



RF TEST REPORT

Applicant	ZTE Corporation
FCC ID	SRQ-VFD510
Brand	ZTE
Product	LTE/WCDMA/GSM (GPRS) Multi-Mode Digital Mobile Phone
Model	VFD 511
Report No.	RXC1703-0087RF06
Issue Date	May 24 ,2017

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 15C (2017)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Performed by: Xianqing Li

Approved by: Kai Xu

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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	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: March 30, 2017~ May 10, 2017			

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.



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

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:	VFD 511
IMEI:	357849080011835
Hardware Version:	VFD 511 MP
Software Version:	VFD-511_ATPB03
Power Supply:	Battery/AC adapter
Antenna Type:	Internal Antenna
Antenna Connector:	A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)
additional beamforming gain:	0 dB
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 :14.07dBm BLE : -1.15 dBm
Operating Frequency Range(s)	802.11b/g/n(HT20): 2412 ~ 2462 MHz BLE: 2402 ~2480 MHz
EUT Accessory	
Adapter (Note 3)	Manufacturer: DOKOCOM Model: STC-A51-I Input power:100-240 V ~ 50/60Hz 250mA
Battery	Manufacturer: BYD Model: Li3822T43P4h736040 Power Rating: DC 3.8V, 2200mAh, Li-ion



Earphone

Manufacturer: Shen zhen FDC Electronic Co.,Ltd.

Model: DEM-94A

Note: 1.The information of the EUT is declared by the manufacturer.

2. Please refer to the specifications or user manual for details.

3.The EUT don't have standard Adapter. The adapter used for testing in this report is the a fter-market accessory.



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 (2017) Radio Frequency Devices**
- **ANSI C63.10 (2013)**
- **KDB 558074 D01 DTS Meas Guidance v04**
- **KDB 662911 D01 Multiple Transmitter Output v02r01**

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

5. Test Case Results

5.1. Average Power Output –Conducted

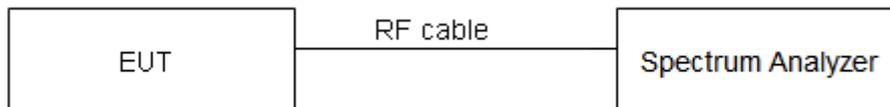
Ambient condition

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 Spectrum Analyzer 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	$\leq 1W$ (30dBm)
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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.

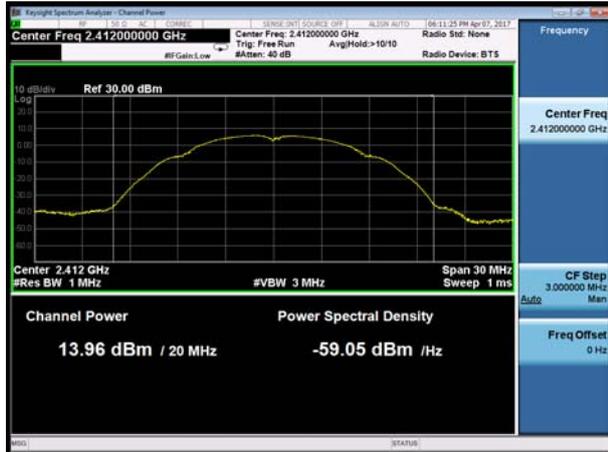
Test Results

Packet Type	Power Index		
	CH1	CH6	CH11
802.11b	15	15	15
802.11g	13	13	13
802.11n HT20	11	11	11

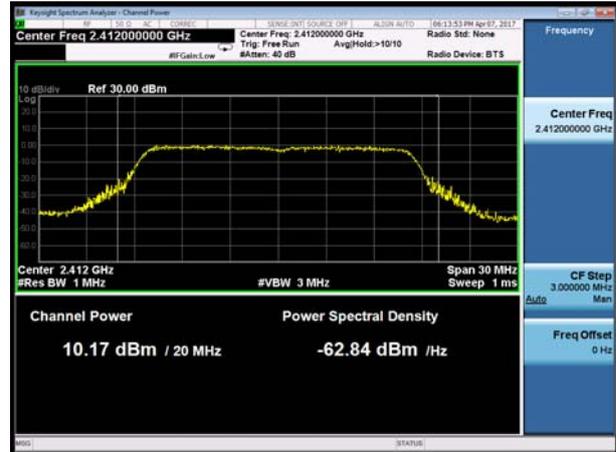
Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)	Limit (dBm)	Conclusion
802.11b	2412	13.96	30	PASS
	2437	14.06	30	PASS
	2462	14.07	30	PASS
802.11g	2412	10.17	30	PASS
	2437	11.00	30	PASS
	2462	10.78	30	PASS
802.11n HT20	2412	5.76	30	PASS
	2437	8.45	30	PASS
	2462	8.54	30	PASS
Bluetooth (Low Energy)	2402	-2.08	30	PASS
	2440	-1.15	30	PASS
	2480	-3.27	30	PASS



802.11b, Carrier frequency (MHz): 2412



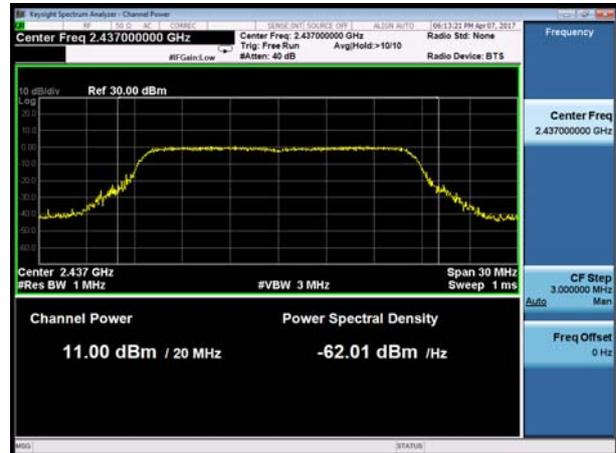
802.11g, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



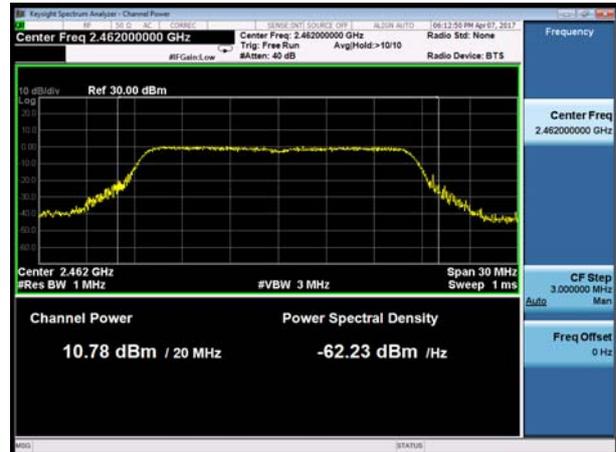
802.11g, Carrier frequency (MHz): 2437



802.11b, Carrier frequency (MHz): 2462

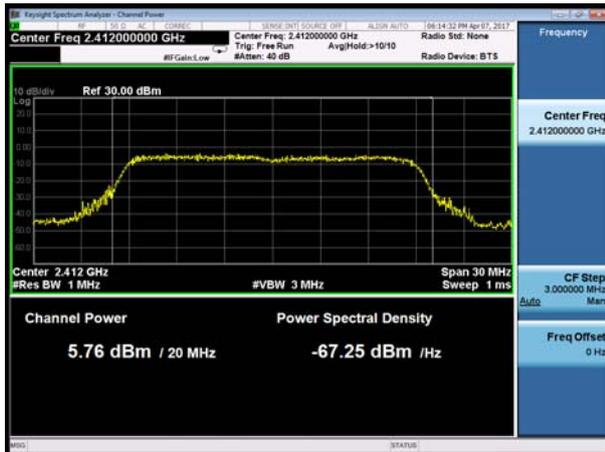


802.11g, Carrier frequency (MHz): 2462

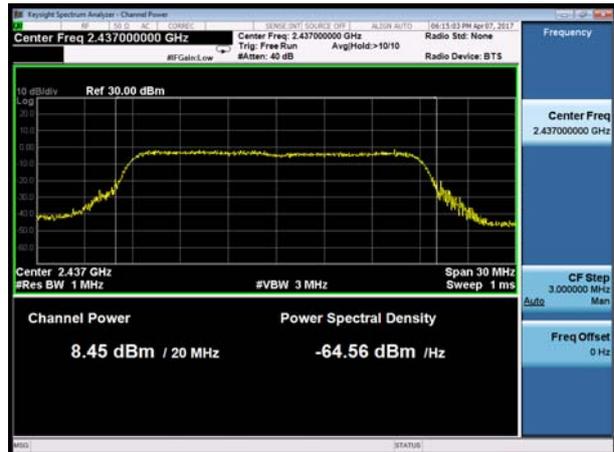




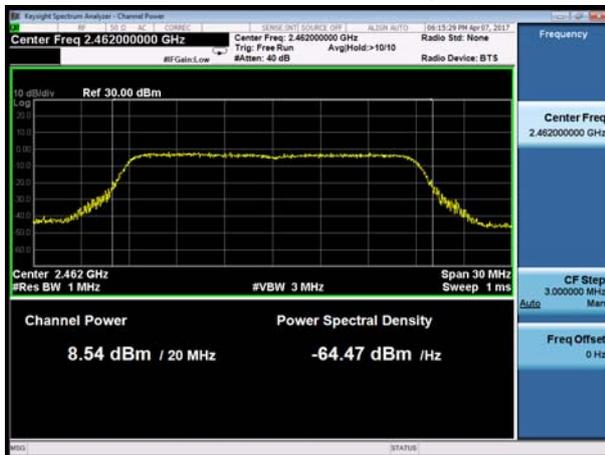
802.11n(HT20), Carrier frequency (MHz): 2412



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



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



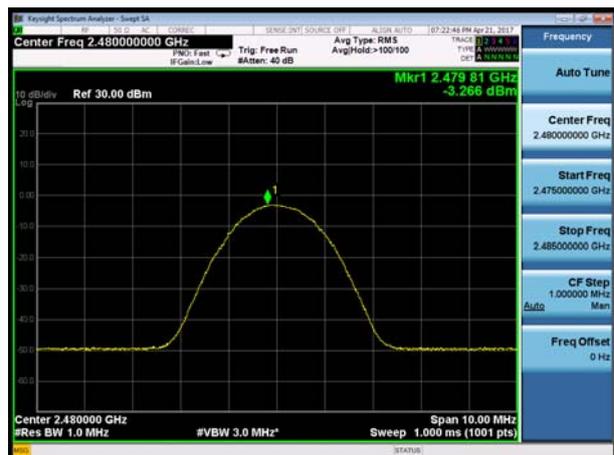
Carrier frequency (MHz): 2402
Channel No.:0



Carrier frequency (MHz): 2440
Channel No.:19



Carrier frequency (MHz): 2480
Channel No.:39



5.2. 6dB Bandwidth

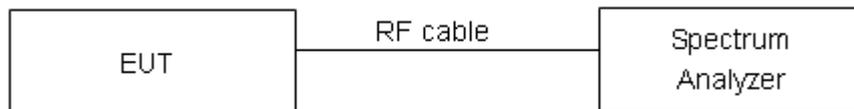
Ambient condition

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
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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.

**Test Results:**

Network Standards	Carrier frequency (MHz)	99% bandwidth (MHz)	Minimum 6 dB bandwidth (MHz)	Limit(kHz)	Conclusion
802.11b	2412	14.928	9.575	500	PASS
	2437	16.013	10.09	500	PASS
	2462	14.248	9.579	500	PASS
802.11g	2412	19.540	16.41	500	PASS
	2437	21.254	16.37	500	PASS
	2462	17.675	16.41	500	PASS
802.11n HT20	2412	18.341	17.35	500	PASS
	2437	18.744	17.26	500	PASS
	2462	17.836	17.62	500	PASS
Bluetooth (Low Energy)	2402	1.0882	0.683	500	PASS
	2440	1.0859	0.682	500	PASS
	2480	1.0857	0.674	500	PASS



802.11b, Carrier frequency (MHz): 2412



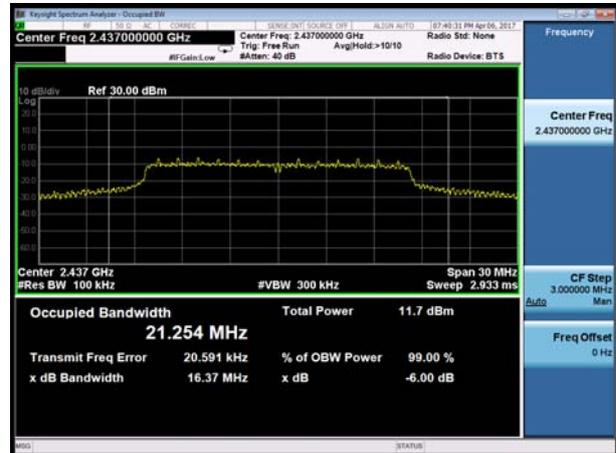
802.11g, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2437



802.11b, Carrier frequency (MHz): 2462



802.11g, Carrier frequency (MHz): 2462



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



5.3. Band Edge

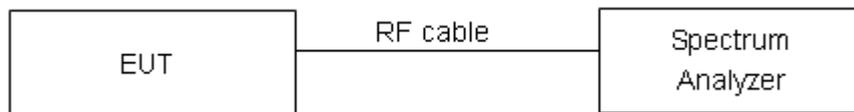
Ambient condition

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.”

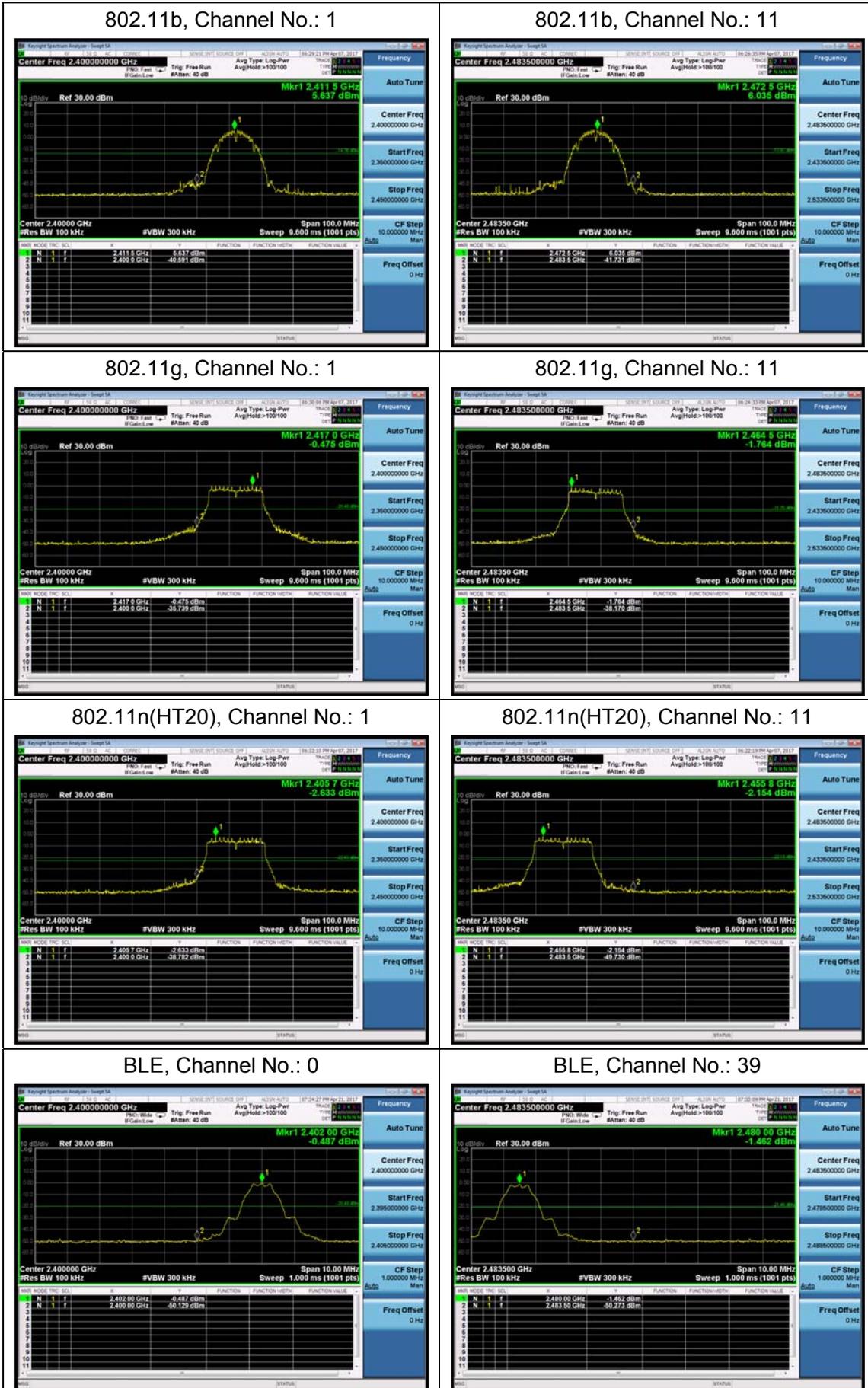
Measurement Uncertainty

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



Test Results: PASS



5.4. Power Spectral Density

Ambient condition

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

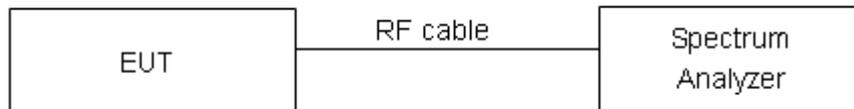
Method of Measurement

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
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Measurement Uncertainty

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

**Test Results:**

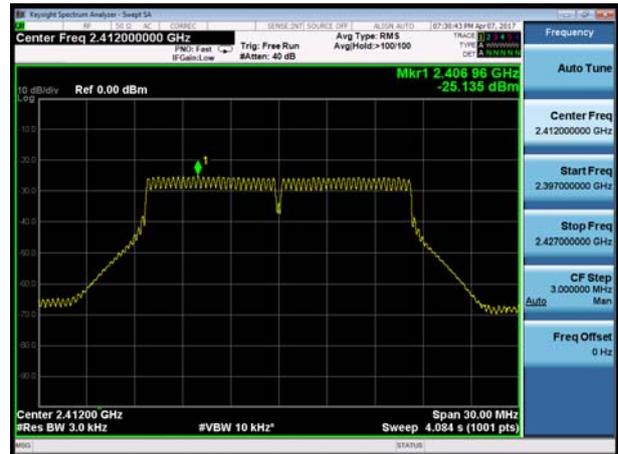
Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)	Limit (dBm / 3kHz)	Conclusion
802.11b	1	-18.752	8	PASS
	6	-17.987	8	PASS
	11	-18.175	8	PASS
802.11g	1	-25.135	8	PASS
	6	-24.581	8	PASS
	11	-24.412	8	PASS
802.11n HT20	1	-27.160	8	PASS
	6	-26.962	8	PASS
	11	-26.780	8	PASS
Bluetooth (Low Energy)	0	-18.738	8	PASS
	19	-18.200	8	PASS
	39	-19.360	8	PASS



802.11b, Channel No.: 1



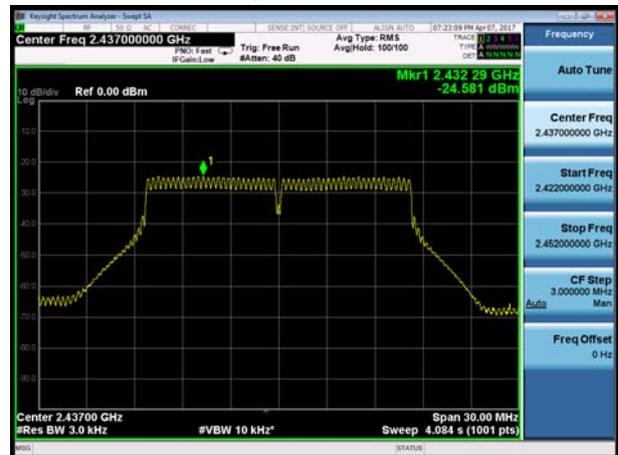
802.11g, Channel No.: 1



802.11b, Channel No.: 6



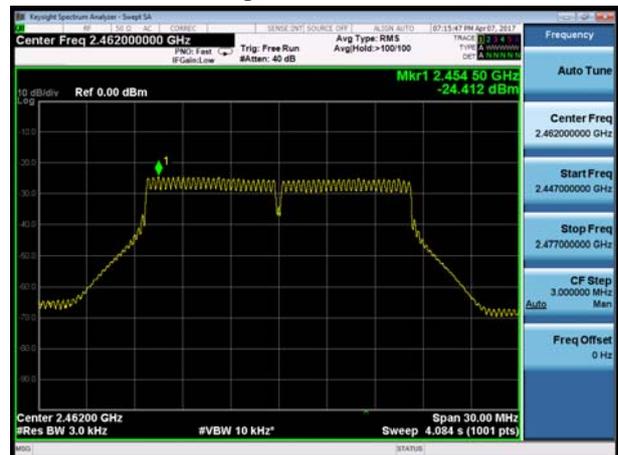
802.11g, Channel No.: 6



802.11b, Channel No.: 11

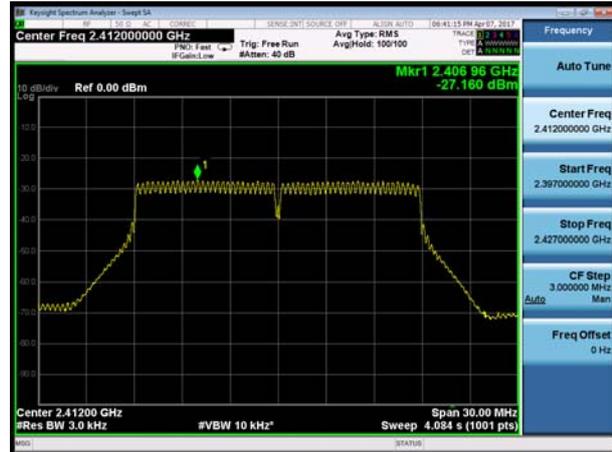


802.11g, Channel No.: 11





802.11n(HT20), Channel No. 1



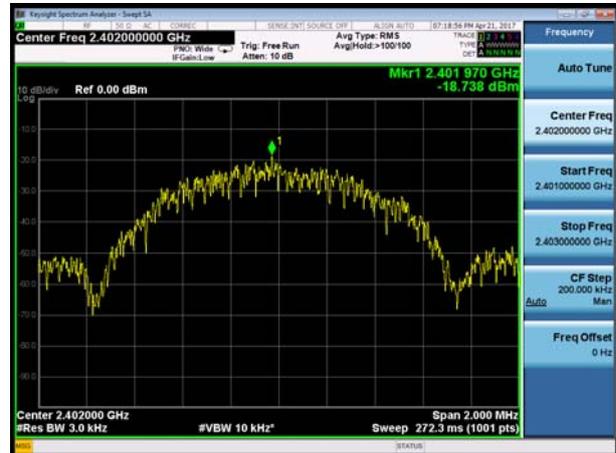
802.11n(HT20), Channel No. 6



802.11n(HT20), Channel No. 11



BLE, Channel No.: 0



BLE, Channel No.: 19



BLE, Channel No.: 39



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	3.278	-16.722
	2437	3.913	-16.087
	2462	3.258	-16.742
802.11g	2412	1.756	-18.244
	2437	-2.037	-22.037
	2462	-1.294	-21.294
802.11n HT20	2412	-4.089	-24.089
	2437	-3.825	-23.825
	2462	-4.23	-24.230
Bluetooth (Low Energy)	2402	-1.653	-21.653
	2440	-0.504	-20.504
	2480	-0.888	-20.888

Measurement Uncertainty

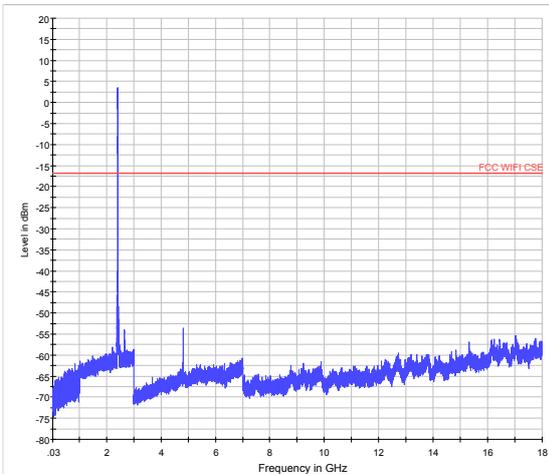
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

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

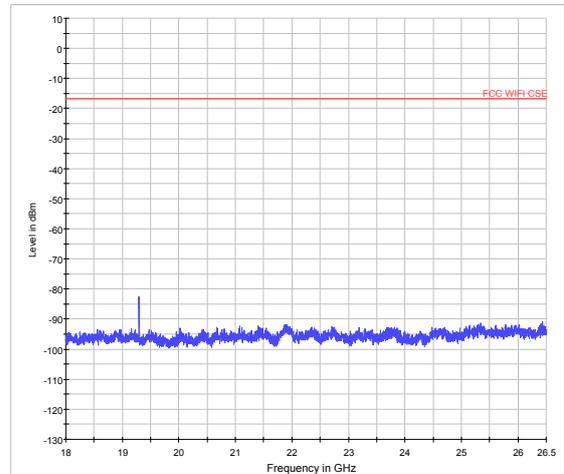


Test Results:

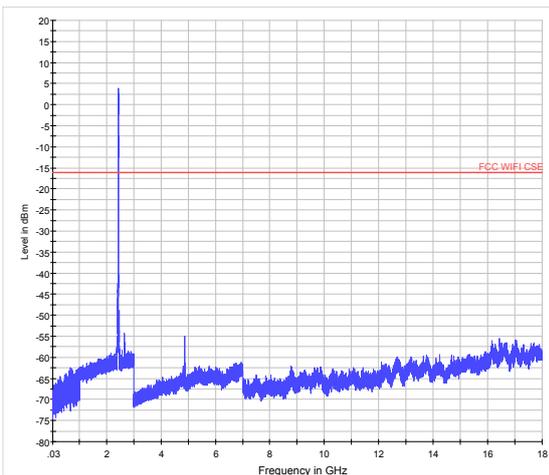
If disturbances were found more than 20dB below limit line, the mark is not required for the EUT. The signal beyond the limit is carrier.



