



REPORT No.: SZ24060163W01

TEST REPORT

APPLICANT : MiMOMax Wireless Limited

PRODUCT NAME : 900MHz TornadoX Transceiver

MODEL NAME : MWL-TORNADOX-BGCD

BRAND NAME : Ubiik Mimomax

FCC ID : XMK-MMXTRNXB012

STANDARD(S) : 47 CFR Part 2
47 CFR Part 24

RECEIPT DATE : 2024-06-20

TEST DATE : 2024-07-11 to 2025-01-08

ISSUE DATE : 2025--07-14

Tested by: Gan Jing
Gan Jing (Rapporteur)

Approved by: Shen Junsheng
Shen Junsheng(Supervisor)

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Change History		
Issue	Date	Reason for change
1.0	2025-07-14	First edition



1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

Applicant:	MiMOMax Wireless Limited
Applicant Address:	540 Wairakei Road, Christchurch 8053, New Zealand
Manufacturer:	MiMOMax Wireless Limited
Manufacturer Address:	540 Wairakei Road, Christchurch 8053, New Zealand

1.2. Equipment Under Test (EUT) Description

Product Name:	900MHz TornadoX Transceiver	
EUT Serial No:	(N/A, marked 1# by test site)	
Hardware Version:	P001	
Software Version:	TRN_04.08.04	
Operating Frequency Range:	901-902 MHz, 2Tx/2Rx	
Channel Bandwidth:	12.5kHz; 25kHz; 50kHz	
Modulation Type:	QPSK; 16QAM; 64QAM; 256QAM	
Operating Voltage:	10.5-60V	
Antenna Gain:	Omni Antenna	2.5 dBi
		4.0 dBi
		6.0 dBi
		8.0 dBi
	Panel Antenna	8.0 dBi
		10.0 dBi
		12.0 dBi
		16.0 dBi
	Parabolic Antenna	21.5 dBi
Emission Designator:	BW(kHz)	Designator
	12.5kHz	10K0W1W
	25.0kHz	20K0W1W
	50.0kHz	42K0W1W



1.3. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2 and Part 24 for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 24	Personal Communications Services

Test detailed items/section required by FCC rules and results are listed as below:

Section	Description	Test Engineer	Result	Method Determination /Remark
2.1046 24.132	Transmitter Conducted Output Power and ERP/EIRP	Gan Jing	PASS	No deviation
2.1049	Occupied Bandwidth	Gan Jing	PASS	No deviation
2.1051 24.133	Conducted Spurious Emissions	Gan Jing	PASS	No deviation
2.1053 24.133	Radiated Spurious Emissions	Li Hanbin	PASS	No deviation
2.1055 24.135	Frequency stability	Gan Jing	PASS	No deviation

Note 1: The TornadoX Transceiver complies with FCC 47 CFR Part 2 and Part 24 when tested in accordance with the test methods described in 47 CFR Part 2 and Part 24.

Note 2: The TornadoX Transceiver supports 2 Tx antenna ports, which was defined as Channel H & Channel V separately.

Note 3: The path loss during the conducted RF test is calibrated to correct the results by the Ext Gain setting. The Ext Gain contains two parts that cable loss of 0.7B and attenuator of 30.0dB.

Note 4: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.

Note 5: The prototype has two kinds of power under different conditions, we define Type 1 in the case of 28dBm power and Type 2 in the case of 34dBm power. In this report, we have recorded the test data of type 2.



1.4. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 - 35
Relative Humidity (%):	30 -60



2. Summary Test Results And Description

2.1. Radio Frequency Power Output and E.R.P.

2.1.1. Test result

Type 1:

Nominal Frequency: 901.5 MHz Tx Port: Channel H

Channel Bandwidth (kHz)	Modulation Type	Voltage (Vdc)	Measured Power (dBm)	Measured Power (Watt)	Rated Power (Watt)	E.R.P. (ANT Gain = 4.0dBi)		E.R.P. (ANT Gain = 12.0dBi)	
						dBm	Watt	dBm	Watt
12.5	QPSK	24	27.82	0.605	0.63	29.67	0.927	37.67	5.848
12.5	16QAM	24	27.66	0.583	0.63	29.51	0.893	37.51	5.636
12.5	64QAM	24	28.19	0.659	0.63	30.04	1.009	38.04	6.368
12.5	256QAM	24	28.21	0.662	0.63	30.06	1.014	38.06	6.397
25.0	QPSK	24	27.60	0.575	0.63	29.45	0.881	37.45	5.559
25.0	16QAM	24	27.80	0.603	0.63	29.65	0.923	37.65	5.821
25.0	64QAM	24	28.23	0.665	0.63	30.08	1.019	38.08	6.427
25.0	256QAM	24	28.11	0.647	0.63	29.96	0.991	37.96	6.252
50.0	QPSK	24	27.28	0.535	0.63	29.13	0.818	37.13	5.164
50.0	16QAM	24	27.26	0.532	0.63	29.11	0.815	37.11	5.140
50.0	64QAM	24	27.45	0.556	0.63	29.30	0.851	37.30	5.370
50.0	256QAM	24	27.67	0.585	0.63	29.52	0.895	37.52	5.649

Nominal Frequency: 901.5 MHz Tx Port: Channel V

Channel Bandwidth (kHz)	Modulation Type	Voltage (Vdc)	Measured Power (dBm)	Measured Power (Watt)	Rated Power (Watt)	E.R.P. (ANT Gain = 4.0dBi)		E.R.P. (ANT Gain = 12.0dBi)	
						dBm	Watt	dBm	Watt
12.5	QPSK	24	27.99	0.630	0.63	29.84	0.964	37.84	6.081
12.5	16QAM	24	27.76	0.597	0.63	29.61	0.914	37.61	5.768
12.5	64QAM	24	28.25	0.668	0.63	30.10	1.023	38.10	6.457
12.5	256QAM	24	28.29	0.675	0.63	30.14	1.033	38.14	6.516
25.0	QPSK	24	28.19	0.659	0.63	30.04	1.009	38.04	6.368



25.0	16QAM	24	28.05	0.638	0.63	29.90	0.977	37.90	6.166
25.0	64QAM	24	27.94	0.622	0.63	29.79	0.953	37.79	6.012
25.0	256QAM	24	28.31	0.678	0.63	30.16	1.038	38.16	6.546
50.0	QPSK	24	28.00	0.631	0.63	29.85	0.966	37.85	6.095
50.0	16QAM	24	27.84	0.608	0.63	29.69	0.931	37.69	5.875
50.0	64QAM	24	28.05	0.638	0.63	29.90	0.977	37.90	6.166
50.0	256QAM	24	28.43	0.697	0.63	30.28	1.067	38.28	6.730

Type 2:**Nominal Frequency: 901.5 MHz Tx Port: Channel H**

Channel Bandwidth (kHz)	Modulation Type	Voltage (Vdc)	Measured Power (dBm)	Measured Power (Watt)	Rated Power (Watt)	E.R.P. (ANT Gain = 4.0dBi)		E.R.P. (ANT Gain = 6.0dBi)	
						dBm	Watt	dBm	Watt
12.5	QPSK	24	33.66	2.323	2.50	35.51	3.556	37.51	5.636
12.5	16QAM	24	33.61	2.296	2.50	35.46	3.516	37.46	5.572
12.5	64QAM	24	33.91	2.460	2.50	35.76	3.767	37.76	5.970
12.5	256QAM	24	33.72	2.355	2.50	35.57	3.606	37.57	5.715
25.0	QPSK	24	34.02	2.523	2.50	35.87	3.864	37.87	6.124
25.0	16QAM	24	33.77	2.382	2.50	35.62	3.648	37.62	5.781
25.0	64QAM	24	34.08	2.559	2.50	35.93	3.917	37.93	6.209
25.0	256QAM	24	33.91	2.460	2.50	35.76	3.767	37.76	5.970
50.0	QPSK	24	33.73	2.360	2.50	35.58	3.614	37.58	5.728
50.0	16QAM	24	33.91	2.460	2.50	35.76	3.767	37.76	5.970
50.0	64QAM	24	33.83	2.415	2.50	35.68	3.698	37.68	5.861
50.0	256QAM	24	34.12	2.582	2.50	35.97	3.954	37.97	6.266

Nominal Frequency: 901.5 MHz Tx Port: Channel V

Channel Bandwidth (kHz)	Modulation Type	Voltage (Vdc)	Measured Power (dBm)	Measured Power (Watt)	Rated Power (Watt)	E.R.P. (ANT Gain = 4.0dBi)		E.R.P. (ANT Gain = 6.0dBi)	
						dBm	Watt	dBm	Watt
12.5	QPSK	24	33.90	2.455	2.50	35.75	3.758	37.75	5.957
12.5	16QAM	24	33.74	2.366	2.50	35.59	3.622	37.59	5.741
12.5	64QAM	24	34.10	2.570	2.50	35.95	3.936	37.95	6.237
12.5	256QAM	24	33.75	2.371	2.50	35.60	3.631	37.60	5.754



25.0	QPSK	24	33.49	2.234	2.50	35.34	3.420	37.34	5.420
25.0	16QAM	24	33.56	2.270	2.50	35.41	3.475	37.41	5.508
25.0	64QAM	24	33.85	2.427	2.50	35.70	3.715	37.70	5.888
25.0	256QAM	24	33.82	2.410	2.50	35.67	3.690	37.67	5.848
50.0	QPSK	24	34.09	2.564	2.50	35.94	3.926	37.94	6.223
50.0	16QAM	24	34.14	2.594	2.50	35.99	3.972	37.99	6.295
50.0	64QAM	24	34.16	2.606	2.50	36.01	3.990	38.01	6.324
50.0	256QAM	24	34.18	2.618	2.50	36.03	4.009	38.03	6.353

Note1: Measurements were carried out at the RF output terminals of the transmitter using spectrum analyzer. The path loss during the conducted RF test is calibrated to correct the results by the Ext Gain setting. The Ext Gain contains two parts that cable loss of 0.7B and attenuator of 30.0dB.

Note 2: The transmitter has a rated output power of .2.512 Watt (34dBm).The measured power has been shown to be within +/- 1 dB of the rated power.

Note3: E.I.R.P. (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi); E.R.P. (dBm) = E.I.R.P. (dBm) - 2.15.

Note4: Part 24 does not specify the transmitter output power.

Stations transmitting in the 901-902 MHz band are limited to 7 watts e.r.p.

Note 5: The product's antenna is a special MIMO antenna with cross-polarization which is able to transmit and receive on both the vertical and horizontal polarizations at the same time, the MIMO antennas are essentially two antennas in one.

Note 6: According to KDB 662911, the MIMO directional gain is the gain of an individual antenna.

Note 7: The DUT transmitter ports are completely uncorrelated. According to KDB 662911 the conducted power or E.R.P is measured on each port individually and it complies with the regulations.

Note 8: This product is based on the interactive calculation of erp limits and conducted power. In the 901-902MHz range, an antenna with a maximum gain of 12dBi can be used when the conducted power is 28dBm, or an antenna with a maximum gain of 6dBi can be used when the conducted power is 34dBm to meet the erp requirements.



2.2. Occupied Bandwidth

2.2.1. Definition

Emission Designator:

Frequency (MHz)	BW(kHz)	Designator
901-902MHz	12.5kHz	10K0W1W
	25.0kHz	20K0W1W
	50.0kHz	42K0W1W

Note: The above data combined with uncertainty and rounding calculations are consistent with the actual test data.

