

Prüfbericht-Nr.: <i>Test report no.:</i>	CN24ZS14 005	Auftrags-Nr.: <i>Order no.:</i>	168484699	Seite 1 von 25 <i>Page 1 of 25</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2024-05-20	
Auftraggeber: <i>Client:</i>	SZ DJI TECHNOLOGY CO., LTD Lobby of T2, DJI Sky City, No. 53 Xianyuan Road, Xili Community, Xili Street, Nanshan District, Shenzhen, China.			
Prüfgegenstand: <i>Test item:</i>	Remote control			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	RC520 (Trademark: DJI)			
Auftrags-Inhalt: <i>Order content:</i>	Test Report			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart E Section 15.407			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2024-06-17	Please refer to Photo Document		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003743309-001~004			
Prüfzeitraum: <i>Testing period:</i>	2024-07-02 - 2024-07-14			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>			genehmigt von: <i>authorized by:</i>	
Datum: <i>Date:</i>	2024-11-19	Signed by: Bell Hu	Ausstellungsdatum: <i>Issue date:</i>	2024-11-19
			Signed by: Jonathan Li	
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert
Sonstiges / <i>Other:</i>	FCC ID: SS3-RC5202410 This report is for 5.8GHz SDR and 5.8GHz Wi-Fi.			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* 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
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Anmerkungen
Remarks

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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 115:2021, 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 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 115:2021, 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.</i>

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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 6dB BANDWIDTH

RESULT: Pass

5.1.6 99% BANDWIDTH

RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.8 CONDUCTED EMISSION ON AC MAINS

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 5.8GHz SDR

Appendix B: Test Results of 5.8GHz 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

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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 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 (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

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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:	-10°C to +40°C
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 5.8GHz SDR	
Operating Frequency:	5728.5-5846.12MHz for 1.4MHz Bandwidth 5727.5-5847.2MHz for 3MHz Bandwidth 5732.5-5842.5MHz for 5MHz Bandwidth 5730.5-5844.5MHz for 10MHz Bandwidth 5735.5-5839.5MHz for 20MHz Bandwidth 5745.5-5829.5MHz for 40MHz Bandwidth 5755.5-5819.5MHz for 60MHz Bandwidth

	5765.5-5809.5MHz for 80MHz Bandwidth
Type of Modulation:	OFDM (QPSK, 16QAM, 64QAM, 256QAM,1024QAM,4096QAM)
Channel Number:	194 channels for 1.4MHz Bandwidth 126 channels for 3MHz Bandwidth 229 channels for 5MHz Bandwidth 317 channels for 10MHz Bandwidth 105 channels for 20MHz Bandwidth 85 channels for 40MHz Bandwidth 65 channels for 60MHz Bandwidth 45 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:	1.5 dBi Max (Provided by the Client)
The type of wideband data transmission equipment:	DTS
Technical Specification of 5.8GHz Wi-Fi	
Operating Frequency:	5745–5825MHz 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:	5 channels for 802.11a/n20/ac20/ax20 2 channels for 802.11n40/ac40/ax40 1 channel 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:	2.0 dBi Max(Provided by the Client)

Table 4: RF Channel and Frequency of 5.8GHz Wi-Fi

U-NII-3					
20MHz Bandwidth		40MHz Bandwidth		80MHz Bandwidth	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, 5.8GHz SDR wireless transmitting mode
 - 1) Low Channel
 - 2) Middle Channel
 - 3) High Channel
- B. On, 5.8GHz 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
- User Manual
- ID Label and Location Info
- 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)

