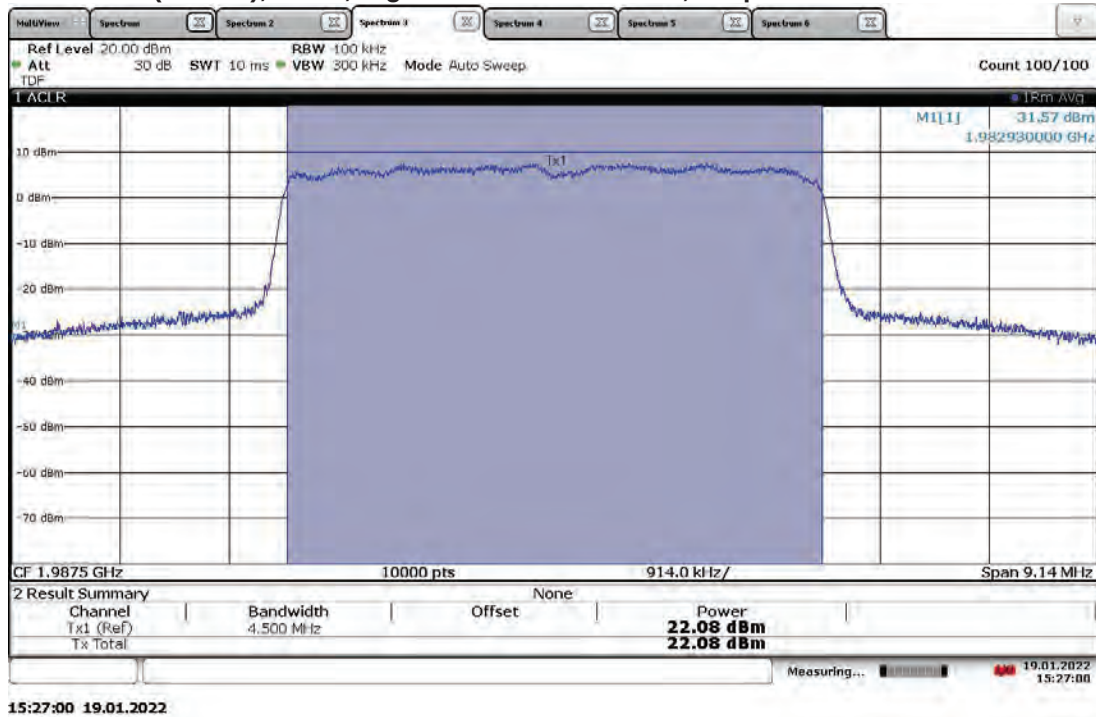
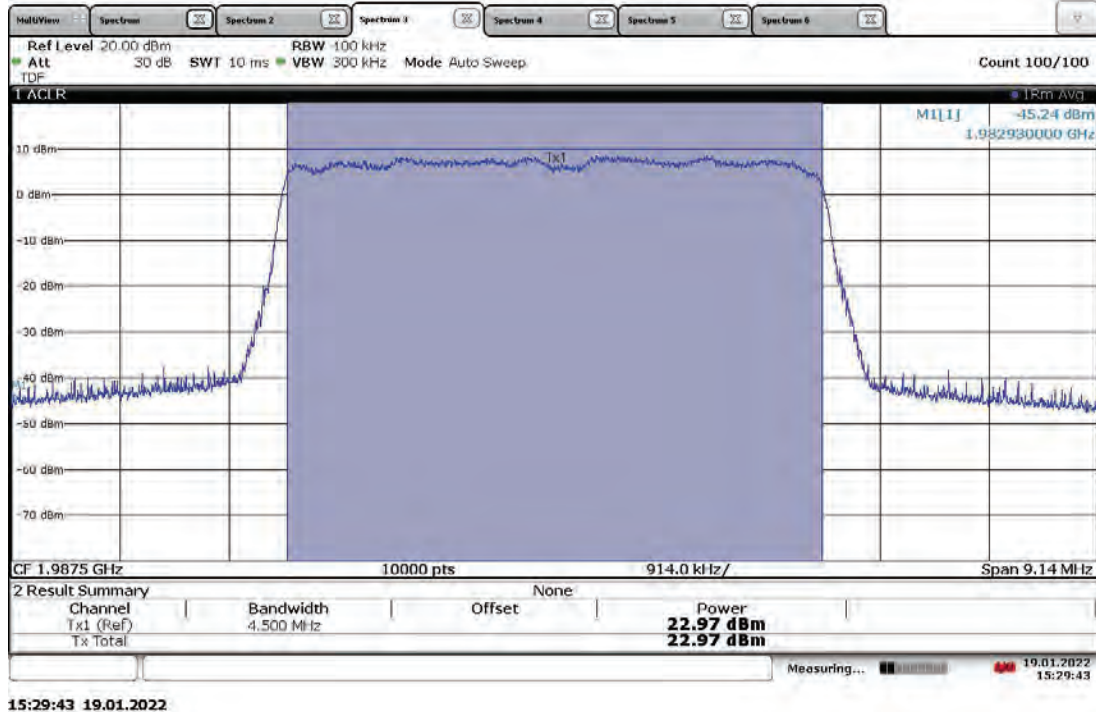


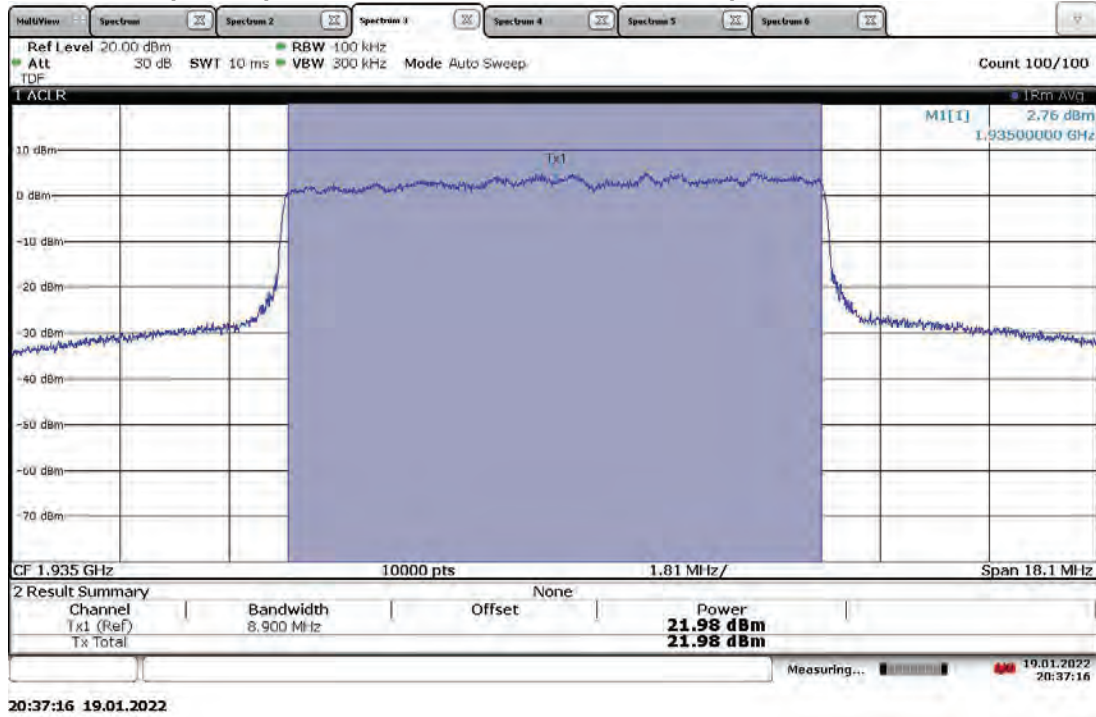
TM3.2-16QAM_5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1987.5 MHz, Output Power = 22.08 dBm



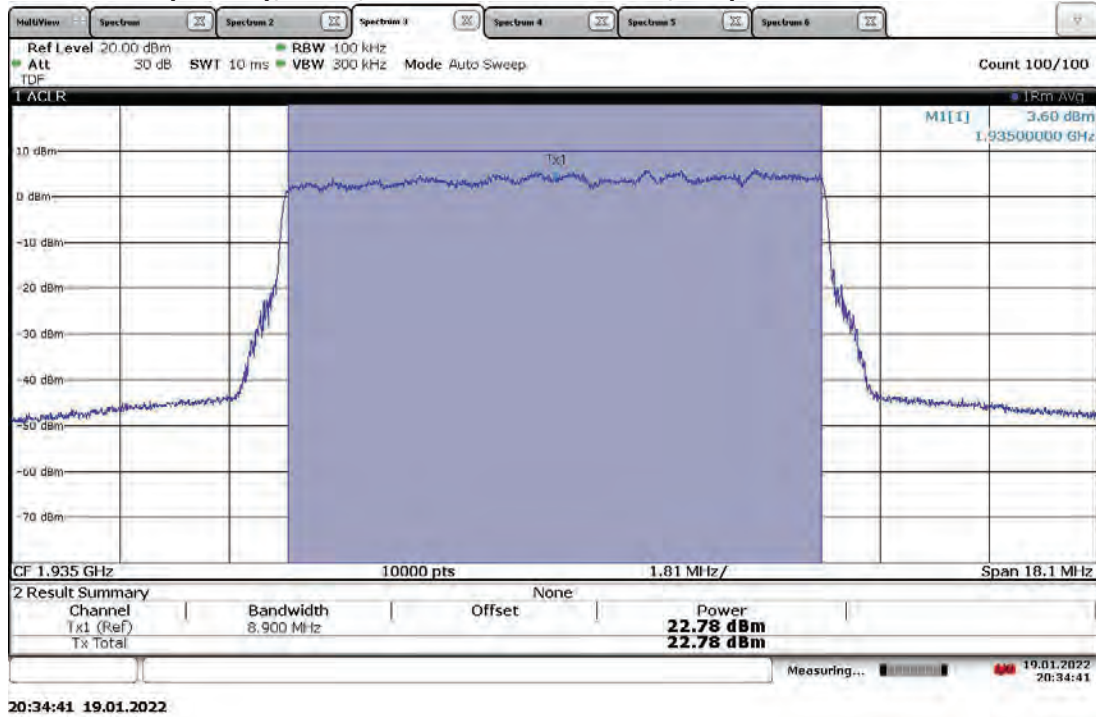
TM3.2-16QAM_5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1987.5MHz, Output Power = 22.97 dBm



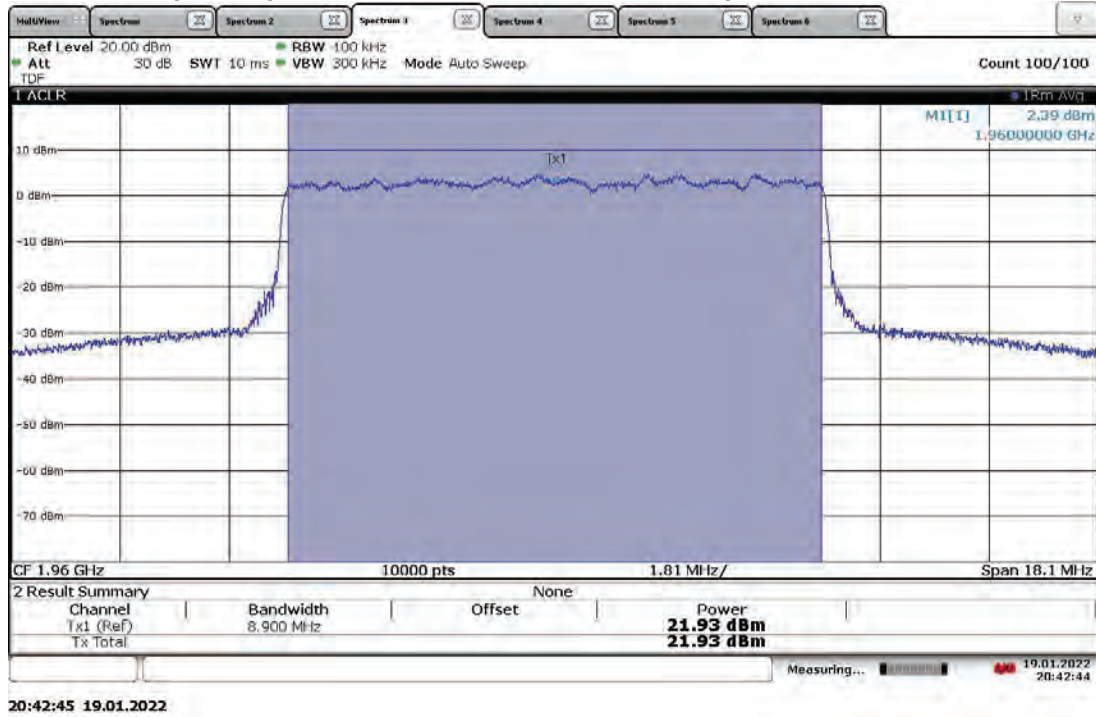
TM3.2-16QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1935 MHz, Output Power = 21.98 dBm



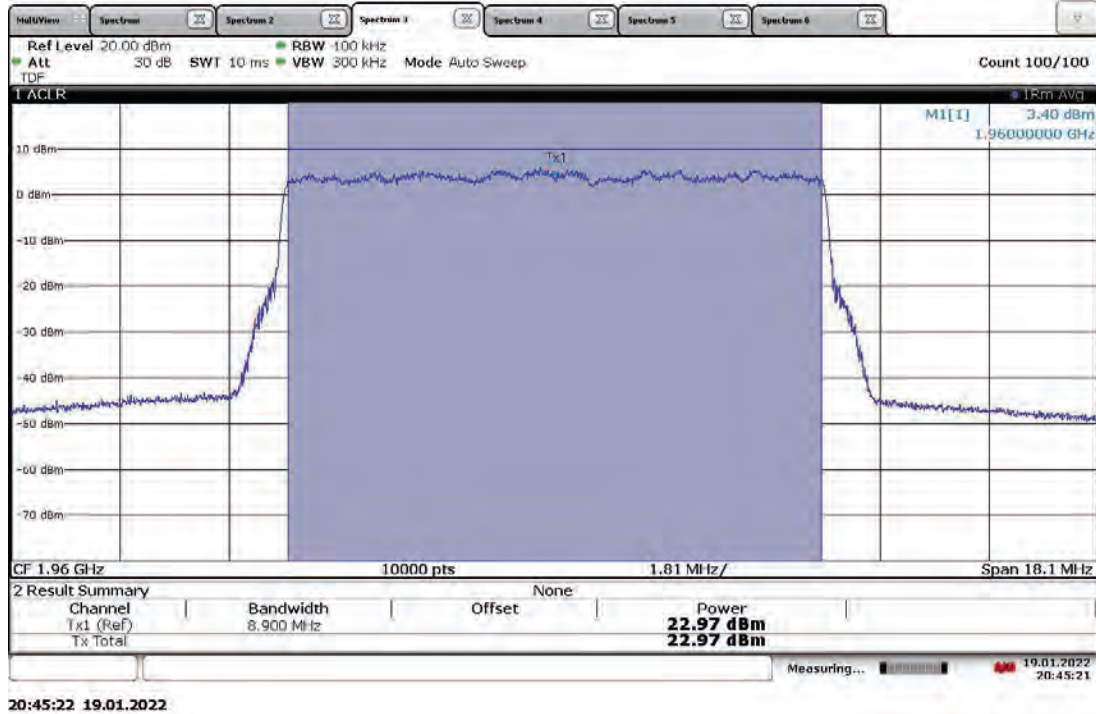
TM3.2-16QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1935 MHz, Output Power = 22.78 dBm



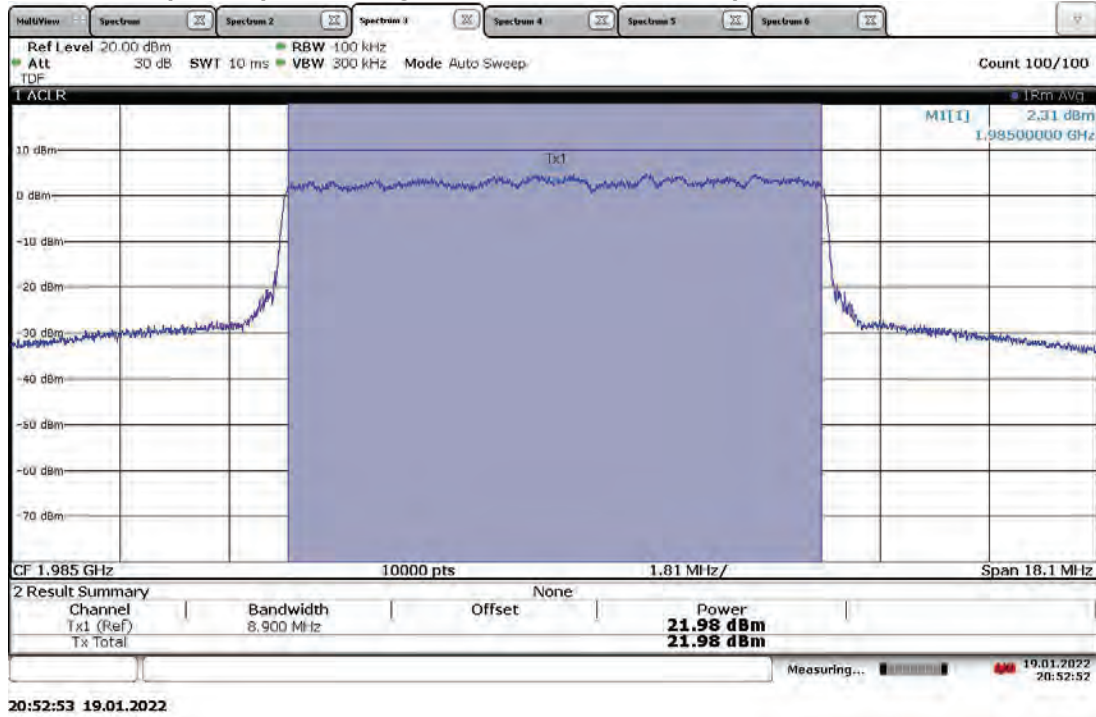
TM3.2-16QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 21.93 dBm



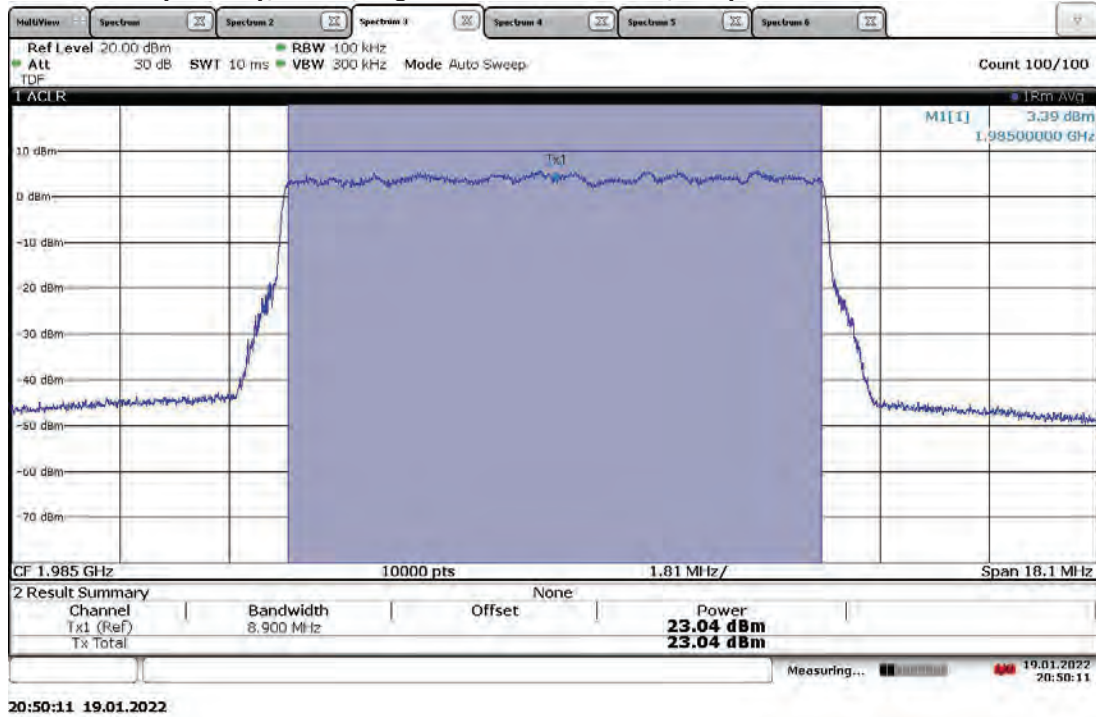
TM3.2-16QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 22.97 dBm



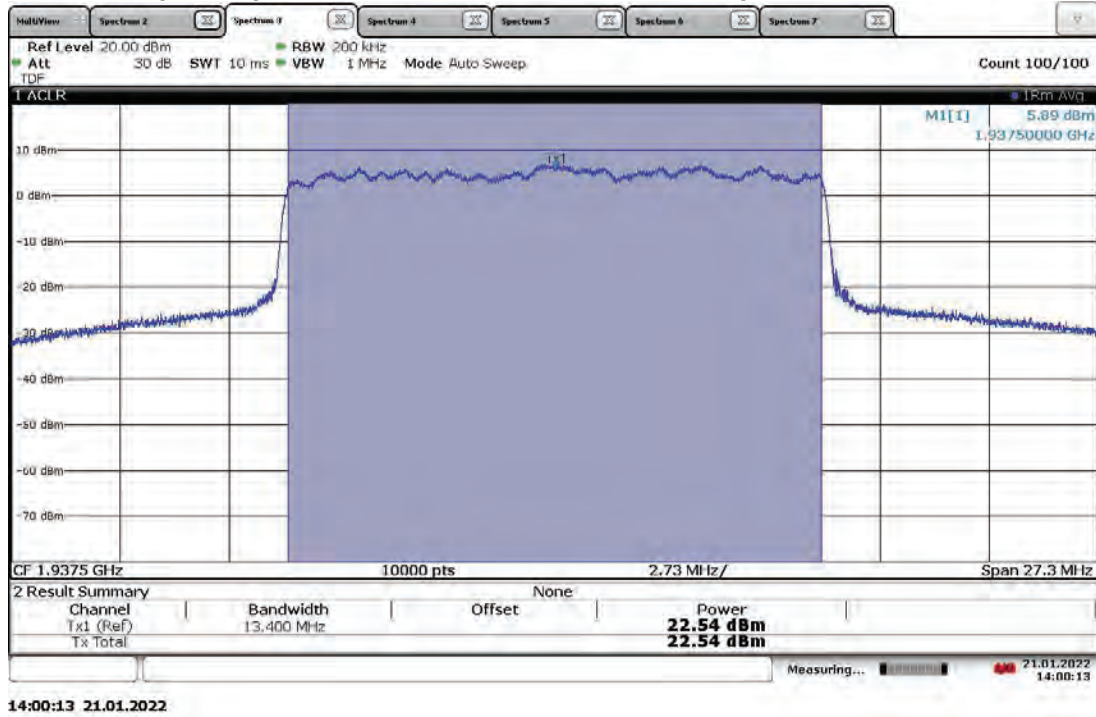
TM3.2-16QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1985 MHz, Output Power = 21.98 dBm



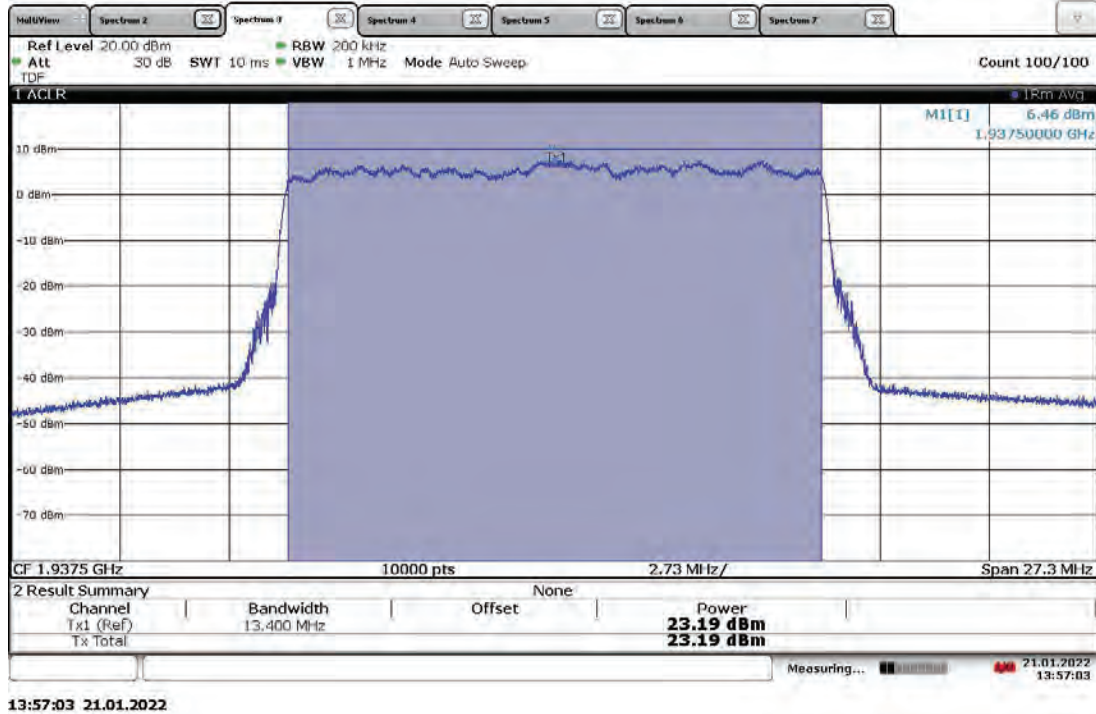
TM3.2-16QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1985 MHz, Output Power = 23.04 dBm



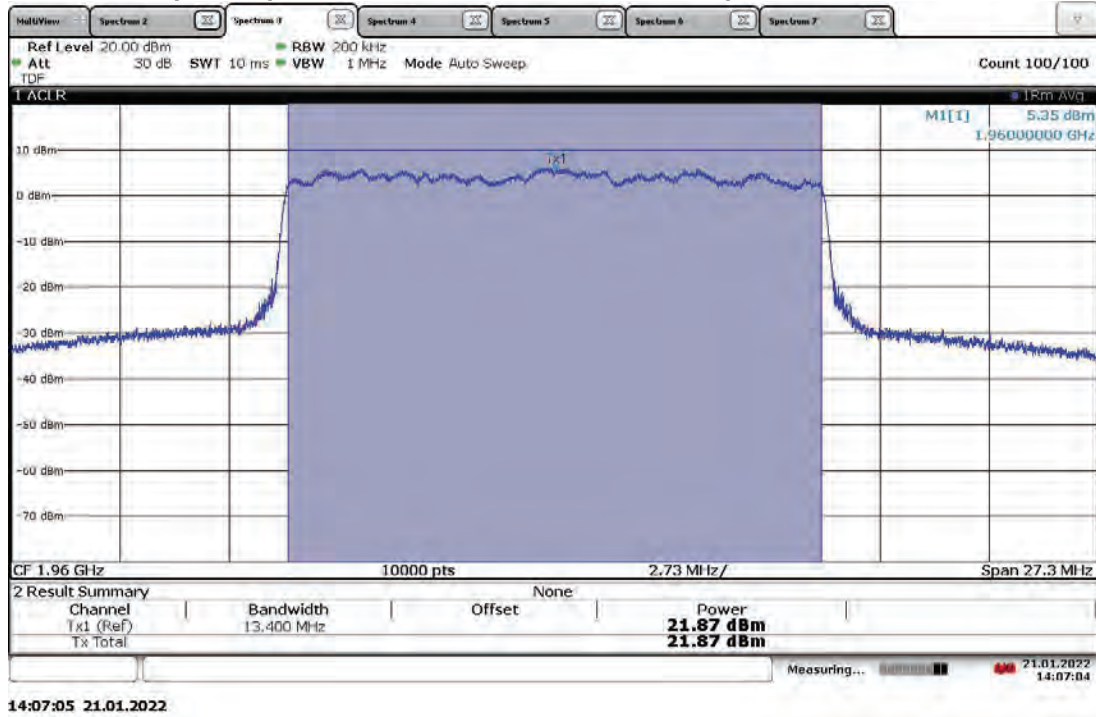
TM3.2-16QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1937.5 MHz, Output Power = 22.54 dBm



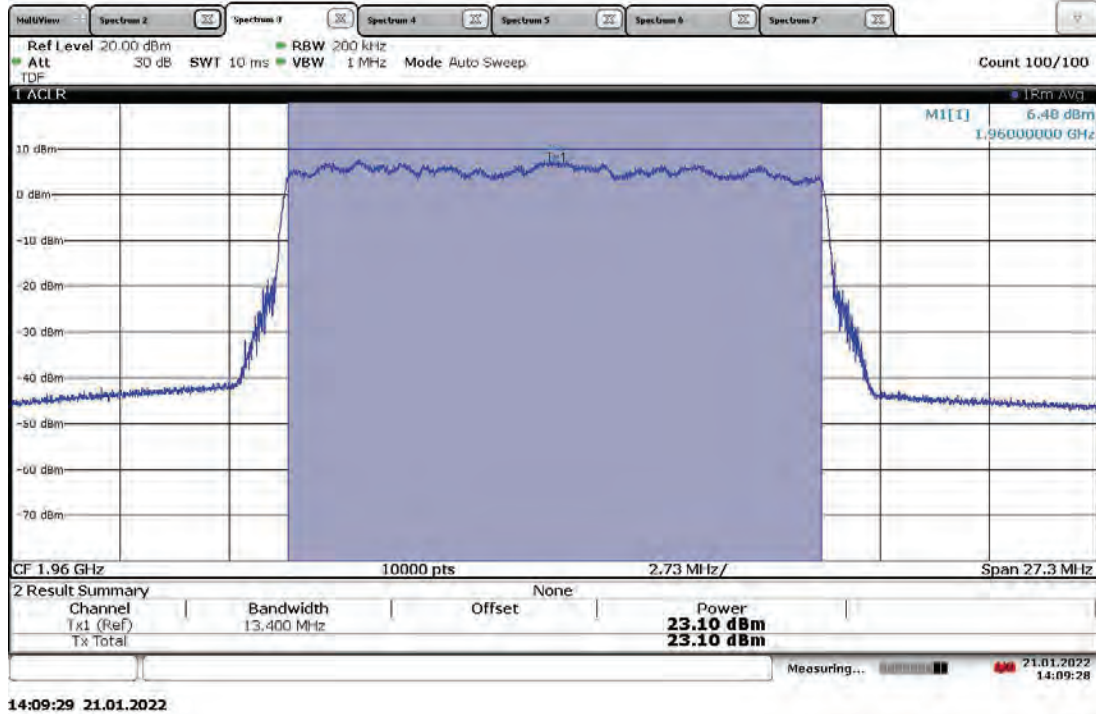
TM3.2-16QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1937.5 MHz, Output Power = 23.19 dBm



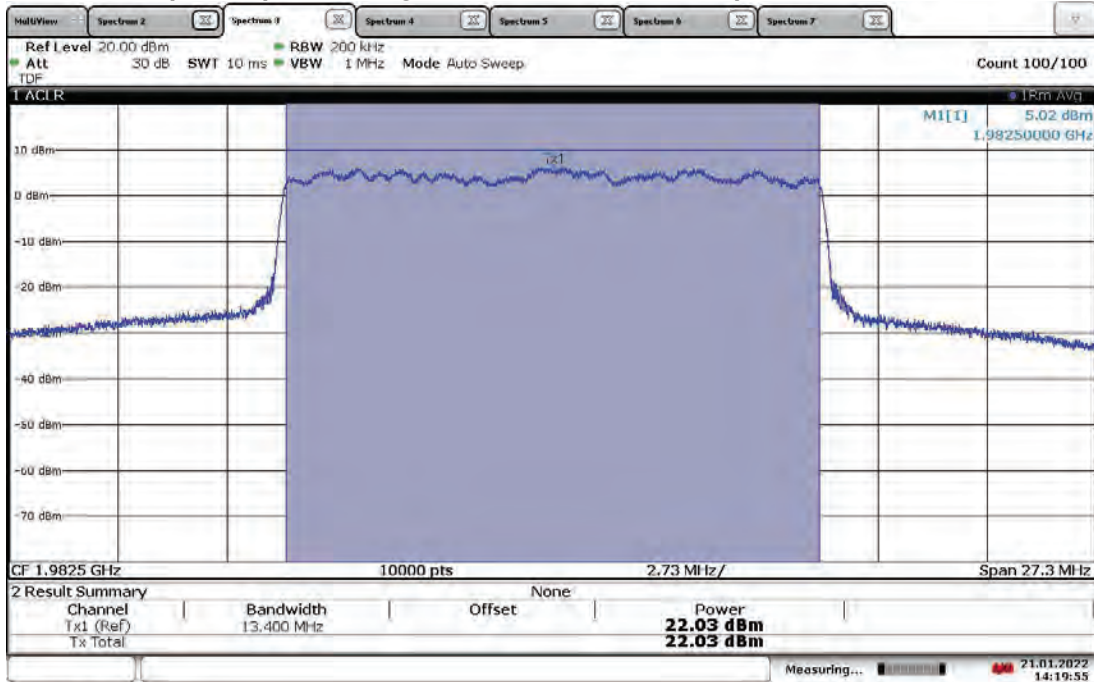
TM3.2-16QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 21.87 dBm