According to FCC section 2.1049, the occupied bandwidth 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.

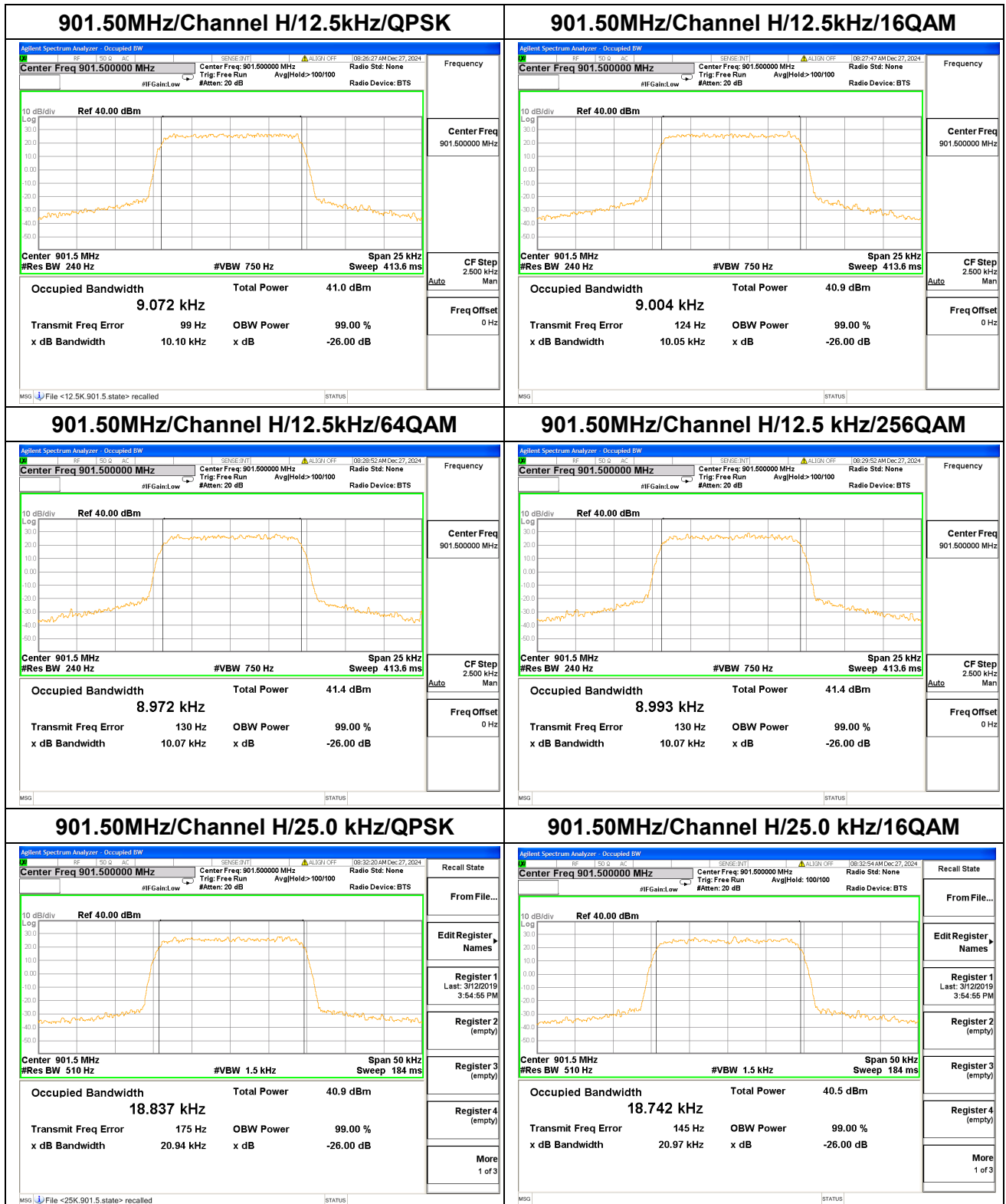
Occupied bandwidth is also known as the 99% emission bandwidth.

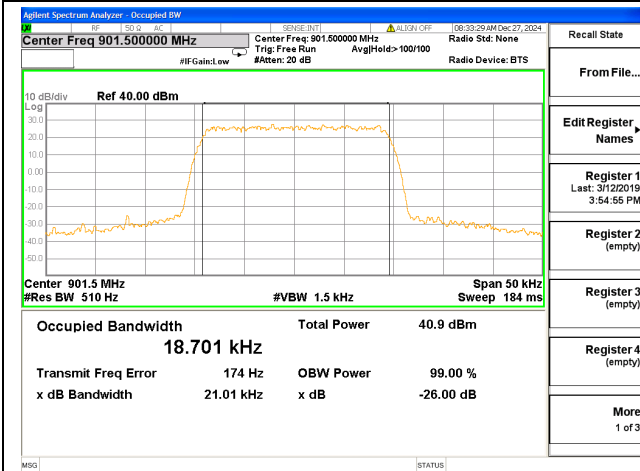
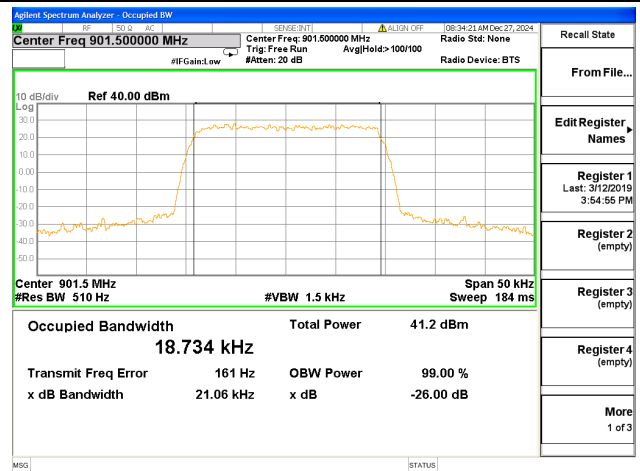
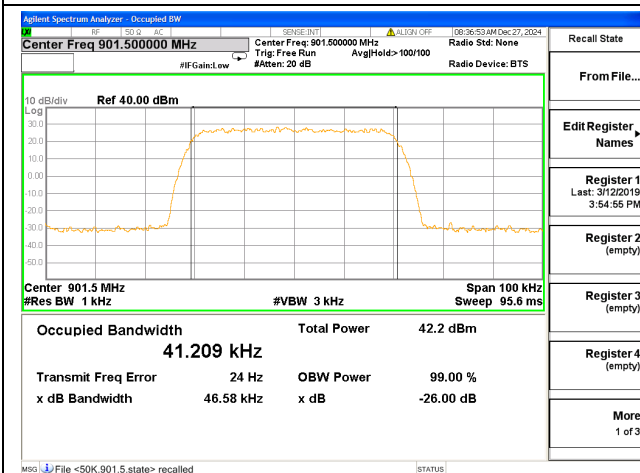
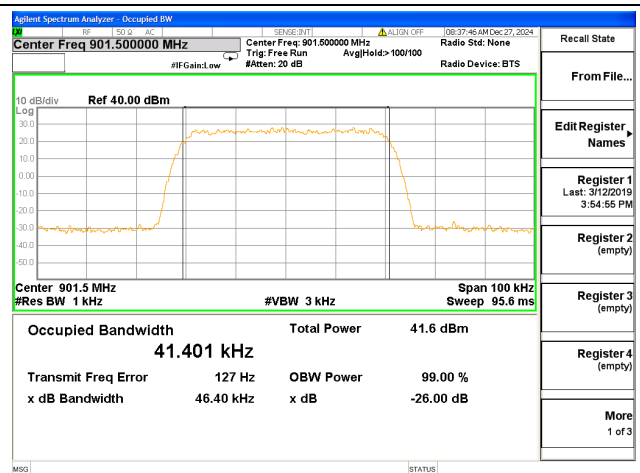
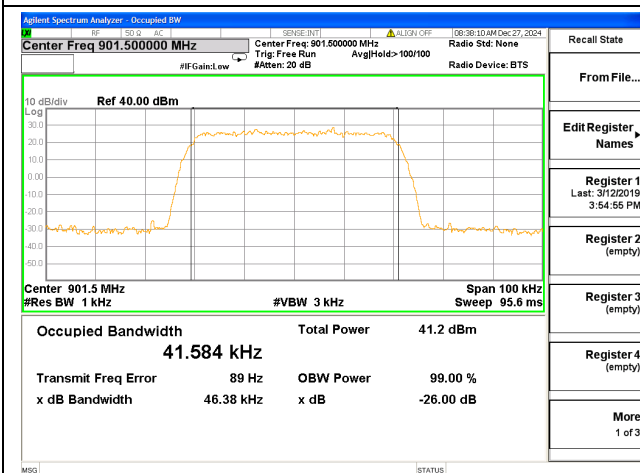
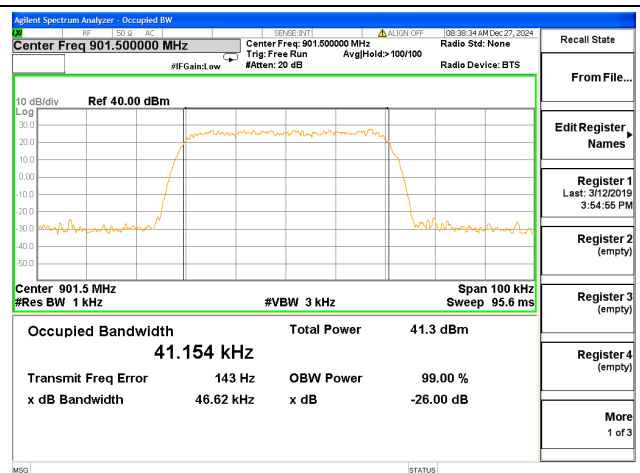
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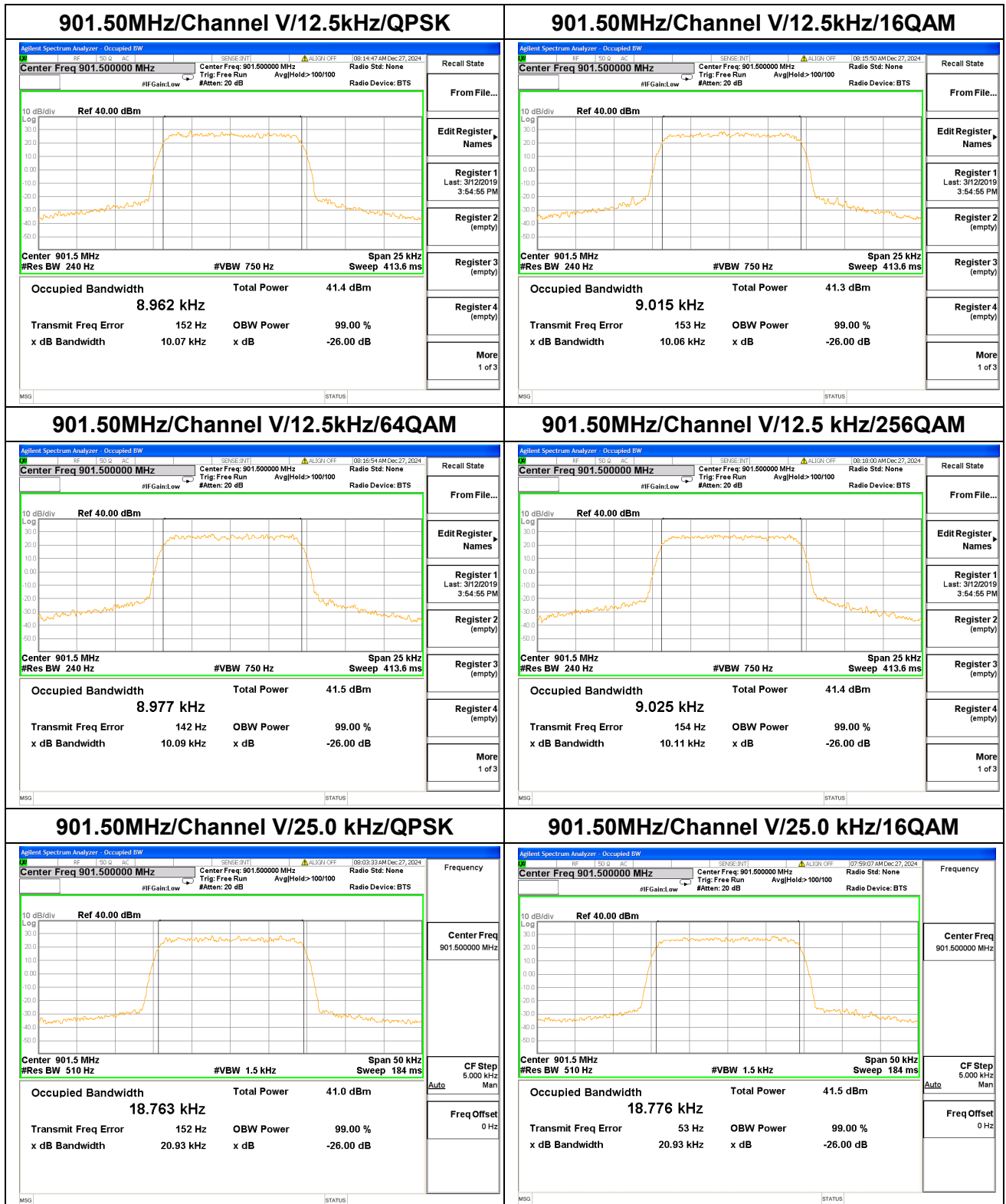
Measurements have been made of each modulation type using a spectrum analyzer operating in occupied bandwidth mode.