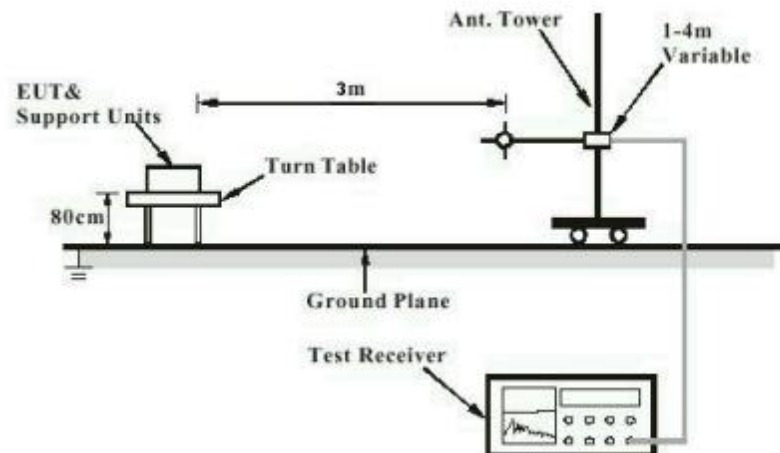


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

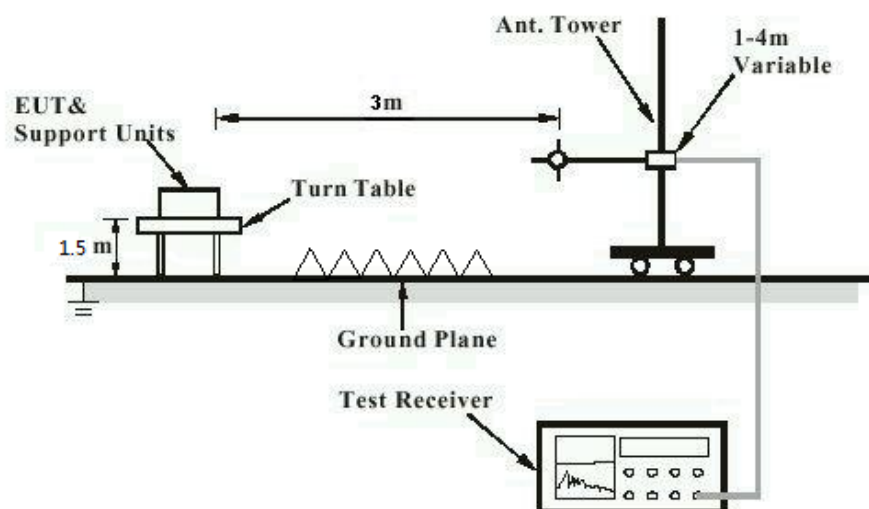


Diagram of Measurement Configuration for Mains Conduction Measurement

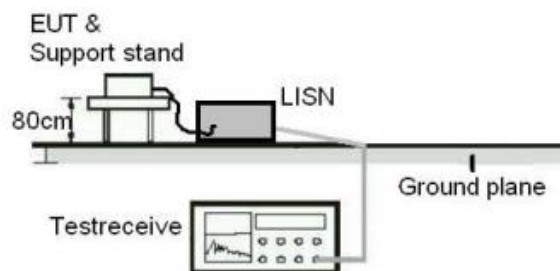
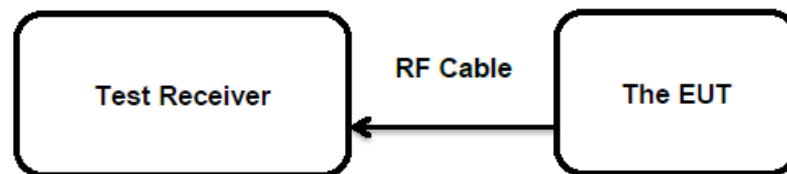


Diagram of Measurement Configuration for Conducted Transmitter Measurement



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 antenna is 2.0dBi for 5.8GHz Wi-Fi, 1.5dBi for 5.8GHz 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 : <1W (30dBm) (5725-5850MHz)
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-07-05
Input voltage : Fully charged battery
Operation mode : A, B
Test channel : Low / Middle / High
Ambient temperature : 25 °C
Relative humidity : 45 %
Atmospheric pressure : 101 kPa

For details refer to following test result.

Table 6: Test Result of Maximum Conducted Output Power, 5.8GHz Wi-Fi

Worst case: SISO mode (ANT 1)

Test Mode	Data Rate	Test Channel (MHz)	Measured Average Power		Limit (W)
			(dBm)	(W)	
802.11a	1 Mbps	5745	21.00	0.1259	< 1.0
		5785	20.56	0.1138	
		5825	18.55	0.0716	
802.11n (HT20)	MCS0	5745	20.95	0.1245	
		5785	20.69	0.1172	
		5825	20.98	0.1253	
802.11n (HT40)	MCS0	5755	20.71	0.1178	
		5795	18.67	0.0736	
802.11ac (VHT20)	MCS0	5745	20.80	0.1202	
		5785	20.69	0.1172	
		5825	20.58	0.1143	
802.11ac (VHT40)	MCS0	5755	20.60	0.1148	
		5795	19.01	0.0796	
802.11ac (VHT80)	MCS0	5775	20.58	0.1143	
802.11ax (HE20)	MCS0	5745	20.96	0.1247	
		5785	20.77	0.1194	
		5825	20.83	0.1211	
802.11ax (HE40)	MCS0	5755	20.93	0.1239	
		5795	19.03	0.0800	
802.11ax (HE80)	MCS0	5775	20.52	0.1127	
Maximum Measured Value			21.00	0.1259	

