



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: NOVISOLUTIONS CIA LTDA

Address: Ponceano N73 y Mariano Paredes QUITO ECUADOR Ecuador

FCC ID: 2BO97ENVNOTEK

Product Name: smartphone

Standard(s): 47 CFR Part 15, Subpart C(15.247)

ANSI C63.10-2020

KDB 558074 D01 15.247 Meas Guidance v05r02

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: 2503S14680E-RF-00C

Date Of Issue: 2025-05-15

Reviewed By: Calvin Chen

Title: RF Engineer

Approved By: Sun Zhong

Title: Lab Manager

Test Laboratory: China Certification ICT Co., Ltd (Dongguan)

No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China

Tel: +86-769-83085888

www.cctt.com.cn

Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

This report cannot be reproduced except in full, without prior written approval of the Company.

This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

This report may contain data that are not covered by the accreditation scope and shall be marked with an asterisk “★”.

Each test item follows the test standard(s) without deviation.

CONTENTS

DOCUMENT REVISION HISTORY	5
1. GENERAL INFORMATION	6
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	6
1.1.1 General.....	6
1.1.2 Operation Frequency Detail	6
1.1.3 Antenna Information Detail▲	6
1.1.4 Accessory Information.....	7
1.2 DESCRIPTION OF TEST CONFIGURATION.....	8
1.2.1 EUT Operation Condition:.....	8
1.2.2 Support Equipment List and Details	8
1.2.3 Support Cable List and Details	8
1.2.4 Block Diagram of Test Setup.....	9
1.3 MEASUREMENT UNCERTAINTY	10
2. SUMMARY OF TEST RESULTS	11
3. REQUIREMENTS AND TEST PROCEDURES	12
3.1 AC LINE CONDUCTED EMISSIONS.....	12
3.1.1 Applicable Standard.....	12
3.1.2 EUT Setup.....	13
3.1.3 EMI Test Receiver Setup	13
3.1.4 Test Procedure	14
3.1.5 Corrected Amplitude & Margin Calculation.....	14
3.2 RADIATION SPURIOUS EMISSIONS	15
3.2.1 Applicable Standard.....	15
3.2.2 EUT Setup.....	15
3.2.3 EMI Test Receiver & Spectrum Analyzer Setup	16
3.2.4 Test Procedure	17
3.2.5 Corrected Amplitude & Margin Calculation.....	17
3.3 MINIMUM 6 DB EMISSION BANDWIDTH	18
3.3.1 Applicable Standard.....	18
3.3.2 EUT Setup.....	18
3.3.3 Test Procedure	18
3.4 99% OCCUPIED BANDWIDTH.....	19
3.4.1 Applicable Standard.....	19
3.4.2 EUT Setup.....	19
3.4.3 Test Procedure	19
3.5 MAXIMUM CONDUCTED OUTPUT POWER.....	20
3.5.1 Applicable Standard.....	20
3.5.2 EUT Setup.....	20
3.5.3 Test Procedure	20
3.6 MAXIMUM POWER SPECTRAL DENSITY	21
3.6.1 Applicable Standard.....	21
3.6.2 EUT Setup.....	21
3.6.3 Test Procedure	21
3.7 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE.....	22
3.7.1 Applicable Standard.....	22
3.7.2 EUT Setup.....	22

3.7.3 Test Procedure	22
3.8 DUTY CYCLE	23
3.8.1 EUT Setup.....	23
3.8.2 Test Procedure	23
3.9 ANTENNA REQUIREMENT.....	24
3.9.1 Applicable Standard.....	24
3.9.2 Judgment.....	24
4. TEST DATA AND RESULTS	25
 4.1 AC LINE CONDUCTED EMISSIONS	25
 4.2 RADIATION SPURIOUS EMISSIONS	28
4.2.1 9 kHz – 1 GHz	28
4.2.2 1 GHz – 25 GHz	37
 4.3 RF CONDUCTED DATA	67
5. EUT PHOTOGRAPHS	68
6. TEST SETUP PHOTOGRAPHS	69

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2503S14680E-RF-00C	Original Report	2025-05-15

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General

EUT Name:	smartphone
EUT Model:	ENV NOTE X
Trade Name:	ENV
Operation Frequency:	2412-2462 MHz(802.11b/g/n ht20)
Maximum Peak Output Power (Conducted):	20.92dBm
Modulation Type:	802.11b: DSSS-DBPSK, DQPSK, CCK 802.11g/n: OFDM-BPSK, QPSK, 16QAM, 64QAM
Rated Input Voltage:	3.84Vdc from battery or 5Vdc from adapter
Sample Number:	31B1-1 (for RF Conducted Test) 31B1-2 (for Radiated Spurious Emissions Test& for AC Line Conducted Emissions Test)
EUT Received Date:	2025.4.17
EUT Received Status:	Good

1.1.2 Operation Frequency Detail

For 802.11b/g/n ht20:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	7	2442
2	2417	8	2447
3	2422	9	2452
4	2427	10	2457
5	2432	11	2462
6	2437	/	/

Per section 15.31(m), the below frequencies were performed the test as below:

Test Channel	Frequency (MHz)
Lowest	2412
Middle	2437
Highest	2462

1.1.3 Antenna Information Detail▲

Antenna Type	input impedance (Ohm)	Frequency Range (MHz)	Antenna Gain (dBi)
FPC	50	2400-2500	-0.33

The Method of §15.203 Compliance either:

- Antenna was permanently attached to the unit.
- Antenna use a unique type of connector to attach to the EUT.
- Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

1.1.4 Accessory Information

Accessory Description	Manufacturer	Model
Adapter	Unknown	EE5020-P25
USB Cable	/	/

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Engineering Mode, which was provided by the manufacturer.		
Equipment Modifications:	No		
EUT Exercise Software:	Engineering Mode		
The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer ▲ :			
Test Modes	Test Frequency (MHz)	Data Rate	Power Level Setting
802.11b	2412	1Mbps	22
	2437	1Mbps	22
	2462	1Mbps	22
802.11g	2412	6Mbps	22
	2437	6Mbps	22
	2462	6Mbps	22
802.11n ht20	2412	MCS0	22
	2437	MCS0	22
	2462	MCS0	22
Note: The above are the worst-case data rates, which are determined for each mode based upon investigations by measuring the power and PSD across all data rates, bandwidths, and modulations.			

1.2.2 Support Equipment List and Details

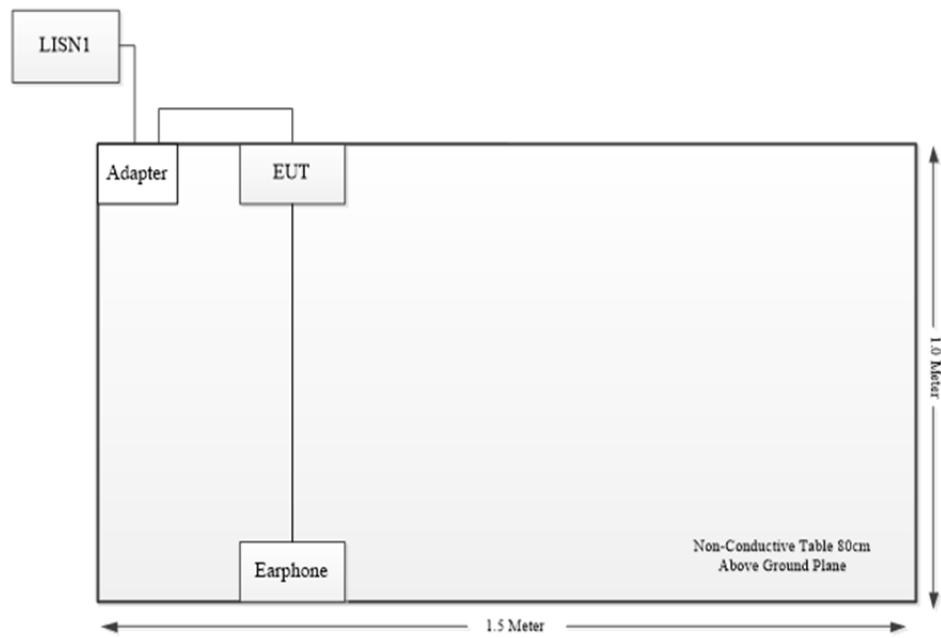
Manufacturer	Description	Model	Serial Number
CLC	Earphone	Whiteview5.0	EP21106054

1.2.3 Support Cable List and Details

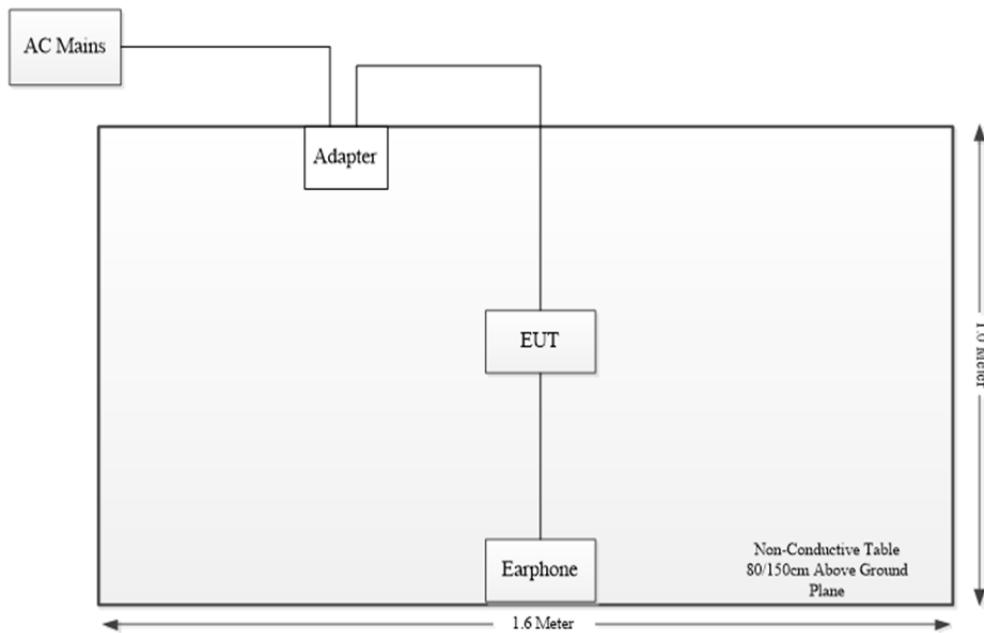
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Earphone Cable	No	No	1.2	Earphone	EUT
USB Cable	No	No	1	Adapter	EUT

1.2.4 Block Diagram of Test Setup

AC line conducted emissions:



Spurious Emissions:



1.3 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±0.61dB
Power Spectral Density, conducted	±0.61 dB
Unwanted Emissions, radiated	9k~30MHz: 4.12dB, 30M~200MHz: 4.15 dB, 200M~1GHz: 5.61 dB, 1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB, 18G~26.5G:5.47 dB, 26.5G~40G:5.63 dB
Unwanted Emissions, conducted	±1.26 dB
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±0.4%
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
FCC §15.203	Antenna Requirement	Compliant
FCC §15.207(a)	AC Line Conducted Emissions	Compliant
FCC §15.205,§15.209,§15.247(d)	Radiated Spurious Emission	Compliant
FCC §15.207(a)(2), §C63.10 6.9.3	6dB Emission Bandwidth & 99% Occupied Bandwidth	Compliant
FCC §15.247(b)(1)	Maximum Conducted Output Power	Compliant
FCC §15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
FCC §15.247(e)	Power Spectral Density	Compliant
C63.10 §11.6	Duty Cycle	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 Applicable Standard

FCC §15.207(a).

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

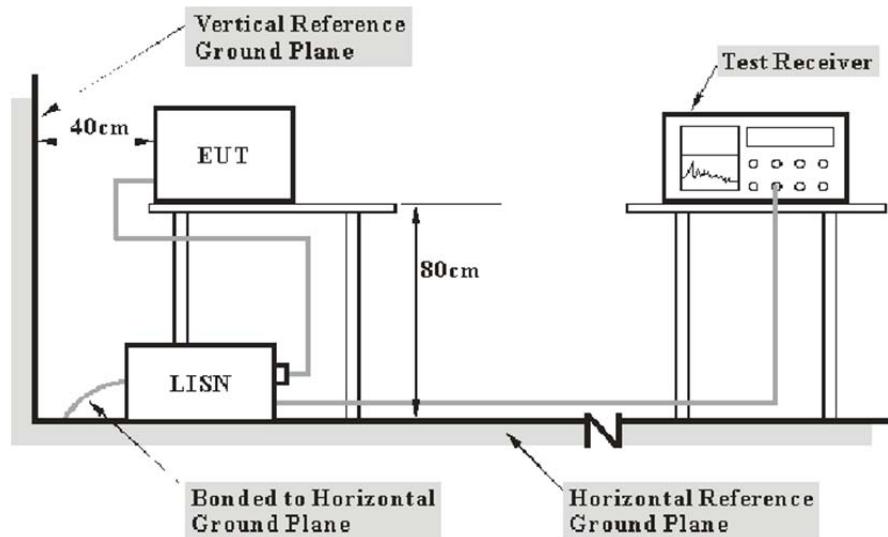
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μ V within the frequency band 535-1705 kHz, as measured using a 50 μ H/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

3.1.2 EUT Setup



The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

3.1.3 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

3.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = attenuation caused by cable loss + voltage division factor of AMN

The “Margin” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.2 Radiation Spurious Emissions

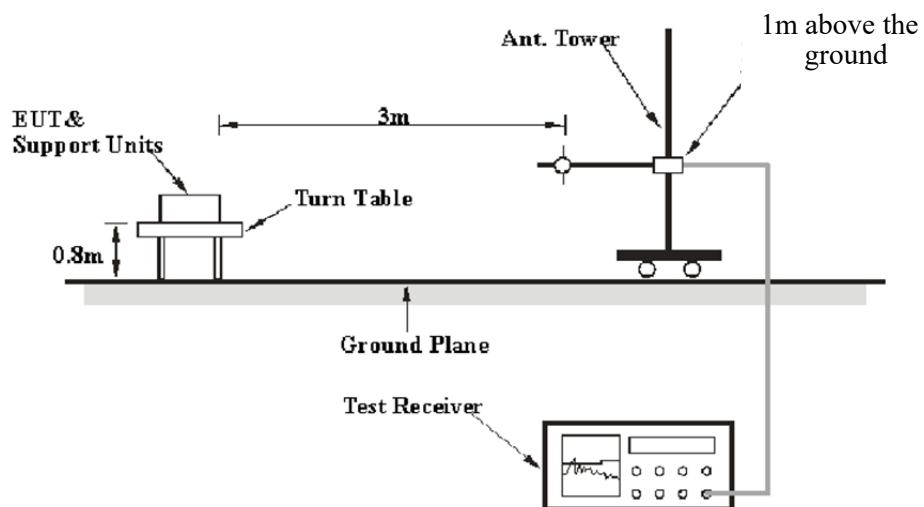
3.2.1 Applicable Standard

FCC §15.247 (d);

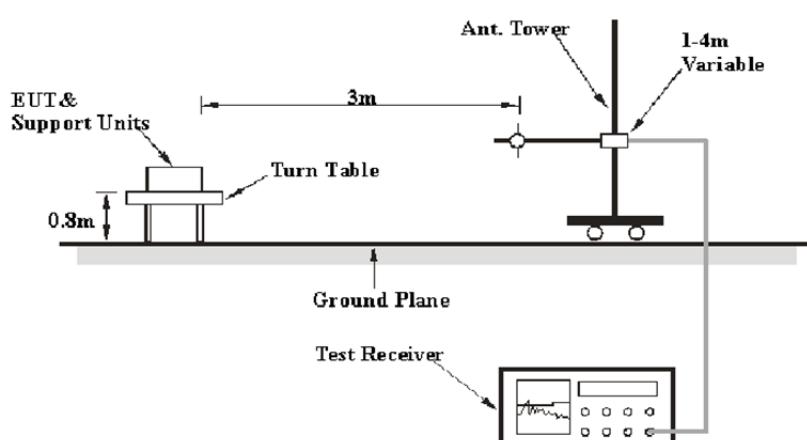
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

