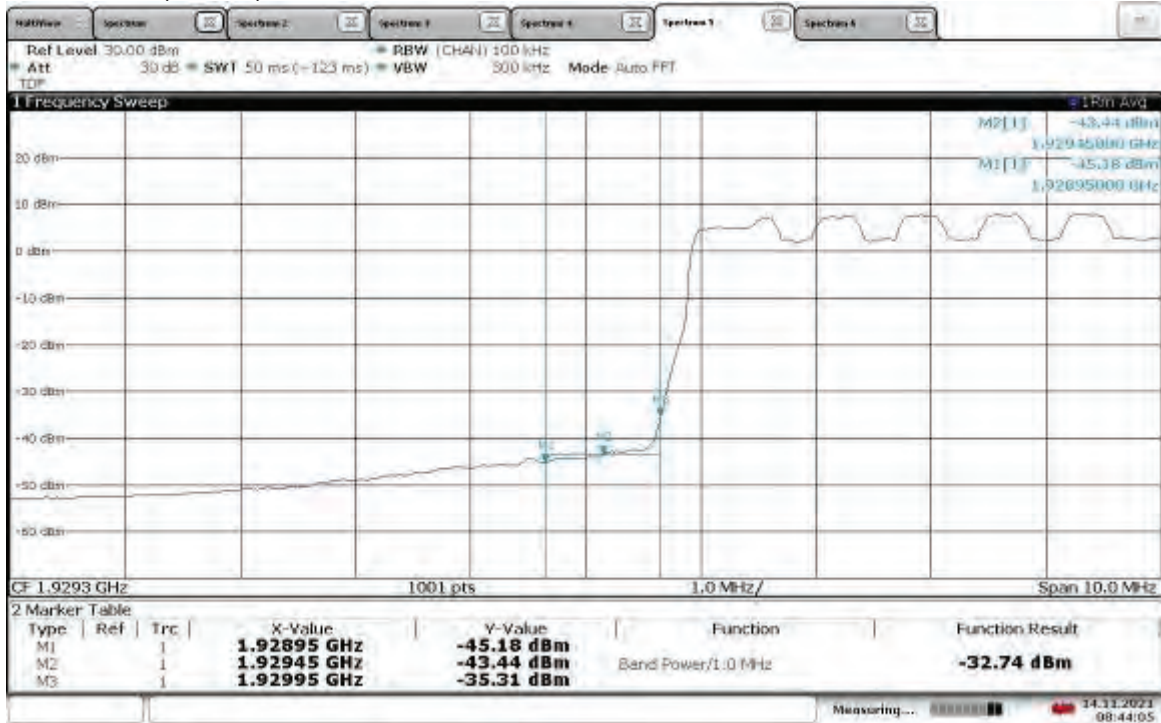
Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM1.1-QPSK



Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM1.1-QPSK

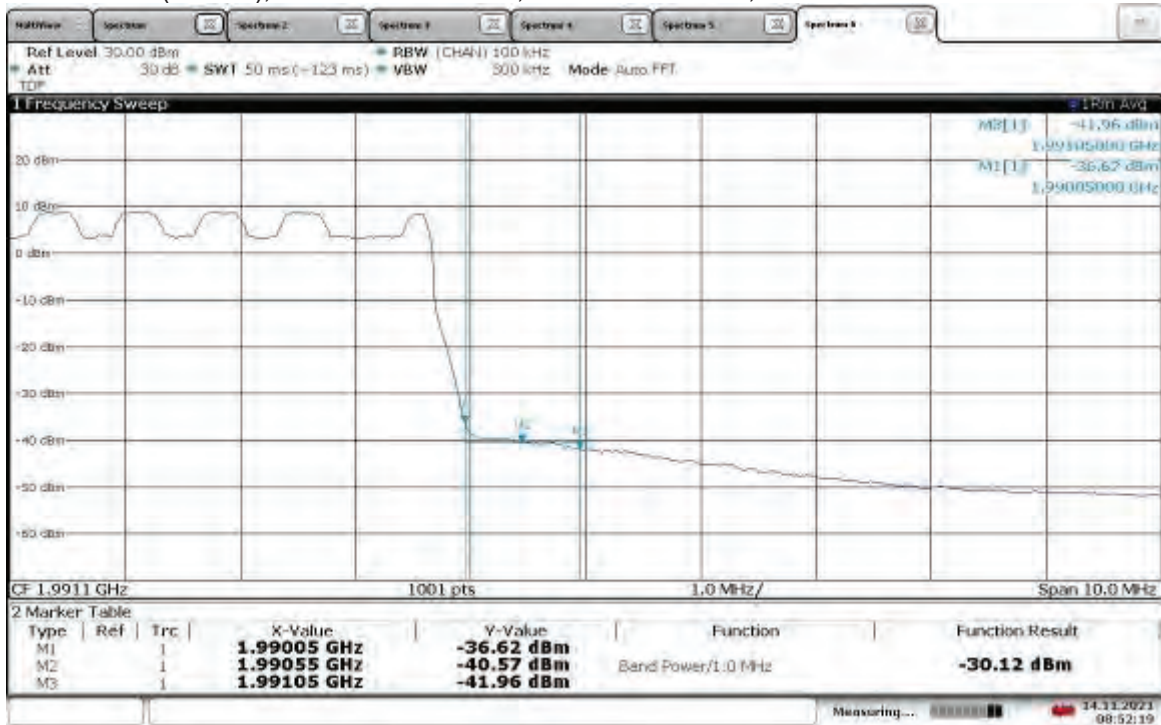


Band Edge Compliant, Lower Band Edge, 1932.5MHz
 Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.2-16QAM



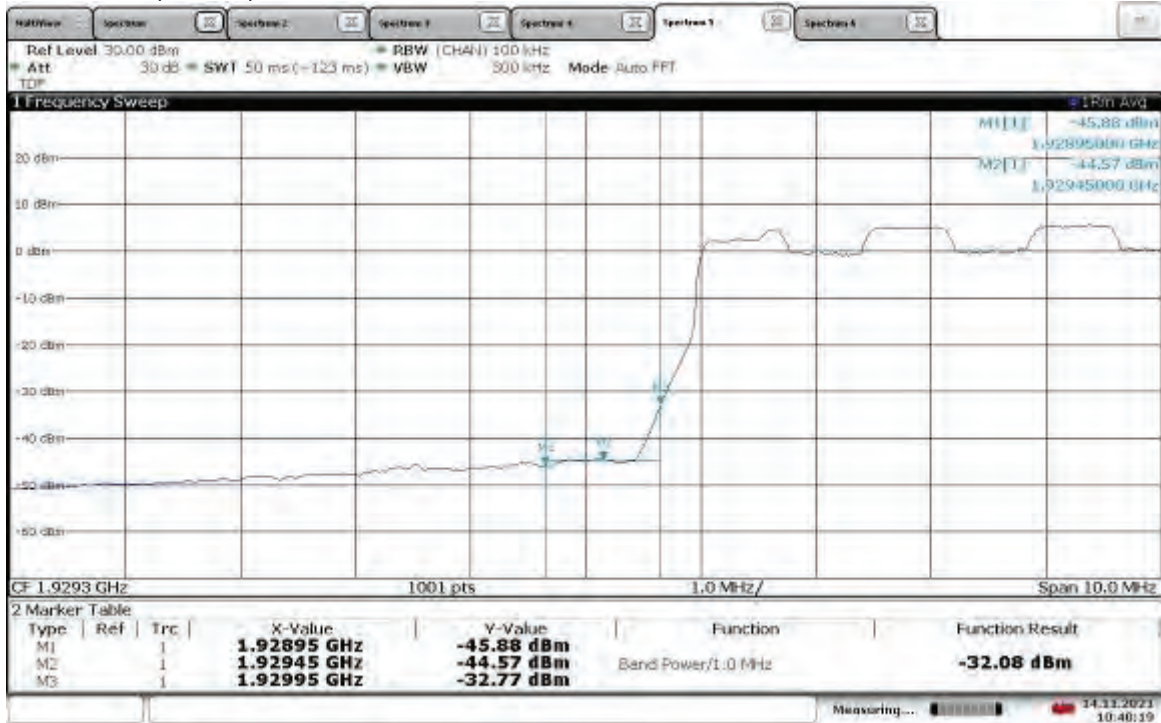
08:44:05 14.11.2021

Band Edge Compliant, Upper Band Edge, 1987.5 MHz
 Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.2-16QAM



