

TEST REPORT

Applicant: Fujian Newland Payment Technology Co.,Ltd.

Address: No. B602, Building #1, Haixia Jingmao Plaza, Fuzhou Bonded Area 350015, Fujian, China

Product Name: POS Terminal

FCC ID: 2AM6U-NAS90

IC: 25226-NAS90

HVIN: S2_33_80_00_11, S2_73_80_00_11, S2_33_83_00_11

47 CFR Part 15, Subpart C(15.247)

RSS-247 Issue 4, July 24, 2025

Standard(s): RSS-Gen, Issue 5, February 2021 Amendment 2
ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024

KDB 558074 D01 15.247 Meas Guidance v05r02

Report Number: 2502A93849E-RF-00C

Report Date: 2026/3/18

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

Alice Tan

Reviewed By: Alice Tan

Title: RF Engineer

Pedro Yun

Approved By: Pedro Yun

Title: RF Supervisor

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	4
1. GENERAL INFORMATION	5
1.1 GENERAL DESCRIPTION OF EQUIPMENT UNDER TEST	5
1.2 ACCESSORY INFORMATION	5
1.3 ANTENNA INFORMATION DETAIL ▲	6
1.4 EQUIPMENT MODIFICATIONS	6
2. SUMMARY OF TEST RESULTS	7
3. DESCRIPTION OF TEST CONFIGURATION	8
3.1 OPERATION FREQUENCY DETAIL	8
3.2 EUT OPERATION CONDITION	8
3.3 SUPPORT EQUIPMENT LIST AND DETAILS	8
3.4 SUPPORT CABLE LIST AND DETAILS	8
3.5 BLOCK DIAGRAM OF TEST SETUP	9
3.6 TEST FACILITY	11
3.7 MEASUREMENT UNCERTAINTY	11
4. REQUIREMENTS AND TEST PROCEDURES	12
4.1 AC LINE CONDUCTED EMISSIONS	12
4.1.1 Applicable Standard	12
4.1.2 EUT Setup	14
4.1.3 EMI Test Receiver Setup	14
4.1.4 Test Procedure	15
4.1.5 Corrected Amplitude & Margin Calculation	15
4.1.6 Test Result	15
4.2 RADIATION SPURIOUS EMISSIONS	16
4.2.1 Applicable Standard	16
4.2.2 EUT Setup	16
4.2.3 EMI Test Receiver & Spectrum Analyzer Setup	18
4.2.4 Test Procedure	19
4.2.5 Corrected Result & Margin Calculation	19
4.2.6 Test Result	19
4.3 MAXIMUM CONDUCTED OUTPUT POWER:	20
4.3.1 Applicable Standard	20
4.3.2 EUT Setup	20
4.3.3 Test Procedure	20
4.3.4 Test Result	20
4.4 DUTY CYCLE:	21
4.4.1 EUT Setup	21
4.4.2 Test Procedure	21
4.4.3 Judgment	21
4.5 ANTENNA REQUIREMENT	22
4.5.1 Applicable Standard	22
4.5.2 Judgment	22

5. TEST DATA AND RESULTS	23
5.1 AC LINE CONDUCTED EMISSIONS	23
5.2 RADIATION SPURIOUS EMISSIONS.....	26
5.3 SPOT CHECK WITH MAXIMUM CONDUCTED OUTPUT POWER	37
5.4 DUTY CYCLE.....	39
EXHIBIT A - EUT PHOTOGRAPHS	40
EXHIBIT B - TEST SETUP PHOTOGRAPHS	41
EXHIBIT C - RF EXPOSURE EVALUATION	42
SAR TEST EXCLUSION.....	42
EXEMPTION LIMITS FOR ROUTINE EVALUATION- SAR EVALUATION.....	43

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2502A93849E-RF-00C	Original Report	2026/3/18

1. GENERAL INFORMATION

1.1 General Description Of Equipment under Test

EUT Name:	POS Terminal
EUT Model:	S90
Operation Frequency:	2402-2480 MHz
Maximum Peak Output Power (Conducted) ▲:	0.421dBm
Modulation Type:	GFSK
Rated Input Voltage:	7.6Vdc from battery or 5.0Vdc from Adapter
Serial Number:	For AC Line Conducted Emissions and Radiated Spurious Emissions Above 1G test: 3FG3-1(Configuration 1#) For Radiated Spurious Emissions Below 1G test: 3FG3-10(Configuration 2#) For RF Conducted Test: 3FG3-2(Configuration 1#)
EUT Received Date:	2025/12/31
EUT Received Status:	Good

Note: Per 15B&ICES 003 Issue 7 report, test with Adapter 3# & Battery 3#&Configuration 1# was the worst for AC Line Conducted Emissions, test with Adapter 2# & Battery 3#&Configuration 2# was the worst for Radiated Spurious Emissions Below 1G and test with Adapter 1# & Battery 1#&Configuration 1# was the worst for Radiated Spurious Emissions Above 1G, so only performed it this report.

There are three Configurations, Configurations 1#, Configurations 2#, Configurations 3#, their differences are as follows:

Configuration	HVIN	Pro scanner	LCD_2
Configuration 1#	S2 33 80 00 11	×	×
Configuration 2#	S2 73 80 00 11	×	√
Configuration 3#	S2 33 83 00 11	√	×

1.2 Accessory Information

Accessory Description	Manufacturer	Model	Parameters
Adapter 1#	SHENZHEN HONOR ELECTRONIC CO.,LTD.	ADS-12B-06 05010E	Input: 100-240Vac 50/60Hz MAX 0.3A Output: 5.0Vdc 2.0A 10.0W
Adapter 2#	SHENZHEN HONOR ELECTRONIC CO.,LTD.	ADS-12EA-05 05010E	Input: 100-240Vac 50/60Hz MAX 0.3A Output: 5.0Vdc 2.0A 10.0W
Adapter 3#	XIAMEN KELI ELECTRONICS CO.,LTD	KL-WD050200	Input: 100-240Vac 50/60Hz 0.5A Output: 5.0Vdc 2.0A 10.0W
Battery 1#	EVE Energy Co., Ltd	NL7626A	7.6V 2600mAh
Battery 2#	Dongguan Veken Battery Co.,Ltd.	NL7626A	7.6V 2600mAh
Battery 3#	Dongguan Veken Battery Co.,Ltd.	NL7635A	7.6V 3500mAh

1.3 Antenna Information Detail ▲

Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
FPC	50	2.4~2.5GHz	0.85dBi
The design of compliance with §15.203:			
☒ 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	Note
§15.207(a) RSS-Gen Clause 8.8	AC line conducted emissions	Compliant	/
§15.205, §15.209, §15.247(d) RSS-Gen Clause 8.10 RSS-247 Clause 6.6	Radiated Spurious Emissions	Compliant	/
§15.247 (a)(2) RSS-247 Clause 6.3.1 a)	Minimum 6 dB Bandwidth	Note*	The test result please refer to report TCWA24120042201 [▲] page22 for FCC and TCWA24120042209 [▲] page22 for IC
RSS-Gen Clause 6.7	99% Occupied Bandwidth	Note*	The test result please refer to report TCWA24120042209 [▲] page23
§15.247(b)(3) RSS-247 Clause 6.3.2	Maximum Conducted Output Power	Reporting	The test result please refer to report TCWA24120042201 [▲] page24 for FCC and TCWA24120042209 [▲] page24 for IC
§15.247(e) RSS-247 Clause 6.3.1 b)	Power Spectral Density	Note*	The test result please refer to report TCWA24120042201 [▲] page25 for FCC and TCWA24120042209 [▲] page25 for IC
§15.247(d) RSS-247 Clause 6.6	Conducted Spurious Emission	Note*	The test result please refer to report TCWA24120042201 [▲] page26-29 for FCC and TCWA24120042209 [▲] page26-29 for IC
FCC §15.203 RSS-Gen Clause 6.8	Antenna Requirement	Compliant	/
§15.247 (i) & §1.1310 & §2.1093	SAR Evaluation	Compliant	/
RSS-102 Clause 6.3	Exemption Limits For Routine Evaluation- SAR Evaluation	Compliant	/

Note*: The device built in a certified module, model: SC200U-NA, FCC ID: XMR2025SC200UNA, IC: 10224A-025SC200UNA, per spot check, the RF parameters are identical with the original module report, therefore, the RF conducted test items please refer to the module FCC report: TCWA24120042201[▲] and IC report: TCWA24120042209[▲], which was issued by Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. on 2025/02/27 for FCC and 2025/02/27 for IC. (according to KDB 996369 D02 Module Q&A v02r02, Answer 1 b))

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.

3. DESCRIPTION OF TEST CONFIGURATION

3.1 Operation Frequency Detail

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

Note 1: The above frequencies in bold were performed the test.

Note 2: For AC line conducted emissions, the maximum output power mode and channel was tested.

Note 3: For Radiated Spurious Emissions 9kHz~1GHz and 18~25GHz, the maximum output power mode and channel was tested.

