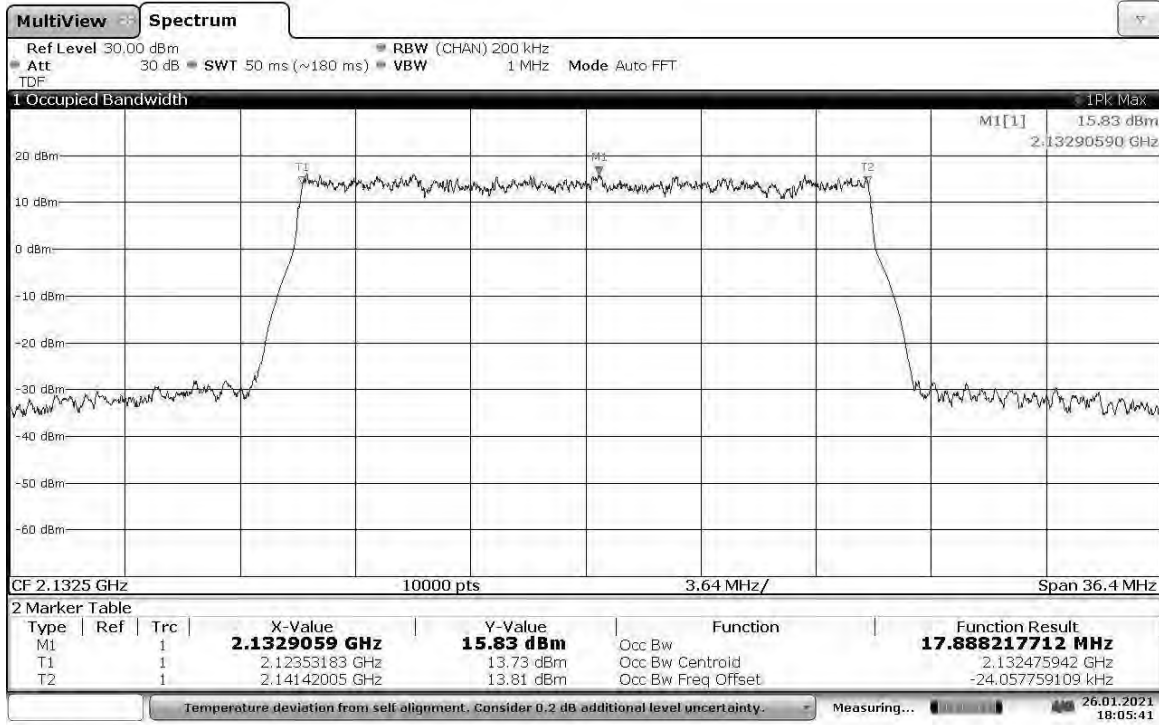
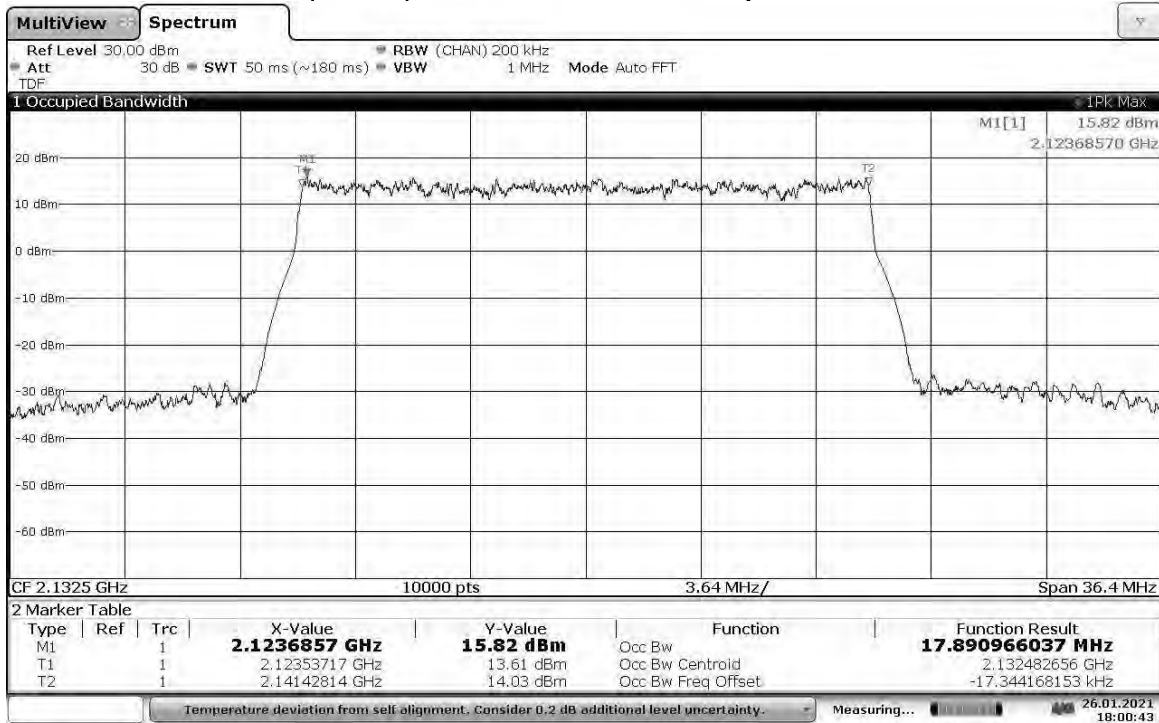


TM3.2-16QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel Occupied Bandwidth



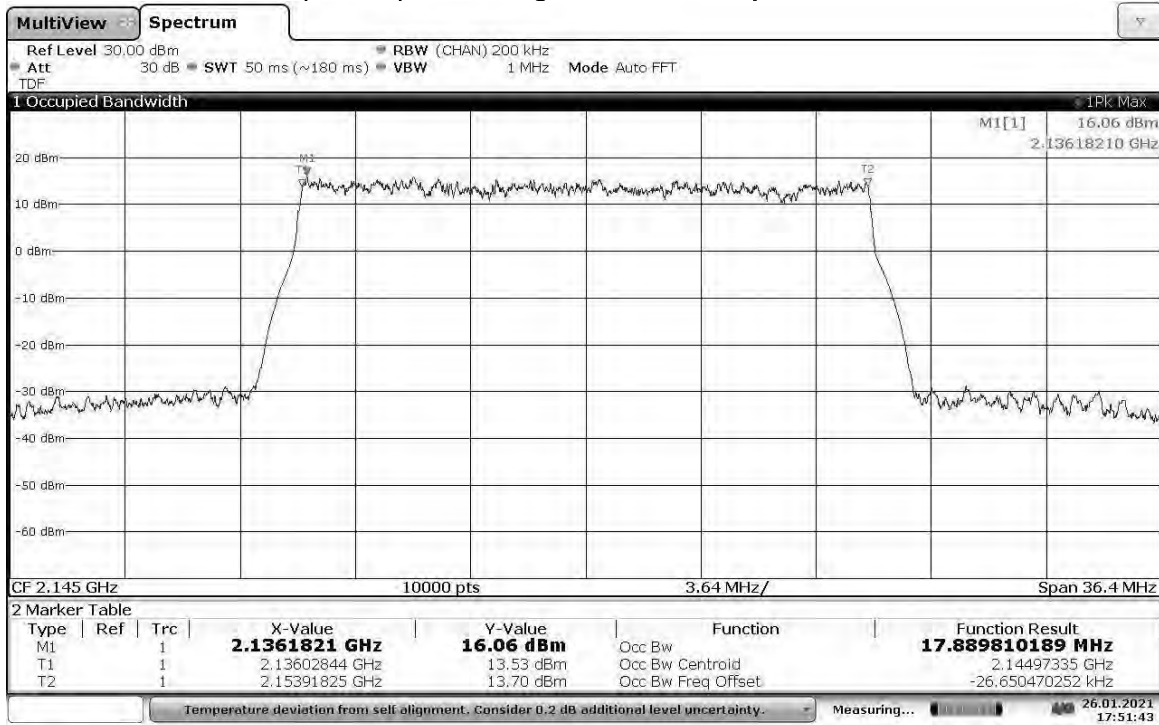
18:05:42 26.01.2021

TM3.2-16QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel Occupied Bandwidth



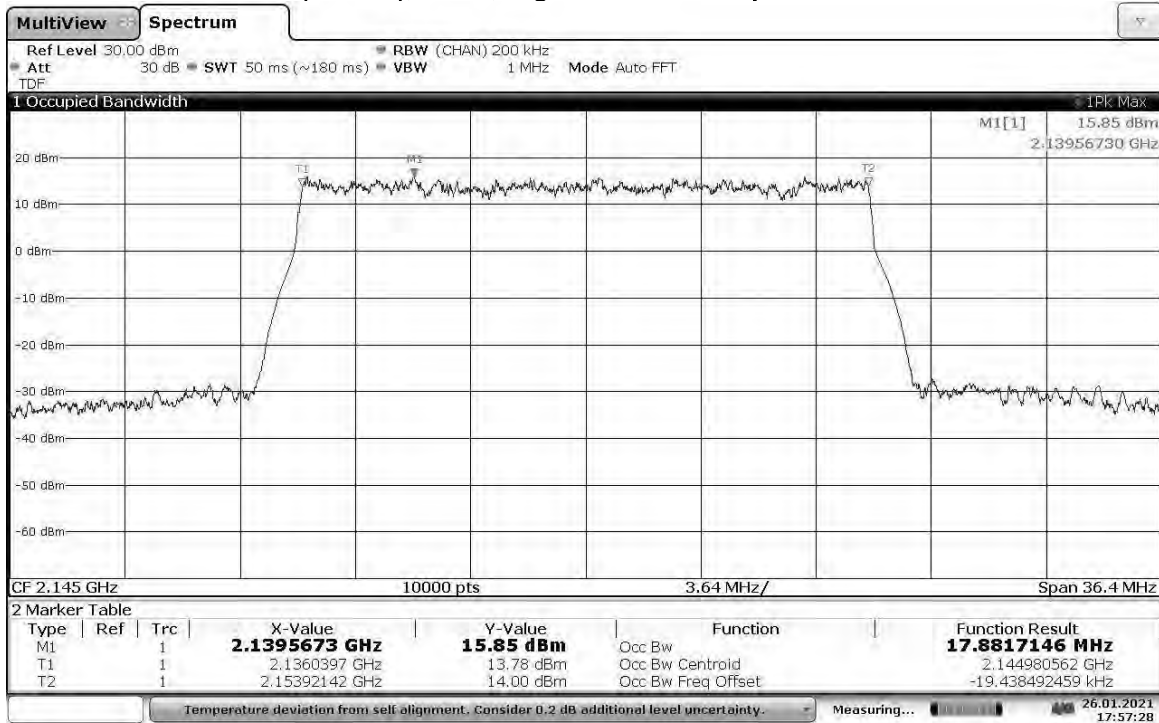
18:00:43 26.01.2021

**TM3.2-16QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel Occupied Bandwidth**



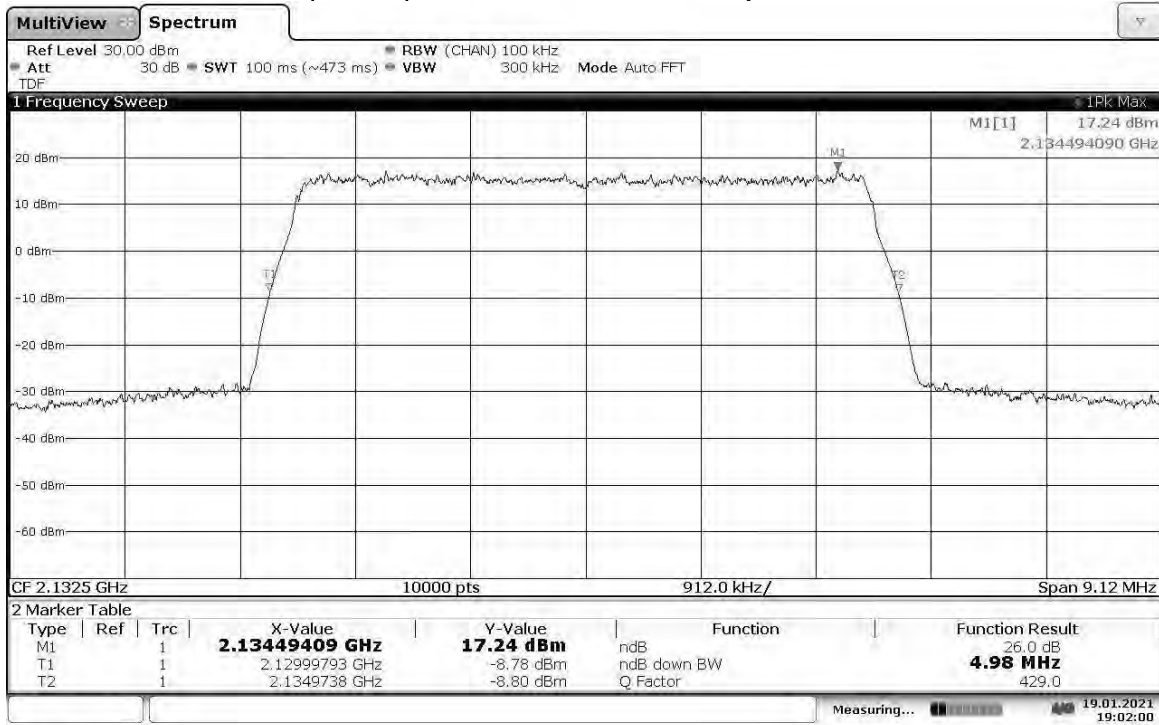
17:51:43 26.01.2021

**TM3.2-16QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel Occupied Bandwidth**



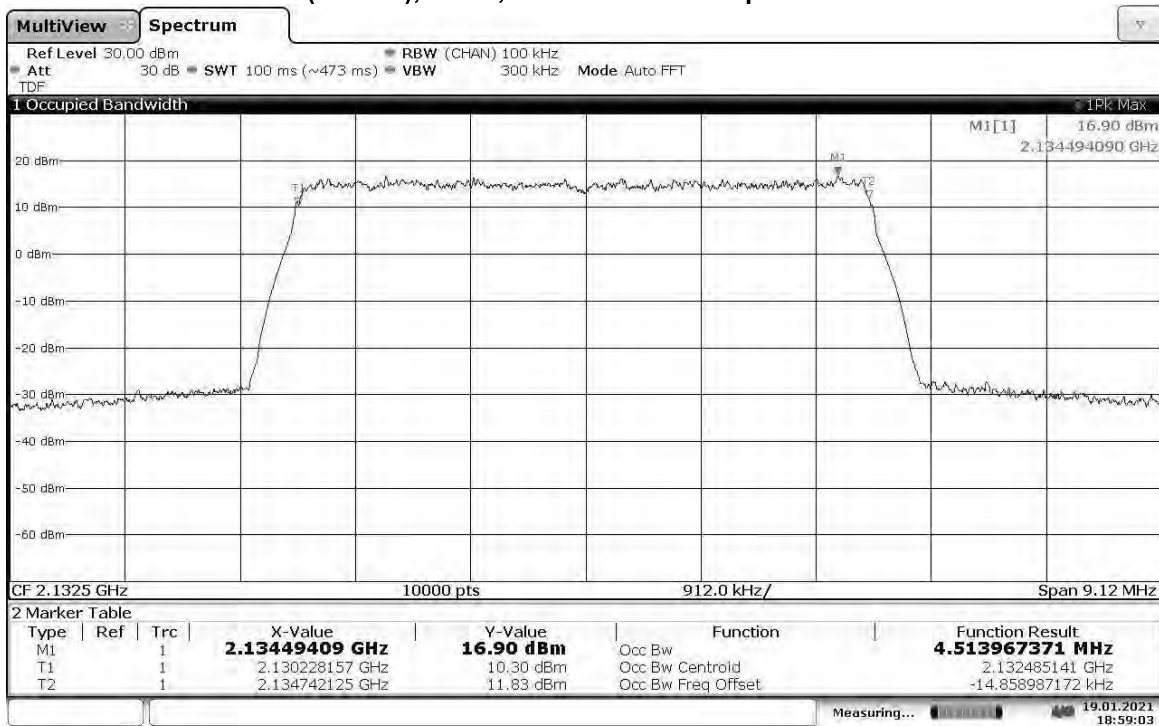
17:57:28 26.01.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel Occupied Bandwidth



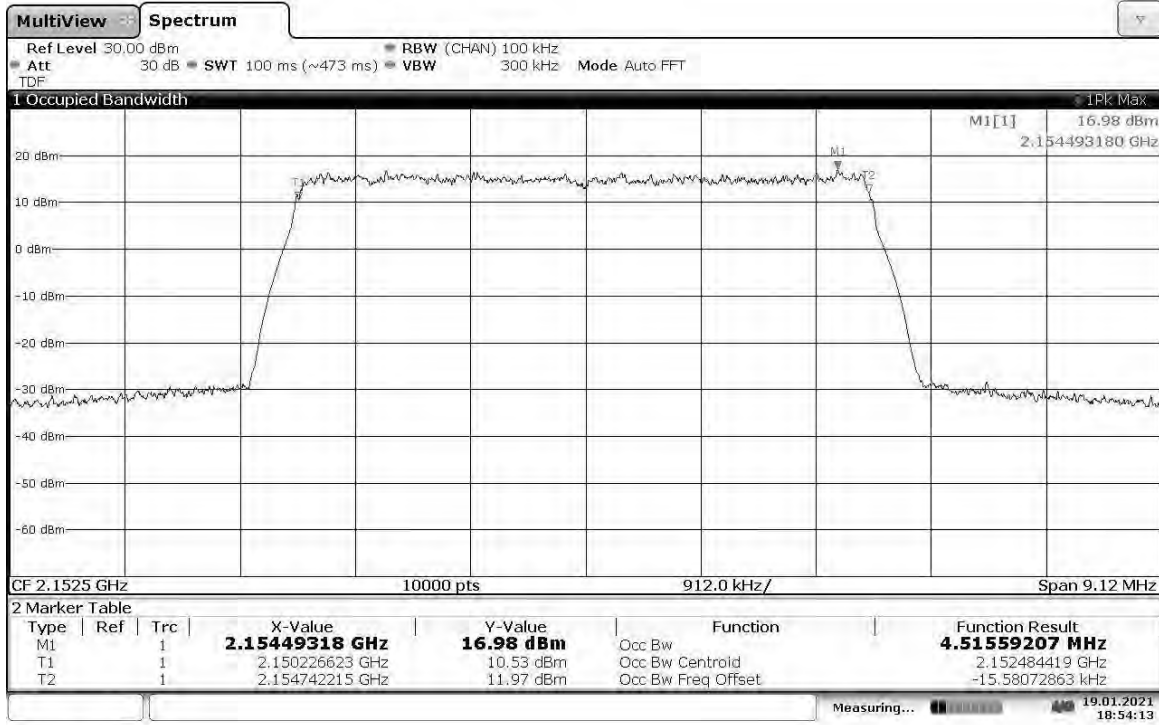
19:02:00 19.01.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel Occupied Bandwidth



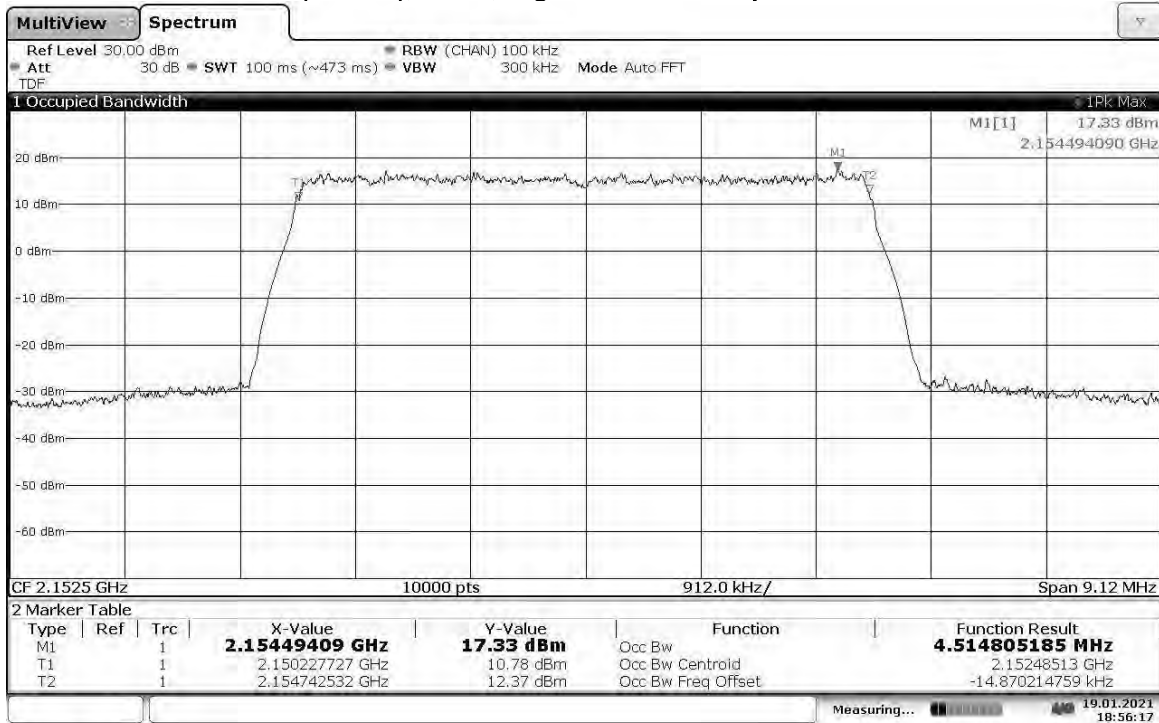
18:59:03 19.01.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel Occupied Bandwidth



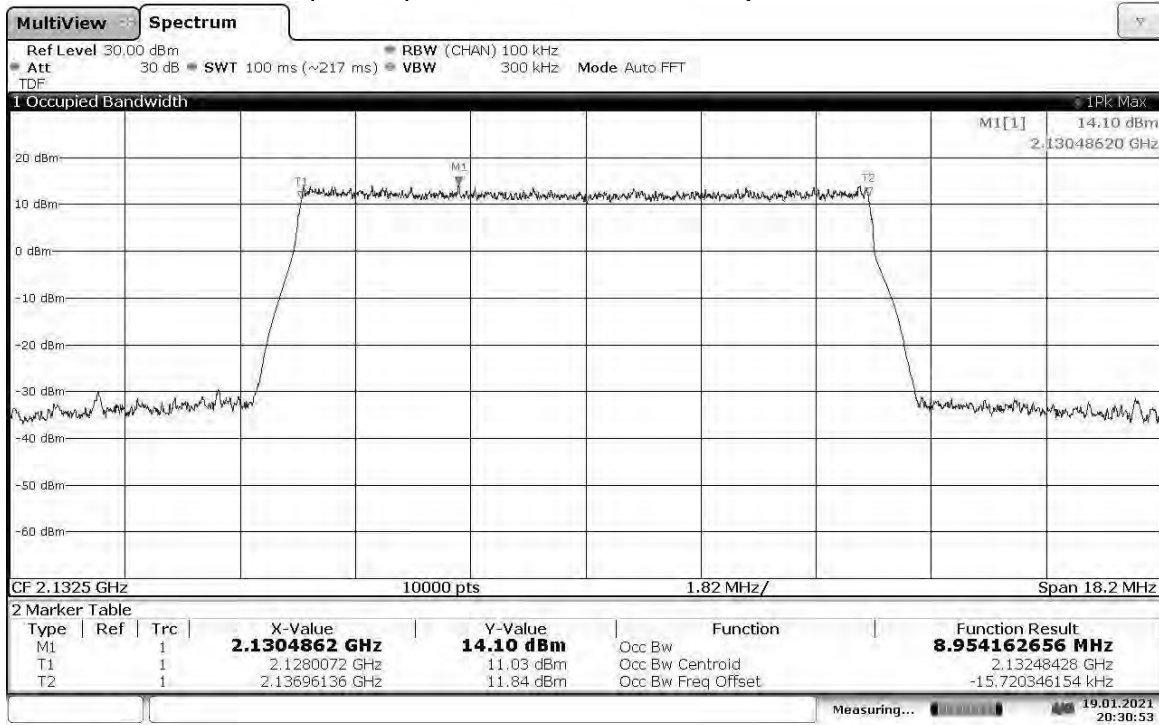
18:54:14 19.01.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel Occupied Bandwidth



