中国认可
国际互认
检测
TESTING
CNAS L2264

RF TEST REPORT

Applicant	ZTE CORPORATION
FCC ID	SRQ-BLADEV8
Product	LTE/WCDMA/GSM (GPRS) Mutil-Mode Digital Mobile Phone
Model	ZTE BLADE V8/BLADE V8/ZTE BLADE V0800
Report No.	RXA1612-0288RF04
Issue Date	January 23, 2017

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15C (2016)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Xianqing Li

Performed by: Xianqing Li

Kai Xu

Approved by: Kai Xu

TA Technology (Shanghai) Co., Ltd.

No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China

TEL: +86-021-50791141/2/3

FAX: +86-021-50791141/2/3-8000

TABLE OF CONTENT

1. Test Laboratory 4
1.1. Notes of the test report 4
1.2. Test facility 4
1.3. Testing Location 5
2. General Description of Equipment under Test 6
3. Applied Standards 8
4. Test Configuration 9
5. Test Case Results 10
5.1. Average Power Output –Conducted 10
5.2. 6dB Bandwidth 12
5.3. Band Edge 16
5.4. Power Spectral Density 18
5.5. Spurious RF Conducted Emissions 22
5.6. Radiated Emissions in the Restricted Band 27
5.7. Radiates Emission 32
5.8. Conducted Emission 83
6. Main Test Instruments 90
ANNEX A: EUT Appearance and Test Setup 91
A.1 EUT Appearance 91
A.2 Test Setup 93

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Summary of measurement results

Number	Summary of measurements of results	Clause in FCC rules	Verdict
1	Maximum Average conducted output power	15.247(b)(3)	PASS
2	6 dB bandwidth	15.247(a)(2)	PASS
3	Maximum power spectral density	15.247(e)	PASS
4	Band Edge	15.247(d)	PASS
5	Spurious RF Conducted Emissions	15.247(d)	PASS
6	Radiated Emissions in restricted frequency bands	15.247(d),15.205,15.209	PASS
7	Radiated Emissions	15.247(d),15.205,15.209	PASS
8	Conducted Emissions	15.207	PASS
Date of Testing: December 23, 2016 ~ January 20, 2017			

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

1. Test Laboratory

1.1. Notes of the test report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above. This report must not be used by the client to claim product certification, approval, or endorsement by CNAS or any government agencies.

1.2. Test facility

CNAS (accreditation number: L2264)

TA Technology (Shanghai) Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

FCC (recognition number is 428261)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

IC (recognition number is 8510A)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Canada to perform electromagnetic emission measurement.

VCCI (recognition number is C-4595, T-2154, R-4113, G-766)

TA Technology (Shanghai) Co., Ltd. has been listed by industry Japan to perform electromagnetic emission measurement.

A2LA (Certificate Number: 3857.01)

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

1.3. Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
Address:	No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Xu Kai
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	http://www.ta-shanghai.com
E-mail:	xukai@ta-shanghai.com

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

2. General Description of Equipment under Test

Client Information

Applicant	ZTE CORPORATION
Applicant address	ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R. China
Manufacturer	ZTE CORPORATION
Manufacturer address	ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R. China

General information

EUT Description	
Model:	ZTE BLADE V8/BLADE V8/ZTE BLADE V0800
IMEI:	862121030052824
Hardware Version:	uy4A
Software Version:	TEL_MX_BLADE_V8V1.0.0
Power Supply:	Battery/AC adapter
Antenna Type:	Internal Antenna
Antenna Connector:	A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)
Test Mode:	Bluetooth (Low Energy) 802.11b 802.11g, 802.11n (HT20);
Modulation Type:	BLE :GFSK 802.11b: DSSS; 802.11g/n (HT20): OFDM
Max. Conducted Power	Wi-Fi 2.4G: 14.12dBm BLE: -1.24dBm
Operating Frequency Range(s)	2400 ~ 2483.5 MHz
EUT Accessory	
Battery	Manufacturer: HARBIN COSLIGHT POWER CO LTD Model: Li3927T44P8h786035 Ratings:3.87Vdc,2730mAh,10.6Wh
Charger	Manufacturer: DOKOCOM Model: STC-A515A-Z Input power:100-240 VAC 50-60Hz 300mA Output power:5V DC 1500mA
Earphone	Manufacturer: GoerTek

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

	Model: HA3-3
Note: The information of the EUT is declared by the manufacturer. Please refer to the specifications or user manual for details.	

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

3. Applied Standards

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

Test standards

- **FCC CFR47 Part 15C (2016) Radio Frequency Devices**
- **ANSI C63.10 (2013)**
- **KDB 558074 D01 DTS Meas Guidance v03r05**

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

4. Test Configuration

Test Mode

The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate. Preliminary tests have been done on all the configuration for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates are shown as following table.

Band	**Data Rate**
Bluetooth (Low Energy)	1Mbps
802.11b	1 Mbps
802.11g	6 Mbps
802.11n HT20	MCS0

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

5. Test Case Results

5.1. Average Power Output –Conducted

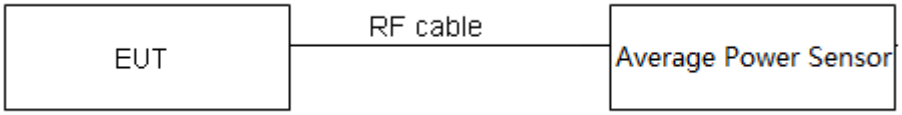
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

During the process of the testing, The EUT was connected to Average power meter with a known loss. The EUT is max power transmission with proper modulation. The Average detector is used. We use Maximum Average Conducted Output Power Level Method in KDB 558074 D01 for this test.

Test Setup



Limits

Rule Part 15.247 (b) (3) specifies that " For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz: 1 Watt."

Average Output Power	≤ 1W (30dBm)

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 0.44 dB.

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Test Results

	Antenna 1 Power Index		
Packet Type	**CH1**	**CH6**	**CH11**
802.11b	14	14	14
802.11g	12	12	12
802.11n HT20	11	11	11
Packet Type	**CH3**	**CH6**	**CH9**
802.11n HT40	/	/	/

Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)	Limit (dBm)	Conclusion
802.11b	2412	14.12	30	PASS
	2437	13.57	30	PASS
	2462	13.78	30	PASS
802.11g	2412	11.42	30	PASS
	2437	10.92	30	PASS
	2462	10.78	30	PASS
802.11n HT20	2412	10.30	30	PASS
	2437	10.90	30	PASS
	2462	9.72	30	PASS
Bluetooth (Low Energy)	2402	-1.24	30	PASS
	2440	-1.36	30	PASS
	2480	-2.18	30	PASS

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

5.2. 6dB Bandwidth

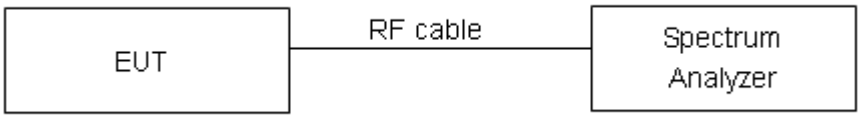
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. RBW is set to 100 kHz; VBW is set to 300 kHz on spectrum analyzer.

Test Setup



Limits

Rule Part 15.247 (a) (2) specifies that “Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.”

minimum 6 dB bandwidth	≥ 500 kHz

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor *k* = 2, *U*= 936 Hz.

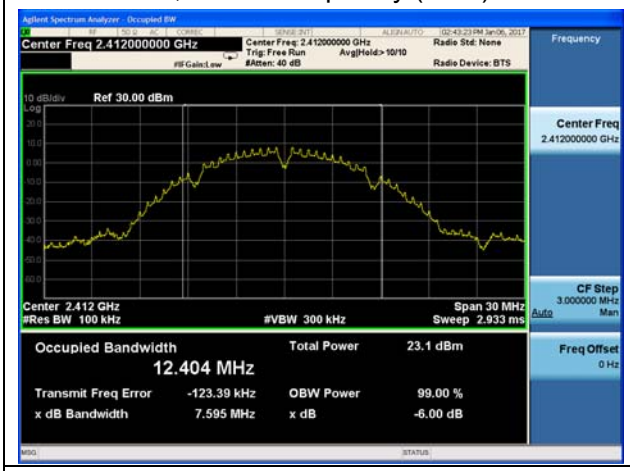
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Test Results:

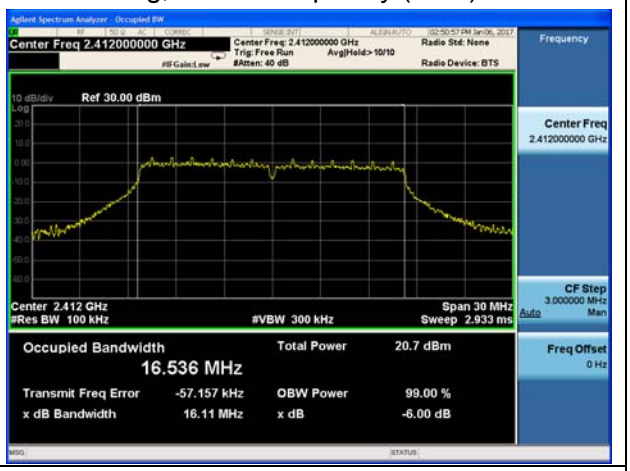
Network Standards	Carrier frequency (MHz)	Minimum 6 dB Bandwidth (MHz)	99% bandwidth (MHz)	Limit(kHz)	Conclusion
802.11b	2412	7.595	12.404	500	PASS
	2437	7.128	12.014	500	PASS
	2462	7.592	12.548	500	PASS
802.11g	2412	16.110	16.536	500	PASS
	2437	16.420	16.614	500	PASS
	2462	16.110	16.565	500	PASS
802.11n HT20	2412	17.330	17.675	500	PASS
	2437	17.600	17.738	500	PASS
	2462	17.230	17.694	500	PASS
Bluetooth (Low Energy)	2402	0.697	1.089	500	PASS
	2440	0.704	1.093	500	PASS
	2480	0.703	1.091	500	PASS

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

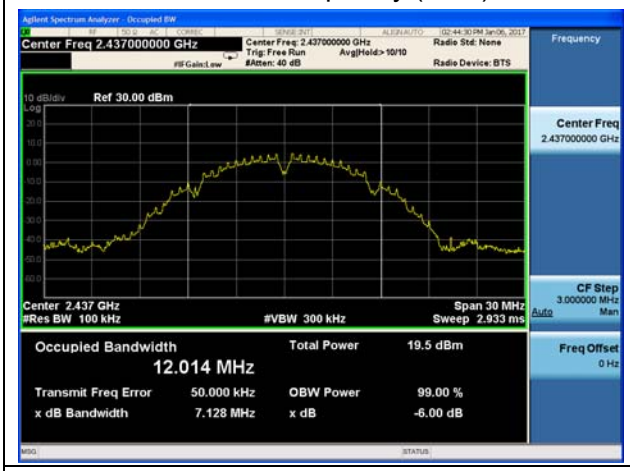
802.11b, Carrier frequency (MHz): 2412



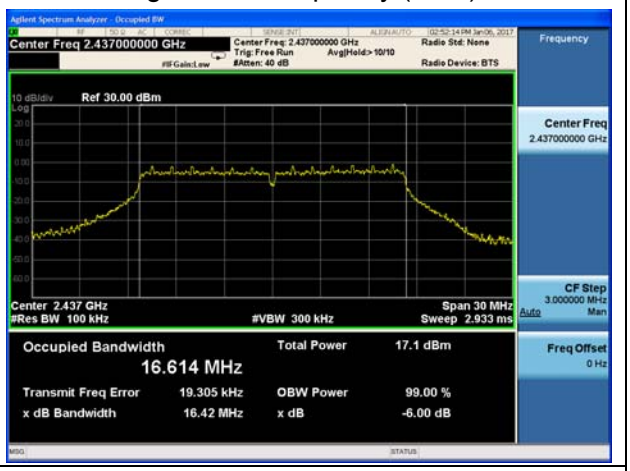
802.11g, Carrier frequency (MHz): 2412



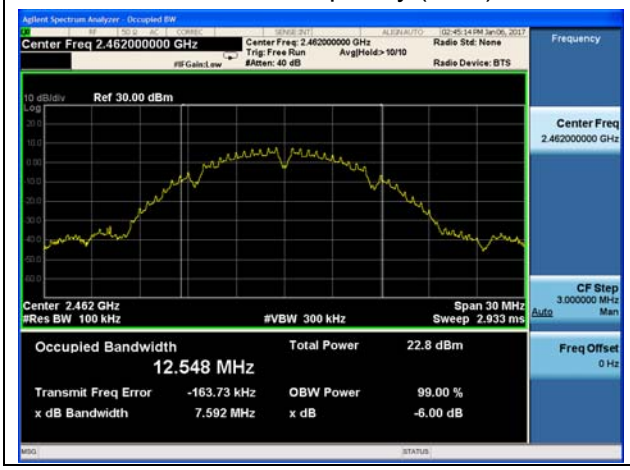
802.11b, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2437



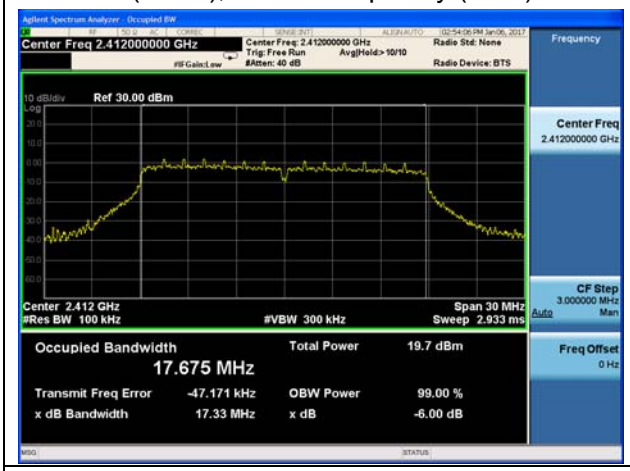
802.11b, Carrier frequency (MHz):2462



802.11g, Carrier frequency (MHz):2462

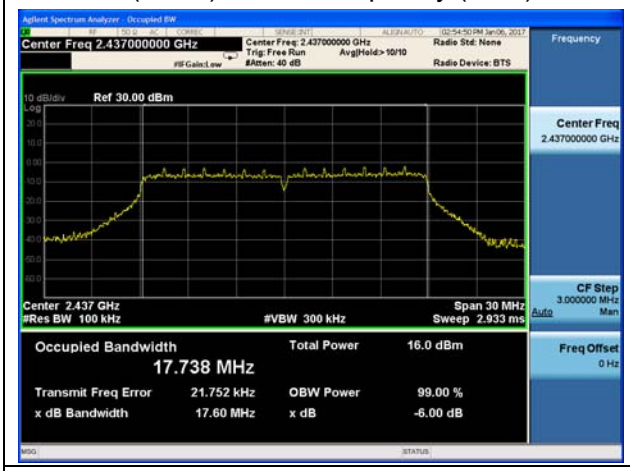
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11n(HT20), Carrier frequency (MHz): 2412



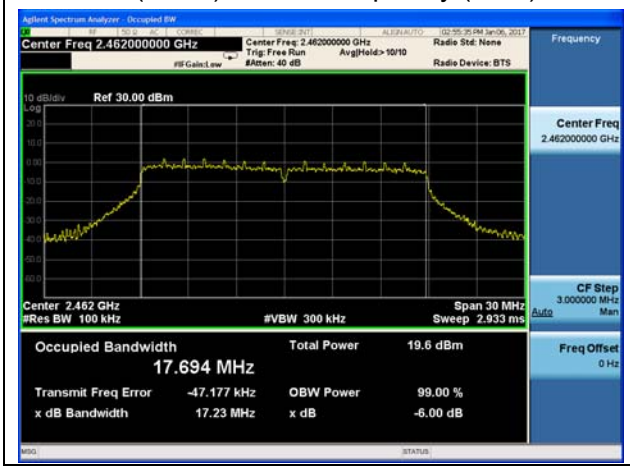
BLE Carrier frequency (MHz): 2402

802.11n(HT20), Carrier frequency (MHz): 2437



BLE Carrier frequency (MHz): 2440

802.11n(HT20), Carrier frequency (MHz):2462



BLE Carrier frequency (MHz): 2480

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

5.3. Band Edge

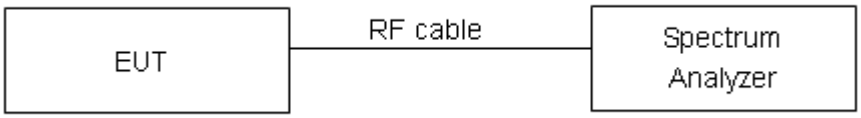
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable the band edge of the lowest and highest channels were measured. The peak detector is used and RBW is set to 100 kHz and VBW is set to 300 kHz on spectrum analyzer. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

Rule Part 15.247(d) specifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is 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.”

Measurement Uncertainty

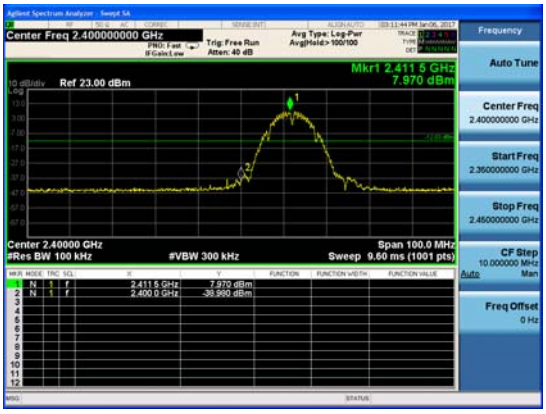
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor *k* = 1.96.

Frequency	Uncertainty
2GHz-3GHz	1.407 dB

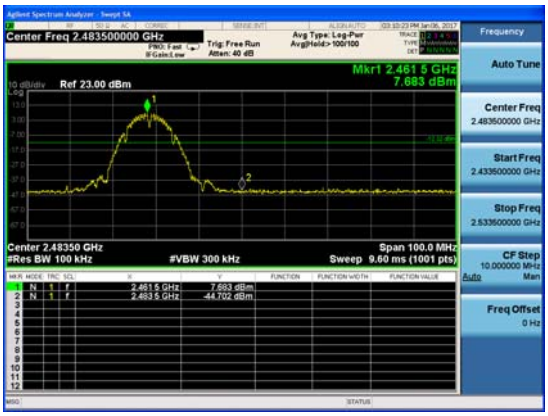
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Test Results: PASS

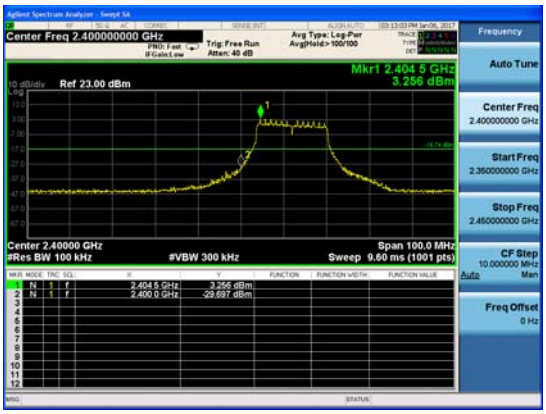
802.11b, Channel No.: 1



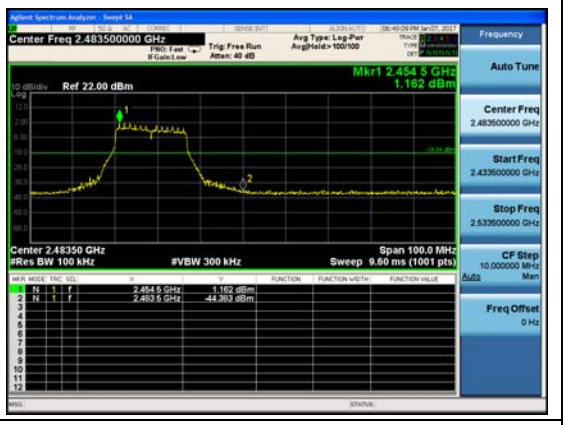
802.11b, Channel No.: 11



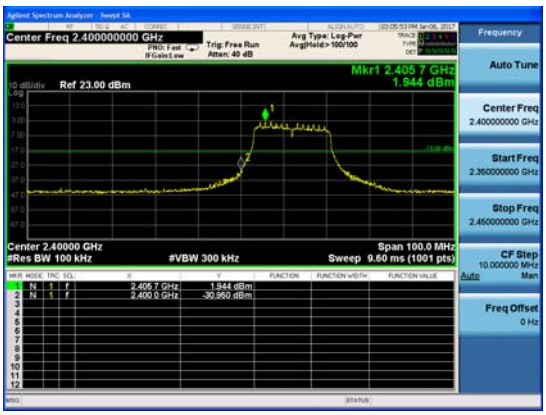
802.11g, Channel No.: 1



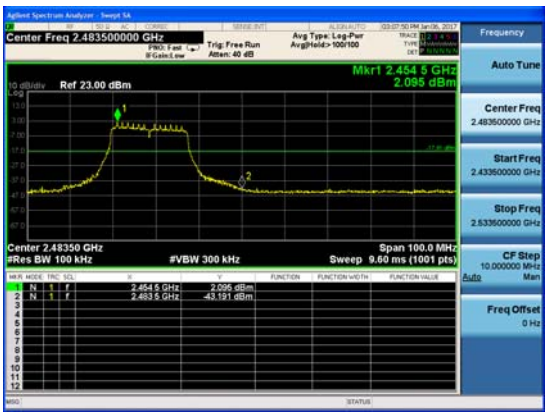
802.11g, Channel No.: 11



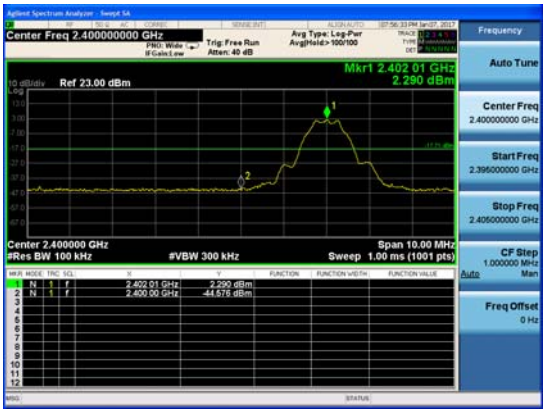
802.11n(HT20), Channel No.: 1



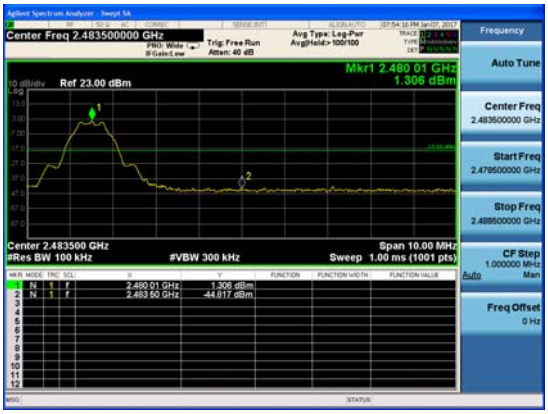
802.11n(HT20), Channel No.: 11



BLE, Channel No.: 0



BLE, Channel No.: 39



This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

5.4. Power Spectral Density

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

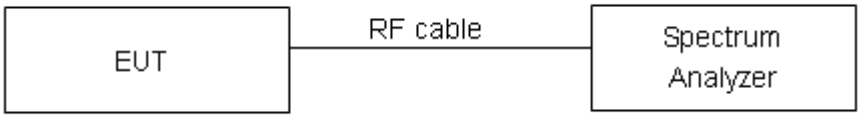
Method of Measurement

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable.

RBW is set to 3 kHz and VBW is set to 10 kHz for BLE/ Wi-Fi 2.4G on spectrum analyzer.

Set the span to 1.5 times the DTS channel bandwidth. Sweep time = auto couple. Trace mode = max hold. The Average power spectral density is recorded.

Test setup



Limits

Rule Part 15.247(e) specifies that" For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. ''

Limits	≤ 8 dBm / 3kHz

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 0.75dB.

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

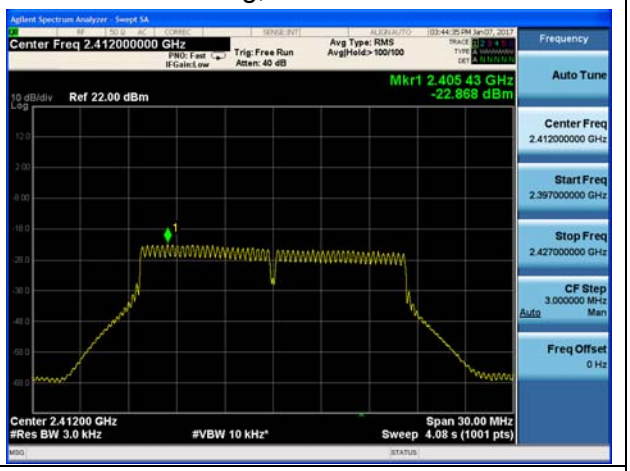
Test Results:

Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)	Limit (dBm / 3kHz)	Conclusion
802.11b	1	-17.795	8	PASS
	6	-17.697	8	PASS
	11	-18.070	8	PASS
802.11g	1	-22.868	8	PASS
	6	-23.346	8	PASS
	11	-23.538	8	PASS
802.11n HT20	1	-24.158	8	PASS
	6	-24.240	8	PASS
	11	-24.783	8	PASS
Bluetooth (Low Energy)	0	-18.020	8	PASS
	19	-16.345	8	PASS
	39	-18.079	8	PASS

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

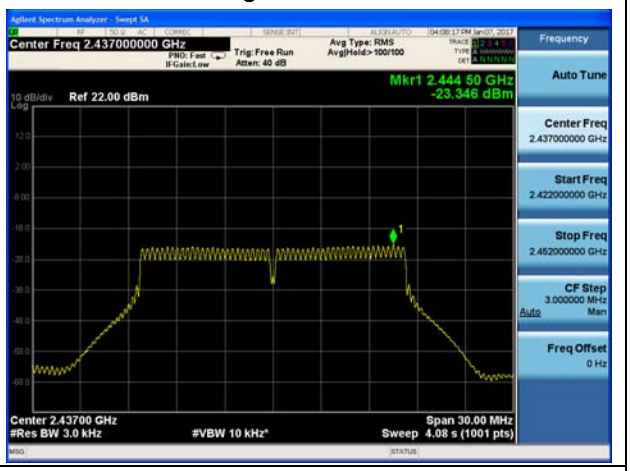
802.11b, Channel No.: 1

802.11g, Channel No.: 1



802.11b, Channel No.: 6

802.11g, Channel No.: 6

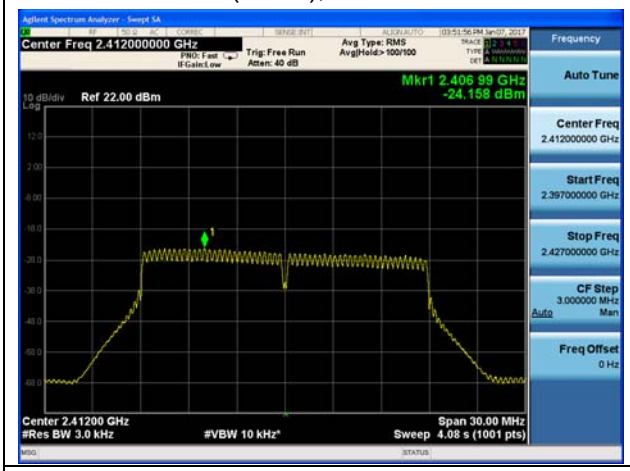


802.11b, Channel No.: 11

802.11g, Channel No.: 11

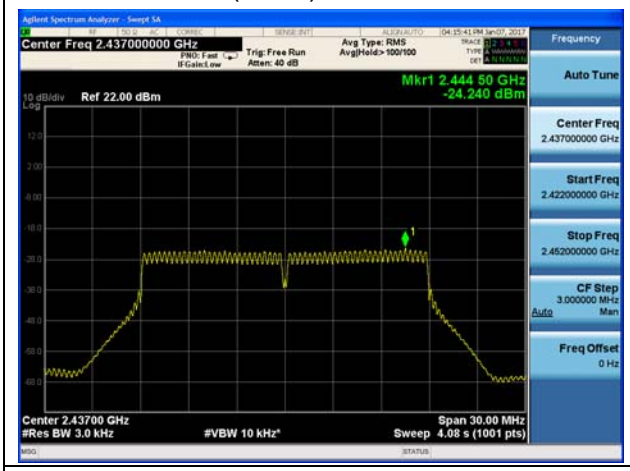
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11n(HT20), Channel No. 1

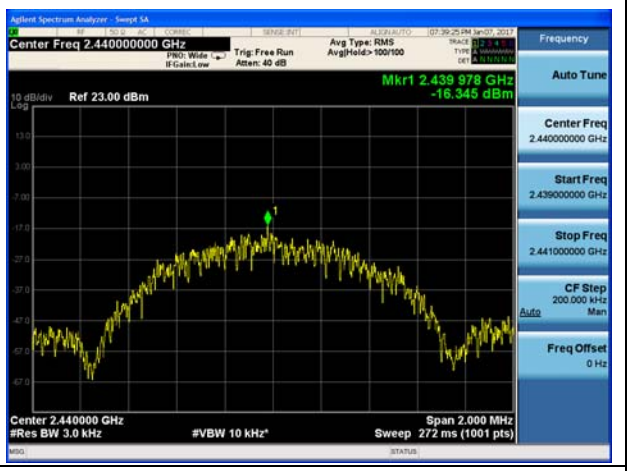


BLE, Channel No.: 0

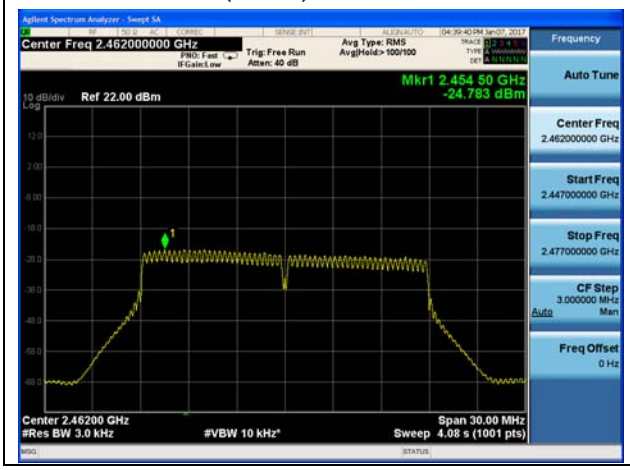
802.11n(HT20), Channel No. 6



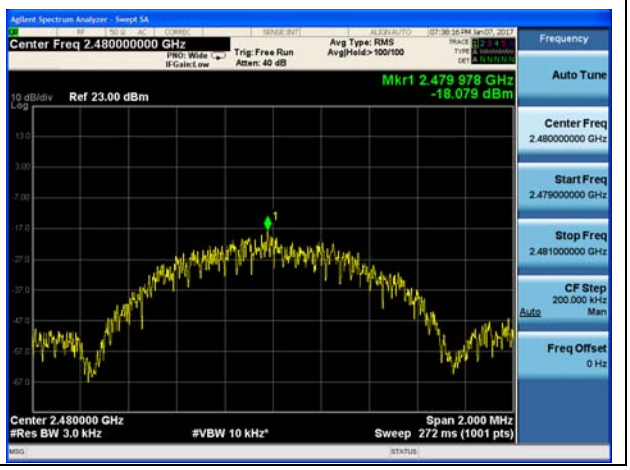
BLE, Channel No.: 19



802.11n(HT20), Channel No. 11



BLE, Channel No.: 39



This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

5.5. Spurious RF Conducted Emissions

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The EUT was connected to the spectrum analyzer with a known loss. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. RBW and VBW are set to 100 kHz, Sweep is set to ATUO.
The test is in transmitting mode.

