RF MEASUREMENT REPORT

FCC ID:	2AQVB- TS101A
Applicant:	Taisync Technology Inc.
Product:	S1 RC
Model No.:	TS101A
Brand Name:	Viulinx
FCC Classification:	Unlicensed National Information Infrastructure (NII)
FCC Rule Part(s):	Part 15 Subpart E (Section 15.407)
Result:	Complies
Received Date:	2023-08-28
Test Date:	2023-09-03 ~ 2023-10-19

Reviewed By: Jame Yuan

Approved By: Robin Wu

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

Revision History

Report No.	Version	Description	Issue Date	Note
2308RSU082-U2	V01	Initial Report	2023-11-10	Valid

CONTENTS

1. General Information

1.1. Applicant

Taisync Technology Inc.

2055 Junction Ave. Ste 235, San Jose, CA 95131

1.2. Manufacturer

Wuxi Yuanchuan Rongchuang Technology Co., Ltd

204-01, Second floor, Convention Center, 78 Jinghui East Road, Xinwu District, Wuxi, Jiangsu, China

1.3. Testing Facility

☒	**Test Site – MRT Suzhou Laboratory**				
	Laboratory Location (Suzhou - Wuzhong) D8 Building, No.2 Tian'edang Rd., Wuzhong Economic Development Zone, Suzhou, China **Laboratory Location (Suzhou - SIP)** 4b Building, Liando U Valley, No.200 Xingpu Rd., Shengpu Town, Suzhou Industrial Park, China				
	Laboratory Accreditations				
	A2LA: 3628.01		CNAS: L10551		
	FCC: CN1166		ISED: CN0001		
	VCCI:	☐R-20025	☐G-20034	☐C-20020	☐T-20020
		☐R-20141	☐G-20134	☐C-20103	☐T-20104
☐	**Test Site – MRT Shenzhen Laboratory**				
	Laboratory Location (Shenzhen) 1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China				
	Laboratory Accreditations				
	A2LA: 3628.02		CNAS: L10551		
	FCC: CN1284		ISED: CN0105		
☐	**Test Site – MRT Taiwan Laboratory**				
	Laboratory Location (Taiwan) No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)				
	Laboratory Accreditations				
	TAF: 3261				
	FCC: 291082, TW3261		ISED: TW3261		

1.4. Product Information

Product Name	S1 RC
Model No.	TS101A
EUT Identification No	20230828Sample#01
Wireless Specification	2417 ~ 2470MHz & 5731 ~ 5782MHz
Antenna Information	Refer to selection 1.5
Working Voltage	DC 8-12V, typically 10V
Operating Temperature	-10 ~ 55 °C
Note 1: The information of EUT was provided by the manufacturer, and the accuracy of the information shall be the responsibility of the manufacturer. Note 2: There are two antenna ports of the EUT, and the two antenna ports could not transmit simultaneous.	

1.5. Radio Specification under Test

Frequency Range	5731 ~ 5782MHz
Channel Number	3
Type of Modulation	OFDM
Data Rate	Upstream: 600kbps Downstream: 2.08~7.78Mbps

1.6. Working Frequencies

Low Channel	Mid Channel	High Channel
5731 MHz	5765 MHz	5782 MHz

1.7. Antenna Details

Antenna No.	Antenna Model	Antenna Type	Frequency Band (MHz)	Antenna Gain (dBi)	
				Ant 0	Ant 1
Antenna 1#	ANTWRJQ24583V70JBIPEX194	Dipole Antenna	2417 ~ 2470	3.0	3.0
			5731 ~ 5782	3.0	3.0
Antenna 2#	N12-7417-R0A N12-7418-R0A	Dipole Antenna	2417 ~ 2470	3.0	3.0
			5731 ~ 5782	3.0	3.0

Note 1: The antenna gain is from antenna data sheet provided by the manufacturer.

Note 2: We choose Antenna 1# to test for this report.

2. Test Configuration

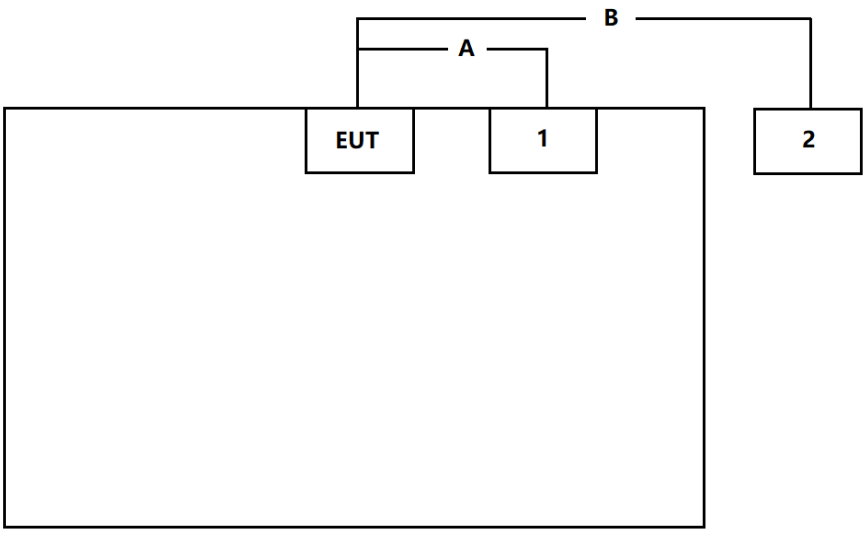
2.1. Test Mode

Mode 1: Transmit at 5731MHz - SISO Mode (Ant 0).
Mode 2: Transmit at 5765MHz - SISO Mode (Ant 0).
Mode 3: Transmit at 5782MHz - SISO Mode (Ant 0).
Mode 4: Transmit at 5731MHz - SISO Mode (Ant 1).
Mode 5: Transmit at 5765MHz - SISO Mode (Ant 1).
Mode 6: Transmit at 5782MHz - SISO Mode (Ant 1).

2.2. Test System Connection Diagram

The device was tested per the guidance ANSI C63.10: 2013 was used to reference the appropriate EUT setup for radiated emissions testing.

Connection Diagram



Cable Type		Cable Description	Length
A	Power Cable	Non shielded	1.8m
B	USB Cable	Shielding	>10m
Product		**Manufacturer**	**Model No.**
1	Adapter	FLYPOWER	PS12T120K1000ED
2	Notebook	Lenovo	E430C

2.3. Test Software

The test utility software used during testing was “IPOP”, and the version was 4.1.

Note: Final power setting please refer to operational description.

2.4. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15.407
- KDB 789033 D02v02r01
- ANSI C63.10-2013

2.5. Test Environment Condition

Ambient Temperature	15 ~ 35°C
Relative Humidity	20 ~ 75%RH

3. Antenna Requirements

Excerpt from §15.203 of the FCC Rules/Regulations:

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section."

- The antenna of the device uses a unique IPEX connector.

Conclusion:

The unit complies with the requirement of §15.203.

4. Measuring Instrument

Instrument	Manufacturer	Model No.	Asset No.	Cali. Interval	Cali. Due Date	Test Site
EMI Test Receiver	R&S	ESR7	MRTSUE06001	1 year	2023-12-28	WZ-AC1
Signal Analyzer	Keysight	N9010B	MRTSUE06607	1 year	2023-12-28	WZ-AC1
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2024-09-17	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06023	1 year	2024-08-09	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06597	1 year	2023-11-05	WZ-AC1
Preamplifier	Agilent	83017A	MRTSUE06076	1 year	2024-05-07	WZ-AC1
Preamplifier	EMCI	EMC184045SE	MRTSUE06640	1 year	2024-01-12	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE06403	1 year	2024-05-31	WZ-AC1
Thermohygrometer	testo	608-H1	MRTSUE11039	1 year	2023-11-01	WZ-AC1
Anechoic Chamber	TDK	WZ-AC1	MRTSUE06212	1 year	2024-04-20	WZ-AC1
EMI Test Receiver	Agilent	N9038A	MRTSUE06125	1 year	2024-05-23	WZ-AC2
TRILOG Antenna	Schwarzbeck	VULB 9162	MRTSUE06022	1 year	2024-05-15	WZ-AC2
Thermohygrometer	Mingle	ETH529	MRTSUE06170	1 year	2023-11-27	WZ-AC2
Thermohygrometer	testo	608-H1	MRTSUE11038	1 year	2023-11-01	WZ-AC2
Anechoic Chamber	RIKEN	WZ-AC2	MRTSUE06213	1 year	2024-04-20	WZ-AC2
USB Power Sensor	Keysight	U2021XA	MRTSUE06446	1 year	2024-05-23	WZ-SR4
Signal Analyzer	Keysight	N9010B	MRTSUE06457	1 year	2024-05-23	WZ-SR4
Attenuator	MVE	MVE2213	MRTSUE11088	1 year	2024-06-08	WZ-SR4
Shielding Room	HUAMING	WZ-SR4	MRTSUE06441	N/A	N/A	WZ-SR4
Temperature Chamber	BAOYT	BYH-150CL	MRTSUE06051	1 year	2024-09-27	WZ-TR3
Signal Analyzer	Keysight	N9010B	MRTSUE06457	1 year	2024-05-23	WZ-TR3
Attenuator	MVE	MVE2213	MRTSUE11088	1 year	2024-06-08	WZ-TR3
Thermohygrometer	testo	608-H1	MRTSUE06401	1 year	2024-05-31	WZ-TR3

Software	Version	Function
EMI Software	V3.0.0	EMI Test Software
Controller_MF 7802	2.03C	RE Antenna & Turntable
Controller_MF 7802	1.02	RE Antenna & Turntable
BenchVue Power Meter	2018.1	Power

5. Decision Rules and Measurement Uncertainty

5.1. Decision Rules

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.2. Measurement Uncertainty

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Radiated Emission Measurement
The maximum measurement uncertainty is evaluated as: Coaxial: 9kHz~30MHz: 2.61dB Coplanar: 9kHz~30MHz: 2.62dB Horizontal: 30MHz~200MHz: 3.79dB 200MHz~1GHz: 3.91dB 1GHz~40GHz: 4.99dB Vertical: 30MHz~200MHz: 4.06dB 200MHz~1GHz: 5.21dB 1GHz~40GHz: 4.90dB
Spurious Emissions, Conducted
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 2.2dB
Output Power
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 1.4dB
Power Spectrum Density
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 2.2dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 2.7%

6. Test Result

6.1. Summary

FCC Section(s)	Test Description	Test Condition	Verdict
15.407(a)	26dB Bandwidth	Conducted	Pass
15.407(e)	6dB Bandwidth		Pass
15.407(a)(3)(i)	Maximum Conducted Output Power		Pass
15.407(g)	Frequency Stability		Pass
15.407(a)(3)(i), (12)	Peak Power Spectral Density		Pass
15.407(b)(4)(i)	Undesirable Emissions		Pass
15.205, 15.209 15.407(b)(8), (9), (10)	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Radiated	Pass
15.207	AC Conducted Emissions 150kHz - 30MHz	Line Conducted	N/A

Notes:

1. The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
2. For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.
3. “N/A” means this item is not applicable, and the details refer to relevant section.