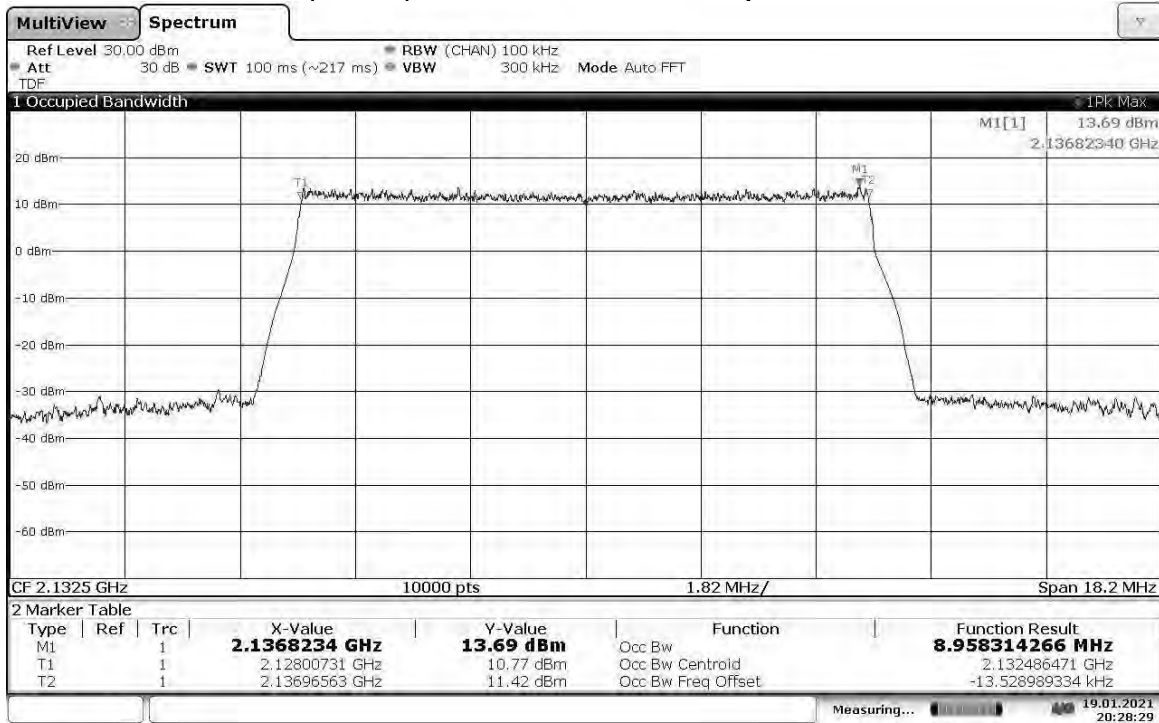
18:56:17 19.01.2021

**TM3.1-64QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel Occupied Bandwidth**



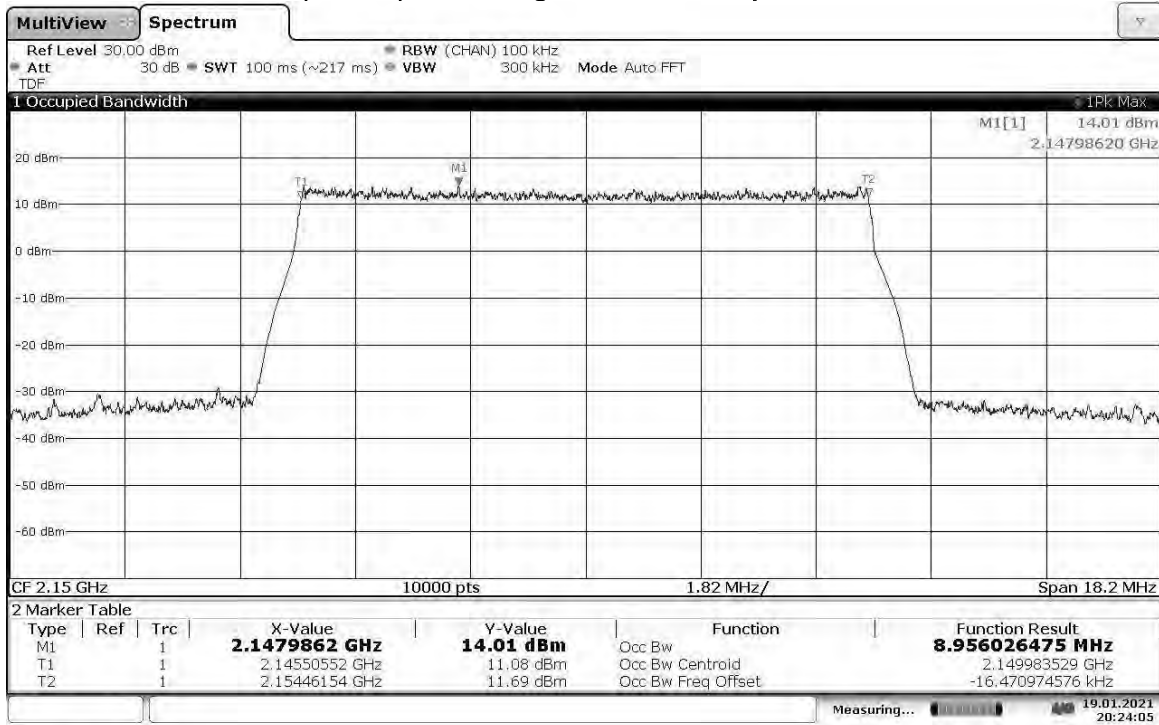
20:30:54 19.01.2021

**TM3.1-64QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel Occupied Bandwidth**



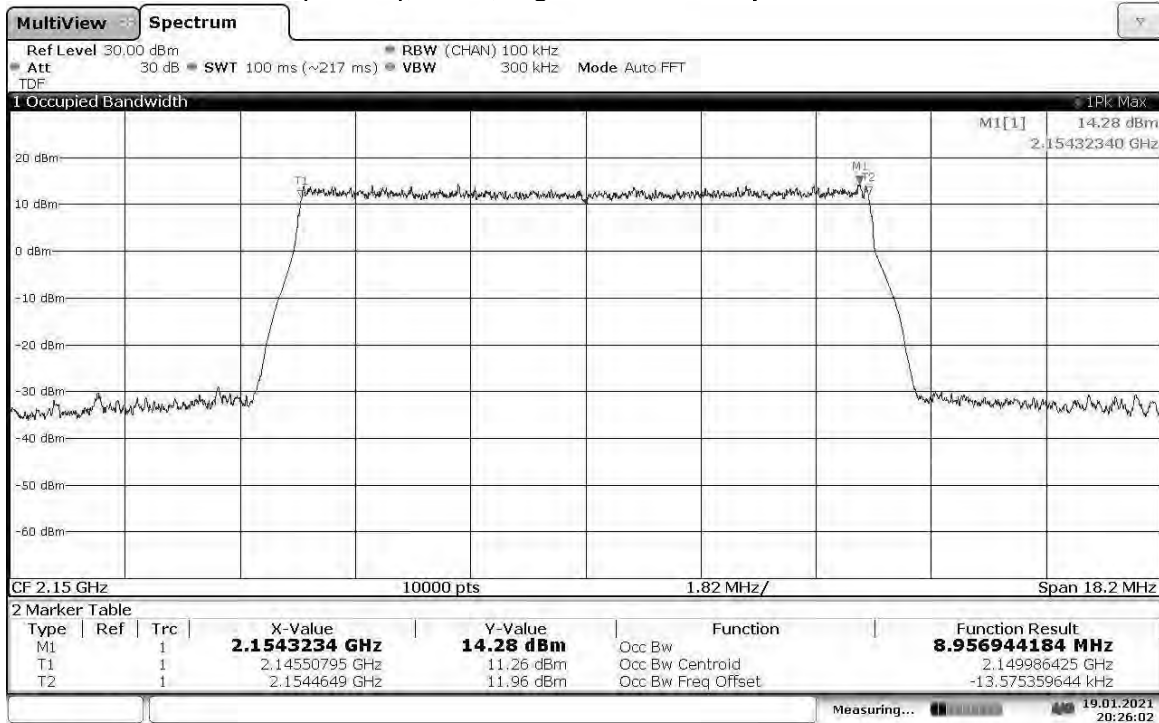
20:28:29 19.01.2021

**TM3.1-64QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel Occupied Bandwidth**



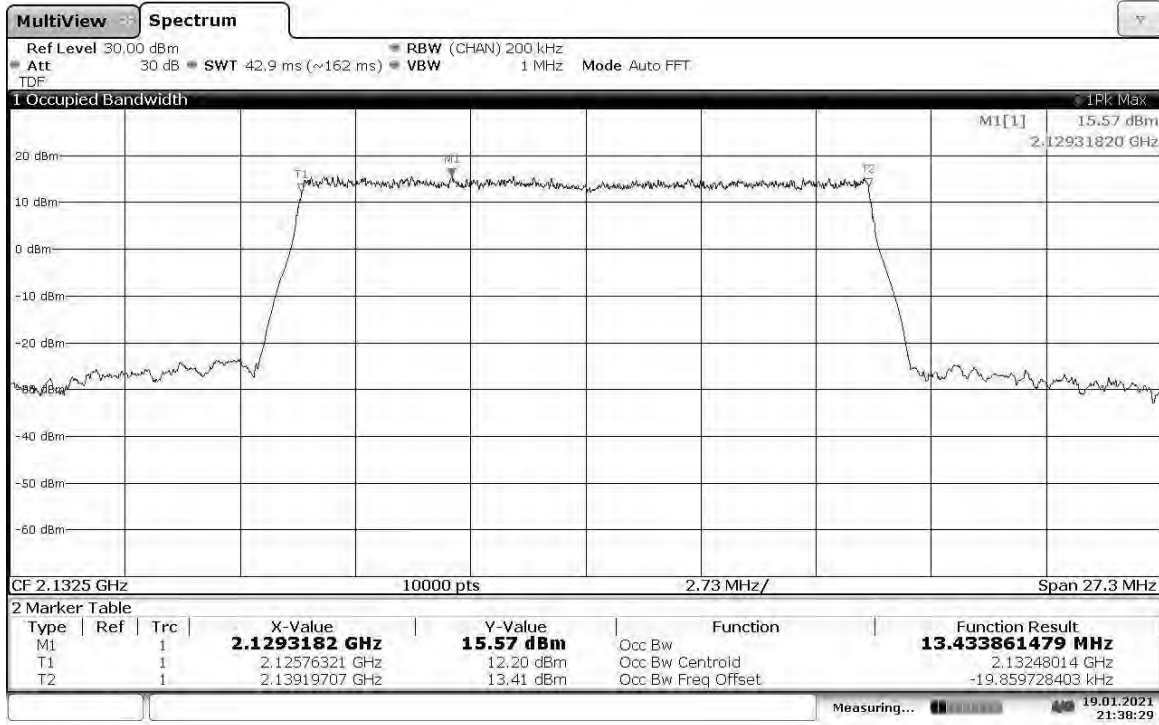
20:24:05 19.01.2021

**TM3.1-64QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel Occupied Bandwidth**



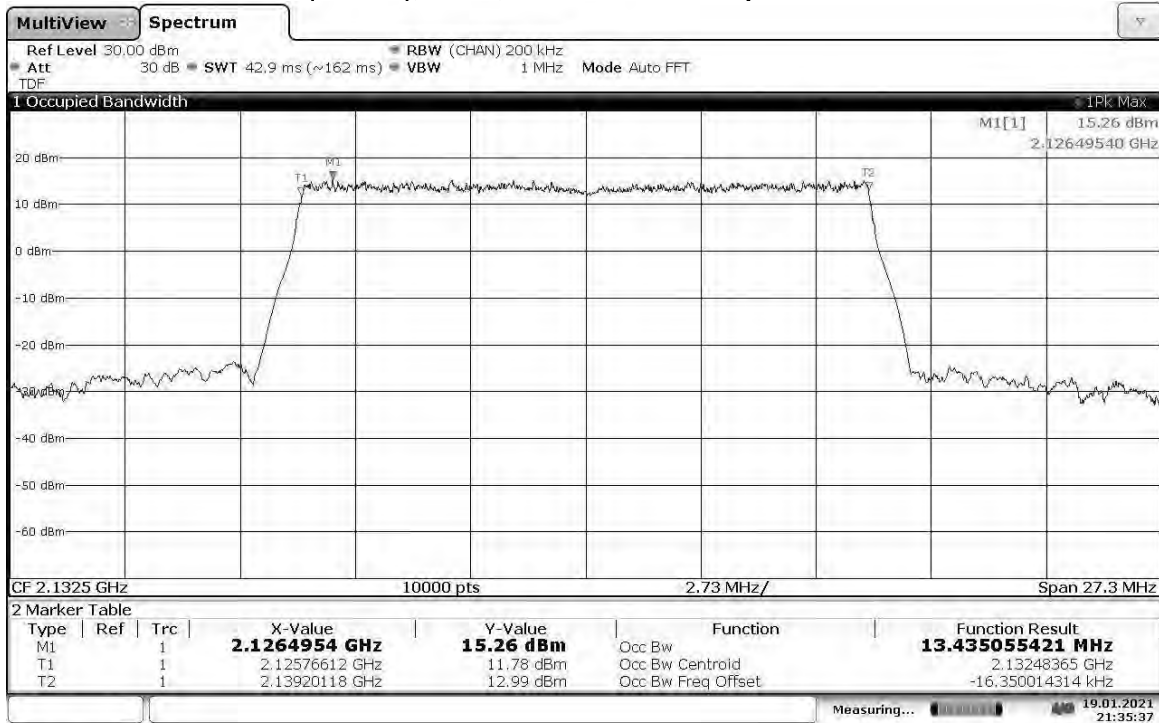
20:26:02 19.01.2021

TM3.1-64QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel Occupied Bandwidth



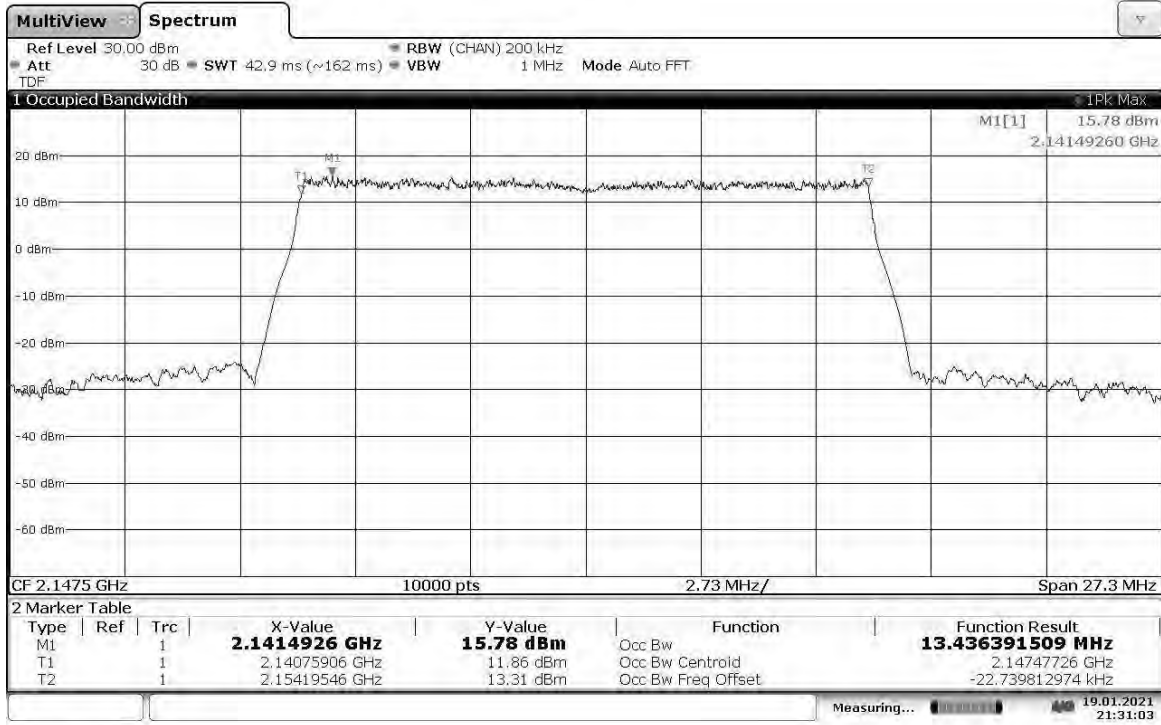
21:38:29 19.01.2021

TM3.1-64QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel Occupied Bandwidth



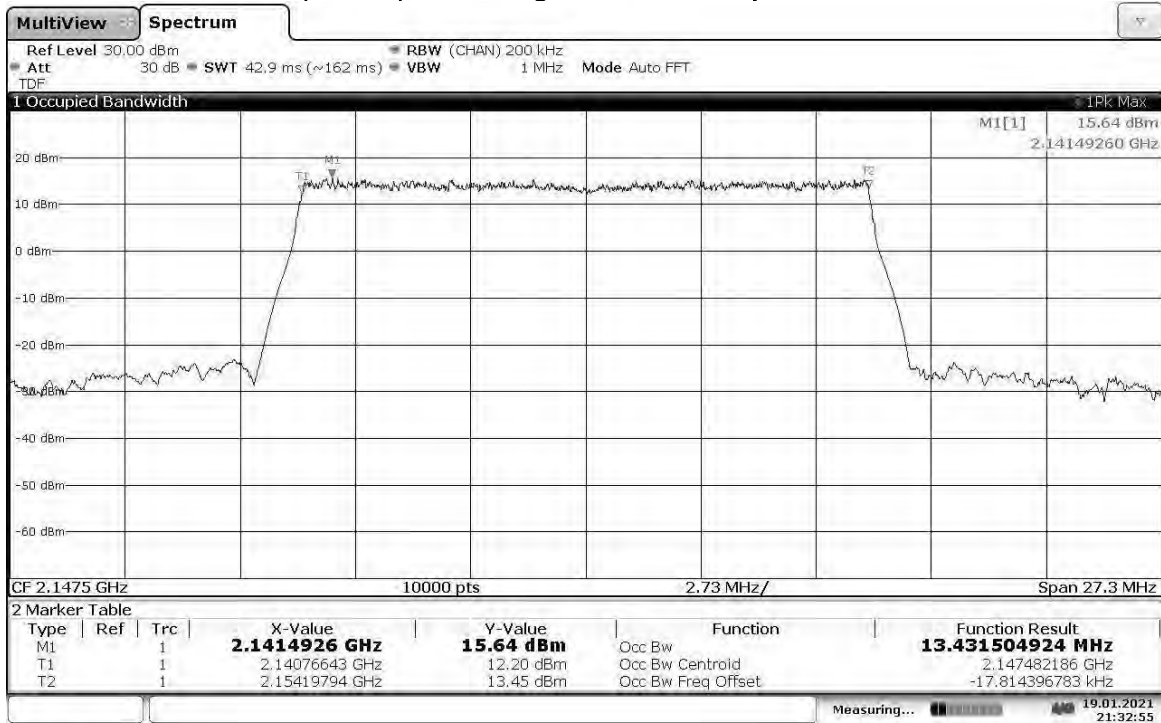
21:35:38 19.01.2021

TM3.1-64QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel Occupied Bandwidth



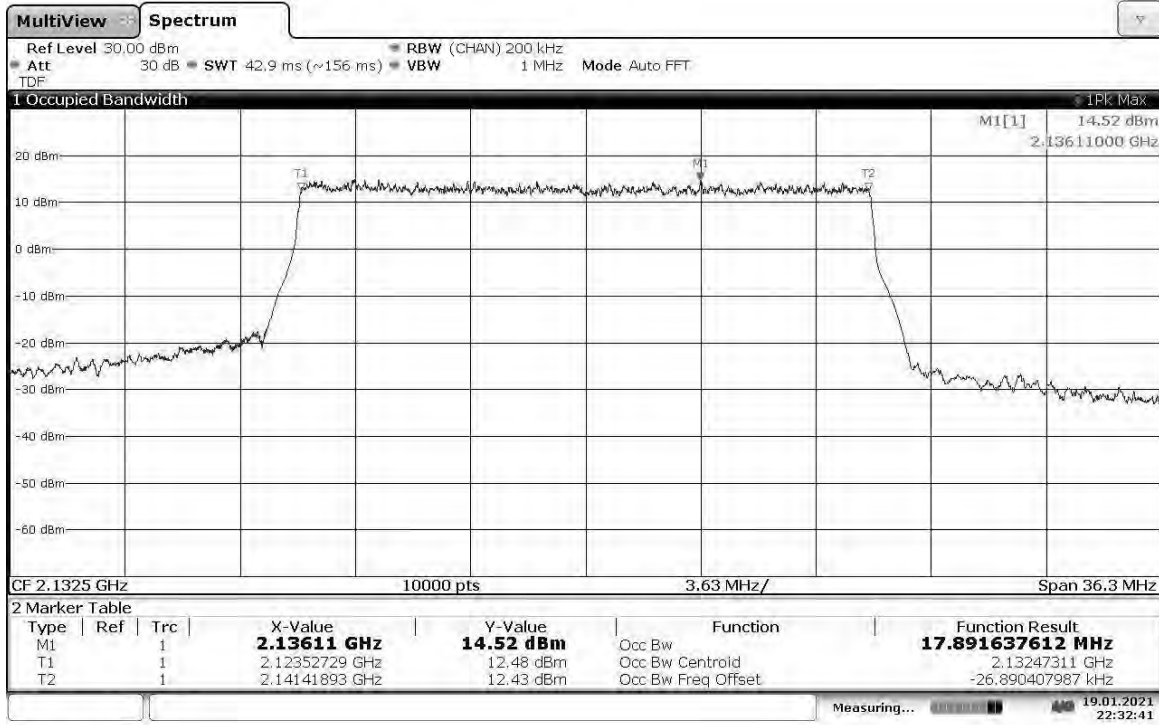
21:31:03 19.01.2021

TM3.1-64QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel Occupied Bandwidth



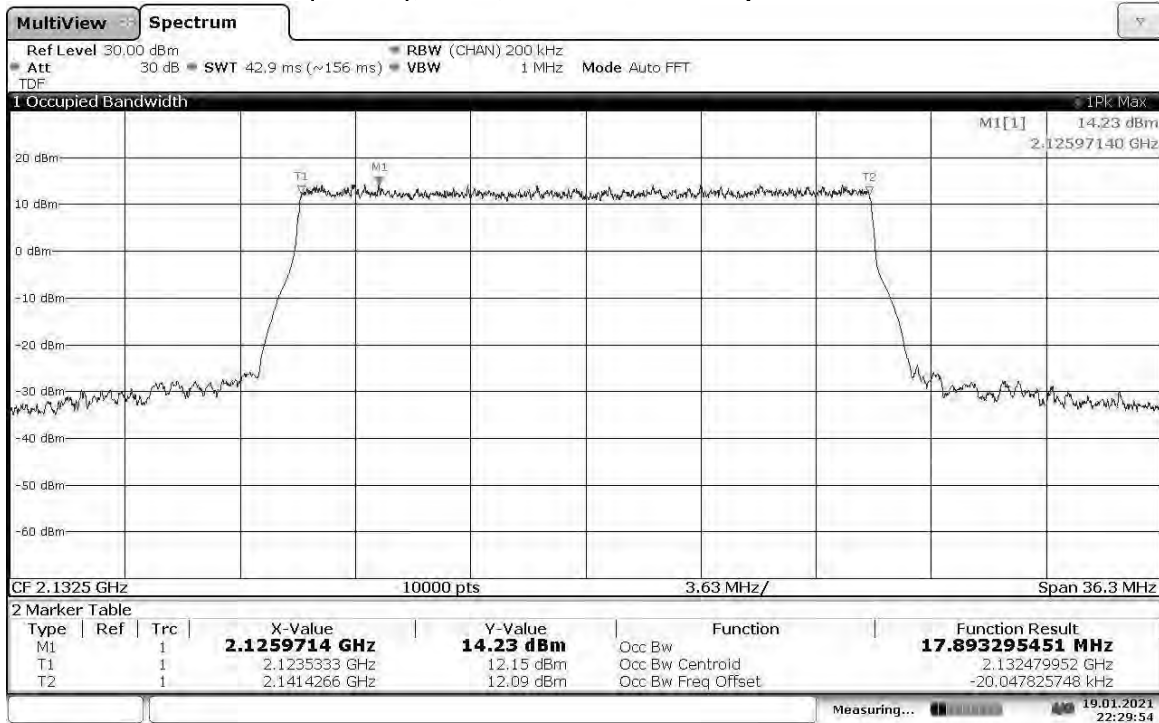
21:32:55 19.01.2021

TM3.1-64QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel Occupied Bandwidth



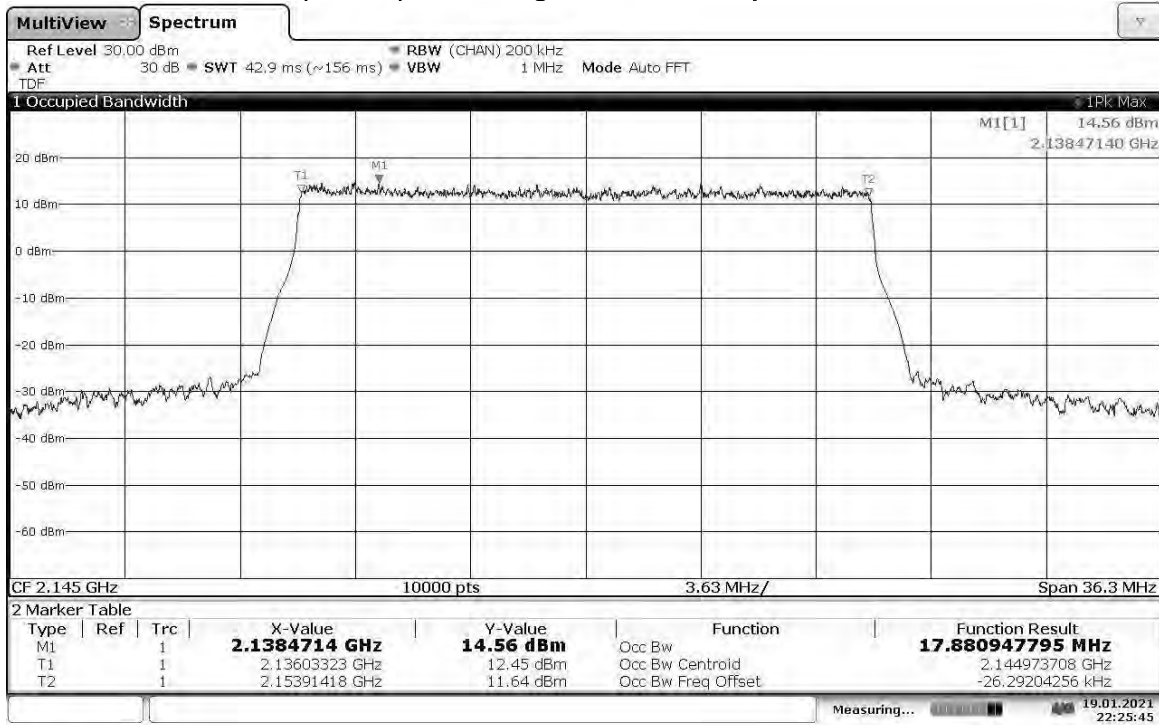
22:32:42 19.01.2021

TM3.1-64QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel Occupied Bandwidth



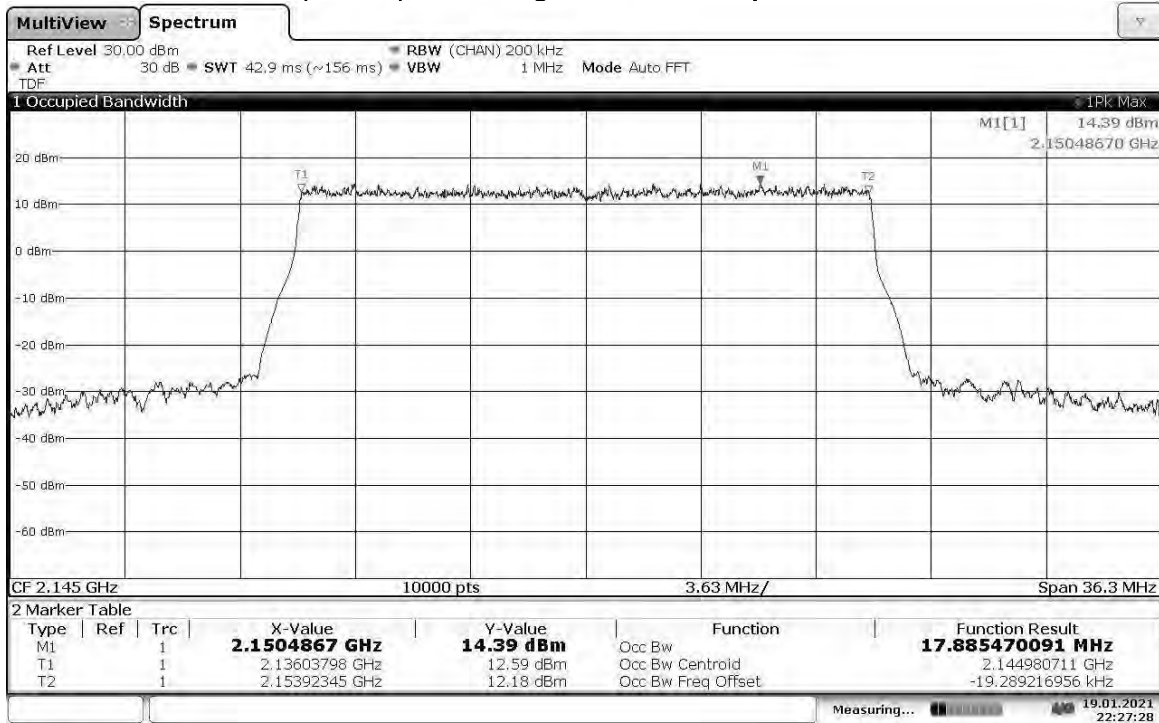
22:29:54 19.01.2021

**TM3.1-64QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel Occupied Bandwidth**



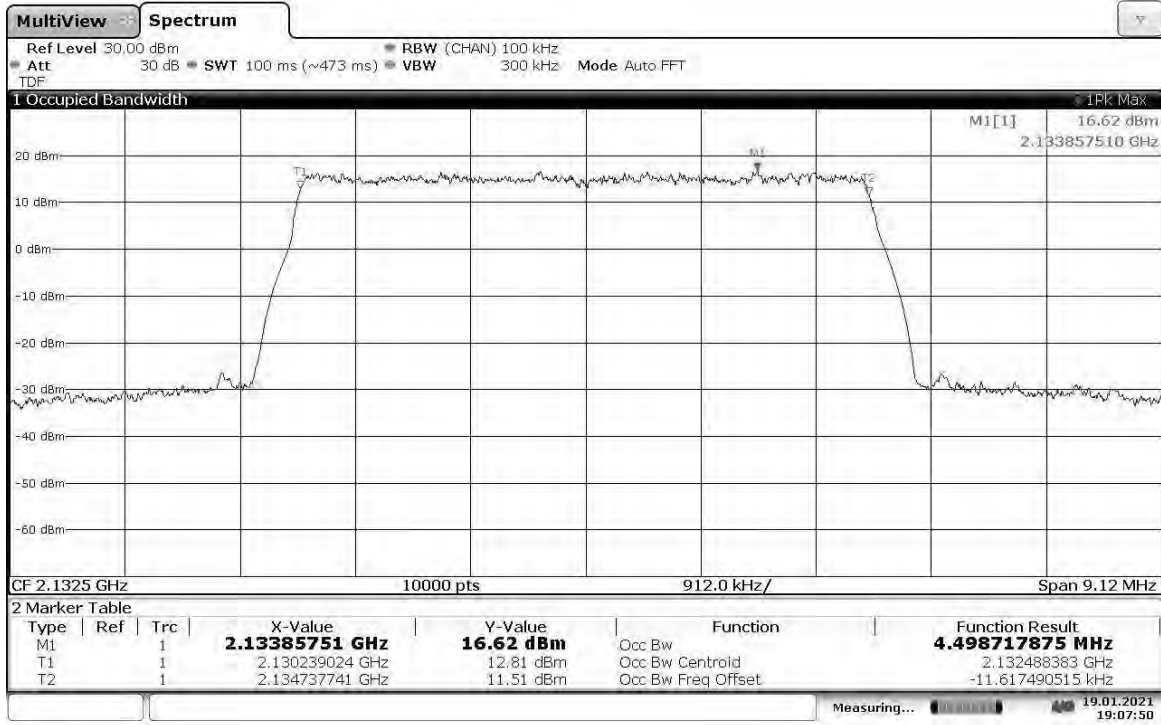
22:25:45 19.01.2021

**TM3.1-64QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel Occupied Bandwidth**



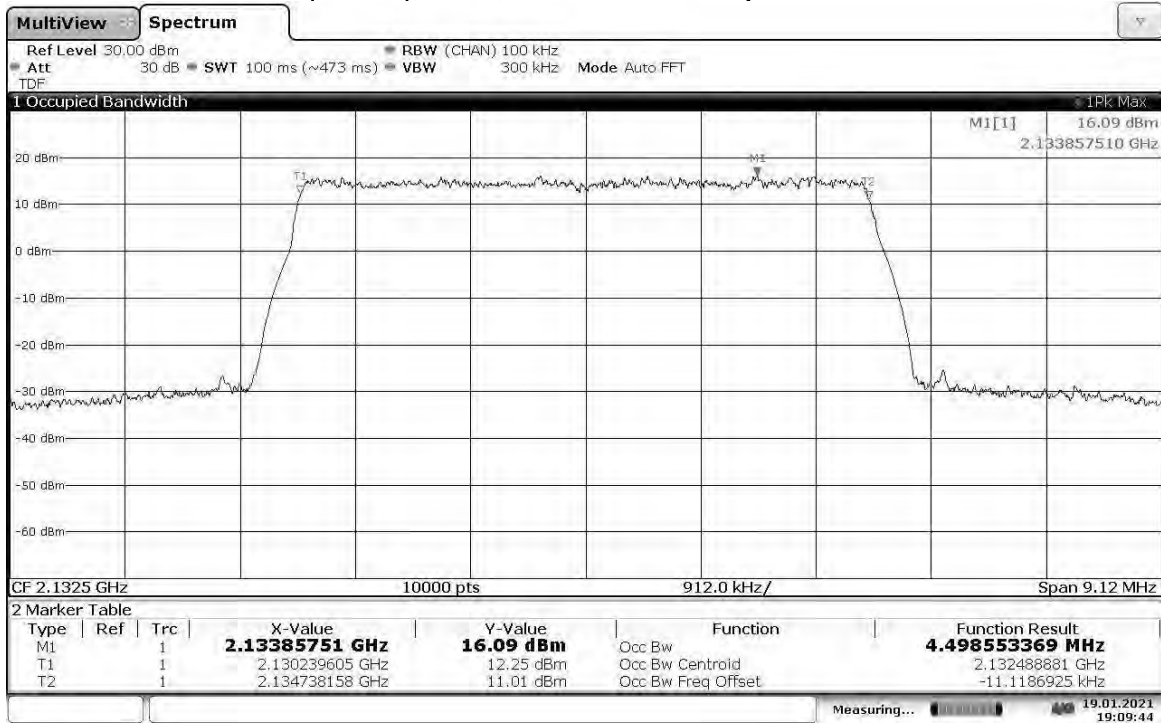
22:27:28 19.01.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot31 (Band 4), ANT0, Mid Channel Occupied Bandwidth



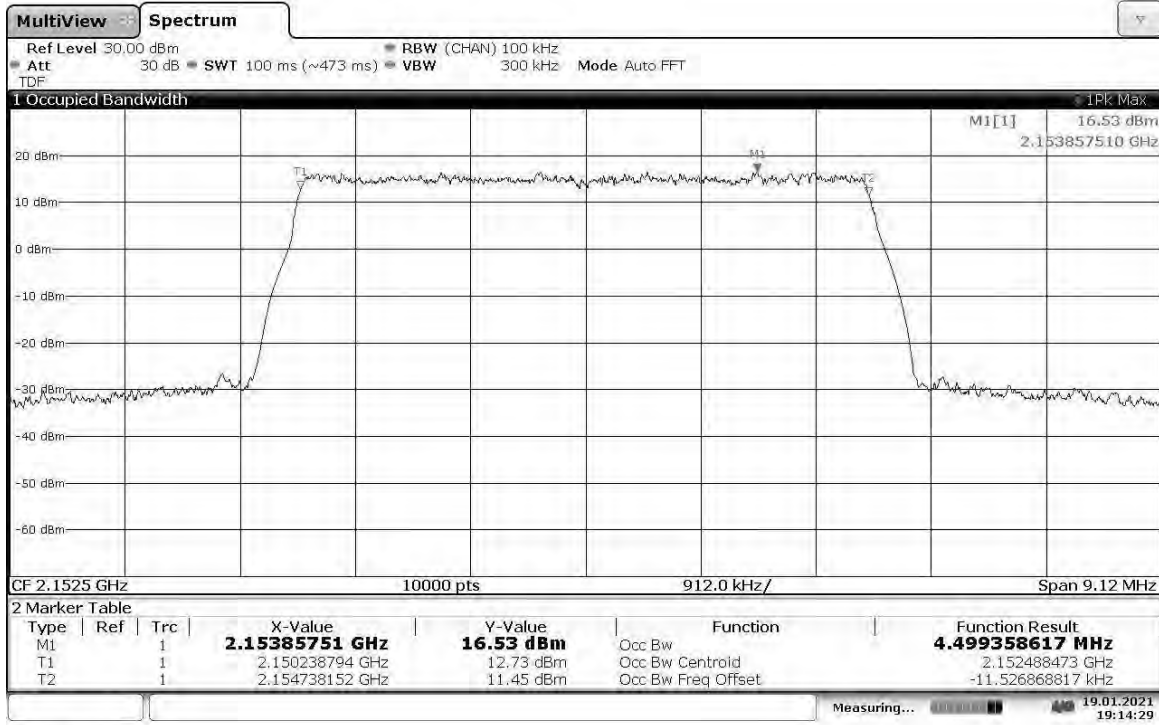
19:07:50 19.01.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel Occupied Bandwidth



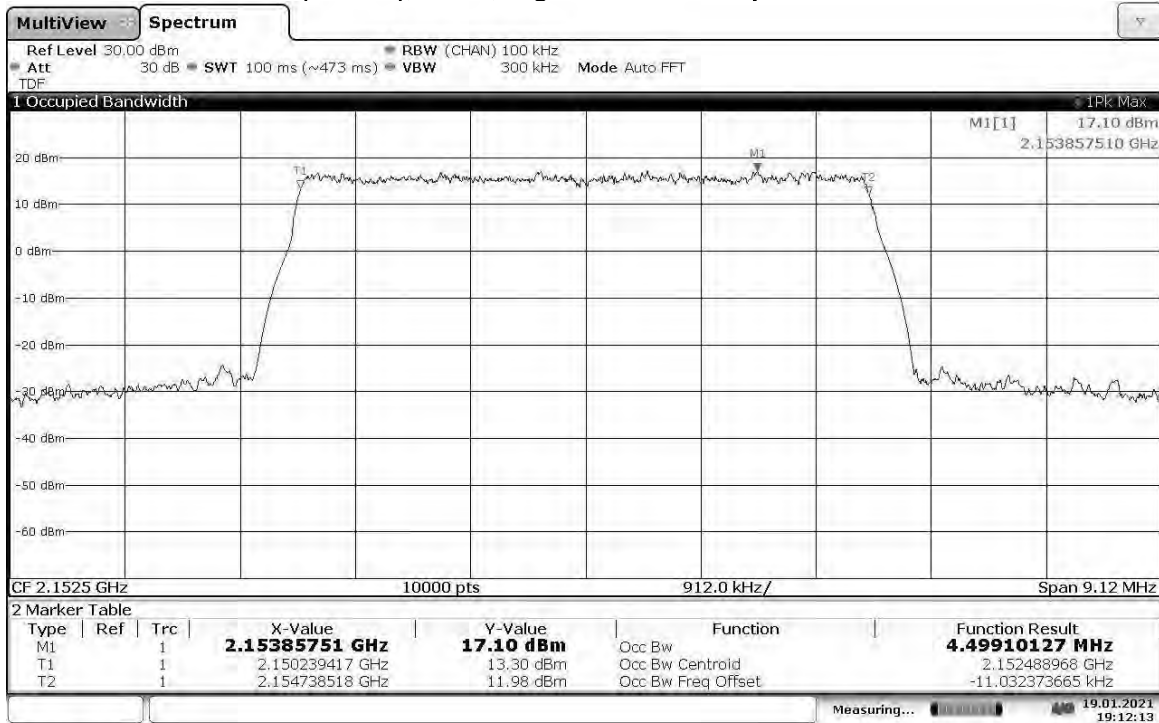
19:09:45 19.01.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel Occupied Bandwidth



