

Test report No:
2630397R.701A

FCC TEST REPORT

Product Name	Automotive Module
Model and /or type reference	AG190W-GL
Trademark	QUECTEL
FCC ID	XMR2026AG190WGL
Applicant's name / address	Quectel Wireless Solutions Co., Ltd No. 8 Waipojing Road, Sijing Town, Songjiang District, Shanghai 201601, China
Test method requested, standard	FCC CFR Title 47 Part 95 Subpart L ANSI C63.26: 2015 KDB 511808 D01V02
Verdict Summary	IN COMPLIANCE
Documented by (name / position & signature)	Jun Xu/ Project Engineer 
Approved by (name / position & signature)	Frank He/Technical Manager 
Date of issue	2026-05-06
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Report template No	Template_FCC Part 95L-RF-V1.0

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COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Mar. 14, 2026
Date (start test)	Mar. 15, 2026
Date (finish test)	Apr. 09, 2026

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	: Equipment Under Test
QP	: Quasi-Peak
CAV	: CISPR Average
AV	: Average
CDN	: Coupling Decoupling Network
SAC	: Semi-Anechoic Chamber
OATS	: Open Area Test Site
BW	: Bandwidth
AM	: Amplitude Modulation
PM	: Pulse Modulation
HCP	: Horizontal Coupling Plane
VCP	: Vertical Coupling Plane
U_N	: Nominal voltage
T_x	: Transmitter
R_x	: Receiver
N/A	: Not Applicable
N/M	: Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2630397R.701A	V1.0	Initial issue of report.	2026-04-14
2630397R.701A	V1.1	Test report 2630397R.701A V1.1 modified the standard on page 1, and modified the EIRP Limit on page 48, adding Note 2. (Test report 2630397R.701A V1.1 replaces test report 2630397R.701A V1.0; test report 2630397R.701A V1.0 is obsolete.)	2026-05-06

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with FCC CFR Title 47 Part 95 Subpart L.
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:
 - Chapter 1.1 General Description of the Item(s);
 - Chapter 1.2 Channel List.

USED EQUIPMENT

Conducted Test/ TR8

Instrument	Manufacturer	Model No.	Serial No.	Cal. Date	Next Cal. Date	Firmware Version	Software version
Coaxial Cable	N/A	N/A	2478	2025.06.10	2026.06.09	N/A	N/A
High and low temperature and fast temperature change test box	ASTUOD	ASTD-FBT-225K	N/A	2026.01.11	2027.01.10	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-8S	RF07	2025.06.17	2026.06.16	N/A	N/A
Signal & Spectrum Analyzer	R&S	'FSV3044	101560	2026.01.18	2027.01.17	A.14.03	N/A

Radiated Emission(9KHz-1GHz) / AC2

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date	Firmware Version	Software Version
Anechoic chamber	Quietek	9m*6m*6m	AC2	2024.07.07	2027.07.06	N/A	N/A
EMI Test Receiver	R&S	ESCI	100573	2025.12.07	2026.12.06	4.42 SP2	N/A
Bilog Antenna	Teseq GmbH	CBL6112D	27611	2026.03.11	2027.03.10	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-021	2025.04.30	2026.04.29	N/A	N/A
Dekra test software	Dekra	N/A	N/A	N/A	N/A	N/A	3

Radiated Emission (1GHz-40GHz) / AC5

Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date	Firmware Version	Software Version
Anechoic chamber	Quietek	9m*6m*6m	AC5	2024.07.07	2027.07.06	N/A	N/A
DRG Horn Antenna	ETS-Lindgren	3117	167055	2025.08.14	2026.08.13	N/A	N/A
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2026.03.01	2027.02.28	N/A	N/A
MXA Signal Analyzer	Keysight	N9020B	MY60112218	2026.01.18	2027.01.17	A.31.05	N/A
Pre-Amplifier	XH	LNA1845	LNA23040284	2025.03.29	2026.03.28	N/A	N/A
Pre-Amplifier	XH	LNA1845	LNA23040284	2026.03.26	2027.03.25	N/A	N/A
Pre-Amplifier	CY	EMC184045SE	980263	2025.05.10	2026.05.09	N/A	N/A
Filter Switch Box	MVE	MSW-F196	C070001S	2026.01.24	2027.01.23	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-001	2025.08.22	2026.08.21	N/A	N/A
Temperature/Humidity Meter	RTS	RTS-1909	THM-024	2025.04.30	2026.04.29	N/A	N/A
Test Software	Tonscend	JS1120	JS36-RE	N/A	N/A	N/A	V5.0.0

UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95% .

Test item Test Location	Uncertainty
Occupied Bandwidth	± 1560.62 Hz
Transmit Power (Radiated Method)	± 2.62 dB
Out-of-Band Emissions (OOBE)	± 2.03 dB
Spurious Emissions at Antenna Terminal	± 2.03 dB
Radiated Emission	30 MHz~180 MHz: ± 4.22 dB 180 MHz~1 GHz: ± 2.69 dB 1 GHz~18 GHz: ± 2.78 dB 18 GHz~40 GHz: ± 2.89 dB
Frequency Stability	± 0.56 ppm

1 GENERAL INFORMATION

1.1 General Description of the Item(s)

Product Name:	Automotive Module	
Model Name:	AG190W-GL	
Trademark.:	QUECTEL	
FCC ID:	XMR2026AG190WGL	
Power Supply:	5Vdc	
Hardware Version:	R1.0	
Software Version:	AG190WGLR01A02M0G	
Manufacturer:	Quectel Wireless Solutions Co., Ltd	
Manufacturer Address:	No. 8 Waipojing Road, Sijing Town, Songjiang District, Shanghai 201601, China	
Test EUT:	SN:E1A26B20R000018	
Wireless specification:	C-V2X	
Type of Modulation:	QPSK&16QAM	
Operating frequency range(s):	5895-5925 MHz	
Smart System:	☐	SISO
	☒	MIMO-CDD
Antenna Type:	External antenna	
Antenna Gain:	-3.70 dBi	

Remark:

As above information is provided and confirmed by the applicant. DEKRA is not liable to the accuracy, suitability, reliability or/and integrity of the information.

1.2 Channel List

10MHz Channel Bandwidth Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
180	5900	182	5910	184	5920	--	--
20MHz Channel Bandwidth Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
181	5905	183	5915	--	--	--	--

Note: The General Description of the Item, Channel List in clause 1 are provided and confirmed by the client.

2 DESCRIPTION OF TEST SETUP

2.1 Auxiliary equipment /Accessories/Test software for the EUT

Auxiliary equipment	Type / Version	Manufacturer	Supplied by
(1) Notebook	ThinkPad T14	Lenovo	Adapter
(2) USB Control Cable	N/A	N/A	N/A
(3) USB Control Cable	N/A	N/A	N/A
Software	Type / Version	Manufacturer	Supplied by
QCOM	V1.5	N/A	N/A

2.2 Power setting in test

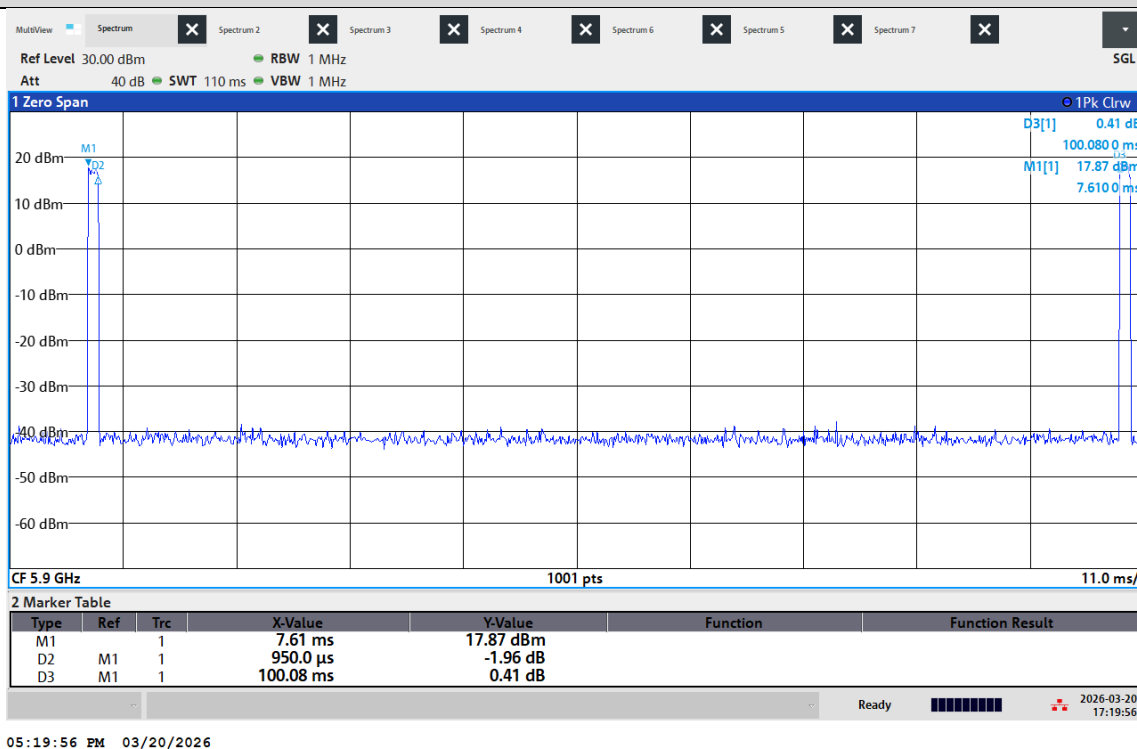
Mode	Channel	Frequency (MHz)	Power setting
10MHz Channel Bandwidth	180	5900	Default
	182	5910	Default
	184	5920	Default
20MHz Channel Bandwidth	181	5905	Default
	183	5915	Default

2.3 Duty Cycle Of Test signal

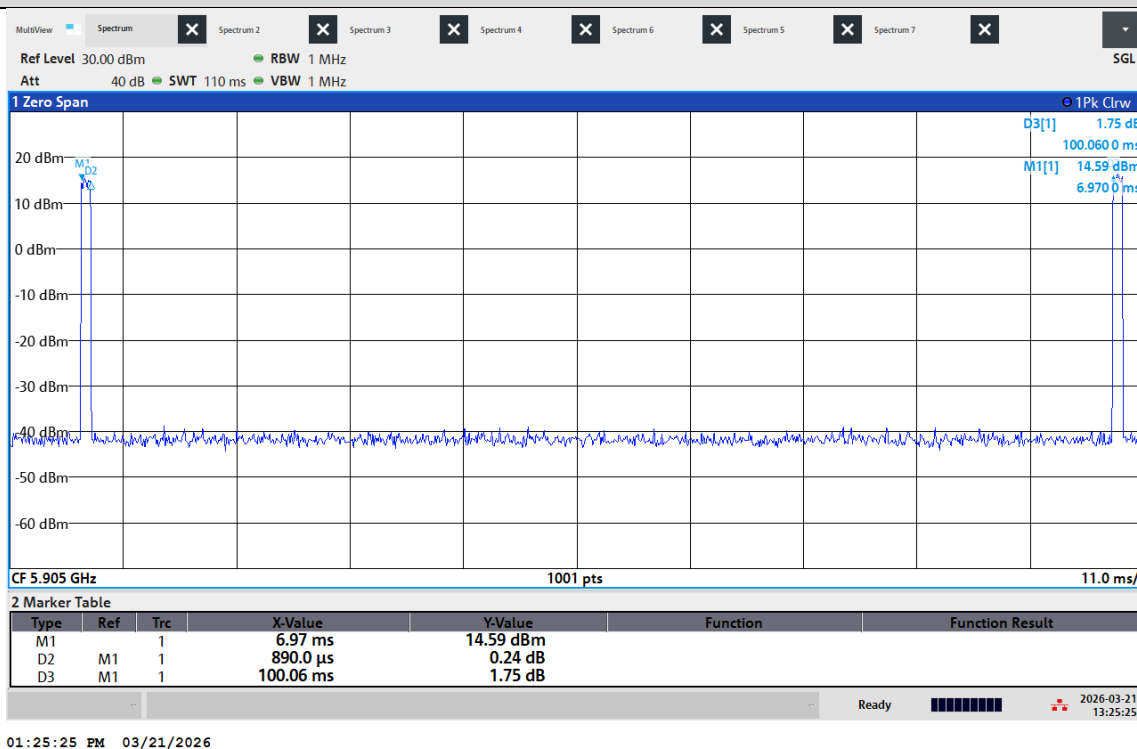
Bandwidth	Frequency[MHz]	On Times (ms)	On+Off Times(ms)	Duty Cycle[%]	Duty Factor (dB)]
10 MHz	5900	0.95	100.08	0.95	20.23
20 MHz	5905	0.89	100.06	0.90	20.51

Duty cycle = Tx on/(Tx on+ Tx off), Duty factor = $10 \cdot \log(\text{On+Off Times/On Times})$.

10MHz



20MHz



3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

3.1 Standards

Standard	Year	Description
FCC CFR Title 47 Part 95 Subpart L	2026	Intelligent Transportation Systems (ITS) On-Board Units (OBUs) in the 5895-5925MHz Band
KDB 511808 D01 C-V2X v02	2025	Equipment Authorization for Cellular Vehicle-to-Everything (C-V2X) Devices for Operation according to Part 90 and Part 95 Rules
ANSI C63.26	2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
KDB 662911 D01 Multiple Transmitter Output v02r01	2013	Emissions Testing of Transmitters with Multiple Outputs in the Same Band

3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards: N/A.

(Please define the deviations from the standard(s) if applicable)

3.3 Overview of results

Requirement – Test Item of FCC	Standard(s)	Verdict	Remark
Occupied Bandwidth	FCC 47 CFR Part 2.1049	PASS	Test data please refer to Appendix A
Transmit Power	FCC 47 CFR Part 95.3204	PASS	Test data please refer to Appendix B
Out-of-Band Emissions (OOBE)	FCC 47 CFR Part 95.3205	PASS	Test data please refer to Appendix C
Spurious Emissions at Antenna Terminal	FCC 47 CFR Part 95.3205	PASS	Test data please refer to Appendix D
Radiated Emission	FCC 47 CFR Part 95.3205	PASS	Test data please refer to Appendix E
Frequency Stability	FCC 47 CFR Part 2.1055	PASS	Test data please refer to Appendix F
Note: The radiation measurement is pre tested under X, Y, and Z axis positioning to find the worst placement for final testing.			

3.4 Test Facility

Test site name :	DEKRA Testing and Certification (Suzhou) Co., Ltd.
Tset address :	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
FCC Designation Number:	CN1199

4 TEST ITEMS OF LIMIT/SETUP/PROCEDURE

4.1 Occupied bandwidth

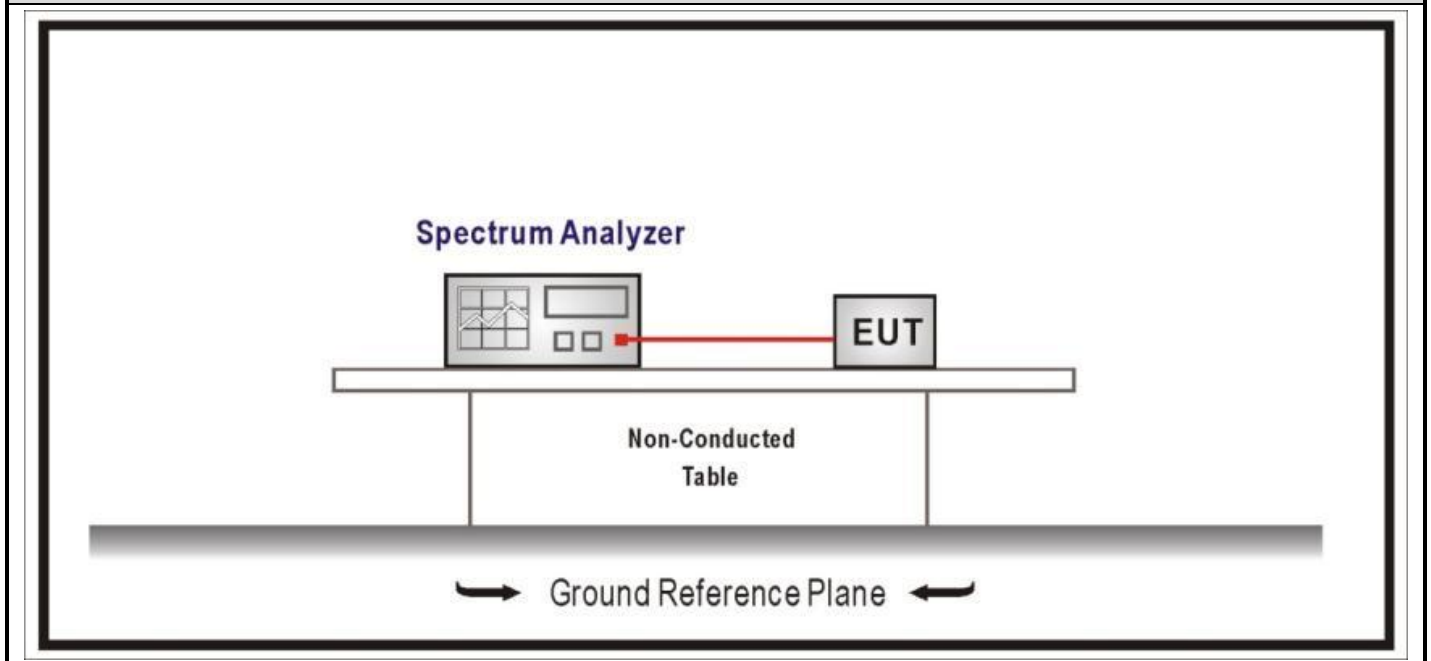
VERDICT: PASS

4.1.1 Limit

Standard	FCC 47 CFR Part 95.3203
-----------------	-------------------------

The 26 dB bandwidth and 99% bandwidth within the designated frequency band.

4.1.2 Test Setup



4.1.3 Test Procedure

FOR 99 PERCENT OCCUPIED BANDWIDTH

- The following procedure shall be used for measuring (99 %) power bandwidth:
- Set center frequency to the nominal EUT channel center frequency.
- Set span = 1.5 times to 5.0 times the OBW.
- Set RBW = 1 % to 5 % of the OBW
- Set VBW $\geq 3 \cdot$ RBW
- Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used.

Otherwise,

peak detection and max hold mode (until the trace stabilizes) shall be used.

- Use the 99 % power bandwidth function of the instrument (if available).
- If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

FOR 26dB BANDWIDTH

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.1.4 Test Data

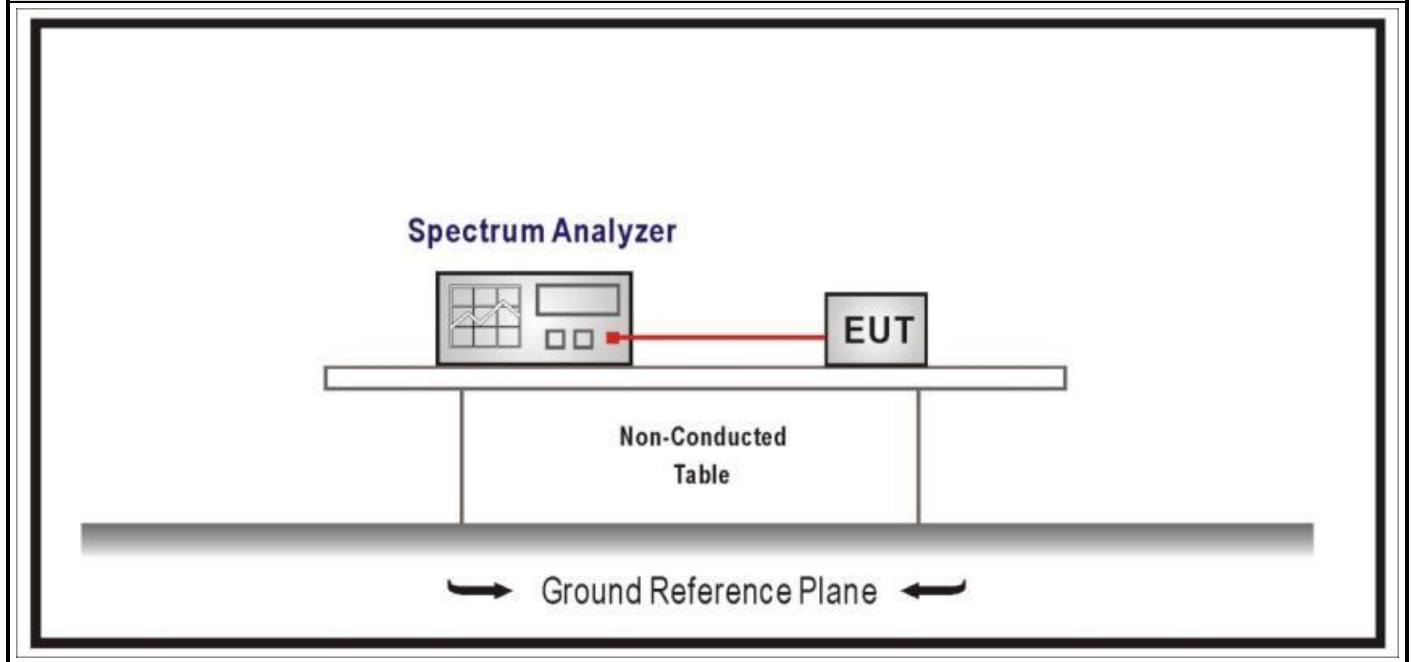
Test data please refer to **Appendix A**

4.2 Transmit Power**VERDICT: PASS****4.2.1 Limit****Standard** FCC 47 CFR Part 95.3204(a)

Channel (MHz)	Channel Bandwidth (MHz)	EIRP with Geofencing outside zone (dBm/BW)	EIRP with Geofencing operating within zone* or without Geofencing (dBm/BW)
5895-5905	10	33	23
5905-5915	10	33	33 [†]
5915-5925	10	33	33 [†]
5895-5915	20	33	23
5905-5925	20	33	33 [†]
5895-5925	30	33	23
* Coordination zones of §90.387(b) ²			
[†] Reduced to 27dBm within ± 5 degrees of horizontal			

Table 1. OBU EIRP Limits

4.2.2 Test Setup



4.2.3 Test Procedure

☐ According to requirements of 511808 D01 C-V2X v02, Transmit Power Test Procedures:

- a) OBUs employing C-V2X technologies shall have a maximum EIRP that does not exceed the limits provided in § 95.3204. The EIRP is measured as the maximum EIRP toward the horizon or horizontally, whichever is greater, based on the gain associated with the main or center of the transmission beam. The EIRP may be calculated from conducted power measurements using characterized antenna data or the antenna data sheet; however, the antenna data must have sufficient resolution to determine the antenna gain within ± 5 degrees from the horizontal plane.
- b) Radiated measurements shall be made if there is insufficient resolution in the antenna data to determine compliance. The resolution should be such that the antenna gain can be determined at ± 5 degrees elevation. The general test setup is shown in Figure 2. The OBU transmit antenna shall be placed at a height of 1.5 meters and oriented such that the antenna's main lobe is facing parallel to the ground plane. The OBU shall be configured for testing to represent the actual installation.
- c) The measurement antenna may be placed at any test distance if it is in the far field of the OBU transmit antenna and at least 3 meters away.

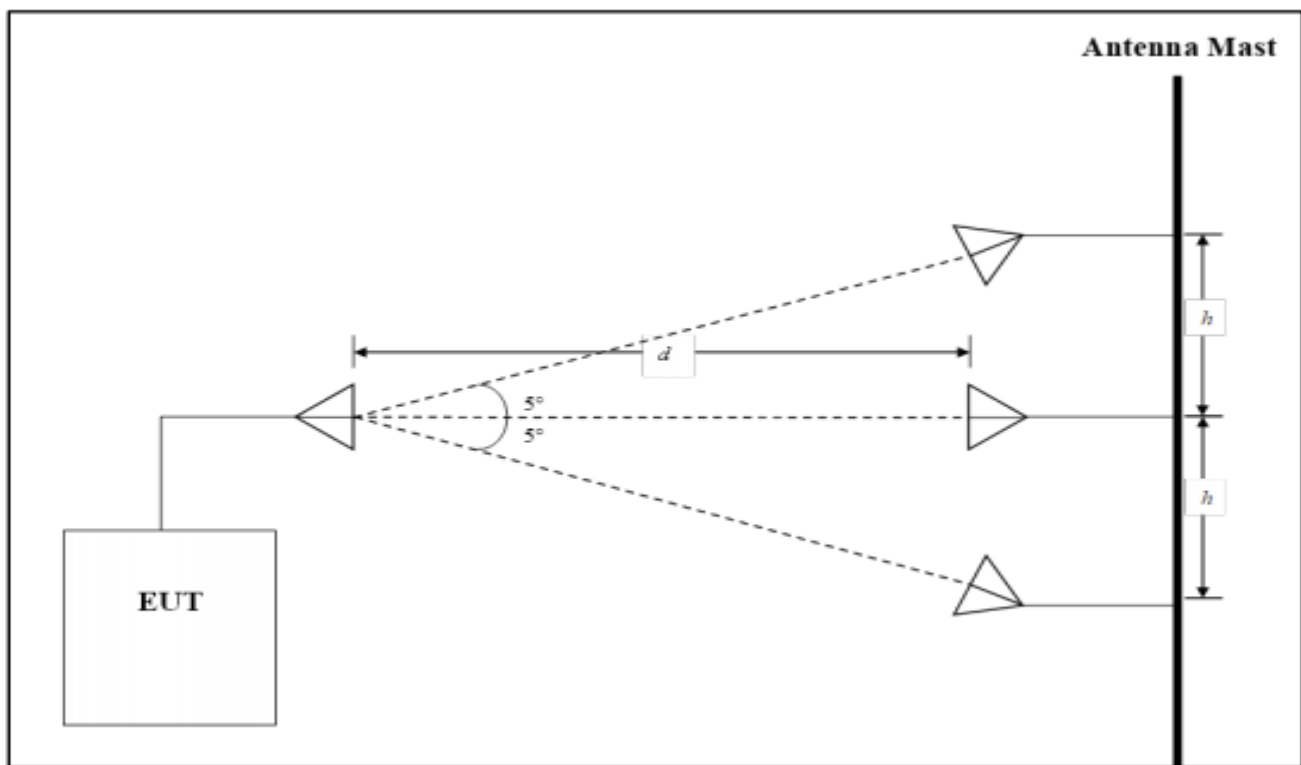


Figure 2. C-V2X OBU Radiated Test Setup Diagram

d) Several operating bands require the beam to be evaluated based on whether the device is transmitting in the coordination zone or operating without geofencing capabilities, as shown in Table 1. To determine compliance in these bands, after the maximum EIRP is measured, the receive measurement antenna shall be elevated to the appropriate height⁴ relative to the transmit antenna. Measurements or calculations for EIRP shall be performed at the upper and lower edges of the ± 5 -degree beam width. If the maximum EIRP is less than 27 dBm, then additional testing for ± 5 degrees is not required.

e) OBUs with a maximum EIRP > 27 dBm shall describe the mechanism for reducing the main beam power to 27 dBm under §95.3204(a)(5) when the beam is within the ± 5 degrees elevation from the horizontal plane.

☒ ANSI C63.26-2015 Section 5.2.4.4.2 Alternative procedure for measuring average power of a broadband signal with a constant duty cycle using a spectrum/signal analyzer or EMI receiver.

