FCC RADIO TEST REPORT

FCC ID	:	**2ABOF-GXRN8356900**
Equipment	:	**RN System (Multiband)**
Brand Name	:	**Tarana**
Model Name	:	**GXRN8356900**
Applicant	:	**Tarana Wireless, Inc. 630 Alder Drive, Milpitas, CA 95035**
Manufacturer	:	**Tarana Wireless, Inc. 630 Alder Drive, Milpitas, CA 95035**
Standard	:	**FCC 47 CFR Part 2, 96**

The product was received on Apr. 30, 2025 and testing was performed from May 14, 2025 to May 27, 2025. We, Sporton International (USA) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (USA) Inc., the test report shall not be reproduced except in full.

Neil Kao

Approved by: Neil Kao

Sporton International (USA) Inc.

1175 Montague Expressway, Milpitas, CA 95035

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History of this test report

Report No.	Version	Description	Issue Date
FG250408001A	01	Initial issue of report	Jun. 06, 2025

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Pass	-
3.3	§96.41	Peak-to-Average Ratio	Pass	-
3.4	§96.41	Effective Isotropic Radiated Power	Pass	-
		Power Density	Pass	-
3.5	§2.1049 §96.41	Occupied Bandwidth	Pass	-
3.6	§2.1051 §96.41	Conducted Band Edge Measurement	Pass	-
3.7	§2.1051 §96.41	Conducted Spurious Emission	Pass	-
3.8	§2.1055	Frequency Stability for Temperature & Voltage	Pass	-
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	-

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”.

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs: Proprietary radio 5G / 6G, CBRS and GNSS. **Antenna Type / Gain:** WWAN : Array Antenna with Antenna Gain 12.86 dBi

Remark: The above EUT's information is declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Modification of EUT

No modifications are made to the EUT during all test items.

1.3 Testing Location

Test Site	Sporton International (USA) Inc.	
Test Site Location	1175 Montague Expressway, Milpitas, CA 95035 TEL : 408 9043300	
Test Site No.	**Sporton Site No.**	
	TH01-CA	03CH01-CA
Test Engineer	Venkata Kondepudi	Leo Liu and Jesse Fan
Temperature (℃)	20.2~21.2	20.1~25.3
Relative Humidity (%)	45.00~47.40	35.1~45.6

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: US1250

1.4 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ANSI C63.26-2015
- FCC 47 CFR Part 2, 96
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis(X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report.

<Single Carrier (SC) Intra Band>

Test Items	Frequency (MHz)	Bandwidth (MHz)				Test Channel		
		10	20	30	40	L	M	H
Max. Output Power	3500~3700	v	v	v	v	v	v	v
Peak EIRP Density	3500~3700	v	v	v	v	v	v	v
26dB and 99% Bandwidth	3500~3700	v	v	v	v		v	
Conducted Band Edge	3500~3700	v	v	v	v	v	v	v
Peak-to-Average Ratio	3500~3700	v	v	v	v		v	
Conducted Spurious Emission	3500~3700	v	v	v	v	v	v	v
E.I.R.P	3500~3700	v	v	v	v	v	v	v
Frequency Stability	3500~3700				v		v	
Radiated Spurious Emission	3500~3700	v	v	v	v	v	v	v
Remark	The mark "**v** "means that this configuration is chosen for testing							

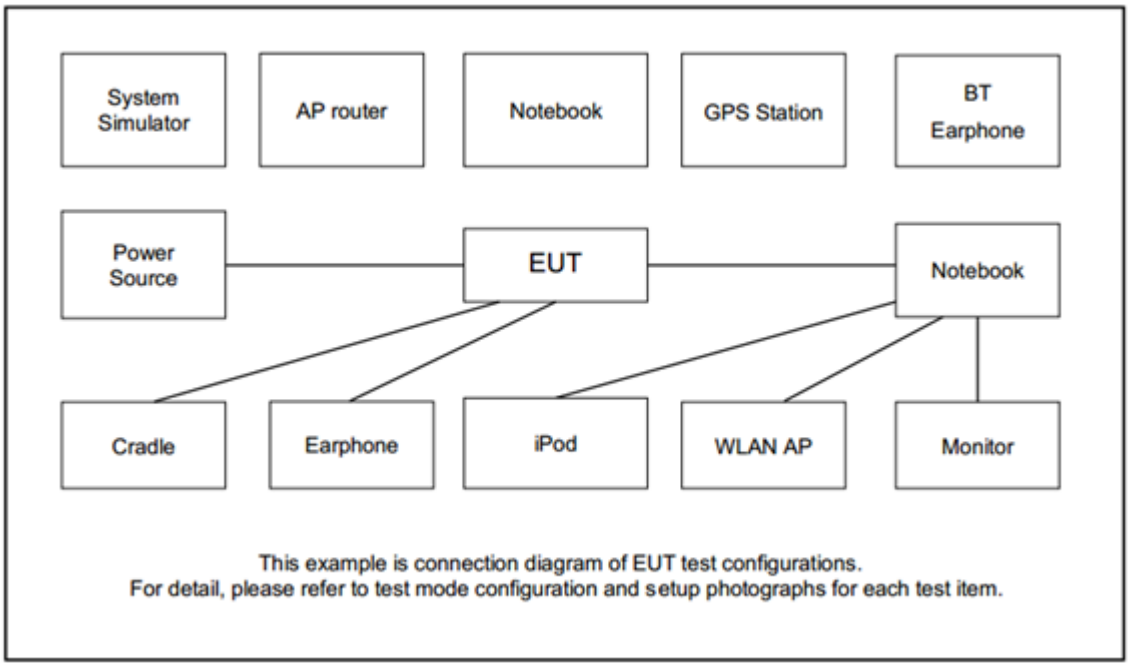
<Multi Carrier (MC) Intra Band Contiguous>

Test Items	Freq. (MHz)	Bandwidth (MHz)							Test Channel		
		20+20	20+30	20+40	30+30	30+40	40+40	40+20	L	M	H
Max. Output Power	3500~3700	v	v	v	v	v	v		v	v	v
Peak EIRP Density	3500~3700	v	v	v	v	v	v		v	v	v
26dB and 99% Bandwidth	3500~3700	v	v	v	v	v	v			v	
Conducted Band Edge	3500~3700	v	v	v	v	v	v	v	v	v	v
Conducted Spurious Emission	3500~3700	v	v	v	v	v	v		v	v	v
E.I.R.P.	3500~3700	v	v	v	v	v	v		v	v	v
Radiated Spurious Emission	3500~3700	v	v	v	v	v	v	v	v	v	v
Remark	The mark "**v** "means that this configuration is chosen for testing										

<Multi Carrier (MC) Intra Band Non-Contiguous>

Test Items	Freq. (MHz)	Bandwidth (MHz)							Test Channel		
		20+20	20+30	20+40	30+30	30+40	40+40	40+20	L	M	H
Max. Output Power	3500~3700	v	v	v	v	v	v		v		v
Peak EIRP Density	3500~3700	v	v	v	v	v	v		v		v
26dB and 99% Bandwidth	3500~3700	v	v	v	v	v	v		v		v
Conducted Band Edge	3500~3700	v	v	v	v	v	v	v	v		v
Conducted Spurious Emission	3500~3700	v	v	v	v	v	v		v		v
E.I.R.P.	3500~3700	v	v	v	v	v	v		v		v
Radiated Spurious Emission	3500~3700	v	v	v	v	v	v	v	v		v
Remark	The mark "**v** "means that this configuration is chosen for testing										

2.2 Connection Diagram of Test System



2.3 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.2 + 10 = 14.2 (dB)

2.4 Frequency List of Low/Middle/High Channels

Single Carrier Frequency List				
BW [MHz]	Frequency (MHz)	Lowest	Middle	Highest
40	Frequency	3570	3625	3680
30	Frequency	3565	3625	3685
20	Frequency	3560	3625	3690
10	Frequency	3555	3625	3695

Multi Carrier (Contiguous) Frequency List					
BW [MHz]	Frequency (MHz)		Lowest	Middle	Highest
40 + 40	PCC	Frequency	3570	3605	3640
	SCC	Frequency	3610	3645	3680
40 + 20	PCC	Frequency	3570	3615	3660
	SCC	Frequency	3600	3645	3690
30 + 40	PCC	Frequency	3565	3605	3645
	SCC	Frequency	3600	3640	3680
30 + 30	PCC	Frequency	3565	3610	3655
	SCC	Frequency	3595	3640	3685
20 + 40	PCC	Frequency	3560	3605	3650
	SCC	Frequency	3590	3635	3680
20 + 30	PCC	Frequency	3560	3610	3660
	SCC	Frequency	3585	3635	3685
20 + 20	PCC	Frequency	3560	3615	3670
	SCC	Frequency	3580	3635	3690

Multi Carrier (Non-Contiguous) Frequency List				
BW [MHz]	Frequency (MHz)	Lowest (PCC)	-	Highest (SCC)
40 + 40	Frequency	3570	-	3680
40 + 20	Frequency	3570	-	3690
30 + 40	Frequency	3565	-	3680
30 + 30	Frequency	3565	-	3685
20 + 40	Frequency	3560	-	3680
20 + 30	Frequency	3560	-	3685
20 + 20	Frequency	3560	-	3690

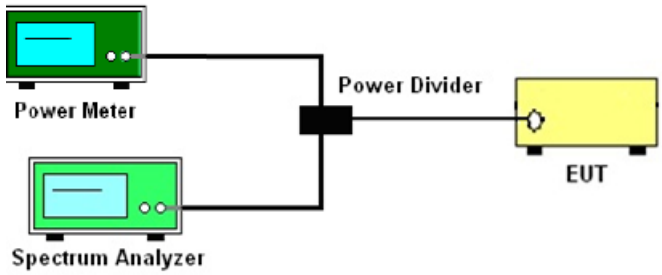
3 Conducted Test Items

3.1 Measuring Instruments

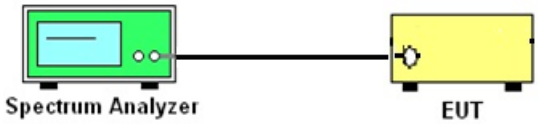
See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



3.1.3 Power Density, Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge and Conducted Spurious Emission



3.1.4 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Description of the Conducted Output Power Measurement

Test commands are used to configure EUT to transmit. The parameters pre-set to force the EUT to always transmit at the maximum output power. The power measured at one of the output terminals of the transmitter is reported in this report based on the manufacturer's declaration that conducted power is identical across all the output terminals.

3.2.2 Test Procedures

1. The transmitting port is connected to a spectrum analyzer and a power meter through a power divider.
2. Enter test commands to force the EUT to transmit the maximum output power.
3. Select the lowest, middle, and highest channels for each band of modulation.
4. The maximum output power transmitted is measured and read by the power meter.
5. The MIMO calculation method can be referred to section 3.9 of this report.

3.3 Peak-to-Average Ratio

3.3.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.3.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.6

1. The EUT was connected to spectrum via a RF cable.
2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
4. Record the deviation as Peak to Average Ratio

3.4 EIRP and Power Density

3.4.1 Description of the EIRP and Power Density Measurement

The EIRP transmitters must not exceed 47 dBm /10 megahertz

The testing follows ANSI C63.26-2015 Section 5.2.5.5

According to KDB 412172 D01 Power Approach,

EIRP = PT + GT – LC, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

Device	Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
Category B CBSD	47	37

3.4.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.4.5

1. Set instrument center frequency to OBW center frequency.
2. Set span to at least 1.5 times the OBW.
3. Set the RBW to the specified reference bandwidth (often 1 MHz).
4. Set VBW ≥ 3 × RBW.
5. Detector = RMS (power averaging).
6. Ensure that the number of measurement points in the sweep ≥ 2 × span/RBW.
7. Sweep time = auto couple.
8. Employ trace averaging (RMS) mode over a minimum of 100 traces.
9. Use the peak marker function to determine the maximum amplitude level within the reference bandwidth (PSD).
10. The MIMO Calculation method can be referred to section 3.9 of this report.
11. Determine the EIRP by adding the effective antenna gain to the adjusted power level.

