China

FCC/IC- TEST REPORT

Report Number	:	**708881779703-00**	Date of Issue:	October 9, 2017

Model	:	SZU06C1, SZU06C2
Product Type	:	ZigBee wireless communication module
FCC ID	:	2ALOUSZU06C
Applicant	:	Chengdu Diyue Technology Co., Ltd.
Address	:	Room 408, 4/F, Block A, Gaofa Building, No.6, Jiuxing Avenue, High-tech Zone, Chengdu, Sichuan province, China
Production Facility	:	Chengdu Diyue Technology Co., Ltd.
Address	:	Room 408, 4/F, Block A, Gaofa Building, No.6, Jiuxing Avenue, High-tech Zone, Chengdu, Sichuan province, China
Test Result	:	■ **Positive** ☐ **Negative**
Total pages including Appendices	:	68

TÜV SÜD CHINA

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch is a subcontractor to TÜV SÜD Product Service GmbH according to the principles outlined in ISO 17025.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch reports apply only to the specific samples tested under stated test conditions. Construction of the actual test samples has been documented. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. The manufacturer/importer is responsible to the Competent Authorities in Europe for any modifications made to the production units which result in non-compliance to the relevant regulations. TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch shall have no liability for any deductions, inferences or generalizations drawn by the client or others from TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch issued reports.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

1 Table of Contents

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name:	TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch No.16 Lane, 1951 Du Hui Road, Shanghai 201108, P.R. China
Test Firm Registration Number:	820234
Telephone:	+86 21 6141 0123
Fax:	+86 21 6140 8600

Test Site 2

Company name:	MRT Technology (Suzhou) Co., Ltd. D8 Building, Youxin Industrial Park, No. 2 Tina'ed Wuzhong Economic Development Zone, Suzhou, China
Test Firm Registration Number:	893164
Telephone:	+86-512-66308358
Fax:	+86-512-66308368

China

3 Description of the Equipment under Test

Description of the Equipment Under Test

Product:	ZigBee wireless communication module
Model no.:	SZU06C1, SZU06C2
FCC ID:	2ALOUSZU06C
IC:	NA
Options and accessories:	NA
Rating voltage:	2.1V~3.9V DC
RF Transmission Frequency:	2405MHz-2480MHz
No. of Operated Channel:	16
Channel Space:	5MHz
Channel list:	Channel 11: 2405MHz Channel 12: 2410MHz Channel 13: 2415MHz … Channel 19: 2445MHz … Channel 26: 2480MHz
Radio technology:	IEEE 802.15.4
Modulation:	O-QPSK
Hardware version:	SZU06C1V06 for SZU06C1; SZU06C2V06 for SZU06C2
Software version:	SZU06C_GSME01_00000006
Antenna Type:	Snake antenna for SZU06C1 Dipole antenna W1010 for SZU06C2
Antenna Gain:	Snake antenna for SZU06C1: 3.66dBi Dipole antenna W1010 for SZU06C2: 2.0dBi
Description of the EUT:	The Equipment Under Test (EUT) is ZigBee wireless transceiver module operated at 2.4GHz

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

4 Summary of Test Standards

Test Standards	
FCC Part 15 Subpart C	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

All the test methods were according to KDB558074 D01 DTS Measurement Guidance v04 and ANSI C63.10 (2013).

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

5 Summary of Test Results

Technical Requirements						
FCC Part 15 Subpart C						
Test Condition		Pages	Test Site	Test Result		
				Pass	Fail	N/A
§15.207	Conducted emission AC power port	---	---	☐	☐	☒
§15.247 (b) (1)	Conducted peak output power	10	Site 2	☒	☐	☐
§15.247(a)(1)	20dB bandwidth	---	---	☐	☐	☒
§15.247(a)(1)	Carrier frequency separation	---	---	☐	☐	☒
§15.247(a)(1)(iii)	Number of hopping frequencies	---	---	☐	☐	☒
§15.247(a)(1)(iii)	Dwell Time	---	---	☐	☐	☒
§15.247(e)	Power spectral density	13	Site 2	☒	☐	☐
§15.247(a)(2)	6dB bandwidth and 99% Occupied Bandwidth	11	Site 2	☒	☐	☐
§15.247(d)	Spurious RF conducted emissions	15	Site 2	☒	☐	☐
§15.247(d)	Band edge	19	Site 2	☒	☐	☐
§15.247(d) & §15.209	Spurious radiated emissions for transmitter	22	Site 2	☒	☐	☐
§15.203	Antenna requirement	See note 1		☒	☐	☐

Remark 1: N/A – Not Applicable.

Note 1: For model: SZU06C1 uses a snake antenna, which gain is 3.3dBi. In accordance to §15.203, It is considered sufficiently to comply with the provisions of this section.

For model: SZU06C2 have a U.FL RF connector and uses a dipole antenna thorough U.FL-RSMA pigtail, which dipole antenna gain is 2.0dBi. In accordance to §15.203, It is considered sufficiently to comply with the provisions of this section.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: 2ALOUSZU06C complies with Section 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C Rules.

.

SUMMARY:

All tests according to the regulations cited on page 5 were

■ - Performed

☐ - **Not** Performed

The Equipment under Test

■ - **Fulfills** the general approval requirements.

☐ - **Does not** fulfill the general approval requirements.

Sample Received Date: August 12, 2017

Testing Start Date: August 23, 2017

Testing End Date: September 25, 2017

- TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch

Reviewed by: Prepared by:

Hui TONG
Review Engineer

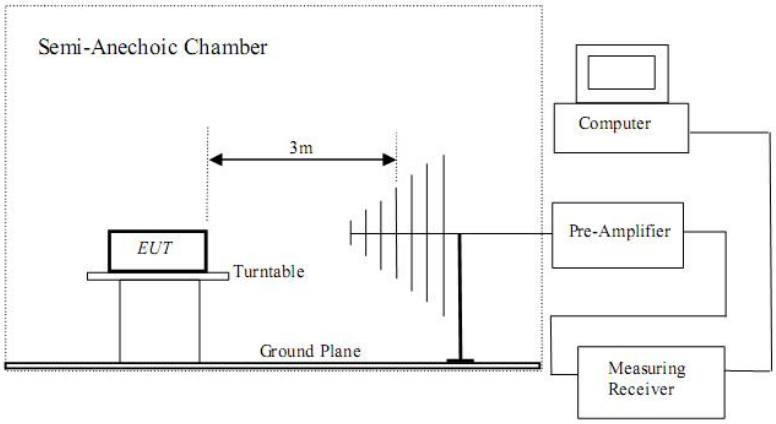
Wenwen CHENG
Project Engineer

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

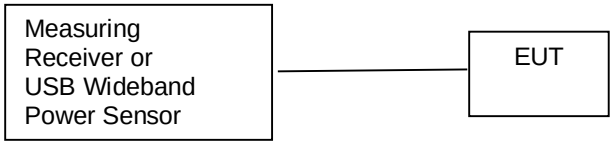
China

7 Test Setups

7.1 Radiated test setups



7.2 Conducted RF test setups



TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

8 Systems test configuration

Auxiliary Equipment Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)
Notebook	Lenove	X240

Test channel & mode:
The Zigbee transceiver was configured using a proprietary communication interface procided by the client. The interface allows power level and channel control required to support the evaluation. The power level settings in the table below were used for the evaluation.

Test software	CommBox-zbspTool

Test mode	Channel	Power settings (dBm)	Frequency (MHz)
Tx	11	16	2405
Tx	18	16	2440
Tx	25	16	2475
Tx	26	10	2480

Additional Comments:
The customer declared two models with the same RF part.
Full Test was performed with DUT2: 2.4GHZ IEEE 802.15.4 Zigbee module with u.FL antenna connector; Model: SZU06C1
Partial test was performed with model name DUT1: 2.4GHz IEEE 802.15.4 Zigbee module with integrated PCB (Snake) antenna; Model: SZU06C2

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

9 Technical Requirement

9.1 Conducted peak output power

Test Method

KDB 558074 D01 v04 – Section 9.1.3 PKPM1 – Peak Power Method

9.1.3 PKPM1 Peak-reading power meter method:
The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

Limits

Frequency Range MHz	Limit W	Limit dBm
2400-2483.5	≤1	≤30

Test result as below table

Model	Max Gain (dBi)	Ch.	Freq. (MHz)	Peak Power (dBm)	Average Power (dBm)	Limit (dBm)
Zigbee	3.66	11	2405	15.32	15.16	30
	3.66	19	2440	15.58	15.41	30
	3.66	25	2475	15.33	15.21	30
	3.66	26	2480	10.09	9.78	30

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

9.2 6dB bandwidth Occupied Bandwidth

Test Method

1. Use the following spectrum analyzer settings:
   RBW=100K, VBW≥3RBW, Sweep = auto, Detector function = peak, Trace = max hold
2. Use the automatic bandwidth measurement capability of an instrument, may be employed using the X dB bandwidth mode with X set to 6 dB, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.
3. Allow the trace to stabilize, record the 6 dB Bandwidth value.

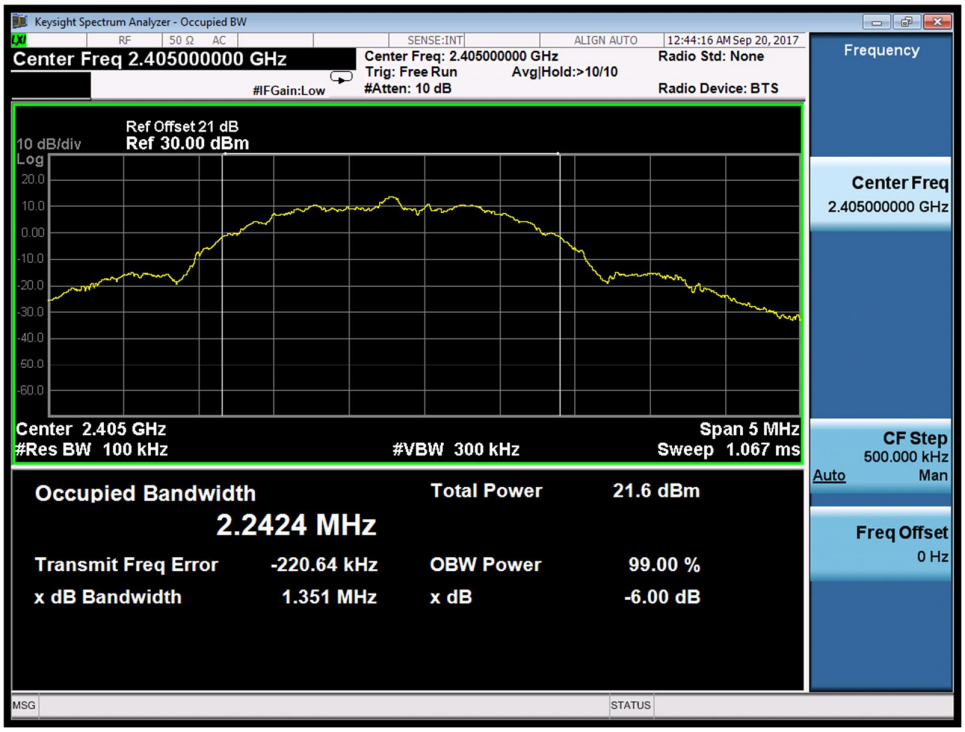
Limit

Limit [kHz]
≥500

Test result

Frequency MHz	6dB bandwidth MHz	Result
Top channel 2405MHz	2.2424	Pass
Middle channel 2440MHz	2.2407	Pass
(Bottom channel -1) 2475MHz	2.2413	Pass
Bottom channel 2480MHz	2.2387	Pass

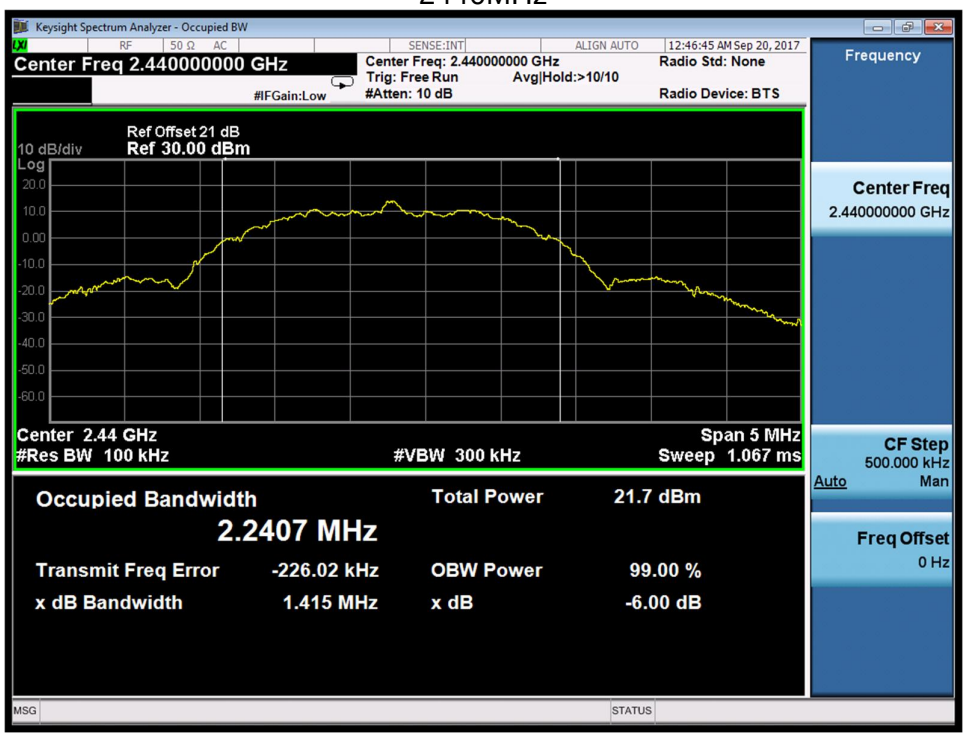
2405MHz



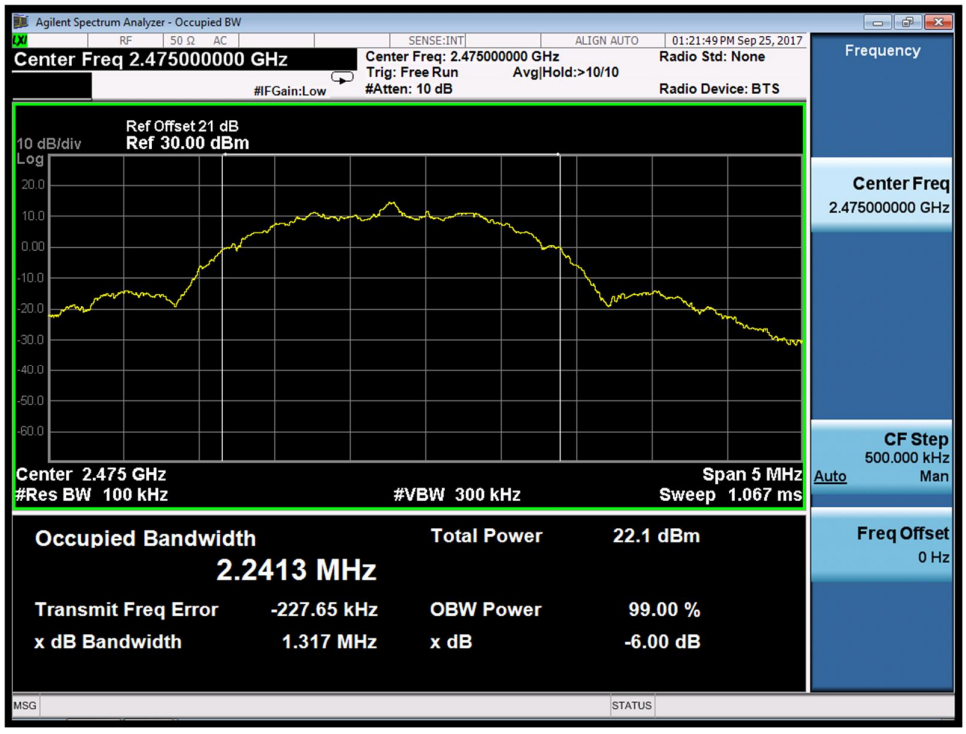
TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

2440MHz



2475MHz



TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

2480MHz

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

9.3 Power spectral density

Test Method

This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance:

1. Set analyzer center frequency to DTS channel center frequency. RBW=3kHz, VBW≥3RBW, Span=1.5 times DTS bandwidth, Detector=Peak, Sweep=auto, Trace= max hold.
2. Allow trace to fully stabilize, use the peak marker function to determine the maximum amplitude level within the RBW.
3. Repeat above procedures until other frequencies measured were completed.

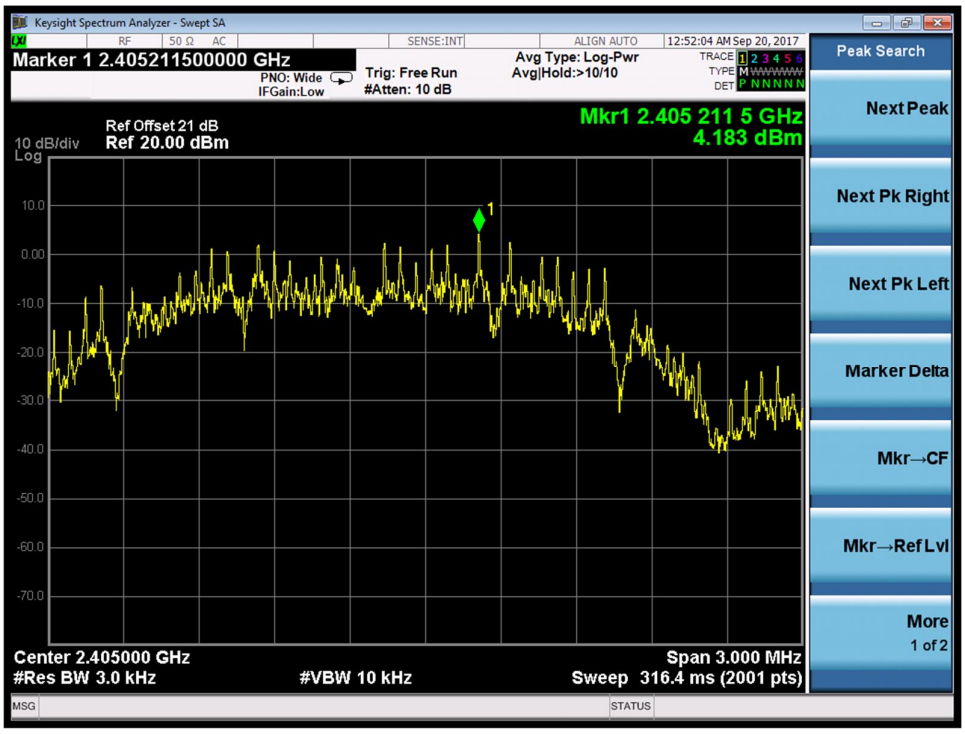
Limit

Limit [dBm]
≤8

Test result

Frequency MHz	Power spectral density dBm	Result
Top channel 2405MHz	4.183	Pass
Middle channel 2440MHz	4.418	Pass
(Bottom channel -1) 2475MHz	4,507	Pass
Bottom channel 2480MHz	-0.909	Pass

