Prüfbericht-Nr.: *Test report no.*:	**CN244E0L 002**	**Auftrags-Nr.:** *Order no.*:	**168449632**	Seite 1 von 27 *Page 1 of 27*
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2023-10-26	
Auftraggeber: *Client*:	**SZ DJI Osmo Technology Co.,Ltd.** 4F, Jingkou Community Comprehensive Service Building, No. 83 Bishui Road North, Guangming Street, Guangming District, Shenzhen, China			
Prüfgegenstand: *Test item*:	DJI SDR Transmission			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	TX5 (Trademark: DJI)			
Auftrags-Inhalt: *Order content*:	Test Report			
Prüfgrundlage: *Test specification*:	CFR47 FCC Part 15: Subpart C Section 15.247			

Wareneingangsdatum: *Date of sample receipt*:	2023-12-05	Please refer to Photo Document
Prüfmuster-Nr.: *Test sample no:*	A003612445-001~047	
Prüfzeitraum: *Testing period*:	2023-12-14 - 2024-02-06	
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:	x Bell Hu Signed by: Bell Hu	**genehmigt von:** *authorized by*:	x Jonathan Li Signed by: Jonathan Li
Datum: *Date:* 2024-05-15		**Ausstellungsdatum:** *Issue date:* 2024-05-15	
Stellung / Position:	Sachverständige(r)/Expert	**Stellung** / Position:	Sachverständige(r)/Expert

Sonstiges / *Other*: FCC ID: 2ANDR-TX53209
This report is for 2.4GHz SDR and 2.4GHz Wi-Fi.

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*

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 Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. *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.*
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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. *Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report.* *Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.*
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, 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 bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. 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 115:2021, 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.

Test Summary

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER
RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY
RESULT: Pass

5.1.4 6DB BANDWIDTH
RESULT: Pass

5.1.5 99% BANDWIDTH
RESULT: Pass

5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH
RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION
RESULT: Pass

5.1.8 CONDUCTED EMISSION ON AC MAINS
RESULT: Pass

Contents

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 2.4GHz SDR

Appendix B: Test Results of 2.4GHz Wi-Fi

Appendix C: Photographs of the Test Set-up.

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China.

FCC Accreditation Designation No.: 694916

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 (SDR-Tonscend)					
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Cal. until**
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	2023-09-22	2024-09-21
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	2023-09-22	2024-09-21
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	2023-09-22	2024-09-21
DC power supply	Keysight	E3642A	MY61276100	2023-09-22	2024-09-21
Power Control Unit	Tonscend	JS0806-4ADC	N/A	2023-09-22	2024-09-21
Automation Control Unit	Tonscend	JS0806-2	21C8060396	2023-09-22	2024-09-21
Test Software	Tonscend	JS1120-3	N/A	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	YLX23JMF	N/A	N/A
Shielding Room 8#	Albatross	SR8	APC17151-SR8	2021-06-22	2024-06-22
Unwanted Emission Testing (TS9975)					
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Cal. until**
EMI Test Receiver	R&S	ESR 7	102021	2023-07-26	2024-07-25
Signal Analyzer	R&S	FSV 40	101439	2023-07-26	2024-07-25
System Controller Interface	R&S	SCI-100	S10010038	N/A	N/A
Filterbank	R&S	Wlan	100759	2023-07-26	2024-07-25
OSP	R&S	OSP 120	102040	N/A	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2023-07-26	2024-07-25
Amplifier	R&S	SCU-18F	180070	2023-07-26	2024-07-25
Amplifier	R&S	SCU40A	100475	2023-07-26	2024-07-25
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2022-08-07	2024-08-06

Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2022-08-07	2024-08-06
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2022-08-28	2024-08-27
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2022-08-07	2024-08-06
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	2021-06-22	2024-06-22

Conducted Emission				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
EMI Test Receiver	R&S	ESR3	102428	2024-07-30
Artificial Mains Network	R&S	ENV216	102333	2024-07-31
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A

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 basics 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 (k=2)
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
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	± 3.70 dB / ± 3.30 dB

2.6 Location of Original Data

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

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. 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 DJI SDR Transmission which supports 2.4GHz SDR, 5GHz SDR, 2.4GHz Wi-Fi and 5GHz Wi-Fi functions.