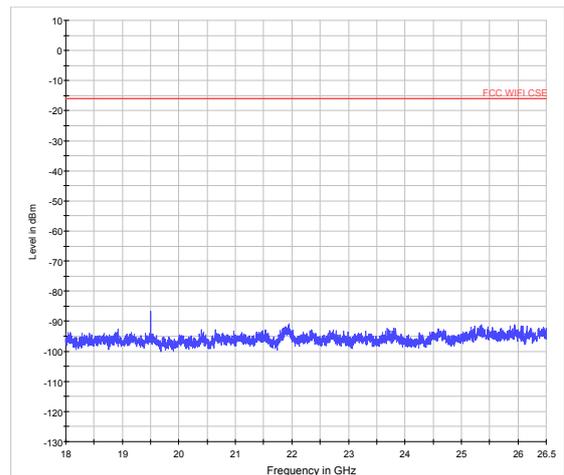
802.11b CH1 30MHz to 18GHz



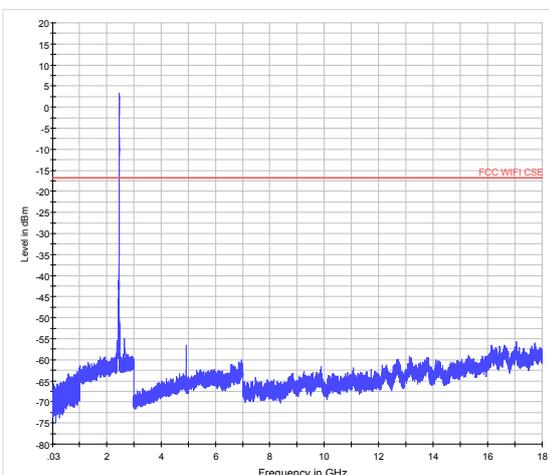
802.11b CH1 18GHz to 26.5GHz



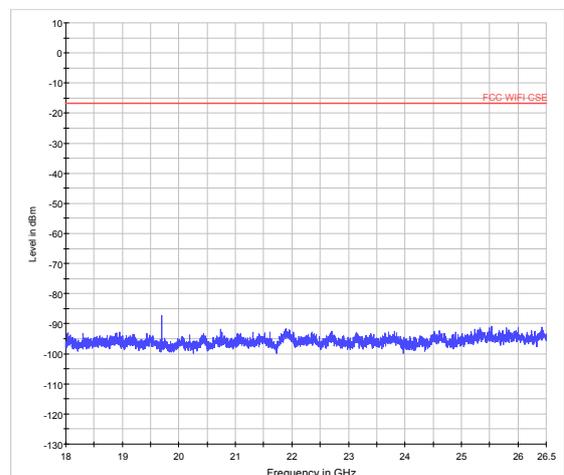
802.11b CH6 30MHz to 18GHz



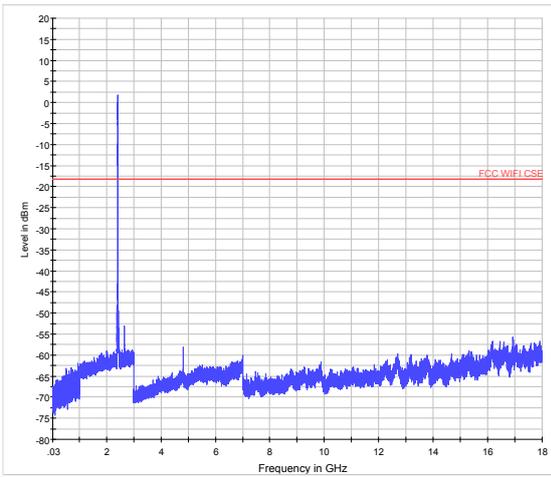
802.11b CH6 18GHz to 26.5GHz



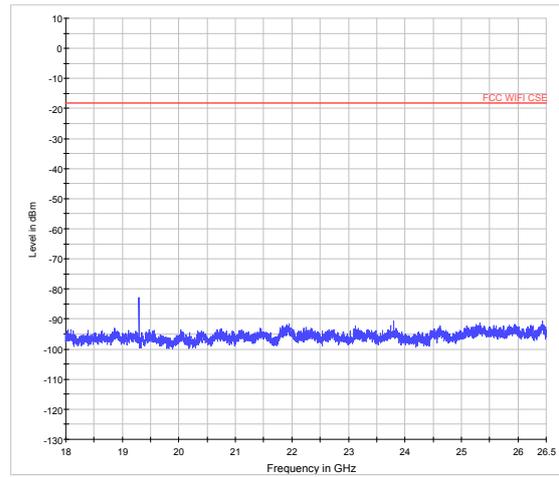
802.11b CH11 30MHz to 18GHz



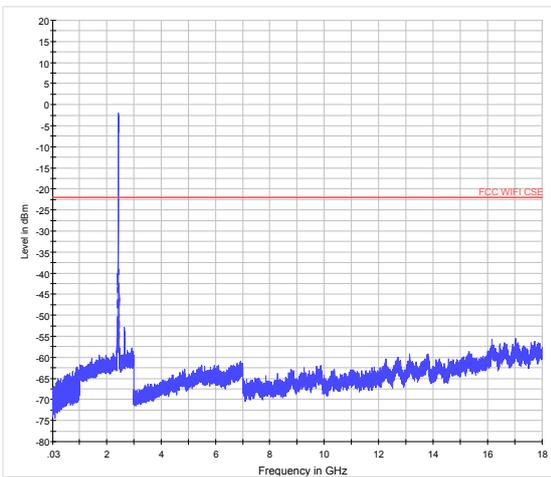
802.11b CH11 18GHz to 26.5GHz



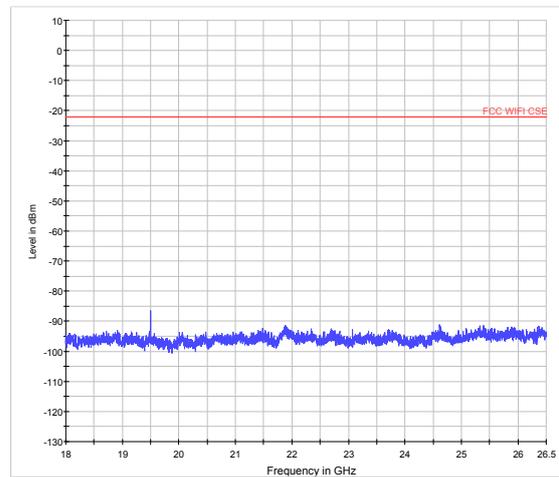
802.11g CH1 30MHz to 18GHz



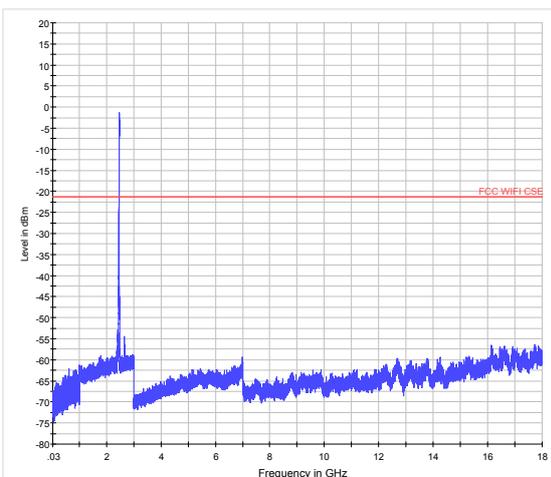
802.11g CH1 18GHz to 26.5GHz



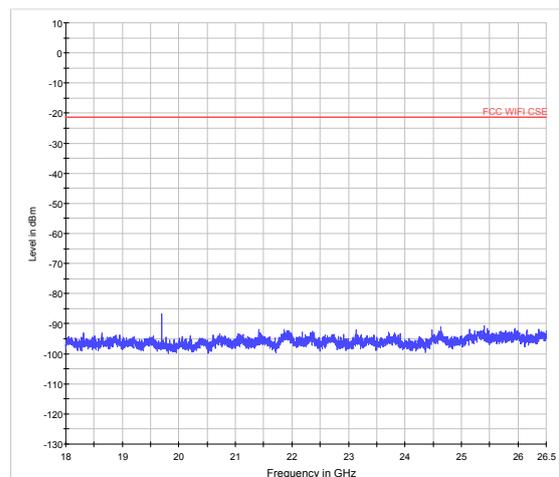
802.11g CH6 30MHz to 18GHz



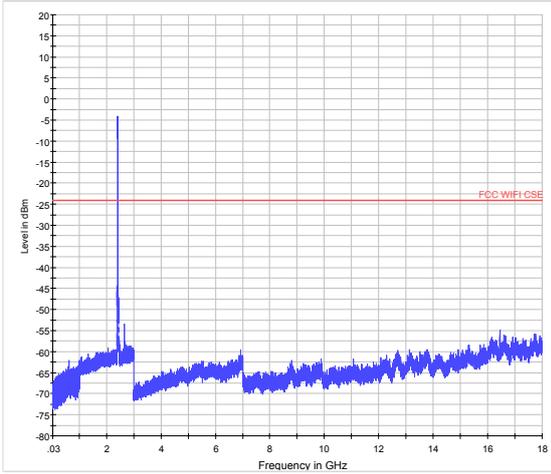
802.11g CH6 18GHz to 26.5GHz



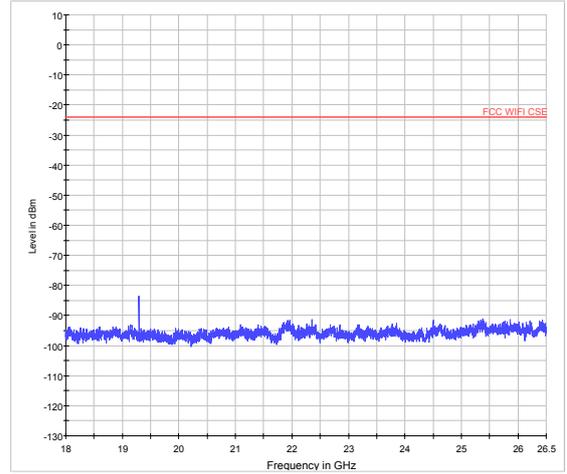
802.11g CH11 30MHz to 18GHz



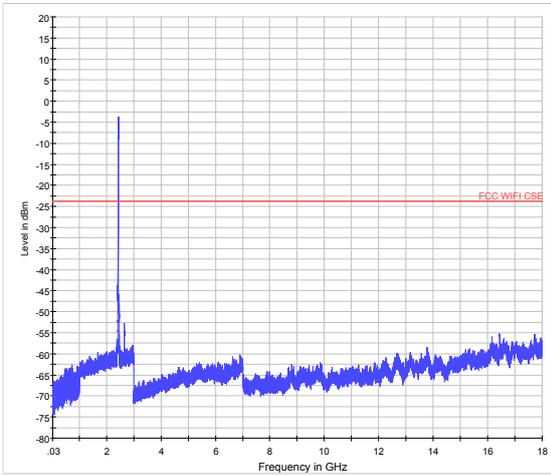
802.11g CH11 18GHz to 26.5GHz



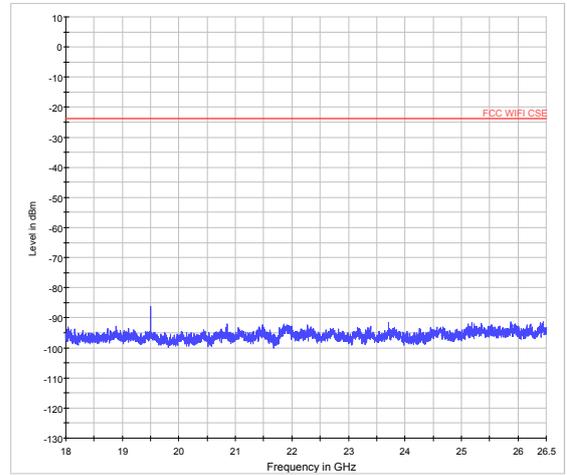
802.11n (HT20) CH1 30MHz to 18GHz



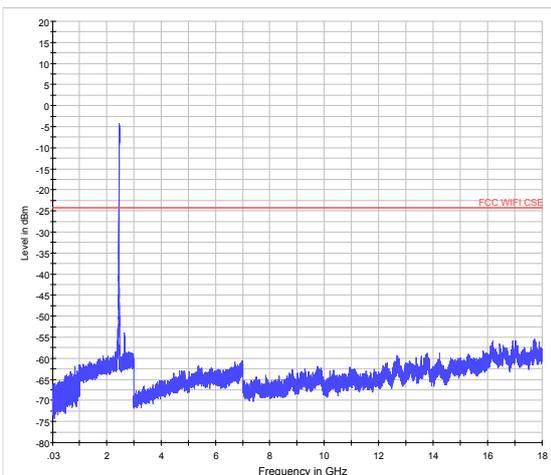
802.11n (HT20) CH1 18GHz to 26.5GHz



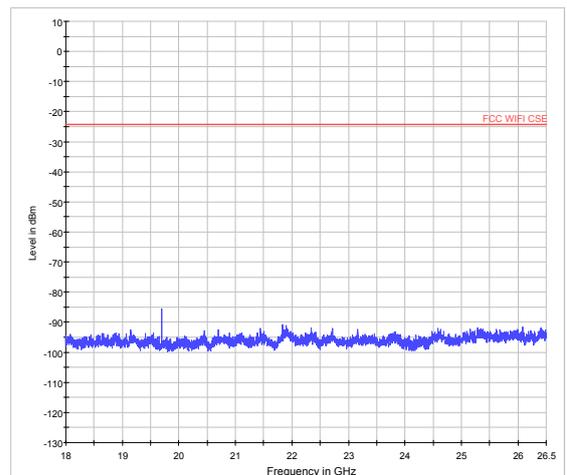
802.11n (HT20) CH6 30MHz to 18GHz



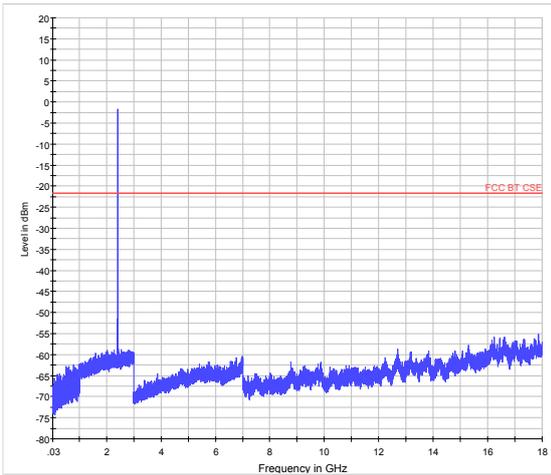
802.11n (HT20) CH6 18GHz to 26.5GHz



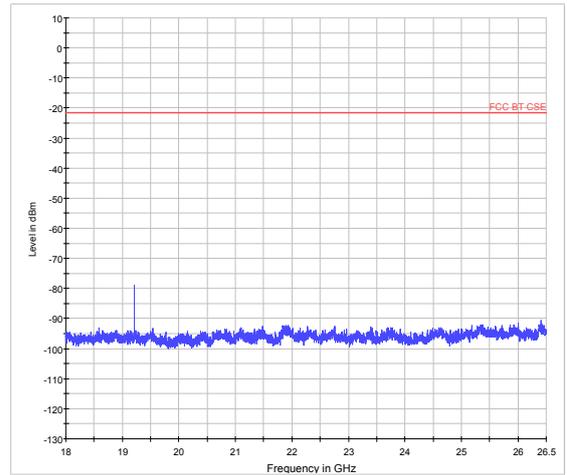
802.11n (HT20) CH11 30MHz to 18GHz



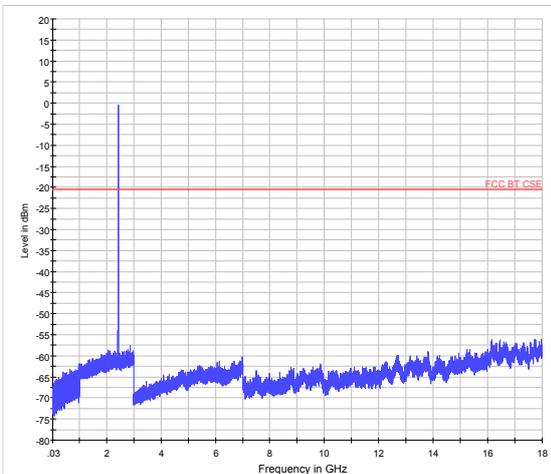
802.11n (HT20) CH11 18GHz to 26.5GHz



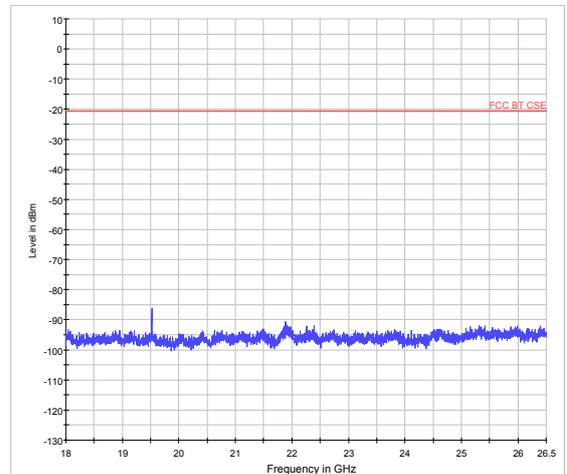
BLE CH0 30MHz to 18GHz



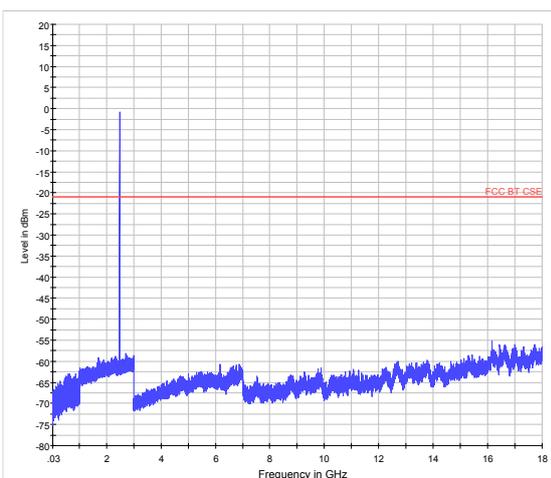
BLE CH0 18GHz to 26.5GHz



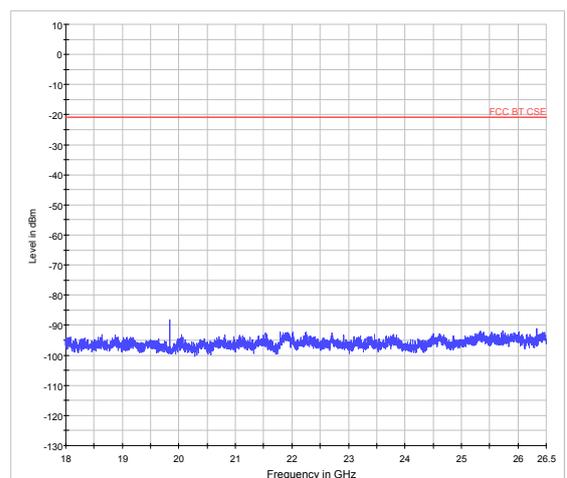
BLE CH19 30MHz to 18GHz



BLE CH19 18GHz to 26.5GHz



BLE CH39 30MHz to 18GHz



BLE CH39 18GHz to 26.5GHz

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:

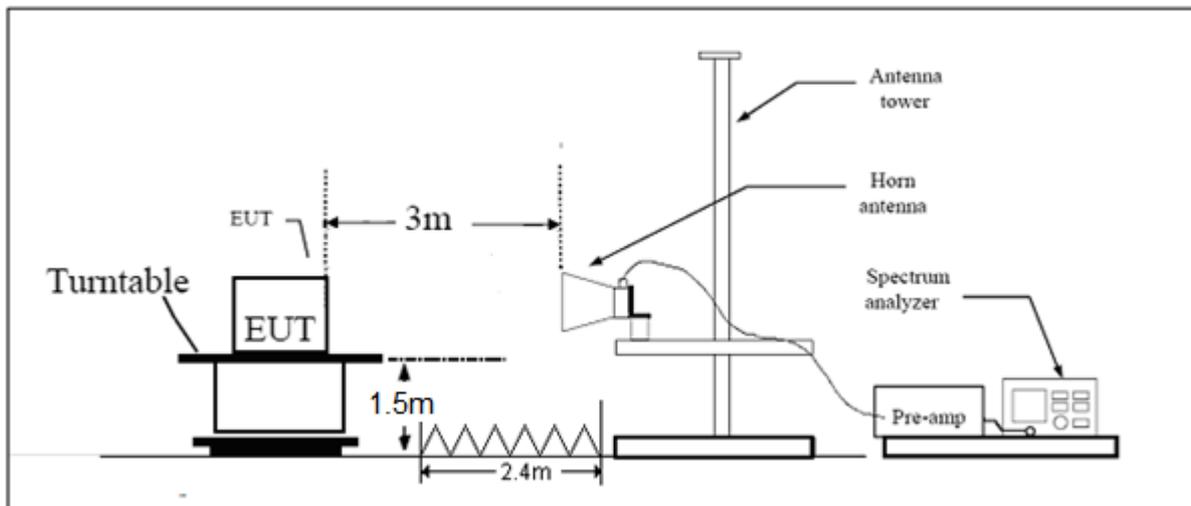
- (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz / VBW=1MHz / Sweep=AUTO

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

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.

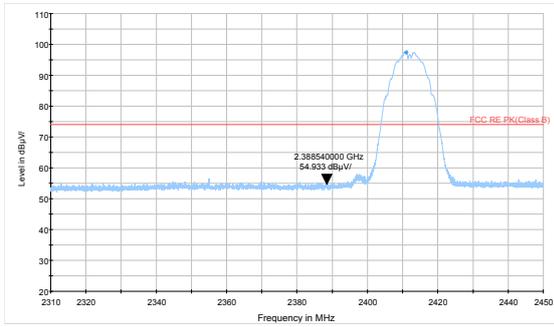


Test Results:

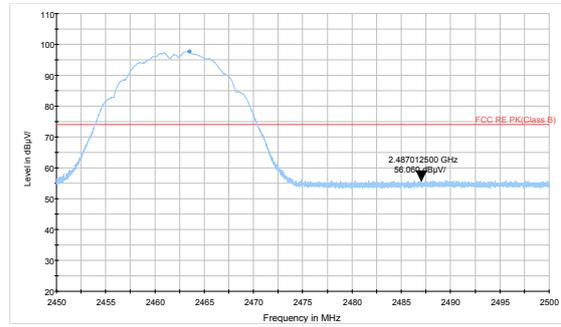
PASS

The signal beyond the limit is carrier.

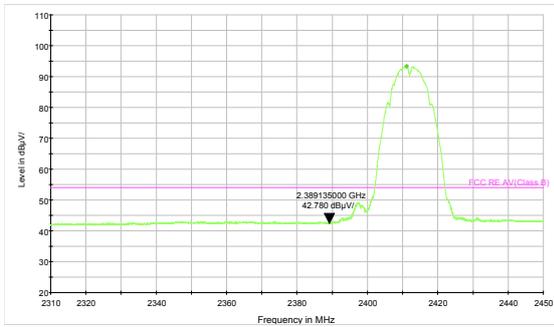
802.11b-Channel 1: Peak



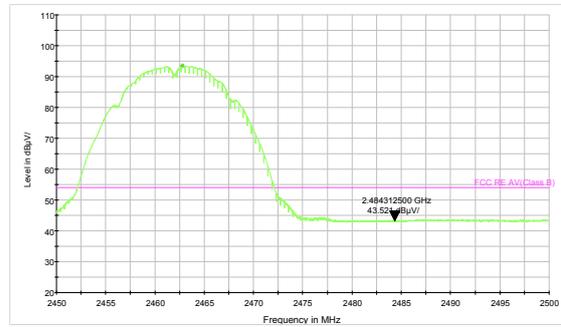
802.11b-Channel 11: Peak



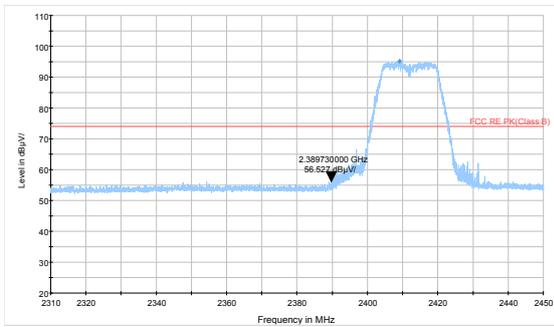
802.11b-Channel 1: Average



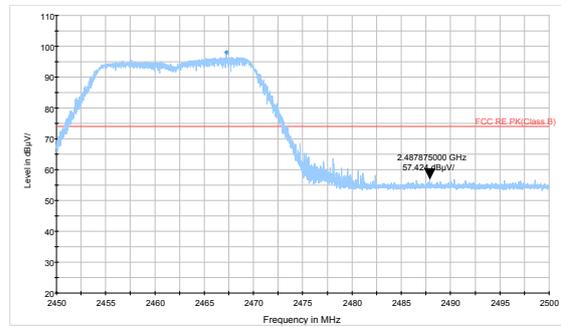
802.11b-Channel 11: Average



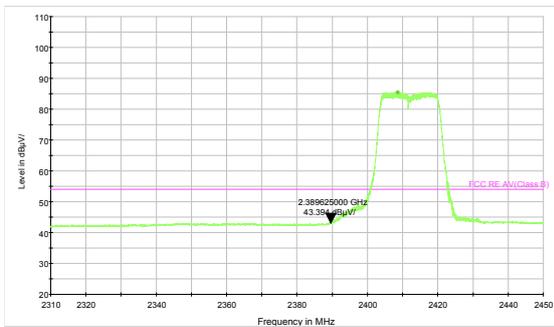
802.11g-Channel 1: Peak



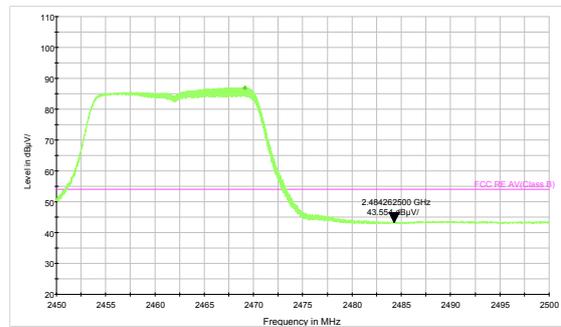
802.11g-Channel 11: Peak



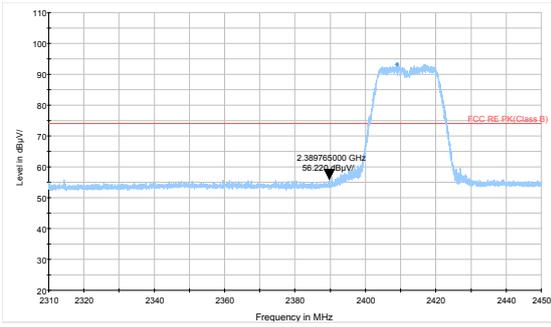
802.11g-Channel 1: Average



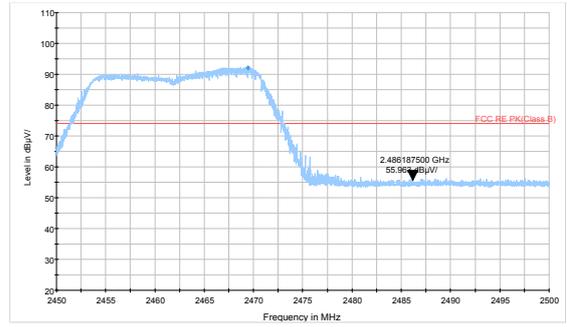
802.11g-Channel 11: Average



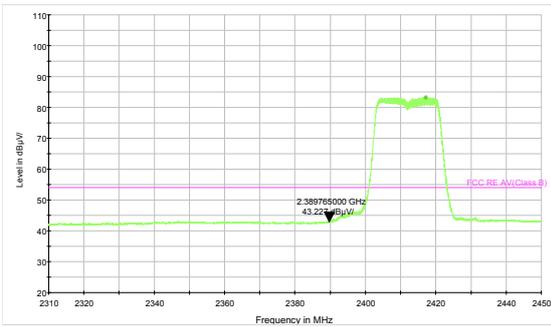
802.11n HT20 -Channel 1: Peak



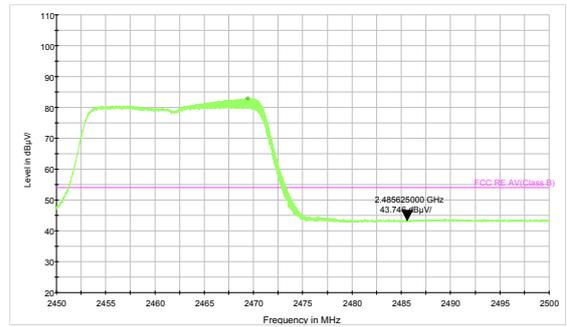
802.11n HT20-Channel 11: Peak



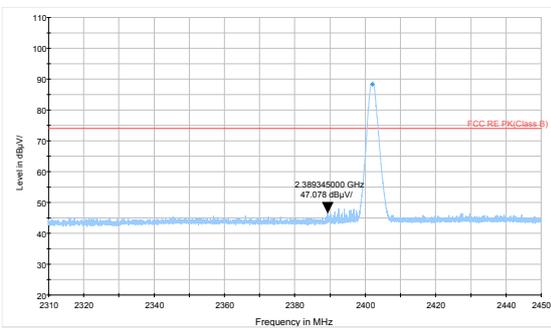
802.11n HT20-Channel 1: Average



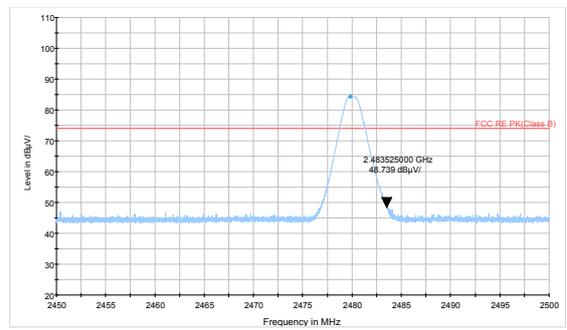
802.11n HT20-Channel 11: Average



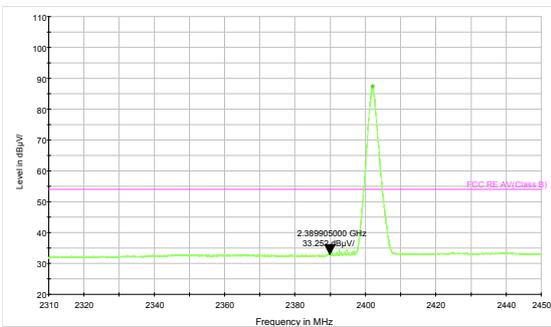
BLE -Channel 0: Peak



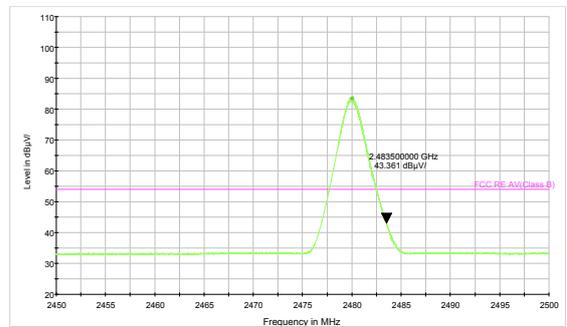
BLE -Channel 39: Peak



BLE -Channel 0: Average



BLE -Channel 39: Average



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

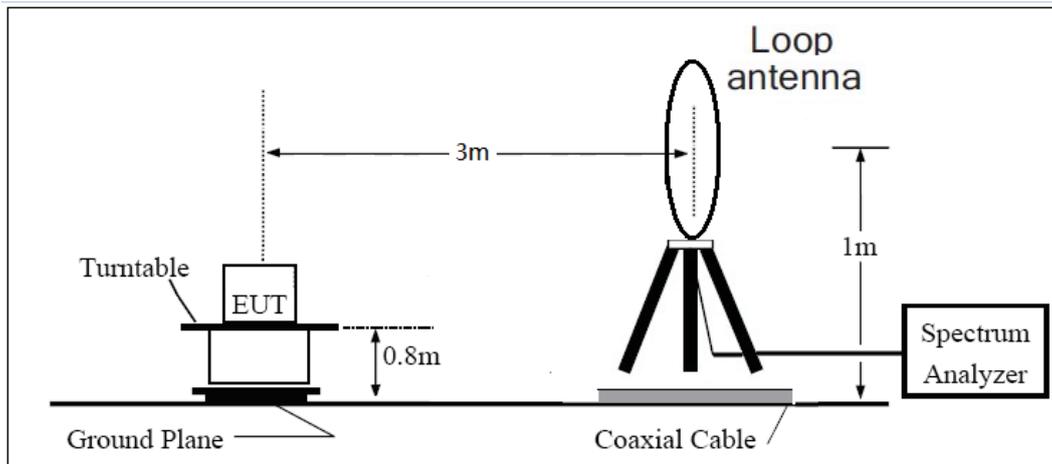
(b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

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.