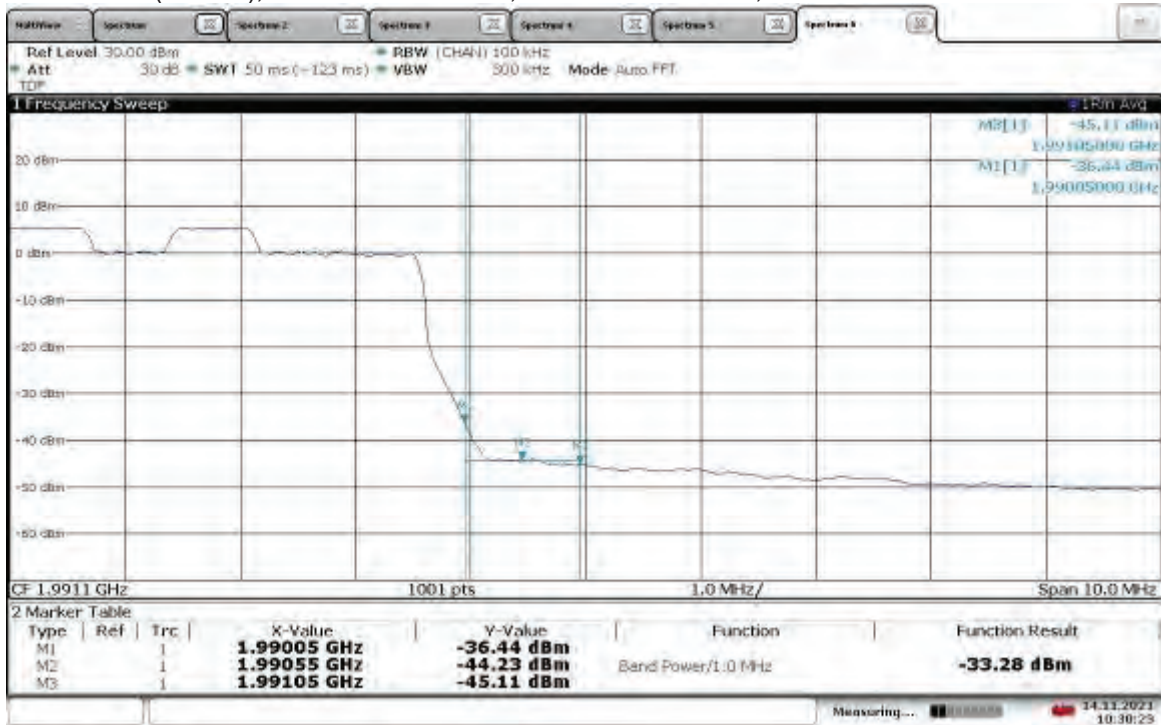
08:52:19 14.11.2021

Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.2-16QAM



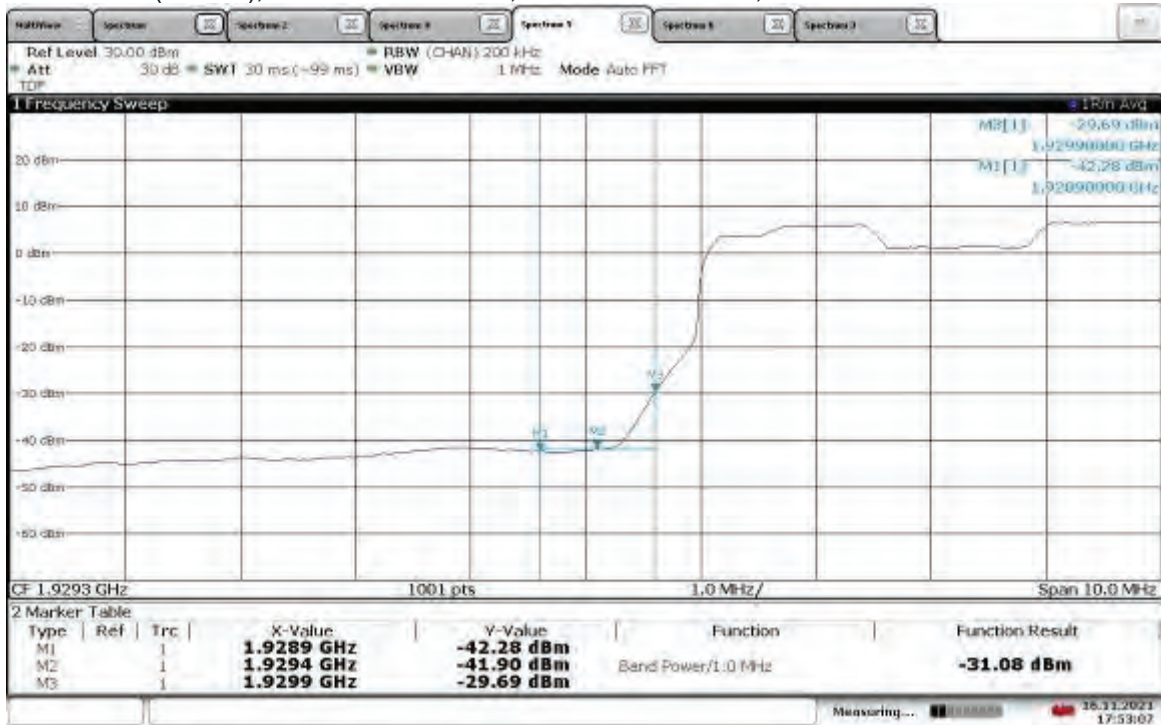
10:40:19 14.11.2021

Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.2-16QAM



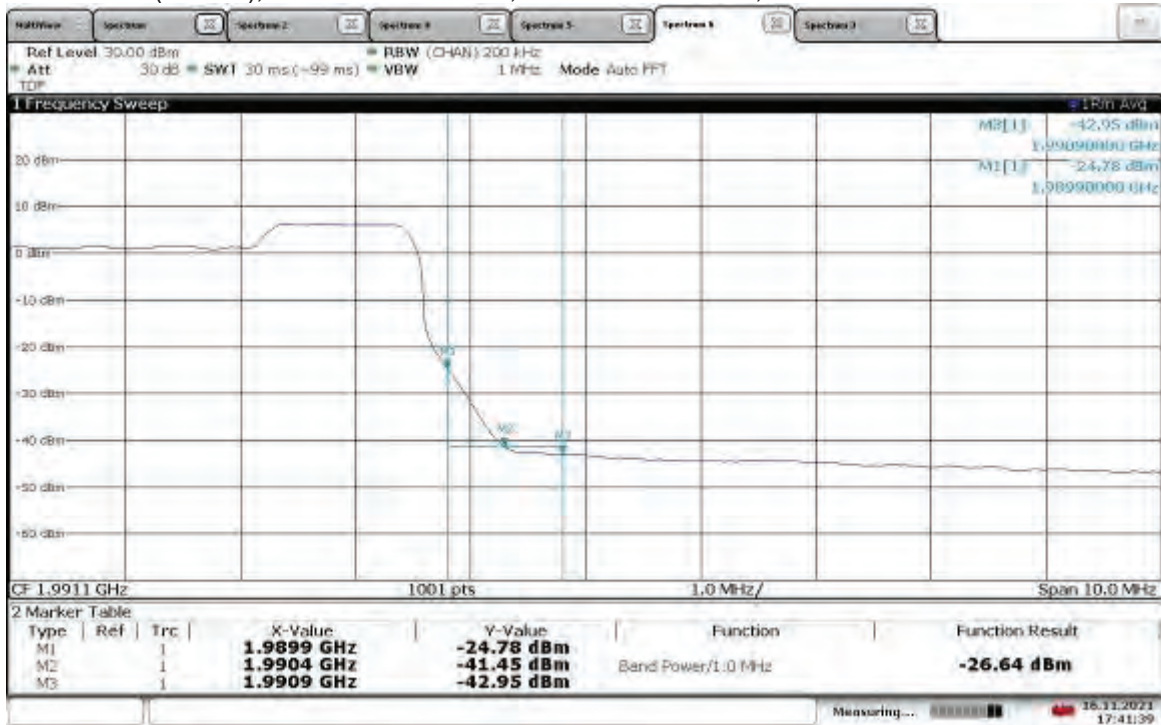
10:30:23 14.11.2021

Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM3.2-16QAM



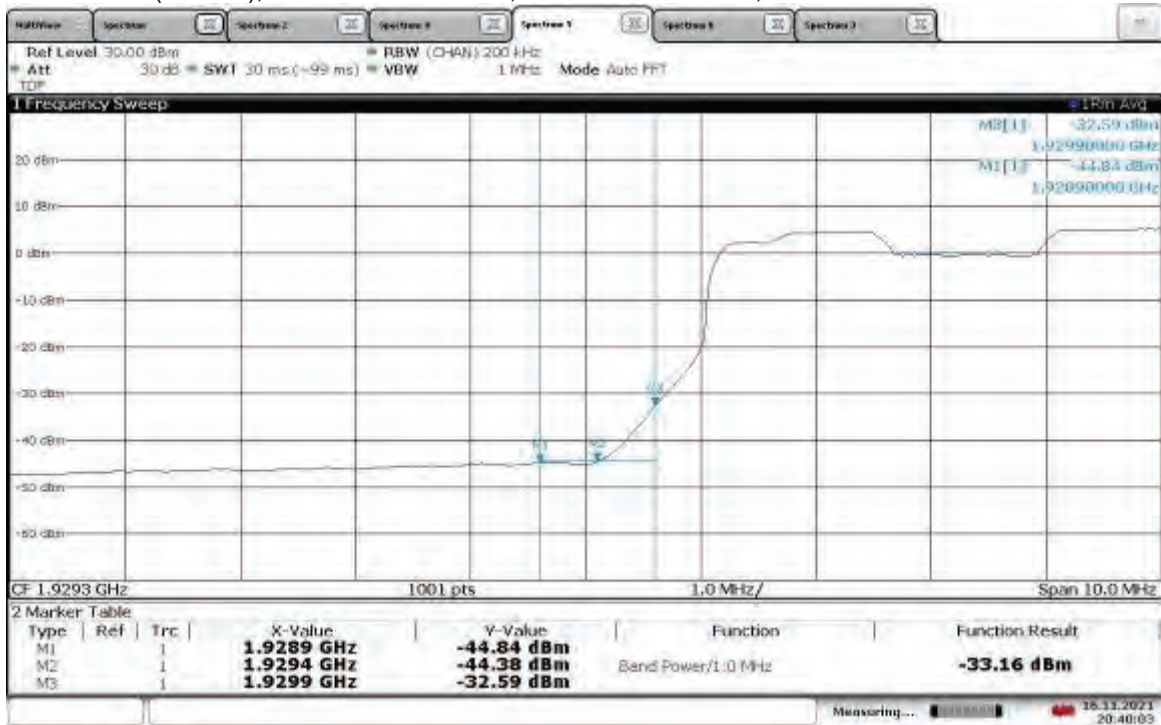
17:53:08 16.11.2021

Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM3.2-16QAM



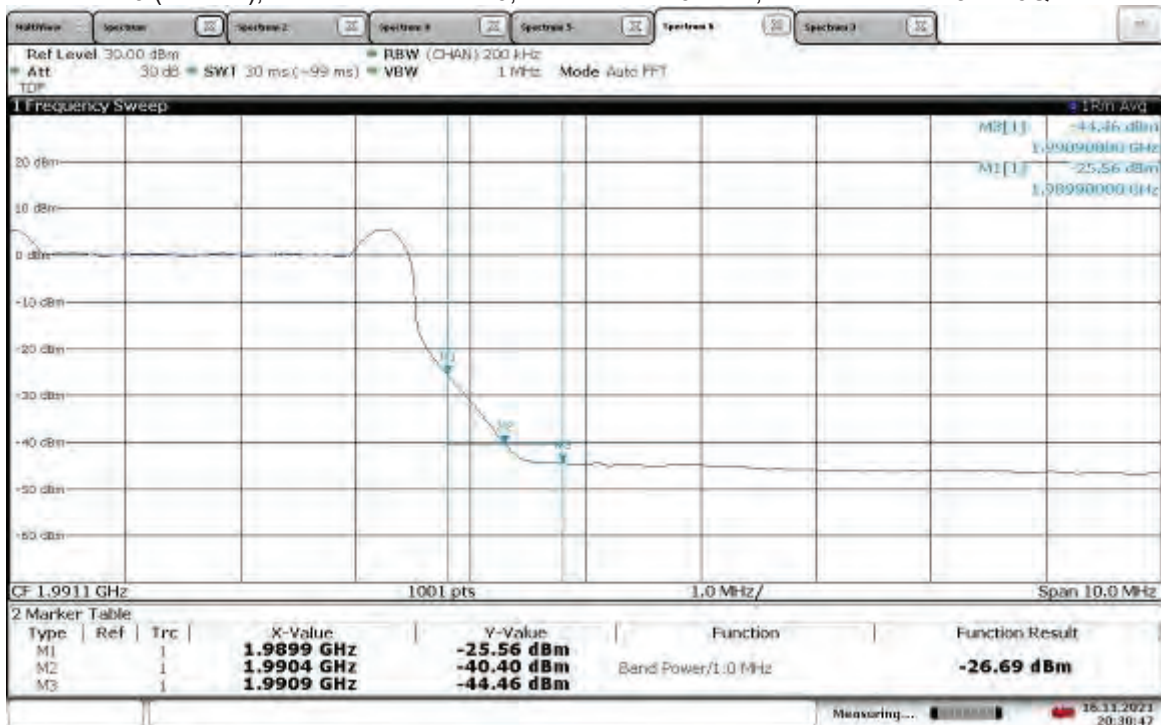
17:41:40 16.11.2021

Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.2-16QAM



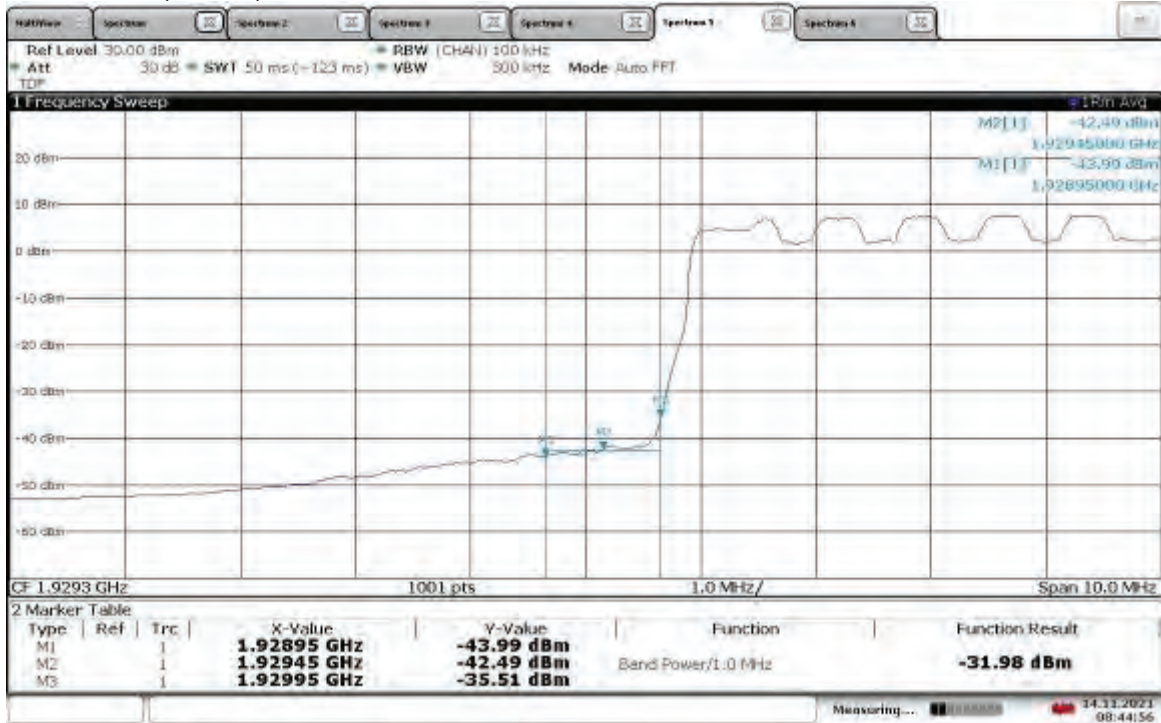
20:40:03 16.11.2021

Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.2-16QAM



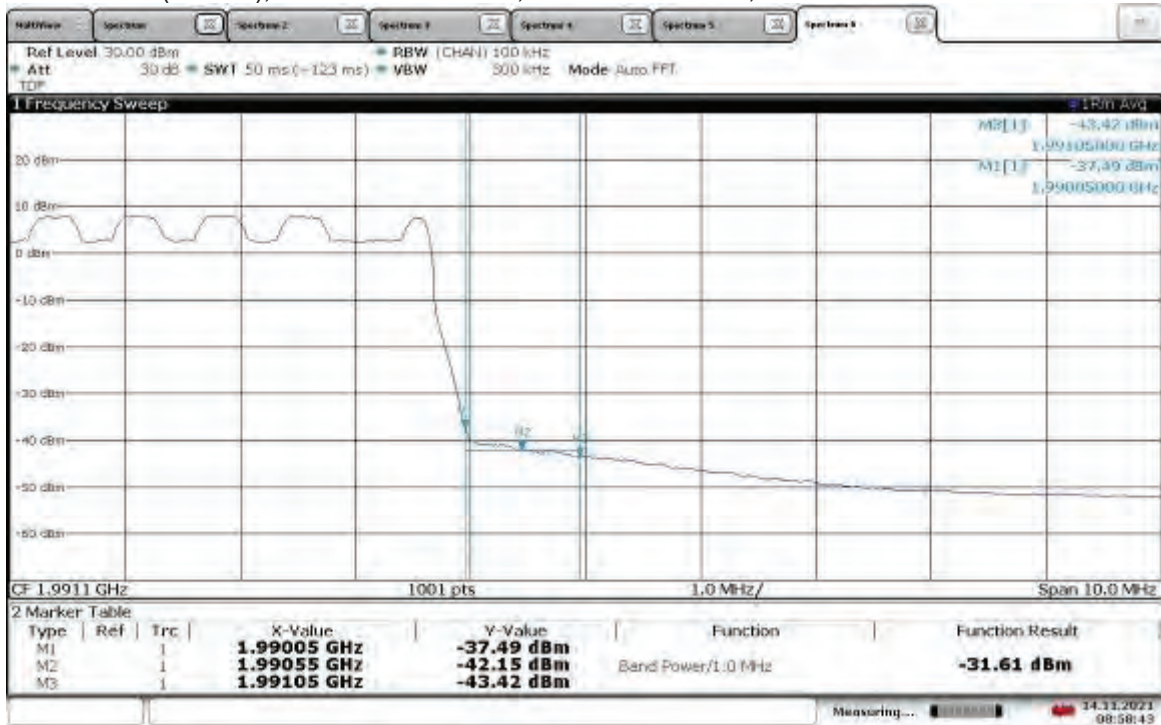
20:30:48 16.11.2021

Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.2-16QAM



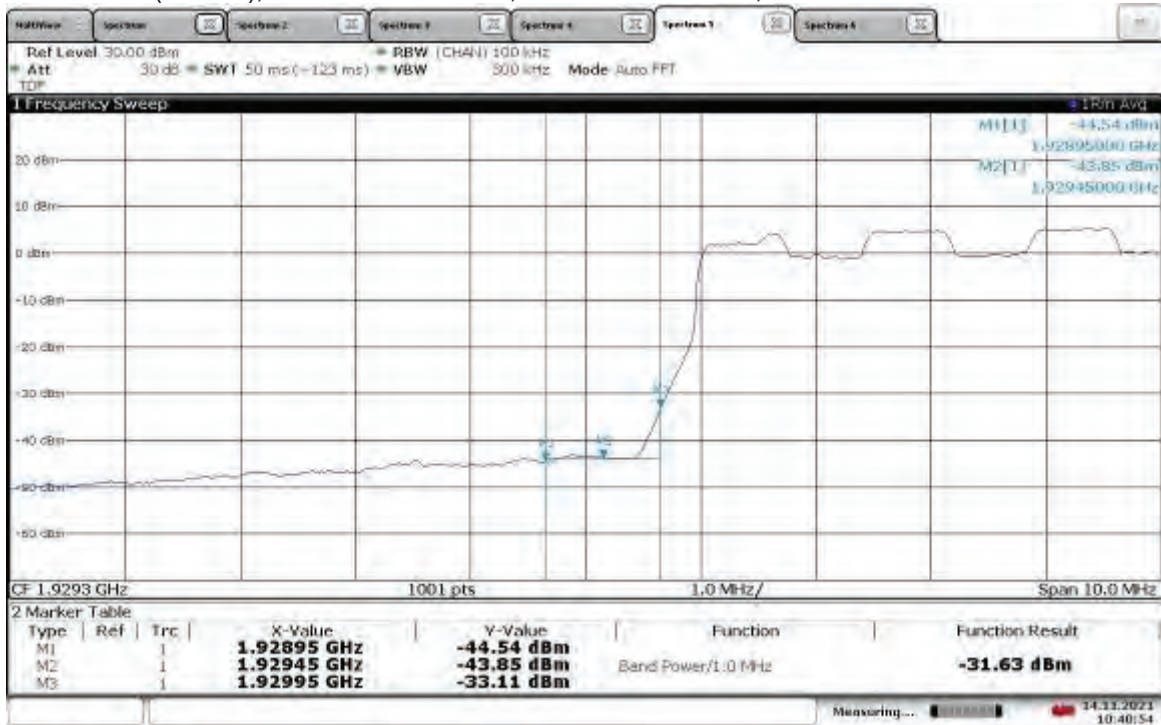
08:44:56 14.11.2021

Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.2-16QAM



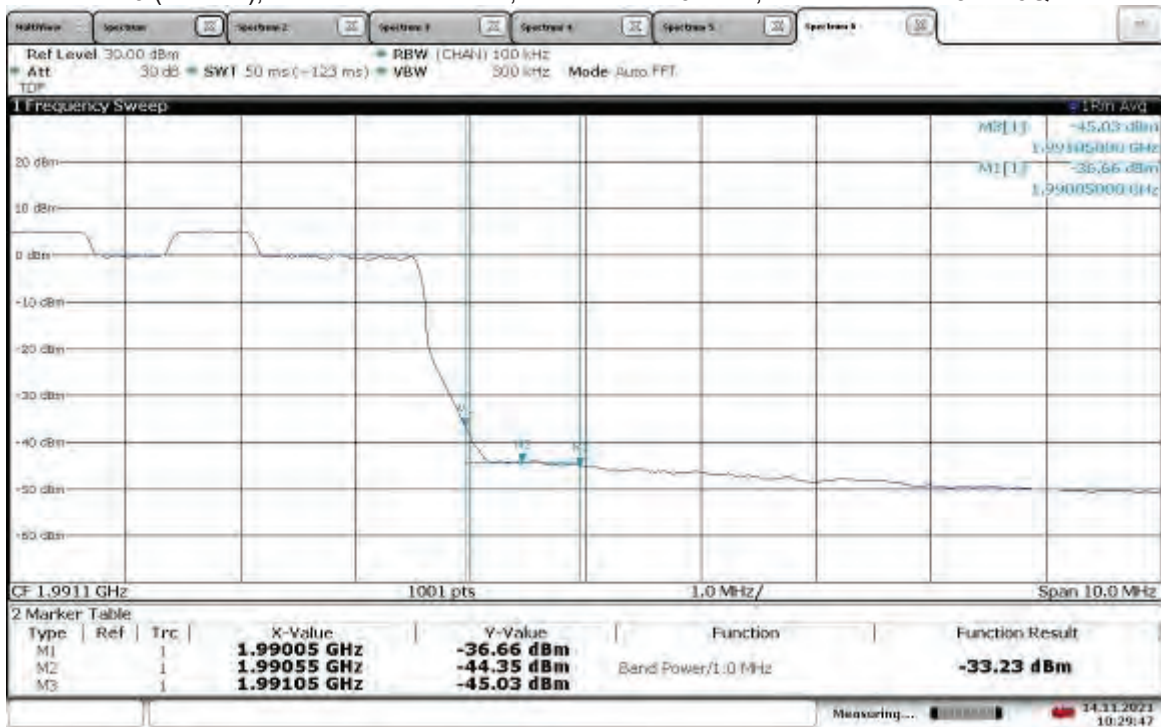
08:58:43 14.11.2021

Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.2-16QAM



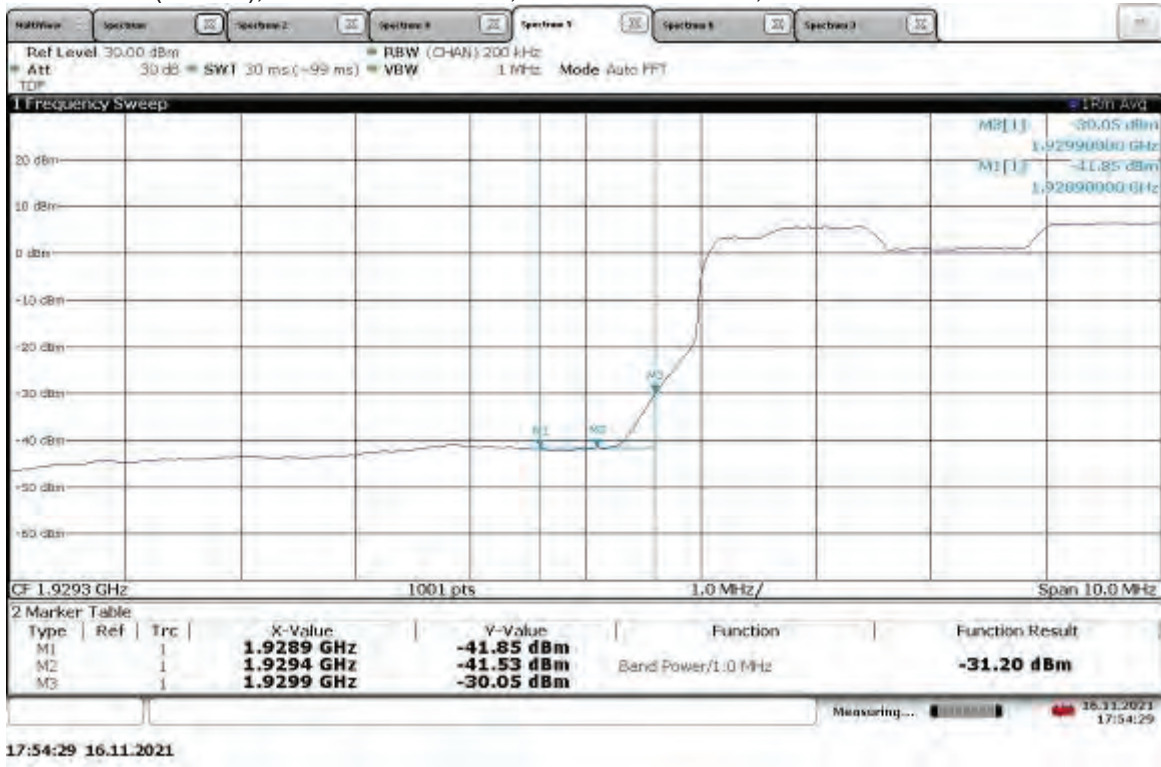
10:40:54 14.11.2021

Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.2-16QAM

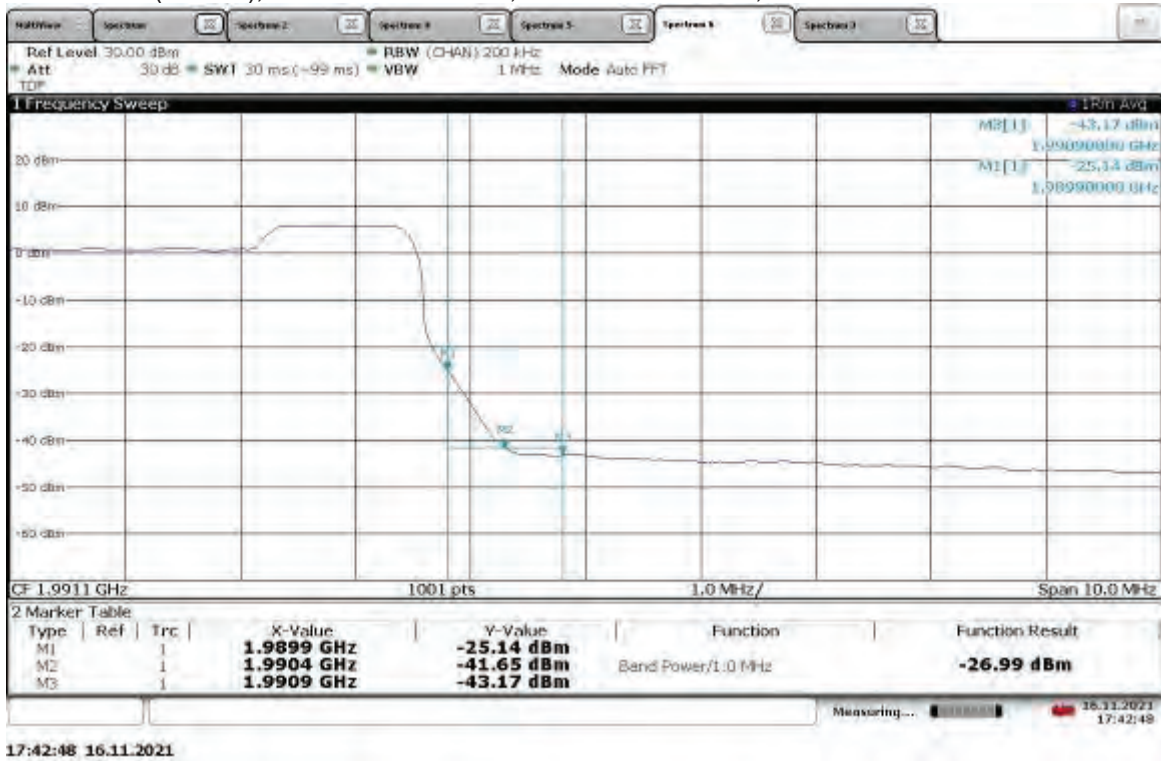


10:29:48 14.11.2021

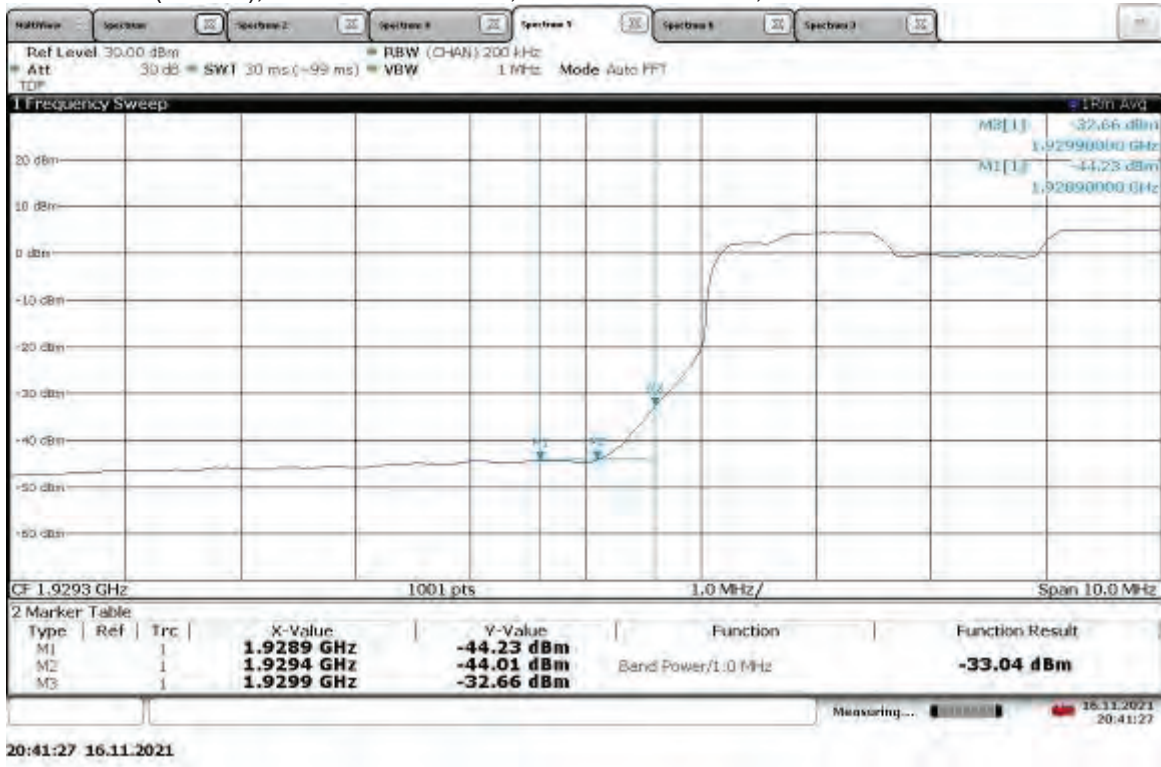
Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM3.2-16QAM



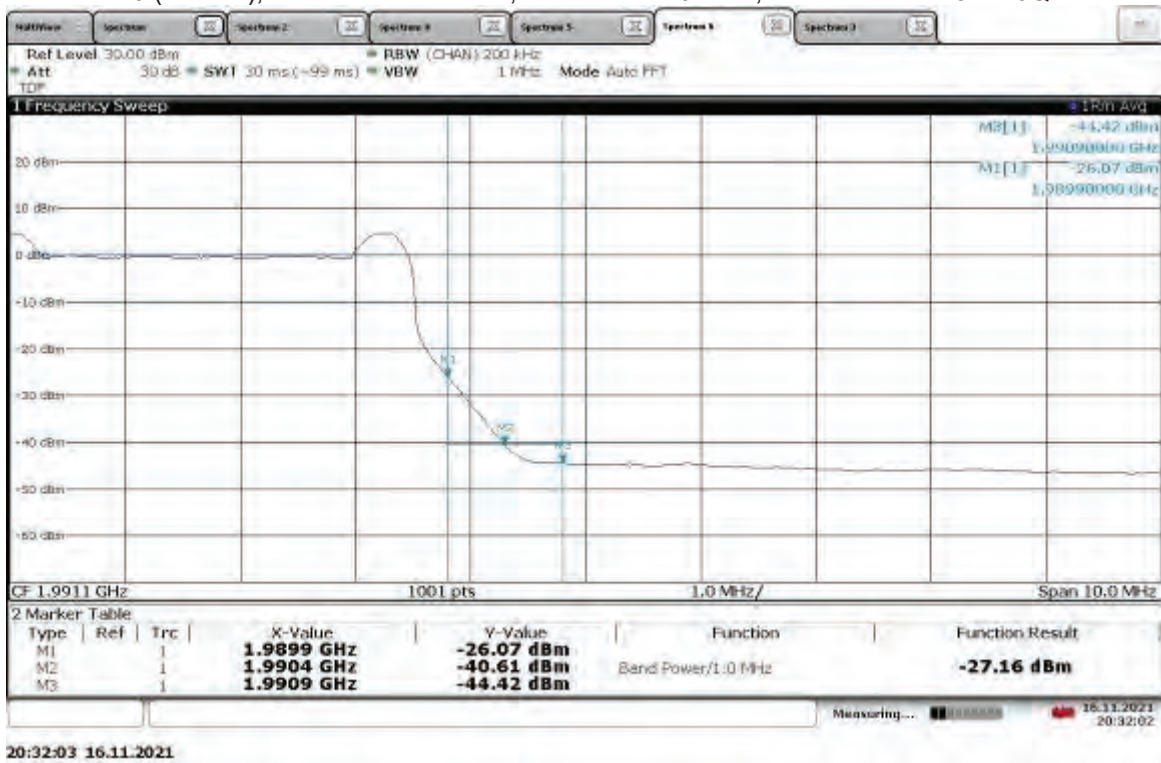
Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM3.2-16QAM