MIMO mode

Test Mode	Data Rate	Test Channel (MHz)	Measured Average Power		Limit (W)
			(dBm)	(W)	
802.11n (HT20)	MCS0	5745	20.82	0.1208	< 1.0
		5785	20.55	0.1135	
		5825	20.79	0.1199	
802.11n (HT40)	MCS0	5755	20.82	0.1208	
		5795	18.96	0.0787	
802.11ac (VHT20)	MCS0	5745	20.58	0.1143	
		5785	20.58	0.1143	
		5825	20.69	0.1172	
802.11ac (VHT40)	MCS0	5755	20.86	0.1219	
		5795	19.04	0.0802	
802.11ac (VHT80)	MCS0	5775	20.64	0.1159	
802.11ax (HE20)	MCS0	5745	20.98	0.1253	
		5785	20.75	0.1189	
		5825	21.06	0.1276	
802.11ax (HE40)	MCS0	5755	20.67	0.1167	
		5795	18.67	0.0736	
802.11ax (HE80)	MCS0	5775	20.52	0.1127	
Maximum Measured Value			21.06	0.1276	

Table 7: Test Result of Maximum Conducted Output Power, 5.8GHz SDR

Worst case: MIMO mode (ANT 3+6)

TestMode	Antenna	Channel	Result[dBm]	Result[W]	Limit[W]	Verdict
1.4MHz	Ant3	5728.5	26.90	0.4898	< 1.0	PASS
	Ant6	5728.5	20.99	0.1256	< 1.0	PASS
	total	5728.5	27.89	0.6152	< 1.0	PASS
	Ant3	5784.5	26.83	0.4819	< 1.0	PASS
	Ant6	5784.5	21.40	0.1380	< 1.0	PASS
	total	5784.5	27.92	0.6194	< 1.0	PASS
	Ant3	5846.12	24.82	0.3034	< 1.0	PASS
	Ant6	5846.12	24.61	0.2891	< 1.0	PASS
	total	5846.12	27.73	0.5929	< 1.0	PASS
3MHz	Ant3	5727.5	26.90	0.4898	< 1.0	PASS
	Ant6	5727.5	20.63	0.1156	< 1.0	PASS
	total	5727.5	27.82	0.6053	< 1.0	PASS
	Ant3	5784.5	26.69	0.4667	< 1.0	PASS
	Ant6	5784.5	21.26	0.1337	< 1.0	PASS
	total	5784.5	27.78	0.5998	< 1.0	PASS
	Ant3	5847.2	25.26	0.3357	< 1.0	PASS
	Ant6	5847.2	24.62	0.2897	< 1.0	PASS
	total	5847.2	27.96	0.6252	< 1.0	PASS
5MHz	Ant3	5732.5	27.11	0.5140	< 1.0	PASS
	Ant6	5732.5	20.58	0.1143	< 1.0	PASS
	total	5732.5	27.98	0.6281	< 1.0	PASS
	Ant3	5787.5	26.91	0.4909	< 1.0	PASS
	Ant6	5787.5	21.40	0.1380	< 1.0	PASS
	total	5787.5	27.99	0.6295	< 1.0	PASS
	Ant3	5842.5	25.41	0.3475	< 1.0	PASS
	Ant6	5842.5	23.91	0.2460	< 1.0	PASS
	total	5842.5	27.73	0.5929	< 1.0	PASS

