



TEST REPORT

Applicant: Fujian LANDI Commercial Equipment Co., Ltd.

Address: Building 17, Section A, Software Park, No. 89 Software Road, Gulou District, Fuzhou Municipality, Fujian Province, China

Product Name: Mobile Terminal

FCC ID: 2AG6N-M20

47 CFR Part 15, Subpart C(15.247)

Standard(s): ANSI C63.10-2013

KDB 558074 D01 15.247 Meas Guidance v05r02

Report Number: 2402Z105148E-RF-00CA1

Report Date: 2025/7/16

The above device has been tested and found compliant with the requirement of the relative standards by Bay Area Compliance Laboratories Corp. (Dongguan).

Peobo Yun

Reviewed By: Pedro Yun Approved By: Gavin Xu

Title: Project Engineer Title: RF Supervisor

Gamin Xn

Bay Area Compliance Laboratories Corp. (Dongguan)

No.12, Pulong East 1st Road, Tangxia Town, Dongguan, Guangdong, China

Tel: +86-769-86858888 Fax: +86-769-86858891 www.baclcorp.com.cn

Note: The information marked ▲ is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. 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 ★.This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government. Each test item follows the test standard(s) without deviation.

CONTENTS

DOCUMENT REVISION HISTORY	
1. GENERAL INFORMATION ······	
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)·······	5
1.2 ACCESSORY INFORMATION	5
1.3 ANTENNA INFORMATION DETAIL▲ ·····	6
1.4 EQUIPMENT MODIFICATIONS ······	
2. SUMMARY OF TEST RESULTS ······	7
3. DESCRIPTION OF TEST CONFIGURATION	8
3.1 OPERATION FREQUENCY DETAIL ·····	
3.2 EUT OPERATION CONDITION	
3.3 EUT EXERCISE SOFTWARE ·····	8
3.4 SUPPORT EQUIPMENT LIST AND DETAILS	9
3.5 SUPPORT CABLE LIST AND DETAILS	
3.6 BLOCK DIAGRAM OF TEST SETUP	
3.7 TEST FACILITY	
3.8 MEASUREMENT UNCERTAINTY	
4. REQUIREMENTS AND TEST PROCEDURES ······	12
4.1 AC LINE CONDUCTED EMISSIONS	12
4.1.1 Applicable Standard ·····	12
4.1.2 FUT Setup	
4.1.3 EMI Test Receiver Setup	······ 13
4.1.5 Corrected Amplitude & Margin Calculation 4.1.6 Test Result	14
4.1.6 Test Result 4.2 RADIATION SPURIOUS EMISSIONS	
4.2.1 Applicable Standard · · · · · · · · · · · · · · · · · · ·	······ 15
4.2.3 EMI Test Receiver & Spectrum Analyzer Setup	
4.2.4 Test Procedure · · · · · · · · · · · · · · · · · · ·	
4.2.5 Corrected Result& Margin Calculation 4.2.6 Test Result	····· 18
4.3 MAXIMUM CONDUCTED OUTPUT POWER ······	
4.3.1 Applicable Standard ·····	
4.3.2 EUT Setup	
4.3.3 Test Procedure 4.3.4 Test Result	
4.4 DUTY CYCLE	
4.4.1 EUT Setup	
4.4.2 Test Procedure · · · · · · · · · · · · · · · · · · ·	20
4.4.3 Judgment · · · · · · · · · · · · · · · · · · ·	
4.4.3 Judgment 4.5 ANTENNA REQUIREMENT	20

4.5.1 Applicab	ole Standard ···································	
•	AND RESULTS ······	
	ONDUCTED EMISSIONS·····	
5.2 RADIATION	SPURIOUS EMISSIONS	29
5.3 SPOT CHEC	CK WITH MAXIMUM CONDUCTED OUTPUT POWER ······	67
5.4 DUTY CYCI	LE	69
EXHIBIT A - E	UT PHOTOGRAPHS ·····	71
EXHIBIT B - T	EST SETUP PHOTOGRAPHS	72

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	XMDN240206-08120E-RF-00C	Original Report	2024/7/10
2.0	2402Z105148E-RF-00CA1	Class II Permissive Change Report	2025/7/16

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	Mobile Terminal
EUT Model:	M20SE
Operation Frequency:	2412-2462MHz (802.11b/g/n ht20) 2422-2452MHz(802.11n ht40)
Maximum Peak Output Power (Conducted) ▲:	19.87dBm
Modulation Type:	802.11b:DSSS-DBPSK, DQPSK, CCK 802.11g/n: OFDM-BPSK, QPSK, 16QAM, 64QAM
Rated Input Voltage:	5Vdc from Adapter or 7.7Vdc from battery
Serial Number:	2UEW-24 (For RF Conducted Test: Configuration 3#) 2UEW-22 (For RF Conducted Test: Configuration 4#) 2UEW-21 (For RF Conducted Test: Configuration 5#) 2UEW-36 (For Radiated spurious emission and AC line conducted emission tests: Configuration 3#) 2UEW-35 (For Radiated spurious emission and AC line conducted emission tests: Configuration 4#) 2UEW-7 (For Radiated spurious emission and AC line conducted emission tests: Configuration 5#)
EUT Received Date:	· ,
EUT Received Status:	Good
Note:	

Note:

The multiple models are electrically identical with the test model. Please refer to the declaration letter for more detail, which was provided by manufacturer.

1.2 Accessory Information

Configuration Information:

Configuration information.			
Configuration	HVIN	Scanning camera (LD47)	Scanning camera (N5703) (old)
3#	M20SES1	×	$\sqrt{}$
4#	M20SES0	×	×
5#	M20SES2	√	×

Battery Information:

Battery No.	Manufacturer	Model	Parameters
1#	HuiZhou Ganfeng LiEnergy Battery Technology Co.,LTD.	526265-2S (2ICP6/62/65)	DC 7.7V 3550mAh/27.34Wh
2#	SCUD(Fujian)Electronics Co.,LTD	526266-2S (2ICP6/62/66)	DC 7.7V 3620mAh/27.874Wh

Adapter Information:

Adapter No.	Manufacturer	Model	Parameters
1#	Something High Electric (Xiamen) Company Inc.	P12GUSB050200	Input: 100-240Vac~50/60Hz 0.3A Output: 5.0Vdc,2.0A
2#	SHENZHEN KEYU POWER SUPPLY TECHNOLOGY CO., LTD	KA1602- 0502000DEU	Input: 100-240Vac~50/60Hz 0.35A Output: 5.0Vdc 2.0A,10W

1.3 Antenna Information Detail ▲

An	tenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
	FPC	50	2400-2500MHz	-1.5dBi
The design of compliance with §15.203:				
\boxtimes	Unit uses a permanently attached antenna.			
	Unit uses a unique coupling to the intentional radiator.			
	Unit was professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.			

1.4 Equipment Modifications

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

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	Reporting
§15.247(d)	100 kHz Bandwidth Of Frequency Band Edge	Compliant*
§15.247(e)	Power Spectral Density	Compliant*
§15.203	Antenna Requirement	Compliant

Purpose:

This is Class II permissive change application based on the original device, model: M20,M20SE, FCC ID: 2AG6N-M20, please refer to report No.: XMDN240206-08120E-RF-00C, issued on 2024/7/10. Differences between the previous device and the current one are stated and guaranteed by the manufacturer, as following:

- 1. Model M20SE added a scanning camera (model: LD47).
- 2. Model M20SE Changed BT/WIFI/GPS and WWAN Main Antenna.

The Bay Area Compliance Laboratories Corp.(Dongguan) is responsible for all the information provided in this report, except when information is provided by the customer as identified in this report.

Note 1: For AC line conducted emissions, the maximum output power mode and channel was tested.

Note 2: For Radiated Spurious Emissions 9kHz~ 1GHz and 18-25GHz, the maximum output power mode and channel was tested.

Note 3: Per original report, Powered by Adapter #1 and Battery #1 was the worst for AC Line Conducted Emissions and Radiated Spurious Emissions Below 1GHz, so only performed it.

Note 4:

Compliant*: The change of the EUT does not affect the test result, the test result please refer to original report NO.: XMDN240206-08120E-RF-00C.

3. DESCRIPTION OF TEST CONFIGURATION

3.1 Operation Frequency Detail

For 802.11b/g/n ht20:

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

For 802.11n ht40:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	7	2442
4	2427	8	2447
5	2432	9	2452
6	2437	/	/

Note: The above frequencies in bold were performed the test.

3.2 EUT Operation Condition

The system was configured for testing in Engineering Mode, which was provided by the manufacturer. The following summary table is showing all test modes to demonstrate in compliance with the standard:

Test Items	Test Modes	
	M1: Transmitting& Configuration5#	
AC Line Conducted Emission:	M2: Transmitting& Configuration4#	
	M3: Transmitting& Configuration3#	
	M1: Transmitting& Configuration5#	
Radiated Spurious Emission:	M2: Transmitting& Configuration4#	
	M3: Transmitting& Configuration3#	

3.3 EUT Exercise Software

by the manufacturer ▲:

EUT Exercise Software:	QRCT4
The software was provided by	manufacturer. The maximum power was configured as below, that was provided

Test Modes	Data Rate	Power Level Setting			
	Data Kate	Lowest Channel	Middle Channel	Highest Channel	
802.11b	1Mbps	6	6	6	
802.11g	6Mbps	14	14	14	
802.11n ht20	MCS0	14	14	14	
802.11n ht40	MCS0	11	11	11	

The above are the worst-case data rates, which are determined for each mode based upon investigations by measuring the average power and PSD across all data rates, bandwidths, and modulations.