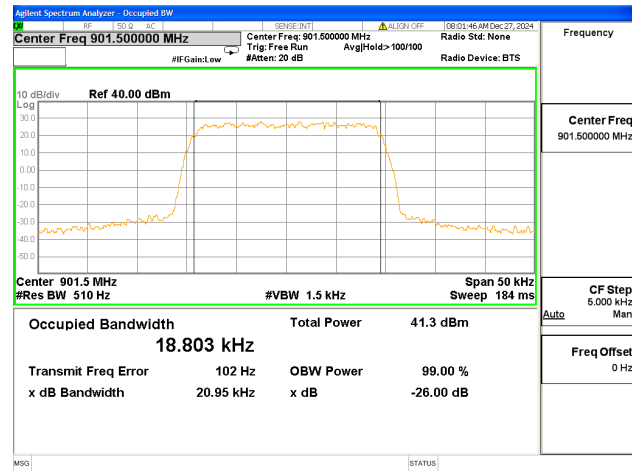
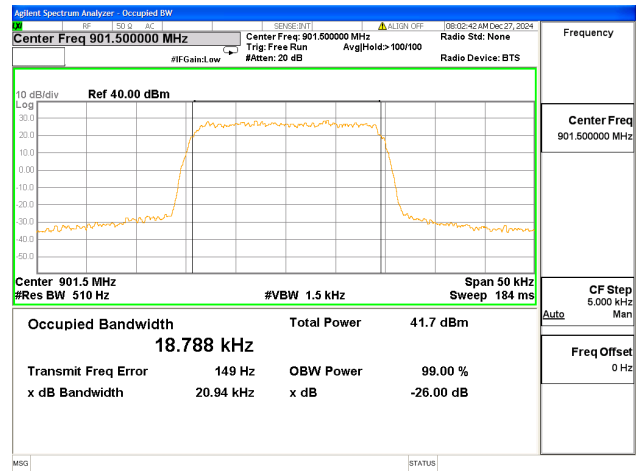
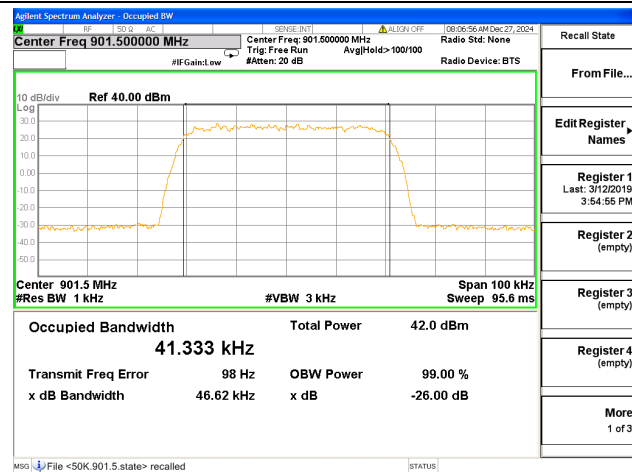
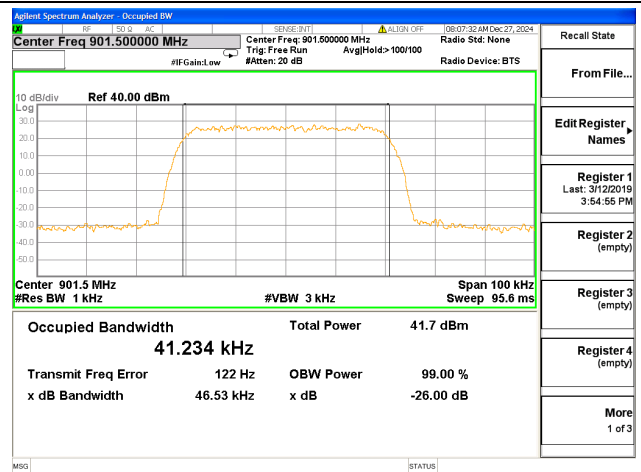
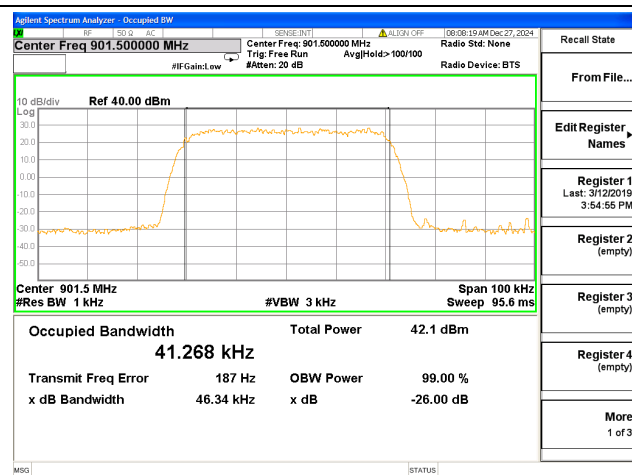
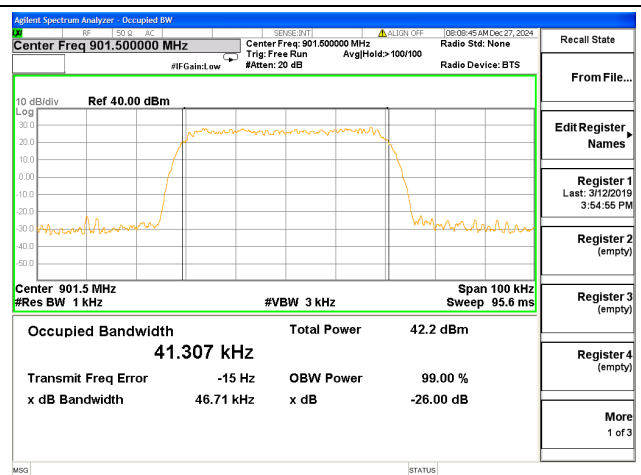
**2.2.3. Test Result**

901.50 MHz			
Tx Port	Channel Bandwidth(kHz)	Emission Type	Occupied Bandwidth(kHz)
H	12.5	QPSK	9.072
		16QAM	9.004
		64QAM	8.972
		256QAM	8.993
	25.0	QPSK	18.837
		16QAM	18.742
		64QAM	18.701
		256QAM	18.743
	50.0	QPSK	41.209
		16QAM	41.401
		64QAM	41.584
		256QAM	41.154
V	12.5	QPSK	8.962
		16QAM	9.015
		64QAM	8.977
		256QAM	9.025
	25.0	QPSK	18.763
		16QAM	18.776
		64QAM	18.803
		256QAM	18.788
	50.0	QPSK	41.333
		16QAM	41.234
		64QAM	41.268
		256QAM	41.307



**901.50MHz/Channel H/25.0 kHz/64QAM****901.50MHz/Channel H/25.0 kHz/256QAM****901.50MHz/Channel H/50.0 kHz/QPSK****901.50MHz/Channel H/50.0 kHz/16QAM****901.50MHz/Channel H/50.0 kHz/64QAM****901.50MHz/Channel H/50.0 kHz/256QAM**



**901.50MHz/Channel V/25.0 kHz/64QAM****901.50MHz/Channel V/25.0 kHz/256QAM****901.50MHz/Channel V/50.0 kHz/QPSK****901.50MHz/Channel V/50.0 kHz/16QAM****901.50MHz/Channel V/50.0 kHz/64QAM****901.50MHz/Channel V/50.0 kHz/256QAM**



2.3. Spurious Emissions At Antenna Terminals

2.3.1. Test Requirement

According to FCC section 2.1051, 24.131 and 24.133(a) section

The authorized bandwidth of narrowband PCS channels will be 10 kHz for 12.5 kHz channels and 45 kHz for 50 kHz channels. For aggregated adjacent channels, a maximum authorized bandwidth of 5 kHz less than the total aggregated channel width is permitted.

