

Prüfbericht-Nr.: Test report no.:	CN261OWP 001	Auftrags-Nr.: Order no.:	168583829	Seite 1 von 21 Page 1 of 21
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2025-11-13	
Auftraggeber: Client:	YuShu Technology Co., Ltd. 306 Room, Building 1, 88 Dongliu Rd, XiXing Street, Binjiang District, Hangzhou, ZheJiang, China			
Prüfgegenstand: Test item:	A2 Quadruped Robot			
Bezeichnung / Typ-Nr.: Identification / Type no.:	A2 PRO, A2, A2-W PRO, A2-W			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	CFR Title 47 FCC Part 15: Subpart C Section 15.247 RSS-247 Issue 4 July 2025 RSS-Gen Issue 5 February 2021			
Wareneingangsdatum: Date of sample receipt:	2026-04-24	Please refer to photo documents		
Prüfmuster-Nr.: Test sample no.:	A004167967-001~005 A004271048-001~006			
Prüfzeitraum: Testing period:	2026-05-19 - 2026-06-04			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:			genehmigt von: authorized by:	
Datum: Date:	2026-06-12	Ausstellungsdatum: Issue date:		2026-06-12
Stellung / Position:	Sachverständige(r)/Expert	Stellung / Position:		Sachverständige(r)/Expert
Sonstiges / Other:	FCC ID: 2A5PE-YUSHU011 IC: 35569-YUSHU003 HVIN: A2 PRO, A2, A2-W PRO, A2-W PMN: A2 Quadruped Robot This report is for Classic Bluetooth.			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet * Legend: P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

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Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfbedingungen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. <i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i>
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3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. <i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i> <i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i>
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2023, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2023, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i>

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER

RESULT: Pass

5.1.3 99% BANDWIDTH

RESULT: Pass

5.1.4 20dB BANDWIDTH

RESULT: Pass

5.1.5 CARRIER FREQUENCY SEPARATION

RESULT: Pass

5.1.6 NUMBER OF HOPPING FREQUENCY

RESULT: Pass

5.1.7 TIME OF OCCUPANCY

RESULT: Pass

5.1.8 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH

RESULT: Pass

5.1.9 RADIATED SPURIOUS EMISSION

RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Classic Bluetooth

Appendix B: Photographs of the Test Set-up

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, People's Republic of China

FCC Accreditation Designation No.: CN1260

ISED Wireless Device Testing Laboratory: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (SRD-Tonscend 1)					
Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. until
Wireless Connectivity Tester	R&S	CMW270	102505	2025-09-23	2026-09-22
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	2025-09-23	2026-09-22
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	2025-09-23	2026-09-22
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	2025-09-23	2026-09-22
DC power supply	Keysight	E3642A	MY61276100	2025-09-23	2026-09-22
Power Control Unit	Tonscend	JS0806-4ADC	N/A	2025-09-23	2026-09-22
Automation Control Unit	Tonscend	JS0806-2	21C8060396	2025-09-23	2026-09-22
Test Software	Tonscend	JS1120-3	N/A	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	YLX23JMF	N/A	N/A
Shielding Room	Albatross	SR1	APC17151-SR1	2024-09-14	2027-09-13
Unwanted Emission Testing (TS9975)					
Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. until
EMI Test Receiver	R&S	ESR 7	102021	2025-09-22	2026-09-21
Signal Analyzer	R&S	FSV 40	101439	2025-09-22	2026-09-21
System Controller Interface	R&S	SCI-100	S10010038	N/A	N/A
Filterbank	R&S	Wlan	100759	2025-09-22	2026-09-21
OSP	R&S	OSP 120	102040	N/A	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2025-09-22	2026-09-21
Amplifier	R&S	SCU-18F	180070	2025-09-22	2026-09-21
Amplifier	R&S	SCU40A	100475	2025-09-22	2026-09-21
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-09-28	2026-09-27
Double-Ridged	ETS-	3117	00218717	2024-09-28	2026-09-27

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Antenna (1-18 GHz)	LINDGREN				
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2024-09-28	2026-09-27
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2024-09-28	2026-09-27
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-09-14	2027-09-13

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table.

Table 2: Measurement Uncertainty

Parameter	Uncertainty
RF output power, conducted	± 0.99 dB
Occupied Channel Bandwidth	± 2.08 %
RF power density, conducted	± 0.99 dB
Unwanted Emissions, conducted	± 0.89 dB
All emissions, radiated	± 4.17 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at 2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The product is an A2 Quadruped Robot which supports Bluetooth, 2.4GHz Wi-Fi, 5GHz Wi-Fi, 2.4GHz SRD and Sub-1GHz wireless technologies.

This report is for Classic Bluetooth operation.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 3: General Information of EUT

General Information of EUT	Value
Kind of Equipment:	A2 Quadruped Robot
Type Designation:	A2 PRO, A2, A2-W PRO, A2-W; * All models share identical RF circuits, mainboards and mechanical structures. The sole distinction is that models A2-W and A2-W PRO are equipped with wheels, a feature unavailable on the A2 and A2 PRO variants. The A2 and A2 PRO share identical hardware, they carry separate model names solely due to differing sales channels and warranty durations. The A2-W and A2-W PRO share identical hardware, they carry separate model names solely due to differing sales channels and warranty durations. Per the model variant distinctions, FCC Part 15 Subpart B and ICES-003 tested for the A2 PRO and A2-W PRO respectively. These variations exert no influence on RF characteristics, and testing was performed on the A2-W PRO unit to cover all models.
FCC ID:	2A5PE-YUSHU011
IC:	35569-YUSHU003
HVIN:	A2 PRO, A2, A2-W PRO, A2-W
PMN:	A2 Quadruped Robot
Operating Voltage:	50.4Vdc Battery Powered
Testing Voltage:	Fully charged battery
Technical Specification of Classic Bluetooth	
Operating Frequency:	2402 MHz to 2480 MHz
Type of Modulation:	GFSK, $\pi/4$ -DQPSK, 8DPSK
Channel Number:	79 channels
Channel Separation:	1MHz
Antenna Type:	Integral Antenna
Antenna Gain:	3.0 dBi (Provided by the Client)

Note: The correctness of all data provided by customer in the test report is ensured and responsible of the customer. Any misjudgment of the test results caused by the use of incorrect data provided by customer shall be borne by the customer.

This device is battery powered only, test for AC power-line conducted emissions is not applicable.

Table 4: Test Channel and Frequency

Technologies	Test Channels (MHz)
Classic Bluetooth	L/M/H: 2402, 2441, 2480; Hopping mode

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Bluetooth transmitting mode
 - 1) Low Channel
 - 2) Middle Channel
 - 3) High Channel
- B. On, Transmitting on Hopping channel
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- | | |
|-------------------------|----------------------------------|
| - Application Form | - User Manual |
| - Operation Description | - FCC/IC Label and Location Info |

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10:2020, ANSI C63.10:2020+Cor. 1:2023+ C63.10a:2024.

According to clause 3.1, all tests were performed on model A2-W PRO in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Laptop	Lenovo	T480	PF-16A6N8

