



中国认可
国际互认
检测
TESTING
CNAS L2264

RF TEST REPORT

Applicant ZTE Corporation

FCC ID SRQ-ZTEBLADEA521

Product LTE/WCDMA/GSM (GPRS)
Multi-Mode Digital Mobile Phone

Model ZTE BLADE A521; BLADE A521

Report No. RXA1704-0112RF04

Issue Date May 4, 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.

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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: April 11, 2017~ April 26, 2017			

1. Test Laboratory

1.1. Notes of the test report

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

1.2. Test facility

CNAS (accreditation number: L2264)

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

FCC (recognition number is 428261)

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

IC (recognition number is 8510A)

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

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

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

A2LA (Certificate Number: 3857.01)

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



1.3. Testing Location

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong
City: Shanghai
Post code: 201201
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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 A521; BLADE A521
IMEI:	863908030029060
Hardware Version:	csrB
Software Version:	ATT_MX_BA521_V1.0
Power Supply:	Battery/AC adapter
Antenna Type:	Internal Antenna
Antenna Connector:	A permanently attached antenna (meet with the standard FCC Part 15.203 requirement)
Antenna Gain:	0 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 : 12.94dBm BLE : -2.43dBm
Operating Frequency Range(s)	802.11b/g/n(HT20): 2412 ~ 2462 MHz BLE: 2402 ~2480 MHz
EUT Accessory	
Adapter	Manufacturer: SHENZHEN RUIJING INDUSTRIAL CO LTD Model: STC-A51A-Z Input power:100-240 VAC 50-60Hz 250mA Output power:5V DC 1000mA
Battery	Manufacturer: Zhongshan Tianmao Battery Co., Ltd Model: Li3824T44P4h716043 Power Rating: DC 3.85V, 2400mAh, Li-ion



Earphone	Manufacturer: Shen zhen FDC Electronic Co.,Ltd. Model: 500002134813
USB Cable	97cm Cable, Shielded
Note: The information of the EUT is declared by the manufacturer. Please refer to the specifications or user manual for details.	

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

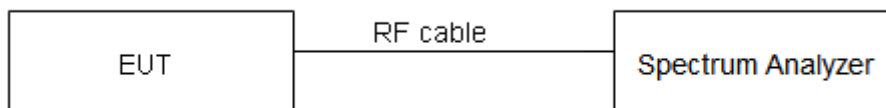
Ambient condition

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	$\leq 1\text{W}$ (30dBm)
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Measurement Uncertainty

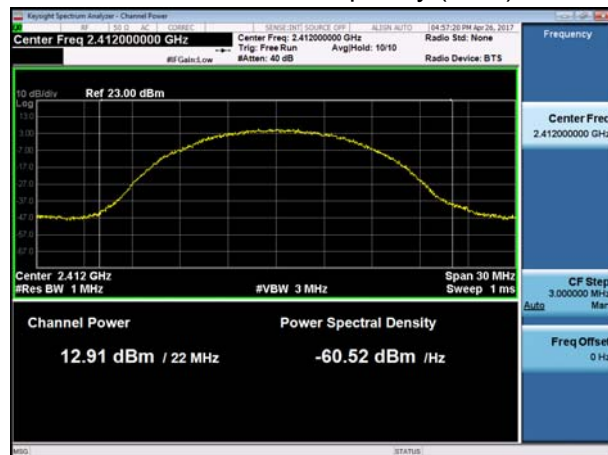
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.44$ dB.

Test Results

	Antenna Power Index		
Packet Type	CH1	CH6	CH11
802.11b	14	14	14
802.11g	13	13	13
802.11n HT20	12	12	12

Network Standards	Carrier frequency (MHz)	Average Output Power (dBm)	Limit (dBm)	Conclusion
802.11b	2412	12.91	30	PASS
	2437	12.94	30	PASS
	2462	12.74	30	PASS
802.11g	2412	8.50	30	PASS
	2437	9.17	30	PASS
	2462	9.09	30	PASS
802.11n HT20	2412	8.33	30	PASS
	2437	8.93	30	PASS
	2462	8.89	30	PASS
Bluetooth (Low Energy)	2402	-4.25	30	PASS
	2440	-2.43	30	PASS
	2480	-3.62	30	PASS

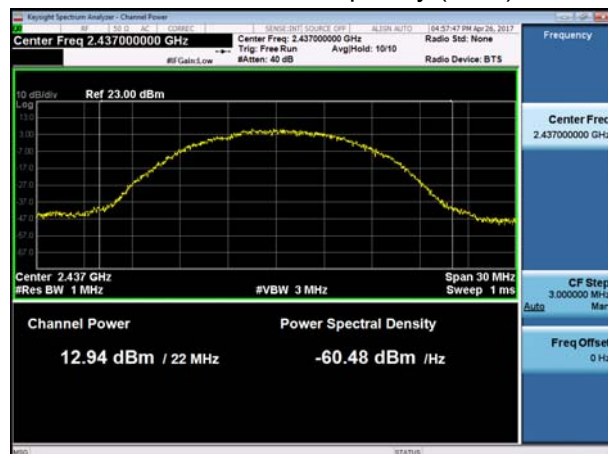
802.11b CH1, Carrier frequency (MHz): 2412



802.11g CH1, Carrier frequency (MHz): 2412



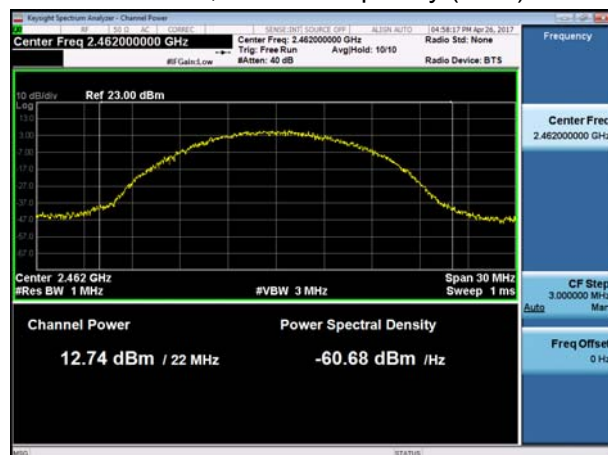
802.11b CH6, Carrier frequency (MHz): 2437



802.11g CH6, Carrier frequency (MHz): 2437



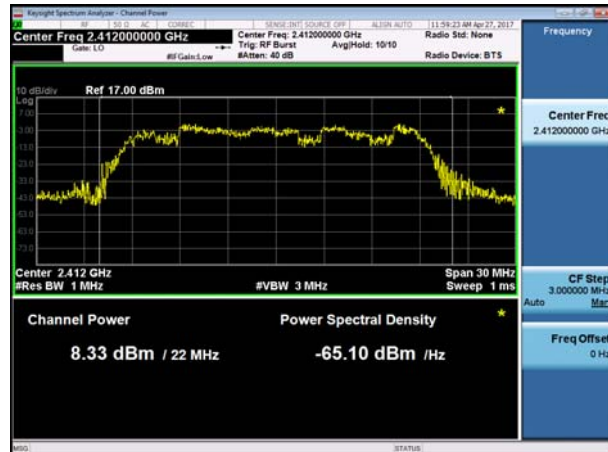
802.11b CH11, Carrier frequency (MHz): 2462



802.11g CH11, Carrier frequency (MHz): 2462



802.11n20 CH1, Carrier frequency (MHz): 2412



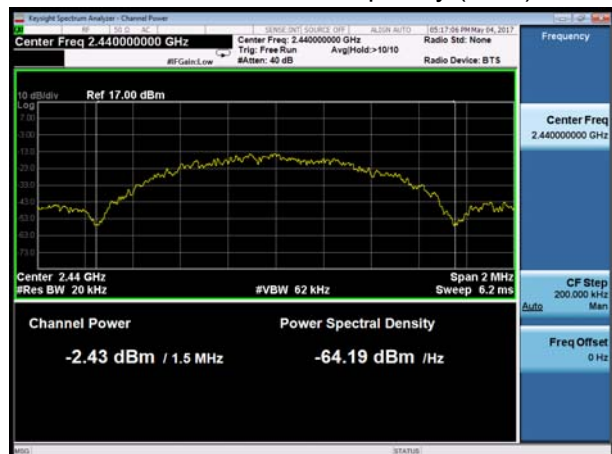
BLE Channel 0, Carrier frequency (MHz): 2402



802.11n20 CH6, Carrier frequency (MHz): 2437



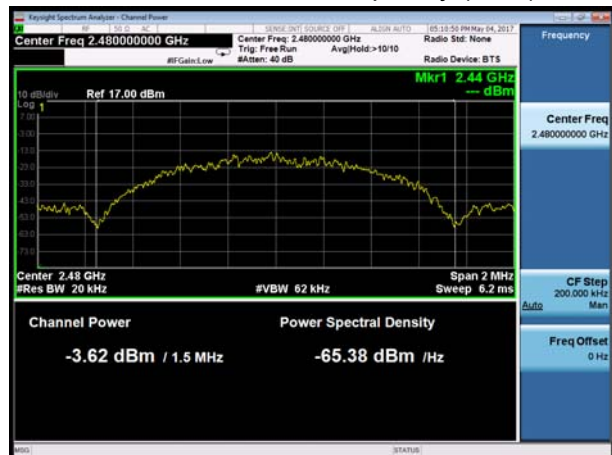
BLE Channel 19, Carrier frequency (MHz): 2440



802.11n20 CH11, Carrier frequency (MHz): 2462



BLE Channel 39, Carrier frequency (MHz): 2462



5.2. 6dB Bandwidth

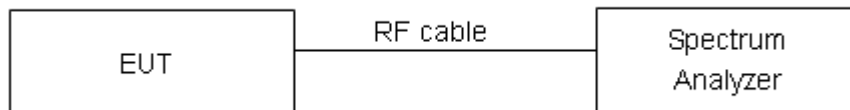
Ambient condition

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	12.998	9.420	500	PASS
	2437	12.823	8.437	500	PASS
	2462	12.891	8.419	500	PASS
802.11g	2412	16.517	16.53	500	PASS
	2437	16.468	16.50	500	PASS
	2462	16.485	16.49	500	PASS
802.11n HT20	2412	17.714	17.78	500	PASS
	2437	17.694	17.78	500	PASS
	2462	17.701	17.73	500	PASS
Bluetooth (Low Energy)	2402	1.0893	0.669	500	PASS
	2440	1.0869	0.670	500	PASS
	2480	1.0864	0.667	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



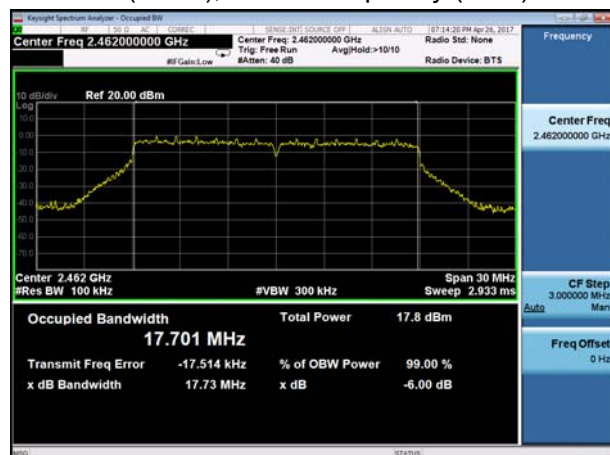
802.11n(HT20), Carrier frequency (MHz): 2437



BLE Carrier frequency (MHz): 2440



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



BLE Carrier frequency (MHz): 2480



5.3. Band Edge

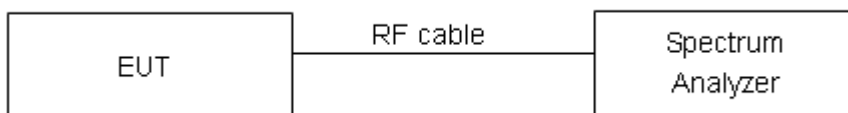
Ambient condition

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

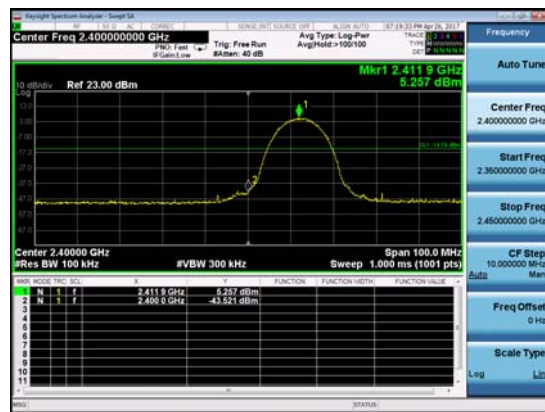
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
2GHz-3GHz	1.407 dB

