RF MEASUREMENT REPORT

FCC ID:	2AQVB-PD21A-010P-01
Applicant:	Taisync Technology Inc.
Product:	Video&Data transmission device
Model No.:	PD21A-010P-01
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:	2023-09-13
Test Date:	2023-09-13 ~ 2023-10-18

Reviewed By: Jame Yuan

Approved By: Robin Wu

ACCREDITED
TESTING LABORATORY
CERTIFICATE #3628.01

The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB789033. Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
2308RSU079-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, Jangsu, China

1.3. Testing Facility

<table>
<tr><td>☒</td><td colspan="5">Test Site – MRT Suzhou Laboratory</td></tr>
<tr><td></td><td colspan="5">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</td></tr>
<tr><td></td><td colspan="5">Laboratory Accreditations</td></tr>
<tr><td></td><td colspan="5">A2LA: 3628.01 CNAS: L10551
FCC: CN1166 ISED: CN0001</td></tr>
<tr><td></td><td>VCCI:</td><td>☐R-20025</td><td>☐G-20034</td><td>☐C-20020</td><td>☐T-20020</td></tr>
<tr><td></td><td></td><td>☐R-20141</td><td>☐G-20134</td><td>☐C-20103</td><td>☐T-20104</td></tr>
<tr><td>☐</td><td colspan="5">Test Site – MRT Shenzhen Laboratory</td></tr>
<tr><td></td><td colspan="5">Laboratory Location (Shenzhen)
1G, Building A, Junxiangda Building, Zhongshanyuan Road West, Nanshan District, Shenzhen, China</td></tr>
<tr><td></td><td colspan="5">Laboratory Accreditations</td></tr>
<tr><td></td><td colspan="5">A2LA: 3628.02 CNAS: L10551
FCC: CN1284 ISED: CN0105</td></tr>
<tr><td>☐</td><td colspan="5">Test Site – MRT Taiwan Laboratory</td></tr>
<tr><td></td><td colspan="5">Laboratory Location (Taiwan)
No. 38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)</td></tr>
<tr><td></td><td colspan="5">Laboratory Accreditations</td></tr>
<tr><td></td><td colspan="5">TAF: 3261
FCC: 291082, TW3261 ISED: TW3261</td></tr>
</table>

1.4. Product Information

Product Name	Video&Data transmission device
Model No.	PD21A-010P-01
EUT Identification No	20230913Sample#04
Wireless Specification	2417 ~ 2470MHz & 5731 ~ 5782MHz
Antenna Information	Refer to selection 1.5
Working Voltage	DC12-26V, Typically DC18V
Operating Temperature	-40 ~ 65°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. Note 3. This model includes both air and ground EUTs, the hardware and RF parts are exactly the same, only the air EUT has been tested.	

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
Antenna Type	Dipole Antenna
Antenna Gain	5.0 dBi

1.6. Working Frequencies

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

2. Test Configuration

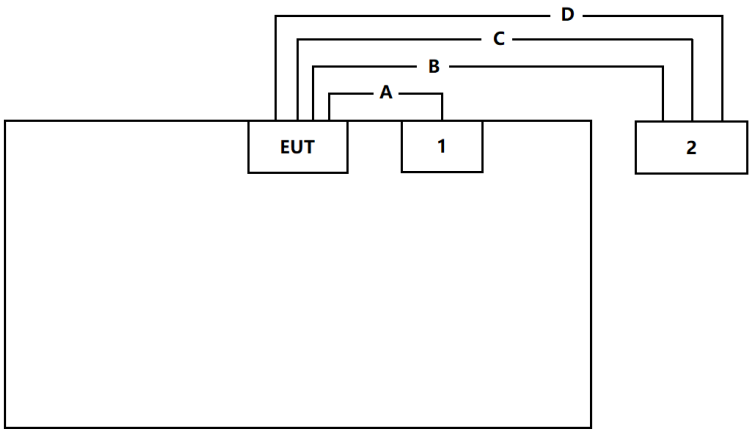
2.1. Test Mode

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	LAN Cable	Non shielded	>10m
C	USB Cable	Shielding	>10m
D	Type-C Cable	Shielding	>10m
Product		**Manufacturer**	**Model No.**
1	Adapter	FLYPOWER	PS12T120K1000ED
2	Notebook	Lenovo	E430C

2.3. Test Software

The EUT could transmit through specific web pages provided by the customer.

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 product is defined as the professional installation of equipment by the manufacturer, there is no necessary to comply 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
TRILOG Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2024-06-09	WZ-AC1
Horn Antenna	Schwarzbeck	BBHA 9170	MRTSUE06597	1 year	2023-11-05	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
Loop Antenna	Schwarzbeck	FMZB 1519	MRTSUE06025	1 year	2024-09-17	WZ-AC2
Horn Antenna	Schwarzbeck	BBHA 9120D	MRTSUE06171	1 year	2024-10-12	WZ-AC2
Preamplifier	Schwarzbeck	BBV 9718	MRTSUE06176	1 year	2024-05-07	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

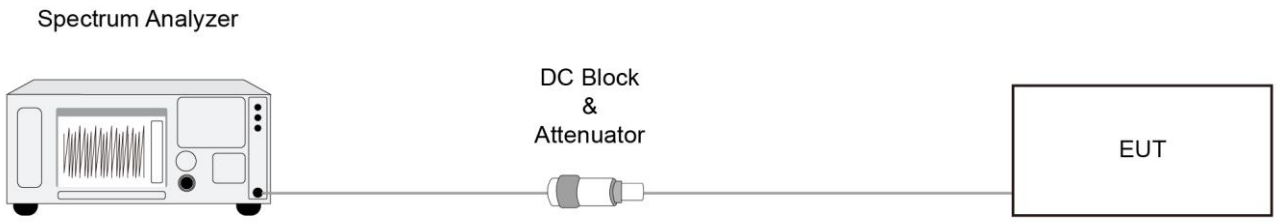
26dB Bandwidth

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.

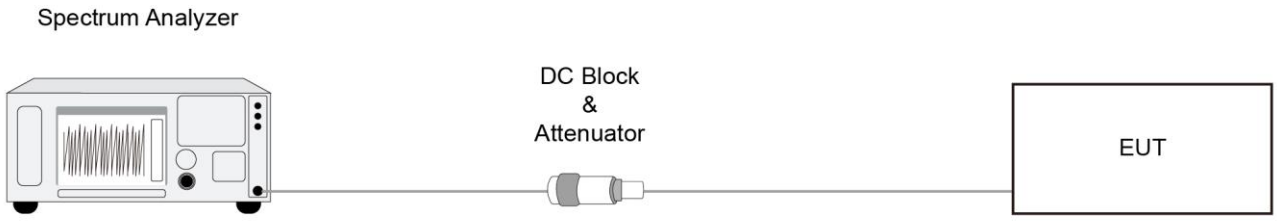
6.3.2. Test Procedure

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

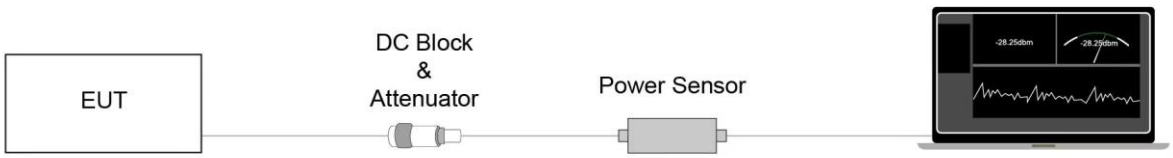
KDB 789033D02v02r01- Section II)E)3)b) Method PM-G

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.

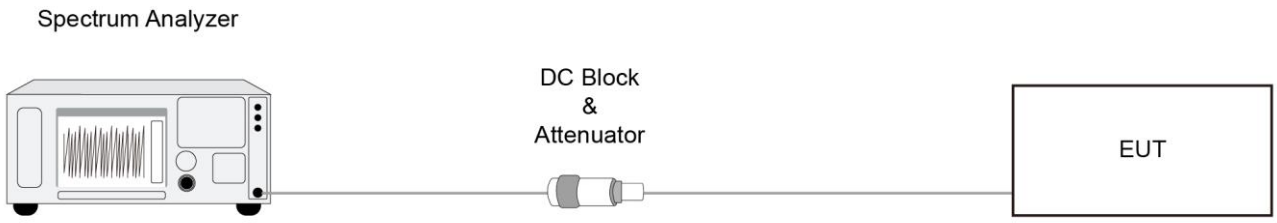
6.5.2. Test Procedure

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:

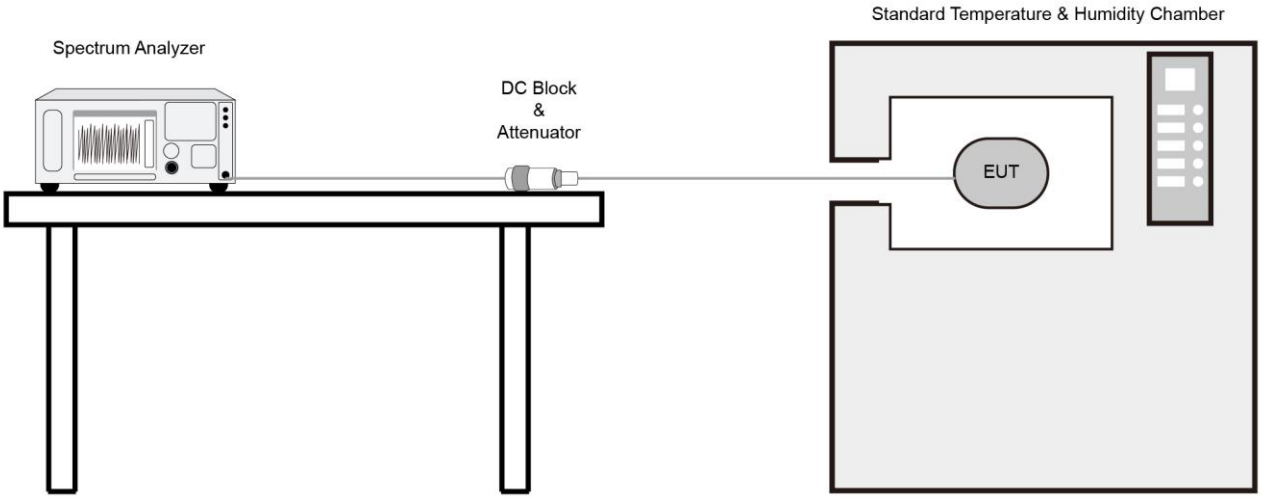
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain 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

