Prüfbericht-Nr.: *Test report no.:*	**CN22CBU2 002**	**Auftrags-Nr.:** *Order no.:*	168342360	Seite 1 von 25 *Page 1 of 25*
Kunden-Referenz-Nr.: *Client reference no.:*	**N/A**	**Auftragsdatum:** *Order date:*	2021-11-20	
Auftraggeber: *Client:*	**SZ DJI TECHNOLOGY CO., LTD** 14th Floor, West Wing, Skyworth Semiconductor Design Building No.18 Gaoxin South 4th Ave Nanshan District, Shenzhen, P.R. China			
Prüfgegenstand: *Test item:*	Agras T40, Agras T20P			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	3WWDZ-40A, 3WWDZ-20A			
Auftrags-Inhalt: *Order content:*	Test Report			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part 15: Subpart E Section 15.407			

Wareneingangsdatum: *Date of sample receipt:*	2021-10-28	Refer to photo document
Prüfmuster-Nr.: *Test sample no:*	A003168006 007	
Prüfzeitraum: *Testing period:*	2021-12-28 to 2022-01-10	
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	**genehmigt von:** *authorized by:*	X Lin Lin
Datum: *Date:* 2022-02-08	Signed by: Bell Hu	**Ausstellungsdatum:** *Issue date:* 2022-02-08	Signed by: Lin Lin
Stellung */ Position:*	**Project Manager**	**Stellung** */ Position:*	**Reviewer**

Sonstiges */ Other:*	FCC ID: SS3-T40A2112; IC:11805A-T40A2112; PMN: Agras T40, Agras T20P; HVIN: 3WWDZ-40A, 3WWDZ-20A This report is for 5.8GHz SDR.

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:*	Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 MAXIMUM OUTPUT POWER
RESULT: Pass

5.1.3 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 6DB BANDWIDTH
RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION
RESULT: Pass

TABLE OF 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 5.8GHz SDR

Appendix B: 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, Shenzhen 518110, People's Republic of China

FCC Accreditation Designation No.: CN1260
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 (TS8997-R&S)					
Equip. No.	**Description**	**Manufacturer**	**Model**	**Serial No.**	**Calibrated until (DD.MM.YYYY)**
G1825794	Wireless Connectivity Tester	R&S	CMW270	101375	09.08.2022
G1825795	Signal Analyzer	R&S	FSV 40	101441	09.08.2022
G1825796	Vector Signal Generator	R&S	SMBV100A	263301	09.08.2022
G1825797	Signal Generator	R&S	SMB100A	115186	09.08.2022
G1825798	OSP	R&S	OSP 150	101017	02.12.2022
G1825799	Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
G1825800	Test Software	R&S	WMS32 (V11.00.00)	N/A	N/A
G1825801	Power Meter	R&S	NRP2	107105	02.12.2022
G1829620	Power Sensor	R&S	NRP-Z81	105677	09.08.2022
G1826483	Humid & Temp Programmable Tester	BOST	NTH090-60	19040801	02.04.2022
G1826431	Shielding Room 8#	Albatross	SR8	APC1715 1-SR8	22.06.2024
Unwanted Emission Testing (TS9975)					
Equip. No.	**Description**	**Manufacturer**	**Model**	**Serial No.**	**Calibrated until (DD.MM.YYYY)**
G1826021	EMI Test Receiver	R&S	ESR 7	102021	10.08.2022
G1826023	Signal Analyzer	R&S	FSV 40	101439	09.08.2022
G1826024	System Controller Interface	R&S	SCI-100	S1001003 8	N/A
G1826025	Filterbank	R&S	Wlan	100759	09.08.2022
G1826026	OSP	R&S	OSP 120	102040	N/A
G1826028	Pre-amplifier	R&S	SCU08F1	08320031	09.08.2022
G1826029	Amplifier	R&S	SCU-18F	180070	09.08.2022
G1826030	Amplifier	R&S	SCU40A	100475	09.08.2022
G1826031	Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	08.08.2022

