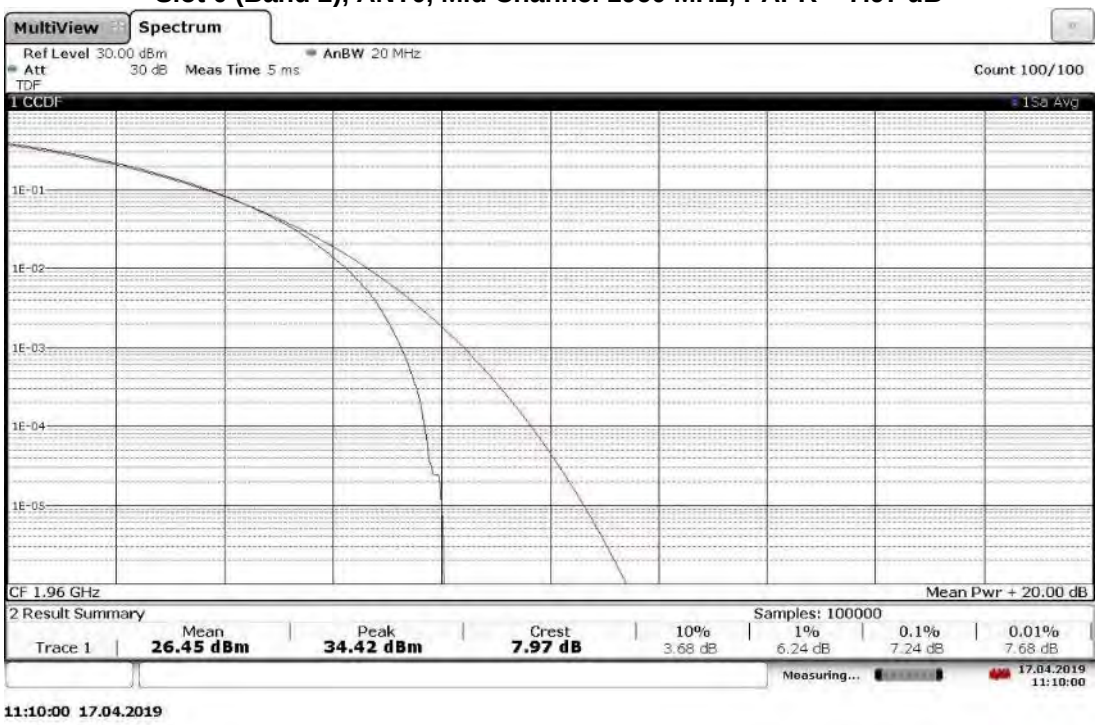
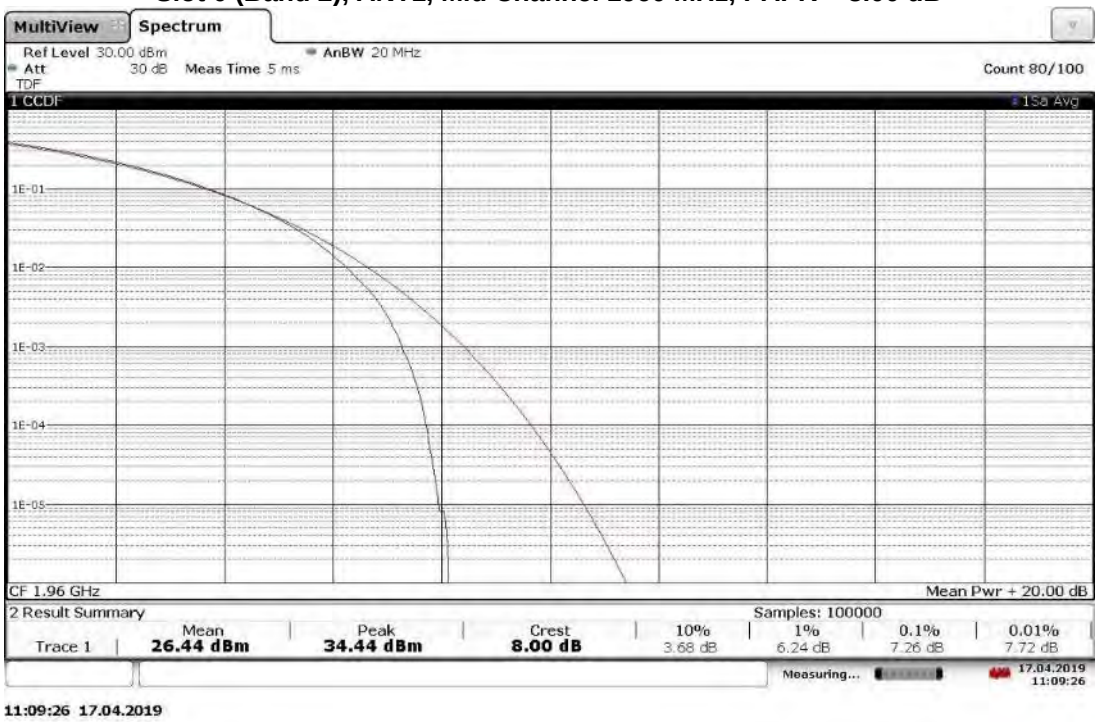
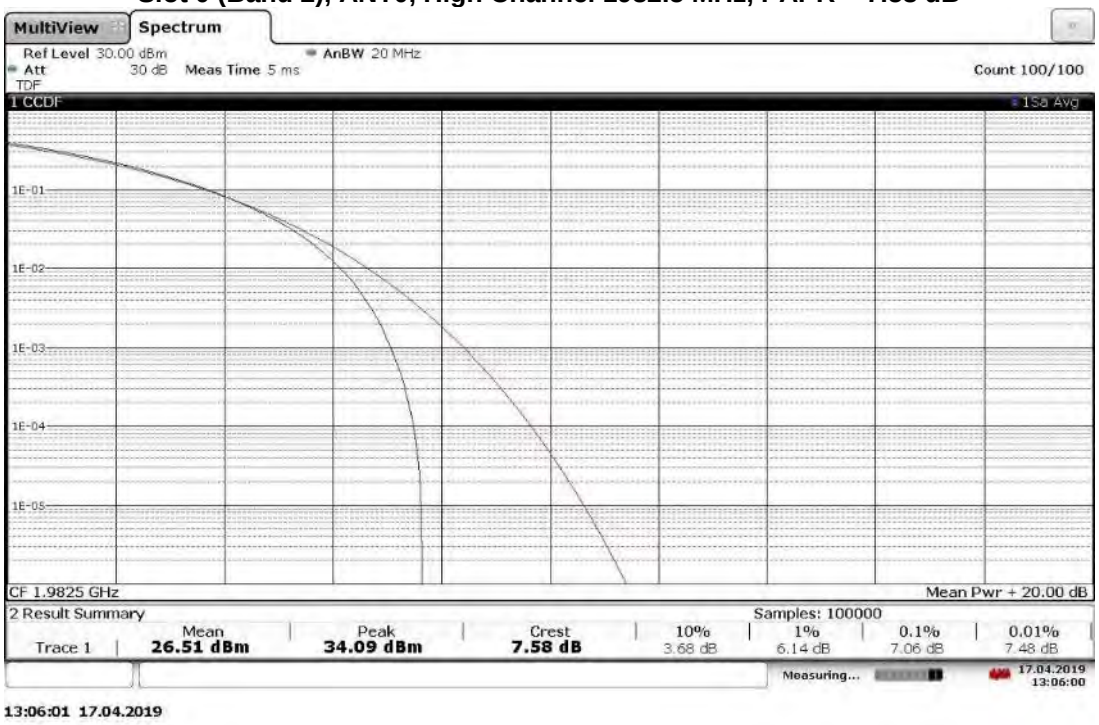
TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 7.97 dB



TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 8.00 dB

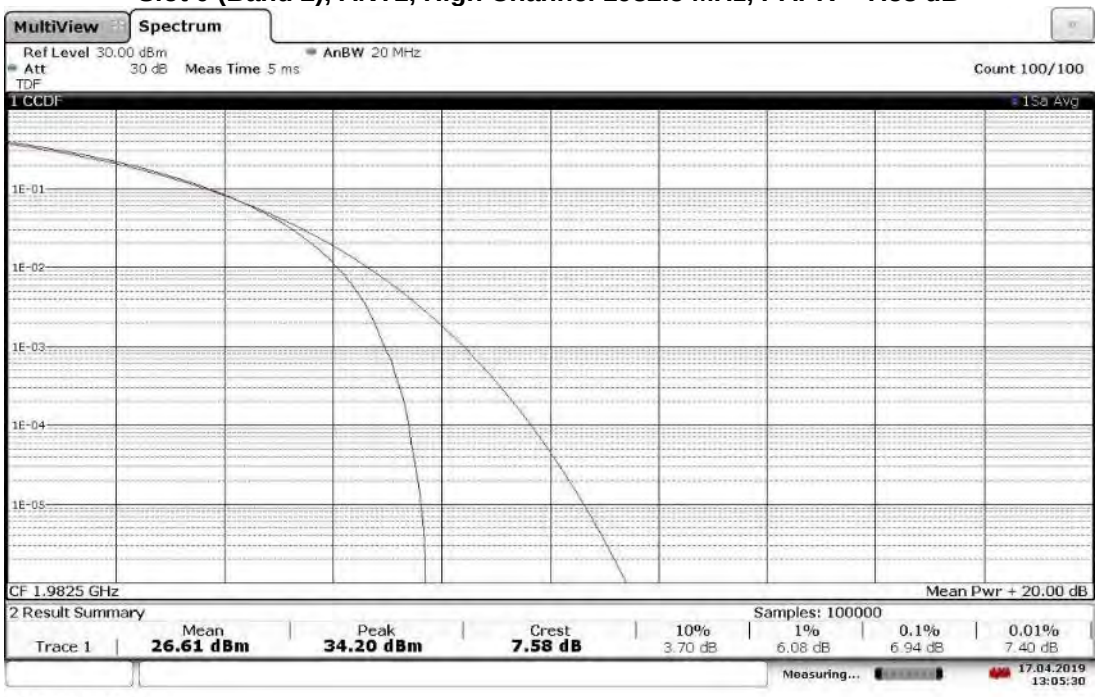


TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 1982.5 MHz, PAPR = 7.58 dB



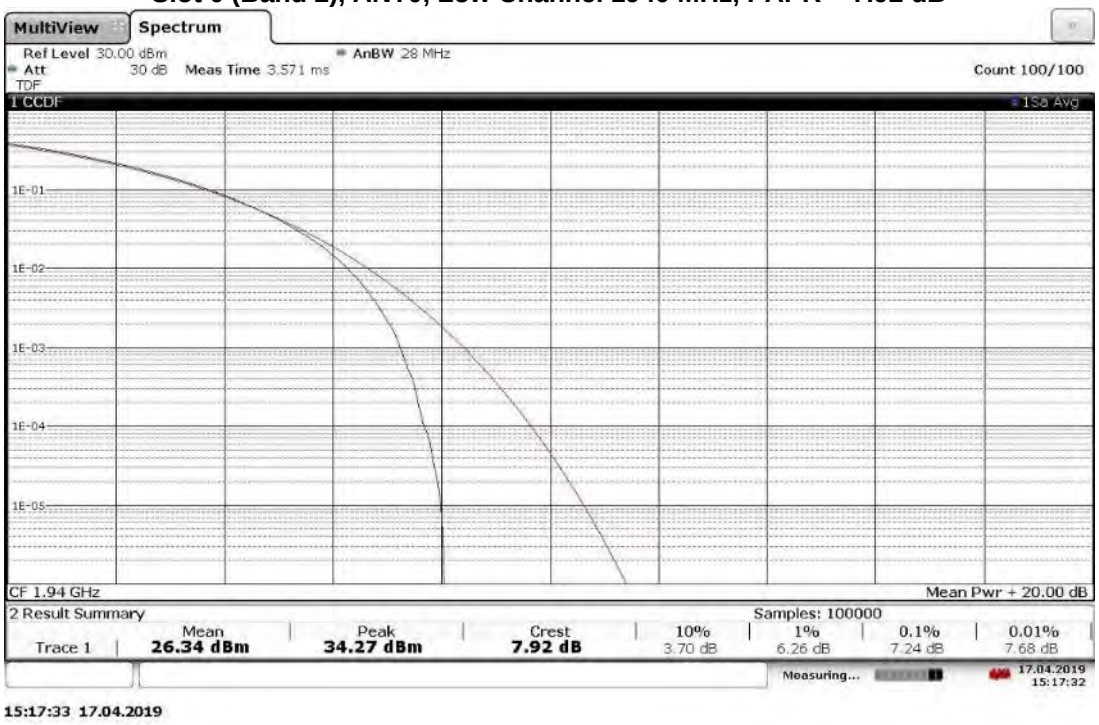
13:06:01 17.04.2019

TM3.1-64QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 1982.5 MHz, PAPR = 7.58 dB



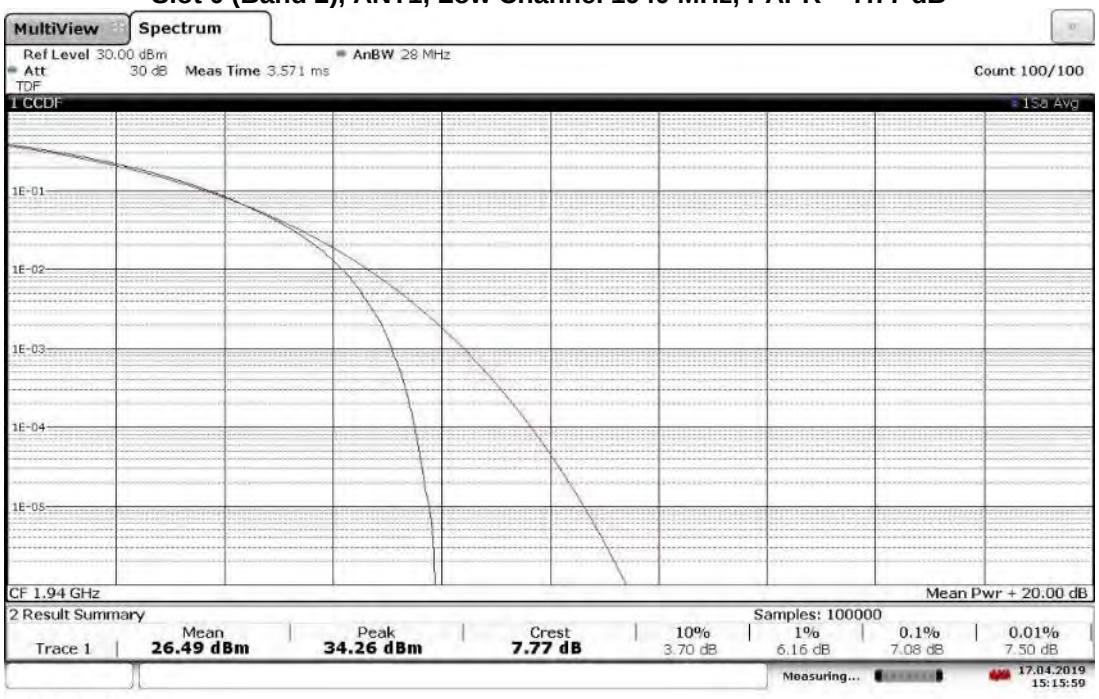
13:05:30 17.04.2019

TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 1940 MHz, PAPR = 7.92 dB



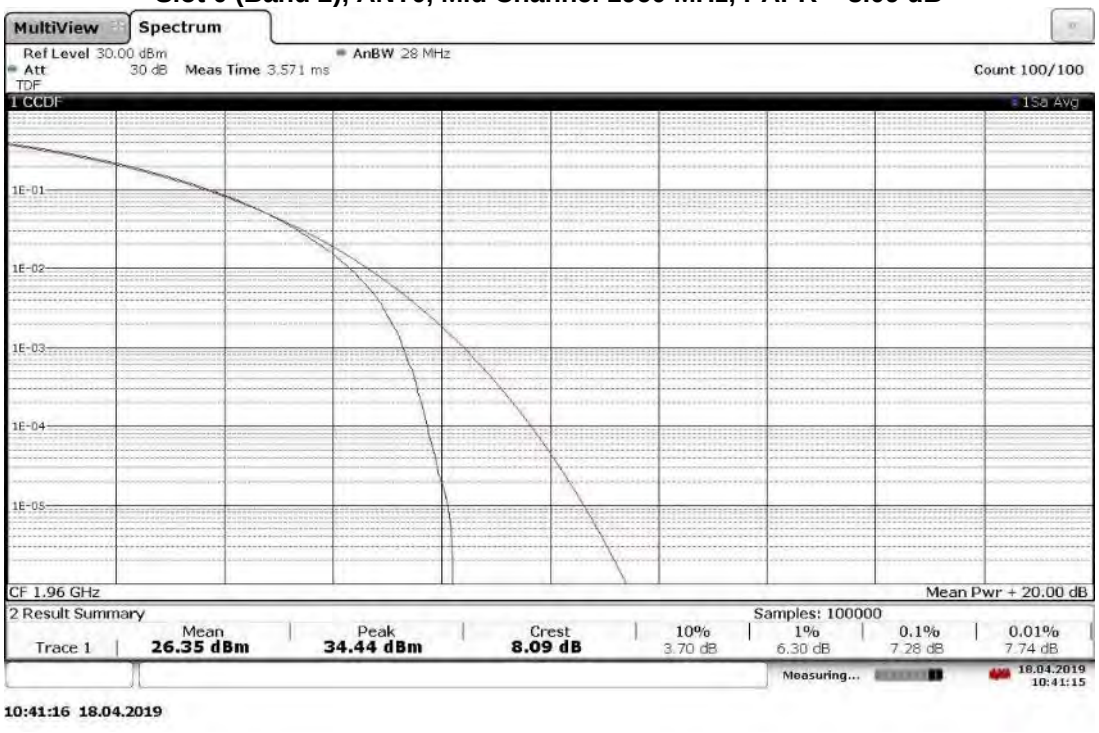
15:17:33 17.04.2019

TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 1940 MHz, PAPR = 7.77 dB

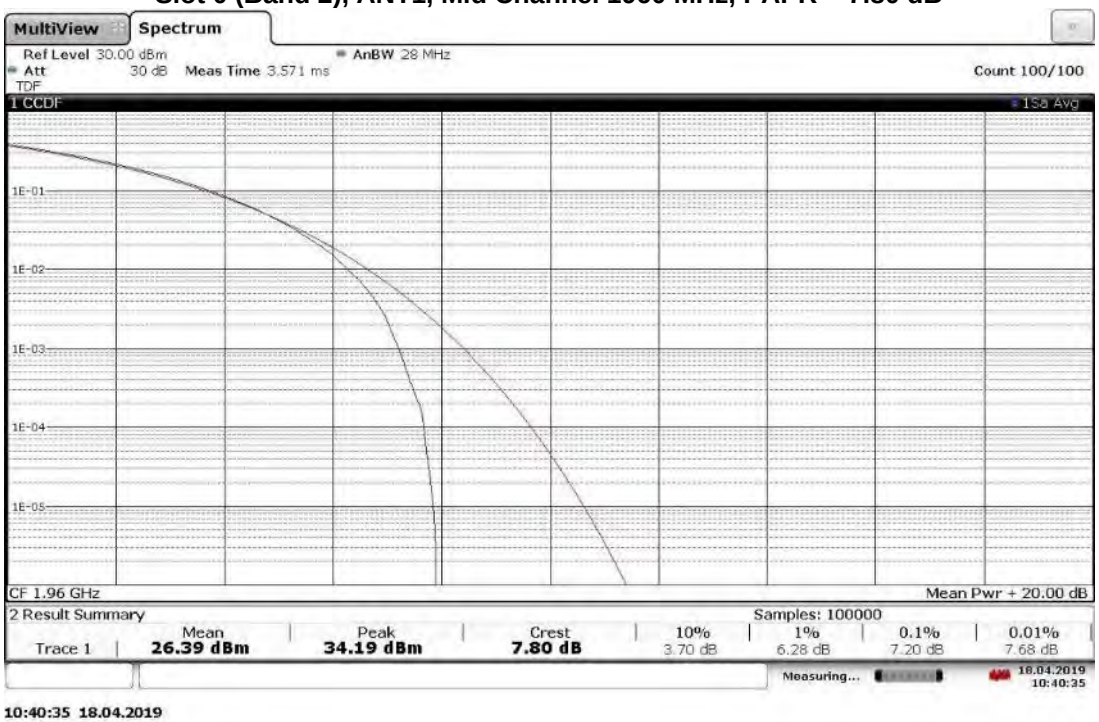


15:15:59 17.04.2019

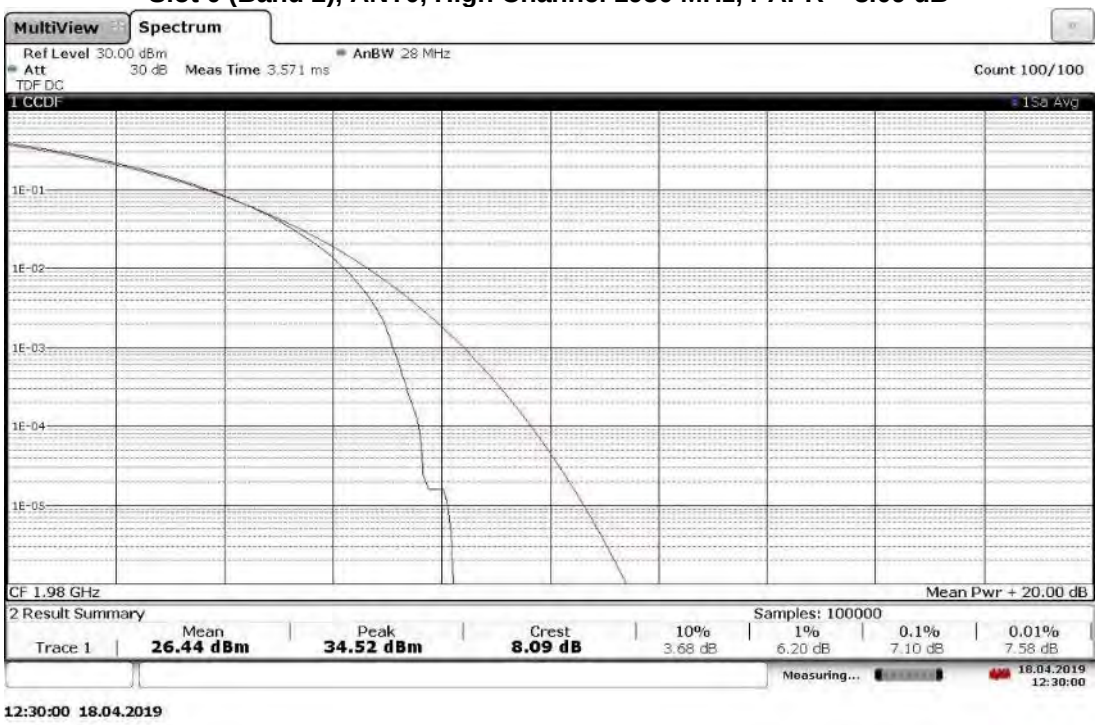
TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 8.09 dB



TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 7.80 dB

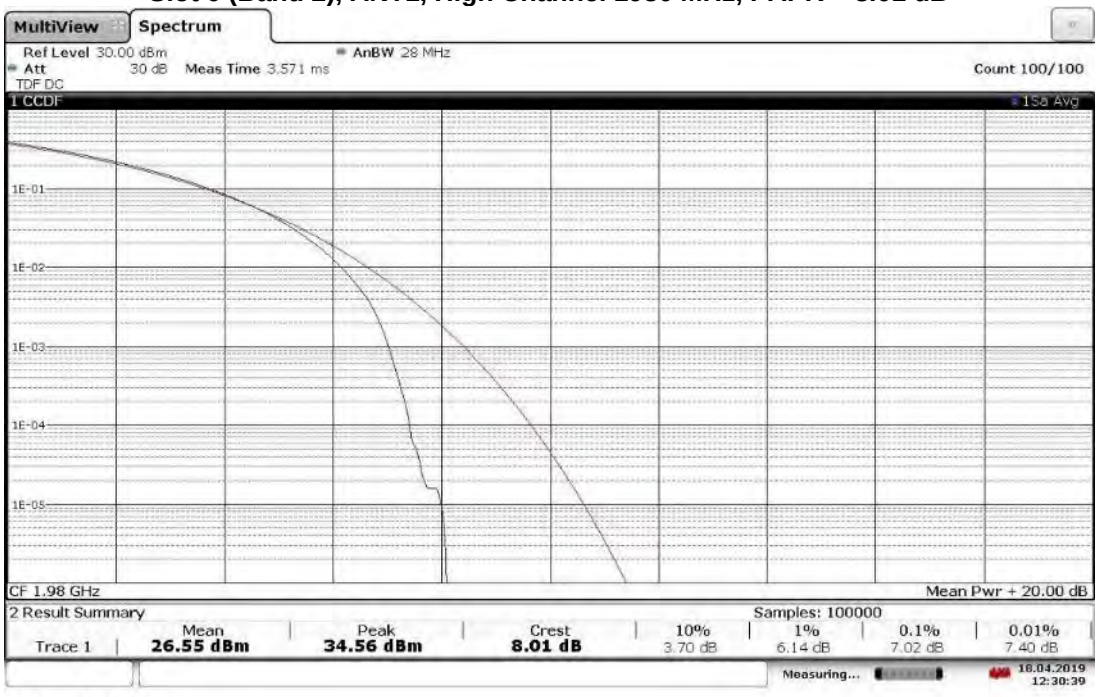


TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 1980 MHz, PAPR = 8.09 dB



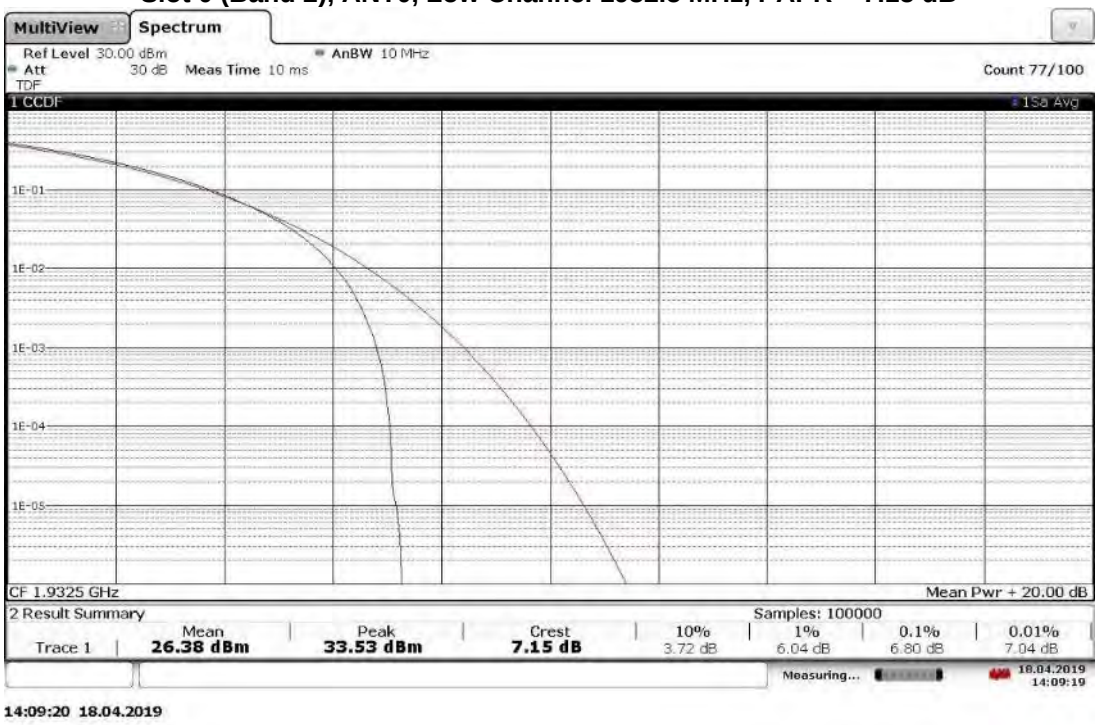
12:30:00 18.04.2019

TM3.1-64QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 1980 MHz, PAPR = 8.01 dB



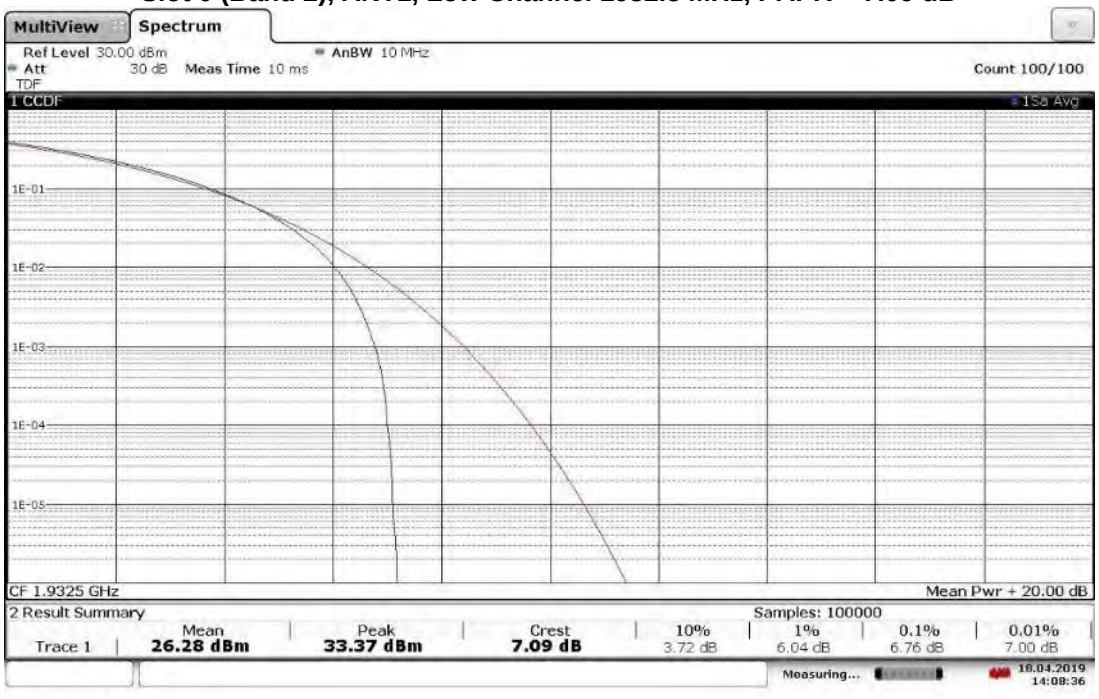
12:30:39 18.04.2019

TM3.1a - 256QAM_5MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 1932.5 MHz, PAPR = 7.15 dB



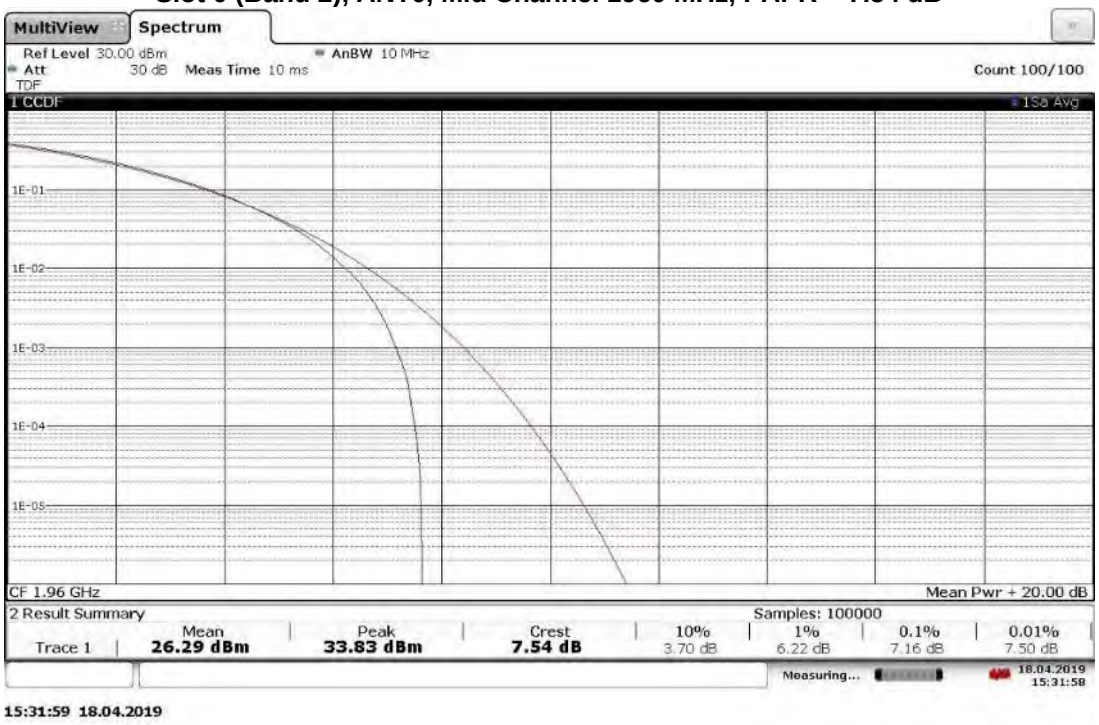
14:09:20 18.04.2019

TM3.1a - 256QAM_5MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 1932.5 MHz, PAPR = 7.09 dB



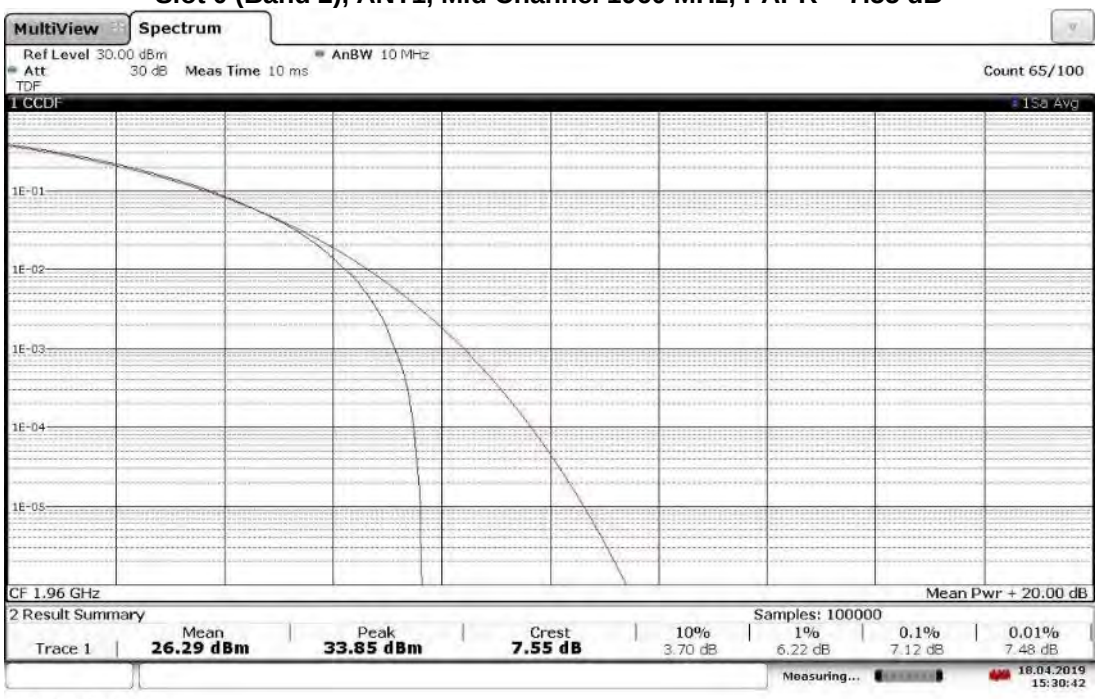
14:08:37 18.04.2019

TM3.1a - 256QAM_5MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 7.54 dB



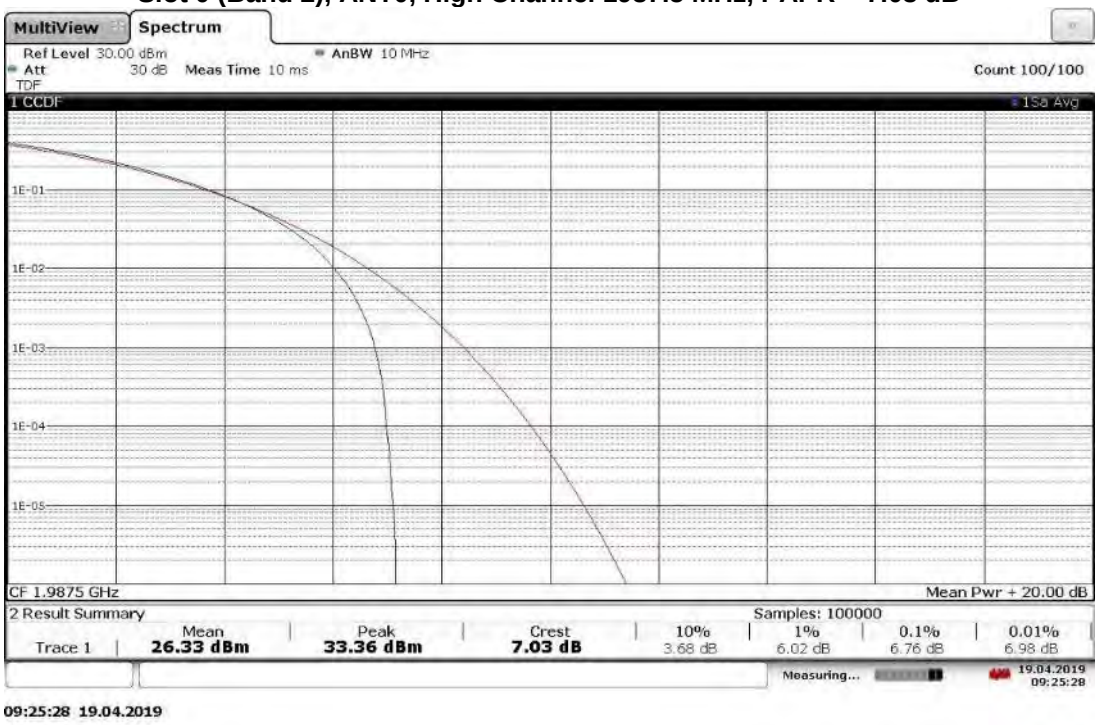
15:31:59 18.04.2019

TM3.1a - 256QAM_5MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 7.55 dB



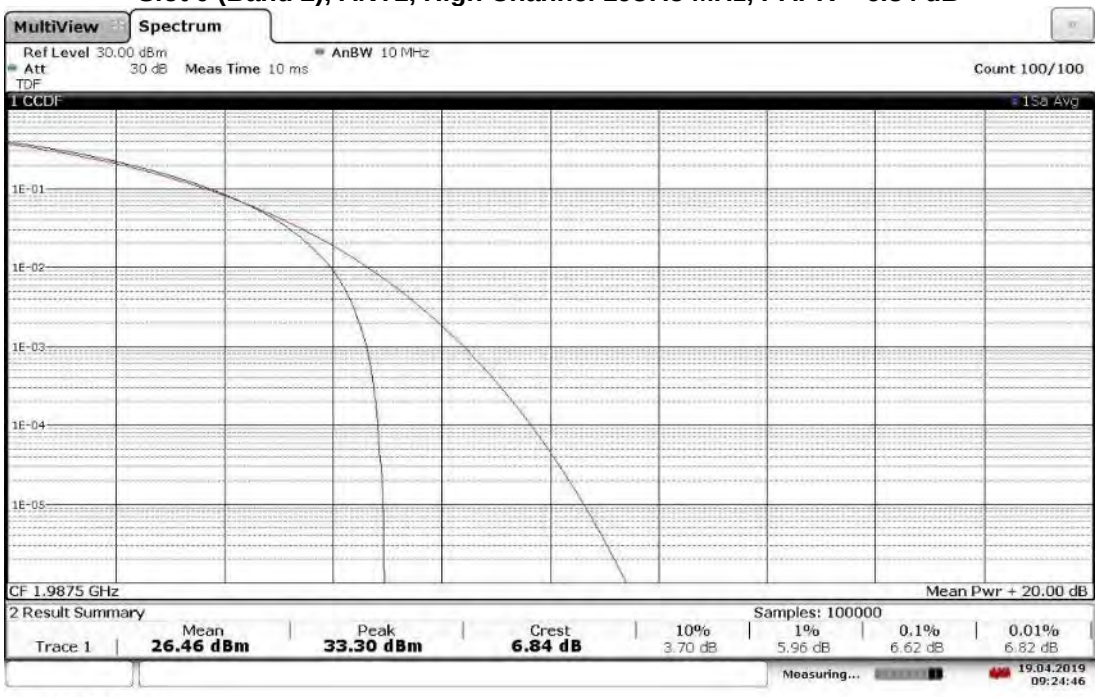
15:30:42 18.04.2019

TM3.1a - 256QAM_5MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 1987.5 MHz, PAPR = 7.03 dB



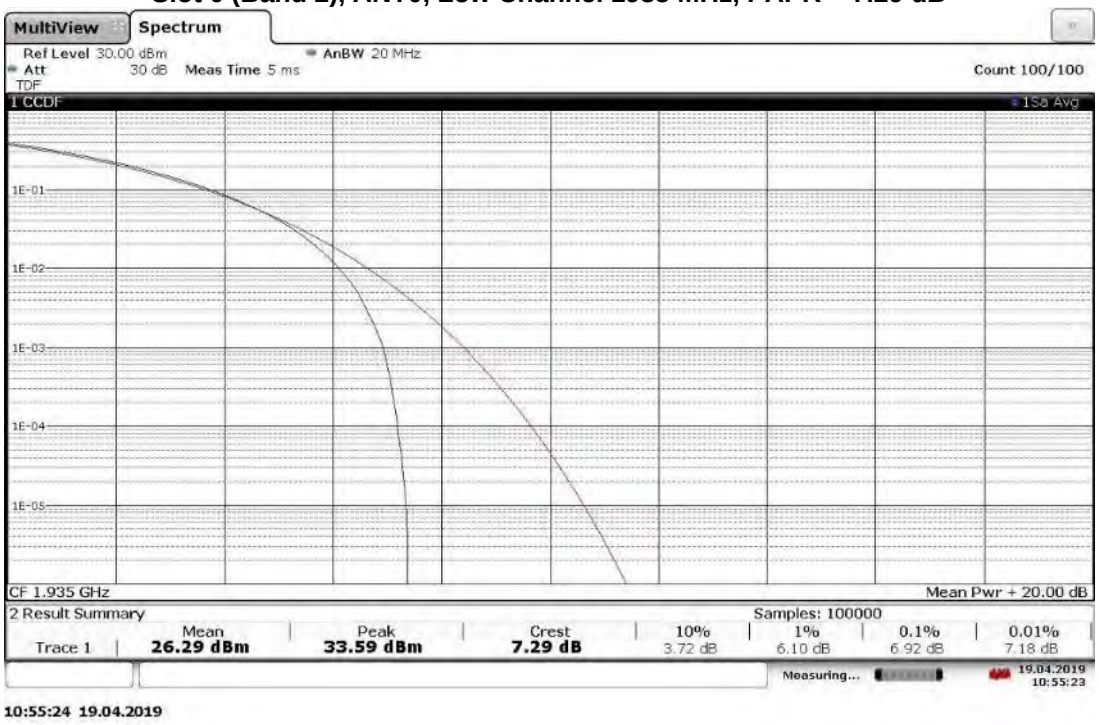
09:25:28 19.04.2019

TM3.1a - 256QAM_5MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 1987.5 MHz, PAPR = 6.84 dB



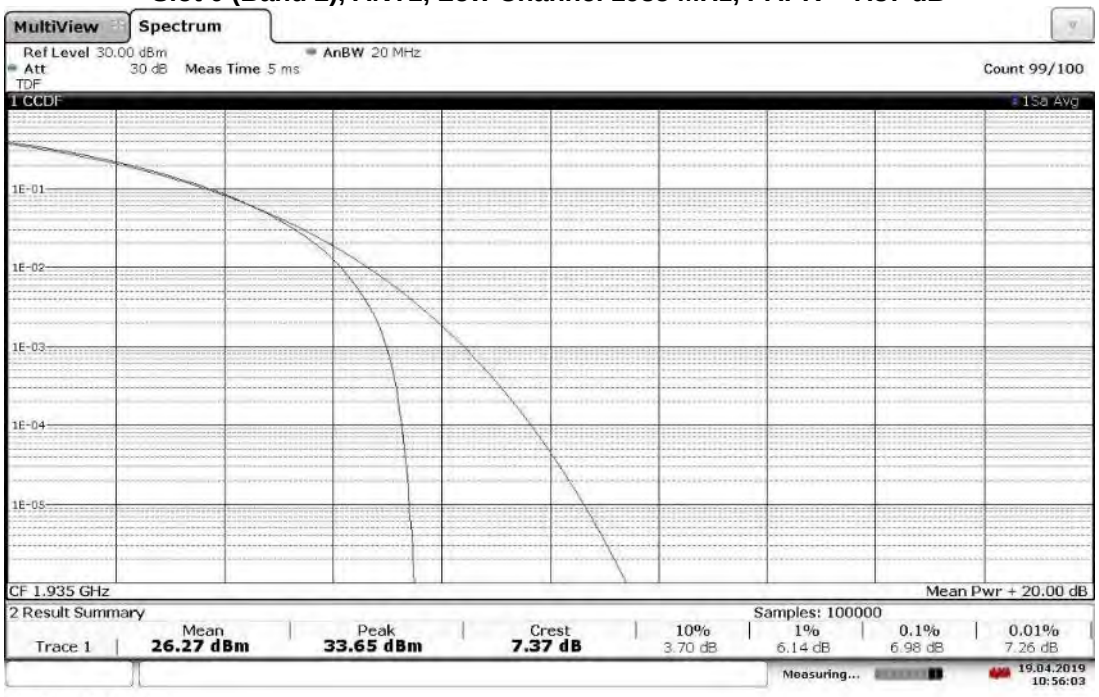
09:24:47 19.04.2019

TM3.1a - 256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 1935 MHz, PAPR = 7.29 dB



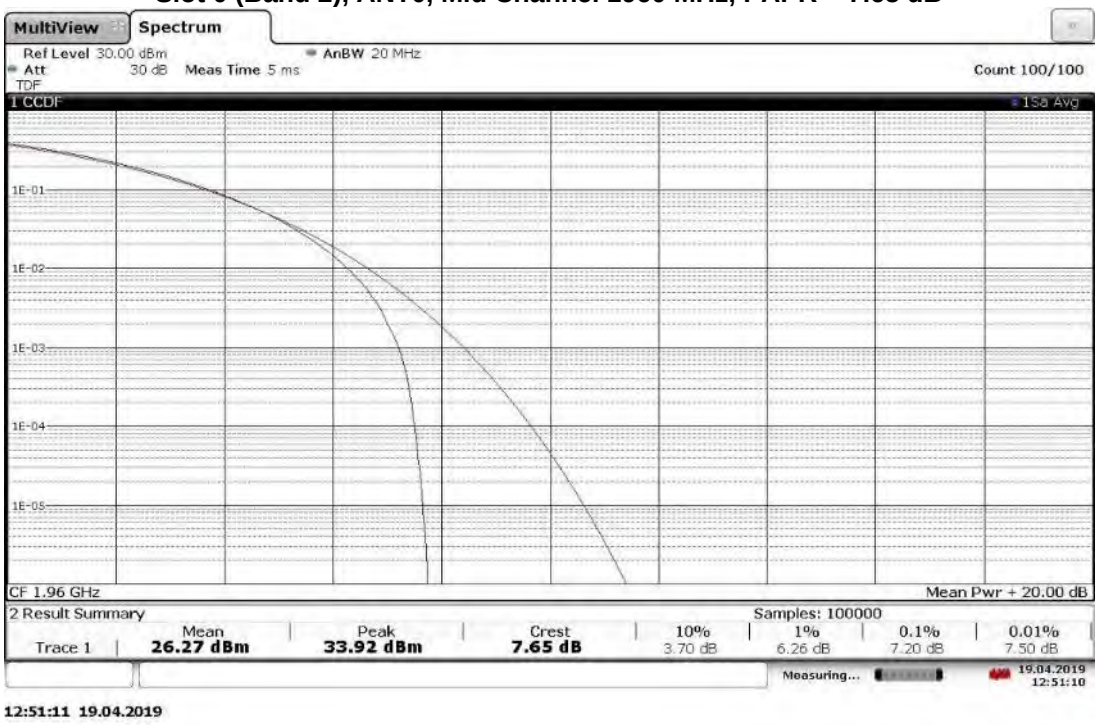
10:55:24 19.04.2019

TM3.1a - 256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 1935 MHz, PAPR = 7.37 dB



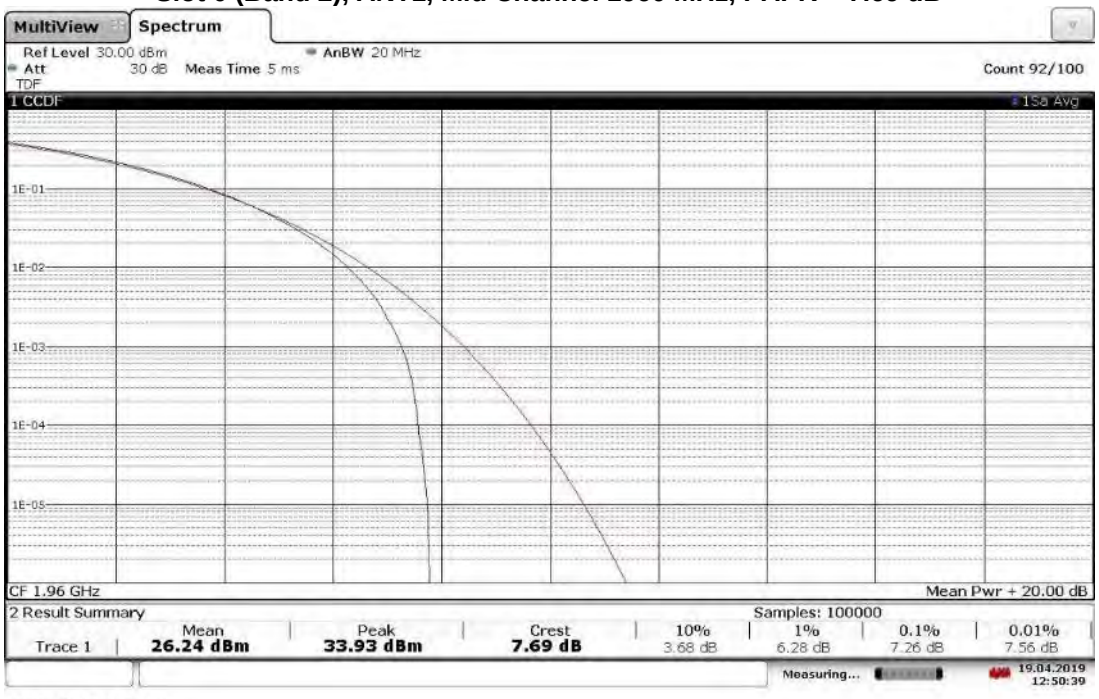
10:56:03 19.04.2019

TM3.1a - 256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 7.65 dB



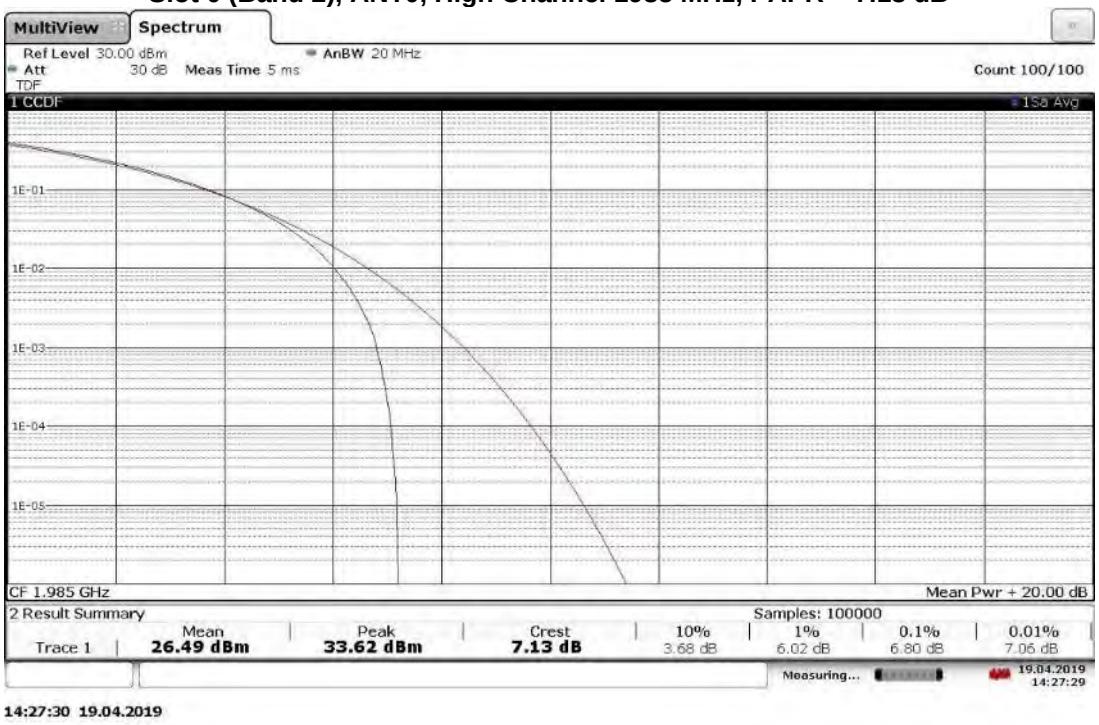
12:51:11 19.04.2019

TM3.1a - 256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 7.69 dB



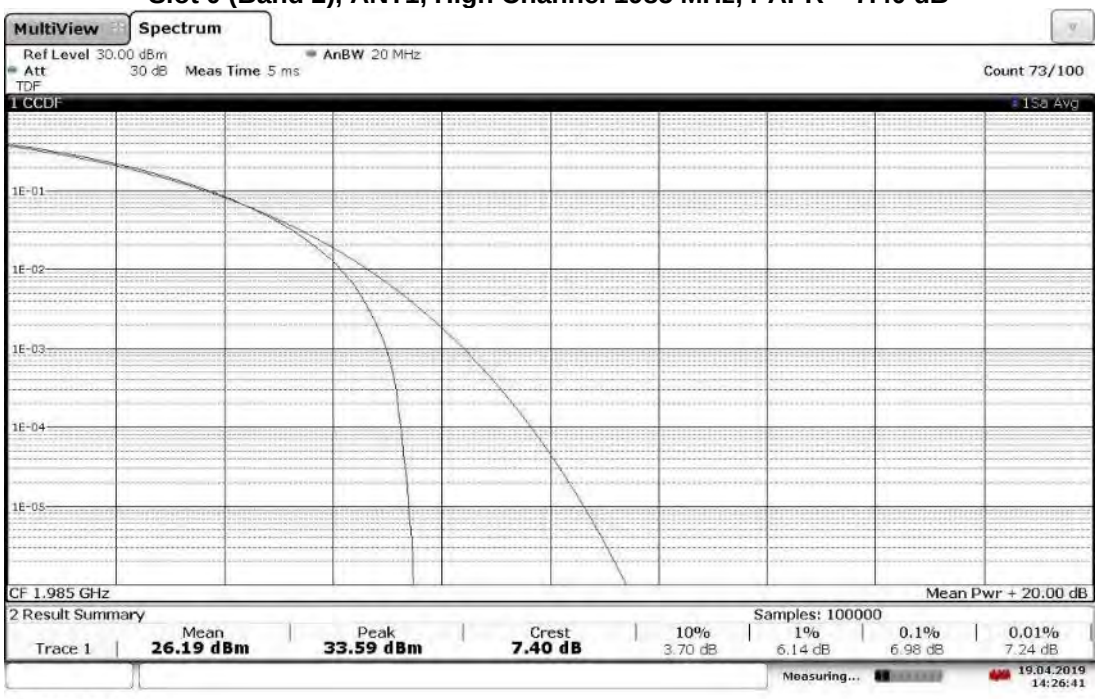
12:50:40 19.04.2019

TM3.1a - 256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 1985 MHz, PAPR = 7.13 dB