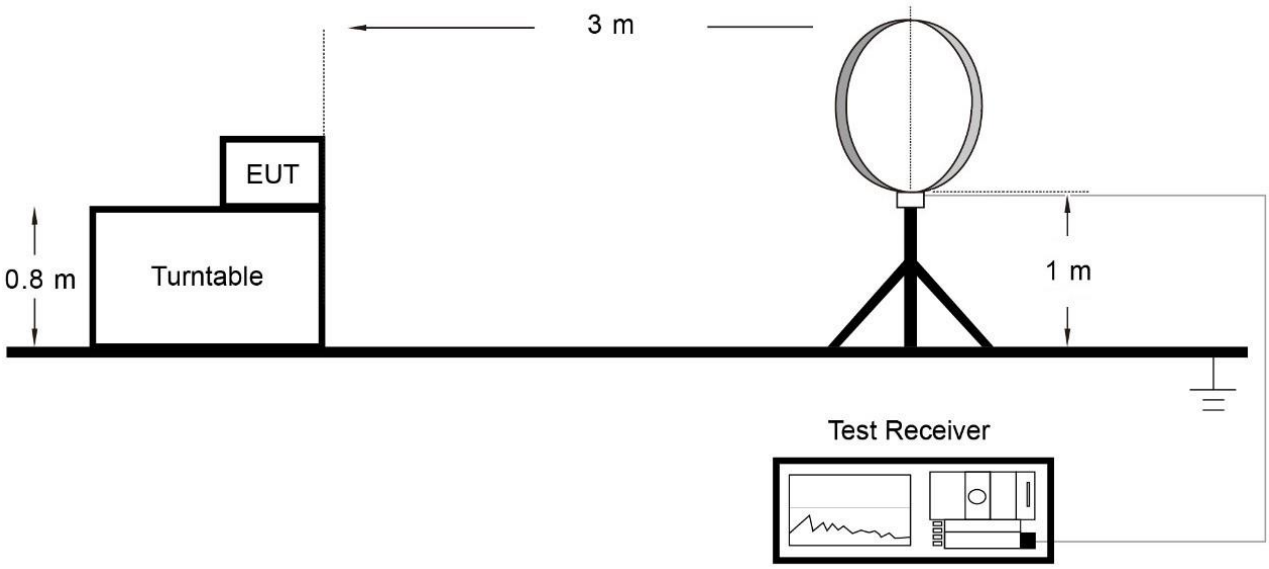
5. Sweep time = auto

6. Trace mode = max hold

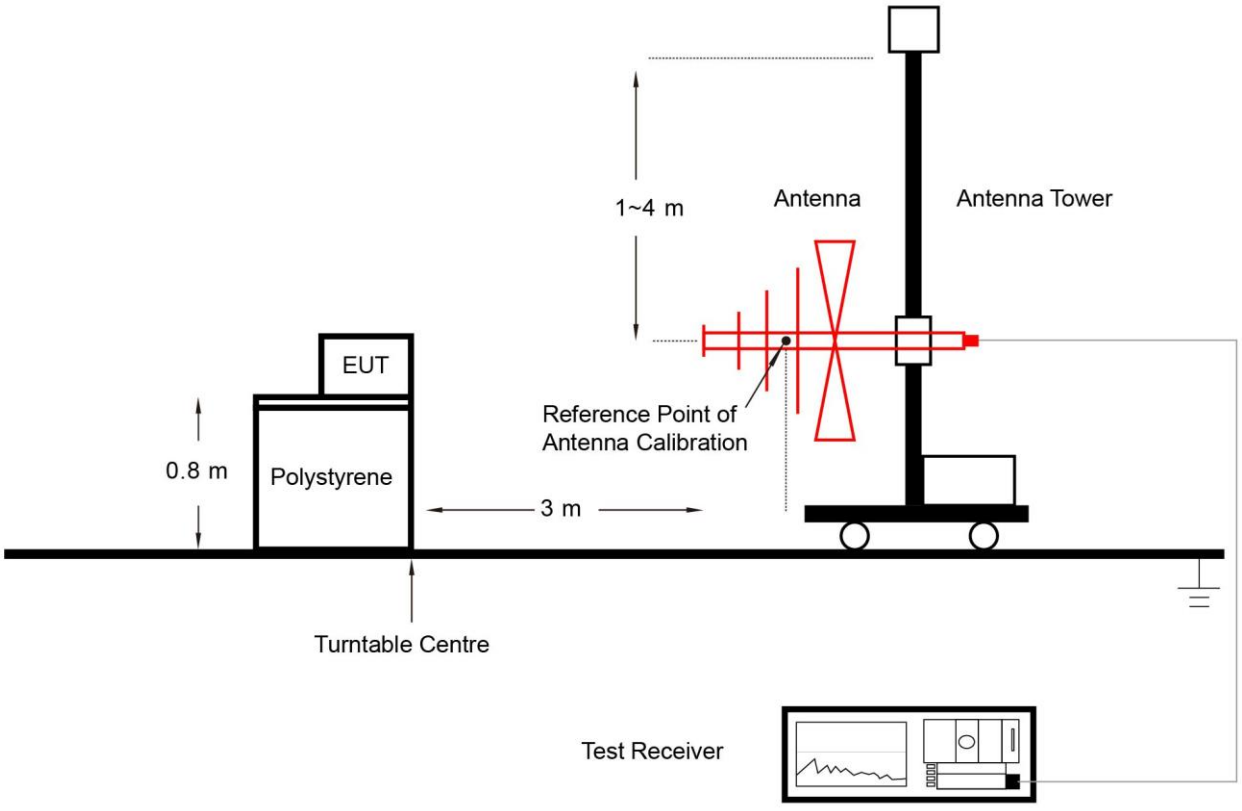
7. Trace was allowed to stabilize

6.7.4. Test Setup

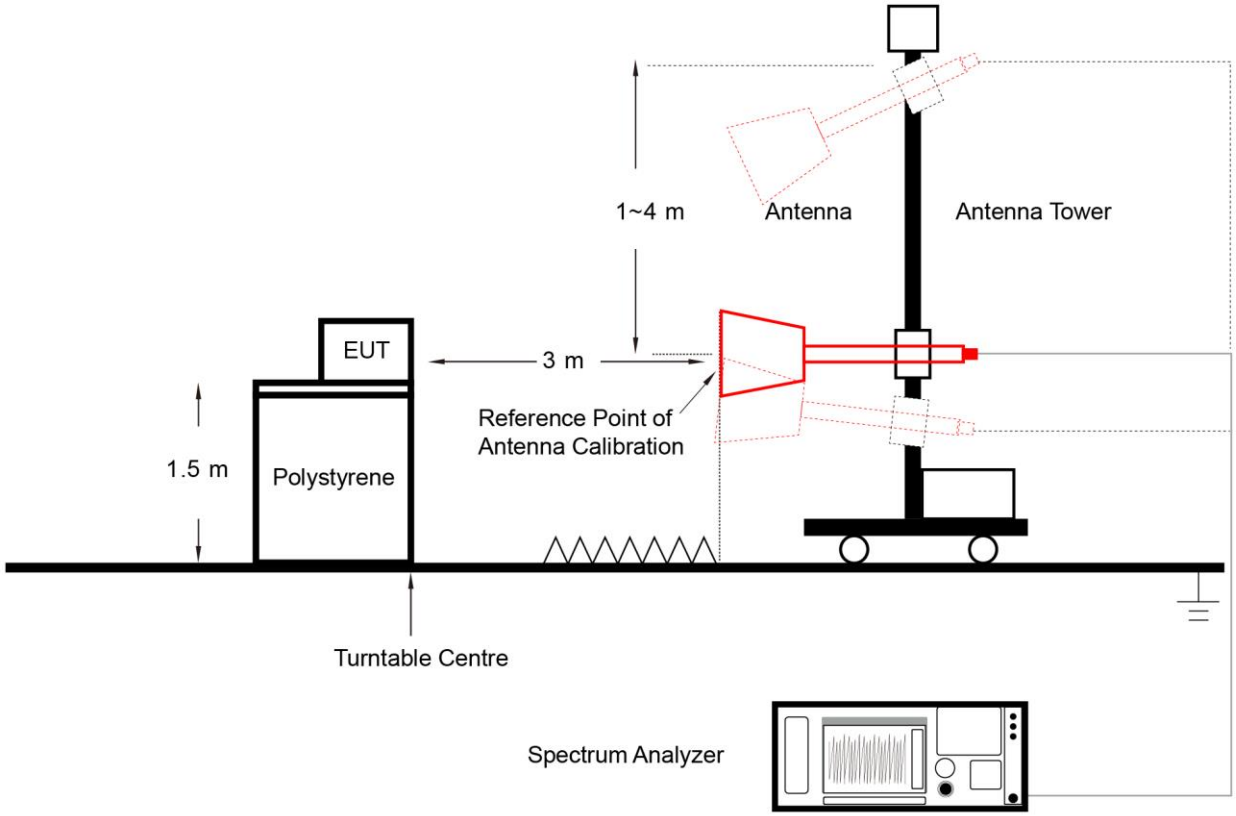
Below 30MHz Test Setup:



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 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

