



RADIO TEST REPORT

Applicant	:	Guangzhou Chuang Rui Automobile Electric Appliance Co., Ltd.
Address of Applicant	:	NO.8 Shenshan East Road Baiyun District, Guangzhou City, 510460, Guangdong, P.R. China
Manufacturer	:	Guangzhou Chuang Rui Automobile Electric Appliance Co., Ltd.
Address of Manufacturer	:	NO.8 Shenshan East Road Baiyun District, Guangzhou City, 510460, Guangdong, P.R. China
Equipment under Test	:	Meter
FVIN/Model No.	:	6KW7-10, 6AQ0-14, 6AQ0-56, 6AQ1-51, 6AQ3-34, 6GU9-50, 6KMS-32, 6KNP-72, 6AQ0-1A
FCC ID	:	2BTEP-6KW710
IC	:	34894-6KW710
HVIN	:	6KW7-10
Test Standard(s)	:	FCC Rules and Regulations Part 15 Subpart E, RSS-247 Issue 4 July 24, 2025, ANSI C63 10-2020+Cor.1-2023+C63.10a-2024+ Errata to C63.10a-2024 789033 D02 General U-NII Test Procedures New Rules v02r01, 662911 D01 Multiple Transmitter Output v02r01, RSS-Gen Issue 5 April 2018
Report No.	:	DDT-RE25072136-1E05
Issue Date	:	2026/09/15
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

Table of Contents

1.	Summary of Test Results	7
2.	General Test Information.....	8
2.1.	Description of EUT	8
2.2.	Accessories of EUT	8
2.3.	Block diagram of EUT configuration for test.....	8
2.4.	Decision of final test mode	9
2.5.	Deviations of test standard	9
2.6.	Test environment conditions	9
2.7.	Test laboratory	10
2.8.	Measurement uncertainty	10
3.	Equipment Used During Conductive Test	11
4.	26dB Bandwidth	12
4.1.	Block diagram of test setup	12
4.2.	Limits	12
4.3.	Test procedure	12
4.4.	Test result.....	13
4.5.	Test graphs	14
5.	6dB Bandwidth	15
5.1.	Block diagram of test setup	15
5.2.	Limits	15
5.3.	Test procedure	15
5.4.	Test result.....	16
5.5.	Test graphs	17
6.	99% Bandwidth	18
6.1.	Block diagram of test setup	18
6.2.	Limits	18
6.3.	Test procedure	18
6.4.	Test result.....	18
6.5.	Test graphs	19
7.	Duty Cycle	20
7.1.	Block diagram of test setup	20
7.2.	Limit.....	20
7.3.	Test procedure	20
7.4.	Test result.....	21
7.5.	Test graphs	22
8.	Maximum Output Power.....	23

8.1.	Block diagram of test setup	23
8.2.	Limits	23
8.3.	Test procedure	23
8.4.	Test result channel power	24
9.	Power Spectral Density	25
9.1.	Block diagram of test setup	25
9.2.	Limits	25
9.3.	Test procedure	25
9.4.	Test result.....	26
9.5.	Test graphs	27
10.	Frequency Stability Measurement.....	28
10.1.	Limit of Frequency Stability	28
10.2.	Measuring Instruments.....	28
10.3.	Test procedures	28
10.4.	Test setup.....	28
10.5.	Test result.....	29
11.	Antenna Requirements.....	31
11.1.	Limit.....	31
11.2.	Result	31
12.	Radiated Emission	32
12.1.	Test equipment.....	32
12.2.	Block diagram of test setup	33
12.3.	Limits	34
12.4.	Assistant equipment used for test	36
12.5.	Test procedure	36
12.6.	Test result.....	38
12.7.	Test data	39
13.	Band Edge Compliance.....	43
13.1.	Test equipment.....	43
13.2.	Block diagram of test setup	44
13.3.	Limits	44
13.4.	Assistant equipment used for test	44
13.5.	Test procedure	44
13.6.	Test result.....	44
13.7.	Test data	45
14.	Power Line Conducted Emissions.....	51
14.1.	Test equipment.....	51
14.2.	Block diagram of test setup	51

14.3. Limits 51

14.4. Assistant equipment used for test 51

14.5. Test procedure 52

14.6. Test result.....52

15. Test Setup Photograph 53

16. Photos of the EUT 55

Test Report Declare

Applicant	:	Guangzhou Chuang Rui Automobile Electric Appliance Co., Ltd.
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Equipment under Test	:	Meter
FVIN/Model No.	:	6KW7-10, 6AQ0-14, 6AQ0-56, 6AQ1-51, 6AQ3-34, 6GU9-50, 6KMS-32, 6KNP-72, 6AQ0-1A
HVIN	:	6KW7-10
Manufacturer	:	Guangzhou Chuang Rui Automobile Electric Appliance Co., Ltd.
Address of Manufacturer	:	NO.8 Shenshan East Road Baiyun District, Guangzhou City, 510460, Guangdong, P.R. China

Test Standard Used:

FCC Rules and Regulations Part 15 Subpart E,

RSS-247 Issue 4 July 24, 2025,

ANSI C63 10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024

789033 D02 General U-NII Test Procedures New Rules v02r01,

662911 D01 Multiple Transmitter Output v02r01,

RSS-Gen Issue 5 April 2018

We Declare:

The equipment described above is tested by Guangdong Dongdian Testing Service Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangdong Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

Report No.:	DDT-RE25072136-1E05		
Date of Receipt:	2025/07/24	Date of Test:	2025/08/21 - 2025/10/30

Created: Jacky Huang	Reviewed: Johnson Huang	Approved: Damon Hu
		
2025/12/22	2026/09/15	2026/09/15

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Version	Revision Content	Issue Date	Approved
V0	Initial issue	2026/09/15	Damon Hu

1. Summary of Test Results

No.	Test Parameter	Clause No.	Condition	Result
1	6/26db Bandwidth and 99% Bandwidth	FCC 15.407 (e), RSS-247 Clause 7.3, RSS-GEN Clause 6.7	/	Pass
2	Output Power	FCC 15.407 (a) ; RSS-247 Clause 7.3	/	Pass
3	Power Spectral Density	FCC 15.407 (a) ; RSS-247 Clause 7.3	/	Pass
4	Frequency Stability Measurement	FCC 15.407 (g); RSS-247 Clause 7.3; RSS-GEN Clause 8.11	/	Pass
5	Radiated Emission	FCC 15.407 (b); FCC 15.209; FCC 15.205; RSS-247 Clause 7.3; RSS-GEN Clause 8.9	/	Pass
6	Band Edge Compliance	FCC 15.407 (b); FCC 15.209; FCC 15.205; RSS-247 Clause 7.3; RSS-GEN Clause 8.10	/	Pass
7	Power Line Conducted Emissions	FCC Part 15: 15.207(a), RSS-Gen Issue 5 clause 8.8	/	N/A
8	Antenna Requirement	FCC Part 15: 15.203, RSS-Gen Issue 5 clause 6.8	/	Pass
Note: N/A is an abbreviation for Not Applicable, and means this item is not applicable for this device or no need to test according to standard.				

2. General Test Information

2.1. Description of EUT

EUT Name	:	Meter
FVIN/Model Number	:	6KW7-10, 6AQ0-14, 6AQ0-56, 6AQ1-51, 6AQ3-34, 6GU9-50, 6KMS-32, 6KNP-72, 6AQ0-1A
HVIN	:	6KW7-10
Difference of model number	:	The difference is model name and software function. So, choose 6KW7-10 to test.
EUT Function Description	:	Please reference user manual of this device
Power Supply	:	DC 12V
Antenna Type	:	ceramic antenna
Max Antenna Gain (dBi)	:	0.61
Radio Technology	:	IEEE 802.11a/n/ac
Operation frequency	:	U-NII-3: 5785 MHz
Modulation	:	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Beamforming	:	Not support

Channel information	
IEEE 802.11a	
IEEE 802.11n (HT20)	
IEEE 802.11ac (VHT20)	
UNII-3	
157	5785

Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
/	/	/	/

2.3. Block diagram of EUT configuration for test



2.4. Decision of final test mode

According pre-test, the worst test modes were reported as below:

Test software: Putty.exe

The test software was used to control EUT work in Continuous Tx mode and select test channel, wireless mode as below table.

The pathloss of external cable: 0.5dB (According to the manufacturer's claims)

Tested mode, Tx Power Setting, Data rate, Channel, and Frequency				
Tested mode	Tx Power Setting	Data rate (Mbps) (see Note)	Test Channel	Frequency (MHz)
	ANT1			
IEEE 802.11a	Default (48)	6	MCH: CH157	5785
IEEE 802.11n HT20	Default (48)	MCS 0	MCH: CH157	5785
IEEE 802.11ac VHT20	Default (48)	MCS 0	MCH: CH157	5785
Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.				

2.5. Deviations of test standard

No deviation.

2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	+15°C to +35 °C
Humidity range:	20% to 75%
Pressure range:	86 kPa to106 kPa

Note: The specific temperature and humidity information of each test item refers to the temperature and humidity record in the corresponding test data.

2.7. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20240, G-20118

2.8. Measurement uncertainty

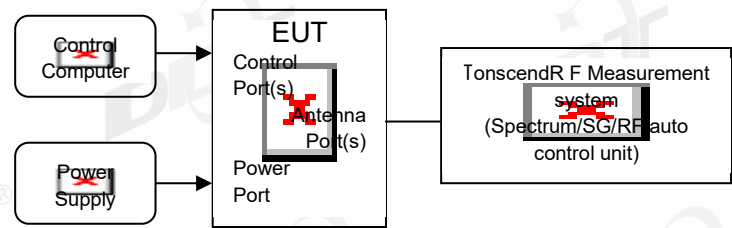
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum analyzer)	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$);
	1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$);
	1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Frequencies Stability	6.7×10^{-8} (Antenna couple method)
	5.5×10^{-8} (Conducted method)
Conducted spurious emissions	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$);
	1.40 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
	1.66 dB ($8 \text{ GHz} \leq f < 26.5 \text{ GHz}$)
Uncertainty for radio frequency (RBW < 20 kHz)	3×10^{-8}
Temperature	0.4 °C
Humidity	2 %
Uncertainty for Radiation Emission test (9 kHz – 30 MHz)	3.44 dB
Uncertainty for Radiation Emission test (30 MHz - 1 GHz)	4.70 dB (Antenna Polarize: V)
	4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1 GHz - 40 GHz)	4.10 dB (1 - 6 GHz)
	4.40 dB (6 GHz - 18 GHz)
	3.54 dB (18 GHz - 26 GHz)
	4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power line conduction emission test	3.34dB (150KHz-30MHz)
	3.72dB (9KHz-150KHz)
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.	