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

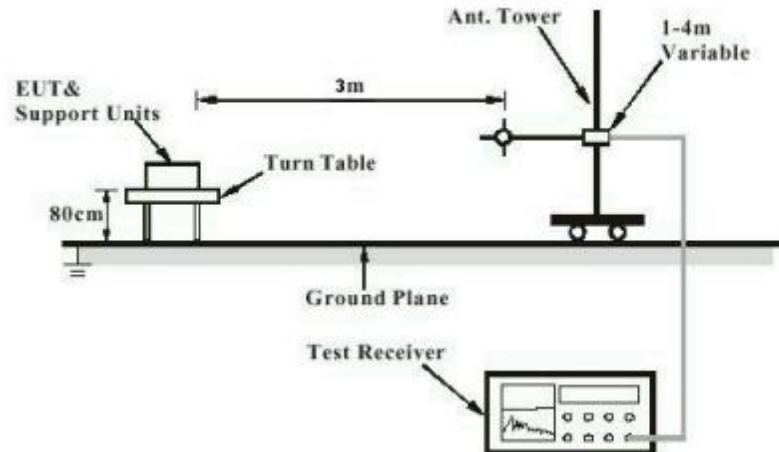


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

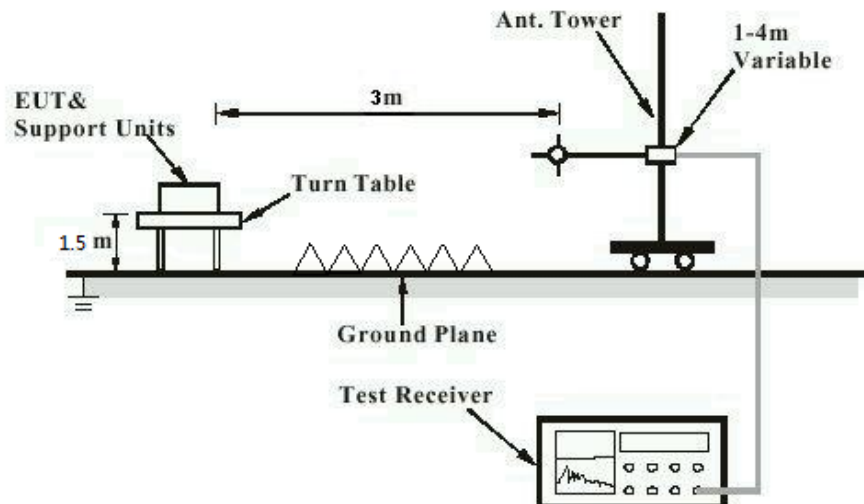
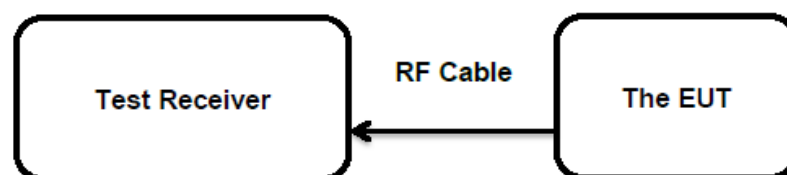


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(b)(4) and Part 15.203
RSS-Gen Clause 6.8

The EUT has Integral Antenna, permanent attachment and no consideration of replacement, refer to section 3.2 for details.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Peak Conducted Output Power

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(b)(1)
RSS-247 Clause 6.2.3.2
Basic standard : ANSI C63.10:2020, ANSI C63.10:2020+Cor. 1:2023+
C63.10a:2024
Limits : FHSS < 0.125 Watts
Kind of test site : Shielded Room

Test Setup

Date of testing : 2026-05-25 to 2026-06-04
Input voltage : Fully charged battery
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 24.8 °C
Relative humidity : 55 %
Atmospheric pressure : 101 kPa

For details refer to following test result.

Table 6: Test Result of Maximum Conducted Output Power, BR & EDR

Test Mode	Test Channel (MHz)	Measured Peak Power		Limit (W)
		(dBm)	(W)	
GFSK (BR)	2402.0	4.53	0.0028	< 0.125
	2441.0	4.35	0.0027	
	2480.0	3.52	0.0022	
8DPSK (EDR)	2402.0	6.88	0.0049	
	2441.0	6.49	0.0045	
	2480.0	5.79	0.0038	
Maximum Measured Value		6.88	0.0049	

Max. e.i.r.p. = -6.88 dBm + 3 dB = 9.88 dBm, which is less than 36 dBm = 4 W.

Note:

- 1) The cable loss is taken into account in results.
- 2) e.i.r.p. = $P_{(\text{Peak power})} + G$, which is far below the 4 W

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5.1.3 99% Bandwidth

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(a)
RSS-Gen Clause 6.7
Basic standard : ANSI C63.10:2020, ANSI C63.10:2020+Cor. 1:2023+
C63.10a:2024
Kind of test site : Shielded Room

Test Setup

Date of testing : 2026-05-25 to 2026-06-04
Input voltage : Fully charged battery
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 24.8 °C
Relative humidity : 55 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

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5.1.4 20dB Bandwidth

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.247(a)(1)
RSS-247 Clause 6.2.3.1
Basic standard : ANSI C63.10:2020, ANSI C63.10:2020+Cor. 1:2023+
C63.10a:2024
Kind of test site : Shielded Room

Test Setup

Date of testing : 2026-05-25 to 2026-06-04
Input voltage : Fully charged battery
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 24.8 °C
Relative humidity : 55 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

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5.1.5 Carrier Frequency Separation

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(a)(1) RSS-247 Clause 6.2.3.1
Basic standard	: ANSI C63.10:2020, ANSI C63.10:2020+Cor. 1:2023+ C63.10a:2024
Limits	: $\geq 25\text{kHz}$ or $2/3$ of 20dB bandwidth, whichever is greater
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2026-05-25 to 2026-06-04
Input voltage	: Fully charged battery
Operation mode	: B
Ambient temperature	: 24.8 °C
Relative humidity	: 55 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

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5.1.6 Number of Hopping Frequency

RESULT:

Pass

Test Specification

Test standard	: FCC part 15.247(a)(1)(iii) RSS-247 Clause 6.2.3.1
Basic standard	: ANSI C63.10:2020, ANSI C63.10:2020+Cor. 1:2023+ C63.10a:2024
Limits	: ≥ 15 non-overlapping channels
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2026-05-25 to 2026-06-04
Input voltage	: Fully charged battery
Operation mode	: B
Ambient temperature	: 24.8 °C
Relative humidity	: 55 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

5.1.7 Time of Occupancy

RESULT:

Pass

Test Specification

Test standard	: FCC part 15.247(a)(1)(iii) RSS-247 Clause 6.2.3.1
Basic standard	: ANSI C63.10:2020, ANSI C63.10:2020+Cor. 1:2023+ C63.10a:2024
Limits	: < 0.4s
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2026-05-25 to 2026-06-04
Input voltage	: Fully charged battery
Operation mode	: B
Ambient temperature	: 24.8 °C
Relative humidity	: 55 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

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5.1.8 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(d) RSS-247 Clause 6.6
Basic standard	: ANSI C63.10:2020, ANSI C63.10:2020+Cor. 1:2023+ C63.10a:2024
Limits	: 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2026-05-25 to 2026-06-04
Input voltage	: Fully charged battery
Operation mode	: A, B
Test channel	: Low / Middle / High
Ambient temperature	: 24.8 °C
Relative humidity	: 55 %
Atmospheric pressure	: 101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix A.

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5.1.9 Radiated Spurious Emission

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 2.4
Basic standard	: ANSI C63.10:2020, ANSI C63.10:2020+Cor. 1:2023+ C63.10a:2024
Limits	: Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Section 8.9 & 8.10
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 2026-05-19 to 2026-05-22
Input voltage	: Fully charged battery
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: Refer to test result
Relative humidity	: Refer to test result
Atmospheric pressure	: 101 kPa

Remark:

Testing was carried out within frequency range 9kHz to the tenth harmonics.
Only the worst-case spurious emissions were reported.

For the measurement records, refer to the appendix A.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix B.

7 List of Tables

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Appendix A.1: Test Results of 20dB Bandwidth

Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.948	2401.544	2402.492	---	PASS
		2441	0.942	2440.544	2441.486	---	PASS
		2480	0.942	2479.547	2480.489	---	PASS
3DH5	Ant1	2402	1.269	2401.358	2402.627	---	PASS
		2441	1.263	2440.364	2441.627	---	PASS
		2480	1.314	2479.352	2480.666	---	PASS