Test setup

Limits

Rule Part 15.247(d) pacifies that "In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is 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."

Network Standards	Carrier frequency (MHz)	Reference value (dBm)	Limit
802.11b	2412	-11.79	-31.79
	2437	-11.21	-31.21
	2462	-12.07	-32.07
802.11g	2412	-13.49	-33.49
	2437	-14.33	-34.33
	2462	-14.11	-34.11
802.11n HT20	2412	-14.62	-34.62
	2437	-14.78	-34.78
	2462	-14.91	-34.91
Bluetooth (Low Energy)	2402	-24.57	-44.57
	2440	-24.26	-44.26
	2480	-24.95	-44.95

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Measurement Uncertainty

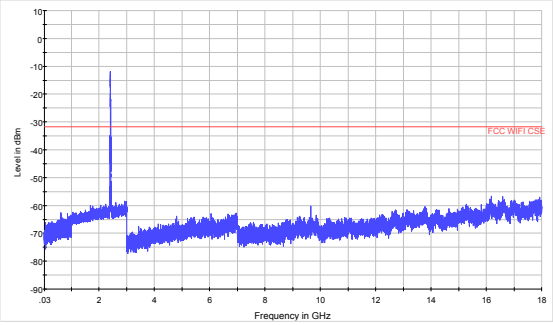
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor *k* = 1.96.

Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-26GHz	1.407 dB

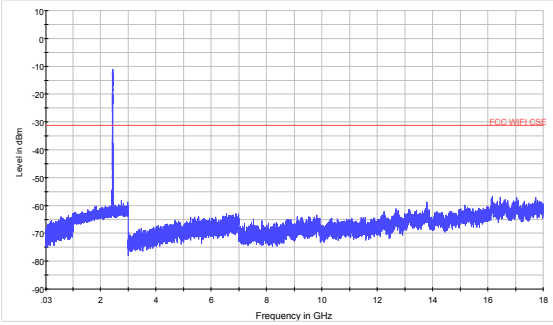
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Test Results:

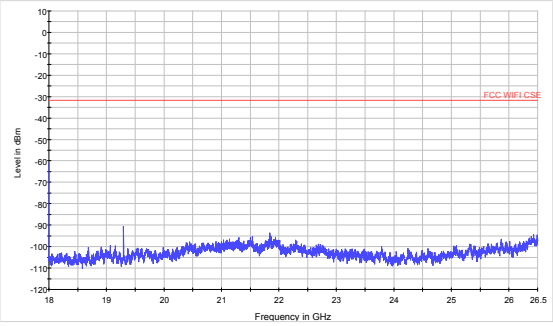
If disturbances were found more than 20dB below limit line, the mark is not required for the EUT. The signal beyond the limit is carrier.



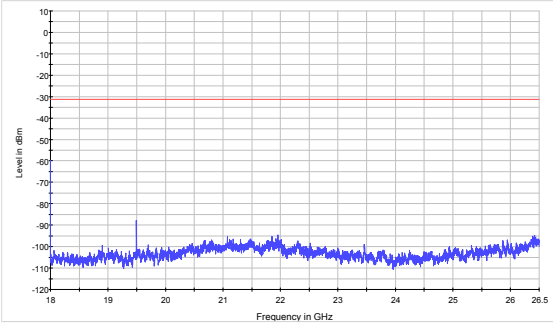
802.11b CH1 30MHz to 18GHz



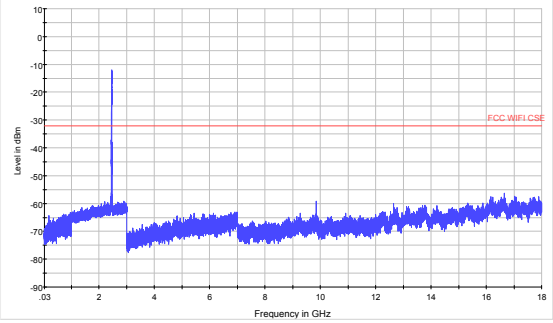
802.11b CH6 30MHz to 18GHz



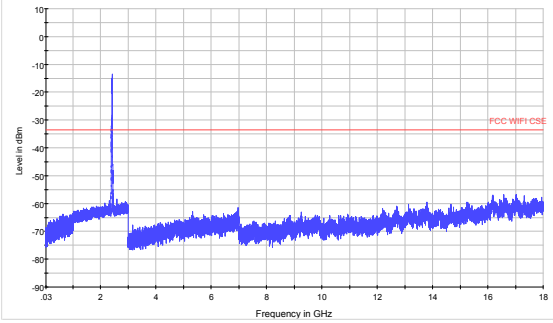
802.11b CH1 18GHz to 26.5GHz



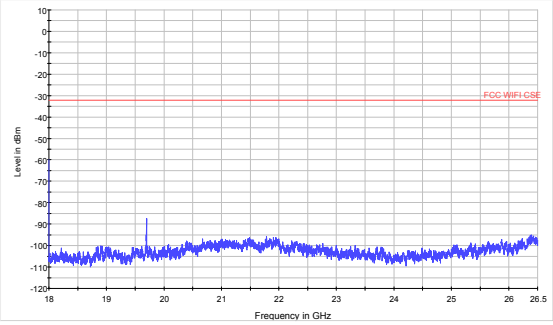
802.11b CH6 18GHz to 26.5GHz



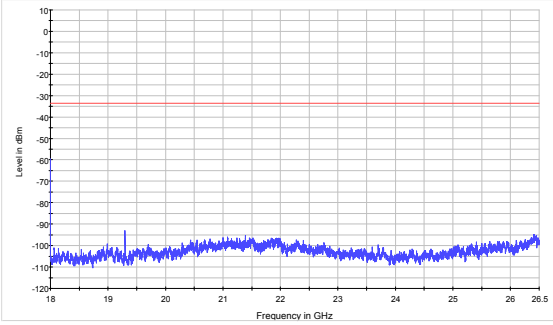
802.11b CH11 30MHz to 18GHz



802.11g CH1 30MHz to 18GHz

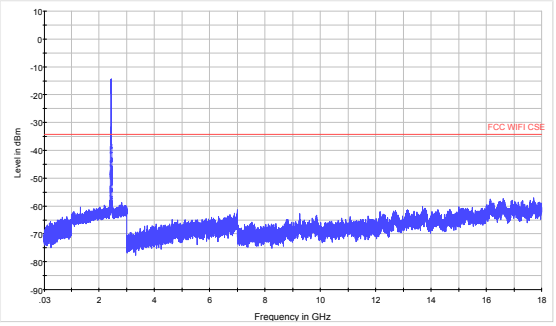


802.11b CH11 18GHz to 26.5GHz

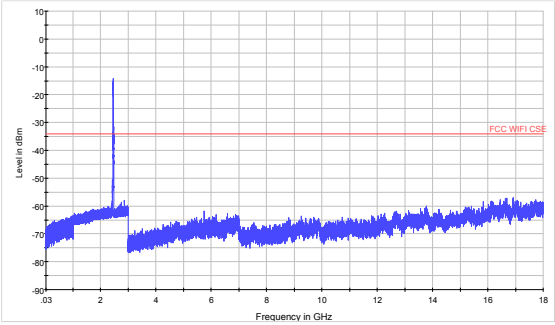


802.11g CH1 18GHz to 26.5GHz

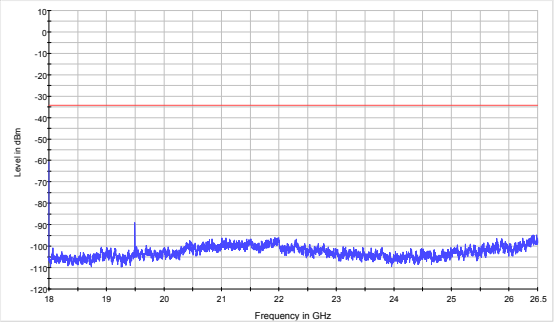
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.



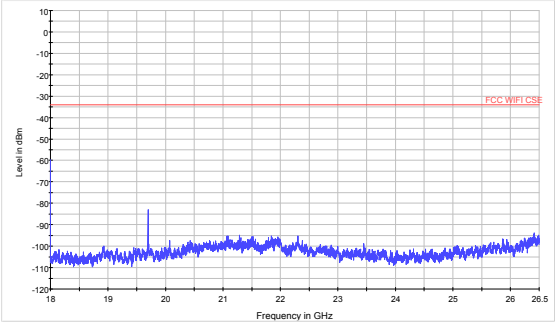
802.11g CH6 30MHz to 18GHz



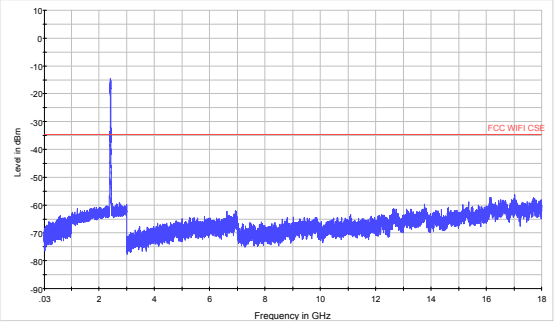
802.11g CH11 30MHz to 18GHz



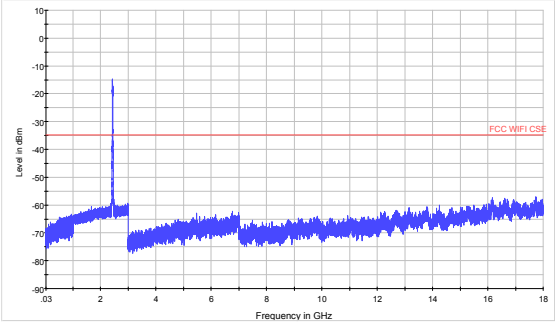
802.11g CH6 18GHz to 26.5GHz



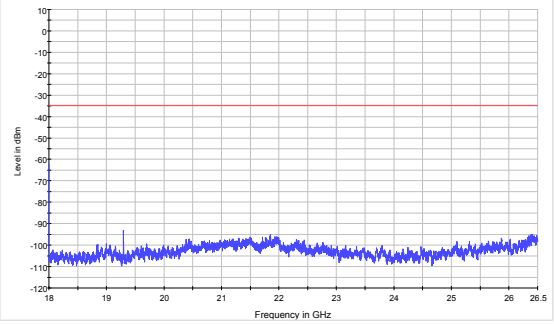
802.11g CH11 18GHz to 26.5GHz



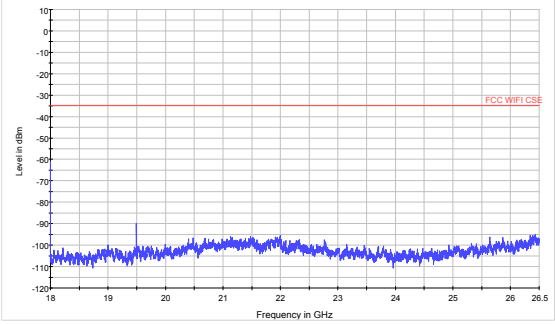
802.11n (HT20) CH1 30MHz to 18GHz



802.11n (HT20) CH6 30MHz to 18GHz

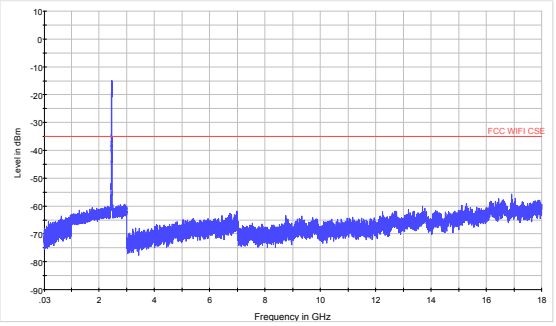


802.11n (HT20) CH1 18GHz to 26.5GHz

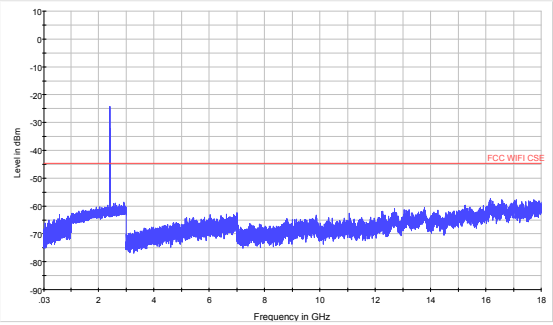


802.11n (HT20) CH6 18GHz to 26.5GHz

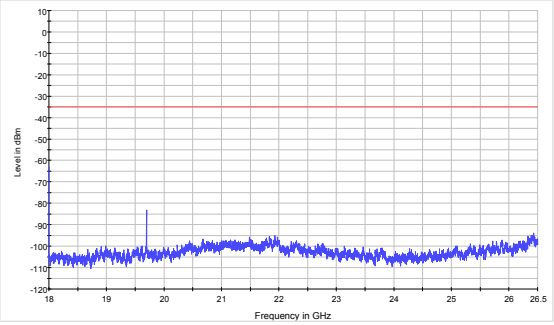
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.



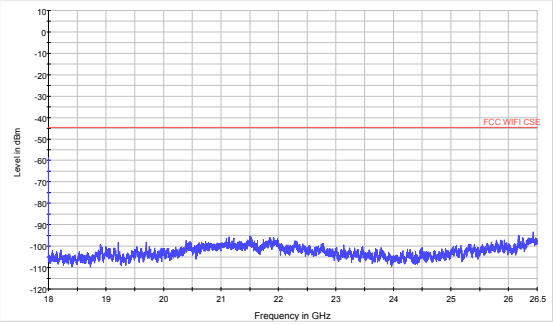
802.11n (HT20) CH11 30MHz to 18GHz



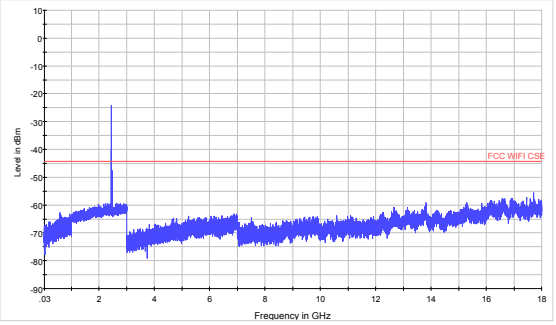
BLE CH0 30MHz to 18GHz



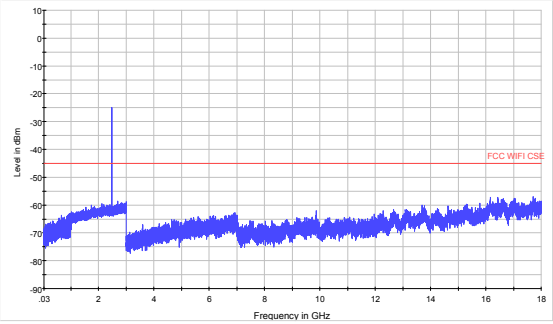
802.11n (HT20) CH11 18GHz to 26.5GHz



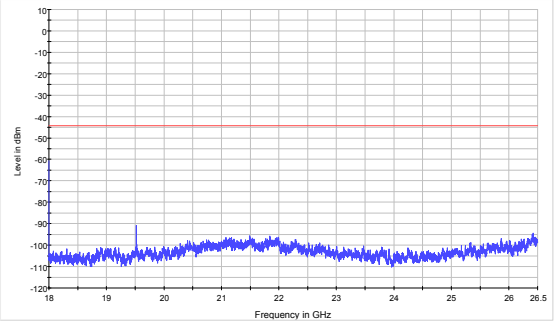
BLE CH0 18GHz to 26.5GHz



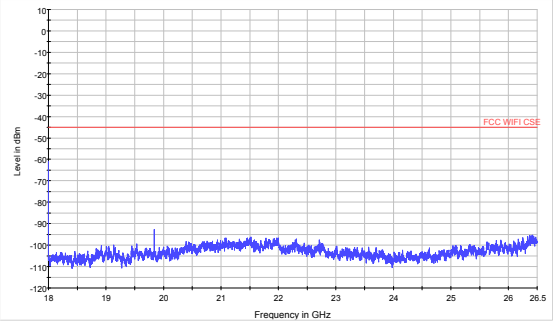
BLE CH19 30MHz to 18GHz



BLE CH39 30MHz to 18GHz



BLE CH19 18GHz to 26.5GHz



BLE CH39 18GHz to 26.5GHz

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

5.6. Radiated Emissions in the Restricted Band

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

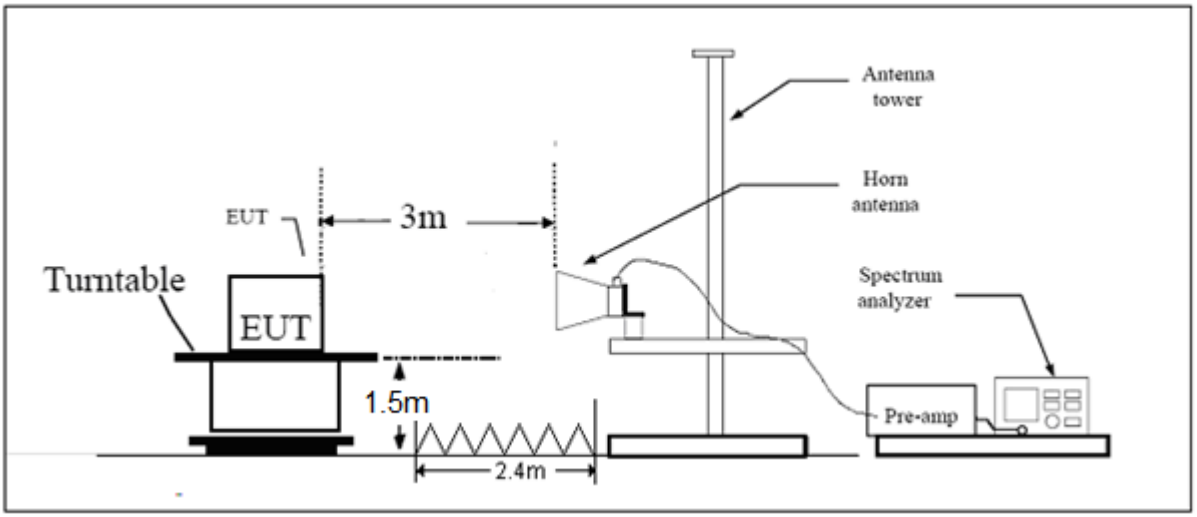
The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. RBW is set to 100kHz.The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing. Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

Set the spectrum analyzer in the following:
(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
(b) AVERAGE: RBW=1MHz / VBW=1MHz / Sweep=AUTO
This setting method can refer to **KDB 558074.**

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Y axis) and the antenna is vertical.

The test is in transmitting mode.

Test setup



Note: Area side: 2.4mX3.6m

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Limits

Spurious Radiated Emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 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			

Limit in restricted band

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

§15.35(b)

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

Peak Limit=74 dBuV/m

Average Limit=54 dBuV/m

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U= 3.55 dB.

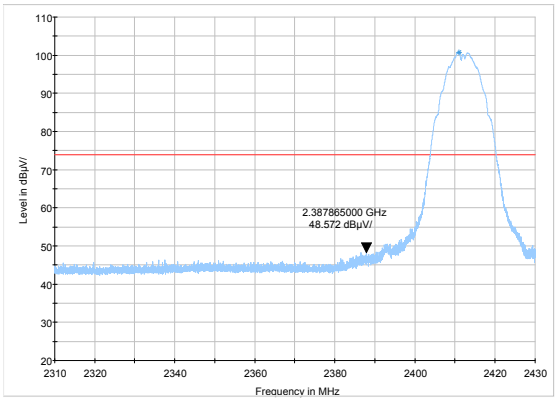
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Test Results:

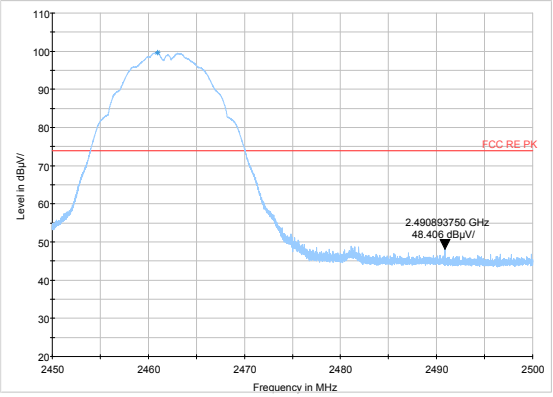
PASS

The signal beyond the limit is carrier.

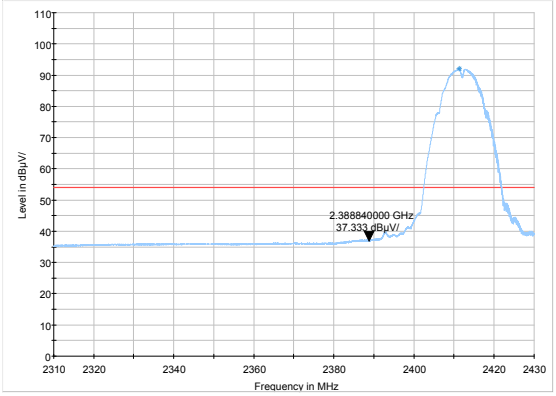
802.11b-Channel 1: Peak



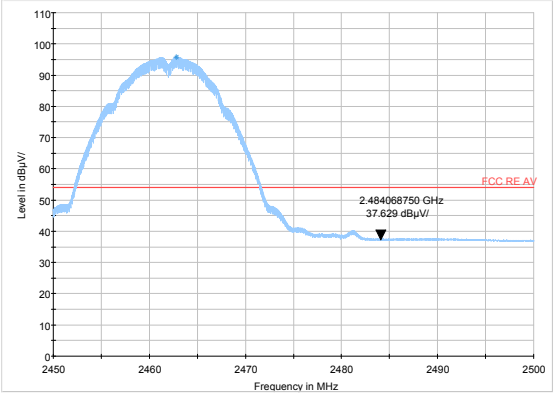
802.11b-Channel 11: Peak



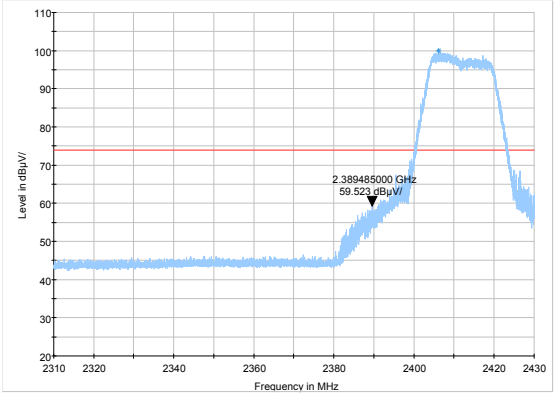
802.11b-Channel 1: Average



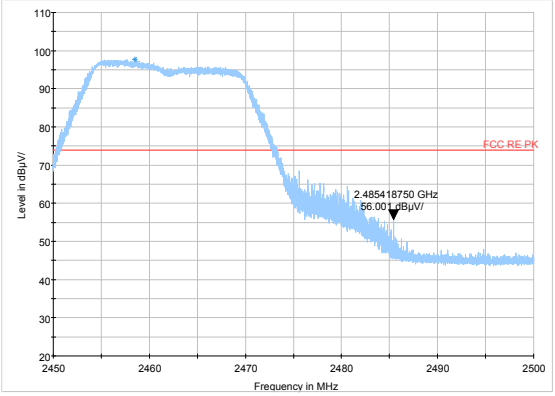
802.11b-Channel 11: Average



802.11g-Channel 1: Peak

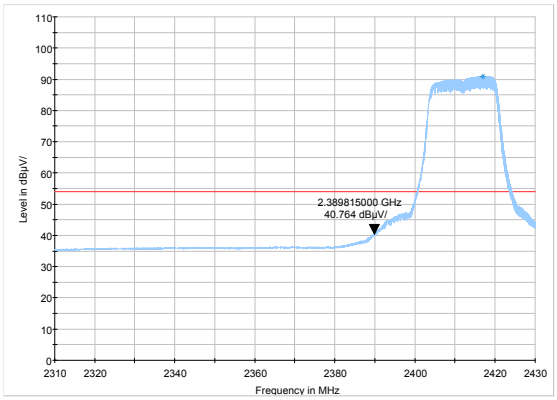


802.11g-Channel 11: Peak

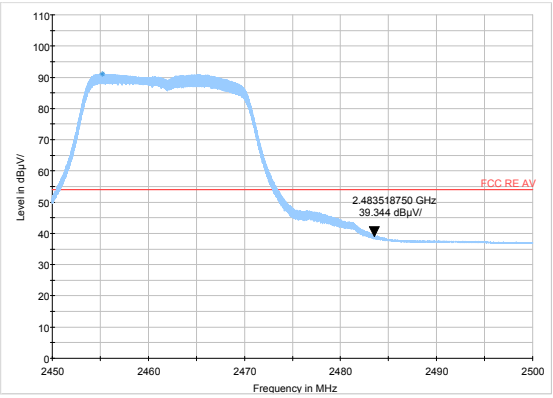


This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

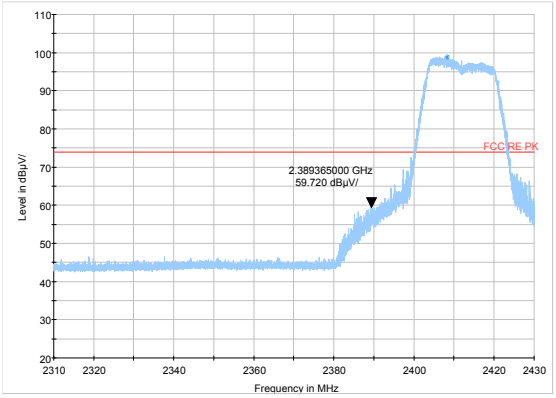
802.11g-Channel 1: Average



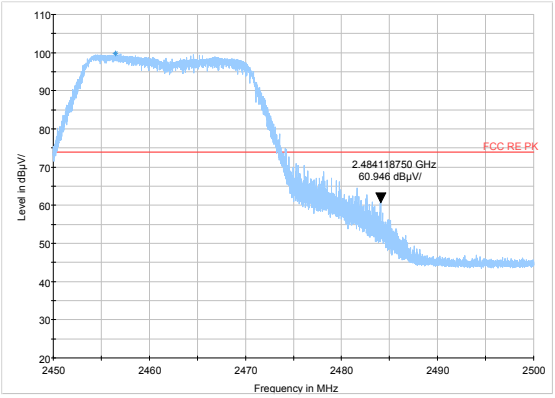
802.11g-Channel 11: Average



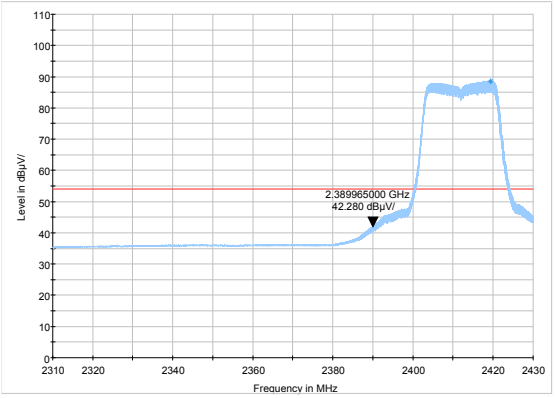
802.11n HT20 -Channel 1: Peak



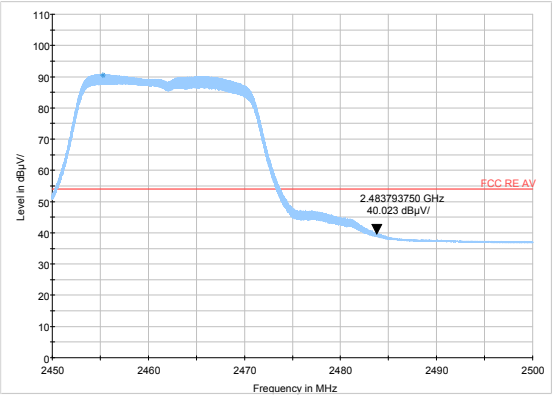
802.11n HT20-Channel 11: Peak



802.11n HT20-Channel 1: Average

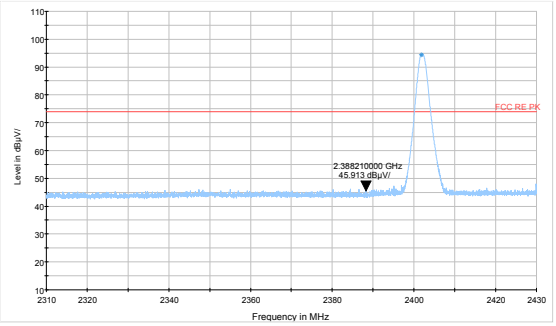


802.11n HT20-Channel 11: Average

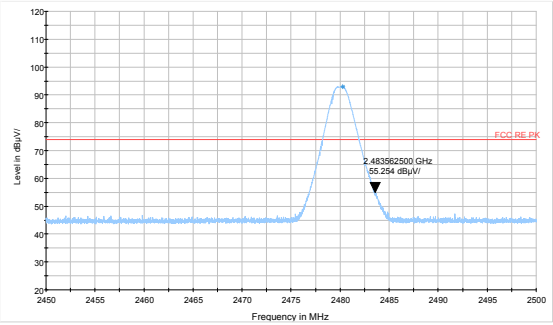


This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

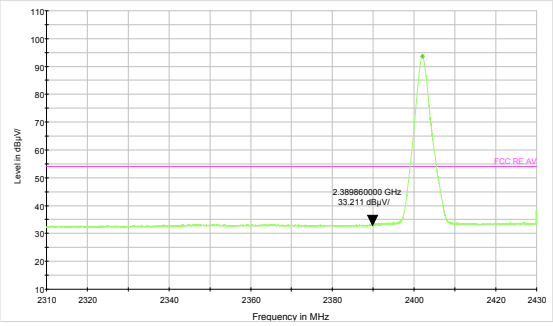
BLE -Channel 0: Peak



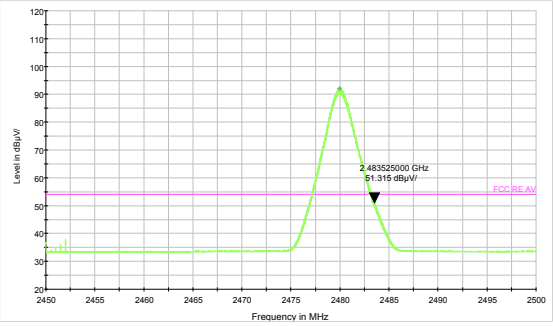
BLE -Channel 39: Peak



BLE -Channel 0: Average



BLE -Channel 39: Average



This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

5.7. Radiates Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	102.5kPa

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10-2013.The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration.
Sweep the whole frequency band through the range from 9 kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

During the test, below 30MHz, the center of the loop shall be 1 meters; above 30MHz, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.
Set the spectrum analyzer in the following:
Below 1GHz (detector: Peak and Quasi-Peak)
RBW=100 kHz / VBW=300 kHz / Sweep=AUTO
Above 1GHz (detector: Peak):
(a) PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO
(b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

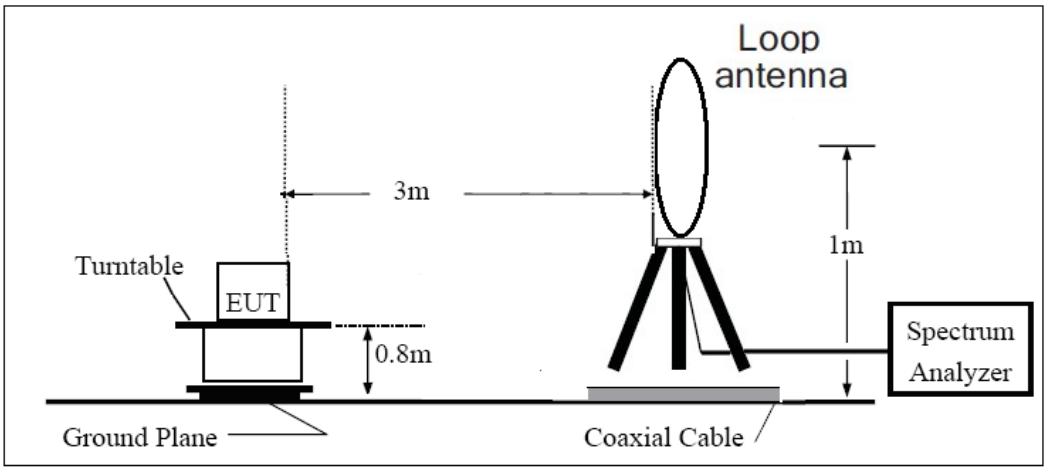
The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the worst case was recorded.