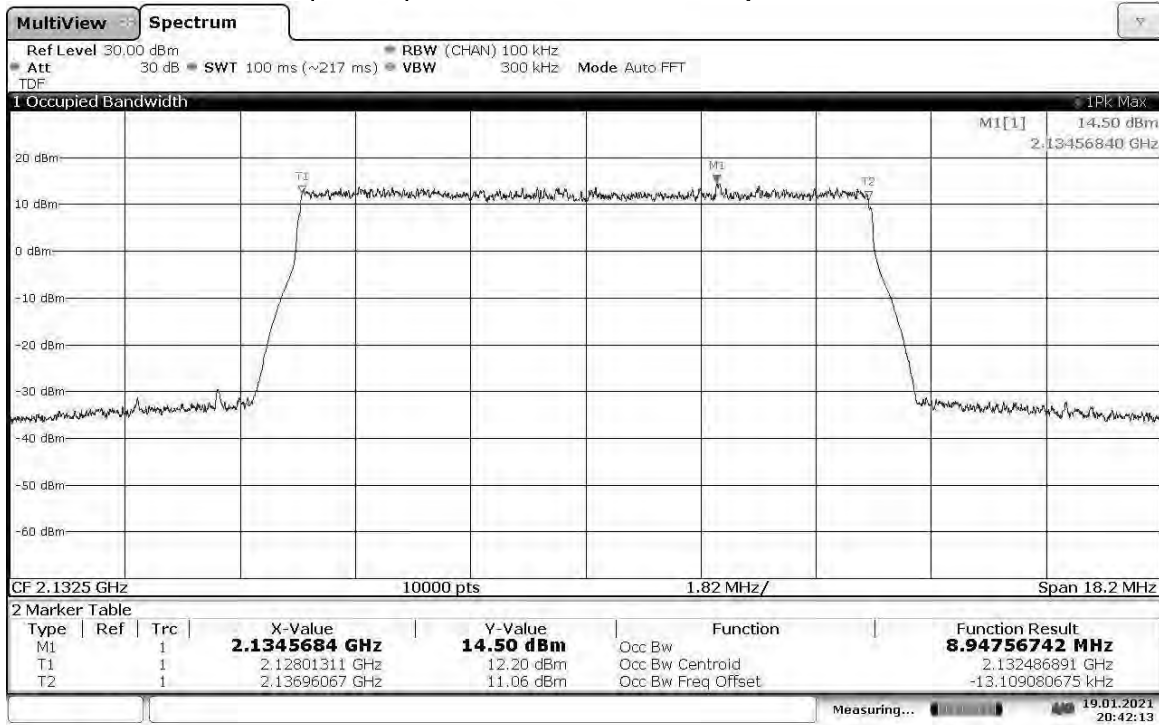
19:14:30 19.01.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel Occupied Bandwidth



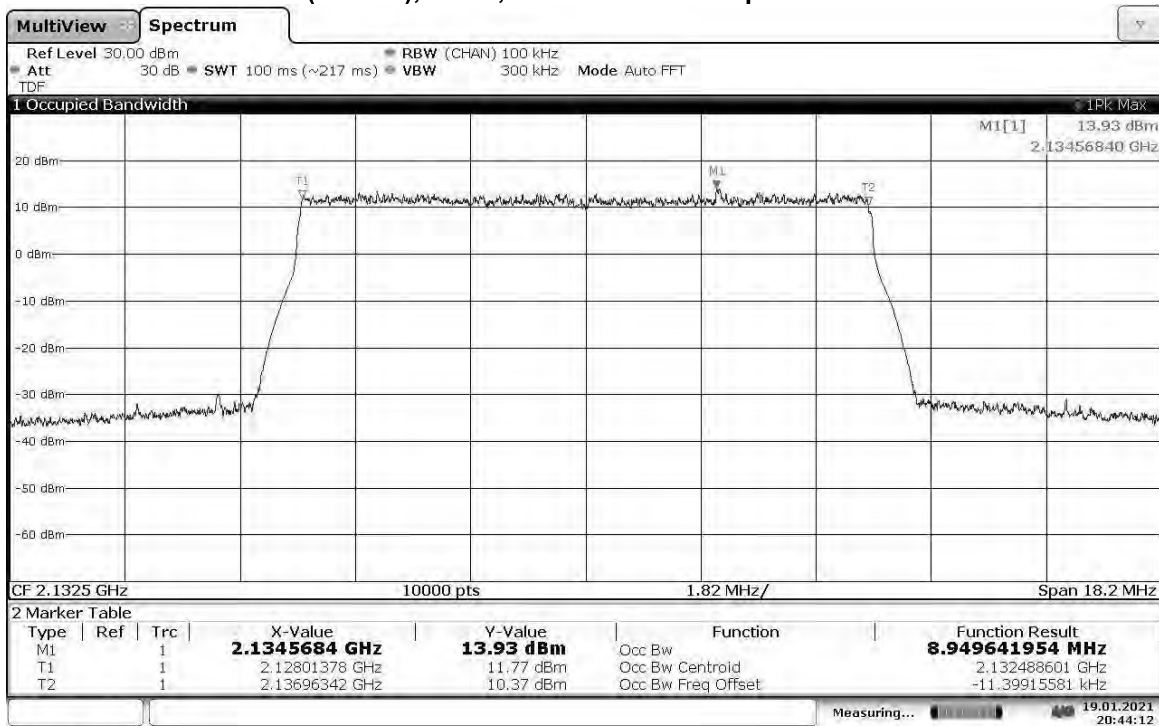
19:12:13 19.01.2021

**TM3.1a-256QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel Occupied Bandwidth**



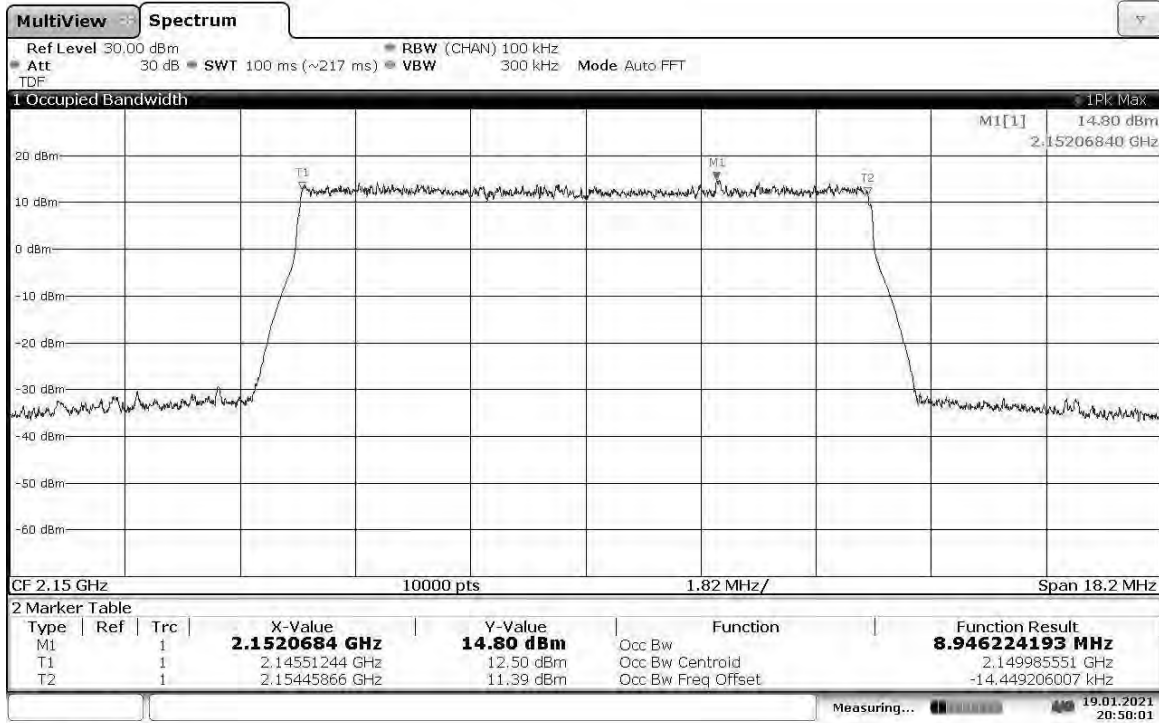
20:42:13 19.01.2021

**TM3.1a-256QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel Occupied Bandwidth**



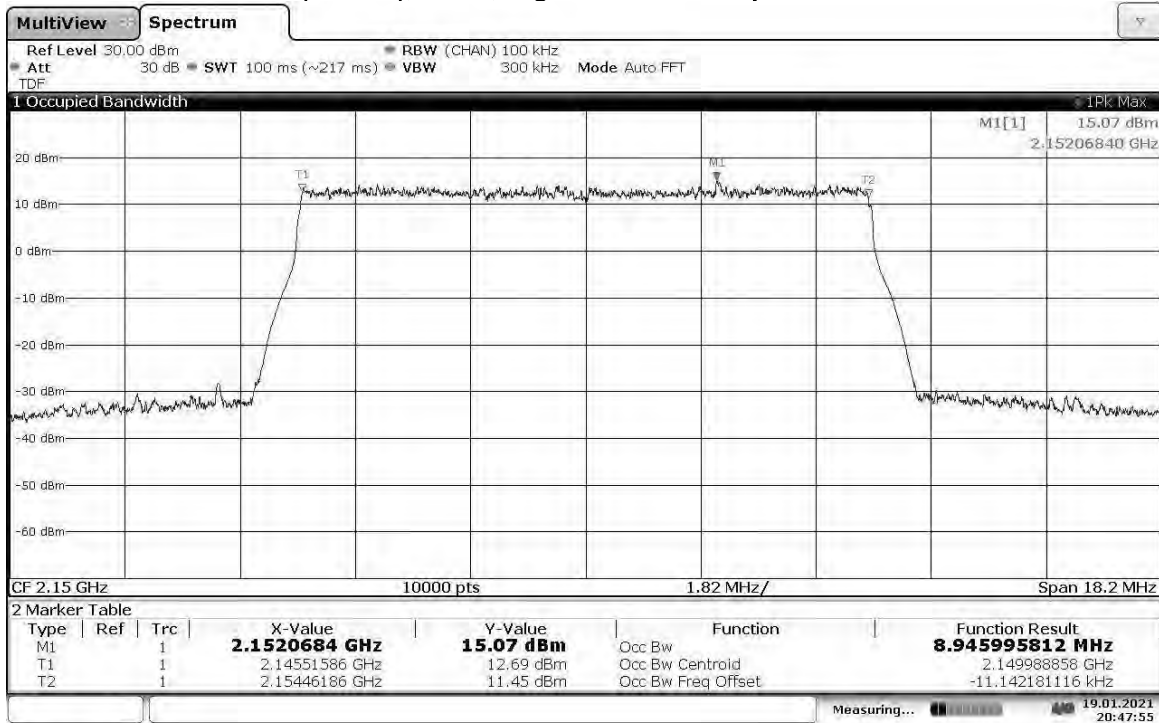
20:44:12 19.01.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel Occupied Bandwidth



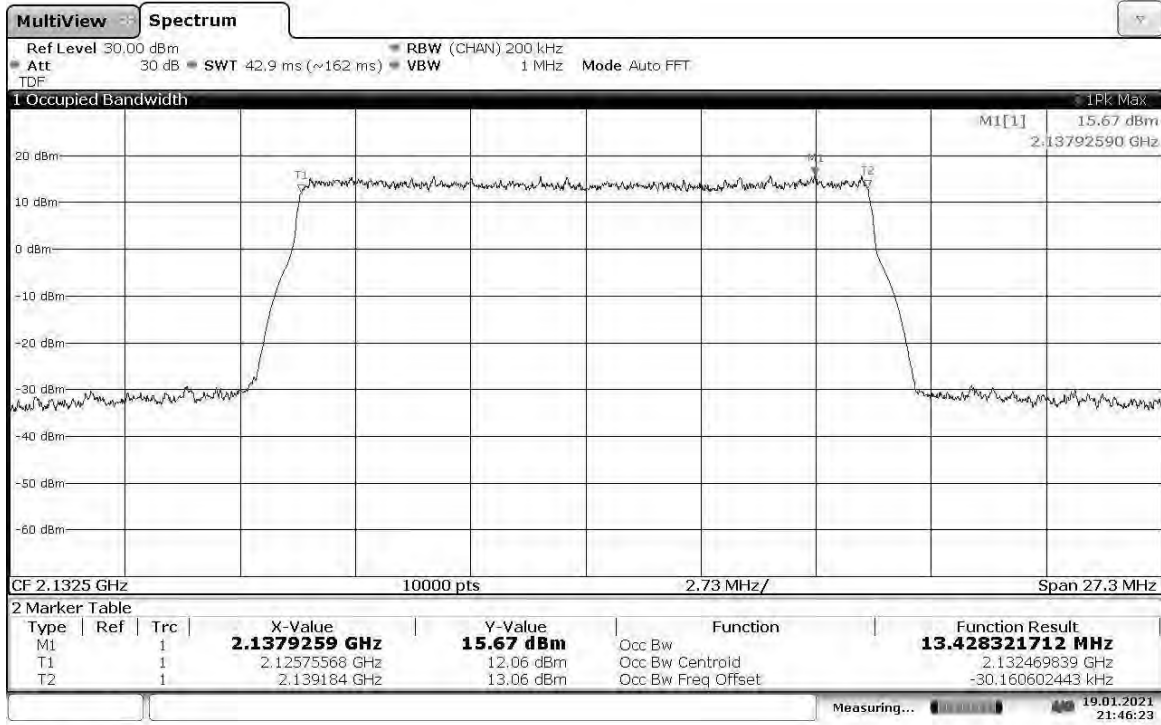
20:50:02 19.01.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel Occupied Bandwidth



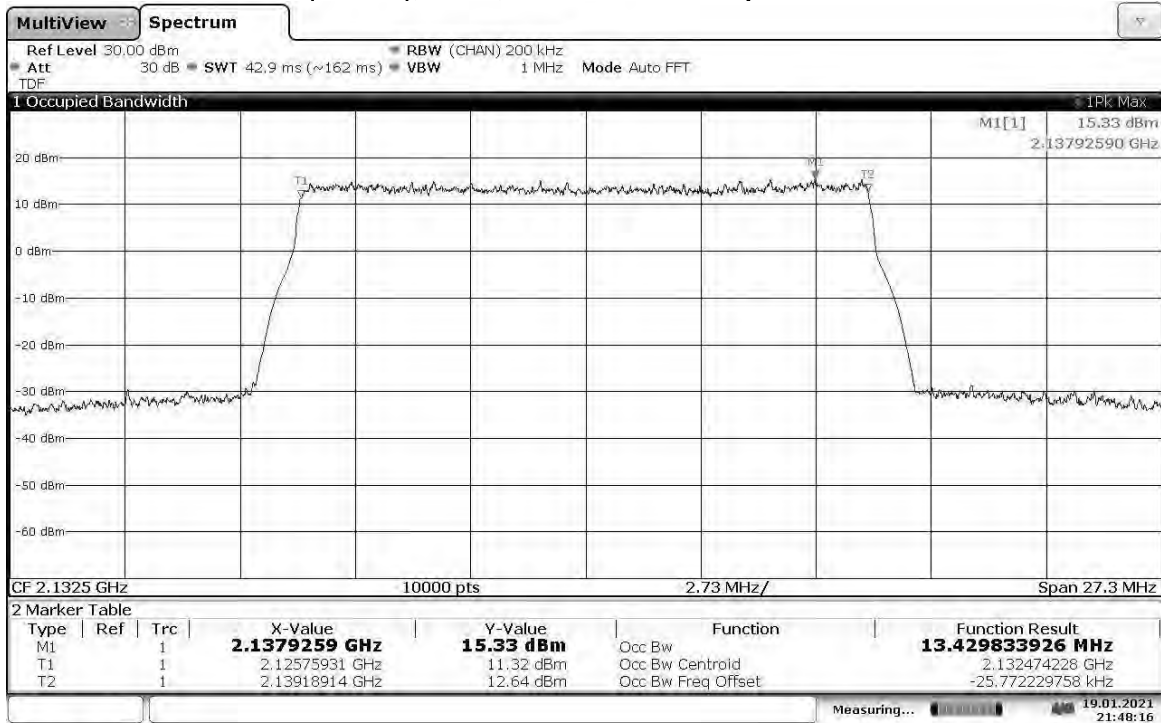
20:47:56 19.01.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel Occupied Bandwidth



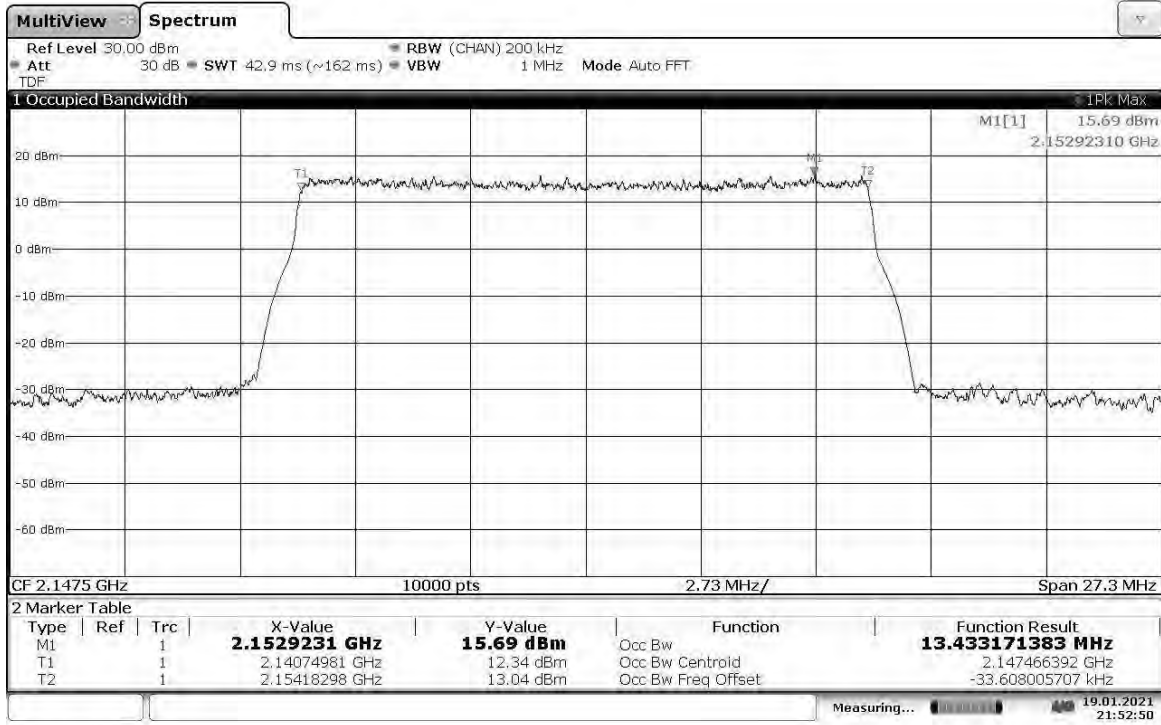
21:46:23 19.01.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel Occupied Bandwidth



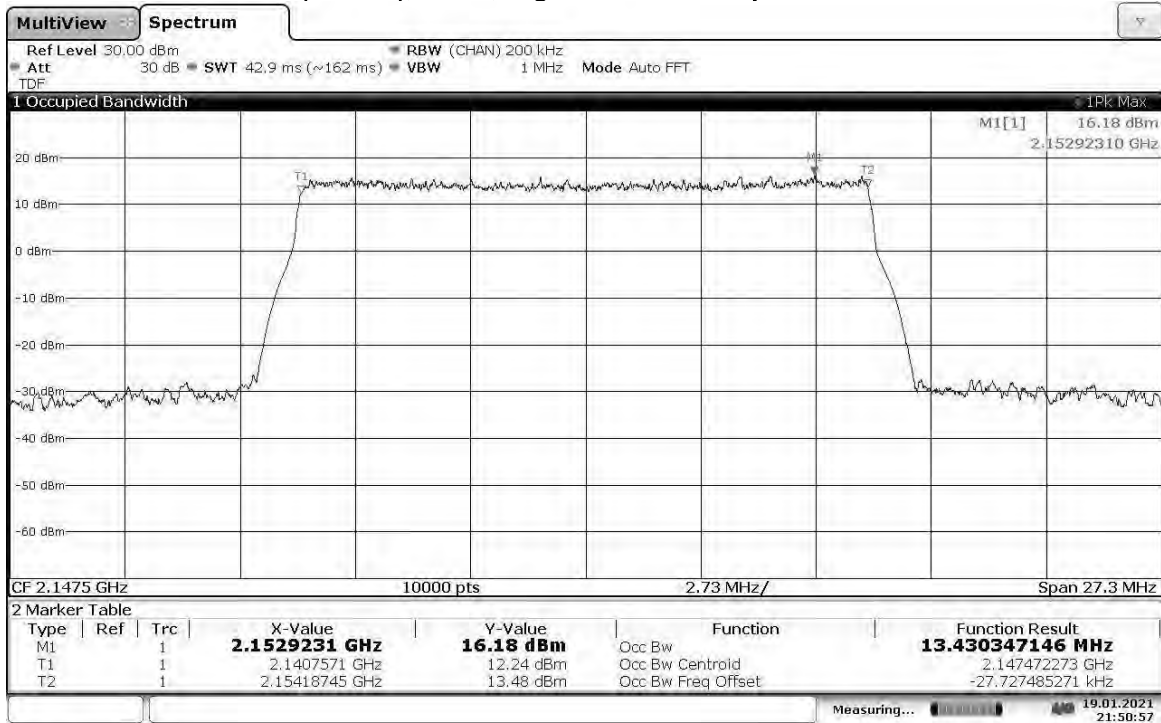
21:48:17 19.01.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel Occupied Bandwidth



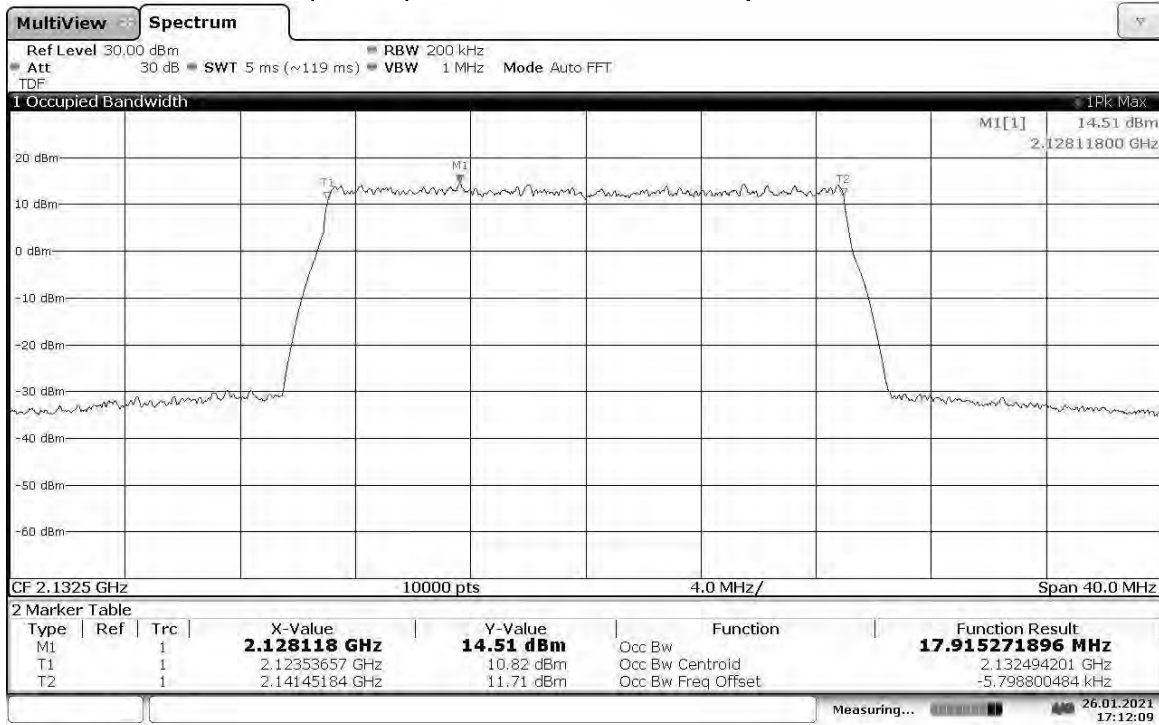
21:52:51 19.01.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel Occupied Bandwidth



21:50:57 19.01.2021

**TM3.1a-256QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel Occupied Bandwidth**



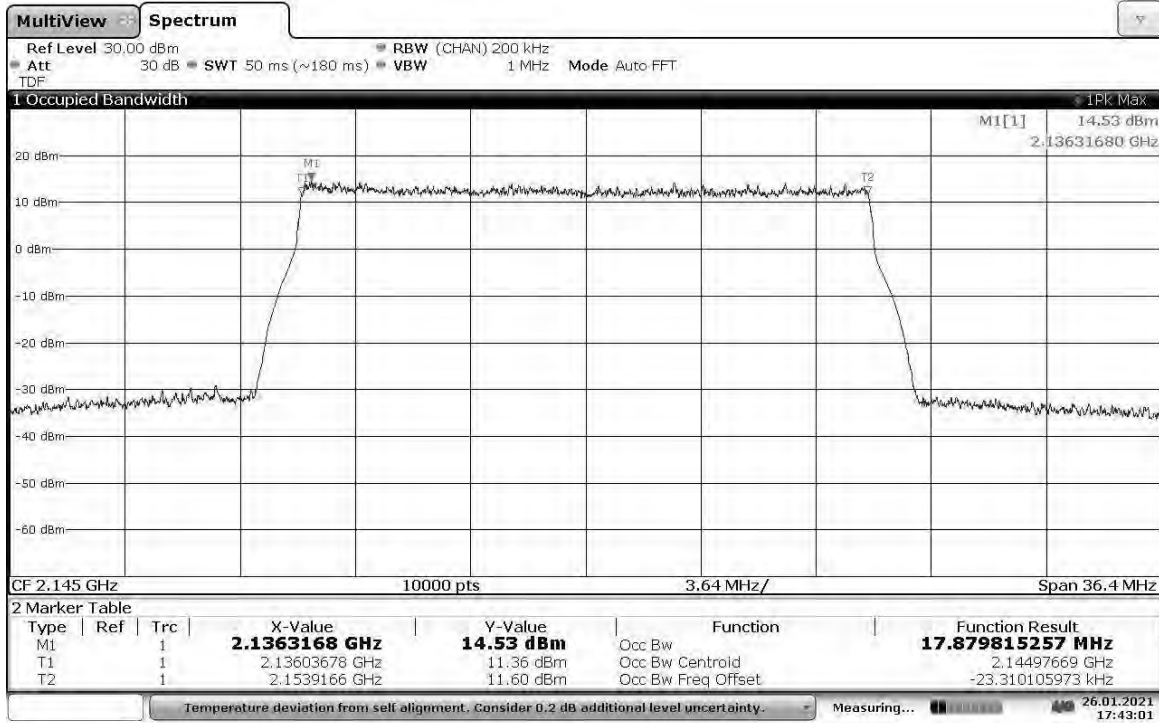
17:12:09 26.01.2021

**TM3.1a-256QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel Occupied Bandwidth**



17:27:14 26.01.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel Occupied Bandwidth



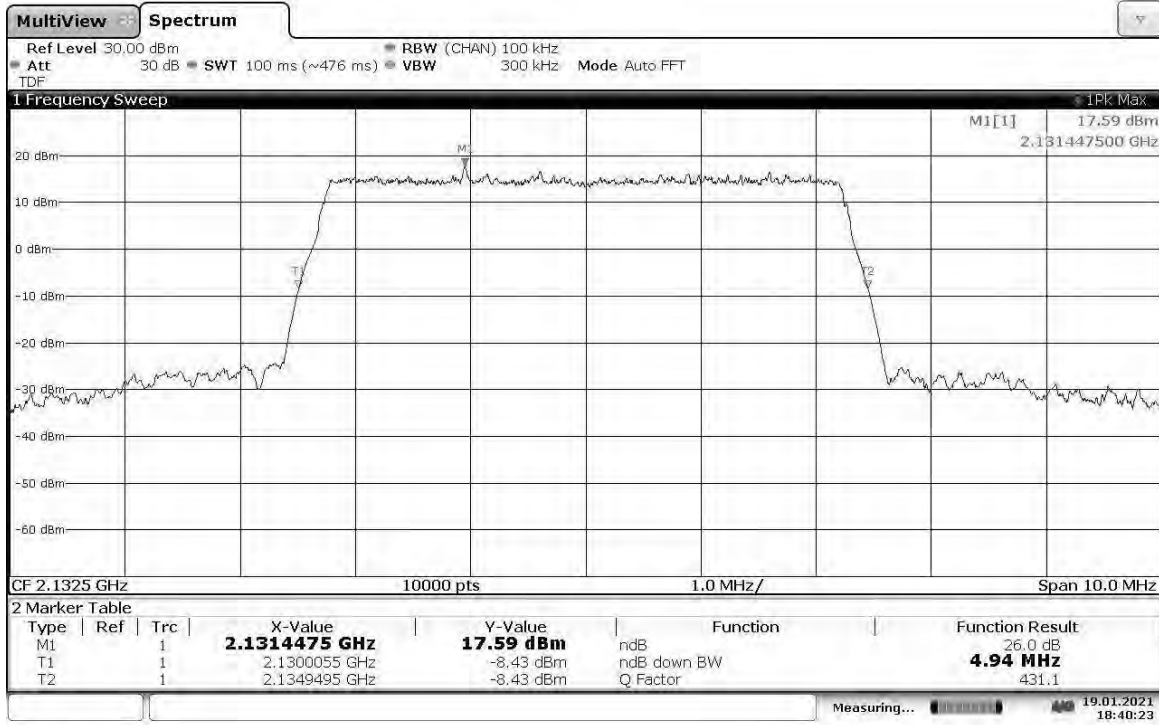
17:43:01 26.01.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel Occupied Bandwidth