3. Equipment Used During Conductive Test

Equipment	Manufacturer	Model No.	Serial Number	Due Date
☑RF Connected Test (RF Measurement System 4#)				
Signal &Spectrum Analyzer	R&S	FSV3044	101173	2026/03/28
Wideband Radio Communication Tester	R&S	CMW500	168801	2026/03/28
MXG Vector Signal Generator	Agilent	N5182A	MY48180737	2026/03/28
PSG Vector Signal Generator	Agilent	E8267D	US49060192	2026/08/10
RF Control Unit	Tonscend	JS0806-2	2118060485	2026/03/28
TEMP&HUMI Programmable Chamber	ZHIXIANG	ZXGDJS-150L	ZX170110-A	2026/03/28
Test Software	Tonscend	JS1120-3	Ver.3.2.22	N/A

4. 26dB Bandwidth

4.1. Block diagram of test setup



4.2. Limits

Just for report.

4.3. Test procedure

Connect EUT's antenna output to spectrum analyzer by RF cable.

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	approximately 1% of the emission bandwidth.
VBW	> RBW
Trace	Max hold
Sweep	Auto couple

Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB relative to the maximum level measured in the fundamental emission.

4.4. Test result

Test Engineer:	Huang Yanwen	Test Site:	RF Measurement System 3#
Ambient Condition:	24.8°C, 46.1%RH	Test Date:	2025.09.06-2025.09.06
Test Power Supply:	DC 12V	Sample Number:	S25072136-001

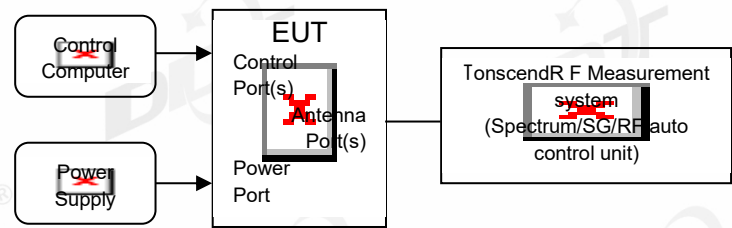
Test Mode	Antenna	Frequency [MHz]	26db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5785	20.64	5774.56	5795.20	---	---
11N20SISO	Ant1	5785	21.08	5774.44	5795.52	---	---
11AC20SISO	Ant1	5785	21.76	5773.92	5795.68	---	---

4.5. Test graphs



5. 6dB Bandwidth

5.1. Block diagram of test setup



5.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
6 dB Bandwidth	Minimum 500 kHz	5725 - 5850

5.3. Test procedure

Connect EUT's antenna output to spectrum analyzer by RF cable.

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Bandwidth: RBW=100 kHz For 26 dB Bandwidth: approximately 1% of the emission bandwidth.
VBW	For 6 dB Bandwidth: VBW=300 kHz For 26 dB Bandwidth: >3 RBW
Trace	Max hold
Sweep	Auto couple

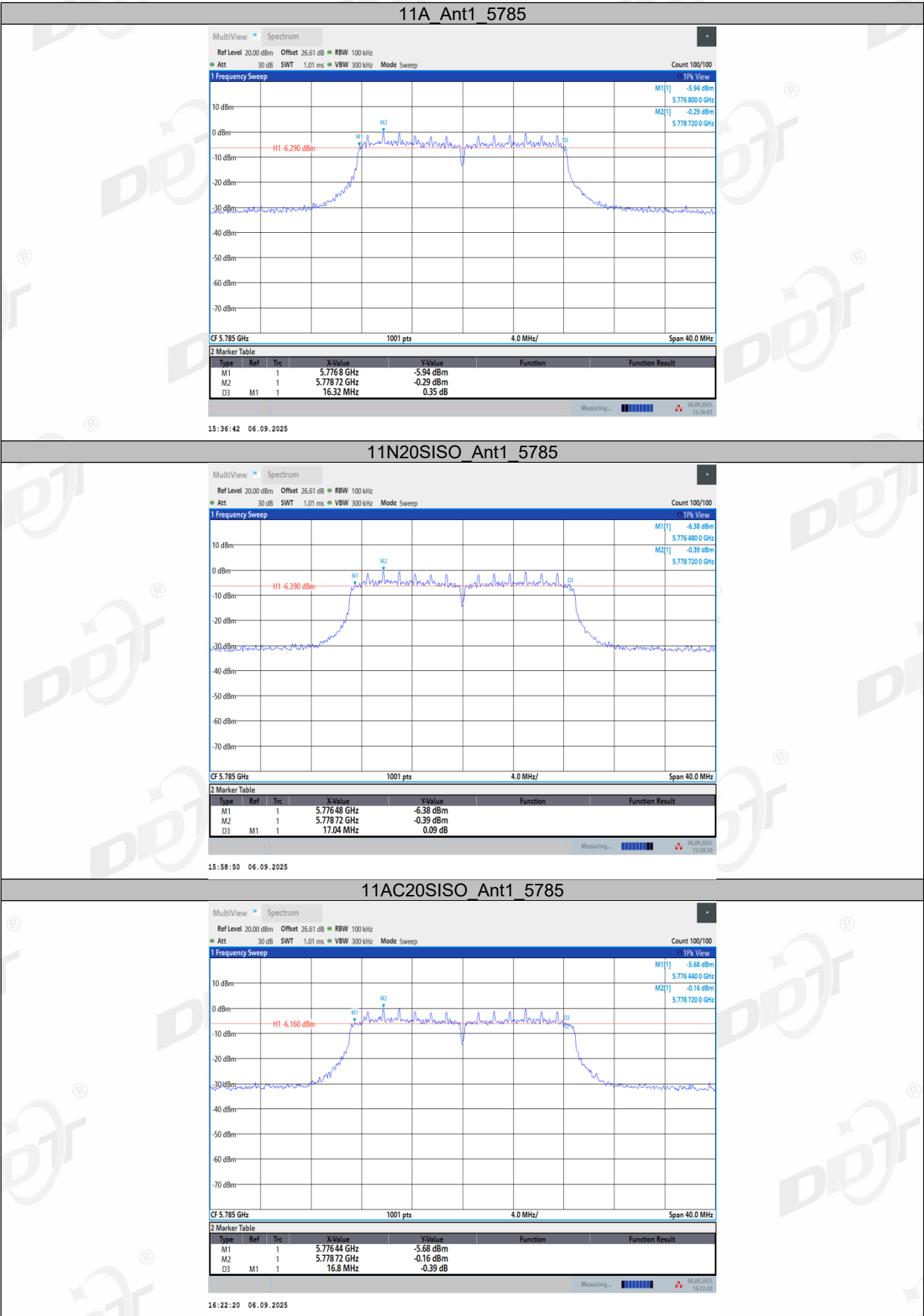
Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

5.4. Test result

Test Engineer:	Huang Yanwen	Test Site:	RF Measurement System 3#
Ambient Condition:	24.8°C, 46.1%RH	Test Date:	2025.09.06-2025.09.06
Test Power Supply:	DC 12V	Sample Number:	S25072136-001

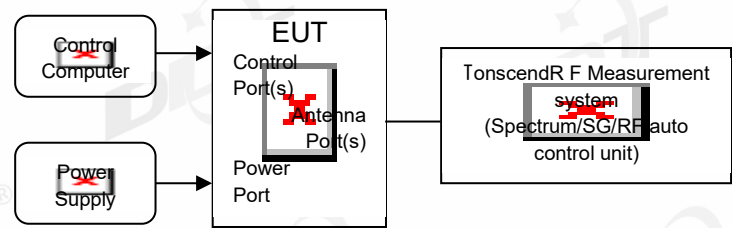
Test Mode	Antenna	Frequency [MHz]	6db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5785	16.32	5776.80	5793.12	0.5	PASS
11N20SISO	Ant1	5785	17.04	5776.48	5793.52	0.5	PASS
11AC20SISO	Ant1	5785	16.80	5776.44	5793.24	0.5	PASS

5.5. Test graphs



6. 99% Bandwidth

6.1. Block diagram of test setup



6.2. Limits

Just for Report.

6.3. Test procedure

- (1) Connect EUT’s antenna output to spectrum analyzer by RF cable.

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	1% to 5% of the OBW
VBW	approximately three times the RBW
Trace	Max hold

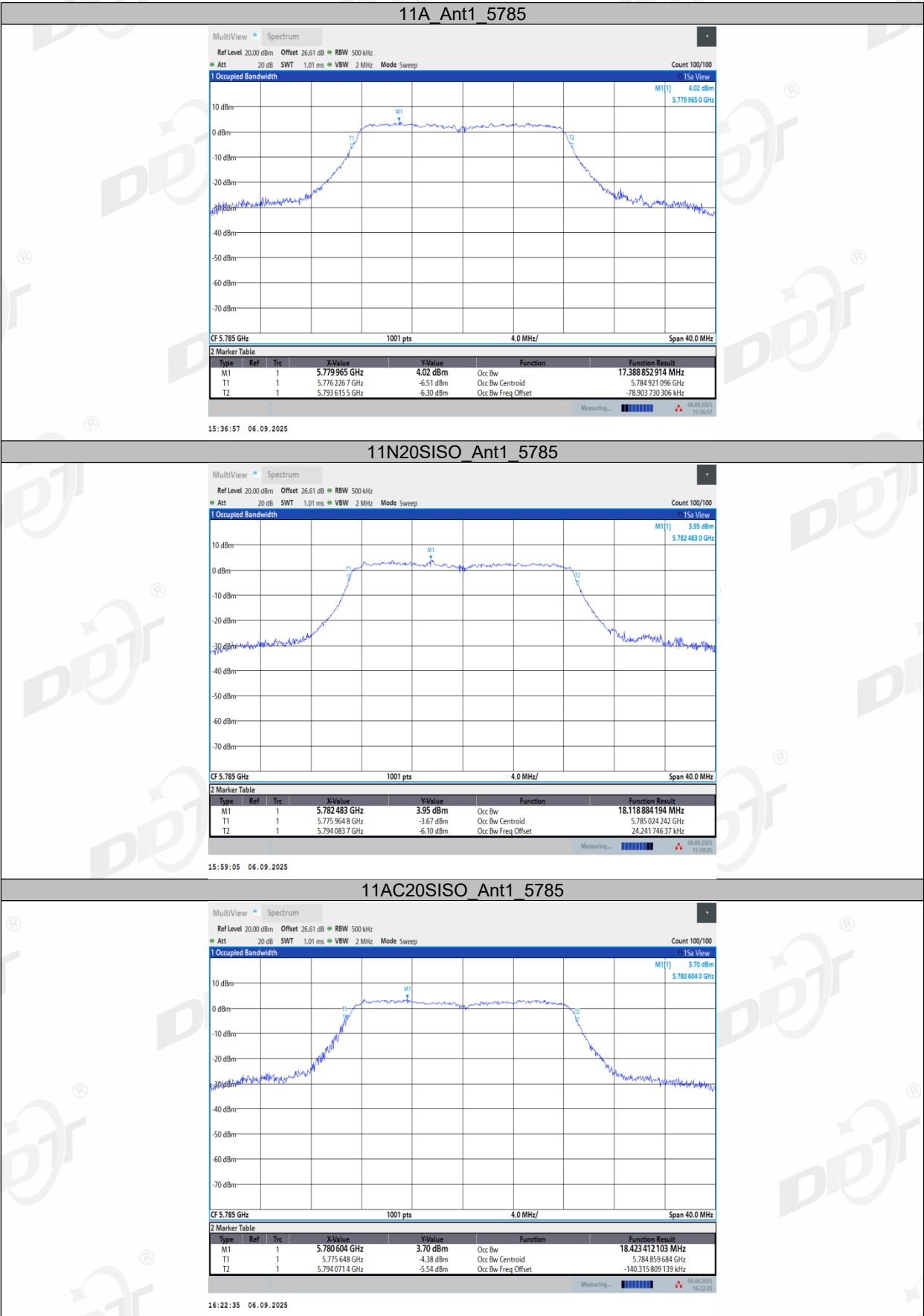
- (2) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