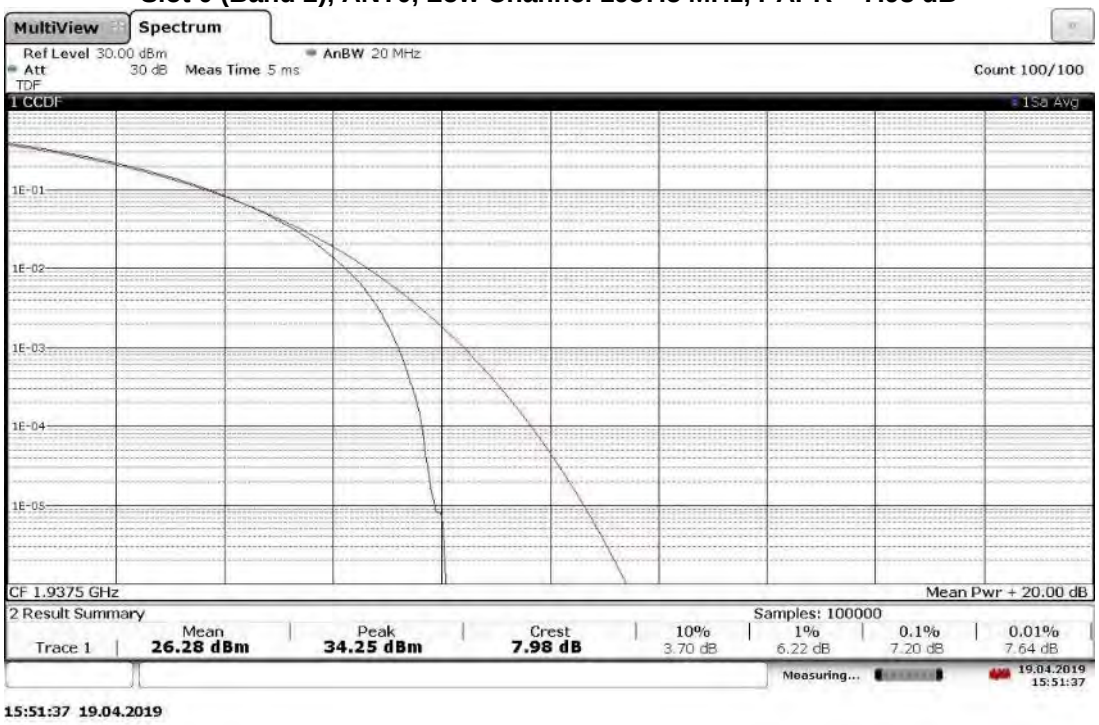
14:27:30 19.04.2019

TM3.1a - 256QAM_10 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 1985 MHz, PAPR = 7.40 dB



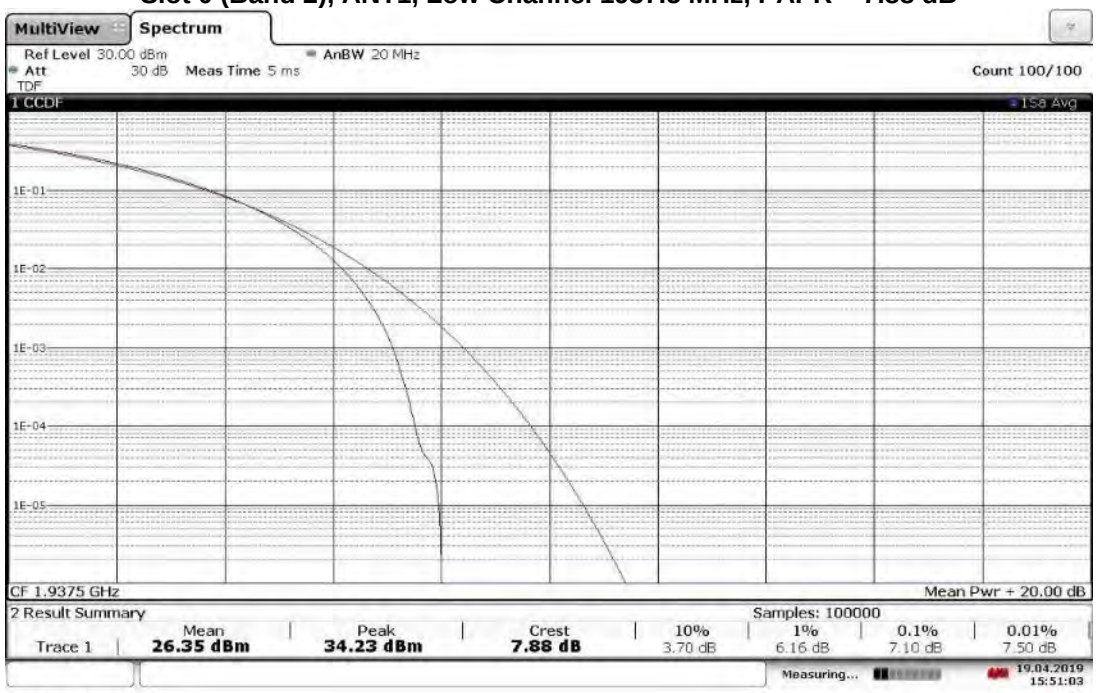
14:26:42 19.04.2019

TM3.1a - 256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 1937.5 MHz, PAPR = 7.98 dB



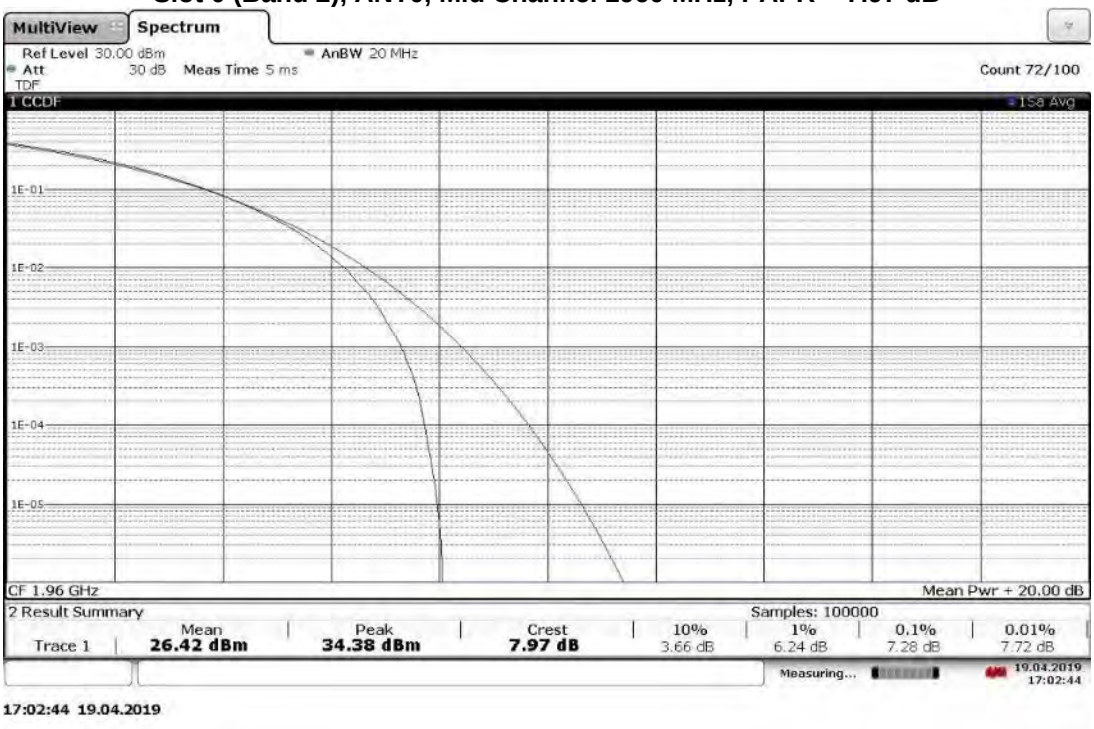
15:51:37 19.04.2019

TM3.1a - 256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 1937.5 MHz, PAPR = 7.88 dB



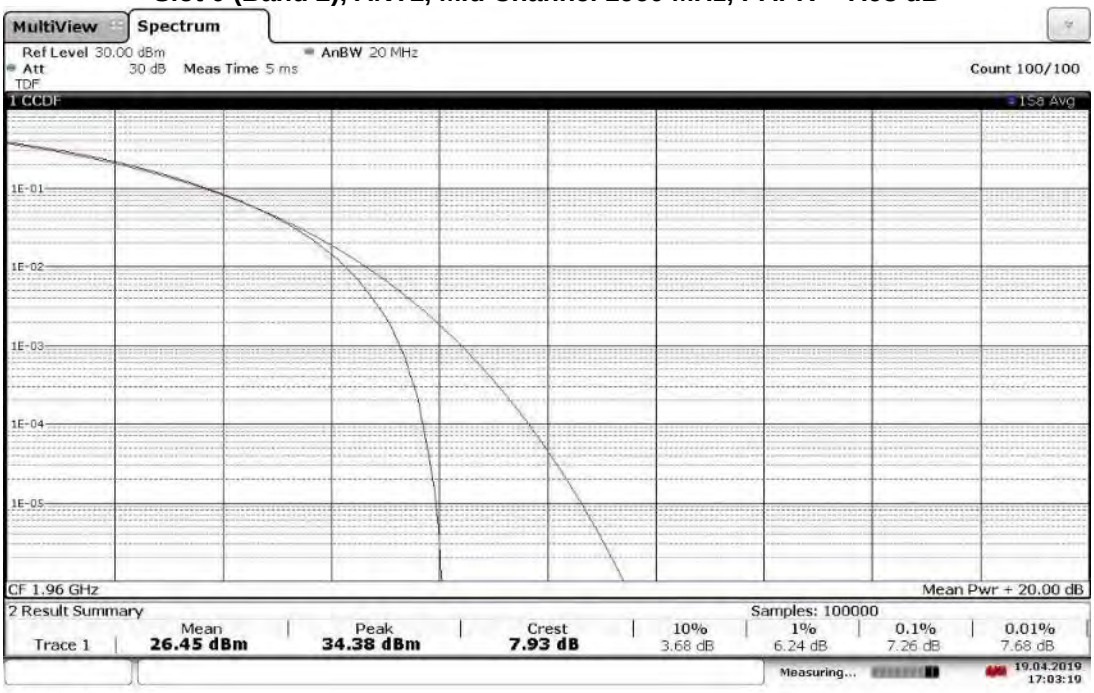
15:51:04 19.04.2019

TM3.1a - 256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 7.97 dB



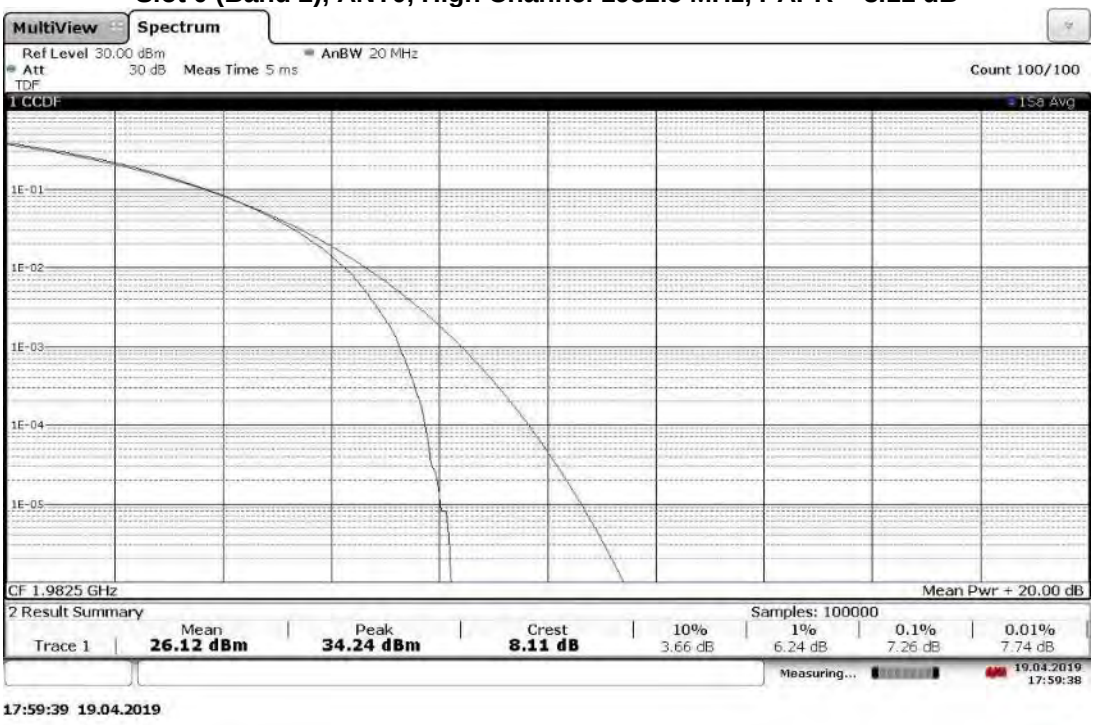
17:02:44 19.04.2019

TM3.1a - 256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 7.93 dB



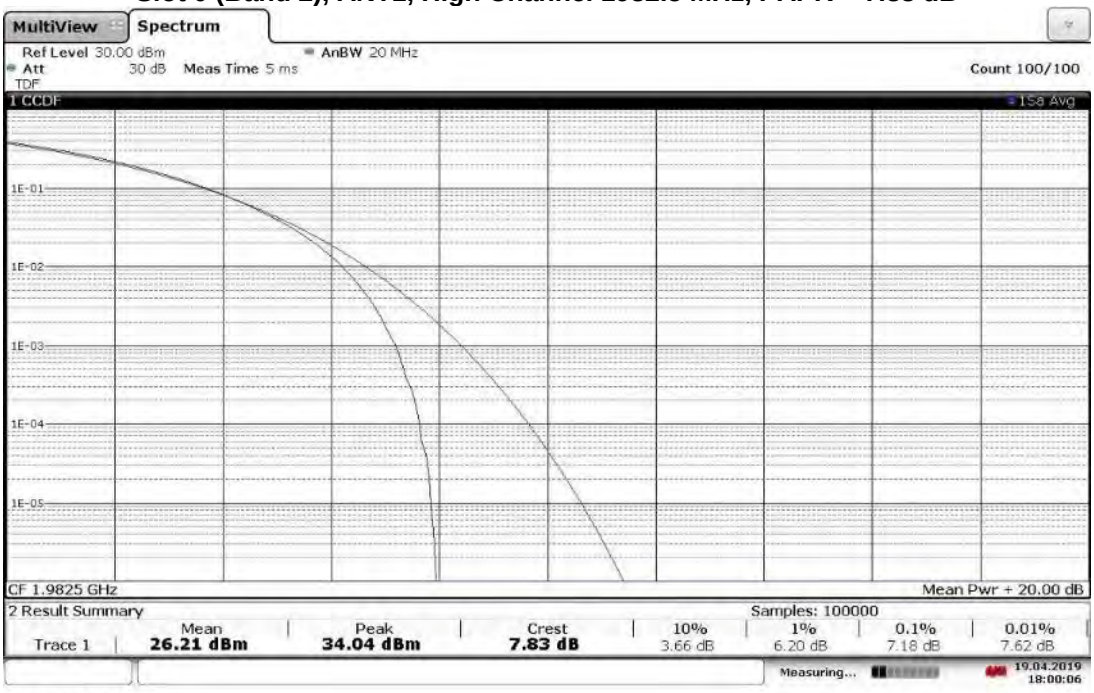
17:03:20 19.04.2019

TM3.1a - 256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 1982.5 MHz, PAPR = 8.11 dB



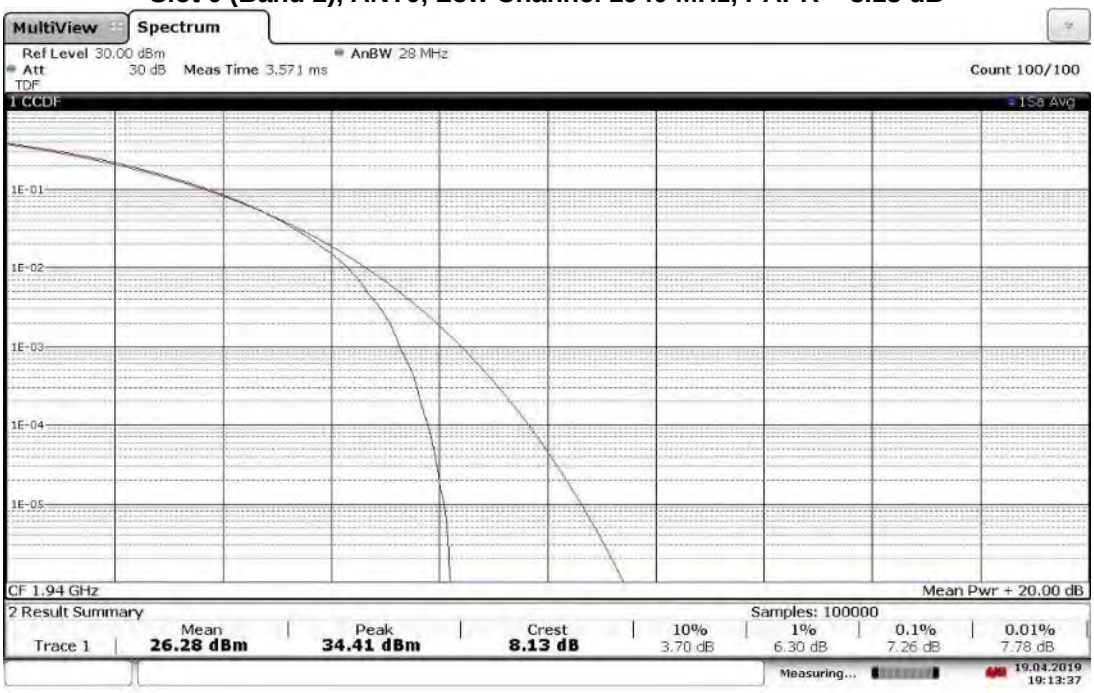
17:59:39 19.04.2019

TM3.1a - 256QAM_15 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 1982.5 MHz, PAPR = 7.83 dB



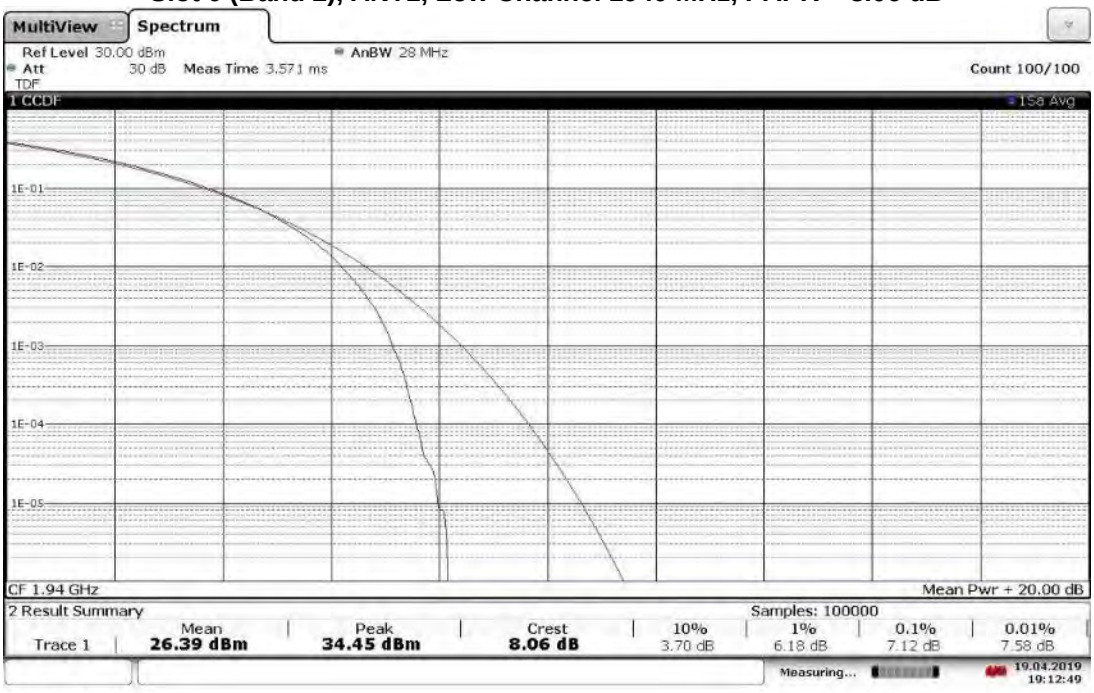
18:00:07 19.04.2019

TM3.1a - 256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Low Channel 1940 MHz, PAPR = 8.13 dB



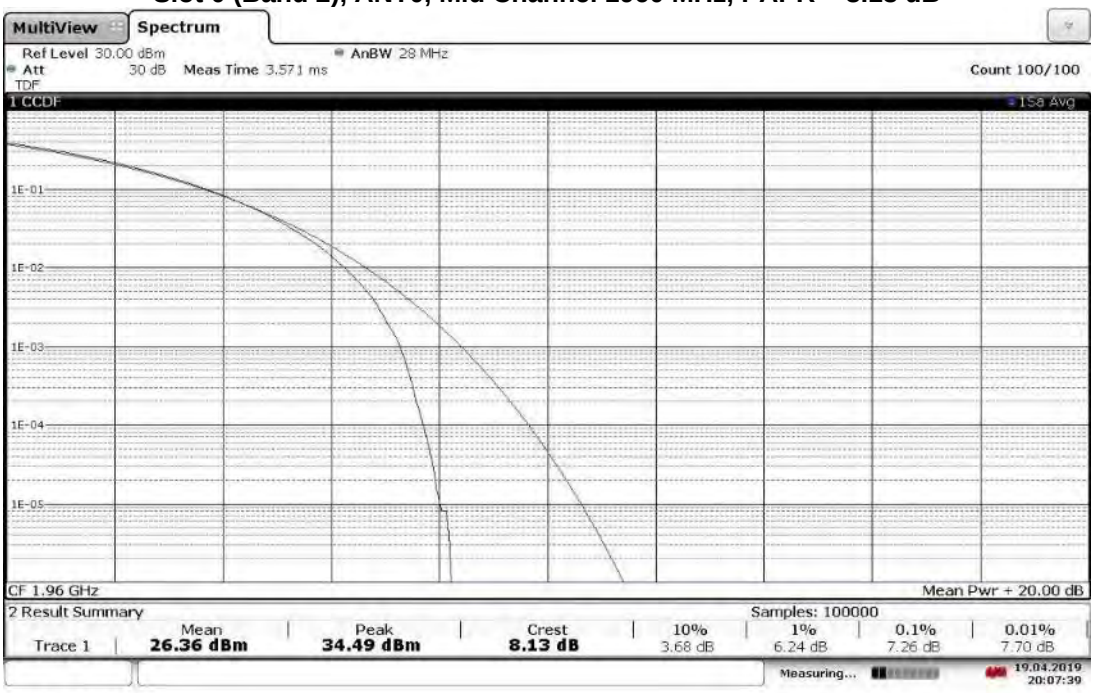
19:13:38 19.04.2019

TM3.1a - 256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Low Channel 1940 MHz, PAPR = 8.06 dB



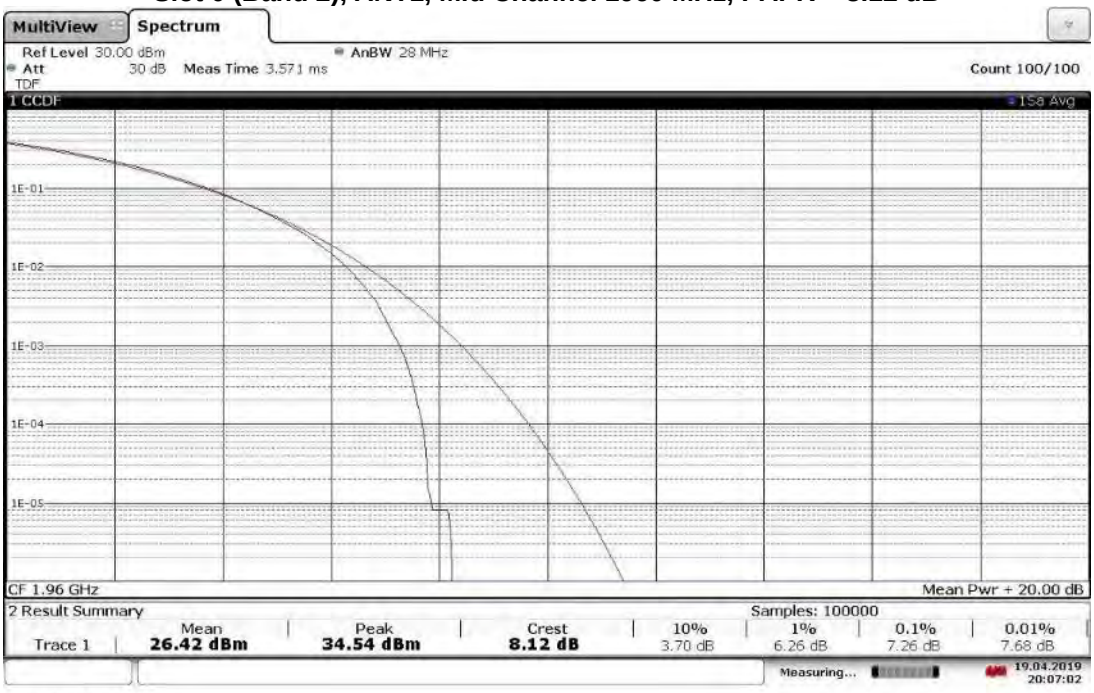
19:12:50 19.04.2019

TM3.1a - 256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, Mid Channel 1960 MHz, PAPR = 8.13 dB



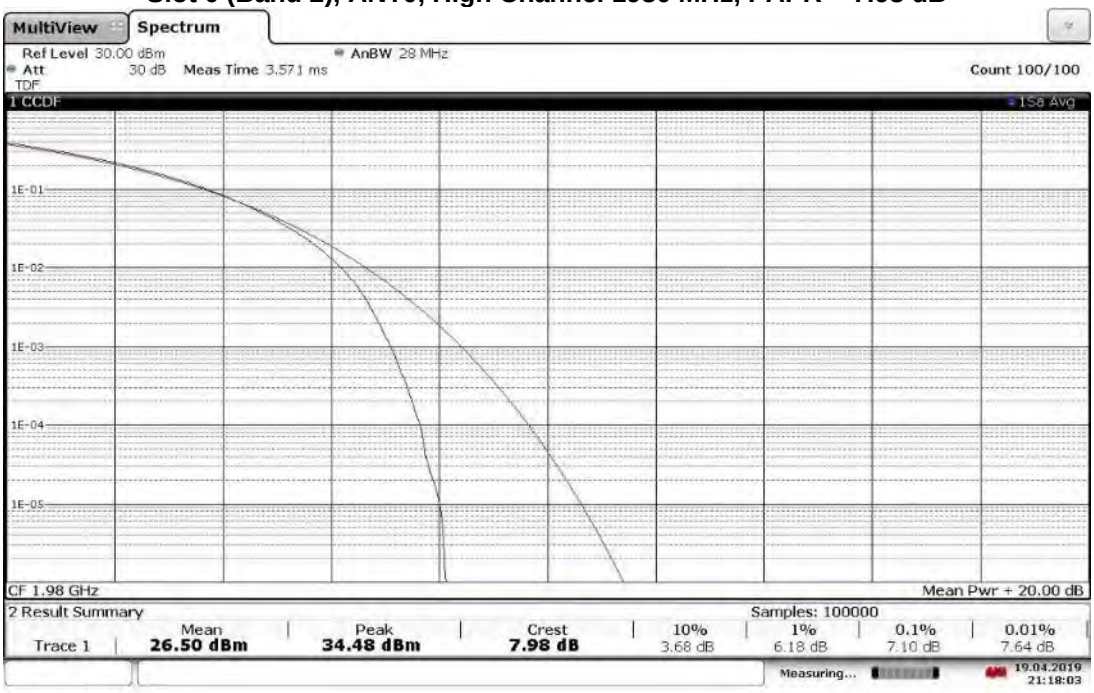
20:07:40 19.04.2019

TM3.1a - 256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, Mid Channel 1960 MHz, PAPR = 8.12 dB



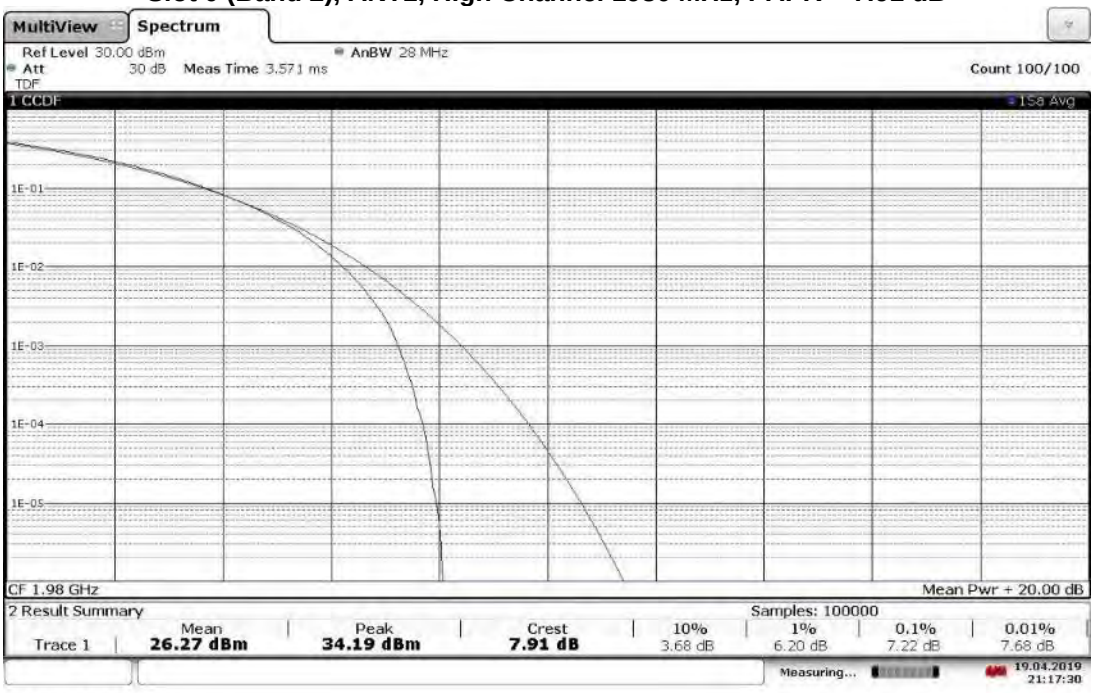
20:07:02 19.04.2019

TM3.1a - 256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT0, High Channel 1980 MHz, PAPR = 7.98 dB



21:18:04 19.04.2019

TM3.1a - 256QAM_20 MHz Bandwidth
Slot 0 (Band 2), ANT1, High Channel 1980 MHz, PAPR = 7.91 dB



21:17:30 19.04.2019

		Test Date:	04/10/2019, 04/11/2019, 04/12/2019, 04/15/2019, 04/16/2019, 04/17/2019, 04/18/2019, 04/19/2019, 04/26/2019, 04/30/2019
Test Personnel:	Kouma Sinn KPS		
Supervising/Reviewing Engineer: (Where Applicable)	N/A		
Product Standard:	FCC Part 24	Limit Applied:	See report section 7.3
Input Voltage:	48 VDC (POE)		
		Ambient Temperature:	22, 23, 23, 23, 23, 22, 22, 22, 20, 22 ºC
Pretest Verification w/ Ambient Signals or BB Source:	N/A	Relative Humidity:	21, 15, 26, 47, 20, 22, 23, 47, 42, 35 %
		Atmospheric Pressure:	1004, 1013, 1004, 980, 1001, 1011, 1014, 1000, 996, 1017 mbars

Deviations, Additions, or Exclusions: None

8 26 dB Bandwidth and Occupied Bandwidth

8.1 Method

Tests are performed in accordance with ANSI C63.26 and CFR47 FCC Parts 2.1049 and 24.

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.

8.2 Test Equipment Used:

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
CEN001'	DC-40GHz attenuator 20dB	Centric RF	C411-20	CEN001	02/01/2019	02/01/2020
CBLHF2012-2M-1'	2m 9kHz-40GHz Coaxial Cable - SET1	Huber & Suhner	SF102	252675001	02/01/2019	02/01/2020
ROS005-1'	Signal and Spectrum Analyzer	Rohde &Schwarz	FSW43	100646	10/15/2018	10/15/2019
DS40'	Temp, humidity, pressure gauge	Digi Sense	68000-49	181717625	11/06/2018	11/06/2019

Software Utilized:

Name	Manufacturer	Version
None	--	--

8.3 Results:

The sample tested was found to Comply.

§24.238(b) The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

§2.1049: The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1932.50	ANT0	4.524	5.03
		ANT1	4.528	5.02
Mid	1960.00	ANT0	4.536	5.02
		ANT1	4.532	5.03
High	1987.50	ANT0	4.528	5.02
		ANT1	4.533	5.01

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1935.00	ANT0	8.988	9.90
		ANT1	8.975	9.89
Mid	1960.00	ANT0	8.954	9.92
		ANT1	8.969	9.91
High	1985.00	ANT0	9.000	9.95
		ANT1	8.975	9.95

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1937.50	ANT0	13.508	14.73
		ANT1	13.487	14.67
Mid	1960.00	ANT0	13.466	14.77
		ANT1	13.489	14.67
High	1982.50	ANT0	13.516	14.76
		ANT1	13.508	14.83

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1940.00	ANT0	17.895	19.58
		ANT1	17.915	19.28
Mid	1960.00	ANT0	17.917	19.60
		ANT1	17.867	19.73
High	1980.00	ANT0	17.940	19.45
		ANT1	17.938	19.72

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1932.50	ANT0	4.527	5.00
		ANT1	4.530	4.99
Mid	1960.00	ANT0	4.521	5.00
		ANT1	4.516	5.04
High	1987.50	ANT0	4.534	5.05
		ANT1	4.518	5.00

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1935.00	ANT0	9.014	9.91
		ANT1	9.007	9.87
Mid	1960.00	ANT0	9.010	9.87
		ANT1	9.004	9.89
High	1985.00	ANT0	8.994	9.89
		ANT1	9.003	9.91

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1937.50	ANT0	13.488	14.45
		ANT1	13.476	14.48
Mid	1960.00	ANT0	13.438	14.30
		ANT1	13.443	14.54
High	1982.50	ANT0	13.479	14.50
		ANT1	13.513	14.46

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1940.00	ANT0	17.859	19.23
		ANT1	17.892	19.36
Mid	1960.00	ANT0	17.934	19.59
		ANT1	17.897	19.09
High	1980.00	ANT0	17.887	19.44
		ANT1	17.894	19.11

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1932.50	ANT0	4.533	5.05
		ANT1	4.541	5.05
Mid	1960.00	ANT0	4.527	4.99
		ANT1	4.569	5.04
High	1987.50	ANT0	4.521	5.04
		ANT1	4.535	5.05

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1935.00	ANT0	8.985	9.86
		ANT1	9.009	9.84
Mid	1960.00	ANT0	8.982	9.92
		ANT1	8.991	9.90
High	1985.00	ANT0	8.986	9.86
		ANT1	9.019	9.95

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1937.50	ANT0	13.463	14.66
		ANT1	13.535	14.68
Mid	1960.00	ANT0	13.450	14.61
		ANT1	13.486	14.54
High	1982.50	ANT0	13.451	14.77
		ANT1	13.468	14.78

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1940.00	ANT0	17.847	19.30
		ANT1	17.869	19.25
Mid	1960.00	ANT0	17.849	19.26
		ANT1	17.851	19.31
High	1980.00	ANT0	17.943	19.48
		ANT1	17.904	19.69

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1932.50	ANT0	4.516	5.04
		ANT1	4.537	5.00
Mid	1960.00	ANT0	4.538	5.01
		ANT1	4.542	5.01
High	1987.50	ANT0	4.525	5.05
		ANT1	4.545	5.05

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1935.00	ANT0	8.961	9.81
		ANT1	8.976	9.85
Mid	1960.00	ANT0	8.989	9.42
		ANT1	8.990	9.87
High	1985.00	ANT0	8.998	9.92
		ANT1	8.975	9.81

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

Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1937.500	ANT0	13.477	14.64
		ANT1	13.431	14.67
Mid	1960.00	ANT0	13.538	14.57
		ANT1	13.465	14.66
High	1982.50	ANT0	13.502	14.57
		ANT1	13.484	14.70

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

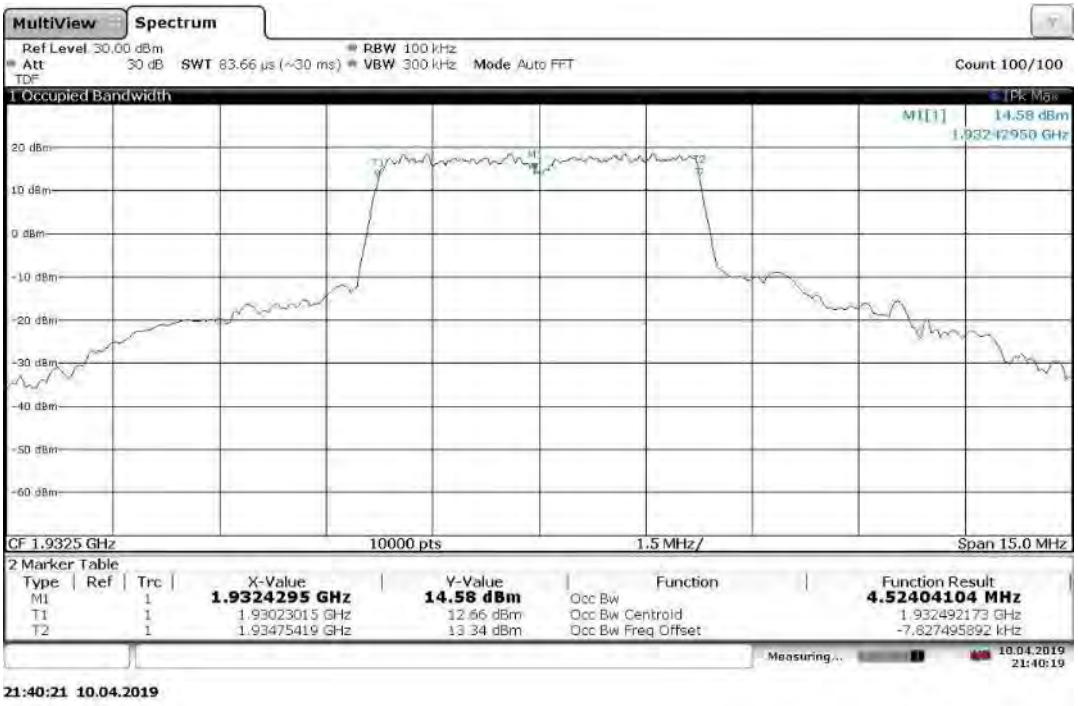
Channel	Frequency (MHz)	Antenna Port	Occupied BW (MHz)	26 dB BW (MHz)
Low	1940	ANT0	17.969	19.62
		ANT1	17.902	19.59
Mid	1960	ANT0	17.890	19.78
		ANT1	17.908	19.70
High	1980	ANT0	17.894	19.55
		ANT1	17.906	19.58

8.4 Setup Photograph:

8.5 Plots/Data:

TM1.1-QPSK_5 MHz Bandwidth

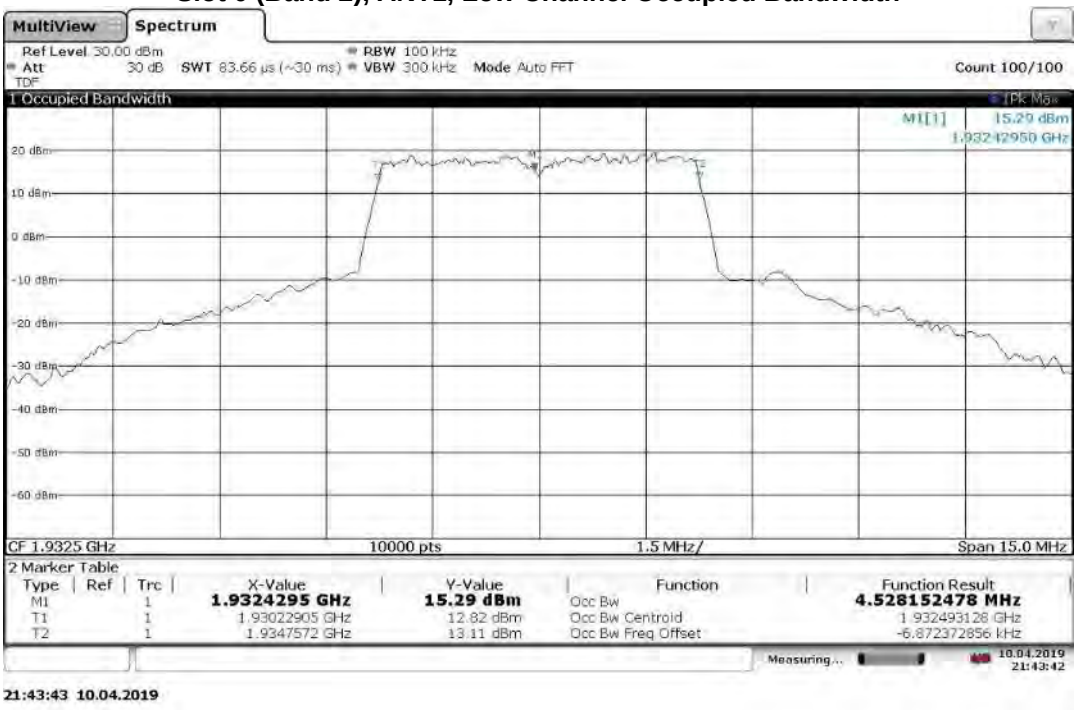
Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



21:40:21 10.04.2019

TM1.1-QPSK_5 MHz Bandwidth

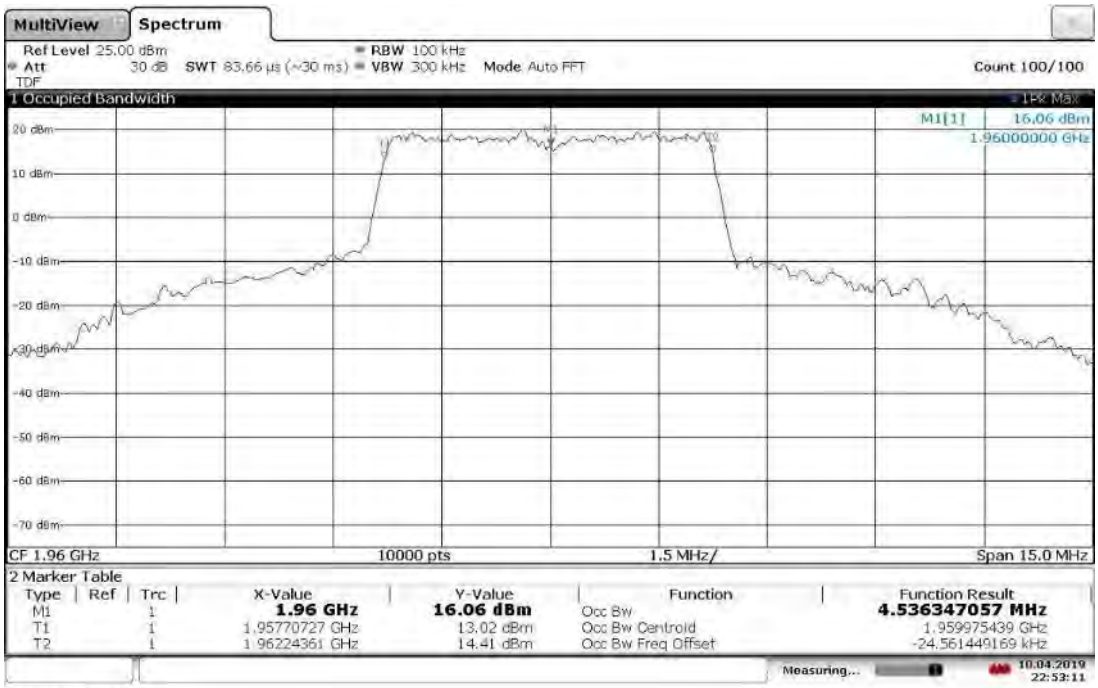
Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



21:43:43 10.04.2019

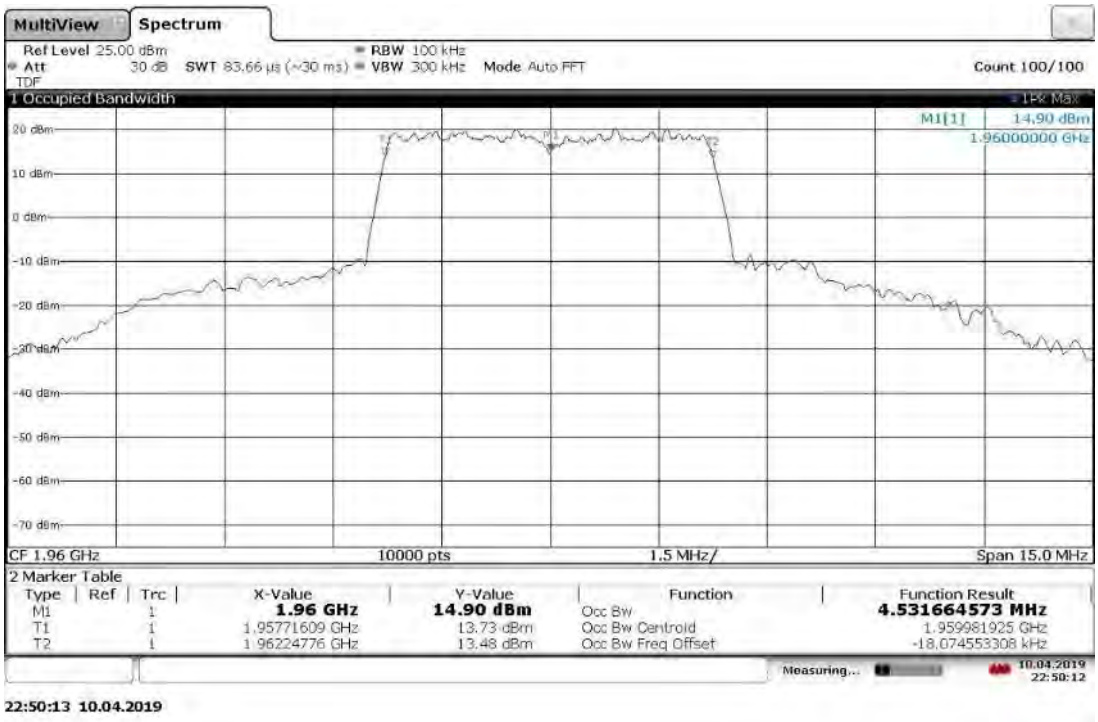
TM1.1-QPSK_5 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



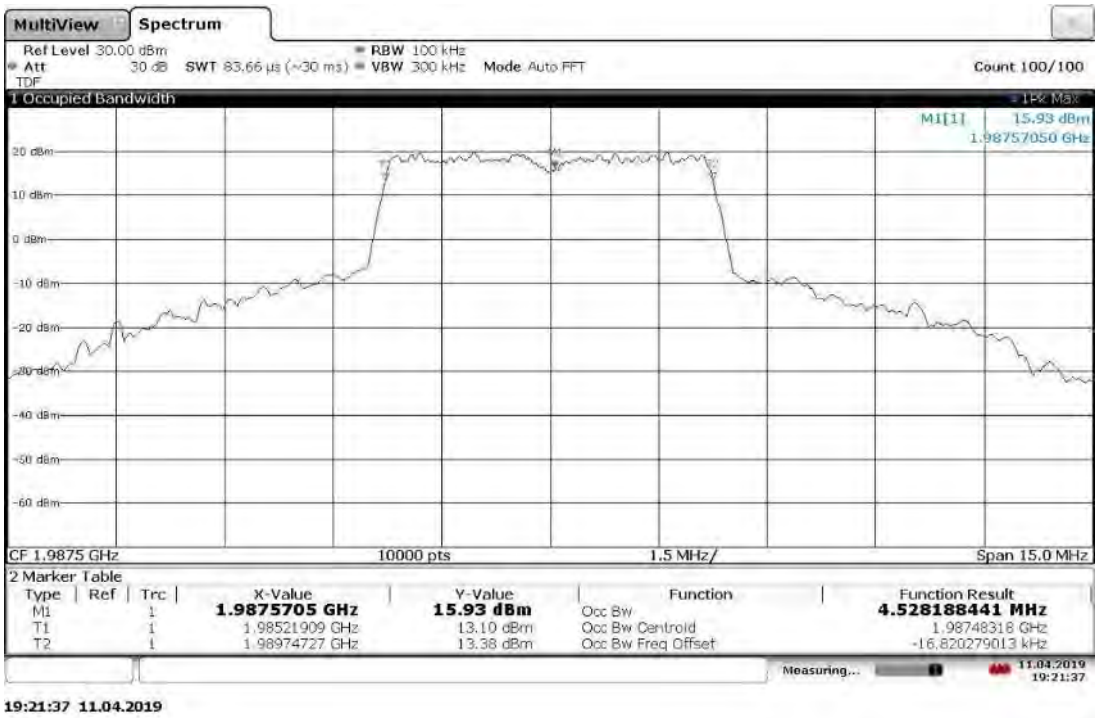
TM1.1-QPSK_5 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



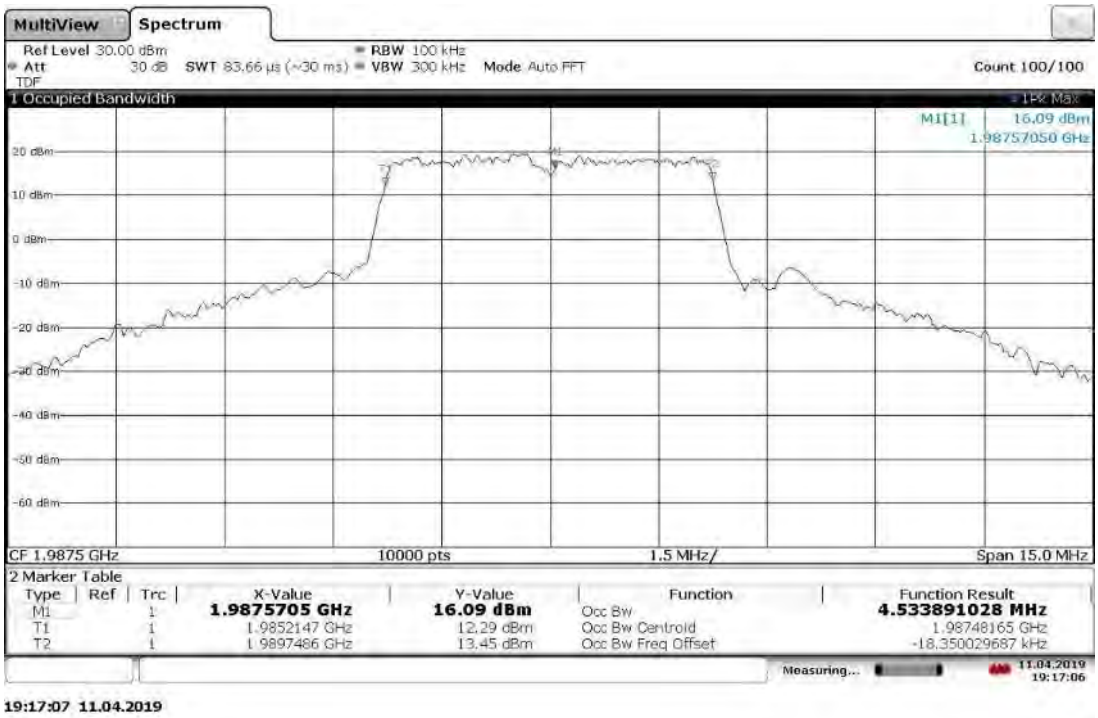
TM1.1-QPSK_5 MHz Bandwidth

Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



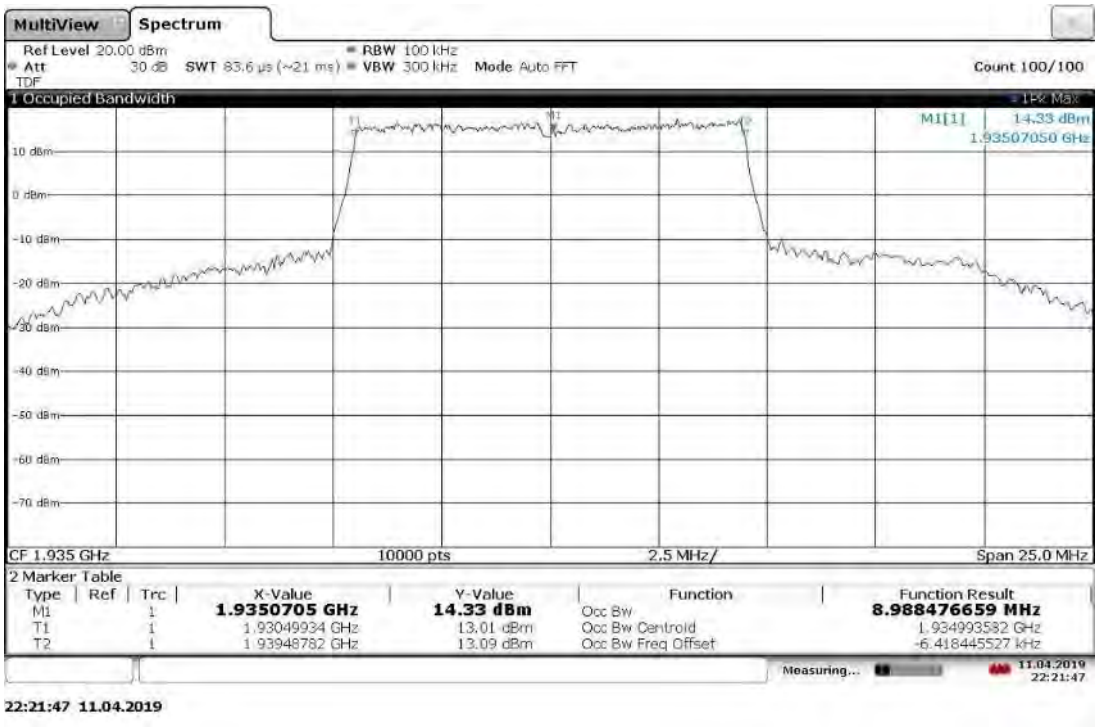
TM1.1-QPSK_5 MHz Bandwidth

Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



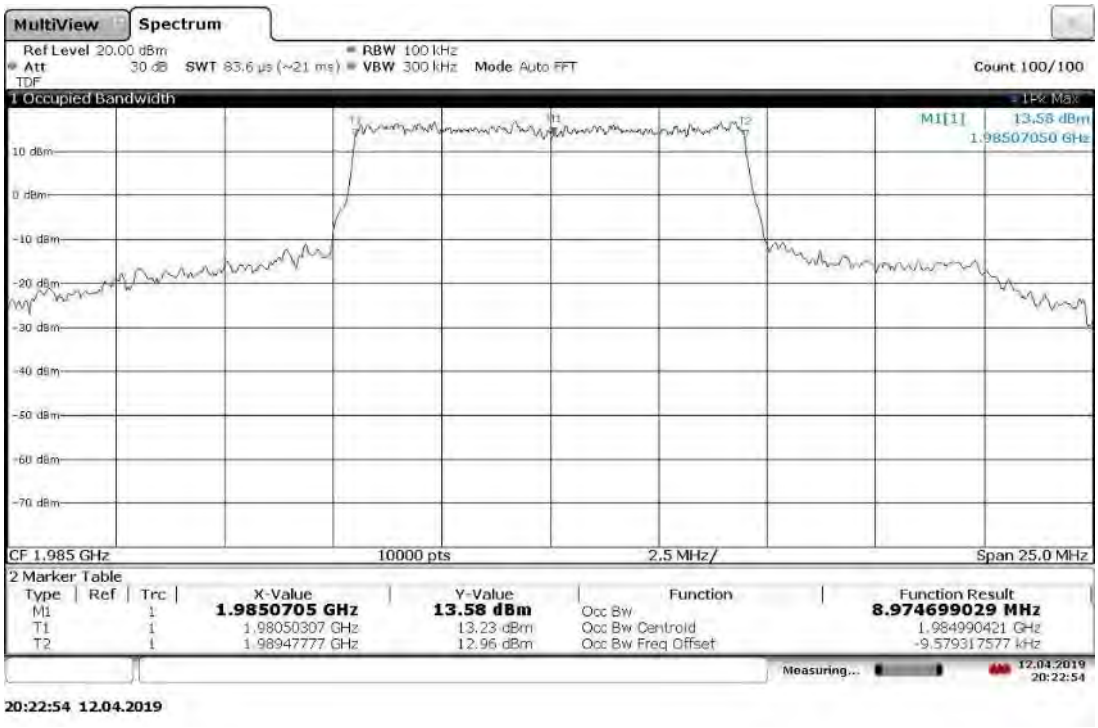
TM1.1-QPSK_10 MHz Bandwidth

Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



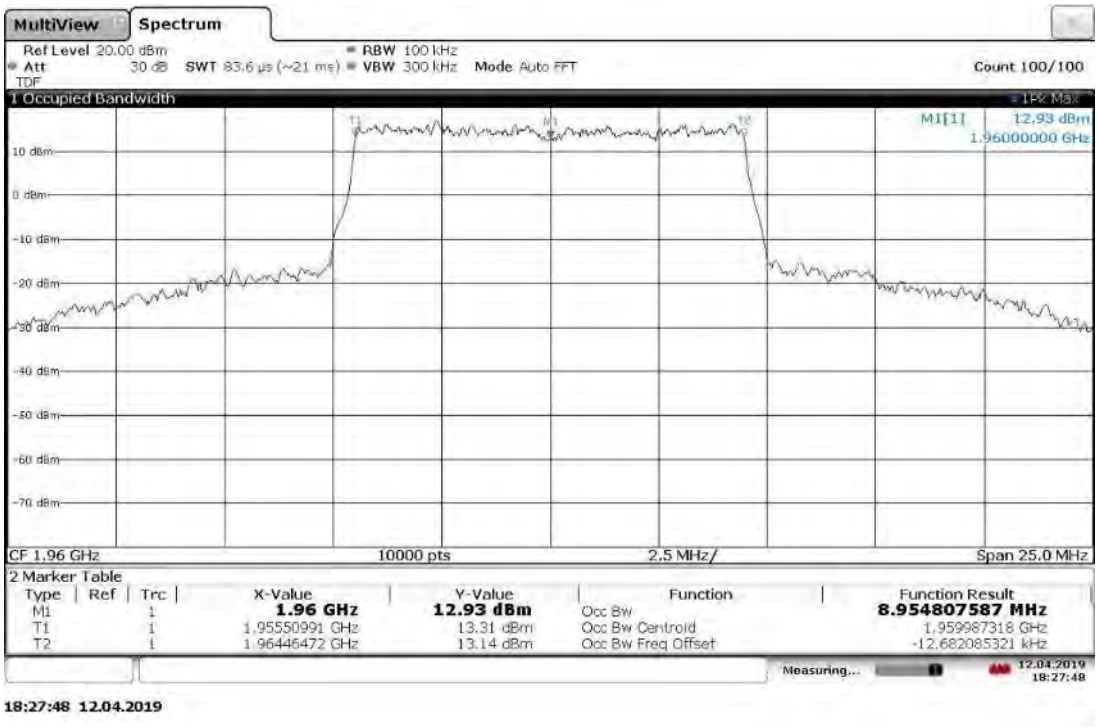
TM1.1-QPSK_10 MHz Bandwidth

Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



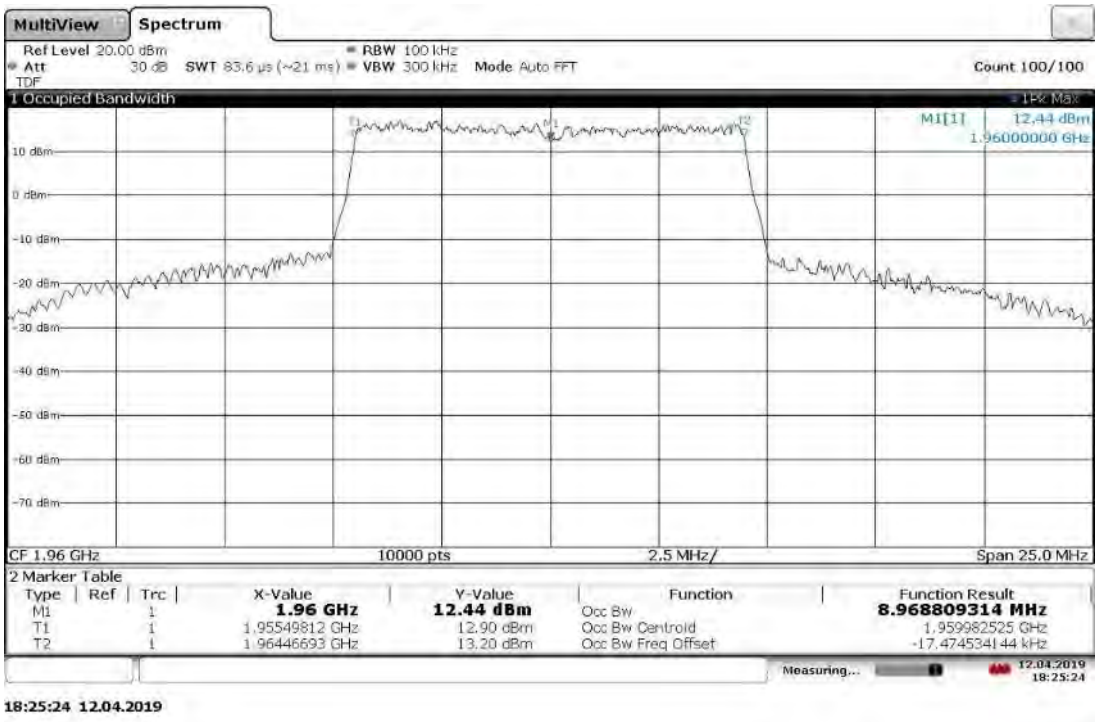
TM1.1-QPSK_10 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