3.4 Support Equipment List and Details

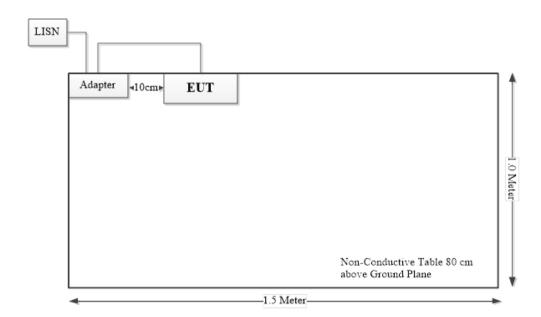
Manufacturer	Description	Model	Serial Number
/	/	/	/

3.5 Support Cable List and Details

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

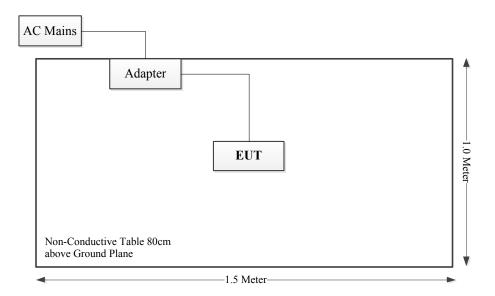
3.6 Block Diagram of Test Setup

AC line conducted emissions:

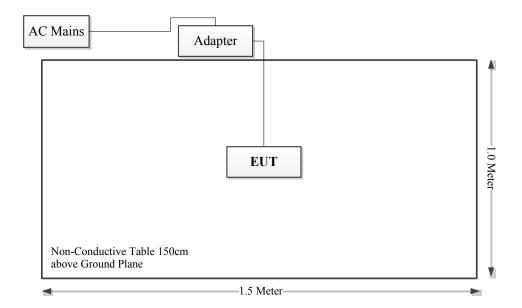


Spurious Emissions:

Below 1GHz:



Above 1GHz:



3.7 Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.12, Pulong East 1st Road, Tangxia 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.: 829273, the FCC Designation No.: CN5044.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0022.

3.8 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: 3.3dB, 30MHz~200MHz: 4.55 dB,200MHz~1GHz: 5.92 dB,1GHz~6GHz: 4.98 dB, 6GHz~18GHz: 5.89 dB, 18GHz~26.5GHz:5.47 dB, 26.5GHz~40GHz:5.63 dB		
Unwanted Emissions, conducted	±2.47 dB		
Temperature	±1°C		
Humidity	±5%		
DC and low frequency voltages	±0.4%		
Duty Cycle	1%		
AC Power Lines Conducted Emission	3.11 dB (150 kHz to 30 MHz)		

4. REQUIREMENTS AND TEST PROCEDURES

4.1 AC Line Conducted Emissions

4.1.1 Applicable Standard

FCC§15.207(a).

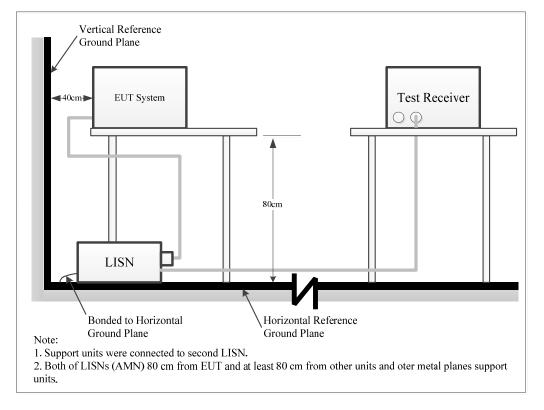
(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz,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

	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: $1000 \,\mu\text{V}$ within the frequency band 535-1705 kHz, as measured using a 50 $\mu\text{H}/50$ ohms LISN.
- (3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221,§15.223, or §15.227, as appropriate.
- (c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

4.1.2 EUT Setup



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 10cm.

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

4.1.3 EMI Test Receiver Setup

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

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

4.1.4 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.

4.1.5 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

4.1.6 Test Result

Please refer to section 5.1.

4.2 Radiation Spurious Emissions

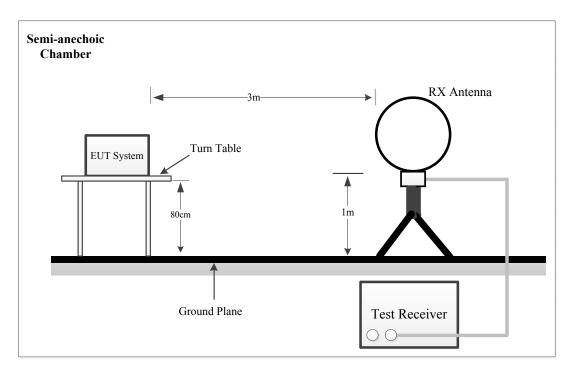
4.2.1 Applicable Standard

FCC §15.247 (d);

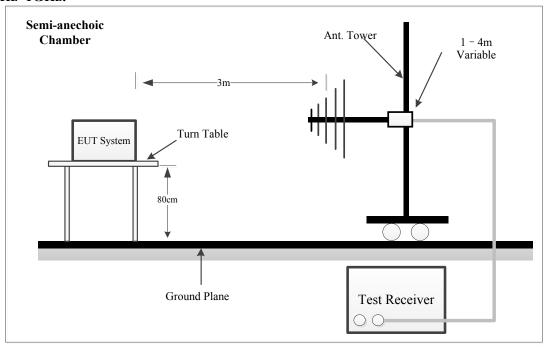
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the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

4.2.2 EUT Setup

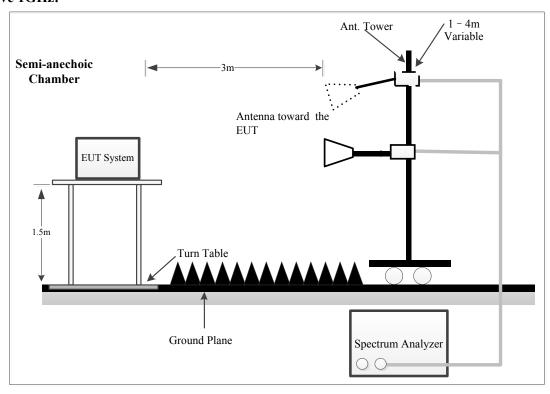
9kHz~30MHz:



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 40cm long in the middle.

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.

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

1GHz-25GHz:

Pre-scan:

Frequency Range	Measurement	RBW	Video B/W	Detector
Above 1 GHz	Peak	1MHz	3 MHz	PK
	AV	1MHz	5kHz	PK

Final measurement for emission identified during the pre-scan:

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

Note: T is minimum transmission duration

4.2.4 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.

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.

4.2.5 Corrected Result& Margin Calculation

 $E_{Log} = 20 \times log_{10}(E_{Linear})$

 E_{Linear} is the field strength of the emission, in μ V/m E_{Log} is the field strength of the emission, in dB μ V/m

For 9kHz-30MHz test, test distance is 3m, extrapolation limit shall be calculated using Equation:

$$E_{limit-measure} = E_{limit-Standard} + 40 \times log_{10} (d_{standard}/d_{measure})$$

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

4.2.6 Test Result

Please refer to section 5.2.

4.3 Maximum Conducted Output Power

4.3.1 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.

4.3.2 EUT Setup



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

4.3.3 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.

According to ANSI C63.10-2013 Section 11.9.2.3.2

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

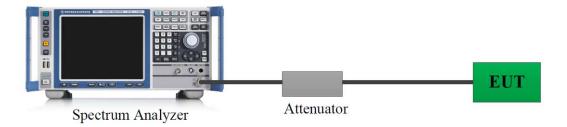
Alternatively, measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Because the measurement is made only during the ON time of the transmitter,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

4.3.4 Test Result

Please refer to section 5.3.

4.4 Duty Cycle

4.4.1 EUT Setup



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

4.4.2 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 \geq OBW if possible; otherwise, set RBW to the largest available value.
- 3) Set $VBW \ge RBW$. 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 $T \le 16.7$ µs.)

4.4.3 Judgment

Please refer to section 5.4.

4.5 Antenna Requirement

4.5.1 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.

4.5.2 Judgment

Compliant. Please refer to the Antenna Information detail in Section 1.3.

5. Test DATA AND RESULTS

5.1 AC Line Conducted Emissions

Serial Number:	2UEW-7, 2UEW-35, 2UEW-36	Test Date:	2024/11/22 ~2025/2/19
Test Site:	СЕ	Test Mode:	M1-M3
Tester:	Yolo Fan, Yukin Qiu	Test Result:	Pass

Environmental Conditions:

Temperature: $(^{\circ}C)$	21.3~24.9	Relative Humidity: (%)	49~56	ATM Pressure: (kPa)	101.7~102.1
----------------------------	-----------	------------------------------	-------	---------------------	-------------

Test Equipment List and Details:

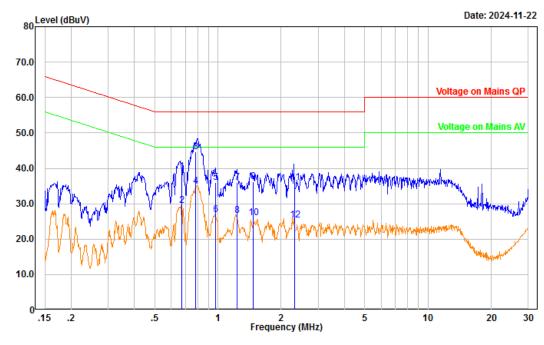
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101614	2024/9/5	2025/9/4
MICRO-COAX	Coaxial Cable	C-NJNJ-50	C-0200-01	2024/9/5	2025/9/4
R&S	EMI Test Receiver	ESCI	100035	2024/8/26	2025/8/25
Audix	Test Software	E3	191218 V9	N/A	N/A

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Note: The maximum output power mode: 802.11g Low channel was tested.