When the fundamental condition for average power measurements cannot be realized (i.e., the EUT cannot be configured to transmit at full-power on a continuous basis (i.e., duty cycle < 98%) and the instrumentation cannot be configured to measure only during active full-power transmissions), then the following procedure can be used if the EUT duty cycle is constant (i.e., duty cycle variations are less than or equal to $\pm 2\%$). See 5.2.4.3.4 for guidance on measurement of duty cycle.

a) Set span to $2 \times$ to $3 \times$ the OBW.

b) Set RBW = 1% to 5% of the OBW.

c) Set VBW $\geq 3 \times$ RBW.

d) Set number of measurement points in sweep $\geq 2 \times$ span / RBW.

e) Sweep time:

1) Set = auto-couple, or

2) Set $\geq [10 \times (\text{number of points in sweep}) \times (\text{transmission symbol period})]$ for single sweep (automation-compatible) measurement.

f) Detector = power averaging (rms).

g) Set sweep trigger to "free run."

h) Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately

determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

i) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band or channel power measurement function with band/channel limits set equal to the OBW band edges. If the instrument does not have a band or channel power function, sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

j) Add $10 \log (1/\text{duty cycle})$ to the measured power level to compute the average power during continuous transmission. For example, add $[10 \log (1/0.25)] = 6 \text{ dB}$ if the duty cycle is a constant 25%

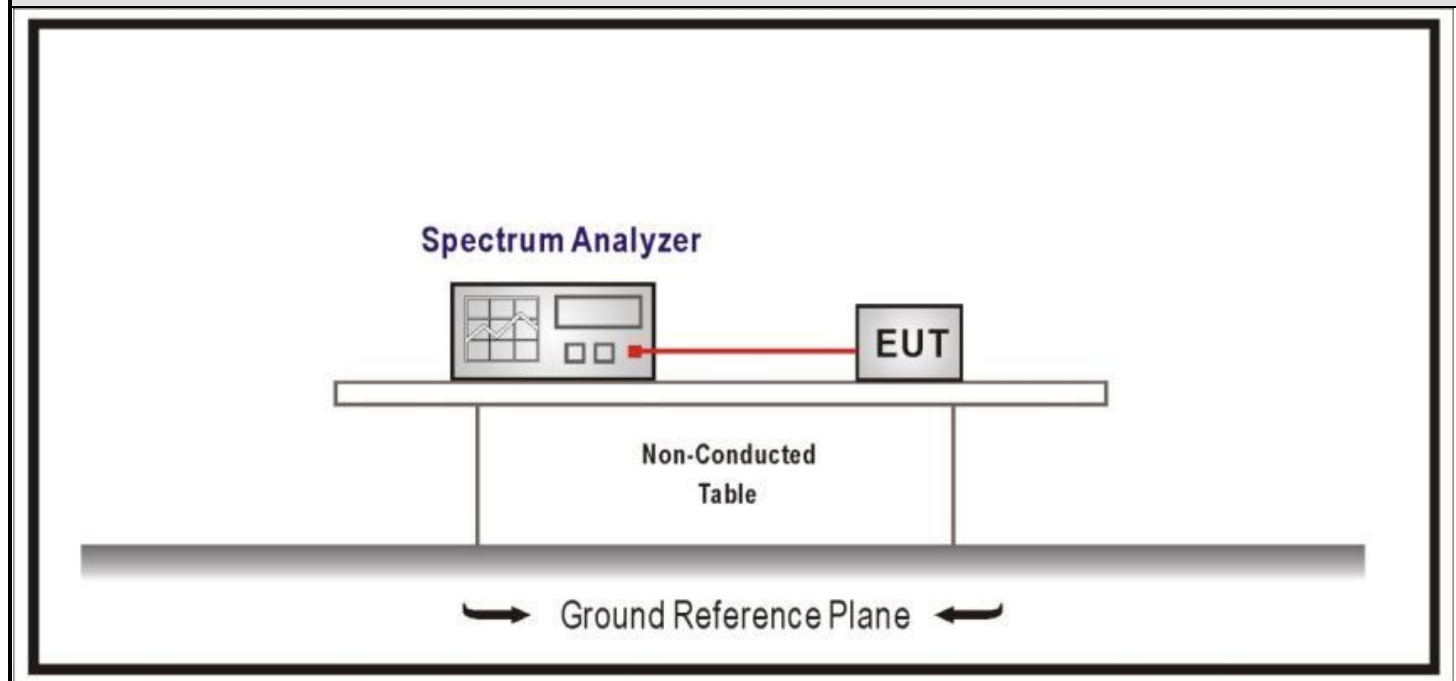
4.2.4 Test Data

Test data please refer to **Appendix B**

4.3 Out-of-Band Emissions (OOBE)**VERDICT: PASS****4.3.1 Limit**

Standard	FCC 47 CFR Part 95.3205(a)
Conducted limits measured at the antenna input must not exceed: 1. -16 dBm/100 kHz within ± 1 megahertz of the band edges. 2. -13 dBm/MHz within ± 1 megahertz to ± 5 megahertz of the band edges. 3. -16 dBm/MHz within ± 5 megahertz to ± 30 megahertz of the band edges and 4. -28 dBm/MHz beyond 30 megahertz from the band edges.	

4.3.2 Test Setup



4.3.3 Test Procedure

RSUs and OBUs must comply with the following guidelines:

a) Conducted limits measured at the antenna input must not exceed:

1. -16 dBm/100 kHz within ± 1 megahertz of the band edges.
2. -13 dBm/MHz within ± 1 megahertz to ± 5 megahertz of the band edges.
3. -16 dBm/MHz within ± 5 megahertz to ± 30 megahertz of the band edges and
4. -28 dBm/MHz beyond 30 megahertz from the band edges.

b) Compliance can be verified using an RMS average detector.

c) The general test methods of ANSI C63.26, section 5.7.3 and 5.7.4 shall be used.

d) There is no requirement as to how the plots are to be formatted or displayed, as long as all applicable data is presented.

e) For example, if the lab possesses a spectrum analyzer capable of performing segmented measurements with control of RBW, VBW, sweep time, number of points, detector type, etc., per segment, then all the segments from 1. – 4. in a) above, may appear on one single plot as shown in Figure 3.

f) When using the emission mask for plots or segments, ensure that the spectrum analyzer's automatic measurement feature is enabled to clearly display the "pass" or "fail" result on the plot as shown in Figure 3.

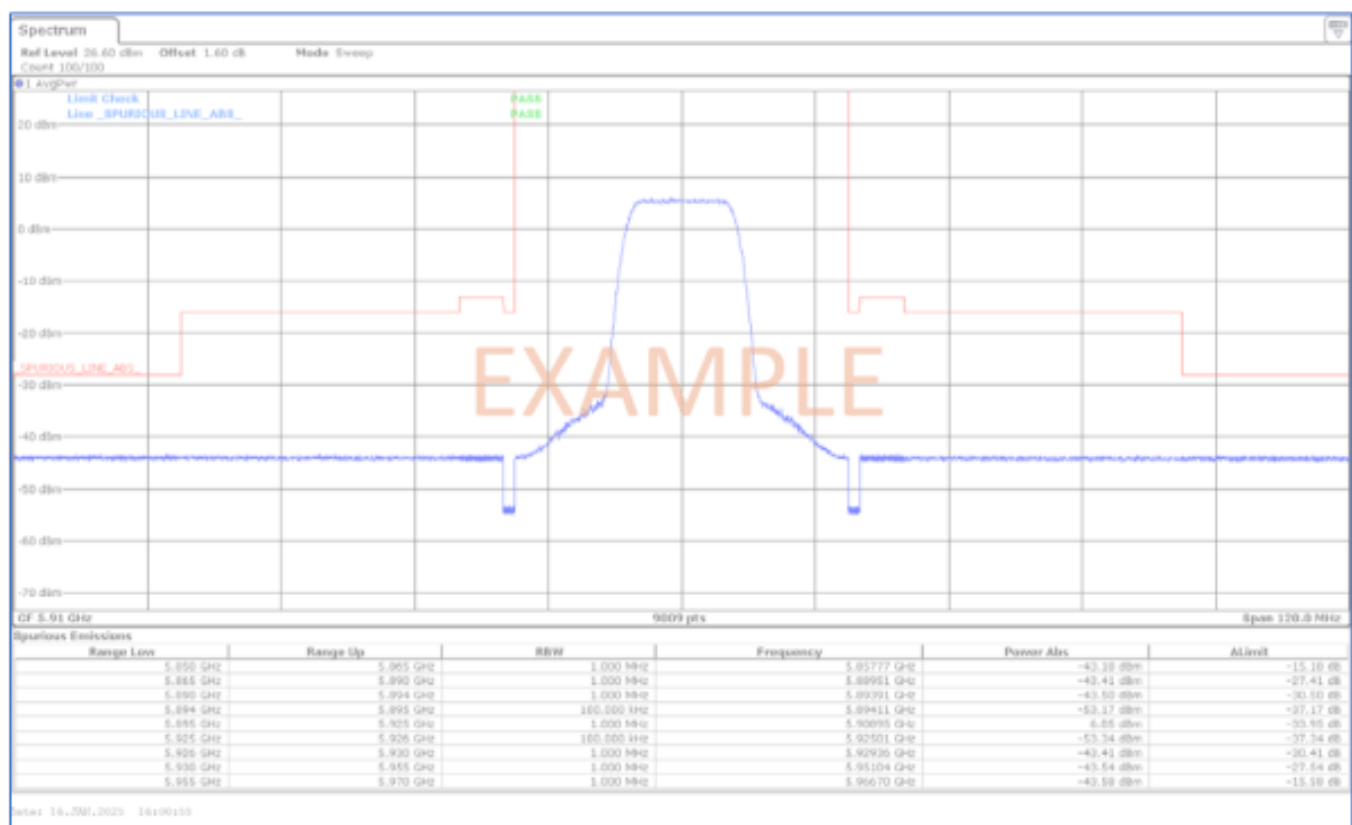


Figure 3. Example of C-V2X OOB limits plot

g) If this method is used, then the report shall also include an example table from one channel displaying the RBW, VBW, sweep time, number of points, detector, etc. for each range in the emission mask.

Sweep List									
	Range 1	Range 2	Range 3	Range 4	Range 5	Range 6	Range 7	Range 8	Range 9
Range Start	5.85 GHz	5.865 GHz	5.89 GHz	5.894 GHz	5.895 GHz	5.925 GHz	5.926 GHz	5.93 GHz	5.955 GHz
Range Step	5.065 GHz	5.89 GHz	5.894 GHz	5.895 GHz	5.925 GHz	5.926 GHz	5.93 GHz	5.955 GHz	5.97 GHz
Filter Type	Gaussian	Gaussian	Gaussian	Gaussian	Gaussian	Gaussian	Gaussian	Gaussian	Gaussian
RBW	1 MHz	1 MHz	1 MHz	100 kHz	1 MHz	100 kHz	1 MHz	1 MHz	1 MHz
VBW	3 MHz	3 MHz	3 MHz	300 kHz	3 MHz	300 kHz	3 MHz	3 MHz	3 MHz
Sweep Time Mode	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto
Sweep Time	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms
Detector	RMS	RMS	RMS	RMS	RMS	RMS	RMS	RMS	RMS
Ref. Level	26.6 dBm	26.6 dBm	26.6 dBm	26.6 dBm	26.6 dBm	26.6 dBm	26.6 dBm	26.6 dBm	26.6 dBm
RF Att. Mode	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual	Manual
RF Attenuator	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB
Preamplifier	Off	Off	Off	Off	Off	Off	Off	Off	Off
Sweep Points	1001	1001	1001	1001	1001	1001	1001	1001	1001
Stop After Sweep	Off	Off	Off	Off	Off	Off	Off	Off	Off
Transducer	None	None	None	None	None	None	None	None	None
Limit Check	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute
Abs Limit Start	-20 dBm	-16 dBm	-13 dBm	-16 dBm	40 dBm	-16 dBm	-13 dBm	-16 dBm	-20 dBm
Abs Limit Stop	-20 dBm	-16 dBm	-13 dBm	-16 dBm	40 dBm	-16 dBm	-13 dBm	-16 dBm	-20 dBm

Figure 4. Example table of Spectrum Analyzer settings

- h) If individual segments are measured, and the pertinent information, RBW, VBW, sweep time, number of points, etc. are displayed on the plot, then there is no need to add an additional sweep list table.
- i) For devices with MIMO capabilities, follow the procedures specified in KDB Publication 662911 for summing emissions or adjusting emission levels measured on individual outputs by $10 \log(\text{NANT})$, where NANT is the number of outputs.
- j) Testing shall be performed on all potential channel bandwidths and all potential power outputs which the RSU or OBU is capable of transmitting. If the RSU or OBU is capable of carrier aggregation (e.g., transmit a 10 MHz and 20 MHz channel simultaneously) then these combinations shall also be investigated. Care shall be taken to evaluate the impact of intermodulation while additional carriers are active and multiple configurations are possible (e.g., varying resource block configurations for 4G LTE).
- k) Measurements shall be performed up to 40 GHz.
- l) In addition to conducted measurements, the RSU or OBU shall also be tested for cabinet radiation with the antenna output terminated into a load.

4.3.4 Test Data

Test data please refer to **Appendix C**

4.4 Spurious Emissions at Antenna Terminal

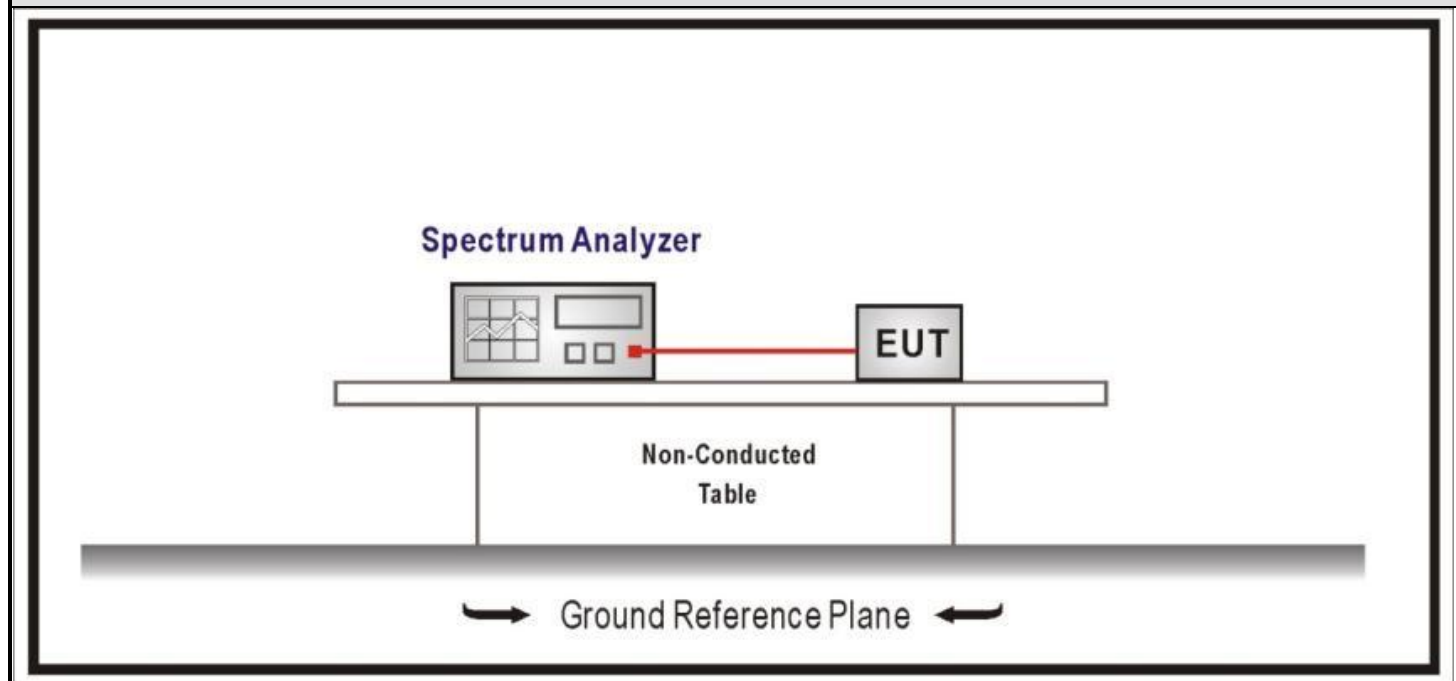
VERDICT: PASS

4.4.1 Limit

Standard	FCC 47 CFR Part 95.3205(a)
----------	----------------------------

-28 dBm/MHz for 30MHz to 40GHz.	
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4.4.2 Test Setup



4.4.3 Test Procedure

The EUT was setup according to ANSI C63.26-2015 section 5.7.3 and 5.7.4; tested according to test procedure of KDB 511808 D01 C-V2X v02.

2.1051 Measurements required: Spurious emissions at antenna terminals.

The radio frequency voltage or powers generated within the equipment and appearing on a spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in § 2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

4.4.4 Test Data

Test data please refer to **Appendix D**

4.5 Transmit Chain Spurious Emissions**VERDICT: PASS****4.5.1 Limit**

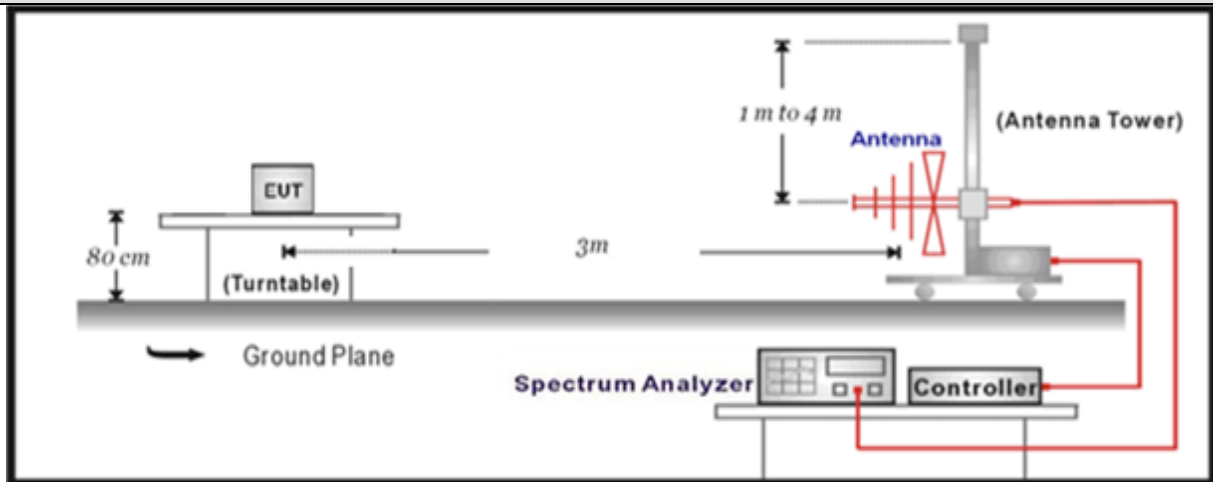
Standard	FCC 47 CFR Part 95.3205(a)
----------	----------------------------

C-V2X Out-of-Band Emissions (OOBE) Limits

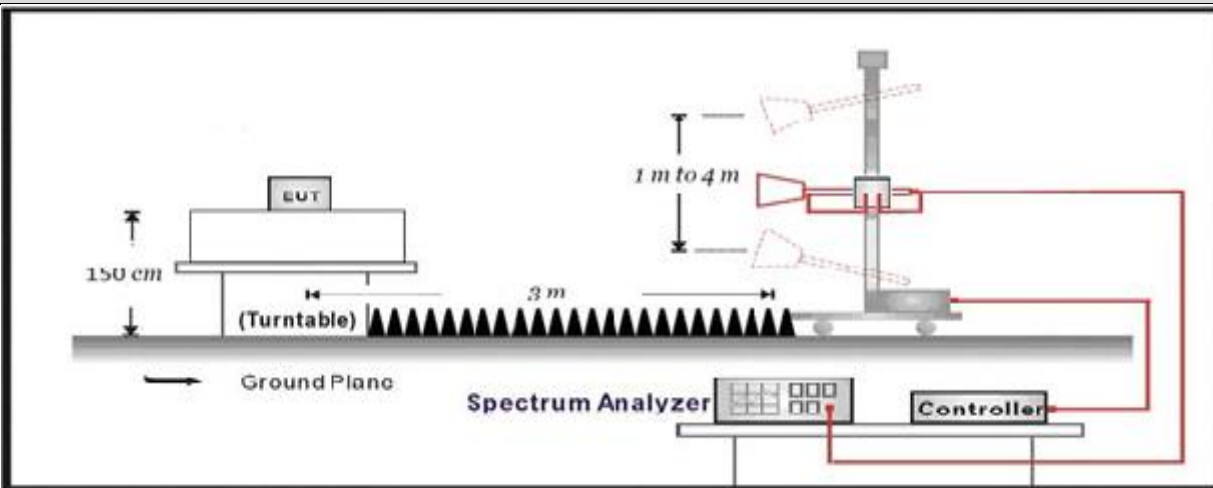
1. -16 dBm/100 kHz within ± 1 megahertz of the band edges.
2. -13 dBm/MHz within ± 1 megahertz to ± 5 megahertz of the band edges.
3. -16 dBm/MHz within ± 5 megahertz to ± 30 megahertz of the band edges and
4. -28 dBm/MHz beyond 30 megahertz from the band edges.

4.5.2 Test Setup

30MHz~1GHz:



Above 1 GHz



4.5.3 Test Procedure

The measurements procedure of the Spurious RF Radiated emissions is as following describe method.

1. The EUT was placed on the top of a rotating table (0.8 meters for below 1 GHz and 1.5 meters for above 1 GHz) above the ground at a 3 meter camber. The table was rotated 360 degree to determine the position of the highest radiation.
 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna master.
 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both Horizontal and vertical polarizations of the antenna are set to make the measurement.
 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotating table was turned from 0 - 360 degrees to find the maximum reading.
 5. The measuring receiver was set to peak detector and specified bandwidth with max hold function.
 6. Low, Middle and high channels were measured, and radiation measurements are performed in X, Y, Z axis positioning. And found the worst axis position and only the test worst case mode is recorded in the report.
- The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter.

The worst-case emissions are reported.

- Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:

a) $E(\text{dBuV/m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$

b) $\text{EIRP (dBm)} = E(\text{dBuV/m}) + 20\log D - 104.8$; where D is the measurement distance in meters.

4.5.4 Test Data

Test data please refer to **Appendix E**

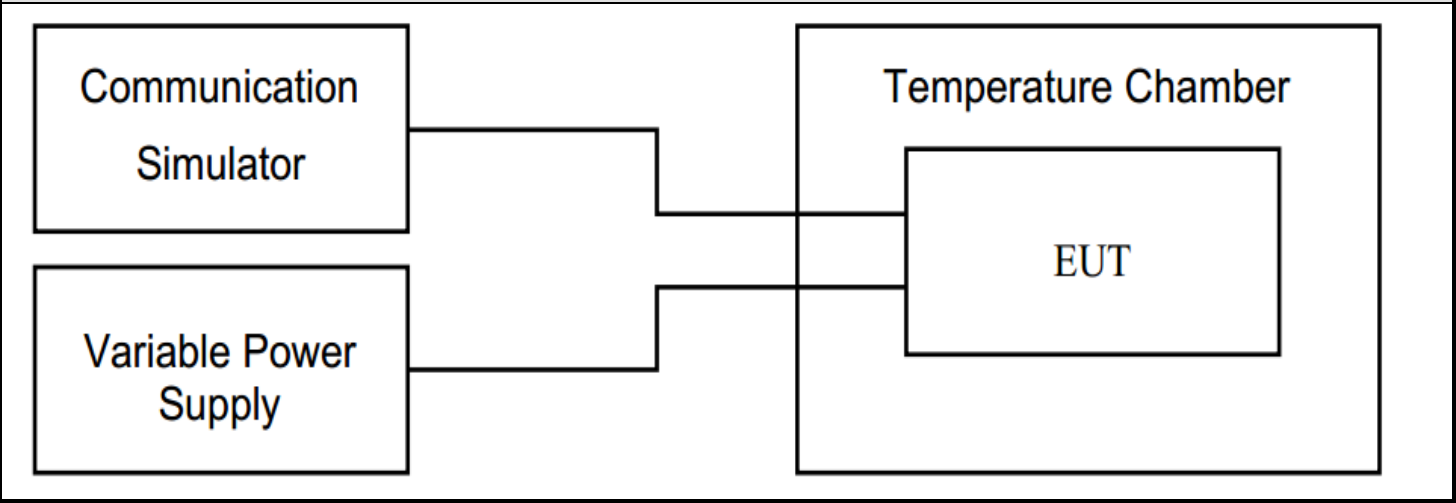
4.6 Frequency Stability

VERDICT: PASS

4.6.1 Limit

Standard	FCC 47 CFR Part 2.1055, FCC 47 CFR Part 95.3203
± 20 ppm	

4.6.2 Test Setup



4.6.3 Test Procedure

Frequency Stability under Temperature Variations:

The EUT under test was connected to an external AC or DC power supply and input rated voltage. The EUT was placed inside the temperature chamber. Set the EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -40°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +85°C reached. (The temperature is declared by the manufacturer)

Frequency Stability under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC or DC power supply to power the EUT and set the voltage to rated voltage. Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

4.6.4 Test Data

Test data please refer to **Appendix F**

5 TEST SETUP PHOTO AND EUT PHOTO

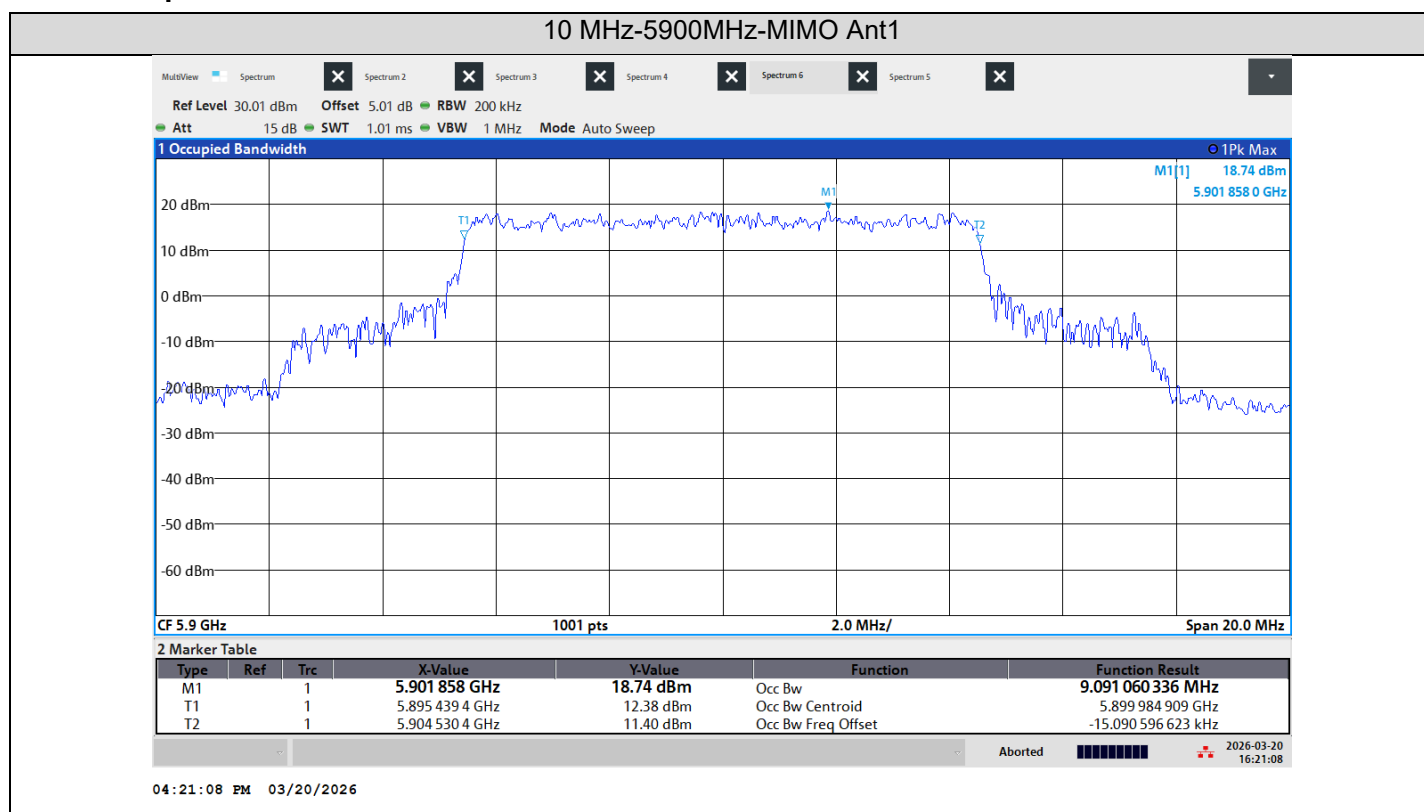
Remark: The test setup photo and EUT Photo please see appendix.