6.4. Test result

Test Engineer:	Huang Yanwen	Test Site:	RF Measurement System 3#
Ambient Condition:	24.8°C, 46.1%RH	Test Date:	2025.09.06-2025.09.06
Test Power Supply:	DC 12V	Sample Number:	S25072136-001

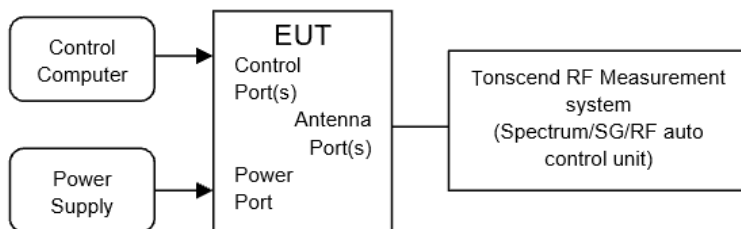
Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5785	17.389	5776.2267	5793.6155	---	---
11N20SISO	Ant1	5785	18.119	5775.9648	5794.0837	---	---
11AC20SISO	Ant1	5785	18.423	5775.6480	5794.0714	---	---

6.5. Test graphs



7. Duty Cycle

7.1. Block diagram of test setup



7.2. Limit

Just for Report.

7.3. Test procedure

- (1) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator, The cable loss and attenuator loss have been put into spectrum analyzer as amplitude offset.

set the Spectrum Analyzer as below:

Centre Frequency: The centre frequency of the middle hopping channel.

Resolution BW: 10 MHz.

Video BW: 10 MHz.

Span: Zero span.

Detector: Peak.

Trace Mode: Clear Write.

Sweep: Video Trigger

- (2) When the trace is complete, measure the sending time of 1 burst and the duty cycle of 1 burst cycle.

- (3) Calculate dwell time follow below formula:

Duty cycle= Pulse's on time / Burst cycle

7.4. Test result

Test Engineer:	Huang Yanwen	Test Site:	RF Measurement system 4#		
Ambient Condition:	24.8°C, 46.1%RH	Test Date:	2025.09.06-2025.09.06		
Test Power Supply:	DC 12V	Sample Number:	S25072136-001		

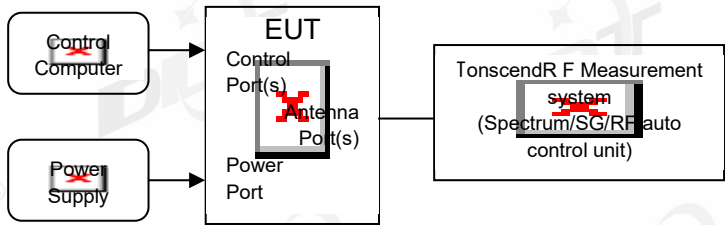
Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11A	Ant1	5785	2.06	2.12	97.17
11N20SISO	Ant1	5785	1.93	2.05	94.15
11AC20SISO	Ant1	5785	1.93	2.08	92.79

7.5. Test graphs



8. Maximum Output Power

8.1. Block diagram of test setup



8.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Maximum Output Power	For FCC: outdoor access point: 1 W(30 dBm) indoor access point: 1 W(30 dBm) fixed point-to-point access points1 W(30 dBm) client devices: 250 mW (24 dBm)	5150-5250
	For RSS: e.i.r.p. power: not exceed 200 mW (23 dBm) or $10 + 10 \log_{10} B$	
	For FCC: 250 mW (24 dBm) or $11 + 10 \log_{10} B$	
	For RSS: For conducted output power: 250 mW (24 dBm) or $11 + 10 \log_{10} B$	5250-5350
	For RSS: e.i.r.p. power: not exceed 1.0 W (30 dBm) or $17 + 10 \log_{10} B$	
	For FCC: 250 mW (24 dBm) or $11 + 10 \log_{10} B$	
	For RSS: For conducted output power: 250 mW (24 dBm) or $11 + 10 \log_{10} B$	For FCC:5470 - 5725 For IC:5470 - 5600 5650 - 5725
	For RSS: e.i.r.p. power: not exceed 1.0 W (30 dBm) or $17 + 10 \log_{10} B$	
	1 Watt (30 dBm)	5725-5850

8.3. Test procedure

Connect each EUT’s antenna output to power sensor by RF cable and attenuator
Measure the output power of each antenna port by power sensor.

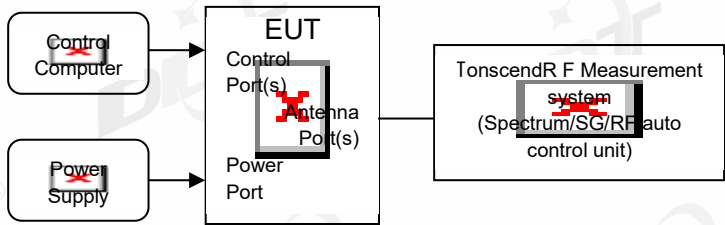
8.4. Test result channel power

Test Engineer:	Huang Yanwen	Test Site:	RF Measurement System 3#
Ambient Condition:	24.8°C, 46.1%RH	Test Date:	2025.09.06-2025.09.06
Test Power Supply:	DC 12V	Sample Number:	S25072136-001

Test Mode	Antenna	Frequency [MHz]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5785	97.17	0.12	10.79	≤30.00	PASS
11N20SISO	Ant1	5785	94.15	0.26	10.77	≤30.00	PASS
11AC20SISO	Ant1	5785	92.79	0.32	10.91	≤30.00	PASS

9. Power Spectral Density

9.1. Block diagram of test setup



9.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	For FCC: Other than Mobile and portable:17 dBm/MHz Mobile and portable client devices:11 dBm/MHz For RSS eirp: 10 dBm/MHz	5150-5250
	11 dBm/MHz	5250-5350
	11 dBm/MHz	For FCC: 5470 - 5725 For ISDE: 5470 - 5600 5650 - 5725
	30 dBm/500 kHz	5725-5850

9.3. Test procedure

The transmitter output was connected to a spectrum analyzer. Power density was measured by spectrum analyzer with 1MHz RBW and 3MHz VBW.

Connect the UUT to the spectrum analyser and use the following settings:

5150 MHz~5250 MHz, 5250 MHz~5350 MHz, 5470 MHz~5725 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

5725 MHz-5850 MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

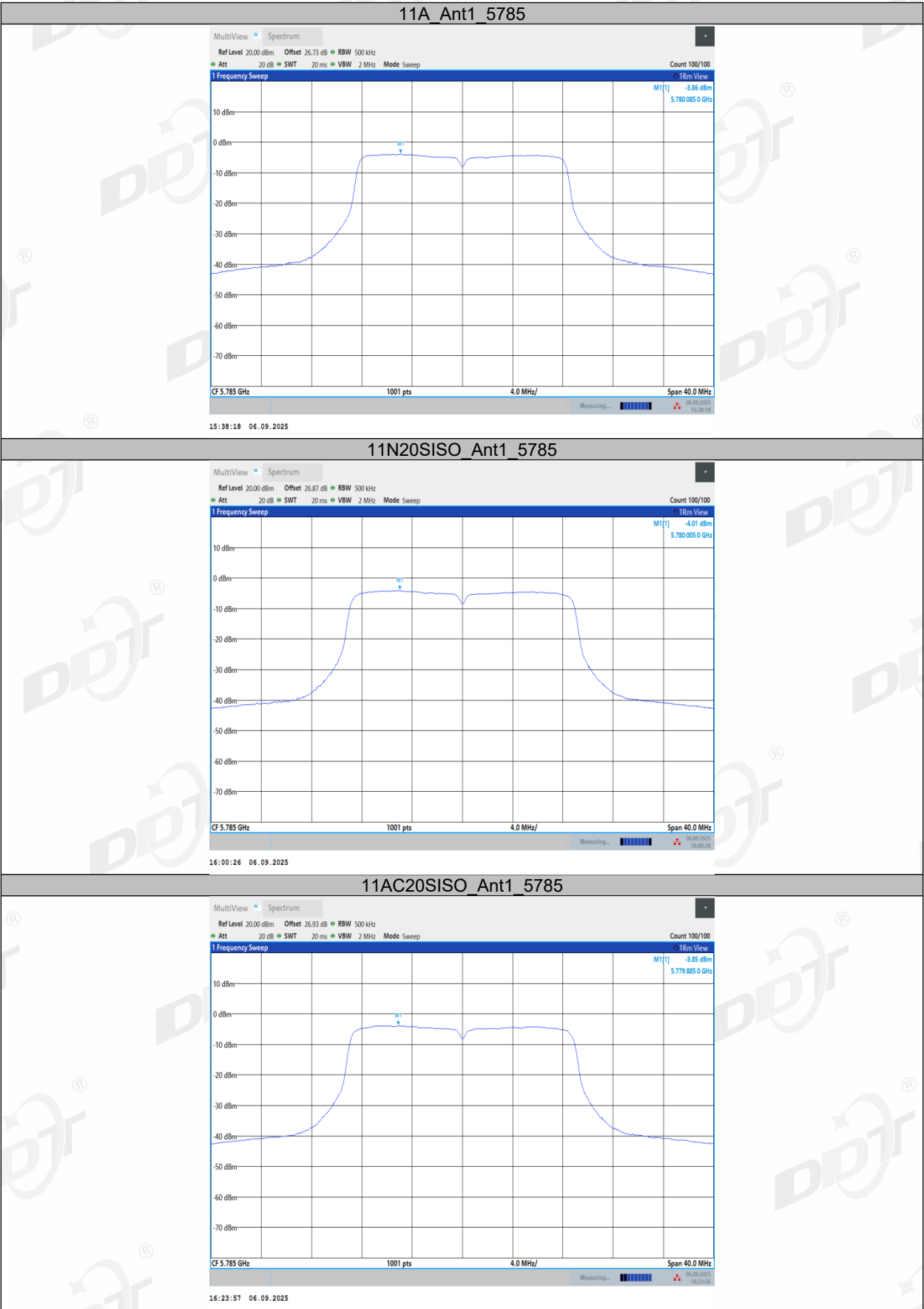
9.4. Test result

Test Engineer:	Huang Yanwen	Test Site:	RF Measurement System 3#
Ambient Condition:	24.8°C, 46.1%RH	Test Date:	2025.09.06
Test Power Supply:	DC 12V	Sample Number:	S25072136-001

Test Mode	Antenna	Frequency [MHz]	Result [dBm/500kHz]	Limit [dBm/500kHz]	Verdict
11A	Ant1	5785	-3.86	≤ 30.00	PASS
11N20SISO	Ant1	5785	-4.01	≤ 30.00	PASS
11AC20SISO	Ant1	5785	-3.85	≤ 30.00	PASS

Note: The Duty Cycle Factor is compensated in the graph.

