Prüfbericht-Nr.: *Test report no.*:	**CN24ZS14 004**	**Auftrags-Nr.:** *Order no.*:	168484699	Seite 1 von 25 *Page 1 of 25*
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2024-05-20	
Auftraggeber: *Client*:	SZ DJI TECHNOLOGY CO., LTD Lobby of T2, DJI Sky City, No. 53 Xianyuan Road, Xili Community, Xili Street, Nanshan District, Shenzhen, China.			
Prüfgegenstand: *Test item*:	Remote control			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	RC520 (Trademark: DJI)			
Auftrags-Inhalt: *Order content*:	Test Report			
Prüfgrundlage: *Test specification*:	CFR47 FCC Part 15: Subpart E Section 15.407			

Wareneingangsdatum: *Date of sample receipt*:	2024-06-17	Please refer to Photo Document
Prüfmuster-Nr.: *Test sample no:*	A003743309-001~004	
Prüfzeitraum: *Testing period*:	2024-07-02 - 2024-07-14	
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:* 2024-11-19		**Ausstellungsdatum:** *Issue date:* 2024-11-19	
Stellung / Position:	Sachverständige(r)/Expert	**Stellung** / Position:	Sachverständige(r)/Expert

Sonstiges / *Other*:	FCC ID: SS3-RC5202410 This report is for 5.2GHz SDR and 5.2GHz 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.*
2	Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature *As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature*
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 OUTPUT POWER
RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY
RESULT: Pass

5.1.4 FREQUENCY STABILITY
RESULT: Pass

5.1.5 26DB BANDWIDTH AND 99% BANDWIDTH
RESULT: Pass

5.1.6 RADIATED SPURIOUS EMISSION
RESULT: Pass

5.1.7 CONDUCTED EMISSION ON AC MAINS
RESULT: Pass

Contents

1 GENERAL REMARKS 5
1.1 COMPLEMENTARY MATERIALS 5
2 TEST SITES 6
2.1 TEST FACILITIES 6
2.2 LIST OF TEST AND MEASUREMENT INSTRUMENTS 6
2.3 TRACEABILITY 7
2.4 CALIBRATION 7
2.5 MEASUREMENT UNCERTAINTY 7
2.6 LOCATION OF ORIGINAL DATA 8
2.7 STATUS OF FACILITY USED FOR TESTING 8
3 GENERAL PRODUCT INFORMATION 9
3.1 PRODUCT FUNCTION AND INTENDED USE 9
3.2 RATINGS AND SYSTEM DETAILS 9
3.3 INDEPENDENT OPERATION MODES 11
3.4 NOISE GENERATING AND NOISE SUPPRESSING PARTS 11
3.5 SUBMITTED DOCUMENTS 11
4 TEST SET-UP AND OPERATION MODES 12
4.1 PRINCIPLE OF CONFIGURATION SELECTION 12
4.2 TEST OPERATION AND TEST SOFTWARE 12
4.3 SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT 12
4.4 COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE 12
4.5 TEST SETUP DIAGRAM 13
5 TEST RESULTS 15
5.1 TRANSMITTER REQUIREMENT & TEST SUITES 15
5.1.1 Antenna Requirement 15
5.1.2 Maximum Output Power 16
5.1.3 Conducted Power Spectral Density 20
5.1.4 Frequency Stability 21
5.1.5 26dB Bandwidth and 99% Bandwidth 22
5.1.6 Radiated Spurious Emission 23
5.1.7 Conducted Emission on AC Mains 24
6 PHOTOGRAPHS OF THE TEST SET-UP 25
7 LIST OF TABLES 25

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 5.2GHz SDR

Appendix B: Test Results of 5.2GHz 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

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (SRD-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	2024-06-21	2025-06-20
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	ETS-LINDGREN	3117	00218717	2022-08-07	2024-08-06

GHz)					
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	2024-06-21	2025-06-20

Conducted Emission				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
EMI Test Receiver	R&S	ESR3	102680	2025-02-22
Artificial Mains Network	R&S	ENV216	101445	2025-02-22
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 Controller which supports Bluetooth dual mode, 2.4GHz SDR, 2.4GHz Wi-Fi, 5.2/5.8GHz Wi-Fi and 5.2/5.8GHz SDR functions.
*Remark: SDR means specific defined radio and cannot changes radio specification via software/firmware by end-users.