6.2. 26dB & 99% Bandwidth Measurement

6.2.1. Test Limit

N/A

6.2.2. Test Procedure

KDB 789033 D02v02r01- Section II)C)1) (26dB Bandwidth)

KDB 789033 D02v02r01- Section II)D) (99% Bandwidth)

6.2.3. Test Setting

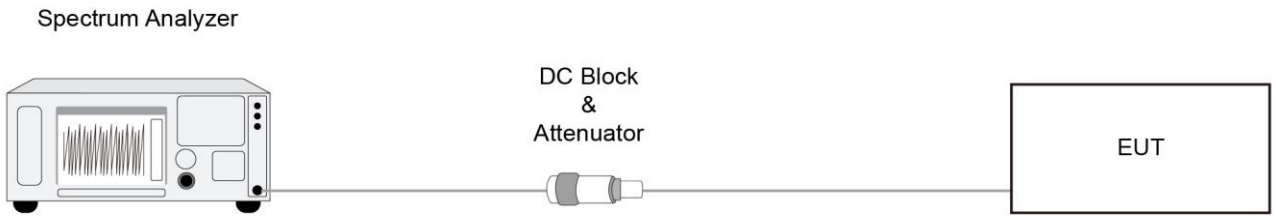
26dB Bandwidth

1. The analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth
2. RBW = approximately 1% of the emission bandwidth.
3. VBW > RBW
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

99% Bandwidth

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 1% to 5% of the OBW
3. VBW ≥ 3 × RBW
4. Span = 1.5 times to 5 times the OBW
5. Detector = peak
6. Trace mode = max hold
7. Allow the trace to stabilize
8. Use the 99% power bandwidth function of the instrument.

6.2.4. Test Setup



6.2.5. Test Result

Refer to Appendix A.2.

6.3. 6dB Bandwidth Measurement

6.3.1. Test Limit

The minimum 6dBbandwidth shall be at least 500 kHz.

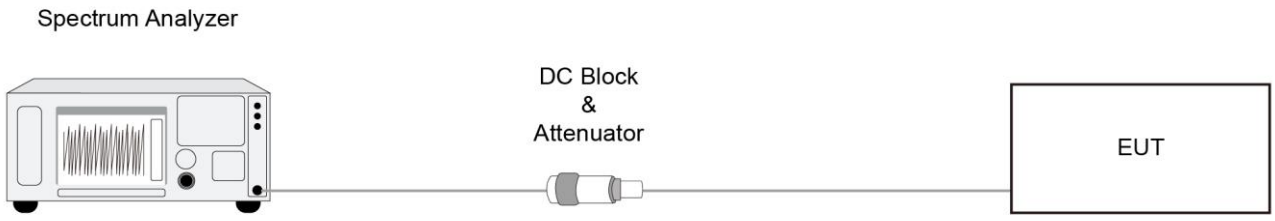
6.3.2. Test Procedure

KDB 789033 D02v02r01- Section II)C)2)

6.3.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 100 kHz.
3. VBW ≥ 3 × RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. 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.

6.3.4. Test Setup



6.3.5. Test Result

Refer to Appendix A.3.

6.4. Output Power Measurement

6.4.1. Test Limit

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

6.4.2. Test Procedure

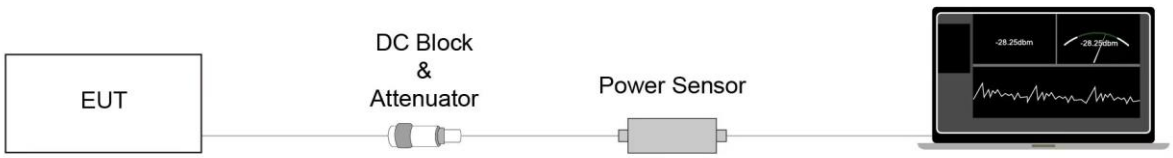
KDB 789033D02v02r01- Section II)E)3)b) Method PM-G

6.4.3. Test Setting

Average Power Measurement

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

6.4.4. Test Setup



6.4.5. Test Result

Refer to Appendix A.4.

6.5. Power Spectral Density Measurement

6.5.1. Test Limit

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

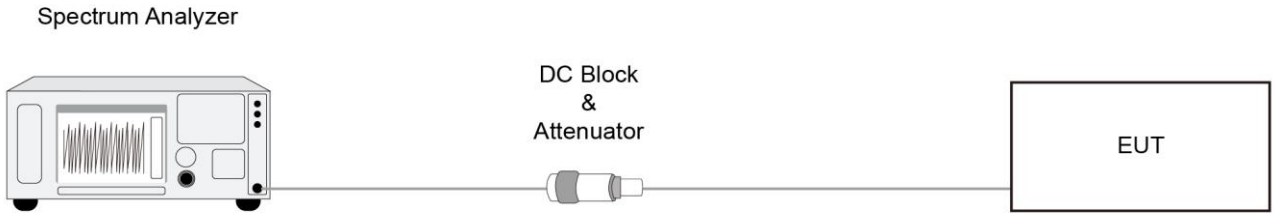
6.5.2. Test Procedure

KDB 789033 D02v02r01-Section Ⅱ)F)

6.5.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz (510kHz, if measurement bandwidth of Maximum PSD is specified in 500 kHz)
4. VBW = 3 × RBW
5. Number of sweep points ≥ 2 × (span / RBW)
6. Detector = power averaging (Average)
7. Sweep time = auto
8. Trigger = free run
9. Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
10. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
11. Add 10*log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add 10*log(1/0.25) = 6 dB if the duty cycle is 25 percent.

6.5.4. Test Setup



6.5.5. Test Result

Refer to Appendix A.5.

6.6. Frequency Stability Measurement

6.6.1. Test Limit

Manufactures 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.

6.6.2. Test Procedure

Frequency Stability Under Temperature Variations:

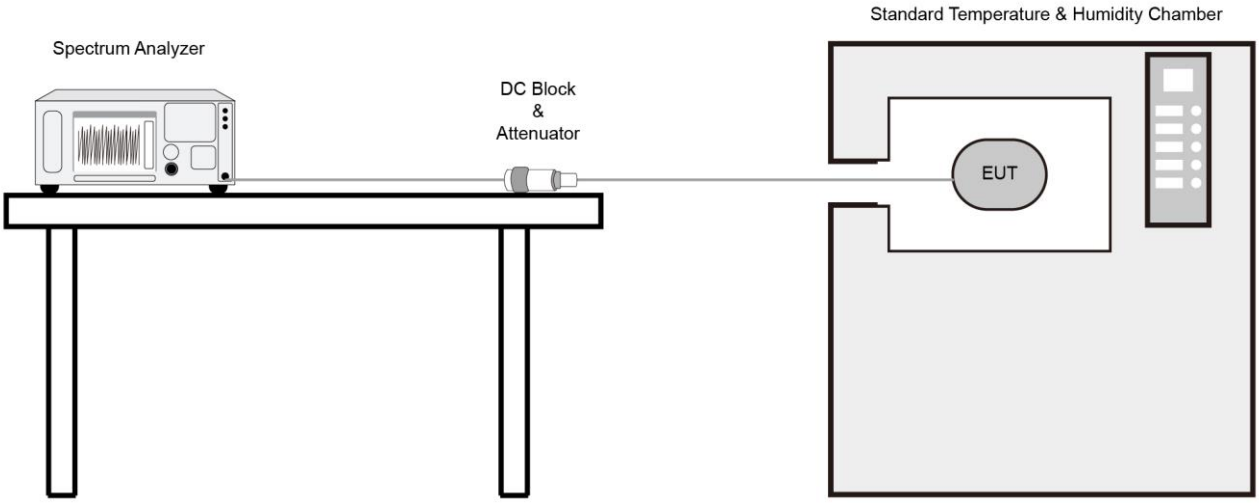
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, record the maximum frequency change.

6.6.3. Test Setup



6.6.4. Test Result

Refer to Appendix A.6.

6.7. Radiated Spurious Emission Measurement

6.7.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [μV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.7.2. Test Procedure

KDB 789033 D02v02r01- Section II)G)

6.7.3. Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz
> 1000MHz	1MHz

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest

2. Span was set greater than 1MHz

3. RBW = as specified in Table 1

4. Detector = CISPR quasi-peak

5. Sweep time = auto couple

6. Trace was allowed to stabilize

Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest

2. RBW = 1MHz

3. VBW = 3MHz

4. Detector = peak

5. Sweep time = auto couple

6. Trace mode = max hold

7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest

2. RBW = 1MHz

3. VBW; If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10 Hz.

If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.