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

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	DJI SDR Transmission
Type Designation	TX5
Trademark	DJI
FCC ID	2ANDR-TX53209
Operating Voltage	7.4 V DC by battery or powered by AC/DC adapter (120V AC/60Hz)
Testing Voltage	DC 7.4V by battery or AC 120V, 60Hz
Extreme Temperature Range	-10ºC to +45ºC
Radiofrequency operating mode	1) 2.4GHz SDR: operating within 2400-2483.5MHz, supports 1.4MHz/3MHz/10MHz/20MHz/40MHz Bandwidth 2) 2.4GHz Wi-Fi: operating within 2400-2483.5MHz, supports 20MHz/40MHz Bandwidth and IEEE 802.11 b/g/n20/n40/ax20/ax40 3) 5.2GHz Wi-Fi: operating within 5150-5250MHz, supports 20MHz/40MHz/80MHz Bandwidth and IEEE 802.11 a/n20/n40/ac20/ac40/ac80/ax20/ax40/ax80 4) 5.6GHz SDR: operating within 5470-5725MHz, supports 20MHz/40MHzBandwidth (Transmitting only) 5) 5.8GHz SDR: operating within 5725-5850MHz, supports 1.4MHz/3MHz/10MHz/20MHz/40MHz Bandwidth
Technical Specification of 2.4GHz SDR	
Operating Frequency	2403.5-2469.5MHz for 1.4MHz Bandwidth 2405.12-2471.12MHz for 1.4MHz Bandwidth CA Mode 2405.5-2468.5MHz for 3MHz Bandwidth 2408.2-2471.2MHz for 3MHz Bandwidth CA Mode 2407.5-2467.5MHz for 10MHz Bandwidth 2412.5-2462.5MHz for 20MHz Bandwidth 2422.5-2452.5MHz for 40MHz Bandwidth
Type of Modulation	OFDM
Channel Number	34 channels for 1.4MHz Bandwidth 34 channels for 1.4MHz Bandwidth CA Mode 22 channels for 3MHz Bandwidth 22 channels for 3MHz Bandwidth CA Mode 61 channels for 10MHz Bandwidth 51 channels for 20MHz Bandwidth 31 channels for 40MHz Bandwidth
Channel Separation	2MHz for 1.4MHz Bandwidth

	2MHz for 1.4MHz Bandwidth CA Mode 3MHz for 3MHz Bandwidth 3MHz for 3MHz Bandwidth CA Mode 1MHz for 10MHz Bandwidth 1MHz for 20MHz Bandwidth 1MHz for 40MHz Bandwidth
Antenna Type	Integral Antennas, only MIMO mode supported.
Antenna Number	2TX (Antennas 0&1, Antennas 0&3, Antennas 2&1 or Antennas 2&3, Uncorrelated Signals).
Antenna Gain	Ant0: 3.32dBi, Ant1: 3.38dBi, Ant2: 4.45dBi, Ant3: 3.31dBi (as provided by client)
The type of wideband data transmission equipment:	DTS
Technical Specification of 2.4GHz Wi-Fi	
Operating Frequency	2412 - 2462 MHz for 802.11b/g/n(HT20)/ax(HE20) 2422 - 2452 MHz for 802.11n(HT40)/ax(HE40)
Type of Modulation	DSSS(DBPSK/DQPSK/CCK) OFDM(BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)
Data Rate	1/2/5.5/11 Mbps for 802.11b 6/9/12/18/24/36/48/54 Mbps for 802.11g MCS0~MCS 7 for 802.11n(HT20/40) MCS0~MCS11 for 802.11ax(HE20/40)
Channel Number	11 channels for 802.11b/g/n(HT20)/ax(HE20) 7 channels for 802.11n(HT40)/ax(HE40)
Channel Separation	5 MHz
Antenna Type	Integral Antenna
Antenna Number	2, SISO only for 802.11b/g. MIMO only for 802.11n/ax (Antennas 0&3).
Antenna Gain	Ant0: 3.32dBi, Ant3: 3.31dBi (as provided by client)
Beamforming	Not supported
The type of wideband data transmission equipment:	DTS