Test Graphs





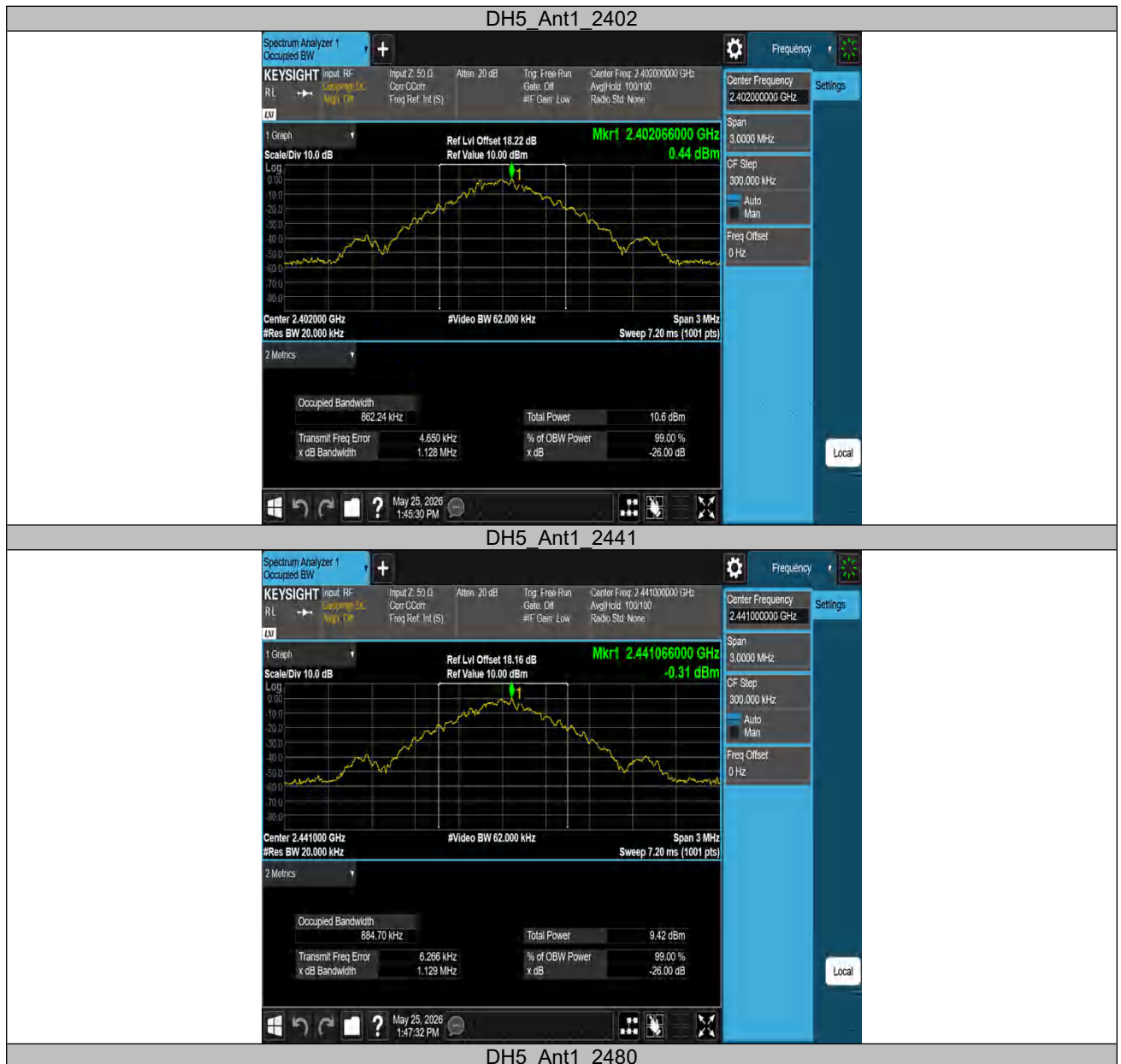


Appendix A.2: Test Results of 99% Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86224	2401.5735	2402.4358	---	PASS
		2441	0.88470	2440.5639	2441.4486	---	PASS
		2480	0.86760	2479.5694	2480.4370	---	PASS
3DH5	Ant1	2402	1.1884	2401.4077	2402.5961	---	PASS
		2441	1.1774	2440.4136	2441.5910	---	PASS
		2480	1.1854	2479.4095	2480.5949	---	PASS

Test Graphs







Appendix A.3: Test Results of Carrier Frequency Separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.014	≥ 0.948	PASS
3DH5	Ant1	Hop	1.162	≥ 0.876	PASS

Test Graphs

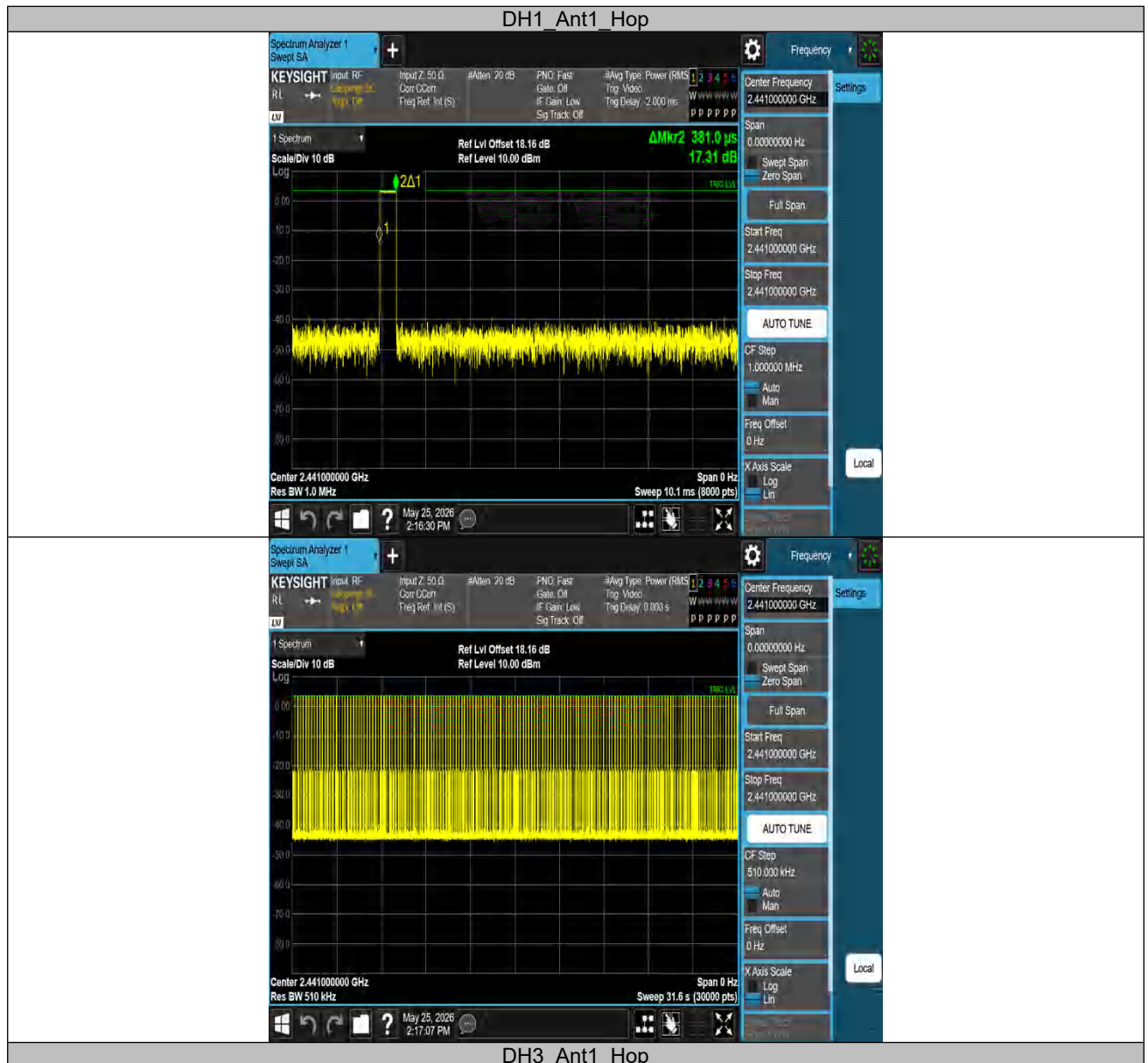


Appendix A.4: Test Results of Time of Occupancy

Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.381	319	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.637	167	0.273	≤0.4	PASS
DH5	Ant1	Hop	2.884	109	0.314	≤0.4	PASS
3DH1	Ant1	Hop	0.390	314	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.640	152	0.249	≤0.4	PASS
3DH5	Ant1	Hop	2.892	102	0.295	≤0.4	PASS