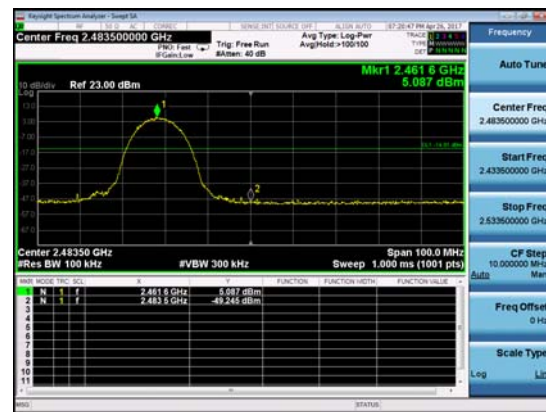


Test Results: PASS

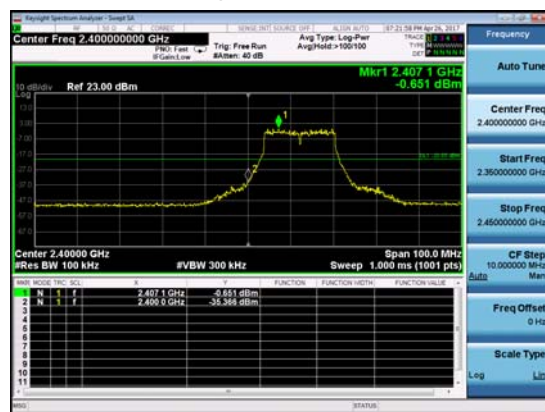
802.11b, Channel No.: 1



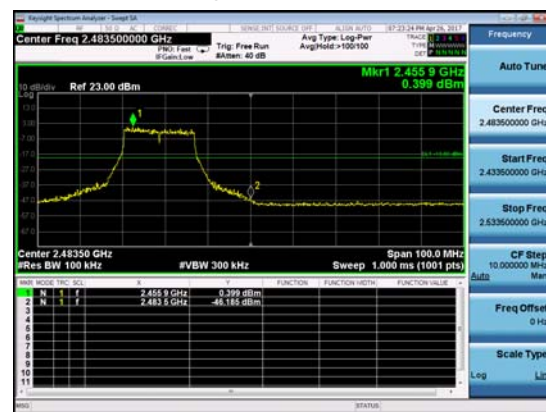
802.11b, Channel No.: 11



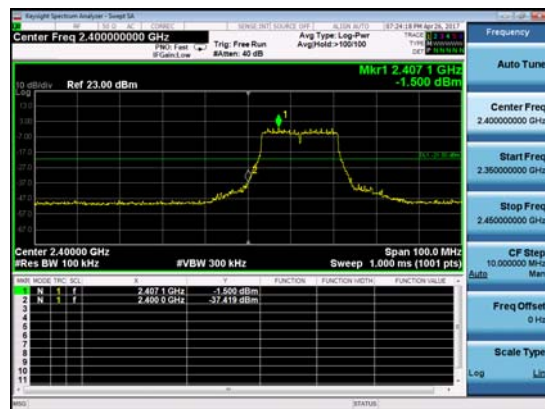
802.11g, Channel No.: 1



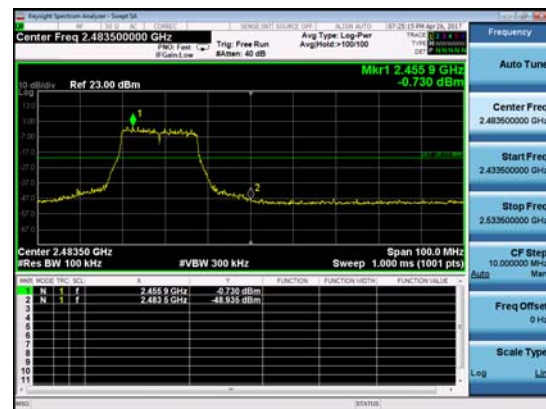
802.11g, Channel No.: 11



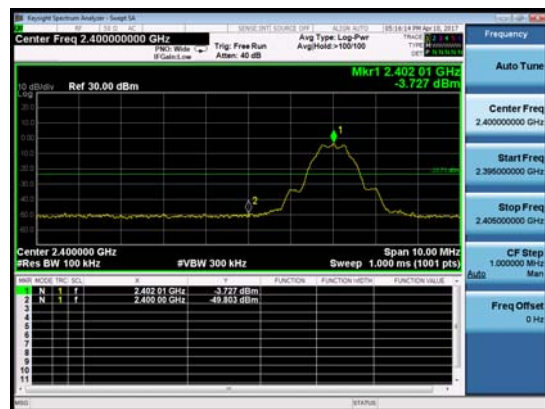
802.11n(HT20), Channel No.: 1



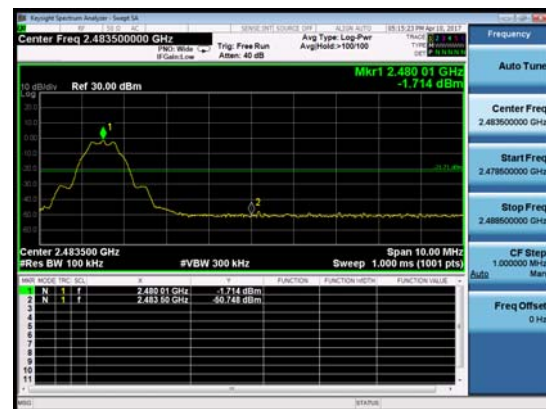
802.11n(HT20), Channel No.: 11



BLE, Channel No.: 0



BLE, Channel No.: 39



5.4. Power Spectral Density

Ambient condition

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

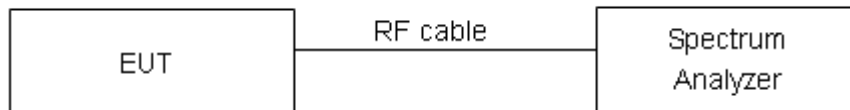
Method of Measurement

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

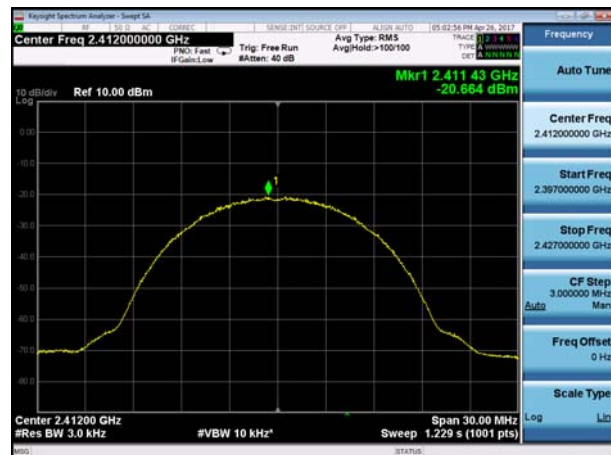
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.75\text{dB}$.

Test Results:

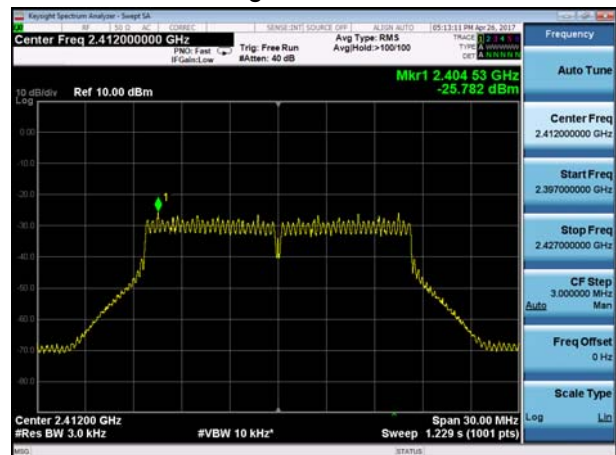
Network Standards	Channel Number	Power Spectral Density (dBm / 3kHz)	Limit (dBm / 3kHz)	Conclusion
802.11b	1	-20.664	8	PASS
	6	-19.840	8	PASS
	11	-20.055	8	PASS
802.11g	1	-25.782	8	PASS
	6	-25.599	8	PASS
	11	-24.939	8	PASS
802.11n HT20	1	-26.339	8	PASS
	6	-26.072	8	PASS
	11	-26.336	8	PASS
Bluetooth (Low Energy)	0	-22.016	8	PASS
	19	-19.390	8	PASS
	39	-20.228	8	PASS