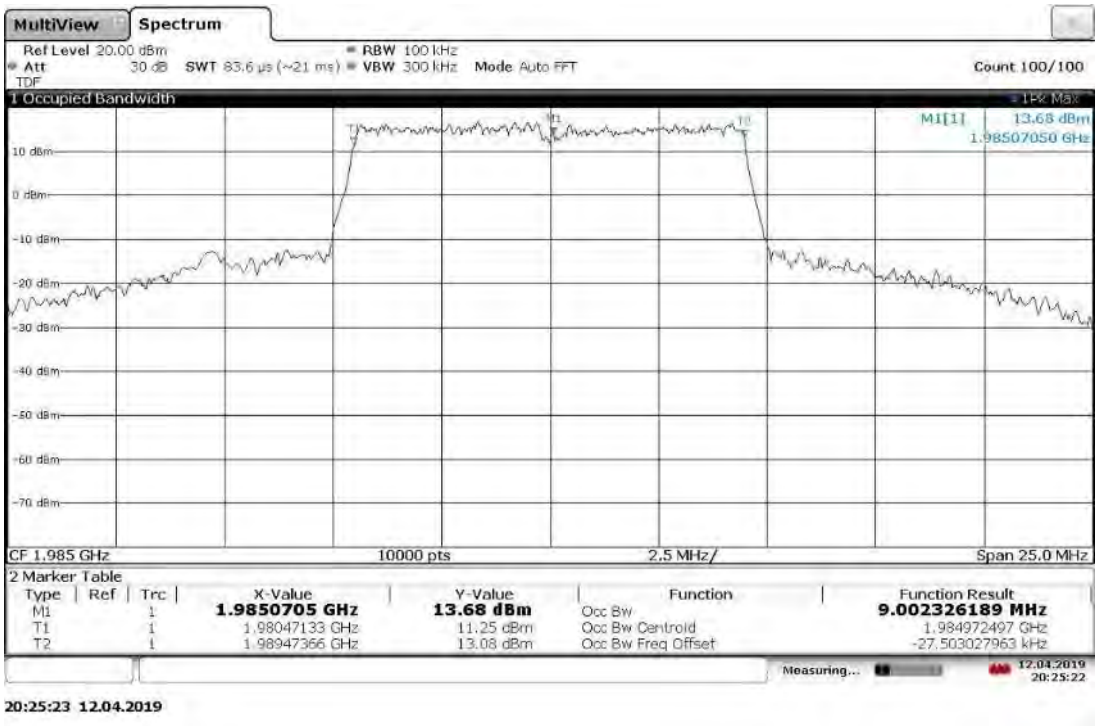
TM1.1-QPSK_10 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



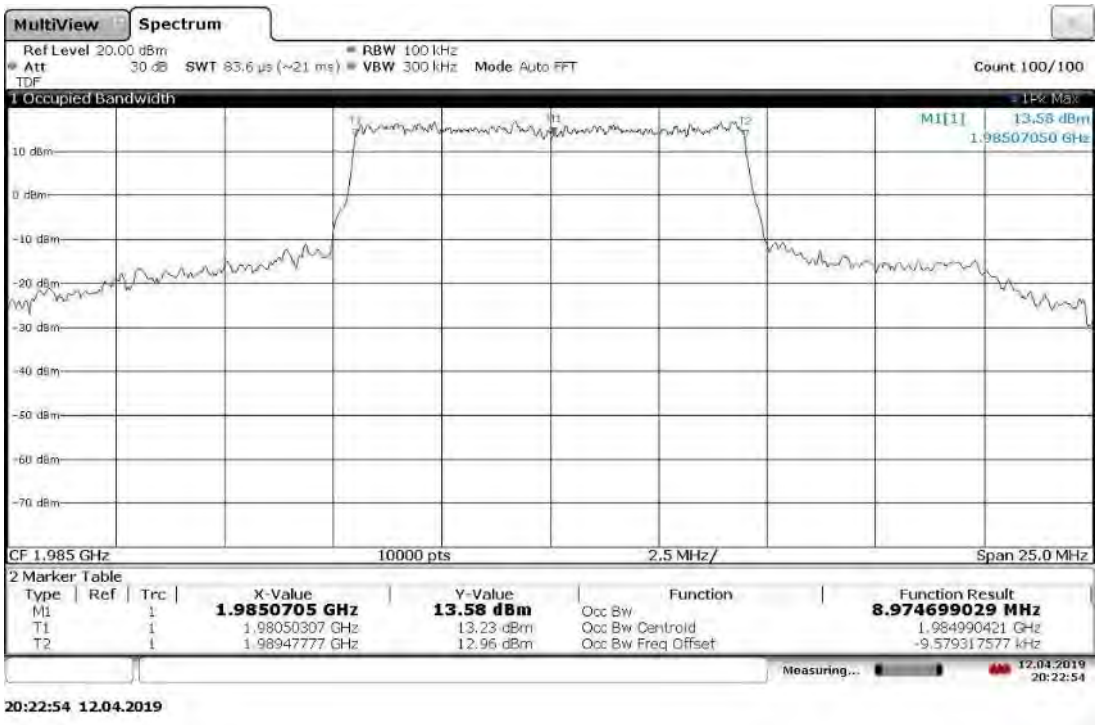
TM1.1-QPSK_10 MHz Bandwidth

Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



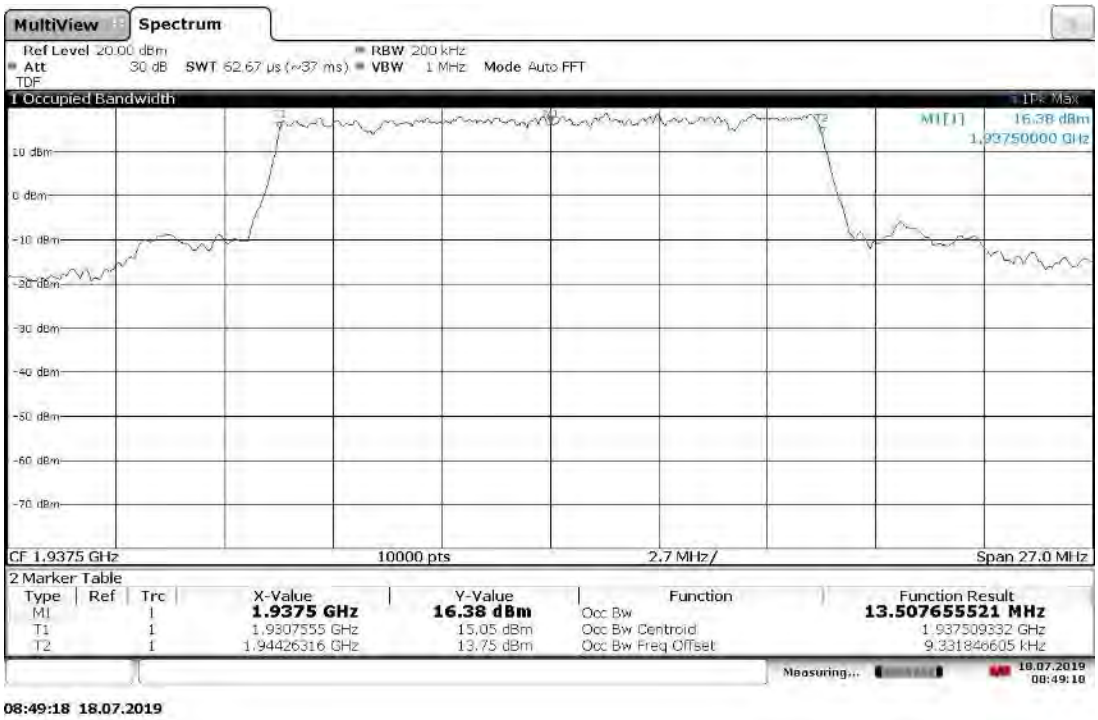
TM1.1-QPSK_10 MHz Bandwidth

Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



TM1.1-QPSK_15 MHz Bandwidth

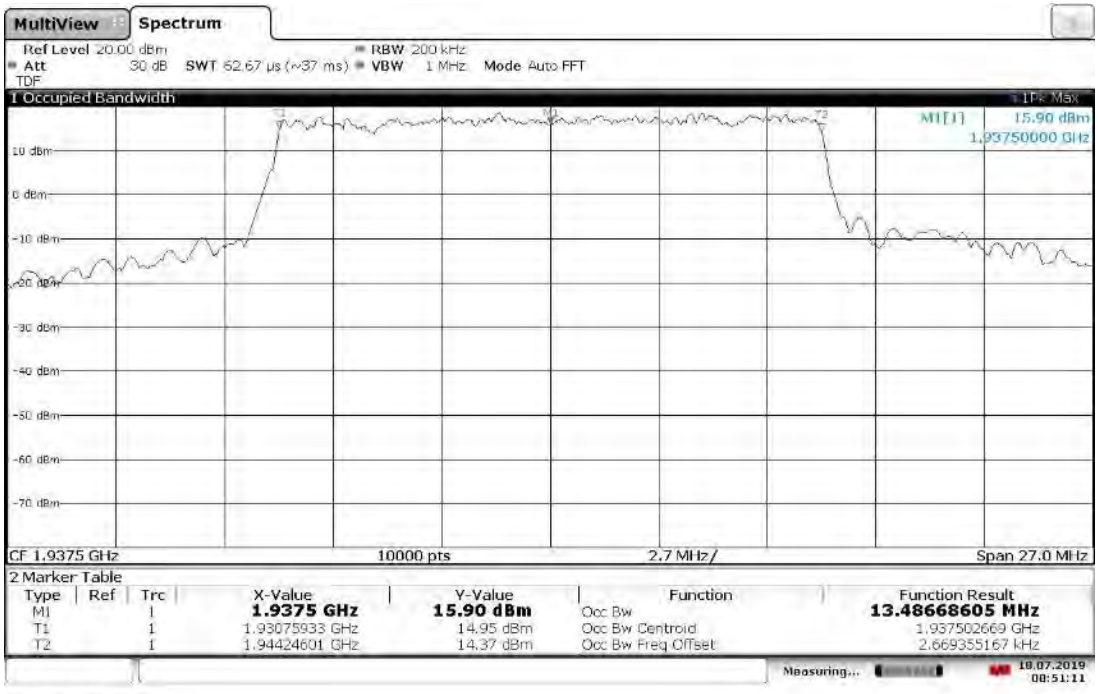
Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



08:49:18 18.07.2019

TM1.1-QPSK_15 MHz Bandwidth

Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



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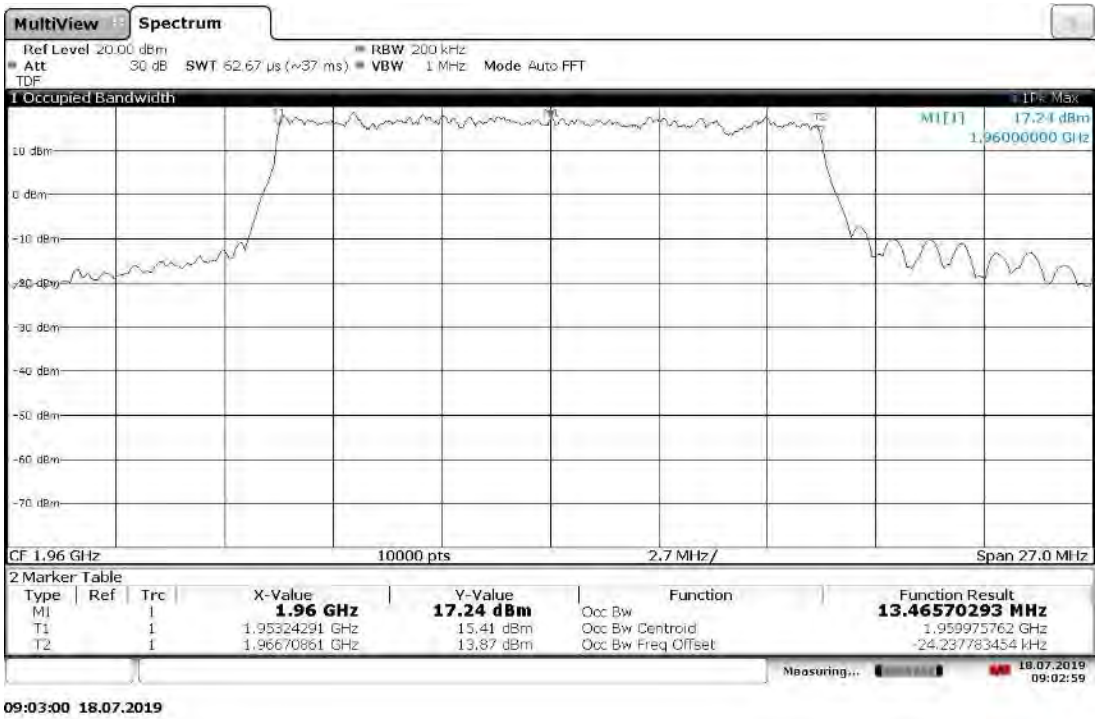
TM1.1-QPSK_15 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



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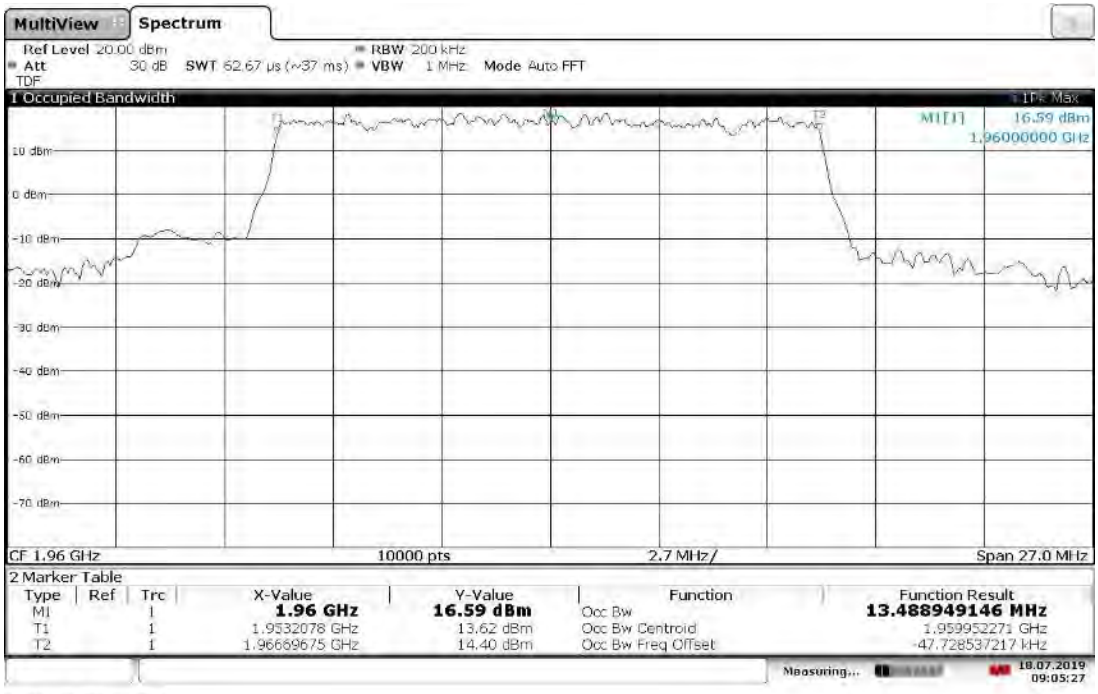
TM1.1-QPSK_15 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



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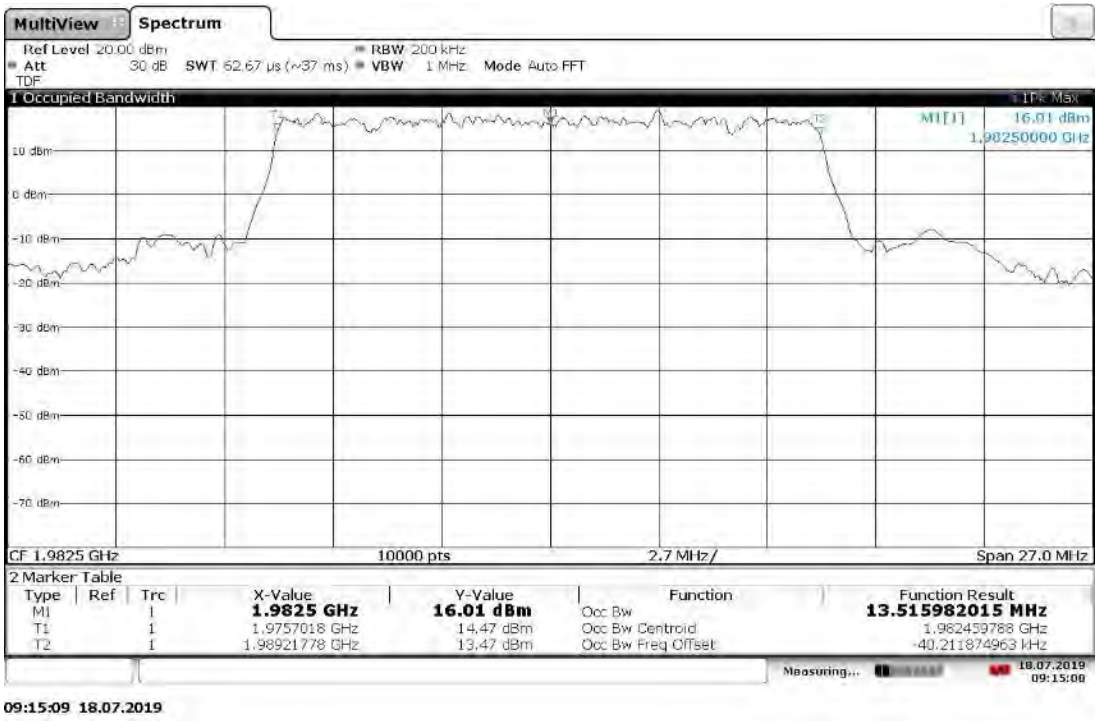
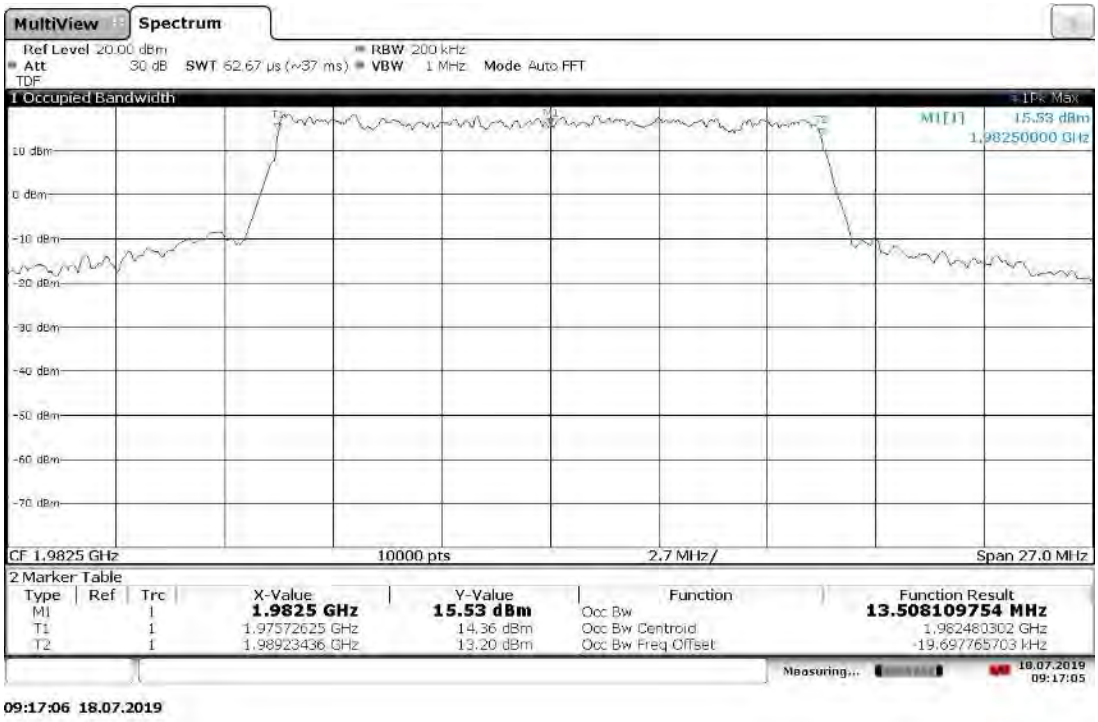
TM1.1-QPSK_15 MHz Bandwidth

Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



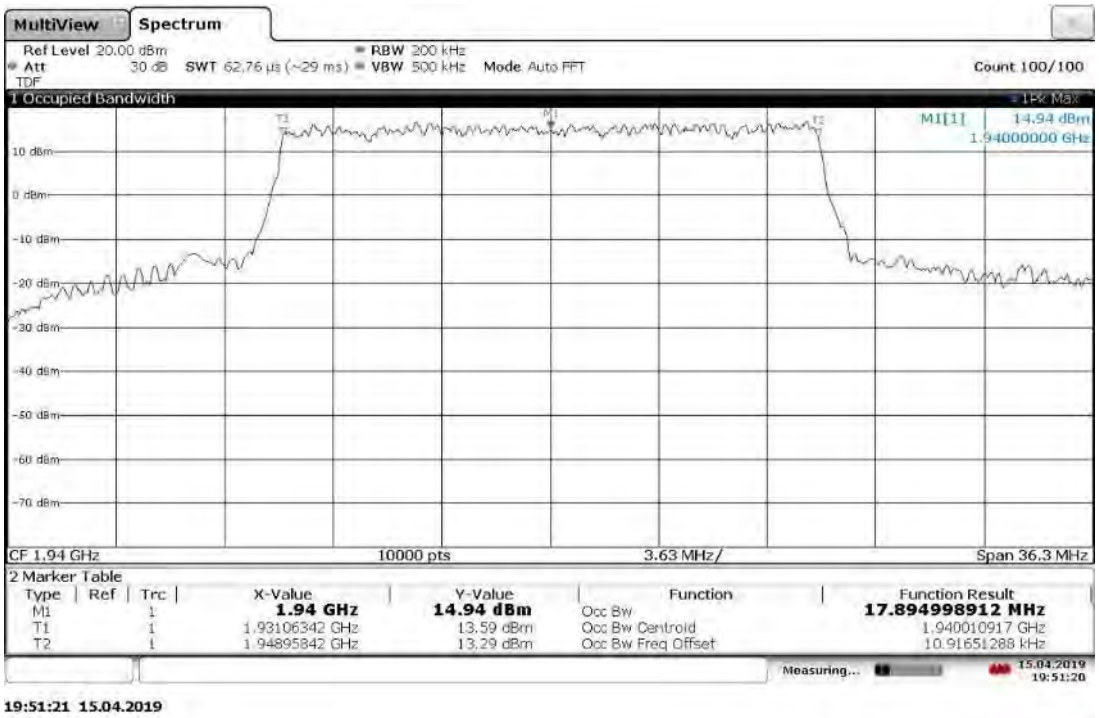
TM1.1-QPSK_15 MHz Bandwidth

Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



TM1.1-QPSK_20 MHz Bandwidth

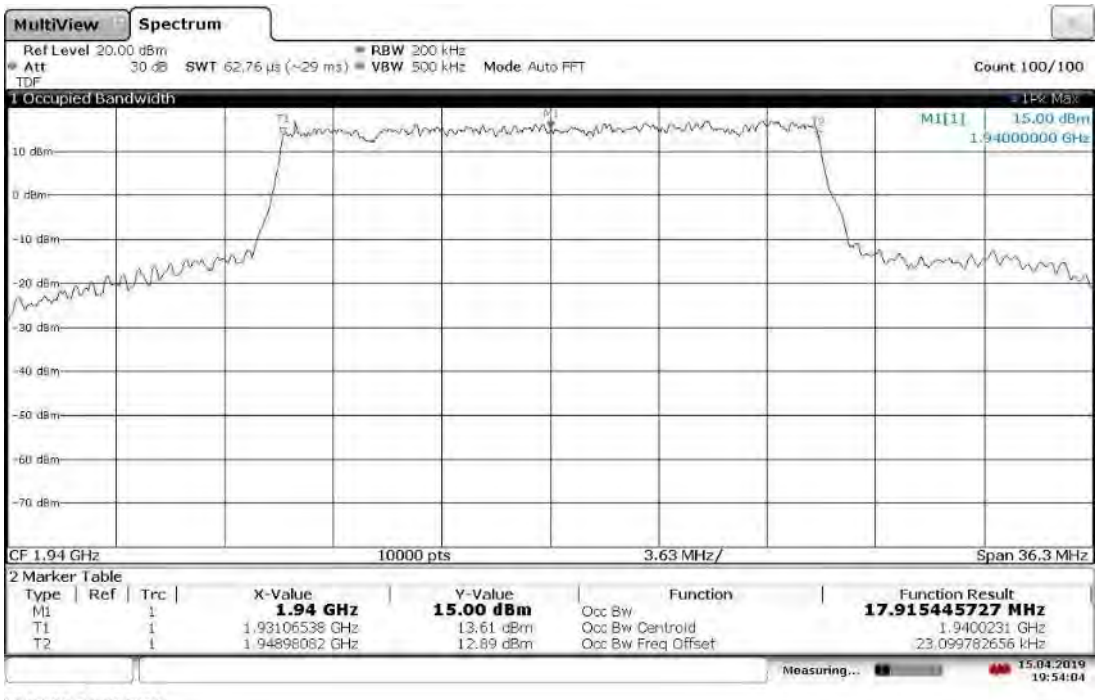
Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



19:51:21 15.04.2019

TM1.1-QPSK_20 MHz Bandwidth

Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



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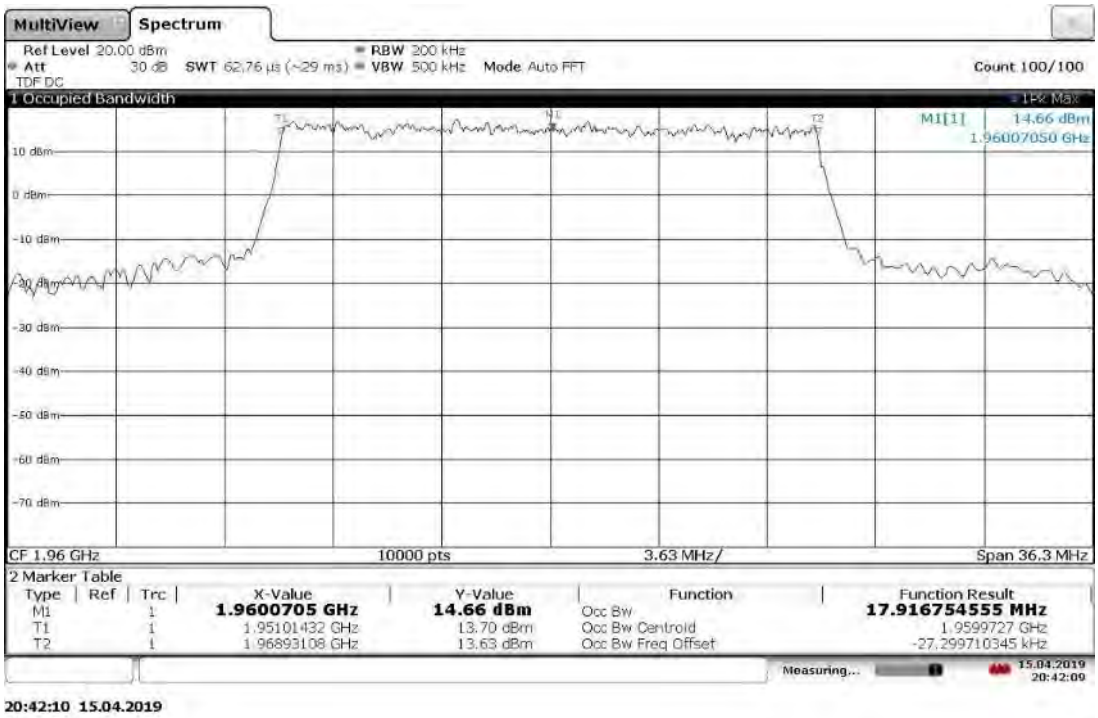
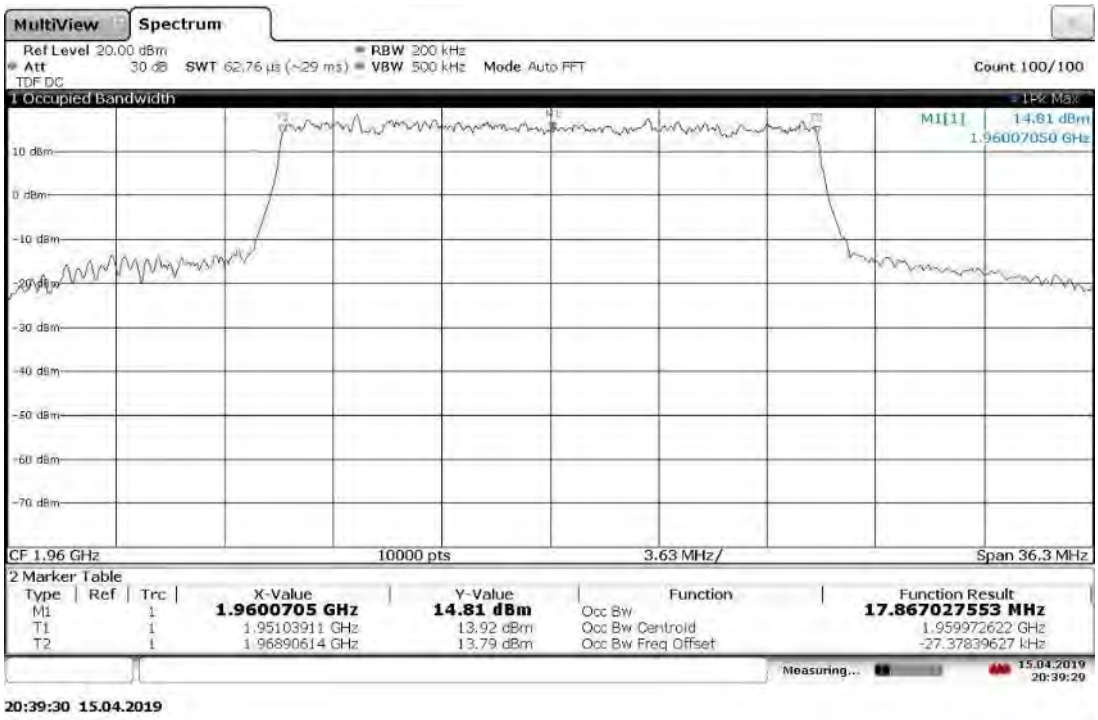
TM1.1-QPSK_20 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



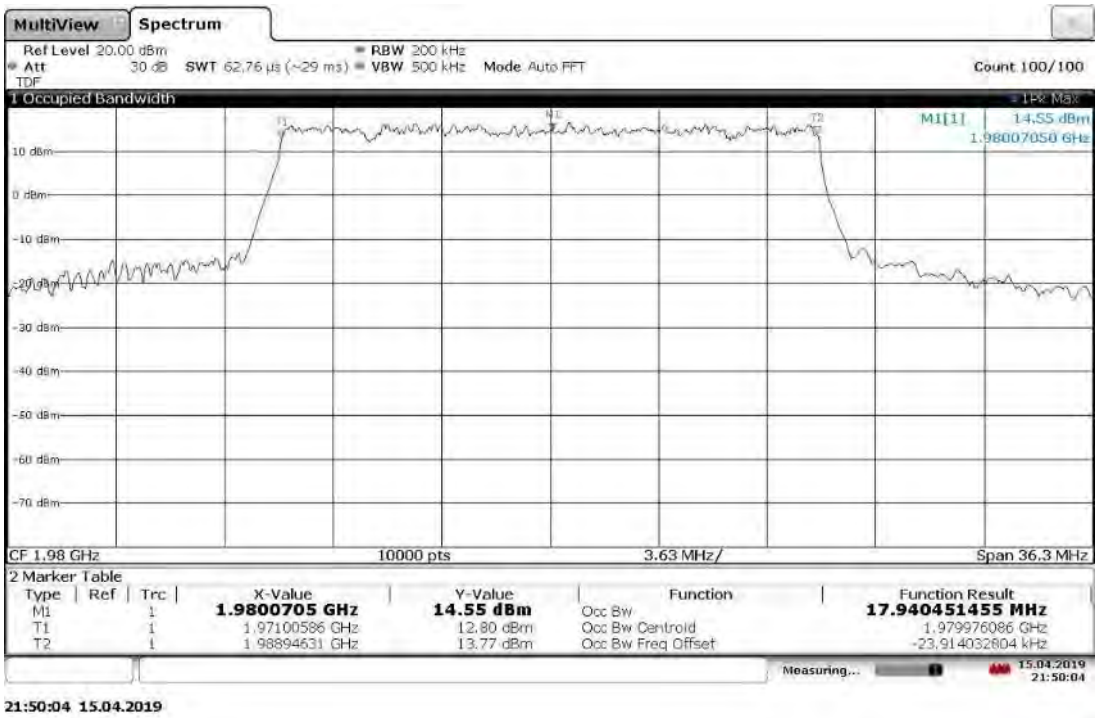
TM1.1-QPSK_20 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



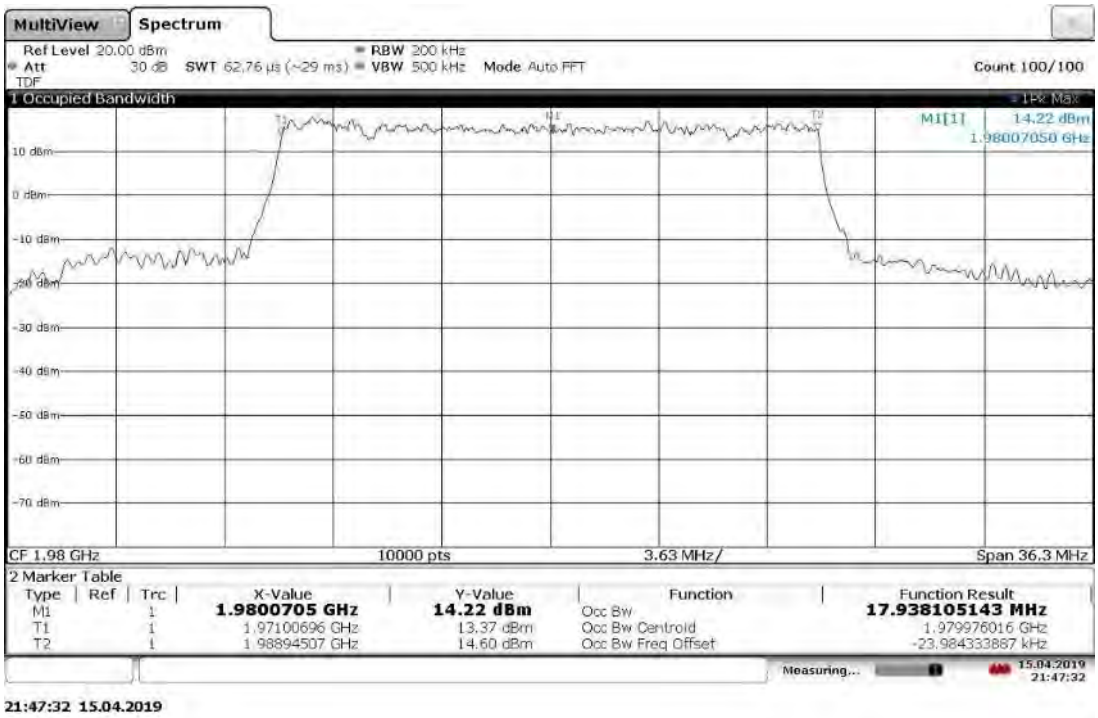
TM1.1-QPSK_20 MHz Bandwidth

Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



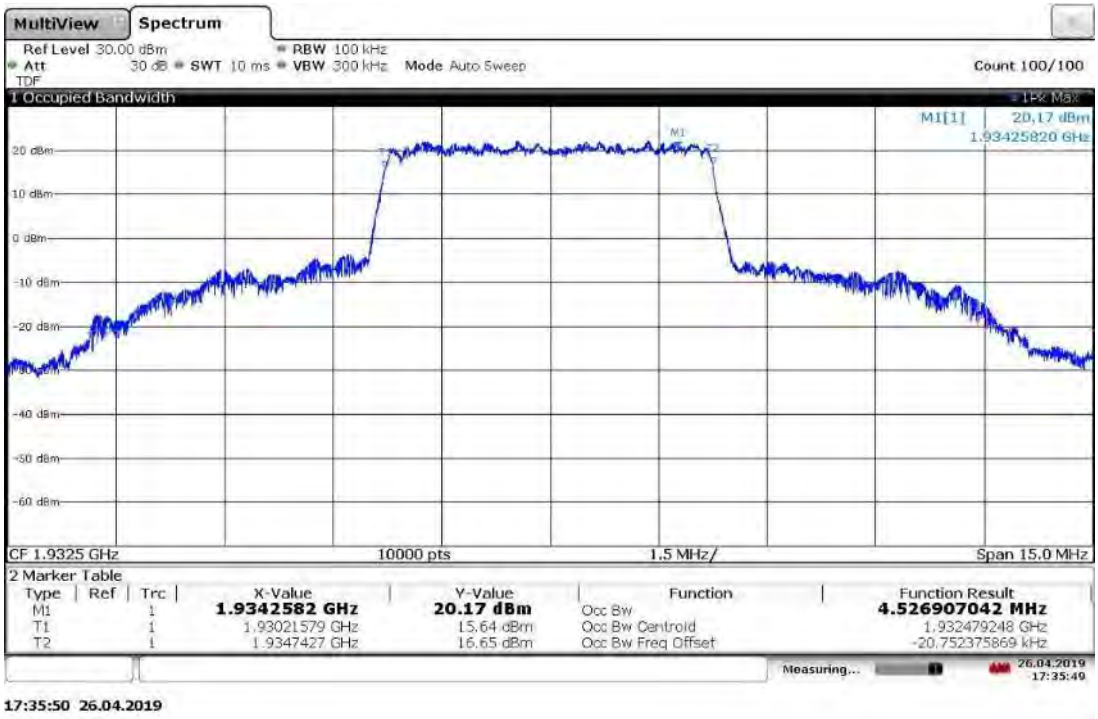
TM1.1-QPSK_20 MHz Bandwidth

Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



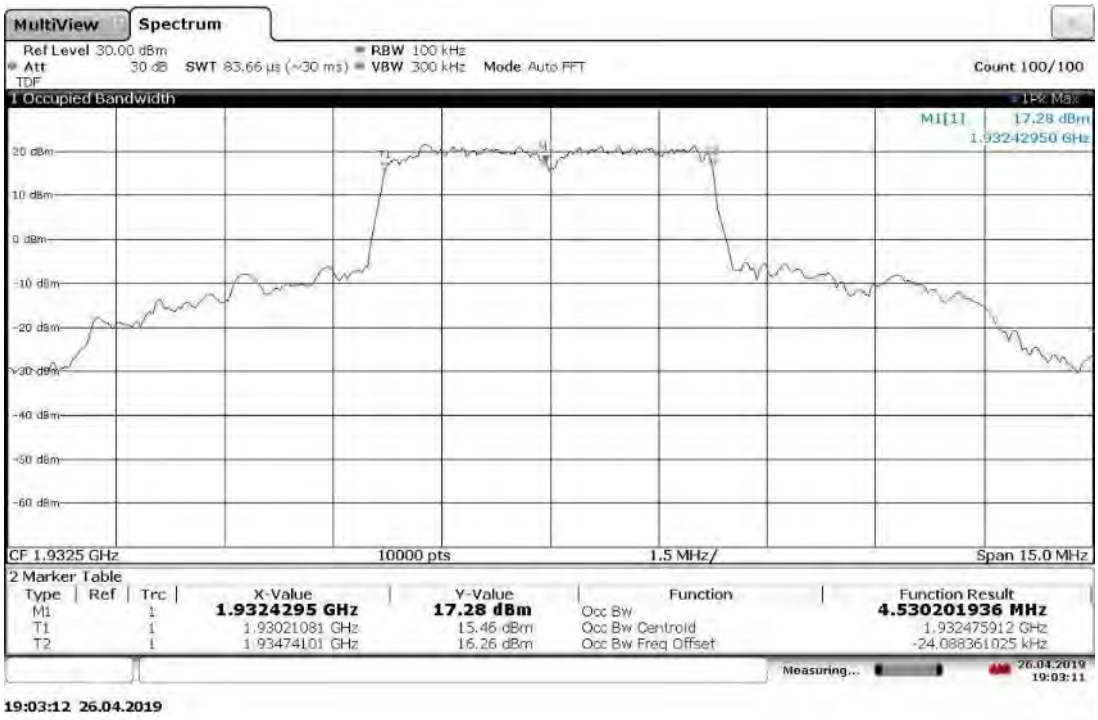
TM3.2-16QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



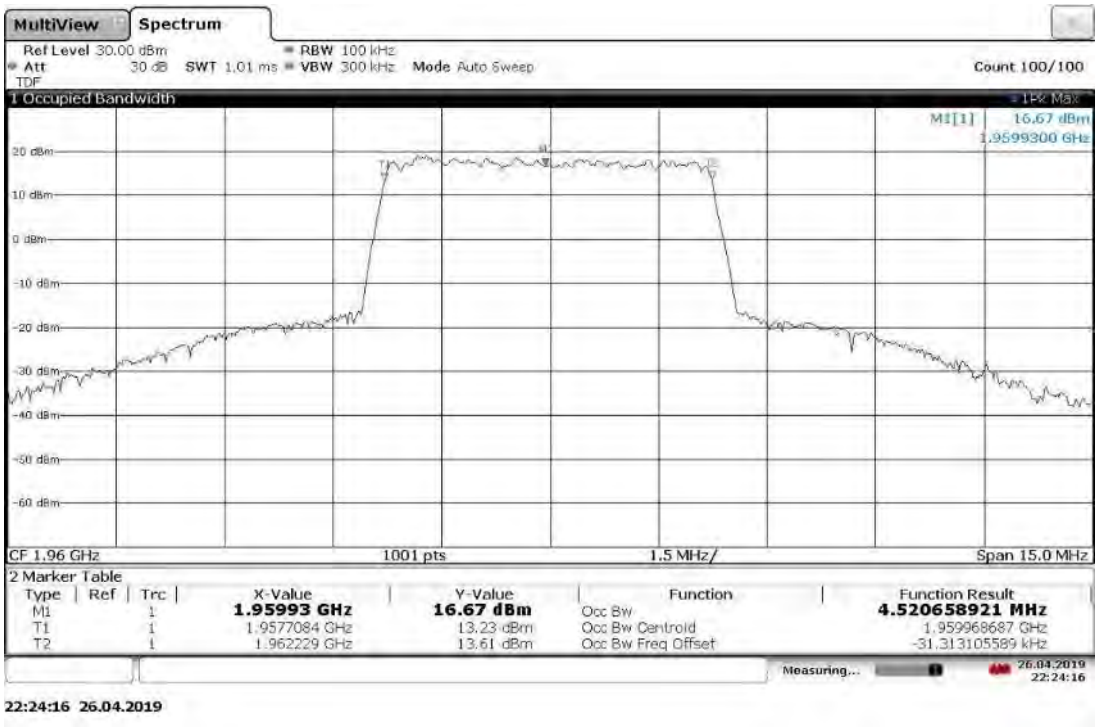
TM3.2-16QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



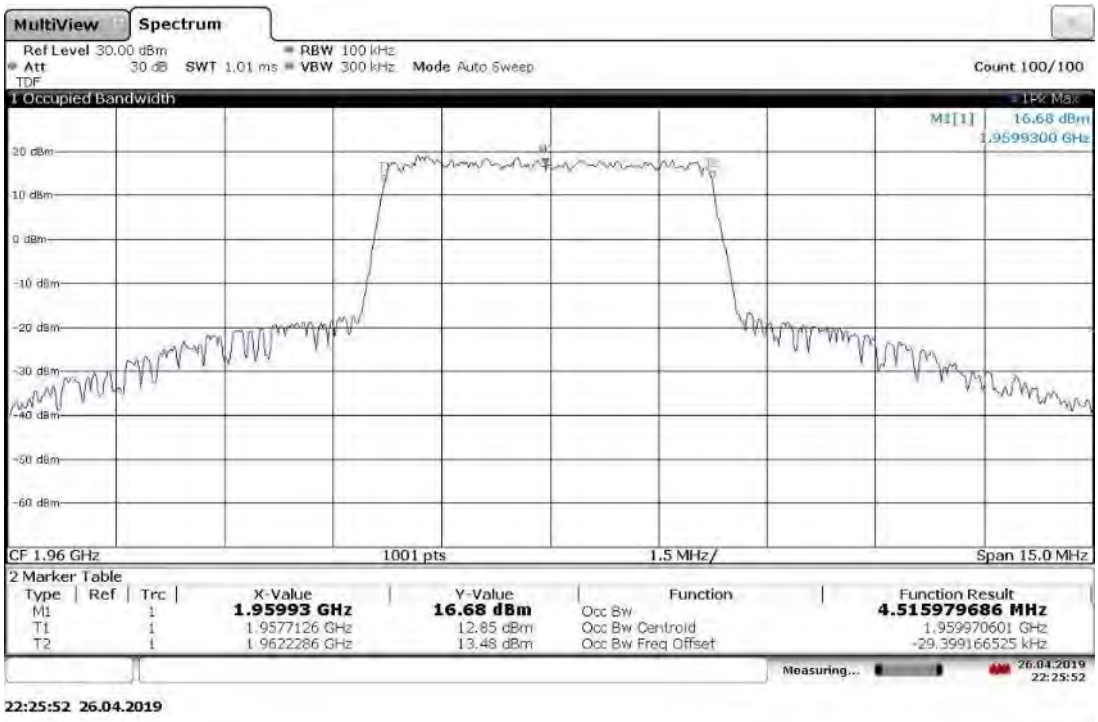
TM3.2-16QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



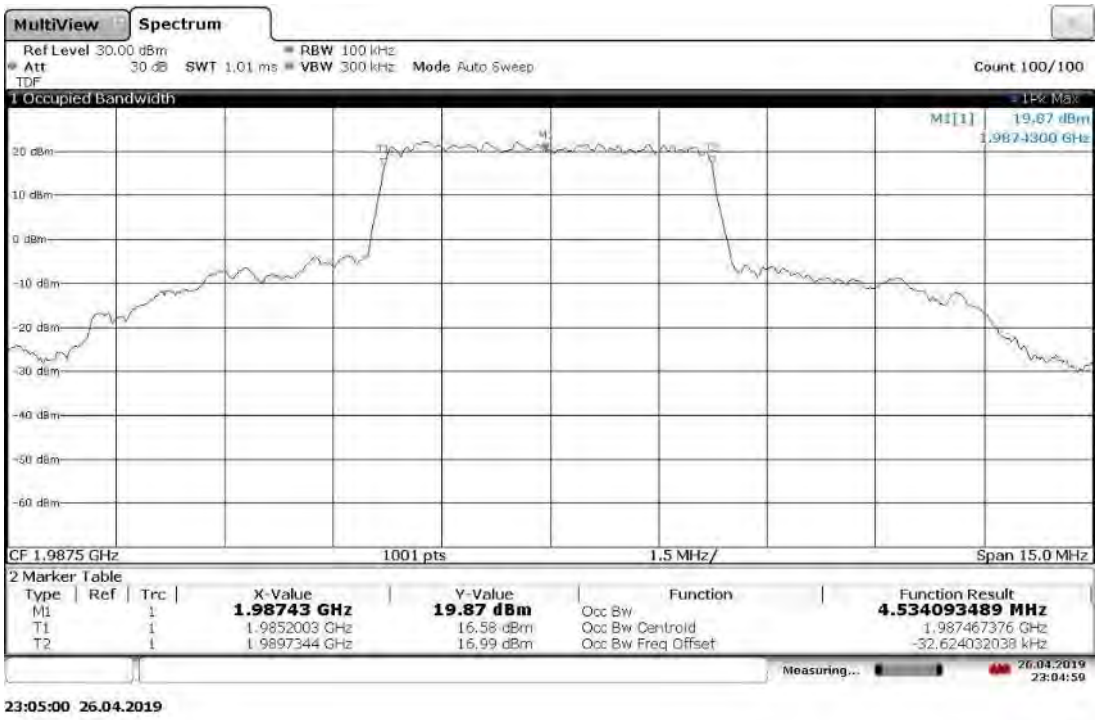
TM3.2-16QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



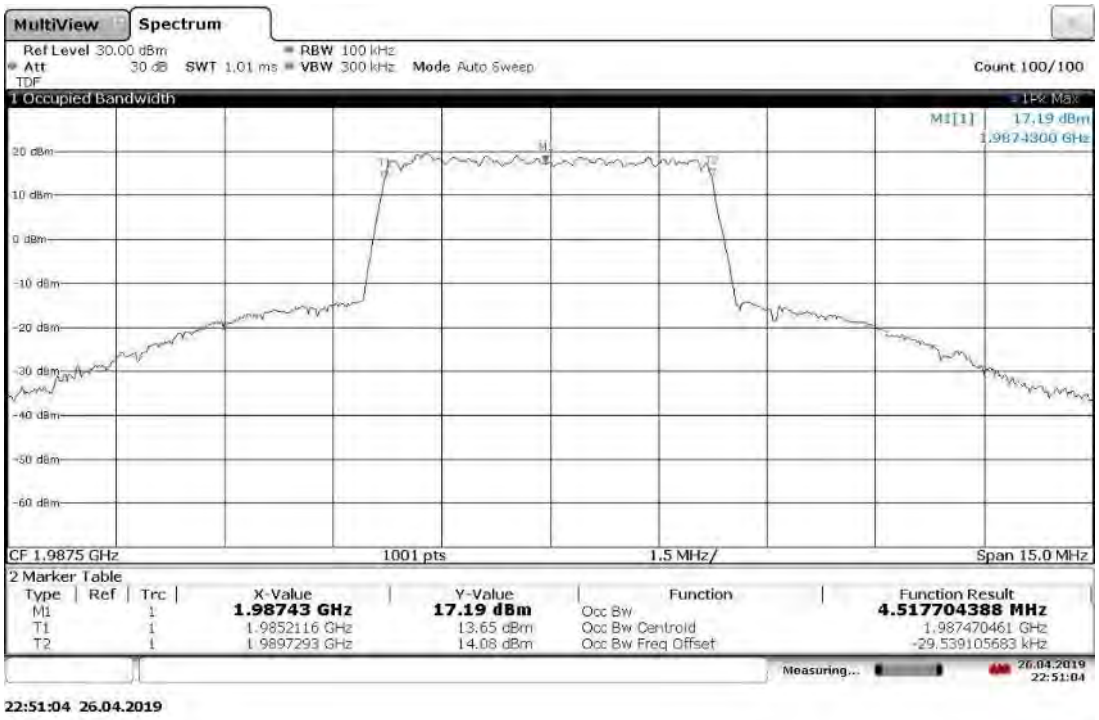
TM3.2-16QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