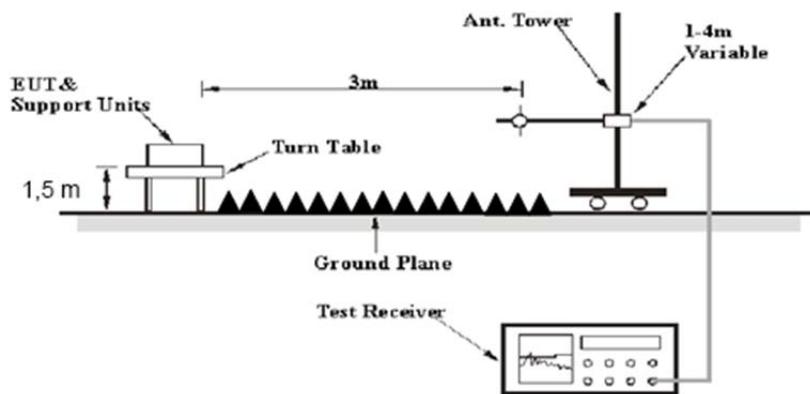
3.2.2 EUT Setup

9kHz - 30MHz:



30M~1GHz:



Above 1GHz:

The radiated emissions were performed in the 3 meters distance, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, and FCC 15.247 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

For 9kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector	Measurement
9 kHz – 150 kHz	300 Hz	1 kHz	/	Peak	PK
	/	/	200 Hz	Quasi Peak/Average	QP/AV
150 kHz – 30 MHz	10 kHz	30 kHz	/	Peak	PK
	/	/	9 kHz	Quasi Peak/Average	QP/AV
30MHz – 1000 MHz	100 kHz	300 kHz	/	Peak	PK
	/	/	120kHz	Quasi Peak	QP

1GHz- 25GHz:

Pre-scan:

Measurement	Duty cycle	RBW	Video B/W	Detector
PK	Any	1MHz	3 MHz	Peak
Ave.	>98%	1MHz	5 kHz	Peak
	<98%	1MHz	$\geq 1/T$, not less than 5 kHz	Peak

Note: T is minimum transmission duration

Final measurement for emission identified during the pre-scan:

Measurement	Duty cycle	RBW	Video B/W	Detector
PK	Any	1MHz	3 MHz	Peak
Ave.	>98%	1MHz	10 Hz	Peak
	<98%	1MHz	$\geq 1/T$	Peak

Note: T is minimum transmission duration

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

3.2.4 Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 9 kHz-1 GHz except 9–90 kHz, 110–490 kHz, employing an average detector, peak and Average detection modes for frequencies above 1 GHz.

All emissions under the average limit and under the noise floor have not recorded in the report.

3.2.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = Antenna Factor + Cable Loss- Amplifier Gain

The “Margin” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

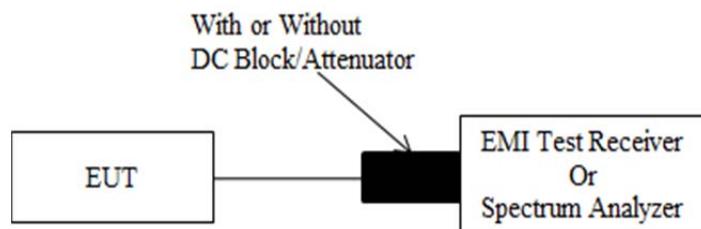
3.3 Minimum 6 dB Emission Bandwidth

3.3.1 Applicable Standard

FCC §15.247 (a)(2)

Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

3.3.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, the insert loss of this RF cable/attenuator was offset into the setting of test equipment.

3.3.3 Test Procedure

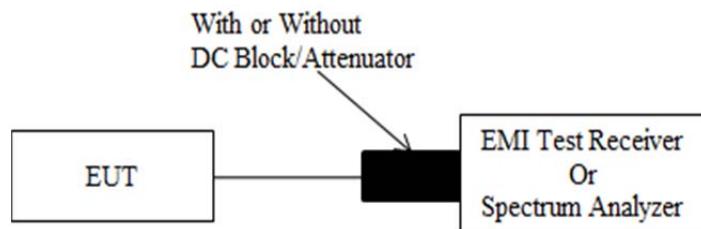
According to ANSI C63.10-2020 Section 11.8

- a) Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
- b) Set the VBW $\geq [3 \times \text{RBW}]$.
- c) Detector = peak.
- d) Trace mode = max-hold.
- e) Sweep = No faster than coupled (auto) time.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB down amplitude” value, then it shall be as close as possible to this value.

3.4 99% Occupied Bandwidth

3.4.1 Applicable Standard

3.4.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable/attenuator was offset into the setting of test equipment.

3.4.3 Test Procedure

According to ANSI C63.10-2020 Section 6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be at least three times the RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level. Specific guidance is given in 4.1.6.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) 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.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. 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% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing spectral plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

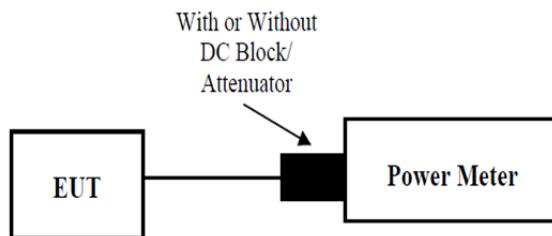
3.5 Maximum Conducted Output Power

3.5.1 Applicable Standard

FCC §15.247 (b)(3)

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.

3.5.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, the insert loss of this RF cable/attenuator was offset into the setting of test equipment.

3.5.3 Test Procedure

According to ANSI C63.10-2020 Section 11.9.1.2

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast responding diode detector.

- a) Set the EUT in transmitting mode.
- b) Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to test equipment.
- c) Add a correction factor to the display.
- d) Set the power meter to test peak output power, record the result.

According to ANSI C63.10-2020 Section 11.9.2.3.2

Method AVGPM-G is a measurement using a gated RF average power meter.

Alternatively, measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

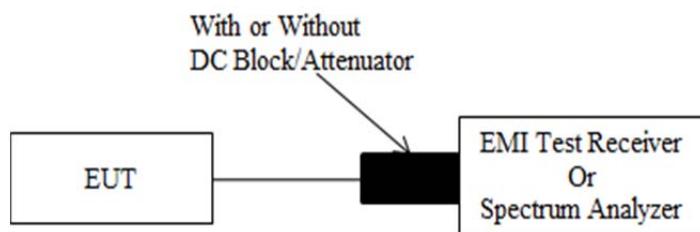
3.6 Maximum Power Spectral Density

3.6.1 Applicable Standard

FCC §15.247 (e)

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

3.6.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, the insert loss of this RF cable/attenuator was offset into the setting of test equipment.

3.6.3 Test Procedure

According to ANSI C63.10-2020 Section 11.10.2

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span >1.5 times the DTS bandwidth.
- c) Set the RBW to $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set the VBW $\geq [3 \times \text{RBW}]$.
- e) Detector = peak.
- f) Sweep time = No faster than coupled (auto) time.
- g) Trace mode = max-hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

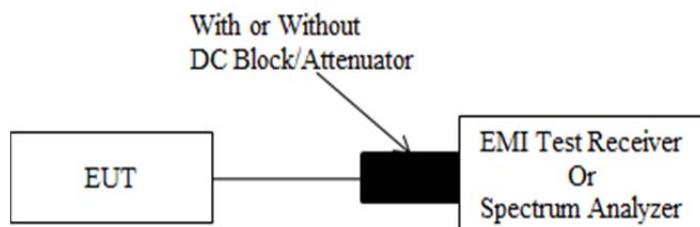
3.7 100 kHz Bandwidth of Frequency Band Edge

3.7.1 Applicable Standard

FCC §15.247 (d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

3.7.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, the insert loss of this RF cable/attenuator was offset into the setting of test equipment.

3.7.3 Test Procedure

According to ANSI C63.10-2020 Section 11.11

a) Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution.

NOTE—the number of points can also be increased for large spans to retain frequency resolution

b) Set the RBW = 100 kHz.

c) Set the VBW $\geq [3 \times \text{RBW}]$.

d) Detector = peak.

e) Sweep time = No faster than coupled (auto) time.

f) Trace mode = max-hold.

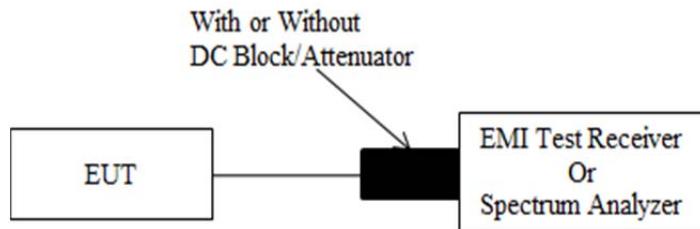
g) Allow trace to fully stabilize.

h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

3.8 Duty Cycle

3.8.1 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port, the insert loss of this RF cable/attenuator was offset into the setting of test equipment.

3.8.2 Test Procedure

According to ANSI C63.10-2020 Section 11.6

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

- 1) Set the center frequency of the instrument to the center frequency of the transmission.
- 2) Set $RBW \geq OBW$ if possible; otherwise, set RBW to the largest available value.
- 3) Set $VBW \geq RBW$. Set detector = peak or average.
- 4) The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring the duty cycle shall not be used if $T \leq 16.7 \mu s$.)

3.9 Antenna Requirement

3.9.1 Applicable Standard

FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.9.2 Judgment

Compliant. Please refer to the Antenna Information detail in Section 1.

4. TEST DATA AND RESULTS

4.1 AC Line Conducted Emissions

Sample Number:	31B1-2	Test Date:	2025/4/27
Test Site:	CE	Test Mode:	Transmitting(maximum output power mode 802.11b high channel)
Tester:	David Huang	Test Result:	Pass

Environmental Conditions:

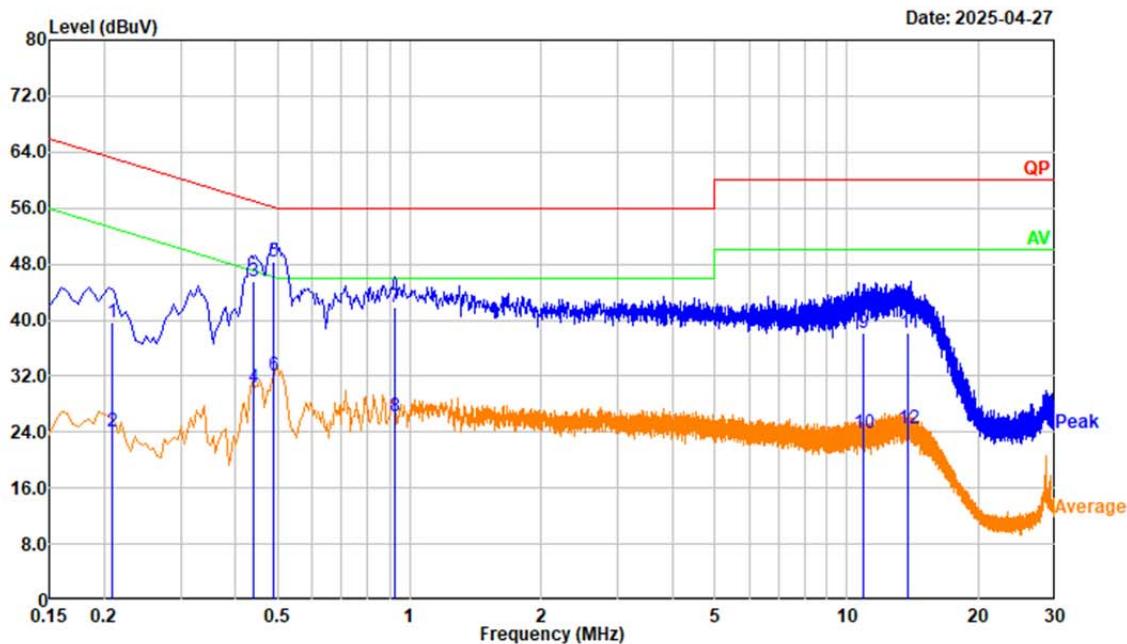
Temperature: (°C)	26.2	Relative Humidity: (%)	48	ATM Pressure: (kPa)	100.5
-------------------	------	------------------------	----	---------------------	-------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101132	2025/3/31	2026/3/30
R&S	EMI Test Receiver	ESR3	103104	2024/5/10	2025/5/9
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2025/1/6	2026/1/5
Audix	Test Software	E3	191218 (V9)	N/A	N/A

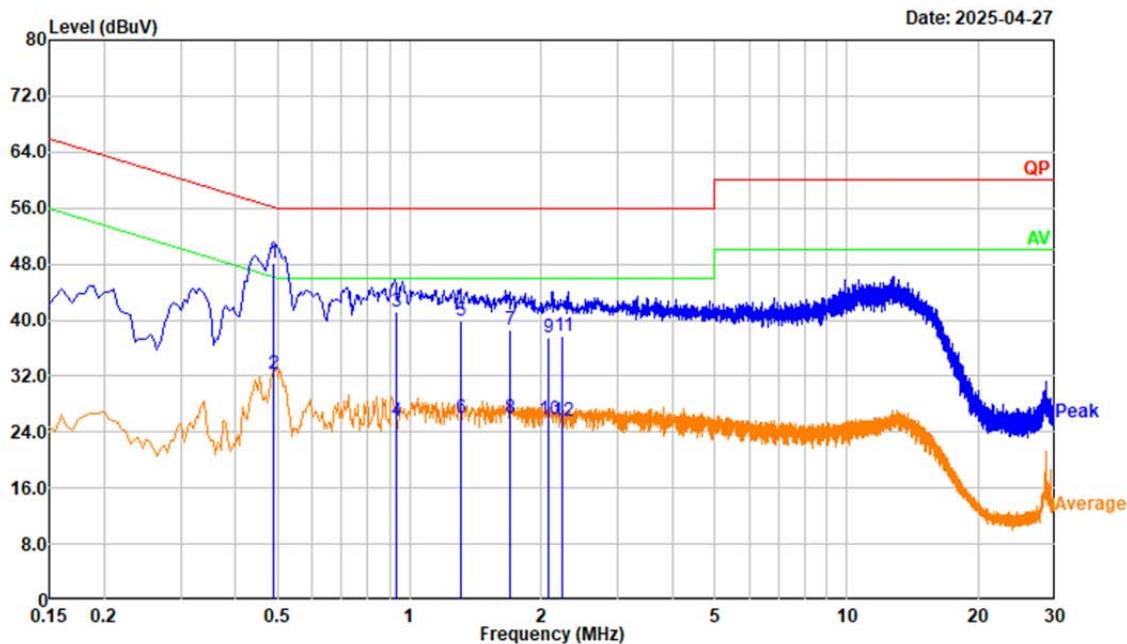
* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Project No.: 2503S14680E-RF
 Tester: David Huang
 Condition: IFBW:9 kHz Meas Time:0.025sec
 Port: Line
 Note: Transmitting 2.4G WIFI



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector
1	0.209	29.18	10.41	39.59	63.25	23.66	QP
2	0.209	13.67	10.41	24.08	53.25	29.17	Average
3	0.438	35.22	10.41	45.63	57.09	11.46	QP
4	0.438	19.89	10.41	30.30	47.09	16.79	Average
5	0.490	37.89	10.41	48.30	56.17	7.87	QP
6	0.490	21.59	10.41	32.00	46.17	14.17	Average
7	0.929	31.21	10.56	41.77	56.00	14.23	QP
8	0.929	15.59	10.56	26.15	46.00	19.85	Average
9	10.884	28.03	10.15	38.18	60.00	21.82	QP
10	10.884	13.62	10.15	23.77	50.00	26.23	Average
11	13.850	28.00	10.05	38.05	60.00	21.95	QP
12	13.850	14.41	10.05	24.46	50.00	25.54	Average

