中认信通
CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 6356.01

TEST REPORT

Applicant: **SUZHOU ZWO CO., LTD.**

Address: Building 2, Peninsula Life Plaza, Moon bay road 6 SuZhou Industrial Park, JiangSu, China

FCC ID: **2A7R3-ASIMOUNT5**

Product Name: **ASI Mount**

Standard(s): **47 CFR Part 15, Subpart C(15.247)**
ANSI C63.10-2013
KDB 558074 D01 15.247 Meas Guidance v05r02

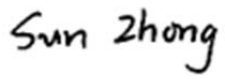
The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: **CR240314516-RF-00A**

Date Of Issue: **2024/4/15**

Reviewed By: **Calvin Chen**
Title: RF Engineer

Approved By: **Sun Zhong**
Title: Manager



Test Laboratory: **China Certification ICT Co., Ltd (Dongguan)**
No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China

Tel: +86-769-82016888

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.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR240314516-RF-00A	Original Report	2024/4/15

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	ASI Mount
Trade Name:	ZWO
EUT Model:	AM5
Operation Frequency:	2402-2480 MHz
Maximum Peak Output Power (Conducted):	1.94dBm
Modulation Type:	GFSK
Rated Input Voltage:	DC 12V from adapter
Serial Number:	2IZQ-1 (for RF Conducted Test) 2IZQ-2 (for Radiated Spurious Emissions Test) 2IZQ-3 (for Conducted Emissions Test)
EUT Received Date:	2024/3/22
EUT Received Status:	Good

Operation Frequency Detail:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2442
1	2404	…	…
…	…	…	…
…	…	…	…
…	…	38	2478
19	2440	39	2480

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

Test Channel	Frequency (MHz)
Lowest	2402
Middle	2440
Highest	2480

Antenna Information Detail▲:

Antenna Type	input impedance (Ohm)	Frequency Range (MHz)	Antenna Gain (dBi)
PCB	50	2400-2500	0.23

The Method of §15.203 Compliance:

☒ 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.

Accessory Information:

Accessory Description	Manufacturer	Model
/	/	/

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:	ESP

The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer▲:

Test Modes	Power Level Setting		
	Lowest Channel	Middle Channel	Highest Channel
1Mbps	**6**	**6**	**7**

1.2.2 Support Equipment List and Details

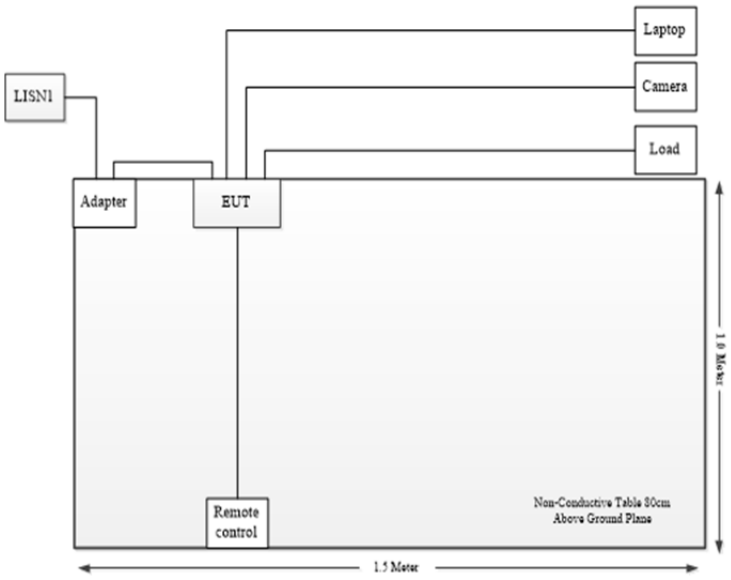
Manufacturer	Description	Model	Serial Number
SUZHOU ZWO	Camera	ASI120MM-S	Unknown
SUZHOU ZWO	Adapter	KPL-060F-VI	Unknown
Lenovo	Laptop	T460S	60PDTEK8
SUZHOU ZWO	Remote Control	Unknown	Unknown
Unknown	Load	Unknown	Unknown

1.2.3 Support Cable List and Details

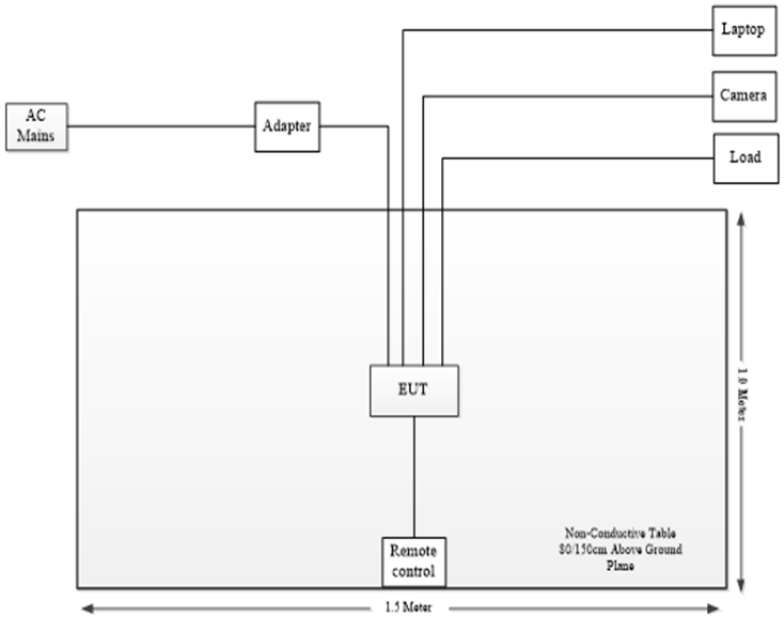
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Power Cable	No	No	1.2	Adapter	LISN
Power Cable	No	Yes	1.2	Adapter	EUT
USB2.0 Cable	No	No	2	EUT	Laptop
Cable	No	No	0.5	EUT	Remote Control
Cable	No	No	2	EUT	Camera
Type-C Cable	No	No	2	EUT	Laptop
Cable	No	No	2	EUT	Load

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℃
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)	6dB Emission 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(d)	Conducted Spurious Emission	Compliant
FCC §15.247(e)	Power Spectral Density	Compliant
C63.10 §11.6	Duty Cycle	Compliant
FCC §1.1307&§2.1093&§15.247 (i)	RF Exposure	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 μH/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.

	Conducted limit (dBμV)	
Frequency of emission (MHz)	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:

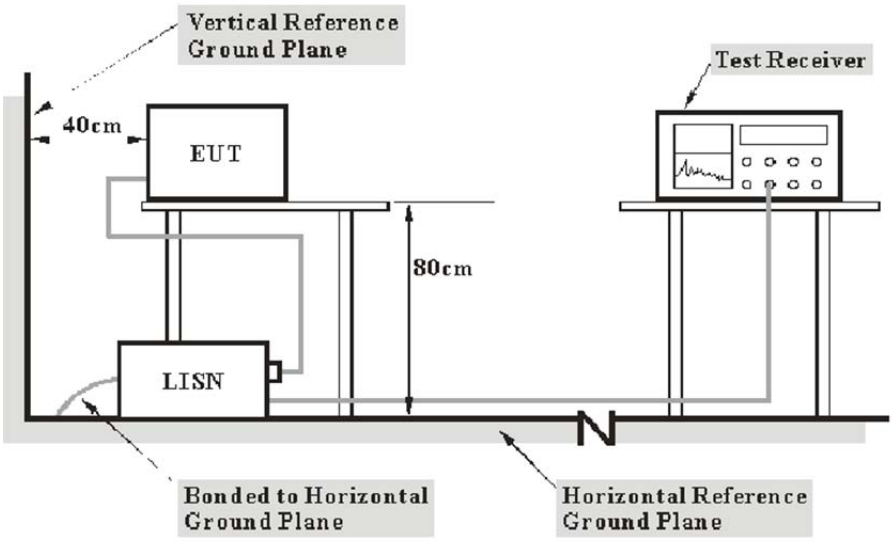
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μV within the frequency band 535-1705 kHz, as measured using a 50 μH/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, obtainig 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



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 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

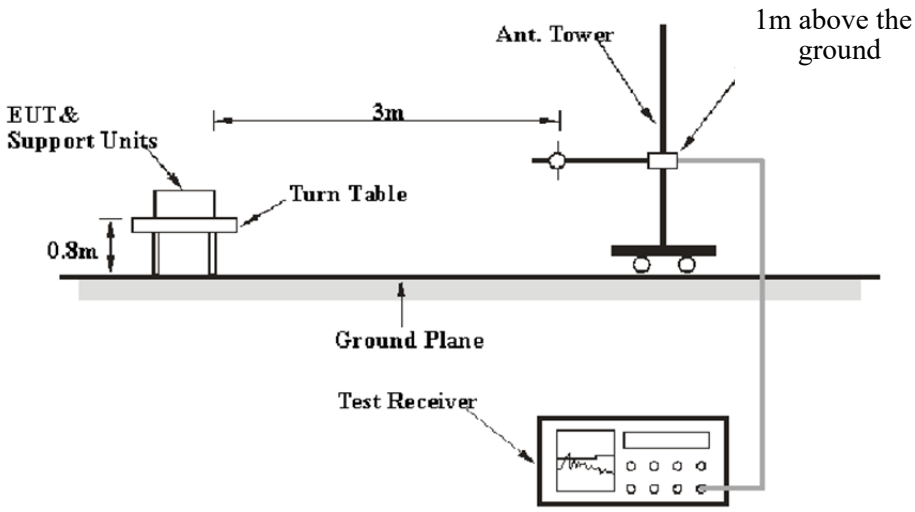
3.2.1 Applicable Standard

FCC §15.247 (d);

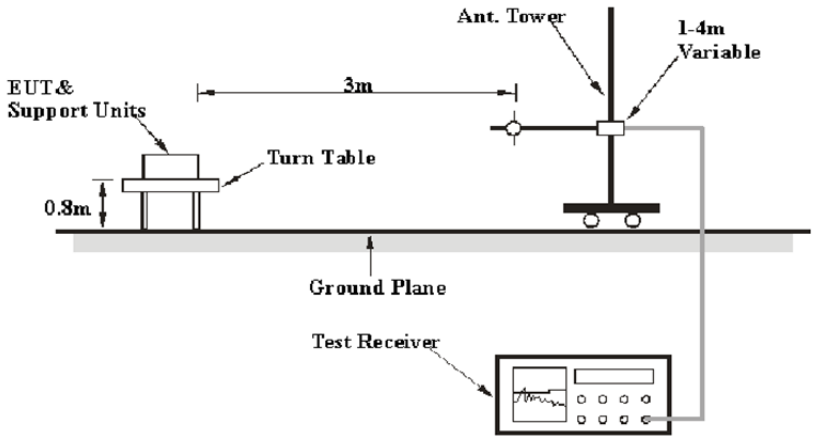
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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

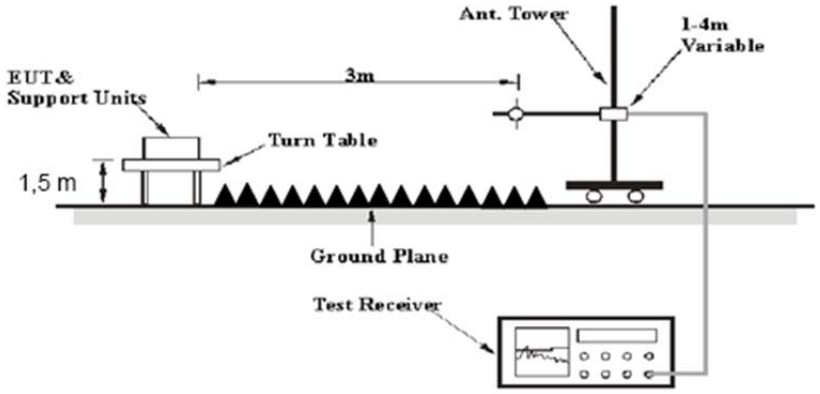
9kHz - 30MHz:



30MHz - 1GHz:



Above 1GHz:



The radiated emissions were performed in the 3 meters distance, using the setup accordance with the ANSI C63.10-2013. 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:

9kHz-1000MHz:

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

1GHz- 25GHz:

Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3 MHz
Ave.	>98%	1MHz	10 Hz
	<98%	1MHz	⩾1/T

Note: T is minimum transmission duration

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

The spurious emissions which below the limit more than 20dB was not be recorded.