M1:

Project No.: 2402Z105148E-RF-A1 Serial No.: 2UEW-7
Port: Line Test Mode: Transmitting
IF B/W 9kHz PK/AV



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.670	28.18	10.85	39.03	56.00	16.97	QP
2	0.670	18.70	10.85	29.55	46.00	16.45	Average
3	0.784	33.84	10.85	44.69	56.00	11.31	QP
4	0.784	24.06	10.85	34.91	46.00	11.09	Average
5	0.976	25.21	10.85	36.06	56.00	19.94	QP
6	0.976	15.93	10.85	26.78	46.00	19.22	Average
7	1.233	25.23	10.84	36.07	56.00	19.93	QP
8	1.233	15.81	10.84	26.65	46.00	19.35	Average
9	1.476	25.33	10.84	36.17	56.00	19.83	QP
10	1.476	15.24	10.84	26.08	46.00	19.92	Average
11	2.322	25.28	10.81	36.09	56.00	19.91	QP
12	2.322	14.51	10.81	25.32	46.00	20.68	Average

12.64

8.50

22.29

17.82

22.09

18.05

23.11

19.97

QР

QΡ

QP

QΡ

Average

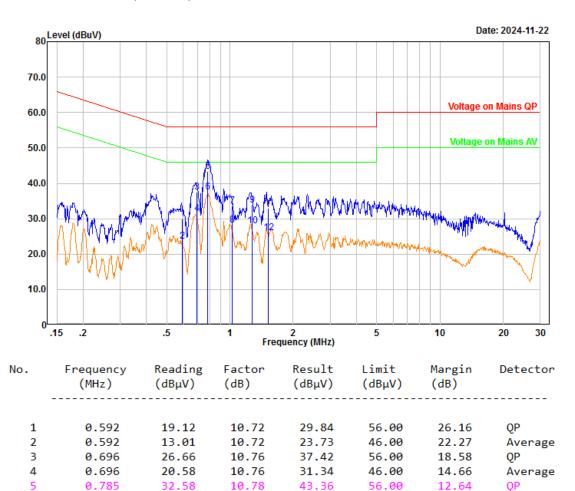
Average

Average

Average

Project No.: 2402Z105148E-RF-A1 Port: neutral Test Mode: Transmitting IF B/W 9kHz PK/AV

Serial No.: 2UEW-7 Tester: Yolo Fan



37.50

33.71

28.18

33.91

27.95

32.89

26.03

46.00

56.00

46.00

56.00

46.00

56.00

46.00

6

7

8

9

10

11

12

0.785

1.023

1.023

1.276

1.276

1.524

1.524

26.72

22.86

17.33

23.04

17.08

22.01

15.15

10.78

10.85

10.85

10.87

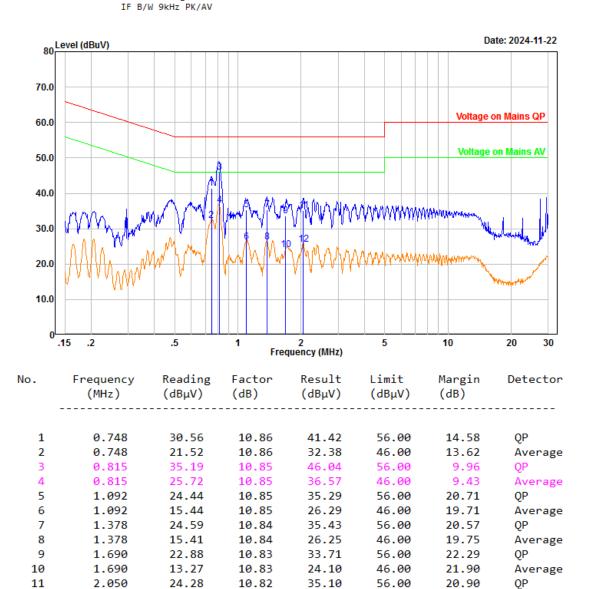
10.87

10.88

10.88

M2:

Project No.: 2402Z105148E-RF-A1 Serial No.: 2UEW-35
Port: Line Test Mode: Transmitting Tester: Yolo Fan



2.050

14.72

10.82

25.54

46.00

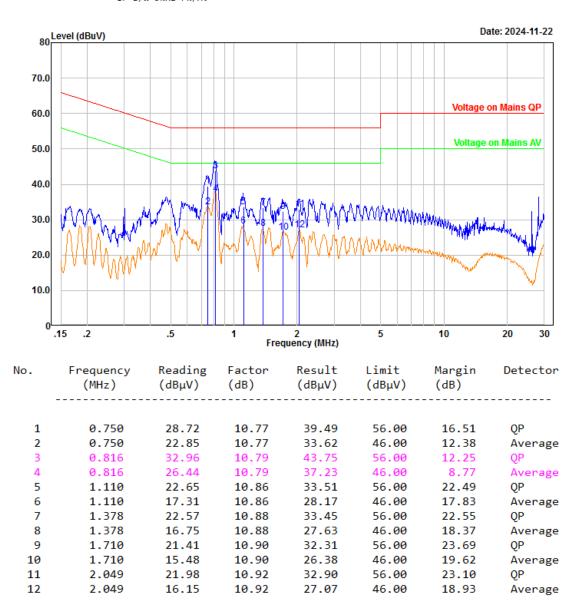
20.46

12

Average

Project No.: 24027105148E-RF-A1
Port: neutral
Test Mode: Transmitting
IF B/W 9kHz PK/AV

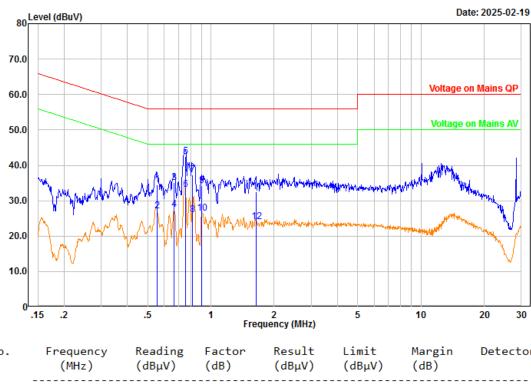
Serial No.: 2UEW-35 Tester: Yolo Fan



M3:

Project No.: 2402Z105148E-RF-A1
Port: Line
Test Mode: Transmitting
IF B/W 9kHz PK/AV

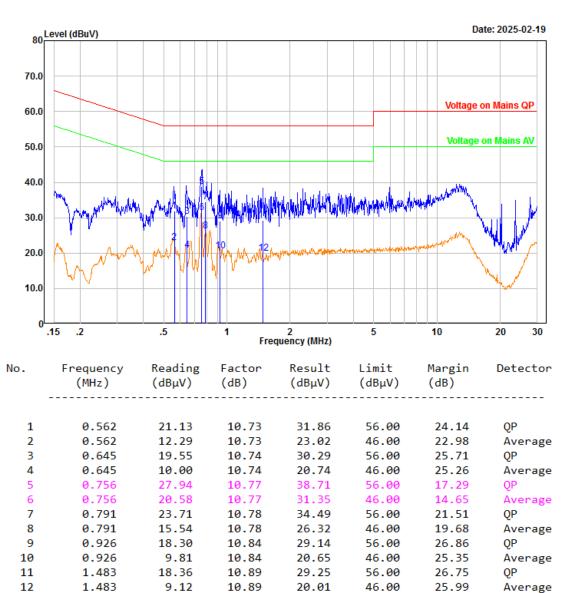
Serial No.: 2UEW-36 Tester: Yukin Qiu



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.557	23.66	10.83	34.49	56.00	21.51	QP
2	0.557	16.22	10.83	27.05	46.00	18.95	Average
3	0.669	24.33	10.85	35.18	56.00	20.82	QP
4	0.669	16.60	10.85	27.45	46.00	18.55	Average
5	0.758	31.73	10.85	42.58	56.00	13.42	QP
6	0.758	22.24	10.85	33.09	46.00	12.91	Average
7	0.815	26.48	10.85	37.33	56.00	18.67	QP
8	0.815	15.26	10.85	26.11	46.00	19.89	Average
9	0.904	23.40	10.86	34.26	56.00	21.74	QP
10	0.904	15.53	10.86	26.39	46.00	19.61	Average
11	1.645	21.62	10.83	32.45	56.00	23.55	QP
12	1.645	13.28	10.83	24.11	46.00	21.89	Average

Project No.: 2402Z105148E-RF-A1
Port: neutral
Test Mode: Transmitting
IF B/W 9kHz PK/AV

Serial No.: 2UEW-36 Tester: Yukin Qiu



5.2 Radiation Spurious Emissions

1)9kHz - 1GHz

Serial Number:	2UEW-7, 2UEW-35, 2UEW-36	Test Date:	2024/12/2~2025/2/21
Test Site:	Chamber A	Test Mode:	M1-M3
Tester:	Alan Xie	Test Result:	Pass

Environmental Conditions:								
Temperature: (°C)	21.8-22.9	Relative Humidity: (%)	30-49	ATM Pressure: (kPa)	101.6			

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
EMCO	Passive Loop Antenna	6512	9706-1206	2023/10/25	2026/10/24
Sunol Sciences	Hybrid Antenna	JB3	A060611-2	2024/4/16	2027/4/15
Narda	Coaxial Attenuator	757C-6dB	34010	2024/4/16	2027/4/15
Unknown	Coaxial Cable	C-NJNJ-50	C-0075-01	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-01	2024/7/1	2025/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-1400-01	2024/7/1	2025/6/30
Sonoma	Amplifier	310N	372193	2024/8/16	2025/8/15
R&S	EMI Test Receiver	ESR3	102453	2024/8/26	2025/8/25
Audix	Test Software	E3	191218 V9	N/A	N/A

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (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 plots.

