

Prüfbericht-Nr.: <i>Test report no.:</i>	CN233GYW 001	Auftrags-Nr.: <i>Order no.:</i>	168386953	Seite 1 von 26 <i>Page 1 of 26</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2022-08-17	
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>	DJI DOCK			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	DOCK-01 (Trademark: DJI)			
Auftrags-Inhalt: <i>Order content:</i>	Test Report			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2023-02-13	Please refer to photo documents		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003433343-002 A003412839-001~002			
Prüfzeitraum: <i>Testing period:</i>	2023-02-20 - 2023-03-28			
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> 2023-05-08	Signed by: Breeze Jiang	Ausstellungsdatum: <i>Issue date:</i> 2023-05-08	Signed by: Lin Lin	
Stellung / Position:	Sachverständige(r)/Expert	Stellung / Position:	Sachverständige(r)/Expert	
Sonstiges / <i>Other:</i>	FCC ID: SS3-DOCK2212 This report is for 2.4GHz SDR.			
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
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>				

V05

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

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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 2.4GHz SDR

Appendix B: Photographs of the Test Set-up

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

362 Huanguan Road Middle Longhua District, Shenzhen 518110 People's Republic of China

FCC Registration No.: 694916

ISED wireless device testing laboratory: 25069

A2LA Certificate Number: 5162.01

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. until
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	2023-10-10
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	2023-10-10
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	2023-10-10
DC power supply	Keysight	E3642A	MY61276100	2023-10-10
Power Control Unit	Tonscend	JS0806-4ADC	N/A	2023-10-10
Automation Control Unit	Tonscend	JS0806-2	21C8060396	2023-10-10
Test Software	Tonscend	JS1120-3	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	Y LX23JMF	N/A
Shielding Room 8#	Albatross	SR8	APC17151-SR8	2024-06-22
Unwanted Emission Testing (TS9975)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	R&S	ESR 7	102021	2023-08-02
Signal Analyzer	R&S	FSV 40	101439	2023-08-01
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	2023-08-01
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2023-08-02
Amplifier	R&S	SCU-18F	180070	2023-08-02
Amplifier	R&S	SCU40A	100475	2023-08-02
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-08-06
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2024-08-06
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2024-08-27
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2023-08-06
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A

Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-06-22

Conducted Emission on AC Mains				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR3	102428	2023-07-31
Artificial Mains Network	R&S	ENV216	102333	2023-08-01
Impedance Stabilisation Network	R&S	ENY81-CA6	101810	2023-08-01
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.

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
Radiated Emission of Transmitter, valid up to 26.5 GHz	± 4.17 dB
Radiated Emission of Receiver, valid up to 26.5 GHz	± 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 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 362 Huanguan Road Middle Longhua District, Shenzhen 518110 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 EUT (Equipment Under Test) is a aircraft dock. It supports 2.4GHz SDR, 5.8GHz SDR and GNSS 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 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	DJI DOCK
Type Designation	DOCK-01
Trademark	DJI
Operating Temperature Range	-35 °C ~ +50 °C
Operating Voltage	AC 100-240V, 50/60Hz, 1500W
Testing Voltage	AC 120V, 60Hz
Radiofrequency operating mode	1) 2.4GHz SDR: operating within 2400-2483.5MHz, supports 1.4MHz/3MHz/10MHz/20MHz/40MHz Bandwidth 2) 5.8GHz SDR: operating within 5725-5850MHz, supports 1.4MHz/3MHz/10MHz/20MHz/40MHz Bandwidth 3) GPS & BDS & Galileo & Glonass (receiver): operating within 1215-1300MHz, 1559-1610MHz
Technical Specification of 2.4GHz SDR	
Operating Frequency	2409.5-2463.5MHz for 1.4MHz Bandwidth 2411.12-2465.12MHz for 1.4MHz Bandwidth (CA mode) 2410.5-2461.5MHz for 3MHz Bandwidth 2413.2-2464.2MHz for 3MHz Bandwidth (CA mode) 2405.5-2467.5MHz for 10MHz Bandwidth 2410.5-2472.5MHz for 20MHz Bandwidth 2422.5-2452.5MHz for 40MHz Bandwidth
Type of Modulation	OFDM (QPSK, 16QAM, 64QAM)
Channel Number	28 channels for 1.4MHz Bandwidth 28 channels for 1.4MHz Bandwidth (CA mode) 18 channels for 3MHz Bandwidth 18 channels for 3MHz Bandwidth (CA mode) 63 channels for 10MHz Bandwidth 63 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 Antenna
Antenna Number	1Tx4Rx for SISO mode (ANT0 or ANT1 or ANT2 or ANT3) 2Tx4Rx for MIMO mode (ANT0+ANT1 or ANT0+ANT3 or ANT2+ANT1 or ANT2+ANT3), Un-correlated signals.
Antenna Gain	4.0dBi for ANT0 4.0dBi for ANT1 4.0dBi for ANT2 4.0dBi for ANT3
The type of wideband data transmission equipment	Non-FHSS