9.5. Test graphs



10. Frequency Stability Measurement

10.1. Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

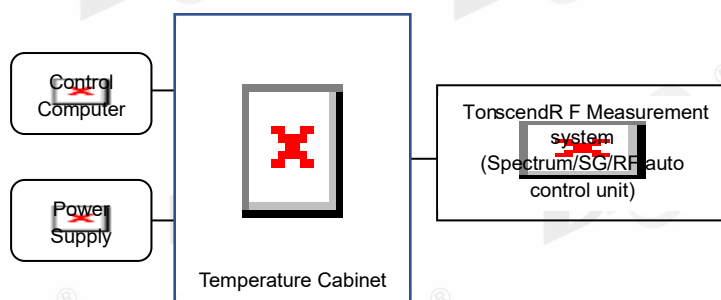
10.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

10.3. Test procedures

- (1) To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
- (2) The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10 dB lower than the measured peak value.
- (3) The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

10.4. Test setup



10.5. Test result

Test Engineer:	Huang Yanwen	Test Site:	RF Measurement System 3#
Ambient Condition:	24.8°C, 46.1%RH	Test Date:	2025.09.06-2025.09.06
Test Power Supply:	DC 12V	Sample Number:	S25072136-001

Voltage								
Test Mode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	ANT1	5785	NV	NT	40000.00	6.914434	20	PASS
			LV	NT	20000.00	3.457217	20	PASS
			HV	NT	40000.00	6.914434	20	PASS
11N20SISO	ANT1	5785	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-40000.00	-6.902502	20	PASS
			HV	NT	-40000.00	-6.902502	20	PASS
11AC20SISO	ANT1	5785	NV	NT	0.00	0.000000	20	PASS
			LV	NT	-20000.00	-3.457217	20	PASS
			HV	NT	-20000.00	-3.457217	20	PASS

Temperature								
Test Mode	Antenna	Frequency [MHz]	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	ANT1	5785	NV	-30	20000.00	3.481288	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	20000.00	3.481288	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	0.00	0.000000	20	PASS
			NV	60	0.00	0.000000	20	PASS

			NV	70	0.00	0.000000	20	PASS
			NV	80	0.00	0.000000	20	PASS
11N20SISO	ANT1	5785	NV	-30	0.00	0.000000	20	PASS
			NV	-20	0.00	0.000000	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	-40000.00	-6.950478	20	PASS
			NV	30	0.00	0.000000	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	0.00	0.000000	20	PASS
			NV	60	0.00	0.000000	20	PASS
			NV	70	0.00	0.000000	20	PASS
			NV	80	0.00	0.000000	20	PASS
11AC20SISO O	ANT1	5785	NV	-30	0.00	0.000000	20	PASS
			NV	-20	-20000.00	-3.457217	20	PASS
			NV	-10	0.00	0.000000	20	PASS
			NV	0	0.00	0.000000	20	PASS
			NV	10	0.00	0.000000	20	PASS
			NV	20	20000.00	3.457217	20	PASS
			NV	30	-20000.00	-3.457217	20	PASS
			NV	40	0.00	0.000000	20	PASS
			NV	50	-20000.00	-3.457217	20	PASS
			NV	60	-20000.00	-3.457217	20	PASS
			NV	70	0.00	0.000000	20	PASS
			NV	80	0.00	0.000000	20	PASS

11. Antenna Requirements

11.1. Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For intentional device, according to RSS-Gen issue 5 section 6.8.

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

11.2. Result

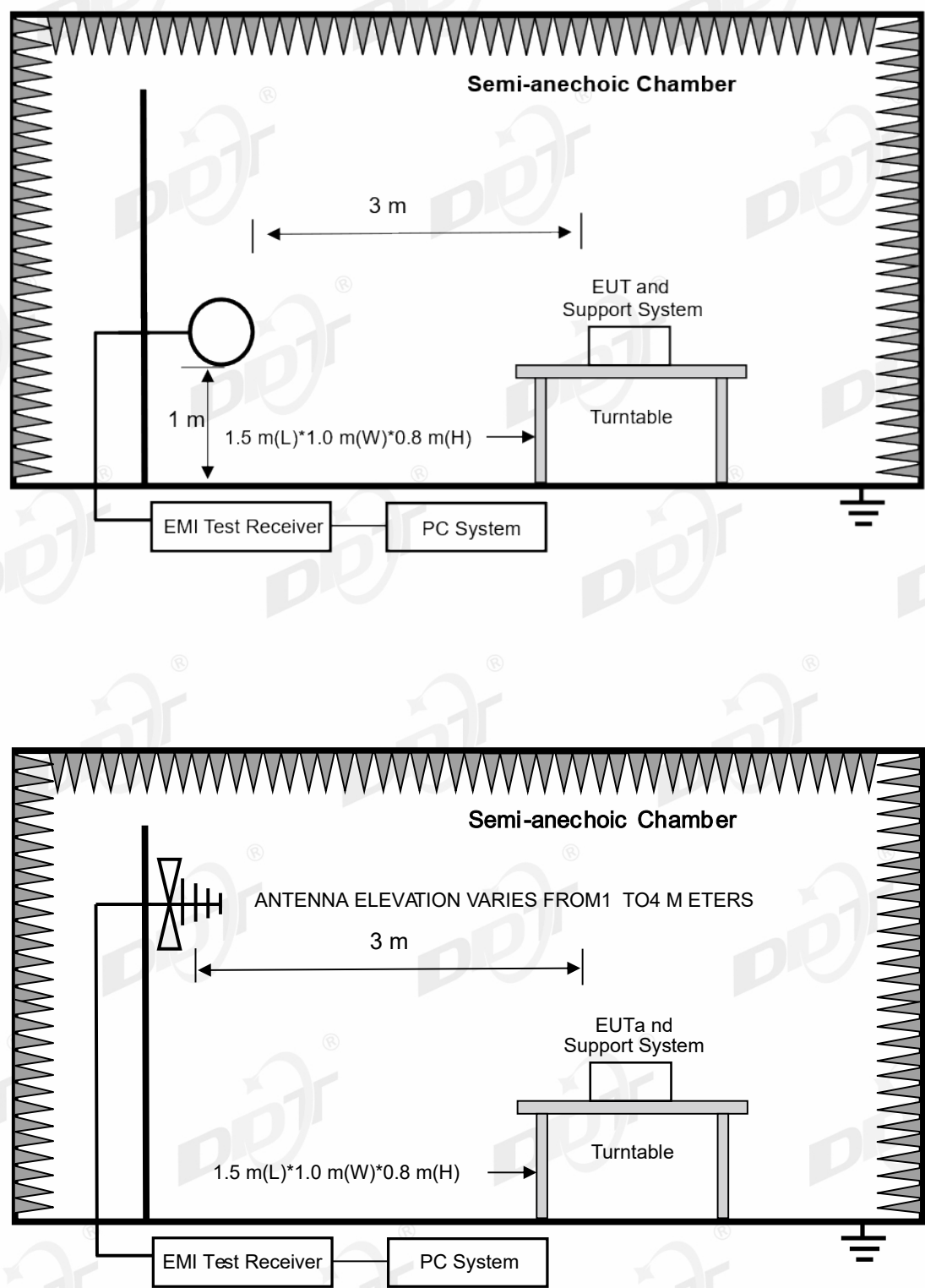
The antenna used for this product as Antenna information described in section 2.1 of the report, and there is no other antenna than that furnished by the responsible party shall be used with the device.

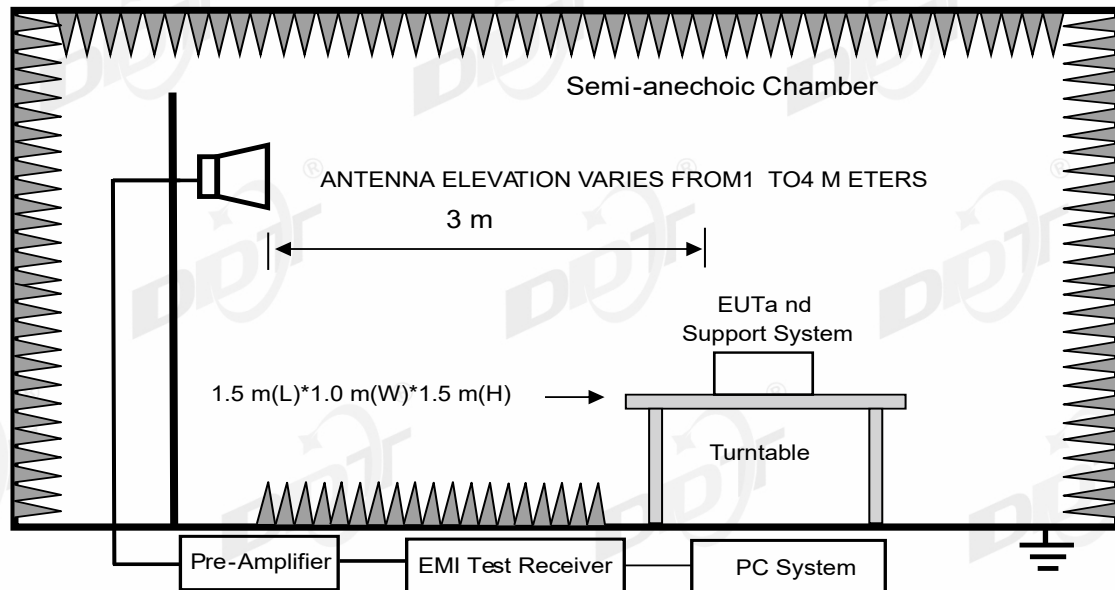
12. Radiated Emission

12.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To	Cal. Interval
Micro-Tronics filters	REBES	BRM50702	DDT-ZC03242	/	/
RF Cable	N/A	W24.02 HL-562	DDT-ZC04022	2026/03/28	1 Year
RF cable	Yuhu Technology	JCTB810-NJ-NJ-9M	DDT-ZC02538	2026/03/28	1 Year
RF cable	Zhongke Junchuang	JCT26S-NJ-NJ-1.5M	DDT-ZC02762	2026/03/28	1 Year
RF cable	Yuhu Technology	ZT26S-SMAJ-SMAJ-1M	DDT-ZC02037	2026/03/28	1 Year
RF Cable	N/A	W13.02 AP1-X2	DDT-ZC04023	2026/03/28	1 Year
Pre-amplifier	COM-POWER	PAM-840A	DDT-ZC01693	2026/03/28	1 Year
Pre-amplifier	COM-POWER	PAM-118A	DDT-ZC01293	2026/08/10	1 Year
High pass filter	Micro-Tronics	HPM50102	DDT-ZC00561	2026/03/28	1 Year
EMI TEST RECEIVER	R&S	ESU26	DDT-ZC01909	2026/03/28	1 Year
High pass filter	Micro-Tronics	HPM50108	DDT-ZC00560	2026/03/28	1 Year
High Pass filter	Xi'an Xingbo	XBLBQ-GTA67	DDT-ZC02179	2026/03/28	1 Year
Micro-Tronics filters	REBES	BRM50716	DDT-ZC03240	/	/
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	DDT-ZC00506	2026/04/01	1 Year
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	DDT-ZC02050	2026/07/25	1Year
Hochgewinn-Hornantenne	SCHWARZBECK	BBHA 9120 D	DDT-ZC02129	2026/08/11	1 Year
Active Loop Antenna	Schwarzbeck	FMZB1519	DDT-ZC00524	2026/08/18	1 Year
PSA Series Spectrum Analyzer	Agilent	E4447A	DDT-ZC00517	2026/03/28	1 Year