Project No.: 2503S14680E-RF
 Tester: David Huang
 Condition: IFBW:9 kHz Meas Time:0.025sec
 Port: neutral
 Note: Transmitting 2.4G WIFI



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB)	Result (dB μ V)	Limit (dB μ V)	Margin (dB)	Detector
1	0.490	37.83	10.41	48.24	56.17	7.93	QP
2	0.490	21.86	10.41	32.27	46.17	13.90	Average
3	0.932	30.75	10.42	41.17	56.00	14.83	QP
4	0.932	15.12	10.42	25.54	46.00	20.46	Average
5	1.314	29.52	10.46	39.98	56.00	16.02	QP
6	1.314	15.58	10.46	26.04	46.00	19.96	Average
7	1.698	28.31	10.39	38.70	56.00	17.30	QP
8	1.698	15.57	10.39	25.96	46.00	20.04	Average
9	2.073	27.16	10.33	37.49	56.00	18.51	QP
10	2.073	15.39	10.33	25.72	46.00	20.28	Average
11	2.241	27.43	10.33	37.76	56.00	18.24	QP
12	2.241	15.16	10.33	25.49	46.00	20.51	Average

4.2 Radiation Spurious Emissions

4.2.1 9 kHz – 1 GHz

Sample Number:	31B1-2	Test Date:	2025/4/19
Test Site:	966-2	Test Mode:	(maximum output power mode 802.11b high channel)
Tester:	Roinin Fu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.2	Relative Humidity: (%)	53	ATM Pressure: (kPa)	100.9
-------------------	------	------------------------	----	---------------------	-------

Test Equipment List and Details:

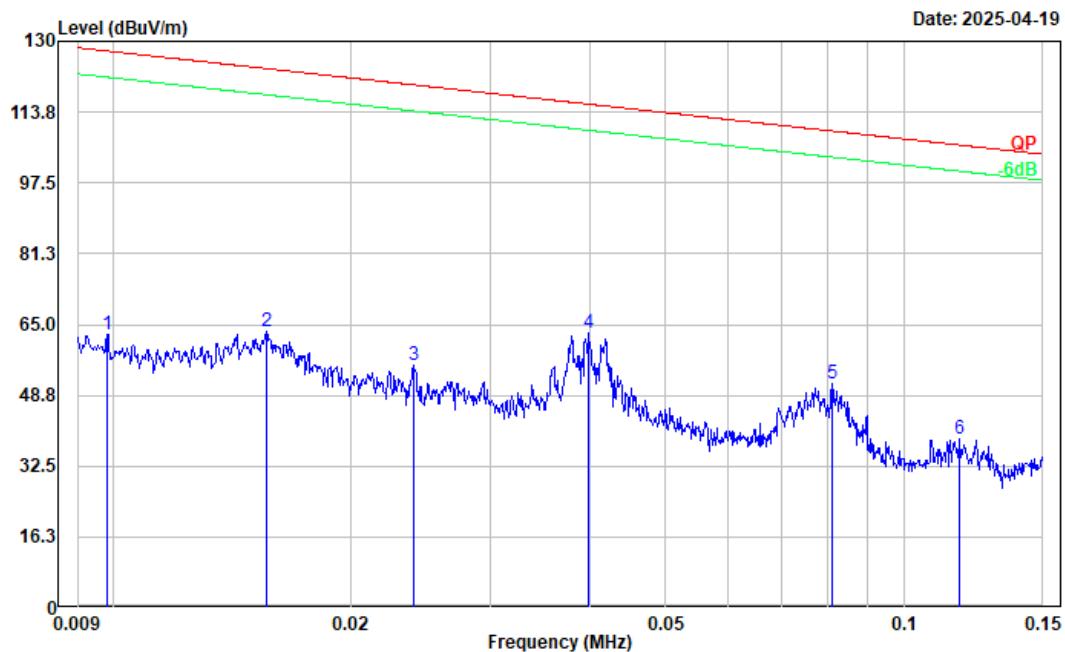
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2023/12/1	2026/11/30
BACL	Loop Antenna	1313-1A	3110611	2023/12/4	2026/12/3
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0300-01	2025/1/10	2026/1/9
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0500-01	2025/1/10	2026/1/9
R&S	EMI Test Receiver	ESR3	102724	2025/2/14	2026/2/13
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0100-03	2024/12/3	2025/12/2
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0370-01	2024/12/3	2025/12/2
XQY	Coaxial Cable	XQY-CMR400UF-NJ-NJ-7M	24056379	2024/6/11	2025/6/10
Sonoma	Amplifier	310N	186165	2024/12/3	2025/12/2
Audix	Test Software	E3	191218 (V9)	N/A	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

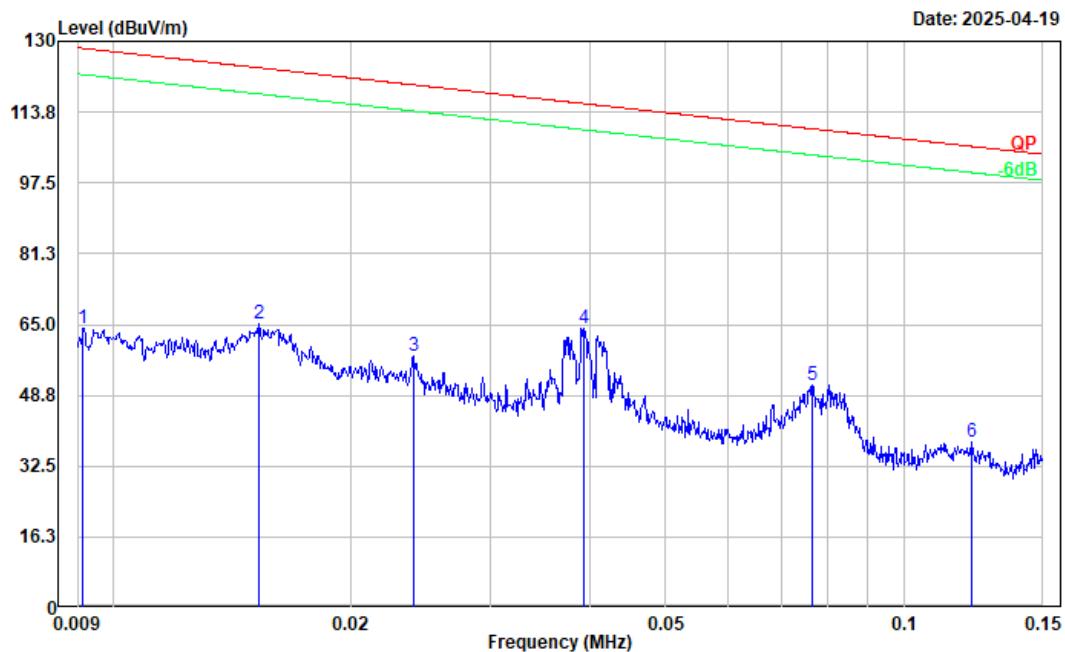
After pre-scan in the X, Y and Z axes of orientation, the worst case is refer to plots.

Project No.: 2503S14680E-RF
Tester: Roinin Fu
Condition: RBW:0.3 kHz VBW:1 kHz SWT:0.1 sec
Polarization: Parallel
Note: Transmitting

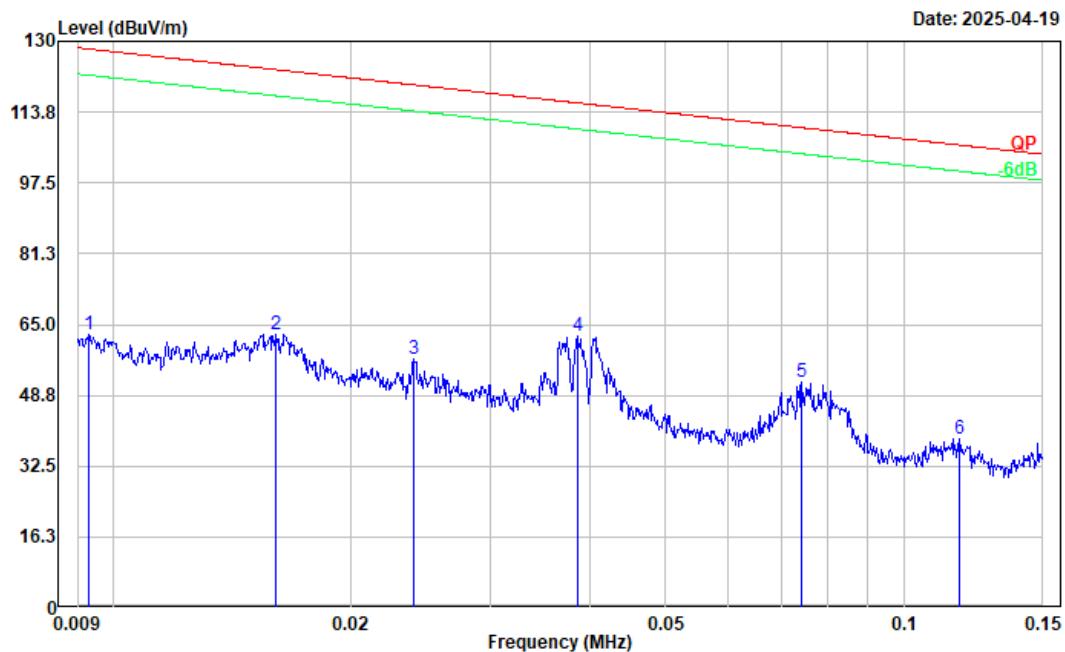


No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	0.010	28.00	34.67	62.67	127.76	65.09	Peak
2	0.016	31.61	31.69	63.30	123.73	60.43	Peak
3	0.024	28.01	27.60	55.61	120.01	64.40	Peak
4	0.040	40.38	22.57	62.95	115.59	52.64	Peak
5	0.081	35.31	16.25	51.56	109.41	57.85	Peak
6	0.118	24.89	13.82	38.71	106.18	67.47	Peak

Project No.: 2503S14680E-RF
Tester: Roinin Fu
Condition: RBW:0.3 kHz VBW:1 kHz SWT:0.1 sec
Polarization: Perpendicular
Note: Transmitting

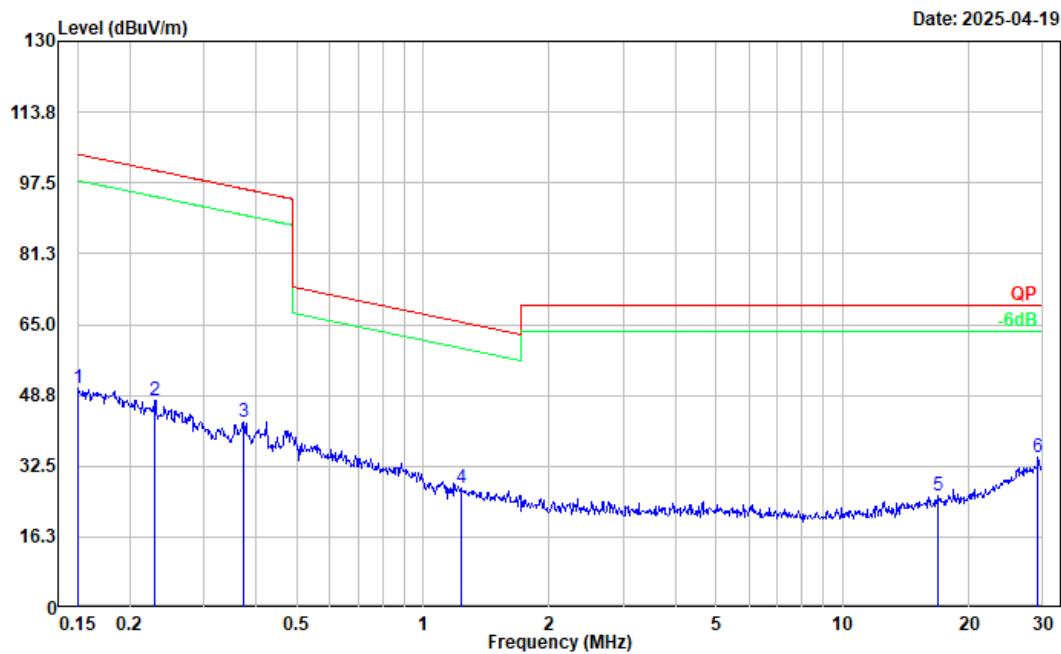


Project No.: 2503S14680E-RF
Tester: Roinin Fu
Condition: RBW:0.3 kHz VBW:1 kHz SWT:0.1 sec
Polarization: Ground-parallel
Note: Transmitting



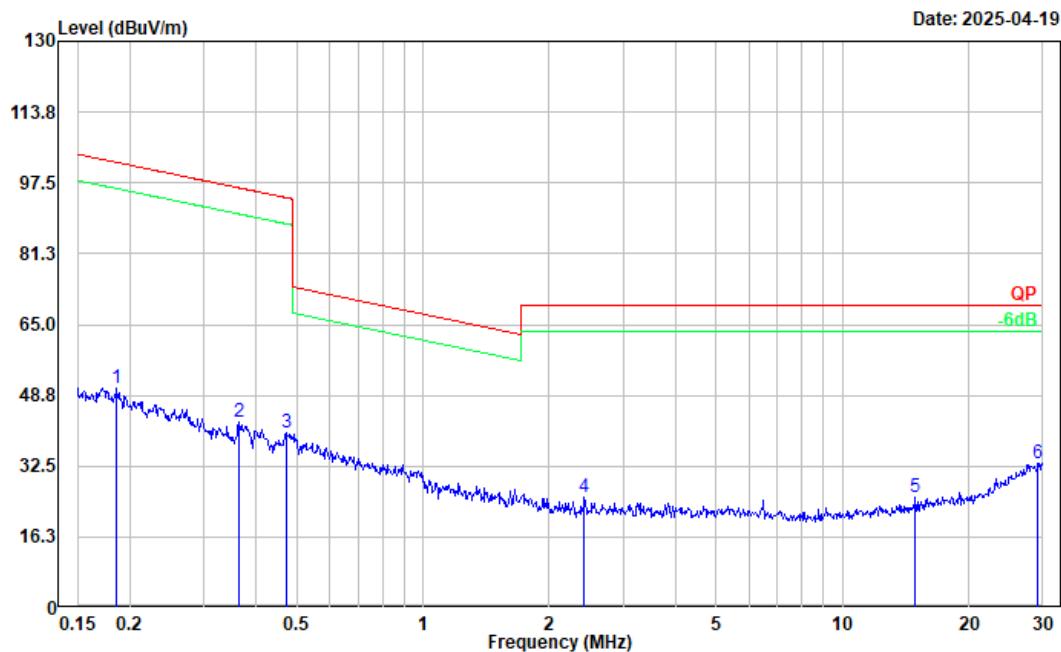
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	0.009	27.55	35.33	62.88	128.23	65.35	Peak
2	0.016	31.39	31.49	62.88	123.51	60.63	Peak
3	0.024	29.44	27.57	57.01	119.99	62.98	Peak
4	0.039	39.68	22.82	62.50	115.86	53.36	Peak
5	0.074	34.49	17.14	51.63	110.19	58.56	Peak
6	0.117	24.95	13.84	38.79	106.21	67.42	Peak

Project No.: 2503S14680E-RF
Tester: Roinin Fu
Condition: RBW:10 kHz VBW:30 kHz SWT:0.1 sec
Polarization: Parallel
Note: Transmitting