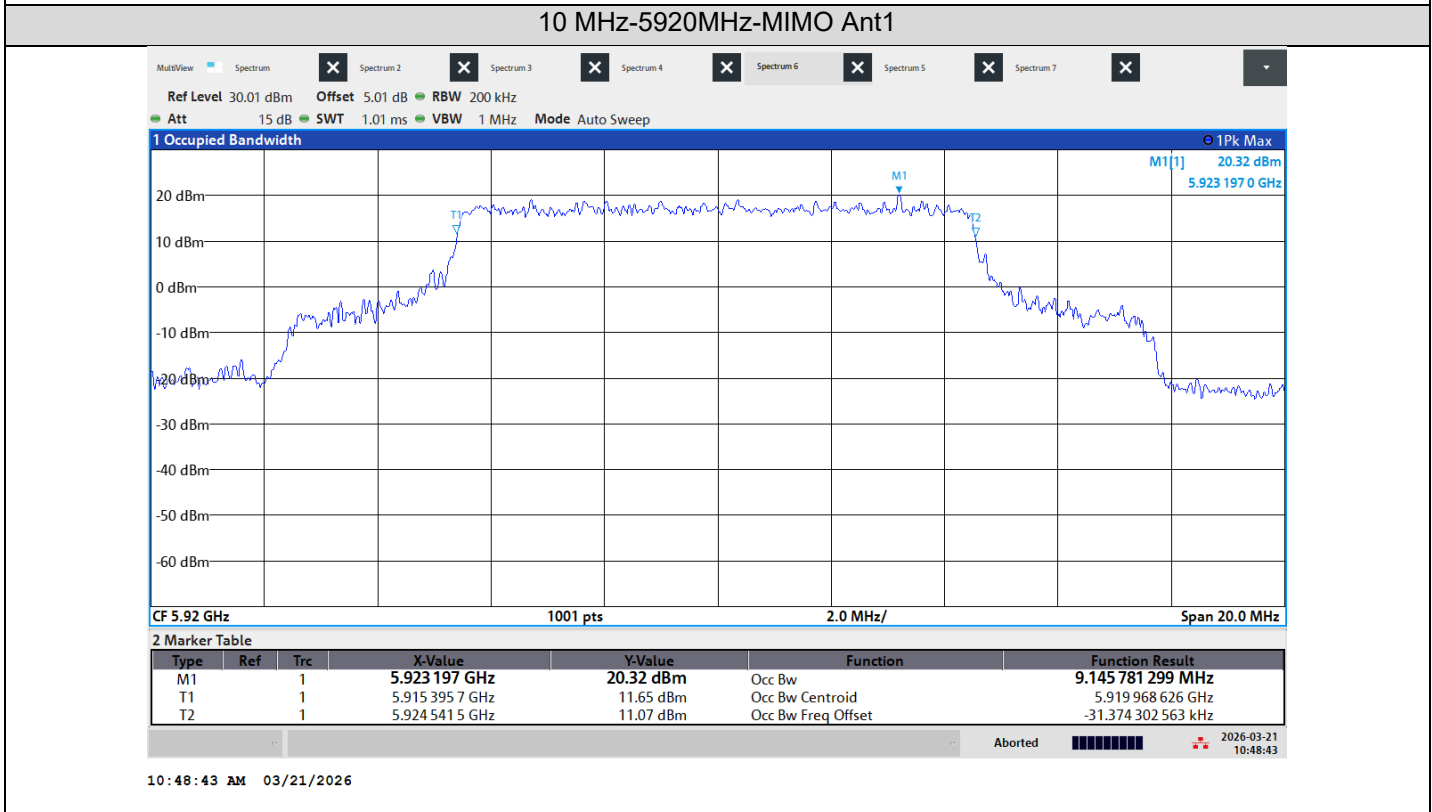
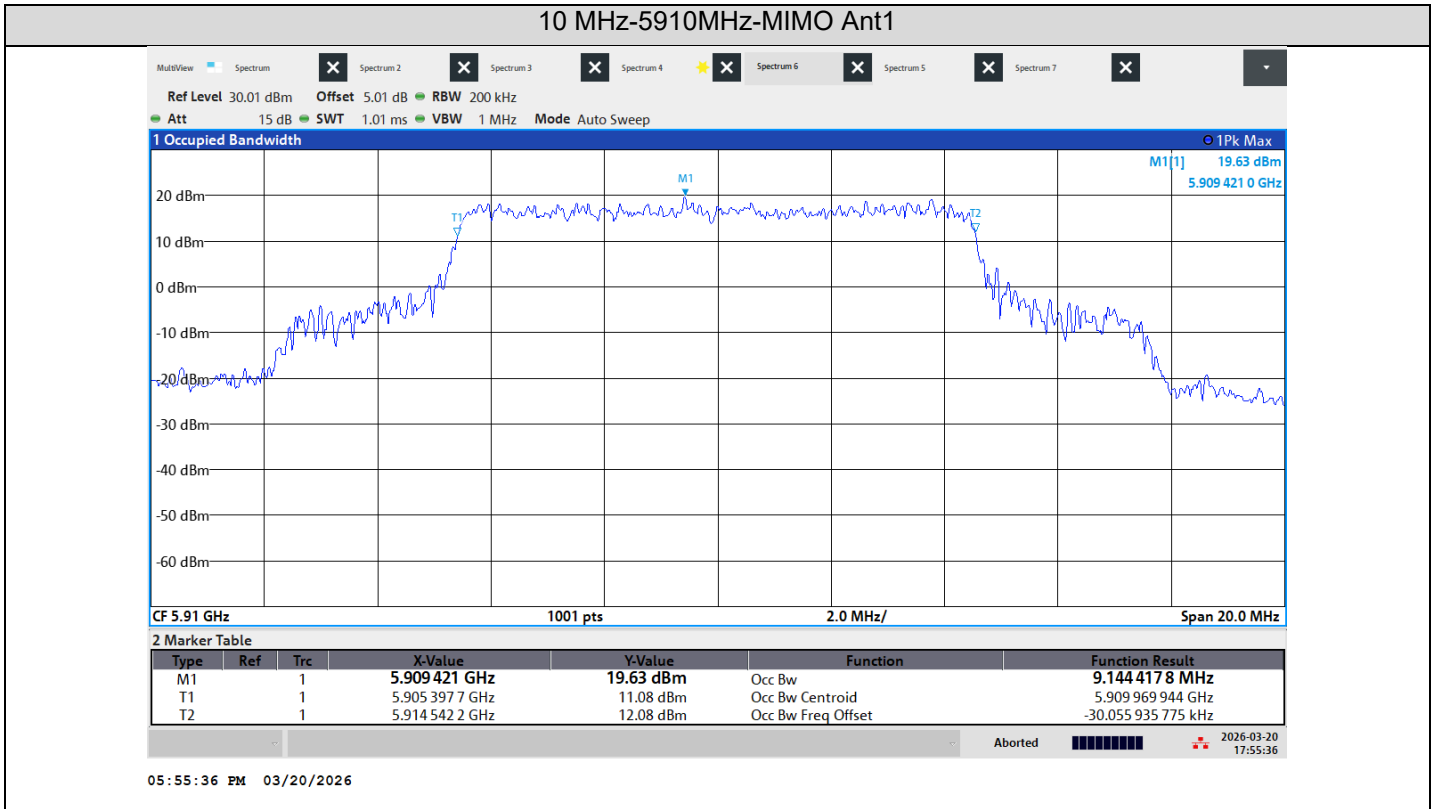
6 TEST RESULT

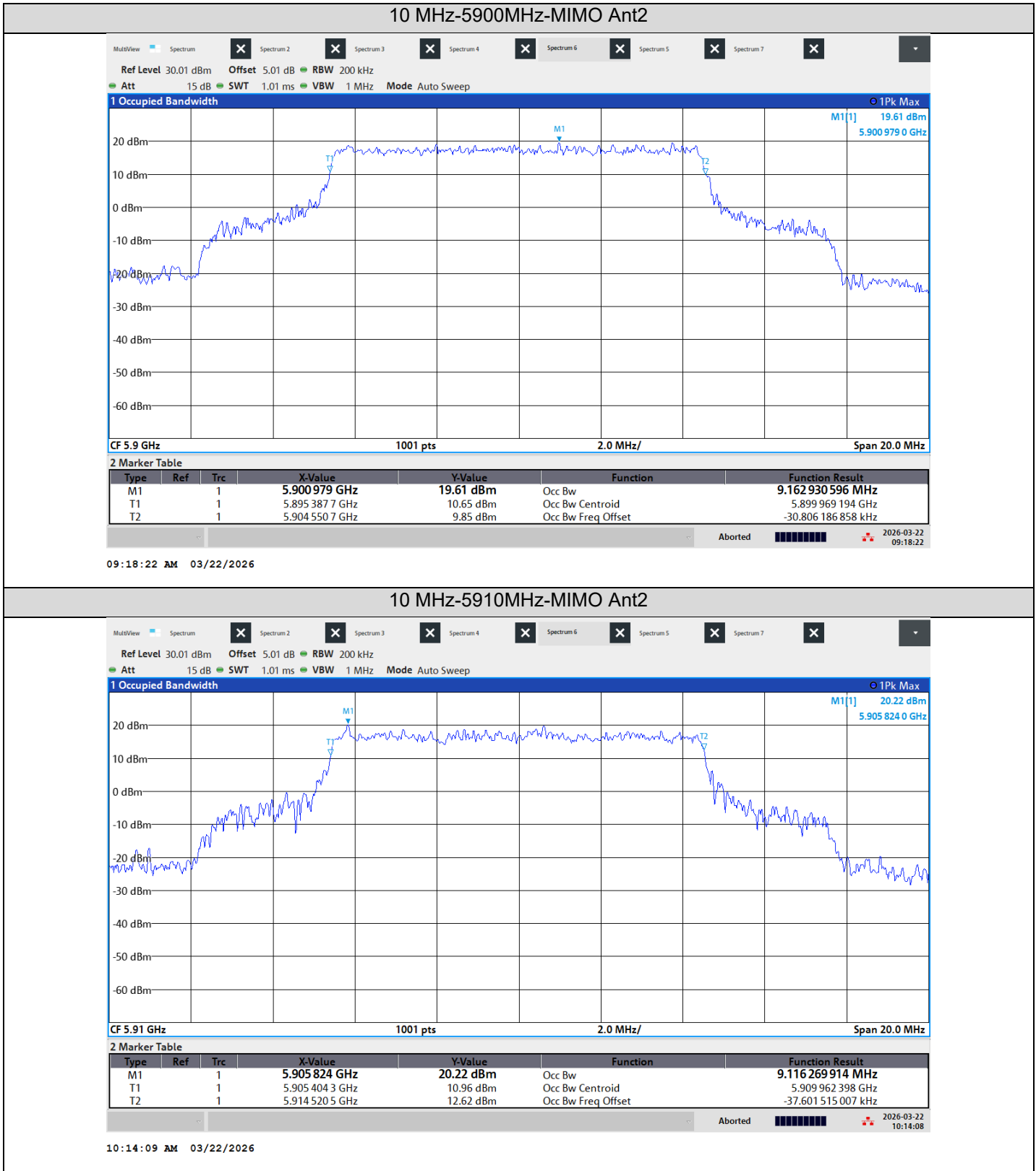
Appendix A: Occupied Bandwidth

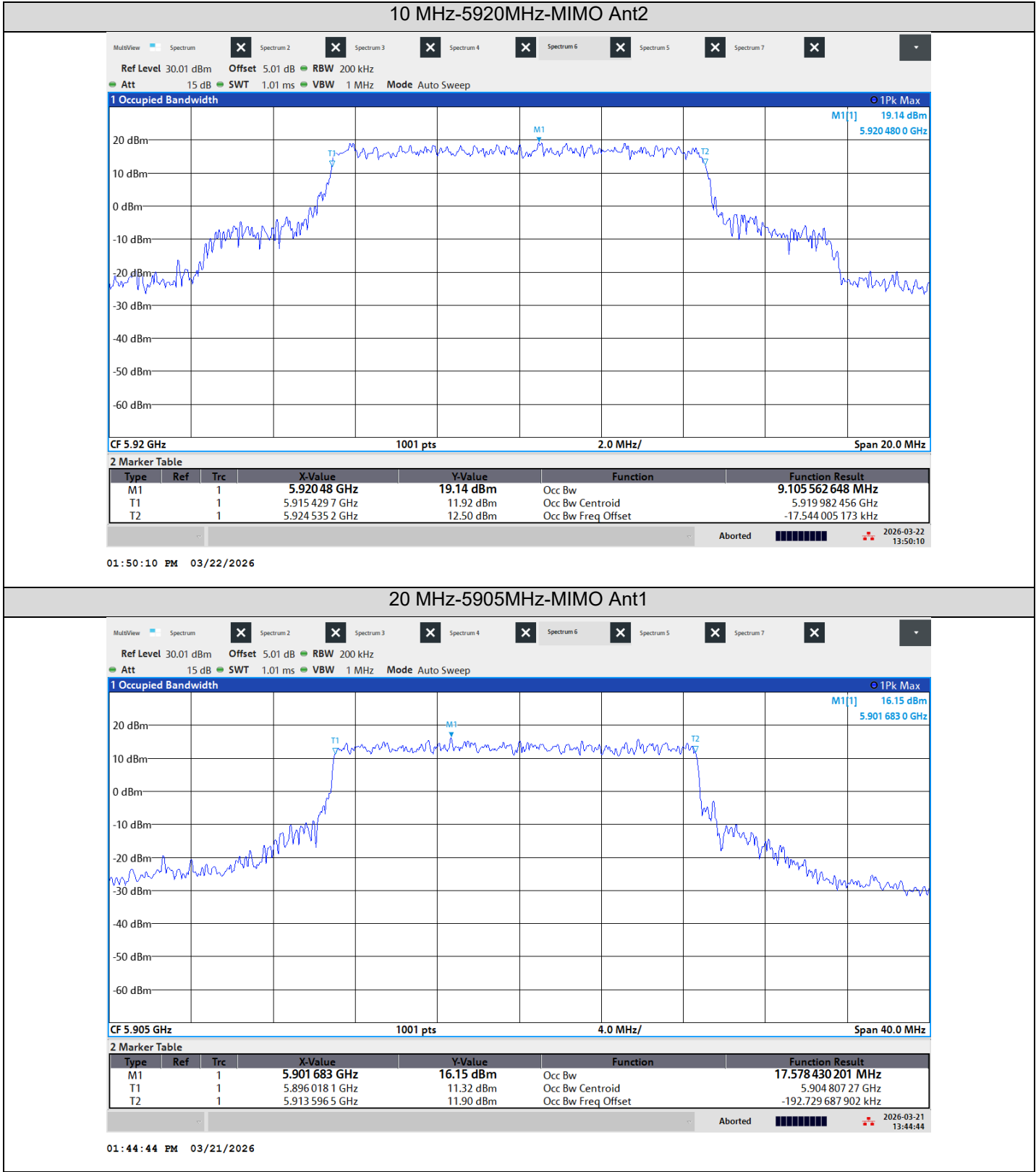
Bandwidth	Frequency (MHz)	MIMO	99% Occupied Bandwidth	26dB bandwidth	Limit	Result
10MHz	5900	Ant1	9.091	11.728	N/A	Pass
	5900	Ant2	9.163	11.968	N/A	Pass
	5910	Ant1	9.144	11.089	N/A	Pass
	5910	Ant2	9.116	10.809	N/A	Pass
	5920	Ant1	9.146	12.188	N/A	Pass
	5920	Ant2	9.106	11.648	N/A	Pass
20MHz	5905	Ant1	17.578	19.780	N/A	Pass
	5905	Ant2	17.576	20.02	N/A	Pass
	5915	Ant1	17.598	20.30	N/A	Pass
	5915	Ant2	17.641	19.021	N/A	Pass

99% Occupied Bandwidth:

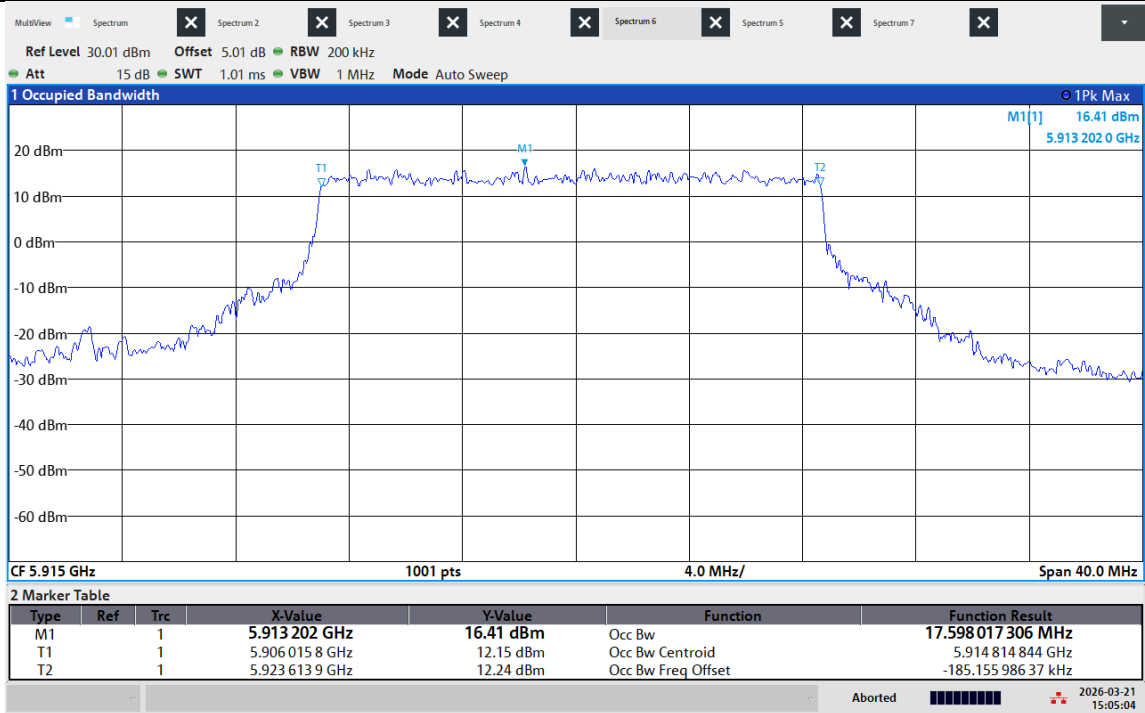






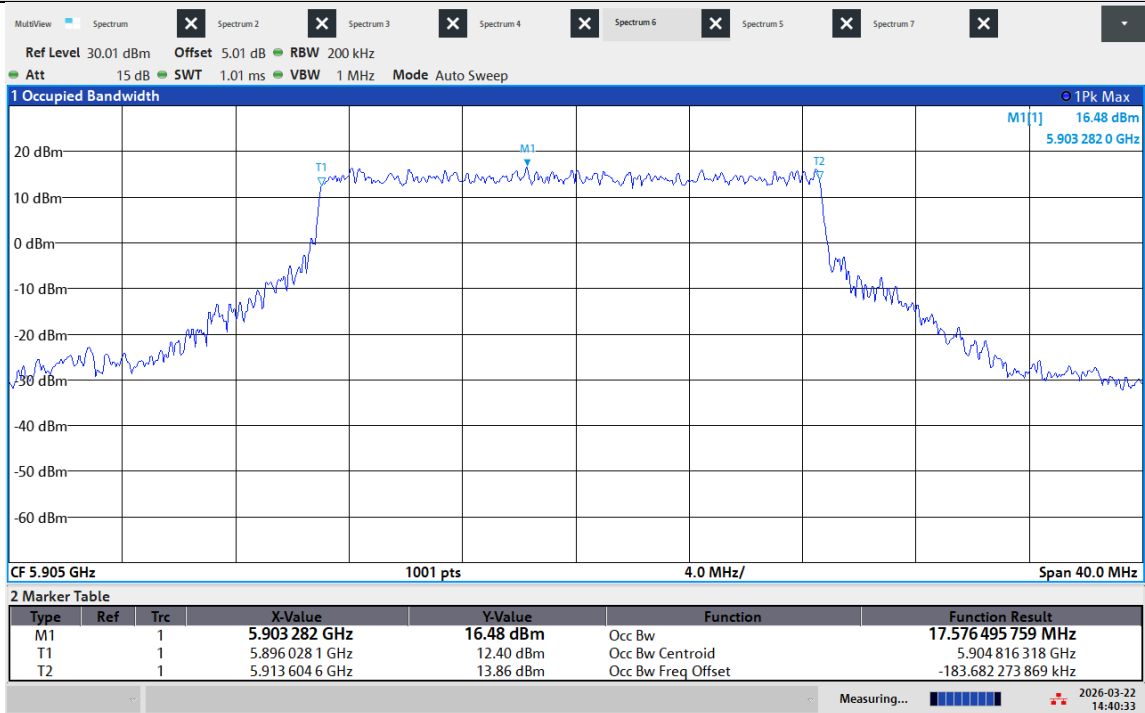


20 MHz-5915MHz-MIMO Ant1

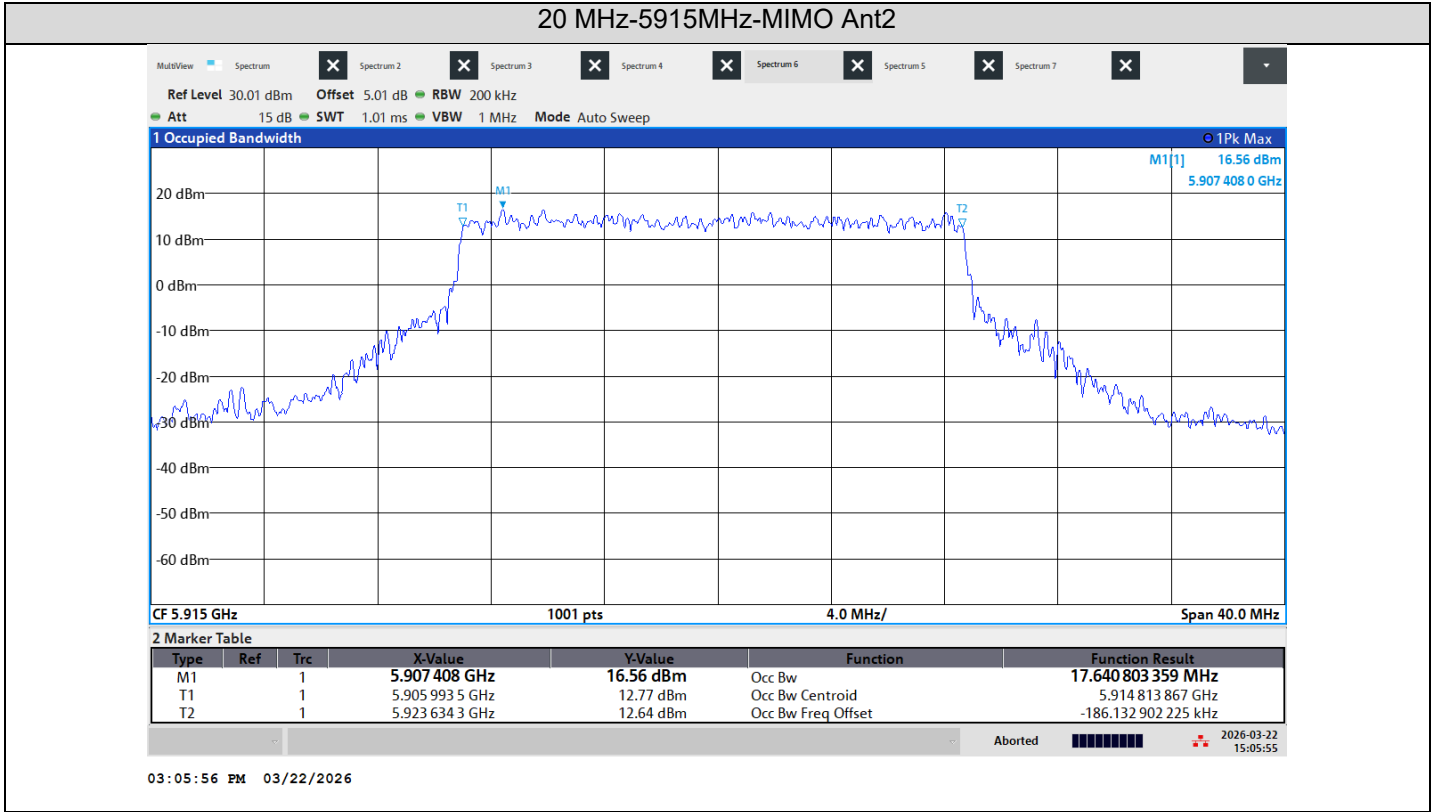


03:05:04 PM 03/21/2026

20 MHz-5905MHz-MIMO Ant2

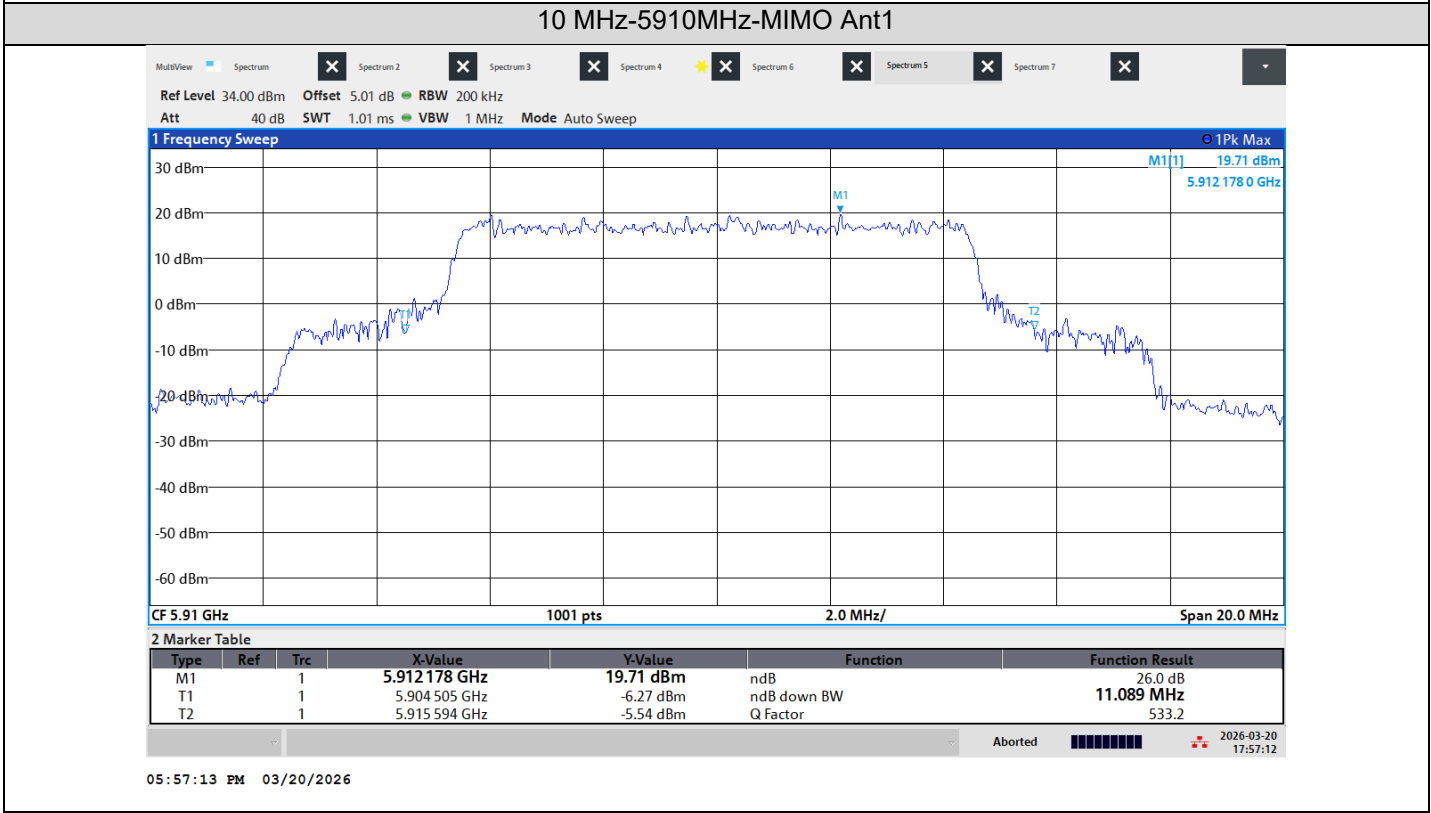
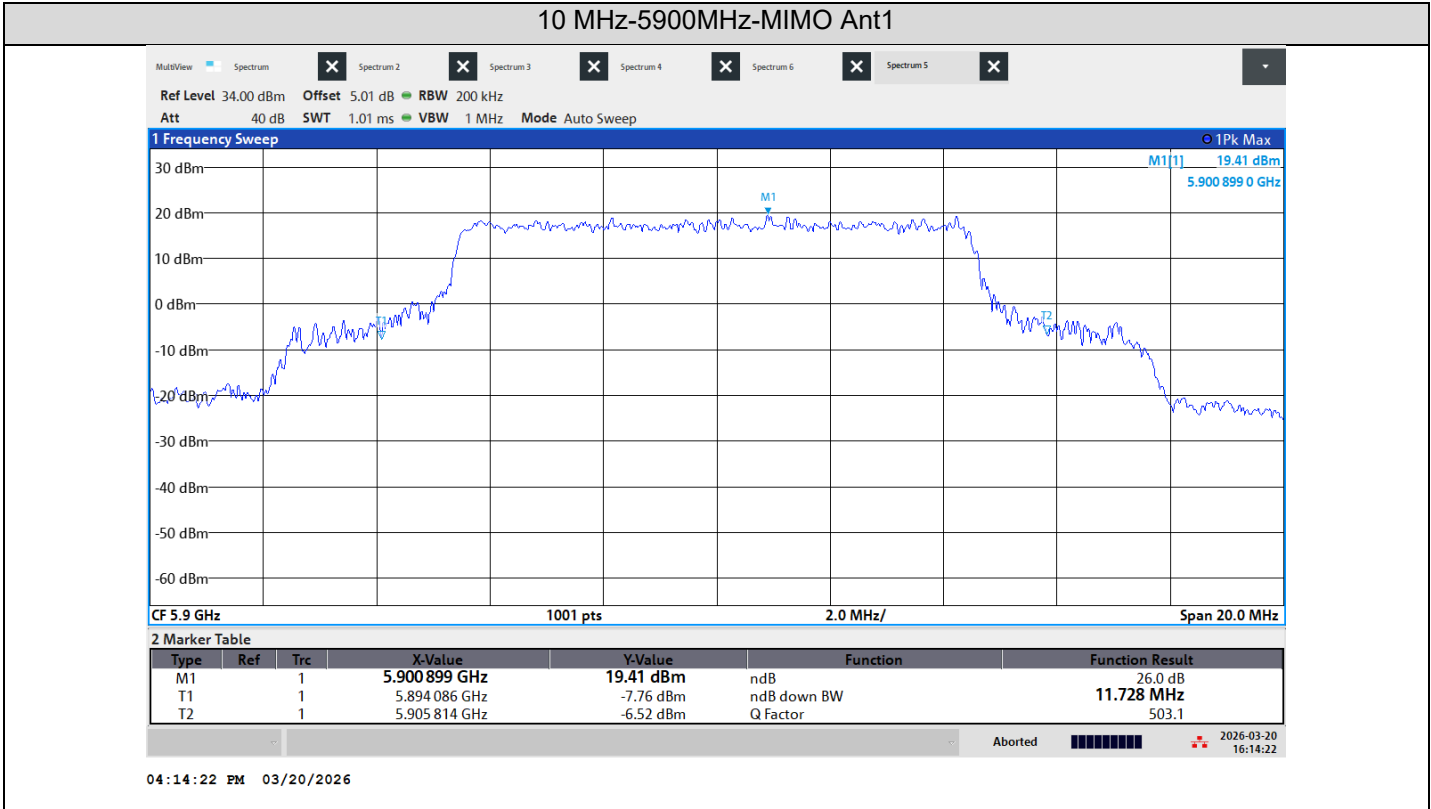