For transmitters authorized a bandwidth greater than 10 kHz:

1. On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of up to and including 40 kHz: at least $116 \log_{10} ((f_d + 10)/6.1)$ decibels or 50 plus $10 \log_{10} (P)$ decibels or 70 decibels, whichever is the lesser attenuation;
2. On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 40 kHz: at least $43 + 10 \log_{10} (P)$ decibels or 80 decibels, whichever is the lesser attenuation;

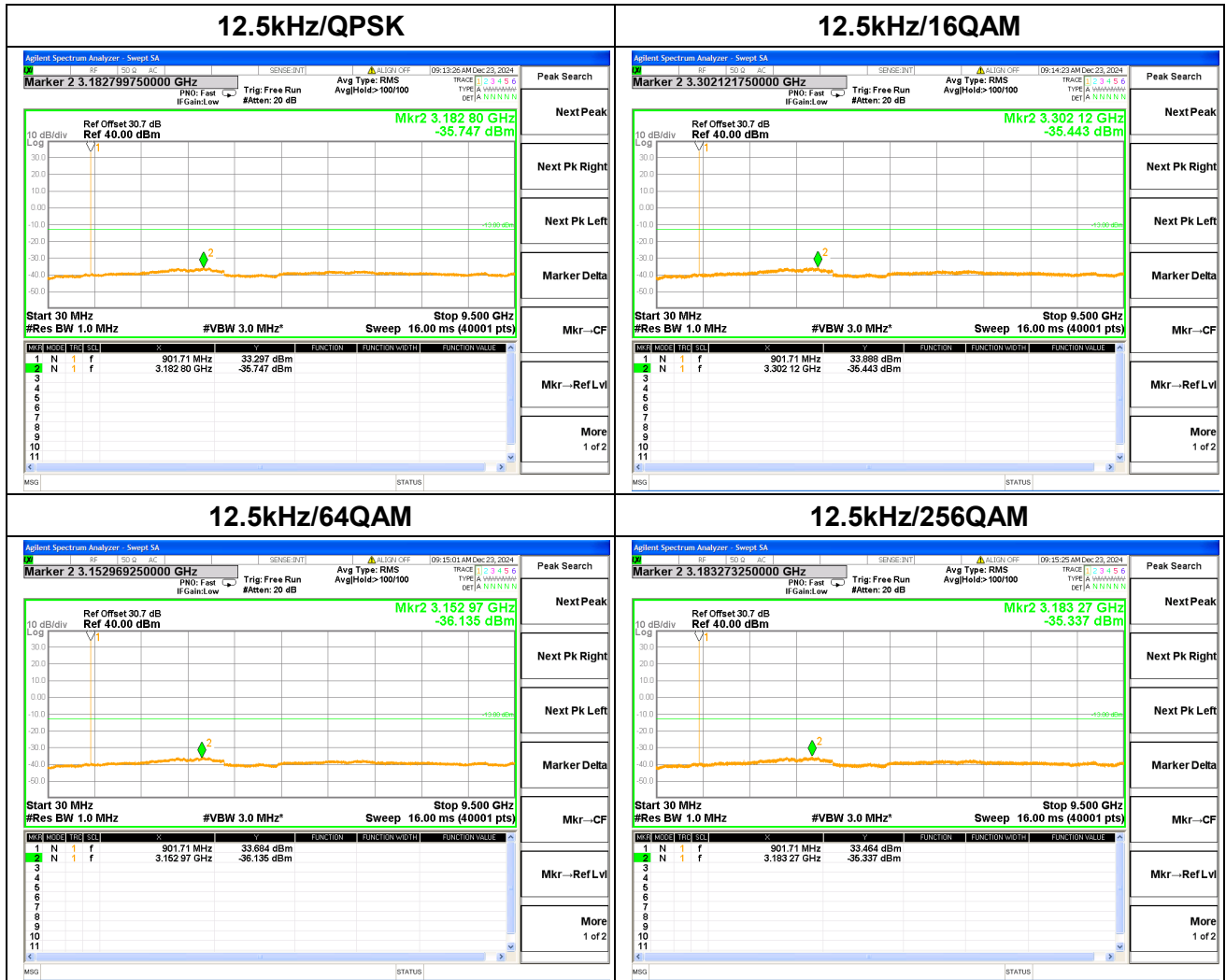
For transmitters authorized a bandwidth of 10 kHz:

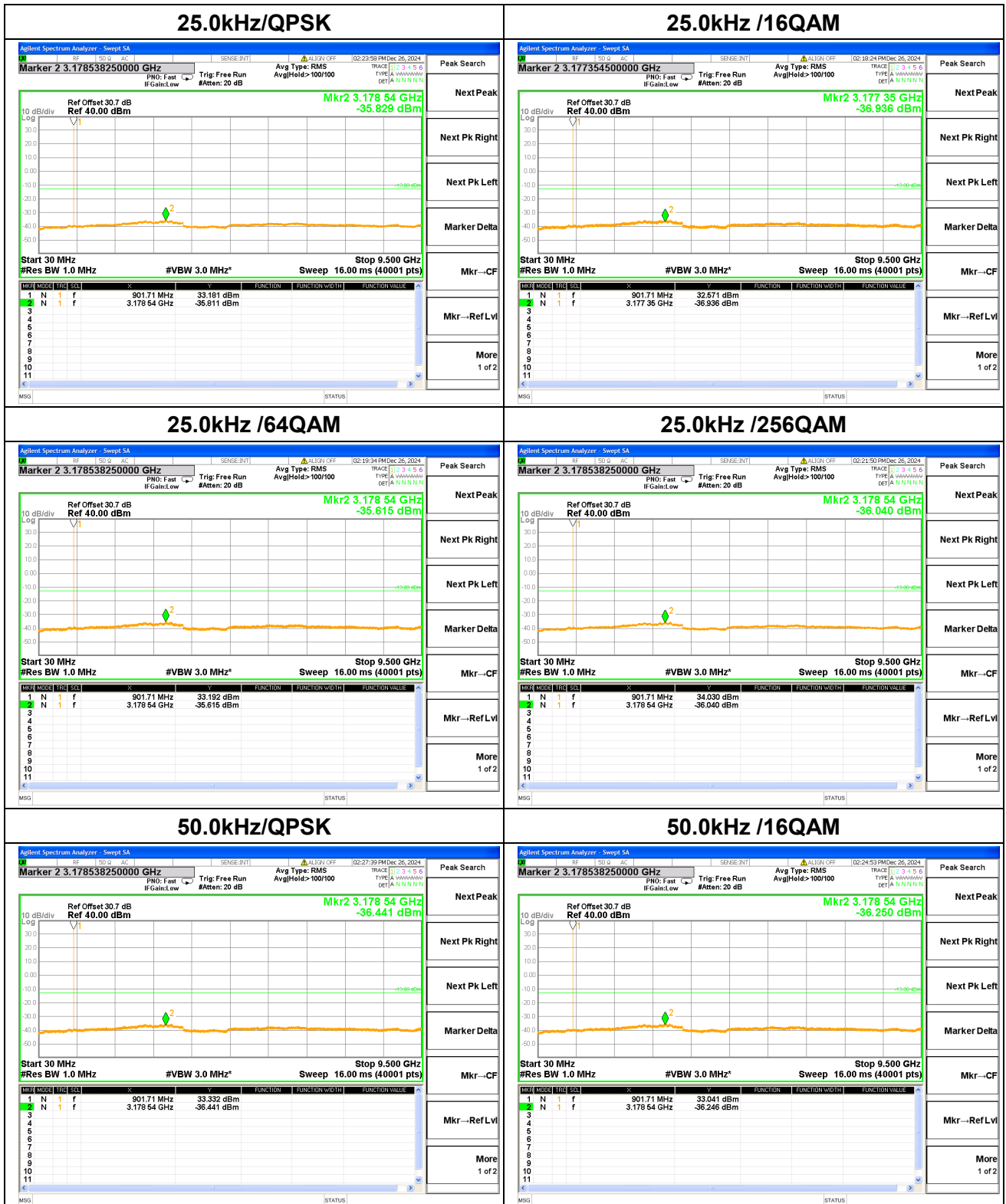
1. On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of up to and including 20 kHz: at least $116 \times \log_{10} ((f_d + 5)/3.05)$ decibels or $50 + 10 \times \log_{10} (P)$ decibels or 70 decibels, whichever is the lesser attenuation;
2. On any frequency outside the authorized bandwidth and removed from the edge of the authorized bandwidth by a displacement frequency (f_d in kHz) of more than 20 kHz: at least $43 + 10 \log_{10} (P)$ decibels or 80 decibels, whichever is the lesser attenuation.



2.3.2. Test Result

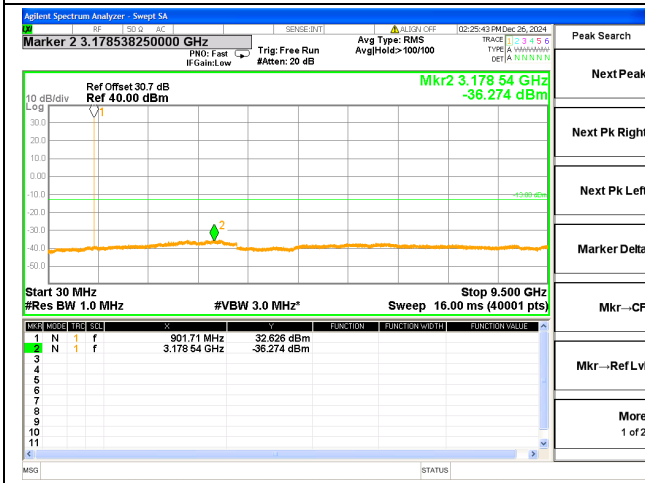
Nominal Frequency: 901.50 MHz Tx Port: Channel H