3.5 Occupied Bandwidth

3.5.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.5.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99% OB)

1. The EUT was connected to spectrum analyzer via a RF cable.
2. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
3. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
4. Set the detection mode to peak, and the trace mode to max hold.
5. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.
   (this is the reference value)
6. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
7. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “–X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.6 Conducted Band Edge

3.6.1 Description of Conducted Band Edge Measurement

The conducted power of any CBSD emission outside the fundamental emission bandwidth as specified in paragraph (e)(3) of this section (whether the emission is inside or outside of the authorized band) shall not exceed −13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any CBSD emission shall not exceed −25 dBm/MHz. The upper and lower SAS assigned channel edges are the upper and lower limits of any channel assigned to a CBSD by an SAS, or in the case of multiple contiguous channels, the upper and lower limits of the combined contiguous channels.

3.6.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT is connected to spectrum analyzer via a RF cable.
2. The band edges of low and high channels for the highest RF powers are measured.
3. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Beyond the 1 MHz band from the band edge, RBW=1MHz is used.
5. Set spectrum analyzer to be RMS detector.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. Follow FCC KDB 662911 D01 Multiple Transmitter Output v02r01to do MIMO calculation.
   Method (iii): Measure and add 10 log (N_{ANT}) dB, the factor should be added to spectrum offset. There are a total of 8 antenna ports which are connected to 4 vertical and 4 horizontal antennas.
   MIMO Factor is 10*log(8) = 9.03 dB

3.7 Conducted Spurious Emission

3.7.1 Description of Conducted Spurious Emission Measurement

Emission and interference limits: the device satisfies the emission limits specified in Section FCC Part 96.41 e) 1) i) & e) 2) at the lowest and highest edges of the band, and in the middle of the band.

3.7.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT is connected to spectrum analyzer via a RF cable.
2. The RF output of EUT is connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency is measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
6. Set spectrum analyzer to be RMS detector.
7. Follow FCC KDB 662911 D01 Multiple Transmitter Output v02r01to do MIMO calculation.
   Method (iii): Measure and add 10 log (N_{ANT}) dB, the factor should be added to spectrum offset. There are a total of 8 antenna ports which are connected to 4 vertical and 4 horizontal antennas.
   MIMO Factor is 10*log(8) = 9.03 dB
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is −40dBm/MHz.

3.8 Frequency Stability

3.8.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency

3.8.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was set up in the thermal chamber and connected with the spectrum analyzer.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.8.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

3.9 Antenna Information

3.9.1 Antenna Directional Gain

The device can support MIMO with antenna.

There are a total of 8 antenna ports which are connected to 4 vertical and 4 horizontal antennas.

The manufacturer declares that it always transmits 2 spatial streams jointly across both polarizations.

MIMO calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 “Measure and add 10 log (NANT) dB”. For the MIMO Factor in this report is 10*log (8) = 9.03 dB

According to FCC KDB 662911 D01 Multiple Transmitter Output v02r01

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

Array Gain = 10 log (N_{ANT} = 4 /N_{SS}= 2) = 3.01 dB, where the lowest possible N_{SS} is 2.

Directional gain = Antenna gain + directionality gain = 14.29+ 10log (N_{ANT}/N_{SS} = 4/2)

= 12.86 + 3.01 = 15.87 dBi

Directional gain may be calculated by using the formulas applicable to equal gain antennas with G_{ANT} set equal to the gain of the antenna having the highest gain;

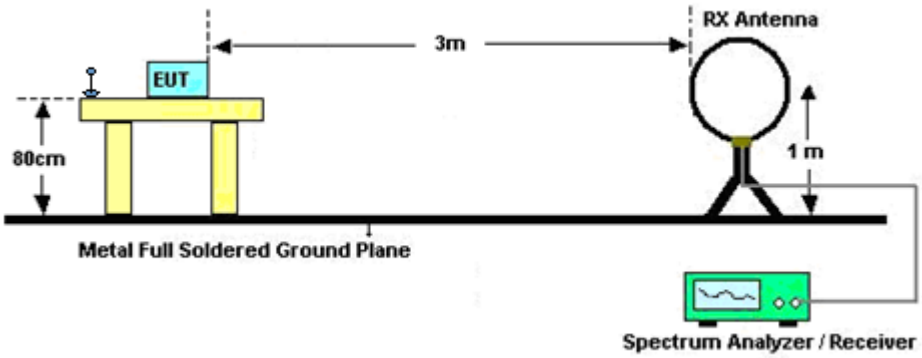
4 Radiated Test Items

4.1 Measuring Instruments

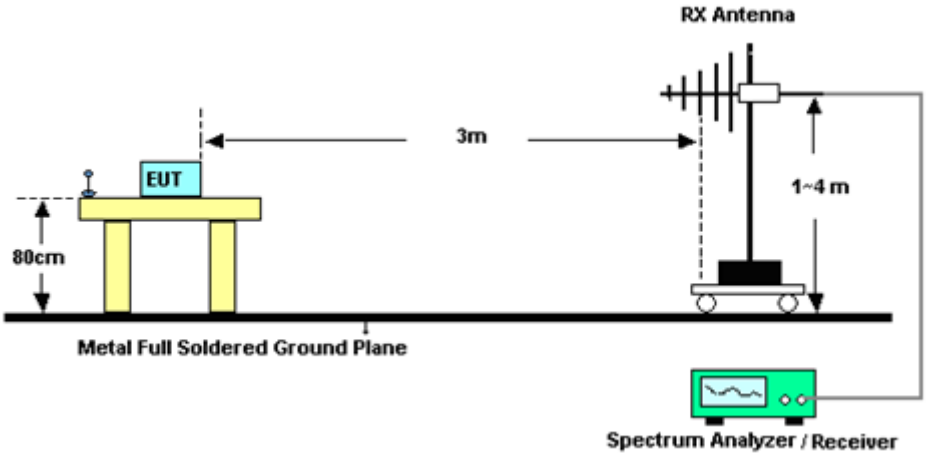
See list of measuring instruments of this test report.

4.2 Test Setup

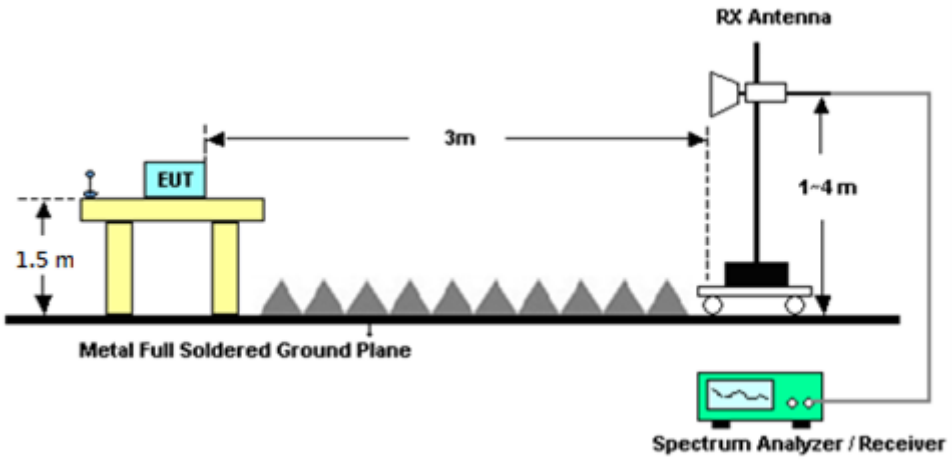
For radiated test below 30MHz



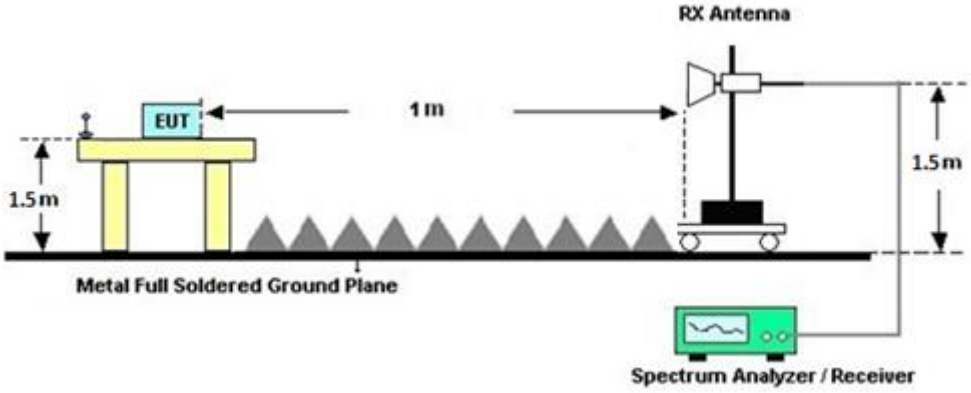
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

Note:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI C63.26-2015. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least -40dBm / MHz .

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI C63.26-2015 Section 5.5.4 Radiated measurement using the field strength method.

1. The EUT is placed on a turntable of 0.8meter height from the ground for frequency below 1GHz, whereas 1.5 meter for frequency above 1GHz.
2. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
3. The table rotates 360 degrees to identify the position where the highest spurious emission is.
4. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. To convert spectrum reading E(dBuV/m) to EIRP (dBm)
   EIRP (dBm) = Level (dBuV/m) + 20log(d) -104.77,
   where d is the distance at which filed strength limit is specified in the rules.
8. Field Strength Level (dBm) = Spectrum Reading (dBm) + Antenna Factor + Cable Loss + Read Level - Preamp Factor.
9. ERP (dBm) = EIRP (dBm) - 2.15
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	6111D	54683	30MHz~1GHz	Nov. 15, 2024	May 22, 2025~ May 27, 2025	Nov. 14, 2025	Radiation (03CH01-CA)
Loop Antenna	R&S	HFH2-Z2E	100840	9kHz~30MHz	Apr. 28, 2025	May 22, 2025~ May 27, 2025	Apr. 27, 2026	Radiation (03CH01-CA)
Horn Antenna	SCHWARZBECK	BBHA 9120D	02115	1GHz~18GHz	Aug. 06, 2024	May 22, 2025~ May 27, 2025	Aug. 05, 2025	Radiation (03CH01-CA)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00841	18GHz~40GHz	Aug. 07, 2024	May 22, 2025~ May 27, 2025	Aug. 06, 2025	Radiation (03CH01-CA)
Amplifier	SONOMA	310N	372241	9kHz~1GHz	Apr. 14, 2025	May 22, 2025~ May 27, 2025	Apr. 13, 2026	Radiation (03CH01-CA)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN8	NA	Jun. 04, 2024	May 22, 2025~ May 27, 2025	Jun. 03, 2025	Radiation (03CH01-CA)
Filter	Wainwright	WLK12-1200-1272-11000-40SS	SN1	1.2GHz Low Pass Filter	Jun. 04, 2024	May 22, 2025~ May 27, 2025	Jun. 03, 2025	Radiation (03CH01-CA)
Preamplifier	Keysight	83017A	MY53270321	1GHz~26.5GHz	Apr. 14, 2025	May 22, 2025~ May 27, 2025	Apr. 13, 2026	Radiation (03CH01-CA)
Preamplifier	E-instrument	ERA-100M-18G-56-01-A70	EC1900252	1GHz~18GHz	Apr. 14, 2025	May 22, 2025~ May 27, 2025	Apr. 13, 2026	Radiation (03CH01-CA)
Preamplifier	EMEC	EMC18G40G	060726	18G-40G	Apr. 15, 2025	May 22, 2025~ May 27, 2025	Apr. 14, 2026	Radiation (03CH01-CA)
RF Cable	HUBER+SUHNER	SUCOFLEX 102	8015932/2, 8015762/2, 804938/2	N/A	Mar. 04, 2025	May 22, 2025~ May 27, 2025	Mar. 03, 2026	Radiation (03CH01-CA)
Hygrometer	TESEO	608-H1	45142559	N/A	Aug. 14, 2024	May 22, 2025~ May 27, 2025	Aug. 13, 2025	Radiation (03CH01-CA)
Controller	Chaintek	EM-1000	060881	Control Turn Table & Antenna Mast	N/A	May 22, 2025~ May 27, 2025	N/A	Radiation (03CH01-CA)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	May 22, 2025~ May 27, 2025	N/A	Radiation (03CH01-CA)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	May 22, 2025~ May 27, 2025	N/A	Radiation (03CH01-CA)
Test Software	Audix E3	E3 230621 Sporton US,V9	PK-002093	N/A	N/A	May 22, 2025~ May 27, 2025	N/A	Radiation (03CH01-CA)
Hygrometer	Testo	608-H1	45141354	N/A	Aug. 14. 2024	May 14, 2025~ May 19, 2025	Aug. 13. 2025	Conducted (TH01-CA)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101089	10Hz-40GHz	Apr. 17, 2025	May 14, 2025~ May 19, 2025	Apr. 16, 2026	Conducted (TH01-CA)
Switch Box	EM Electronics	EMSW26	1090304	N/A	Oct. 10, 2024	May 14, 2025~ May 19, 2025	Oct. 09, 2025	Conducted (TH01-CA)