TM3.2-16QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 23.10 dBm

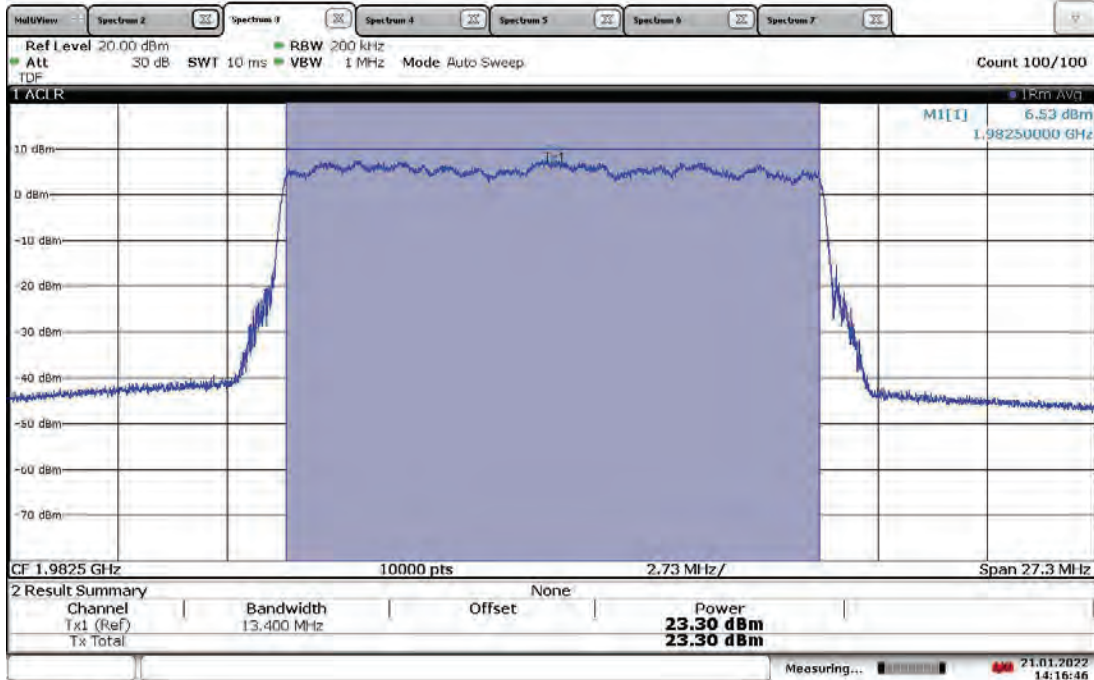


TM3.2-16QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1982 MHz, Output Power =22.03 dBm



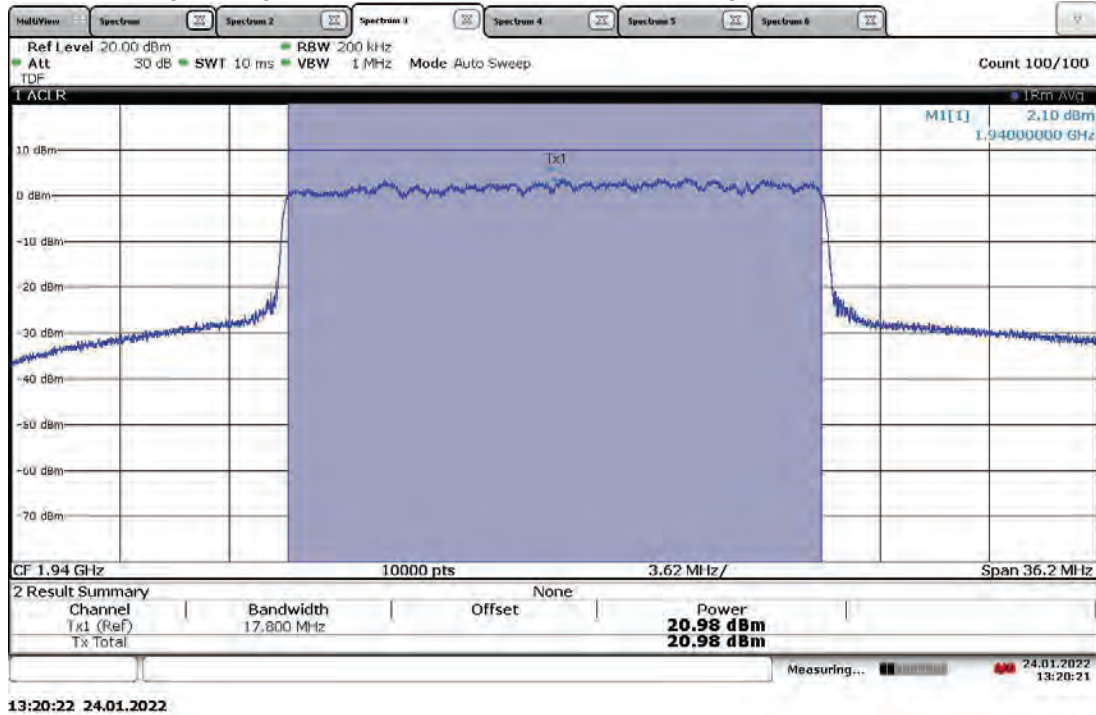
14:19:55 21.01.2022

TM3.2-16QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1982.5 MHz, Output Power = 23.30 dBm

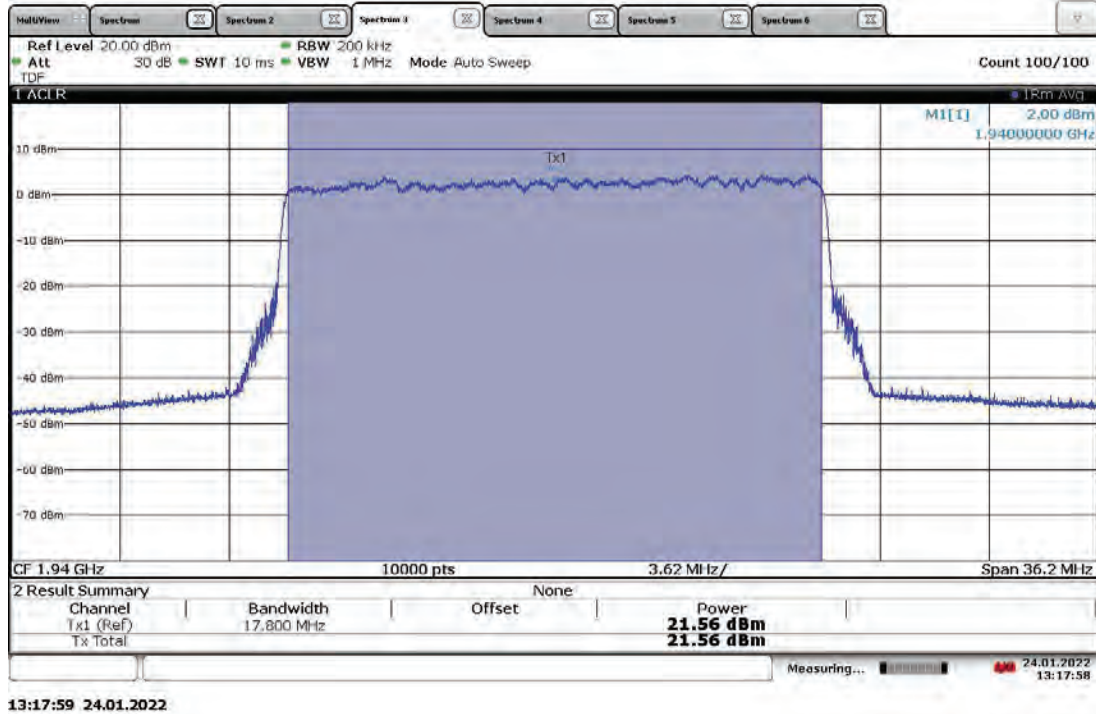


14:16:46 21.01.2022

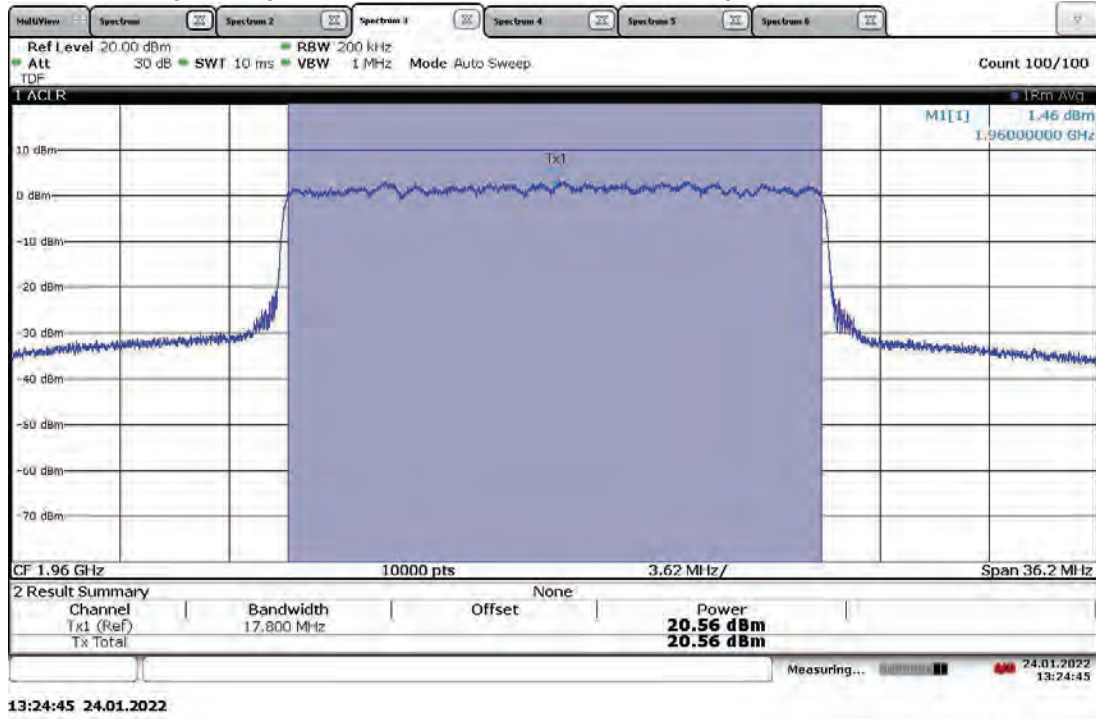
TM3.2-16QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1940 MHz, Output Power = 20.98 dBm



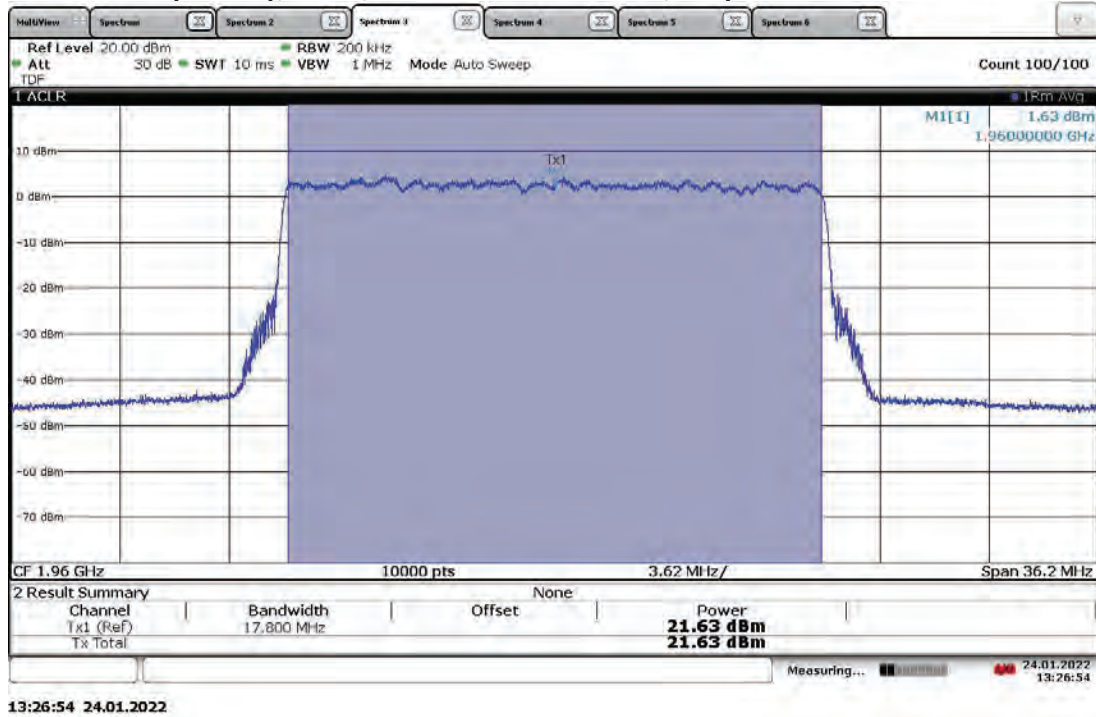
TM3.2-16QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1940 MHz, Output Power = 21.56 dBm



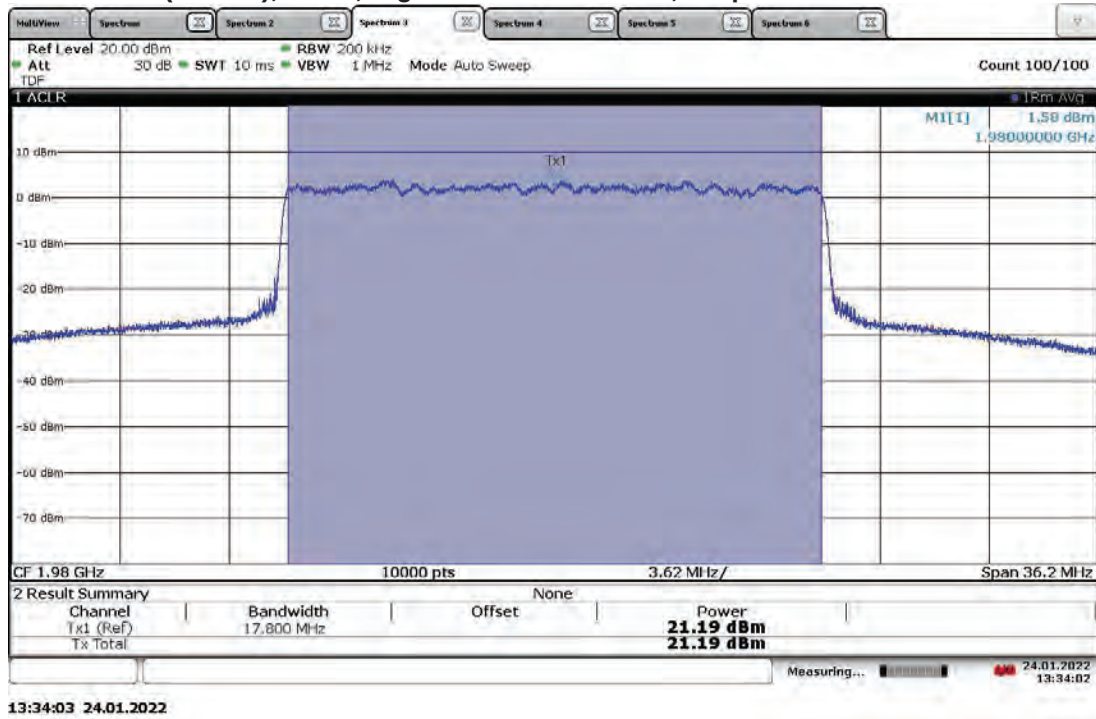
TM3.2-16QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 20.56 dBm



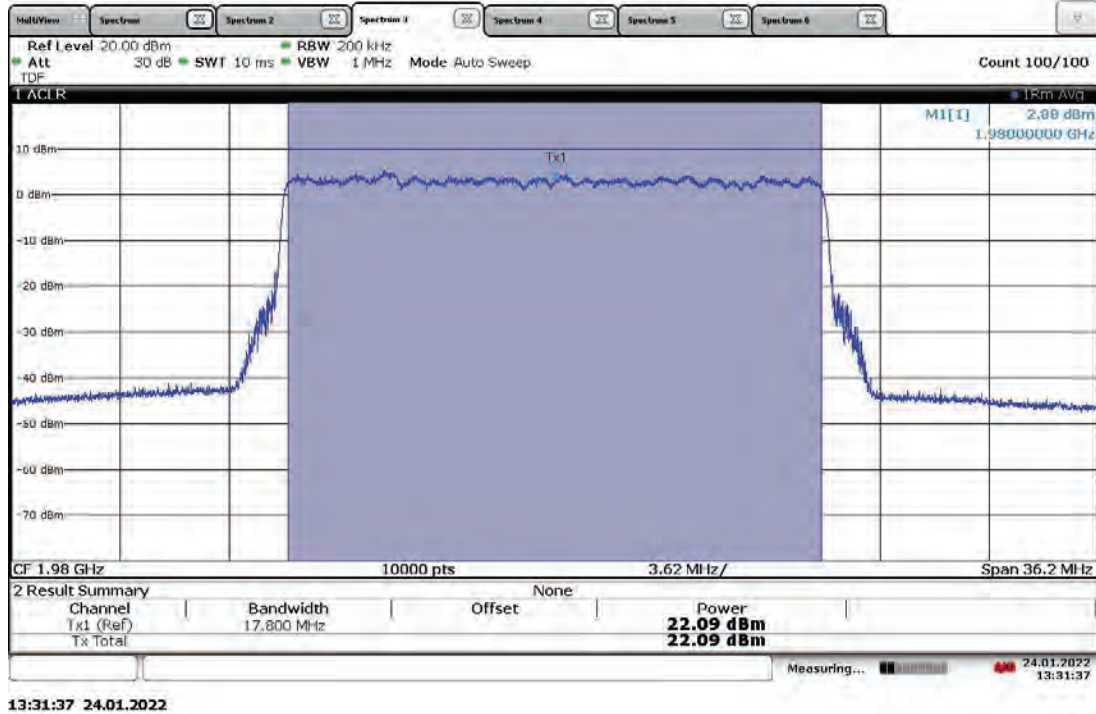
TM3.2-16QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 21.63 dBm



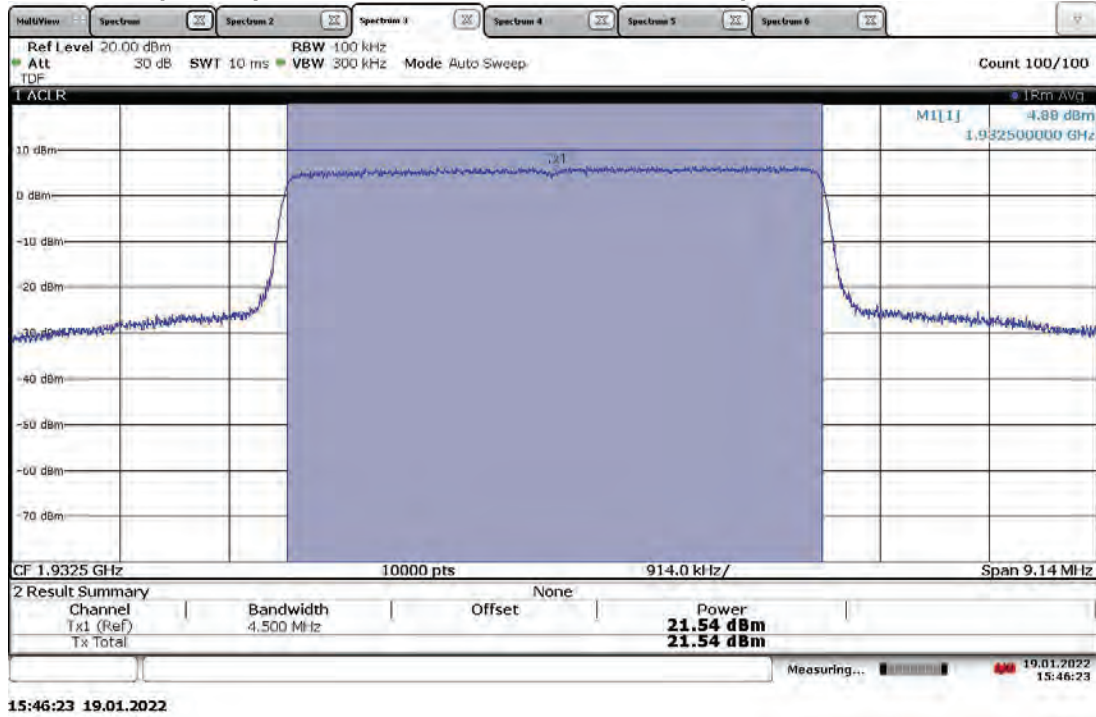
TM3.2-16QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1980 MHz, Output Power = 21.19 dBm



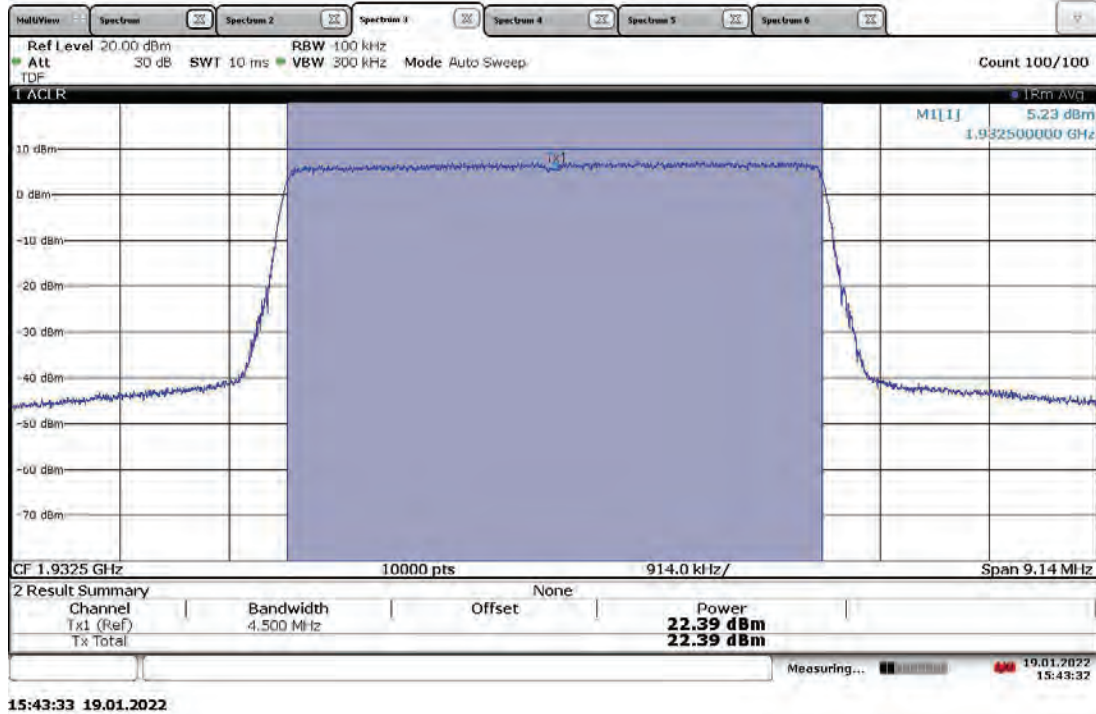
TM3.2-16QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1980 MHz, Output Power = 22.09 dBm



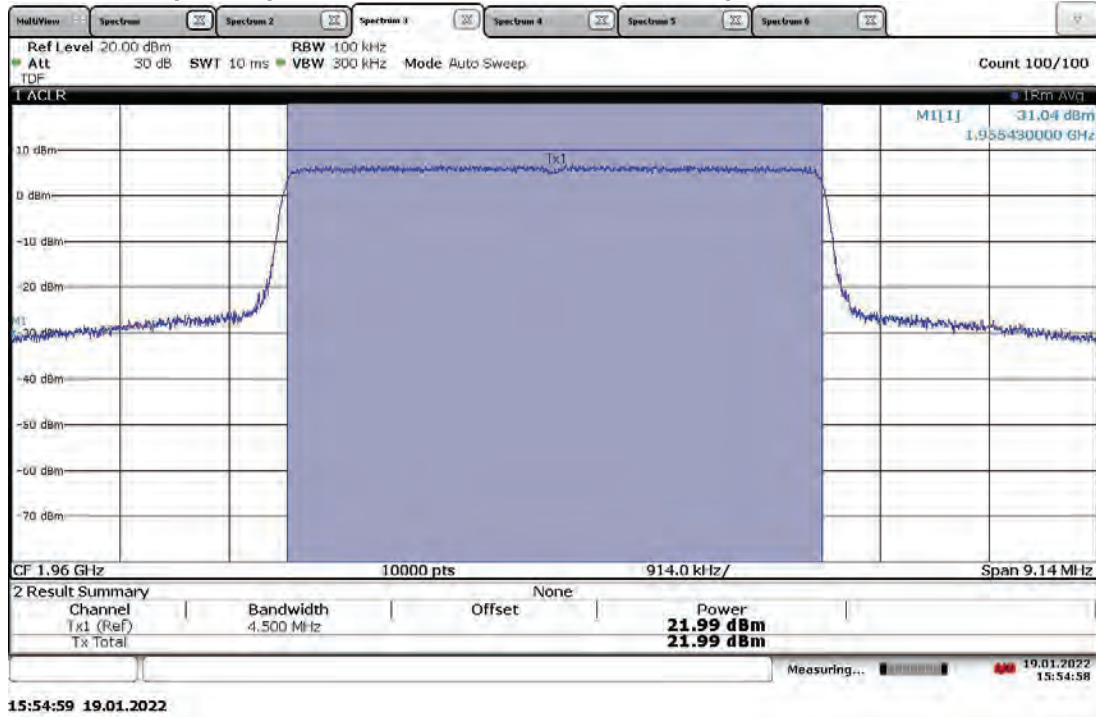
TM3.1-64QAM_5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1932.5 MHz, Output Power = 21.54 dBm



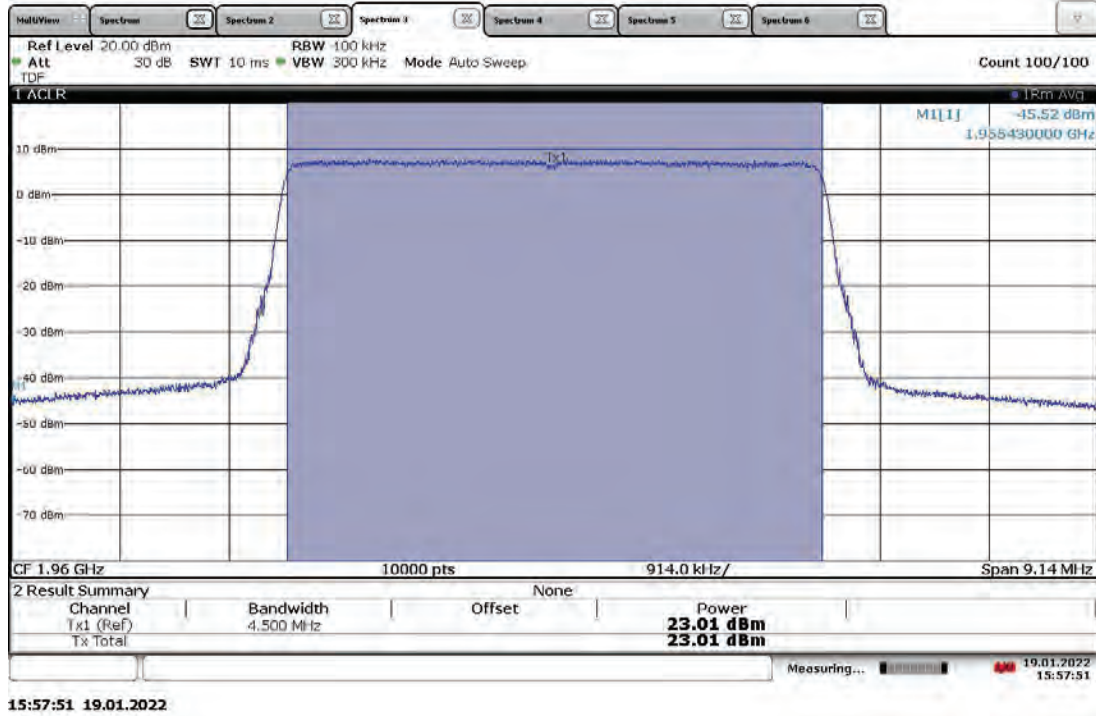
TM3.1-64QAM_5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1932.5 MHz, Output Power = 22.39 dBm



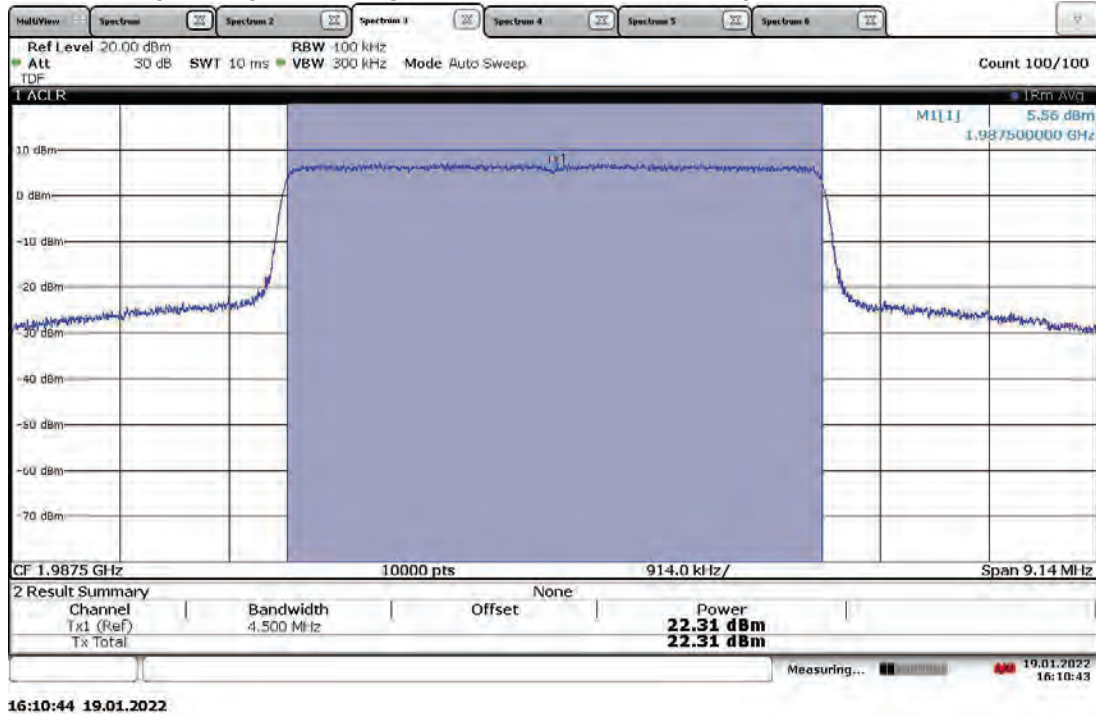
TM3.1-64QAM_5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 21.99 dBm



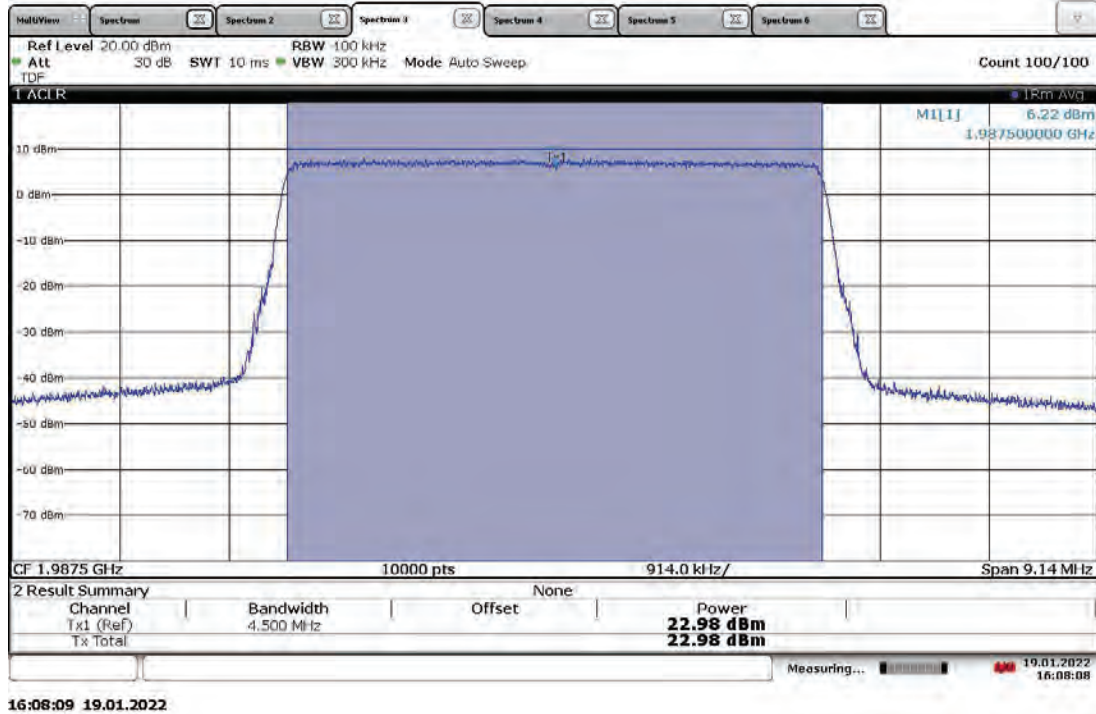
TM3.1-64QAM_5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 23.01 dBm



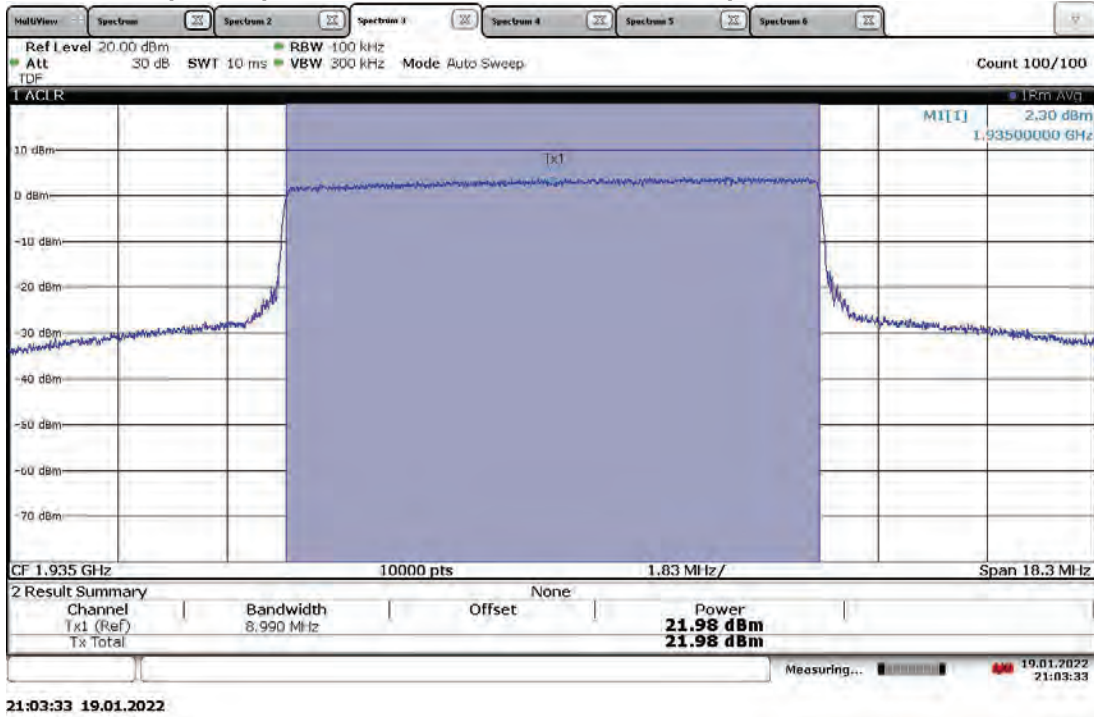
TM3.1-64QAM_5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1987.5 MHz, Output Power = 22.31 dBm



