

TEST REPORT

Report No.: SHATBL2601032W08

Applicant : Shanghai AllyNav Technology Co.,Ltd.

Product Name : GNSS RECEIVER

Brand Name : N/A

Model Name : R62GT

FCC ID : 2AT4H-R62GT

Test Standard : FCC 47 CFR Part 15 Subpart C §15.247

Date of Test : 2026.06.01~2026.08.19

Report Prepared by :

Emily

(Emily)

Report Approved by :

Guozheng Li

(Guozheng Li)

Authorized Signatory :

Terry Yang

(Terry Yang)



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Tel:+86(0)21-51298625

Web:www.atbl-lab.com

Email:atbl@atbl-lab.com

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REVISION HISTORY

Rev.	Issue Date	Revisions	Revised by
00	2026.08.19	Initial Release	Guozheng Li

DECLARATION OF REPORT

1. The device has been tested by ATBL, and the test results show that the equipment under test (EUT) is in compliance with the requirements of 47 CFR 15.247. And it is applicable only to the tested sample identified in the report.
2. This report shall not be reproduced except in full, without the written approval of ATBL, this document only be altered or revised by ATBL, personal only, and shall be noted in the revision of the document.
3. The general information of EUT in this report is provided by the customer or manufacture, ATBL is only responsible for the test data but not for the information provided by the customer or manufacture.
4. The results in this report is only apply to the sample as tested under conditions. The customer or manufacturer is responsible for ensuring that the additional production units of this model have the same electrical and mechanical components.
5. In this report, '☐' indicates that EUT does not support content after '☐', and '☑' indicates that it supports content after '☑'

SUMMARY OF TEST RESULT

Report Section	Standard Section	Test Item	Judgment	Remark
3.1	47 CFR 15.247(b)(3)	Maximum Conducted Output Power	PASS	--
3.2	--	Duty Cycle	Report only	--
3.3	47 CFR 15.247(a)(2)	DTS (6 dB) Bandwidth & 99% Occupied Bandwidth	PASS	--
3.4	47 CFR 15.247(e)	Power Spectral Density	PASS	--
3.5	47 CFR 15.247(d)	Emission outside the frequency band	PASS	--
3.6	47 CFR 15.247(d) 15.209(a) 15.205(a)	Radiated Spurious Emission and Restricted Band	PASS	--
3.7	47 CFR 15.207(a)	AC Power-Line Conducted Emission	N/A	--
3.8	47 CFR 15.203	Antenna Requirements	PASS	--

1. GENERAL DESCRIPTION

1.1. Applicant

Name : Shanghai AllyNav Technology Co.,Ltd.

Address : Room 201, Buliding 1, No 215, Gaoguang RD, Qingpu District, Shanghai, China

1.2. Manufacturer

Name : Shanghai AllyNav Technology Co.,Ltd.

Address : Room 201, Buliding 1, No 215, Gaoguang RD, Qingpu District, Shanghai, China

1.3. Factory

Name : Shanghai AllyNav Technology Co.,Ltd.

Address : Room 201, Buliding 1, No 215, Gaoguang RD, Qingpu District, Shanghai, China

1.4. General Information of EUT

General Information	
Equipment Name	GNSS RECEIVER
Brand Name	N/A
Model Name	R62GT
Series Model	N/A
Model Difference	N/A
Sample No.	202512010001002
Power Input	DC 9-36V
Adapter	N/A
Battery	N/A
Hardware Version	N/A
Software Version	N/A
Operating Temperature Range	-20℃ ~ +70℃
Connecting I/O Port(s)	Refer to the remark below.