The test is in transmitting mode.

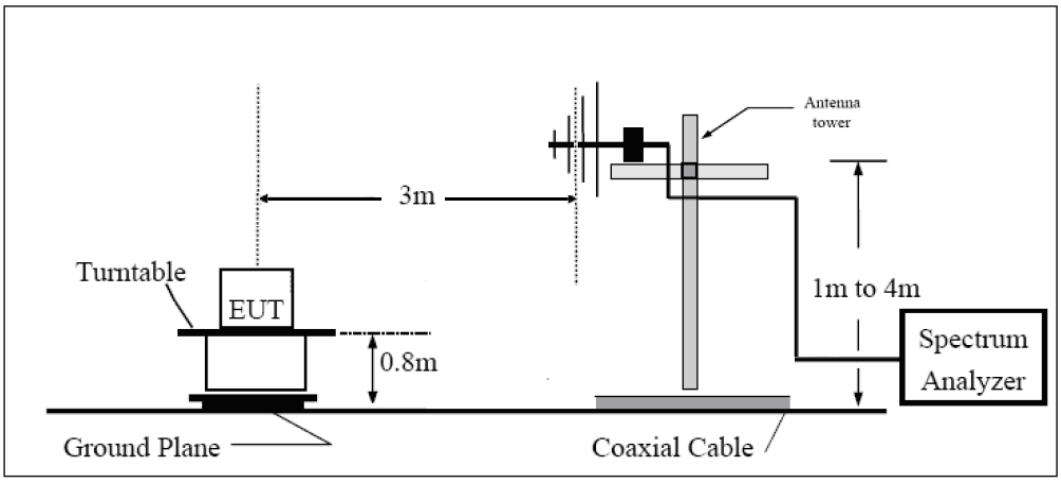
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Test setup

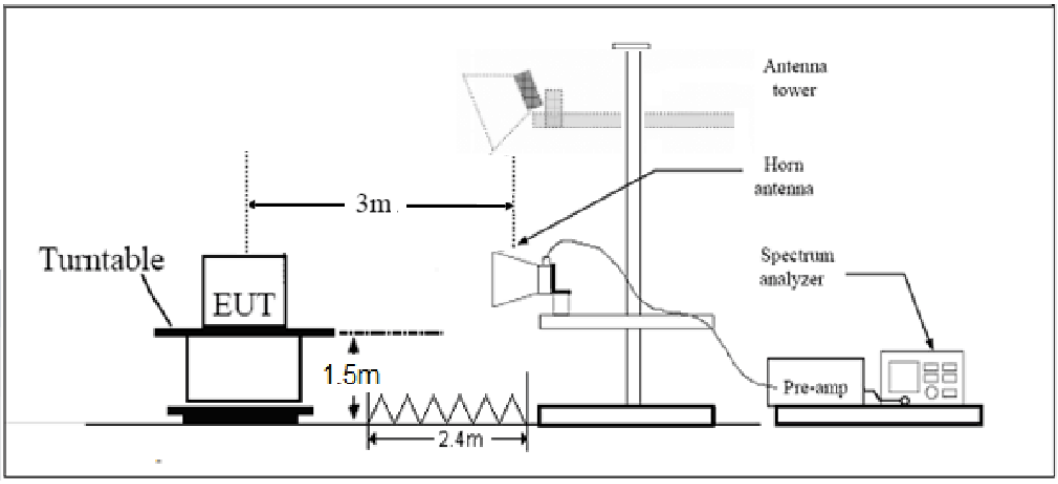
9KHz~~~ 30MHz



30MHz~~~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Limits

Rule Part 15.247(d) specifies that "In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c))."

Limit in restricted band

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
0.009–0.490	2400/F(kHz)	/
0.490–1.705	24000/F(kHz)	/
1.705–30.0	30	/
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

§15.35(b)

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor *k* = 1.96.

Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.19 dB
200MHz-1GHz	3.63 dB
Above 1GHz	3.68 dB

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Test result

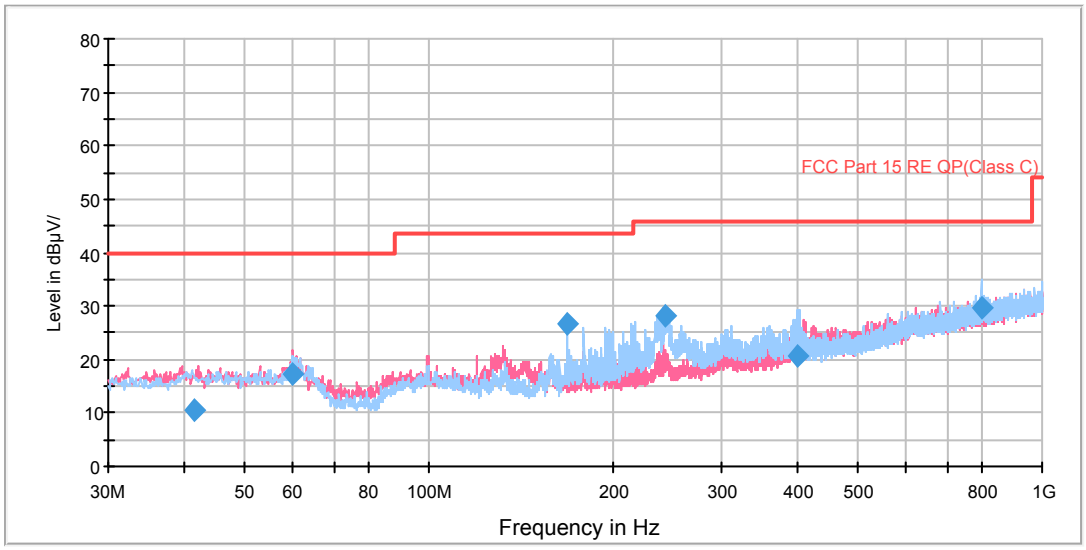
Sweep from 9 kHz to 30MHz, and the emissions more than 20 dB below the permissible value are not reported.

The following graphs display the maximum values of horizontal and vertical by software.

For above 1GHz, Blue trace uses the peak detection, Green trace uses the average detection.

802.11b CH1

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
41.525000	10.6	114.0	V	125.0	23.8	-13.2	29.4	40.0
60.070000	17.3	100.0	V	64.0	29.8	-12.5	22.7	40.0
167.982500	26.5	125.0	H	97.0	36.7	-10.2	17.0	43.5
242.308750	28.0	125.0	H	240.0	41.8	-13.8	18.0	46.0
399.045000	20.8	114.0	H	182.0	38.7	-17.9	25.2	46.0
796.863750	29.7	100.0	H	0.0	54.0	-24.3	16.3	46.0

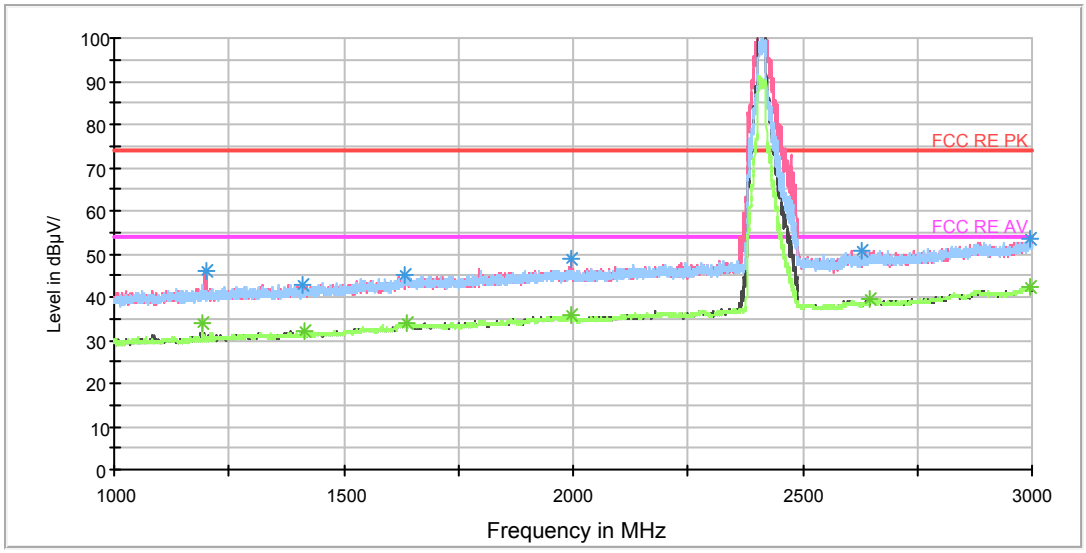
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss (cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1200.000000	46.2	102.0	V	0.0	54.4	-8.2	27.8	74
1408.500000	42.8	102.0	V	291.0	49.9	-7.1	31.2	74
1634.000000	45.2	102.0	V	283.0	49.9	-4.7	28.8	74
1997.000000	48.9	102.0	V	265.0	52.2	-3.3	25.1	74
2627.250000	50.9	102.0	H	145.0	51.0	-0.1	23.1	74
2996.750000	53.5	102.0	H	109.0	55.8	-2.3	20.5	74

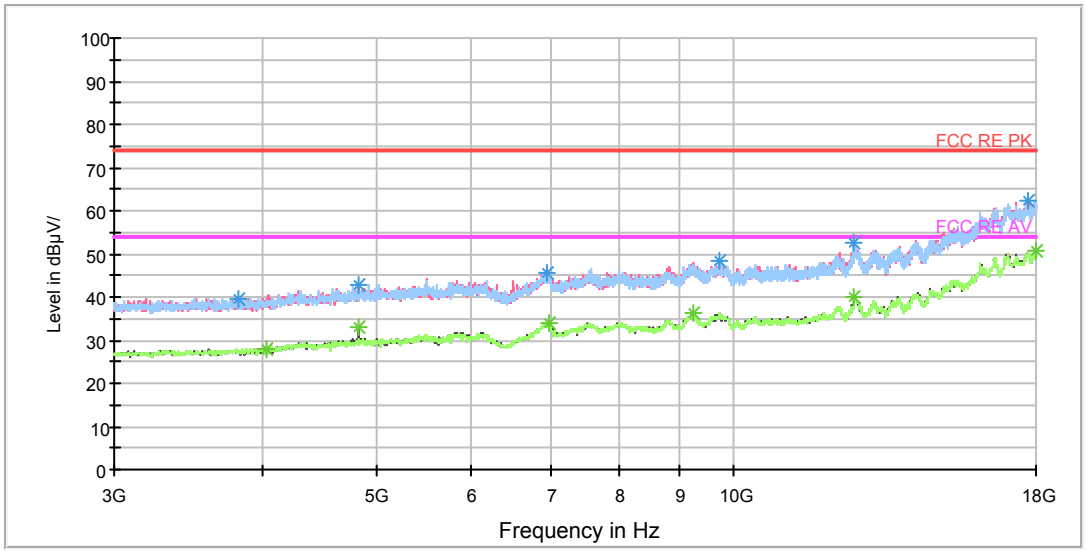
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1193.750000	33.8	102.0	H	218.0	42.0	-8.2	20.2	54
1414.250000	32.1	102.0	H	0.0	39.1	-7.0	21.9	54
1636.500000	34.0	102.0	H	0.0	38.7	-4.7	20.0	54
1995.500000	35.7	102.0	H	0.0	38.9	-3.2	18.3	54
2644.250000	39.7	102.0	V	206.0	40.0	-0.3	14.3	54
2997.000000	42.3	102.0	V	247.0	44.6	-2.3	11.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3817.500000	39.7	102.0	H	0.0	41.5	-1.8	34.3	74
4822.500000	43.0	102.0	V	0.0	44.3	-1.3	31.0	74
6961.875000	45.7	102.0	H	0.0	51.9	-6.2	28.3	74
9740.625000	48.4	102.0	V	0.0	58.4	-10.0	25.6	74
12633.750000	52.3	102.0	V	207.0	66.2	-13.9	21.7	74
17711.250000	62.3	102.0	V	321.0	87.0	-24.7	11.7	74

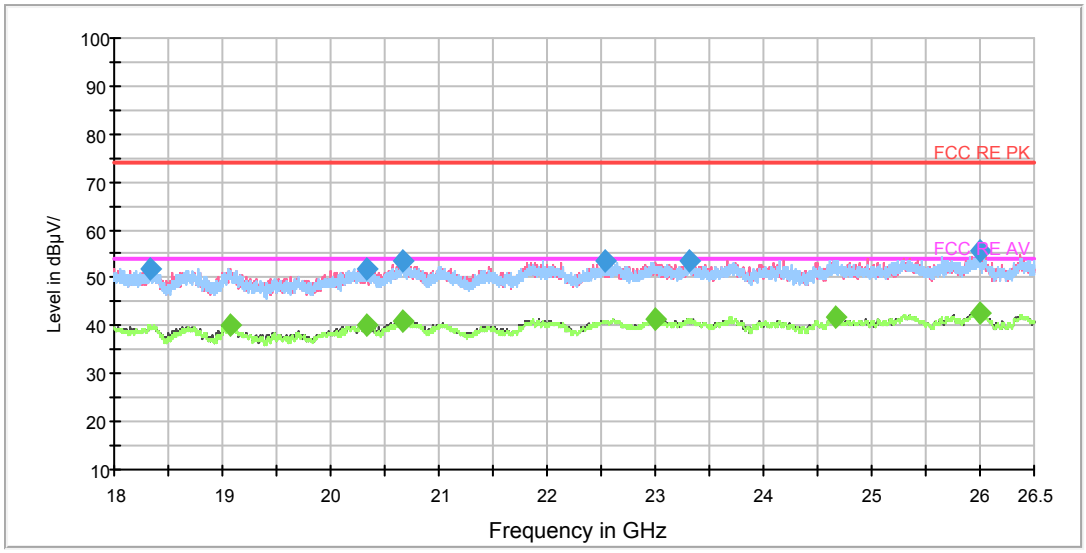
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4036.875000	28.1	102.0	H	106.0	29.1	-1.0	25.9	54
4822.500000	33.3	102.0	V	0.0	34.6	-1.3	20.7	54
6997.500000	34.2	102.0	H	173.0	40.7	-6.5	19.8	54
9238.125000	36.4	102.0	H	0.0	46.3	-9.9	17.6	54
12639.375000	40.2	102.0	H	265.0	54.7	-14.5	13.8	54
18000.000000	50.5	102.0	V	343.0	76.0	-25.5	3.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18341.062500	52.0	H	91.0	55.2	-3.2	22.0	74.0
20336.437500	51.9	V	269.0	57.9	-6.0	22.1	74.0
20675.375000	53.5	H	90.0	60.1	-6.6	20.5	74.0
22545.375000	53.7	H	108.0	60.5	-6.8	20.3	74.0
23308.250000	53.7	V	270.0	59.7	-6.0	20.3	74.0
25991.062500	55.5	V	270.0	60.9	-5.4	18.5	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

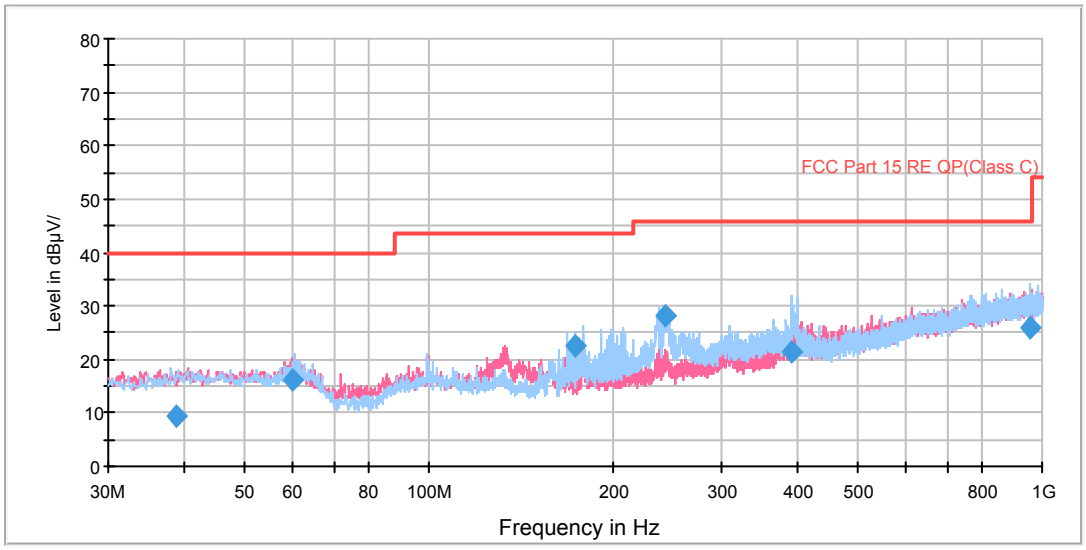
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19066.750000	40.2	H	90.0	45.4	-5.2	13.8	54.0
20325.812500	40.1	H	199.0	46.1	-6.0	13.9	54.0
20674.312500	41.0	V	198.0	47.6	-6.6	13.0	54.0
22993.750000	41.4	H	162.0	47.6	-6.2	12.6	54.0
24659.750000	41.9	H	90.0	47.9	-6.0	12.1	54.0
25993.187500	42.8	H	91.0	48.2	-5.4	11.2	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11b CH6

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
38.602500	9.3	114.0	H	293.0	22.1	-12.8	30.7	40.0
59.993750	16.3	125.0	H	352.0	28.8	-12.5	23.7	40.0
173.112500	22.4	125.0	H	279.0	32.9	-10.5	21.1	43.5
242.308750	28.0	125.0	H	236.0	41.8	-13.8	18.0	46.0
391.038750	21.4	100.0	H	181.0	39.1	-17.7	24.6	46.0
958.293750	25.9	100.0	H	313.0	52.1	-26.2	20.1	46.0

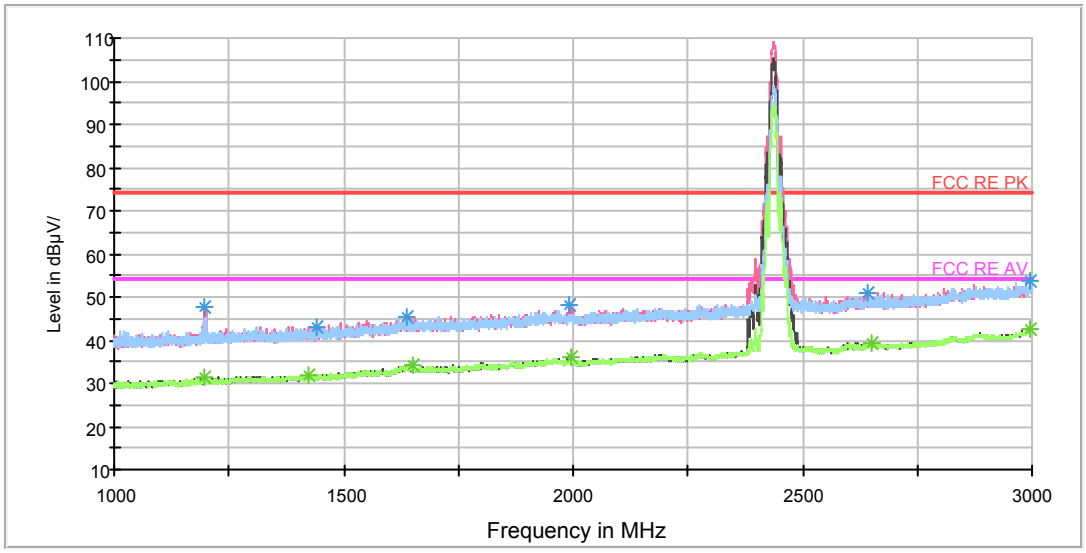
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss (cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	47.8	102.0	V	214.0	56.0	-8.2	26.2	74
1440.750000	43.2	102.0	H	41.0	50.1	-6.9	30.8	74
1639.500000	45.4	102.0	H	0.0	50.1	-4.7	28.6	74
1991.250000	48.3	102.0	V	0.0	51.6	-3.3	25.7	74
2643.250000	50.9	102.0	V	0.0	51.1	-0.2	23.1	74
2996.250000	53.7	102.0	H	67.0	56.0	-2.3	20.3	74

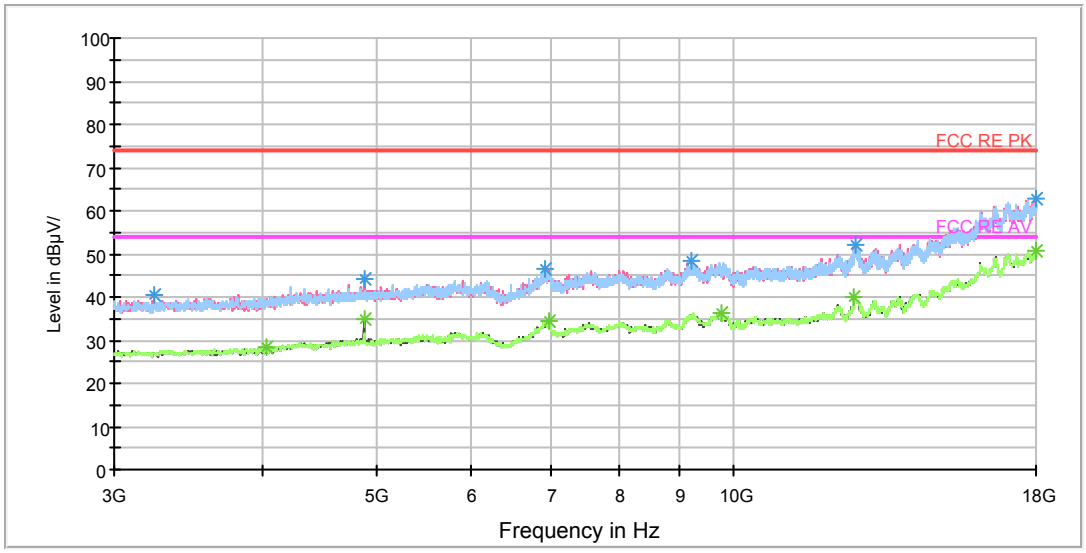
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.000000	31.3	102.0	H	233.0	39.5	-8.2	22.7	54
1424.250000	31.9	102.0	V	0.0	38.8	-6.9	22.1	54
1649.250000	34.2	102.0	V	0.0	39.3	-5.1	19.8	54
1996.000000	36.0	102.0	V	267.0	39.3	-3.3	18.0	54
2649.250000	39.3	102.0	H	187.0	39.7	-0.4	14.7	54
2995.250000	42.5	102.0	V	346.0	44.8	-2.3	11.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3245.625000	40.6	102.0	H	17.0	43.2	-2.6	33.4	74
4873.125000	44.0	102.0	V	0.0	45.8	-1.8	30.0	74
6931.875000	46.5	102.0	H	85.0	52.7	-6.2	27.5	74
9204.375000	48.2	102.0	V	232.0	58.4	-10.2	25.8	74
12658.125000	52.3	102.0	V	0.0	66.2	-13.9	21.7	74
17986.875000	62.6	102.0	V	0.0	87.7	-25.1	11.4	74

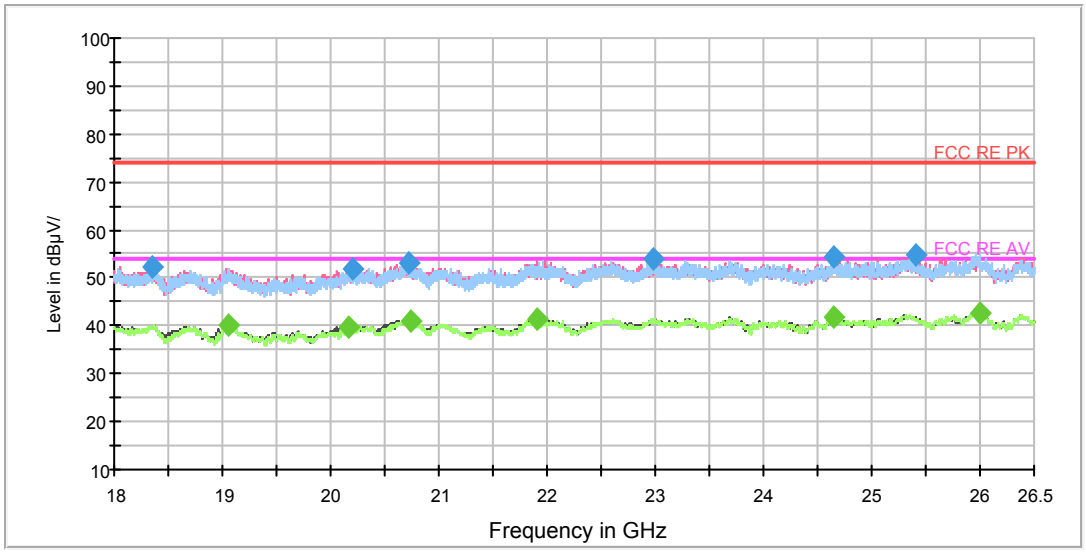
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4040.625000	28.2	102.0	V	232.0	29.2	-1.0	25.8	54
4873.125000	35.0	102.0	V	0.0	36.8	-1.8	19.0	54
6993.750000	34.3	102.0	H	85.0	40.8	-6.5	19.7	54
9748.125000	36.4	102.0	V	0.0	46.2	-9.8	17.6	54
12639.375000	40.1	102.0	H	0.0	54.6	-14.5	13.9	54
17998.125000	50.7	102.0	V	300.0	76.1	-25.4	3.3	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18358.062500	52.2	V	267.0	55.5	-3.3	21.8	74.0
20201.500000	52.0	V	270.0	57.9	-5.9	22.0	74.0
20723.187500	53.1	H	126.0	59.8	-6.7	20.9	74.0
22978.875000	54.0	H	91.0	60.2	-6.2	20.0	74.0
24643.812500	54.2	H	180.0	60.2	-6.0	19.8	74.0
25399.250000	54.9	H	90.0	60.7	-5.8	19.1	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

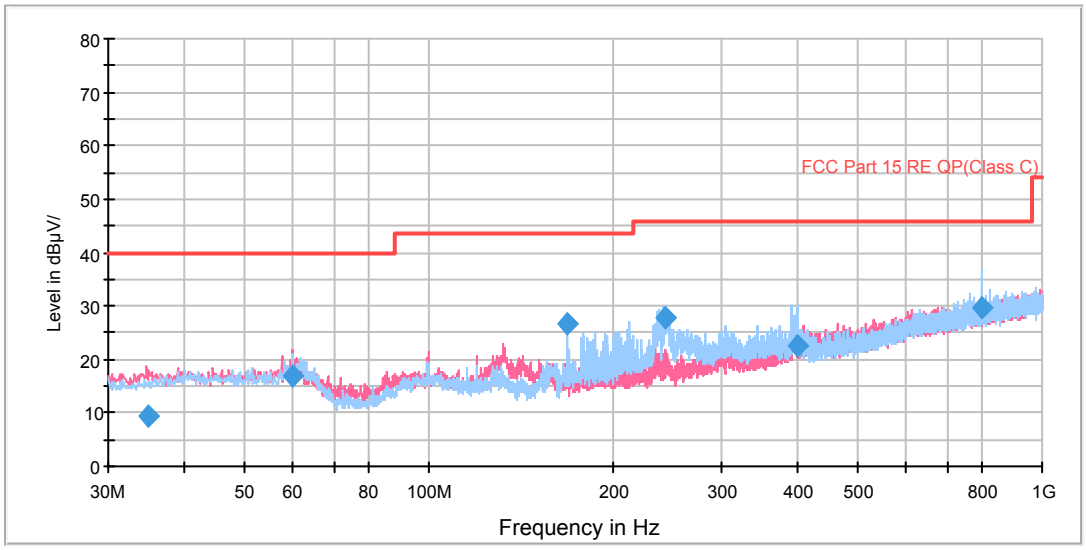
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19057.187500	40.3	V	90.0	45.5	-5.2	13.7	54.0
20159.000000	39.9	H	108.0	45.7	-5.8	14.1	54.0
20740.187500	41.0	V	142.0	47.8	-6.8	13.0	54.0
21913.187500	41.5	V	90.0	49.5	-8.0	12.5	54.0
24653.375000	42.0	V	250.0	48.0	-6.0	12.0	54.0
25992.125000	42.8	H	90.0	48.2	-5.4	11.2	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11b CH11

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.888750	9.4	100.0	V	199.0	21.3	-11.9	30.6	40.0
60.068750	17.0	100.0	V	63.0	29.5	-12.5	23.0	40.0
167.982500	26.6	125.0	H	98.0	36.8	-10.2	16.9	43.5
242.343750	27.7	125.0	H	252.0	41.5	-13.8	18.3	46.0
399.565000	22.6	100.0	H	176.0	40.5	-17.9	23.4	46.0
796.863750	29.8	100.0	H	0.0	54.1	-24.3	16.2	46.0

