



中国认可
国际互认
检测
TESTING
CNAS L2264

RF TEST REPORT

Applicant ZTE Corporation
FCC ID SRQ-BLADEA522
Product LTE/WCDMA/GSM(GPRS)
Multi-Mode Digital Mobile Phone
Brand ZTE
Model ZTE Blade A522
Report No. RXC1705-0142RF05
Issue Date June 22, 2017

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

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: May 23, 2017 ~ June 4, 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 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-10766)

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
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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:	ZTE Blade A522
IMEI:	SIM 1: 864938030006502 SIM 2: 864938030005298
Hardware Version:	ZTE Blade A522 MP
Software Version:	A522B01-DE-RFA01a/GEN_EU_A522_V1.0
Power Supply:	Battery/AC adapter
Antenna Type:	Internal Antenna (FPC antenna)
Antenna Connector:	A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)
Antenna Gain:	1.13 dBi
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 :15.72dBm BLE : 1.43 dBm
Operating Frequency Range(s)	802.11b/g/n(HT20): 2412 ~ 2462 MHz BLE: 2402 ~2480 MHz
EUT Accessory	
Battery	Manufacturer: SCUD (Fujian) Electronics Co., LTD Model: Li3925T44P8h786035
Earphone	Manufacturer: GoerTek Inc



	Model: HA3-6
Adapter	Manufacturer: RUIJING Model: STC-A51A-Z Input: 100-240Vac 50/60Hz 250mA Output: 5.0Vdc 1000mA
USB Cable	100cm Cable, Shielded
Note: The information of the EUT is declared by the manufacturer. Please refer to the specifications or user manual for details.	

Difference Configuration Statement		
Configuration	Configuration 1	Configuration 2
Software Version	A522B01-DE-RFA01a	GEN_EU_A522_V1.0
SIM Card Slot	SIM 1	SIM 1, SIM 2
Others	The same	The same
The difference between the two EUT is only the Software Version and the quantity of SIM Card Slot, however, only the Software Version of GEN_EU_A522_V1.0 (with 2 SIM Card Slots) is refer to this report. SIM 1 Card supports 2G/4G, and SIM 2 Card only supports 2G.		

3. Applied Standards

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

Test standards

- **FCC CFR47 Part 15C (2016) Radio Frequency Devices**
- **ANSI C63.10 (2013)**
- **KDB 558074 D01 DTS Meas Guidance v04**

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

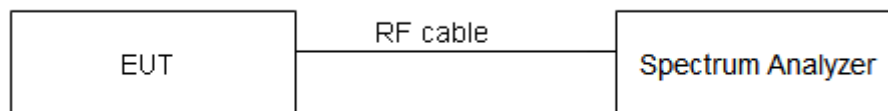
Ambient condition

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.

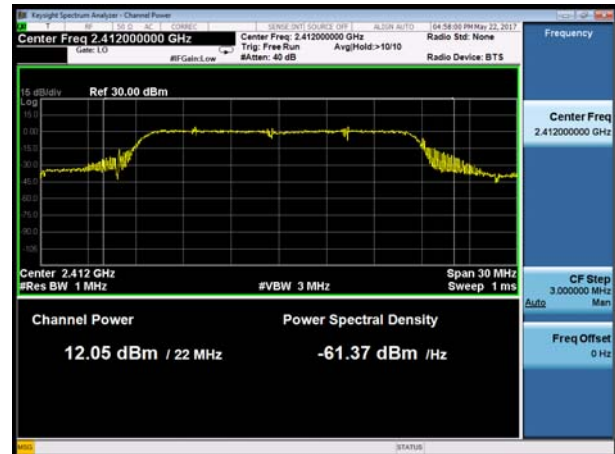
Test Results

Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)	Limit (dBm)	Conclusion
802.11b	2412	14.87	30	PASS
	2437	15.72	30	PASS
	2462	15.40	30	PASS
802.11g	2412	12.05	30	PASS
	2437	12.26	30	PASS
	2462	12.66	30	PASS
802.11n HT20	2412	11.09	30	PASS
	2437	11.30	30	PASS
	2462	11.56	30	PASS
Bluetooth (Low Energy)	2402	0.63	30	PASS
	2440	1.43	30	PASS
	2480	0.40	30	PASS

802.11b, Carrier frequency (MHz): 2412



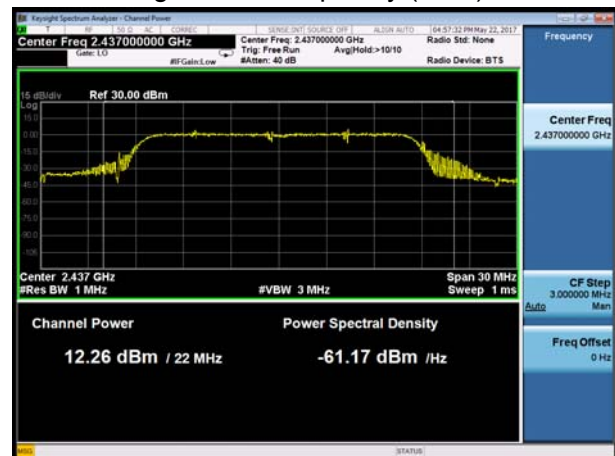
802.11g, Carrier frequency (MHz): 2412



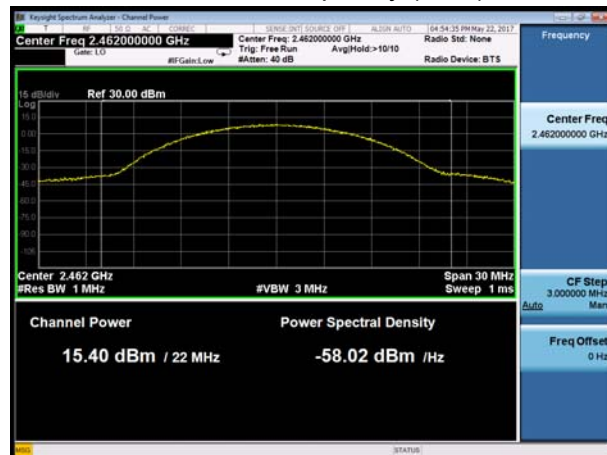
802.11b, Carrier frequency (MHz): 2437



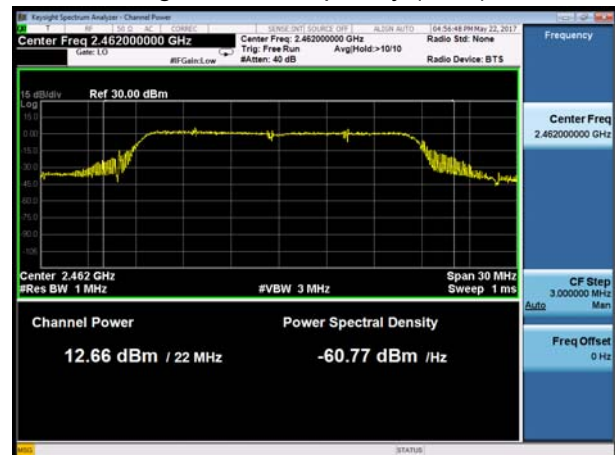
802.11g, Carrier frequency (MHz): 2437



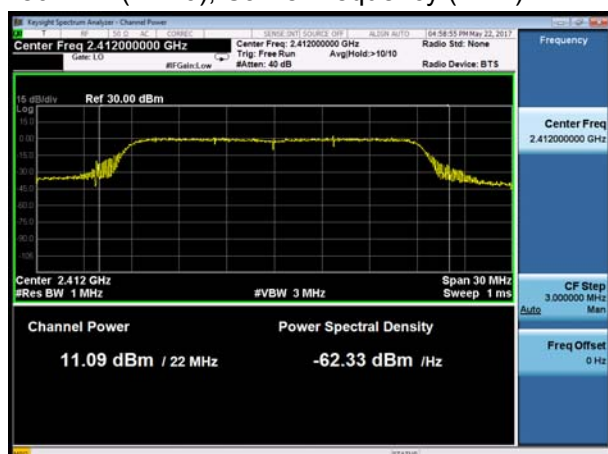
802.11b, Carrier frequency (MHz): 2462



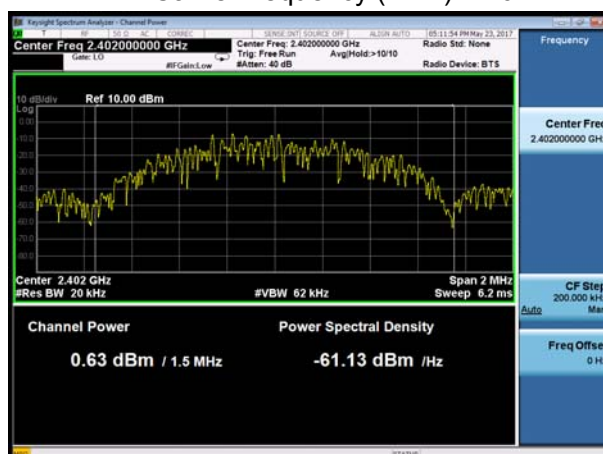
802.11g, Carrier frequency (MHz): 2462



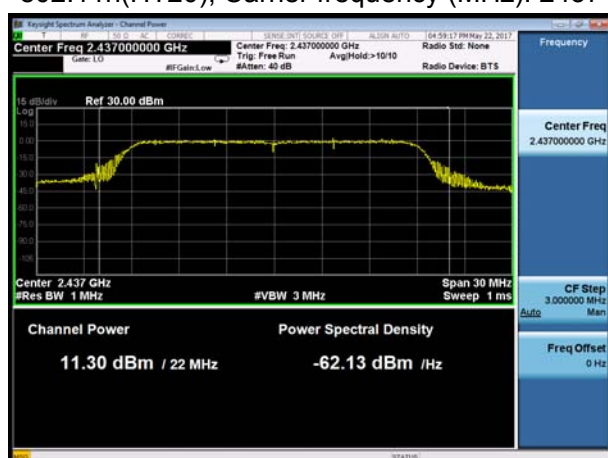
802.11n(HT20), Carrier frequency (MHz): 2412



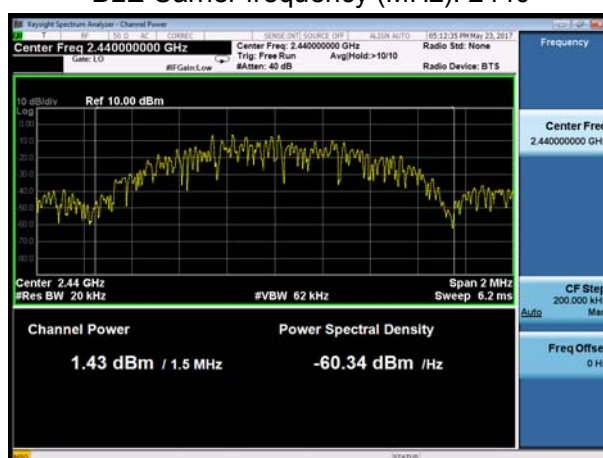
BLE Carrier frequency (MHz): 2402



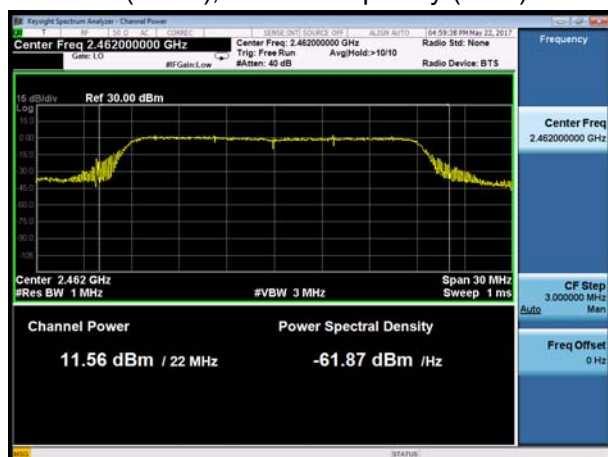
802.11n(HT20), Carrier frequency (MHz): 2437



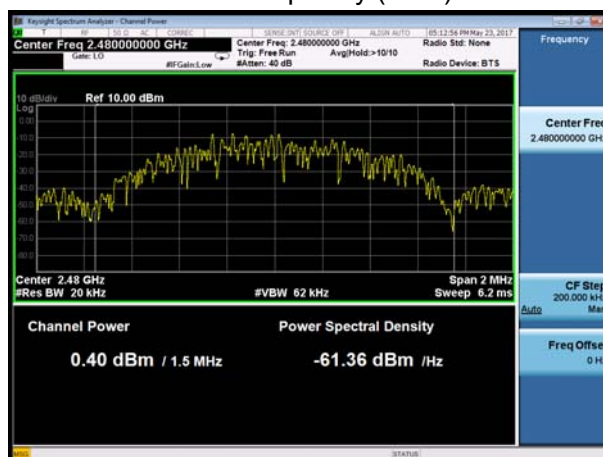
BLE Carrier frequency (MHz): 2440



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



BLE Carrier frequency (MHz): 2480



5.2. 6dB Bandwidth

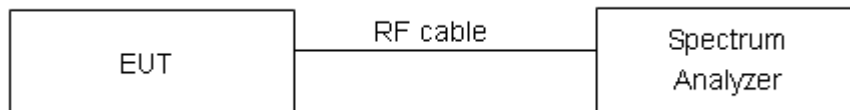
Ambient condition

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	12.009	7.422	500	PASS
	2437	11.894	7.192	500	PASS
	2462	12.285	7.694	500	PASS
802.11g	2412	16.481	16.51	500	PASS
	2437	16.457	16.51	500	PASS
	2462	16.486	16.50	500	PASS
802.11n HT20	2412	17.660	17.73	500	PASS
	2437	17.660	17.73	500	PASS
	2462	17.678	17.71	500	PASS
Bluetooth (Low Energy)	2402	1.0843	0.669	500	PASS
	2440	1.0851	0.670	500	PASS
	2480	1.0848	0.664	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

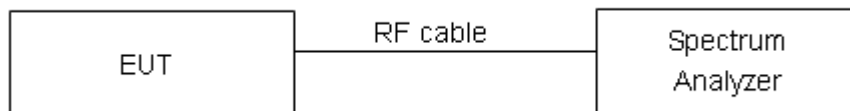
Ambient condition

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

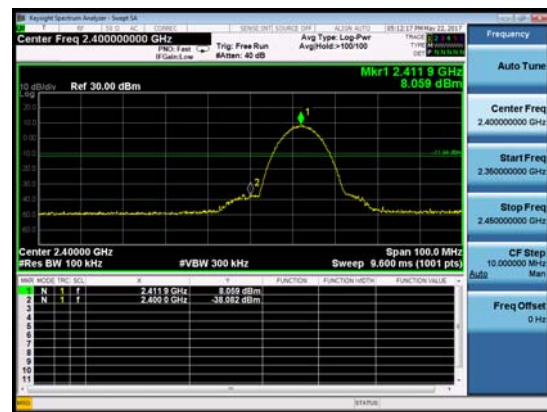
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
2GHz-3GHz	1.407 dB

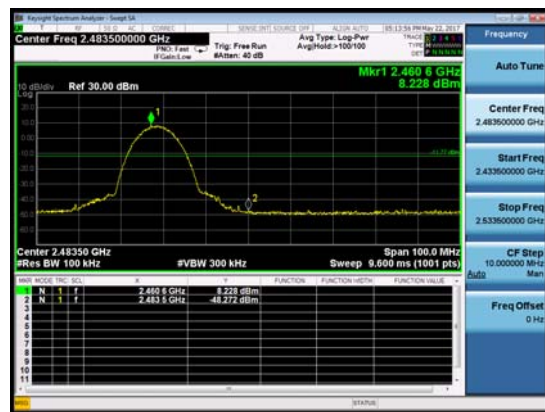


Test Results: PASS

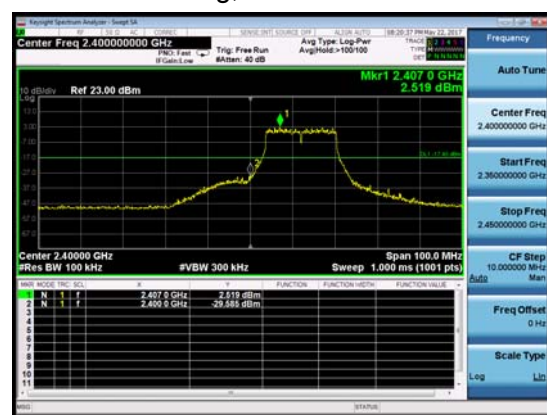
802.11b, Channel No.: 1



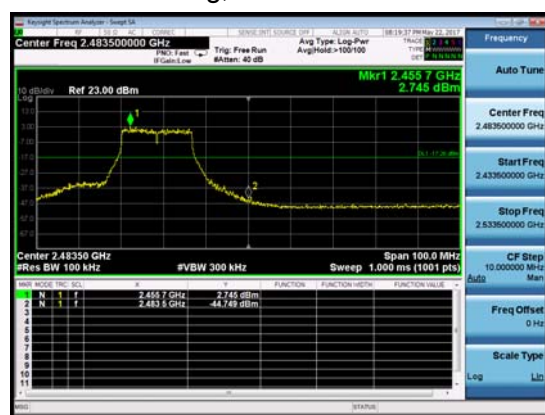
802.11b, Channel No.: 11



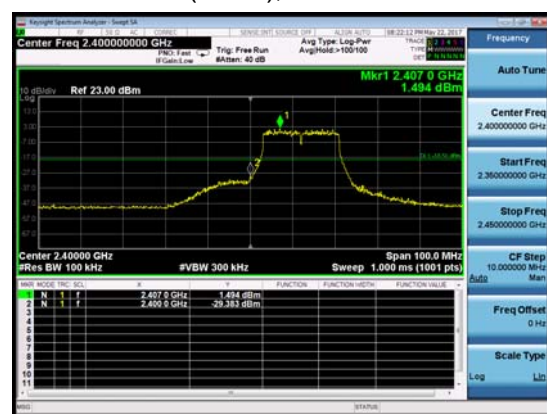
802.11g, Channel No.: 1



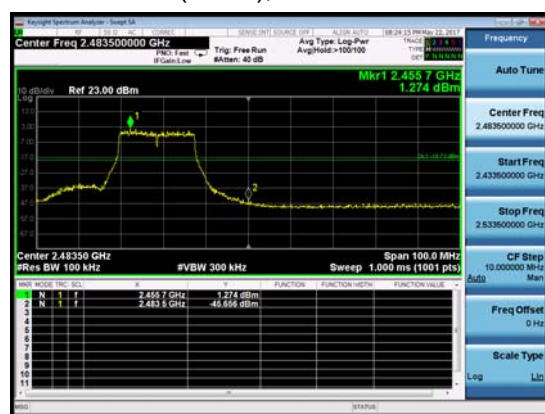
802.11g, Channel No.: 11

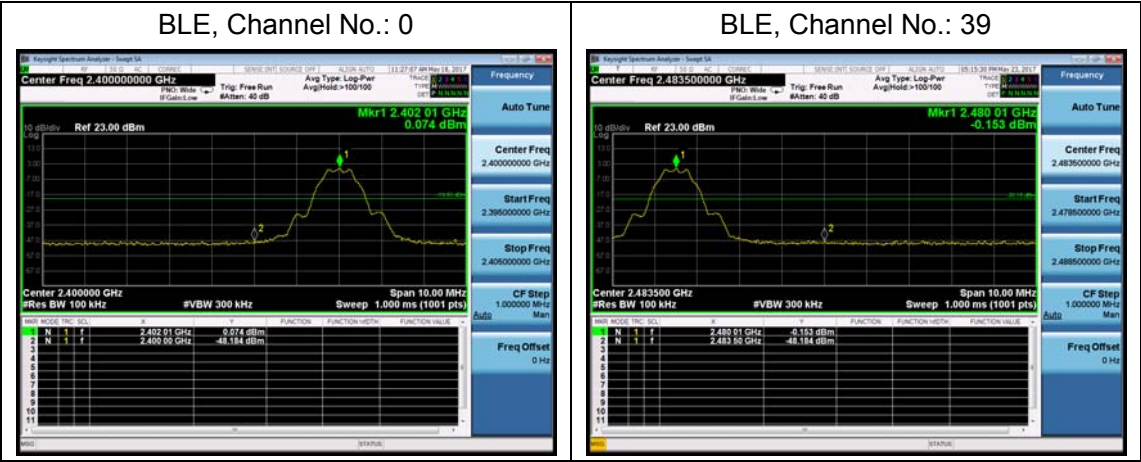


802.11n(HT20), Channel No.: 1



802.11n(HT20), Channel No.: 11





5.4. Power Spectral Density

Ambient condition

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

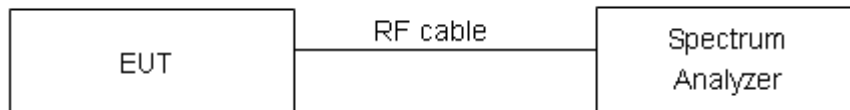
Method of Measurement

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	$\leq 8 \text{ dBm} / 3\text{kHz}$
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Measurement Uncertainty

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

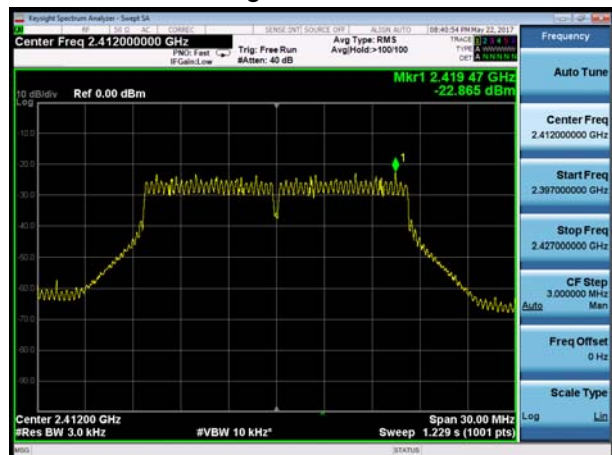
Test Results:

Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)	Limit (dBm / 3kHz)	Conclusion
802.11b	1	-17.042	8	PASS
	6	-18.840	8	PASS
	11	-17.170	8	PASS
802.11g	1	-22.865	8	PASS
	6	-25.461	8	PASS
	11	-22.939	8	PASS
802.11n HT20	1	-22.937	8	PASS
	6	-25.490	8	PASS
	11	-23.253	8	PASS
Bluetooth (Low Energy)	0	-19.274	8	PASS
	19	-18.732	8	PASS
	39	-19.528	8	PASS

802.11b, Channel No.: 1



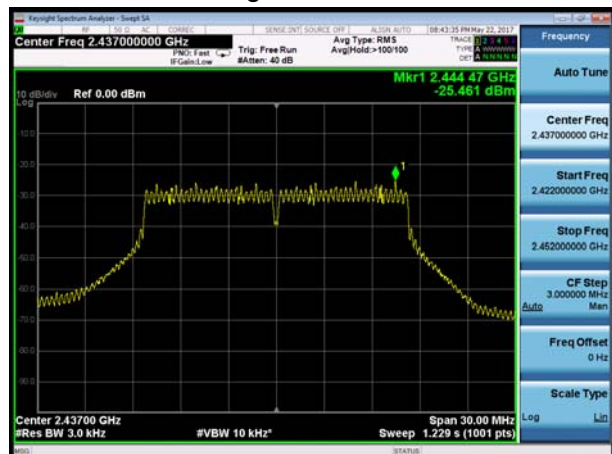
802.11g, Channel No.: 1



802.11b, Channel No.: 6



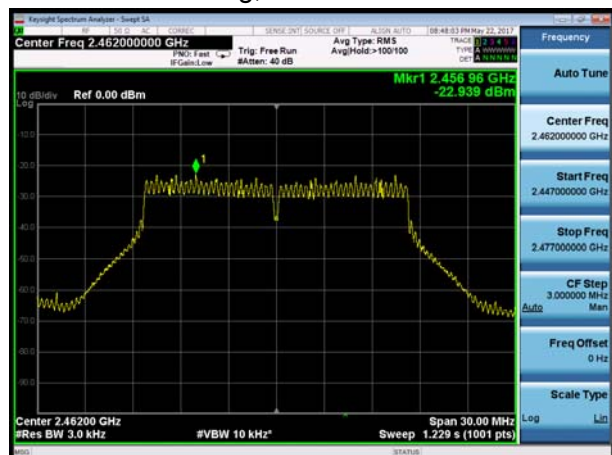
802.11g, Channel No.: 6



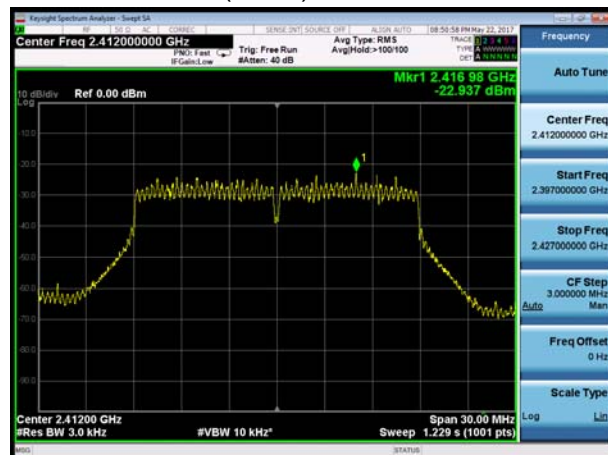
802.11b, Channel No.: 11



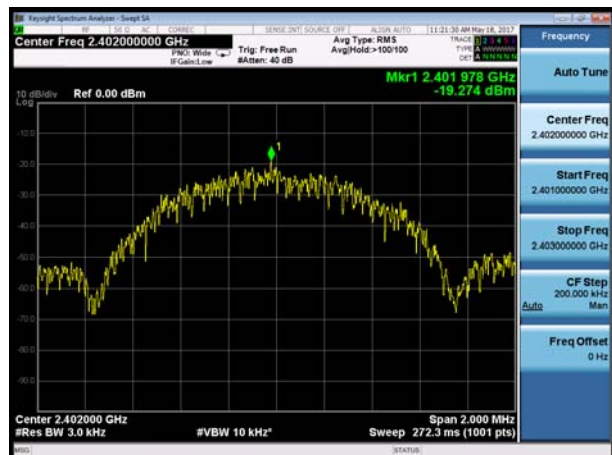
802.11g, Channel No.: 11



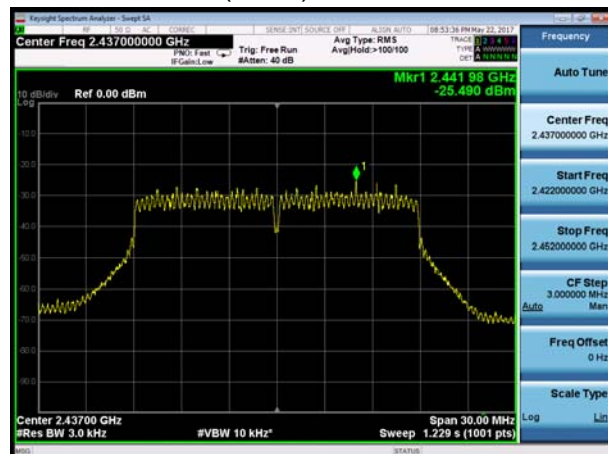
802.11n(HT20), Channel No. 1



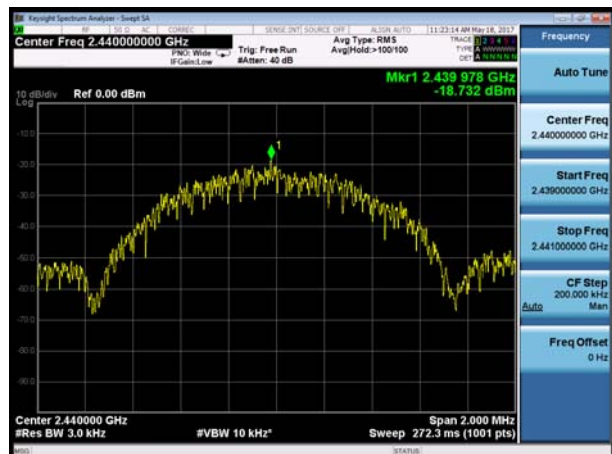
BLE, Channel No.: 0



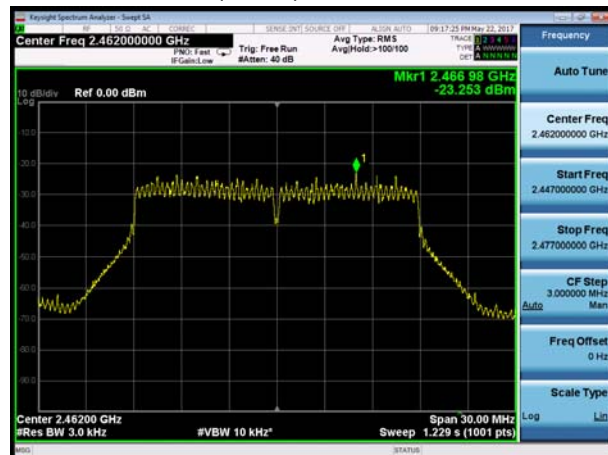
802.11n(HT20), Channel No. 6



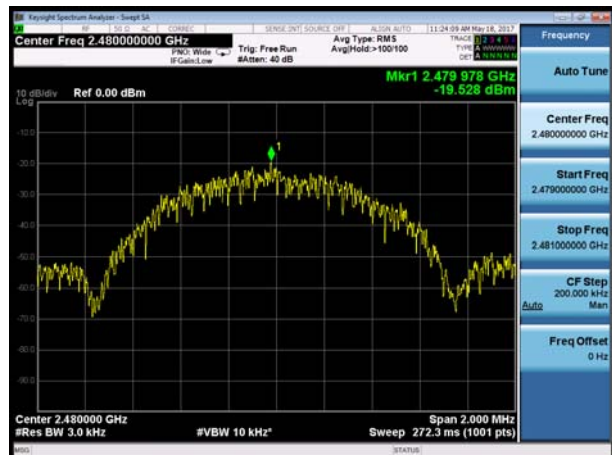
BLE, Channel No.: 19



802.11n(HT20), Channel No. 11



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. Set RBW to100kHz and VBW to 300 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.”