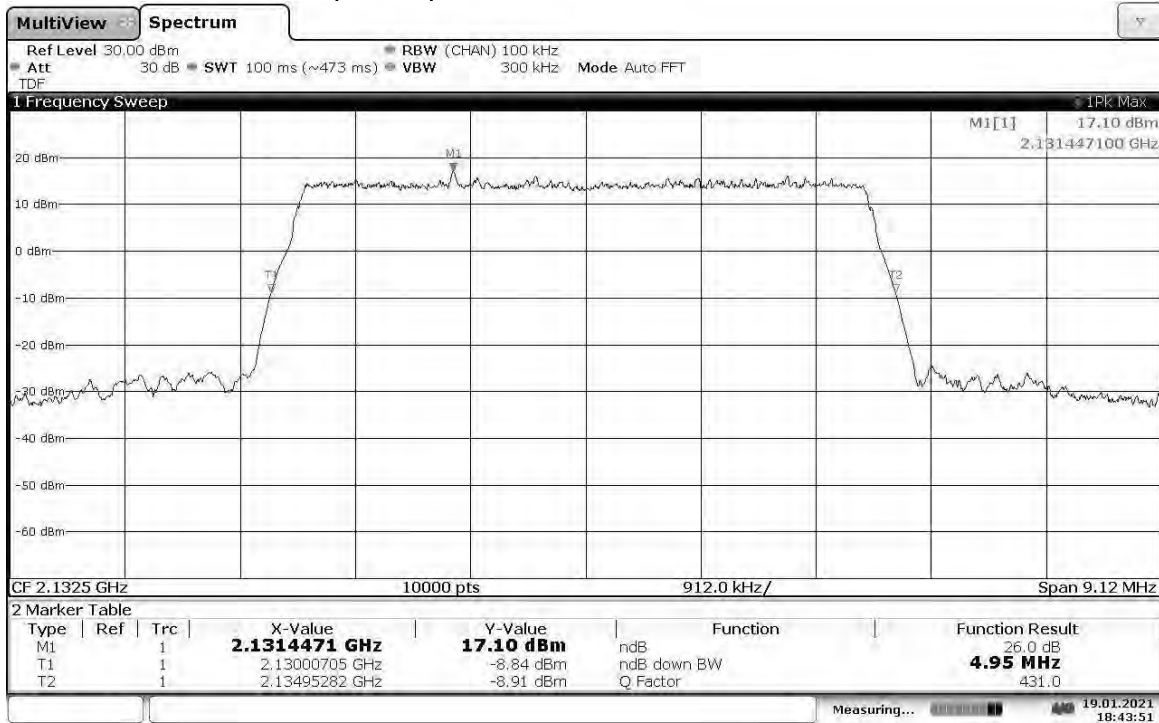
17:34:10 26.01.2021

TM1.1-QPSK_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



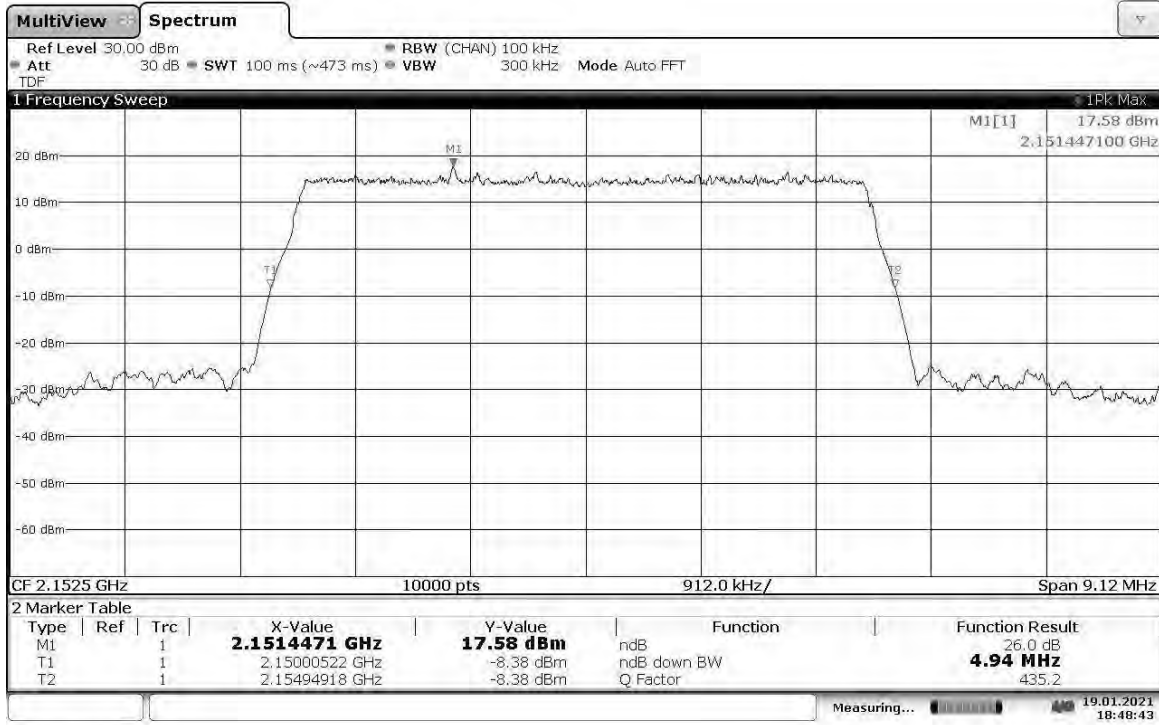
18:40:23 19.01.2021

TM1.1-QPSK_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



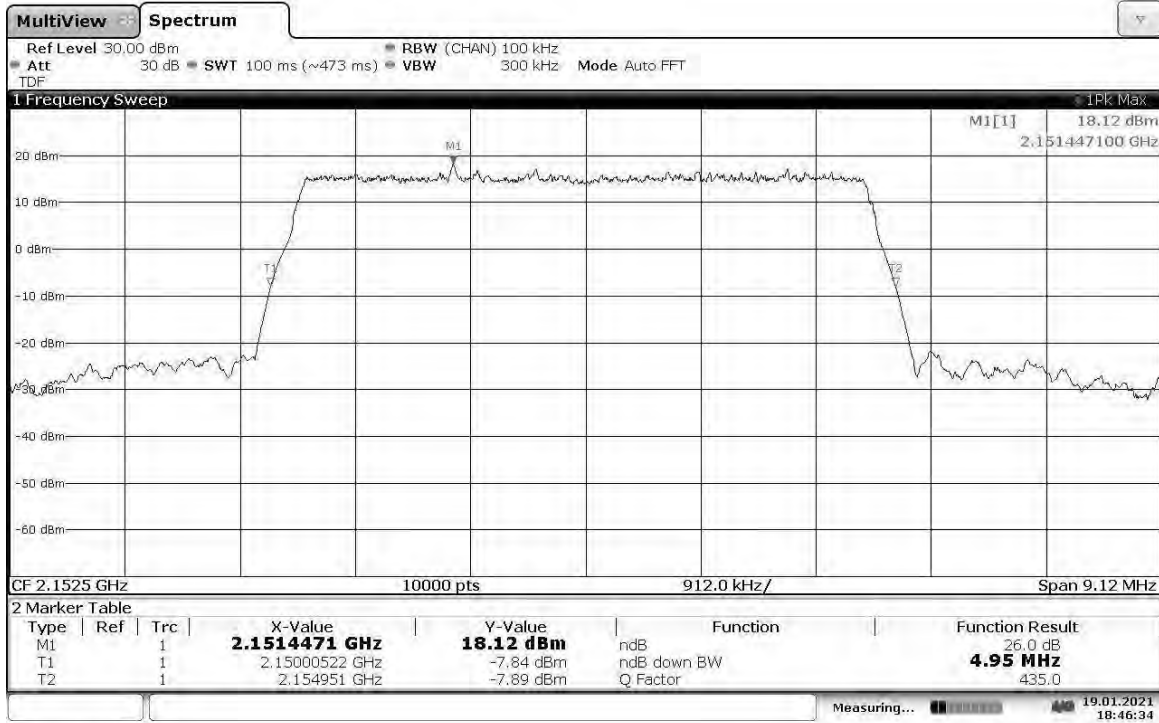
18:43:51 19.01.2021

TM1.1-QPSK_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



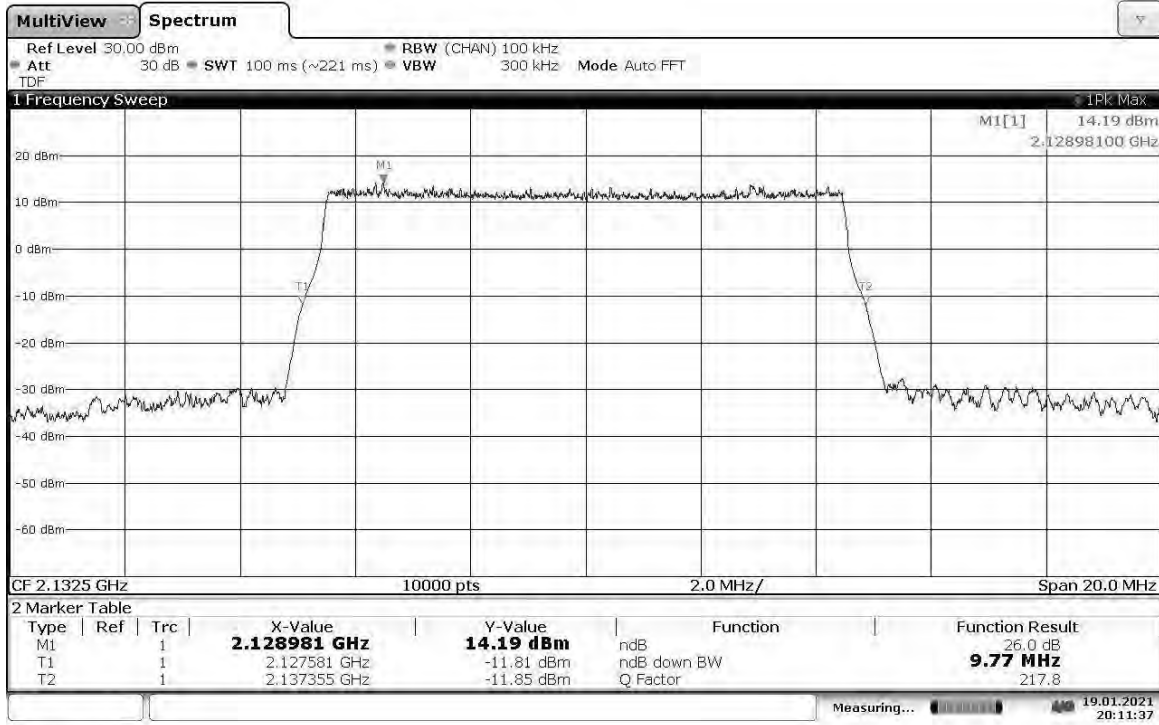
18:48:43 19.01.2021

TM1.1-QPSK_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



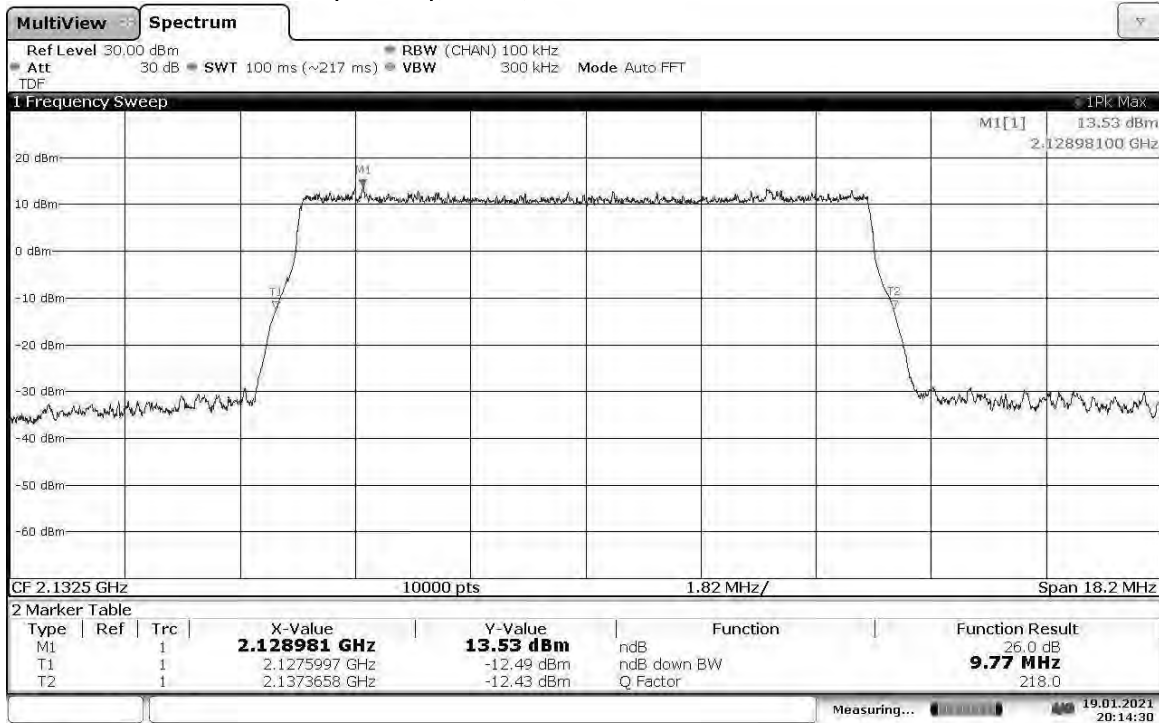
18:46:34 19.01.2021

TM1.1-QPSK_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



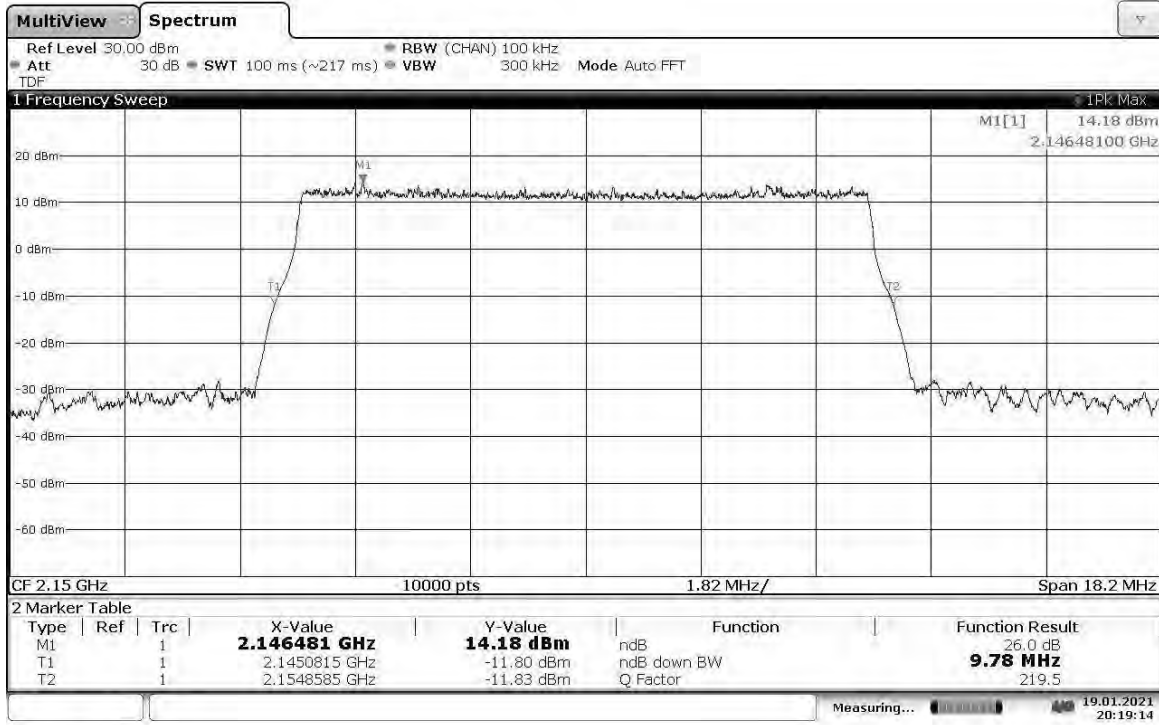
20:11:38 19.01.2021

TM1.1-QPSK_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



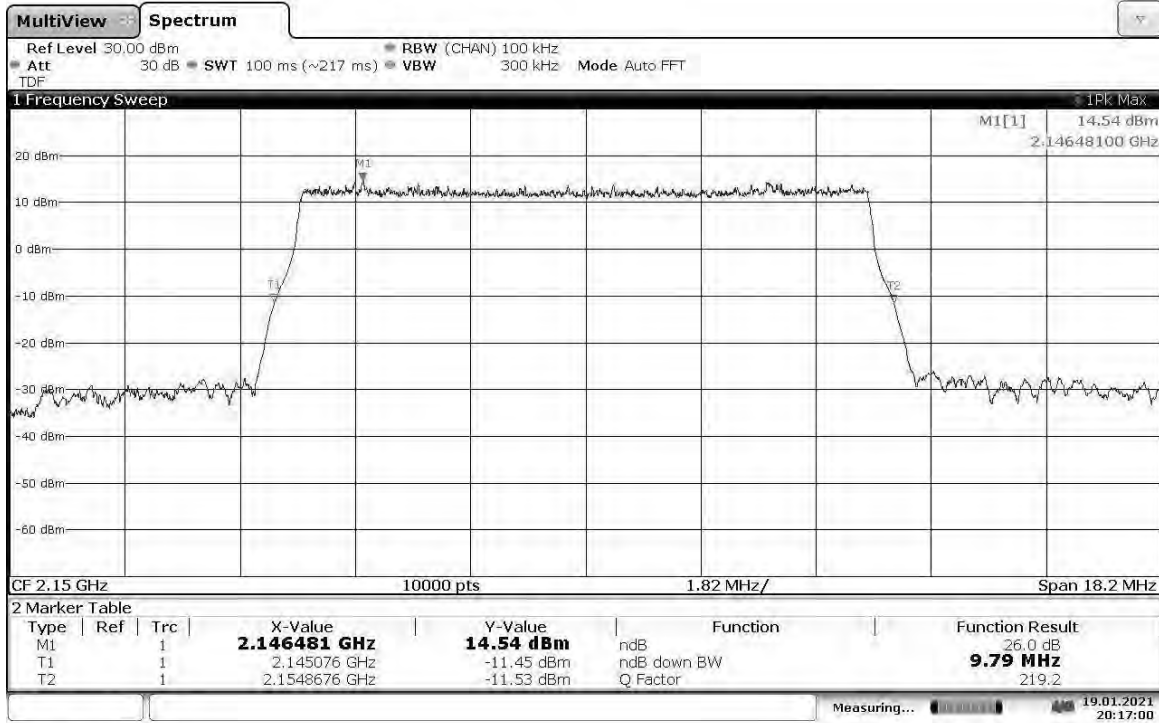
20:14:30 19.01.2021

TM1.1-QPSK_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



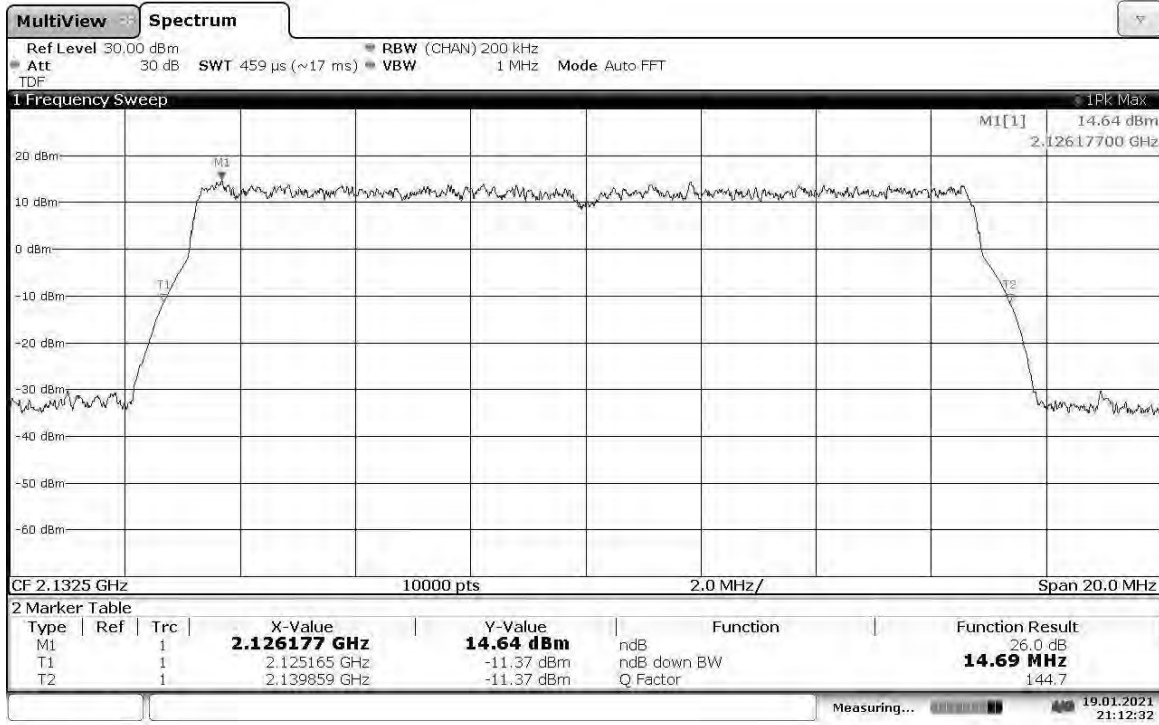
20:19:15 19.01.2021

TM1.1-QPSK_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



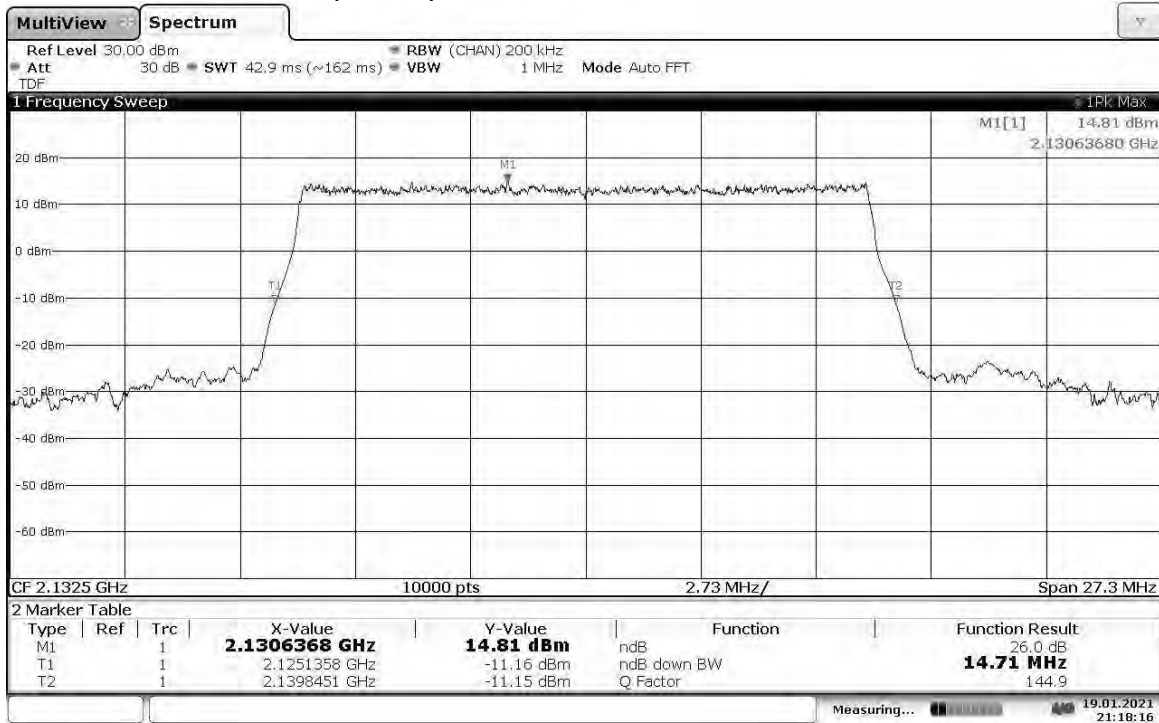
20:17:00 19.01.2021

TM1.1-QPSK_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



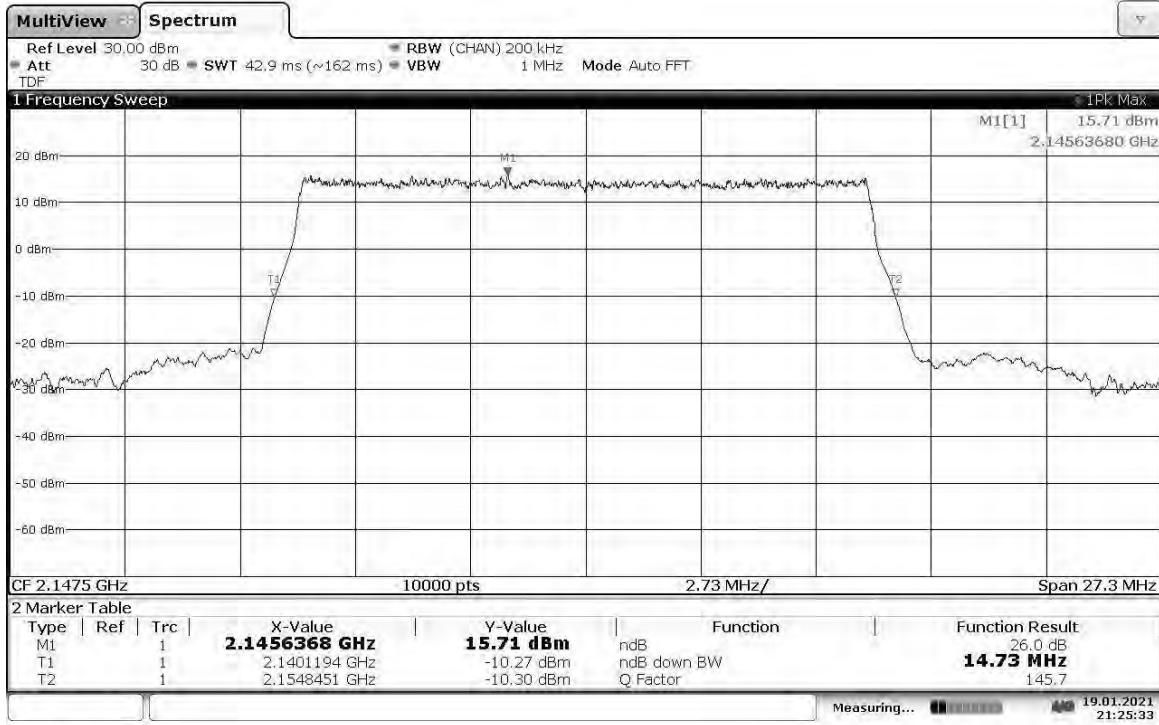
21:12:32 19.01.2021

TM1.1-QPSK_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



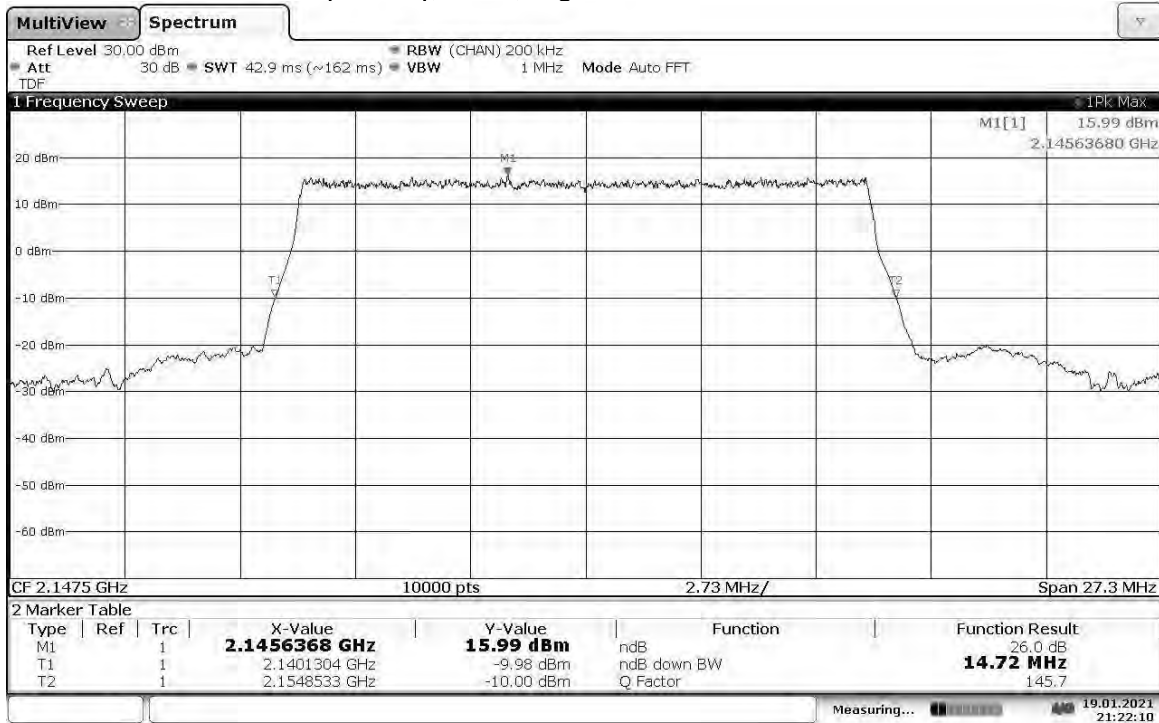
21:18:16 19.01.2021

TM1.1-QPSK_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



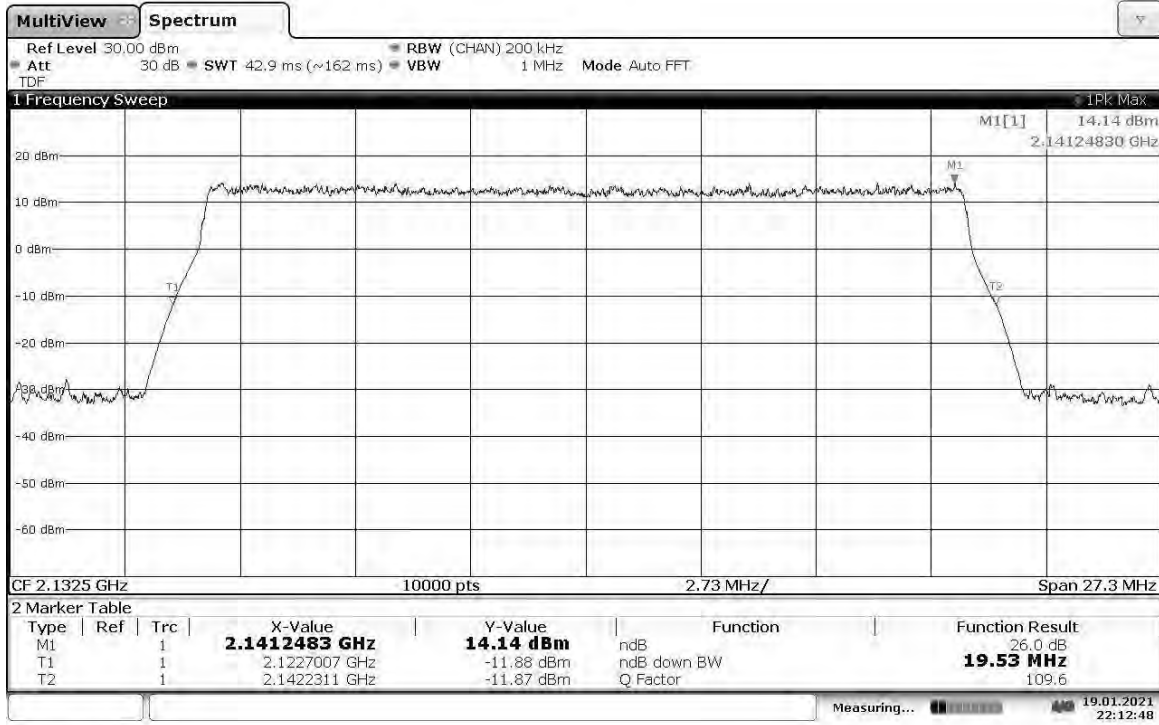
21:25:33 19.01.2021

TM1.1-QPSK_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