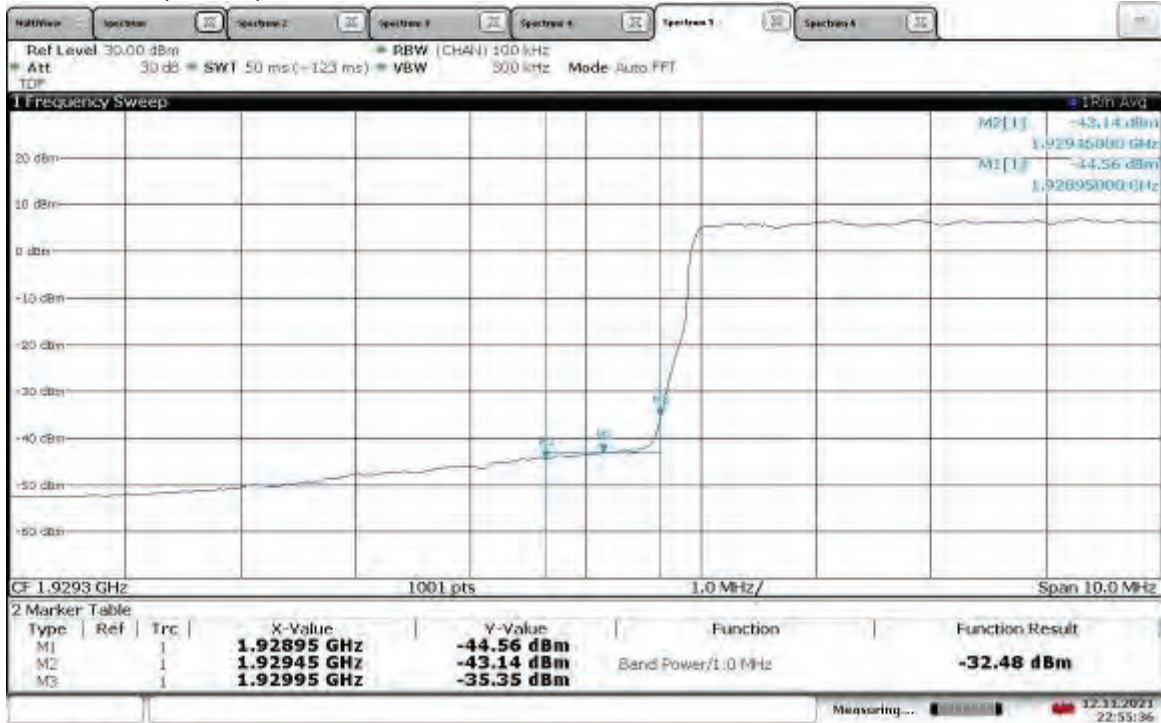
Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM3.2-16QAM



Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM3.2-16QAM

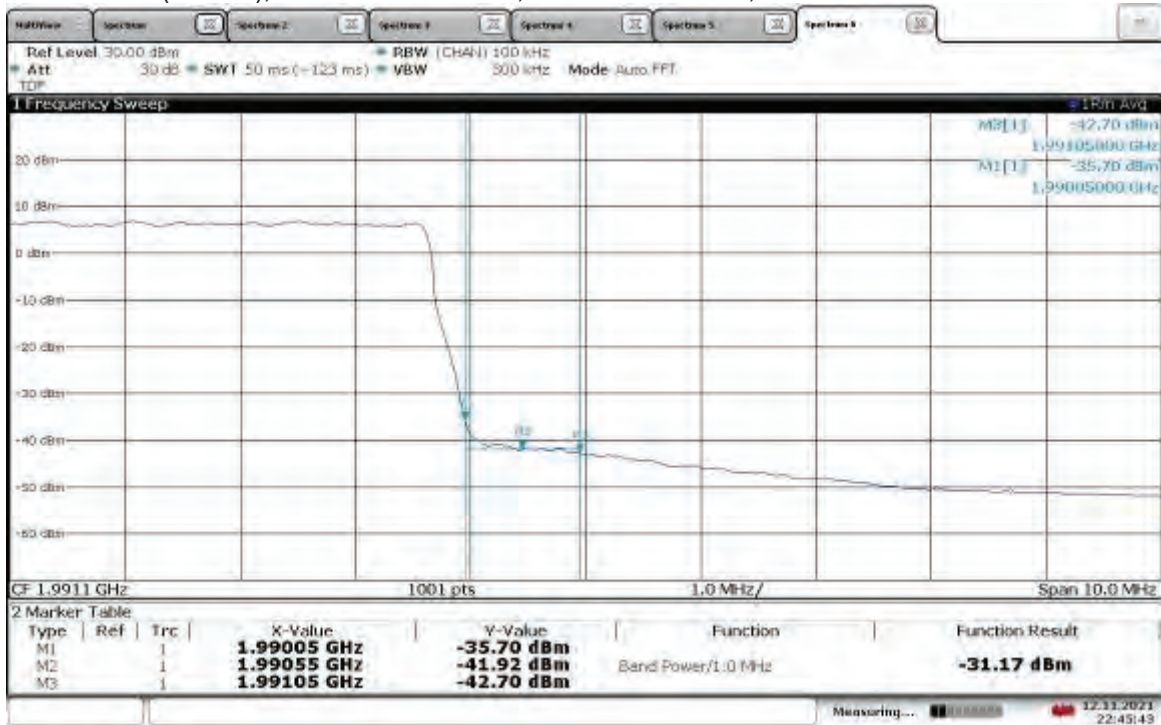


Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.1-64QAM



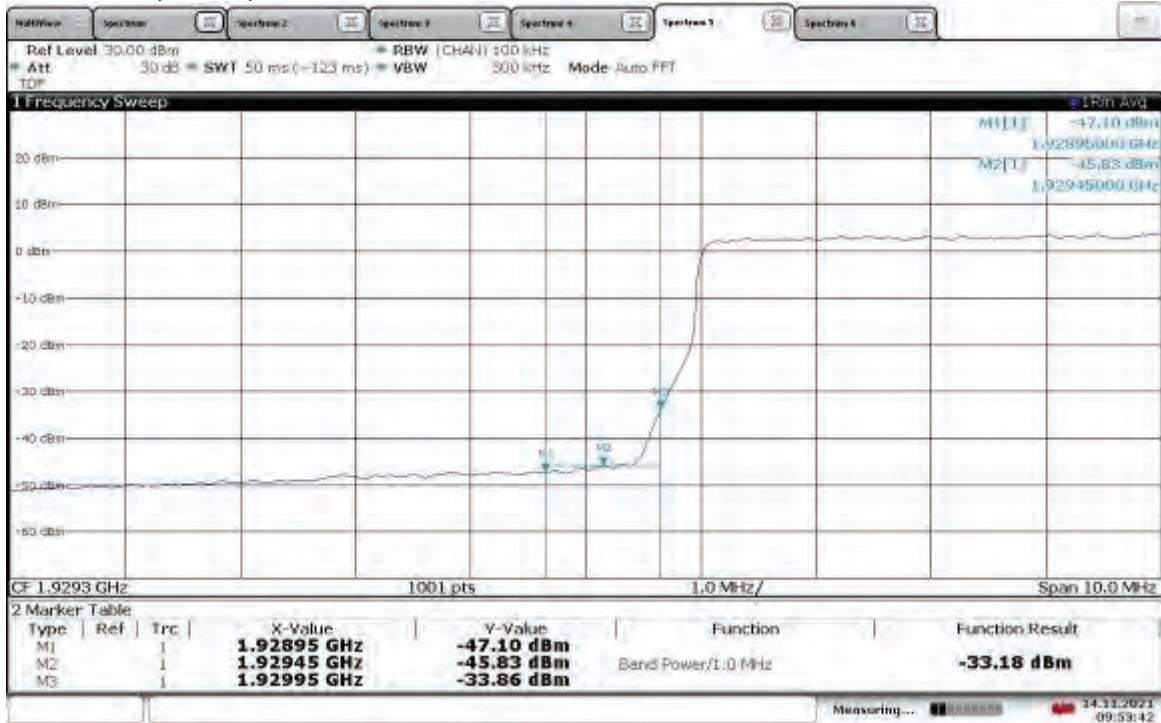
22:55:36 12.11.2021

Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.1-64QAM



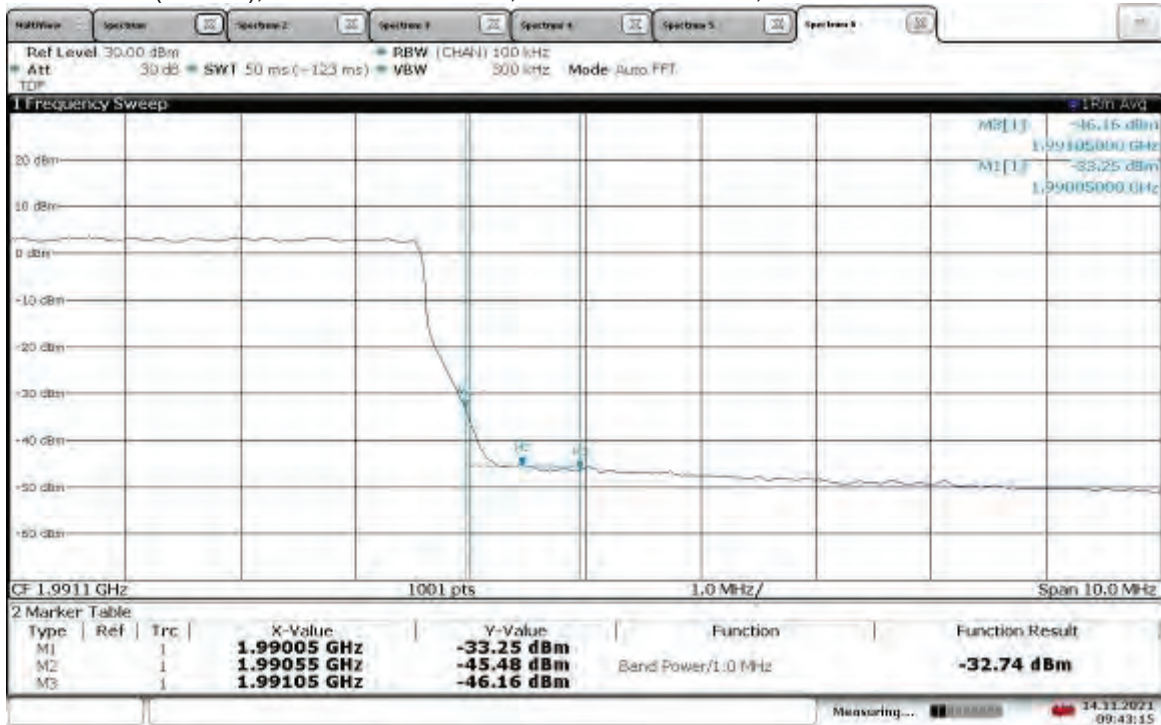
22:45:43 12.11.2021

Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.1-64QAM



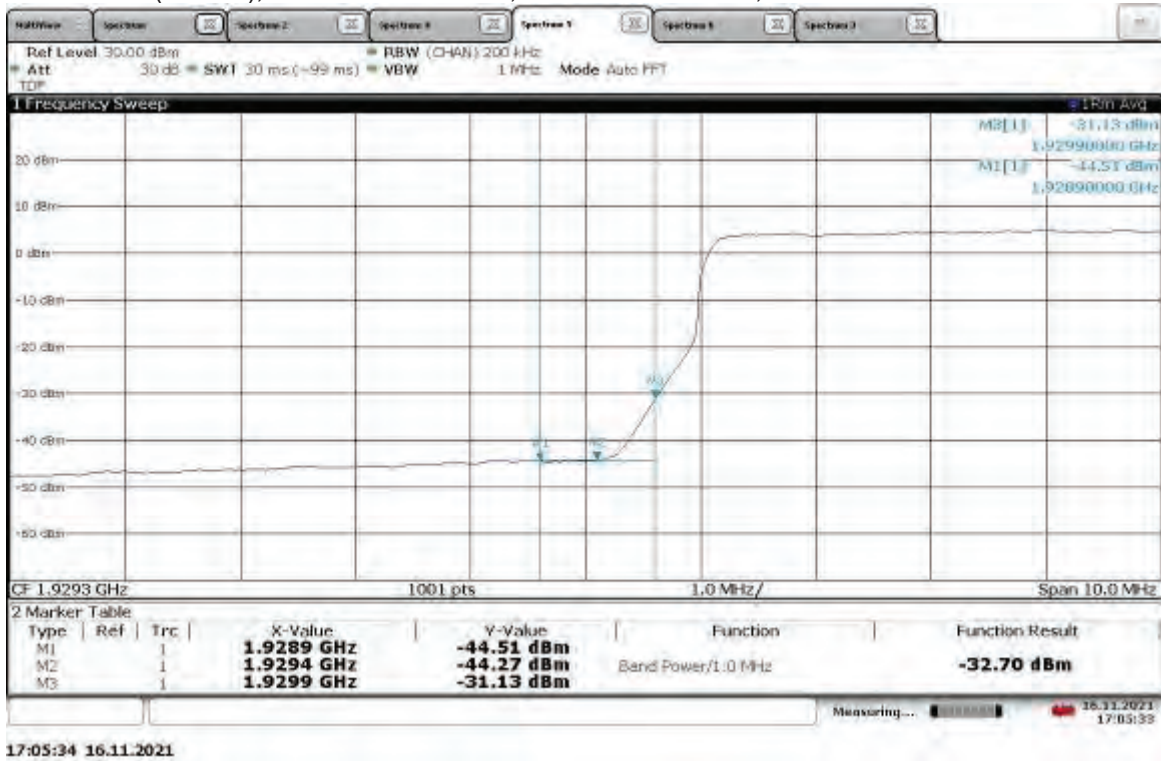
09:53:42 14.11.2021

Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.1-64QAM

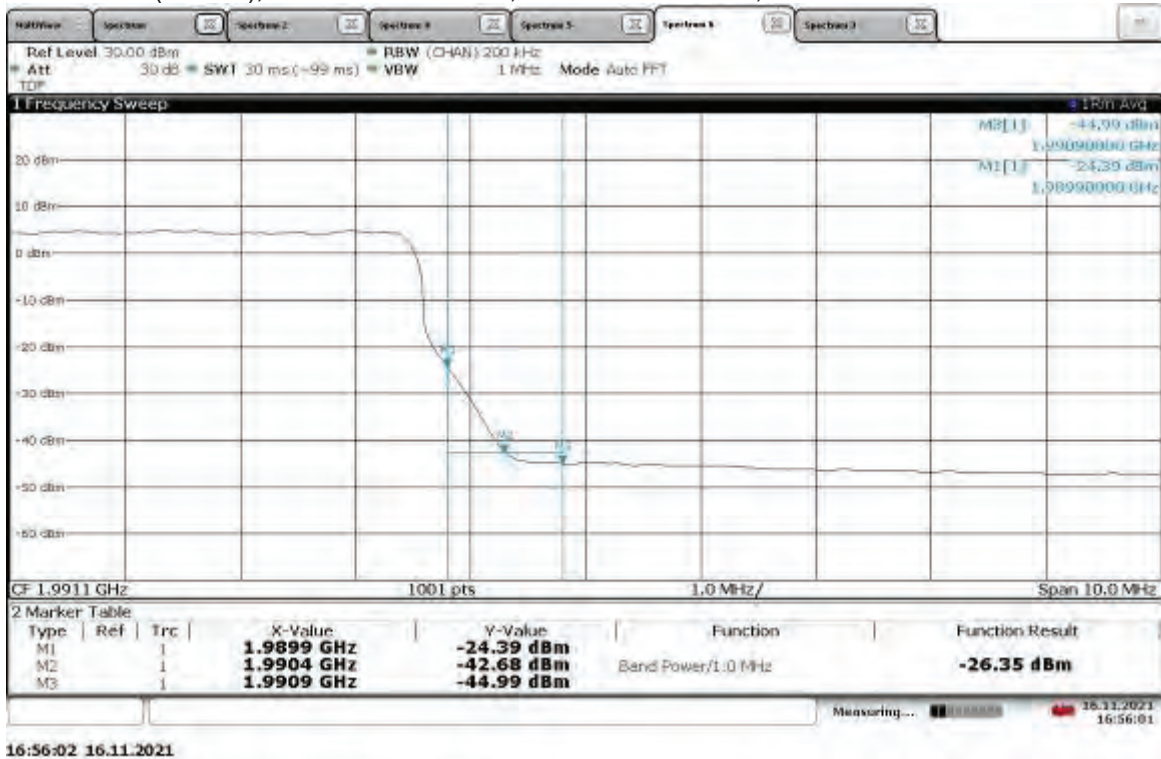


09:43:15 14.11.2021

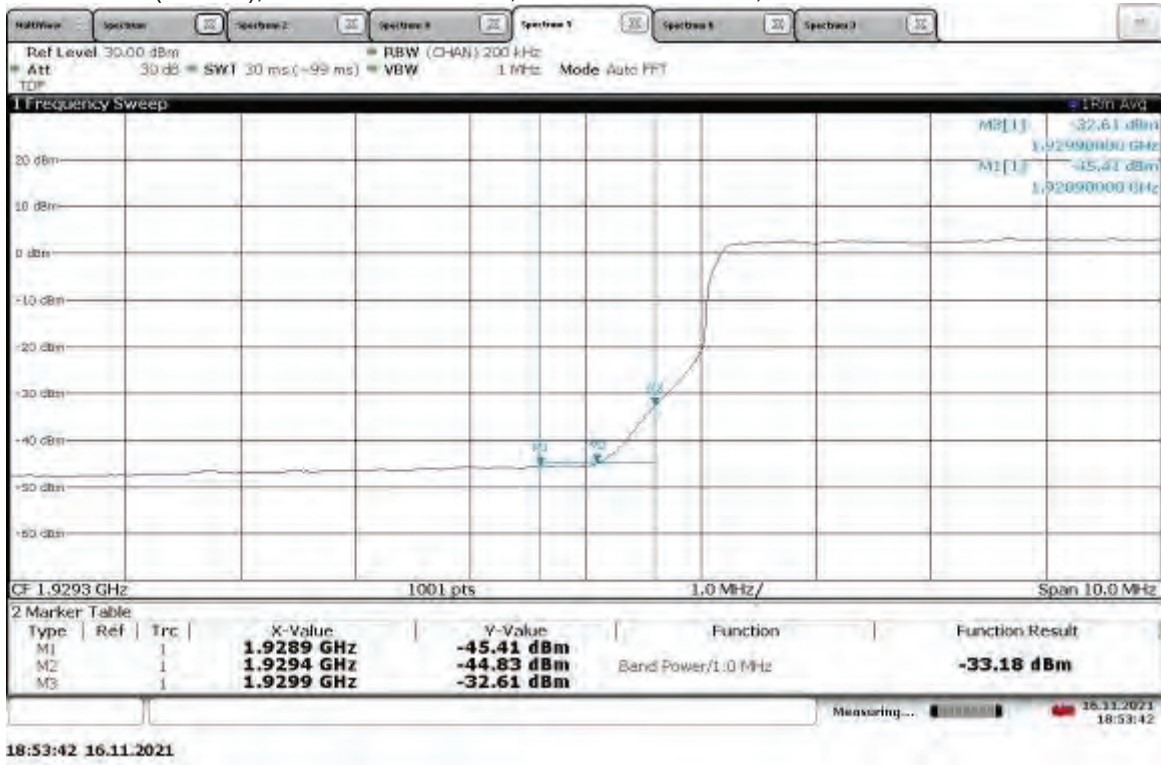
Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM3.1-64QAM



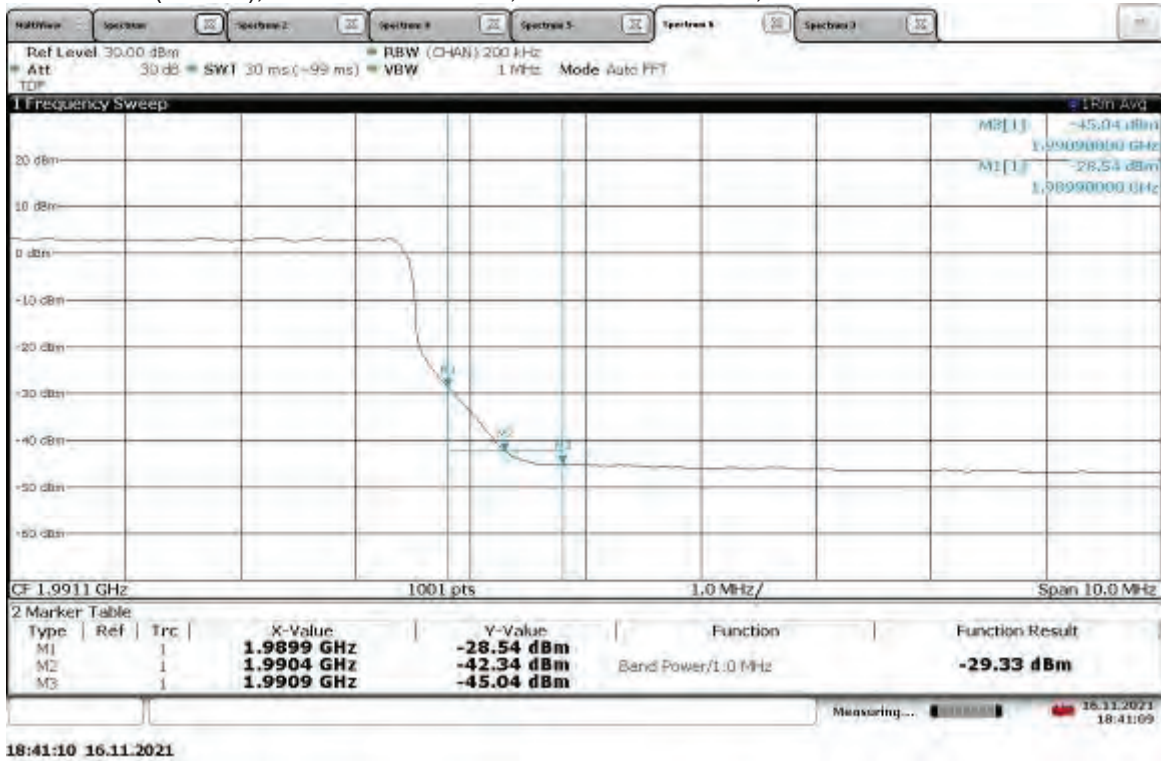
Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM3.1-64QAM