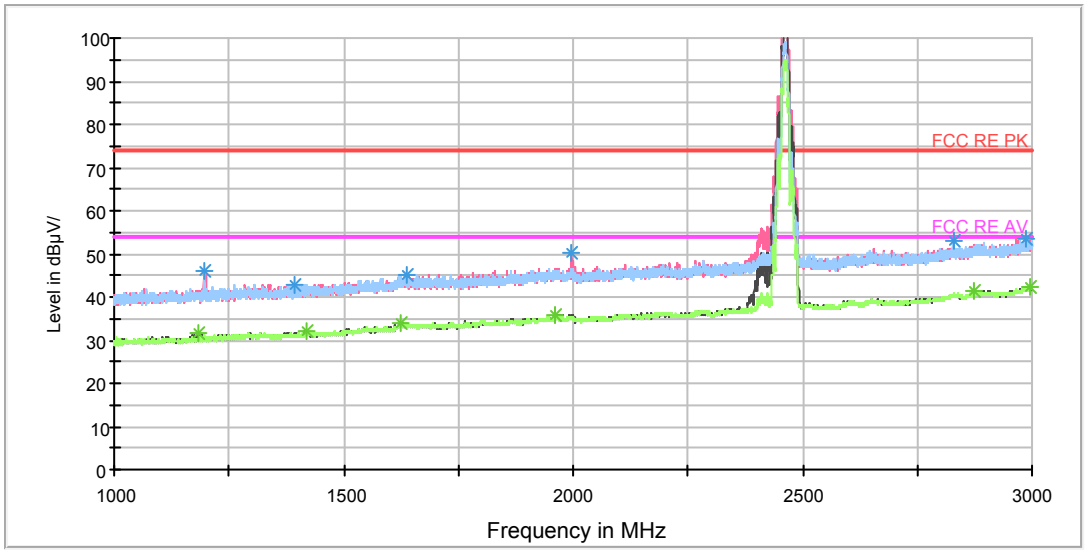
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.750000	46.1	102.0	H	203.0	54.3	-8.2	27.9	74
1391.750000	43.0	102.0	V	204.0	50.0	-7.0	31.0	74
1636.500000	45.1	102.0	V	40.0	49.8	-4.7	28.9	74
1993.750000	50.3	102.0	V	0.0	53.6	-3.3	23.7	74
2827.750000	52.9	102.0	H	158.0	54.5	-1.6	21.1	74
2984.750000	53.6	102.0	V	347.0	55.8	-2.2	20.4	74

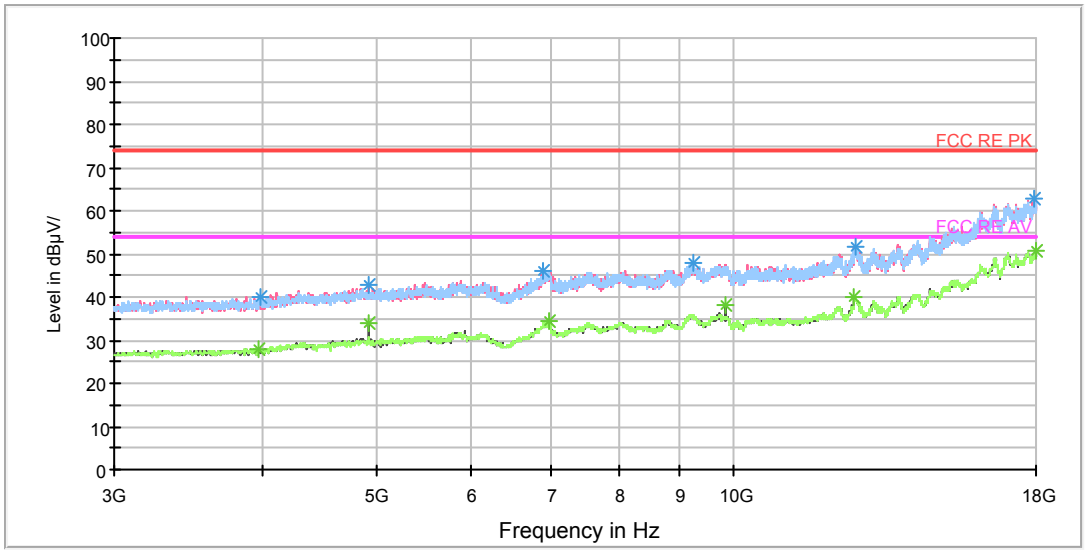
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1184.750000	31.7	102.0	V	356.0	39.8	-8.1	22.3	54
1420.000000	32.1	102.0	H	212.0	39.0	-6.9	21.9	54
1624.750000	34.1	102.0	V	71.0	38.9	-4.8	19.9	54
1962.250000	35.8	102.0	V	295.0	39.1	-3.3	18.2	54
2873.750000	41.4	102.0	H	212.0	43.7	-2.3	12.6	54
2997.000000	42.5	102.0	V	117.0	44.8	-2.3	11.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3990.000000	40.2	102.0	H	222.0	41.2	-1.0	33.8	74
4923.750000	42.8	102.0	V	0.0	44.7	-1.9	31.2	74
6905.625000	46.1	102.0	H	269.0	52.4	-6.3	27.9	74
9240.000000	47.8	102.0	H	292.0	57.7	-9.9	26.2	74
12688.125000	51.6	102.0	V	67.0	65.8	-14.2	22.4	74
17915.625000	62.6	102.0	H	63.0	88.2	-25.6	11.4	74

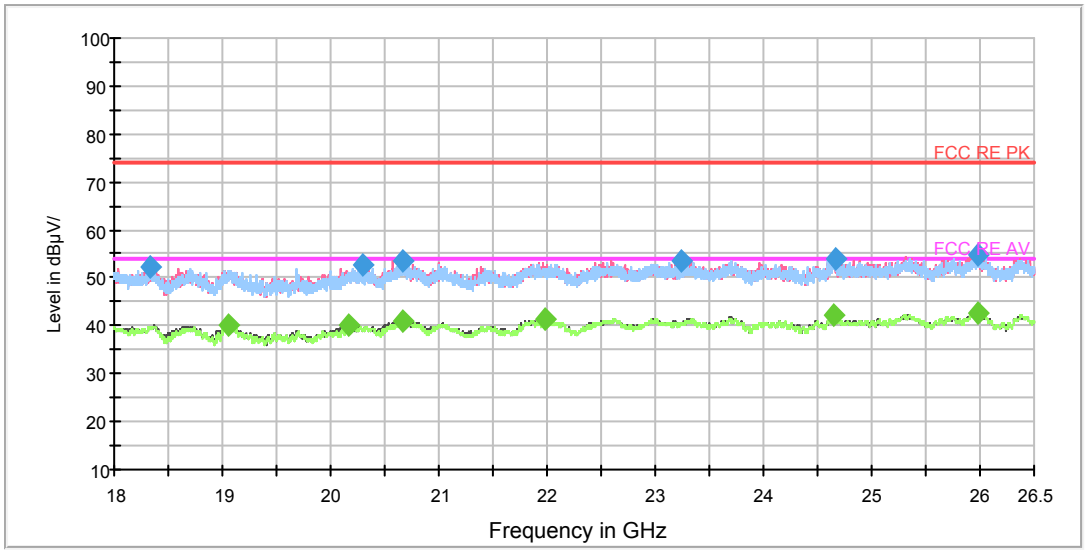
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3973.125000	28.1	102.0	H	222.0	29.0	-0.9	25.9	54
4923.750000	34.0	102.0	V	0.0	35.9	-1.9	20.0	54
6997.500000	34.2	102.0	V	138.0	40.7	-6.5	19.8	54
9847.500000	38.1	102.0	V	340.0	48.4	-10.3	15.9	54
12643.125000	40.1	102.0	V	0.0	54.5	-14.4	13.9	54
18000.000000	50.6	102.0	H	0.0	76.1	-25.5	3.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18333.625000	52.1	V	180.0	55.3	-3.2	21.9	74.0
20291.812500	52.7	H	162.0	58.7	-6.0	21.3	74.0
20658.375000	53.5	V	270.0	60.1	-6.6	20.5	74.0
23231.750000	53.4	H	162.0	59.4	-6.0	20.6	74.0
24658.687500	54.0	V	270.0	60.0	-6.0	20.0	74.0
25977.250000	54.7	V	215.0	60.1	-5.4	19.3	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

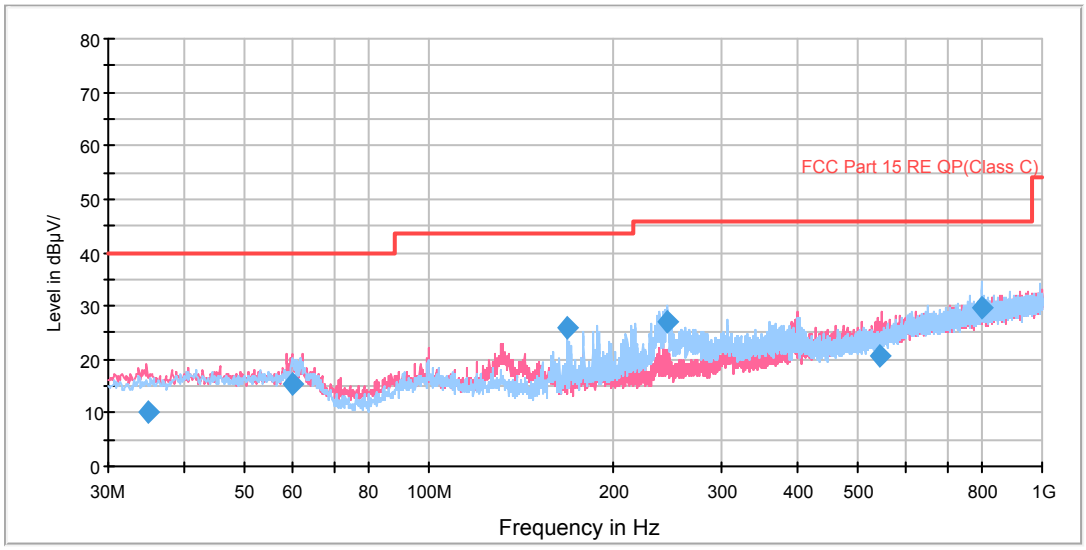
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19061.437500	40.2	V	270.0	45.4	-5.2	13.8	54.0
20159.000000	40.0	H	109.0	45.8	-5.8	14.0	54.0
20664.750000	41.1	V	270.0	47.7	-6.6	12.9	54.0
21974.812500	41.5	V	251.0	49.5	-8.0	12.5	54.0
24653.375000	42.2	V	161.0	48.2	-6.0	11.8	54.0
25990.000000	42.8	V	143.0	48.2	-5.4	11.2	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11g CH1

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.808750	10.0	114.0	V	315.0	21.9	-11.9	30.0	40.0
60.027500	15.5	100.0	V	106.0	28.0	-12.5	24.5	40.0
167.982500	25.8	125.0	H	111.0	36.0	-10.2	17.7	43.5
244.131250	27.2	125.0	H	242.0	41.1	-13.9	18.8	46.0
545.358750	20.5	100.0	V	15.0	41.4	-20.9	25.5	46.0
799.446250	29.5	100.0	H	0.0	53.9	-24.4	16.5	46.0

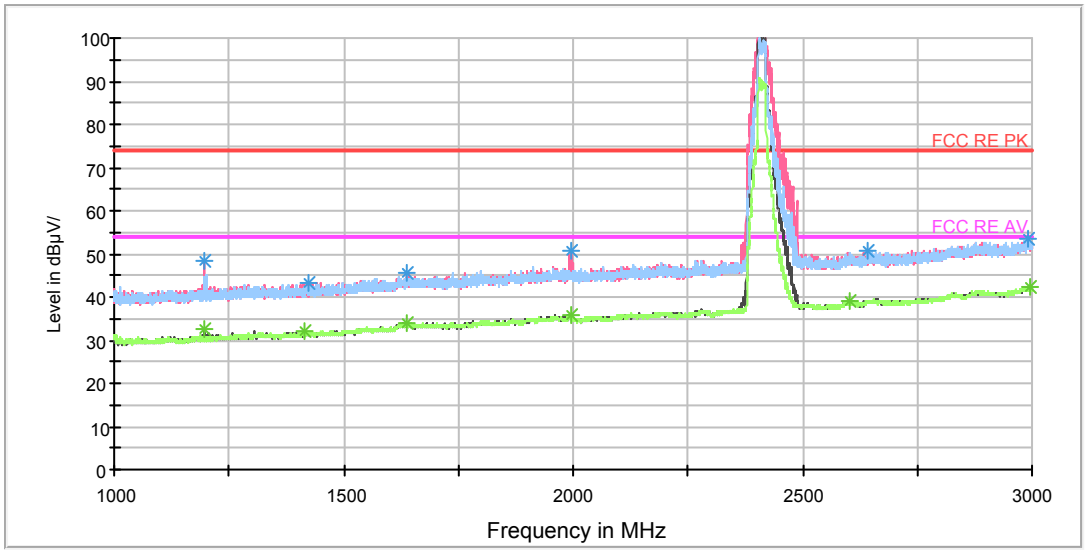
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.750000	48.3	102.0	V	31.0	56.5	-8.2	25.7	74
1422.750000	43.3	102.0	V	276.0	50.2	-6.9	30.7	74
1638.250000	45.4	102.0	H	319.0	50.1	-4.7	28.6	74
1997.750000	50.8	102.0	V	0.0	54.1	-3.3	23.2	74
2643.250000	50.5	102.0	H	95.0	50.7	-0.2	23.5	74
2989.500000	53.4	102.0	H	250.0	55.6	-2.2	20.6	74

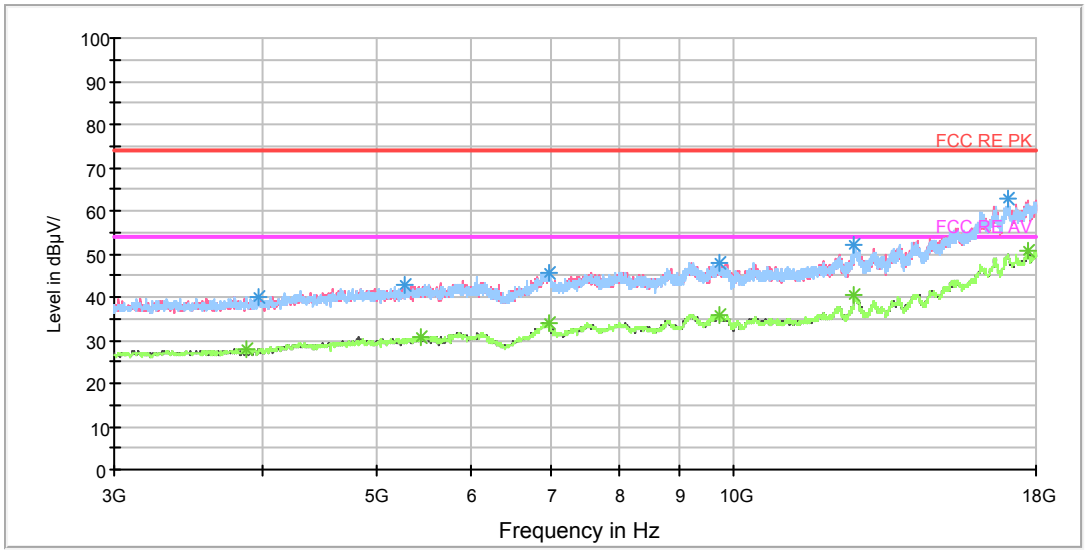
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.500000	32.7	102.0	V	31.0	40.9	-8.2	21.3	54
1414.500000	31.9	102.0	H	168.0	38.9	-7.0	22.1	54
1639.500000	34.0	102.0	V	61.0	38.7	-4.7	20.0	54
1995.000000	35.8	102.0	H	0.0	39.0	-3.2	18.2	54
2603.750000	39.1	102.0	V	0.0	39.4	-0.3	14.9	54
2995.750000	42.5	102.0	V	70.0	44.8	-2.3	11.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3976.875000	40.1	102.0	H	62.0	41.0	-0.9	33.9	74
5278.125000	42.6	102.0	H	0.0	44.8	-2.2	31.4	74
6988.125000	45.6	102.0	H	0.0	52.0	-6.4	28.4	74
9738.750000	47.9	102.0	H	87.0	57.9	-10.0	26.1	74
12648.750000	52.0	102.0	H	0.0	66.2	-14.2	22.0	74
17015.625000	62.8	102.0	V	0.0	87.3	-24.5	11.2	74

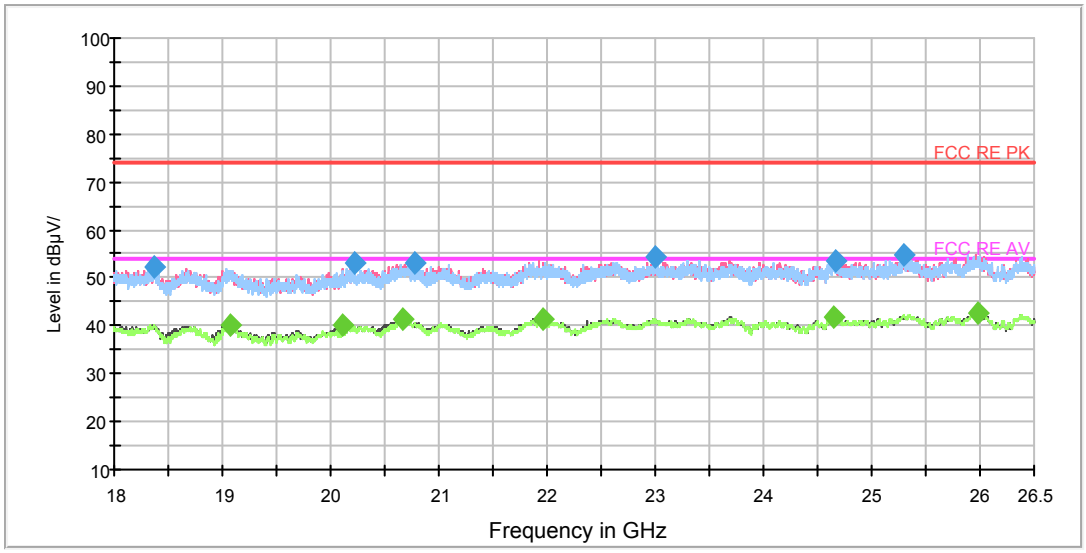
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3875.625000	28.1	102.0	V	343.0	29.5	-1.4	25.9	54
5446.875000	30.8	102.0	H	0.0	33.6	-2.8	23.2	54
6993.750000	34.2	102.0	V	320.0	40.7	-6.5	19.8	54
9740.625000	36.0	102.0	H	110.0	46.0	-10.0	18.0	54
12641.250000	40.3	102.0	H	269.0	54.8	-14.5	13.7	54
17709.375000	50.5	102.0	V	0.0	75.2	-24.7	3.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18370.812500	52.2	V	90.0	55.6	-3.4	21.8	74.0
20217.437500	53.0	V	198.0	58.9	-5.9	21.0	74.0
20774.187500	53.3	V	198.0	60.2	-6.9	20.7	74.0
23007.562500	54.2	V	233.0	60.4	-6.2	19.8	74.0
24657.625000	53.6	V	233.0	59.6	-6.0	20.4	74.0
25288.750000	54.7	V	161.0	60.5	-5.8	19.3	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

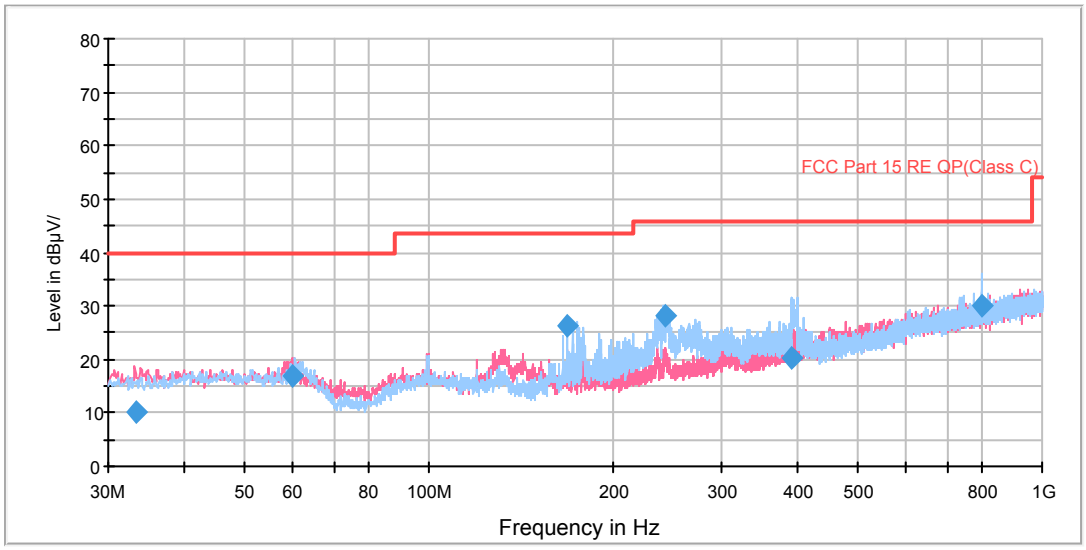
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19068.875000	40.3	V	90.0	45.5	-5.2	13.7	54.0
20108.000000	40.1	V	90.0	45.9	-5.8	13.9	54.0
20675.375000	41.2	H	124.0	47.8	-6.6	12.8	54.0
21966.312500	41.5	V	215.0	49.5	-8.0	12.5	54.0
24655.500000	41.9	V	215.0	47.9	-6.0	12.1	54.0
25987.875000	42.7	V	270.0	48.1	-5.4	11.3	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11g CH6

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
33.352500	10.3	100.0	V	30.0	22.2	-11.9	29.7	40.0
60.035000	16.8	100.0	V	68.0	29.3	-12.5	23.2	40.0
167.982500	26.5	125.0	H	92.0	36.7	-10.2	17.0	43.5
242.302500	28.0	125.0	H	240.0	41.8	-13.8	18.0	46.0
390.642500	20.3	100.0	H	212.0	38.0	-17.7	25.7	46.0
799.457500	29.9	100.0	H	0.0	54.3	-24.4	16.1	46.0

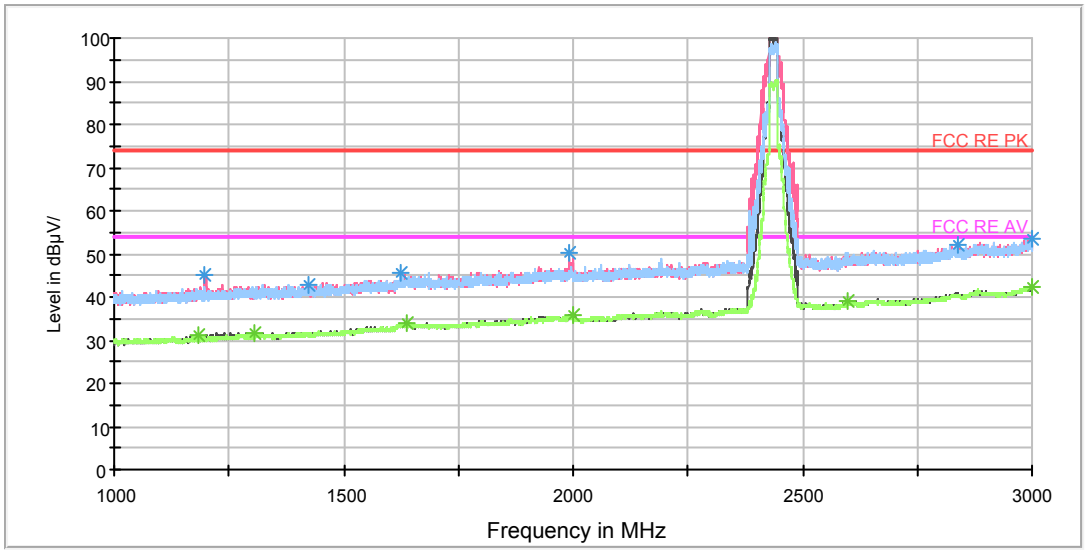
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.000000	45.3	102.0	V	198.0	53.5	-8.2	28.7	74
1422.500000	43.0	102.0	V	46.0	49.9	-6.9	31.0	74
1624.250000	45.5	102.0	H	178.0	50.3	-4.8	28.5	74
1993.000000	50.2	102.0	V	347.0	53.5	-3.3	23.8	74
2838.500000	52.2	102.0	V	198.0	53.7	-1.5	21.8	74
2999.750000	53.4	102.0	V	330.0	55.7	-2.3	20.6	74

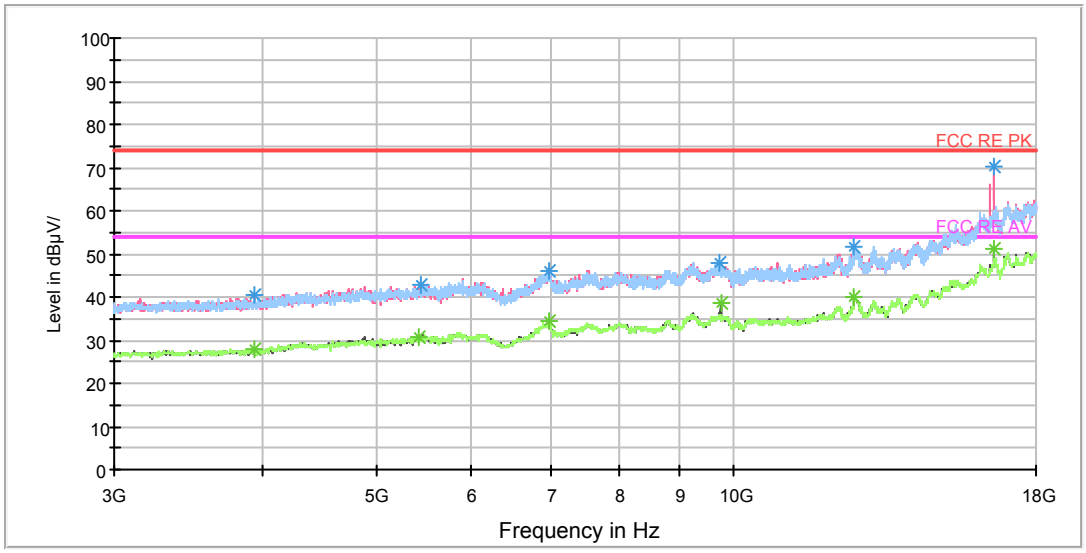
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1185.500000	31.2	102.0	V	0.0	39.3	-8.1	22.8	54
1306.000000	31.8	102.0	V	7.0	39.6	-7.8	22.2	54
1639.000000	34.0	102.0	V	277.0	38.7	-4.7	20.0	54
2001.750000	35.8	102.0	V	0.0	39.2	-3.4	18.2	54
2599.000000	39.0	102.0	V	304.0	39.4	-0.4	15.0	54
2999.250000	42.3	102.0	V	268.0	44.6	-2.3	11.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3943.125000	40.5	102.0	V	0.0	41.6	-1.1	33.5	74
5435.625000	42.9	102.0	V	318.0	45.8	-2.9	31.1	74
6997.500000	46.2	102.0	H	341.0	52.7	-6.5	27.8	74
9735.000000	48.0	102.0	V	318.0	57.9	-9.9	26.0	74
12641.250000	51.6	102.0	H	0.0	66.1	-14.5	22.4	74
16573.125000	70.4	102.0	V	251.0	93.1	-22.7	3.6	74

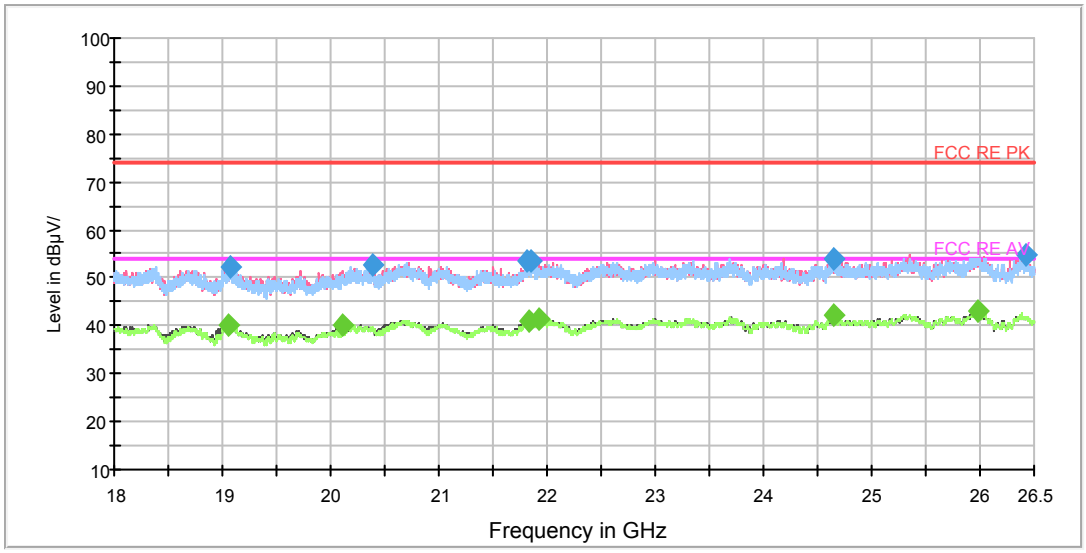
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3939.375000	27.9	102.0	V	137.0	29.0	-1.1	26.1	54
5420.625000	30.8	102.0	H	127.0	33.5	-2.7	23.2	54
6993.750000	34.2	102.0	V	0.0	40.7	-6.5	19.8	54
9748.125000	38.6	102.0	V	341.0	48.4	-9.8	15.4	54
12646.875000	39.9	102.0	V	0.0	54.2	-14.3	14.1	54
16573.125000	51.3	102.0	V	251.0	74.0	-22.7	2.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19067.812500	52.3	V	270.0	57.5	-5.2	21.7	74.0
20393.812500	52.5	H	180.0	58.6	-6.1	21.5	74.0
21823.937500	53.5	V	270.0	61.5	-8.0	20.5	74.0
21859.000000	53.7	H	180.0	61.7	-8.0	20.3	74.0
24642.750000	54.1	V	270.0	60.1	-6.0	19.9	74.0
26428.812500	55.0	H	90.0	60.4	-5.4	19.0	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

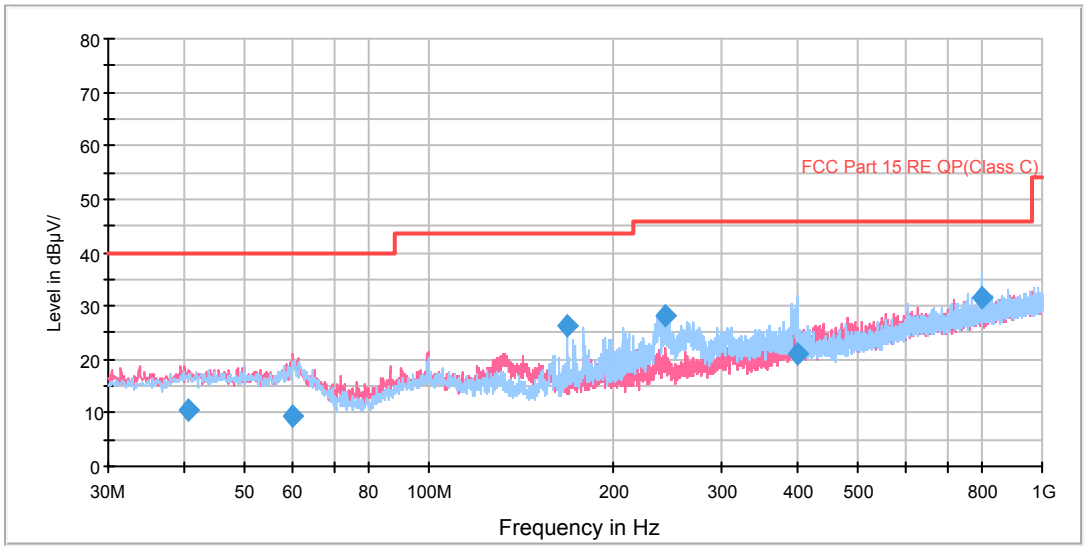
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19061.437500	40.3	H	235.0	45.5	-5.2	13.7	54.0
20111.187500	40.0	V	270.0	45.8	-5.8	14.0	54.0
21826.062500	41.1	H	255.0	49.1	-8.0	12.9	54.0
21919.562500	41.3	V	270.0	49.3	-8.0	12.7	54.0
24653.375000	42.0	V	233.0	48.0	-6.0	12.0	54.0
25988.937500	42.9	V	233.0	48.3	-5.4	11.1	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11g CH11

