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

ACCREDITED
TESTING LABORATORY
CERTIFICATE # 6356.01

TEST REPORT

Applicant: **INFINIX MOBILITY LIMITED**

Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

FCC ID: **2AIZN-X6850**

Product Name: **Mobile Phone**

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: **CR231061271-00A**

Date Of Issue: **2024/1/12**

Reviewed By: **Julie Tan** Julie Tan
Title: RF Engineer

Approved By: **Sun Zhong** 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.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

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 "★".

CONTENTS

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR231061271-00A	Original Report	2024/1/12

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	Mobile Phone
EUT Model[Note]:	X6850
Operation Frequency:	2402-2480 MHz
Maximum Peak Output Power (Conducted):	2.28dBm
Modulation Type:	GFSK
Rated Input Voltage:	DC 3.91V from battery or 4-20V from adapter
Serial Number:	AC line conducted emissions and Radiated Spurious Emissions: 2CGI-1(Normal version), 2CGI-5(Lighting version) RF Conducted: 2CGI-2(Normal version)
EUT Received Date:	2023/10/21
EUT Received Status:	Good
Note: This model has two versions: Normal version and Lighting version, the two versions are electrically identical, please refer to the declaration letter for more detail, which was provided by manufacturer. All tests were performed with normal version, except Radiated Spurious Emissions and AC line conducted emission test.	

Operation Frequency Detail:
For BLE 1Mbps:

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

For BLE 2Mbps:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2404	19	2440
2	2406	…	…
…	…	…	…
…	…	…	…
..	…	37	2476
18	2438	38	2478

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

Test Channel	Frequency (MHz)
Lowest	2404
Middle	2440
Highest	2478

Antenna Information Detail▲:

Antenna	Antenna Manufacturer	Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
Chain 0 (ANT12)	Dongguan Guangzheng Mold Plastic Co., Ltd	LDS	50	2.4~2.5GHz	-4.12dBi
Chain 1 (ANT14)					-3.37dBi

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	Parameters
Adapter #1	Unknown	U700XSA	Input: 100-240V~50/60Hz 2.0A Output:5.0V 3.0A 15.0W or 5.0-10.0V 7.0A MAX or 11.0V 6.4A MAX or 4.0-20.0V 3.5A 70.0W MAX
Adapter #2	Unknown	U700XSA	Input: 100-240V~50/60Hz 2.0A Output:5.0V 3.0A 15.0W or 5.0-10.0V 7.0A MAX or 11.0V 6.4A MAX or 4.0-20.0V 3.5A 70.0W MAX

Note: The two adapters are electrically identical, but different manufacturers, and both adapters were tested for this report.

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. Radiated Emission below 1GHz and AC line conducted emission test with below configuration: M1: (Normal Version&Adapter#1) M2: (Normal Version &Adapter#2) M3: (Lighting Version &Worst Adapter)
Equipment Modifications:	No
EUT Exercise Software:	Engineering Mode

The devices have two Bluetooth/WiFi Antennas and only one RF path front RF switcher, the RF switcher was used to control the antenna used, depend on the system software to determine which antenna have a better performance. Antenna port conducted tests only was performed at chain 0 except the conducted output power was checked with two antenna output.
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	Middle	Highest
1Mbps	7	7	7
2Mbps	7	7	7

1.2.2 Support Equipment List and Details

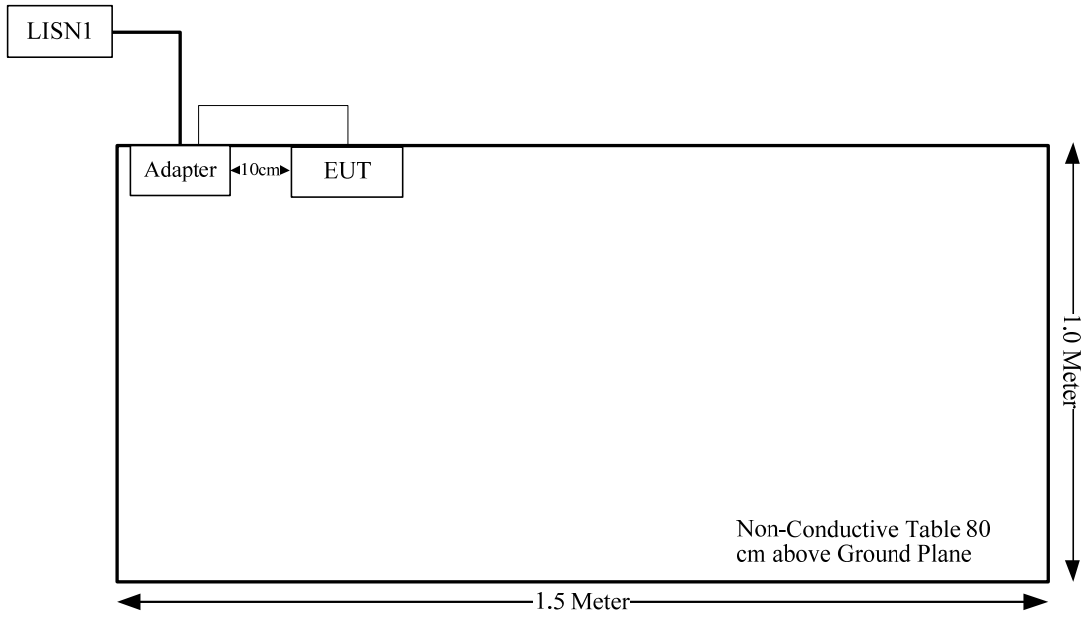
Manufacturer	Description	Model	Serial Number
/	/	/	/

1.2.3 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
USB Cable	No	No	0.8	Adapter	EUT

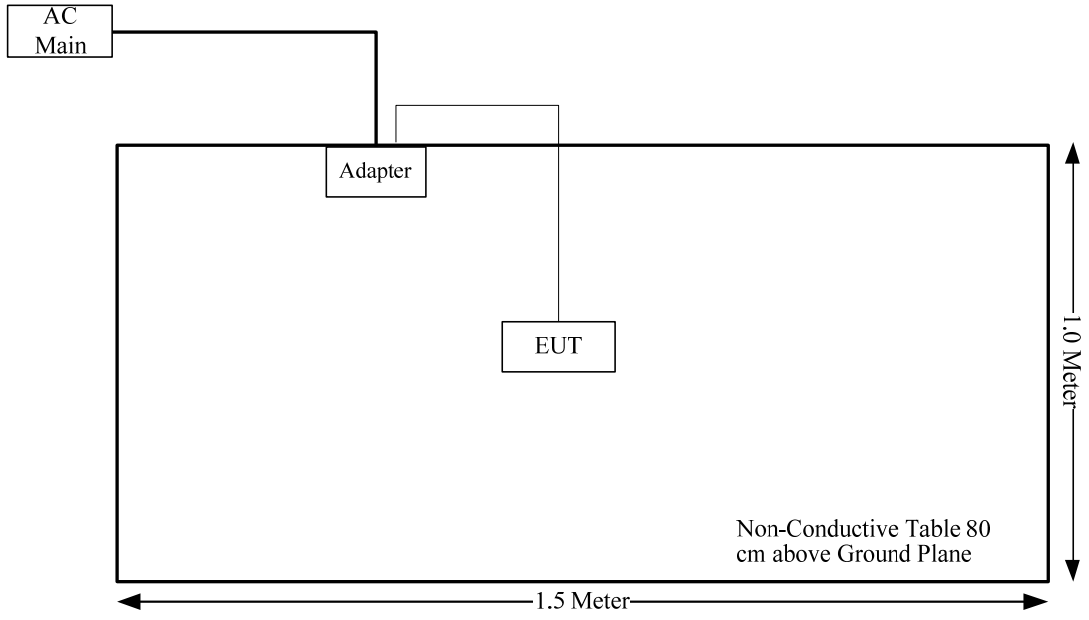
1.2.4 Block Diagram of Test Setup

AC line conducted emissions:

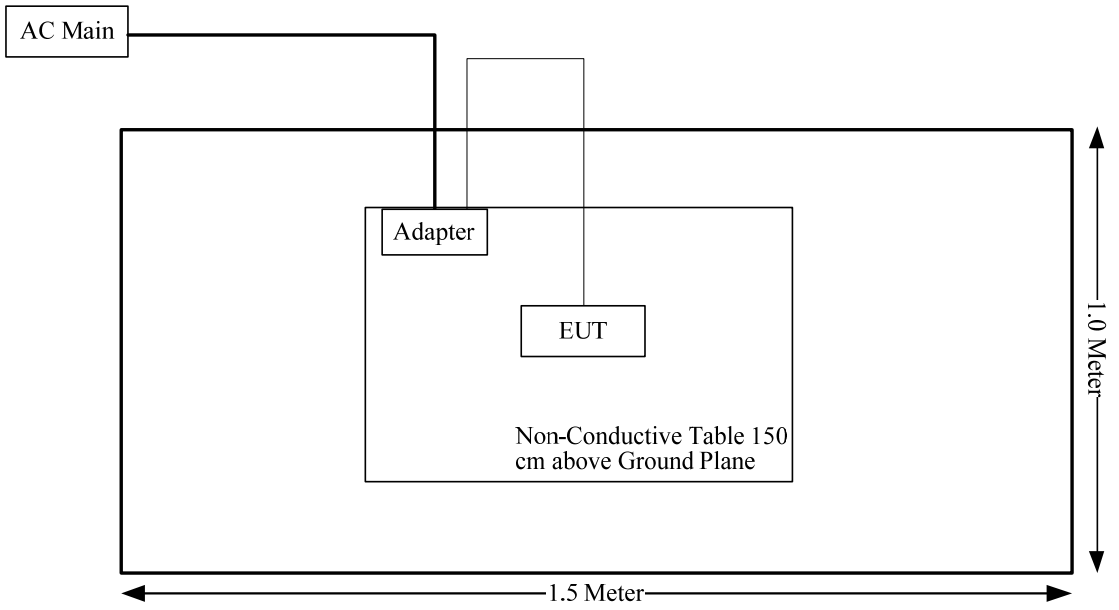


Radiated Spurious Emissions:

Below 1G:



Above 1G:


AC Main
Adapter
EUT
Non-Conductive Table 150
cm above Ground Plane
1.0 Meter
1.5 Meter

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	9kHz~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

Standard(s) Section	Test Items	Result
§15.207(a)	AC line conducted emissions	Compliant
§15.205, §15.209, §15.247(d)	Radiated Spurious Emissions	Compliant
§15.247 (a)(2)	Minimum 6 dB Bandwidth	Compliant
§15.247(b)(3)	Maximum Conducted Output Power	Compliant
§15.247(e)	Power Spectral Density	Compliant
§15.247(d)	100 kHz Bandwidth of Frequency Band Edge	Compliant
§15.203	Antenna Requirement	Compliant
FCC§15.247 (i) & §1.1310	RF Exposure Evaluation	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:

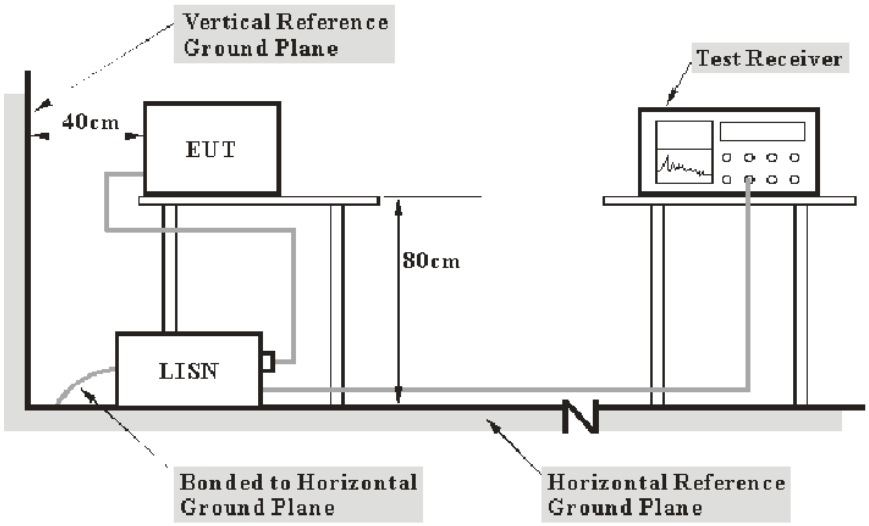
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(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.

The adapter or EUT was connected to the main LISN with a 120 V/60 Hz AC power source.

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

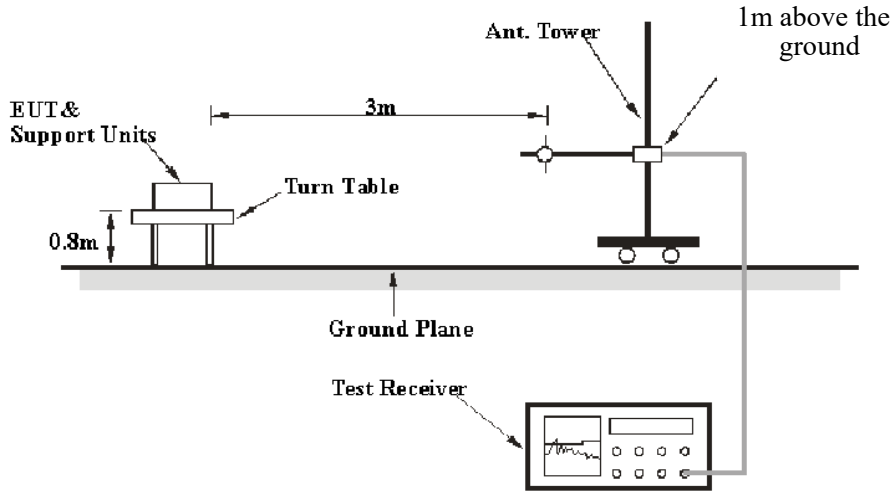
3.2.1 Applicable Standard

FCC §15.247 (d);

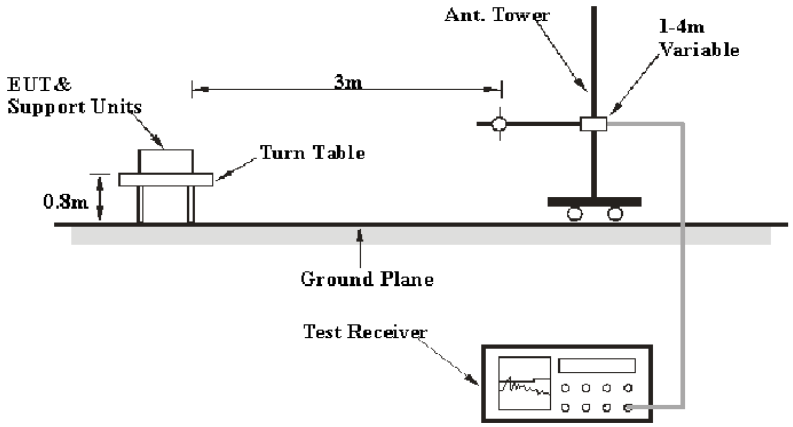
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the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

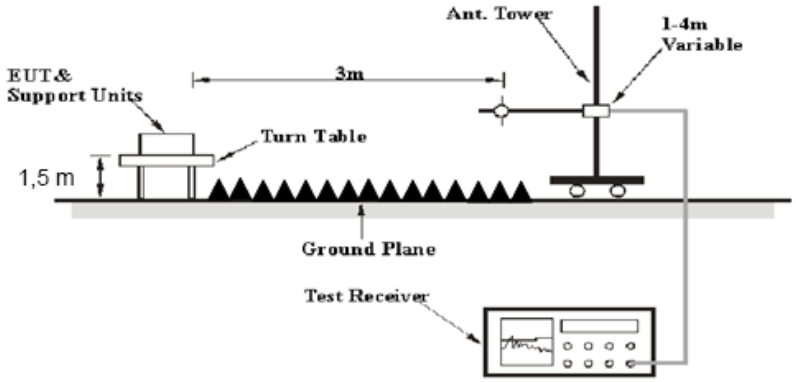
9kHz~30MHz:



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

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	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
Above 1 GHz	1MHz	3 MHz	/	PK
	1MHz	10 Hz	/	AV

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

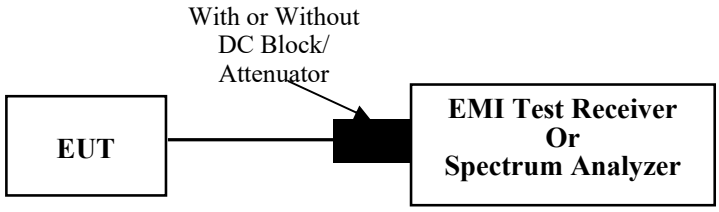
3.3 Minimum 6 dB Bandwidth

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.