12.2. Block diagram of test setup





12.3. Limits

(1) FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

²Above 38.6

RSS-Gen section 8.10 Restricted frequency bands*

MHz	MHz	MHz	GHz
0.090-0.110	12.51975-12.52025	240-285	3.5-4.4
0.495-0.505	12.57675-12.57725	322-335.4	4.5-5.15
2.1735-2.1905	13.36-13.41	399.9-410	5.35-5.46
3.020-3.026	16.42-16.423	608-614	7.25-7.75
4.125-4.128	16.69475-16.69525	960-1427	8.025-8.5
4.1772&4.17775	16.80425-16.80475	1435-1626.5	9.0-9.2
4.2072&4.20775	25.5-25.67	1645.5-1646.5	9.3-9.5
5.677-5.683	37.5-38.25	1660-1710	10.6-12.7
6.215-6.218	73-74.6	1718.8-1722.2	13.25-13.4
6.26775-6.26825	74.8-75.2	2200-2300	14.47-14.5
6.31175-6.31225	108-138	2310-2390	15.35-16.2
8.291-8.294	149.9-150.05	2483.5-2500	17.7-21.4
8.362-8.366	156.52475-156.52525	2655-2900	22.01-23.12
8.37625-8.38675	156.7-156.9	3260-3267	23.6-24.0
8.41425-8.41475	162.0125-167.17	3332-3339	31.2-31.8
12.29-12.293	167.72-173.2	3345.8-3358	36.43-36.5
			Above 38.6

* Certain frequency bands listed in table and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

(2) FCC 15.209 Limit & RSS-Gen section 8.9 Limit

Frequency	Magnetic field strength (H-Field) ($\mu\text{A/m}$)	Measurement distance (m)
9 - 490 kHz ¹	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		uV/m	dBuV/m
0.009 ~ 0.490	300	2400/F(kHz)	67.6-20log(F)
0.490 ~ 1.705	30	24000/F(kHz)	87.6-20log(F)
1.705 ~ 30.0	30	30	29.54
30~88	3	100	40.0
88~216	3	150	43.5
216~960	3	200	46.0
960~1000	3	500	54.0
Above 1000	3	74.0 dBuV/m(Peak) 54.0 dBuV/m(Average)	

Note:

(1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9 - 90 kHz, 110 - 490 kHz and above 1000 MHz, radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30 MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$\text{Limit}_{3m}(\text{dBuV/m}) = \text{Limit}_{30m}(\text{dBuV/m}) + 40\text{Log}(30m/3m)$$

(3) Limit for this EUT

The emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, and the emissions appearing within RSS-Gen section 8.10 Restricted frequency bands shall not exceed the limits shown in RSS-Gen section 8.9, all the other emissions shall be at least 20 dB below the fundamental emissions or comply with 15.209 limits and RSS-Gen section 8.9 limits.

12.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description
Laptop	Lenovo	00425-00000-00002-AA135	NA

12.5. Test procedure

- (1) EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber for below 1G and 150 cm above the ground plane inside a fully-anechoic chamber for above 1G.
- (2) Test antenna was located 3 m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used	Test antenna distance
9 kHz - 30 MHz	Active Loop antenna	3 m
30 MHz - 1 GHz	Trilog Broadband Antenna	3 m
1 GHz - 18 GHz	Double Ridged Horn Antenna (1 GHz-18 GHz)	3 m
18 GHz - 40 GHz	Horn Antenna (18 GHz-40 GHz)	1 m

According ANSI C63.10:2020 clause 6.4.6 and 6.5.3, for measurements below 30 MHz, Antenna was located 3 m from EUT, the loop antenna was positioned in three antenna orientations (parallel, perpendicular, and round-parallel), for each measurement antenna alignment, the EUT shall be rotated through 0° to 360° on a turntable, and the lowest height of the magnetic antenna shall be 1 m above the ground. For measurement above 30 MHz, the trilog Broadband Antenna or Horn Antenna was located 3 m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

(3) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9 kHz to 25 GHz:

(a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1 m to 4 m (Except loop antenna, it's fixed 1 m above ground.)

(b) Change work frequency or channel of device if practicable.

(c) Change modulation type of device if practicable.

(d) Change power supply range from 85% to 115% of the rated supply voltage

(e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9 kHz to 25 GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 18 GHz to 25 GHz, so below final test was performed with frequency range from 9 kHz to 18 GHz.

(4) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1 m and 4 m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipment and all of the interface cables were changed according to ANSI C63.10:2020 on Radiated Emission test.

(5) The emissions from 9 kHz to 1 GHz were measured based on CISPR QP detector except for the frequency bands 9 - 90 kHz, 110 - 490 kHz, for emissions from 9 kHz - 90 kHz, 110 kHz - 490 kHz

and above 1 GHz were measured based on average detector, for emissions above 1 GHz, peak emissions also be measured and need comply with Peak limit.

(6) The emissions from 9 kHz to 1 GHz, QP or average values were measured with EMI receiver with below RBW.

Frequency band	RBW
9 kHz - 150 kHz	200 Hz
150 kHz - 30 MHz	9 kHz
30 MHz - 1 GHz	120 kHz

(7) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1 MHz, VBW is set at 3 MHz for Peak measure; According ANSI C63.10:2020 clause 4.1.4.2.2 procedure for average measure.

(8) For portable device, X axis, Y axis, Z axis are tested, and worse setup is reported.

(9) According exploratory test, the emission levels are 20 dB below the limit detected from 9 kHz to 30 MHz and 18 GHz to 25 GHz, so the final test was performed with frequency range from 30 MHz to 18 GHz and recorded in below.

(10) For 30 MHz ~ 25 GHz: (Scan with all mode, the worst case is reported)

(11) For emissions below 1 GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1 GHz, the final test was only performed with EUT working in worst mode.

12.6. Test result

PASS. (See below detailed test result)

Note: All modes have been tested, only recorded the worst case in this report.

12.7. Test data

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-08-21

Tested By:

Nan Zhong

EUT:

Meter

Model Number:

6KW7-10

Test Mode:

TX 11N20 5785MHz Mode

Power Supply:

DC 12V

Condition:

Temp:22.5°C;Humi:54.1%

Test Site:

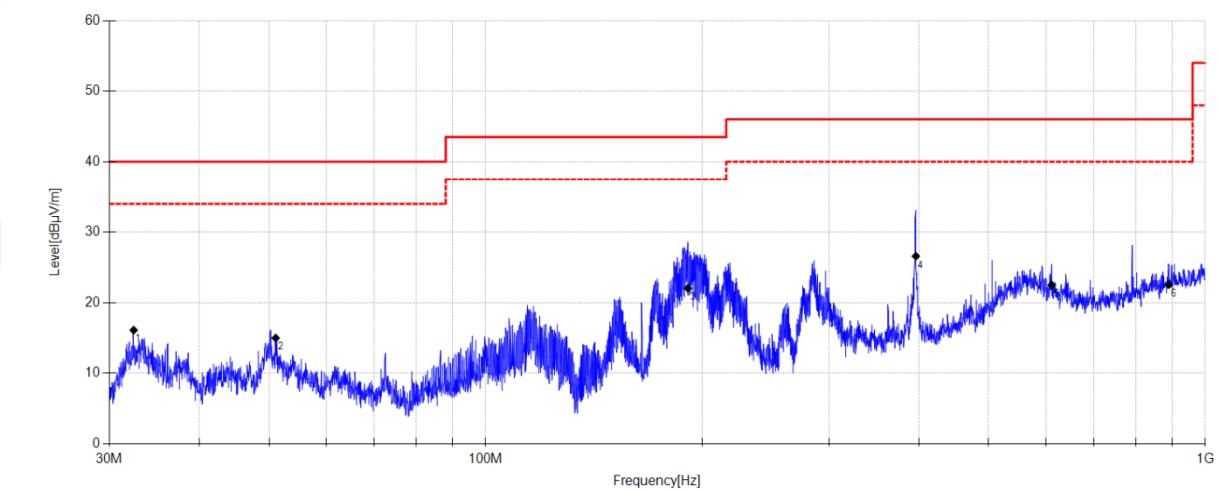
DDT 3# Chamber

File Path:

d:\ts\2025 report date\Q25072136-1E\FCC BELOW1G\20250821-062658_H

Memo:

Sample Numbler:S25072136-002



Final Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable Loss [dB]	Result [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	32.428	33.76	10.90	3.74	16.10	40.00	23.90	QP	Horizontal
2	51.080	30.37	13.02	3.89	14.98	40.00	25.02	QP	Horizontal
3	191.003	39.79	10.20	4.44	22.04	43.50	21.46	QP	Horizontal
4	396.037	38.45	15.10	5.54	26.59	46.00	19.41	QP	Horizontal
5	611.695	29.88	19.19	6.32	22.51	46.00	23.49	QP	Horizontal
6	890.124	25.88	21.60	7.05	22.57	46.00	23.43	QP	Horizontal

Note:

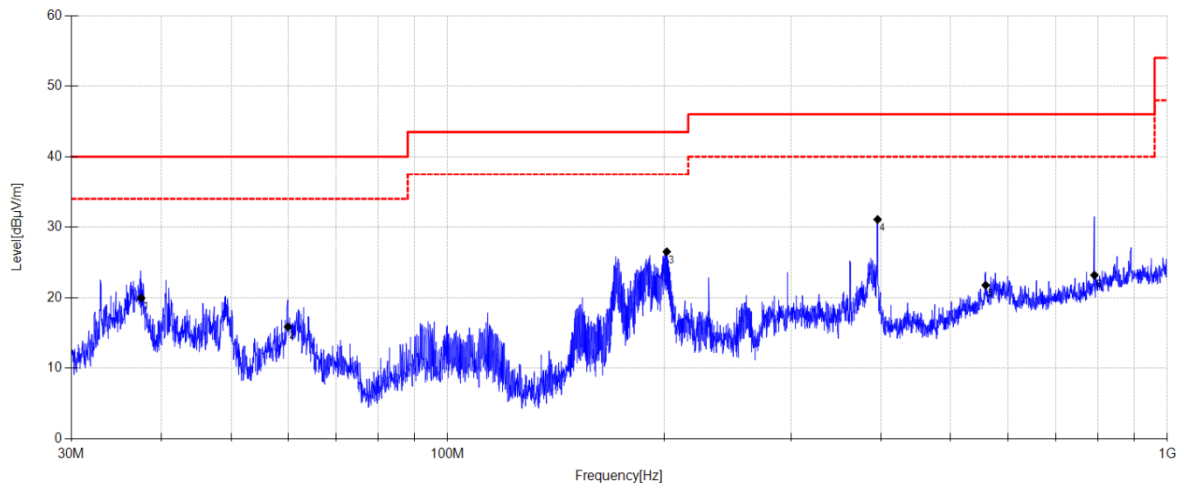
1. Result Level = Reading + Cable loss + Antenna Factor + AMP