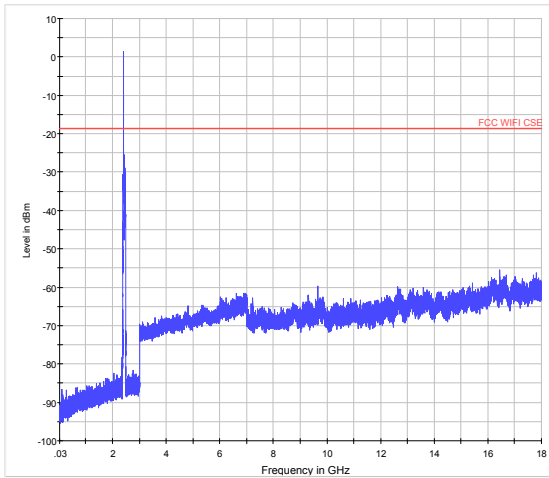
Antenna

Network Standards	Carrier frequency (MHz)	Reference value (dBm)	Limit
802.11b	2412	1.390	-18.610
	2437	-5.516	-25.516
	2462	-1.500	-21.500
802.11g	2412	-2.926	-22.926
	2437	-9.590	-29.590
	2462	-2.304	-22.304
802.11n HT20	2412	-3.334	-23.334
	2437	-8.868	-28.868
	2462	-3.264	-23.264
Bluetooth (Low Energy)	2402	-12.273	-32.273
	2440	-21.072	-41.072
	2480	-16.487	-36.487

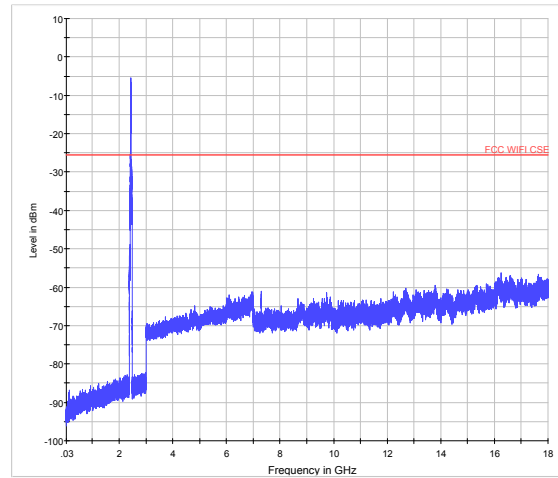
Measurement Uncertainty

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

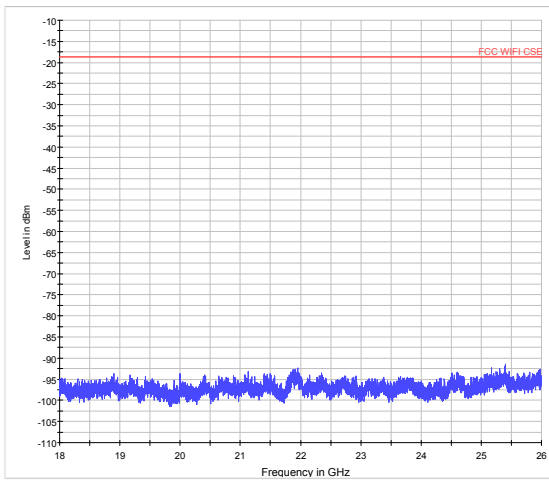
Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-26GHz	1.407 dB

**Test Results:****Antenna**

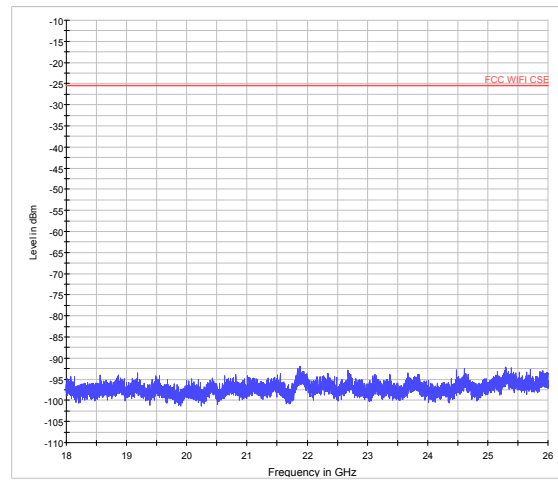
802.11b CH1 30MHz to 18GHz



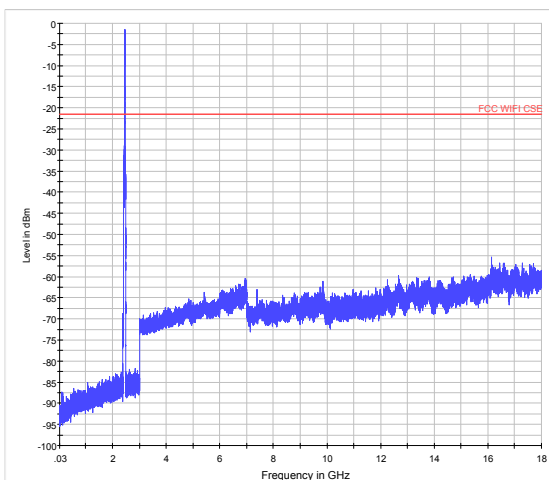
802.11b CH6 30MHz to 18GHz



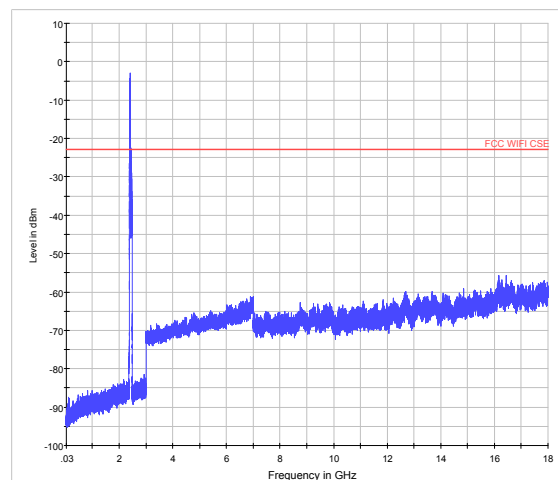
802.11b CH1 18GHz to 26.5GHz



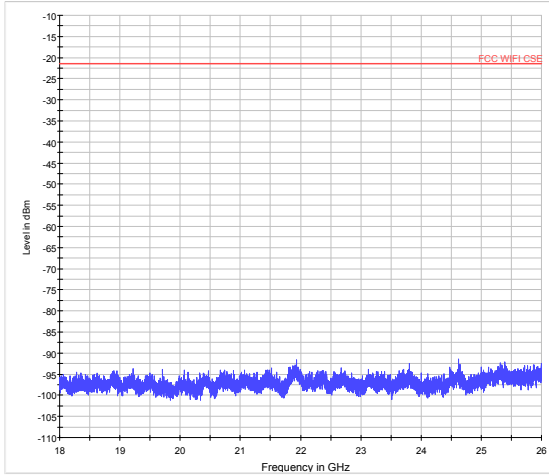
802.11b CH6 18GHz to 26.5GHz



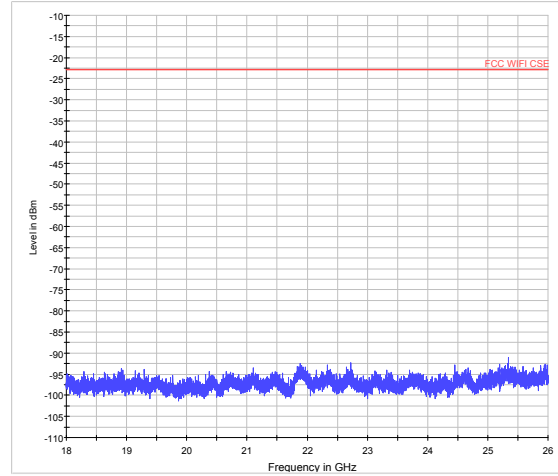
802.11b CH11 30MHz to 18GHz



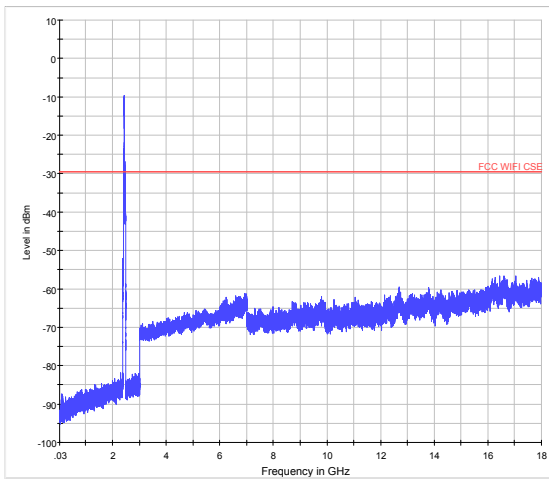
802.11g CH1 30MHz to 18GHz



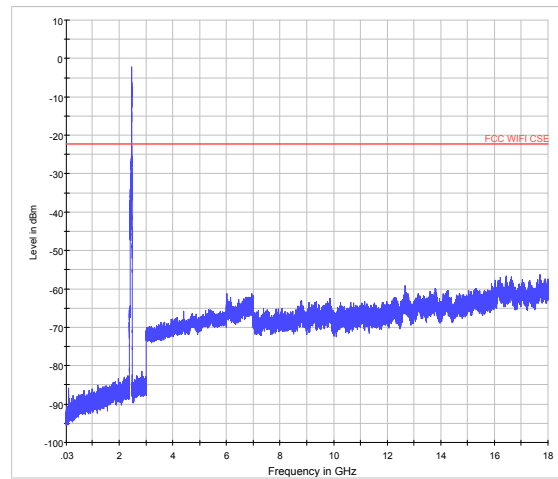
802.11b CH11 18GHz to 26.5GHz



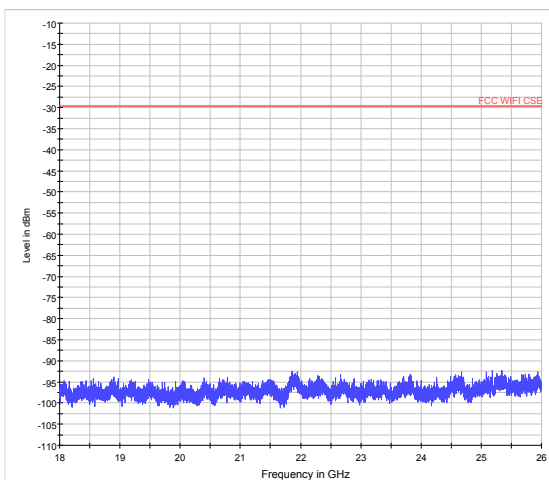
802.11g CH1 18GHz to 26.5GHz



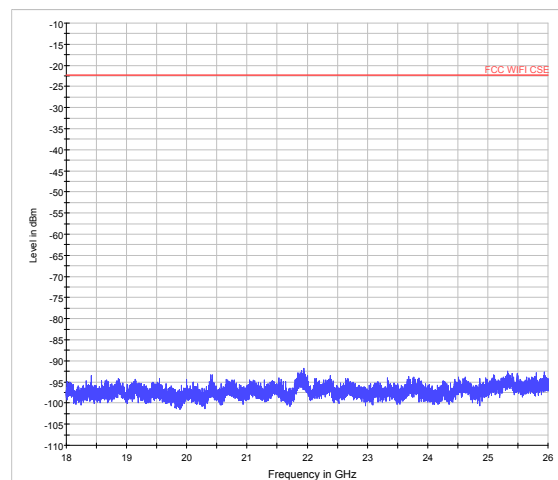
802.11g CH6 30MHz to 18GHz



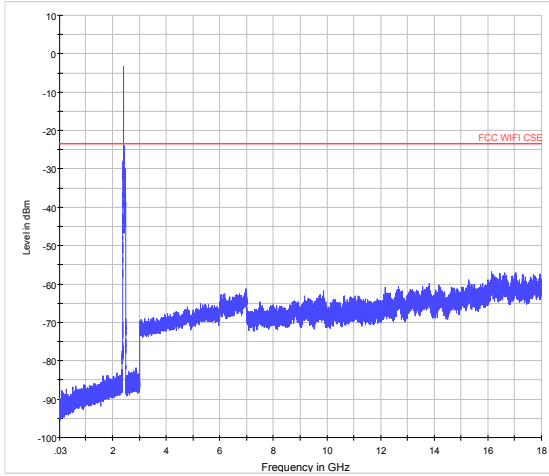
802.11g CH11 30MHz to 18GHz



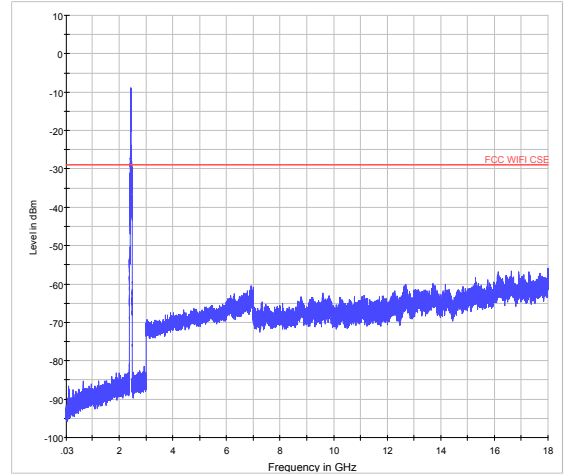
802.11g CH6 18GHz to 26.5GHz



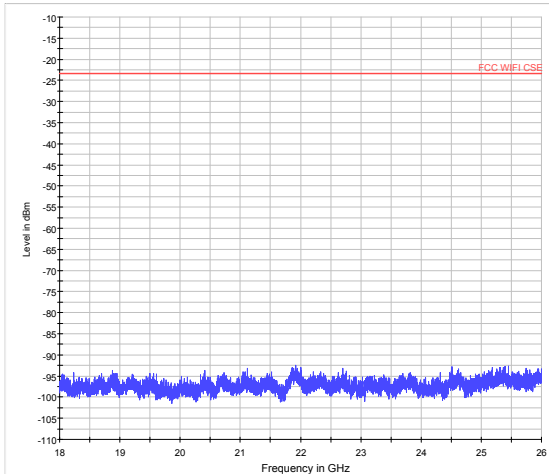
802.11g CH11 18GHz to 26.5GHz



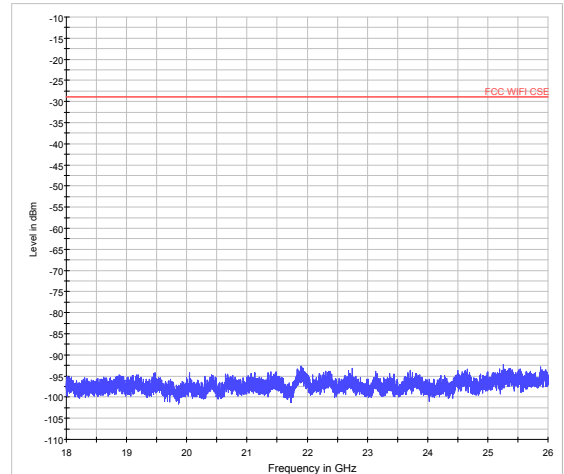
802.11n (HT20) CH1 30MHz to 18GHz



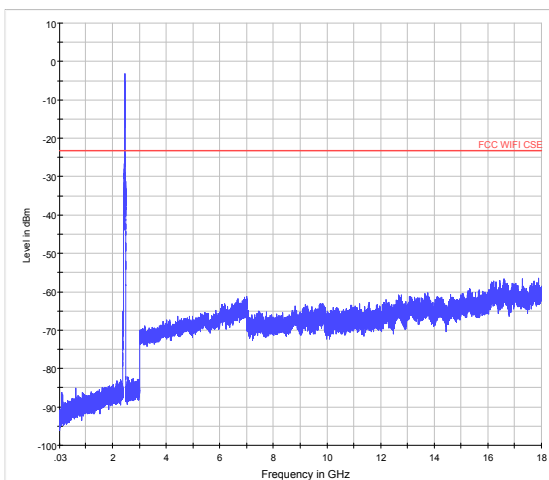
802.11n (HT20) CH6 30MHz to 18GHz



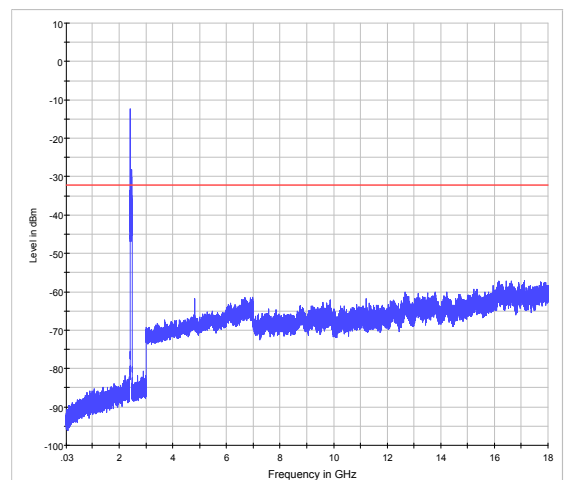
802.11n (HT20) CH1 18GHz to 26.5GHz



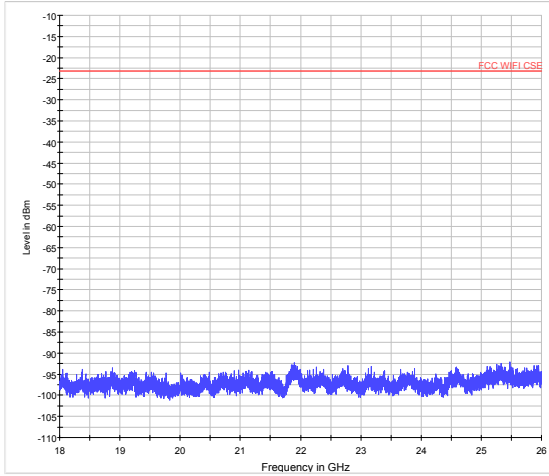
802.11n (HT20) CH6 18GHz to 26.5GHz



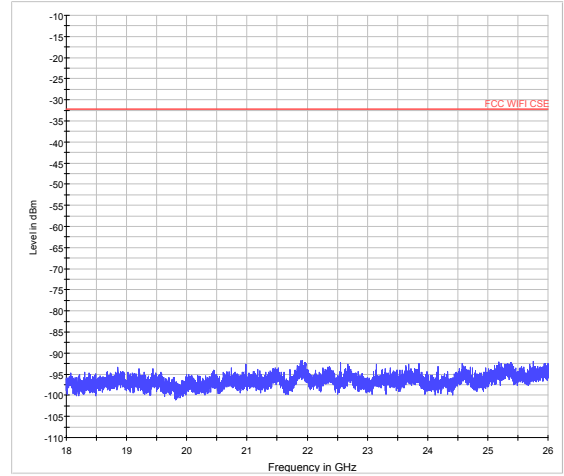
802.11n (HT20) CH11 30MHz to 18GHz



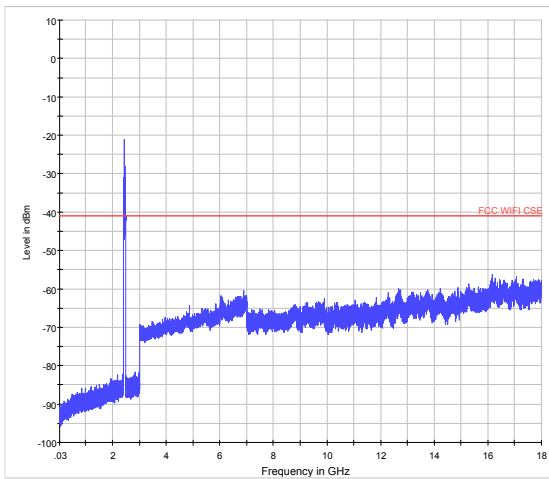
BLE CH0 30MHz to 18GHz



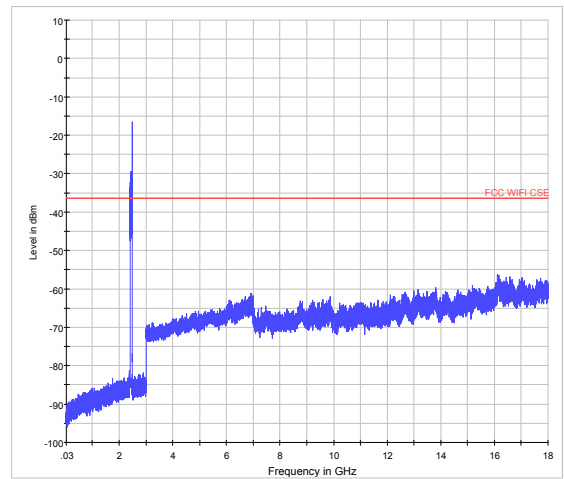
802.11n (HT20) CH11 18GHz to 26.5GHz



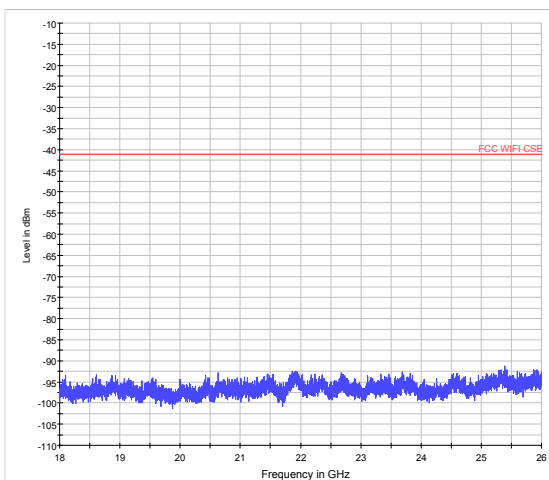
BLE CH0 18GHz to 26.5GHz



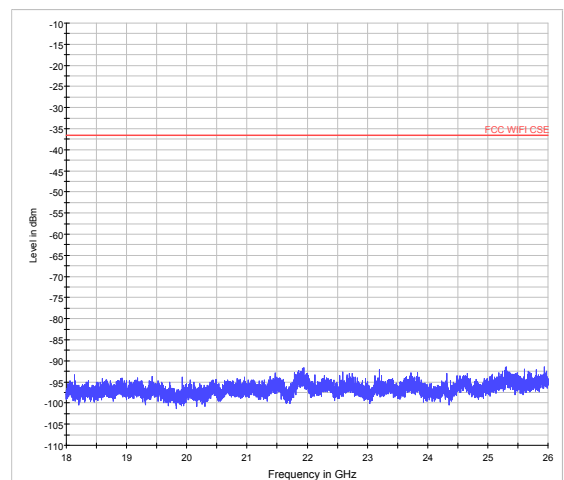
BLE CH19 30MHz to 18GHz



BLE CH39 30MHz to 3GHz



BLE CH19 18GHz to 26.5GHz



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:

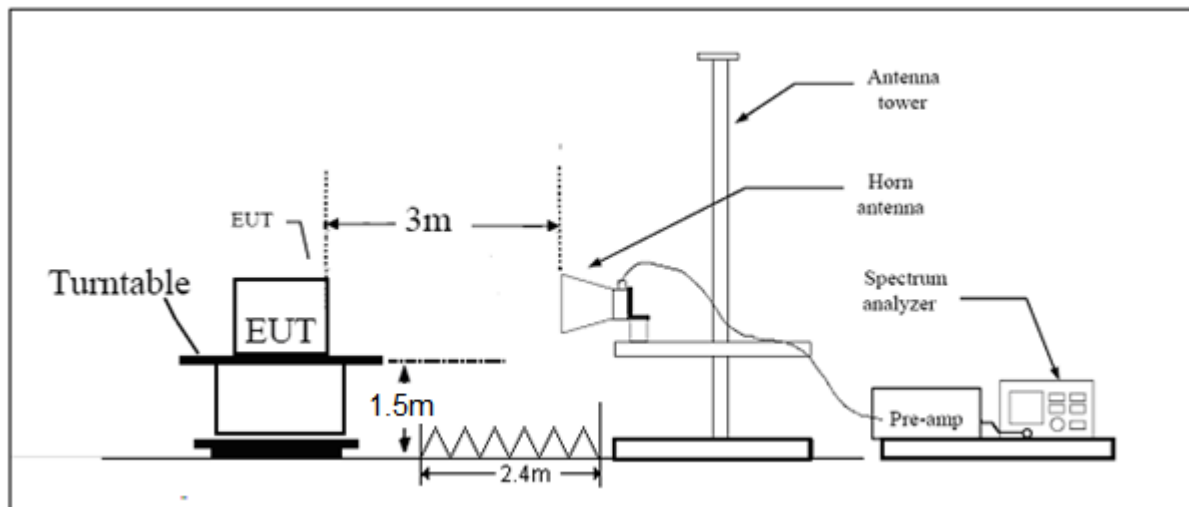
- (a) PEAK: RBW=1MHz/VBW=3MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

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

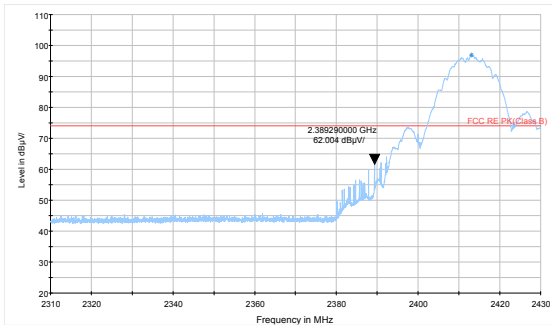
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 3.55$ dB.

Test Results:

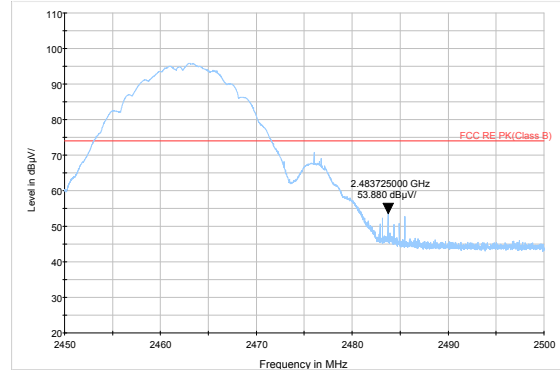
PASS

The signal beyond the limit is carrier.

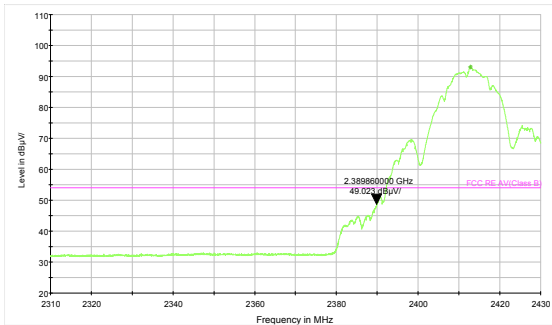
802.11b-Channel 1: Peak



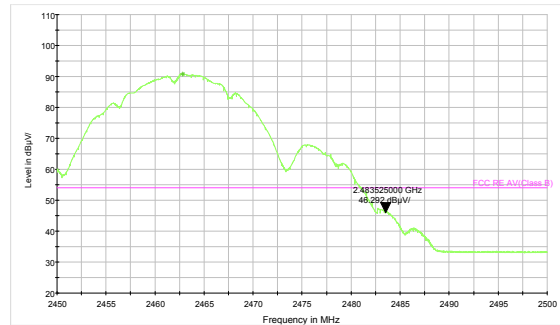
802.11b-Channel 11: Peak



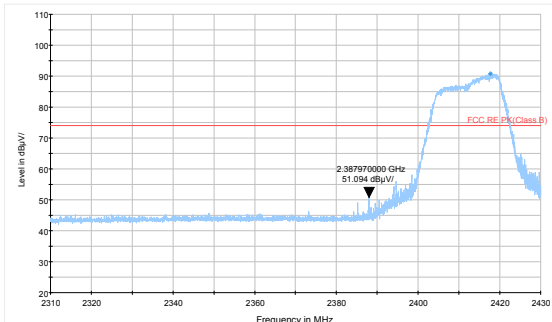
802.11b-Channel 1: Average



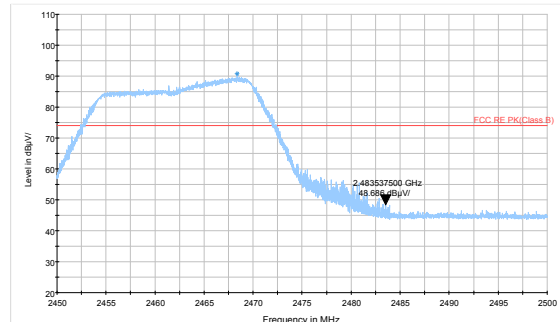
802.11b-Channel 11: Average



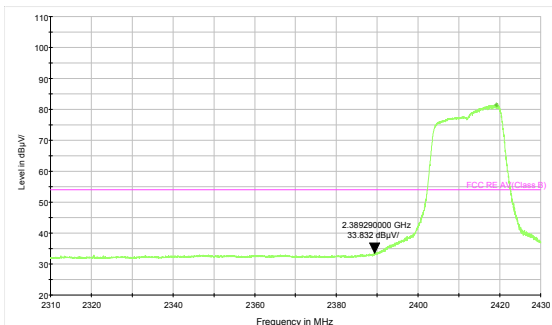
802.11g-Channel 1: Peak



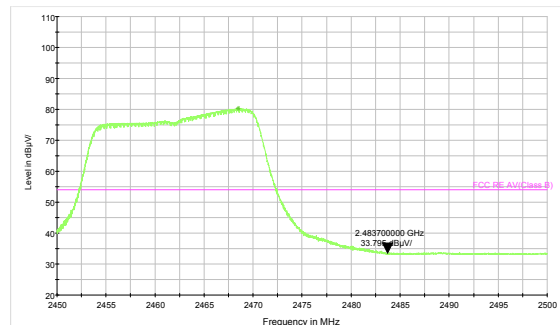
802.11g-Channel 11: Peak

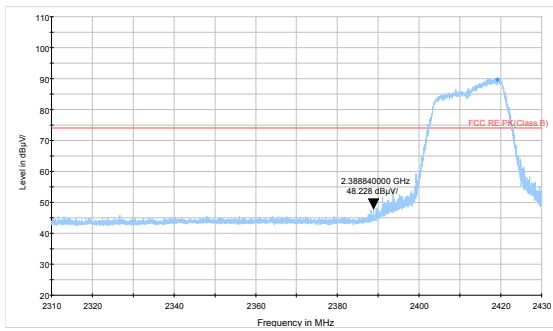
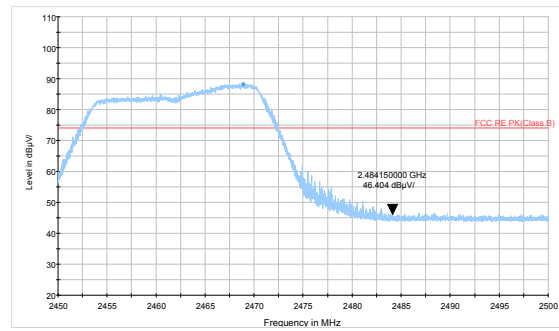
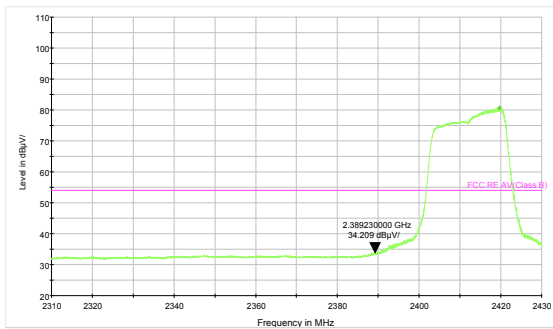
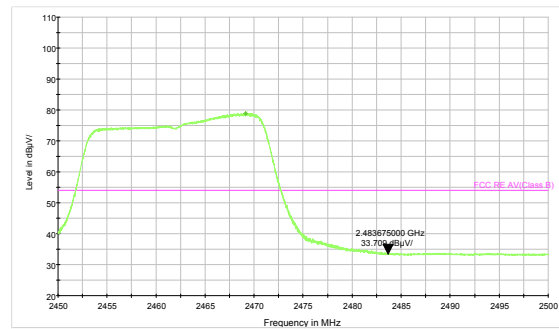
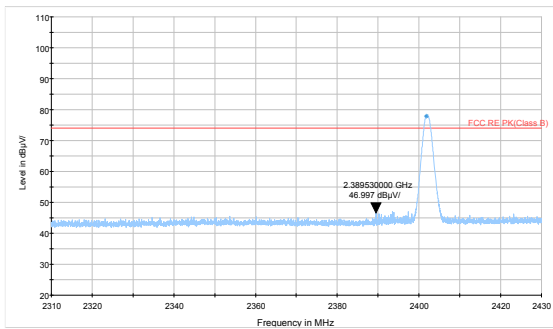
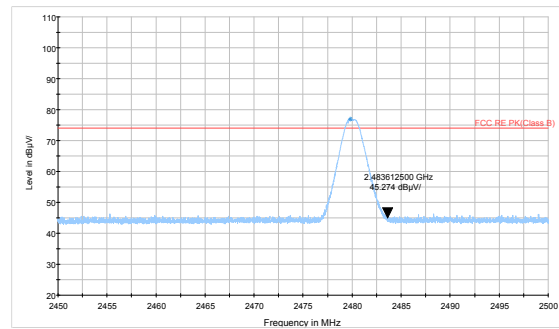
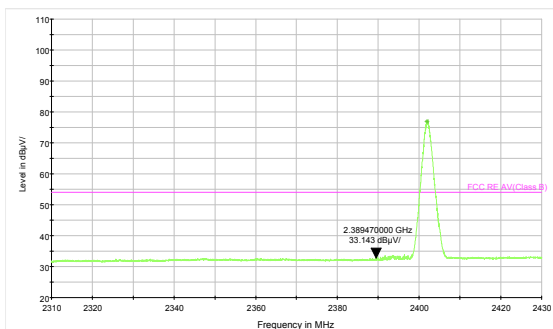
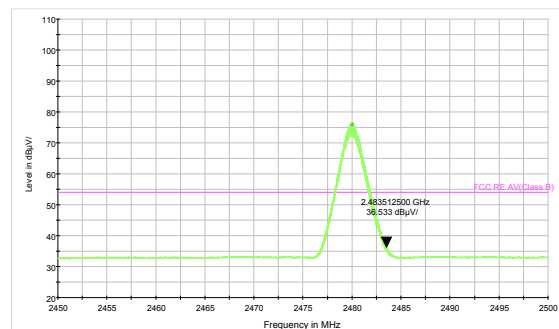