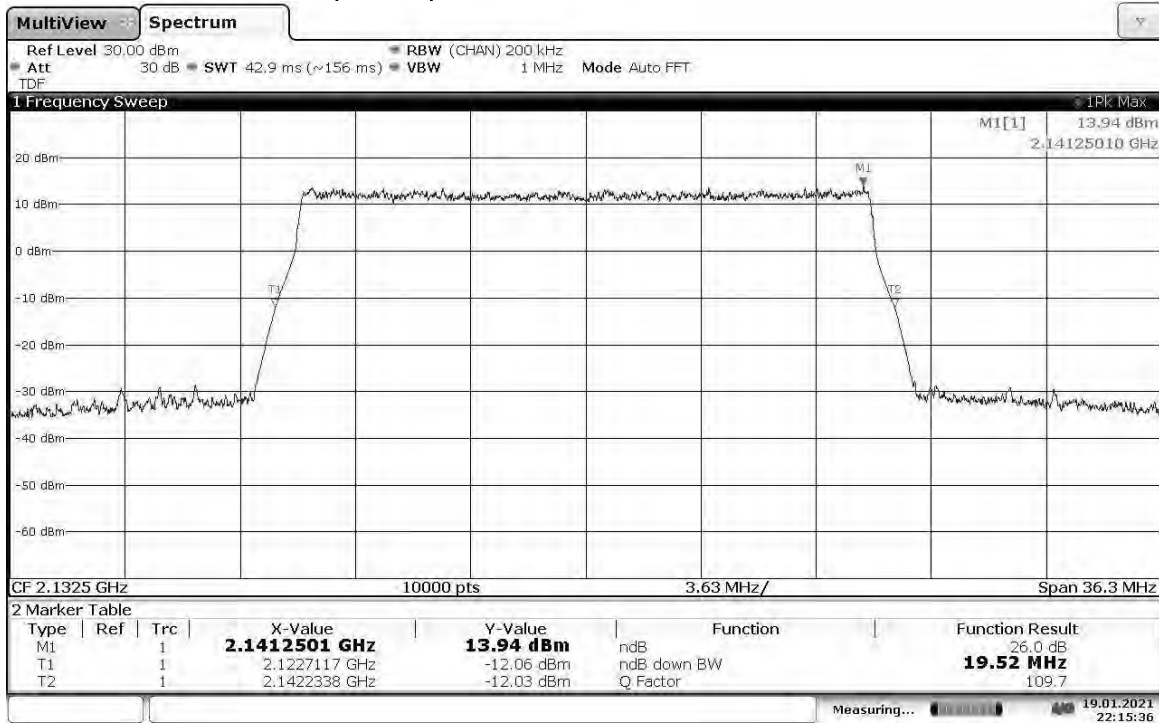
21:22:11 19.01.2021

TM1.1-QPSK_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



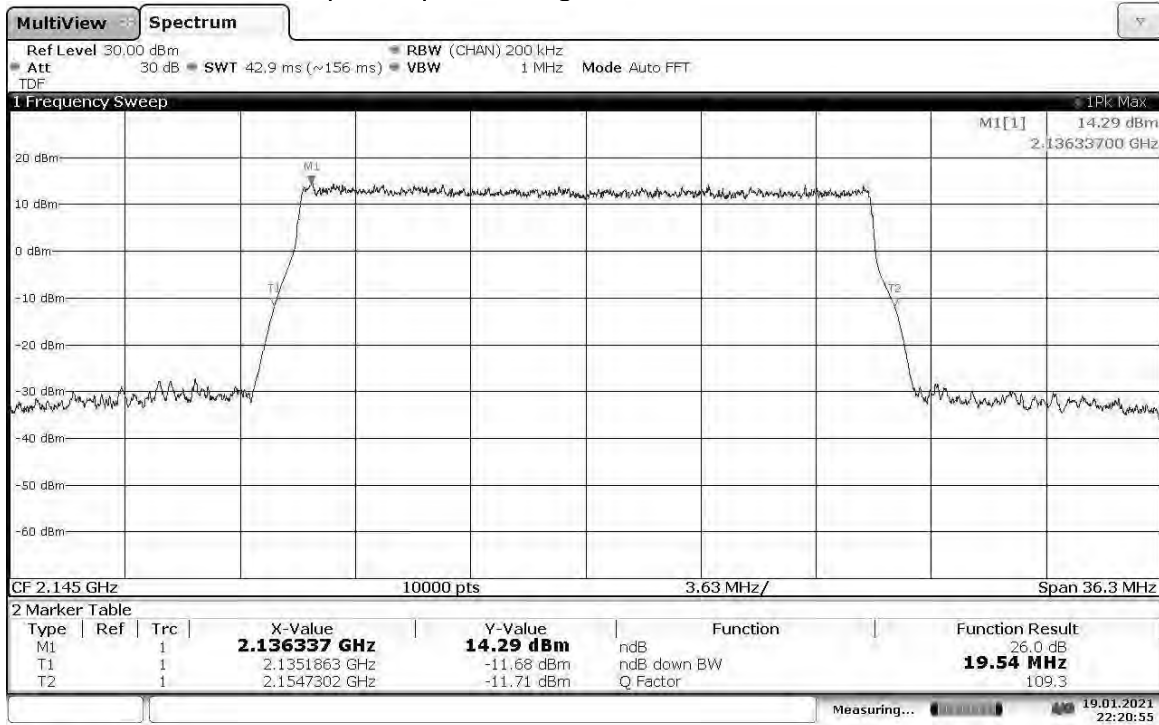
22:12:48 19.01.2021

TM1.1-QPSK_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



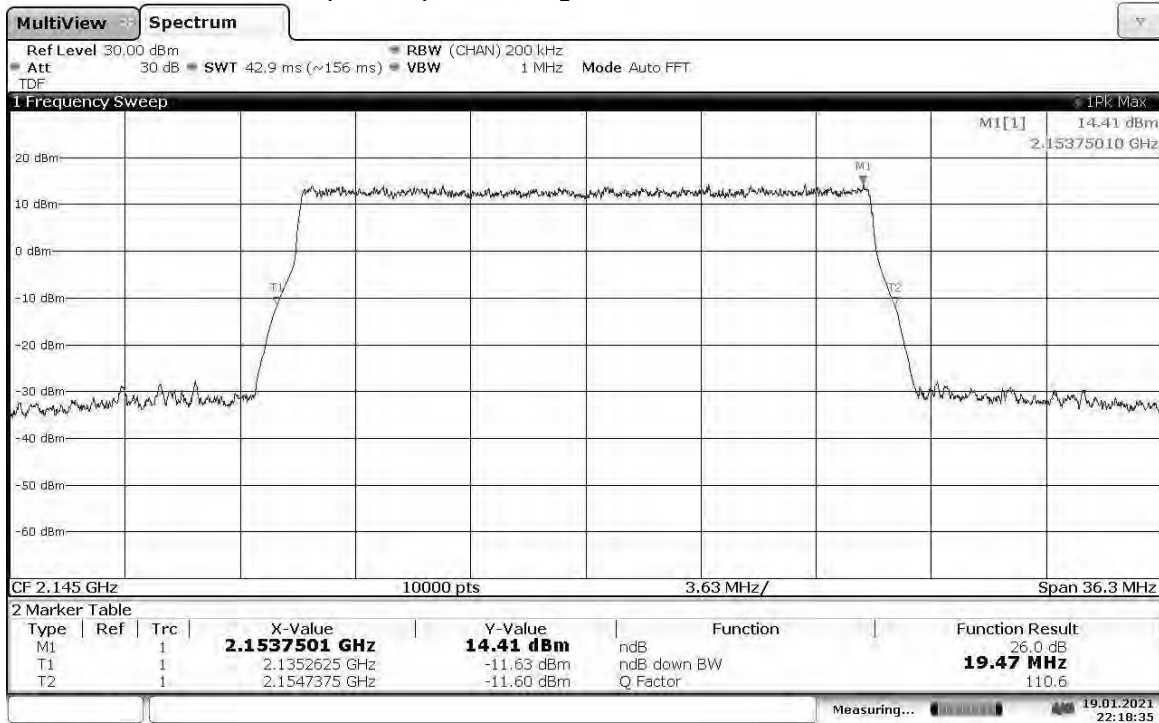
22:15:37 19.01.2021

TM1.1-QPSK_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



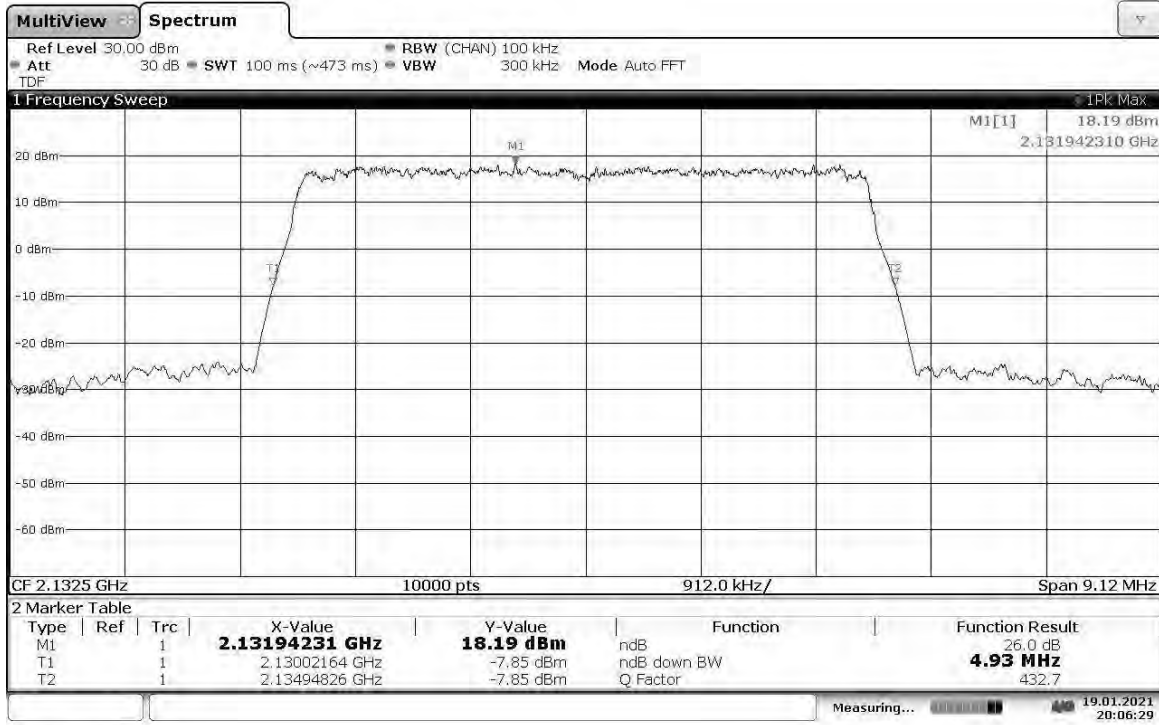
22:20:55 19.01.2021

TM1.1-QPSK_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



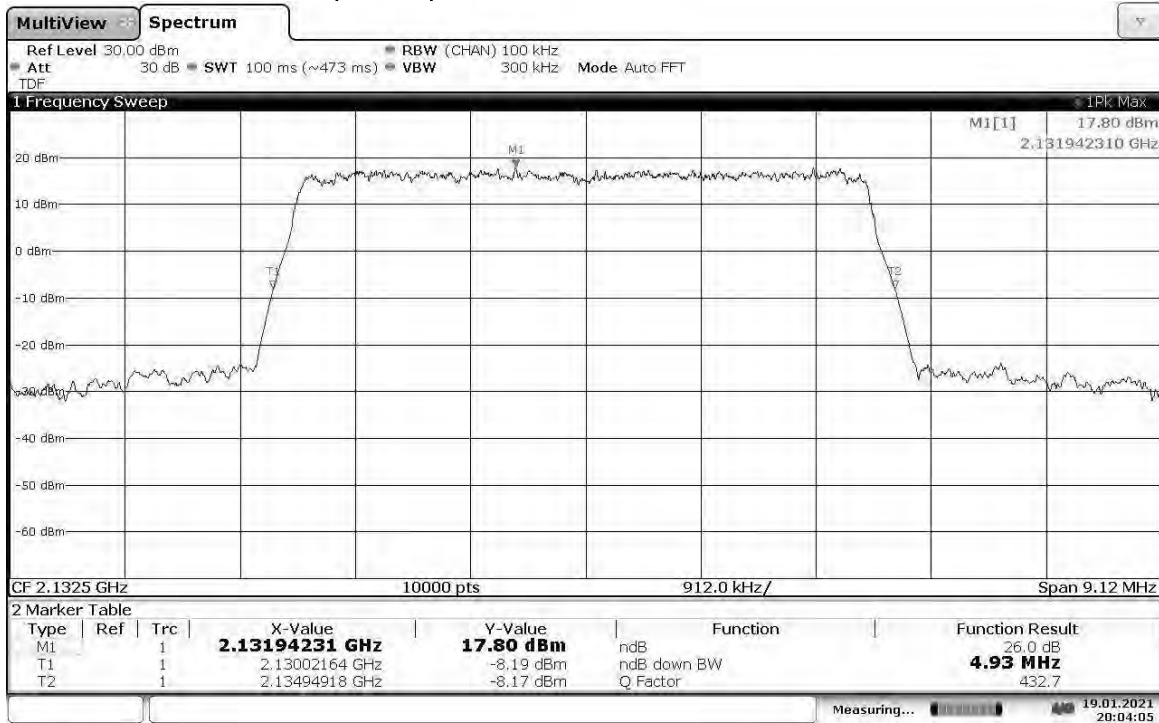
22:18:35 19.01.2021

TM3.2-16QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



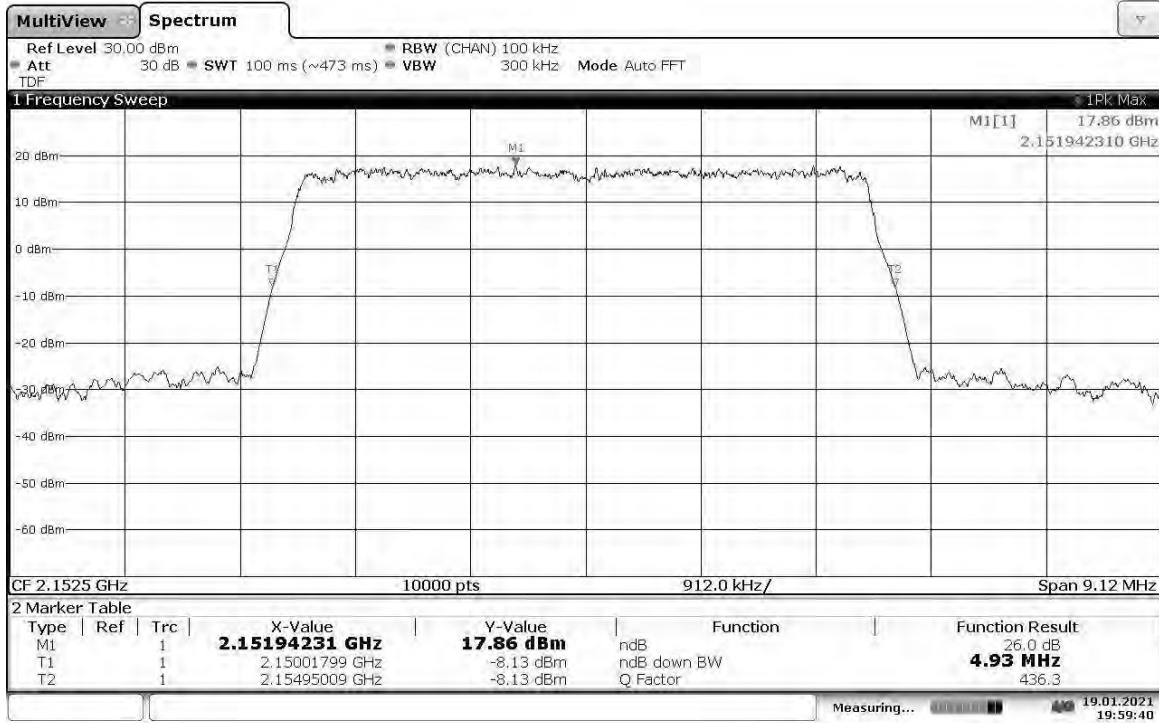
20:06:29 19.01.2021

TM3.2-16QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



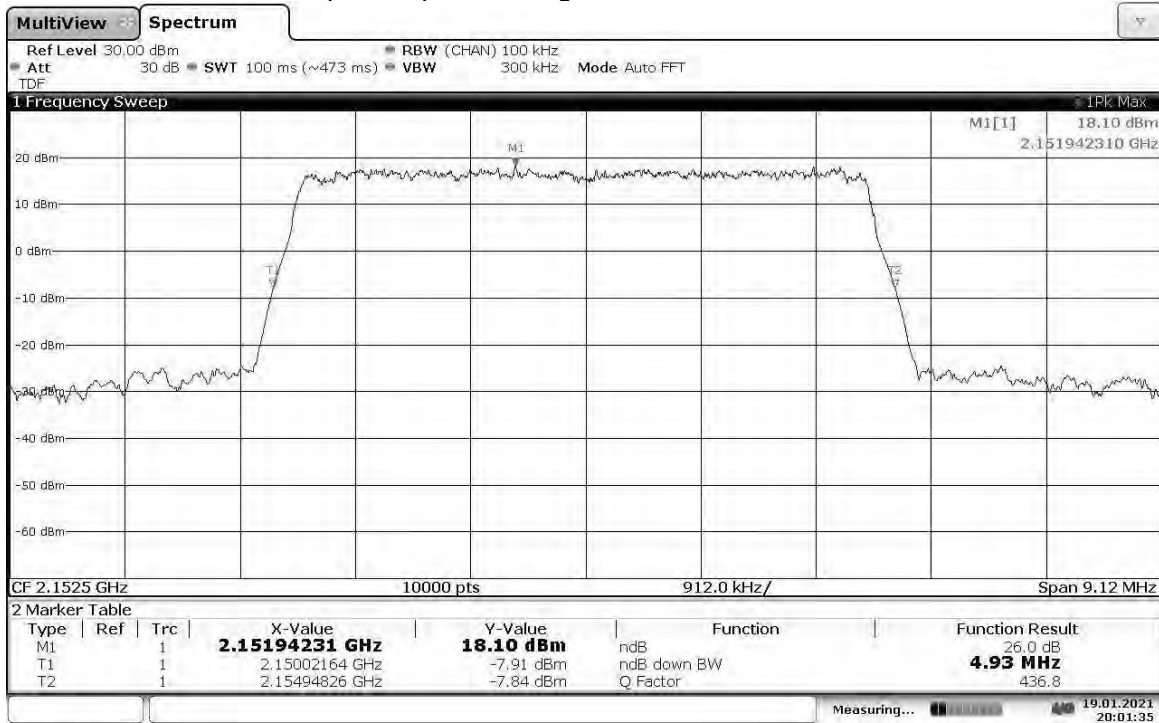
20:04:05 19.01.2021

TM3.2-16QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



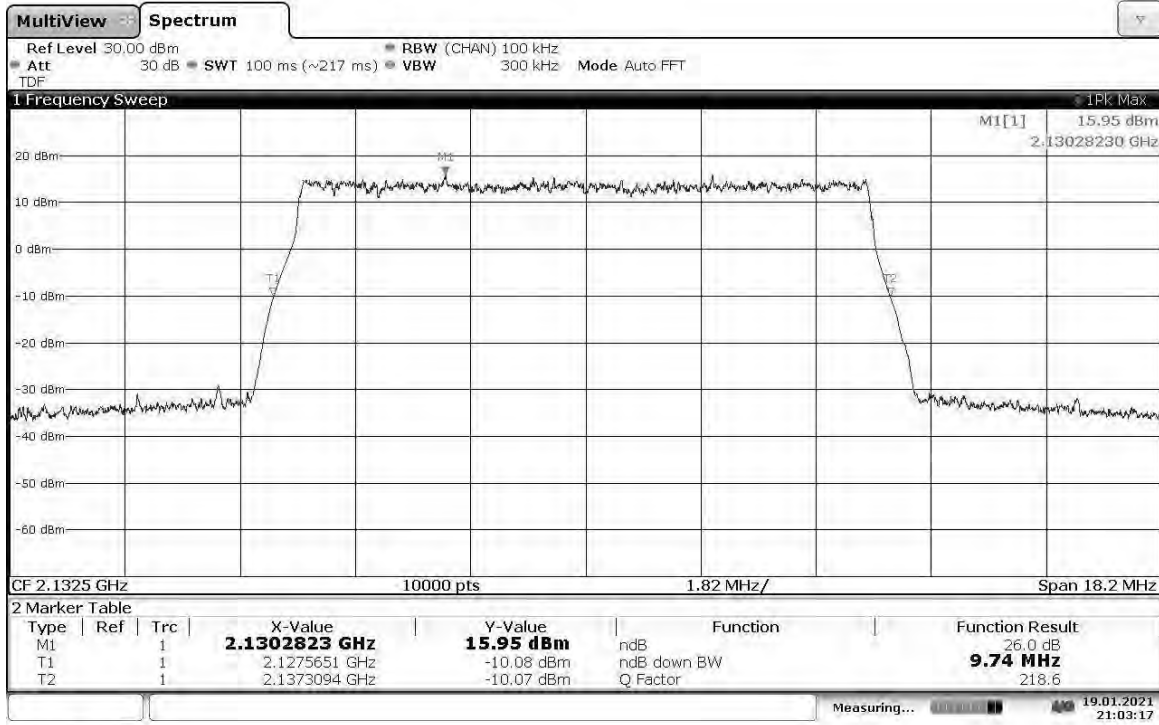
19:59:41 19.01.2021

TM3.2-16QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



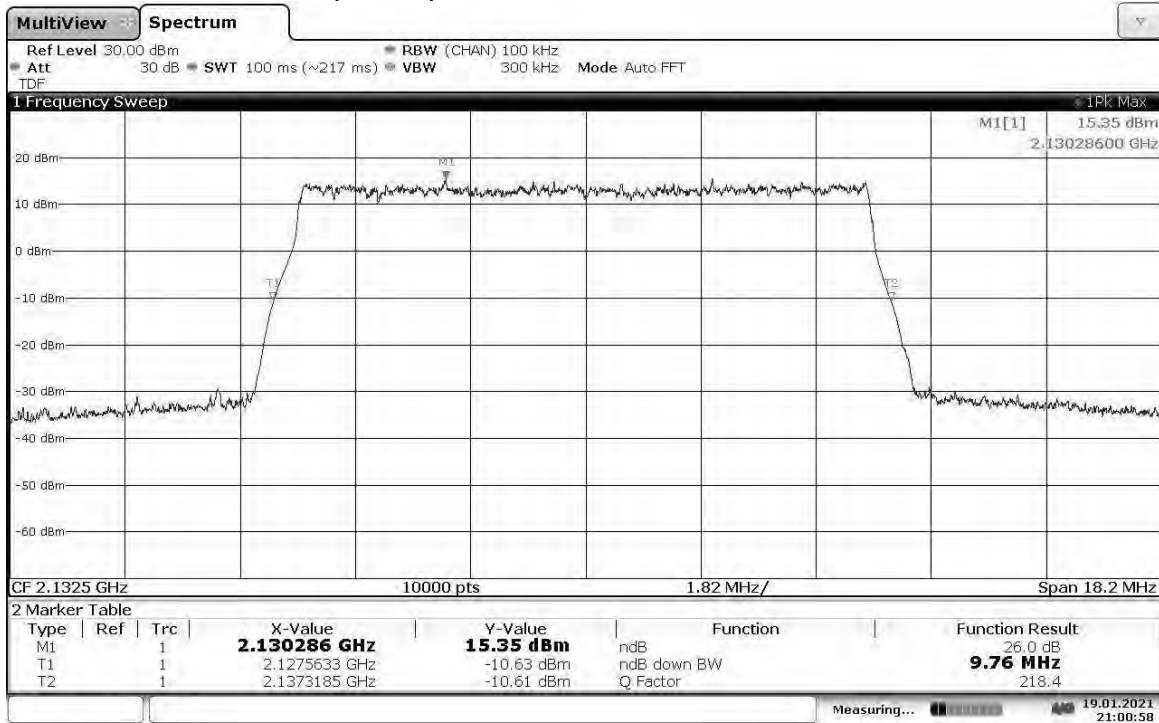
20:01:35 19.01.2021

TM3.2-16QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



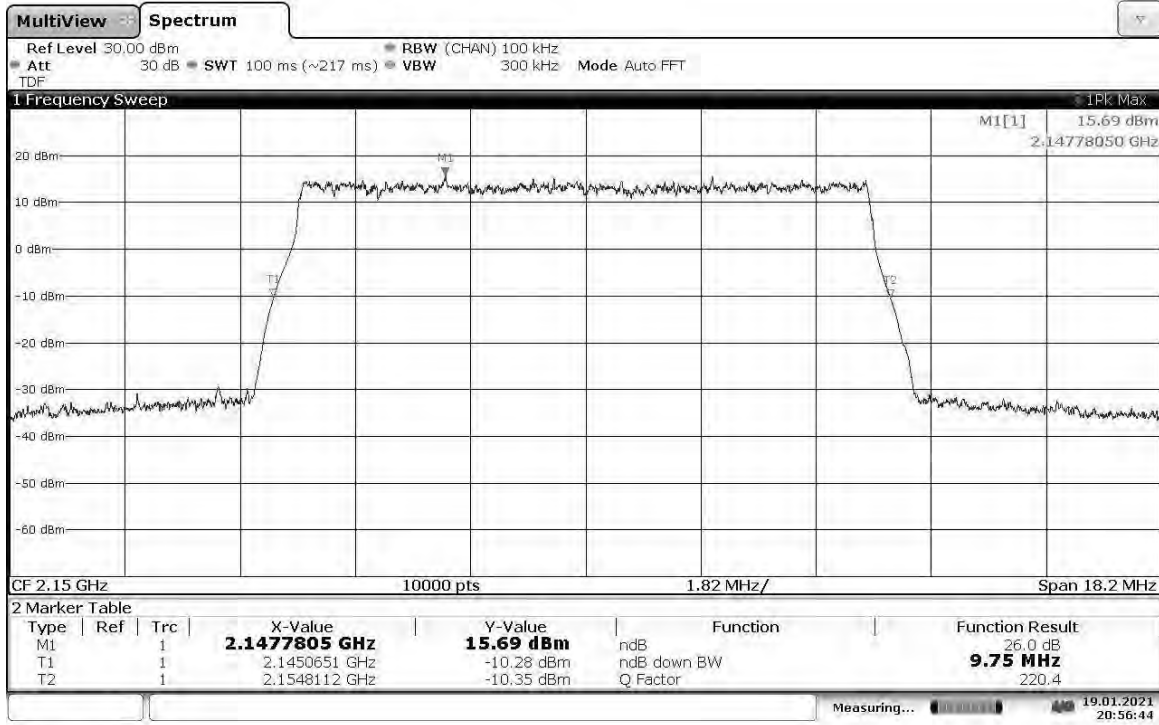
21:03:17 19.01.2021

TM3.2-16QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



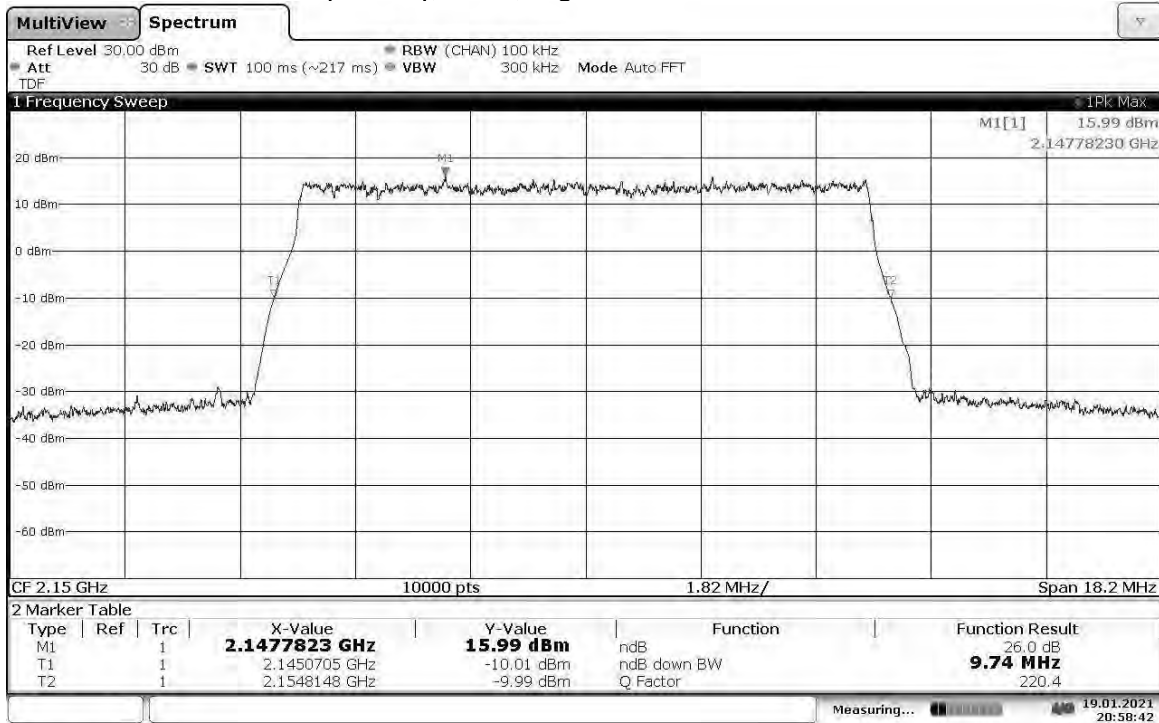
21:00:59 19.01.2021

TM3.2-16QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



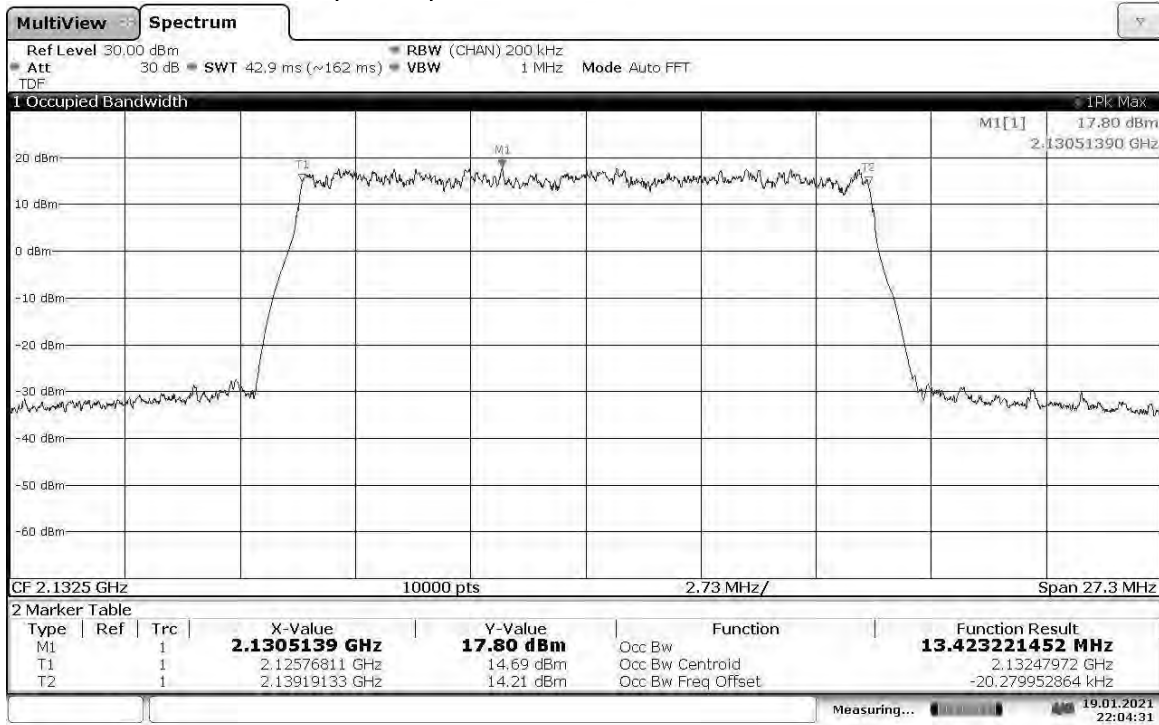
20:56:44 19.01.2021

TM3.2-16QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



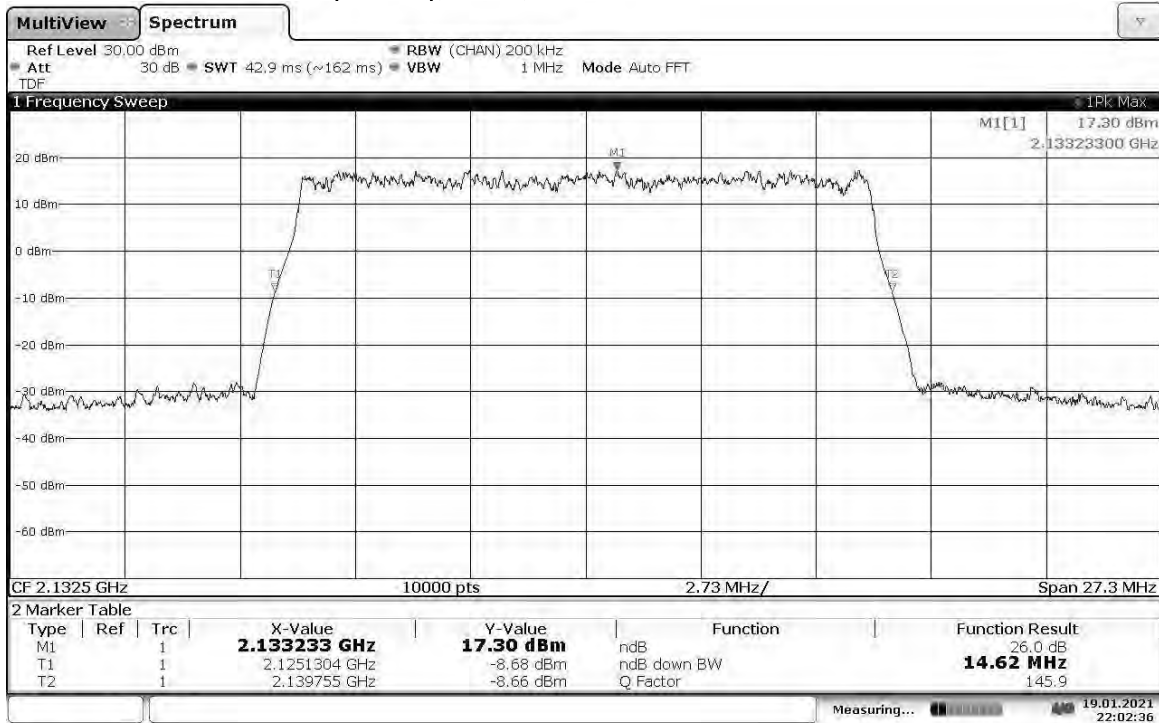