4. Detector = Peak

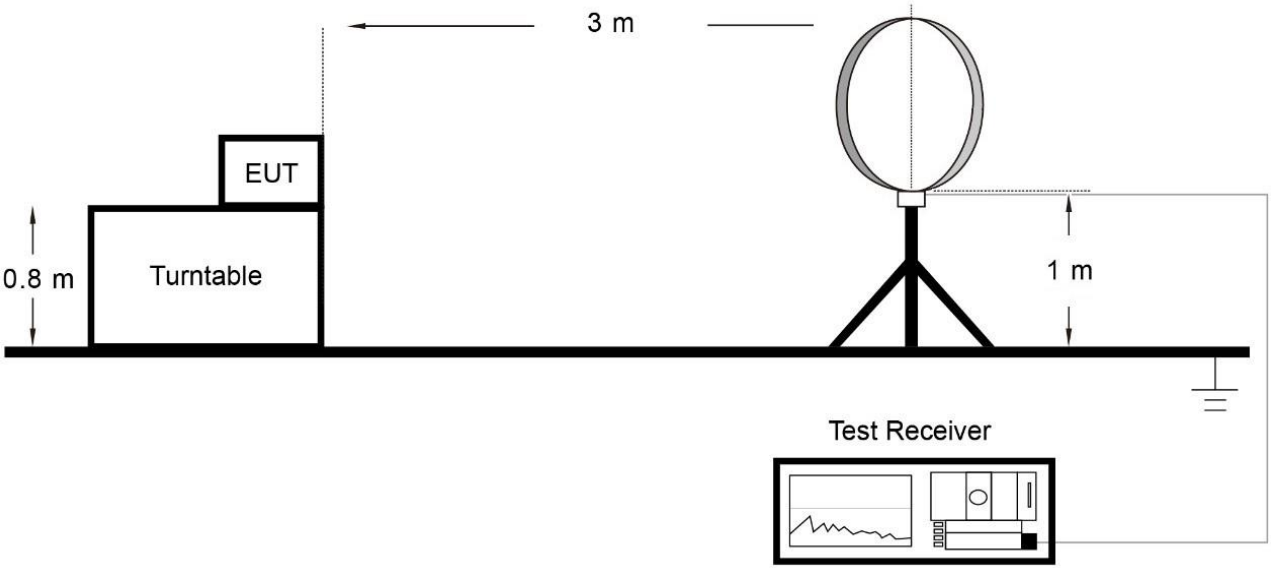
5. Sweep time = auto

6. Trace mode = max hold

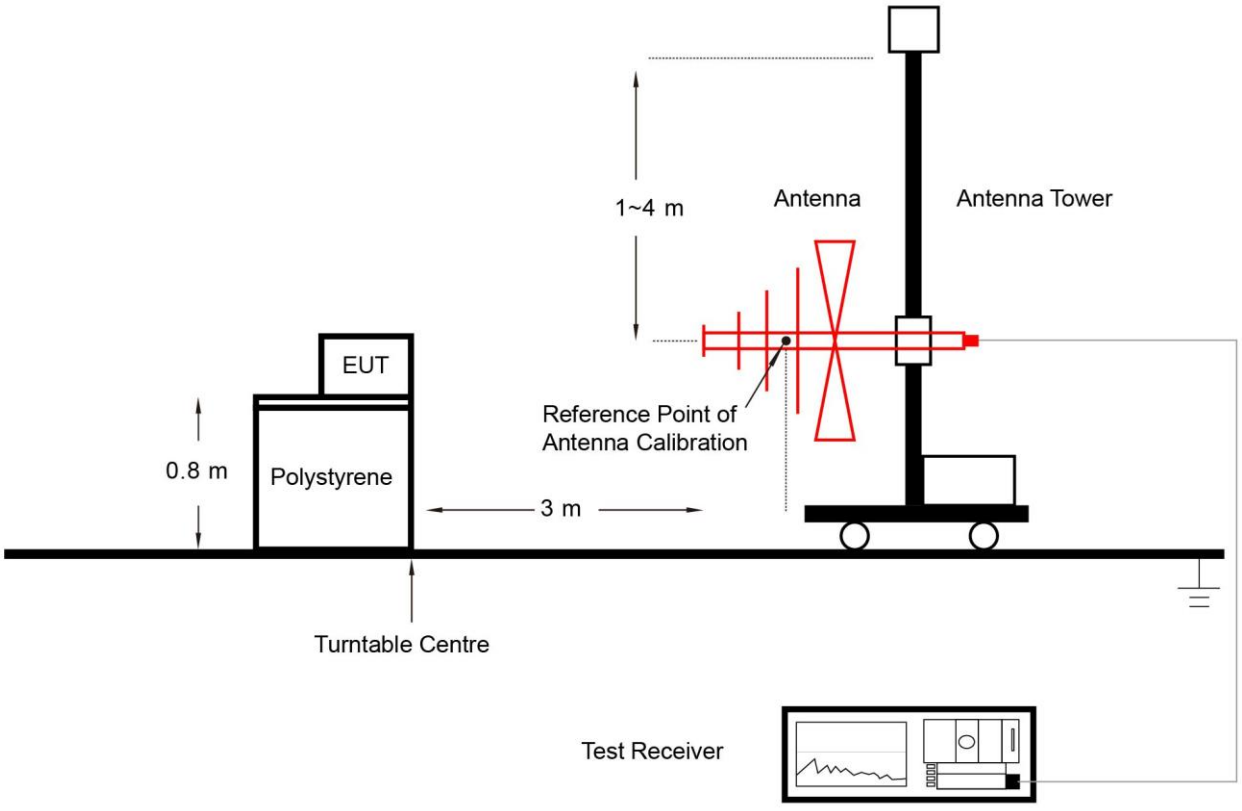
7. Trace was allowed to stabilize

6.7.4. Test Setup

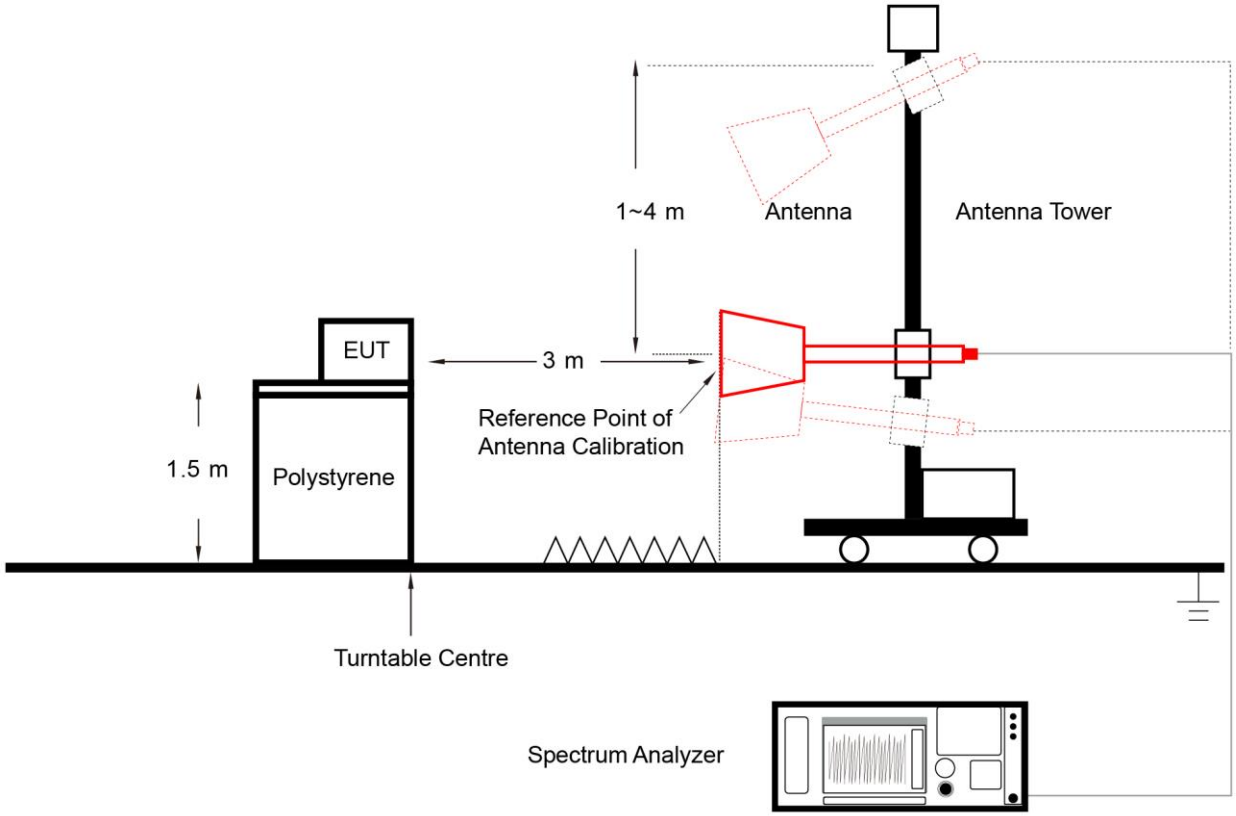
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



6.7.5. Test Result

Refer to Appendix A.7.

6.8. Radiated Restricted Band Edge Measurement

6.8.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (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
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 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	--	--	--

For 15.407(b) requirement:

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.

Refer to KDB 789033 D02v02r01 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.
All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [μV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

6.8.2. Test Procedure

KDB 789033 D02v02r01- Section II)G)

6.8.3. Test Setting

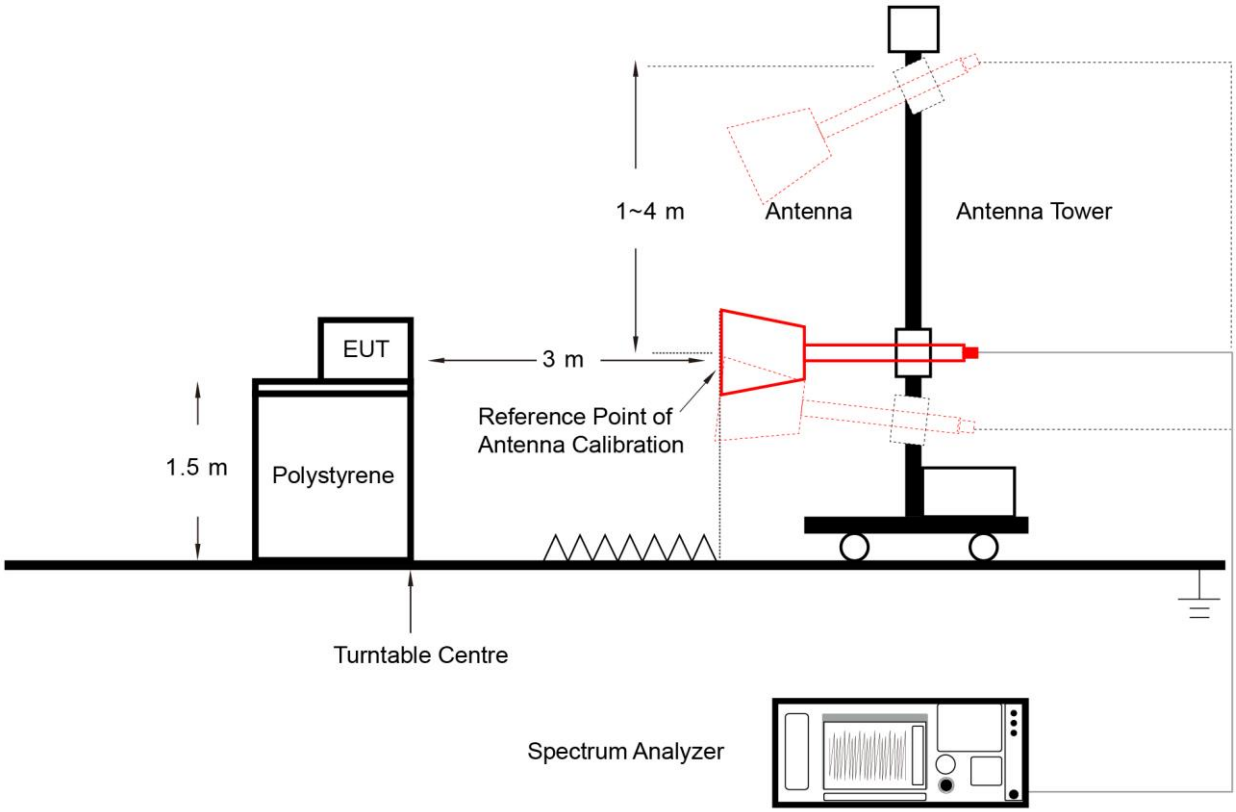
Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = Peak
5. Sweep time = Auto couple
6. Trace mode = Max hold
7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW; if the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10Hz
4. If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration
5. Detector = Peak
6. Sweep time = Auto
7. Trace mode = Max hold
8. Trace was allowed to stabilize

6.8.4. Test Setup



6.8.5. Test Result

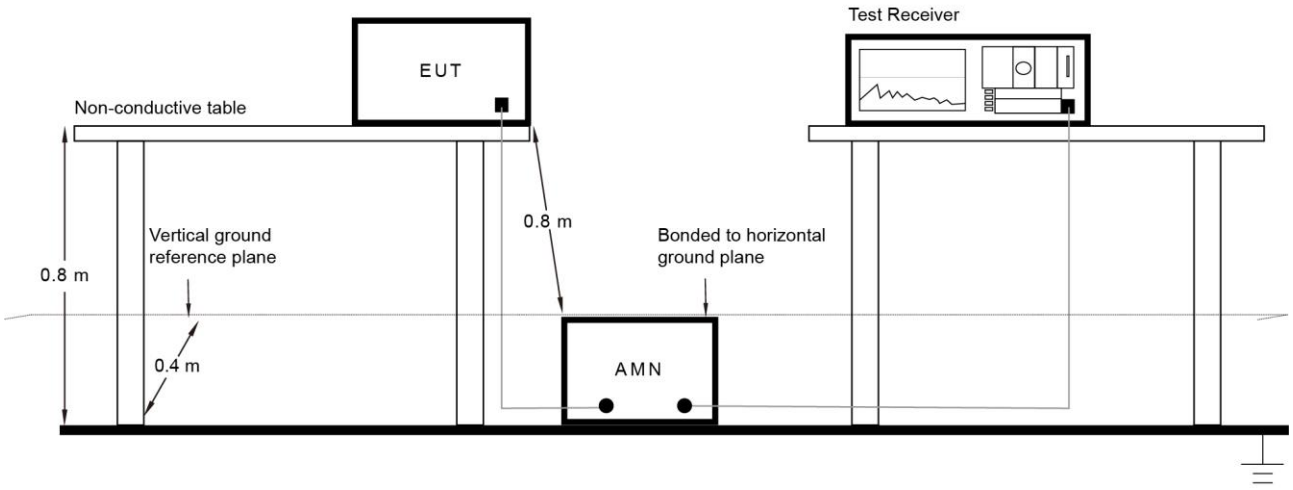
Refer to Appendix A.8.