802.11g-Channel 1: Average



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

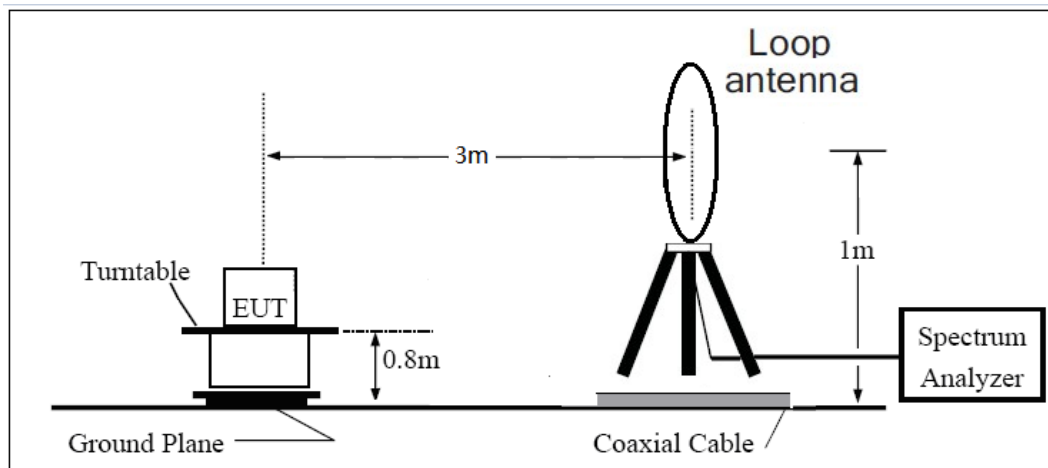
(b) AVERAGE: RBW=1MHz /VBW=3MHz / Sweep=AUTO

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.

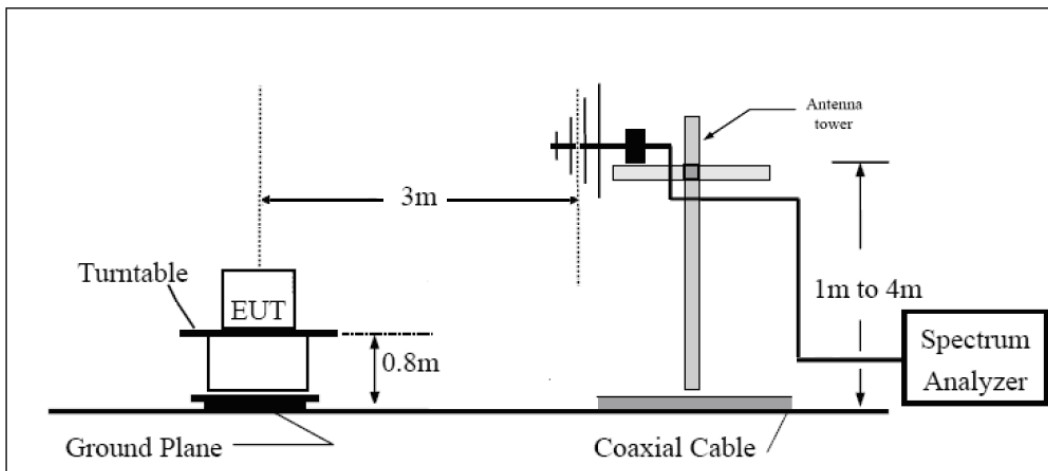
The test is in transmitting mode.

Test setup

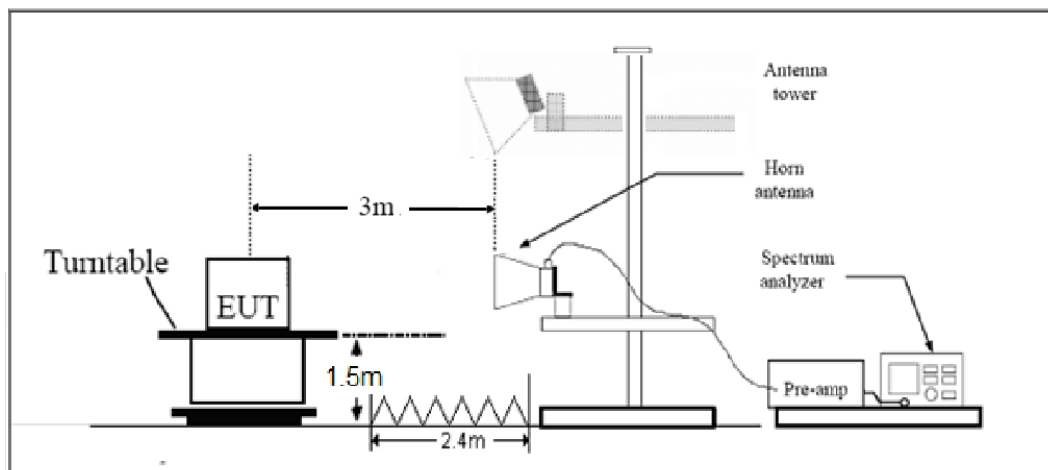
9KHz ~ 30MHz



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

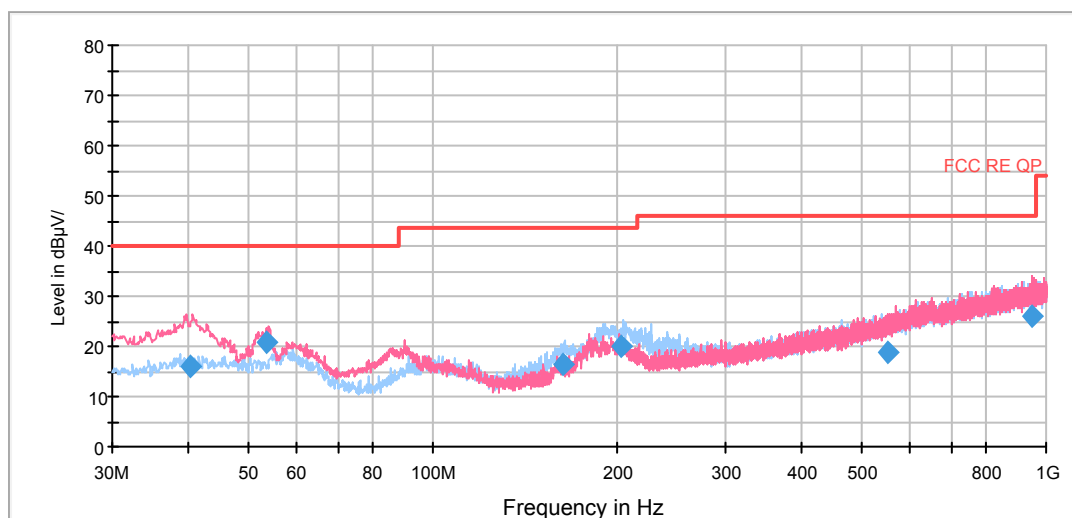
Sweep from 9 kHz to 30MHz, and the emissions more than 20 dB below the permissible value are not reported.

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.

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FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

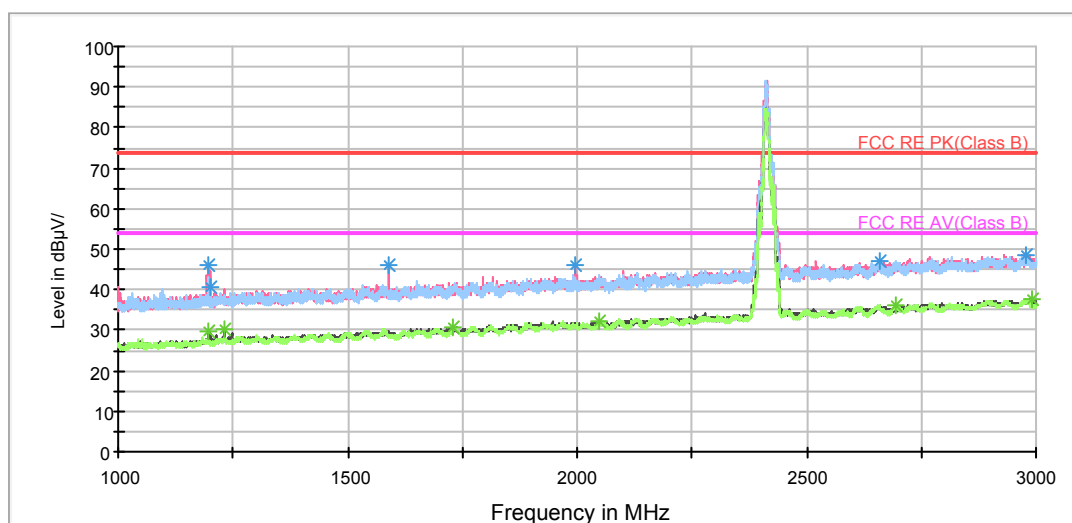
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.300000	15.9	100.0	V	286.0	2.6	13.3	24.1	40.0
53.687500	20.7	100.0	V	242.0	7.9	12.8	19.3	40.0
163.218750	16.3	125.0	H	89.0	6.4	9.9	27.2	43.5
203.433750	20.0	125.0	H	282.0	7.8	12.2	23.5	43.5
551.976250	18.8	100.0	V	19.0	-2.8	21.6	27.2	46.0
947.020000	26.0	125.0	V	73.0	-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

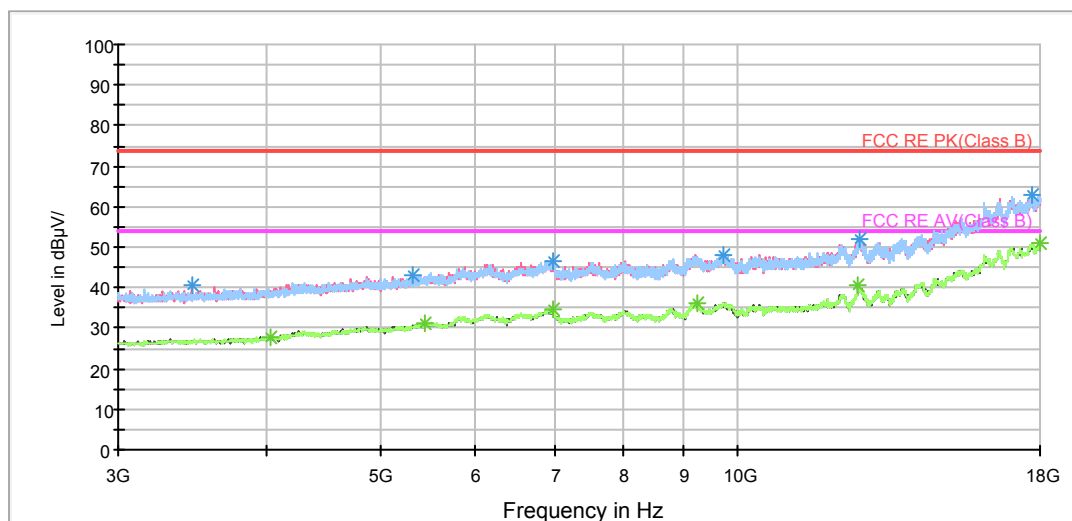
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.250000	46.0	100.0	V	196.0	54.2	-8.2	28.0	74
1202.500000	40.6	100.0	V	0.0	48.8	-8.2	33.4	74
1588.500000	45.9	100.0	V	110.0	52.3	-6.4	28.1	74
1994.500000	45.9	100.0	V	35.0	49.1	-3.2	28.1	74
2660.750000	47.1	100.0	H	281.0	46.8	0.3	26.9	74
2979.000000	48.6	100.0	V	251.0	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)
1197.250000	29.7	100.0	V	196.0	37.9	-8.2	24.3	54
1230.250000	30.1	100.0	V	0.0	37.8	-7.7	23.9	54
1730.000000	30.5	100.0	H	296.0	35.5	-5.0	23.5	54
2050.000000	32.3	100.0	V	0.0	35.5	-3.2	21.7	54
2695.000000	36.2	100.0	H	0.0	36.2	0.0	17.8	54
2993.250000	37.9	100.0	V	0.0	35.7	2.2	16.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

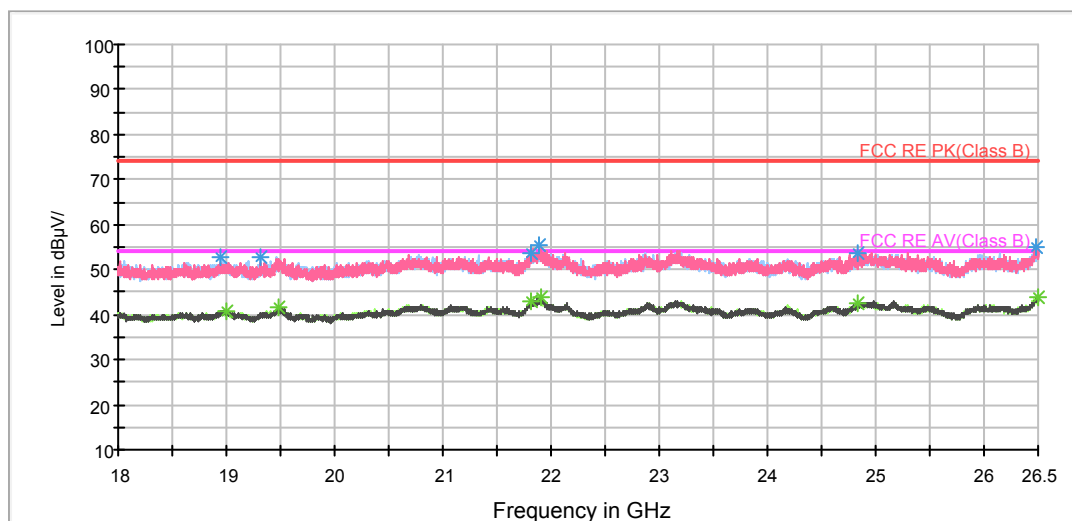
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3459.375000	40.4	210.0	V	177.0	42.6	-2.2	33.6	74
5321.250000	43.1	210.0	V	316.0	40.7	2.4	30.9	74
6997.500000	46.5	210.0	V	132.0	40.0	6.5	27.5	74
9735.000000	47.9	110.0	V	0.0	38.0	9.9	26.1	74
12690.000000	52.0	110.0	H	40.0	37.8	14.2	22.0	74
17705.625000	62.8	110.0	H	0.0	38.1	24.7	11.2	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4035.000000	27.8	210.0	V	132.0	28.8	-1.0	26.2	54
5445.000000	31.0	110.0	H	62.0	28.1	2.9	23.0	54
6993.750000	34.5	210.0	V	41.0	28.0	6.5	19.5	54
9232.500000	36.3	110.0	H	0.0	26.4	9.9	17.7	54
12639.375000	40.4	210.0	H	318.0	25.9	14.5	13.6	54
18000.000000	51.1	110.0	H	0.0	25.6	25.5	2.9	54

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

BELL_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)
18949.875000	52.8	H	225.0	52.8	0.0	21.2	74
19316.437500	52.7	H	172.0	52.9	-0.2	21.3	74
21808.000000	53.5	H	223.0	55.5	-2.0	20.5	74
21893.000000	55.2	V	45.0	56.8	-1.6	18.8	74
24829.750000	53.7	V	102.0	53.5	0.2	20.3	74
26476.625000	55.0	H	90.0	53.9	1.1	19.0	74

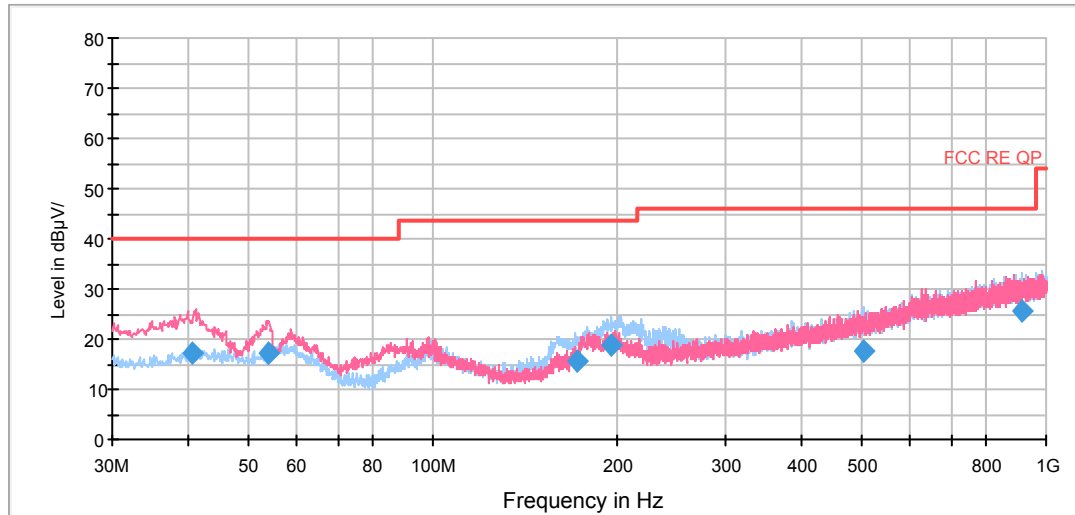
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18991.312500	40.9	V	190.0	41.0	-0.1	13.1	54
19490.687500	41.6	V	200.0	41.5	0.1	12.4	54
21816.500000	43.1	H	90.0	45.1	-2.0	10.9	54
21906.812500	43.7	H	225.0	45.2	-1.5	10.3	54
24838.250000	42.7	H	172.0	42.4	0.3	11.3	54
26491.500000	43.8	H	225.0	42.7	1.1	10.2	54

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

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FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

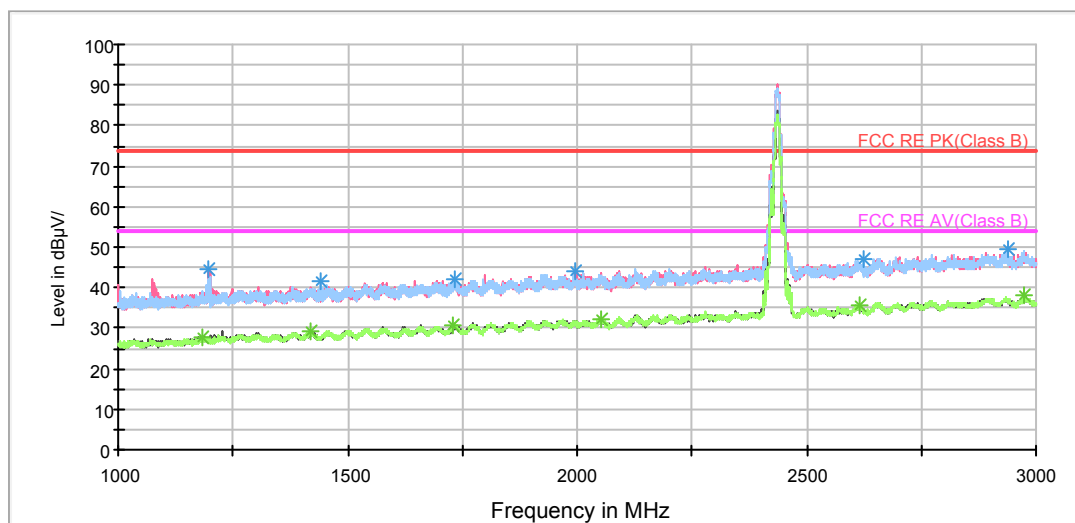
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.553750	17.2	100.0	V	259.0	3.9	13.3	22.8	40.0
54.007500	17.1	100.0	V	224.0	4.1	13.0	22.9	40.0
171.452500	15.6	125.0	H	318.0	5.1	10.5	27.9	43.5
195.910000	18.9	125.0	H	274.0	6.9	12.0	24.6	43.5
503.481250	17.6	100.0	H	263.0	-3.1	20.7	28.4	46.0
911.890000	25.6	100.0	H	282.0	-1.4	27.0	20.4	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

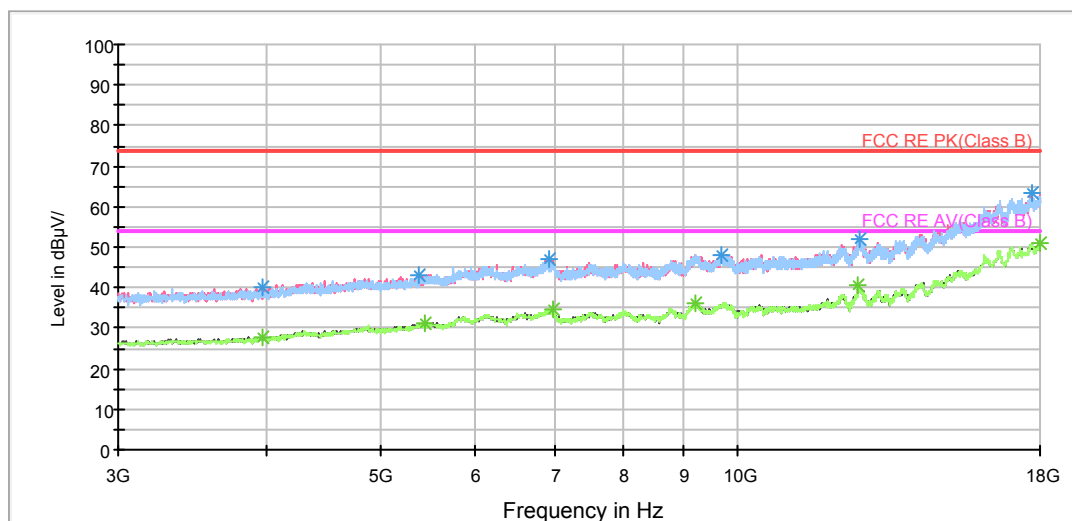
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.000000	44.5	100.0	V	0.0	52.7	-8.2	29.5	74
1440.500000	41.4	100.0	H	12.0	48.3	-6.9	32.6	74
1731.500000	42.3	100.0	H	204.0	47.1	-4.8	31.7	74
1995.500000	44.3	100.0	V	113.0	47.5	-3.2	29.7	74
2622.750000	47.1	100.0	H	27.0	47.2	-0.1	26.9	74
2938.000000	49.5	100.0	V	144.0	47.6	1.9	24.5	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)
1185.500000	27.9	100.0	V	0.0	36.0	-8.1	26.1	54
1418.250000	29.1	100.0	H	86.0	36.0	-6.9	24.9	54
1730.750000	30.5	100.0	H	56.0	35.4	-4.9	23.5	54
2053.000000	32.2	100.0	H	72.0	35.4	-3.2	21.8	54
2614.000000	35.8	100.0	H	138.0	35.7	0.1	18.2	54
2973.750000	37.9	100.0	H	197.0	35.7	2.2	16.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

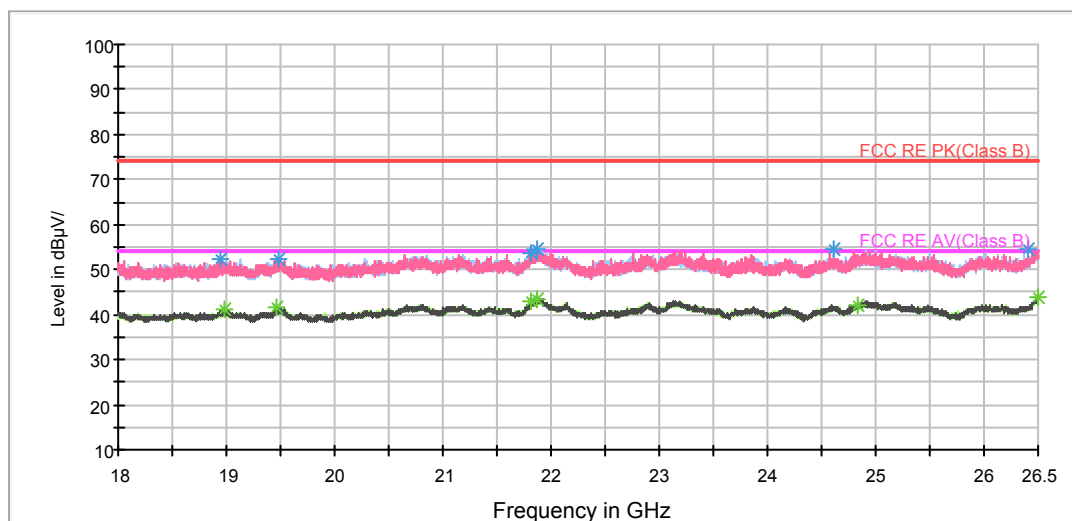
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3965.625000	40.0	210.0	V	0.0	41.0	-1.0	34.0	74
5379.375000	43.2	210.0	V	83.0	40.9	2.3	30.8	74
6918.750000	46.9	110.0	H	271.0	40.7	6.2	27.1	74
9680.625000	48.1	210.0	H	0.0	38.6	9.5	25.9	74
12680.625000	52.0	210.0	V	0.0	37.7	14.3	22.0	74
17709.375000	63.4	210.0	H	138.0	38.7	24.7	10.6	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)
3976.875000	27.6	210.0	V	60.0	28.5	-0.9	26.4	54
5435.625000	31.0	210.0	V	108.0	28.1	2.9	23.0	54
6995.625000	34.6	210.0	H	19.0	28.1	6.5	19.4	54
9215.625000	36.2	110.0	H	0.0	26.2	10.0	17.8	54
12639.375000	40.4	210.0	H	343.0	25.9	14.5	13.6	54
17998.125000	51.2	110.0	H	89.0	25.8	25.4	2.8	54

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

BELL_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)
18941.375000	52.5	V	143.0	52.5	0.0	21.5	74
19477.937500	52.2	V	45.0	52.1	0.1	21.8	74
21814.375000	53.6	H	185.0	55.6	-2.0	20.4	74
21879.187500	54.6	V	143.0	56.3	-1.7	19.4	74
24608.750000	54.4	H	192.0	54.6	-0.2	19.6	74
26404.375000	54.5	H	116.0	53.5	1.0	19.5	74