20:58:42 19.01.2021

**TM3.2-16QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth**



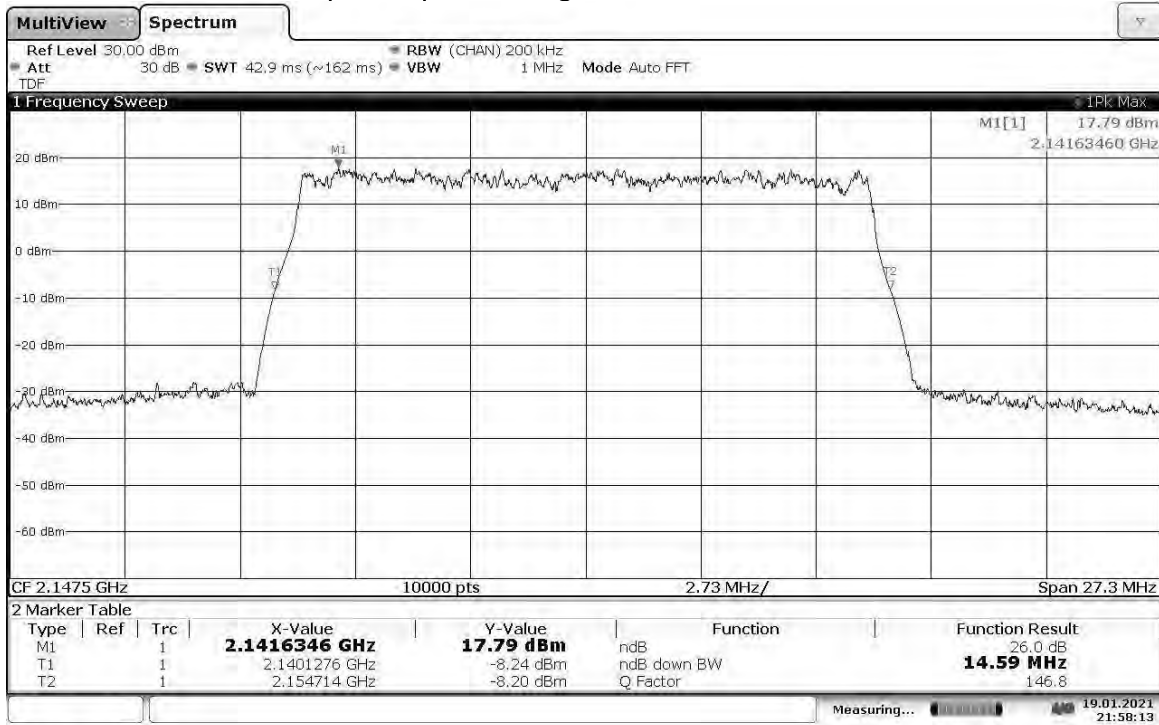
22:04:31 19.01.2021

**TM3.2-16QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth**



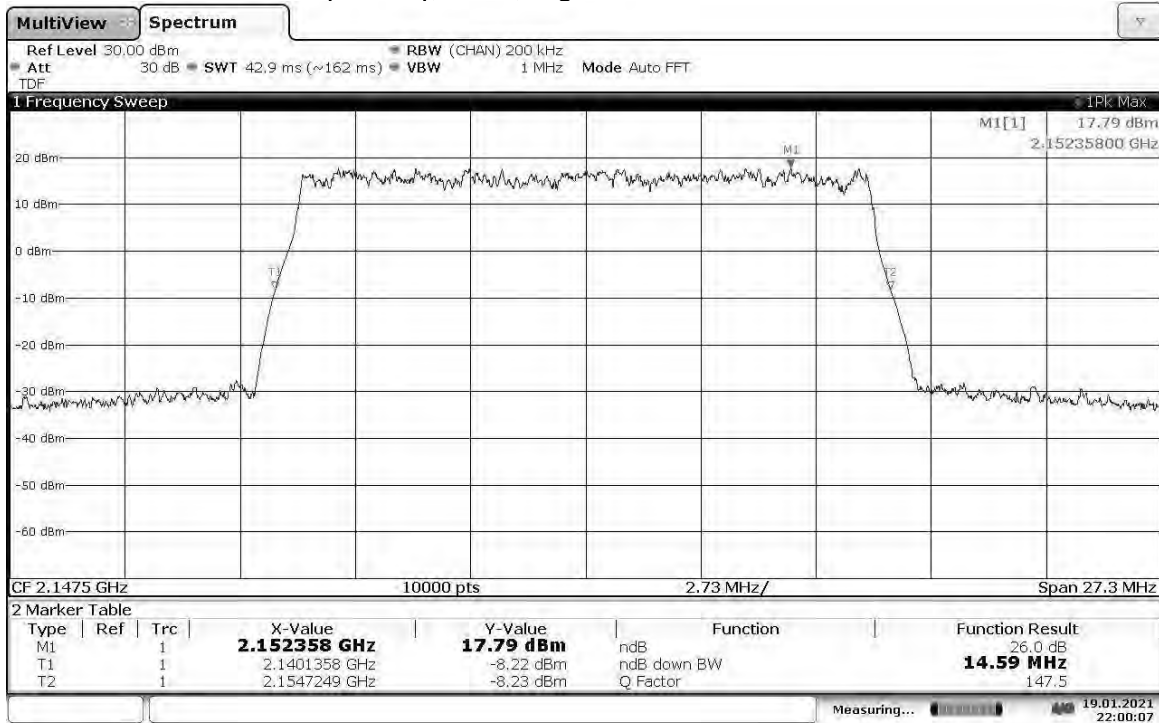
22:02:36 19.01.2021

**TM3.2-16QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth**



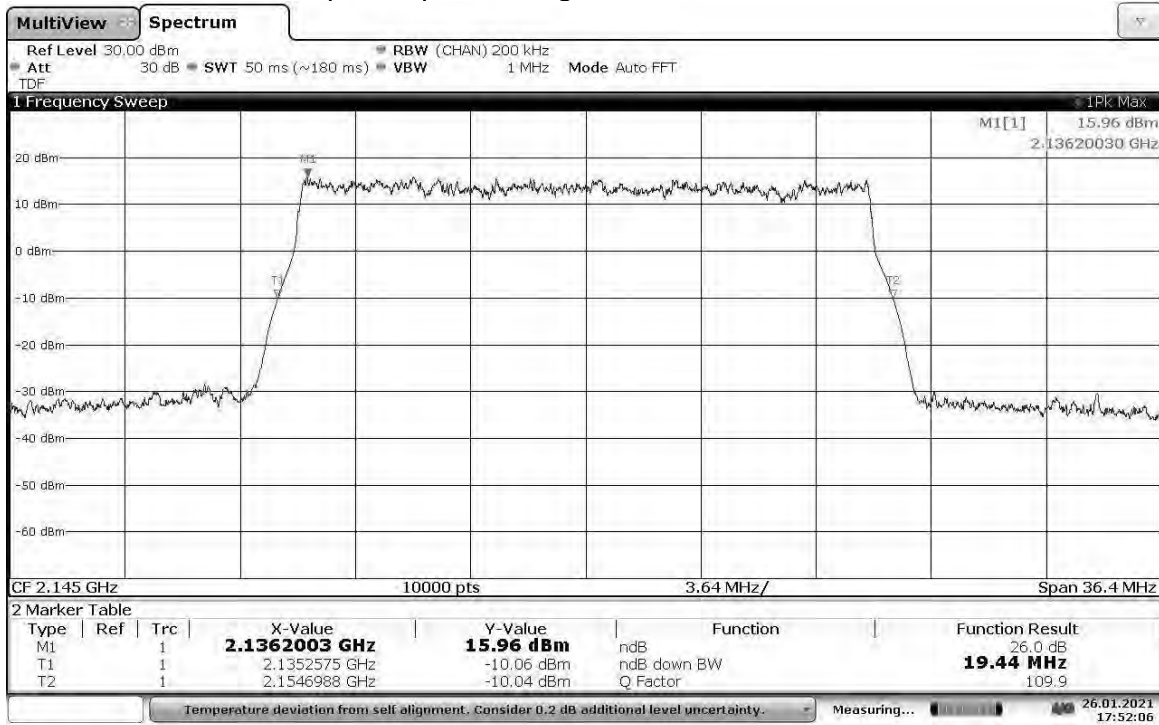
21:58:13 19.01.2021

**TM3.2-16QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth**



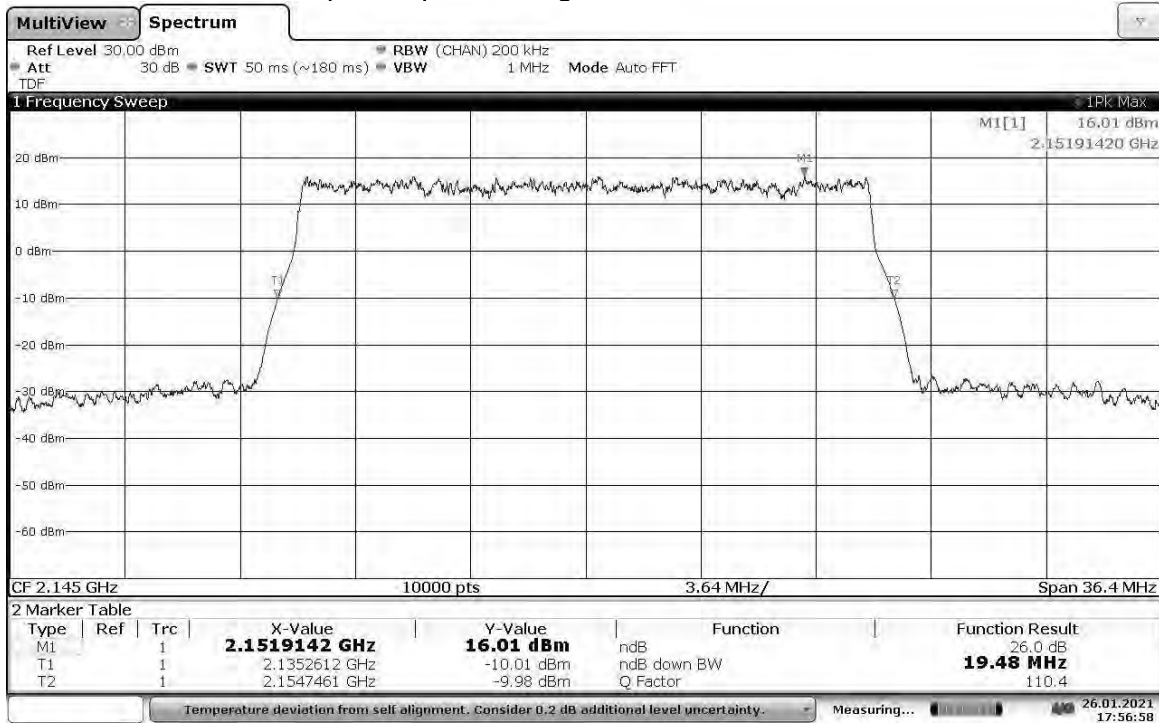
22:00:07 19.01.2021

**TM3.2-16QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth**



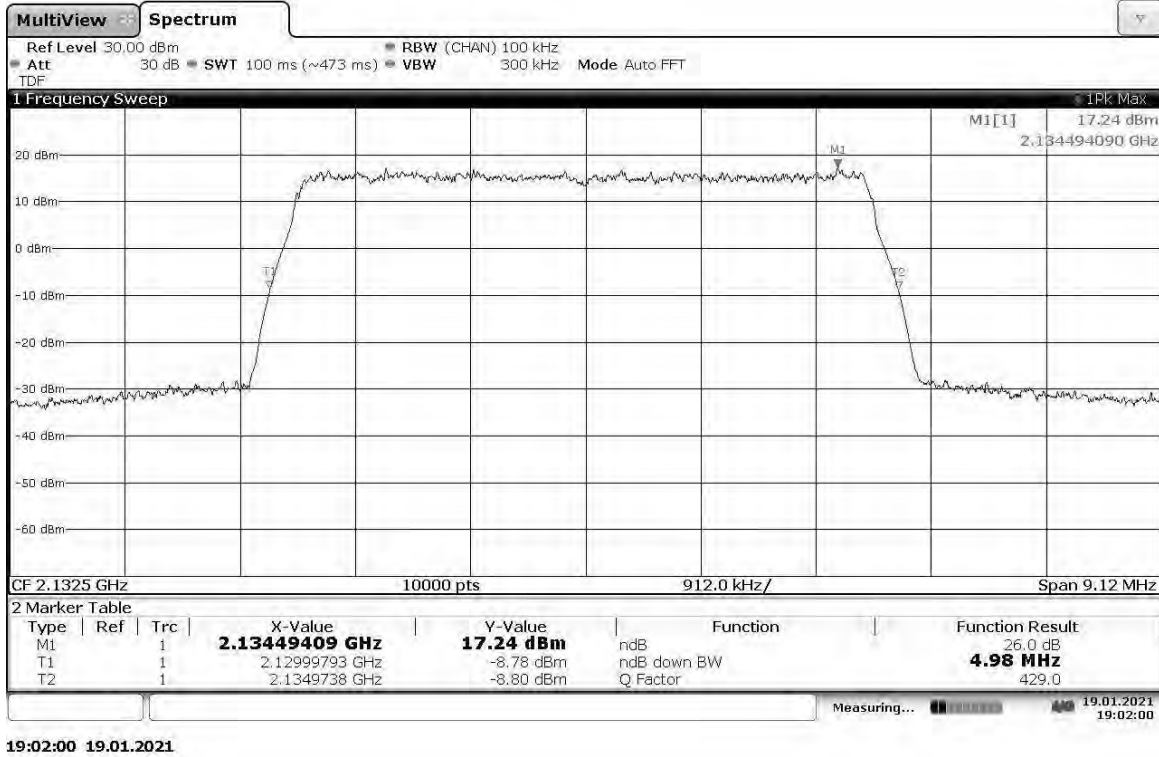
17:52:07 26.01.2021

**TM3.2-16QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth**

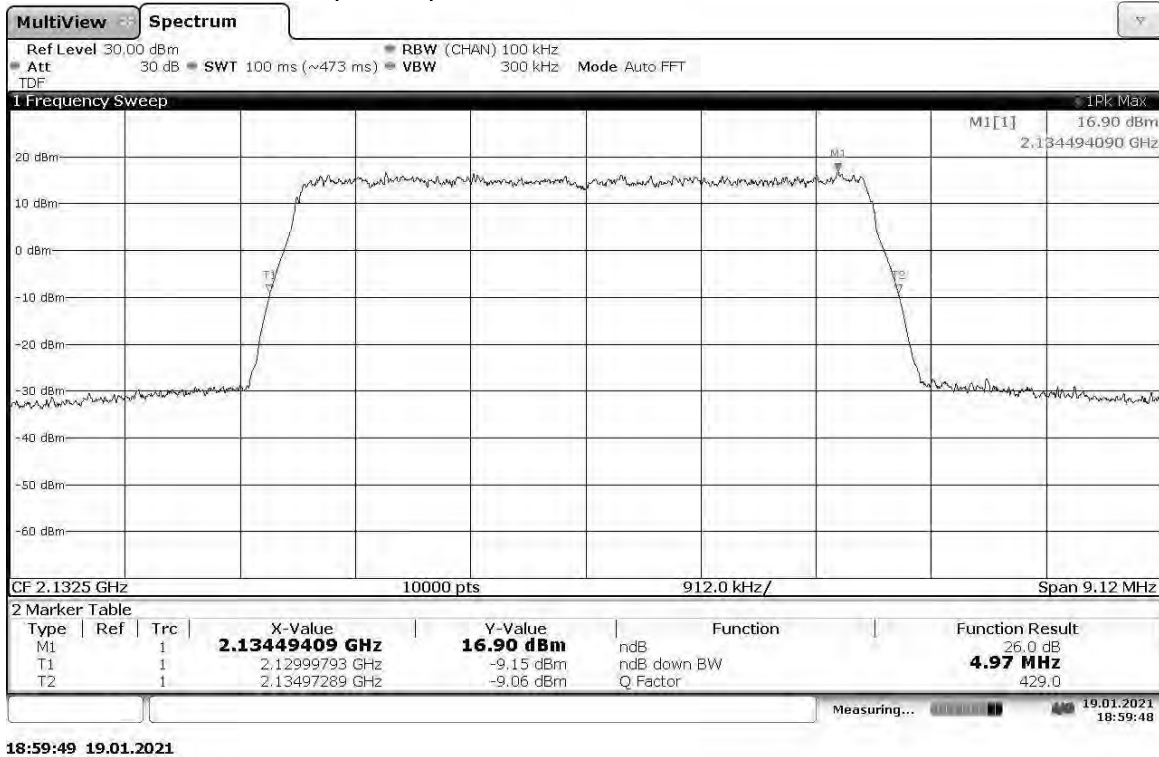


17:56:58 26.01.2021

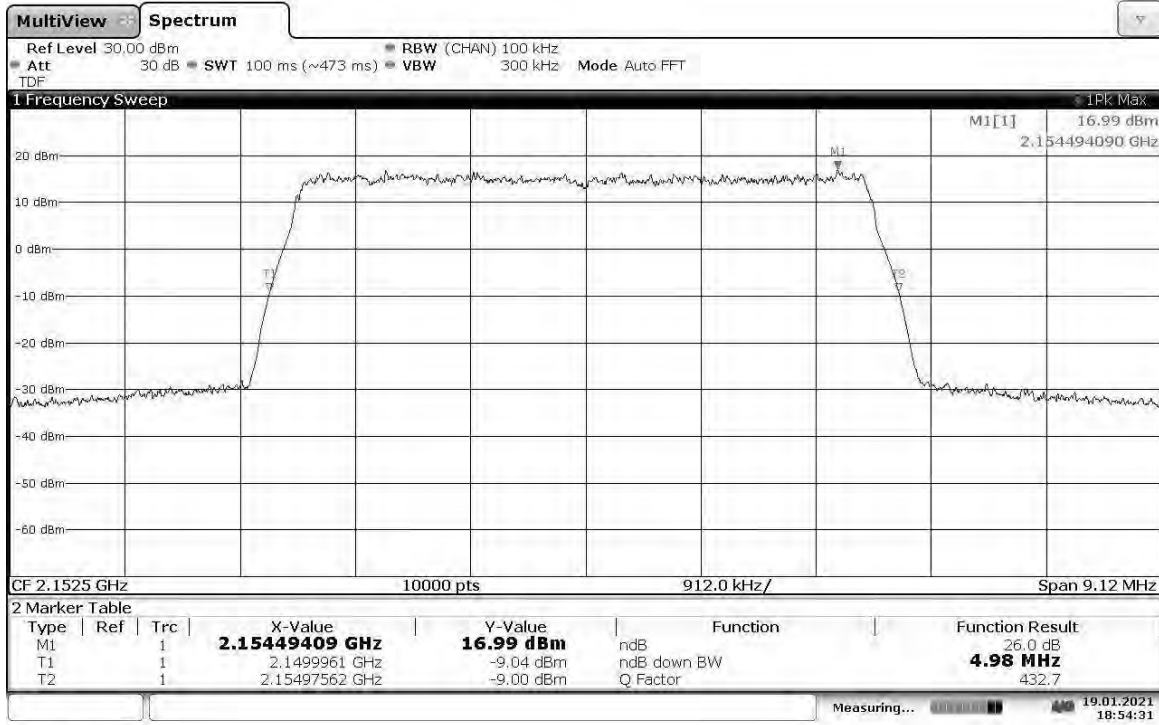
TM3.1-64QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



TM3.1-64QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth

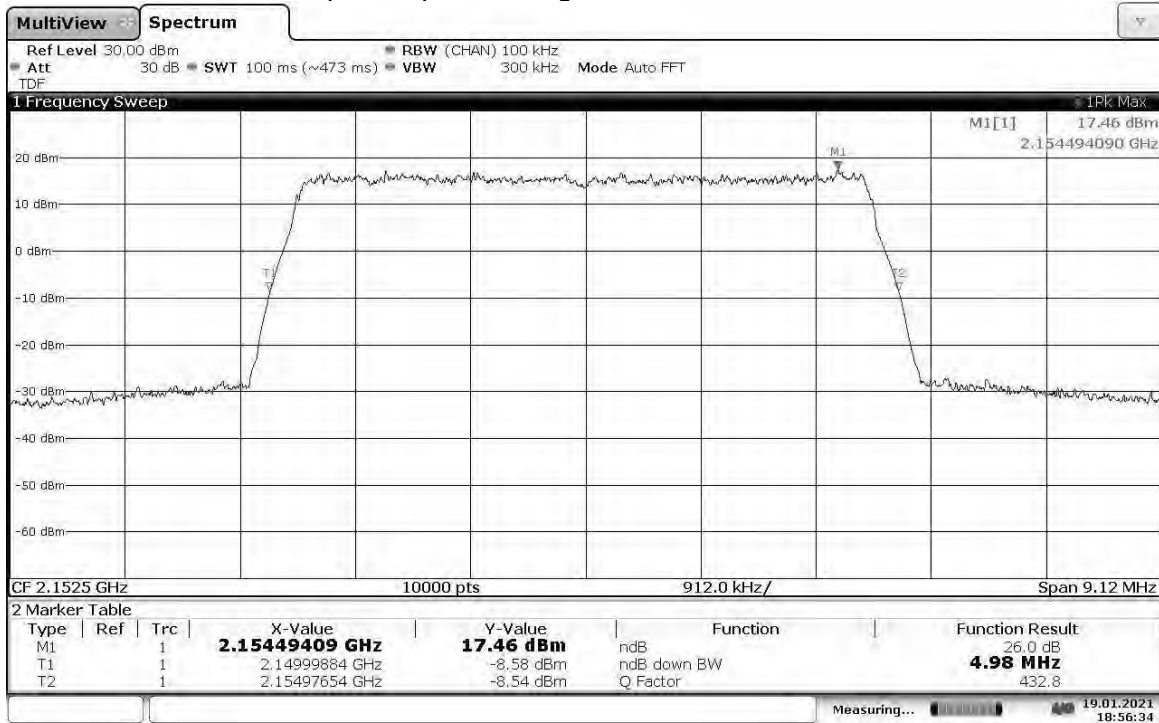


TM3.1-64QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



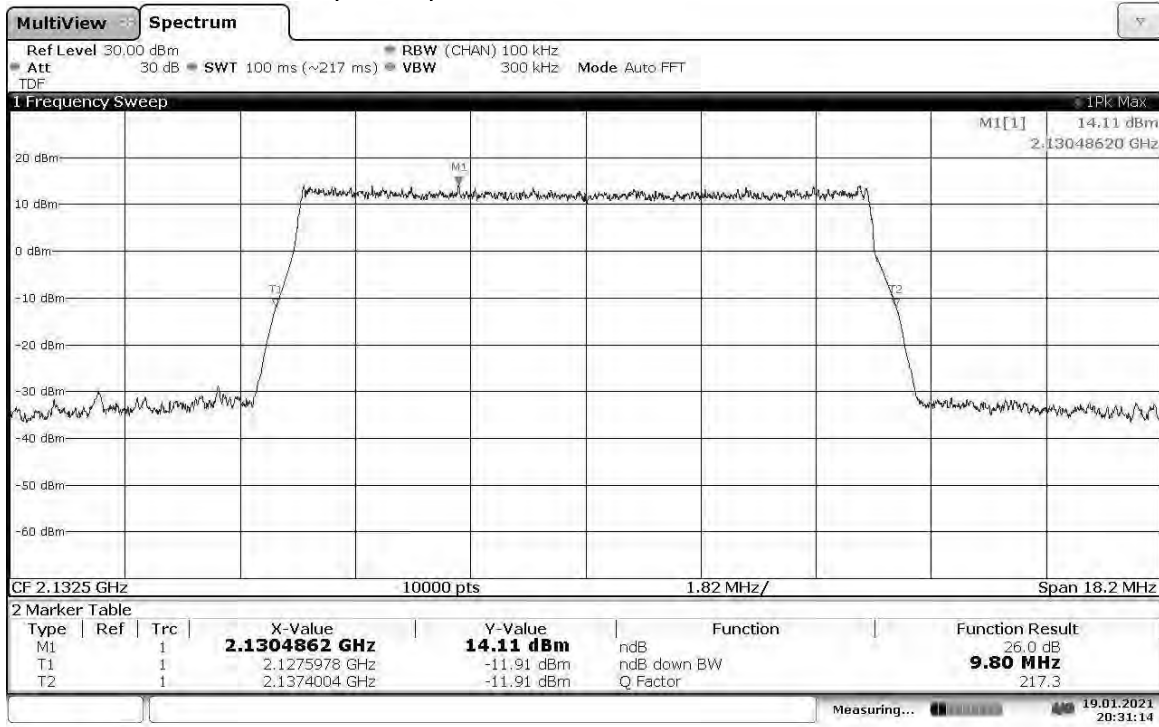
18:54:32 19.01.2021

TM3.1-64QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



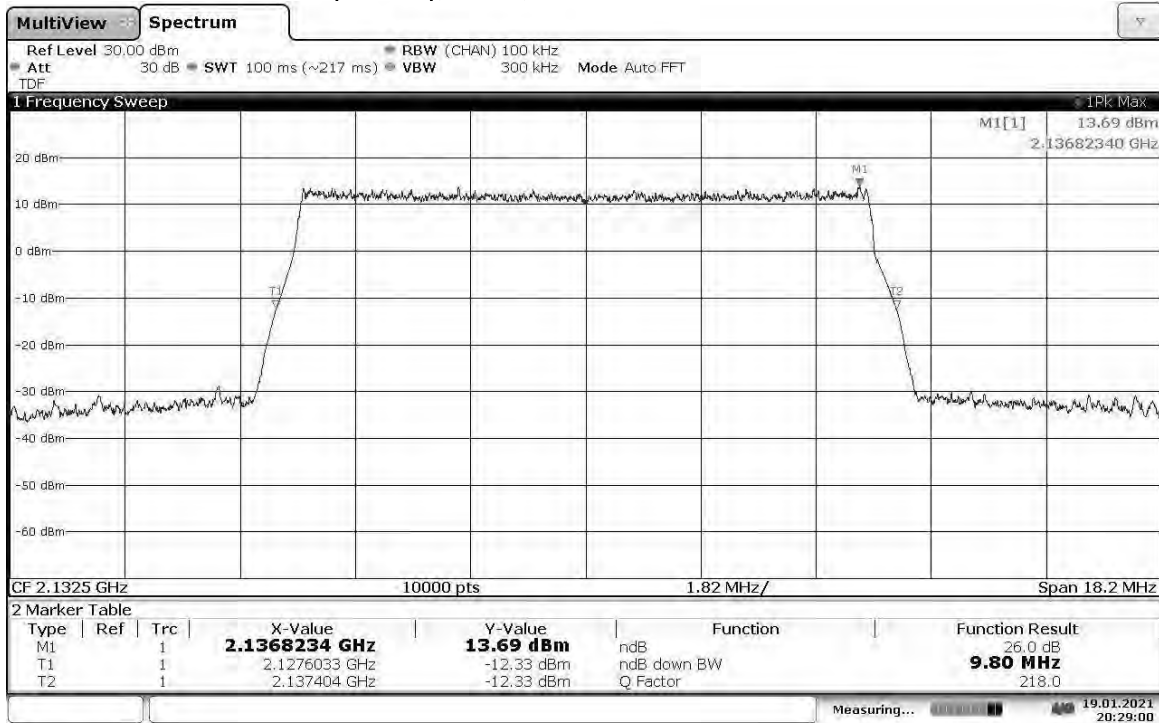
18:56:34 19.01.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



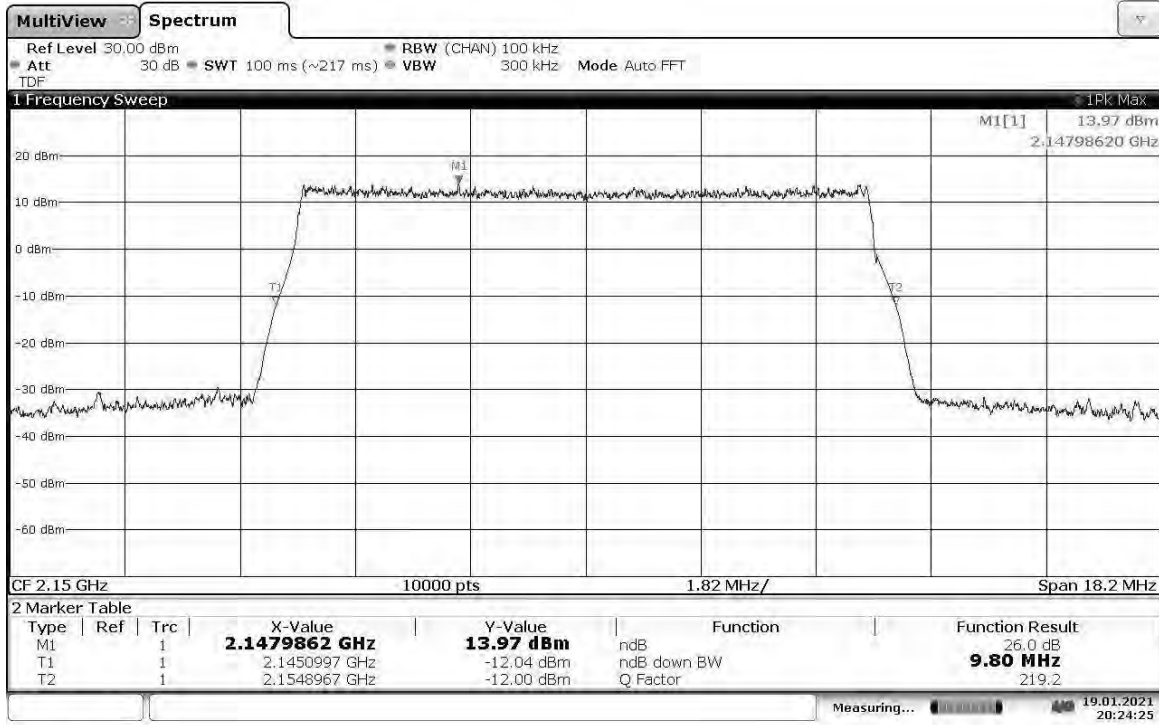
20:31:15 19.01.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



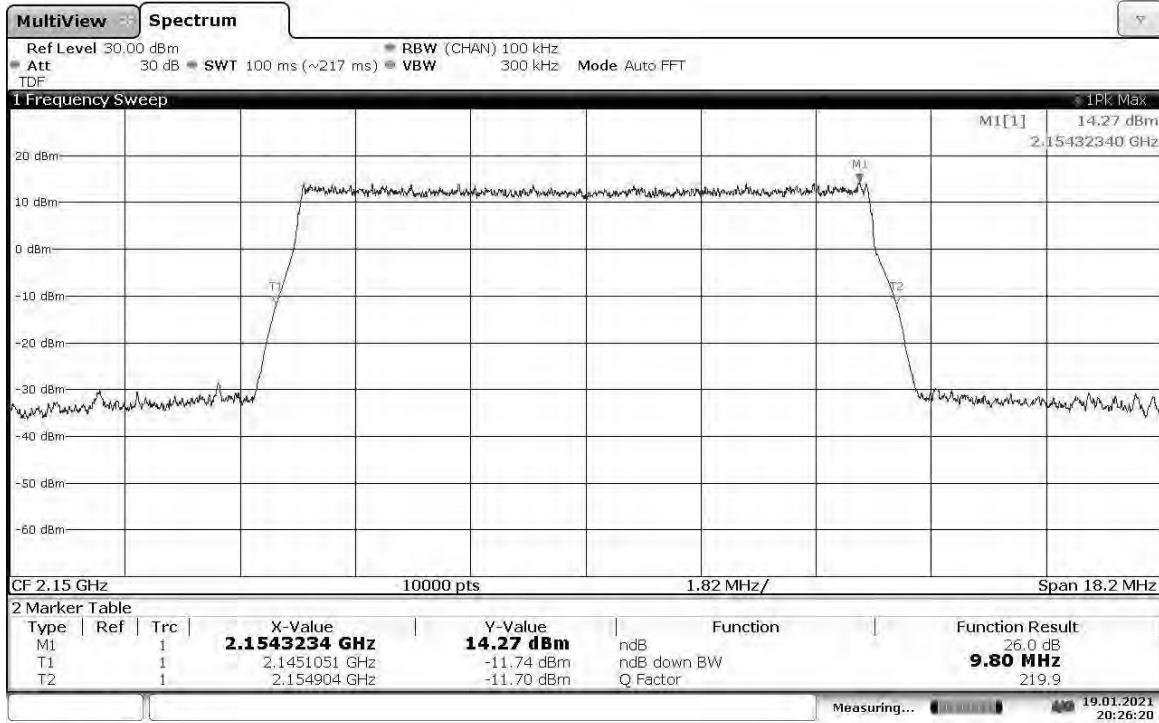
20:29:00 19.01.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