Remark:

The above information of EUT was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.5. Equipment Specification

Equipment Specification		
Frequency Range	2402 MHz ~ 2480 MHz	
Number of Channels	40	
Carrier Frequency of Each Channel	2402 + n*2 MHz; n = 0 ~ 39	
Maximum Output Power To Antenna	☑Bluetooth LE(1Mbps):	4.291 dBm (2.69 mW)
	☑Bluetooth LE(2Mbps):	3.527 dBm (2.25 mW)
	☑Bluetooth LE(150Kbps):	5.613 dBm (3.64 mW)
	☑Bluetooth LE(500Kbps):	5.875 dBm (3.87 mW)
99% Occupied Bandwidth	☑Bluetooth LE(1Mbps):	1.04 MHz
	☑Bluetooth LE(2Mbps):	2.05 MHz
	☑Bluetooth LE(150Kbps):	1.05 MHz
	☑Bluetooth LE(500Kbps):	1.02 MHz
Type of Modulation	Bluetooth LE:	GFSK
Antenna Type	Rubber Antenna	
Antenna Gain	0.3 dBi	

1.6. Modification of EUT

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

1.7. Laboratory Information

Company Name	:	Shanghai ATBL Technology Co., Ltd.
Address	:	Building 8, No.160 Basheng Road, Waigaoqiao Free Trade Zone, Pudong New Area, Shanghai
Telephone	:	+86(0)21-51298625
FCC-Registration Number	:	485917
Designation Number	:	CN1306
A2LA Number	:	6184.01
CNAS Number	:	CNAS L14531
ISED Designation Number	:	27371
CAB identifier	:	CN0116

1.8. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

47 CFR Part 15 Subpart C §15.247

FCC KDB 558074 D01(v05r02)

ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.

2. TEST CONFIGURATION OF EUT

2.1. Carrier Frequency Channel

Frequency Band(MHz)	Channel	Frequency MHz	Channel	Frequency MHz	Channel	Frequency MHz
2402 - 2480	00	2402	14	2430	28	2458
	01	2404	15	2432	29	2460
	02	2406	16	2434	30	2462
	03	2408	17	2436	31	2464
	04	2410	18	2438	32	2466
	05	2412	19	2440	33	2468
	06	2414	20	2442	34	2470
	07	2416	21	2444	35	2472
	08	2418	22	2446	36	2474
	09	2420	23	2448	37	2476
	10	2422	24	2450	38	2478
	11	2424	25	2452	39	2480
	12	2426	26	2454	--	--
	13	2428	27	2456	--	--

Remark:

Low Channel: **CH 00_2402 MHz;**

Middle Channel: **CH 19_2440 MHz;**

High Channel: **CH 39_2480 MHz.**

2.2. Test Modes

The table below is showing all test modes to demonstrate in compliance with the standard.

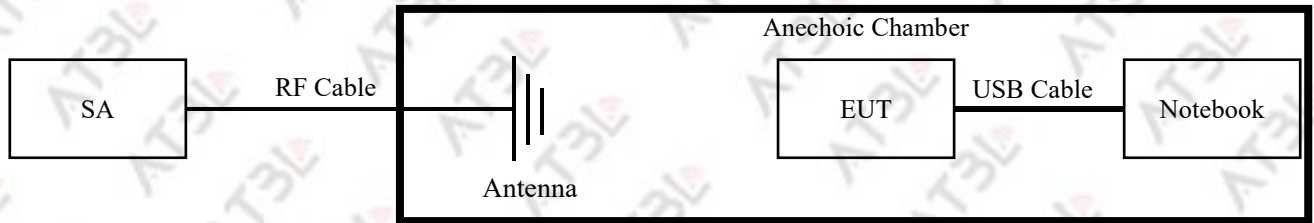
Summary Table of Test Modes		
Test Item	Data Rate / Modulation	
	☒ Bluetooth LE(1Mbps)	☒ Bluetooth LE(2Mbps)
For Conducted and Radiated Test	Mode 1: CH00_2402 MHz	Mode 4: CH00_2402 MHz
	Mode 2: CH19_2440 MHz	Mode 5: CH19_2440 MHz
	Mode 3: CH39_2480 MHz	Mode 6: CH39_2480 MHz
	☒ Bluetooth LE(150Kbps)	☒ Bluetooth LE(500Kbps)
	Mode 7: CH00_2402 MHz	Mode 10: CH00_2402 MHz
	Mode 8: CH19_2440 MHz	Mode 11: CH19_2440 MHz
	Mode 9: CH39_2480 MHz	Mode 12: CH39_2480 MHz
For AC Power-line Conducted Emission	N/A (Note:DC power supply, this test item is not tested)	

Remark:

All the test modes of Radiated Spurious Emission (RSE) were tested at the worst data rate; only the worse data shown in report.