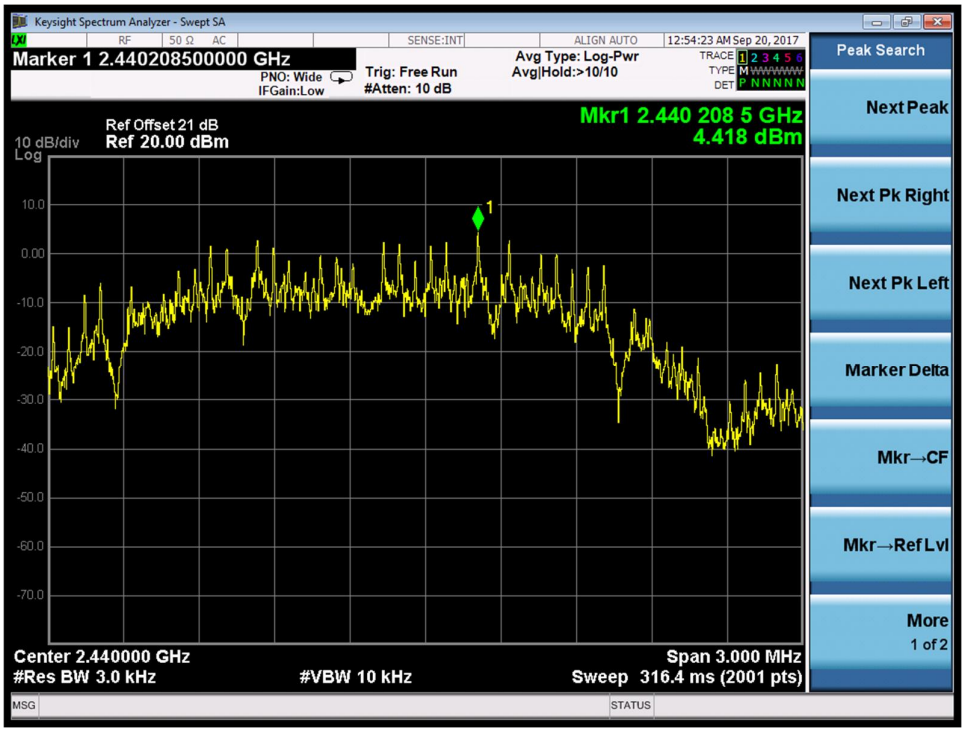
2405MHz



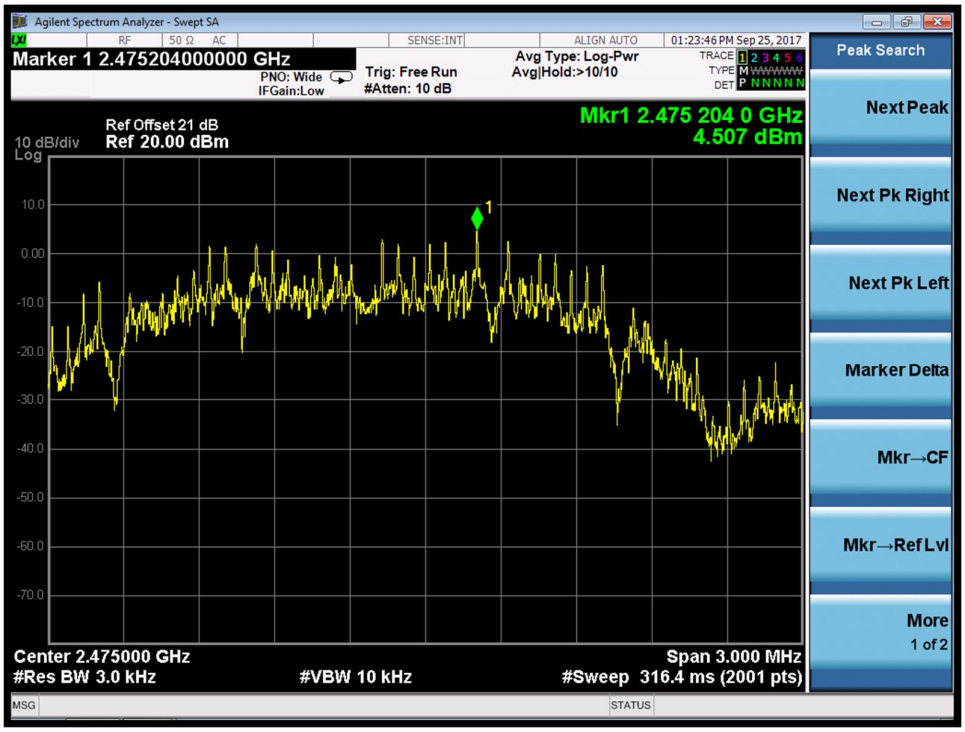
TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

2440MHz



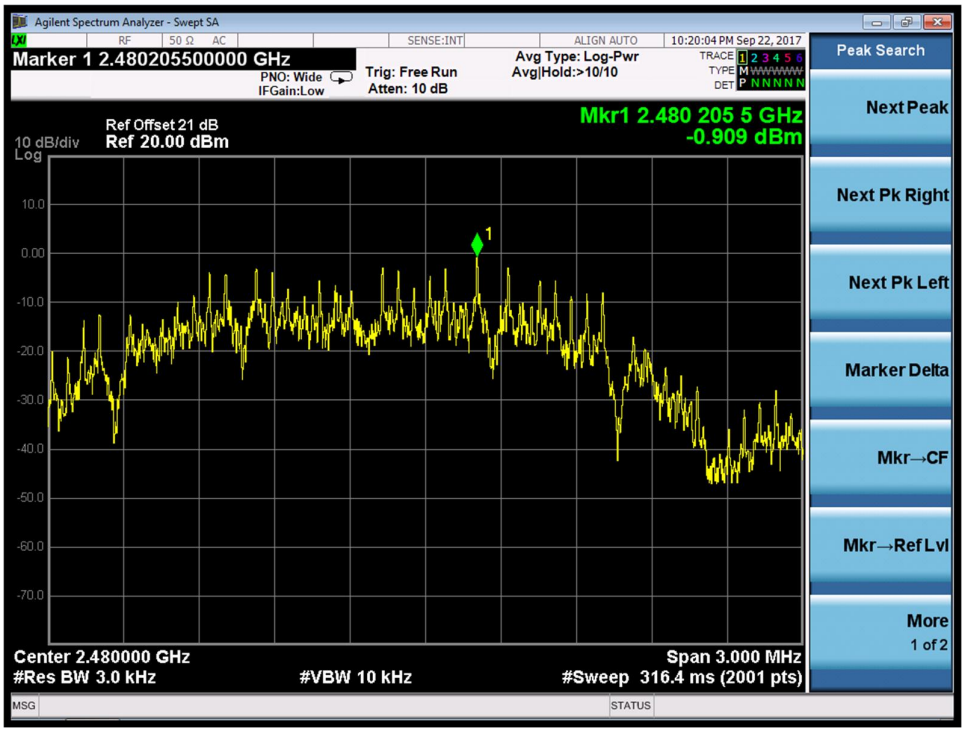
2475MHz



TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

2480MHz



TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

9.4 Spurious RF conducted emissions

Test Method

1. Establish a reference level by using the following procedure:
   a. Set RBW=100 kHz. VBW≥3RBW. Detector =peak, Sweep time = auto couple, Trace mode = max hold.
   b. Allow trace to fully stabilize, use the peak marker function to determine the maximum PSD level.
2. Use the maximum PSD level to establish the reference level.
   a. Set the center frequency and span to encompass frequency range to be measured.
   b. Use the peak marker function to determine the maximum amplitude level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements, report the three highest emissions relative to the limit.
3. Repeat above procedures until other frequencies measured were completed.

Limit

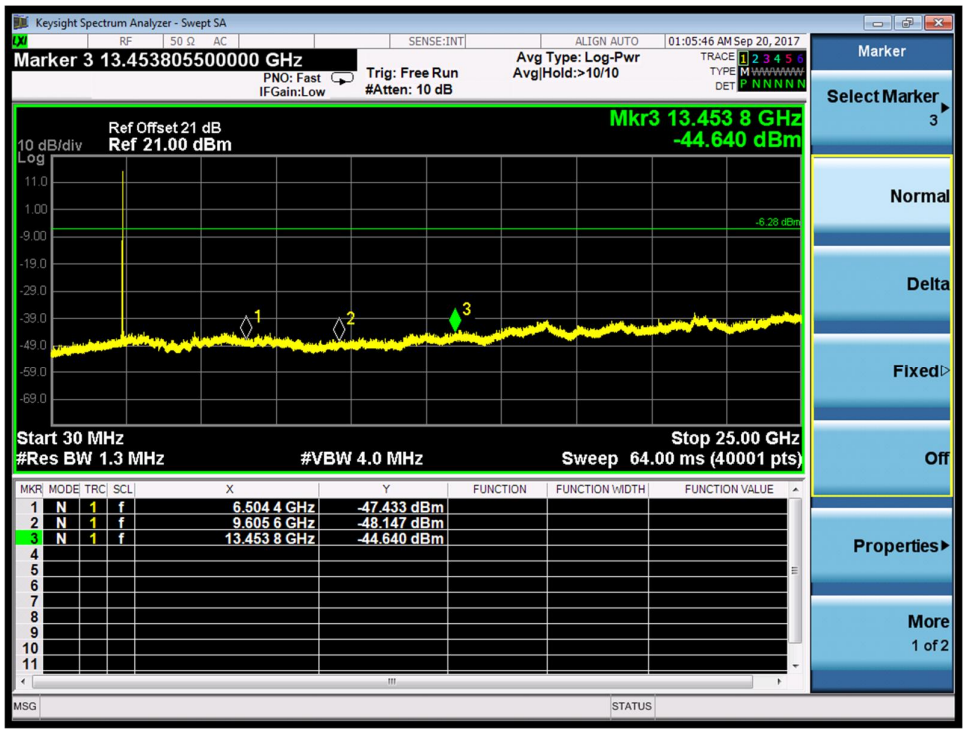
Frequency Range MHz	Limit (dBc)
30-25000	-20

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

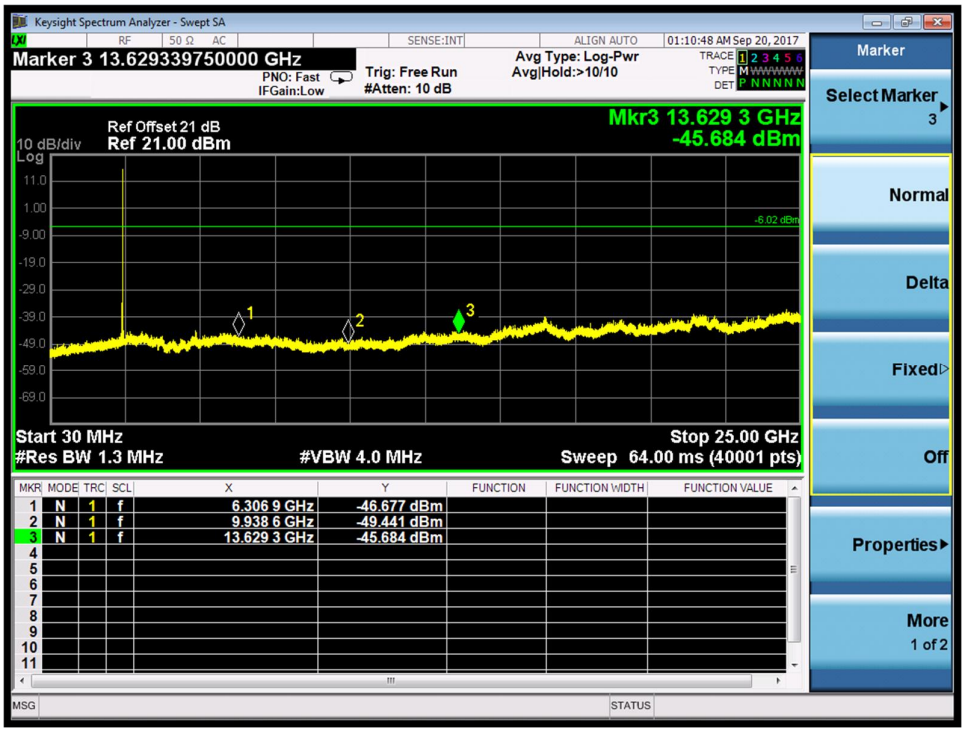
Spurious RF conducted emissions

2405MHz



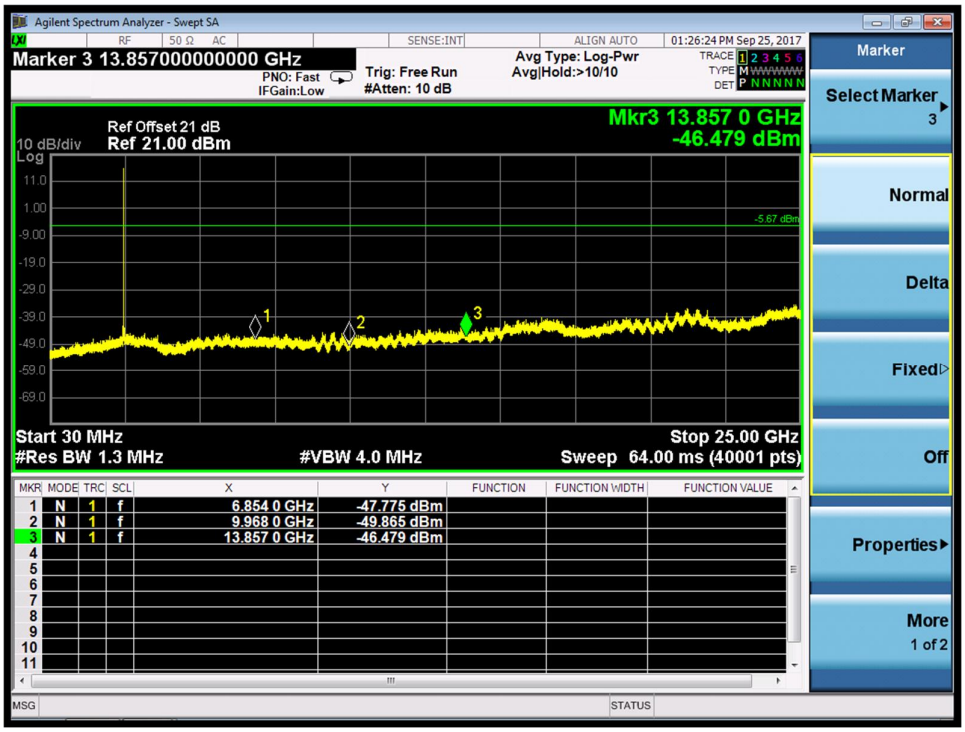
China

2440MHz



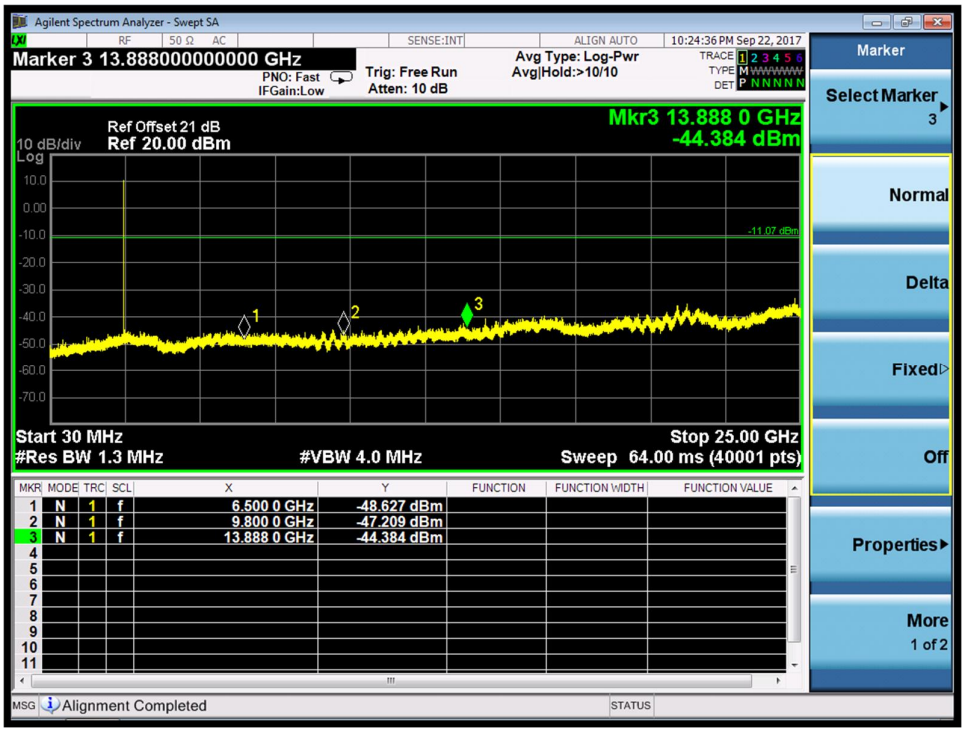
China

2475MHz



China

2480MHz



9.5 Band edge

Test Method

1 Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the in-band emission and all spurious
RBW = 100 kHz, VBW≥RBW, Sweep = auto, Detector function = peak, Trace = max hold.
2 Allow the trace to stabilize, use the peak and delta measurement to record the result.
3 The level displayed must comply with the limit specified in this Section.

Limit

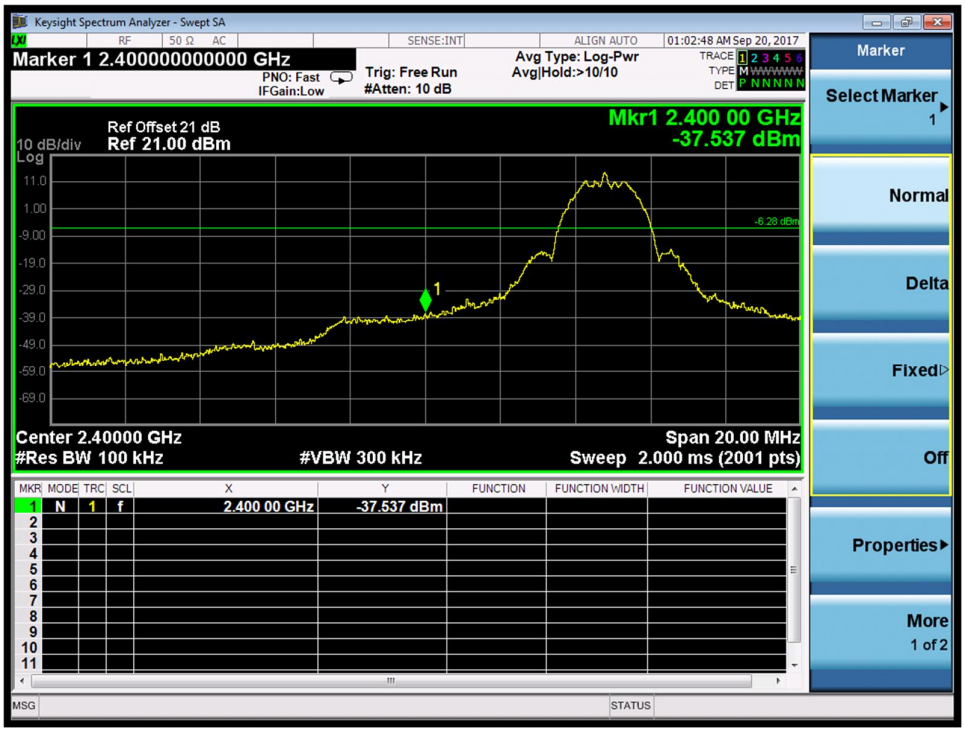
In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a) and RSS-Gen8.10, must also comply with the radiated emission limits specified in 15.209(a) (see Section 15.205(c)) and RSS-Gen.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