6.9. AC Conducted Emissions Measurement

6.9.1. Test Limit

FCC Part 15.207 Limits		
Frequency (MHz)	QP (dBμV)	AV (dBμV)
0.15 - 0.50	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50
Note 1: The lower limit shall apply at the transition frequencies.		
Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.		

6.9.2. Test Setup



6.9.3. Test Result

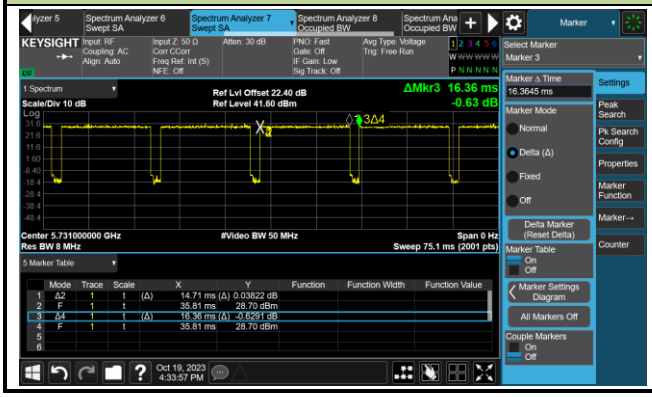
The device is powered by battery in actual use, so this test item is not applicable.

Appendix A – Test Result

A.1 Duty Cycle Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-10-19		

Duty Cycle	89.91%

Duty Cycle (T = Transmission Duration)	
T = 14.71 ms	
	

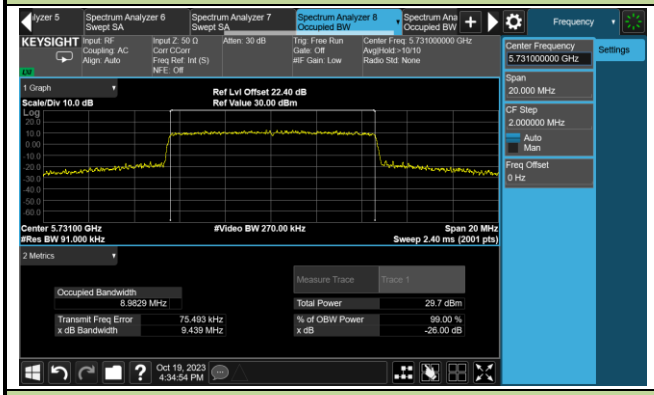
A.2 26dB Bandwidth Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-10-19		

Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
SISO Mode - Ant 0		
5731	9.439	8.9829
5765	10.780	9.0081
5782	10.250	8.9929
SISO Mode - Ant 1		
5731	9.684	8.9947
5765	9.837	8.9850
5782	11.130	9.0147

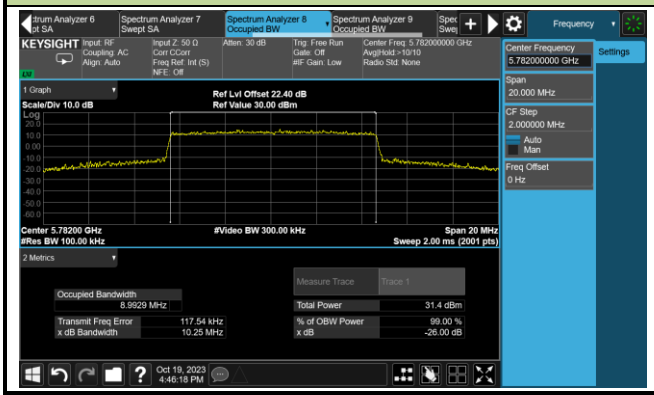
26dB Bandwidth & 99% Bandwidth – Ant 0

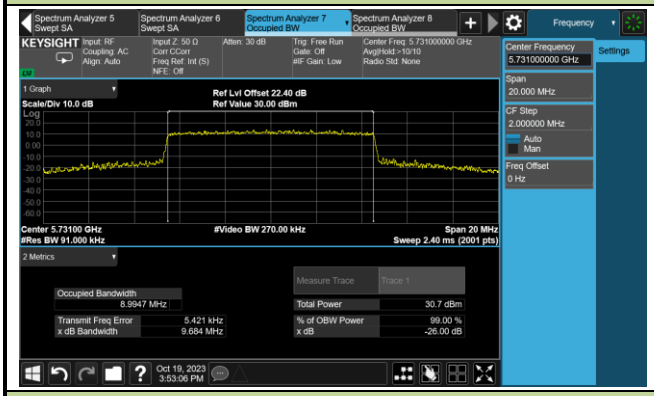
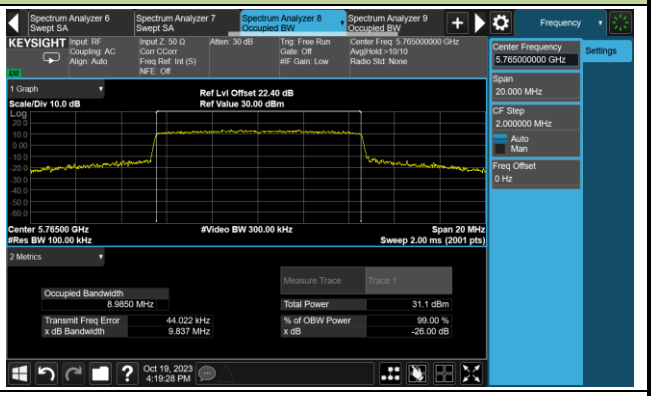
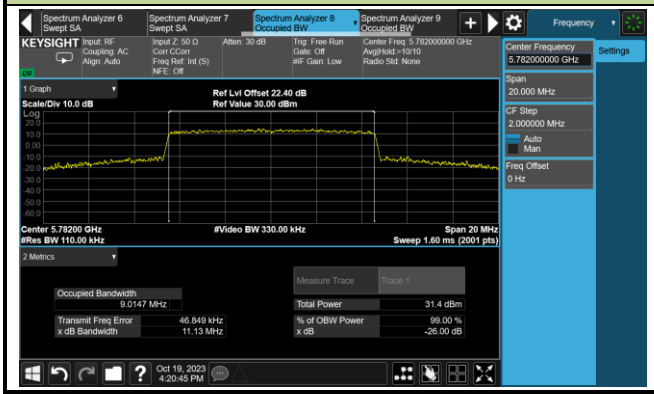
5731MHz



5765MHz

5782MHz



26dB Bandwidth & 99% Bandwidth – Ant 1	
5731MHz	5765MHz
	
5782MHz	
	

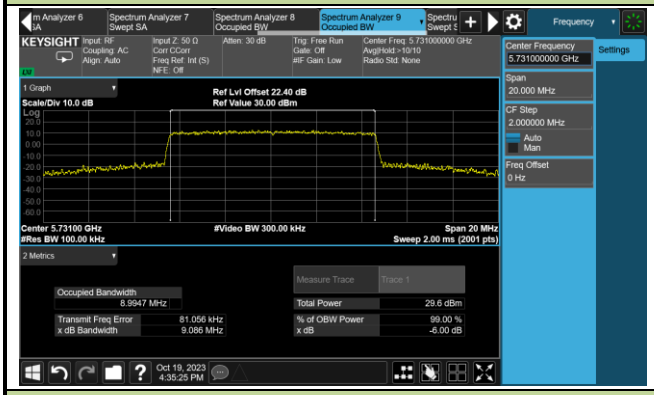
A.3 6dB Bandwidth Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-10-19		

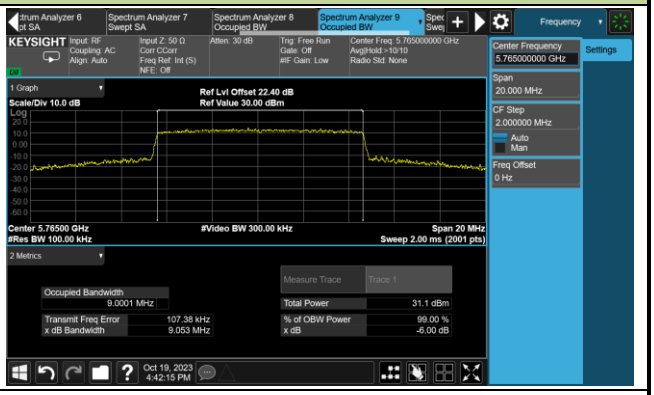
Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
SISO Mode - Ant 0		
5731	9.086	≥0.5
5765	9.053	≥0.5
5782	9.048	≥0.5
SISO Mode - Ant 1		
5731	9.053	≥0.5
5765	9.065	≥0.5
5782	9.074	≥0.5

6dB Bandwidth – Ant 0

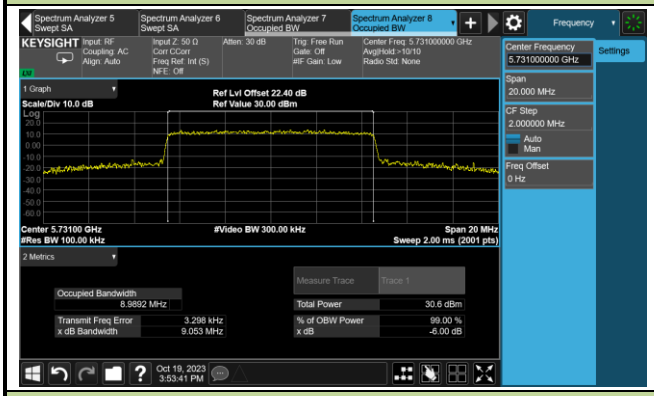
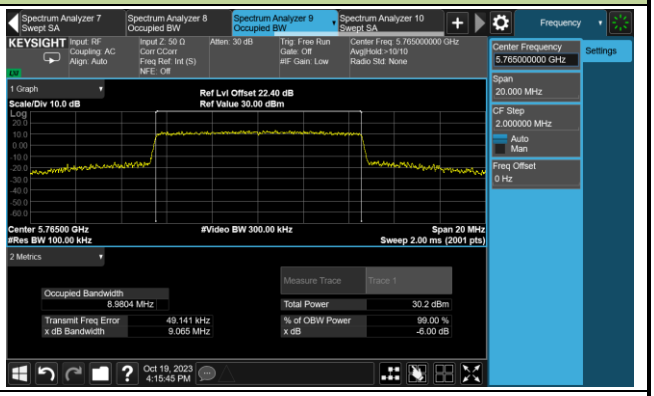
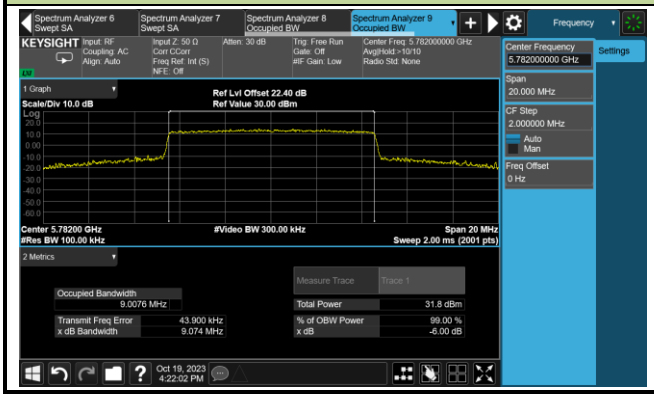
5731MHz