2.3. Block Diagram of Test System

2.3.1. For Radiated Spurious Emission



2.3.2. For Conducted Test



2.4. Description of Support Units

NO.	Unit	Brand	Model	Description
1	Notebook	Lenovo	Air 14	/
2	USB Line	ZL	24AWG	/

2.5. EUT Operating Conditions

For radiated spurious emission and conducted test, the engineering test program was provided and make the EUT to continuous transmit/receive.

2.6. Equipment List

2.6.1. For Conducted Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	equipment number	Calibrated until	Calibrated due until	Cal. Interval
Power sensor	DARE	RPR3006W	16I00054SN016	SHATBL-W008	2025.07.28	2026.07.27	1 year
					2026.08.08	2027.08.07	1 year
Adjustable Attenuator	Agilent	8494B	MY42144015	SHATBL-W009	2025.07.28	2026.07.27	1 year
					2026.08.08	2027.08.07	1 year
Adjustable Attenuator	Agilent	8496B	MY42143776	SHATBL-W010	2025.07.28	2026.07.27	1 year
					2026.08.08	2027.08.07	1 year
Environmental Test Chamber	KSON	THS-B6C-150	9159K	SHATBL-W019	2026.03.31	2027.03.30	1 year
Signal analyzer	Keysight	N9020A	MY50510136	SHATBL-W003	2025.07.18	2026.07.17	1 year
					2026.08.08	2027.08.07	1 year
Vector signal generator	Agilent	N5182A	MY48180764	SHATBL-W043	2025.07.18	2026.07.17	1 year
					2026.08.08	2027.08.07	1 year
Analog signal generator	Keysight	N5182B	MY57300196	SHATBL-W005	2025.07.18	2026.07.17	1 year
					2026.08.08	2027.08.07	1 year
Wideband radio communication tester	R&S	CMW500	101331	SHATBL-W007	2025.07.28	2026.07.27	1 year
					2026.08.08	2027.08.07	1 year
Switch Box	Cesheng	smu 1003	WCS20221215	SHATBL-W046	2026.03.31	2027.03.30	1 year
Thermometer	DeLi	N/A	N/A	SHATBL-W011	2025.08.01	2026.07.31	1 year
					2026.08.08	2027.08.07	1 year
Test Software	Cesheng	WCS-WC N	N/A	SHATBL-W021	N/A	N/A	N/A

2.6.2. For Radiated Spurious Emission

Kind of Equipment	Manufacturer	Type No.	Serial No.	equipment number	Calibrated until	Calibrated due until	Cal. Interval
Signal analyzer	Agilent	N9020A	MY50200811	SHATBL-E017	2026.03.31	2027.03.30	1 year
Amplifier	JPT	JPA0118-55-303A	1910001800055000	SHATBL-E006	2026.03.31	2027.03.30	1 year
Amplifier	JPT	JPA-10M1G32	21010100035001	SHATBL-E005	2026.03.31	2027.03.30	1 year
Antenna/Turntable Controller	Brilliant	N/A	N/A	SHATBL-E007	N/A	N/A	N/A
Loop Antenna(9kHz-30 MHz)	Daze	ZN30900C	20077	SHATBL-E042	2025.05.13	2026.05.12	1 year
					2026.05.20	2027.05.19	1 year
Bilog Antenna	SCHWARZBECK	VULB 9168	01174	SHATBL-E008	2025.05.20	2026.05.19	1 year
					2026.05.20	2027.05.19	1 year
Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120D	02334	SHATBL-E009	2025.05.20	2026.05.19	1 year
					2026.05.20	2027.05.19	1 year
Horn Antenna	COM-POWER	AH-1840	10100008	SHATBL-E043	2025.07.27	2026.07.26	1 year
Thermometer	DeLi	N/A	N/A	SHATBL-E015	2025.08.01	2026.07.31	1 year
Test Software	FALA	EMC-RI(Ver.4A2)	N/A	N/A	N/A	N/A	N/A
Wideband radio communication tester	R&S	CMW500	101331	SHATBL-W044	2025.07.28	2026.07.27	1 year
Spectrum analyzer	R&S	FSV40-N	101761	SHATBL-W036	2025.07.28	2026.07.27	1 year