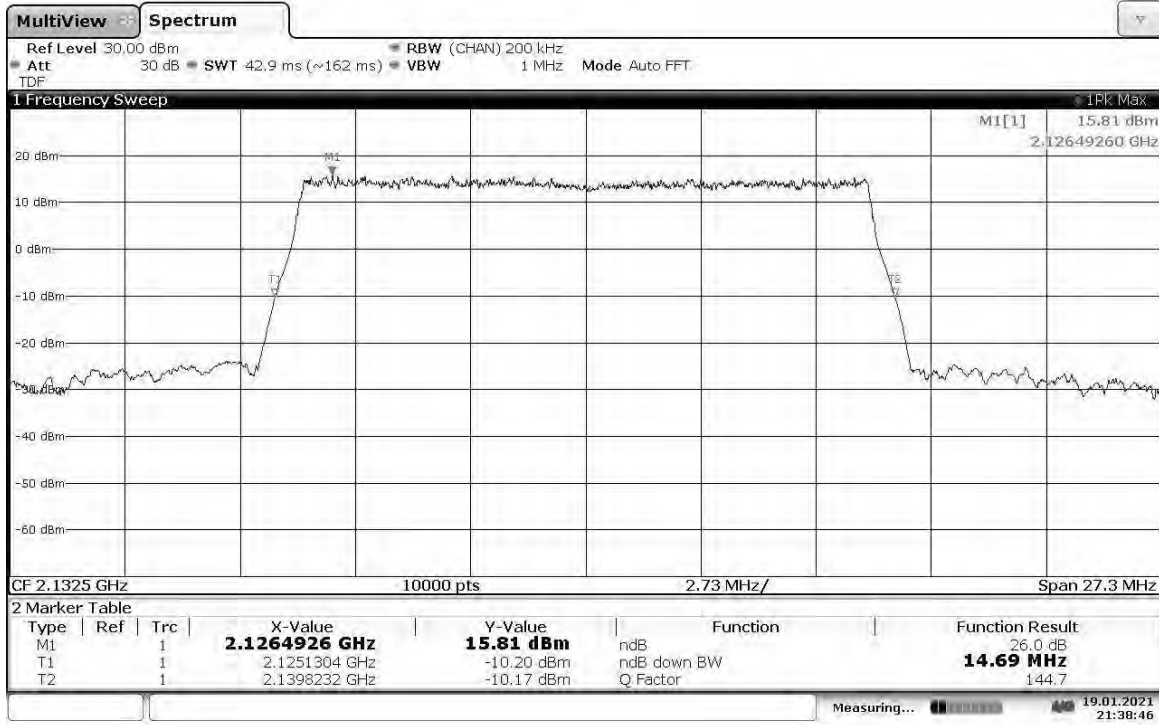
20:24:25 19.01.2021

TM3.1-64QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



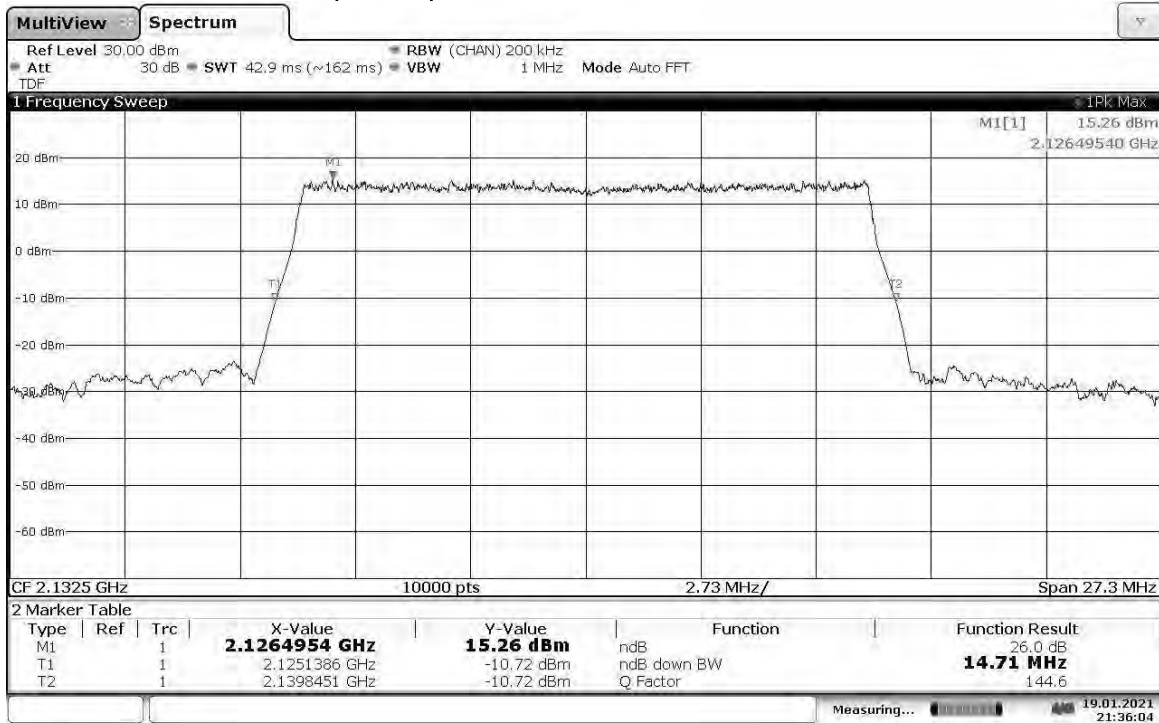
20:26:20 19.01.2021

TM3.1-64QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



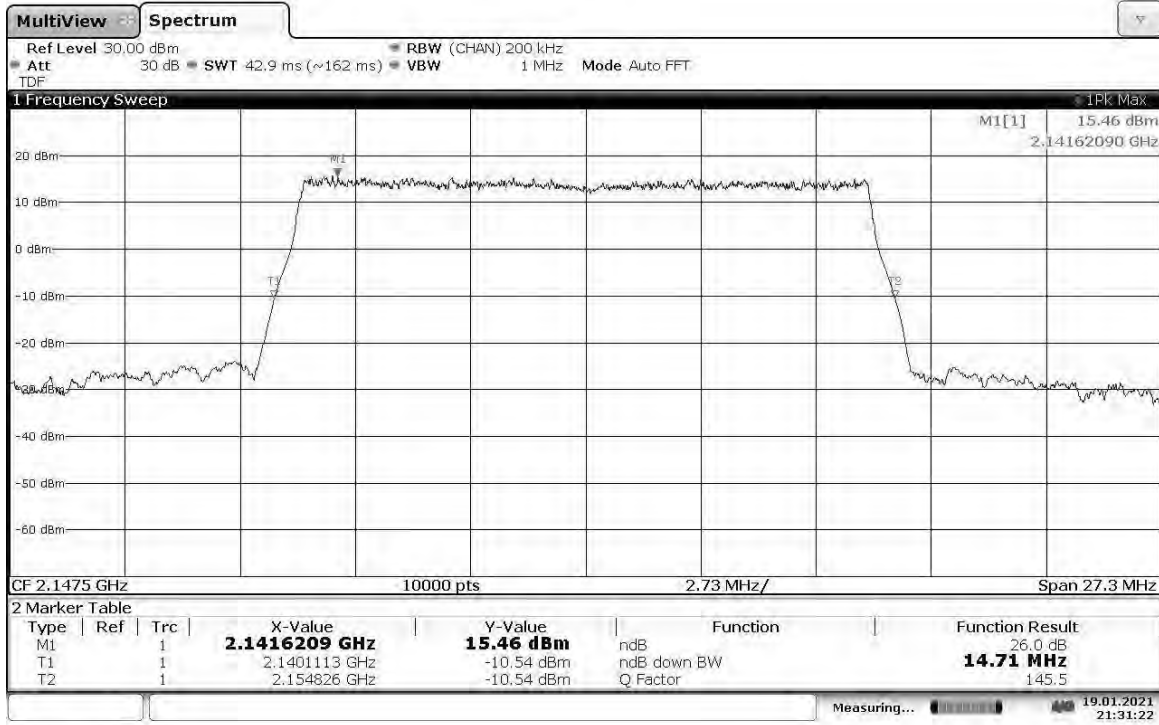
21:38:46 19.01.2021

TM3.1-64QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



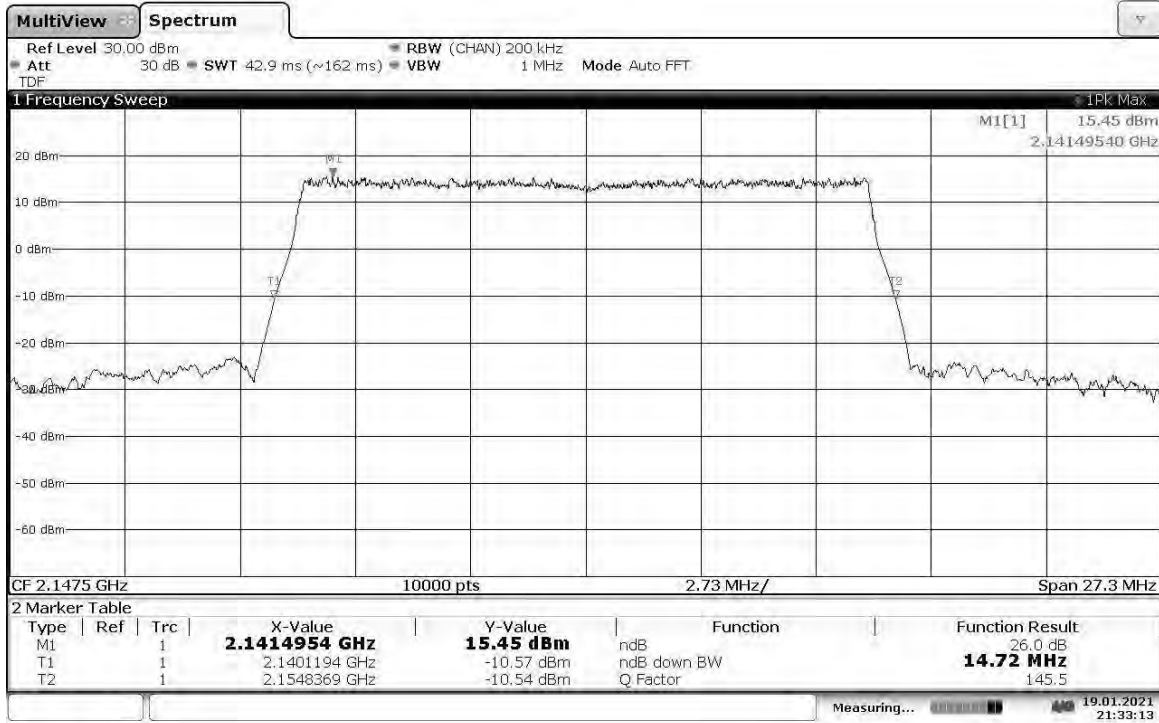
21:36:05 19.01.2021

TM3.1-64QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



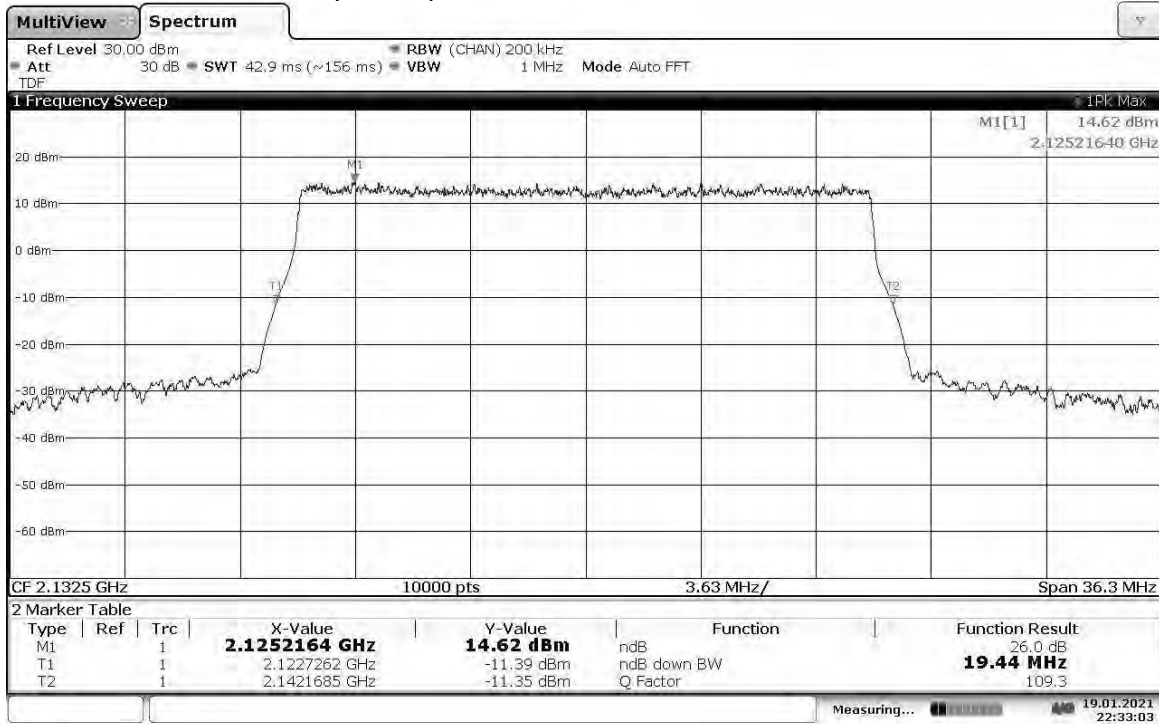
21:31:22 19.01.2021

TM3.1-64QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



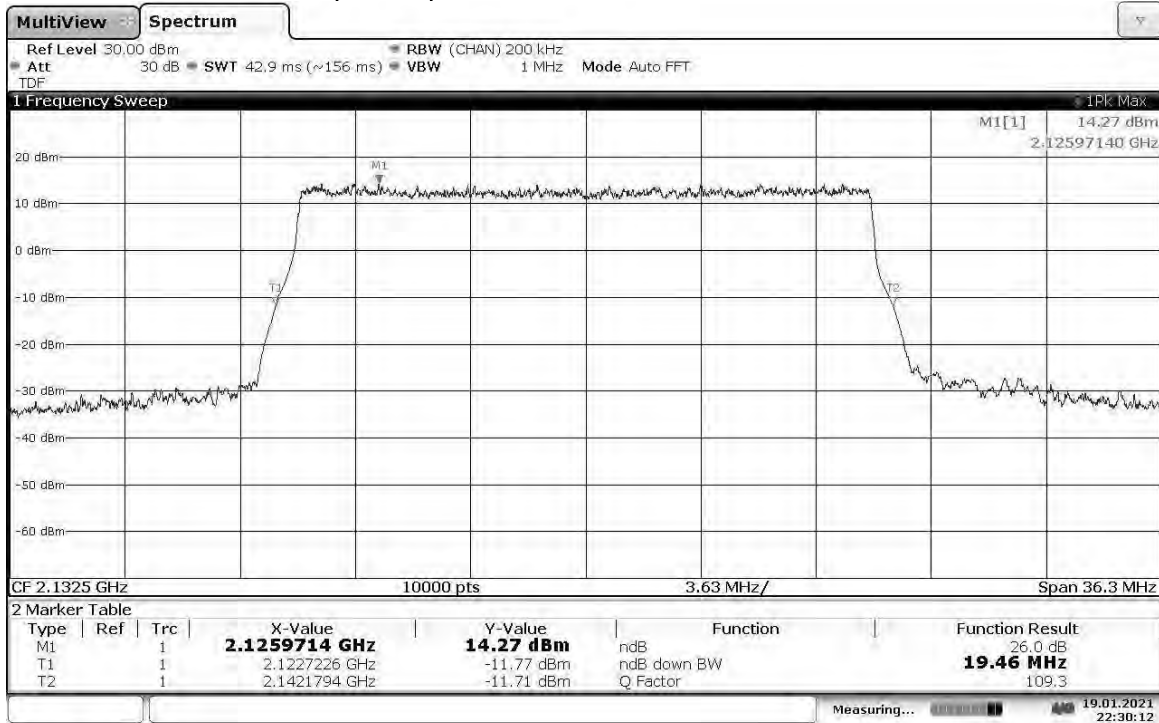
21:33:13 19.01.2021

TM3.1-64QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



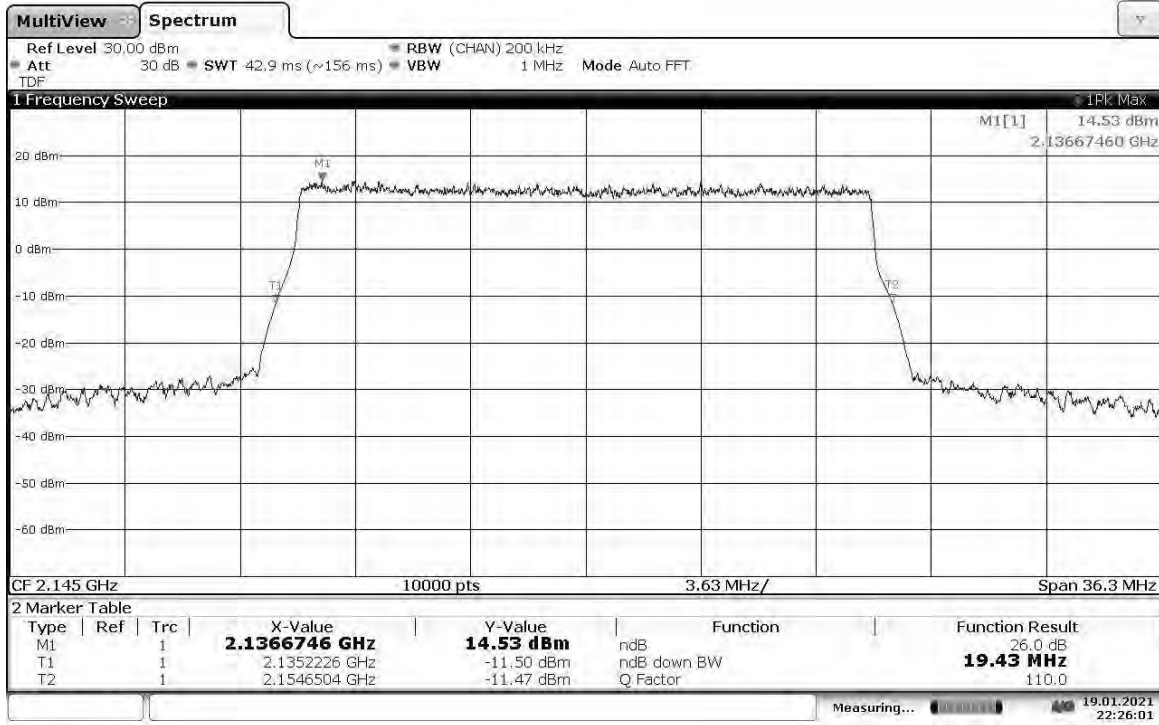
22:33:03 19.01.2021

TM3.1-64QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



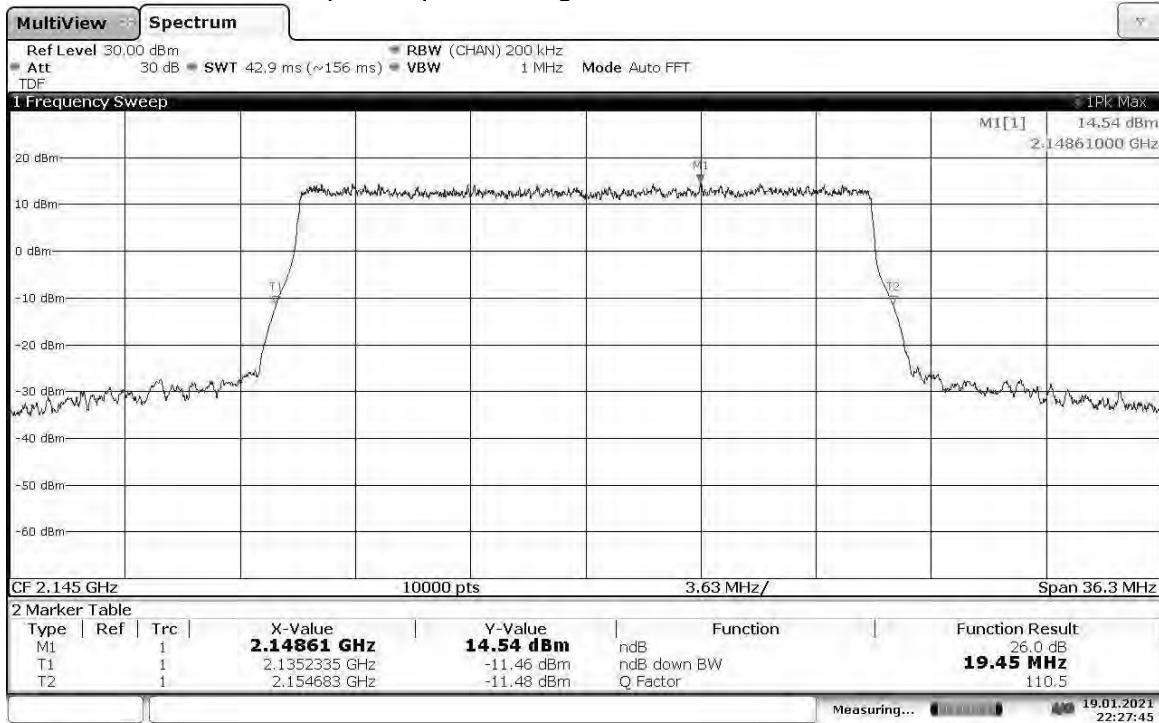
22:30:13 19.01.2021

TM3.1-64QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



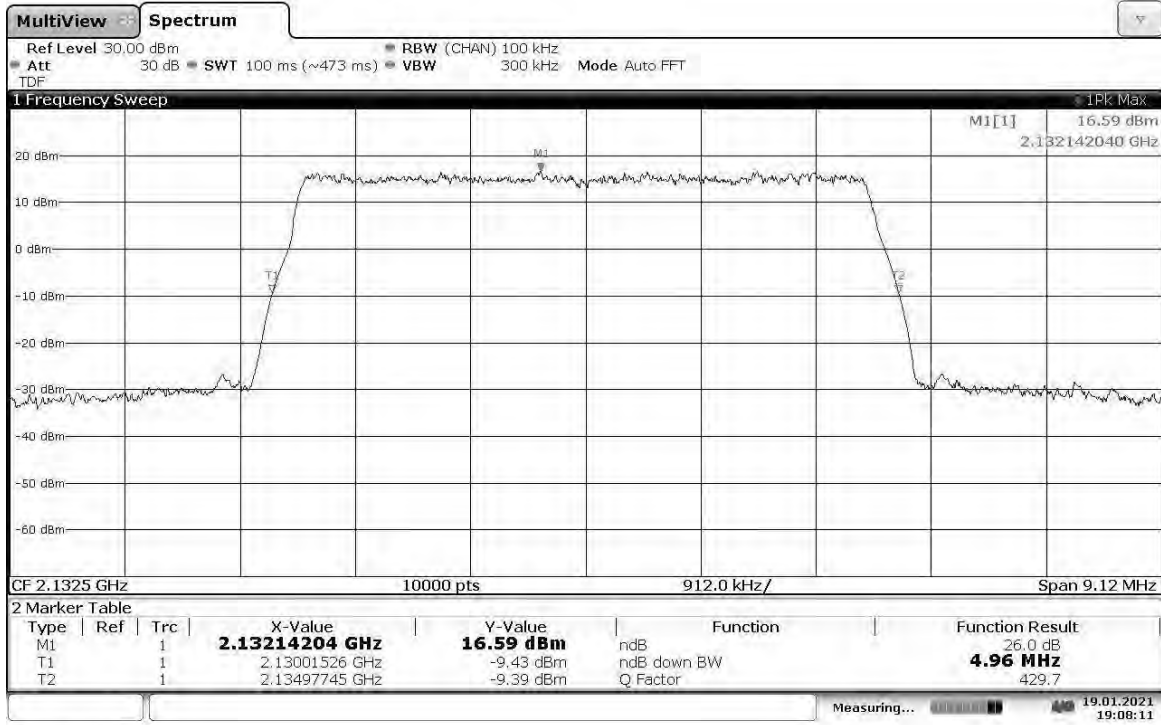
22:26:02 19.01.2021

TM3.1-64QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



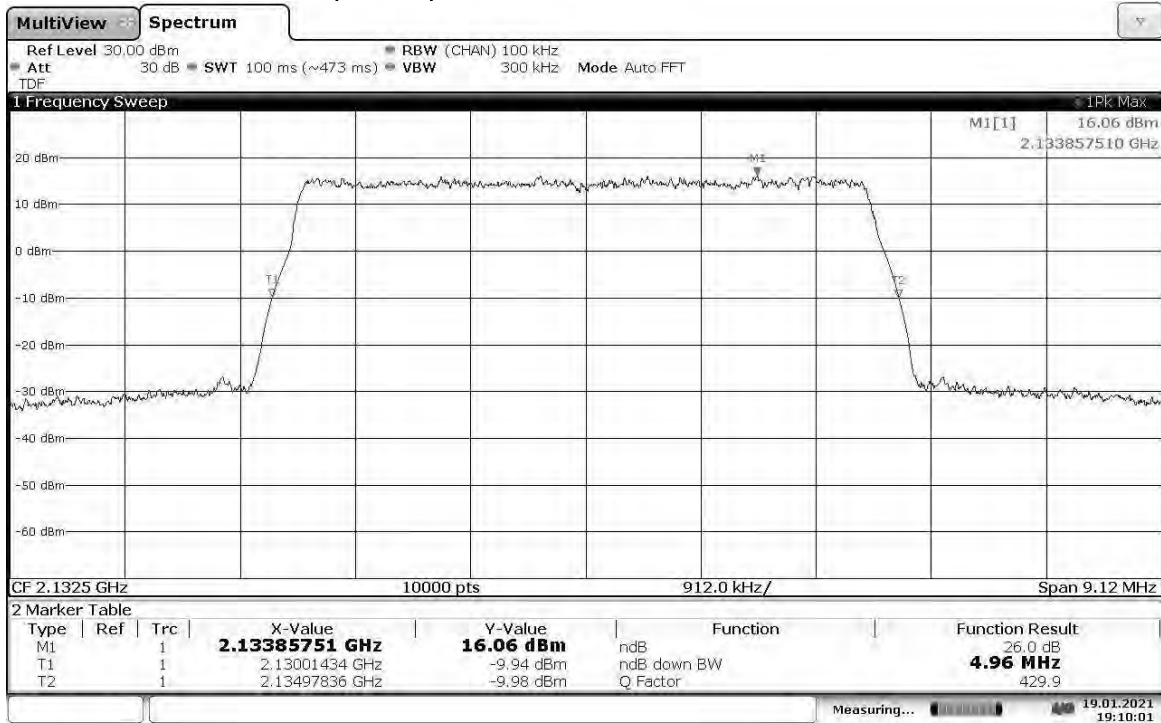
22:27:46 19.01.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



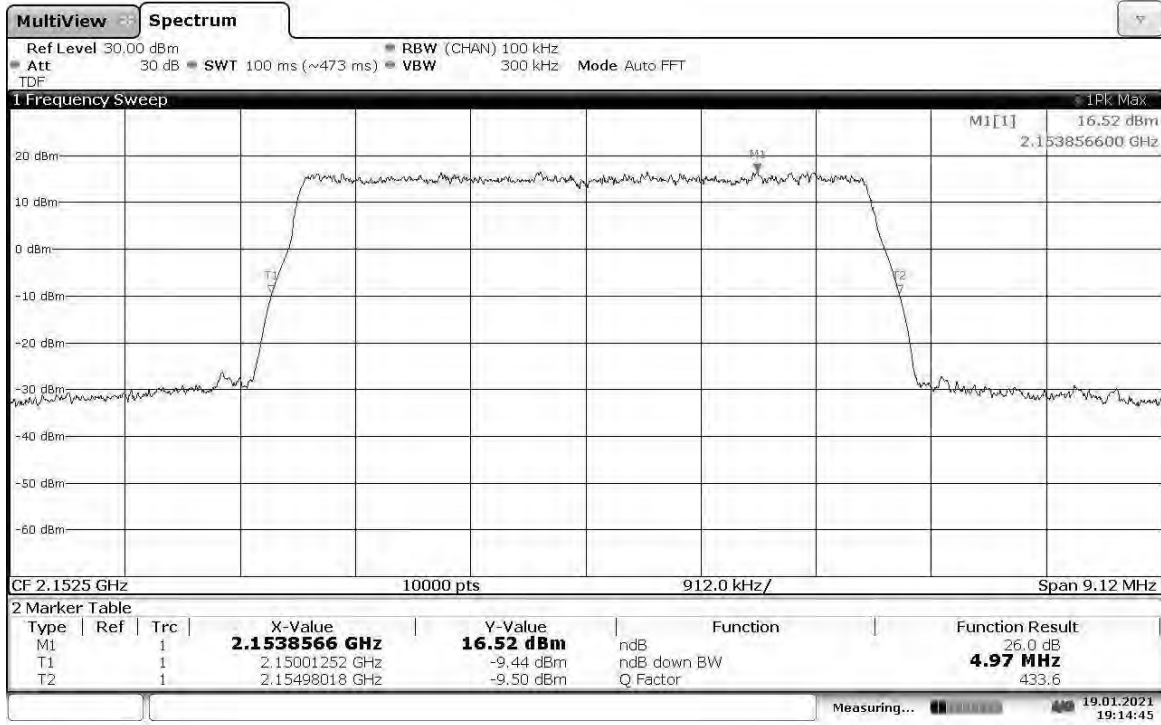
19:08:11 19.01.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



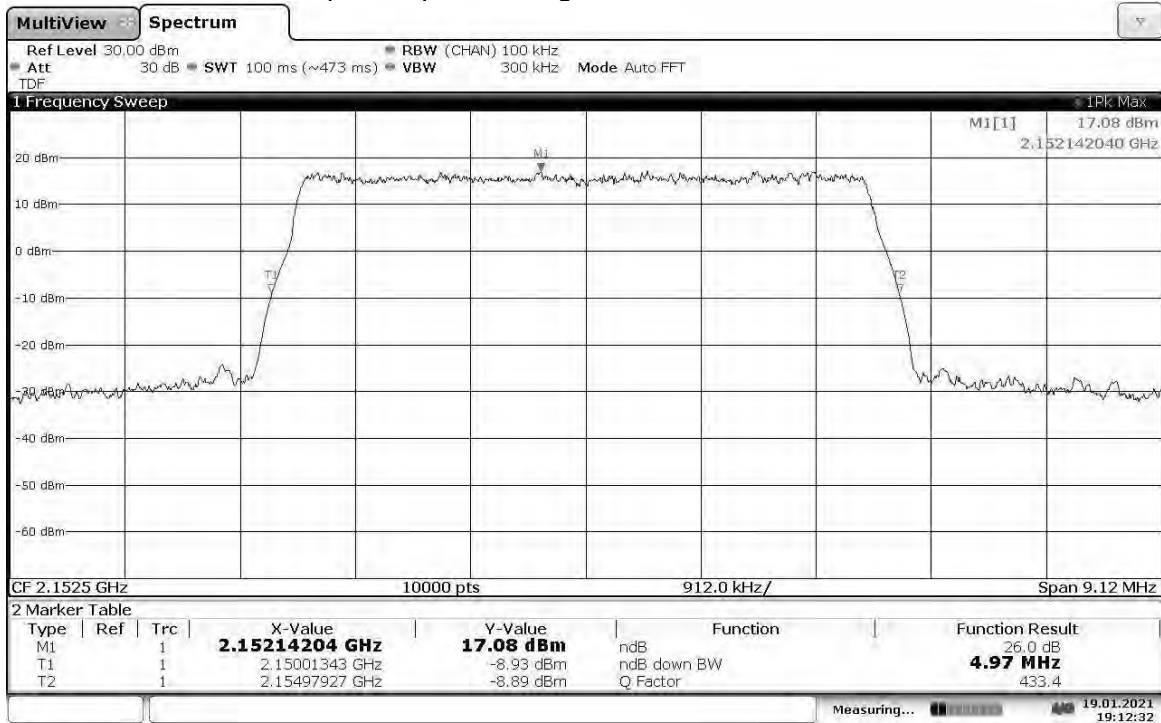
19:10:02 19.01.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