02:40:33 PM 03/22/2026

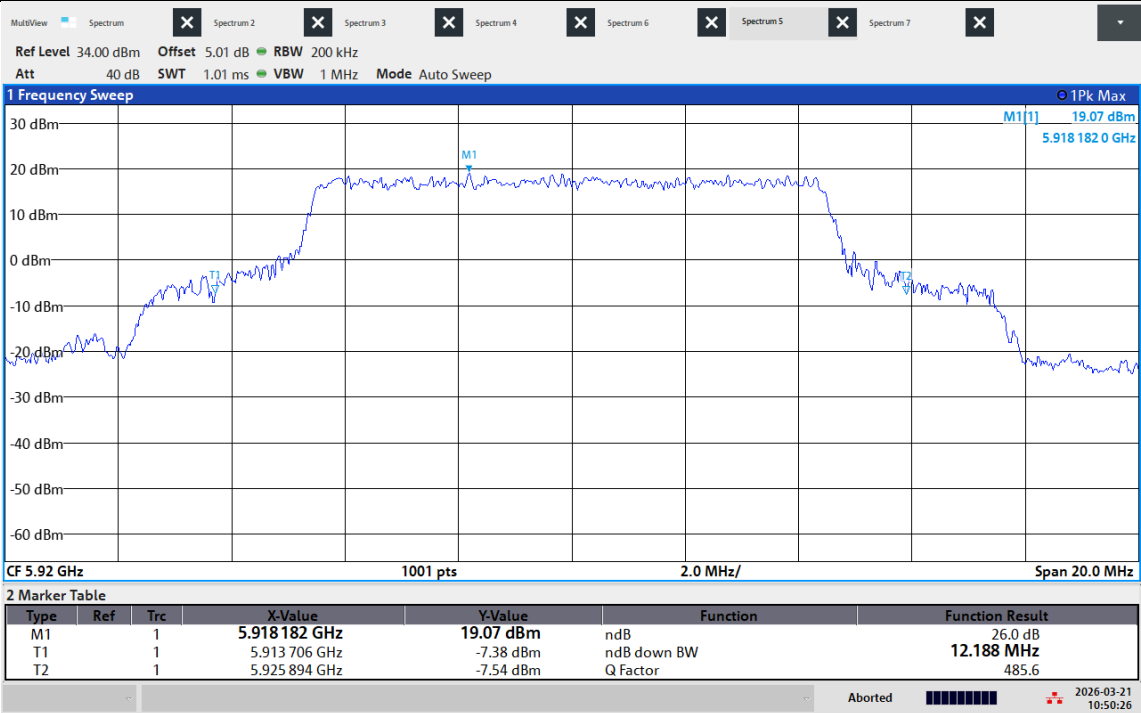


Note: Offset = Cable Loss + 10Log(N_{ANT}), where N_{ANT} is the number of outputs. Cable Loss = 2dB.

26dB bandwidth:

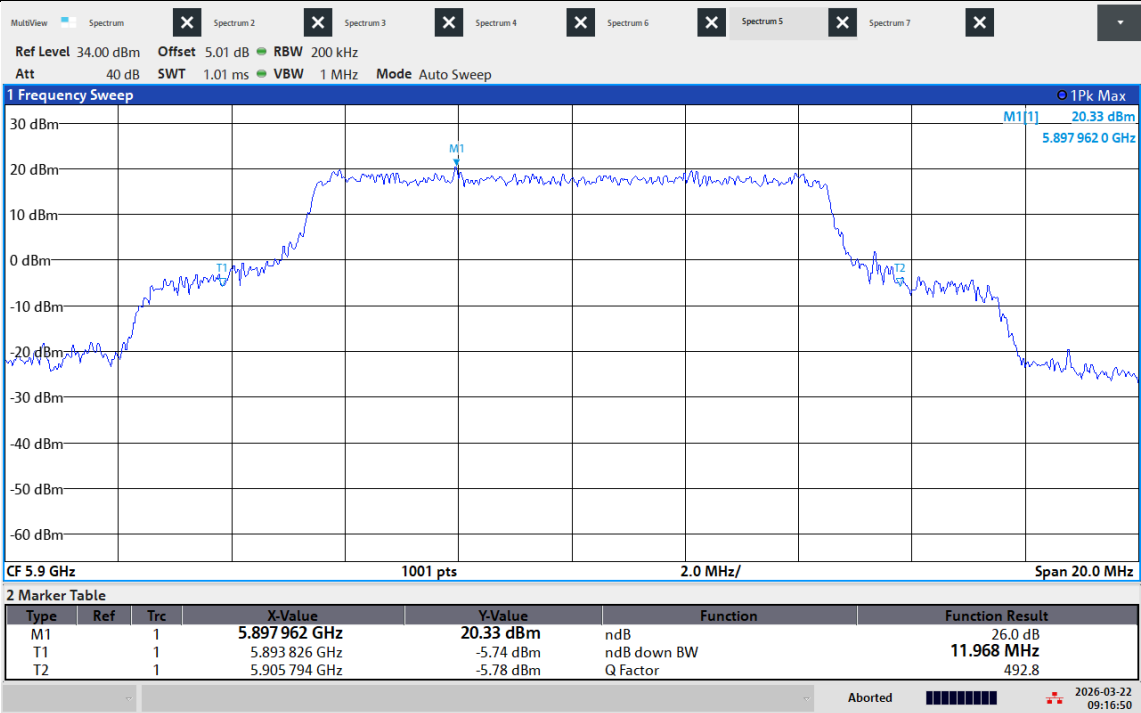


10 MHz-5920MHz-MIMO Ant1



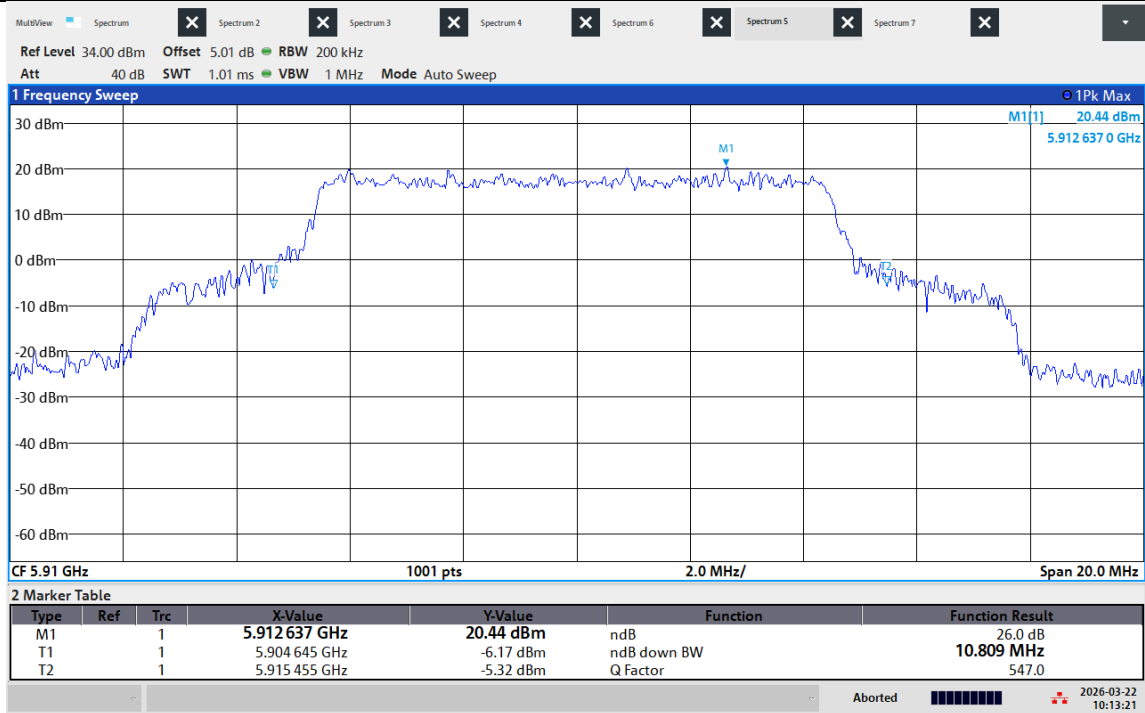
10:50:26 AM 03/21/2026

10 MHz-5900MHz-MIMO Ant2



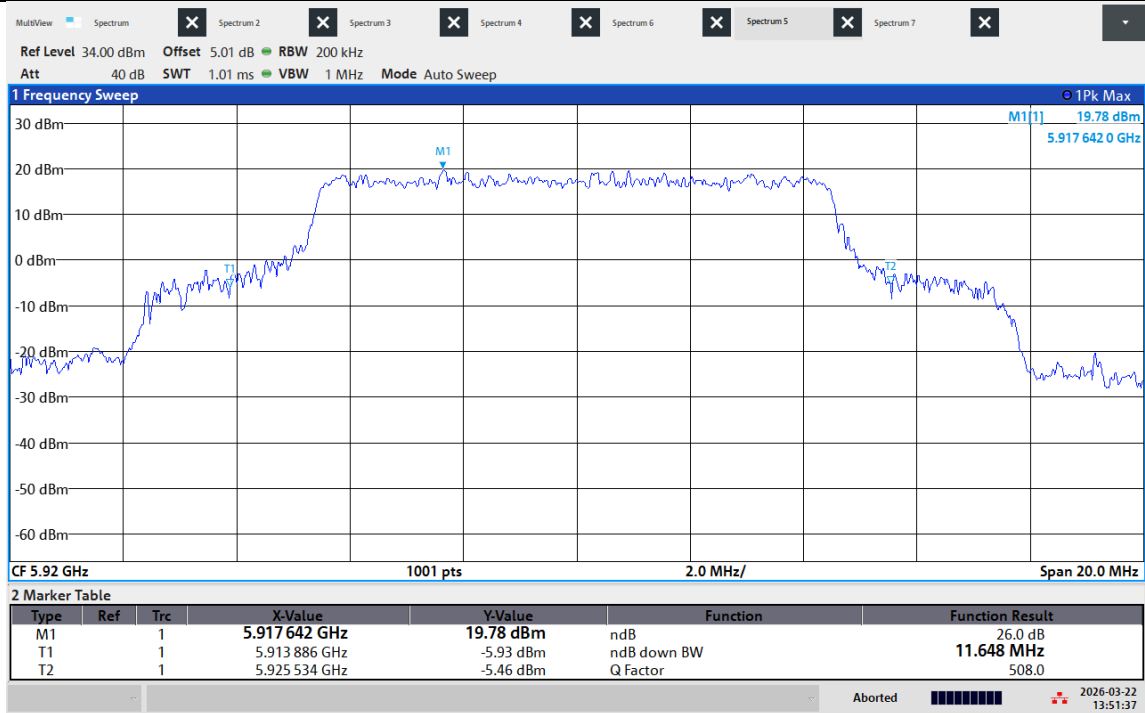
09:16:50 AM 03/22/2026

10 MHz-5910MHz-MIMO Ant2

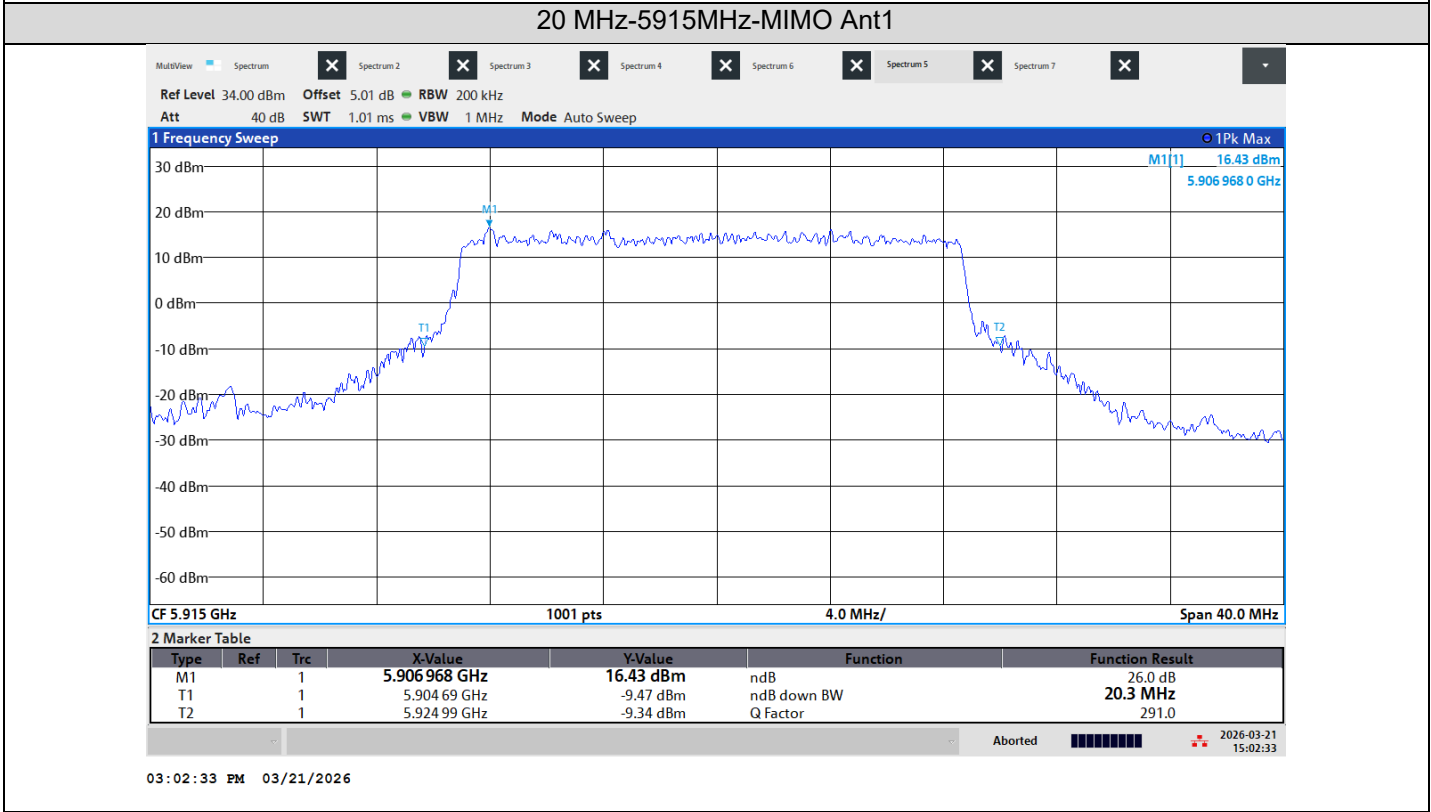
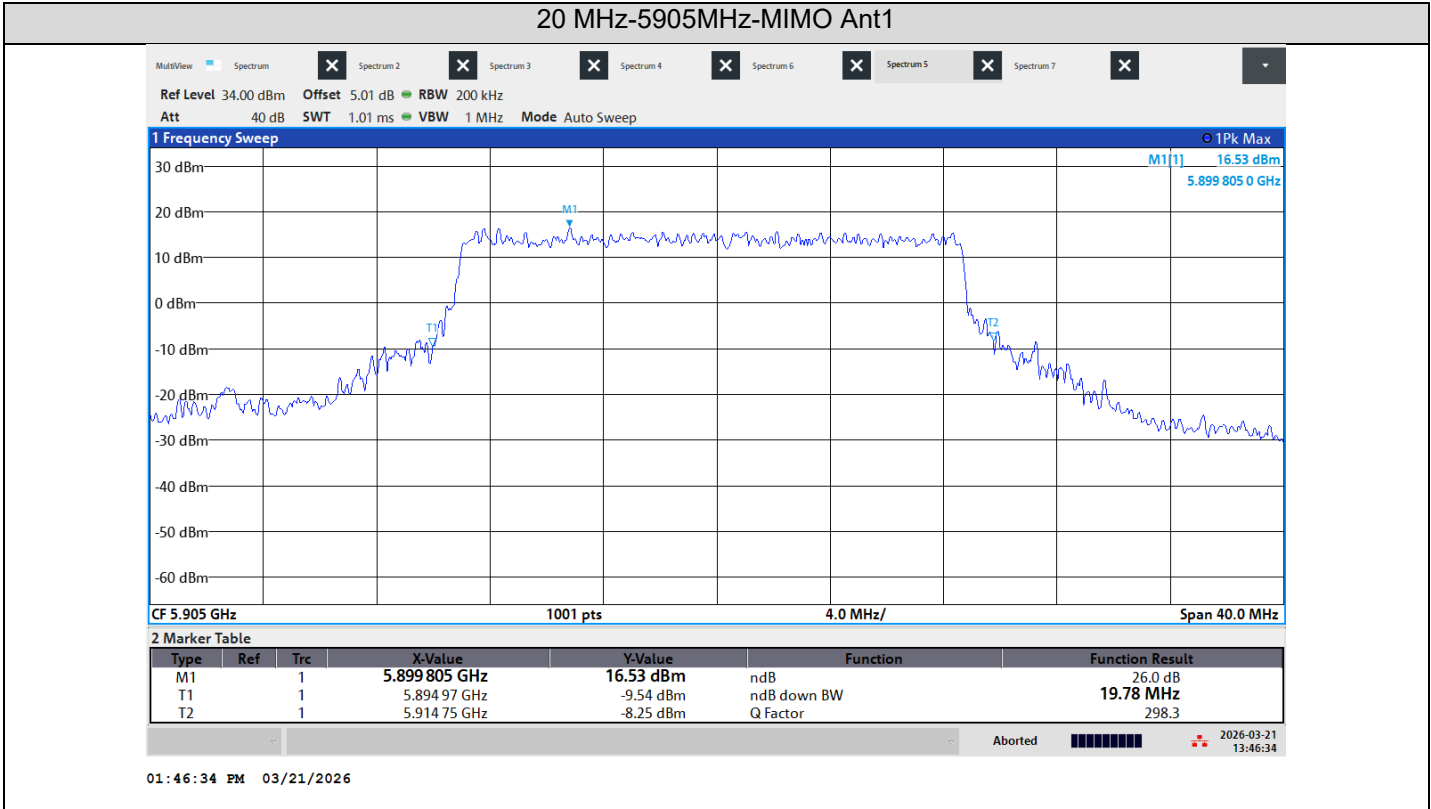


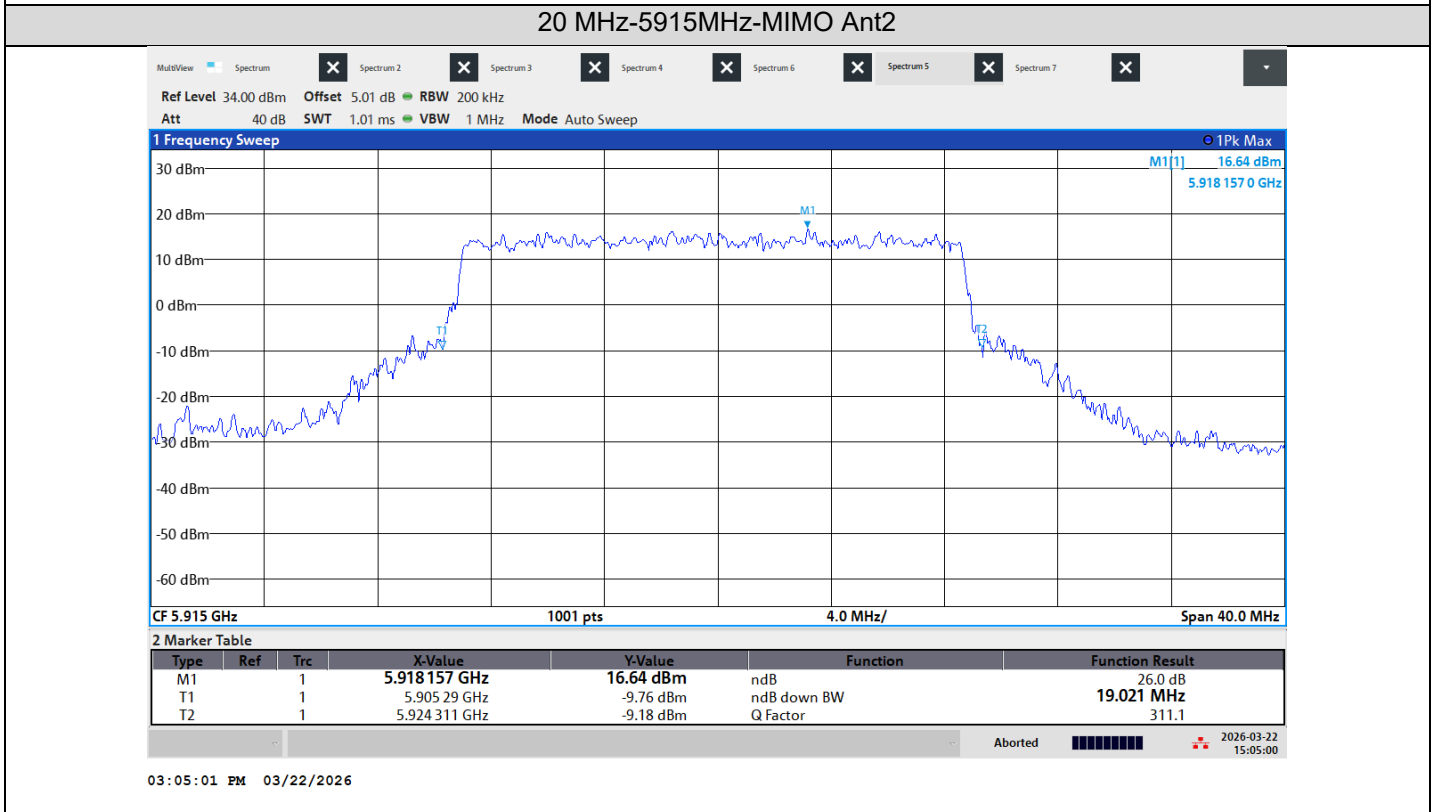
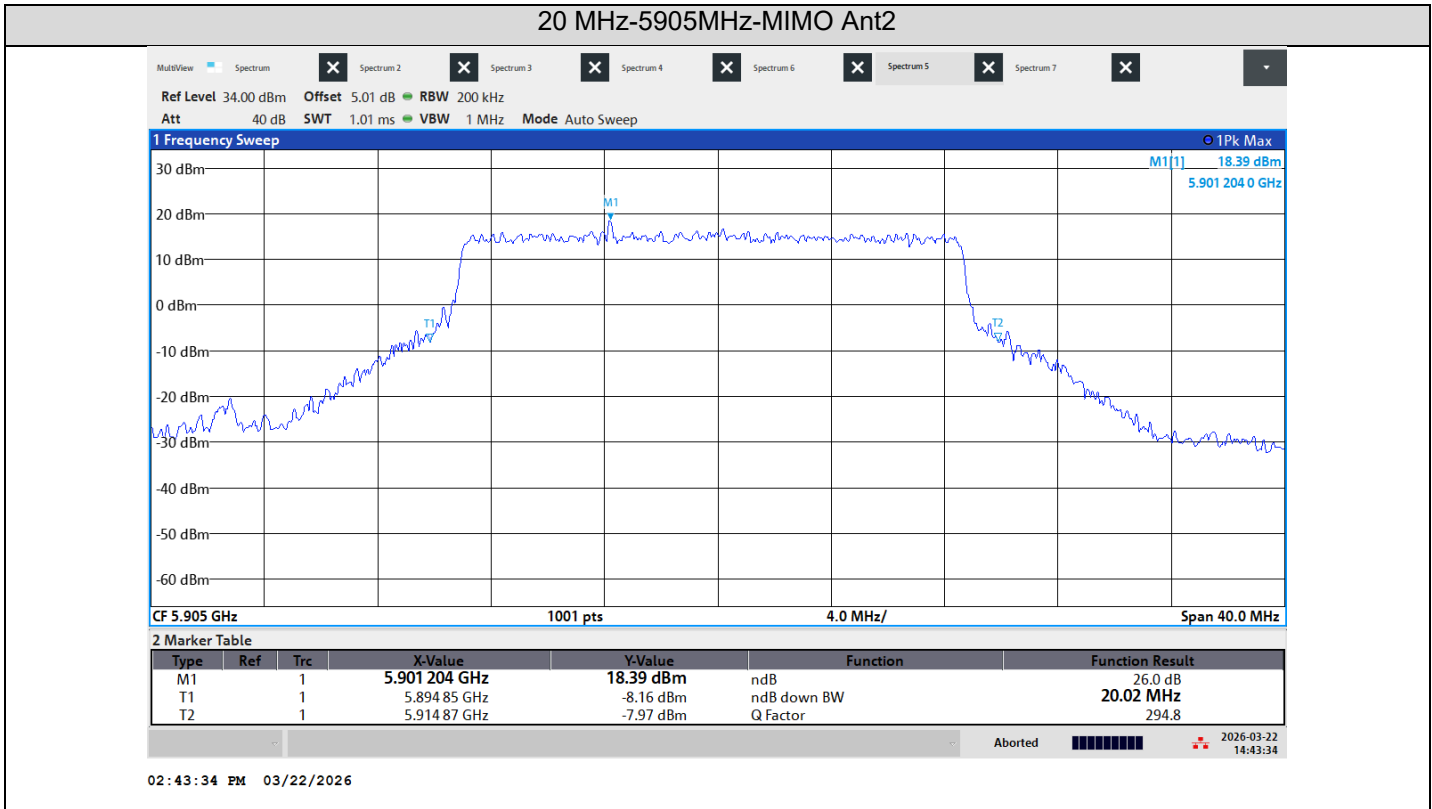
10:13:21 AM 03/22/2026