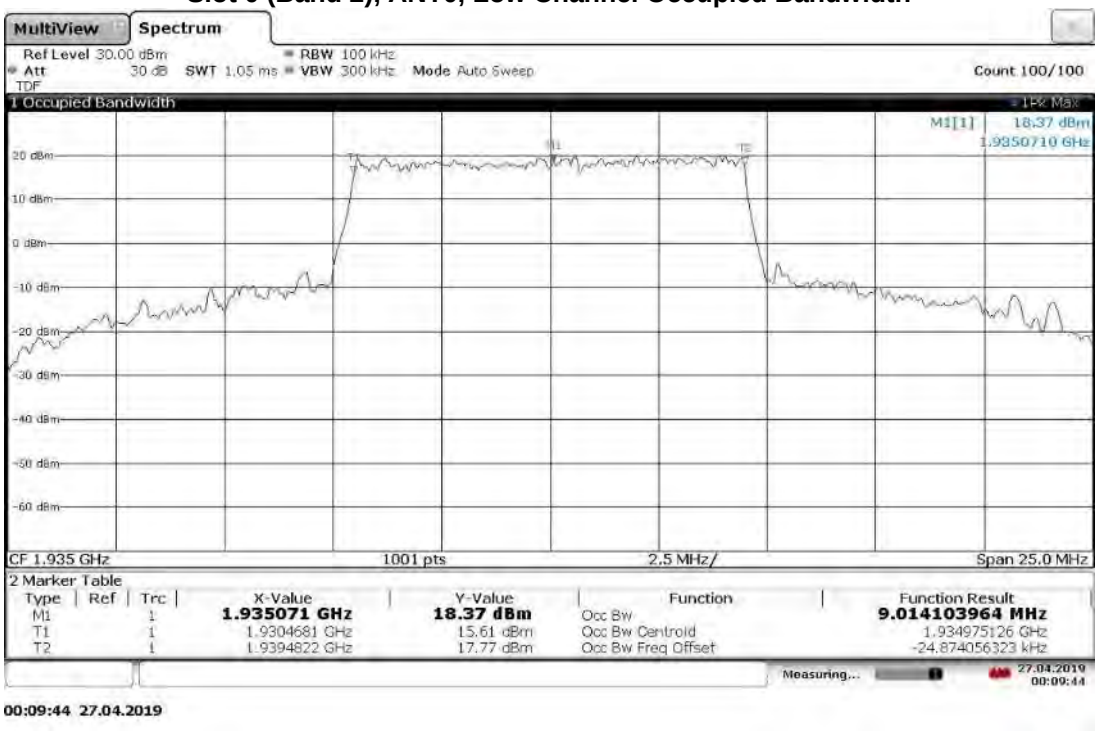
TM3.2-16QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



TM3.2-16QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



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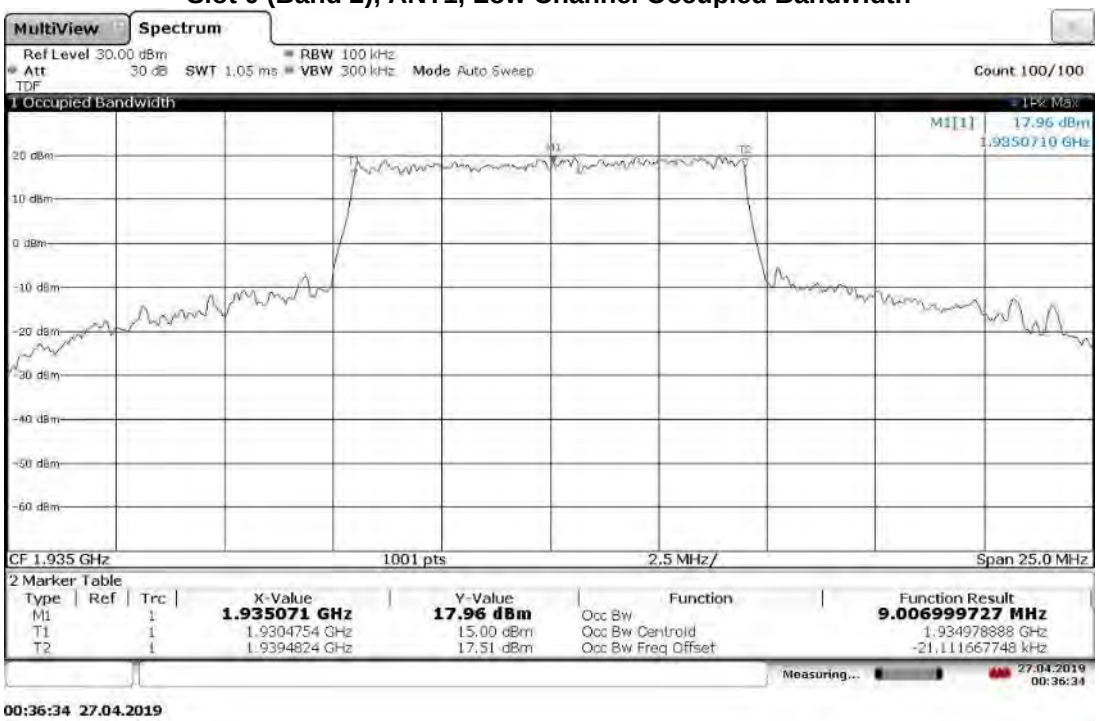
TM3.2-16QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



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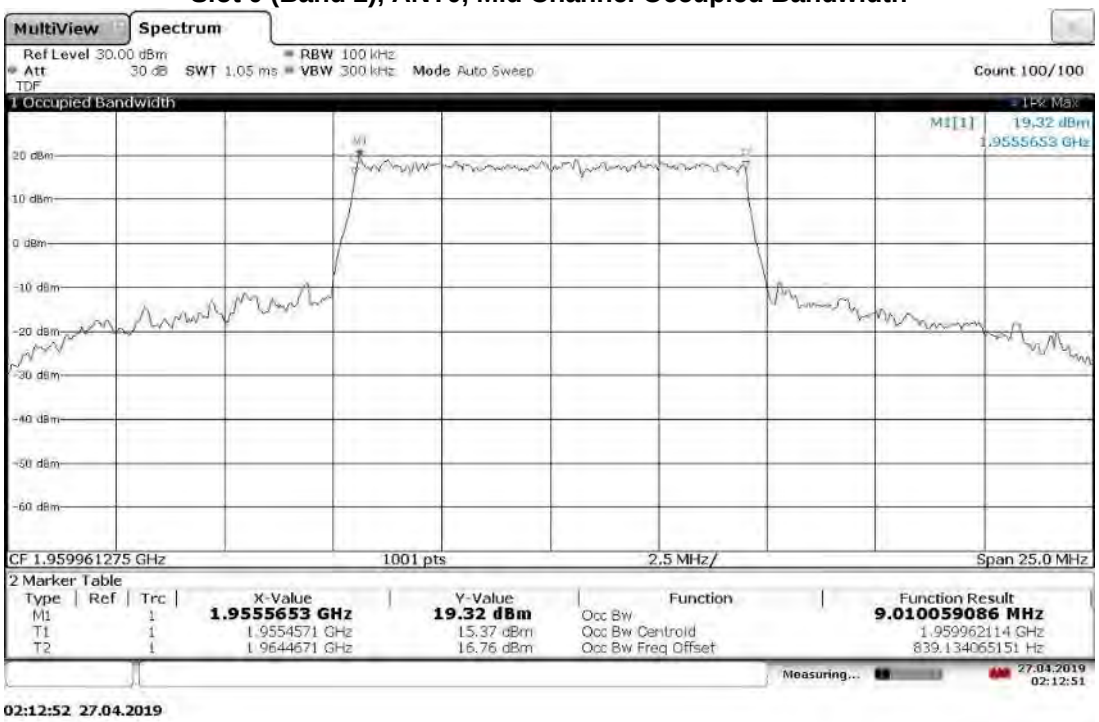
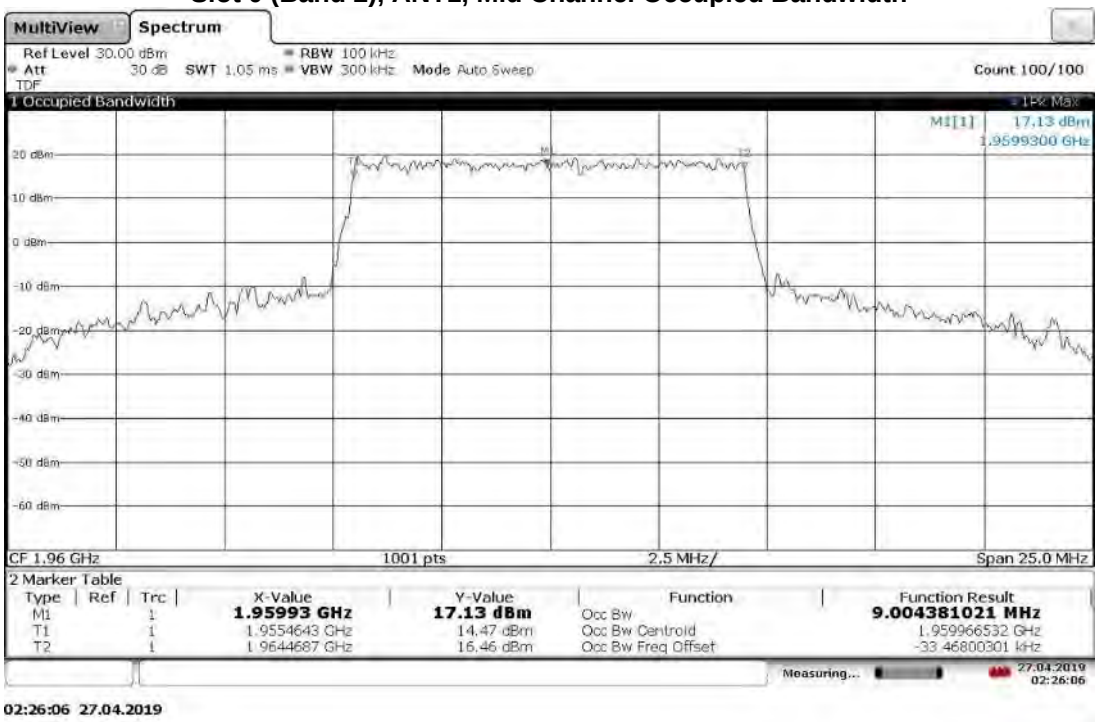
TM3.2-16QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



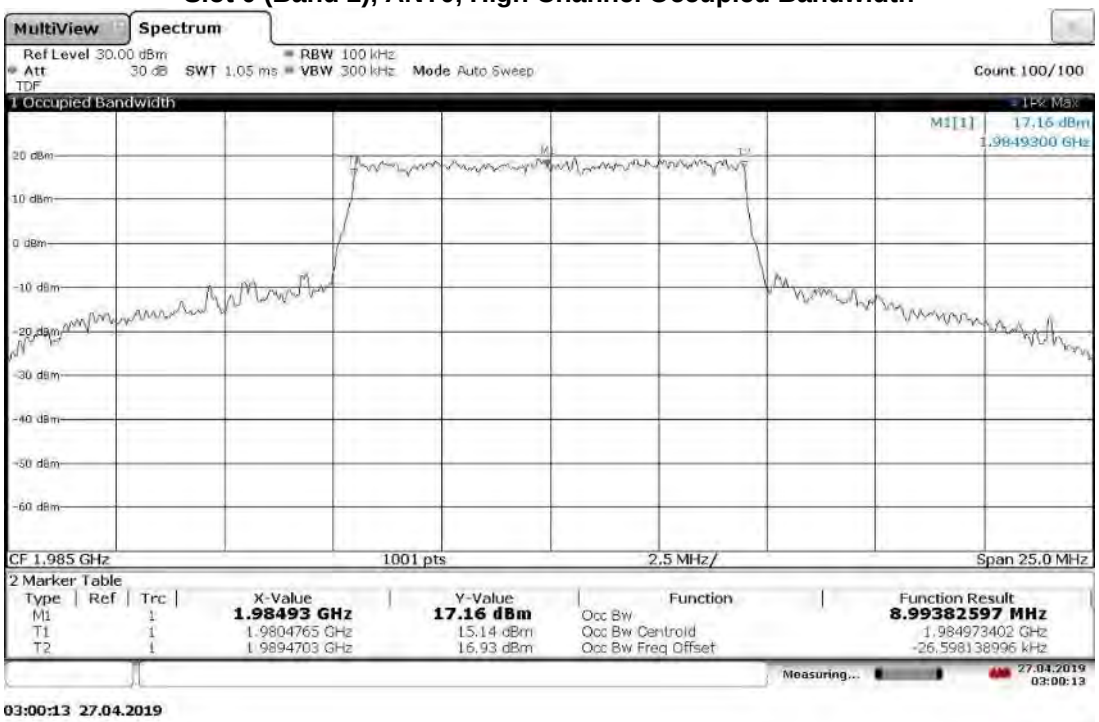
TM3.2-16QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



TM3.2-16QAM_10 MHz Bandwidth

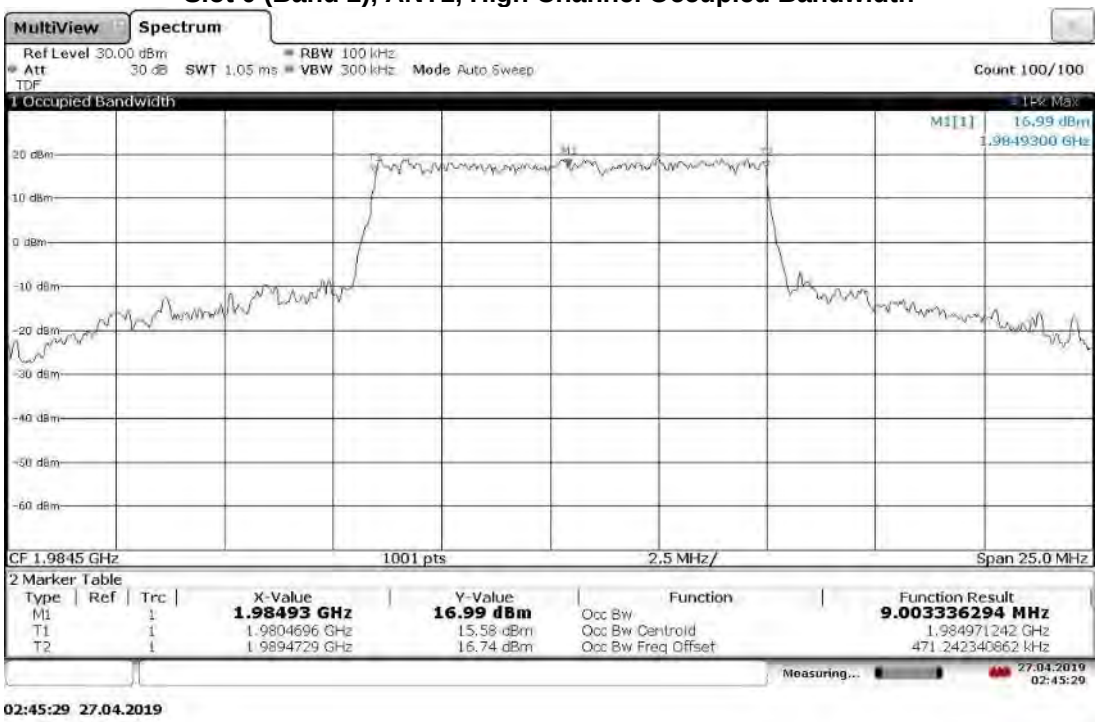
Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



03:00:13 27.04.2019

TM3.2-16QAM_10 MHz Bandwidth

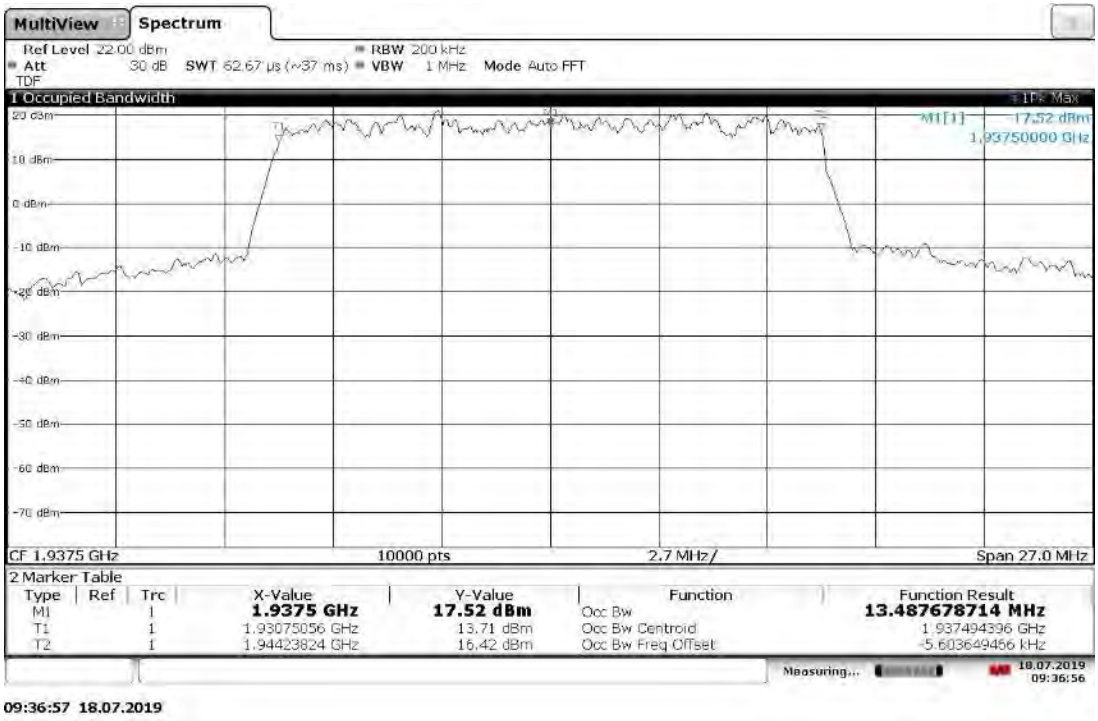
Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



02:45:29 27.04.2019

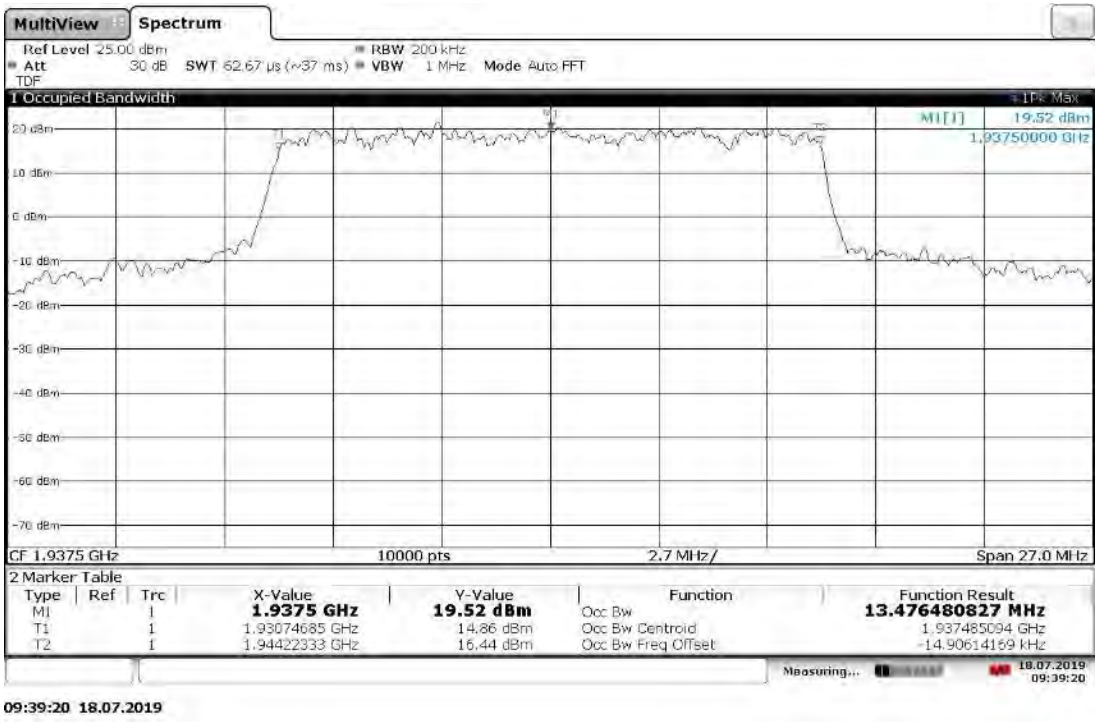
TM3.2-16QAM_15 MHz Bandwidth

Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



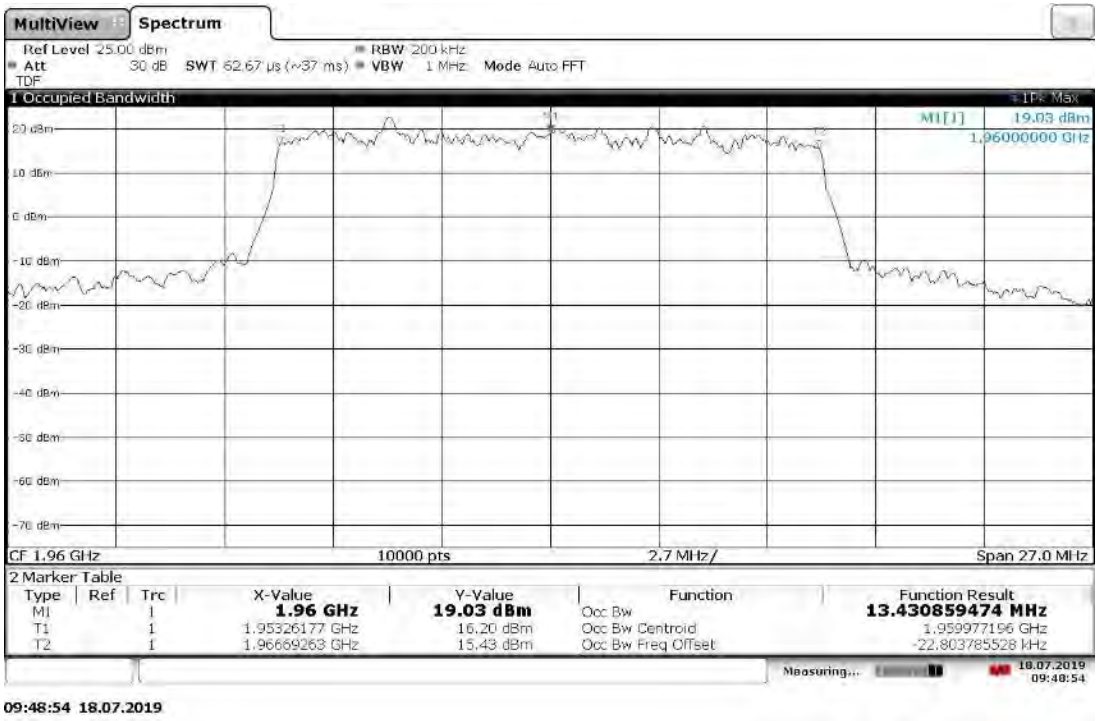
TM3.2-16QAM_15 MHz Bandwidth

Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



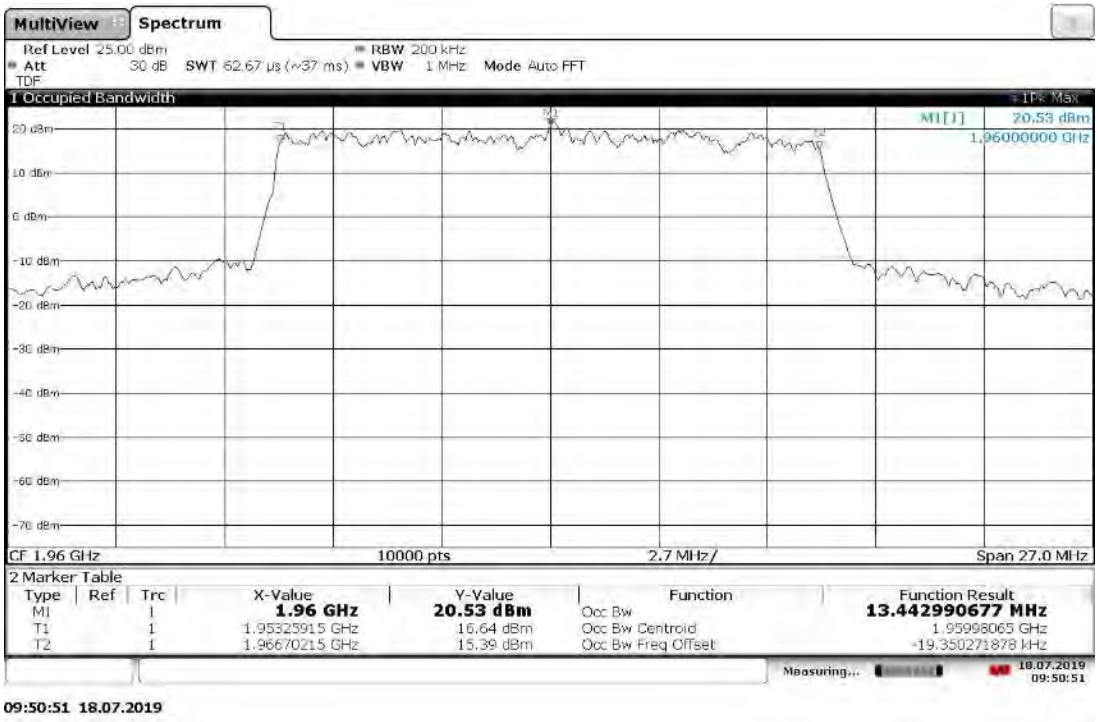
TM3.2-16QAM_15 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



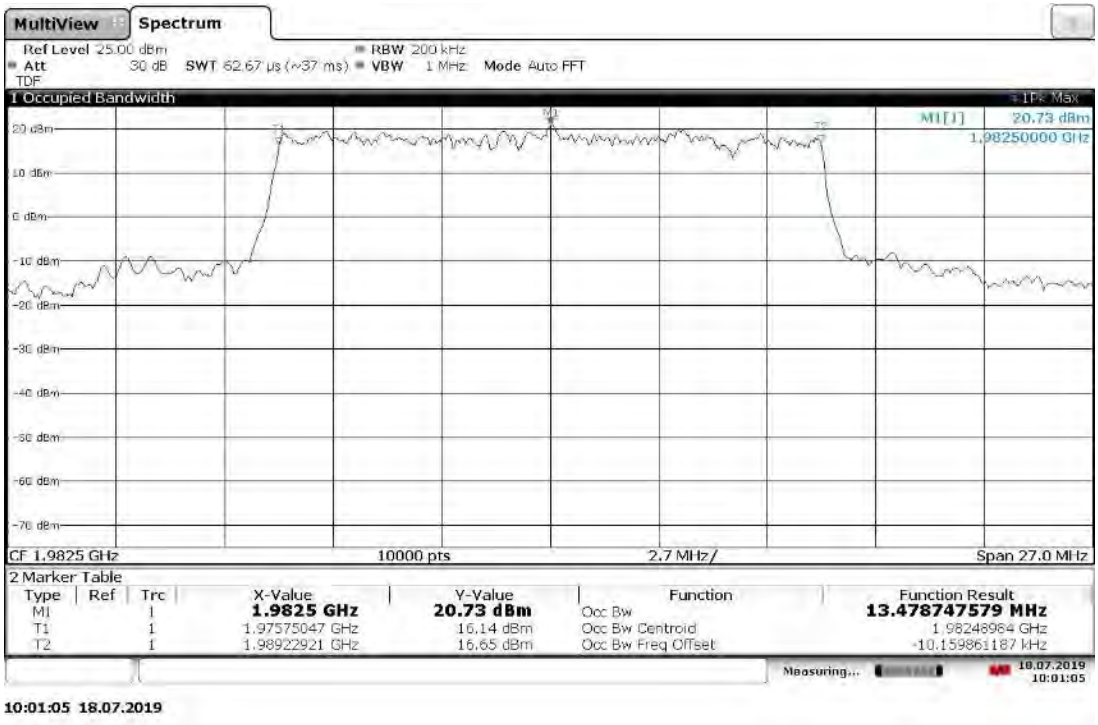
TM3.2-16QAM_15 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



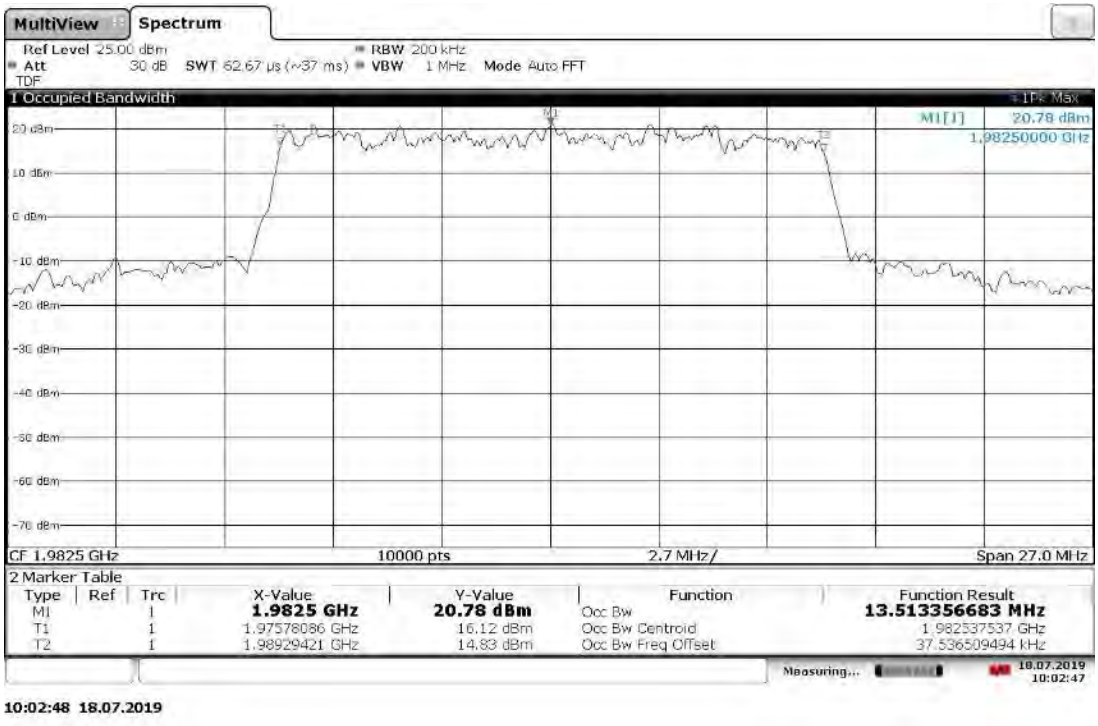
TM3.2-16QAM_15 MHz Bandwidth

Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



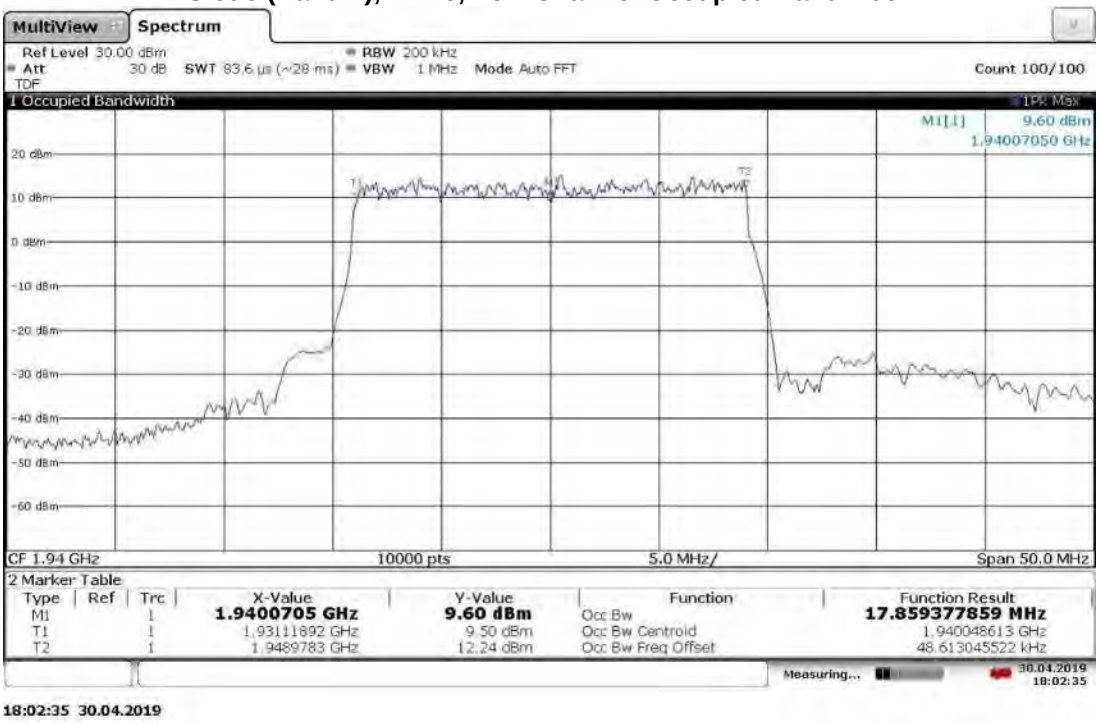
TM3.2-16QAM_15 MHz Bandwidth

Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



TM3.2-16QAM_20 MHz Bandwidth

Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



18:02:35 30.04.2019

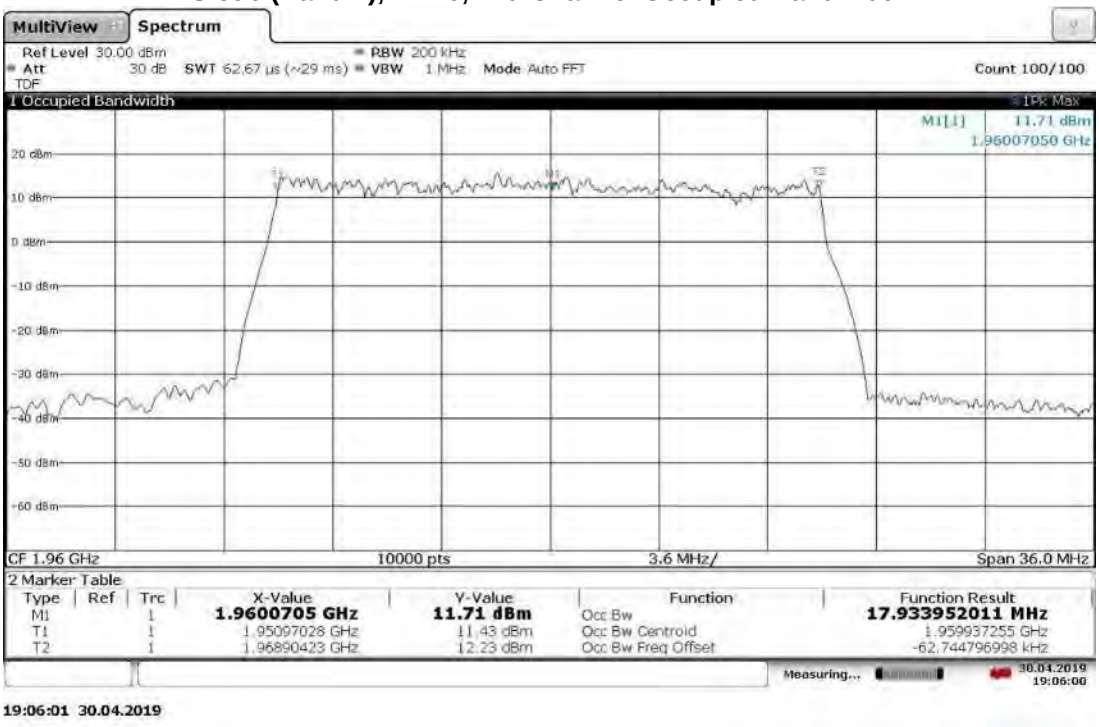
TM3.2-16QAM_20 MHz Bandwidth

Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth

18:21:23 30.04.2019

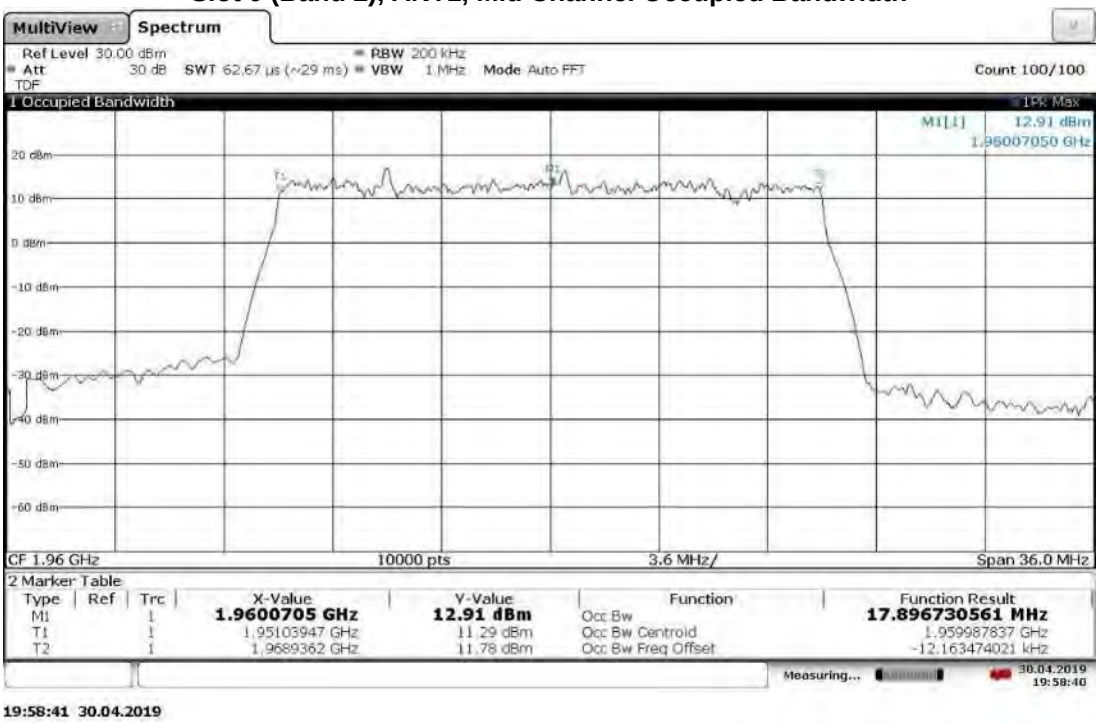
TM3.2-16QAM_20 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



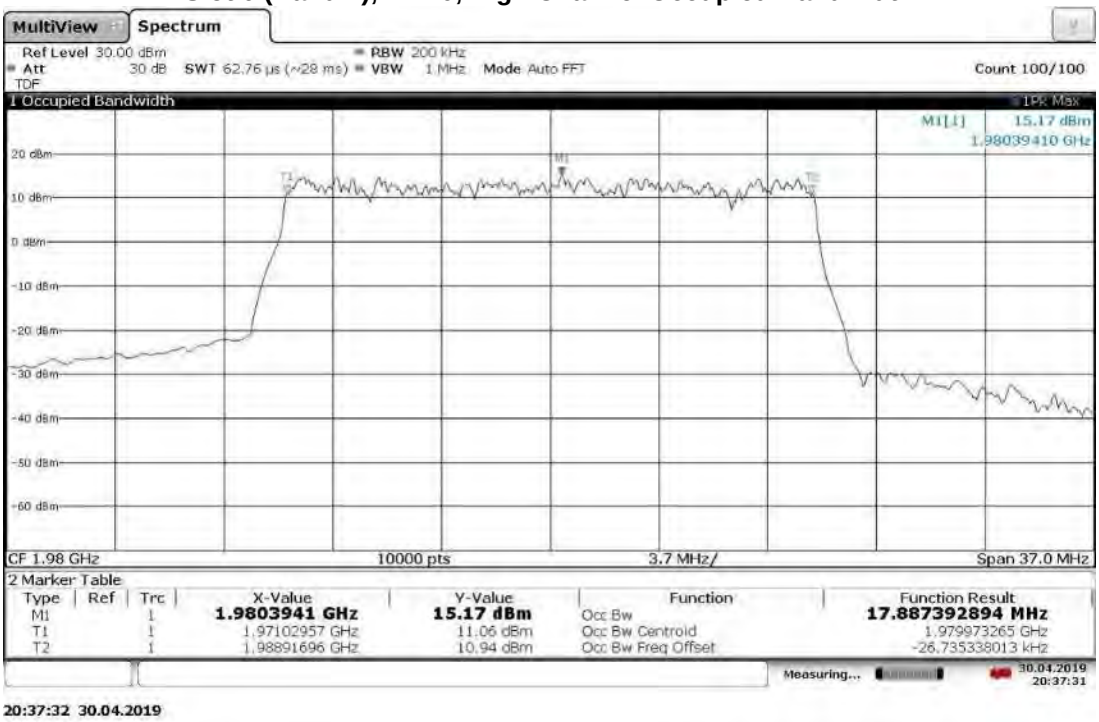
TM3.2-16QAM_20 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



TM3.2-16QAM_20 MHz Bandwidth

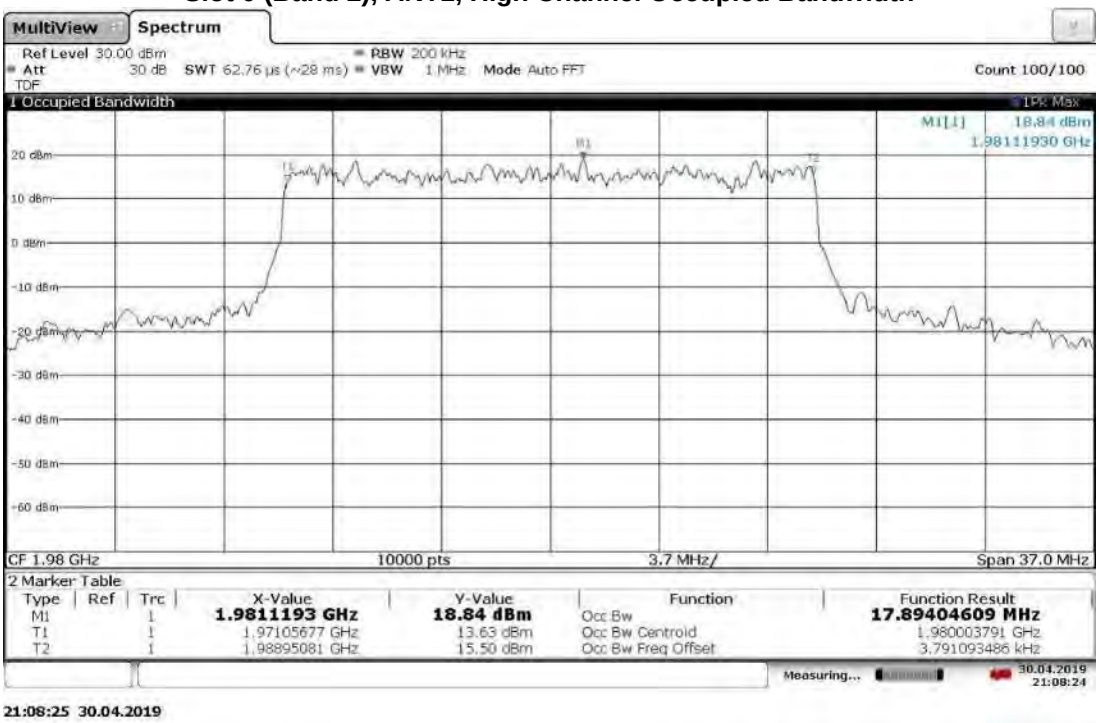
Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



20:37:32 30.04.2019

TM3.2-16QAM_20 MHz Bandwidth

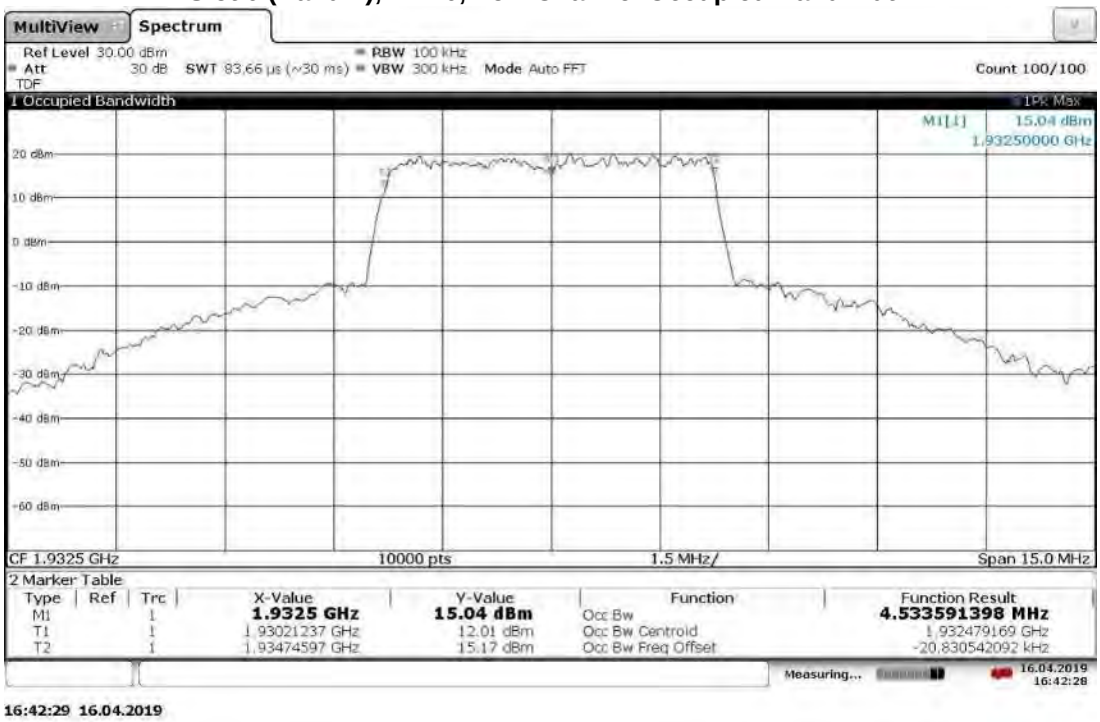
Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



21:08:25 30.04.2019

TM3.1-64QAM_5 MHz Bandwidth

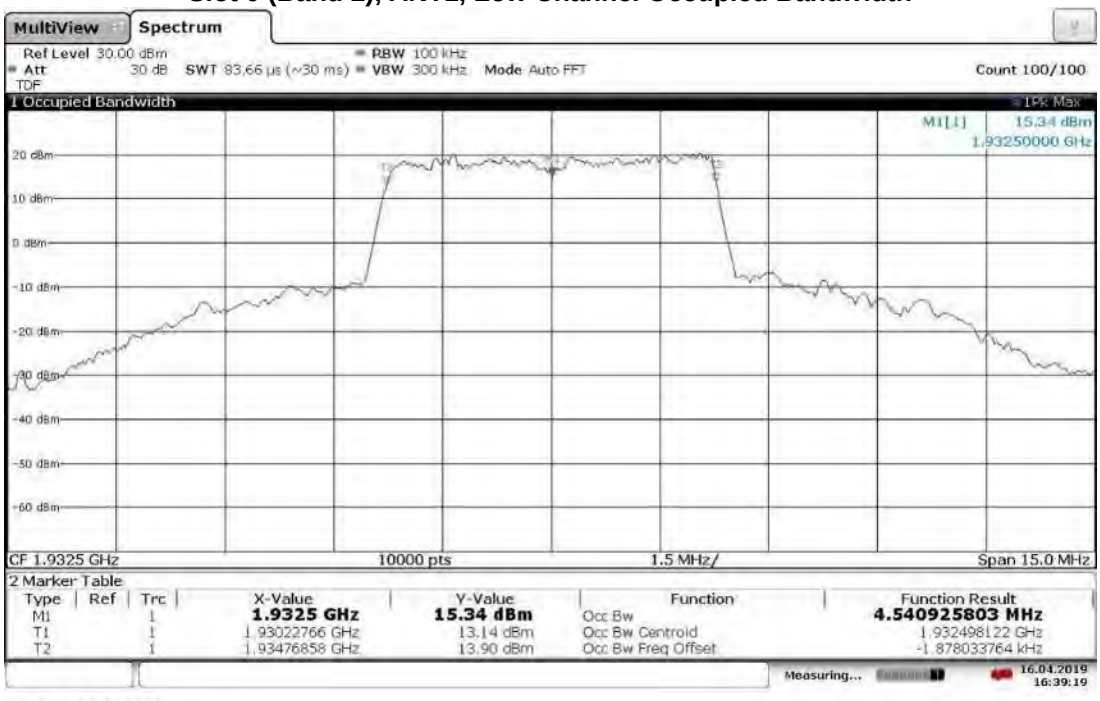
Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



16:42:29 16.04.2019

TM3.1-64QAM_5 MHz Bandwidth

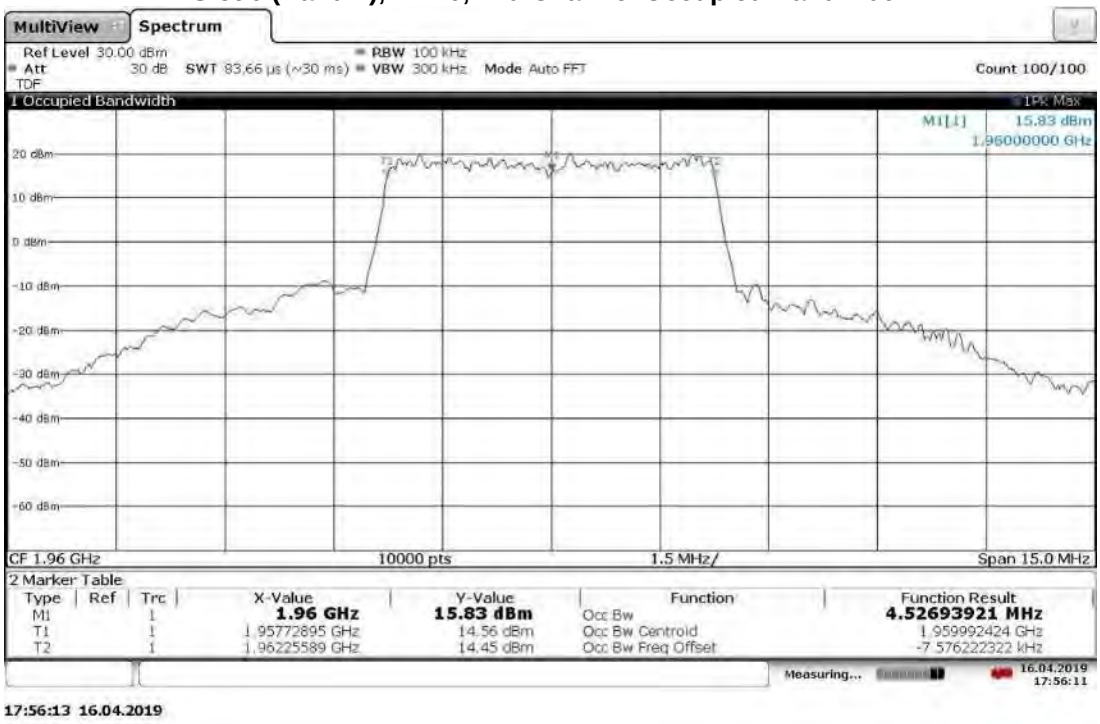
Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



16:39:19 16.04.2019

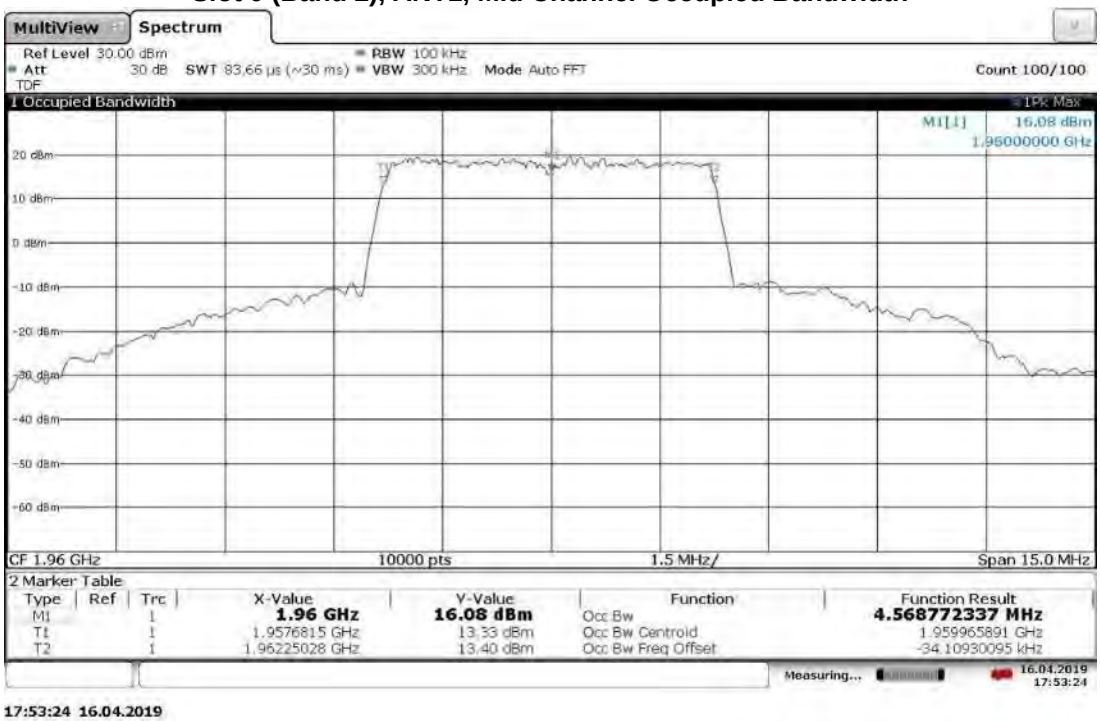
TM3.1-64QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



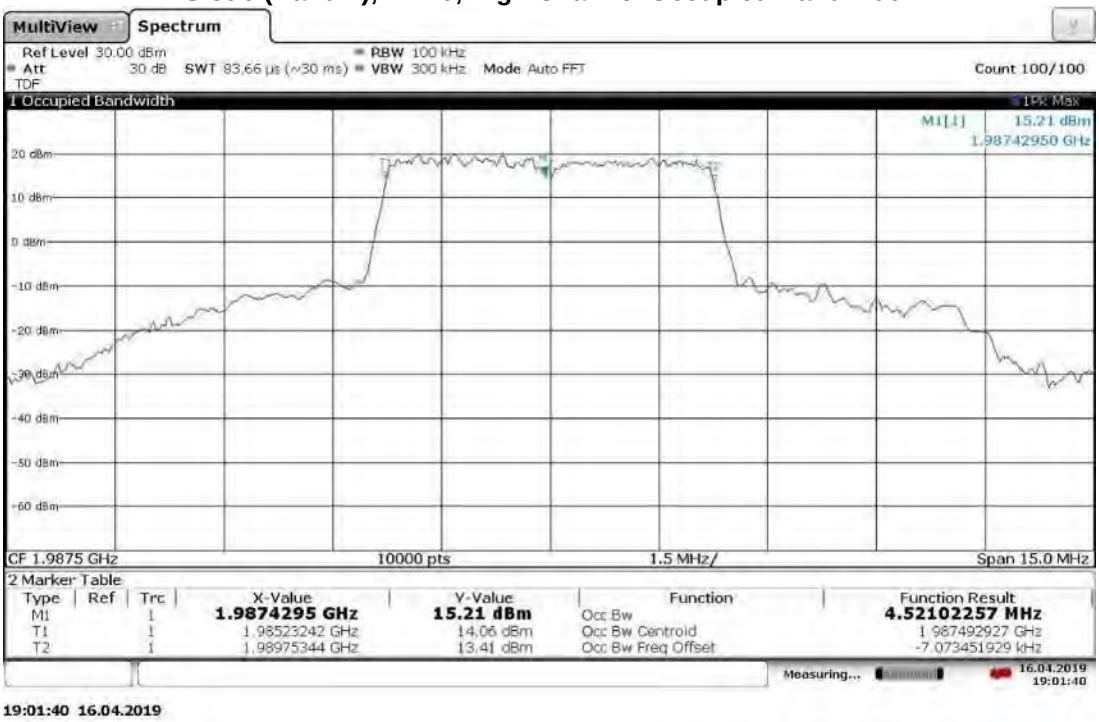
TM3.1-64QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