6 Measurement Uncertainty

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.70 dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	5.50 dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

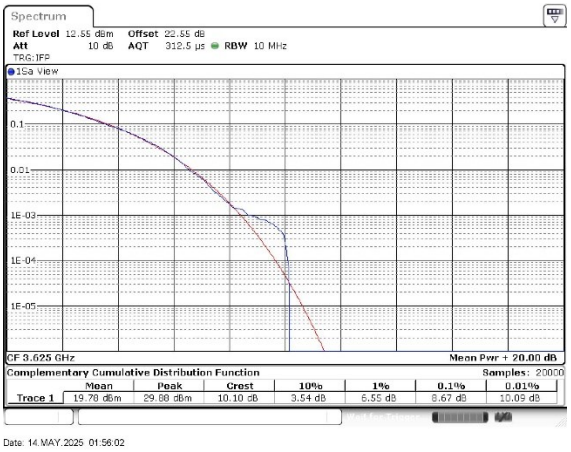
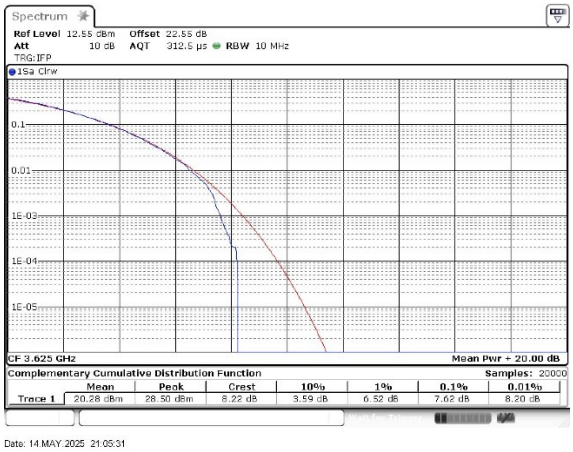
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.50 dB

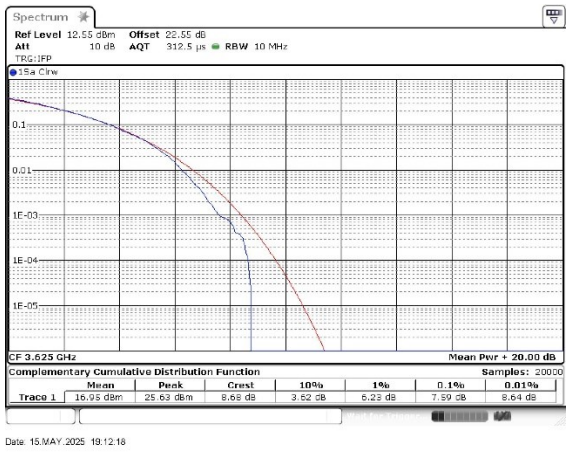
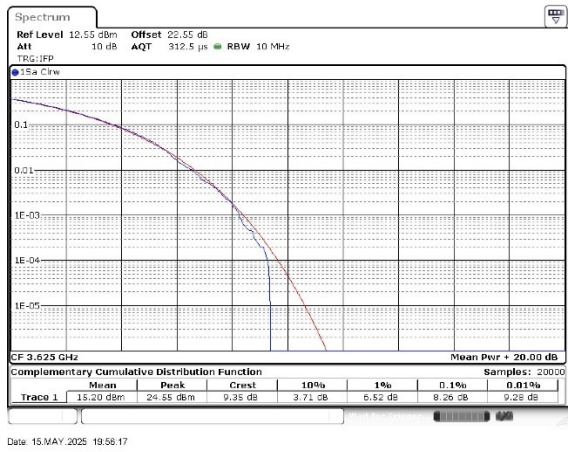
Appendix A. Test Results of Conducted Test

Peak-to-Average Ratio

<Single Carrier>

Mode	3625MHz / 10MHz	Limit: 13dB
		Result
Middle CH	8.67 dB	PASS
Mode	3625MHz / 20MHz	Limit: 13dB
		Result
Middle CH	7.62 dB	PASS
Mode	3625MHz / 30MHz	Limit: 13dB
		Result
Middle CH	7.59 dB	PASS
Mode	3625MHz / 40MHz	Limit: 13dB
		Result
Middle CH	8.26 dB	PASS

10MHz / Middle Channel	20MHz/ Middle Channel
3625MHz	3625MHz
	

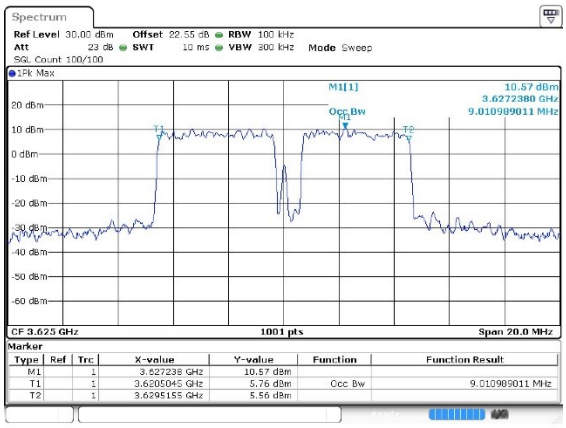
30MHz / Middle Channel	40MHz/ Middle Channel
3625MHz	3625MHz
	

Occupied Bandwidth

Mode	99%OBW(MHz)			
Frequency	3625MHz			
BW	10MHz	20MHz	30MHz	40MHz
Middle CH	9.01	18.06	27.51	37.48

99%OBW(MHz)

Middle Channel / 10MHz



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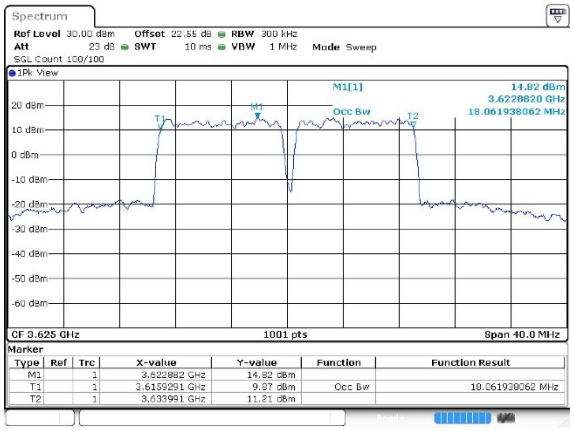
Middle Channel / 20MHz



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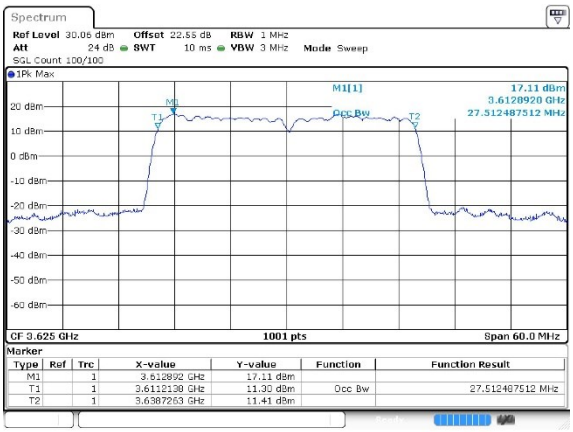
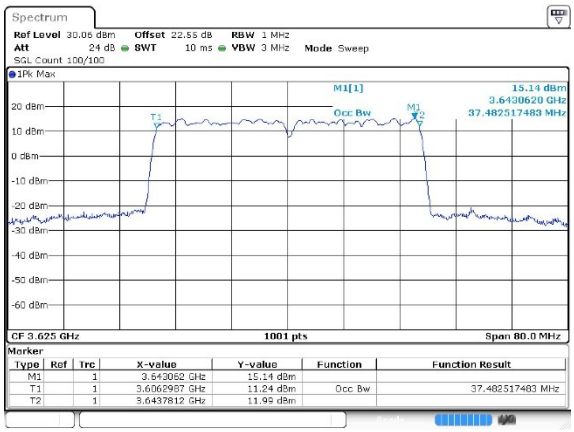
Middle Channel / 30MHz



Date: 15.MAY.2025 19:08:41

Middle Channel / 40MHz



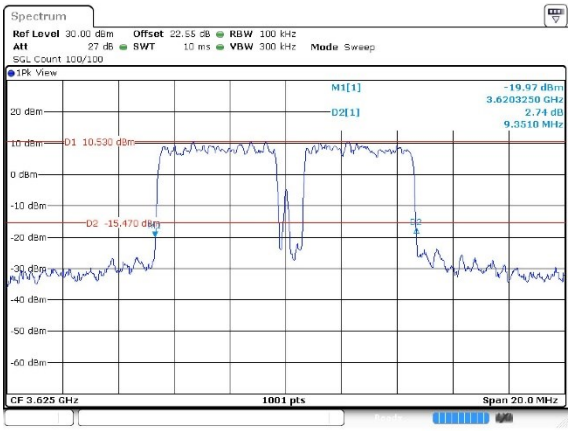
Date: 15.MAY.2025 19:53:10

Emission Bandwidth

Mode	26dB BW(MHz)			
Frequency	3625MHz			
BW	10MHz	20MHz	30MHz	40MHz
Middle CH	9.35	18.94	29.73	39.96

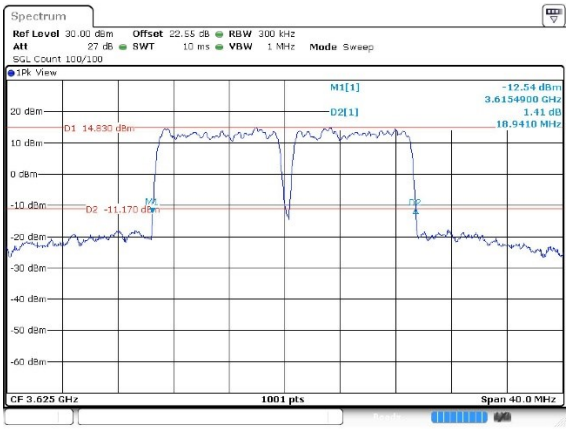
26dB BW(MHz)

Middle Channel / 10MHz / 3625MHz



Date: 14.MAY.2025 02:11:00

Middle Channel / 20MHz / 3625MHz



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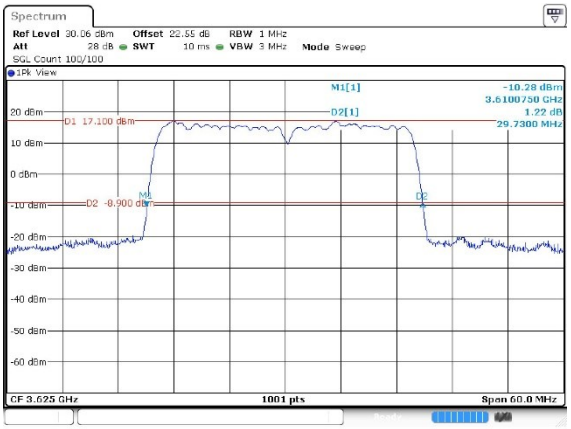
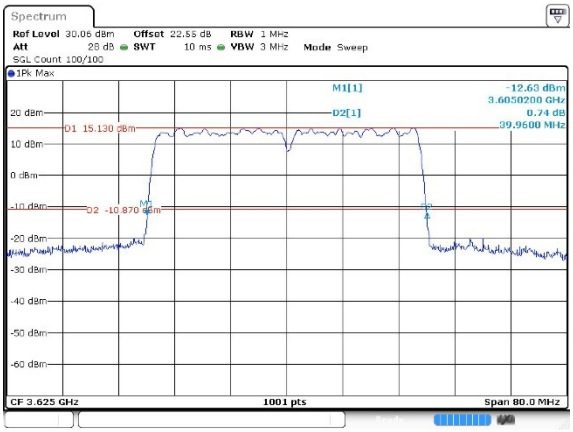
Middle Channel / 30MHz /3625MHz