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

Note: The maximum output power mode: 802.11g Low channel was tested.

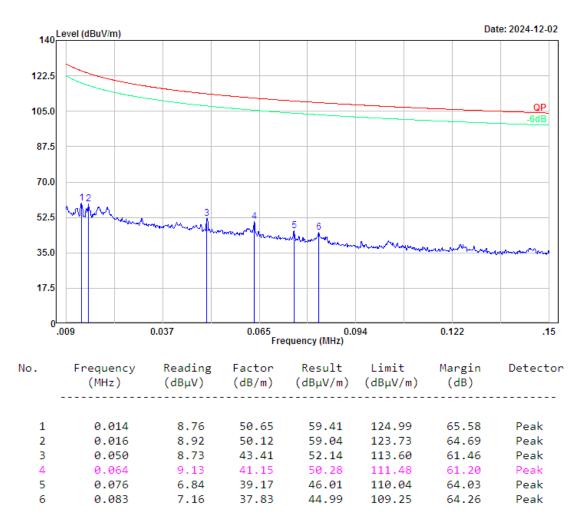
9kHz~30MHz

Three antenna orientations (parallel, perpendicular, and ground-parallel) was measured, the worst orientations was below:

M1:

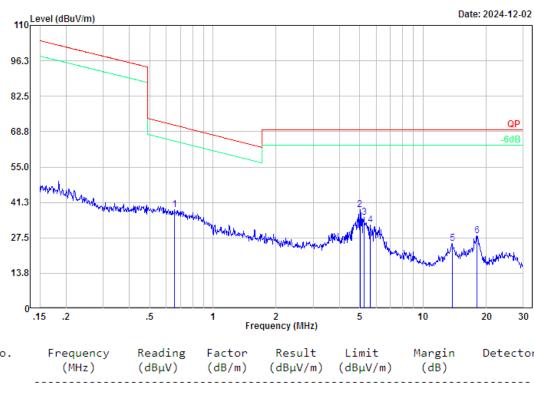
Project No.: 2402Z105148E-RF-A1 Serial No.: 2UEW-7
Polarization: Parallel Tester: Alan Xie
Test Mode: Transmitting

Note: M1 : RBW:300Hz VBW:1kHz



Project No.: 2402Z105148E-RF-A1
Polarization: Parallel
Test Mode: Transmitting
Note: M1 Serial No.: 2UEW-7 Tester: Alan Xie

: RBW:10kHz VBW:30kHz

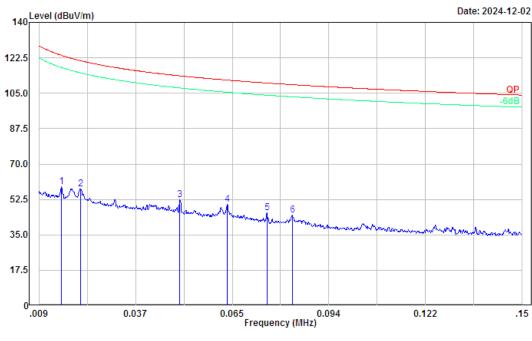


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.658	17.33	21.16	38.49	71.19	32.70	Peak
2	5.005	32.78	5.70	38.48	69.54	31.06	Peak
3	5.221	29.83	5.55	35.38	69.54	34.16	Peak
4	5.594	27.20	5.31	32.51	69.54	37.03	Peak
5	13.768	21.36	4.07	25.43	69.54	44.11	Peak
6	18.039	24.49	3.78	28.27	69.54	41.27	Peak

M2:

Project No.: 2402Z105148E-RF-A1
Polarization: Parallel
Test Mode: Transmitting
Note: M2 Serial No.: 2UEW-35 Tester: Alan Xie

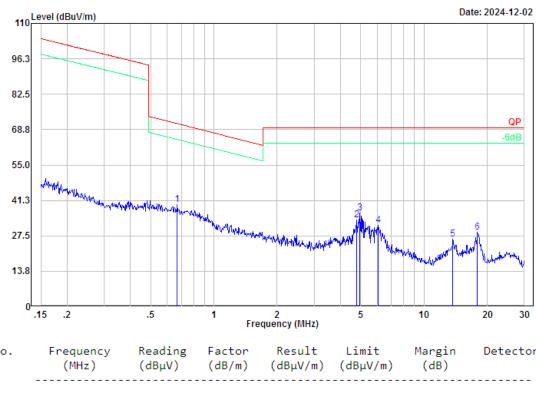
: RBW:300Hz VBW:1kHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.016	8.72	50.12	58.84	123.73	64.89	Peak
2	0.021	9.13	48.72	57.85	121.05	63.20	Peak
3	0.050	8.82	43.41	52.23	113.60	61.37	Peak
4	0.064	9.04	41.15	50.19	111.48	61.29	Peak
5	0.076	6.57	39.17	45.74	110.04	64.30	Peak
6	0.083	6.84	37.81	44.65	109.23	64.58	Peak

Project No.: 2402Z105148E-RF-A1 Polarization: Parallel Test Mode: Transmitting Note: M2 Serial No.: 2UEW-35 Tester: Alan Xie

: RBW:10kHz VBW:30kHz

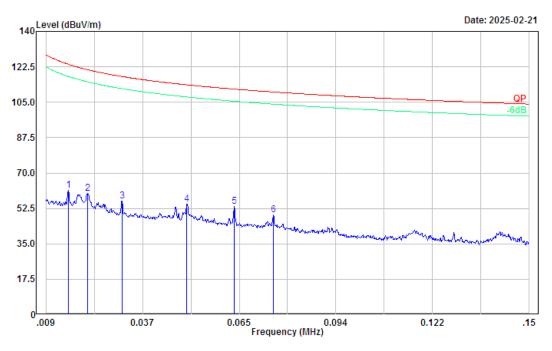


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.668	18.52	21.03	39.55	71.05	31.50	Peak
2	4.797	27.66	5.97	33.63	69.54	35.91	Peak
3	4.952	30.63	5.76	36.39	69.54	33.15	Peak
4	6.024	26.65	5.04	31.69	69.54	37.85	Peak
5	13.695	22.12	4.04	26.16	69.54	43.38	Peak
6	17.944	25.21	3.79	29.00	69.54	40.54	Peak

M3:

Project No.: 2402Z105148E-RF-A1
Polarization: Parallel
Test Mode: Transmitting
Note: M3 Serial No.: 2UEW-36 Tester: Alan Xie

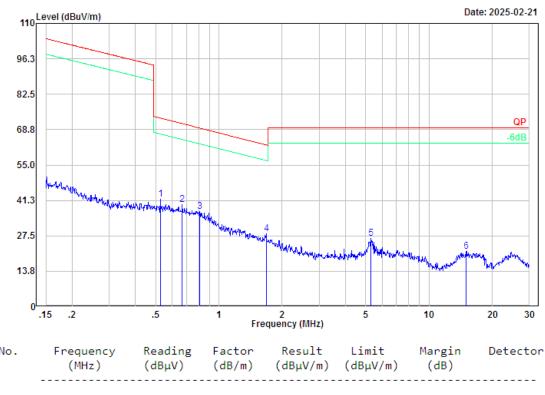
: RBW:300Hz VBW:1kHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector
1	0.015	11.14	50.15	61.29	123.81	62.52	Peak
2	0.021	11.18	48.75	59.93	121.11	61.18	Peak
3	0.031	9.59	46.51	56.10	117.70	61.60	Peak
4	0.050	11.32	43.41	54.73	113.60	58.87	Peak
5	0.064	12.28	41.15	53.43	111.48	58.05	Peak
6	0.075	10.25	39.19	49.44	110.06	60.62	Peak

Project No.: 2402Z105148E-RF-A1 Serial No.: 2UEW-36
Polarization: Parallel Tester: Alan Xie
Test Mode: Transmitting
Note: M3

: RBW:10kHz VBW:30kHz



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.527	19.21	22.44	41.65	73.16	31.51	Peak
2	0.668	18.49	21.03	39.52	71.05	31.53	Peak
3	0.809	17.41	19.54	36.95	69.36	32.41	Peak
4	1.680	15.76	12.57	28.33	62.87	34.54	Peak
5	5.305	20.89	5.50	26.39	69.54	43.15	Peak
6	14.986	17.85	3.71	21.56	69.54	47.98	Peak

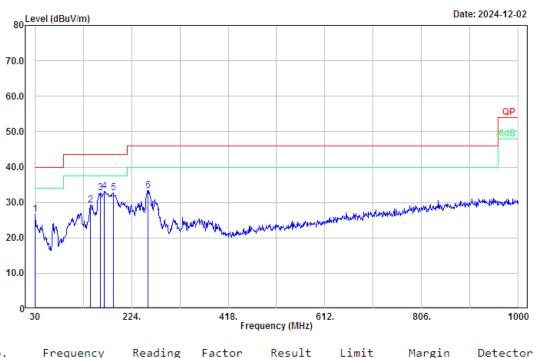
30MHz-1GHz

M1:

Project No.: 2402Z105148E-RF-A1 Polarization: Horizontal Test Mode: Transmitting Serial No.: 2UEW-7 Tester: Alan Xie

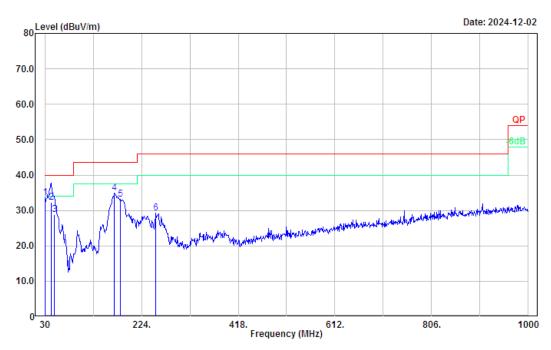
Note: M1

: RBW:100kHz VBW:300kHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.00	30.40	-3.71	26.69	40.00	13.31	Peak
2	141.55	40.08	-10.84	29.24	43.50	14.26	Peak
3	160.95	44.20	-11.47	32.73	43.50	10.77	Peak
4	169.68	44.89	-11.78	33.11	43.50	10.39	Peak
5	187.14	45.07	-12.28	32.79	43.50	10.71	Peak
6	256.98	44.33	-10.89	33.44	46.00	12.56	Peak

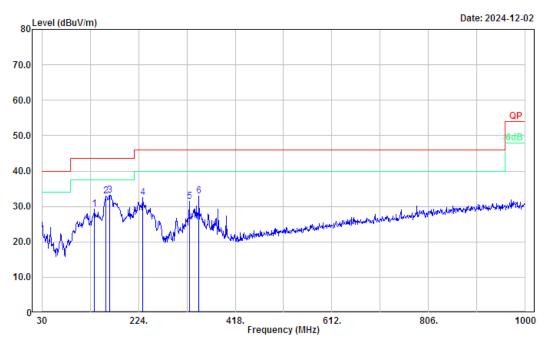
Project No.: 2402Z105148E-RF-A1 Polarization: Vertical Test Mode: Transmitting Note: M1 Serial No.: 2UEW-7 Tester: Alan Xie



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.97	37.90	-4.37	33.53	40.00	6.47	Peak
2	42.61	44.40	-12.03	32.37	40.00	7.63	QP
3	48.43	44.37	-15.47	28.90	40.00	11.10	QP
4	169.68	46.73	-11.78	34.95	43.50	8.55	Peak
5	182.29	45.47	-12.19	33.28	43.50	10.22	Peak
6	253.10	40.46	-11.11	29.35	46.00	16.65	Peak

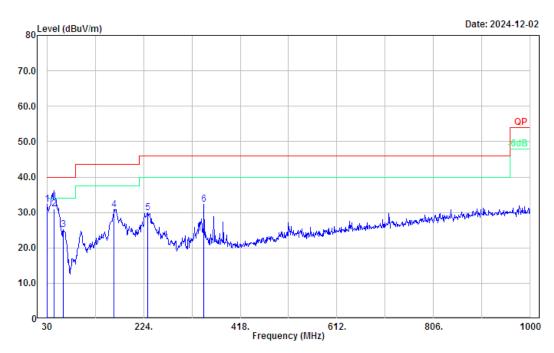
M2:

Project No.: 2402Z105148E-RF-A1 Polarization: Horizontal Test Mode: Transmitting Note: M2 Serial No.: 2UEW-35 Tester: Alan Xie



No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	135.73	39.61	-10.42	29.19	43.50	14.31	Peak
2	159.01	44.32	-11.45	32.87	43.50	10.63	Peak
3	165.80	44.72	-11.63	33.09	43.50	10.41	Peak
4	231.76	43.68	-11.13	32.55	46.00	13.45	Peak
5	325.85	39.79	-8.39	31.40	46.00	14.60	Peak
6	345.25	40.90	-8.04	32.86	46.00	13.14	Peak

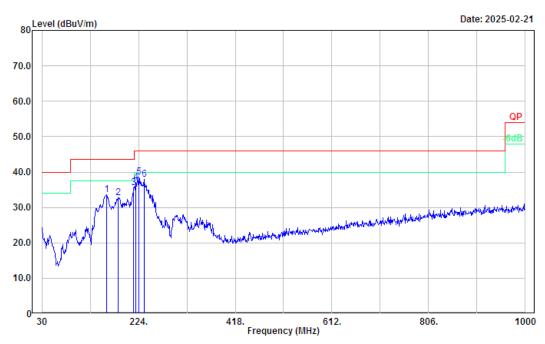
Project No.: 2402Z105148E-RF-A1
Polarization: Vertical
Test Mode: Transmitting
Note: M2 Serial No.: 2UEW-35 Tester: Alan Xie



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.97	36.57	-4.37	32.20	40.00	7.80	Peak
2	44.55	44.20	-13.09	31.11	40.00	8.89	QP
3	62.98	42.09	-16.84	25.25	40.00	14.75	Peak
4	164.83	42.46	-11.60	30.86	43.50	12.64	Peak
5	231.76	41.00	-11.13	29.87	46.00	16.13	Peak
6	345.25	40.43	-8.04	32.39	46.00	13.61	Peak

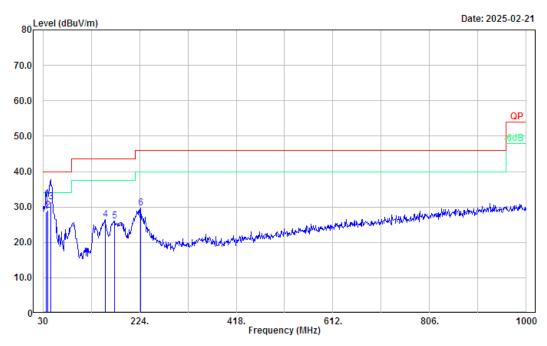
M3:

Project No.: 2402Z105148E-RF-A1 Polarization: Horizontal Test Mode: Transmitting Note: M3 Serial No.: 2UEW-36 Tester: Alan Xie



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	159.98	45.08	-11.44	33.64	43.50	9.86	Peak
2	183.26	44.99	-12.21	32.78	43.50	10.72	Peak
3	214.30	46.47	-11.00	35.47	43.50	8.03	Peak
4	218.18	48.04	-10.95	37.09	46.00	8.91	Peak
5	224.00	49.53	-10.99	38.54	46.00	7.46	Peak
6	235.64	49.19	-11.21	37.98	46.00	8.02	Peak

Serial No.: 2UEW-36 Tester: Alan Xie Project No.: 2402Z105148E-RF-A1 Polarization: Vertical
Test Mode: Transmitting
Note: M3
: RBW:100kHz VBW:300kHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	36.79	37.03	-8.35	28.68	40.00	11.32	QP
2	39.70	39.54	-10.39	29.15	40.00	10.85	QP
3	45.52	45.20	-13.66	31.54	40.00	8.46	QP
4	155.13	37.93	-11.48	26.45	43.50	17.05	Peak
5	174.53	38.05	-11.95	26.10	43.50	17.40	Peak
6	226.91	40.71	-11.05	29.66	46.00	16.34	Peak

2) 1-25GHz:

Serial Number:	2UEW-7,2UEW-35,2UEW-36	Test Date:	2024/12/2-2025/2/6
Test Site:	Chamber B	Test Mode:	M1-M3
Tester:	Nat Zhou, Colin Yang	Test Result:	Pass

Environmental Conditions:										
Temperature:	19.7-21.9	Relative Humidity: (%)	32-41	ATM Pressure: (kPa)	101.2-101.6					

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ETS-Lindgren	Horn Antenna	3115	000 527 35	2023/9/7	2026/9/6
Ducommun Technologies	Horn Antenna	ARH-4223-02	1007726-02 1304	2023/2/22	2026/2/21
Xinhang Macrowave	Coaxial Cable	XH750A-N/J-SMA/J- 10M	20231117004 #0001	2024/11/17	2025/11/16
Xinhang Macrowave	Coaxial Cable	XH360A-2.92/J-2.92/J- 6M-A	20231208001 #0001	2023/12/11	2024/12/10
Xinhang Macrowave	Coaxial Cable	XH360A-2.92/J-2.92/J- 6M-A	20231208001 #0001	2024/12/9	2025/12/8
AH	Preamplifier	PAM-0118P	469	2024/4/15	2025/4/14
AH	Preamplifier	PAM-1840VH	191	2024/9/5	2025/9/4
R&S	Spectrum Analyzer	FSV40	101944	2024/9/6	2025/9/5
Audix	Test Software	E3	191218 V9	N/A	N/A
Audix Test Software Multiplex Switch Test Control Set & Filter Switch Unit		DT7220SCU & DT7220FCU	DC79902 & DC79905	2024/8/27	2025/8/26

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

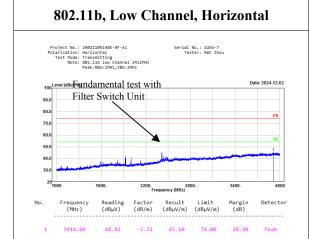
Test Data:

Please refer to the below plots.

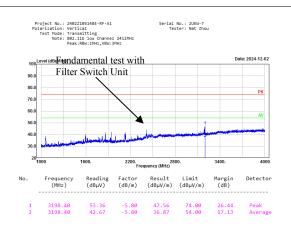
After pre-scan in the X, Y and Z axes of orientation, the worst case is refer to plots.