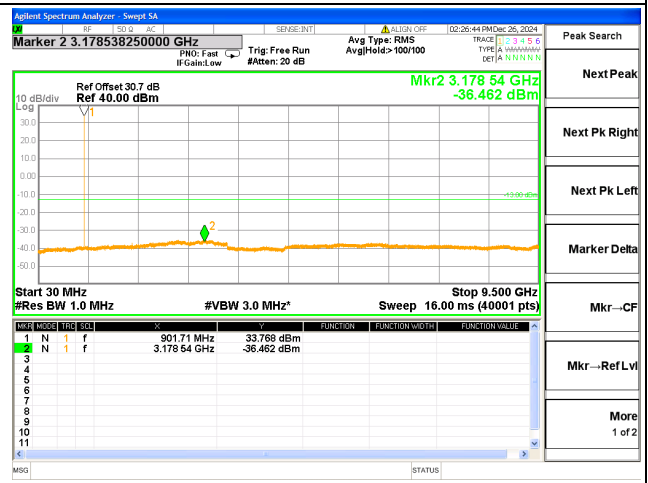




50.0kHz /64QAM

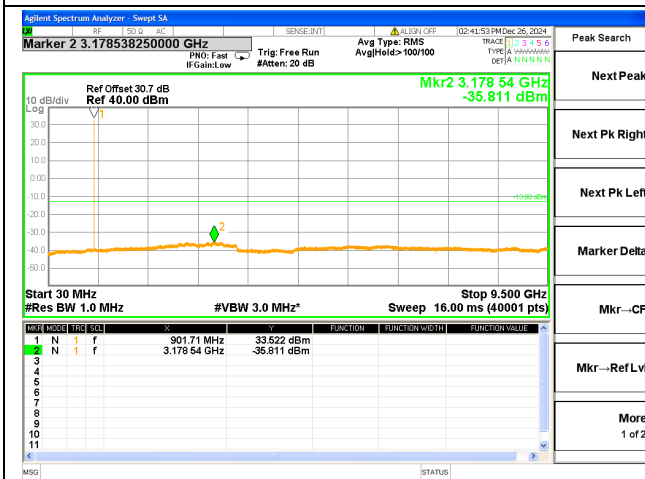


50.0kHz /256QAM

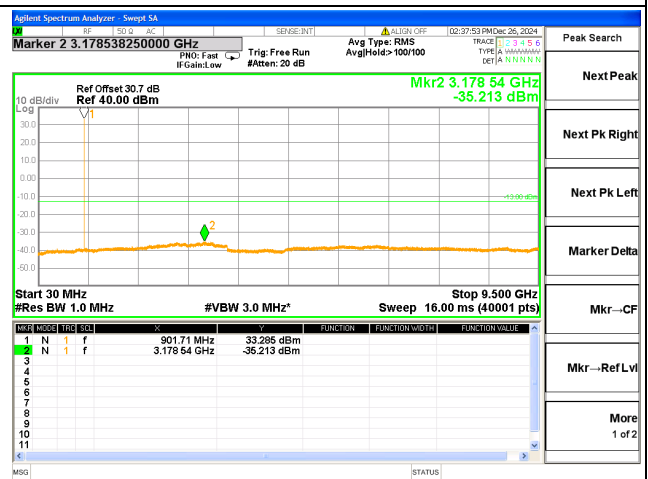


Nominal Frequency: 901.50 MHz Tx Port: Channel V

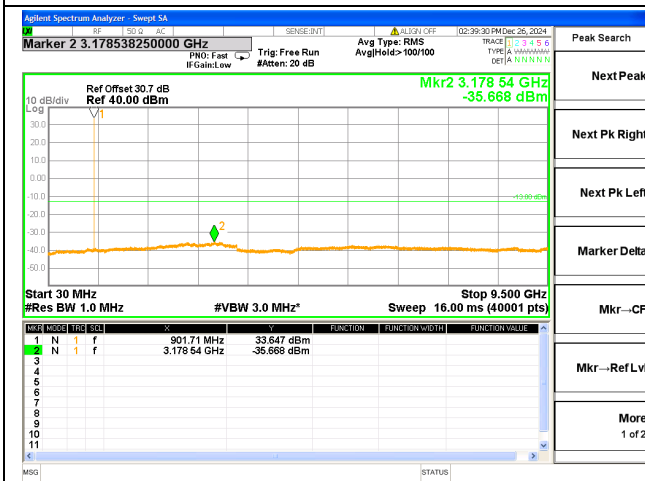
12.5kHz/QPSK



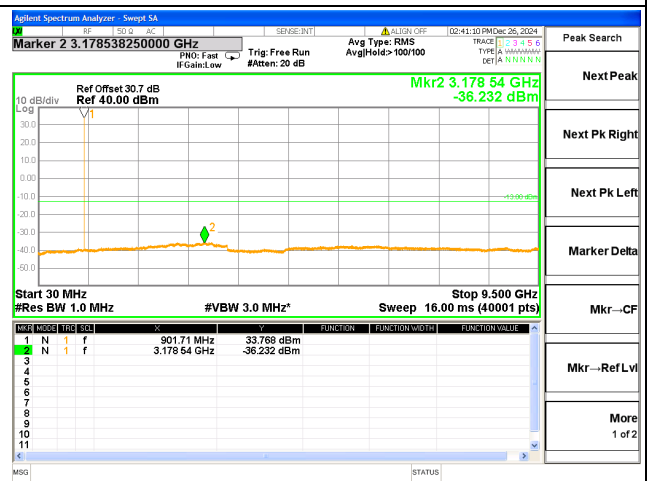
12.5kHz/16QAM

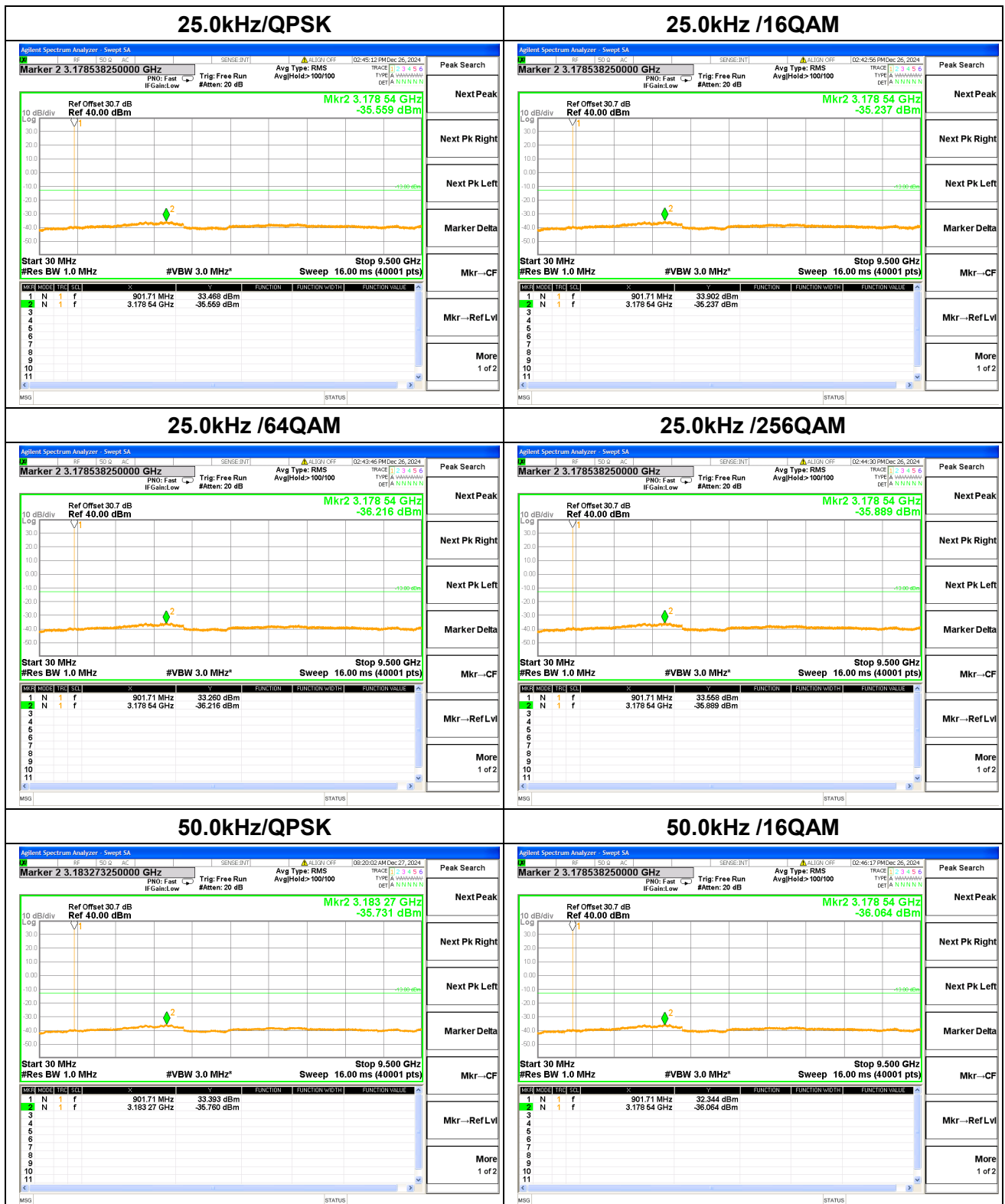


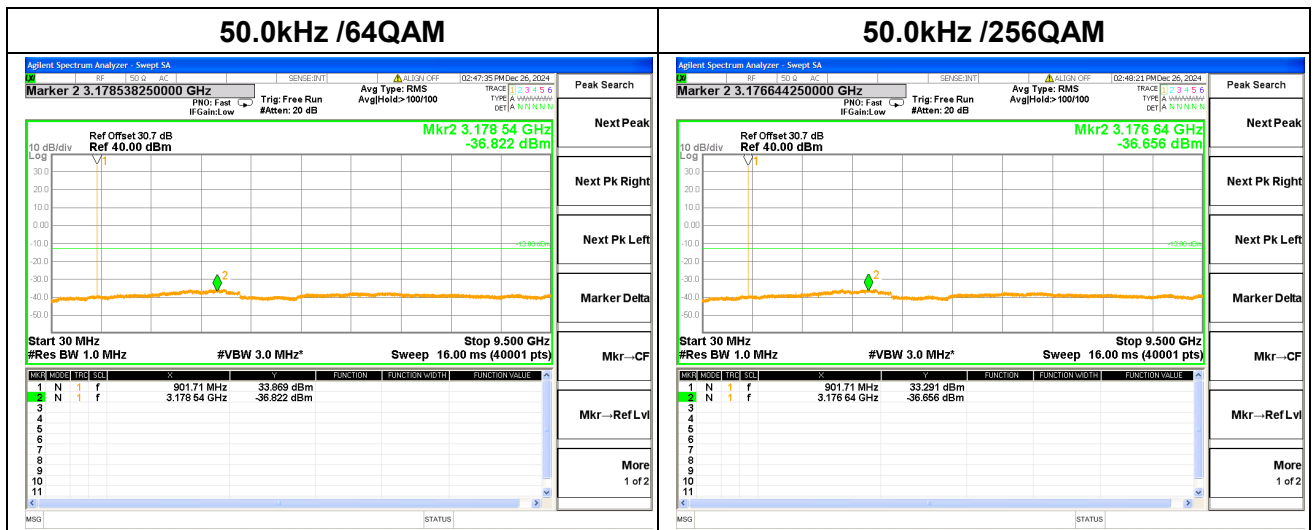
12.5kHz/64QAM



12.5kHz/256QAM

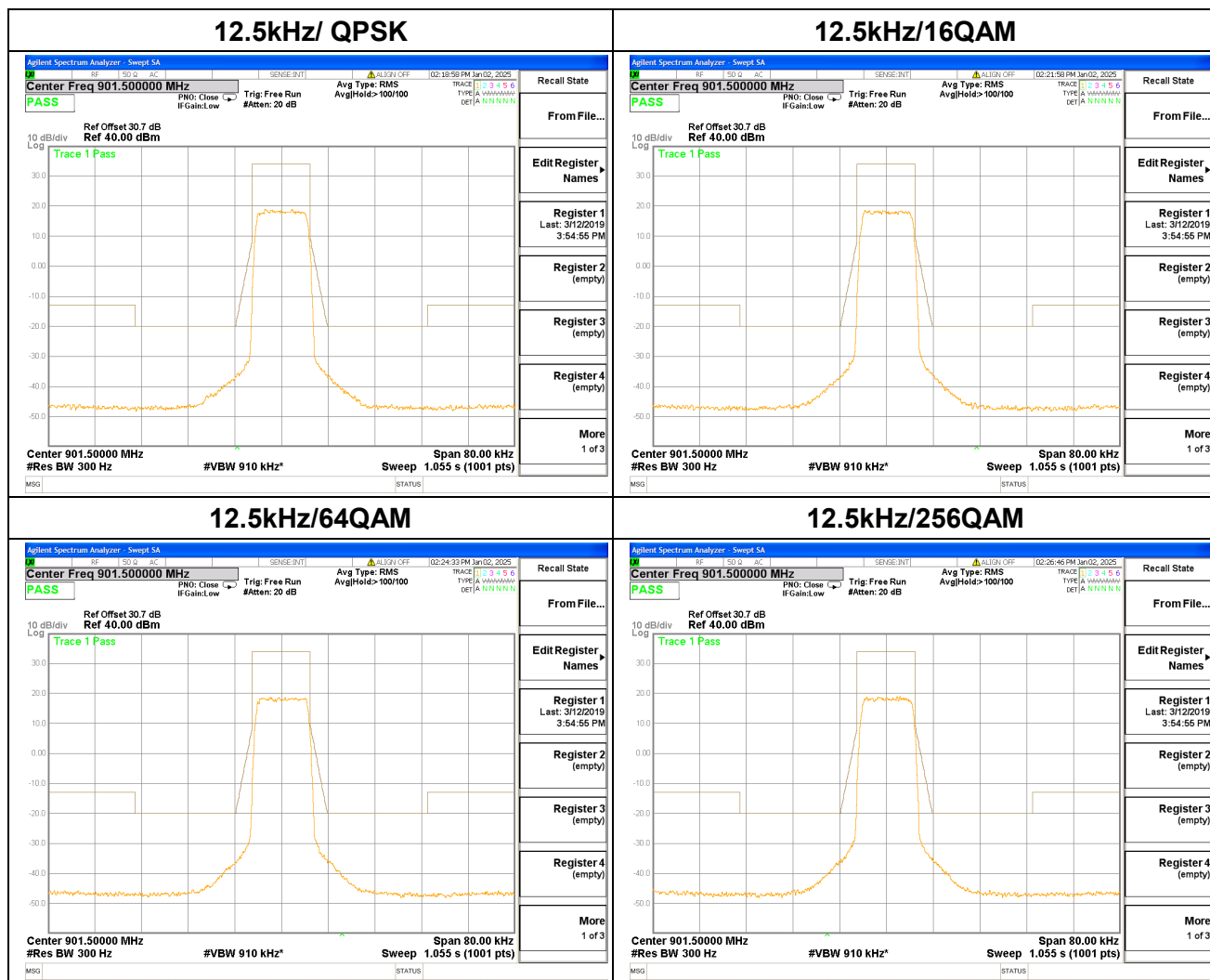


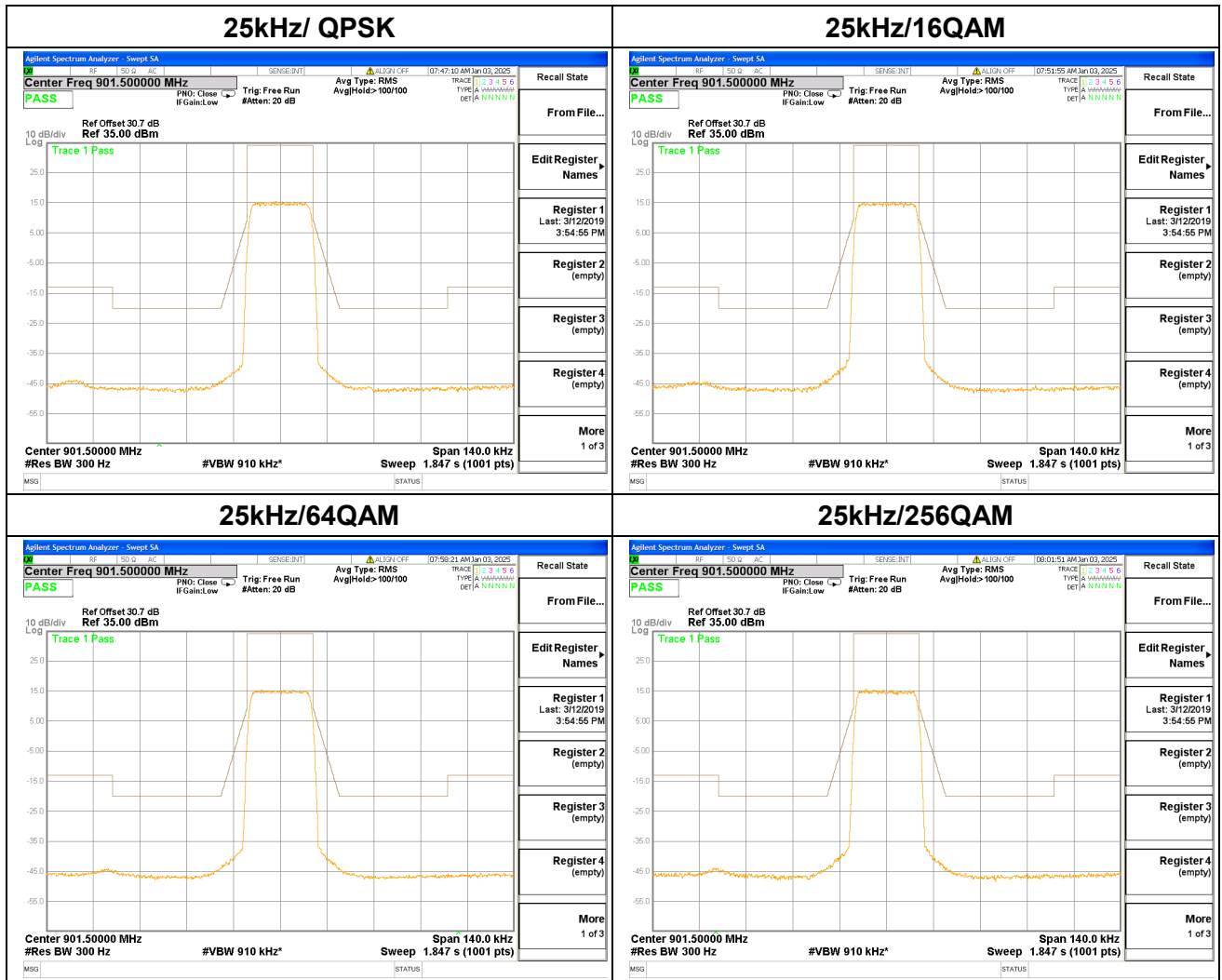


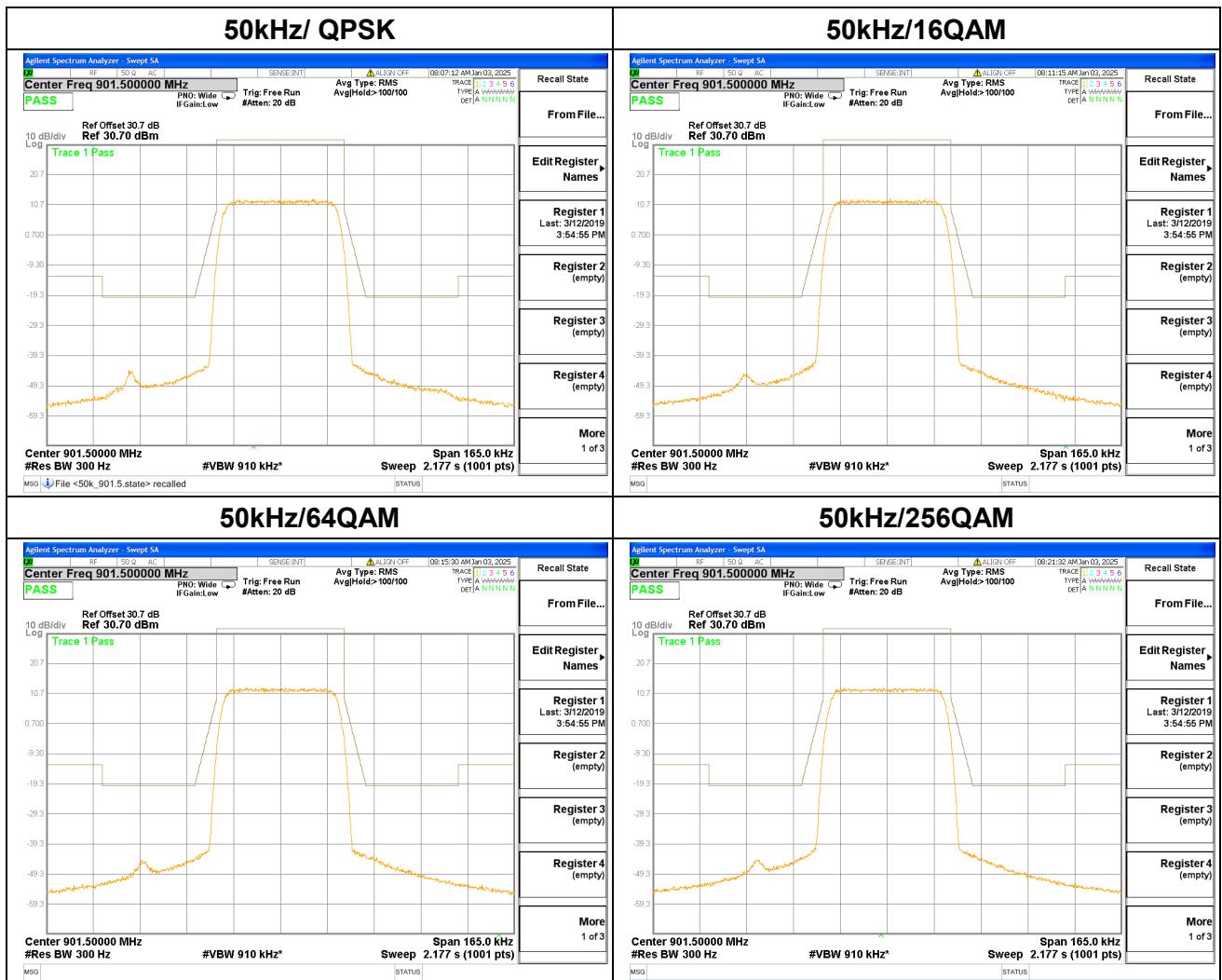




Nominal Frequency: 901.50 MHz Tx Port: Channel H



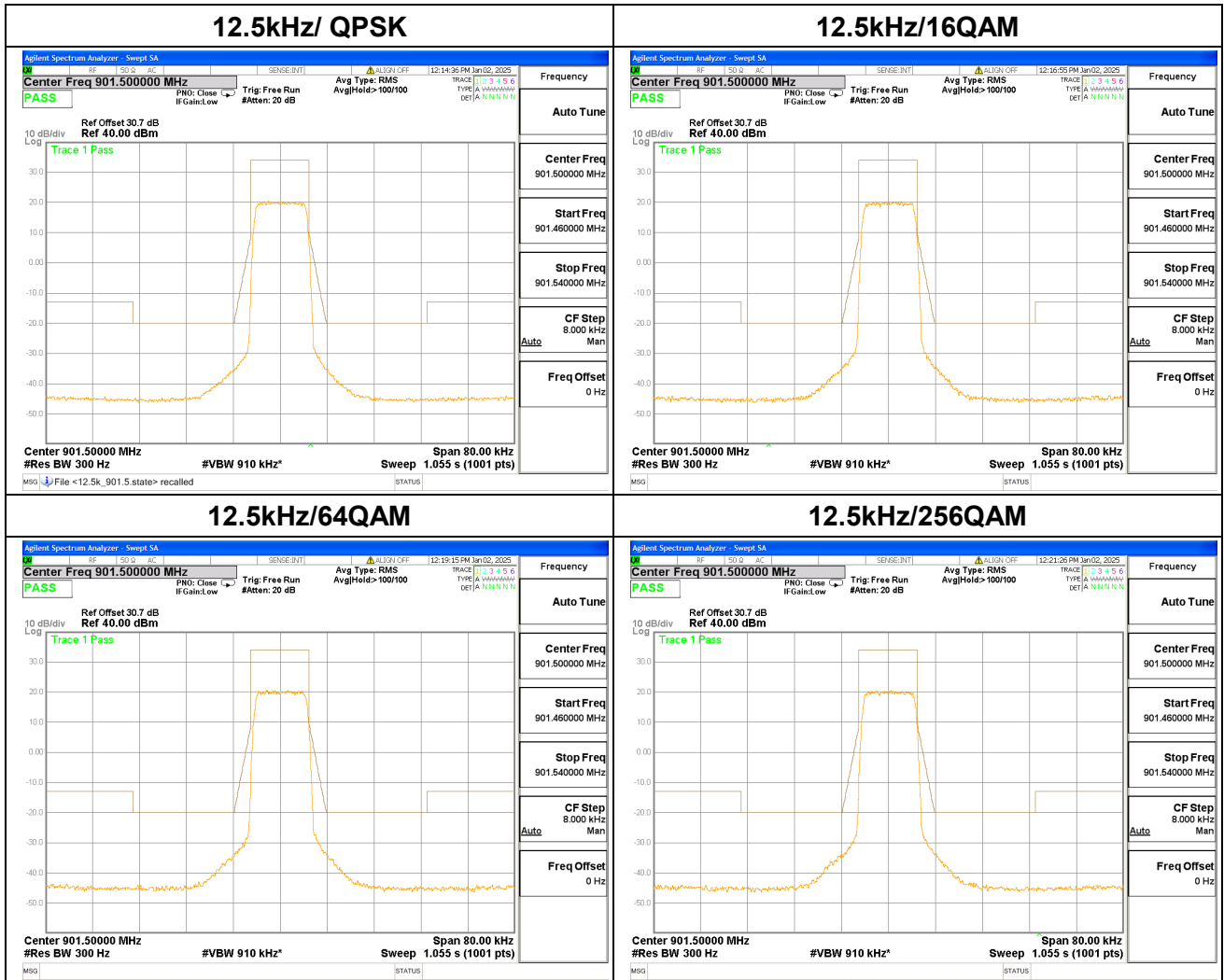


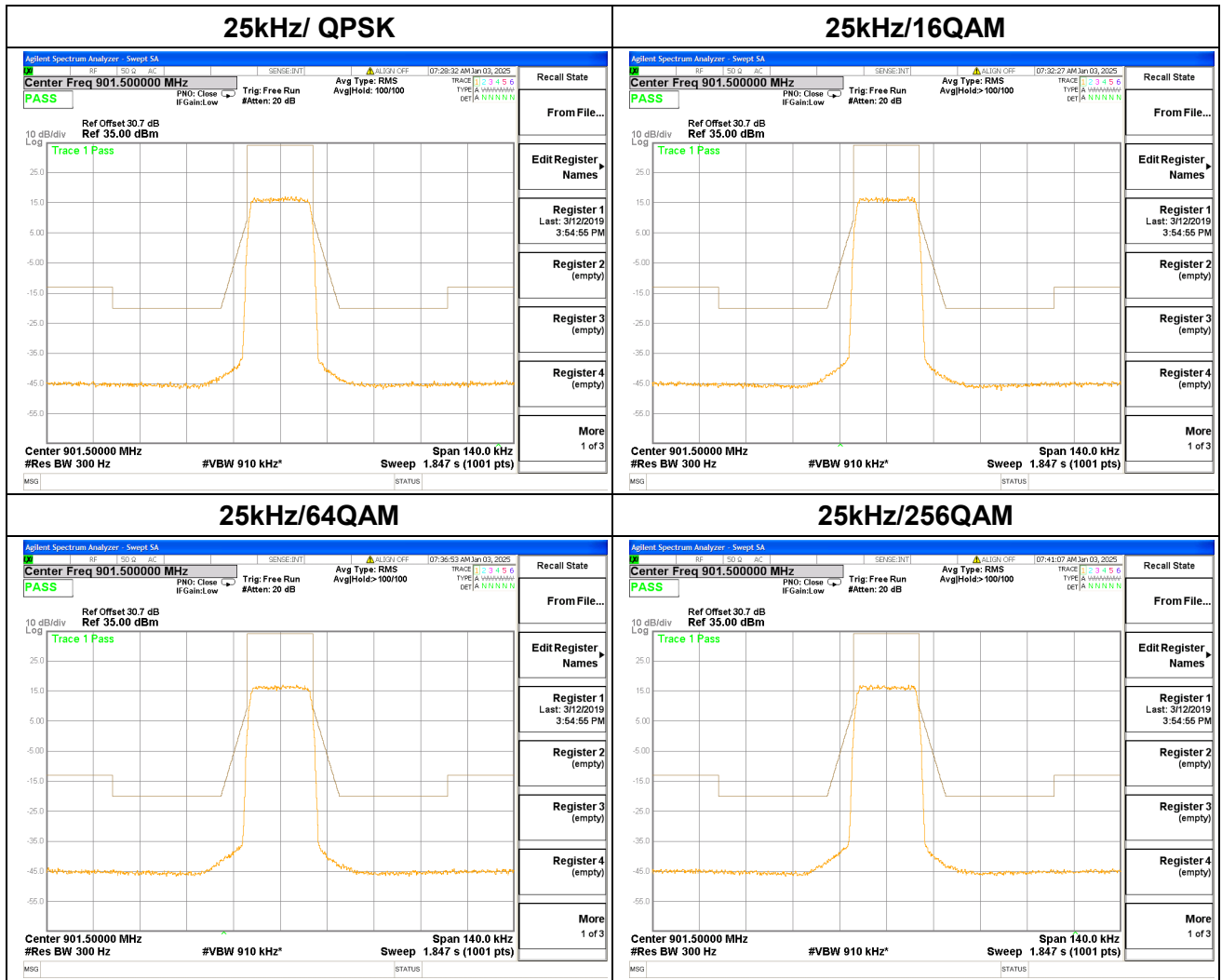