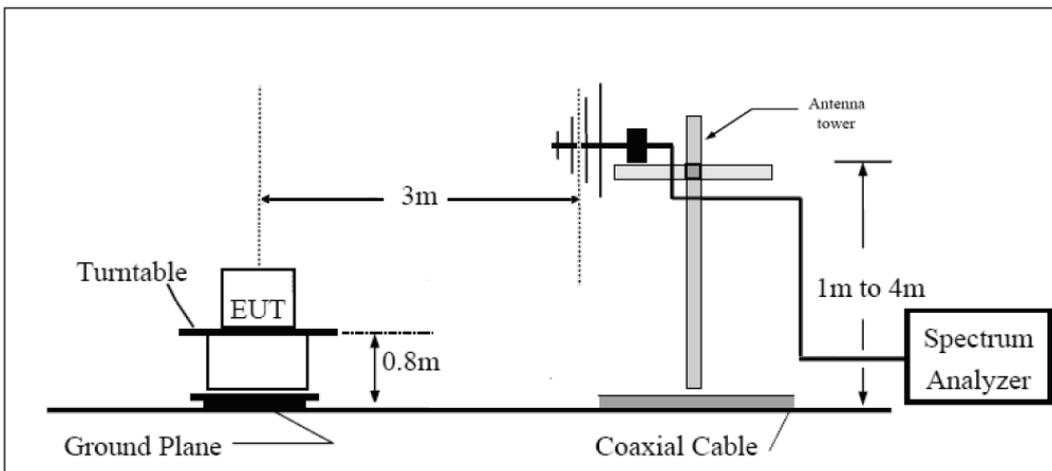
The test is in transmitting mode.

Test setup

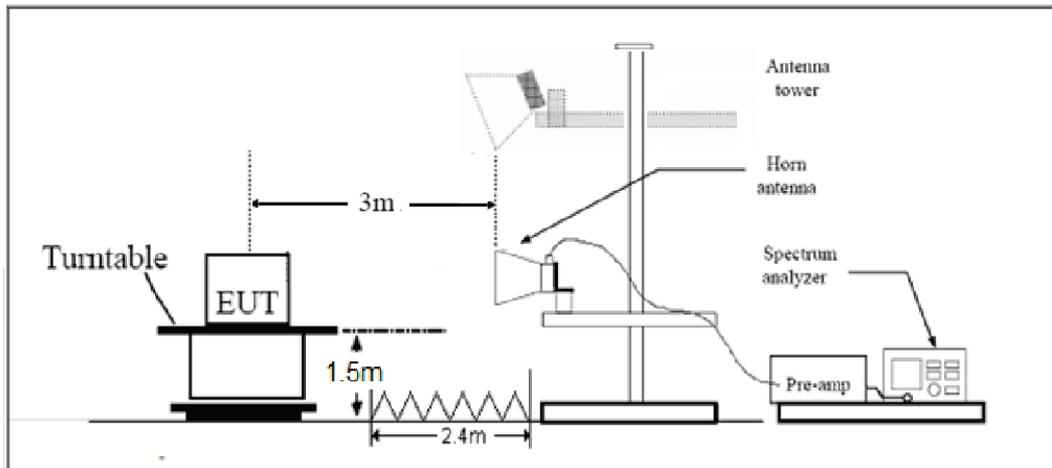
9KHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

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

Test result

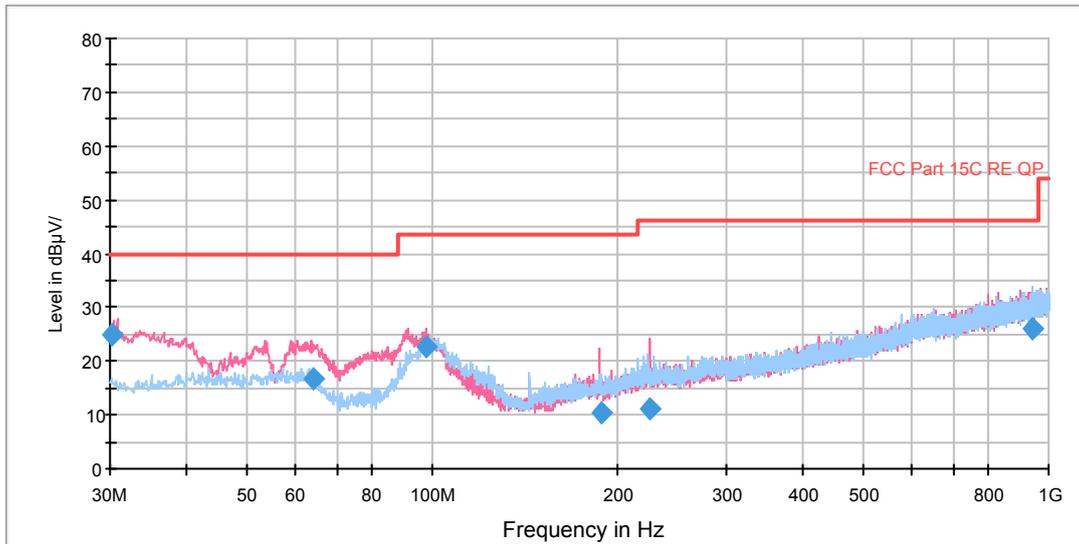
Sweep from 9 kHz to 30MHz, and the emissions more than 20 dB below the permissible value are not reported.

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

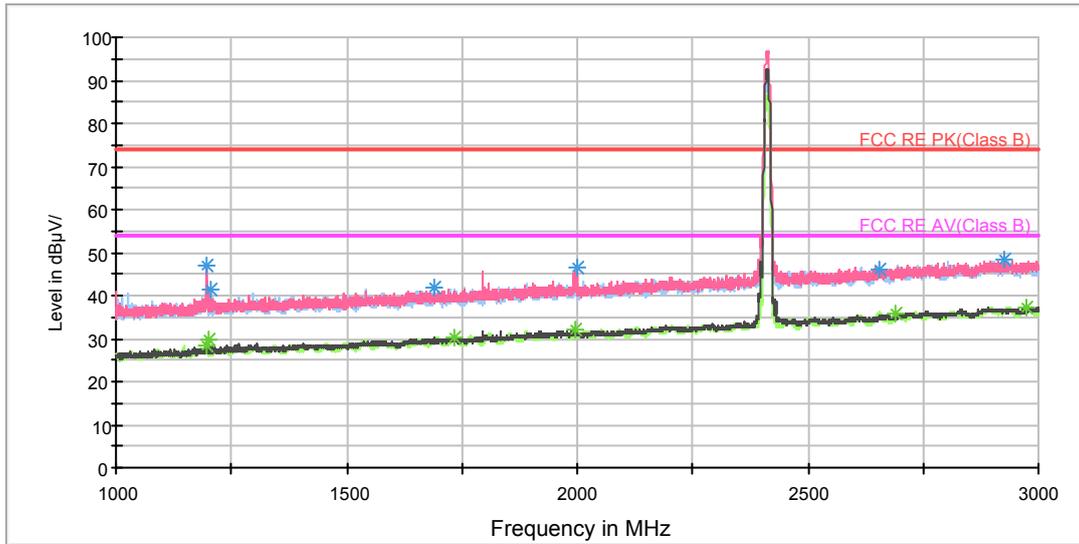
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.288750	24.9	100.0	V	116.0	12.8	12.1	15.1	40.0
64.027500	16.8	100.0	V	117.0	5.7	11.1	23.2	40.0
98.098750	22.6	125.0	V	87.0	9.5	13.1	20.9	43.5
187.620000	10.6	100.0	V	113.0	-0.8	11.4	32.9	43.5
226.056250	11.2	125.0	V	261.0	-1.9	13.1	34.8	46.0
939.900000	25.9	125.0	H	104.0	-1.2	27.1	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

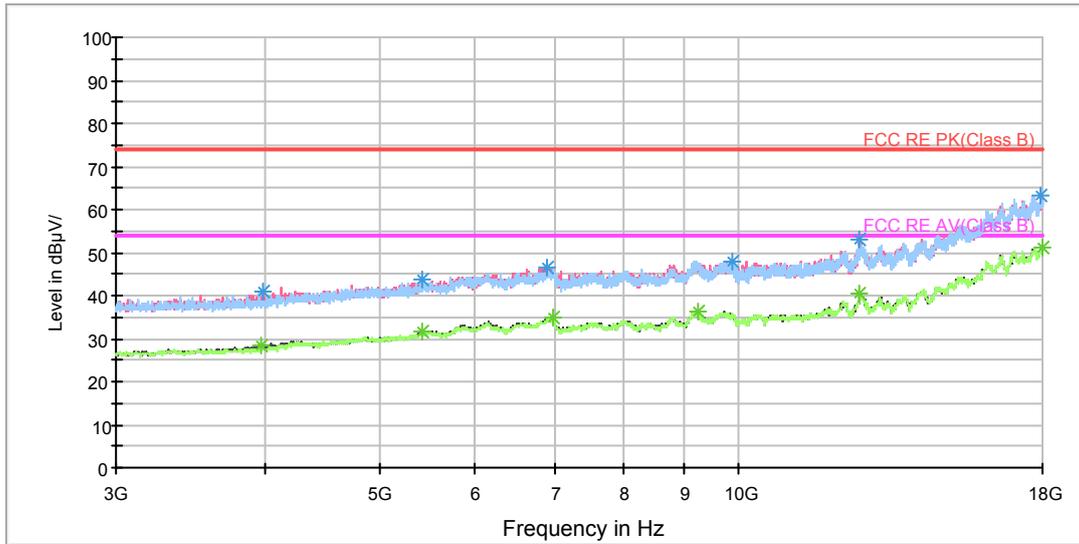
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.500000	47.1	101.0	H	20.0	55.3	-8.2	26.9	74
1206.250000	41.5	101.0	H	0.0	49.6	-8.1	32.5	74
1691.250000	42.0	101.0	H	332.0	47.0	-5.0	32.0	74
2000.000000	46.4	101.0	V	103.0	49.8	-3.4	27.6	74
2654.500000	46.2	101.0	H	135.0	45.8	0.4	27.8	74
2927.500000	48.1	101.0	V	295.0	46.4	1.7	25.9	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)
1197.500000	28.5	101.0	V	173.0	36.7	-8.2	25.5	54
1202.250000	29.5	101.0	H	0.0	37.7	-8.2	24.5	54
1731.500000	30.4	101.0	H	299.0	35.2	-4.8	23.6	54
1996.000000	32.1	101.0	V	23.0	35.4	-3.3	21.9	54
2690.750000	35.6	101.0	H	307.0	35.5	0.1	18.4	54
2971.750000	37.2	101.0	H	0.0	35.0	2.2	16.8	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

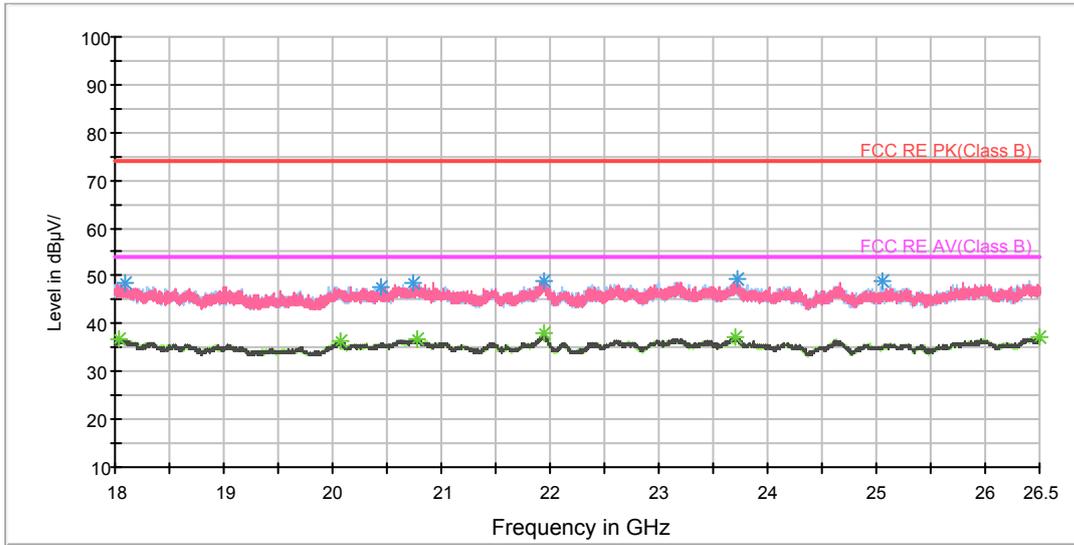
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3993.750000	40.8	101.0	V	220.0	41.9	-1.1	33.2	74
5428.125000	44.0	101.0	V	0.0	41.2	2.8	30.0	74
6911.250000	46.5	101.0	H	0.0	40.3	6.2	27.5	74
9894.375000	48.0	101.0	V	0.0	37.7	10.3	26.0	74
12635.625000	52.9	101.0	V	0.0	38.8	14.1	21.1	74
17947.500000	63.1	101.0	V	165.0	38.2	24.9	10.9	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)
3971.250000	28.5	101.0	V	274.0	29.4	-0.9	25.5	54
5431.875000	31.4	101.0	V	52.0	28.6	2.8	22.6	54
6997.500000	34.8	101.0	V	0.0	28.3	6.5	19.2	54
9236.250000	36.4	101.0	V	0.0	26.5	9.9	17.6	54
12639.375000	40.4	101.0	H	0.0	25.9	14.5	13.6	54
17998.125000	51.2	101.0	V	137.0	25.8	25.4	2.8	54

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

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)
18098.812500	48.5	V	18.0	50.7	-2.2	25.5	74
20451.187500	47.7	V	114.0	53.8	-6.1	26.3	74
20740.187500	48.6	H	327.0	55.4	-6.8	25.4	74
21947.187500	48.9	V	0.0	56.9	-8.0	25.1	74
23716.250000	49.2	H	358.0	55.1	-5.9	24.8	74
25050.750000	48.9	H	0.0	54.8	-5.9	25.1	74

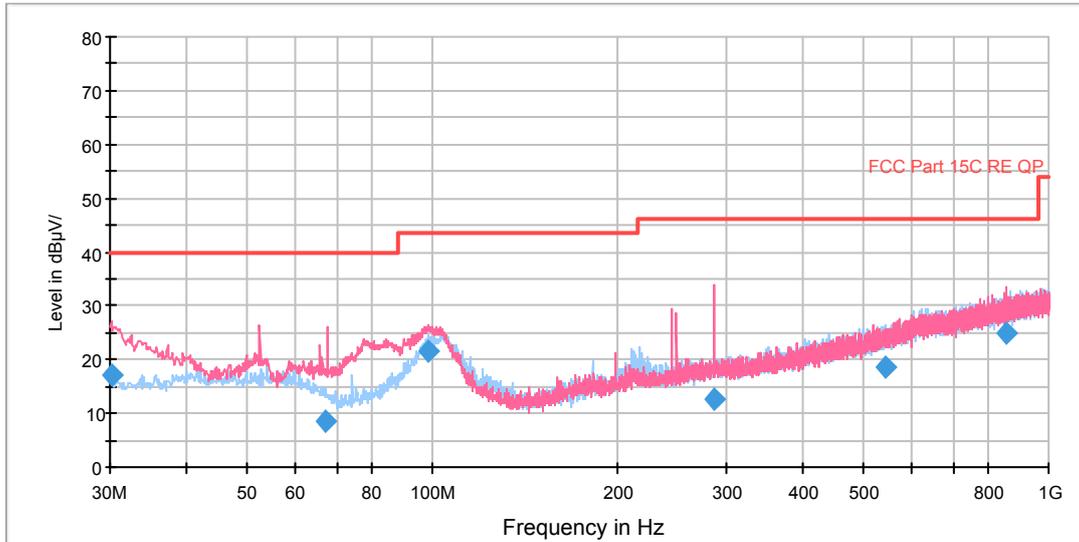
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18032.937500	36.9	H	133.0	38.8	-1.9	17.1	54
20075.062500	36.2	V	145.0	41.9	-5.7	17.8	54
20771.000000	36.8	V	0.0	43.7	-6.9	17.2	54
21944.000000	37.8	V	0.0	45.8	-8.0	16.2	54
23695.000000	37.2	V	261.0	43.1	-5.9	16.8	54
26500.000000	37.0	H	264.0	42.5	-5.5	17.0	54

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

802.11b CH6

FCC RE 0.03-1GHz QP Class C

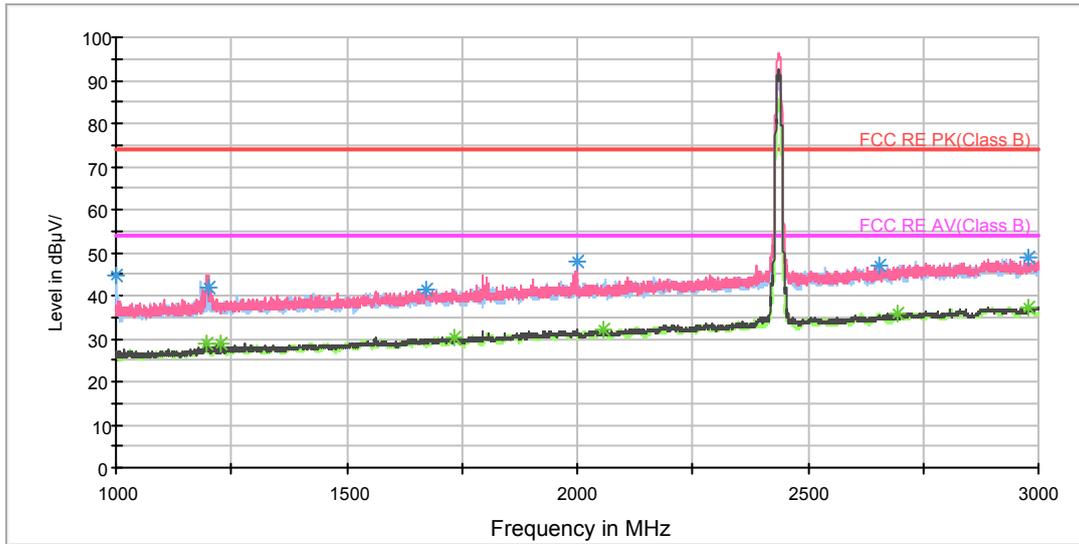


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.160000	17.0	100.0	V	155.0	4.9	12.1	23.0	40.0
67.228750	8.7	125.0	V	225.0	-1.0	9.7	31.3	40.0
98.705000	21.7	125.0	V	96.0	8.6	13.1	21.8	43.5
287.010000	12.6	100.0	V	58.0	-2.8	15.4	33.4	46.0
542.965000	18.7	125.0	H	54.0	-2.8	21.5	27.3	46.0
855.470000	24.9	125.0	V	264.0	-1.2	26.1	21.1	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

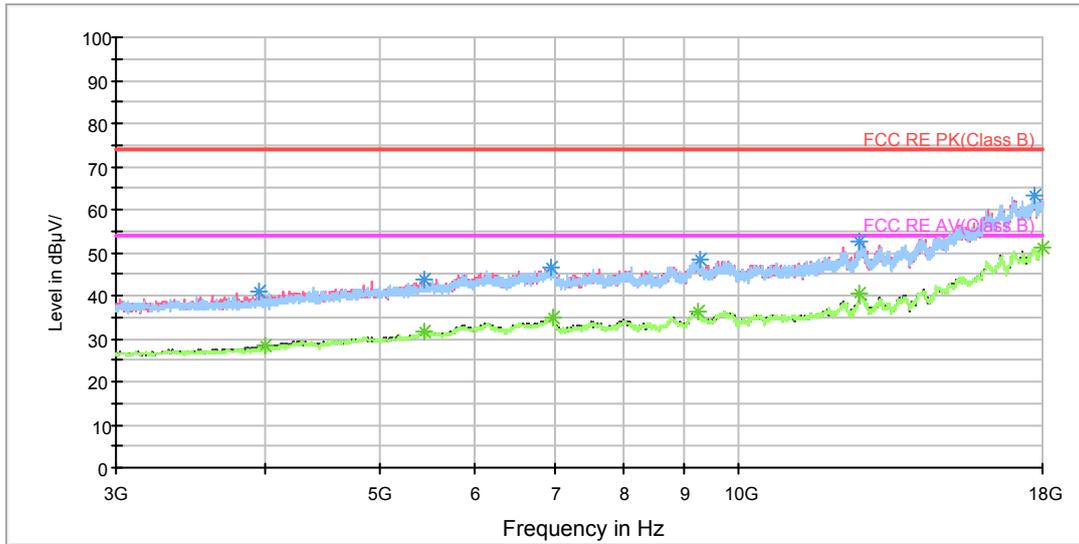
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1000.250000	44.7	101.0	H	30.0	53.9	-9.2	29.3	74
1202.000000	42.0	101.0	V	49.0	50.2	-8.2	32.0	74
1672.250000	41.6	101.0	V	219.0	46.7	-5.1	32.4	74
1999.500000	48.0	101.0	V	85.0	51.4	-3.4	26.0	74
2653.750000	46.8	101.0	H	0.0	46.4	0.4	27.2	74
2977.000000	48.9	101.0	H	300.0	46.7	2.2	25.1	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)
1197.500000	29.0	101.0	V	58.0	37.2	-8.2	25.0	54
1226.250000	28.9	101.0	H	19.0	36.7	-7.8	25.1	54
1732.000000	30.3	101.0	H	0.0	35.1	-4.8	23.7	54
2055.000000	32.1	101.0	H	300.0	35.3	-3.2	21.9	54
2693.750000	35.6	101.0	H	205.0	35.5	0.1	18.4	54
2977.250000	37.3	101.0	H	257.0	35.1	2.2	16.7	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

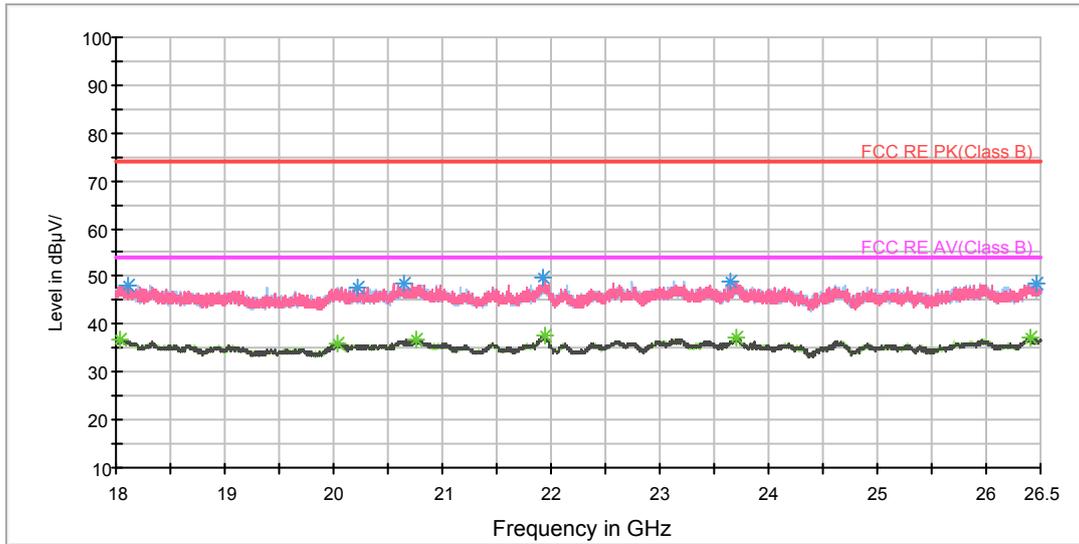
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3948.750000	40.8	101.0	H	2.0	41.9	-1.1	33.2	74
5437.500000	43.8	101.0	V	327.0	40.9	2.9	30.2	74
6960.000000	46.5	101.0	H	168.0	40.3	6.2	27.5	74
9283.125000	48.2	101.0	V	272.0	38.9	9.3	25.8	74
12646.875000	52.6	101.0	V	0.0	38.3	14.3	21.4	74
17711.250000	63.1	101.0	H	0.0	38.4	24.7	10.9	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)
3999.375000	28.4	101.0	V	218.0	29.5	-1.1	25.6	54
5433.750000	31.5	101.0	V	0.0	28.7	2.8	22.5	54
6997.500000	34.7	101.0	V	0.0	28.2	6.5	19.3	54
9232.500000	36.3	101.0	H	0.0	26.4	9.9	17.7	54
12639.375000	40.5	101.0	V	0.0	26.0	14.5	13.5	54
17998.125000	51.1	101.0	V	0.0	25.7	25.4	2.9	54