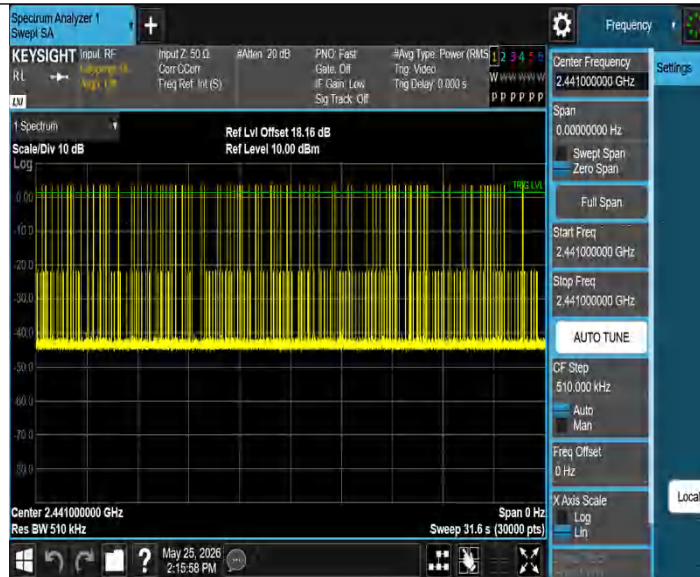
Test Graphs





DH5_Ant1_Hop





3DH1 Ant1 Hop

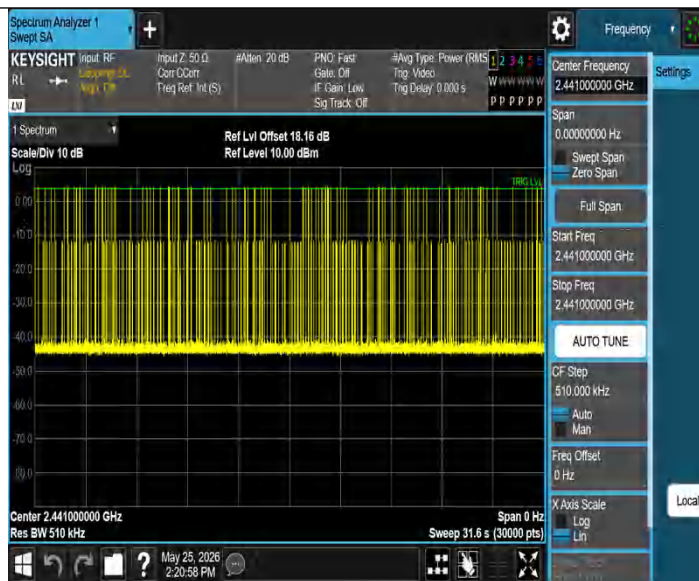


3DH3 Ant1 Hop



3DH5_Ant1_Hop





Appendix A.5: Test Results of Number of Hopping Frequency

Test Result

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

Test Graphs



Appendix A.6: Test Results of Band Edge Measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	3.97	-41.28	≤-16.03	PASS
		High	2480	2.62	-40.82	≤-17.38	PASS
3DH5	Ant1	Low	2402	4.76	-42.23	≤-15.24	PASS
		High	2480	3.64	-41.06	≤-16.36	PASS
DH5	Ant1	Hopping	2402	3.45	-40.54	≤-16.55	PASS
		Hopping	2480	2.10	-41.44	≤-17.90	PASS
3DH5	Ant1	Hopping	2402	1.85	-42.21	≤-18.15	PASS
		Hopping	2480	0.54	-41.97	≤-19.46	PASS

Test Graphs







3DH5_Ant1_Hopping_2402



3DH5_Ant1_Hopping_2480

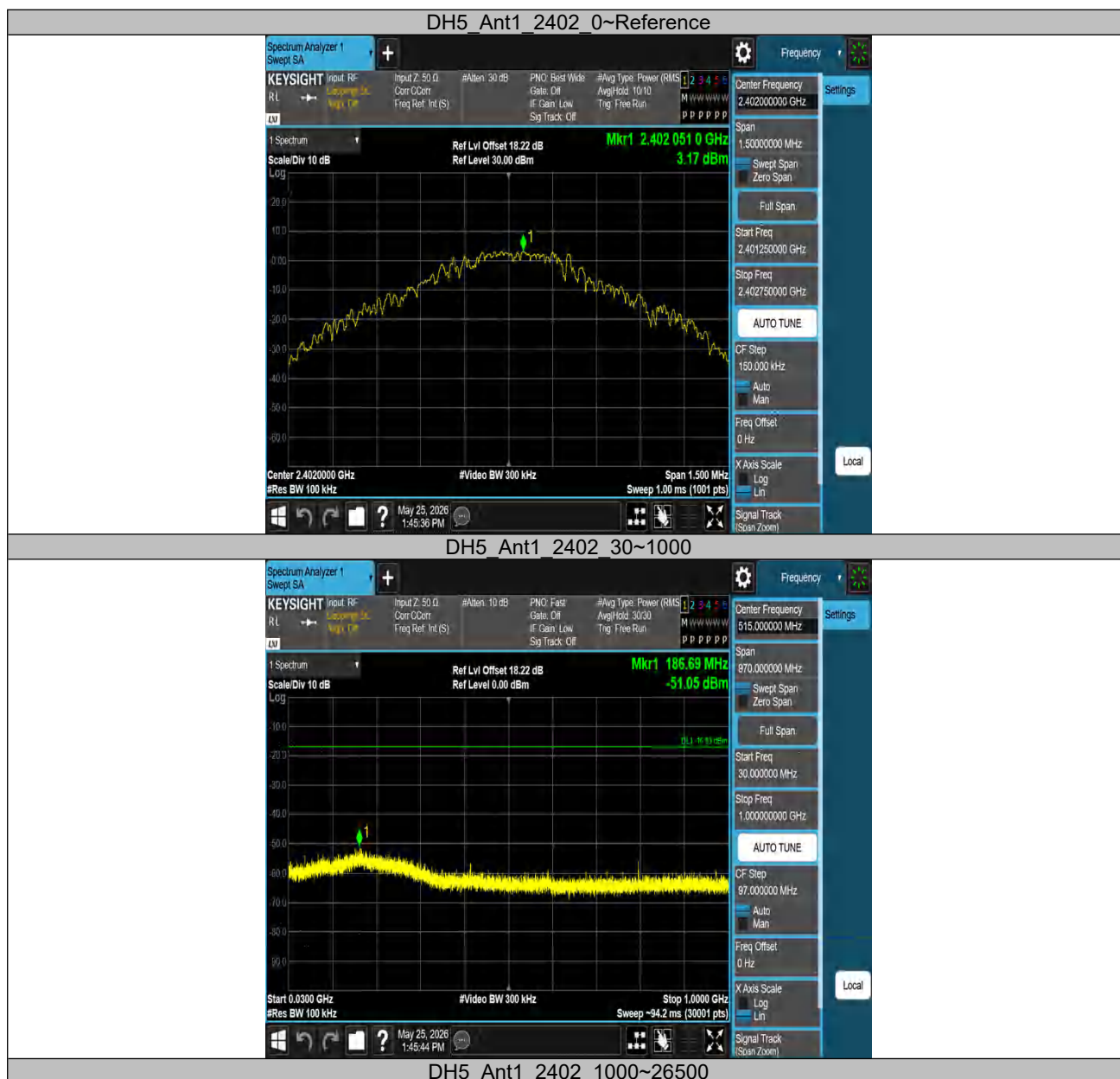


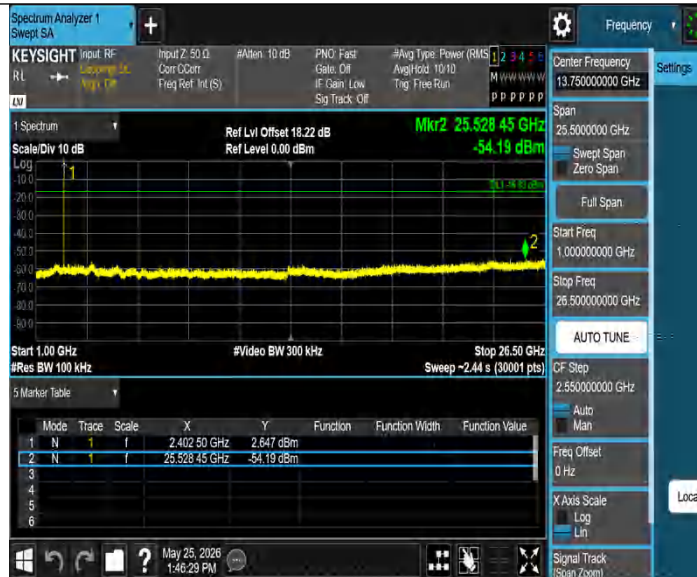
Appendix A.7: Test Results of Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	3.17	3.17	---	PASS
			30~1000	3.17	-51.05	≤-16.83	PASS
			1000~26500	3.17	-54.19	≤-16.83	PASS
		2441	Reference	2.57	2.57	---	PASS
			30~1000	2.57	-51.45	≤-17.43	PASS
			1000~26500	2.57	-54.01	≤-17.43	PASS
		2480	Reference	1.71	1.71	---	PASS
			30~1000	1.71	-51.93	≤-18.29	PASS
			1000~26500	1.71	-54.33	≤-18.29	PASS
3DH5	Ant1	2402	Reference	3.67	3.67	---	PASS
			30~1000	3.67	-52.14	≤-16.33	PASS
			1000~26500	3.67	-53.81	≤-16.33	PASS
		2441	Reference	3.78	3.78	---	PASS
			30~1000	3.78	-51.99	≤-16.22	PASS
			1000~26500	3.78	-53.99	≤-16.22	PASS
		2480	Reference	3.08	3.08	---	PASS
			30~1000	3.08	-51.63	≤-16.92	PASS
			1000~26500	3.08	-54.12	≤-16.92	PASS