G1826032	Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	08.08.2022
G1826033	Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	08.08.2022
G1826034	Active Loop Antenna	Schwarzbeck	FMZB 1513	302	13.09.2022
G1826036	Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
G1826037	Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
G1826433	3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC1715 1-SAC	22.06.2024

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 Uncertainty of Measurement

The value of the measurement uncertainty of each parameter is listed as below:

Table 2: Measurement Uncertainty

Parameter	Uncertainty
Radio Frequency	±1 x 10-7
RF Power (conducted)	±2.5 dB
Radiated Emission of Transmitter, valid up to 26.5 GHz	±6 dB
Radiated Emission of Receiver, valid up to 26.5 GHz	±6 dB
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	± 3.70 dB / ± 3.30 dB
Radiated Emission (3m SAC), 30MHz to 1000MHz	± 4.52 dB
Radiated Emission (3m SAC), above 1000MHz	± 4.37 dB
Temperature	±1 °C
Humidity	±5 %
Voltage (DC)	±1 %
Voltage (AC, <10kHz)	±2 %

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 No. 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 (**E**quipment **U**nder **T**est) is an Aircraft. It supports 2.4GHz SDR, 5.8GHz SDR, 24GHz Radar and GNSS functions.
*Remark: SDR means specific defined radio, and cannot changes radio specification via software/firmware by end-users.
This report is only for 5.8GHz SDR.
According to the declaration of the applicant, the electrical circuit design and PCB layout are identical, only the model number, battery capacity and overall size are different for market strategy.

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

For details refer to user manual and circuit diagram.

3.2 Ratings and System Details

Table 3: Technical Specification

General Information of EUT	**Value**
Kind of Equipment:	Agras T40, Agras T20P
Type Designation:	3WWDZ-40A, 3WWDZ-20A
Trademark:	DJI
FCC ID:	SS3-T40A2112
IC:	11805A-T40A2112
Operating Temperature Range:	0 °C ~ 45 °C
Operating Voltage:	Battery operated 52.2V DC. Intelligent Flight Battery in Agras T40: Model: BAX601-30000mAh 52.22V Capacity: 30000 mAh Intelligent Flight Battery in Agras T20P: Model: BAX601-13000mAh 52.22V Capacity: 13000 mAh
Testing Voltage:	Built-in battery
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 1559-1610MHz 4) Phased Array Omnidirectional Radar & Downward Rear Radar: Operating within 24.05-24.25 GHz band.
Technical Specification of 5.8GHz SDR	
Operating Frequency	5728.5-5846.5MHz for 1.4MHz Bandwidth 5727.5-5844.5MHz for 3MHz Bandwidth 5730.5-5844.5MHz for 10MHz Bandwidth

	5735.5-5839.5MHz for 20MHz Bandwidth 5745.5-5829.5MHz for 40MHz Bandwidth
Type of Modulation	OFDM (QPSK, 16QAM, 64QAM)
Channel Number	60 channels for 1.4MHz Bandwidth 40 channels for 3MHz Bandwidth 115 channels for 10MHz Bandwidth 105 channels for 20MHz Bandwidth 85 channels for 40MHz Bandwidth
Channel Separation	2MHz for 1.4MHz Bandwidth 3MHz for 3MHz Bandwidth 1MHz for 10MHz Bandwidth 1MHz for 20MHz Bandwidth 1MHz for 40MHz Bandwidth
Antenna Type	Integral Antennas
Antenna Number	1Tx1Rx for SISO mode (ANT1 or ANT2) 2TxTRx for MIMO mode (ANT1+ANT2), Un-correlated signals.
Antenna Gain	Max 2.0dBi for 2.4GHz Band, Max 0.5dBi for 5.8GHz Band.
The type of wideband data transmission equipment	Non-FHSS