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

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)
18119.000000	48.3	V	198.0	50.6	-2.3	25.7	74
20228.062500	47.8	V	134.0	53.7	-5.9	26.2	74
20657.312500	48.5	H	71.0	55.1	-6.6	25.5	74
21933.375000	49.7	H	345.0	57.7	-8.0	24.3	74
23649.312500	48.9	H	0.0	54.8	-5.9	25.1	74
26470.250000	48.4	V	12.0	53.8	-5.4	25.6	74

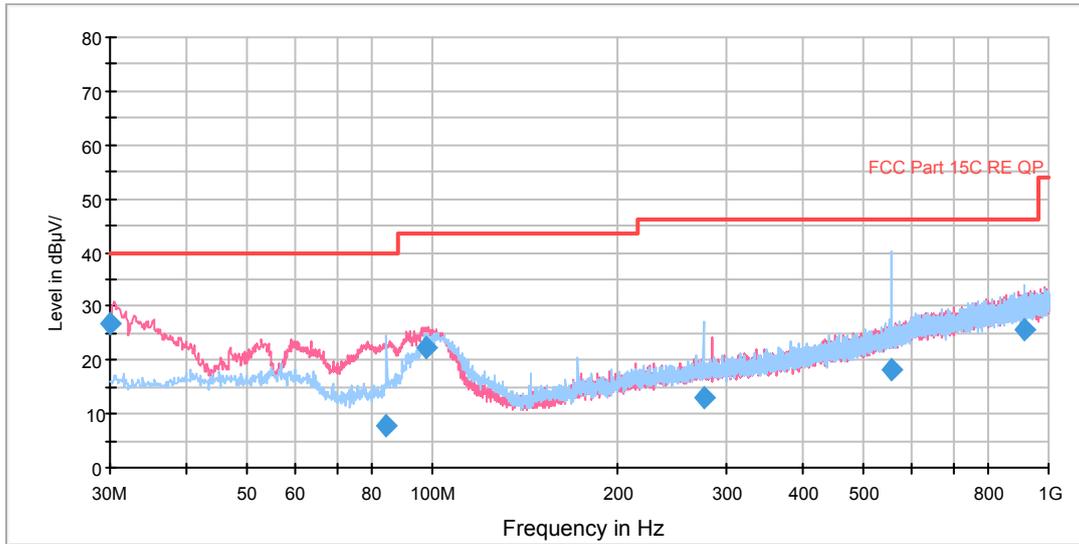
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18038.250000	36.9	V	149.0	38.9	-2.0	17.1	54
20045.312500	36.1	V	42.0	41.8	-5.7	17.9	54
20766.750000	36.7	H	0.0	43.6	-6.9	17.3	54
21941.875000	37.6	H	0.0	45.6	-8.0	16.4	54
23700.312500	37.1	V	134.0	43.0	-5.9	16.9	54
26402.250000	37.0	V	166.0	42.4	-5.4	17.0	54

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

802.11b CH11

FCC RE 0.03-1GHz QP Class C

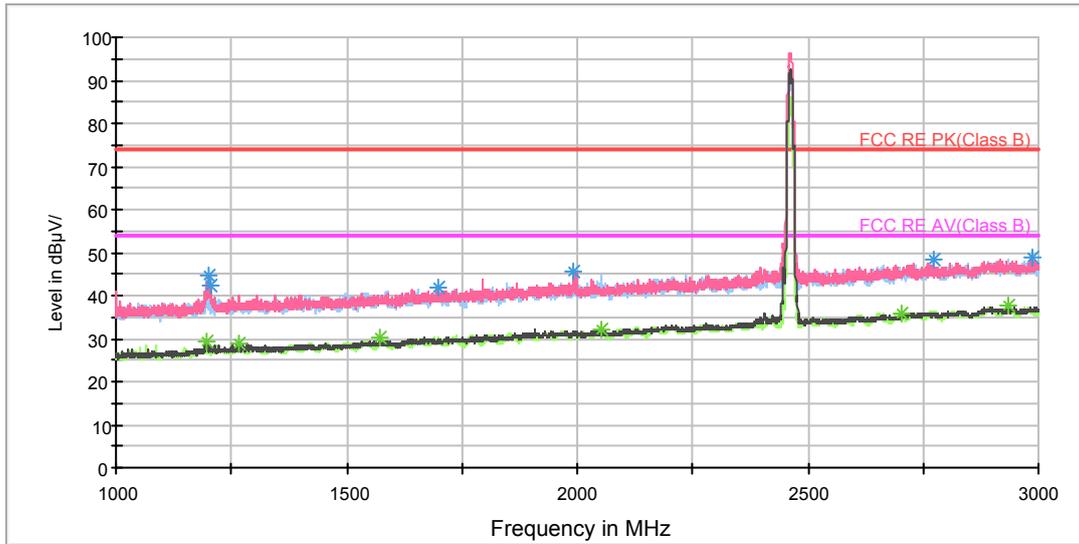


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	26.9	100.0	V	183.0	14.8	12.1	13.1	40.0
84.120000	7.8	125.0	H	84.0	-2.1	9.9	32.2	40.0
98.101250	22.4	114.0	V	214.0	9.3	13.1	21.1	43.5
275.767500	13.1	114.0	H	84.0	-1.9	15.0	32.9	46.0
556.707500	18.4	100.0	H	128.0	-2.8	21.2	27.6	46.0
911.372500	25.7	100.0	H	211.0	-1.3	27.0	20.3	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

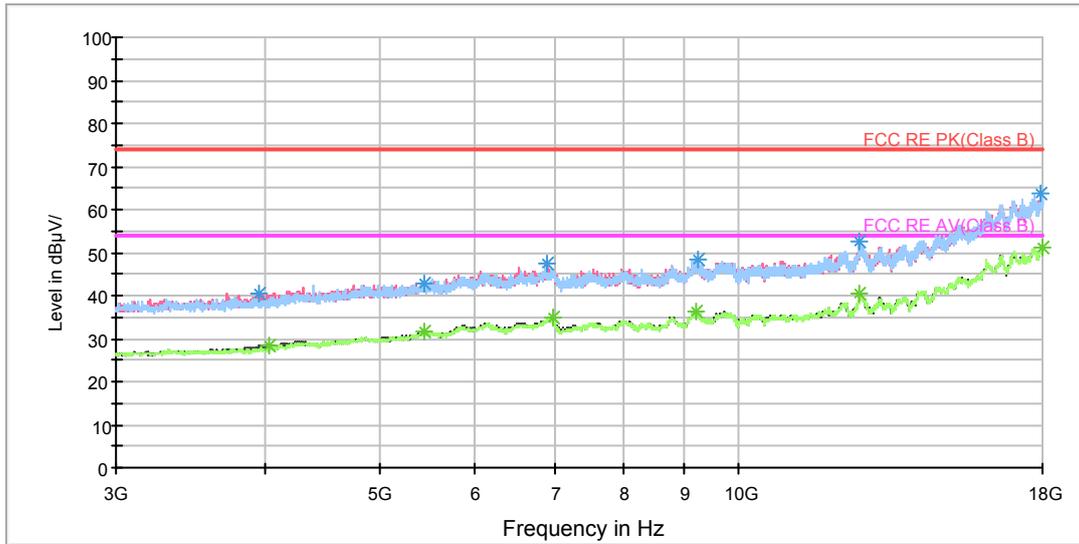
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1200.000000	44.6	101.0	V	16.0	52.8	-8.2	29.4	74
1204.250000	42.2	101.0	V	69.0	50.4	-8.2	31.8	74
1700.250000	42.0	101.0	V	24.0	46.9	-4.9	32.0	74
1992.500000	45.8	101.0	V	105.0	49.1	-3.3	28.2	74
2770.750000	48.2	101.0	H	338.0	47.4	0.8	25.8	74
2987.000000	49.0	101.0	V	87.0	46.8	2.2	25.0	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)
1194.500000	29.1	101.0	V	69.0	37.3	-8.2	24.9	54
1266.000000	29.0	101.0	V	167.0	36.7	-7.7	25.0	54
1573.000000	30.5	101.0	H	216.0	37.0	-6.5	23.5	54
2053.250000	32.3	101.0	H	321.0	35.5	-3.2	21.7	54
2701.500000	35.8	101.0	H	294.0	35.8	0.0	18.2	54
2932.750000	37.5	101.0	H	171.0	35.7	1.8	16.5	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

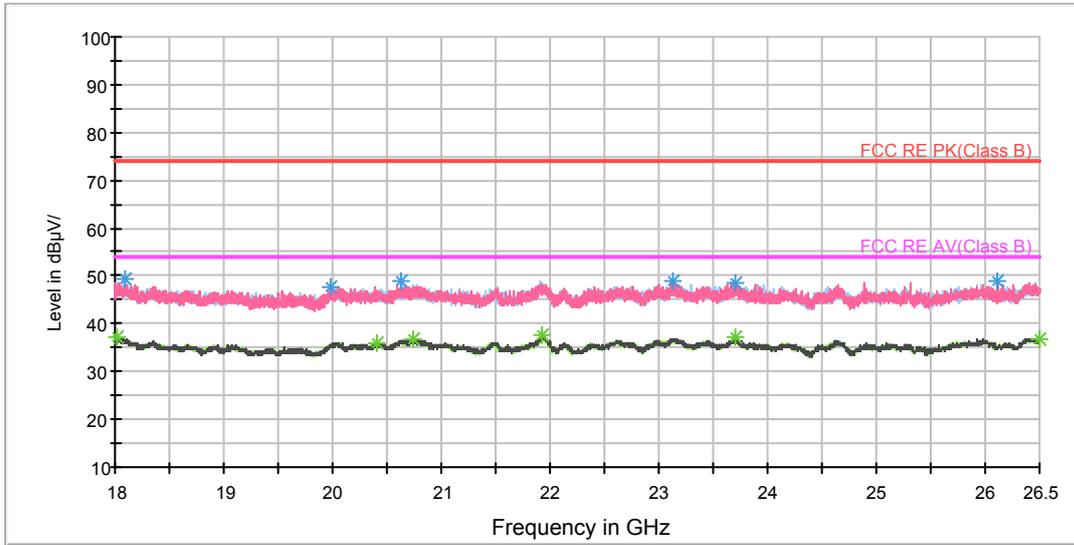
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3956.250000	40.6	101.0	V	356.0	41.6	-1.0	33.4	74
5437.500000	42.8	101.0	V	0.0	39.9	2.9	31.2	74
6916.875000	47.6	101.0	V	329.0	41.4	6.2	26.4	74
9236.250000	48.4	101.0	H	0.0	38.5	9.9	25.6	74
12639.375000	52.7	101.0	V	356.0	38.2	14.5	21.3	74
17910.000000	63.7	101.0	H	0.0	38.2	25.5	10.3	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)
4036.875000	28.5	101.0	V	301.0	29.5	-1.0	25.5	54
5435.625000	31.4	101.0	V	219.0	28.5	2.9	22.6	54
6995.625000	34.9	101.0	V	0.0	28.4	6.5	19.1	54
9226.875000	36.4	101.0	V	109.0	26.5	9.9	17.6	54
12639.375000	40.4	101.0	H	54.0	25.9	14.5	13.6	54
17998.125000	51.2	101.0	V	165.0	25.8	25.4	2.8	54

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

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)
18083.937500	49.3	H	165.0	51.5	-2.2	24.7	74
19990.062500	47.7	H	259.0	53.4	-5.7	26.3	74
20633.937500	48.8	V	118.0	55.3	-6.5	25.2	74
23129.750000	49.1	V	72.0	55.2	-6.1	24.9	74
23709.875000	48.6	H	0.0	54.5	-5.9	25.4	74
26119.625000	49.0	V	0.0	54.4	-5.4	25.0	74

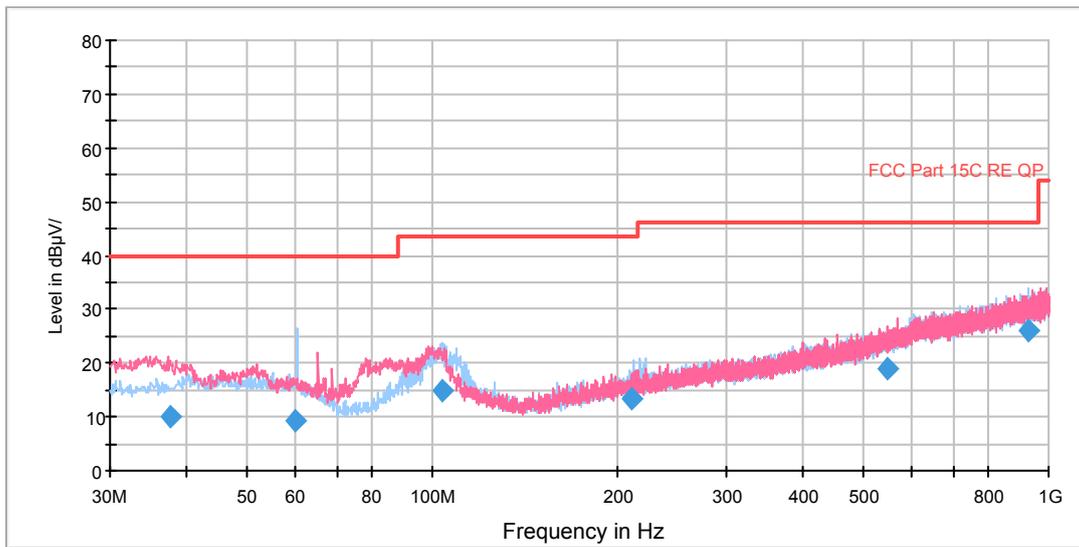
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18024.437500	37.1	H	244.0	39.0	-1.9	16.9	54
20407.625000	36.1	V	0.0	42.2	-6.1	17.9	54
20734.875000	37.0	H	228.0	43.8	-6.8	17.0	54
21931.250000	37.6	H	307.0	45.6	-8.0	16.4	54
23696.062500	37.2	H	275.0	43.1	-5.9	16.8	54
26493.625000	37.0	H	213.0	42.4	-5.4	17.0	54

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

802.11g CH1

FCC RE 0.03-1GHz QP Class C

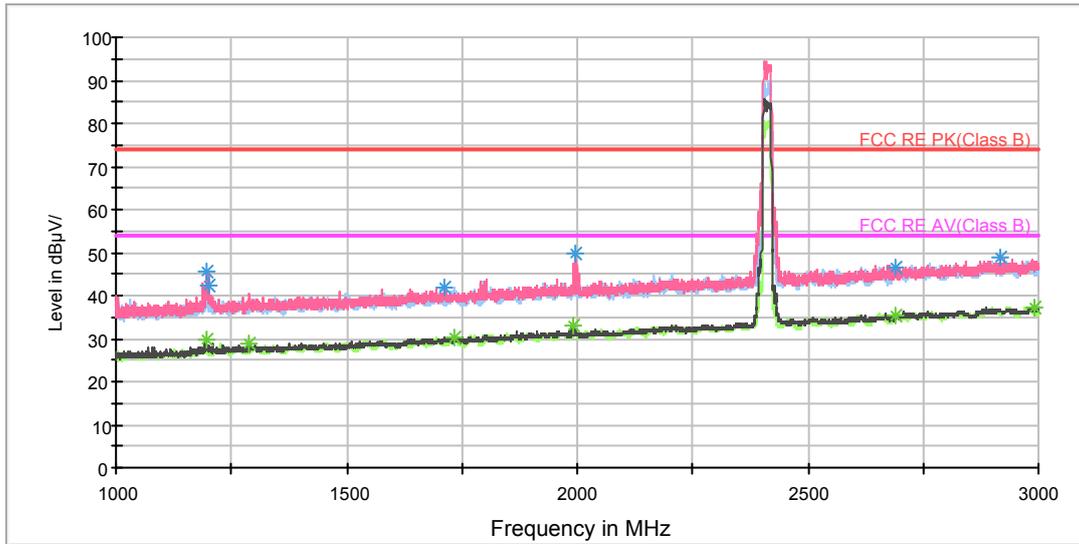


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
37.675000	10.1	100.0	V	156.0	-2.6	12.7	29.9	40.0
59.872500	9.2	114.0	H	98.0	-3.4	12.6	30.8	40.0
103.758750	14.9	125.0	H	25.0	2.0	12.9	28.6	43.5
211.352500	13.4	125.0	H	49.0	0.8	12.6	30.1	43.5
546.927500	18.8	100.0	V	100.0	-2.7	21.5	27.2	46.0
929.995000	25.9	114.0	H	17.0	-1.2	27.1	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

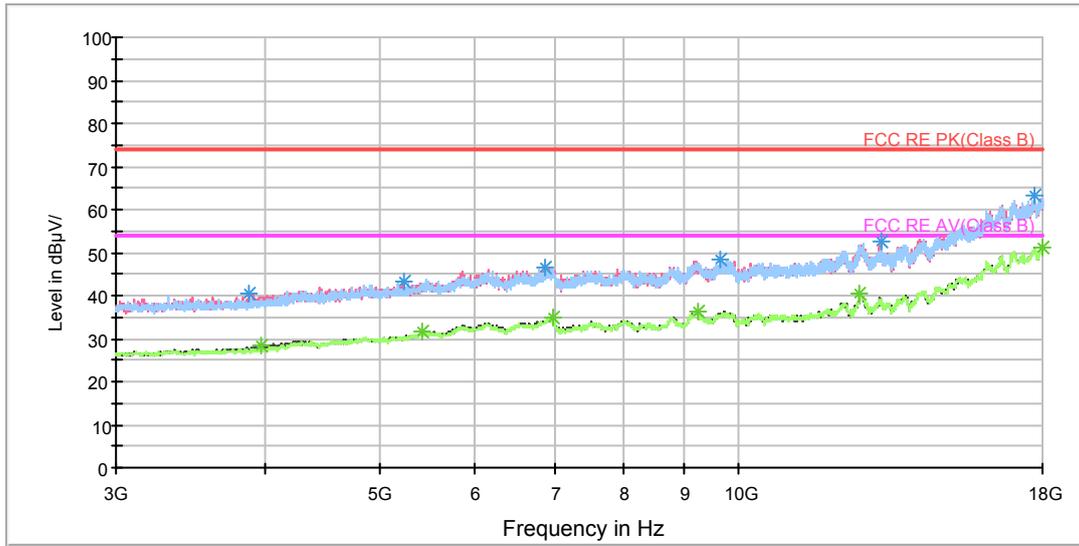
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	45.5	101.0	V	147.0	53.7	-8.2	28.5	74
1202.250000	42.3	101.0	V	57.0	50.5	-8.2	31.7	74
1713.250000	41.8	101.0	V	13.0	46.7	-4.9	32.2	74
1994.000000	49.8	101.0	V	85.0	53.0	-3.2	24.2	74
2691.500000	46.7	101.0	H	0.0	46.6	0.1	27.3	74
2915.750000	48.7	101.0	V	165.0	46.9	1.8	25.3	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	29.6	101.0	H	357.0	37.8	-8.2	24.4	54
1289.250000	28.7	101.0	V	0.0	36.4	-7.7	25.3	54
1731.750000	30.3	101.0	H	284.0	35.1	-4.8	23.7	54
1992.250000	32.9	101.0	V	165.0	36.2	-3.3	21.1	54
2690.750000	35.3	101.0	V	201.0	35.2	0.1	18.7	54
2990.750000	37.3	101.0	V	0.0	35.1	2.2	16.7	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

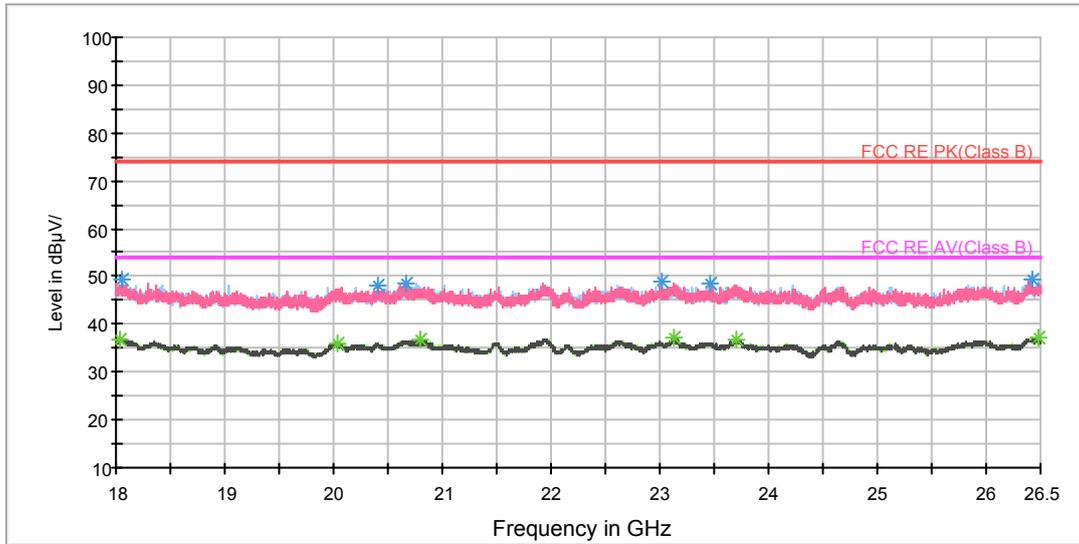
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3886.875000	40.4	101.0	V	275.0	41.7	-1.3	33.6	74
5240.625000	43.0	101.0	V	302.0	40.9	2.1	31.0	74
6868.125000	46.4	101.0	H	0.0	40.5	5.9	27.6	74
9648.750000	48.2	101.0	V	329.0	38.4	9.8	25.8	74
13158.750000	52.4	101.0	V	164.0	38.3	14.1	21.6	74
17698.125000	63.3	101.0	V	0.0	38.6	24.7	10.7	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)
3969.375000	28.4	101.0	V	191.0	29.3	-0.9	25.6	54
5428.125000	31.5	101.0	V	0.0	28.7	2.8	22.5	54
6997.500000	35.0	101.0	V	0.0	28.5	6.5	19.0	54
9241.875000	36.4	101.0	H	58.0	26.5	9.9	17.6	54
12639.375000	40.5	101.0	V	302.0	26.0	14.5	13.5	54
17998.125000	51.3	101.0	H	140.0	25.9	25.4	2.7	54

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

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)
18060.562500	49.4	H	0.0	51.5	-2.1	24.6	74
20407.625000	48.1	V	260.0	54.2	-6.1	25.9	74
20664.750000	48.4	V	162.0	55.0	-6.6	25.6	74
23018.187500	49.0	H	322.0	55.1	-6.1	25.0	74
23463.375000	48.7	V	349.0	54.6	-5.9	25.3	74
26420.312500	49.2	H	30.0	54.6	-5.4	24.8	74

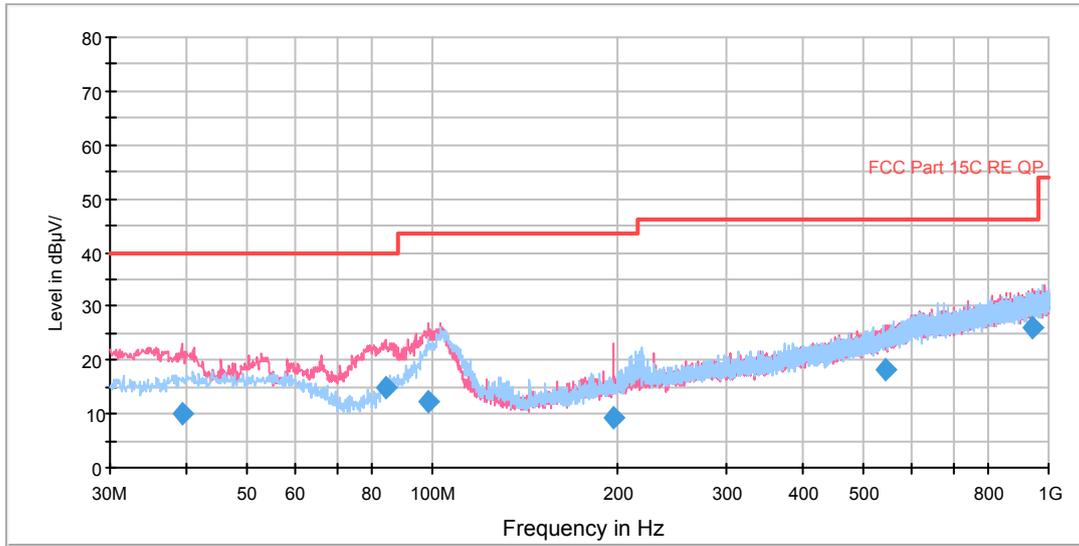
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18044.625000	37.0	V	21.0	39.0	-2.0	17.0	54
20043.187500	36.1	V	178.0	41.8	-5.7	17.9	54
20803.937500	36.6	V	99.0	43.5	-6.9	17.4	54
23127.625000	37.2	V	53.0	43.3	-6.1	16.8	54
23695.000000	36.6	H	0.0	42.5	-5.9	17.4	54
26481.937500	37.0	H	228.0	42.4	-5.4	17.0	54

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

802.11g CH6

FCC RE 0.03-1GHz QP Class C

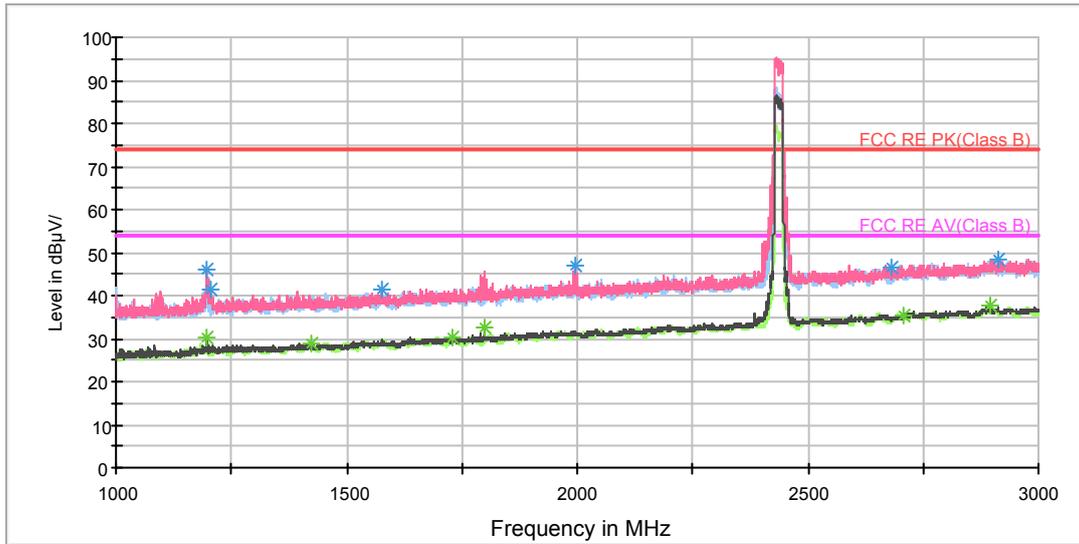


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
39.295000	10.2	111.0	V	51.0	-2.8	13.0	29.8	40.0
83.955000	15.0	114.0	V	51.0	5.0	10.0	25.0	40.0
98.543750	12.3	125.0	V	102.0	-0.8	13.1	31.2	43.5
196.795000	9.4	100.0	V	117.0	-2.6	12.0	34.1	43.5
544.742500	18.2	100.0	V	322.0	-2.7	20.9	27.8	46.0
943.897500	26.2	125.0	V	99.0	-1.0	27.2	19.8	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