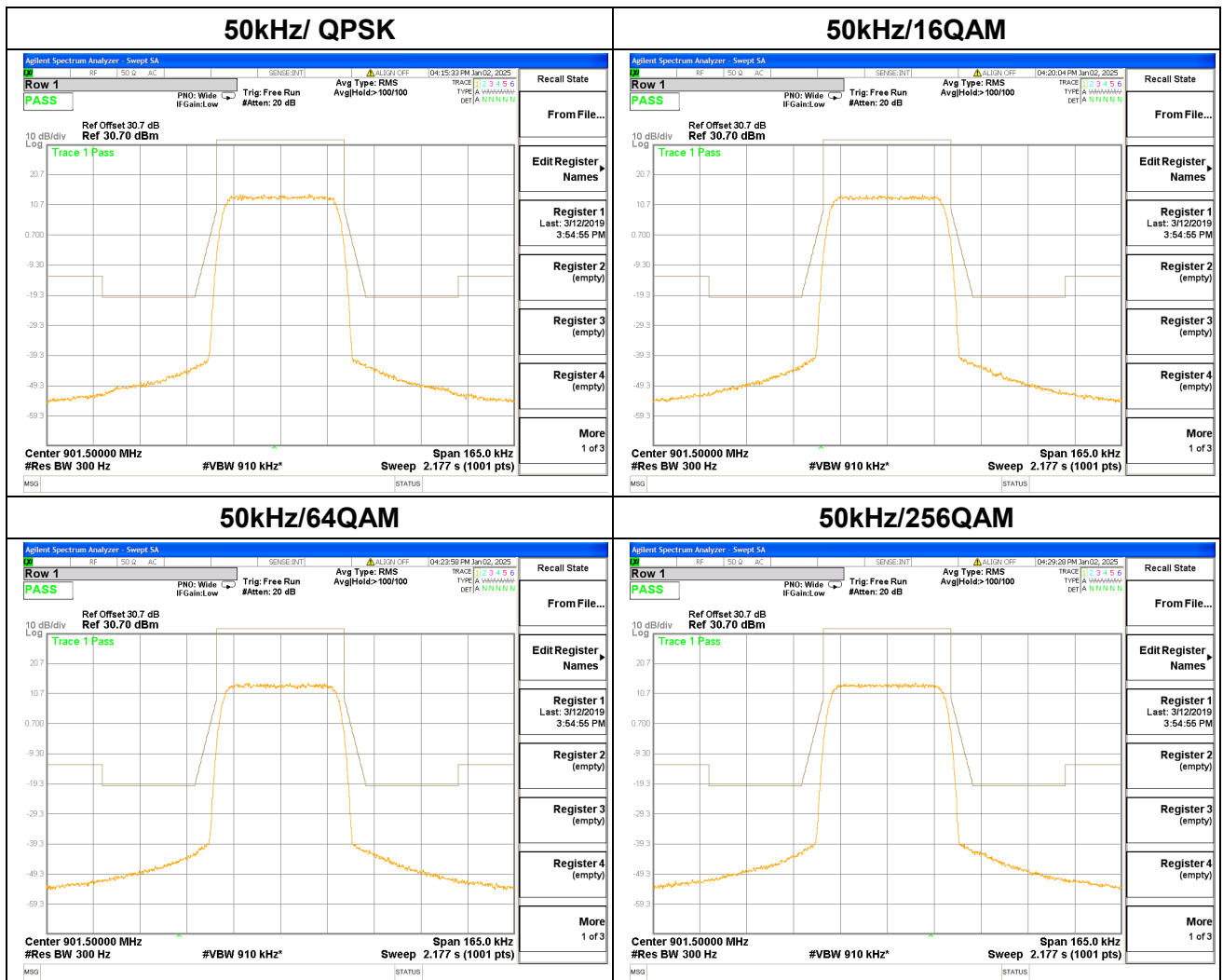


REPORT No.: SZ24060163W01

Nominal Frequency: 901.50 MHz Tx Port: Channel V







2.4. Radiated Spurious Emissions

2.4.1. Requirement

According to FCC section 2.1053 and section 24.133(a). For operations in the 901-902 MHz band , the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 901-902 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;

2.4.2. Test Result

Note 1: No discrete emissions were detected.

Note 2: The power of the EUT transmitting frequency should be ignored.

Note 3: N/A means the frequency is the basic frequency; they are no need to verdict.

Note 4: For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements. For measurements above 1GHz the resolution bandwidth is set to 1MHz for peak measurements.