Date: 15.MAY.2025 19:11:11

Middle Channel / 40MHz / 3625MHz



Date: 15.MAY.2025 19:55:32

EIRP Power Density

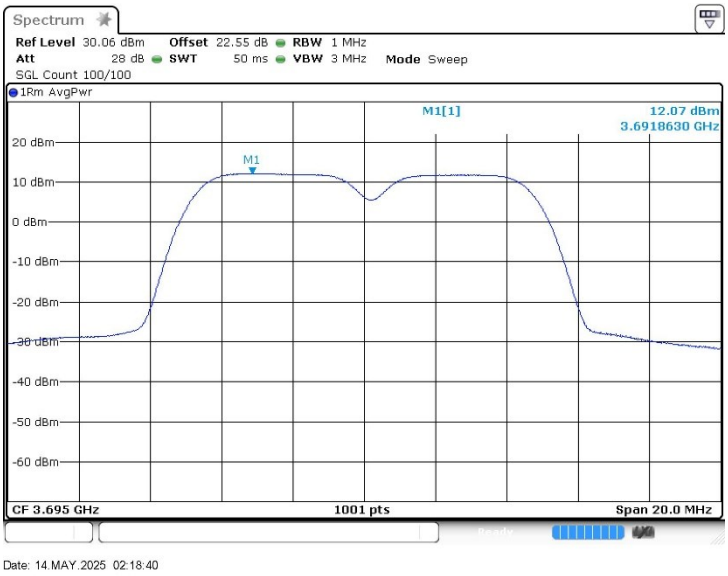
EIRP PSD (dBm/MHz)								
	Mode	Frequency (MHz)	Power Setting (ATT/ADAK)	DG (dBi)	MIMO Factor (dB)	Single port conducted power (dBm/MHz)	EIRP PSD (dBm/MHz)	Limit (dBm/MHz)
Single Carrier(SC) Intra Band	10MHz_Low	3555	6_0.6	15.87	9.03	12.02	36.92	< 37 dBm/MHz
	10MHz_Middle	3625	9_1.4	15.87	9.03	12.03	36.93	
	10MHz_High	3695	9_2.3	15.87	9.03	12.07	36.97	
	20MHz_Low	3560	6_1.3	15.87	9.03	9.33	34.23	
	20MHz_Middle	3625	6_1.5	15.87	9.03	11.37	36.27	
	20MHz_High	3690	9_2.3	15.87	9.03	9.04	33.94	
	30MHz_Low	3565	6_1.1	15.87	9.03	7.91	32.81	
	30MHz_Middle	3625	9_2	15.87	9.03	7.79	32.69	
	30MHz_High	3685	9_2.7	15.87	9.03	7.73	32.63	
	40MHz_Low	3570	6_1.1	15.87	9.03	6.41	31.31	
	40MHz_Middle	3625	9_1.7	15.87	9.03	5.97	30.87	
	40MHz_High	3680	9_2.2	15.87	9.03	6.07	30.97	

Remark:

DG (dBi, 4H/4V) = antenna gain + 10*log(Nant/Nss) = 12.86 + 10*log(4/2) = 15.87 dBi

MIMO Factor: 10*log(8) = 9.03 dB

Maximum EIRP Power Density – 10MHz 3695MHz



EIRP Power (dBm/10MHz)

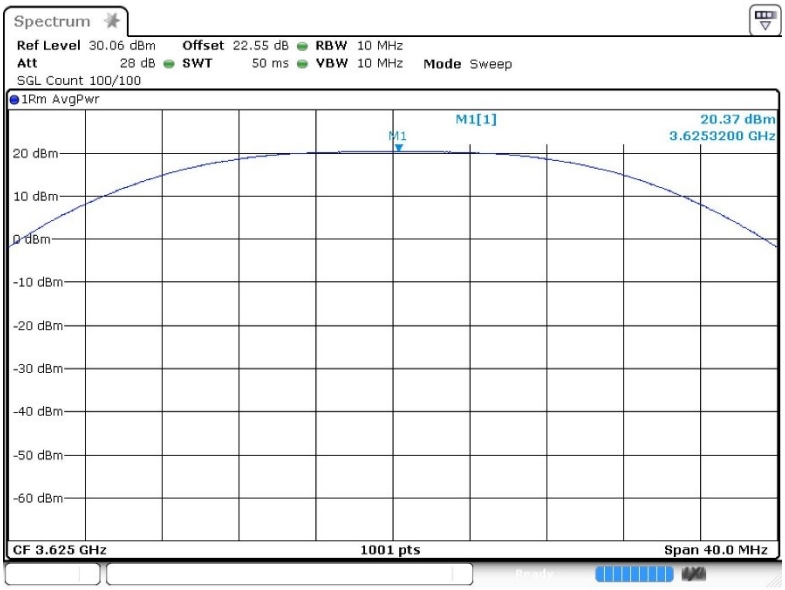
EIRP Power (dBm/10MHz)								
	Mode	Frequency (MHz)	Power Setting (ATT/ADAK)	DG (dBi)	MIMO Factor (dB)	Single port conducted power (dBm/10MHz)	EIRP Power (dBm/10MHz)	Limit (dBm/10MHz)
Single Carrier(SC) Intra Band	10MHz_Low	3555	6_0.6	15.87	9.03	19.70	44.60	< 47 dBm/10MHz
	10MHz_Middle	3625	9_1.4	15.87	9.03	19.78	44.68	
	10MHz_High	3695	9_2.3	15.87	9.03	19.66	44.56	
	20MHz_Low	3560	6_1.3	15.87	9.03	18.48	43.38	
	20MHz_Middle	3625	6_1.5	15.87	9.03	20.37	45.27	
	20MHz_High	3690	9_2.3	15.87	9.03	18.15	43.05	
	30MHz_Low	3565	6_1.1	15.87	9.03	17.35	42.25	
	30MHz_Middle	3625	9_2	15.87	9.03	17.23	42.13	
	30MHz_High	3685	9_2.7	15.87	9.03	17.11	42.01	
	40MHz_Low	3570	6_1.1	15.87	9.03	15.97	40.87	
	40MHz_Middle	3625	9_1.7	15.87	9.03	15.63	40.53	
	40MHz_High	3680	9_2.2	15.87	9.03	15.72	40.62	

Remark:

DG (dBi, 4H/4V) = antenna gain + 10*log(Nant/Nss) = 12.86 + 10*log(4/2) = 15.87 dBi

MIMO Factor: 10*log(8) = 9.03 dB

Maximum EIRP Power (dBm/10MHz) – 20MHz 3625MHz



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EIRP total Power (dBm) for reporting only

Total EIRP Power (dBm) reporting only							
	Mode	Frequency (MHz)	Power Setting (ATT/ADAK)	DG (dBi)	MIMO Factor (dB)	Single port conducted power (dBm)	Total EIRP (dBm)
Single Carrier(SC) Intra Band	10MHz_Low	3555	6_0.6	15.87	9.03	20.36	45.26
	10MHz_Middle	3625	9_1.4	15.87	9.03	20.55	45.45
	10MHz_High	3695	9_2.3	15.87	9.03	20.54	45.44
	20MHz_Low	3560	6_1.3	15.87	9.03	21.12	46.02
	20MHz_Middle	3625	6_1.5	15.87	9.03	22.95	47.85
	20MHz_High	3690	9_2.3	15.87	9.03	20.81	45.71
	30MHz_Low	3565	6_1.1	15.87	9.03	21.36	46.26
	30MHz_Middle	3625	9_2	15.87	9.03	21.38	46.28
	30MHz_High	3685	9_2.7	15.87	9.03	21.20	46.10
	40MHz_Low	3570	6_1.1	15.87	9.03	21.19	46.09
	40MHz_Middle	3625	9_1.7	15.87	9.03	21.02	45.92
	40MHz_High	3680	9_2.2	15.87	9.03	20.86	45.76

Remark:

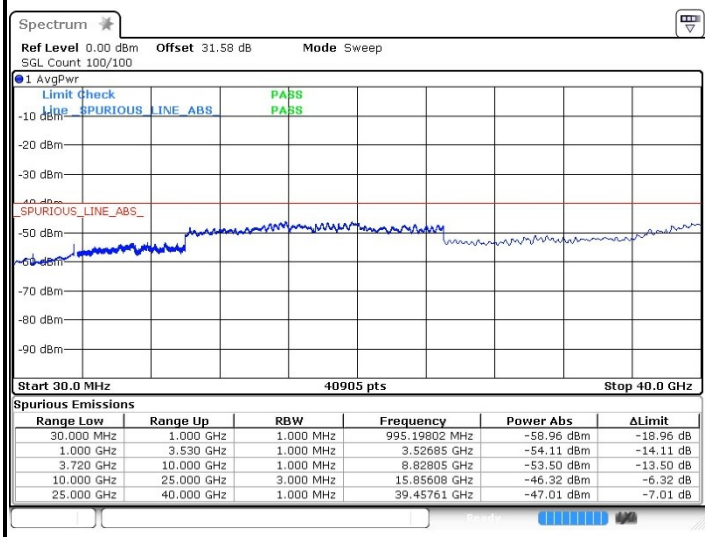
DG (dBi, 4H/4V) = antenna gain + 10*log(Nant/Nss) = 12.86 + 10*log(4/2) = 15.87 dBi

MIMO Factor: 10*log(8) = 9.03 dB

Conducted Spurious Emissions

10MHz

Low Channel / 3555MHz



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	995.19802 MHz	-58.96 dBm	-18.96 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52685 GHz	-54.11 dBm	-14.11 dB
3.720 GHz	10.000 GHz	1.000 MHz	8.82805 GHz	-53.50 dBm	-13.50 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.85608 GHz	-46.32 dBm	-6.32 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.45761 GHz	-47.01 dBm	-7.01 dB

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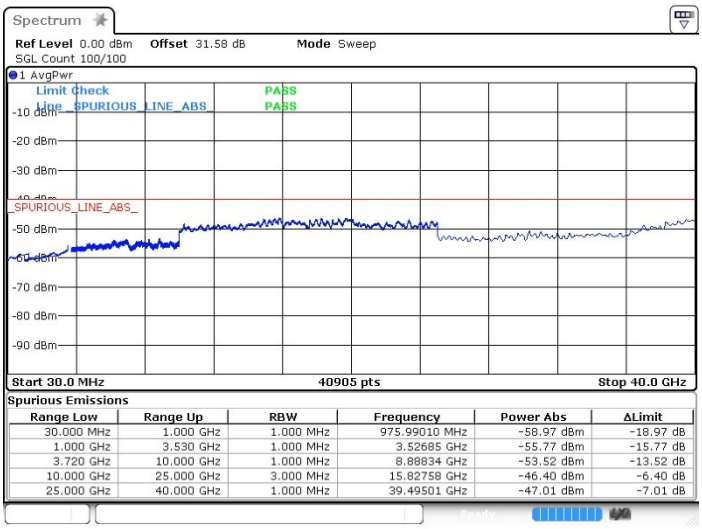
Middle Channel/ 3625MHz