5765MHz



5782MHz

6dB Bandwidth – Ant 1	
5731MHz	5765MHz
	
5782MHz	
	

A.4 Output Power Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-10-19		

Freq. (MHz)	Average Power (dBm)		Power Limit (dBm)
	Ant 0	Ant 1	
5731	23.23	23.49	≤ 30.00
5765	23.85	22.63	≤ 30.00
5782	23.96	23.56	≤ 30.00

A.5 Power Spectral Density Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-10-19		

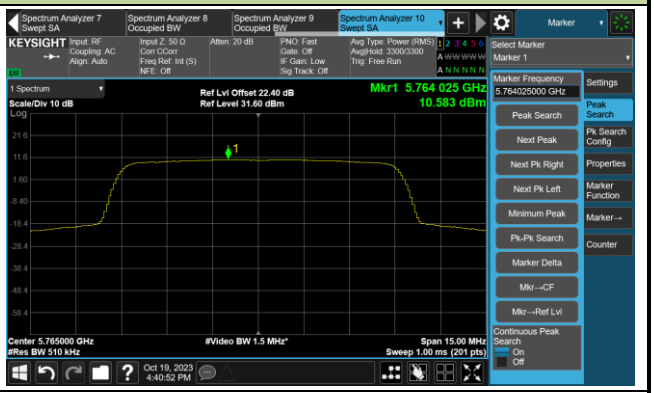
Freq. (MHz)	AV PSD (dBm/510kHz)		Duty Cycle (%)	10*log(1/x)	Total PSD (dBm/510kHz)		PSD Limit (dBm/500kHz)
	Ant 0	Ant 1			Ant 0	Ant 1	
5731	9.547	10.573	89.91	0.462	10.009	11.035	≤ 30.00
5765	10.583	9.888	89.91	0.462	11.045	10.350	≤ 30.00
5782	10.692	10.775	89.91	0.462	11.154	11.237	≤ 30.00

Note: When Duty Cycle < 98%, Total PSD (dBm/510kHz) = AV PSD (dBm/510kHz) + 10*log (1/Duty Cycle).

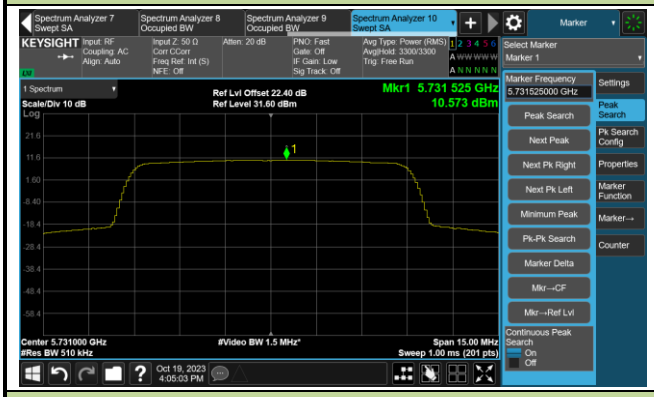
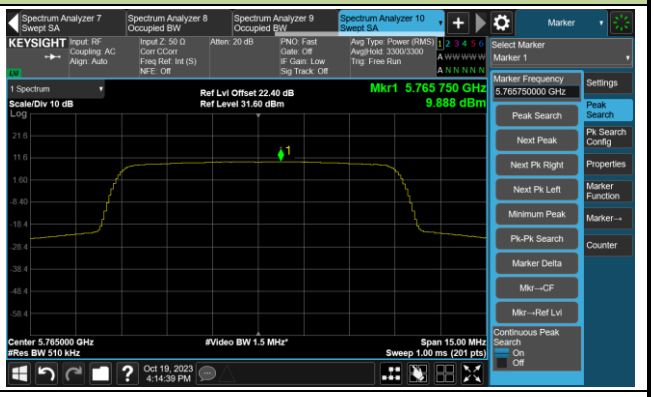
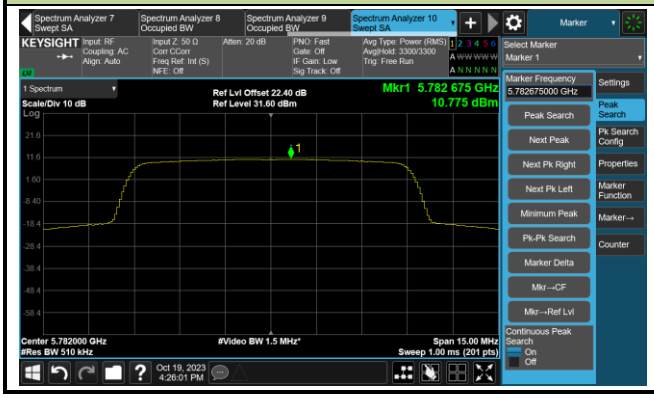
Power Spectral Density - Ant 0

5731MHz

5765MHz



5782MHz

Power Spectral Density - Ant 1	
5731MHz	5765MHz
	
5782MHz	
	

A.6 Frequency Stability Test Result

Test Site	WZ-TR3	Test Engineer	Jeff Yang
Test Date	2023-10-18	Test Mode	5731MHz (Carrier Mode) - Ant 0

Voltage (%)	Power (VDC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	10.0	- 30	-4.77	-4.77	-4.76	-4.76
		- 20	-4.64	-4.64	-4.65	-4.65
		- 10	-4.53	-4.54	-4.54	-4.54
		0	-4.53	-4.53	-4.53	-4.53
		+ 10	-4.49	-4.49	-4.51	-4.51
		+ 20	-4.26	-4.22	-4.22	-4.22
		+ 30	-4.42	-4.41	-4.77	-4.76
		+ 40	-4.32	-4.42	-4.42	-4.42
		+ 50	-4.24	-4.23	-4.24	-4.23
115%	11.5	+ 20	-4.22	-4.22	-4.22	-4.22
85%	8.5	+ 20	-4.21	-4.21	-4.21	-4.21

Note: Frequency Tolerance (ppm) = {[Measured Frequency (Hz) - Declared Frequency (Hz)] / Declared Frequency (Hz)} *10^6.

Test Site	WZ-TR3	Test Engineer	Jeff Yang
Test Date	2023-10-18	Test Mode	5731MHz (Carrier Mode) - Ant 1

Voltage (%)	Power (VDC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	10.0	- 30	-4.76	-4.77	-4.77	-4.77
		- 20	-4.65	-4.65	-4.66	-4.66
		- 10	-4.54	-4.54	-4.54	-4.54
		0	-4.54	-4.54	-4.53	-4.53
		+ 10	-4.48	-4.49	-4.51	-4.51
		+ 20	-4.26	-4.26	-4.26	-4.26
		+ 30	-4.41	-4.41	-4.41	-4.41
		+ 40	-4.30	-4.42	-4.44	-4.44
		+ 50	-4.25	-4.25	-4.24	-4.24
115%	11.5	+ 20	-4.23	-4.23	-4.23	-4.23
85%	8.5	+ 20	-4.20	-4.26	-4.27	-4.27

Note: Frequency Tolerance (ppm) = {[Measured Frequency (Hz) - Declared Frequency (Hz)] / Declared Frequency (Hz)} *10^6.

A.7 Radiated Spurious Emission Test Result

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-09-05	Test Mode	5731MHz – SISO Mode Ant 0
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	10069.5	34.8	13.0	47.8	68.2	-20.4	Peak	Horizontal
	10792.0	34.0	14.3	48.3	74.0	-25.7	Peak	Horizontal
	11463.5	35.8	13.5	49.3	74.0	-24.7	Peak	Horizontal
*	13197.5	37.1	12.9	50.0	68.2	-18.2	Peak	Horizontal
*	9831.5	34.1	13.1	47.2	68.2	-21.0	Peak	Vertical
	11463.5	44.9	13.5	58.4	74.0	-15.6	Peak	Vertical
	11463.5	32.9	13.5	46.4	54.0	-7.6	Average	Vertical
	12118.0	35.6	12.5	48.1	74.0	-25.9	Peak	Vertical
*	13801.0	33.6	14.3	47.9	68.2	-20.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-09-05	Test Mode	5765MHz – SISO Mode Ant 0
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB/m)	Detector	Polarization
*	10307.5	32.6	13.3	45.9	68.2	-22.3	Peak	Horizontal
	11531.5	43.9	13.5	57.4	74.0	-16.6	Peak	Horizontal
	11531.5	36.9	13.5	50.4	54.0	-3.6	Average	Horizontal
	12109.5	35.8	12.4	48.2	74.0	-25.8	Peak	Horizontal
*	13792.5	33.3	14.4	47.7	68.2	-20.5	Peak	Horizontal
*	10375.5	32.7	13.7	46.4	68.2	-21.8	Peak	Vertical
	11531.5	46.4	13.5	59.9	74.0	-14.1	Peak	Vertical
	11531.5	39.5	13.5	53.0	54.0	-1.0	Average	Vertical
	12373.0	35.5	12.2	47.7	74.0	-26.3	Peak	Vertical
*	13792.5	34.4	14.4	48.8	68.2	-19.4	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-09-05	Test Mode	5782MHz – SISO Mode Ant 0
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB/m)	Detector	Polarization
*	9899.5	32.4	13.0	45.4	68.2	-22.8	Peak	Horizontal
	10783.5	32.1	14.1	46.2	74.0	-27.8	Peak	Horizontal
	11565.5	45.1	13.3	58.4	74.0	-15.6	Peak	Horizontal
	11565.5	38.0	13.3	51.3	54.0	-2.7	Average	Horizontal
*	14090.0	34.6	15.3	49.9	68.2	-18.3	Peak	Horizontal
*	10120.5	32.4	13.1	45.5	68.2	-22.7	Peak	Vertical
	11565.5	45.0	13.3	58.3	74.0	-15.7	Peak	Vertical
	11565.5	36.4	13.3	49.7	54.0	-4.3	Average	Vertical
	12262.5	35.2	12.5	47.7	74.0	-26.3	Peak	Vertical
*	13648.0	35.6	13.9	49.5	68.2	-18.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-09-05	Test Mode	5731MHz – SISO Mode Ant 1
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
*	10409.5	32.8	13.6	46.4	68.2	-21.8	Peak	Horizontal
	11463.5	46.5	13.5	60.0	74.0	-14.0	Peak	Horizontal
	11463.5	36.2	13.5	49.7	54.0	-4.3	Average	Horizontal
	11897.0	35.7	12.2	47.9	74.0	-26.1	Peak	Horizontal
*	14090.0	34.7	15.3	50.0	68.2	-18.2	Peak	Horizontal
*	10409.5	35.4	13.6	49.0	68.2	-19.2	Peak	Vertical
	11463.5	47.4	13.5	60.9	74.0	-13.1	Peak	Vertical
	11463.5	36.0	13.5	49.5	54.0	-4.5	Average	Vertical
	12356.0	35.4	12.4	47.8	74.0	-26.2	Peak	Vertical
*	13784.0	34.1	14.5	48.6	68.2	-19.6	Peak	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-09-05	Test Mode	5765MHz – SISO Mode Ant 1
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB/m)	Detector	Polarization
*	9899.5	33.3	13.0	46.3	68.2	-21.9	Peak	Horizontal
	11531.5	44.6	13.5	58.1	74.0	-15.9	Peak	Horizontal
	11531.5	36.3	13.5	49.8	54.0	-4.2	Average	Horizontal
	12109.5	33.1	12.4	45.5	74.0	-28.5	Peak	Horizontal
*	14141.0	36.6	15.2	51.8	68.2	-16.4	Peak	Horizontal
*	9925.0	34.1	13.0	47.1	68.2	-21.1	Peak	Vertical
	11030.0	35.2	14.0	49.2	74.0	-24.8	Peak	Vertical
	11531.5	50.2	13.5	63.7	74.0	-10.3	Peak	Vertical
	11531.5	39.9	13.5	53.4	54.0	-0.6	Average	Vertical
*	13818.0	34.8	14.5	49.3	68.2	-18.9	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Site	WZ-AC1	Test Engineer	Carl Jiang
Test Date	2023-09-05	Test Mode	5782MHz – SISO Mode Ant 1
Remark	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB/m)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB/m)	Detector	Polarization
*	9959.0	33.6	12.9	46.5	68.2	-21.7	Peak	Horizontal
	11565.5	47.0	13.3	60.3	74.0	-13.7	Peak	Horizontal
	11565.5	38.2	13.3	51.5	54.0	-2.5	Average	Horizontal
	12135.0	34.8	12.6	47.4	74.0	-26.6	Peak	Horizontal
*	13792.5	34.8	14.4	49.2	68.2	-19.0	Peak	Horizontal
*	10401.0	31.6	13.6	45.2	68.2	-23.0	Peak	Vertical
	11565.5	49.8	13.3	63.1	74.0	-10.9	Peak	Vertical
	11565.5	40.3	13.3	53.6	54.0	-0.4	Average	Vertical
	12543.0	35.8	11.7	47.5	74.0	-26.5	Peak	Vertical
*	17345.5	43.9	16.3	60.2	68.2	-8.0	Peak	Vertical