Table 4: RF Channel and Frequency of 5.8GHz SDR

5.8GHz 1.4MHzBandwidth (5728.5MHz-5846.5MHz)					
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	5728.5	21	5768.5	41	5808.5
2	5730.5	22	5770.5	42	5810.5
3	5732.5	23	5772.5	43	5812.5
4	5734.5	24	5774.5	44	5814.5
5	5736.5	25	5776.5	45	5816.5
6	5738.5	26	5778.5	46	5818.5
7	5740.5	27	5780.5	47	5820.5
8	5742.5	28	5782.5	48	5822.5
9	5744.5	29	5784.5	49	5824.5
10	5746.5	30	5786.5	50	5826.5
11	5748.5	31	5788.5	51	5828.5
12	5750.5	32	5790.5	52	5830.5
13	5752.5	33	5792.5	53	5832.5
14	5754.5	34	5794.5	54	5834.5
15	5756.5	35	5796.5	55	5836.5
16	5758.5	36	5798.5	56	5838.5
17	5760.5	37	5800.5	57	5840.5
18	5762.5	38	5802.5	58	5842.5
19	5764.5	39	5804.5	59	5844.5
20	5766.5	40	5806.5	60	5846.5

5.8GHz 3MHz Bandwidth (5727.5MHz-5844.5MHz)					
RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
1	5727.5	15	5769.5	29	5811.5
2	5730.5	16	5772.5	30	5814.5
3	5733.5	17	5775.5	31	5817.5
4	5736.5	18	5778.5	32	5820.5
5	5739.5	19	5781.5	33	5823.5
6	5742.5	20	5784.5	34	5826.5
7	5745.5	21	5787.5	35	5829.5
8	5748.5	22	5790.5	36	5832.5
9	5751.5	23	5793.5	37	5835.5
10	5754.5	24	5796.5	38	5838.5
11	5757.5	25	5799.5	39	5841.5
12	5760.5	26	5802.5	40	5844.5
13	5763.5	27	5805.5		
14	5766.5	28	5808.5		

5.8GHz 10MHzBandwidth (5730.5MHz-5844.5MHz)					
RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
1	5730.5	40	5769.5	79	5808.5
2	5731.5	41	5770.5	80	5809.5
3	5732.5	42	5771.5	81	5810.5
4	5733.5	43	5772.5	82	5811.5
5	5734.5	44	5773.5	83	5812.5
6	5735.5	45	5774.5	84	5813.5
7	5736.5	46	5775.5	85	5814.5
8	5737.5	47	5776.5	86	5815.5
9	5738.5	48	5777.5	87	5816.5
10	5739.5	49	5778.5	88	5817.5
11	5740.5	50	5779.5	89	5818.5
12	5741.5	51	5780.5	90	5819.5
13	5742.5	52	5781.5	91	5820.5
14	5743.5	53	5782.5	92	5821.5
15	5744.5	54	5783.5	93	5822.5
16	5745.5	55	5784.5	94	5823.5
17	5746.5	56	5785.5	95	5824.5
18	5747.5	57	5786.5	96	5825.5

19	5748.5	58	5787.5	97	5826.5
20	5749.5	59	5788.5	98	5827.5
21	5750.5	60	5789.5	99	5828.5
22	5751.5	61	5790.5	100	5829.5
23	5752.5	62	5791.5	101	5830.5
24	5753.5	63	5792.5	102	5831.5
25	5754.5	64	5793.5	103	5832.5
26	5755.5	65	5794.5	104	5833.5
27	5756.5	66	5795.5	105	5834.5
28	5757.5	67	5796.5	106	5835.5
29	5758.5	68	5797.5	107	5836.5
30	5759.5	69	5798.5	108	5837.5
31	5760.5	70	5799.5	109	5838.5
32	5761.5	71	5800.5	110	5839.5
33	5762.5	72	5801.5	111	5840.5
34	5763.5	73	5802.5	112	5841.5
35	5764.5	74	5803.5	113	5842.5
36	5765.5	75	5804.5	114	5843.5
37	5766.5	76	5805.5	115	5844.5
38	5767.5	77	5806.5		
39	5768.5	78	5807.5		