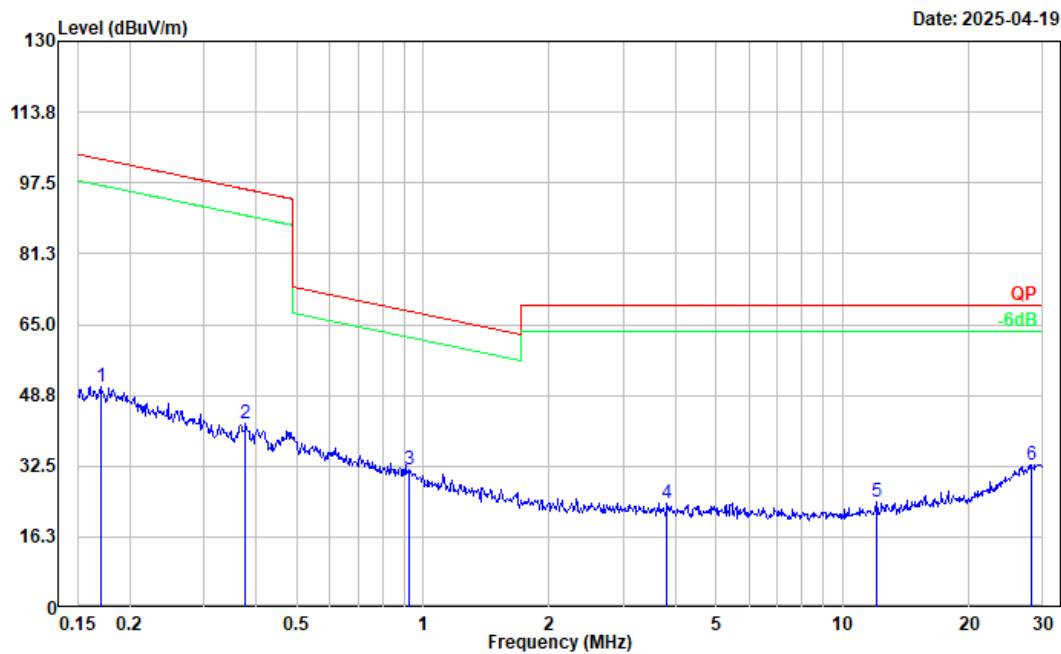
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	0.150	38.07	12.33	50.40	104.08	53.68	Peak
2	0.229	38.88	8.65	47.53	100.40	52.87	Peak
3	0.373	38.93	3.76	42.69	96.17	53.48	Peak
4	1.236	32.68	-5.04	27.64	65.59	37.95	Peak
5	16.839	33.37	-7.56	25.81	69.54	43.73	Peak
6	29.216	41.79	-7.20	34.59	69.54	34.95	Peak

Project No.: 2503S14680E-RF
Tester: Roinin Fu
Condition: RBW:10 kHz VBW:30 kHz SWT:0.1 sec
Polarization: Perpendicular
Note: Transmitting



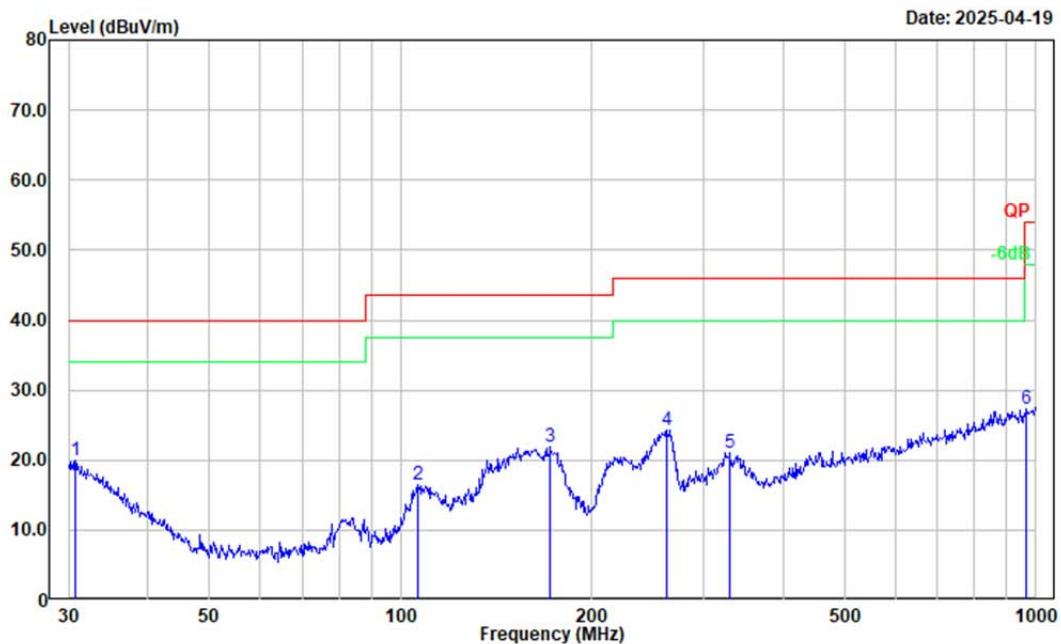
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	0.186	39.81	10.63	50.44	102.20	51.76	Peak
2	0.363	38.67	3.98	42.65	96.40	53.75	Peak
3	0.471	38.62	1.61	40.23	94.14	53.91	Peak
4	2.422	33.35	-7.97	25.38	69.54	44.16	Peak
5	14.907	32.80	-7.60	25.20	69.54	44.34	Peak
6	29.216	40.23	-7.20	33.03	69.54	36.51	Peak

Project No.: 2503S14680E-RF
Tester: Roinin Fu
Condition: RBW:10 kHz VBW:30 kHz SWT:0.1 sec
Polarization: Ground-parallel
Note: Transmitting



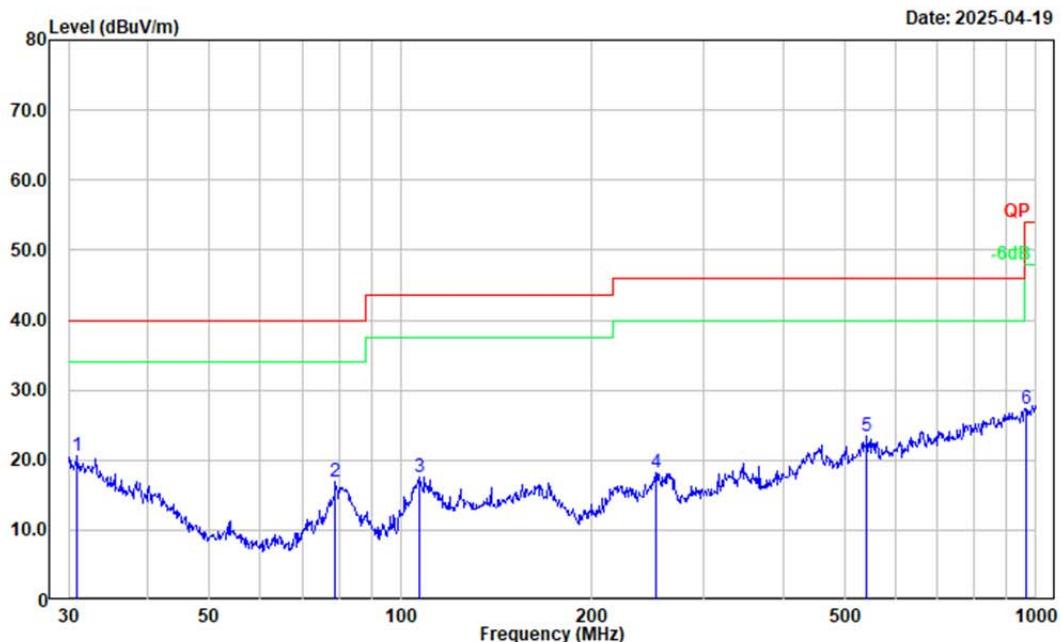
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	0.170	39.49	11.38	50.87	102.98	52.11	Peak
2	0.377	38.55	3.67	42.22	96.07	53.85	Peak
3	0.928	35.14	-3.59	31.55	68.13	36.58	Peak
4	3.820	32.68	-8.76	23.92	69.54	45.62	Peak
5	12.060	32.15	-7.87	24.28	69.54	45.26	Peak
6	28.302	40.24	-7.34	32.90	69.54	36.64	Peak

Project No.: 2503S14680E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Transmitting



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	30.745	24.18	-4.27	19.91	40.00	20.09	Peak
2	106.385	29.39	-12.88	16.51	43.50	26.99	Peak
3	171.995	34.72	-12.83	21.89	43.50	21.61	Peak
4	262.896	35.66	-11.43	24.23	46.00	21.77	Peak
5	330.195	30.96	-9.91	21.05	46.00	24.95	Peak
6	965.542	26.47	0.90	27.37	54.00	26.63	Peak

Project No.: 2503S14680E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: vertical
Note: Transmitting



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	30.962	24.98	-4.41	20.57	40.00	19.43	Peak
2	78.965	34.09	-17.15	16.94	40.00	23.06	Peak
3	106.759	30.35	-12.80	17.55	43.50	25.95	Peak
4	252.063	31.00	-12.83	18.17	46.00	27.83	Peak
5	541.373	28.80	-5.46	23.34	46.00	22.66	Peak
6	965.542	26.47	0.90	27.37	54.00	26.63	Peak

4.2.2 1 GHz – 25 GHz

Sample Number	31B1-2	Test Date:	2025/4/18
Test Site:	966-1	Test Mode:	Transmitting
Tester:	Mack Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	24.4	Relative Humidity: (%)	61	ATM Pressure: (kPa)	100.4

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ETS-Lindgren	Horn Antenna	3115	9912-5985	2023/12/6	2026/12/5
R&S	Spectrum Analyzer	FSV40	101591	2025/3/31	2026/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2025/1/10	2026/1/9
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2025/1/10	2026/1/9
A.H	Preamplifier	PAM-0118P	628	2025/2/21	2026/2/20
Audix	Test Software	E3	191218 (V9)	N/A	N/A
PASTERNACK	Horn Antenna	PE9852/2F-20	112002	2024/2/4	2027/2/3
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2025/1/6	2026/1/5
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2025/1/6	2026/1/5
JD	Multiplex Switch Test Control Set	DT7220SCU	DQ77925	2024/8/5	2025/8/4
JD	Filter Switch Unit	DT7220FSU	DQ77928	2024/8/5	2025/8/4

* *Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

802.11b Mode

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Remark					
Low Channel: 2412 MHz							
4824.000	50.40	PK	H	-5.26	45.14	74.00	28.86
4824.000	44.11	AV	H	-5.26	38.85	54.00	15.15
4824.000	49.35	PK	V	-5.26	44.09	74.00	29.91
4824.000	43.39	AV	V	-5.26	38.13	54.00	15.87
7236.000	53.42	PK	H	-1.68	51.74	74.00	22.26
7236.000	47.17	AV	H	-1.68	45.49	54.00	8.51
7236.000	51.71	PK	V	-1.68	50.03	74.00	23.97
7236.000	45.39	AV	V	-1.68	43.71	54.00	10.29
Middle Channel: 2437 MHz							
4874.000	50.33	PK	H	-5.26	45.07	74.00	28.93
4874.000	44.21	AV	H	-5.26	38.95	54.00	15.05
4874.000	49.87	PK	V	-5.26	44.61	74.00	29.39
4874.000	43.35	AV	V	-5.26	38.09	54.00	15.91
7311.000	54.62	PK	H	-1.32	53.30	74.00	20.70
7311.000	48.25	AV	H	-1.32	46.93	54.00	7.07
7311.000	51.59	PK	V	-1.32	50.27	74.00	23.73
7311.000	45.08	AV	V	-1.32	43.76	54.00	10.24
High Channel: 2462 MHz							
4924.000	51.06	PK	H	-5.36	45.70	74.00	28.30
4924.000	45.27	AV	H	-5.36	39.91	54.00	14.09
4924.000	50.55	PK	V	-5.36	45.19	74.00	28.81
4924.000	44.19	AV	V	-5.36	38.83	54.00	15.17
7386.000	55.50	PK	H	-1.02	54.48	74.00	19.52
7386.000	49.11	AV	H	-1.02	48.09	54.00	5.91
7386.000	50.93	PK	V	-1.02	49.91	74.00	24.09
7386.000	44.27	AV	V	-1.02	43.25	54.00	10.75

802.11g Mode

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Remark					
Low Channel: 2412 MHz							
4824.000	46.10	PK	H	-5.26	40.84	74.00	33.16
4824.000	33.27	AV	H	-5.26	28.01	54.00	25.99
4824.000	45.89	PK	V	-5.26	40.63	74.00	33.37
4824.000	32.45	AV	V	-5.26	27.19	54.00	26.81
7236.000	51.54	PK	H	-1.68	49.86	74.00	24.14
7236.000	38.67	AV	H	-1.68	36.99	54.00	17.01
7236.000	50.33	PK	V	-1.68	48.65	74.00	25.35
7236.000	37.15	AV	V	-1.68	35.47	54.00	18.53
Middle Channel: 2437 MHz							
4874.000	46.17	PK	H	-5.26	40.91	74.00	33.09
4874.000	33.24	AV	H	-5.26	27.98	54.00	26.02
4874.000	45.58	PK	V	-5.26	40.32	74.00	33.68
4874.000	32.41	AV	V	-5.26	27.15	54.00	26.85
7311.000	52.91	PK	H	-1.32	51.59	74.00	22.41
7311.000	39.63	AV	H	-1.32	38.31	54.00	15.69
7311.000	46.03	PK	V	-1.32	44.71	74.00	29.29
7311.000	33.36	AV	V	-1.32	32.04	54.00	21.96
High Channel: 2462 MHz							
4924.000	46.11	PK	H	-5.36	40.75	74.00	33.25
4924.000	33.29	AV	H	-5.36	27.93	54.00	26.07
4924.000	47.02	PK	V	-5.36	41.66	74.00	32.34
4924.000	34.70	AV	V	-5.36	29.34	54.00	24.66
7386.000	53.72	PK	H	-1.02	52.70	74.00	21.30
7386.000	40.32	AV	H	-1.02	39.30	54.00	14.70
7386.000	49.68	PK	V	-1.02	48.66	74.00	25.34
7386.000	36.63	AV	V	-1.02	35.61	54.00	18.39