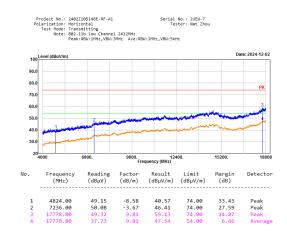
1-18GHz:

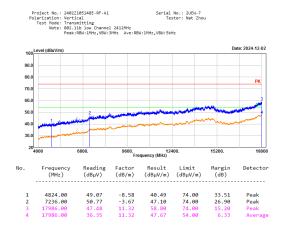
M1:



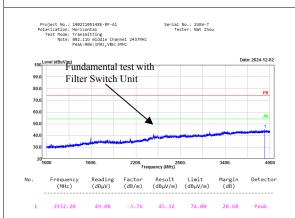
802.11b, Low Channel, Vertical



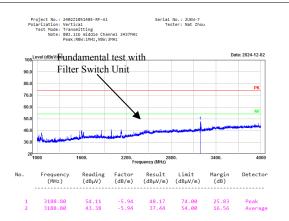


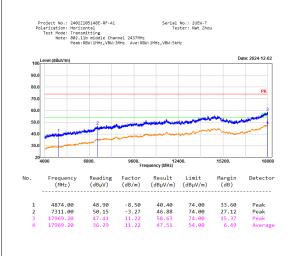


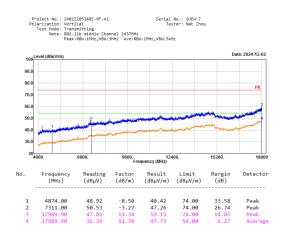
802.11b, Middle Channel, Horizontal



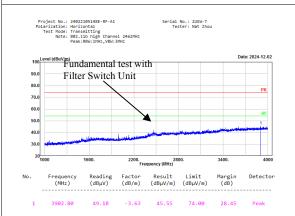
802.11b, Middle Channel, Vertical



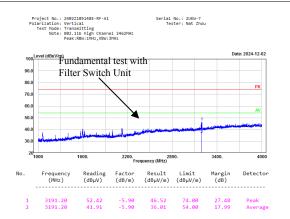


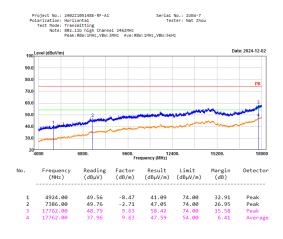


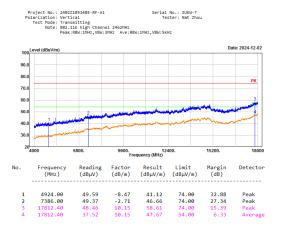
802.11b, High Channel, Horizontal



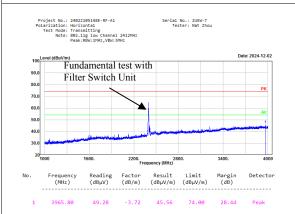
802.11b, High Channel, Vertical



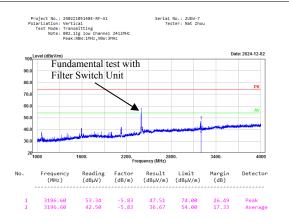


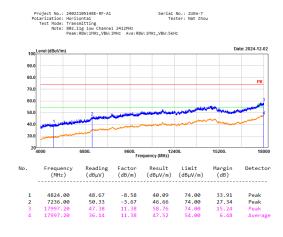


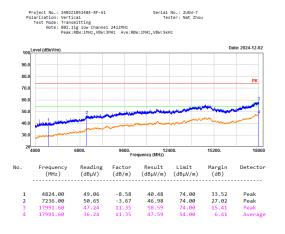
802.11g, Low Channel, Horizontal



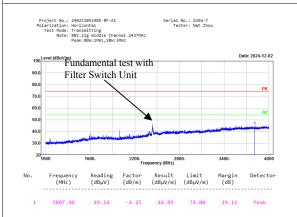
802.11g, Low Channel, Vertical



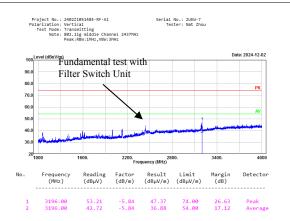




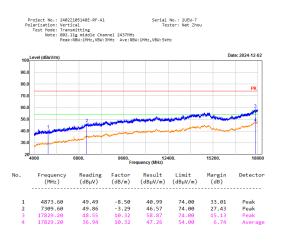
802.11g, Middle Channel, Horizontal



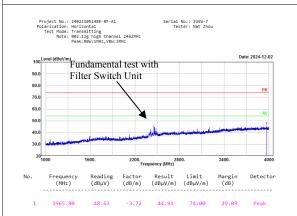
802.11g, Middle Channel, Vertical



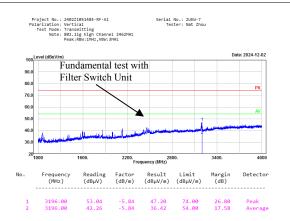


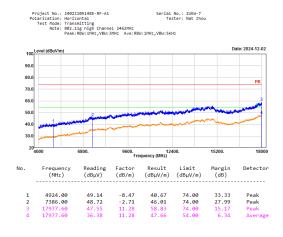


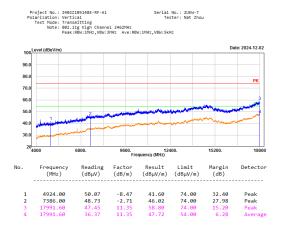
802.11g, High Channel, Horizontal



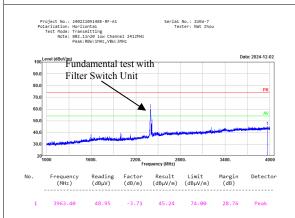
802.11g, High Channel, Vertical



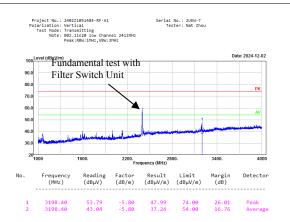


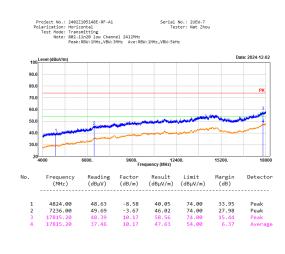


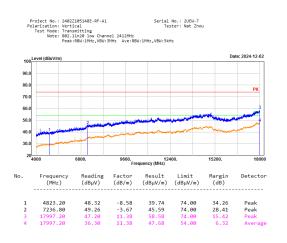
802. 11n20, Low Channel, Horizontal



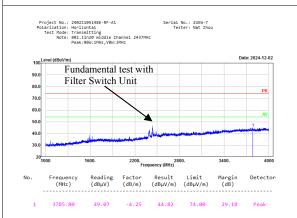
802. 11n20, Low Channel, Vertical



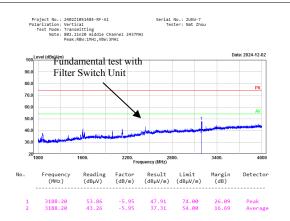


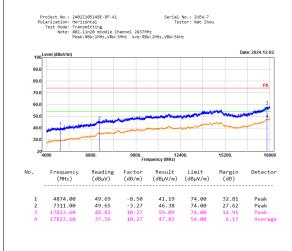


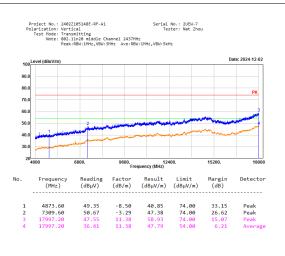
802. 11n20, Middle Channel, Horizontal



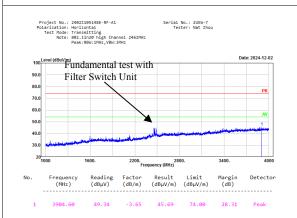
802. 11n20, Middle Channel, Vertical



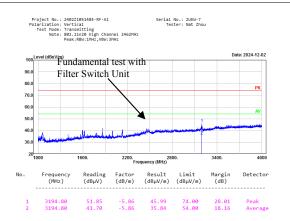


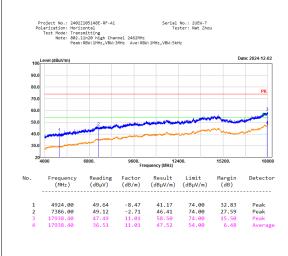


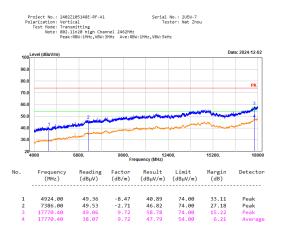
802. 11n20, High Channel, Horizontal



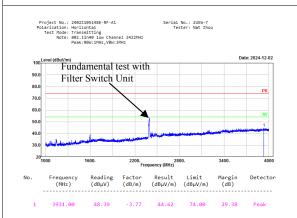
802. 11n20, High Channel, Vertical



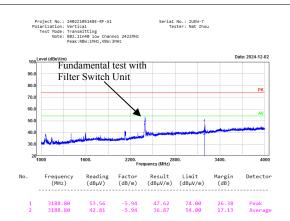