5.8GHz 20MHz Bandwidth (5735.5MHz-5839.5MHz)					
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	5735.5	36	5770.5	71	5805.5
2	5736.5	37	5771.5	72	5806.5
3	5737.5	38	5772.5	73	5807.5
4	5738.5	39	5773.5	74	5808.5
5	5739.5	40	5774.5	75	5809.5
6	5740.5	41	5775.5	76	5810.5
7	5741.5	42	5776.5	77	5811.5
8	5742.5	43	5777.5	78	5812.5
9	5743.5	44	5778.5	79	5813.5
10	5744.5	45	5779.5	80	5814.5
11	5745.5	46	5780.5	81	5815.5
12	5746.5	47	5781.5	82	5816.5
13	5747.5	48	5782.5	83	5817.5
14	5748.5	49	5783.5	84	5818.5
15	5749.5	50	5784.5	85	5819.5
16	5750.5	51	5785.5	86	5820.5
17	5751.5	52	5786.5	87	5821.5
18	5752.5	53	5787.5	88	5822.5
19	5753.5	54	5788.5	89	5823.5

20	5754.5	55	5789.5	90	5824.5
21	5755.5	56	5790.5	91	5825.5
22	5756.5	57	5791.5	92	5826.5
23	5757.5	58	5792.5	93	5827.5
24	5758.5	59	5793.5	94	5828.5
25	5759.5	60	5794.5	95	5829.5
26	5760.5	61	5795.5	96	5830.5
27	5761.5	62	5796.5	97	5831.5
28	5762.5	63	5797.5	98	5832.5
29	5763.5	64	5798.5	99	5833.5
30	5764.5	65	5799.5	100	5834.5
31	5765.5	66	5800.5	101	5835.5
32	5766.5	67	5801.5	102	5836.5
33	5767.5	68	5802.5	103	5837.5
34	5768.5	69	5803.5	104	5838.5
35	5769.5	70	5804.5	105	5839.5

5.8GHz 40MHz Bandwidth (5745.5MHz-5829.5MHz)					
RF Channel	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**	**RF Channel**	**Frequency (MHz)**
1	5745.5	30	5774.5	59	5803.5
2	5746.5	31	5775.5	60	5804.5
3	5747.5	32	5776.5	61	5805.5
4	5748.5	33	5777.5	62	5806.5
5	5749.5	34	5778.5	63	5807.5
6	5750.5	35	5779.5	64	5808.5
7	5751.5	36	5780.5	65	5809.5
8	5752.5	37	5781.5	66	5810.5
9	5753.5	38	5782.5	67	5811.5
10	5754.5	39	5783.5	68	5812.5
11	5755.5	40	5784.5	69	5813.5
12	5756.5	41	5785.5	70	5814.5
13	5757.5	42	5786.5	71	5815.5
14	5758.5	43	5787.5	72	5816.5
15	5759.5	44	5788.5	73	5817.5
16	5760.5	45	5789.5	74	5818.5
17	5761.5	46	5790.5	75	5819.5
18	5762.5	47	5791.5	76	5820.5
19	5763.5	48	5792.5	77	5821.5
20	5764.5	49	5793.5	78	5822.5
21	5765.5	50	5794.5	79	5823.5
22	5766.5	51	5795.5	80	5824.5
23	5767.5	52	5796.5	81	5825.5
24	5768.5	53	5797.5	82	5826.5

25	5769.5	54	5798.5	83	5827.5
26	5770.5	55	5799.5	84	5828.5
27	5771.5	56	5800.5	85	5829.5
28	5772.5	57	5801.5		
29	5773.5	58	5802.5		

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, Normal Operation

C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- Application Form
- Circuit Diagram
- Instruction Manual
- Photo Documents
- Technical Description
- Bill of Material
- 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.