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date: 2025-08-21
Tested By: Nan Zhong
EUT: Meter
Model Number: 6KW7-10
Test Mode: TX 11N20 5785MHz Mode
Power Supply: DC 12V
Condition: Temp:22.5°C;Humi:54.1%
Test Site: DDT 3# Chamber
File Path: d:\ts\2025 report date\Q25072136-1E\FCC BELOW1G\20250821-062719_V
Memo: Sample Numble:S25072136-002

**Final Data List**

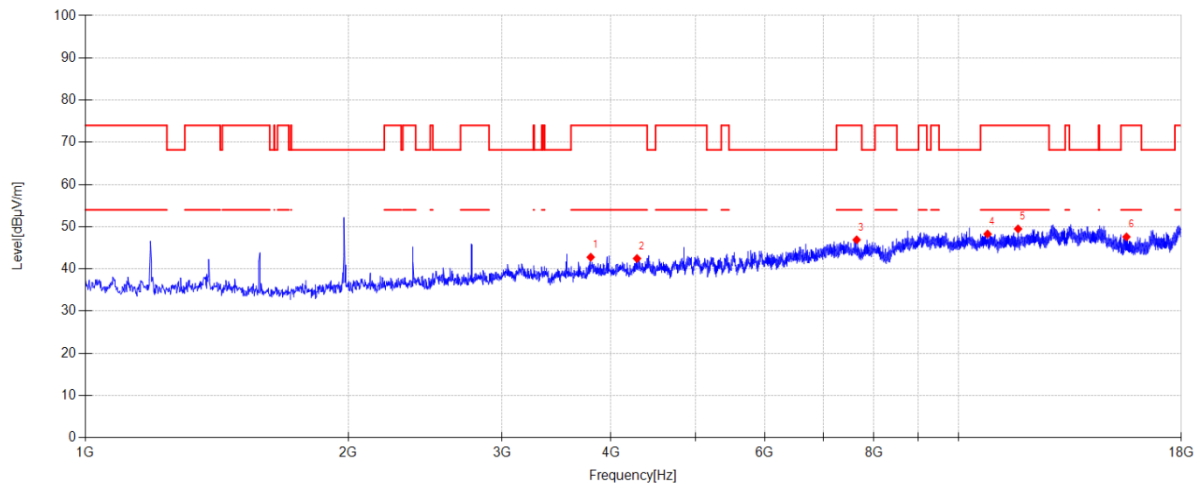
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable Loss [dB]	Result [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	37.520	36.27	12.20	3.78	19.95	40.00	20.05	QP	Vertical
2	59.977	31.81	12.40	3.95	15.86	40.00	24.14	QP	Vertical
3	201.599	43.32	11.11	4.48	26.51	43.50	16.99	QP	Vertical
4	395.760	42.97	15.08	5.54	31.09	46.00	14.91	QP	Vertical
5	559.187	30.19	18.19	6.13	21.76	46.00	24.24	QP	Vertical
6	791.765	28.6	20.30	6.84	23.19	46.00	22.81	QP	Vertical

Note:

1. Result Level = Reading + Cable loss + Antenna Factor + AMP
2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.
3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date: 2025-10-29 **Tested By:** Nan Zhong
EUT: Meter **Model Number:** 6KW7-10
Test Mode: TX 11n20 5785MHz Mode **Power Supply:** DC 12V
Condition: Temp:22.5°C;Humi:54.1% **Test Site:** DDT 3# Chamber
File Path: d:\ts\2025 report date\Q25072136-1E\FCC ABOVE1G 5.8G\3
Memo: Sample Numble:S25072136-002



Suspected Data List

NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	3791.400	47.29	30.71	4.40	-39.62	42.78	74.00	31.22	PK	Horizontal
2	4284.400	45.85	31.75	4.60	-39.73	42.47	74.00	31.53	PK	Horizontal
3	7645.300	43.67	36.92	6.15	-39.84	46.90	74.00	27.10	PK	Horizontal
4	10798.800	41.68	39.01	7.20	-39.62	48.27	74.00	25.73	PK	Horizontal
5	11703.200	43.02	38.50	7.57	-39.60	49.49	74.00	24.51	PK	Horizontal
6	15575.800	39.41	38.88	8.43	-39.13	47.59	74.00	26.41	PK	Horizontal

Note:

1. Level = Reading + Cable loss + Antenna Factor + AMP
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-10-29

Tested By:

Nan Zhong

EUT:

Meter

Model Number:

6KW7-10

Test Mode:

TX 11n20 5785MHz Mode

Power Supply:

DC 12V

Condition:

Temp:22.5°C;Humi:54.1%

Test Site:

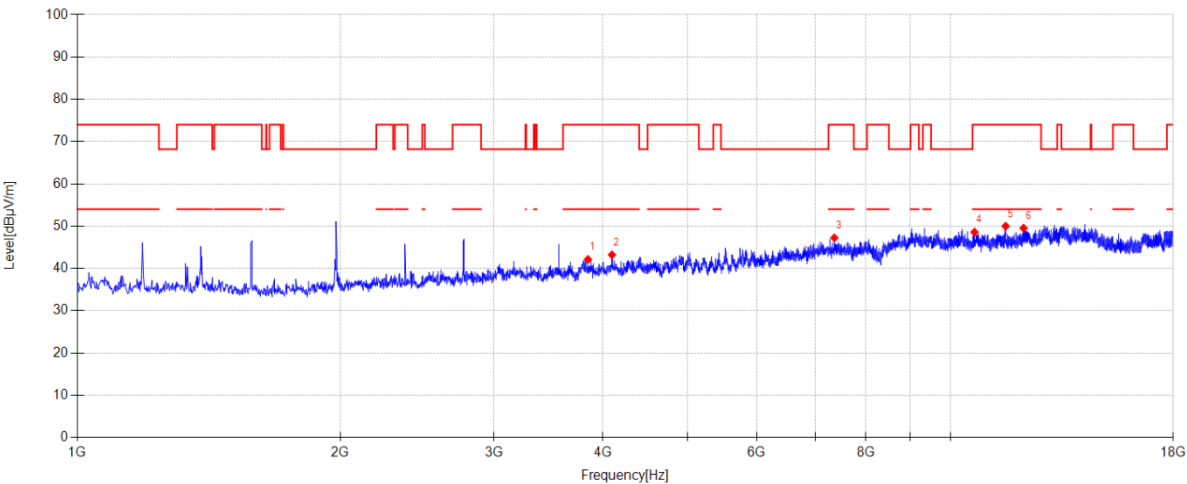
DDT 3# Chamber

File Path:

d:\ts\2025 report date\Q25072136-1E\FCC ABOVE1G 5.8G\4

Memo:

Sample Numbler:S25072136-002



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	3844.100	46.99	30.37	4.41	-39.64	42.13	74.00	31.87	PK	Vertical
2	4095.700	47.31	31.11	4.51	-39.71	43.22	74.00	30.78	PK	Vertical
3	7363.100	44.10	36.92	6.07	-39.86	47.23	74.00	26.77	PK	Vertical
4	10654.300	41.65	39.36	7.21	-39.63	48.59	74.00	25.41	PK	Vertical
5	11567.200	43.43	38.67	7.49	-39.60	49.99	74.00	24.01	PK	Vertical
6	12126.500	41.91	39.42	7.71	-39.50	49.54	74.00	24.46	PK	Vertical

Note:

1. Level = Reading + Cable loss + Antenna Factor + AMP

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

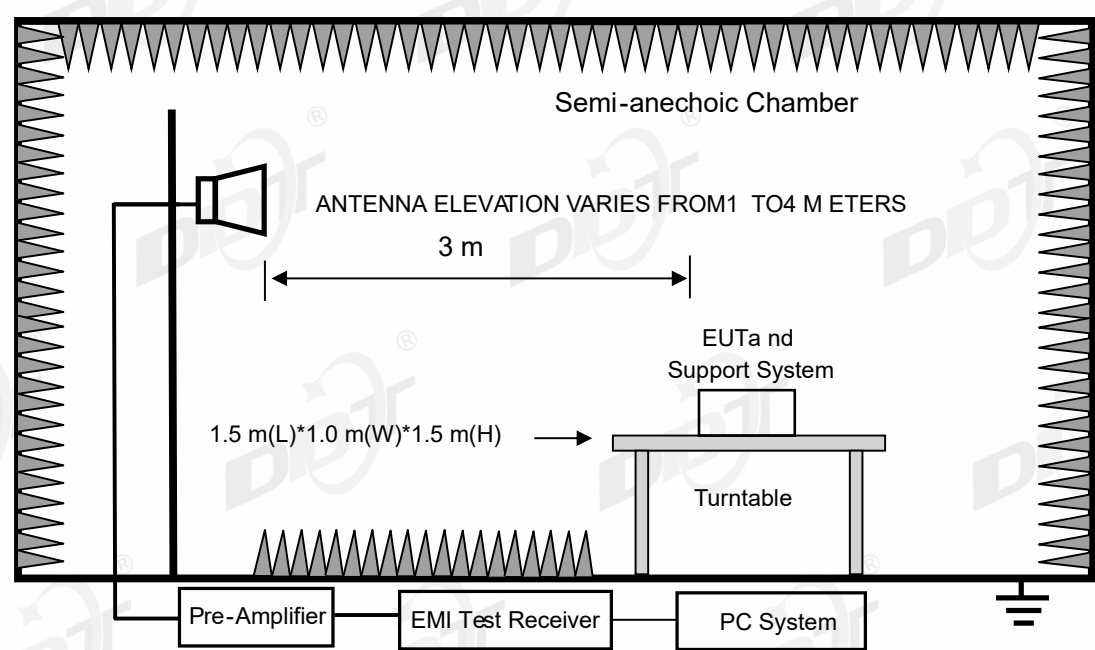
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

13. Band Edge Compliance

13.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To	Cal. Interval
Micro-Tronics filters	REBES	BRM50702	DDT-ZC03242	/	/
RF Cable	N/A	W24.02 HL-562	DDT-ZC04022	2026/03/28	1 Year
RF cable	Yuhu Technology	JCTB810-NJ-NJ-9M	DDT-ZC02538	2026/03/28	1 Year
RF cable	Zhongke Junchuang	JCT26S-NJ-NJ-1.5M	DDT-ZC02762	2026/03/28	1 Year
RF cable	Yuhu Technology	ZT26S-SMAJ-SMAJ-1M	DDT-ZC02037	2026/03/28	1 Year
RF Cable	N/A	W13.02 AP1-X2	DDT-ZC04023	2026/03/28	1 Year
Pre-amplifier	COM-POWER	PAM-840A	DDT-ZC01693	2026/03/28	1 Year
Pre-amplifier	COM-POWER	PAM-118A	DDT-ZC01293	2026/08/10	1 Year
High pass filter	Micro-Tronics	HPM50102	DDT-ZC00561	2026/03/28	1 Year
EMI TEST RECEIVER	R&S	ESU26	DDT-ZC01909	2026/03/28	1 Year
High pass filter	Micro-Tronics	HPM50108	DDT-ZC00560	2026/03/28	1 Year
High Pass filter	Xi'an Xingbo	XBLBQ-GTA67	DDT-ZC02179	2026/03/28	1 Year
Micro-Tronics filters	REBES	BRM50716	DDT-ZC03240	/	/
Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	DDT-ZC00506	2026/04/01	1 Year
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	DDT-ZC02050	2026/07/25	1Year
Hochgewinn-Hornantenne	SCHWARZBECK	BBHA 9120 D	DDT-ZC02129	2026/08/11	1 Year
Active Loop Antenna	Schwarzbeck	FMZB1519	DDT-ZC00524	2026/08/18	1 Year
PSA Series Spectrum Analyzer	Agilent	E4447A	DDT-ZC00517	2026/03/28	1 Year

13.2. Block diagram of test setup



13.3. Limits

(1) For transmitters operating solely in the 5.725-5.850 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.