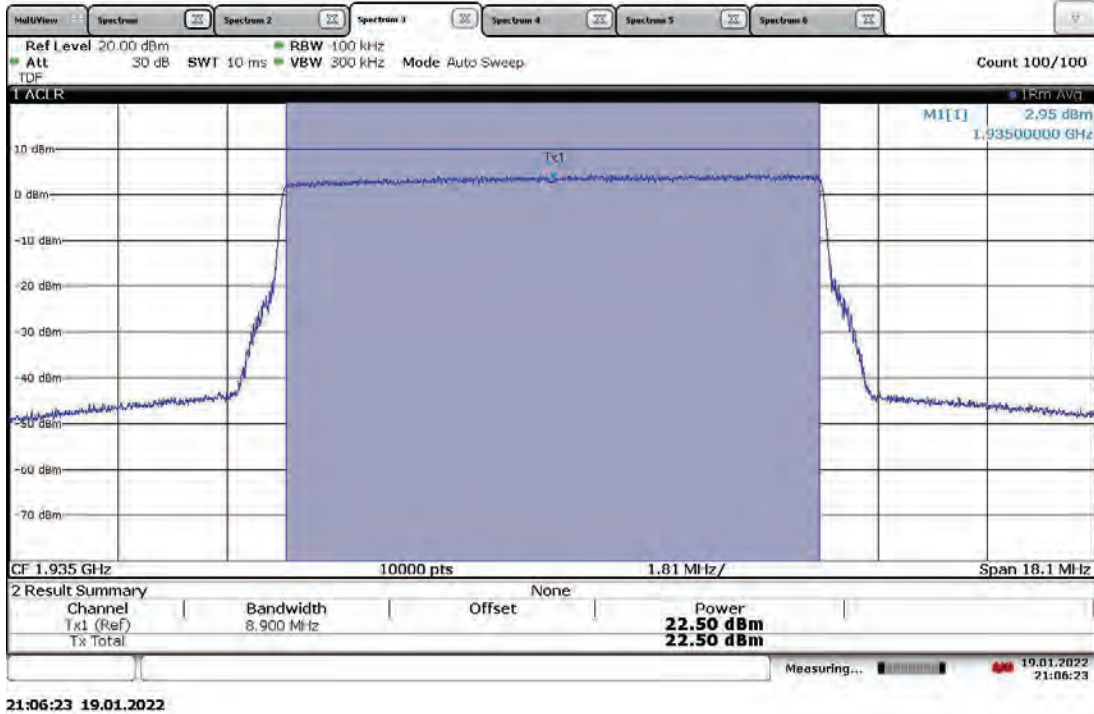
TM3.1-64QAM_5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1987.5 MHz, Output Power = 22.98 dBm



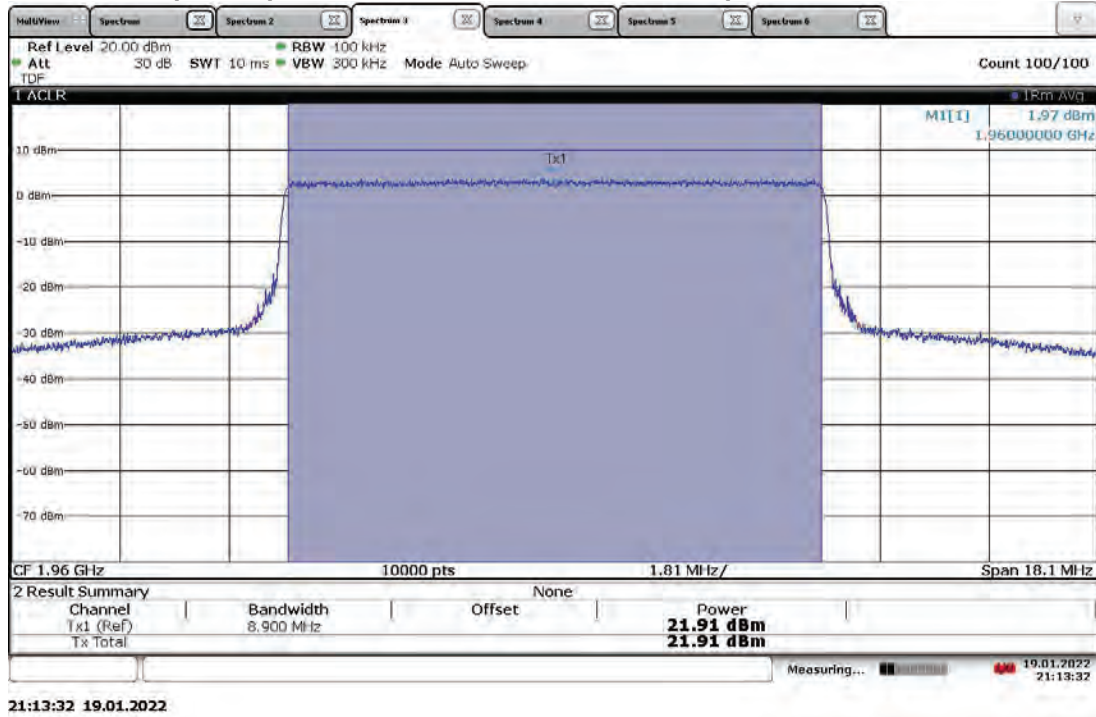
TM3.1-64QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1935 MHz, Output Power = 21.98 dBm



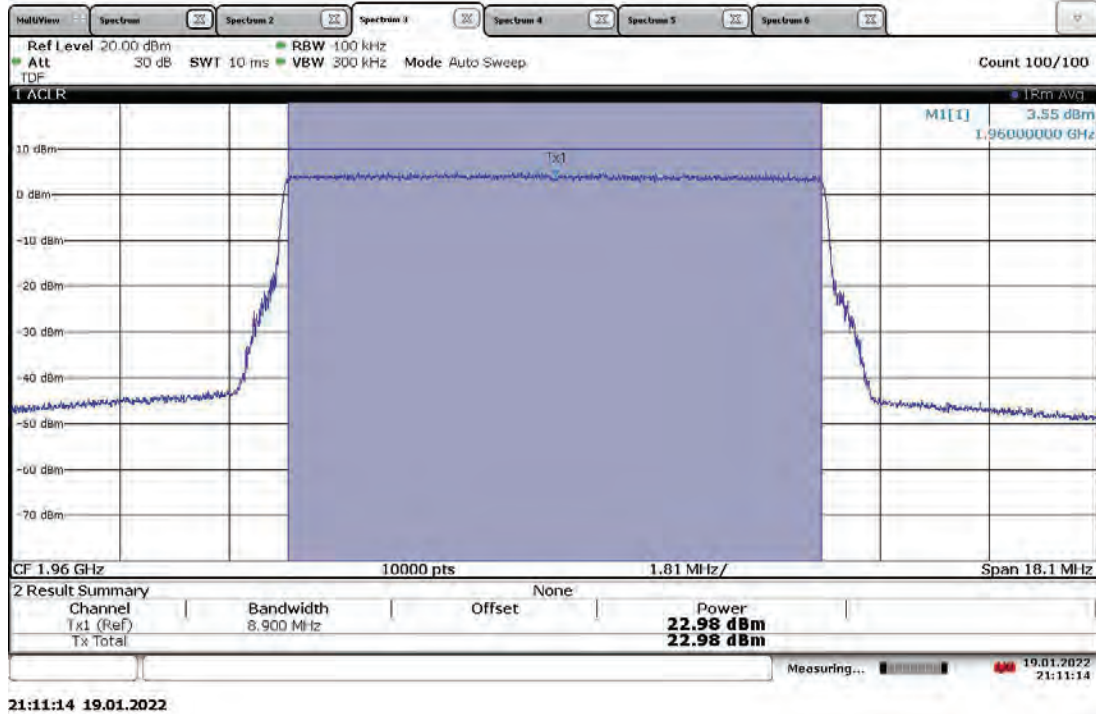
TM3.1-64QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1935 MHz, Output Power = 22.50 dBm



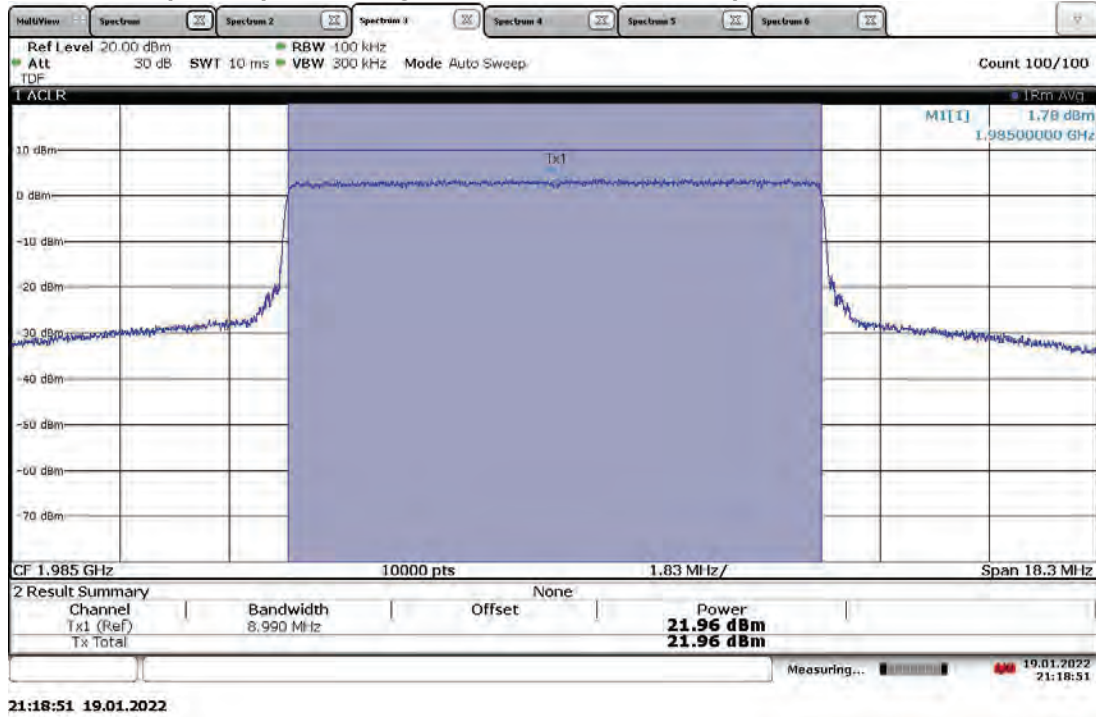
TM3.1-64QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 21.91 dBm



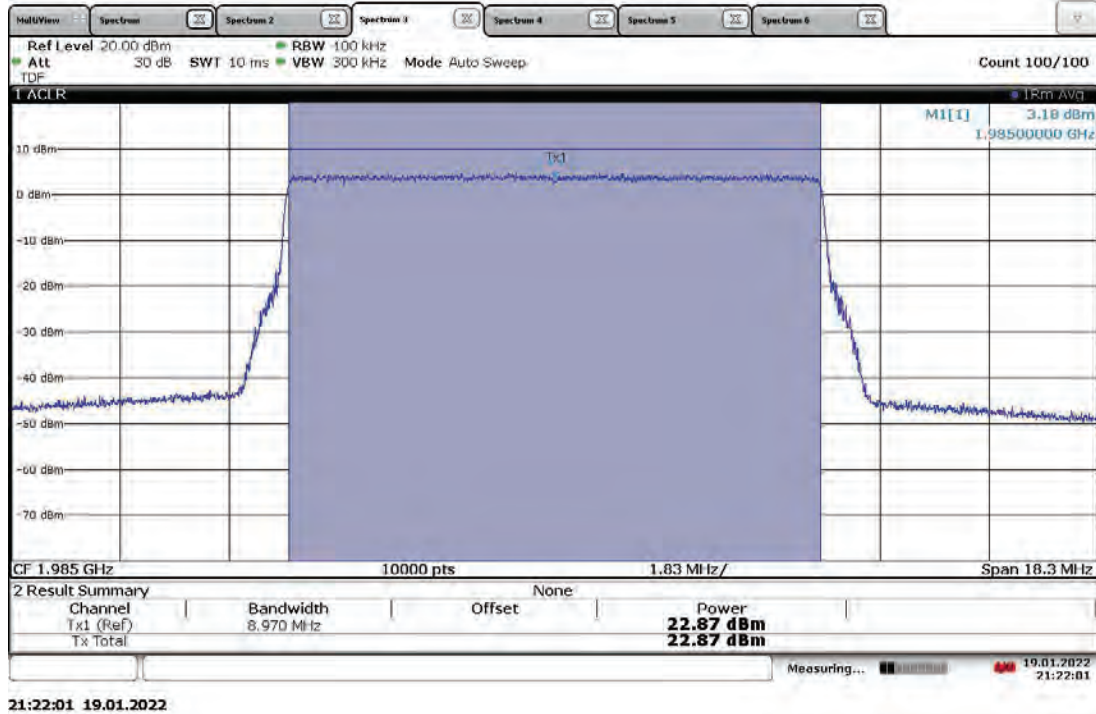
TM3.1-64QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 22.98 dBm



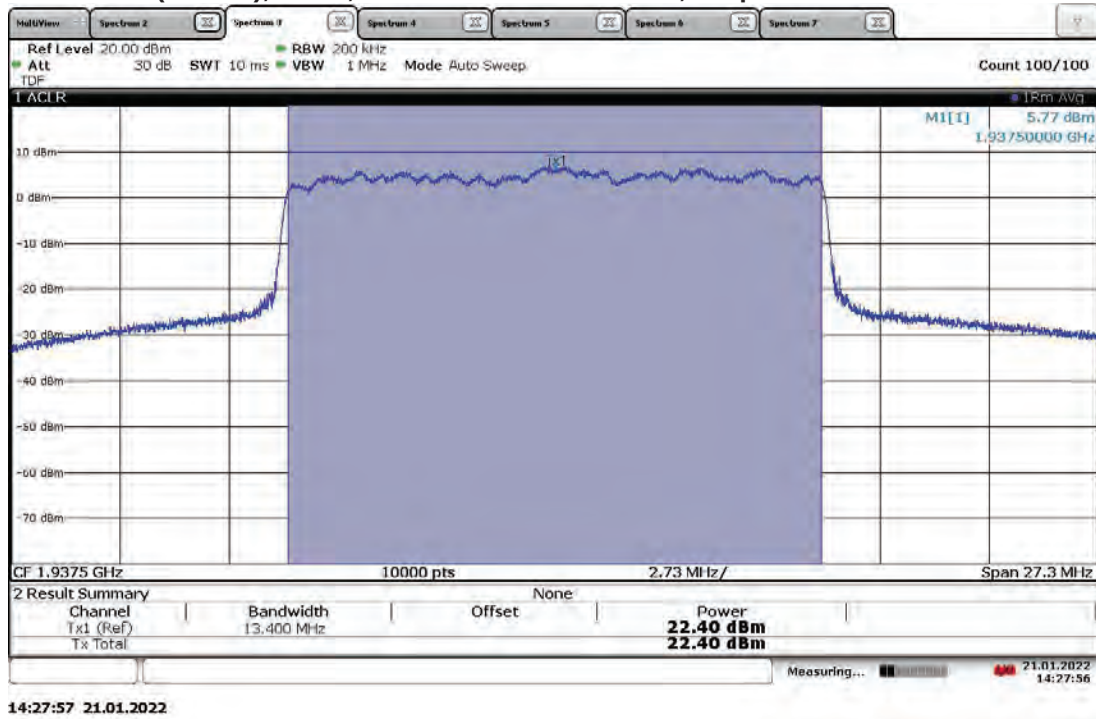
TM3.1-64QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1985 MHz, Output Power = 21.96 dBm



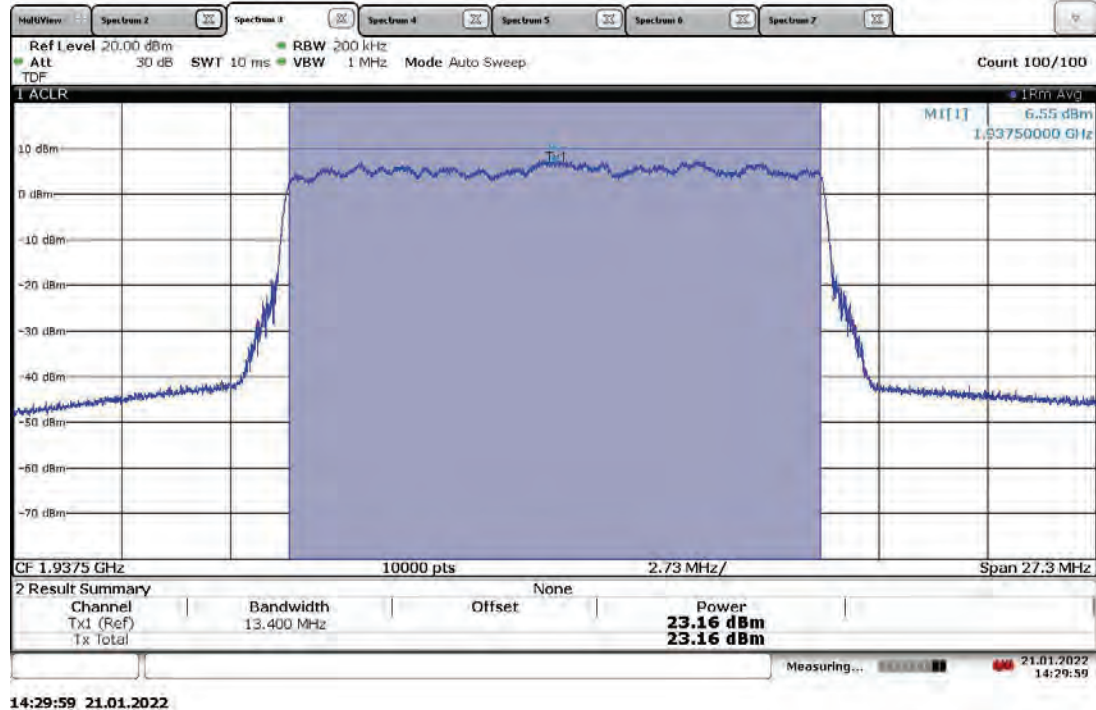
TM3.1-64QAM_10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1985 MHz, Output Power = 22.87 dBm



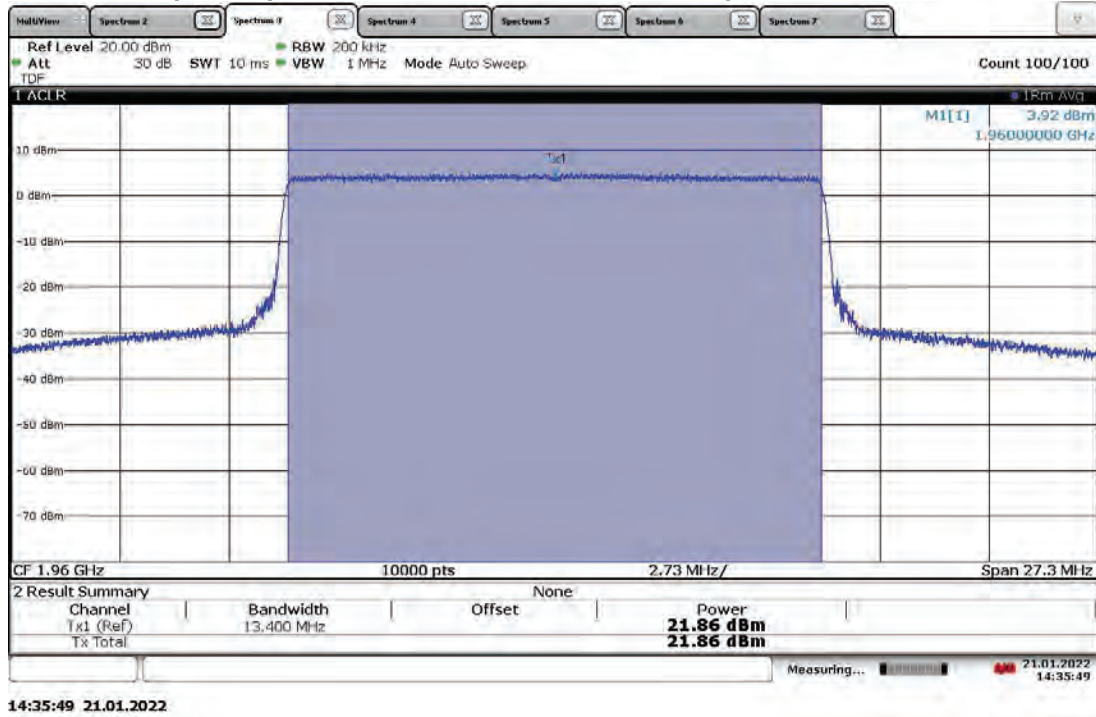
TM3.1-64QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1937.5 MHz, Output Power = 22.40 dBm



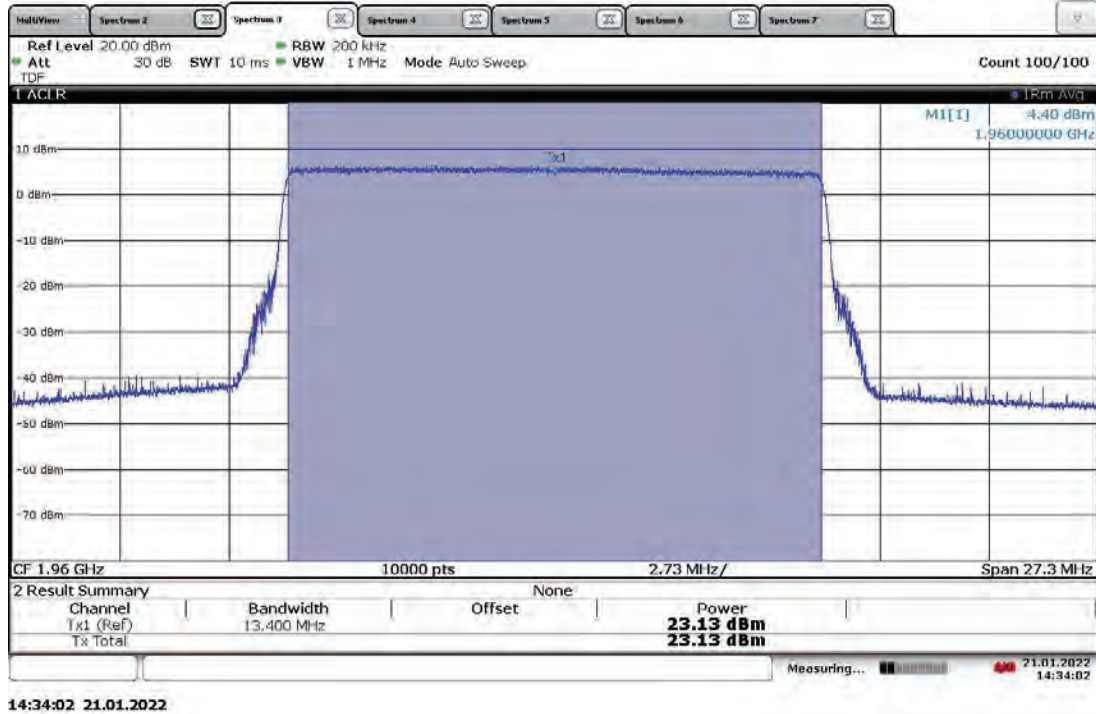
TM3.1-64QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1937.5 MHz, Output Power = 23.16 dBm



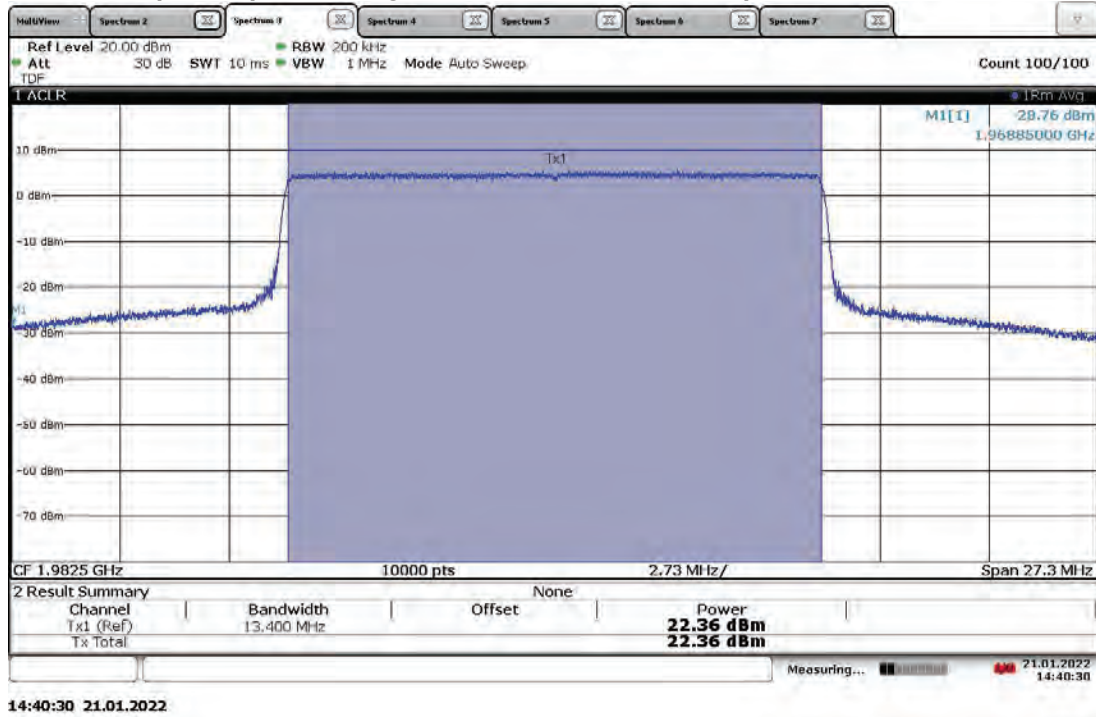
TM3.1-64QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 21.86 dBm



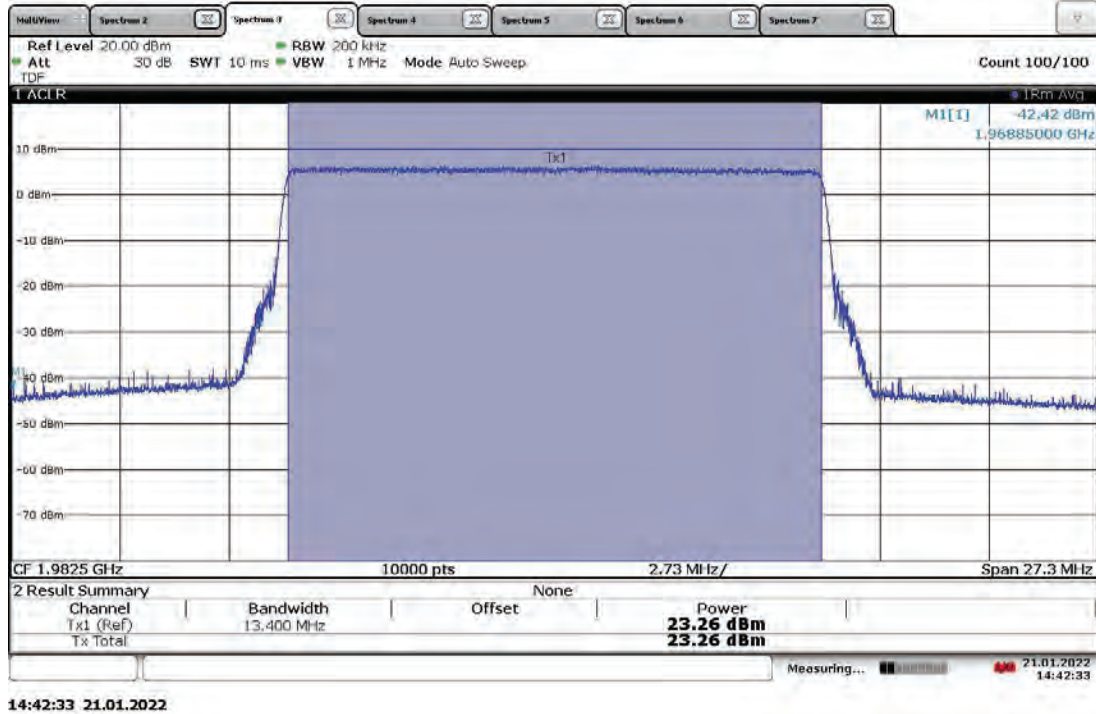
TM3.1-64QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 23.13 dBm



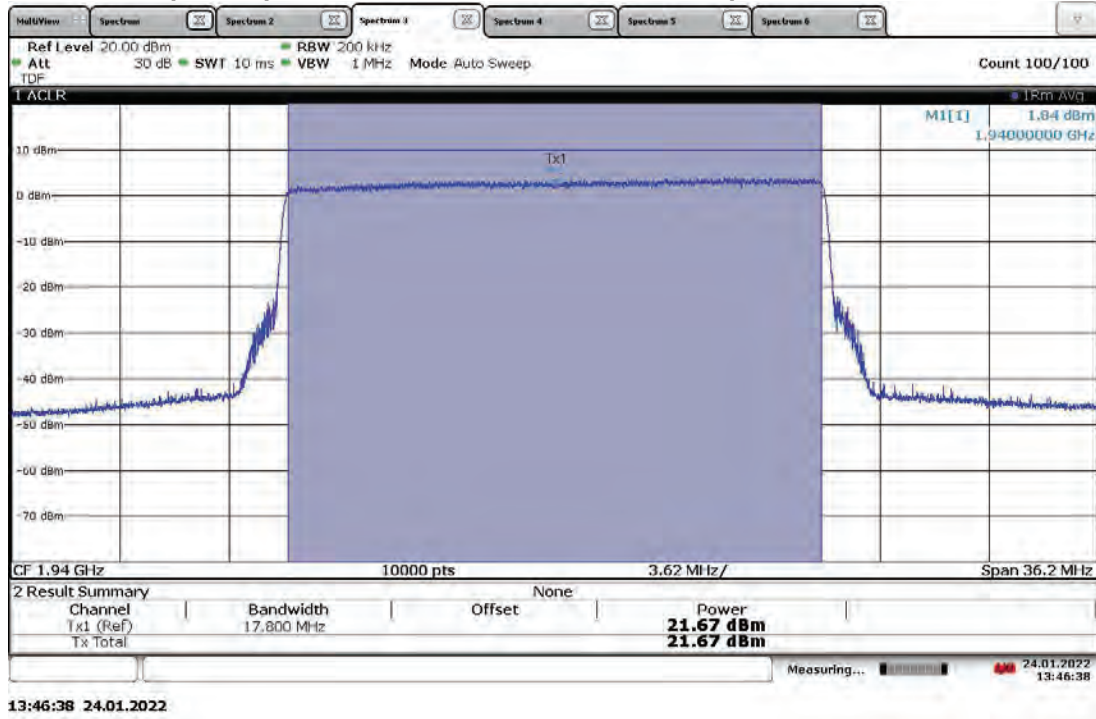
TM3.1-64QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1982.5 MHz, Output Power = 22.36 dBm



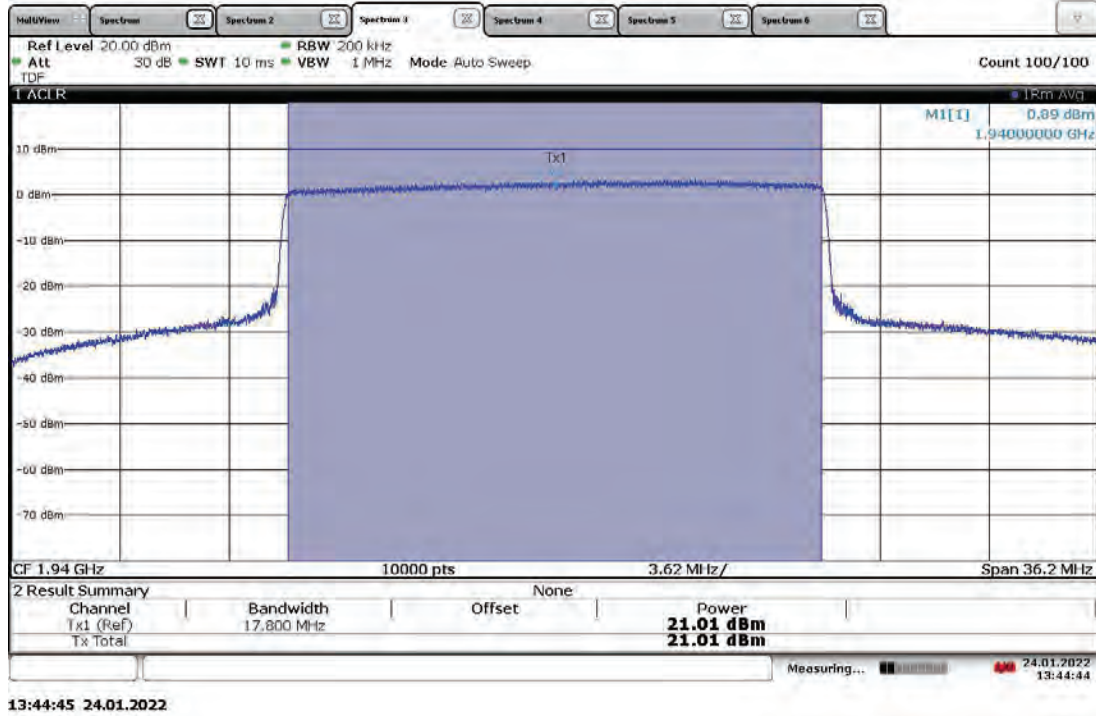
TM3.1-64QAM_15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1982.5 MHz, Output Power = 23.26 dBm