3.2 EUT Operation Condition

The EUT was configured for testing in Engineering Mode, which was provided by the manufacturer. The EUT configuration as below:

EUT Exercise Software:	QRCT3		
The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer▲:			
Test Modes	Power Level Setting		
	Lowest Channel	Middle Channel	Highest Channel
BLE 1Mbps	default	default	default

3.3 Support Equipment List and Details

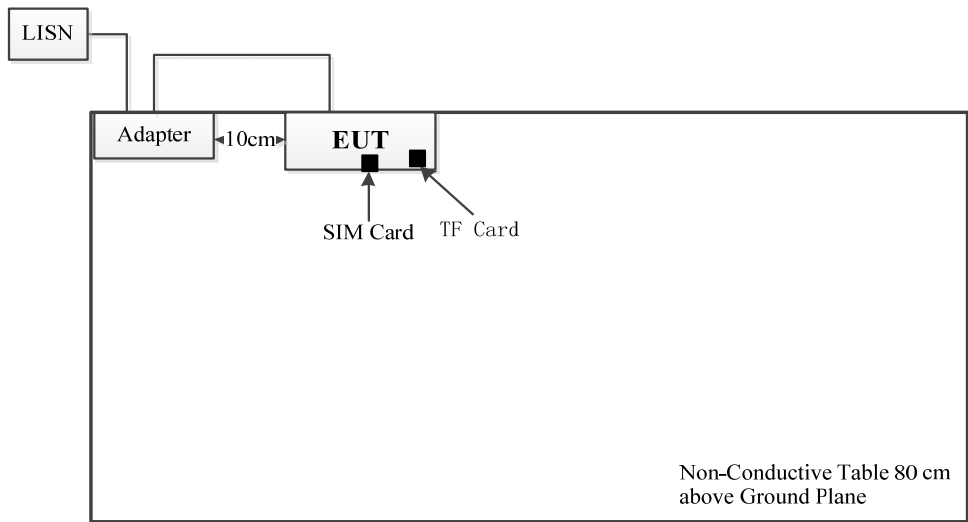
Manufacturer	Description	Model	Serial Number
SanDisk	TF Card	UHS-I-16G	9292DVDSV0XZ
Unknown	SIM Card	Unknown	180722

3.4 Support Cable List and Details

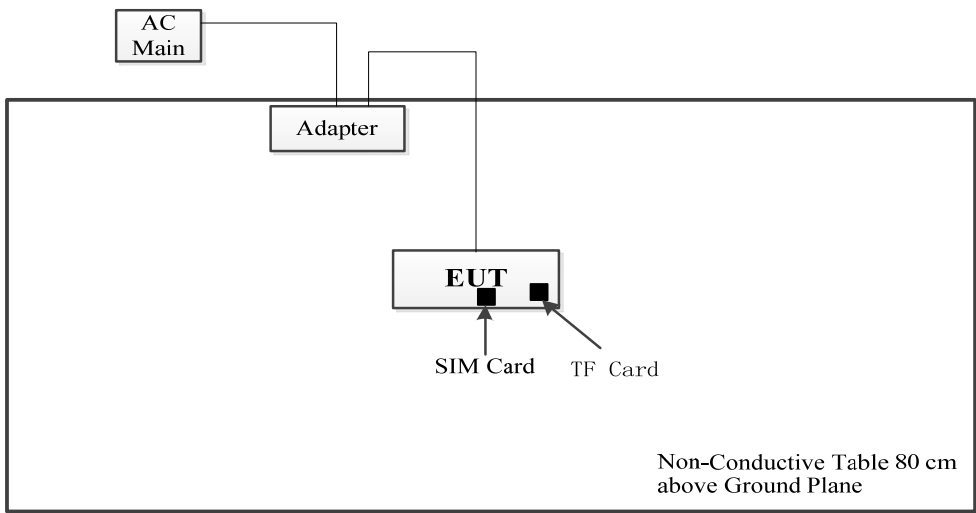
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
DC Cable	no	no	1.2	Adapter 1#	EUT
USB Cable	no	no	1.0	Adapter 2#	EUT
DC Cable	no	no	1.2	Adapter 3#	EUT

3.5 Block Diagram of Test Setup

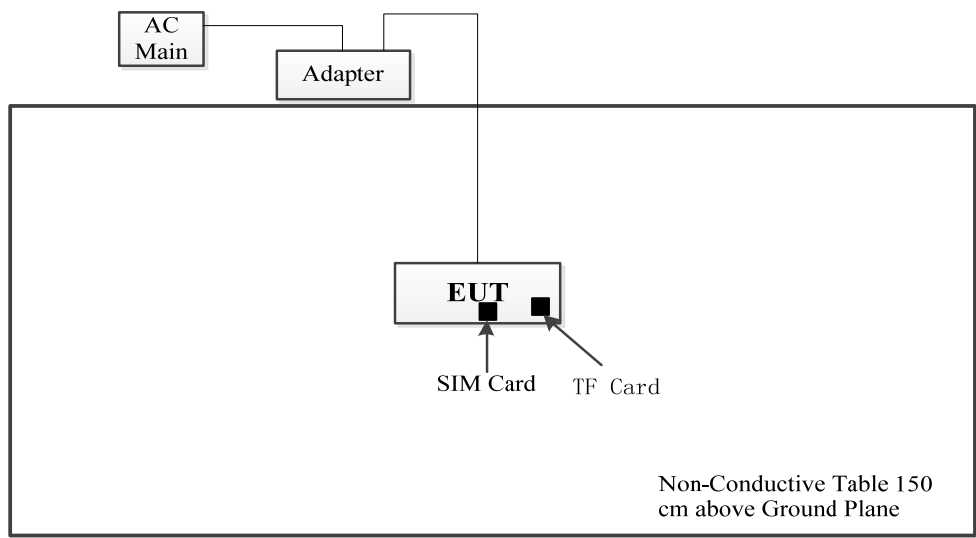
AC line conducted emissions:



Spurious Emissions:
Below 1GHz:



Above 1GHz:



3.6 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.

3.7 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	±0.55 dB
Power Spectral Density, conducted	±0.55 dB
Unwanted Emissions, radiated	9kHz~30MHz: 3.06dB, 30MHz~1GHz: 6.13 dB, 1GHz~6GHz: 4.79 dB, 6GHz~18GHz: 4.63 dB, 18GHz~26.5GHz: 4.79 dB, 26.5GHz~40GHz: 4.63 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	2.83 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.

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

*Decreases with the logarithm of the frequency.

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

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

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

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

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

RSS-Gen Clause 8.8

Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 μ H / 50 Ω line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.

For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

Table 4 – AC power-line conducted emissions limits

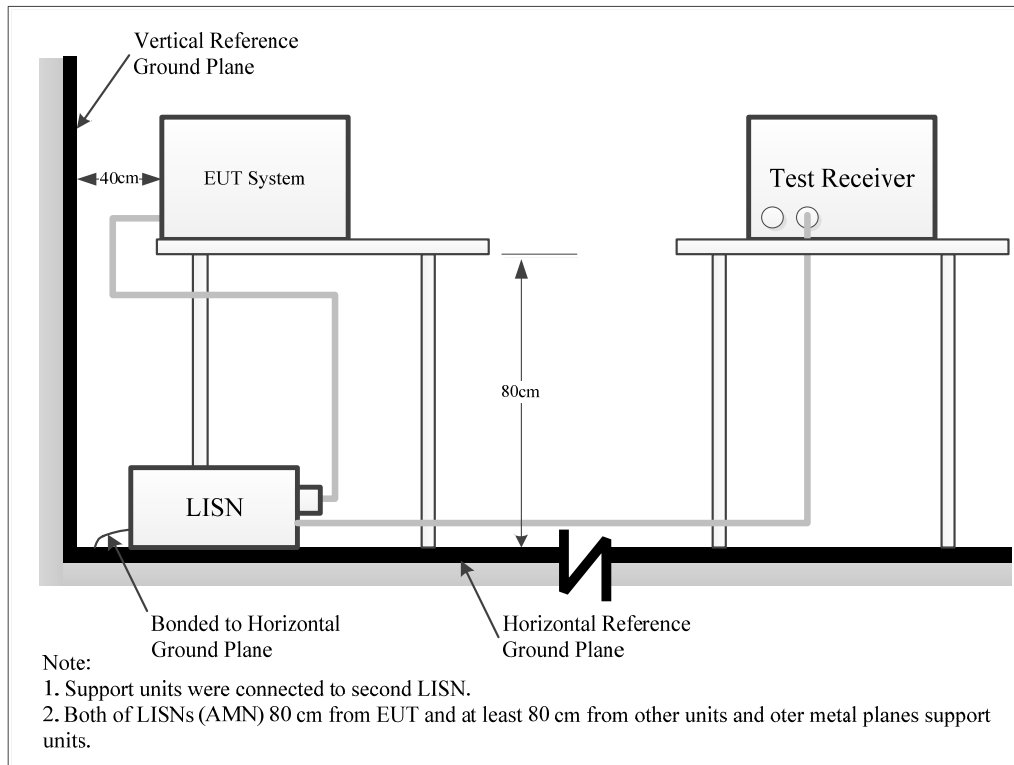
Frequency (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 ¹	56 to 46 ¹
0.5 – 5	56	46
5 – 30	60	50

Note 1: The level decreases linearly with the logarithm of the frequency.

For an EUT with a permanent or detachable antenna operating between 150 kHz and 30 MHz, the AC power-line conducted emissions must be measured using the following configurations:

- (a) Perform the AC power-line conducted emissions test with the antenna connected to determine compliance with the limits of table 4 outside the transmitter's fundamental emission band.
- (b) Retest with a dummy load instead of the antenna to determine compliance with the limits of table 4 within the transmitter's fundamental emission band. For a detachable antenna, remove the antenna and connect a suitable dummy load to the antenna connector. For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network that simulates the antenna in the fundamental frequency band.