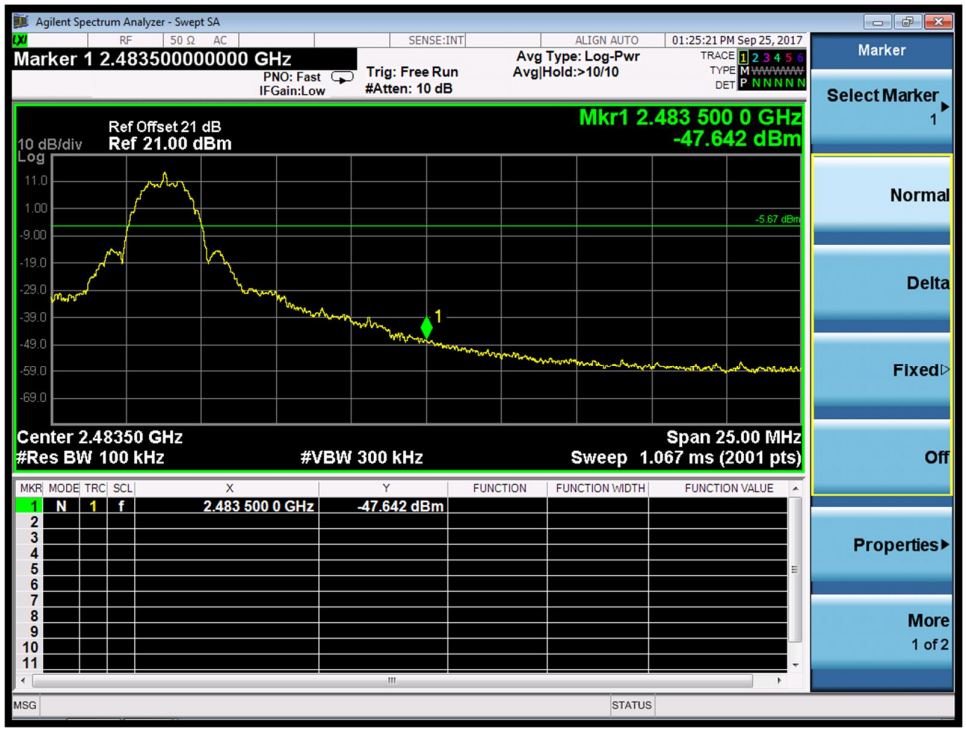
Test result

2405MHz



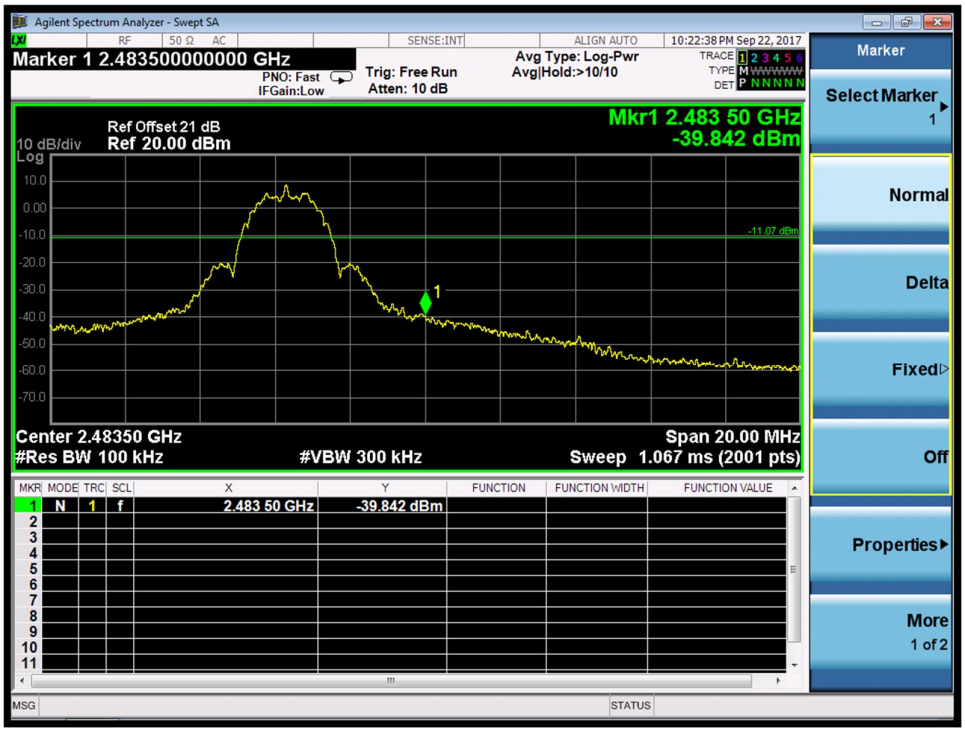
China

2475MHz



China

2480MHz



China

9.6 Spurious radiated emissions for transmitter

Test Method

1: The EUT was place on a turn table which is 1.5m above ground plane for above 1GHz and 0.8m above ground for below 1GHz at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

2: The EUT was set 3 meters away from the interference – receiving antenna, which was mounted on the top of a variable – height antenna tower.

3: The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

4: For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

5: Use the following spectrum analyzer settings According to C63.10:

For Above 1GHz

Span = wide enough to capture the peak level of the in-band emission and all spurious

RBW = 1MHz, VBW≥RBW for peak measurement and VBW = 10Hz for average measurement,

Sweep = auto, Detector function = peak, Trace = max hold.

For Below 1GHz

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious

RBW = 100 KHz, VBW≥RBW for peak measurement, Sweep = auto, Detector function = peak,

Trace = max hold.

Note:

1: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 KHz for Quasi-peak detection (QP) at frequency below 1GHz.

2: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for peak detection (PK) at frequency above 1GHz.

3: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average ((duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (20log(1/duty cycle)).

4: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Limit

The radio emission outside the operating frequency band shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. Radiated emissions which fall in the restricted bands, as defined in section15.205, must comply with the radiated emission limits specified in section 15.209.

LIMITS OF RADIATED EMISSION MEASUREMENT (Frequency Range 9kHz-1000MHz)

Frequency MHz	Field Strength uV/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
960~1000	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Frequency MHz	Field Strength (dBuv/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20logEmission level (uV/m).

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

Spurious radiated emissions for transmitter

According to C63.10, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement, so AV emission value did not show in below table if the peak value complies with average limit.

Transmitting spurious emission test result as below:
Remark 1: There are the ambient noise within frequency range 9kHz ~ 30MHz and 18GHz ~ 25GHz, the permissible value is not show in the report.
Remark 2: Average measurement was not performed if peak level lower than average limit.
Remark 3: Other frequency was 20dB below limit line with 1-18GHz, there is not show in the report.

For model: SZU06C1

2405MHz

Frequency	Reading Level	Factor	Measure Level	Limit	Margin	Detector	Polarization
MHz	dBuV/m	dB	dBuV/m	dBμV/m	dB	Peak	
4808.00	44.05	2.66	46.70	74.00	-27.30	PK	Horizontal
4808.00	38.78	2.66	41.44	74.00	-32.56	PK	Vertical
7477.00	32.80	10.83	43.63	74.00	-30.37	PK	Vertical

2445MHz

Frequency	Reading Level	Factor	Measure Level	Limit	Margin	Detector	Polarization
MHz	dBuV/m	dB	dBuV/m	dBμV/m	dB	Peak	
4876.00	42.31	2.61	44.93	74.00	-29.08	PK	Horizontal
4876.00	39.23	2.61	41.84	74.00	-32.16	PK	Vertical

2475MHz

Frequency	Reading Level	Factor	Measure Level	Limit	Margin	Detector	Polarization
MHz	dBuV/m	dB	dBuV/m	dBμV/m	dB	Peak	
4952.50	40.96	2.69	43.65	74.00	-30.35	PK	Horizontal
4952.50	38.51	2.69	41.20	74.00	-32.80	PK	Vertical
7069.00	33.98	9.89	43.87	74.00	-30.13	PK	Vertical

2480MHz

Frequency	Reading Level	Factor	Measure Level	Limit	Margin	Detector	Polarization
MHz	dBuV/m	dB	dBuV/m	dBμV/m	dB	Peak	
4961.00	38.19	2.67	40.86	74.00	-33.14	PK	Horizontal
11557.00“*”	30.66	17.67	48.33	74.00	-25.67	PK	Horizontal
4961.00	36.88	2.67	39.55	74.00	-34.45	PK	Vertical

Remark:
(1) Emission level= Original Receiver Reading + Correct Factor

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

(2) Correct Factor = Antenna Factor + Cable Loss -Amplifier gain
(3) Margin = limit – Corrected Reading
(4) "*" is not in restricted band, its limit is 20dBc of the fundamental emission level or 15.209 which is higher.

For model: SZU06C2

2405MHz

Frequency MHz	Reading Level dBuV/m	Factor dB	Measure Level dBuV/m	Limit dBµV/m	Margin dB	Detector Peak	Polarization
4808.00	51.15	2.66	53.81	74.00	-20.19	PK	Horizontal
4810.00	45.36	2.65	48.01	54.00	-5.99	AV	Horizontal
7213.50	44.77	10.62	55.40	74.00	-18.60	PK	Horizontal
9619.00	41.42	12.45	53.87	74.00	-20.13	PK	Horizontal
4808.00	50.45	2.66	53.11	74.00	-20.89	PK	Vertical
4808.00	42.69	2.66	45.35	54.00	-8.65	AV	Vertical
7213.50	45.40	10.62	56.03	74.00	-17.98	PK	Vertical
9619.00	39.56	12.45	52.01	74.00	-21.99	PK	Vertical
12024.50"*"	33.58	17.01	50.59	74.00	-23.41	PK	Vertical

2445MHz

Frequency MHz	Reading Level dBuV/m	Factor dB	Measure Level dBuV/m	Limit dBµV/m	Margin dB	Detector Peak	Polarization
4876.00	50.33	2.61	52.94	74.00	-21.06	PK	Horizontal
4876.00	43.62	2.61	46.23	54.00	-7.77	AV	Horizontal
7315.50	39.18	10.67	49.84	74.00	-24.16	PK	Horizontal
9763.50	41.66	12.83	54.49	74.00	-19.51	PK	Horizontal
4884.50	49.61	2.69	52.30	74.00	-21.70	PK	Vertical
4884.50	42.69	2.69	45.38	54.00	-8.63	AV	Vertical
7315.50	41.67	10.67	52.33	74.00	-21.67	PK	Vertical
9763.50	40.11	12.83	52.94	74.00	-21.06	PK	Vertical

2475MHz

Frequency MHz	Reading Level dBuV/m	Factor dB	Measure Level dBuV/m	Limit dBµV/m	Margin dB	Detector Peak	Polarization
4952.50	48.51	2.69	51.20	74.00	-22.81	PK	Horizontal
7426.00	37.70	10.74	48.44	74.00	-25.56	PK	Horizontal
9899.50	40.75	13.35	54.09	74.00	-19.91	PK	Horizontal
4952.50	48.92	2.69	51.61	74.00	-22.39	PK	Vertical
7426.00	38.13	10.74	48.87	74.00	-25.13	PK	Vertical
9899.50	42.29	13.35	55.64	74.00	-18.36	PK	Vertical

2480MHz

Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization

China

MHz	Level dBuV/m	dB	Level dBuV/m	dBµV/m	dB	Peak	
4961.00	47.52	2.67	50.19	74.00	-23.81	PK	Horizontal
7443.00	38.71	10.74	49.45	74.00	-24.55	PK	Horizontal
9916.50	42.80	13.42	56.21	74.00	-17.79	PK	Horizontal
14464.00“*”	33.34	20.90	54.25	74.00	-19.76	PK	Horizontal
4961.00	47.98	2.67	50.65	74.00	-23.35	PK	Vertical
7443.00	37.46	10.74	48.20	74.00	-25.80	PK	Vertical
9925.00	42.14	13.33	55.47	74.00	-18.53	PK	Vertical

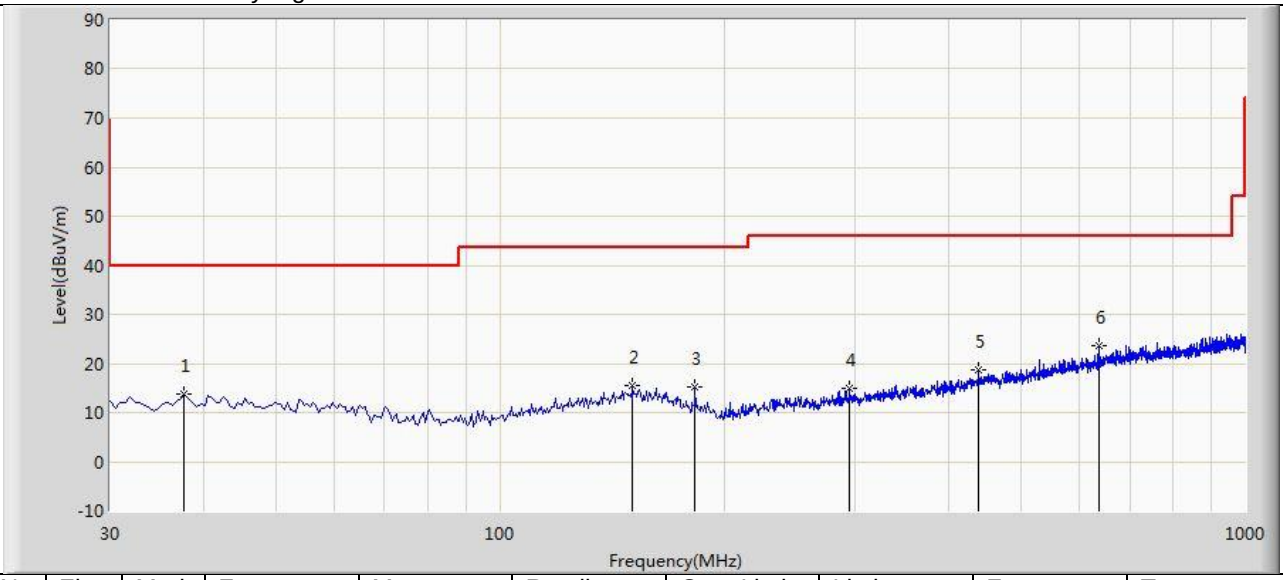
Remark:

(1) Emission level= Original Receiver Reading + Correct Factor
(2) Correct Factor = Antenna Factor + Cable Loss -Amplifier gain
(3) Margin = limit – Corrected Reading
(4) “*” is not in restricted band, its limit is 20dBc of the fundamental emission level or 15.209 which is higher.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

The worst case of Radiated Emission below 1GHz:

Site: AC1	Time: 2017/08/30 - 04:16
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2445MHz	



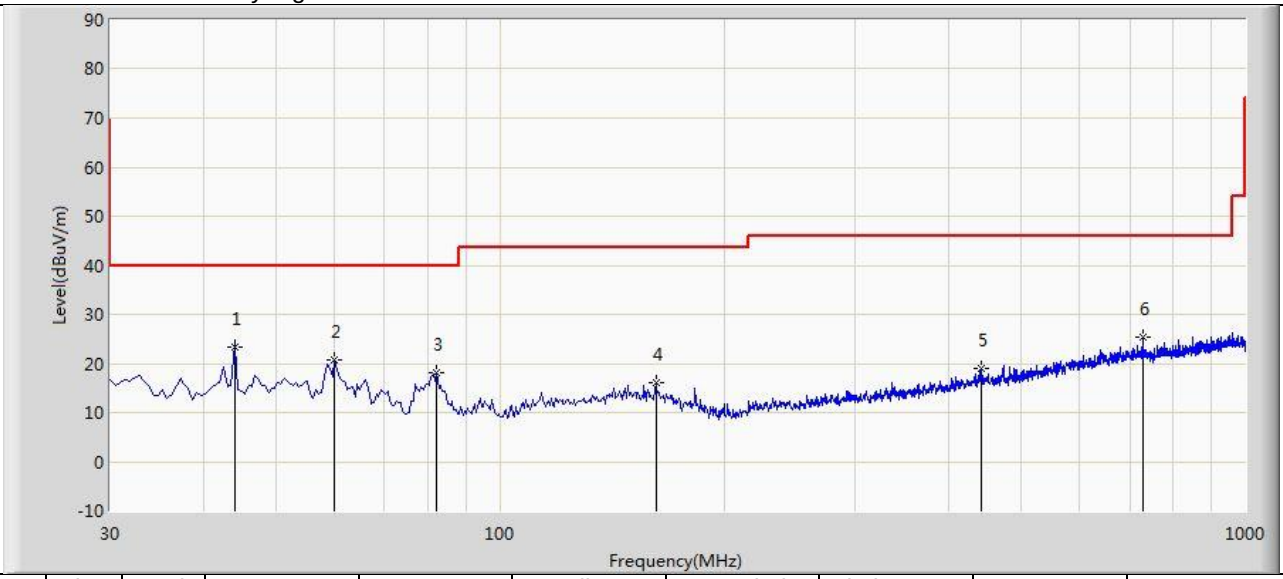
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			37.760	13.793	-0.438	-26.207	40.000	14.231	PK
2			150.765	15.376	0.194	-28.124	43.500	15.182	PK
3			182.775	15.075	2.599	-28.425	43.500	12.477	PK
4			294.325	14.849	0.699	-31.151	46.000	14.150	PK
5			438.370	18.673	1.127	-27.327	46.000	17.546	PK
6		*	635.765	23.481	2.309	-22.519	46.000	21.173	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/08/30 - 04:18
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2445MHz	



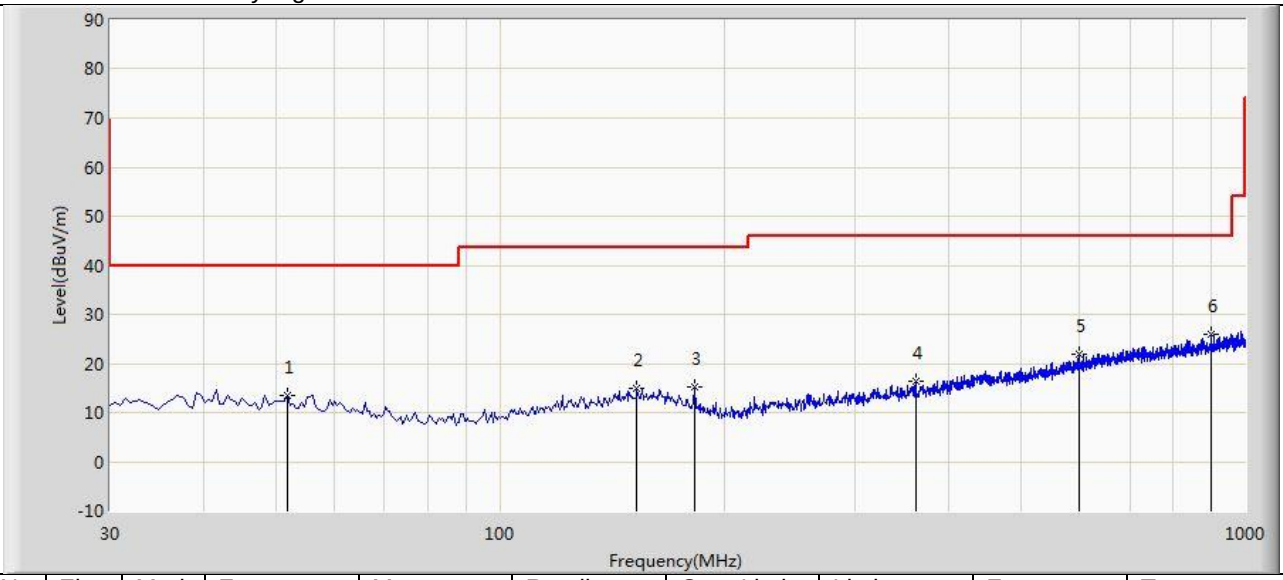
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	44.065	23.427	9.183	-16.573	40.000	14.244	PK
2			60.070	20.850	7.538	-19.150	40.000	13.312	PK
3			82.380	18.003	7.935	-21.997	40.000	10.068	PK
4			161.920	16.122	1.100	-27.378	43.500	15.022	PK
5			441.765	19.050	1.435	-26.950	46.000	17.615	PK
6			728.885	25.458	3.029	-20.542	46.000	22.429	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/08/30 - 04:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Flag Yang
Probe: VULB 9168 _20-2000MHz	Polarity: Horizontal
EUT: SZU06C2	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2480MHz	