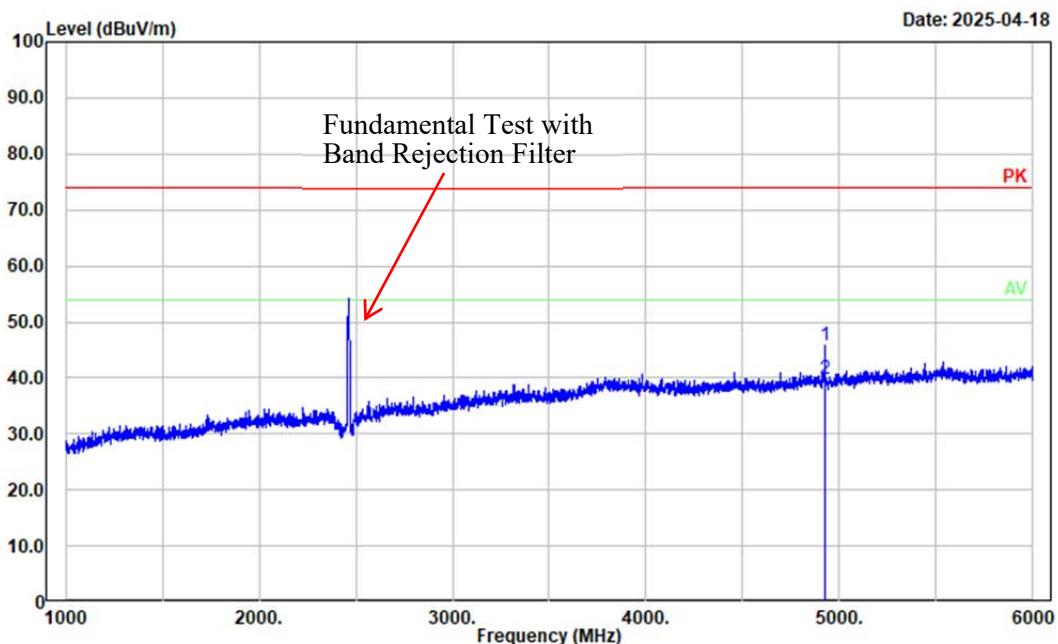
802.11n ht20 Mode:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)
	Reading (dB μ V)	Remark					
Low Channel: 2412 MHz							
4824.000	46.05	PK	H	-5.26	40.79	74.00	33.21
4824.000	33.50	AV	H	-5.26	28.24	54.00	25.76
4824.000	46.34	PK	V	-5.26	41.08	74.00	32.92
4824.000	33.17	AV	V	-5.26	27.91	54.00	26.09
7236.000	53.14	PK	H	-1.68	51.46	74.00	22.54
7236.000	40.69	AV	H	-1.68	39.01	54.00	14.99
7236.000	48.63	PK	V	-1.68	46.95	74.00	27.05
7236.000	35.22	AV	V	-1.68	33.54	54.00	20.46
Middle Channel: 2437 MHz							
4874.000	45.98	PK	H	-5.26	40.72	74.00	33.28
4874.000	32.41	AV	H	-5.26	27.15	54.00	26.85
4874.000	46.11	PK	V	-5.26	40.85	74.00	33.15
4874.000	33.20	AV	V	-5.26	27.94	54.00	26.06
7311.000	53.92	PK	H	-1.32	52.60	74.00	21.40
7311.000	40.17	AV	H	-1.32	38.85	54.00	15.15
7311.000	49.23	PK	V	-1.32	47.91	74.00	26.09
7311.000	36.97	AV	V	-1.32	35.65	54.00	18.35
High Channel: 2462 MHz							
4924.000	47.64	PK	H	-5.36	42.28	74.00	31.72
4924.000	34.68	AV	H	-5.36	29.32	54.00	24.68
4924.000	46.88	PK	V	-5.36	41.52	74.00	32.48
4924.000	33.49	AV	V	-5.36	28.13	54.00	25.87
7386.000	53.01	PK	H	-1.02	51.99	74.00	22.01
7386.000	40.58	AV	H	-1.02	39.56	54.00	14.44
7386.000	49.20	PK	V	-1.02	48.18	74.00	25.82
7386.000	36.84	AV	V	-1.02	35.82	54.00	18.18

Worst radiation spurious emissions margin test plots for each mode

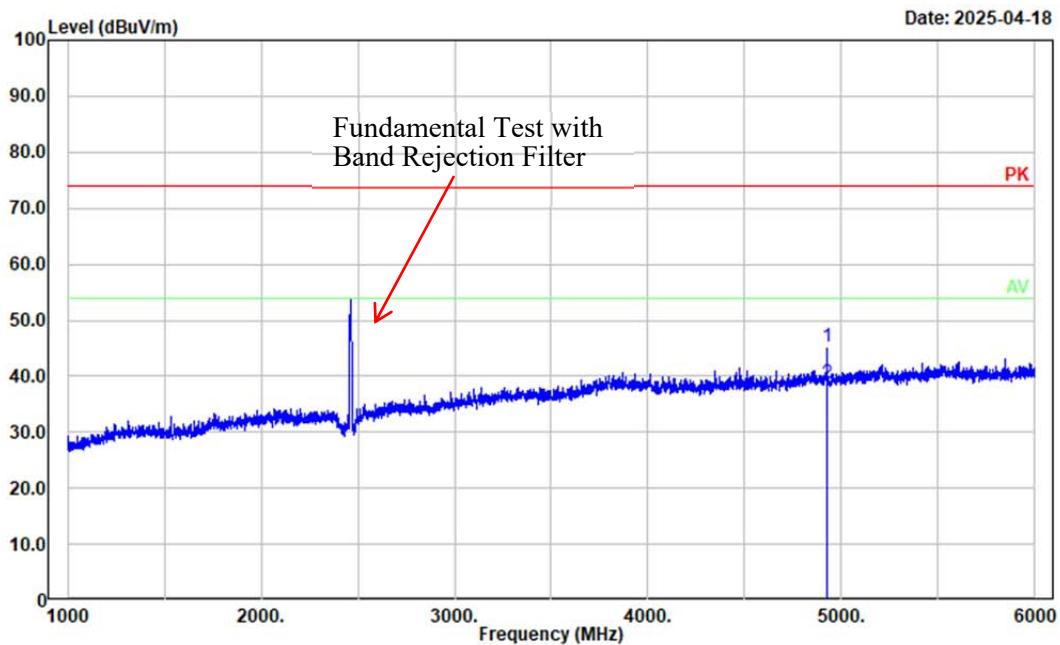
Note: for 18 – 25 GHz range, test was performed on the maximum power mode.

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: b High Channel 2462MHz



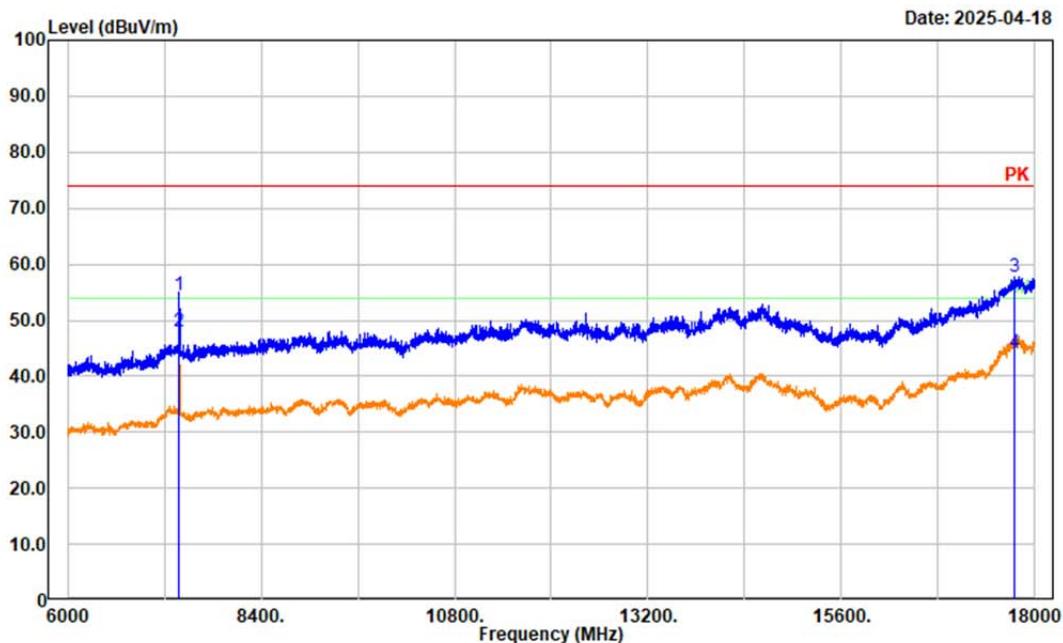
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	4924.000	51.06	-5.36	45.70	74.00	28.30	Peak
2	4924.000	45.27	-5.36	39.91	54.00	14.09	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: b High Channel 2462MHz



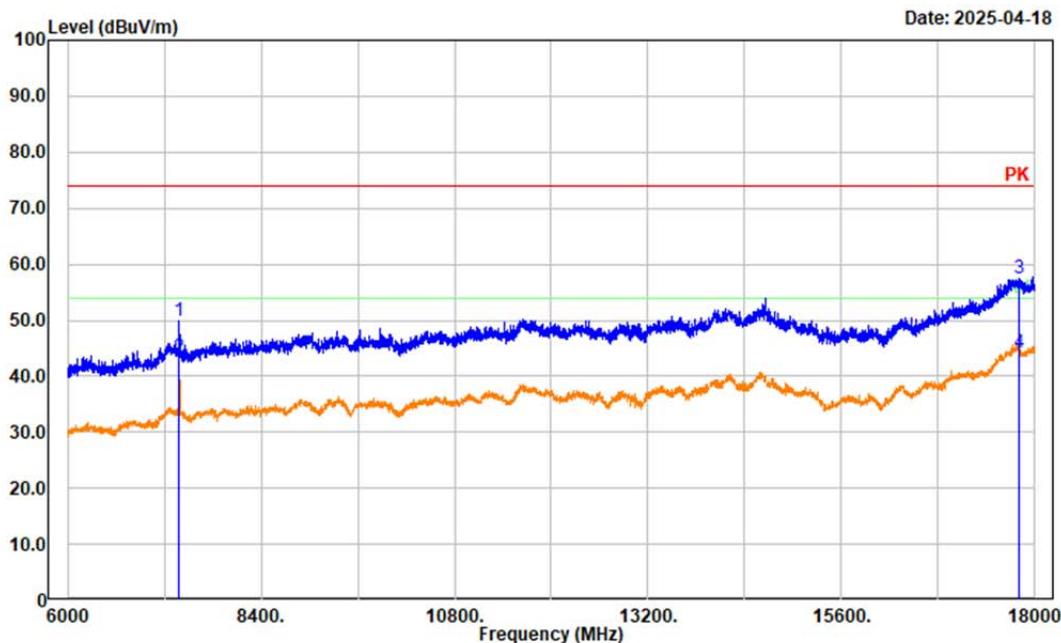
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	4924.000	50.55	-5.36	45.19	74.00	28.81	Peak
2	4924.000	44.19	-5.36	38.83	54.00	15.17	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: horizontal
Note: b High Channel 2462MHz



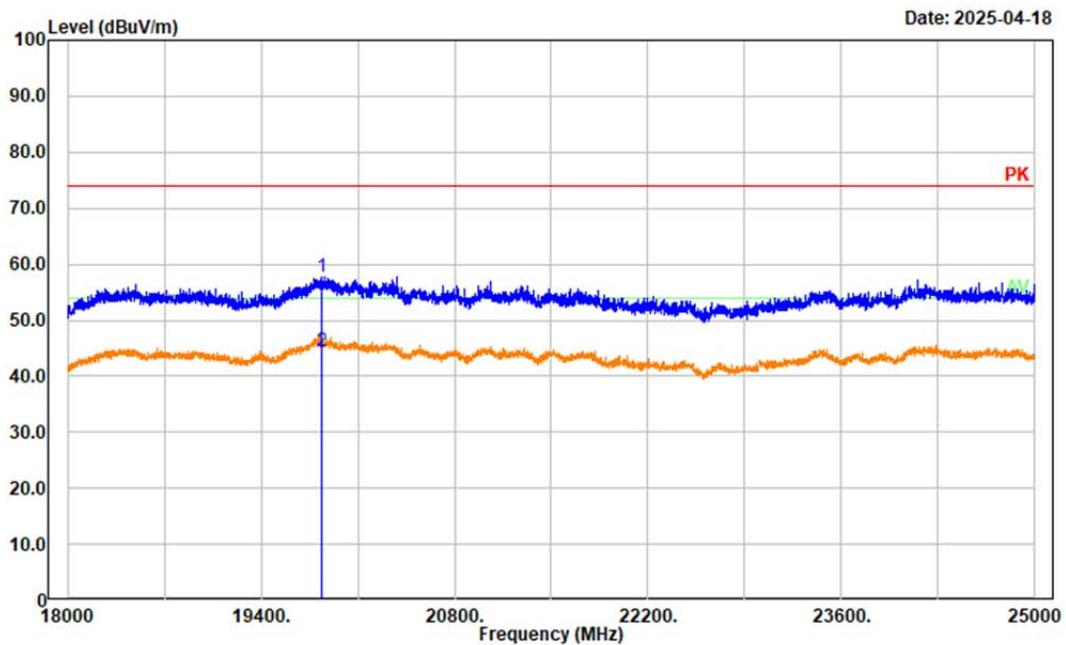
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	7386.000	55.50	-1.02	54.48	74.00	19.52	Peak
2	7386.000	49.11	-1.02	48.09	54.00	5.91	Average
3	17748.000	44.49	13.30	57.79	74.00	16.21	Peak
4	17748.000	30.80	13.30	44.10	54.00	9.90	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: vertical
Note: b High Channel 2462MHz



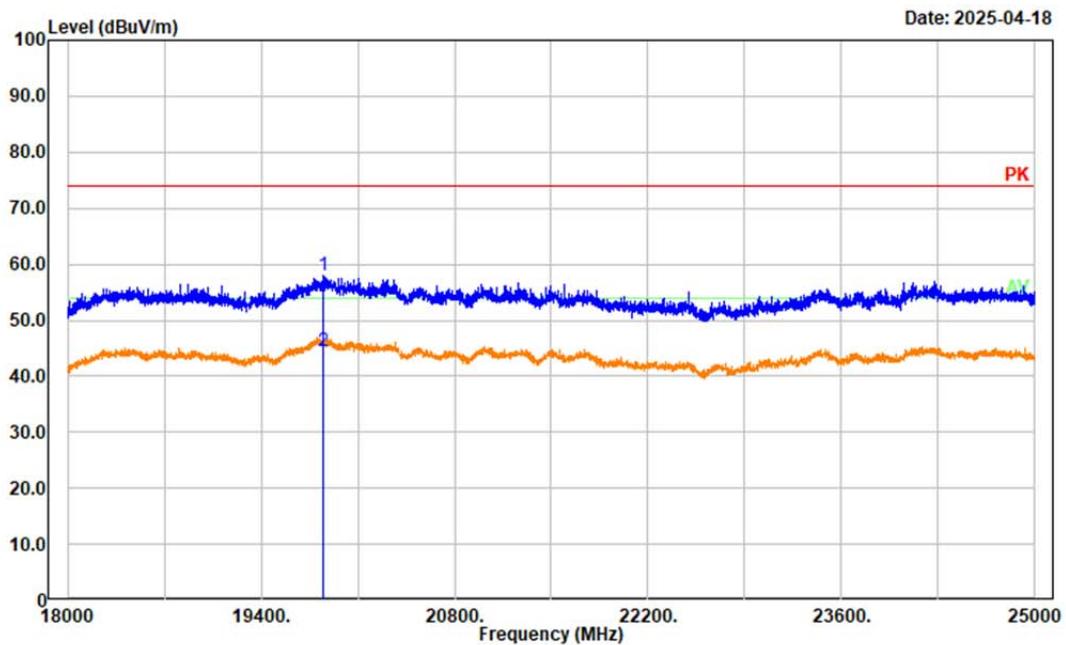
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	7386.000	50.93	-1.02	49.91	74.00	24.09	Peak
2	7386.000	44.27	-1.02	43.25	54.00	10.75	Average
3	17810.400	43.98	13.55	57.53	74.00	16.47	Peak
4	17810.400	30.55	13.55	44.10	54.00	9.90	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Horizontal
Note: b High Channel 2462MHz



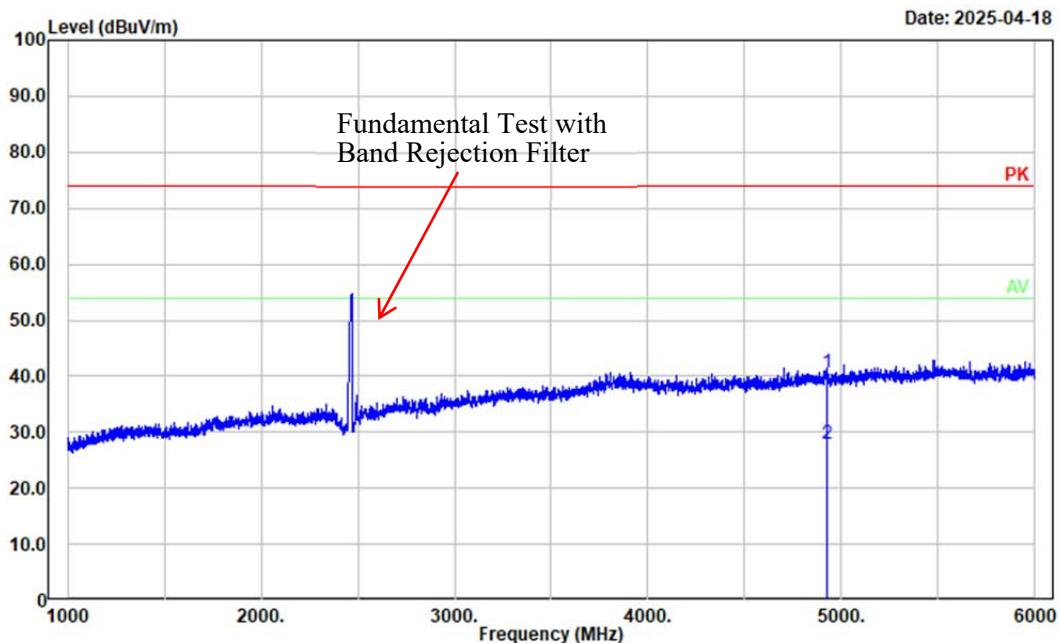
No.	Frequency (MHz)	Reading (dB _u V)	Factor (dB/m)	Result (dB _u V/m)	Limit (dB _u V/m)	Margin (dB)	Remark
1	19835.400	49.87	7.96	57.83	74.00	16.17	Peak
2	19835.400	36.39	7.96	44.35	54.00	9.65	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Vertical
Note: b High Channel 2462MHz