Table 3: RF Channel and Frequency of 2.4GHz SDR

2.4GHz 1.4MHz Bandwidth (2409.5MHz-2463.5MHz)			
RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
1	2409.5	15	2437.5
2	2411.5	16	2439.5
3	2413.5	17	2441.5
4	2415.5	18	2443.5
5	2417.5	19	2445.5
6	2419.5	20	2447.5
7	2421.5	21	2449.5
8	2423.5	22	2451.5
9	2425.5	23	2453.5
10	2427.5	24	2455.5
11	2429.5	25	2457.5
12	2431.5	26	2459.5
13	2433.5	27	2461.5
14	2435.5	28	2463.5

2.4GHz 1.4MHz Bandwidth (CA Mode) (2411.12MHz-2465.12MHz)			
RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
1	2411.12	15	2439.12
2	2413.12	16	2441.12
3	2415.12	17	2443.12
4	2417.12	18	2445.12
5	2419.12	19	2447.12
6	2421.12	20	2449.12
7	2423.12	21	2451.12
8	2425.12	22	2453.12
9	2427.12	23	2455.12

10	2429.12	24	2457.12
11	2431.12	25	2459.12
12	2433.12	26	2461.12
13	2435.12	27	2463.12
14	2437.12	28	2465.12

2.4GHz 3MHz Bandwidth (2410.5MHz-2461.5MHz)			
RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
1	2410.5	10	2437.5
2	2413.5	11	2440.5
3	2416.5	12	2443.5
4	2419.5	13	2446.5
5	2422.5	14	2449.5
6	2425.5	15	2452.5
7	2428.5	16	2455.5
8	2431.5	17	2458.5
9	2434.5	18	2461.5

2.4GHz 3MHz Bandwidth (CA mode) (2413.2MHz-2464.2MHz)			
RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
1	2413.2	10	2440.2
2	2416.2	11	2443.2
3	2419.2	12	2446.2
4	2422.2	13	2449.2
5	2425.2	14	2452.2
6	2428.2	15	2455.2
7	2431.2	16	2458.2
8	2434.2	17	2461.2
9	2437.2	18	2464.2

2.4GHz 10MHz Bandwidth (2405.5MHz-2467.5MHz)							
RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
1	2405.5	17	2421.5	33	2437.5	49	2453.5
2	2406.5	18	2422.5	34	2438.5	50	2454.5
3	2407.5	19	2423.5	35	2439.5	51	2455.5
4	2408.5	20	2424.5	36	2440.5	52	2456.5
5	2409.5	21	2425.5	37	2441.5	53	2457.5
6	2410.5	22	2426.5	38	2442.5	54	2458.5
7	2411.5	23	2427.5	39	2443.5	55	2459.5
8	2412.5	24	2428.5	40	2444.5	56	2460.5
9	2413.5	25	2429.5	41	2445.5	57	2461.5