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.383750	10.4	100.0	V	30.0	23.6	-13.2	29.6	40.0
59.990000	9.4	100.0	V	112.0	21.9	-12.5	30.6	40.0
167.982500	26.3	125.0	H	97.0	36.5	-10.2	17.2	43.5
242.348750	28.0	125.0	H	241.0	41.8	-13.8	18.0	46.0
399.125000	20.9	114.0	H	194.0	38.8	-17.9	25.1	46.0
799.285000	31.4	100.0	H	52.0	55.8	-24.4	14.6	46.0

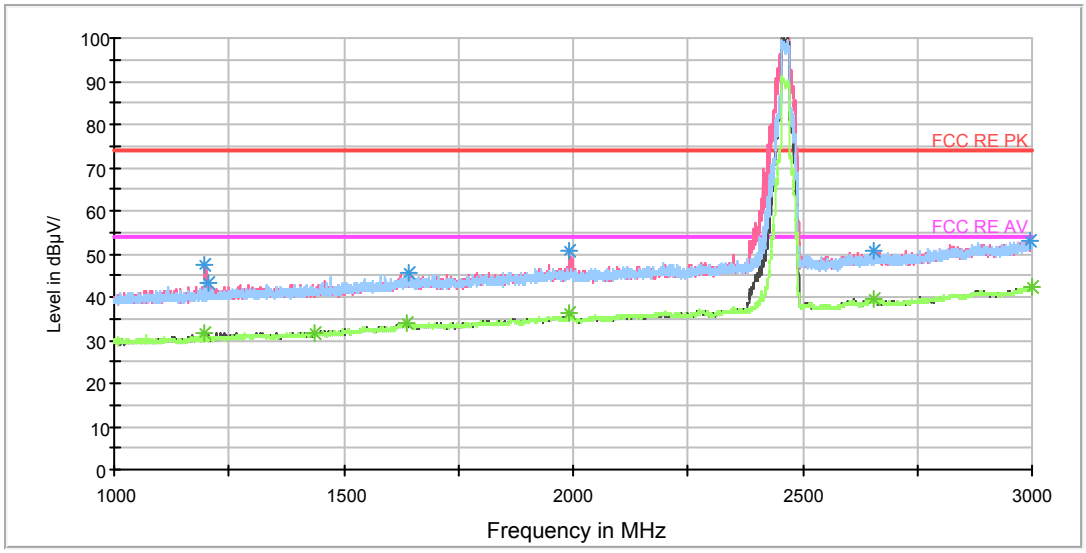
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.500000	47.4	102.0	V	202.0	55.6	-8.2	26.6	74
1205.250000	43.2	102.0	H	77.0	51.3	-8.1	30.8	74
1643.250000	45.4	102.0	H	42.0	50.2	-4.8	28.6	74
1992.750000	50.7	102.0	V	343.0	54.0	-3.3	23.3	74
2656.750000	50.6	102.0	V	352.0	51.0	-0.4	23.4	74
2995.000000	53.2	102.0	V	211.0	55.5	-2.3	20.8	74

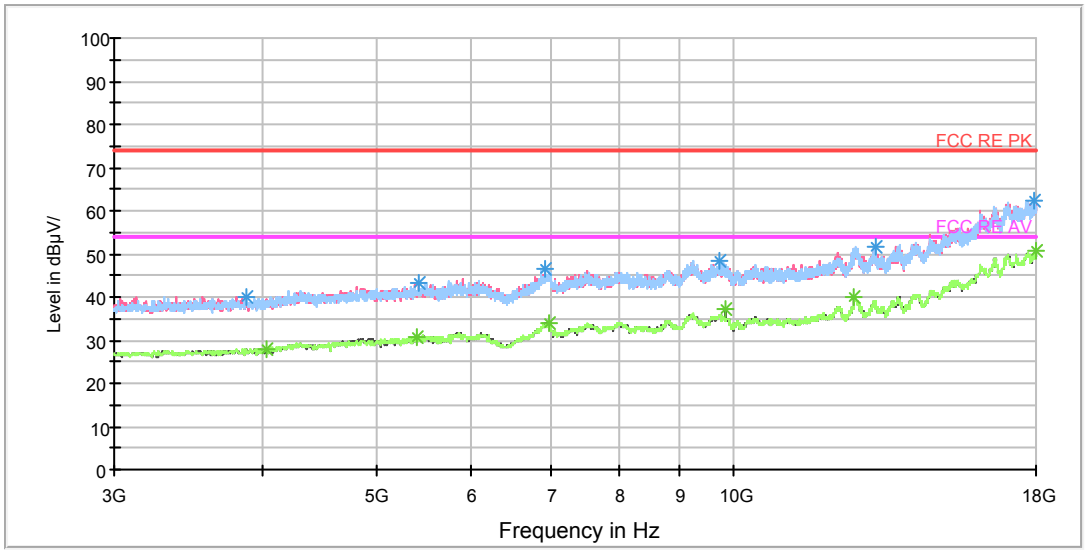
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.000000	31.6	102.0	V	202.0	39.8	-8.2	22.4	54
1434.500000	31.8	102.0	V	120.0	38.7	-6.9	22.2	54
1638.500000	34.0	102.0	H	139.0	38.7	-4.7	20.0	54
1993.000000	36.4	102.0	V	352.0	39.7	-3.3	17.6	54
2654.000000	39.4	102.0	H	0.0	39.8	-0.4	14.6	54
3000.000000	42.5	102.0	H	34.0	44.8	-2.3	11.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3879.375000	39.9	102.0	H	131.0	41.2	-1.3	34.1	74
5420.625000	43.0	102.0	V	229.0	45.7	-2.7	31.0	74
6924.375000	46.6	102.0	H	0.0	52.8	-6.2	27.4	74
9740.625000	48.3	102.0	H	269.0	58.3	-10.0	25.7	74
13156.875000	51.7	102.0	H	153.0	65.8	-14.1	22.3	74
17921.250000	62.1	102.0	H	0.0	87.8	-25.7	11.9	74

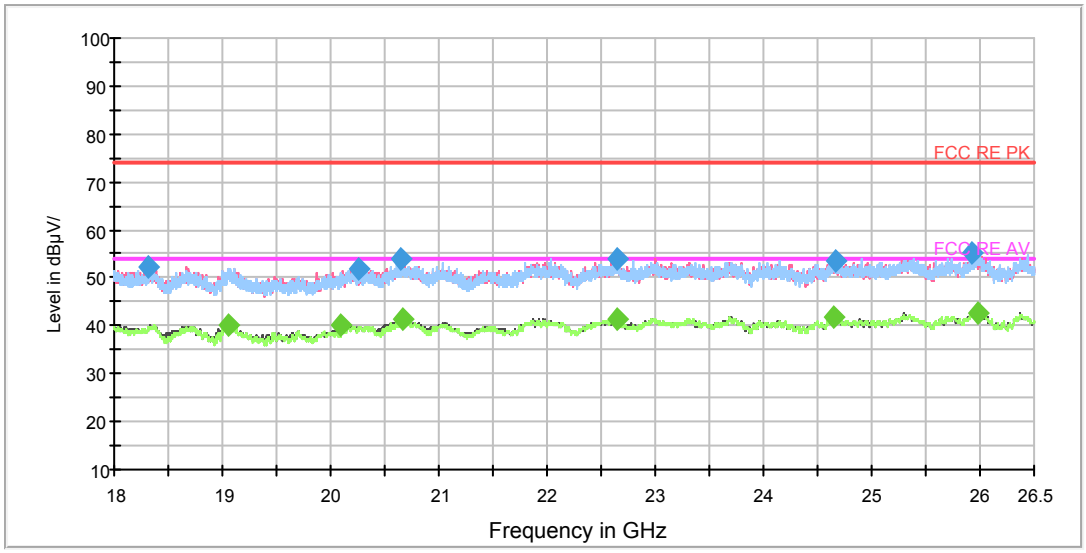
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4040.625000	28.0	102.0	H	17.0	29.0	-1.0	26.0	54
5409.375000	30.8	102.0	H	64.0	33.4	-2.6	23.2	54
6995.625000	34.2	102.0	V	229.0	40.7	-6.5	19.8	54
9847.500000	37.4	102.0	V	0.0	47.7	-10.3	16.6	54
12645.000000	40.1	102.0	V	0.0	54.5	-14.4	13.9	54
18000.000000	50.6	102.0	H	131.0	76.1	-25.5	3.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18317.687500	52.3	H	107.0	55.4	-3.1	21.7	74.0
20268.437500	51.7	H	90.0	57.6	-5.9	22.3	74.0
20644.562500	53.8	V	270.0	60.4	-6.6	20.2	74.0
22641.000000	54.0	V	270.0	60.7	-6.7	20.0	74.0
24660.812500	53.6	H	90.0	59.6	-6.0	20.4	74.0
25934.750000	55.1	H	125.0	60.5	-5.4	18.9	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

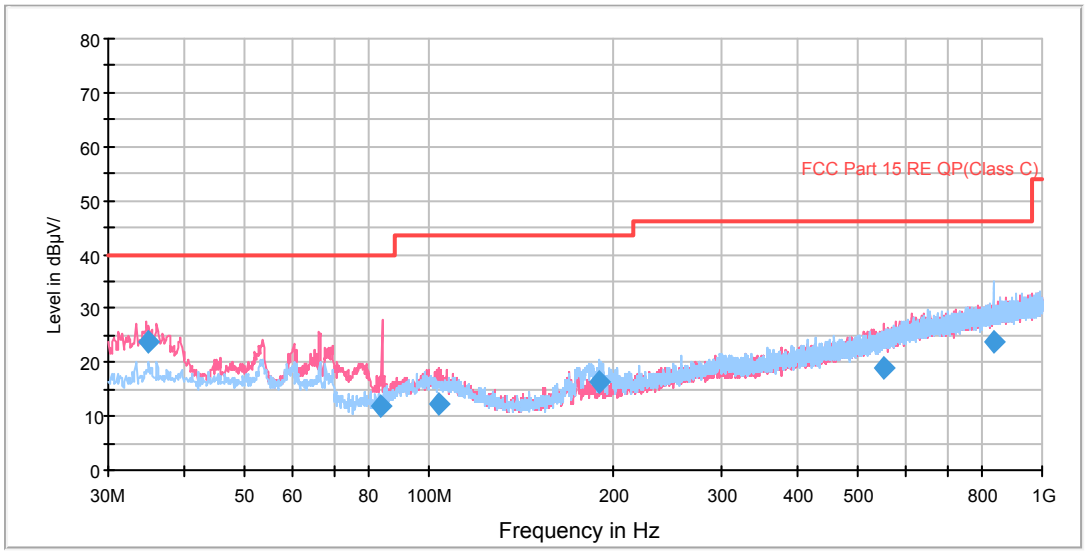
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19064.625000	40.3	V	143.0	45.5	-5.2	13.7	54.0
20098.437500	40.0	V	143.0	45.8	-5.8	14.0	54.0
20672.187500	41.2	H	90.0	47.8	-6.6	12.8	54.0
22651.625000	41.3	H	107.0	47.9	-6.6	12.7	54.0
24654.437500	42.0	V	215.0	48.0	-6.0	12.0	54.0
25984.687500	42.8	H	90.0	48.2	-5.4	11.2	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11n (HT20) CH1

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.967500	23.6	100.0	V	19.0	35.5	-11.9	16.4	40.0
83.635000	11.9	125.0	V	286.0	21.7	-9.8	28.1	40.0
103.720000	12.3	100.0	V	217.0	25.2	-12.9	31.2	43.5
190.043750	16.4	100.0	H	118.0	27.9	-11.5	27.1	43.5
551.695000	18.9	125.0	V	307.0	39.9	-21.0	27.1	46.0
832.551250	24.0	125.0	H	22.0	48.8	-24.8	22.0	46.0

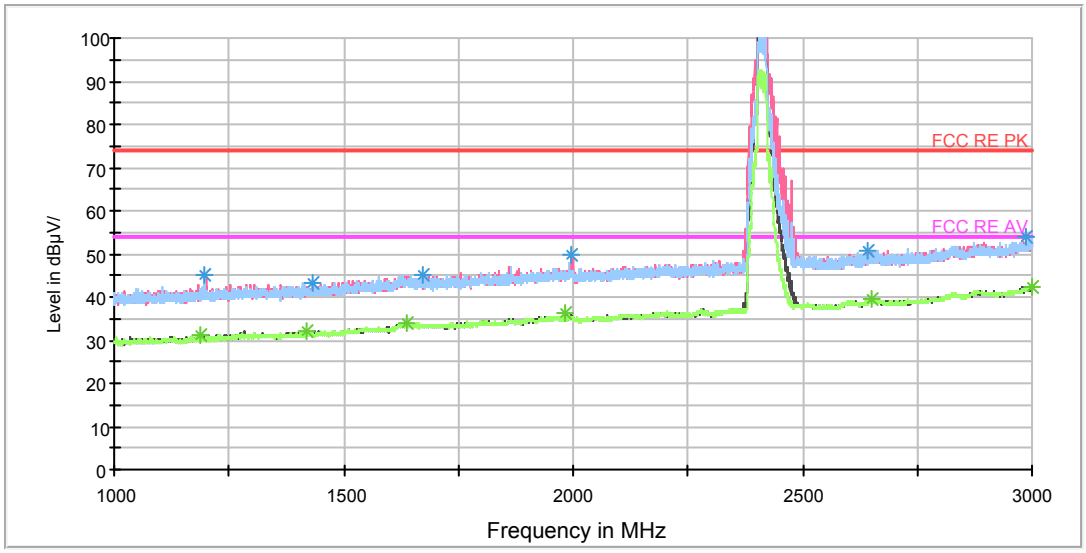
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.750000	45.0	102.0	V	340.0	53.2	-8.2	29.0	74
1431.250000	43.3	102.0	V	0.0	50.2	-6.9	30.7	74
1673.750000	45.2	102.0	H	0.0	50.3	-5.1	28.8	74
1995.750000	49.9	102.0	V	244.0	53.2	-3.3	24.1	74
2639.750000	50.5	102.0	V	0.0	50.7	-0.2	23.5	74
2987.500000	54.0	102.0	H	61.0	56.2	-2.2	20.0	74

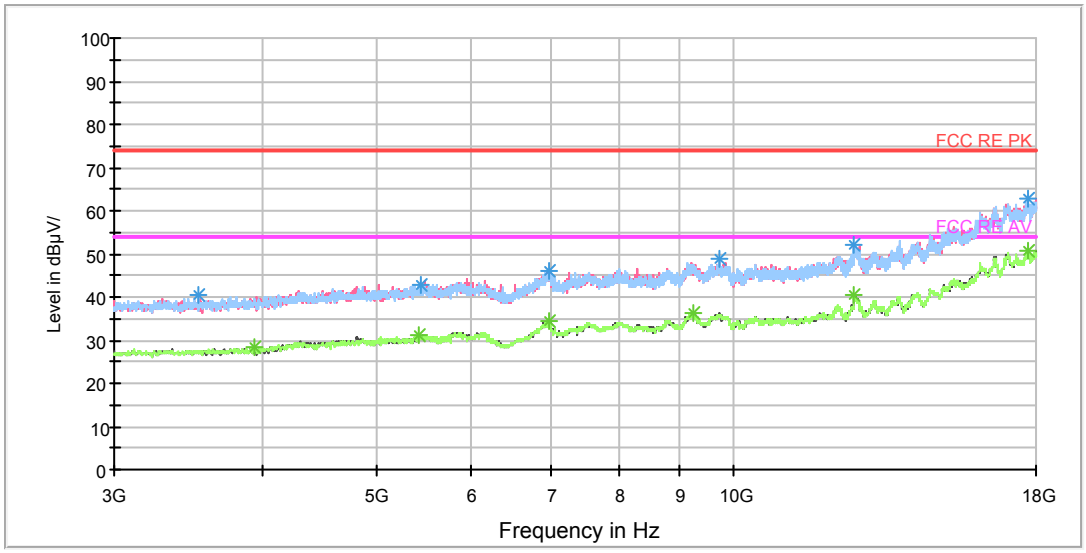
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1187.750000	31.0	102.0	V	356.0	39.1	-8.1	23.0	54
1418.750000	32.0	102.0	H	130.0	38.9	-6.9	22.0	54
1635.500000	34.2	102.0	V	117.0	38.9	-4.7	19.8	54
1983.250000	36.2	102.0	V	356.0	40.0	-3.8	17.8	54
2652.500000	39.7	102.0	V	305.0	40.1	-0.4	14.3	54
2999.250000	42.5	102.0	V	216.0	44.8	-2.3	11.5	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3532.500000	40.5	102.0	H	155.0	42.6	-2.1	33.5	74
5448.750000	42.8	102.0	H	0.0	45.6	-2.8	31.2	74
6986.250000	46.2	102.0	H	41.0	52.6	-6.4	27.8	74
9738.750000	48.7	102.0	H	0.0	58.7	-10.0	25.3	74
12637.500000	51.9	102.0	V	300.0	66.2	-14.3	22.1	74
17720.625000	62.8	102.0	H	0.0	87.4	-24.6	11.2	74

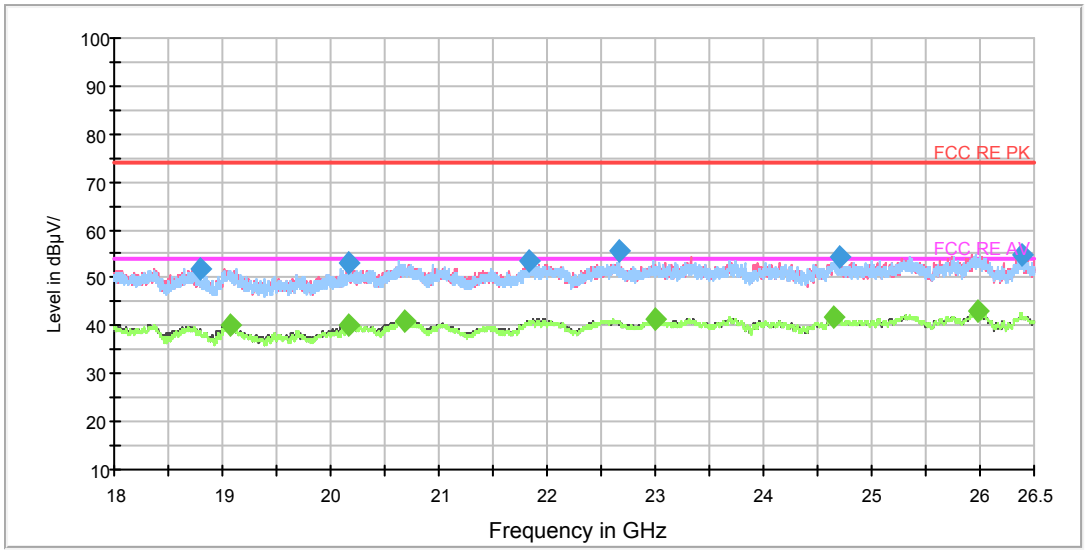
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3941.250000	28.2	102.0	H	0.0	29.3	-1.1	25.8	54
5422.500000	30.9	102.0	H	0.0	33.6	-2.7	23.1	54
6984.375000	34.2	102.0	H	63.0	40.6	-6.4	19.8	54
9234.375000	36.3	102.0	H	200.0	46.2	-9.9	17.7	54
12639.375000	40.3	102.0	V	165.0	54.8	-14.5	13.7	54
17716.875000	50.6	102.0	H	41.0	75.2	-24.6	3.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18787.312500	51.9	V	214.0	56.5	-4.6	22.1	74.0
20161.125000	53.0	V	161.0	58.8	-5.8	21.0	74.0
21835.625000	53.4	H	108.0	61.4	-8.0	20.6	74.0
22662.250000	55.8	H	180.0	62.4	-6.6	18.2	74.0
24709.687500	54.3	V	105.0	60.3	-6.0	19.7	74.0
26392.687500	54.7	H	108.0	60.1	-5.4	19.3	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

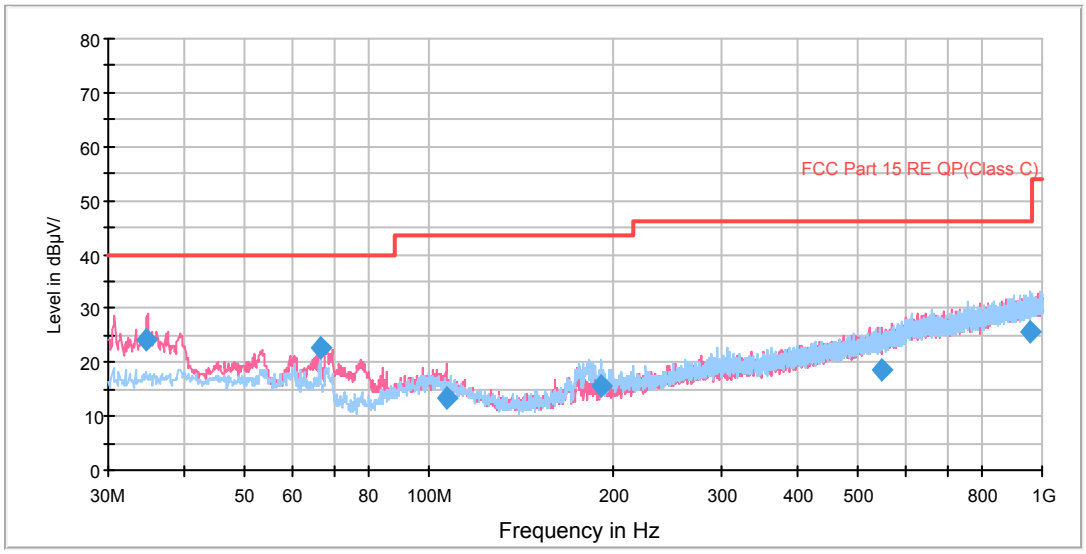
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19067.812500	40.2	V	250.0	45.4	-5.2	13.8	54.0
20159.000000	40.0	V	197.0	45.8	-5.8	14.0	54.0
20677.500000	41.1	V	267.0	47.7	-6.6	12.9	54.0
22996.937500	41.4	H	91.0	47.6	-6.2	12.6	54.0
24653.375000	41.9	V	214.0	47.9	-6.0	12.1	54.0
25987.875000	43.0	V	179.0	48.4	-5.4	11.0	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11n (HT20) CH6

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.650000	24.2	100.0	V	29.0	36.1	-11.9	15.8	40.0
66.415000	22.8	125.0	V	104.0	32.8	-10.0	17.2	40.0
106.751250	13.4	100.0	V	0.0	26.0	-12.6	30.1	43.5
191.013750	15.6	100.0	H	120.0	27.1	-11.5	27.9	43.5
546.081250	18.6	114.0	V	306.0	39.5	-20.9	27.4	46.0
957.646250	25.6	100.0	H	62.0	51.8	-26.2	20.4	46.0

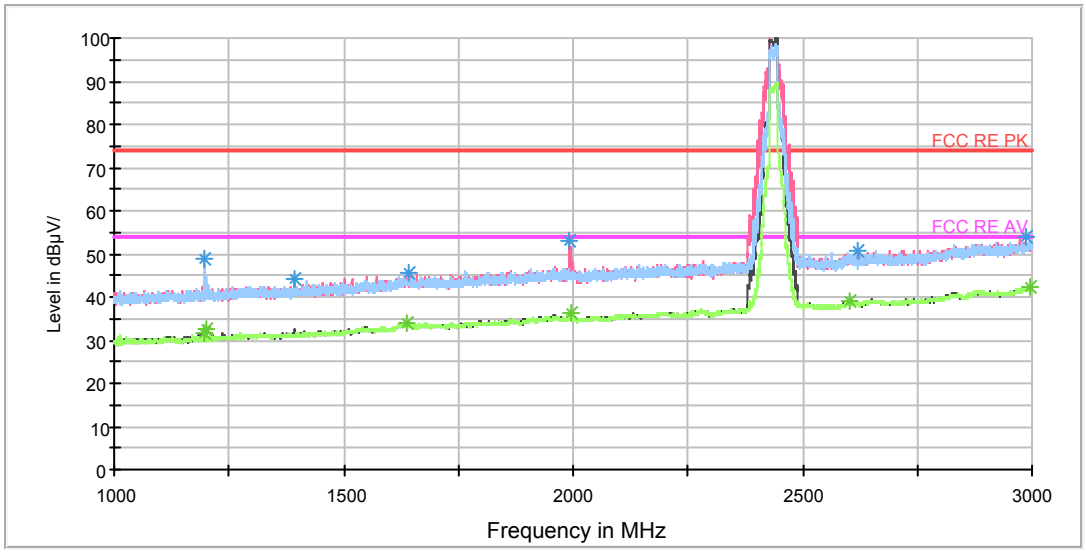
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.500000	48.8	102.0	H	188.0	57.0	-8.2	25.2	74
1392.000000	44.3	102.0	V	7.0	51.3	-7.0	29.7	74
1640.250000	45.6	102.0	H	206.0	50.3	-4.7	28.4	74
1991.500000	52.8	102.0	V	0.0	56.1	-3.3	21.2	74
2618.250000	50.7	102.0	V	0.0	50.7	-0.0	23.3	74
2986.750000	54.0	102.0	H	260.0	56.2	-2.2	20.0	74

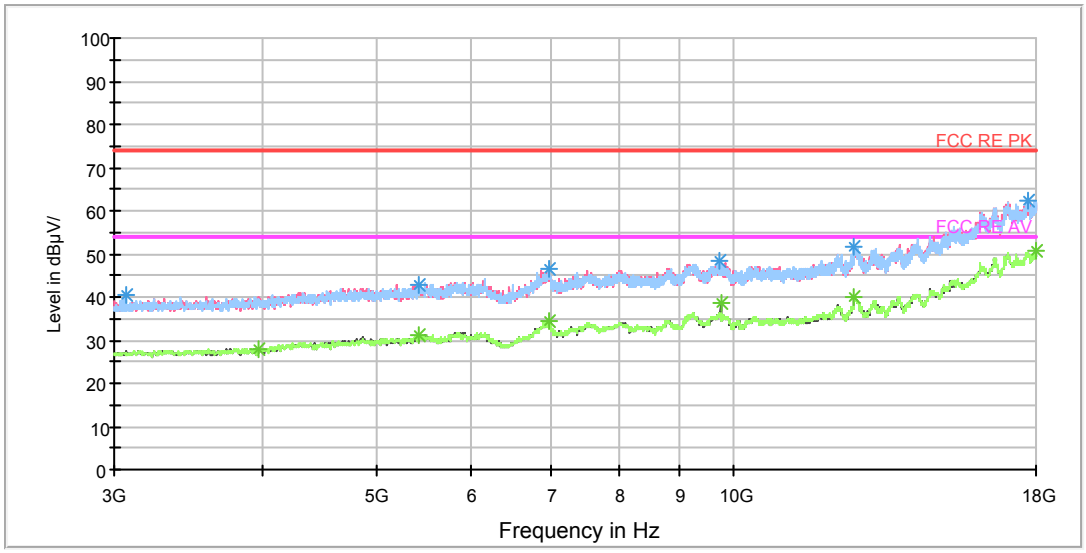
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.500000	31.4	102.0	H	188.0	39.6	-8.2	22.6	54
1201.750000	32.5	102.0	H	215.0	40.7	-8.2	21.5	54
1635.500000	34.0	102.0	H	80.0	38.7	-4.7	20.0	54
1995.750000	36.3	102.0	V	359.0	39.6	-3.3	17.7	54
2602.250000	39.3	102.0	H	0.0	39.7	-0.4	14.7	54
2996.000000	42.3	102.0	V	342.0	44.6	-2.3	11.7	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3073.125000	40.5	102.0	H	61.0	43.5	-3.0	33.5	74
5418.750000	43.0	102.0	H	315.0	45.7	-2.7	31.0	74
6973.125000	46.7	102.0	H	154.0	53.0	-6.3	27.3	74
9733.125000	48.3	102.0	H	84.0	58.1	-9.8	25.7	74
12652.500000	51.6	102.0	H	222.0	65.7	-14.1	22.4	74
17700.000000	62.3	102.0	V	229.0	87.0	-24.7	11.7	74

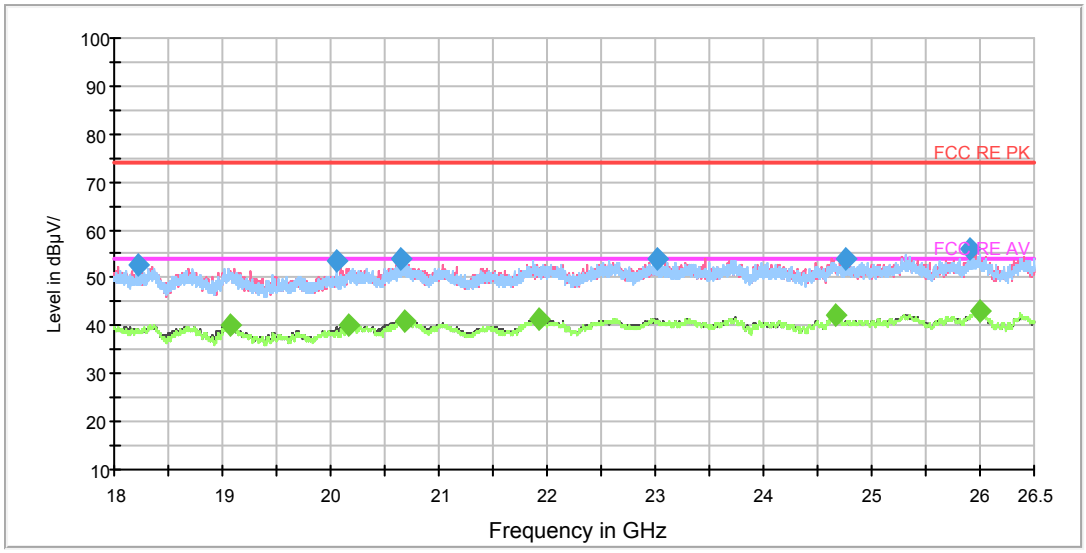
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3971.250000	28.0	102.0	H	38.0	28.9	-0.9	26.0	54
5422.500000	31.2	102.0	H	84.0	33.9	-2.7	22.8	54
6997.500000	34.5	102.0	H	154.0	41.0	-6.5	19.5	54
9748.125000	38.4	102.0	V	342.0	48.2	-9.8	15.6	54
12641.250000	40.1	102.0	V	0.0	54.6	-14.5	13.9	54
18000.000000	50.6	102.0	V	0.0	76.1	-25.5	3.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18230.562500	52.7	V	270.0	55.5	-2.8	21.3	74.0
20057.000000	53.3	H	217.0	59.0	-5.7	20.7	74.0
20653.062500	54.0	V	125.0	60.6	-6.6	20.0	74.0
23018.187500	53.9	H	90.0	60.0	-6.1	20.1	74.0
24753.250000	53.9	H	109.0	59.9	-6.0	20.1	74.0
25913.500000	56.2	H	180.0	61.6	-5.4	17.8	74.0