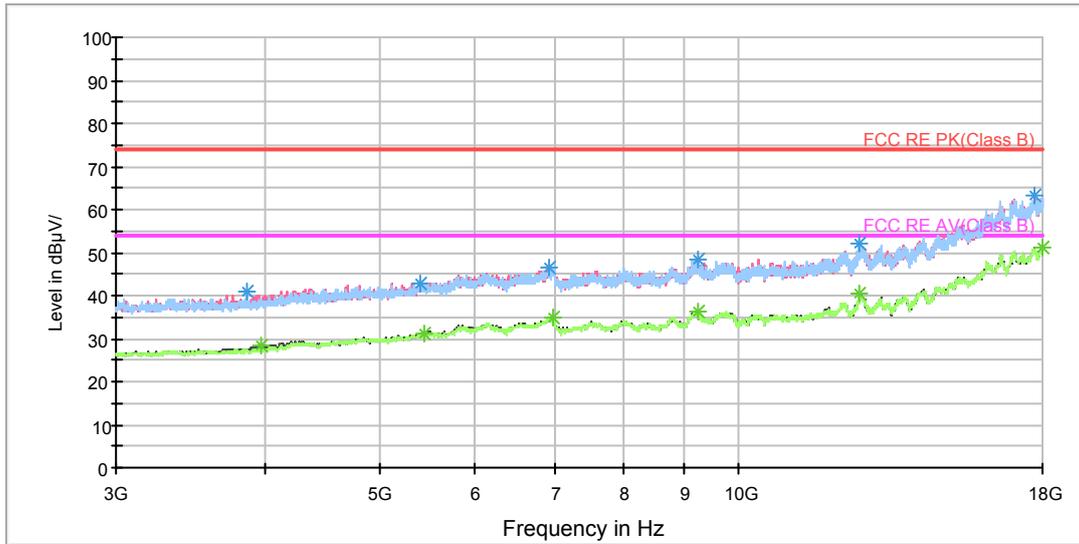
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.250000	45.9	101.0	V	8.0	54.1	-8.2	28.1	74
1204.000000	41.5	101.0	V	61.0	49.7	-8.2	32.5	74
1578.250000	41.4	101.0	V	0.0	47.7	-6.3	32.6	74
1993.500000	46.8	101.0	V	77.0	50.1	-3.3	27.2	74
2683.000000	46.6	101.0	V	42.0	46.5	0.1	27.4	74
2913.500000	48.5	101.0	V	104.0	46.7	1.8	25.5	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)
1198.250000	30.4	101.0	V	77.0	38.6	-8.2	23.6	54
1424.500000	28.8	101.0	H	276.0	35.7	-6.9	25.2	54
1731.250000	30.3	101.0	H	294.0	35.2	-4.9	23.7	54
1799.250000	32.5	101.0	V	33.0	36.5	-4.0	21.5	54
2708.500000	35.5	101.0	V	141.0	35.4	0.1	18.5	54
2896.250000	37.7	101.0	H	0.0	35.6	2.1	16.3	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

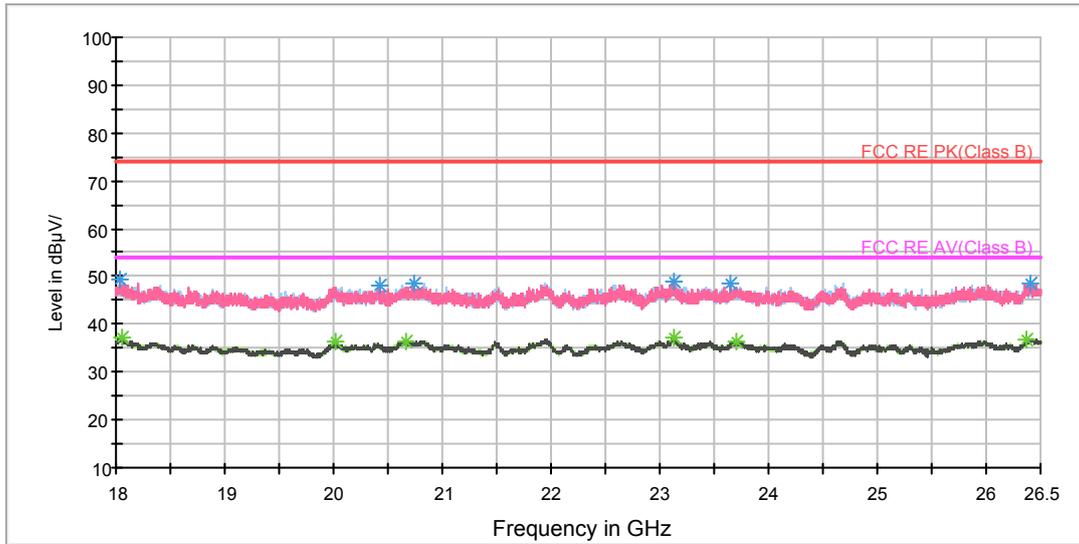
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3858.750000	40.9	101.0	H	59.0	42.5	-1.6	33.1	74
5400.000000	43.0	101.0	V	0.0	40.5	2.5	31.0	74
6924.375000	46.5	101.0	V	274.0	40.3	6.2	27.5	74
9234.375000	48.4	101.0	V	219.0	38.5	9.9	25.6	74
12641.250000	51.9	101.0	H	223.0	37.4	14.5	22.1	74
17713.125000	63.3	101.0	V	165.0	38.7	24.6	10.7	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)
3973.125000	28.5	101.0	V	0.0	29.4	-0.9	25.5	54
5433.750000	31.2	101.0	V	165.0	28.4	2.8	22.8	54
6993.750000	34.7	101.0	V	274.0	28.2	6.5	19.3	54
9232.500000	36.5	101.0	V	192.0	26.6	9.9	17.5	54
12639.375000	40.6	101.0	H	5.0	26.1	14.5	13.4	54
18000.000000	51.2	101.0	H	196.0	25.7	25.5	2.8	54

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

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)
18029.750000	49.5	V	349.0	51.4	-1.9	24.5	74
20433.125000	48.3	V	213.0	54.4	-6.1	25.7	74
20741.250000	48.5	V	130.0	55.3	-6.8	25.5	74
23129.750000	48.9	V	213.0	55.0	-6.1	25.1	74
23655.687500	48.6	V	67.0	54.5	-5.9	25.4	74
26410.750000	48.4	V	0.0	53.8	-5.4	25.6	74

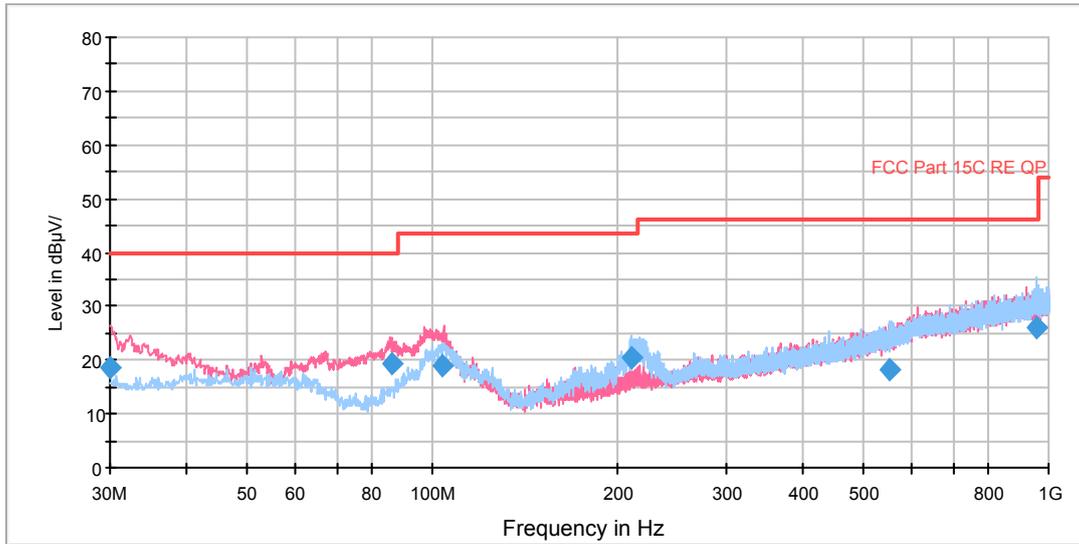
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18054.187500	37.0	H	259.0	39.0	-2.0	17.0	54
20015.562500	36.2	H	213.0	41.9	-5.7	17.8	54
20659.437500	36.5	H	82.0	43.1	-6.6	17.5	54
23130.812500	37.0	H	11.0	43.1	-6.1	17.0	54
23702.437500	36.5	V	0.0	42.4	-5.9	17.5	54
26369.312500	36.9	V	83.0	42.3	-5.4	17.1	54

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

802.11g CH11

FCC RE 0.03-1GHz QP Class B

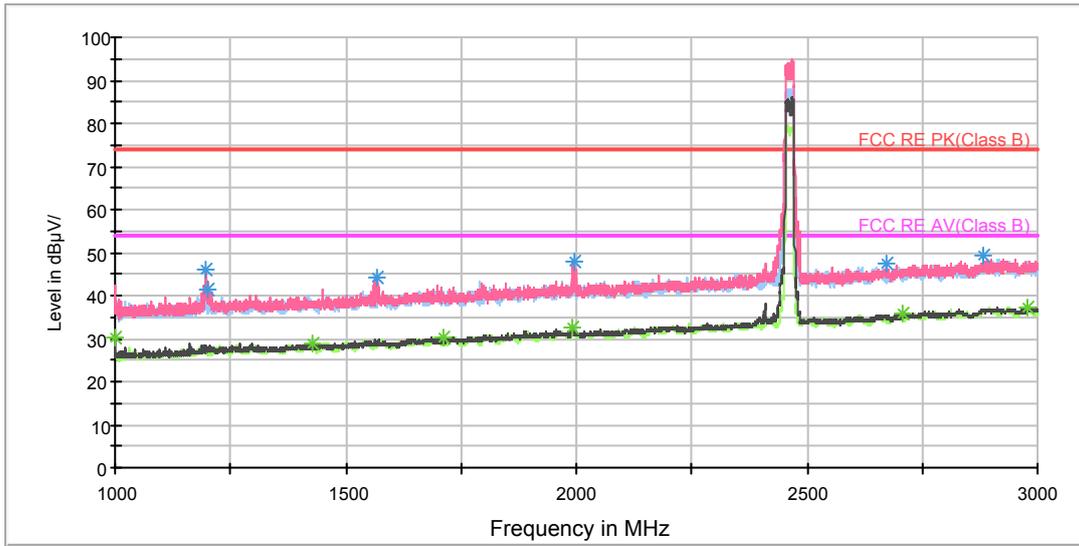


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.080000	18.6	100.0	V	112.0	6.5	12.1	21.4	40.0
85.735000	19.3	125.0	V	113.0	8.7	10.6	20.7	40.0
104.086250	19.1	100.0	V	109.0	6.2	12.9	24.4	43.5
210.535000	20.6	125.0	H	93.0	8.0	12.6	22.9	43.5
552.420000	18.3	100.0	H	140.0	-2.8	21.1	27.7	46.0
955.945000	26.2	100.0	H	157.0	-1.1	27.3	19.8	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

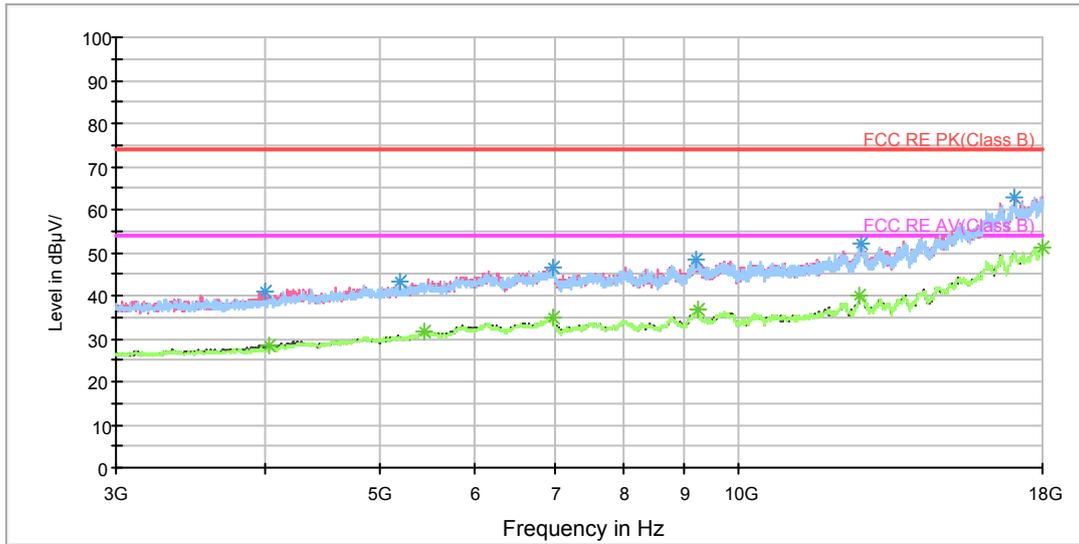
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.500000	46.0	101.0	V	7.0	54.2	-8.2	28.0	74
1201.750000	41.4	101.0	V	43.0	49.6	-8.2	32.6	74
1569.750000	44.1	101.0	V	150.0	50.7	-6.6	29.9	74
1996.500000	48.1	101.0	V	167.0	51.4	-3.3	25.9	74
2674.250000	47.2	101.0	V	61.0	47.0	0.2	26.8	74
2881.000000	49.3	101.0	V	194.0	47.0	2.3	24.7	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)
1001.500000	30.3	101.0	V	248.0	39.5	-9.2	23.7	54
1426.000000	28.8	101.0	V	167.0	35.7	-6.9	25.2	54
1713.000000	30.4	101.0	V	17.0	35.2	-4.8	23.6	54
1993.000000	32.4	101.0	V	79.0	35.7	-3.3	21.6	54
2708.250000	35.8	101.0	V	61.0	35.7	0.1	18.2	54
2976.750000	37.3	101.0	H	0.0	35.1	2.2	16.7	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

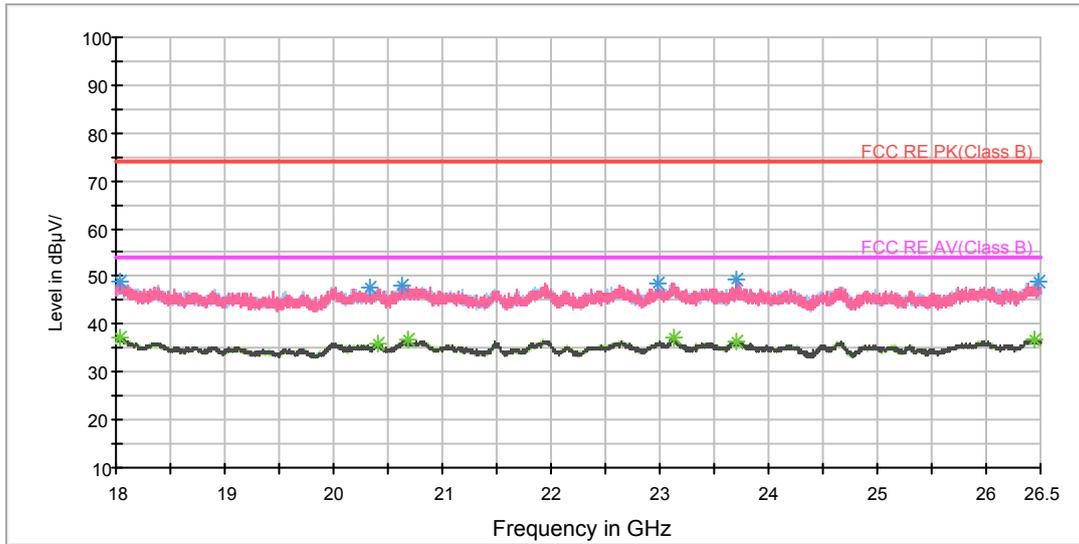
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4005.000000	40.8	101.0	V	0.0	41.9	-1.1	33.2	74
5188.125000	43.2	101.0	V	0.0	41.1	2.1	30.8	74
6995.625000	46.5	101.0	H	308.0	40.0	6.5	27.5	74
9210.000000	48.2	101.0	V	0.0	38.1	10.1	25.8	74
12701.250000	52.1	101.0	V	110.0	38.0	14.1	21.9	74
17053.125000	63.0	101.0	H	0.0	38.6	24.4	11.0	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)
4033.125000	28.4	101.0	V	300.0	29.5	-1.1	25.6	54
5441.250000	31.5	101.0	H	86.0	28.6	2.9	22.5	54
6995.625000	34.8	101.0	H	308.0	28.3	6.5	19.2	54
9238.125000	36.6	101.0	V	328.0	26.7	9.9	17.4	54
12637.500000	40.2	101.0	H	0.0	25.9	14.3	13.8	54
17998.125000	51.3	101.0	H	0.0	25.9	25.4	2.7	54

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

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)
18028.687500	48.8	V	181.0	50.7	-1.9	25.2	74
20329.000000	47.8	V	181.0	53.8	-6.0	26.2	74
20630.750000	48.2	V	101.0	54.7	-6.5	25.8	74
22979.937500	48.4	H	267.0	54.6	-6.2	25.6	74
23698.187500	49.5	H	172.0	55.4	-5.9	24.5	74
26477.687500	49.0	H	298.0	54.4	-5.4	25.0	74

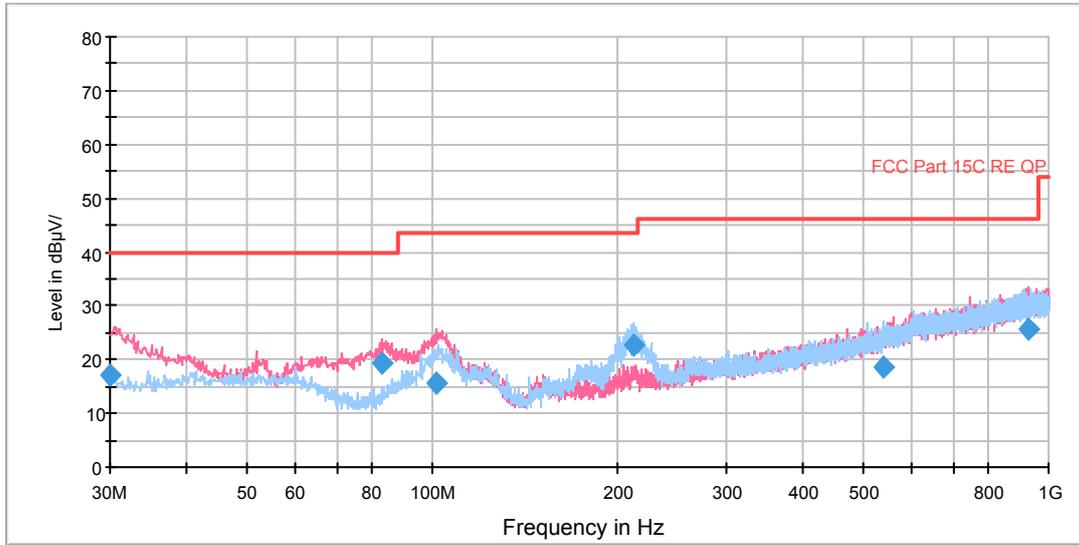
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18032.937500	37.2	V	165.0	39.1	-1.9	16.8	54
20402.312500	36.1	V	23.0	42.2	-6.1	17.9	54
20688.125000	36.7	V	197.0	43.4	-6.7	17.3	54
23131.875000	37.1	H	0.0	43.2	-6.1	16.9	54
23704.562500	36.5	H	298.0	42.4	-5.9	17.5	54
26450.062500	36.8	H	205.0	42.2	-5.4	17.2	54

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

802.11n (HT20) CH1

FCC RE 0.03-1GHz QP Class B

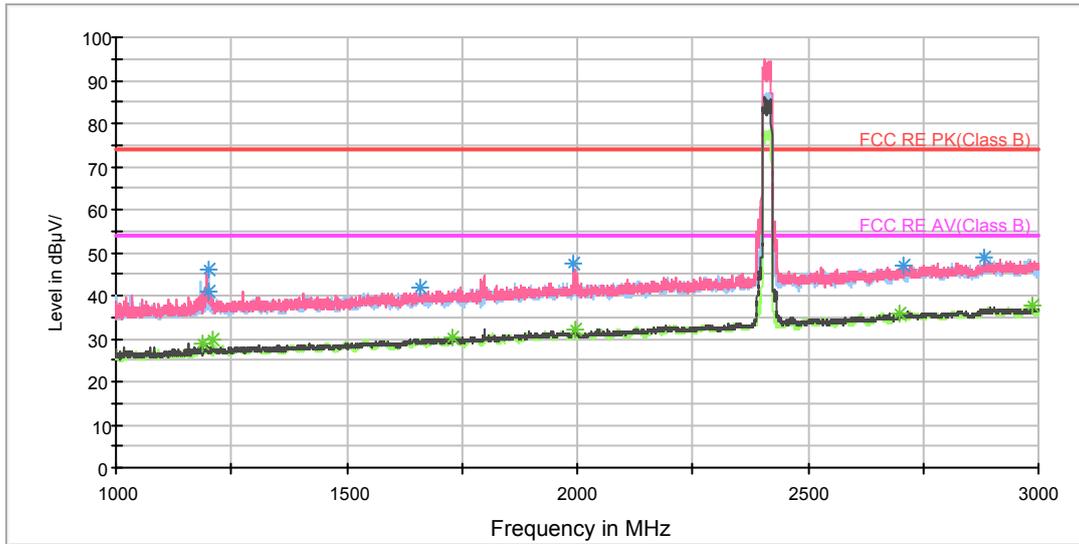


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	17.2	100.0	V	72.0	5.1	12.1	22.8	40.0
83.026250	19.2	125.0	V	100.0	9.6	9.6	20.8	40.0
101.458750	15.6	100.0	V	144.0	2.5	13.1	27.9	43.5
211.916250	22.6	125.0	H	88.0	9.9	12.7	20.9	43.5
540.986250	18.5	100.0	H	345.0	-2.9	21.4	27.5	46.0
927.612500	25.7	125.0	V	0.0	-1.3	27.0	20.3	40.0

- Remark: 1. Quasi-Peak = Reading value + Correction factor
 2. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)
 3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

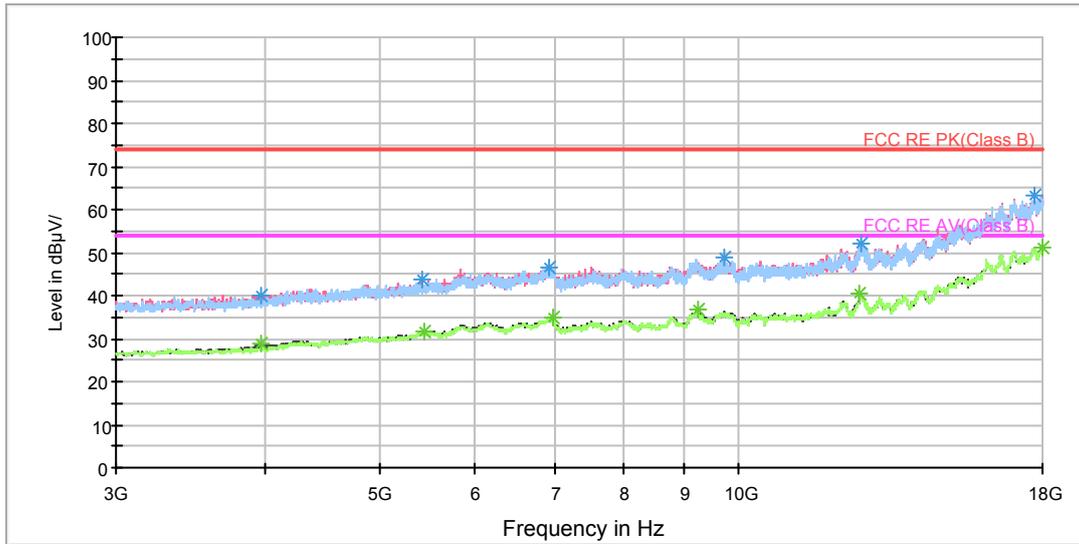
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.750000	46.1	101.0	H	19.0	54.3	-8.2	27.9	74
1202.000000	41.0	101.0	V	67.0	49.2	-8.2	33.0	74
1657.500000	41.7	101.0	V	0.0	46.9	-5.2	32.3	74
1991.500000	47.4	101.0	V	164.0	50.7	-3.3	26.6	74
2708.000000	46.9	101.0	V	76.0	46.8	0.1	27.1	74
2884.250000	48.9	101.0	V	172.0	46.7	2.2	25.1	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)
1187.000000	28.8	101.0	H	223.0	36.9	-8.1	25.2	54
1211.250000	29.6	101.0	H	61.0	37.6	-8.0	24.4	54
1730.750000	30.3	101.0	H	0.0	35.2	-4.9	23.7	54
1995.750000	32.2	101.0	V	0.0	35.5	-3.3	21.8	54
2698.750000	35.6	101.0	H	302.0	35.6	0.0	18.4	54
2985.250000	37.8	101.0	V	128.0	36.9	2.2	16.2	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

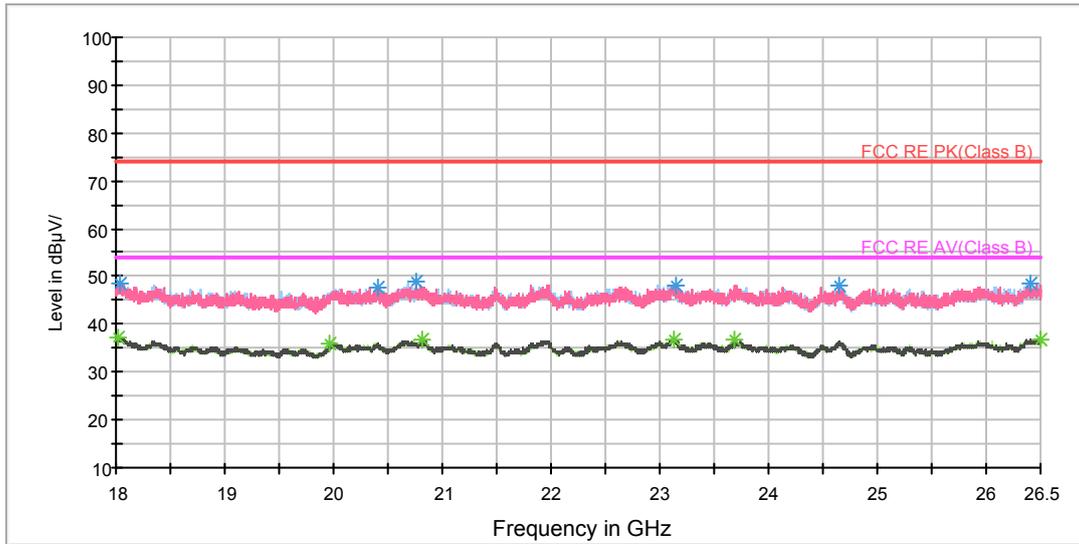
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3971.250000	40.1	101.0	H	114.0	41.0	-0.9	33.9	74
5422.500000	43.9	101.0	V	0.0	41.2	2.7	30.1	74
6924.375000	46.4	101.0	V	0.0	40.2	6.2	27.6	74
9733.125000	48.7	101.0	V	219.0	38.9	9.8	25.3	74
12658.125000	52.1	101.0	V	0.0	38.2	13.9	21.9	74
17705.625000	63.1	101.0	V	302.0	41.0	24.7	10.9	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)
3971.250000	28.8	101.0	V	0.0	29.7	-0.9	25.2	54
5433.750000	31.7	101.0	V	0.0	28.9	2.8	22.3	54
6997.500000	34.8	101.0	V	0.0	28.3	6.5	19.2	54
9238.125000	36.5	101.0	V	0.0	26.6	9.9	17.5	54
12639.375000	40.4	101.0	V	0.0	25.9	14.5	13.6	54
18000.000000	51.3	101.0	H	169.0	25.8	25.5	2.7	54