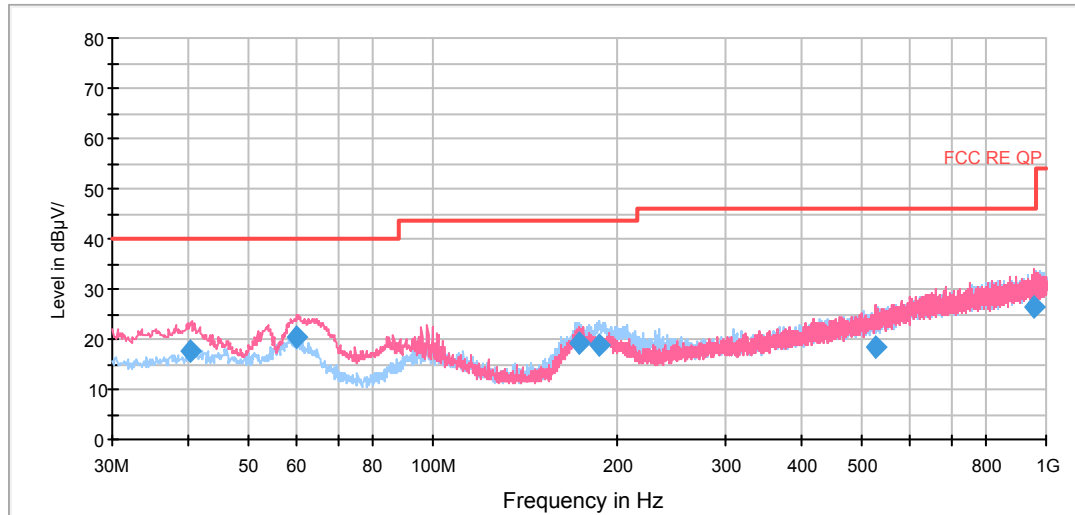
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18973.250000	41.0	H	211.0	41.1	-0.1	13.0	54
19465.187500	41.6	V	92.0	41.5	0.1	12.4	54
21811.187500	43.0	V	117.0	45.0	-2.0	11.0	54
21877.062500	43.6	V	108.0	45.3	-1.7	10.4	54
24841.437500	42.2	H	225.0	41.9	0.3	11.8	54
26491.500000	43.7	V	45.0	42.6	1.1	10.3	54

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

802.11b CH11

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

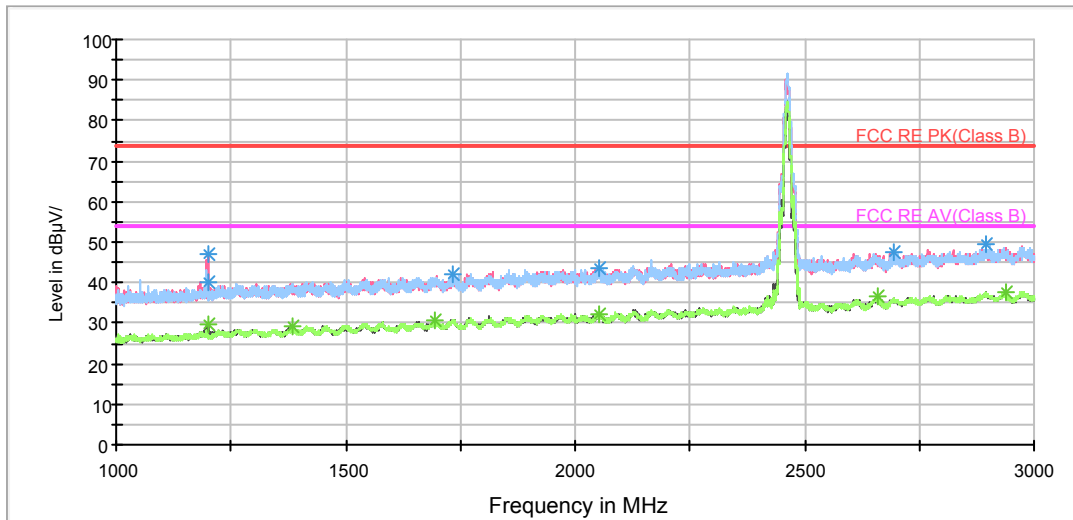
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.107500	17.4	100.0	V	244.0	4.1	13.3	22.6	40.0
59.991250	20.4	113.0	V	37.0	7.8	12.6	19.6	40.0
173.076250	19.3	125.0	H	277.0	8.7	10.6	24.2	43.5
186.973750	18.8	100.0	H	277.0	7.4	11.4	24.7	43.5
527.650000	18.2	114.0	V	2.0	-3.0	21.2	27.8	46.0
959.221250	26.2	114.0	V	318.0	-1.2	27.4	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

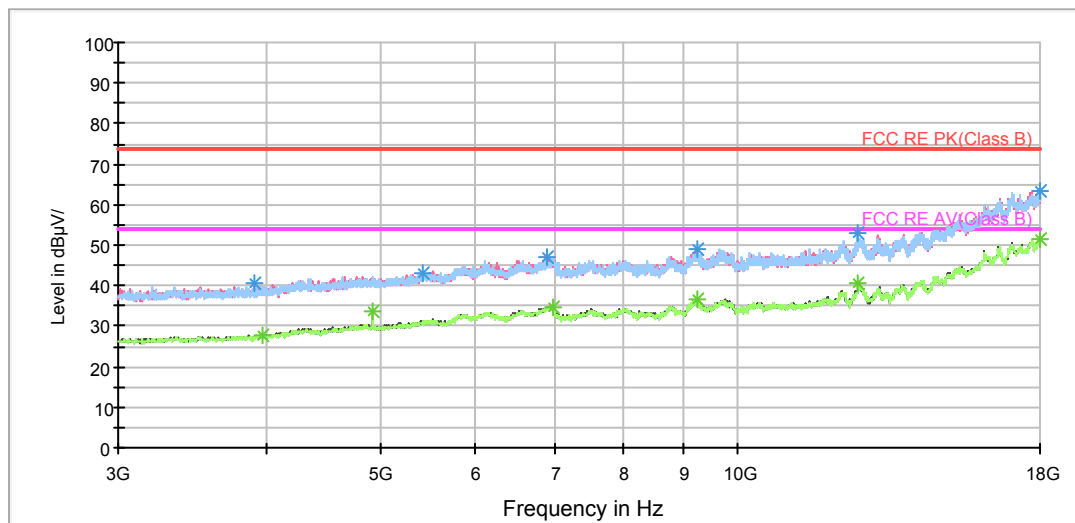
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.500000	47.2	100.0	V	0.0	55.4	-8.2	26.8	74
1201.000000	40.3	100.0	V	0.0	48.5	-8.2	33.7	74
1732.000000	42.0	100.0	V	160.0	46.8	-4.8	32.0	74
2051.750000	43.7	100.0	V	349.0	46.9	-3.2	30.3	74
2692.250000	47.6	100.0	H	23.0	47.5	0.1	26.4	74
2893.500000	49.7	100.0	H	309.0	47.6	2.1	24.3	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)
1199.500000	29.6	100.0	V	0.0	37.8	-8.2	24.4	54
1382.250000	29.2	100.0	H	309.0	36.2	-7.0	24.8	54
1696.250000	30.6	100.0	H	0.0	35.6	-5.0	23.4	54
2053.750000	32.3	100.0	V	99.0	35.5	-3.2	21.7	54
2657.250000	36.7	100.0	V	256.0	36.3	0.4	17.3	54
2938.750000	37.6	100.0	V	228.0	35.7	1.9	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

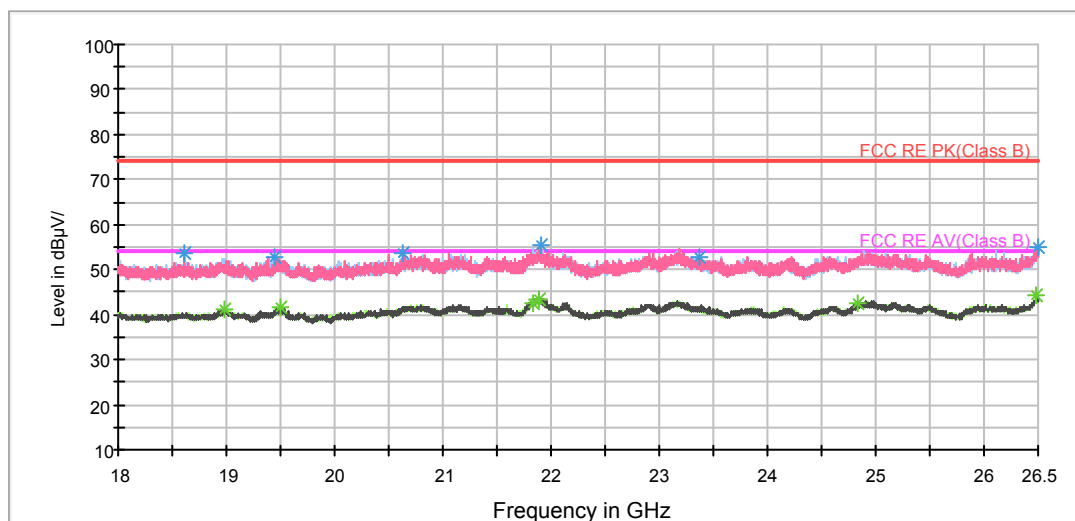
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3909.375000	40.5	110.0	V	0.0	41.7	-1.2	33.5	74
5430.000000	43.2	110.0	H	316.0	40.4	2.8	30.8	74
6898.125000	47.3	210.0	V	178.0	41.1	6.2	26.7	74
9240.000000	49.1	210.0	V	108.0	39.2	9.9	24.9	74
12630.000000	52.9	210.0	V	41.0	39.5	13.4	21.1	74
17998.125000	63.2	210.0	V	64.0	37.8	25.4	10.8	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3967.500000	27.9	210.0	H	229.0	28.8	-0.9	26.1	54
4923.750000	33.6	110.0	V	0.0	31.7	1.9	20.4	54
6997.500000	34.8	210.0	V	0.0	28.3	6.5	19.2	54
9232.500000	36.4	210.0	V	41.0	26.5	9.9	17.6	54
12639.375000	40.8	210.0	V	108.0	26.3	14.5	13.2	54
18000.000000	51.4	210.0	V	64.0	25.9	25.5	2.6	54

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

BELL_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)
18608.812500	53.4	V	45.0	53.3	0.1	20.6	74
19438.625000	52.9	H	206.0	52.9	0.0	21.1	74
20635.000000	53.9	V	45.0	55.1	-1.2	20.1	74
21904.687500	55.4	V	112.0	56.9	-1.5	18.6	74
23367.750000	53.0	H	223.0	53.1	-0.1	21.0	74
26498.937500	55.2	V	86.0	54.1	1.1	18.8	74

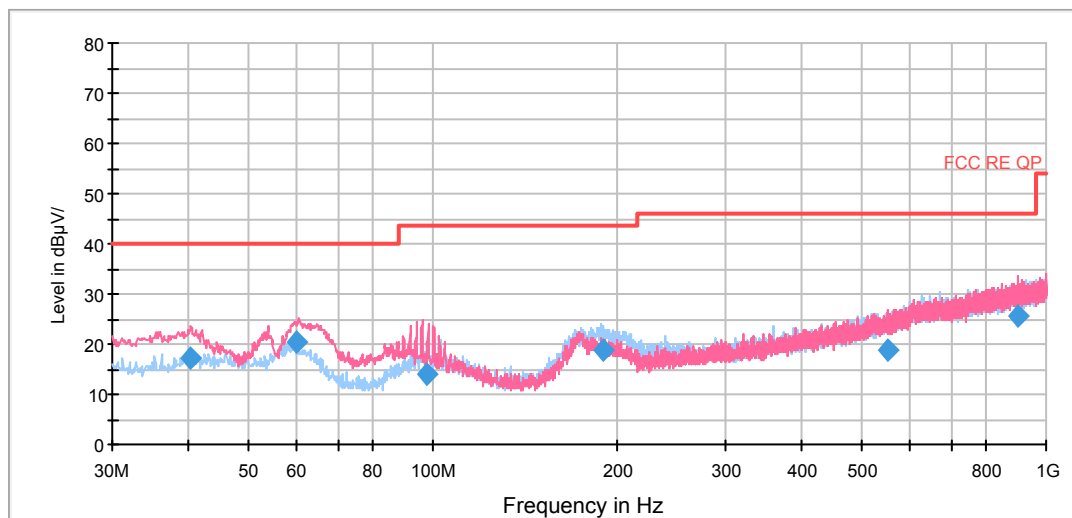
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18973.250000	41.0	H	136.0	41.1	-0.1	13.0	54
19504.500000	41.6	H	45.0	41.5	0.1	12.4	54
21826.062500	42.7	V	104.0	44.6	-1.9	11.3	54
21888.750000	43.6	H	171.0	45.2	-1.6	10.4	54
24842.500000	42.4	H	225.0	42.1	0.3	11.6	54
26489.375000	44.2	V	130.0	43.1	1.1	9.8	54

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

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FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

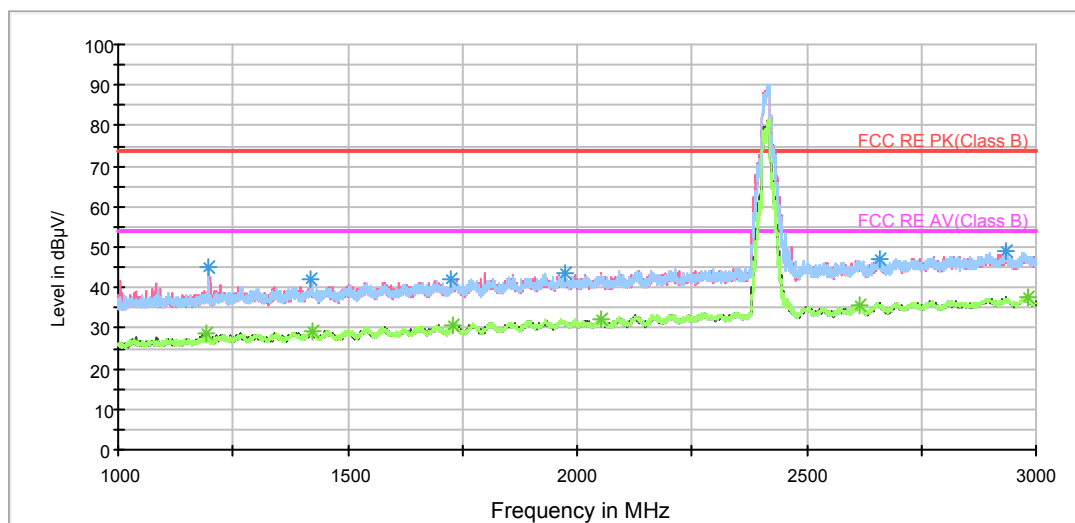
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.146250	17.2	100.0	V	218.0	3.9	13.3	22.8	40.0
59.955000	20.4	115.0	V	28.0	7.8	12.6	19.6	40.0
98.023750	14.0	100.0	V	281.0	1.0	13.0	29.5	43.5
188.995000	18.9	100.0	H	274.0	7.4	11.5	24.6	43.5
553.235000	18.9	100.0	V	135.0	-2.8	21.7	27.1	46.0
899.643750	25.5	114.0	V	24.0	-1.3	26.8	20.5	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

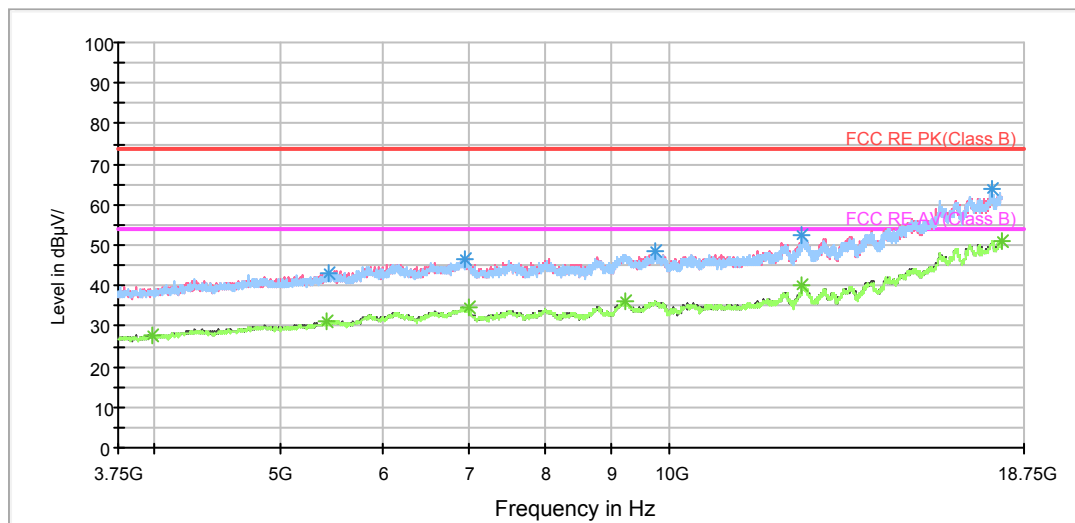
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.250000	45.3	100.0	V	331.0	53.5	-8.2	28.7	74
1417.500000	41.9	100.0	V	316.0	48.8	-6.9	32.1	74
1724.250000	42.2	100.0	V	184.0	47.2	-5.0	31.8	74
1973.250000	43.8	100.0	H	0.0	47.4	-3.6	30.2	74
2658.250000	47.1	100.0	V	214.0	46.7	0.4	26.9	74
2934.750000	49.1	100.0	V	236.0	47.3	1.8	24.9	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)
1193.750000	28.7	100.0	V	0.0	36.9	-8.2	25.3	54
1424.500000	29.3	100.0	H	53.0	36.2	-6.9	24.7	54
1731.250000	30.8	100.0	H	263.0	35.7	-4.9	23.2	54
2052.750000	32.3	100.0	V	302.0	35.5	-3.2	21.7	54
2617.000000	35.6	100.0	V	316.0	35.6	0.0	18.4	54
2984.000000	37.7	100.0	V	353.0	35.5	2.2	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

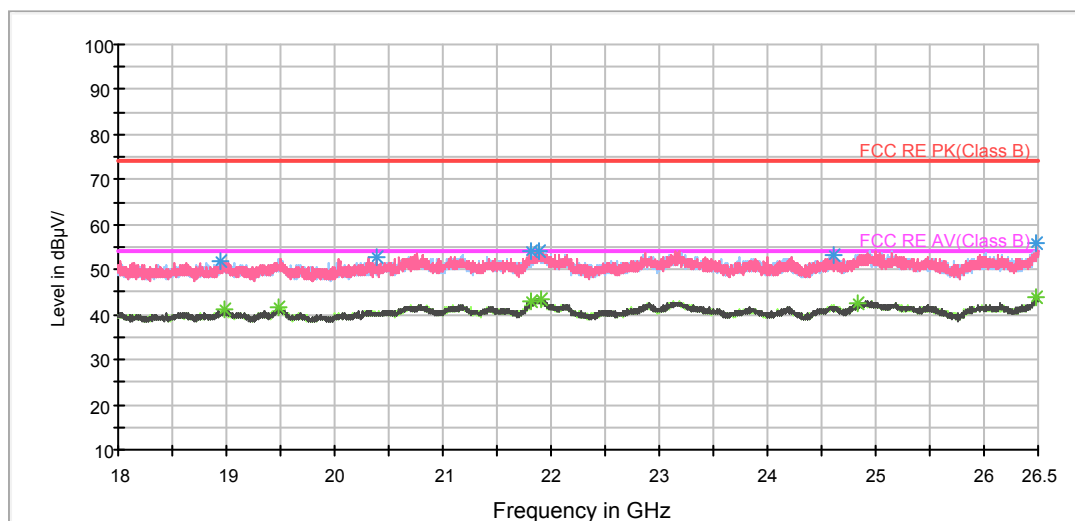
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3253.125000	39.8	210.0	V	130.0	42.3	-2.5	34.2	74
5448.750000	43.3	110.0	V	0.0	40.5	2.8	30.7	74
6954.375000	46.7	110.0	V	229.0	40.5	6.2	27.3	74
9746.250000	48.7	110.0	H	61.0	38.8	9.9	25.3	74
12641.250000	52.5	210.0	V	154.0	38.0	14.5	21.5	74
17722.500000	63.9	110.0	V	318.0	39.4	24.5	10.1	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)
3990.000000	27.7	110.0	V	340.0	28.7	-1.0	26.3	54
5435.625000	31.1	110.0	V	160.0	28.2	2.9	22.9	54
6997.500000	34.7	110.0	V	138.0	28.2	6.5	19.3	54
9232.500000	36.4	110.0	V	318.0	26.5	9.9	17.6	54
12641.250000	40.3	110.0	H	0.0	25.8	14.5	13.7	54
17998.125000	51.1	110.0	V	206.0	25.7	25.4	2.9	54

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

BELL_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)
18937.125000	52.1	V	65.0	52.1	0.0	21.9	74
20387.437500	52.9	V	45.0	53.9	-1.0	21.1	74
21805.875000	54.2	V	45.0	56.3	-2.1	19.8	74
21894.062500	54.2	H	166.0	55.8	-1.6	19.8	74
24603.437500	53.4	H	129.0	53.6	-0.2	20.6	74
26483.000000	55.9	H	225.0	54.8	1.1	18.1	74

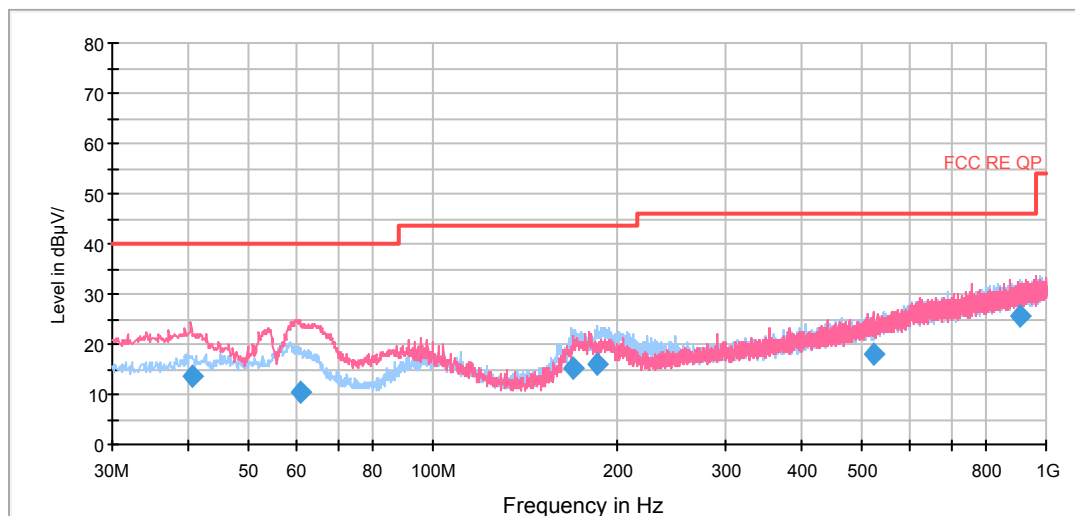
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18975.375000	41.1	V	48.0	41.2	-0.1	12.9	54
19489.625000	41.9	H	210.0	41.8	0.1	12.1	54
21805.875000	43.1	V	45.0	45.2	-2.1	10.9	54
21899.375000	43.6	V	109.0	45.2	-1.6	10.4	54
24838.250000	42.5	H	225.0	42.2	0.3	11.5	54
26487.250000	43.8	H	129.0	42.7	1.1	10.2	54

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

802.11g CH6

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

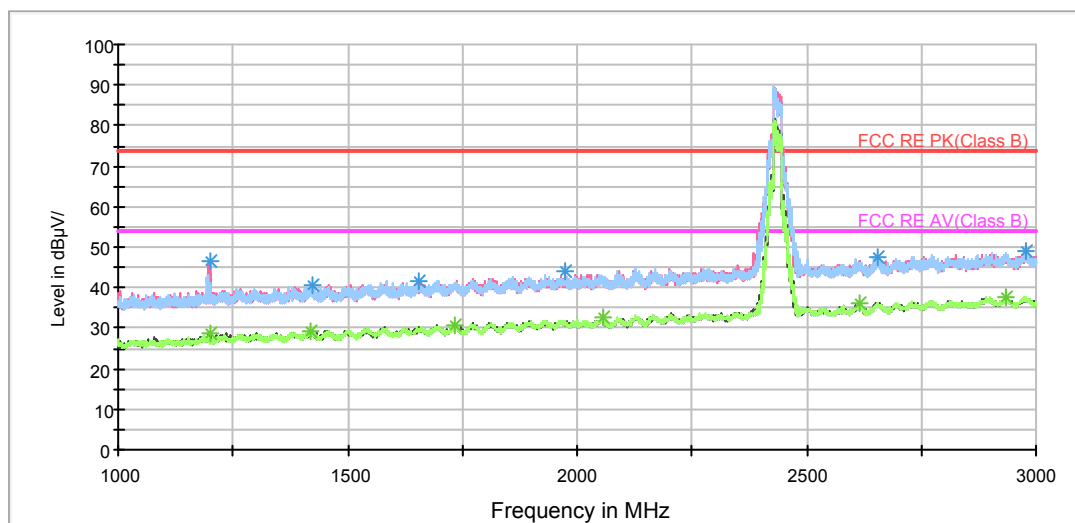
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.586250	13.5	100.0	V	0.0	0.2	13.3	26.5	40.0
60.670000	10.5	100.0	V	129.0	-1.9	12.4	29.5	40.0
169.067500	15.3	125.0	H	279.0	5.0	10.3	28.2	43.5
185.557500	16.1	125.0	H	279.0	4.8	11.3	27.4	43.5
521.991250	18.1	100.0	V	251.0	-2.9	21.0	27.9	46.0
907.282500	25.6	100.0	H	17.0	-1.4	27.0	20.4	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

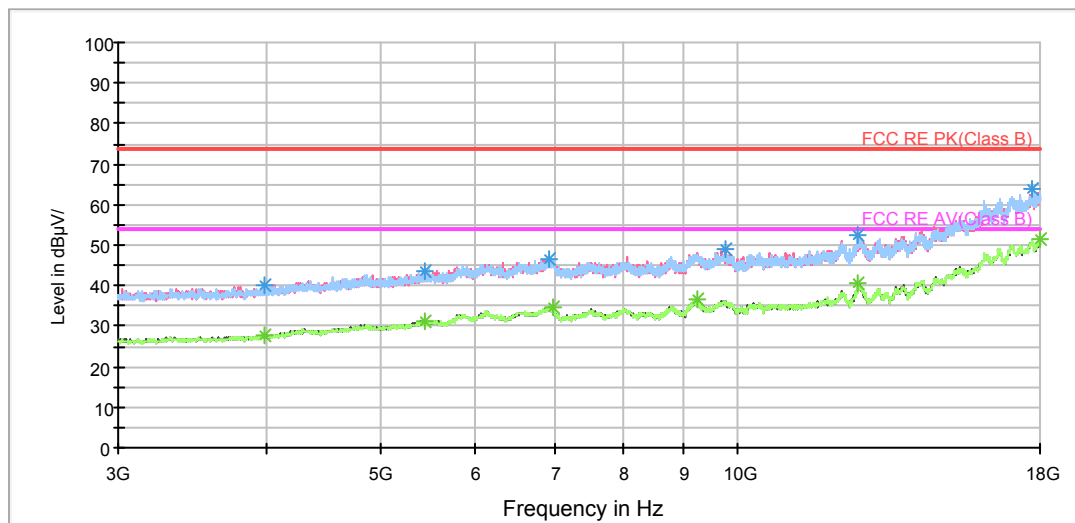
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.750000	46.3	100.0	V	329.0	54.5	-8.2	27.7	74
1425.250000	40.4	100.0	H	119.0	47.3	-6.9	33.6	74
1654.750000	41.8	100.0	V	242.0	46.9	-5.1	32.2	74
1972.500000	43.9	100.0	V	0.0	47.5	-3.6	30.1	74
2653.750000	47.6	100.0	V	287.0	47.2	0.4	26.4	74
2978.750000	48.8	100.0	H	10.0	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)
1199.750000	29.0	100.0	V	329.0	37.2	-8.2	25.0	54
1419.250000	29.3	100.0	H	0.0	36.2	-6.9	24.7	54
1731.500000	30.6	100.0	H	82.0	35.4	-4.8	23.4	54
2056.000000	32.4	100.0	V	199.0	35.6	-3.2	21.6	54
2615.500000	36.0	100.0	V	257.0	36.0	0.0	18.0	54
2934.750000	37.8	100.0	H	119.0	36.0	1.8	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

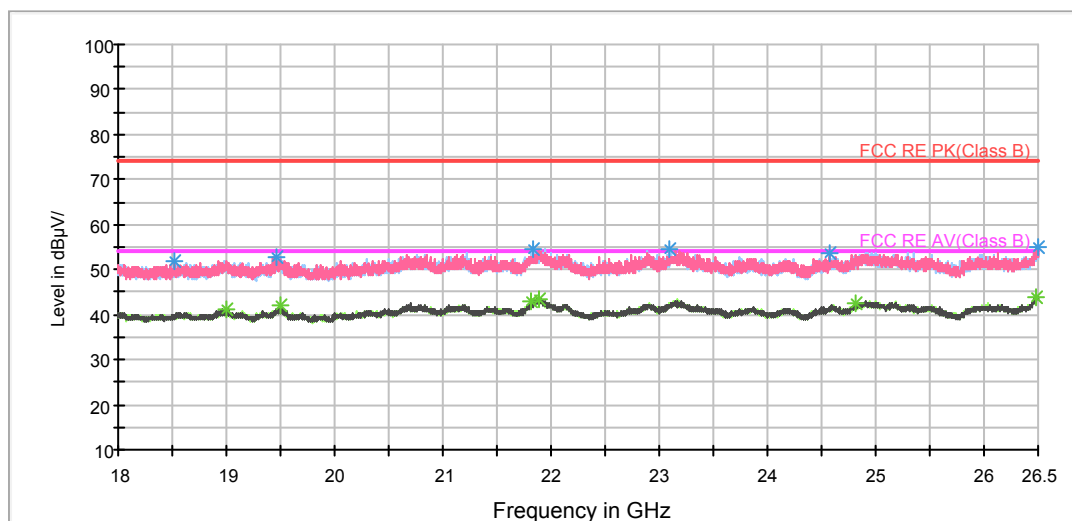
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3991.875000	40.0	110.0	V	0.0	41.0	-1.0	34.0	74
5441.250000	43.5	210.0	H	116.0	40.6	2.9	30.5	74
6943.125000	46.5	110.0	H	0.0	40.4	6.1	27.5	74
9757.500000	49.1	210.0	V	0.0	39.5	9.6	24.9	74
12637.500000	52.5	210.0	V	0.0	38.2	14.3	21.5	74
17715.000000	63.7	210.0	H	139.0	39.1	24.6	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)
3988.125000	27.8	210.0	V	109.0	28.8	-1.0	26.2	54
5441.250000	31.2	210.0	V	86.0	28.3	2.9	22.8	54
6997.500000	34.8	210.0	V	41.0	28.3	6.5	19.2	54
9230.625000	36.5	210.0	V	177.0	26.6	9.9	17.5	54
12639.375000	40.5	210.0	H	343.0	26.0	14.5	13.5	54
18000.000000	51.3	110.0	H	0.0	25.8	25.5	2.7	54