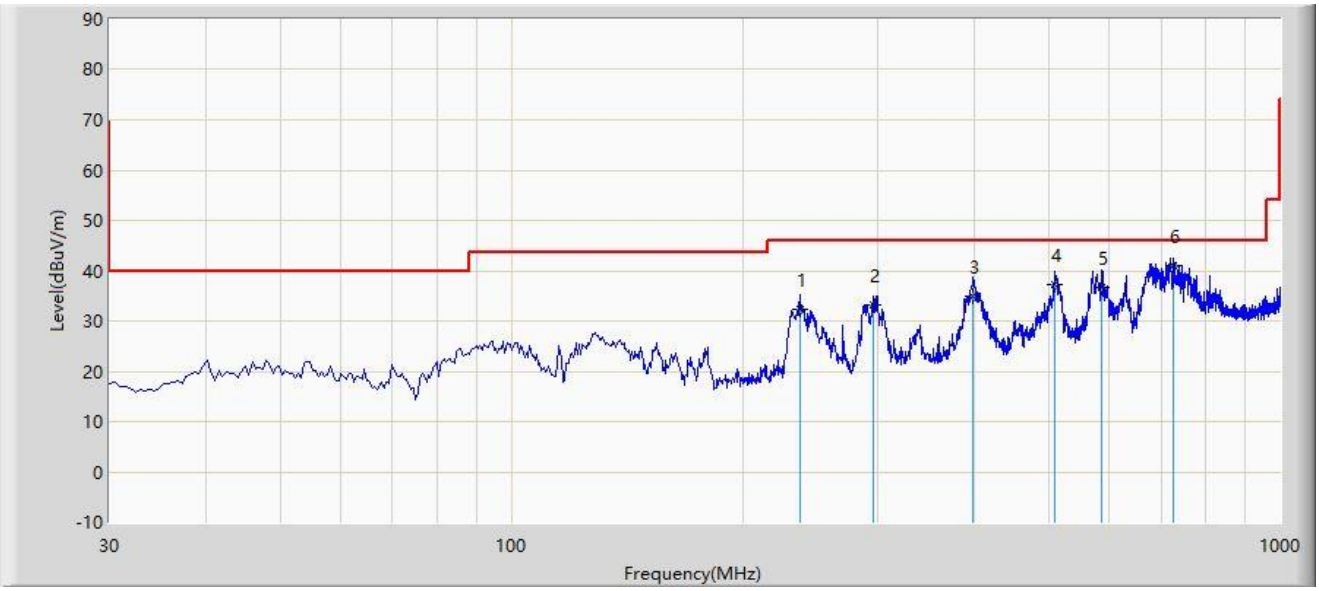
Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m)

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

The Result of Radiated Emission for 30MHz ~ 1GHz:

Site: WZ-AC2	Test Date: 2023-10-13
Limit: FCC_Part15.209_RSE(3m)	Engineer: Bob Zhang
Probe: VULB9162_30-7000MHz	Polarity: Vertical
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz with Ant 0	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		237.200	32.261	12.600	-13.739	46.000	19.661	QP
2		296.300	33.242	12.300	-12.758	46.000	20.941	QP
3		398.400	35.072	11.600	-10.928	46.000	23.472	QP
4		509.400	37.315	11.900	-8.685	46.000	25.415	QP
5		585.900	36.750	9.500	-9.250	46.000	27.250	QP
6	*	725.100	40.924	12.000	-5.076	46.000	28.924	QP

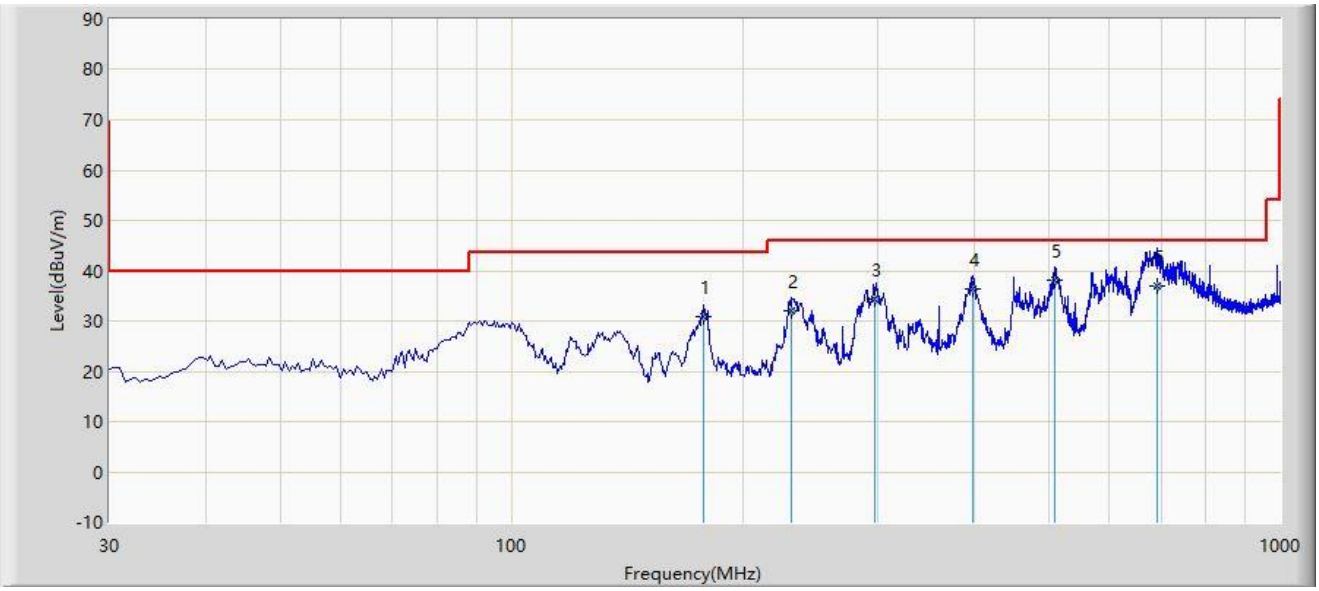
Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

Site: WZ-AC2	Test Date: 2023-10-13
Limit: FCC_Part15.209_RSE(3m)	Engineer: Bob Zhang
Probe: VULB9162_30-7000MHz	Polarity: Vertical
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz with Ant 0	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		177.500	30.787	14.200	-12.713	43.500	16.586	QP
2		231.200	32.052	12.600	-13.948	46.000	19.452	QP
3		297.600	34.458	13.500	-11.542	46.000	20.959	QP
4		399.200	36.403	12.900	-9.597	46.000	23.503	QP
5	*	509.200	38.115	12.700	-7.885	46.000	25.415	QP
6		693.070	37.072	8.400	-8.928	46.000	28.672	QP

Note 1: " * ", means this data is the worst emission level.

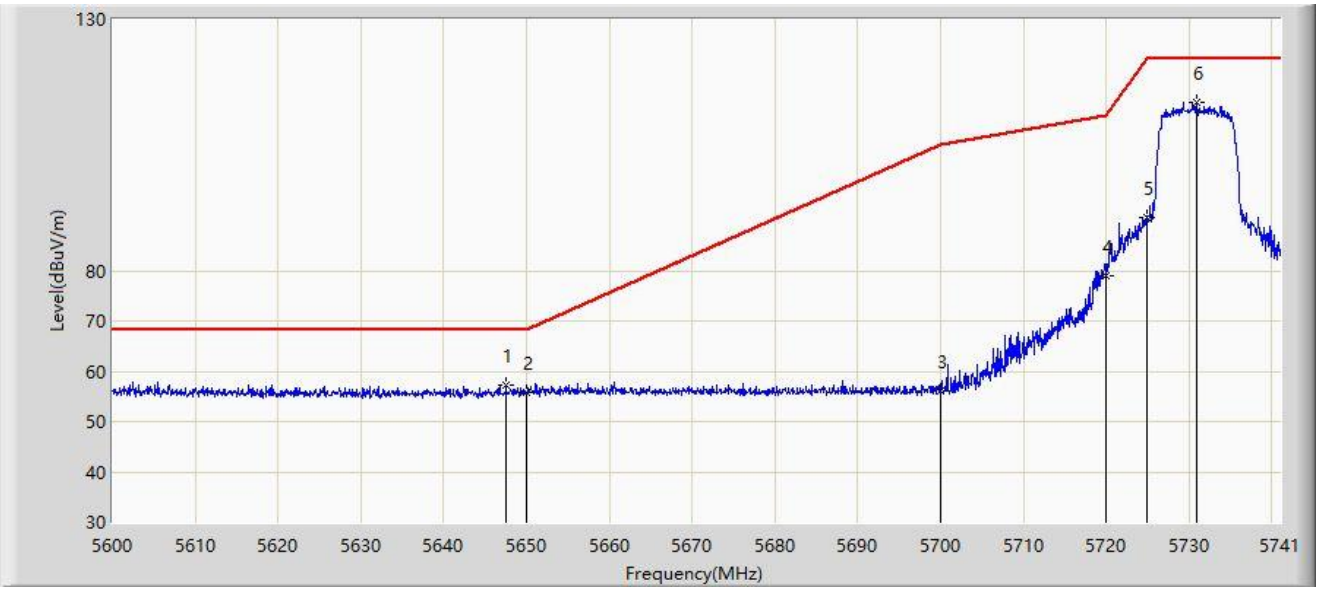
Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m).

Note 4: The amplitude of radiated emissions (frequency range from 9kHz to 30MHz and 18GHz to 40GHz) is that proximity to ambient noise, which also are attenuated more than 20 dB below the permissible value. Therefore, the data is not presented in the report.