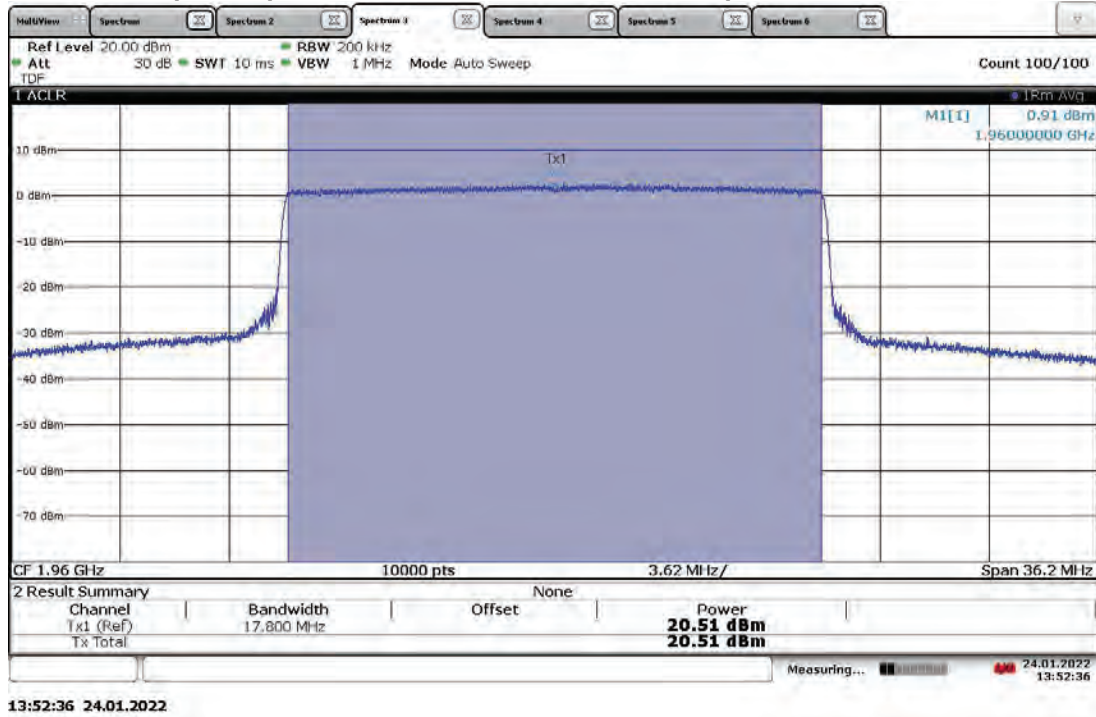
TM3.1-64QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1940 MHz, Output Power = 21.67 dBm



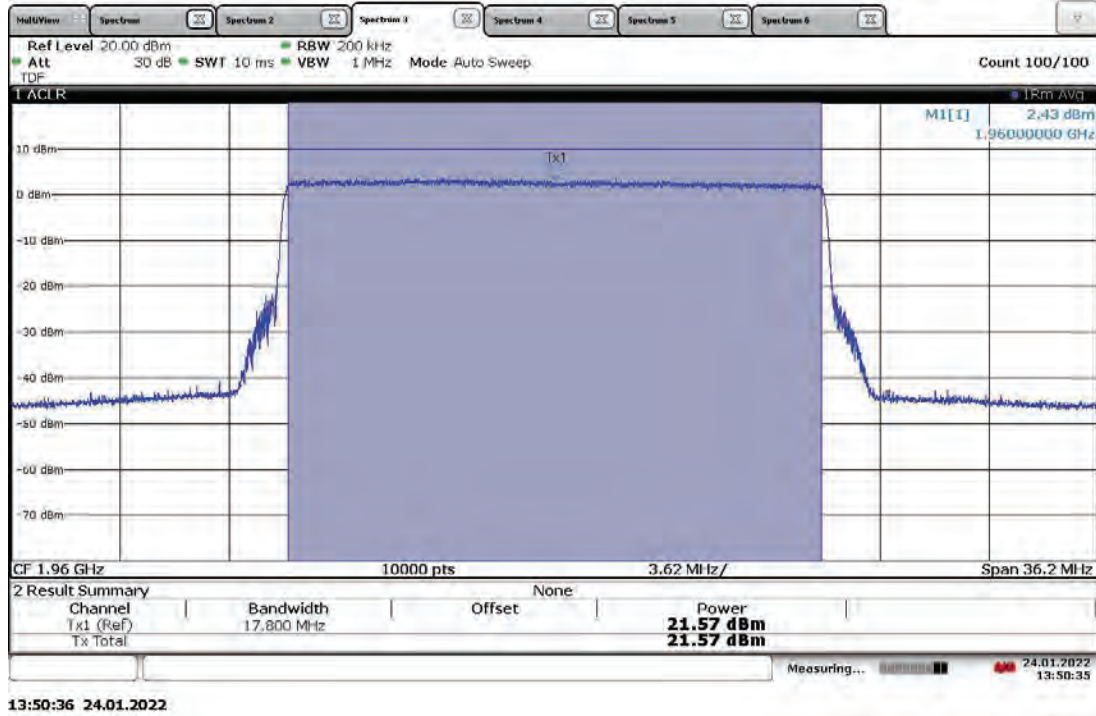
TM3.1-64QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1940 MHz, Output Power = 21.01 dBm



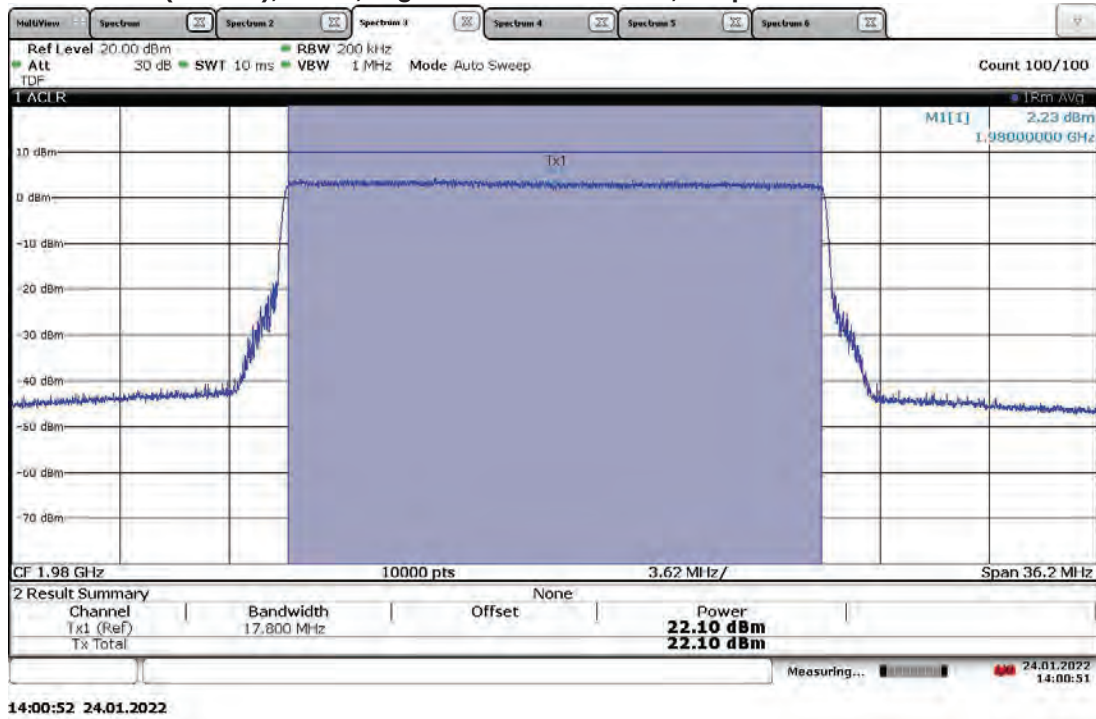
TM3.1-64QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 20.51 dBm



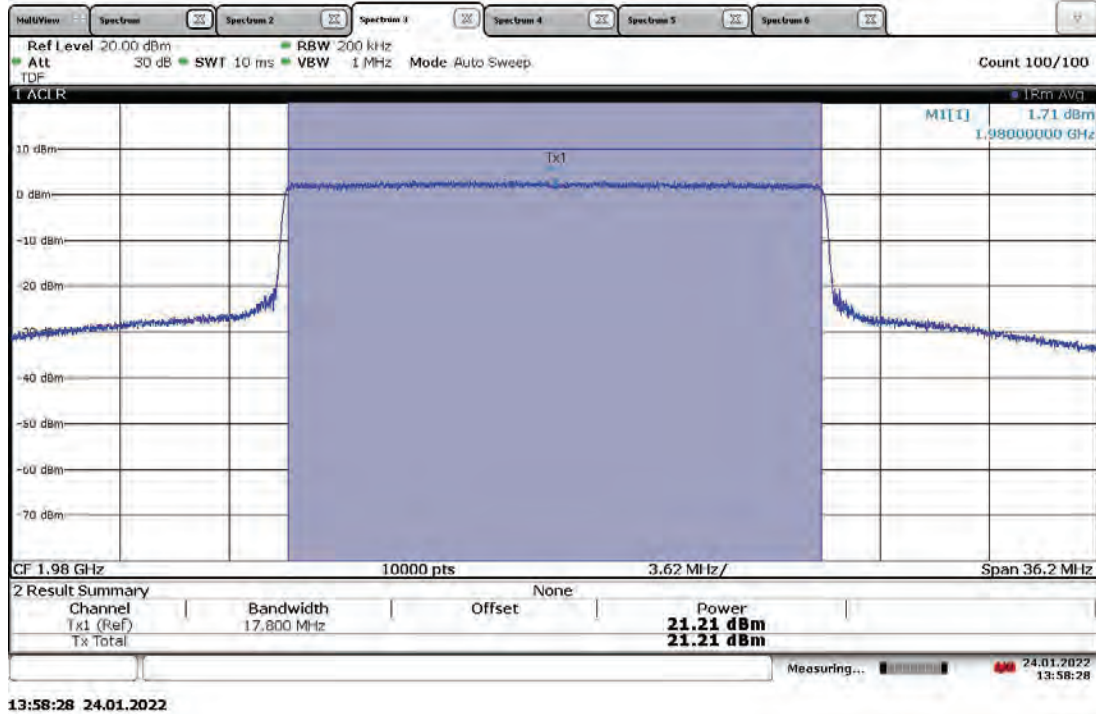
TM3.1-64QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 21.57 dBm



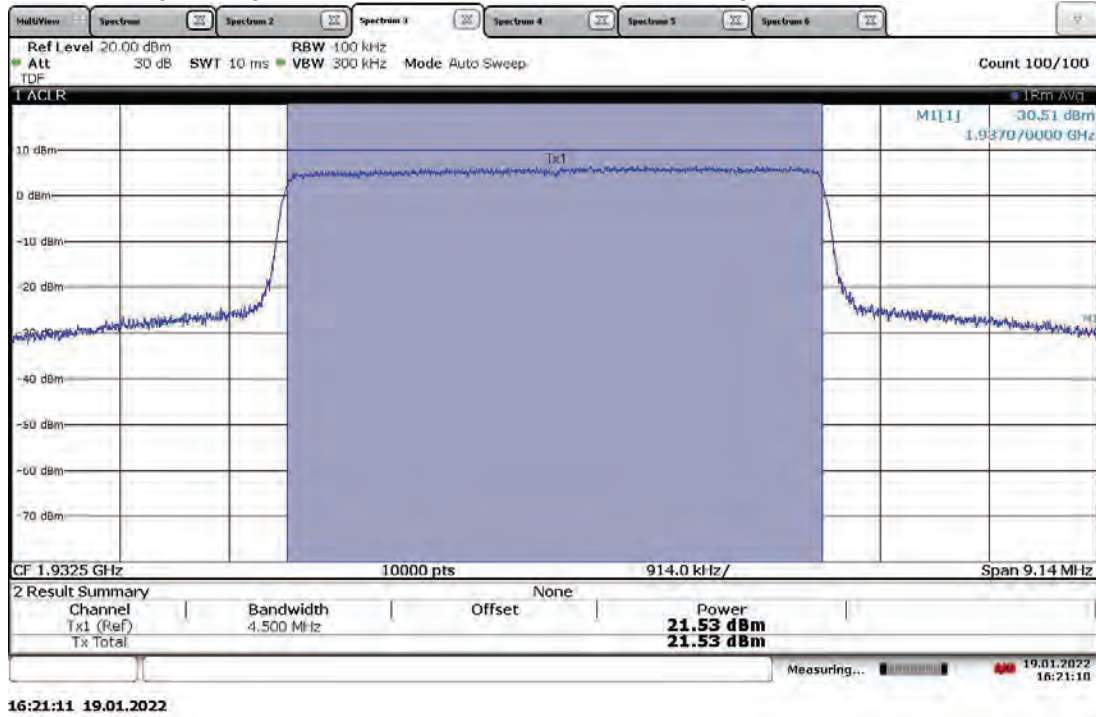
TM3.1-64QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1980 MHz, Output Power = 22.10 dBm



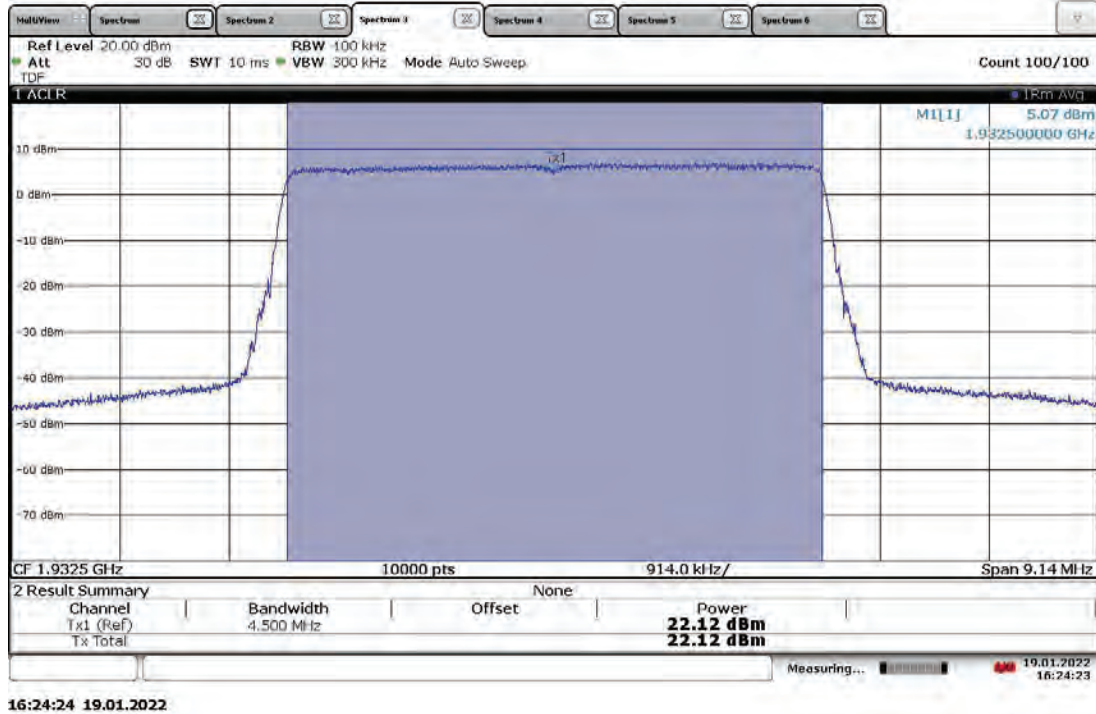
TM3.1-64QAM_20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1980 MHz, Output Power = 21.21 dBm



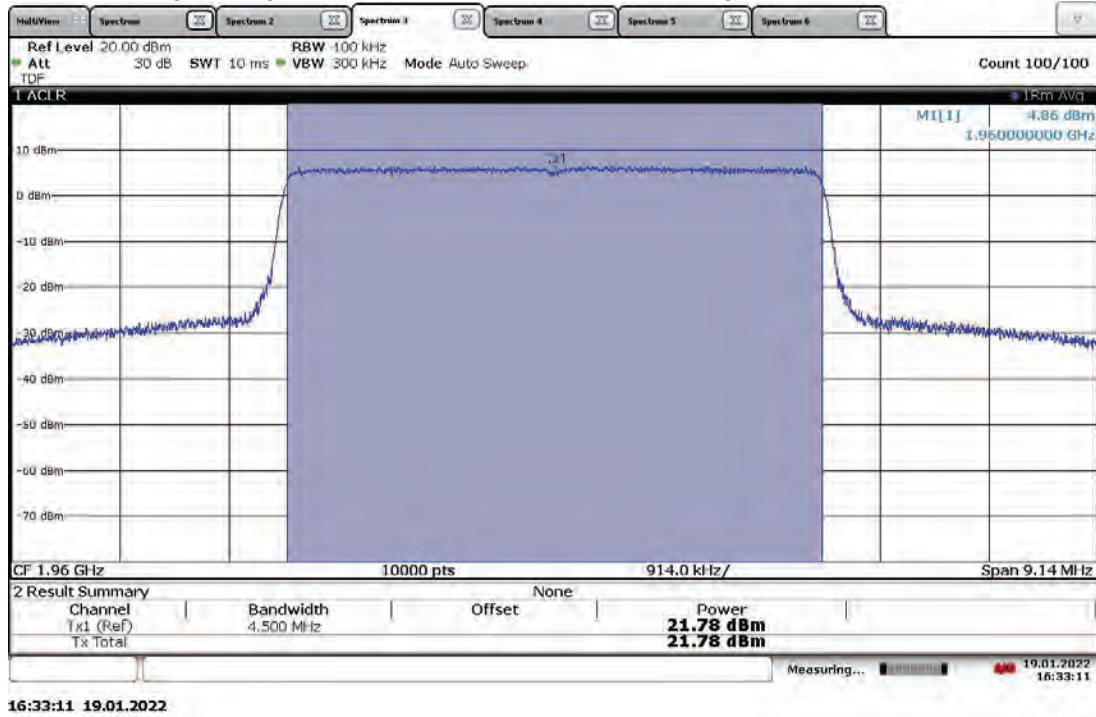
TM3.1a-256QAM _5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1932.5 MHz, Output Power = 21.53 dBm



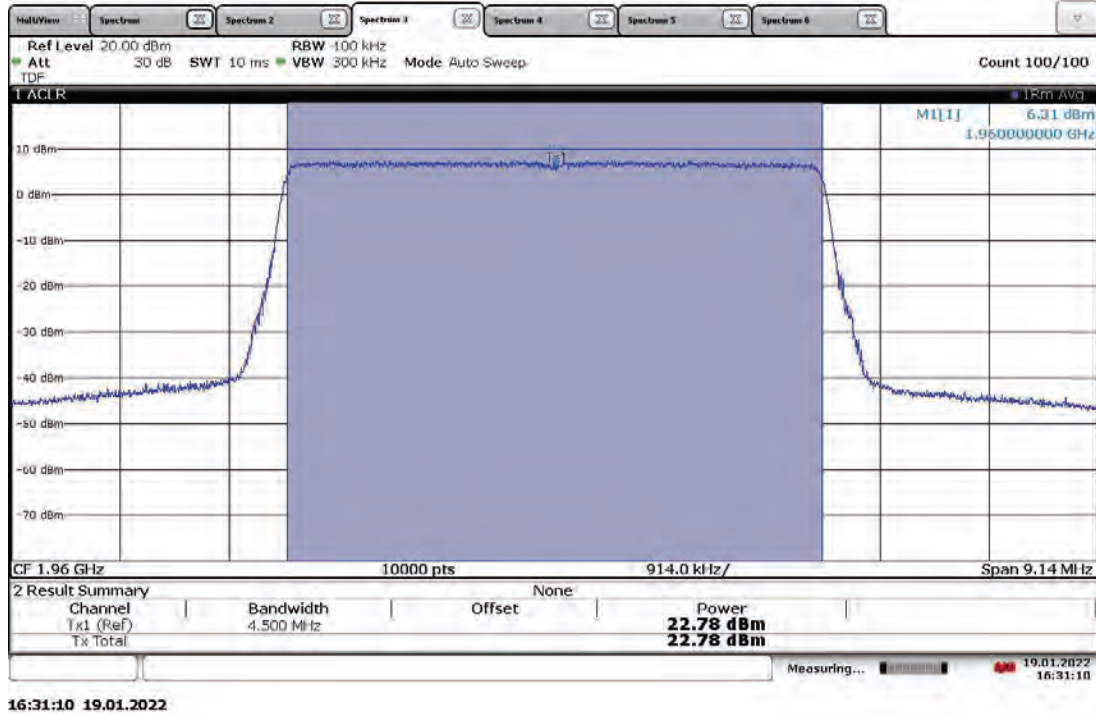
TM3.1a-256QAM _5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1932.5 MHz, Output Power = 22.12 dBm



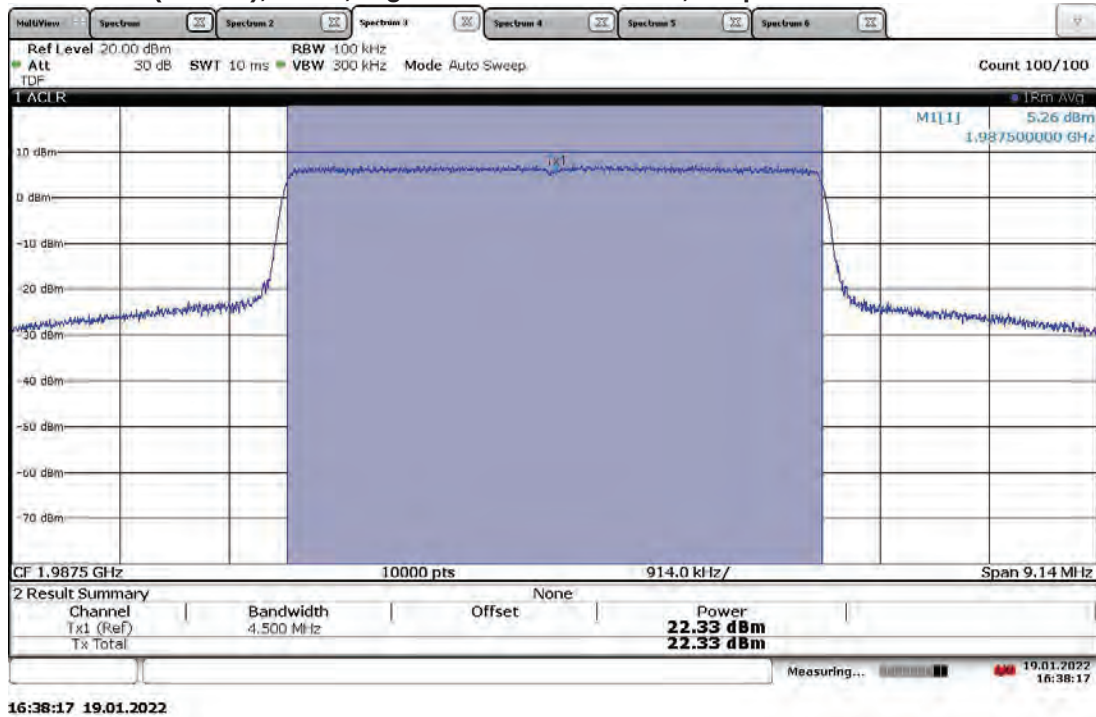
TM3.1a-256QAM _5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 21.78 dBm



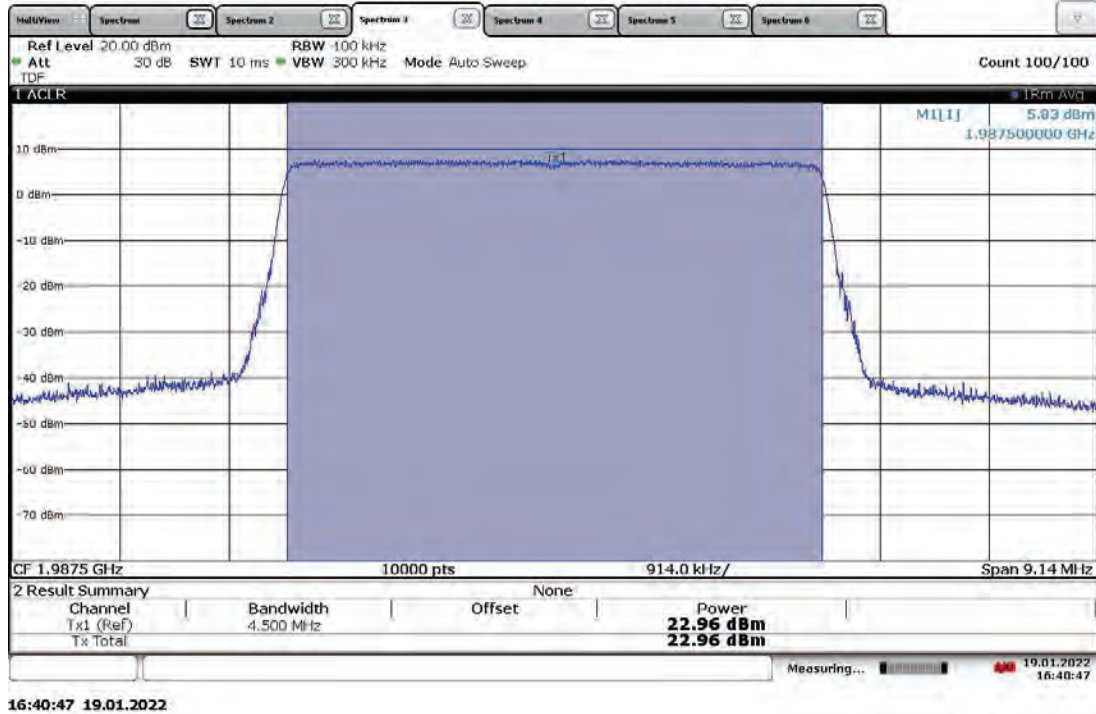
TM3.1a-256QAM _5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 22.78 dBm



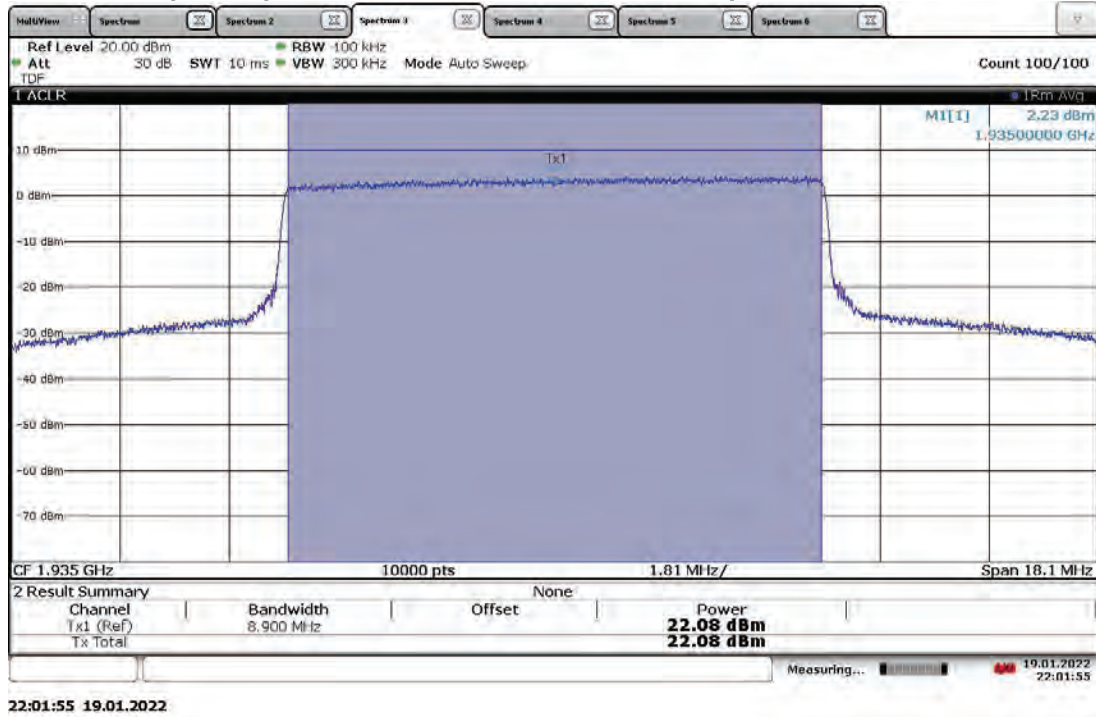
TM3.1a-256QAM _5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1987.5 MHz, Output Power = 22.33 dBm



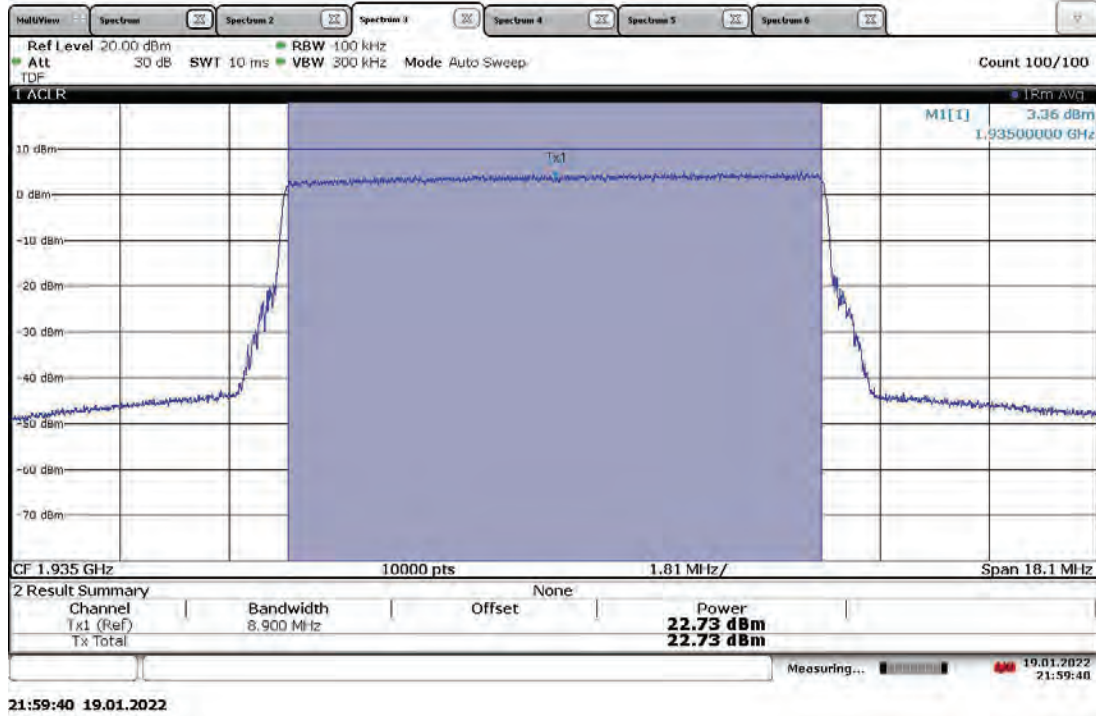
TM3.1a-256QAM _5 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1987.5 MHz, Output Power = 22.96 dBm



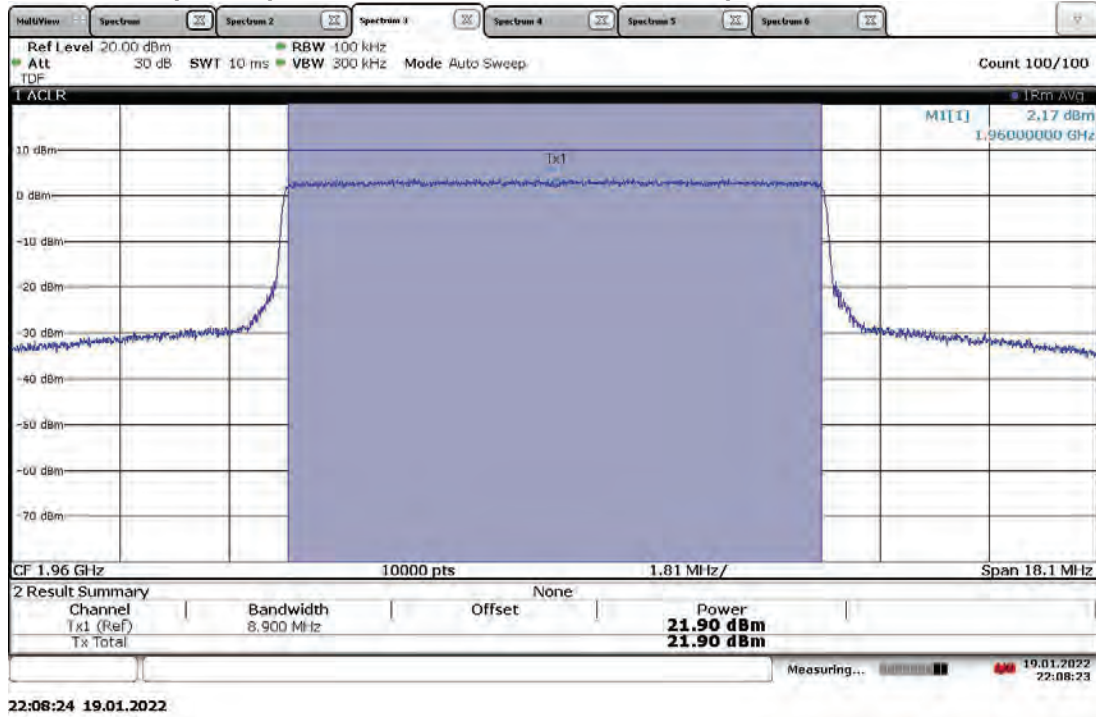
TM3.1a-256QAM _10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1935 MHz, Output Power = 22.08 dBm