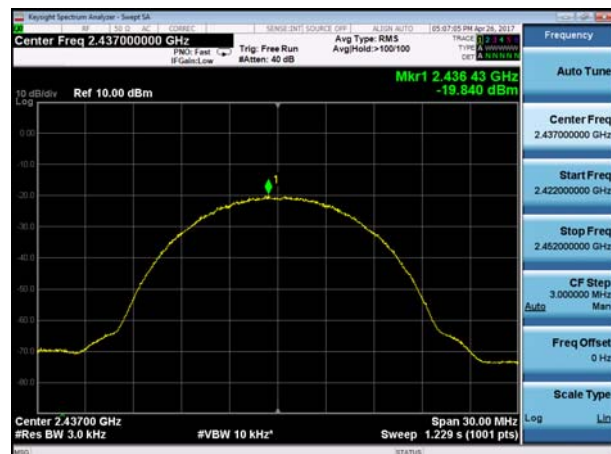
802.11b, Channel No.: 1



802.11g, Channel No.: 1



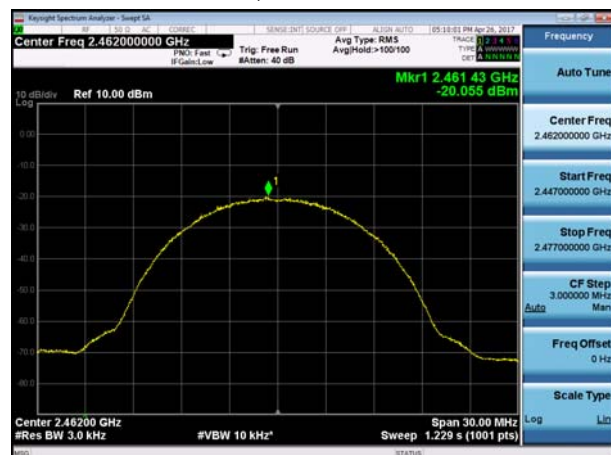
802.11b, Channel No.: 6



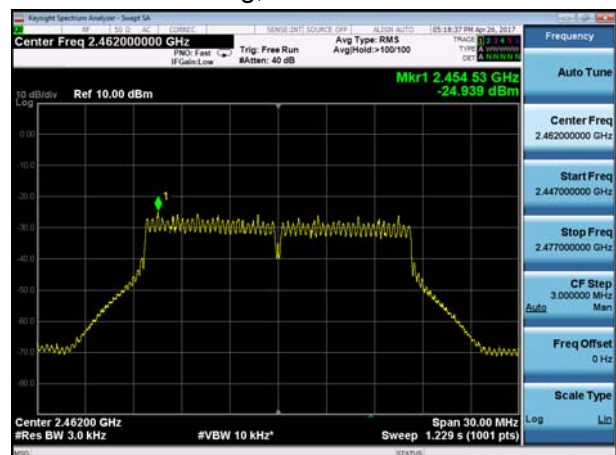
802.11g, Channel No.: 6



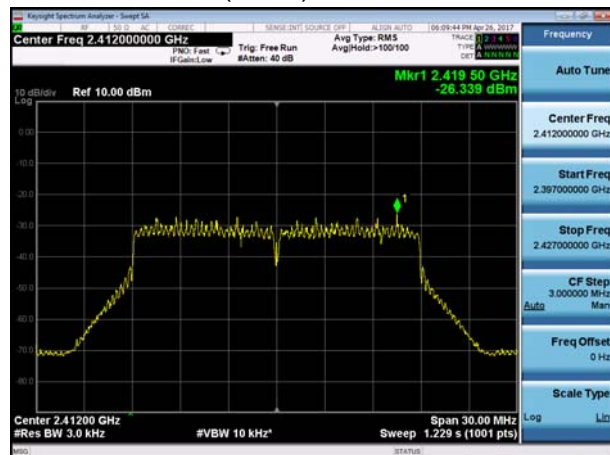
802.11b, Channel No.: 11



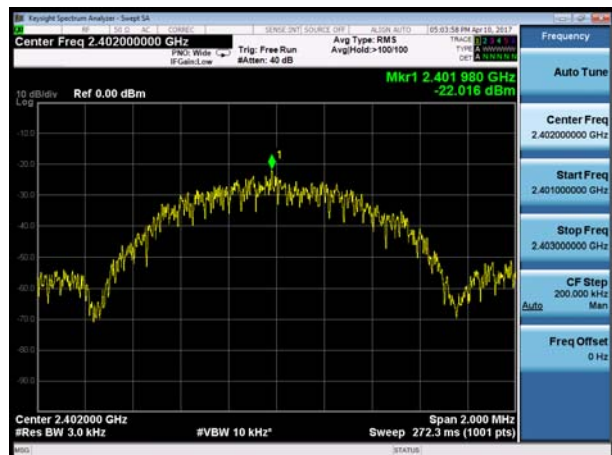
802.11g, Channel No.: 11



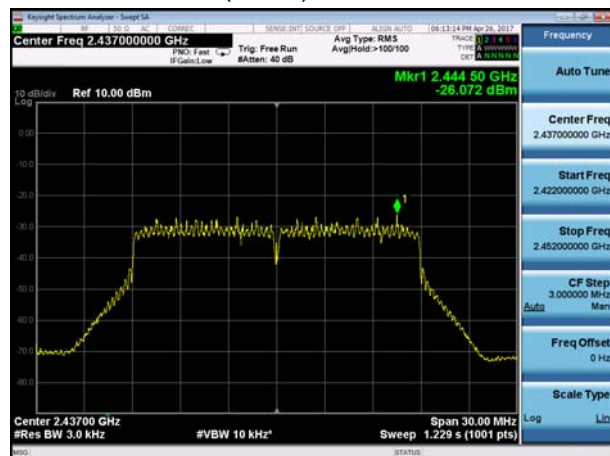
802.11n(HT20), Channel No. 1



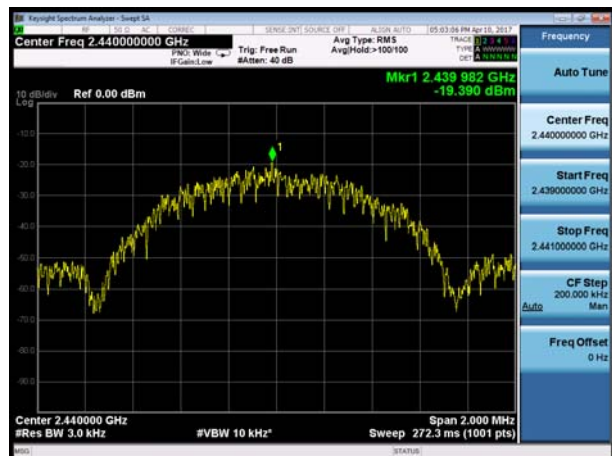
BLE, Channel No.: 0



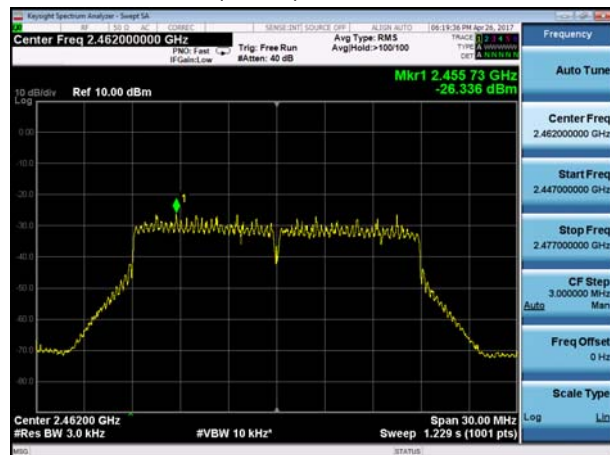
802.11n(HT20), Channel No. 6



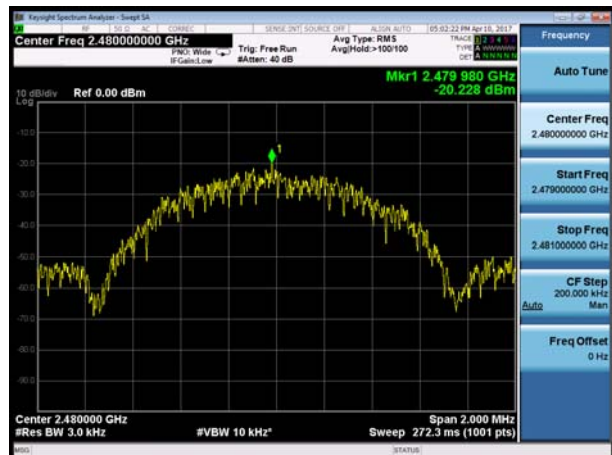
BLE, Channel No.: 19



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. RBW and VBW are set to 100 kHz, Sweep is set to ATUO.

The test is in transmitting mode.

Test setup



Limits

Rule Part 15.247(d) pacifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.”

Network Standards	Carrier frequency (MHz)	Reference value (dBm)	Limit(dBm)
802.11b	2412	19.352	-0.648
	2437	21.217	1.217
	2462	20.575	0.575
802.11g	2412	14.084	-5.916
	2437	15.176	-4.824
	2462	15.656	-4.344
802.11n HT20	2412	12.880	-7.120
	2437	14.052	-5.948
	2462	15.300	-4.700
Bluetooth (Low Energy)	2402	12.483	-7.517
	2440	15.111	-4.889
	2480	13.946	-6.054

Measurement Uncertainty

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



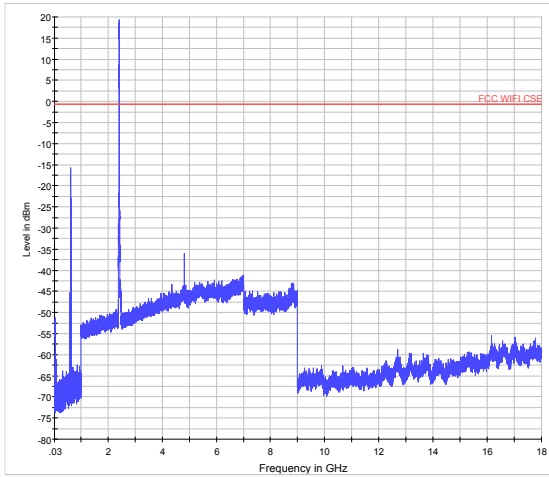
Frequency	Uncertainty
100kHz-2GHz	0.684 dB
2GHz-26GHz	1.407 dB

**Test Results:**

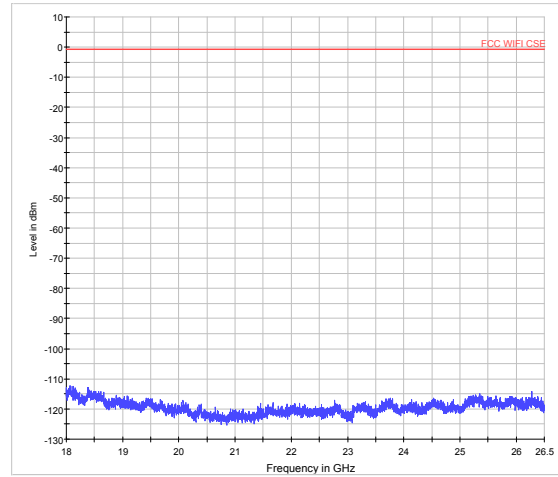
If disturbances were found more than 20dB below limit line, the mark is not required for the EUT.
The signal beyond the limit is carrier.

The signal beyond the limit is carrier

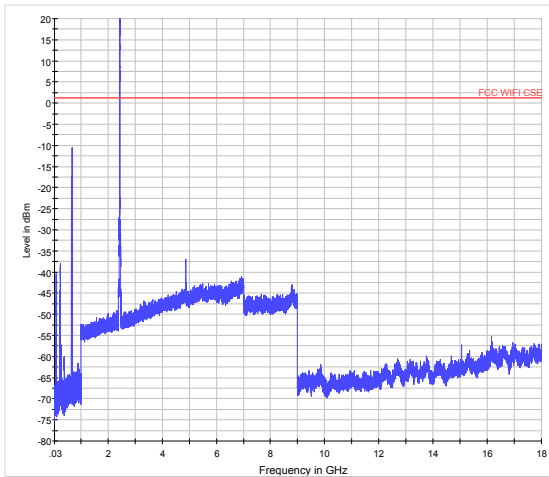
Test Data File Name	Frequency (MHz)	Peak (dBm)	Limit (dBm)	Margin (dB)
CSE_ WIFI b CH01_0.03-18GHz	619.0	-15.80	-0.65	15.15
CSE_ WIFI b CH06_0.03-18GHz	669.0	-10.51	1.22	11.73
CSE_ WIFI b CH11_0.03-18GHz	719.2	-10.51	0.57	11.09