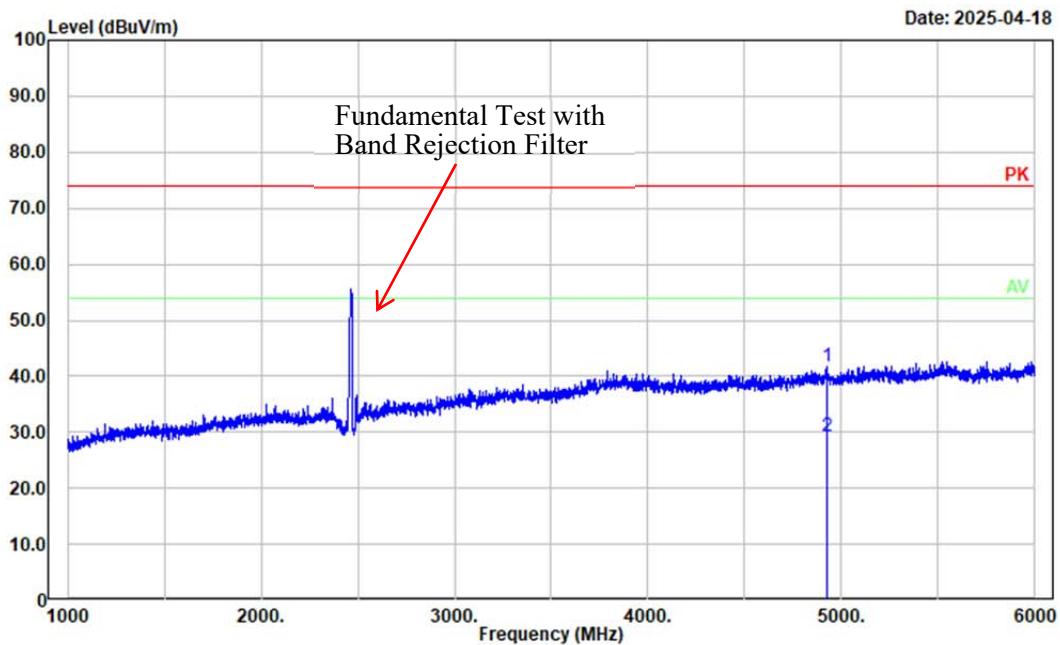
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	19853.600	49.93	7.96	57.89	74.00	16.11	Peak
2	19853.600	36.46	7.96	44.42	54.00	9.58	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: g High Channel 2462MHz



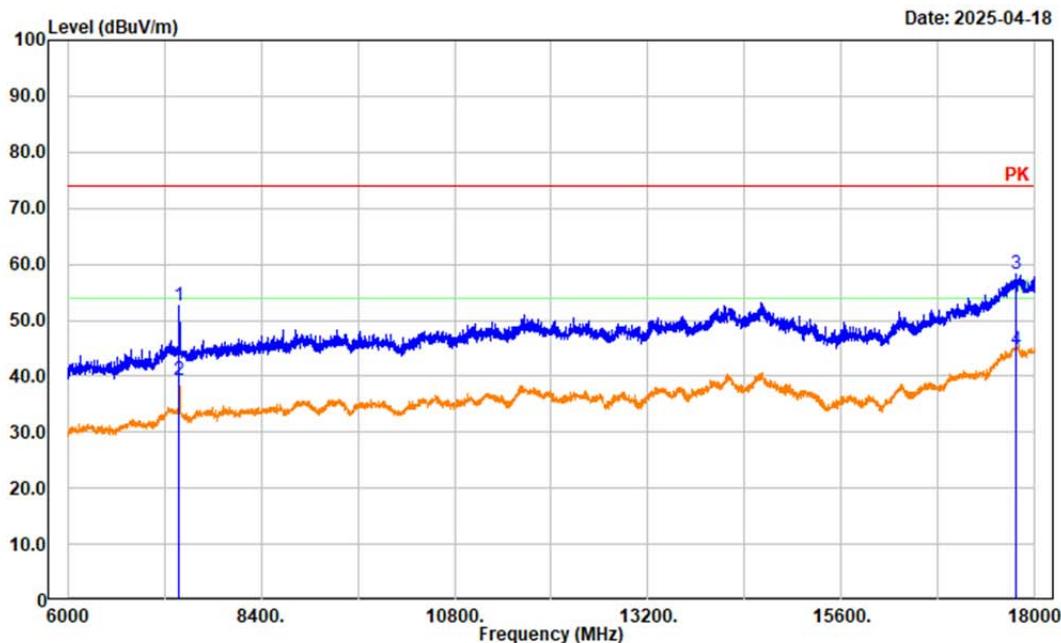
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	4924.000	46.11	-5.36	40.75	74.00	33.25	Peak
2	4924.000	33.29	-5.36	27.93	54.00	26.07	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: g High Channel 2462MHz



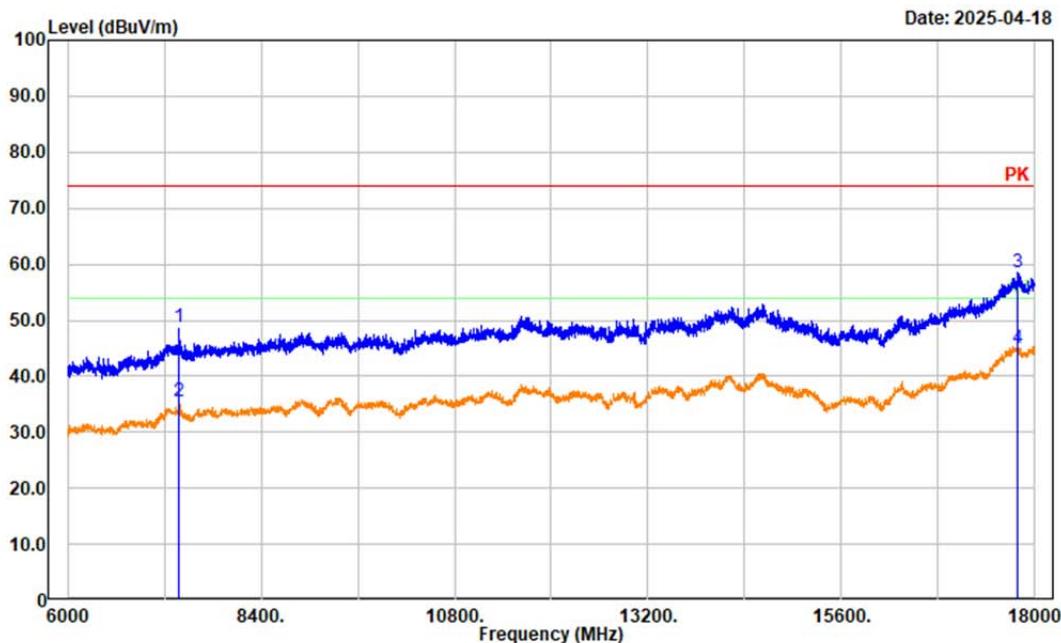
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	4924.000	47.02	-5.36	41.66	74.00	32.34	Peak
2	4924.000	34.70	-5.36	29.34	54.00	24.66	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: horizontal
Note: g High Channel 2462MHz



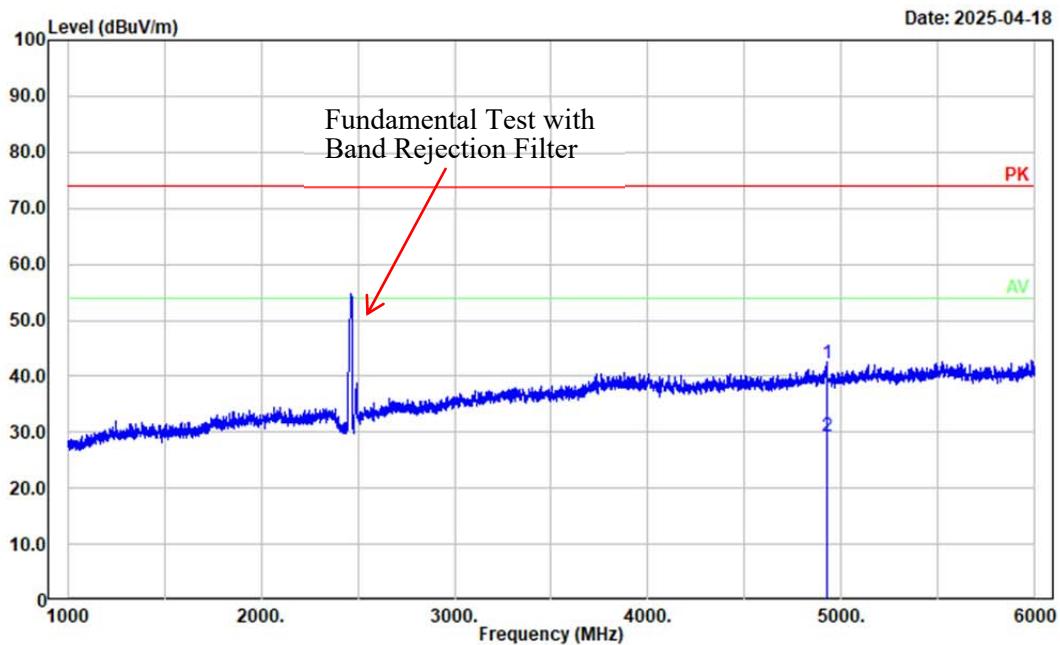
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	7386.000	53.72	-1.02	52.70	74.00	21.30	Peak
2	7386.000	40.32	-1.02	39.30	54.00	14.70	Average
3	17767.200	44.93	13.39	58.32	74.00	15.68	Peak
4	17767.200	31.39	13.39	44.78	54.00	9.22	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: vertical
Note: g High Channel 2462MHz



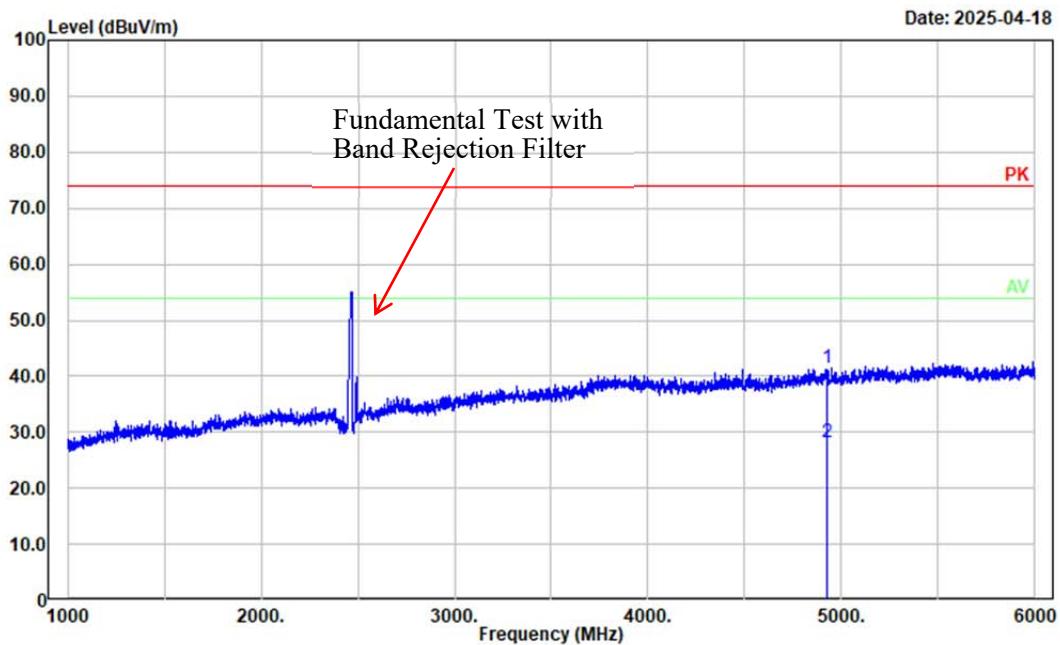
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	7386.000	49.68	-1.02	48.66	74.00	25.34	Peak
2	7386.000	36.63	-1.02	35.61	54.00	18.39	Average
3	17779.200	45.01	13.45	58.46	74.00	15.54	Peak
4	17779.200	31.44	13.45	44.89	54.00	9.11	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: n20 High Channel 2462MHz



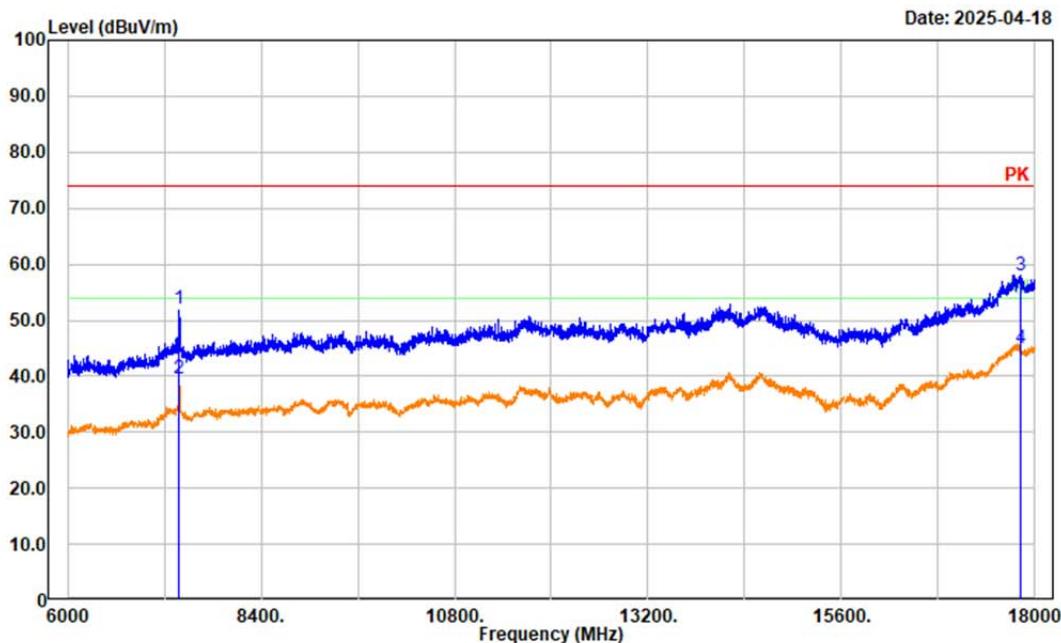
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	4924.000	47.64	-5.36	42.28	74.00	31.72	Peak
2	4924.000	34.68	-5.36	29.32	54.00	24.68	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: n20 High Channel 2462MHz