10 MHz-5920MHz-MIMO Ant2



01:51:37 PM 03/22/2026





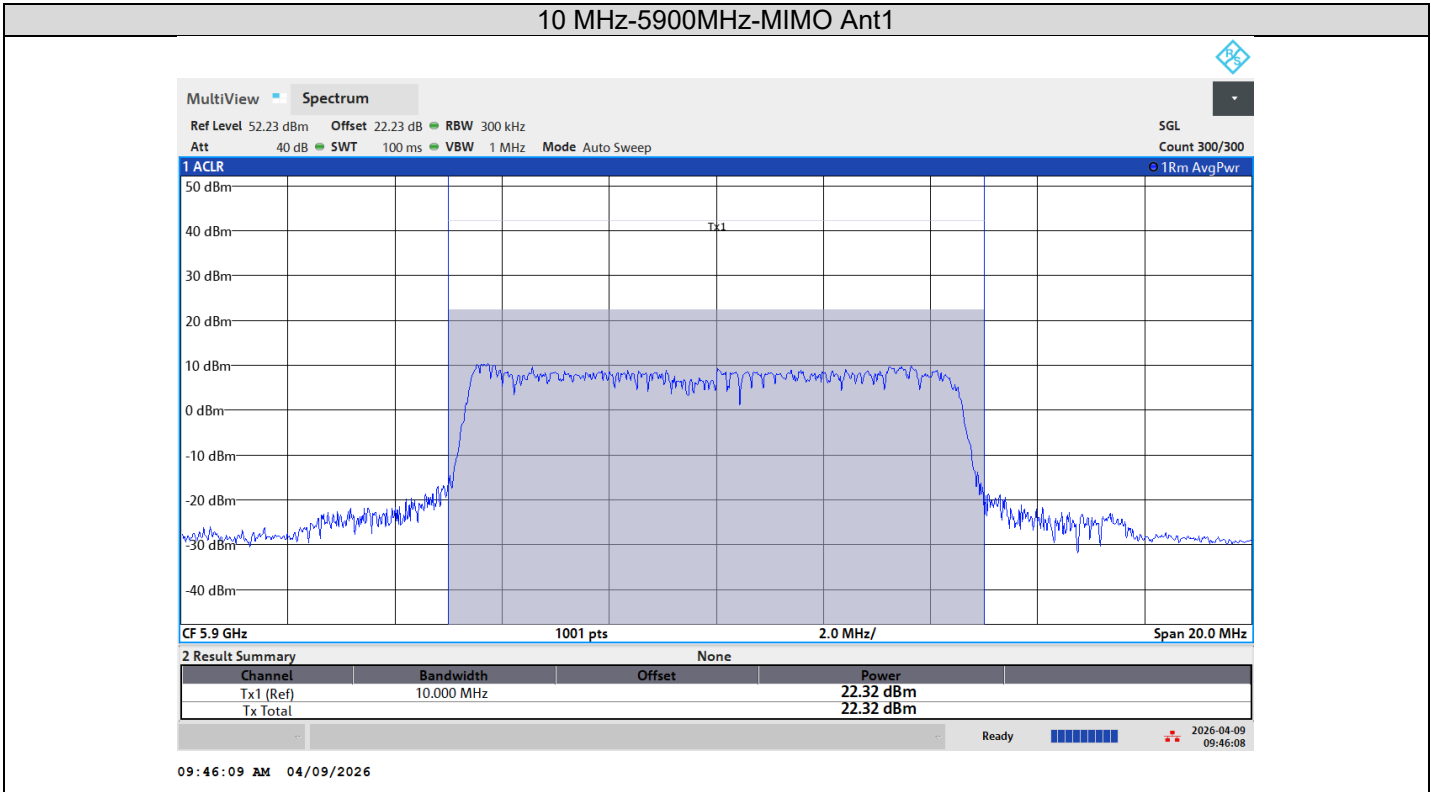
Note: Offset = Cable Loss + 10Log(N_{ANT}), where N_{ANT} is the number of outputs. Cable Loss = 2dB.

Appendix B: Transmit Power

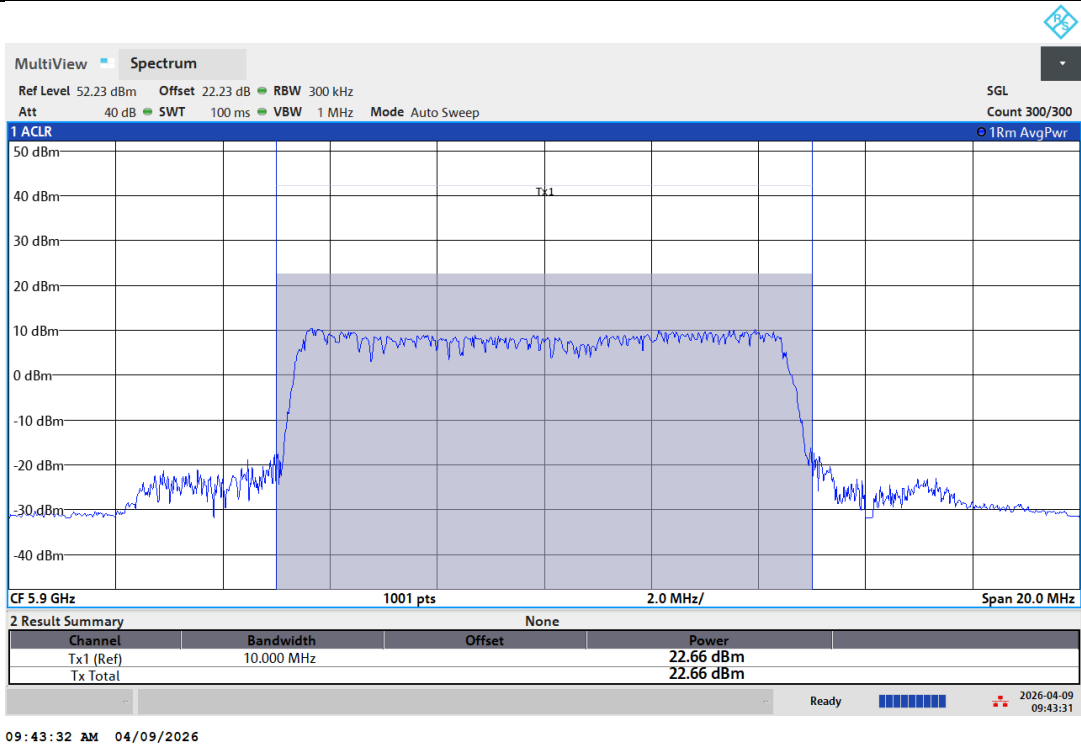
Bandwidth	Frequency (MHz)	Conducted Power(dBm)			EIRP (dBm)	EIRP Limit (dBm)	Result
		MIMO Ant1	MIMO Ant2	Total			
10 MHz	5900	22.32	22.66	25.50	21.80	23	Pass
	5910	22.49	22.58	25.55	21.85	33†	Pass
	5920	22.68	22.23	25.47	21.77	33†	Pass
20 MHz	5905	22.40	22.52	25.47	21.77	23	Pass
	5915	22.70	22.79	25.76	22.06	33†	Pass

Note1: EIRP = Conducted Power + Antenna Gain, Antenna Gain = -3.70dBi.

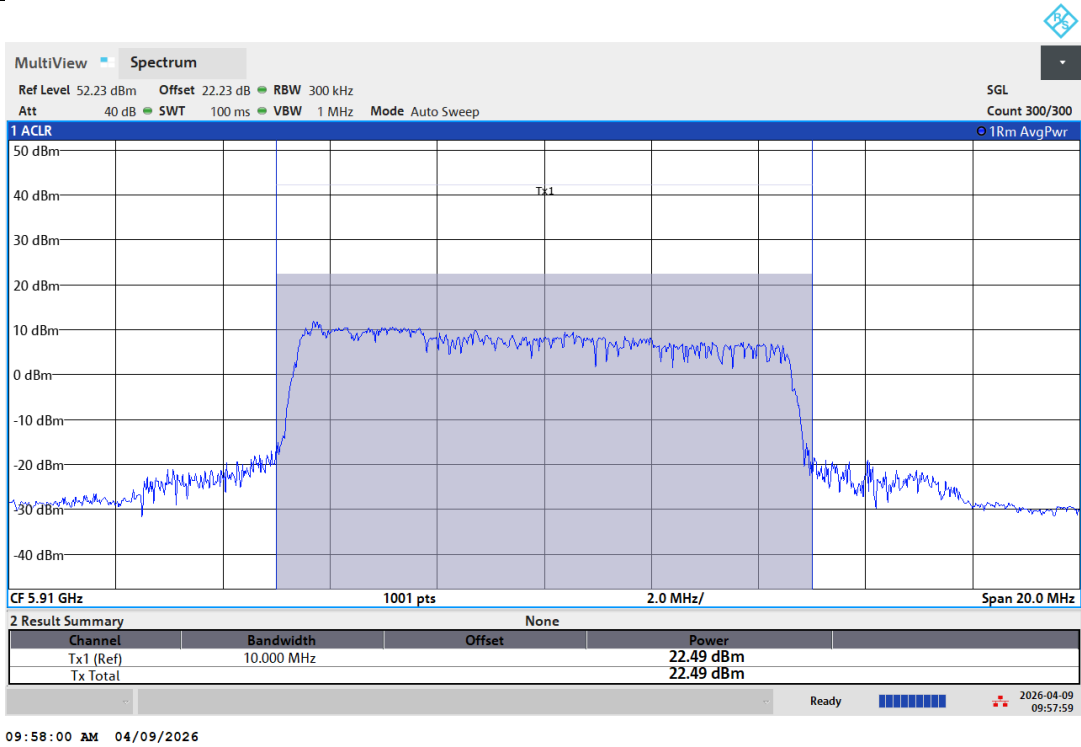
Note2: †Reduced to 27dBm within ± 5 degrees of horizontal.



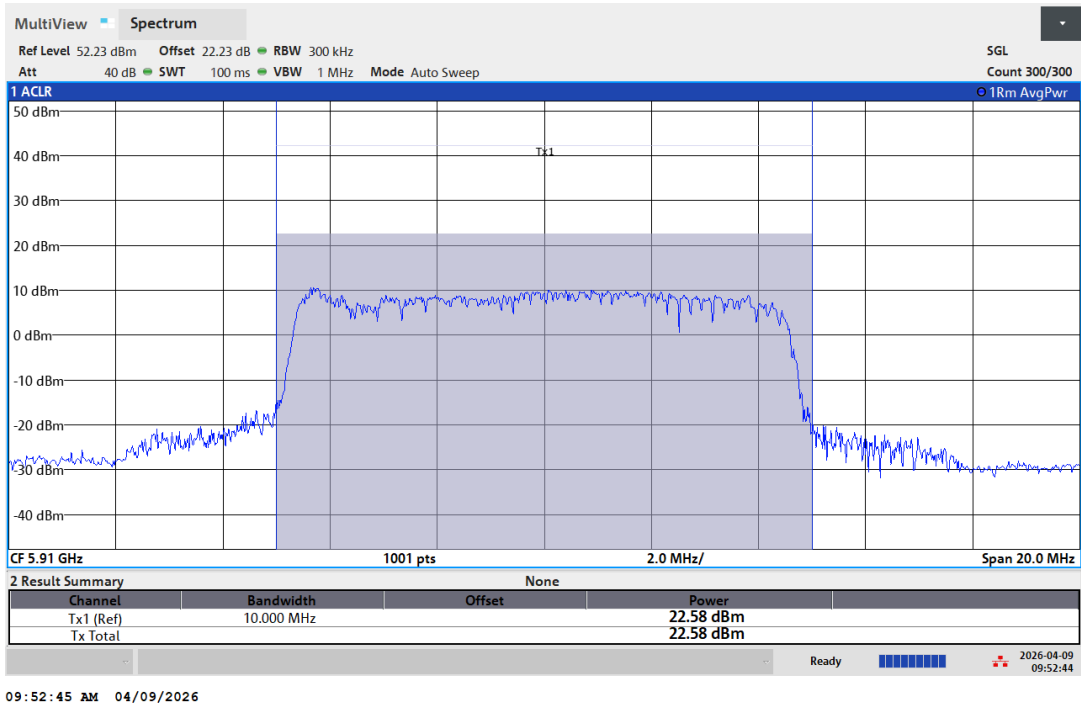
10 MHz-5900MHz-MIMO Ant2



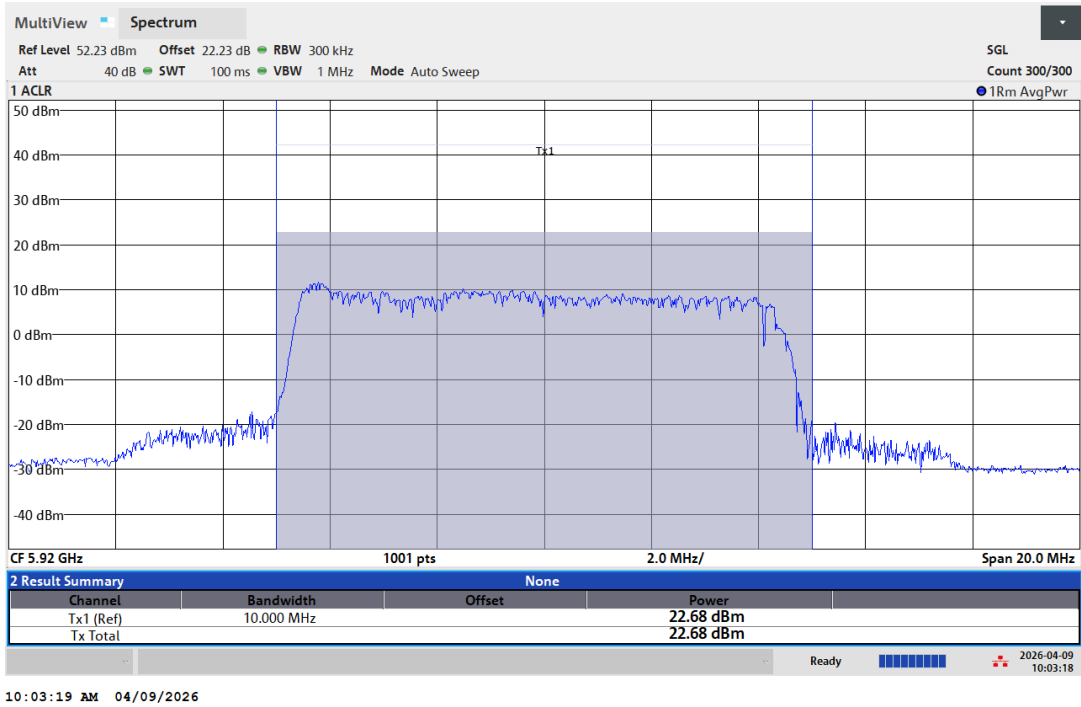
10 MHz-5910MHz-MIMO Ant1



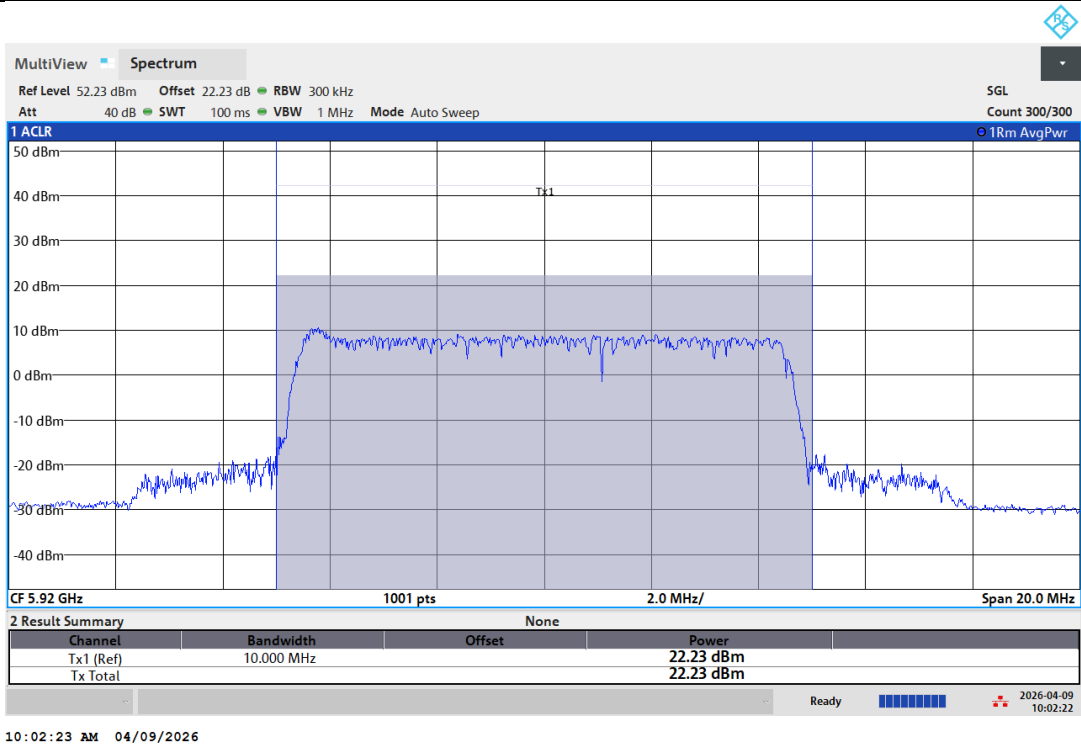
10 MHz-5910MHz-MIMO Ant2



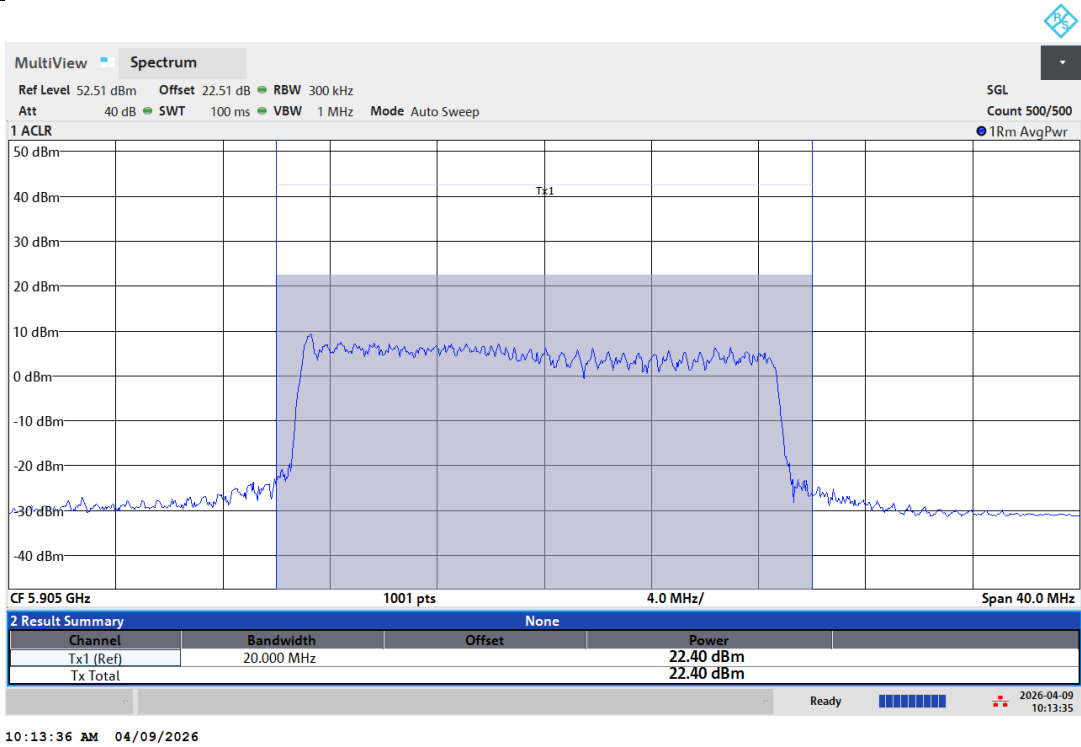
10 MHz-5920MHz-MIMO Ant1



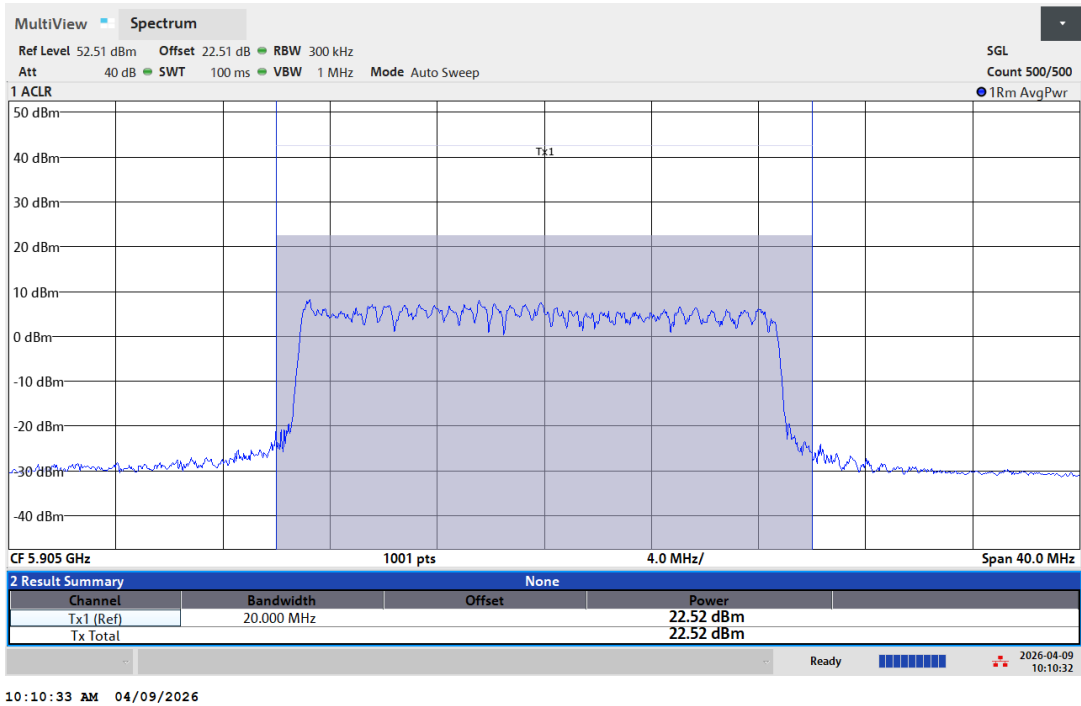
10 MHz-5920MHz-MIMO Ant2



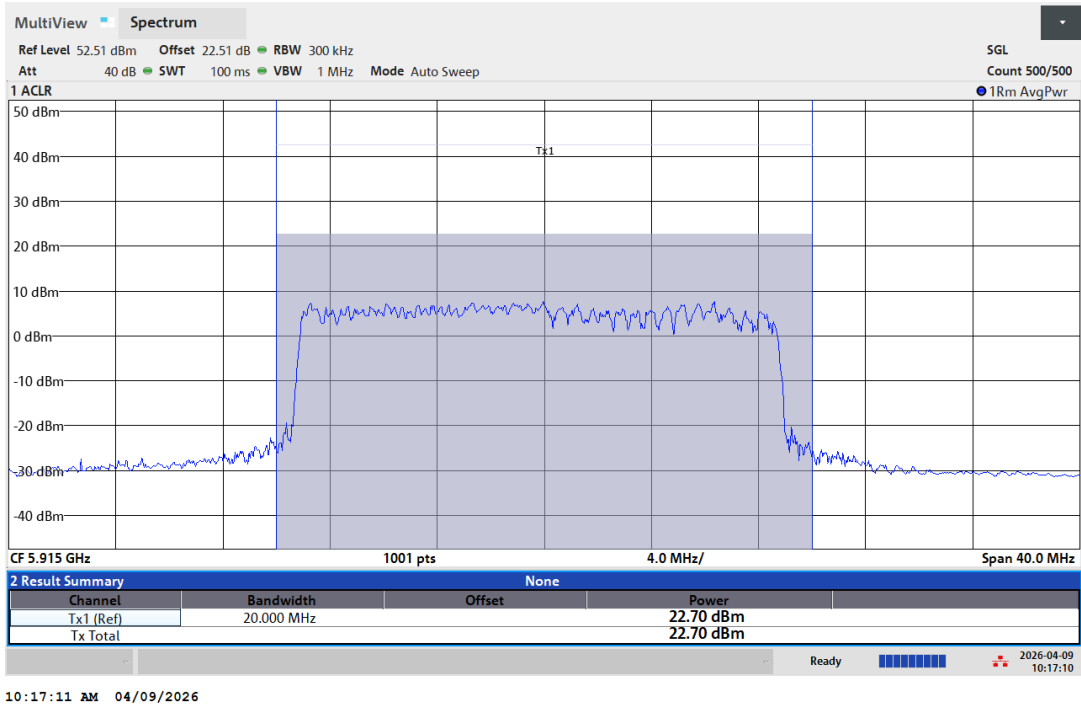
20 MHz-5905MHz-MIMO Ant1



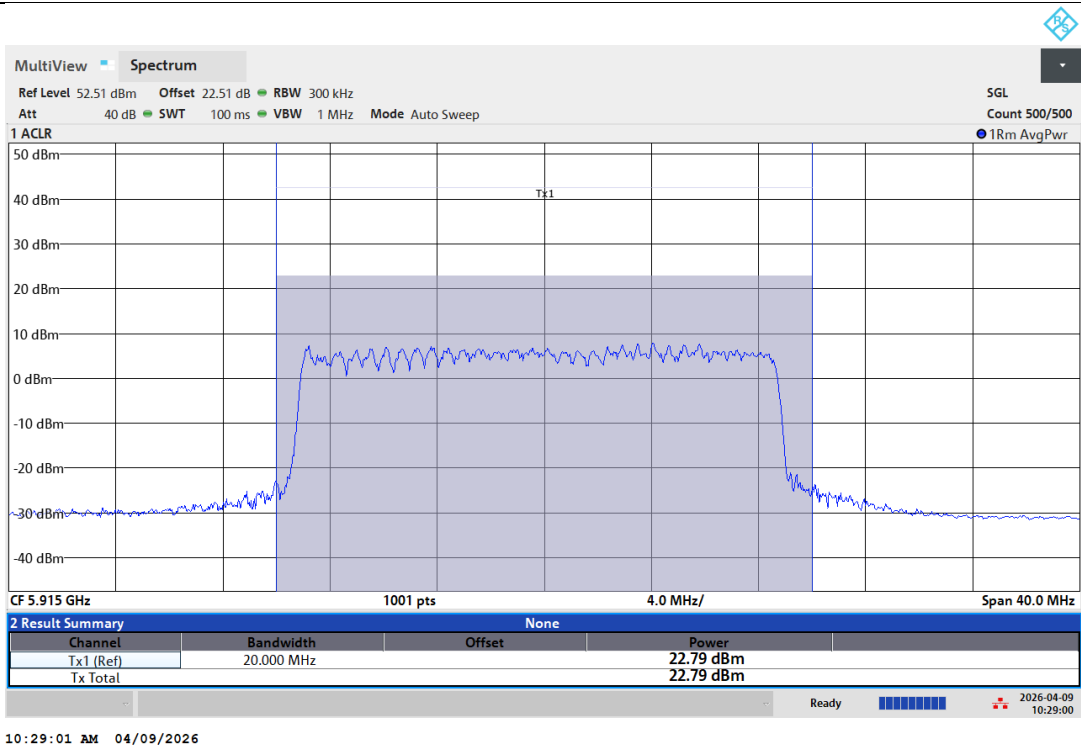
20 MHz-5905MHz-MIMO Ant2



20 MHz-5915MHz-MIMO Ant1



20 MHz-5915MHz-MIMO Ant2



Note: Offset = Cable Loss + Duty Factor, Cable Loss = 2dB.