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

BELL_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)
18516.375000	51.9	V	144.0	51.6	0.3	22.1	74
19469.437500	53.0	H	185.0	52.9	0.1	21.0	74
21836.687500	54.7	V	65.0	56.6	-1.9	19.3	74
23086.187500	54.7	H	225.0	54.8	-0.1	19.3	74
24573.687500	53.5	V	49.0	53.7	-0.2	20.5	74
26500.000000	54.9	V	45.0	53.8	1.1	19.1	74

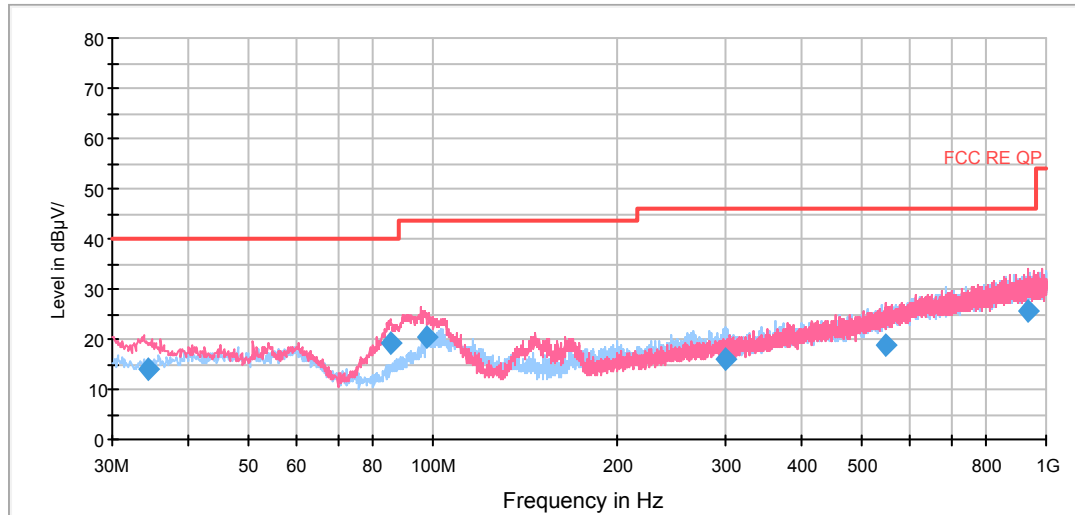
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19003.000000	41.1	V	108.0	41.3	-0.2	12.9	54
19501.312500	41.9	H	60.0	41.8	0.1	12.1	54
21816.500000	43.0	H	211.0	45.0	-2.0	11.0	54
21880.250000	43.6	V	45.0	45.3	-1.7	10.4	54
24819.125000	42.6	V	108.0	42.4	0.2	11.4	54
26487.250000	44.0	V	56.0	42.9	1.1	10.0	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

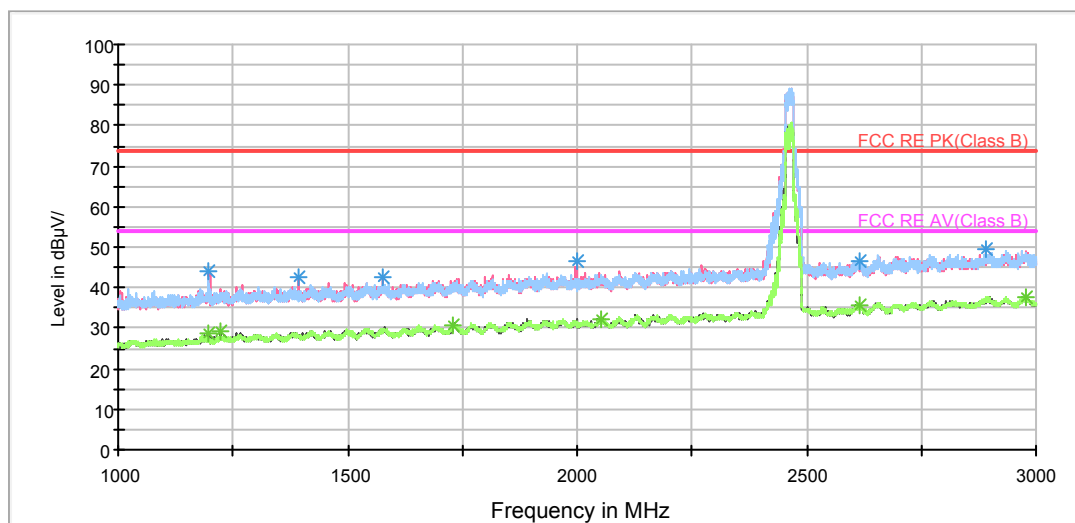
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.278750	13.9	100.0	V	217.0	1.9	12.0	26.1	40.0
85.168750	19.1	125.0	V	139.0	8.8	10.3	20.9	40.0
97.571250	20.4	125.0	V	265.0	7.5	12.9	23.1	43.5
299.900000	16.0	100.0	H	357.0	0.2	15.8	30.0	46.0
548.946250	18.9	100.0	V	26.0	-2.6	21.5	27.1	46.0
932.988750	25.7	125.0	V	11.0	-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

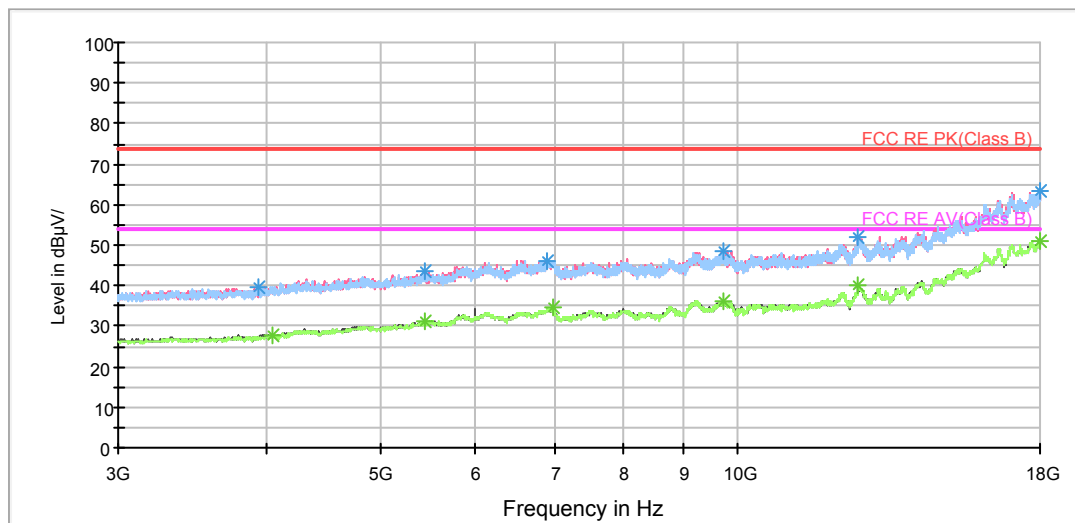
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.500000	44.0	100.0	V	296.0	52.2	-8.2	30.0	74
1392.000000	42.6	100.0	V	263.0	49.6	-7.0	31.4	74
1575.750000	42.6	100.0	V	219.0	49.0	-6.4	31.4	74
1998.250000	46.6	100.0	V	115.0	50.0	-3.4	27.4	74
2616.500000	46.3	100.0	V	122.0	46.3	0.0	27.7	74
2890.750000	49.4	100.0	V	0.0	47.2	2.2	24.6	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)
1196.500000	28.7	100.0	V	296.0	36.9	-8.2	25.3	54
1223.250000	29.3	100.0	V	189.0	37.1	-7.8	24.7	54
1731.250000	30.6	100.0	H	35.0	35.5	-4.9	23.4	54
2053.250000	32.3	100.0	V	160.0	35.5	-3.2	21.7	54
2616.500000	35.8	100.0	V	122.0	35.8	0.0	18.2	54
2979.500000	37.7	100.0	H	20.0	35.5	2.2	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

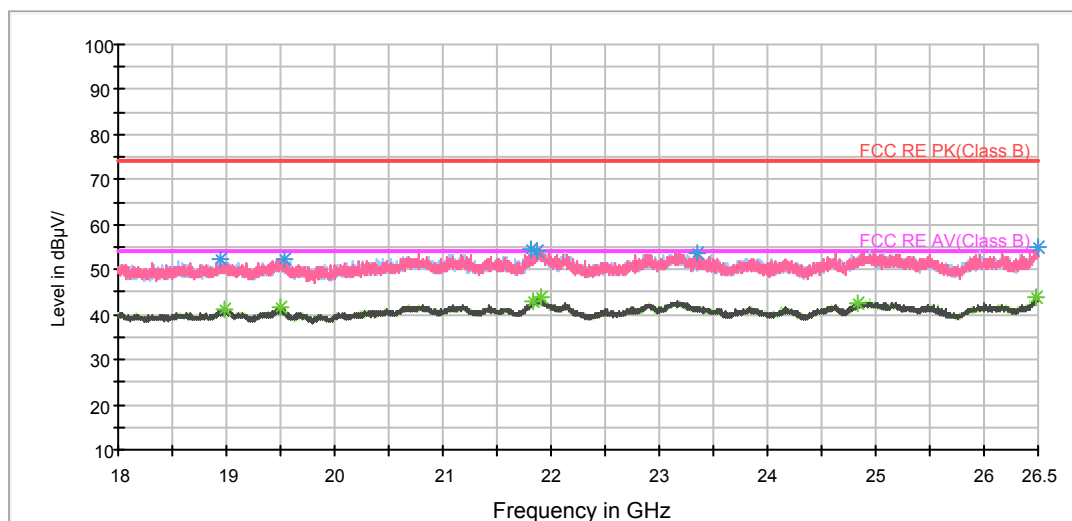
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3935.625000	39.8	110.0	H	88.0	40.9	-1.1	34.2	74
5450.625000	43.4	110.0	V	0.0	40.6	2.8	30.6	74
6909.375000	46.3	110.0	V	318.0	40.1	6.2	27.7	74
9729.375000	48.4	110.0	V	318.0	38.7	9.7	25.6	74
12645.000000	51.9	210.0	H	0.0	37.5	14.4	22.1	74
17998.125000	63.5	210.0	V	222.0	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)
4042.500000	27.7	110.0	H	43.0	28.7	-1.0	26.3	54
5445.000000	31.0	110.0	V	250.0	28.1	2.9	23.0	54
6995.625000	34.4	210.0	V	64.0	27.9	6.5	19.6	54
9740.625000	36.1	210.0	V	0.0	26.1	10.0	17.9	54
12643.125000	40.3	210.0	V	64.0	25.9	14.4	13.7	54
17990.625000	51.0	210.0	V	19.0	25.8	25.2	3.0	54

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

BELL_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)
18946.687500	52.1	H	212.0	52.1	0.0	21.9	74
19536.375000	52.5	H	225.0	52.5	0.0	21.5	74
21808.000000	54.6	V	75.0	56.6	-2.0	19.4	74
21874.937500	54.2	V	179.0	55.9	-1.7	19.8	74
23358.187500	53.6	V	58.0	53.6	0.0	20.4	74
26495.750000	54.9	H	212.0	53.8	1.1	19.1	74

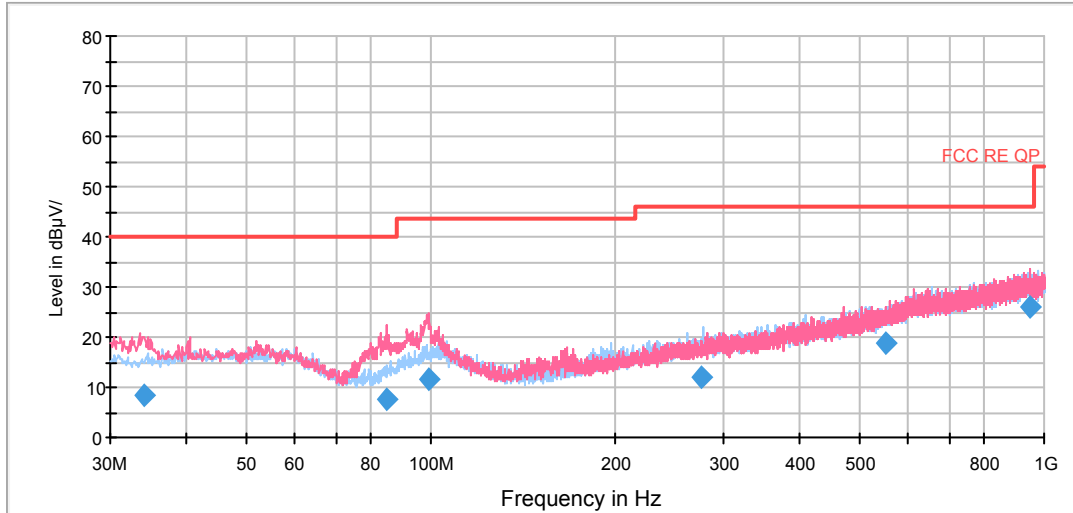
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18973.250000	41.2	V	45.0	41.3	-0.1	12.8	54
19499.187500	41.7	H	60.0	41.6	0.1	12.3	54
21837.750000	42.9	V	45.0	44.8	-1.9	11.1	54
21902.562500	43.9	V	45.0	45.5	-1.6	10.1	54
24829.750000	42.5	V	45.0	42.3	0.2	11.5	54
26485.125000	43.9	V	45.0	42.8	1.1	10.1	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

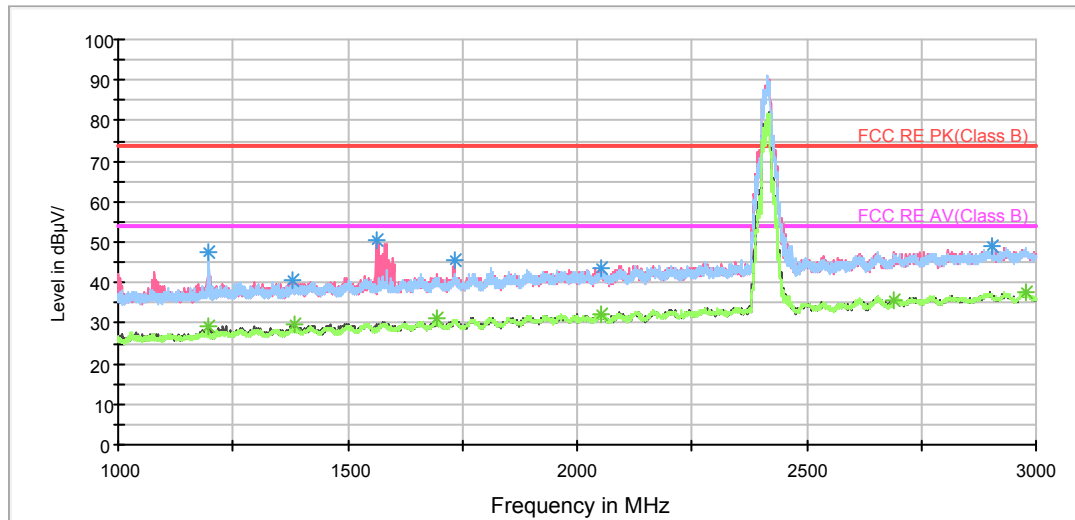
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.116250	8.4	114.0	V	39.0	-3.6	12.0	31.6	40.0
84.682500	7.6	125.0	V	129.0	-2.5	10.1	32.4	40.0
98.991250	11.6	125.0	V	162.0	-1.6	13.2	31.9	43.5
276.870000	12.1	113.0	H	110.0	-2.9	15.0	33.9	46.0
551.978750	18.7	125.0	V	343.0	-2.9	21.6	27.3	46.0
949.918750	25.9	100.0	V	0.0	-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

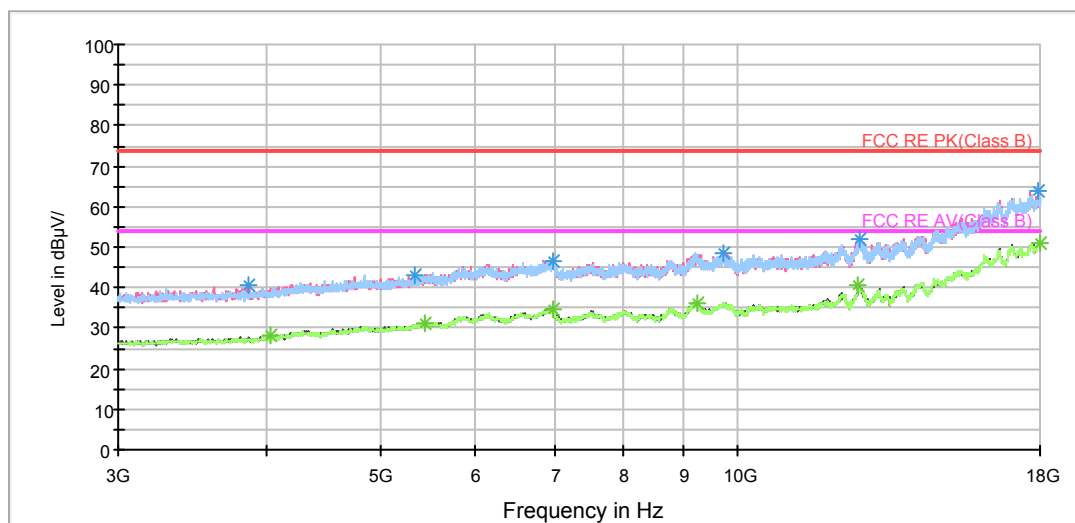
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.500000	47.5	100.0	H	40.0	55.7	-8.2	26.5	74
1380.000000	40.4	100.0	V	187.0	47.4	-7.0	33.6	74
1561.250000	50.3	100.0	V	217.0	56.9	-6.6	23.7	74
1732.000000	45.4	100.0	V	0.0	50.2	-4.8	28.6	74
2053.500000	43.8	100.0	H	301.0	47.0	-3.2	30.2	74
2903.500000	48.8	100.0	V	0.0	46.8	2.0	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)
1197.750000	29.0	100.0	V	0.0	37.2	-8.2	25.0	54
1383.250000	29.5	100.0	V	195.0	36.5	-7.0	24.5	54
1692.750000	31.2	100.0	V	298.0	36.2	-5.0	22.8	54
2054.000000	32.4	100.0	H	0.0	35.6	-3.2	21.6	54
2688.500000	35.4	100.0	V	0.0	35.3	0.1	18.6	54
2979.250000	37.6	100.0	H	19.0	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

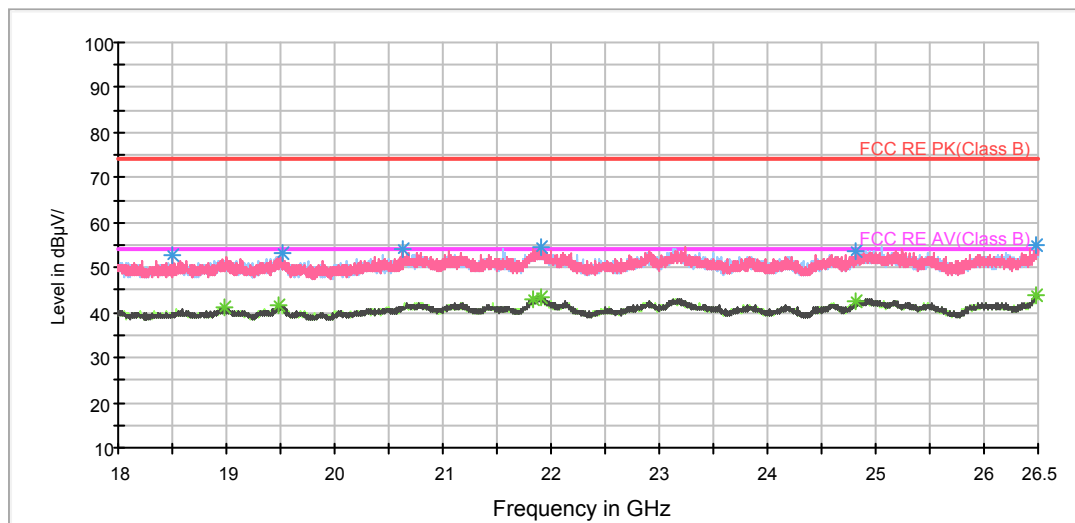
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3871.875000	40.4	210.0	V	0.0	41.8	-1.4	33.6	74
5338.125000	43.2	210.0	H	0.0	40.9	2.3	30.8	74
6993.750000	46.7	110.0	H	155.0	40.2	6.5	27.3	74
9712.500000	48.5	110.0	H	155.0	39.0	9.5	25.5	74
12682.500000	52.1	110.0	H	41.0	37.9	14.2	21.9	74
17926.875000	63.8	110.0	H	86.0	38.3	25.5	10.2	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)
4033.125000	28.0	210.0	V	0.0	29.1	-1.1	26.0	54
5446.875000	31.4	210.0	H	0.0	28.6	2.8	22.6	54
6995.625000	34.7	110.0	H	0.0	28.2	6.5	19.3	54
9234.375000	36.2	110.0	H	269.0	26.3	9.9	17.8	54
12641.250000	40.6	210.0	H	297.0	26.1	14.5	13.4	54
17998.125000	51.1	210.0	V	0.0	25.7	25.4	2.9	54

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

BELL_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)
18500.437500	53.0	V	45.0	52.7	0.3	21.0	74
19525.750000	53.0	H	225.0	53.0	0.0	21.0	74
20621.187500	54.3	V	151.0	55.5	-1.2	19.7	74
21899.375000	54.5	V	199.0	56.1	-1.6	19.5	74
24807.437500	53.6	V	45.0	53.5	0.1	20.4	74
26475.562500	54.9	V	188.0	53.8	1.1	19.1	74

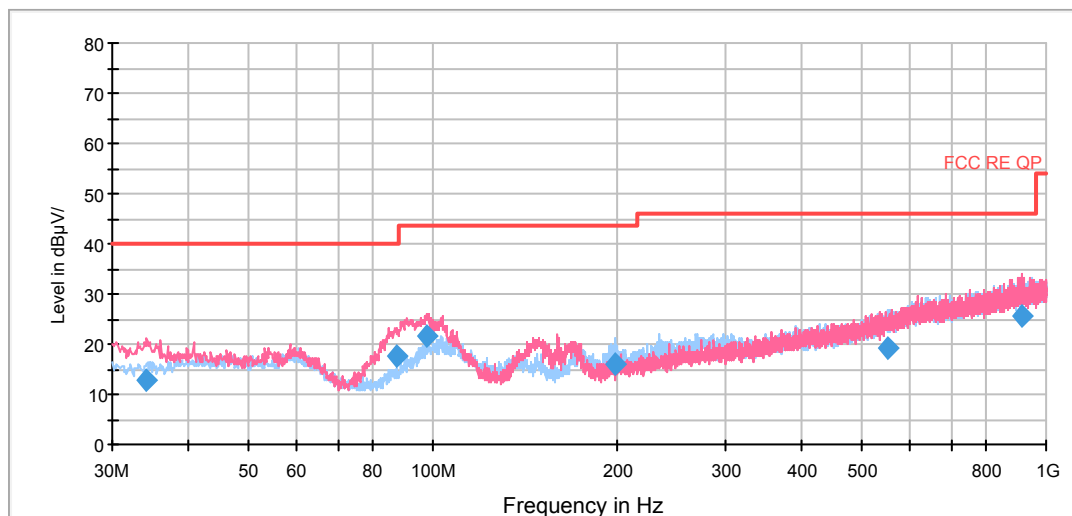
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18974.312500	41.0	V	96.0	41.1	-0.1	13.0	54
19484.312500	41.5	H	146.0	41.4	0.1	12.5	54
21834.562500	43.1	V	45.0	45.0	-1.9	10.9	54
21902.562500	43.6	V	188.0	45.2	-1.6	10.4	54
24809.562500	42.5	H	188.0	42.4	0.1	11.5	54
26486.187500	44.1	H	119.0	43.0	1.1	9.9	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

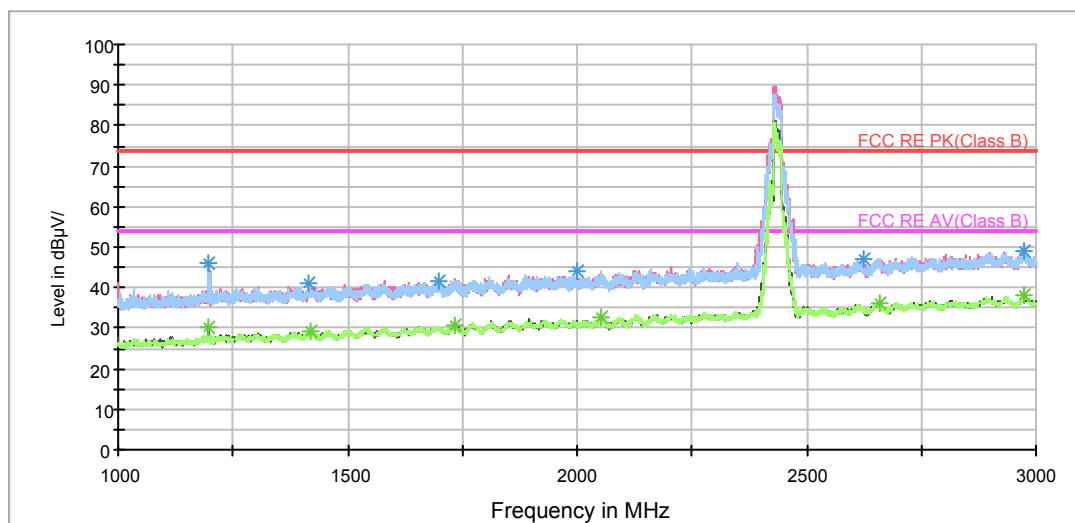
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
34.162500	12.9	100.0	V	298.0	0.9	12.0	27.1	40.0
87.587500	17.7	125.0	V	240.0	6.5	11.2	22.3	40.0
98.025000	21.7	100.0	V	240.0	8.7	13.0	21.8	43.5
198.451250	16.1	125.0	H	8.0	4.1	12.0	27.4	43.5
553.516250	19.3	125.0	H	0.0	-2.4	21.7	26.7	46.0
913.992500	25.5	100.0	V	294.0	-1.5	27.0	20.5	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

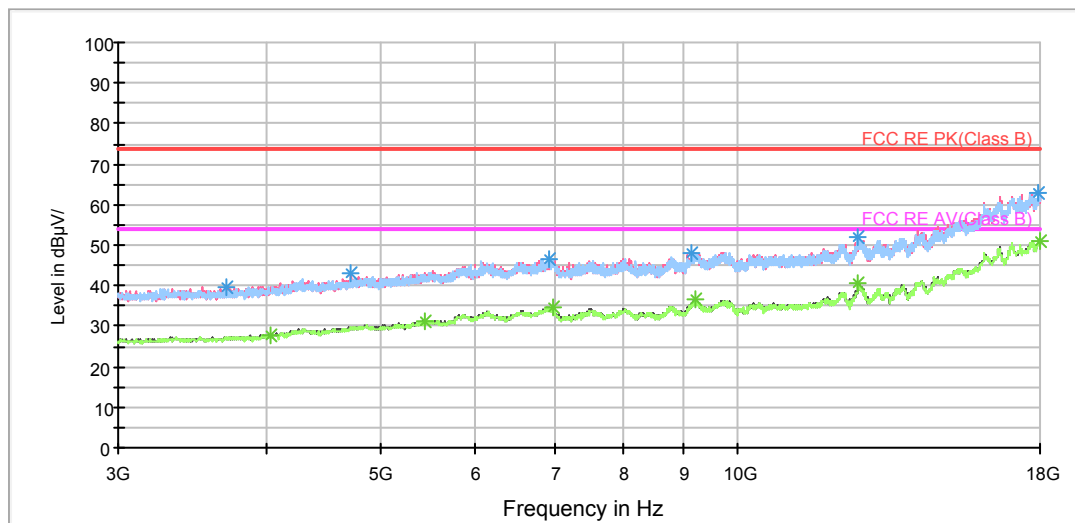
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.250000	45.9	100.0	V	0.0	54.1	-8.2	28.1	74
1417.000000	41.1	100.0	H	89.0	48.1	-7.0	32.9	74
1697.750000	41.6	100.0	V	120.0	46.6	-5.0	32.4	74
1998.500000	44.2	100.0	V	201.0	47.6	-3.4	29.8	74
2622.750000	47.2	100.0	V	223.0	47.3	-0.1	26.8	74
2972.250000	48.9	100.0	H	68.0	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)
1195.250000	30.3	100.0	V	0.0	38.5	-8.2	23.7	54
1419.500000	29.2	100.0	H	0.0	36.1	-6.9	24.8	54
1731.750000	30.5	100.0	H	247.0	35.3	-4.8	23.5	54
2052.500000	32.5	100.0	V	303.0	35.7	-3.2	21.5	54
2658.500000	36.2	100.0	V	172.0	35.8	0.4	17.8	54
2974.750000	37.9	100.0	V	172.0	35.7	2.2	16.1	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

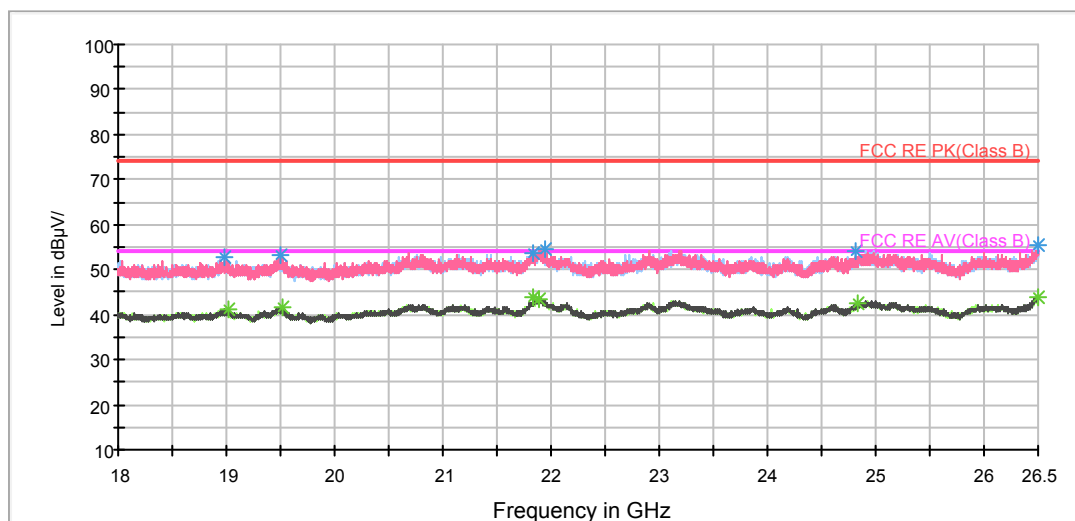
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3699.375000	39.8	210.0	V	0.0	41.4	-1.6	34.2	74
4721.250000	43.0	210.0	V	14.0	42.2	0.8	31.0	74
6931.875000	46.8	110.0	V	251.0	40.6	6.2	27.2	74
9151.875000	48.2	110.0	V	273.0	38.0	10.2	25.8	74
12641.250000	51.9	210.0	H	251.0	37.4	14.5	22.1	74
17913.750000	63.1	210.0	H	0.0	37.5	25.6	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)
4035.000000	27.8	110.0	V	251.0	28.8	-1.0	26.2	54
5435.625000	31.2	110.0	V	0.0	28.3	2.9	22.8	54
6995.625000	34.8	110.0	V	91.0	28.3	6.5	19.2	54
9210.000000	36.5	210.0	V	59.0	26.4	10.1	17.5	54
12639.375000	40.5	210.0	H	115.0	26.0	14.5	13.5	54
17998.125000	51.2	110.0	V	296.0	25.8	25.4	2.8	54