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:	Remote control
Type Designation:	RC520
Trademark:	DJI
FCC ID:	SS3-RC5202410
Operating Voltage:	7.6V DC by built-in battery or AC 100-240V via AC/DC adapter
Testing Voltage:	Fully charged battery
Extreme Temperature Range:	-10ºC to +40ºC
Radiofrequency operating mode:	1) Bluetooth: operating within 2400-2483.5MHz, Classic Bluetooth (BR&EDR), Bluetooth BLE (1Mbps&2Mbps) 2) 2.4GHz SDR: operating within 2400-2483.5MHz, supports 1.4MHz/3MHz/5MHz/10MHz/20MHz/40MHz/60MHz Bandwidth 3) 2.4GHz Wi-Fi: operating within 2400-2483.5MHz, supports 20MHz/40MHz Bandwidth and IEEE 802.11 b/g/n20/n40/ax20/ax40 4) 5.2GHz SDR: operating within 5150-5250MHz, supports 10MHz/20MHz/40MHz/60MHz/80MHz Bandwidth 5) 5.2GHz Wi-Fi: operating with 5150-5250MHz, supports 20MHz/40MHz/80MHz Bandwidth and IEEE 802.11 a/n20/n40/ac20/ac40/ac80/ax20/ax40/ax80 6) 5.8GHz SDR: operating within 5725-5850MHz, supports 1.4MHz/3MHz/5MHz/10MHz/20MHz/40MHz/60MHz/80MHz Bandwidth 7) 5.8GHz Wi-Fi: operating within 5725-5850MHz, supports 20MHz/40MHz/80MHz Bandwidth and IEEE 802.11 a/n20/n40/ac20/ac40/ac80/ax20/ax40/ax80
Technical Specification of 5.2GHz SDR	
Operating Frequency:	5157-5245MHz for 10MHz Bandwidth 5161-5240MHz for 20MHz Bandwidth 5170-5230MHz for 40MHz Bandwidth 5180-5220MHz for 60MHz Bandwidth 5190-5210MHz for 80MHz Bandwidth
Type of Modulation:	OFDM (QPSK, 16QAM, 64QAM, 256QAM,1024QAM,4096QAM)

Channel Number:	239 channels for 10MHz Bandwidth 80 channels for 20MHz Bandwidth 61 channels for 40MHz Bandwidth 41 channels for 60MHz Bandwidth 21 channels for 80MHz Bandwidth
Antenna Type:	Integral Antennas
Antenna Number:	1Tx for SISO mode (ANT0 or ANT1 or ANT4 or ANT5 or ANT6) 2Tx for MIMO mode (ANT0+1 or ANT0+5 or ANT4+1 or ANT4+5 or ANT6+1 or ANT6+5)
Antenna Gain:	0 dBi (Provided by the Client)
The type of wideband data transmission equipment:	DTS
Technical Specification of 5.2GHz Wi-Fi	
Operating Frequency:	5180–5240MHz for 802.11 a/n20/n40/ac20/ac40/ac80/ax20/ax40/ax80
Type of Modulation:	OFDM(BPSK/QPSK/16QAM/64QAM) OFDMA(BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)
Data Rate:	6/9/12/18/24/36/48/54 Mbps for 802.11a MCS0 ~ MCS7 for 802.11n MCS0 ~ MCS9 for 802.11ac MCS0 ~ MCS11 for 802.11ax* *Only Full RU mode supported for 802.11ax.
Channel Number:	4 channels for 802.11a/n20/ac20/ax20 2 channels for 802.11n40/ac40/ax40 1 channels for 802.11ac80/ax80
Channel Separation:	20MHz, 40MHz, 80MHz
Antenna Type:	Integral Antenna
Antenna Number:	1Tx1Rx for SISO mode (ANT0 or ANT1) 2Tx2Rx for MIMO mode (ANT0+ANT1)
Antenna Gain:	-0.5 dBi for ANT0/ANT1 (Provided by the Client)

Table 4: RF Channel and Frequency of 5.2GHz Wi-Fi

U-NII-1					
20MHz Bandwidth		**40MHz Bandwidth**		**80MHz Bandwidth**	
Channel	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**	**Channel**	**Frequency (MHz)**
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

3.3 Independent Operation Modes

The basic operation modes are:

A. On, 5.2GHz SDR wireless transmitting mode
   1) Low Channel
   2) Middle Channel
   3) High Channel

B. On, 5.2GHz Wi-Fi wireless transmitting mode
   1) Low Channel
   2) Middle Channel
   3) High Channel

C. 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 RC520 in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	Remark
Laptop	Lenovo	T480	PF-16A6N8
Portable Laptop	Lenovo	ThinkPad T480	10Q67059
AC/DC Adapter	DJI	PD-65US	Input: 100-240V, 50/60Hz, 2.0A Output (USB-C): 5V/5A or 9V/5A or 12V/5A or 15V/4.5A or 20V/3.25A or 5-20V/3.25A Output (USB-A): 5V/2A Output (USB-A+USB-C): 65W Max