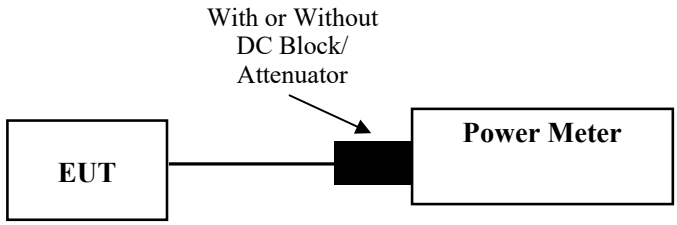
3.4 Maximum Conducted Output Power

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 11.9.1.3

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.

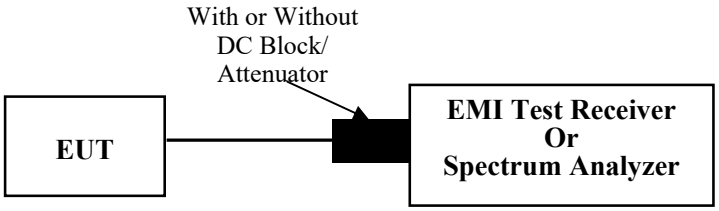
3.5 Maximum power spectral density

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.

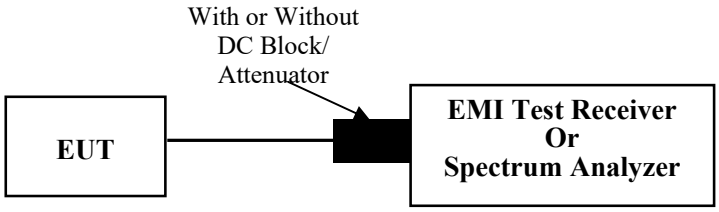
3.6 100 kHz Bandwidth of Frequency Band Edge

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



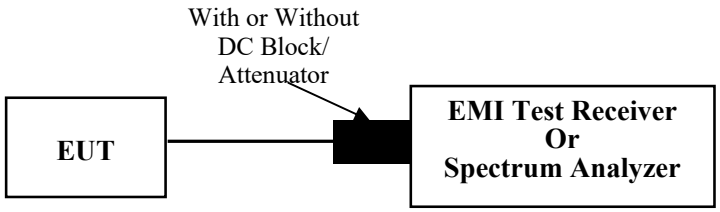
3.6.3 Test Procedure

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:	2CGI-1,2CGI-5	Test Date:	2023/10/26~2023/11/8
Test Site:	CE	Test Mode:	Transmitting maximum output power mode(BLE 2Mbps High channel Chain 0) was tested
Tester:	David Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.7~26.1	Relative Humidity: (%)	53~55	ATM Pressure: (kPa)	100.8~101

Test Equipment List and Details:

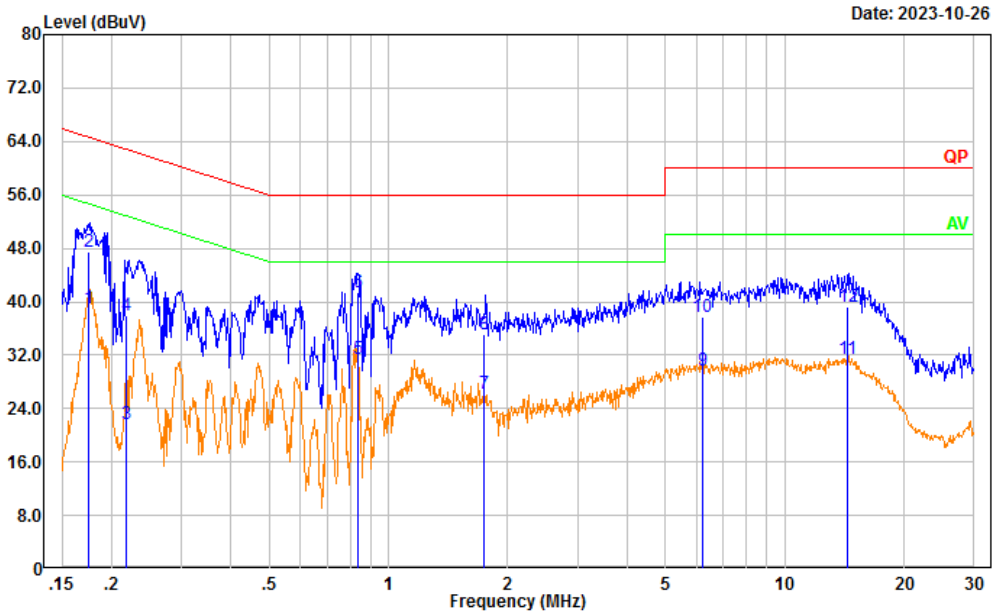
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	2023/03/31	2024/03/30
R&S	EMI Test Receiver	ESR3	102726	2023/03/31	2024/03/30
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2023/08/06	2024/08/05
Audix	Test Software	E3	190306 (V9)	N/A	N/A

** 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).*

Test Data:

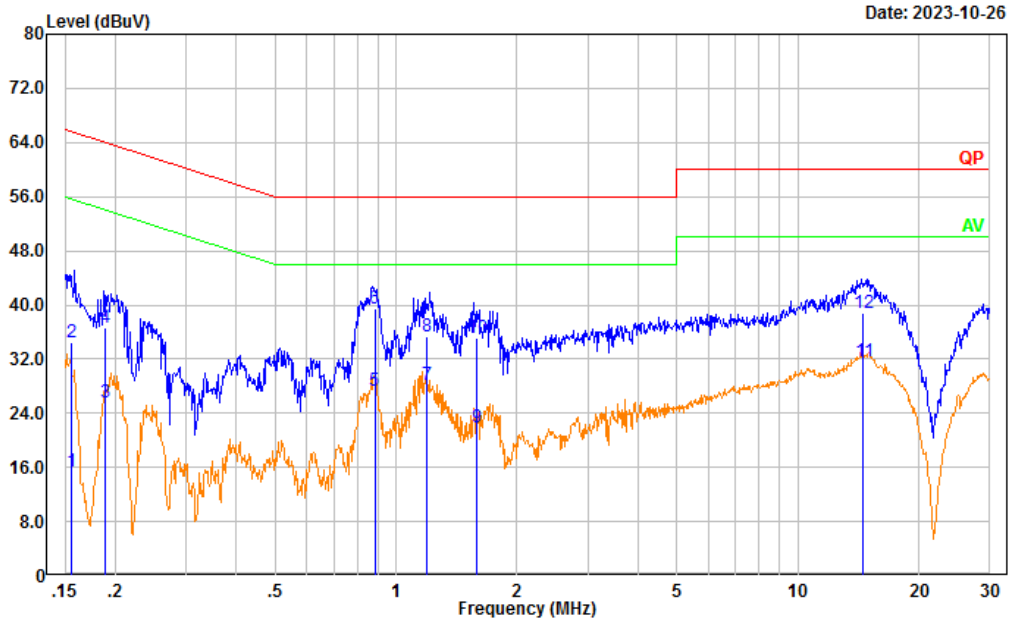
Normal Version&Adapter#1:

Project No.: CR231061271-RF
Tester: David Huang
Port: Line
Note: M1 Transmitting (Sample #1&Adapter#1 BLE)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.175	29.33	9.61	38.94	54.71	15.77	Average
2	0.175	37.89	9.61	47.50	64.71	17.21	QP
3	0.218	12.11	9.61	21.72	52.89	31.17	Average
4	0.218	28.29	9.61	37.90	62.89	24.99	QP
5	0.840	21.92	9.62	31.54	46.00	14.46	Average
6	0.840	31.86	9.62	41.48	56.00	14.52	QP
7	1.746	16.57	9.63	26.20	46.00	19.80	Average
8	1.746	25.51	9.63	35.14	56.00	20.86	QP
9	6.177	20.09	9.66	29.75	50.00	20.25	Average
10	6.177	28.03	9.66	37.69	60.00	22.31	QP
11	14.384	21.71	9.68	31.39	50.00	18.61	Average
12	14.384	29.47	9.68	39.15	60.00	20.85	QP

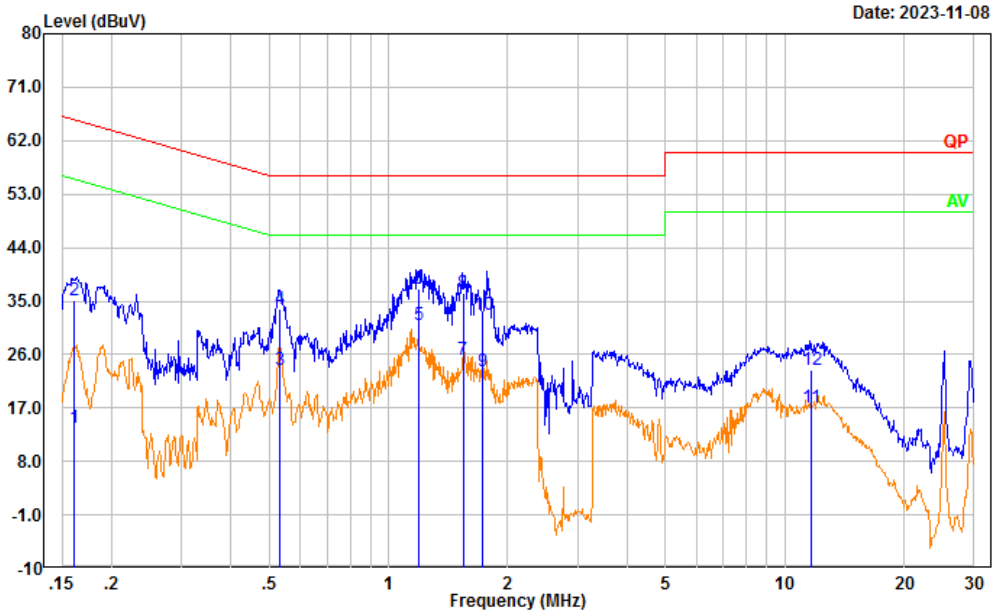
Project No.: CR231061271-RF
Tester: David Huang
Port: neutral
Note: M1 Transmitting（Sample #1&Adapter#1 BLE）



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.156	5.79	9.61	15.40	55.68	40.28	Average
2	0.156	24.88	9.61	34.49	65.68	31.19	QP
3	0.188	15.90	9.61	25.51	54.11	28.60	Average
4	0.188	26.94	9.61	36.55	64.11	27.56	QP
5	0.885	17.71	9.62	27.33	46.00	18.67	Average
6	0.885	29.93	9.62	39.55	56.00	16.45	QP
7	1.189	18.63	9.62	28.25	46.00	17.75	Average
8	1.189	25.62	9.62	35.24	56.00	20.76	QP
9	1.591	12.31	9.63	21.94	46.00	24.06	Average
10	1.591	25.40	9.63	35.03	56.00	20.97	QP
11	14.563	22.05	9.69	31.74	50.00	18.26	Average
12	14.563	29.16	9.69	38.85	60.00	21.15	QP

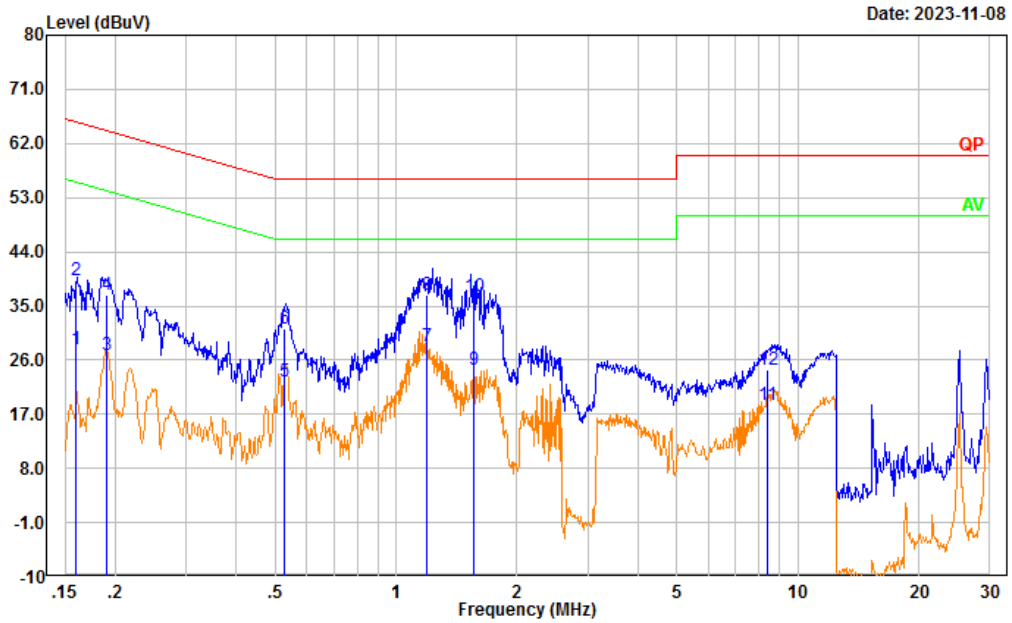
Normal Version &Adapter#2:

Project No.: CR231061271-RF
Tester: David Huang
Port: Line
Note: M2 Transmitting（Sample #1&Adapter#2 BLE）



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.162	4.04	9.61	13.65	55.38	41.73	Average
2	0.162	25.53	9.61	35.14	65.38	30.24	QP
3	0.530	13.74	9.61	23.35	46.00	22.65	Average
4	0.530	24.16	9.61	33.77	56.00	22.23	QP
5	1.191	21.39	9.62	31.01	46.00	14.99	Average
6	1.191	27.42	9.62	37.04	56.00	18.96	QP
7	1.541	15.37	9.63	25.00	46.00	21.00	Average
8	1.541	26.76	9.63	36.39	56.00	19.61	QP
9	1.733	13.52	9.63	23.15	46.00	22.85	Average
10	1.733	23.10	9.63	32.73	56.00	23.27	QP
11	11.626	7.48	9.67	17.15	50.00	32.85	Average
12	11.626	13.79	9.67	23.46	60.00	36.54	QP