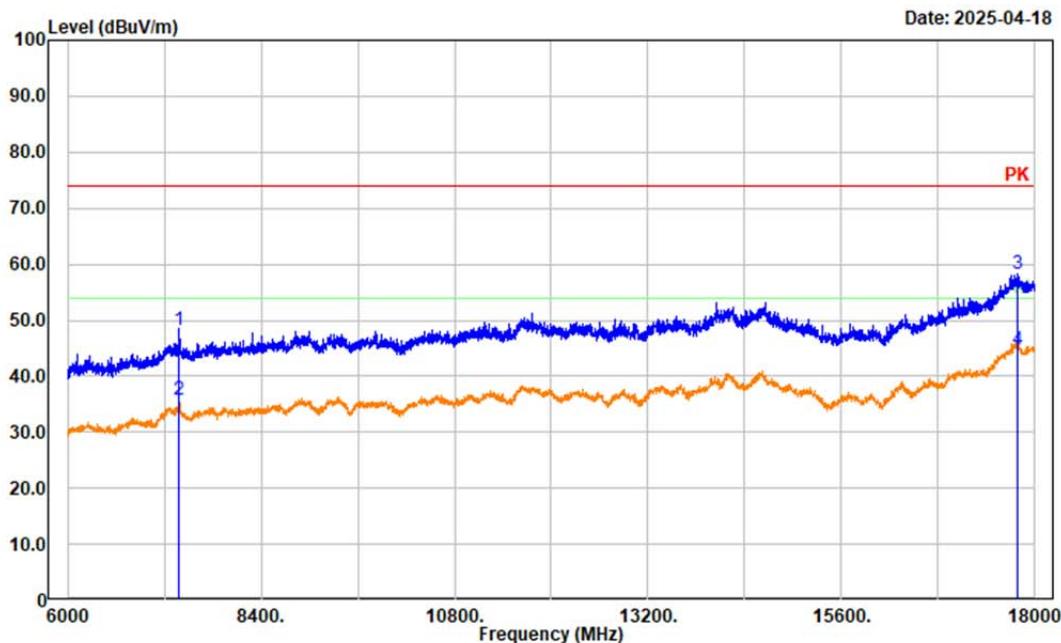
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	4924.000	46.88	-5.36	41.52	74.00	32.48	Peak
2	4924.000	33.49	-5.36	28.13	54.00	25.87	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: horizontal
Note: n20 High Channel 2462MHz



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	7386.000	53.01	-1.02	51.99	74.00	22.01	Peak
2	7386.000	40.58	-1.02	39.56	54.00	14.44	Average
3	17824.800	44.46	13.54	58.00	74.00	16.00	Peak
4	17824.800	31.35	13.54	44.89	54.00	9.11	Average

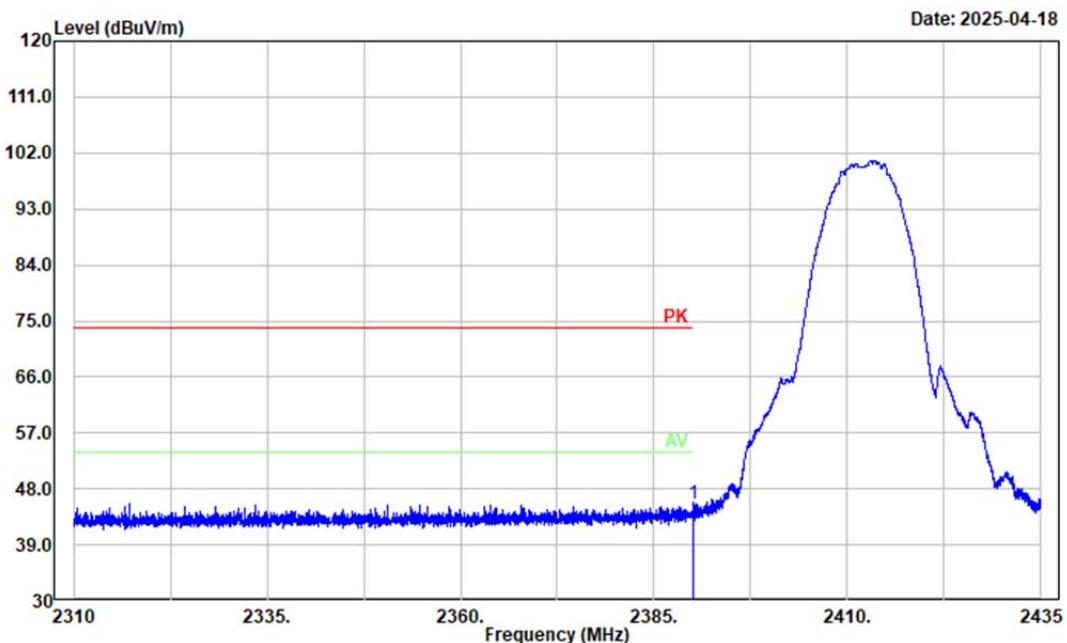
Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: vertical
Note: n20 High Channel 2462MHz



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	7386.000	49.20	-1.02	48.18	74.00	25.82	Peak
2	7386.000	36.84	-1.02	35.82	54.00	18.18	Average
3	17781.600	44.71	13.46	58.17	74.00	15.83	Peak
4	17781.600	31.23	13.46	44.69	54.00	9.31	Average

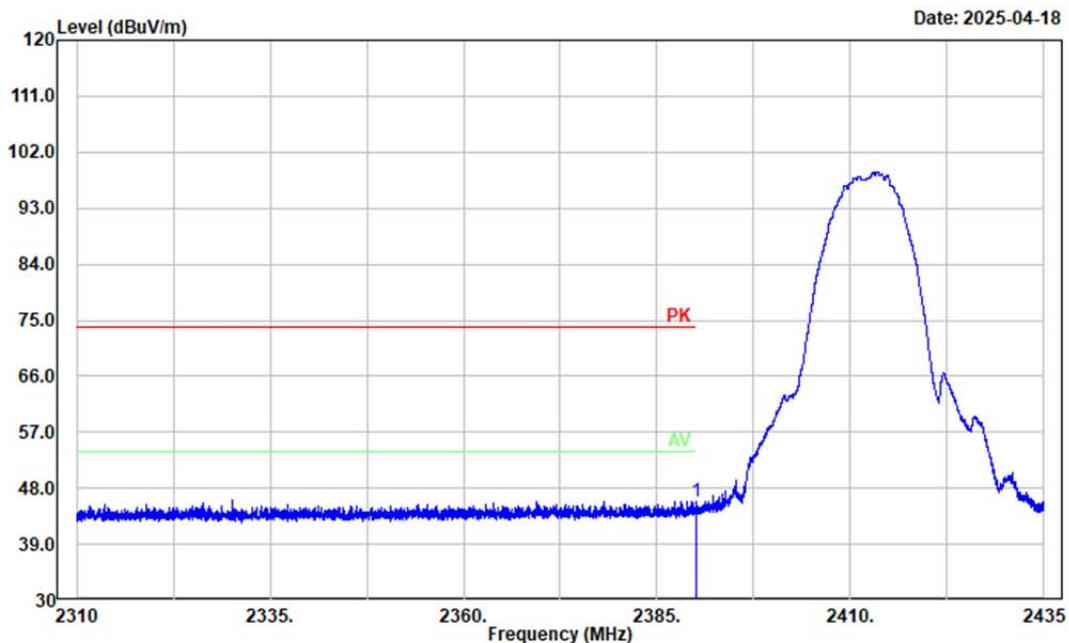
Band edge test plots

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: Horizontal
Note: b Low Channel 2412MHz



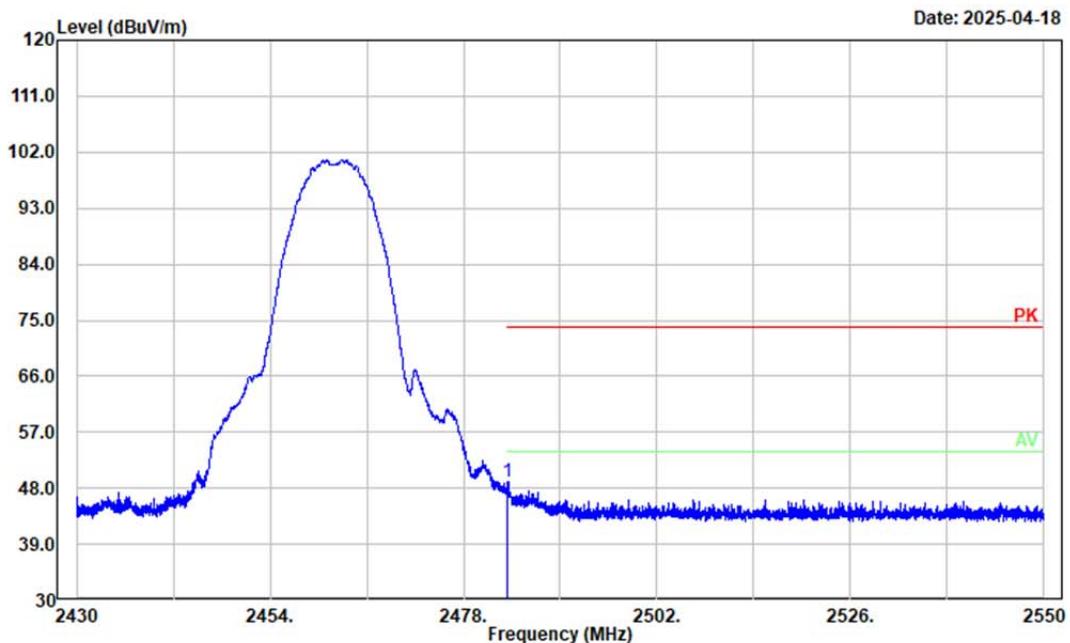
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2390.000	55.97	-10.30	45.67	74.00	28.33	Peak

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: Vertical
Note: b Low Channel 2412MHz



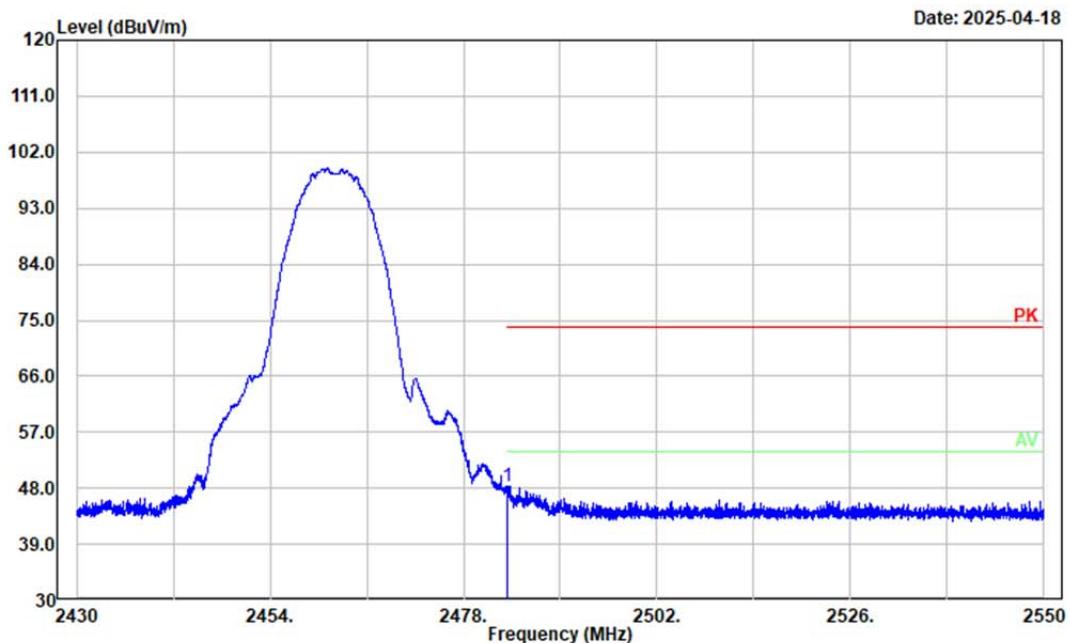
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2390.000	56.20	-10.30	45.90	74.00	28.10	Peak

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: Horizontal
Note: b High Channel 2462MHz



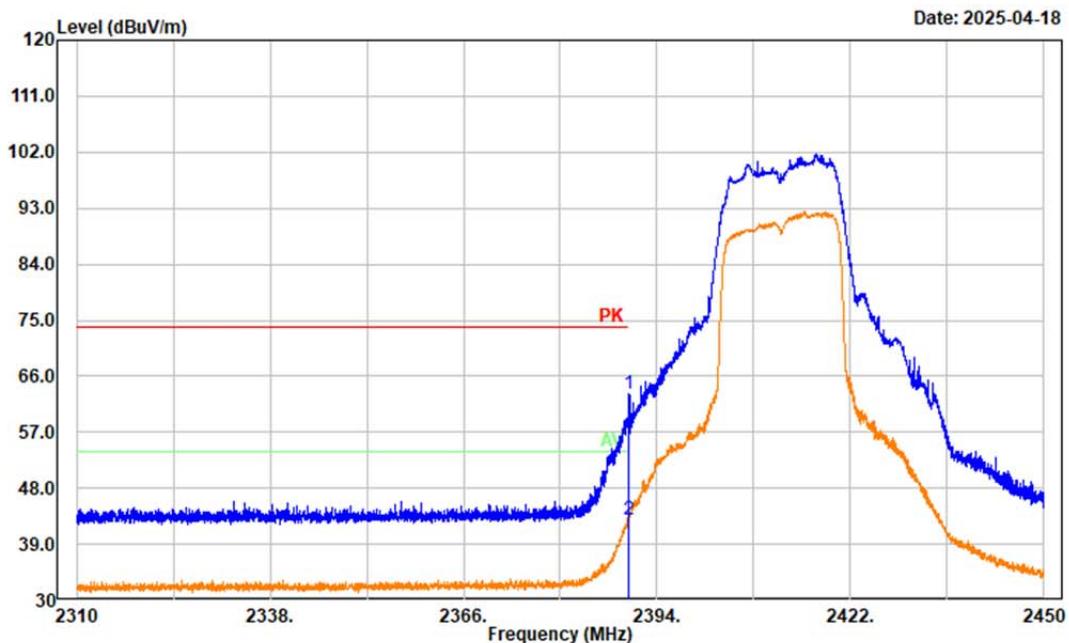
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2483.500	59.44	-10.40	49.04	74.00	24.96	Peak

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: Vertical
Note: b High Channel 2462MHz



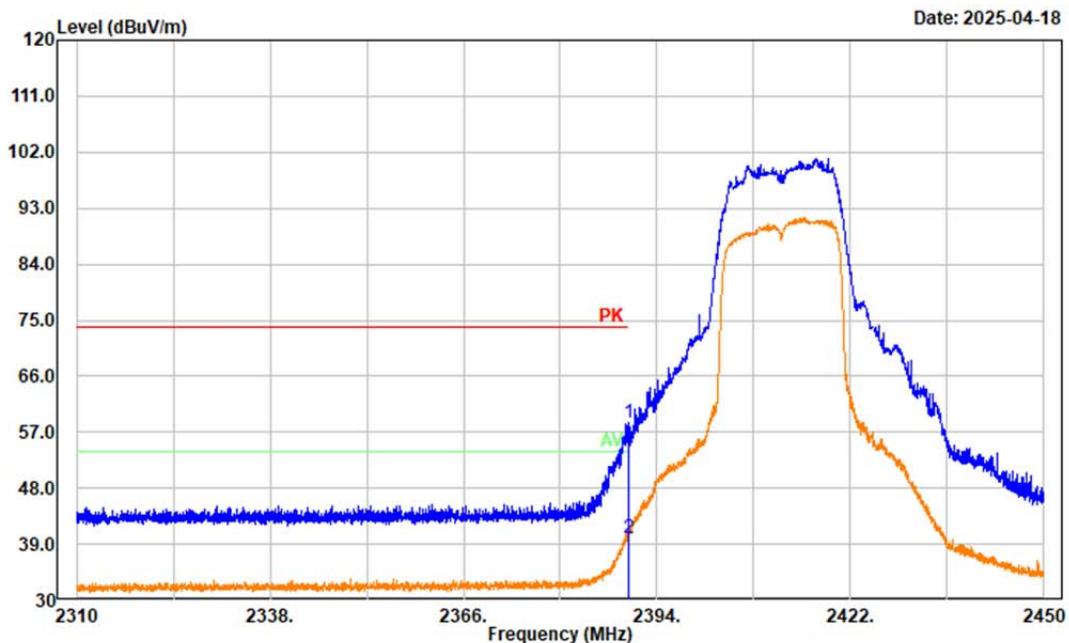
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2483.500	58.67	-10.40	48.27	74.00	25.73	Peak