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

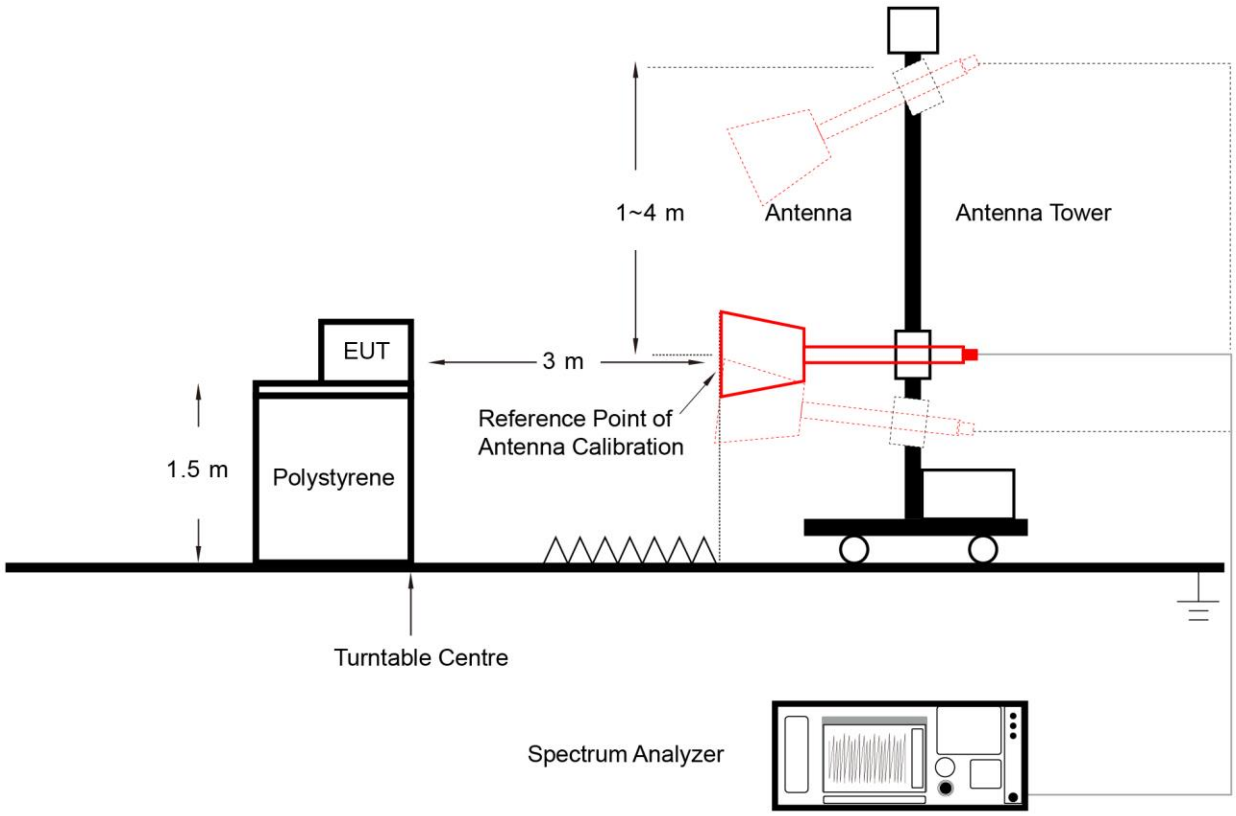
Peak Measurements above 1GHz

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

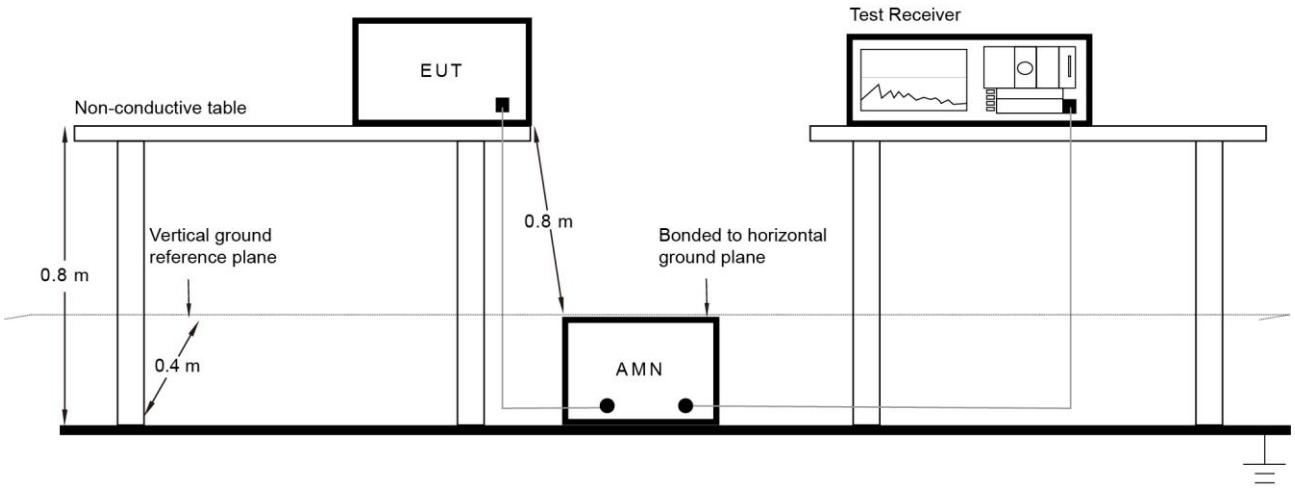
Refer to Appendix A.8.

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

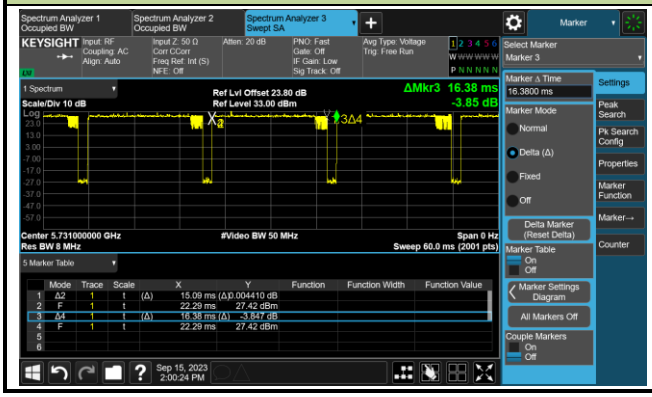
The device is powered by battery in actual use, so this test item is not applicable.

Appendix A – Test Result

A.1 Duty Cycle Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-09-15		

Duty Cycle	92.12%

Duty Cycle (T = Transmission Duration)	
T = 15.09 ms	
	

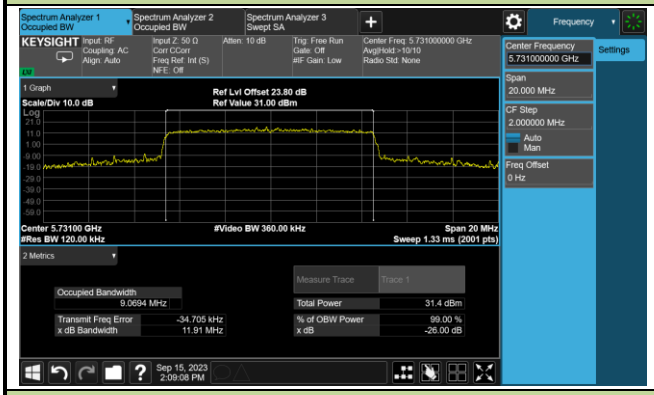
A.2 26dB Bandwidth Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-09-15		

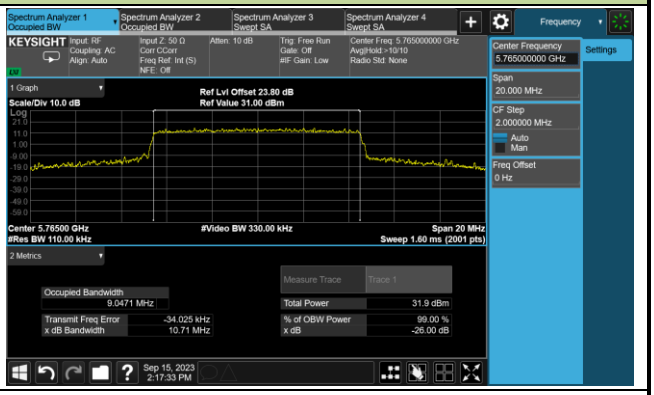
Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
SISO Mode - Ant 0		
5731	11.91	9.0694
5765	10.71	9.0471
5782	10.94	9.0861
SISO Mode - Ant 1		
5731	15.70	9.1627
5765	15.47	9.0933
5782	15.73	9.1118

26dB Bandwidth & 99% Bandwidth – Ant 0

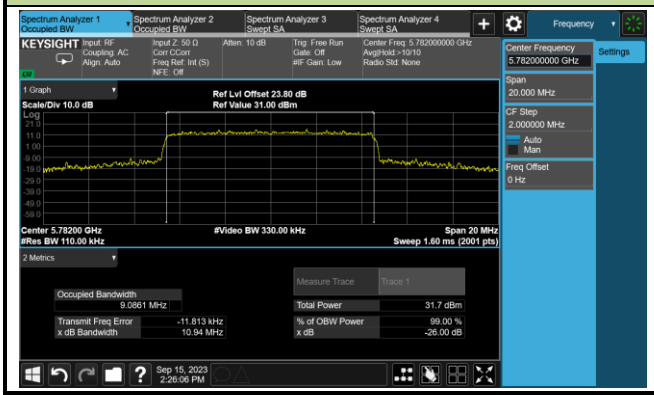
5731MHz

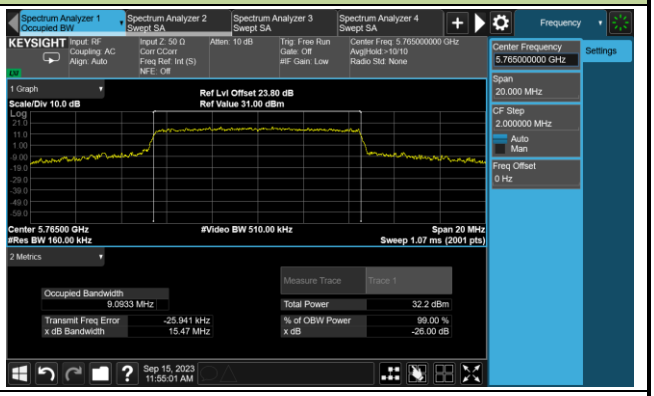
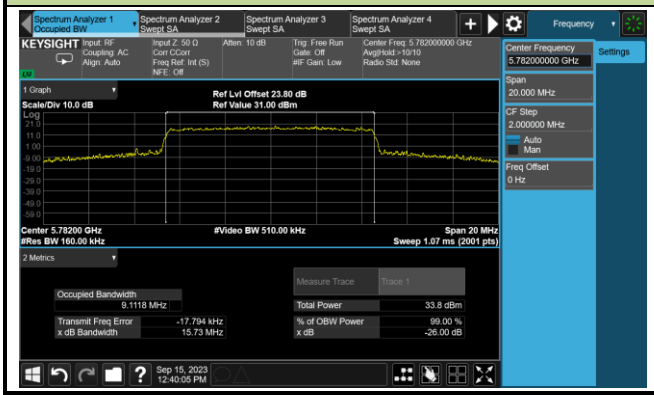