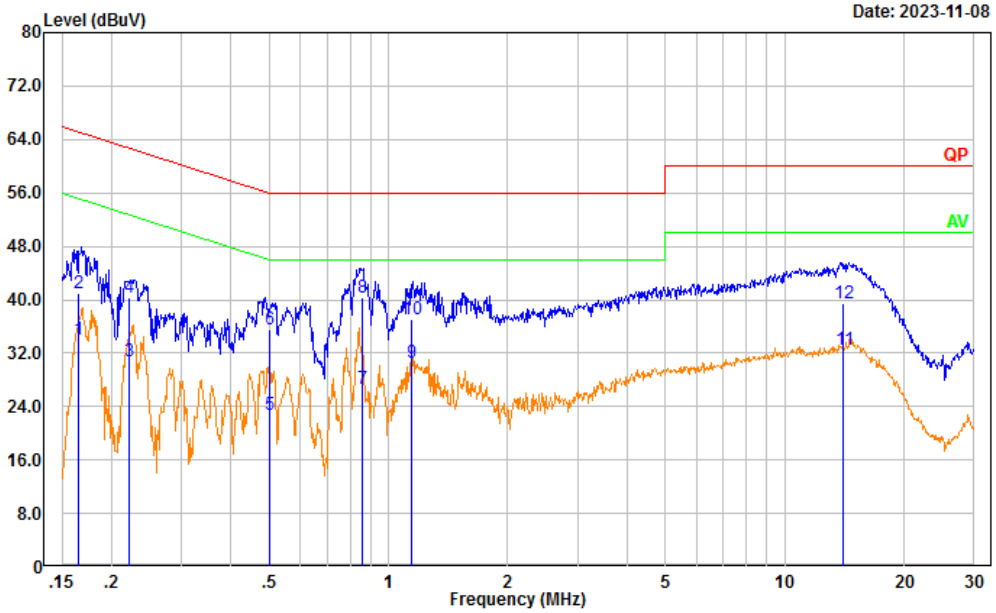
Project No.: CR231061271-RF
Tester: David Huang
Port: neutral
Note: M2 Transmitting (Sample #1&Adapter#2 BLE)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.159	18.23	9.61	27.84	55.49	27.65	Average
2	0.159	29.70	9.61	39.31	65.49	26.18	QP
3	0.191	17.28	9.61	26.89	53.99	27.10	Average
4	0.191	27.21	9.61	36.82	63.99	27.17	QP
5	0.527	12.87	9.61	22.48	46.00	23.52	Average
6	0.527	21.59	9.61	31.20	56.00	24.80	QP
7	1.193	18.71	9.62	28.33	46.00	17.67	Average
8	1.193	27.21	9.62	36.83	56.00	19.17	QP
9	1.566	14.64	9.63	24.27	46.00	21.73	Average
10	1.566	26.93	9.63	36.56	56.00	19.44	QP
11	8.366	8.98	9.67	18.65	50.00	31.35	Average
12	8.366	14.65	9.67	24.32	60.00	35.68	QP

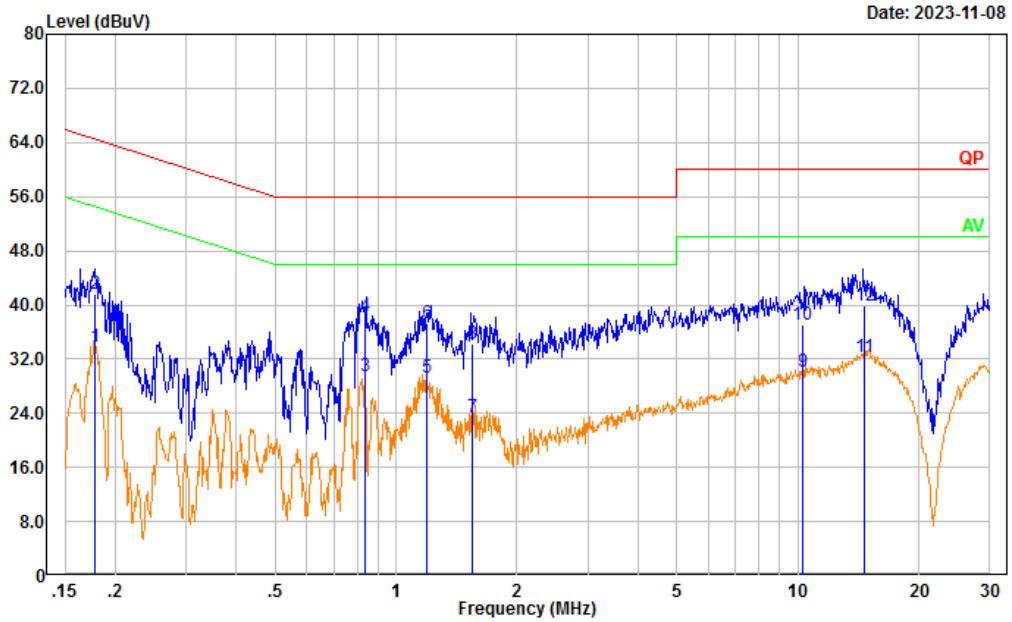
Lighting Version&Adapter #1:

Project No.: CR231061271-RF
Tester: David Huang
Port: Line
Note: M3 Transmitting (Sample #2&Adapter#1 BLE)



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.165	24.50	9.61	34.11	55.21	21.10	Average
2	0.165	31.36	9.61	40.97	65.21	24.24	QP
3	0.222	21.25	9.61	30.86	52.73	21.87	Average
4	0.222	30.80	9.61	40.41	62.73	22.32	QP
5	0.501	13.07	9.61	22.68	46.00	23.32	Average
6	0.501	25.97	9.61	35.58	56.00	20.42	QP
7	0.858	17.14	9.62	26.76	46.00	19.24	Average
8	0.858	30.75	9.62	40.37	56.00	15.63	QP
9	1.142	20.96	9.62	30.58	46.00	15.42	Average
10	1.142	27.35	9.62	36.97	56.00	19.03	QP
11	14.045	22.74	9.68	32.42	50.00	17.58	Average
12	14.045	29.88	9.68	39.56	60.00	20.44	QP

Project No.: CR231061271-RF
Tester: David Huang
Port: neutral
Note: M3 Transmitting（Sample #2&Adapter#1 BLE）



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB)	Result (dBµV)	Limit (dBµV)	Margin (dB)	Detector
1	0.178	24.11	9.61	33.72	54.56	20.84	Average
2	0.178	32.01	9.61	41.62	64.56	22.94	QP
3	0.835	19.85	9.62	29.47	46.00	16.53	Average
4	0.835	28.71	9.62	38.33	56.00	17.67	QP
5	1.192	19.69	9.62	29.31	46.00	16.69	Average
6	1.192	27.70	9.62	37.32	56.00	18.68	QP
7	1.542	13.71	9.63	23.34	46.00	22.66	Average
8	1.542	24.67	9.63	34.30	56.00	21.70	QP
9	10.236	20.43	9.67	30.10	50.00	19.90	Average
10	10.236	27.48	9.67	37.15	60.00	22.85	QP
11	14.595	22.70	9.69	32.39	50.00	17.61	Average
12	14.595	30.24	9.69	39.93	60.00	20.07	QP

4.2 Radiation Spurious Emissions

Serial Number:	2CGI-1, 2CGI-5	Test Date:	2023/11/9~2023/11/16
Test Site:	966-1, 966-2	Test Mode:	Transmitting
Tester:	Vic Du ,coco Tian	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.4~26.5	Relative Humidity: (%)	61~63	ATM Pressure: (kPa)	100.9~101.7

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Below 1GHz					
Sunol Sciences	Antenna	JB6	A082520-6	2023/9/18	2026/9/17
BACL	Loop Antenna	1313-1P	3092721	2023/10/20	2026/10/19
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2023/7/16	2024/7/15
Sonoma	Amplifier	310N	186165	2023/7/16	2024/7/15
Audix	Test Software	E3	201021 (V9)	N/A	N/A
Above 1GHz					
AH	Double Ridge Guide Horn Antenna	SAS-571	1394	2023/2/22	2026/2/21
R&S	Spectrum Analyzer	FSV40	101591	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2023/8/6	2024/8/5
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2023/8/6	2024/8/5
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2023/11/8	2024/11/7
Audix	Test Software	E3	201021 (V9)	N/A	N/A
PASTERNACK	Horn Antenna	PE9852/2F-20	112002	2021/2/5	2024/2/4
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2023/9/15	2024/9/14
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2023/8/6	2024/8/5
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:

Please refer to the below table and plots.

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

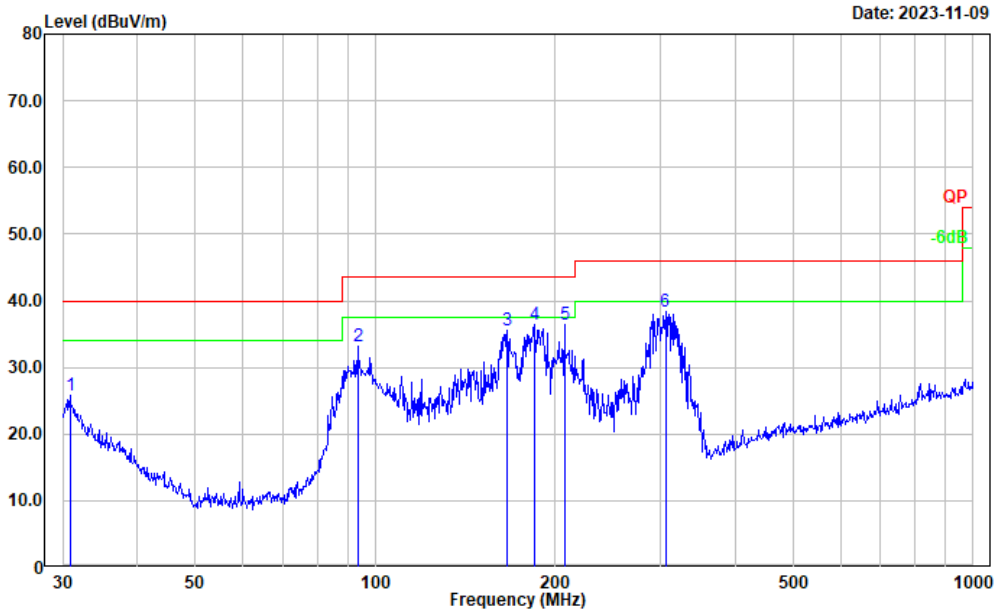
1) 9kHz~30MHz

The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

2) 30MHz-1GHz (maximum output power mode (BLE 2Mbps Chain 0) was tested)

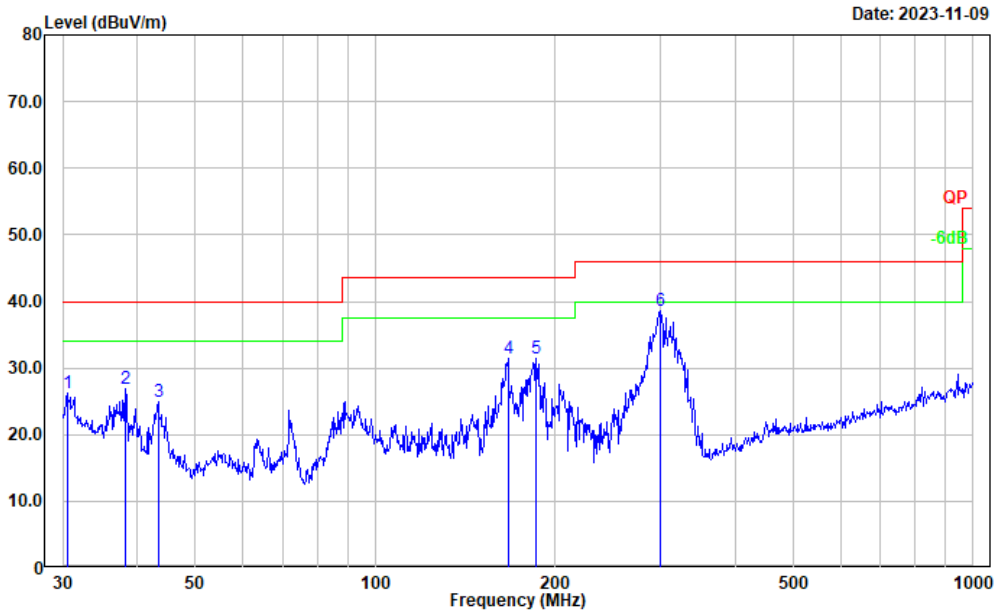
Normal Version&Adapter#1 Low Channel

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.853	30.21	-4.45	25.76	40.00	14.24	Peak
2	93.440	49.26	-16.05	33.21	43.50	10.29	Peak
3	166.068	48.05	-12.44	35.61	43.50	7.89	Peak
4	184.490	50.00	-13.52	36.48	43.50	7.02	Peak
5	207.123	48.77	-12.41	36.36	43.50	7.14	Peak
6	305.680	48.89	-10.57	38.32	46.00	7.68	Peak

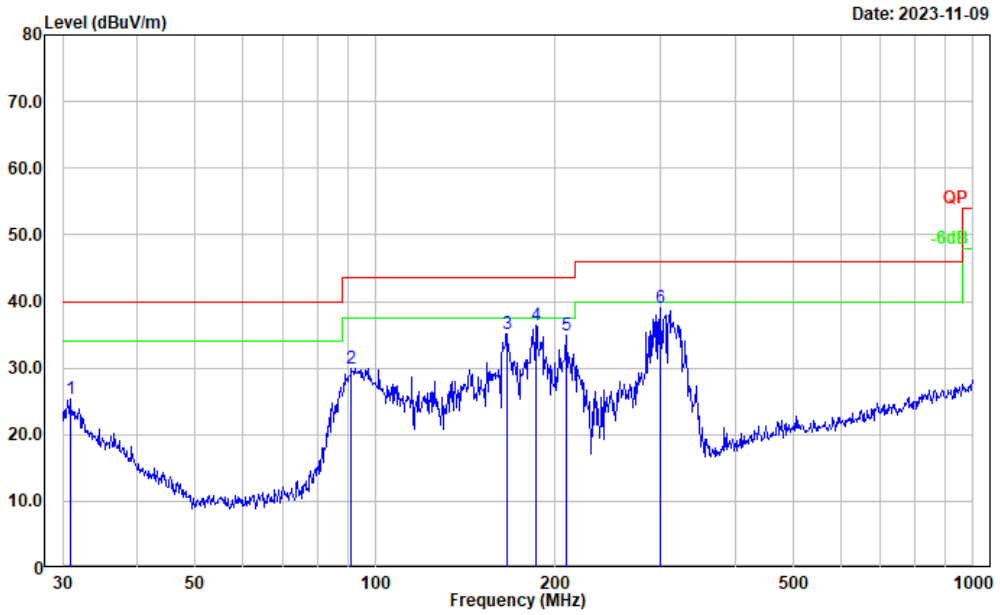
Project No.: CR231061271-RF
Tester: Vic Du
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	30.35	-4.20	26.15	40.00	13.85	Peak
2	38.212	36.97	-10.02	26.95	40.00	13.05	Peak
3	43.353	38.29	-13.32	24.97	40.00	15.03	Peak
4	166.651	43.99	-12.53	31.46	43.50	12.04	Peak
5	185.788	44.85	-13.52	31.33	43.50	12.17	Peak
6	300.367	49.12	-10.63	38.49	46.00	7.51	Peak