4.1.2 EUT Setup



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

4.1.3 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

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)

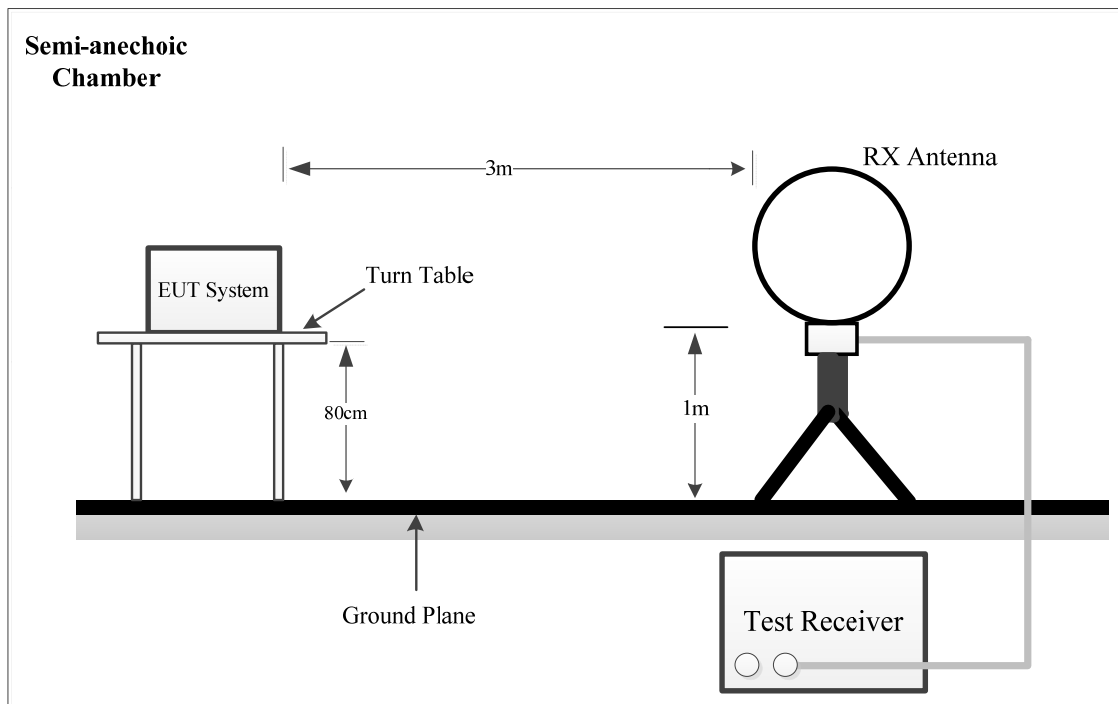
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the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

RSS-247 Clause 6.6

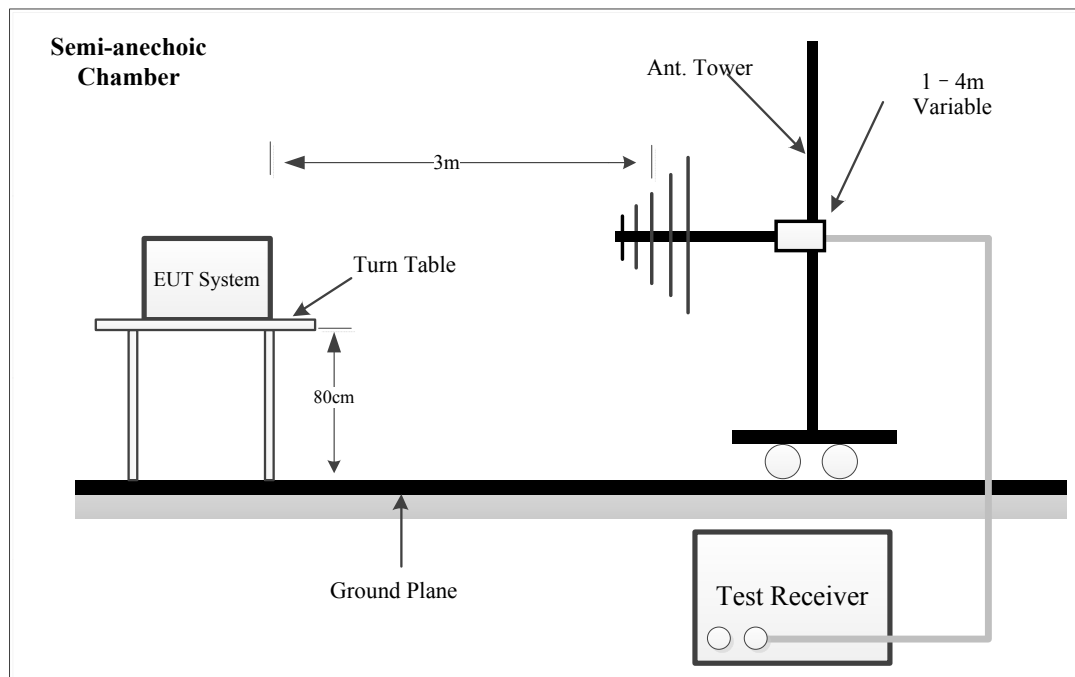
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system is operating, the RF power that is produced shall be at least 20 dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power -based on either an RF conducted or a radiated measurement -provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 6.3.2, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

4.2.2 EUT Setup

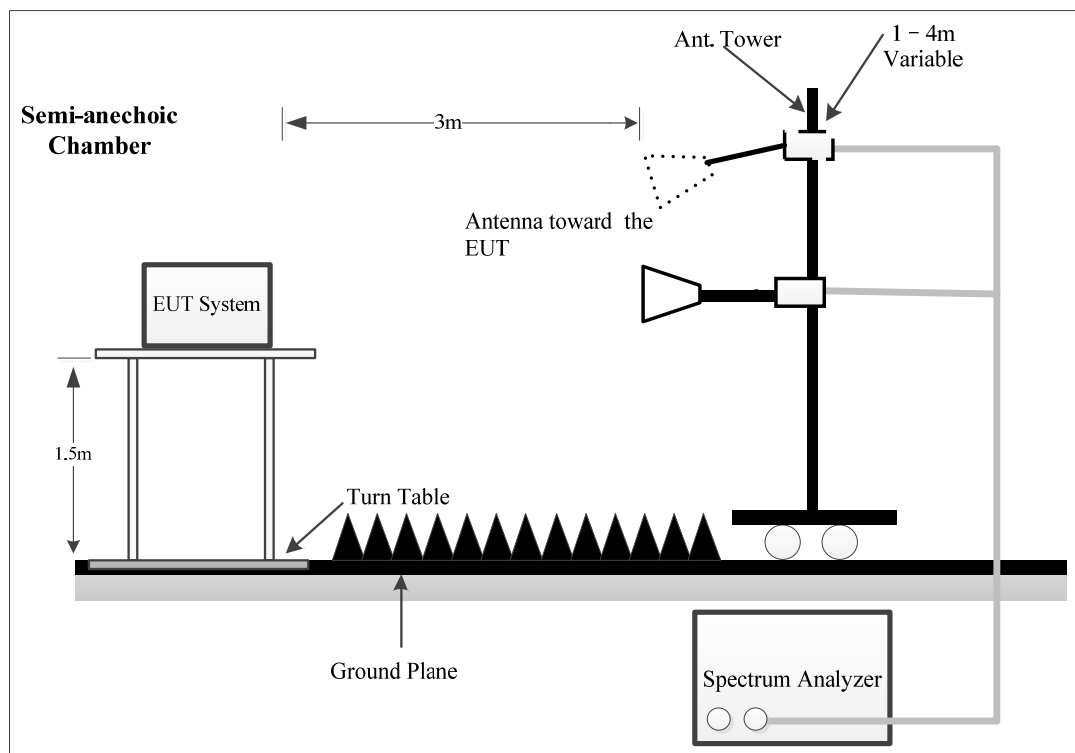
9kHz-30MHz:



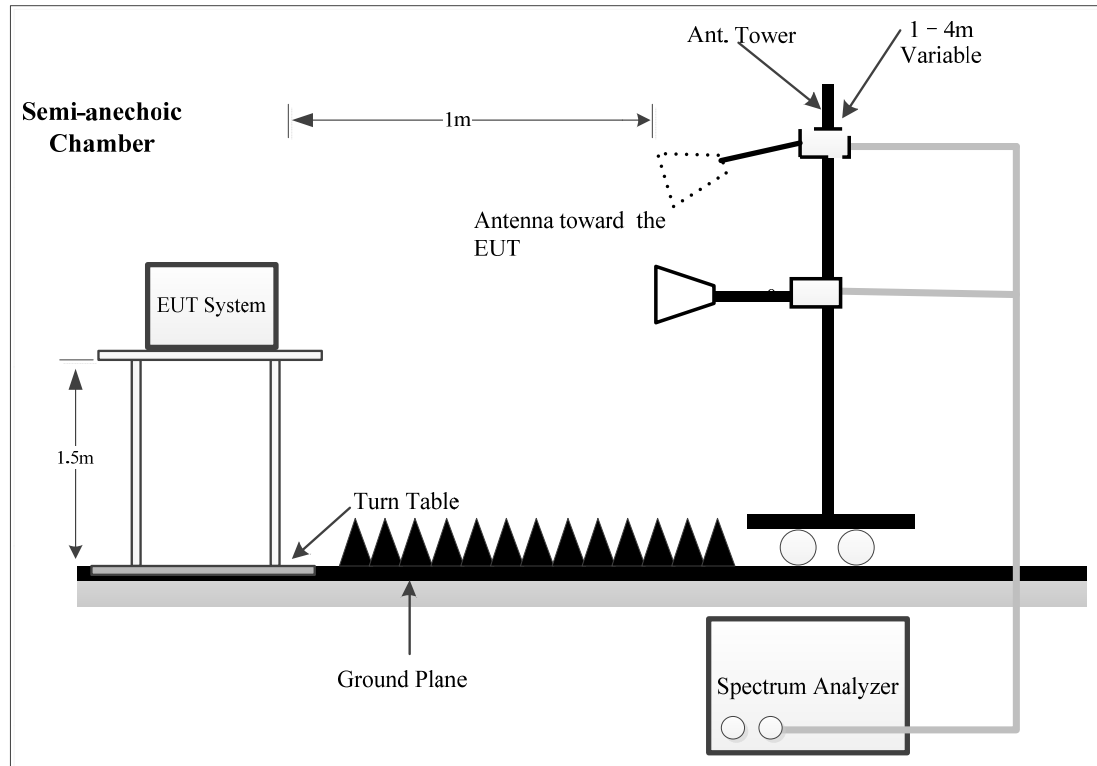
30MHz~1GHz:



1-18GHz:



18-25GHz:



The radiated emissions were performed in the semi-anechoic chamber, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209, and FCC 15.247, RSS-247, RSS-Gen limits.

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

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	200 Hz	1 kHz	200 Hz	QP/AV
150 kHz-30 MHz	QP/AV	9 kHz	30 kHz	9 kHz	QP/AV
30 MHz-1000 MHz	Peak	120 kHz	500 kHz	/	PK
	QP	/	/	120 kHz	QP

Above 1GHz:

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.	PK	>98%	1MHz	10 Hz
		<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 required in Quasi-peak measurement for frequency range of 9 kHz-1 GHz except 9-90 kHz, 110-490 kHz, employing an average measurement, peak and Average measurement for frequencies above 1 GHz.

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.

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

For Radiated 18-25GHz test, which was performed at 1.0 m distance, according to C63.10, the test result shall be extrapolated to the specified distance using an extrapolation Factor of 20dB/decade from 3m to 1.0m
Distance extrapolation Factor = $20 \log (\text{specific distance [3m]}/\text{test distance [1.0m]})$ dB = 9.54 dB

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:

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

The basic equation except 18-25GHz test is as follows:

Factor = Antenna Factor + Cable Loss- Amplifier Gain

For Radiated 18-25GHz test:

Factor = Antenna Factor + Cable Loss- Distance extrapolation Factor

Result = Reading + Factor

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:

$$\text{Margin} = \text{Limit} - \text{Result}$$

For the spurious emission below 30MHz, the limit was convert from dB μ A/m to dB μ V/m by adding 51.5 dB.

4.2.6 Test Result

Please refer to section 5.2.

4.3 Maximum Conducted Output Power:

4.3.1 Applicable Standard

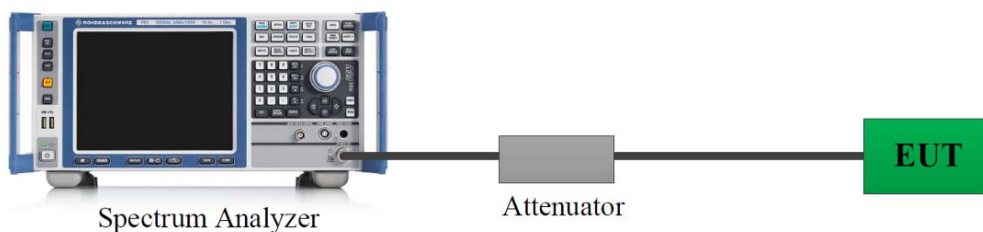
FCC §15.247 (b)(3)

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.

RSS-247 Clause 6.3.2

For DTS operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W, and the e.i.r.p. shall not exceed 4 W, except as provided in section 6.5 a) and b).

4.3.2 EUT Setup



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

Offset=Insert loss of RF cable+ Insert loss of attenuator

4.3.3 Test Procedure

According to ANSI C63.10-2020 Section 11.9.1.1

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

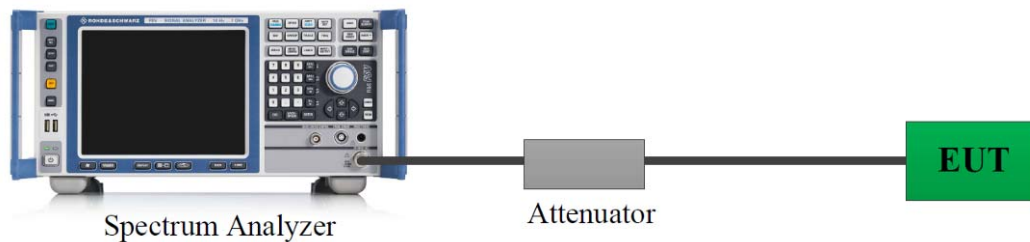
- Set the $RBW \geq DTS$ bandwidth.
- Set $VBW \geq [3 \times RBW]$.
- Set $span \geq [3 \times RBW]$.
- Sweep time = No faster than coupled (auto) time.
- Detector = peak.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use peak marker function to determine the peak amplitude level.

4.3.4 Test Result

Please refer to section 5.3.

4.4 Duty Cycle:

4.4.1 EUT Setup



4.4.2 Test Procedure

According to ANSI C63.10-2020 Section 11.6

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

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

4.4.3 Judgment

Report Only. 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.

RSS-Gen Clause 6.8

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer. The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

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:	3FG3-1	Test Date:	2026/01/16
Test Site:	CE	Test Mode:	Transmitting
Tester:	Leesin Xiang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	21.3	Relative Humidity: (%)	51	ATM Pressure: (kPa)	100.8
----------------------	------	------------------------------	----	------------------------	-------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101614	2025/6/25	2026/6/24
Unknown	Coaxial Cable	RG 142	C-0200-05	2025/5/6	2026/5/5
R&S	EMI Test Receiver	ESCI	100224	2025/6/25	2026/6/24
Audix	Test Software	E3	191218 V9	N/A	N/A

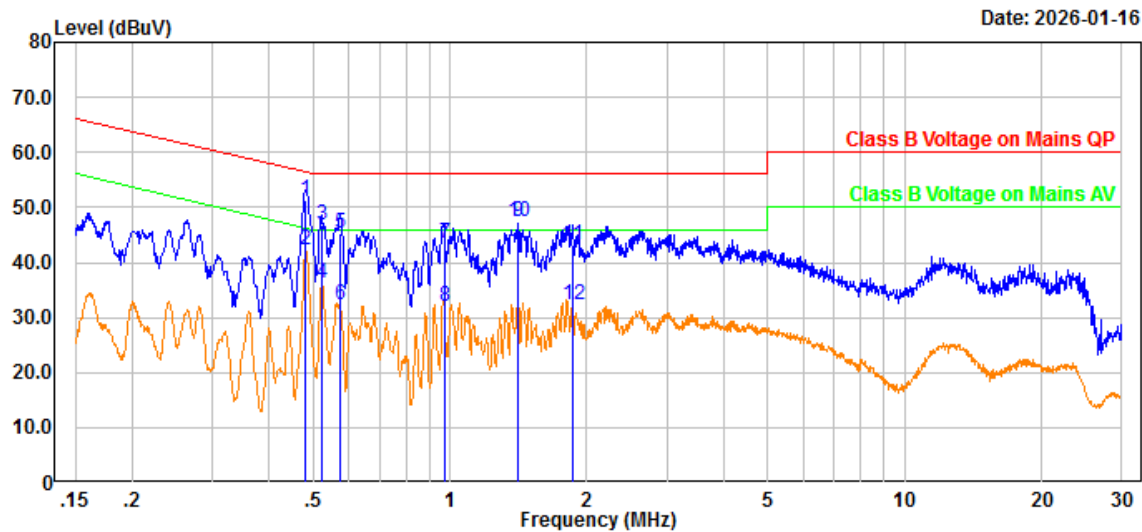
** Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Note: Low Channel was tested.