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

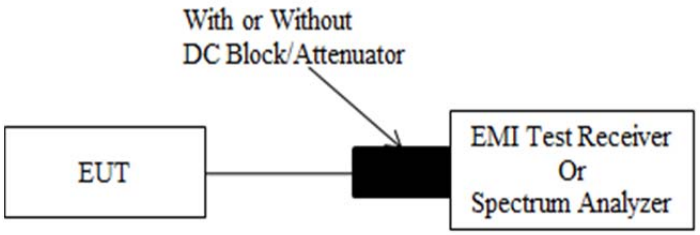
3.3 Minimum 6 dB Bandwidth

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



3.3.3 Test Procedure

According to ANSI C63.10-2013 Section 11.8

a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3×RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

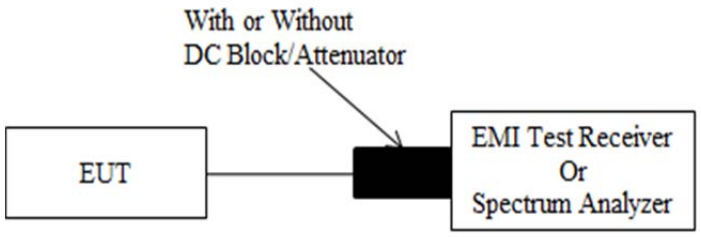
3.4 Maximum Conducted Output Power

3.4.1 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.

3.4.2 EUT Setup



3.4.3 Test Procedure

According to ANSI C63.10-2013 Section 11.9.1.1

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:
a) Set the RBW ≥ DTS bandwidth.
b) Set VBW ≥ [3 × RBW].
c) Set span ≥ [3 × RBW].
d) Sweep time = auto couple.
e) Detector = peak.
f) Trace mode = max hold.
g) Allow trace to fully stabilize.
h) Use peak marker function to determine the peak amplitude level.

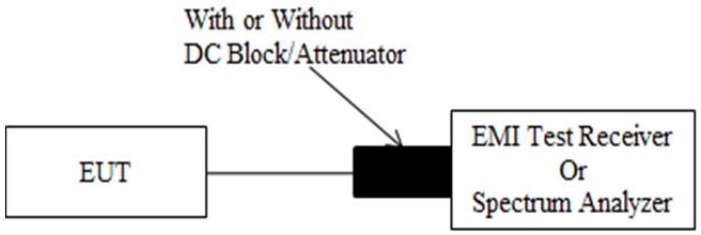
3.5 Maximum power spectral density

3.5.1 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.

3.5.2 EUT Setup



3.5.3 Test Procedure

According to ANSI C63.10-2013 Section 11.10.2

a) Set analyzer center frequency to DTS channel center frequency.
b) Set the span to 1.5 times the DTS bandwidth.
c) Set the RBW to 3 kHz ≤ RBW ≤ 100 kHz.
d) Set the VBW ≥ [3 × RBW].
e) Detector = peak.
f) Sweep time = auto couple.
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.

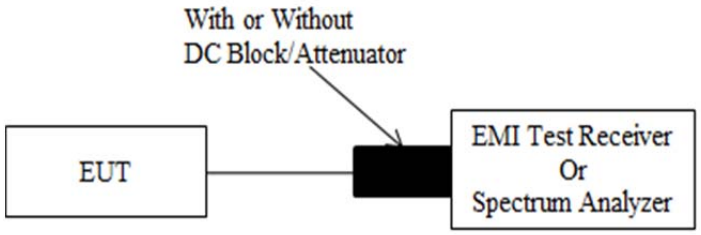
3.6 100 kHz Bandwidth of Frequency Band Edge

3.6.1 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)).

3.6.2 EUT Setup



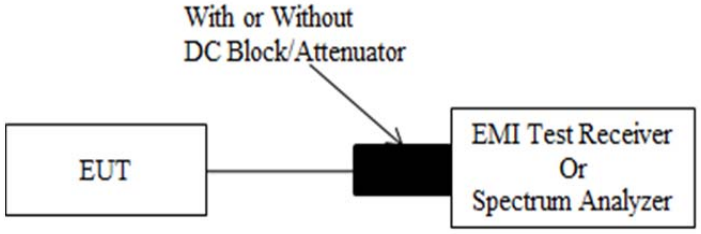
3.6.3 Test Procedure

According to ANSI C63.10-2013 Section 11.11

a) Set the center frequency and span to encompass frequency range to be measured.
b) Set the RBW = 100 kHz.
c) Set the VBW ≥ [3 × RBW].
d) Detector = peak.
e) Sweep time = auto couple.
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.

3.7 Duty Cycle

3.7.1 EUT Setup



3.7.2 Test Procedure

According to ANSI C63.10-2013 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 ≥ OBW if possible; otherwise, set RBW to the largest available value.
3) Set VBW ≥ 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 ≤ 16.7 μs.)

3.8 Antenna Requirement

3.8.1 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.

3.8.2 Judgment

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

4. TEST DATA AND RESULTS

4.1 AC Line Conducted Emissions

Serial Number:	2IZQ-3	Test Date:	2024/4/12
Test Site:	CE	Test Mode:	Transmitting(maximum output power mode, high channel)
Tester:	David Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (℃)	28.4	Relative Humidity: (%)	69	ATM Pressure: (kPa)	100.4

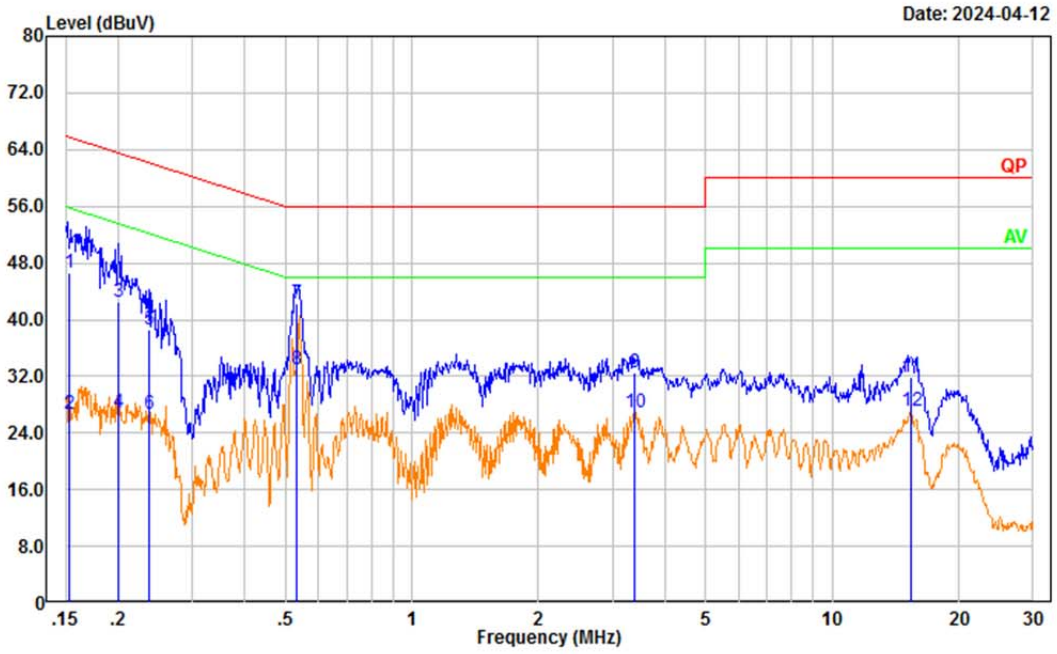
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	2024/4/1	2025/3/31
R&S	EMI Test Receiver	ESR3	102726	2024/4/1	2025/3/31
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2024/1/15	2025/1/14
Audix	Test Software	E3	190306 (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).*

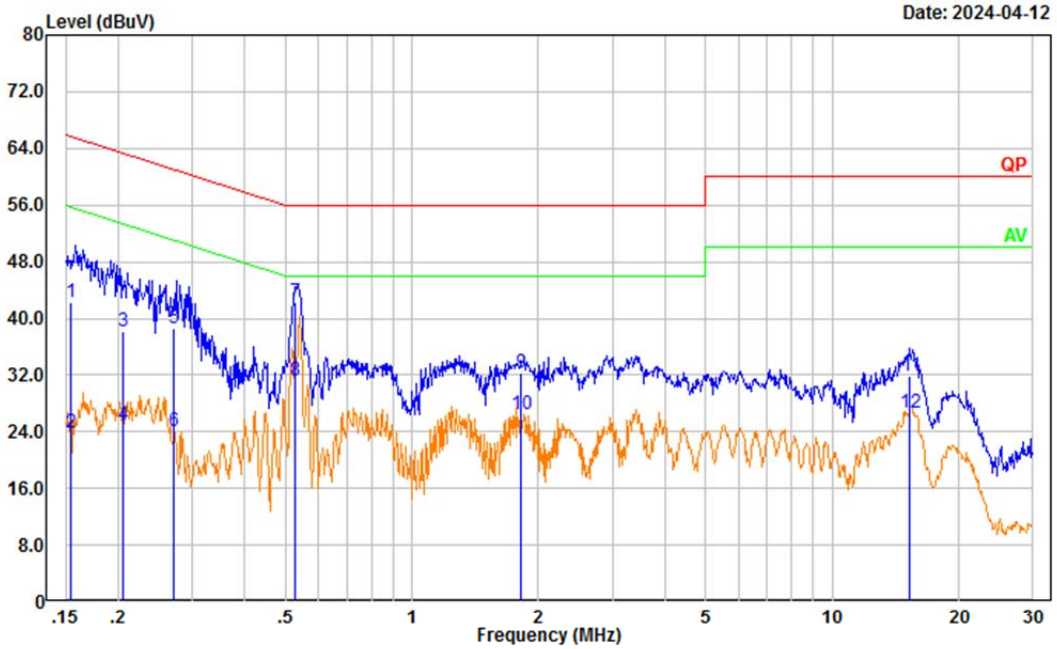
Front DC input + rear DC output + Type-C link to laptop:

Project No.: CR240314516-RF
Tester: David Huang
Port: Line
Note: Transmitting(Front DC input + rear DC output + Type-C Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.153	36.08	10.49	46.57	65.82	19.25	QP
2	0.153	16.10	10.49	26.59	55.82	29.23	Average
3	0.200	32.18	10.21	42.39	63.61	21.22	QP
4	0.200	16.69	10.21	26.90	53.61	26.71	Average
5	0.237	28.44	10.22	38.66	62.20	23.54	QP
6	0.237	16.40	10.22	26.62	52.20	25.58	Average
7	0.532	31.94	10.33	42.27	56.00	13.73	QP
8	0.532	22.71	10.33	33.04	46.00	12.96	Average
9	3.395	22.18	10.31	32.49	56.00	23.51	QP
10	3.395	16.49	10.31	26.80	46.00	19.20	Average
11	15.355	21.98	9.99	31.97	60.00	28.03	QP
12	15.355	17.02	9.99	27.01	50.00	22.99	Average