4.2 Test Operation

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10: 2013 and ANSI C63.4: 2014.

According to clause 3.1, all tests were performed on model 3WWDZ-20A in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

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

4.4 Countermeasures to Achieve ERM 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)

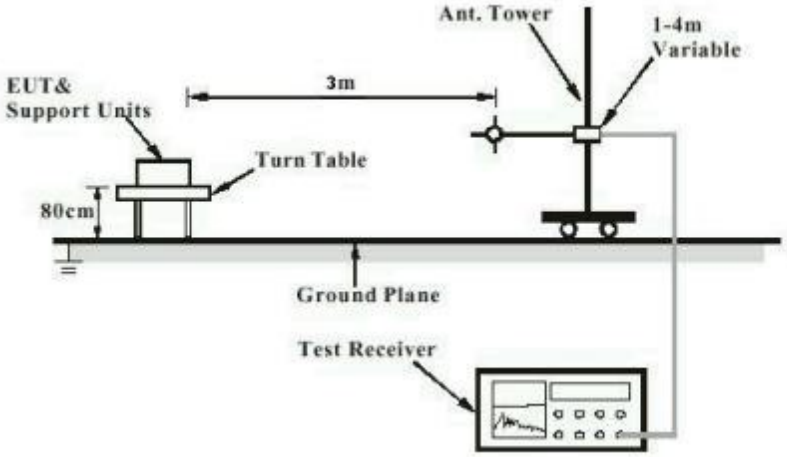


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

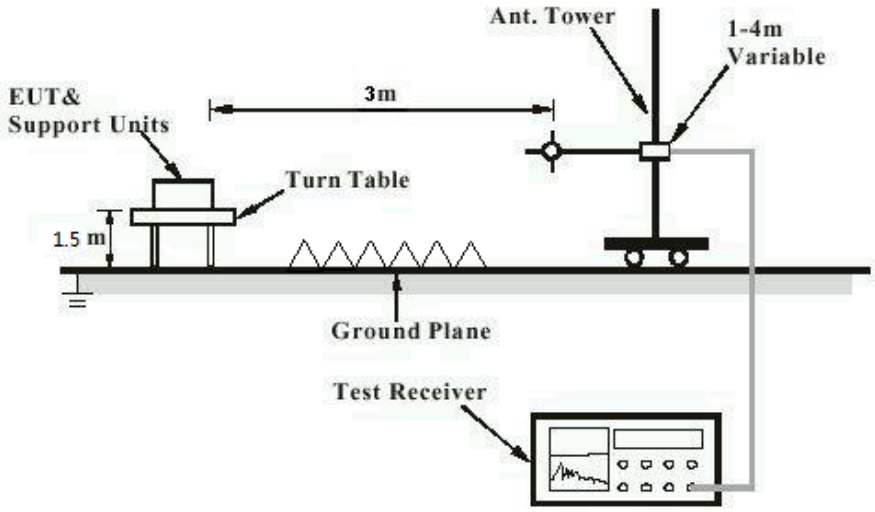


Diagram of Measurement Configuration for Mains Conduction Measurement

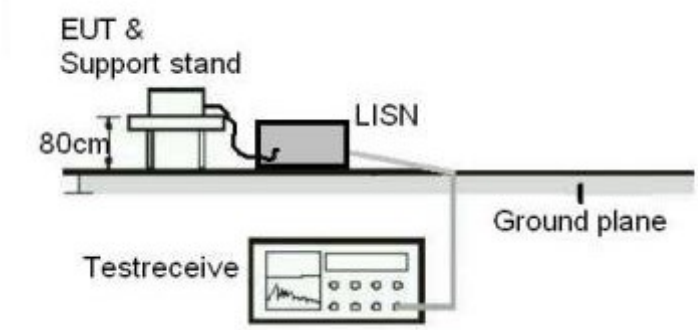


Diagram of Measurement Configuration for Conducted Transmitter Measurement

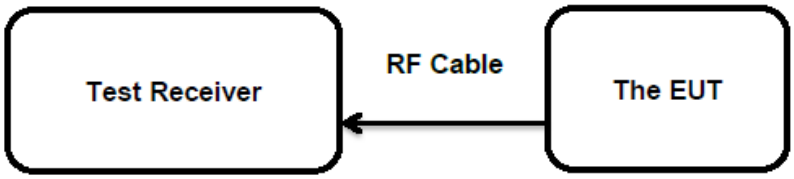
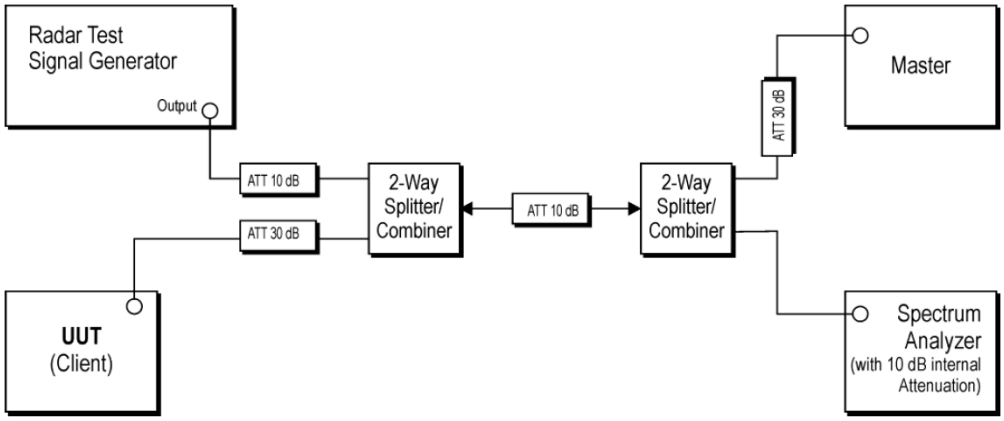


Diagram of Measurement Configuration for Dynamic Frequency Selection (DFS)



5. Test Results

5.1 Radio Test Requirement & Test Suites (5GHz Bands)

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification
Test standard : FCC Part 15.203