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

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)
18031.875000	48.4	V	132.0	50.3	-1.9	25.6	74
20416.125000	47.8	V	69.0	53.9	-6.1	26.2	74
20761.437500	49.1	V	244.0	55.9	-6.8	24.9	74
23144.625000	48.3	V	212.0	54.4	-6.1	25.7	74
24647.000000	48.3	V	5.0	54.3	-6.0	25.7	74
26402.250000	48.4	H	0.0	53.8	-5.4	25.6	74

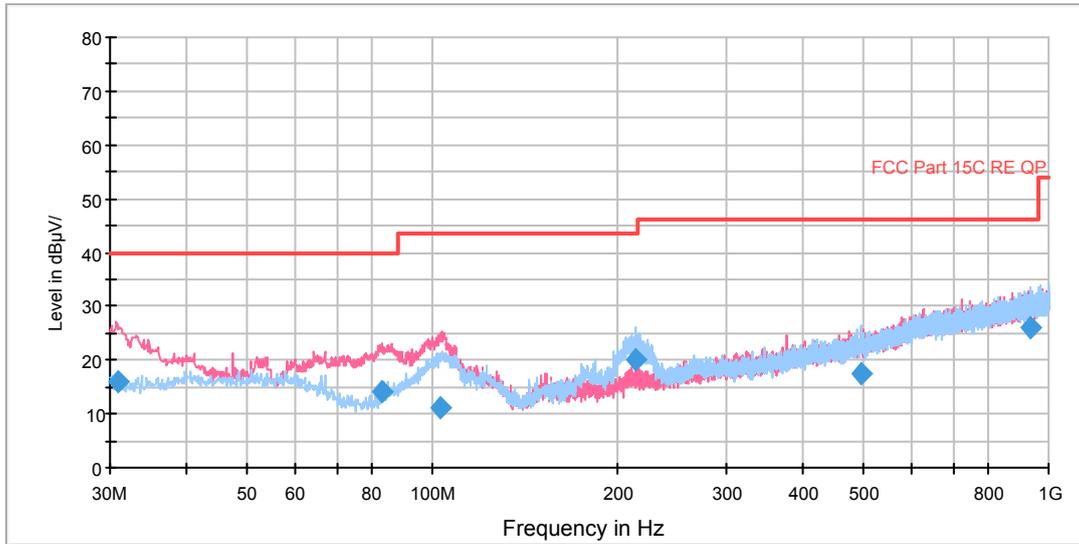
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18026.562500	37.1	H	232.0	39.0	-1.9	16.9	54
19969.875000	36.0	H	311.0	41.7	-5.7	18.0	54
20806.062500	36.6	H	85.0	43.5	-6.9	17.4	54
23126.562500	36.9	V	197.0	43.0	-6.1	17.1	54
23691.812500	36.6	V	0.0	42.5	-5.9	17.4	54
26498.937500	36.8	H	248.0	42.2	-5.4	17.2	54

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

802.11n (HT20) CH6

FCC RE 0.03-1GHz QP Class B

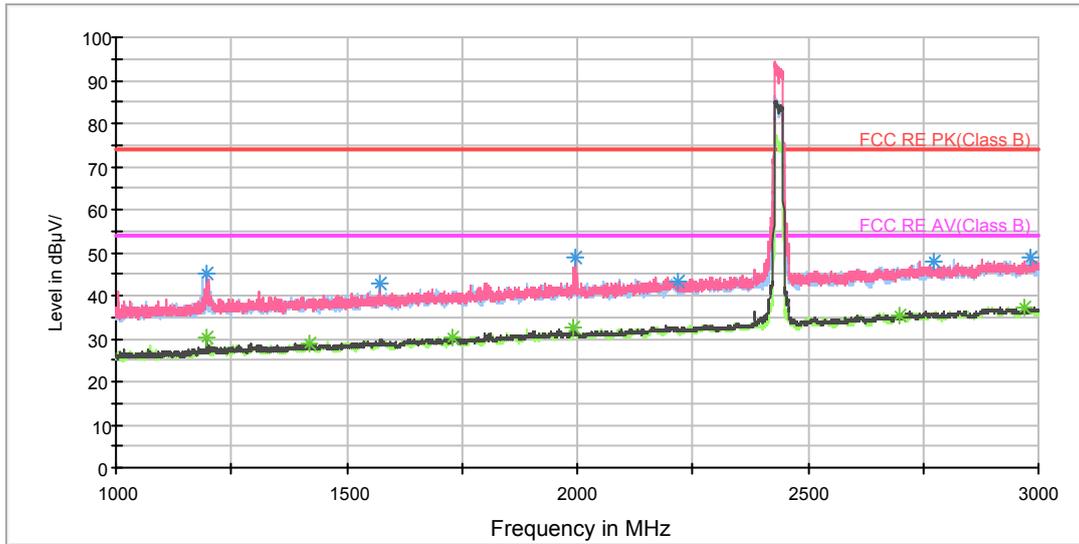


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.887500	16.0	100.0	V	187.0	3.9	12.1	24.0	40.0
82.866250	14.0	100.0	V	144.0	4.4	9.6	26.0	40.0
103.317500	11.3	125.0	V	178.0	-1.6	12.9	32.2	43.5
213.941250	20.1	125.0	H	268.0	7.3	12.8	23.4	43.5
497.337500	17.4	100.0	H	222.0	-3.1	20.5	28.6	46.0
935.983750	25.9	125.0	H	130.0	-1.2	27.1	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

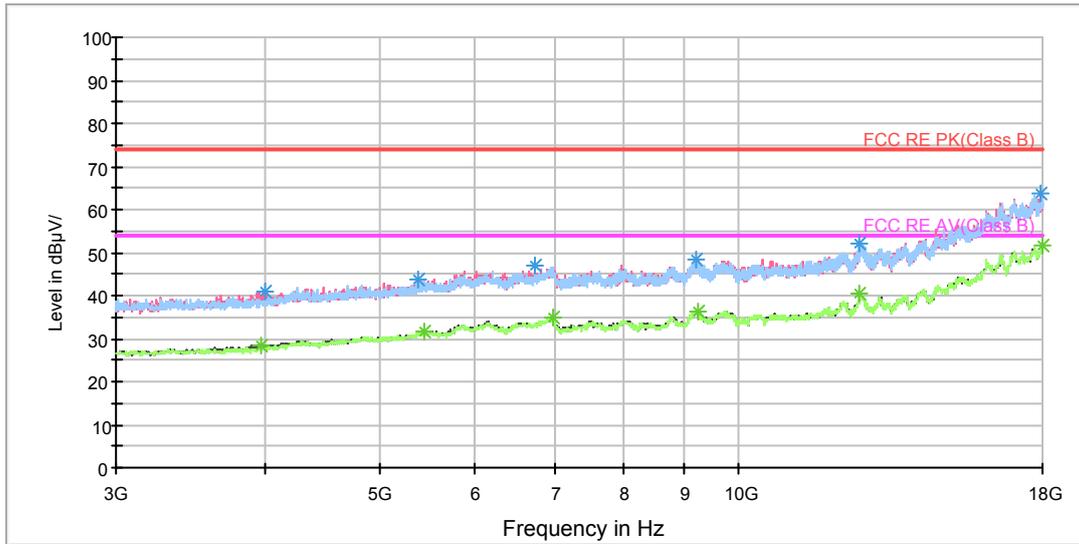
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.000000	44.9	101.0	V	19.0	53.1	-8.2	29.1	74
1571.250000	42.7	101.0	V	72.0	49.2	-6.5	31.3	74
1997.500000	48.8	101.0	V	164.0	52.1	-3.3	25.2	74
2219.000000	43.2	101.0	H	0.0	45.5	-2.3	30.8	74
2771.750000	48.0	101.0	H	276.0	47.2	0.8	26.0	74
2983.000000	48.8	101.0	H	276.0	46.6	2.2	25.2	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)
1196.250000	30.4	101.0	V	200.0	38.6	-8.2	23.6	54
1417.750000	28.9	101.0	H	70.0	35.8	-6.9	25.1	54
1730.250000	30.2	101.0	H	116.0	35.2	-5.0	23.8	54
1989.750000	32.7	101.0	V	164.0	36.1	-3.4	21.3	54
2697.000000	35.6	101.0	H	332.0	35.6	0.0	18.4	54
2971.000000	37.3	101.0	V	0.0	35.1	2.2	16.7	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

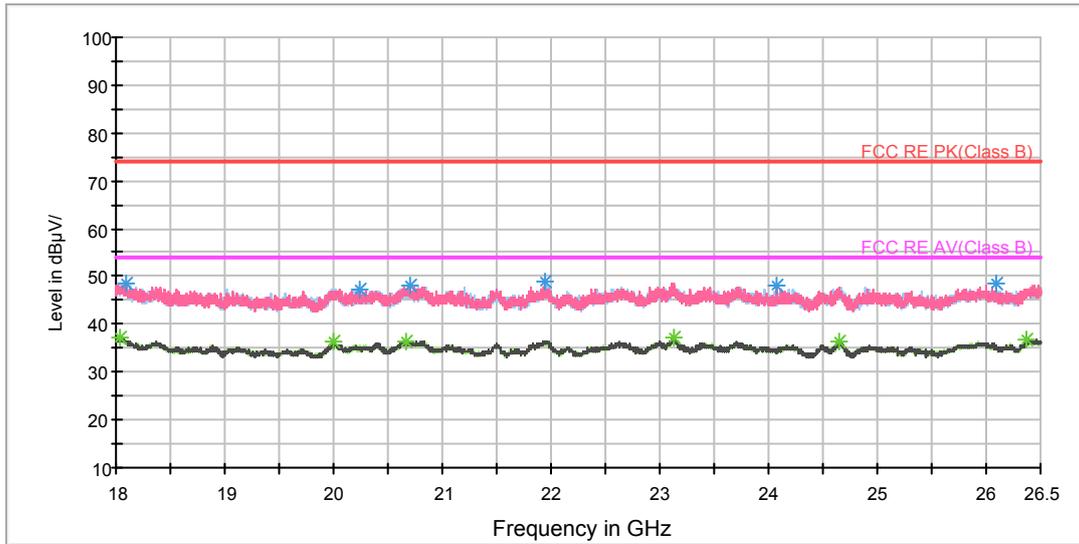
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4008.750000	40.8	101.0	V	194.0	41.9	-1.1	33.2	74
5371.875000	43.7	101.0	H	0.0	41.4	2.3	30.3	74
6755.625000	47.0	101.0	V	0.0	41.5	5.5	27.0	74
9213.750000	48.3	101.0	H	0.0	38.3	10.0	25.7	74
12641.250000	52.1	101.0	H	6.0	37.6	14.5	21.9	74
17910.000000	63.7	101.0	H	6.0	38.2	25.5	10.3	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)
3971.250000	28.6	101.0	V	276.0	29.5	-0.9	25.4	54
5435.625000	31.6	101.0	V	0.0	28.7	2.9	22.4	54
6997.500000	34.9	101.0	V	276.0	28.4	6.5	19.1	54
9232.500000	36.4	101.0	H	33.0	26.5	9.9	17.6	54
12639.375000	40.6	101.0	H	0.0	26.1	14.5	13.4	54
18000.000000	51.4	101.0	V	194.0	25.9	25.5	2.6	54

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

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)
18089.250000	48.5	H	247.0	50.7	-2.2	25.5	74
20233.375000	47.4	V	91.0	53.3	-5.9	26.6	74
20698.750000	48.1	H	0.0	54.8	-6.7	25.9	74
21946.125000	48.8	V	12.0	56.8	-8.0	25.2	74
24074.312500	48.0	V	0.0	53.9	-5.9	26.0	74
26088.812500	48.6	V	59.0	54.0	-5.4	25.4	74

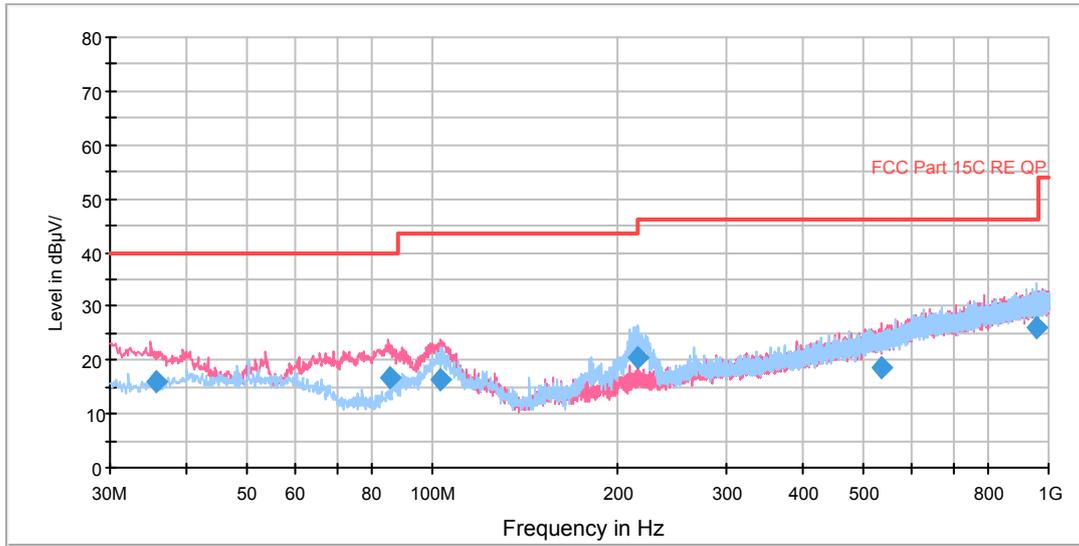
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18031.875000	37.2	H	0.0	39.1	-1.9	16.8	54
20006.000000	36.3	V	91.0	42.0	-5.7	17.7	54
20663.687500	36.4	V	0.0	43.0	-6.6	17.6	54
23128.687500	37.1	H	263.0	43.2	-6.1	16.9	54
24644.875000	36.4	H	0.0	42.4	-6.0	17.6	54
26372.500000	36.7	V	59.0	42.1	-5.4	17.3	54

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

802.11n (HT20) CH11

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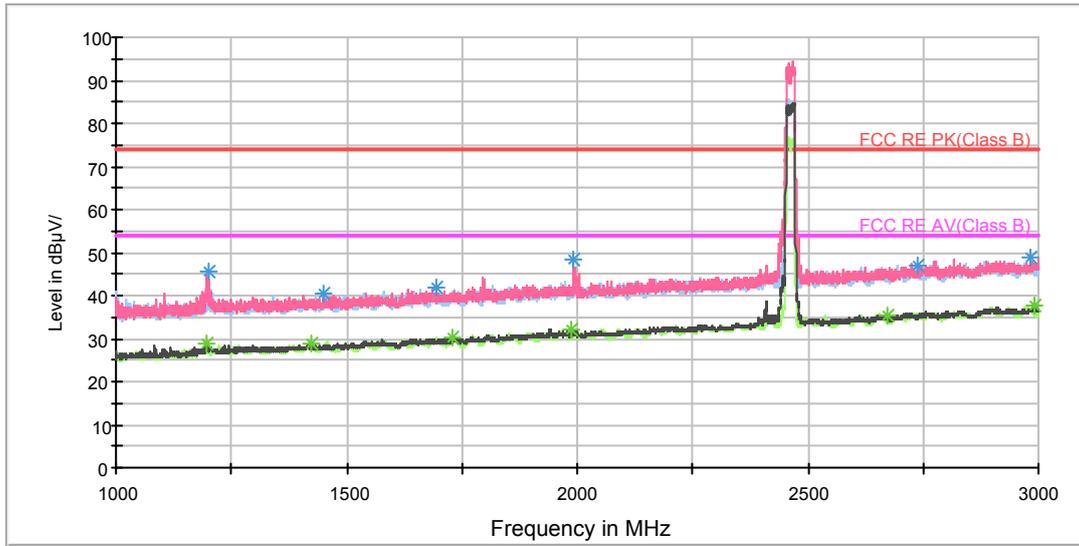


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
35.571250	15.9	100.0	V	199.0	3.7	12.2	24.1	40.0
85.447500	16.9	125.0	V	144.0	6.5	10.4	23.1	40.0
103.073750	16.3	100.0	V	170.0	3.4	12.9	27.2	43.5
215.593750	20.3	125.0	H	279.0	7.5	12.8	23.2	43.5
537.021250	18.5	100.0	V	209.0	-2.8	21.3	27.5	46.0
955.538750	26.2	125.0	H	32.0	-1.1	27.3	19.8	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

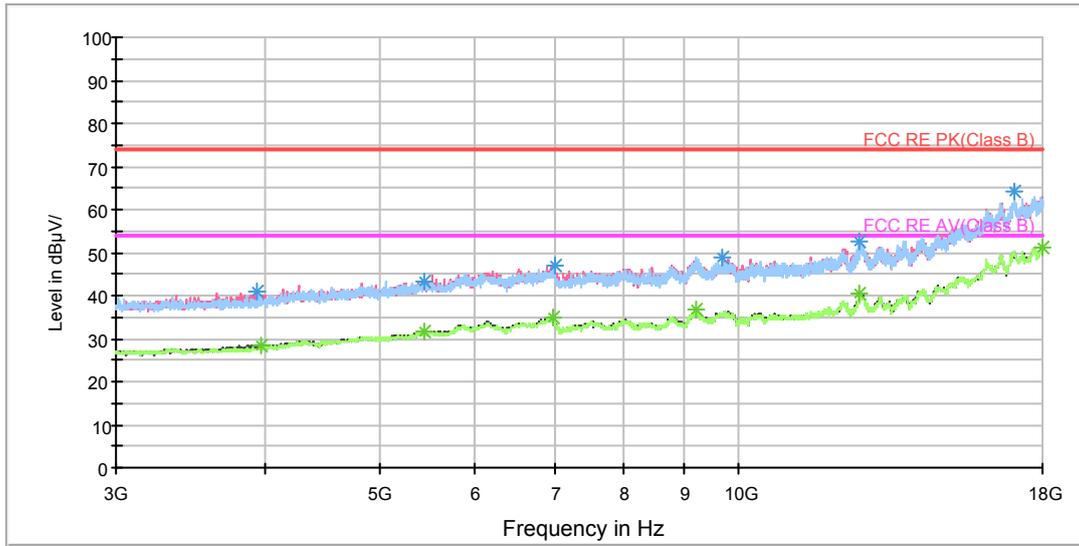
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.750000	45.5	101.0	H	52.0	53.7	-8.2	28.5	74
1448.000000	40.4	101.0	V	149.0	47.1	-6.7	33.6	74
1694.000000	41.8	101.0	H	0.0	46.8	-5.0	32.2	74
1992.000000	48.5	101.0	V	87.0	51.8	-3.3	25.5	74
2736.750000	47.0	101.0	H	255.0	46.4	0.6	27.0	74
2981.000000	48.6	101.0	H	298.0	46.4	2.2	25.4	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)
1198.250000	28.7	101.0	V	16.0	36.9	-8.2	25.3	54
1425.250000	28.7	101.0	H	0.0	35.6	-6.9	25.3	54
1731.000000	30.4	101.0	H	0.0	35.3	-4.9	23.6	54
1985.250000	32.0	101.0	V	167.0	35.8	-3.8	22.0	54
2673.750000	35.4	101.0	V	0.0	35.2	0.2	18.6	54
2991.000000	37.6	101.0	V	59.0	35.4	2.2	16.4	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

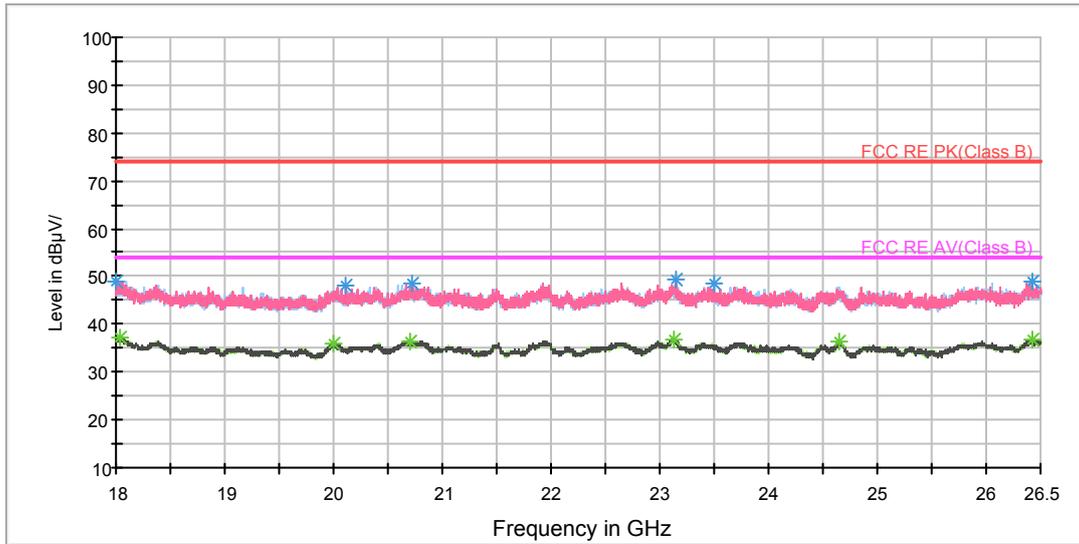
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3933.750000	40.8	101.0	V	22.0	41.9	-1.1	33.2	74
5445.000000	43.3	101.0	V	0.0	40.4	2.9	30.7	74
6999.375000	46.8	101.0	H	32.0	40.3	6.5	27.2	74
9686.250000	48.9	101.0	H	0.0	39.4	9.5	25.1	74
12637.500000	52.7	101.0	H	224.0	38.4	14.3	21.3	74
17040.000000	64.2	101.0	H	168.0	39.6	24.6	9.8	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)
3967.500000	28.5	101.0	V	327.0	29.4	-0.9	25.5	54
5433.750000	31.6	101.0	V	0.0	28.8	2.8	22.4	54
6997.500000	34.9	101.0	V	0.0	28.4	6.5	19.1	54
9204.375000	36.5	101.0	V	219.0	26.3	10.2	17.5	54
12641.250000	40.5	101.0	V	355.0	26.0	14.5	13.5	54
18000.000000	51.4	101.0	H	59.0	29.4	25.5	2.6	54

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

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)
18007.437500	48.9	H	262.0	50.7	-1.8	25.1	74
20119.687500	48.2	V	245.0	54.0	-5.8	25.8	74
20730.625000	48.4	V	182.0	55.2	-6.8	25.6	74
23143.562500	49.3	V	197.0	55.4	-6.1	24.7	74
23503.750000	48.3	H	199.0	54.2	-5.9	25.7	74
26426.687500	49.0	H	50.0	54.4	-5.4	25.0	74

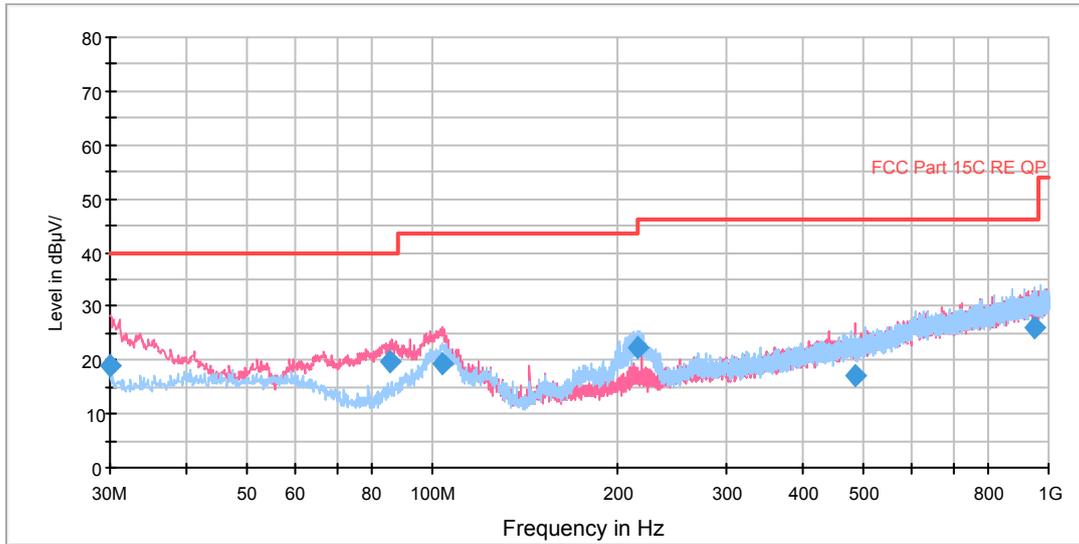
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18038.250000	37.1	H	356.0	39.1	-2.0	16.9	54
20008.125000	36.1	H	117.0	41.8	-5.7	17.9	54
20697.687500	36.5	H	0.0	43.2	-6.7	17.5	54
23128.687500	37.0	V	8.0	43.1	-6.1	17.0	54
24650.187500	36.3	V	229.0	42.3	-6.0	17.7	54
26427.750000	36.6	H	0.0	42.0	-5.4	17.4	54

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

BLE-Channel 0

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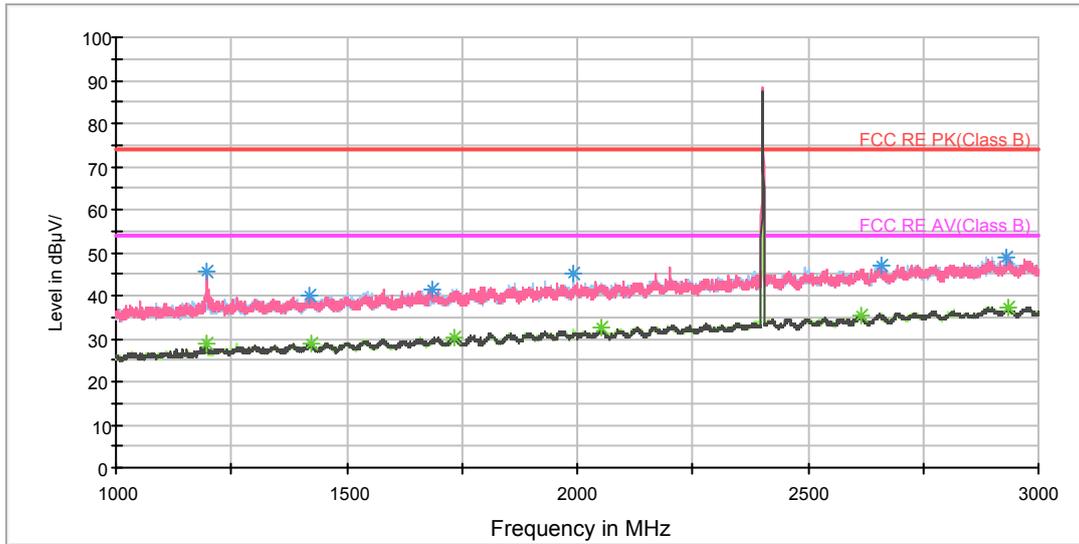


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	19.0	125.0	V	209.0	6.9	12.1	21.0	40.0
85.457500	19.7	125.0	V	177.0	9.3	10.4	20.3	40.0
103.723750	19.5	100.0	V	143.0	6.6	12.9	24.0	43.5
215.997500	22.4	125.0	H	260.0	9.5	12.9	21.1	43.5
485.580000	17.2	125.0	V	177.0	-3.1	20.3	28.8	46.0
951.382500	26.0	125.0	H	0.0	-1.2	27.2	20.0	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