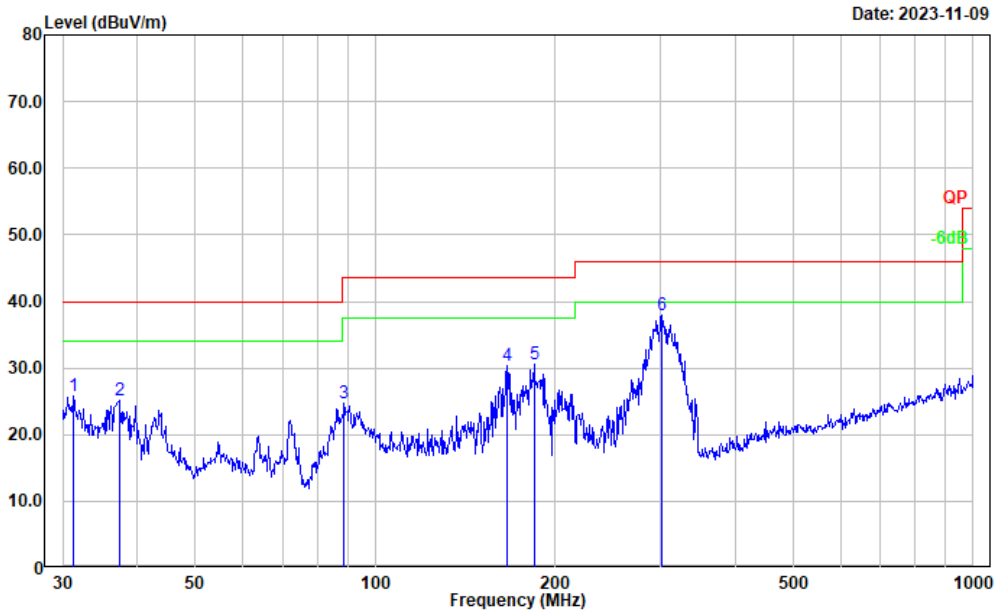
Normal Version&Adapter#1 Middle Channel:

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.853	29.88	-4.45	25.43	40.00	14.57	Peak
2	91.175	46.55	-16.64	29.91	43.50	13.59	Peak
3	166.068	47.59	-12.44	35.15	43.50	8.35	Peak
4	185.788	49.97	-13.52	36.45	43.50	7.05	Peak
5	208.580	47.27	-12.46	34.81	43.50	8.69	Peak
6	299.316	49.69	-10.65	39.04	46.00	6.96	Peak

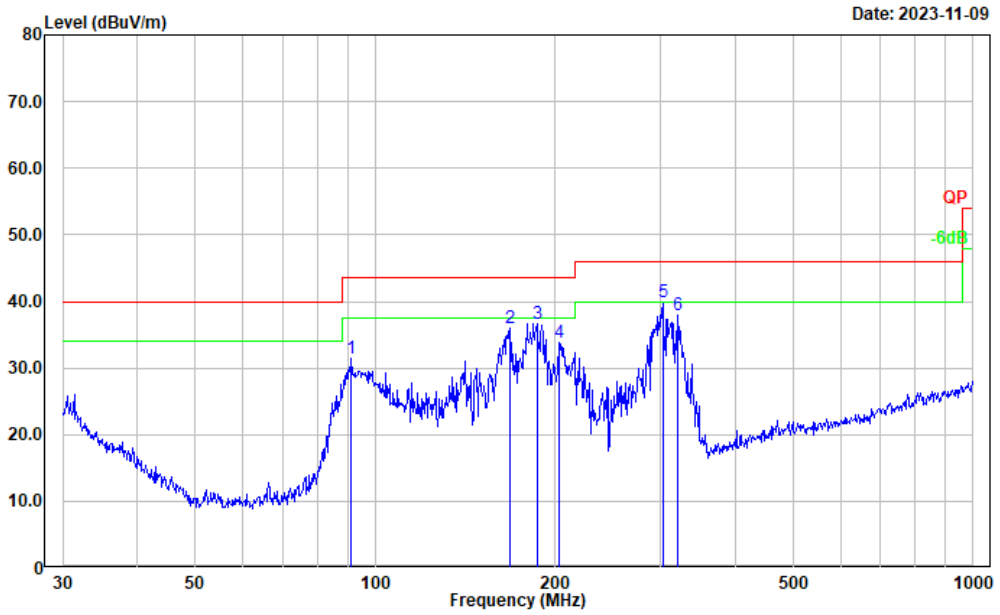
Project No.: CR231061271-RF
Tester: Vic Du
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	31.289	30.56	-4.77	25.79	40.00	14.21	Peak
2	37.285	34.55	-9.35	25.20	40.00	14.80	Peak
3	88.652	41.76	-17.01	24.75	43.50	18.75	Peak
4	166.068	42.80	-12.44	30.36	43.50	13.14	Peak
5	184.490	44.05	-13.52	30.53	43.50	12.97	Peak
6	301.422	48.50	-10.61	37.89	46.00	8.11	Peak

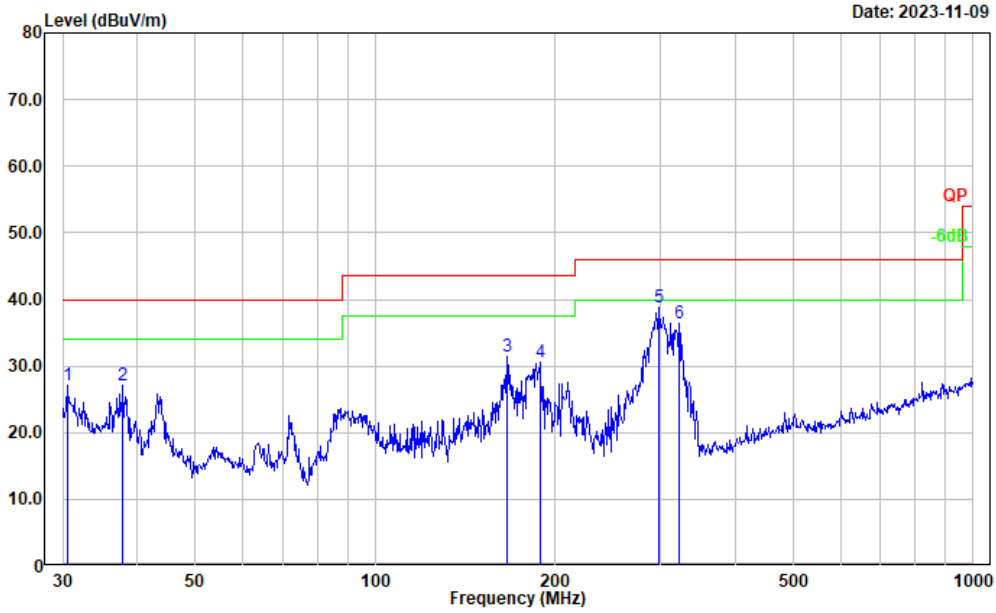
Normal Version&Adapter#1 High Channel:

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	91.175	48.13	-16.64	31.49	43.50	12.01	Peak
2	168.414	48.71	-12.68	36.03	43.50	7.47	Peak
3	186.441	50.27	-13.53	36.74	43.50	6.76	Peak
4	203.523	46.22	-12.33	33.89	43.50	9.61	Peak
5	302.481	50.58	-10.61	39.97	46.00	6.03	Peak
6	321.061	48.45	-10.52	37.93	46.00	8.07	Peak

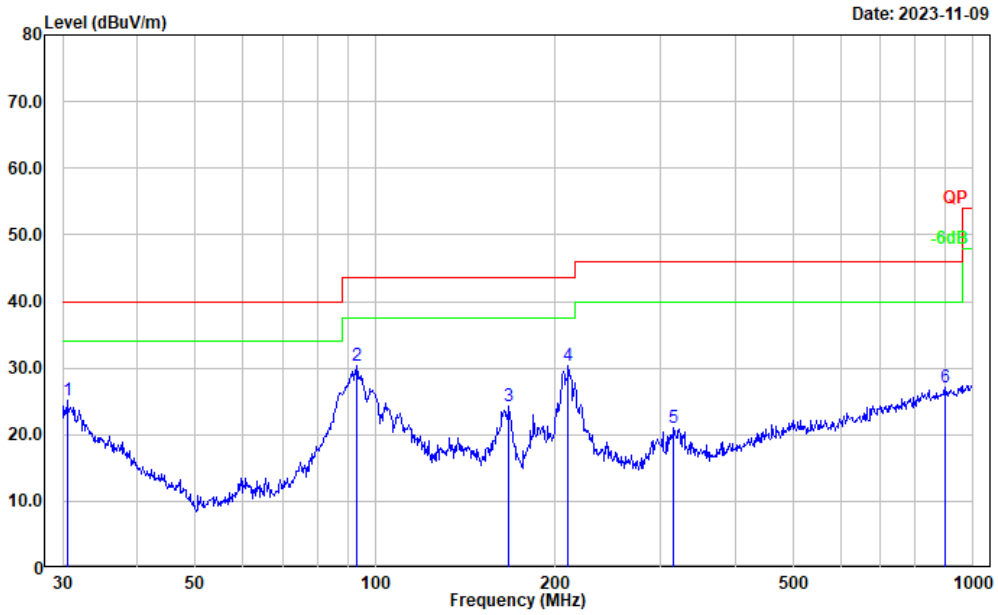
Project No.: CR231061271-RF
Tester: Vic Du
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	31.25	-4.20	27.05	40.00	12.95	Peak
2	37.812	36.76	-9.72	27.04	40.00	12.96	Peak
3	166.068	43.98	-12.44	31.54	43.50	11.96	Peak
4	188.413	44.09	-13.49	30.60	43.50	12.90	Peak
5	298.268	49.45	-10.69	38.76	46.00	7.24	Peak
6	322.189	46.98	-10.47	36.51	46.00	9.49	Peak

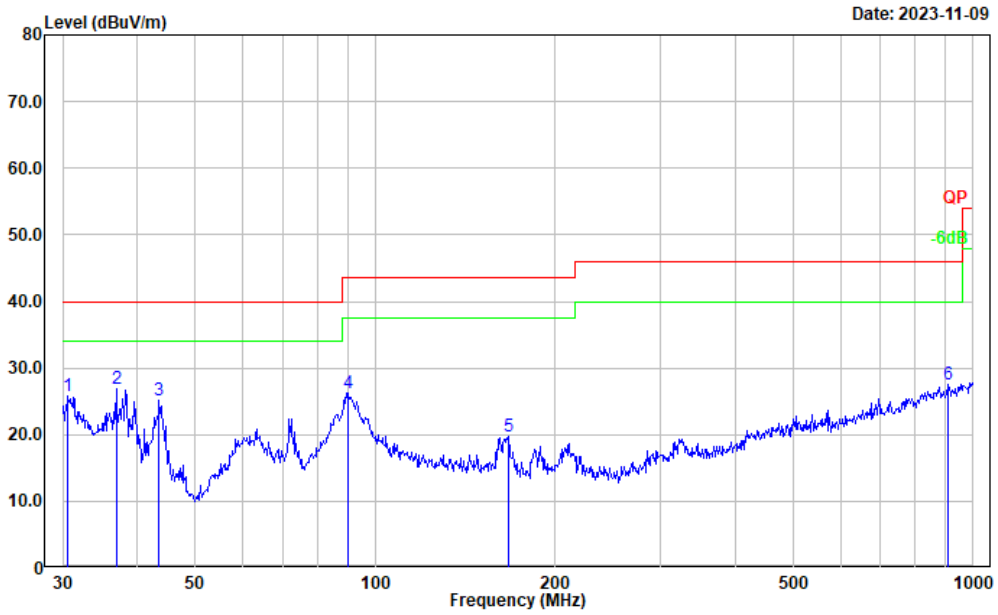
Normal Version&Adapter#2 Low Channel:

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	29.40	-4.20	25.20	40.00	14.80	Peak
2	93.113	46.38	-16.12	30.26	43.50	13.24	Peak
3	167.237	36.95	-12.59	24.36	43.50	19.14	Peak
4	210.048	42.88	-12.49	30.39	43.50	13.11	Peak
5	315.481	31.54	-10.59	20.95	46.00	25.05	Peak
6	896.997	28.09	-0.95	27.14	46.00	18.86	Peak

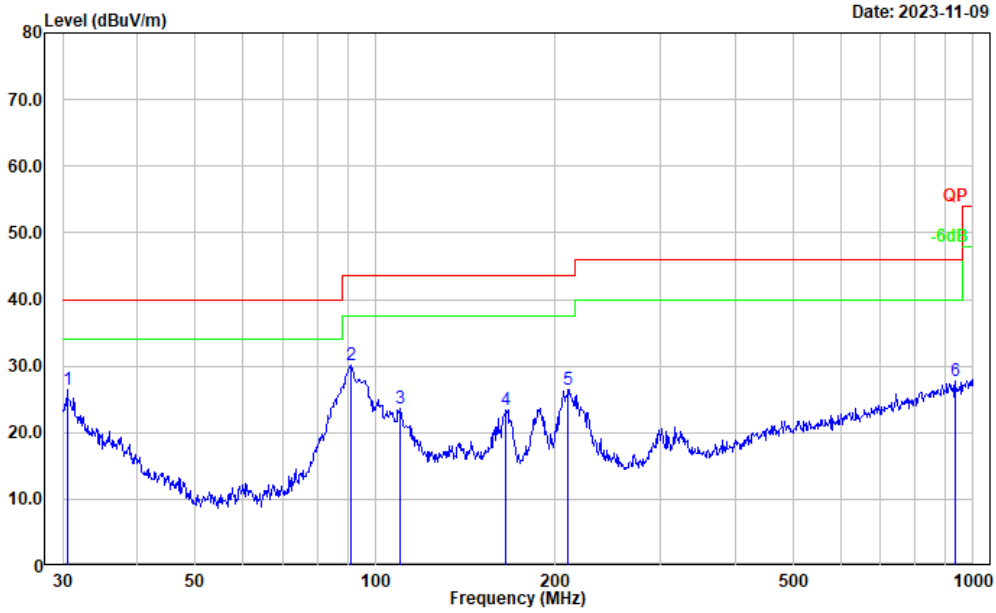
Project No.: CR231061271-RF
Tester: Vic Du
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.638	30.05	-4.28	25.77	40.00	14.23	Peak
2	36.895	35.90	-9.06	26.84	40.00	13.16	Peak
3	43.506	38.46	-13.40	25.06	40.00	14.94	Peak
4	90.220	43.06	-16.87	26.19	43.50	17.31	Peak
5	166.651	32.26	-12.53	19.73	43.50	23.77	Peak
6	909.667	28.07	-0.62	27.45	46.00	18.55	Peak

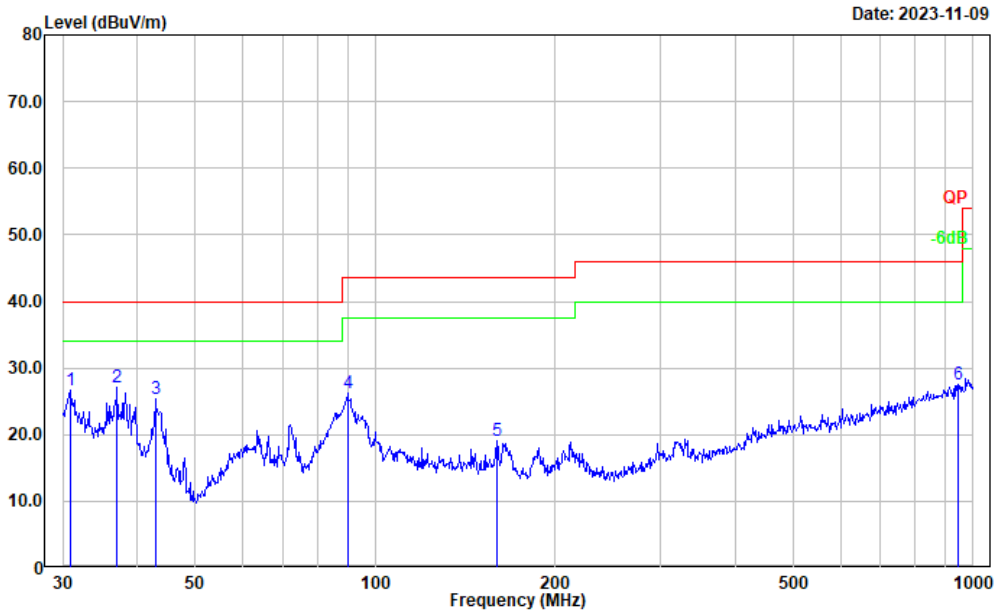
Normal Version&Adapter#2 Middle Channel:

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	30.67	-4.20	26.47	40.00	13.53	Peak
2	91.175	46.69	-16.64	30.05	43.50	13.45	Peak
3	110.182	35.86	-12.32	23.54	43.50	19.96	Peak
4	165.487	35.91	-12.41	23.50	43.50	20.00	Peak
5	210.048	38.89	-12.49	26.40	43.50	17.10	Peak
6	932.272	28.36	-0.58	27.78	46.00	18.22	Peak

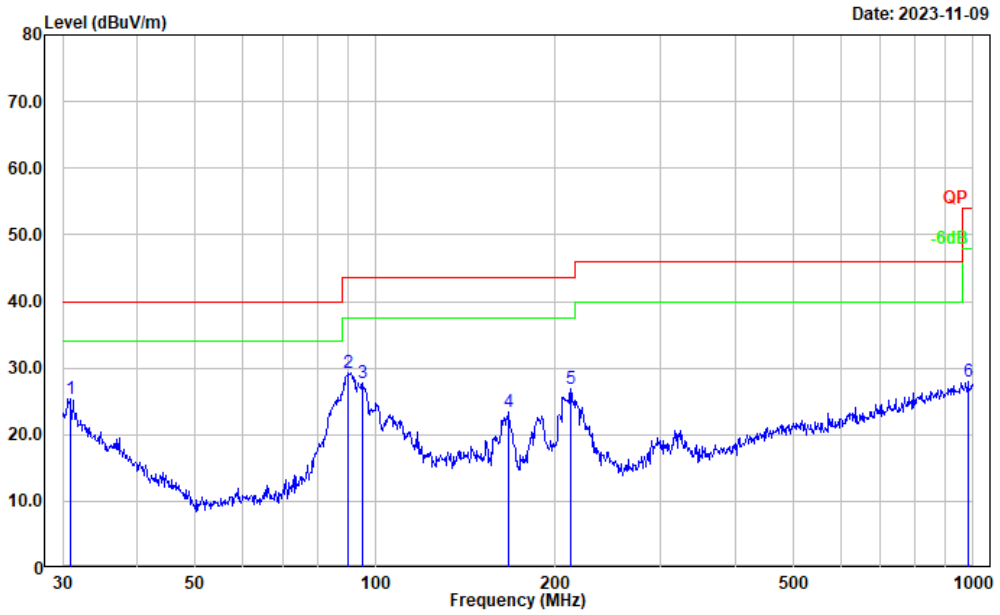
Project No.: CR231061271-RF
Tester: Vic Du
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.853	31.09	-4.45	26.64	40.00	13.36	Peak
2	37.025	36.16	-9.16	27.00	40.00	13.00	Peak
3	42.900	38.35	-13.05	25.30	40.00	14.70	Peak
4	89.905	43.21	-16.93	26.28	43.50	17.22	Peak
5	159.784	31.00	-11.95	19.05	43.50	24.45	Peak
6	942.131	27.86	-0.41	27.45	46.00	18.55	Peak

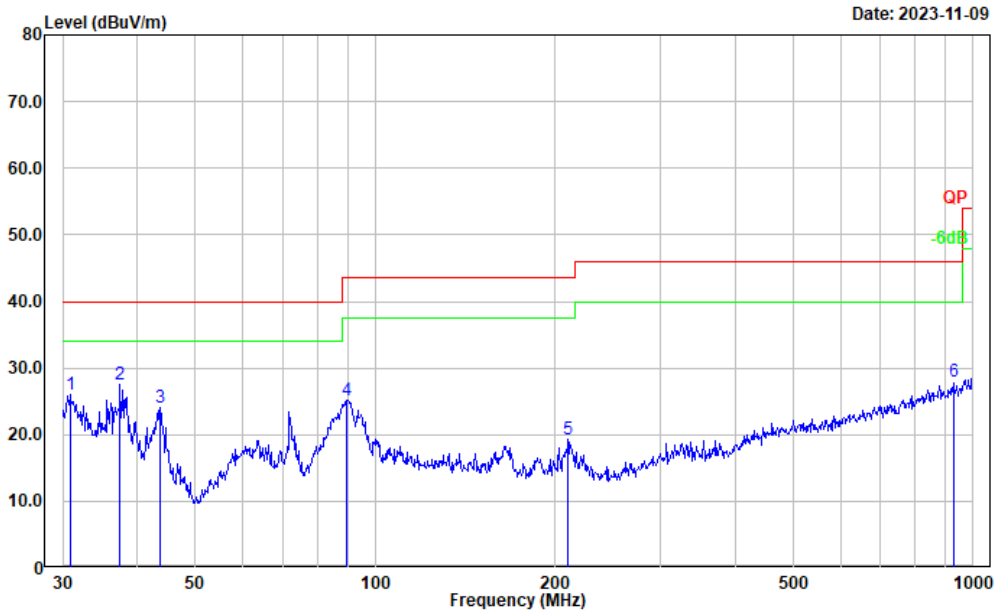
Normal Version&Adapter#2 High Channel:

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.853	29.86	-4.45	25.41	40.00	14.59	Peak
2	90.220	46.21	-16.87	29.34	43.50	14.16	Peak
3	95.093	43.44	-15.60	27.84	43.50	15.66	Peak
4	166.651	35.91	-12.53	23.38	43.50	20.12	Peak
5	212.270	39.48	-12.57	26.91	43.50	16.59	Peak
6	979.180	27.74	0.32	28.06	54.00	25.94	Peak

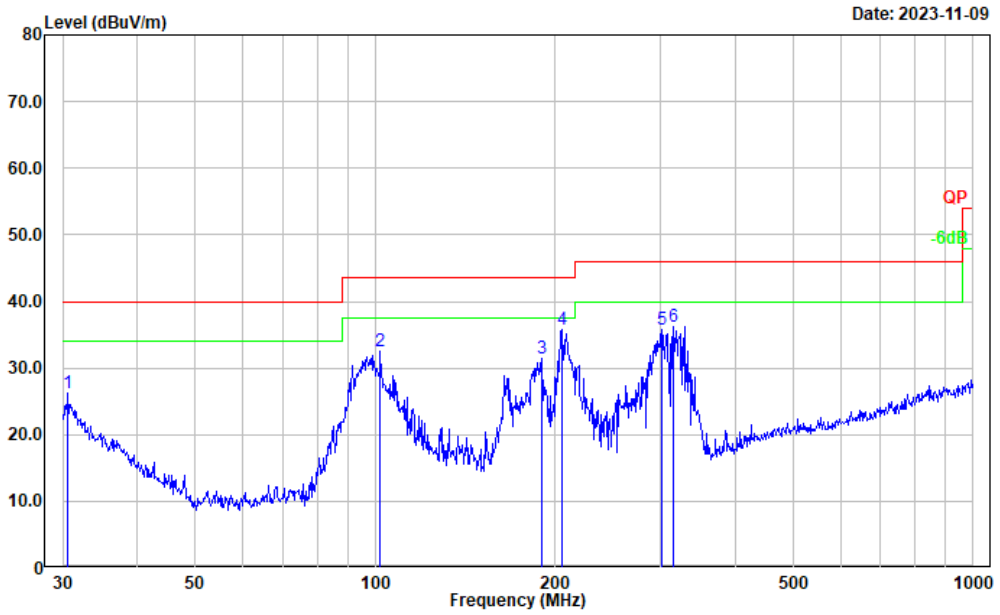
Project No.: CR231061271-RF
Tester: Vic Du
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.853	30.52	-4.45	26.07	40.00	13.93	Peak
2	37.416	36.90	-9.44	27.46	40.00	12.54	Peak
3	43.659	37.48	-13.49	23.99	40.00	16.01	Peak
4	89.590	42.21	-16.96	25.25	43.50	18.25	Peak
5	210.048	31.78	-12.49	19.29	43.50	24.21	Peak
6	925.756	28.49	-0.63	27.86	46.00	18.14	Peak

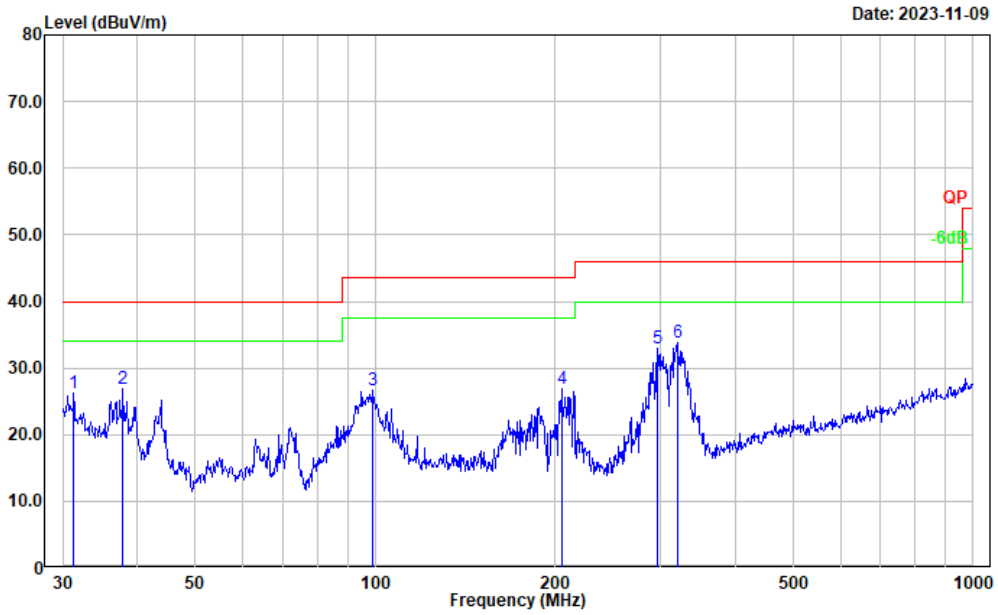
Lighting Version&Adapter#1 Low Channel:

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.638	30.50	-4.28	26.22	40.00	13.78	Peak
2	102.001	46.54	-13.97	32.57	43.50	10.93	Peak
3	189.739	44.87	-13.47	31.40	43.50	12.10	Peak
4	205.675	48.09	-12.38	35.71	43.50	7.79	Peak
5	301.422	46.42	-10.61	35.81	46.00	10.19	Peak
6	315.481	46.71	-10.59	36.12	46.00	9.88	Peak

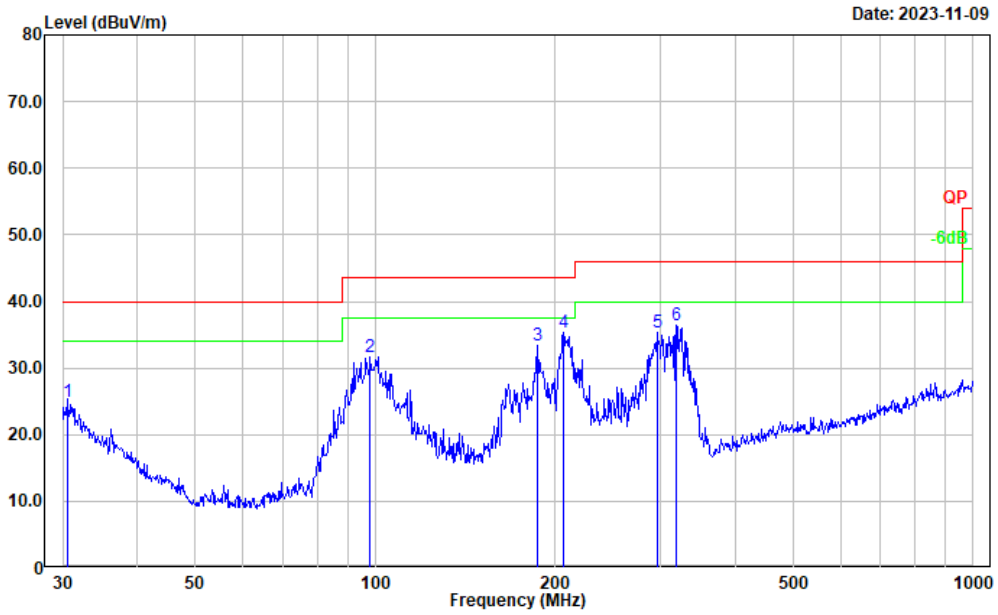
Project No.: CR231061271-RF
Tester: Vic Du
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	31.289	31.07	-4.77	26.30	40.00	13.70	Peak
2	37.812	36.65	-9.72	26.93	40.00	13.07	Peak
3	99.180	41.13	-14.51	26.62	43.50	16.88	Peak
4	204.955	39.15	-12.37	26.78	43.50	16.72	Peak
5	297.224	43.66	-10.71	32.95	46.00	13.05	Peak
6	319.937	44.37	-10.55	33.82	46.00	12.18	Peak

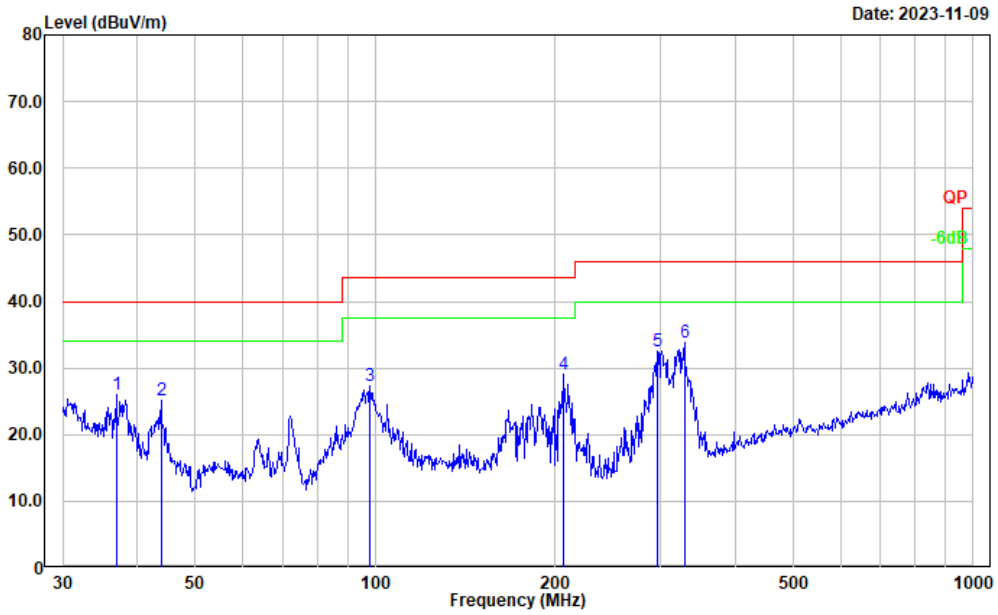
Lighting Version&Adapter#1 Middle Channel:

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.638	29.16	-4.28	24.88	40.00	15.12	Peak
2	98.142	46.46	-14.75	31.71	43.50	11.79	Peak
3	186.441	46.99	-13.53	33.46	43.50	10.04	Peak
4	206.398	47.67	-12.40	35.27	43.50	8.23	Peak
5	296.184	46.15	-10.74	35.41	46.00	10.59	Peak
6	318.817	46.96	-10.56	36.40	46.00	9.60	Peak