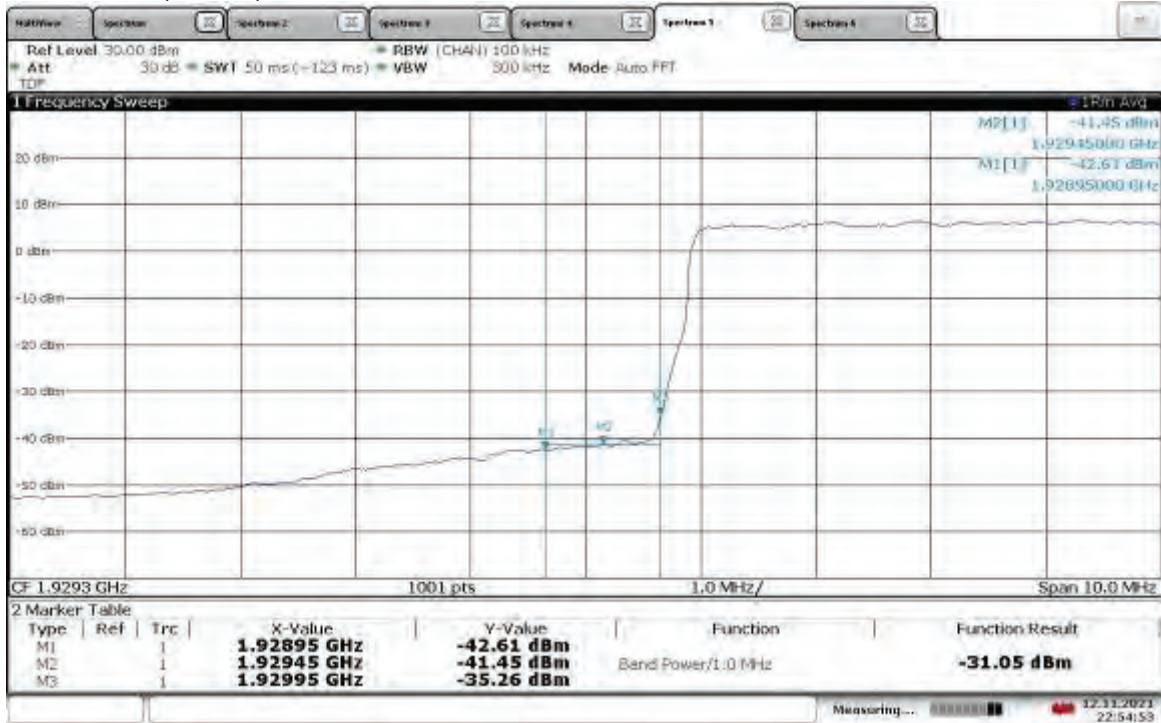
Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.1-64QAM



Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.1-64QAM

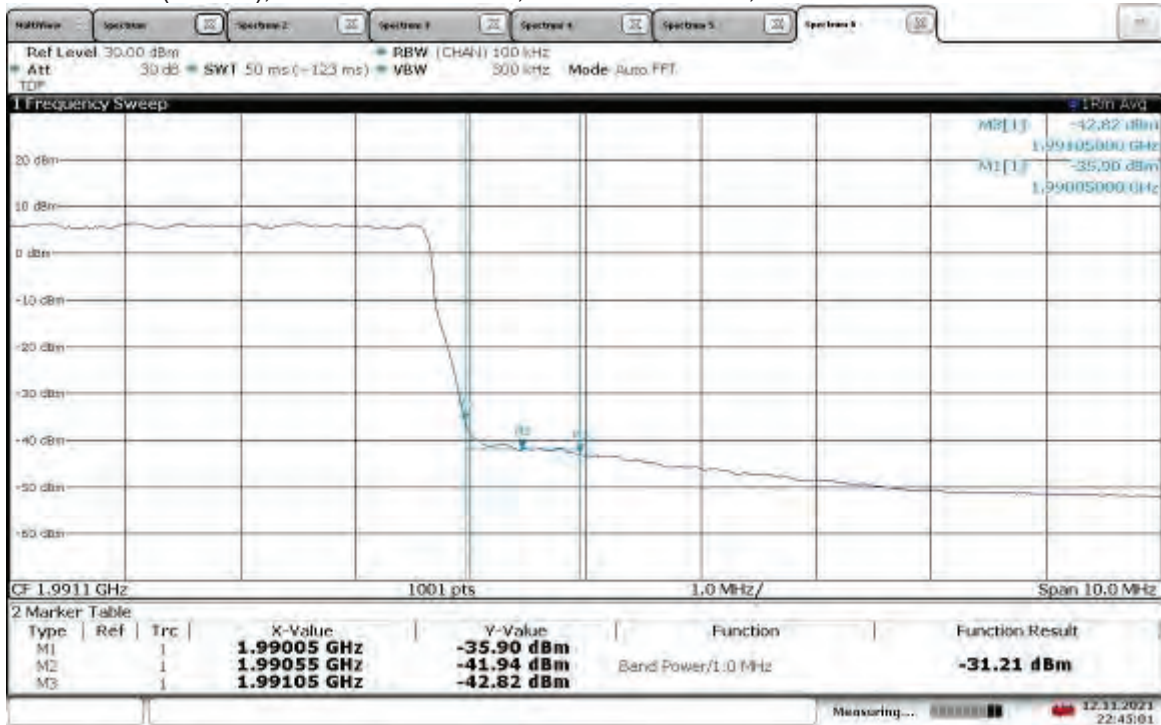


Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.1-64QAM



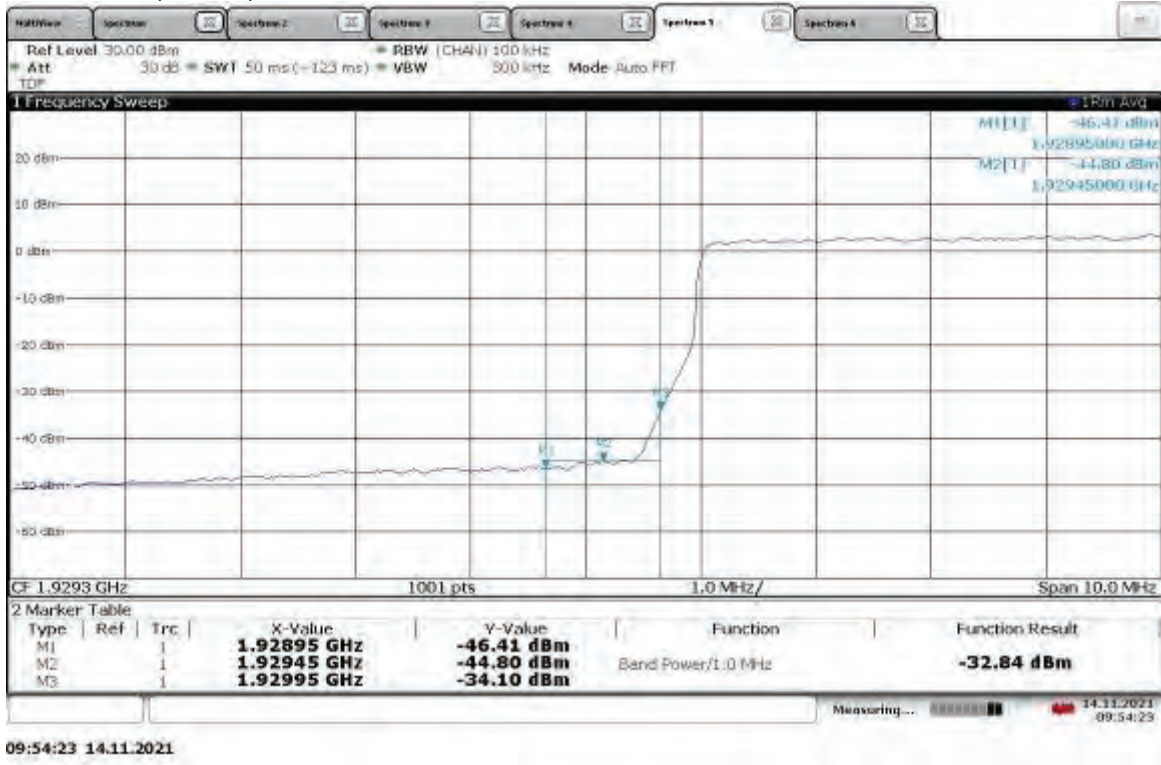
22:54:54 12.11.2021

Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.1-64QAM

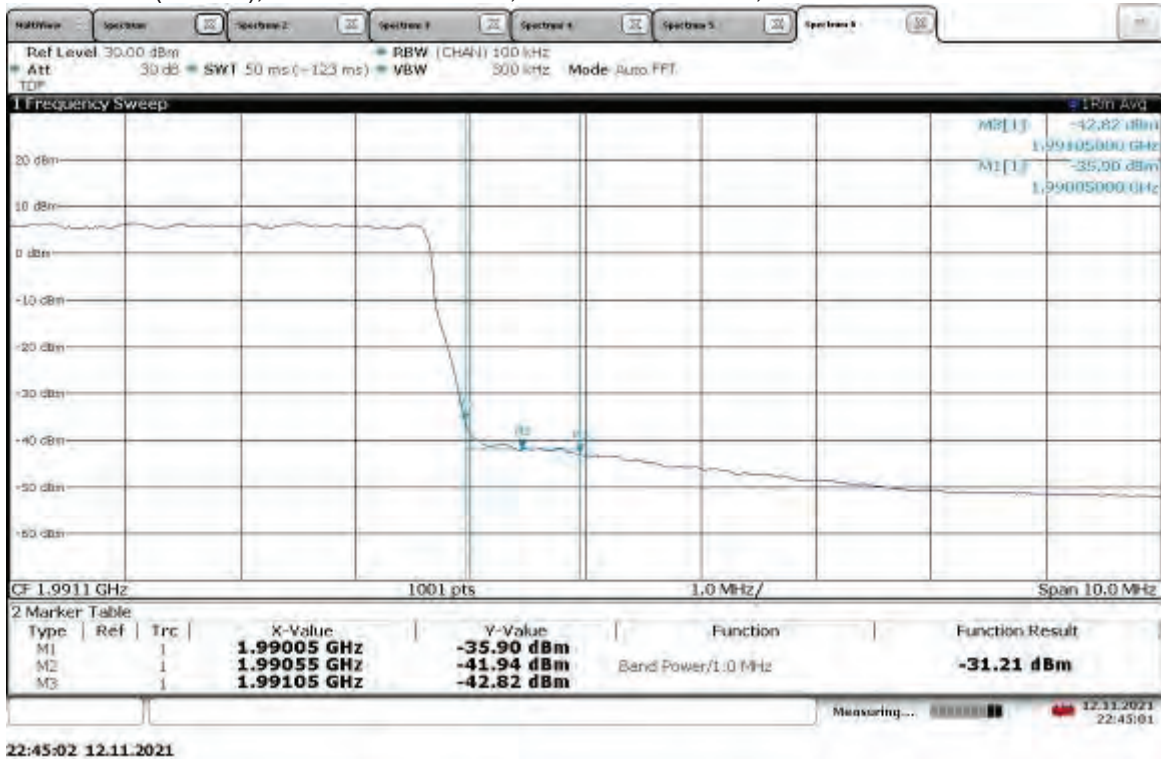


22:45:02 12.11.2021

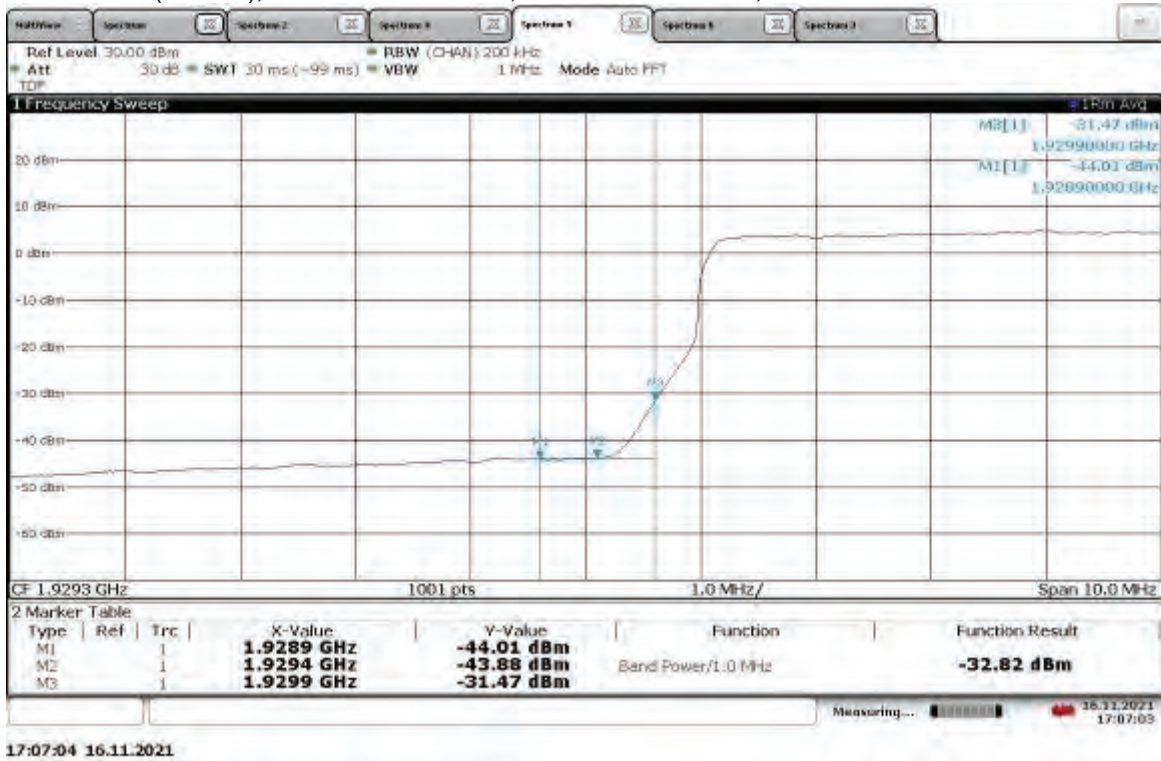
Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.1-64QAM



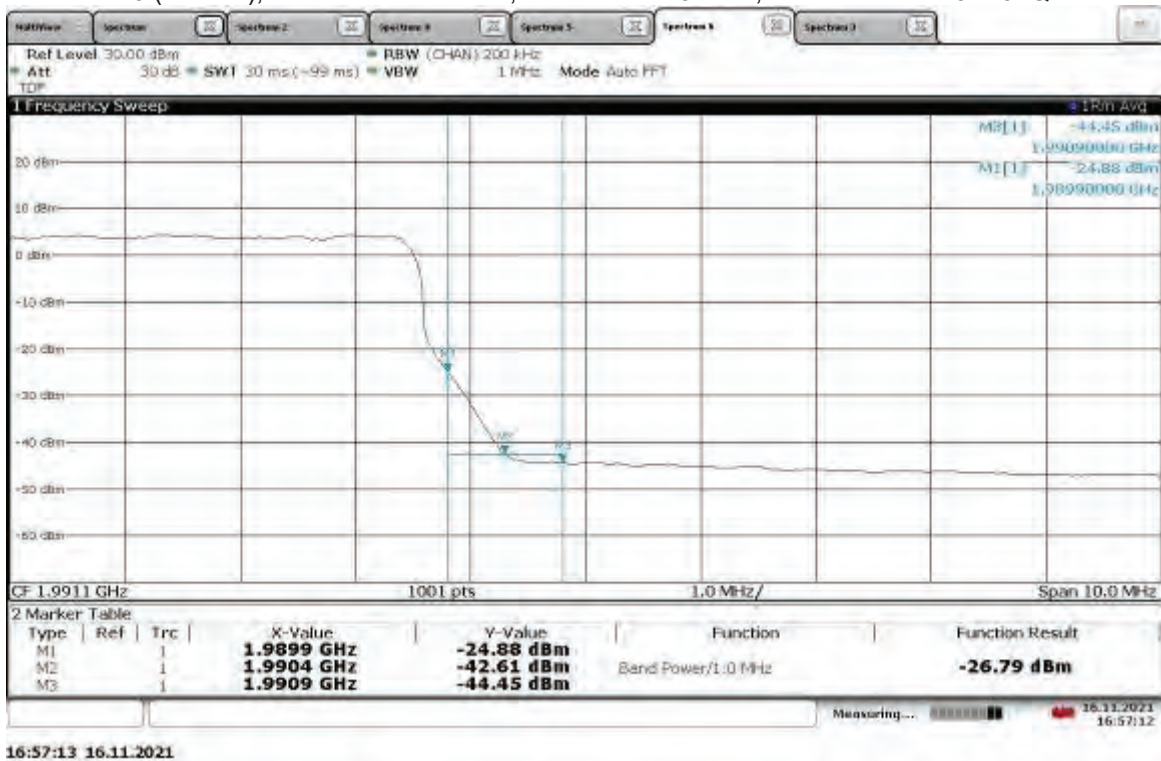
Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.1-64QAM



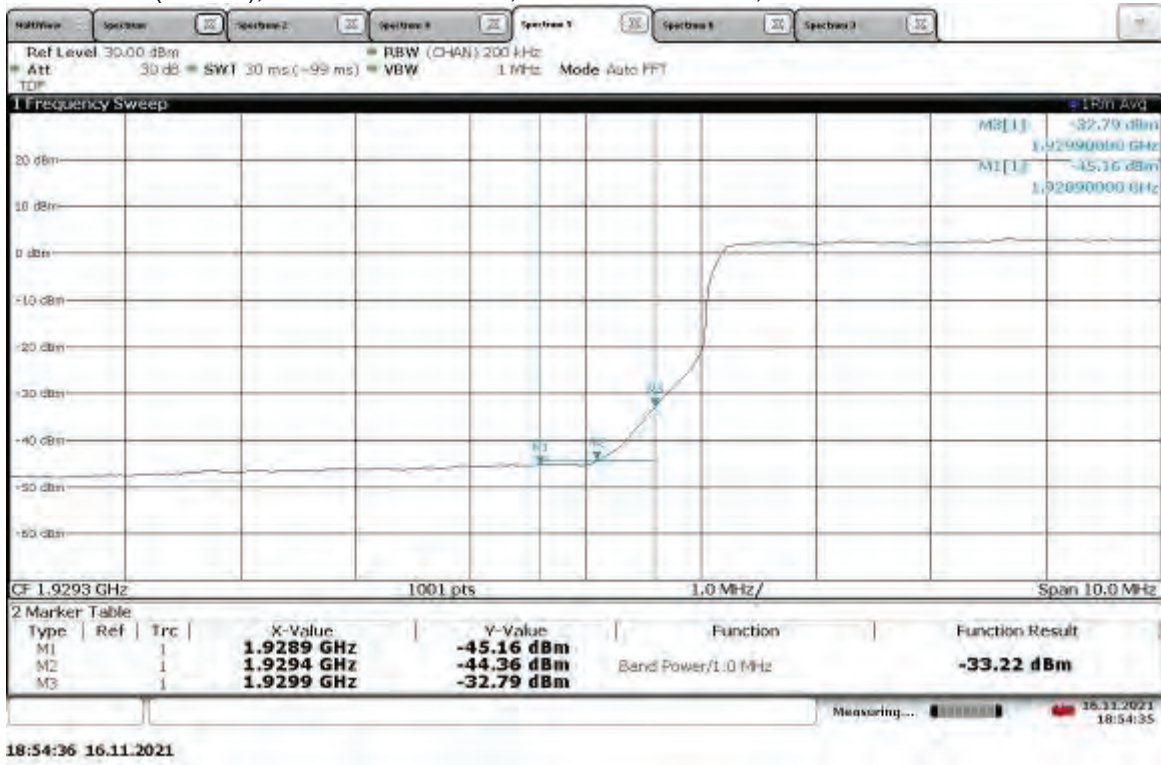
Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM3.1-64QAM