Table 4: RF Channel and Frequency of 2.4GHz SDR

2.4GHz 1.4MHz Bandwidth (2403.5MHz-2469.5MHz)			
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	2403.5	18	2437.5
2	2405.5	19	2439.5
3	2407.5	20	2441.5
4	2409.5	21	2443.5
5	2411.5	22	2445.5
6	2413.5	23	2447.5
7	2415.5	24	2449.5
8	2417.5	25	2451.5
9	2419.5	26	2453.5
10	2421.5	27	2455.5

11	2423.5	28	2457.5
12	2425.5	29	2459.5
13	2427.5	30	2461.5
14	2429.5	31	2463.5
15	2431.5	32	2465.5
16	2433.5	33	2467.5
17	2435.5	34	2469.5

2.4GHz 1.4MHz Bandwidth (CA Mode) (2405.12MHz-2471.12MHz)			
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	2405.12	18	2439.12
2	2407.12	19	2441.12
3	2409.12	20	2443.12
4	2411.12	21	2445.12
5	2413.12	22	2447.12
6	2415.12	23	2449.12
7	2417.12	24	2451.12
8	2419.12	25	2453.12
9	2421.12	26	2455.12
10	2423.12	27	2457.12
11	2425.12	28	2459.12
12	2427.12	29	2461.12
13	2429.12	30	2463.12
14	2431.12	31	2465.12
15	2433.12	32	2467.12
16	2435.12	33	2469.12
17	2437.12	34	2471.12

2.4GHz 3MHz Bandwidth (2405.5MHz-2468.5MHz)			
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	2405.5	12	2438.5
2	2408.5	13	2441.5
3	2411.5	14	2444.5
4	2414.5	15	2447.5
5	2417.5	16	2450.5
6	2420.5	17	2453.5
7	2423.5	18	2456.5
8	2426.5	19	2459.5
9	2429.5	20	2462.5
10	2432.5	21	2465.5
11	2435.5	22	2468.5

2.4GHz 3MHz Bandwidth (CA Mode)

(2408.2MHz-2471.2MHz)					
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	2408.2	9	2432.2	17	2456.2
2	2411.2	10	2435.2	18	2459.2
3	2414.2	11	2438.2	19	2462.2
4	2417.2	12	2441.2	20	2465.2
5	2420.2	13	2444.2	21	2468.2
6	2423.2	14	2447.2	22	2471.2
7	2426.2	15	2450.2	/	/
8	2429.2	16	2453.2	/	/

2.4GHz 10MHz Bandwidth (2407.5MHz-2467.5MHz)					
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	2407.5	22	2428.5	43	2449.5
2	2408.5	23	2429.5	44	2450.5
3	2409.5	24	2430.5	45	2451.5
4	2410.5	25	2431.5	46	2452.5
5	2411.5	26	2432.5	47	2453.5
6	2412.5	27	2433.5	48	2454.5
7	2413.5	28	2434.5	49	2455.5
8	2414.5	29	2435.5	50	2456.5
9	2415.5	30	2436.5	51	2457.5
10	2416.5	31	2437.5	52	2458.5
11	2417.5	32	2438.5	53	2459.5
12	2418.5	33	2439.5	54	2460.5
13	2419.5	34	2440.5	55	2461.5
14	2420.5	35	2441.5	56	2462.5
15	2421.5	36	2442.5	57	2463.5
16	2422.5	37	2443.5	58	2464.5
17	2423.5	38	2444.5	59	2465.5
18	2424.5	39	2445.5	60	2466.5
19	2425.5	40	2446.5	61	2467.5
20	2426.5	41	2447.5	/	/
21	2427.5	42	2448.5	/	/