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

BELL_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)
18990.250000	52.6	H	221.0	52.7	-0.1	21.4	74
19499.187500	53.4	V	107.0	53.3	0.1	20.6	74
21839.875000	53.7	V	160.0	55.6	-1.9	20.3	74
21947.187500	54.4	V	98.0	55.7	-1.3	19.6	74
24821.250000	53.9	H	225.0	53.7	0.2	20.1	74
26491.500000	55.6	H	109.0	54.5	1.1	18.4	74

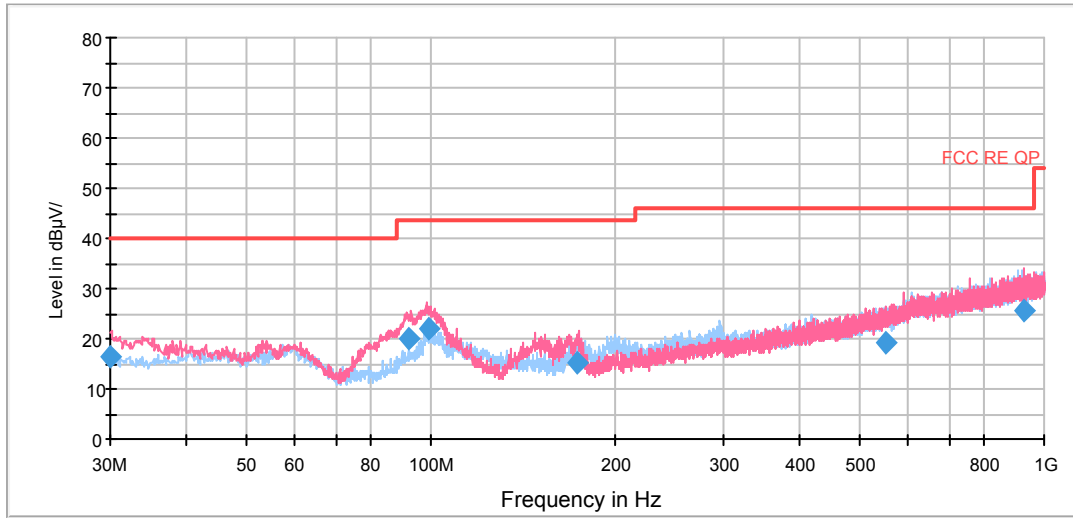
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
19009.375000	41.1	V	47.0	41.3	-0.2	12.9	54
19509.812500	41.5	V	98.0	41.4	0.1	12.5	54
21834.562500	43.7	H	225.0	45.6	-1.9	10.3	54
21894.062500	43.5	V	45.0	45.1	-1.6	10.5	54
24842.500000	42.4	H	144.0	42.1	0.3	11.6	54
26492.562500	43.8	V	142.0	42.7	1.1	10.2	54

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

802.11n (HT20) CH11

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

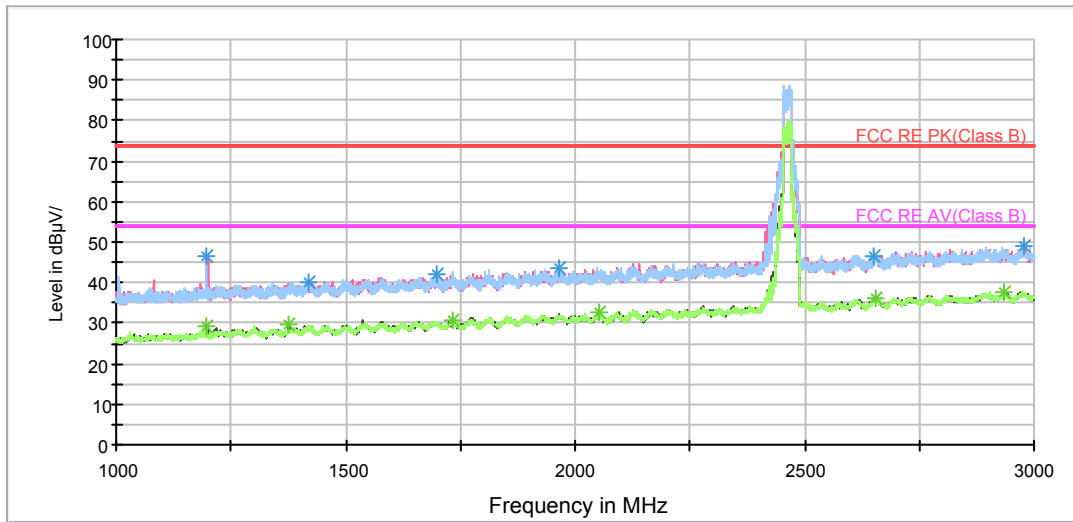
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	16.6	100.0	V	231.0	4.5	12.1	23.4	40.0
91.831250	20.1	100.0	V	272.0	7.9	12.2	23.4	43.5
99.106250	22.0	100.0	V	244.0	8.9	13.1	21.5	43.5
173.403750	15.3	100.0	V	242.0	4.6	10.7	28.2	43.5
553.147500	19.3	100.0	V	22.0	-2.4	21.7	26.7	46.0
927.983750	25.6	125.0	V	10.0	-1.4	27.0	20.4	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

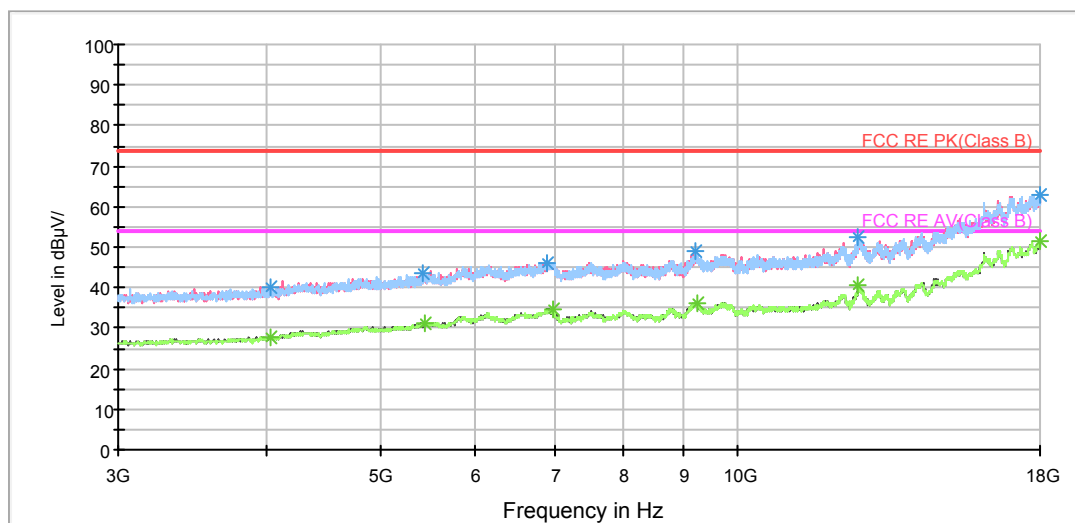
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.500000	46.3	100.0	V	7.0	54.5	-8.2	27.7	74
1418.000000	40.1	100.0	H	57.0	47.0	-6.9	33.9	74
1696.750000	41.9	100.0	V	150.0	46.9	-5.0	32.1	74
1966.000000	43.4	100.0	V	150.0	46.8	-3.4	30.6	74
2651.250000	46.8	100.0	V	252.0	46.4	0.4	27.2	74
2979.500000	49.1	100.0	H	94.0	46.9	2.2	24.9	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)
1198.500000	29.3	100.0	V	7.0	37.5	-8.2	24.7	54
1376.500000	29.7	100.0	V	334.0	36.8	-7.1	24.3	54
1731.750000	30.7	100.0	H	123.0	35.5	-4.8	23.3	54
2053.000000	32.7	100.0	H	123.0	35.9	-3.2	21.3	54
2655.000000	36.1	100.0	H	145.0	35.7	0.4	17.9	54
2932.500000	37.7	100.0	V	209.0	35.9	1.8	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

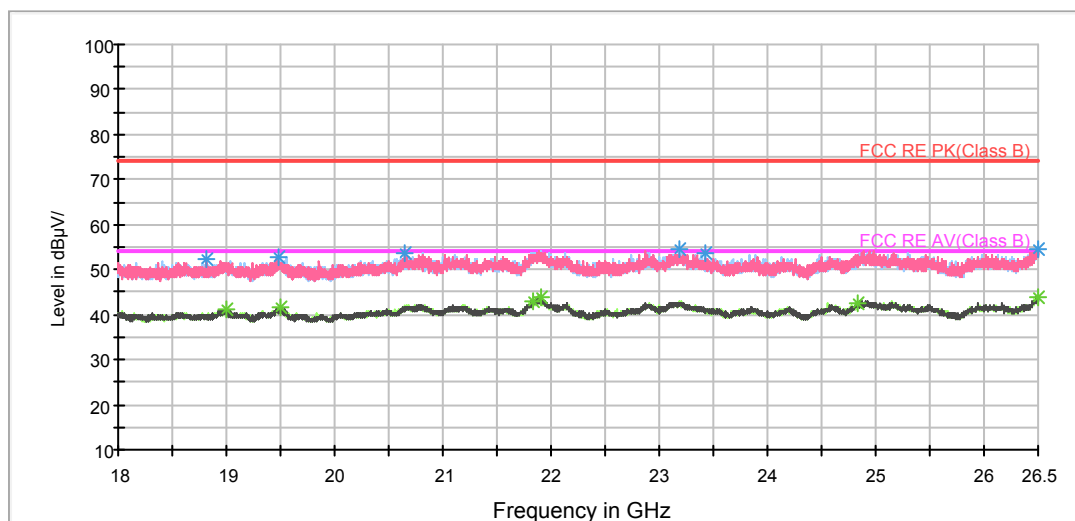
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4029.375000	40.0	210.0	H	182.0	41.1	-1.1	34.0	74
5428.125000	43.6	210.0	V	18.0	40.8	2.8	30.4	74
6898.125000	46.3	110.0	H	178.0	40.1	6.2	27.7	74
9221.250000	49.1	110.0	V	296.0	39.2	9.9	24.9	74
12635.625000	52.3	110.0	H	21.0	38.2	14.1	21.7	74
17996.250000	63.0	210.0	H	228.0	37.6	25.4	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)
4036.875000	27.8	110.0	H	21.0	28.8	-1.0	26.2	54
5445.000000	31.3	210.0	V	63.0	28.4	2.9	22.7	54
6997.500000	34.8	110.0	H	133.0	28.3	6.5	19.2	54
9232.500000	36.3	210.0	H	294.0	26.4	9.9	17.7	54
12641.250000	40.5	110.0	H	178.0	26.0	14.5	13.5	54
18000.000000	51.3	210.0	V	18.0	25.8	25.5	2.7	54

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

BELL_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)
18819.187500	52.3	V	199.0	52.3	0.0	21.7	74
19489.625000	53.0	H	225.0	52.9	0.1	21.0	74
20641.375000	53.9	V	50.0	55.1	-1.2	20.1	74
23176.500000	54.5	H	181.0	54.6	-0.1	19.5	74
23417.687500	53.8	H	216.0	53.9	-0.1	20.2	74
26491.500000	54.6	H	225.0	53.5	1.1	19.4	74

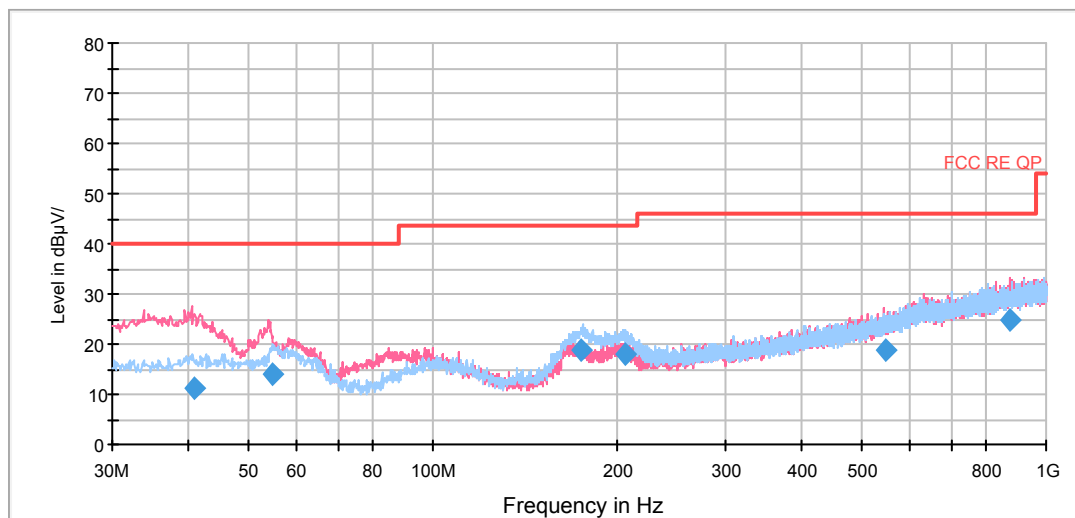
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18997.687500	41.1	V	210.0	41.3	-0.2	12.9	54
19494.937500	41.8	H	128.0	41.7	0.1	12.2	54
21839.875000	42.9	V	91.0	44.8	-1.9	11.1	54
21903.625000	43.8	V	74.0	45.4	-1.6	10.2	54
24836.125000	42.6	H	208.0	42.3	0.3	11.4	54
26493.625000	43.9	H	164.0	42.8	1.1	10.1	54

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

BLE-Channel 0

FCC RE 0.03-1GHz QP Class B



Radiates Emission from 30MHz to 1GHz

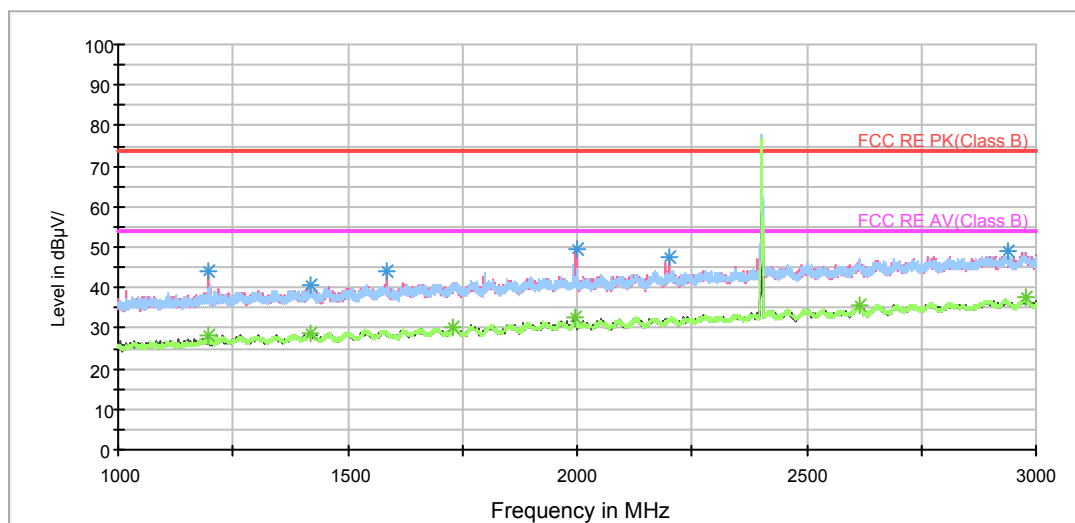
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.707500	11.1	100.0	H	197.0	-2.2	13.3	28.9	40.0
54.607500	14.1	100.0	H	124.0	1.2	12.9	25.9	40.0
174.977500	18.9	100.0	H	125.0	8.2	10.7	24.6	43.5
206.425000	18.0	100.0	H	70.0	5.6	12.4	25.5	43.5
545.873750	18.7	100.0	H	115.0	-2.9	21.6	27.3	46.0
871.400000	25.0	100.0	H	47.0	-1.3	26.3	21.0	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

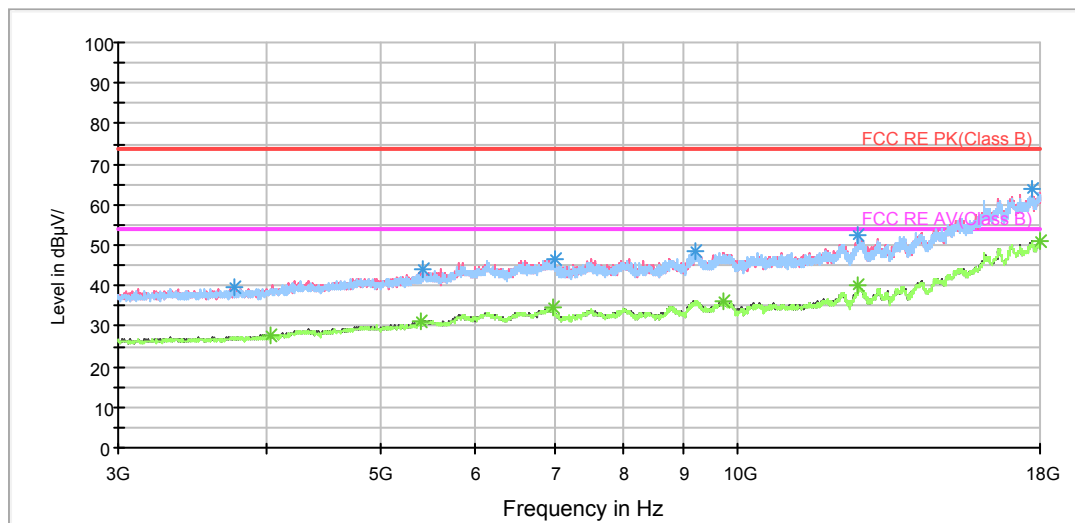
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.500000	44.2	110.0	V	89.0	52.4	-8.2	29.8	74
1420.250000	40.5	110.0	V	211.0	47.4	-6.9	33.5	74
1584.750000	44.2	110.0	V	238.0	50.5	-6.3	29.8	74
1999.250000	49.7	110.0	V	108.0	53.1	-3.4	24.3	74
2200.750000	47.5	210.0	V	68.0	49.6	-2.1	26.5	74
2937.250000	48.9	210.0	V	83.0	47.0	1.9	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	28.0	110.0	V	89.0	36.2	-8.2	26.0	54
1418.500000	28.9	110.0	H	294.0	35.8	-6.9	25.1	54
1731.250000	30.2	210.0	H	320.0	35.1	-4.9	23.8	54
1996.000000	32.6	210.0	V	83.0	35.9	-3.3	21.4	54
2616.500000	35.5	210.0	V	192.0	35.5	0.0	18.5	54
2978.250000	37.4	110.0	H	286.0	35.2	2.2	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

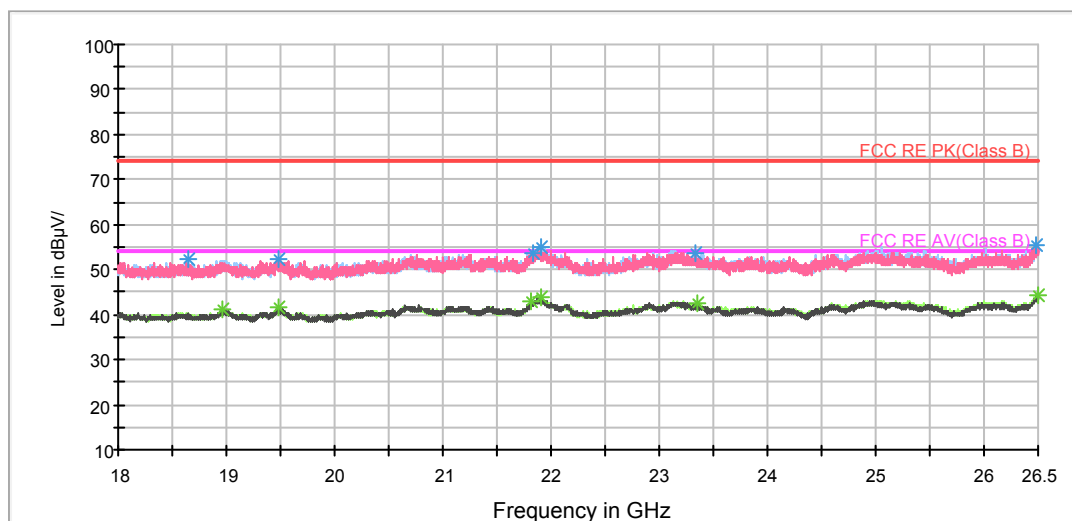
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3753.750000	39.6	110.0	H	63.0	41.2	-1.6	34.4	74
5418.750000	43.9	210.0	H	0.0	41.2	2.7	30.1	74
6999.375000	46.7	210.0	H	0.0	40.2	6.5	27.3	74
9196.875000	48.3	210.0	V	269.0	38.1	10.2	25.7	74
12639.375000	52.3	210.0	V	41.0	37.8	14.5	21.7	74
17711.250000	63.7	210.0	H	205.0	39.0	24.7	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	27.6	110.0	V	0.0	28.6	-1.0	26.4	54
5409.375000	31.1	110.0	V	0.0	28.5	2.6	22.9	54
6995.625000	34.6	110.0	V	0.0	28.1	6.5	19.4	54
9738.750000	36.2	210.0	H	43.0	26.2	10.0	17.8	54
12641.250000	40.3	210.0	V	110.0	25.8	14.5	13.7	54
17998.125000	51.0	110.0	H	0.0	25.6	25.4	3.0	54

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

BELL_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)
18652.375000	52.5	H	157.0	52.4	0.1	21.5	74
19483.250000	52.3	H	249.0	52.2	0.1	21.7	74
21833.500000	53.5	V	14.0	55.4	-1.9	20.5	74
21900.437500	55.1	V	116.0	56.7	-1.6	18.9	74
23324.187500	53.7	H	240.0	53.7	0.0	20.3	74
26486.187500	55.3	H	232.0	54.2	1.1	18.7	74

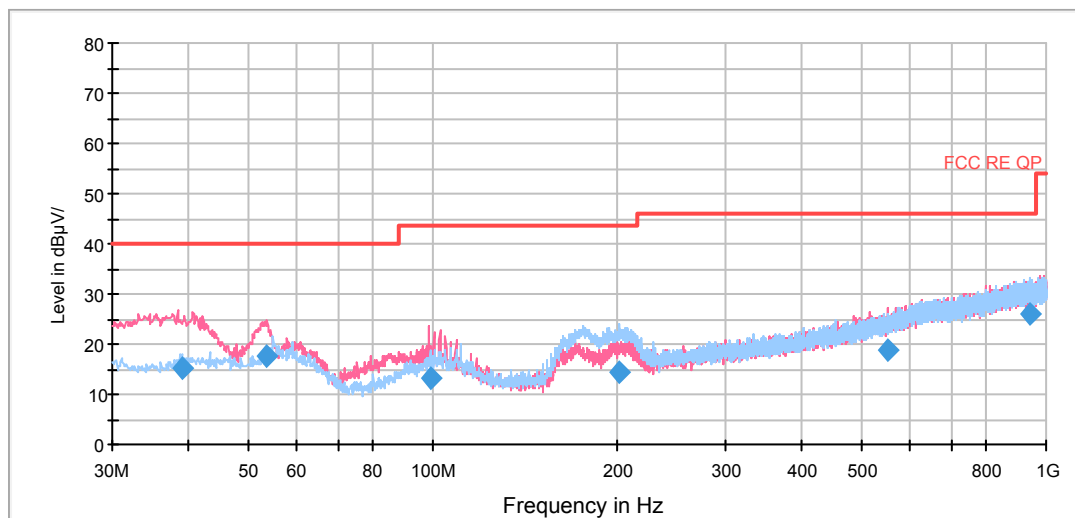
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18971.125000	41.1	H	300.0	41.2	-0.1	12.9	54
19482.187500	41.4	V	175.0	41.3	0.1	12.6	54
21819.687500	42.9	H	0.0	44.9	-2.0	11.1	54
21910.000000	43.7	H	0.0	45.2	-1.5	10.3	54
23345.437500	42.4	H	208.0	42.4	0.0	11.6	54
26494.687500	44.3	H	157.0	43.2	1.1	9.7	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

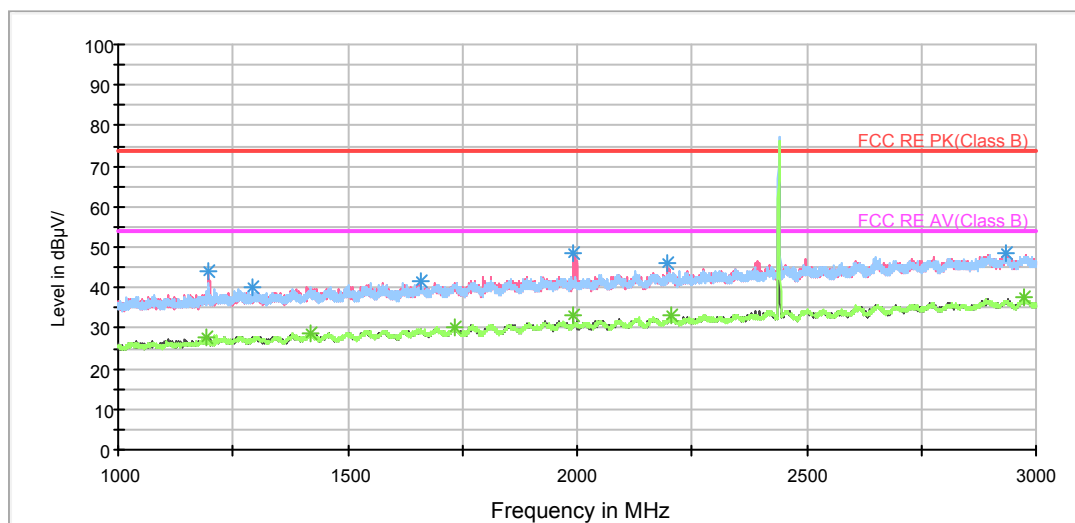
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
38.966250	15.2	100.0	V	180.0	2.2	13.0	24.8	40.0
53.407500	17.5	100.0	V	193.0	4.7	12.8	22.5	40.0
99.026250	13.3	125.0	V	238.0	0.2	13.1	30.2	43.5
201.805000	14.2	125.0	H	63.0	2.0	12.2	29.3	43.5
549.920000	18.6	100.0	V	0.0	-3.0	21.6	27.4	46.0
943.460000	25.9	100.0	H	210.0	-1.3	27.2	20.1	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

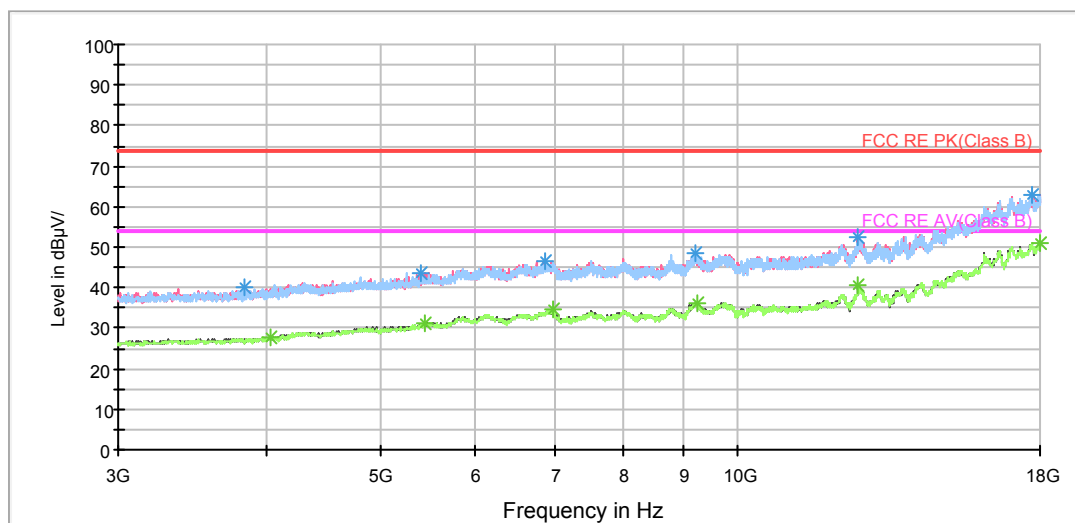
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	43.9	110.0	V	69.0	52.1	-8.2	30.1	74
1293.750000	40.3	210.0	H	0.0	48.0	-7.7	33.7	74
1661.250000	41.5	110.0	V	248.0	46.7	-5.2	32.5	74
1992.750000	48.3	210.0	V	32.0	51.6	-3.3	25.7	74
2198.250000	46.0	210.0	V	63.0	48.1	-2.1	28.0	74
2932.500000	48.3	210.0	V	0.0	46.5	1.8	25.7	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)
1191.500000	27.6	210.0	V	77.0	35.8	-8.2	26.4	54
1420.000000	28.7	110.0	H	0.0	35.6	-6.9	25.3	54
1731.750000	30.2	210.0	H	262.0	35.0	-4.8	23.8	54
1991.750000	33.1	110.0	V	93.0	36.4	-3.3	20.9	54
2206.750000	33.0	210.0	V	326.0	35.1	-2.1	21.0	54
2973.250000	37.5	210.0	H	277.0	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