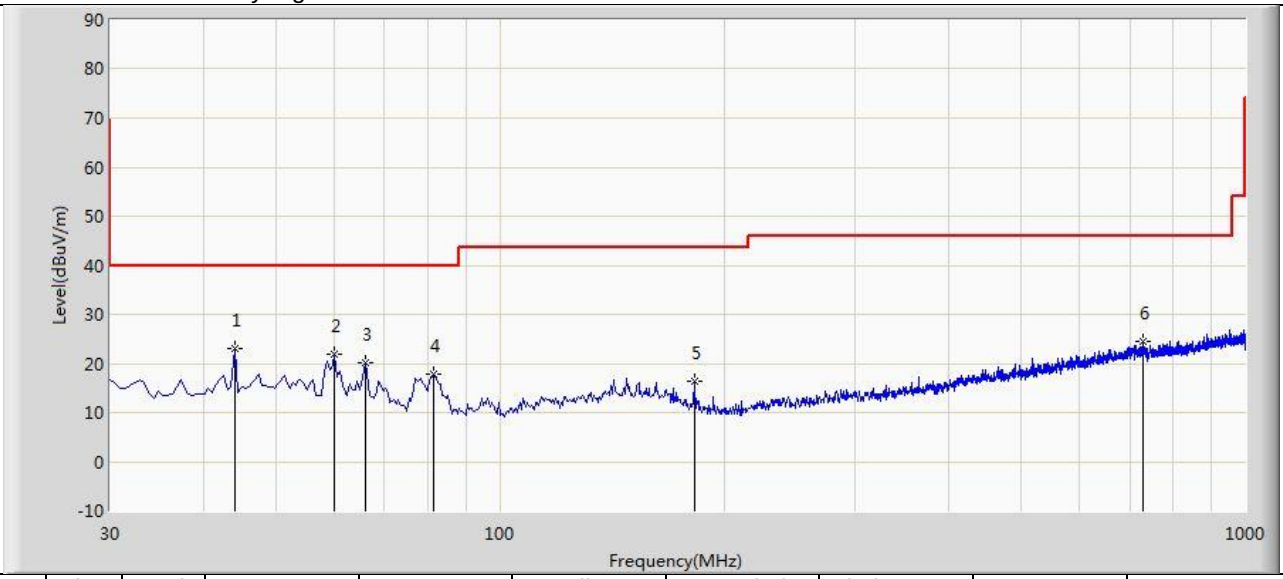
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			51.825	13.385	-0.535	-26.615	40.000	13.921	PK
2			152.705	14.861	-0.326	-28.639	43.500	15.188	PK
3			182.290	15.353	2.821	-28.147	43.500	12.532	PK
4			361.255	16.394	0.695	-29.606	46.000	15.699	PK
5			597.935	22.006	1.566	-23.994	46.000	20.440	PK
6		*	902.030	25.962	1.584	-20.038	46.000	24.378	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/08/30 - 04:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Flag Yang
Probe: VULB 9168 _20-2000MHz	Polarity: Vertical
EUT: SZU06C2	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	44.065	23.185	8.941	-16.815	40.000	14.244	PK
2			60.070	21.779	8.467	-18.221	40.000	13.312	PK
3			65.890	20.215	7.950	-19.785	40.000	12.265	PK
4			81.410	17.918	7.872	-22.082	40.000	10.046	PK
5			182.290	16.357	3.825	-27.143	43.500	12.532	PK
6			727.915	24.512	2.102	-21.488	46.000	22.410	PK

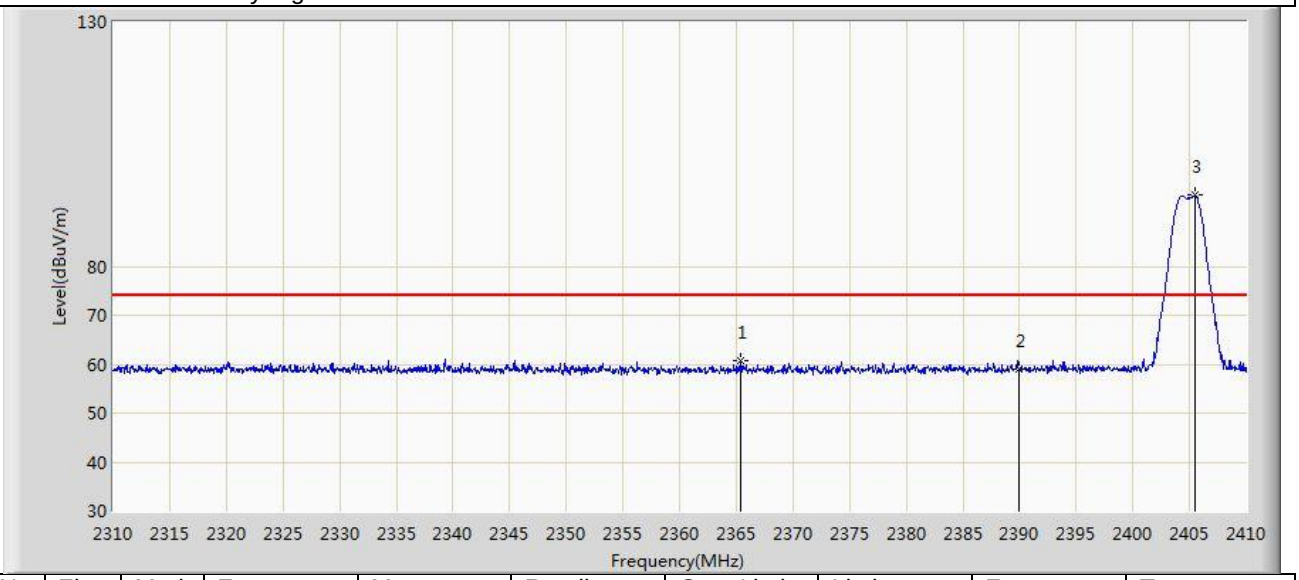
Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Radiated Restricted Band Edge Measurement
Test Result:

Site: AC1	Time: 2017/09/23 - 06:20
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2405MHz	



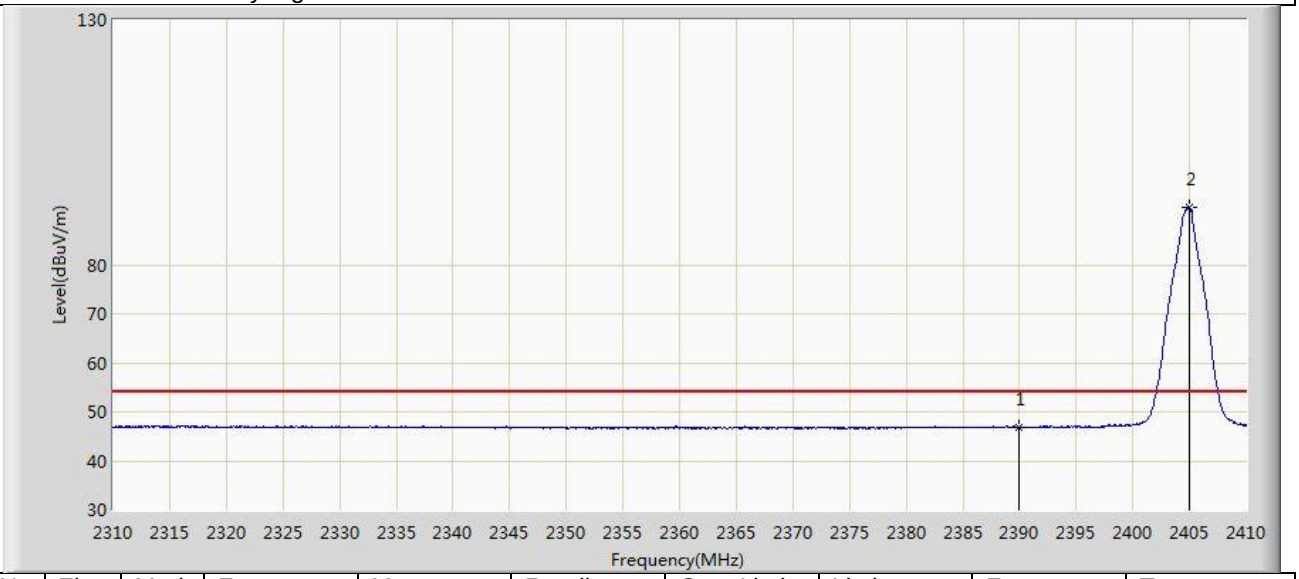
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2365.400	60.747	28.511	-13.253	74.000	32.236	PK
2			2390.000	59.086	26.808	-14.914	74.000	32.278	PK
3		*	2405.450	94.512	62.250	N/A	N/A	32.262	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/09/23 - 06:27
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2405MHz	



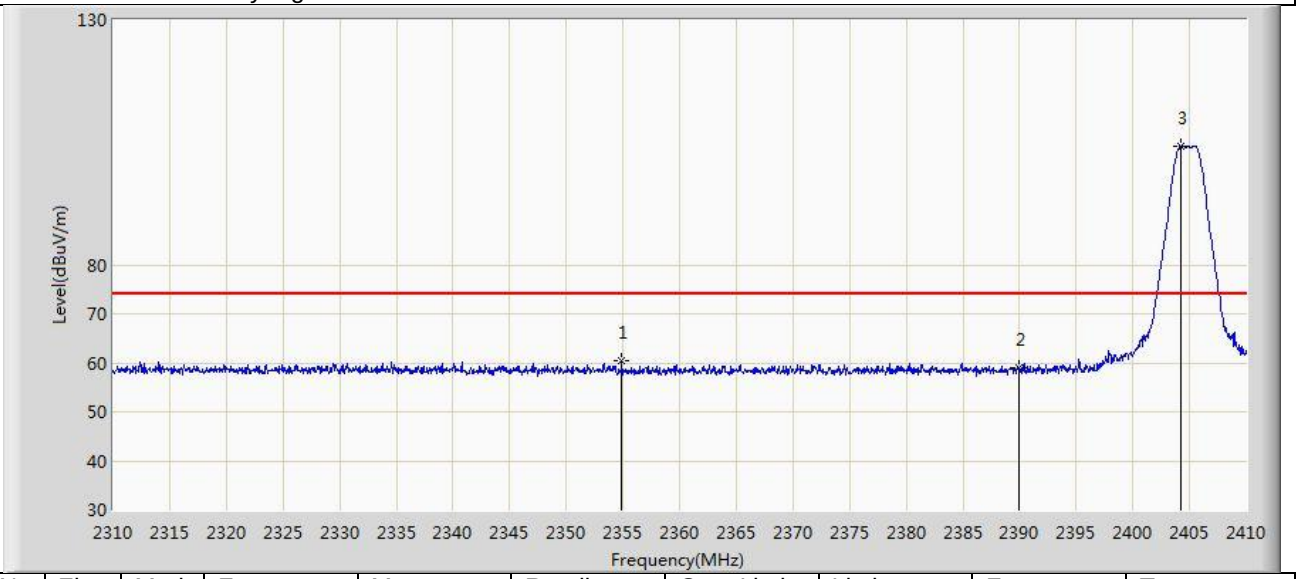
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.834	14.556	-7.166	54.000	32.278	AV
2		*	2404.950	91.709	59.445	N/A	N/A	32.264	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/09/23 - 06:28
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2405MHz	



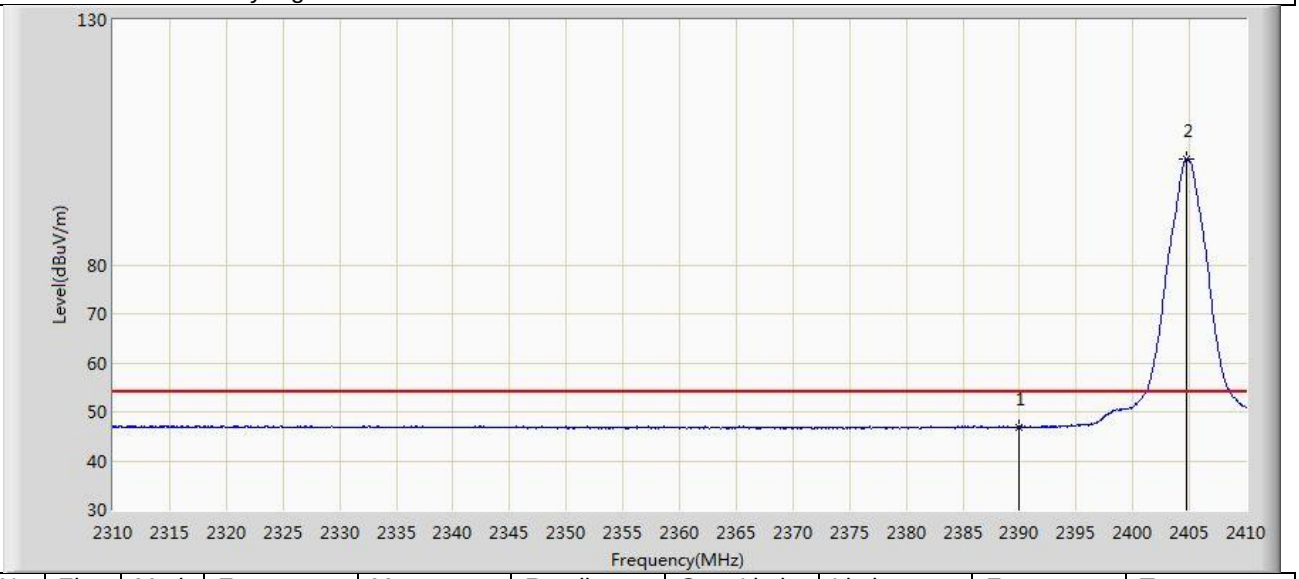
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2354.850	60.364	28.101	-13.636	74.000	32.264	PK
2			2390.000	58.889	26.611	-15.111	74.000	32.278	PK
3		*	2404.200	104.226	71.960	N/A	N/A	32.266	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/09/23 - 06:30
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2405MHz	



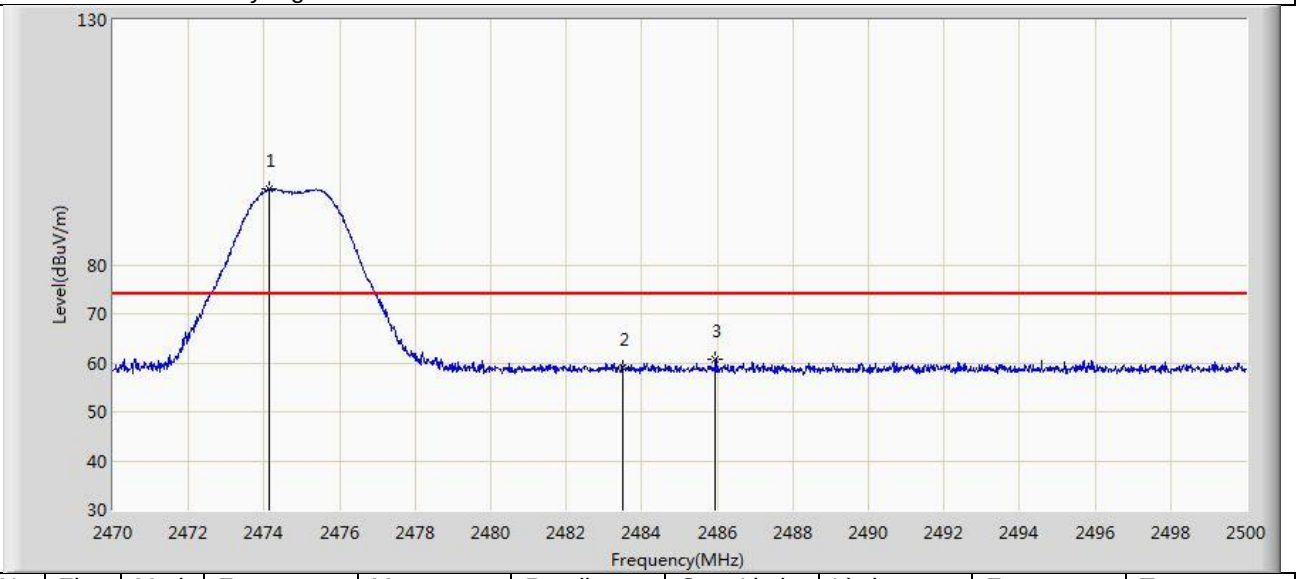
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.875	14.597	-7.125	54.000	32.278	AV
2		*	2404.700	101.580	69.315	N/A	N/A	32.265	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/09/23 - 06:32
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2475MHz	



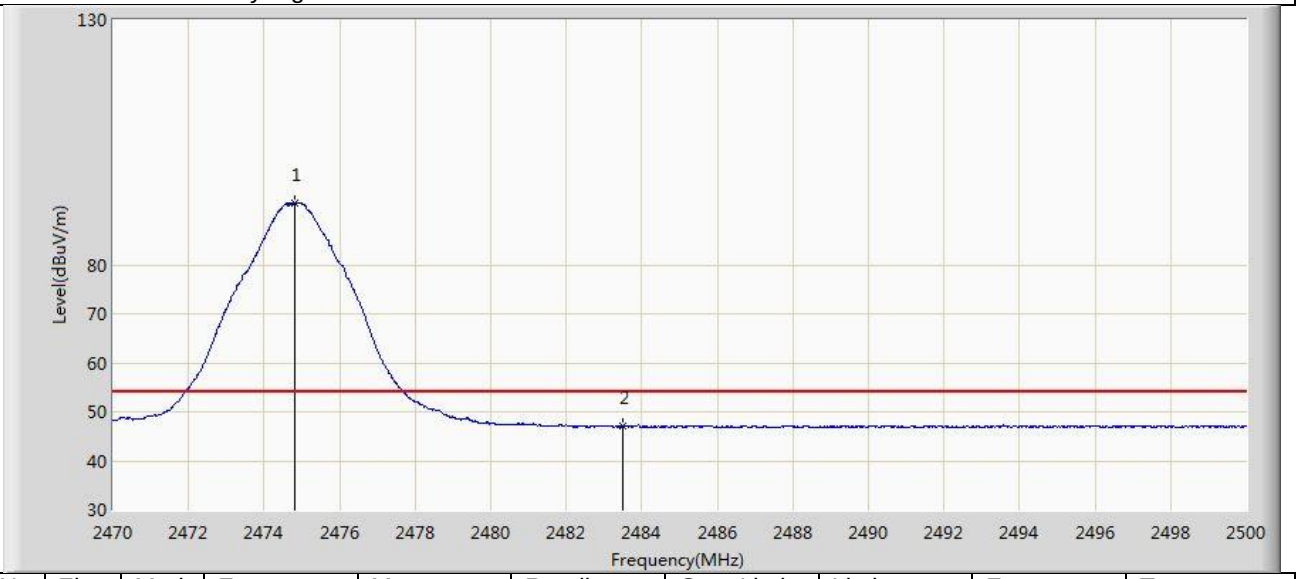
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2474.140	95.374	63.117	N/A	N/A	32.258	PK
2			2483.500	58.893	26.612	-15.107	74.000	32.282	PK
3			2485.945	60.651	28.361	-13.349	74.000	32.290	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/09/23 - 06:35
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2475MHz	



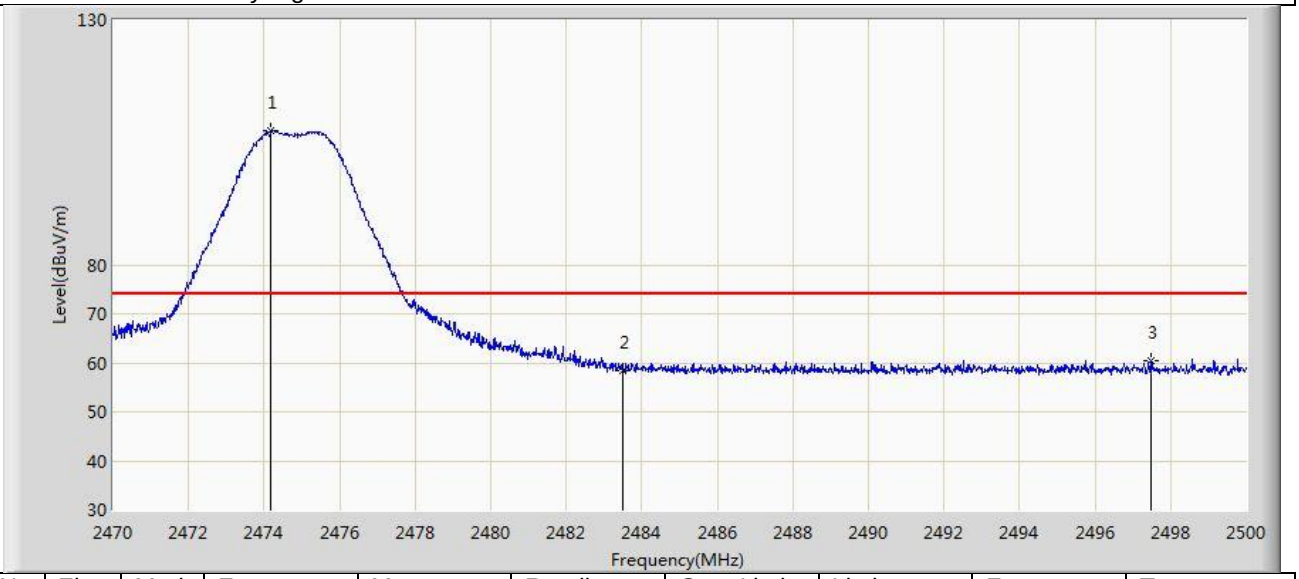
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2474.830	92.636	60.377	N/A	N/A	32.259	AV
2			2483.500	47.006	14.725	-6.994	54.000	32.282	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/09/23 - 06:36
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2475MHz	