According to the manufacturer declared, the EUT has integral antennas, the max. Uncorrelated antenna gain antenna is 3.5dBi, permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

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) RSS-247 clause 6.2
Basic standard	:	ANSI C63.10:2013
Limits	:	<1W (30dBm) (5725-5850MHz)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2021-12-29 to 2022-01-06
Input voltage	:	Full Battery
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

Worst case for SISO mode Ant 1

Test Mode	Test Channel (MHz)	Measured Average Power		Limit (W)
		(dBm)	(W)	
1.4MHz BW	5728.5	17.70	0.0589	< 1.0
	5786.5	17.42	0.0552	
	5846.5	17.80	0.0603	
3MHz BW	5727.5	17.50	0.0562	
	5784.5	17.70	0.0589	
	5844.5	17.90	0.0617	
10MHz BW	5730.5	25.40	0.3467	
	5787.5	**26.00**	0.3981	
	5844.5	25.90	0.3890	
20MHz BW	5735.5	25.40	0.3467	
	5787.5	25.40	0.3467	
	5839.5	25.20	0.3311	
40MHz BW	5745.5	25.20	0.3311	
	5787.5	25.40	0.3467	
	5829.5	25.80	0.3802	
Max. e.i.r.p.=26.00dBm+0.5dBi=26.50dBm, which is less than 36dBm=4W.				