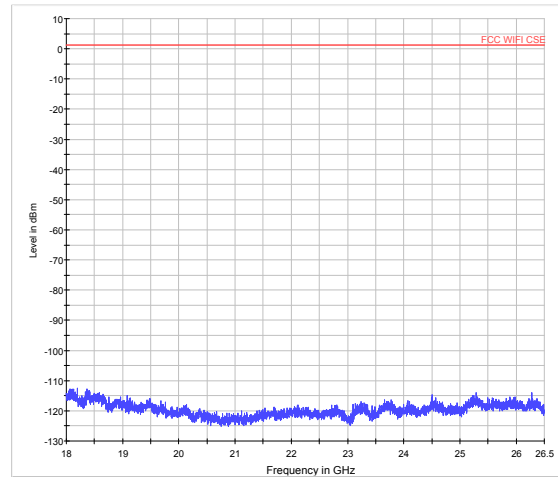
802.11b CH1 30MHz to 18GHz



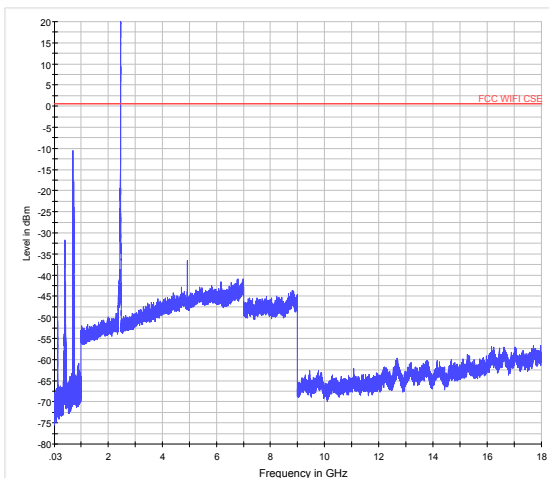
802.11b CH1 18GHz to 26.5GHz



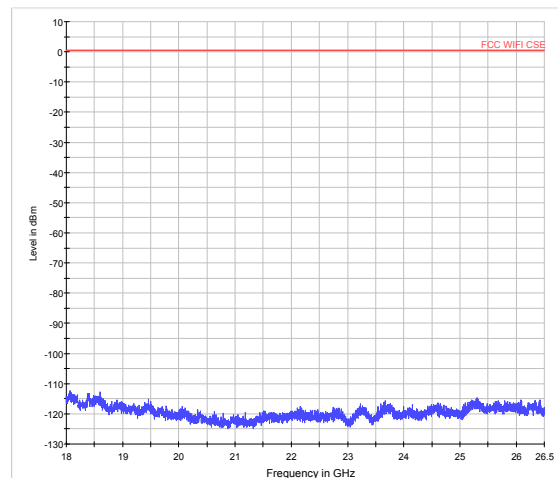
802.11b CH6 30MHz to 18GHz



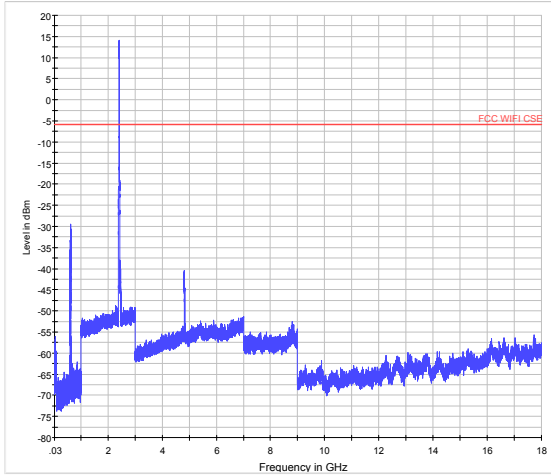
802.11b CH6 18GHz to 26.5GHz



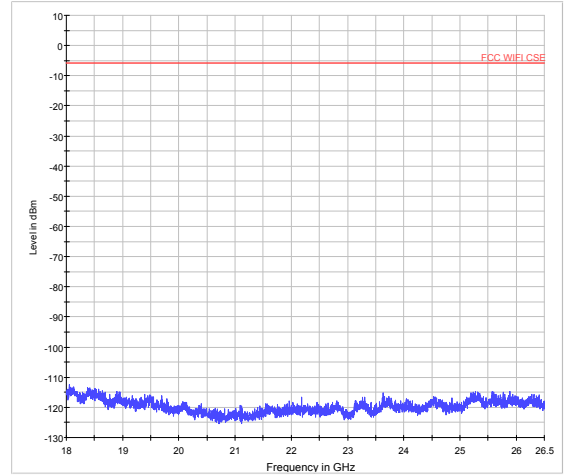
802.11b CH11 30MHz to 18GHz



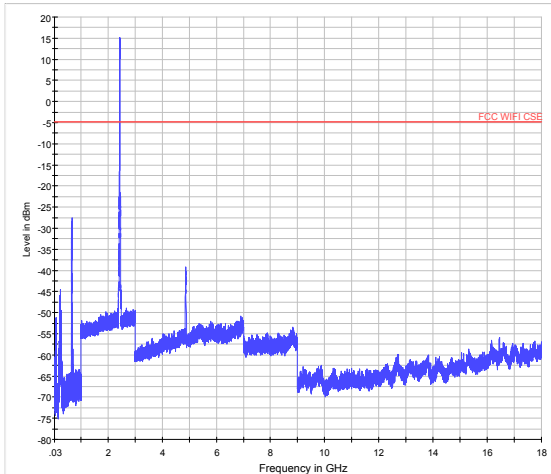
802.11b CH11 18GHz to 26.5GHz



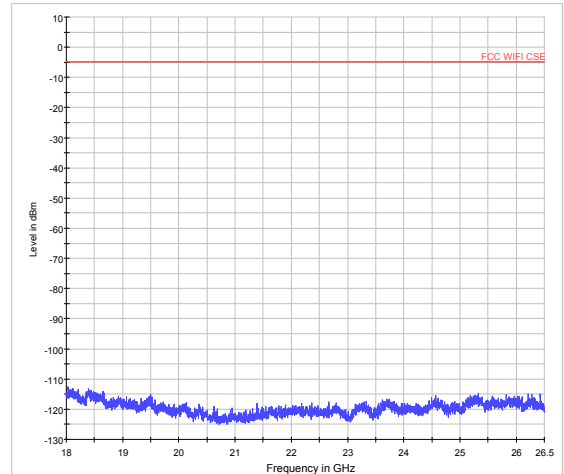
802.11g CH1 30MHz to 18GHz



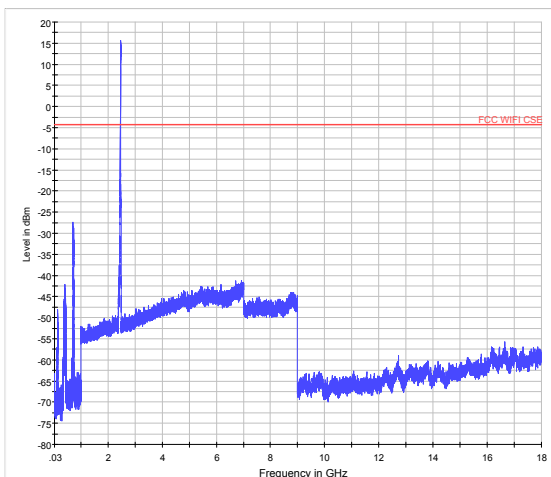
802.11g CH1 18GHz to 26.5GHz



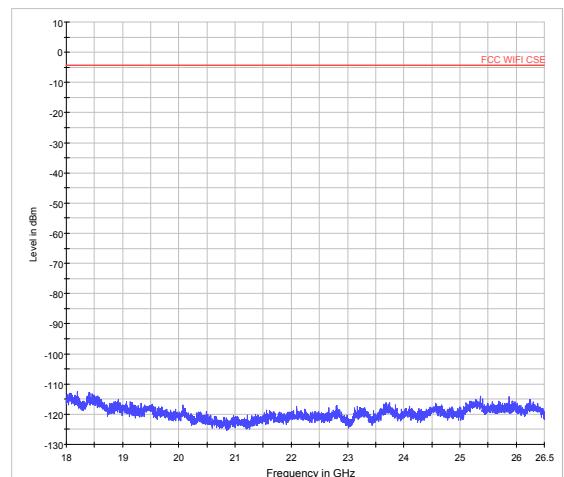
802.11g CH6 30MHz to 18GHz



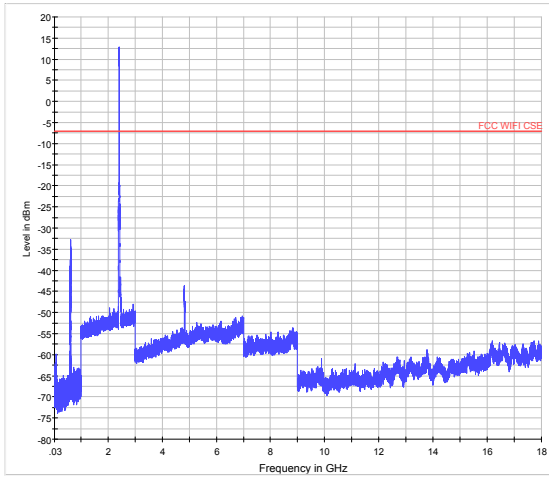
802.11g CH6 18GHz to 26.5GHz



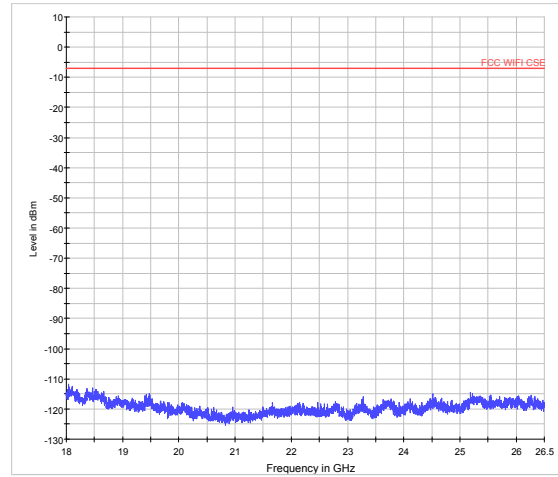
802.11g CH11 30MHz to 18GHz



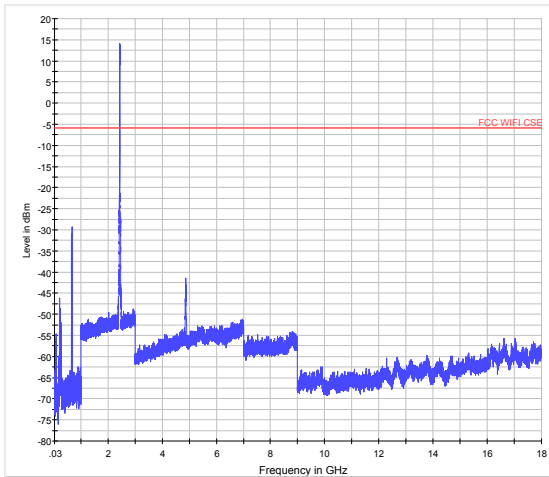
802.11g CH11 18GHz to 26.5GHz



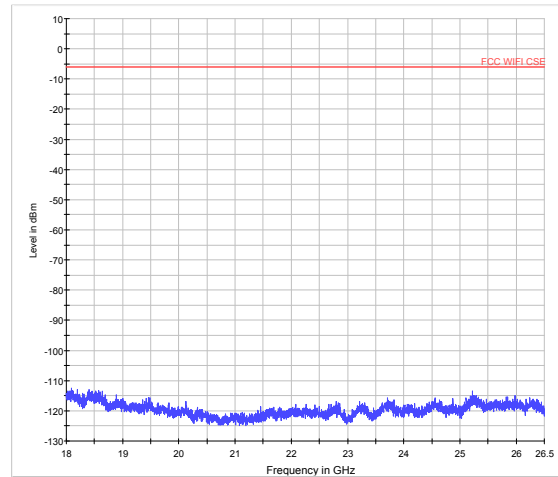
802.11n (HT20) CH1 30MHz to 18GHz



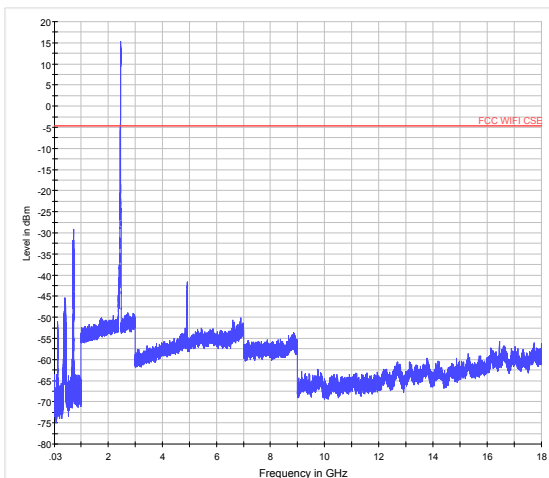
802.11n (HT20) CH1 18GHz to 26.5GHz



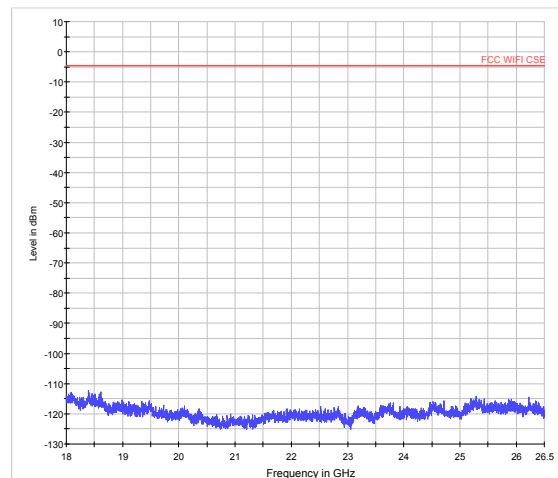
802.11n (HT20) CH6 30MHz to 18GHz



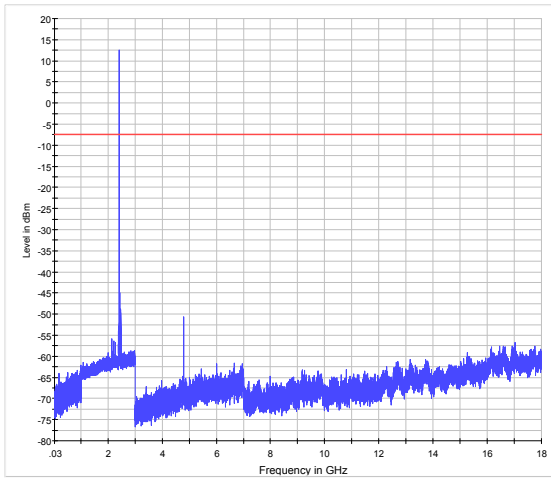
802.11n (HT20) CH6 18GHz to 26.5GHz



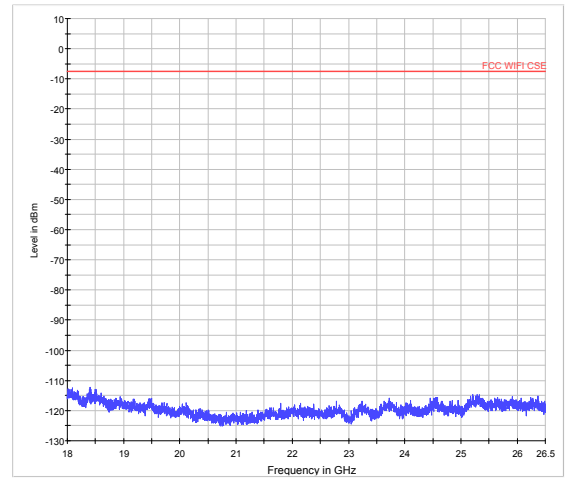
802.11n (HT20) CH11 30MHz to 18GHz



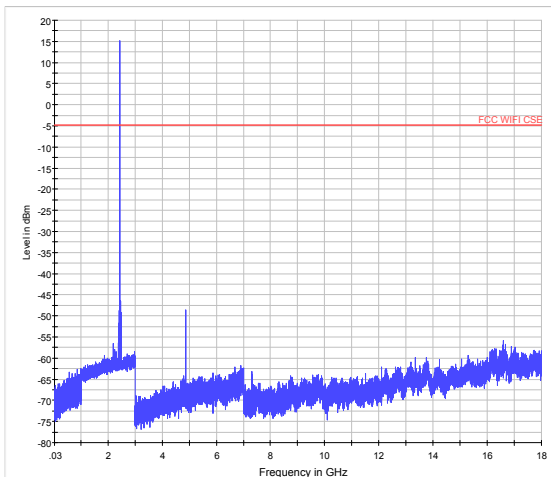
802.11n (HT20) CH11 18GHz to 26.5GHz



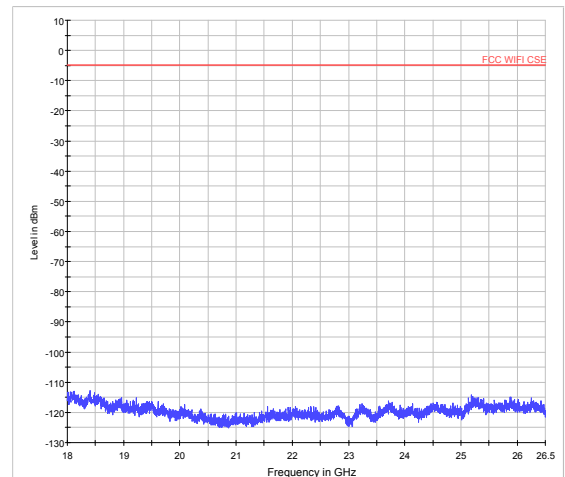
BLE CH0 30MHz to 18GHz



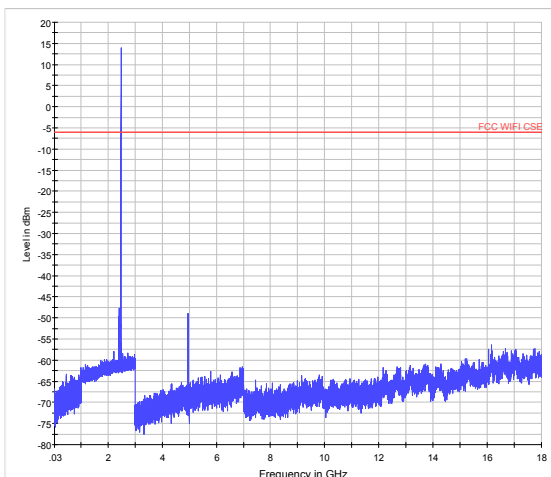
BLE CH0 18GHz to 26.5GHz



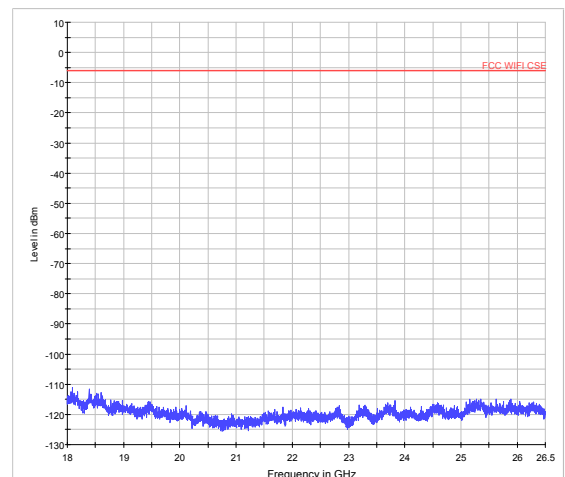
BLE CH19 30MHz to 18GHz



BLE CH19 18GHz to 26.5GHz



BLE CH39 30MHz to 18GHz



BLE CH39 18GHz to 26.5GHz

5.6. Radiated Emissions in the Restricted Band

Ambient condition

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

Method of Measurement

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

Set the spectrum analyzer in the following:

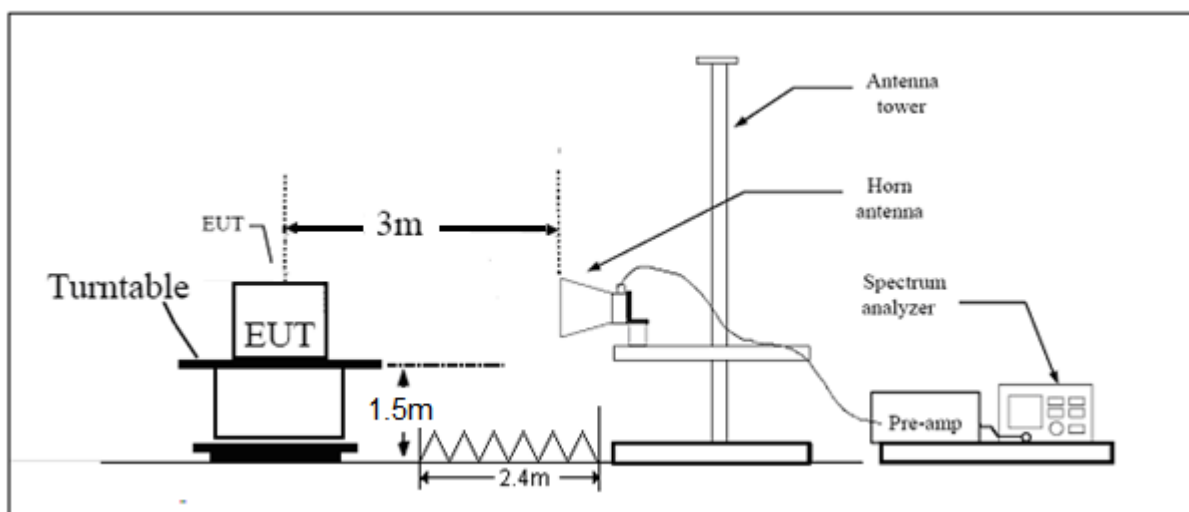
- (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz / VBW=1MHz / Sweep=AUTO

This setting method can refer to **KDB 558074**.

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

The test is in transmitting mode.

Test setup



Note: Area side: 2.4mX3.6m

Limits

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

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41			

Limit in restricted band

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

§15.35(b)

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

Peak Limit=74 dBuV/m

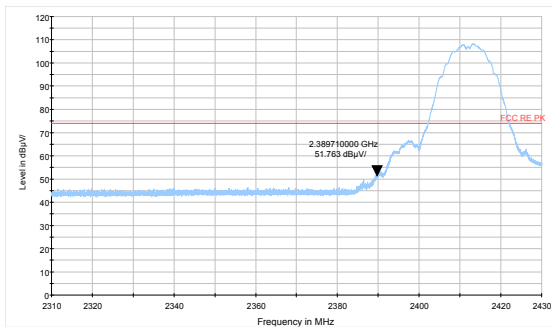
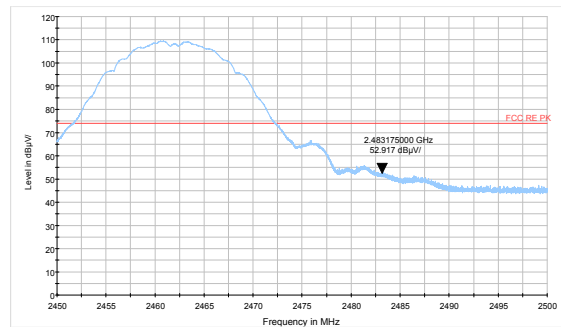
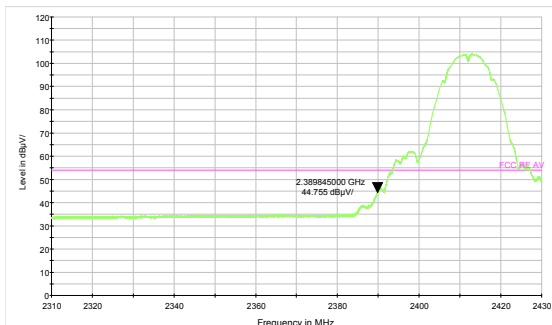
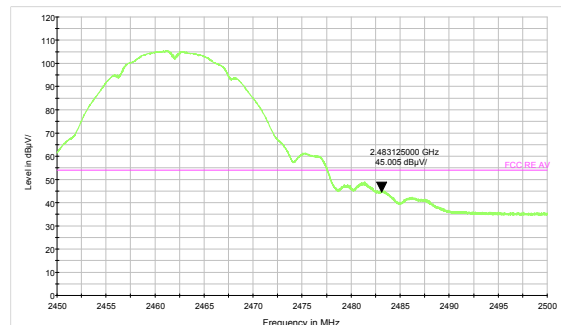
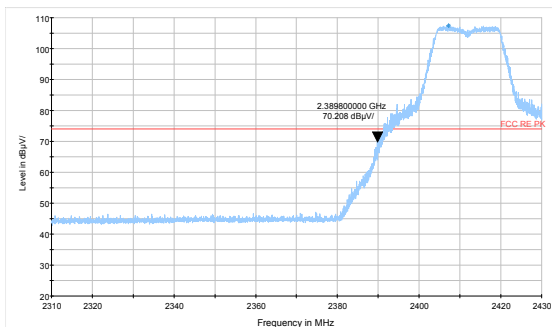
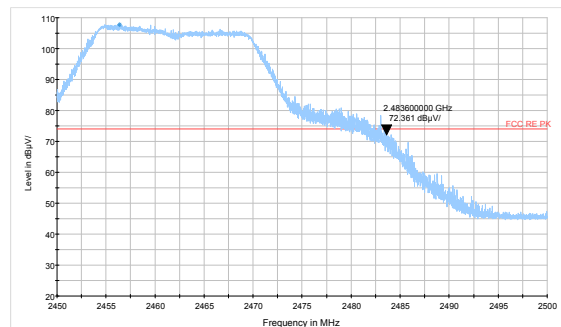
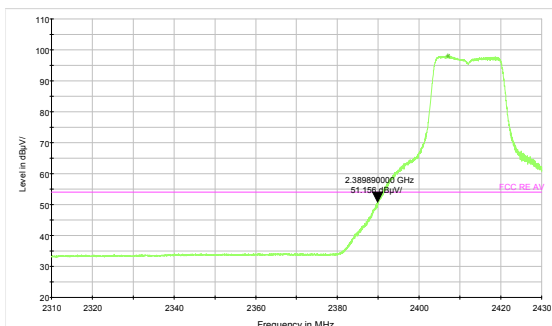
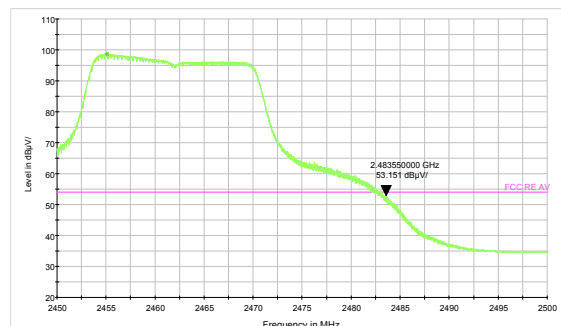
Average Limit=54 dBuV/m

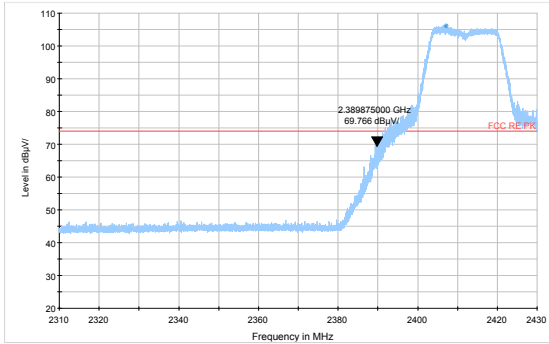
Measurement Uncertainty

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

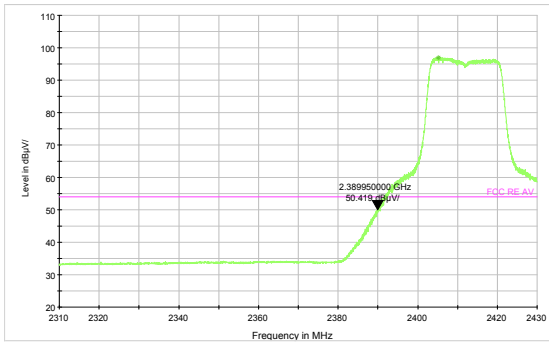
**Test Results:****PASS**

The signal beyond the limit is carrier.

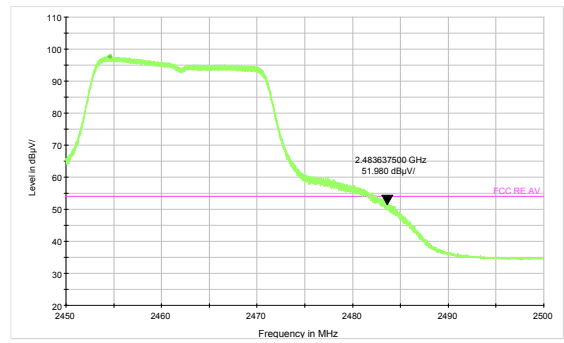
802.11b-Channel 1: Peak**802.11b-Channel 11: Peak****802.11b-Channel 1: Average****802.11b-Channel 11: Average****802.11g-Channel 1: Peak****802.11g-Channel 11: Peak****802.11g-Channel 1: Average****802.11g-Channel 11: Average****802.11n HT20 -Channel 1: Peak****802.11n HT20-Channel 11: Peak**



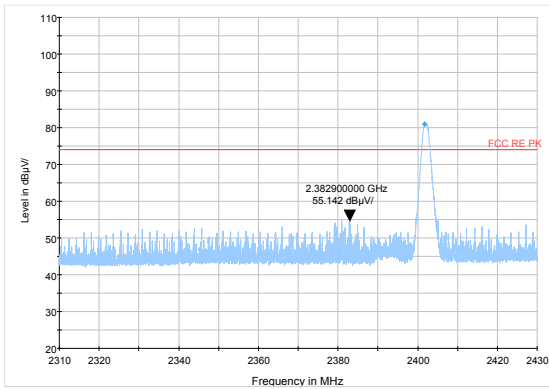
802.11n HT20-Channel 1: Average



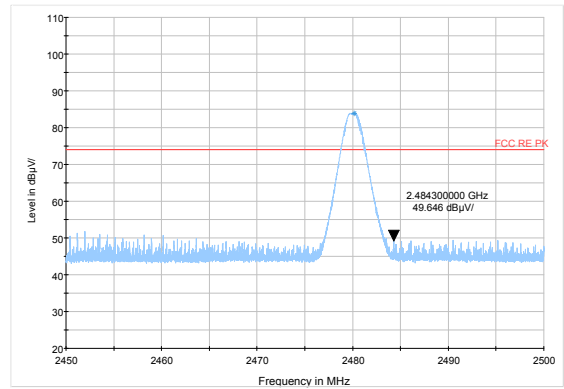
802.11n HT20-Channel 11: Average



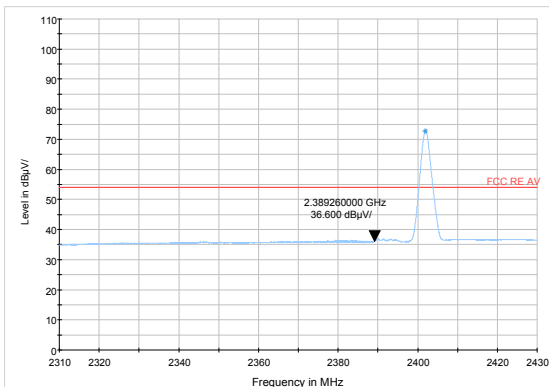
BLE -Channel 0: Peak



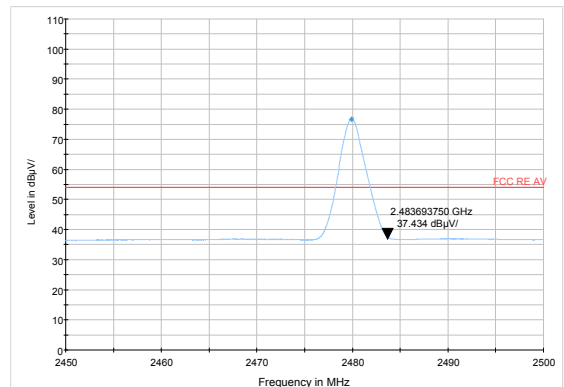
BLE -Channel 39: Peak



BLE -Channel 0: Average



BLE -Channel 39: Average



5.7. Radiates Emission

Ambient condition

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

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10-2013. The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration.