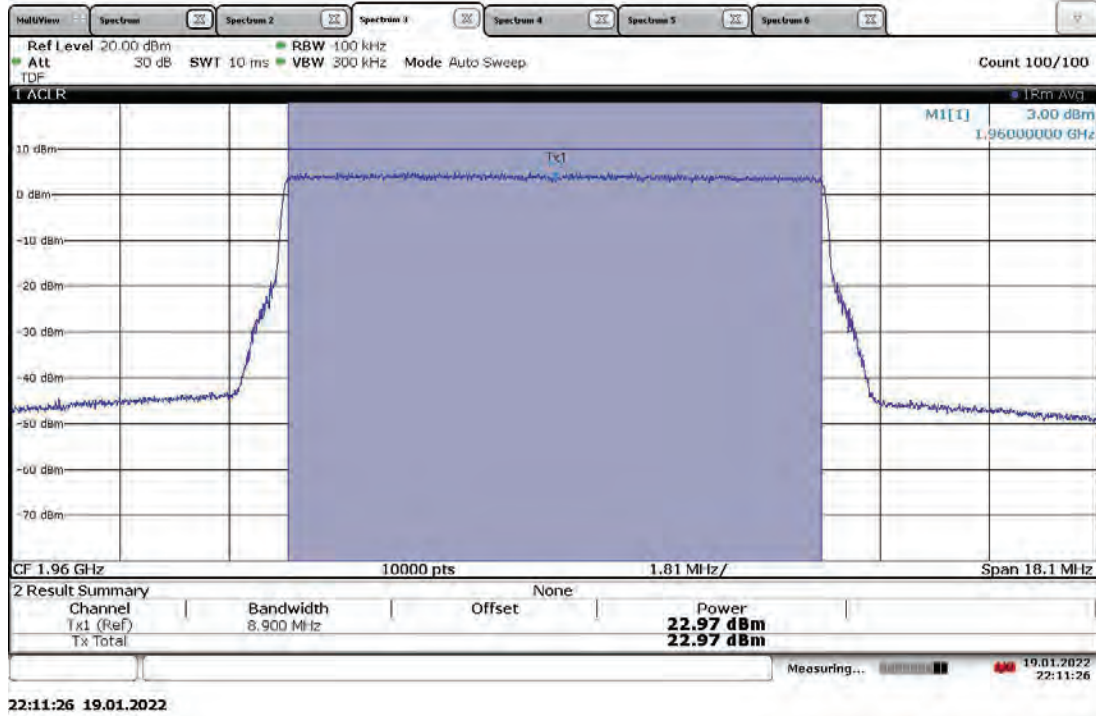
TM3.1a-256QAM _10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1935 MHz, Output Power = 22.73 dBm



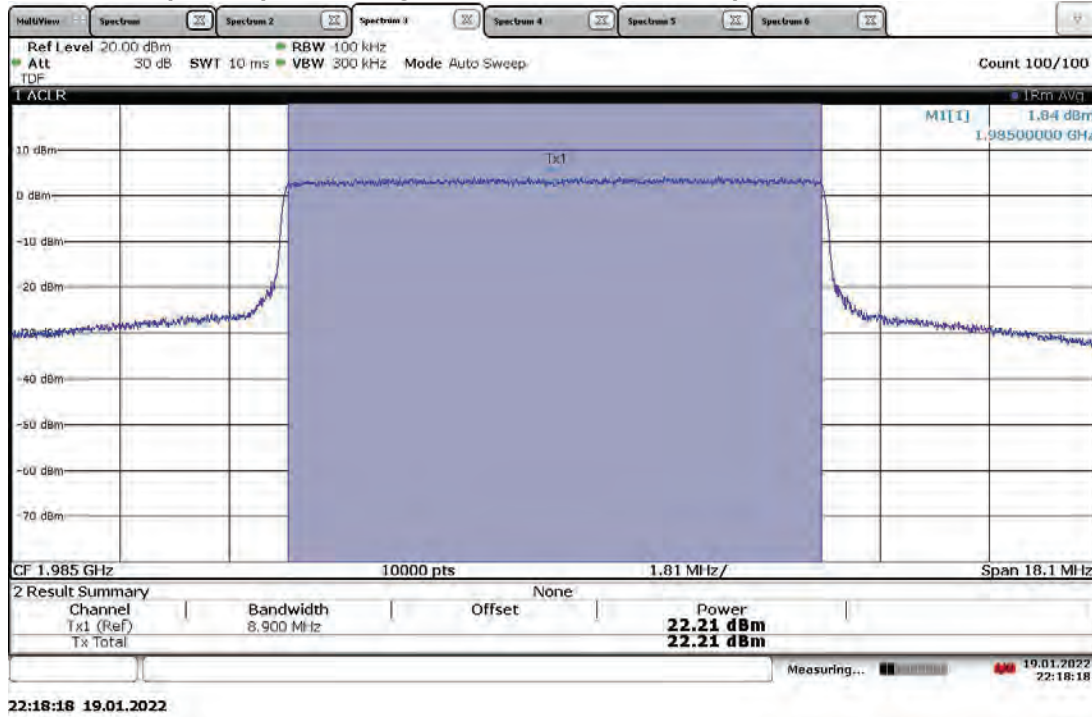
TM3.1a-256QAM _10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 23.05 dBm



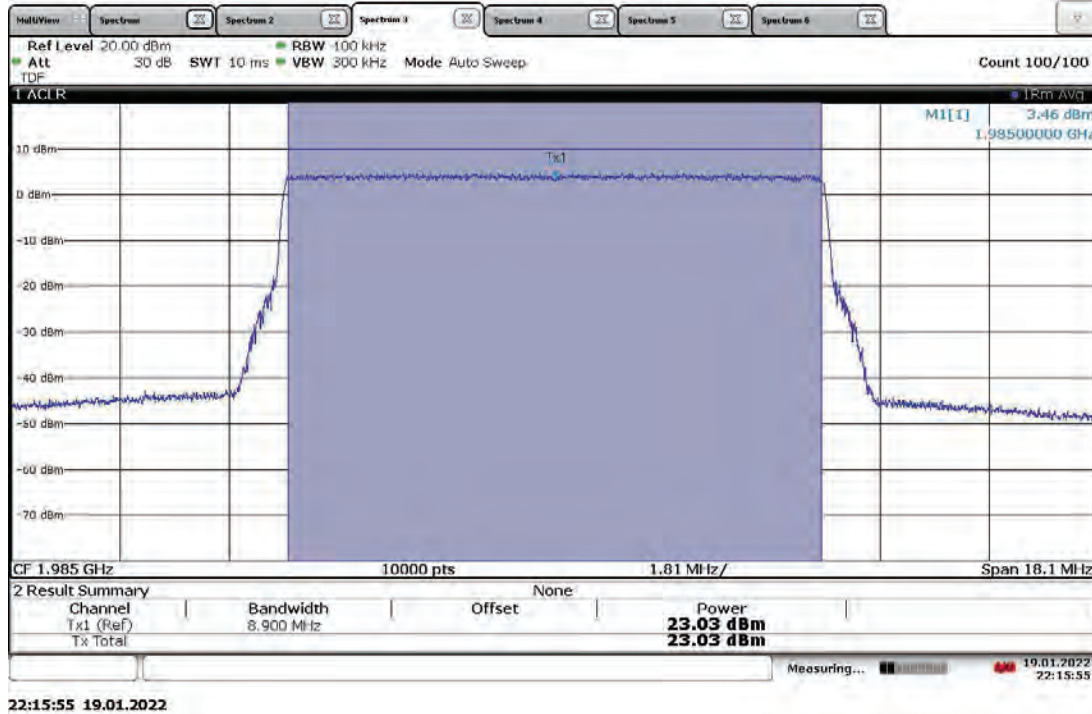
TM3.1a-256QAM _10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 22.97 dBm



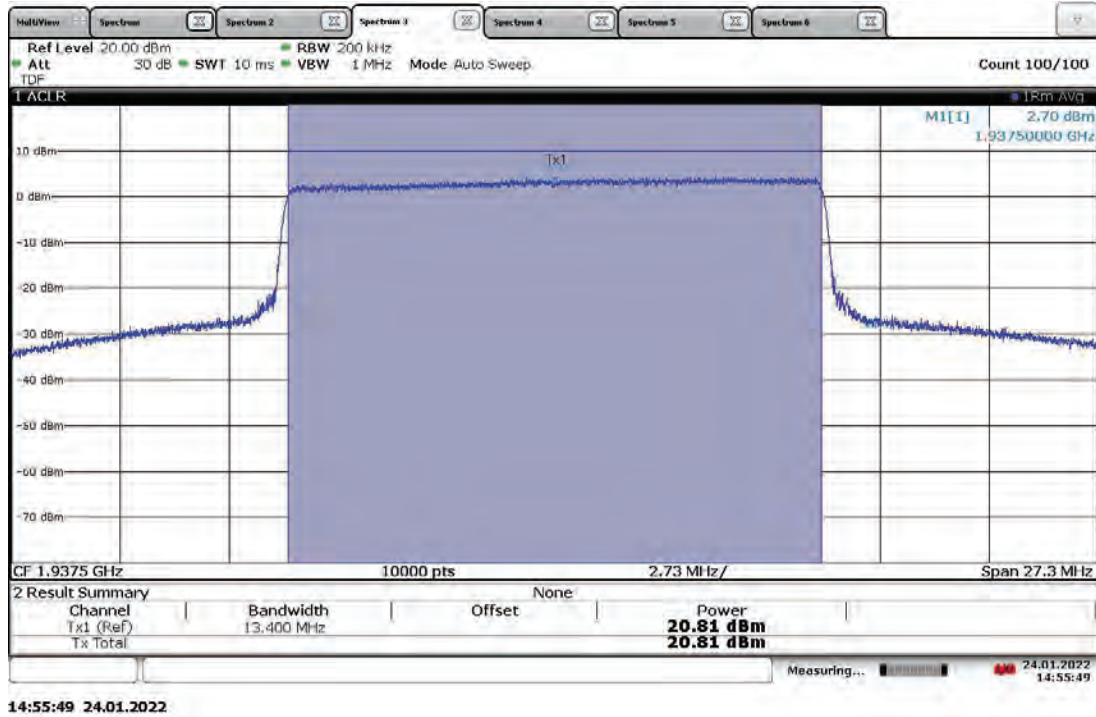
TM3.1a-256QAM _10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1985 MHz, Output Power = 22.21 dBm



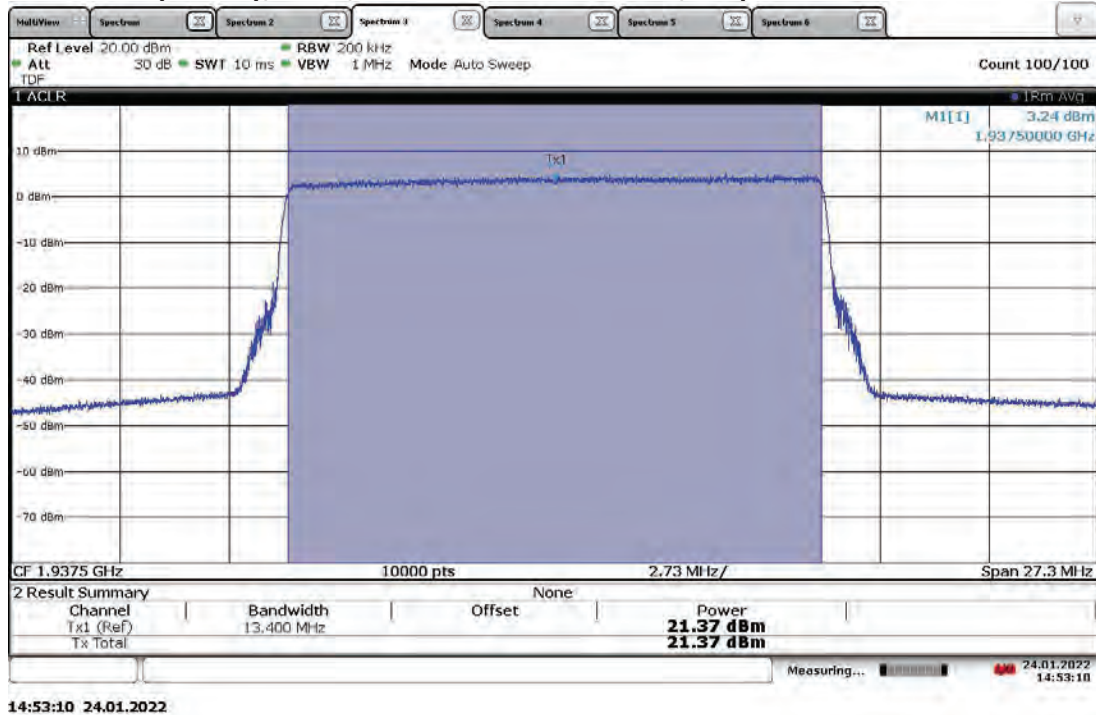
TM3.1a-256QAM _10 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1985 MHz, Output Power = 23.03 dBm



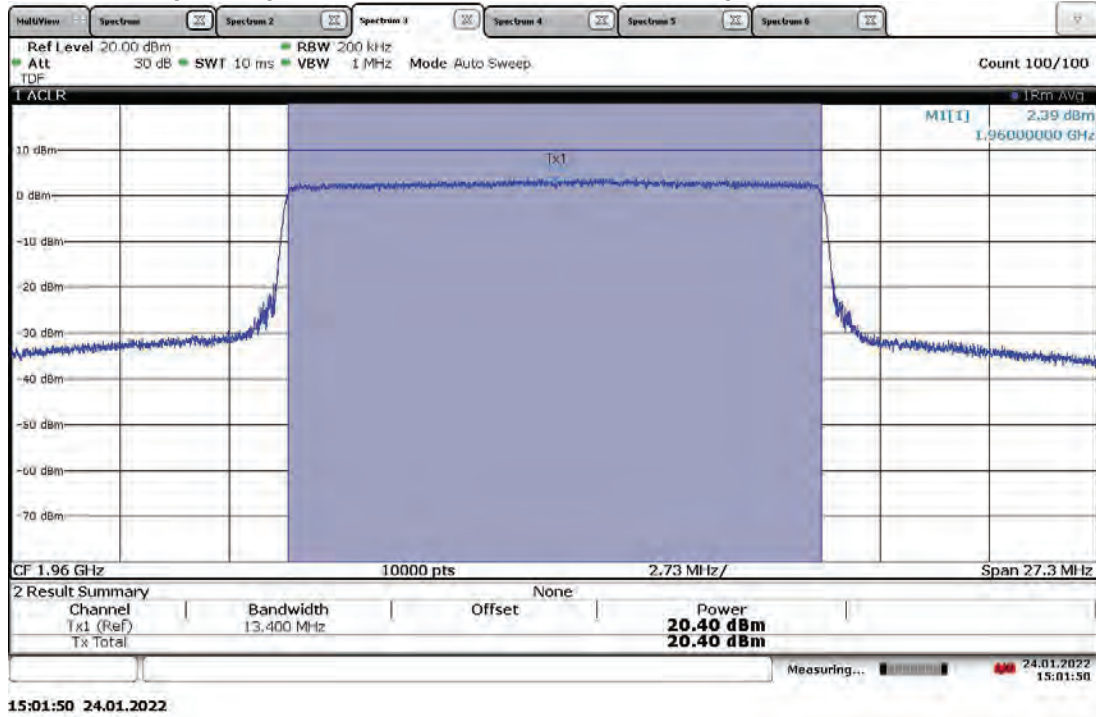
TM3.1a-256QAM _15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1937.5 MHz, Output Power = 20.81 dBm



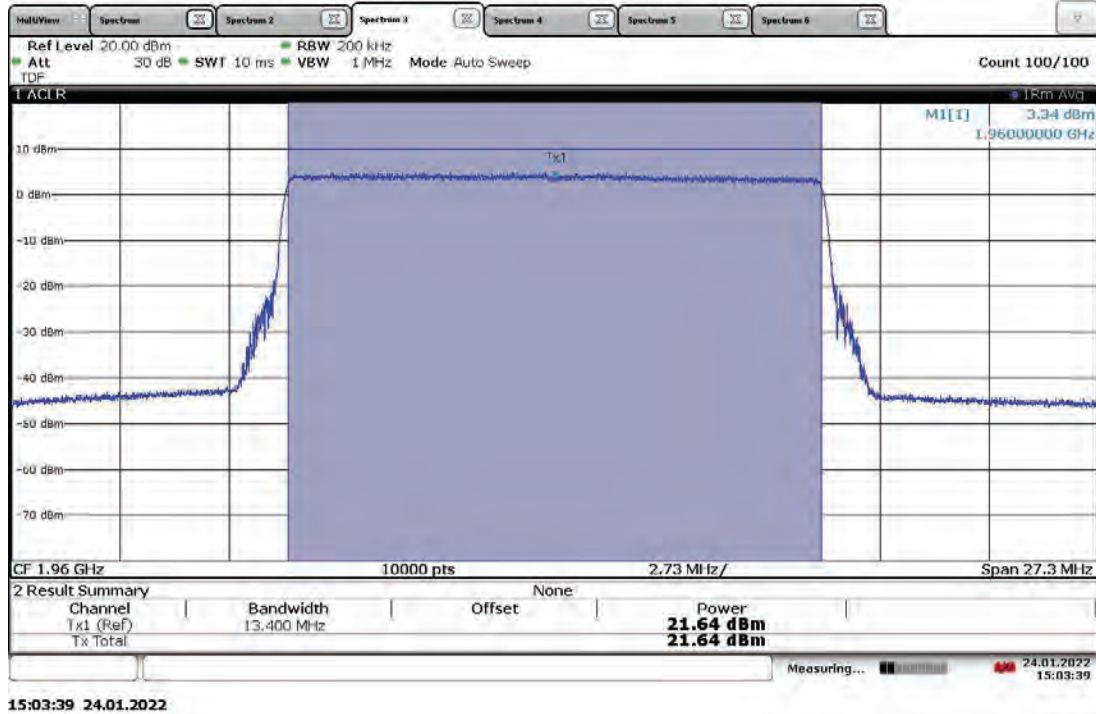
TM3.1a-256QAM _15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1937.5 MHz, Output Power = 21.37 dBm



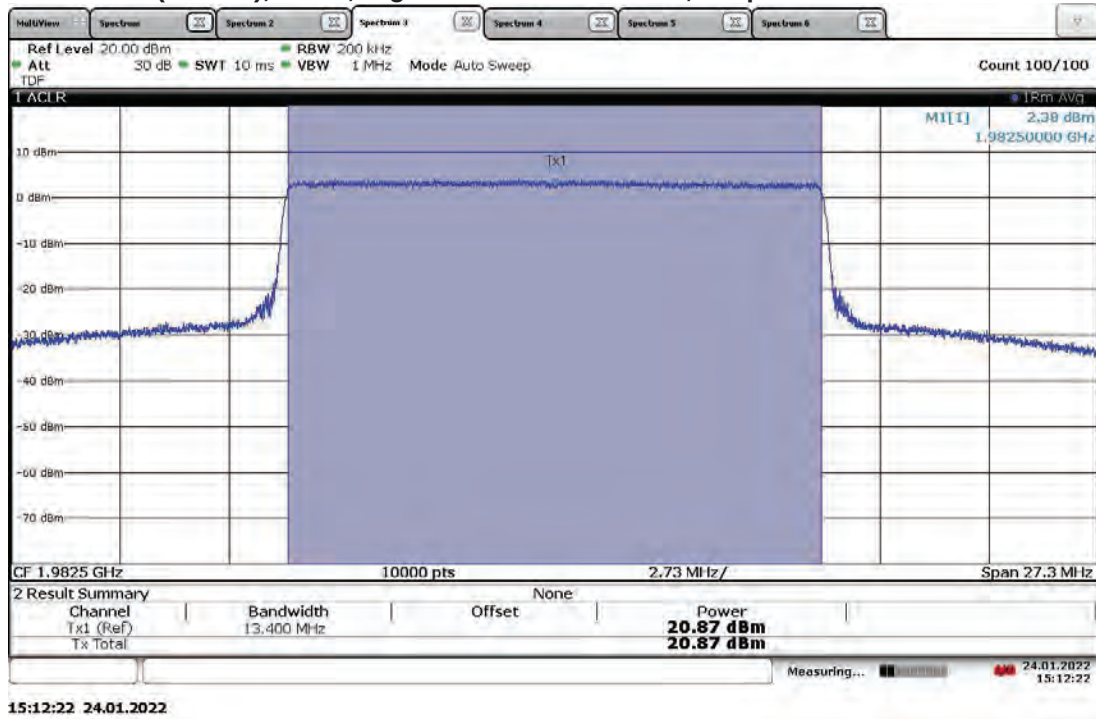
TM3.1a-256QAM _15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 20.40 dBm



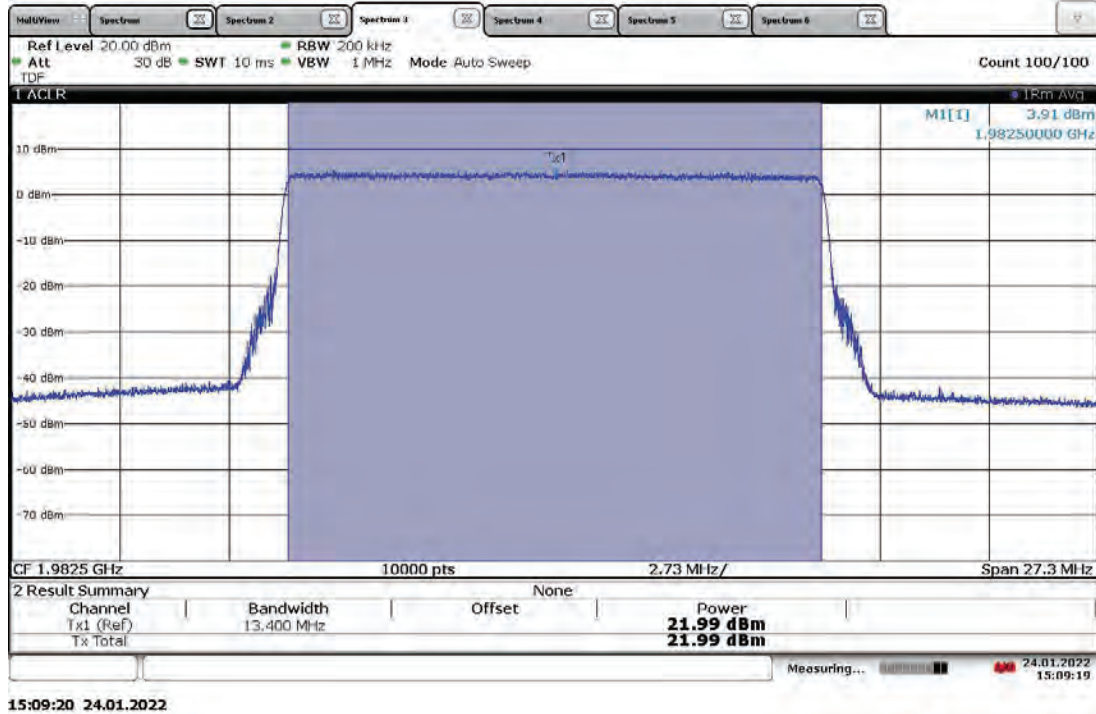
TM3.1a-256QAM _15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 21.64 dBm



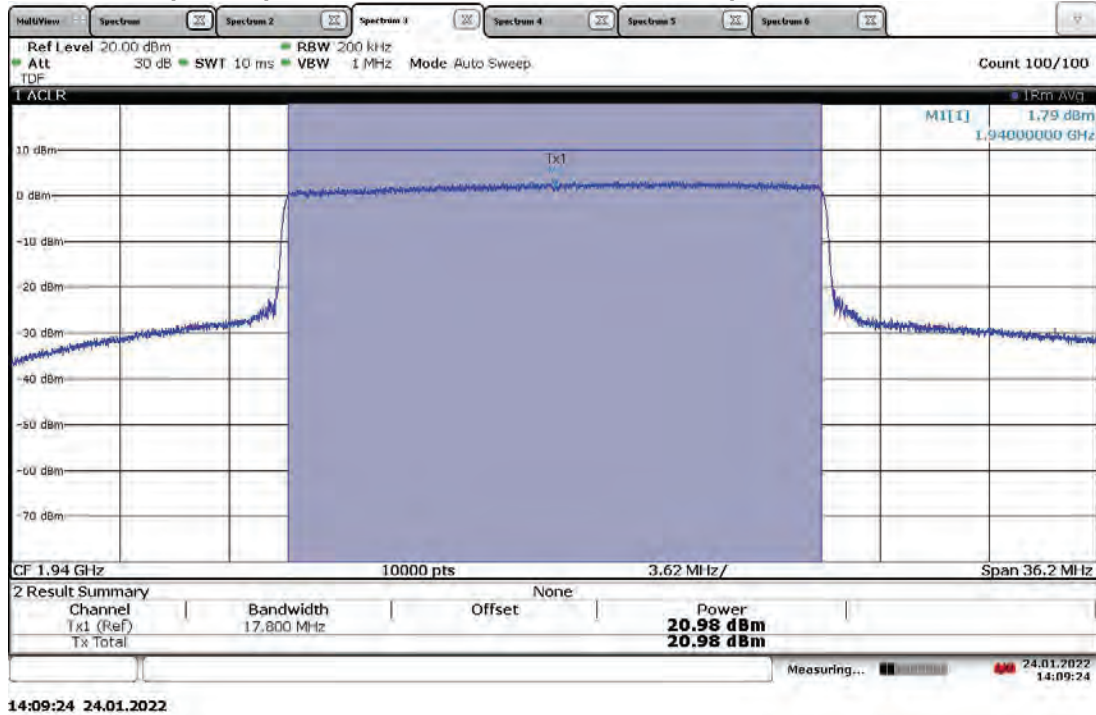
TM3.1a-256QAM _15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1932.5 MHz, Output Power = 20.87dBm



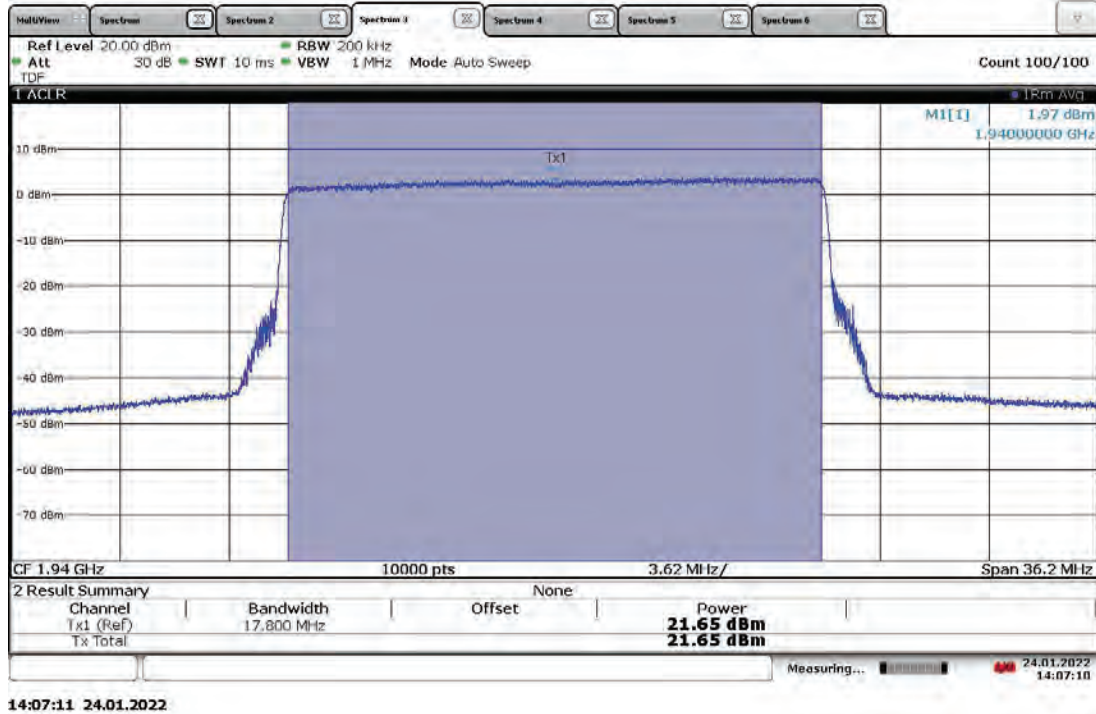
TM3.1a-256QAM _15 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1982.5 MHz, Output Power = 21.99 dBm



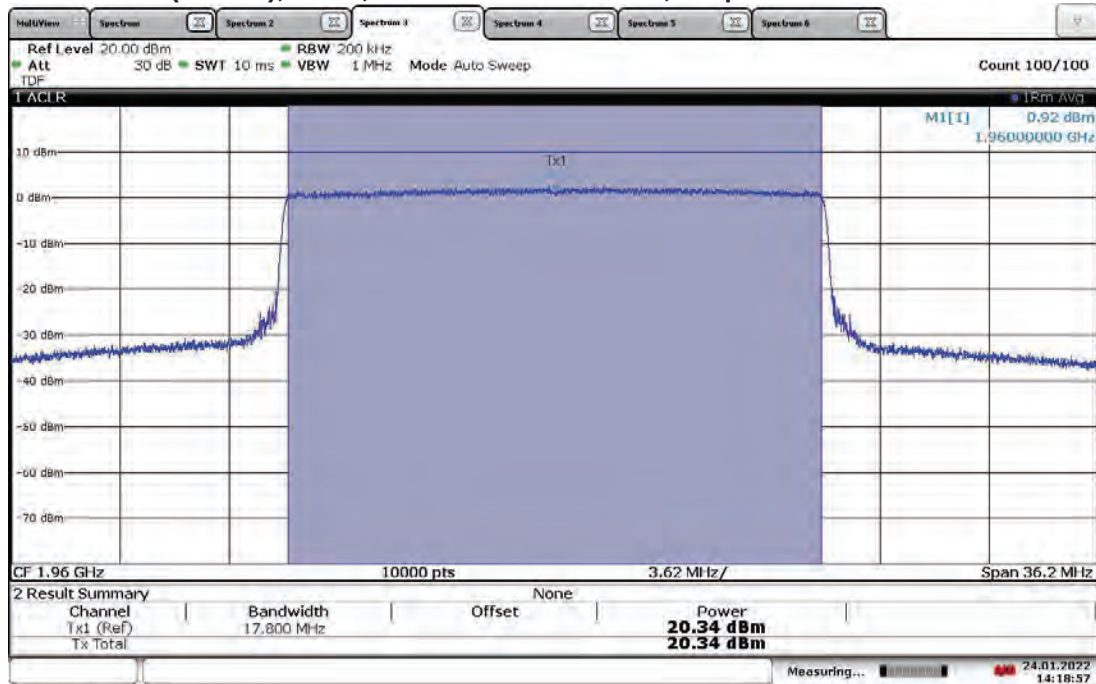
TM3.1a-256QAM _20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Low Channel 1940 MHz, Output Power = 20.98 dBm



TM3.1a-256QAM _20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Low Channel 1940 MHz, Output Power = 22.65 dBm

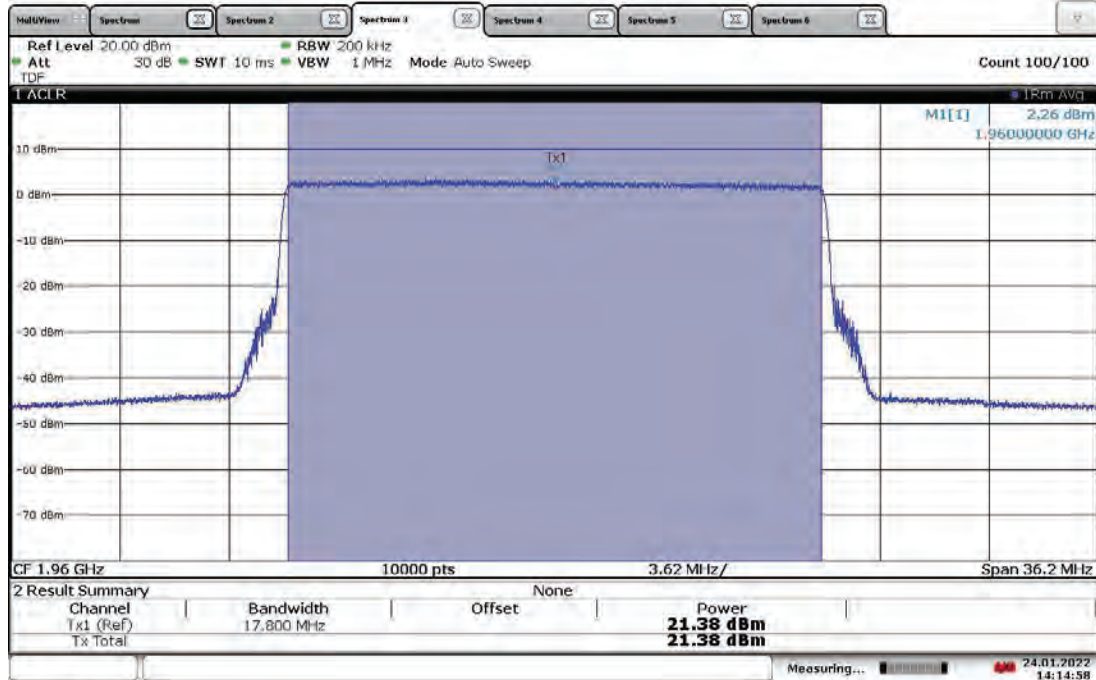


TM3.1a-256QAM _20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, Output Power = 20.34 dBm



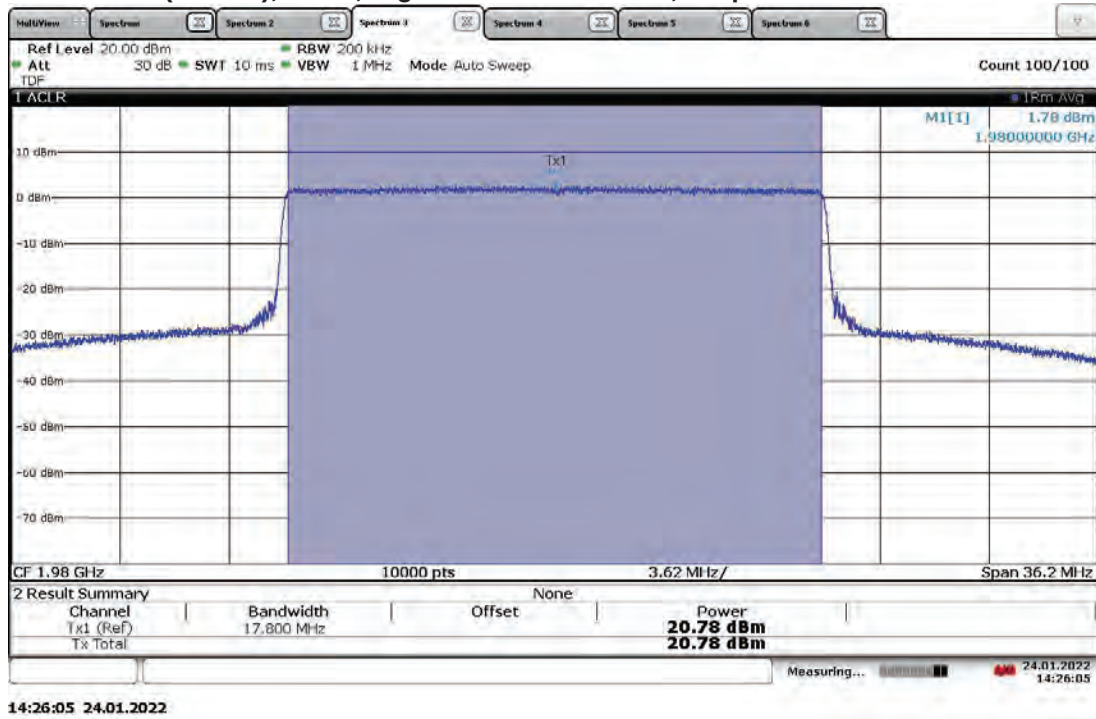
14:18:57 24.01.2022

TM3.1a-256QAM _20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 21.38 dBm

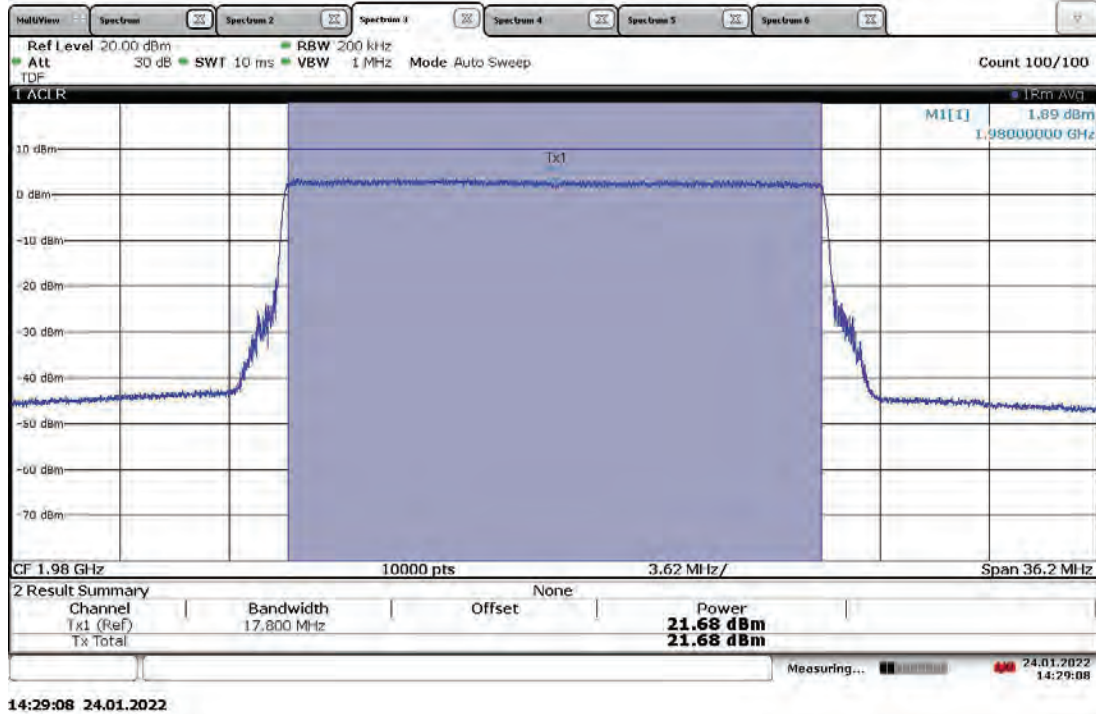


14:14:58 24.01.2022

TM3.1a-256QAM _20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT0, High Channel 1980 MHz, Output Power = 20.78 dBm



TM3.1a-256QAM _20 MHz Bandwidth (5G nR)
Slot 0 (Band 2), ANT1, High Channel 1980 MHz, Output Power = 21.68 dBm



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

Test Date: 01/19/2022, 01/21/2022, 01/24/2022

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

Limit Applied: See report section 6.3

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

Ambient Temperature: 24, 24, 23 °C

Relative Humidity: 15, 8, 12 %

Atmospheric Pressure: 1003, 1025, 1002 mbars

Deviations, Additions, or Exclusions: None

7 Peak-to-Average Power Ratio (PAPR)

7.1 Method

Tests are performed in accordance with CFR47 FCC Part 24 and ANSI C63.26:2015.