2.7. Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Output Power	1.27dB
2	Power spectral density	1.28dB
3	Conducted Frequency Stability	10.14Hz
4	Conducted spurious emissions	1.73dB
5	RF Cable Loss	1.22dB
6	Radiated Spurious Emission 9KHz-30MHz	2.35dB
7	Radiated Spurious Emission 30MHz-1GHz	2.59dB
8	Radiated Spurious Emission 1GHz-18GHz	2.62dB
9	Radiated Spurious Emission 18GHz - 40GHz	2.80dB
10	Occupied bandwidth	23.20Hz
11	Conducted Emissions	9kHz ~ 150kHz
		150kHz ~ 30MHz

3. TEST RESULT

3.1. Maximum Conducted Output Power.

3.1.1. Limit

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

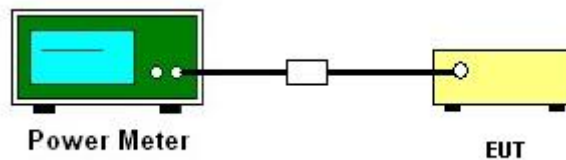
Systems operating in the 2400–2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

3.1.2. Measurement Procedure

A peak power sensor was used on the output port of the EUT.

A peak power meter was used to read the response of the peak power sensor. Record the peak power level.

3.1.3. Test Configuration



3.1.4. Test Result of Maximum Conducted Output Power

Temperature	25.2°C~25.5°C	Humidity	48.5%~50.2%
Atmospheric Pressure	101 kPa~103 kPa	Test Data	2026.06.02~2026.08.19

Please refer to the Appendix.

3.2. Duty Cycle

3.2.1. Limit

There is no limit requirement for Duty Cycle.

3.2.2. Measurement Procedure

Measurements of duty cycle and transmission duration shall be performed using one of the following techniques:

1. A diode detector and an oscilloscope that together have a sufficiently short response time to permit accurate measurements of the ON and OFF times of the transmitted signal.
2. The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the ON and OFF times of the transmitted signal:

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

3.2.3. Test Configuration



3.2.4. Test Result of Duty Cycle

Temperature	25.2℃~25.5℃	Humidity	48.5%~50.2%
Atmospheric Pressure	101 kPa~103 kPa	Test Data	2026.06.02~2026.08.19

Please refer to the Appendix.

3.3. DTS (6 dB) Bandwidth & 99% Occupied Bandwidth

3.3.1. Limit

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

There is no limit requirement for 99% Bandwidth.

3.3.2. Measurement Procedure

The testing of 6dB Bandwidth follows:

Option 1

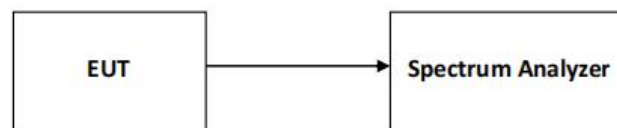
The steps for the first option are as follows:

- ① Set RBW = shall be in the range of 1% to 5% of the OB W but not less than 100 kHz.
- ② Set the VBW $\geq [3 \times \text{RBW}]$.
- ③ Detector = peak.
- ④ Trace mode = max hold.
- ⑤ Sweep = auto couple.
- ⑥ Allow the trace to stabilize.
- ⑦ MMeasure the maximum width of the emission by placing two markers, one at the lowest frequencyand the other at the highest frequency of the envelope of the spectral display, such that each markeris at or slightly below the "-6 dB down amplitude". If a marker is below this "-6 dB downamplitude" value, then it shall be as close as possible to this value.