TM3.1-64QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



19:01:40 16.04.2019

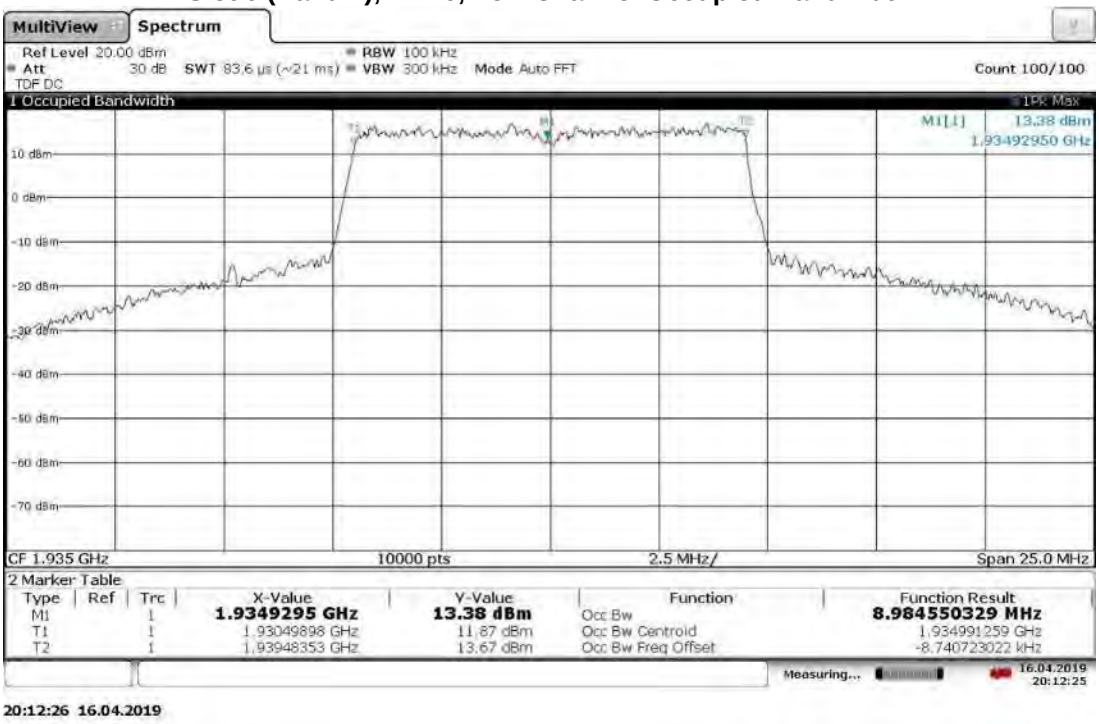
TM3.1-64QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth

18:57:38 16.04.2019

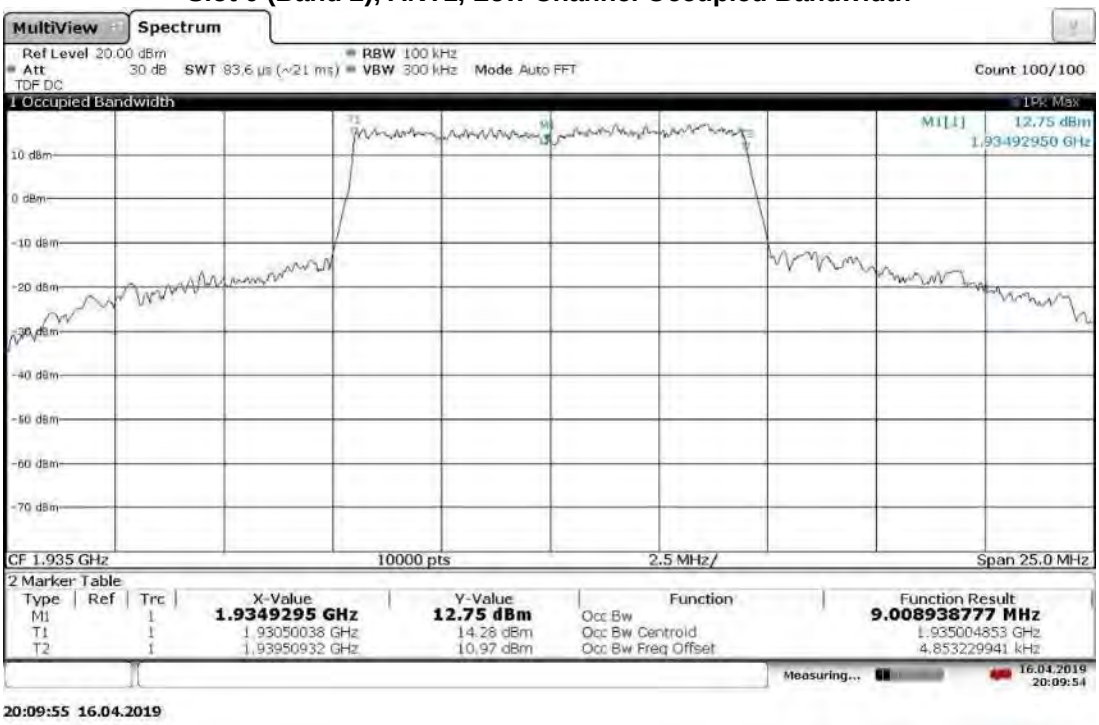
TM3.1-64QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



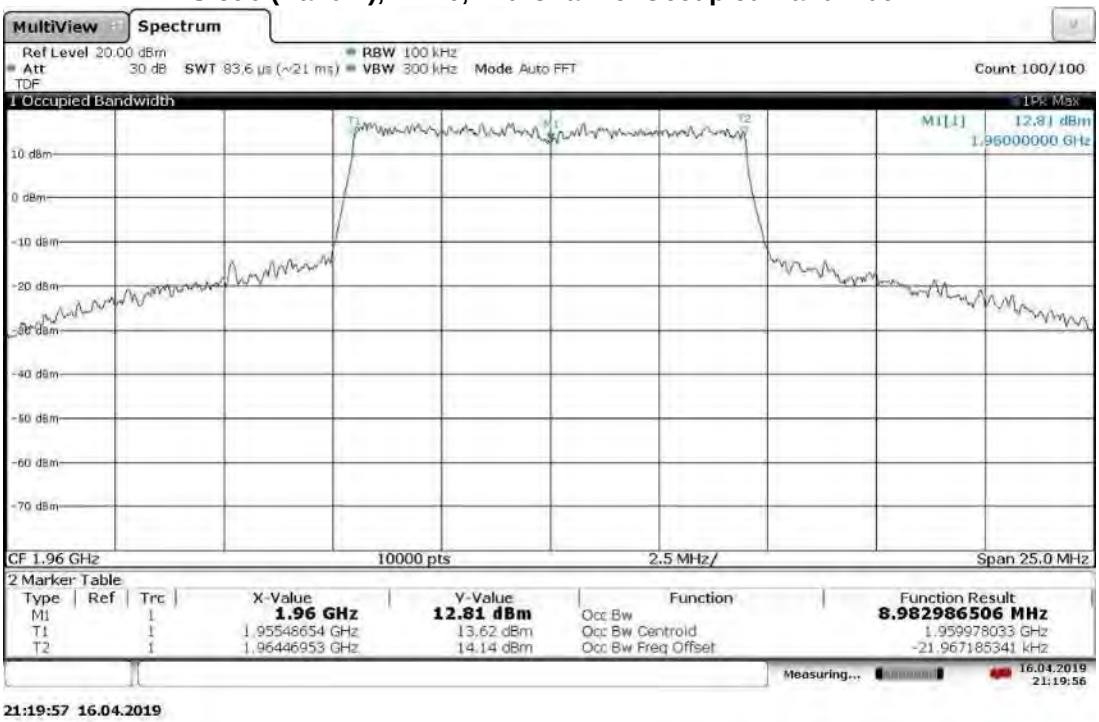
TM3.1-64QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



TM3.1-64QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



21:19:57 16.04.2019

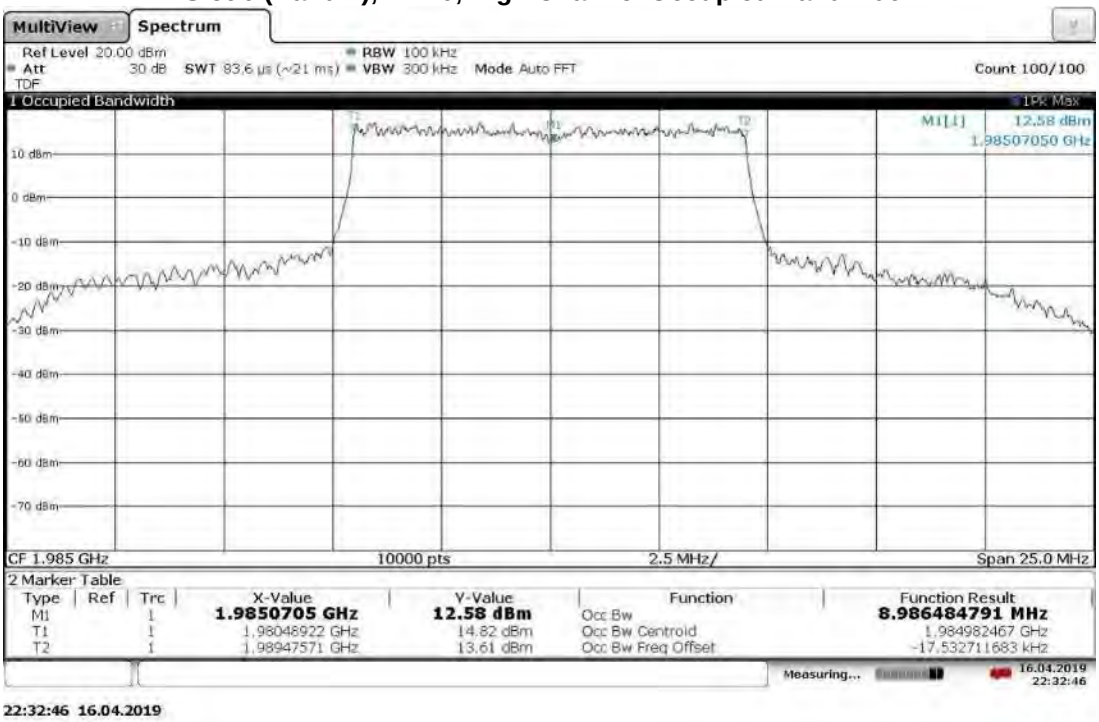
TM3.1-64QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth

21:17:03 16.04.2019

TM3.1-64QAM_10 MHz Bandwidth

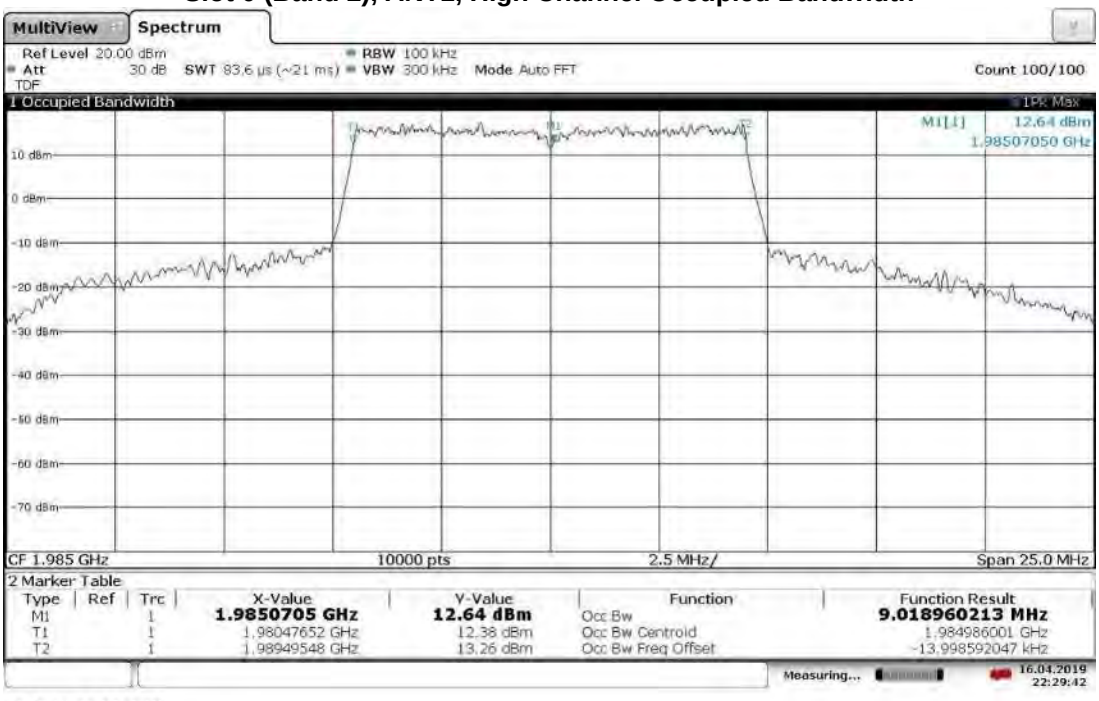
Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



22:32:46 16.04.2019

TM3.1-64QAM_10 MHz Bandwidth

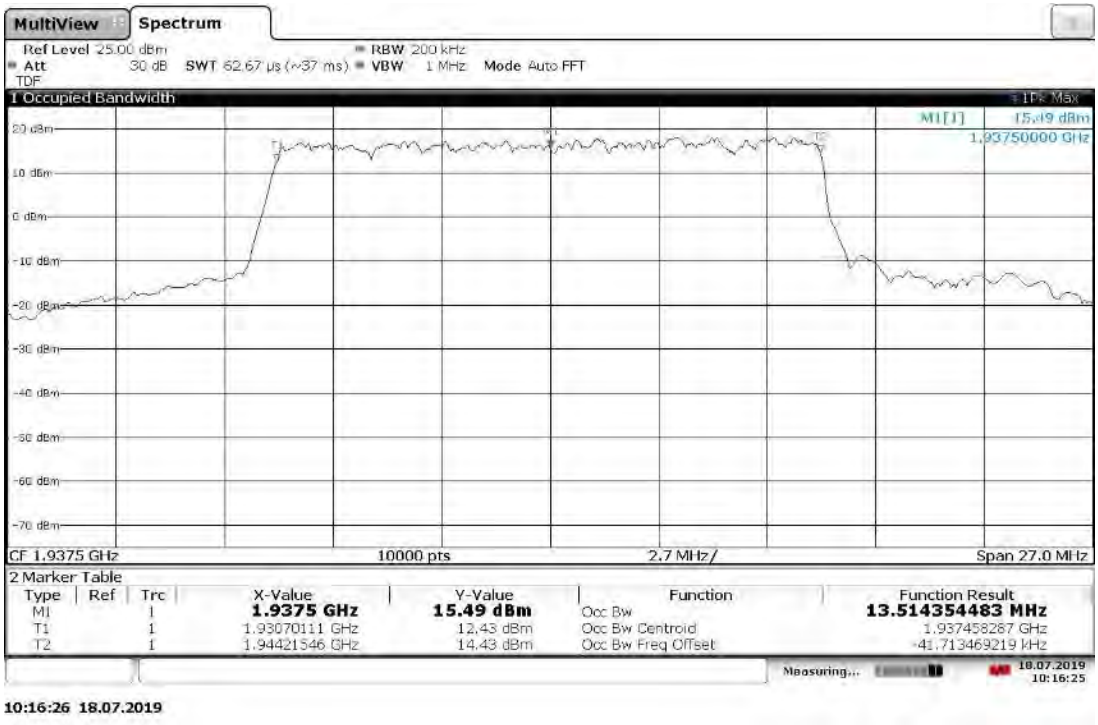
Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



22:29:43 16.04.2019

TM3.1-64QAM_15 MHz Bandwidth

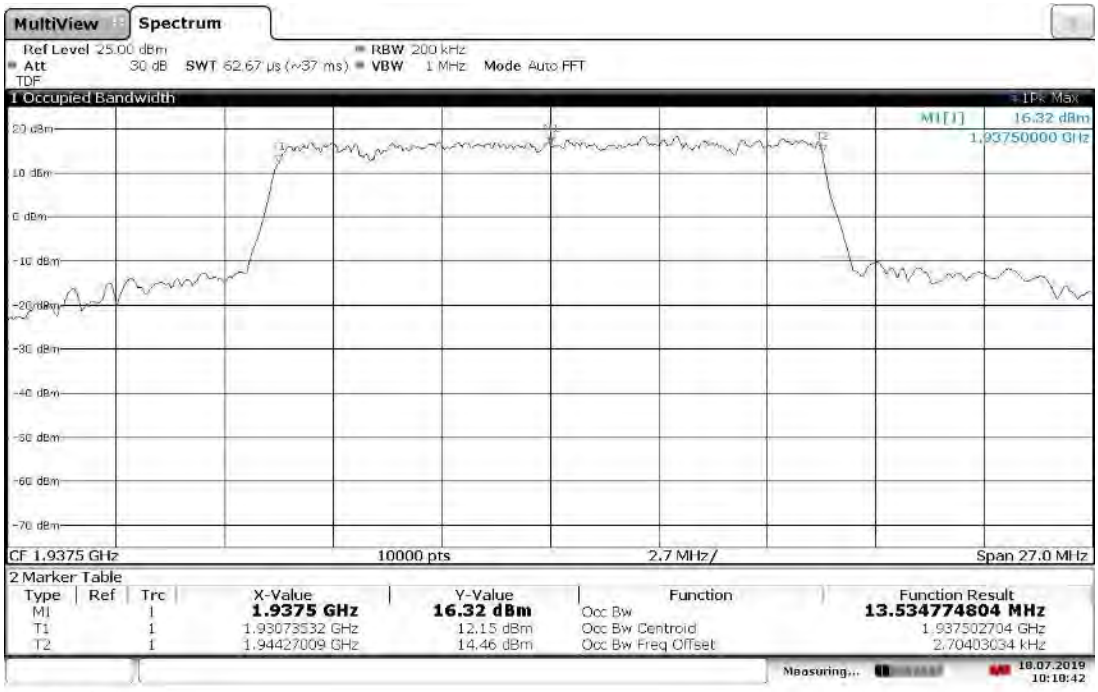
Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



10:16:26 18.07.2019

TM3.1-64QAM_15 MHz Bandwidth

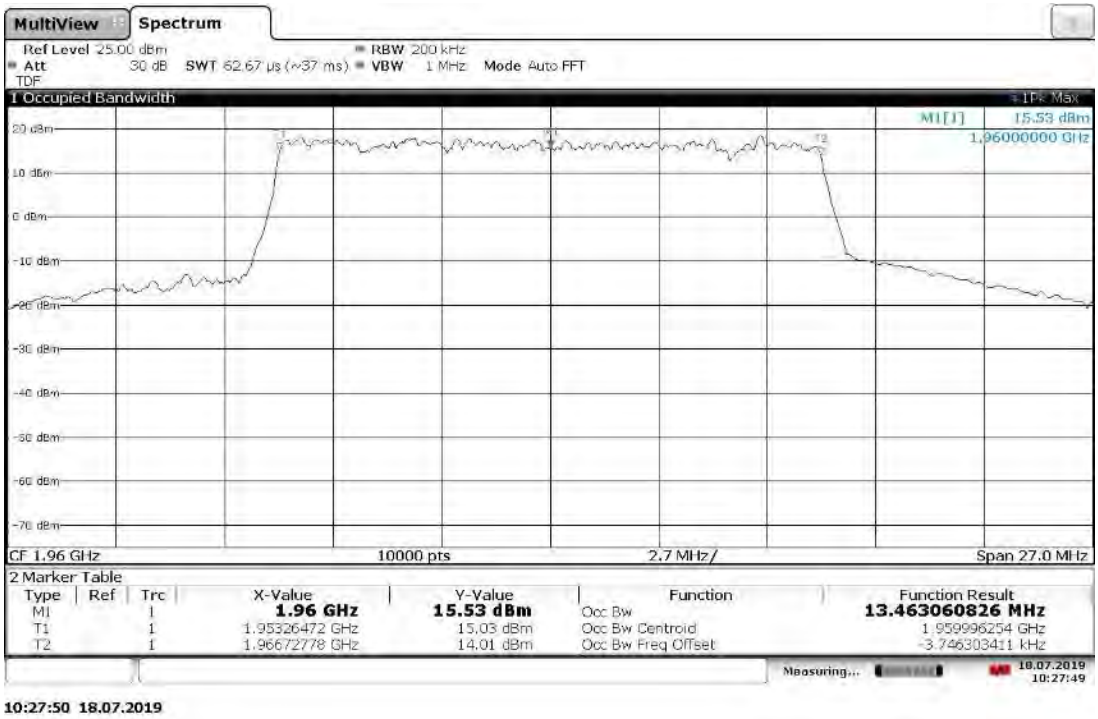
Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



10:18:43 18.07.2019

TM3.1-64QAM_15 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



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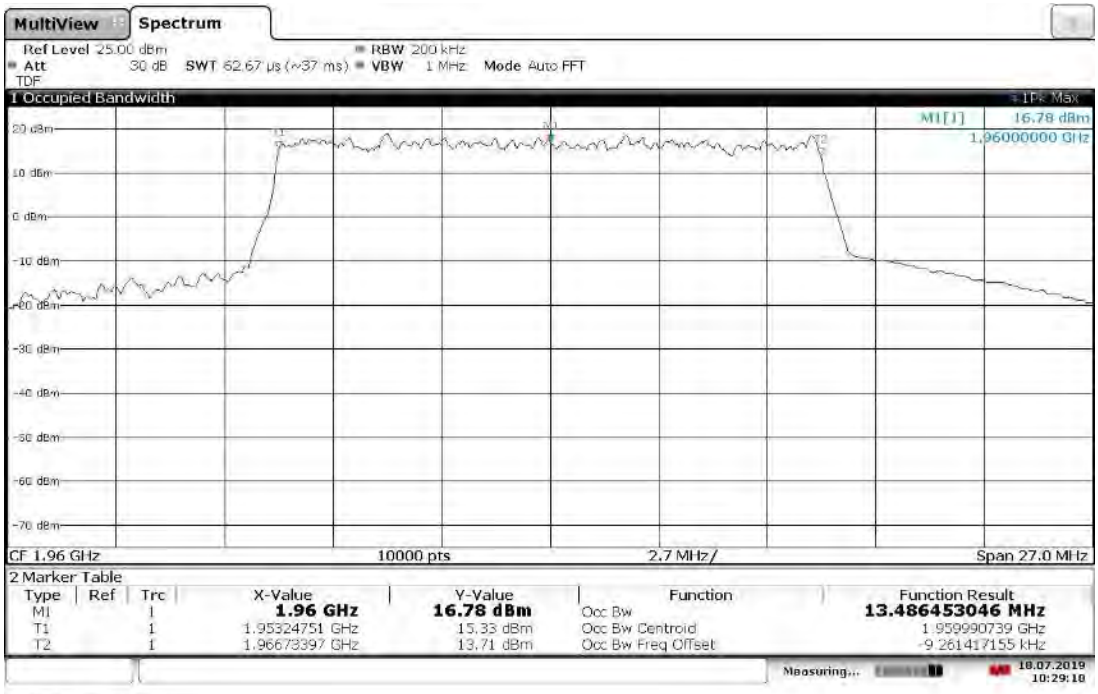
TM3.1-64QAM_15 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



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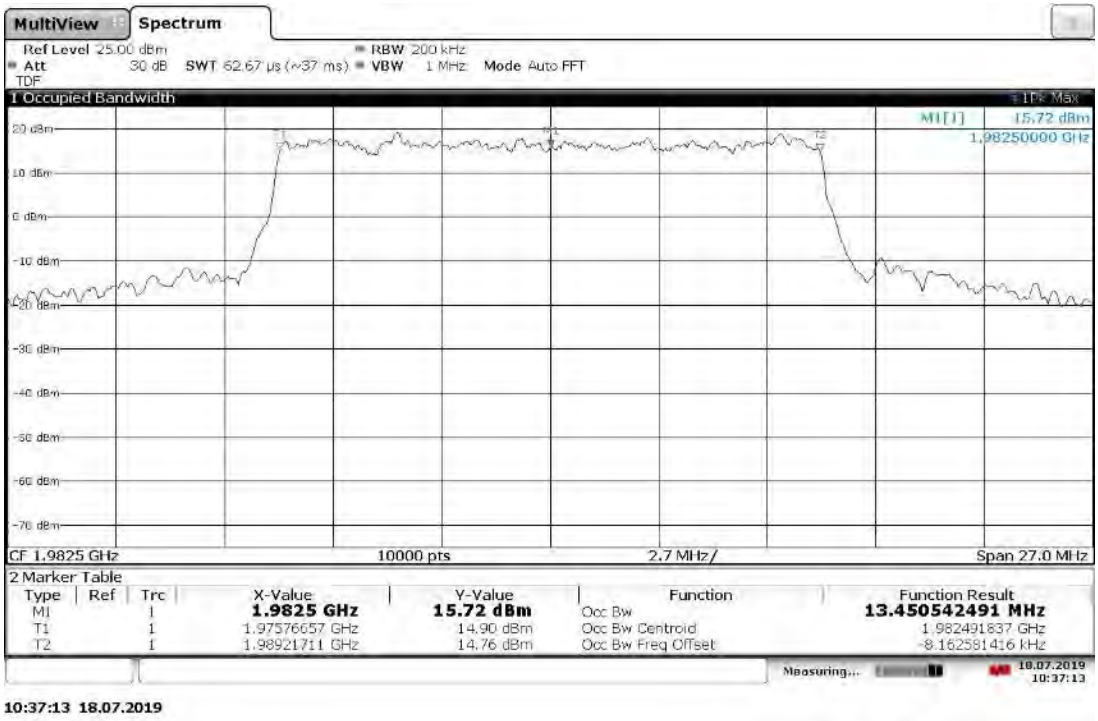
TM3.1-64QAM_15 MHz Bandwidth

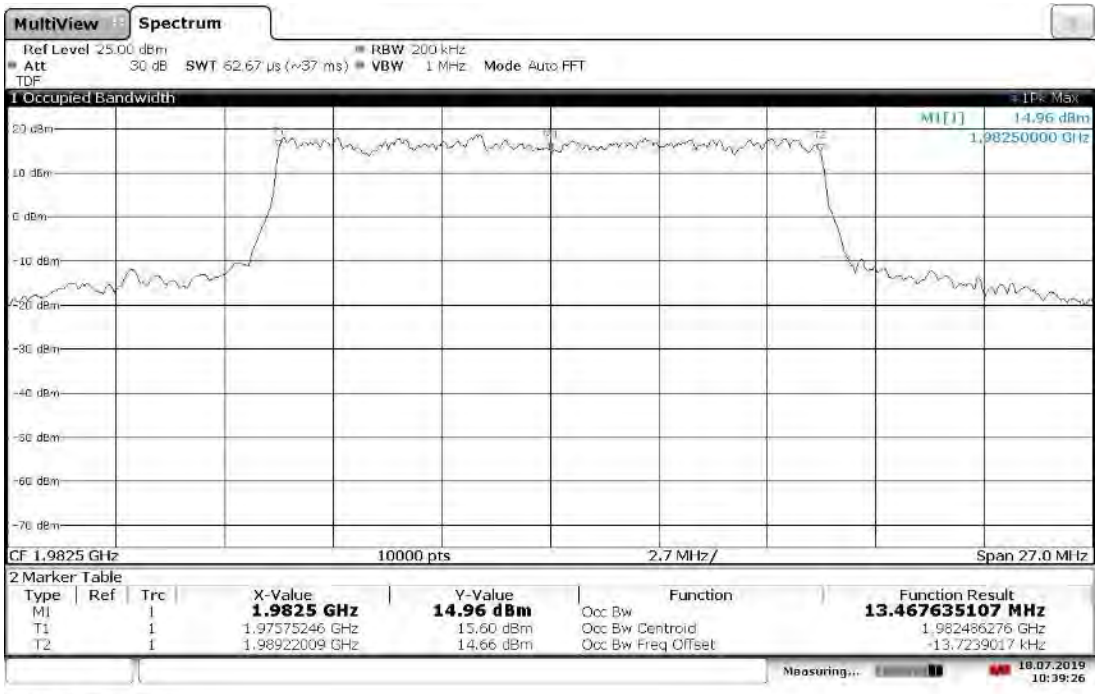
Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



10:37:13 18.07.2019

TM3.1-64QAM_15 MHz Bandwidth

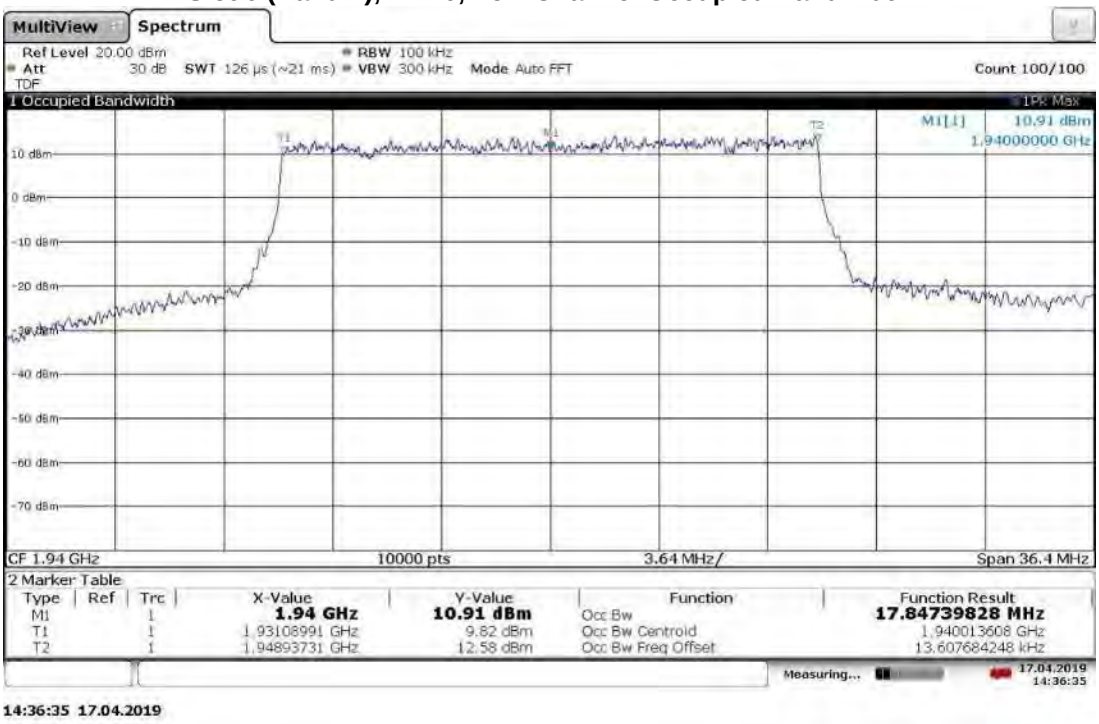
Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



10:39:27 18.07.2019

TM3.1-64QAM_20 MHz Bandwidth

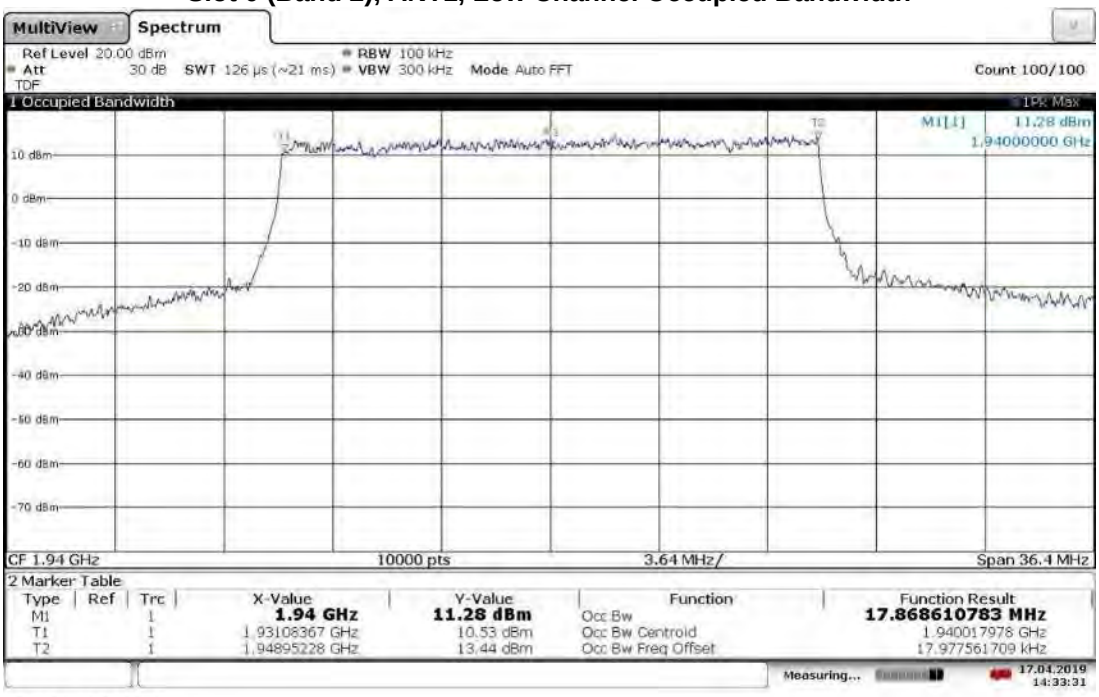
Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



14:36:35 17.04.2019

TM3.1-64QAM_20 MHz Bandwidth

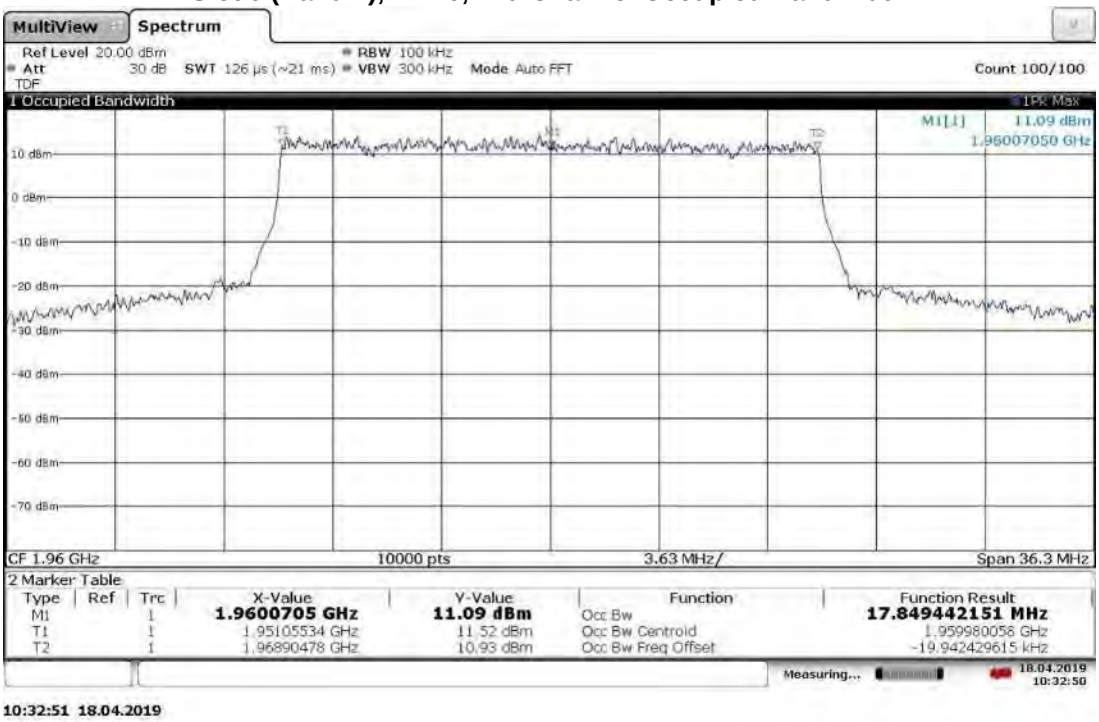
Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



14:33:31 17.04.2019

TM3.1-64QAM_20 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



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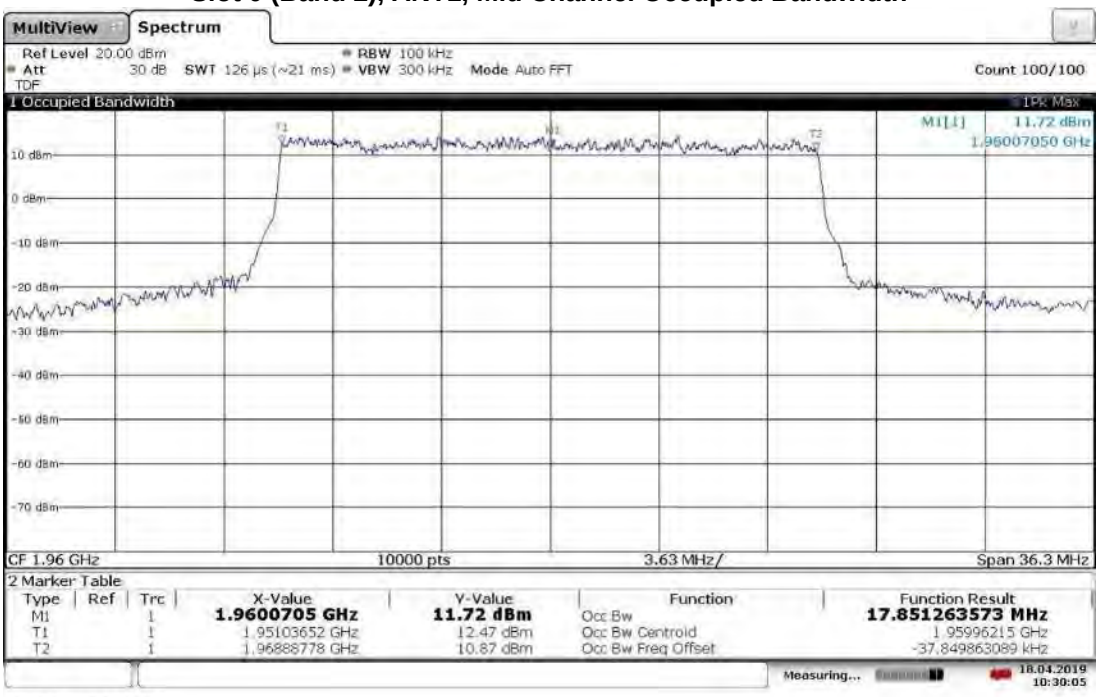
TM3.1-64QAM_20 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



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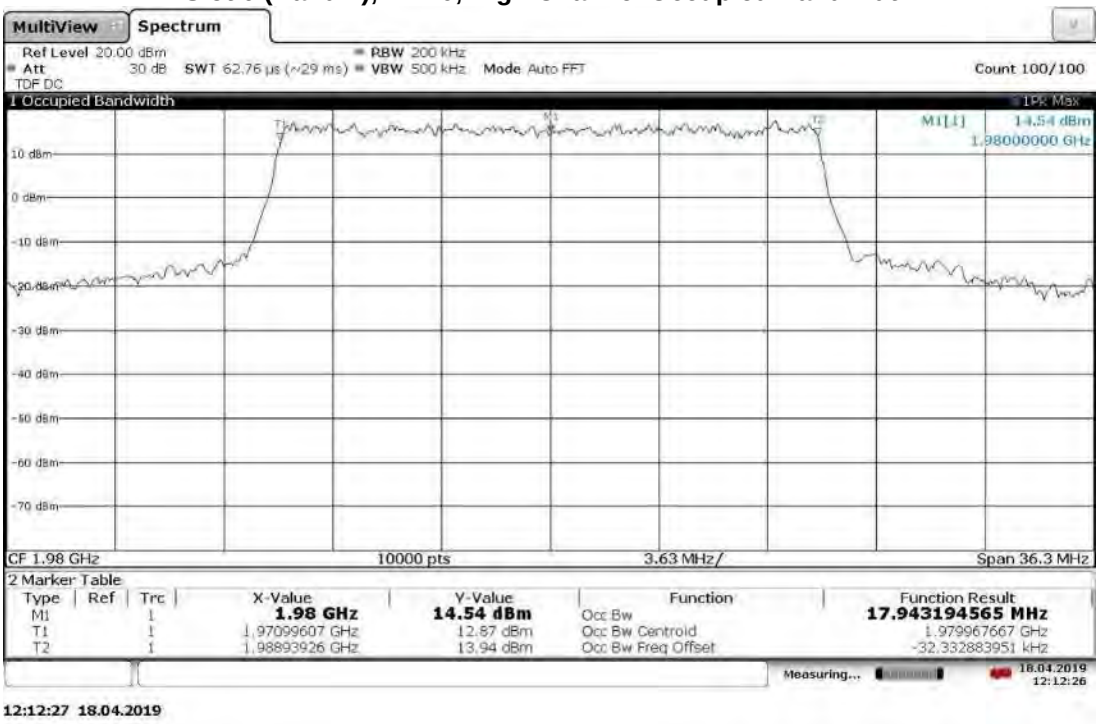
TM3.1-64QAM_20 MHz Bandwidth

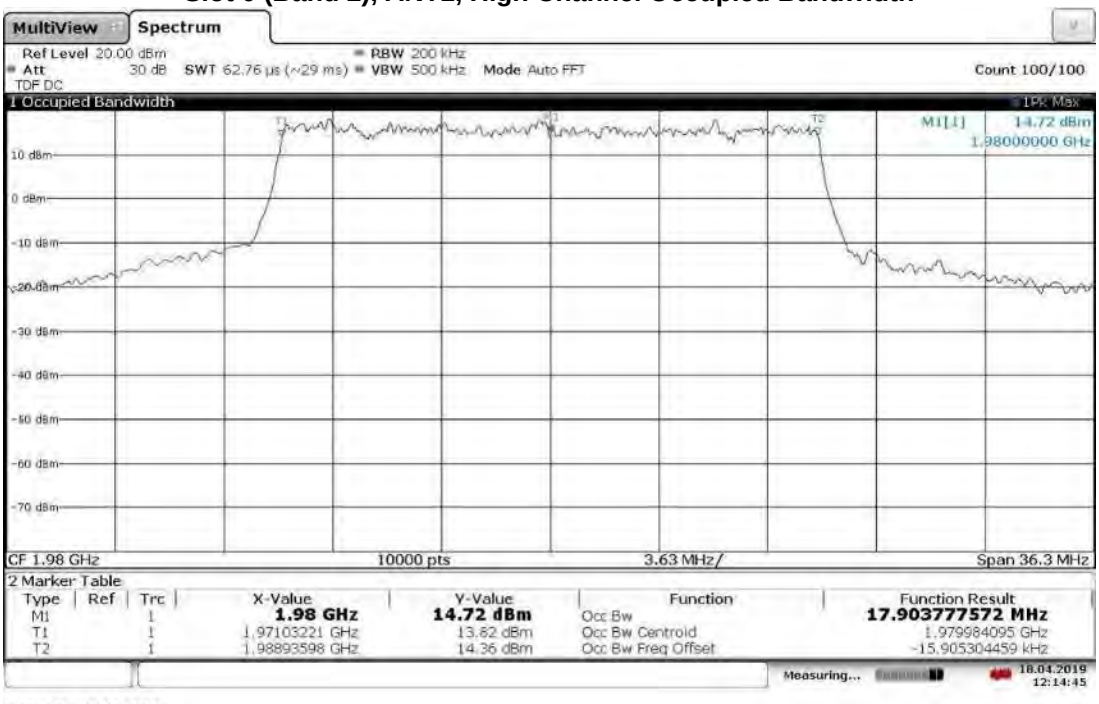
Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



12:12:27 18.04.2019

TM3.1-64QAM_20 MHz Bandwidth

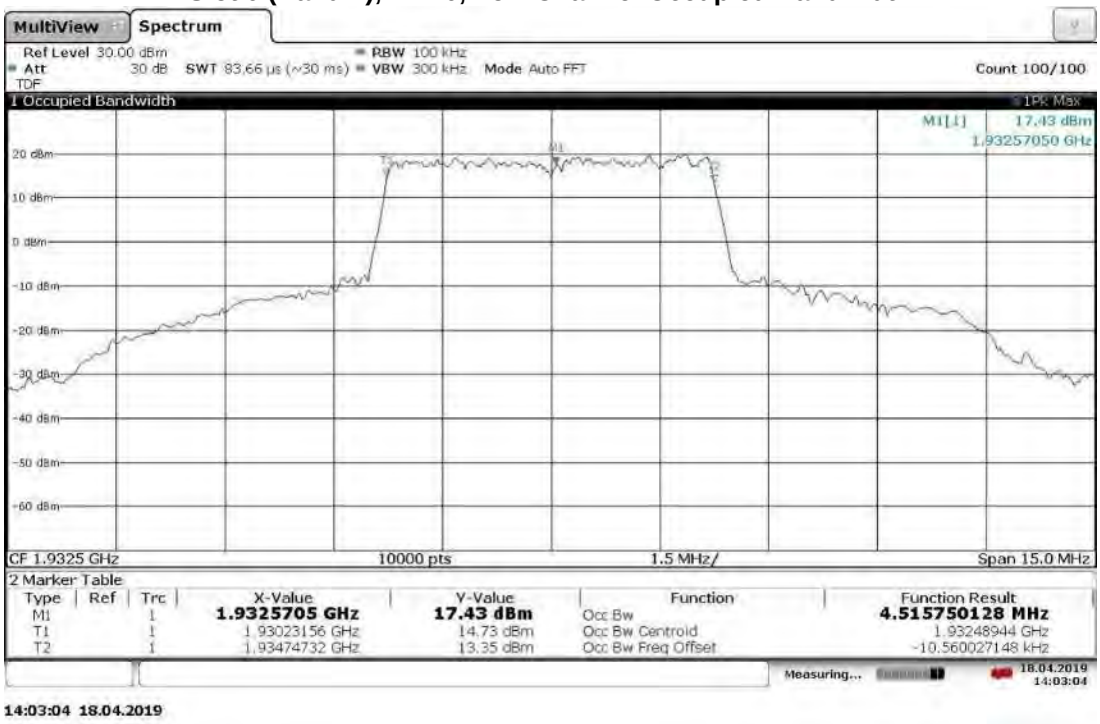
Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



12:14:46 18.04.2019

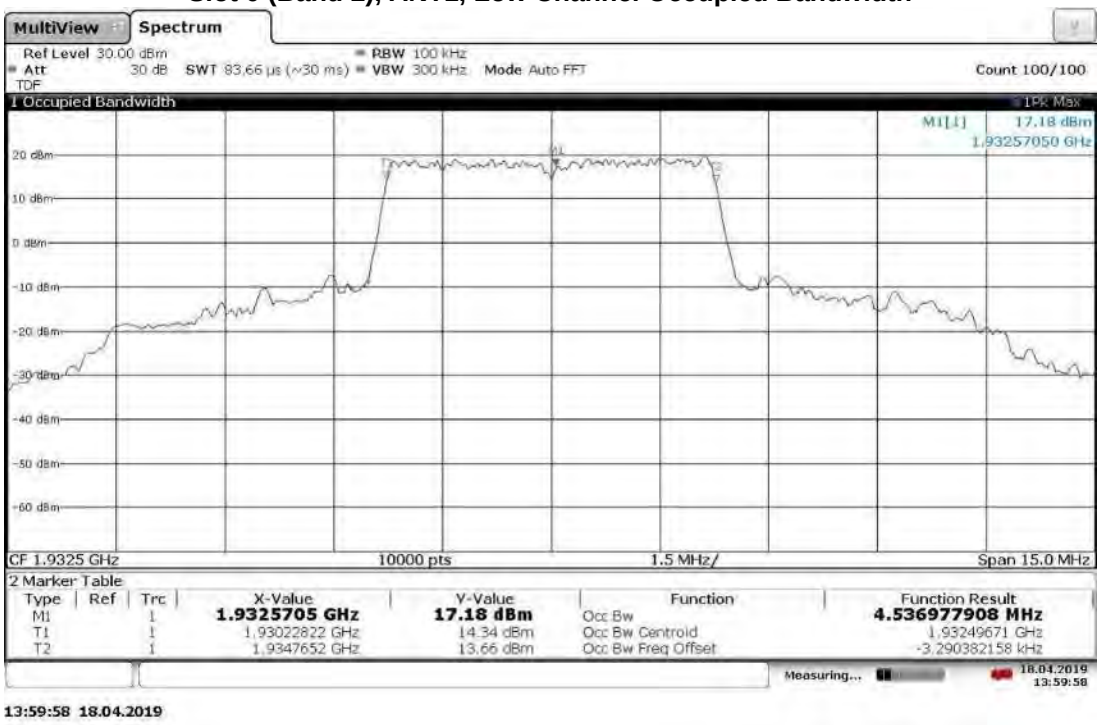
TM3.1a-256QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



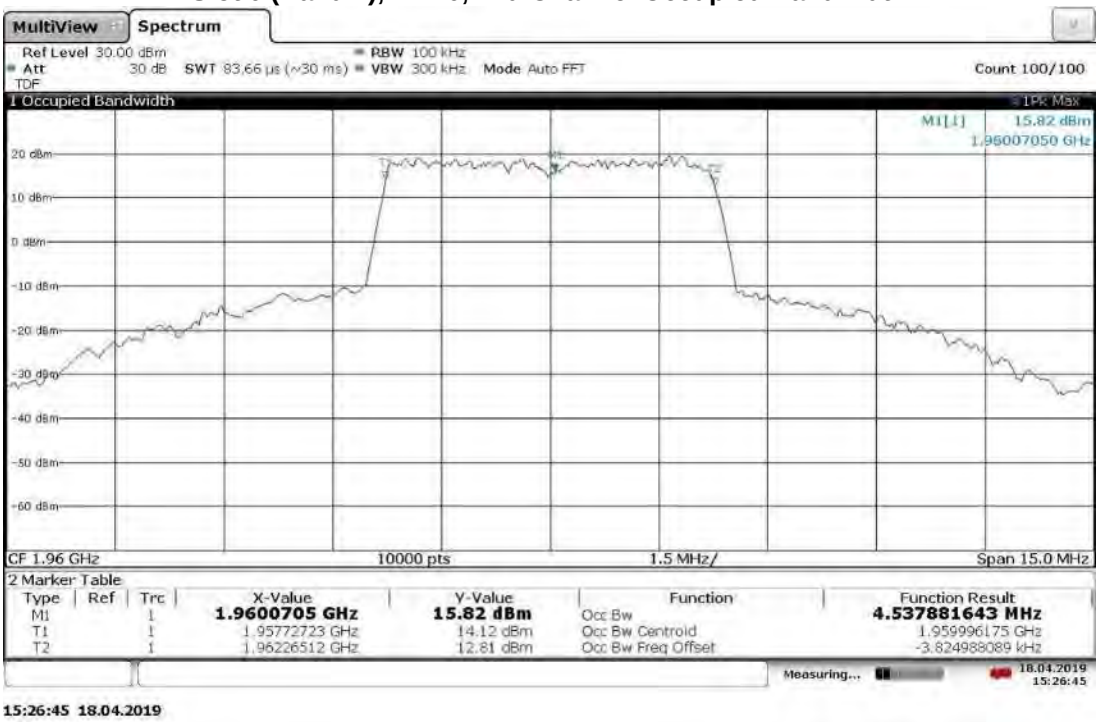
TM3.1a-256QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



TM3.1a-256QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



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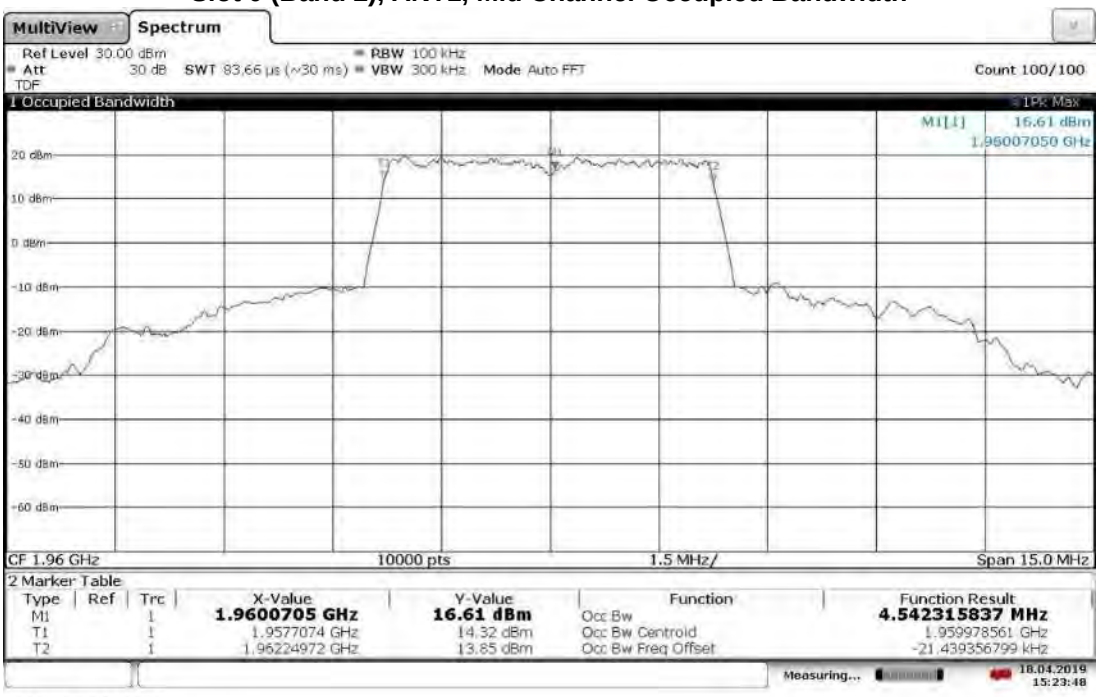
TM3.1a-256QAM_5 MHz Bandwidth

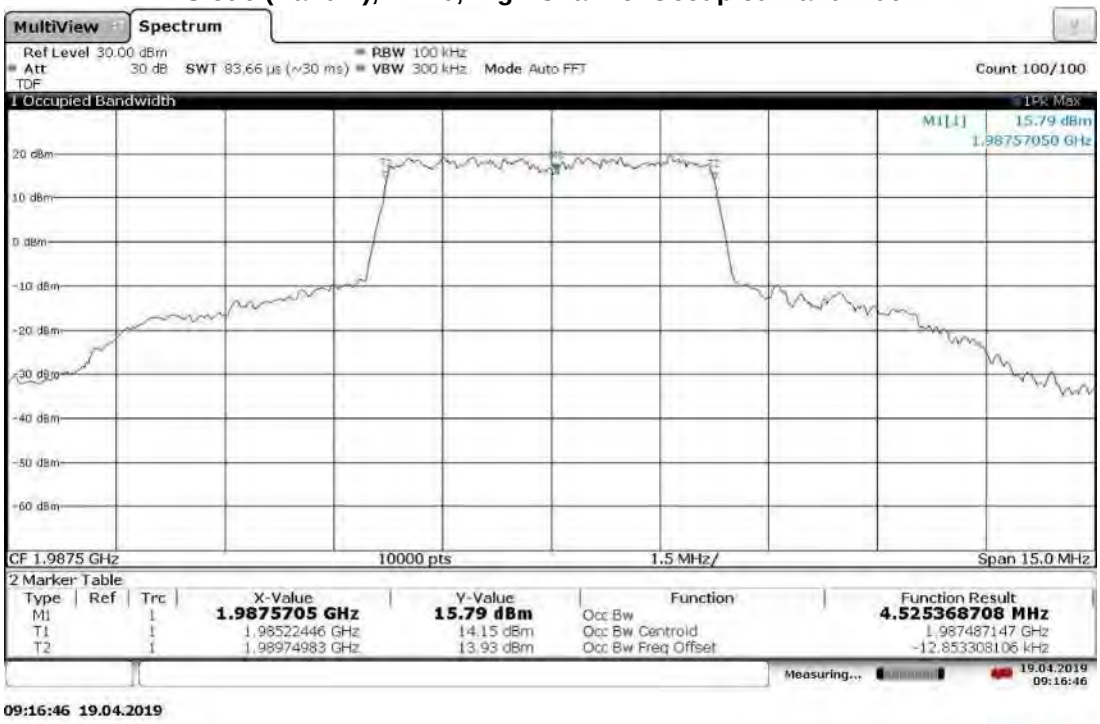
Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