Appendix C: Out-of-Band Emissions (OOBE)

Table of Spectrum Analyzer Settings

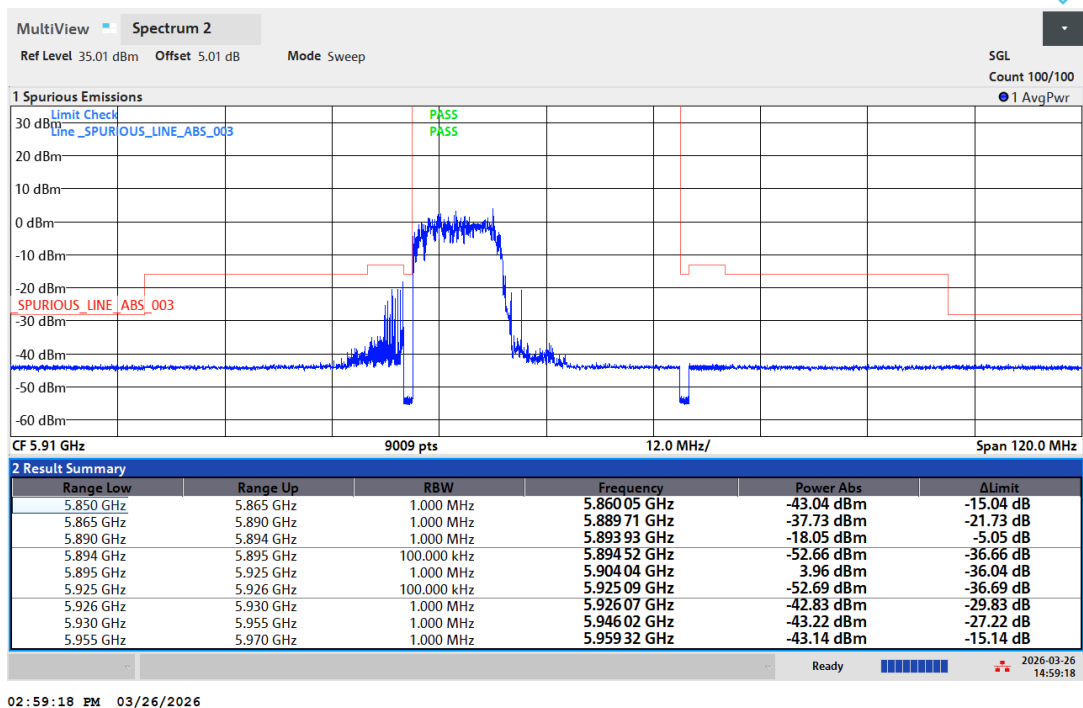
Spurious Emissions							
	Range 1	Range 2	Range 3	Range 4	Range 5	Range 6	Range 7
Range Start	5.85 GHz	5.865 GHz	5.89 GHz	5.894 GHz	5.895 GHz	5.925 GHz	5.926 GHz
Range Stop	5.865 GHz	5.89 GHz	5.894 GHz	5.895 GHz	5.925 GHz	5.926 GHz	5.93 GHz
Filter Type	Normal(3dB)	Normal(3dB)	Normal(3dB)	Normal(3dB)	Normal(3dB)	Normal(3dB)	Normal(3dB)
RBW	1 MHz	1 MHz	1 MHz	100 kHz	1 MHz	100 kHz	1 MHz
VBW	3 MHz	3 MHz	3 MHz	300 kHz	3 MHz	300 kHz	3 MHz
Sweep Time Mode	Auto	Auto	Auto	Auto	Auto	Auto	Auto
Sweep Time	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms
Detector	RMS	RMS	RMS	RMS	RMS	RMS	RMS
Ref Level	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm
RF Att Mode	Manual	Manual	Manual	Manual	Manual	Manual	Manual
RF Attenuation	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB
Preamp	Off	Off	Off	Off	Off	Off	Off
Sweep Points	1001	1001	1001	1001	1001	1001	1001
Insert before Range Insert after Range Delete Range Adjust X-Axis							

Spurious Emissions							
	Range 3	Range 4	Range 5	Range 6	Range 7	Range 8	Range 9
Range Start	5.89 GHz	5.894 GHz	5.895 GHz	5.925 GHz	5.926 GHz	5.93 GHz	5.955 GHz
Range Stop	5.894 GHz	5.895 GHz	5.925 GHz	5.926 GHz	5.93 GHz	5.955 GHz	5.97 GHz
Filter Type	Normal(3dB)	Normal(3dB)	Normal(3dB)	Normal(3dB)	Normal(3dB)	Normal(3dB)	Normal(3dB)
RBW	1 MHz	100 kHz	1 MHz	100 kHz	1 MHz	1 MHz	1 MHz
VBW	3 MHz	300 kHz	3 MHz	300 kHz	3 MHz	3 MHz	3 MHz
Sweep Time Mode	Auto	Auto	Auto	Auto	Auto	Auto	Auto
Sweep Time	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms
Detector	RMS	RMS	RMS	RMS	RMS	RMS	RMS
Ref Level	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm
RF Att Mode	Manual	Manual	Manual	Manual	Manual	Manual	Manual
RF Attenuation	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB
Preamp	Off	Off	Off	Off	Off	Off	Off
Sweep Points	1001	1001	1001	1001	1001	1001	1001
Insert before Range Insert after Range Delete Range Adjust X-Axis							

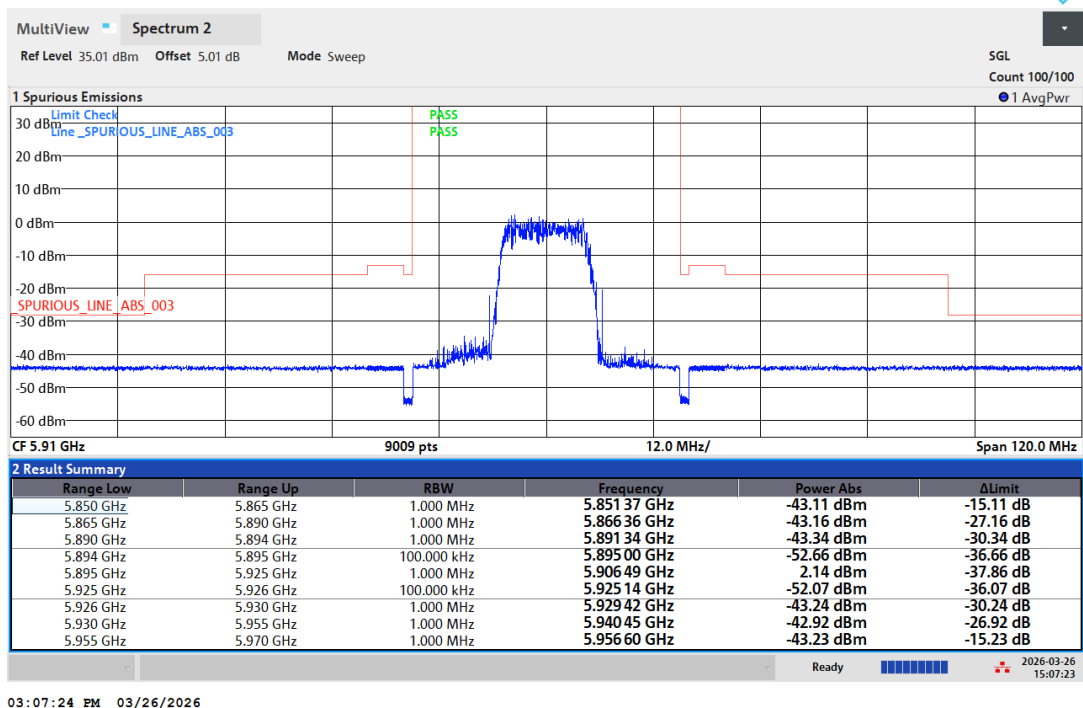
Spurious Emissions							
	Range 1	Range 2	Range 3	Range 4	Range 5	Range 6	Range 7
Sweep Time Mode	Auto	Auto	Auto	Auto	Auto	Auto	Auto
Sweep Time	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms
Detector	RMS	RMS	RMS	RMS	RMS	RMS	RMS
Ref Level	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm
RF Att Mode	Manual	Manual	Manual	Manual	Manual	Manual	Manual
RF Attenuation	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB
Preamp	Off	Off	Off	Off	Off	Off	Off
Sweep Points	1001	1001	1001	1001	1001	1001	1001
Stop After Sweep	Off	Off	Off	Off	Off	Off	Off
Transducer	None	None	None	None	None	None	None
Limit Check	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute
Abs Limit Start	-28 dBm	-16 dBm	-13 dBm	-16 dBm	40 dBm	-16 dBm	-13 dBm
Abs Limit Stop	-28 dBm	-16 dBm	-13 dBm	-16 dBm	40 dBm	-16 dBm	-13 dBm
Insert before Range Insert after Range Delete Range Adjust X-Axis							

Spurious Emissions							
	Range 3	Range 4	Range 5	Range 6	Range 7	Range 8	Range 9
Sweep Time Mode	Auto	Auto	Auto	Auto	Auto	Auto	Auto
Sweep Time	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms	1.01 ms
Detector	RMS	RMS	RMS	RMS	RMS	RMS	RMS
Ref Level	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm	35.01 dBm
RF Att Mode	Manual	Manual	Manual	Manual	Manual	Manual	Manual
RF Attenuation	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB	40 dB
Preamp	Off	Off	Off	Off	Off	Off	Off
Sweep Points	1001	1001	1001	1001	1001	1001	1001
Stop After Sweep	Off	Off	Off	Off	Off	Off	Off
Transducer	None	None	None	None	None	None	None
Limit Check	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute	Absolute
Abs Limit Start	-13 dBm	-16 dBm	40 dBm	-16 dBm	-13 dBm	-16 dBm	-28 dBm
Abs Limit Stop	-13 dBm	-16 dBm	40 dBm	-16 dBm	-13 dBm	-16 dBm	-28 dBm
Insert before Range Insert after Range Delete Range Adjust X-Axis							

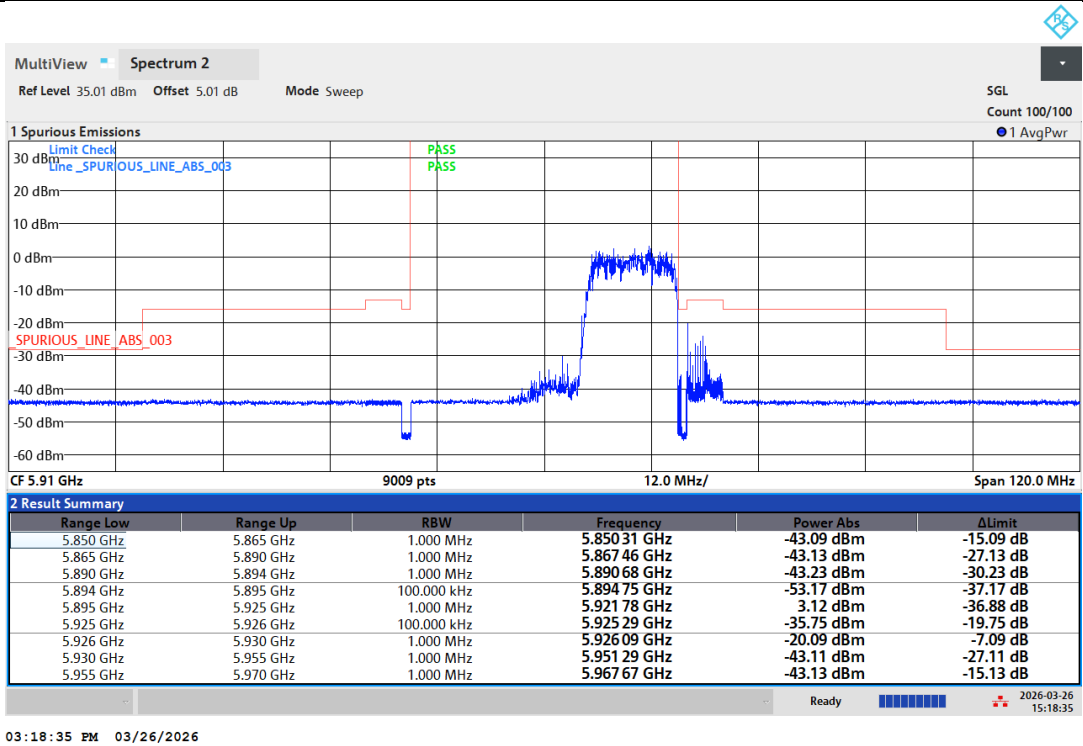
Spectrum plots for worst-case 10 MHz-5900MHz-MIMO Ant2



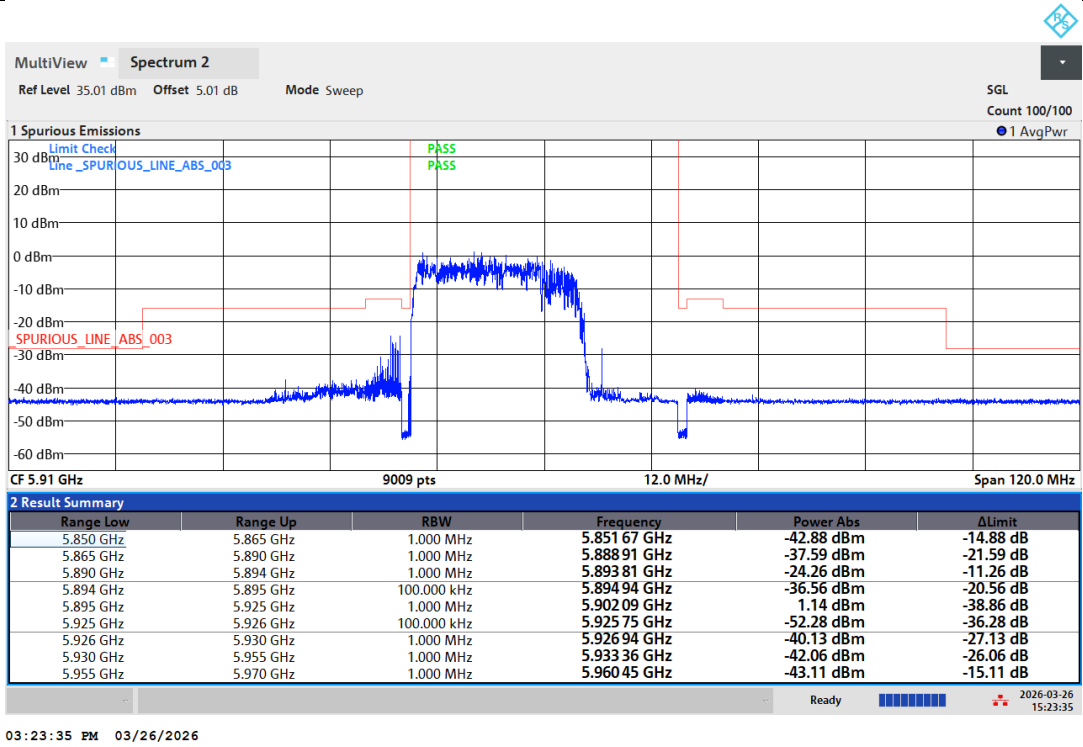
10 MHz-5910MHz-MIMO Ant2

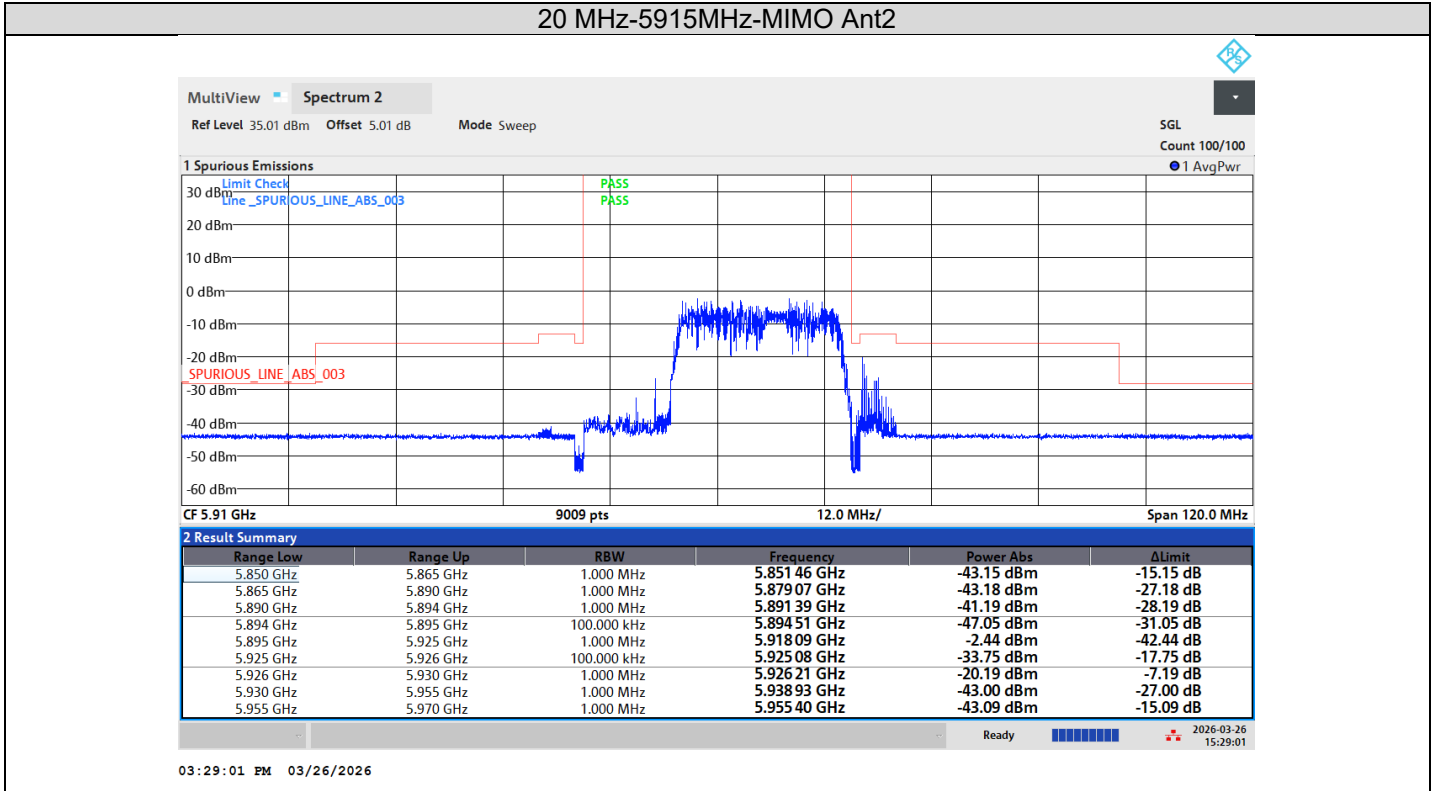


10 MHz-5920MHz-MIMO Ant1



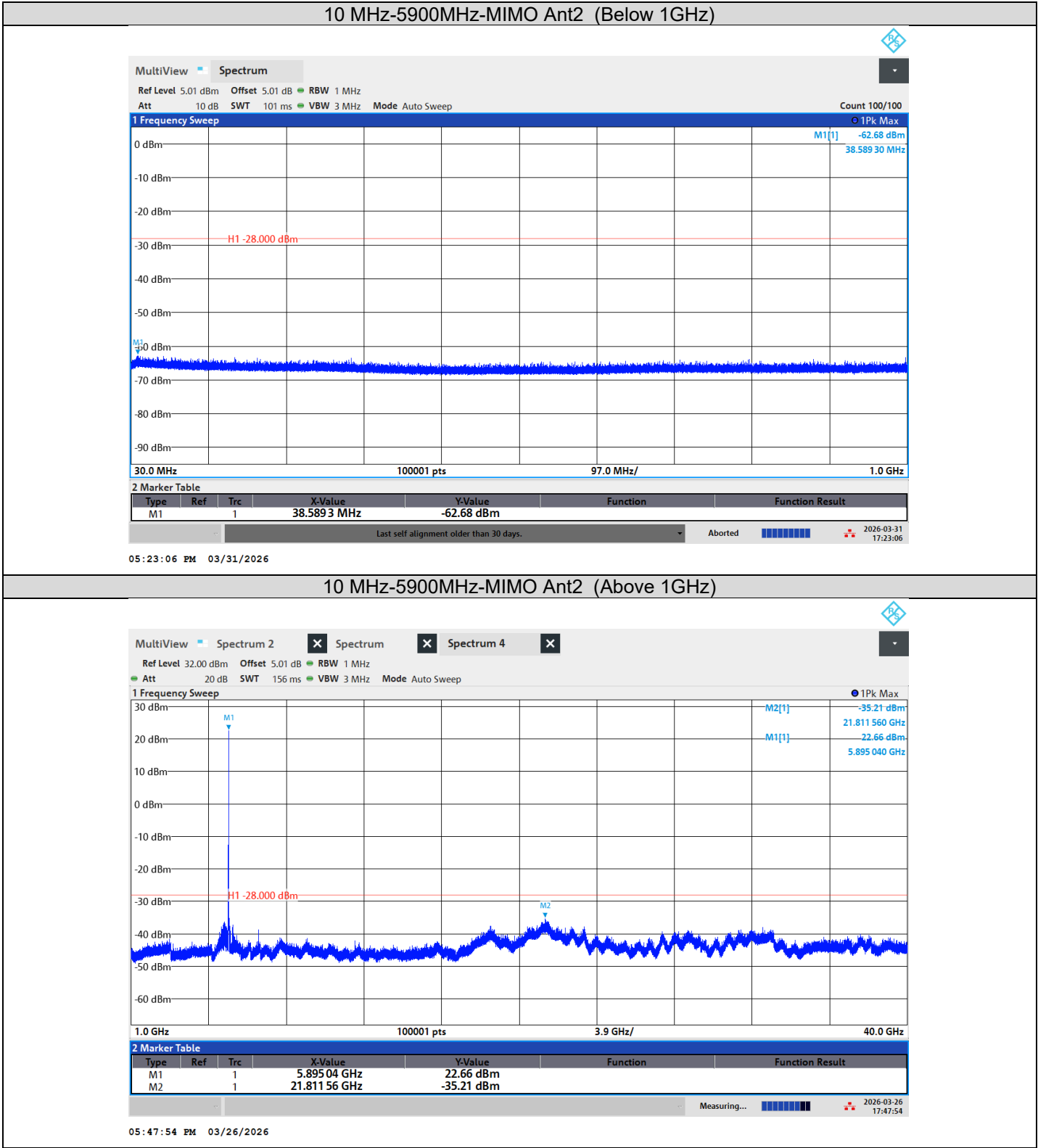
20 MHz-5905MHz-MIMO Ant2



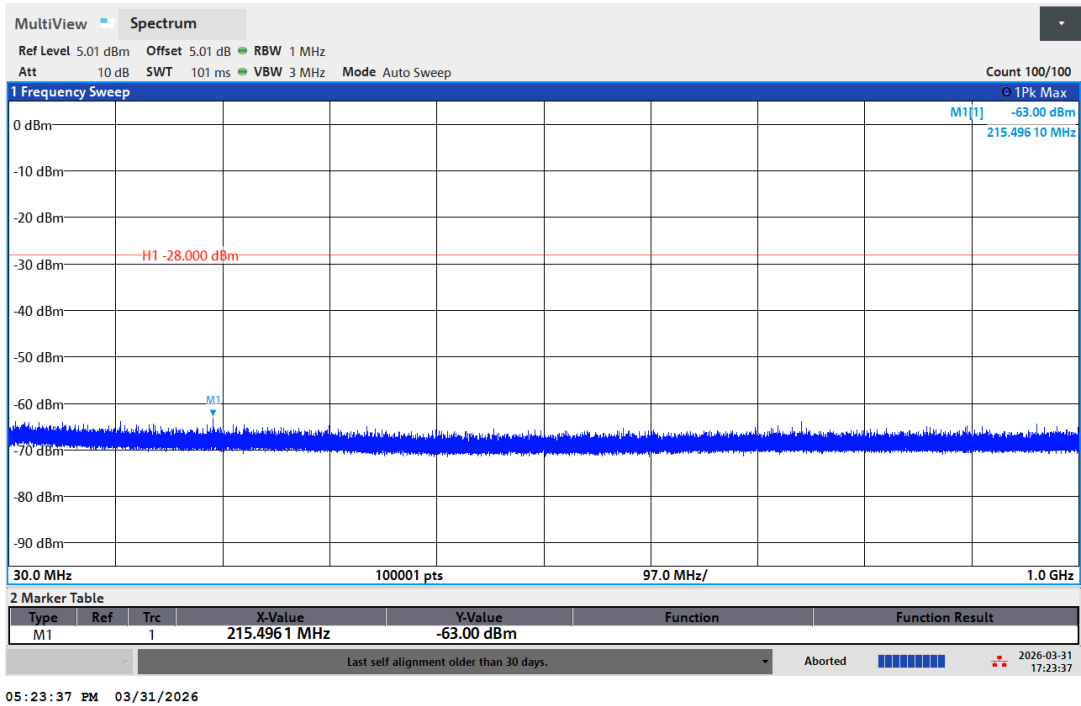


Note: Offset = Cable Loss + 10Log(N_{ANT}), where N_{ANT} is the number of outputs. Cable Loss = 2dB.