Option 2

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described in 11.8.1 (i.e., RBW = 100 kHz, VBW $\geq 3 \times \text{RBW}$, and peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

3.3.3. Test Configuration



3.3.4. Test Result of 6dB Bandwidth and 99% Bandwidth

Temperature	25.2℃~25.5℃	Humidity	48.5%~50.2%
Atmospheric Pressure	101 kPa~103 kPa	Test Data	2026.06.02~2026.08.19

Please refer to the Appendix.

3.4. Power Spectral Density

3.4.1. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

If the transmitting antenna of directional gain greater than 6dBi is used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi. If there have a beam forming type, the limit should be the minimum of 8dBm/MHz and $8 + (6 - \text{antenna gain} - \text{beam forming gain})$.

3.4.2. Measurement Procedure

- Set analyzer center frequency to DTS channel center frequency.
- Set the span to 1.5 times the DTS bandwidth.
- Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- Set the VBW $\geq 3 \times \text{RBW}$.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level within the RBW.
- If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

3.4.3. Test Configuration



3.4.4. Test Result of Power Spectral Density

Temperature	25.2℃~25.5℃	Humidity	48.5%~50.2%
Atmospheric Pressure	101 kPa~103 kPa	Test Data	2026.06.02~2026.08.19

Please refer to the Appendix.

3.5. Emission outside the frequency band

3.5.1. Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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.

3.5.2. Measurement Procedure

Reference level measurement

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set the span to ≥ 1.5 times the DTS bandwidth.
- c) Set the RBW = 100 kHz.
- d) Set the VBW $\geq 3 \times$ RBW.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum PSD level.

Emission level measurement

- j) Set the center frequency and span to encompass frequency range to be measured.
- k) Set the RBW = 100 kHz.
- l) Set the VBW $\geq 3 \times$ RBW.
- m) Detector = peak.
- n) Sweep time = auto couple.
- o) Trace mode = max hold.
- p) Allow trace to fully stabilize.
- q) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in 11.1 a) or 11.1 b). Report the three highest emissions relative to the limit.

3.5.3. Test Configuration



3.5.4. Test Result of Emission outside the frequency band

Temperature	25.2℃~25.5℃	Humidity	48.5%~50.2%
Atmospheric Pressure	101 kPa~103 kPa	Test Data	2026.06.02~2026.08.19

Please refer to the Appendix.

3.6. Radiated Spurious Emission and Restricted Band

3.6.1. Limit

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.

Only spurious emissions are permitted in any of the frequency bands listed below:

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090-0.110	12.29-12.293	149.9-150.05	1660-1710	8.025-8.5
0.495-0.505	12.51975-12.52025	156.52475-156.52525	1718.8-1722.2	9.0-9.2
2.1735-2.1905	12.57675-12.57725	156.7-156.9	2200-2300	9.3-9.5
4.125-4.128	13.36-13.41	162.0125-167.17	2310-2390	10.6-12.7
4.17725-4.17775	16.42-16.423	167.72-173.2	2483.5-2500	13.25-13.4
4.20725-4.20775	16.69475-16.69525	240-285	2690-2900	14.47-14.5
6.215-6.218	16.80425-16.80475	322-335.4	3260-3267	15.35-16.2
6.26775-6.26825	25.5-25.67	399.9-410	3332-3339	17.7-21.4
6.31175-6.31225	37.5-38.25	608-614	3345.8-3358	22.01-23.12
8.291-8.294	73-74.6	960-1240	3600-4400	23.6-24.0
8.362-8.366	74.8-75.2	1300-1427	4500-5150	31.2-31.8
8.37625-8.38675	108-121.94	1435-1626.5	5350-5460	36.43-36.5
8.41425-8.41475	123-138	1645.5-1646.5	7250-7750	Above 38.6