2.4GHz 20MHz Bandwidth (2412.5MHz-2462.5MHz)					
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	2412.5	18	2429.5	35	2446.5
2	2413.5	19	2430.5	36	2447.5
3	2414.5	20	2431.5	37	2448.5
4	2415.5	21	2432.5	38	2449.5

5	2416.5	22	2433.5	39	2450.5
6	2417.5	23	2434.5	40	2451.5
7	2418.5	24	2435.5	41	2452.5
8	2419.5	25	2436.5	42	2453.5
9	2420.5	26	2437.5	43	2454.5
10	2421.5	27	2438.5	44	2455.5
11	2422.5	28	2439.5	45	2456.5
12	2423.5	29	2440.5	46	2457.5
13	2424.5	30	2441.5	47	2458.5
14	2425.5	31	2442.5	48	2459.5
15	2426.5	32	2443.5	49	2460.5
16	2427.5	33	2444.5	50	2461.5
17	2428.5	34	2445.5	51	2462.5

2.4GHz 40MHz Bandwidth (2422.5MHz-2452.5MHz)					
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	2422.5	12	2433.5	23	2444.5
2	2423.5	13	2434.5	24	2445.5
3	2424.5	14	2435.5	25	2446.5
4	2425.5	15	2436.5	26	2447.5
5	2426.5	16	2437.5	27	2448.5
6	2427.5	17	2438.5	28	2449.5
7	2428.5	18	2439.5	29	2450.5
8	2429.5	19	2440.5	30	2451.5
9	2430.5	20	2441.5	31	2452.5
10	2431.5	21	2442.5	/	/
11	2432.5	22	2443.5	/	/

Table 5: RF Channel and Frequency of 2.4GHz Wi-Fi

RF Channel	802.11 b/g/n(HT20)/ax(HE20)	802.11 n(HT40)/ax(HE40)
	Frequency (MHz)	Frequency (MHz)
01	**2412**	**/**
02	2417	/
03	2422	**2422**
04	2427	2427
05	2432	2432
06	**2437**	**2437**
07	2442	2442
08	2447	2447
09	2452	**2452**
10	2457	/
11	**2462**	**/**

3.3 Independent Operation Modes

The basic operation modes are:

A. On, 2.4GHz SDR wireless transmitting mode
   1) Low Channel
   2) Middle Channel
   3) High Channel

B. On, 2.4GHz Wi-Fi wireless transmitting mode
   1) Low Channel
   2) Middle Channel
   3) High Channel

C. On, Normal operation + Charging

D. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- ID Label and Location Info
- User Manual
- Operation Description

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 testing were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model TX5 in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 6: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	Remark
Portable Laptop	Lenovo	ThinkPad T480	SN: 10Q67059
Signal Cable	DJI	/	Type C to Type C, 0.3m
Signal Cable	DJI	/	BNC to BNC, 0.5m
DJI Transmission Air	DJI	RX5	SN: 7GZDLA40010264
Earphone	DJI	/	/
Smartphone	HUAWEI	/	/
Laptop	Lenovo	T480	SN: PF-16A6N8
AC/DC Adapter	/	PD-30CN	Input: 100-240V, 50/60Hz, 0.8A Max Output: 3.3-11V, 2.72A or 5V/3A or 9V/3A or 12V/2.5A or 15V/2A

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)