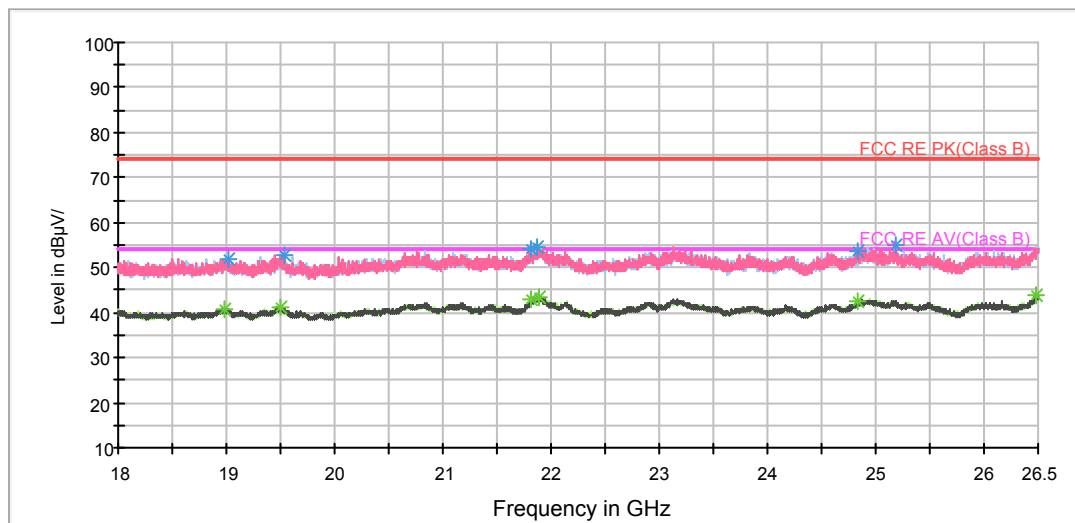
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3828.750000	40.1	210.0	H	0.0	41.8	-1.7	33.9	74
5401.875000	43.5	110.0	H	0.0	41.0	2.5	30.5	74
6877.500000	46.5	210.0	V	0.0	40.5	6.0	27.5	74
9210.000000	48.6	110.0	H	0.0	38.5	10.1	25.4	74
12639.375000	52.3	210.0	V	0.0	37.8	14.5	21.7	74
17705.625000	62.9	110.0	V	296.0	38.2	24.7	11.1	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)
4029.375000	27.7	210.0	V	14.0	28.8	-1.1	26.3	54
5450.625000	31.1	210.0	H	295.0	28.3	2.8	22.9	54
6995.625000	34.5	110.0	V	296.0	28.0	6.5	19.5	54
9230.625000	36.3	210.0	V	150.0	26.4	9.9	17.7	54
12641.250000	40.4	210.0	V	0.0	25.9	14.5	13.6	54
17998.125000	51.1	210.0	V	83.0	25.7	25.4	2.9	54

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

BELL_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)
19010.437500	51.9	H	0.0	52.1	-0.2	22.1	74
19539.562500	52.9	V	56.0	52.9	0.0	21.1	74
21814.375000	54.0	V	240.0	56.0	-2.0	20.0	74
21862.187500	54.7	H	241.0	56.5	-1.8	19.3	74
24838.250000	53.5	V	265.0	53.2	0.3	20.5	74
25187.812500	54.9	H	352.0	54.2	0.7	19.1	74

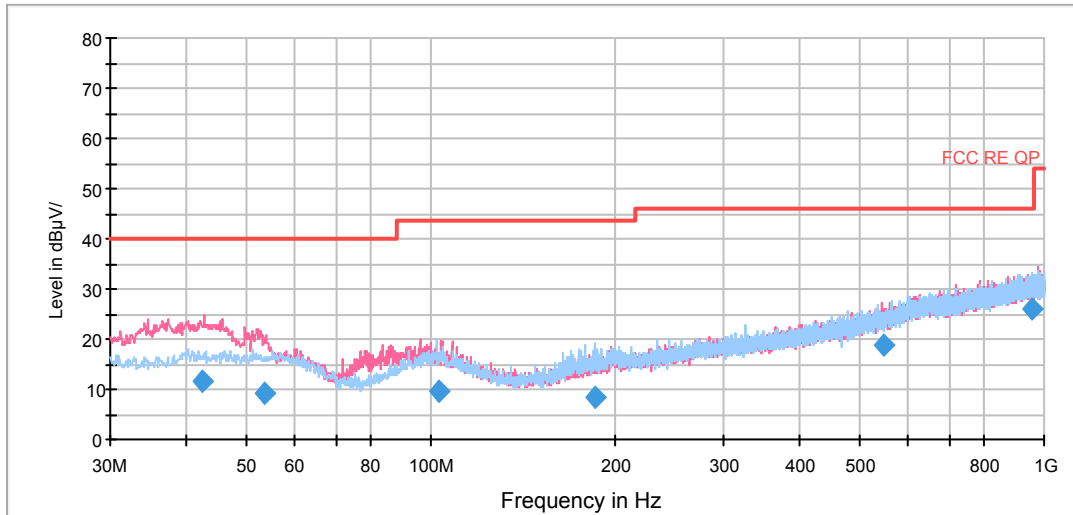
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18975.375000	40.8	V	0.0	40.9	-0.1	13.2	54
19500.250000	41.3	H	88.0	41.2	0.1	12.7	54
21823.937500	42.8	V	0.0	44.8	-2.0	11.2	54
21882.375000	43.5	V	14.0	45.2	-1.7	10.5	54
24825.500000	42.4	V	122.0	42.2	0.2	11.6	54
26486.187500	43.9	V	311.0	42.8	1.1	10.1	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

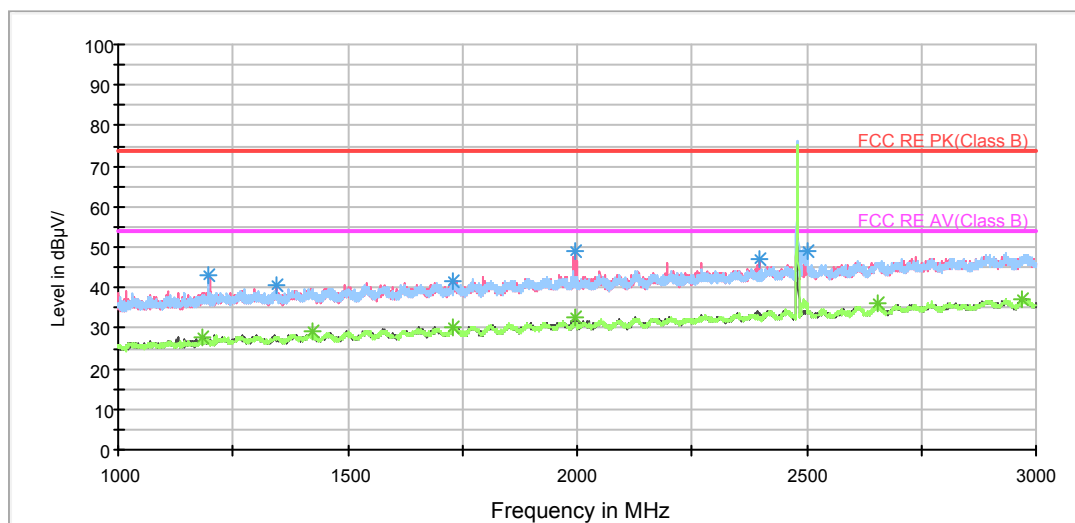
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
42.531250	11.7	100.0	V	140.0	-1.6	13.3	28.3	40.0
53.366250	9.1	100.0	V	0.0	-3.7	12.8	30.9	40.0
102.825000	9.4	100.0	H	351.0	-3.6	13.0	34.1	43.5
184.836250	8.3	125.0	H	139.0	-3.0	11.3	35.2	43.5
545.670000	18.7	100.0	V	253.0	-2.9	21.6	27.3	46.0
955.905000	26.0	100.0	H	0.0	-1.3	27.3	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

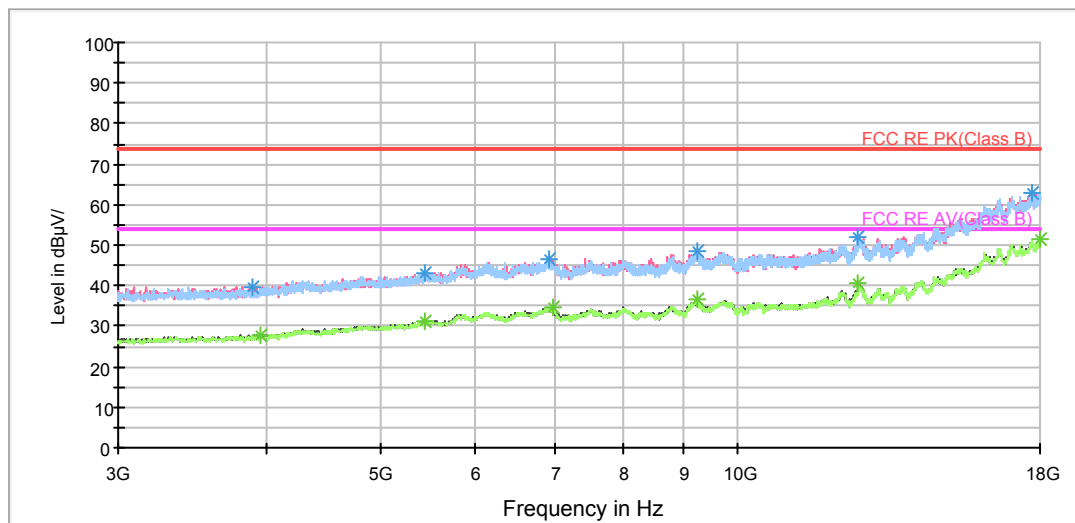
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.500000	43.1	210.0	V	68.0	51.3	-8.2	30.9	74
1343.500000	40.4	210.0	V	0.0	47.9	-7.5	33.6	74
1730.750000	41.5	110.0	V	307.0	46.4	-4.9	32.5	74
1997.250000	49.2	210.0	V	90.0	52.5	-3.3	24.8	74
2397.000000	47.2	210.0	V	119.0	48.5	-1.3	26.8	74
2500.250000	48.9	210.0	H	340.0	49.1	-0.2	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)
1184.750000	28.0	210.0	V	83.0	36.1	-8.1	26.0	54
1421.500000	29.2	110.0	H	0.0	36.1	-6.9	24.8	54
1730.750000	30.1	110.0	H	20.0	35.0	-4.9	23.9	54
1994.500000	32.5	210.0	V	76.0	35.7	-3.2	21.5	54
2653.750000	35.9	210.0	H	326.0	35.5	0.4	18.1	54
2970.750000	37.2	210.0	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

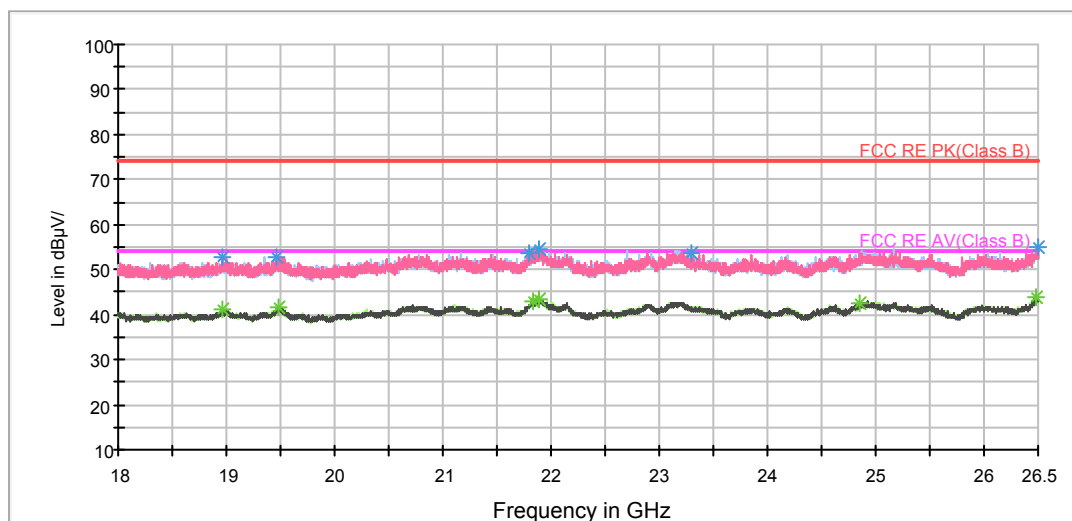
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3890.625000	39.7	210.0	V	0.0	41.0	-1.3	34.3	74
5443.125000	43.2	110.0	H	246.0	40.3	2.9	30.8	74
6933.750000	46.3	110.0	V	298.0	40.1	6.2	27.7	74
9243.750000	48.3	210.0	H	161.0	38.5	9.8	25.7	74
12639.375000	52.1	110.0	V	343.0	37.6	14.5	21.9	74
17713.125000	62.9	110.0	V	208.0	38.3	24.6	11.1	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)
3952.500000	27.8	210.0	V	87.0	28.8	-1.0	26.2	54
5443.125000	31.1	210.0	V	20.0	28.2	2.9	22.9	54
6997.500000	34.5	210.0	V	200.0	28.0	6.5	19.5	54
9230.625000	36.4	210.0	V	20.0	26.5	9.9	17.6	54
12641.250000	40.5	210.0	V	0.0	26.0	14.5	13.5	54
17996.250000	51.3	110.0	V	94.0	25.9	25.4	2.7	54

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

BELL_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)
18971.125000	52.6	V	35.0	52.7	-0.1	21.4	74
19467.312500	52.9	H	342.0	52.8	0.1	21.1	74
21797.375000	53.7	V	84.0	55.8	-2.1	20.3	74
21893.000000	54.5	V	51.0	56.1	-1.6	19.5	74
23299.750000	53.5	H	71.0	53.5	0.0	20.5	74
26496.812500	55.0	V	0.0	53.9	1.1	19.0	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)
18971.125000	41.2	V	35.0	41.3	-0.1	12.8	54
19488.562500	41.5	V	2.0	41.4	0.1	12.5	54
21834.562500	42.9	V	93.0	44.8	-1.9	11.1	54
21885.562500	43.5	H	290.0	45.1	-1.6	10.5	54
24843.562500	42.4	H	256.0	42.1	0.3	11.6	54
26490.437500	43.8	V	158.0	42.7	1.1	10.2	54

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

5.8. Conducted Emission

Ambient condition

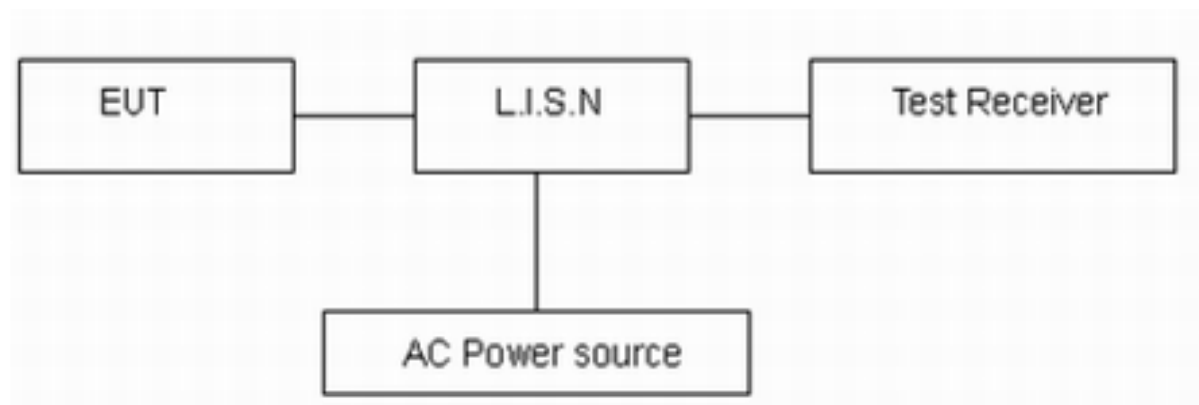
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

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

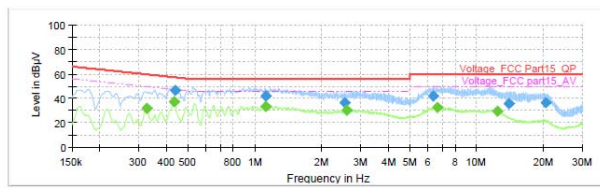
*: Decreases with the logarithm of the frequency.

Measurement Uncertainty

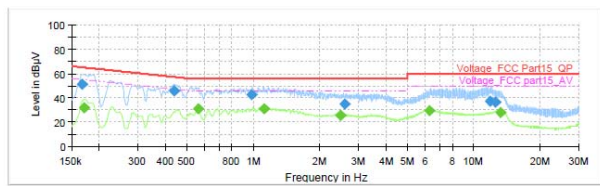
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

**Test Results:**

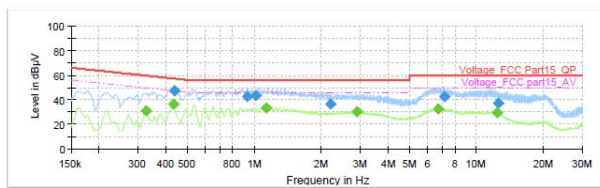
Following plots, Blue trace uses the peak detection and Green trace uses the average detection.

802.11b, Channel No.: 1**L Line****Final Result**

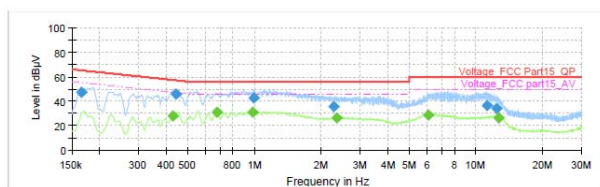
Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.325500	---	31.42	49.57	18.15	1000.0	9.000	L1	ON	19.2
0.433500	---	36.97	47.19	10.22	1000.0	9.000	L1	ON	19.2
0.438000	46.60	---	57.10	10.50	1000.0	9.000	L1	ON	19.2
1.122000	42.03	---	56.00	13.97	1000.0	9.000	L1	ON	19.2
1.124250	---	33.34	46.00	12.66	1000.0	9.000	L1	ON	19.2
2.528250	36.06	---	56.00	19.94	1000.0	9.000	L1	ON	19.0
2.595750	---	30.04	46.00	15.96	1000.0	9.000	L1	ON	19.0
6.375750	41.79	---	60.00	18.21	1000.0	9.000	L1	ON	19.1
6.616500	---	32.78	50.00	17.22	1000.0	9.000	L1	ON	19.1
12.354000	---	29.67	50.00	20.33	1000.0	9.000	L1	ON	19.4
13.996500	35.31	---	60.00	24.69	1000.0	9.000	L1	ON	19.5
20.364000	36.72	---	60.00	23.28	1000.0	9.000	L1	ON	19.7

N Line**Final Result**

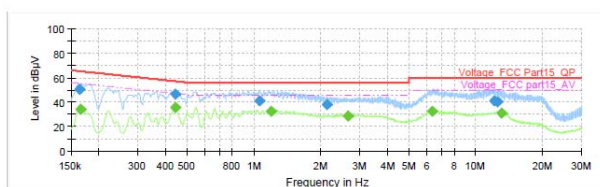
Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.168000	50.93	---	65.06	14.13	1000.0	9.000	N	ON	19.2
0.170250	---	31.85	54.95	23.10	1000.0	9.000	N	ON	19.2
0.435750	45.39	---	57.14	11.76	1000.0	9.000	N	ON	19.2
0.595500	---	31.16	46.00	14.84	1000.0	9.000	N	ON	19.3
0.982500	42.41	---	56.00	13.59	1000.0	9.000	N	ON	19.2
1.117500	---	31.09	46.00	14.91	1000.0	9.000	N	ON	19.2
2.487750	---	25.24	46.00	20.76	1000.0	9.000	N	ON	19.0
2.584500	35.02	---	56.00	20.98	1000.0	9.000	N	ON	19.0
6.306000	---	29.14	50.00	20.86	1000.0	9.000	N	ON	19.1
11.883750	37.42	---	60.00	22.58	1000.0	9.000	N	ON	19.4
12.576750	36.22	---	60.00	23.78	1000.0	9.000	N	ON	19.4
13.186500	---	27.52	50.00	22.48	1000.0	9.000	N	ON	19.5

802.11b, Channel No.: 6**L Line****Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.325500	---	31.30	49.57	18.27	1000.0	9.000	L1	ON	19.2
0.433500	---	36.82	47.19	10.37	1000.0	9.000	L1	ON	19.2
0.438000	46.93	---	57.10	10.17	1000.0	9.000	L1	ON	19.2
0.930750	43.00	---	56.00	13.00	1000.0	9.000	L1	ON	19.2
1.018500	43.28	---	56.00	12.72	1000.0	9.000	L1	ON	19.2
1.126500	---	33.39	46.00	12.61	1000.0	9.000	L1	ON	19.2
2.215500	36.35	---	56.00	19.65	1000.0	9.000	L1	ON	19.1
2.895500	---	29.99	46.00	16.01	1000.0	9.000	L1	ON	19.1
6.688500	---	32.55	50.00	17.45	1000.0	9.000	L1	ON	19.1
7.136250	42.60	---	60.00	17.40	1000.0	9.000	L1	ON	19.2
12.358500	---	29.22	50.00	20.78	1000.0	9.000	L1	ON	19.4
12.498000	37.19	---	60.00	22.81	1000.0	9.000	L1	ON	19.4

N Line**Final Result**

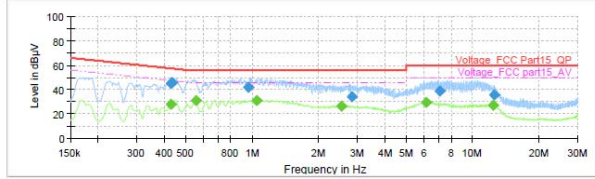
Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.165750	47.34	---	65.17	17.83	1000.0	9.000	N	ON	19.2
0.429000	---	27.87	47.27	19.40	1000.0	9.000	N	ON	19.2
0.440250	45.49	---	57.06	11.57	1000.0	9.000	N	ON	19.2
0.678750	---	31.26	46.00	14.74	1000.0	9.000	N	ON	19.3
0.982500	---	31.05	46.00	14.95	1000.0	9.000	N	ON	19.2
0.991500	42.63	---	56.00	13.37	1000.0	9.000	N	ON	19.2
2.287500	35.68	---	56.00	20.32	1000.0	9.000	N	ON	19.0
2.359500	---	26.47	46.00	19.53	1000.0	9.000	N	ON	19.0
6.069750	---	28.93	50.00	21.07	1000.0	9.000	N	ON	19.1
11.175000	36.34	---	60.00	23.66	1000.0	9.000	N	ON	19.4
12.387750	34.28	---	60.00	25.72	1000.0	9.000	N	ON	19.4
12.603750	---	26.72	50.00	23.28	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)
0.163500	50.06	---	65.28	15.23	1000.0	9.000	L1	ON	19.1
0.165750	---	34.26	55.17	20.91	1000.0	9.000	L1	ON	19.1
0.440250	---	35.58	47.06	11.48	1000.0	9.000	L1	ON	19.2
0.444750	46.84	---	56.97	10.14	1000.0	9.000	L1	ON	19.2
1.061250	40.88	---	56.00	15.12	1000.0	9.000	L1	ON	19.2
1.196250	---	32.75	46.00	13.25	1000.0	9.000	L1	ON	19.2
2.125500	37.88	---	56.00	18.12	1000.0	9.000	L1	ON	19.1
2.647500	---	29.03	46.00	16.97	1000.0	9.000	L1	ON	19.0
6.378000	---	32.76	50.00	17.24	1000.0	9.000	L1	ON	19.1
12.169500	40.97	---	60.00	19.03	1000.0	9.000	L1	ON	19.4
12.529500	40.10	---	60.00	19.90	1000.0	9.000	L1	ON	19.4
13.148250	---	31.27	50.00	18.73	1000.0	9.000	L1	ON	19.5



N Line

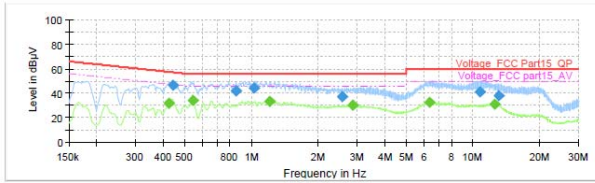


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.426750	44.65	---	57.32	12.66	1000.0	9.000	N	ON	19.2
0.429000	---	27.88	47.27	19.39	1000.0	9.000	N	ON	19.2
0.433500	45.46	---	57.19	11.72	1000.0	9.000	N	ON	19.2
0.555000	---	31.21	46.00	14.79	1000.0	9.000	N	ON	19.3
0.962250	41.82	---	56.00	14.18	1000.0	9.000	N	ON	19.2
1.052250	---	31.31	46.00	14.69	1000.0	9.000	N	ON	19.2
2.548500	---	26.33	46.00	19.67	1000.0	9.000	N	ON	19.0
2.832000	34.03	---	56.00	21.97	1000.0	9.000	N	ON	19.0
6.171000	---	29.83	50.00	20.17	1000.0	9.000	N	ON	19.1
7.073250	38.62	---	60.00	21.38	1000.0	9.000	N	ON	19.2
12.437250	---	27.19	50.00	22.81	1000.0	9.000	N	ON	19.4
12.453000	35.80	---	60.00	24.20	1000.0	9.000	N	ON	19.4

802.11g, Channel No.: 1

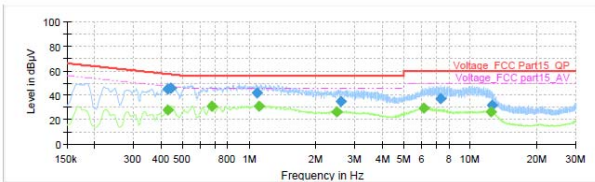
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.422250	---	31.88	47.40	15.53	1000.0	9.000	L1	ON	19.2
0.442500	46.67	---	57.02	10.34	1000.0	9.000	L1	ON	19.2
0.543750	---	34.47	46.00	11.53	1000.0	9.000	L1	ON	19.2
0.849750	41.93	---	56.00	14.07	1000.0	9.000	L1	ON	19.2
1.029750	44.27	---	56.00	11.73	1000.0	9.000	L1	ON	19.2
1.205250	---	33.54	46.00	12.46	1000.0	9.000	L1	ON	19.2
2.575500	37.26	---	56.00	18.74	1000.0	9.000	L1	ON	19.0
2.854500	---	30.43	46.00	15.57	1000.0	9.000	L1	ON	19.0
6.342000	---	32.84	50.00	17.16	1000.0	9.000	L1	ON	19.1
10.758750	41.13	---	60.00	18.87	1000.0	9.000	L1	ON	19.4
12.486750	---	30.81	50.00	19.19	1000.0	9.000	L1	ON	19.4
13.069500	37.79	---	60.00	22.21	1000.0	9.000	L1	ON	19.5

N Line

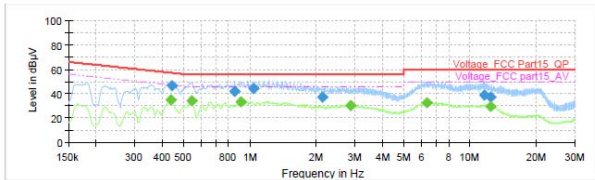


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.426750	44.81	---	57.32	12.51	1000.0	9.000	N	ON	19.2
0.429000	---	27.90	47.27	19.37	1000.0	9.000	N	ON	19.2
0.442500	46.10	---	57.02	10.92	1000.0	9.000	N	ON	19.2
0.674250	---	31.29	46.00	14.71	1000.0	9.000	N	ON	19.3
1.081500	41.81	---	56.00	14.19	1000.0	9.000	N	ON	19.2
1.113000	---	31.35	46.00	14.65	1000.0	9.000	N	ON	19.2
2.485500	---	26.58	46.00	19.42	1000.0	9.000	N	ON	19.0
2.607000	35.26	---	56.00	20.74	1000.0	9.000	N	ON	19.0
6.164250	---	29.35	50.00	20.65	1000.0	9.000	N	ON	19.1
7.359000	37.26	---	60.00	22.74	1000.0	9.000	N	ON	19.2
12.358500	---	26.43	50.00	23.57	1000.0	9.000	N	ON	19.4
12.558750	31.53	---	60.00	28.47	1000.0	9.000	N	ON	19.4

802.11g, Channel No.: 6

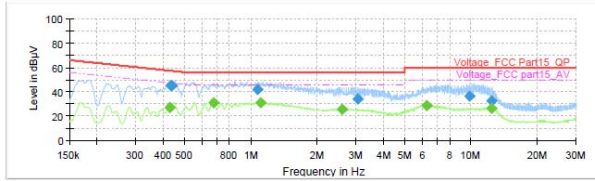
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.435750	---	34.51	47.14	12.63	1000.0	9.000	L1	ON	19.2
0.444750	46.37	---	56.97	10.60	1000.0	9.000	L1	ON	19.2
0.541500	---	34.42	46.00	11.58	1000.0	9.000	L1	ON	19.2
0.856500	42.25	---	56.00	13.75	1000.0	9.000	L1	ON	19.2
0.912750	---	33.36	46.00	12.64	1000.0	9.000	L1	ON	19.2
1.038750	44.25	---	56.00	11.75	1000.0	9.000	L1	ON	19.2
2.132250	37.16	---	56.00	18.84	1000.0	9.000	L1	ON	19.1
2.865750	---	30.18	46.00	15.82	1000.0	9.000	L1	ON	19.1
6.326250	---	32.19	50.00	17.81	1000.0	9.000	L1	ON	19.1
11.544000	38.90	---	60.00	21.10	1000.0	9.000	L1	ON	19.4
12.374250	---	29.75	50.00	20.25	1000.0	9.000	L1	ON	19.4
12.439500	37.52	---	60.00	22.48	1000.0	9.000	L1	ON	19.4

N Line

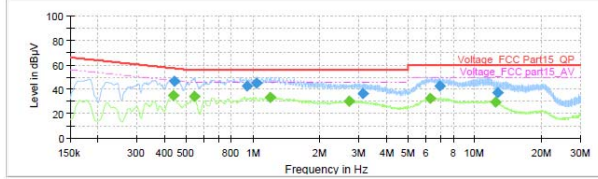


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.429000	---	27.47	47.27	19.81	1000.0	9.000	N	ON	19.2
0.431250	45.02	---	57.23	12.21	1000.0	9.000	N	ON	19.2
0.438000	45.07	---	57.10	12.03	1000.0	9.000	N	ON	19.2
0.674250	---	31.22	46.00	14.78	1000.0	9.000	N	ON	19.3
1.070250	41.84	---	56.00	14.16	1000.0	9.000	N	ON	19.2
1.113000	---	31.15	46.00	14.85	1000.0	9.000	N	ON	19.2
2.591250	---	25.94	46.00	20.06	1000.0	9.000	N	ON	19.0
3.066000	34.27	---	56.00	21.73	1000.0	9.000	N	ON	19.1
6.285750	---	28.98	50.00	21.02	1000.0	9.000	N	ON	19.1
9.800250	36.07	---	60.00	23.93	1000.0	9.000	N	ON	19.4
12.414750	---	26.07	50.00	23.93	1000.0	9.000	N	ON	19.4
12.439500	32.91	---	60.00	27.09	1000.0	9.000	N	ON	19.4