10MHz	Ant3	5730.5	27.48	0.5598	< 1.0	PASS
	Ant6	5730.5	21.68	0.1472	< 1.0	PASS
	total	5730.5	28.49	0.7063	< 1.0	PASS
	Ant3	5787.5	27.09	0.5117	< 1.0	PASS
	Ant6	5787.5	22.45	0.1758	< 1.0	PASS
	total	5787.5	28.37	0.6871	< 1.0	PASS
	Ant3	5844.5	25.82	0.3819	< 1.0	PASS
	Ant6	5844.5	24.86	0.3062	< 1.0	PASS
20MHz	total	5844.5	28.38	0.6887	< 1.0	PASS
	Ant3	5735.5	27.31	0.5383	< 1.0	PASS
	Ant6	5735.5	21.68	0.1472	< 1.0	PASS
	total	5735.5	28.36	0.6855	< 1.0	PASS
	Ant3	5787.5	27.16	0.5200	< 1.0	PASS
	Ant6	5787.5	22.07	0.1611	< 1.0	PASS
	total	5787.5	28.33	0.6808	< 1.0	PASS
	Ant3	5839.5	25.35	0.3428	< 1.0	PASS
40MHz	Ant6	5839.5	23.42	0.2198	< 1.0	PASS
	total	5839.5	27.50	0.5623	< 1.0	PASS
	Ant3	5745.5	22.42	0.1746	< 1.0	PASS
	Ant6	5745.5	15.02	0.0318	< 1.0	PASS
	total	5745.5	23.15	0.2065	< 1.0	PASS
	Ant3	5787.5	24.76	0.2992	< 1.0	PASS
	Ant6	5787.5	17.19	0.0524	< 1.0	PASS
	total	5787.5	25.46	0.3516	< 1.0	PASS
60MHz	Ant3	5829.5	21.33	0.1358	< 1.0	PASS
	Ant6	5829.5	15.64	0.0366	< 1.0	PASS
	total	5829.5	22.37	0.1726	< 1.0	PASS
	Ant3	5755.5	22.90	0.1950	< 1.0	PASS
	Ant6	5755.5	15.13	0.0326	< 1.0	PASS
	total	5755.5	23.57	0.2275	< 1.0	PASS
	Ant3	5787.5	23.28	0.2128	< 1.0	PASS
	Ant6	5787.5	15.71	0.0372	< 1.0	PASS
80MHz	total	5787.5	23.98	0.2500	< 1.0	PASS
	Ant3	5819.5	22.91	0.1954	< 1.0	PASS
	Ant6	5819.5	16.60	0.0457	< 1.0	PASS
	total	5819.5	23.82	0.2410	< 1.0	PASS
	Ant3	5765.5	22.87	0.1936	< 1.0	PASS
	Ant6	5765.5	15.41	0.0348	< 1.0	PASS
	total	5765.5	23.59	0.2286	< 1.0	PASS
	Ant3	5787.5	23.21	0.2094	< 1.0	PASS
	Ant6	5787.5	15.31	0.0340	< 1.0	PASS
	total	5787.5	23.86	0.2432	< 1.0	PASS
	Ant3	5809.5	23.04	0.2014	< 1.0	PASS
	Ant6	5809.5	15.86	0.0385	< 1.0	PASS
	total	5809.5	23.80	0.2399	< 1.0	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 5.8GHz Wi-Fi : 2.0dBi
Antenna gain(G) of 5.8GHz SDR: 3.0dBi (uncorrelated antenna gain)

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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	: <30dBm/500KHz (5725-5850MHz)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2024-07-05
Input voltage	: Fully charged battery
Operation mode	: A, B
Test channel	: Low / Middle / High
Ambient temperature	: 25 °C
Relative humidity	: 45 %
Atmospheric pressure	: 101 kPa

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

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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 : 2024-07-05
Input voltage : Fully charged battery
Operation mode : A, B
Test channel : Low / Middle / High
Ambient temperature : 25 °C
Relative humidity : 45 %
Atmospheric pressure : 101 kPa

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

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5.1.5 6dB Bandwidth

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.407 (e)
Basic standard : ANSI C63.10: 2013
Limits : At least 500KHz (5725-5850MHz)
Kind of test site : Shielded Room

Test Setup

Date of testing : 2024-07-05
Input voltage : Fully charged battery
Operation mode : A, B
Test channel : Low / Middle / High
Ambient temperature : 25 °C
Relative humidity : 45 %
Atmospheric pressure : 101 kPa

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

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5.1.6 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 : 2024-07-05
Input voltage : Fully charged battery
Operation mode : A, B
Test channel : Low / Middle / High
Ambient temperature : 25 °C
Relative humidity : 45 %
Atmospheric pressure : 101 kPa

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

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5.1.7 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 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge. • 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.

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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	: 2024-07-02
Input voltage	: AC 120V, 60Hz
Operation mode	: A, B
Earthing	: Not connected
Ambient temperature	: 23.4 °C
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.

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