Test Graphs





DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000



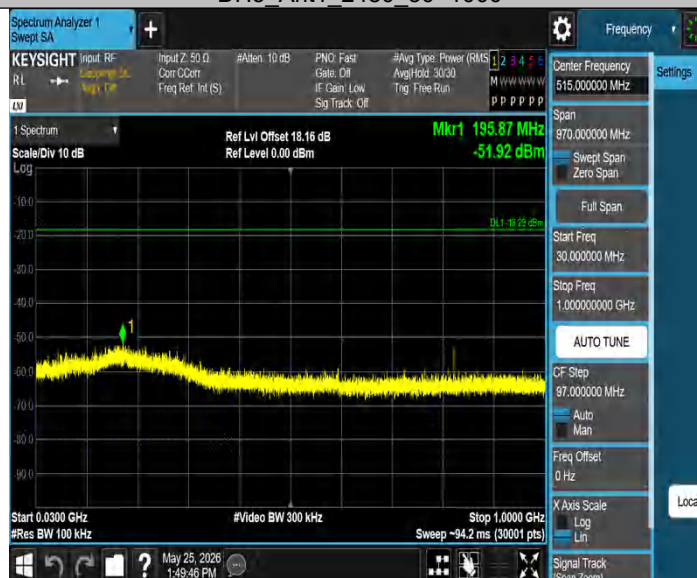
DH5_Ant1_2441_1000~26500



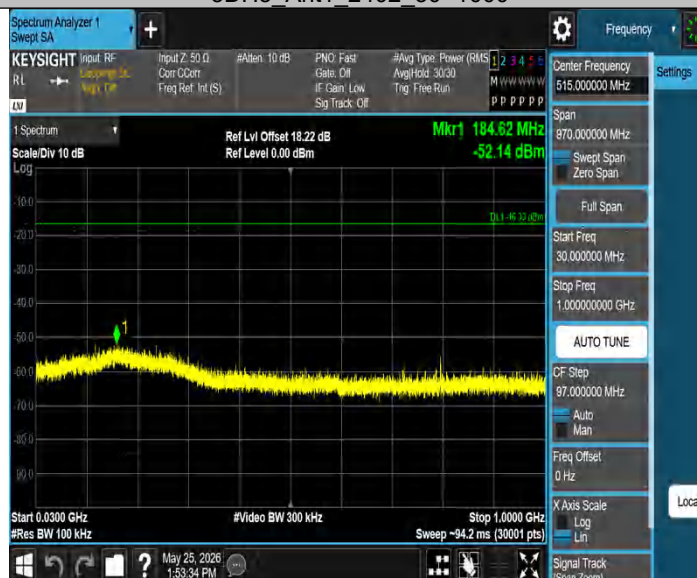
DH5_Ant1_2480_0~Reference

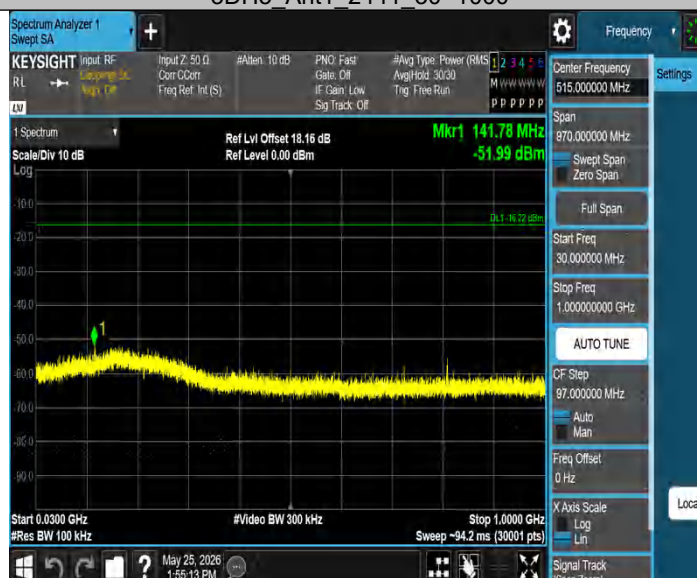
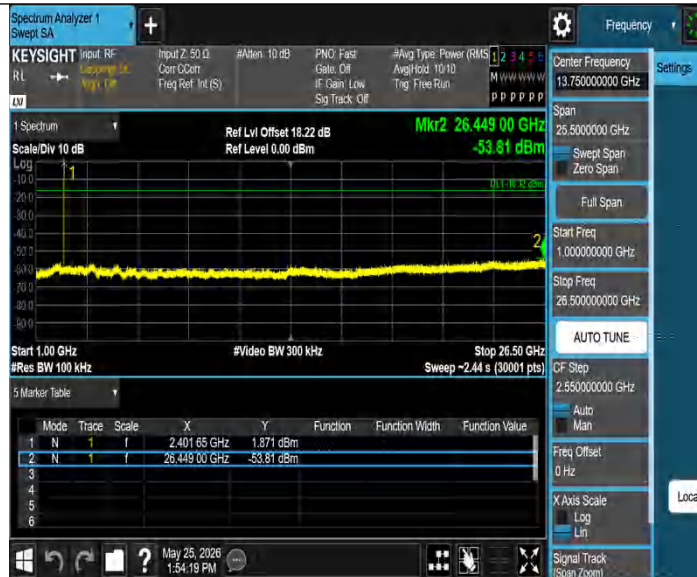


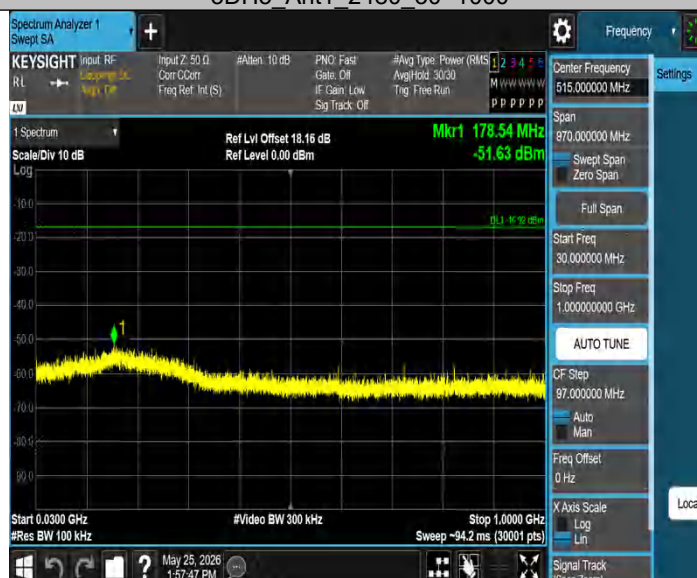
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500









Appendix A.8: Test Results of Radiated Spurious Emissions

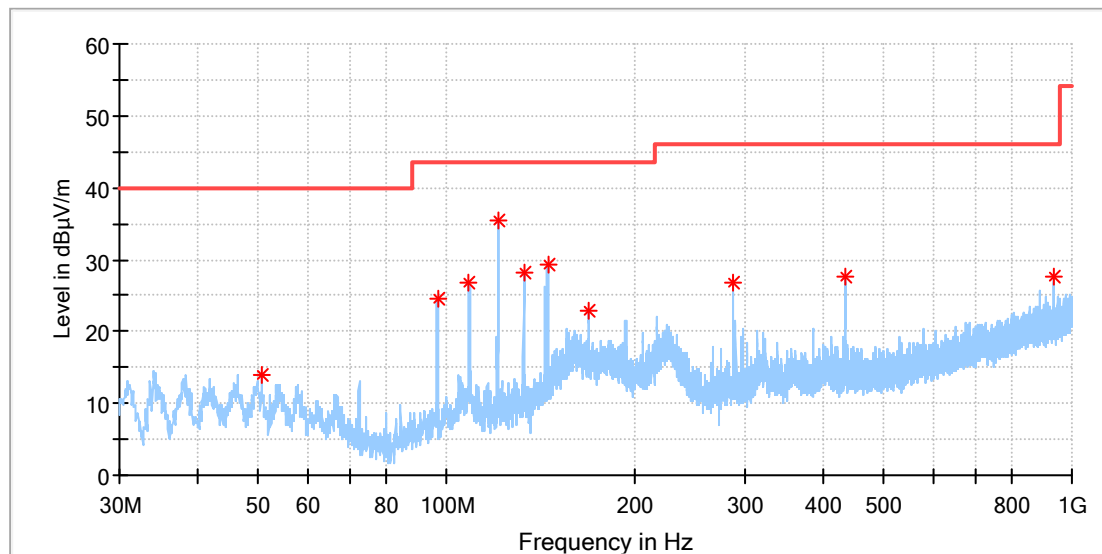
Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30MHz - 1GHz