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

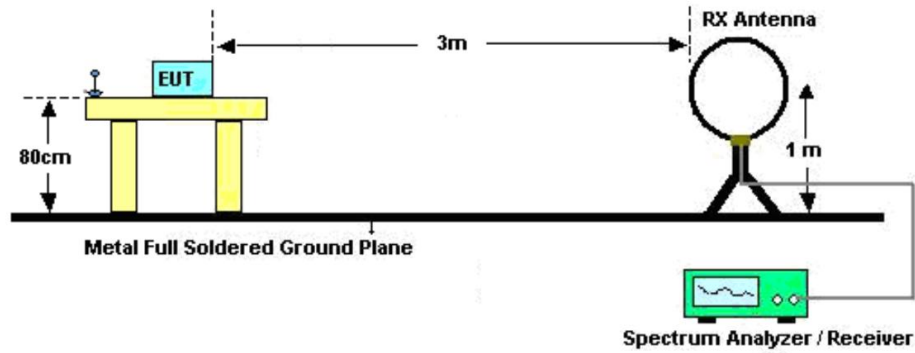
3.6.2. Measurement Procedure

The testing follows:

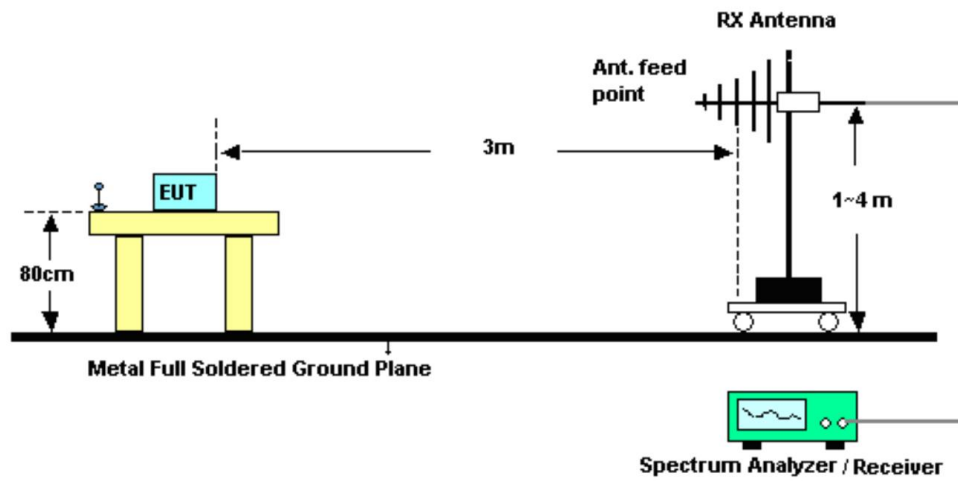
1. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
2. The EUT was placed on a turntable with 0.1 meter for frequency below 1GHz and 0.1 meter for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
4. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Pre-amp Factor = Level.
5. For testing below 1GHz, if the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the CISPR quasi-peak method and reported.
6. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than peak limit (that means the emission level in average mode also complies with the limit in average mode), then peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
7. Use the following spectrum analyzer settings:
 - ① Span shall wide enough to fully capture the emission being measured;
 - ② When frequency < 1 GHz:
 - Set RBW=100 kHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold;
 - ③ When frequency $\geq$ 1 GHz:
 - Set RBW = 1 MHz; VBW = 3 MHz for peak measurement;
 - Set RBW = 1 MHz; VBW = 10 Hz, when duty cycle is no less than 98 percent or VBW $\geq$ 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