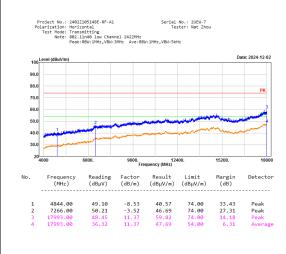


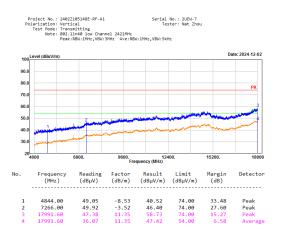
802. 11n40, Low Channel, Horizontal



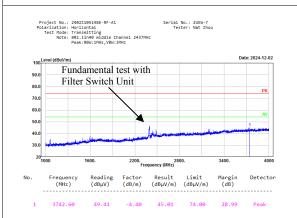
802. 11n40, Low Channel, Vertical



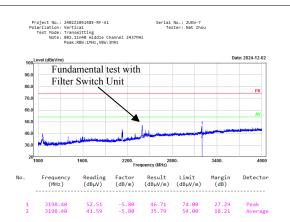


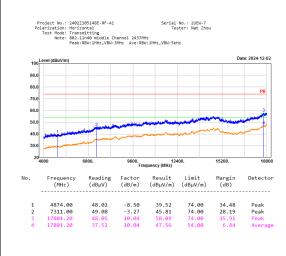


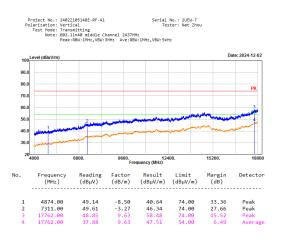
802. 11n40, Middle Channel, Horizontal



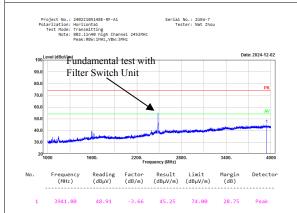
802. 11n40, Middle Channel, Vertical



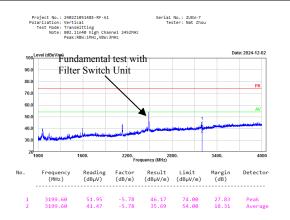




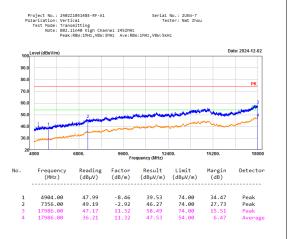
802. 11n40, High Channel, Horizontal



802. 11n40, High Channel, Vertical



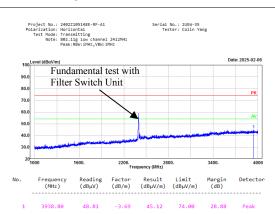




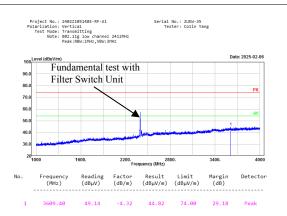
Spot check:

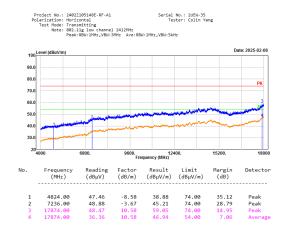
M2:

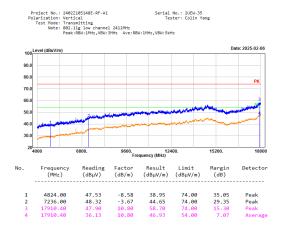
802.11g, Low Channel, Horizontal



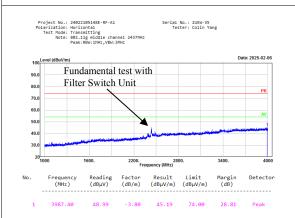
802.11g, Low Channel, Vertical



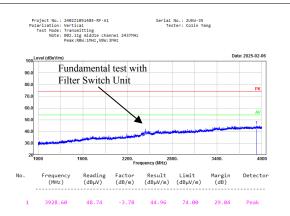


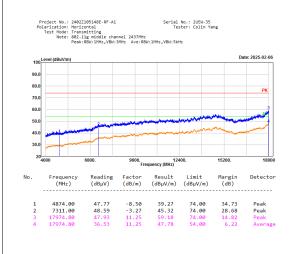


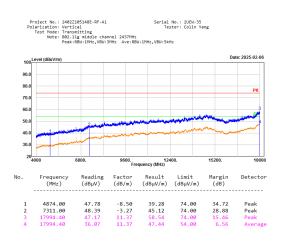
802.11g, Middle Channel, Horizontal



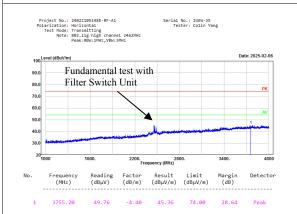
802.11g, Middle Channel, Vertical



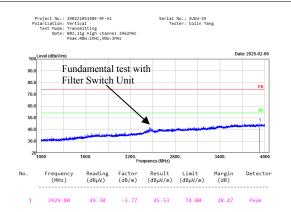


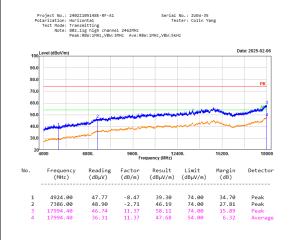


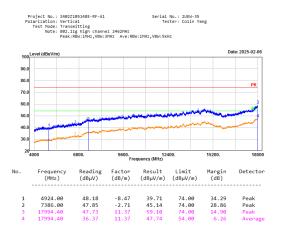
802.11g, High Channel, Horizontal



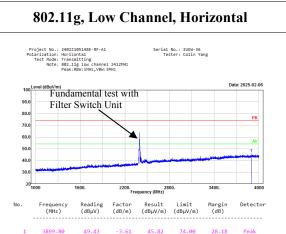
802.11g, High Channel, Vertical



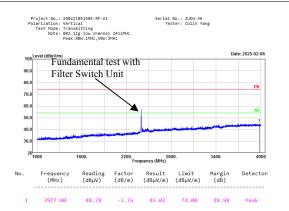




M3:



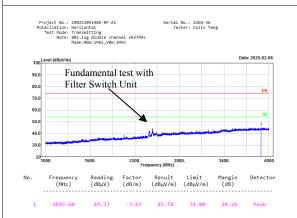
802.11g, Low Channel, Vertical



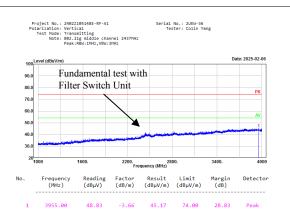


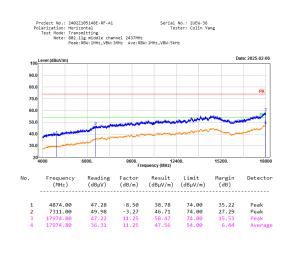


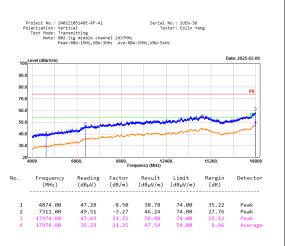
802.11g, Middle Channel, Horizontal



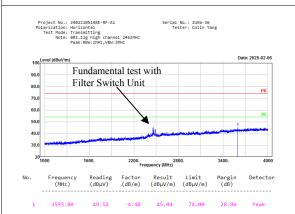
802.11g, Middle Channel, Vertical



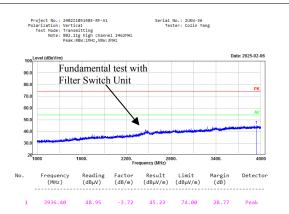


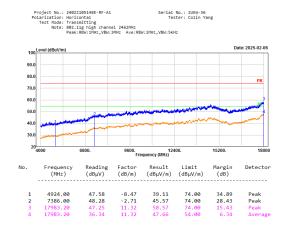


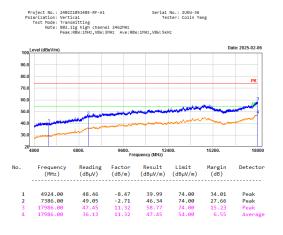
802.11g, High Channel, Horizontal



802.11g, High Channel, Vertical



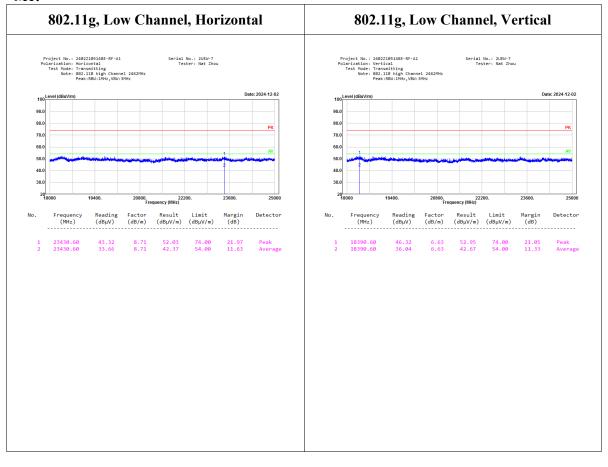




18-25GHz:

No Emission was detected in the range 18-25GHz, test was performed on the mode and channel which with the maximum power.