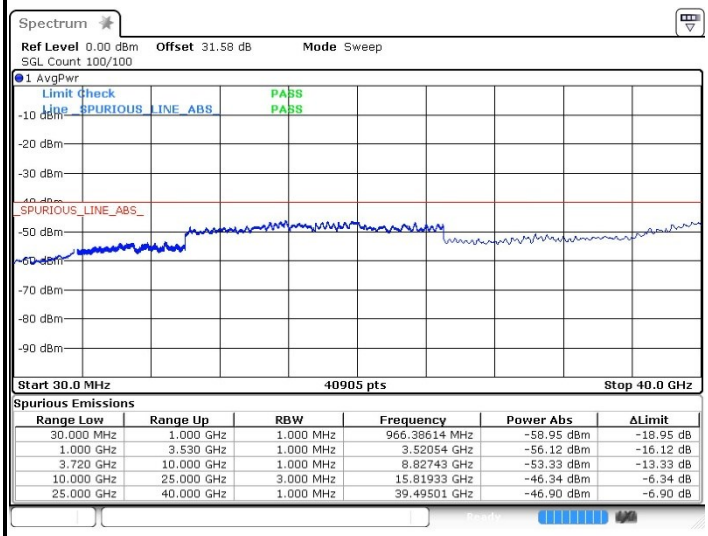


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	975.99010 MHz	-58.97 dBm	-18.97 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52685 GHz	-55.77 dBm	-15.77 dB
3.720 GHz	10.000 GHz	1.000 MHz	8.88834 GHz	-53.52 dBm	-13.52 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.82758 GHz	-46.40 dBm	-6.40 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-47.01 dBm	-7.01 dB

Date: 14.MAY.2025 02:02:02

High Channel / 3695MHz



Spurious Emissions

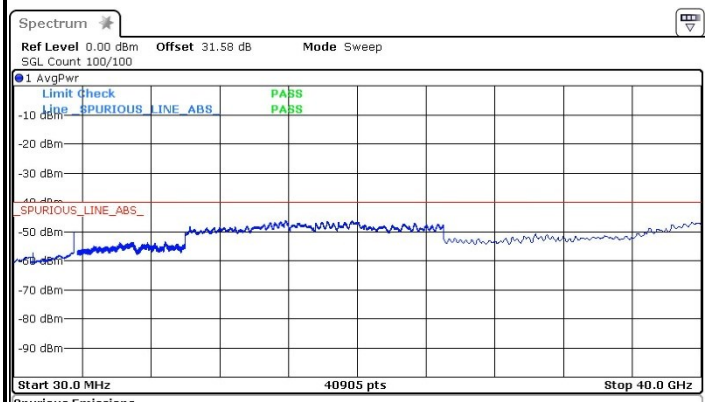
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	966.38614 MHz	-58.95 dBm	-18.95 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52054 GHz	-56.12 dBm	-16.12 dB
3.720 GHz	10.000 GHz	1.000 MHz	8.82743 GHz	-53.33 dBm	-13.33 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.81933 GHz	-46.34 dBm	-6.34 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-46.90 dBm	-6.90 dB

Date: 14.MAY.2025 02:23:47

N/A

20MHz

Low Channel / 3560MHz



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	975.99010 MHz	-58.88 dBm	-18.88 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52685 GHz	-50.45 dBm	-10.45 dB
3.720 GHz	10.000 GHz	1.000 MHz	8.83747 GHz	-53.50 dBm	-13.50 dB
10.000 GHz	25.000 GHz	3.000 MHz	19.69514 GHz	-46.33 dBm	-6.33 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-46.96 dBm	-6.96 dB

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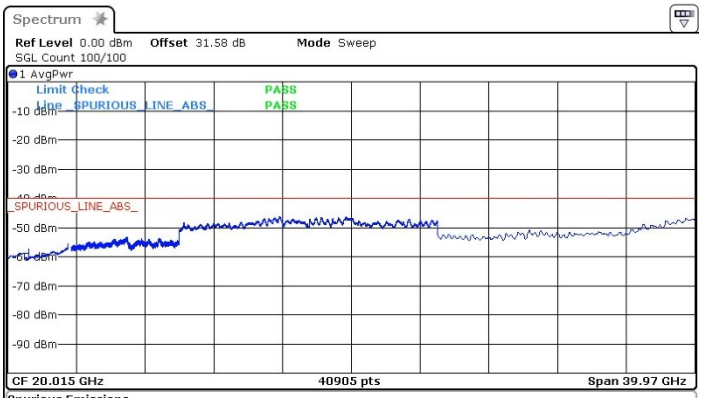
Middle Channel / 3625MHz

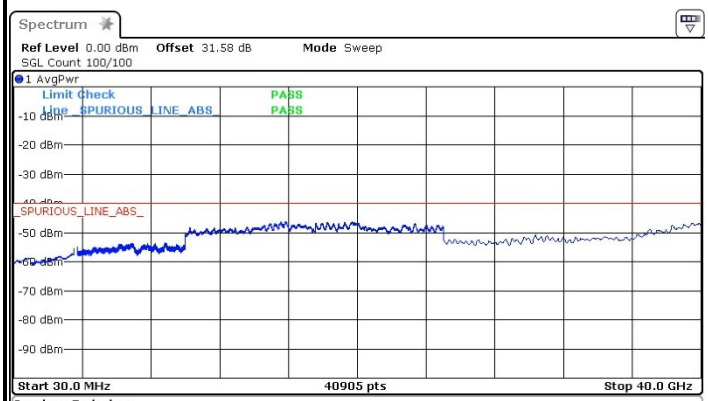


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	975.99010 MHz	-58.89 dBm	-18.89 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52054 GHz	-55.64 dBm	-15.64 dB
3.720 GHz	10.000 GHz	1.000 MHz	6.98183 GHz	-53.28 dBm	-13.28 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.82608 GHz	-46.38 dBm	-6.38 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-46.94 dBm	-6.94 dB

Date: 14.MAY.2025 20:44:19

High Channel / 3690MHz



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	985.59406 MHz	-58.85 dBm	-18.85 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52054 GHz	-55.66 dBm	-15.66 dB
3.720 GHz	10.000 GHz	1.000 MHz	8.84281 GHz	-53.57 dBm	-13.57 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.86358 GHz	-46.27 dBm	-6.27 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-46.84 dBm	-6.84 dB

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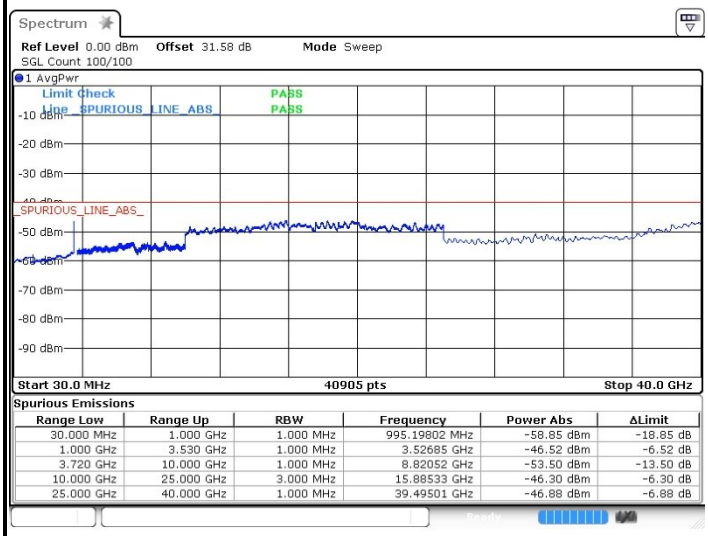
N/A

30MHz

Low Channel / 3565MHz



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	995.19802 MHz	-58.85 dBm	-18.85 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52685 GHz	-46.52 dBm	-6.52 dB
3.720 GHz	10.000 GHz	1.000 MHz	8.82052 GHz	-53.50 dBm	-13.50 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.88533 GHz	-46.30 dBm	-6.30 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-46.88 dBm	-6.88 dB

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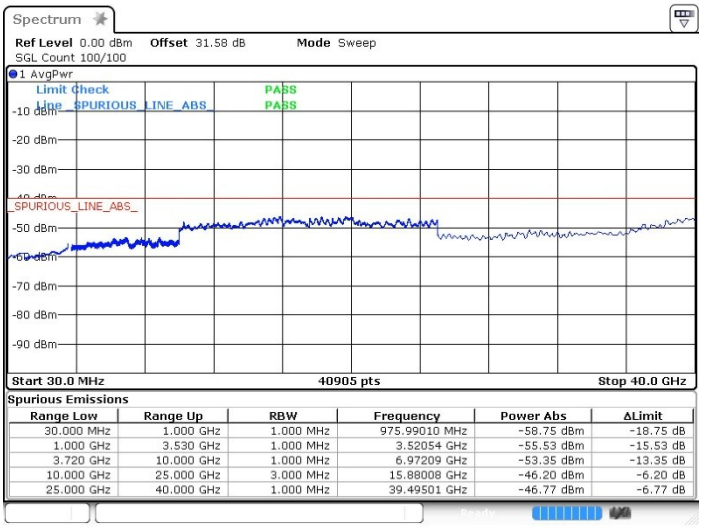
Middle Channel / 3625MHz

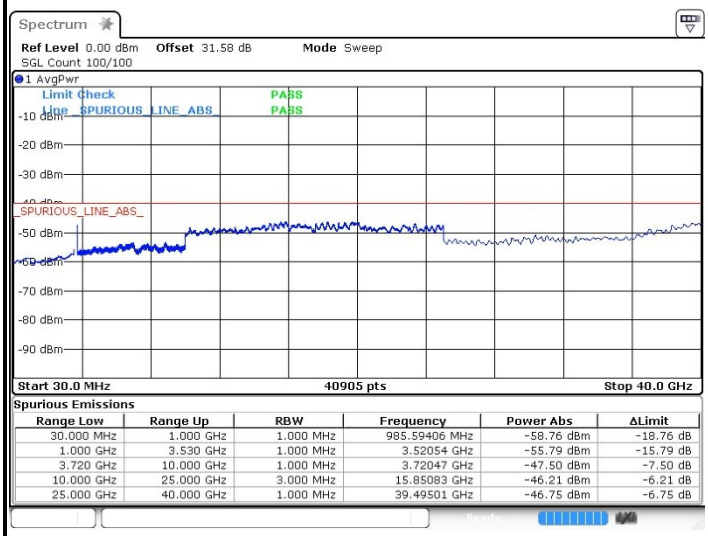


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	975.99010 MHz	-58.75 dBm	-18.75 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52054 GHz	-55.53 dBm	-15.53 dB
3.720 GHz	10.000 GHz	1.000 MHz	6.97209 GHz	-53.35 dBm	-13.35 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.88008 GHz	-46.20 dBm	-6.20 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-46.77 dBm	-6.77 dB

Date: 15.MAY.2025 19:04:35

High Channel / 3685MHz



Spurious Emissions

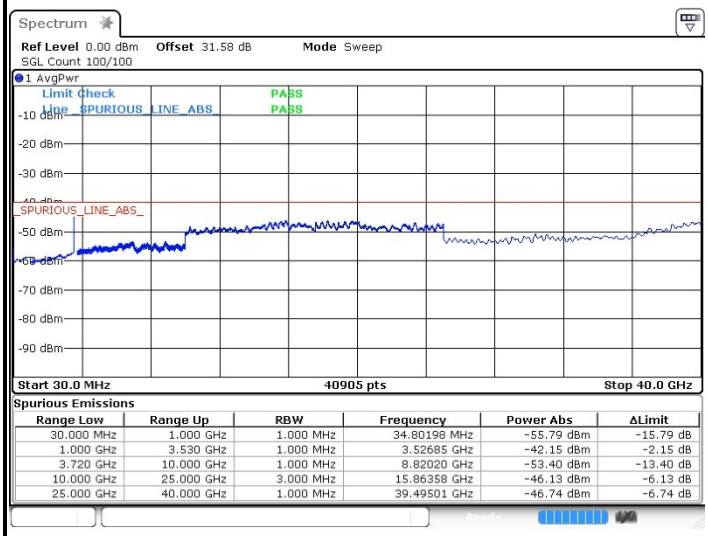
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	985.59406 MHz	-58.76 dBm	-18.76 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52054 GHz	-55.79 dBm	-15.79 dB
3.720 GHz	10.000 GHz	1.000 MHz	3.72047 GHz	-47.50 dBm	-7.50 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.85083 GHz	-46.21 dBm	-6.21 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-46.75 dBm	-6.75 dB