Project No.: 2502A93849E-RF
Port: Line
Test Mode: Transmitting
IF B/W 9kHz PK/AV

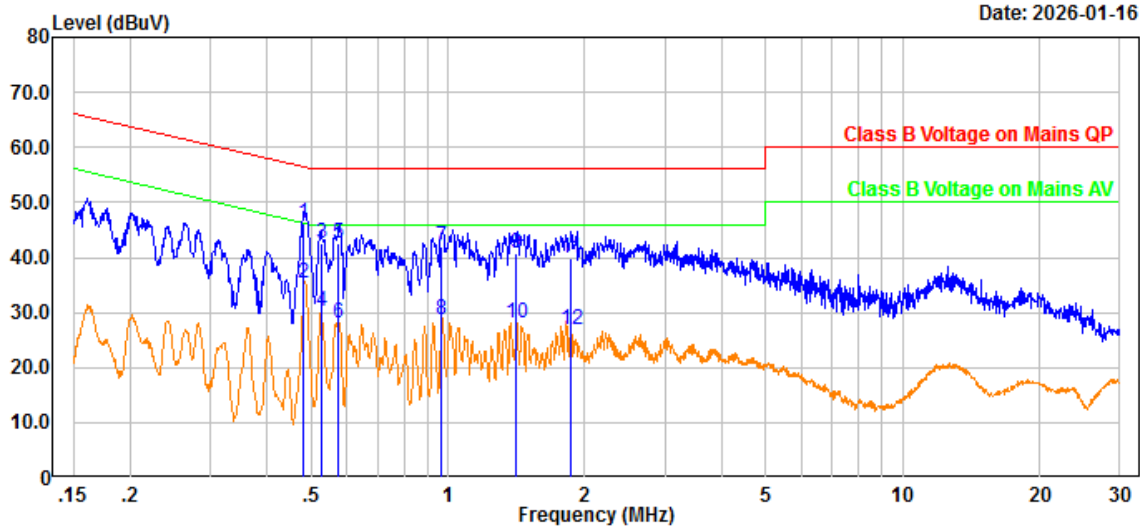
Serial No.: 3FG3-1
Tester: Leesin Xiang
Note: Configuration1# & Adapter3# & Battery3#



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Measurement
1	0.480	40.83	10.62	51.45	56.34	4.89	QP
2	0.480	31.75	10.62	42.37	46.34	3.97	Average
3	0.521	36.06	10.59	46.65	56.00	9.35	QP
4	0.521	25.50	10.59	36.09	46.00	9.91	Average
5	0.574	34.65	10.54	45.19	56.00	10.81	QP
6	0.574	21.66	10.54	32.20	46.00	13.80	Average
7	0.972	32.73	10.77	43.50	56.00	12.50	QP
8	0.972	21.23	10.77	32.00	46.00	14.00	Average
9	1.415	36.23	11.02	47.25	56.00	8.75	Average
10	1.415	36.23	11.02	47.25	56.00	8.75	
11	1.859	31.93	11.24	43.17	56.00	12.83	QP
12	1.859	20.97	11.24	32.21	46.00	13.79	Average

Project No.: 2502A93849E-RF
 Port: neutral
 Test Mode: Transmitting
 IF B/W 9kHz PK/AV

Serial No.: 3FG3-1
 Tester: Leesin Xiang
 Note: Configuration1# & Adapter3# & Battery3#



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Measurement
1	0.482	35.63	10.53	46.16	56.30	10.14	QP
2	0.482	24.73	10.53	35.26	46.30	11.04	Average
3	0.525	31.96	10.50	42.46	56.00	13.54	QP
4	0.525	19.77	10.50	30.27	46.00	15.73	Average
5	0.575	32.22	10.47	42.69	56.00	13.31	QP
6	0.575	17.47	10.47	27.94	46.00	18.06	Average
7	0.968	31.25	10.86	42.11	56.00	13.89	QP
8	0.968	17.87	10.86	28.73	46.00	17.27	Average
9	1.416	29.59	11.03	40.62	56.00	15.38	QP
10	1.416	16.91	11.03	27.94	46.00	18.06	Average
11	1.862	28.69	11.17	39.86	56.00	16.14	QP
12	1.862	15.72	11.17	26.89	46.00	19.11	Average

5.2 Radiation Spurious Emissions

1) 9kHz - 1GHz

Serial Number:	3FG3-10	Test Date:	2026/1/16~2026/1/17
Test Site:	Chamber 10m	Test Mode:	Transmitting
Tester:	Zoo Zou	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	21~22.2	Relative Humidity: (%)	41~42	ATM Pressure: (kPa)	100.8~101.6
----------------------	---------	---------------------------	-------	---------------------------	-------------

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	A060611-1	2023/9/6	2026/9/5
Narda	Coaxial Attenuator	779-6dB	04269	2023/9/6	2026/9/5
Unknown	Coaxial Cable	C-NJNJ-50	C-1000-01	2025/7/1	2026/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0400-04	2025/7/1	2026/6/30
Unknown	Coaxial Cable	C-NJNJ-50	C-0530-01	2025/7/1	2026/6/30
Sonoma	Amplifier	310N	185914	2025/8/25	2026/8/24
R&S	EMI Test Receiver	ESR3	102453	2025/6/25	2026/6/24
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(Y axes was the worst) is refer to plots.

Note: Low Channel was tested.

9kHz~30MHz:

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

Project No.: 2502A93849E-RF

Serial No.: 3FG3-10

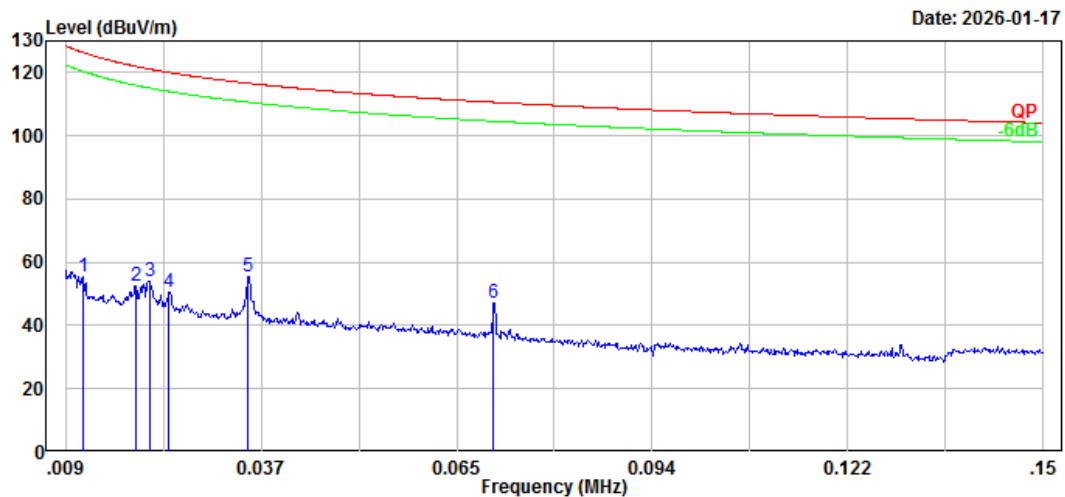
Polarization: Parallel

Tester: Zoo Zou

Test Mode: Transmitting

Note: BLE

: RBW:200Hz VBW:1kHz

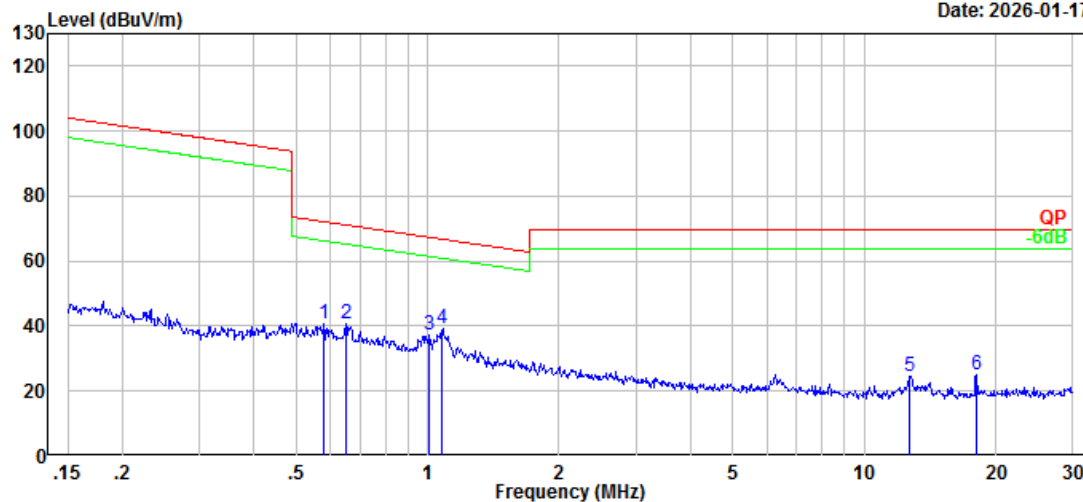


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	0.012	2.79	52.42	55.21	126.36	71.15	Peak
2	0.019	2.07	50.28	52.35	121.96	69.61	Peak
3	0.021	4.08	49.76	53.84	121.11	67.27	Peak
4	0.024	1.38	49.05	50.43	120.02	69.59	Peak
5	0.035	8.94	46.60	55.54	116.63	61.09	Peak
6	0.071	6.83	40.46	47.29	110.61	63.32	Peak

Project No.: 2502A93849E-RF
Polarization: Parallel
Test Mode: Transmitting
Note: BLE
: RBW:9kHz VBW:30kHz