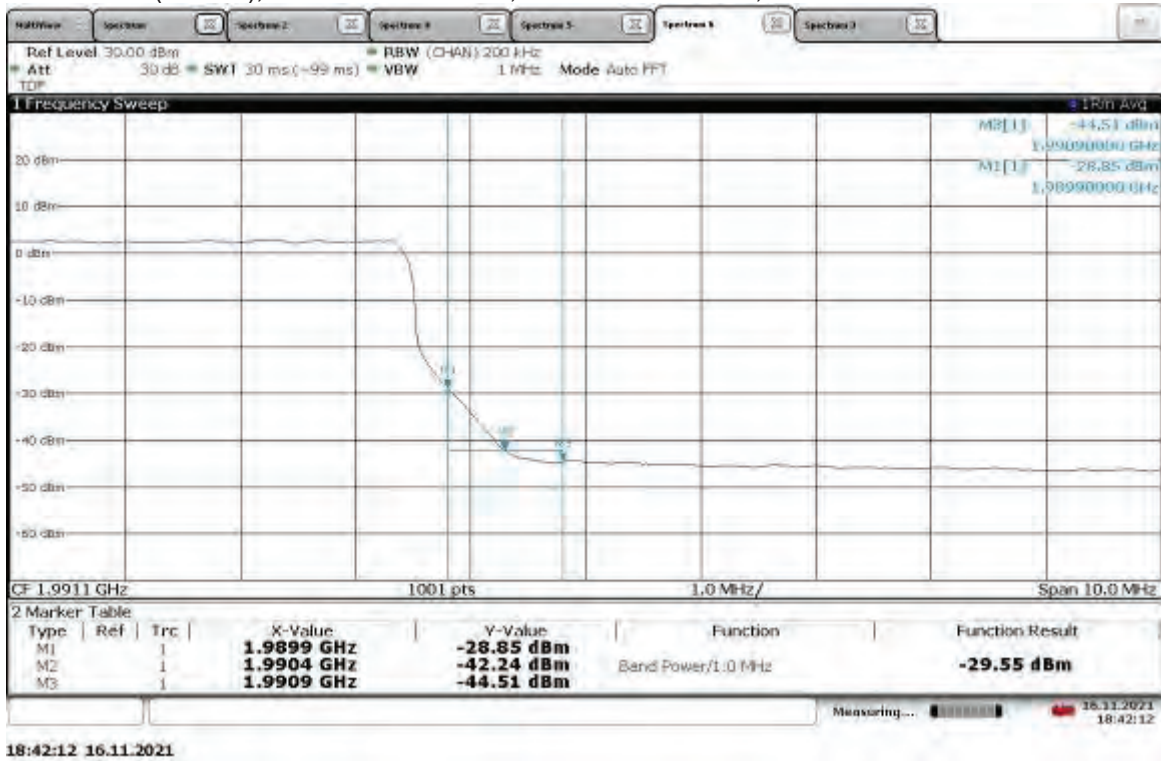
Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM3.1-64QAM



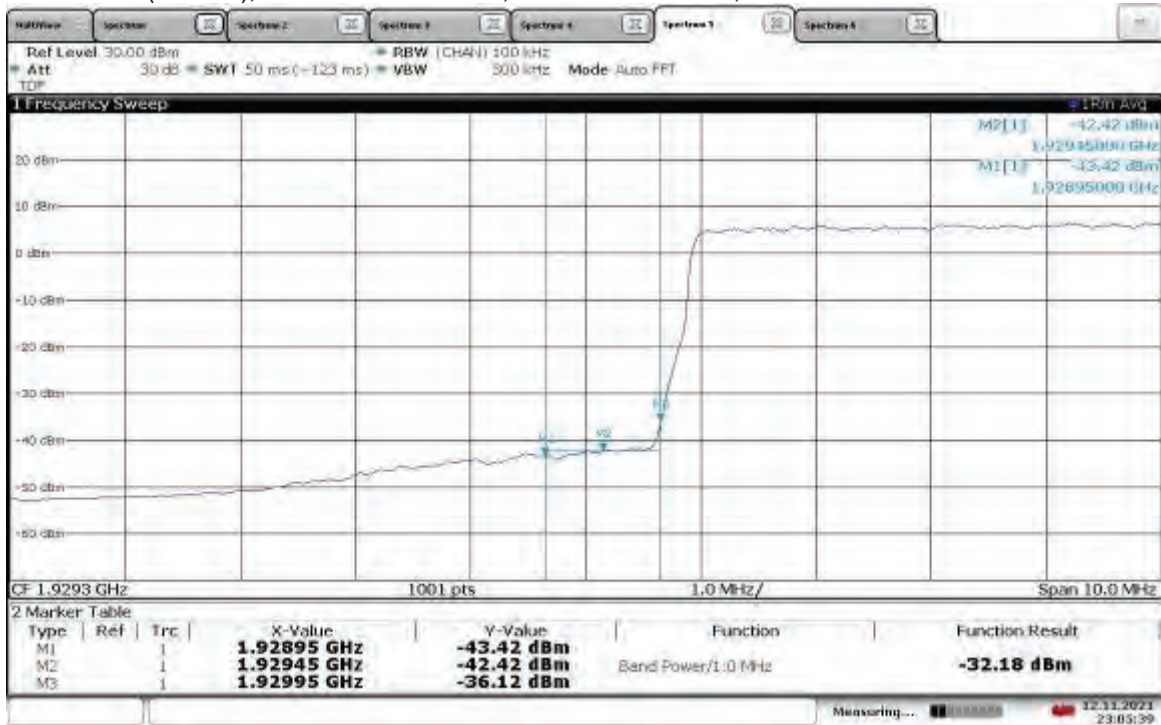
Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM3.1-64QAM



Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM3.1-64QAM

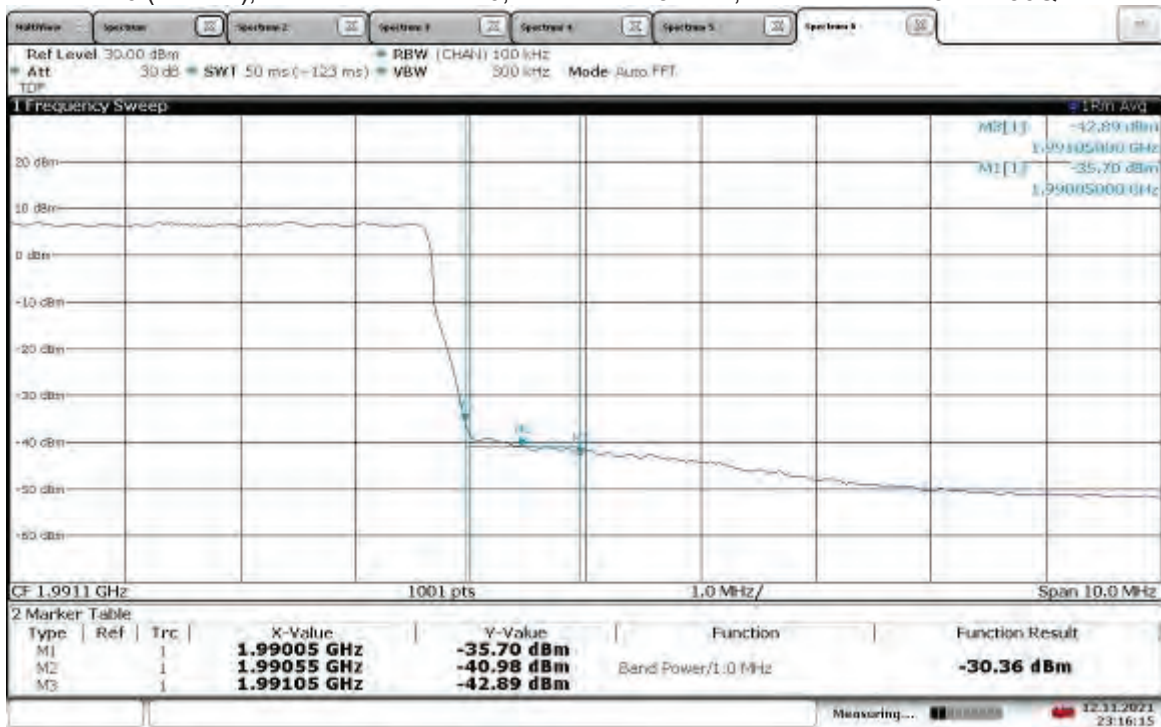


Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.1a-256QAM



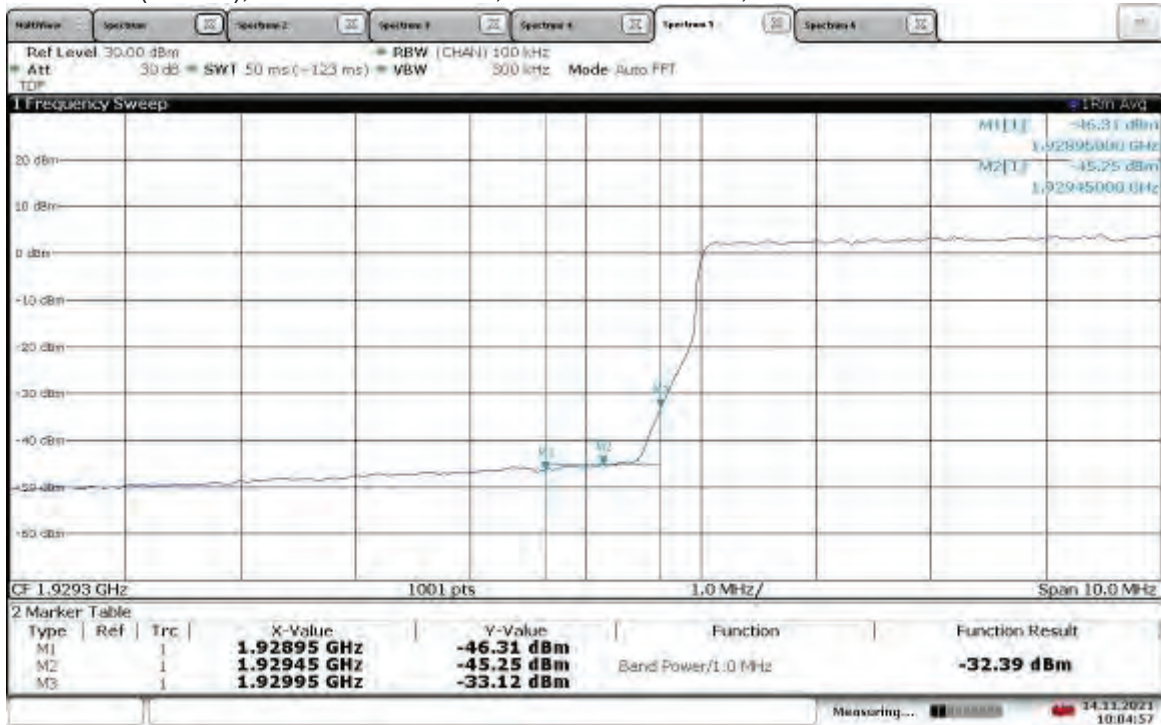
23:05:39 12.11.2021

Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.1a-256QAM



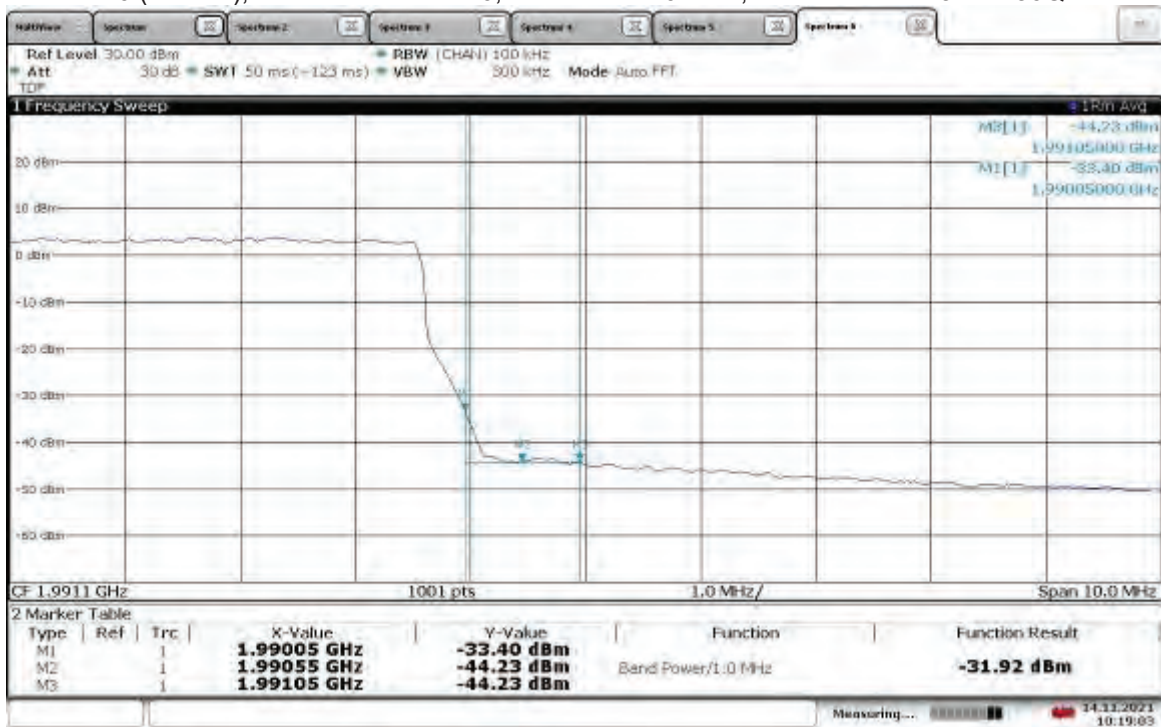
23:16:16 12.11.2021

Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.1a-256QAM



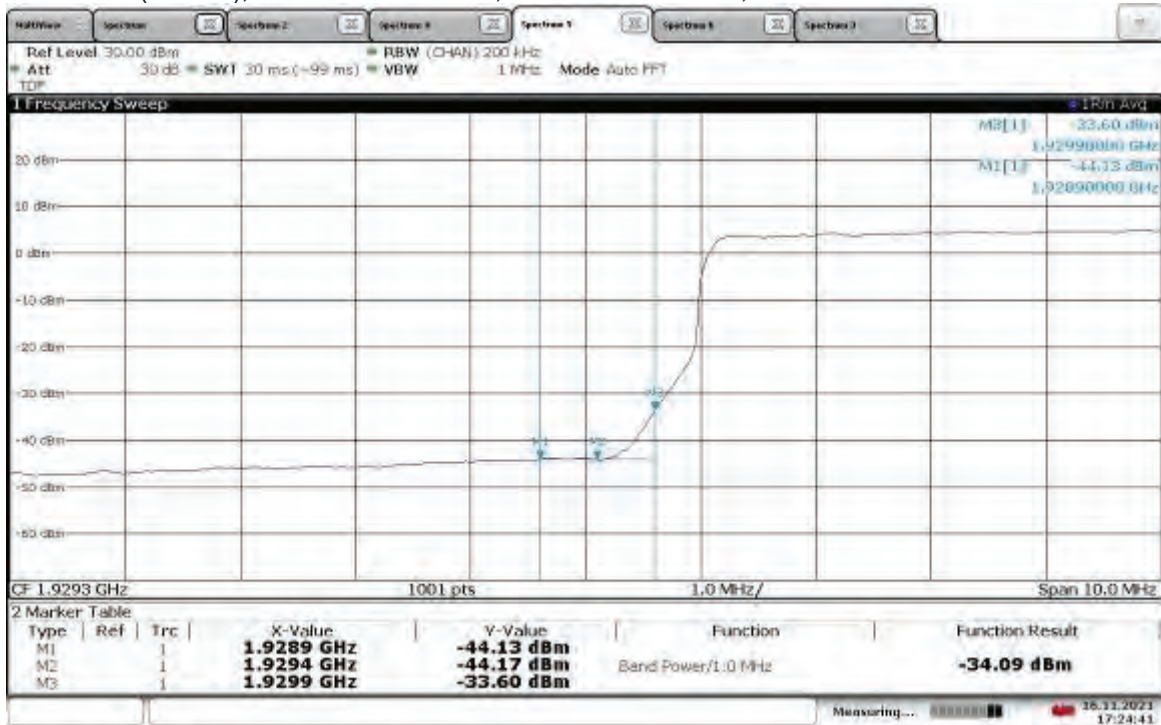
10:04:57 14.11.2021

Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.1a-256QAM



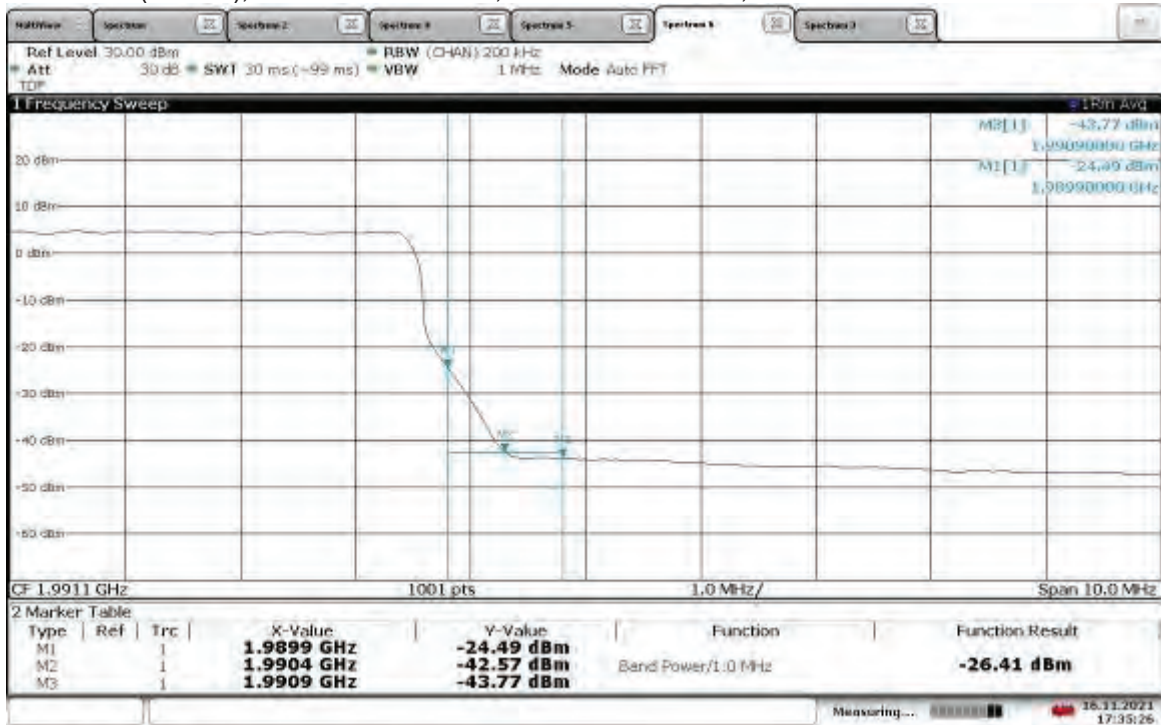
10:19:03 14.11.2021

Band Edge Compliant, Lower Band Edge, 1937.5MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM3.1a-256QAM