Sweep the whole frequency band through the range from 9 kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

During the test, below 30MHz, the center of the loop shall be 1 meters; above 30MHz, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

Set the spectrum analyzer in the following:

Below 1GHz (detector: Peak and Quasi-Peak)

RBW=100 kHz / VBW=300 kHz / Sweep=AUTO

Above 1GHz (detector: Peak):

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

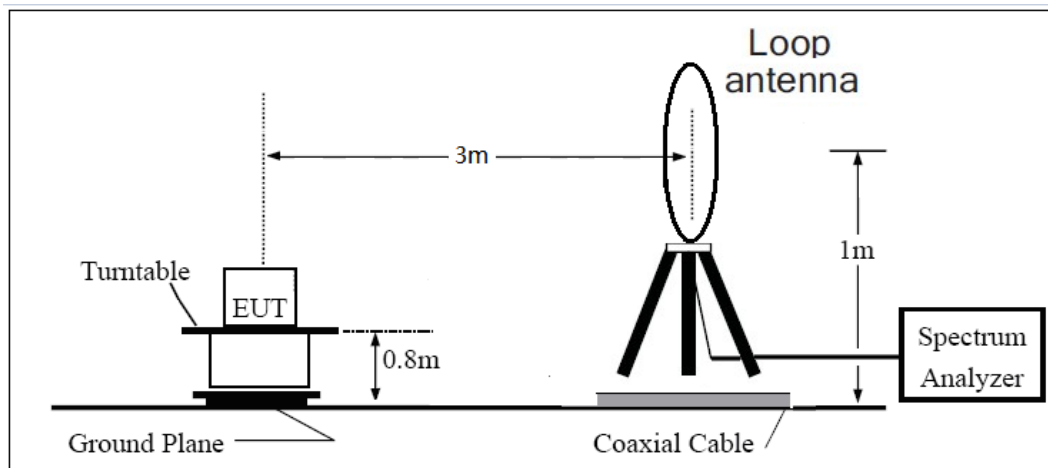
(b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

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

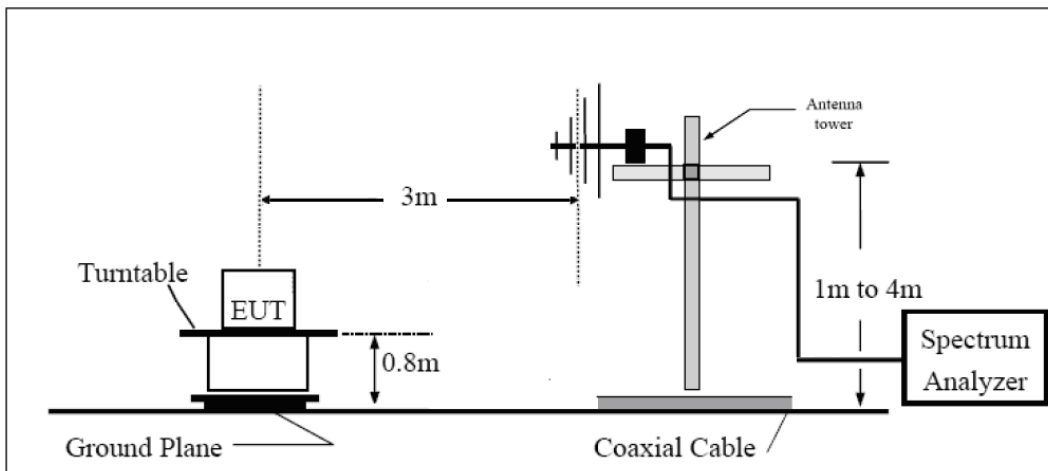
The test is in transmitting mode.

Test setup

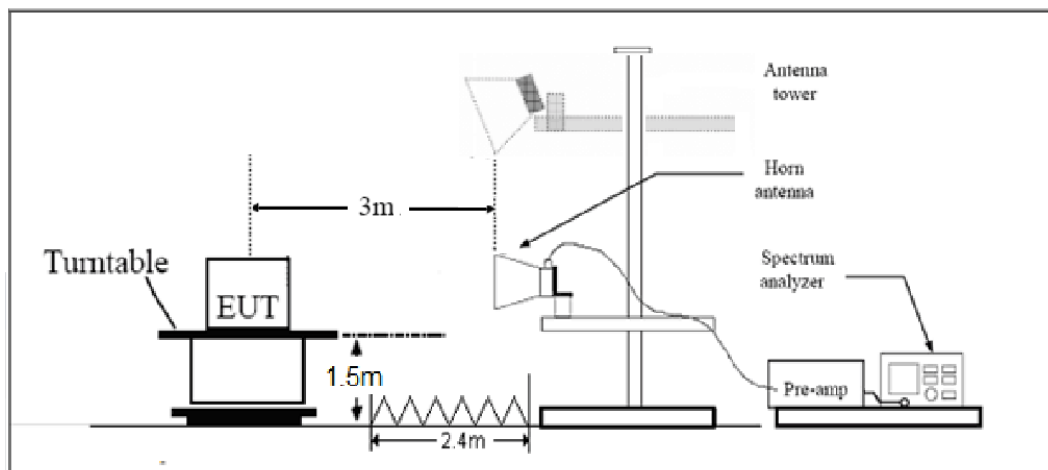
9KHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

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

Limit in restricted band

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

§15.35(b)

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

Measurement Uncertainty

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

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

Test result

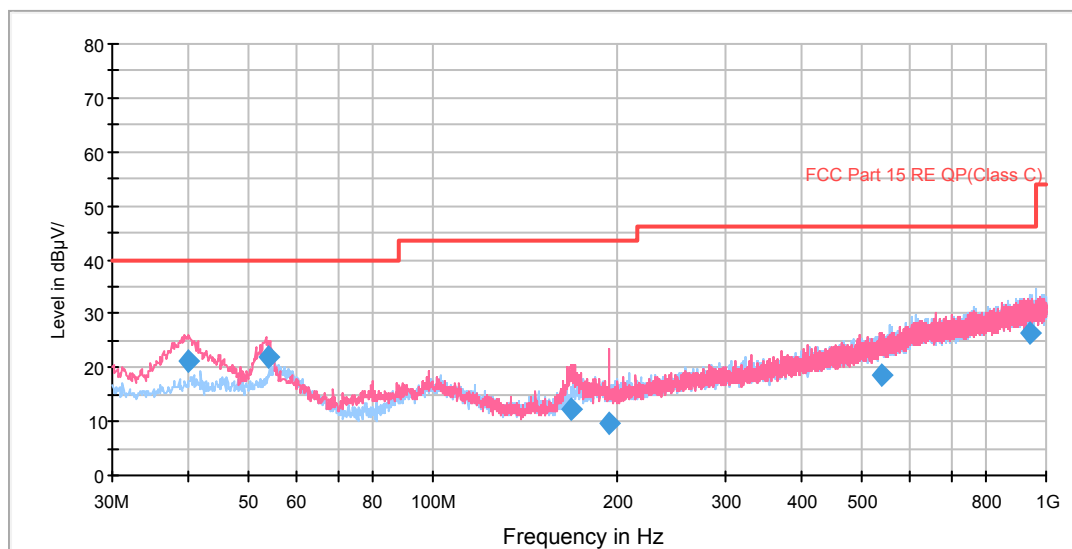
Sweep from 9 kHz to 30MHz, and the emissions more than 20 dB below the permissible value are not reported.

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

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

802.11b CH1

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

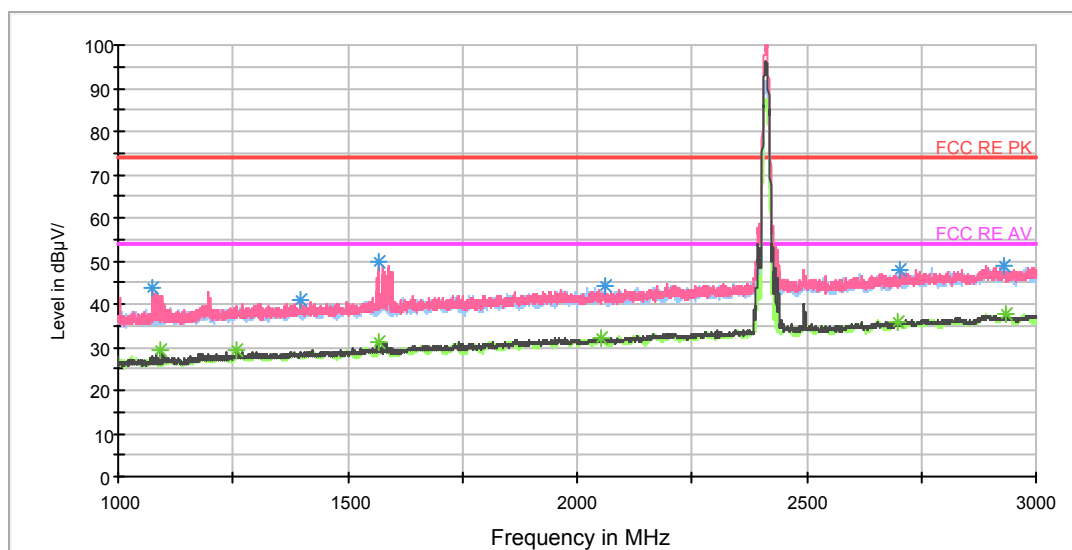
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.023750	21.3	100.0	V	269.0	8.0	13.3	18.7	40.0
54.010000	21.8	100.0	V	269.0	8.8	13.0	18.2	40.0
167.580000	12.2	100.0	V	352.0	1.9	10.3	31.3	43.5
193.732500	9.7	100.0	V	352.0	-2.1	11.8	33.8	43.5
538.963750	18.7	125.0	V	0.0	-2.7	21.4	27.3	46.0
943.462500	26.2	100.0	H	346.0	-1.0	27.2	19.8	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

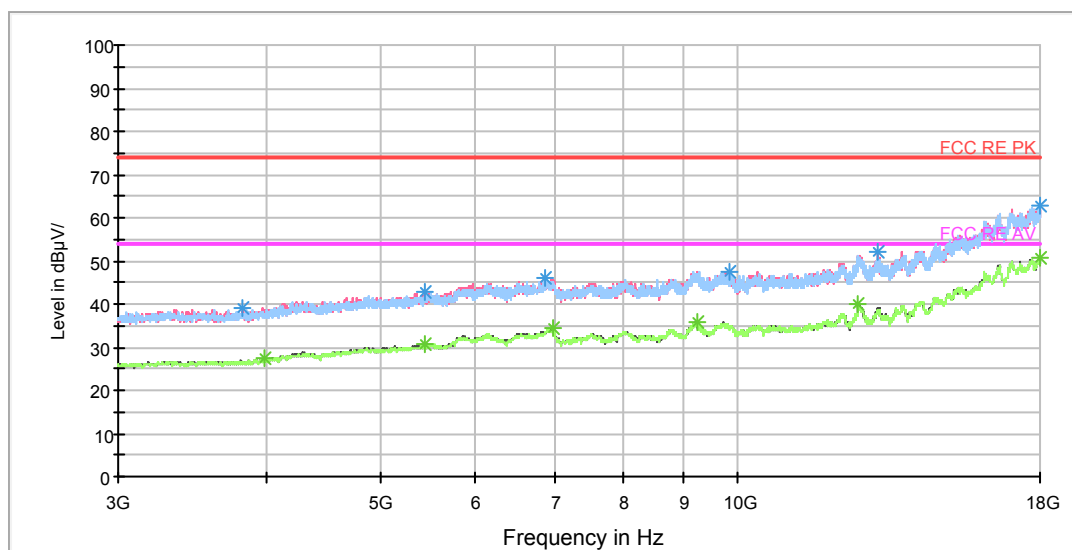
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1073.750000	43.6	100.0	V	175.0	52.4	-8.8	30.4	74
1397.750000	40.7	100.0	V	251.0	47.8	-7.1	33.3	74
1567.000000	49.6	100.0	V	251.0	56.2	-6.6	24.4	74
2059.750000	44.0	100.0	V	0.0	47.1	-3.1	30.0	74
2703.250000	47.7	100.0	V	239.0	47.7	0.0	26.3	74
2929.250000	49.1	100.0	V	0.0	47.4	1.7	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)
1091.250000	29.3	100.0	V	239.0	38.2	-8.9	24.7	54
1257.500000	29.2	100.0	V	193.0	37.0	-7.8	24.8	54
1568.000000	31.2	100.0	V	251.0	37.8	-6.6	22.8	54
2052.500000	32.2	100.0	H	107.0	35.4	-3.2	21.8	54
2697.500000	35.9	100.0	H	357.0	35.9	0.0	18.1	54
2936.000000	37.7	100.0	H	259.0	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