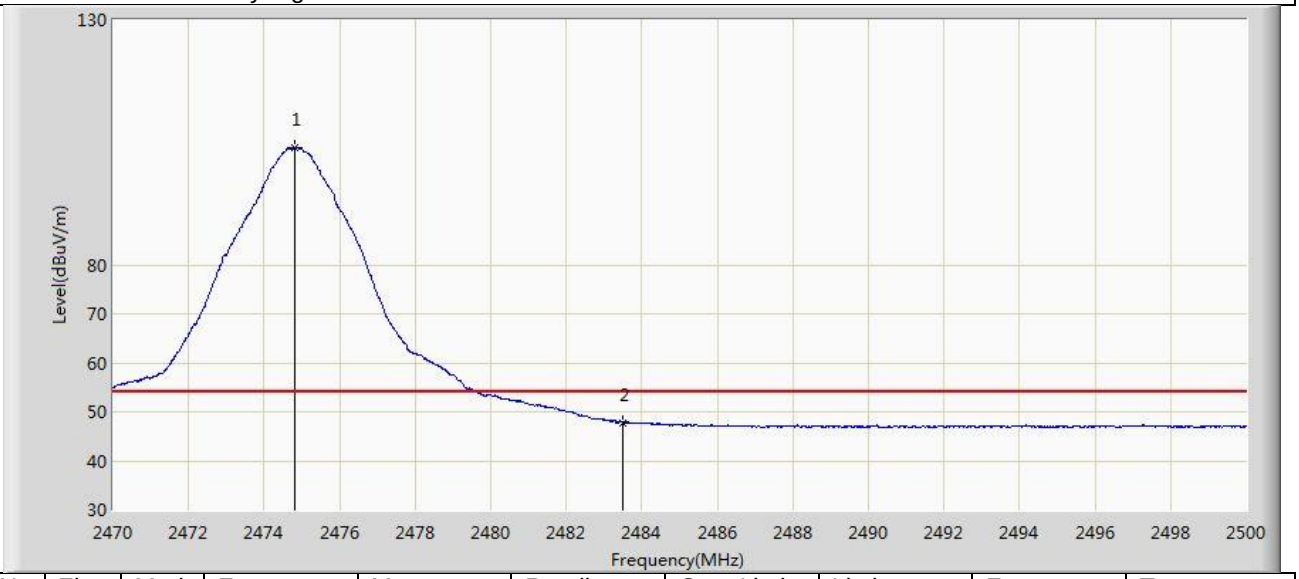
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2474.185	107.287	75.030	N/A	N/A	32.258	PK
2			2483.500	58.414	26.133	-15.586	74.000	32.282	PK
3			2497.495	60.534	28.214	-13.466	74.000	32.320	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC1	Time: 2017/09/23 - 06:38
Limit: FCC_Part15.209_RE(3m)	Engineer: Bruce Wang
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C1	Power: By PC
Test Mode: Transmit by Zigbee at Channel 2475MHz	



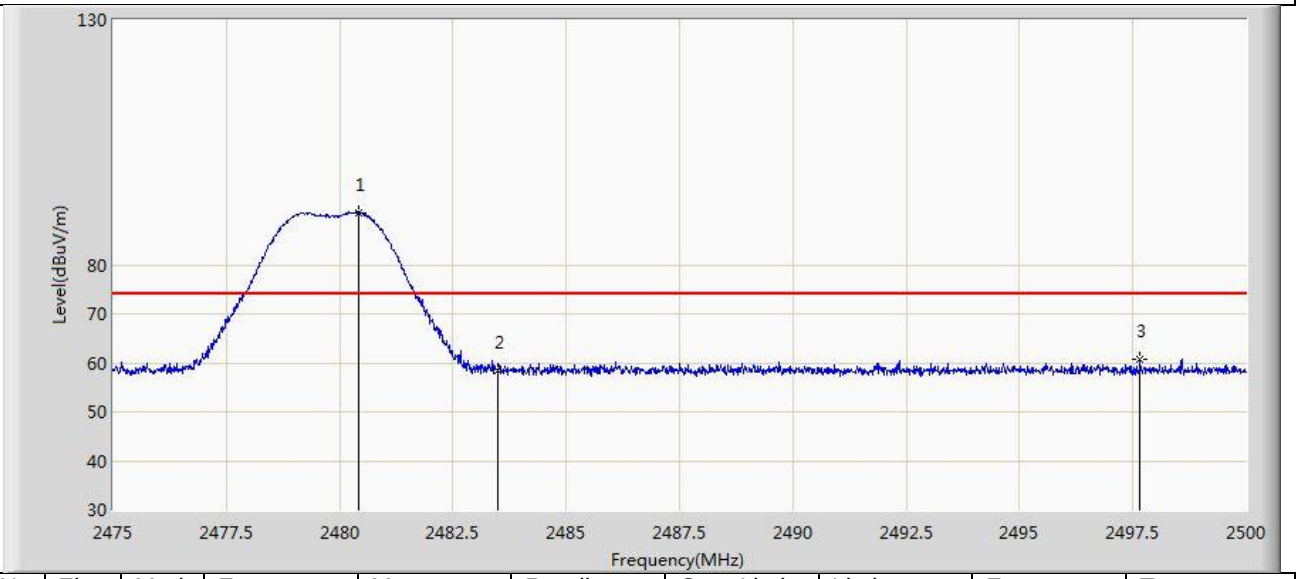
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2474.830	103.929	71.670	N/A	N/A	32.259	AV
2			2483.500	47.809	15.528	-6.191	54.000	32.282	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 07:02
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C1	Power: By USB
Test Mode: Transmit at channel 2480MHz	



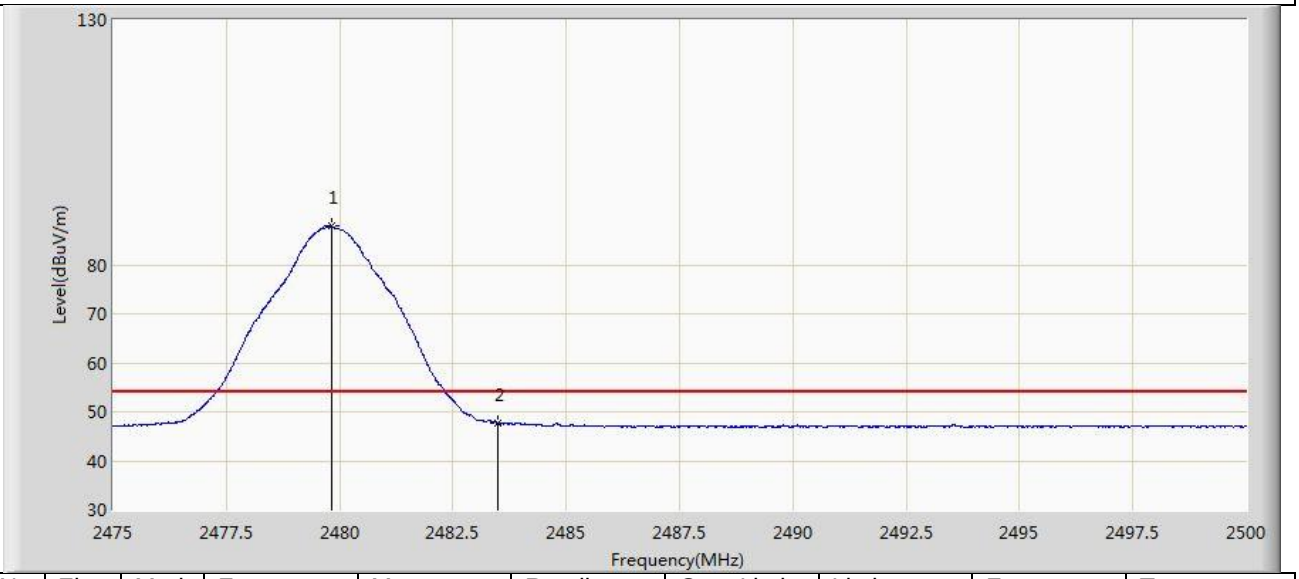
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.425	90.715	58.444	N/A	N/A	32.271	PK
2			2483.500	58.340	26.059	-15.660	74.000	32.282	PK
3			2497.650	60.603	28.284	-13.397	74.000	32.319	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 07:03
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C1	Power: By USB
Test Mode: Transmit at channel 2480MHz	

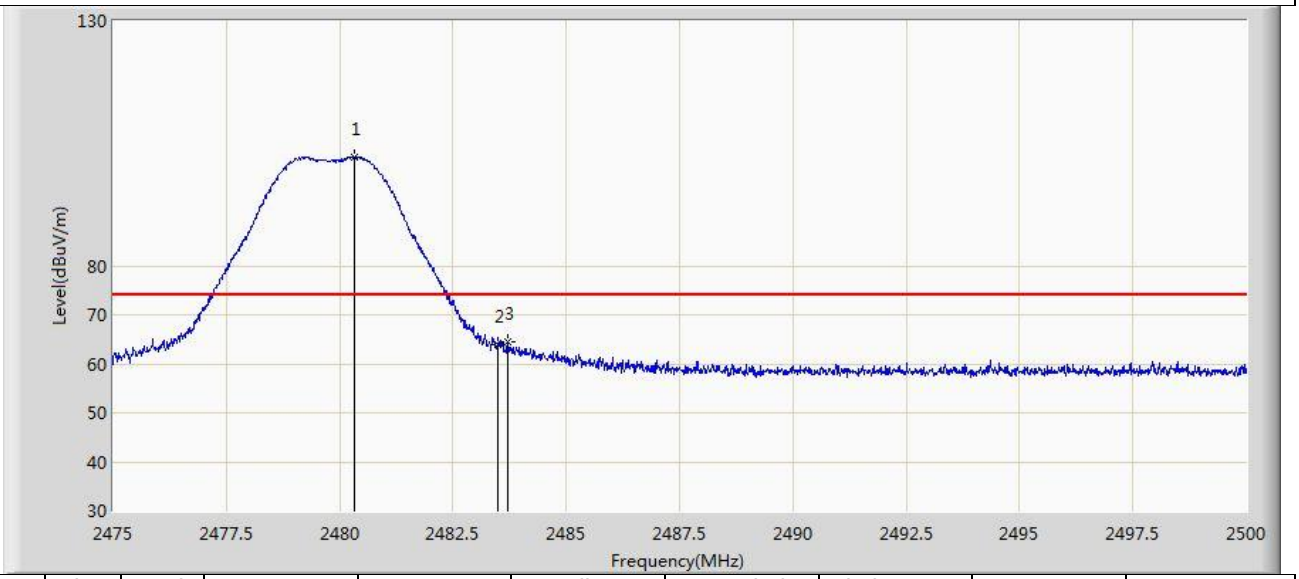


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.812	87.855	55.587	N/A	N/A	32.269	AV
2			2483.500	47.716	15.435	-6.284	54.000	32.282	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

Site: AC2	Time: 2017/09/23 - 07:00
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C1	Power: By USB
Test Mode: Transmit at channel 2480MHz	



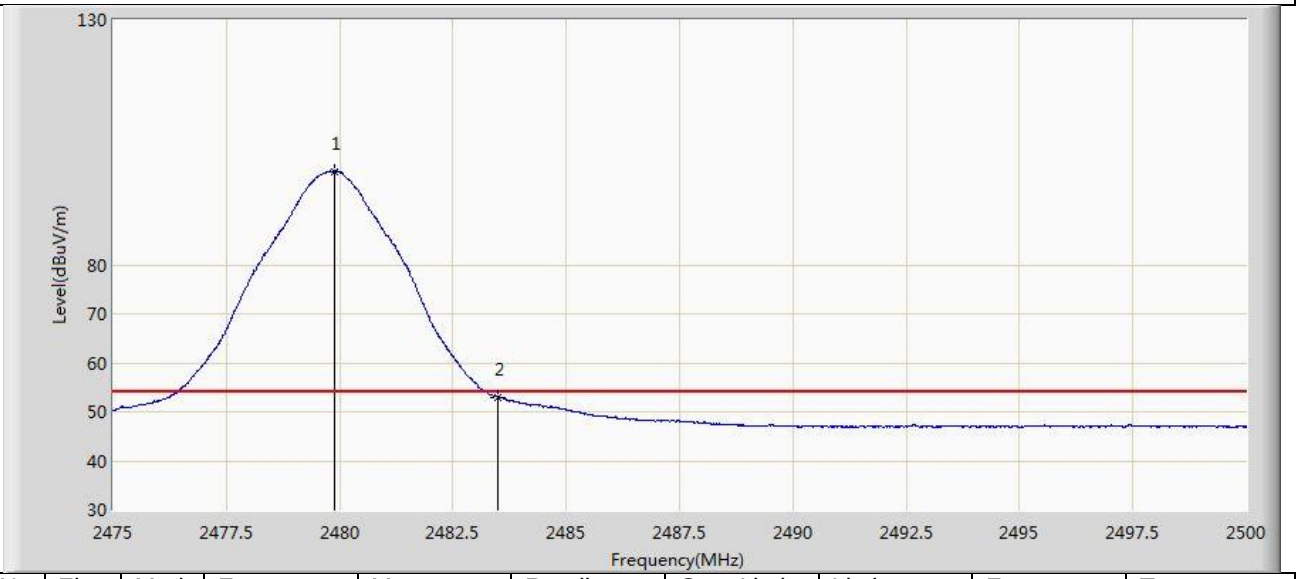
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.325	102.205	69.935	N/A	N/A	32.270	PK
2			2483.500	63.784	31.503	-10.216	74.000	32.282	PK
3			2483.700	64.630	32.348	-9.370	74.000	32.282	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 06:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C1	Power: By USB
Test Mode: Transmit at channel 2480MHz	

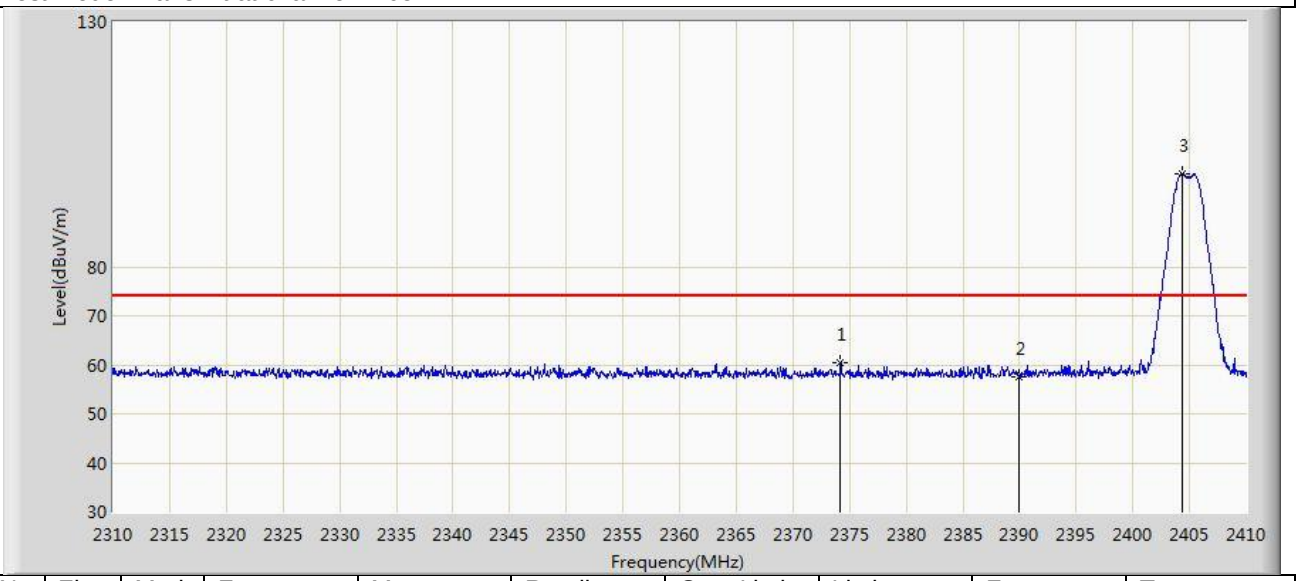


No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.887	99.130	66.861	N/A	N/A	32.269	AV
2			2483.500	53.008	20.727	-0.992	54.000	32.282	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

Site: AC2	Time: 2017/09/23 - 07:31
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2405MHz	



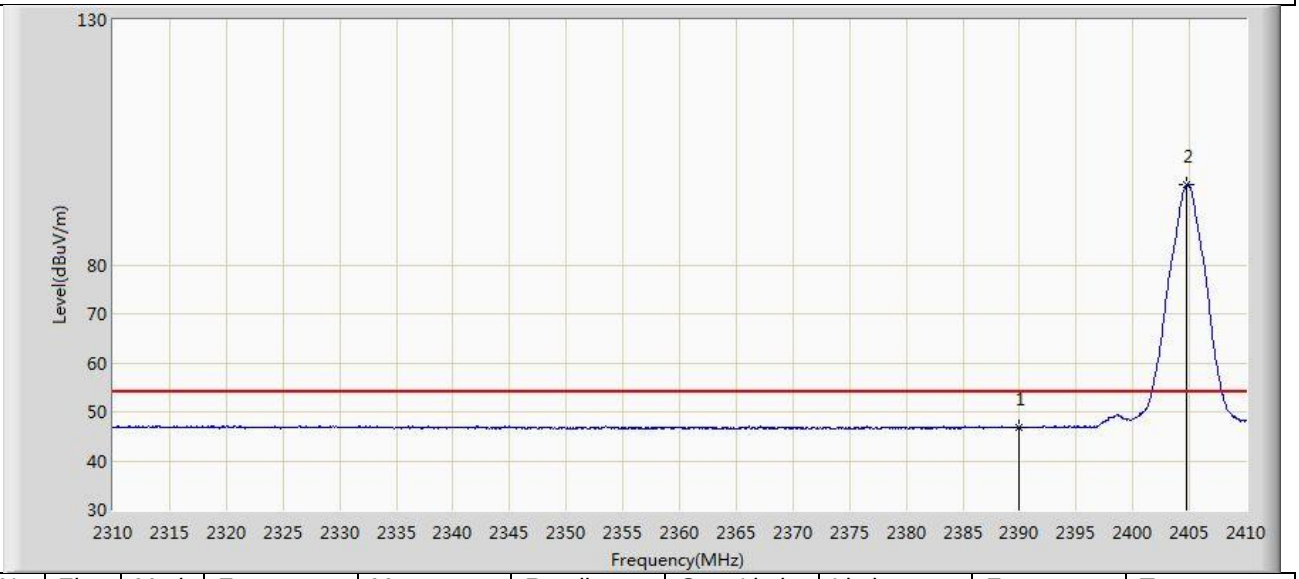
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2374.200	60.423	28.210	-13.577	74.000	32.213	PK
2			2390.000	57.642	25.364	-16.358	74.000	32.278	PK
3		*	2404.350	98.981	66.715	N/A	N/A	32.266	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:43
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2405MHz	