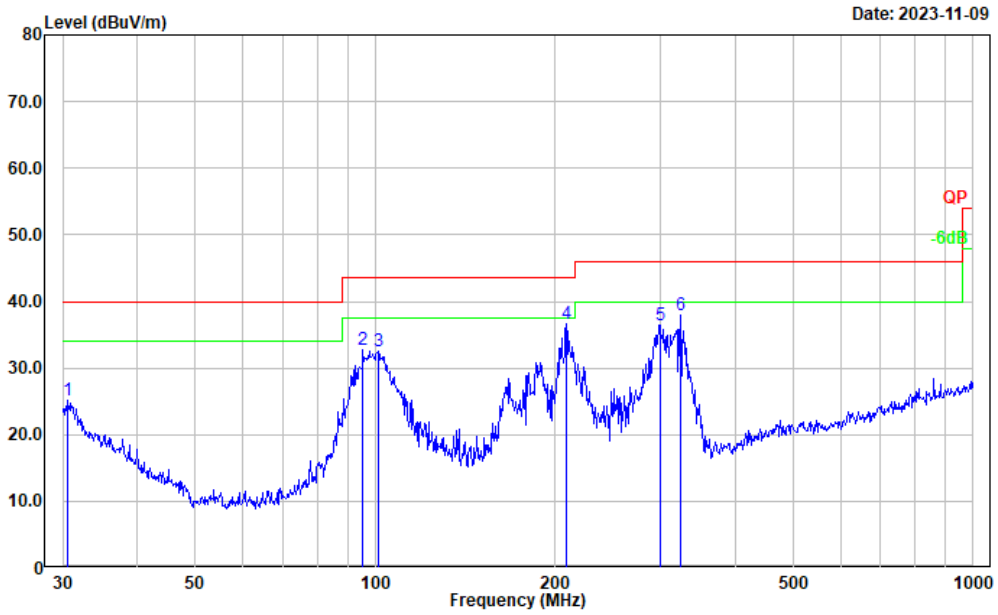
Project No.: CR231061271-RF
Tester: Vic Du
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	36.895	35.06	-9.06	26.00	40.00	14.00	Peak
2	43.812	38.83	-13.58	25.25	40.00	14.75	Peak
3	98.142	42.08	-14.75	27.33	43.50	16.17	Peak
4	206.398	41.52	-12.40	29.12	43.50	14.38	Peak
5	296.184	43.22	-10.74	32.48	46.00	13.52	Peak
6	329.039	44.00	-10.26	33.74	46.00	12.26	Peak

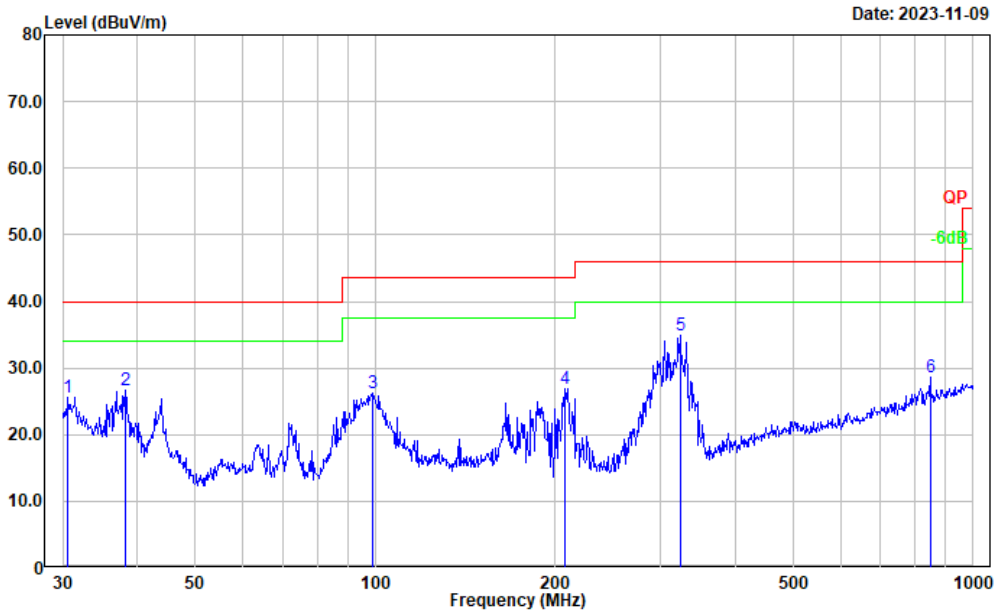
Lighting Version&Adapter#1 High Channel:

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.531	29.39	-4.20	25.19	40.00	14.81	Peak
2	95.427	48.19	-15.50	32.69	43.50	10.81	Peak
3	101.289	46.47	-14.06	32.41	43.50	11.09	Peak
4	208.580	49.18	-12.46	36.72	43.50	6.78	Peak
5	299.316	47.13	-10.65	36.48	46.00	9.52	Peak
6	323.320	48.32	-10.44	37.88	46.00	8.12	Peak

Project No.: CR231061271-RF
Tester: Vic Du
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	30.638	29.97	-4.28	25.69	40.00	14.31	Peak
2	38.212	36.65	-10.02	26.63	40.00	13.37	Peak
3	99.180	40.73	-14.51	26.22	43.50	17.28	Peak
4	207.123	39.29	-12.41	26.88	43.50	16.62	Peak
5	323.320	45.44	-10.44	35.00	46.00	11.00	Peak
6	848.056	30.16	-1.63	28.53	46.00	17.47	Peak

3) 1-25GHz:
Normal Version&Adapter#1 was the worst:
Chain 0:
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							
2390.000	26.75	PK	H	31.71	58.46	74.00	15.54
2390.000	13.86	AV	H	31.71	45.57	54.00	8.43
2390.000	26.54	PK	V	31.71	58.25	74.00	15.75
2390.000	13.49	AV	V	31.71	45.20	54.00	8.80
4804.000	34.67	PK	H	11.19	45.86	74.00	28.14
4804.000	21.59	AV	H	11.19	32.78	54.00	21.22
4804.000	34.59	PK	V	11.19	45.78	74.00	28.22
4804.000	21.39	AV	V	11.19	32.58	54.00	21.42
7206.000	33.46	PK	H	15.03	48.49	74.00	25.51
7206.000	20.38	AV	H	15.03	35.41	54.00	18.59
7206.000	33.38	PK	V	15.03	48.41	74.00	25.59
7206.000	20.19	AV	V	15.03	35.22	54.00	18.78
Middle Channel: 2440 MHz							
4880.000	34.46	PK	H	11.48	45.94	74.00	28.06
4880.000	21.39	AV	H	11.48	32.87	54.00	21.13
4880.000	34.52	PK	V	11.48	46.00	74.00	28.00
4880.000	21.39	AV	V	11.48	32.87	54.00	21.13
7320.000	33.45	PK	H	15.58	49.03	74.00	24.97
7320.000	20.29	AV	H	15.58	35.87	54.00	18.13
7320.000	33.76	PK	V	15.58	49.34	74.00	24.66
7320.000	20.54	AV	V	15.58	36.12	54.00	17.88
High Channel: 2480 MHz							
2483.500	26.54	PK	H	32.19	58.73	74.00	15.27
2483.500	13.57	AV	H	32.19	45.76	54.00	8.24
2483.500	26.59	PK	V	32.19	58.78	74.00	15.22
2483.500	13.58	AV	V	32.19	45.77	54.00	8.23
4960.000	34.41	PK	H	11.77	46.18	74.00	27.82
4960.000	21.64	AV	H	11.77	33.41	54.00	20.59
4960.000	34.72	PK	V	11.77	46.49	74.00	27.51
4960.000	21.88	AV	V	11.77	33.65	54.00	20.35
7440.000	33.77	PK	H	15.98	49.75	74.00	24.25
7440.000	20.79	AV	H	15.98	36.77	54.00	17.23
7440.000	33.80	PK	V	15.98	49.78	74.00	24.22
7440.000	20.83	AV	V	15.98	36.81	54.00	**17.19**

BLE 2Mbps:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 2404 MHz							
2390.000	26.85	PK	H	31.71	58.56	74.00	15.44
2390.000	13.49	AV	H	31.71	45.20	54.00	8.80
2390.000	26.54	PK	V	31.71	58.25	74.00	15.75
2390.000	13.62	AV	V	31.71	45.33	54.00	8.67
4808.000	34.39	PK	H	11.22	45.61	74.00	28.39
4808.000	21.58	AV	H	11.22	32.80	54.00	21.20
4808.000	34.62	PK	V	11.22	45.84	74.00	28.16
4808.000	21.29	AV	V	11.22	32.51	54.00	21.49
7212.000	33.29	PK	H	15.07	48.36	74.00	25.64
7212.000	20.57	AV	H	15.07	35.64	54.00	18.36
7212.000	33.28	PK	V	15.07	48.35	74.00	25.65
7212.000	20.47	AV	V	15.07	35.54	54.00	18.46
Middle Channel: 2440 MHz							
4880.000	34.52	PK	H	11.48	46.00	74.00	28.00
4880.000	21.39	AV	H	11.48	32.87	54.00	21.13
4880.000	34.76	PK	V	11.48	46.24	74.00	27.76
4880.000	21.52	AV	V	11.48	33.00	54.00	21.00
7320.000	33.53	PK	H	15.58	49.11	74.00	24.89
7320.000	20.29	AV	H	15.58	35.87	54.00	18.13
7320.000	33.47	PK	V	15.58	49.05	74.00	24.95
7320.000	20.85	AV	V	15.58	36.43	54.00	17.57
High Channel: 2478 MHz							
2483.500	26.53	PK	H	32.19	58.72	74.00	15.28
2483.500	13.37	AV	H	32.19	45.56	54.00	8.44
2483.500	26.59	PK	V	32.19	58.78	74.00	15.22
2483.500	13.35	AV	V	32.19	45.54	54.00	8.46
4956.000	34.26	PK	H	11.77	46.03	74.00	27.97
4956.000	21.38	AV	H	11.77	33.15	54.00	20.85
4956.000	34.47	PK	V	11.77	46.24	74.00	27.76
4956.000	21.55	AV	V	11.77	33.32	54.00	20.68
7434.000	33.58	PK	H	15.93	49.51	74.00	24.49
7434.000	20.54	AV	H	15.93	36.47	54.00	17.53
7434.000	33.62	PK	V	15.93	49.55	74.00	24.45
7434.000	20.81	AV	V	15.93	36.74	54.00	17.26

Chain 1:
BLE 1Mbps:

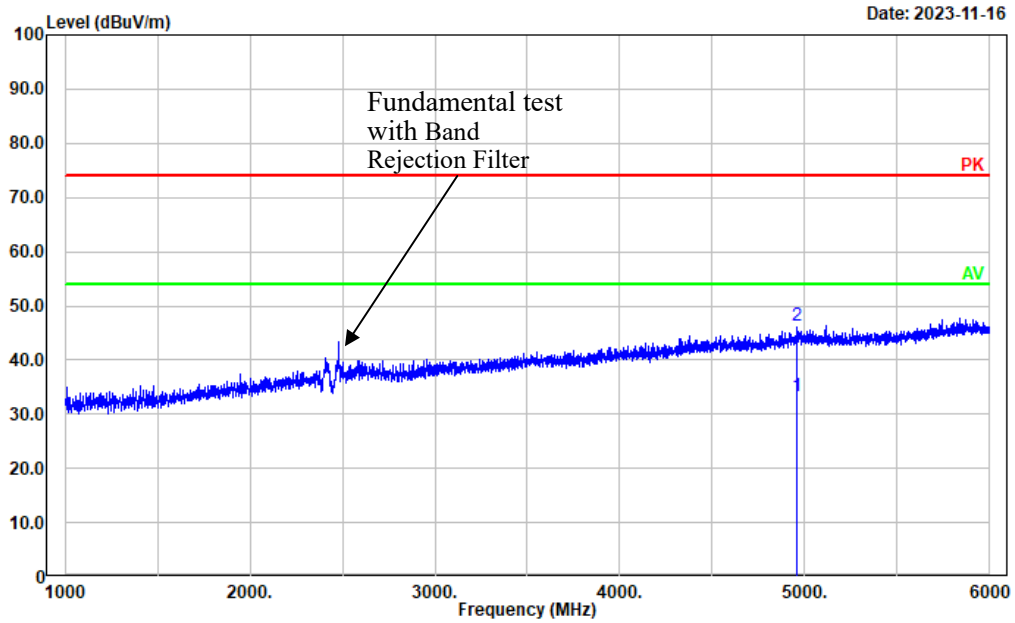
Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 2402 MHz							
2390.000	26.37	PK	H	31.71	58.08	74.00	15.92
2390.000	13.49	AV	H	31.71	45.20	54.00	8.80
2390.000	26.65	PK	V	31.71	58.36	74.00	15.64
2390.000	13.88	AV	V	31.71	45.59	54.00	8.41
4804.000	34.26	PK	H	11.19	45.45	74.00	28.55
4804.000	21.09	AV	H	11.19	32.28	54.00	21.72
4804.000	34.33	PK	V	11.19	45.52	74.00	28.48
4804.000	21.22	AV	V	11.19	32.41	54.00	21.59
7206.000	33.78	PK	H	15.03	48.81	74.00	25.19
7206.000	20.58	AV	H	15.03	35.61	54.00	18.39
7206.000	33.65	PK	V	15.03	48.68	74.00	25.32
7206.000	20.33	AV	V	15.03	35.36	54.00	18.64
Middle Channel: 2440 MHz							
4880.000	34.36	PK	H	11.48	45.84	74.00	28.16
4880.000	21.30	AV	H	11.48	32.78	54.00	21.22
4880.000	34.57	PK	V	11.48	46.05	74.00	27.95
4880.000	21.79	AV	V	11.48	33.27	54.00	20.73
7320.000	33.40	PK	H	15.58	48.98	74.00	25.02
7320.000	20.25	AV	H	15.58	35.83	54.00	18.17
7320.000	33.73	PK	V	15.58	49.31	74.00	24.69
7320.000	20.57	AV	V	15.58	36.15	54.00	17.85
High Channel: 2480 MHz							
2483.500	26.66	PK	H	32.19	58.85	74.00	15.15
2483.500	13.77	AV	H	32.19	45.96	54.00	8.04
2483.500	26.82	PK	V	32.19	59.01	74.00	14.99
2483.500	13.70	AV	V	32.19	45.89	54.00	8.11
4960.000	34.55	PK	H	11.77	46.32	74.00	27.68
4960.000	21.43	AV	H	11.77	33.20	54.00	20.80
4960.000	34.90	PK	V	11.77	46.67	74.00	27.33
4960.000	21.69	AV	V	11.77	33.46	54.00	20.54
7440.000	33.14	PK	H	15.98	49.12	74.00	24.88
7440.000	20.76	AV	H	15.98	36.74	54.00	17.26
7440.000	33.28	PK	V	15.98	49.26	74.00	24.74
7440.000	20.87	AV	V	15.98	36.85	54.00	**17.15**

BLE 2Mbps:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel: 2404 MHz							
2390.000	26.47	PK	H	31.71	58.18	74.00	15.82
2390.000	13.68	AV	H	31.71	45.39	54.00	8.61
2390.000	26.63	PK	V	31.71	58.34	74.00	15.66
2390.000	13.50	AV	V	31.71	45.21	54.00	8.79
4808.000	34.55	PK	H	11.22	45.77	74.00	28.23
4808.000	21.61	AV	H	11.22	32.83	54.00	21.17
4808.000	34.73	PK	V	11.22	45.95	74.00	28.05
4808.000	21.49	AV	V	11.22	32.71	54.00	21.29
7212.000	33.26	PK	H	15.07	48.33	74.00	25.67
7212.000	20.37	AV	H	15.07	35.44	54.00	18.56
7212.000	33.45	PK	V	15.07	48.52	74.00	25.48
7212.000	20.60	AV	V	15.07	35.67	54.00	18.33
Middle Channel: 2440 MHz							
4880.000	34.53	PK	H	11.48	46.01	74.00	27.99
4880.000	21.62	AV	H	11.48	33.10	54.00	20.90
4880.000	34.40	PK	V	11.48	45.88	74.00	28.12
4880.000	21.44	AV	V	11.48	32.92	54.00	21.08
7320.000	33.38	PK	H	15.58	48.96	74.00	25.04
7320.000	20.63	AV	H	15.58	36.21	54.00	17.79
7320.000	33.49	PK	V	15.58	49.07	74.00	24.93
7320.000	20.66	AV	V	15.58	36.24	54.00	17.76
High Channel: 2478 MHz							
2483.500	26.66	PK	H	32.19	58.85	74.00	15.15
2483.500	13.78	AV	H	32.19	45.97	54.00	8.03
2483.500	26.70	PK	V	32.19	58.89	74.00	15.11
2483.500	13.85	AV	V	32.19	46.04	54.00	7.96
4956.000	34.55	PK	H	11.77	46.32	74.00	27.68
4956.000	21.54	AV	H	11.77	33.31	54.00	20.69
4956.000	34.67	PK	V	11.77	46.44	74.00	27.56
4956.000	21.69	AV	V	11.77	33.46	54.00	20.54
7434.000	33.58	PK	H	15.93	49.51	74.00	24.49
7434.000	20.74	AV	H	15.93	36.67	54.00	17.33
7434.000	33.48	PK	V	15.93	49.41	74.00	24.59
7434.000	20.75	AV	V	15.93	36.68	54.00	17.32