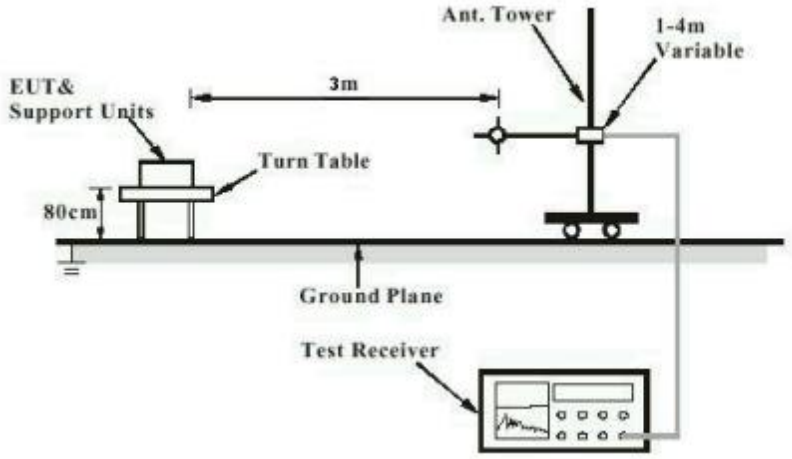


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

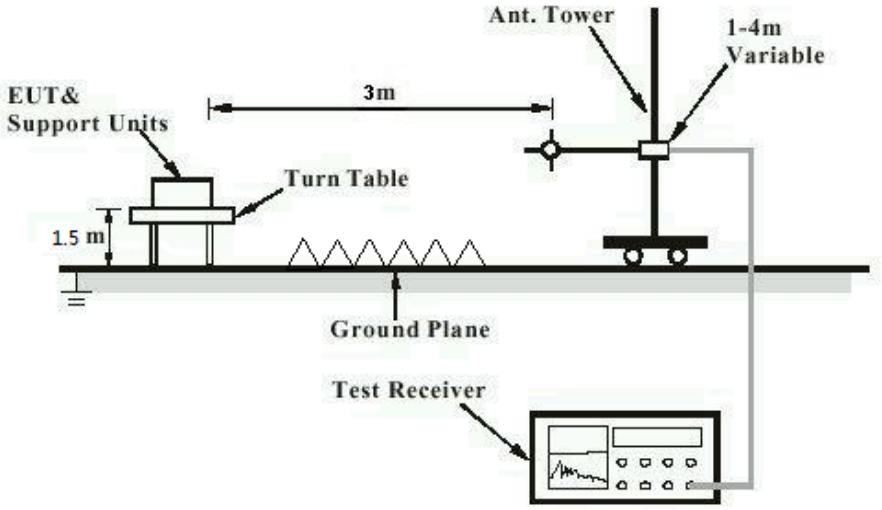


Diagram of Measurement Configuration for Mains Conduction Measurement

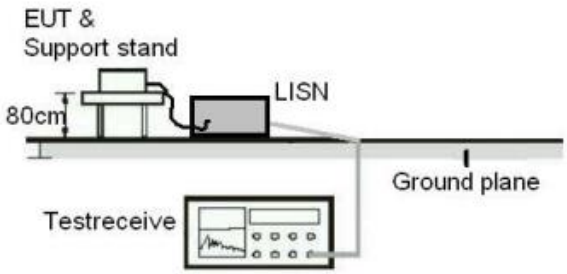
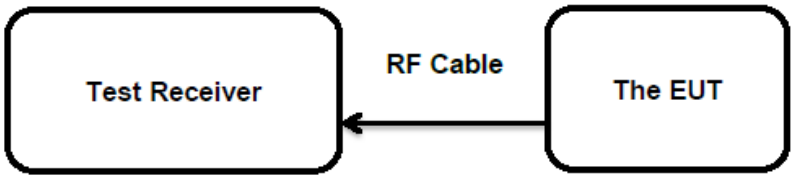


Diagram of Measurement Configuration for Conducted Transmitter Measurement



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
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

The EUT have Integral Antennas, the max. antenna gain antenna is 4.45dBi for 2.4GHz SDR and 3.32dBi for 2.4GHz Wi-Fi, permanent attachment and no consideration of replacement..

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)(3)
Basic standard	:	ANSI C63.10: 2013
Limits	:	< 1 W (Maximum Conducted Peak Power)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-01-23 to 2024-02-06
Input voltage	:	DC 7.4V by battery
Operation mode	:	A, B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 7: Test Result of Maximum Conducted Output Power, 2.4GHz Wi-Fi

Worst case: SISO mode (ANT 0)

Test Mode	Data Rate	Test Channel (MHz)	Measured Peak Power		Limit (W)
			(dBm)	(W)	
802.11b	1 Mbps	2412	23.14	0.2061	< 1.0
		2437	24.21	0.2636	
		2462	23.83	0.2415	
802.11g	6 Mbps	2412	27.40	0.5495	
		2437	27.67	0.5848	
		2462	27.44	0.5546	