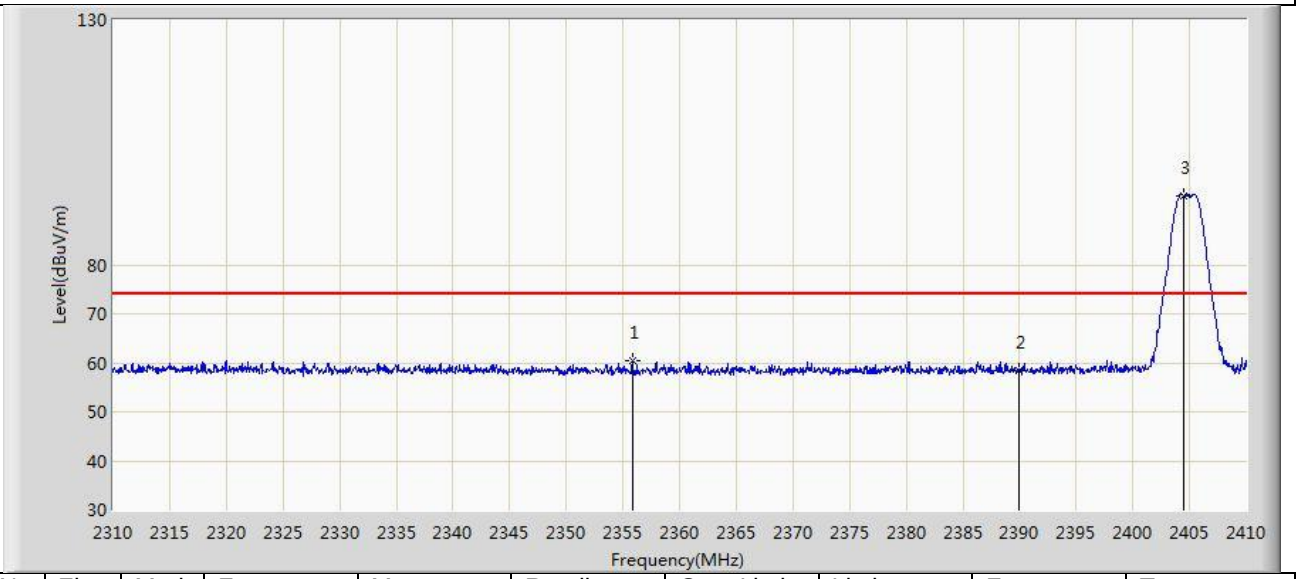
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.935	14.657	-7.065	54.000	32.278	AV
2		*	2404.700	96.310	64.045	N/A	N/A	32.265	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:44
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2405MHz	



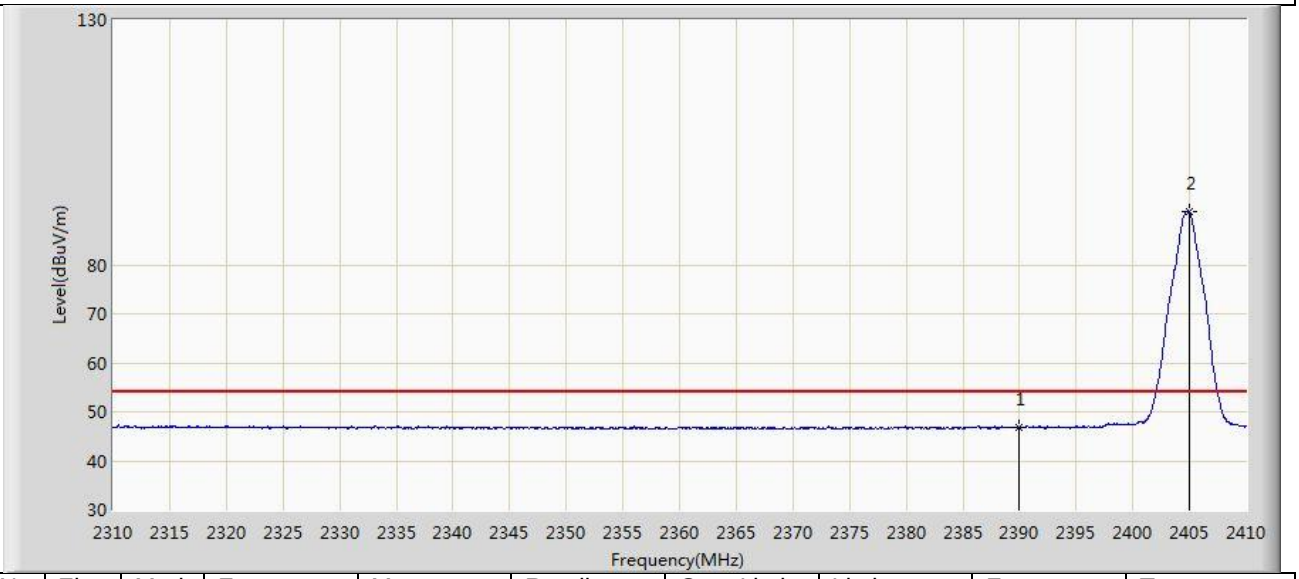
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2355.850	60.291	28.031	-13.709	74.000	32.259	PK
2			2390.000	58.428	26.150	-15.572	74.000	32.278	PK
3		*	2404.500	94.133	61.868	N/A	N/A	32.265	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:46
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2405MHz	



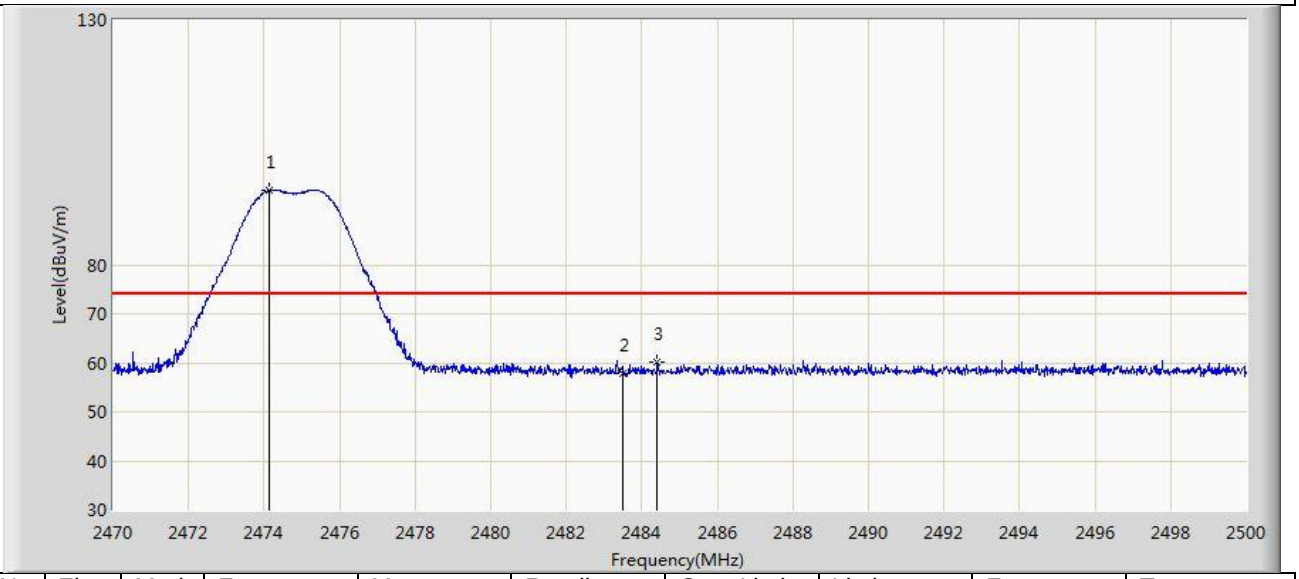
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1			2390.000	46.789	14.511	-7.211	54.000	32.278	AV
2		*	2404.950	90.825	58.561	N/A	N/A	32.264	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:47
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2475MHz	



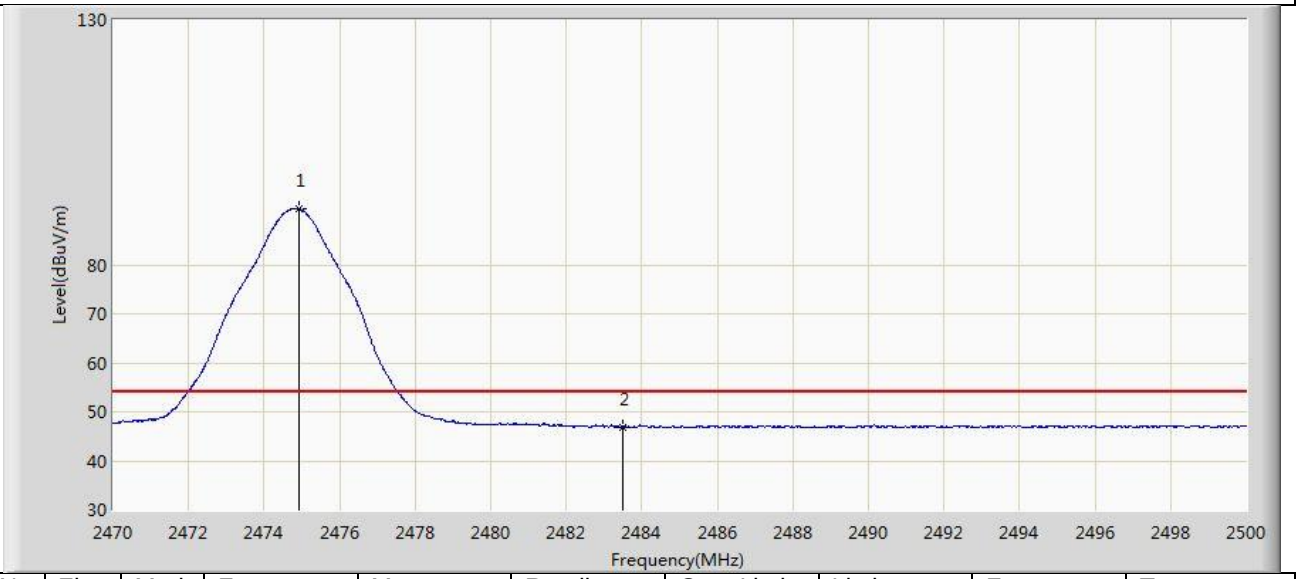
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2474.140	95.221	62.964	N/A	N/A	32.258	PK
2			2483.500	57.868	25.587	-16.132	74.000	32.282	PK
3			2484.415	60.054	27.770	-13.946	74.000	32.284	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2475MHz	



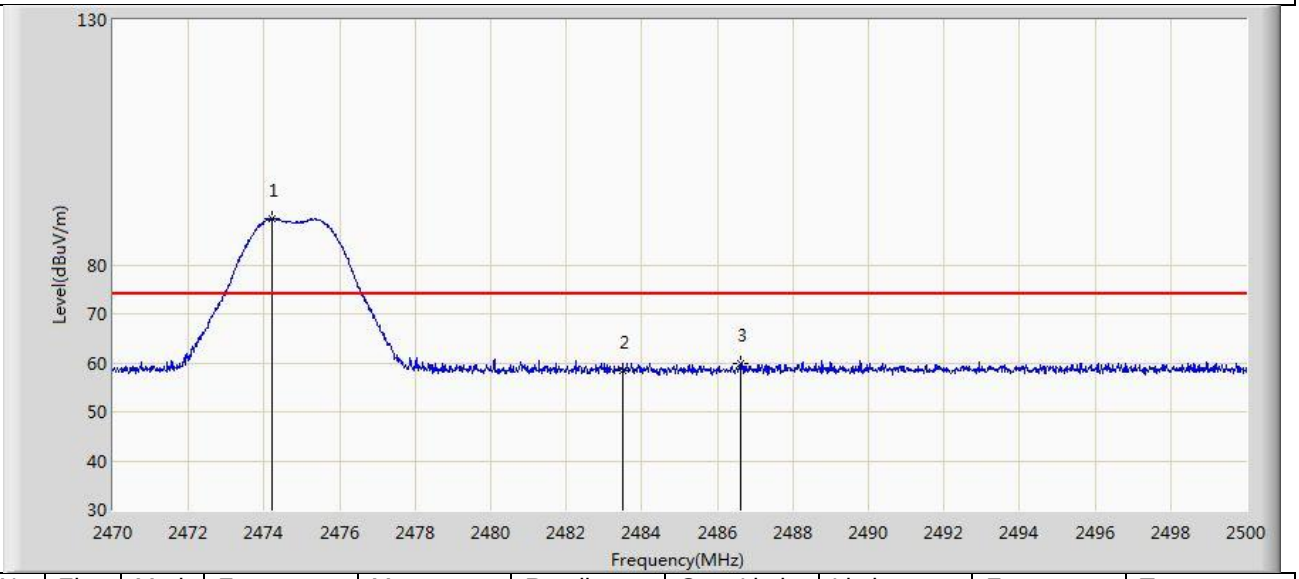
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2474.935	91.351	59.092	N/A	N/A	32.259	AV
2			2483.500	46.934	14.653	-7.066	54.000	32.282	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:48
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2475MHz	



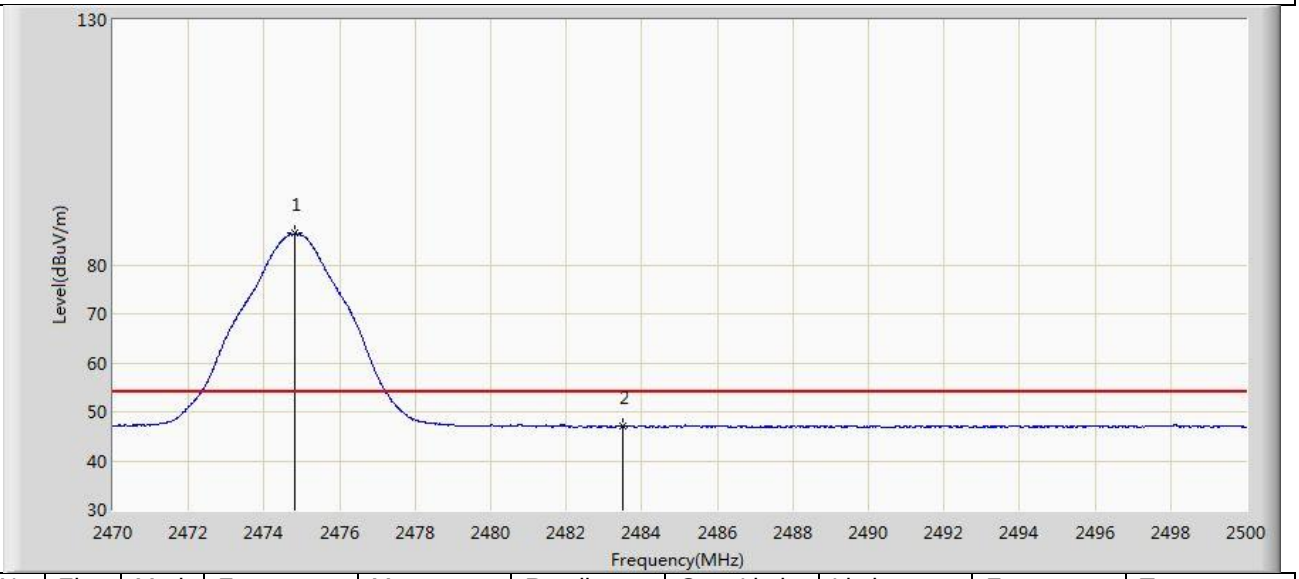
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2474.200	89.475	57.218	N/A	N/A	32.258	PK
2			2483.500	58.303	26.022	-15.697	74.000	32.282	PK
3			2486.635	59.989	27.697	-14.011	74.000	32.292	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2475MHz	



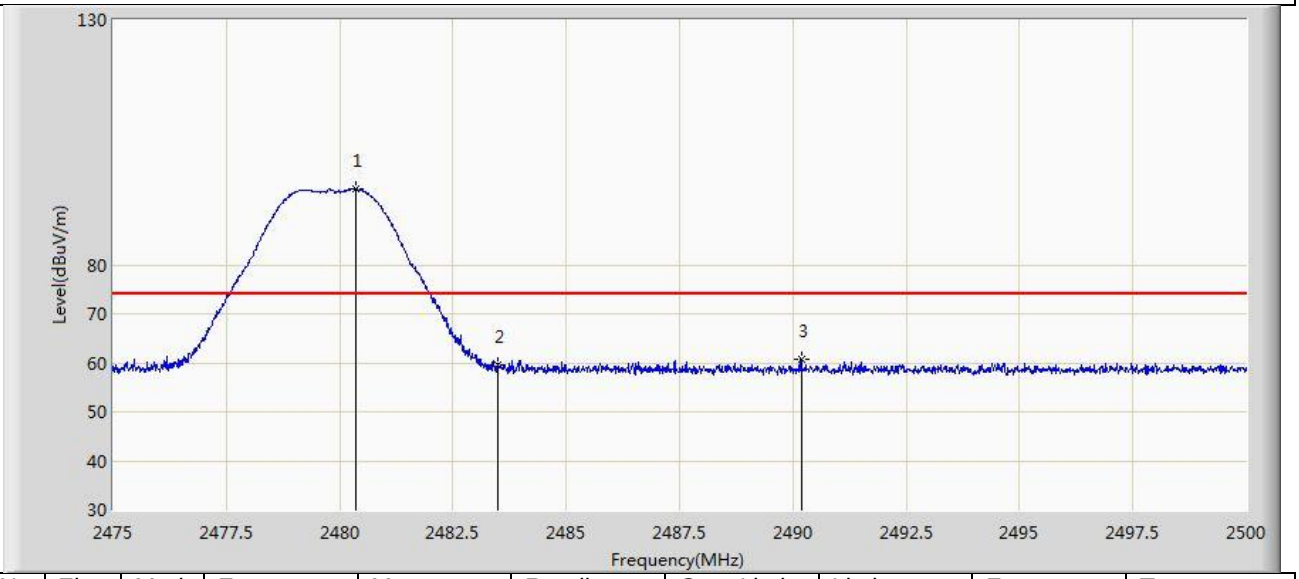
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2474.830	86.398	54.139	N/A	N/A	32.259	AV
2			2483.500	47.187	14.906	-6.813	54.000	32.282	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:50
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2480MHz	



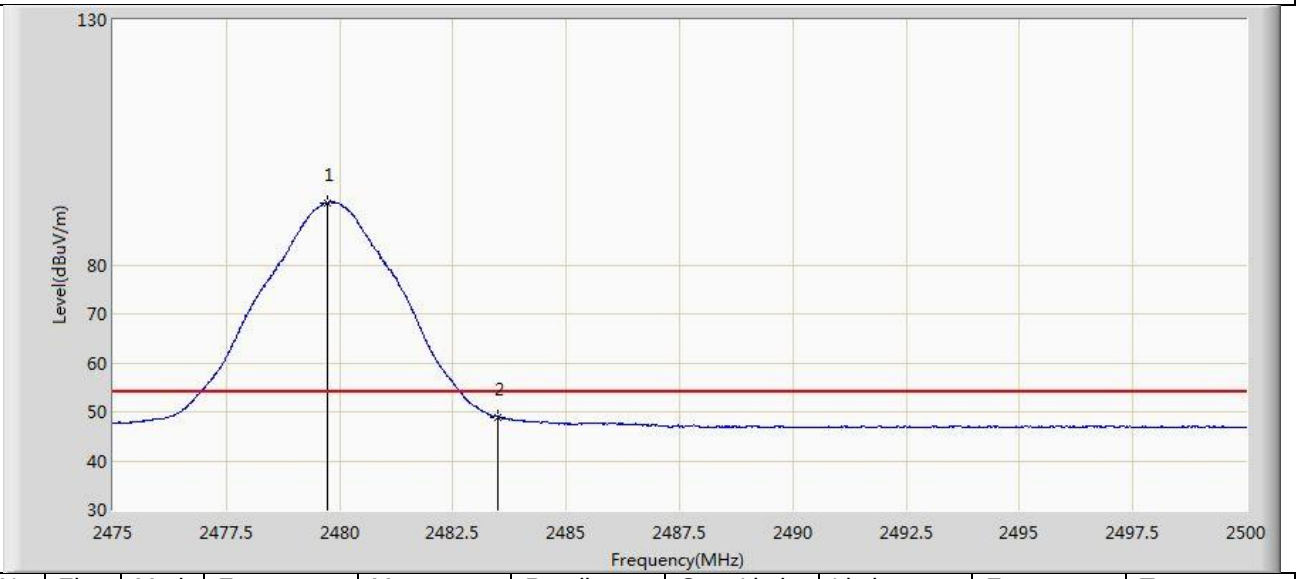
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2480.350	95.449	63.179	N/A	N/A	32.270	PK
2			2483.500	59.647	27.366	-14.353	74.000	32.282	PK
3			2490.187	60.605	28.301	-13.395	74.000	32.305	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:52
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Horizontal
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2480MHz	