TEST SITE: EMC Lab

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.

7.2 Test Equipment Used:

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
DAV005'	Weather Station	Davis	6250	MS191218083	02/07/2021	02/07/2022
ROS005-1'	Signal and Spectrum Analyzer	Rohde and Shwartz	FSW43	100646	11/02/2021	11/02/2022
CEN001'	DC-40GHz attenuator 20dB	Centric RF	C411-20	CEN001	01/26/2022	01/26/2023
CBLHF2012-2M-2'	2m 9kHz-40GHz Coaxial Cable - SET2	Huber & Suhner	SF102	252675002	02/10/2021	02/10/2022
MIN26	50Watt 20dB attenuator	Mini Circuits	BW-N20W50+	VY573711721	07/23/2021	07/23/2022
DS40'	Temp, humidity, pressure gauge	Digi Sense	68000-49	181717625	11/09/2021	11/09/2022

Software Utilized:

Name	Manufacturer	Version
None	--	--

7.3 Results:

The sample tested was found to Comply.

Limit:

§24.232(d) The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

Intertek

Report Number: 104915434BOX-001

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

Slot 0 (Band 2), Bandwidth: 5 MHz, Modulation: TM1.1-QPSK (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1932.50	ANT0	7.00	13	-6.00
		ANT1	10.78	13	-2.22
Mid	1960.00	ANT0	7.47	13	-5.53
		ANT1	10.69	13	-2.31
High	1987.50	ANT0	6.79	13	-6.21
		ANT1	10.28	13	-2.72

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM1.1-QPSK (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1935.00	ANT0	7.31	13	-5.69
		ANT1	11.03	13	-1.97
Mid	1960.00	ANT0	7.38	13	-5.62
		ANT1	11.4	13	-1.60
High	1985.00	ANT0	6.78	13	-6.22
		ANT1	9.82	13	-3.18

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM1.1-QPSK (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1937.50	ANT0	7.52	13	-5.48
		ANT1	11.67	13	-1.33
Mid	1960.00	ANT0	8.11	13	-4.89
		ANT1	11.38	13	-1.62
High	1982.50	ANT0	7.67	13	-5.33
		ANT1	10.90	13	-2.10

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM1.1-QPSK (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1940.00	ANT0	7.55	13	-5.45
		ANT1	10.31	13	-2.69
Mid	1960.00	ANT0	7.86	13	-5.14
		ANT1	10.71	13	-2.29
High	1980.00	ANT0	7.28	13	-5.72
		ANT1	10.27	13	-2.73

Slot 0 (Band 2), Bandwidth: 5 MHz, Modulation: TM3.2-16QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1932.50	ANT0	6.89	13	-6.11
		ANT1	10.57	13	-2.43
Mid	1960.00	ANT0	7.38	13	-5.62
		ANT1	10.81	13	-2.19
High	1987.50	ANT0	7.12	13	-5.88
		ANT1	10.50	13	-2.50

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM3.2-16QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1935.00	ANT0	6.85	13	-6.15
		ANT1	9.85	13	-3.15
Mid	1960.00	ANT0	7.26	13	-5.74
		ANT1	10.25	13	-2.75
High	1985.00	ANT0	7.10	13	-5.90
		ANT1	9.79	13	-3.21

Intertek

Report Number: 104915434BOX-001

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

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM3.2-16QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1937.50	ANT0	7.48	13	-5.52
		ANT1	10.20	13	-2.80
Mid	1960.00	ANT0	8.48	13	-4.52
		ANT1	10.10	13	-2.90
High	1982.50	ANT0	7.53	13	-5.47
		ANT1	10.49	13	-2.51

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.2-16QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1940.00	ANT0	7.03	13	-5.97
		ANT1	10.38	13	-2.62
Mid	1960.00	ANT0	7.97	13	-5.03
		ANT1	11.03	13	-1.97
High	1980.00	ANT0	7.56	13	-5.44
		ANT1	10.64	13	-2.36

Slot 0 (Band 2), Bandwidth: 5 MHz, Modulation: TM3.1-64QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1932.50	ANT0	6.74	13	-6.26
		ANT1	9.97	13	-3.03
Mid	1960.00	ANT0	7.12	13	-5.88
		ANT1	10.02	13	-2.98
High	1987.50	ANT0	7.07	13	-5.93
		ANT1	10.02	13	-2.98

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM3.1-64QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1935.00	ANT0	7.00	13	-6.00
		ANT1	10.67	13	-2.33
Mid	1960.00	ANT0	7.48	13	-5.52
		ANT1	10.15	13	-2.85
High	1985.00	ANT0	7.15	13	-5.85
		ANT1	10.45	13	-2.55

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM3.1-64QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1937.50	ANT0	7.28	13	-5.72
		ANT1	10.31	13	-2.69
Mid	1960.00	ANT0	7.98	13	-5.02
		ANT1	10.11	13	-2.89
High	1982.50	ANT0	7.38	13	-5.62
		ANT1	10.12	13	-2.88

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.1-64QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1940.00	ANT0	7.17	13	-5.83
		ANT1	10.04	13	-2.96
Mid	1960.00	ANT0	7.75	13	-5.25
		ANT1	10.48	13	-2.52
High	1980.00	ANT0	7.17	13	-5.83
		ANT1	10.62	13	-2.38

Slot 0 (Band 2), Bandwidth: 5 MHz, Modulation: TM3.1a-256QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1932.50	ANT0	6.97	13	-6.03
		ANT1	10.16	13	-2.84
Mid	1960.00	ANT0	7.33	13	-5.67
		ANT1	10.43	13	-2.57
High	1987.50	ANT0	6.73	13	-6.27
		ANT1	10.16	13	-2.84

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM3.1a-256QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1935.00	ANT0	6.83	13	-6.17
		ANT1	7.94	13	-5.06
Mid	1960.00	ANT0	7.18	13	-5.82
		ANT1	10.32	13	-2.68
High	1985.00	ANT0	7.08	13	-5.92
		ANT1	10.12	13	-2.88

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM3.1a-256QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1937.500	ANT0	7.13	13	-5.87
		ANT1	10.82	13	-2.18
Mid	1960.00	ANT0	7.79	13	-5.21
		ANT1	10.39	13	-2.61
High	1982.50	ANT0	7.53	13	-5.47
		ANT1	10.54	13	-2.46

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.1a-256QAM (4G LTE)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1940	ANT0	7.31	13	-5.69
		ANT1	10.11	13	-2.89
Mid	1960	ANT0	8.03	13	-4.97
		ANT1	10.18	13	-2.82
High	1980	ANT0	7.29	13	-5.71
		ANT1	10.04	13	-2.96

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

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1932.50	ANT0	7.03	13	-5.97
		ANT1	10.54	13	-2.46
Mid	1960.00	ANT0	7.54	13	-5.46
		ANT1	10.70	13	-2.30
High	1987.50	ANT0	7.04	13	-5.96
		ANT1	10.55	13	-2.45

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM1.1-QPSK (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1935.00	ANT0	6.82	13	-6.18
		ANT1	9.85	13	-3.15
Mid	1960.00	ANT0	7.65	13	-5.35
		ANT1	10.95	13	-2.05
High	1985.00	ANT0	7.24	13	-5.76
		ANT1	9.59	13	-3.41

Intertek

Report Number: 104915434BOX-001

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

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM1.1-QPSK (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1937.50	ANT0	7.29	13	-5.71
		ANT1	11.35	13	-1.65
Mid	1960.00	ANT0	8.27	13	-4.73
		ANT1	11.02	13	-1.98
High	1982.50	ANT0	7.93	13	-5.07
		ANT1	10.89	13	-2.11

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM1.1-QPSK (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1940.00	ANT0	7.18	13	-5.82
		ANT1	10.94	13	-2.06
Mid	1960.00	ANT0	7.98	13	-5.02
		ANT1	10.42	13	-2.58
High	1980.00	ANT0	7.27	13	-5.73
		ANT1	10.25	13	-2.75

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

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1932.50	ANT0	6.90	13	-6.10
		ANT1	10.74	13	-2.26
Mid	1960.00	ANT0	7.50	13	-5.50
		ANT1	10.89	13	-2.11
High	1987.50	ANT0	7.16	13	-5.84
		ANT1	10.31	13	-2.69

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM3.2-16QAM (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1935.00	ANT0	6.87	13	-6.13
		ANT1	10.05	13	-2.95
Mid	1960.00	ANT0	7.24	13	-5.76
		ANT1	10.42	13	-2.58
High	1985.00	ANT0	7.15	13	-5.85
		ANT1	7.65	13	-5.35

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM3.2-16QAM (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1937.50	ANT0	7.16	13	-5.84
		ANT1	9.86	13	-3.14
Mid	1960.00	ANT0	7.81	13	-5.19
		ANT1	10.18	13	-2.82
High	1982.50	ANT0	7.68	13	-5.32
		ANT1	9.87	13	-3.13

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.2-16QAM (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1940.00	ANT0	7.23	13	-5.77
		ANT1	10.99	13	-2.01
Mid	1960.00	ANT0	7.81	13	-5.19
		ANT1	10.24	13	-2.76
High	1980.00	ANT0	7.59	13	-5.41
		ANT1	11.04	13	-1.96

Intertek

Report Number: 104915434BOX-001

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

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

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1932.50	ANT0	6.89	13	-6.11
		ANT1	9.94	13	-3.06
Mid	1960.00	ANT0	7.17	13	-5.83
		ANT1	10.03	13	-2.97
High	1987.50	ANT0	6.68	13	-6.32
		ANT1	9.81	13	-3.19

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM3.1-64QAM (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1935.00	ANT0	6.87	13	-6.13
		ANT1	10.75	13	-2.25
Mid	1960.00	ANT0	7.19	13	-5.81
		ANT1	10.60	13	-2.4
High	1985.00	ANT0	7.04	13	-5.96
		ANT1	10.48	13	-2.52

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM3.1-64QAM (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1937.50	ANT0	7.46	13	-5.54
		ANT1	9.82	13	-3.18
Mid	1960.00	ANT0	7.86	13	-5.14
		ANT1	11.52	13	-1.48
High	1982.50	ANT0	7.31	13	-5.69
		ANT1	10.38	13	-2.62

Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.1-64QAM (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1940.00	ANT0	7.03	13	-5.97
		ANT1	11.01	13	-1.99
Mid	1960.00	ANT0	7.92	13	-5.08
		ANT1	10.86	13	-2.14
High	1980.00	ANT0	7.18	13	-5.82
		ANT1	10.43	13	-2.57

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

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1932.50	ANT0	6.93	13	-6.07
		ANT1	10.28	13	-2.72
Mid	1960.00	ANT0	7.33	13	-5.67
		ANT1	10.45	13	-2.55
High	1987.50	ANT0	6.78	13	-6.22
		ANT1	10.12	13	-2.88

Slot 0 (Band 2), Bandwidth: 10 MHz, Modulation: TM3.1a-256QAM (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1935.00	ANT0	6.62	13	-6.38
		ANT1	9.92	13	-3.08
Mid	1960.00	ANT0	7.17	13	-5.83
		ANT1	9.88	13	-3.12
High	1985.00	ANT0	6.75	13	-6.25
		ANT1	9.92	13	-3.08

Slot 0 (Band 2), Bandwidth: 15 MHz, Modulation: TM3.1a-256QAM (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1937.500	ANT0	7.31	13	-5.69
		ANT1	10.69	13	-2.31
Mid	1960.00	ANT0	7.94	13	-5.06
		ANT1	11.04	13	-1.96
High	1982.50	ANT0	7.54	13	-5.46
		ANT1	10.35	13	-2.65

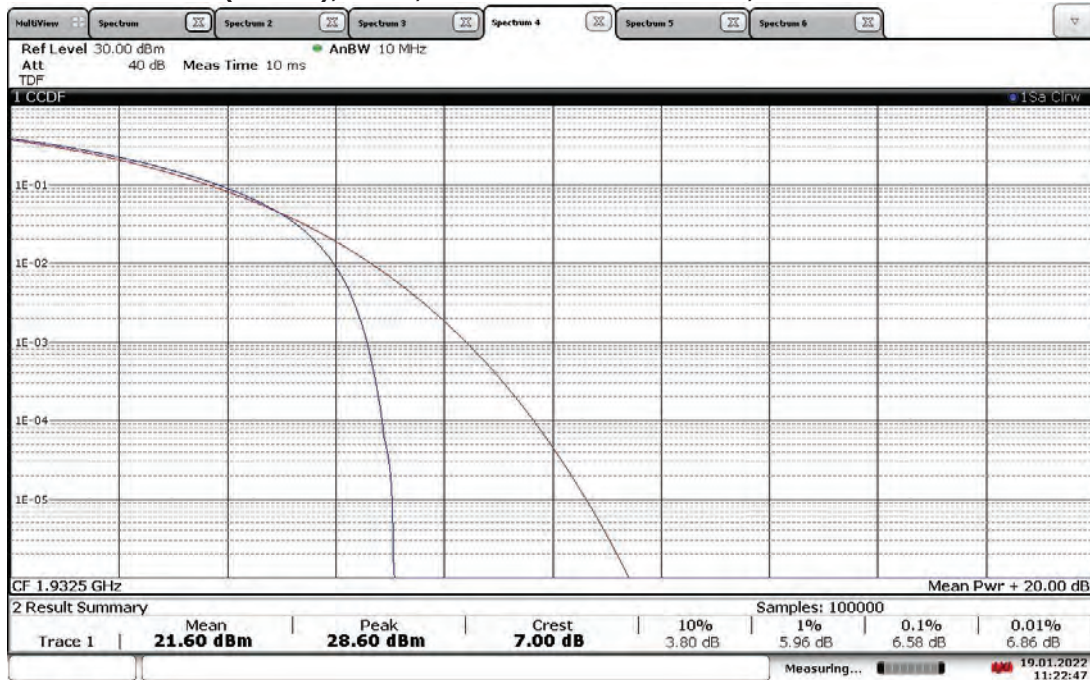
Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.1a-256QAM (5G nR)

Channel	Frequency (MHz)	Antenna Port	PAR (dB)	Limit (dB)	Margin (dB)
Low	1940	ANT0	7.36	13	-5.64
		ANT1	10.29	13	-2.71
Mid	1960	ANT0	8.07	13	-4.93
		ANT1	10.28	13	-2.72
High	1980	ANT0	7.55	13	-5.45
		ANT1	10.28	13	-2.72

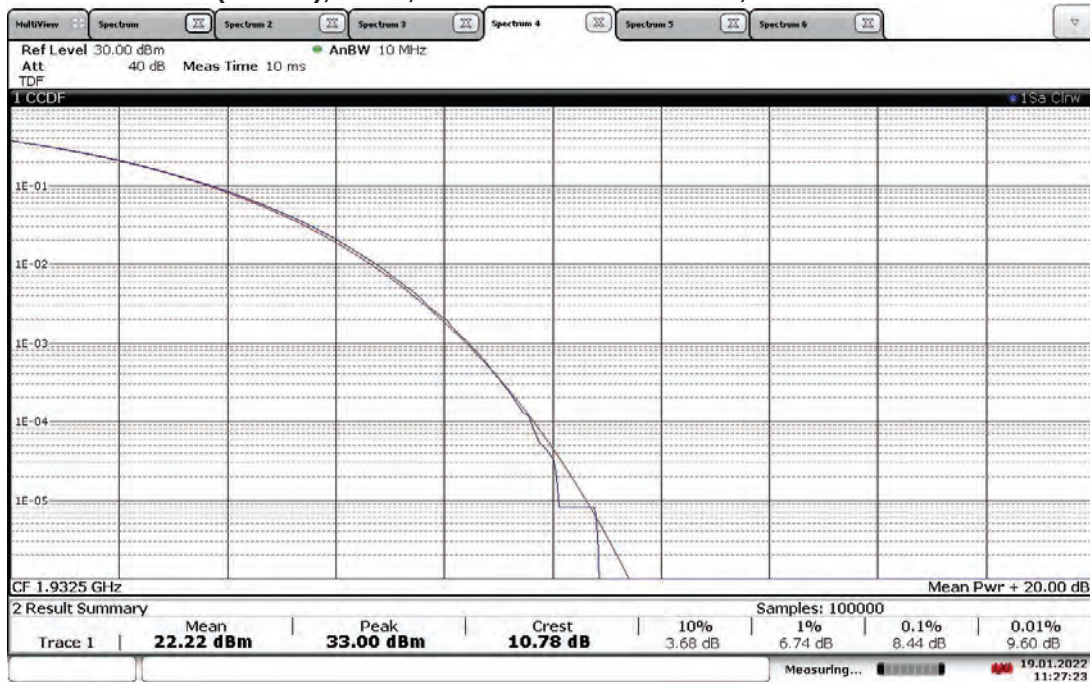
7.4 Setup Photograph:

Confidential – Photos not included in this report

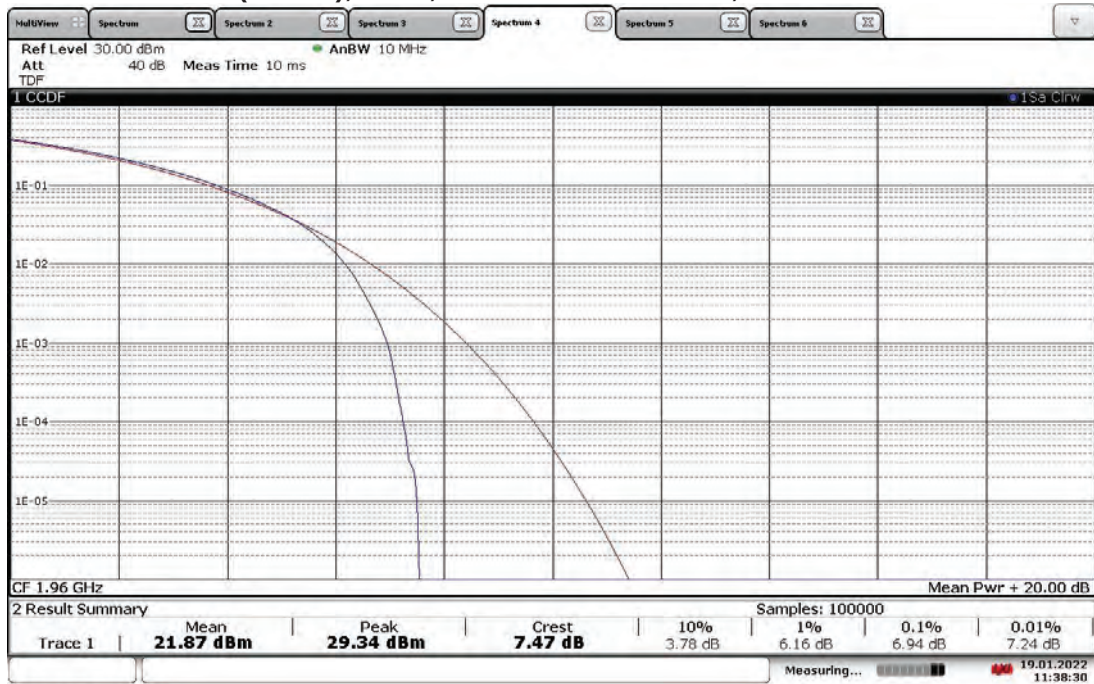
7.5 Plots/Data:

TM1.1-QPSK_5 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Low Channel 1932.5 MHz, PAPR = 7.00 dB

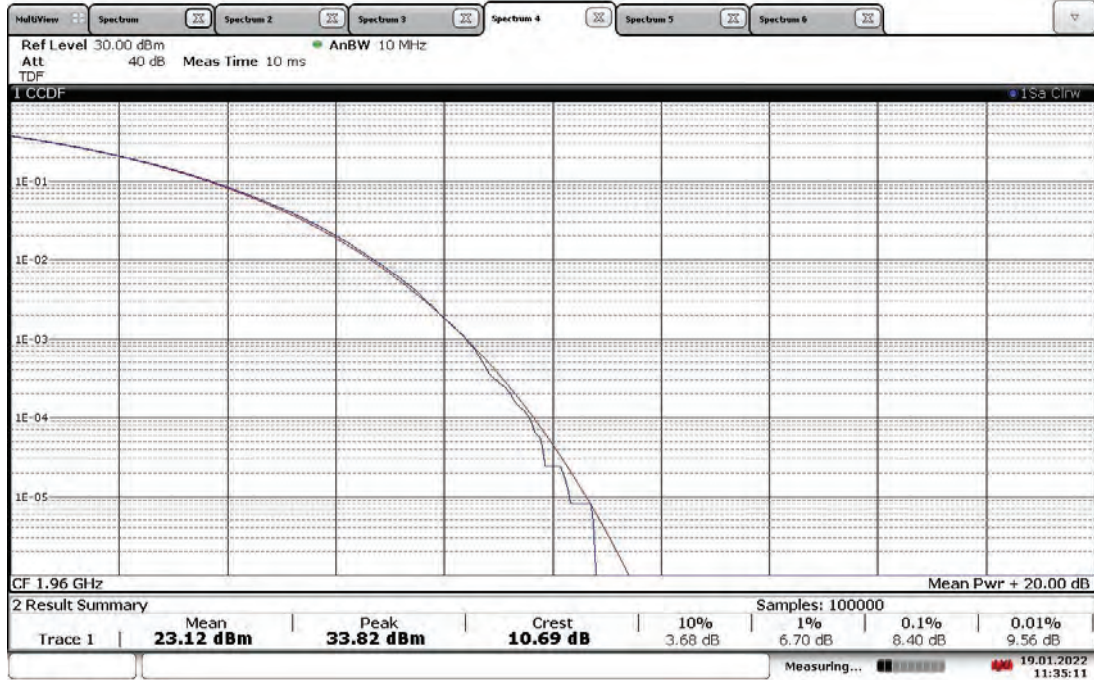
11:22:47 19.01.2022

TM1.1-QPSK_5 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Low Channel 1932.5 MHz, PAPR = 10.78 dB

11:27:23 19.01.2022

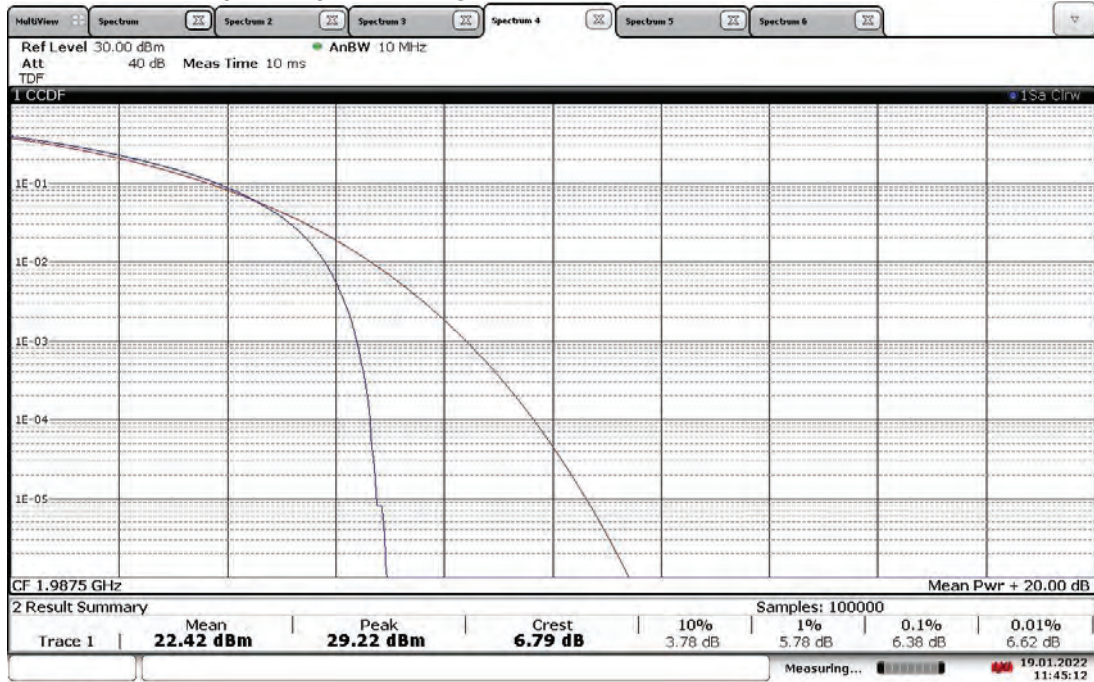
TM1.1-QPSK_5 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 7.47 dB

11:38:30 19.01.2022

TM1.1-QPSK_5 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 10.69 dB

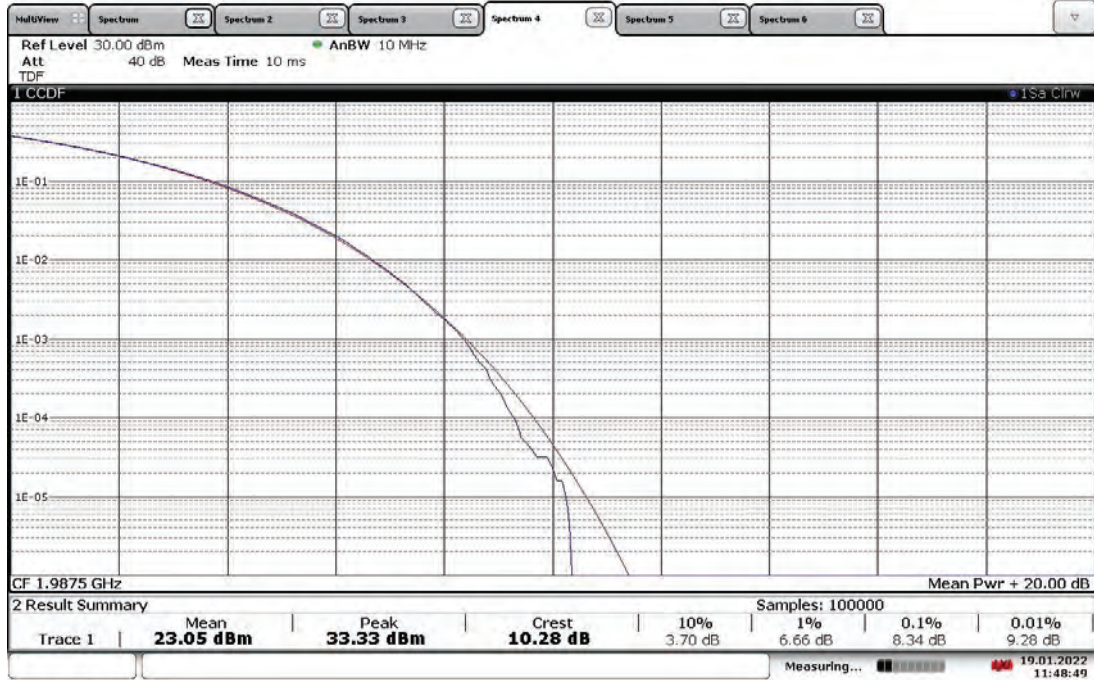
11:35:11 19.01.2022

TM1.1-QPSK_5 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, High Channel 1987.5 MHz, PAPR = 6.79 dB



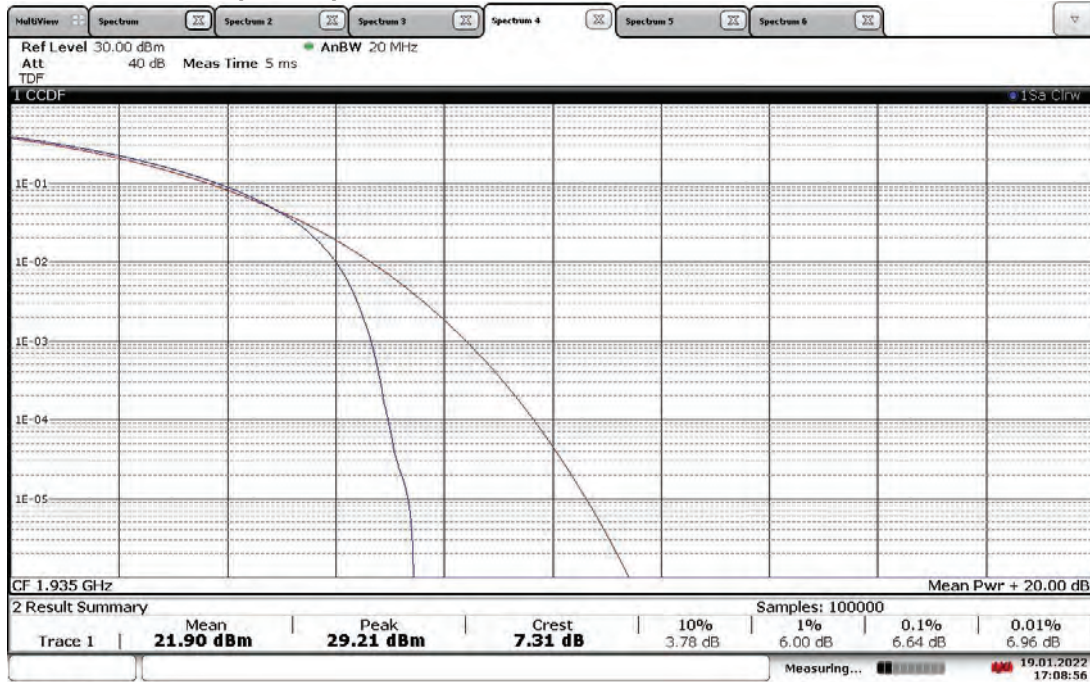
11:45:12 19.01.2022

TM1.1-QPSK_5 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, High Channel 1987.5 MHz, PAPR = 10.28 dB