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)

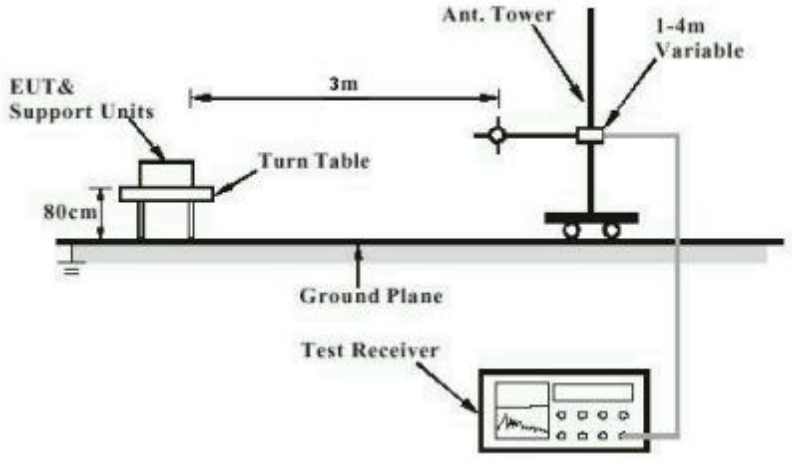


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

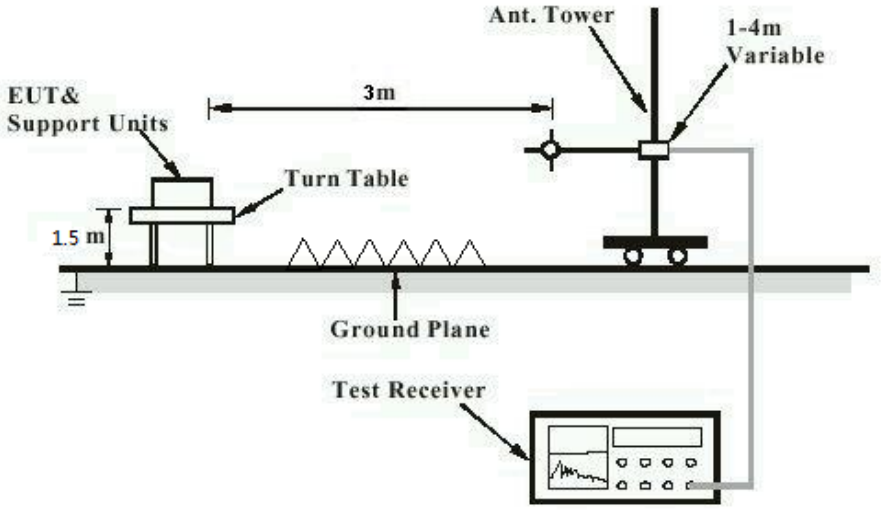


Diagram of Measurement Configuration for Mains Conduction Measurement

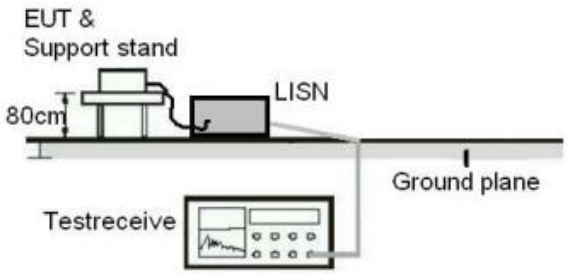
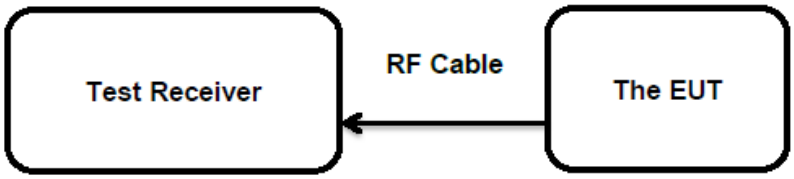


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.203
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT have Integral Antennas, the max. uncorrelated antenna gain is -0.5dBi for 5.2GHz Wi-Fi, 0dBi for 5.2GHz SDR, 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 Output Power