10	2414.5	26	2430.5	42	2446.5	58	2462.5
11	2415.5	27	2431.5	43	2447.5	59	2463.5
12	2416.5	28	2432.5	44	2448.5	60	2464.5
13	2417.5	29	2433.5	45	2449.5	61	2465.5
14	2418.5	30	2434.5	46	2450.5	62	2466.5
15	2419.5	31	2435.5	47	2451.5	63	2467.5
16	2420.5	32	2436.5	48	2452.5	/	/

2.4GHz 20MHz Bandwidth (2410.5MHz-2472.5MHz)							
RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
1	2410.5	17	2426.5	33	2442.5	49	2458.5
2	2411.5	18	2427.5	34	2443.5	50	2459.5
3	2412.5	19	2428.5	35	2444.5	51	2460.5
4	2413.5	20	2429.5	36	2445.5	52	2461.5
5	2414.5	21	2430.5	37	2446.5	53	2462.5
6	2415.5	22	2431.5	38	2447.5	54	2463.5
7	2416.5	23	2432.5	39	2448.5	55	2464.5
8	2417.5	24	2433.5	40	2449.5	56	2465.5
9	2418.5	25	2434.5	41	2450.5	57	2466.5
10	2419.5	26	2435.5	42	2451.5	58	2467.5
11	2420.5	27	2436.5	43	2452.5	59	2468.5
12	2421.5	28	2437.5	44	2453.5	60	2469.5
13	2422.5	29	2438.5	45	2454.5	61	2470.5
14	2423.5	30	2439.5	46	2455.5	62	2471.5
15	2424.5	31	2440.5	47	2456.5	63	2472.5
16	2425.5	32	2441.5	48	2457.5	/	/

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	/	/

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, Normal Operation
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Circuit Diagram
- Bill of Material
- Instruction Manual
- Rating Label

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: 2013.

According to clause 3.1, all tests were performed on model DOCK-01 in this report.

Note: All testing were carried out on SISO mode and MIMO mode, but only the worst case(Ant2+1) was presented in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 4: Auxiliary Equipment Used during Test

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)