5765MHz



5782MHz



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

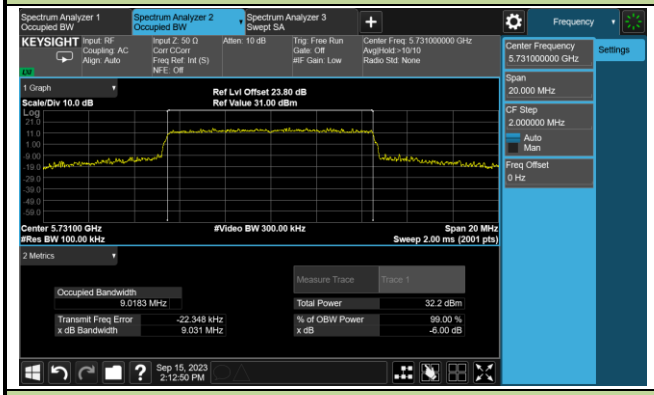
A.3 6dB Bandwidth Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-09-15		

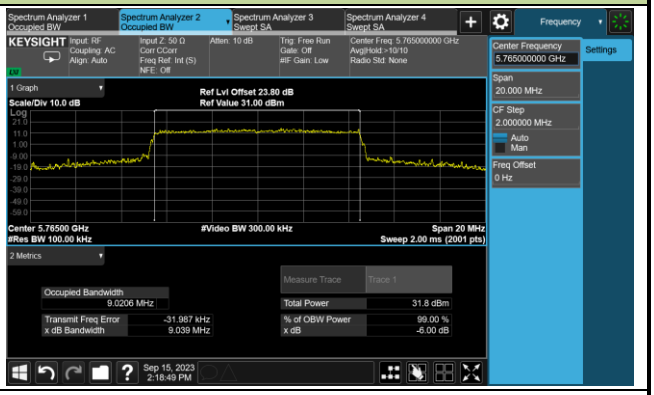
Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
SISO Mode - Ant 0		
5731	9.031	≥0.5
5765	9.039	≥0.5
5782	9.001	≥0.5
SISO Mode - Ant 1		
5731	9.027	≥0.5
5765	8.984	≥0.5
5782	9.062	≥0.5

6dB Bandwidth – Ant 0

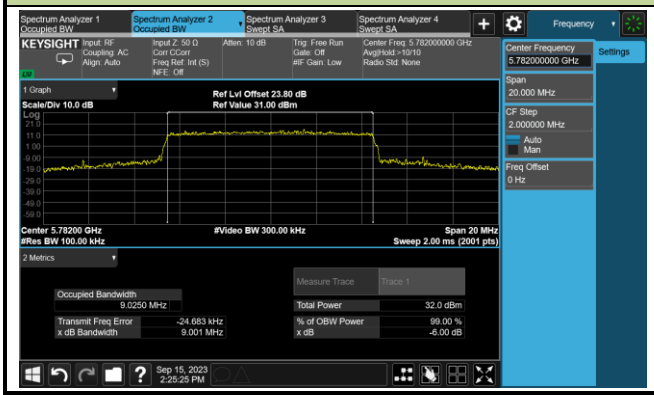
5731MHz

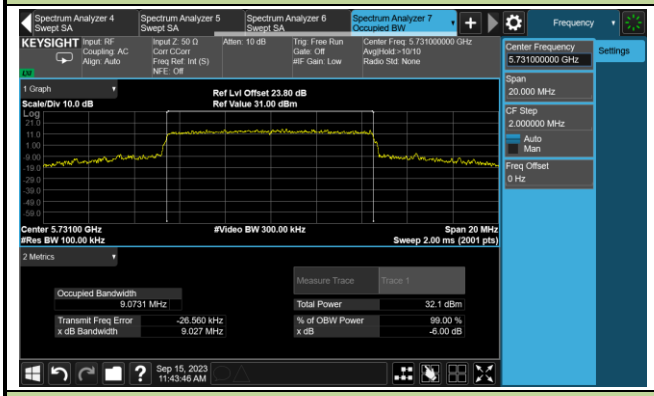
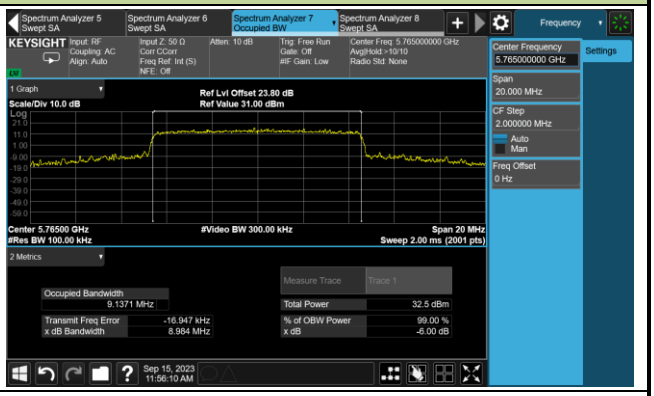
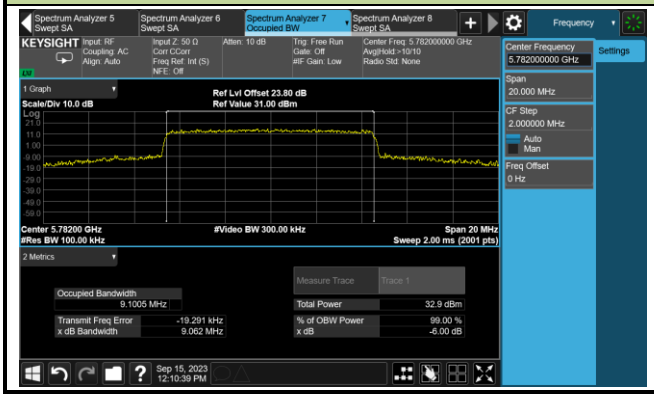


5765MHz



5782MHz



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

A.4 Output Power Test Result

Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-09-13		

Freq. (MHz)	Average Power (dBm)		Power Limit (dBm)
	Ant 0	Ant 1	
5731	22.71	23.62	≤ 30.00
5765	22.33	23.83	≤ 30.00
5782	23.56	23.37	≤ 30.00

A.5 Power Spectral Density Test Result

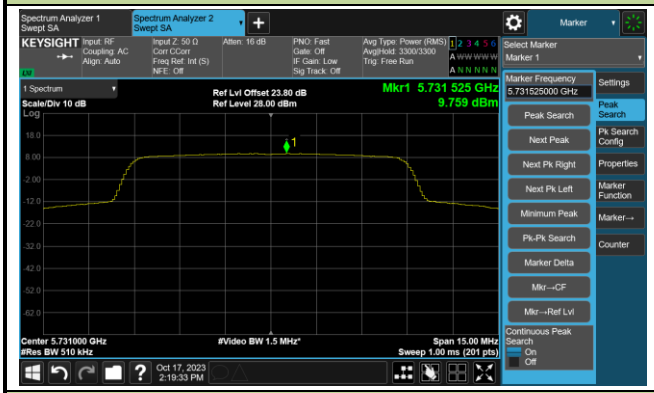
Test Site	WZ-SR4	Test Engineer	Jeff Yang
Test Date	2023-09-15		

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	9.759	11.103	92.12	0.356	10.115	11.459	≤ 30.00
5765	9.719	11.282	92.12	0.356	10.075	11.638	≤ 30.00
5782	10.725	10.769	92.12	0.356	11.081	11.125	≤ 30.00

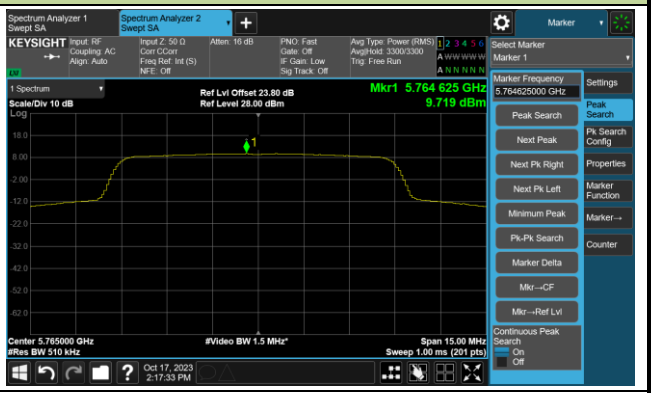
Note: When Duty Cycle < 98%, Total PSD (dBm/510kHz) = AV PSD (dBm/510kHz) +10*log (1/Duty Cycle).

Power Spectral Density - Ant 0

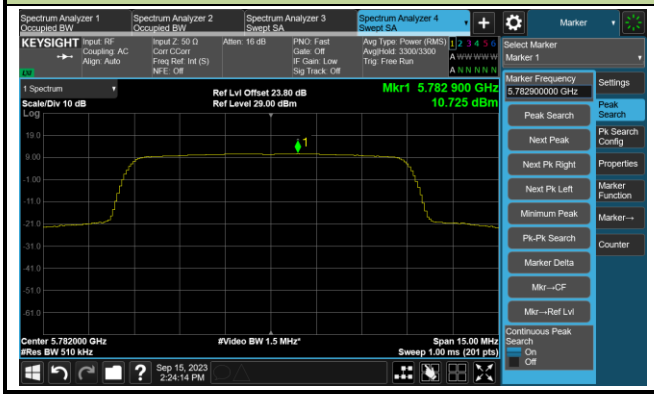
5731MHz

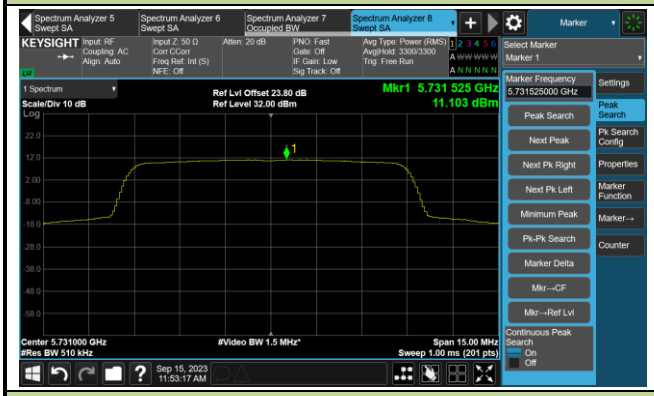
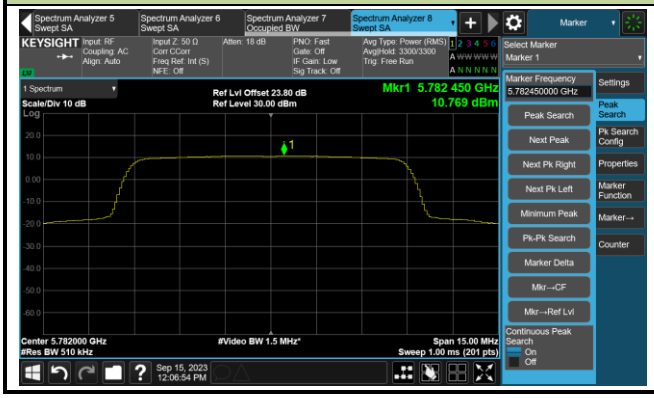