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

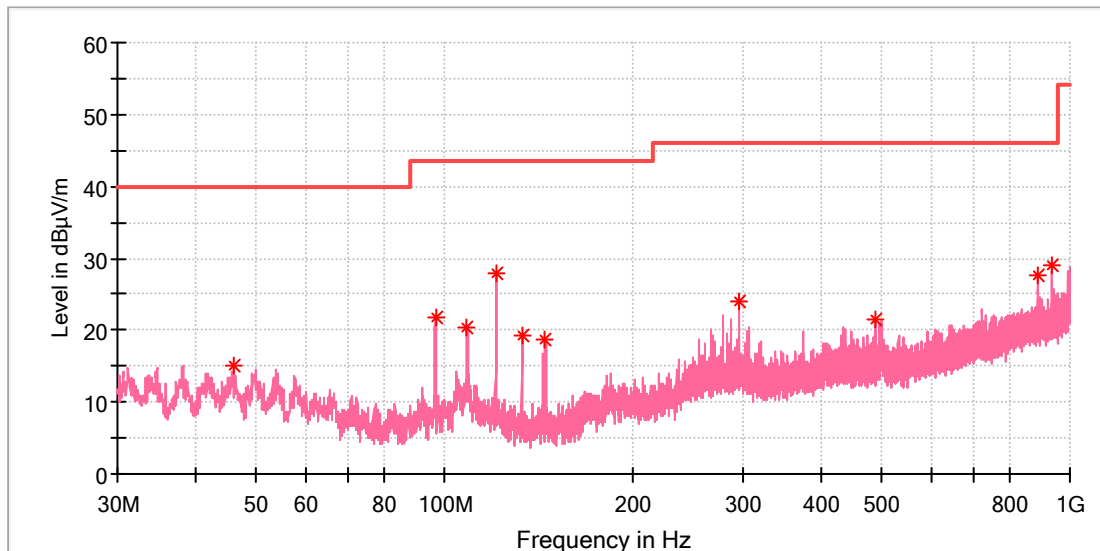
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.639444	13.82	40.00	26.18	100.0	H	131.0	-18.4
96.768333	24.49	43.50	19.01	100.0	H	26.0	-19.6
108.785556	26.66	43.50	16.84	100.0	H	18.0	-19.1
120.802778	35.51	43.50	7.99	100.0	H	34.0	-21.0
132.981667	28.17	43.50	15.33	100.0	H	34.0	-22.1
145.106667	29.38	43.50	14.12	100.0	H	50.0	-22.4
169.248889	22.77	43.50	20.73	100.0	H	50.0	-21.4
287.966111	26.67	46.00	19.33	100.0	H	203.0	-16.6
434.813333	27.69	46.00	18.31	100.0	H	107.0	-13.0
936.950000	27.62	46.00	18.38	100.0	H	210.0	-4.4

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: A2 Quadruped Robot
Model: A2-W PRO
Test Mode: BR DH5_Mid channel
Order No/Sample No: 168583829/A004271048-003
Test Voltage: Battery
Remark: Temp 23.8°C Humi:57%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
46.058889	15.17	40.00	24.83	100.0	V	6.0	-18.8
96.714444	21.64	43.50	21.86	100.0	V	304.0	-19.6
108.785556	20.31	43.50	23.19	100.0	V	289.0	-19.1
120.802778	28.02	43.50	15.48	100.0	V	304.0	-21.0
132.981667	19.16	43.50	24.34	100.0	V	312.0	-22.1
145.052778	18.67	43.50	24.83	100.0	V	319.0	-22.4
295.348889	24.09	46.00	21.91	100.0	V	251.0	-16.4
486.923889	21.61	46.00	24.39	100.0	V	259.0	-12.0
890.982778	27.60	46.00	18.40	100.0	V	345.0	-4.9
938.405000	29.01	46.00	16.99	100.0	V	94.0	-4.4

Final Result

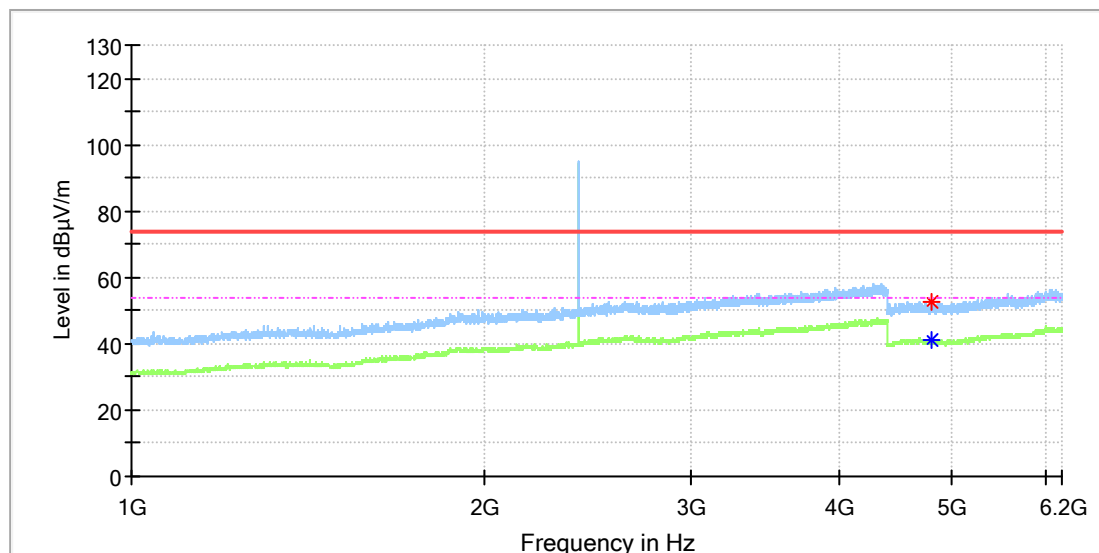
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_Low channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

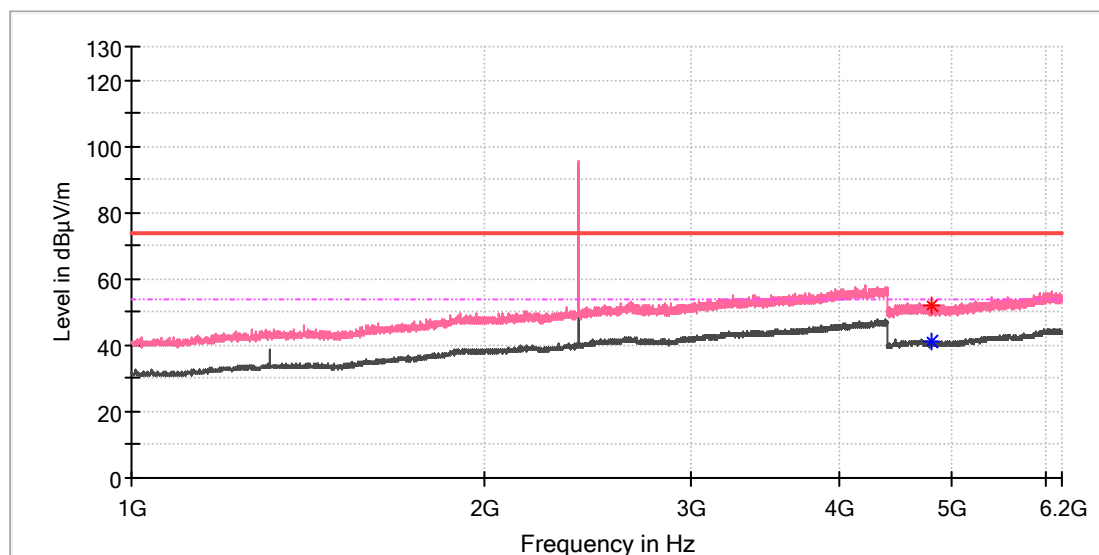
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4802.500000	52.31	---	74.00	21.69	150.0	H	46.0	13.3
4810.000000	---	40.92	54.00	13.08	150.0	H	155.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_Low channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