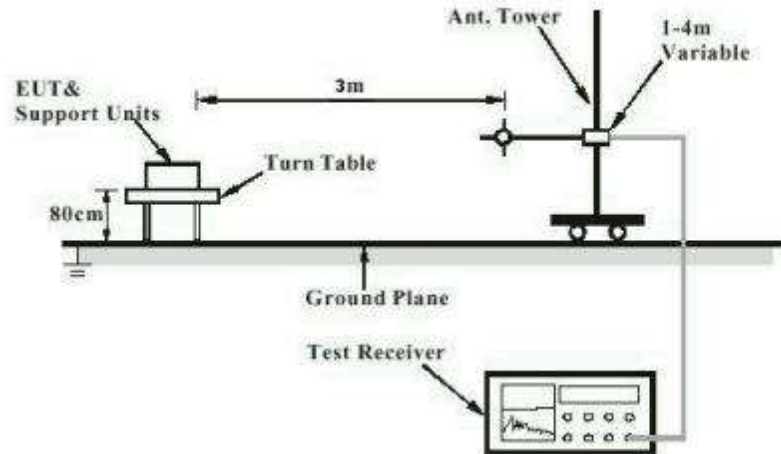


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

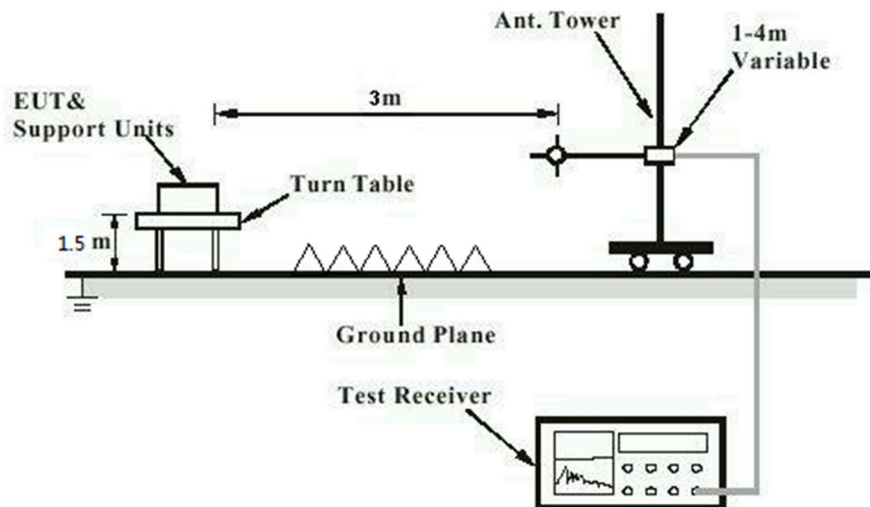


Diagram of Measurement Configuration for Mains Conduction Measurement

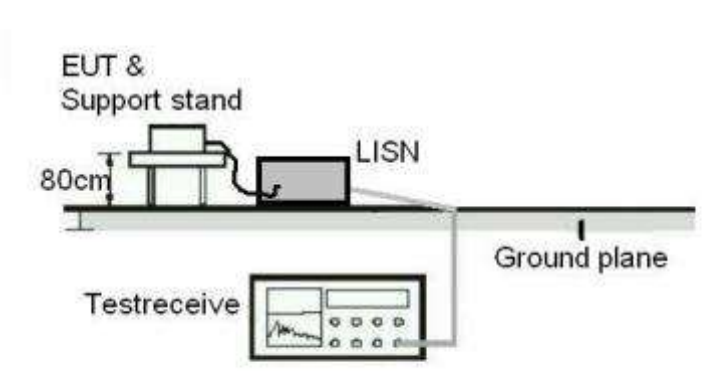
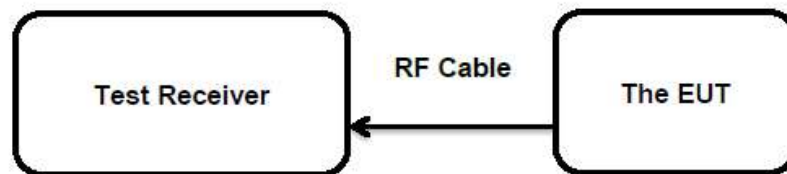


Diagram of Measurement Configuration for Conducted Transmitter Measurement



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

According to the manufacturer declared, the EUT has Integral antennas, the maximum uncorrelated antenna gain is 4.0dBi for 2.4GHz SDR, and the antenna connector is designed unique, prefer to EUT photos for details.

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

5.1.2 Maximum Conducted Output Power

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

Test standard	: FCC Part 15.247(b)(3)
Basic standard	: ANSI C63.10: 2013
Limits	: 1.0 Watts
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-02-20 to 2023-03-21
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.2 °C
Relative humidity	: 53 %
Atmospheric pressure	: 101 kPa

For details refer to following test result.

Table 5: Test Result of Maximum Conducted Output Power

Worst case for SISO mode (Ant 3)