5765MHz



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%	18.0	- 30	-4.59	-4.65	-4.63	-4.64
		- 20	-4.60	-4.59	-4.56	-4.74
		- 10	-4.46	-4.45	-4.46	-4.46
		0	-4.39	-4.36	-4.37	-4.44
		+ 10	-4.37	-4.35	-4.33	-4.38
		+ 20	-4.26	-4.25	-4.25	-4.27
		+ 30	-4.26	-4.26	-4.25	-4.26
		+ 40	-4.25	-4.25	-4.25	-4.25
		+ 50	-4.14	-4.16	-4.22	-4.17
115%	20.7	+ 20	-4.26	-4.25	-4.25	-4.27
85%	15.3	+ 20	-4.25	-4.25	-4.29	-4.30

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	2023-09-27	Test Mode	5731MHz (Carrier Mode) - Ant 1

Voltage (%)	Power (VDC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	18.0	- 30	-4.79	-4.80	-4.75	-4.82
		- 20	-4.74	-4.74	-4.59	-4.72
		- 10	-4.57	-4.59	-4.61	-4.61
		0	-4.43	-4.45	-4.45	-4.45
		+ 10	-4.39	-4.39	-4.33	-4.38
		+ 20	-4.39	-4.30	-4.31	-4.32
		+ 30	-4.31	-4.31	-4.31	-4.31
		+ 40	-4.28	-4.24	-4.27	-4.23
		+ 50	-4.18	-4.23	-4.23	-4.23
115%	20.7	+ 20	-4.32	-4.28	-4.31	-4.31
85%	15.3	+ 20	-4.32	-4.30	-4.35	-4.35

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-AC2	Test Engineer	Dick Shen
Test Date	2023-10-13	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
	8148.5	33.0	10.4	43.4	74.0	-30.6	Peak	Horizontal
*	10035.5	33.4	12.4	45.8	68.2	-22.4	Peak	Horizontal
	11463.5	34.0	15.5	49.5	74.0	-24.5	Peak	Horizontal
*	16580.5	31.3	22.3	53.6	68.2	-14.6	Peak	Horizontal
	8131.5	32.7	10.6	43.3	74.0	-30.7	Peak	Vertical
*	9959.0	32.5	12.1	44.6	68.2	-23.6	Peak	Vertical
	11463.5	36.9	15.5	52.4	74.0	-21.6	Peak	Vertical
	11463.5	36.2	15.5	51.7	54.0	-2.3	Average	Vertical
*	16971.5	30.7	23.3	54.0	68.2	-14.2	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-AC2	Test Engineer	Dick Shen
Test Date	2023-10-13	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
	8157.0	33.3	10.3	43.6	74.0	-30.4	Peak	Horizontal
*	10503.0	33.2	13.6	46.8	68.2	-21.4	Peak	Horizontal
	11531.5	34.4	15.4	49.8	74.0	-24.2	Peak	Horizontal
*	16572.0	31.8	22.1	53.9	68.2	-14.3	Peak	Horizontal
	8191.0	33.4	10.5	43.9	74.0	-30.1	Peak	Vertical
*	10035.5	33.8	12.4	46.2	68.2	-22.0	Peak	Vertical
	11531.5	37.9	15.4	53.3	74.0	-20.7	Peak	Vertical
	11531.5	37.0	15.4	52.4	54.0	-1.6	Average	Vertical
*	16614.5	31.4	22.1	53.5	68.2	-14.7	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-AC2	Test Engineer	Dick Shen
Test Date	2023-10-13	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
	8174.0	33.2	10.4	43.6	74.0	-30.4	Peak	Horizontal
*	10214.0	33.9	12.8	46.7	68.2	-21.5	Peak	Horizontal
	11565.5	33.4	16.0	49.4	74.0	-24.6	Peak	Horizontal
*	16988.5	30.7	23.4	54.1	68.2	-14.1	Peak	Horizontal
	8199.5	33.4	10.4	43.8	74.0	-30.2	Peak	Vertical
*	10171.5	33.6	12.6	46.2	68.2	-22.0	Peak	Vertical
	11565.5	36.0	16.0	52.0	74.0	-22.0	Peak	Vertical
	11565.5	34.0	16.0	50.0	54.0	-4.0	Average	Vertical
*	16971.5	31.6	23.3	54.9	68.2	-13.3	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-AC2	Test Engineer	Dick Shen
Test Date	2023-10-13	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
	7604.5	32.8	10.9	43.7	74.0	-30.3	Peak	Horizontal
*	9908.0	33.5	11.8	45.3	68.2	-22.9	Peak	Horizontal
	11463.5	34.2	15.5	49.7	74.0	-24.3	Peak	Horizontal
*	14923.0	31.9	19.0	50.9	68.2	-17.3	Peak	Horizontal
	8437.5	32.9	10.7	43.6	74.0	-30.4	Peak	Vertical
*	8930.5	32.3	12.0	44.3	68.2	-23.9	Peak	Vertical
*	10035.5	32.9	12.4	45.3	68.2	-22.9	Peak	Vertical
	11463.5	40.8	15.5	56.3	74.0	-17.7	Peak	Vertical
	11463.5	37.7	15.5	53.2	54.0	-0.8	Average	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-AC2	Test Engineer	Dick Shen
Test Date	2023-10-13	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
	7681.0	33.0	10.6	43.6	74.0	-30.4	Peak	Horizontal
*	9882.5	33.2	11.7	44.9	68.2	-23.3	Peak	Horizontal
	11531.5	35.6	15.4	51.0	74.0	-23.0	Peak	Horizontal
	11531.5	33.9	15.4	49.3	54.0	-4.7	Average	Horizontal
*	16776.0	31.8	22.5	54.3	68.2	-13.9	Peak	Horizontal
	8276.0	33.4	10.4	43.8	74.0	-30.2	Peak	Vertical
*	10248.0	33.1	12.8	45.9	68.2	-22.3	Peak	Vertical
	11531.5	41.1	15.4	56.5	74.0	-17.5	Peak	Vertical
	11531.5	37.2	15.4	52.6	54.0	-1.4	Average	Vertical
*	17065.0	30.5	23.7	54.2	68.2	-14.0	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)

Test Site	WZ-AC2	Test Engineer	Dick Shen
Test Date	2023-10-13	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
	8174.0	33.5	10.4	43.9	74.0	-30.1	Peak	Horizontal
*	9899.5	33.4	11.7	45.1	68.2	-23.1	Peak	Horizontal
	11565.5	35.3	16.0	51.3	74.0	-22.7	Peak	Horizontal
	11565.5	37.5	16.0	53.5	54.0	-0.5	Average	Horizontal
*	17549.5	32.6	22.7	55.3	68.2	-12.9	Peak	Horizontal
	8131.5	33.1	10.6	43.7	74.0	-30.3	Peak	Vertical
*	9712.5	33.3	11.5	44.8	68.2	-23.4	Peak	Vertical
	11557.0	39.5	16.0	55.5	74.0	-18.5	Peak	Vertical
	11557.0	37.9	16.0	53.9	54.0	-0.1	Average	Vertical
*	17150.0	30.6	23.5	54.1	68.2	-14.1	Peak	Vertical

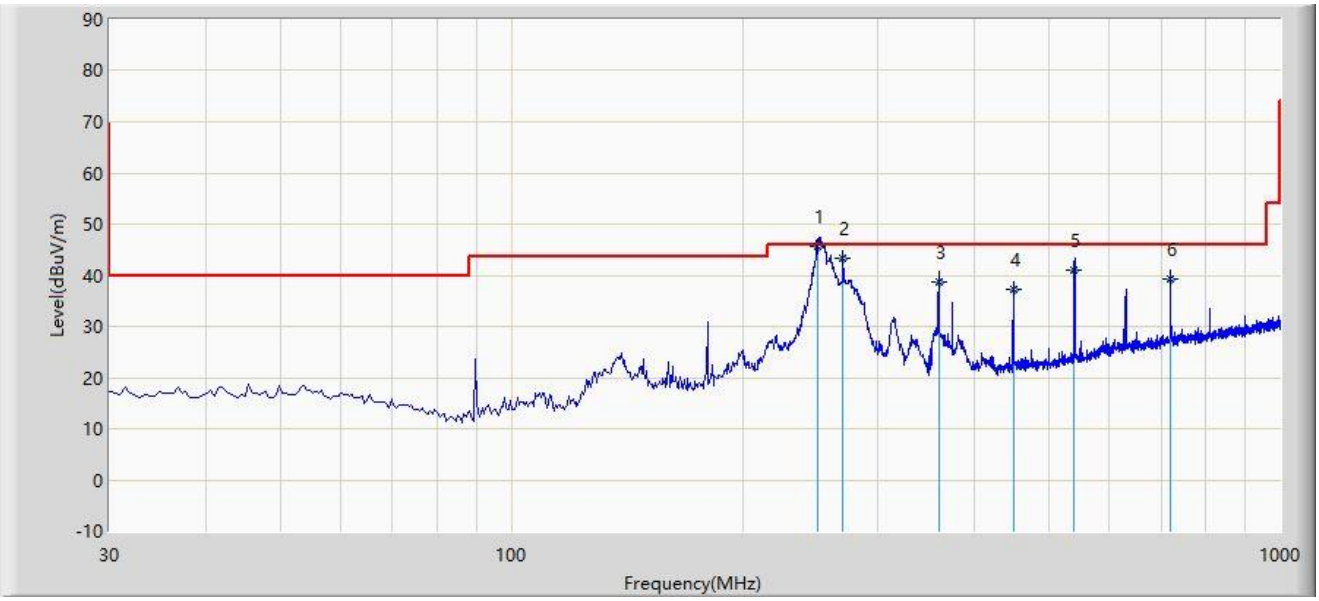
Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