15:23:48 18.04.2019

TM3.1a-256QAM_5 MHz Bandwidth

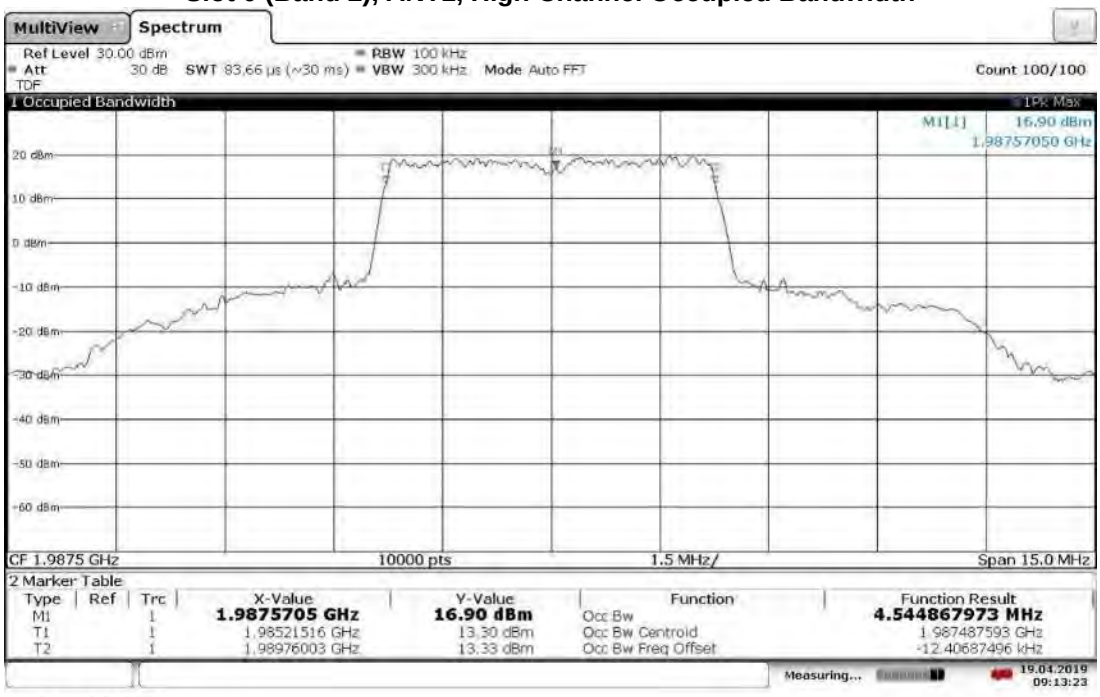
Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



09:16:46 19.04.2019

TM3.1a-256QAM_5 MHz Bandwidth

Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



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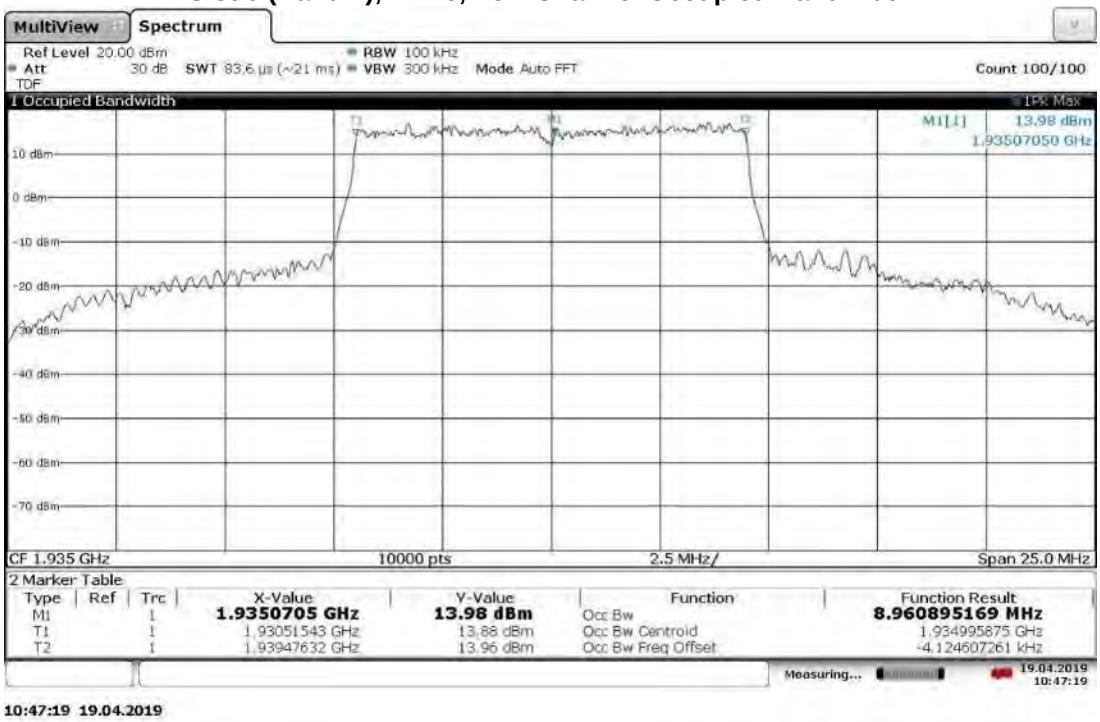
TM3.1a-256QAM_10 MHz Bandwidth

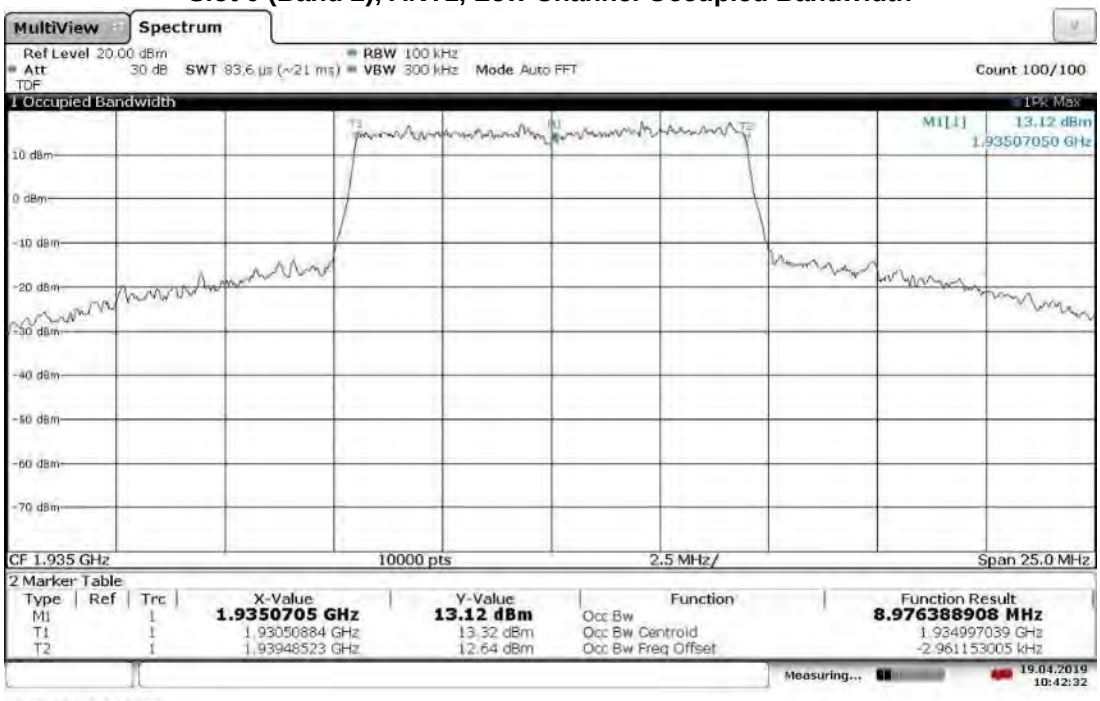
Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



10:47:19 19.04.2019

TM3.1a-256QAM_10 MHz Bandwidth

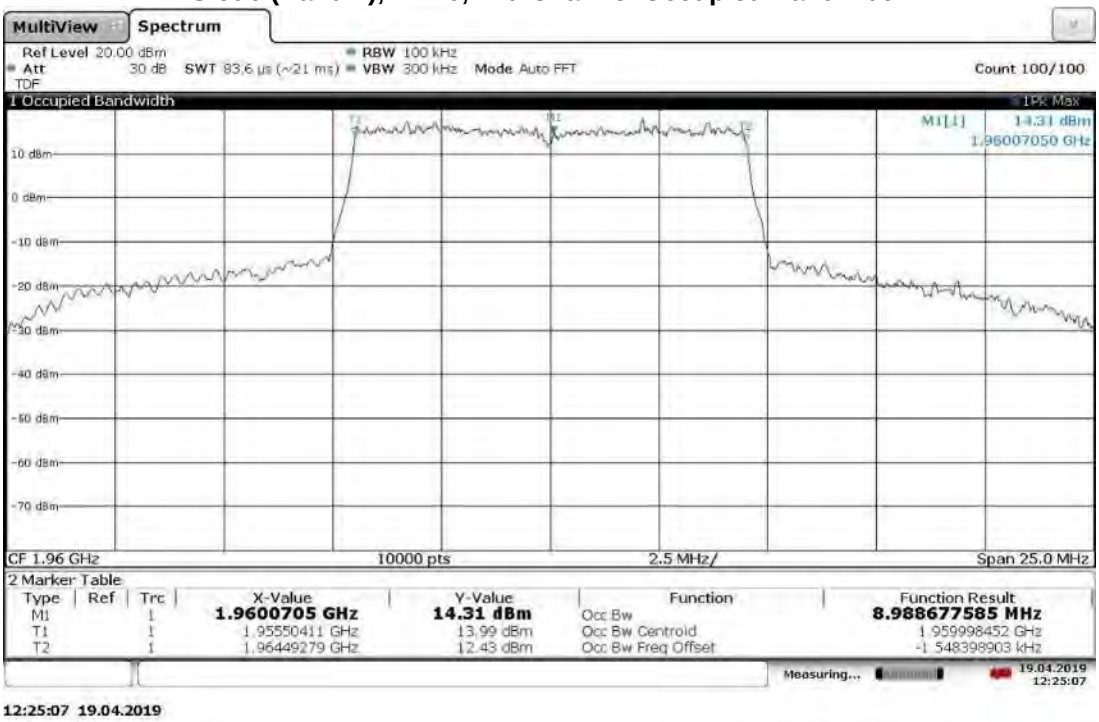
Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



10:42:32 19.04.2019

TM3.1a-256QAM_10 MHz Bandwidth

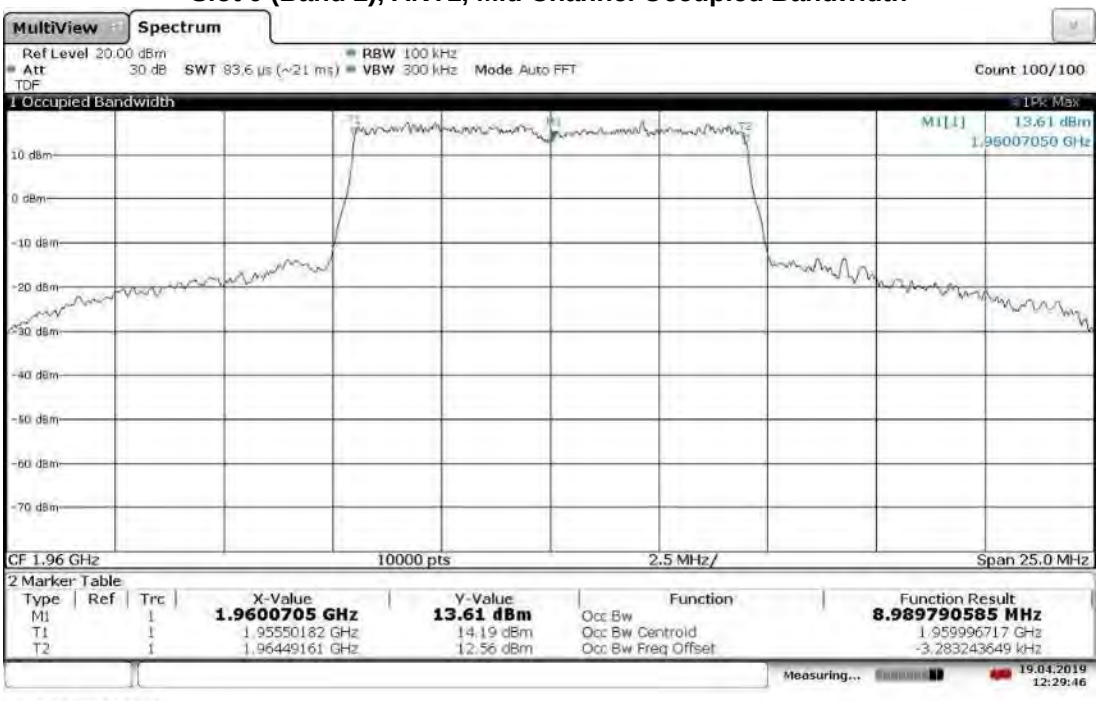
Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



12:25:07 19.04.2019

TM3.1a-256QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



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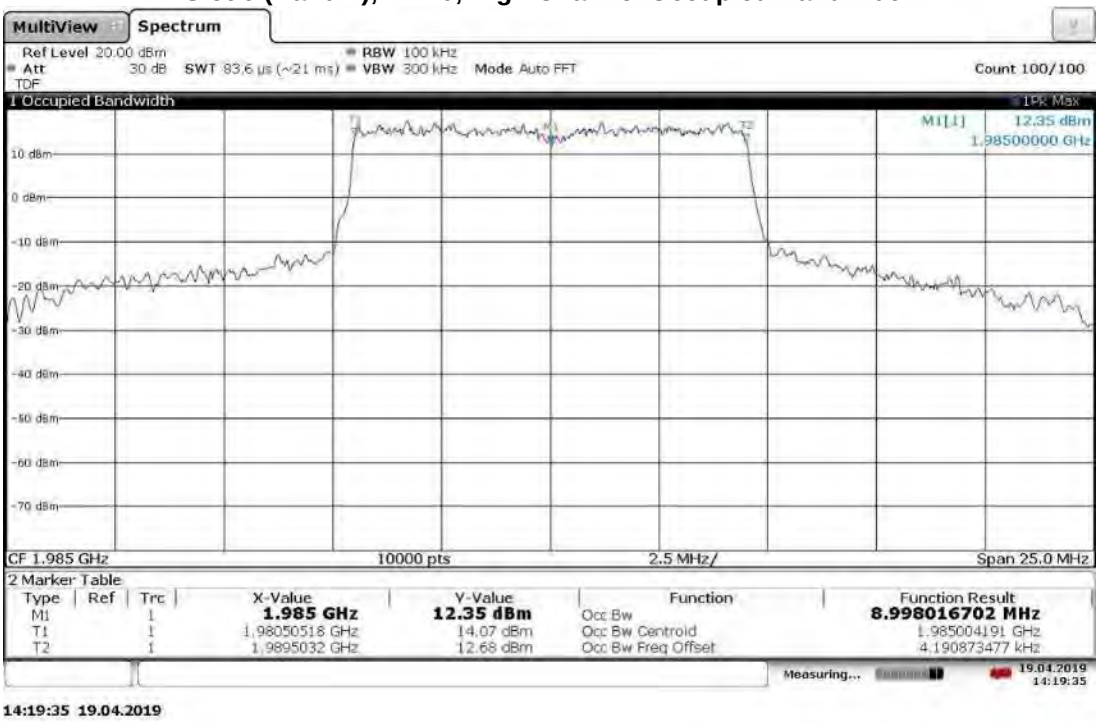
TM3.1a-256QAM_10 MHz Bandwidth

Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



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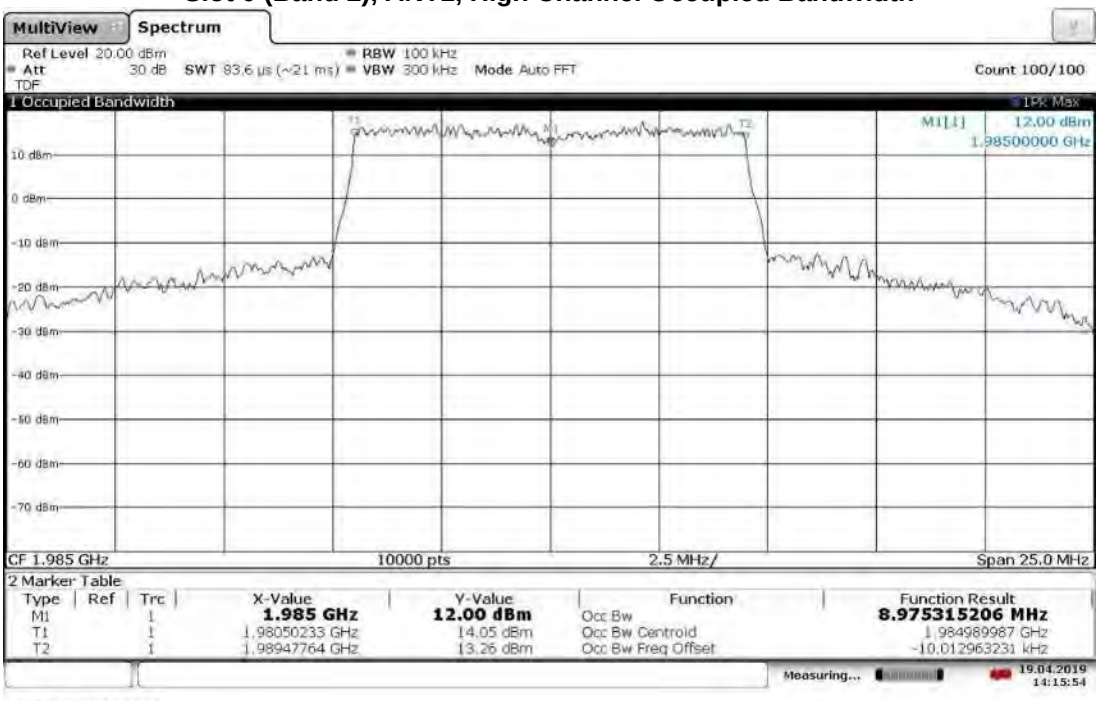
TM3.1a-256QAM_10 MHz Bandwidth

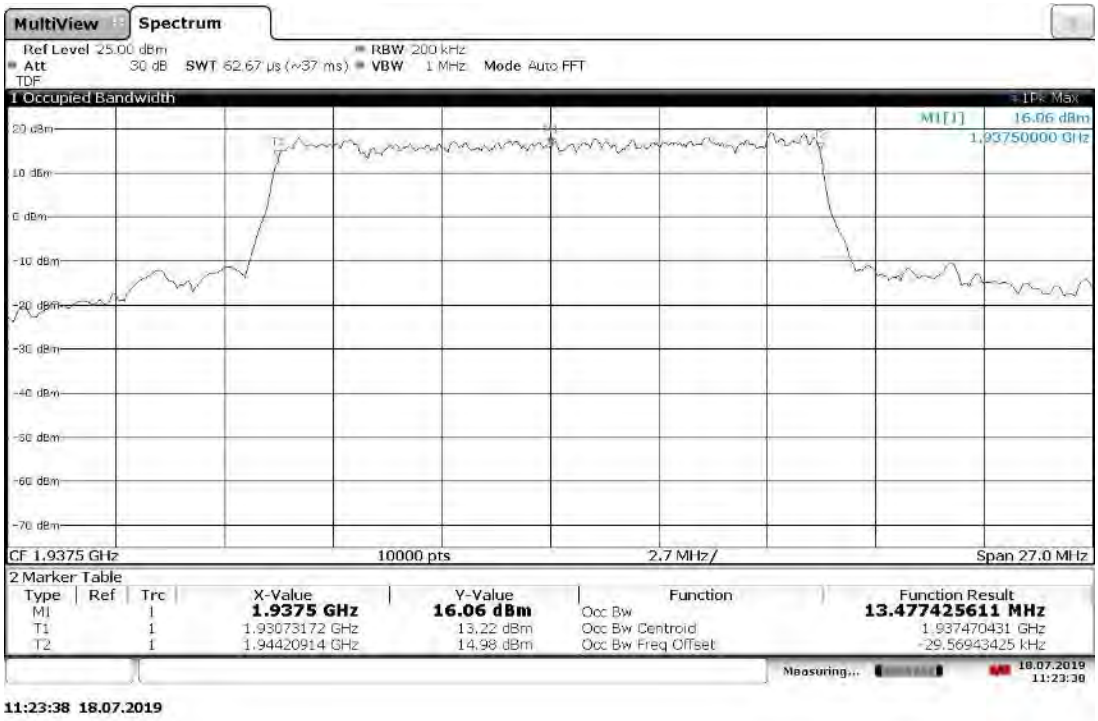
Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



14:15:54 19.04.2019

TM3.1a-256QAM_15 MHz Bandwidth

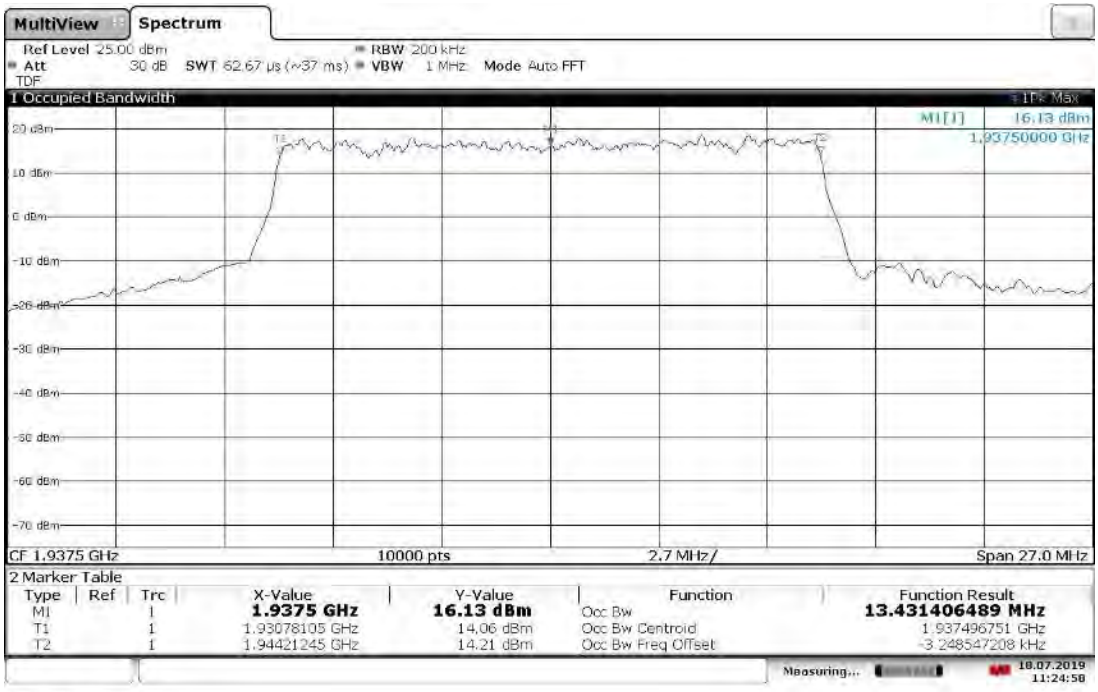
Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



11:23:38 18.07.2019

TM3.1a-256QAM_15 MHz Bandwidth

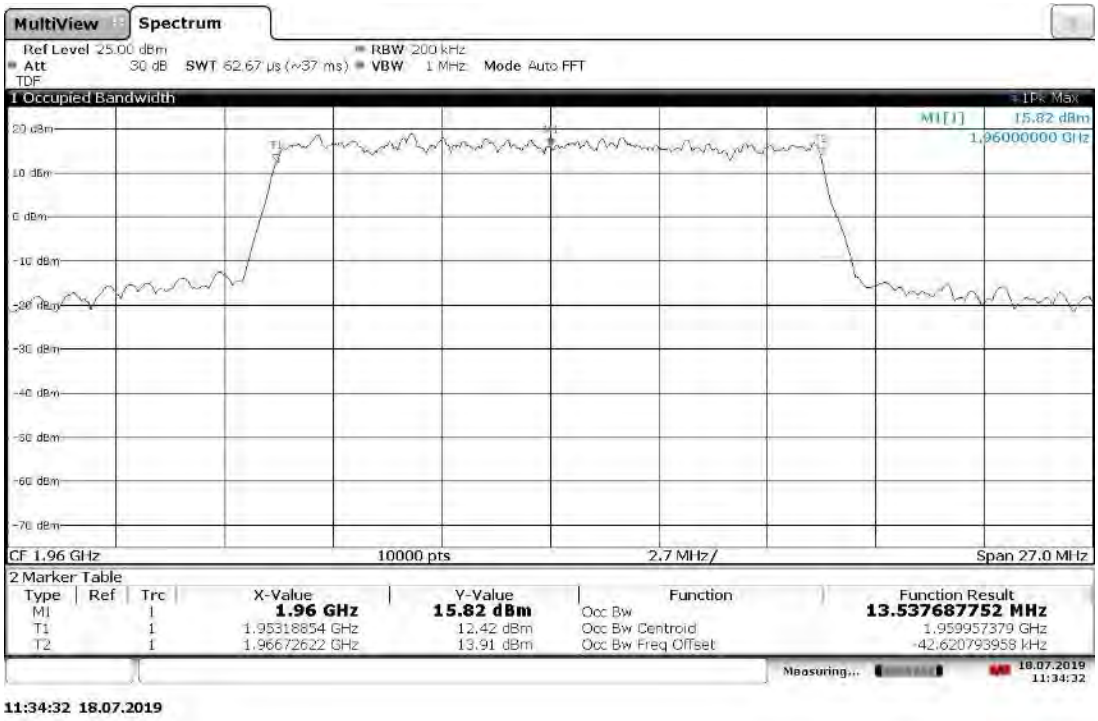
Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



11:24:59 18.07.2019

TM3.1a-256QAM_15 MHz Bandwidth

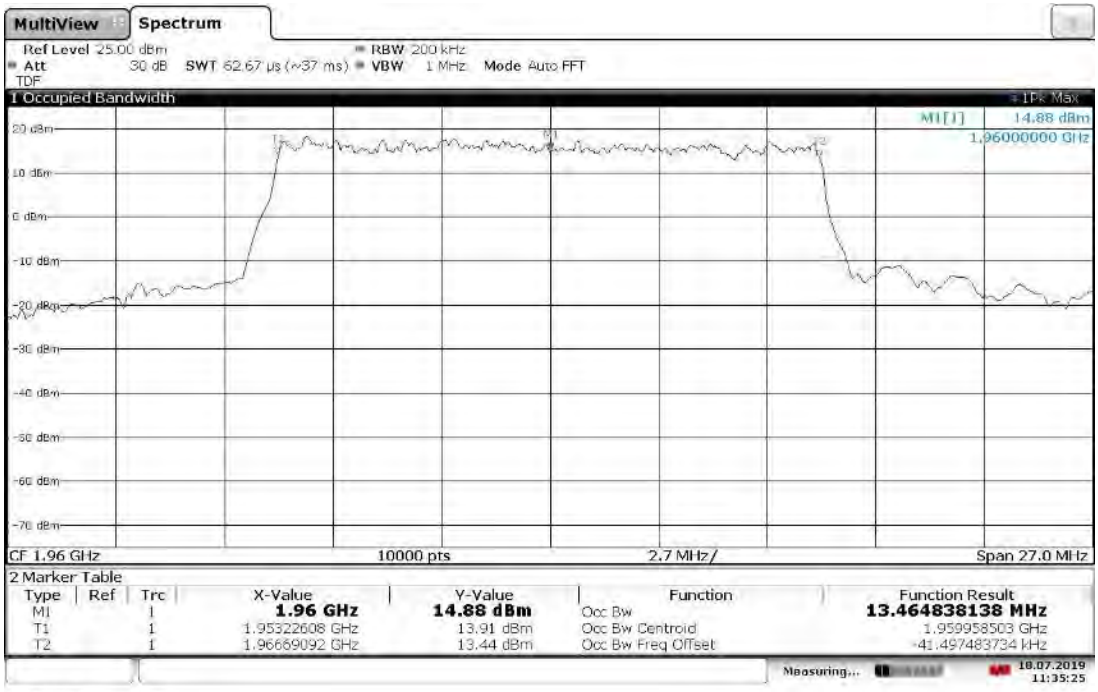
Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



11:34:32 18.07.2019

TM3.1a-256QAM_15 MHz Bandwidth

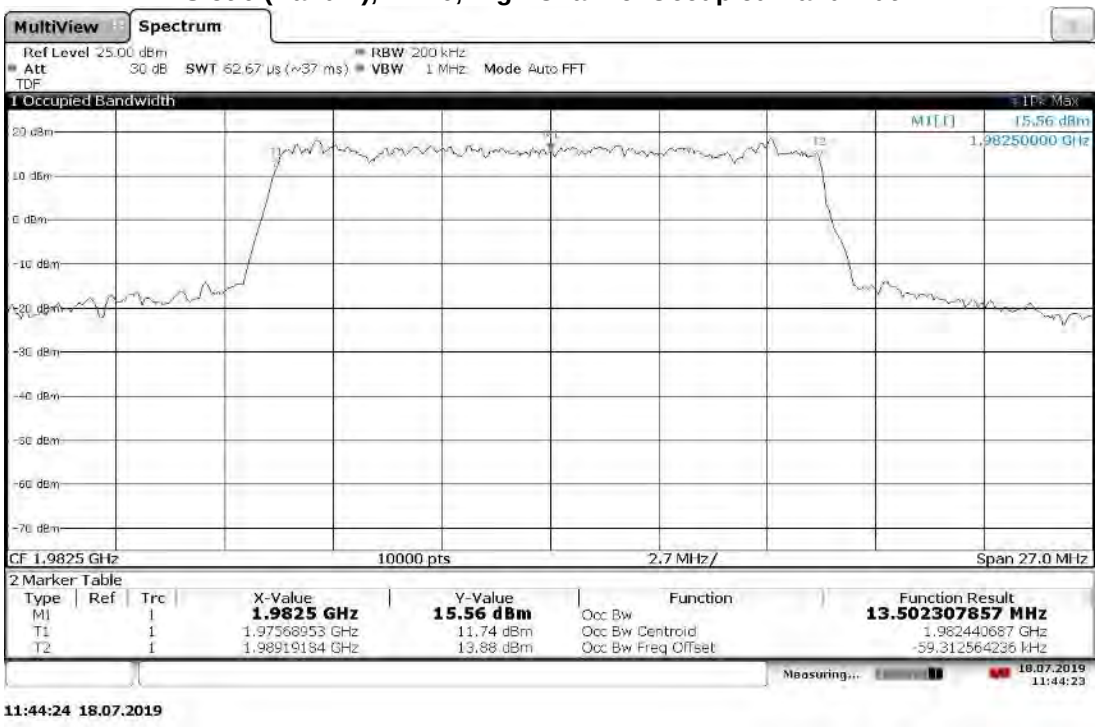
Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



11:35:25 18.07.2019

TM3.1a-256QAM_15 MHz Bandwidth

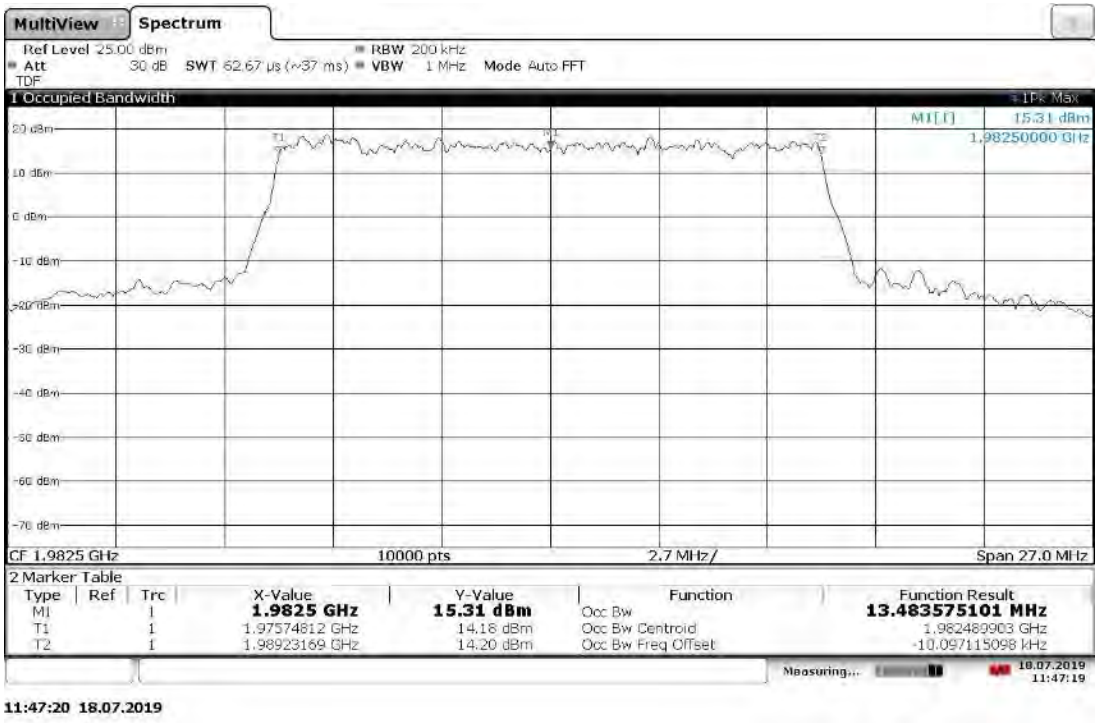
Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



11:44:24 18.07.2019

TM3.1a-256QAM_15 MHz Bandwidth

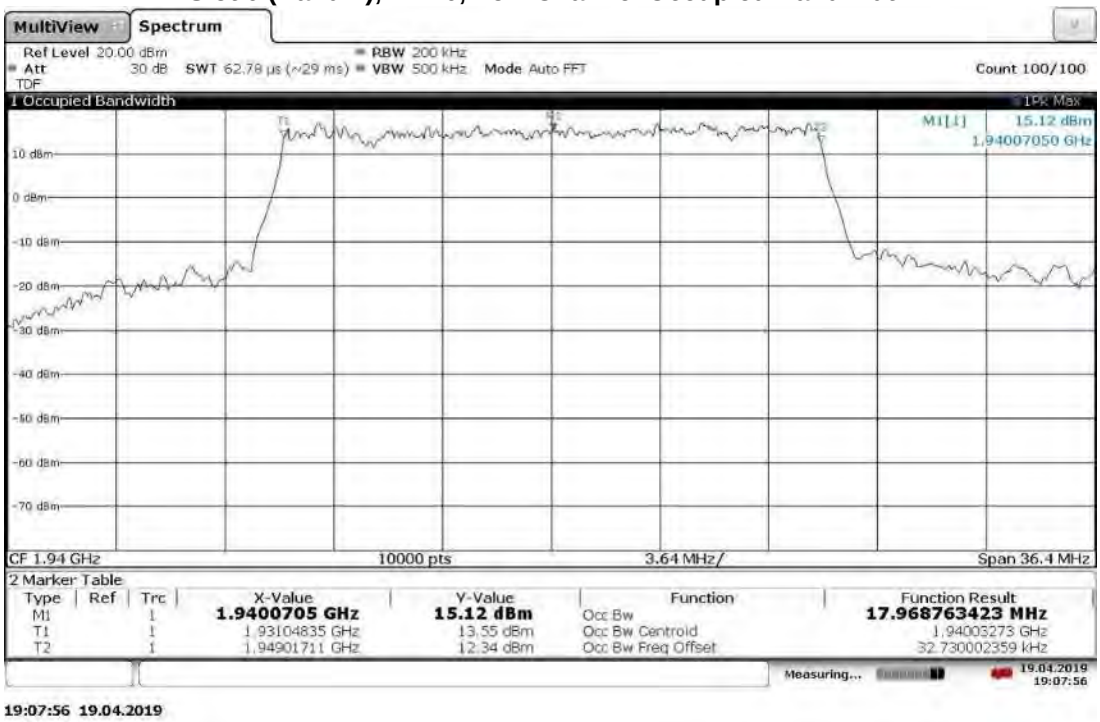
Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



11:47:20 18.07.2019

TM3.1a-256QAM_20 MHz Bandwidth

Slot 0 (Band 2), ANT0, Low Channel Occupied Bandwidth



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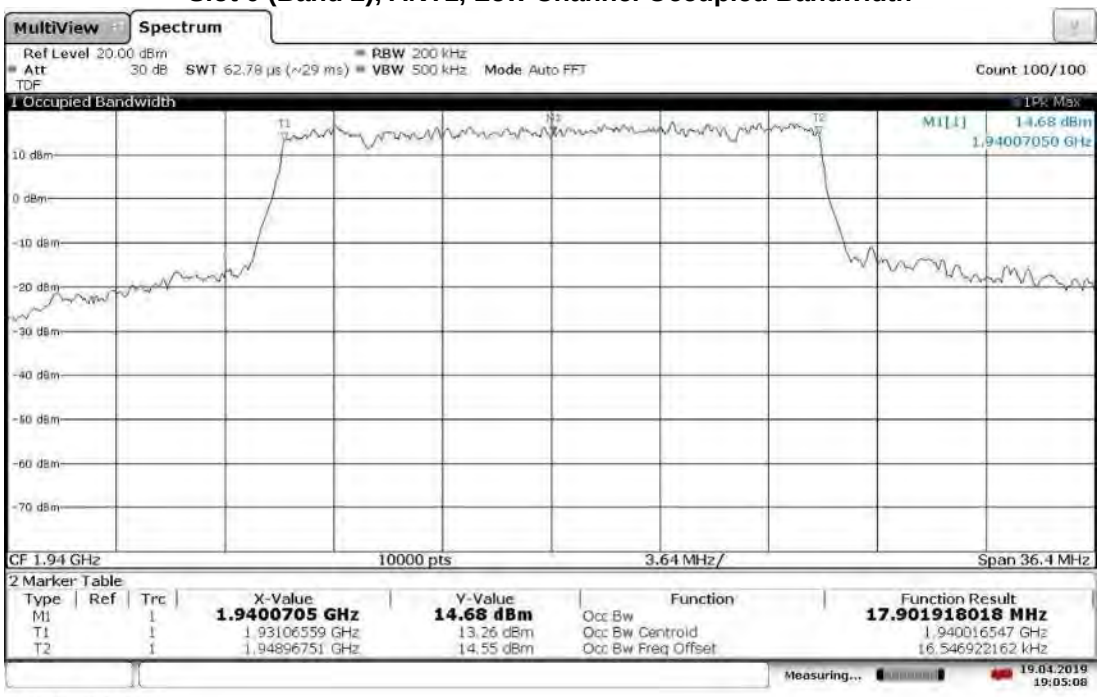
TM3.1a-256QAM_20 MHz Bandwidth

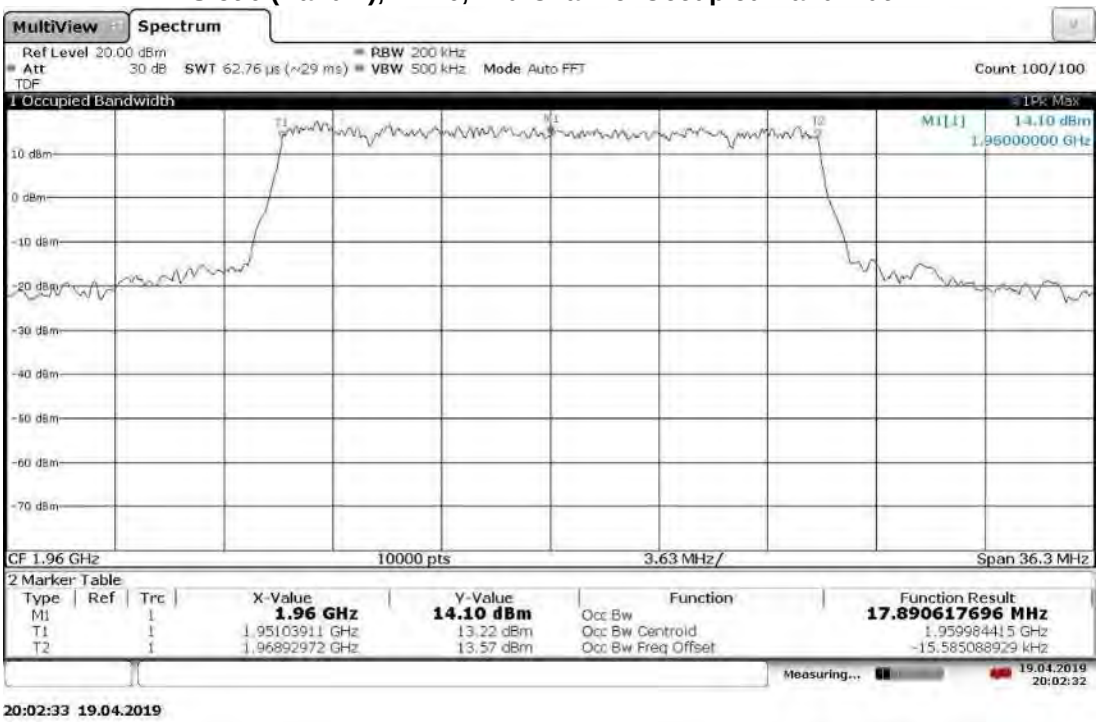
Slot 0 (Band 2), ANT1, Low Channel Occupied Bandwidth



19:05:09 19.04.2019

TM3.1a-256QAM_20 MHz Bandwidth

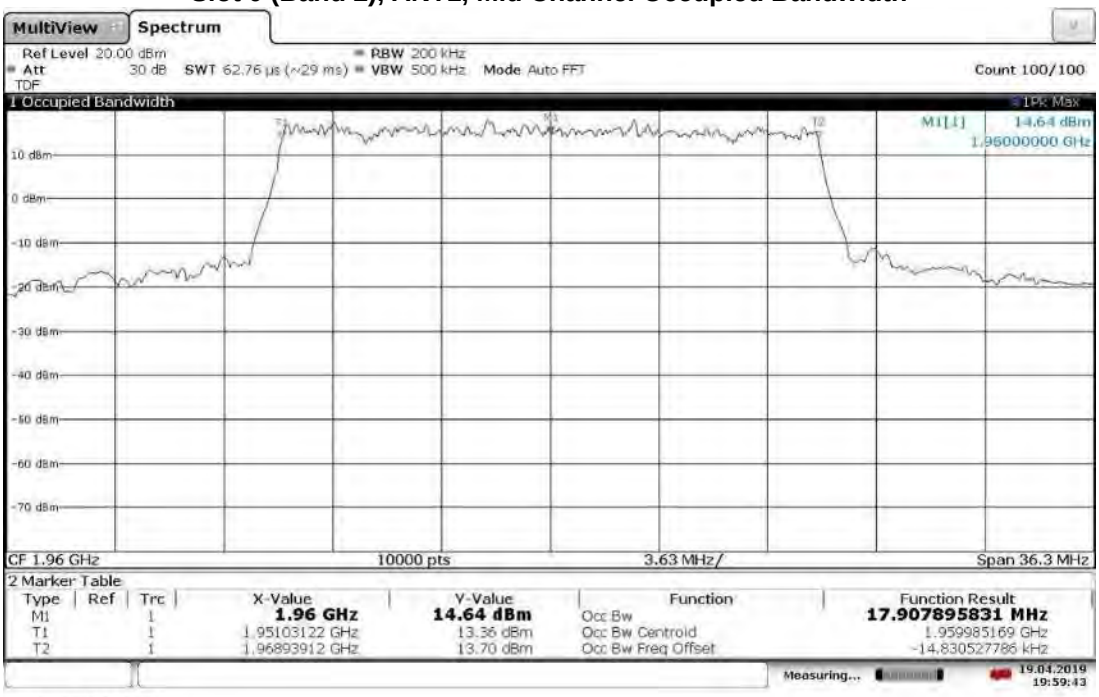
Slot 0 (Band 2), ANT0, Mid Channel Occupied Bandwidth



20:02:33 19.04.2019

TM3.1a-256QAM_20 MHz Bandwidth

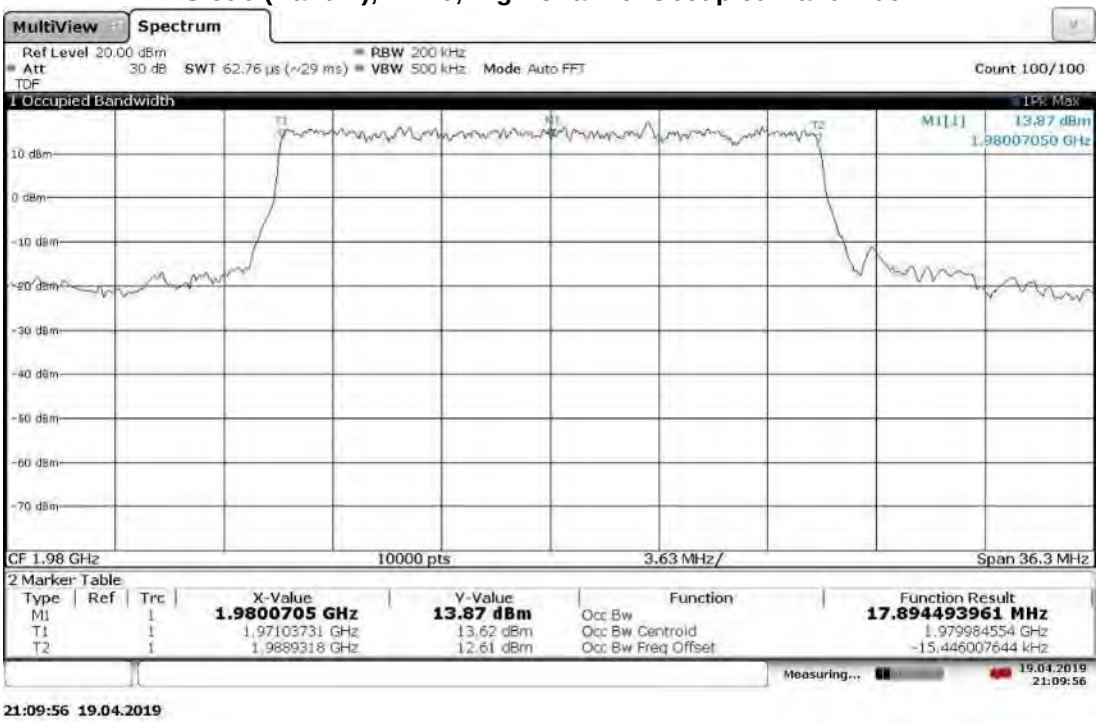
Slot 0 (Band 2), ANT1, Mid Channel Occupied Bandwidth



19:59:44 19.04.2019

TM3.1a-256QAM_20 MHz Bandwidth

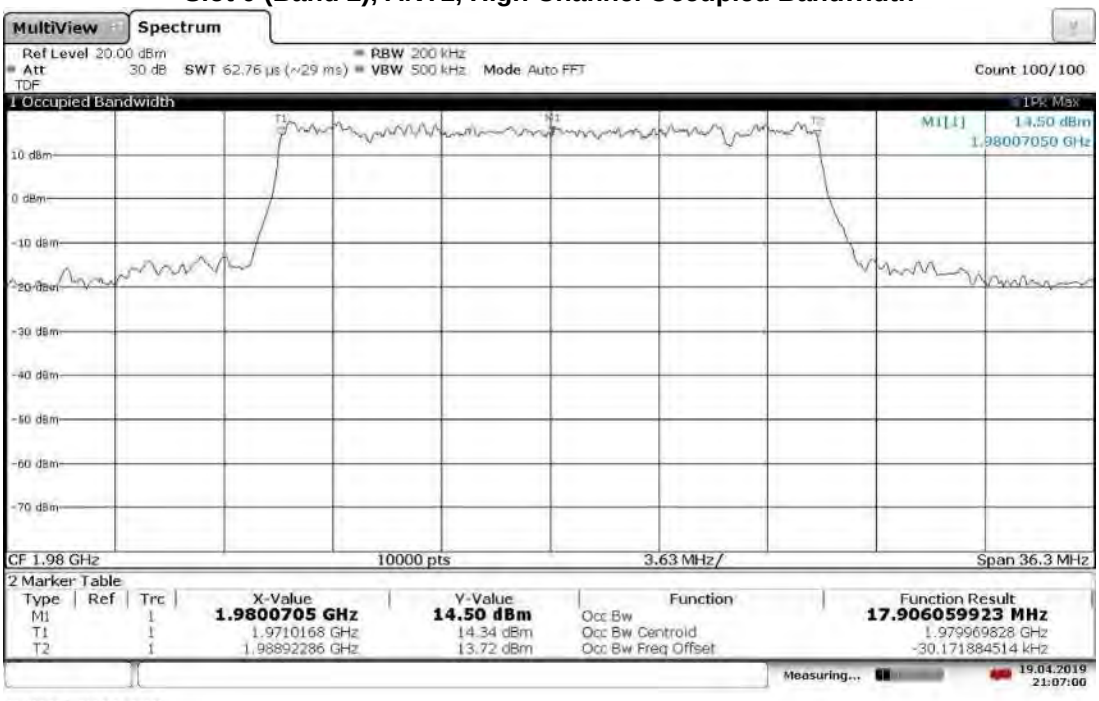
Slot 0 (Band 2), ANT0, High Channel Occupied Bandwidth



21:09:56 19.04.2019

TM3.1a-256QAM_20 MHz Bandwidth

Slot 0 (Band 2), ANT1, High Channel Occupied Bandwidth



21:07:01 19.04.2019

		Test Date:	04/10/2019, 04/11/2019, 04/12/2019, 04/15/2019, 04/16/2019, 04/17/2019, 04/18/2019, 04/19/2019, 04/26/2019, 04/30/2019, 07/18/2019
Test Personnel:	Kouma Sinn KPS		
Supervising/Reviewing Engineer: (Where Applicable)	N/A		
Product Standard:	FCC Part 24	Limit Applied:	See report section 7.3
Input Voltage:	48 VDC (POE)		
		Ambient Temperature:	22, 23, 23, 23, 23, 22, 22, 22, 20, 22, 22 ºC
Pretest Verification w/ Ambient Signals or BB Source:	N/A	Relative Humidity:	21, 15, 26, 47, 20, 22, 23, 47, 42, 35, 64 %
		Atmospheric Pressure:	1004, 1013, 1004, 980, 1001, 1011, 1014, 1000, 996, 1017, 1007 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	02/01/2019	02/01/2020
CBLHF2012-2M-1'	2m 9kHz-40GHz Coaxial Cable - SET1	Huber & Suhner	SF102	252675001	02/01/2019	02/01/2020
ROS005-1'	Signal and Spectrum Analyzer	Rohde &Schwarz	FSW43	100646	10/15/2018	10/15/2019
DS40'	Temp, humidity, pressure gauge	Digi Sense	68000-49	181717625	11/06/2018	11/06/2019

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.