Date: 15.MAY.2025 19:24:13

N/A

40MHz

Low Channel / 3570MHz

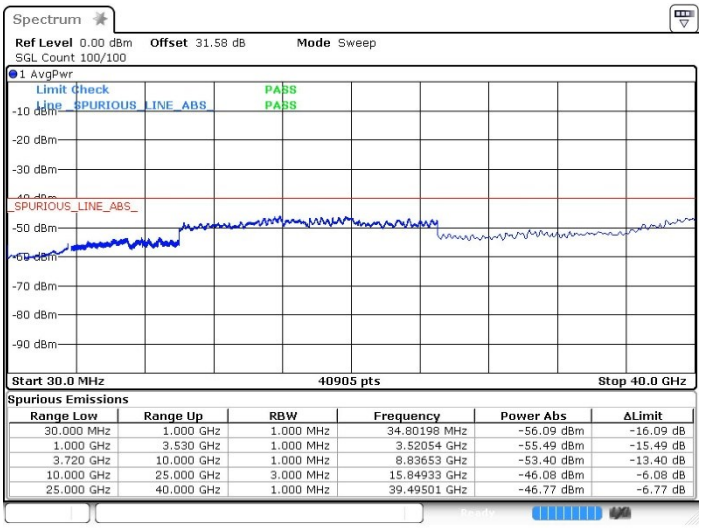


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	34.80198 MHz	-55.79 dBm	-15.79 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52685 GHz	-42.15 dBm	-2.15 dB
3.720 GHz	10.000 GHz	1.000 MHz	8.82020 GHz	-53.40 dBm	-13.40 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.86358 GHz	-46.13 dBm	-6.13 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-46.74 dBm	-6.74 dB

Date: 15.MAY.2025 19:39:28

Middle Channel / 3625MHz

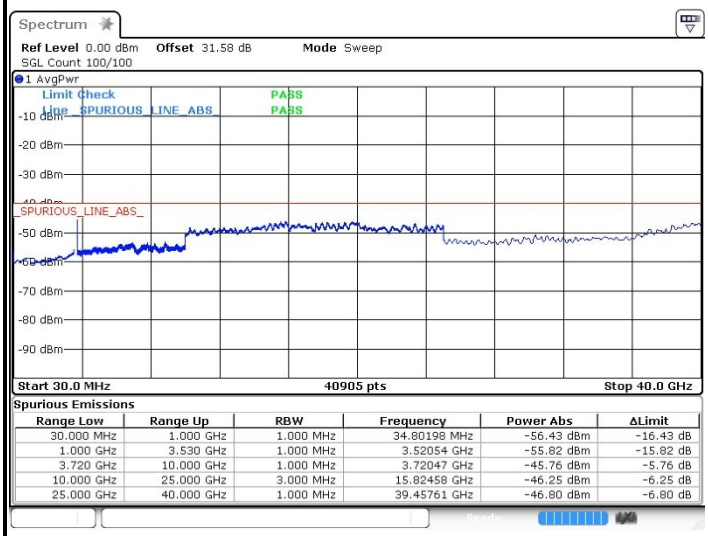


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	34.80198 MHz	-56.09 dBm	-16.09 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52054 GHz	-55.49 dBm	-15.49 dB
3.720 GHz	10.000 GHz	1.000 MHz	8.83653 GHz	-53.40 dBm	-13.40 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.84933 GHz	-46.08 dBm	-6.08 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.49501 GHz	-46.77 dBm	-6.77 dB

Date: 15.MAY.2025 19:49:34

High Channel / 3680MHz



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	34.80198 MHz	-56.43 dBm	-16.43 dB
1.000 GHz	3.530 GHz	1.000 MHz	3.52054 GHz	-55.82 dBm	-15.82 dB
3.720 GHz	10.000 GHz	1.000 MHz	3.72047 GHz	-45.76 dBm	-5.76 dB
10.000 GHz	25.000 GHz	3.000 MHz	15.82458 GHz	-46.25 dBm	-6.25 dB
25.000 GHz	40.000 GHz	1.000 MHz	39.45761 GHz	-46.80 dBm	-6.80 dB

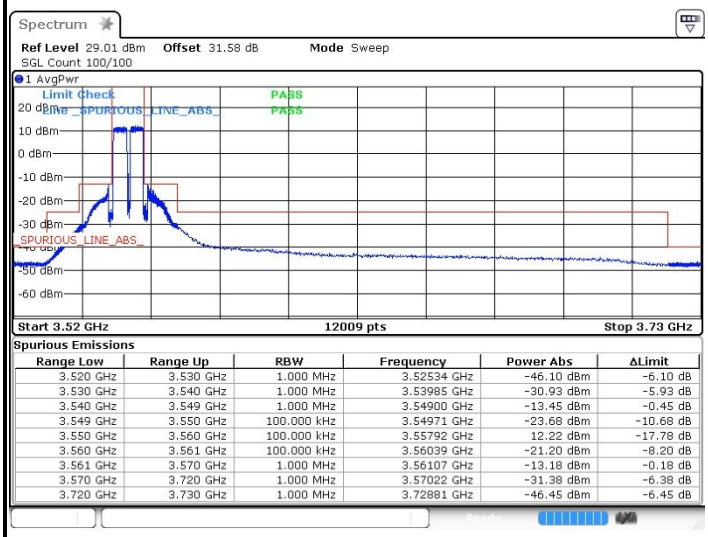
Date: 15.MAY.2025 20:07:31

N/A

Conducted Band Edge

10MHz

Low Channel / 3555MHz

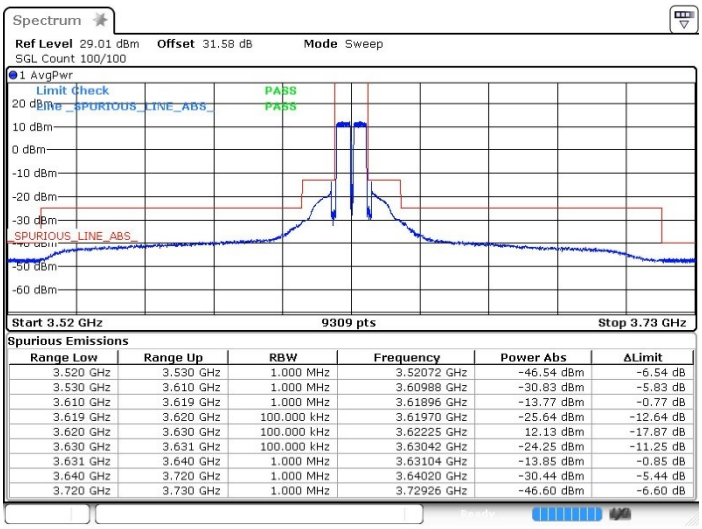


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52534 GHz	-46.10 dBm	-6.10 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53985 GHz	-30.93 dBm	-5.93 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54900 GHz	-13.45 dBm	-0.45 dB
3.549 GHz	3.550 GHz	100.000 kHz	3.54971 GHz	-23.68 dBm	-10.68 dB
3.550 GHz	3.560 GHz	100.000 kHz	3.55792 GHz	12.22 dBm	-17.78 dB
3.560 GHz	3.561 GHz	100.000 kHz	3.56039 GHz	-21.20 dBm	-8.20 dB
3.561 GHz	3.570 GHz	1.000 MHz	3.56107 GHz	-13.18 dBm	-0.18 dB
3.570 GHz	3.720 GHz	1.000 MHz	3.57022 GHz	-31.38 dBm	-6.38 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72881 GHz	-46.45 dBm	-6.45 dB

Date: 14.MAY.2025 01:28:01

Middle Channel / 3625MHz

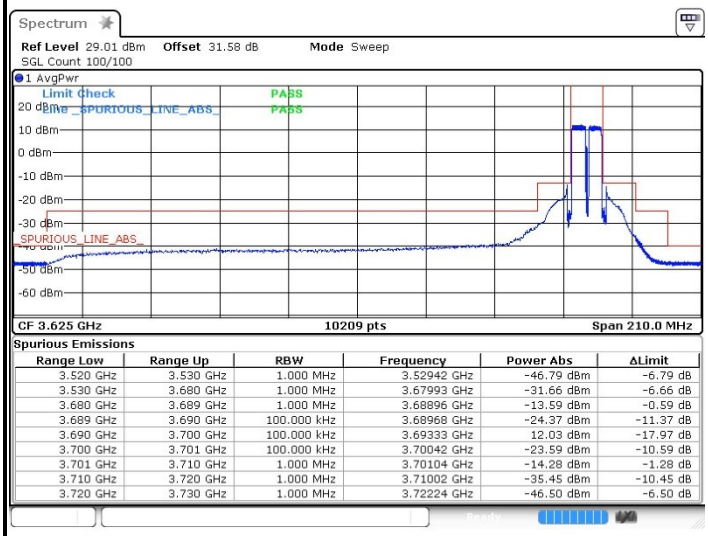


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52072 GHz	-46.54 dBm	-6.54 dB
3.530 GHz	3.610 GHz	1.000 MHz	3.60988 GHz	-30.83 dBm	-5.83 dB
3.610 GHz	3.619 GHz	1.000 MHz	3.61896 GHz	-13.77 dBm	-0.77 dB
3.619 GHz	3.620 GHz	100.000 kHz	3.61970 GHz	-25.64 dBm	-12.64 dB
3.620 GHz	3.630 GHz	100.000 kHz	3.62225 GHz	12.13 dBm	-17.87 dB
3.630 GHz	3.631 GHz	100.000 kHz	3.63042 GHz	-24.25 dBm	-11.25 dB
3.631 GHz	3.640 GHz	1.000 MHz	3.63104 GHz	-13.85 dBm	-0.85 dB
3.640 GHz	3.720 GHz	1.000 MHz	3.64020 GHz	-30.44 dBm	-5.44 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72926 GHz	-46.60 dBm	-6.60 dB

Date: 14.MAY.2025 02:04:14

High Channel / 3695MHz



Spurious Emissions

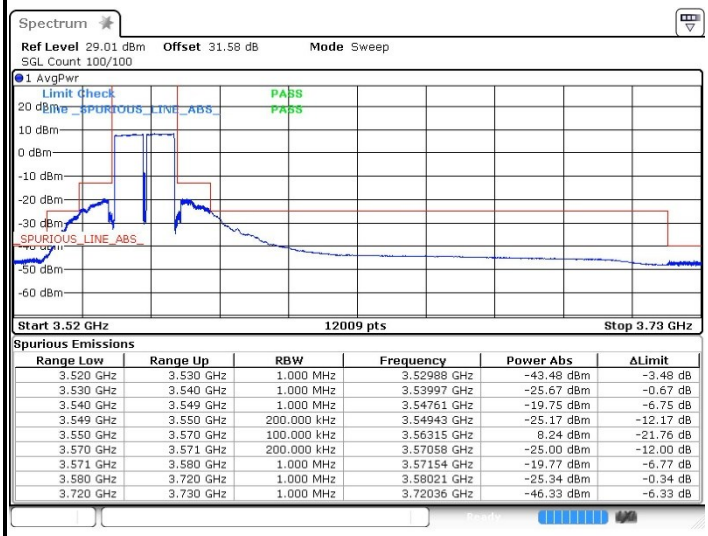
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52942 GHz	-46.79 dBm	-6.79 dB
3.530 GHz	3.680 GHz	1.000 MHz	3.67993 GHz	-31.66 dBm	-6.66 dB
3.680 GHz	3.689 GHz	1.000 MHz	3.68896 GHz	-13.59 dBm	-0.59 dB
3.689 GHz	3.690 GHz	100.000 kHz	3.68968 GHz	-24.37 dBm	-11.37 dB
3.690 GHz	3.700 GHz	100.000 kHz	3.69333 GHz	12.03 dBm	-17.97 dB
3.700 GHz	3.701 GHz	100.000 kHz	3.70042 GHz	-23.59 dBm	-10.59 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70104 GHz	-14.28 dBm	-1.28 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71002 GHz	-35.45 dBm	-10.45 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72224 GHz	-46.50 dBm	-6.50 dB