A.8 Radiated Restricted Band Edge Test Result

Site: WZ-AC1	Test Date: 2023-09-05
Limit: FCC_5.8G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5731MHz Ant 0	



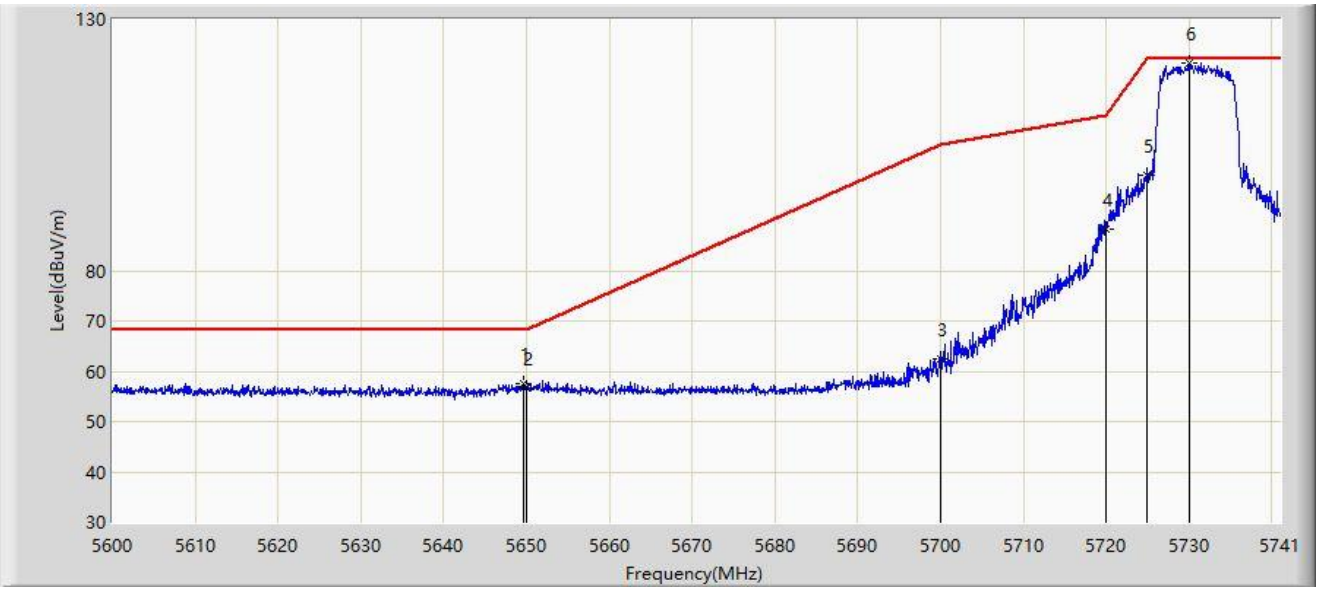
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5647.517	57.197	53.125	-11.003	68.200	4.072	PK
2		5650.000	55.744	51.610	-12.456	68.200	4.134	PK
3		5700.000	56.079	51.905	-49.121	105.200	4.173	PK
4		5720.000	78.964	74.747	-31.836	110.800	4.217	PK
5		5725.000	90.562	86.331	-31.638	122.200	4.231	PK
6		5730.989	113.401	109.126	N/A	N/A	4.275	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: WZ-AC1	Test Date: 2023-09-05
Limit: FCC_5.8G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5731MHz Ant 0	



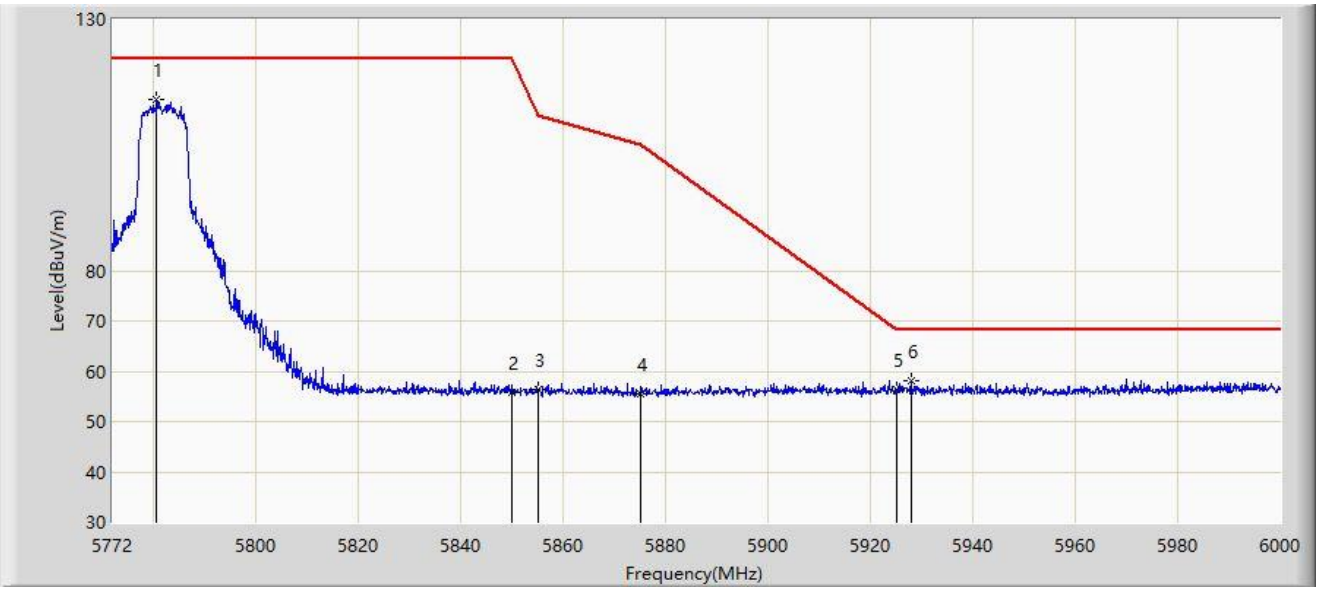
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5649.703	57.604	53.477	-10.596	68.200	4.127	PK
2		5650.000	56.709	52.575	-11.491	68.200	4.134	PK
3		5700.000	62.423	58.249	-42.777	105.200	4.173	PK
4		5720.000	88.368	84.151	-22.432	110.800	4.217	PK
5		5725.000	98.964	94.733	-23.236	122.200	4.231	PK
6		5730.002	121.169	116.904	N/A	N/A	4.265	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: WZ-AC1	Test Date: 2023-09-05
Limit: FCC_5.8G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz Ant 0	



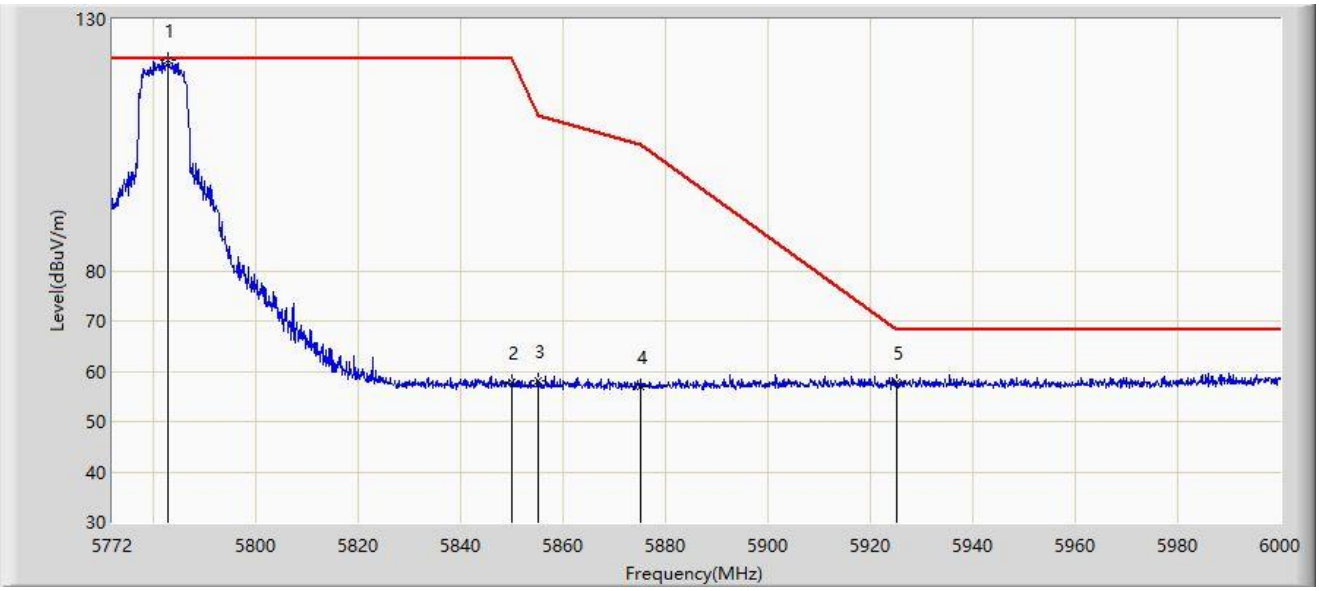
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5780.550	114.045	109.724	N/A	N/A	4.321	PK
2		5850.000	55.809	51.209	-66.391	122.200	4.599	PK
3		5855.000	56.268	51.708	-54.532	110.800	4.560	PK
4		5875.000	55.649	51.186	-49.551	105.200	4.462	PK
5		5925.000	56.459	51.828	-11.741	68.200	4.631	PK
6	*	5927.952	58.034	53.400	-10.166	68.200	4.634	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: WZ-AC1	Test Date: 2023-09-05
Limit: FCC_5.8G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz Ant 0	



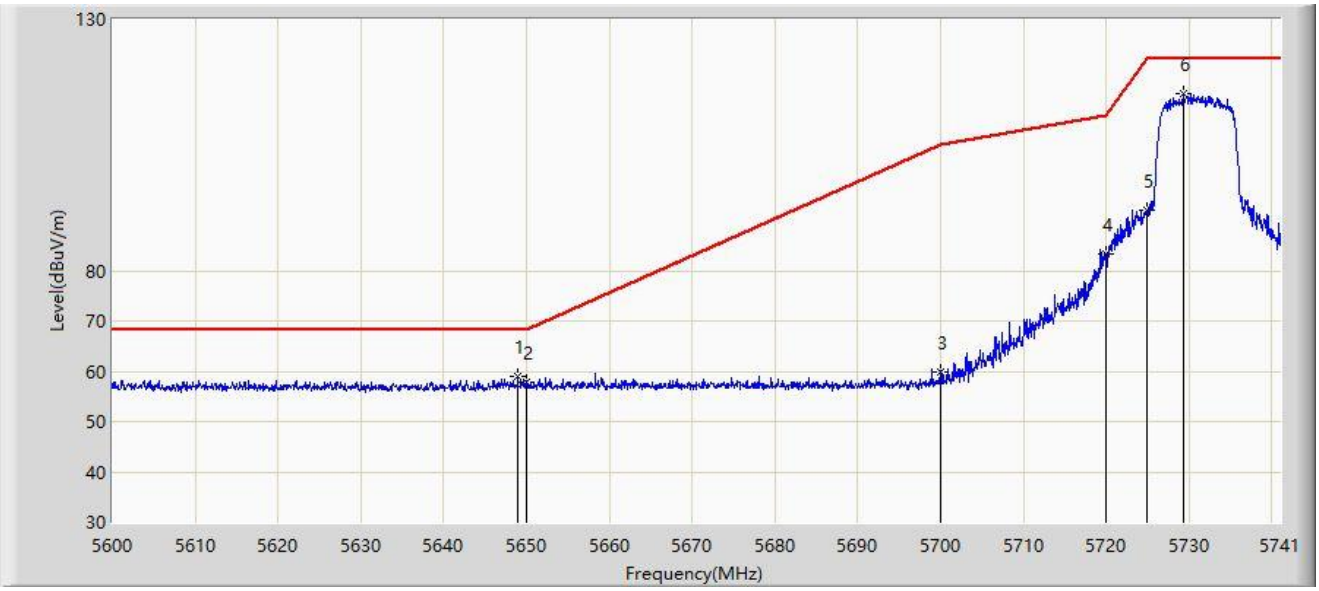
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		5782.944	121.969	117.641	N/A	N/A	4.328	PK
2		5850.000	57.769	53.169	-64.431	122.200	4.599	PK
3		5855.000	58.225	53.665	-52.575	110.800	4.560	PK
4		5875.000	56.958	52.495	-48.242	105.200	4.462	PK
5	*	5925.000	57.754	53.123	-10.446	68.200	4.631	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: WZ-AC1	Test Date: 2023-09-05
Limit: FCC_5.8G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5731MHz Ant 1	