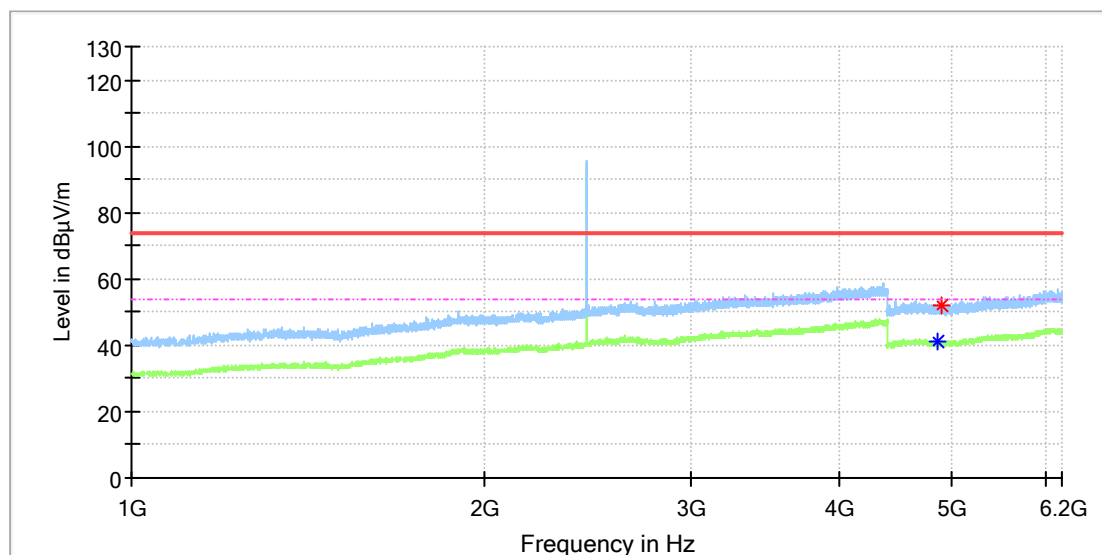
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4802.000000	52.11	---	74.00	21.89	150.0	V	43.0	13.3
4802.000000	---	40.89	54.00	13.11	150.0	V	43.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.000000	100.000000	100.000000	100.000000	100.000000	100.000000		100.000000	100.000000

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

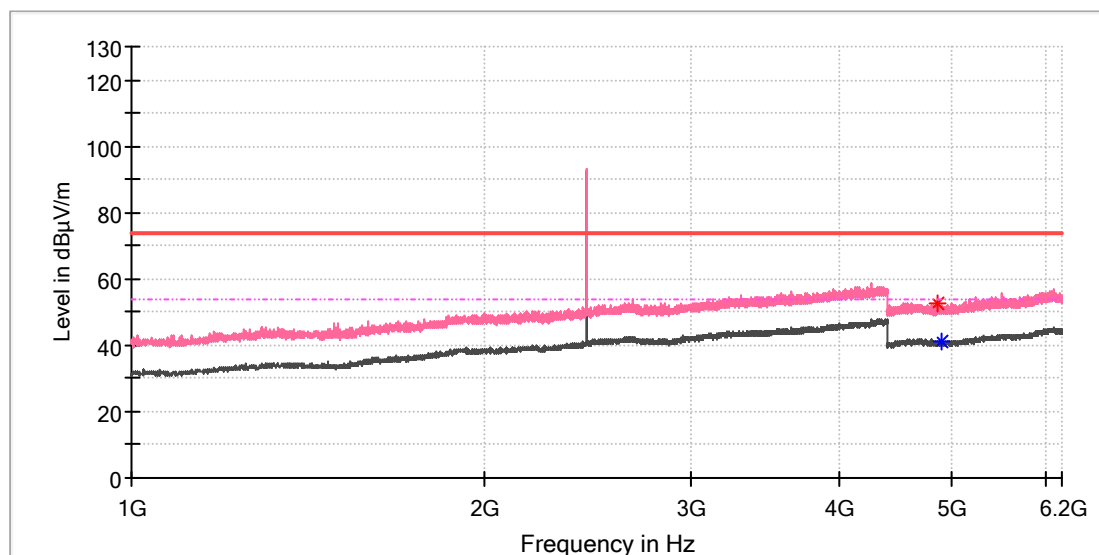
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4862.000000	---	41.22	54.00	12.78	150.0	H	0.0	13.3
4896.500000	51.84	---	74.00	22.16	150.0	H	358.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.5	122.5	122.5	0	100	0	0	0

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

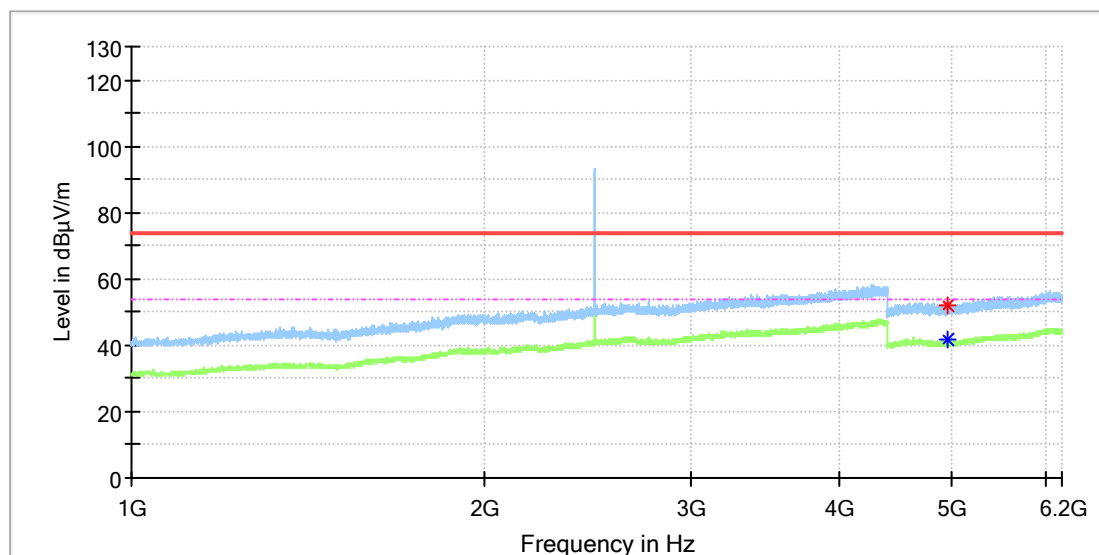
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4859.500000	52.61	---	74.00	21.39	150.0	V	330.0	13.3
4896.000000	---	41.30	54.00	12.70	150.0	V	305.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.000000	100.000000	100.000000	100.000000	100.000000	100.000000		100.000000	100.000000

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_High channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

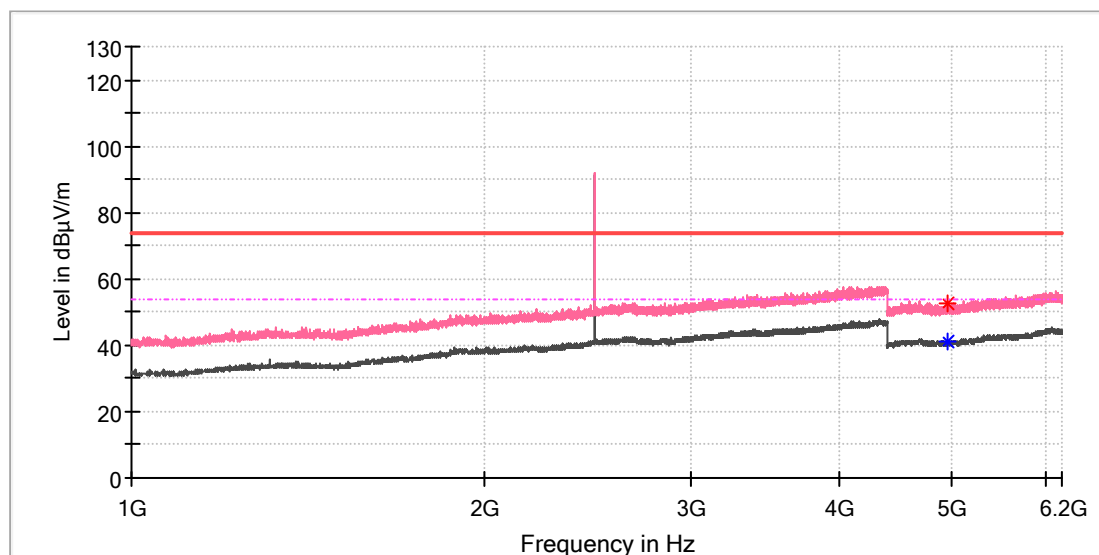
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4953.500000	52.25	---	74.00	21.75	150.0	H	168.0	13.3
4960.000000	---	41.43	54.00	12.57	150.0	H	15.0	13.3

Final Result

[illegible]

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_High channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4951.000000	52.44	---	74.00	21.56	150.0	V	57.0	13.3
4958.500000	---	41.36	54.00	12.64	150.0	V	259.0	13.3