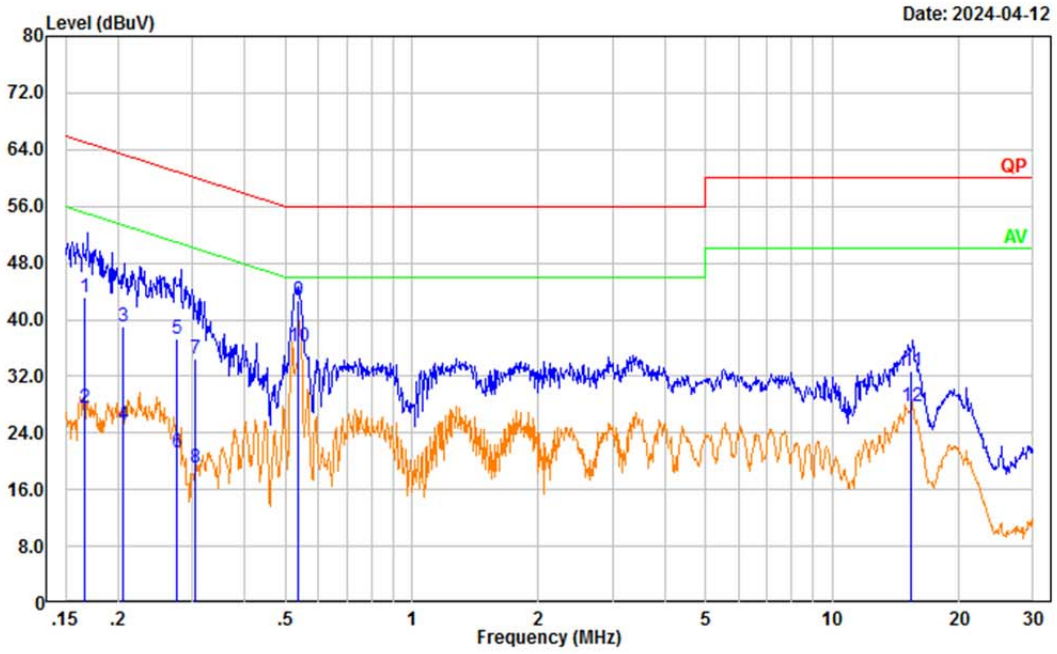
Project No.: CR240314516-RF
Tester: David Huang
Port: neutral
Note: Transmitting(Front DC input + rear DC output + Type-C Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.154	31.94	10.31	42.25	65.78	23.53	QP
2	0.154	13.56	10.31	23.87	55.78	31.91	Average
3	0.206	27.92	10.31	38.23	63.35	25.12	QP
4	0.206	14.56	10.31	24.87	53.35	28.48	Average
5	0.270	28.28	10.33	38.61	61.11	22.50	QP
6	0.270	13.84	10.33	24.17	51.11	26.94	Average
7	0.528	31.84	10.40	42.24	56.00	13.76	QP
8	0.528	20.83	10.40	31.23	46.00	14.77	Average
9	1.818	22.02	10.37	32.39	56.00	23.61	QP
10	1.818	16.09	10.37	26.46	46.00	19.54	Average
11	15.287	21.90	9.91	31.81	60.00	28.19	QP
12	15.287	16.85	9.91	26.76	50.00	23.24	Average

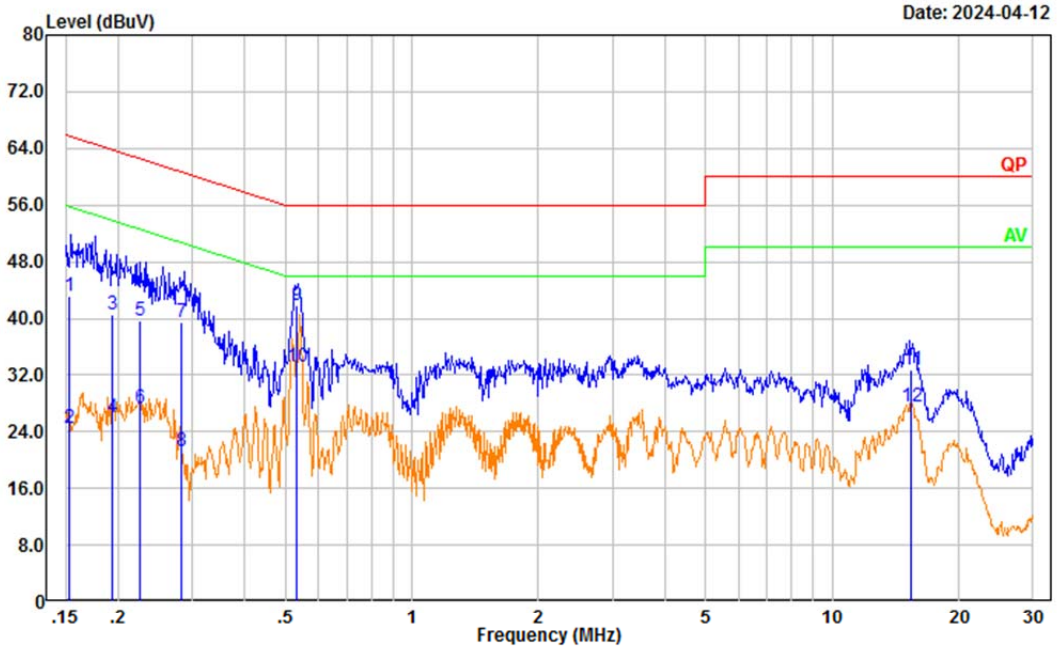
Front DC input + rear DC output + USB2.0 link to laptop:

Project No.: CR240314516-RF
Tester: David Huang
Port: Line
Note: Transmitting(Front DC input + rear DC output + USB2.0 Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.166	32.76	10.41	43.17	65.15	21.98	QP
2	0.166	17.06	10.41	27.47	55.15	27.68	Average
3	0.206	28.81	10.21	39.02	63.38	24.36	QP
4	0.206	14.96	10.21	25.17	53.38	28.21	Average
5	0.277	27.13	10.24	37.37	60.91	23.54	QP
6	0.277	10.94	10.24	21.18	50.91	29.73	Average
7	0.305	24.27	10.24	34.51	60.11	25.60	QP
8	0.305	8.93	10.24	19.17	50.11	30.94	Average
9	0.537	32.33	10.33	42.66	56.00	13.34	QP
10	0.537	25.89	10.33	36.22	46.00	9.78	Average
11	15.427	22.81	9.99	32.80	60.00	27.20	QP
12	15.427	17.73	9.99	27.72	50.00	22.28	Average

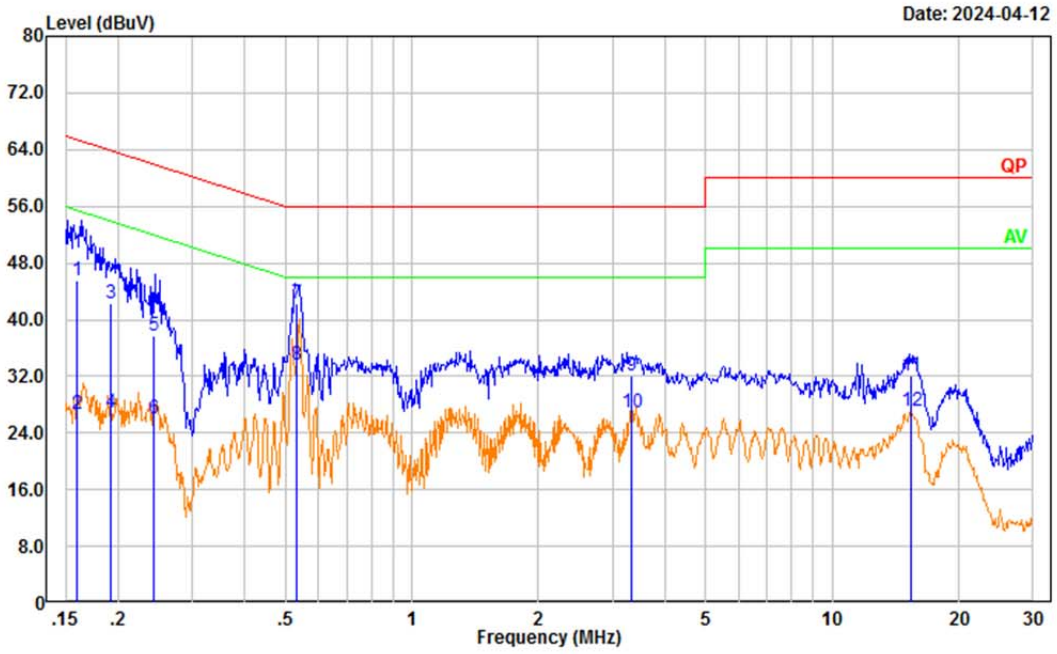
Project No.: CR240314516-RF
Tester: David Huang
Port: neutral
Note: Transmitting(Front DC input + rear DC output + USB2.0 Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.153	32.87	10.31	43.18	65.85	22.67	QP
2	0.153	14.29	10.31	24.60	55.85	31.25	Average
3	0.193	30.24	10.31	40.55	63.90	23.35	QP
4	0.193	15.75	10.31	26.06	53.90	27.84	Average
5	0.226	29.44	10.32	39.76	62.60	22.84	QP
6	0.226	17.07	10.32	27.39	52.60	25.21	Average
7	0.283	29.13	10.34	39.47	60.72	21.25	QP
8	0.283	10.82	10.34	21.16	50.72	29.56	Average
9	0.534	31.46	10.39	41.85	56.00	14.15	QP
10	0.534	22.85	10.39	33.24	46.00	12.76	Average
11	15.431	22.78	9.91	32.69	60.00	27.31	QP
12	15.431	17.67	9.91	27.58	50.00	22.42	Average

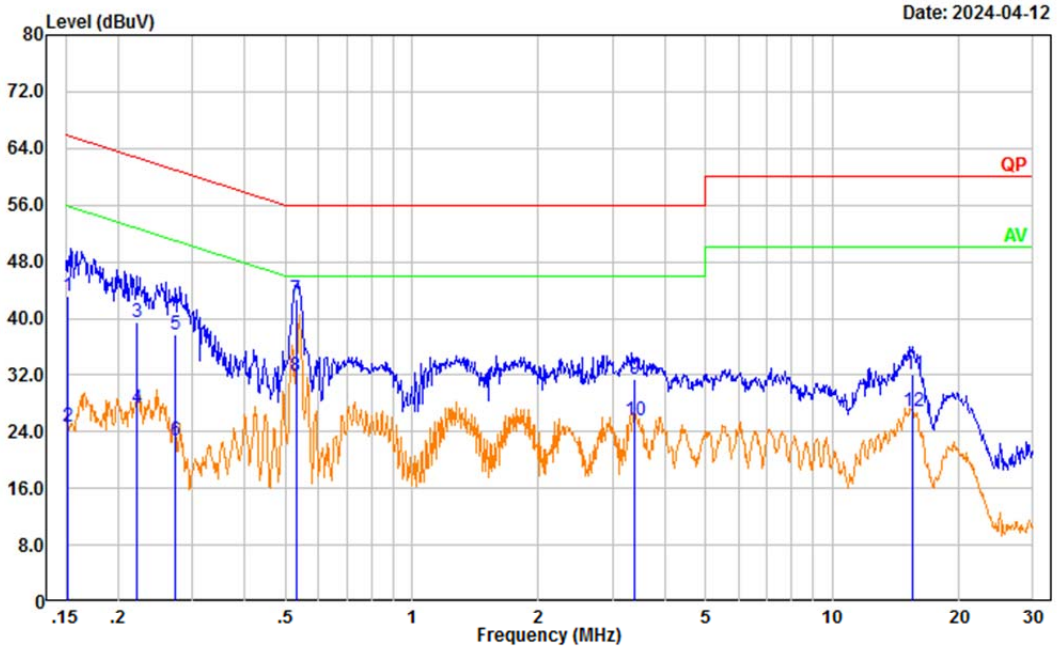
Front DC output + rear DC input + Type-C link to laptop:

Project No.: CR240314516-RF
Tester: David Huang
Port: Line
Note: Transmitting(Front DC output + rear DC input + Type-C Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.159	35.09	10.45	45.54	65.50	19.96	QP
2	0.159	16.14	10.45	26.59	55.50	28.91	Average
3	0.192	32.12	10.26	42.38	63.96	21.58	QP
4	0.192	16.67	10.26	26.93	53.96	27.03	Average
5	0.244	27.58	10.22	37.80	61.96	24.16	QP
6	0.244	15.82	10.22	26.04	51.96	25.92	Average
7	0.533	31.93	10.33	42.26	56.00	13.74	QP
8	0.533	23.18	10.33	33.51	46.00	12.49	Average
9	3.329	21.82	10.31	32.13	56.00	23.87	QP
10	3.329	16.64	10.31	26.95	46.00	19.05	Average
11	15.372	22.03	9.99	32.02	60.00	27.98	QP
12	15.372	17.09	9.99	27.08	50.00	22.92	Average