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407 (a)
Basic standard	:	ANSI C63.10: 2013
Limits	:	<250mW (24dBm) (5150-5250MHz)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-07-08 to 2024-07-10
Input voltage	:	Fully charged 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 6: Test Result of Maximum Conducted Output Power, 5.2GHz Wi-Fi

Worst case: SISO mode (ANT 1)

Test Mode	Data Rate	Frequency (MHz)	Measured Average Power		Limit (W)
			(dBm)	(W)	
802.11a	1 Mbps	5180	19.52	0.0895	< 0.25
		5200	19.49	0.0889	
		5240	19.53	0.0897	
802.11n (HT20)	MCS0	5180	19.46	0.0883	
		5200	19.64	0.0920	
		5240	19.78	0.0951	
802.11n (HT40)	MCS0	5190	20.78	0.1197	
		5230	20.68	0.1169	
802.11ac (VHT20)	MCS0	5180	20.31	0.1074	
		5200	20.15	0.1035	
		5240	19.71	0.0935	
802.11ac (VHT40)	MCS0	5190	20.74	0.1186	
		5230	20.66	0.1164	
802.11ac (VHT80)	MCS0	5210	20.93	0.1239	
802.11ax (HE20)	MCS0	5180	20.44	0.1107	
		5200	20.05	0.1012	
		5240	19.60	0.0912	
802.11ax (HE40)	MCS0	5190	20.50	0.1122	
		5230	20.82	0.1208	
802.11ax (HE80)	MCS0	5210	21.01	0.1262	
Maximum Measured Value			**21.01**	**0.1262**	

MIMO mode

Test Mode	Data Rate	Frequency (MHz)	Measured Average Power		Limit (W)
			(dBm)	(W)	
802.11n (HT20)	MCS0	5180	19.62	0.0916	< 0.25
		5200	19.47	0.0885	
		5240	19.45	0.0881	
802.11n (HT40)	MCS0	5190	20.63	0.1156	
		5230	20.64	0.1159	
802.11ac (VHT20)	MCS0	5180	19.49	0.0889	
		5200	19.49	0.0889	
		5240	19.44	0.0879	
802.11ac (VHT40)	MCS0	5190	20.72	0.1180	
		5230	20.50	0.1122	
802.11ac (VHT80)	MCS0	5210	20.65	0.1161	
802.11ax (HE20)	MCS0	5180	19.86	0.0968	
		5200	19.76	0.0946	
		5240	19.67	0.0927	
802.11ax (HE40)	MCS0	5190	20.95	0.1245	
		5230	20.75	0.1189	
802.11ax (HE80)	MCS0	5210	20.53	0.1130	
Maximum Measured Value			**20.95**	**0.1245**	

Table 7: Test Result of Maximum Conducted Output Power, 5.2GHz SDR

Worst case: MIMO mode (ANT 2+5)