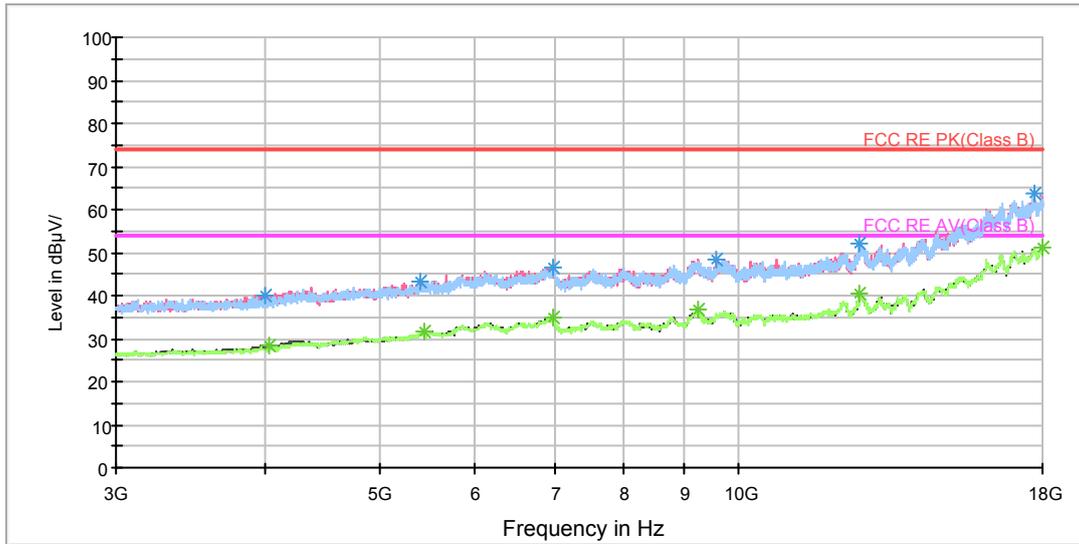
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.250000	45.7	101.0	V	278.0	53.9	-8.2	28.3	74
1419.500000	39.8	101.0	V	64.0	46.7	-6.9	34.2	74
1684.250000	41.4	101.0	V	153.0	46.4	-5.0	32.6	74
1991.750000	45.2	101.0	H	240.0	48.5	-3.3	28.8	74
2658.750000	47.0	101.0	V	56.0	46.6	0.4	27.0	74
2930.000000	48.7	101.0	V	109.0	47.0	1.7	25.3	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)
1198.250000	28.7	101.0	H	311.0	36.9	-8.2	25.3	54
1424.500000	28.9	101.0	V	215.0	35.8	-6.9	25.1	54
1731.750000	30.3	101.0	V	91.0	35.1	-4.8	23.7	54
2051.500000	32.4	101.0	V	64.0	35.6	-3.2	21.6	54
2615.250000	35.5	101.0	V	0.0	35.5	0.0	18.5	54
2932.500000	37.4	101.0	H	320.0	35.6	1.8	16.6	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

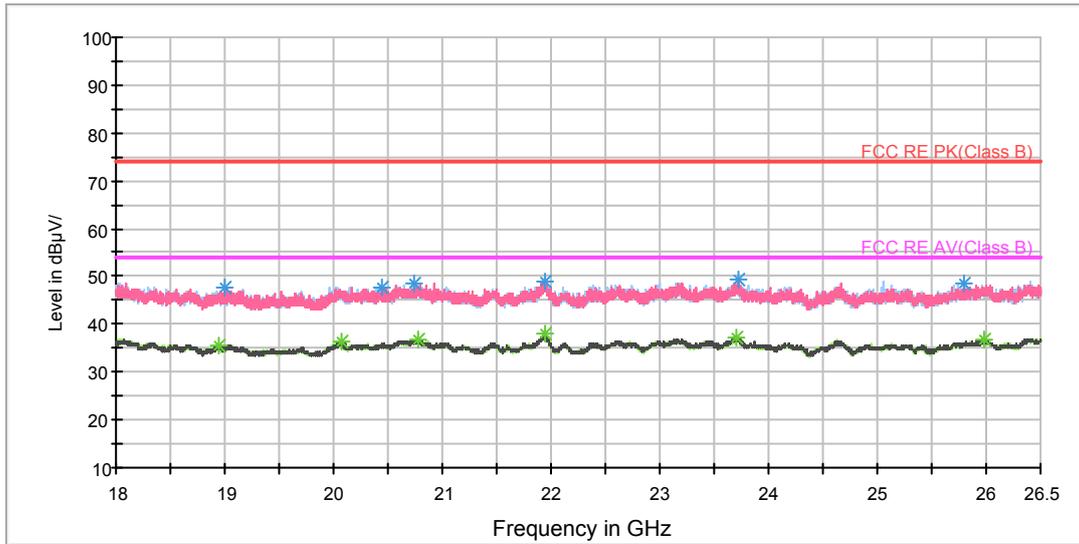
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3995.625000	40.1	101.0	V	192.0	41.2	-1.1	33.9	74
5411.250000	43.3	101.0	V	246.0	40.7	2.6	30.7	74
6995.625000	46.6	101.0	H	0.0	40.1	6.5	27.4	74
9583.125000	48.4	101.0	V	219.0	38.4	10.0	25.6	74
12635.625000	51.9	101.0	H	32.0	37.8	14.1	22.1	74
17705.625000	63.6	101.0	H	168.0	38.9	24.7	10.4	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)
4038.750000	28.4	101.0	V	136.0	29.4	-1.0	25.6	54
5446.875000	31.7	101.0	V	192.0	28.9	2.8	22.3	54
6997.500000	34.9	101.0	H	0.0	28.4	6.5	19.1	54
9238.125000	36.5	101.0	V	246.0	26.6	9.9	17.5	54
12641.250000	40.7	101.0	V	0.0	26.2	14.5	13.3	54
17998.125000	51.2	101.0	V	246.0	25.8	25.4	2.8	54

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

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)
19001.937500	47.7	V	145.0	52.8	-5.1	26.3	74
20451.187500	47.7	V	114.0	53.8	-6.1	26.3	74
20740.187500	48.6	H	327.0	55.4	-6.8	25.4	74
21947.187500	48.9	V	0.0	56.9	-8.0	25.1	74
23716.250000	49.2	H	358.0	55.1	-5.9	24.8	74
25789.187500	48.7	V	3.0	54.2	-5.5	25.3	74

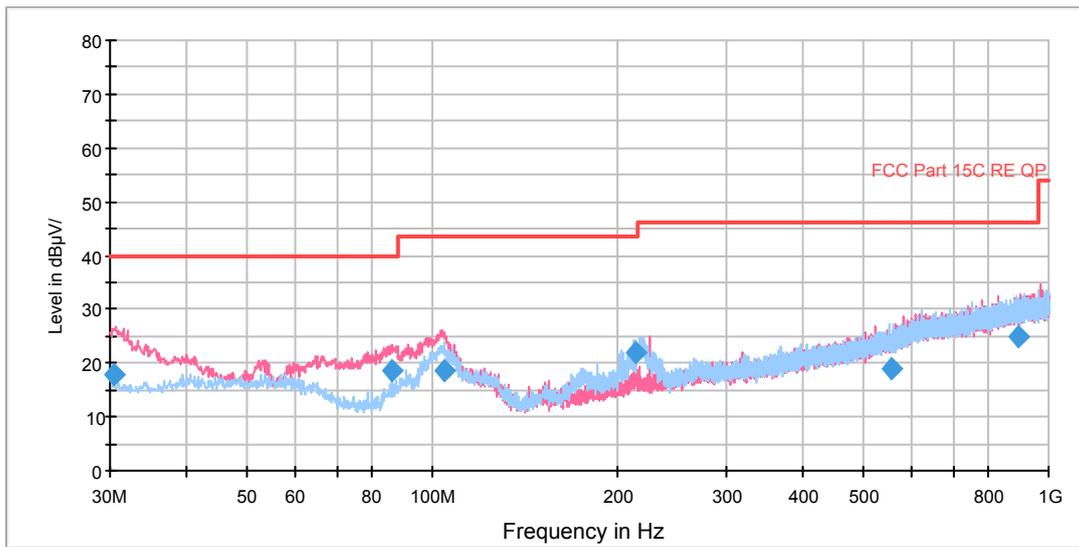
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18940.312500	35.6	V	179.0	40.5	-4.9	18.4	54
20075.062500	36.2	V	145.0	41.9	-5.7	17.8	54
20771.000000	36.8	V	0.0	43.7	-6.9	17.2	54
21944.000000	37.8	V	0.0	45.8	-8.0	16.2	54
23695.000000	37.2	V	261.0	43.1	-5.9	16.8	54
25985.750000	36.6	H	295.0	42.0	-5.4	17.4	54

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

BLE-Channel 19

FCC RE 0.03-1GHz QP Class B

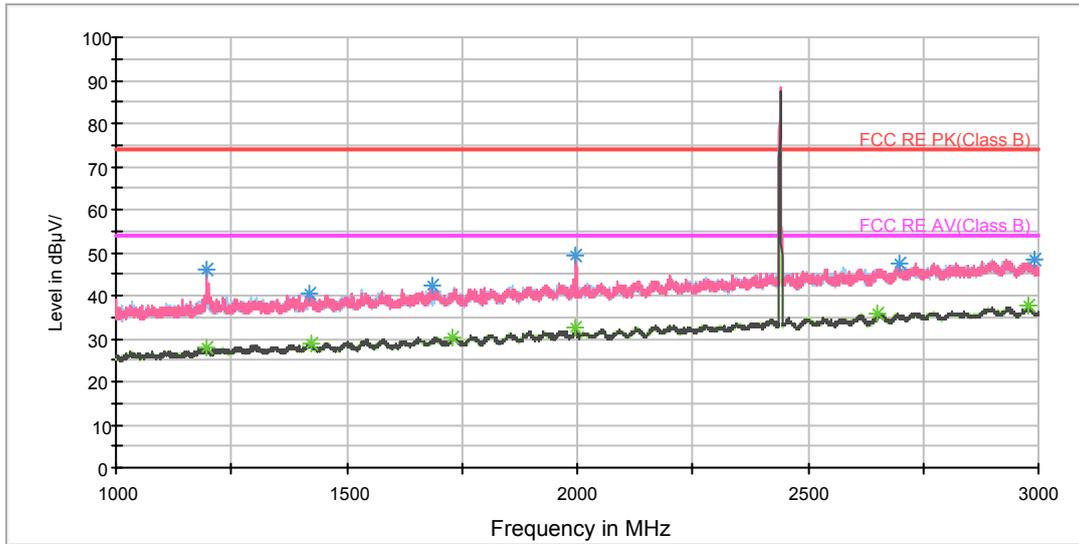


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.566250	18.0	100.0	V	134.0	5.9	12.1	22.0	40.0
85.735000	18.6	125.0	V	191.0	8.0	10.6	21.4	40.0
104.243750	18.4	125.0	V	156.0	5.5	12.9	25.1	43.5
213.971250	22.1	125.0	H	78.0	9.2	12.9	21.4	43.5
553.996250	18.9	100.0	H	47.0	-2.8	21.7	27.1	46.0
896.416250	24.8	114.0	V	352.0	-1.2	26.0	21.2	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

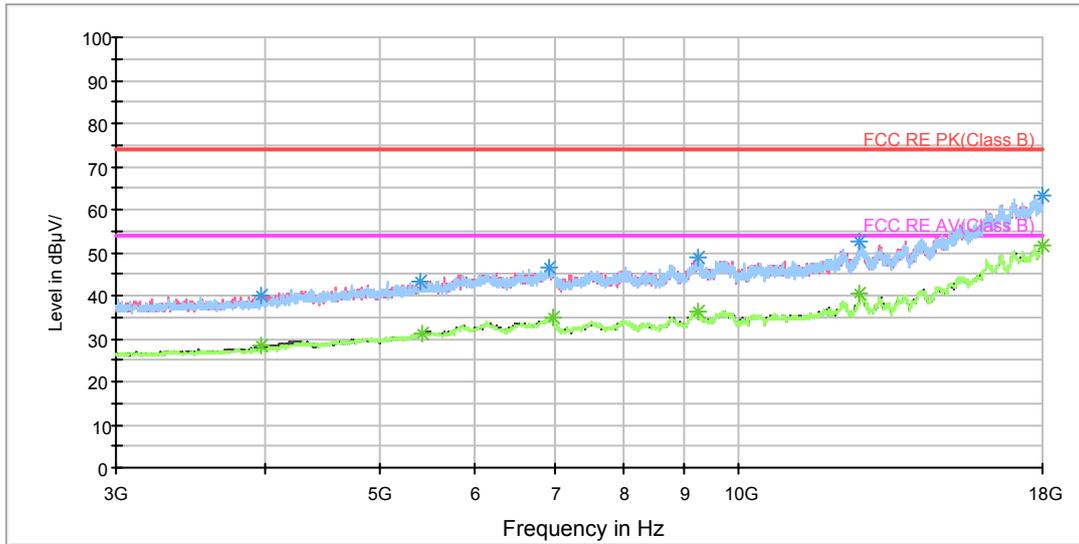
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.500000	46.0	101.0	V	279.0	54.2	-8.2	28.0	74
1419.750000	40.4	101.0	V	109.0	47.3	-6.9	33.6	74
1683.500000	42.5	101.0	V	127.0	47.5	-5.0	31.5	74
1997.750000	49.5	101.0	V	260.0	52.8	-3.3	24.5	74
2698.750000	47.5	101.0	H	162.0	47.5	0.0	26.5	74
2989.500000	48.4	101.0	H	348.0	46.2	2.2	25.6	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)
1197.500000	28.0	101.0	V	279.0	36.2	-8.2	26.0	54
1424.250000	28.7	101.0	V	100.0	35.6	-6.9	25.3	54
1729.750000	30.3	101.0	V	161.0	35.3	-5.0	23.7	54
1997.750000	32.5	101.0	V	260.0	35.8	-3.3	21.5	54
2652.500000	35.9	101.0	V	260.0	35.5	0.4	18.1	54
2976.000000	37.5	101.0	H	296.0	35.3	2.2	16.5	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

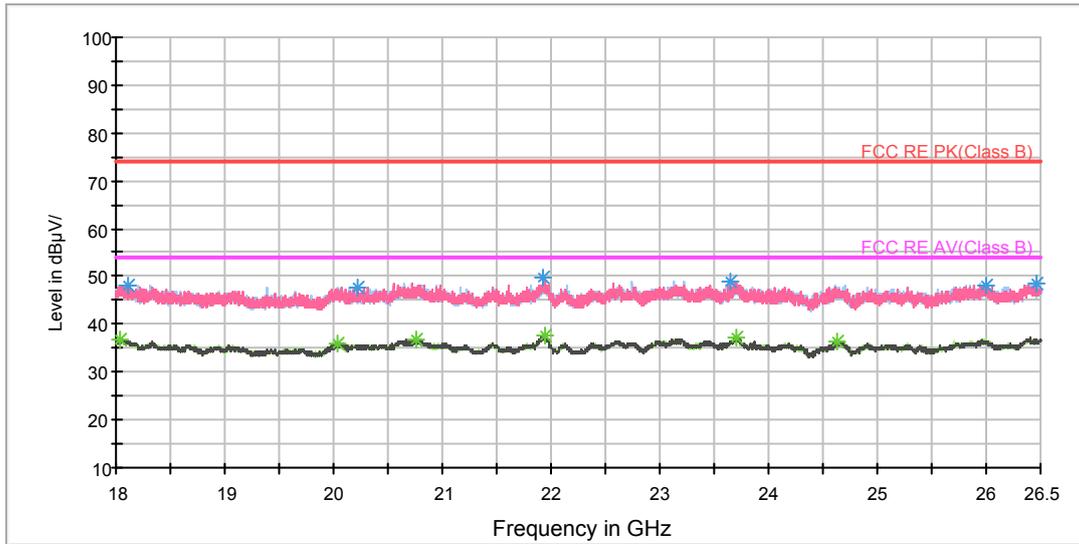
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3967.500000	40.2	101.0	V	301.0	41.1	-0.9	33.8	74
5398.125000	43.2	101.0	V	137.0	40.7	2.5	30.8	74
6943.125000	46.3	101.0	V	0.0	40.2	6.1	27.7	74
9241.875000	49.0	101.0	V	274.0	39.1	9.9	25.0	74
12639.375000	52.3	101.0	V	0.0	37.8	14.5	21.7	74
17998.125000	63.5	101.0	V	137.0	38.1	25.4	10.5	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)
3969.375000	28.4	101.0	V	0.0	29.3	-0.9	25.6	54
5431.875000	31.2	101.0	H	144.0	28.4	2.8	22.8	54
6997.500000	35.0	101.0	V	274.0	28.5	6.5	19.0	54
9232.500000	36.5	101.0	V	0.0	26.6	9.9	17.5	54
12641.250000	40.5	101.0	H	144.0	26.0	14.5	13.5	54
17998.125000	51.4	101.0	H	171.0	26.0	25.4	2.6	54

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

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)
18119.000000	48.3	V	198.0	50.6	-2.3	25.7	74
20228.062500	47.8	V	134.0	53.7	-5.9	26.2	74
21933.375000	49.7	H	345.0	57.7	-8.0	24.3	74
23649.312500	48.9	H	0.0	54.8	-5.9	25.1	74
25992.125000	48.2	V	0.0	53.6	-5.4	25.8	74
26470.250000	48.4	V	12.0	53.8	-5.4	25.6	74

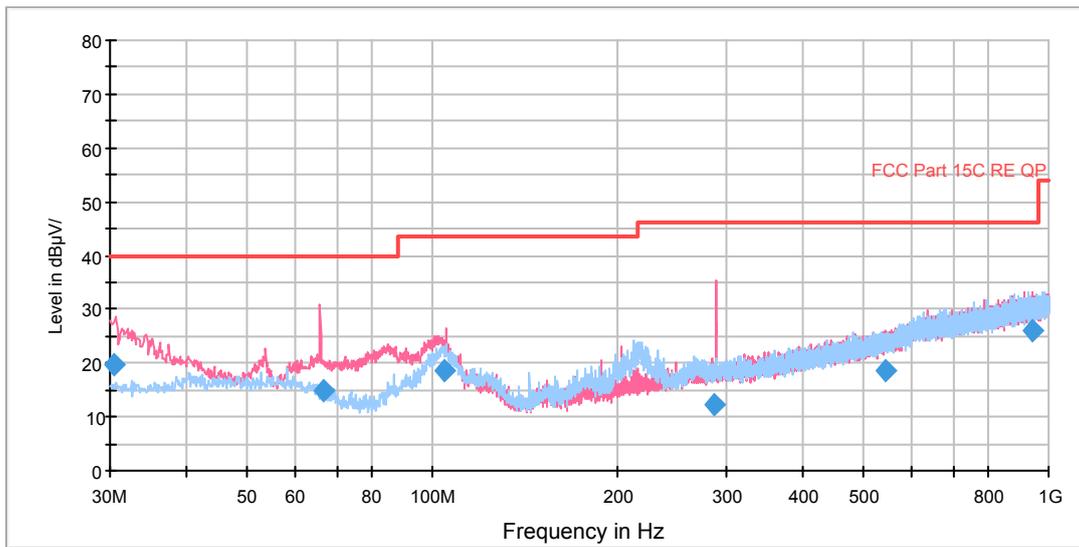
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18038.250000	36.9	V	149.0	38.9	-2.0	17.1	54
20045.312500	36.1	V	42.0	41.8	-5.7	17.9	54
20766.750000	36.7	H	0.0	43.6	-6.9	17.3	54
21941.875000	37.6	H	0.0	45.6	-8.0	16.4	54
23700.312500	37.1	V	134.0	43.0	-5.9	16.9	54
24623.625000	36.4	V	118.0	42.4	-6.0	17.6	54

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

BLE-Channel 39

FCC RE 0.03-1GHz QP Class B

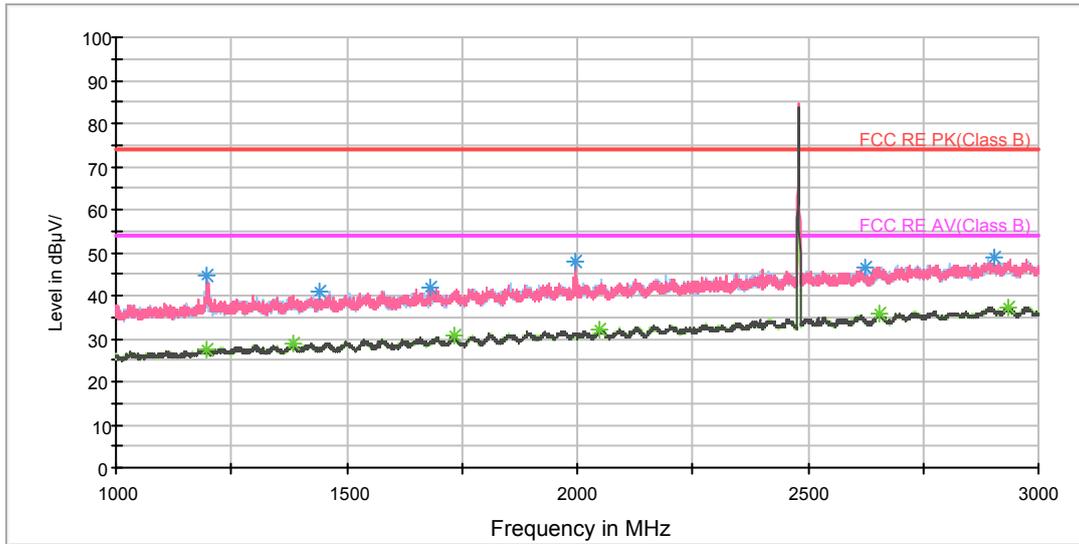


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.486250	19.8	114.0	V	170.0	7.7	12.1	20.2	40.0
66.368750	14.7	100.0	V	284.0	4.5	10.2	25.3	40.0
104.817500	18.5	100.0	V	156.0	5.6	12.9	25.0	43.5
287.541250	12.3	125.0	V	87.0	-2.9	15.2	33.7	46.0
541.995000	18.6	125.0	V	145.0	-2.8	21.4	27.4	46.0
944.991250	26.0	125.0	V	351.0	-1.2	27.2	20.0	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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz

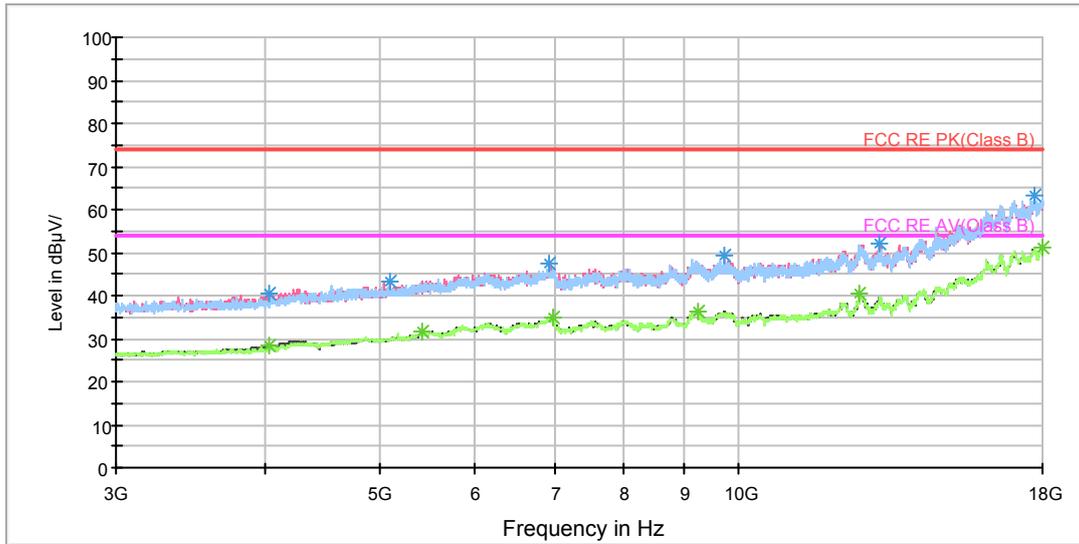
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.000000	44.7	101.0	V	123.0	52.9	-8.2	29.3	74
1439.750000	40.9	101.0	H	333.0	47.8	-6.9	33.1	74
1680.000000	41.8	101.0	V	24.0	46.9	-5.1	32.2	74
1995.750000	48.1	101.0	V	213.0	51.4	-3.3	25.9	74
2623.000000	46.4	101.0	H	269.0	46.5	-0.1	27.6	74
2903.250000	48.6	101.0	H	297.0	46.6	2.0	25.4	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)
1196.250000	27.6	101.0	V	16.0	35.8	-8.2	26.4	54
1384.500000	28.9	101.0	V	42.0	35.9	-7.0	25.1	54
1732.000000	30.7	101.0	V	42.0	35.5	-4.8	23.3	54
2049.750000	32.0	101.0	V	51.0	35.2	-3.2	22.0	54
2655.250000	35.6	101.0	V	106.0	35.2	0.4	18.4	54
2936.500000	37.3	101.0	V	313.0	35.5	1.8	16.7	54

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

RE 3-18GHz PK+AV



Note: The signal beyond the limit is carrier.
Radiates Emission from 3GHz to 18GHz

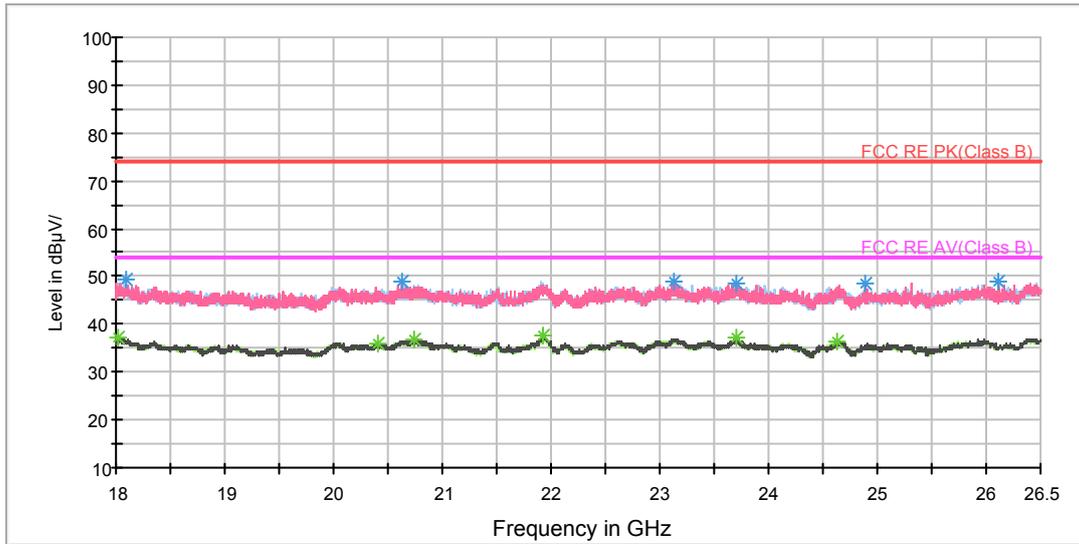
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4033.125000	40.5	101.0	V	192.0	41.6	-1.1	33.5	74
5096.250000	43.5	101.0	V	0.0	41.7	1.8	30.5	74
6933.750000	47.4	101.0	H	33.0	41.2	6.2	26.6	74
9738.750000	49.2	101.0	H	33.0	39.2	10.0	24.8	74
13151.250000	51.9	101.0	V	358.0	37.7	14.2	22.1	74
17716.875000	63.1	101.0	H	87.0	38.5	24.6	10.9	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)
4036.875000	28.2	101.0	V	0.0	29.2	-1.0	25.8	54
5430.000000	31.4	101.0	V	0.0	28.6	2.8	22.6	54
6995.625000	34.8	101.0	V	136.0	28.3	6.5	19.2	54
9238.125000	36.4	101.0	H	60.0	26.5	9.9	17.6	54
12639.375000	40.7	101.0	V	0.0	26.2	14.5	13.3	54
17998.125000	51.3	101.0	V	304.0	25.9	25.4	2.7	54

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

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)
18083.937500	49.3	H	165.0	51.5	-2.2	24.7	74
20633.937500	48.8	V	118.0	55.3	-6.5	25.2	74
23129.750000	49.1	V	72.0	55.2	-6.1	24.9	74
23709.875000	48.6	H	0.0	54.5	-5.9	25.4	74
24891.375000	48.6	V	197.0	54.5	-5.9	25.4	74
26119.625000	49.0	V	0.0	54.4	-5.4	25.0	74

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)
18024.437500	37.1	H	244.0	39.0	-1.9	16.9	54
20407.625000	36.1	V	0.0	42.2	-6.1	17.9	54
20734.875000	37.0	H	228.0	43.8	-6.8	17.0	54
21931.250000	37.6	H	307.0	45.6	-8.0	16.4	54
23696.062500	37.2	H	275.0	43.1	-5.9	16.8	54
24626.812500	36.4	V	0.0	42.4	-6.0	17.6	54

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

5.8. Conducted Emission

Ambient condition

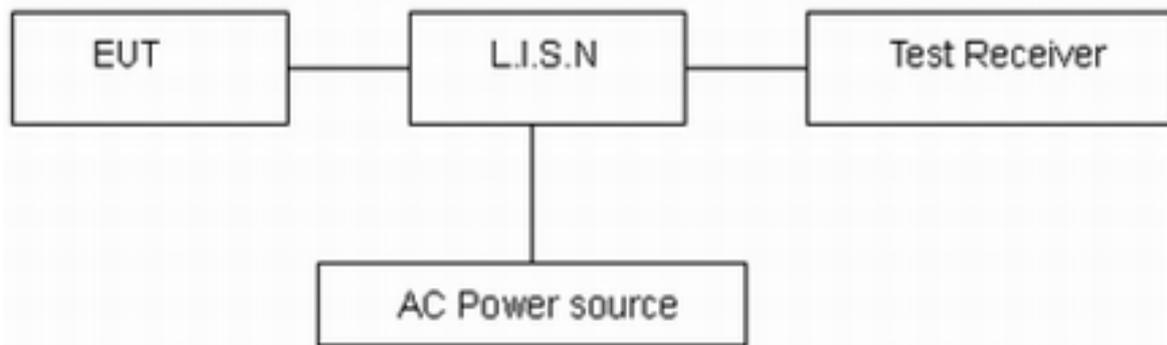
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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.