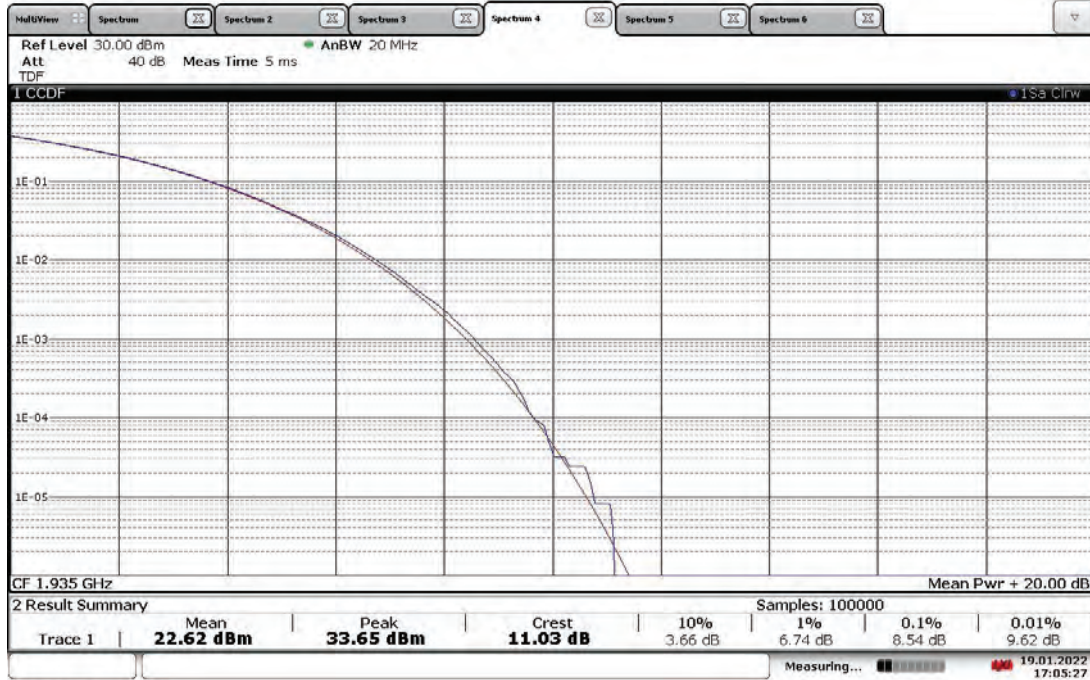
11:48:49 19.01.2022

TM1.1-QPSK_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Low Channel 1935 MHz, PAPR = 7.31 dB



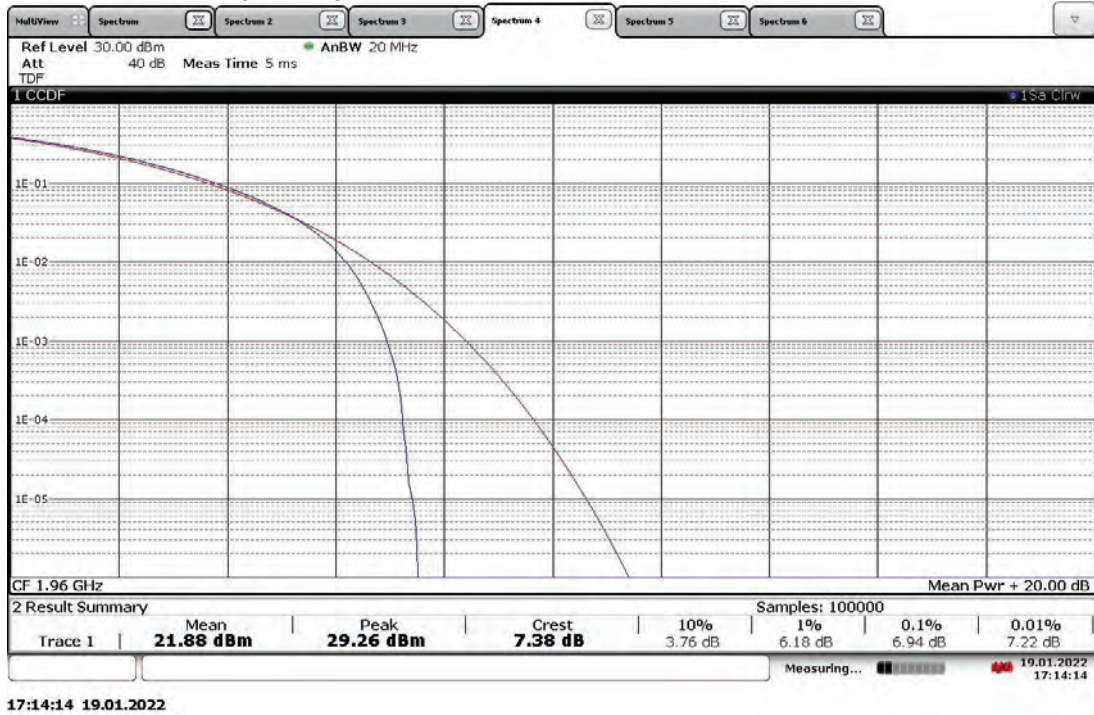
17:08:56 19.01.2022

TM1.1-QPSK_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Low Channel 1935 MHz, PAPR = 11.03 dB

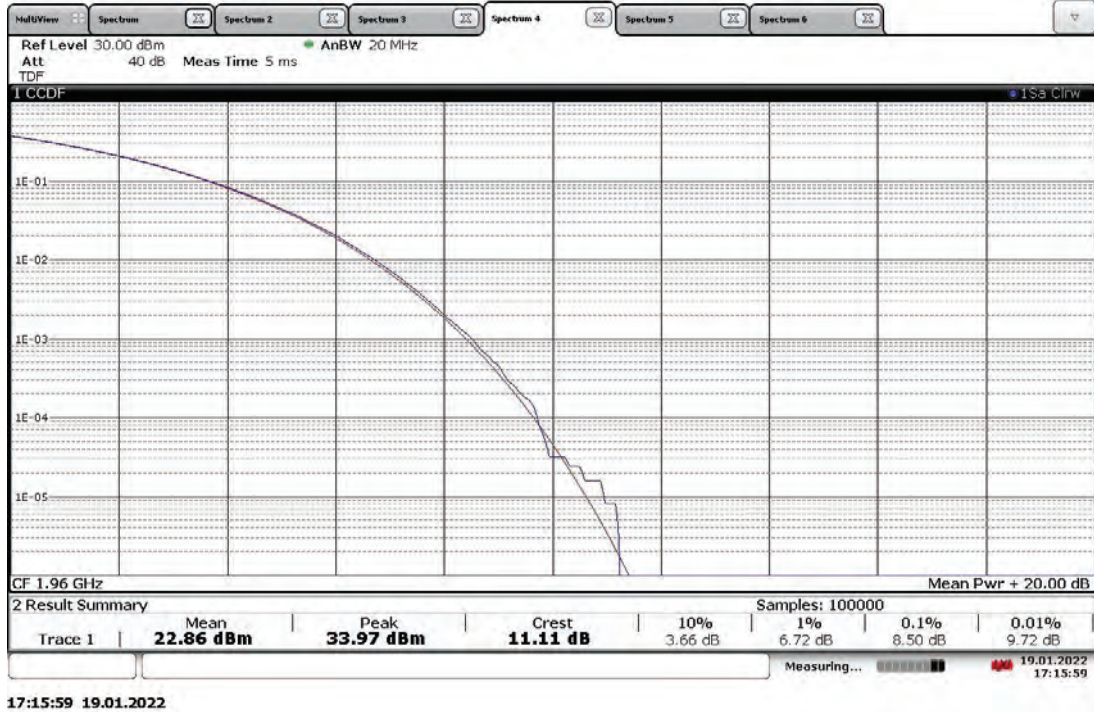


17:05:28 19.01.2022

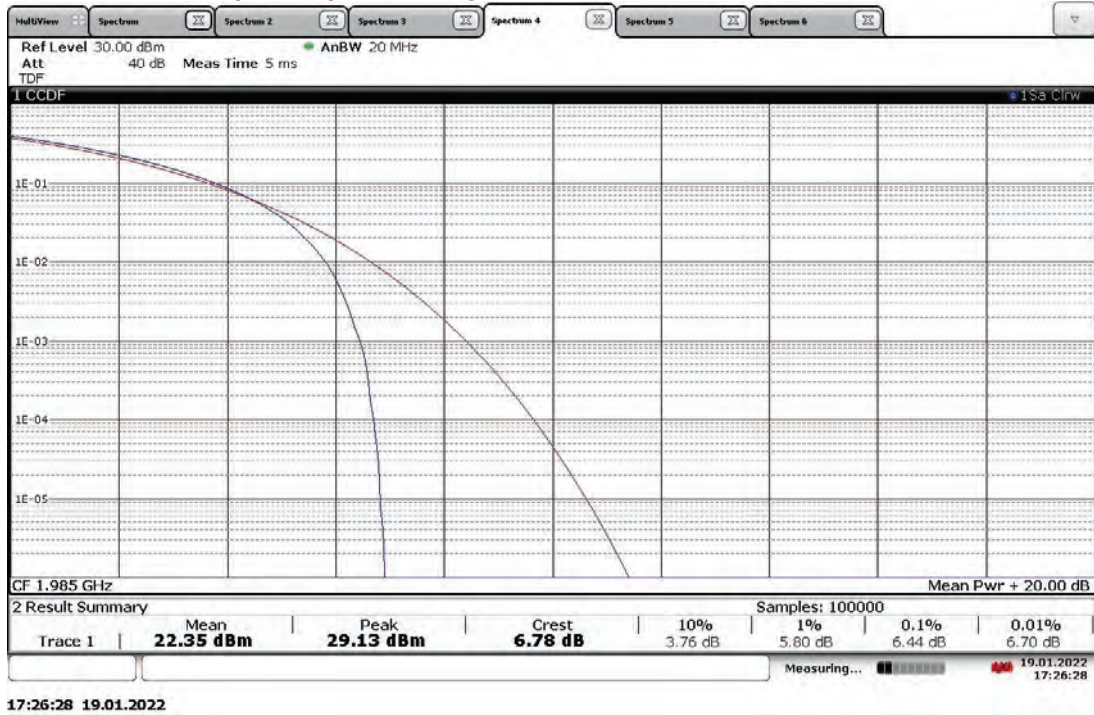
TM1.1-QPSK_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 7.38 dB



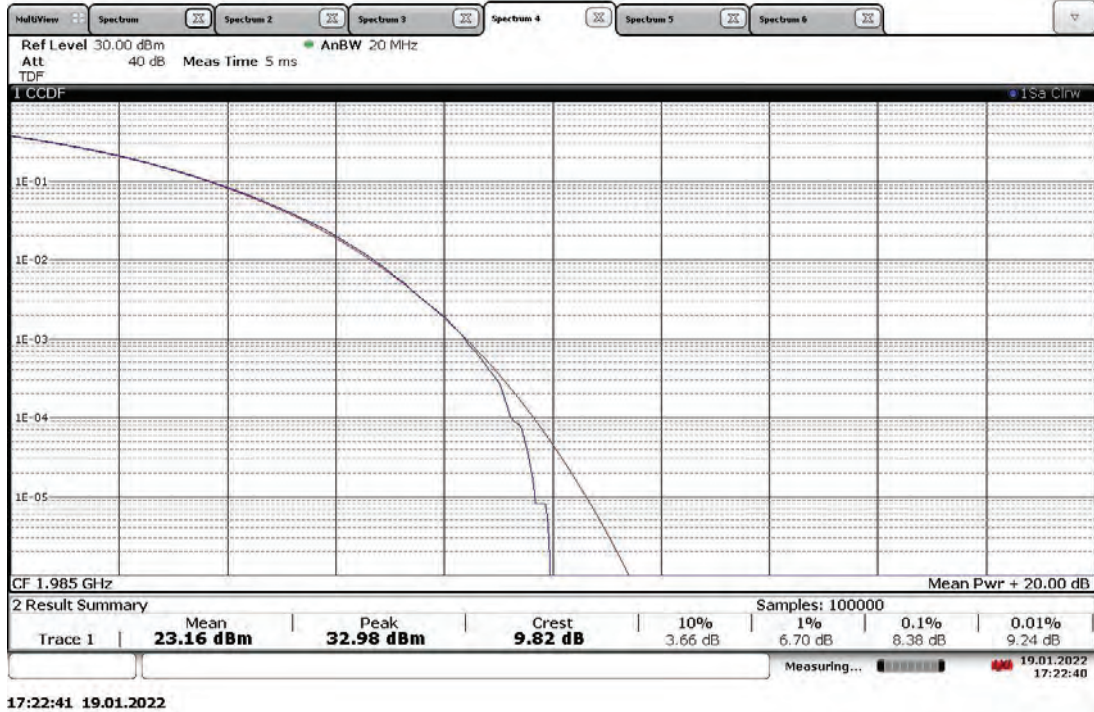
TM1.1-QPSK_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 11.11 dB

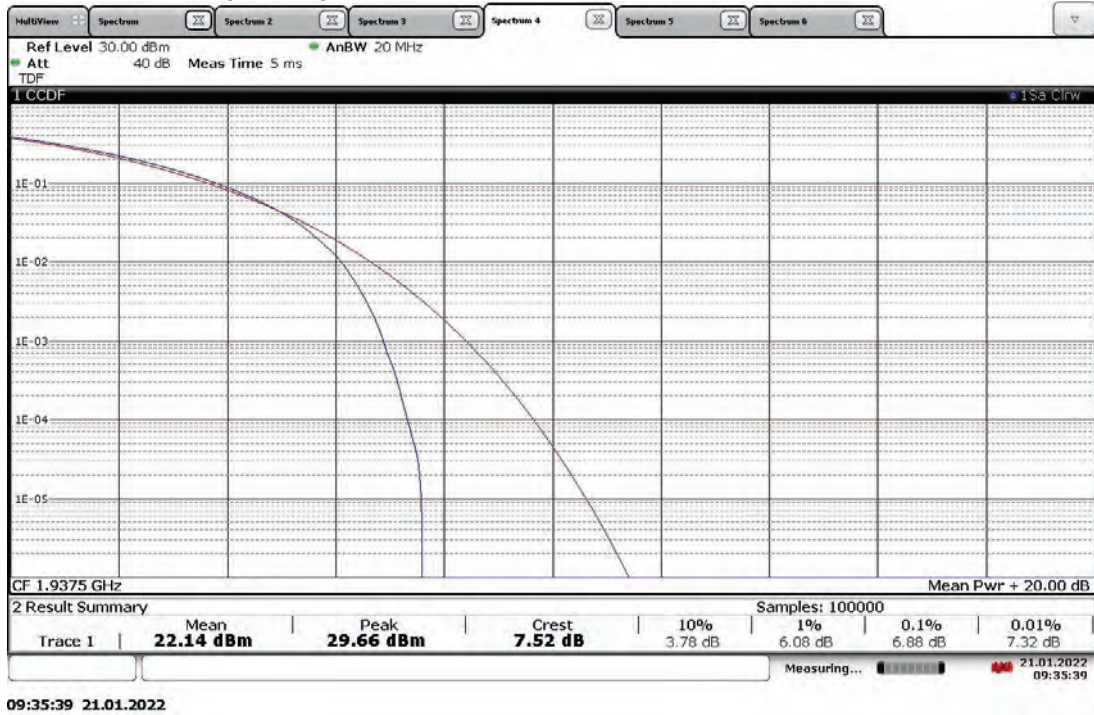
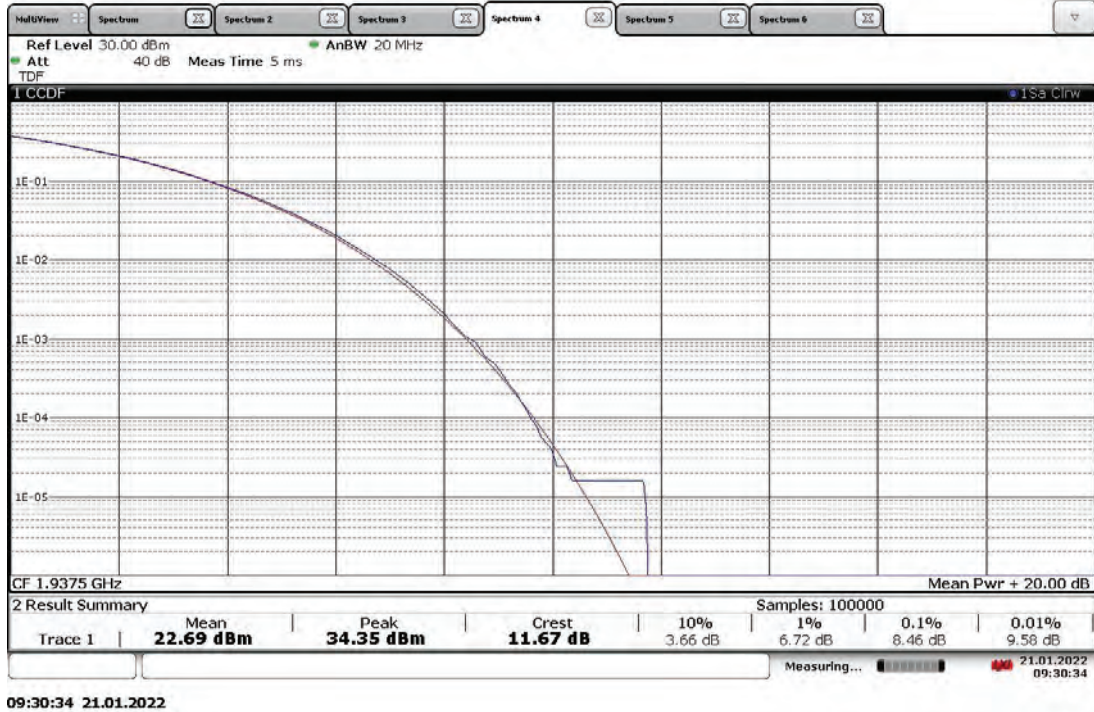


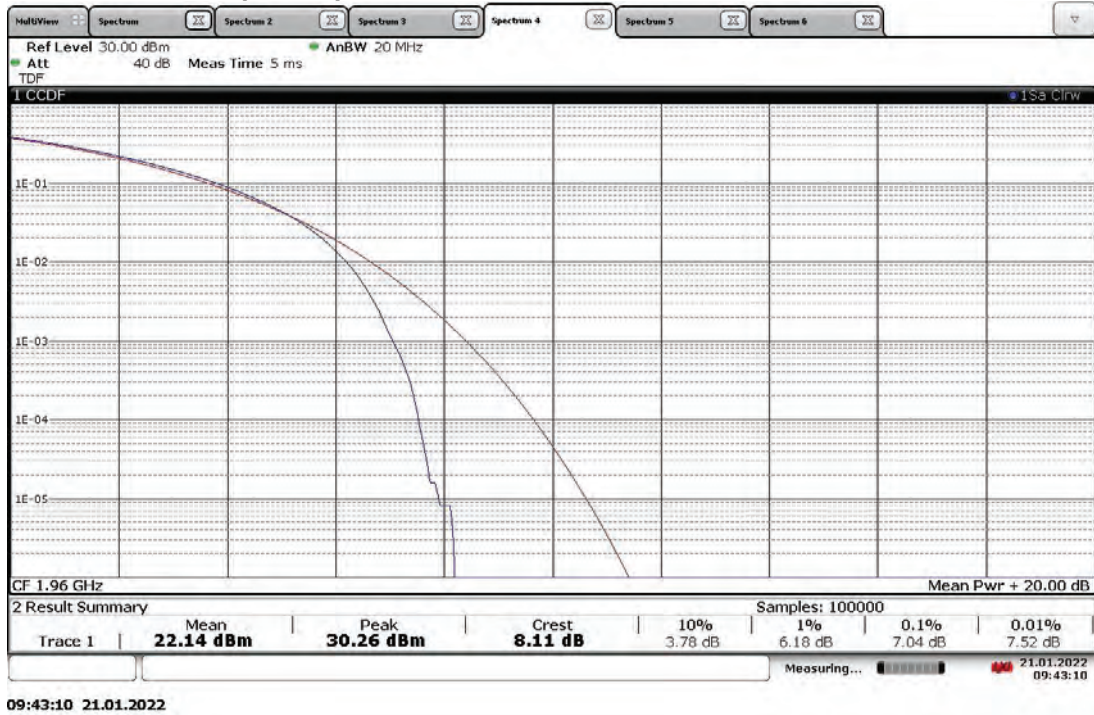
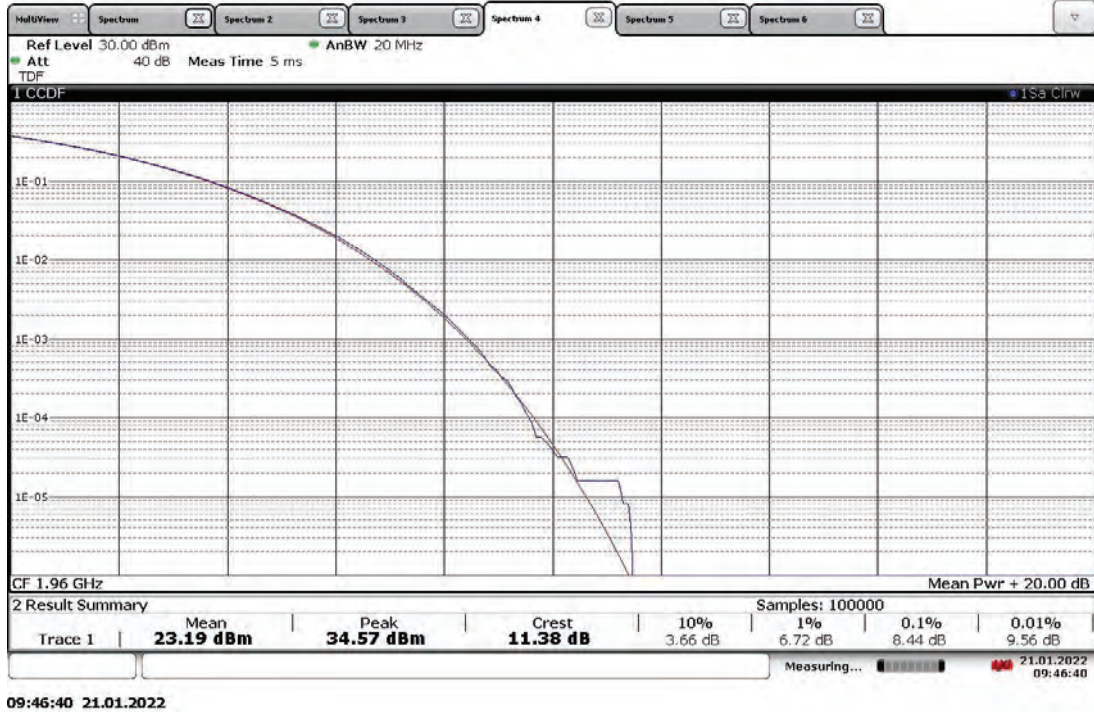
TM1.1-QPSK_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, High Channel 1985 MHz, PAPR = 6.78 dB

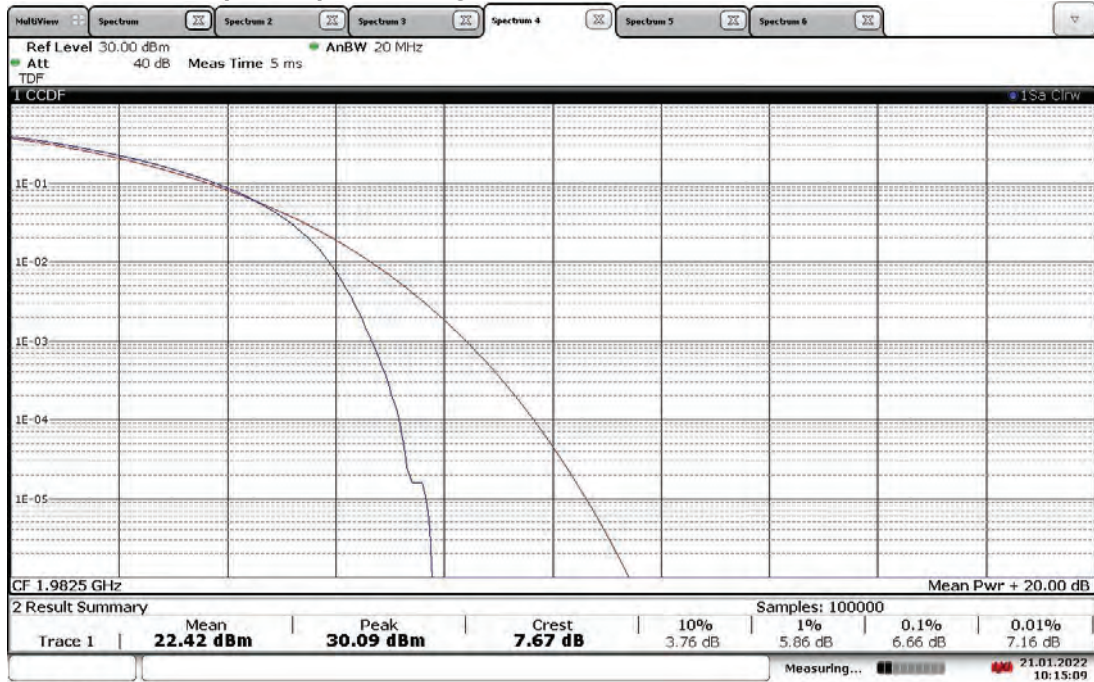


TM1.1-QPSK_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, High Channel 1985 MHz, PAPR = 9.82 dB

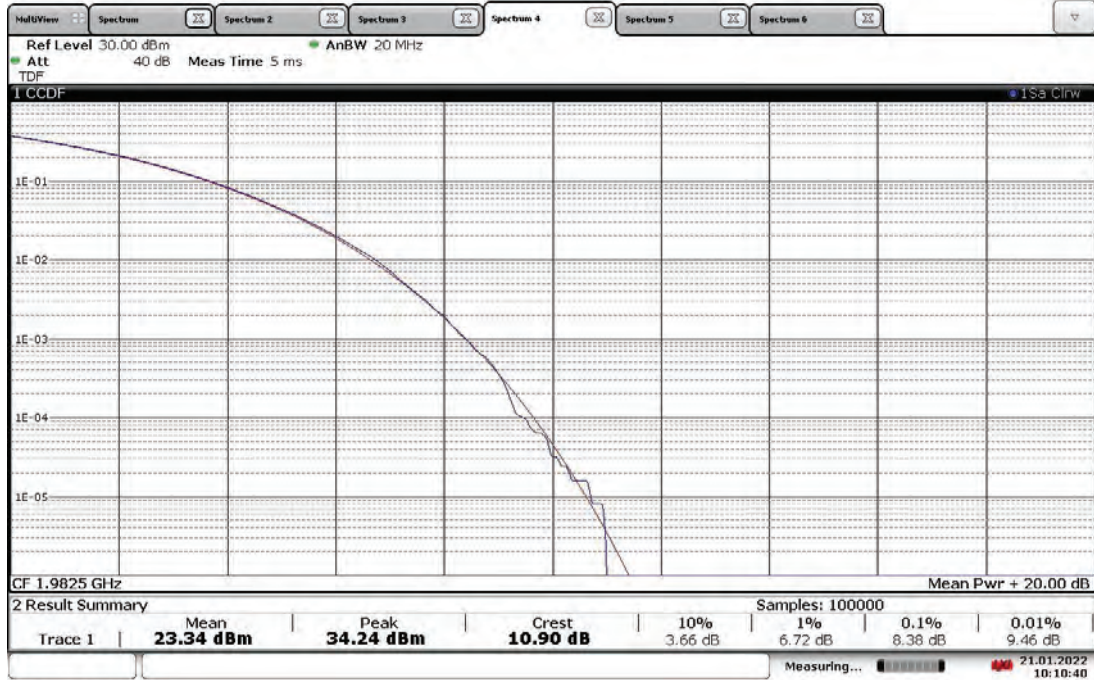


TM1.1-QPSK_15 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Low Channel 1937.5 MHz, PAPR = 7.52 dB**TM1.1-QPSK_15 MHz Bandwidth (4G LTE)**
Slot 0 (Band 2), ANT1, Low Channel 1937.5 MHz, PAPR = 11.67 dB

**TM1.1-QPSK_15 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 8.11 dB****TM1.1-QPSK_15 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 11.38 dB**

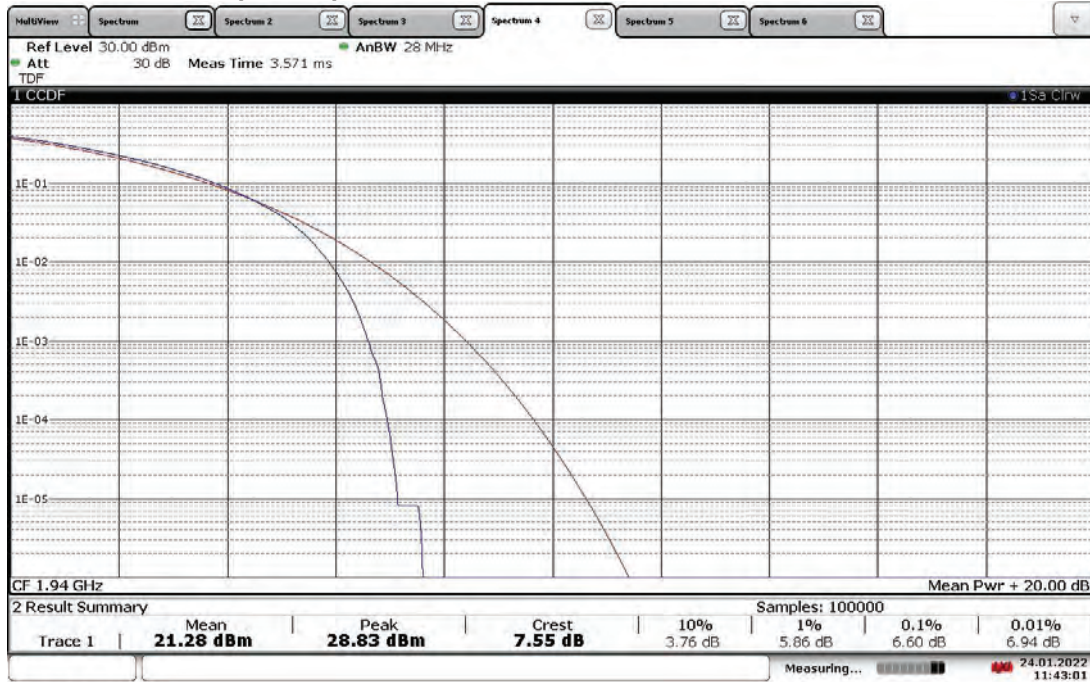
TM1.1-QPSK_15 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, High Channel 1982.5 MHz, PAPR = 7.67 dB

10:15:10 21.01.2022

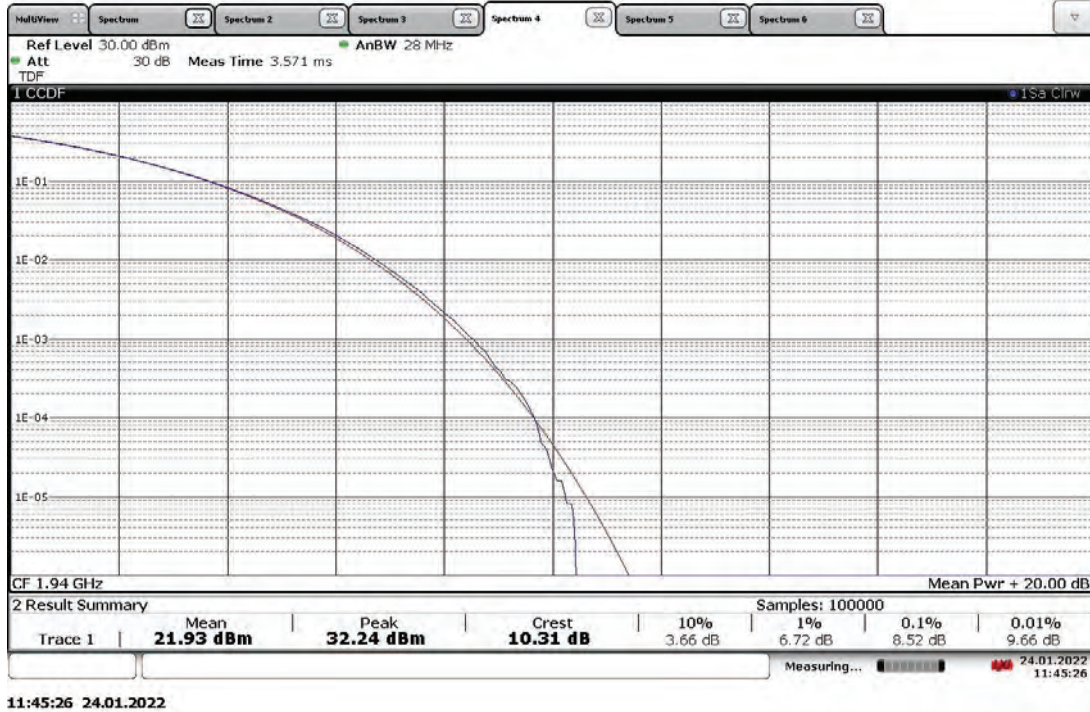
TM1.1-QPSK_15 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, High Channel 1982.5 MHz, PAPR = 10.90 dB

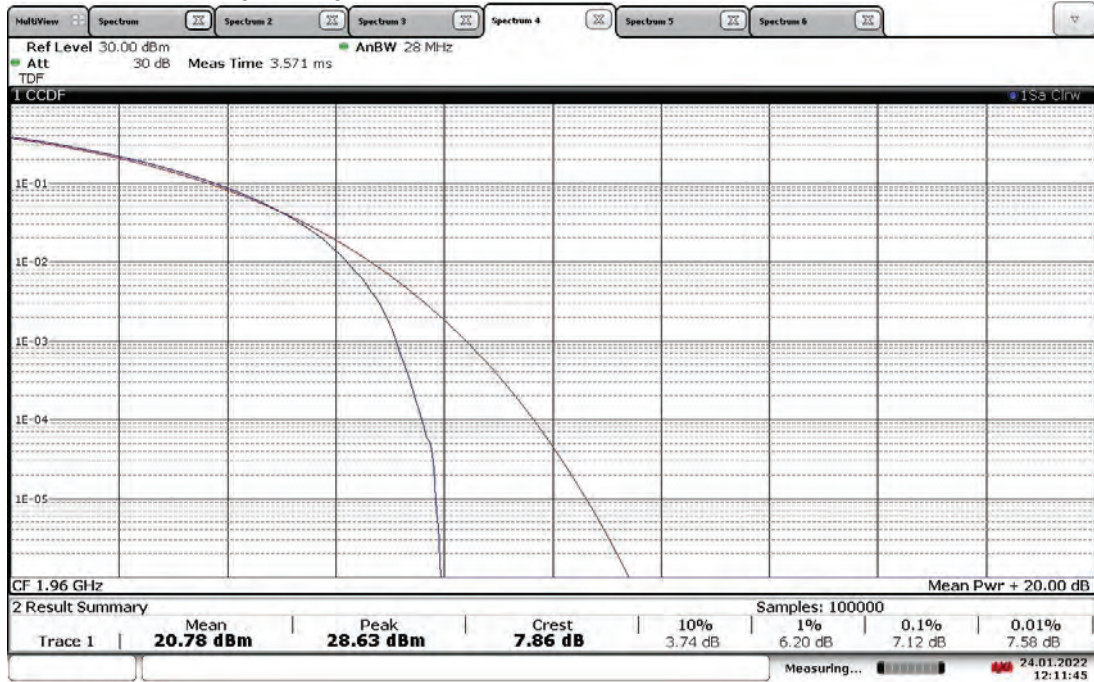
10:10:41 21.01.2022

TM1.1-QPSK_20 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Low Channel 1940 MHz, PAPR = 7.55 dB