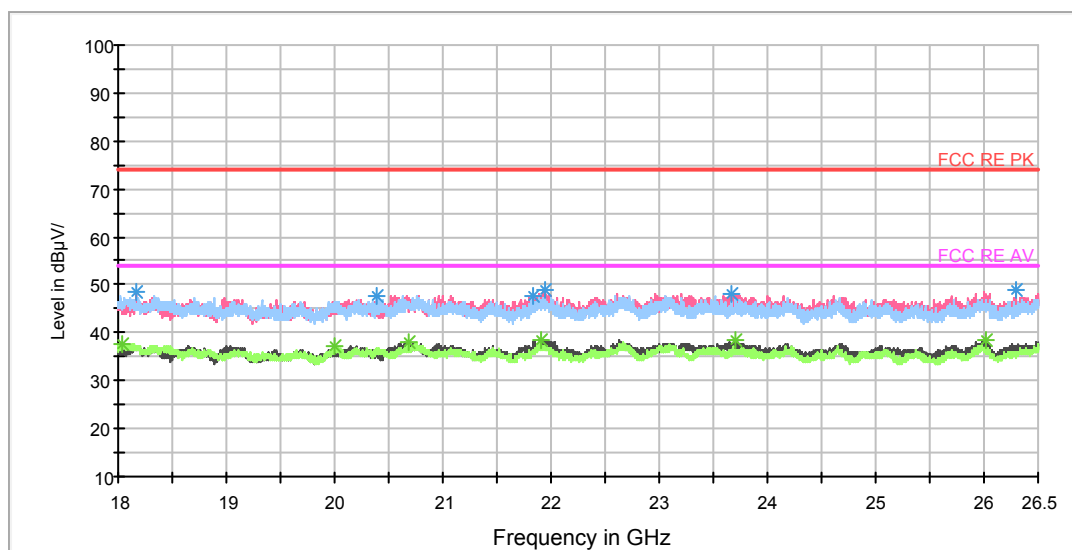
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3826.875000	38.9	100.0	V	300.0	40.6	-1.7	35.1	74
5443.125000	42.7	100.0	V	0.0	39.8	2.9	31.3	74
6877.500000	46.2	100.0	H	222.0	40.2	6.0	27.8	74
9830.625000	47.5	100.0	H	0.0	37.5	10.0	26.5	74
13143.750000	52.0	100.0	V	0.0	37.7	14.3	22.0	74
18000.000000	62.6	100.0	V	300.0	37.1	25.5	11.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3826.875000	26.5	100.0	V	300.0	28.2	-1.7	27.5	54
5443.125000	30.4	100.0	V	0.0	27.5	2.9	23.6	54
6877.500000	33.3	100.0	H	222.0	27.3	6.0	20.7	54
9830.625000	34.5	100.0	H	0.0	24.5	10.0	19.5	54
13143.750000	38.6	100.0	V	0.0	24.3	14.3	15.4	54
18000.000000	50.3	100.0	V	300.0	24.8	25.5	3.7	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18173.187500	48.3	V	281.0	50.8	-2.5	25.7	74
20393.812500	47.5	H	0.0	53.6	-6.1	26.5	74
21829.250000	47.7	V	0.0	55.7	-8.0	26.3	74
21945.062500	48.9	V	343.0	56.9	-8.0	25.1	74
23666.312500	48.0	V	192.0	53.9	-5.9	26.0	74
26298.125000	48.8	V	0.0	54.2	-5.4	25.2	74

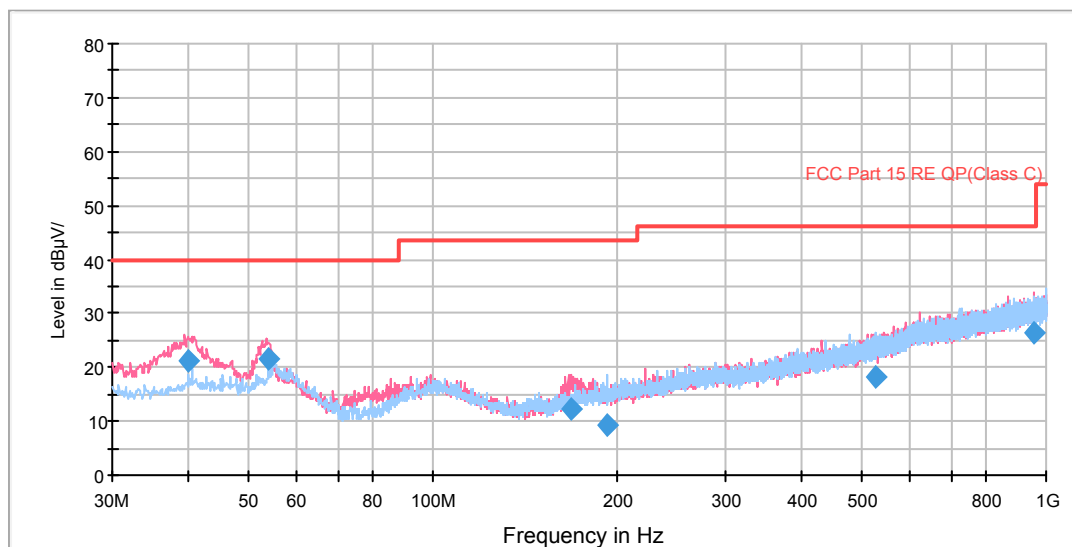
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18173.187500	36.5	V	281.0	39.0	-2.5	17.5	54
20393.812500	35.9	H	0.0	42.0	-6.1	18.1	54
21829.250000	37.0	V	0.0	45.0	-8.0	17.0	54
21945.062500	37.9	V	343.0	45.9	-8.0	16.1	54
23666.312500	36.6	V	192.0	42.5	-5.9	17.4	54
26298.125000	36.4	V	0.0	41.8	-5.4	17.6	54

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

802.11b CH6

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

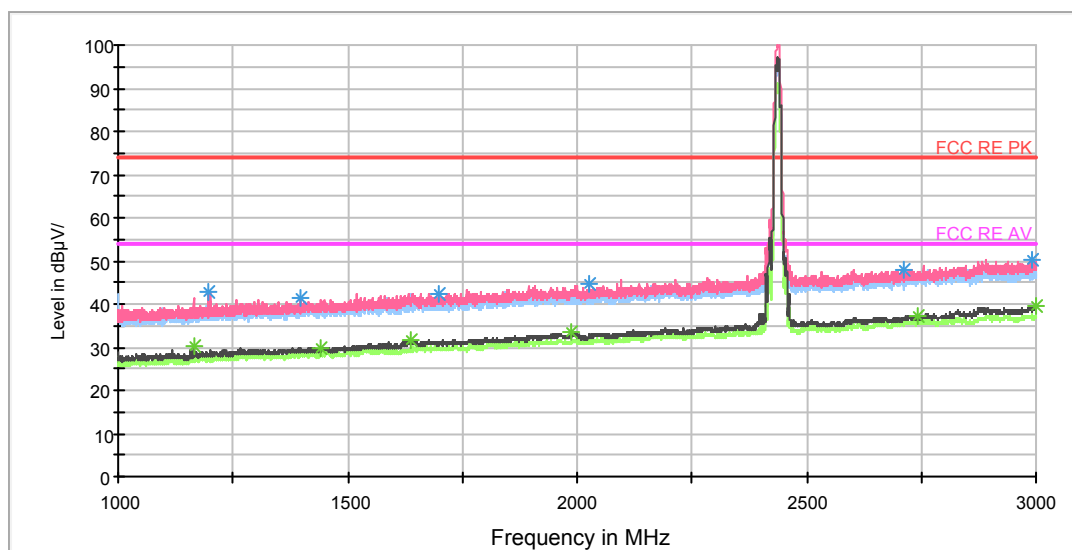
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.057500	21.3	100.0	V	266.0	8.0	13.3	18.7	40.0
54.006250	21.5	100.0	V	266.0	8.5	13.0	18.5	40.0
168.303750	12.3	100.0	V	192.0	2.1	10.2	31.2	43.5
193.078750	9.3	125.0	H	28.0	-2.5	11.8	34.2	43.5
529.106250	18.4	100.0	H	115.0	-2.8	21.2	27.6	46.0
955.302500	26.3	100.0	V	0.0	-1.0	27.3	19.7	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

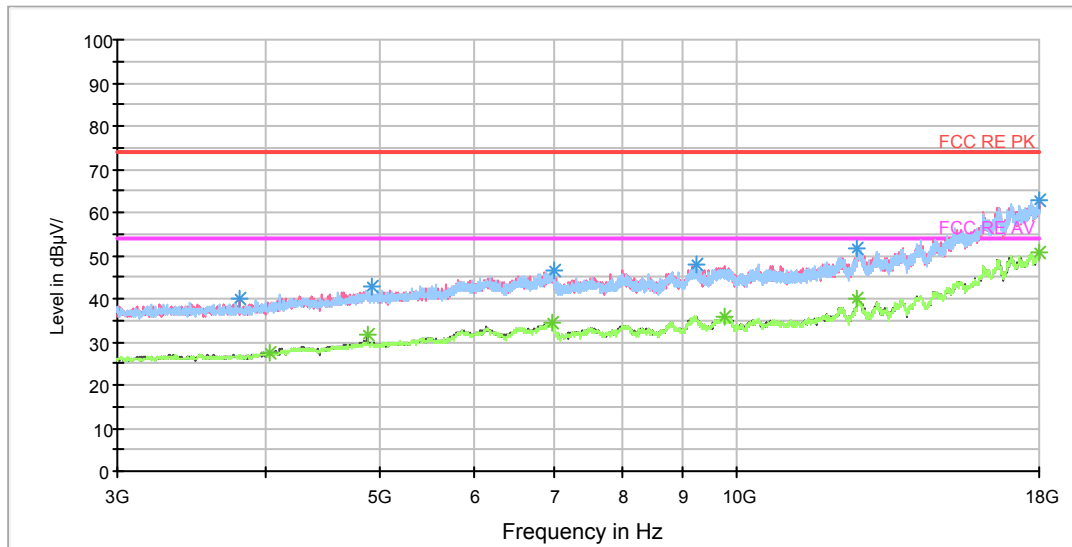
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.000000	42.7	100.0	V	0.0	50.9	-8.2	31.3	74
1396.000000	41.6	100.0	V	25.0	48.7	-7.1	32.4	74
1699.250000	42.6	100.0	V	0.0	47.6	-5.0	31.4	74
2025.500000	44.6	100.0	V	68.0	48.1	-3.5	29.4	74
2709.750000	47.8	100.0	V	42.0	47.7	0.1	26.2	74
2990.500000	50.2	100.0	V	0.0	48.0	2.2	23.8	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)
1164.000000	30.1	100.0	V	149.0	38.4	-8.3	23.9	54
1441.500000	29.8	100.0	V	0.0	36.7	-6.9	24.2	54
1638.250000	31.6	100.0	V	0.0	36.3	-4.7	22.4	54
1987.000000	33.4	100.0	V	0.0	37.0	-3.6	20.6	54
2741.000000	37.3	100.0	V	7.0	36.6	0.7	16.7	54
2998.250000	39.4	100.0	V	16.0	37.1	2.3	14.6	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