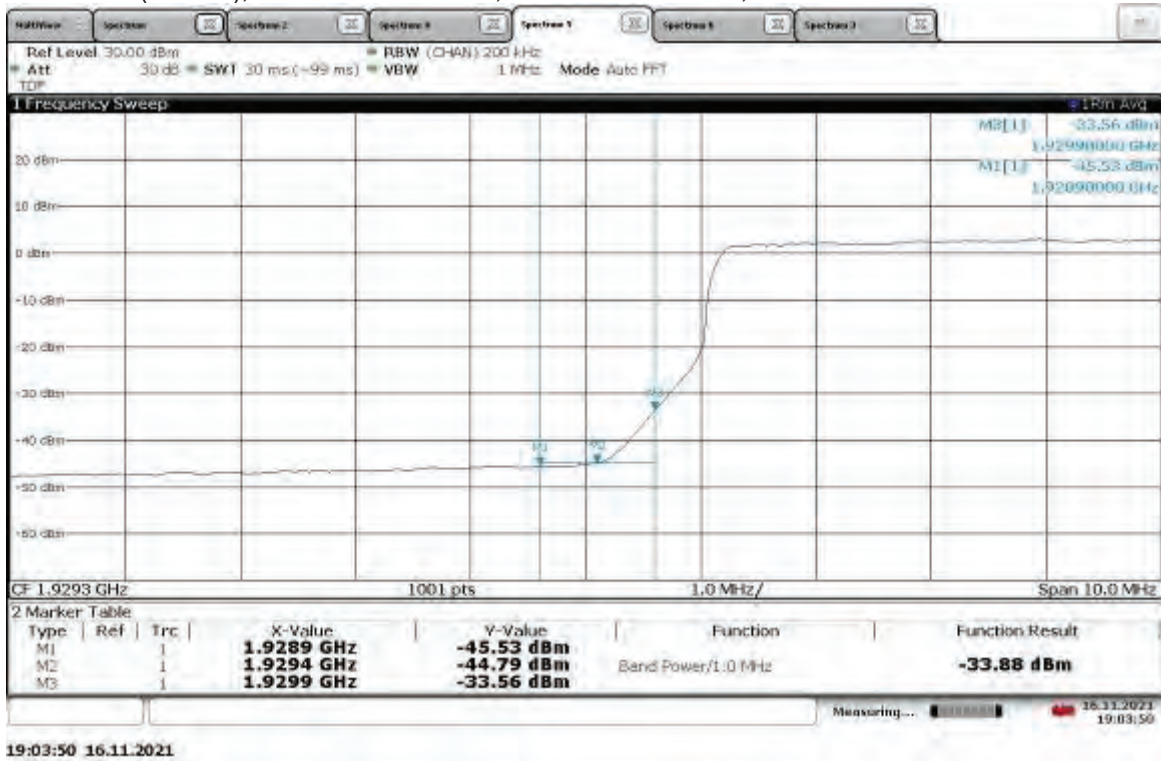
17:24:41 16.11.2021

Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM3.1a-256QAM

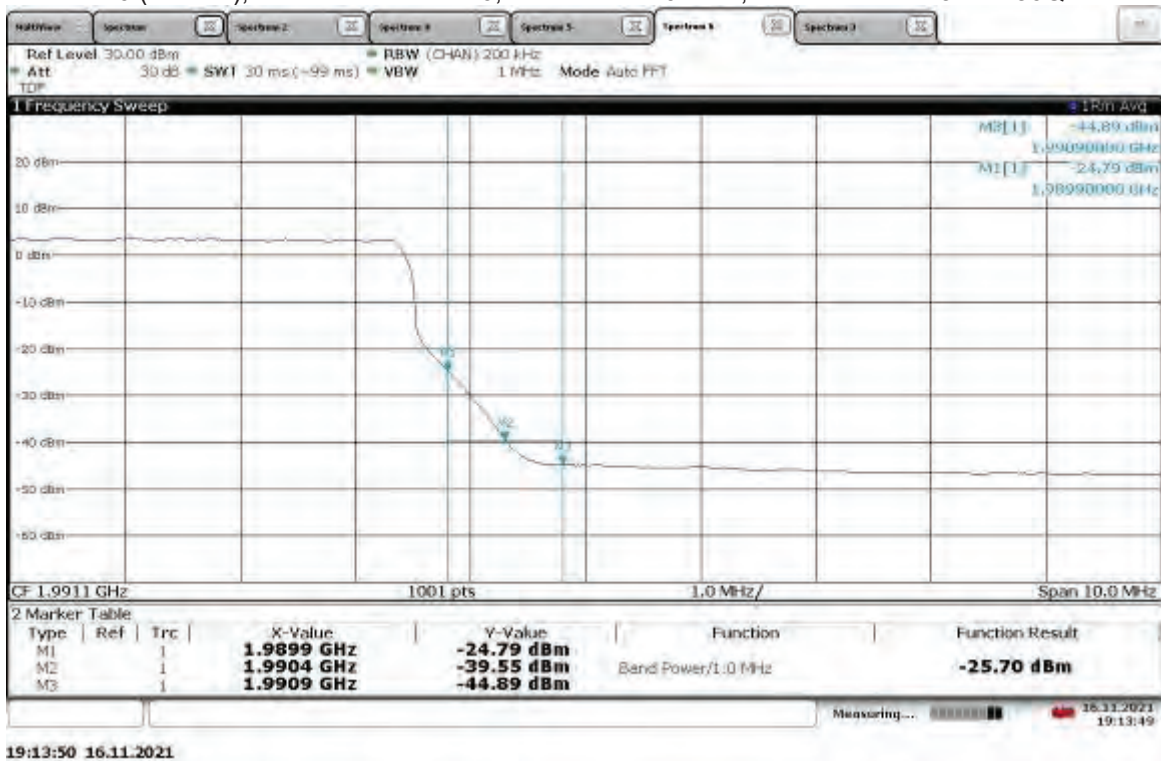


17:35:26 16.11.2021

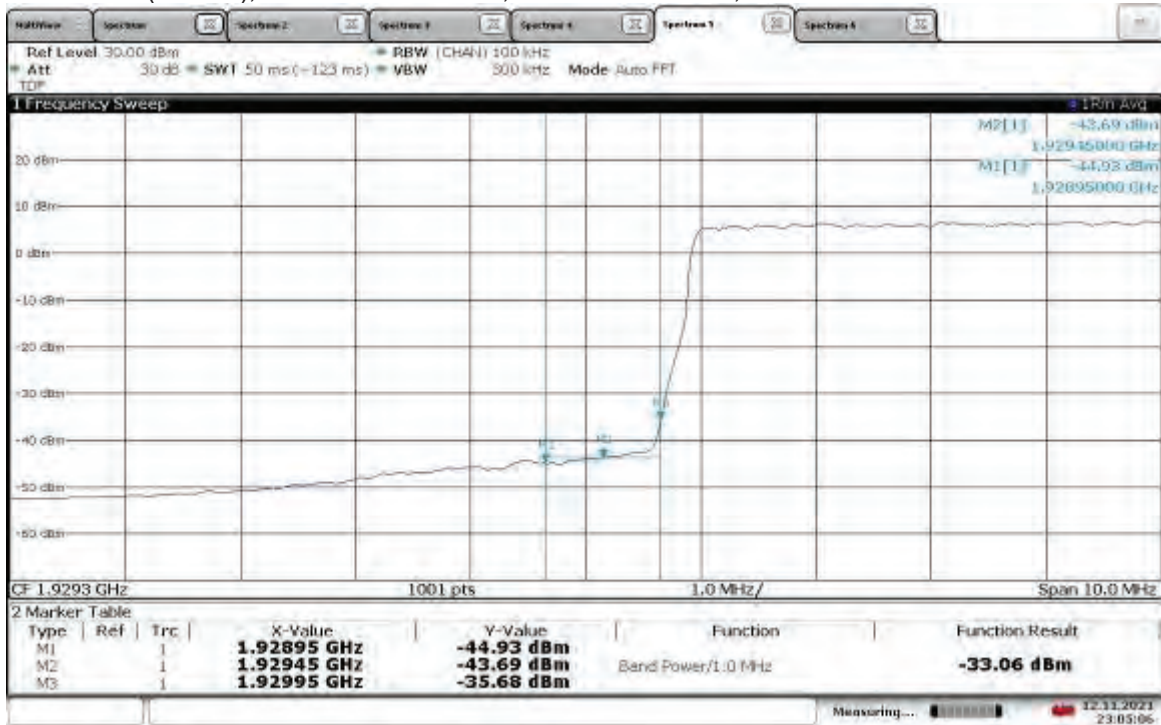
Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.1a-256QAM



Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.1a-256QAM

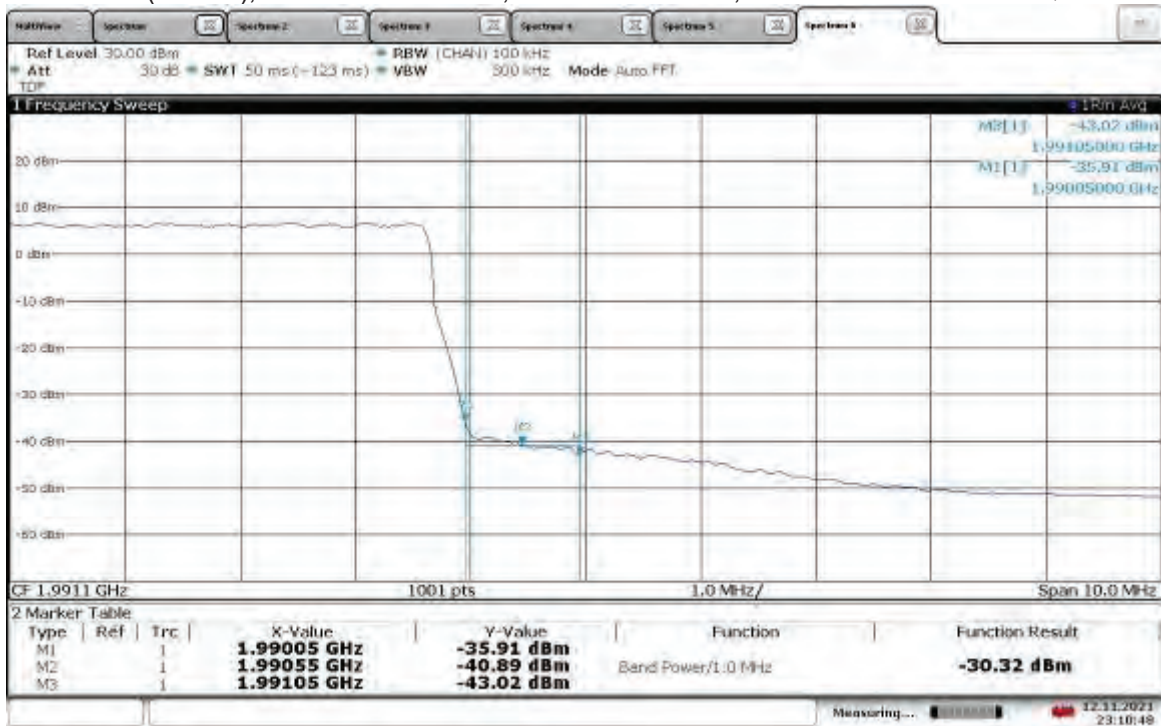


Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.1a-256QAM



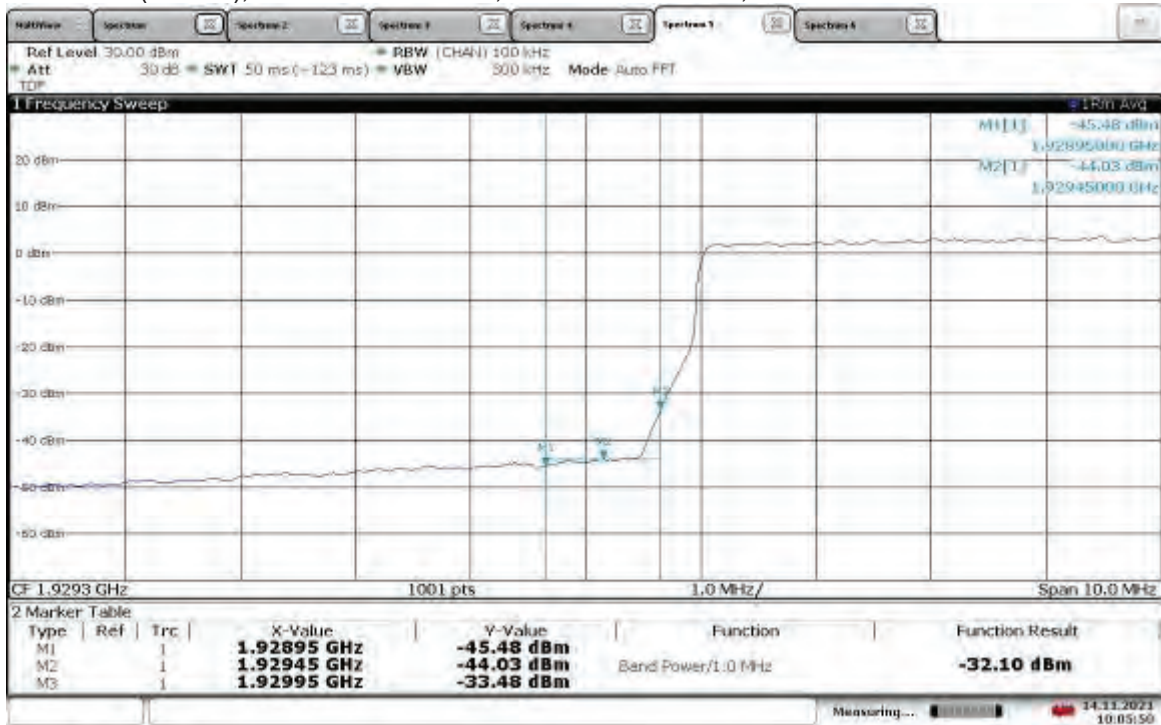
23:05:07 12.11.2021

Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.1a-256QAM



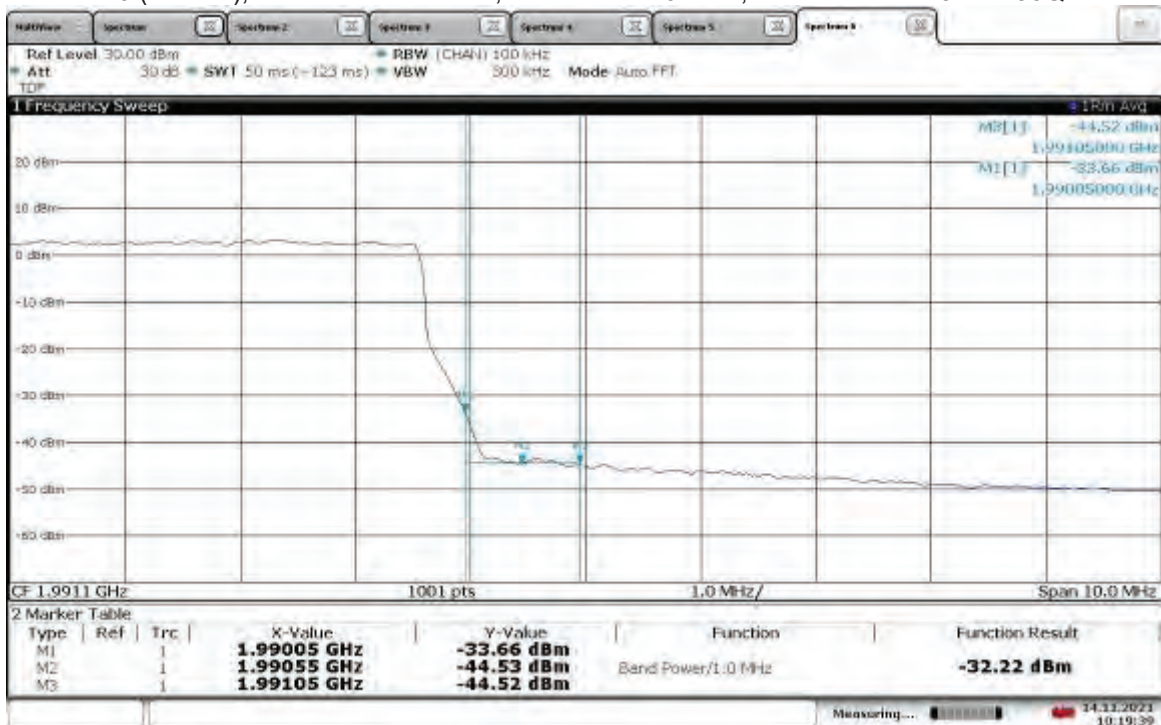
23:10:48 12.11.2021

Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.1a-256QAM



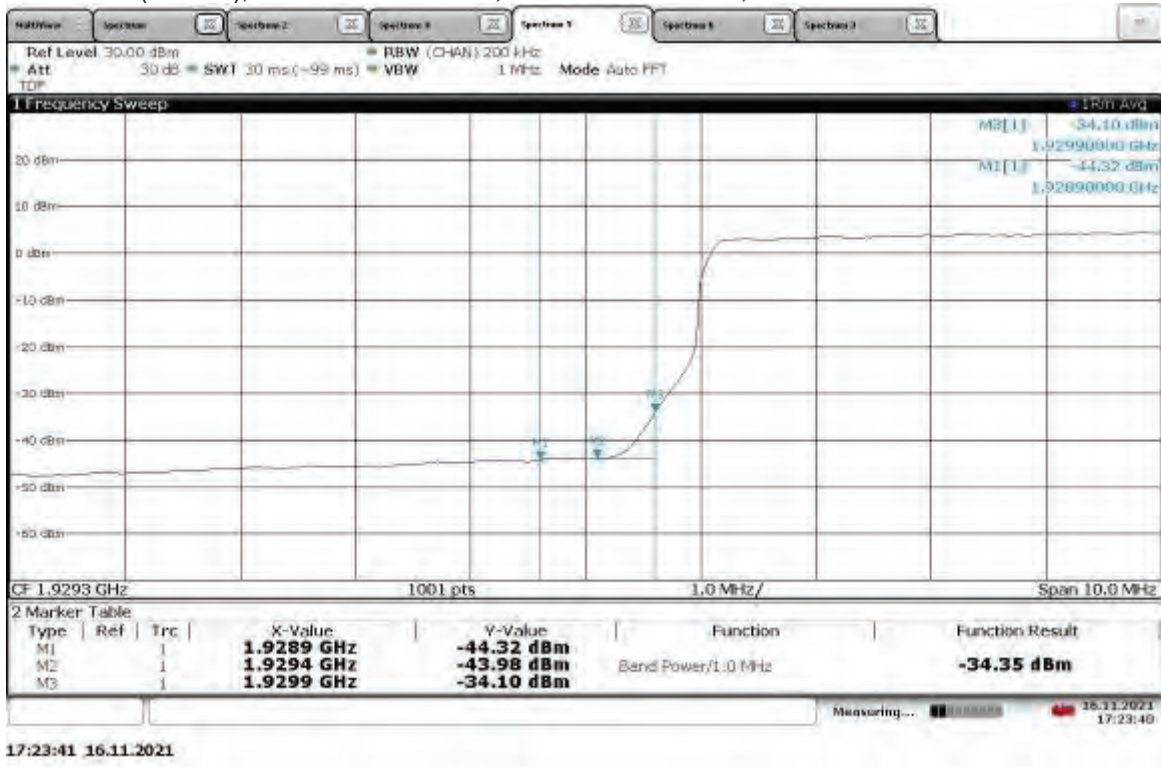
10:05:51 14.11.2021

Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.1a-256QAM

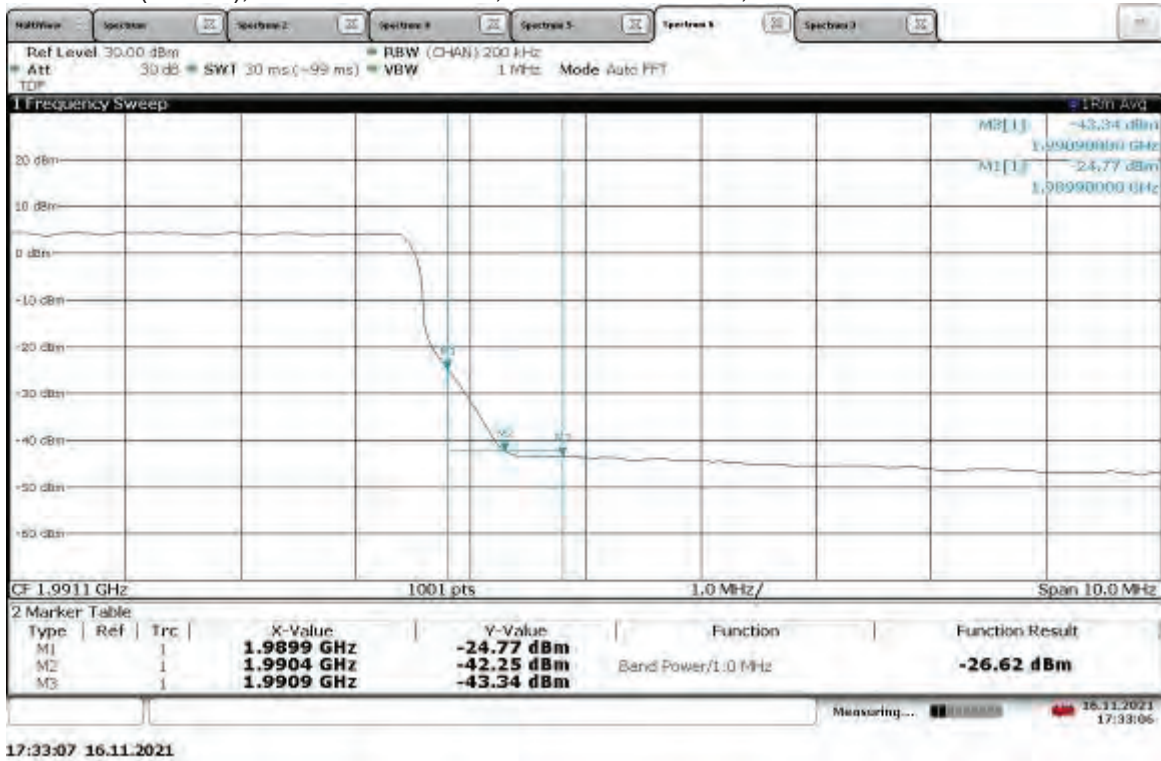


10:19:39 14.11.2021

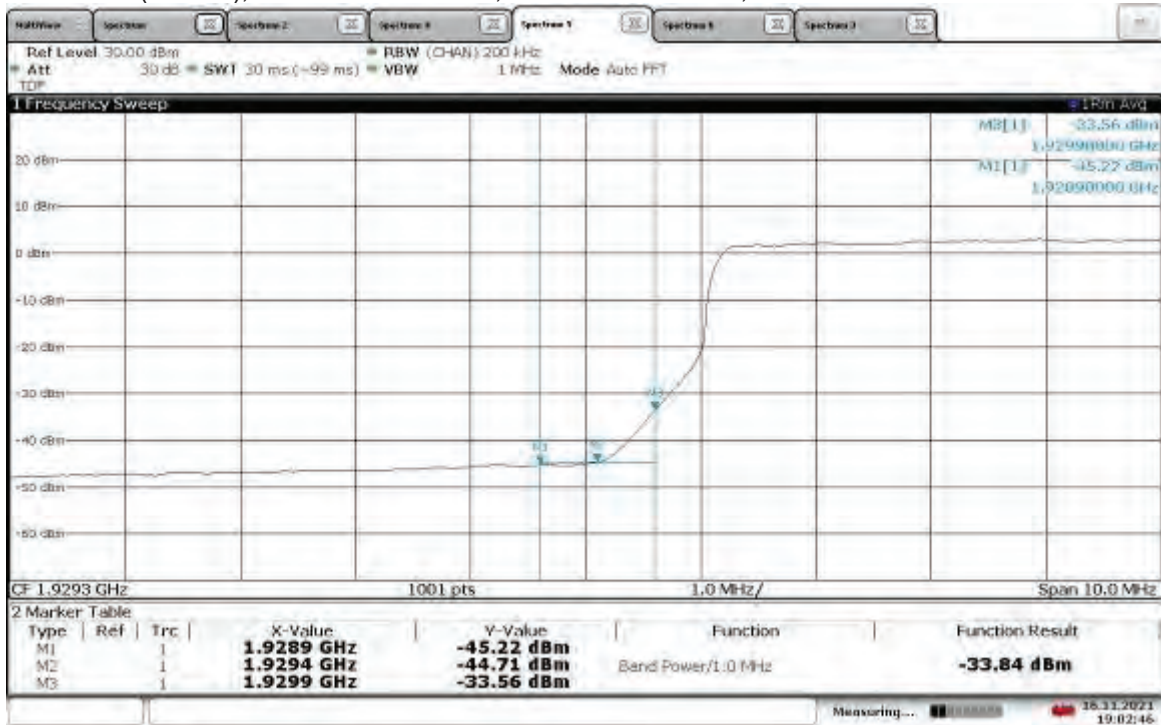
Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM3.1a-256QAM



Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM3.1a-256QAM

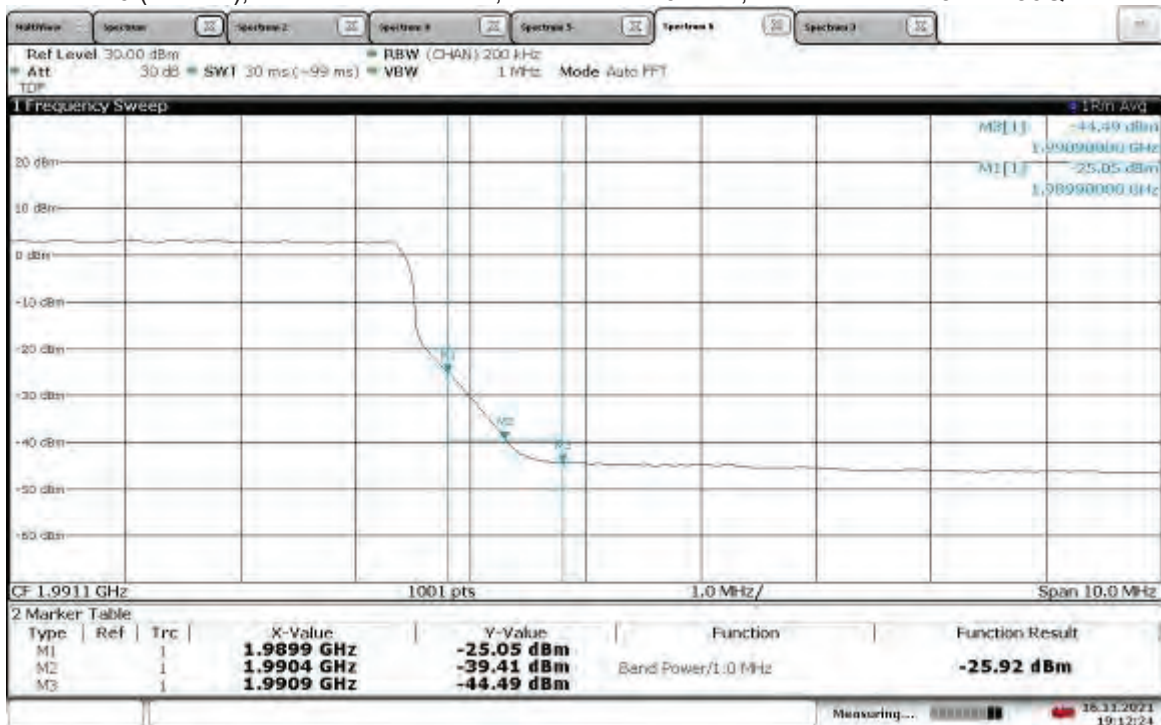


Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM3.1a-256QAM



19:02:47 16.11.2021

Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM3.1a-256QAM



19:12:25 16.11.2021

Intertek

Report Number: 104844468BOX-001

Issued: 12/03/2021
Revised: 02/07/2022

Test Personnel: Vathana Ven *VJV*
Supervising/Reviewing

Test Date: 11/12/2021, 11/14/2021, 11/16/2021

Engineer:
(Where Applicable) Kouma Sinn *KPS*

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

Limit Applied: See report section 9.3

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

Ambient Temperature: 23, 22, 23 °C

Relative Humidity: 42, 28, 42, 47 %

Atmospheric Pressure: 1004, 1002, 1009 mbars

Deviations, Additions, or Exclusions: None

10 Frequency Stability

10.1 Method

Tests are performed in accordance with ANSI C63.26 and CFR47 FCC Parts 2.1055 and 24.

TEST SITE: Safety Lab

10.2 Test Equipment Used:

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
CBLHF2012-5M-2'	5m 9kHz-40GHz Coaxial Cable - SET2	Huber & Suhner	SF102	252676002	02/19/2021	02/19/2022
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
SAF1153'	Freezing Rain\Icing\Temp\Humidity) - 73deg C to +190deg C, 95% humidity, Ice Freezing Rain	Cincinnati Sub-Zero	CTH-(FR)64-6-6-SC/AC	12-CT15628	11/18/2020	11/18/2021

Software Utilized:

Name	Manufacturer	Version
None	--	--

10.3 Results:

The sample tested was found to Comply.

§24.235 Frequency stability – The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The occupied bandwidth measurement was used to make sure the lower and upper frequencies of the occupied bandwidth remains within the assigned band of 1930-1990 MHz.

Frequency stability over temperature

Band 2, Modulation: TM1.1 QPSK, Bandwidth: 5MHz, Antenna Port: ANT1 , Channel: Low 1932.5

Low Edge of Occupied Bandwidth

Temperature (Deg. C)	Low Edge (GHz)	Low Edge Deviation (GHz)	Low Edge (%)	PPM	Limit PPM
-30	1.9302599	-5.7E-06	-2.95298E-06	-0.03	2.5
-20	1.9302587	-4.5E-06	-2.3313E-06	-0.02	2.5
-10	1.9302571	-2.9E-06	-1.50239E-06	-0.02	2.5
0	1.9302573	3.1E-06	1.60601E-06	0.02	2.5
10	1.9302514	-2.8E-06	-1.45059E-06	-0.01	2.5
20	1.9302542	0	0	0.00	--
30	1.9302532	-1E-06	-5.18066E-07	-0.01	2.5
40	1.9302532	-1E-06	-5.18066E-07	-0.01	2.5
50	1.9302527	-1.5E-06	-7.771E-07	-0.01	2.5

Upper Edge of Occupied Bandwidth

Temperature (Deg. C)	Upper Edge (GHz)	Upper Edge Deviation (GHz)	Upper Edge (%)	PPM	Limit PPM
-30	1.9347296	-9E-07	-4.65182E-07	0.00	2.5
-20	1.934729	-3E-07	-1.55061E-07	0.00	2.5
-10	1.934729	-3E-07	-1.55061E-07	0.00	2.5
0	1.9347277	-1E-06	-5.16868E-07	-0.01	2.5
10	1.9347306	1.9E-06	9.8205E-07	0.01	2.5
20	1.9347287	0	0	0.00	--
30	1.9347283	-4E-07	-2.06747E-07	0.00	2.5
40	1.9347283	-4E-07	-2.06747E-07	0.00	2.5
50	1.9347272	-1.5E-06	-7.75303E-07	-0.01	2.5

Frequency stability over temperature

Band 2, Modulation: TM1.1 QPSK, Bandwidth: 5MHz, Antenna Port: ANT1 , Channel: High 1987.5 MHz

Low Edge of Occupied Bandwidth

Temperature (Deg. C)	Low Edge (GHz)	Low Edge Deviation (GHz)	Low Edge (%)	PPM	Limit PPM
-30	1.9852483	-1.2E-06	-6.04459E-07	-0.01	2.5
-20	1.9852485	-1.4E-06	-7.05202E-07	-0.01	2.5
-10	1.9852479	-8E-07	-4.02973E-07	0.00	2.5
0	1.9852478	7E-07	3.52601E-07	0.00	2.5
10	1.9852404	-6.7E-06	-3.37489E-06	-0.03	2.5
20	1.9852471	0	0	0.00	--
30	1.9852473	2E-07	1.00743E-07	0.00	2.5
40	1.9852459	-1.2E-06	-6.04459E-07	-0.01	2.5
50	1.9852459	-1.2E-06	-6.04459E-07	-0.01	2.5

Upper Edge of Occupied Bandwidth

Temperature (Deg. C)	Upper Edge (GHz)	Upper Edge Deviation (GHz)	Upper Edge (%)	PPM	Limit PPM
-30	1.9897213	1.7E-06	8.5439E-07	0.01	2.5
-20	1.9897212	1.8E-06	9.04649E-07	0.01	2.5
-10	1.9897212	1.8E-06	9.04649E-07	0.01	2.5
0	1.9897218	-1.2E-06	-6.03099E-07	-0.01	2.5
10	1.9897214	-1.6E-06	-8.04132E-07	-0.01	2.5
20	1.989723	0	0	0.00	--
30	1.9897221	-9E-07	-4.52324E-07	0.00	2.5
40	1.9897222	-8E-07	-4.02066E-07	0.00	2.5
50	1.9897223	-7E-07	-3.51808E-07	0.00	2.5

Frequency stability over temperature

Band 2, Modulation: TM1.1 QPSK, Bandwidth: 20MHz, Antenna Port: ANT1 , Channel: Low 1940 MHz

Low Edge of Occupied Bandwidth

Temperature (Deg. C)	Low Edge (GHz)	Low Edge Deviation (GHz)	Low Edge (%)	PPM	Limit PPM
-30	1.9305641	-7.9E-06	-4.09208E-06	-0.04	2.5
-20	1.9305749	-1.87E-05	-9.68633E-06	-0.10	2.5
-10	1.9305726	-1.64E-05	-8.49496E-06	-0.08	2.5
0	1.9305679	1.17E-05	6.06043E-06	0.06	2.5
10	1.9305613	5.1E-06	2.64173E-06	0.03	2.5
20	1.9305562	0	0	0.00	--
30	1.9305527	-3.5E-06	-1.81295E-06	-0.02	2.5
40	1.9305551	-1.1E-06	-5.69784E-07	-0.01	2.5
50	1.9305475	-8.7E-06	-4.50647E-06	-0.05	2.5

Upper Edge of Occupied Bandwidth

Temperature (Deg. C)	Upper Edge (GHz)	Upper Edge Deviation (GHz)	Upper Edge (%)	PPM	Limit PPM
-30	1.9494426	-1.9E-06	-9.74639E-07	-0.01	2.5
-20	1.9494443	-3.6E-06	-1.84668E-06	-0.02	2.5
-10	1.9494432	-2.5E-06	-1.28242E-06	-0.01	2.5
0	1.9494426	1.9E-06	9.74639E-07	0.01	2.5
10	1.9494411	4E-07	2.05187E-07	0.00	2.5
20	1.9494407	0	0	0.00	--
30	1.9494392	-1.5E-06	-7.69451E-07	-0.01	2.5
40	1.9494387	-2E-06	-1.02594E-06	-0.01	2.5
50	1.9494394	-1.3E-06	-6.66858E-07	-0.01	2.5

Frequency stability over temperature

Band 2, Modulation: TM1.1 QPSK, Bandwidth: 20MHz, Antenna Port: ANT1 , Channel: High 1980 MHz

Low Edge of Occupied Bandwidth

Temperature (Deg. C)	Low Edge (GHz)	Low Edge Deviation (GHz)	Low Edge (%)	PPM	Limit PPM
-30	1.9704981	1.4E-06	7.1048E-07	0.01	2.5
-20	1.9704495	5E-05	2.53743E-05	0.25	2.5
-10	1.9705023	-2.8E-06	-1.42096E-06	-0.01	2.5
0	1.9704996	1E-07	5.07486E-08	0.00	2.5
10	1.9705007	1.2E-06	6.08983E-07	0.01	2.5
20	1.9704995	0	0	0.00	--
30	1.9704999	4E-07	2.02994E-07	0.00	2.5
40	1.9705021	2.6E-06	1.31946E-06	0.01	2.5
50	1.9705047	5.2E-06	2.63892E-06	0.03	2.5

Upper Edge of Occupied Bandwidth

Temperature (Deg. C)	Upper Edge (GHz)	Upper Edge Deviation (GHz)	Upper Edge (%)	PPM	Limit PPM
-30	1.9894157	2.7E-06	1.35718E-06	0.01	2.5
-20	1.9894147	3.7E-06	1.85984E-06	0.02	2.5
-10	1.9894164	2E-06	1.00532E-06	0.01	2.5
0	1.9894178	-6E-07	-3.01596E-07	0.00	2.5
10	1.9894179	-5E-07	-2.5133E-07	0.00	2.5
20	1.9894184	0	0	0.00	--
30	1.9894189	5E-07	2.5133E-07	0.00	2.5
40	1.9894183	-1E-07	-5.02659E-08	0.00	2.5
50	1.9894169	-1.5E-06	-7.53989E-07	-0.01	2.5

Frequency stability over voltages

Band 2, 5G, RP5100, Modulation: QPSK, Bandwidth: 5MHz, Antenna Port: ANT1 , Low Channel

Low Edge of Occupied Bandwidth

Voltage (VDC)	Low Edge (GHz)	Low Edge Deviation (GHz)	Low Edge (%)	PPM	Limit PPM
41.1	1.9302549	5E-07	2.59033E-07	0.00	2.5
48	1.9302544	0	0	0.00	--
57	1.9302546	2E-07	1.03613E-07	0.00	2.5

Upper Edge of Occupied Bandwidth

Volt (VDC)	Upper Edge (GHz)	Upper Edge Deviation (GHz)	Upper Edge (%)	PPM	Limit PPM
41.1	1.9347286	3E-07	1.55061E-07	0.00	2.5
48	1.9347283	0	0	0.00	--
57	1.9347285	2E-07	1.03374E-07	0.00	2.5

Band 2, 5G, RP5100, Modulation: QPSK, Bandwidth: 5MHz, Antenna Port: ANT1 , High Channel

Low Edge of Occupied Bandwidth

Voltage (VDC)	Low Edge (GHz)	Low Edge Deviation (GHz)	Low Edge (%)	PPM	Limit PPM
41.1	1.9852485	2E-07	1.00743E-07	0.00	2.5
48	1.9852483	0	0	0.00	--
57	1.9852484	1E-07	5.03715E-08	0.00	2.5

Upper Edge of Occupied Bandwidth

Volt (VDC)	Upper Edge (GHz)	Upper Edge Deviation (GHz)	Upper Edge (%)	PPM	Limit PPM
41.1	1.989723	2E-07	1.00517E-07	0.00	2.5
48	1.9897228	0	0	0.00	--
57	1.9897228	0	0	0.00	2.5

Frequency stability over voltages

Band 2, 5G, RP5100, Modulation: QPSK, Bandwidth: 20MHz, Antenna Port: ANT1 , Low Channel

Low Edge of Occupied Bandwidth

Voltage (VDC)	Low Edge (GHz)	Low Edge Deviation (GHz)	Low Edge (%)	PPM	Limit PPM
41.1	1.9305551	7E-07	3.6259E-07	0.00	2.5
48	1.9305544	0	0	0.00	--
57	1.9305534	-1E-06	-5.17986E-07	-0.01	2.5

Upper Edge of Occupied Bandwidth

Volt (VDC)	Upper Edge (GHz)	Upper Edge Deviation (GHz)	Upper Edge (%)	PPM	Limit PPM
41.1	1.9494409	4E-07	2.05187E-07	0.00	2.5
48	1.9494405	0	0	0.00	--
57	1.949442	1.5E-06	7.69452E-07	0.01	2.5

Band 2, 5G, RP5100, Modulation: QPSK, Bandwidth: 20MHz, Antenna Port: ANT1 , High Channel

Low Edge of Occupied Bandwidth

Voltage (VDC)	Low Edge (GHz)	Low Edge Deviation (GHz)	Low Edge (%)	PPM	Limit PPM
41.1	1.9704973	-5E-06	-2.53742E-06	-0.03	2.5
48	1.9705023	0	0	0.00	--
57	1.9705055	3.2E-06	1.62395E-06	0.02	2.5

Upper Edge of Occupied Bandwidth

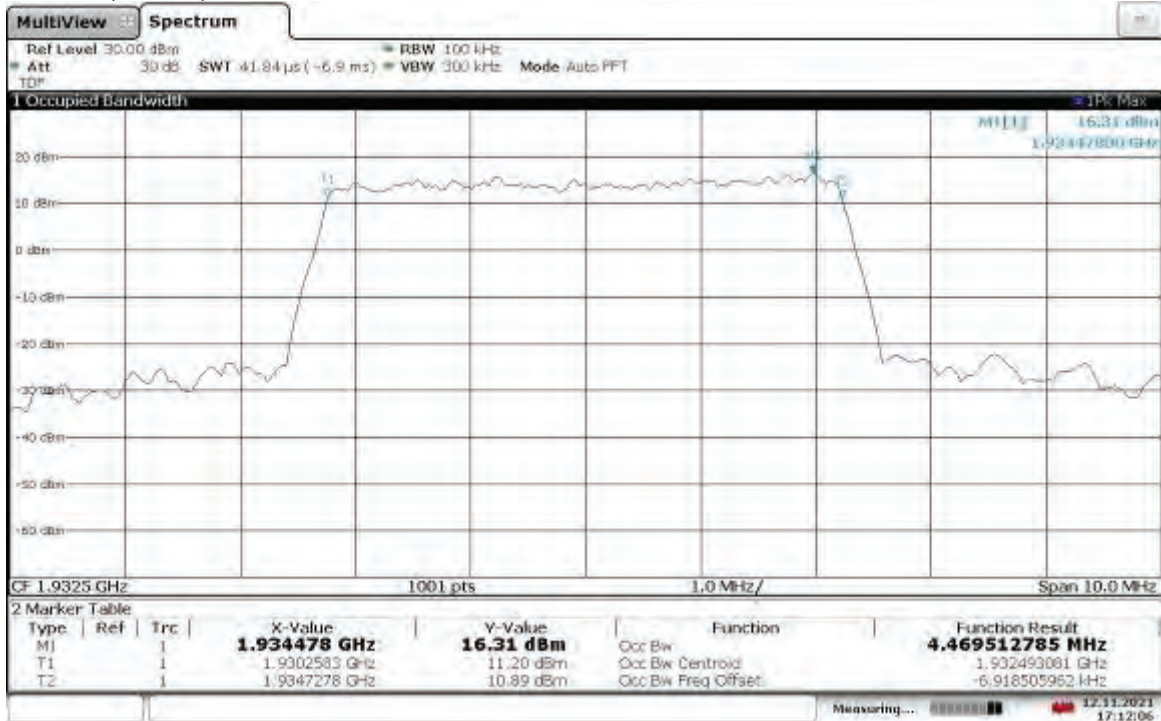
Volt (VDC)	Upper Edge (GHz)	Upper Edge Deviation (GHz)	Upper Edge (%)	PPM	Limit PPM
41.1	1.9894225	8E-07	4.02127E-07	0.00	2.5
48	1.9894217	0	0	0.00	--
57	1.9894212	-5E-07	-2.51329E-07	0.00	2.5

10.4 Setup Photographs:

Confidential – Test setup photo not included in this report

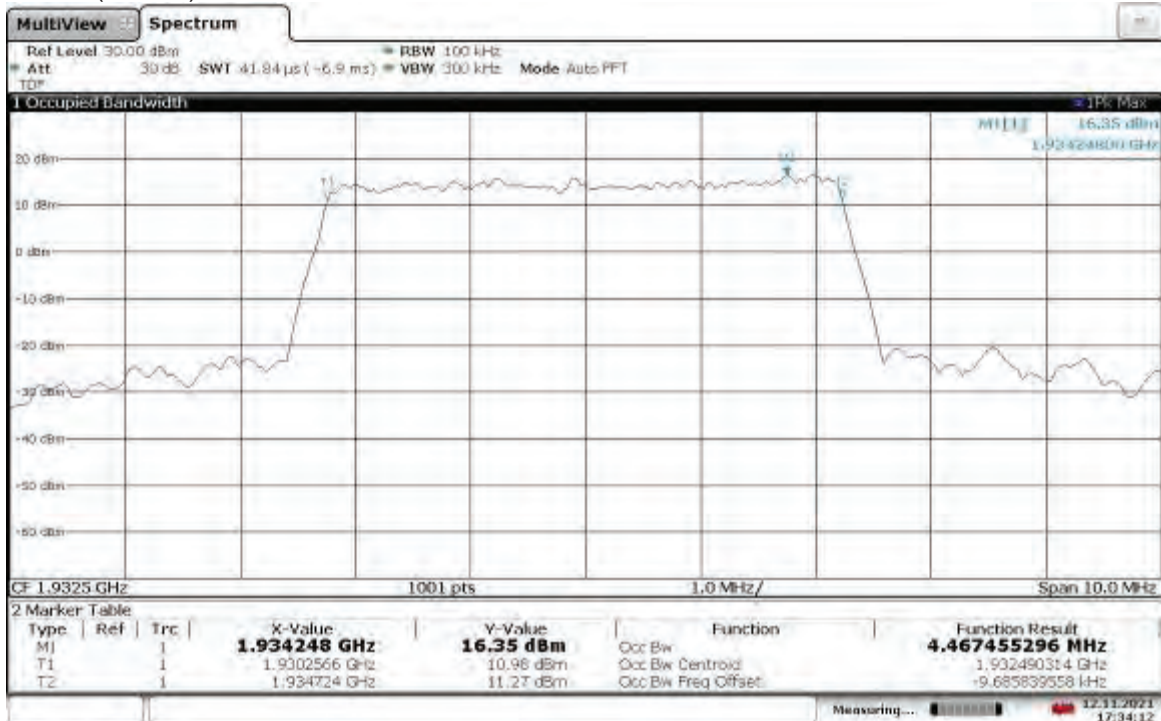
10.5 Plots/Data:

Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz Low Channel 1932.5 MHz, 0 °C