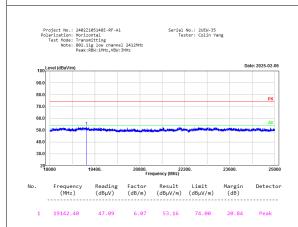
M1:



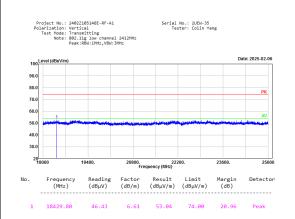
Spot check:

M2:



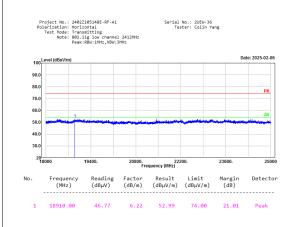


802.11g, Low Channel, Vertical

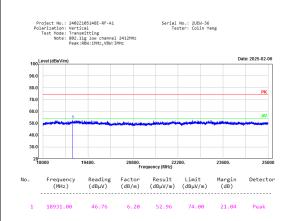


M3:

802.11g, Low Channel, Horizontal



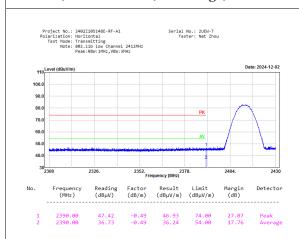
802.11g, Low Channel, Vertical



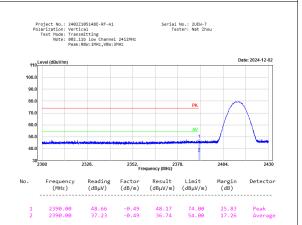
Bandedge:

M1:

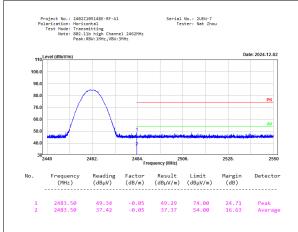
802.11b, Low Channel, Bandedge, Horizontal



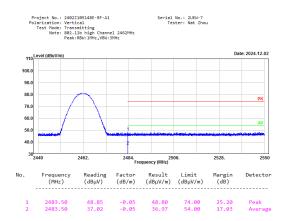
802.11b, Low Channel, Bandedge, Vertical



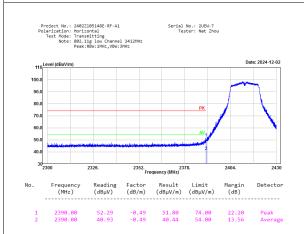
802.11b, High Channel, Bandedge, Horizontal



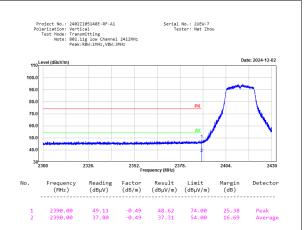
802.11b, High Channel, Bandedge, Vertical



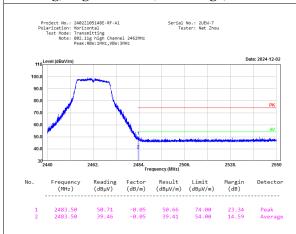
802. 11g, Low Channel, Bandedge, Horizontal



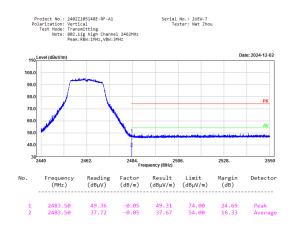
802. 11g, Low Channel, Bandedge, Vertical



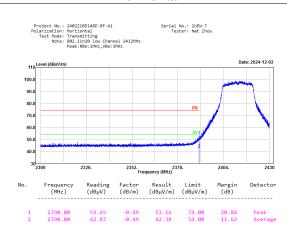
802.11g, High Channel, Bandedge, Horizontal



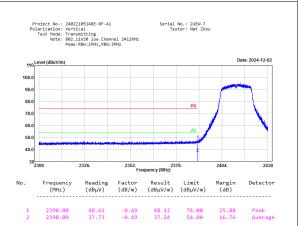
802. 11g, High Channel, Bandedge, Vertical



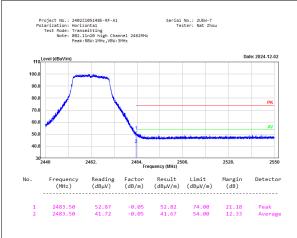
802. 11n20, Low Channel, Bandedge, Horizontal



802. 11n20, Low Channel, Bandedge, Vertical



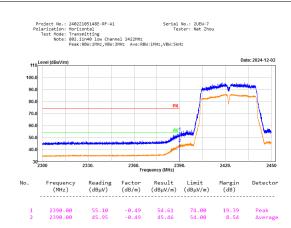
802.11n20, High Channel, Bandedge, Horizontal



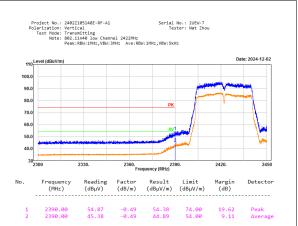
802. 11n20, High Channel, Bandedge, Vertical



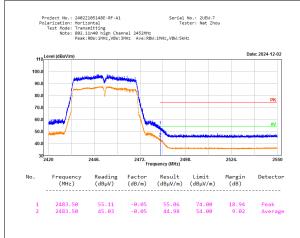
802. 11n40, Low Channel, Bandedge, Horizontal



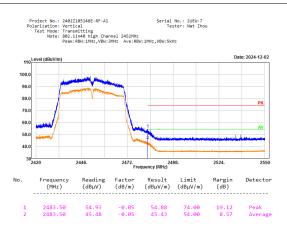
802. 11n40, Low Channel, Bandedge, Vertical



802. 11n40, High Channel, Bandedge, Horizontal



802. 11n40, High Channel, Bandedge, Vertical



5.3 Spot Check With Maximum Conducted Output Power

Test Information:

Serial No.:	2UEW-21, 2UEW-22, 2UEW-24	Test Date:	2024/12/11~2025/2/12
Test Site:	RF	Test Mode:	Transmitting
Tester:	Tower Qing	Test Result:	Pass

Environmental Conditions:

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Coaxial Attenuator	10dB	F-08- EM512	2024/06/13	2025/06/12
Anritsu	Microwave Peak Power Sensor	MA24418A	12618	2024/09/04	2025/09/03

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Configuration5#

Mode	Antenna	Test Frequency (MHz)	Peak Output Power (dBm)	Average Output Power (dBm)	Limit (dBm)	Verdict
	2412	19.38	14.70	30	Pass	
802.11g	Chain 0	2437	18.77	14.46	30	Pass
		2462	18.98	14.44	30	Pass

Configuration4#

Mode	Antenna	Test Frequency (MHz)	Peak Output Power (dBm)	Average Output Power (dBm)	Limit (dBm)	Verdict
802.11g	Chain 0	2412	19.33	14.64	30	Pass
		2437	18.72	14.42	30	Pass
		2462	18.95	14.47	30	Pass

Configuration3#

Mode	Antenna	Test Frequency (MHz)	Peak Output Power (dBm)	Average Output Power (dBm)	Limit (dBm)	Verdict
802.11g	Chain 0	2412	19.31	14.66	30	Pass
		2437	18.73	14.51	30	Pass
		2462	18.69	14.37	30	Pass

Note:

The Spot Check data were similar to the original data.

5.4 Duty Cycle

Test Information:

Serial No.:	2UEW-21	Test Date:	2025/07/16
Test Site:	RF	Test Mode:	Transmitting
Tester:	Tower Qing	Test Result:	N/A

Environmental Conditions:

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101589	2024/09/05	2025/09/04
R&S	Coaxial Attenuator	10dB	F-08-EM512	2025/06/13	2026/06/12

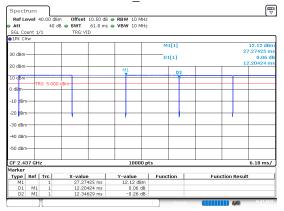
^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Mode	Test Frequency (MHz)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	1/Ton (Hz)	VBW Setting (kHz)
802.11b	2437	12.204	12.346	98.85	/	0.010
802.11g	2437	2.026	2.139	94.72	494	0.500
802.11n20	2437	1.701	1.828	93.05	588	1
802.11n40	2437	0.838	0.957	87.57	1193	2

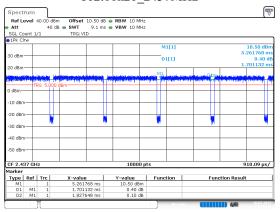
Duty Cycle = Ton/(Ton+Toff)*100%

802.11b_2437MHz



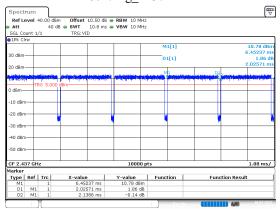
ProjectNo.:2402Z105148E-RF-A1 Tester:Tower Qing Date: 16.JUL.2025 17:38:49

802.11n20_2437MHz



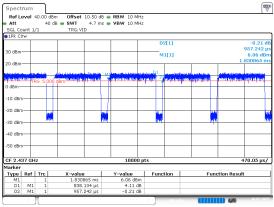
ProjectNo.:2402Z105148E-RF-Al Tester:Tower Oing

802.11g_2437MHz



ProjectNo.:2402Z105148E-RF-A1 Tester:Tower Qing Date: 16.JUL.2025 17:44:07

802.11n40_2437MHz



ProjectNo.:2402Z105148E-RF-Al Tester:Tower Oing

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2402Z105148EA1-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2402Z105148EA1-RF-INP EUT INTERNAL PHOTOGRAPHS.

Report Template Version: FCC-Wi-Fi-V1.3 Page 71 of 72

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2402Z105148E-RF-00CA1-TSP TEST SETUP PHOTOGRAPHS.

***** END OF REPORT *****