Serial No.: 3FG3-10
Tester: Zoo Zou

Date: 2026-01-17

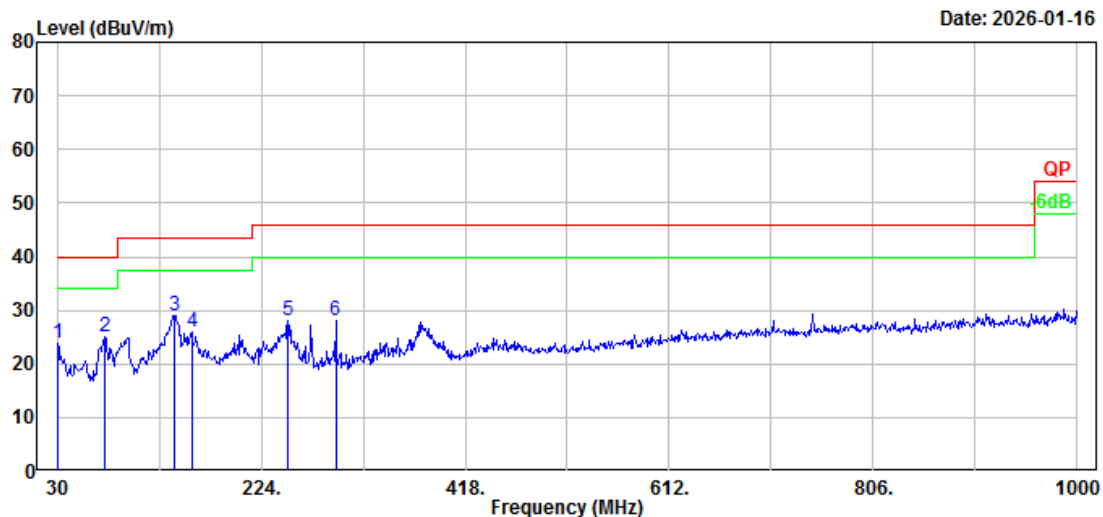


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	0.579	18.16	22.68	40.84	72.32	31.48	Peak
2	0.651	18.53	21.95	40.48	71.28	30.80	Peak
3	1.005	20.50	16.54	37.04	67.43	30.39	Peak
4	1.082	23.10	16.19	39.29	66.77	27.48	Peak
5	12.649	19.95	4.65	24.60	69.54	44.94	Peak
6	18.039	20.76	4.29	25.05	69.54	44.49	Peak

30MHz-1GHz:

Project No.: 2502A93849E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: BLE
: RBW:120kHz VBW:500kHz

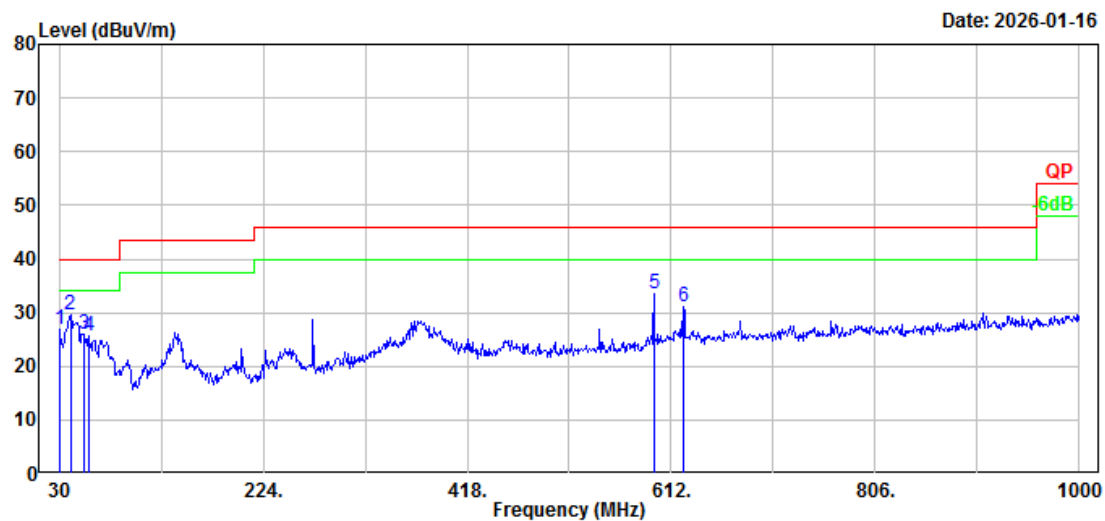
Serial No.: 3FG3-10
Tester: Zoo Zou



No.	Frequency	Reading	Factor	Result	Limit	Margin	Measurement
	(MHz)	(dBμV)	(dB/m)	(dBμV/m)	(dBμV/m)	(dB)	
1	30.00	27.95	-4.10	23.85	40.00	16.15	Peak
2	75.59	41.08	-16.14	24.94	40.00	15.06	Peak
3	141.55	39.92	-10.84	29.08	43.50	14.42	Peak
4	158.04	36.99	-10.93	26.06	43.50	17.44	Peak
5	249.22	39.68	-11.65	28.03	46.00	17.97	Peak
6	294.81	37.37	-9.30	28.07	46.00	17.93	Peak

Project No.: 2502A93849E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: BLE
: RBW:120kHz VBW:500kHz

Serial No.: 3FG3-10
Tester: Zoo Zou



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	30.00	30.87	-4.10	26.77	40.00	13.23	Peak
2	40.67	40.80	-11.29	29.51	40.00	10.49	Peak
3	53.28	42.53	-16.42	26.11	40.00	13.89	Peak
4	58.13	41.91	-16.37	25.54	40.00	14.46	Peak
5	595.51	36.66	-3.18	33.48	46.00	12.52	Peak
6	623.64	33.79	-2.67	31.12	46.00	14.88	Peak

2) 1-25GHz:

Serial Number:	3FG3-1	Test Date:	2026/1/15
Test Site:	Chamber B	Test Mode:	Transmitting
Tester:	Alan Xie	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	21	Relative Humidity: (%)	41	ATM Pressure: (kPa)	101.2
----------------------	----	---------------------------	----	---------------------------	-------

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	2025/11/17	2026/11/16
Xinhang Macrowave	Coaxial Cable	XH360A-2.92/J-2.92/J-6M-A	20231208001 #0001	2025/11/14	2026/11/13
AH	Preamplifier	PAM-0118P	469	2025/4/11	2026/4/10
AH	Preamplifier	PAM-1840VH	191	2025/7/31	2026/7/30
R&S	Spectrum Analyzer	FSV40	101944	2025/8/8	2026/8/7
Audix	Test Software	E3	191218 V9	N/A	N/A
Decentest	Multiplex Switch Test Control Set & Filter Switch Unit	DT7220SCU & DT7220FSU	DS79902 & DS79905	2025/8/25	2026/8/24

** 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(Y axes was the worst) is refer to plots.

1-18GHz:

Project No.: 2502A93849E-RF

Polarization: Horizontal

Test Mode: Transmitting

Note: BLE 1M low channel 2402MHz

Peak: RBW:1MHz,VBW:3MHz

Serial No.: 3FG3-1

Tester: Alan Xie

Date: 2026-01-15

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	3605.20	49.07	-4.16	44.91	74.00	29.09	Peak

Project No.: 2502A93849E-RF

Polarization: Vertical

Test Mode: Transmitting

Note: BLE 1M low channel 2402MHz

Peak: RBW:1MHz,VBW:3MHz

Serial No.: 3FG3-1

Tester: Alan Xie

Date: 2026-01-15

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	3869.80	48.63	-3.96	44.67	74.00	29.33	Peak

Project No.: 2502A93849E-RF

Polarization: Horizontal

Test Mode: Transmitting

Note: BLE 1M low channel 2402MHz

Peak: RBW:1MHz,VBW:3MHz

Ave: RBW:1MHz,VBW:5kHz

Serial No.: 3FG3-1

Tester: Alan Xie

Date: 2026-01-15

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	4804.00	47.62	-7.53	40.09	74.00	33.91	Peak
2	7206.00	46.48	-3.42	43.06	74.00	30.94	Peak
3	17980.40	47.99	11.07	59.06	74.00	14.94	Peak
4	17980.40	36.25	11.07	47.32	54.00	6.68	Average