Worst case: MIMO mode (ANT0+3)

Test Mode	Data Rate	Test Channel (MHz)	Measured Peak Power		Limit (W)
			(dBm)	(W)	
802.11n (HT20)	MCS0	2412	27.85	0.6095	< 1.0
		2437	28.23	0.6653	
		2462	28.17	0.6561	
802.11n (HT40)	MCS0	2422	27.54	0.5675	
		2437	27.51	0.5636	
		2452	27.51	0.5636	
802.11ax (HE20)	MCS0	2412	28.57	0.7194	
		2437	**29.08**	**0.8091**	
		2462	28.75	0.7499	
802.11ax (HE40)	MCS0	2422	27.98	0.6281	
		2437	28.03	0.6353	
		2452	28.02	0.6339	

Table 8: Test Result of Maximum Conducted Output Power, 2.4GHz SDR

Test Mode	Test Channel (MHz)	Measured Average Power (MIMO mode_ANT0+3)		Limit (W)
		(dBm)	(W)	
1.4MHz BW	2403.5	14.59	0.0288	< 1.0
	2435.5	14.95	0.0313	
	2469.5	14.94	0.0312	
1.4MHz BW CA	2405.12	14.83	0.0304	
	2437.12	14.69	0.0294	
	2471.12	14.89	0.0308	
3MHz BW	2405.5	14.88	0.0308	
	2435.5	14.73	0.0297	
	2468.5	15.15	0.0327	
3MHz BW CA	2408.2	14.97	0.0314	
	2438.2	14.72	0.0296	
	2471.2	14.93	0.0311	
10MHz BW	2407.5	24.65	0.2917	
	2437.5	25.36	0.3436	
	2467.5	24.93	0.3112	
20MHz BW	2412.5	24.05	0.2541	
	2437.5	**25.60**	**0.3631**	
	2460.5	22.86	0.1932	
	2462.5	22.13	0.1633	
40MHz BW	2422.5	20.83	0.1211	
	2425.5	21.69	0.1476	
	2437.5	24.40	0.2754	
	2448.5	21.58	0.1439	
	2452.5	20.73	0.1183	

Note:

1) The cable loss is taken into account in results, e.i.r.p.=$P_{(Peak\ power)}$+ G

5.1.3 Conducted Power Spectral Density

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(e)
Basic standard	:	ANSI C63.10: 2013
Limits	:	8 dBm / 3kHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-01-23 to 2024-02-06
Input voltage	:	DC 7.4V by battery
Operation mode	:	A, B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A, B.

5.1.4 6dB Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)(2)
Basic standard	:	ANSI C63.10: 2013
Limits	:	> 500 KHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-01-23 to 2024-02-06
Input voltage	:	DC 7.4V by battery
Operation mode	:	A, B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A, B.

5.1.5 99% Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-01-23 to 2024-02-06
Input voltage	:	DC 7.4V by battery
Operation mode	:	A, B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A, B.

5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d)
Basic standard	:	ANSI C63.10: 2013
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	:	2024-01-23 to 2024-02-06
Input voltage	:	DC 7.4V by battery
Operation mode	:	A, B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
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, B.

5.1.7 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) & FCC Part 15.205
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d)
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	2024-01-25 to 2024-02-05
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A, B
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 configuration of the each mode were reported.

For the measurement records, refer to the appendix A, B.

5.1.8 Conducted Emission on AC Mains

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.207(a)
Basic standard	:	ANSI C63.10: 2013
Frequency range	:	0.15 – 30MHz
Classification	:	Class B
Limits	:	FCC Part 15.207(a)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2023-12-14
Input voltage	:	AC 120V, 60Hz
Operation mode	:	C
Earthing	:	Not connected
Ambient temperature	:	23.3 ℃
Relative humidity	:	50.8 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A, B.

6 Photographs of the Test Set-Up

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

7 List of Tables