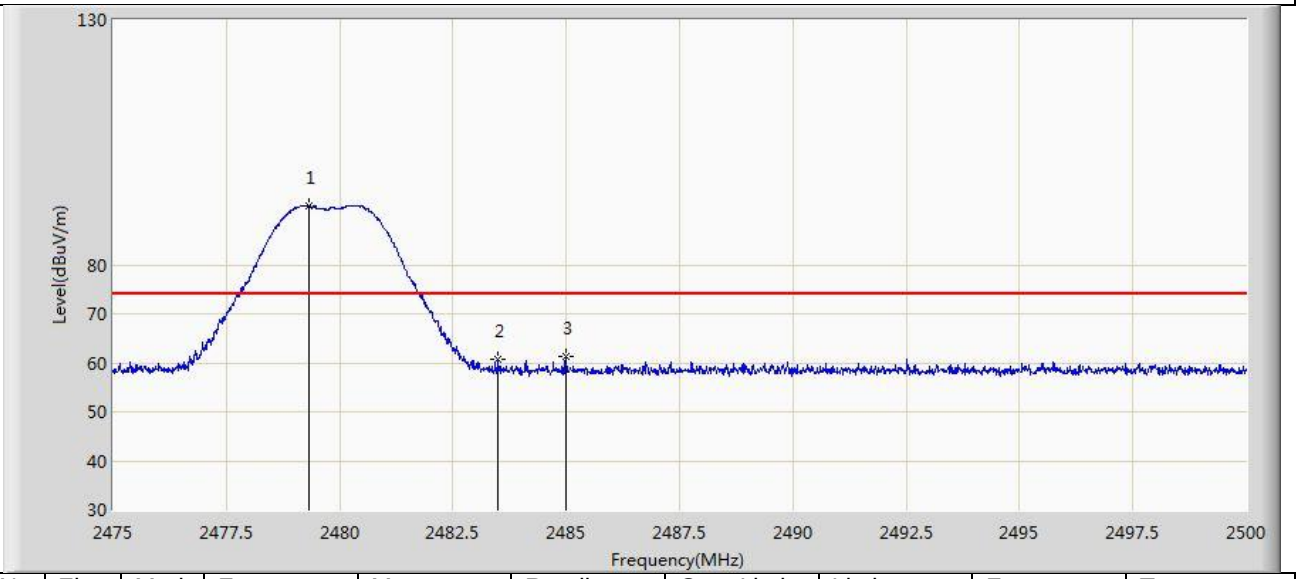
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.725	92.654	60.386	N/A	N/A	32.268	AV
2			2483.500	48.921	16.640	-5.079	54.000	32.282	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:57
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2480MHz	



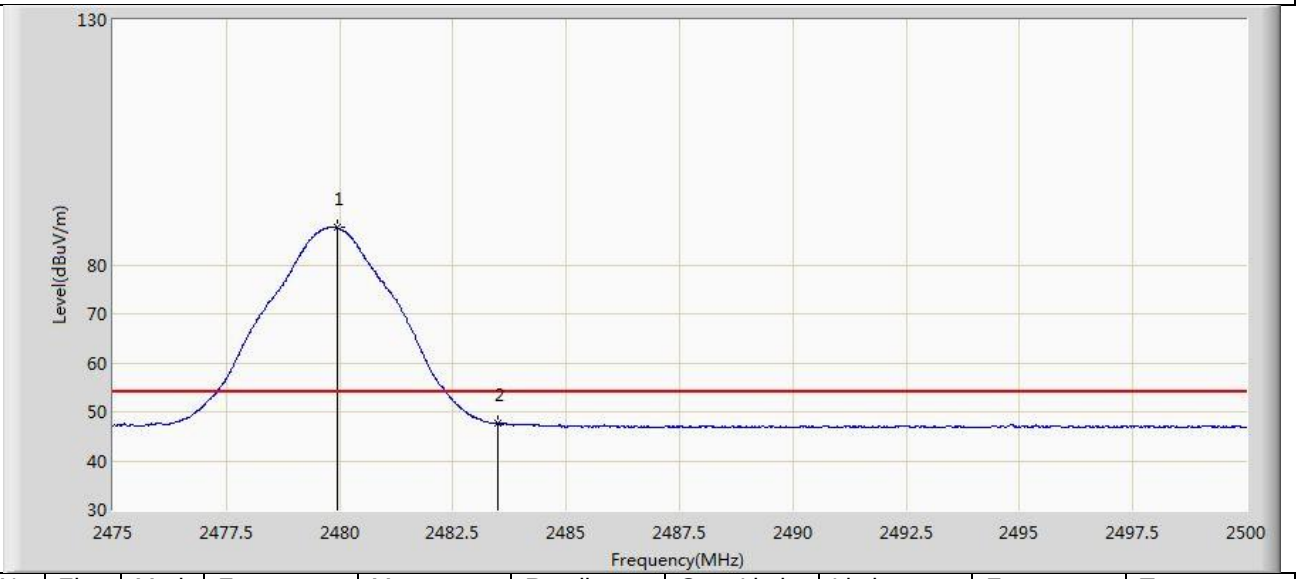
No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.337	91.973	59.706	N/A	N/A	32.267	PK
2			2483.500	60.591	28.310	-13.409	74.000	32.282	PK
3			2484.988	61.256	28.970	-12.744	74.000	32.286	PK

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

Site: AC2	Time: 2017/09/23 - 05:59
Limit: FCC_Part15.209_RE(3m)	Engineer: Snake Ni
Probe: BBHA9120D_1-18GHz	Polarity: Vertical
EUT: SZU06C2	Power: By USB
Test Mode: Transmit at channel 2480MHz	



No	Flag	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		*	2479.937	87.631	55.362	N/A	N/A	32.269	AV
2			2483.500	47.659	15.378	-6.341	54.000	32.282	AV

Note: Measure Level (dBuV/m) = Reading Level (dBuV) + Factor (dB)
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

10 Test Equipment List

List of Test Instruments
Test Site1

	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
C	Signal Analyzer	Rohde & Schwarz	FSV40	101091	2018-8-7
RE	EMI Test Receiver	Rohde & Schwarz	ESR3	101906	2018-8-7
	Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	848	2018-9-17
	Horn Antenna	Rohde & Schwarz	HF907	102393	2018-9-17
	Pre-amplifier	Rohde & Schwarz	SCU-18D	19006451	2018-8-7
	3m Semi-anechoic chamber	TDK	9X6X6	----	2018-5-20
CE	EMI Test Receiver	Rohde & Schwarz	ESR 3	101907	2018-8-7
	LISN	Rohde & Schwarz	ENV4200	100224	2018-8-7
	LISN	Rohde & Schwarz	ENV216	101924	2018-8-7

Test Site2

Radiated Disturbance – AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cal. Due Date
MXE EMI Receiver	Agilent	N9038A	MRTSUE06125	1 year	2018/08/02
Loop Antenna	Schwarzbeck	FMZB1519	MRTSUE06025	1 year	2017/12/21
Microwave System Amplifier	Agilent	83017A	MRTSUE06076	1 year	2018/03/28
Bilog Period Antenna	Schwarzbeck	VULB 9168	MRTSUE06172	1 year	2017/11/19
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	MRTSUE06023	1 year	2017/10/22
Broadband Horn Antenna	Schwarzbeck	BBHA9170	MRTSUE06024	1 year	2018/01/04
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06183	1 year	2017/12/20
Anechoic Chamber	TDK	Chamber-AC1	MRTSUE06212	1 year	2018/05/10

Conducted Test Equipment - TR3

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Spectrum Analyzer	Agilent	N9020A	MRTSUE06106	1 year	2018/04/25
USB Wideband Power Sensor	Agilent	U2021XA	MRTSUE06030	1 year	2017/12/06
Temperature/Humidity Meter	Yuhuaze	HTC-2	MRTSUE06184	1 year	2017/12/22

C - Conducted RF tests

- Conducted peak output power
- 6dB bandwidth and 99% Occupied Bandwidth
- Power spectral density*
- Spurious RF conducted emissions
- Conducted Band edge

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

11 System Measurement Uncertainty

For a 95% confidence level, the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 were:

Test Site1

Items	Extended Uncertainty
Conducted Disturbance at Mains Terminals	150kHz to 30MHz, LISN, ±2.73dB
Radiated Disturbance	30MHz to 1GHz, ±5.03dB (Horizontal) ±5.11dB (Vertical) 1GHz to 18GHz, ±5.15dB (Horizontal) ±5.12dB (Vertical) 18GHz to 25GHz, ±4.76dB

Test Site2

AC Conducted Emission Measurement - SR2

Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):

150kHz~30MHz: 3.46dB

Radiated Emission Measurement – AC1

Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):