13.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description
Laptop	Lenovo	00425-00000-00002-AA135	NA

13.5. Test procedure

Same with Emissions in Restricted Frequency Bands except change investigated frequency range from 5.725-5.85 GHz.
Remark: All restriction band have been tested, and only the worst case is shown in report.

13.6. Test result

PASS. (See below detailed test result)

13.7. Test data

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-10-30

Tested By:

Nan Zhong

EUT:

Meter

Model Number:

6KW7-10

Test Mode:

TX A 5785MHz Mode

Power Supply:

DC 12V

Condition:

Temp:22.5°C;Humi:54.1%

Test Site:

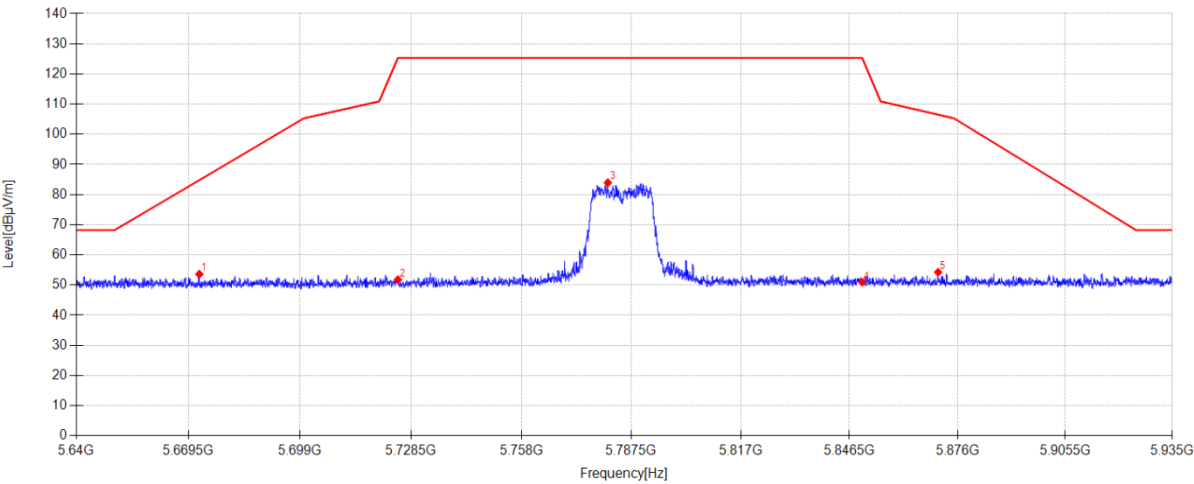
DDT 3# Chamber

File Path:

d:\ts\2025 report date\Q25072136-1E\FCC ABOVE1G 5.8G\11

Memo:

Sample Numbel:S25072136-002 setting power:48



Suspected Data List										
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5672.362	44.71	33.32	5.24	-29.67	53.60	84.79	31.19	PK	Horizontal
2	5725.000	42.73	33.45	5.26	-29.65	51.79	125.30	73.51	PK	Horizontal
3	5781.187	74.45	33.86	5.28	-29.64	83.95	125.30	41.35	PK	Horizontal
4	5850.000	41.37	33.90	5.31	-29.63	50.95	125.30	74.35	PK	Horizontal
5	5870.690	44.48	34.07	5.32	-29.63	54.24	106.51	52.27	PK	Horizontal

Note:

- Level = Reading + Cable loss + Antenna Factor + AMP
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date:

2025-10-30

Tested By:

Nan Zhong

EUT:

Meter

Model Number:

6KW7-10

Test Mode:

TX A 5785MHz Mode

Power Supply:

DC 12V

Condition:

Temp:22.5°C;Humi:54.1%

Test Site:

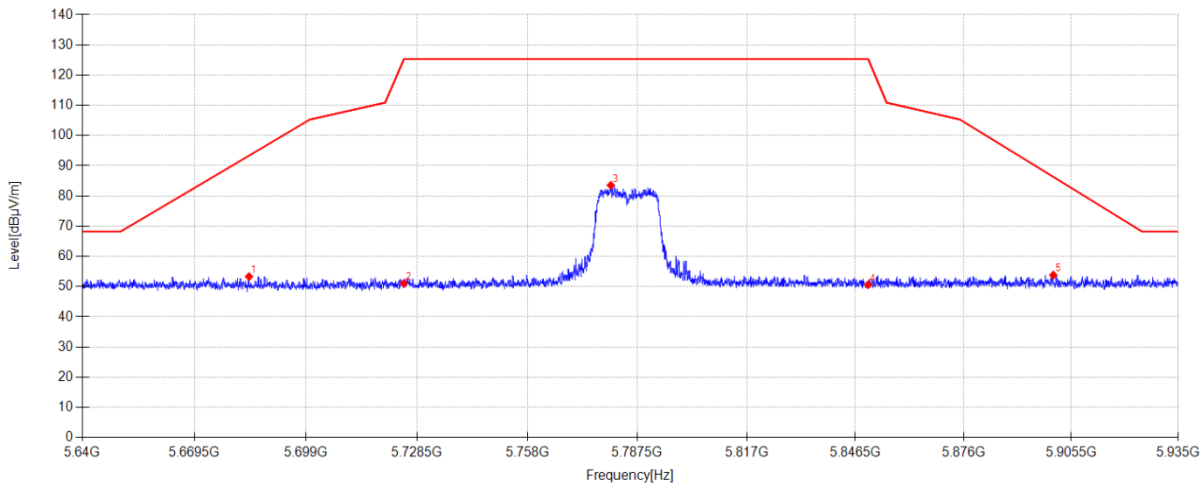
DDT 3# Chamber

File Path:

d:\ts\2025 report date\Q25072136-1E\FCC ABOVE1G 5.8G\12

Memo:

Sample Numbler:S25072136-002 setting power:48



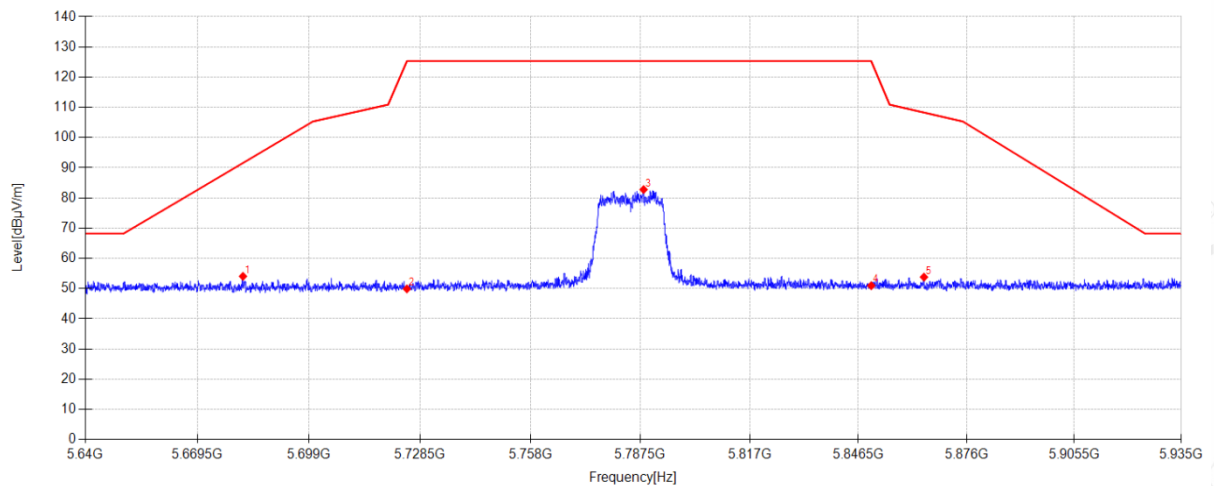
Suspected Data List										
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5683.896	44.47	33.23	5.24	-29.66	53.28	93.35	40.07	PK	Vertical
2	5725.000	42.01	33.45	5.26	-29.65	51.07	125.30	74.23	PK	Vertical
3	5780.361	74.05	33.86	5.28	-29.64	83.55	125.30	41.75	PK	Vertical
4	5850.000	41.00	33.90	5.31	-29.63	50.58	125.30	74.72	PK	Vertical
5	5900.603	43.80	34.30	5.33	-29.62	53.81	86.30	32.49	PK	Vertical

Note:

- Level = Reading + Cable loss + Antenna Factor + AMP
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date: 2025-10-30 **Tested By:** Nan Zhong
EUT: Meter **Model Number:** 6KW7-10
Test Mode: TX N20 5785MHz Mode **Power Supply:** DC 12V
Condition: Temp:22.5°C;Humi:54.1% **Test Site:** DDT 3# Chamber
File Path: d:\ts\2025 report date\Q25072136-1E\FCC ABOVE1G 5.8G\15
Memo: Sample Numbler:S25072136-002 setting power:NA