802.11g, Channel No.: 11

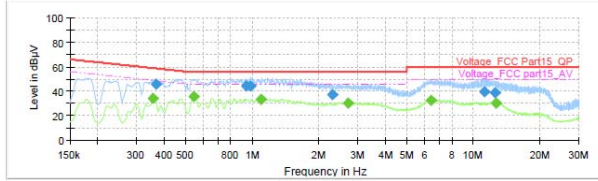
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.435750	---	34.56	47.14	12.59	1000.0	9,000	L1	ON	19.2
0.444750	46.45	---	56.97	10.52	1000.0	9,000	L1	ON	19.2
0.543750	---	34.46	46.00	11.54	1000.0	9,000	L1	ON	19.2
0.942000	42.88	---	56.00	13.12	1000.0	9,000	L1	ON	19.2
1.038750	44.60	---	56.00	11.40	1000.0	9,000	L1	ON	19.2
1.191750	---	33.37	46.00	12.63	1000.0	9,000	L1	ON	19.2
2.706000	---	30.34	46.00	15.66	1000.0	9,000	L1	ON	19.0
3.140250	36.44	---	56.00	19.56	1000.0	9,000	L1	ON	19.1
6.283500	---	32.62	50.00	17.38	1000.0	9,000	L1	ON	19.1
6.906750	42.54	---	60.00	17.46	1000.0	9,000	L1	ON	19.2
12.408000	---	29.63	50.00	20.37	1000.0	9,000	L1	ON	19.4
12.599250	36.94	---	60.00	23.06	1000.0	9,000	L1	ON	19.5

N Line

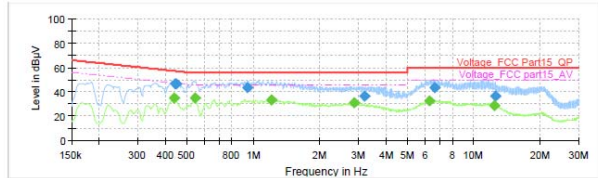


Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.357000	---	34.01	48.80	14.78	1000.0	9,000	N	ON	19.2
0.366000	45.55	---	58.59	13.04	1000.0	9,000	N	ON	19.2
0.541500	---	36.03	46.00	9.97	1000.0	9,000	N	ON	19.2
0.942000	44.03	---	56.00	11.97	1000.0	9,000	N	ON	19.2
0.987000	43.99	---	56.00	12.01	1000.0	9,000	N	ON	19.2
1.099500	---	33.51	46.00	12.49	1000.0	9,000	N	ON	19.2
2.296500	37.36	---	56.00	18.64	1000.0	9,000	N	ON	19.0
2.721750	---	29.97	46.00	16.03	1000.0	9,000	N	ON	19.0
6.434250	---	32.54	50.00	17.46	1000.0	9,000	N	ON	19.1
11.253750	39.22	---	60.00	20.78	1000.0	9,000	N	ON	19.4
12.477750	38.91	---	60.00	21.09	1000.0	9,000	N	ON	19.4
12.608250	---	30.28	50.00	19.72	1000.0	9,000	N	ON	19.4

802.11n(HT20), Channel No.: 1

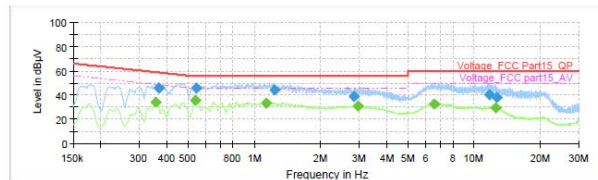
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.435750	---	34.63	47.14	12.52	1000.0	9,000	L1	ON	19.2
0.444750	46.56	---	56.97	10.41	1000.0	9,000	L1	ON	19.2
0.447000	46.48	---	56.93	10.45	1000.0	9,000	L1	ON	19.2
0.546000	---	34.58	46.00	11.42	1000.0	9,000	L1	ON	19.2
0.944250	43.23	---	56.00	12.77	1000.0	9,000	L1	ON	19.2
1.214250	---	33.38	46.00	12.62	1000.0	9,000	L1	ON	19.2
2.879250	---	30.64	46.00	15.36	1000.0	9,000	L1	ON	19.1
3.187500	36.44	---	56.00	19.56	1000.0	9,000	L1	ON	19.1
6.294750	---	32.93	50.00	17.07	1000.0	9,000	L1	ON	19.1
6.632250	43.06	---	60.00	16.94	1000.0	9,000	L1	ON	19.1
12.347250	---	28.91	50.00	21.09	1000.0	9,000	L1	ON	19.4
12.489000	36.66	---	60.00	23.34	1000.0	9,000	L1	ON	19.4

N Line

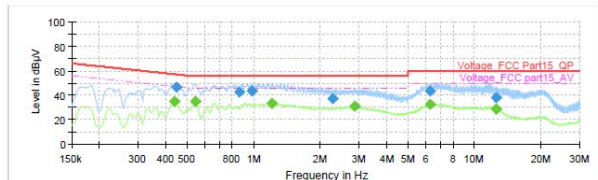


Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.354750	---	34.00	48.85	14.85	1000.0	9,000	N	ON	19.2
0.366000	45.96	---	58.59	12.63	1000.0	9,000	N	ON	19.2
0.539250	---	35.93	46.00	10.07	1000.0	9,000	N	ON	19.2
0.541500	45.72	---	56.00	10.28	1000.0	9,000	N	ON	19.2
1.131000	---	33.47	46.00	12.53	1000.0	9,000	N	ON	19.2
1.230000	44.05	---	56.00	11.95	1000.0	9,000	N	ON	19.2
2.825250	38.47	---	56.00	17.53	1000.0	9,000	N	ON	19.0
2.951250	---	30.71	46.00	15.29	1000.0	9,000	N	ON	19.1
6.567000	---	32.74	50.00	17.26	1000.0	9,000	N	ON	19.1
11.685750	40.51	---	60.00	19.49	1000.0	9,000	N	ON	19.4
12.520500	---	29.40	50.00	20.60	1000.0	9,000	N	ON	19.4
12.594750	38.01	---	60.00	21.99	1000.0	9,000	N	ON	19.4

802.11n(HT20), Channel No.: 6

L Line

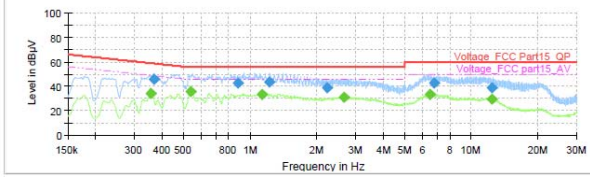


Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.438000	---	34.91	47.10	12.18	1000.0	9,000	L1	ON	19.2
0.447000	46.81	---	56.93	10.12	1000.0	9,000	L1	ON	19.2
0.546000	---	34.71	46.00	11.29	1000.0	9,000	L1	ON	19.2
0.851000	42.27	---	56.00	13.73	1000.0	9,000	L1	ON	19.2
0.980250	43.51	---	56.00	12.49	1000.0	9,000	L1	ON	19.2
1.214250	---	33.37	46.00	12.63	1000.0	9,000	L1	ON	19.2
2.271750	36.85	---	56.00	19.15	1000.0	9,000	L1	ON	19.1
2.879250	---	30.75	46.00	15.25	1000.0	9,000	L1	ON	19.1
6.294750	---	32.44	50.00	17.56	1000.0	9,000	L1	ON	19.1
6.297000	43.05	---	60.00	16.95	1000.0	9,000	L1	ON	19.1
12.491250	37.74	---	60.00	22.26	1000.0	9,000	L1	ON	19.4
12.493500	---	28.80	50.00	21.20	1000.0	9,000	L1	ON	19.4



N Line

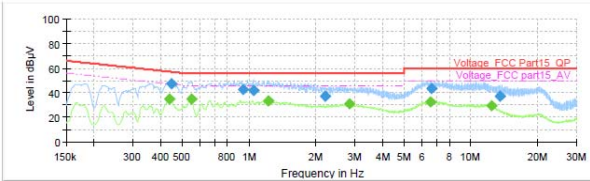


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.354750	---	33.87	48.85	14.98	1000.0	9.000	N	ON	19.2
0.368250	45.59	---	58.54	12.95	1000.0	9.000	N	ON	19.2
0.539250	---	35.84	46.00	10.16	1000.0	9.000	N	ON	19.2
0.883500	42.87	---	56.00	13.13	1000.0	9.000	N	ON	19.2
1.128750	---	33.33	46.00	12.67	1000.0	9.000	N	ON	19.2
1.221000	43.25	---	56.00	12.75	1000.0	9.000	N	ON	19.2
2.224500	39.05	---	56.00	16.95	1000.0	9.000	N	ON	19.1
2.643000	---	31.05	46.00	14.95	1000.0	9.000	N	ON	19.0
5.499500	---	33.44	50.00	16.56	1000.0	9.000	N	ON	19.1
6.771750	42.90	---	60.00	17.10	1000.0	9.000	N	ON	19.1
12.441750	---	29.46	50.00	20.54	1000.0	9.000	N	ON	19.4
12.441750	38.92	---	60.00	21.08	1000.0	9.000	N	ON	19.4

802.11n(HT20), Channel No.: 11

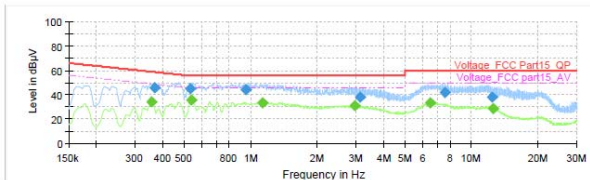
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.438000	---	35.13	47.10	11.97	1000.0	9.000	L1	ON	19.2
0.447000	47.07	---	56.93	9.86	1000.0	9.000	L1	ON	19.2
0.548250	---	35.01	46.00	10.99	1000.0	9.000	L1	ON	19.3
0.937500	42.50	---	56.00	13.50	1000.0	9.000	L1	ON	19.2
1.052250	41.83	---	56.00	14.17	1000.0	9.000	L1	ON	19.2
1.216500	---	33.47	46.00	12.53	1000.0	9.000	L1	ON	19.2
2.208750	37.34	---	56.00	18.66	1000.0	9.000	L1	ON	19.1
2.823000	---	30.64	46.00	15.36	1000.0	9.000	L1	ON	19.0
5.551250	---	32.94	50.00	17.06	1000.0	9.000	L1	ON	19.1
6.607500	43.70	---	60.00	16.30	1000.0	9.000	L1	ON	19.1
12.363000	---	29.27	50.00	20.73	1000.0	9.000	L1	ON	19.4
13.551000	36.95	---	60.00	23.05	1000.0	9.000	L1	ON	19.5

N Line

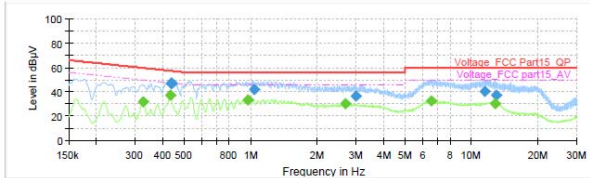


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.354750	---	33.86	48.85	14.99	1000.0	9.000	N	ON	19.2
0.368250	45.40	---	58.54	13.14	1000.0	9.000	N	ON	19.2
0.532500	45.05	---	56.00	10.95	1000.0	9.000	N	ON	19.2
0.537000	---	35.81	46.00	10.19	1000.0	9.000	N	ON	19.2
0.948750	44.42	---	56.00	11.58	1000.0	9.000	N	ON	19.2
1.128750	---	33.45	46.00	12.55	1000.0	9.000	N	ON	19.2
2.944500	---	30.83	46.00	15.17	1000.0	9.000	N	ON	19.1
3.115500	37.83	---	56.00	18.17	1000.0	9.000	N	ON	19.1
6.492750	---	33.26	50.00	16.74	1000.0	9.000	N	ON	19.1
7.597500	42.11	---	60.00	17.89	1000.0	9.000	N	ON	19.2
12.448500	37.98	---	60.00	22.02	1000.0	9.000	N	ON	19.4
12.529500	---	28.61	50.00	21.39	1000.0	9.000	N	ON	19.4

BLE, Channel No.: 0

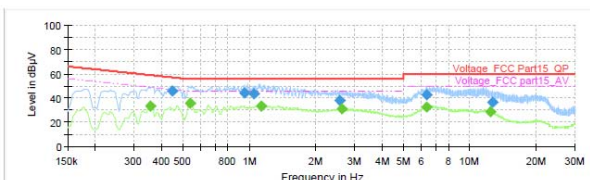
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.325500	---	31.61	49.57	17.96	1000.0	9.000	L1	ON	19.2
0.433500	---	37.25	47.19	9.93	1000.0	9.000	L1	ON	19.2
0.435750	47.08	---	57.14	10.06	1000.0	9.000	L1	ON	19.2
0.438000	46.34	---	57.10	10.76	1000.0	9.000	L1	ON	19.2
0.975750	---	33.22	46.00	12.78	1000.0	9.000	L1	ON	19.2
1.038750	41.90	---	56.00	14.10	1000.0	9.000	L1	ON	19.2
2.697000	---	30.16	46.00	15.84	1000.0	9.000	L1	ON	19.0
2.987250	36.53	---	56.00	19.47	1000.0	9.000	L1	ON	19.1
5.540000	---	32.54	50.00	17.46	1000.0	9.000	L1	ON	19.1
11.436000	40.52	---	60.00	19.48	1000.0	9.000	L1	ON	19.4
12.752250	---	30.58	50.00	19.42	1000.0	9.000	L1	ON	19.5
12.925500	37.56	---	60.00	22.44	1000.0	9.000	L1	ON	19.5

N Line



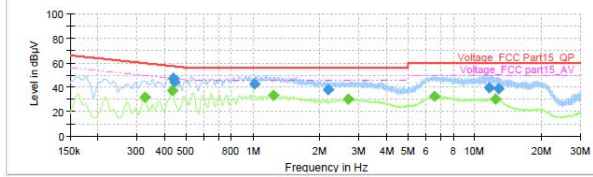
Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.354750	---	33.47	48.85	15.39	1000.0	9.000	N	ON	19.2
0.447000	45.80	---	56.93	11.13	1000.0	9.000	N	ON	19.2
0.537000	---	35.49	46.00	10.51	1000.0	9.000	N	ON	19.2
0.946500	44.05	---	56.00	11.95	1000.0	9.000	N	ON	19.2
1.052250	43.29	---	56.00	12.71	1000.0	9.000	N	ON	19.2
1.126500	---	33.49	46.00	12.51	1000.0	9.000	N	ON	19.2
2.568750	38.37	---	56.00	17.63	1000.0	9.000	N	ON	19.0
2.634000	---	31.08	46.00	14.92	1000.0	9.000	N	ON	19.0
6.330750	42.28	---	60.00	17.72	1000.0	9.000	N	ON	19.1
6.380250	---	32.49	50.00	17.51	1000.0	9.000	N	ON	19.1
12.408000	---	28.43	50.00	21.57	1000.0	9.000	N	ON	19.4
12.630750	36.72	---	60.00	23.28	1000.0	9.000	N	ON	19.4

BLE, Channel No.: 19



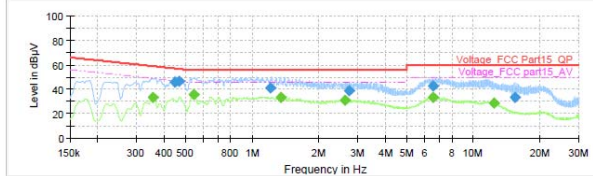
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.325500	---	31.49	49.57	18.08	1000.0	9.000	L1	ON	19.2
0.433500	---	37.11	47.19	10.07	1000.0	9.000	L1	ON	19.2
0.435750	47.03	---	57.14	10.11	1000.0	9.000	L1	ON	19.2
0.440250	44.25	---	57.06	12.81	1000.0	9.000	L1	ON	19.2
1.014000	42.73	---	56.00	13.27	1000.0	9.000	L1	ON	19.2
1.239000	---	33.20	46.00	12.80	1000.0	9.000	L1	ON	19.2
2.168250	37.88	---	56.00	18.12	1000.0	9.000	L1	ON	19.1
2.694750	---	30.20	46.00	15.80	1000.0	9.000	L1	ON	19.0
6.589500	---	32.80	50.00	17.20	1000.0	9.000	L1	ON	19.1
11.557500	39.30	---	60.00	20.70	1000.0	9.000	L1	ON	19.4
12.430500	---	30.56	50.00	19.44	1000.0	9.000	L1	ON	19.4
12.759000	39.00	---	60.00	21.00	1000.0	9.000	L1	ON	19.5

N Line

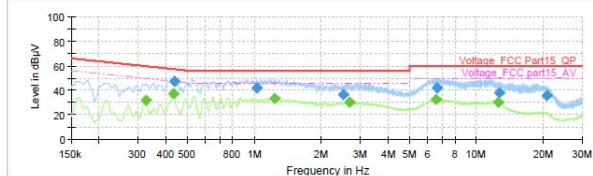


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.354750	---	33.38	48.85	15.47	1000.0	9.000	N	ON	19.2
0.447000	45.83	---	56.93	11.10	1000.0	9.000	N	ON	19.2
0.467250	46.62	---	56.56	9.94	1000.0	9.000	N	ON	19.2
0.546000	---	35.58	46.00	10.42	1000.0	9.000	N	ON	19.2
1.212000	41.28	---	56.00	14.72	1000.0	9.000	N	ON	19.2
1.347000	---	33.55	46.00	12.45	1000.0	9.000	N	ON	19.2
2.634000	---	31.12	46.00	14.88	1000.0	9.000	N	ON	19.0
2.744250	38.66	---	56.00	17.34	1000.0	9.000	N	ON	19.0
6.535500	---	33.06	50.00	16.94	1000.0	9.000	N	ON	19.1
6.589500	42.69	---	60.00	17.31	1000.0	9.000	N	ON	19.1
12.315750	---	28.50	50.00	21.50	1000.0	9.000	N	ON	19.4
15.486000	33.40	---	60.00	26.60	1000.0	9.000	N	ON	19.4

BLE, Channel No.: 39

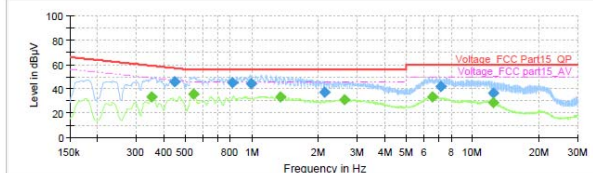
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.325500	---	31.40	49.57	18.16	1000.0	9.000	L1	ON	19.2
0.433500	---	37.06	47.19	10.13	1000.0	9.000	L1	ON	19.2
0.435750	47.05	---	57.14	10.10	1000.0	9.000	L1	ON	19.2
1.025250	41.80	---	56.00	14.20	1000.0	9.000	L1	ON	19.2
1.239000	---	33.35	46.00	12.65	1000.0	9.000	L1	ON	19.2
2.519250	36.50	---	56.00	19.50	1000.0	9.000	L1	ON	19.0
2.697000	---	30.21	46.00	15.79	1000.0	9.000	L1	ON	19.0
6.587250	---	32.48	50.00	17.52	1000.0	9.000	L1	ON	19.1
6.636750	41.79	---	60.00	18.21	1000.0	9.000	L1	ON	19.1
12.464250	---	30.18	50.00	19.82	1000.0	9.000	L1	ON	19.4
12.702750	38.12	---	60.00	21.88	1000.0	9.000	L1	ON	19.5
20.755500	35.77	---	60.00	24.23	1000.0	9.000	L1	ON	19.7

N Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.352500	---	33.35	48.90	15.55	1000.0	9.000	N	ON	19.2
0.447000	45.88	---	56.93	11.05	1000.0	9.000	N	ON	19.2
0.546000	---	35.57	46.00	10.43	1000.0	9.000	N	ON	19.2
0.816000	44.75	---	56.00	11.25	1000.0	9.000	N	ON	19.2
0.991500	44.15	---	56.00	11.85	1000.0	9.000	N	ON	19.2
1.347000	---	33.55	46.00	12.45	1000.0	9.000	N	ON	19.2
2.141250	37.00	---	56.00	19.00	1000.0	9.000	N	ON	19.1
2.636250	---	31.09	46.00	14.91	1000.0	9.000	N	ON	19.0
6.537500	---	33.01	50.00	16.99	1000.0	9.000	N	ON	19.1
7.140750	41.88	---	60.00	18.12	1000.0	9.000	N	ON	19.4
12.396750	---	28.34	50.00	21.66	1000.0	9.000	N	ON	19.2
12.421500	36.72	---	60.00	23.28	1000.0	9.000	N	ON	19.4

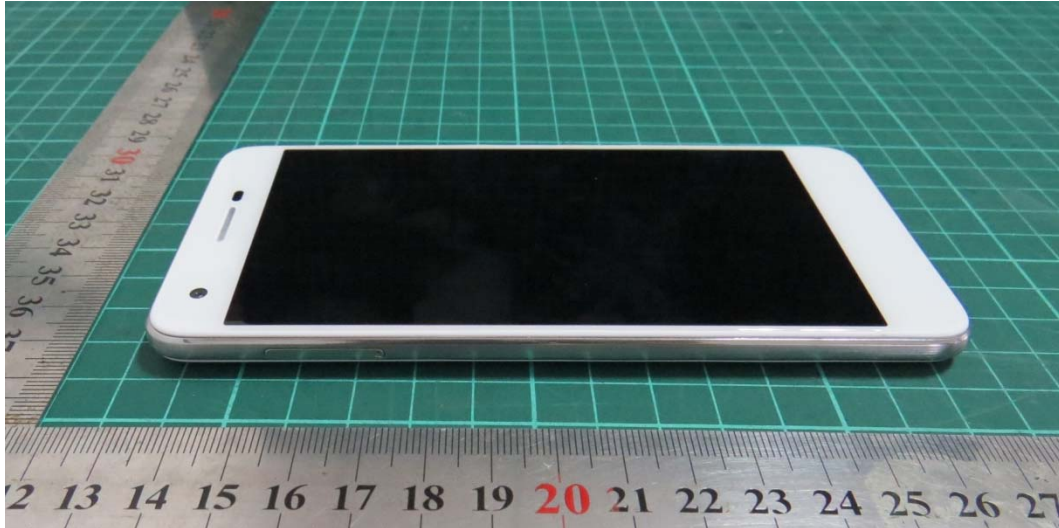
6. Main Test Instruments

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	2017-05-20	2018-05-19
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	2016-12-16	2017-12-15
LISN	ENV216	R&S	101171	2016-12-16	2019-12-15
Spectrum Analyzer	N9010A	Agilent	MY47191109	2017-05-20	2018-05-19
RF Cable	SMA 15cm	Agilent	0001	2017-02-06	2017-08-05

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

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



Front Side



Back Side

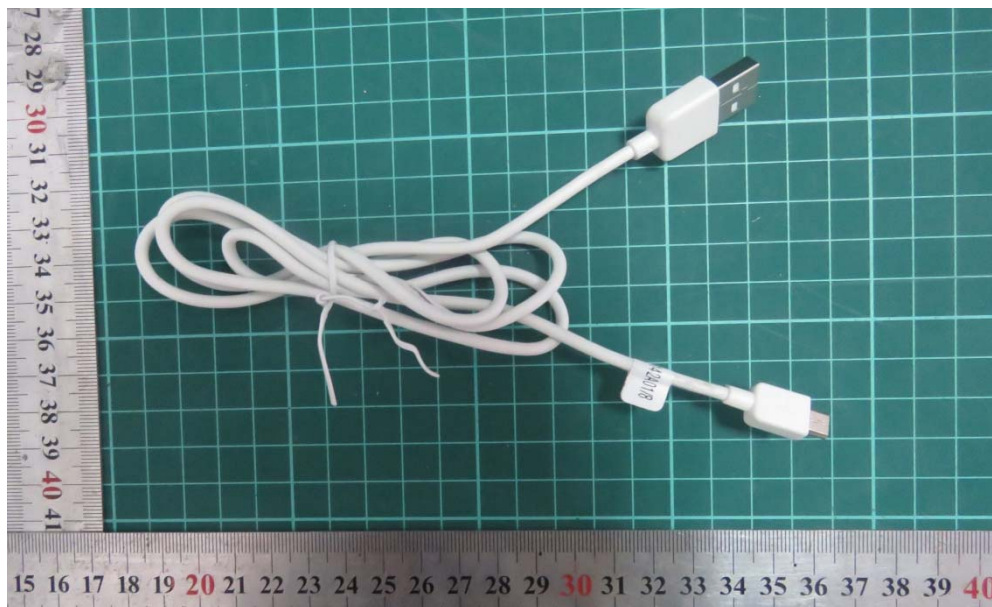
a: EUT



b: Adapter



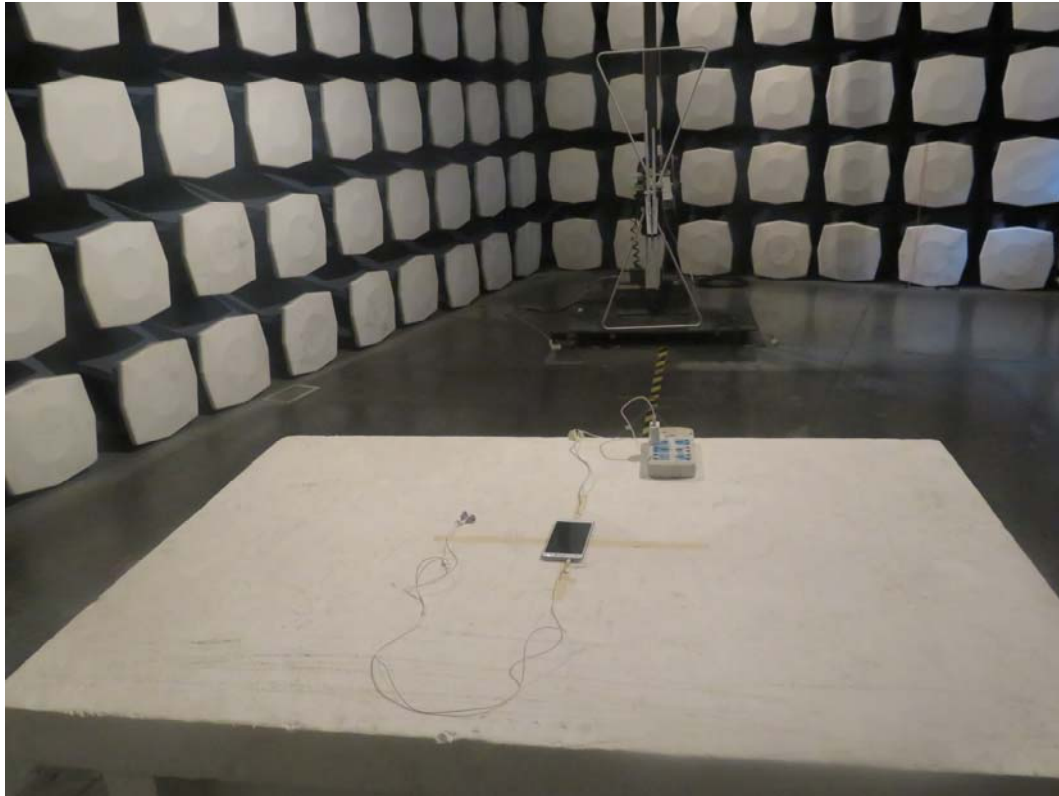
c: Earphone



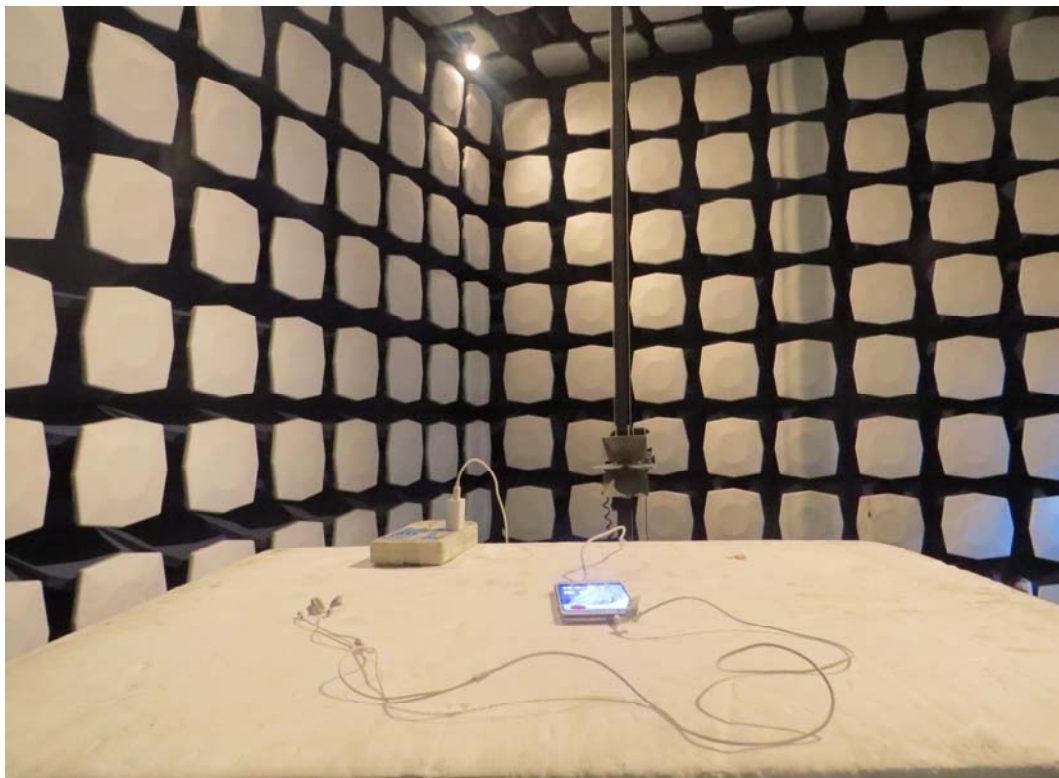
d: USB Cable

Picture 1 EUT and Accessory

A.2 Test Setup



30M Hz-1GHz



Above 1GHz

Picture 2 Radiated Emission Test Setup



Picture 3 Conducted Emission Test Setup