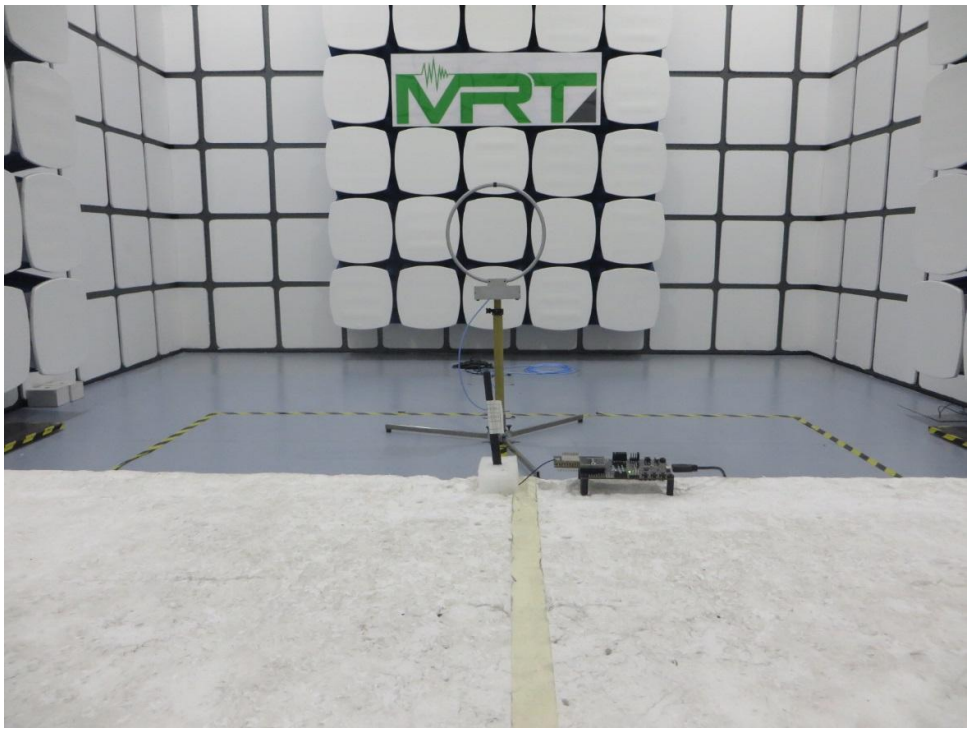
9kHz ~ 1GHz: 4.18dB

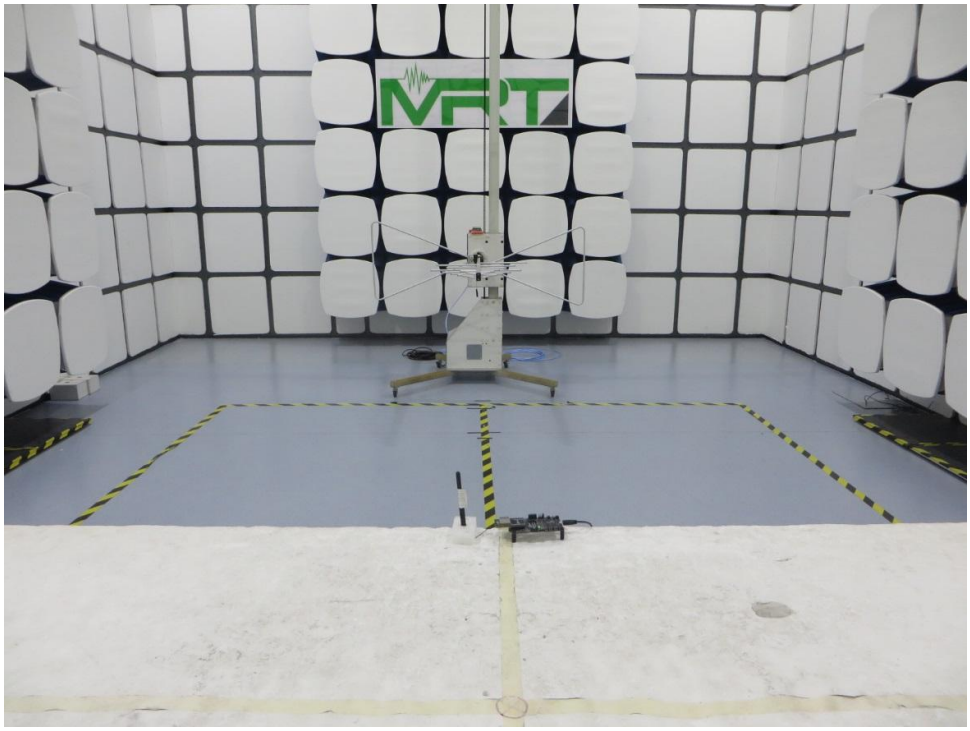
1GHz ~ 25GHz: 4.76dB

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China

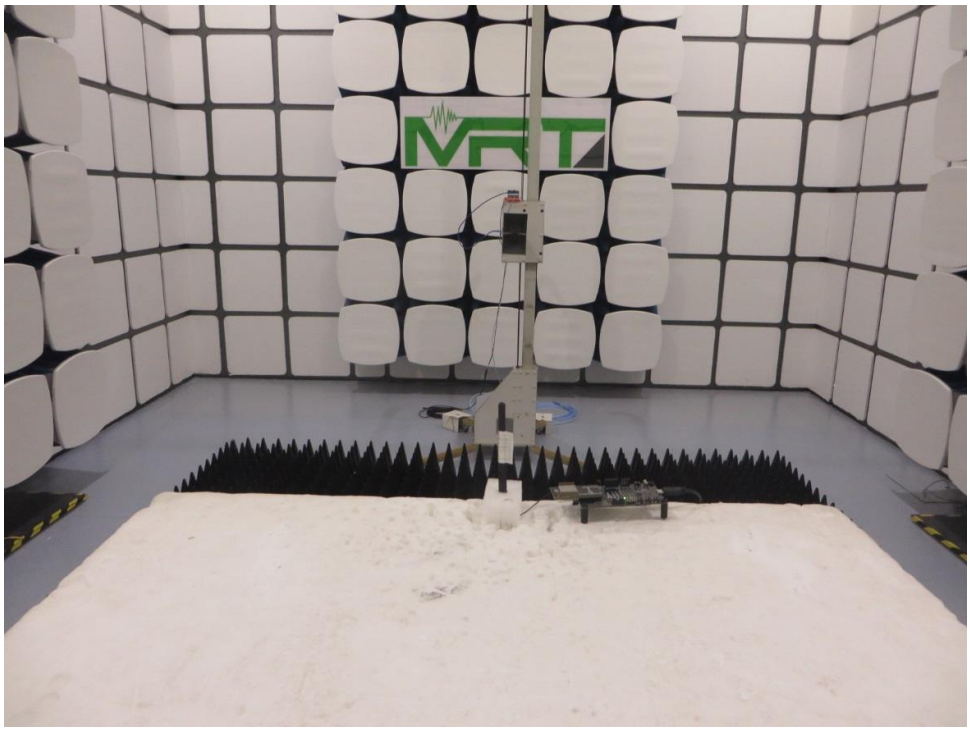
12 Photographs of Test Set-ups

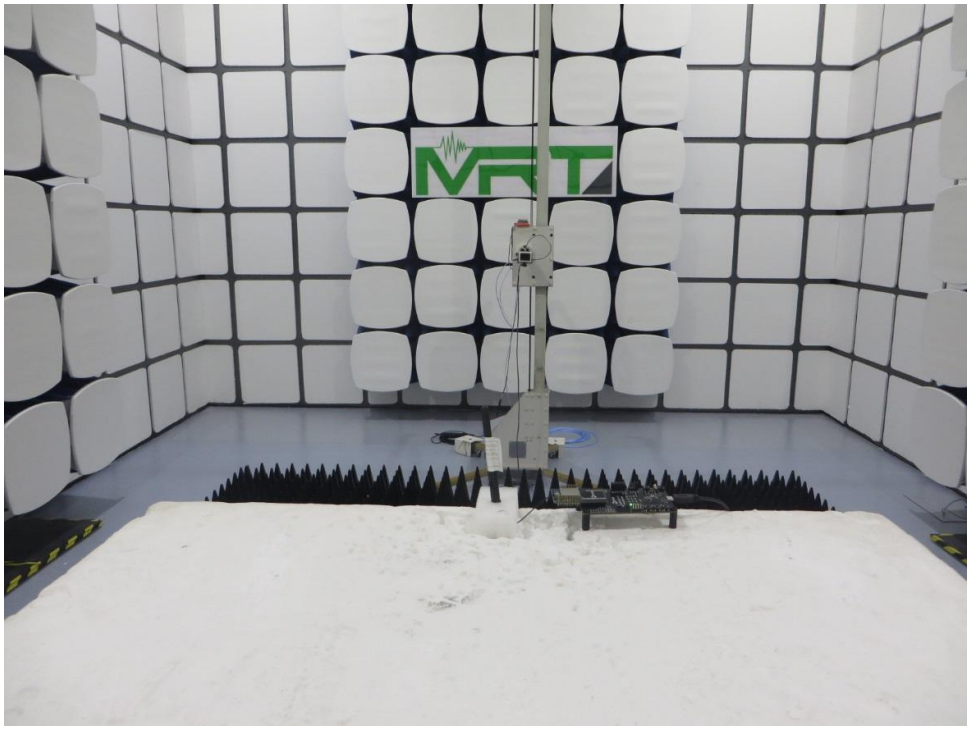




TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

China





TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

13 Photographs of EUT

Photo 1. General view of SZU06C1

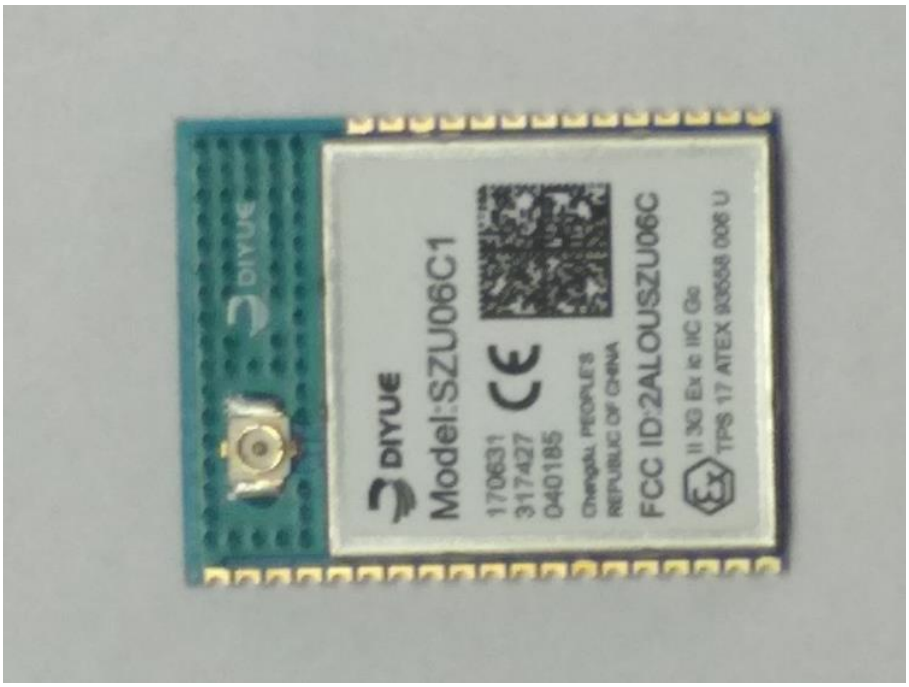


Photo 2. General view of SZU06C1 connect with Dipole Antenna

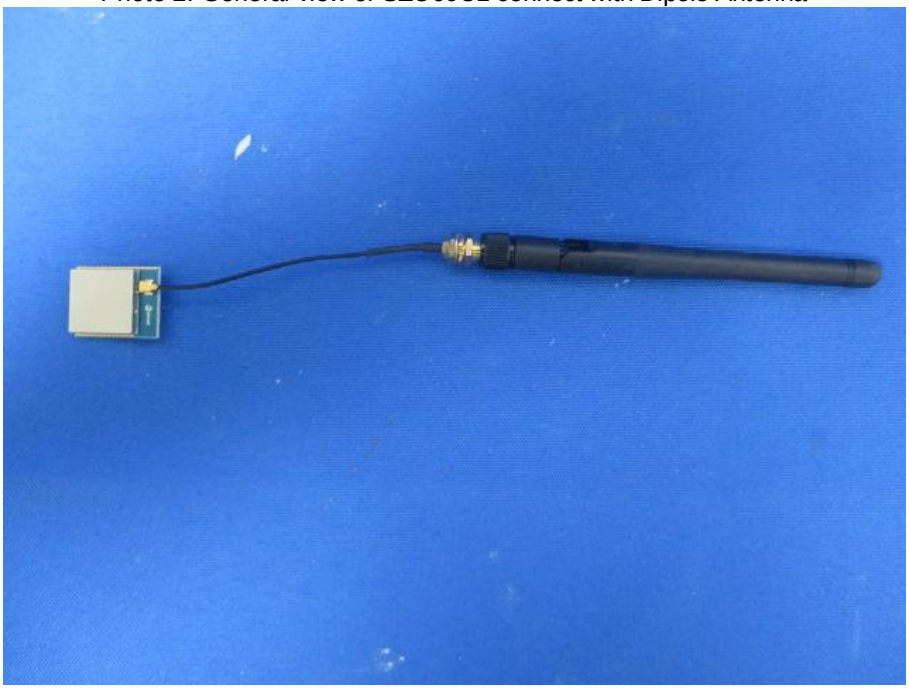


Photo 3. General view of SZU06C1

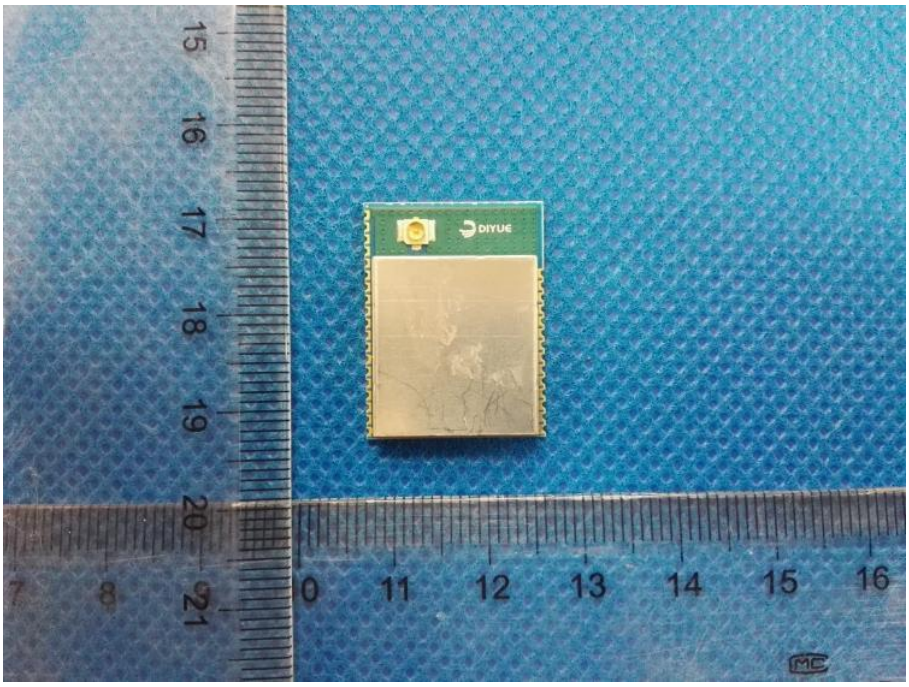
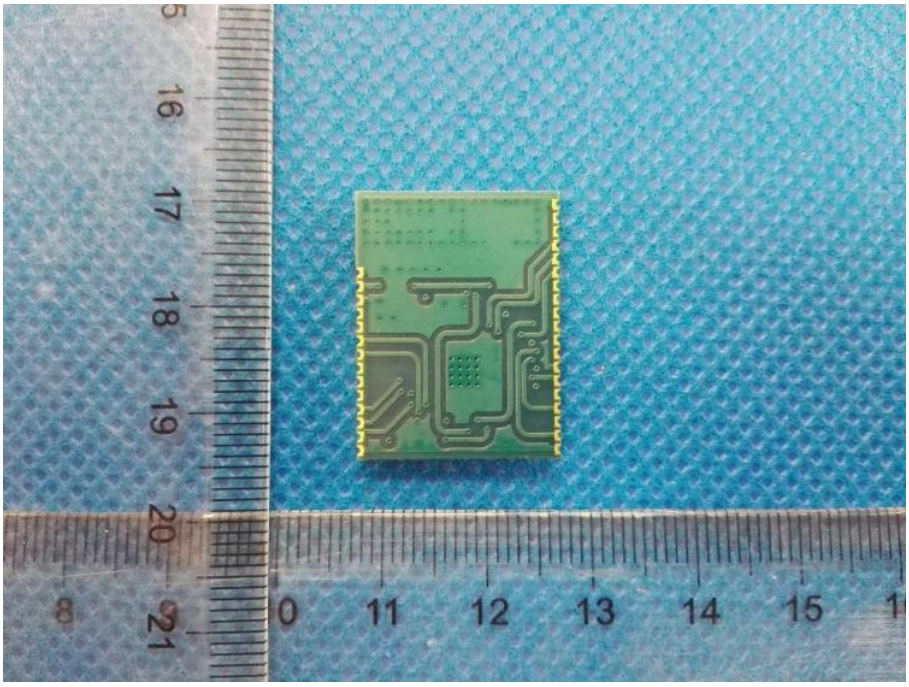


Photo 4. Internal view of SZU06C1



TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

Photo 5 Internal view of SZU06C1

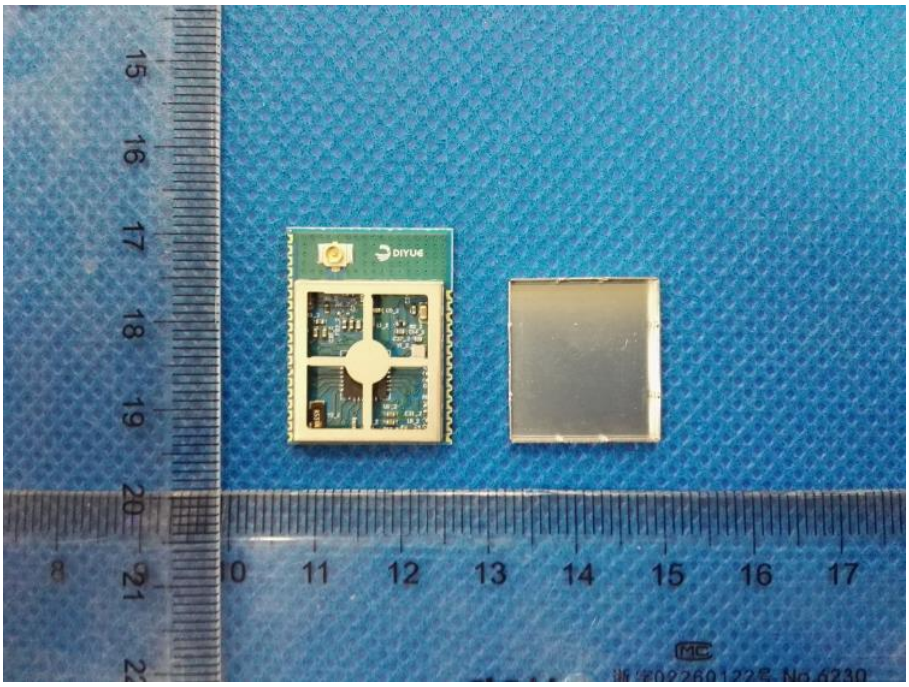
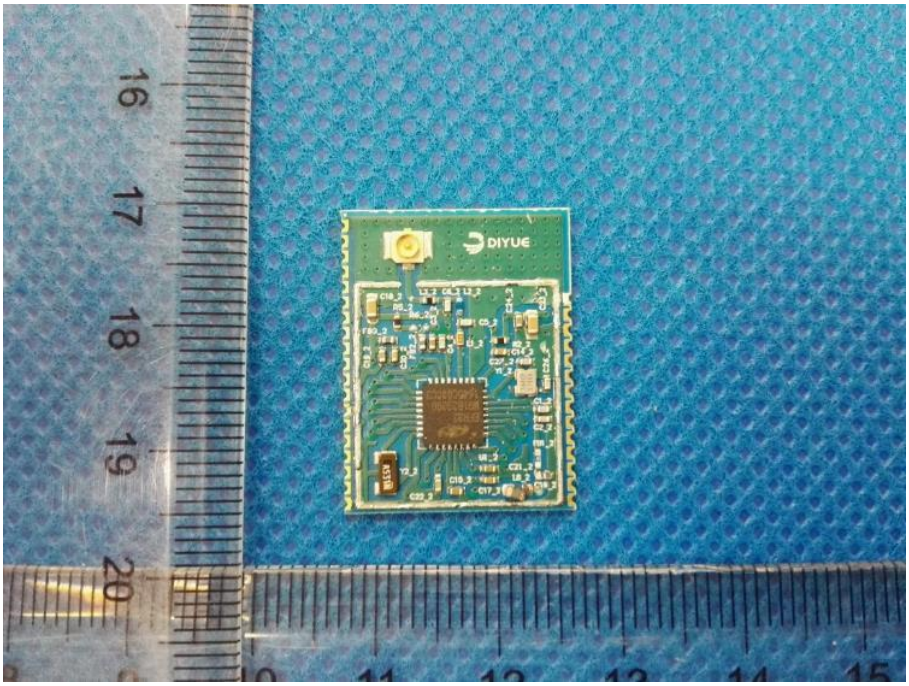


Photo 6. Internal view of SZU06C1



TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

Photo 7. Internal view of SZU06C1 Dipole antenna W1010

Photo 8. General view of SZU06C2

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

Photo 9. General view of SZU06C2

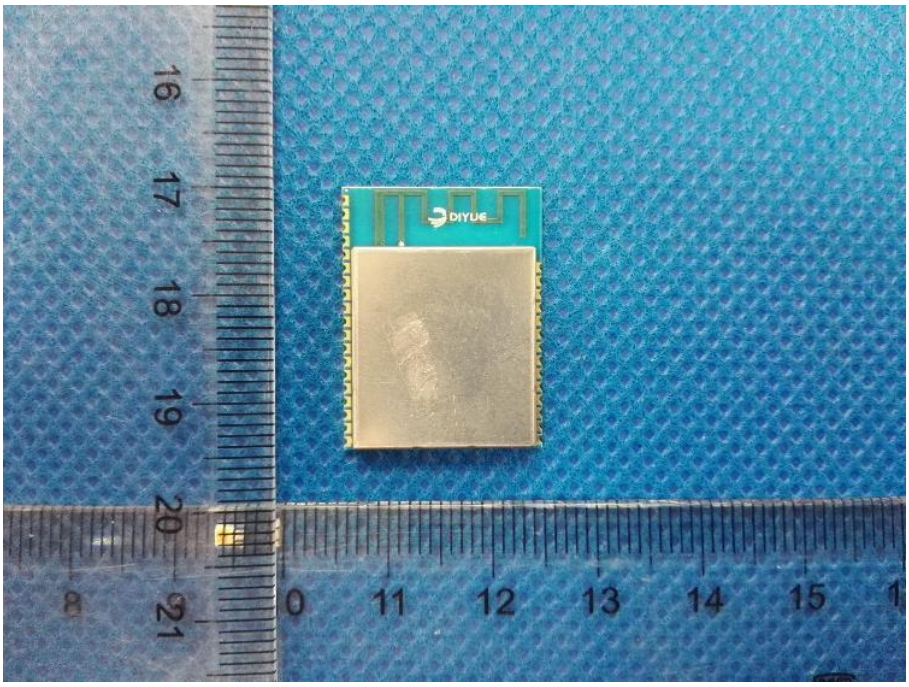
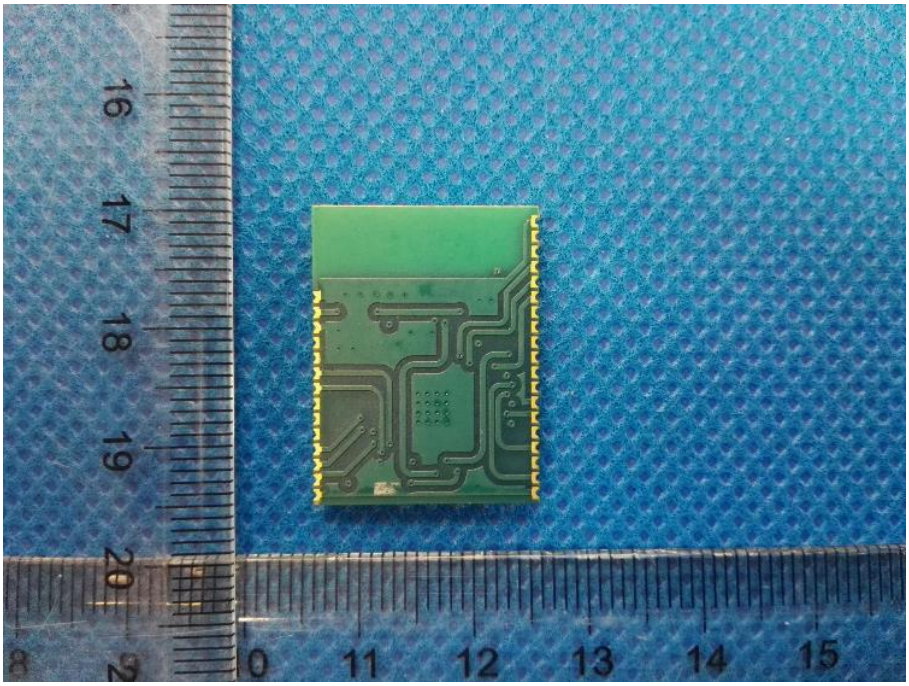


Photo 10. General view of SZU06C2



TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600

Photo 11. Internal view of SZU06C2

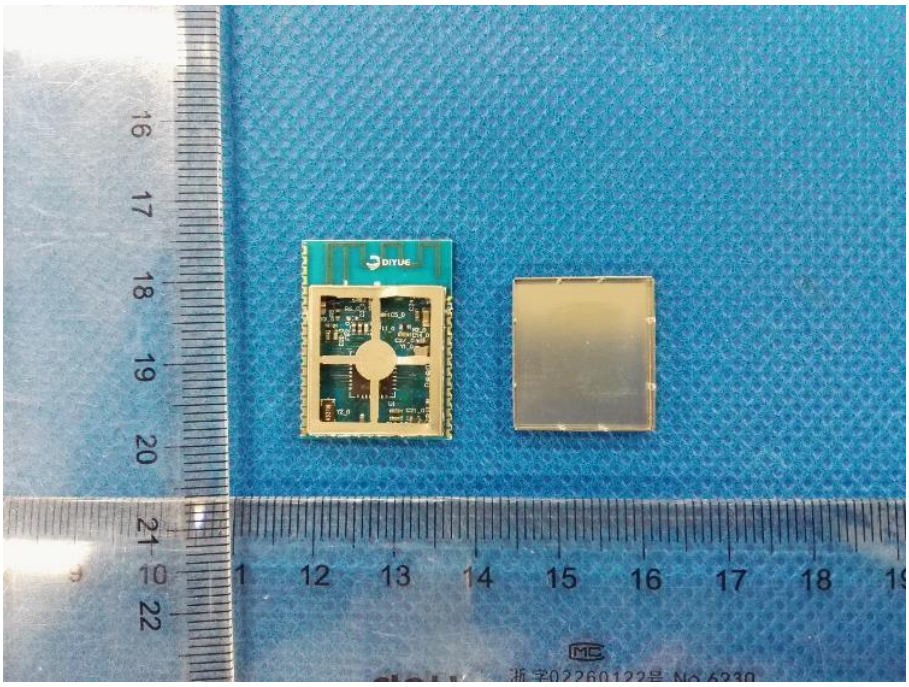
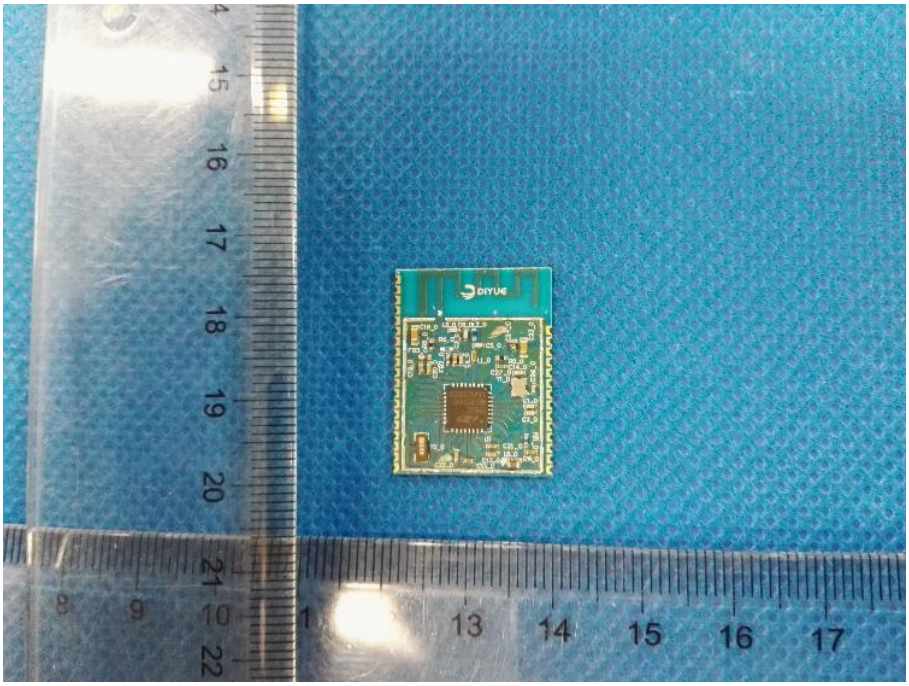


Photo 12. Internal view of SZU06C2



TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
3-13, No.151, Heng Tong Road, Shanghai, 200070, P.R. China
Phone: +86 21 61410123, Fax:+86 21 61408600