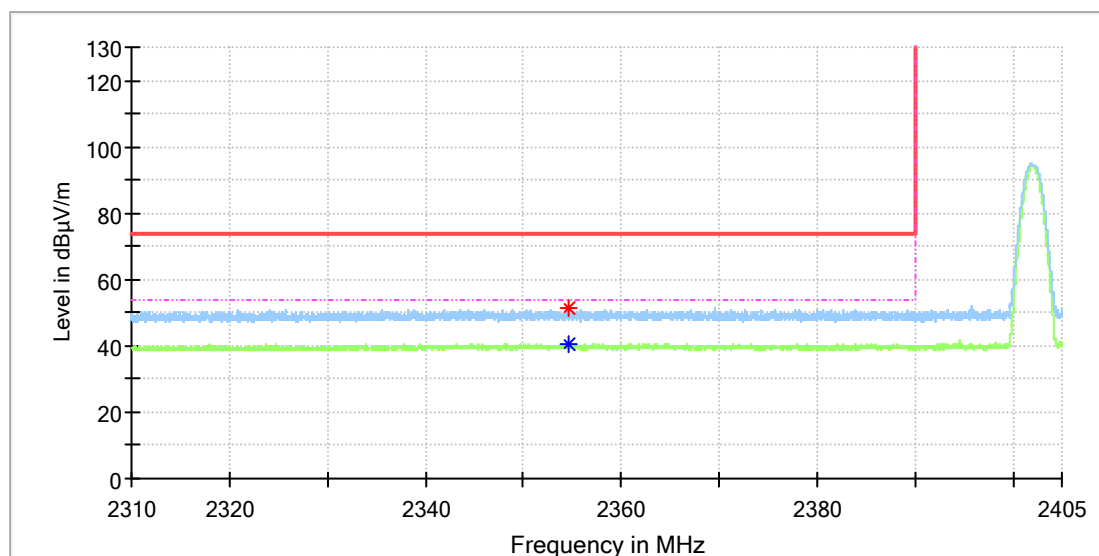
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.000000	100.000000	100.000000	100.000000	100.000000	100.000000		100.000000	100.000000

Appendix A.9: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_Low channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

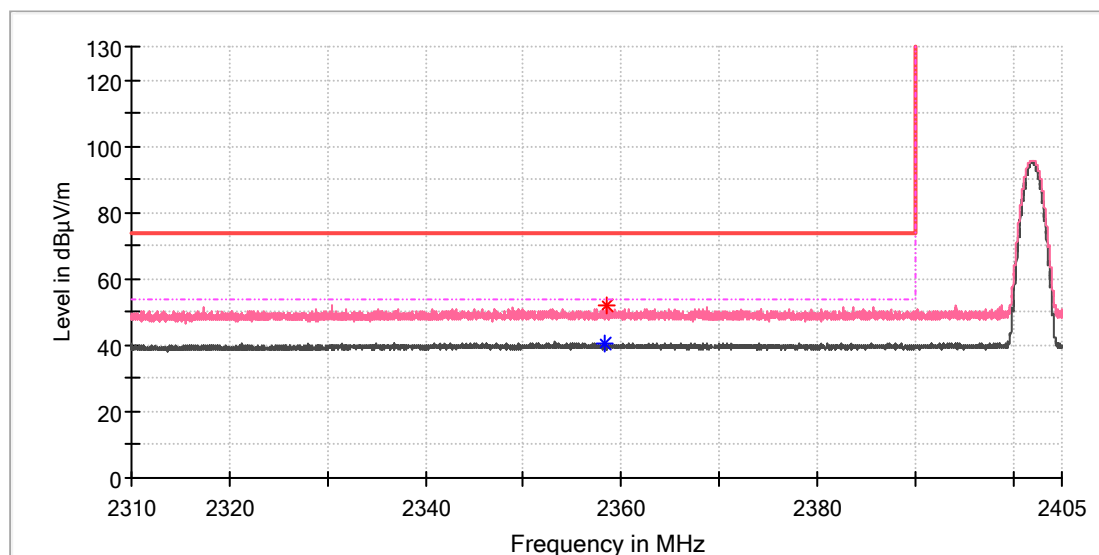
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2354.705294	---	40.46	54.00	13.54	150.0	H	12.0	8.5
2354.734118	51.11	---	74.00	22.89	150.0	H	340.0	8.5

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.000000	100.000000	100.000000	100.000000	100.000000	100.000000		100.000000	

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_Low channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

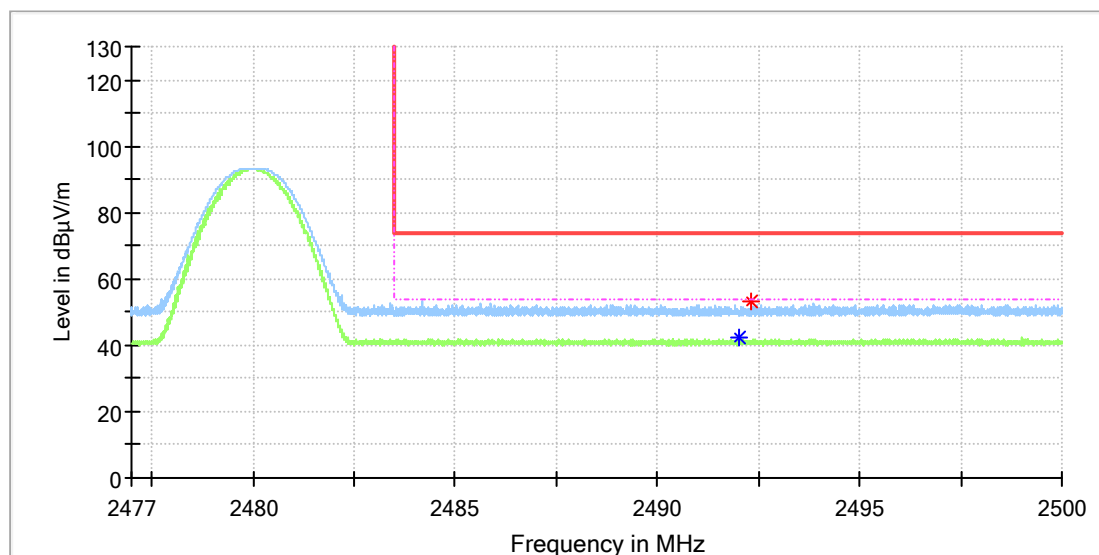
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2358.409118	---	40.48	54.00	13.52	150.0	V	53.0	8.5
2358.567647	51.97	---	74.00	22.03	150.0	V	75.0	8.5

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.000000	100.000000	100.000000	100.000000	100.000000	100.000000		100.000000	100.000000

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_High channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

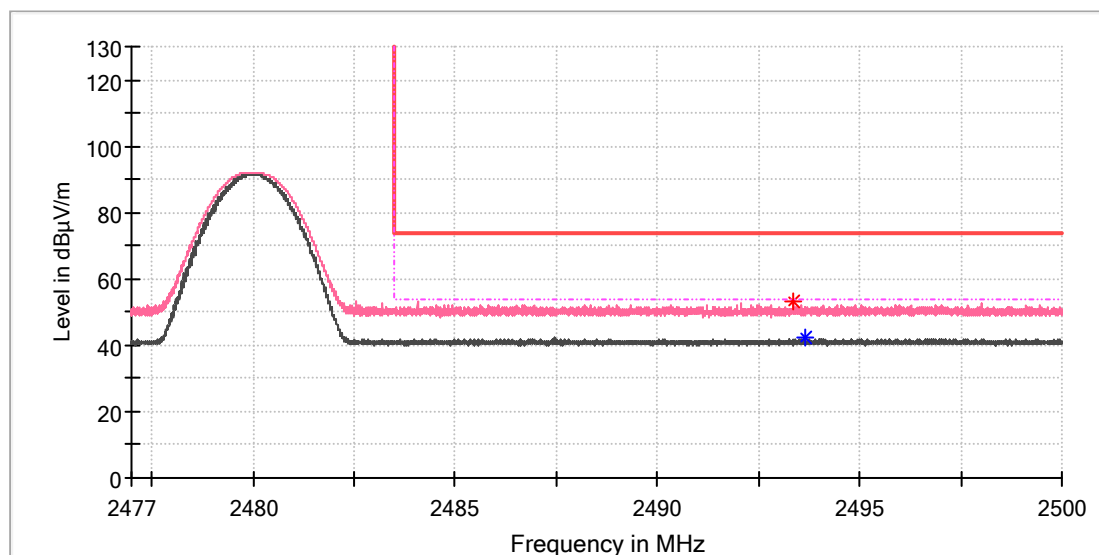
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2491.996324	---	42.15	54.00	11.85	150.0	H	215.0	9.0
2492.312500	52.98	---	74.00	21.02	150.0	H	285.0	9.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.000000	100.000000	100.000000	100.000000	100.000000	100.000000		100.000000	100.000000

EUT Information

EUT Name:	A2 Quadruped Robot
Model:	A2-W PRO
Test Mode:	BR DH5_High channel
Order No/Sample No:	168583829/A004271048-003
Test Voltage:	Battery
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2493.338235	53.25	---	74.00	20.75	150.0	V	265.0	9.0
2493.632353	---	42.27	54.00	11.73	150.0	V	351.0	9.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.000000	100.000000	100.000000	100.000000	100.000000	100.000000		100.000000	100.000000