Test Mode	Test Channel (MHz)	Measured Average Power		Limit (W)
		(dBm)	(W)	
1.4MHz BW	2409.5	25.08	0.3221	< 1.0
	2435.5	24.69	0.2944	
	2463.5	23.83	0.2415	
1.4MHz BW CA	2411.12	24.91	0.3097	
	2437.12	24.85	0.3055	
	2465.12	25.03	0.3184	
3MHz BW	2410.5	26.35	0.4315	
	2434.5	26.01	0.3990	
	2461.5	26.28	0.4246	
3MHz BW CA	2413.2	26.13	0.4102	
	2437.2	26.31	0.4276	
	2464.2	26.48	0.4446	
10MHz BW	2405.5	3.11	0.0020	
	2406.5	3.02	0.0020	
	2407.5	15.87	0.0386	
	2410.5	15.54	0.0358	
	2436.5	15.34	0.0342	
	2467.5	14.78	0.0301	
20MHz BW	2410.5	2.62	0.0018	
	2411.5	2.81	0.0019	
	2412.5	12.81	0.0191	
	2415.5	14.09	0.0256	
	2441.5	15.30	0.0339	
	2455.5	14.44	0.0278	
	2458.5	12.84	0.0192	
	2462.5	10.91	0.0123	
	2463.5	2.15	0.0016	
2472.5	2.12	0.0016		
40MHz BW	2422.5	11.76	0.0150	
	2430.5	12.39	0.0173	
	2431.5	13.34	0.0216	
	2437.5	14.60	0.0288	
	2440.5	12.89	0.0195	
	2445.5	11.60	0.0145	
	2452.5	10.29	0.0107	
Max. e.i.r.p.=26.48dBm+4.0dBi=30.48dBm, which is less than 36dBm=4W.				

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G) of 2.4GHz SDR: 4.0dBi (Ant 3)

Worst case for MIMO mode (Ant 2+1)

Test Mode	Test Channel (MHz)	Measured Average Power		Limit (W)
		(dBm)	(W)	
1.4MHz BW	2409.5	25.01	0.3170	< 1.0
	2435.5	24.79	0.3013	
	2463.5	25.31	0.3396	
1.4MHz BW CA	2411.12	25.19	0.3304	
	2437.12	25.27	0.3365	
	2465.12	25.61	0.3639	
3MHz BW	2410.5	26.19	0.4159	
	2434.5	25.83	0.3828	
	2461.5	26.07	0.4046	
3MHz BW CA	2413.2	25.87	0.3864	
	2437.2	26.28	0.4246	
	2464.2	26.19	0.4159	
10MHz BW	2405.5	2.40	0.0017	
	2406.5	2.55	0.0018	
	2407.5	16.03	0.0401	
	2410.5	16.18	0.0415	
	2436.5	16.46	0.0443	
	2467.5	16.06	0.0404	
20MHz BW	2410.5	1.89	0.0015	
	2411.5	1.81	0.0015	
	2412.5	13.80	0.0240	
	2415.5	14.77	0.0300	
	2441.5	16.06	0.0404	
	2455.5	15.13	0.0326	
	2458.5	13.88	0.0244	
	2462.5	11.83	0.0152	
	2463.5	1.51	0.0014	
2472.5	1.78	0.0015		
40MHz BW	2422.5	11.94	0.0156	
	2430.5	14.30	0.0269	
	2431.5	15.33	0.0341	
	2437.5	14.69	0.0294	
	2440.5	13.43	0.0220	
	2445.5	12.55	0.0180	
	2452.5	10.60	0.0115	

Max. e.i.r.p.=26.28dBm+4.0dBi=30.28dBm, which is less than 36dBm=4W.

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G) of 2.4GHz SDR: 4.0dBi (uncorrelated antenna gain MIMO)

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	: 2023-02-20 to 2023-03-21
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.2 °C
Relative humidity	: 53 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

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	:	2023-02-20 to 2023-03-21
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.2 °C
Relative humidity	:	53 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

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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 : 2023-02-20 to 2023-03-21
Input voltage : AC 120V, 60Hz
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 24.2 °C
Relative humidity : 53 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

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	: 2023-02-20 to 2023-03-21
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.2 °C
Relative humidity	: 53 %
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.

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	: 2023-03-20 to 2023-03-28
Input voltage	: AC 120V, 60Hz
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 configuration of the each mode were reported.

For the measurement records, refer to the appendix A.

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
Limits	:	FCC Part 15.207(a)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2023-03-23
Input voltage	:	AC 120V, 60Hz
Operation mode	:	B
Earthing	:	Not connected
Ambient temperature	:	23.0 °C
Relative humidity	:	50.8 %
Atmospheric pressure	:	101 kPa

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.

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