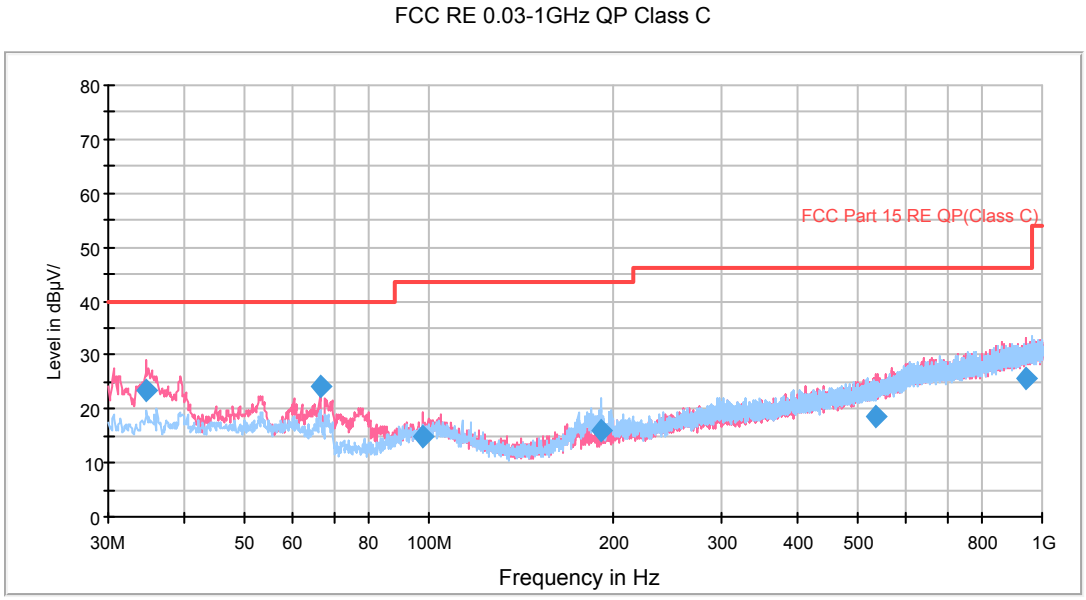
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19071.000000	40.3	V	179.0	45.5	-5.2	13.7	54.0
20160.062500	40.0	V	270.0	45.8	-5.8	14.0	54.0
20684.937500	41.2	V	270.0	47.9	-6.7	12.8	54.0
21920.625000	41.6	V	161.0	49.6	-8.0	12.4	54.0
24659.750000	42.0	V	270.0	48.0	-6.0	12.0	54.0
25995.312500	43.0	H	198.0	48.4	-5.4	11.0	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11n (HT20) CH11



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.647500	23.4	100.0	V	0.0	35.3	-11.9	16.6	40.0
66.415000	24.2	114.0	V	289.0	34.2	-10.0	15.8	40.0
97.698750	14.9	100.0	V	23.0	27.8	-12.9	28.6	43.5
190.740000	16.1	100.0	H	122.0	27.6	-11.5	27.4	43.5
537.506250	18.6	100.0	V	23.0	39.3	-20.7	27.4	46.0
942.723750	25.5	125.0	V	83.0	51.5	-26.0	20.5	46.0

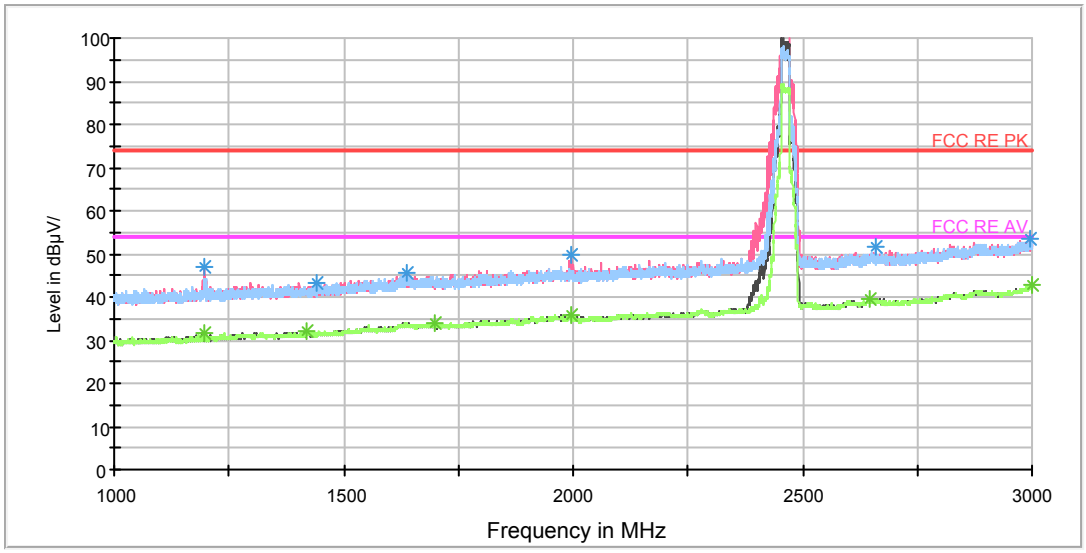
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.250000	46.8	102.0	V	207.0	55.0	-8.2	27.2	74
1439.250000	43.2	102.0	H	18.0	50.1	-6.9	30.8	74
1638.000000	45.4	102.0	V	110.0	50.1	-4.7	28.6	74
1996.750000	49.8	102.0	V	358.0	53.1	-3.3	24.2	74
2659.000000	51.5	102.0	H	147.0	51.9	-0.4	22.5	74
2997.500000	53.7	102.0	V	136.0	56.0	-2.3	20.3	74

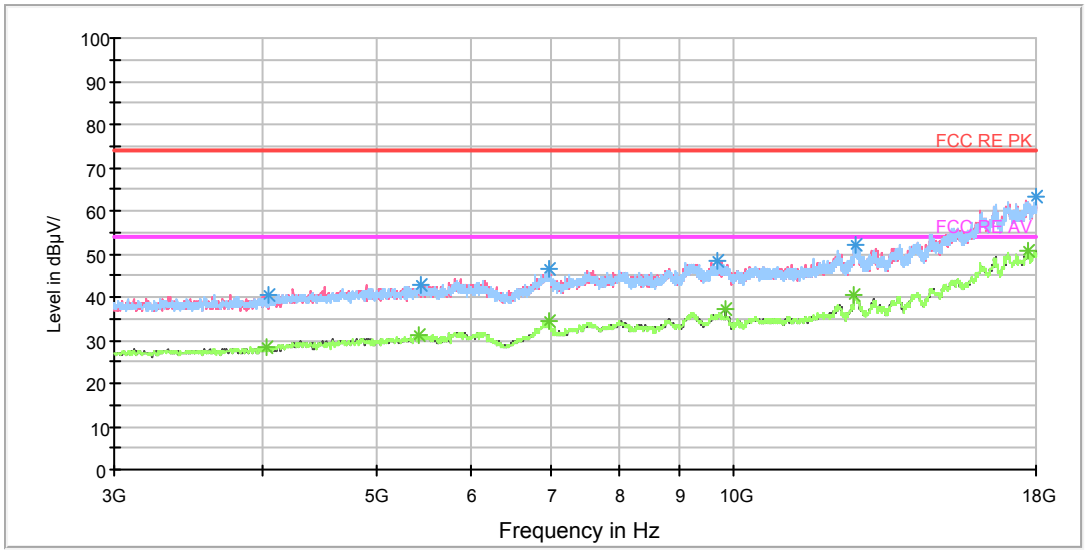
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.500000	31.7	102.0	V	0.0	39.9	-8.2	22.3	54
1417.250000	31.9	102.0	H	27.0	38.8	-6.9	22.1	54
1697.750000	34.0	102.0	V	297.0	39.0	-5.0	20.0	54
1996.750000	35.9	102.0	V	358.0	39.2	-3.3	18.1	54
2646.500000	39.5	102.0	V	262.0	39.8	-0.3	14.5	54
2998.000000	42.7	102.0	H	46.0	45.0	-2.3	11.3	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4042.500000	40.4	102.0	H	18.0	41.4	-1.0	33.6	74
5445.000000	42.9	102.0	V	276.0	45.8	-2.9	31.1	74
6978.750000	46.4	102.0	V	70.0	52.7	-6.3	27.6	74
9693.750000	48.4	102.0	H	40.0	58.0	-9.6	25.6	74
12660.000000	51.9	102.0	V	19.0	65.7	-13.8	22.1	74
17998.125000	63.2	102.0	V	344.0	88.6	-25.4	10.8	74

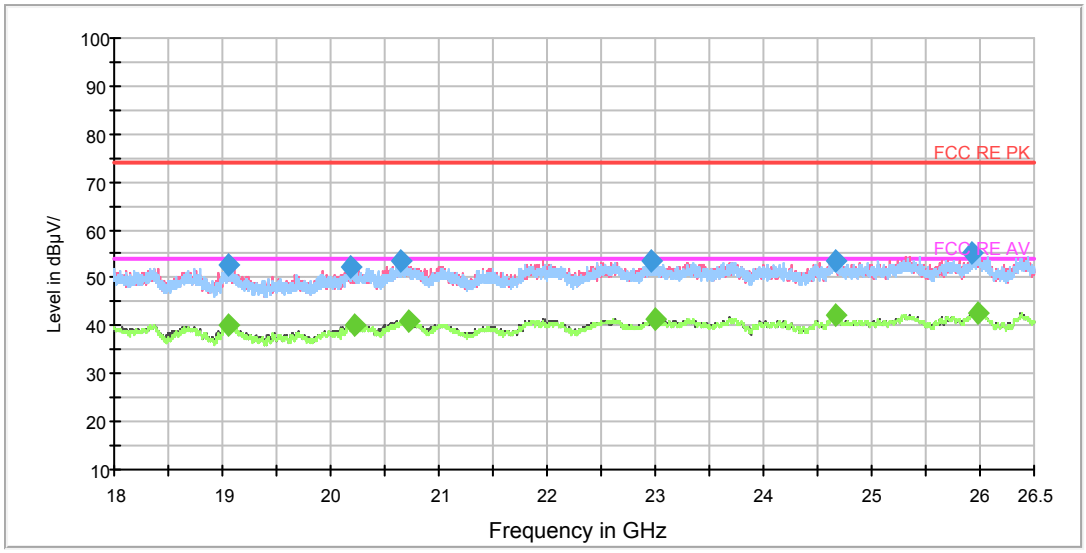
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4040.625000	28.3	102.0	H	199.0	29.3	-1.0	25.7	54
5420.625000	31.0	102.0	V	0.0	33.7	-2.7	23.0	54
6997.500000	34.3	102.0	H	0.0	40.8	-6.5	19.7	54
9847.500000	37.0	102.0	V	344.0	47.3	-10.3	17.0	54
12639.375000	40.5	102.0	V	299.0	55.0	-14.5	13.5	54
17711.250000	50.6	102.0	H	40.0	75.3	-24.7	3.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19055.062500	52.8	V	105.0	58.0	-5.2	21.2	74.0
20190.875000	52.4	V	215.0	58.3	-5.9	21.6	74.0
20652.000000	53.3	V	250.0	59.9	-6.6	20.7	74.0
22958.687500	53.7	V	270.0	59.9	-6.2	20.3	74.0
24665.062500	53.6	V	232.0	59.6	-6.0	20.4	74.0
25928.375000	55.1	V	250.0	60.5	-5.4	18.9	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

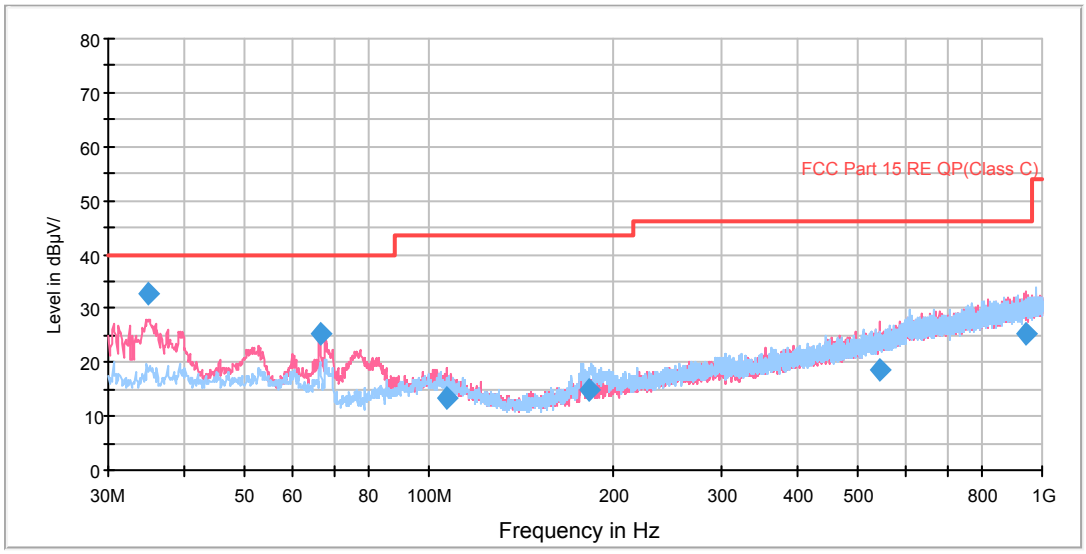
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19061.437500	40.2	V	215.0	45.4	-5.2	13.8	54.0
20217.437500	40.0	V	270.0	45.9	-5.9	14.0	54.0
20729.562500	41.0	V	250.0	47.8	-6.8	13.0	54.0
22996.937500	41.3	H	144.0	47.5	-6.2	12.7	54.0
24658.687500	42.1	H	109.0	48.1	-6.0	11.9	54.0
25988.937500	42.9	H	199.0	48.3	-5.4	11.1	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

BLE-Channel 0

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.806250	32.6	100.0	V	185.0	44.5	-11.9	7.4	40.0
66.415000	25.5	114.0	V	292.0	35.5	-10.0	14.5	40.0
106.751250	13.5	100.0	V	0.0	26.1	-12.6	30.0	43.5
183.145000	14.8	114.0	H	114.0	25.9	-11.1	28.7	43.5
543.250000	18.7	100.0	V	0.0	39.6	-20.9	27.3	46.0
942.527500	25.4	125.0	V	304.0	51.4	-26.0	20.6	46.0

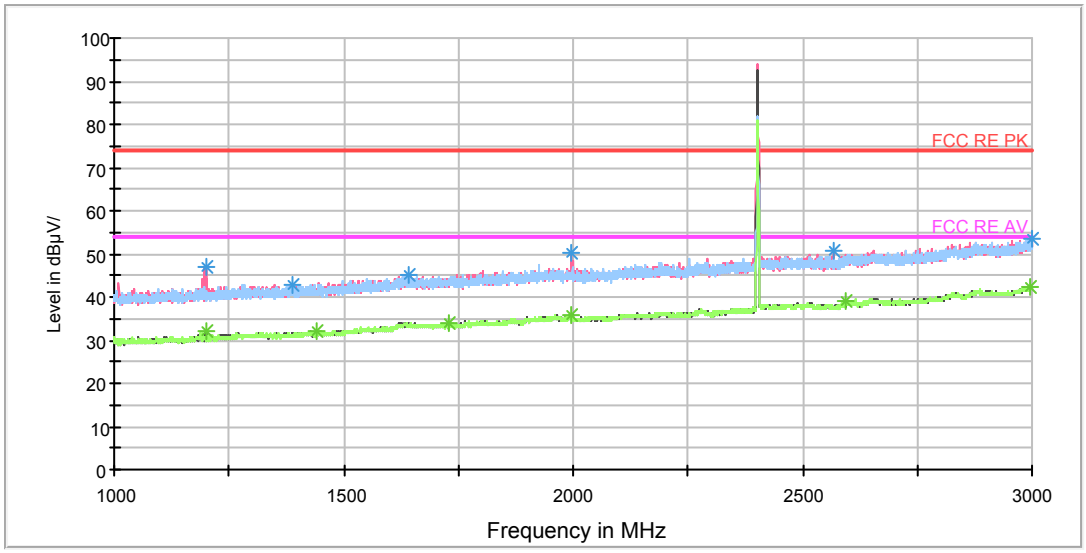
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.000000	47.1	102.0	V	0.0	55.3	-8.2	26.9	74
1389.250000	42.9	102.0	H	180.0	49.9	-7.0	31.1	74
1642.250000	45.1	102.0	V	303.0	49.9	-4.8	28.9	74
1993.750000	50.3	102.0	V	267.0	53.6	-3.3	23.7	74
2566.750000	50.7	102.0	V	276.0	51.3	-0.6	23.3	74
3000.000000	53.6	102.0	V	294.0	55.9	-2.3	20.4	74

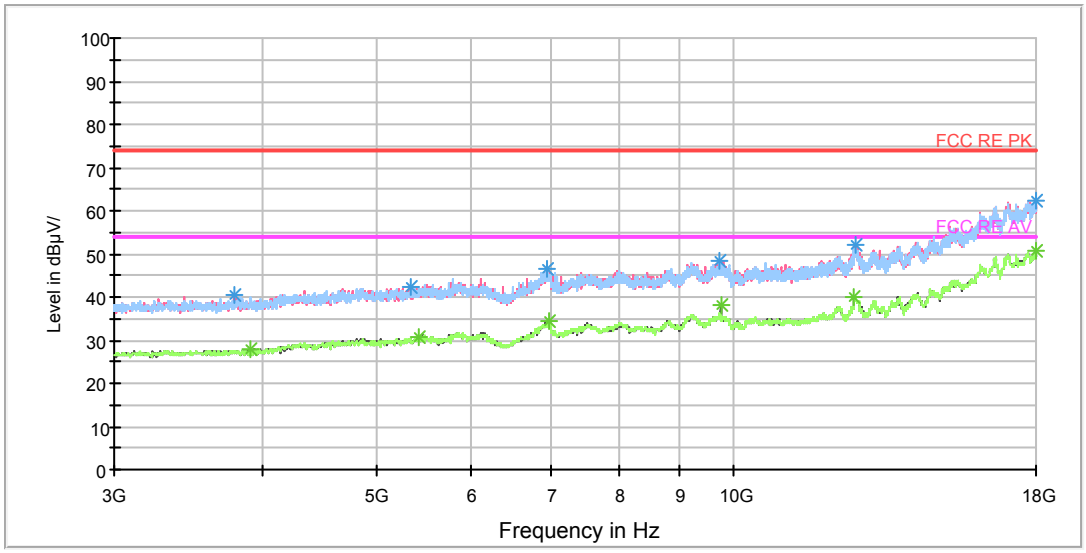
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.000000	32.0	102.0	V	0.0	40.2	-8.2	22.0	54
1441.250000	32.1	102.0	V	0.0	39.0	-6.9	21.9	54
1729.500000	34.1	102.0	V	240.0	39.1	-5.0	19.9	54
1993.750000	35.8	102.0	V	267.0	39.1	-3.3	18.2	54
2595.250000	39.1	102.0	V	329.0	39.3	-0.2	14.9	54
2994.500000	42.4	102.0	H	134.0	44.7	-2.3	11.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3783.750000	40.5	102.0	V	162.0	42.3	-1.8	33.5	74
5336.250000	42.3	102.0	V	321.0	44.6	-2.3	31.7	74
6971.250000	46.4	102.0	H	0.0	52.7	-6.3	27.6	74
9721.875000	48.3	102.0	H	108.0	57.8	-9.5	25.7	74
12680.625000	52.2	102.0	V	277.0	66.5	-14.3	21.8	74
17986.875000	62.5	102.0	V	277.0	87.6	-25.1	11.5	74

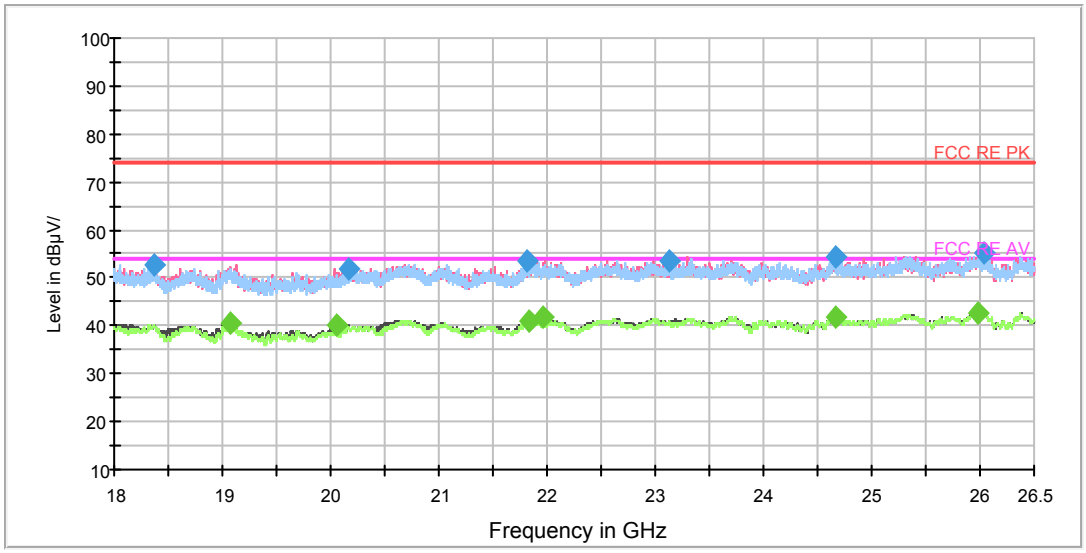
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3915.000000	27.9	102.0	V	210.0	29.1	-1.2	26.1	54
5418.750000	30.9	102.0	V	299.0	33.6	-2.7	23.1	54
6988.125000	34.3	102.0	V	188.0	40.7	-6.4	19.7	54
9748.125000	38.1	102.0	V	343.0	47.9	-9.8	15.9	54
12639.375000	39.9	102.0	H	62.0	54.4	-14.5	14.1	54
18000.000000	50.6	102.0	H	130.0	76.1	-25.5	3.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18366.562500	52.7	H	54.0	56.0	-3.3	21.3	74.0
20161.125000	52.0	V	180.0	57.8	-5.8	22.0	74.0
21817.562500	53.5	H	0.0	61.5	-8.0	20.5	74.0
23128.687500	53.6	V	0.0	59.7	-6.1	20.4	74.0
24662.937500	54.6	V	180.0	60.6	-6.0	19.4	74.0
26037.812500	55.1	H	36.0	60.5	-5.4	18.9	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

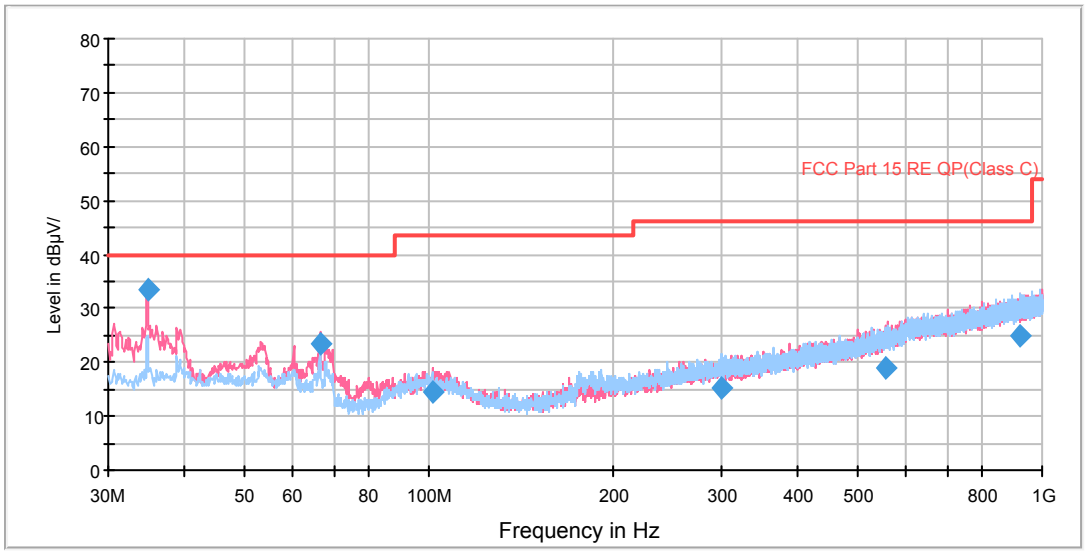
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19071.000000	40.5	V	124.0	45.7	-5.2	13.5	54.0
20053.812500	40.2	V	0.0	45.9	-5.7	13.8	54.0
21832.437500	41.2	V	180.0	49.2	-8.0	12.8	54.0
21963.125000	41.9	V	107.0	49.9	-8.0	12.1	54.0
24665.062500	42.0	H	54.0	48.0	-6.0	12.0	54.0
25990.000000	42.8	V	142.0	48.2	-5.4	11.2	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

BLE-Channel 19

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.808750	33.6	100.0	V	259.0	45.5	-11.9	6.4	40.0
66.415000	23.6	114.0	V	0.0	33.6	-10.0	16.4	40.0
101.698750	14.4	100.0	V	136.0	27.5	-13.1	29.1	43.5
299.988750	15.1	100.0	H	272.0	30.6	-15.5	30.9	46.0
556.305000	19.1	100.0	V	332.0	40.3	-21.2	26.9	46.0
921.950000	25.1	114.0	V	237.0	50.9	-25.8	20.9	46.0

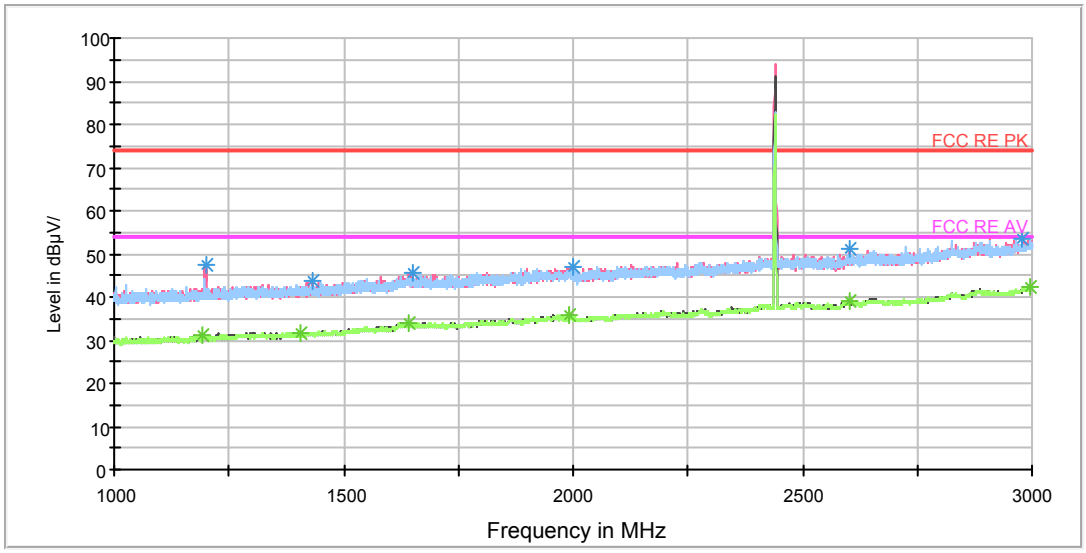
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.250000	47.2	102.0	V	0.0	55.4	-8.2	26.8	74
1433.000000	43.9	102.0	V	359.0	50.8	-6.9	30.1	74
1651.000000	45.6	102.0	V	307.0	50.7	-5.1	28.4	74
1999.250000	47.1	102.0	V	307.0	50.5	-3.4	26.9	74
2604.250000	51.0	102.0	V	298.0	51.3	-0.3	23.0	74
2978.250000	53.7	102.0	H	23.0	55.9	-2.2	20.3	74

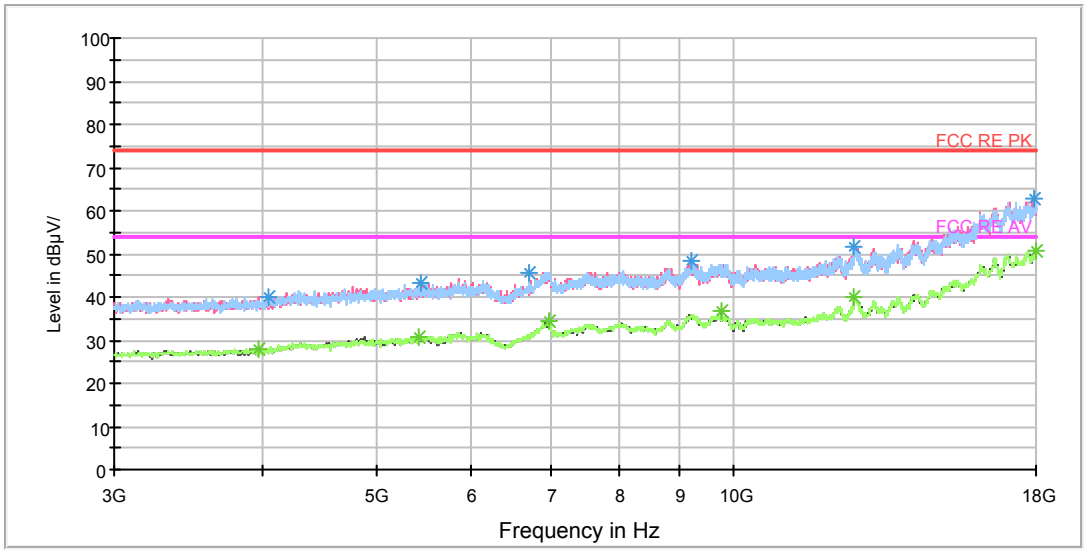
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1192.250000	31.3	102.0	V	333.0	39.5	-8.2	22.7	54
1406.250000	31.8	102.0	V	245.0	38.9	-7.1	22.2	54
1640.250000	34.1	102.0	H	0.0	38.8	-4.7	19.9	54
1992.750000	36.0	102.0	V	254.0	39.3	-3.3	18.0	54
2603.000000	39.1	102.0	H	0.0	39.4	-0.3	14.9	54
2997.250000	42.4	102.0	H	60.0	44.7	-2.3	11.6	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4042.500000	40.2	102.0	H	173.0	41.2	-1.0	33.8	74
5446.875000	43.3	102.0	V	0.0	46.1	-2.8	30.7	74
6727.500000	45.6	102.0	H	15.0	50.9	-5.3	28.4	74
9202.500000	48.5	102.0	V	320.0	58.7	-10.2	25.5	74
12639.375000	51.7	102.0	H	15.0	66.2	-14.5	22.3	74
17919.375000	62.6	102.0	H	341.0	88.4	-25.8	11.4	74