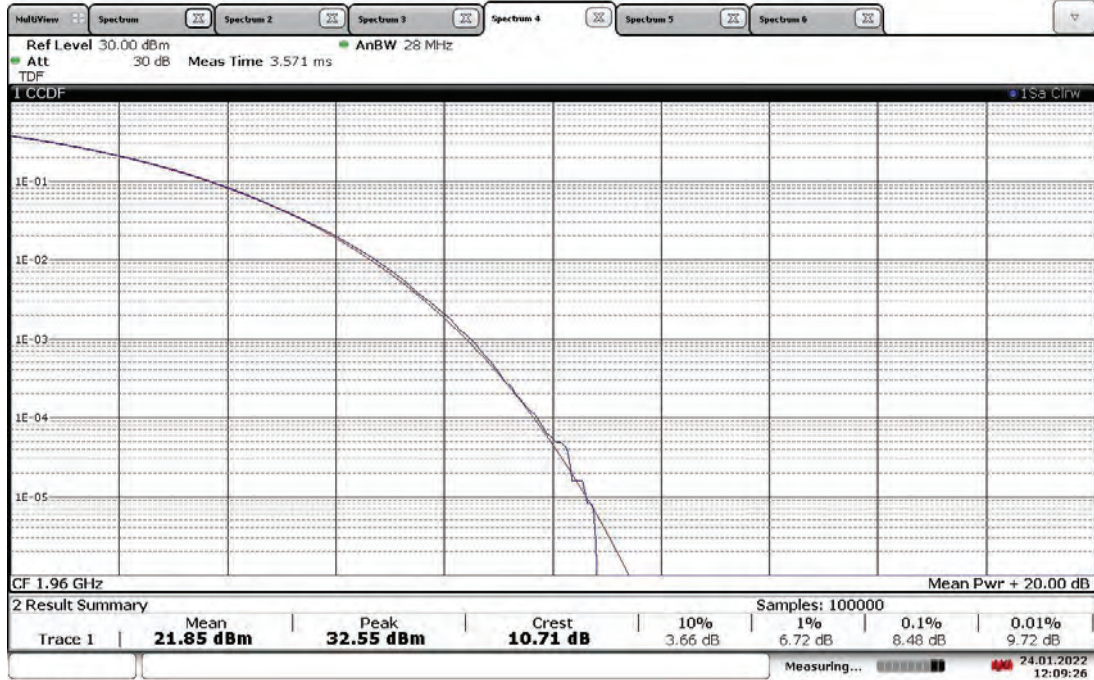


TM1.1-QPSK_20 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Low Channel 1940 MHz, PAPR = 10.31 dB

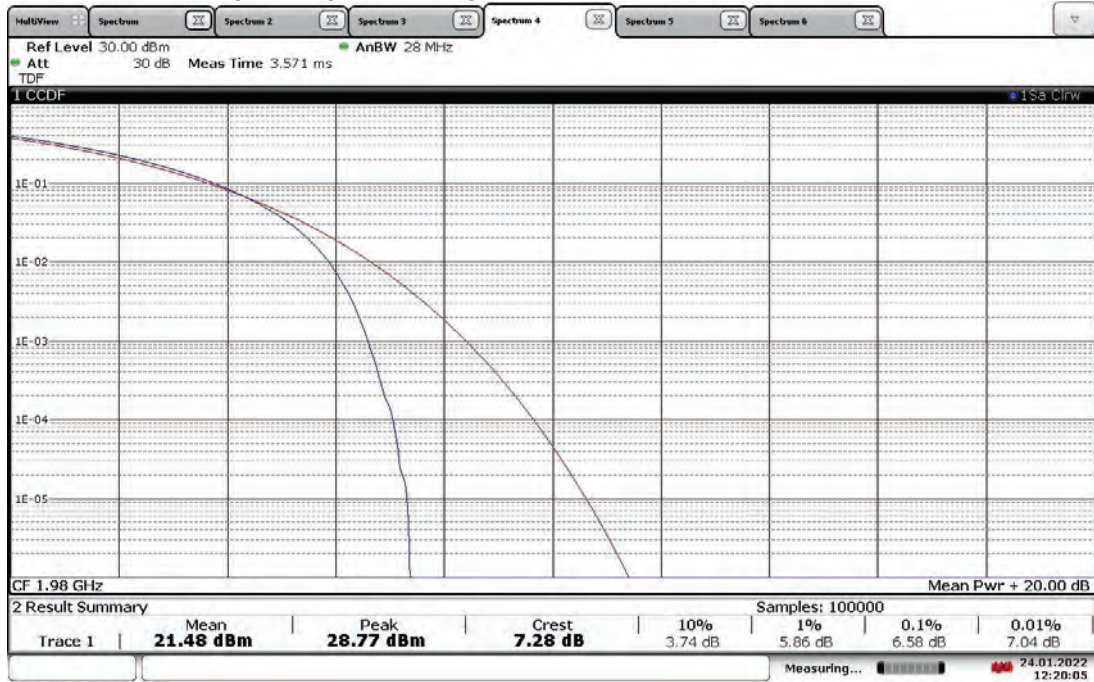


TM1.1-QPSK_20 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 7.86 dB

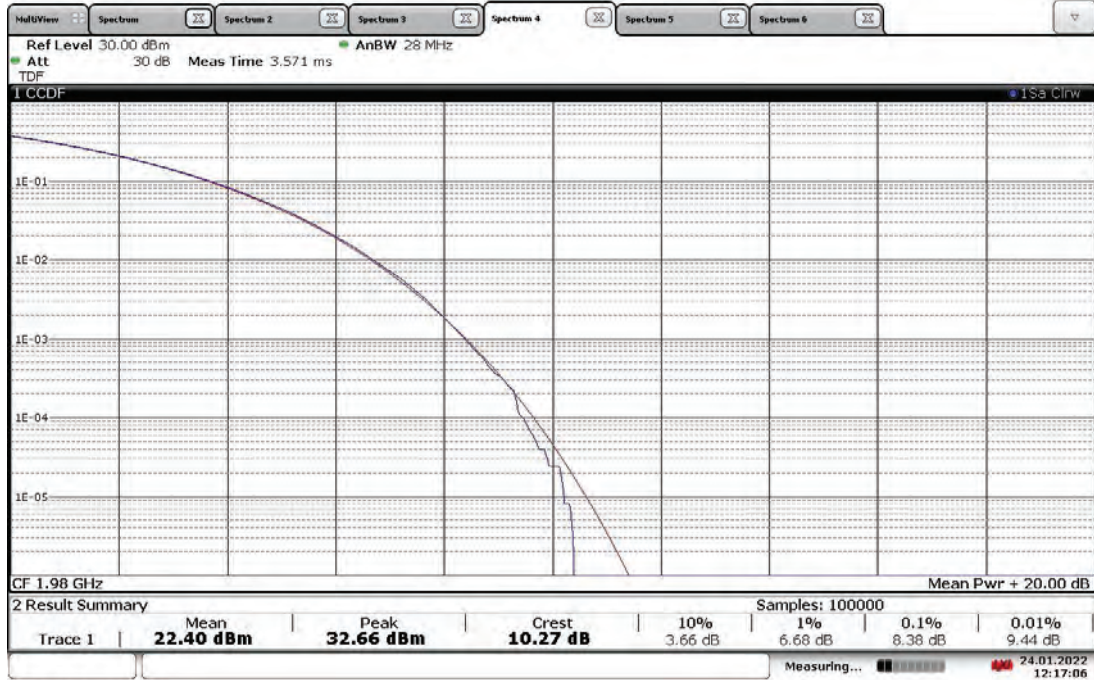
12:11:46 24.01.2022

TM1.1-QPSK_20 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, Output Power = 10.71 dB

12:09:26 24.01.2022

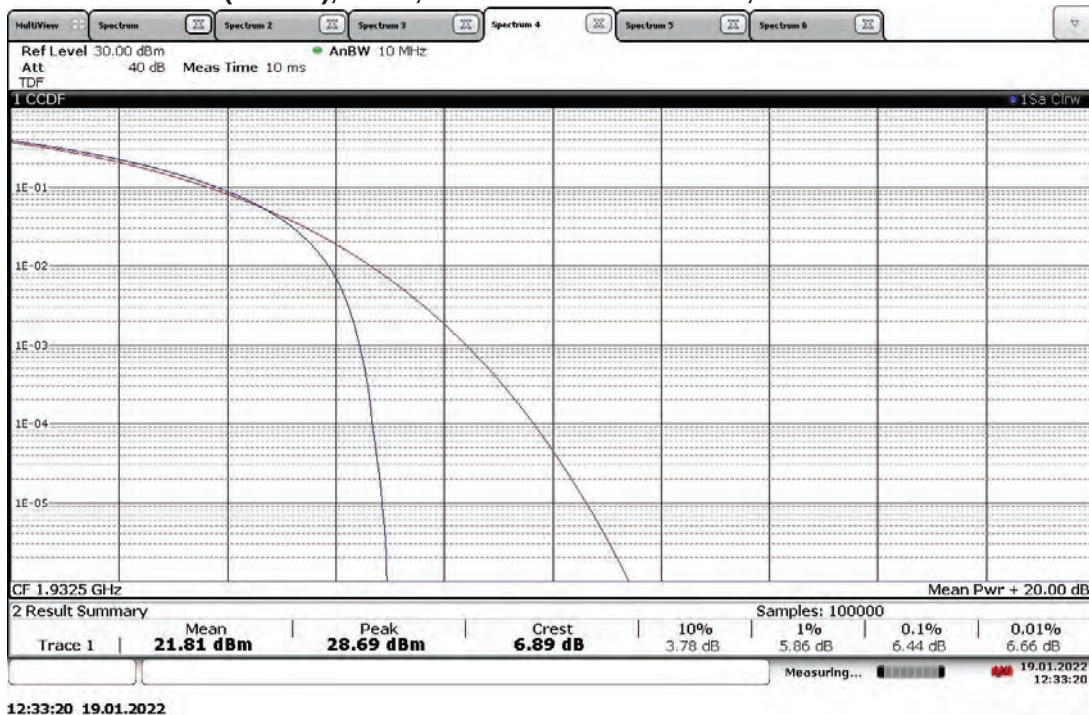
TM1.1-QPSK_20 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, High Channel 1980 MHz, PAPR = 7.28 dB

12:20:06 24.01.2022

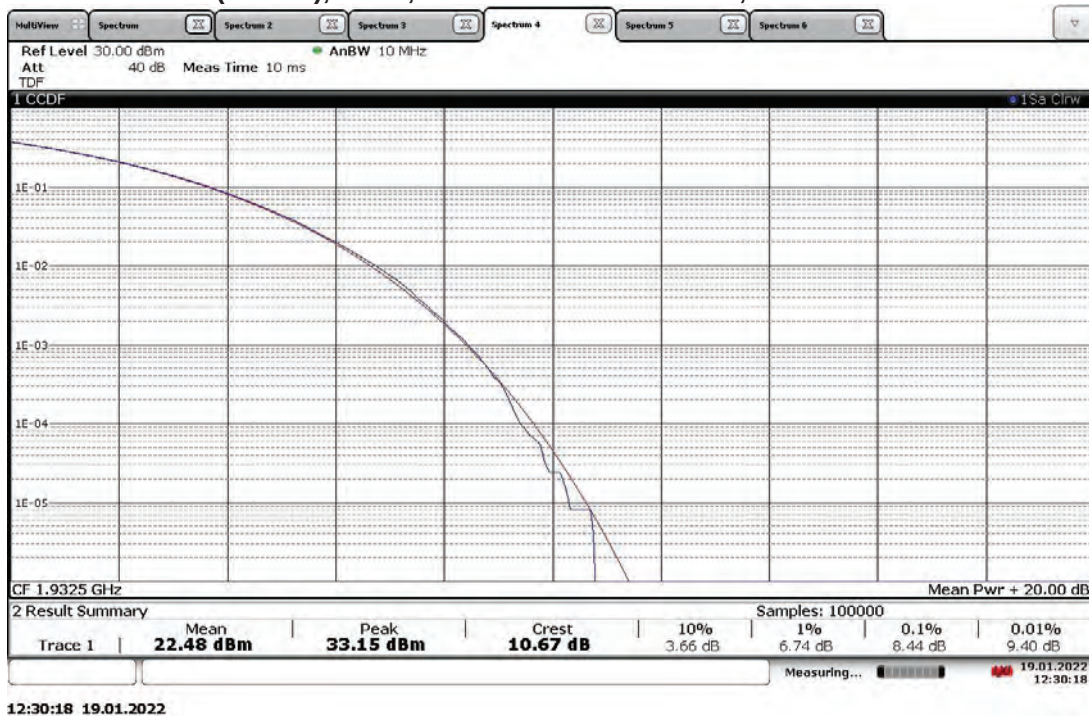
TM1.1-QPSK_20 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, High Channel 1980 MHz, PAPR = 10.27 dB

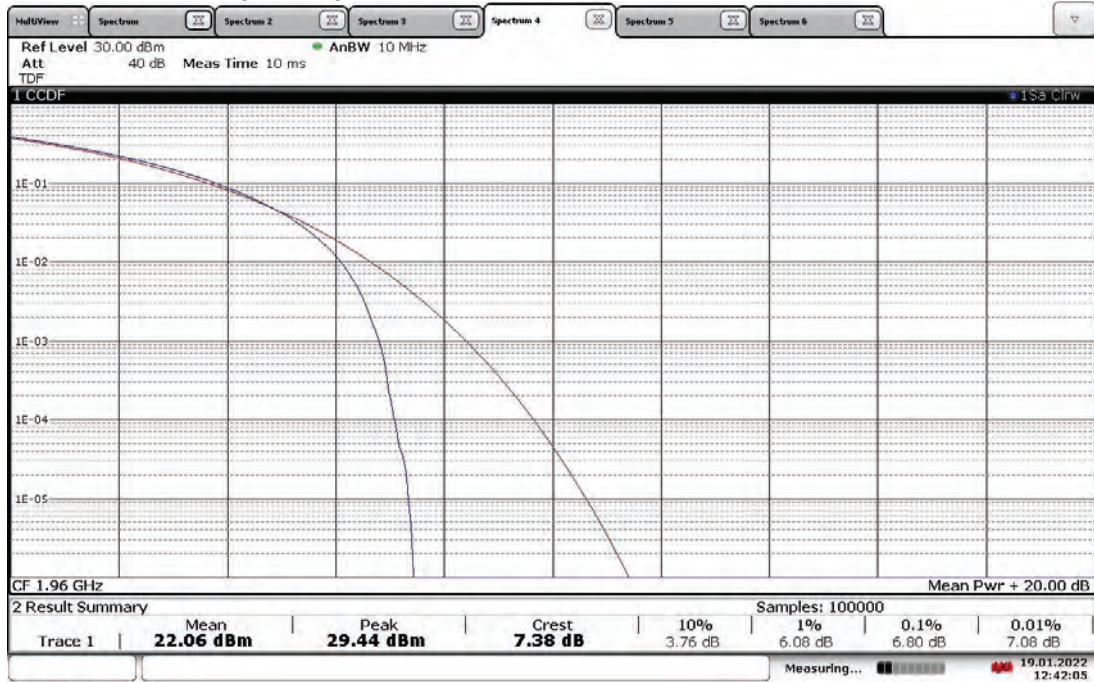
12:17:07 24.01.2022

TM3.2 - 16QAM_5MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Low Channel 1932.5 MHz, PAPR = 6.89 dB

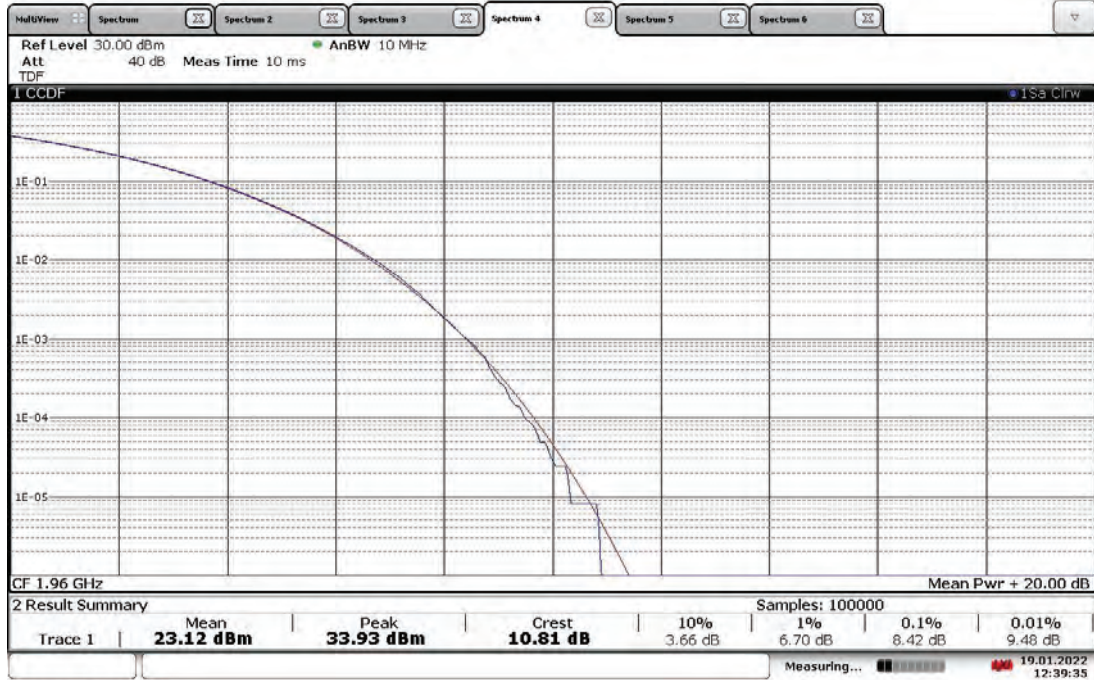


TM3.2 - 16QAM_5MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Low Channel 1932.5 MHz, PAPR = 10.57 dB

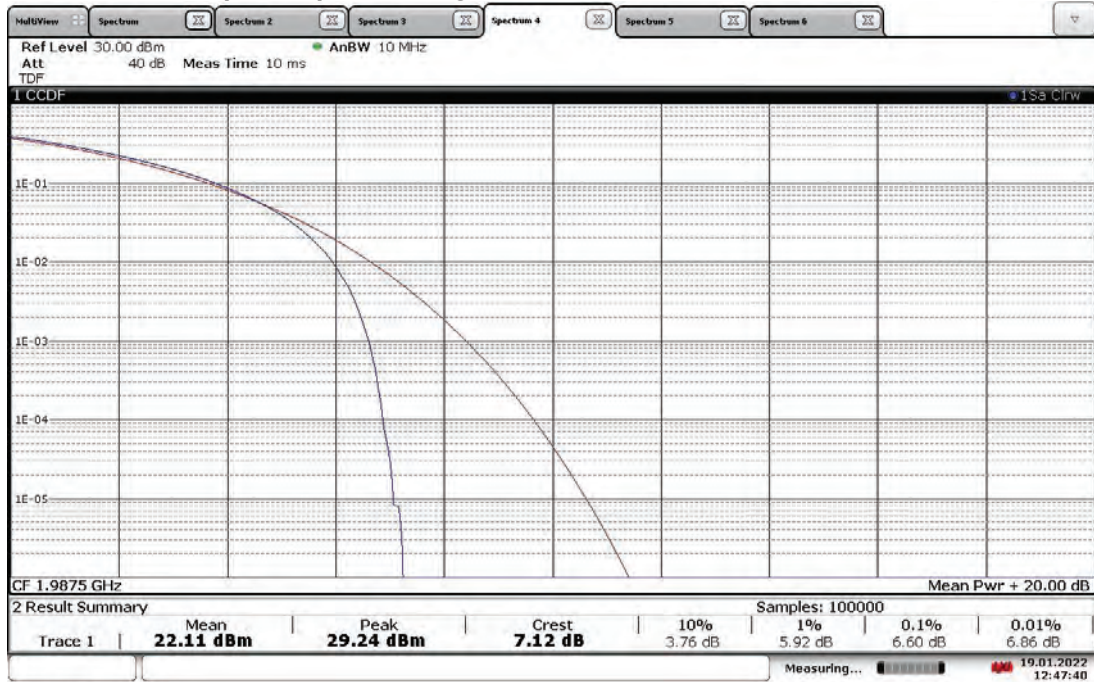


TM3.2 - 16QAM_5MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 7.38 dB

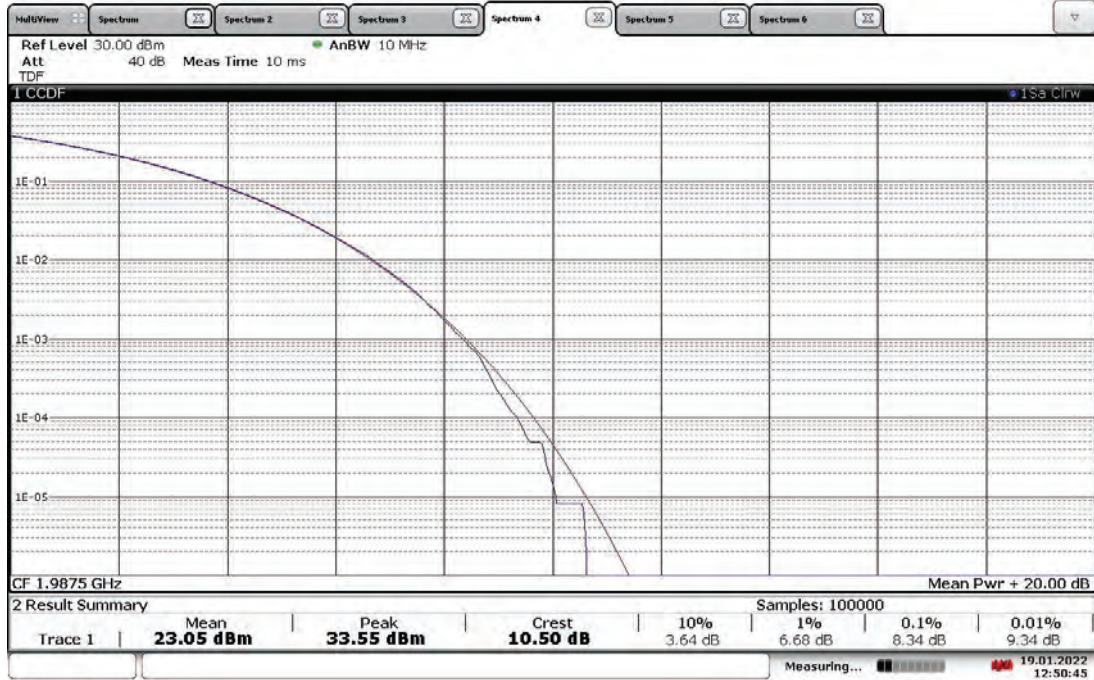
12:42:05 19.01.2022

TM3.2 - 16QAM_5MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 10.81 dB

12:39:35 19.01.2022

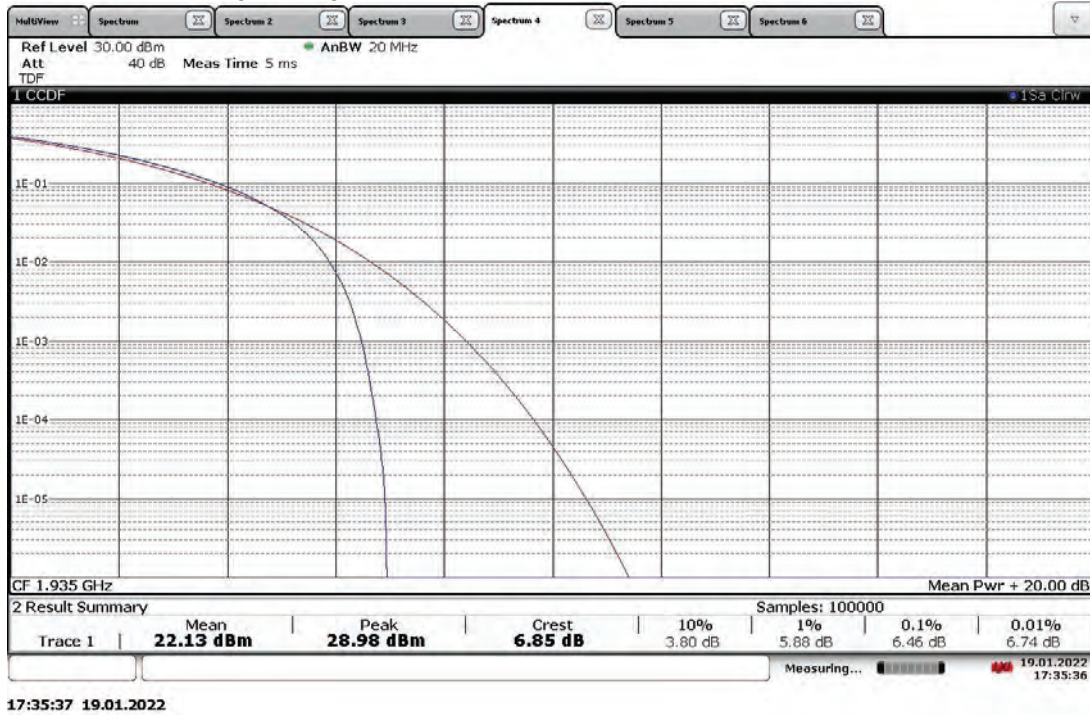
TM3.2 - 16QAM_5MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, High Channel 1987.5 MHz, PAPR = 7.12 dB

12:47:40 19.01.2022

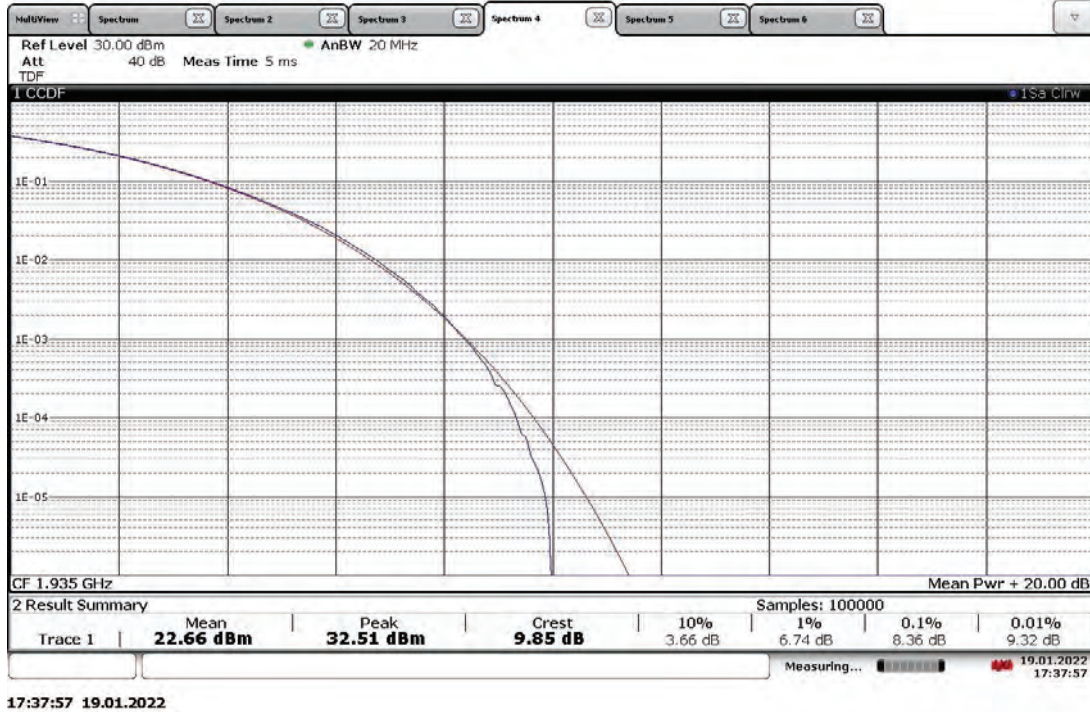
TM3.2 - 16QAM_5MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, High Channel 1987.5 MHz, PAPR = 10.5 dB

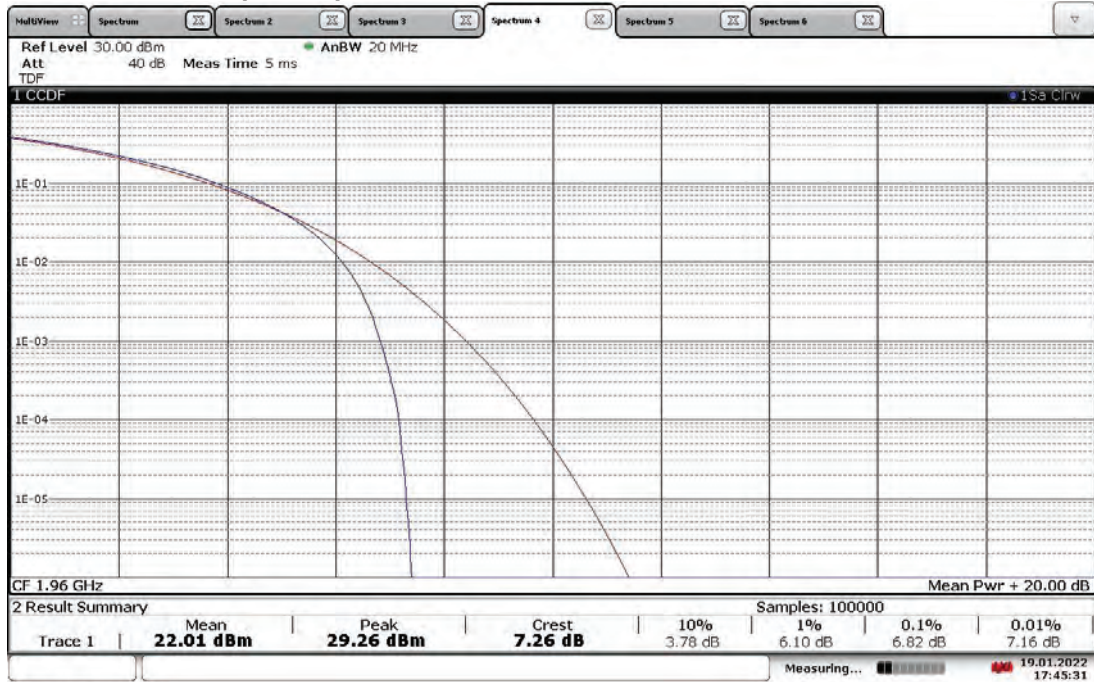
12:50:45 19.01.2022

TM3.2 - 16QAM_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Low Channel 1935 MHz, PAPR = 6.85 dB

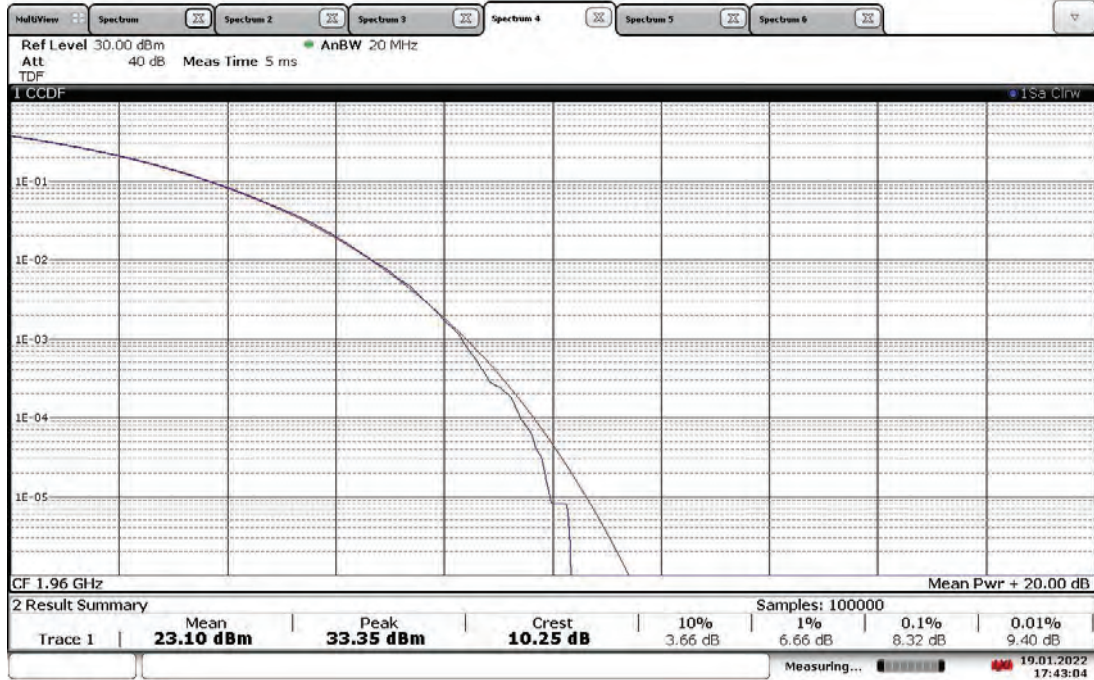


TM3.2 - 16QAM_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Low Channel 1935 MHz, PAPR = 9.85 dB



TM3.2 - 16QAM_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 7.26 dB

17:45:32 19.01.2022

TM3.2 - 16QAM_10 MHz Bandwidth (4G LTE)
Slot 0 (Band 2), ANT1, Mid Channel 1935 MHz, PAPR = 10.25 dB

17:43:04 19.01.2022