Project No.: 2502A93849E-RF

Polarization: Vertical

Test Mode: Transmitting

Note: BLE 1M low channel 2402MHz

Peak: RBW:1MHz,VBW:3MHz

Ave: RBW:1MHz,VBW:5kHz

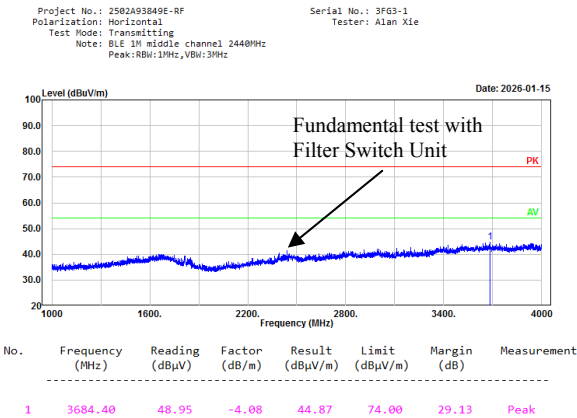
Serial No.: 3FG3-1

Tester: Alan Xie

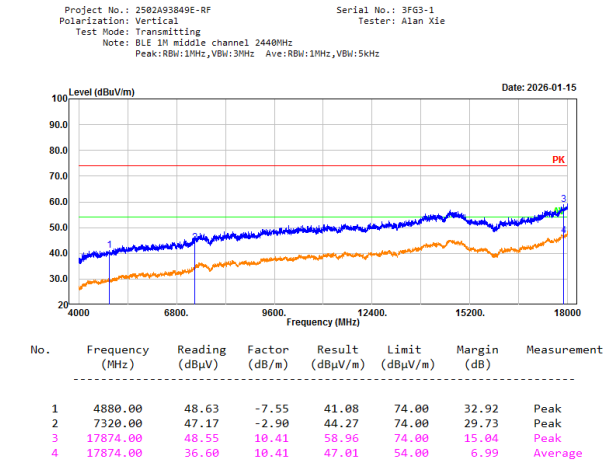
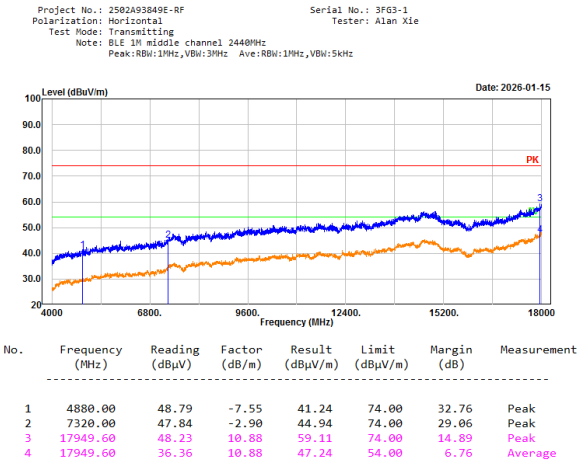
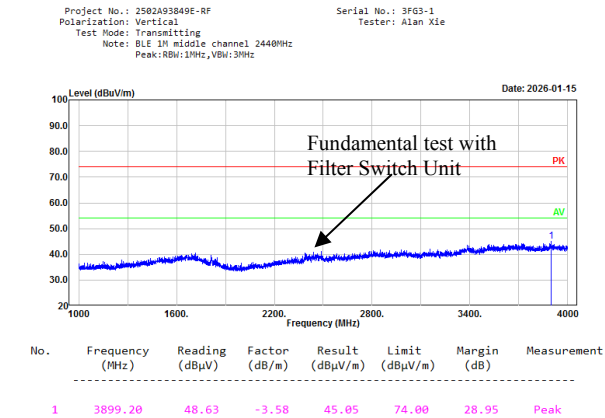
Date: 2026-01-15

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Measurement
1	4804.00	47.91	-7.53	40.38	74.00	33.62	Peak
2	7206.00	47.51	-3.42	44.09	74.00	29.91	Peak
3	17980.40	48.27	11.07	59.34	74.00	14.66	Peak
4	17980.40	36.38	11.07	47.45	54.00	6.55	Average

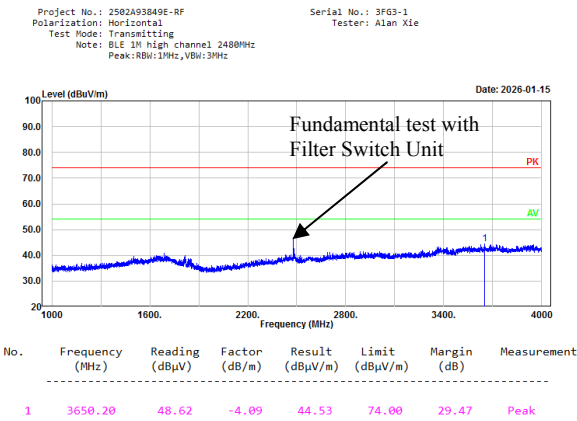
BLE 1M Middle channel Horizontal



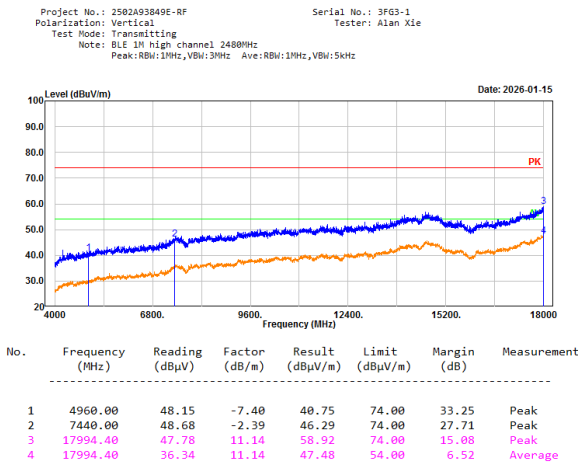
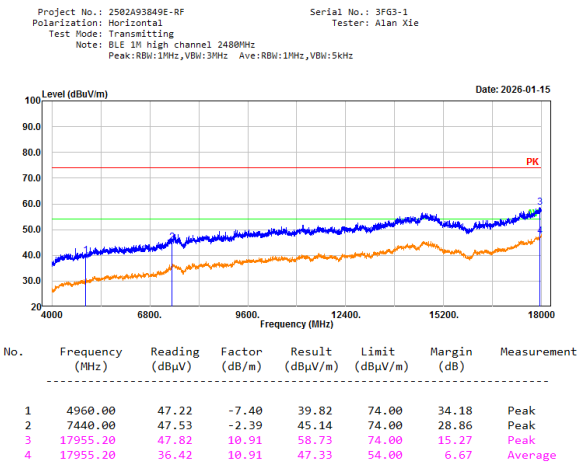
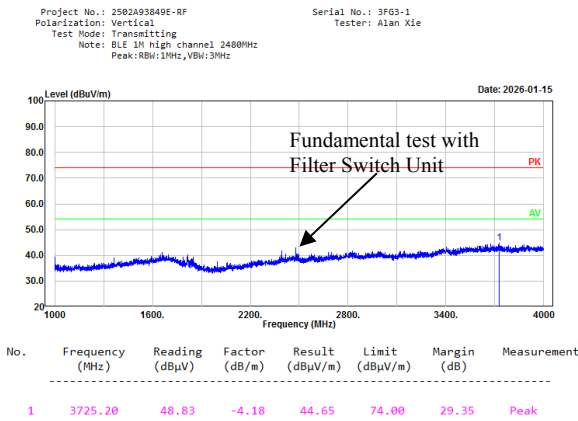
BLE 1M Middle channel Vertical



BLE 1M High channel Horizontal



BLE 1M 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.

Project No.: 2502A93849E-RF
Polarization: Horizontal
Test Mode: Transmitting
Note: BLE
Peak: RBW:1MHz,VBW:3MHz

Serial No.: 3FG3-1
Tester: Alan Xie

Level (dBuV/m)
Date: 2026-01-15

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	19883.00	47.77	0.28	48.05	74.00	25.95	Peak

Project No.: 2502A93849E-RF
Polarization: Vertical
Test Mode: Transmitting
Note: BLE
Peak: RBW:1MHz,VBW:3MHz

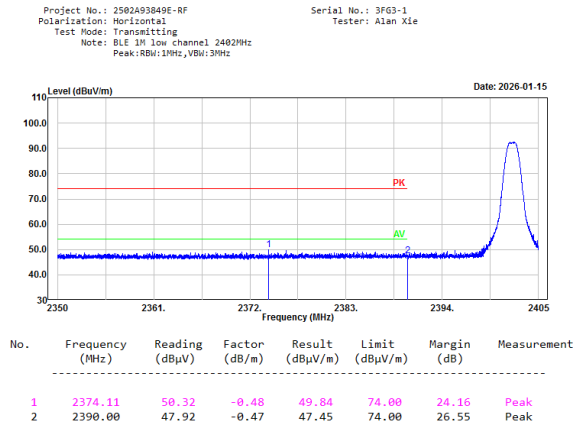
Serial No.: 3FG3-1
Tester: Alan Xie

Level (dBuV/m)
Date: 2026-01-15

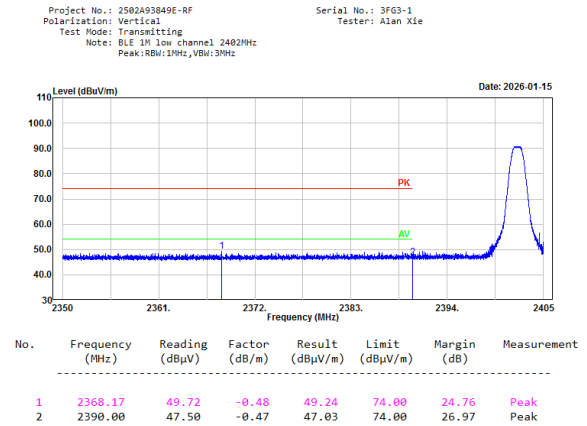
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement
1	20478.00	47.73	-0.02	47.71	74.00	26.29	Peak

Bandedge:

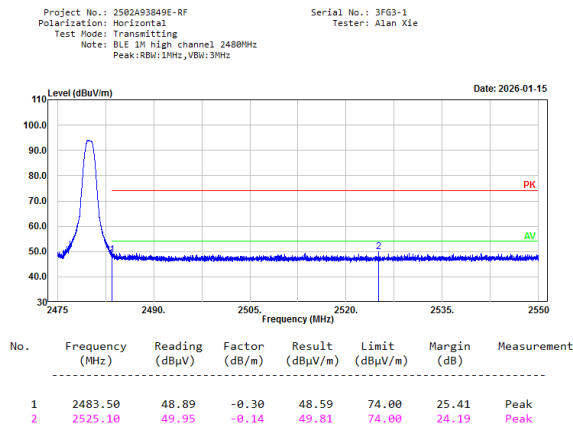
BLE 1M Low channel Bandedge Horizontal



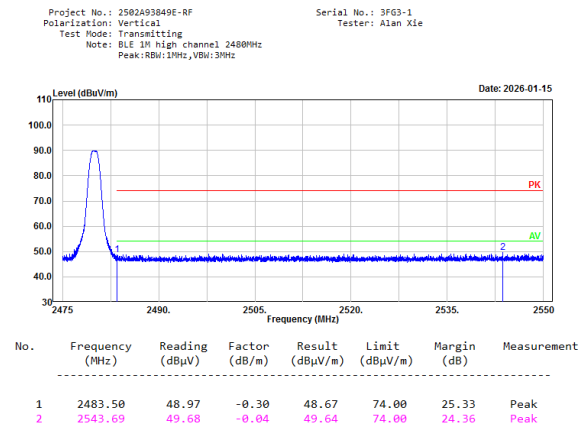
BLE 1M Low channel Bandedge Vertical



BLE 1M High channel Bandedge Horizontal



BLE 1M High channel Bandedge Vertical



5.3 Spot Check With Maximum Conducted Output Power**Test Information:**

Serial No.:	3FG3-2	Test Date:	2026/1/15
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jeff Wei	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.7	Relative Humidity: (%)	39	ATM Pressure: (kPa)	101.2
-----------------------------	------	----------------------------------	----	-------------------------------	-------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Coaxial Attenuator	10dB	F-08-EM512	2025/6/6	2026/6/5
R&S	Spectrum Analyzer	FSP 38	100478	2025/7/28	2026/7/27

** 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).*

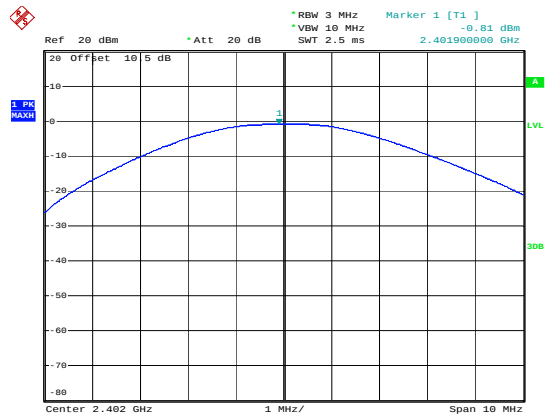
Test Data:

Channel	Maximum Conducted Peak Output Power (dBm)	Limit (dBm)	Verdict
BLE 1Mbps Low	-0.81	30.00	Pass
BLE 1Mbps Middle	-1.09	30.00	Pass
BLE 1Mbps High	-0.30	30.00	Pass
Max.EIRP	0.55	36.00	Pass

Note:

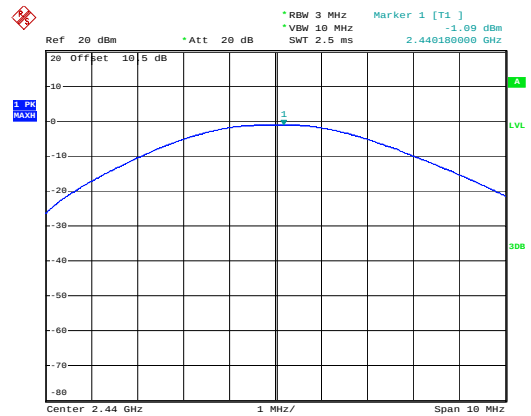
The Spot Check data were similar to the original data.

BLE_1M_Low_Channel



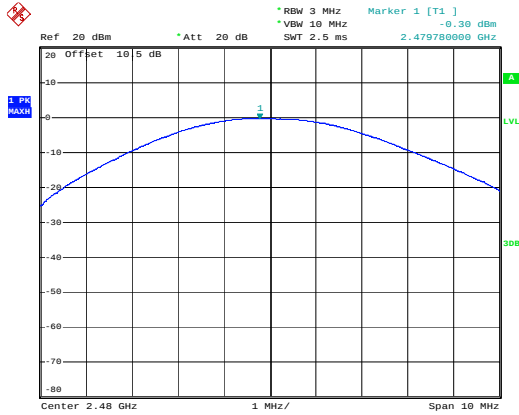
ProjectNo.:2502A93849E-RF Tester:Jeff Wei
Date: 15.JAN.2026 10:39:05

BLE_1M_Middle_Channel



ProjectNo.:2502A93849E-RF Tester:Jeff Wei
Date: 15.JAN.2026 10:42:06

BLE_1M_High_Channel



ProjectNo.:2502A93849E-RF Tester:Jeff Wei
Date: 15.JAN.2026 10:42:51

5.4 Duty Cycle

Test Information:

Serial No.:	3FG3-2	Test Date:	2026/3/16
Test Site:	RF	Test Mode:	Transmitting
Tester:	Jeff Wei	Test Result:	N/A

Environmental Conditions:

Temperature: (°C)	26.8	Relative Humidity: (%)	29	ATM Pressure: (kPa)	101.3
----------------------	------	---------------------------	----	------------------------	-------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Coaxial Attenuator	10dB	F-08-EM512	2025/6/6	2026/6/5
R&S	Spectrum Analyzer	FSV40	101461	2025/8/3	2026/8/2

* 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:

Test Mode	Ton (ms)	Ton+off (ms)	Duty cycle (%)	1/Ton (Hz)	VBW Setting (kHz)
BLE 1Mbps	0.394	0.624	63.14	2538	5

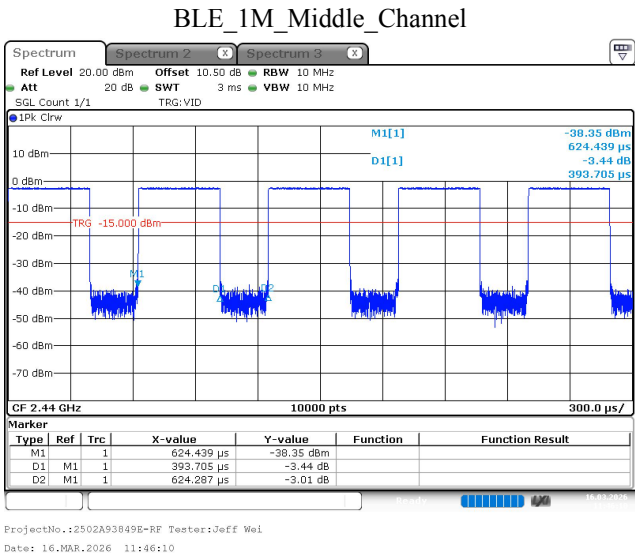


EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2502A93849E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2502A93849E-RF-INP EUT INTERNAL PHOTOGRAPHS.

EXHIBIT B - TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2502A93849E-RF-00B-TSP TEST SETUP PHOTOGRAPHS.

EXHIBIT C - RF EXPOSURE EVALUATION

SAR test exclusion

Applicable Standard

According to §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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- $f(\text{GHz})$ 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.

Measurement Result

The max conducted power including tune-up tolerance is 0.5 dBm (1.12 mW).

$[(\text{max. power of channel, mW})/(\text{min. test separation distance, mm})][\sqrt{f(\text{GHz})}]$
 $= 1.12/5 \cdot (\sqrt{2.480}) = 0.4 < 3.0$

Note:

The max conducted power including tune-up tolerance was declared by manufacturer.

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

Exemption Limits For Routine Evaluation- SAR Evaluation

Applicable Standard

RSS-102, Issue 6, Clause 6.3:

Devices operating at or below the applicable output power levels (adjusted for tune-up tolerance) specified in table 11, based on the separation distance, are exempt from SAR evaluation. The separation distance, defined as the distance between the user and/or bystander and the antenna and/or radiating element of the device or the outer surface of the device, shall be less than or equal to 20 cm for these exemption limits to apply.

Table 11: Power limits for exemption from routine SAR evaluation based on the separation distance

Frequency (MHz)	≤ 5 mm (mW)	10 mm (mW)	15 mm (mW)	20 mm (mW)	25 mm (mW)	30 mm (mW)	35 mm (mW)	40 mm (mW)	45 mm (mW)	> 50 mm (mW)
≤ 300	45	116	139	163	189	216	246	280	319	362
450	32	71	87	104	124	147	175	208	248	296
835	21	32	41	54	72	96	129	172	228	298
1900	6	10	18	33	57	92	138	194	257	323
2450	3	7	16	32	56	89	128	170	209	245
3500	2	6	15	29	50	72	94	114	134	158
5800	1	5	13	23	32	41	54	74	102	128

Measurement Result:

The max conducted power including tune-up tolerance is 0.5 dBm (1.12 mW), Antenna Gain is 0.85dBi, EIRP is 1.35dBm(1.36mW),

The exemption power(P) limits for routine evaluation in 2402-2480MHz is:
 $(2480-2450)/(3500-2450)=(P-3)/(2-3)$
 $\Rightarrow P=2.97 \text{ mW}@2480 \text{ MHz}$
 $> 1.36\text{mW}$

Note: the max conducted power including tune-up tolerance was declared by manufacturer.

So the stand-alone SAR evaluation can be exempted.

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