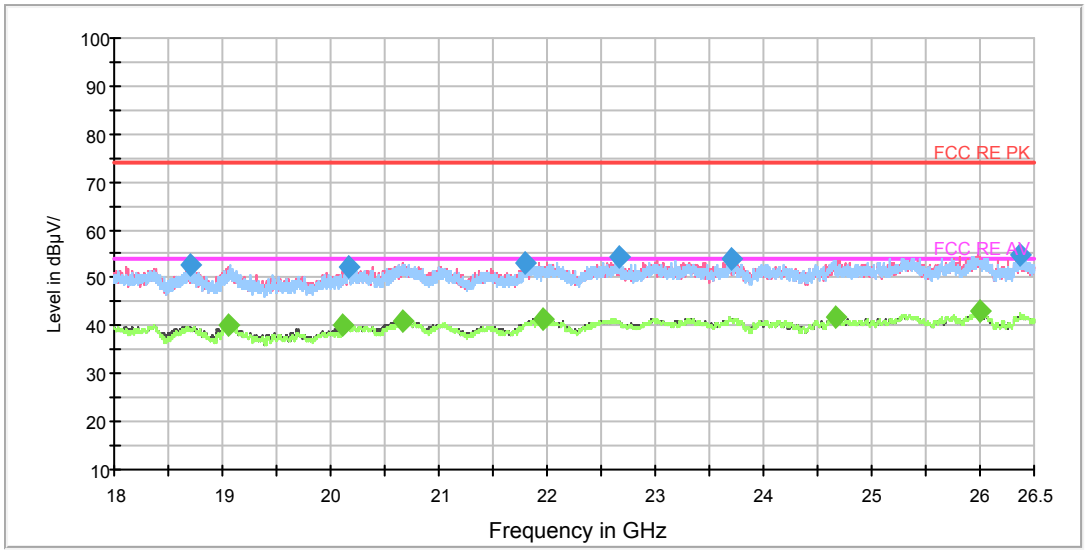
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3973.125000	28.0	102.0	V	0.0	28.9	-0.9	26.0	54
5422.500000	30.9	102.0	H	105.0	33.6	-2.7	23.1	54
6995.625000	34.4	102.0	H	15.0	40.9	-6.5	19.6	54
9748.125000	36.9	102.0	V	342.0	46.7	-9.8	17.1	54
12643.125000	40.0	102.0	V	342.0	54.4	-14.4	14.0	54
18000.000000	50.6	102.0	V	184.0	76.1	-25.5	3.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18712.937500	52.7	H	35.0	57.1	-4.4	21.3	74.0
20167.500000	52.3	H	0.0	58.1	-5.8	21.7	74.0
21804.812500	53.0	V	161.0	61.0	-8.0	21.0	74.0
22664.375000	54.2	H	0.0	60.8	-6.6	19.8	74.0
23697.125000	53.9	H	53.0	59.8	-5.9	20.1	74.0
26377.812500	54.9	V	161.0	60.3	-5.4	19.1	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

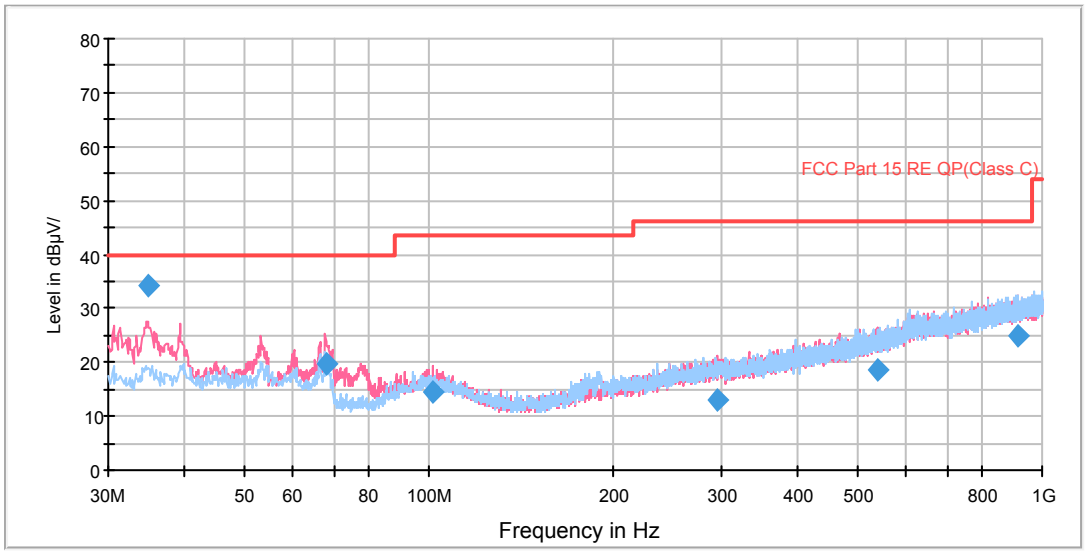
Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19063.562500	40.3	V	143.0	45.5	-5.2	13.7	54.0
20108.000000	40.1	V	107.0	45.9	-5.8	13.9	54.0
20672.187500	41.1	V	180.0	47.7	-6.6	12.9	54.0
21964.187500	41.4	V	16.0	49.4	-8.0	12.6	54.0
24665.062500	42.0	V	71.0	48.0	-6.0	12.0	54.0
25995.312500	42.9	H	0.0	48.3	-5.4	11.1	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

BLE-Channel 39

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.808750	34.2	100.0	V	263.0	46.1	-11.9	5.8	40.0
67.950000	19.8	114.0	V	130.0	29.2	-9.4	20.2	40.0
101.698750	14.5	125.0	V	0.0	27.6	-13.1	29.0	43.5
295.902500	13.1	100.0	V	144.0	28.5	-15.4	32.9	46.0
540.145000	18.5	125.0	V	35.0	39.3	-20.8	27.5	46.0
914.557500	25.1	100.0	H	46.0	50.9	-25.8	20.9	46.0

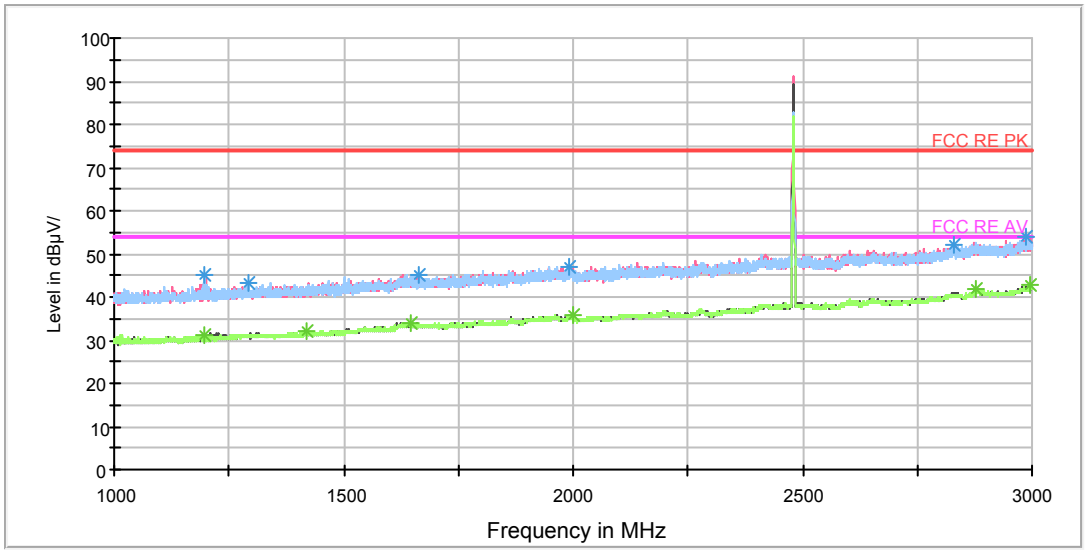
Remark: 1. Quasi-Peak = Reading value + Correction factor

2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

3. Margin = Limit – Quasi-Peak

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.250000	45.2	102.0	H	141.0	53.4	-8.2	28.8	74
1292.750000	43.4	102.0	H	53.0	51.1	-7.7	30.6	74
1663.000000	45.2	102.0	V	287.0	50.4	-5.2	28.8	74
1993.000000	47.0	102.0	V	0.0	50.3	-3.3	27.0	74
2828.000000	52.3	102.0	H	0.0	53.9	-1.6	21.7	74
2985.000000	54.1	102.0	H	62.0	56.3	-2.2	19.9	74

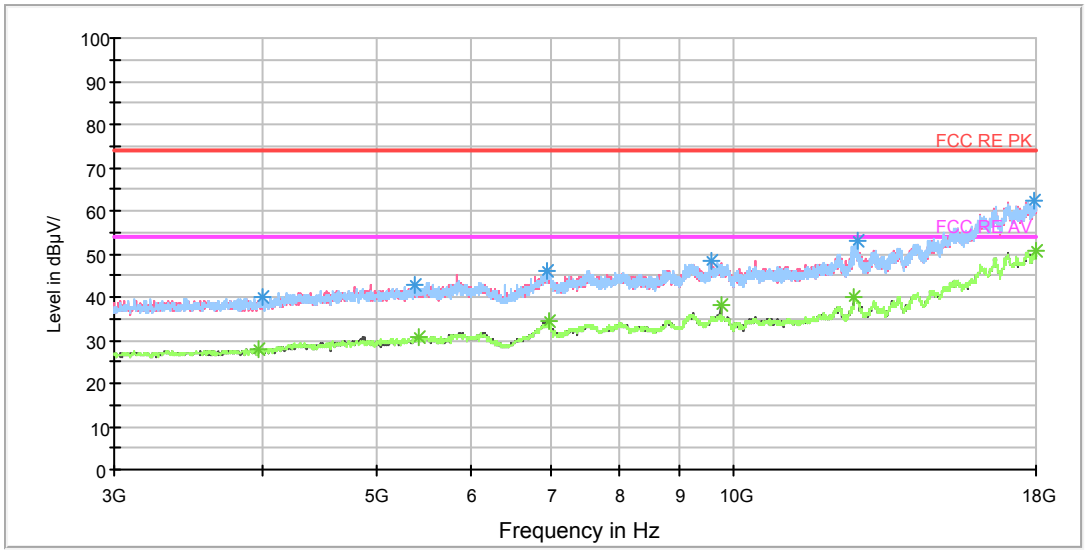
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.250000	31.4	102.0	V	206.0	39.6	-8.2	22.6	54
1420.500000	32.0	102.0	H	0.0	38.9	-6.9	22.0	54
1646.250000	34.0	102.0	V	0.0	38.9	-4.9	20.0	54
1999.750000	35.8	102.0	V	225.0	39.2	-3.4	18.2	54
2878.750000	41.6	102.0	H	186.0	43.9	-2.3	12.4	54
2997.500000	42.8	102.0	H	195.0	45.1	-2.3	11.2	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4008.750000	39.8	102.0	H	0.0	40.9	-1.1	34.2	74
5386.875000	42.7	102.0	H	0.0	45.1	-2.4	31.3	74
6961.875000	45.8	102.0	H	0.0	52.0	-6.2	28.2	74
9581.250000	48.3	102.0	V	275.0	58.3	-10.0	25.7	74
12708.750000	52.8	102.0	H	62.0	66.8	-14.0	21.2	74
17921.250000	62.2	102.0	H	62.0	87.9	-25.7	11.8	74

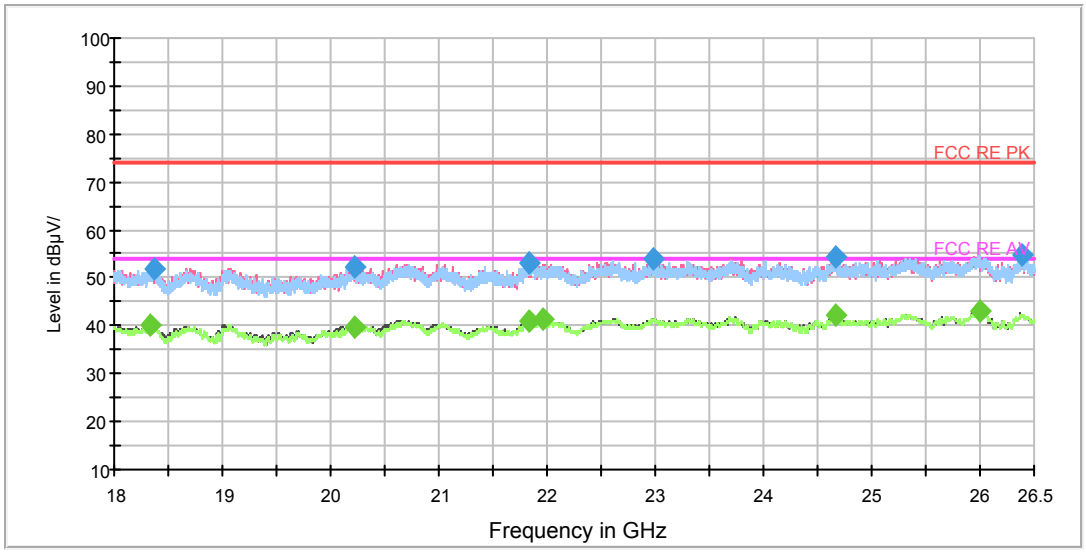
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3971.250000	27.9	102.0	V	342.0	28.8	-0.9	26.1	54
5418.750000	30.7	102.0	V	114.0	33.4	-2.7	23.3	54
6988.125000	34.2	102.0	V	275.0	40.6	-6.4	19.8	54
9748.125000	38.3	102.0	V	342.0	48.1	-9.8	15.7	54
12645.000000	40.1	102.0	V	320.0	54.5	-14.4	13.9	54
18000.000000	50.6	102.0	H	0.0	76.1	-25.5	3.4	54

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18377.187500	51.9	H	0.0	55.3	-3.4	22.1	74.0
20214.250000	52.5	H	165.0	58.4	-5.9	21.5	74.0
21837.750000	53.0	H	0.0	61.0	-8.0	21.0	74.0
22988.437500	53.9	V	71.0	60.1	-6.2	20.1	74.0
24659.750000	54.4	V	0.0	60.4	-6.0	19.6	74.0
26387.375000	54.8	H	17.0	60.2	-5.4	19.2	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18335.750000	40.3	V	180.0	43.5	-3.2	13.7	54.0
20216.375000	39.8	H	0.0	45.7	-5.9	14.2	54.0
21836.687500	41.0	V	161.0	49.0	-8.0	13.0	54.0
21967.375000	41.5	V	0.0	49.5	-8.0	12.5	54.0
24660.812500	42.1	V	178.0	48.1	-6.0	11.9	54.0
25991.062500	42.9	V	180.0	48.3	-5.4	11.1	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

5.8. Conducted Emission

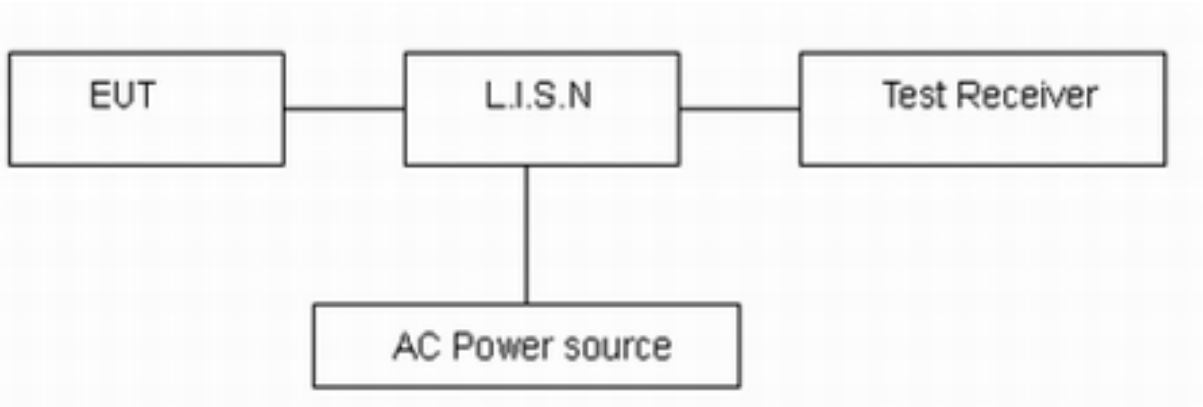
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

The EUT is placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10-2013. Connect the AC power line of the EUT to the L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, VBW is set to 30kHz. The measurement result should include both L line and N line.
The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

Limits

Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U= 2.69 dB.

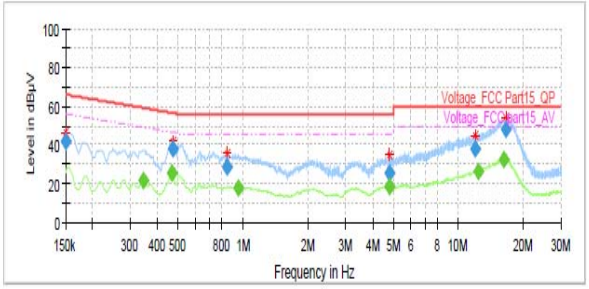
This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Test Results:

Following plots, Blue trace uses the peak detection and Green trace uses the average detection.

802.11b, Channel No.: 1

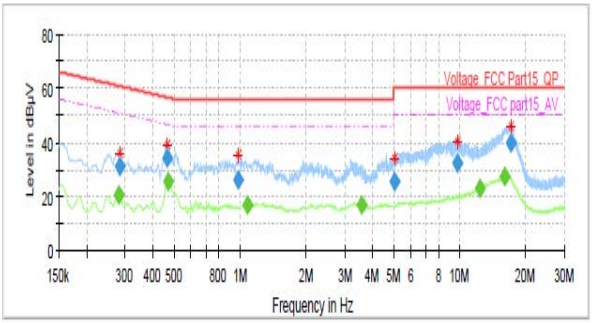
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	41.82	---	66.00	24.18	1000.0	9.000	L1	ON	19.1
0.343500	---	21.69	49.12	27.43	1000.0	9.000	L1	ON	19.2
0.467250	---	25.45	46.56	21.11	1000.0	9.000	L1	ON	19.2
0.471750	37.88	---	56.48	18.60	1000.0	9.000	L1	ON	19.2
0.845250	28.86	---	56.00	27.14	1000.0	9.000	L1	ON	19.2
0.953250	---	17.92	46.00	28.08	1000.0	9.000	L1	ON	19.2
4.773750	---	18.23	46.00	27.77	1000.0	9.000	L1	ON	19.1
4.782750	25.79	---	56.00	30.21	1000.0	9.000	L1	ON	19.1
12.048000	37.63	---	60.00	22.37	1000.0	9.000	L1	ON	19.4
12.437250	---	26.50	50.00	23.50	1000.0	9.000	L1	ON	19.4
16.233000	---	32.21	50.00	17.79	1000.0	9.000	L1	ON	19.5
16.669500	48.29	---	60.00	11.71	1000.0	9.000	L1	ON	19.5

N Line

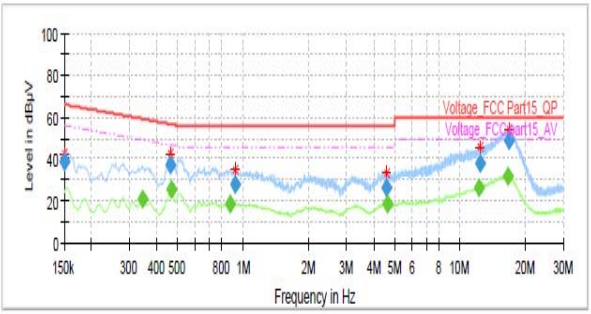


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.280500	---	20.42	50.80	30.38	1000.0	9.000	N	ON	19.2
0.282750	31.10	---	60.74	29.64	1000.0	9.000	N	ON	19.2
0.467250	33.97	---	56.56	22.59	1000.0	9.000	N	ON	19.2
0.469500	---	25.74	46.52	20.79	1000.0	9.000	N	ON	19.2
0.975750	25.95	---	56.00	30.05	1000.0	9.000	N	ON	19.2
1.077000	---	17.04	46.00	28.96	1000.0	9.000	N	ON	19.2
3.594750	---	16.83	46.00	29.17	1000.0	9.000	N	ON	19.1
5.077500	25.55	---	60.00	34.45	1000.0	9.000	N	ON	19.1
9.771000	32.54	---	60.00	27.46	1000.0	9.000	N	ON	19.4
12.428250	---	22.76	50.00	27.24	1000.0	9.000	N	ON	19.4
16.077750	---	27.26	50.00	22.74	1000.0	9.000	N	ON	19.4
17.056500	39.91	---	60.00	20.09	1000.0	9.000	N	ON	19.5

802.11b, Channel No.: 6

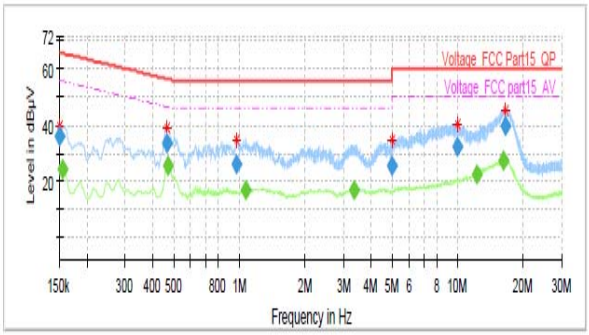
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	39.08	---	66.00	26.92	1000.0	9.000	L1	ON	19.1
0.345750	---	21.06	49.06	28.00	1000.0	9.000	L1	ON	19.2
0.460500	36.90	---	56.68	19.78	1000.0	9.000	L1	ON	19.2
0.469500	---	25.54	46.52	20.98	1000.0	9.000	L1	ON	19.2
0.874500	---	18.79	46.00	27.21	1000.0	9.000	L1	ON	19.2
0.917250	28.29	---	56.00	27.71	1000.0	9.000	L1	ON	19.2
4.562250	26.29	---	56.00	29.71	1000.0	9.000	L1	ON	19.1
4.609500	---	18.58	46.00	27.42	1000.0	9.000	L1	ON	19.1
12.259500	---	26.28	50.00	23.72	1000.0	9.000	L1	ON	19.4
12.412500	37.70	---	60.00	22.30	1000.0	9.000	L1	ON	19.4
16.548000	---	31.99	50.00	18.01	1000.0	9.000	L1	ON	19.5
16.788750	48.52	---	60.00	11.48	1000.0	9.000	L1	ON	19.5

N Line



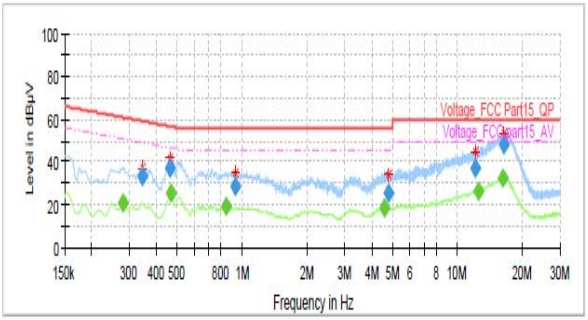
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.150000	35.74	---	66.00	30.26	1000.0	9.000	N	ON	19.1
0.154500	---	24.25	55.75	31.50	1000.0	9.000	N	ON	19.1
0.467250	33.81	---	56.56	22.75	1000.0	9.000	N	ON	19.2
0.469500	---	25.70	46.52	20.82	1000.0	9.000	N	ON	19.2
0.973500	26.39	---	56.00	29.61	1000.0	9.000	N	ON	19.2
1.065750	---	17.09	46.00	28.91	1000.0	9.000	N	ON	19.2
3.358500	---	17.10	46.00	28.90	1000.0	9.000	N	ON	19.1
5.005500	25.37	---	60.00	34.63	1000.0	9.000	N	ON	19.1
9.942000	32.59	---	60.00	27.41	1000.0	9.000	N	ON	19.4
12.315750	---	22.49	50.00	27.51	1000.0	9.000	N	ON	19.4
16.170000	---	27.25	50.00	22.75	1000.0	9.000	N	ON	19.4
16.577250	39.72	---	60.00	20.28	1000.0	9.000	N	ON	19.5

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11b, Channel No.: 11

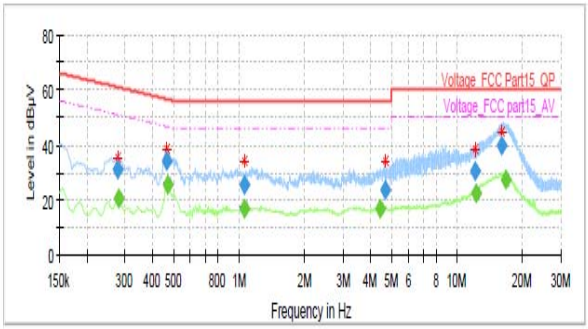
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.278250	---	21.03	50.87	29.84	1000.0	9.000	L1	ON	19.2
0.345750	32.97	---	59.06	26.09	1000.0	9.000	L1	ON	19.2
0.462750	37.51	---	56.64	19.13	1000.0	9.000	L1	ON	19.2
0.467250	---	25.62	46.56	20.94	1000.0	9.000	L1	ON	19.2
0.845250	---	19.17	46.00	26.83	1000.0	9.000	L1	ON	19.2
0.930750	28.37	---	56.00	27.63	1000.0	9.000	L1	ON	19.2
4.602750	---	18.68	46.00	27.32	1000.0	9.000	L1	ON	19.1
4.762500	25.49	---	56.00	30.51	1000.0	9.000	L1	ON	19.1
12.171750	37.40	---	60.00	22.60	1000.0	9.000	L1	ON	19.4
12.462000	---	26.38	50.00	23.62	1000.0	9.000	L1	ON	19.4
16.190250	---	32.18	50.00	17.82	1000.0	9.000	L1	ON	19.5
16.467000	48.11	---	60.00	11.89	1000.0	9.000	L1	ON	19.5

N Line

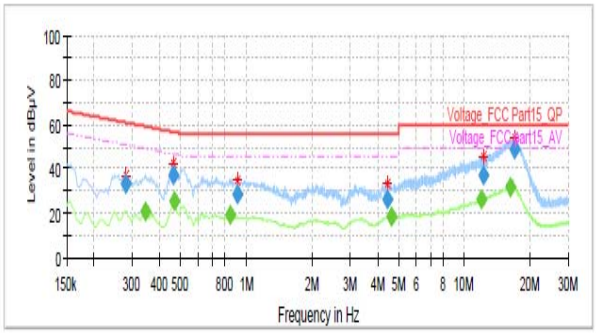


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.276000	30.88	---	60.94	30.05	1000.0	9.000	N	ON	19.2
0.280500	---	20.49	50.80	30.31	1000.0	9.000	N	ON	19.2
0.467250	33.87	---	56.56	22.69	1000.0	9.000	N	ON	19.2
0.469500	---	25.73	46.52	20.79	1000.0	9.000	N	ON	19.2
1.056750	25.49	---	56.00	30.51	1000.0	9.000	N	ON	19.2
1.059000	---	16.97	46.00	29.03	1000.0	9.000	N	ON	19.2
4.438500	---	16.65	46.00	29.35	1000.0	9.000	N	ON	19.1
4.668000	23.55	---	56.00	32.45	1000.0	9.000	N	ON	19.1
12.104250	30.13	---	60.00	29.87	1000.0	9.000	N	ON	19.4
12.297750	---	22.51	50.00	27.49	1000.0	9.000	N	ON	19.4
16.059750	39.61	---	60.00	20.39	1000.0	9.000	N	ON	19.4
16.732500	---	27.01	50.00	22.99	1000.0	9.000	N	ON	19.5

802.11g, Channel No.: 1

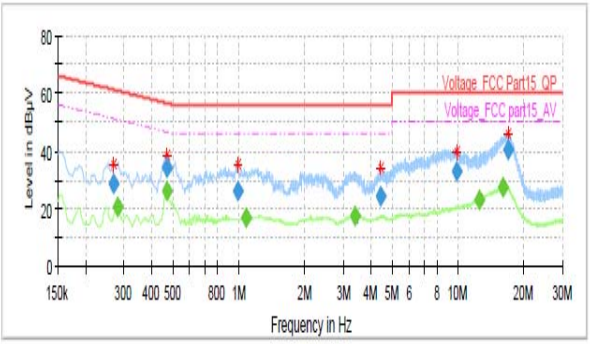
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.278250	33.12	---	60.87	27.75	1000.0	9.000	L1	ON	19.2
0.343500	---	21.13	49.12	27.99	1000.0	9.000	L1	ON	19.2
0.462750	37.58	---	56.64	19.06	1000.0	9.000	L1	ON	19.2
0.467250	---	25.56	46.56	21.00	1000.0	9.000	L1	ON	19.2
0.845250	---	19.24	46.00	26.76	1000.0	9.000	L1	ON	19.2
0.908250	28.65	---	56.00	27.35	1000.0	9.000	L1	ON	19.2
4.431750	26.44	---	56.00	29.56	1000.0	9.000	L1	ON	19.1
4.616250	---	18.54	46.00	27.46	1000.0	9.000	L1	ON	19.1
11.922000	---	26.11	50.00	23.89	1000.0	9.000	L1	ON	19.4
12.279750	37.32	---	60.00	22.68	1000.0	9.000	L1	ON	19.4
16.219500	---	32.02	50.00	17.98	1000.0	9.000	L1	ON	19.5
17.002500	48.70	---	60.00	11.30	1000.0	9.000	L1	ON	19.6

N Line



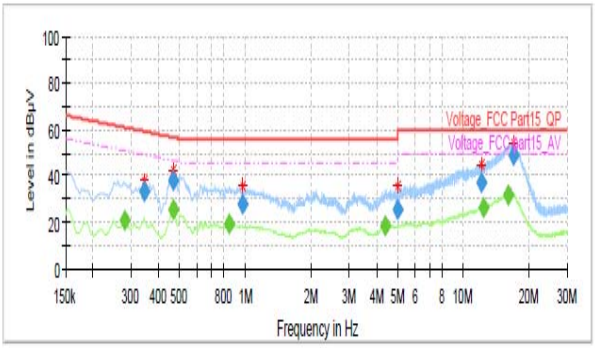
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.269250	28.76	---	61.14	32.39	1000.0	9.000	N	ON	19.1
0.280500	---	20.31	50.80	30.49	1000.0	9.000	N	ON	19.2
0.469500	---	25.76	46.52	20.77	1000.0	9.000	N	ON	19.2
0.471750	33.82	---	56.48	22.66	1000.0	9.000	N	ON	19.2
0.993750	25.87	---	56.00	30.13	1000.0	9.000	N	ON	19.2
1.079250	---	16.98	46.00	29.02	1000.0	9.000	N	ON	19.2
3.381000	---	17.06	46.00	28.94	1000.0	9.000	N	ON	19.1
4.463250	24.01	---	56.00	31.99	1000.0	9.000	N	ON	19.1
9.908250	32.65	---	60.00	27.35	1000.0	9.000	N	ON	19.4
12.464250	---	22.80	50.00	27.20	1000.0	9.000	N	ON	19.4
16.044000	---	27.16	50.00	22.84	1000.0	9.000	N	ON	19.4
16.926000	40.11	---	60.00	19.89	1000.0	9.000	N	ON	19.5