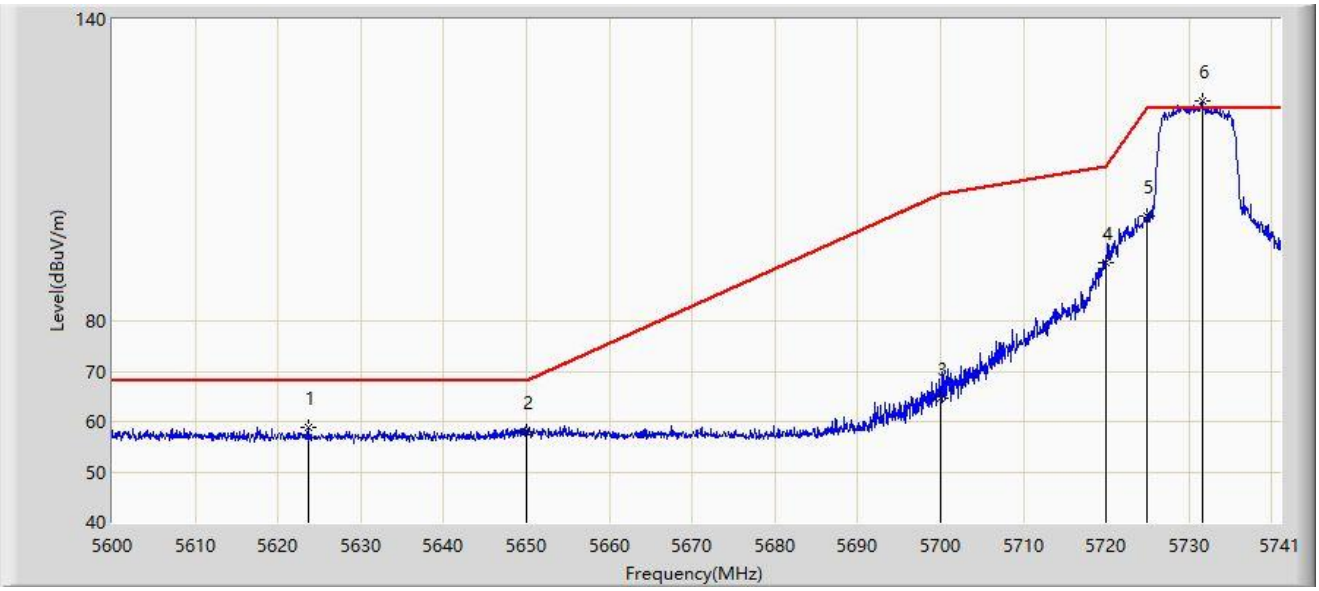
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5648.927	58.841	54.734	-9.359	68.200	4.107	PK
2		5650.000	57.877	53.743	-10.323	68.200	4.134	PK
3		5700.000	59.829	55.655	-45.371	105.200	4.173	PK
4		5720.000	83.259	79.042	-27.541	110.800	4.217	PK
5		5725.000	91.886	87.655	-30.314	122.200	4.231	PK
6		5729.297	115.152	110.893	N/A	N/A	4.259	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: WZ-AC1	Test Date: 2023-09-05
Limit: FCC_5.8G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5731MHz Ant 1	



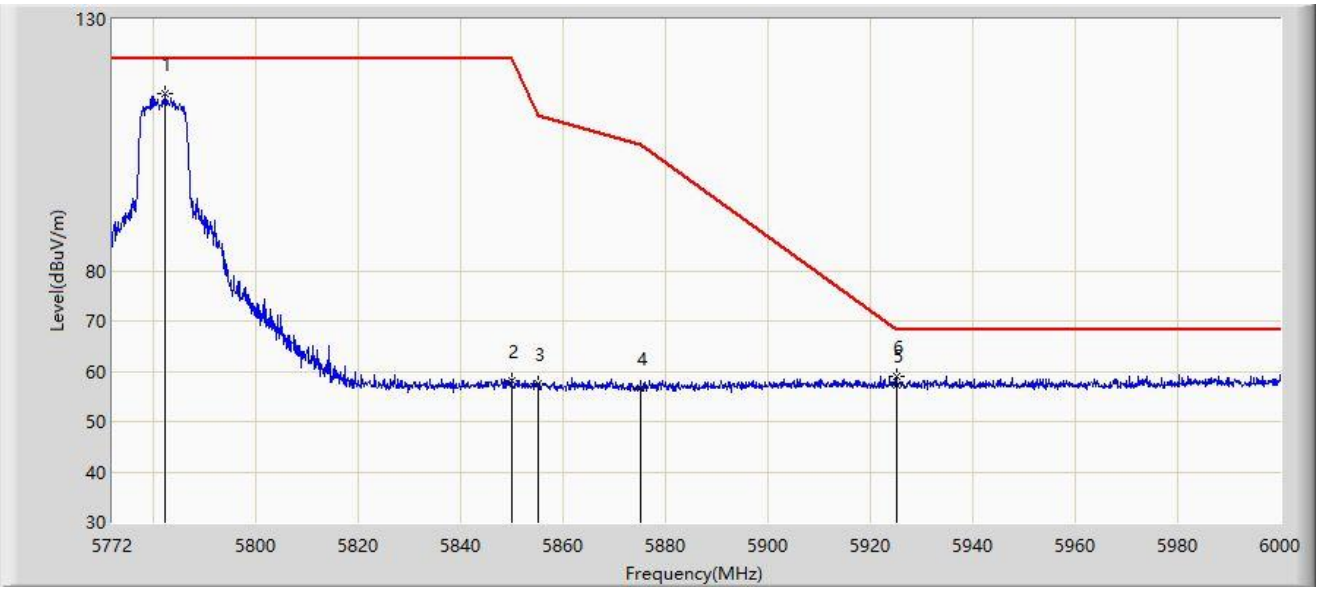
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5623.758	58.817	54.901	-9.383	68.200	3.917	PK
2		5650.000	57.969	53.835	-10.231	68.200	4.134	PK
3		5700.000	64.761	60.587	-40.439	105.200	4.173	PK
4		5720.000	91.489	87.272	-19.311	110.800	4.217	PK
5		5725.000	100.837	96.606	-21.363	122.200	4.231	PK
6		5731.624	123.775	119.494	N/A	N/A	4.281	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: WZ-AC1	Test Date: 2023-09-05
Limit: FCC_5.8G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Horizontal
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz Ant 1	



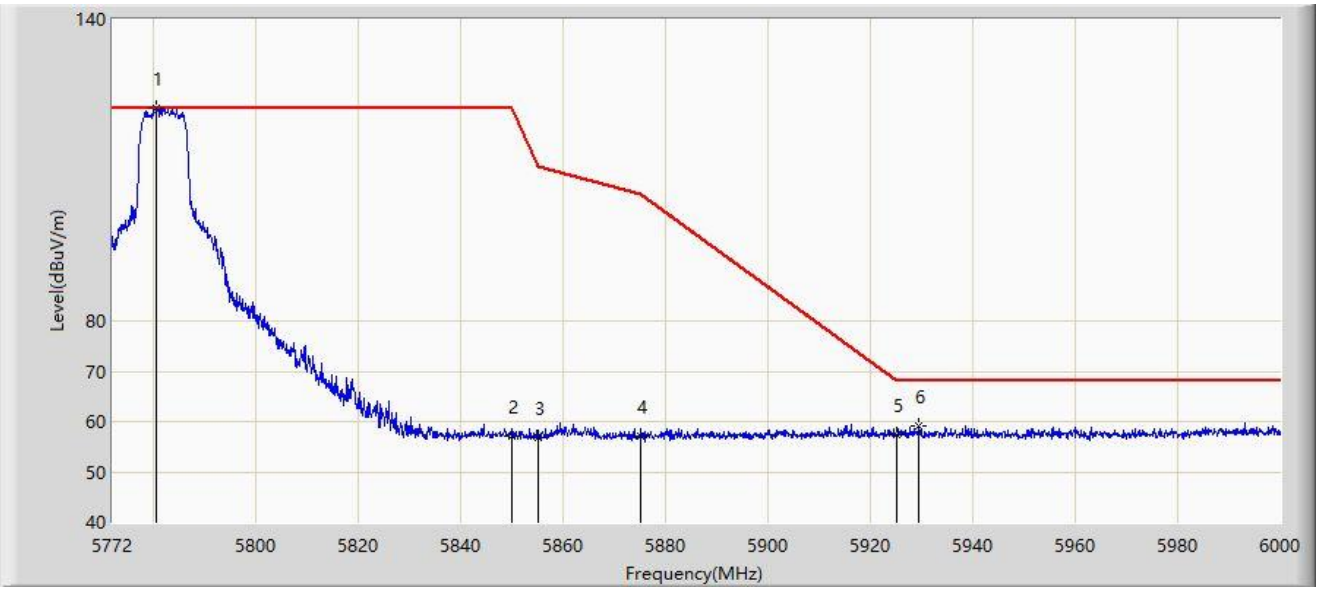
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		5782.146	115.209	110.884	N/A	N/A	4.325	PK
2		5850.000	58.137	53.537	-64.063	122.200	4.599	PK
3		5855.000	57.628	53.068	-53.172	110.800	4.560	PK
4		5875.000	56.765	52.302	-48.435	105.200	4.462	PK
5		5925.000	57.110	52.479	-11.090	68.200	4.631	PK
6	*	5925.102	58.988	54.357	-9.212	68.200	4.632	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Site: WZ-AC1	Test Date: 2023-09-05
Limit: FCC_5.8G_RE(3m)	Engineer: Carl Jiang
Probe: BBHA9120D_1167_1-18GHz	Polarity: Vertical
EUT: S1 RC	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz Ant 1	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		5780.550	122.407	118.086	N/A	N/A	4.321	PK
2		5850.000	57.189	52.589	-65.011	122.200	4.599	PK
3		5855.000	56.938	52.378	-53.862	110.800	4.560	PK
4		5875.000	56.977	52.514	-48.223	105.200	4.462	PK
5		5925.000	57.270	52.639	-10.930	68.200	4.631	PK
6	*	5929.548	59.020	54.385	-9.180	68.200	4.635	PK

Note 1: " * ", means this data is the worst emission level.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

Note 3: Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB).

Appendix B – Test Setup Photograph

Refer to “2308RSU082-UT” file.

Appendix C – EUT Photograph

Refer to “2308RSU082-UE” file.

The End