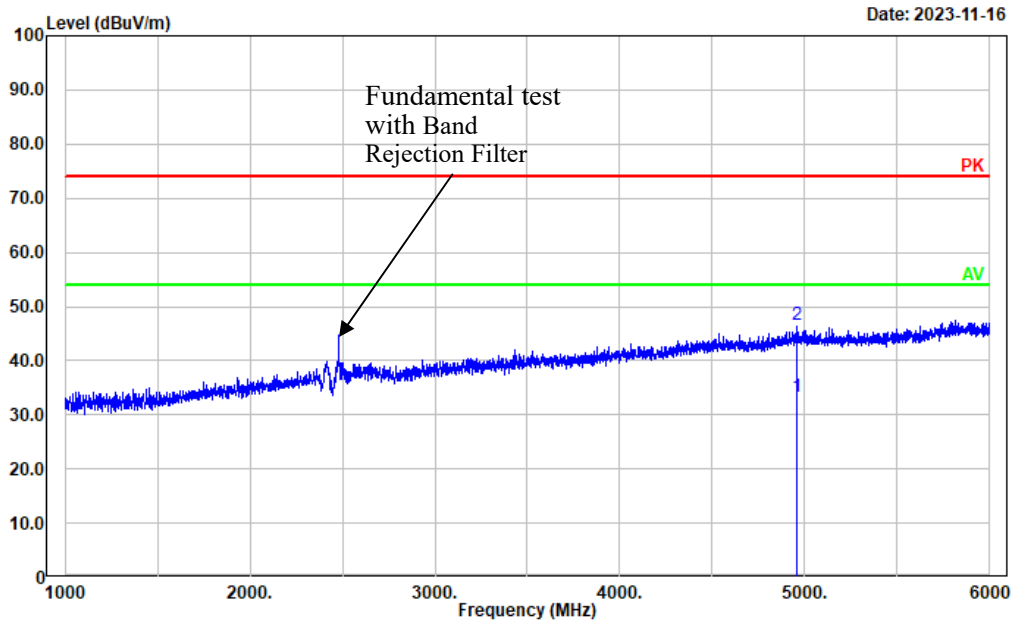
Worst Test plots
(Normal version&Adapter#1 BLE 1Mbps High channel, Chain 1):

```
Project No.: CR231061271-RF
     Tester: coco Tian
Polarization: horizontal
       Note:
```



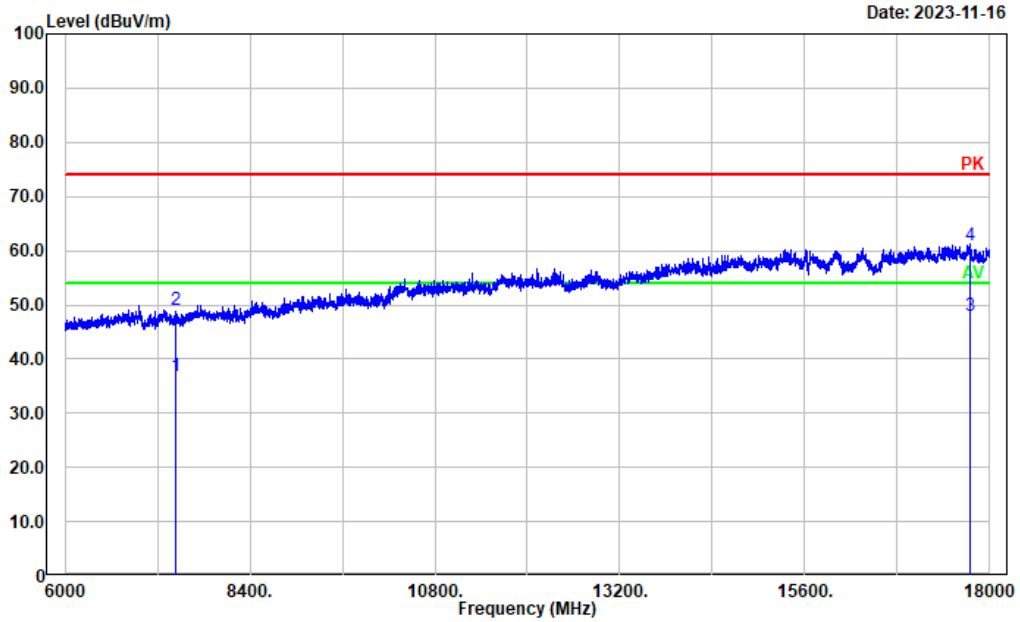
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4960.000	21.43	11.77	33.20	54.00	20.80	Average
2	4960.000	34.55	11.77	46.32	74.00	27.68	Peak

Project No.: CR231061271-RF
Tester: coco Tian
Polarization: vertical
Note:



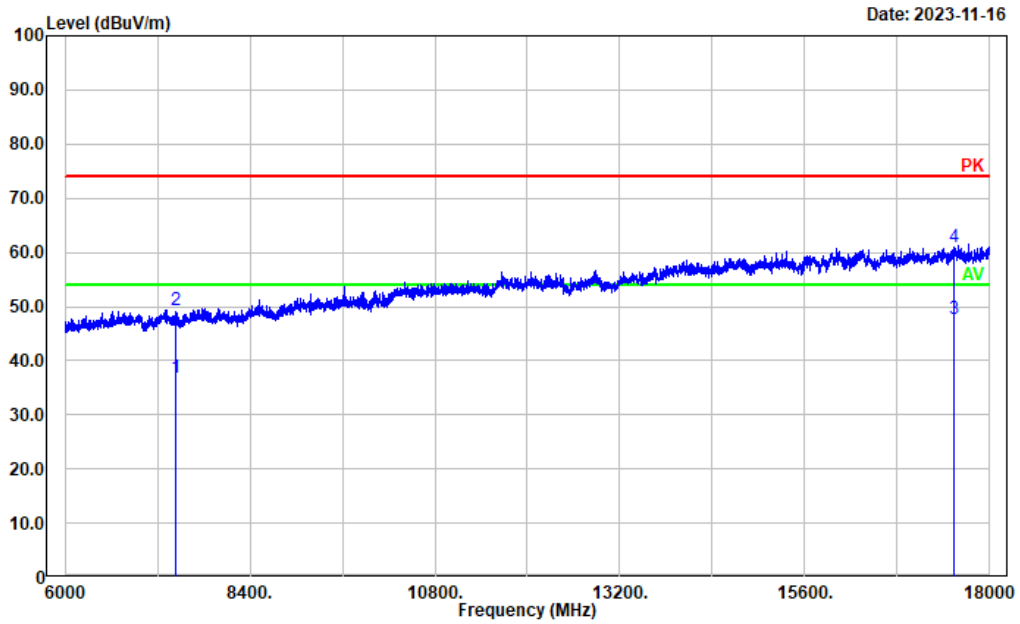
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	4960.000	21.69	11.77	33.46	54.00	20.54	Average
2	4960.000	34.90	11.77	46.67	74.00	27.33	Peak

Project No.: CR231061271-RF
Tester: coco Tian
Polarization: horizontal
Note:



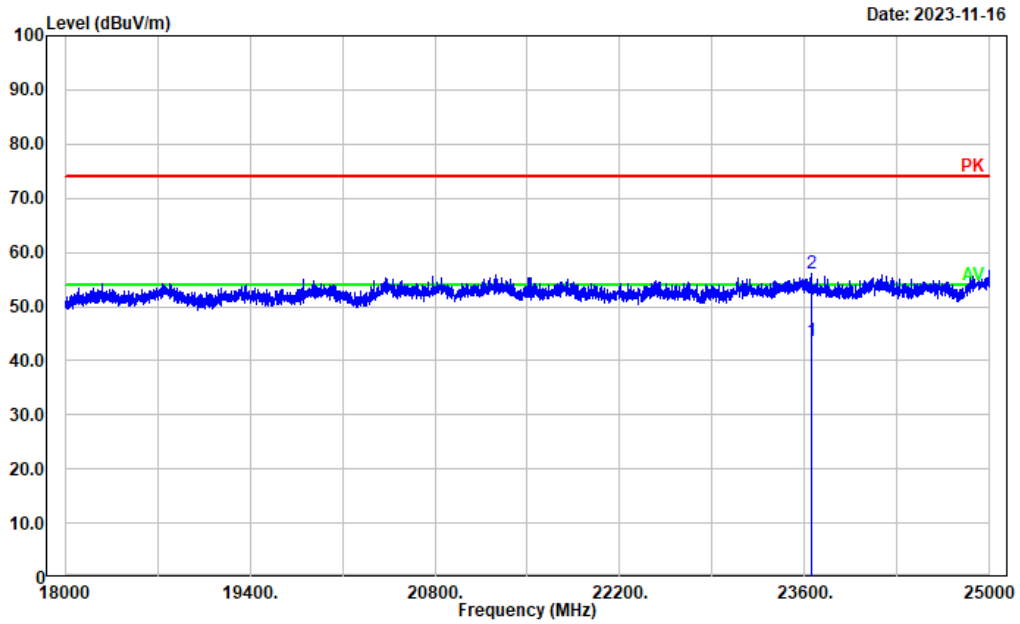
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	7440.000	20.76	15.98	36.74	54.00	17.26	Average
2	7440.000	33.14	15.98	49.12	74.00	24.88	Peak
3	17735.950	16.49	31.39	47.88	54.00	6.12	Average
4	17735.950	29.72	31.39	61.11	74.00	12.89	Peak

Project No.: CR231061271-RF
Tester: coco Tian
Polarization: vertical
Note:



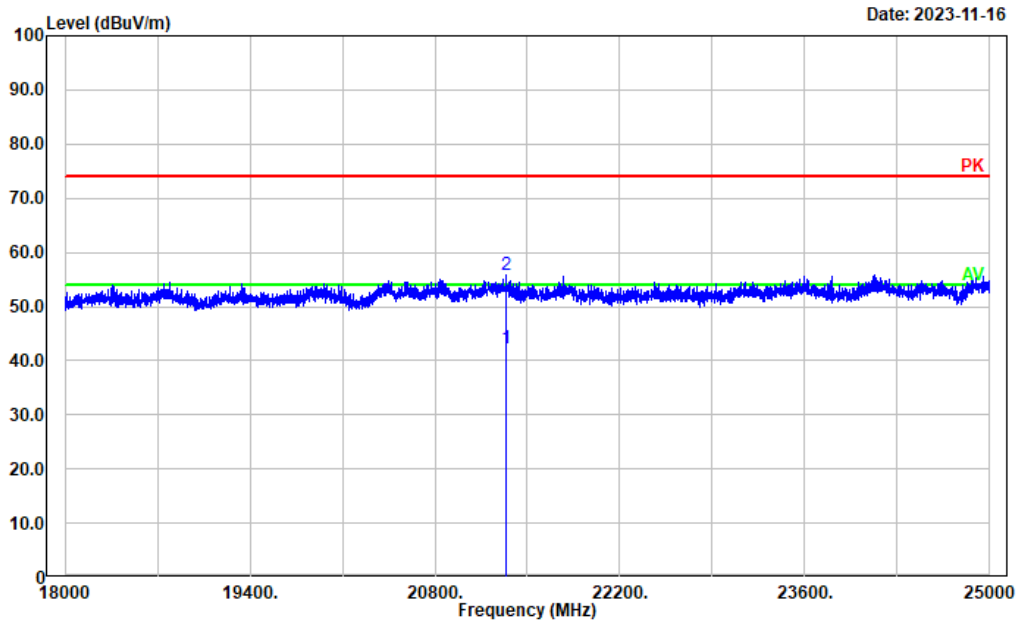
No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	7440.000	20.87	15.98	36.85	54.00	17.15	Average
2	7440.000	33.28	15.98	49.26	74.00	24.74	Peak
3	17541.510	17.45	30.22	47.67	54.00	6.33	Average
4	17541.510	30.71	30.22	60.93	74.00	13.07	Peak

Project No.: CR231061271-RF
Tester: coco Tian
Polarization: Horizontal
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	23651.530	38.63	4.89	43.52	54.00	10.48	Average
2	23651.530	51.31	4.89	56.20	74.00	17.80	Peak

Project No.: CR231061271-RF
Tester: coco Tian
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	21341.070	37.67	4.70	42.37	54.00	11.63	Average
2	21341.070	51.13	4.70	55.83	74.00	18.17	Peak

4.3 6 dB Emission Bandwidth

Serial Number:	2CGI-2	Test Date:	2023/10/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Morpheus Shi	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.5	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100.8

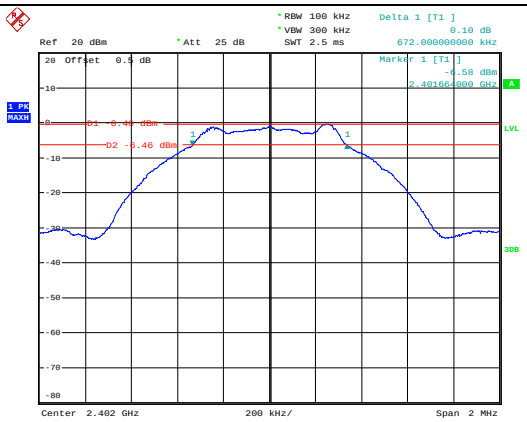
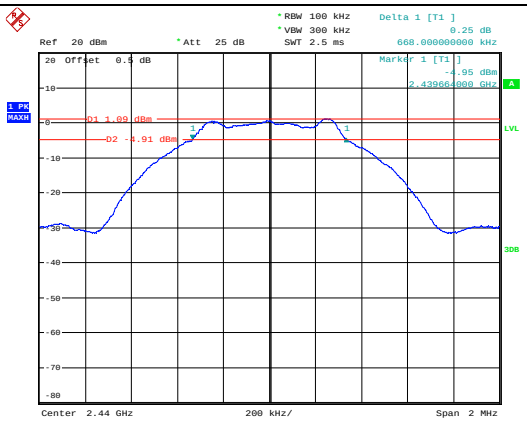
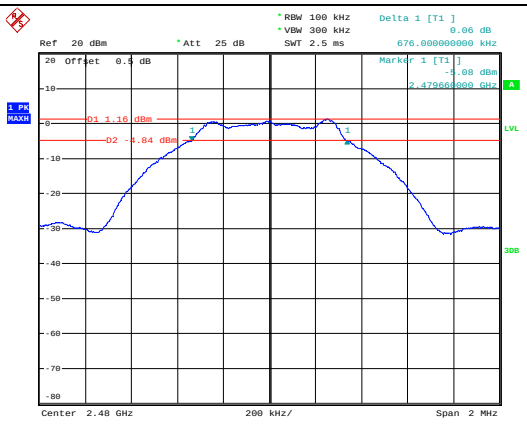
Test Equipment List and Details:

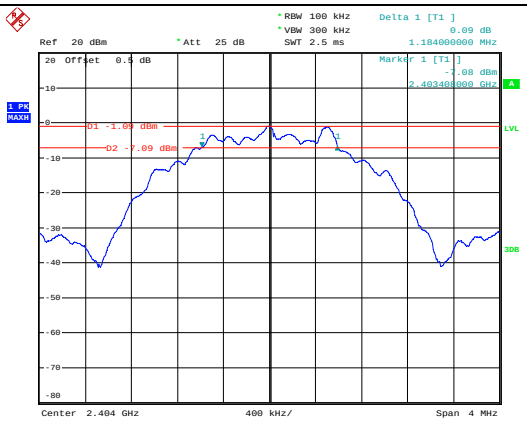
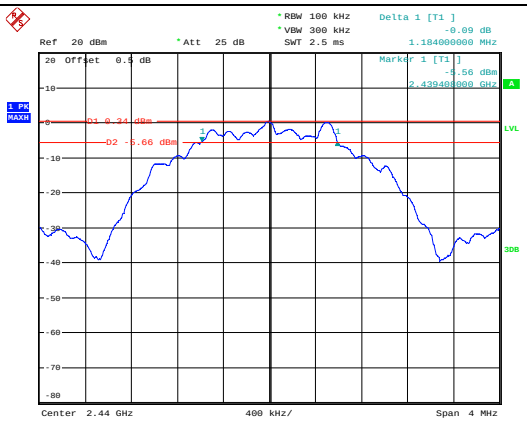
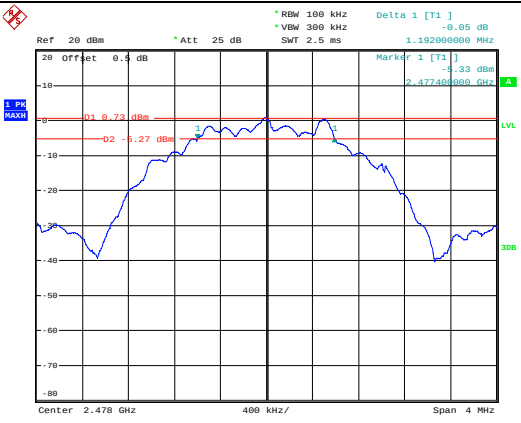
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200445	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A

** 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:

Test Modes	Test Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)
BLE 1Mbps	2402	0.672	≥0.5
	2440	0.668	≥0.5
	2480	0.676	≥0.5
BLE 2Mbps	2404	1.184	≥0.5
	2440	1.184	≥0.5
	2478	1.192	≥0.5
Note: the test was performed at Chain 0.			

6dB Emission Bandwidth	
BLE 1Mbps Lowest Channel	
BLE 1Mbps Middle Channel	
BLE 1Mbps Highest Channel	

6dB Emission Bandwidth	
BLE 2Mbps Lowest Channel	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:26:27
BLE 2Mbps Middle Channel	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:27:52
BLE 2Mbps Highest Channel	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:28:56

4.4 Maximum Conducted Output Power

Serial Number:	2CGI-2	Test Date:	2023/10/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Morpheus Shi	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.5	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100.8

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Anritsu	Power Meter	ML2495A	1106009	2023/08/04	2024/08/03
Anritsu	Pulse Power Sensor	MA2411A	10780	2023/08/04	2024/08/03
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	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:

Test Modes	Test Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		Limit (dBm)
		Chain 0	Chain 1	
BLE 1Mbps	2402	1.11	1.07	≤30
	2440	1.63	1.6	≤30
	2480	1.73	1.61	≤30
BLE 2Mbps	2404	1.31	0.96	≤30
	2440	1.71	1.64	≤30
	2478	**2.28**	2.17	≤30

4.5 Maximum power spectral density

Serial Number:	2CGI-2	Test Date:	2023/10/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Morpheus Shi	Test Result:	Pass

Environmental Conditions:					
Temperature: (℃)	25.5	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100.8

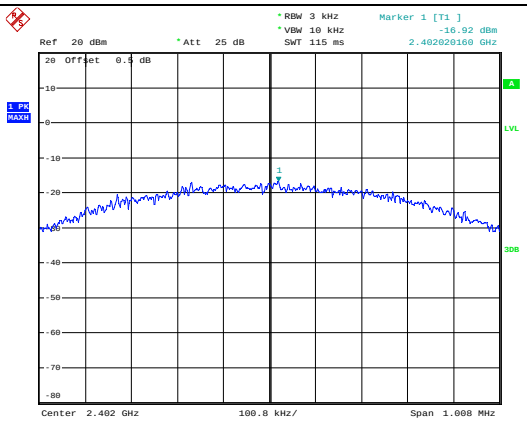
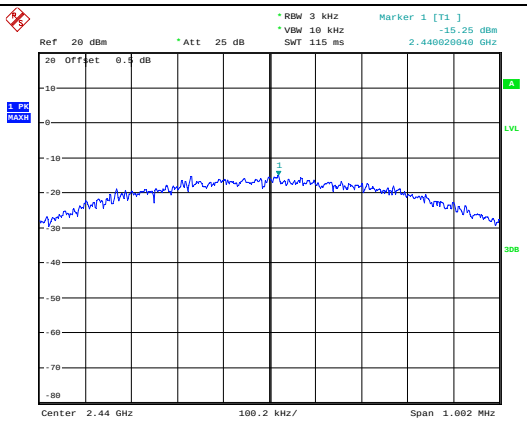
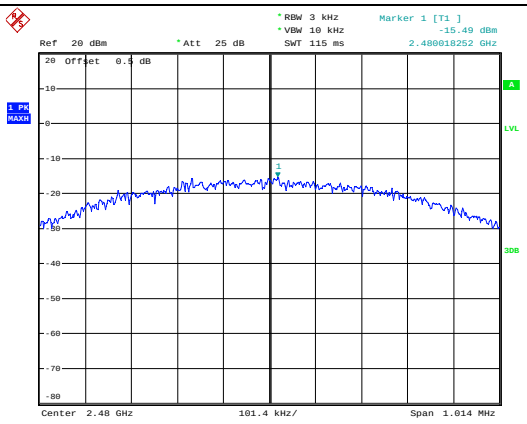
Test Equipment List and Details:

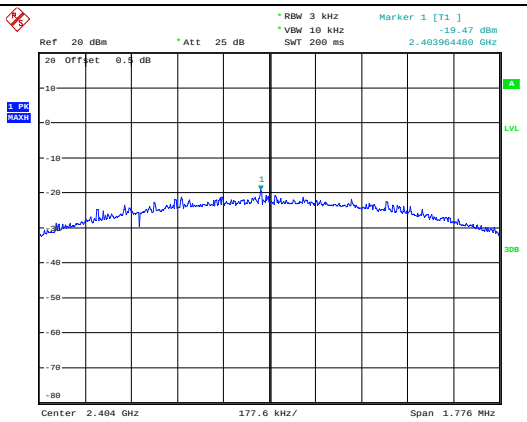
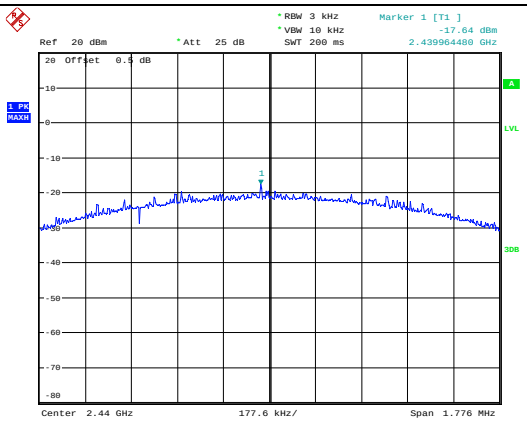
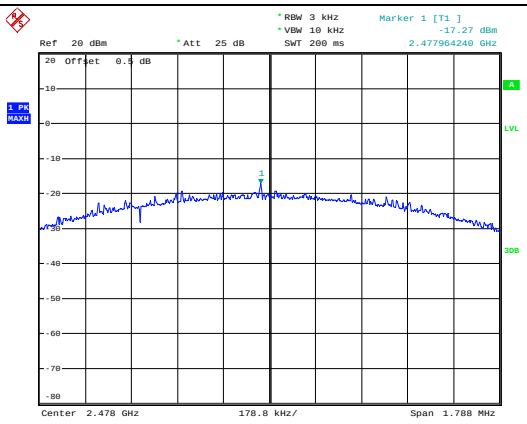
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200445	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A

** 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:

Test Modes	Test Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
BLE 1Mbps	2402	-16.92	≤8.00
	2440	-15.25	≤8.00
	2480	-15.49	≤8.00
BLE 2Mbps	2404	-19.47	≤8.00
	2440	-17.64	≤8.00
	2478	-17.27	≤8.00
Note: the test was performed at Chain 0.			

Maximum power spectral density	
BLE 1Mbps Lowest Channel	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:43:20
BLE 1Mbps Middle Channel	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:43:49
BLE 1Mbps Highest Channel	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:44:08

Maximum power spectral density	
BLE 2Mbps Lowest Channel	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:44:48
BLE 2Mbps Middle Channel	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:45:06
BLE 2Mbps Highest Channel	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:45:25

4.6 100 kHz Bandwidth of Frequency Band Edge

Serial Number:	2CGI-2	Test Date:	2023/10/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Morpheus Shi	Test Result:	Pass

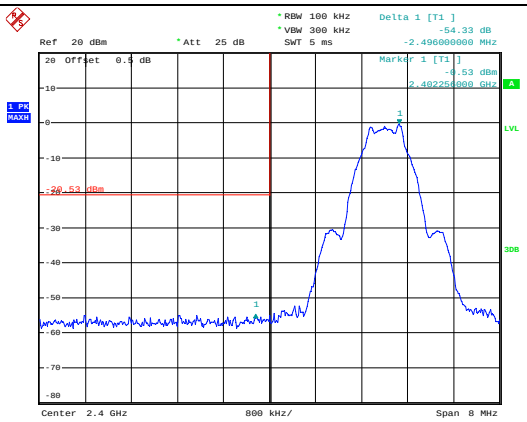
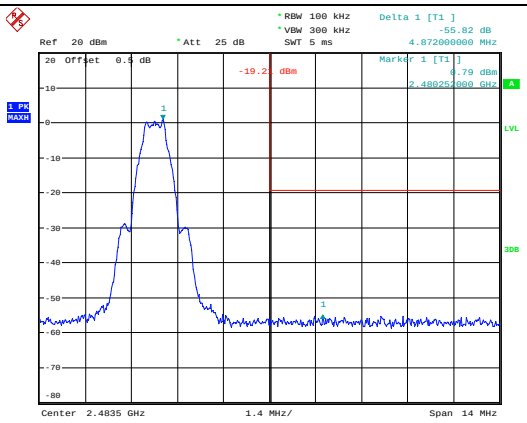
Environmental Conditions:					
Temperature: (℃)	25.5	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100.8

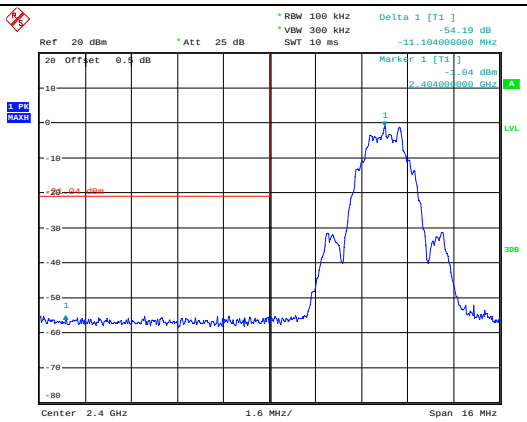
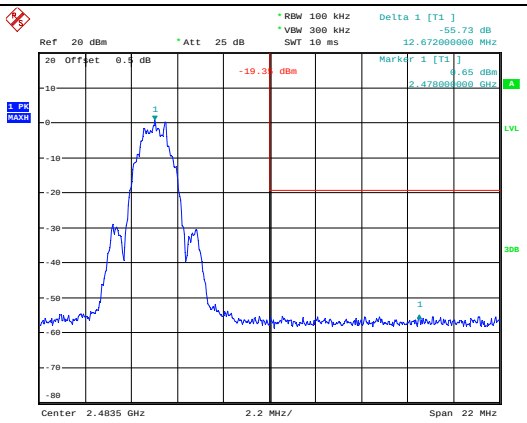
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200445	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	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:
Test only was performed at Chain 0.

100 kHz Bandwidth of Frequency Band Edge	
BLE 1Mbps Lowest Band edge	
BLE 1Mbps Highest Band edge	

100 kHz Bandwidth of Frequency Band Edge	
BLE 2Mbps Lowest Band edge	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:39:08
BLE 2Mbps Highest Band edge	 ProjectNo.:CR231061271-RF0 Tester:Morpheus Shi Date: 28.OCT.2023 00:39:48

4.7 Duty Cycle

Serial Number:	2CGI-2	Test Date:	2023/10/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Morpheus Shi	Test Result:	pass

Environmental Conditions:					
Temperature: (℃)	25.5	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100.8

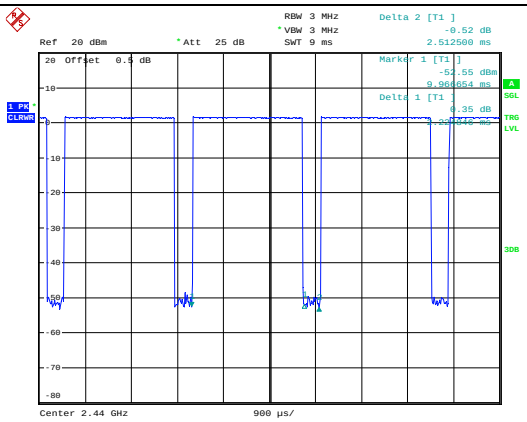
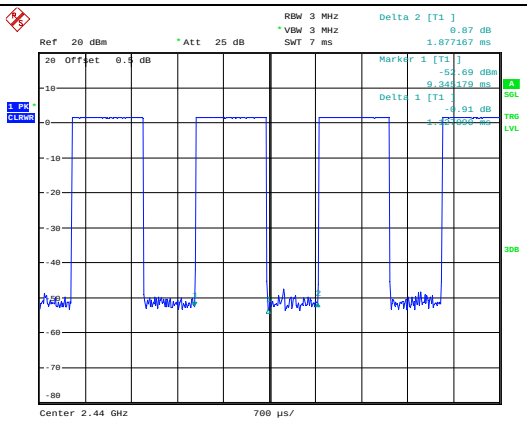
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200445	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	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:

Test Modes	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/T (Hz)	VBW Setting (kHz)
BLE 1Mbps	2.225	2.513	88.54	449	0.5
BLE 2Mbps	1.127	1.877	60.04	887	1
Note: the test was performed at Chain 0.					

Duty Cycle	
BLE 1Mbps	
BLE 2Mbps	

5. RF EXPOSURE EVALUATION

5.1 Applicable Standard

According to§15.247(i) and §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

According to KDB447498 D01 General RF Exposure Guidance v06:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

5.2 Measurement Result

The max conducted power including tune-up tolerance is 2.5dBm (1.78mW).
[(max. power of channel, mW)/(min. test separation distance, mm)][√f(GHz)]
=1.78/5*(√2.480) = 0.6< 3.0

Result: Compliant. The stand-alone SAR evaluation is not necessary.

6. EUT PHOTOGRAPHS

Please refer to the attachment CR231061271-EXP EUT EXTERNAL PHOTOGRAPHS and CR231061271-INP EUT INTERNAL PHOTOGRAPHS

7. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR231061271-00A-TSP TEST SETUP PHOTOGRAPHS.

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