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1932.50	ANT0	-17.83
		ANT1	-17.93
High	1987.50	ANT0	-14.72
		ANT1	-13.89

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1935.00	ANT0	-17.55
		ANT1	-17.16
High	1985.00	ANT0	-15.85
		ANT1	-14.98

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1937.50	ANT0	-19.16
		ANT1	-18.49
High	1982.50	ANT0	-17.49
		ANT1	-16.99

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1940	ANT0	20.74
		ANT1	-21.22
High	1980	ANT0	-20.67
		ANT1	-19.23

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1932.50	ANT0	-13.48
		ANT1	-13.41
High	1987.50	ANT0	-13.47
		ANT1	-14.24

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1935.00	ANT0	-15.47
		ANT1	-15.02
High	1985.00	ANT0	-13.79
		ANT1	-13.99

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1937.50	ANT0	-18.04
		ANT1	-15.98
High	1982.50	ANT0	-16.38
		ANT1	-15.04

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1940.00	ANT0	-19.92
		ANT1	-20.30
High	1980.00	ANT0	-19.03
		ANT1	-18.53

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1932.50	ANT0	-14.22
		ANT1	-13.27
High	1987.50	ANT0	-15.08
		ANT1	-14.07

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1935.00	ANT0	-17.99
		ANT1	-17.45
High	1985.00	ANT0	-15.63
		ANT1	-14.85

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1937.50	ANT0	-21.79
		ANT1	-17.85
High	1982.50	ANT0	-17.98
		ANT1	-16.72

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1940.00	ANT0	-22.19
		ANT1	-21.59
High	1980.00	ANT0	-19.18
		ANT1	-18.36

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1932.50	ANT0	-14.05
		ANT1	-13.79
High	1987.50	ANT0	-13.35
		ANT1	-13.98

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1935.00	ANT0	-17.92
		ANT1	-17.44
High	1985.00	ANT0	-15.80
		ANT1	-16.80

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

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1937.00	ANT0	-21.22
		ANT1	-20.22
High	1982.50	ANT0	-19.54
		ANT1	-18.73

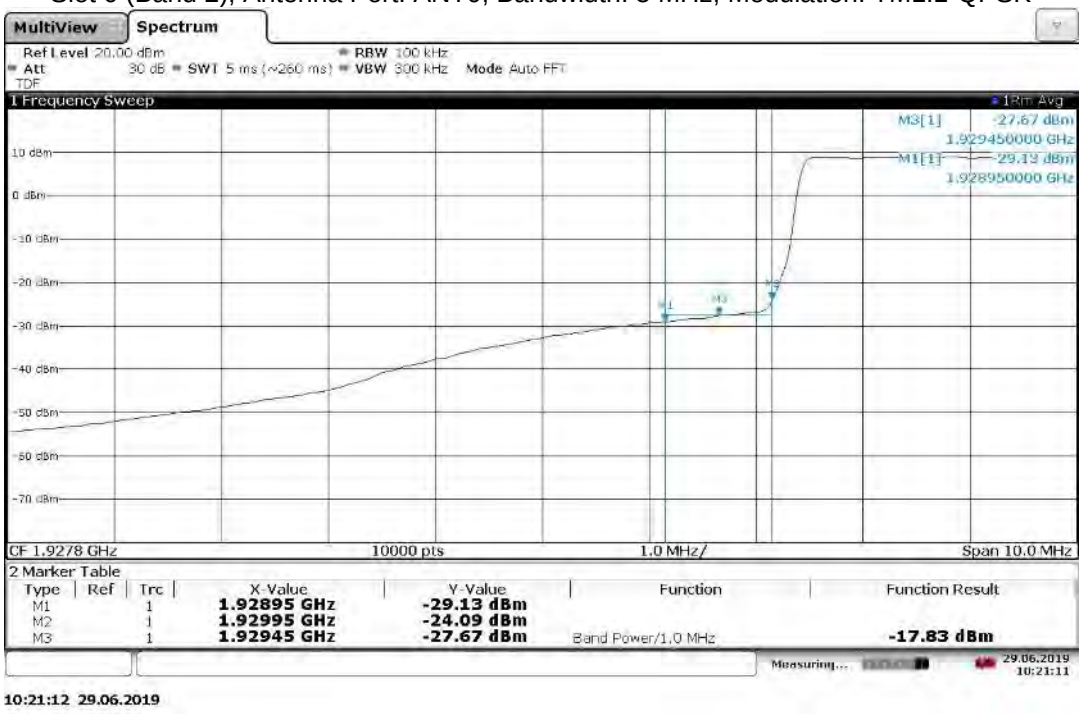
Slot 0 (Band 2), Bandwidth: 20 MHz, Modulation: TM3.1a-256QAM

Band Edge	Frequency (MHz)	Antenna Port	Reading (dBm)
Low	1940.50	ANT0	-22.15
		ANT1	-21.43
High	1980.00	ANT0	-19.03
		ANT1	-18.14

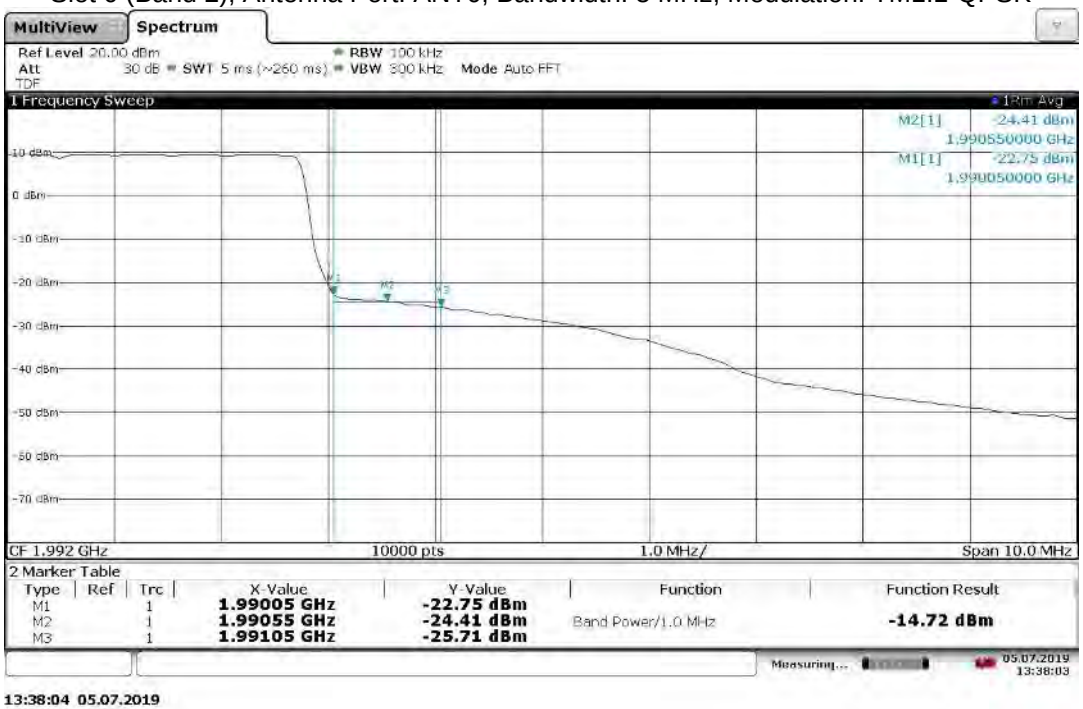
9.4 Setup Photograph:

9.5 Plots/Data:

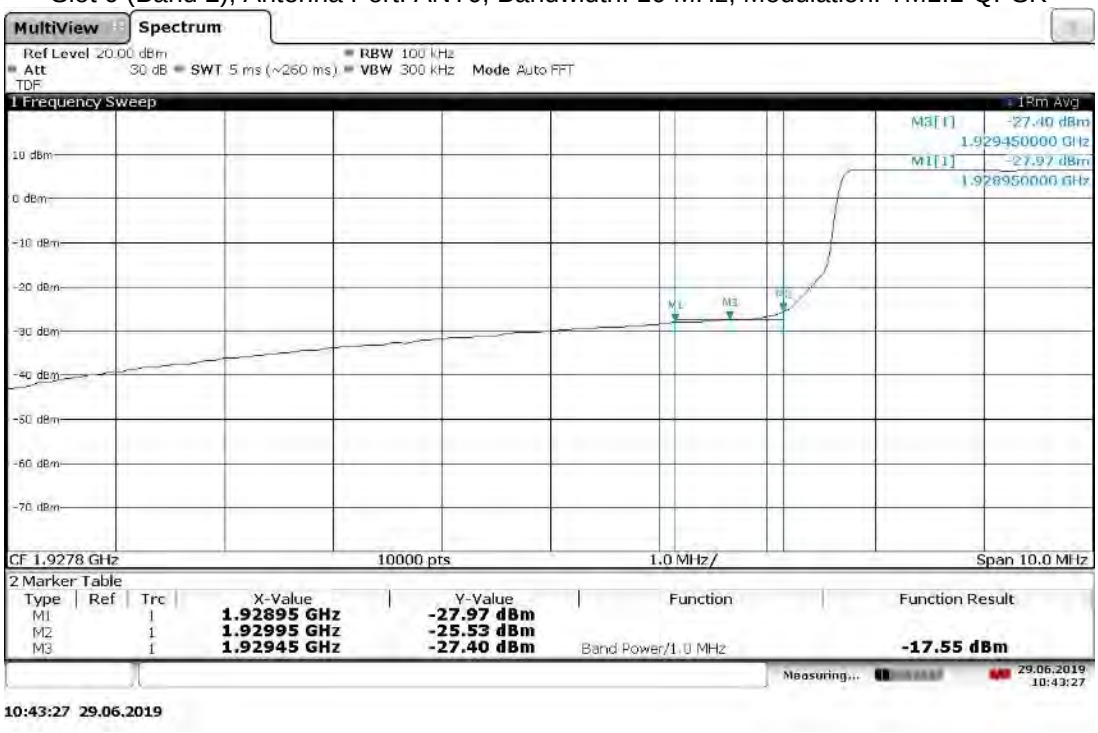
Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM1.1-QPSK



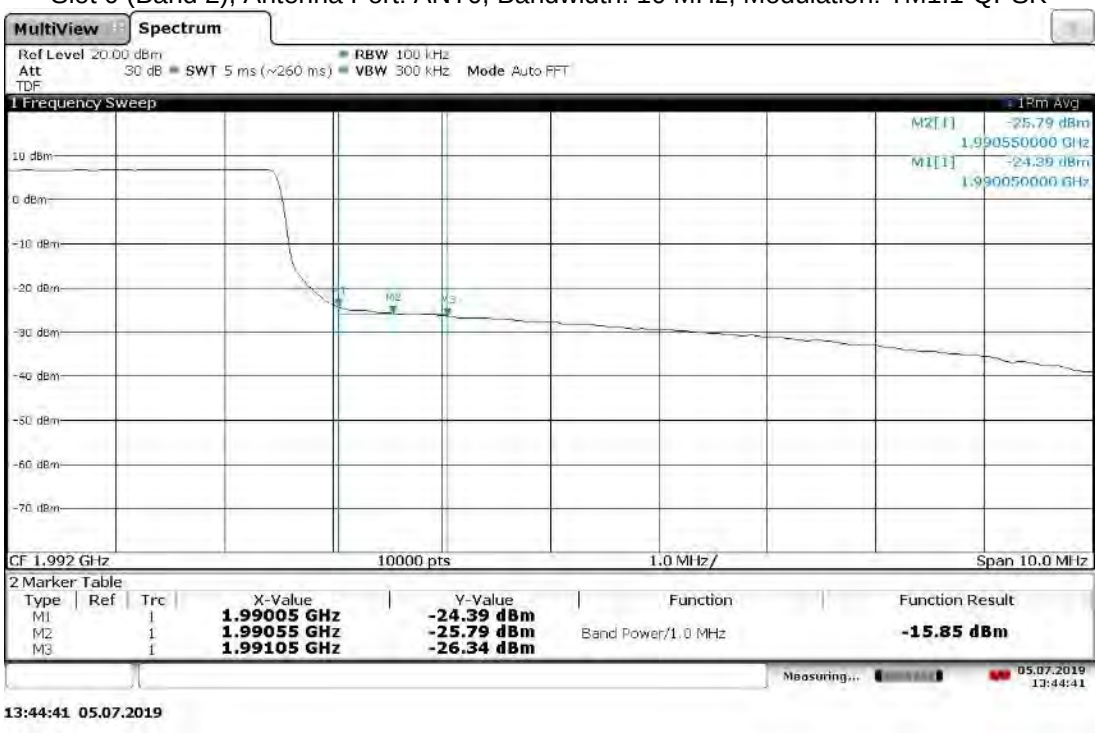
Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM1.1-QPSK



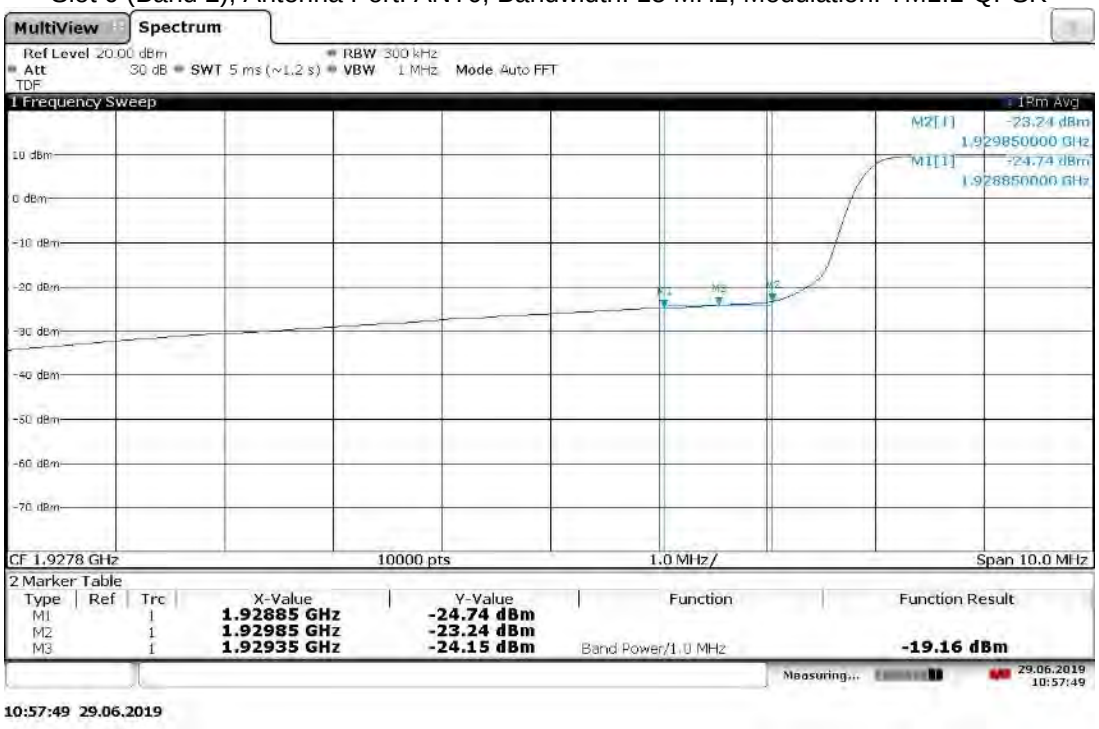
Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM1.1-QPSK



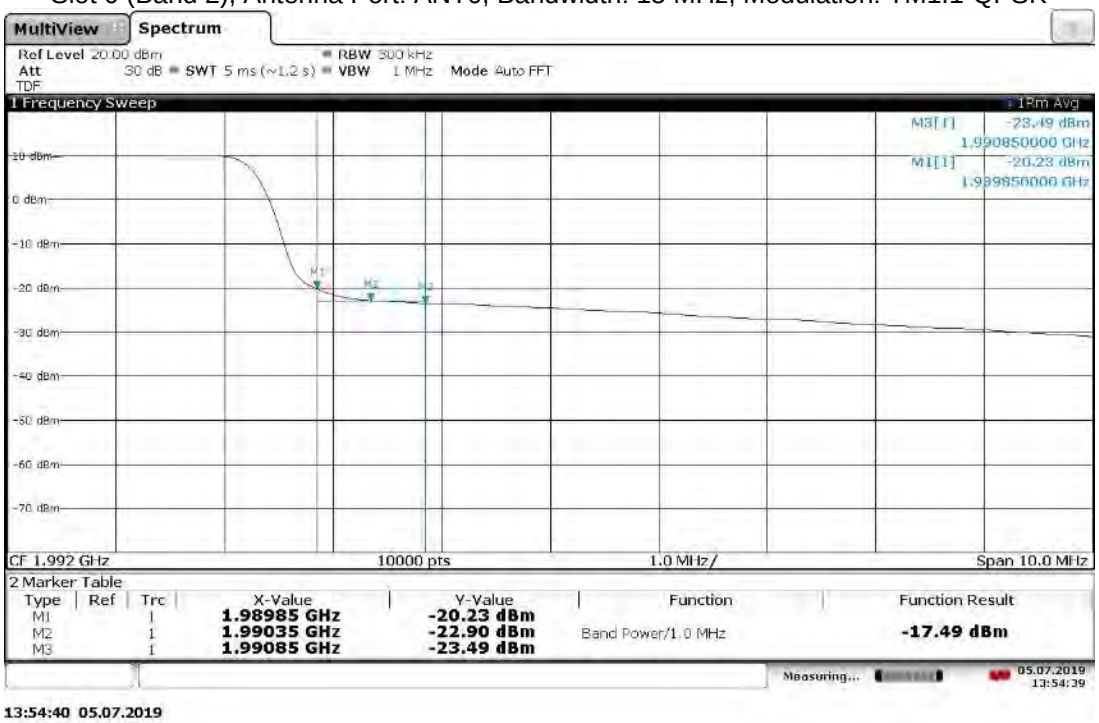
Band Edge Compliant, Upper Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM1.1-QPSK



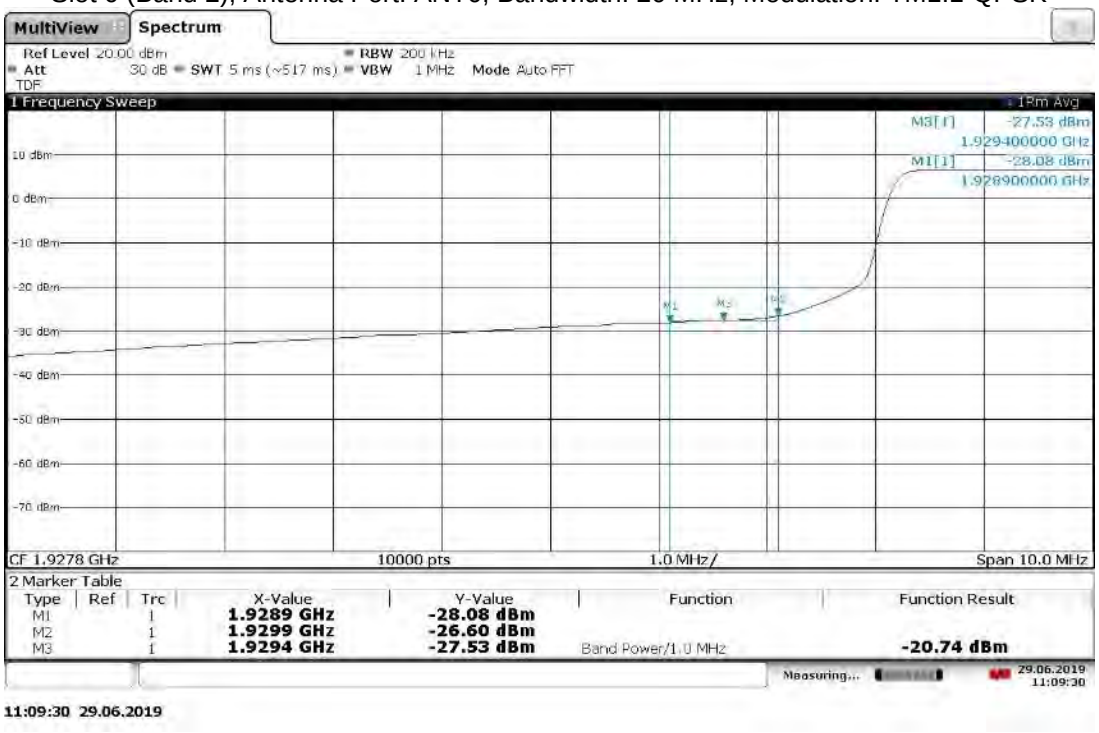
Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM1.1-QPSK



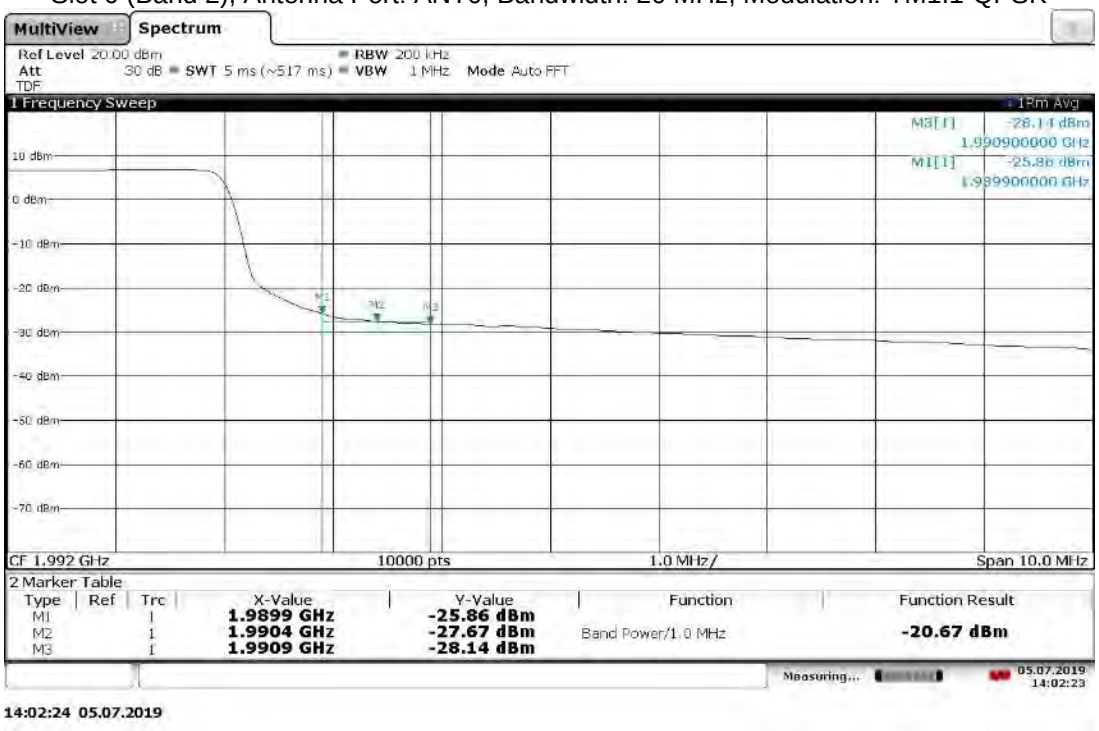
Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM1.1-QPSK



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

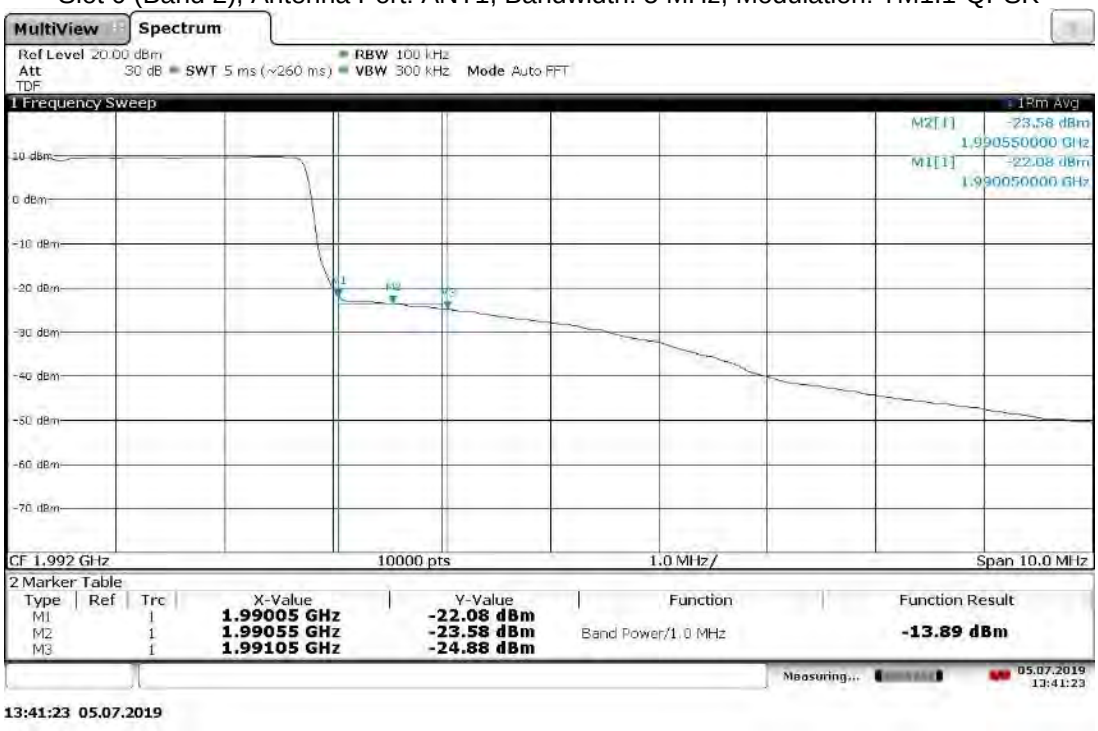


Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM1.1-QPSK

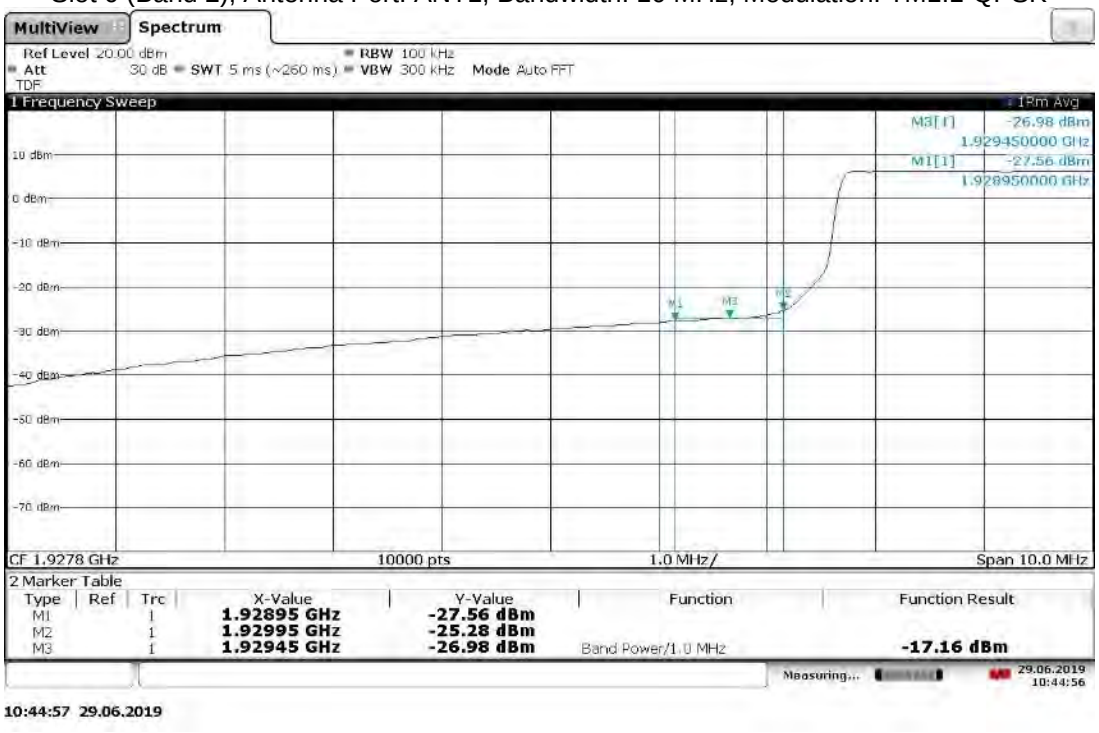


Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM1.1-QPSK

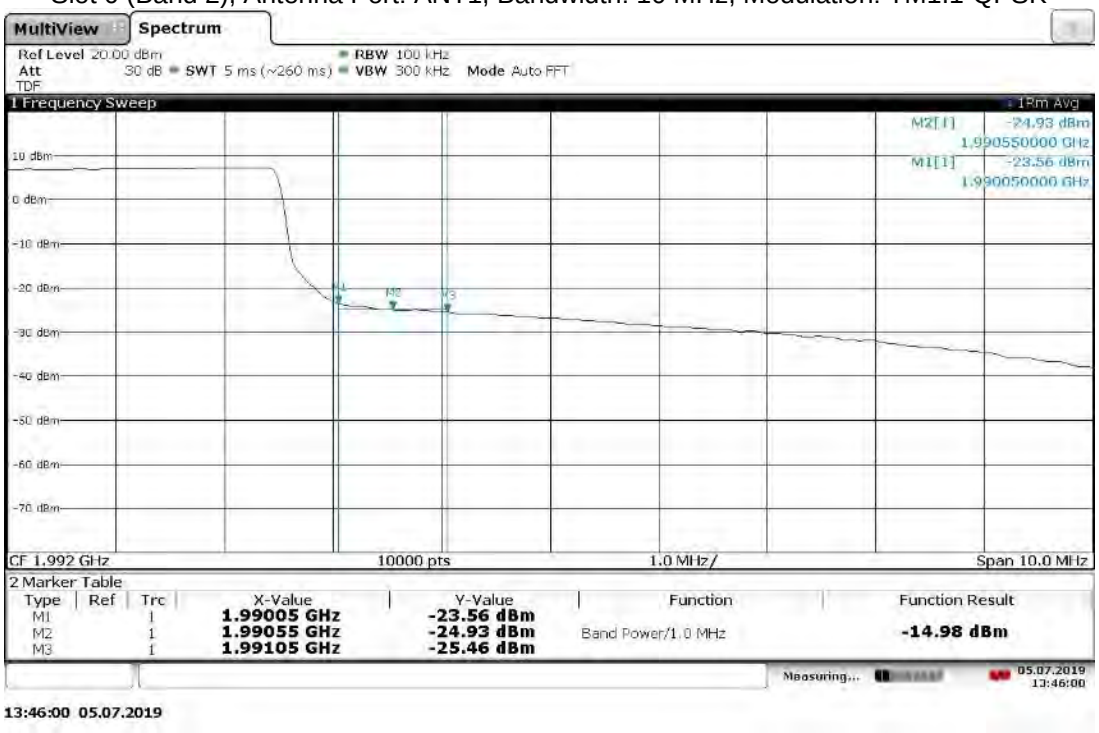
Band Edge Compliant, Lower Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM1.1-QPSK



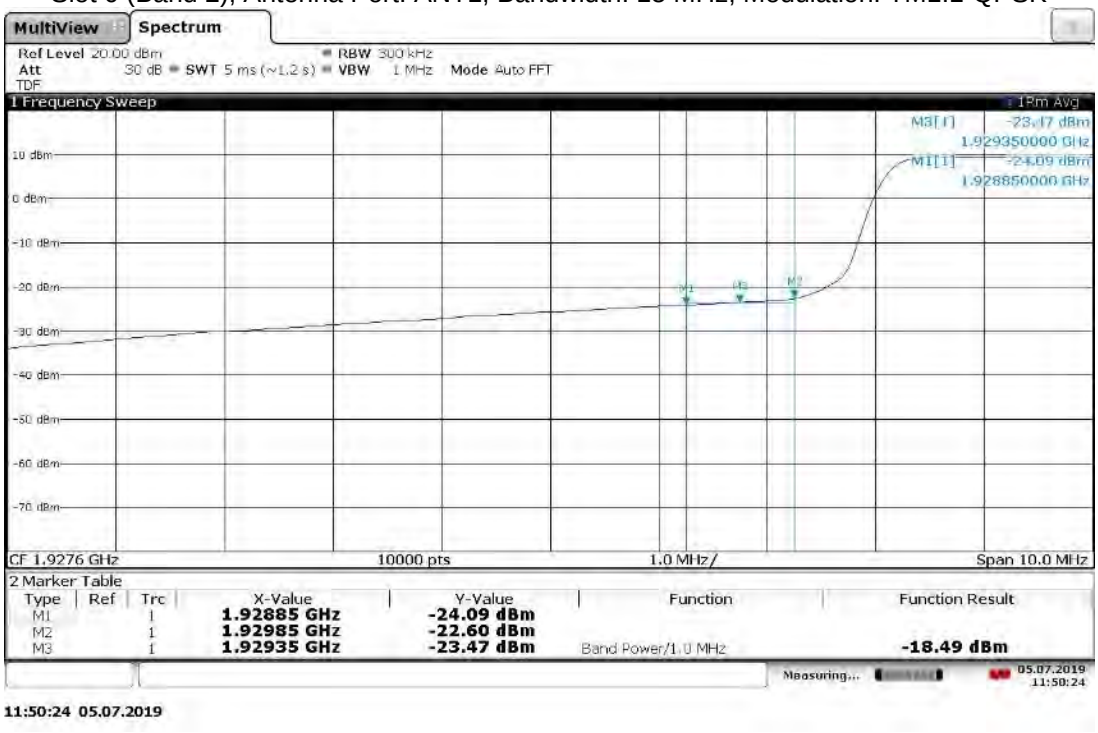
Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM1.1-QPSK



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

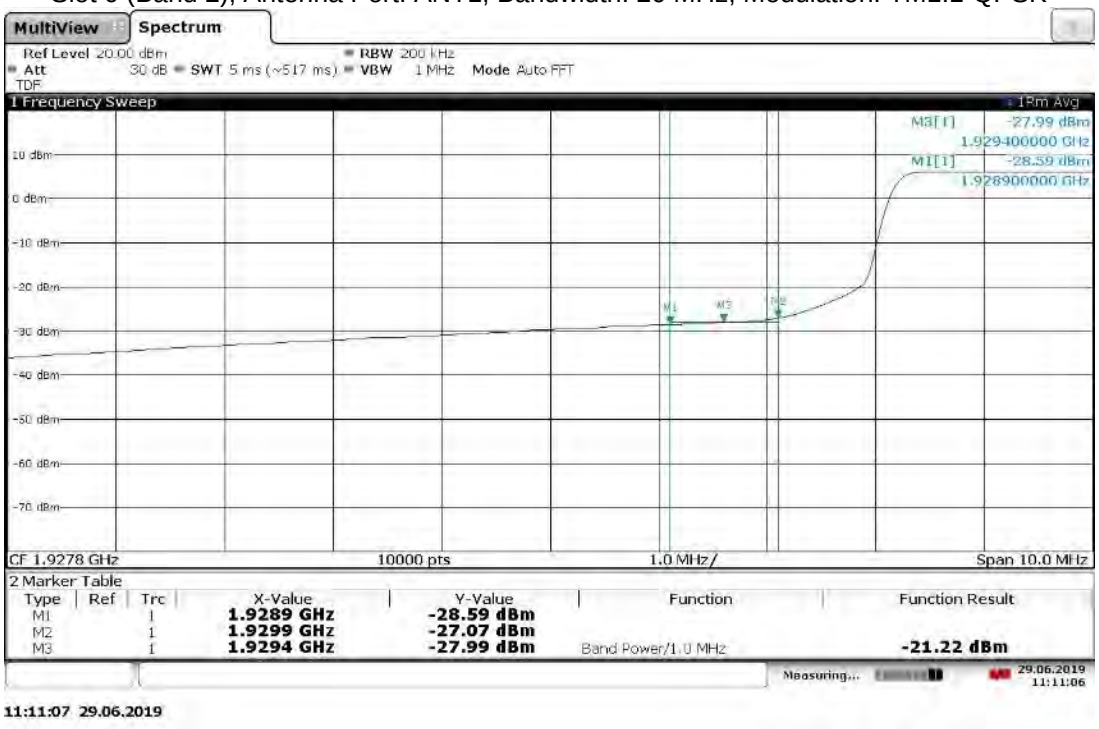


Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM1.1-QPSK

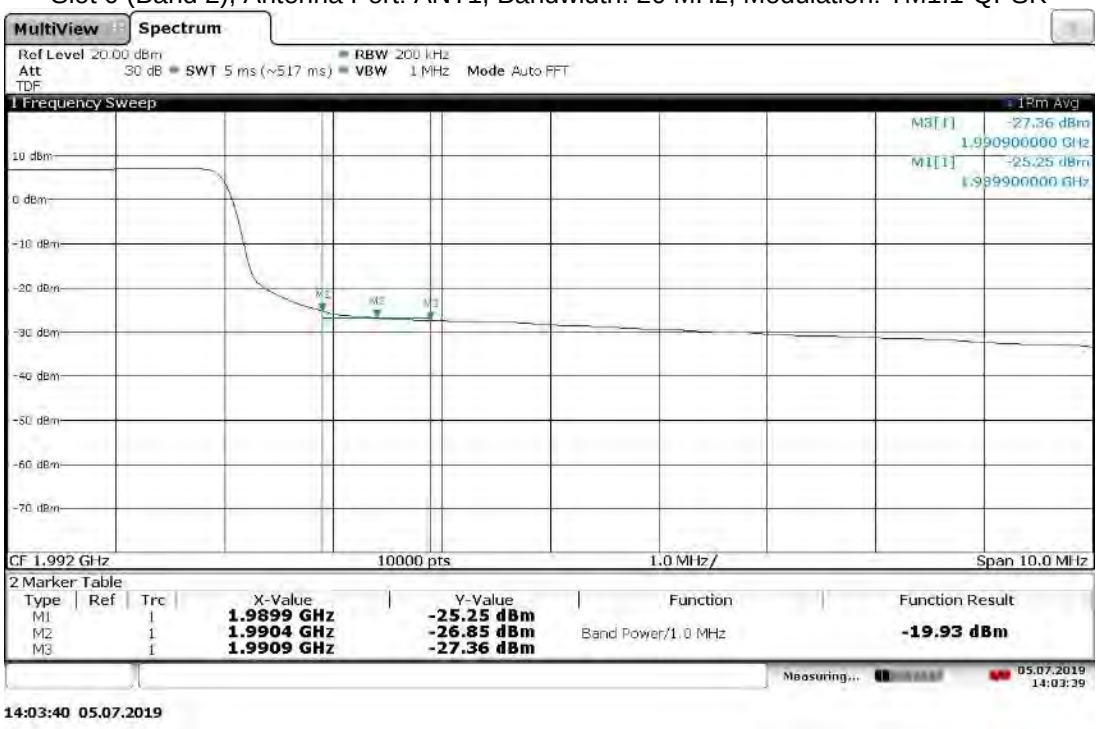


Band Edge Compliant, Lower Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM1.1-QPSK

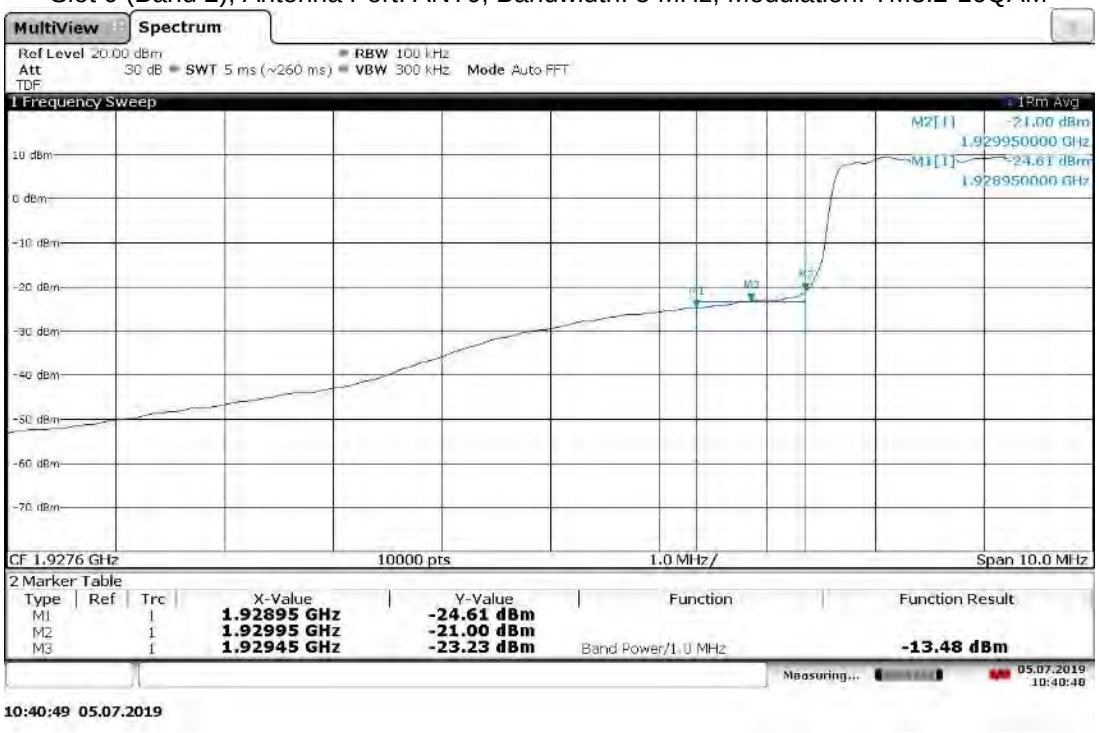
Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM1.1-QPSK



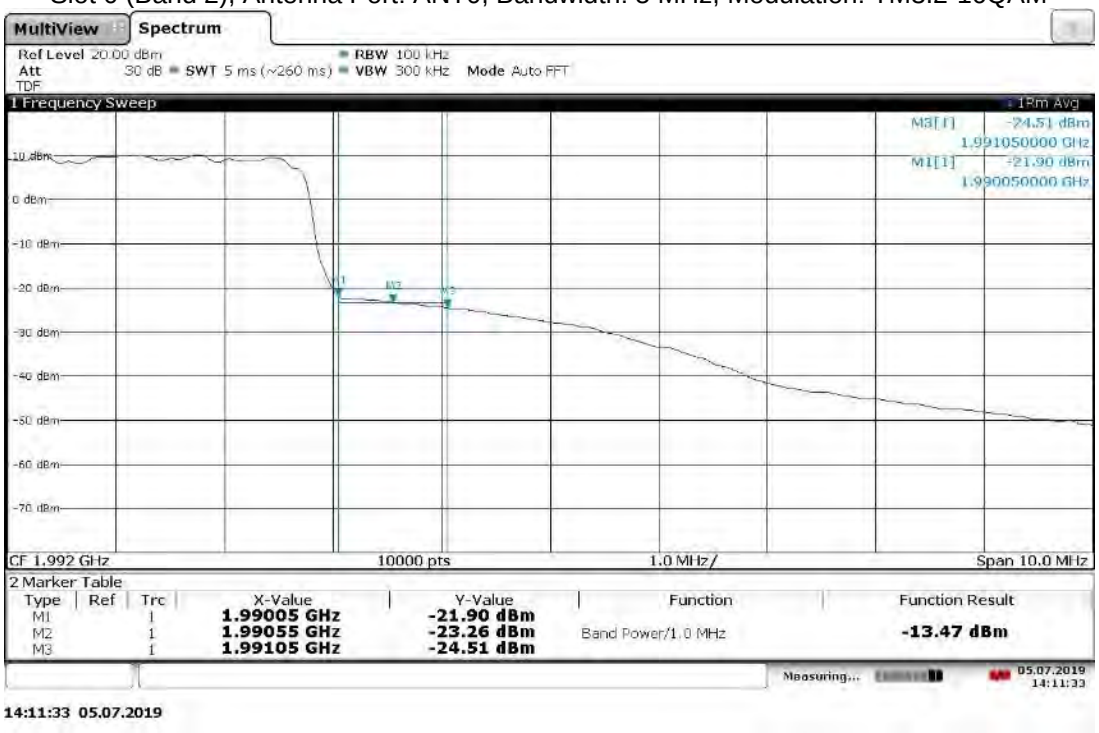
Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM1.1-QPSK



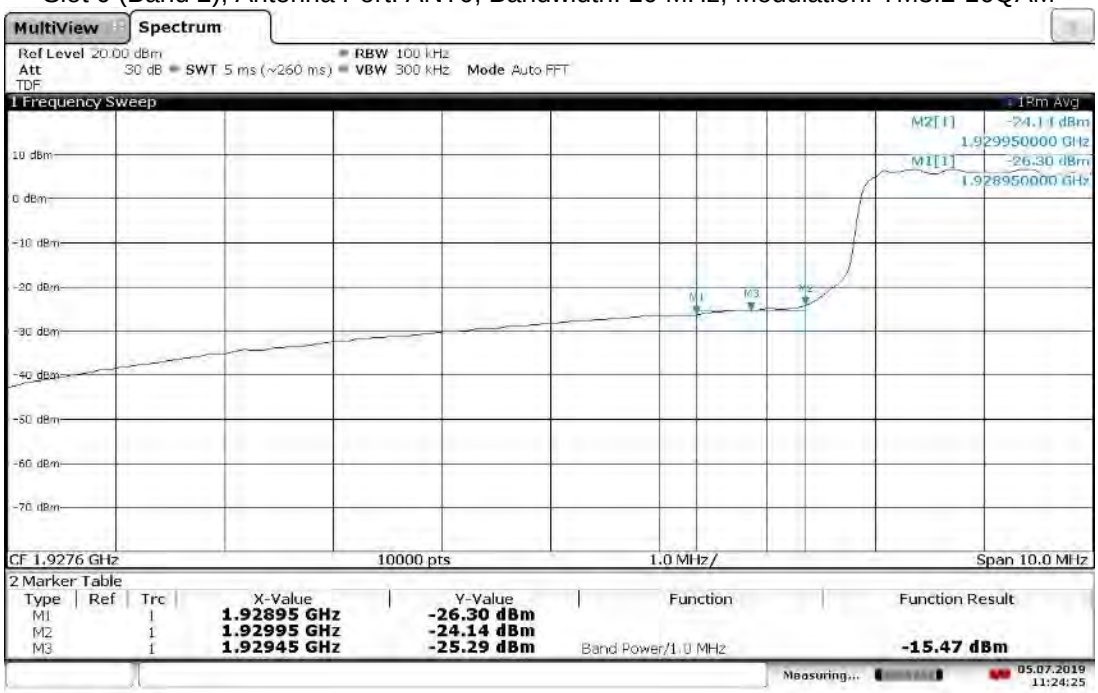
Band Edge Compliant, Lower Band Edge, 1932.5MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.2-16QAM



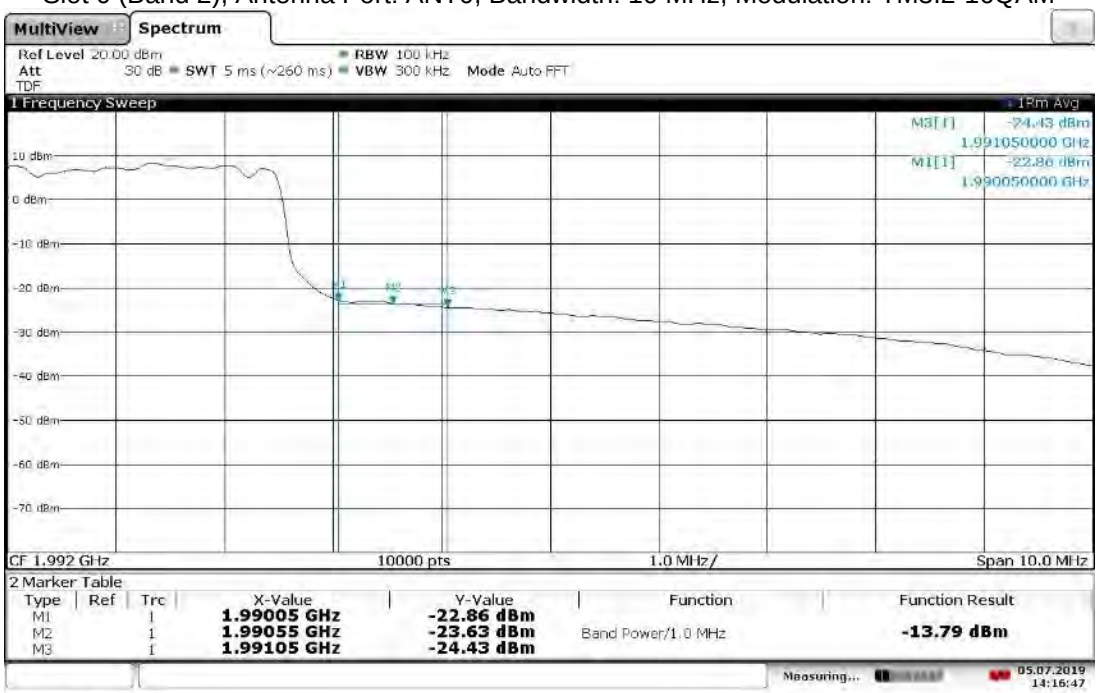
Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.2-16QAM



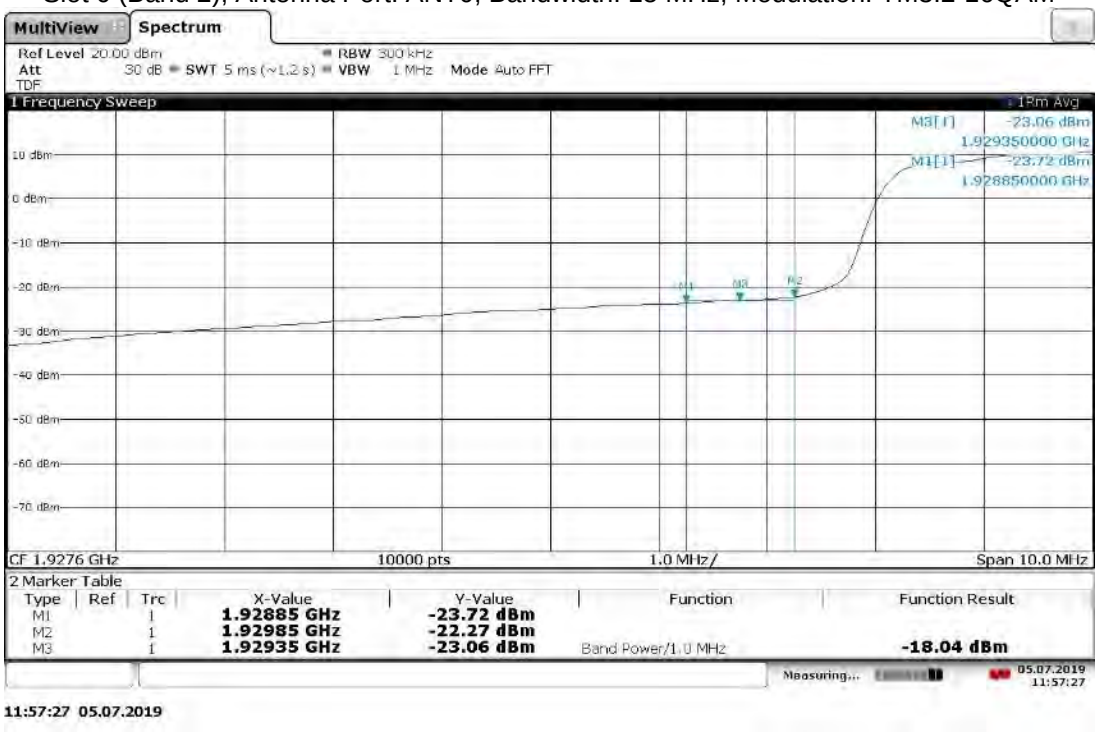
Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.2-16QAM



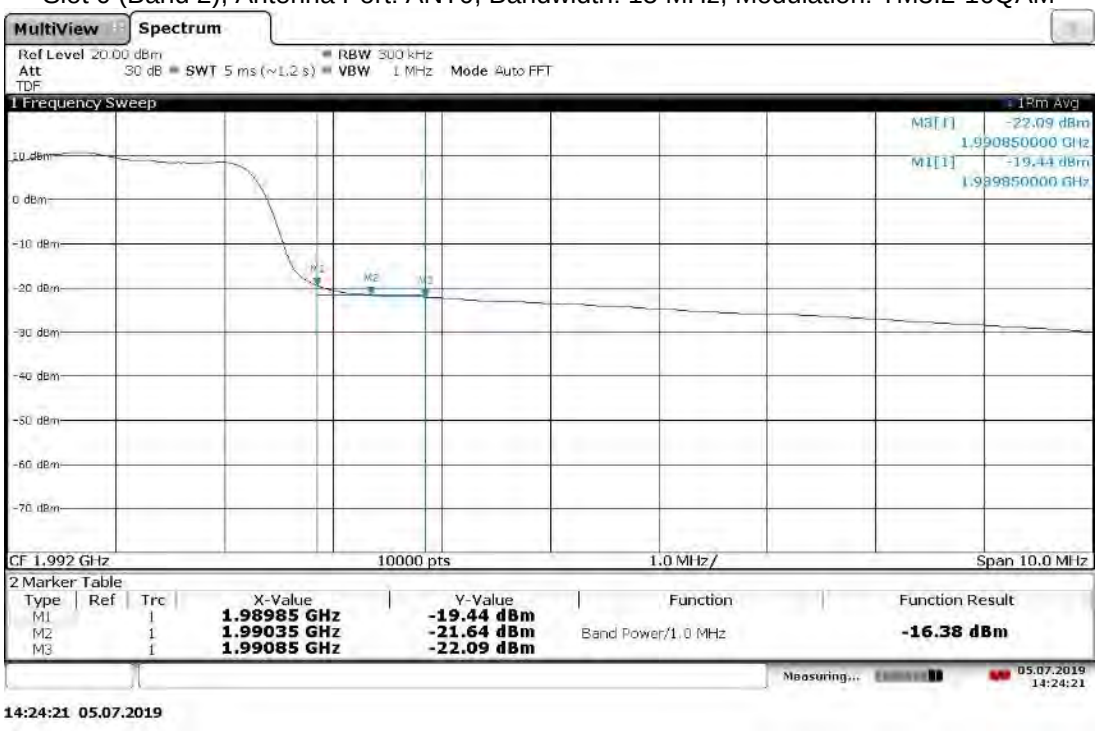
Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.2-16QAM



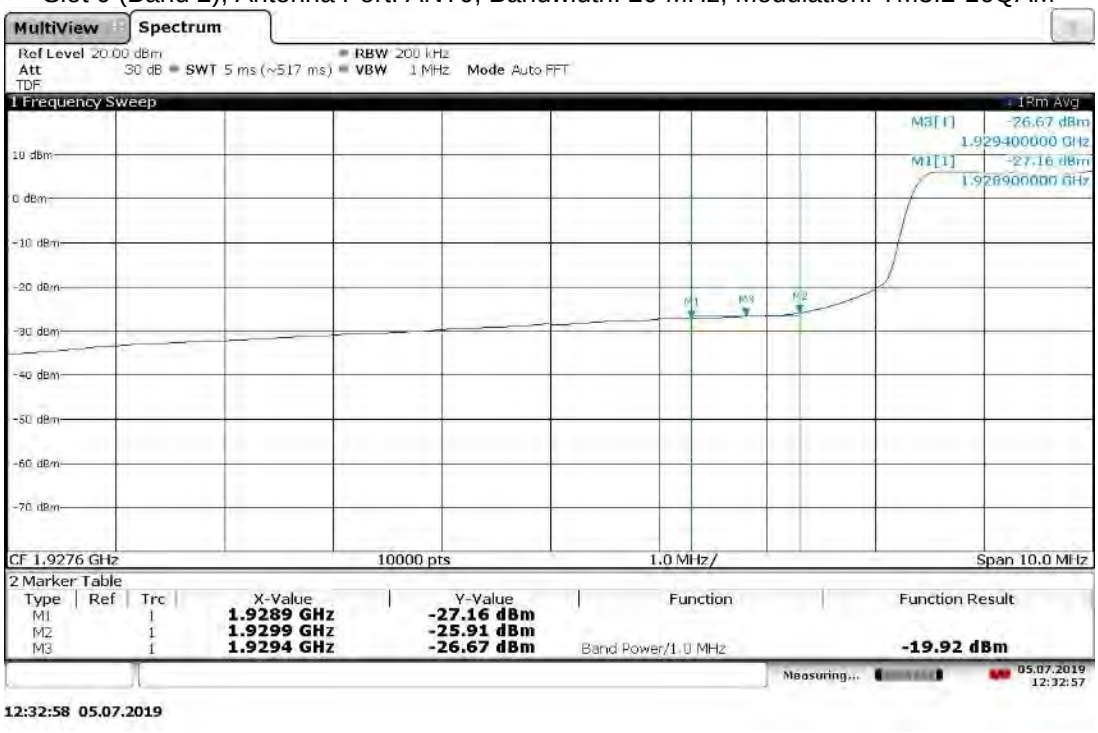
Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM3.2-16QAM



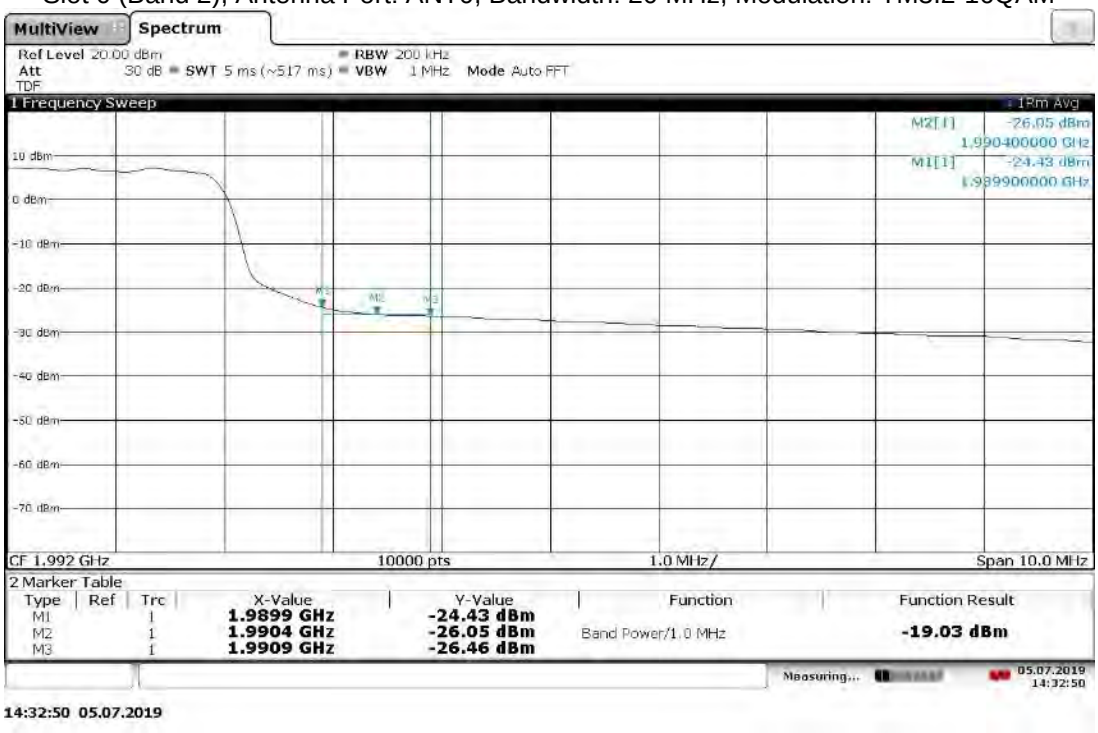
Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM3.2-16QAM



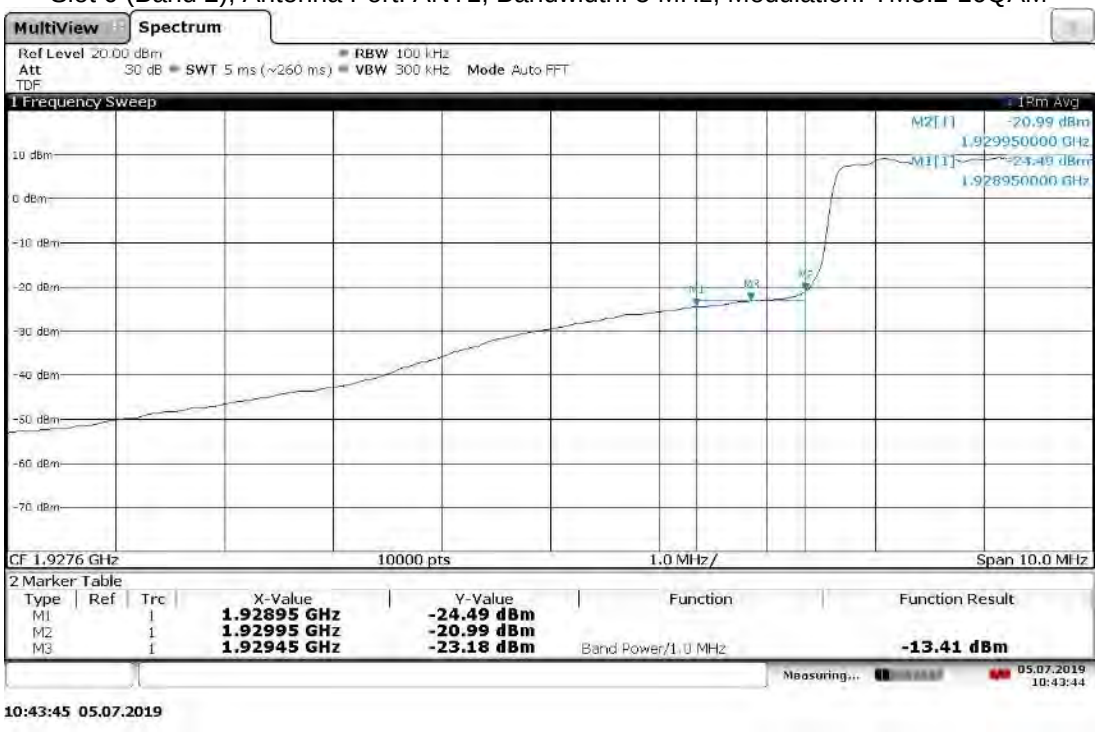
Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.2-16QAM