**Suspected Data List**

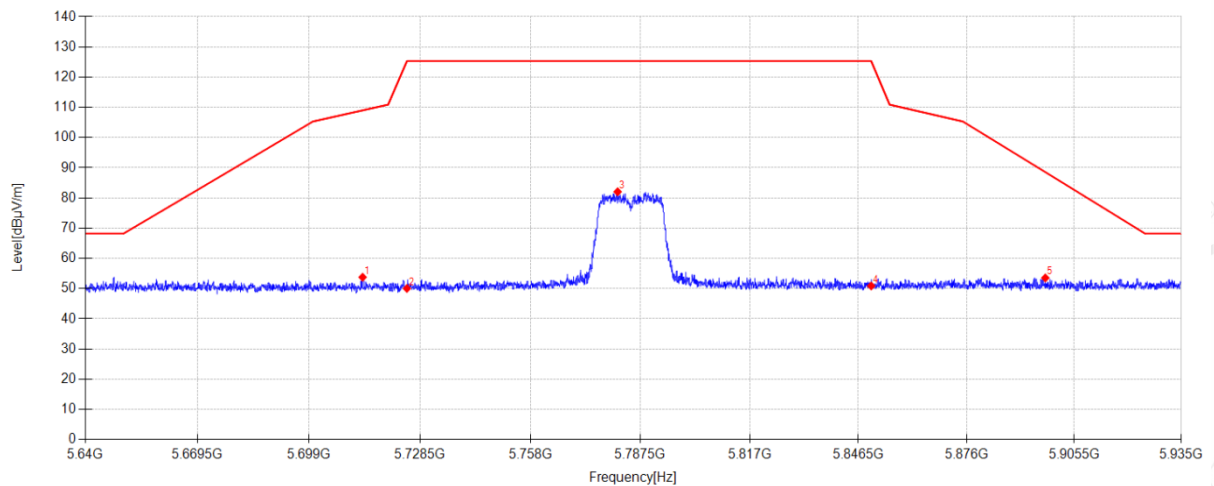
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5681.507	45.22	33.25	5.24	-29.66	54.05	91.58	37.53	PK	Horizontal
2	5725.000	40.83	33.45	5.26	-29.65	49.89	125.30	75.41	PK	Horizontal
3	5788.385	73.25	33.88	5.29	-29.64	82.78	125.30	42.52	PK	Horizontal
4	5850.000	41.39	33.90	5.31	-29.63	50.97	125.30	74.33	PK	Horizontal
5	5864.377	44.09	34.02	5.32	-29.63	53.80	108.27	54.47	PK	Horizontal

Note:

1. Level = Reading + Cable loss + Antenna Factor + AMP
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date: 2025-10-30 **Tested By:** Nan Zhong
EUT: Meter **Model Number:** 6KW7-10
Test Mode: TX N20 5785MHz Mode **Power Supply:** DC 12V
Condition: Temp:22.5°C;Humi:54.1% **Test Site:** DDT 3# Chamber
File Path: d:\ts\2025 report date\Q25072136-1E\FCC ABOVE1G 5.8G\16
Memo: Sample Numbler:S25072136-002 setting power:NA

**Suspected Data List**

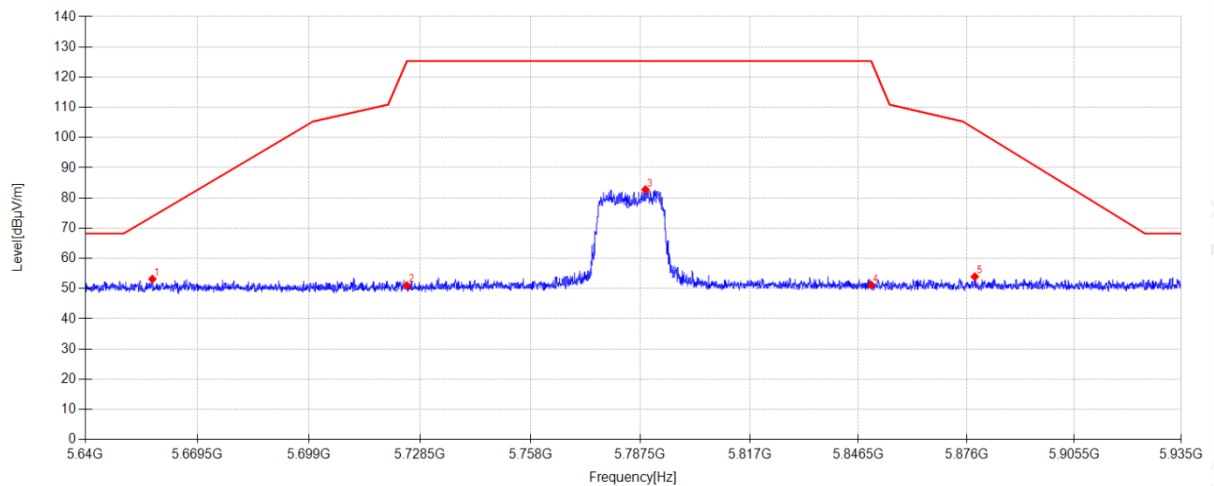
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5713.219	44.86	33.29	5.26	-29.66	53.75	109.00	55.25	PK	Vertical
2	5725.000	40.97	33.45	5.26	-29.65	50.03	125.30	75.27	PK	Vertical
3	5781.394	72.54	33.86	5.28	-29.64	82.04	125.30	43.26	PK	Vertical
4	5850.000	41.30	33.90	5.31	-29.63	50.88	125.30	74.42	PK	Vertical
5	5897.565	43.54	34.28	5.33	-29.62	53.53	88.56	35.03	PK	Vertical

Note:

- Level = Reading + Cable loss + Antenna Factor + AMP
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date: 2025-10-30 **Tested By:** Nan Zhong
EUT: Meter **Model Number:** 6KW7-10
Test Mode: TX AC20 5785MHz Mode **Power Supply:** DC 12V
Condition: Temp:22.5°C;Humi:54.1% **Test Site:** DDT 3# Chamber
File Path: d:\ts\2025 report date\Q25072136-1E\FCC ABOVE1G 5.8G\17
Memo: Sample Numbler:S25072136-002 setting power:NA

**Suspected Data List**

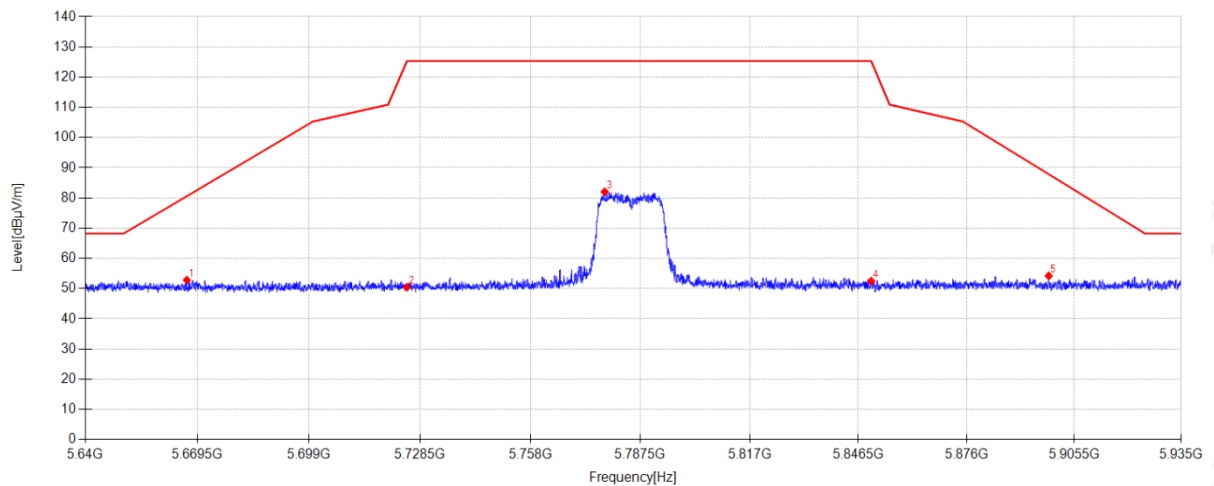
NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5657.612	44.14	33.44	5.23	-29.67	53.14	73.85	20.71	PK	Horizontal
2	5725.000	41.92	33.45	5.26	-29.65	50.98	125.30	74.32	PK	Horizontal
3	5788.887	73.23	33.88	5.29	-29.64	82.76	125.30	42.54	PK	Horizontal
4	5850.000	41.63	33.90	5.31	-29.63	51.21	125.30	74.09	PK	Horizontal
5	5878.242	44.11	34.13	5.32	-29.62	53.94	102.89	48.95	PK	Horizontal

Note:

- Level = Reading + Cable loss + Antenna Factor + AMP
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Date: 2025-10-30 **Tested By:** Nan Zhong
EUT: Meter **Model Number:** 6KW7-10
Test Mode: TX AC20 5785MHz Mode **Power Supply:** DC 12V
Condition: Temp:22.5°C;Humi:54.1% **Test Site:** DDT 3# Chamber
File Path: d:\ts\2025 report date\Q25072136-1E\FCC ABOVE1G 5.8G\18
Memo: Sample Numbler:S25072136-002 setting power:NA

**Suspected Data List**

NO.	Freq. [MHz]	Reading [dBμV/m]	Antenna Factor [dB]	Cable loss [dB]	AMP [dB]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Detector	Polarity
1	5666.698	43.86	33.37	5.24	-29.67	52.80	80.59	27.79	PK	Vertical
2	5725.000	41.38	33.45	5.26	-29.65	50.44	125.30	74.86	PK	Vertical
3	5777.913	72.53	33.86	5.28	-29.64	82.03	125.30	43.27	PK	Vertical
4	5850.000	42.88	33.90	5.31	-29.63	52.46	125.30	72.84	PK	Vertical
5	5898.509	44.21	34.29	5.33	-29.62	54.21	87.86	33.65	PK	Vertical

Note:

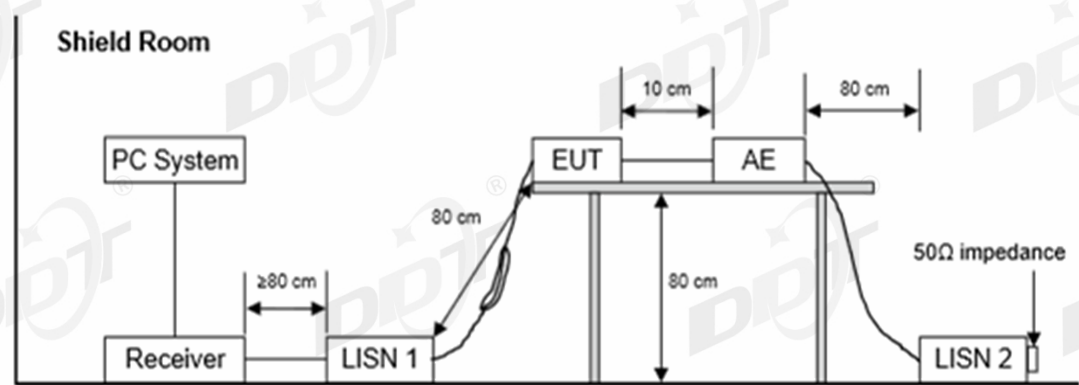
- Level = Reading + Cable loss + Antenna Factor + AMP
- If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
- Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

14. Power Line Conducted Emissions

14.1. Test equipment

Equipment	Manufacturer	Model No.	Serial No.	Cal Due To
/	/	/	/	/

14.2. Block diagram of test setup



14.3. Limits

Frequency	Quasi-Peak Level dB(uV)	Average Level dB(uV)
150 kHz~500 kHz	66 ~ 56*	56 ~ 46*
500 kHz~5 MHz	56	46
5 MHz~30 MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

14.4. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	Description	other
/	/	/	/	/

14.5. Test procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.4 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

14.6. Test result

Not applicable, for the product is DC powered.

16. Photos of the EUT

Please refer to appendix I

-----End Report-----