Note 5: All bandwidth and modulation were considered and evaluated respectively by performing full test, only the worst cases were recorded in this test report.

Note 6: The received power level is the measured power adjusted for measurement antenna gain, connecting cable loss, and any external signal amplification or attenuation used in the test configuration. Mathematically, as in Equation:

$$P_R = P_{\text{meas}} - G_R + L_C - G_{\text{amp}}$$

where

P_{meas} measured power level, in dBm;

G_R gain of the receive (measurement) antenna, in dBi;

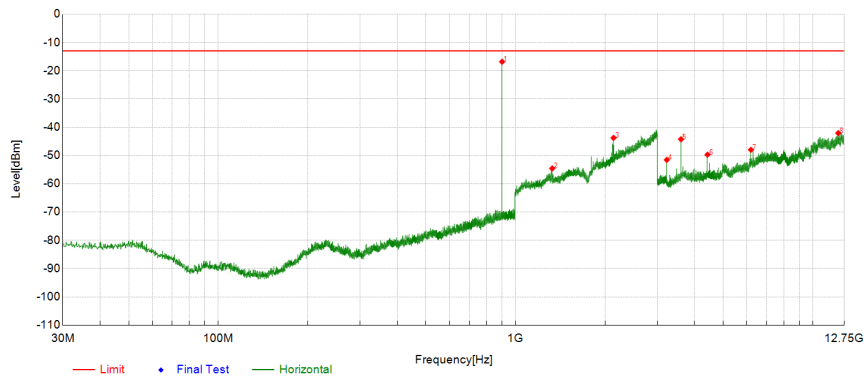
L_C signal loss in the measurement cable, in dB;

G_{amp} value of external amplification, in dB.