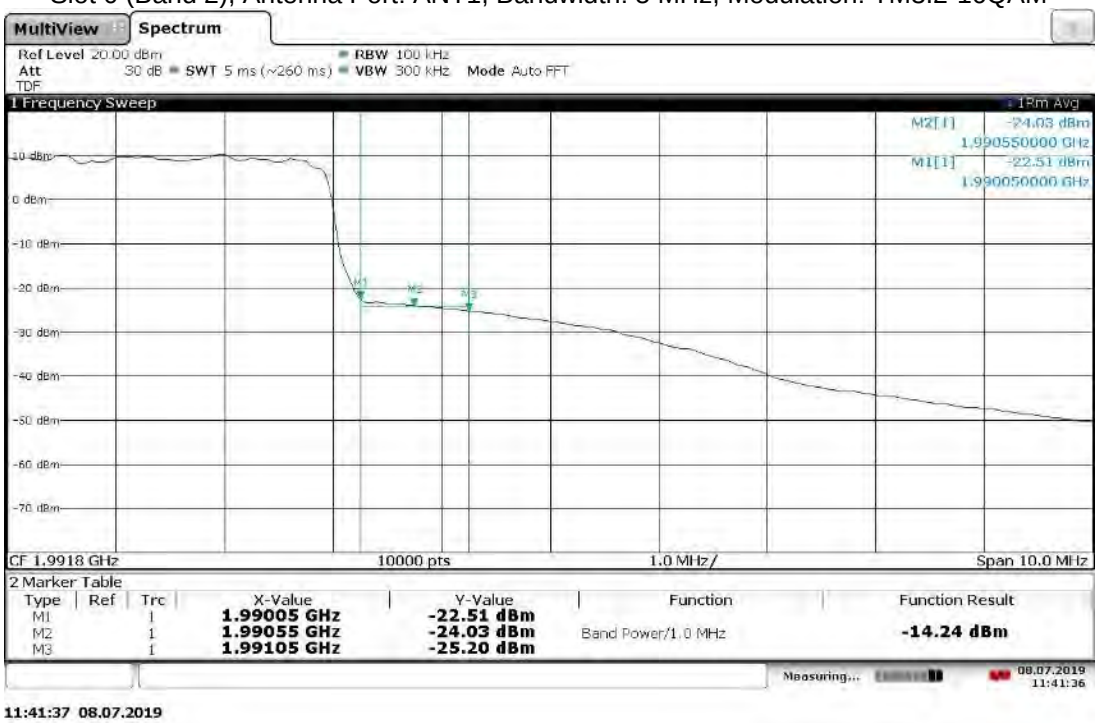
Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.2-16QAM



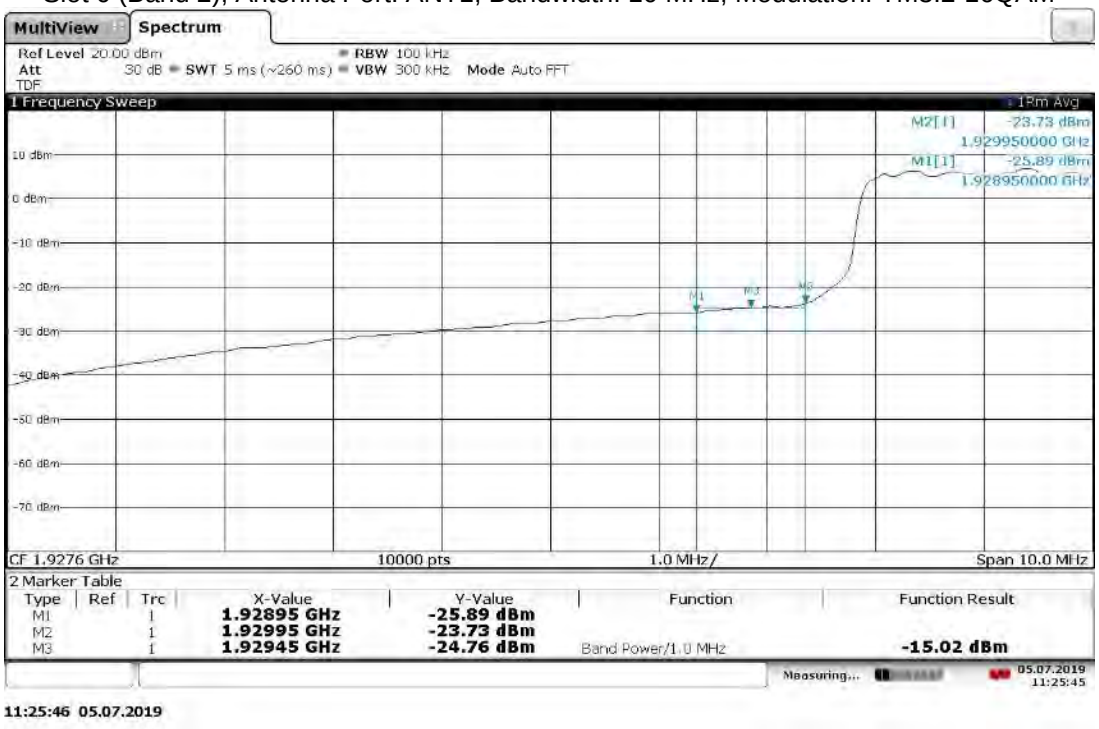
Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.2-16QAM



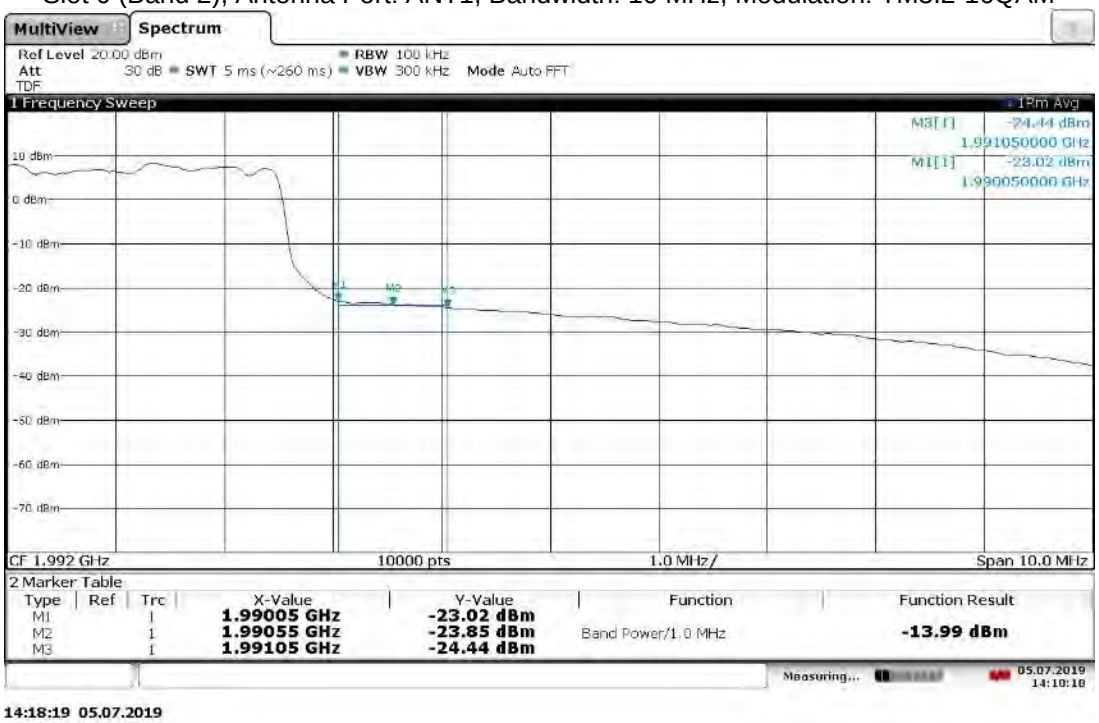
Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.2-16QAM



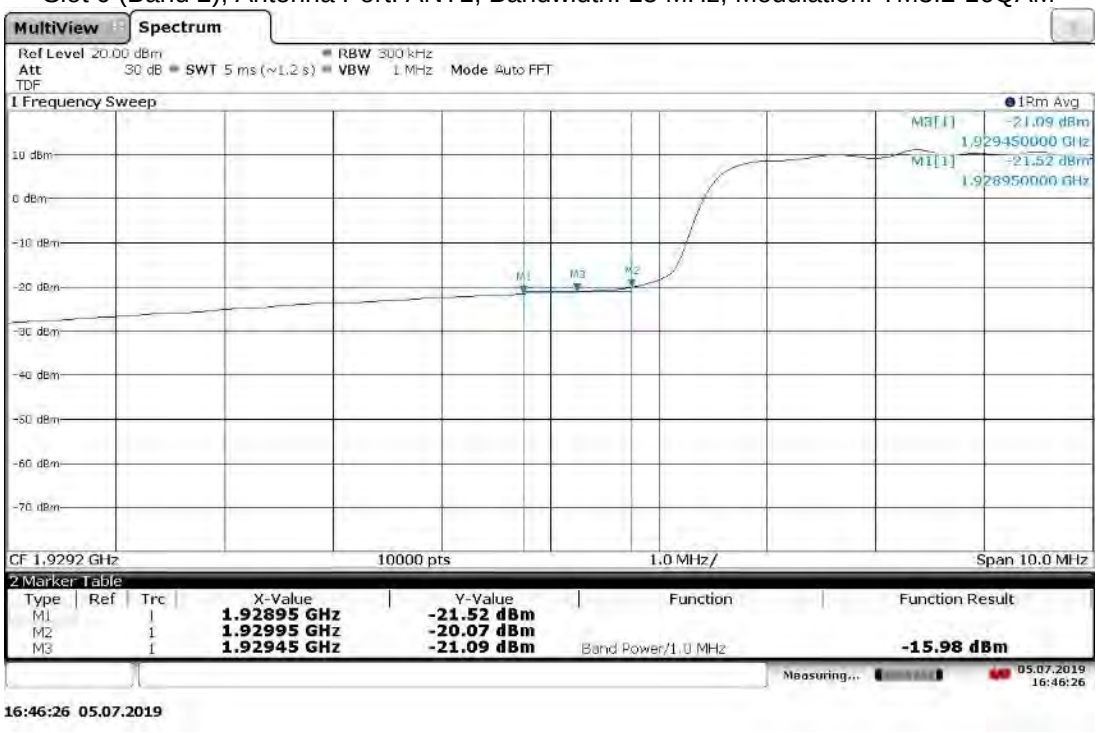
Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.2-16QAM



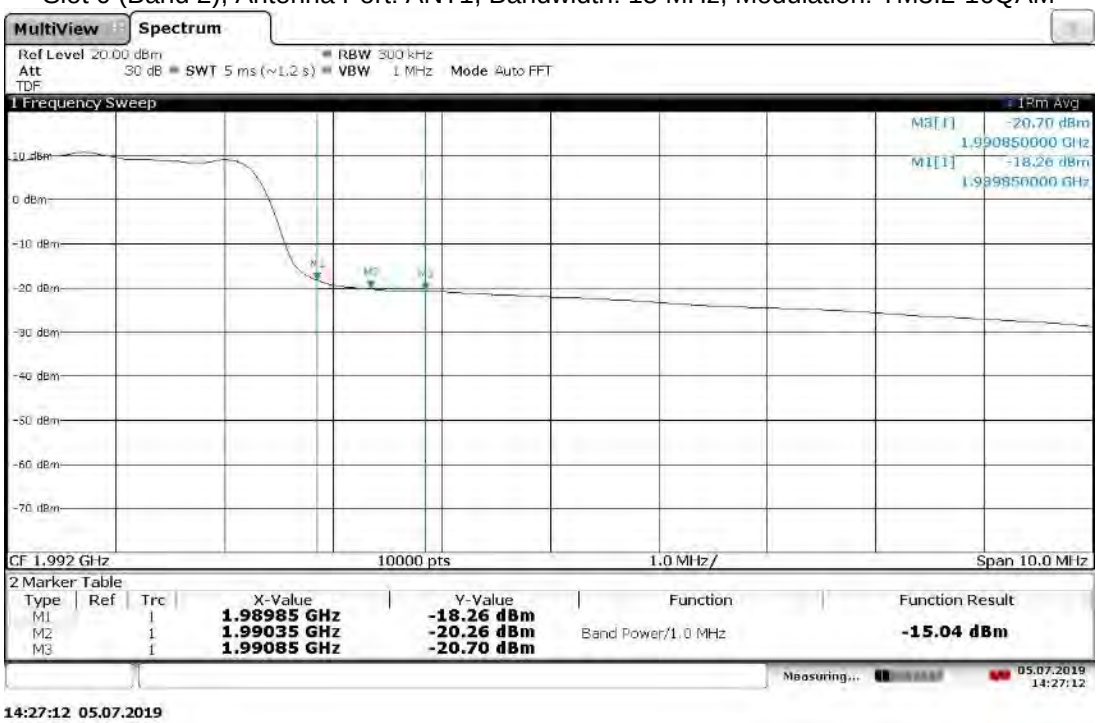
Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.2-16QAM



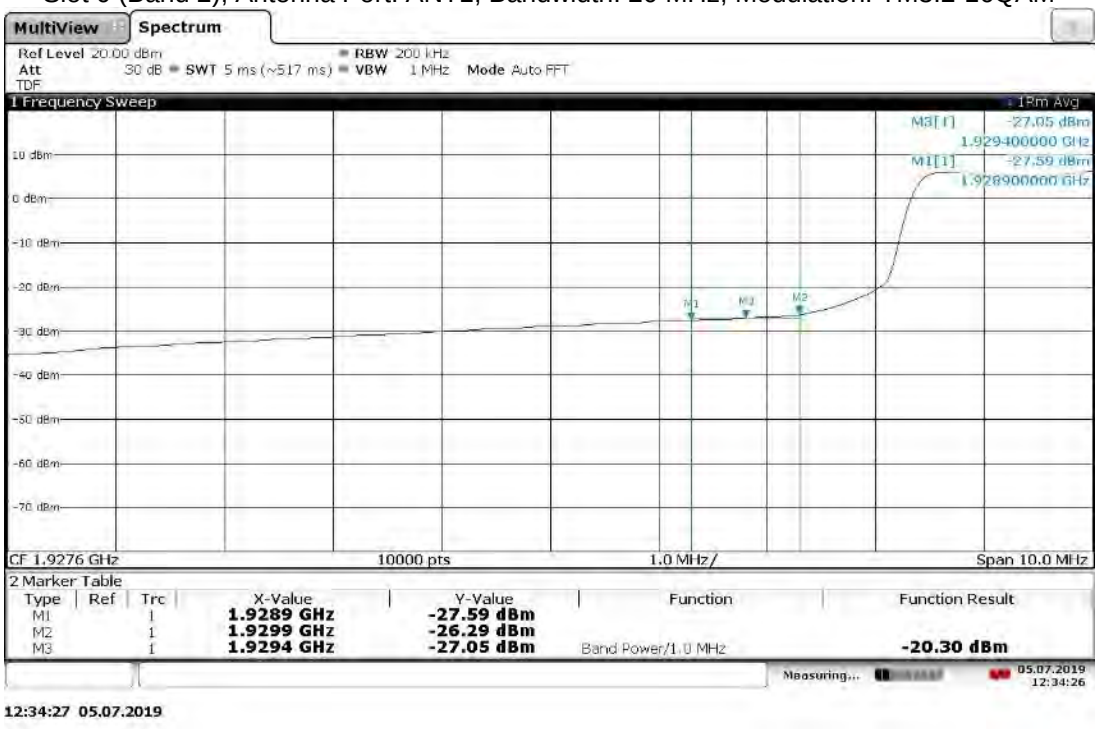
Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM3.2-16QAM



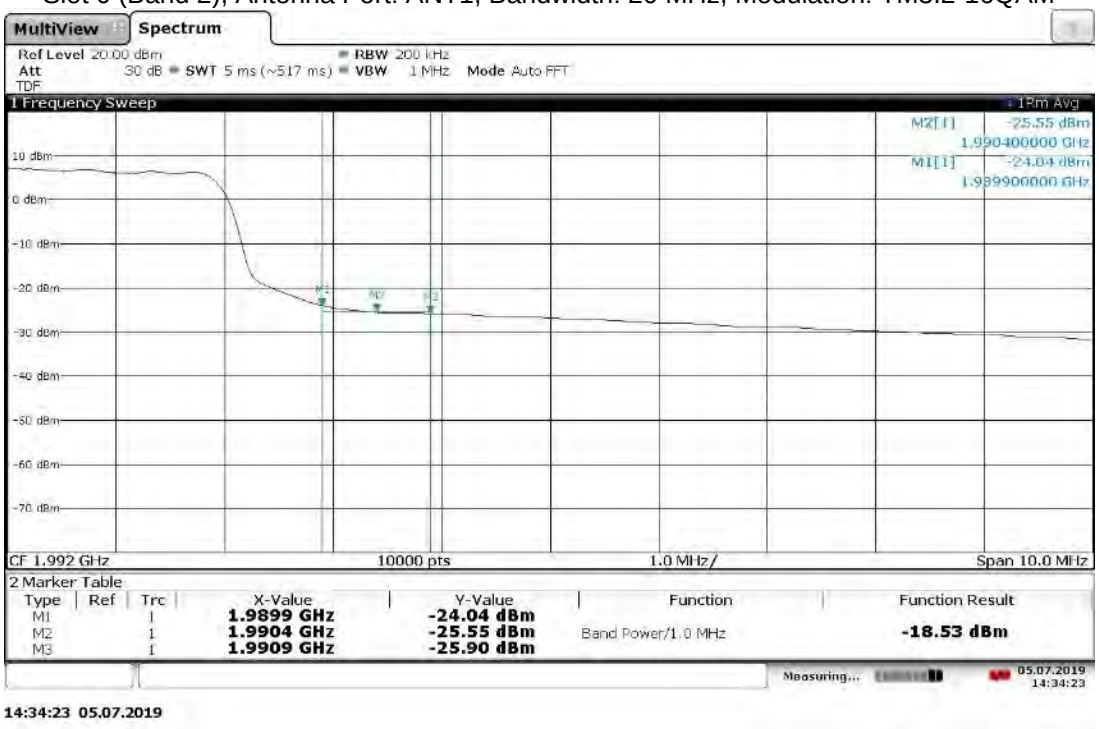
Band Edge Compliant, Upper Band Edge, 1982.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM3.2-16QAM



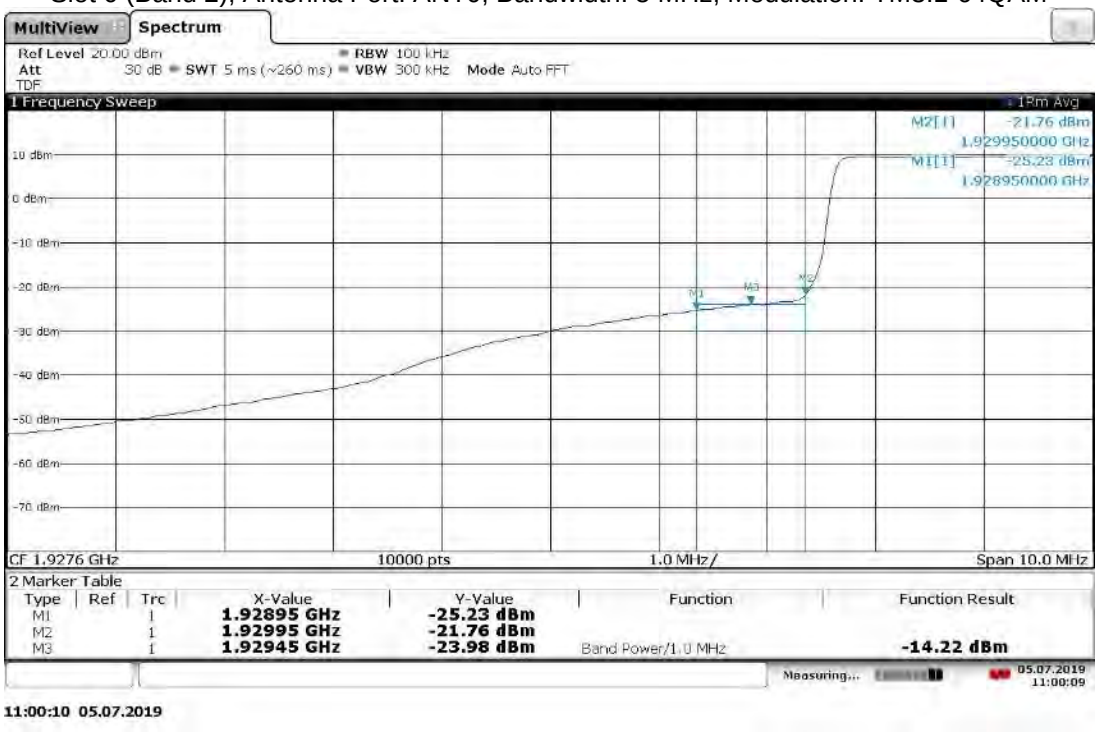
Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM3.2-16QAM



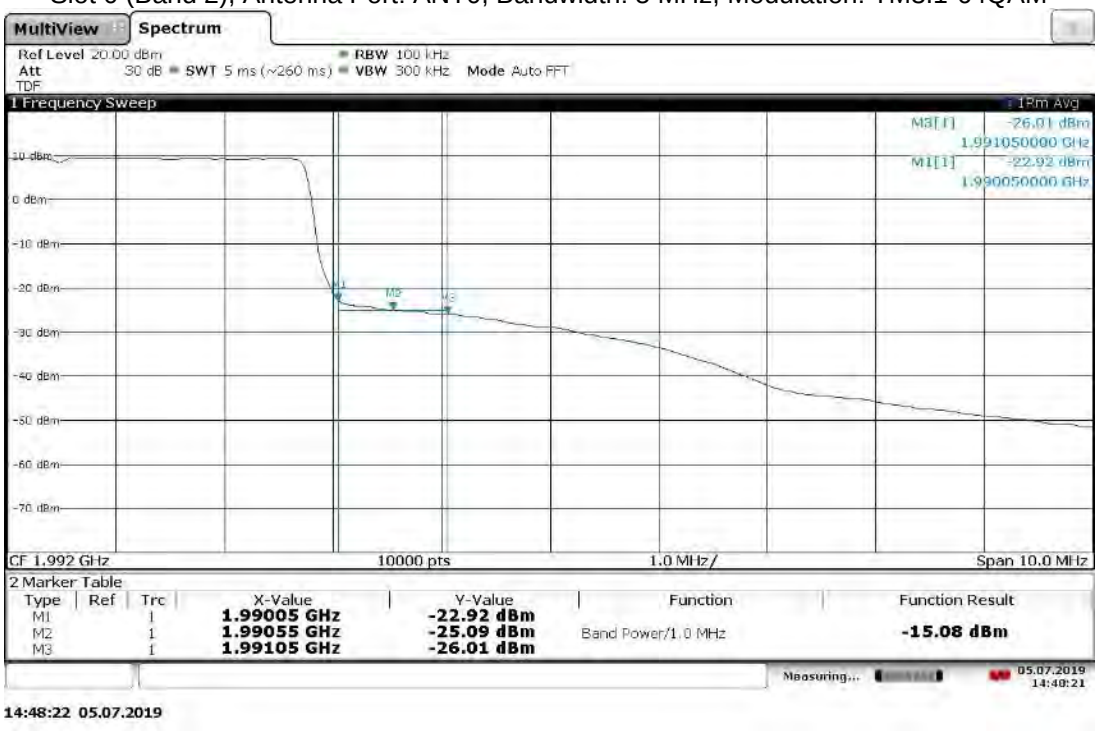
Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 20 MHz, Modulation: TM3.2-16QAM



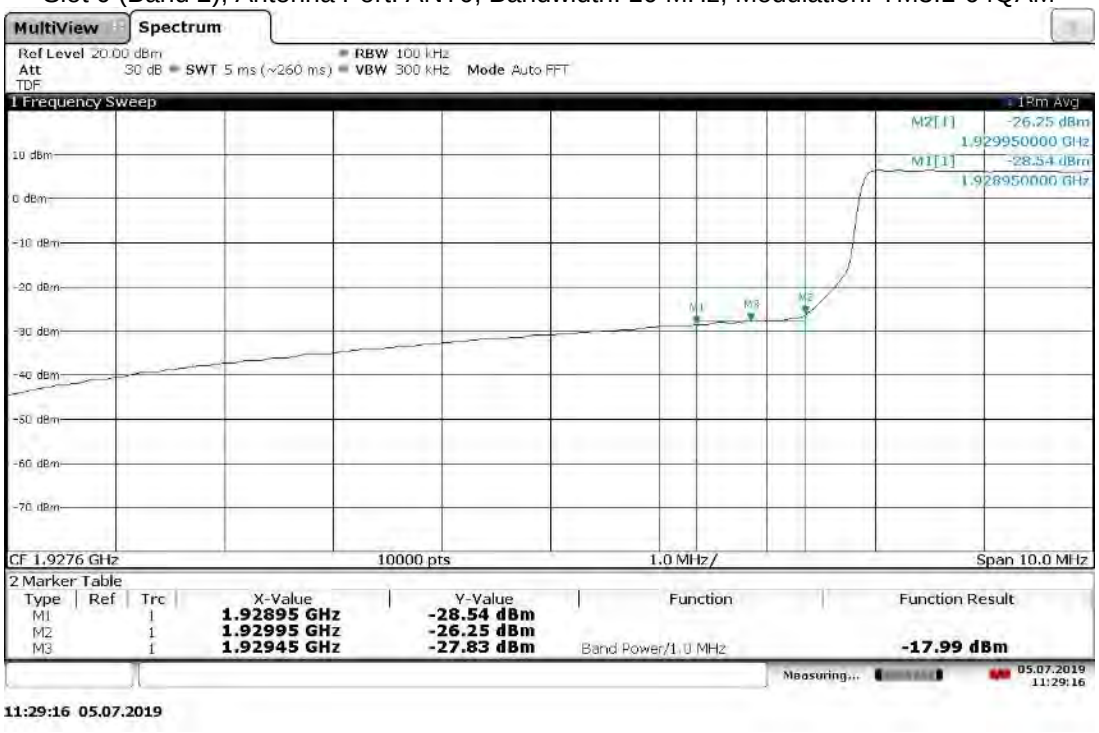
Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.1-64QAM



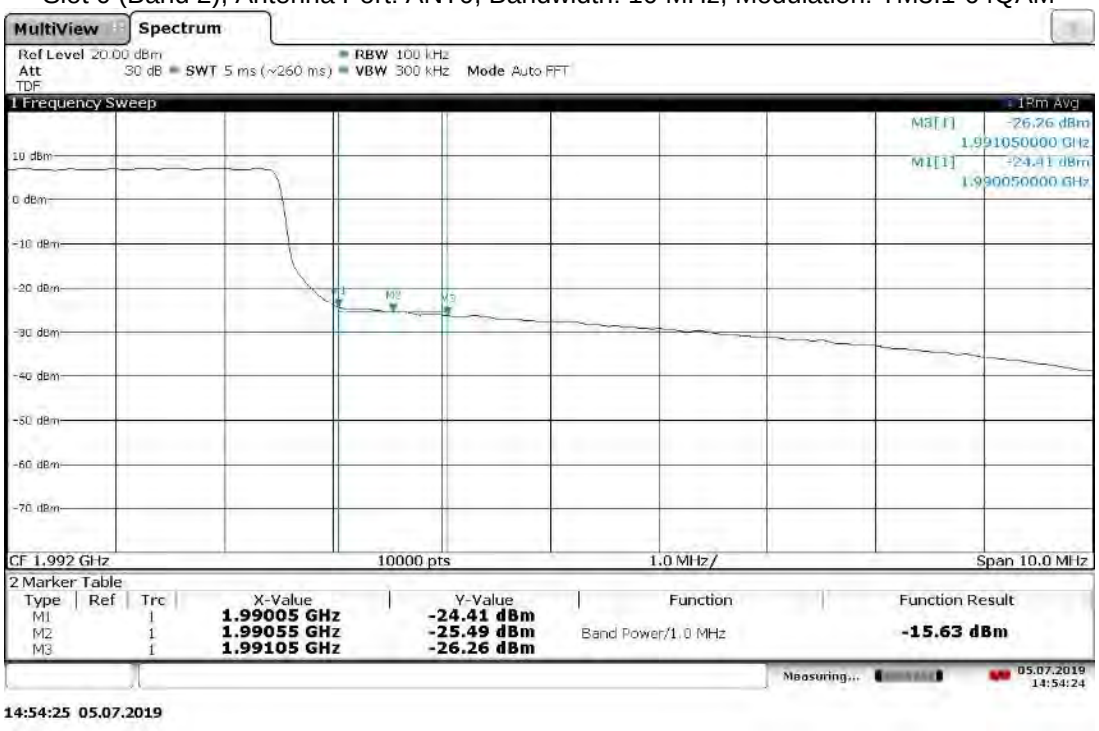
Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 5 MHz, Modulation: TM3.1-64QAM



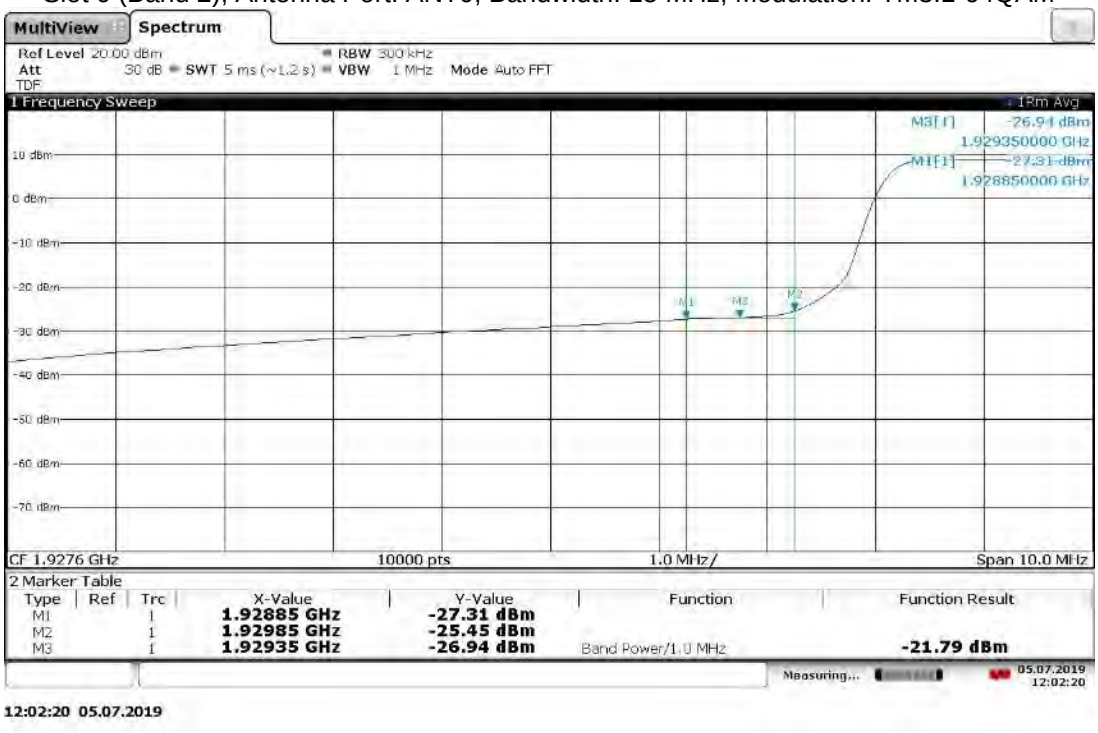
Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.1-64QAM



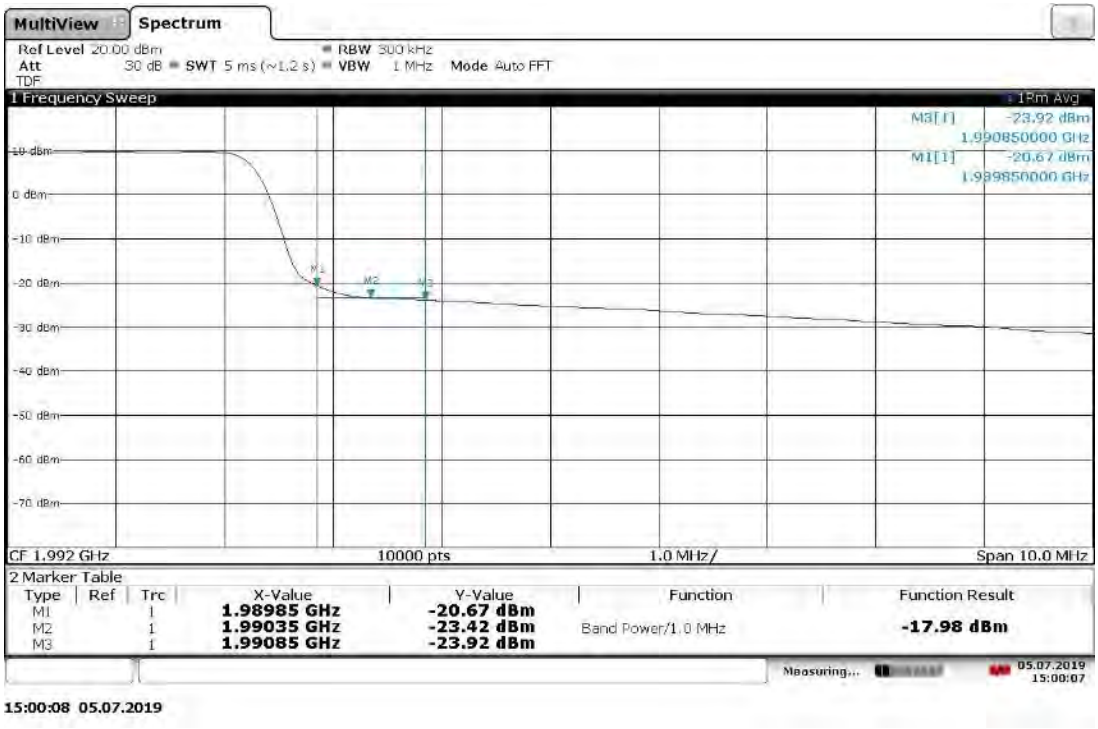
Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 10 MHz, Modulation: TM3.1-64QAM



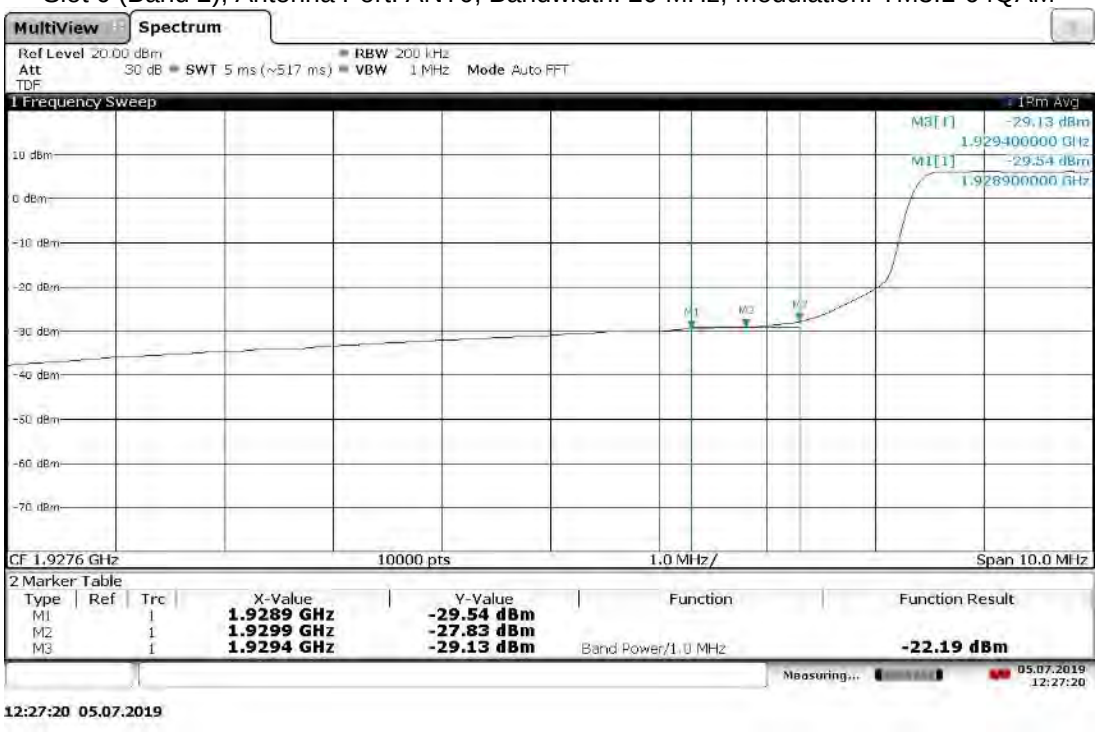
Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 15 MHz, Modulation: TM3.1-64QAM



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

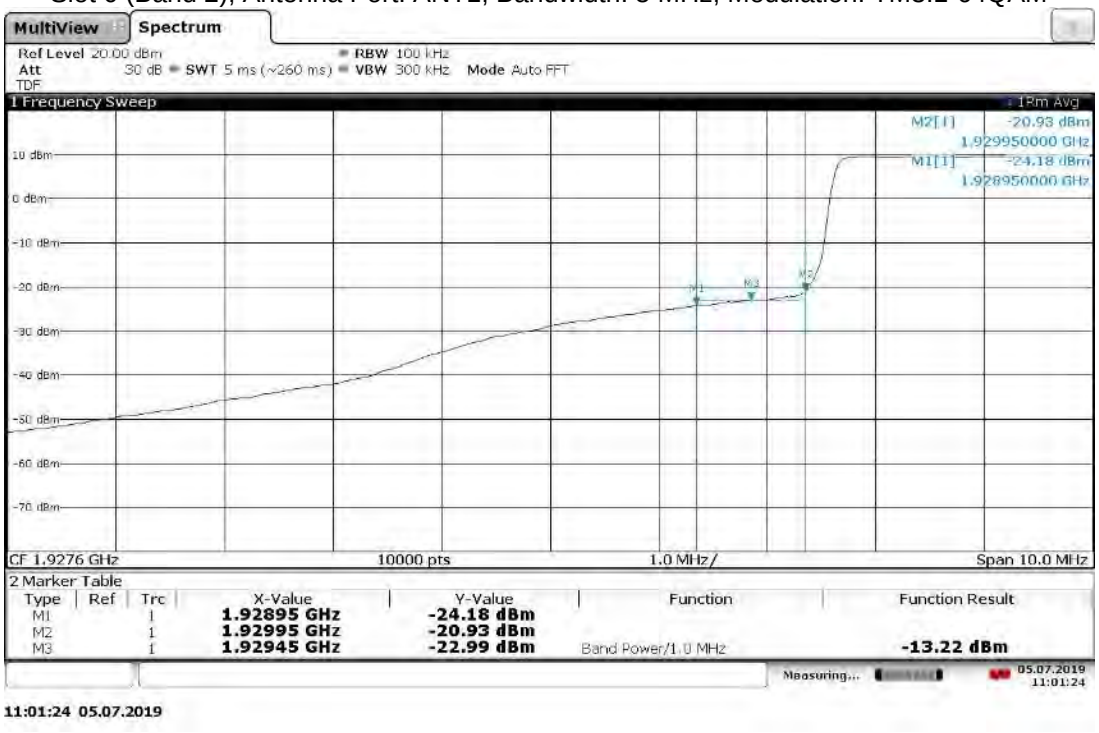


Band Edge Compliant, Lower Band Edge, 1940 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.1-64QAM

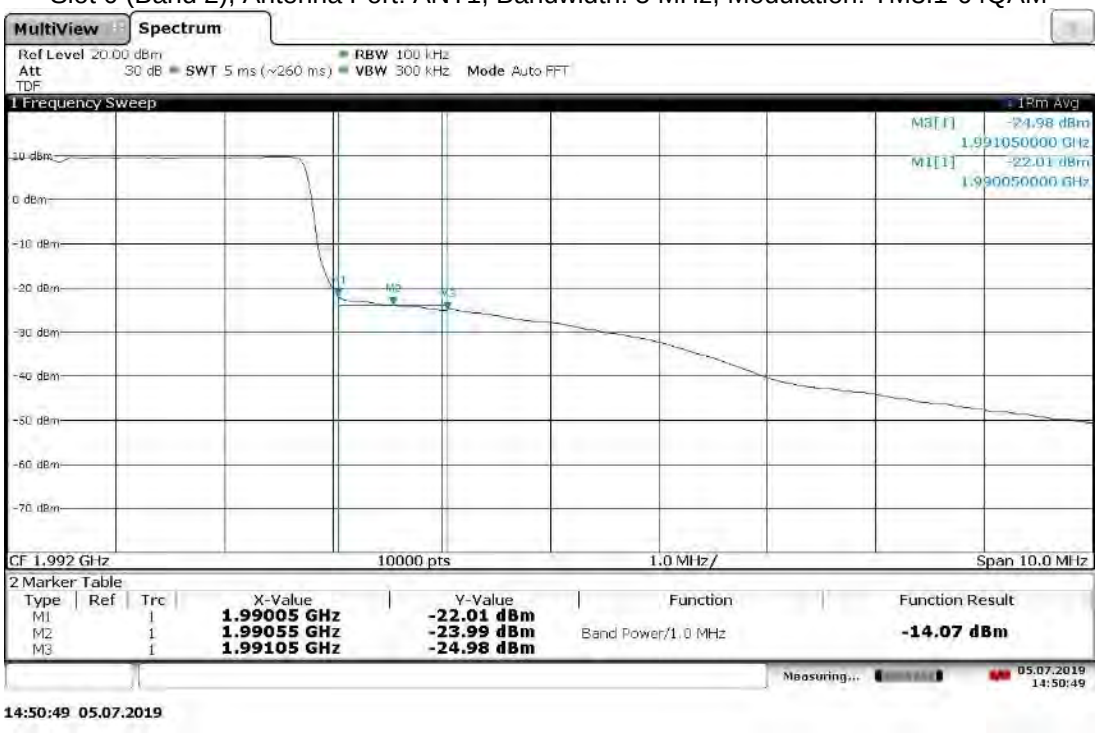


Band Edge Compliant, Upper Band Edge, 1980 MHz
Slot 0 (Band 2), Antenna Port: ANT0, Bandwidth: 20 MHz, Modulation: TM3.1-64QAM

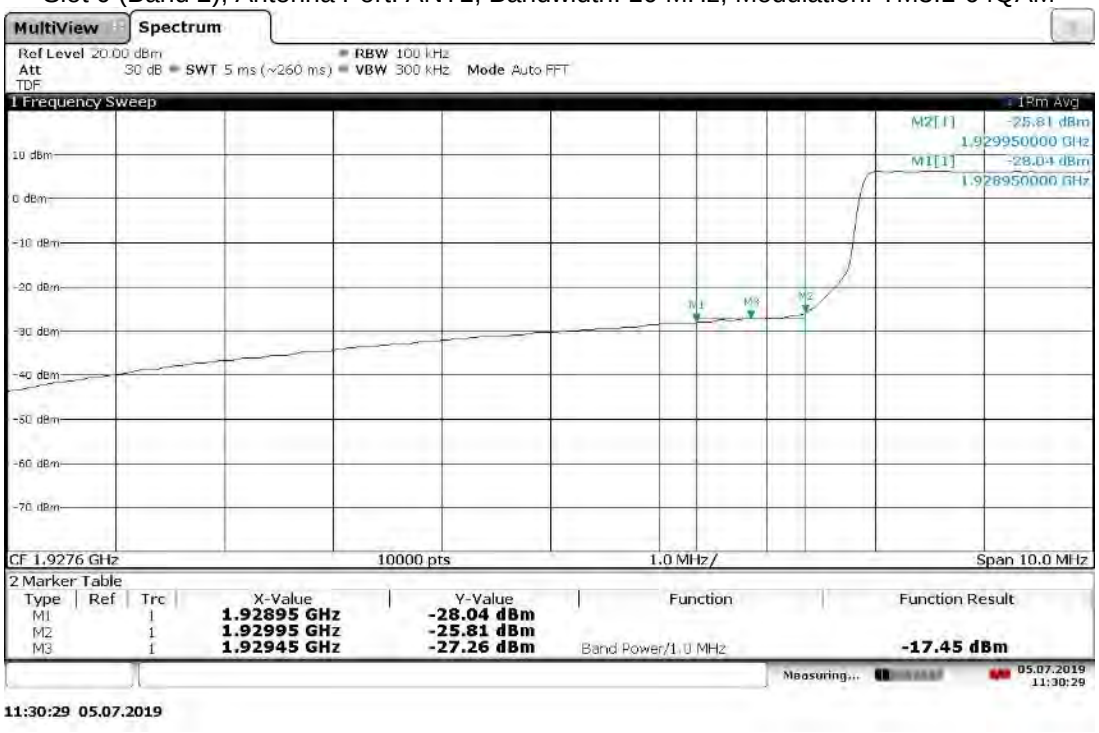
Band Edge Compliant, Lower Band Edge, 1932.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.1-64QAM



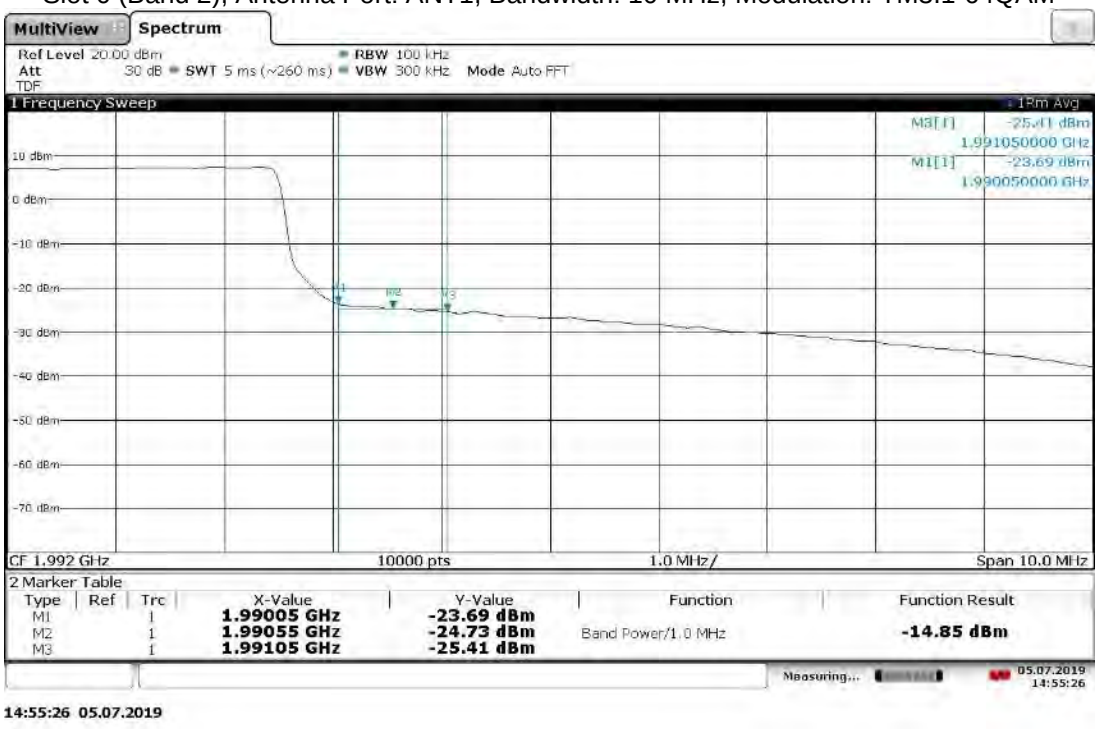
Band Edge Compliant, Upper Band Edge, 1987.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 5 MHz, Modulation: TM3.1-64QAM



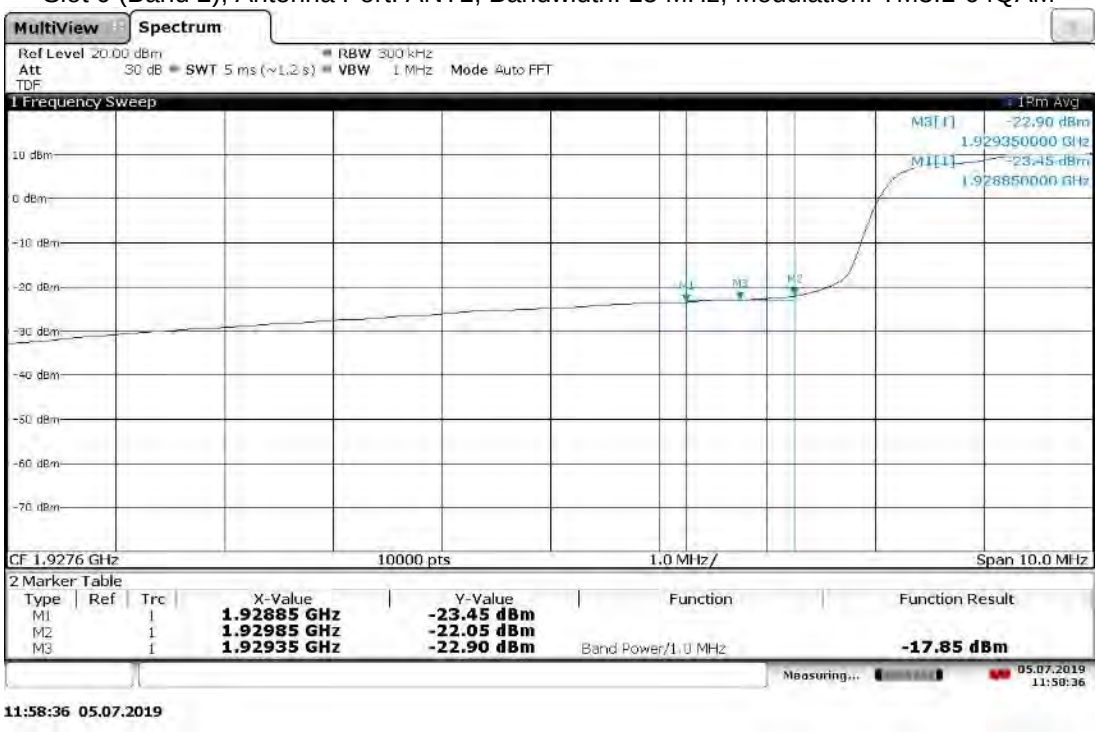
Band Edge Compliant, Lower Band Edge, 1935 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.1-64QAM



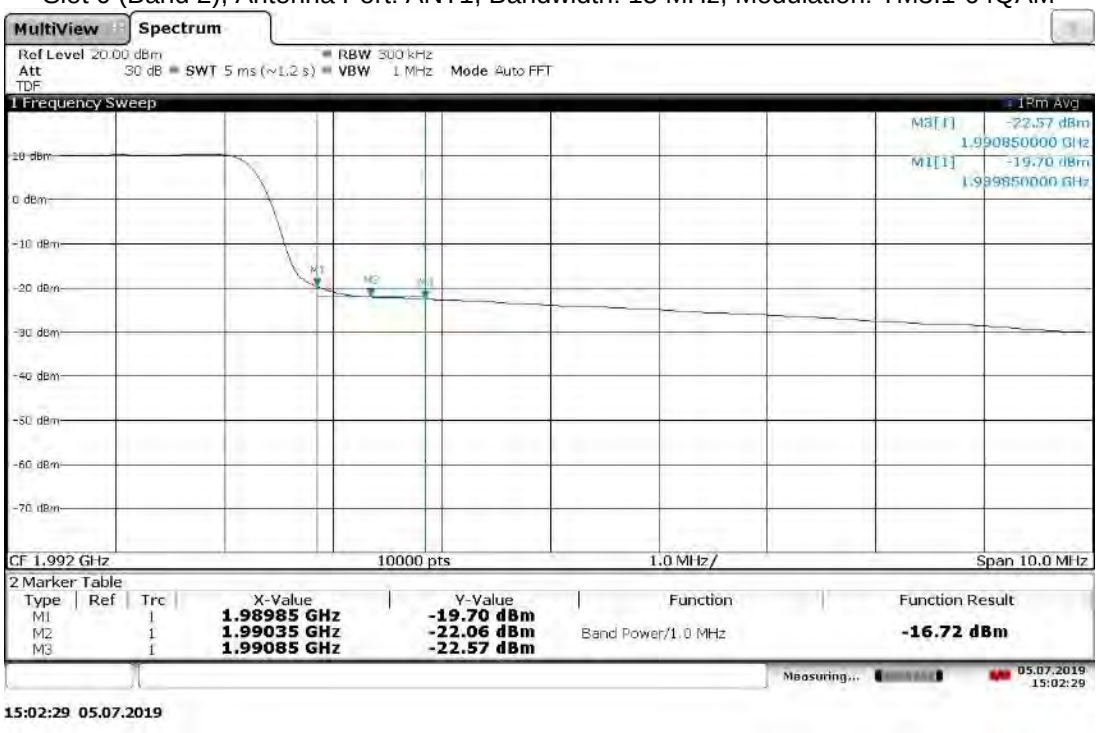
Band Edge Compliant, Upper Band Edge, 1985 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 10 MHz, Modulation: TM3.1-64QAM



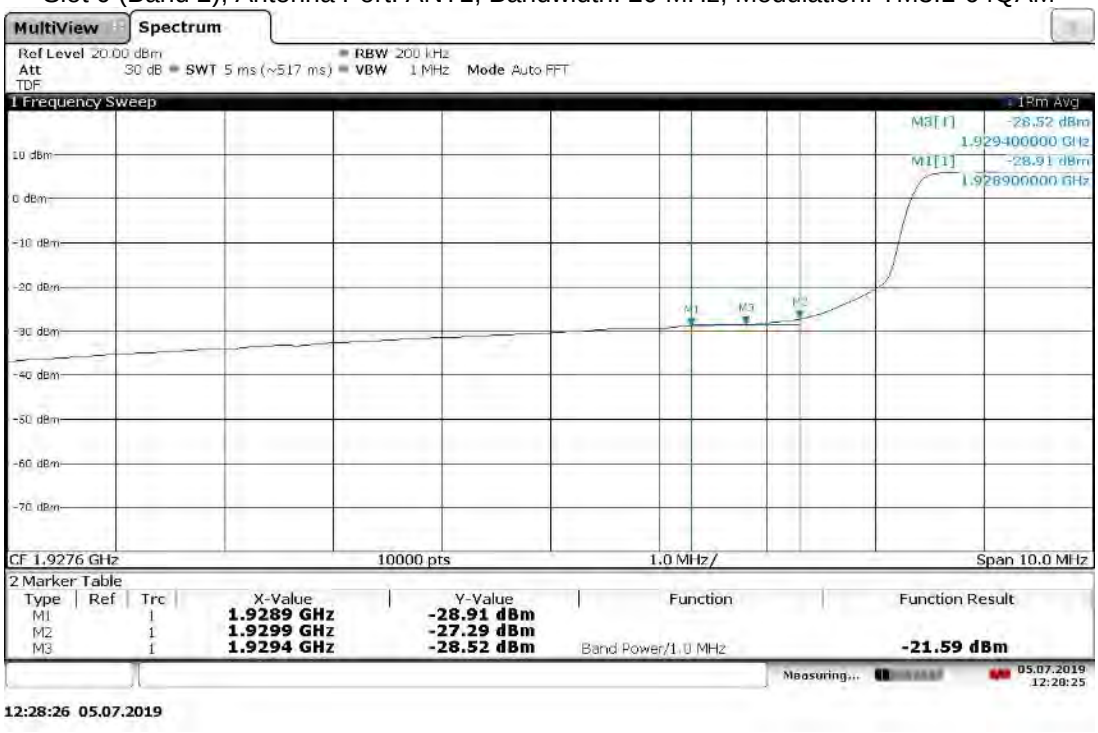
Band Edge Compliant, Lower Band Edge, 1937.5 MHz
Slot 0 (Band 2), Antenna Port: ANT1, Bandwidth: 15 MHz, Modulation: TM3.1-64QAM



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