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-AC1	Test Date: 2023-09-26
Limit: FCC_Part15.209_RSE(3m)	Engineer: Carl Jiang
Probe: VULB 9168_25-2000MHz	Polarity: Horizontal
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5765MHz with Ant 1	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	250.000	45.666	28.900	-0.334	46.000	16.766	QP
2		270.000	43.287	25.700	-2.713	46.000	17.587	QP
3		360.000	38.784	18.920	-7.216	46.000	19.864	QP
4		450.000	37.327	14.900	-8.673	46.000	22.428	QP
5		540.000	40.972	16.900	-5.028	46.000	24.072	QP
6		720.000	39.248	12.200	-6.752	46.000	27.049	QP

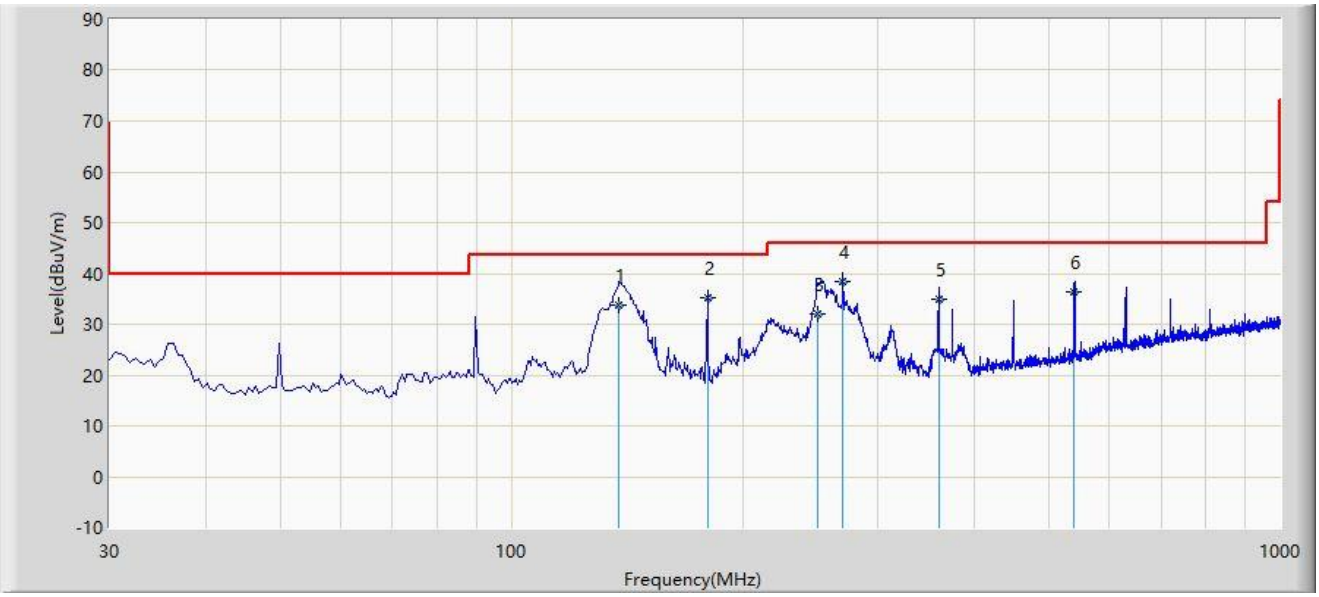
Note 1: " * ", means this data is the worst emission level.

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-AC1	Test Date: 2023-09-26
Limit: FCC_Part15.209_RSE(3m)	Engineer: Carl Jiang
Probe: VULB 9168_25-2000MHz	Polarity: Vertical
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5765MHz with Ant 1	



No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		138.150	33.781	16.200	-9.719	43.500	17.581	QP
2		180.000	35.196	18.300	-8.304	43.500	16.896	QP
3		250.000	32.166	15.400	-13.834	46.000	16.766	QP
4	*	270.000	38.387	20.800	-7.613	46.000	17.587	QP
5		360.000	34.964	15.100	-11.036	46.000	19.864	QP
6		540.000	36.372	12.300	-9.628	46.000	24.072	QP

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

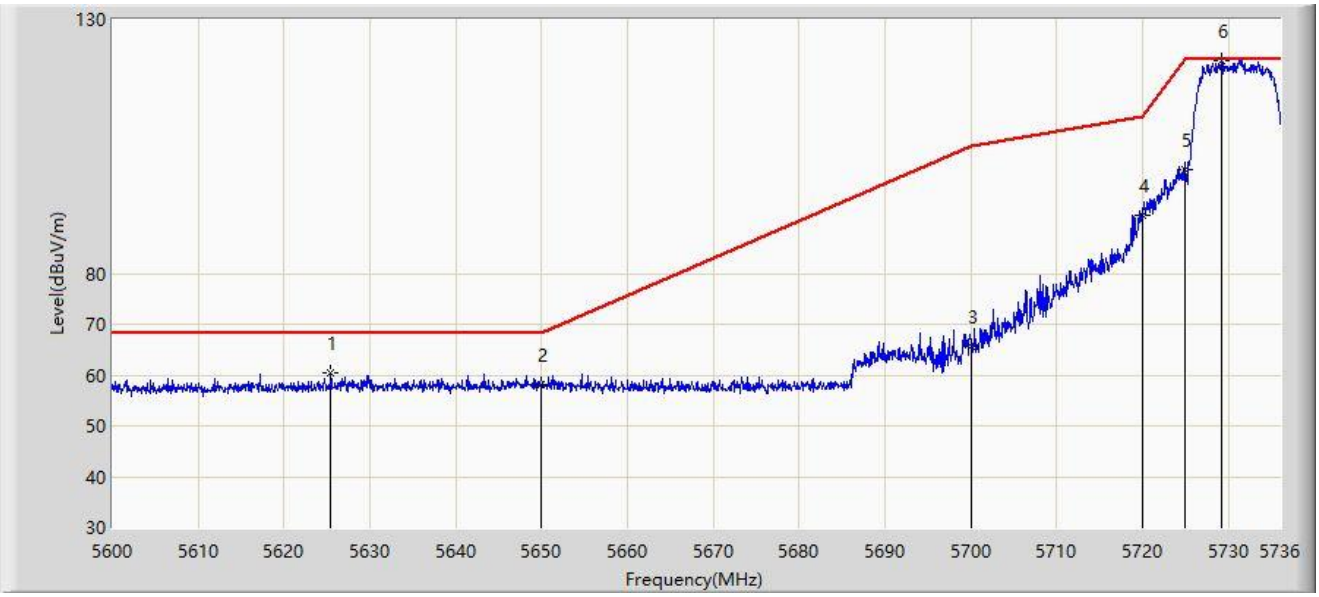
Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB/m).

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-AC2	Test Date: 2023-09-27
Limit: FCC_5.8G_RE(3m)	Engineer: Dick Shen
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5731MHz with Ant 0	



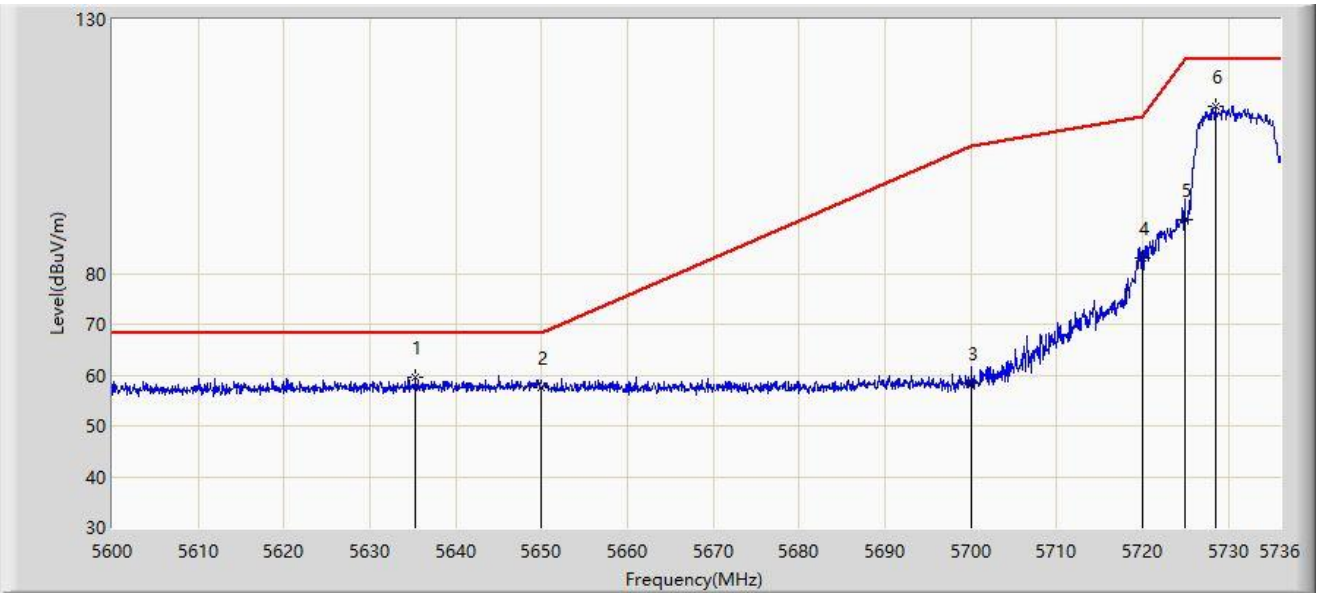
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5625.432	60.542	56.603	-7.658	68.200	3.940	PK
2		5650.000	58.082	54.011	-10.118	68.200	4.070	PK
3		5700.000	65.704	61.327	-39.496	105.200	4.378	PK
4		5720.000	91.315	86.712	-19.485	110.800	4.602	PK
5		5725.000	100.493	95.850	-21.707	122.200	4.643	PK
6		5729.132	121.930	117.331	N/A	N/A	4.599	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-AC2	Test Date: 2023-09-27
Limit: FCC_5.8G_RE(3m)	Engineer: Dick Shen
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5731MHz with Ant 0	