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11g, Channel No.: 6

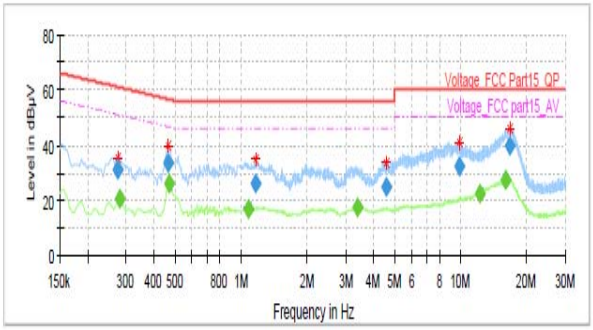
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.278250	---	21.14	50.87	29.73	1000.0	9.000	L1	ON	19.2
0.345750	32.95	---	59.06	26.12	1000.0	9.000	L1	ON	19.2
0.467250	---	25.65	46.56	20.91	1000.0	9.000	L1	ON	19.2
0.467250	38.09	---	56.56	18.47	1000.0	9.000	L1	ON	19.2
0.845250	---	19.21	46.00	26.79	1000.0	9.000	L1	ON	19.2
0.971250	28.18	---	56.00	27.82	1000.0	9.000	L1	ON	19.2
4.402500	---	18.54	46.00	27.46	1000.0	9.000	L1	ON	19.1
5.019000	25.88	---	60.00	34.12	1000.0	9.000	L1	ON	19.1
12.084000	37.53	---	60.00	22.47	1000.0	9.000	L1	ON	19.4
12.450750	---	26.46	50.00	23.54	1000.0	9.000	L1	ON	19.4
16.111500	---	32.04	50.00	17.96	1000.0	9.000	L1	ON	19.5
17.007000	48.81	---	60.00	11.19	1000.0	9.000	L1	ON	19.6

N Line

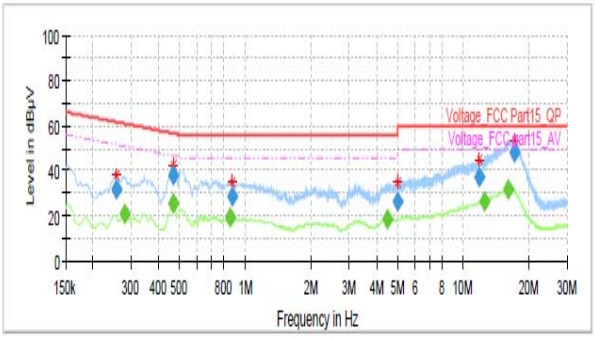


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.273750	30.79	---	61.00	30.22	1000.0	9.000	N	ON	19.1
0.280500	---	20.53	50.80	30.28	1000.0	9.000	N	ON	19.2
0.467250	33.79	---	56.56	22.77	1000.0	9.000	N	ON	19.2
0.469500	---	25.78	46.52	20.74	1000.0	9.000	N	ON	19.2
1.077000	---	16.98	46.00	29.02	1000.0	9.000	N	ON	19.2
1.164750	25.98	---	56.00	30.02	1000.0	9.000	N	ON	19.2
3.381000	---	17.12	46.00	28.88	1000.0	9.000	N	ON	19.1
4.564500	24.53	---	56.00	31.47	1000.0	9.000	N	ON	19.1
9.822750	32.09	---	60.00	27.91	1000.0	9.000	N	ON	19.4
12.234750	---	22.34	50.00	27.66	1000.0	9.000	N	ON	19.4
16.098000	---	27.28	50.00	22.72	1000.0	9.000	N	ON	19.4
16.813500	39.97	---	60.00	20.03	1000.0	9.000	N	ON	19.5

802.11g, Channel No.: 11

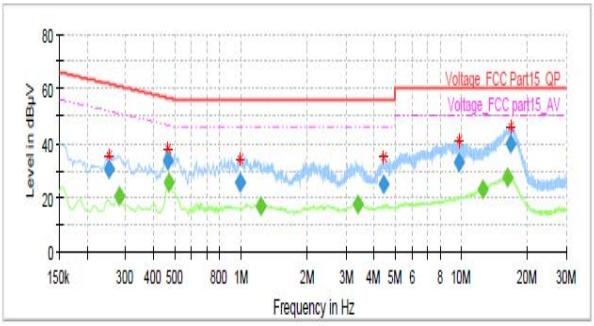
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.255750	31.60	---	61.57	29.96	1000.0	9.000	L1	ON	19.1
0.278250	---	20.96	50.87	29.91	1000.0	9.000	L1	ON	19.2
0.467250	---	25.49	46.56	21.07	1000.0	9.000	L1	ON	19.2
0.467250	38.02	---	56.56	18.54	1000.0	9.000	L1	ON	19.2
0.847500	---	19.13	46.00	26.87	1000.0	9.000	L1	ON	19.2
0.872250	28.53	---	56.00	27.47	1000.0	9.000	L1	ON	19.2
4.488000	---	18.24	46.00	27.76	1000.0	9.000	L1	ON	19.1
4.976250	25.99	---	56.00	30.01	1000.0	9.000	L1	ON	19.1
11.870250	37.46	---	60.00	22.54	1000.0	9.000	L1	ON	19.4
12.489000	---	26.52	50.00	23.48	1000.0	9.000	L1	ON	19.4
16.023750	---	31.98	50.00	18.02	1000.0	9.000	L1	ON	19.5
17.121750	48.17	---	60.00	11.83	1000.0	9.000	L1	ON	19.6

N Line



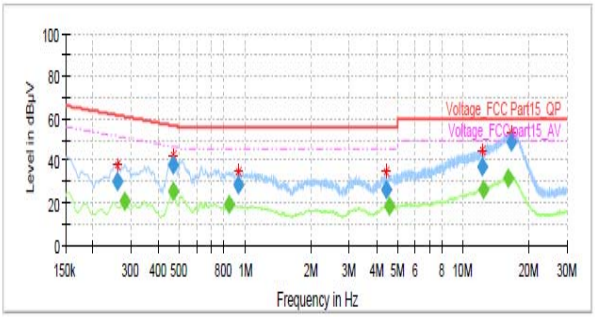
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.251250	30.19	---	61.72	31.53	1000.0	9.000	N	ON	19.1
0.280500	---	20.45	50.80	30.35	1000.0	9.000	N	ON	19.2
0.465000	33.23	---	56.60	23.37	1000.0	9.000	N	ON	19.2
0.469500	---	25.67	46.52	20.86	1000.0	9.000	N	ON	19.2
0.996000	25.73	---	56.00	30.27	1000.0	9.000	N	ON	19.2
1.227750	---	16.83	46.00	29.17	1000.0	9.000	N	ON	19.2
3.378750	---	17.08	46.00	28.92	1000.0	9.000	N	ON	19.1
4.436250	24.81	---	56.00	31.19	1000.0	9.000	N	ON	19.1
9.735000	32.73	---	60.00	27.27	1000.0	9.000	N	ON	19.4
12.480000	---	22.89	50.00	27.11	1000.0	9.000	N	ON	19.4
16.172250	---	27.15	50.00	22.85	1000.0	9.000	N	ON	19.4
16.737000	39.93	---	60.00	20.07	1000.0	9.000	N	ON	19.5

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11n(HT20), Channel No.: 1

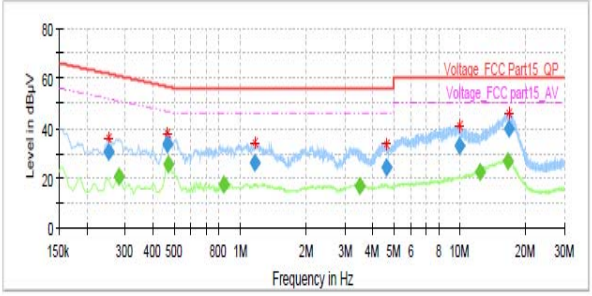
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.260250	30.36	---	61.42	31.07	1000.0	9.000	L1	ON	19.1
0.280500	---	21.10	50.80	29.70	1000.0	9.000	L1	ON	19.2
0.467250	---	25.48	46.56	21.09	1000.0	9.000	L1	ON	19.2
0.467250	38.14	---	56.56	18.42	1000.0	9.000	L1	ON	19.2
0.845250	---	19.24	46.00	26.76	1000.0	9.000	L1	ON	19.2
0.933000	28.45	---	56.00	27.55	1000.0	9.000	L1	ON	19.2
4.449750	26.26	---	56.00	29.74	1000.0	9.000	L1	ON	19.1
4.564500	---	18.57	46.00	27.43	1000.0	9.000	L1	ON	19.1
12.291000	37.57	---	60.00	22.43	1000.0	9.000	L1	ON	19.4
12.390000	---	26.28	50.00	23.72	1000.0	9.000	L1	ON	19.4
16.172250	---	32.11	50.00	17.89	1000.0	9.000	L1	ON	19.5
16.721250	48.56	---	60.00	11.44	1000.0	9.000	L1	ON	19.5

N Line

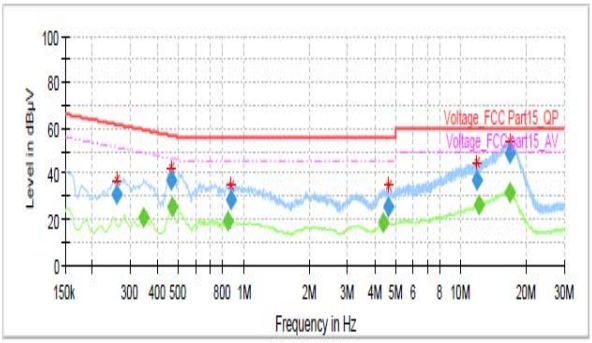


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.251250	30.18	---	61.72	31.54	1000.0	9.000	N	ON	19.1
0.280500	---	20.41	50.80	30.39	1000.0	9.000	N	ON	19.2
0.465000	33.50	---	56.60	23.10	1000.0	9.000	N	ON	19.2
0.469500	---	25.73	46.52	20.79	1000.0	9.000	N	ON	19.2
0.845250	---	17.41	46.00	28.59	1000.0	9.000	N	ON	19.2
1.167000	26.11	---	56.00	29.89	1000.0	9.000	N	ON	19.2
3.502500	---	17.04	46.00	28.96	1000.0	9.000	N	ON	19.1
4.634250	24.37	---	56.00	31.63	1000.0	9.000	N	ON	19.1
9.946500	32.57	---	60.00	27.43	1000.0	9.000	N	ON	19.4
12.399000	---	22.54	50.00	27.46	1000.0	9.000	N	ON	19.4
16.640250	---	26.80	50.00	23.20	1000.0	9.000	N	ON	19.5
16.692000	39.84	---	60.00	20.16	1000.0	9.000	N	ON	19.5

802.11n(HT20), Channel No.: 6

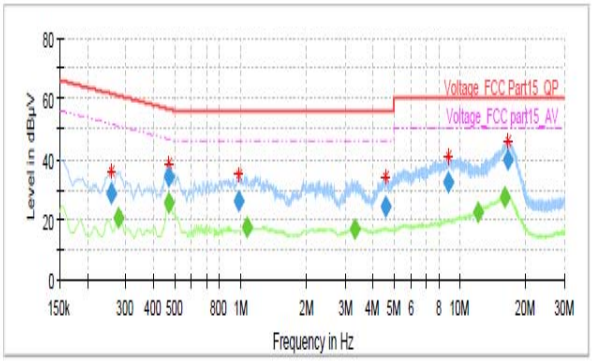
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.258000	30.74	---	61.50	30.76	1000.0	9.000	L1	ON	19.1
0.343500	---	20.90	49.12	28.22	1000.0	9.000	L1	ON	19.2
0.462750	37.53	---	56.64	19.11	1000.0	9.000	L1	ON	19.2
0.467250	---	25.52	46.56	21.04	1000.0	9.000	L1	ON	19.2
0.843000	---	19.04	46.00	26.96	1000.0	9.000	L1	ON	19.2
0.870000	28.54	---	56.00	27.46	1000.0	9.000	L1	ON	19.2
4.407000	---	18.52	46.00	27.48	1000.0	9.000	L1	ON	19.1
4.641000	25.85	---	56.00	30.15	1000.0	9.000	L1	ON	19.1
11.890500	37.06	---	60.00	22.94	1000.0	9.000	L1	ON	19.4
12.075000	---	26.11	50.00	23.89	1000.0	9.000	L1	ON	19.4
16.770750	---	32.09	50.00	17.91	1000.0	9.000	L1	ON	19.5
16.881000	48.57	---	60.00	11.43	1000.0	9.000	L1	ON	19.6

N Line



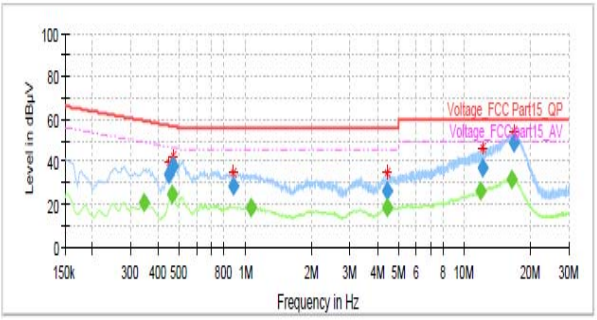
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.258000	28.69	---	61.50	32.80	1000.0	9.000	N	ON	19.1
0.278250	---	20.52	50.87	30.35	1000.0	9.000	N	ON	19.2
0.469500	34.13	---	56.52	22.39	1000.0	9.000	N	ON	19.2
0.469500	---	25.70	46.52	20.82	1000.0	9.000	N	ON	19.2
0.982500	26.08	---	56.00	29.92	1000.0	9.000	N	ON	19.2
1.065750	---	17.15	46.00	28.85	1000.0	9.000	N	ON	19.2
3.333750	---	16.93	46.00	29.07	1000.0	9.000	N	ON	19.1
4.575750	24.45	---	56.00	31.55	1000.0	9.000	N	ON	19.1
8.846250	32.47	---	60.00	27.53	1000.0	9.000	N	ON	19.3
12.059250	---	22.41	50.00	27.59	1000.0	9.000	N	ON	19.4
15.999000	---	27.19	50.00	22.81	1000.0	9.000	N	ON	19.4
16.615500	39.95	---	60.00	20.05	1000.0	9.000	N	ON	19.5

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

802.11n(HT20), Channel No.: 11

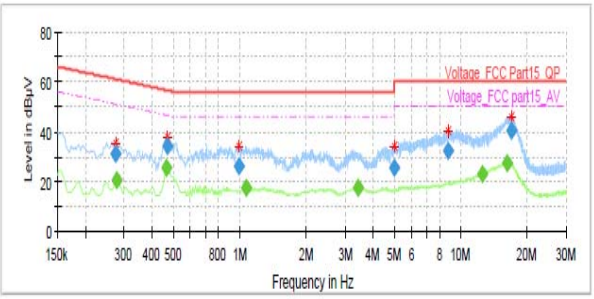
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.345750	---	20.84	49.06	28.23	1000.0	9.000	L1	ON	19.2
0.449250	33.73	---	56.89	23.16	1000.0	9.000	L1	ON	19.2
0.462750	---	24.96	46.64	21.68	1000.0	9.000	L1	ON	19.2
0.465000	38.06	---	56.60	18.54	1000.0	9.000	L1	ON	19.2
0.879000	28.74	---	56.00	27.26	1000.0	9.000	L1	ON	19.2
1.056750	---	18.41	46.00	27.59	1000.0	9.000	L1	ON	19.2
4.420500	---	18.69	46.00	27.31	1000.0	9.000	L1	ON	19.1
4.447500	26.25	---	56.00	29.75	1000.0	9.000	L1	ON	19.1
11.908500	---	26.11	50.00	23.89	1000.0	9.000	L1	ON	19.4
12.063750	37.47	---	60.00	22.53	1000.0	9.000	L1	ON	19.4
16.530000	---	31.84	50.00	18.16	1000.0	9.000	L1	ON	19.5
16.786500	48.49	---	60.00	11.51	1000.0	9.000	L1	ON	19.5

N Line

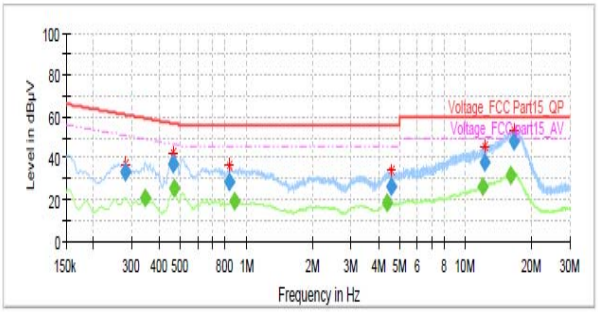


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.273750	30.95	---	61.00	30.06	1000.0	9.000	N	ON	19.1
0.278250	---	20.37	50.87	30.50	1000.0	9.000	N	ON	19.2
0.467250	---	25.51	46.56	21.06	1000.0	9.000	N	ON	19.2
0.469500	34.26	---	56.52	22.27	1000.0	9.000	N	ON	19.2
0.989250	25.95	---	56.00	30.05	1000.0	9.000	N	ON	19.2
1.072500	---	17.11	46.00	28.89	1000.0	9.000	N	ON	19.2
3.430500	---	17.12	46.00	28.88	1000.0	9.000	N	ON	19.0
5.023500	25.26	---	60.00	34.74	1000.0	9.000	N	ON	19.1
8.801250	32.35	---	60.00	27.65	1000.0	9.000	N	ON	19.3
12.462000	---	22.79	50.00	27.21	1000.0	9.000	N	ON	19.4
16.174500	---	27.23	50.00	22.77	1000.0	9.000	N	ON	19.4
16.887750	40.32	---	60.00	19.68	1000.0	9.000	N	ON	19.5

BLE, Channel No.: 0

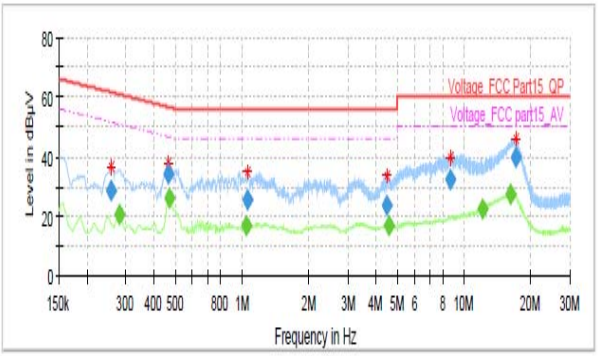
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.278250	33.20	---	60.87	27.67	1000.0	9.000	L1	ON	19.2
0.343500	---	21.00	49.12	28.12	1000.0	9.000	L1	ON	19.2
0.460500	37.21	---	56.68	19.47	1000.0	9.000	L1	ON	19.2
0.467250	---	25.67	46.56	20.89	1000.0	9.000	L1	ON	19.2
0.834000	28.49	---	56.00	27.51	1000.0	9.000	L1	ON	19.2
0.876750	---	19.22	46.00	26.78	1000.0	9.000	L1	ON	19.2
4.400250	---	18.58	46.00	27.42	1000.0	9.000	L1	ON	19.1
4.566750	26.47	---	56.00	29.53	1000.0	9.000	L1	ON	19.1
11.933250	---	26.08	50.00	23.92	1000.0	9.000	L1	ON	19.4
12.286500	37.88	---	60.00	22.12	1000.0	9.000	L1	ON	19.4
16.030500	---	32.01	50.00	17.99	1000.0	9.000	L1	ON	19.5
16.694250	48.32	---	60.00	11.68	1000.0	9.000	L1	ON	19.5

N Line



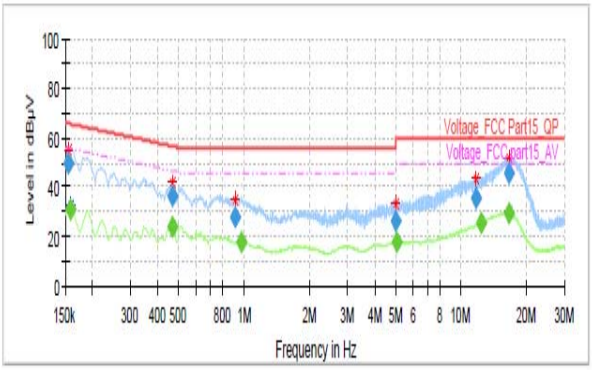
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.258000	28.56	---	61.50	32.94	1000.0	9.000	N	ON	19.1
0.280500	---	20.49	50.80	30.31	1000.0	9.000	N	ON	19.2
0.467250	34.04	---	56.56	22.52	1000.0	9.000	N	ON	19.2
0.469500	---	25.74	46.52	20.78	1000.0	9.000	N	ON	19.2
1.047750	---	16.82	46.00	29.18	1000.0	9.000	N	ON	19.2
1.052250	25.70	---	56.00	30.30	1000.0	9.000	N	ON	19.2
4.499250	23.65	---	56.00	32.35	1000.0	9.000	N	ON	19.1
4.578000	---	16.79	46.00	29.21	1000.0	9.000	N	ON	19.1
8.713500	32.27	---	60.00	27.73	1000.0	9.000	N	ON	19.3
12.115500	---	22.27	50.00	27.73	1000.0	9.000	N	ON	19.4
16.226250	---	27.25	50.00	22.75	1000.0	9.000	N	ON	19.4
17.054250	39.84	---	60.00	20.16	1000.0	9.000	N	ON	19.5

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

BLE, Channel No.: 19

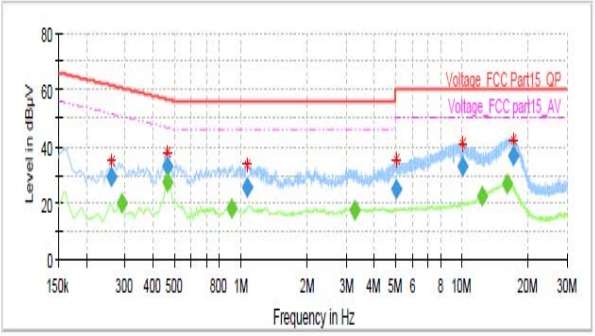
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.154500	49.46	---	65.75	16.29	1000.0	9.000	L1	ON	19.1
0.159000	---	31.16	55.52	24.36	1000.0	9.000	L1	ON	19.1
0.469500	---	24.21	46.52	22.32	1000.0	9.000	L1	ON	19.2
0.469500	36.76	---	56.52	19.76	1000.0	9.000	L1	ON	19.2
0.912750	27.78	---	56.00	28.22	1000.0	9.000	L1	ON	19.2
0.971250	---	18.19	46.00	27.81	1000.0	9.000	L1	ON	19.2
4.992000	26.37	---	56.00	29.63	1000.0	9.000	L1	ON	19.1
5.057250	---	18.19	50.00	31.81	1000.0	9.000	L1	ON	19.1
11.773500	35.47	---	60.00	24.53	1000.0	9.000	L1	ON	19.4
12.448500	---	25.53	50.00	24.47	1000.0	9.000	L1	ON	19.4
16.633500	---	29.84	50.00	20.16	1000.0	9.000	L1	ON	19.5
16.669500	45.93	---	60.00	14.07	1000.0	9.000	L1	ON	19.5

N Line

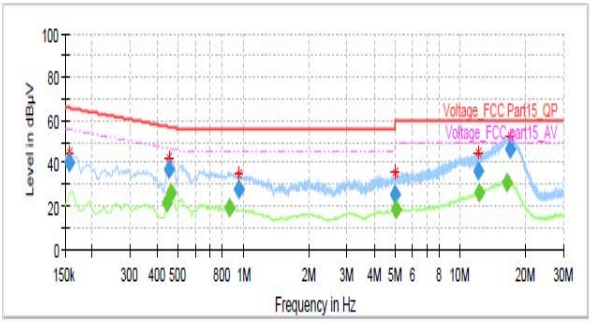


Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.260250	29.34	---	61.42	32.08	1000.0	9.000	N	ON	19.1
0.289500	---	20.02	50.54	30.52	1000.0	9.000	N	ON	19.2
0.467250	---	27.17	46.56	19.40	1000.0	9.000	N	ON	19.2
0.467250	33.10	---	56.56	23.46	1000.0	9.000	N	ON	19.2
0.910500	---	18.22	46.00	27.78	1000.0	9.000	N	ON	19.2
1.065750	25.54	---	56.00	30.46	1000.0	9.000	N	ON	19.2
3.291000	---	17.54	46.00	28.46	1000.0	9.000	N	ON	19.1
5.052750	25.07	---	60.00	34.93	1000.0	9.000	N	ON	19.1
10.070250	32.98	---	60.00	27.02	1000.0	9.000	N	ON	19.4
12.378750	---	22.09	50.00	27.91	1000.0	9.000	N	ON	19.4
16.080000	---	26.37	50.00	23.63	1000.0	9.000	N	ON	19.4
17.115000	36.72	---	60.00	23.28	1000.0	9.000	N	ON	19.5

BLE, Channel No.: 39

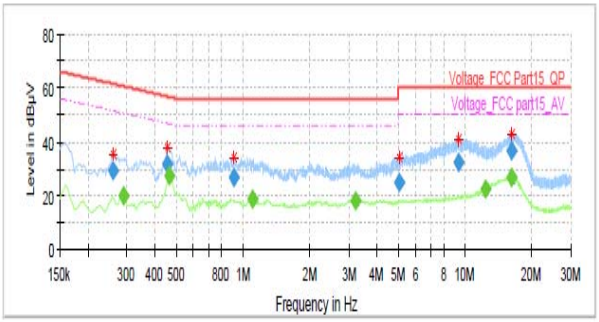
L Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.156750	40.30	---	65.63	25.34	1000.0	9.000	L1	ON	19.1
0.444750	---	21.84	46.97	25.14	1000.0	9.000	L1	ON	19.2
0.453750	37.21	---	56.81	19.60	1000.0	9.000	L1	ON	19.2
0.460500	---	26.10	46.68	20.58	1000.0	9.000	L1	ON	19.2
0.858750	---	19.36	46.00	26.64	1000.0	9.000	L1	ON	19.2
0.946500	27.92	---	56.00	28.08	1000.0	9.000	L1	ON	19.2
5.016750	25.77	---	60.00	34.23	1000.0	9.000	L1	ON	19.1
5.082000	---	18.46	50.00	31.54	1000.0	9.000	L1	ON	19.1
12.070500	36.60	---	60.00	23.40	1000.0	9.000	L1	ON	19.4
12.223500	---	26.03	50.00	23.97	1000.0	9.000	L1	ON	19.4
16.451250	---	31.31	50.00	18.69	1000.0	9.000	L1	ON	19.5
16.939500	46.70	---	60.00	13.30	1000.0	9.000	L1	ON	19.6

N Line



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.260250	29.25	---	61.42	32.17	1000.0	9.000	N	ON	19.1
0.289500	---	20.01	50.54	30.53	1000.0	9.000	N	ON	19.2
0.453750	31.51	---	56.81	25.30	1000.0	9.000	N	ON	19.2
0.467250	---	27.18	46.56	19.38	1000.0	9.000	N	ON	19.2
0.910500	26.38	---	56.00	29.62	1000.0	9.000	N	ON	19.2
1.099500	---	18.56	46.00	27.44	1000.0	9.000	N	ON	19.2
3.207750	---	17.82	46.00	28.18	1000.0	9.000	N	ON	19.1
5.046000	24.96	---	60.00	35.04	1000.0	9.000	N	ON	19.1
9.395250	32.34	---	60.00	27.66	1000.0	9.000	N	ON	19.3
12.408000	---	22.03	50.00	27.97	1000.0	9.000	N	ON	19.4
16.174500	---	26.38	50.00	23.62	1000.0	9.000	N	ON	19.4
16.224000	36.71	---	60.00	23.29	1000.0	9.000	N	ON	19.4

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

6. Main Test Instruments

Name	Type	Manufacturer	Serial Number	Calibration Date	Expiration Time
Spectrum Analyzer	FSV30	R&S	100815	2016-12-17	2017-12-16
EMI Test Receiver	ESCI	R&S	100948	2016-06-01	2017-05-31
TRILOG Broadband Antenna	VULB 9163	Schwarzbeck	9163-201	2014-12-06	2017-12-05
Double Ridged Waveguide Horn Antenna	HF907	R&S	100126	2014-12-06	2017-12-05
Loop Antenna	FMZB1519	SCHWARZBECK	1519-047	2014-02-19	2017-02-18
Standard Gain Horn	3160-09	ETS-Lindgren	00102644	2015-01-30	2018-01-29
EMI Test Receiver	ESCS30	R&S	100138	2016-12-17	2017-12-16
LISN	ENV216	R&S	101171	2016-12-18	2019-12-17
Spectrum Analyzer	N9010A	Agilent	MY47191109	2016-05-21	2017-05-20
MOB COMMS DC SUPPLY	66319D	Agilent	MY43004105	2016-05-21	2017-05-20
Peak Power Meter	U2021XA	Keysight	MY55240003	2016-06-26	2017-06-25
RF Cable	SMA 15cm	Agilent	0001	2016-12-06	2017-03-05

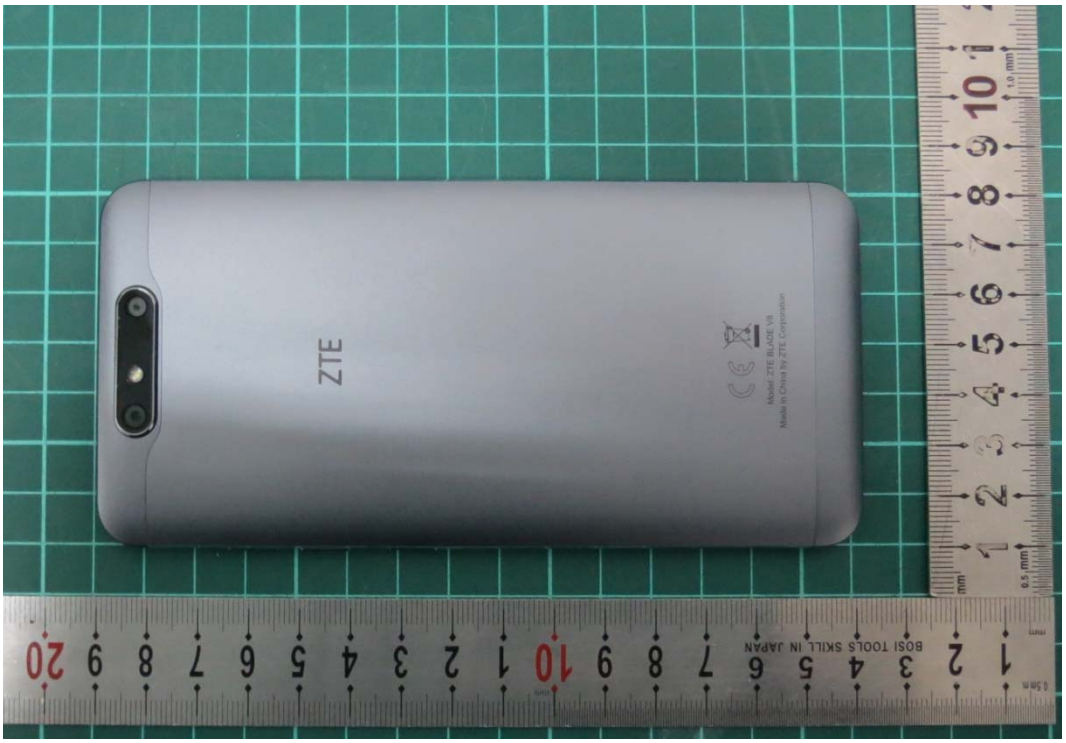
*******END OF REPORT *******

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance

Front Side



Back Side

a: EUT

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

b: Earphone

Picture 1 EUT and Accessory

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

A.2 Test Setup

30M Hz-1GHz

Above 1GHz

Picture 2 Radiated Emission Test Setup

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.

Picture 3 Conducted Emission Test Setup

This report shall not be reproduced except in full, without the written approval of TA Technology (Shanghai) Co., Ltd.