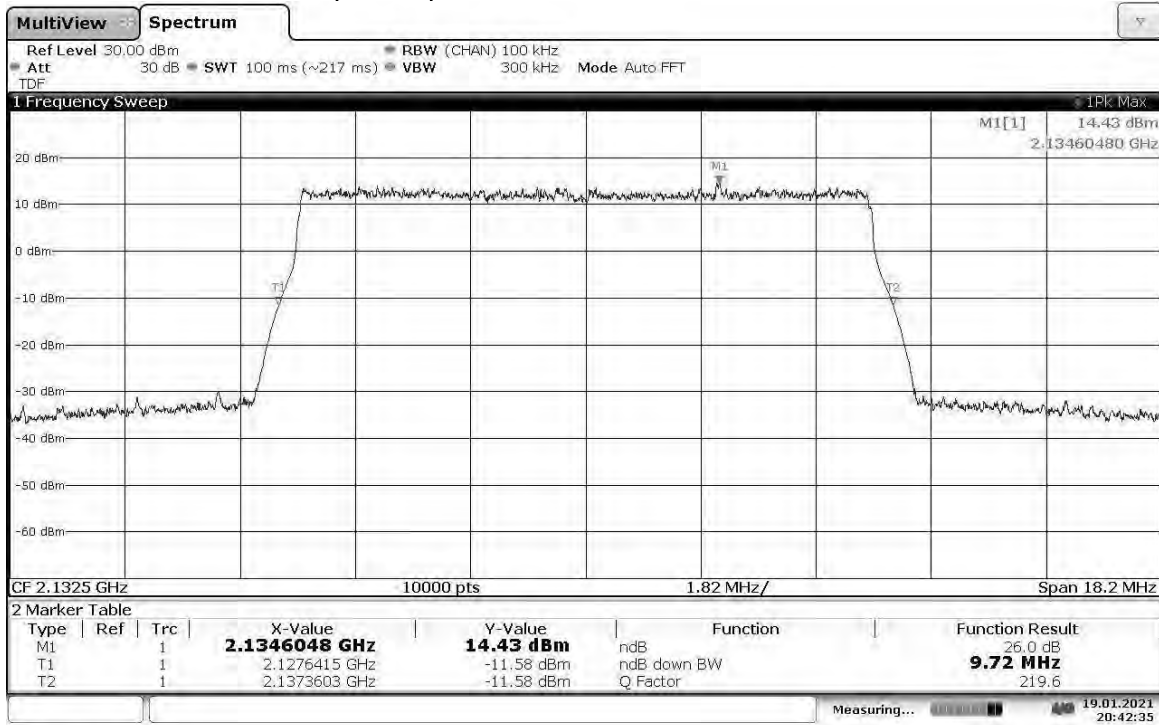
19:14:45 19.01.2021

TM3.1a-256QAM_5 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



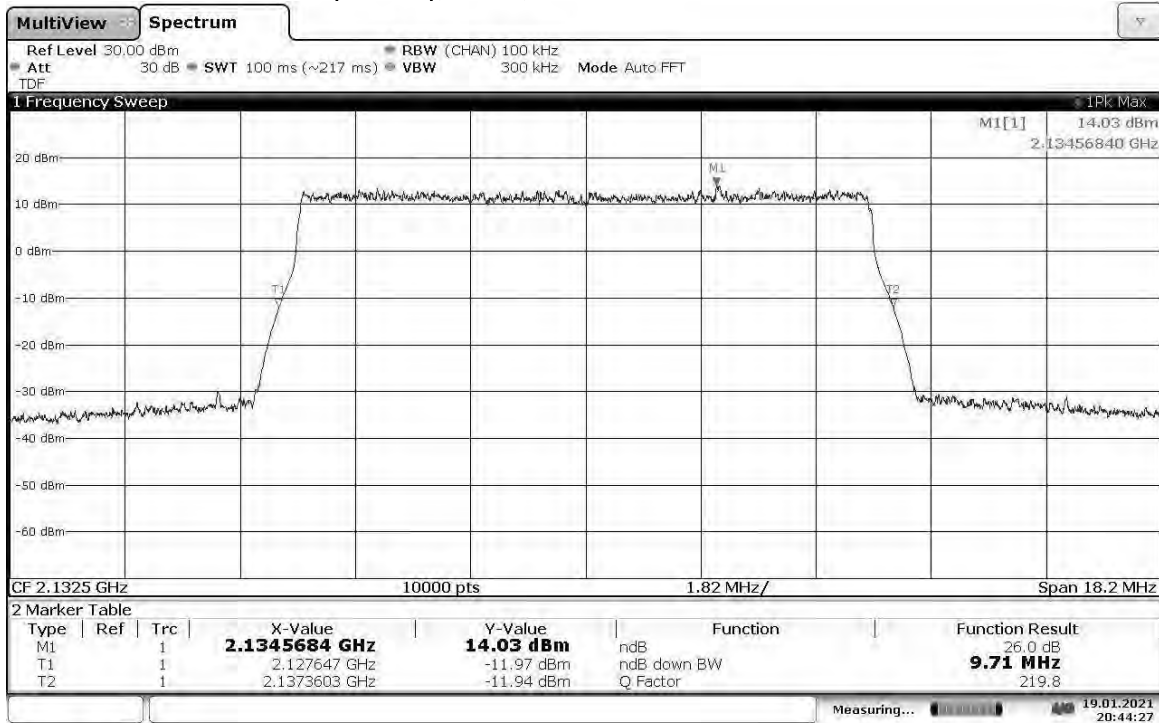
19:12:33 19.01.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



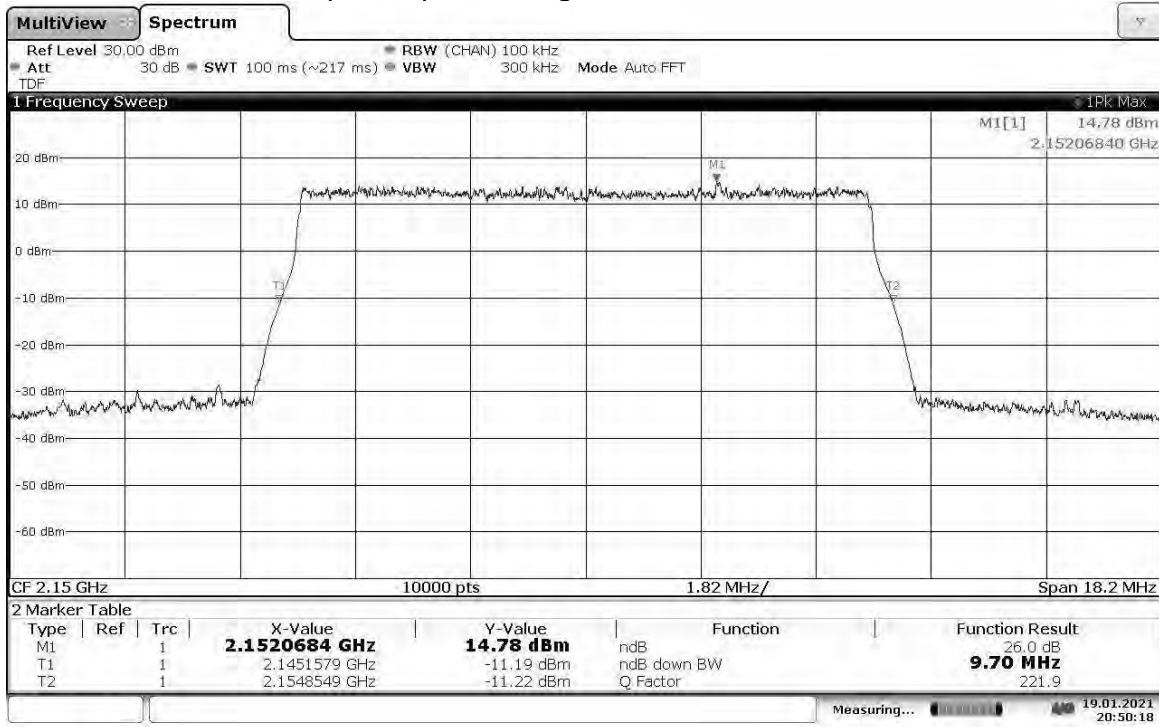
20:42:35 19.01.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



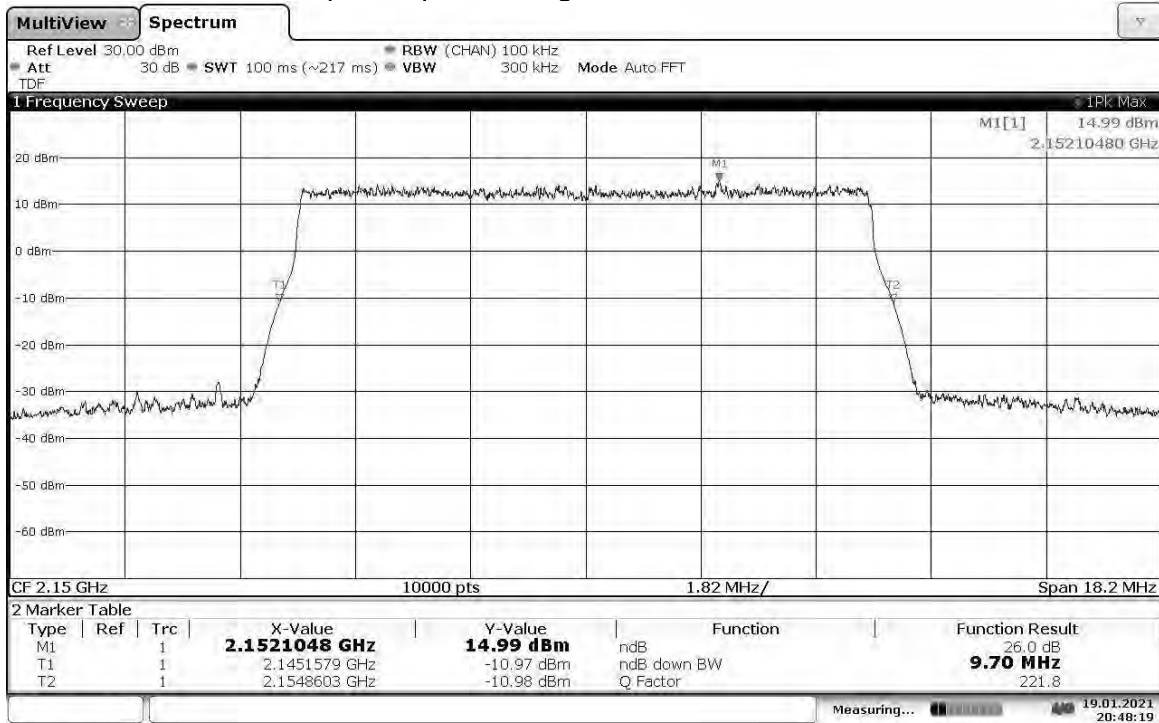
20:44:27 19.01.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



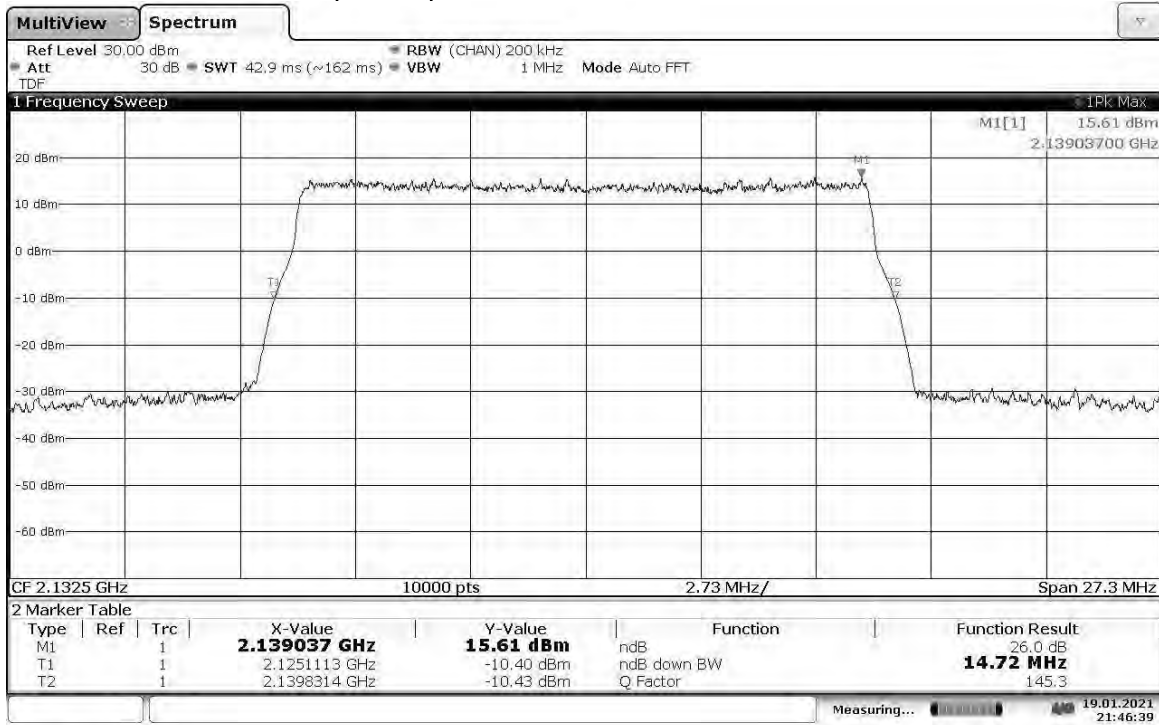
20:50:19 19.01.2021

TM3.1a-256QAM_10 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



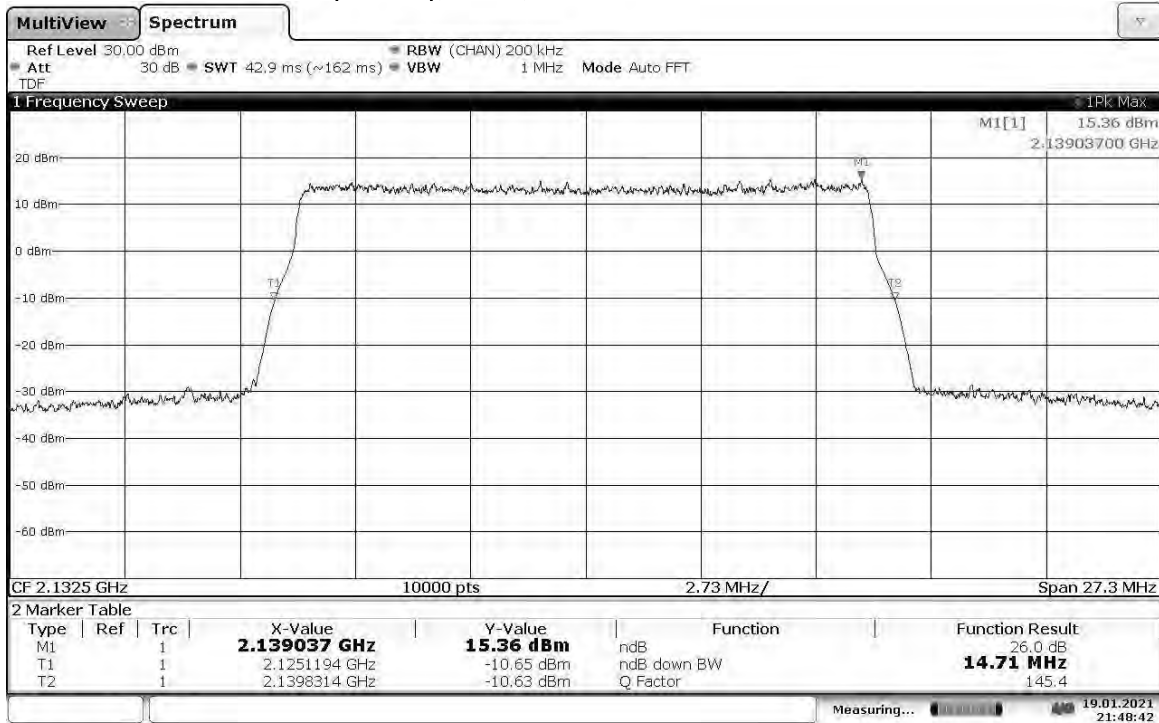
20:48:20 19.01.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



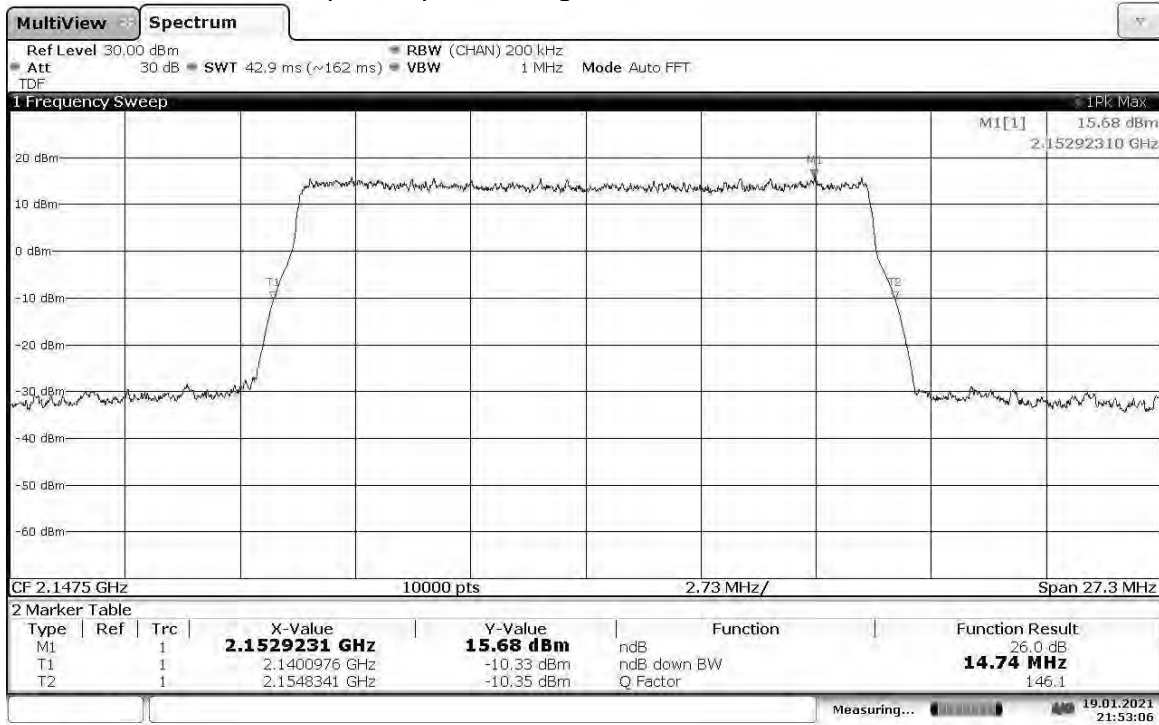
21:46:40 19.01.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



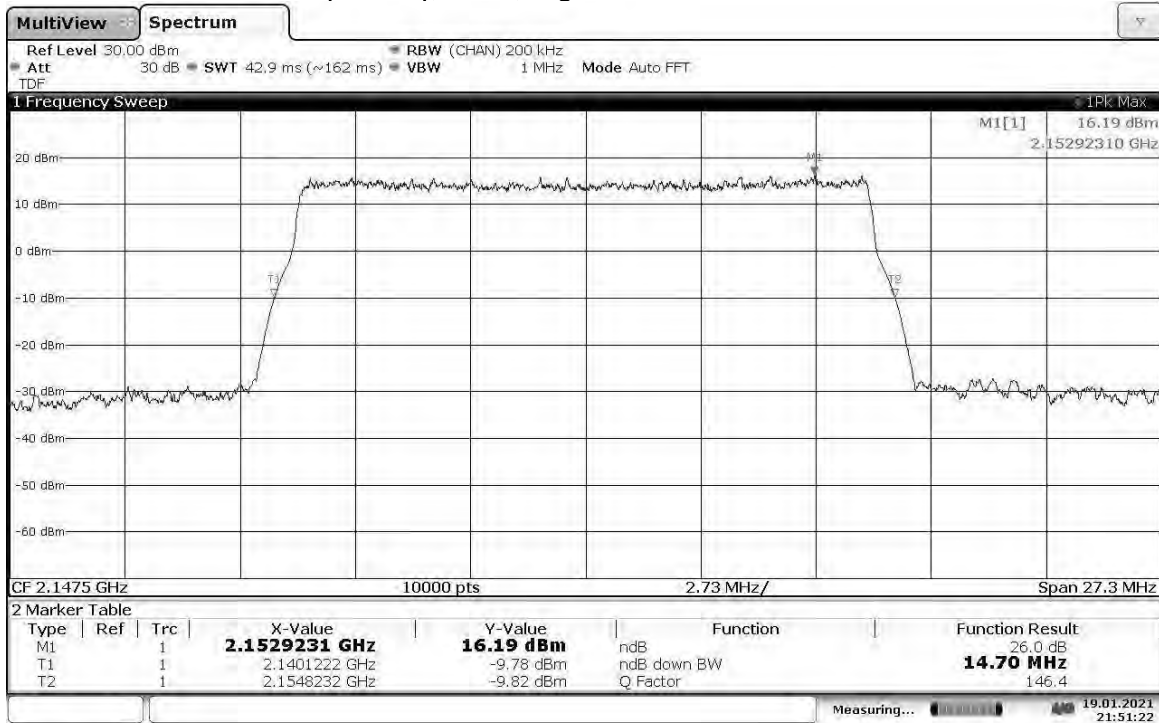
21:48:42 19.01.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth



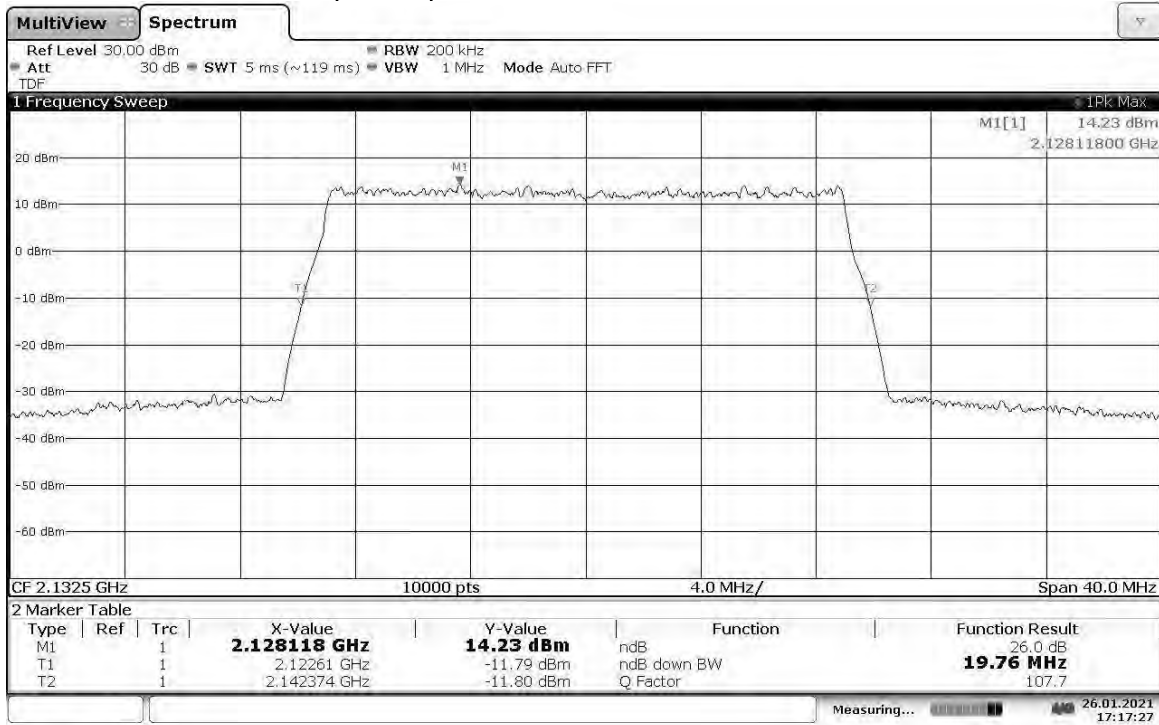
21:53:07 19.01.2021

TM3.1a-256QAM_15 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth



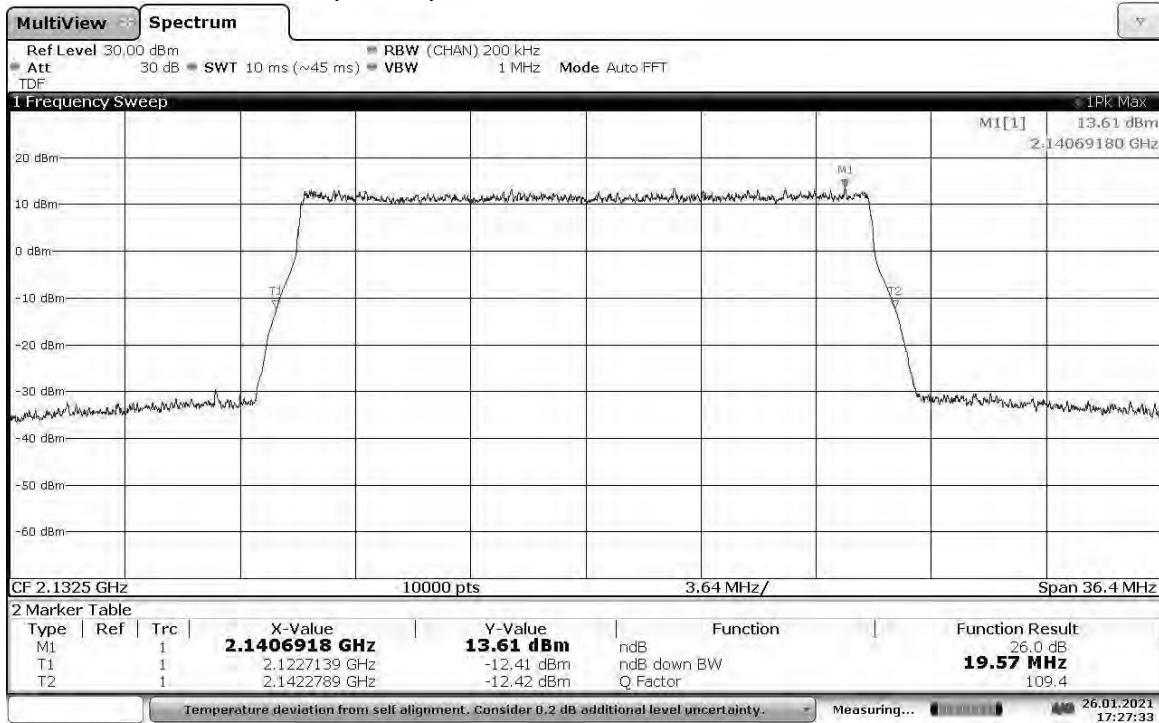
21:51:22 19.01.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, Mid Channel 26 dB Bandwidth



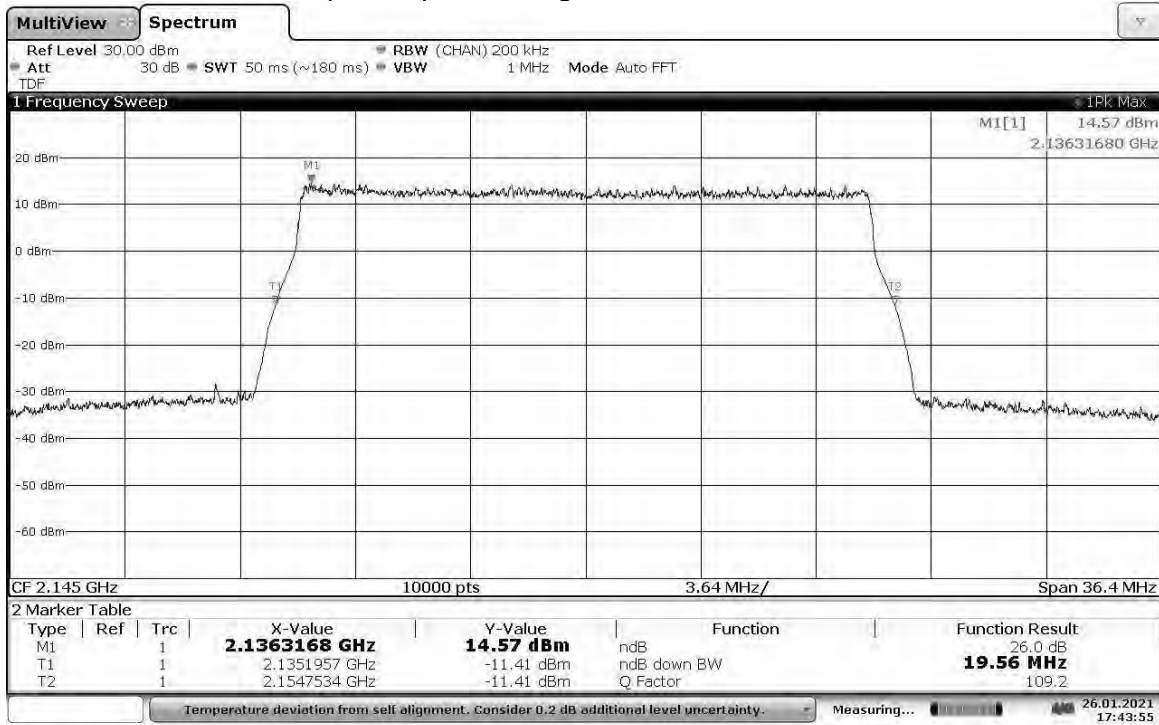
17:17:28 26.01.2021

TM3.1a-256QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, Mid Channel 26 dB Bandwidth



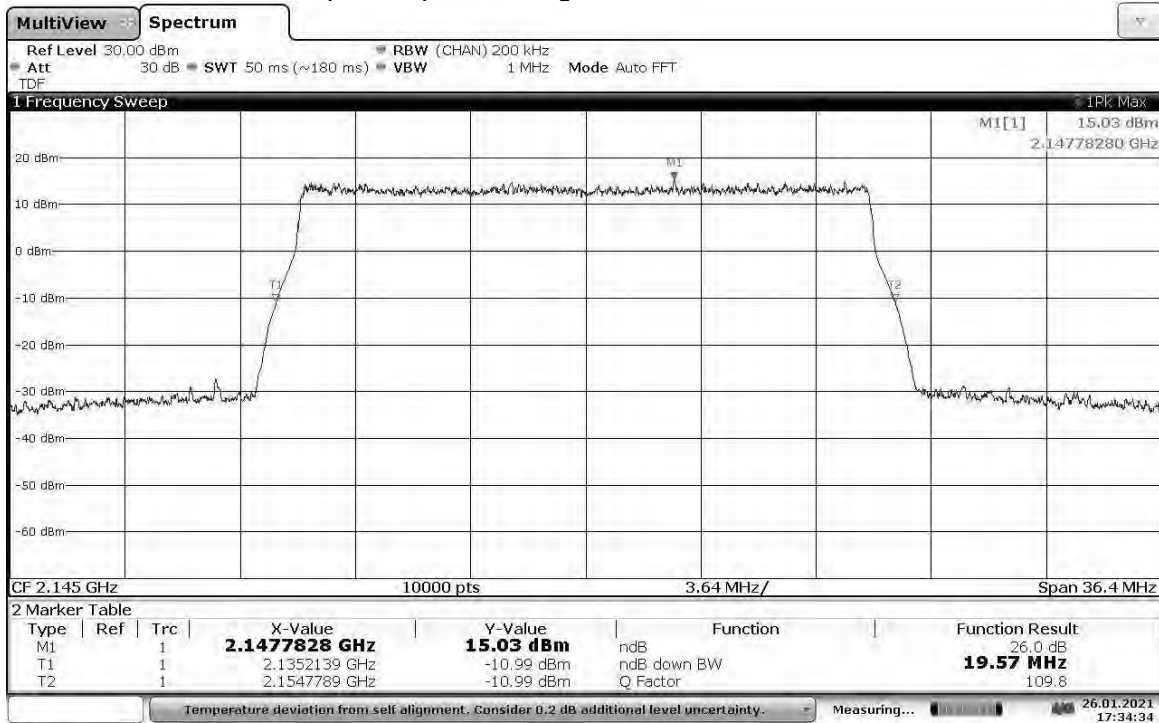
17:27:34 26.01.2021

**TM3.1a-256QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT0, High Channel 26 dB Bandwidth**



17:43:55 26.01.2021

**TM3.1a-256QAM_20 MHz Bandwidth
Slot 3 (Band 4), ANT1, High Channel 26 dB Bandwidth**



17:34:34 26.01.2021

Test Personnel: Vathana Ven *VSV*
Supervising/Reviewing
Engineer:
(Where Applicable) N/A

Test Date: 01/19/2021
01/26/2021

Product Standard: FCC Part 27
Input Voltage: 48 VDC (POE)

Limit Applied: See report section 8.3

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

Ambient Temperature: 22, 23°C

Relative Humidity: 21, 15%

Atmospheric Pressure: 1004, 1013mbars

Deviations, Additions, or Exclusions: None

9 Upper Band Edge Compliance

9.1 Method

Tests are performed in accordance with ANSI C63.26 and CFR47 FCC Parts 2.1051, 2.1053, and 27.

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
CBLHF2012-2M-1'	2m 9kHz-40GHz Coaxial Cable - SET1	Huber & Suhner	SF102	252675001	02/17/2020	02/17/2021
ROS005-1'	Signal and Spectrum Analyzer	Rohde and Schwartz	FSW43	100646	10/27/2020	10/27/2021
DAV005'	Weather Station	Davis	6250	MS19121808 3	02/05/2020	02/05/2021

Software Utilized:

Name	Manufacturer	Version
None	--	--

9.3 Results:

The sample tested was found to Comply.

§ 27.53(h): 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.