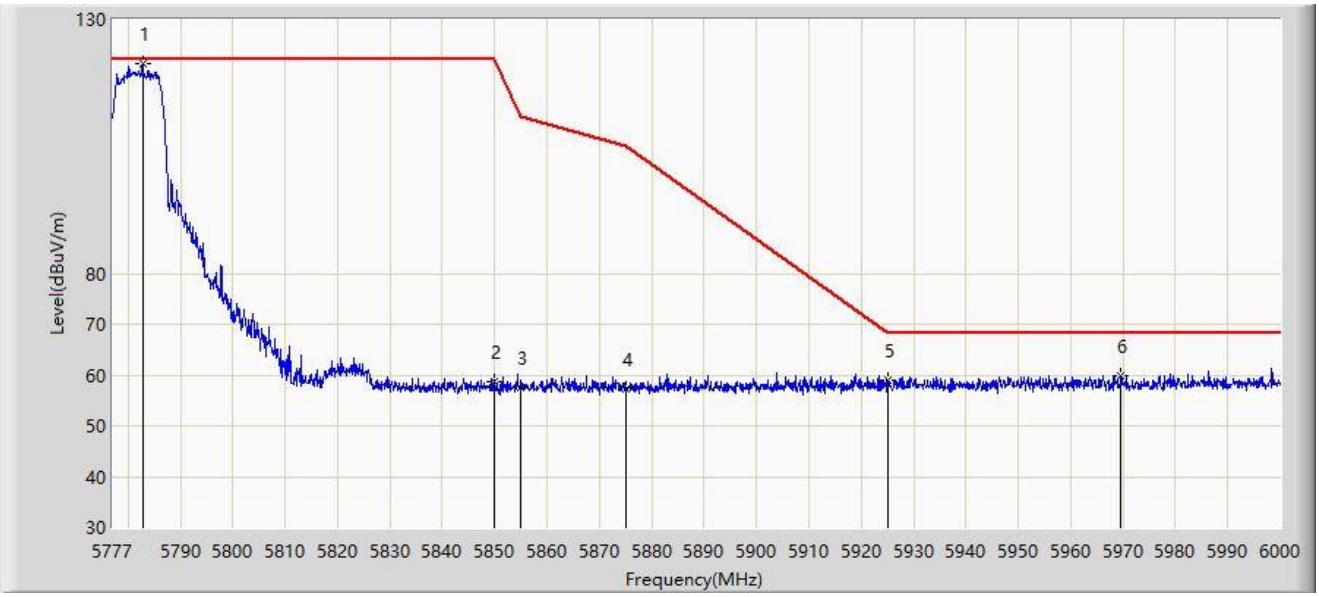
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5635.292	59.499	55.447	-8.701	68.200	4.051	PK
2		5650.000	57.494	53.423	-10.706	68.200	4.070	PK
3		5700.000	58.358	53.981	-46.842	105.200	4.378	PK
4		5720.000	83.053	78.450	-27.747	110.800	4.602	PK
5		5725.000	90.605	85.962	-31.595	122.200	4.643	PK
6		5728.452	112.783	108.172	N/A	N/A	4.612	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-AC2	Test Date: 2023-09-27
Limit: FCC_5.8G_RE(3m)	Engineer: Dick Shen
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz with Ant 0	



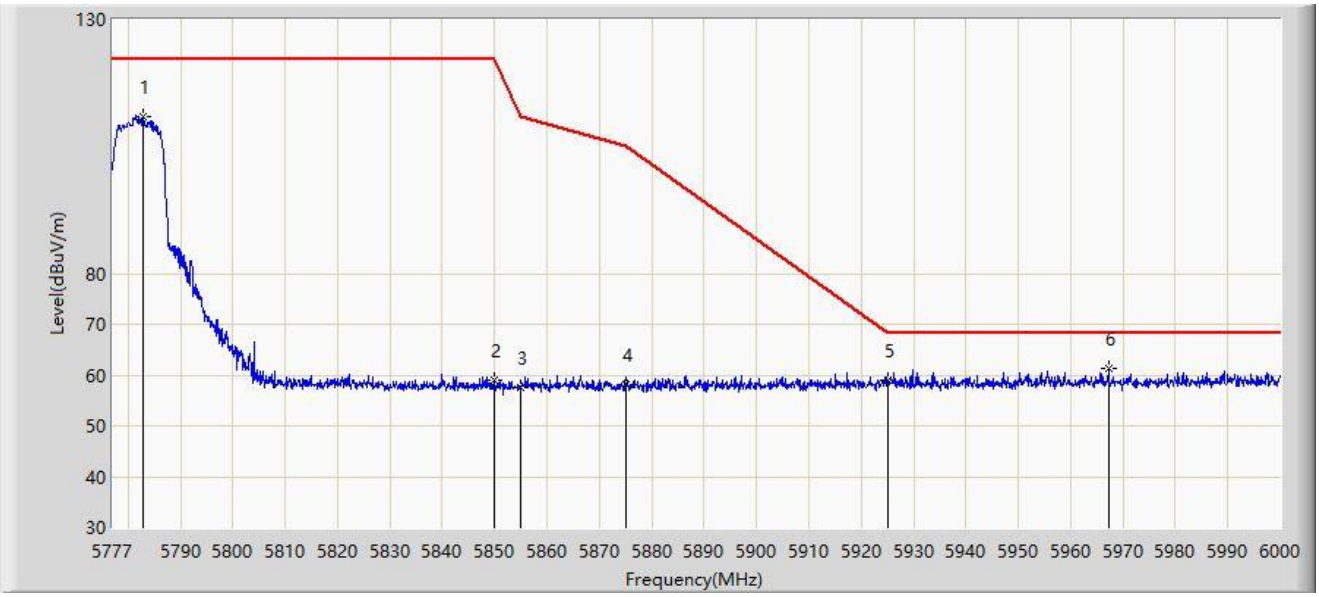
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		5782.798	121.239	116.322	N/A	N/A	4.917	PK
2		5850.000	58.634	53.684	-63.566	122.200	4.950	PK
3		5855.000	57.676	52.669	-53.124	110.800	5.007	PK
4		5875.000	57.135	52.035	-48.065	105.200	5.100	PK
5		5925.000	58.929	53.702	-9.271	68.200	5.227	PK
6	*	5969.672	59.779	54.515	-8.421	68.200	5.264	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-AC2	Test Date: 2023-09-27
Limit: FCC_5.8G_RE(3m)	Engineer: Dick Shen
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz with Ant 0	



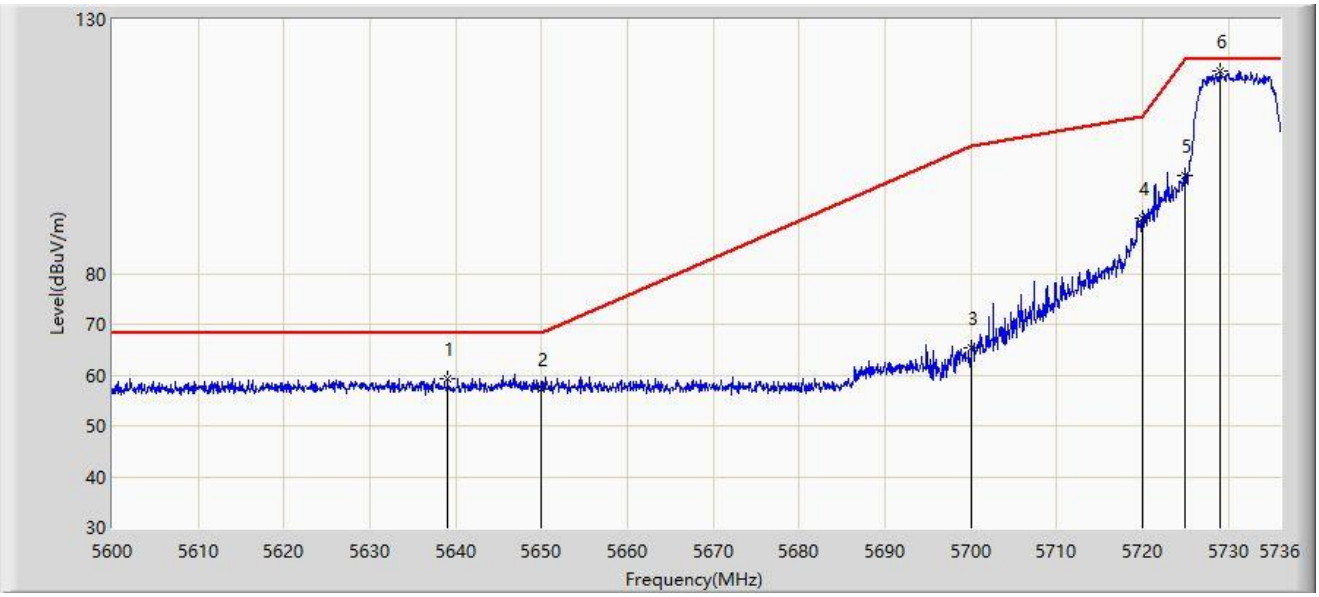
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5782.798	110.928	106.011	N/A	N/A	4.917	PK
2		5850.000	58.916	53.966	-63.284	122.200	4.950	PK
3		5855.000	57.393	52.386	-53.407	110.800	5.007	PK
4		5875.000	57.975	52.875	-47.225	105.200	5.100	PK
5		5925.000	58.860	53.633	-9.340	68.200	5.227	PK
6	*	5967.331	61.259	55.974	-6.941	68.200	5.285	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-AC2	Test Date: 2023-09-27
Limit: FCC_5.8G_RE(3m)	Engineer: Dick Shen
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5731MHz with Ant 1	