Date: 14.MAY.2025 02:24:54

N/A

20MHz

Low Channel / 3560MHz

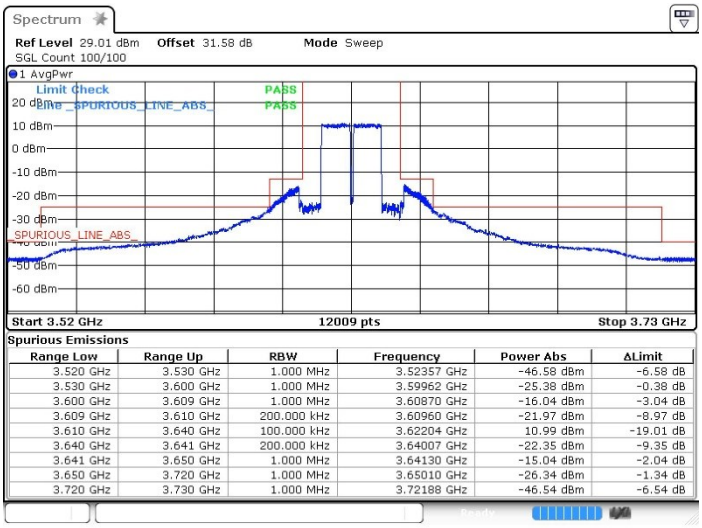


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52988 GHz	-43.48 dBm	-3.48 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53997 GHz	-25.67 dBm	-0.67 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54761 GHz	-19.75 dBm	-6.75 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.54943 GHz	-25.17 dBm	-12.17 dB
3.550 GHz	3.570 GHz	100.000 kHz	3.56315 GHz	8.24 dBm	-21.76 dB
3.570 GHz	3.571 GHz	200.000 kHz	3.57058 GHz	-25.00 dBm	-12.00 dB
3.571 GHz	3.580 GHz	1.000 MHz	3.57154 GHz	-19.77 dBm	-6.77 dB
3.580 GHz	3.720 GHz	1.000 MHz	3.58021 GHz	-25.34 dBm	-0.34 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72036 GHz	-46.33 dBm	-6.33 dB

Date: 14.MAY.2025 20:28:14

Middle Channel / 3625MHz

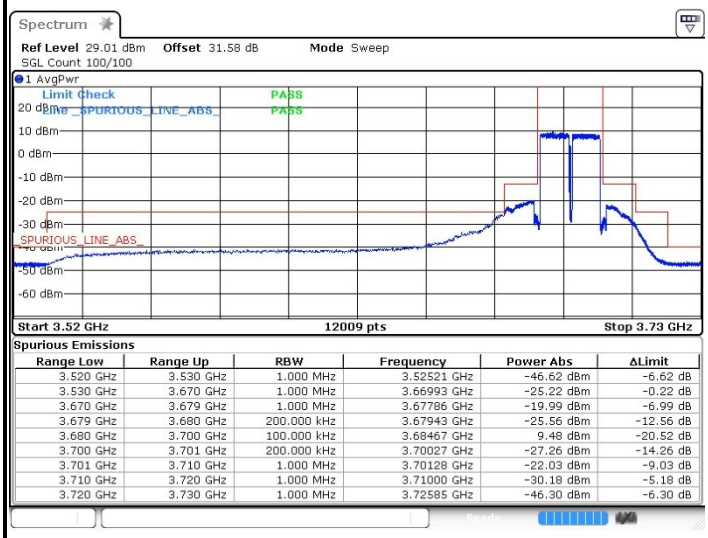


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52357 GHz	-46.58 dBm	-6.58 dB
3.530 GHz	3.600 GHz	1.000 MHz	3.59962 GHz	-25.38 dBm	-0.38 dB
3.600 GHz	3.609 GHz	1.000 MHz	3.60870 GHz	-16.04 dBm	-3.04 dB
3.609 GHz	3.610 GHz	200.000 kHz	3.60960 GHz	-21.97 dBm	-8.97 dB
3.610 GHz	3.640 GHz	100.000 kHz	3.62204 GHz	10.99 dBm	-19.01 dB
3.640 GHz	3.641 GHz	200.000 kHz	3.64007 GHz	-22.35 dBm	-9.35 dB
3.641 GHz	3.650 GHz	1.000 MHz	3.64130 GHz	-15.04 dBm	-2.04 dB
3.650 GHz	3.720 GHz	1.000 MHz	3.65010 GHz	-26.34 dBm	-1.34 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72188 GHz	-46.54 dBm	-6.54 dB

Date: 14.MAY.2025 20:41:26

High Channel / 3690MHz



Spurious Emissions

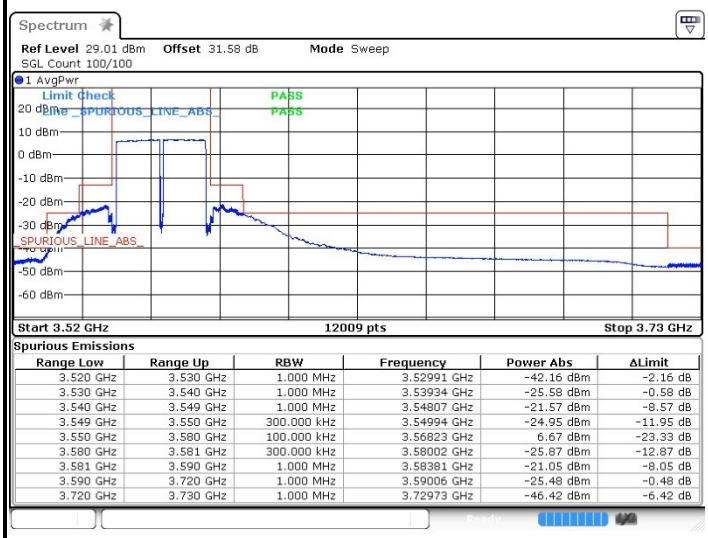
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52521 GHz	-46.62 dBm	-6.62 dB
3.530 GHz	3.670 GHz	1.000 MHz	3.66993 GHz	-25.22 dBm	-0.22 dB
3.670 GHz	3.679 GHz	1.000 MHz	3.67786 GHz	-19.99 dBm	-6.99 dB
3.679 GHz	3.680 GHz	200.000 kHz	3.67943 GHz	-25.56 dBm	-12.56 dB
3.680 GHz	3.700 GHz	100.000 kHz	3.68467 GHz	9.48 dBm	-20.52 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70027 GHz	-27.26 dBm	-14.26 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70128 GHz	-22.03 dBm	-9.03 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71000 GHz	-30.18 dBm	-5.18 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72585 GHz	-46.30 dBm	-6.30 dB

Date: 14.MAY.2025 22:40:42

N/A

30MHz

Low Channel / 3565MHz

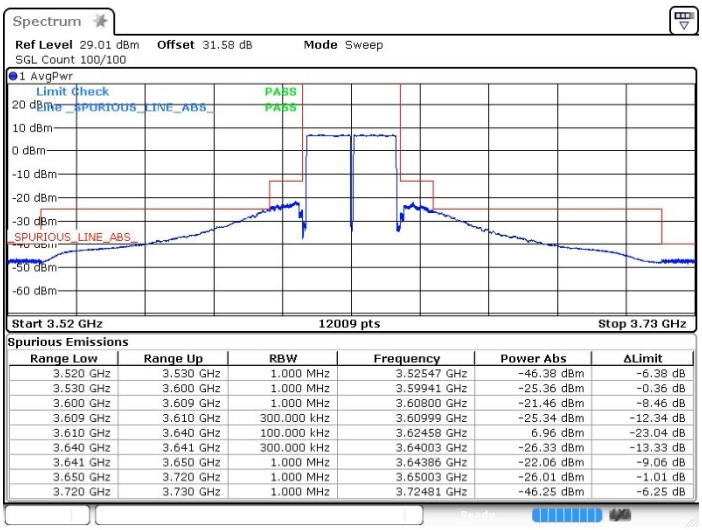


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52991 GHz	-42.16 dBm	-2.16 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53934 GHz	-25.58 dBm	-0.58 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54807 GHz	-21.57 dBm	-8.57 dB
3.549 GHz	3.550 GHz	300.000 kHz	3.54994 GHz	-24.95 dBm	-11.95 dB
3.550 GHz	3.580 GHz	100.000 kHz	3.56823 GHz	6.67 dBm	-23.33 dB
3.580 GHz	3.581 GHz	300.000 kHz	3.58002 GHz	-25.87 dBm	-12.87 dB
3.581 GHz	3.590 GHz	1.000 MHz	3.58381 GHz	-21.05 dBm	-8.05 dB
3.590 GHz	3.720 GHz	1.000 MHz	3.59006 GHz	-25.48 dBm	-0.48 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72973 GHz	-46.42 dBm	-6.42 dB

Date: 14.MAY.2025 23:04:39

Middle Channel / 3625MHz

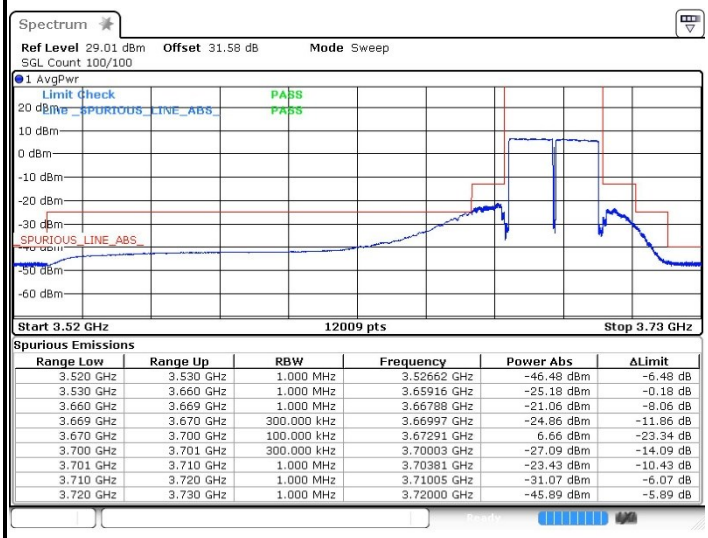


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52547 GHz	-46.38 dBm	-6.38 dB
3.530 GHz	3.600 GHz	1.000 MHz	3.59941 GHz	-25.36 dBm	-0.36 dB
3.600 GHz	3.609 GHz	1.000 MHz	3.60800 GHz	-21.46 dBm	-8.46 dB
3.609 GHz	3.610 GHz	300.000 kHz	3.60999 GHz	-25.34 dBm	-12.34 dB
3.610 GHz	3.640 GHz	100.000 kHz	3.62458 GHz	6.96 dBm	-23.04 dB
3.640 GHz	3.641 GHz	300.000 kHz	3.64003 GHz	-26.33 dBm	-13.33 dB
3.641 GHz	3.650 GHz	1.000 MHz	3.64386 GHz	-22.06 dBm	-9.06 dB
3.650 GHz	3.720 GHz	1.000 MHz	3.65003 GHz	-26.01 dBm	-1.01 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72481 GHz	-46.25 dBm	-6.25 dB