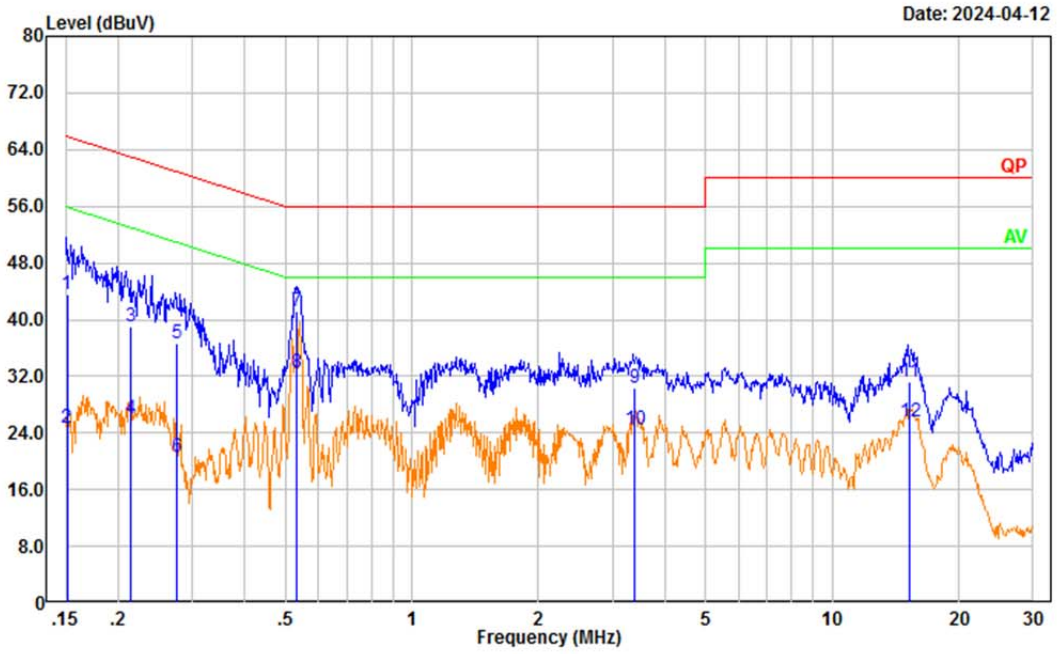
Project No.: CR240314516-RF
Tester: David Huang
Port: neutral
Note: Transmitting(Front DC output + rear DC input + Type-C Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.152	32.84	10.31	43.15	65.90	22.75	QP
2	0.152	14.37	10.31	24.68	55.90	31.22	Average
3	0.222	29.10	10.32	39.42	62.75	23.33	QP
4	0.222	16.96	10.32	27.28	52.75	25.47	Average
5	0.274	27.46	10.33	37.79	60.98	23.19	QP
6	0.274	12.39	10.33	22.72	50.98	28.26	Average
7	0.530	32.26	10.40	42.66	56.00	13.34	QP
8	0.530	21.52	10.40	31.92	46.00	14.08	Average
9	3.383	21.17	10.27	31.44	56.00	24.56	QP
10	3.383	15.22	10.27	25.49	46.00	20.51	Average
11	15.564	22.26	9.92	32.18	60.00	27.82	QP
12	15.564	16.98	9.92	26.90	50.00	23.10	Average

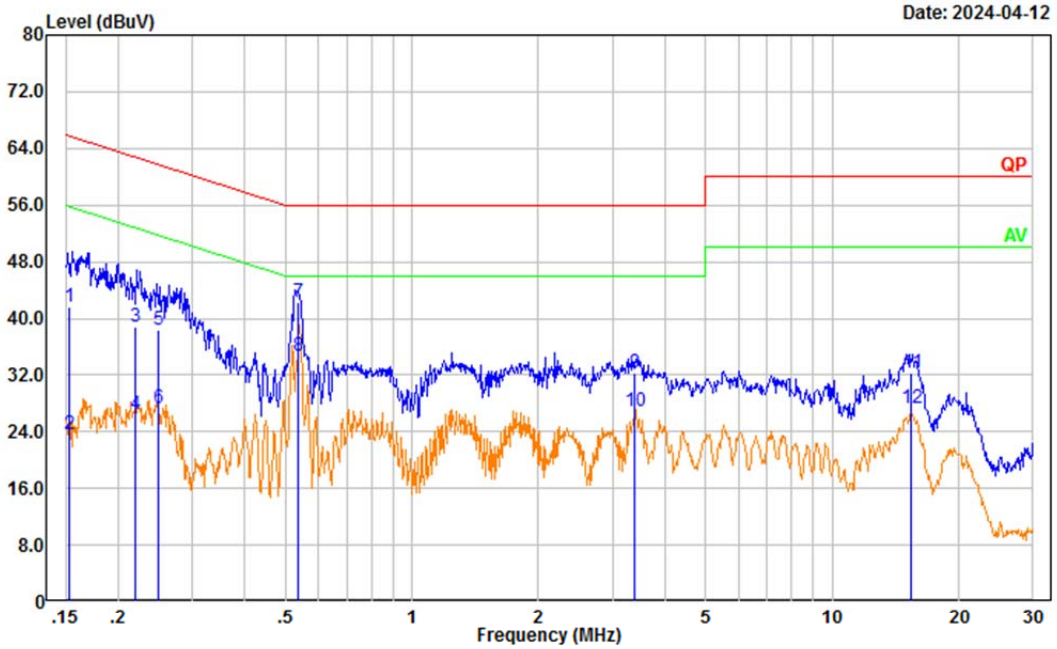
Front DC output + rear DC input + USB2.0 link to laptop:

Project No.: CR240314516-RF
Tester: David Huang
Port: Line
Note: Transmitting(Front DC output + rear DC input + USB2.0 Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.151	33.05	10.50	43.55	65.93	22.38	QP
2	0.151	14.31	10.50	24.81	55.93	31.12	Average
3	0.214	28.71	10.21	38.92	63.04	24.12	QP
4	0.214	15.86	10.21	26.07	53.04	26.97	Average
5	0.277	26.32	10.24	36.56	60.91	24.35	QP
6	0.277	10.29	10.24	20.53	50.91	30.38	Average
7	0.534	30.88	10.33	41.21	56.00	14.79	QP
8	0.534	22.25	10.33	32.58	46.00	13.42	Average
9	3.384	20.09	10.31	30.40	56.00	25.60	QP
10	3.384	14.23	10.31	24.54	46.00	21.46	Average
11	15.237	21.15	10.00	31.15	60.00	28.85	QP
12	15.237	15.51	10.00	25.51	50.00	24.49	Average

Project No.: CR240314516-RF
Tester: David Huang
Port: neutral
Note: Transmitting(Front DC output + rear DC input + USB2.0 Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.153	31.39	10.31	41.70	65.83	24.13	QP
2	0.153	13.28	10.31	23.59	55.83	32.24	Average
3	0.220	28.43	10.32	38.75	62.83	24.08	QP
4	0.220	16.09	10.32	26.41	52.83	26.42	Average
5	0.248	28.15	10.33	38.48	61.81	23.33	QP
6	0.248	16.96	10.33	27.29	51.81	24.52	Average
7	0.535	31.87	10.39	42.26	56.00	13.74	QP
8	0.535	24.26	10.39	34.65	46.00	11.35	Average
9	3.374	22.02	10.27	32.29	56.00	23.71	QP
10	3.374	16.56	10.27	26.83	46.00	19.17	Average
11	15.404	22.31	9.91	32.22	60.00	27.78	QP
12	15.404	17.39	9.91	27.30	50.00	22.70	Average

4.2 Radiation Spurious Emissions

1) 9kHz-1GHz

Serial Number:	2IZQ-2	Test Date:	2024/4/13
Test Site:	966-2	Test Mode:	Transmitting (maximum output power, high channel)
Tester:	Jeff Luo	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	26.5	Relative Humidity: (%)	57	ATM Pressure: (kPa)	100.5

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	2024/1/11	2025/1/10
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0500-01	2024/1/11	2025/1/10
R&S	EMI Test Receiver	ESR3	102724	2024/2/29	2025/2/28
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0100-03	2023/12/4	2024/12/3
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0370-01	2023/12/4	2024/12/3
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2023/12/4	2024/12/3
Sonoma	Amplifier	310N	186165	2023/12/4	2024/12/3
Audix	Test Software	E3	191218 (V9)	N/A	N/A

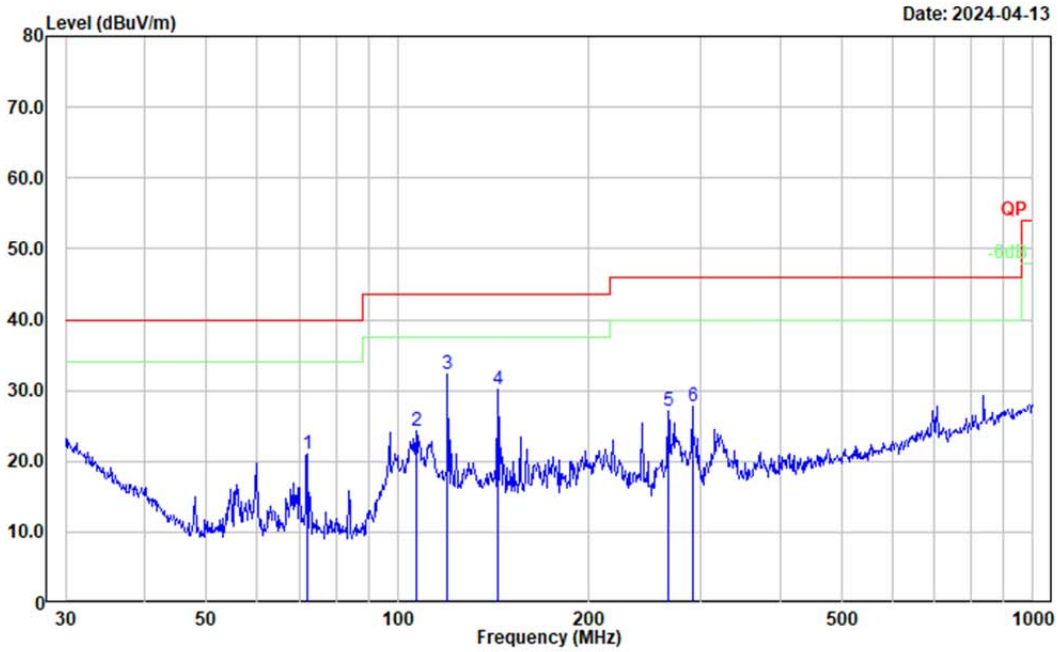
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

For 9kHz-30MHz, The amplitude of spurious emissions attenuated more than 20 dB below the limit was not be recorded.