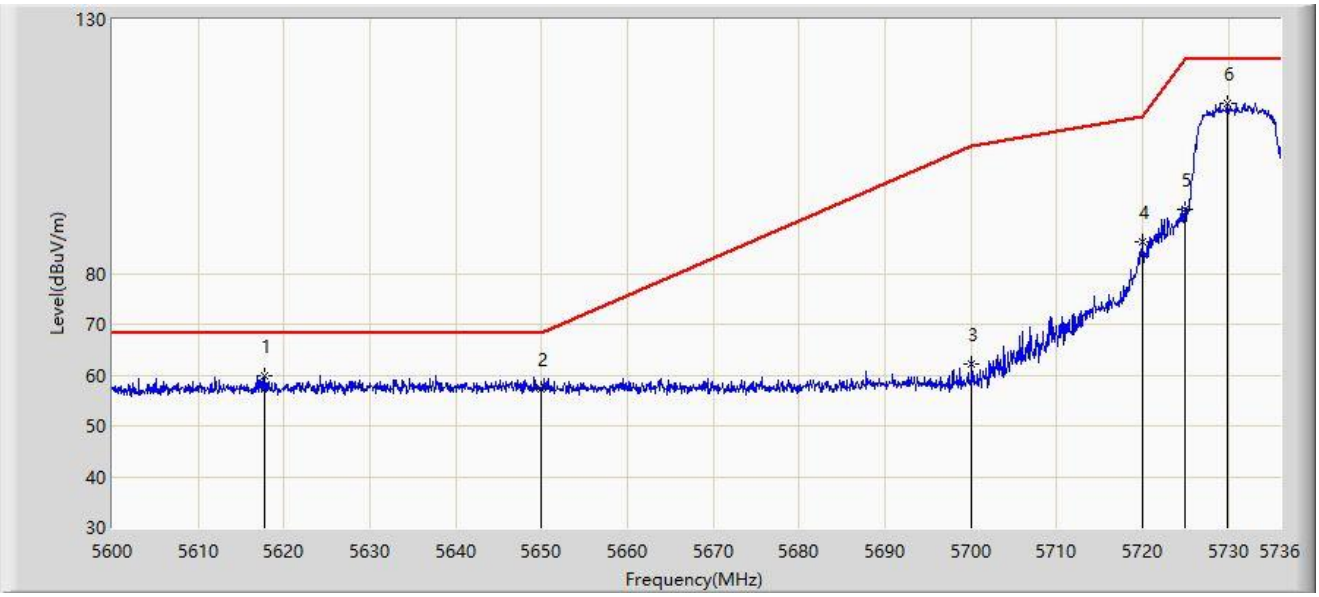
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1	*	5639.032	59.259	55.162	-8.941	68.200	4.097	PK
2		5650.000	57.326	53.255	-10.874	68.200	4.070	PK
3		5700.000	65.301	60.924	-39.899	105.200	4.378	PK
4		5720.000	90.981	86.378	-19.819	110.800	4.602	PK
5		5725.000	99.415	94.772	-22.785	122.200	4.643	PK
6		5729.064	119.947	115.347	N/A	N/A	4.601	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-AC2	Test Date: 2023-09-27
Limit: FCC_5.8G_RE(3m)	Engineer: Dick Shen
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5731MHz with Ant 1	



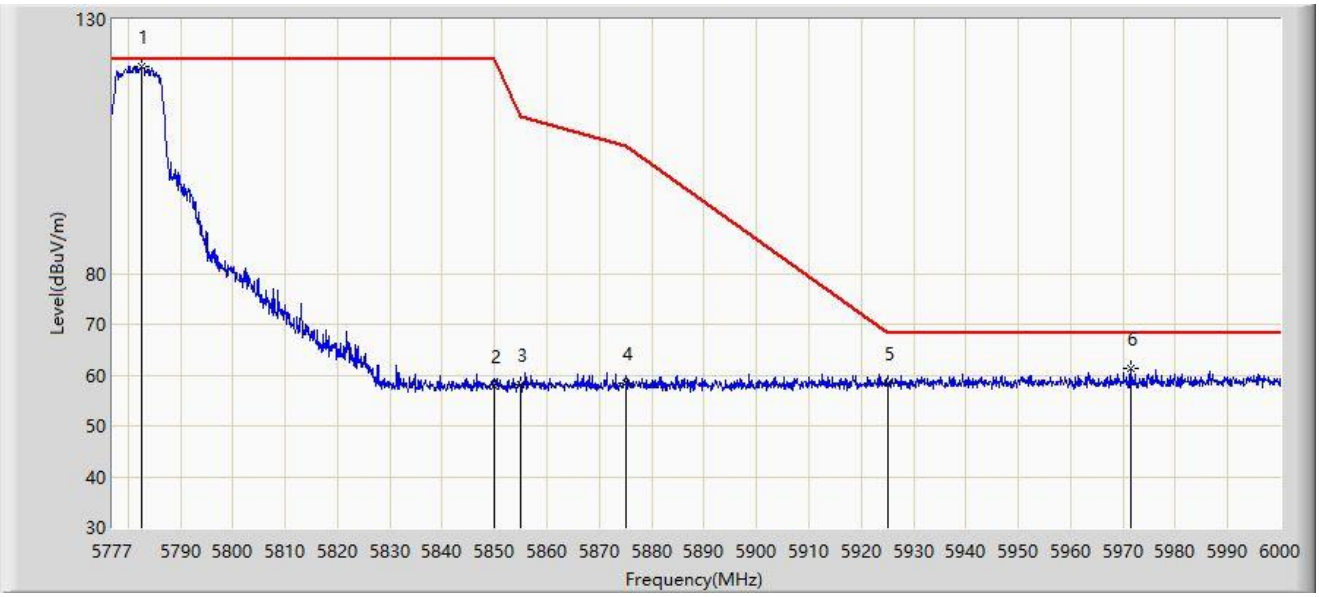
No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1	*	5617.748	59.757	55.998	-8.443	68.200	3.759	PK
2		5650.000	57.340	53.269	-10.860	68.200	4.070	PK
3		5700.000	62.115	57.738	-43.085	105.200	4.378	PK
4		5720.000	86.231	81.628	-24.569	110.800	4.602	PK
5		5725.000	92.483	87.840	-29.717	122.200	4.643	PK
6		5729.812	113.399	108.812	N/A	N/A	4.587	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-AC2	Test Date: 2023-09-28
Limit: FCC_5.8G_RE(3m)	Engineer: Dick Shen
Probe: BBHA9120D_1457_1-18GHz	Polarity: Horizontal
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz with Ant 1	



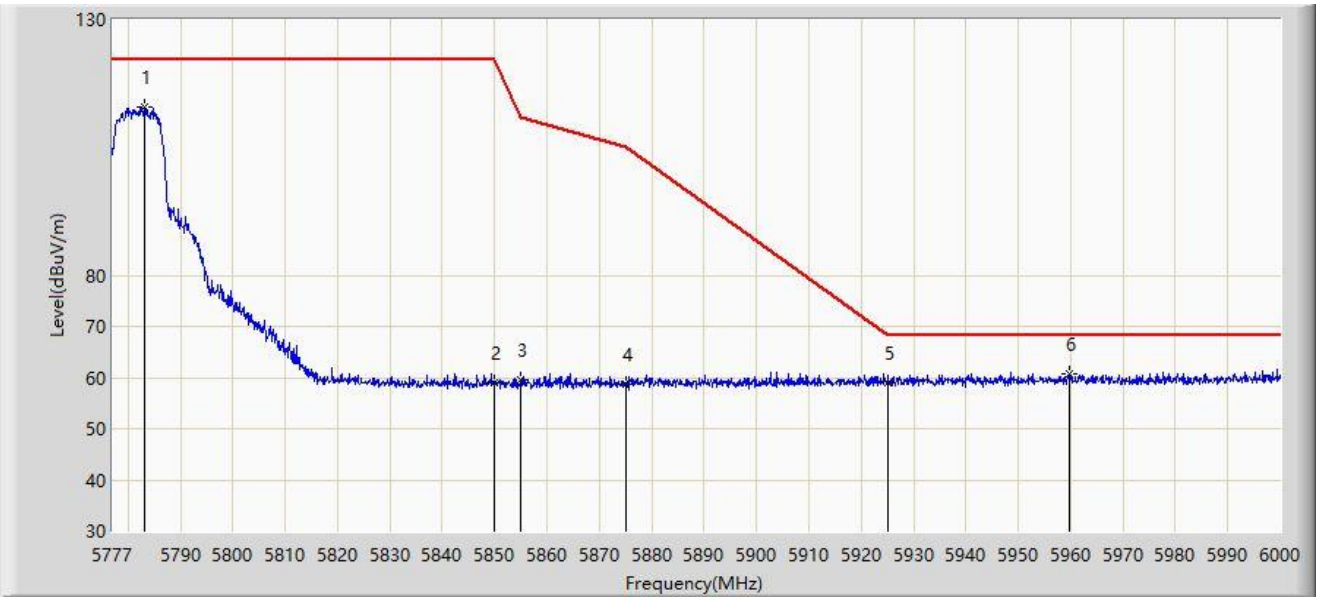
No	Mark	Frequency (MHz)	Measure Level (dBµV/m)	Reading Level (dBµV)	Margin (dB)	Limit (dBµV/m)	Factor (dB/m)	Type
1		5782.687	120.834	115.919	N/A	N/A	4.916	PK
2		5850.000	57.792	52.842	-64.408	122.200	4.950	PK
3		5855.000	58.061	53.054	-52.739	110.800	5.007	PK
4		5875.000	58.509	53.409	-46.691	105.200	5.100	PK
5		5925.000	58.374	53.147	-9.826	68.200	5.227	PK
6	*	5971.456	61.339	56.092	-6.861	68.200	5.247	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-AC2	Test Date: 2023-09-28
Limit: FCC_5.8G_RE(3m)	Engineer: Dick Shen
Probe: BBHA9120D_1457_1-18GHz	Polarity: Vertical
EUT: Video&Data transmission device	Power: AC 120V/60Hz
Test Mode: Transmit at 5782MHz with Ant 1	



No	Mark	Frequency (MHz)	Measure Level (dBμV/m)	Reading Level (dBμV)	Margin (dB)	Limit (dBμV/m)	Factor (dB/m)	Type
1		5783.132	112.883	107.962	N/A	N/A	4.920	PK
2		5850.000	58.916	53.966	-63.284	122.200	4.950	PK
3		5855.000	59.438	54.431	-51.362	110.800	5.007	PK
4		5875.000	58.769	53.669	-46.431	105.200	5.100	PK
5		5925.000	59.101	53.874	-9.099	68.200	5.227	PK
6	*	5959.749	60.843	55.486	-7.357	68.200	5.357	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 “2308RSU079-UT” file.

Appendix C – EUT Photograph

Refer to “2308RSU079-UE” file.

The End