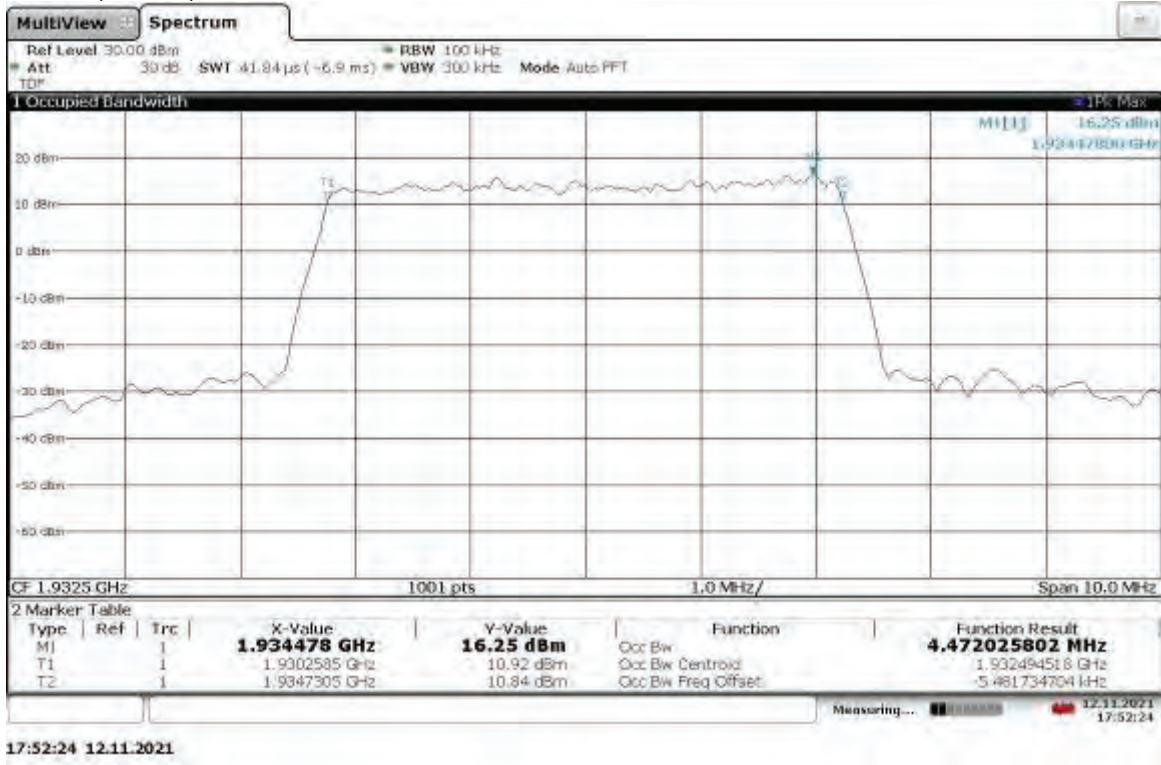
17:12:06 12.11.2021

Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz Low Channel 1932.5 MHz, -10 °C

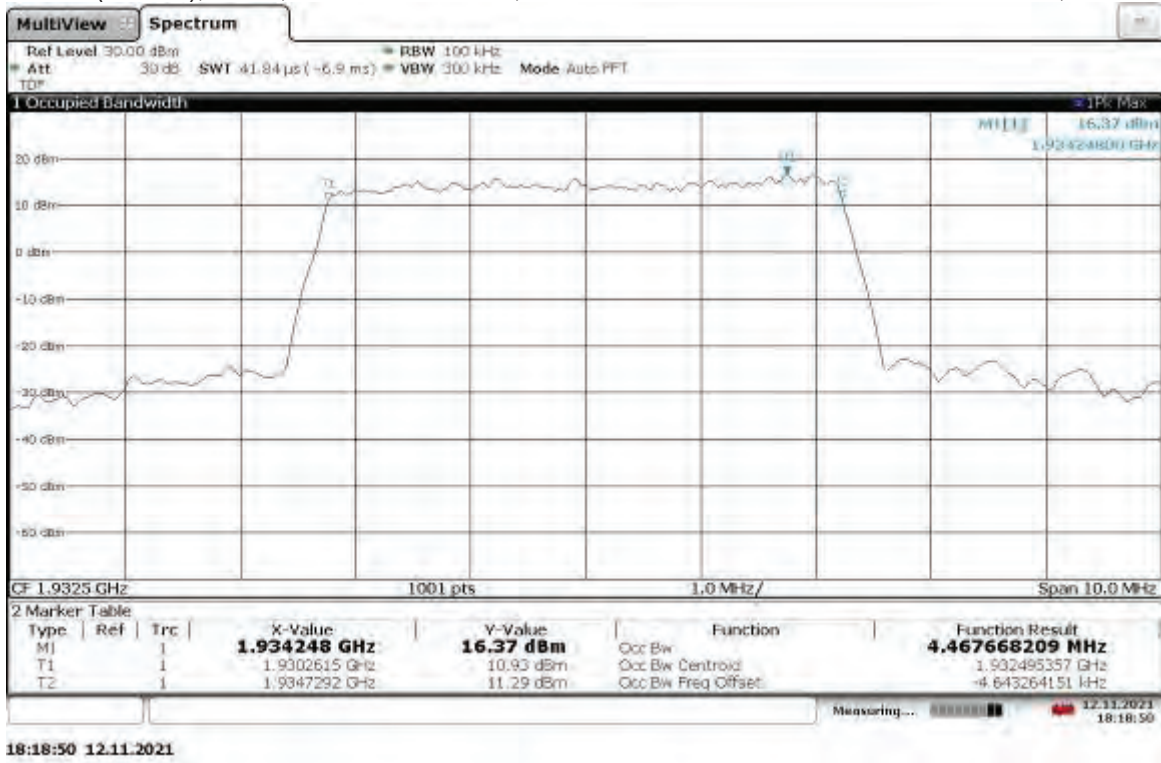


17:34:13 12.11.2021

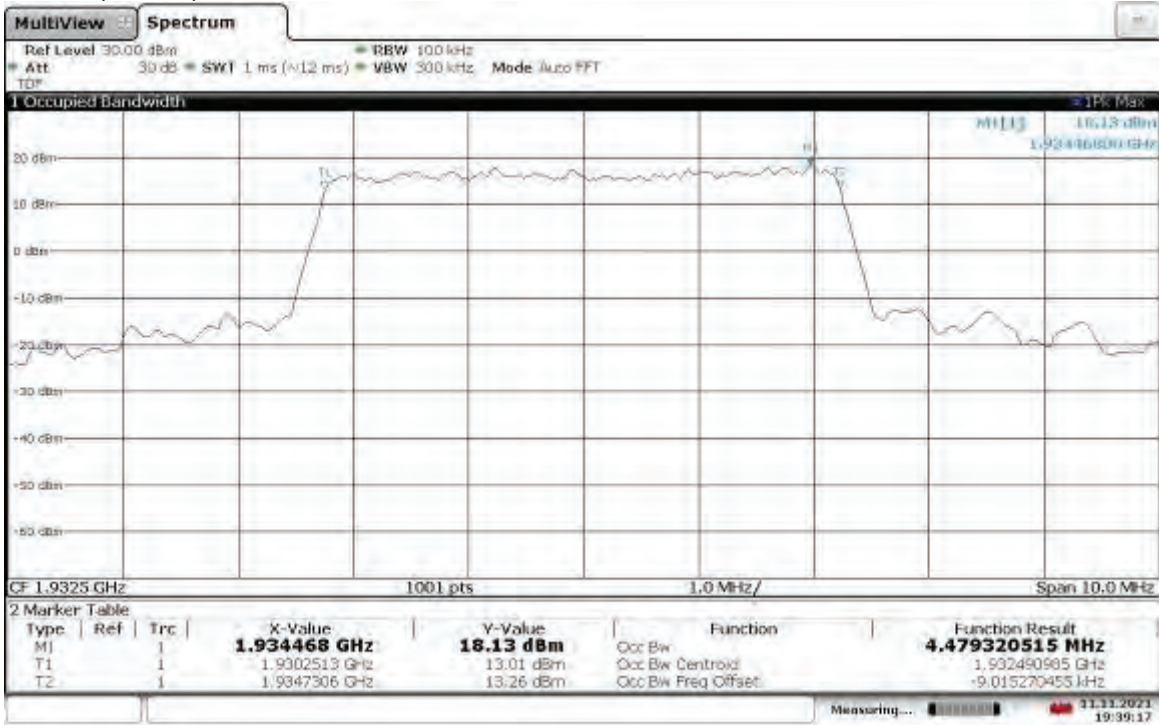
Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz Low Channel 1932.5 MHz, -20 °C



Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz Low Channel 1932.5 MHz, -30 °C

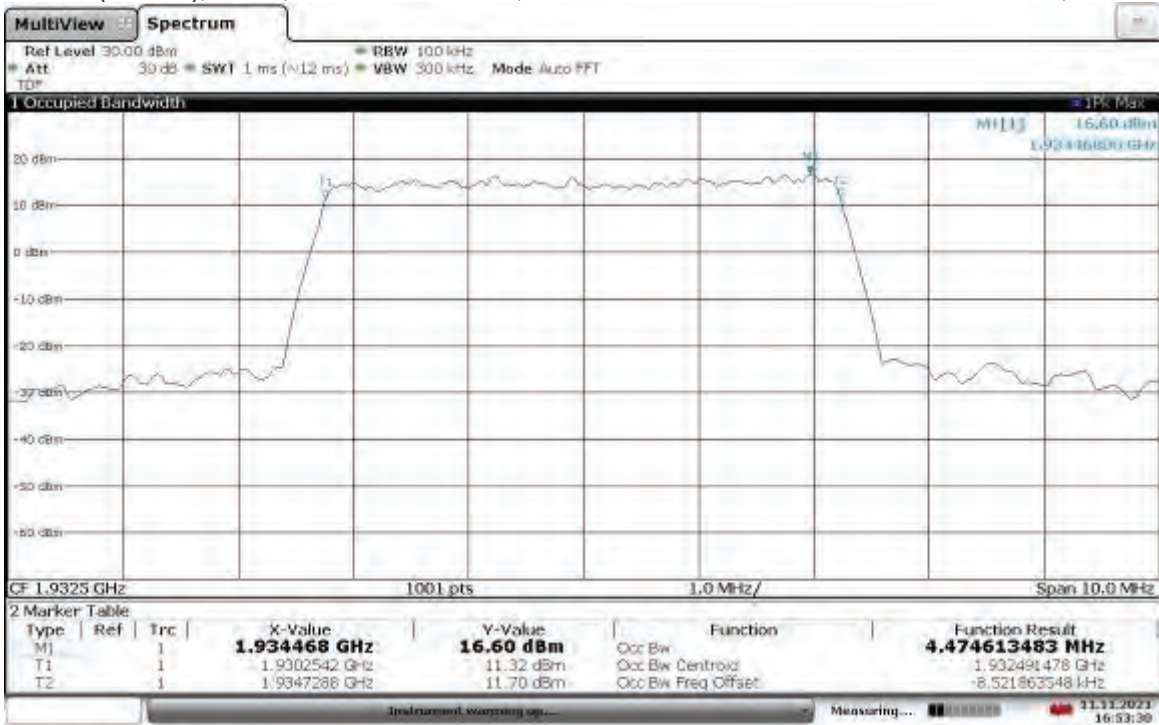


Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz Low Channel 1932.5 MHz, 10 °C



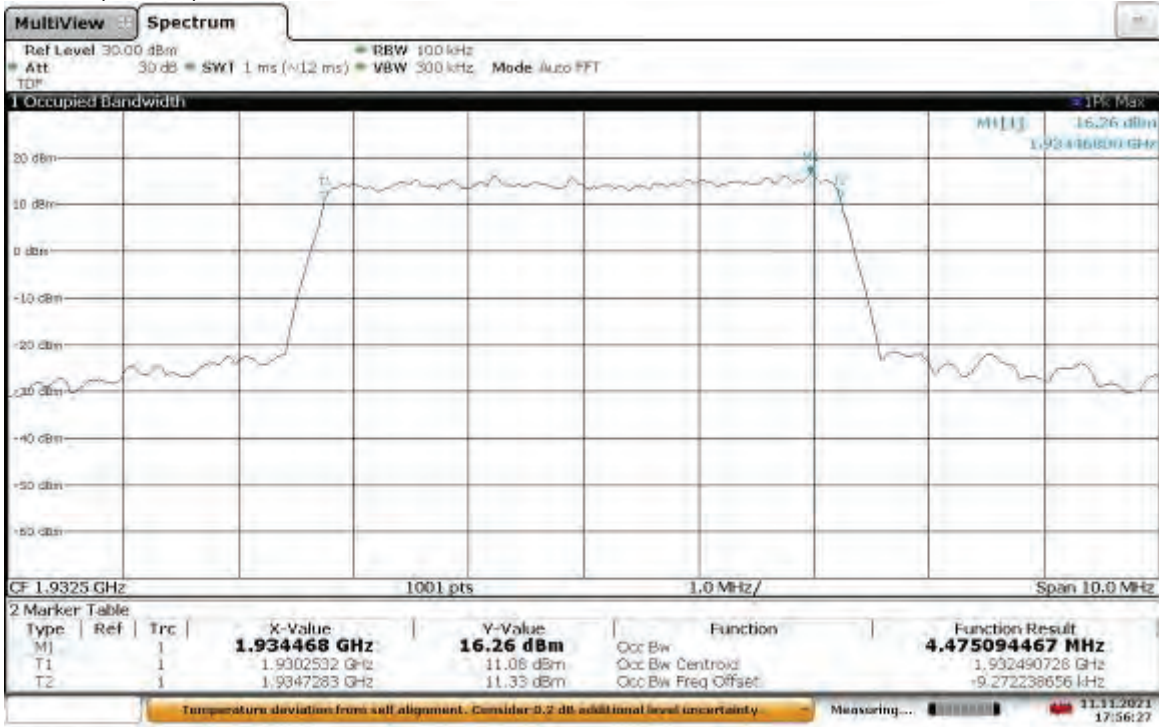
19:39:17 11.11.2021

Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz Low Channel 1932.5 MHz, 20 °C



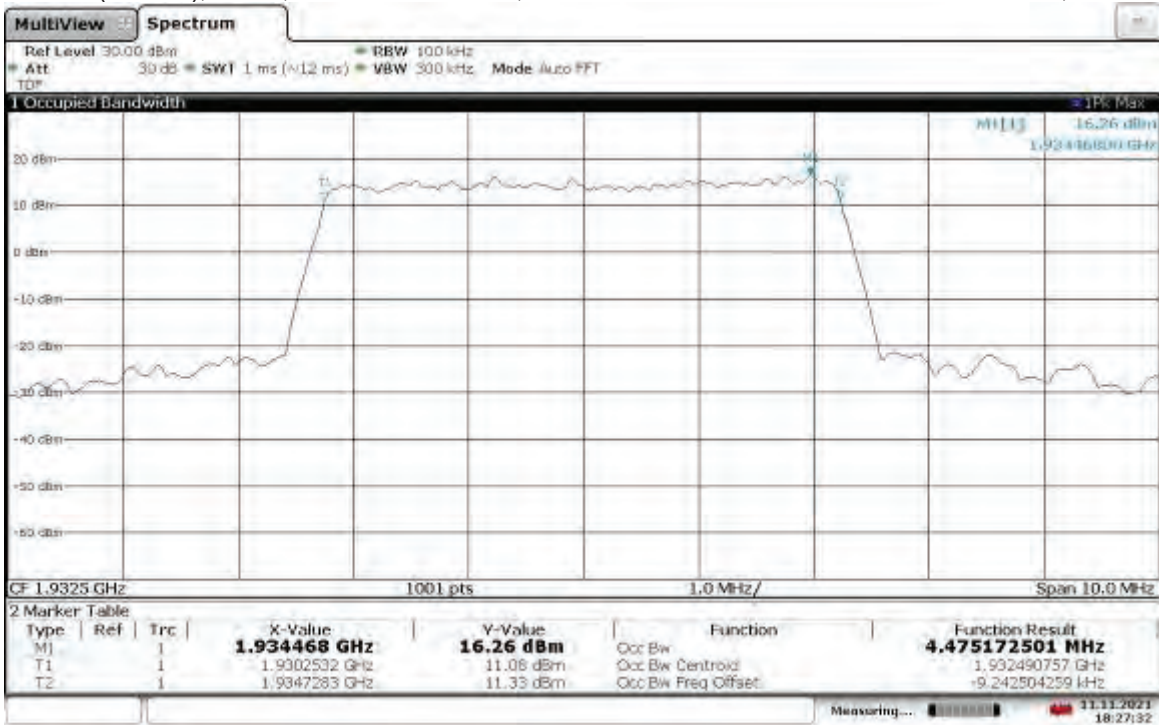
16:53:31 11.11.2021

Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz Low Channel 1932.5 MHz, 30 °C



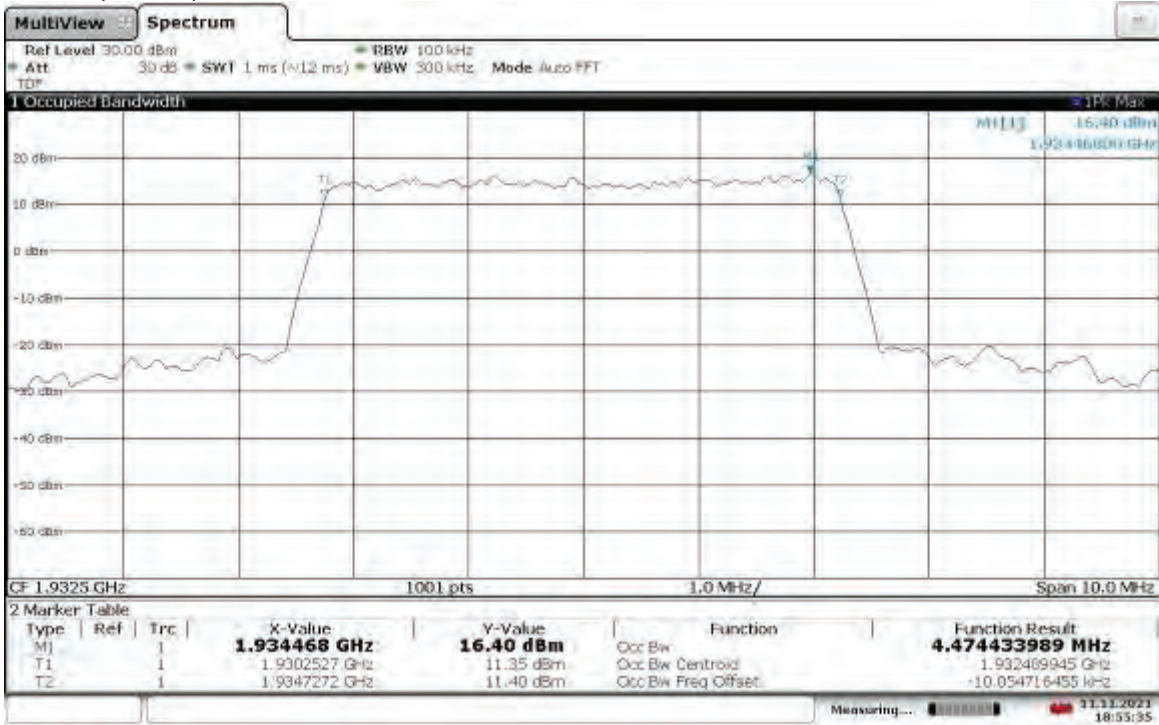
17:56:27 11.11.2021

Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz Low Channel 1932.5 MHz, 40 °C



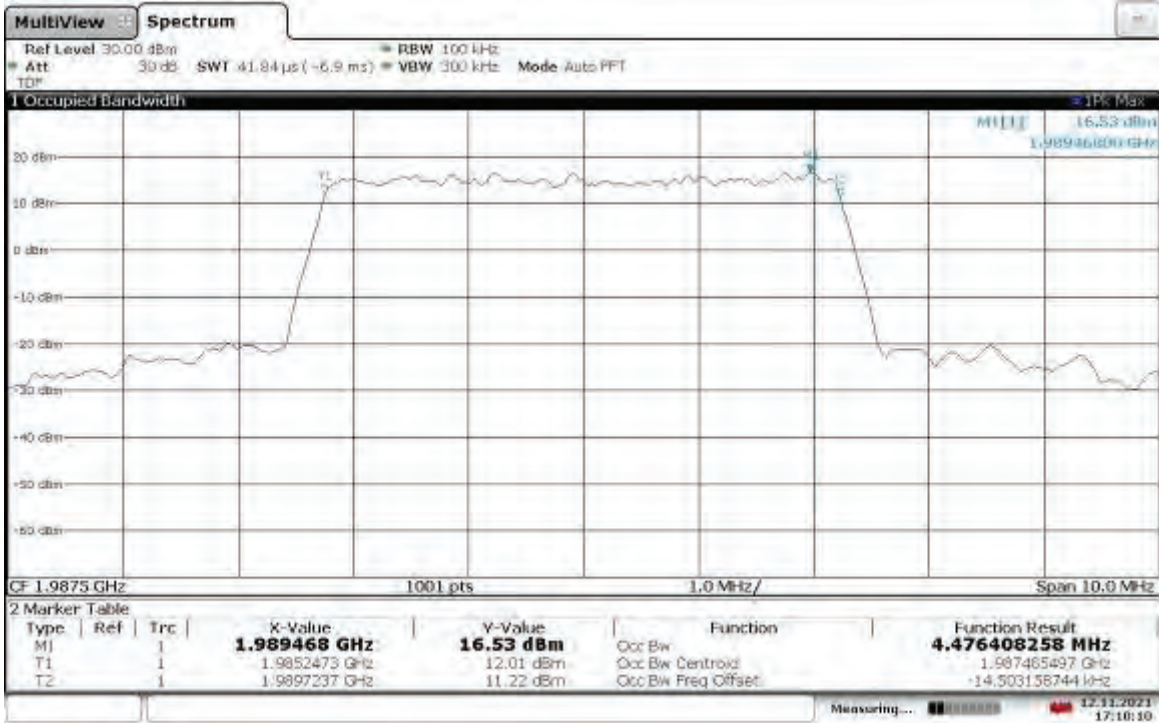
18:27:33 11.11.2021

Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz Low Channel 1932.5 MHz, 50 °C



18:55:35 11.11.2021

Slot 0 (Band 2), ANT1, Modulation: QPSK, Bandwidth: 5 MHz High Channel 1987.5 MHz, 0 °C



17:10:11 12.11.2021