Worst case for MIMO mode

Test Mode	Test Channel (MHz)	Measured Average Power		Limit (W)
		(dBm)	(W)	
1.4MHz BW	5728.5	17.50	0.0562	< 1.0
	5786.5	17.20	0.0525	
	5846.5	17.90	0.0617	
3MHz BW	5727.5	17.30	0.0537	
	5784.5	17.50	0.0562	
	5844.5	17.70	0.0589	
10MHz BW	5730.5	27.43	0.5534	
	5787.5	26.61	0.4581	
	5844.5	27.20	0.5248	
20MHz BW	5735.5	27.10	0.5129	
	5787.5	27.70	0.5888	
	5839.5	**28.20**	**0.6607**	
40MHz BW	5745.5	26.90	0.4898	
	5787.5	27.70	0.5888	
	5829.5	26.90	0.4898	
Max. e.i.r.p.=28.20dBm+0.5dBi=28.70dBm, which is less than 36dBm=4W.				

Note:

1) The cable loss is taken into account in results.
2) Max. Antenna gain(G) of 5.8GHz SDR: 0.5dBi (uncorrelated antenna gain)
   e.i.r.p.=$P_{(Peak\ power)}$+ G, which is far below the 4 W

5.1.3 Power Spectral Density

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407 (a) RSS-247 clause 6.2
Basic standard	:	ANSI C63.10:2013
Limits	:	<30dBm/500KHz (5725-5850MHz)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-04 to 2022-01-07
Input voltage	:	Full Battery
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

Refer to attached Appendix A for details of test data.

5.1.4 Frequency Stability

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407 (g) RSS-Gen Clause 6.11
Basic standard	:	ANSI C63.10:2013
Limits	:	Within assigned bands
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-04 to 2022-01-07
Input voltage	:	Full Battery
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

Frequency (MHz)	Voltage (Vdc)	Temperature (℃)	Measurement Frequency (MHz)	Frequency deviation (Hz)	ppm
5728.5	Nominal	0	5728.49999	-11.8899	-0.00208
		10	5728.49996	-43.6110	-0.00761
		20	5728.49998	-21.4901	-0.00375
		30	5728.50007	70.7020	0.01234
		45	5728.49999	-10.3681	-0.00181
	High	25	5728.50005	47.2235	0.00824
	Low	25	5728.49997	-25.3128	-0.00442
5786.5	Nominal	0	5786.50001	9.1680	0.00158
		10	5786.49999	-6.6277	-0.00115
		20	5786.49995	-48.2958	-0.00835
		30	5786.50002	16.1139	0.00278
		45	5786.50001	10.9631	0.00189
	High	25	5786.50004	36.3821	0.00629
	Low	25	5728.49999	-11.8899	-0.00208

Note: This device is powered by an internal battery, with DC 52.22V nominal Voltage.
As declared, this device is maintained within the band of operation under all conditions of normal operation as specified in the user manual. Test results listed as above just for reference.

5.1.5 26dB Bandwidth and 99% Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407 RSS-Gen Clause 6.6
Basic standard	:	ANSI C63.10:2013
Limits	:	N/A
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-04 to 2022-01-07
Input voltage	:	Full Battery
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

Refer to attached Appendix A for details of test data.

5.1.6 6dB Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.407 (e) RSS-247 clause 6.2.4.1
Basic standard	:	ANSI C63.10:2013
Limits	:	At least 500KHz (5725-5850MHz)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-01-04 to 2022-01-07
Input voltage	:	Full Battery
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	56 %
Atmospheric pressure	:	101 kPa

Refer to attached Appendix A for details of test data.

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 RSS-247 clause 6.2 & RSS-GEN clause 8.9 and 8.10
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 and RSS-GEN
Kind of test site	:	3m Semi-Anechoic Chamber (below 1GHz) 3m Anechoic Chamber (above 1GHz)

Test Setup

Date of testing	:	2022-01-03 to 2022-01-10
Input voltage	:	Full Battery
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	23 ℃
Relative humidity	:	48 %
Atmospheric pressure	:	101 kPa

Refer to attached Appendix A for details of test data.

6. List of Tables