Date: 15.MAY.2025 19:02:11

High Channel / 3685MHz



Spurious Emissions

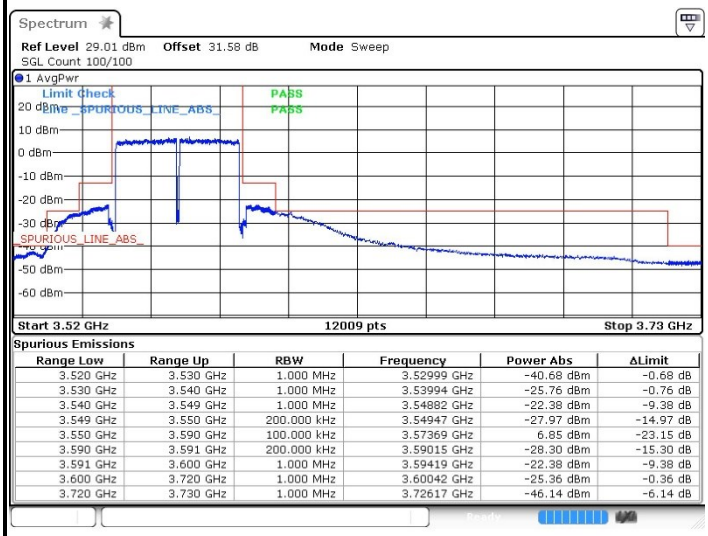
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52662 GHz	-46.48 dBm	-6.48 dB
3.530 GHz	3.660 GHz	1.000 MHz	3.65916 GHz	-25.18 dBm	-0.18 dB
3.660 GHz	3.669 GHz	1.000 MHz	3.66788 GHz	-21.06 dBm	-8.06 dB
3.669 GHz	3.670 GHz	300.000 kHz	3.66997 GHz	-24.86 dBm	-11.86 dB
3.670 GHz	3.700 GHz	100.000 kHz	3.67291 GHz	6.66 dBm	-23.34 dB
3.700 GHz	3.701 GHz	300.000 kHz	3.70003 GHz	-27.09 dBm	-14.09 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70381 GHz	-23.43 dBm	-10.43 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71005 GHz	-31.07 dBm	-6.07 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72000 GHz	-45.89 dBm	-5.89 dB

Date: 15.MAY.2025 19:21:55

N/A

40MHz

Low Channel / 3570MHz

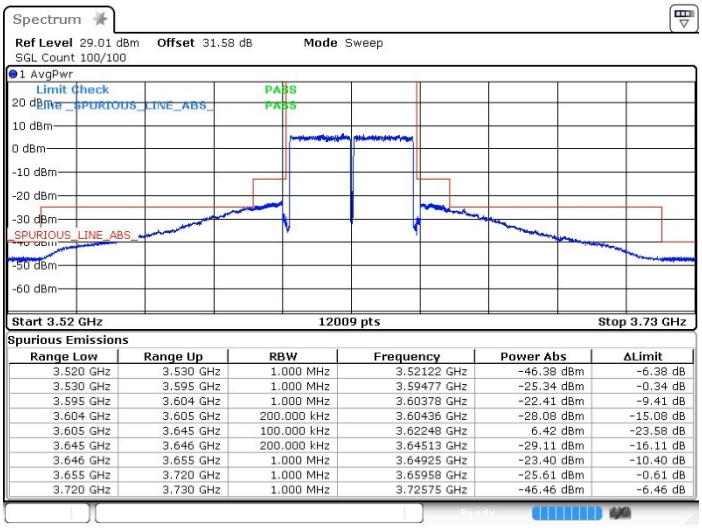


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52999 GHz	-40.68 dBm	-0.68 dB
3.530 GHz	3.540 GHz	1.000 MHz	3.53994 GHz	-25.76 dBm	-0.76 dB
3.540 GHz	3.549 GHz	1.000 MHz	3.54882 GHz	-22.38 dBm	-9.38 dB
3.549 GHz	3.550 GHz	200.000 kHz	3.54947 GHz	-27.97 dBm	-14.97 dB
3.550 GHz	3.590 GHz	100.000 kHz	3.57369 GHz	6.85 dBm	-23.15 dB
3.590 GHz	3.591 GHz	200.000 kHz	3.59015 GHz	-28.30 dBm	-15.30 dB
3.591 GHz	3.600 GHz	1.000 MHz	3.59419 GHz	-22.38 dBm	-9.38 dB
3.600 GHz	3.720 GHz	1.000 MHz	3.60042 GHz	-25.36 dBm	-0.36 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72617 GHz	-46.14 dBm	-6.14 dB

Date: 15.MAY.2025 19:37:12

Middle Channel /3625MHz

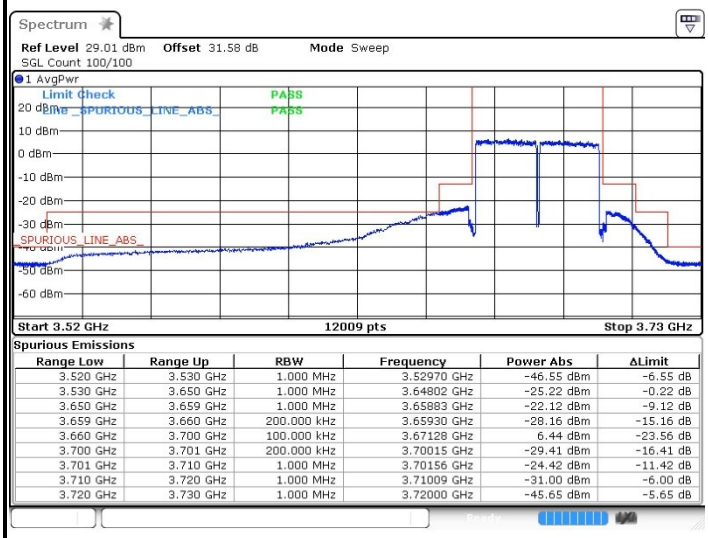


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52122 GHz	-46.38 dBm	-6.38 dB
3.530 GHz	3.595 GHz	1.000 MHz	3.59477 GHz	-25.34 dBm	-0.34 dB
3.595 GHz	3.604 GHz	1.000 MHz	3.60378 GHz	-22.41 dBm	-9.41 dB
3.604 GHz	3.605 GHz	200.000 kHz	3.60436 GHz	-28.08 dBm	-15.08 dB
3.605 GHz	3.645 GHz	100.000 kHz	3.62248 GHz	6.42 dBm	-23.58 dB
3.645 GHz	3.646 GHz	200.000 kHz	3.64513 GHz	-29.11 dBm	-16.11 dB
3.646 GHz	3.655 GHz	1.000 MHz	3.64925 GHz	-23.40 dBm	-10.40 dB
3.655 GHz	3.720 GHz	1.000 MHz	3.65958 GHz	-25.61 dBm	-0.61 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72575 GHz	-46.46 dBm	-6.46 dB

Date: 15.MAY.2025 19:46:54

High Channel / 3680MHz



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.520 GHz	3.530 GHz	1.000 MHz	3.52970 GHz	-46.55 dBm	-6.55 dB
3.530 GHz	3.650 GHz	1.000 MHz	3.64802 GHz	-25.22 dBm	-0.22 dB
3.650 GHz	3.659 GHz	1.000 MHz	3.65883 GHz	-22.12 dBm	-9.12 dB
3.659 GHz	3.660 GHz	200.000 kHz	3.65930 GHz	-28.16 dBm	-15.16 dB
3.660 GHz	3.700 GHz	100.000 kHz	3.67128 GHz	6.44 dBm	-23.56 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70015 GHz	-29.41 dBm	-16.41 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70156 GHz	-24.42 dBm	-11.42 dB
3.710 GHz	3.720 GHz	1.000 MHz	3.71009 GHz	-31.00 dBm	-6.00 dB
3.720 GHz	3.730 GHz	1.000 MHz	3.72000 GHz	-45.65 dBm	-5.65 dB

Date: 15.MAY.2025 19:58:22

N/A

Frequency Stability

Test Conditions		Middle Channel / 3625MHz	Limit
Temperature (°C)	Voltage (Volt)	BW 40MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	2.00	PASS
40	Normal Voltage	2.00	
30	Normal Voltage	0.00	
20(Ref.)	Normal Voltage	0.00	
10	Normal Voltage	0.00	
0	Normal Voltage	2.00	
-10	Normal Voltage	2.00	
-20	Normal Voltage	2.00	
-30	Normal Voltage	2.00	
20	Maximum Voltage	-1.00	
20	Normal Voltage	0.00	
20	Minimum Voltage	-1.00	

Note:

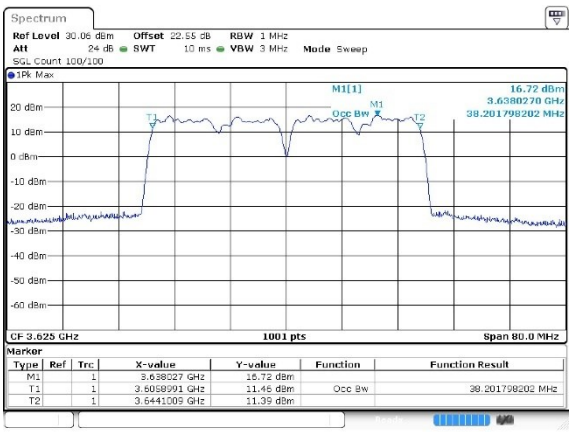
1. Normal Voltage = 50 V.；Minimum Voltage = 42.5 V.；Maximum Voltage = 57.5 V.
2. The frequency fundamental emissions stay within the authorized frequency block
3. The frequency variation is sufficient to ensure that the occupied bandwidth of all operation channels stay within the operating frequency block or frequency block group.

<Multi Carrier (Contiguous)>

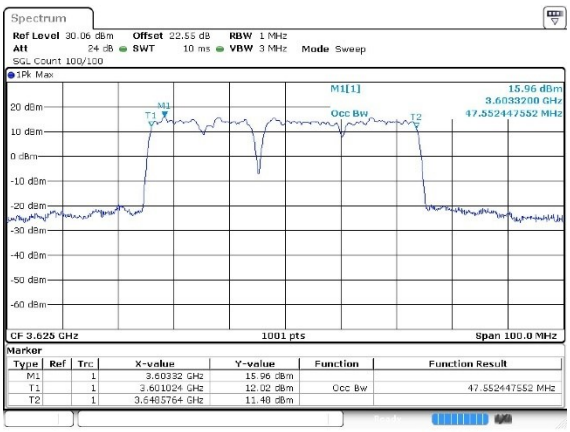
Occupied Bandwidth

Mode	99%OBW(MHz)		
Frequency	3615MHz + 3635MHz	3610MHz + 3635MHz	3605MHz + 3635MHz
BW	20MHz + 20MHz	20MHz + 30MHz	20MHz + 40MHz
Middle CH	38.20	47.55	57.78
Frequency	3610MHz + 3640MHz	3605MHz + 3640MHz	3605MHz + 3645MHz
BW	30MHz + 30MHz	30MHz + 40MHz	40MHz + 40MHz
Middle CH	57.06	67.27	77.20

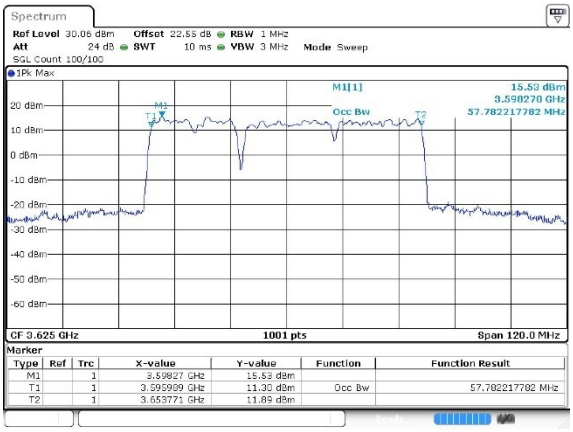
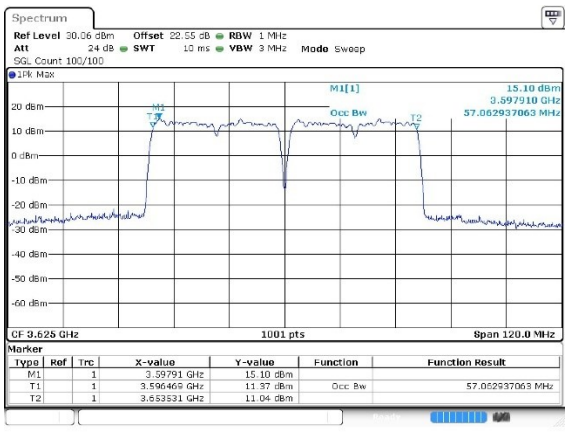
20+20MHz / Middle Channel



20+30MHz/ Middle Channel



20+40MHz / Middle Channel



30+30MHz/ Middle Channel