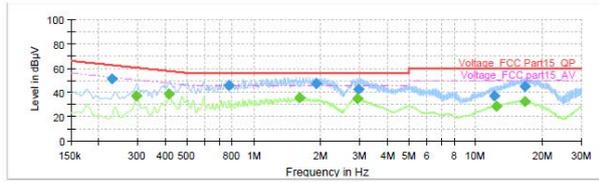


Test Results:

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

802.11b, Channel No.: 1

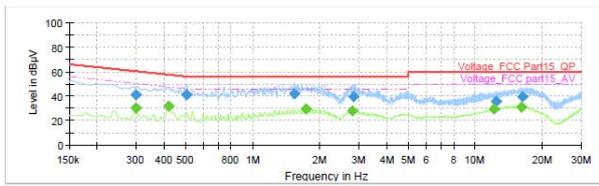
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.228750	51.39	---	62.50	11.10	1000.0	9.000	L1	ON	19.1
0.296250	---	37.22	50.35	13.13	1000.0	9.000	L1	ON	19.2
0.415500	---	38.07	47.54	8.67	1000.0	9.000	L1	ON	19.2
0.775000	45.40	---	56.00	10.60	1000.0	9.000	L1	ON	19.2
1.608000	---	35.84	46.00	10.16	1000.0	9.000	L1	ON	19.2
1.907250	47.10	---	56.00	8.90	1000.0	9.000	L1	ON	19.2
2.919750	---	34.78	46.00	11.22	1000.0	9.000	L1	ON	19.1
2.973750	42.91	---	56.00	13.09	1000.0	9.000	L1	ON	19.1
12.158250	37.34	---	60.00	22.66	1000.0	9.000	L1	ON	19.4
12.381000	---	28.93	50.00	21.07	1000.0	9.000	L1	ON	19.4
16.687500	---	32.79	50.00	17.21	1000.0	9.000	L1	ON	19.5
16.716750	44.63	---	60.00	15.37	1000.0	9.000	L1	ON	19.5

N Line

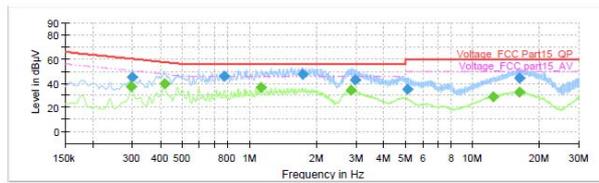


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.298500	---	30.56	50.28	19.72	1000.0	9.000	N	ON	19.2
0.298500	41.03	---	60.28	19.25	1000.0	9.000	N	ON	19.2
0.417750	---	32.14	47.49	15.35	1000.0	9.000	N	ON	19.2
0.505500	41.03	---	56.00	14.97	1000.0	9.000	N	ON	19.2
1.542750	41.96	---	56.00	14.04	1000.0	9.000	N	ON	19.2
1.731750	---	29.33	46.00	16.67	1000.0	9.000	N	ON	19.2
2.809500	---	27.81	46.00	18.19	1000.0	9.000	N	ON	19.0
2.843250	39.49	---	56.00	16.51	1000.0	9.000	N	ON	19.0
12.140250	---	29.07	50.00	20.93	1000.0	9.000	N	ON	19.4
12.384500	35.35	---	60.00	24.65	1000.0	9.000	N	ON	19.4
16.073250	---	31.24	50.00	18.76	1000.0	9.000	N	ON	19.4
16.206000	39.71	---	60.00	20.29	1000.0	9.000	N	ON	19.4

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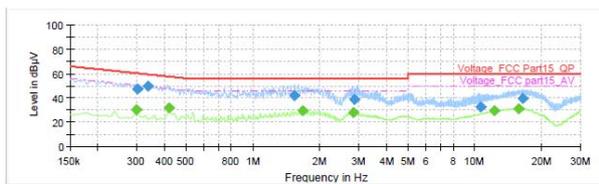
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.296250	---	37.34	50.35	13.01	1000.0	9.000	L1	ON	19.2
0.298500	44.71	---	60.28	15.58	1000.0	9.000	L1	ON	19.2
0.417750	---	39.23	47.49	8.27	1000.0	9.000	L1	ON	19.2
0.775500	46.03	---	56.00	9.97	1000.0	9.000	L1	ON	19.2
1.131000	---	36.22	46.00	9.78	1000.0	9.000	L1	ON	19.2
1.729500	47.60	---	56.00	8.40	1000.0	9.000	L1	ON	19.2
2.859000	---	33.92	46.00	12.08	1000.0	9.000	L1	ON	19.0
2.978250	42.72	---	56.00	13.28	1000.0	9.000	L1	ON	19.1
5.097750	35.27	---	60.00	24.73	1000.0	9.000	L1	ON	19.1
12.403500	---	29.10	50.00	20.90	1000.0	9.000	L1	ON	19.4
16.172250	44.35	---	60.00	15.65	1000.0	9.000	L1	ON	19.5
16.251000	---	32.88	50.00	17.12	1000.0	9.000	L1	ON	19.5

N Line

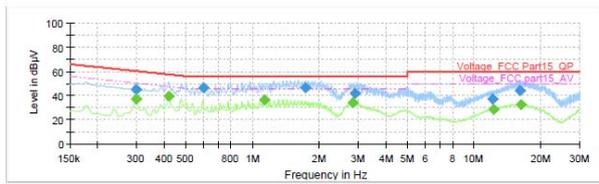


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.298500	---	30.55	50.28	19.74	1000.0	9.000	N	ON	19.2
0.300750	47.57	---	60.22	12.65	1000.0	9.000	N	ON	19.2
0.336750	49.48	---	59.28	9.80	1000.0	9.000	N	ON	19.2
0.417750	---	31.47	47.49	16.02	1000.0	9.000	N	ON	19.2
1.540500	42.20	---	56.00	13.80	1000.0	9.000	N	ON	19.2
1.673250	---	29.12	46.00	16.88	1000.0	9.000	N	ON	19.2
2.820750	---	28.16	46.00	17.84	1000.0	9.000	N	ON	19.0
2.874750	39.14	---	56.00	16.86	1000.0	9.000	N	ON	19.1
16.582250	32.57	---	60.00	27.43	1000.0	9.000	N	ON	19.4
12.309000	---	29.15	50.00	20.85	1000.0	9.000	N	ON	19.4
15.805500	---	31.31	50.00	18.69	1000.0	9.000	N	ON	19.4
16.410750	39.83	---	60.00	20.17	1000.0	9.000	N	ON	19.4

802.11b, Channel No.: 11

L Line

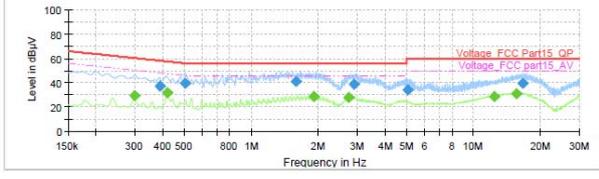


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.298500	---	37.48	50.28	12.80	1000.0	9.000	L1	ON	19.2
0.298500	44.98	---	60.28	15.31	1000.0	9.000	L1	ON	19.2
0.417750	---	39.23	47.49	8.27	1000.0	9.000	L1	ON	19.2
0.597750	46.31	---	56.00	9.69	1000.0	9.000	L1	ON	19.3
1.133250	---	36.32	46.00	9.68	1000.0	9.000	L1	ON	19.2
1.729500	46.81	---	56.00	9.19	1000.0	9.000	L1	ON	19.2
2.818500	---	34.21	46.00	11.79	1000.0	9.000	L1	ON	19.0
2.883750	41.94	---	56.00	14.06	1000.0	9.000	L1	ON	19.1
12.033000	37.38	---	60.00	22.63	1000.0	9.000	L1	ON	19.4
12.309000	---	29.04	50.00	20.96	1000.0	9.000	L1	ON	19.4
16.127250	44.30	---	60.00	15.70	1000.0	9.000	L1	ON	19.5
16.262250	---	32.71	50.00	17.29	1000.0	9.000	L1	ON	19.5



N Line

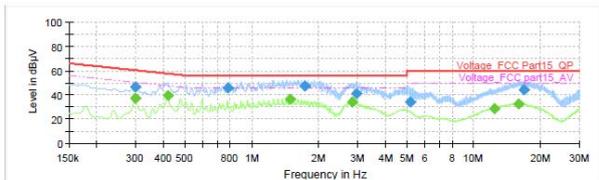


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.

802.11g, Channel No.: 1

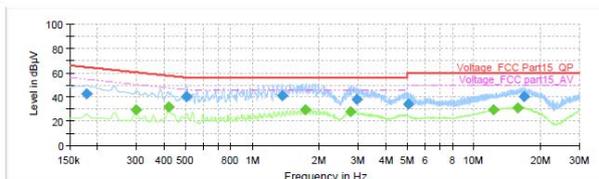
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.

N Line

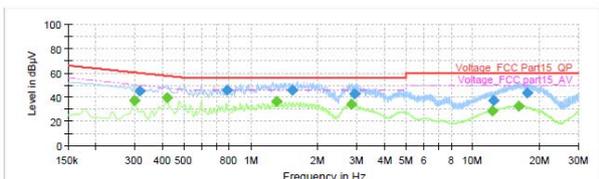


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.

802.11g, Channel No.: 6

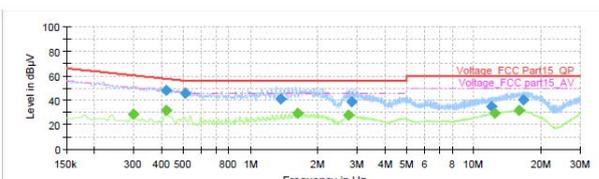
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.

N Line



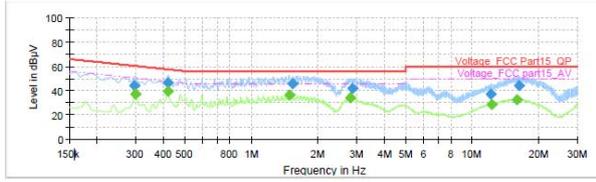
Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBuV), Average (dBuV), Limit (dBuV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.



802.11g, Channel No.: 11

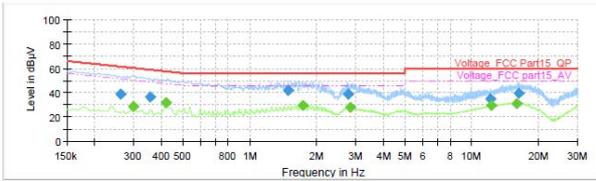
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 15 rows of test data.

N Line

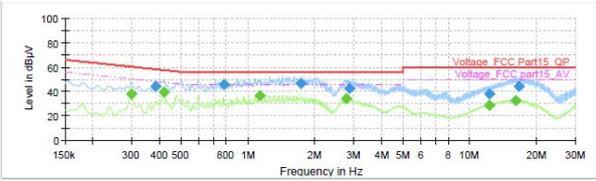


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 15 rows of test data.

802.11n(HT20), Channel No.: 1

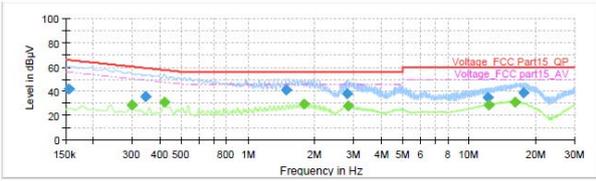
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 15 rows of test data.

N Line

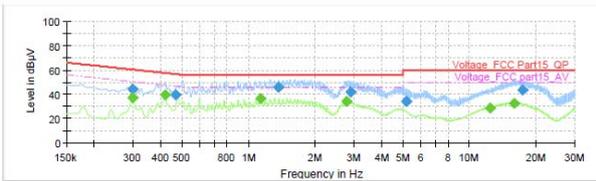


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 15 rows of test data.

802.11n(HT20), Channel No.: 6

L Line

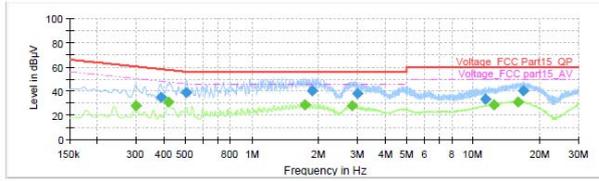


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 15 rows of test data.



N Line

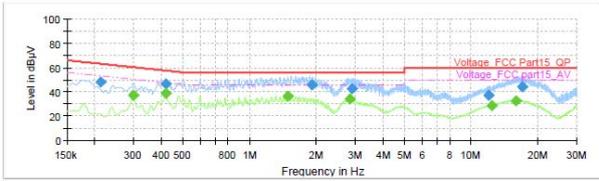


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.

802.11n(HT20), Channel No.: 11

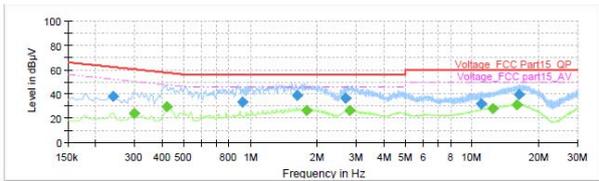
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.

N Line

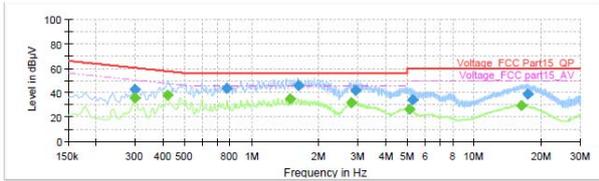


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.

BLE, Channel No.: 0

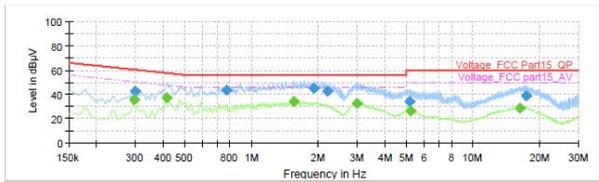
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.

N Line



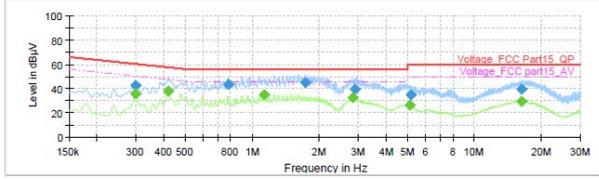
Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 16 rows of test data.



BLE, Channel No.: 19

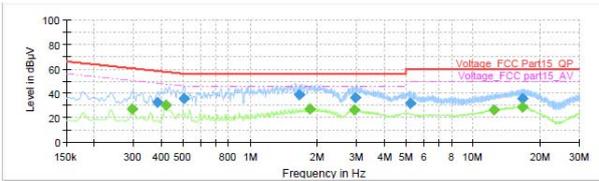
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.298500	---	35.78	50.28	14.50	1000.0	9.000	L1	ON	19.2
0.298500	42.76	---	60.28	17.53	1000.0	9.000	L1	ON	19.2
0.417750	---	37.73	47.49	9.77	1000.0	9.000	L1	ON	19.2
0.777750	43.75	---	56.00	12.25	1000.0	9.000	L1	ON	19.2
1.135500	---	34.63	46.00	11.37	1000.0	9.000	L1	ON	19.2
1.731750	---	45.12	56.00	10.88	1000.0	9.000	L1	ON	19.2
2.918500	---	32.19	46.00	13.81	1000.0	9.000	L1	ON	19.0
2.908500	39.37	---	56.00	16.63	1000.0	9.000	L1	ON	19.1
5.088750	---	26.02	50.00	23.98	1000.0	9.000	L1	ON	19.1
5.149500	34.89	---	60.00	25.11	1000.0	9.000	L1	ON	19.1
16.197000	---	29.62	50.00	20.38	1000.0	9.000	L1	ON	19.5
16.235250	39.31	---	60.00	20.69	1000.0	9.000	L1	ON	19.5

N Line

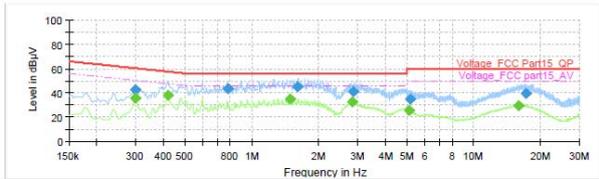


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.296250	---	27.14	50.35	23.21	1000.0	9.000	N	ON	19.2
0.384000	32.43	---	58.19	25.76	1000.0	9.000	N	ON	19.2
0.417750	---	30.04	47.49	17.45	1000.0	9.000	N	ON	19.2
0.503250	36.03	---	56.00	19.97	1000.0	9.000	N	ON	19.2
1.655250	38.43	---	56.00	17.57	1000.0	9.000	N	ON	19.2
1.848750	---	27.21	46.00	18.79	1000.0	9.000	N	ON	19.2
2.924250	---	26.67	46.00	19.33	1000.0	9.000	N	ON	19.1
2.967000	36.54	---	56.00	19.46	1000.0	9.000	N	ON	19.1
5.230500	32.12	---	60.00	27.88	1000.0	9.000	N	ON	19.1
12.448500	---	26.39	50.00	23.61	1000.0	9.000	N	ON	19.4
16.568250	---	28.61	50.00	21.39	1000.0	9.000	N	ON	19.5
16.624500	35.28	---	60.00	24.72	1000.0	9.000	N	ON	19.5

BLE, Channel No.: 39

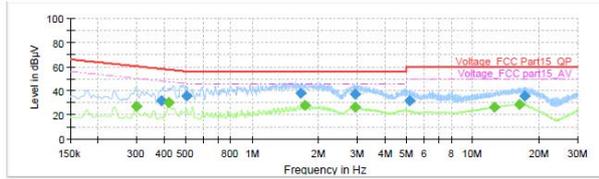
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.298500	---	35.75	50.28	14.54	1000.0	9.000	L1	ON	19.2
0.298500	42.58	---	60.28	17.70	1000.0	9.000	L1	ON	19.2
0.417750	---	37.72	47.49	9.78	1000.0	9.000	L1	ON	19.2
0.777750	43.72	---	56.00	12.28	1000.0	9.000	L1	ON	19.2
1.493250	---	34.76	46.00	11.24	1000.0	9.000	L1	ON	19.2
1.612500	45.18	---	56.00	10.82	1000.0	9.000	L1	ON	19.2
2.820750	---	32.30	46.00	13.70	1000.0	9.000	L1	ON	19.0
2.872500	41.26	---	56.00	14.74	1000.0	9.000	L1	ON	19.1
5.091000	---	25.93	50.00	24.07	1000.0	9.000	L1	ON	19.1
5.154000	34.69	---	60.00	25.31	1000.0	9.000	L1	ON	19.1
15.902250	---	29.50	50.00	20.50	1000.0	9.000	L1	ON	19.4
17.232000	39.23	---	60.00	20.77	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)
0.298500	---	27.38	50.28	22.90	1000.0	9.000	N	ON	19.2
0.388500	31.43	---	58.10	26.66	1000.0	9.000	N	ON	19.2
0.417750	---	30.19	47.49	17.31	1000.0	9.000	N	ON	19.2
0.505500	35.40	---	56.00	20.60	1000.0	9.000	N	ON	19.2
1.659750	38.03	---	56.00	17.97	1000.0	9.000	N	ON	19.2
1.731750	---	27.54	46.00	18.46	1000.0	9.000	N	ON	19.2
2.931000	37.49	---	56.00	18.51	1000.0	9.000	N	ON	19.1
2.942250	---	26.33	46.00	19.67	1000.0	9.000	N	ON	19.1
5.185500	31.89	---	60.00	28.11	1000.0	9.000	N	ON	19.1
12.455250	---	26.45	50.00	23.55	1000.0	9.000	N	ON	19.4
16.307250	---	28.61	50.00	21.39	1000.0	9.000	N	ON	19.4
17.146500	35.47	---	60.00	24.53	1000.0	9.000	N	ON	19.5



6. Main Test Instruments

Name	Type	Manufacturer	Serial Number	Calibration Date	Expiration Time
Spectrum Analyzer	FSV30	R&S	100815	2016-12-16	2017-12-15
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	2017-02-18	2020-02-17
Standard Gain Horn	3160-09	ETS-Lindgren	00102644	2015-01-30	2018-01-29
EMI Test Receiver	ESCS30	R&S	100138	2016-06-01	2017-05-31
LISN	ENV216	R&S	101171	2016-12-17	2019-12-16
Spectrum Analyzer	N9010A	Agilent	MY47191109	2016-05-21	2017-05-20
RF Cable	SMA 15cm	Agilent	0001	2017-03-02	2017-06-01

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

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



Front Side



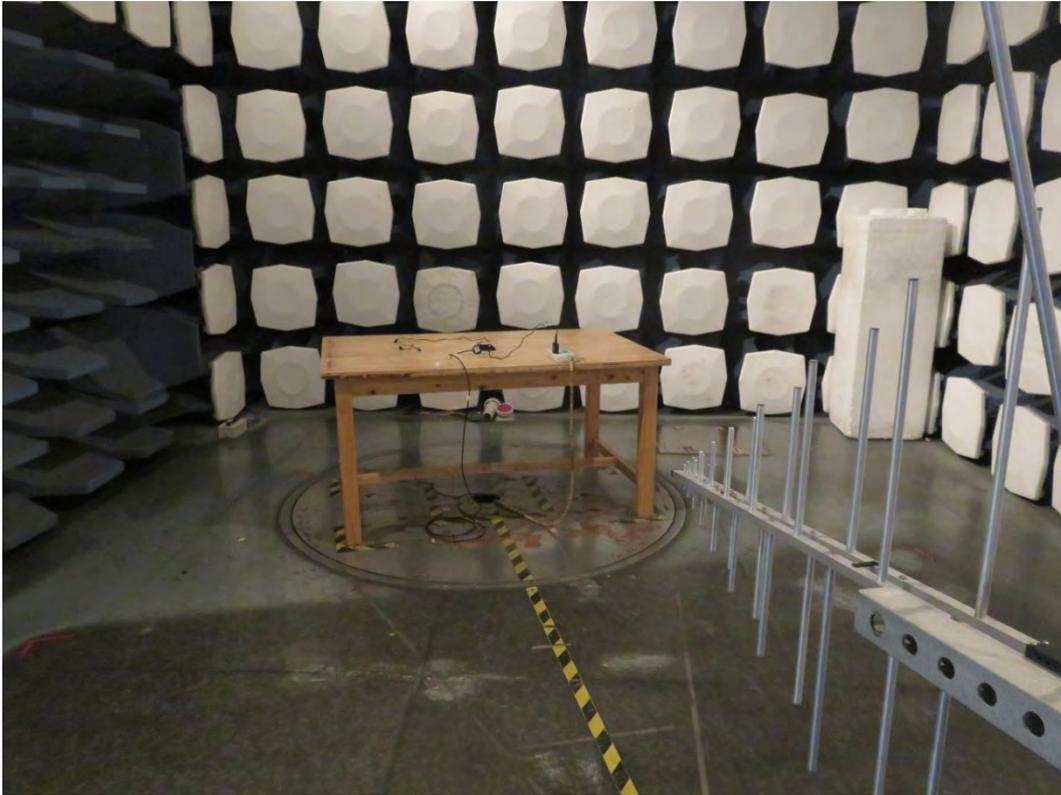
Back Side

a: EUT



b: Battery
Picture 1 EUT and Accessory

A.2 Test Setup

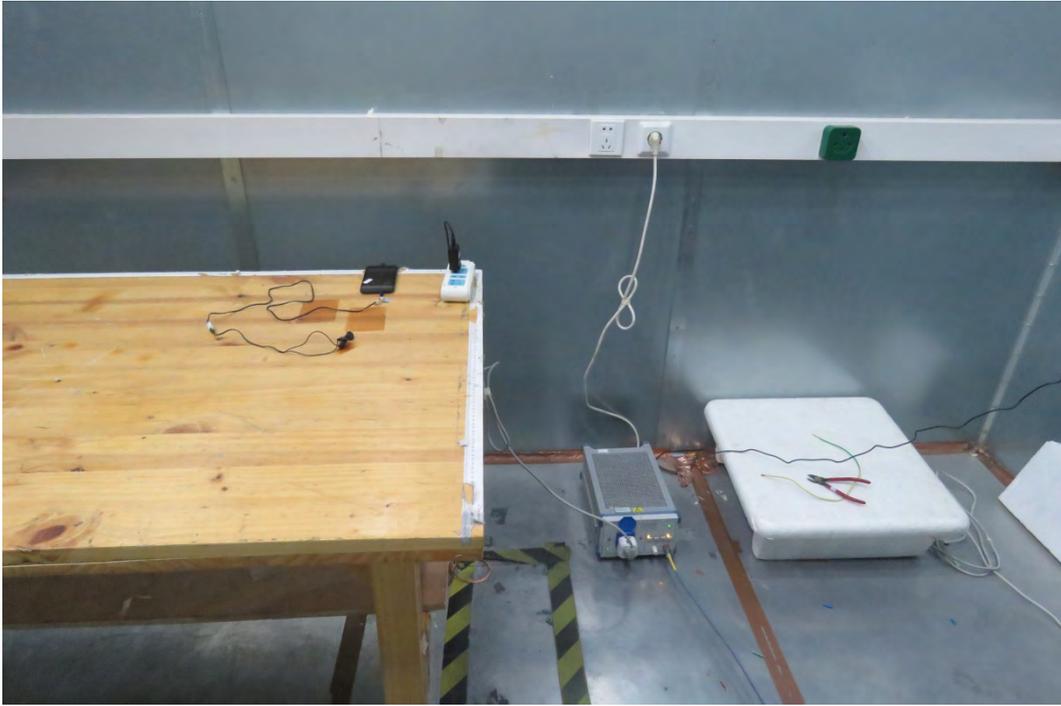


Below 1GHz



Above 1GHz

Picture 2 Radiated Emission Test Setup



Picture 3 Conducted Emission Test Setup