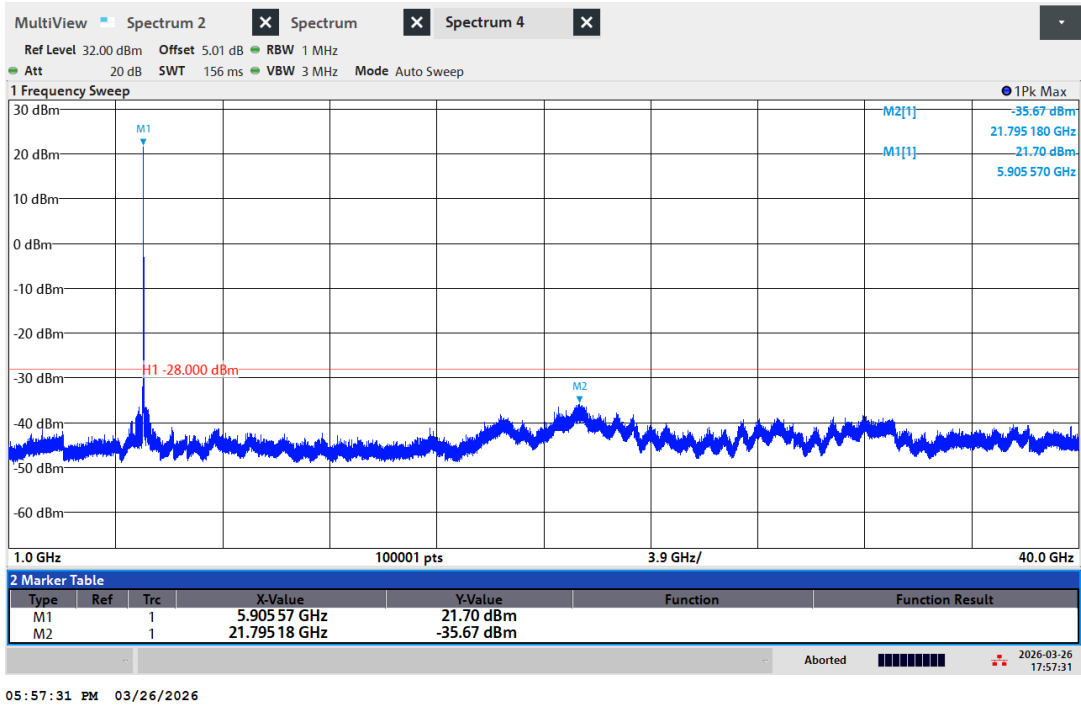
Appendix D: Spurious Emissions at Antenna Terminal



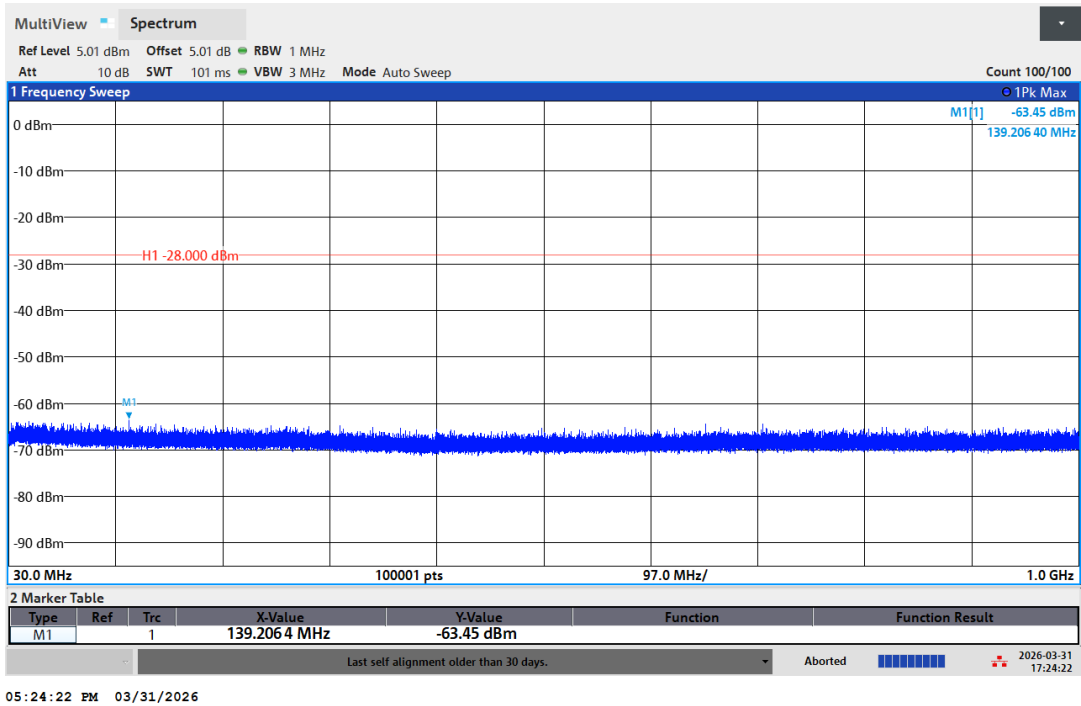
10 MHz-5910MHz-MIMO Ant2 (Below 1GHz)



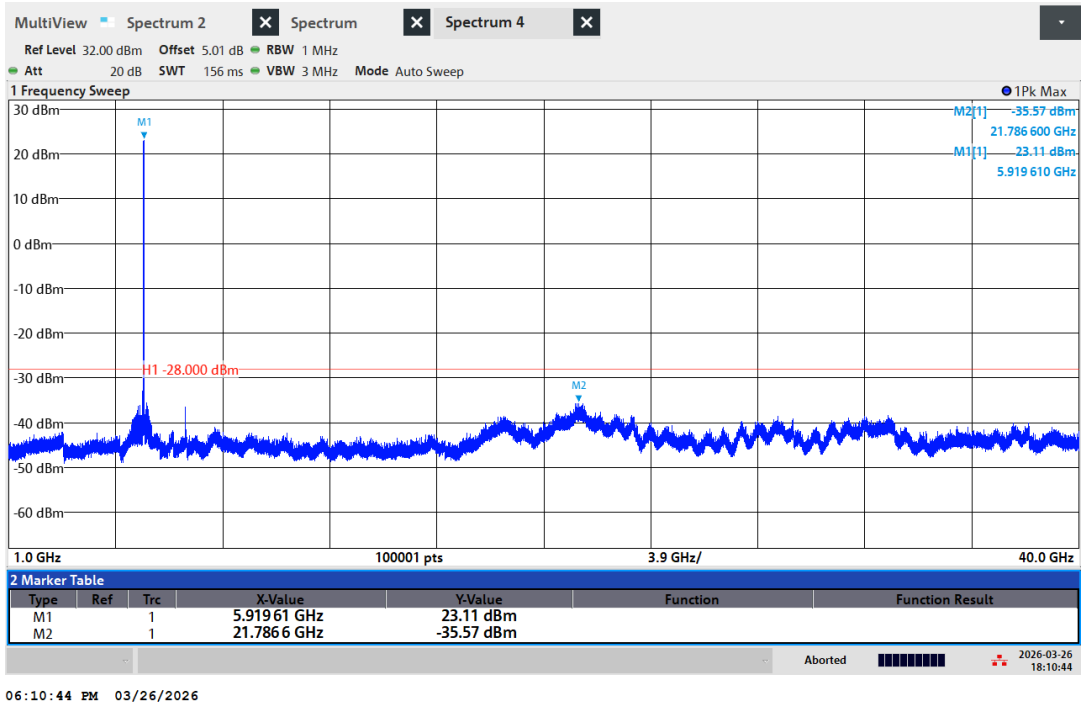
10 MHz-5910MHz-MIMO Ant2 (Above 1GHz)



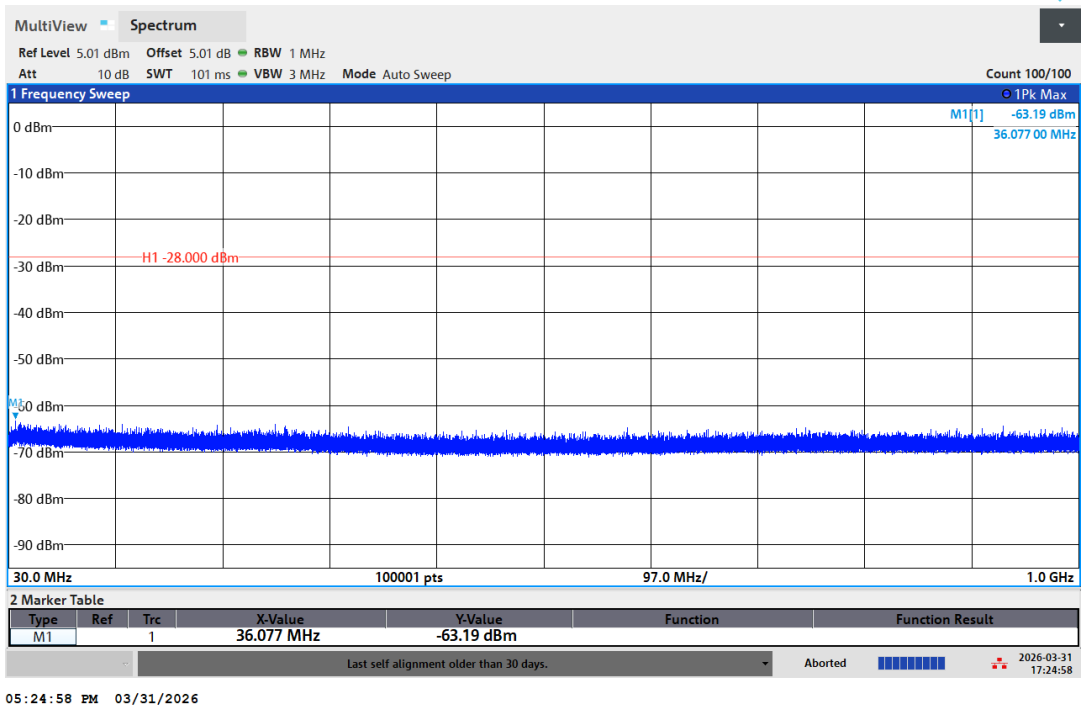
10 MHz-5920MHz-MIMO Ant1 (Below 1GHz)



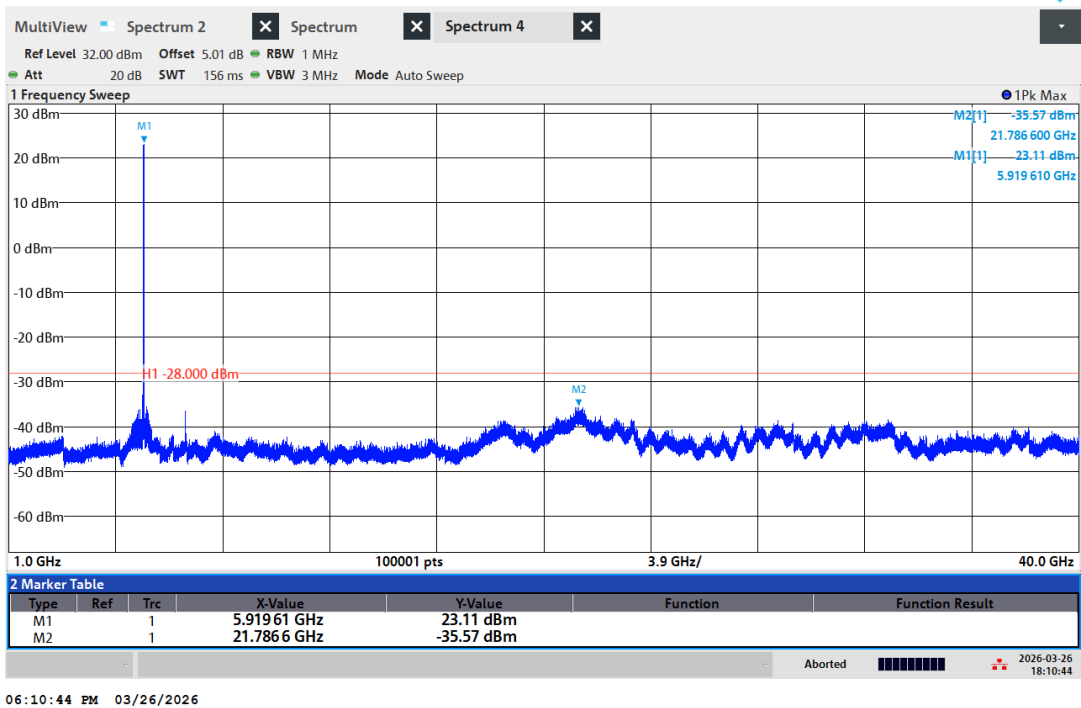
10 MHz-5920MHz-MIMO Ant1 (Above 1GHz)



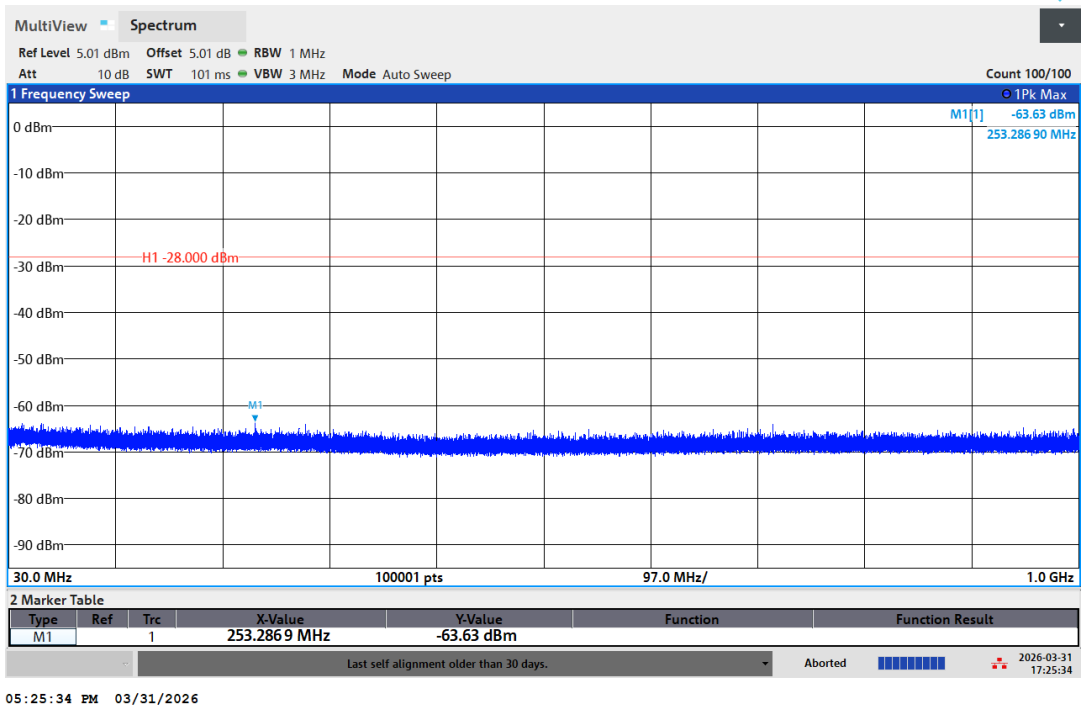
20 MHz-5905MHz-MIMO Ant2 (Below 1GHz)



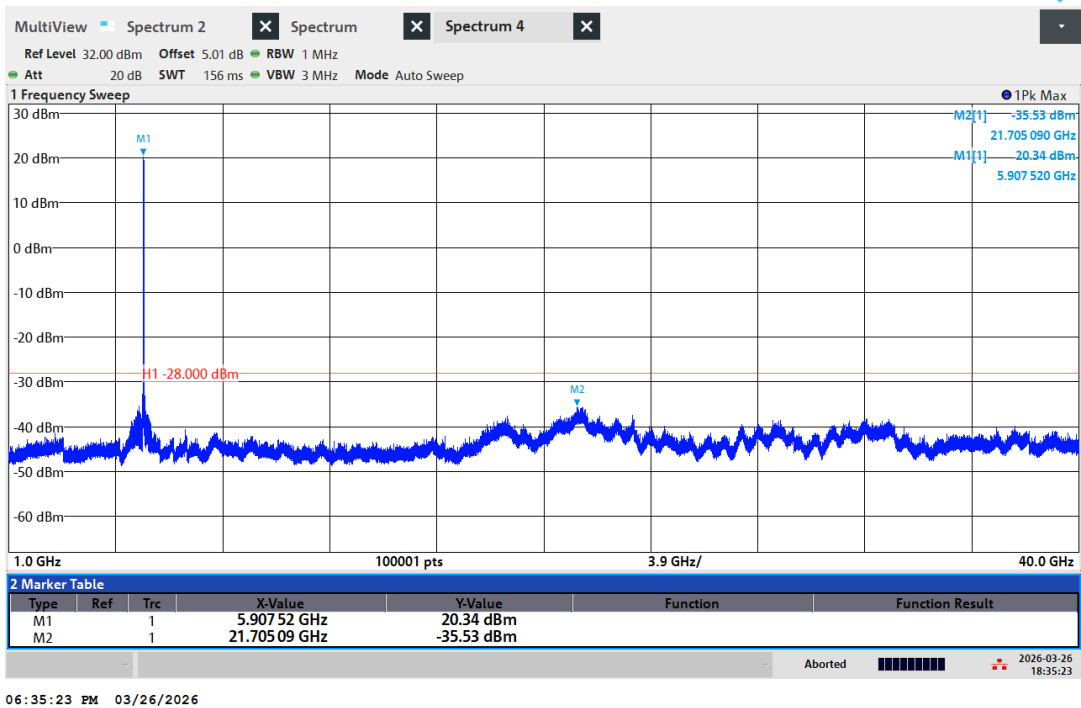
20 MHz-5905MHz-MIMO Ant2 (Above 1GHz)



20 MHz-5915MHz-MIMO Ant2 (Below 1GHz)



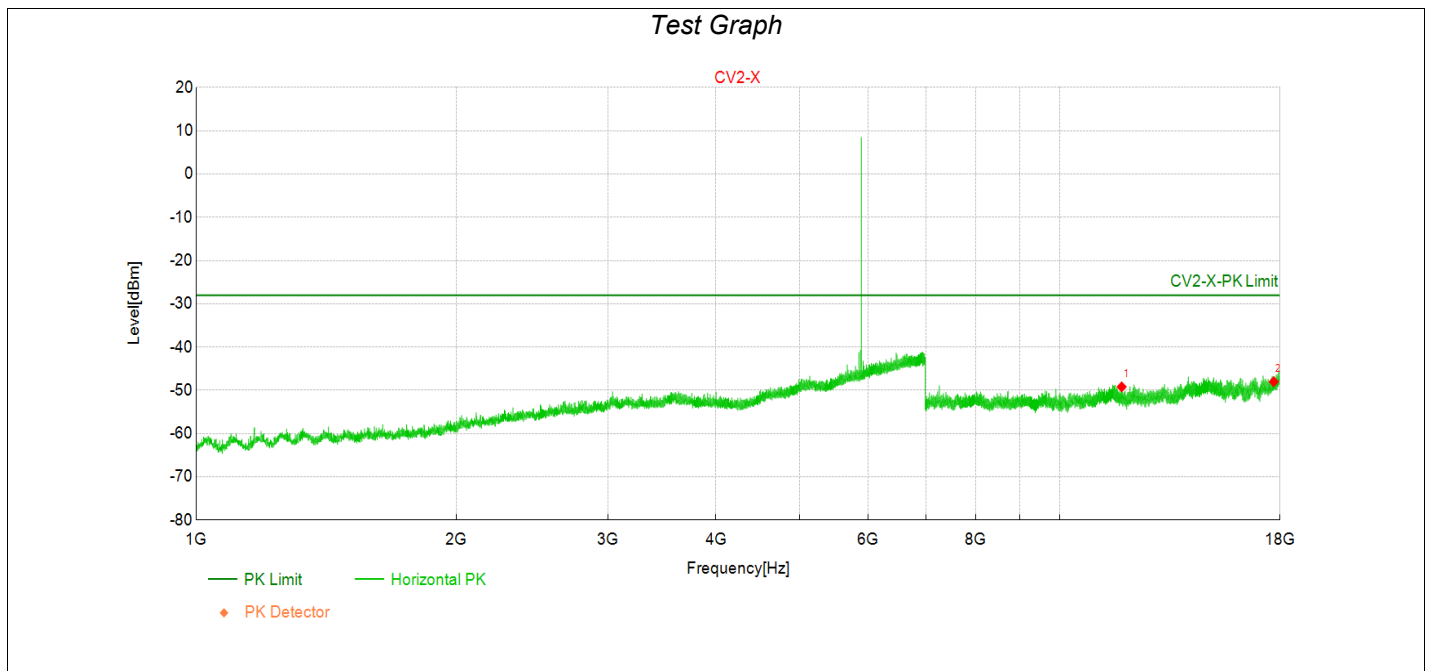
20 MHz-5915MHz-MIMO Ant2 (Above 1GHz)



Note: Offset = Cable Loss + 10Log(N_{ANT}), where N_{ANT} is the number of outputs. Cable Loss = 2dB.

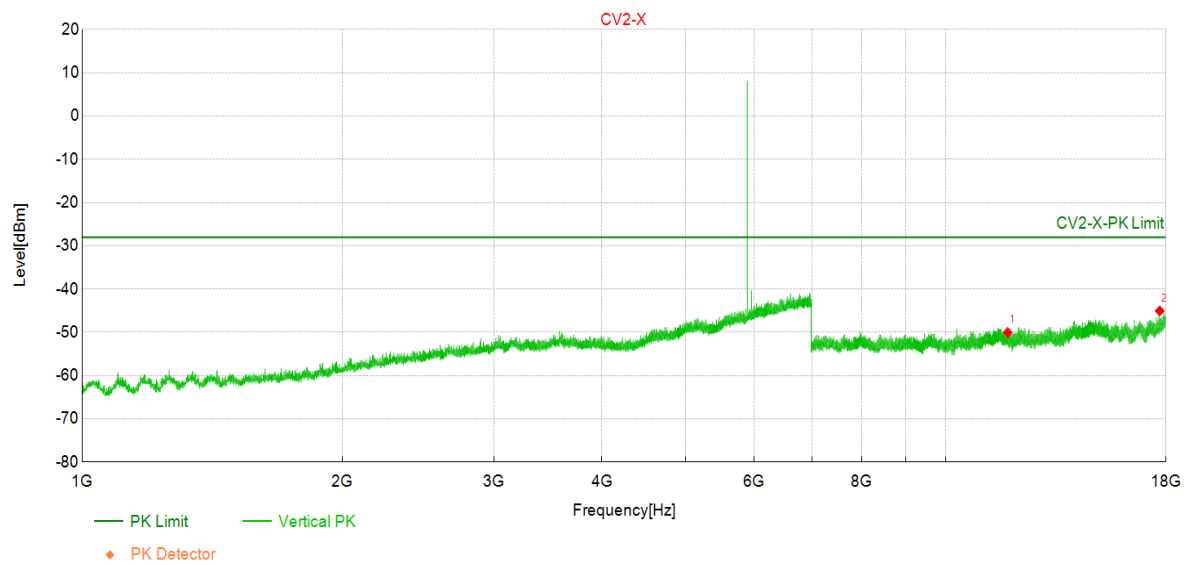
Appendix E: Radiated Emission

Transmit at 5900MHz by 10MHz

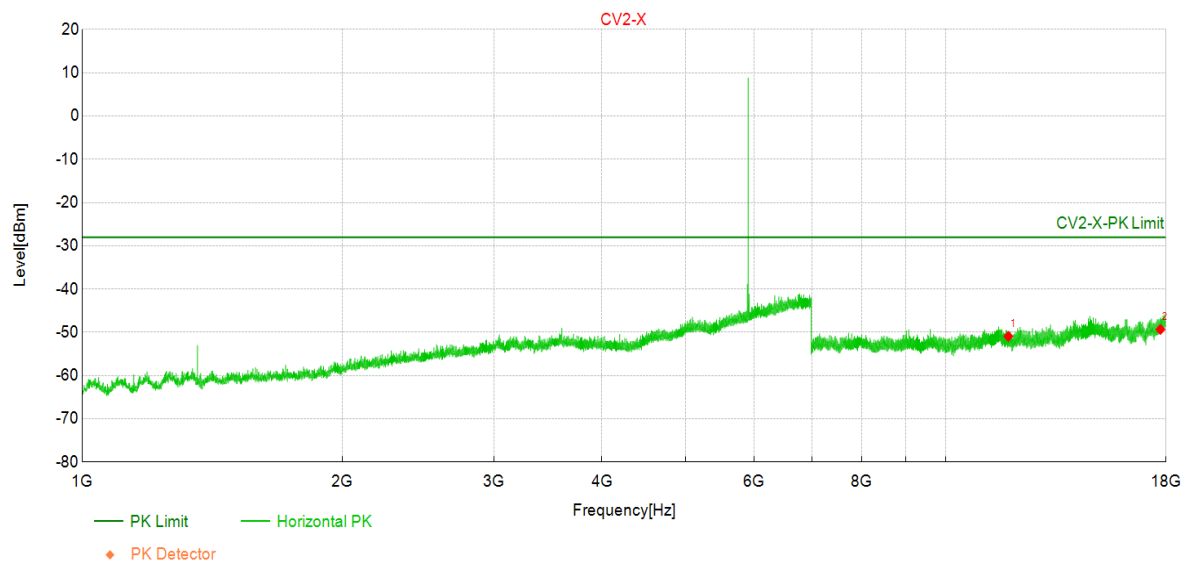


Data List

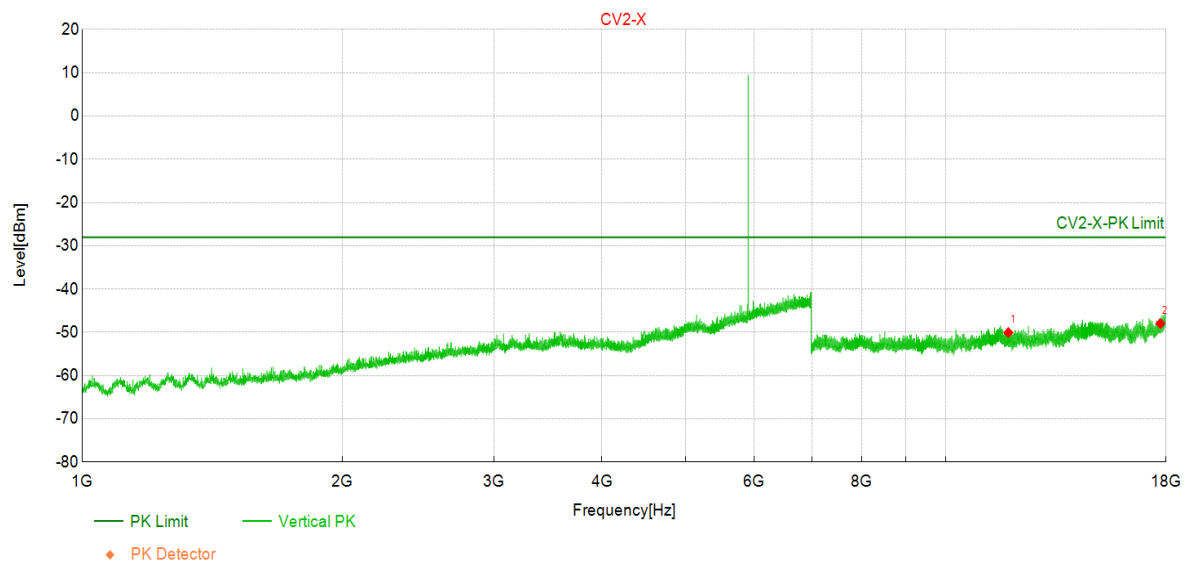
NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11800.00	41.2	-49.20	-90.410	-28.00	21.20	PK	Horizo	PASS
2	17700.00	36.6	-48.01	-84.560	-28.00	20.01	PK	Horizo	PASS

Transmit at 5900MHz by 10MHz*Test Graph***Data List**

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11800.00	40.3	-50.07	-90.410	-28.00	22.07	PK	Vertic	PASS
2	17700.00	39.5	-45.05	-84.560	-28.00	17.05	PK	Vertic	PASS

Transmit at 5910MHz by 10MHz*Test Graph***Data List**

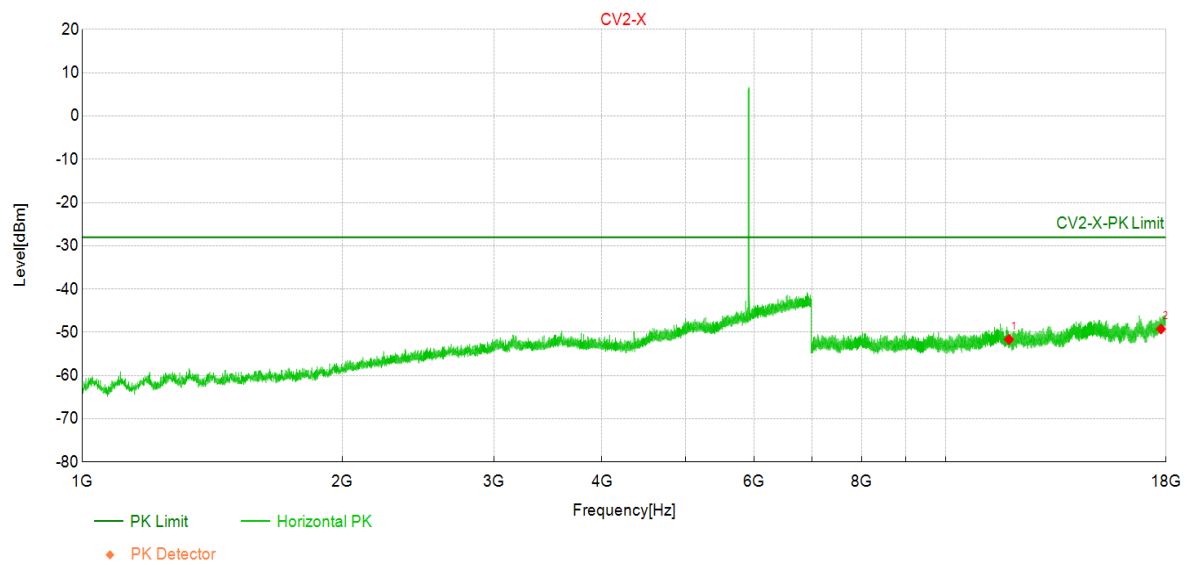
NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11820.00	39.5	-50.93	-90.380	-28.00	22.93	PK	Horizo	PASS
2	17730.00	35.1	-49.34	-84.410	-28.00	21.34	PK	Horizo	PASS

Transmit at 5910MHz by 10MHz*Test Graph***Data List**

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11820.00	40.3	-50.06	-90.380	-28.00	22.06	PK	Vertic	PASS
2	17730.00	36.4	-47.97	-84.410	-28.00	19.97	PK	Vertic	PASS