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Horizontal
Note: g Low Channel 2412MHz



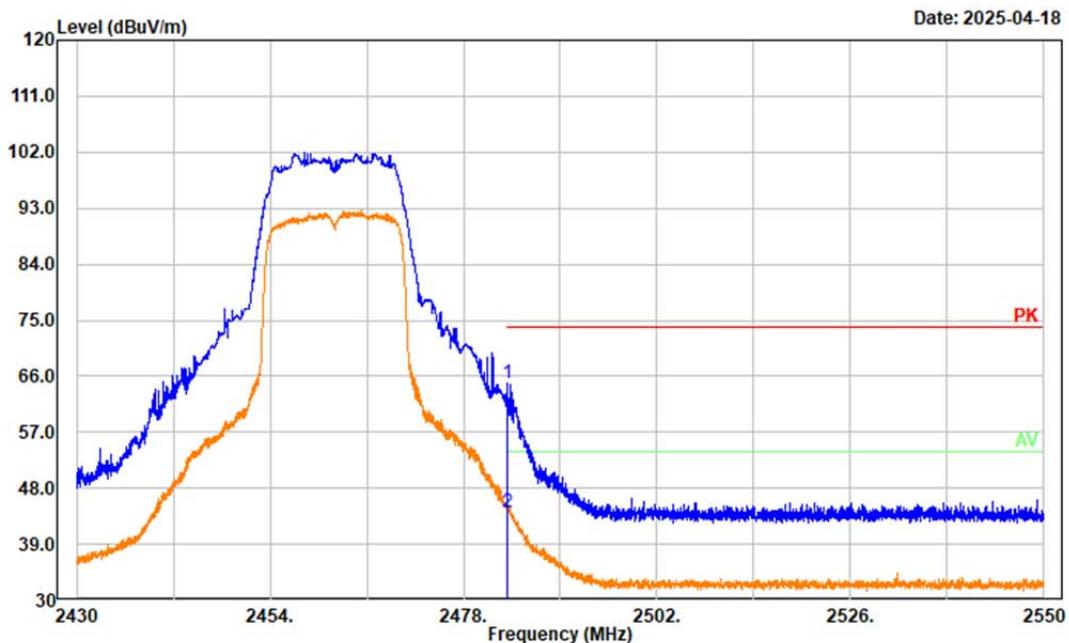
No.	Frequency (MHz)	Reading (dB _u V)	Factor (dB/m)	Result (dB _u V/m)	Limit (dB _u V/m)	Margin (dB)	Remark
1	2390.000	73.47	-10.30	63.17	74.00	10.83	Peak
2	2390.000	53.19	-10.30	42.89	54.00	11.11	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Vertical
Note: g Low Channel 2412MHz



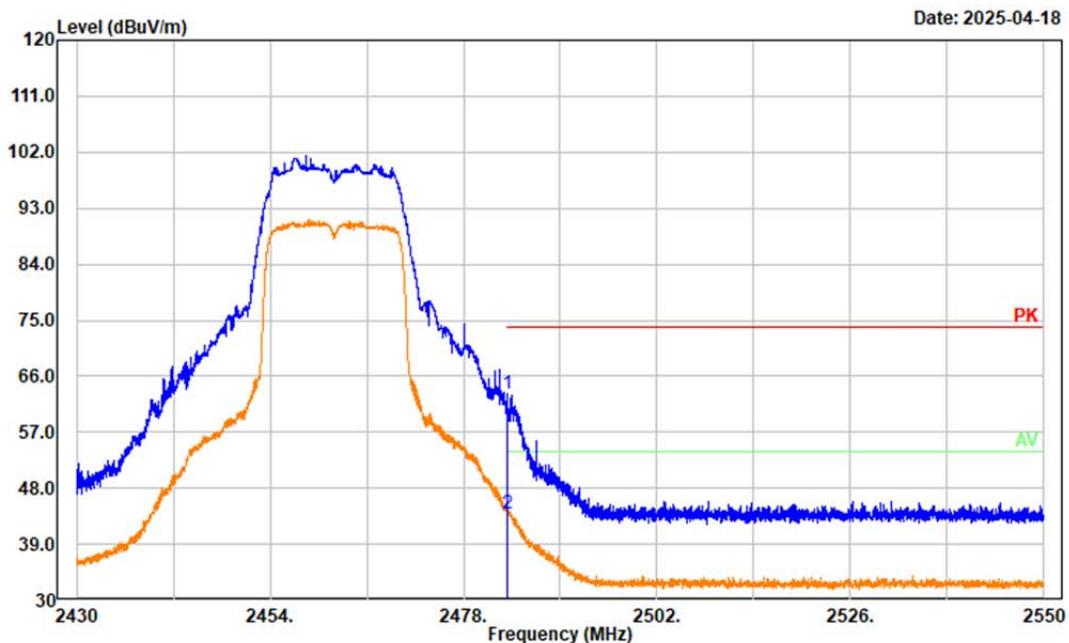
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2390.000	68.77	-10.30	58.47	74.00	15.53	Peak
2	2390.000	50.30	-10.30	40.00	54.00	14.00	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Horizontal
Note: g High Channel 2462MHz



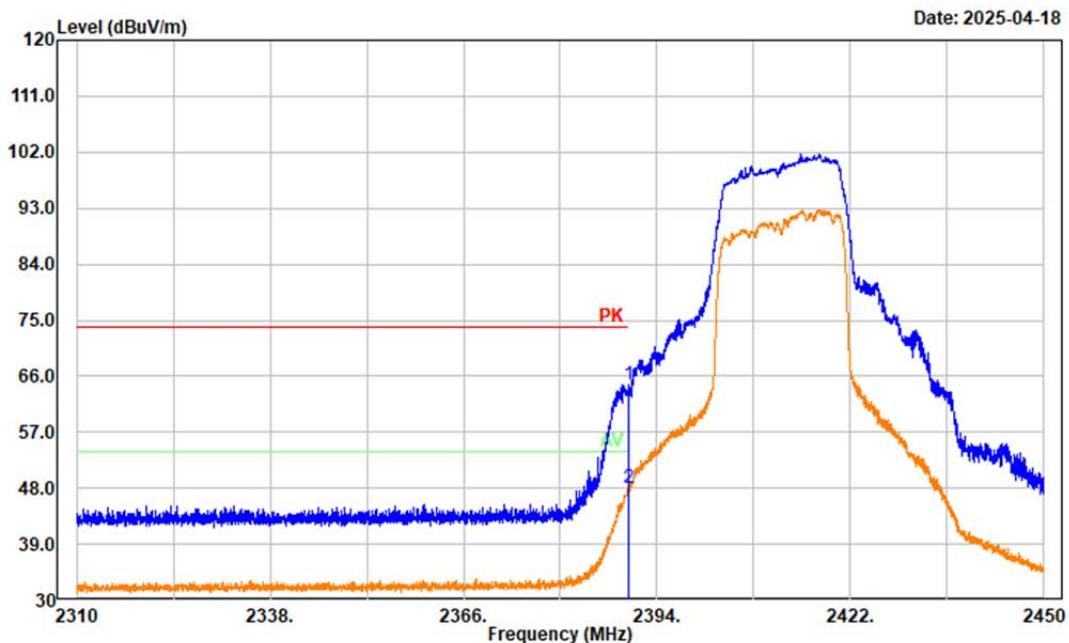
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2483.500	75.17	-10.40	64.77	74.00	9.23	Peak
2	2483.500	54.50	-10.40	44.10	54.00	9.90	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Vertical
Note: g High Channel 2462MHz



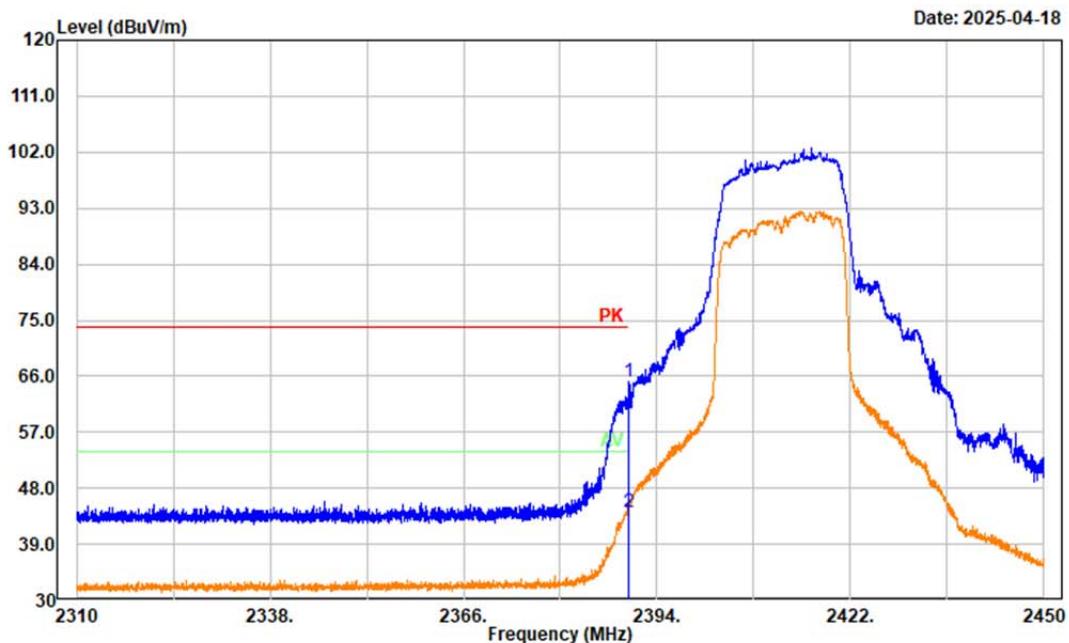
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2483.500	73.46	-10.40	63.06	74.00	10.94	Peak
2	2483.500	54.40	-10.40	44.00	54.00	10.00	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Horizontal
Note: n20 Low Channel 2412MHz



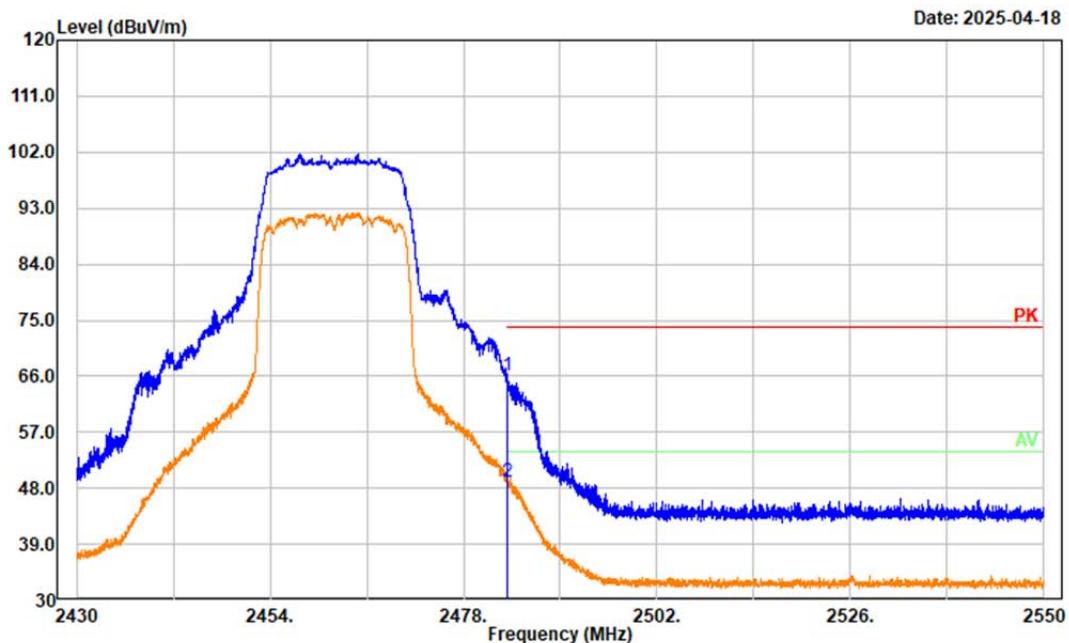
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2390.000	74.96	-10.30	64.66	74.00	9.34	Peak
2	2390.000	58.31	-10.30	48.01	54.00	5.99	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Vertical
Note: n20 Low Channel 2412MHz



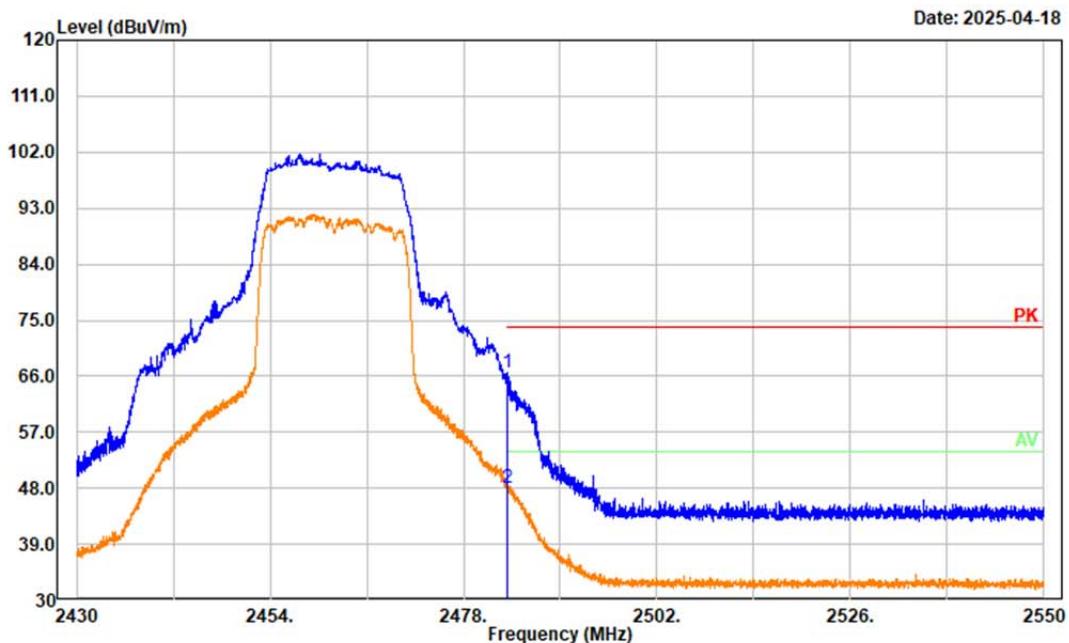
No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2390.000	75.42	-10.30	65.12	74.00	8.88	Peak
2	2390.000	54.53	-10.30	44.23	54.00	9.77	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Horizontal
Note: n20 High Channel 2462MHz



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2483.500	76.54	-10.40	66.14	74.00	7.86	Peak
2	2483.500	59.40	-10.40	49.00	54.00	5.00	Average

Project No.: 2503S14680E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Vertical
Note: n20 High Channel 2462MHz



No.	Frequency (MHz)	Reading (dB μ V)	Factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Remark
1	2483.500	76.90	-10.40	66.50	74.00	7.50	Peak
2	2483.500	58.50	-10.40	48.10	54.00	5.90	Average

4.3 RF Conducted Data

Please refer to Annex "2503S14680E-RF-00C_Appendix A" for detail test data.

5. EUT PHOTOGRAPHS

Please refer to the attachment 2503S14680E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2503S14680E-RF-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2503S14680E-RF-00C-TSP TEST SETUP PHOTOGRAPHS.

===== END OF REPORT =====