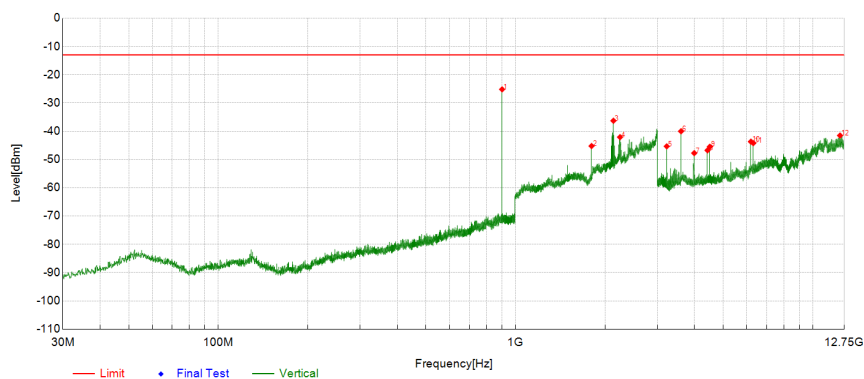


Type 1:

Nominal Frequency 901.5MHz, 50kHz BW, 256QAM



No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	901.545	-12.19	-13.00	H	PASS
2	1329.5	-54.03	-13.00	H	PASS
3	2136.75	-50.50	-13.00	H	PASS
4	3229.624	-51.09	-13.00	H	PASS
5	3605.9928	-45.90	-13.00	H	PASS
6	4426.9838	-52.78	-13.00	H	PASS
7	6197.6724	-57.99	-13.00	H	PASS
8	12189.8345	-63.90	-13.00	H	PASS



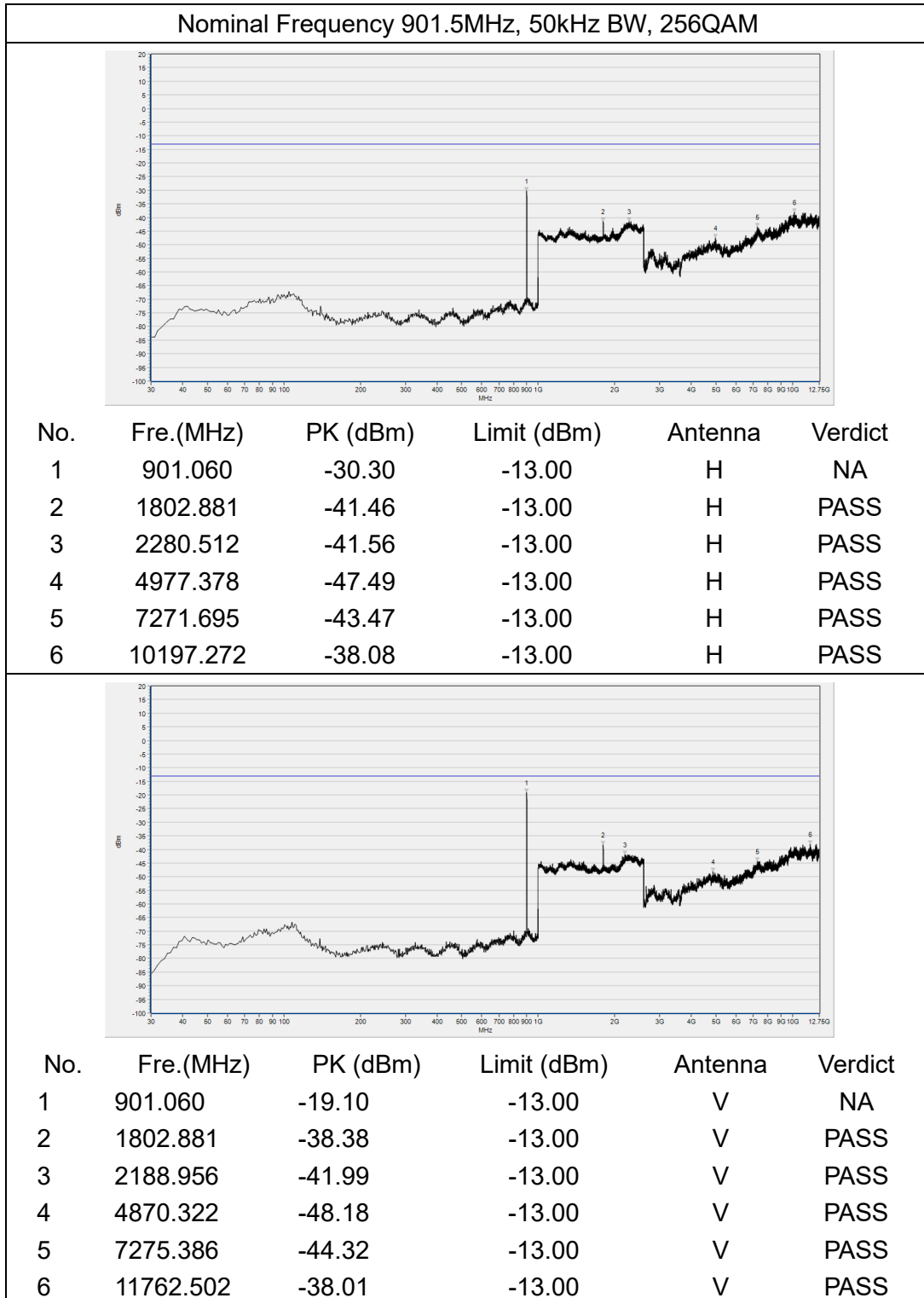
No.	Fre.(MHz)	PK (dBm)	Limit (dBm)	Antenna	Verdict
1	901.545	-20.76	-13.00	V	NA
2	1802.75	-49.12	-13.00	V	PASS
3	2135.5	-42.97	-13.00	V	PASS
4	2247.75	-50.81	-13.00	V	PASS
5	3227.6739	-44.73	-13.00	V	PASS
6	3605.9928	-41.51	-13.00	V	PASS
7	3993.0872	-48.81	-13.00	V	PASS



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8	4426.9838	-49.54	-13.00	V	PASS
9	4507.4254	-48.37	-13.00	V	PASS
10	6197.6724	-53.03	-13.00	V	PASS
11	6310.778	-52.87	-13.00	V	PASS
12	12359.0054	-63.91	-13.00	V	PASS

Type 2:





2.5. Frequency Stability

2.5.1. Requirement

According to FCC section 2.1055 and FCC section 24.135.e frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 24.135, the test conditions are:

The frequency stability of the transmitter shall be maintained within ± 0.0001 percent (± 1 ppm) of the center frequency over a temperature variation of -30 °Celsius to $+50$ °Celsius at normal supply voltage, and over a variation in the primary supply voltage of 85 percent to 115 percent of the rated supply voltage at a temperature of 20 °Celsius..

2.5.2. Test Results

901.5MHz QPSK 12.5kHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	24.0	+20(Ref)	17	0.019	PASS
100		-40	11	0.012	
100		-30	19	0.021	
100		-20	-14	-0.016	
100		-10	9	0.010	
100		0	16	0.018	
100		+10	16	0.018	
100		+20	13	0.014	
100		+30	19	0.021	
100		+40	15	0.017	
100		+50	-1	-0.001	
100		+60	17	0.019	
100		+70	16	0.018	
115	27.6	+20	14	0.016	
85	20.4	+20	14	0.016	



901.5MHz QPSK 25.0kHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	24.0	+20(Ref)	17	0.019	PASS
100		-40	2	0.002	
100		-30	17	0.019	
100		-20	15	0.017	
100		-10	-16	-0.018	
100		0	15	0.017	
100		+10	15	0.017	
100		+20	-6	-0.007	
100		+30	13	0.014	
100		+40	-12	-0.013	
100		+50	14	0.016	
100		+60	18	0.020	
100		+70	-20	-0.022	
115	27.6	+20	9	0.010	
85	20.4	+20	15	0.017	



901.5MHz QPSK 50.0kHz Limit =Within Authorized Band					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	24.0	+20(Ref)	14	0.016	PASS
100		-40	14	0.016	
100		-30	20	0.022	
100		-20	13	0.014	
100		-10	6	0.007	
100		0	19	0.021	
100		+10	-2	-0.002	
100		+20	20	0.022	
100		+30	13	0.014	
100		+40	15	0.017	
100		+50	19	0.021	
100		+60	-5	-0.006	
100		+70	18	0.020	
115	27.6	+20	17	0.019	
85	20.4	+20	-13	-0.014	



Annex A Test Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for test performed on the EUT as specified in CISPR 16-1-2:

Test items	Uncertainty
Output Power	± 2.22 dB
Bandwidth	$\pm 5\%$
Conducted Spurious Emission	± 2.77 dB
Band Edge	± 2.77 dB
Equivalent Isotropic Radiated Power	± 2.22 dB
Radiated Spurious Emissions	± 6 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.



Annex B Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Company Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

3. Facilities and Accreditations

All measurement facilities used to collect the measurement data are located at FL.3, Building A, FeiYang Science Park, Block 67, BaoAn District, Shenzhen, 518101 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.10-2013 and CISPR Publication 22; the FCC designation number is CN1192, the test firm registration number is 226174.



4. Test Equipment Utilized

4.1 Conducted Test Equipment

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Power Splitter	NW521	1506A	Weinschel	N/A	N/A
Attenuator 1	(N/A.)	30.0dB	Resnet	N/A	N/A
Attenuator 2	(N/A.)	30.0dB	Resnet	N/A	N/A
EXA Signal Analyzer	MY51511149	N9020A	Agilent	2024.06.19	2025.06.18
RF Cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
Coaxial Cable	CB02	RF02	Morlab	N/A	N/A
SMA Connector	CN01	RF03	HUBER-SUHNER	N/A	N/A
Temperature Chamber	S022177101 00089002	KMT-36LF 1A0	KOMEG	2024.09.11	2025.09.10

4.2 List of Software Used

Description	Manufacturer	Software Version
MORLAB EMCR	MORLAB	V1.2



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4.3 Radiated Test Equipment

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Cal. Due
Bi-Log Antenna	9163-274	VULB 9163	SCHWARZBECK	2024.06.29	2025.06.28
Horn Antenna	9120D-963	BBHA 9120D	SCHWARZBECK	2024.06.03	2025.06.02
Signal Analyzer	MY56060145	N9020A	Agilent	2024.05.30	2025.05.29
6db Attenuator	E191001	BW-N6W5+	Mini-circuits	2024.09.11	2025.09.10
Preamplifier (2GHz-18GHz)	61171/61172	S020180L3203	LUCIX CORP.	2024.05.30	2025.05.29
Preamplifier (10MHz-6GHz)	46732	S10M100L3802	LUCIX CORP.	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2024.05.30	2025.05.29
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2024.05.30	2025.05.29

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