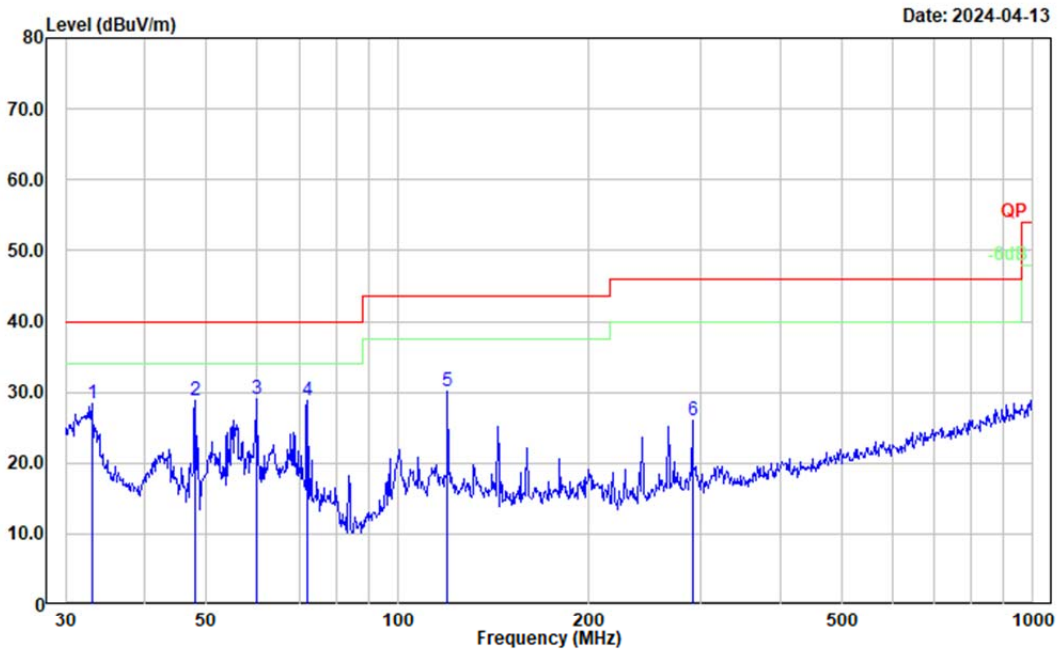
Front DC input + rear DC output + USB2.0 link to laptop:

Project No.: CR240314516-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting (Front DC input + rear DC output + USB2.0 Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	72.084	38.30	-17.18	21.12	40.00	18.88	Peak
2	106.759	37.07	-12.81	24.26	43.50	19.24	Peak
3	119.856	43.44	-11.24	32.20	43.50	11.30	Peak
4	143.830	42.22	-12.07	30.15	43.50	13.35	Peak
5	266.609	38.19	-11.05	27.14	46.00	18.86	Peak
6	291.036	38.12	-10.31	27.81	46.00	18.19	Peak

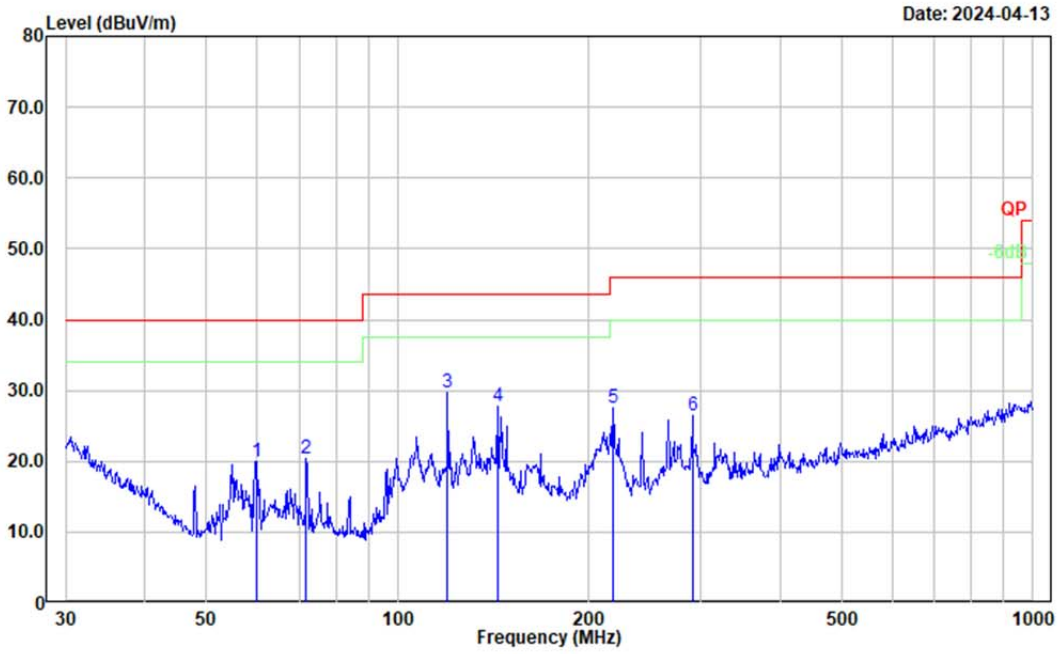
Project No.: CR240314516-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting (Front DC input + rear DC output + USB2.0 Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	32.979	34.33	-6.04	28.29	40.00	11.71	Peak
2	47.994	45.24	-16.39	28.85	40.00	11.15	Peak
3	59.859	46.68	-17.73	28.95	40.00	11.05	Peak
4	72.084	45.98	-17.18	28.80	40.00	11.20	Peak
5	119.856	41.29	-11.24	30.05	43.50	13.45	Peak
6	291.036	36.24	-10.31	25.93	46.00	20.07	Peak

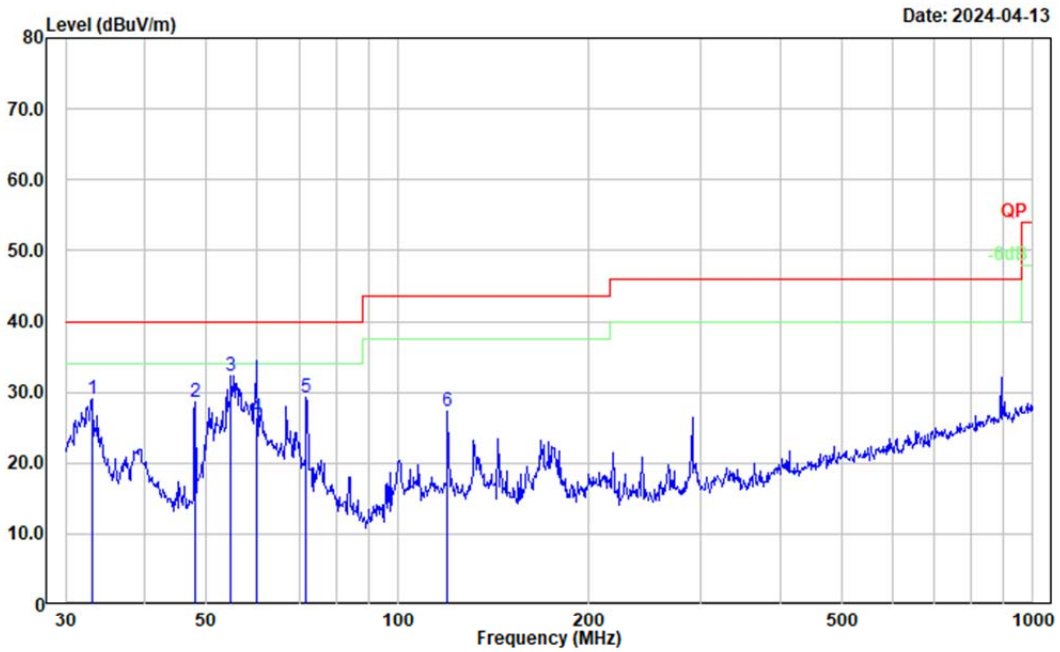
Front DC output + rear DC input + USB2.0 link to laptop:

Project No.: CR240314516-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting (Front DC output + rear DC input + USB2.0 Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	60.069	37.75	-17.74	20.01	40.00	19.99	Peak
2	71.832	37.49	-17.19	20.30	40.00	19.70	Peak
3	119.856	40.95	-11.24	29.71	43.50	13.79	Peak
4	143.830	39.76	-12.07	27.69	43.50	15.81	Peak
5	218.309	41.31	-13.74	27.57	46.00	18.43	Peak
6	291.036	36.80	-10.31	26.49	46.00	19.51	Peak

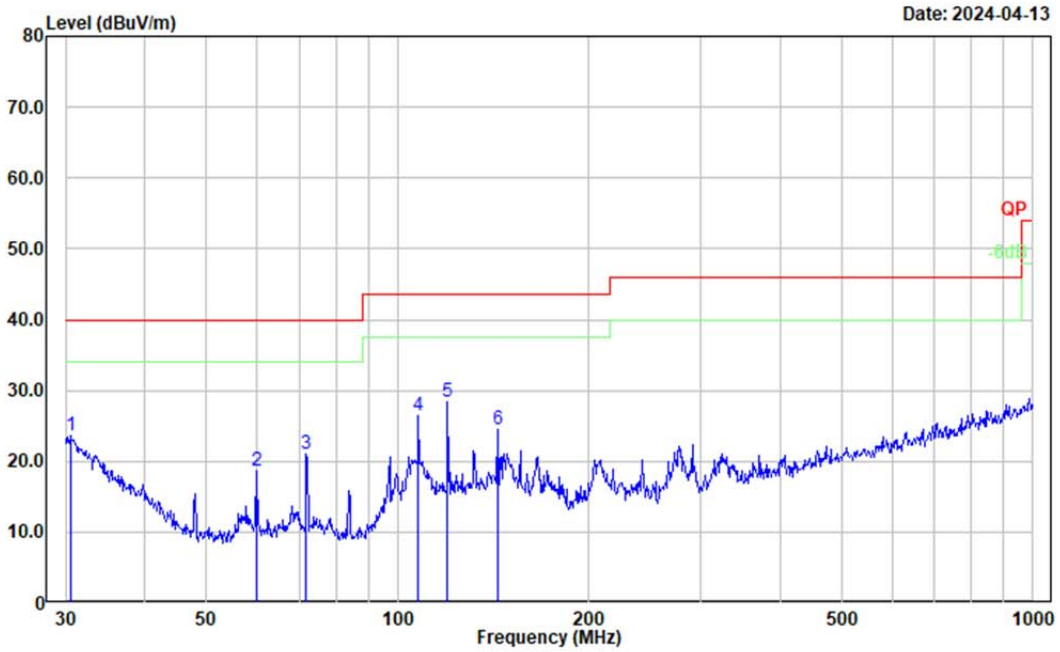
Project No.: CR240314516-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting (Front DC output + rear DC input + USB2.0 Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	32.979	35.03	-6.04	28.99	40.00	11.01	Peak
2	47.994	45.09	-16.39	28.70	40.00	11.30	Peak
3	54.643	50.04	-17.71	32.33	40.00	7.67	Peak
4	60.136	44.19	-17.74	26.45	40.00	13.55	QP
5	71.832	46.54	-17.19	29.35	40.00	10.65	Peak
6	119.856	38.65	-11.24	27.41	43.50	16.09	Peak

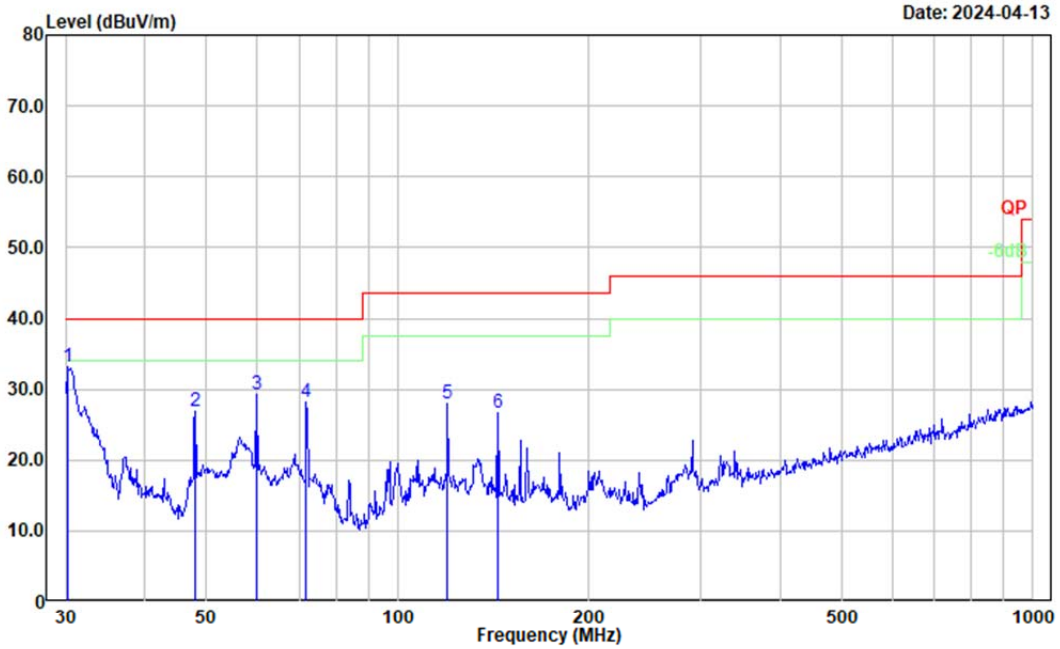
Front DC input + rear DC output + Type-C link to laptop:

Project No.: CR240314516-RF
Tester: Jeff Luo
Polarization: horizontal
Note: Transmitting (Front DC input + rear DC output + Type-C Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	27.75	-4.18	23.57	40.00	16.43	Peak
2	59.859	36.31	-17.73	18.58	40.00	21.42	Peak
3	71.832	38.16	-17.19	20.97	40.00	19.03	Peak
4	107.888	39.10	-12.66	26.44	43.50	17.06	Peak
5	119.856	39.60	-11.24	28.36	43.50	15.14	Peak
6	143.830	36.49	-12.07	24.42	43.50	19.08	Peak

Project No.: CR240314516-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting (Front DC input + rear DC output + Type-C Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.317	37.22	-4.06	33.16	40.00	6.84	Peak
2	47.994	43.34	-16.39	26.95	40.00	13.05	Peak
3	59.859	47.11	-17.73	29.38	40.00	10.62	Peak
4	71.832	45.35	-17.19	28.16	40.00	11.84	Peak
5	119.856	39.18	-11.24	27.94	43.50	15.56	Peak
6	143.830	38.64	-12.07	26.57	43.50	16.93	Peak

Front DC output + rear DC input + Type-C link to laptop:

```
Project No.: CR240314516-RF
     Tester: Jeff Luo
Polarization: horizontal
       Note: Transmitting (Front DC output + rear DC input + Type-C Link to Laptop)
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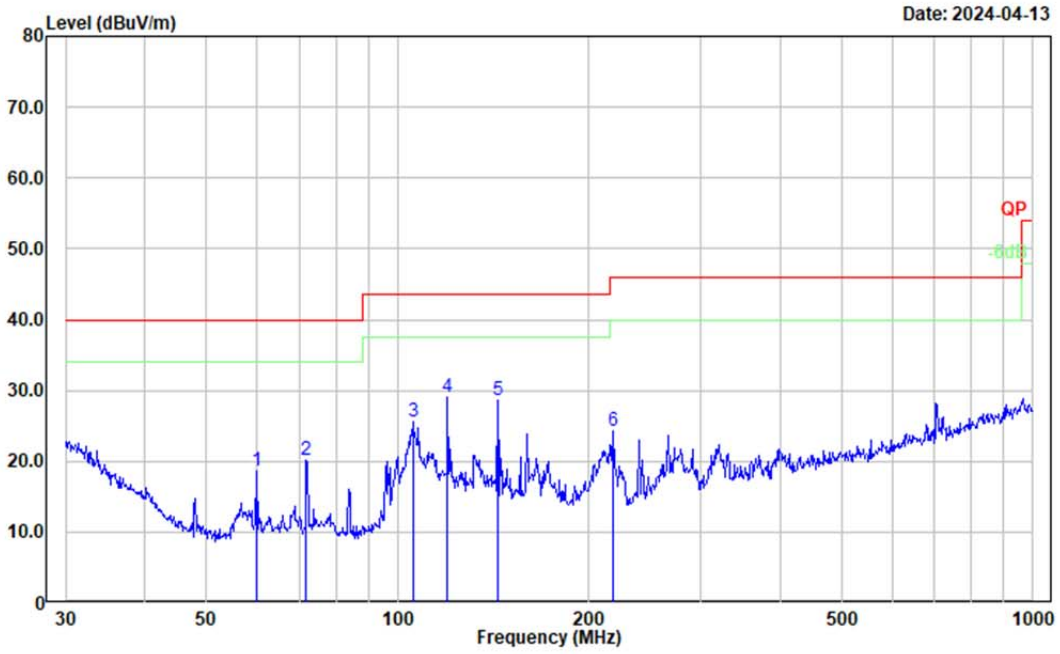
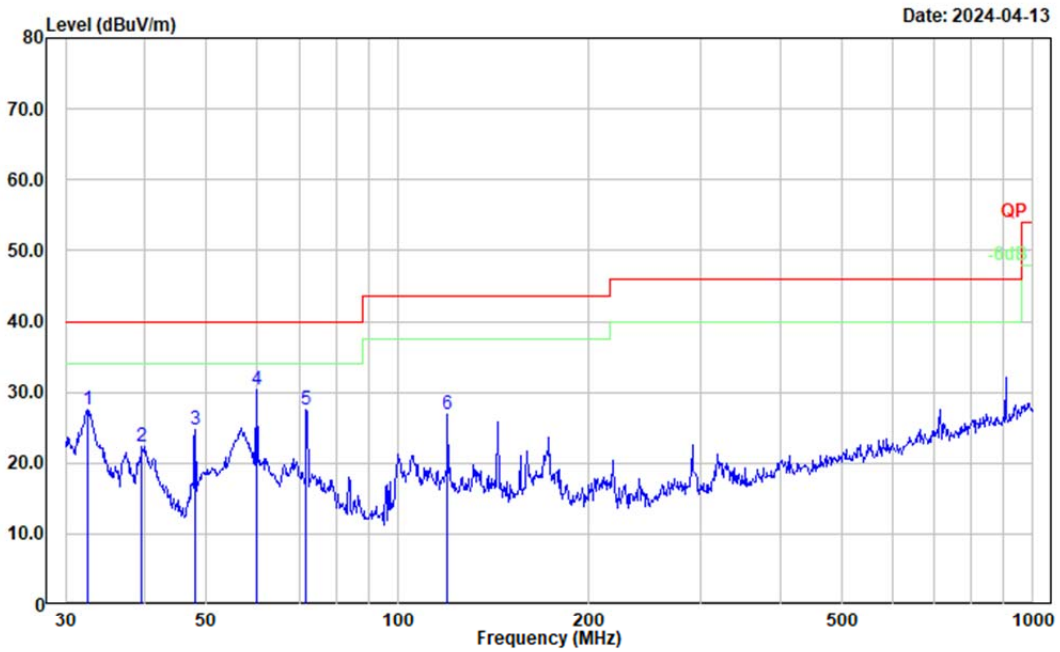


No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	60.069	36.31	-17.74	18.57	40.00	21.43	Peak
2	71.832	37.44	-17.19	20.25	40.00	19.75	Peak
3	105.642	38.63	-13.07	25.56	43.50	17.94	Peak
4	119.856	40.40	-11.24	29.16	43.50	14.34	Peak
5	143.830	40.75	-12.07	28.68	43.50	14.82	Peak
6	218.309	37.92	-13.74	24.18	46.00	21.82	Peak

Project No.: CR240314516-RF
Tester: Jeff Luo
Polarization: vertical
Note: Transmitting (Front DC output + rear DC input + Type-C Link to Laptop)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	32.520	33.28	-5.68	27.60	40.00	12.40	Peak
2	39.576	33.29	-10.91	22.38	40.00	17.62	Peak
3	47.994	41.10	-16.39	24.71	40.00	15.29	Peak
4	59.859	48.15	-17.73	30.42	40.00	9.58	Peak
5	71.832	44.75	-17.19	27.56	40.00	12.44	Peak
6	119.856	38.06	-11.24	26.82	43.50	16.68	Peak

2) 1-25GHz:

Serial Number:	2IZQ-2	Test Date:	2024/3/30
Test Site:	966-1	Test Mode:	Transmitting
Tester:	Tao Zhu	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	26.5	Relative Humidity: (%)	61	ATM Pressure: (kPa)	100.6

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	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2024/1/15	2025/1/14
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2024/1/15	2025/1/14
A.H	Preamplifier	PAM-0118P	628	2024/1/15	2025/1/14
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	2024/1/15	2025/1/14
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2024/1/15	2025/1/14
E-Microwave	Band Rejection Filter	2400-2483.5MHz	OE01902424	2023/8/6	2024/8/5
Mini Circuits	High Pass Filter	VHF-6010+	31119	2023/8/6	2024/8/5

**** 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:

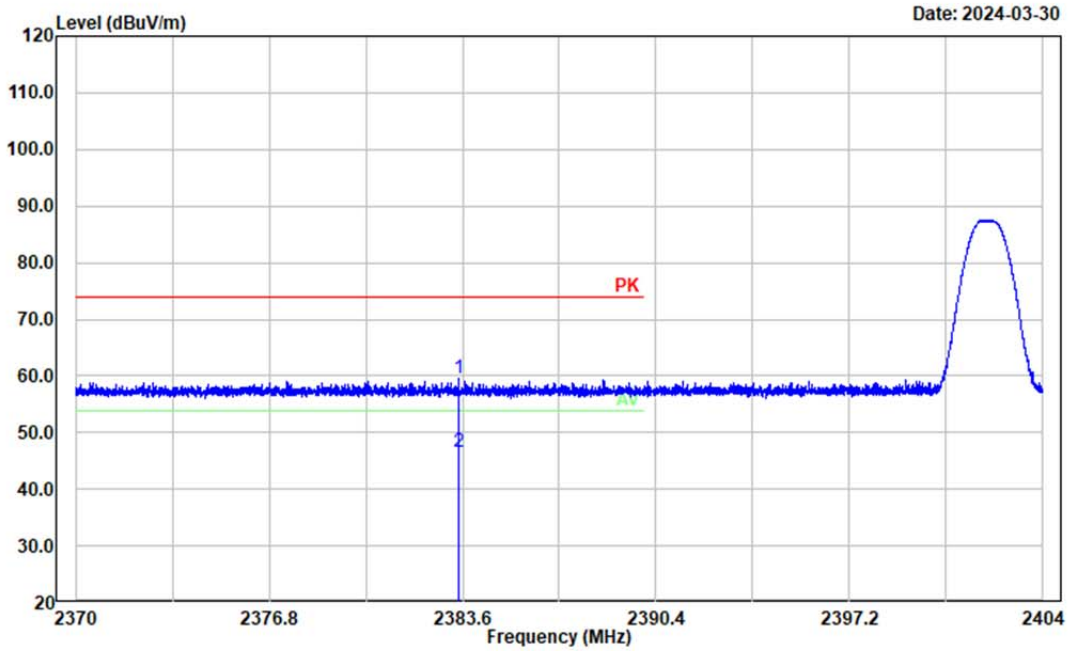
Front DC input + rear DC output + Type-C link to laptop was the worst case:

BLE 1Mbps:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 2402 MHz							
4804.000	46.38	PK	H	-5.70	40.68	74.00	33.32
4804.000	34.37	AV	H	-5.70	28.67	54.00	25.33
4804.000	46.37	PK	V	-5.70	40.67	74.00	33.33
4804.000	34.11	AV	V	-5.70	28.41	54.00	25.59
7206.000	45.29	PK	H	-0.32	44.97	74.00	29.03
7206.000	33.11	AV	H	-0.32	32.79	54.00	21.21
7206.000	46.45	PK	V	-0.32	46.13	74.00	27.87
7206.000	34.56	AV	V	-0.32	34.24	54.00	19.76
Middle Channel: 2440 MHz							
4880.000	45.78	PK	H	-5.50	40.28	74.00	33.72
4880.000	33.64	AV	H	-5.50	28.14	54.00	25.86
4880.000	45.95	PK	V	-5.50	40.45	74.00	33.55
4880.000	33.74	AV	V	-5.50	28.24	54.00	25.76
7320.000	45.19	PK	H	0.47	45.66	74.00	28.34
7320.000	33.32	AV	H	0.47	33.79	54.00	20.21
7320.000	45.90	PK	V	0.47	46.37	74.00	27.63
7320.000	33.45	AV	V	0.47	33.92	54.00	20.08
High Channel: 2480 MHz							
4960.000	46.39	PK	H	-5.11	41.28	74.00	32.72
4960.000	34.10	AV	H	-5.11	28.99	54.00	25.01
4960.000	45.88	PK	V	-5.11	40.77	74.00	33.23
4960.000	33.90	AV	V	-5.11	28.79	54.00	25.21
7440.000	45.20	PK	H	0.63	45.83	74.00	28.17
7440.000	33.17	AV	H	0.63	33.80	54.00	20.20
7440.000	45.03	PK	V	0.63	45.66	74.00	28.34
7440.000	33.12	AV	V	0.63	33.75	54.00	20.25

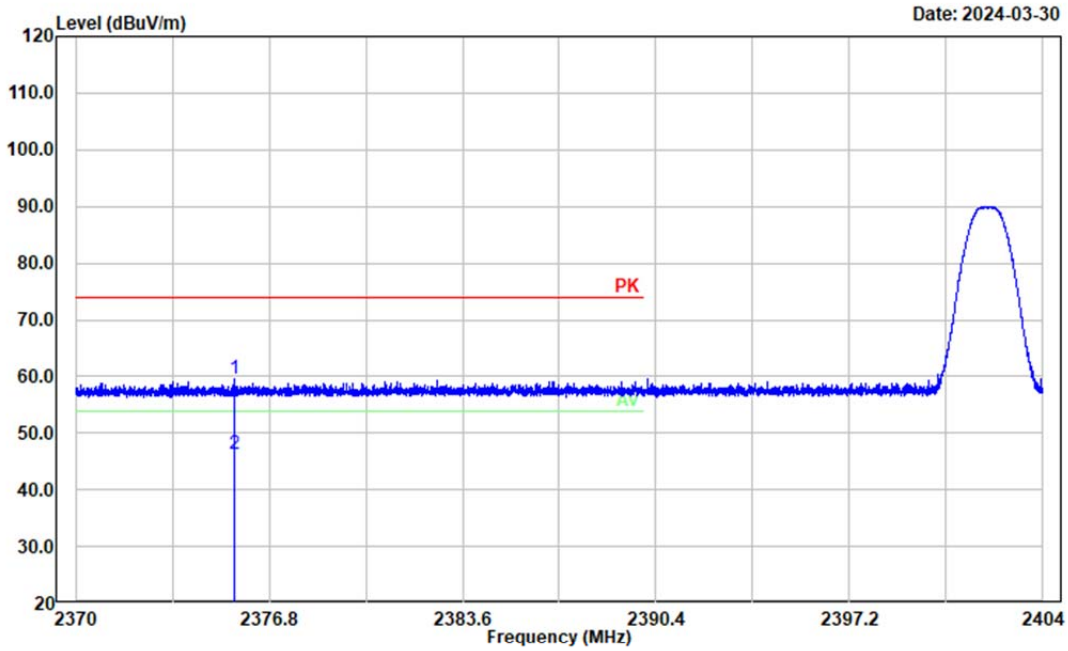
Band edge test plots
Low channel:

```
Project No.: CR240314516-RF
     Tester: Tao Zhu
Polarization: Horizontal
       Note:
```



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	2383.473	28.02	31.45	59.47	74.00	14.53	Peak
2	2383.473	15.18	31.45	46.63	54.00	7.37	Average

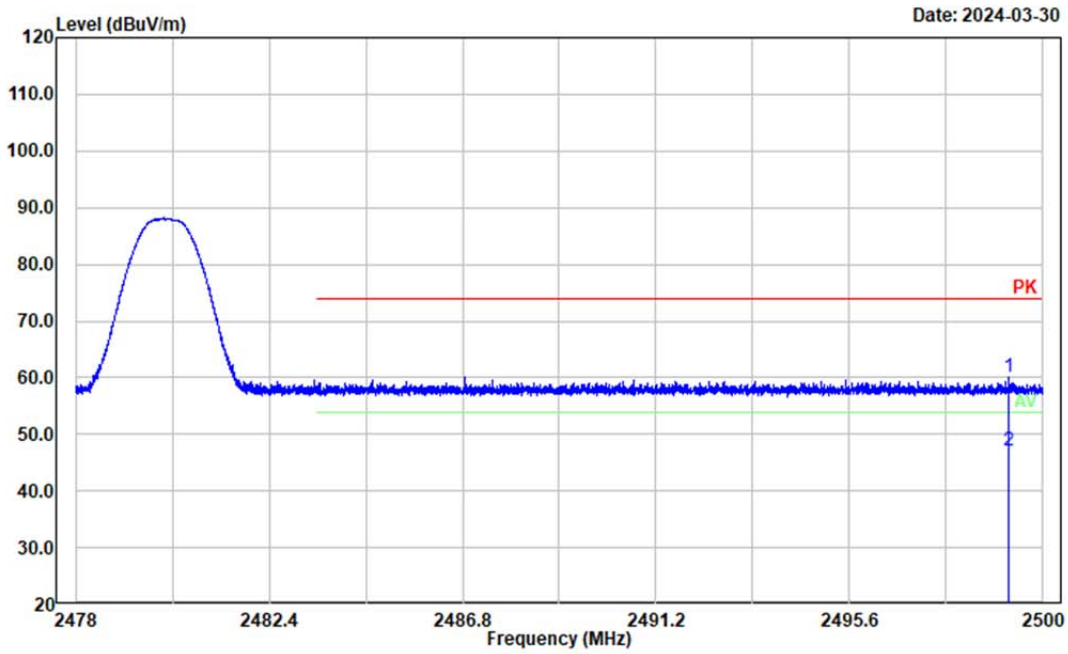
Project No.: CR240314516-RF
Tester: Tao Zhu
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	2375.570	28.12	31.44	59.56	74.00	14.44	Peak
2	2375.570	14.93	31.44	46.37	54.00	7.63	Average

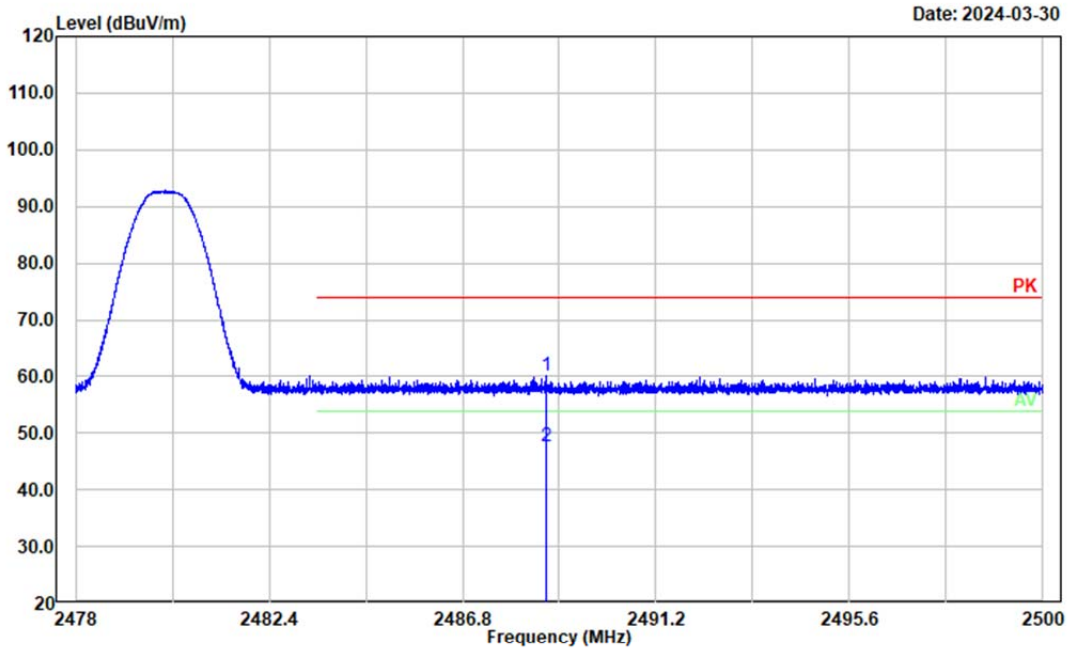
High channel:

Project No.: CR240314516-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2499.234	28.56	31.51	60.07	74.00	13.93	Peak
2	2499.234	15.70	31.51	47.21	54.00	6.79	Average

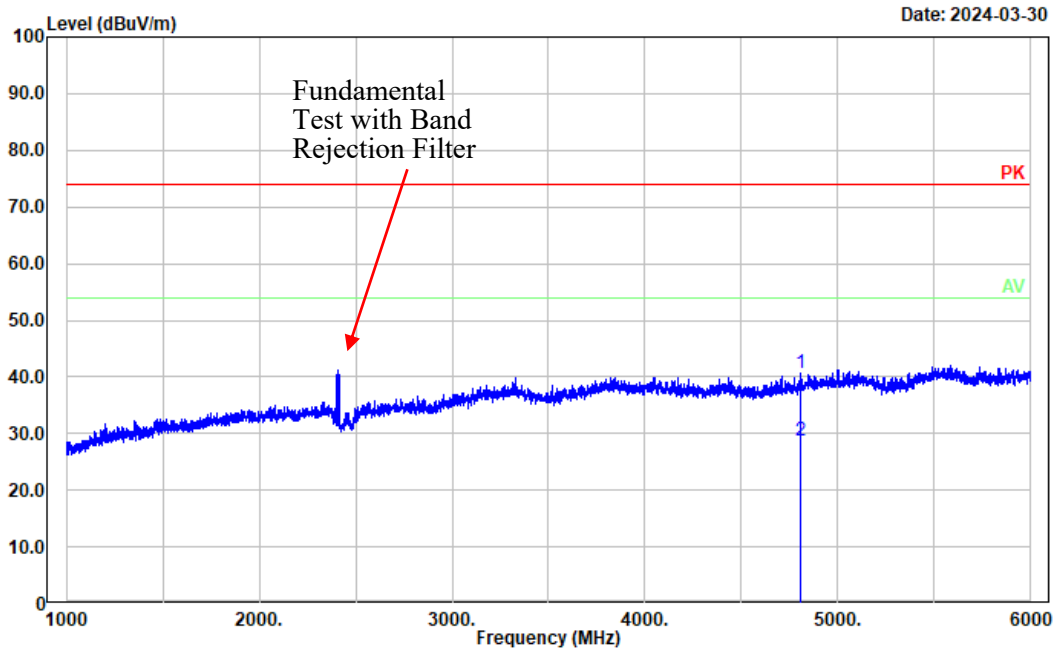
Project No.: CR240314516-RF
Tester: Tao Zhu
Polarization: Vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	2488.712	28.64	31.50	60.14	74.00	13.86	Peak
2	2488.712	16.15	31.50	47.65	54.00	6.35	Average

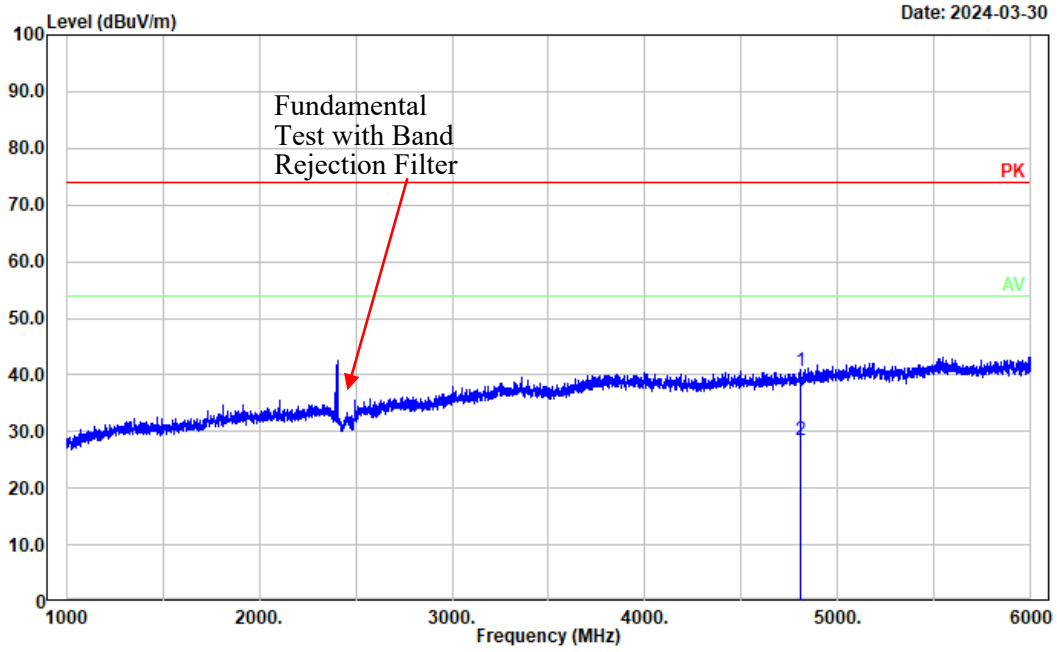
Worst radiation spurious emissions margin test plots(low channel)