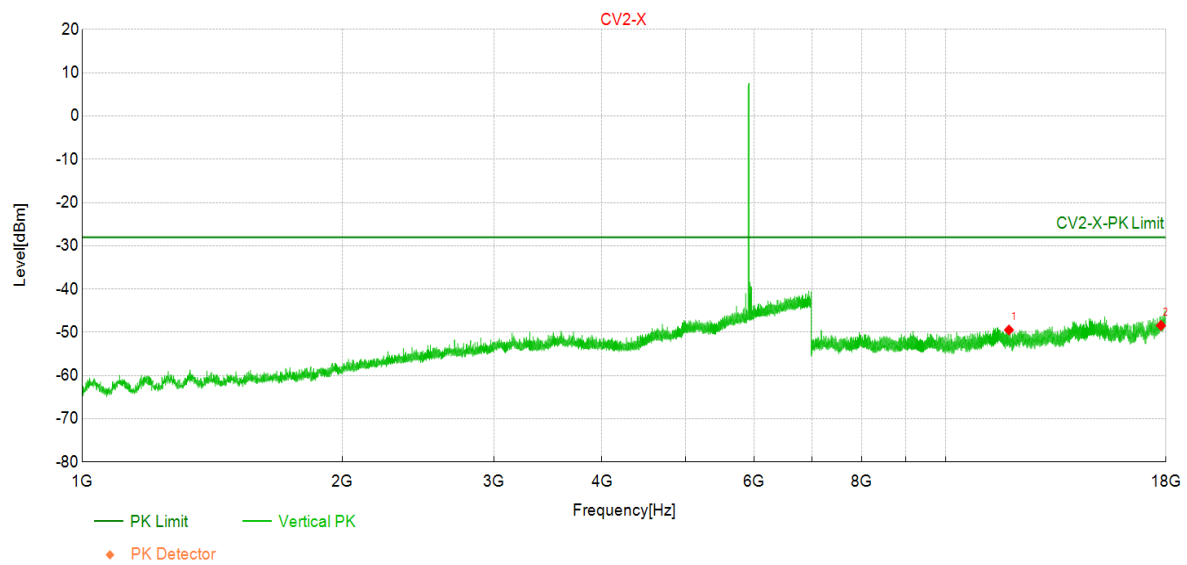
Transmit at 5920MHz by 10MHz

Test Graph

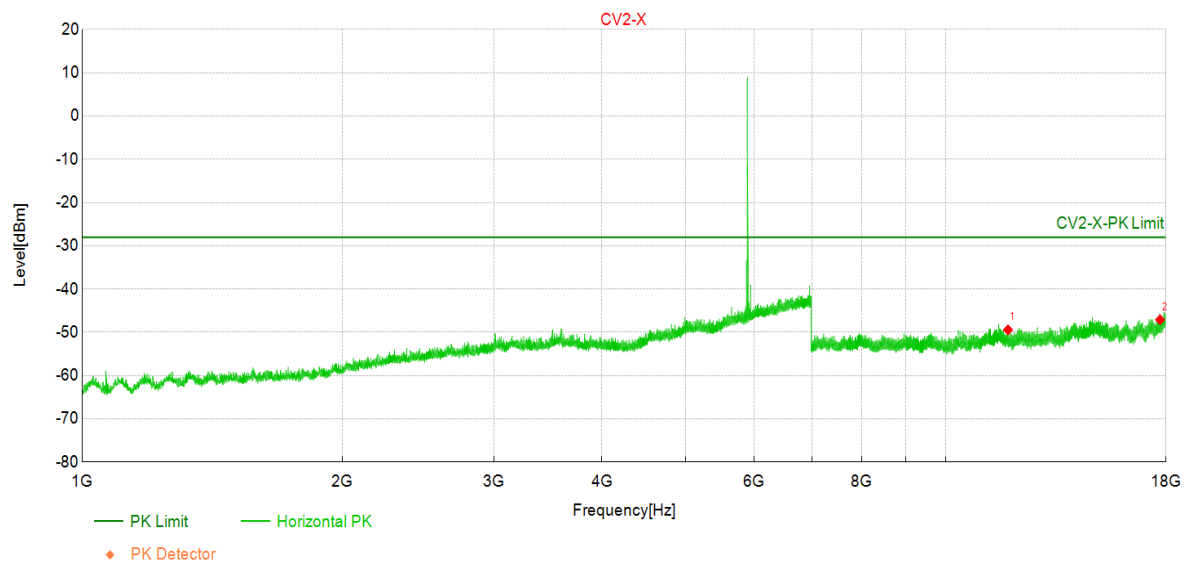


Data List

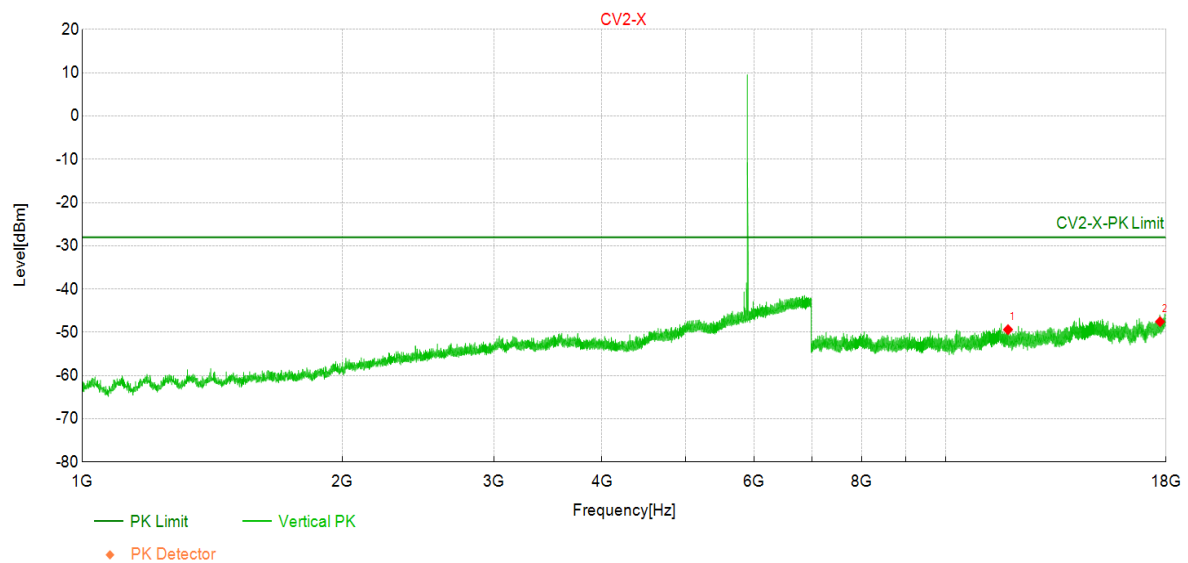
NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11840.00	38.7	-51.65	-90.340	-28.00	23.65	PK	Horizo	PASS
2	17760.00	35.0	-49.25	-84.240	-28.00	21.25	PK	Horizo	PASS

Transmit at 5920MHz by 10MHz*Test Graph***Data List**

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11840.00	40.9	-49.45	-90.340	-28.00	21.45	PK	Vertic	PASS
2	17760.00	35.8	-48.43	-84.240	-28.00	20.43	PK	Vertic	PASS

Transmit at 5905MHz by 20MHz*Test Graph***Data List**

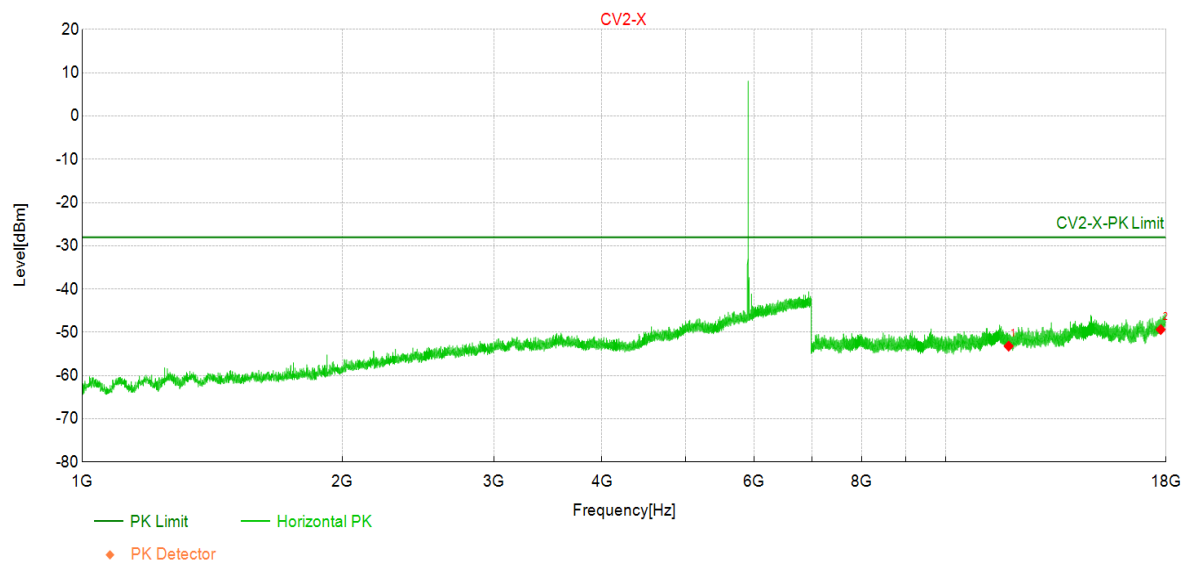
NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11810.00	41.0	-49.43	-90.400	-28.00	21.43	PK	Horizo	PASS
2	17715.00	37.4	-47.11	-84.490	-28.00	16.76	PK	Horizo	PASS

Transmit at 5905MHz by 20MHz*Test Graph***Data List**

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11810.00	41.0	-49.38	-90.400	-28.00	21.38	PK	Vertic	PASS
2	17715.00	37.0	-47.54	-84.490	-28.00	16.81	PK	Vertic	PASS

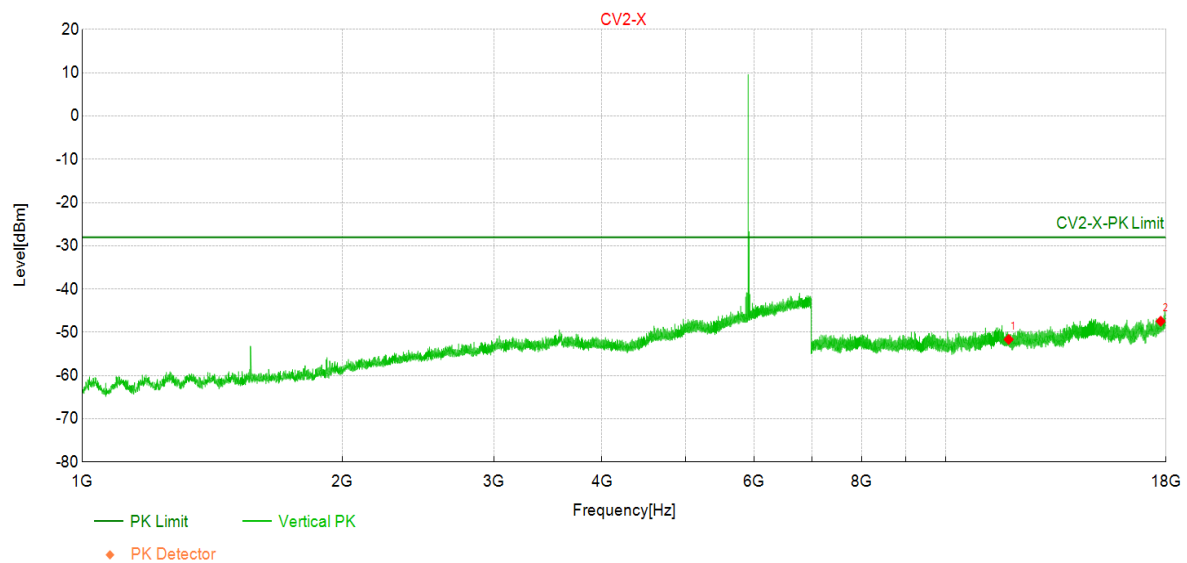
Transmit at 5915MHz by 20MHz

Test Graph



Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11830.00	37.2	-53.19	-90.360	-28.00	25.19	PK	Horizo	PASS
2	17745.00	35.0	-49.36	-84.340	-28.00	16.60	PK	Horizo	PASS

Transmit at 5915MHz by 20MHz*Test Graph***Data List**

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	11830.00	38.7	-51.65	-90.360	-28.00	23.65	PK	Vertic	PASS
2	17745.00	36.9	-47.44	-84.340	-28.00	19.44	PK	Vertic	PASS

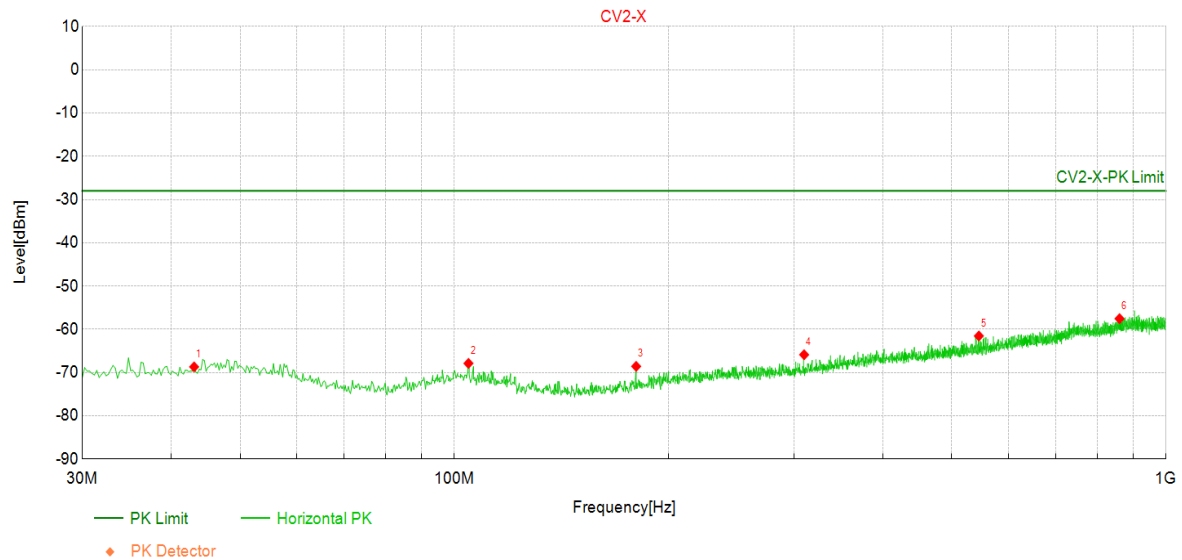
Note:

1. Level=Reading+Factor

The worst case of Radiated Emission below 1GHz :

Transmit at 5910MHz

Test Graph

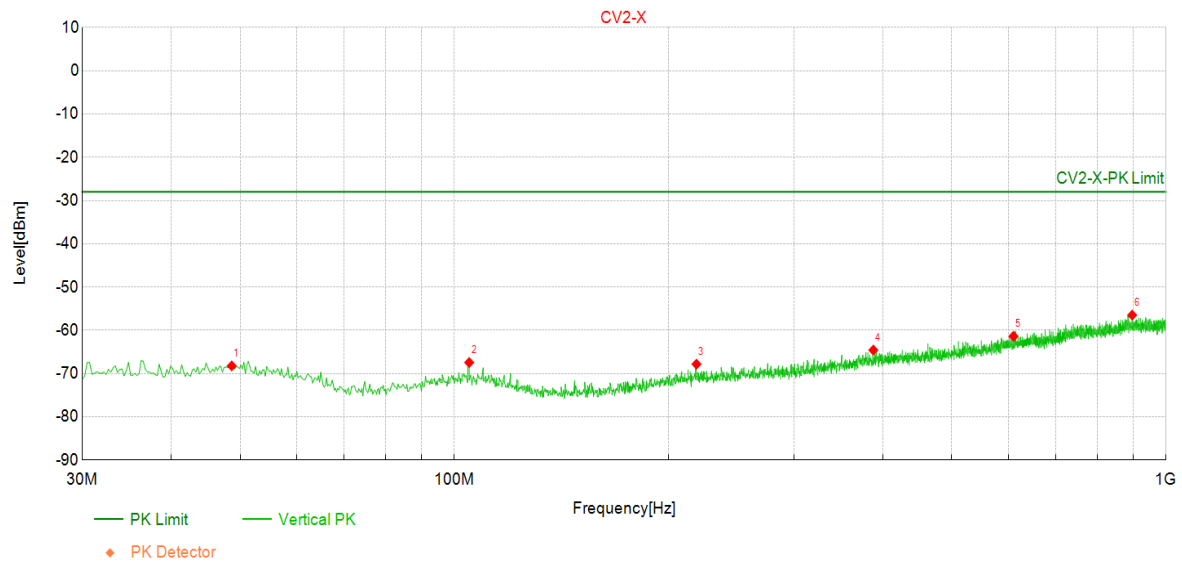


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	43.10	12.2	-68.69	-80.890	-28.00	40.69	PK	Horizo	PASS
2	104.69	14.9	-67.88	-82.810	-28.00	39.88	PK	Horizo	PASS
3	180.11	16.2	-68.57	-84.720	-28.00	40.57	PK	Horizo	PASS
4	310.09	15.1	-65.88	-80.940	-28.00	37.88	PK	Horizo	PASS
5	545.80	15.4	-61.54	-76.980	-28.00	33.54	PK	Horizo	PASS
6	860.32	15.4	-57.54	-72.910	-28.00	29.54	PK	Horizo	PASS

Transmit at 5910MH

Test Graph



Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	48.67	12.1	-68.23	-80.360	-28.00	40.23	PK	Vertic	PASS
2	104.93	15.4	-67.45	-82.820	-28.00	39.45	PK	Vertic	PASS
3	218.91	15.1	-67.82	-82.900	-28.00	39.82	PK	Vertic	PASS
4	387.93	14.7	-64.57	-79.230	-28.00	36.57	PK	Vertic	PASS
5	610.55	14.0	-61.38	-75.420	-28.00	33.38	PK	Vertic	PASS
6	896.21	15.9	-56.49	-72.360	-28.00	28.49	PK	Vertic	PASS

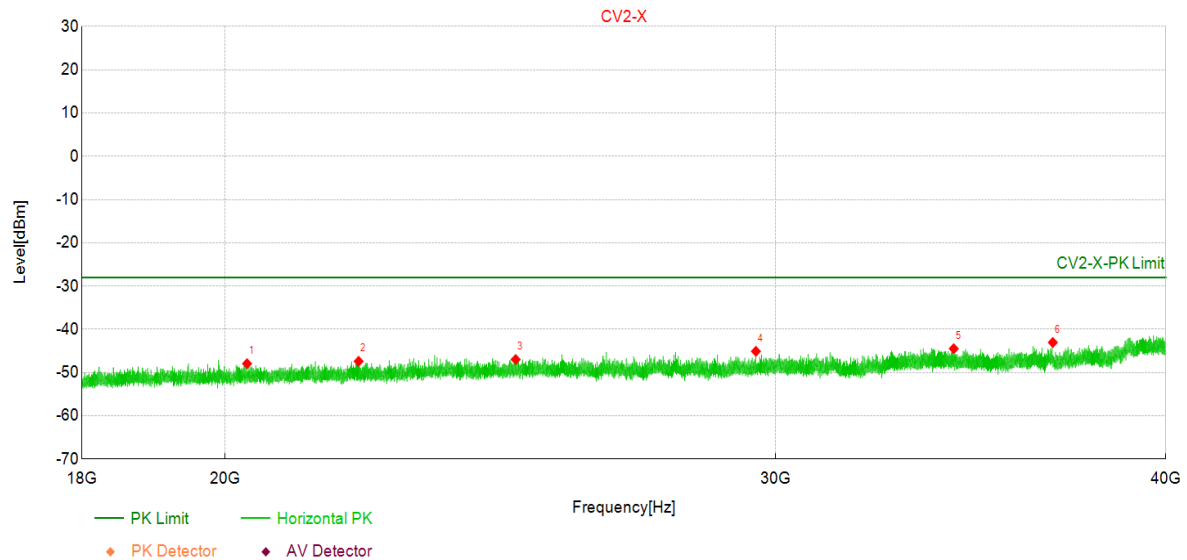
Note:

1. All Readings below 1GHz are PK, PK as an alternative to CISPR quasi-peak measurements or average measurements.
2. Level=Reading+Factor.

The worst case of Radiated Emission Above 18GHz :

Transmit at 5910MHz by 10MHz

Test Graph

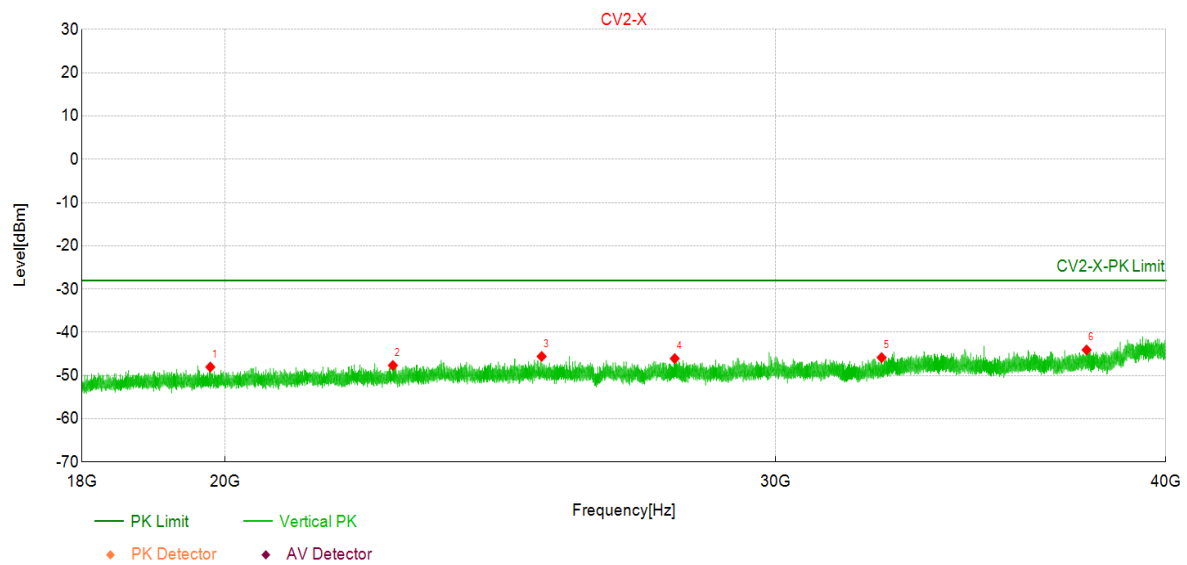


Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	20324.90	52.8	-47.95	-100.780	-28.00	19.95	PK	Horizo	PASS
2	22066.45	52.8	-47.40	-100.240	-28.00	19.40	PK	Horizo	PASS
3	24772.45	52.5	-46.98	-99.480	-28.00	18.98	PK	Horizo	PASS
4	29569.16	54.4	-45.09	-99.480	-28.00	17.09	PK	Horizo	PASS
5	34209.03	52.2	-44.48	-96.650	-28.00	16.48	PK	Horizo	PASS
6	36798.65	54.3	-43.05	-97.310	-28.00	15.05	PK	Horizo	PASS

Transmit at 5910MHz by 10MHz

Test Graph



Data List

NO	Frequency [MHz]	Reading [dBμV]	Level [dBm]	Factor [dB/m]	Limit [dBm]	Margin [dB]	Det	Pol	Verdict
1	19782.71	53.1	-48.03	-101.130	-28.00	20.03	PK	Vertic	PASS
2	22629.94	52.5	-47.65	-100.140	-28.00	19.65	PK	Vertic	PASS
3	25251.48	53.8	-45.58	-99.390	-28.00	17.58	PK	Vertic	PASS
4	27852.45	53.4	-46.07	-99.480	-28.00	18.07	PK	Vertic	PASS
5	32437.68	52.3	-45.85	-98.170	-28.00	17.85	PK	Vertic	PASS
6	37725.48	53.2	-44.08	-97.320	-28.00	16.08	PK	Vertic	PASS

Note:

1. Level=Reading+Factor.

Appendix F: Frequency Stability

Temperature (°C)	Voltage (V)	Frequency(MHz)	Measure value(MHz)	Deviation(ppm)	Limits(ppm)	Result
20	NV	5900	5900.012	-2.03	±20	Pass
20	HV	5900	5900.012	-2.03	±20	Pass
20	LV	5900	5899.984	2.71	±20	Pass
-40	NV	5900	5899.99	1.69	±20	Pass
-30	NV	5900	5899.988	2.03	±20	Pass
-20	NV	5900	5899.988	2.03	±20	Pass
-10	NV	5900	5899.987	2.20	±20	Pass
0	NV	5900	5899.999	0.17	±20	Pass
10	NV	5900	5899.988	2.03	±20	Pass
30	NV	5900	5899.995	0.85	±20	Pass
40	NV	5900	5900.004	-0.68	±20	Pass
50	NV	5900	5900.02	-3.39	±20	Pass
60	NV	5900	5900.014	-2.37	±20	Pass
70	NV	5900	5900.009	-1.53	±20	Pass
80	NV	5900	5900.004	-0.68	±20	Pass
85	NV	5900	5899.984	2.71	±20	Pass
20	NV	5910	5910.015	-2.54	±20	Pass
20	HV	5910	5910.018	-3.05	±20	Pass
20	LV	5910	5909.993	1.18	±20	Pass
-40	NV	5910	5910.015	-2.54	±20	Pass
-30	NV	5910	5910.012	-2.03	±20	Pass
-20	NV	5910	5909.993	1.18	±20	Pass
-10	NV	5910	5910.003	-0.51	±20	Pass
0	NV	5910	5910.017	-2.88	±20	Pass
10	NV	5910	5909.981	3.21	±20	Pass
30	NV	5910	5910.009	-1.52	±20	Pass
40	NV	5910	5910.007	-1.18	±20	Pass
50	NV	5910	5909.99	1.69	±20	Pass
60	NV	5910	5909.984	2.71	±20	Pass
70	NV	5910	5909.988	2.03	±20	Pass
80	NV	5910	5910.001	-0.17	±20	Pass
85	NV	5910	5909.991	1.52	±20	Pass
20	NV	5920	5920.02	-3.38	±20	Pass
20	HV	5920	5919.998	0.34	±20	Pass
20	LV	5920	5919.98	3.38	±20	Pass
-40	NV	5920	5919.999	0.17	±20	Pass
-30	NV	5920	5919.982	3.04	±20	Pass
-20	NV	5920	5920.007	-1.18	±20	Pass
-10	NV	5920	5920.011	-1.86	±20	Pass
0	NV	5920	5919.991	1.52	±20	Pass
10	NV	5920	5920.015	-2.53	±20	Pass
30	NV	5920	5920.009	-1.52	±20	Pass
40	NV	5920	5919.987	2.20	±20	Pass
50	NV	5920	5919.993	1.18	±20	Pass
60	NV	5920	5920.009	-1.52	±20	Pass
70	NV	5920	5919.994	1.01	±20	Pass

80	NV	5920	5919.998	0.34	±20	Pass
85	NV	5920	5919.981	3.21	±20	Pass
20	NV	5905	5904.997	0.51	±20	Pass
20	HV	5905	5904.986	2.37	±20	Pass
20	LV	5905	5904.987	2.20	±20	Pass
-40	NV	5905	5905.016	-2.71	±20	Pass
-30	NV	5905	5904.985	2.54	±20	Pass
-20	NV	5905	5905.002	-0.34	±20	Pass
-10	NV	5905	5905.016	-2.71	±20	Pass
0	NV	5905	5905	0.00	±20	Pass
10	NV	5905	5904.989	1.86	±20	Pass
30	NV	5905	5904.981	3.22	±20	Pass
40	NV	5905	5905.002	-0.34	±20	Pass
50	NV	5905	5905.007	-1.19	±20	Pass
60	NV	5905	5905.002	-0.34	±20	Pass
70	NV	5905	5904.983	2.88	±20	Pass
80	NV	5905	5905.006	-1.02	±20	Pass
85	NV	5905	5905.011	-1.86	±20	Pass
20	NV	5915	5915.018	-3.04	±20	Pass
20	HV	5915	5914.998	0.34	±20	Pass
20	LV	5915	5915.017	-2.87	±20	Pass
-40	NV	5915	5914.996	0.68	±20	Pass
-30	NV	5915	5914.984	2.70	±20	Pass
-20	NV	5915	5914.981	3.21	±20	Pass
-10	NV	5915	5915.012	-2.03	±20	Pass
0	NV	5915	5914.981	3.21	±20	Pass
10	NV	5915	5915.016	-2.70	±20	Pass
30	NV	5915	5914.994	1.01	±20	Pass
40	NV	5915	5915.018	-3.04	±20	Pass
50	NV	5915	5914.996	0.68	±20	Pass
60	NV	5915	5914.98	3.38	±20	Pass
70	NV	5915	5914.99	1.69	±20	Pass
80	NV	5915	5915.018	-3.04	±20	Pass
85	NV	5915	5914.996	0.68	±20	Pass

The End