3.6.3. Test Configuration

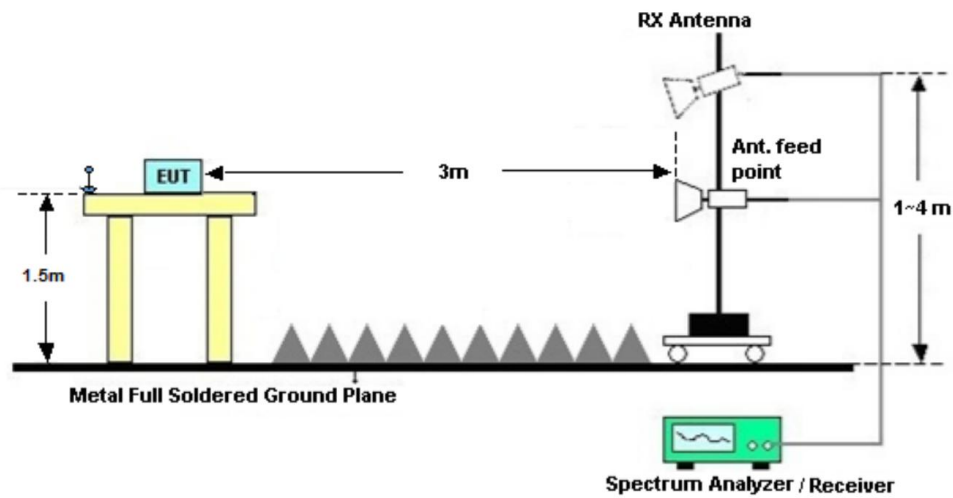
3.6.3.1. For radiated emissions below 30MHz



3.6.3.2. For radiated emissions from 30MHz to 1GHz



3.6.3.3. For radiated emissions above 1GHz



3.6.4. Test Result of Radiated Spurious Emission

Temperature	25.2℃~25.5℃	Humidity	48.5%~50.2%
Atmospheric Pressure	101 kPa~103 kPa	Test Data	2026.06.02~2026.08.19

Please refer to the Appendix.

3.6.5. Test Result of Restricted Band

Temperature	25.2℃~25.5℃	Humidity	48.5%~50.2%
Atmospheric Pressure	101 kPa~103 kPa	Test Data	2026.06.02~2026.08.19

Please refer to the Appendix.

3.7. AC Power-Line Conducted Emission

3.7.1. Limit

47 CFR 15.207(a): 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:

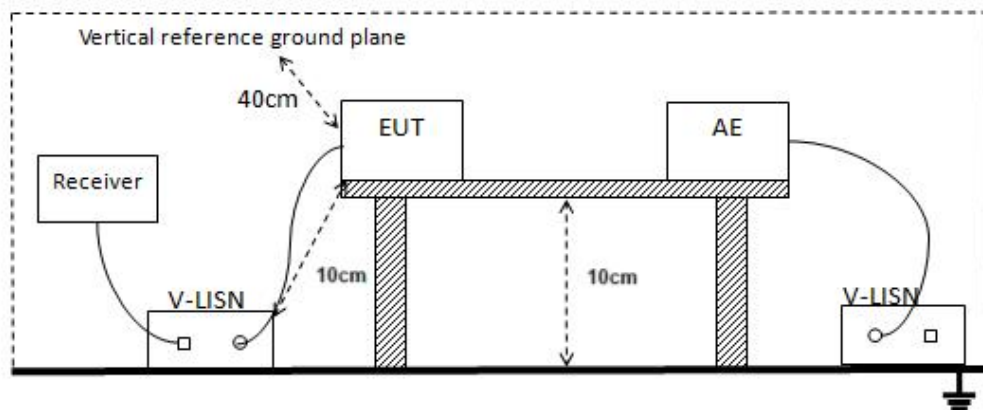
Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

3.7.2. Measurement Procedure

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 10 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9 kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

3.7.3. Test Configuration



3.7.4. Test Result of AC Power-Line Conducted Emission

Note: This test item is not applicable.

3.8. Antenna Requirement

3.8.1. Standard Requirement

47 CFR 15.203 requirement: 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, 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.

3.8.2. EUT Antenna

The antenna used for the EUT is PCB antenna, and the best case gain of the antenna is 0.3dBi, which meets the antenna requirements.

4. Test Setup Photos of the EUT

Please refer to Annex for Setup photos.

5. External and Internal Photos of the EUT

Please refer to Annex for EUT photos.

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