```
Project No.: CR240314516-RF
     Tester: Tao Zhu
Polarization: horizontal
       Note:
```



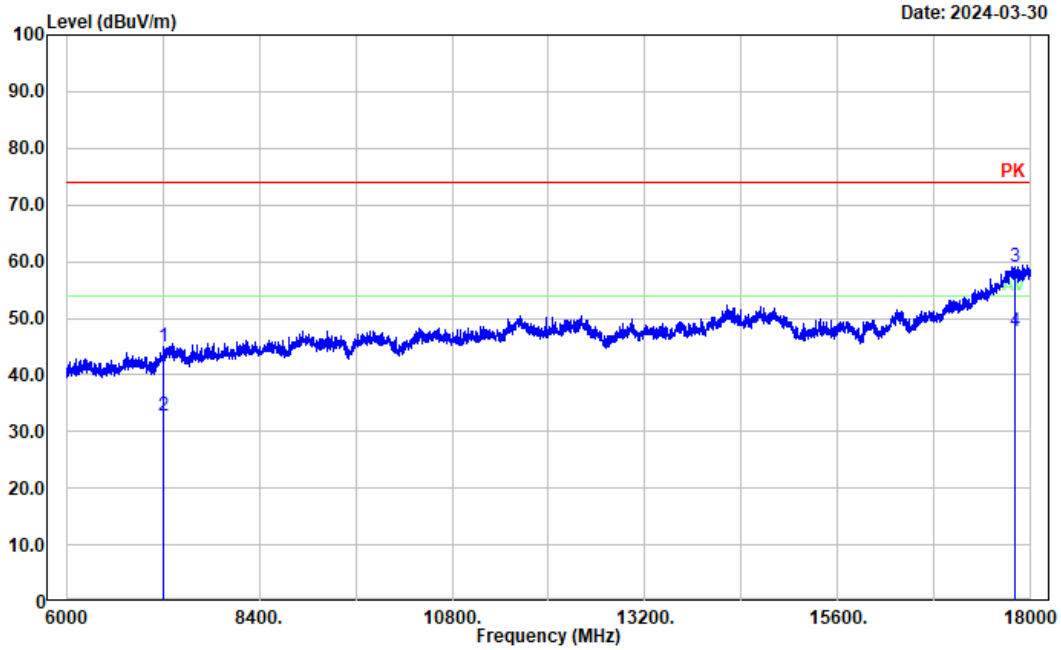
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4804.000	46.38	-5.70	40.68	74.00	33.32	Peak
2	4804.000	34.37	-5.70	28.67	54.00	25.33	Average

Project No.: CR240314516-RF
Tester: Tao Zhu
Polarization: vertical
Note:



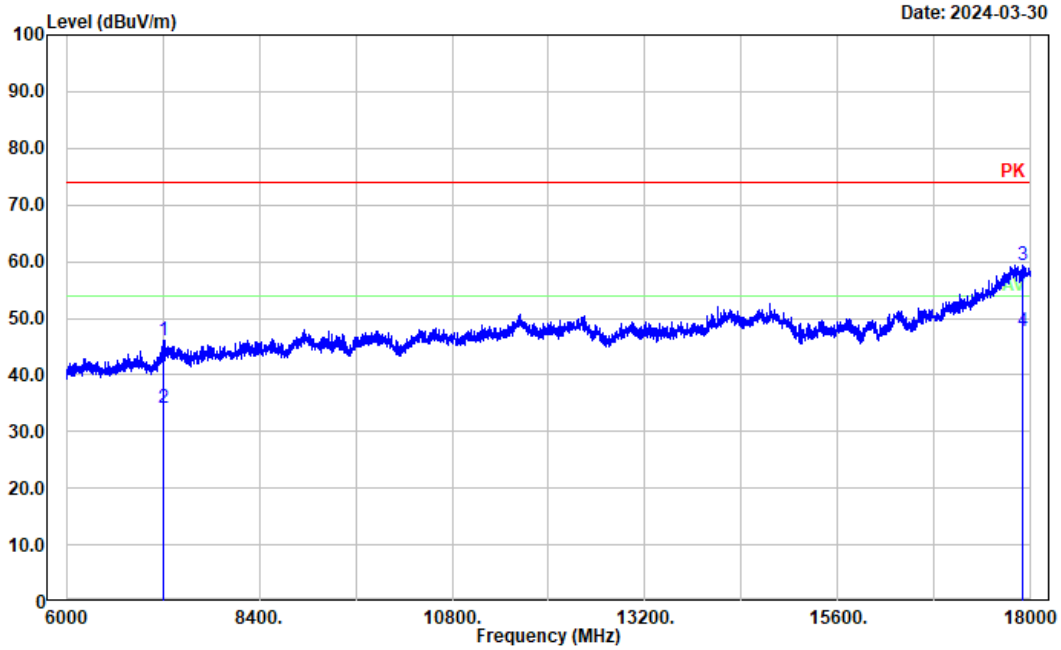
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4804.000	46.37	-5.70	40.67	74.00	33.33	Peak
2	4804.000	34.11	-5.70	28.41	54.00	25.59	Average

Project No.: CR240314516-RF
Tester: Tao Zhu
Polarization: horizontal
Note:



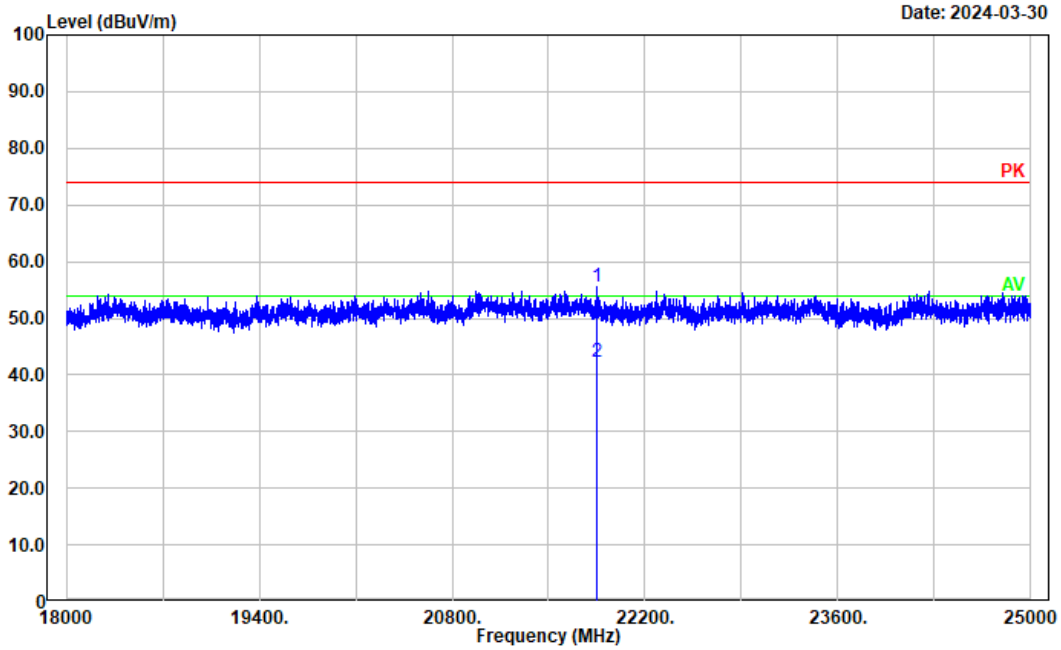
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	7206.000	45.29	-0.32	44.97	74.00	29.03	Peak
2	7206.000	33.11	-0.32	32.79	54.00	21.21	Average
3	17810.400	42.93	16.18	59.11	74.00	14.89	Peak
4	17810.400	31.48	16.18	47.66	54.00	6.34	Average

Project No.: CR240314516-RF
Tester: Tao Zhu
Polarization: vertical
Note:



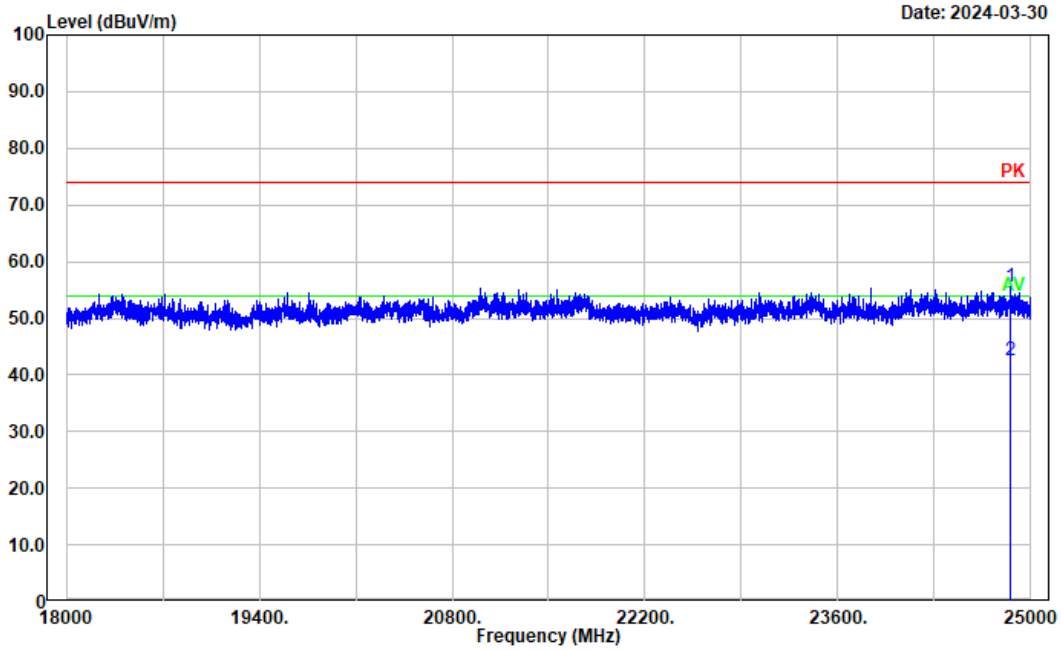
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	7206.000	46.45	-0.32	46.13	74.00	27.87	Peak
2	7206.000	34.56	-0.32	34.24	54.00	19.76	Average
3	17889.600	43.44	16.04	59.48	74.00	14.52	Peak
4	17889.600	31.62	16.04	47.66	54.00	6.34	Average

Project No.: CR240314516-RF
Tester: Tao Zhu
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	21847.970	50.67	4.83	55.50	74.00	18.50	Peak
2	21847.970	37.52	4.83	42.35	54.00	11.65	Average

Project No.: CR240314516-RF
Tester: Tao Zhu
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	24851.570	49.52	5.98	55.50	74.00	18.50	Peak
2	24851.570	36.59	5.98	42.57	54.00	11.43	Average

4.3 RF Conducted data

Please refer to Annex "Appendix A" for detail test data.

5. RF EXPOSURE EVALUATION

5.1 Applicable Standard

FCC §15.247 (i) and subpart §1.1307

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

5.2 Procedure

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	1,920 R^2.
1.34-30	3,450 R^2/f^2.
30-300	3.83 R^2.
300-1,500	0.0128 R^2f.
1,500-100,000	19.2R^2.

5.3 Measurement Result

Radio	Frequency (MHz)	λ /2 Π (mm)	Distance (mm)	Exemption ERP (mW)	Maximum Conducted Power including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP	
							dBm	mW
BLE	2402-2480	19.88	200	768	2	0.23	0.08	1.02

Note: The Maximum Conducted Power including Tune-up Tolerance was declared by manufacturer.

Result: The device compliant the MPE-Based Exemption at 20cm distances.

6. EUT PHOTOGRAPHS

Please refer to the attachment CR240314516-RF-EXP EUT EXTERNAL PHOTOGRAPHS and CR240314516-RF-INP EUT INTERNAL PHOTOGRAPHS

7. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR240314516-RF-00A-TSP TEST SETUP PHOTOGRAPHS.

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