TestMode	Antenna	Frequency (MHz)	Result[dBm]	Result[W]	Limit[W]	Verdict
10MHz	Ant2	5157	5.97	0.0040	< 0.25	PASS
	Ant5	5157	2.89	0.0019	< 0.25	PASS
	total	5157	7.71	0.0059	< 0.25	PASS
	Ant2	5169	15.54	0.0358	< 0.25	PASS
	Ant5	5169	12.87	0.0194	< 0.25	PASS
	total	5169	17.42	0.0552	< 0.25	PASS
	Ant2	5200	17.64	0.0581	< 0.25	PASS
	Ant5	5200	14.09	0.0256	< 0.25	PASS
	total	5200	19.23	0.0838	< 0.25	PASS
	Ant2	5245	17.04	0.0506	< 0.25	PASS
	Ant5	5245	14.85	0.0305	< 0.25	PASS
	total	5245	19.09	0.0811	< 0.25	PASS
20MHz	Ant2	5161	6.20	0.0042	< 0.25	PASS
	Ant5	5161	3.70	0.0023	< 0.25	PASS
	total	5161	8.14	0.0065	< 0.25	PASS
	Ant2	5169	15.42	0.0348	< 0.25	PASS
	Ant5	5169	12.75	0.0188	< 0.25	PASS
	total	5169	17.30	0.0537	< 0.25	PASS
	Ant2	5200	17.78	0.0600	< 0.25	PASS
	Ant5	5200	14.21	0.0264	< 0.25	PASS
	total	5200	19.36	0.0863	< 0.25	PASS
	Ant2	5240	17.10	0.0513	< 0.25	PASS
	Ant5	5240	14.96	0.0313	< 0.25	PASS
	total	5240	19.17	0.0826	< 0.25	PASS
40MHz	Ant2	5170	9.69	0.0093	< 0.25	PASS
	Ant5	5170	6.63	0.0046	< 0.25	PASS
	total	5170	11.43	0.0139	< 0.25	PASS
	Ant2	5186	14.85	0.0305	< 0.25	PASS
	Ant5	5186	12.11	0.0163	< 0.25	PASS
	total	5186	16.70	0.0468	< 0.25	PASS
	Ant2	5200	17.38	0.0547	< 0.25	PASS
	Ant5	5200	15.02	0.0318	< 0.25	PASS
	total	5200	19.37	0.0865	< 0.25	PASS
	Ant2	5230	17.18	0.0522	< 0.25	PASS
	Ant5	5230	15.67	0.0369	< 0.25	PASS
	total	5230	19.50	0.0891	< 0.25	PASS
60MHz	Ant2	5180	12.14	0.0164	< 0.25	PASS
	Ant5	5180	8.46	0.0070	< 0.25	PASS
	total	5180	13.69	0.0234	< 0.25	PASS
	Ant2	5185	14.85	0.0305	< 0.25	PASS
	Ant5	5185	11.99	0.0158	< 0.25	PASS
	total	5185	16.66	0.0463	< 0.25	PASS
	Ant2	5200	17.70	0.0589	< 0.25	PASS
	Ant5	5200	13.93	0.0247	< 0.25	PASS
	total	5200	19.22	0.0836	< 0.25	PASS
	Ant2	5220	17.42	0.0552	< 0.25	PASS
	Ant5	5220	15.52	0.0356	< 0.25	PASS
	total	5220	**19.58**	**0.0908**	< 0.25	PASS
80MHz	Ant2	5190	12.25	0.0168	< 0.25	PASS
	Ant5	5190	8.66	0.0073	< 0.25	PASS
	total	5190	13.83	0.0242	< 0.25	PASS
	Ant2	5192	13.50	0.0224	< 0.25	PASS

	Ant5	5192	9.67	0.0093	< 0.25	PASS
	total	5192	15.00	0.0316	< 0.25	PASS
	Ant2	5200	15.61	0.0364	< 0.25	PASS
	Ant5	5200	12.66	0.0185	< 0.25	PASS
	total	5200	17.39	0.0548	< 0.25	PASS
	Ant2	5210	17.42	0.0552	< 0.25	PASS
	Ant5	5210	14.99	0.0316	< 0.25	PASS
	total	5210	19.38	0.0867	< 0.25	PASS

Note:

1) The cable loss is taken into account in results, e.i.r.p.=$P_{(Peak\ power)}$+ G
2) Antenna gain(G) of 5.2GHz Wi-Fi : -0.5dBi
   Antenna gain(G) of 5.2GHz SDR: 0dBi (uncorrelated antenna gain)

5.1.3 Conducted Power Spectral Density

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407 (a)
Basic standard	:	ANSI C63.10: 2013
Limits	:	<11dBm/MHz (5150-5250MHz)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-07-08 to 2024-07-10
Input voltage	:	Fully charged 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 Frequency Stability

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407 (g)
Basic standard	:	ANSI C63.10: 2013
Limits	:	Within assigned bands
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-07-08 to 2024-07-10
Input voltage	:	Fully charged 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 26dB Bandwidth and 99% Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407
Basic standard	:	ANSI C63.10: 2013
Limits	:	N/A
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-07-08 to 2024-07-10
Input voltage	:	Fully charged 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 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407(b) & FCC Part 15.205 & FCC Part 15.209
Basic standard	:	ANSI C63.10: 2013
Limits	:	• For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz. • Restricted Bands meet the requirement of 15.209 limit
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	2024-07-04 to 2024-07-14
Input voltage	:	Fully charged battery
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.

5.1.7 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	:	2024-07-02
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A, B
Earthing	:	Not connected
Ambient temperature	:	23.4 ℃
Relative humidity	:	51.2 %
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

Table 1: List of Test and Measurement Equipment.....6
Table 2: Measurement Uncertainty 7
Table 3: Technical Specification of EUT.....9
Table 4: RF Channel and Frequency of 5.2GHz Wi-Fi.....10
Table 5: List of Accessories and Auxiliary Equipment.....12
Table 6: Test Result of Maximum Conducted Output Power, 5.2GHz Wi-Fi.....17
Table 7: Test Result of Maximum Conducted Output Power, 5.2GHz SDR.....18