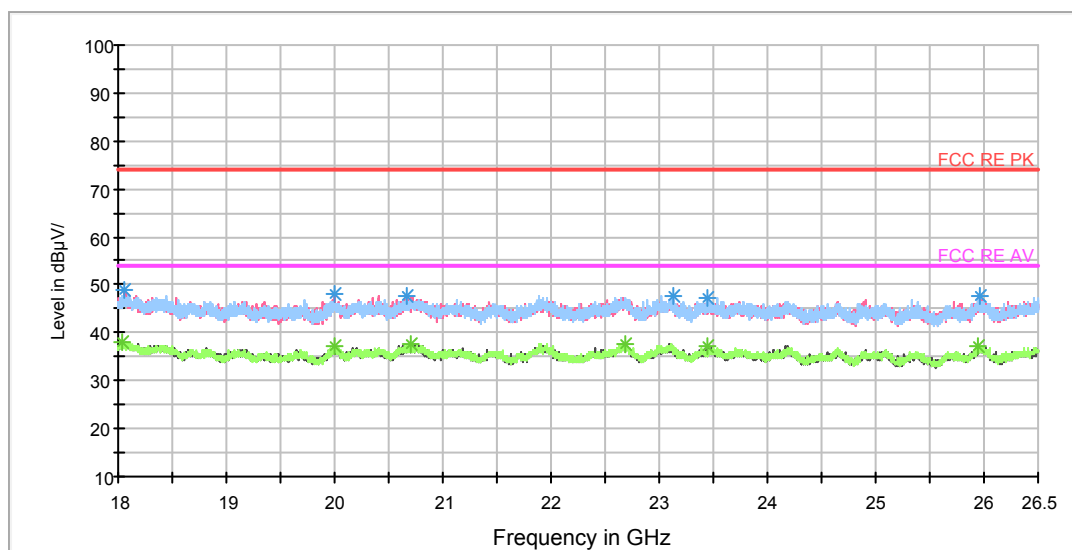
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3806.250000	40.1	100.0	V	0.0	41.8	-1.7	33.9	74
4910.625000	42.6	100.0	H	0.0	40.7	1.9	31.4	74
6999.375000	46.3	100.0	V	164.0	39.8	6.5	27.7	74
9251.250000	47.8	100.0	H	0.0	38.2	9.6	26.2	74
12645.000000	51.5	100.0	H	4.0	37.1	14.4	22.5	74
17998.125000	62.7	100.0	V	164.0	37.3	25.4	11.3	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)
3806.250000	26.6	100.0	V	0.0	28.3	-1.7	27.4	54
4910.625000	29.3	100.0	H	0.0	27.4	1.9	24.7	54
6999.375000	34.0	100.0	V	164.0	27.5	6.5	20.0	54
9251.250000	35.4	100.0	H	0.0	25.8	9.6	18.6	54
12645.000000	39.5	100.0	H	4.0	25.1	14.4	14.5	54
17998.125000	50.5	100.0	V	164.0	25.1	25.4	3.5	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18056.312500	48.9	V	0.0	50.9	-2.0	25.1	74
19999.625000	47.9	V	189.0	53.6	-5.7	26.1	74
20671.125000	47.6	V	289.0	54.2	-6.6	26.4	74
23123.375000	47.6	H	73.0	53.7	-6.1	26.4	74
23435.750000	47.4	H	0.0	53.3	-5.9	26.6	74
25958.125000	47.8	H	73.0	53.2	-5.4	26.2	74

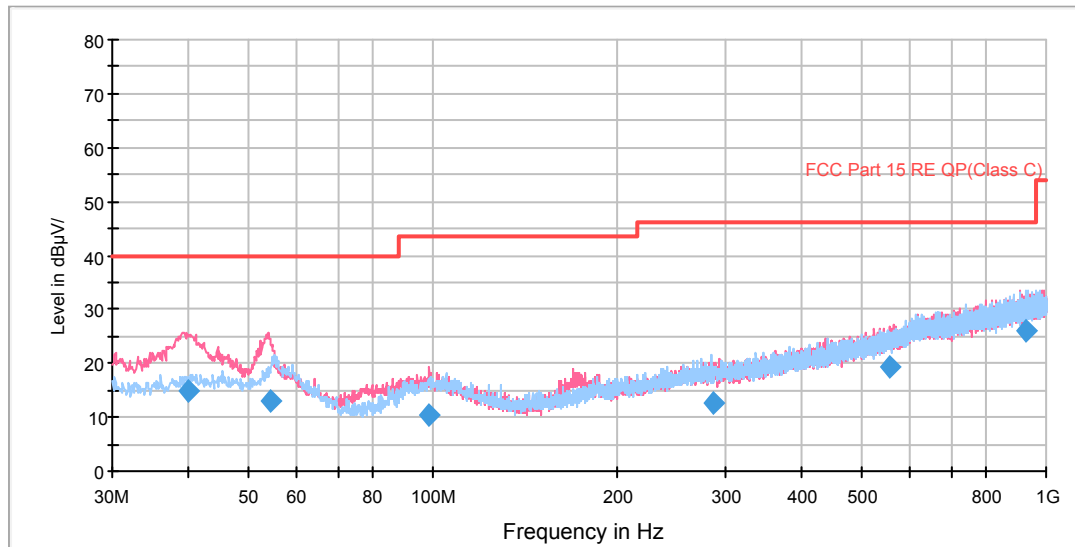
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18056.312500	37.4	V	0.0	39.4	-2.0	16.6	54
19999.625000	36.3	V	189.0	42.0	-5.7	17.7	54
20671.125000	36.0	V	289.0	42.6	-6.6	18.0	54
23123.375000	36.8	H	73.0	42.9	-6.1	17.2	54
23435.750000	35.5	H	0.0	41.4	-5.9	18.5	54
25958.125000	36.1	H	73.0	41.5	-5.4	17.9	54

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

802.11b CH11

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

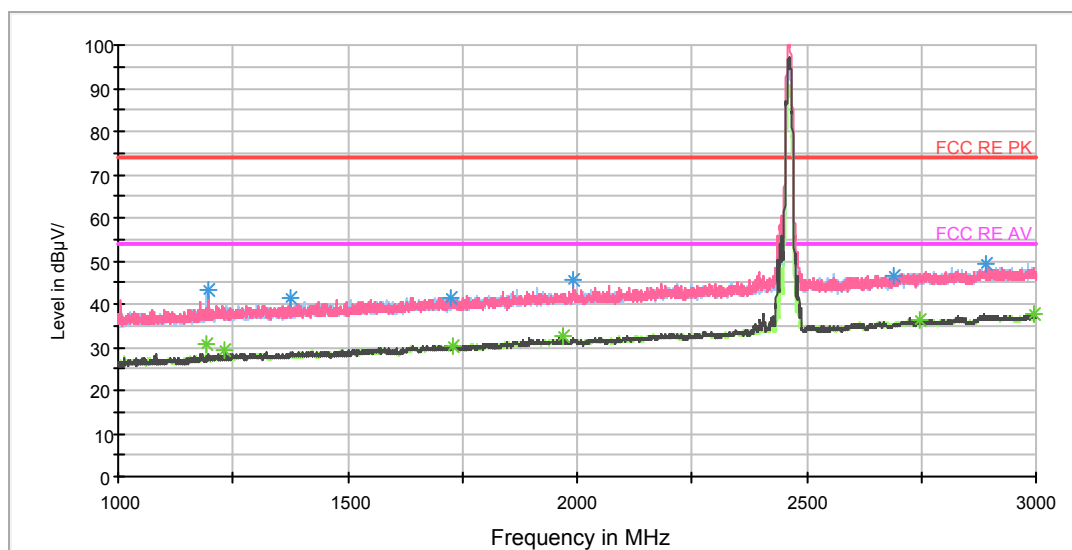
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
39.820000	14.9	100.0	V	265.0	1.8	13.1	25.1	40.0
54.447500	13.0	100.0	V	267.0	0.1	12.9	27.0	40.0
98.270000	10.6	100.0	V	156.0	-2.5	13.1	32.9	43.5
285.993750	12.6	114.0	H	148.0	-2.8	15.4	33.4	46.0
557.393750	19.2	125.0	V	93.0	-2.6	21.8	26.8	46.0
927.648750	25.9	100.0	H	93.0	-1.1	27.0	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

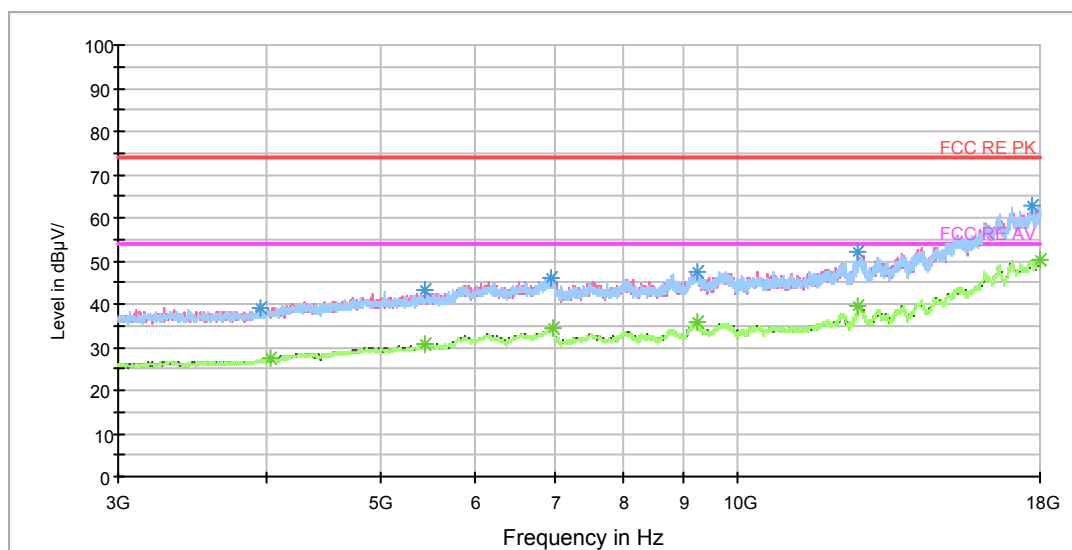
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.750000	43.3	100.0	V	35.0	51.5	-8.2	30.7	74
1375.500000	41.3	100.0	V	0.0	48.4	-7.1	32.7	74
1724.000000	41.4	100.0	H	167.0	46.4	-5.0	32.6	74
1992.750000	45.4	100.0	V	131.0	48.7	-3.3	28.6	74
2688.750000	46.7	100.0	V	211.0	46.6	0.1	27.3	74
2892.750000	49.5	100.0	H	310.0	47.4	2.1	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)
1193.750000	30.8	100.0	H	204.0	39.0	-8.2	23.2	54
1233.500000	29.5	100.0	V	0.0	37.3	-7.8	24.5	54
1731.250000	30.5	100.0	V	175.0	35.4	-4.9	23.5	54
1969.250000	32.4	100.0	V	26.0	36.0	-3.6	21.6	54
2745.000000	36.1	100.0	H	232.0	35.3	0.8	17.9	54
2997.500000	37.8	100.0	V	166.0	35.5	2.3	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

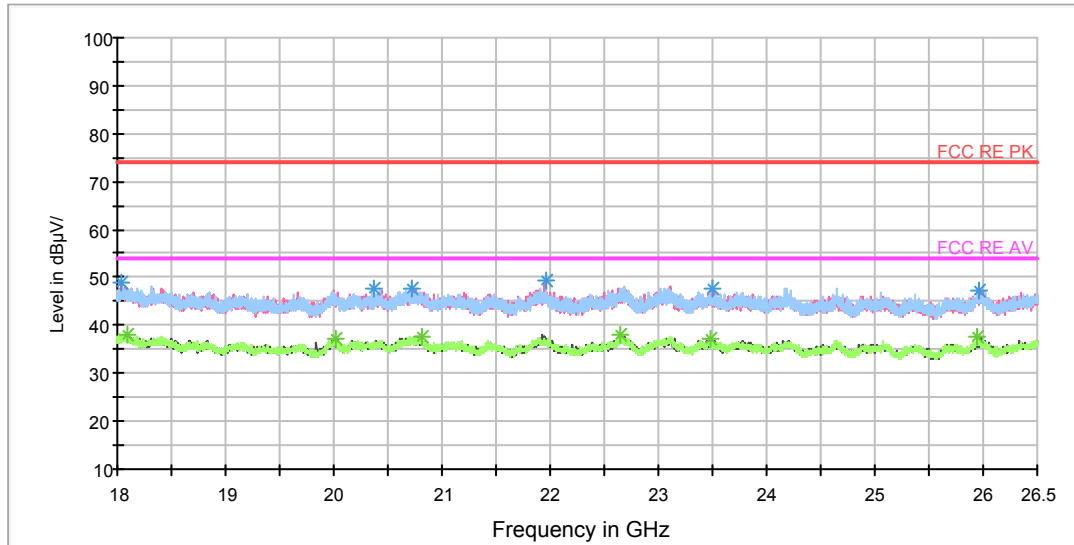
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3954.375000	39.2	100.0	H	168.0	40.2	-1.0	34.8	74
5446.875000	43.1	100.0	V	303.0	40.3	2.8	30.9	74
6960.000000	46.0	100.0	V	357.0	39.8	6.2	28.0	74
9238.125000	47.4	100.0	H	0.0	37.5	9.9	26.6	74
12643.125000	52.2	100.0	V	195.0	37.8	14.4	21.8	74
17692.500000	62.6	100.0	V	249.0	38.0	24.6	11.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4035.000000	27.4	100.0	V	0.0	28.4	-1.0	26.6	54
5433.750000	30.5	100.0	V	0.0	27.7	2.8	23.5	54
6993.750000	34.4	100.0	V	303.0	27.9	6.5	19.6	54
9236.250000	35.7	100.0	H	0.0	25.8	9.9	18.3	54
12639.375000	39.7	100.0	V	83.0	25.2	14.5	14.3	54
17998.125000	50.4	100.0	H	33.0	25.0	25.4	3.6	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18039.312500	49.1	V	163.0	51.1	-2.0	24.9	74
20374.687500	47.8	H	289.0	53.9	-6.1	26.2	74
20720.000000	47.6	H	59.0	54.3	-6.7	26.4	74
21955.687500	49.5	H	36.0	57.5	-8.0	24.5	74
23502.687500	47.7	V	0.0	53.6	-5.9	26.3	74
25958.125000	47.4	H	86.0	52.8	-5.4	26.6	74

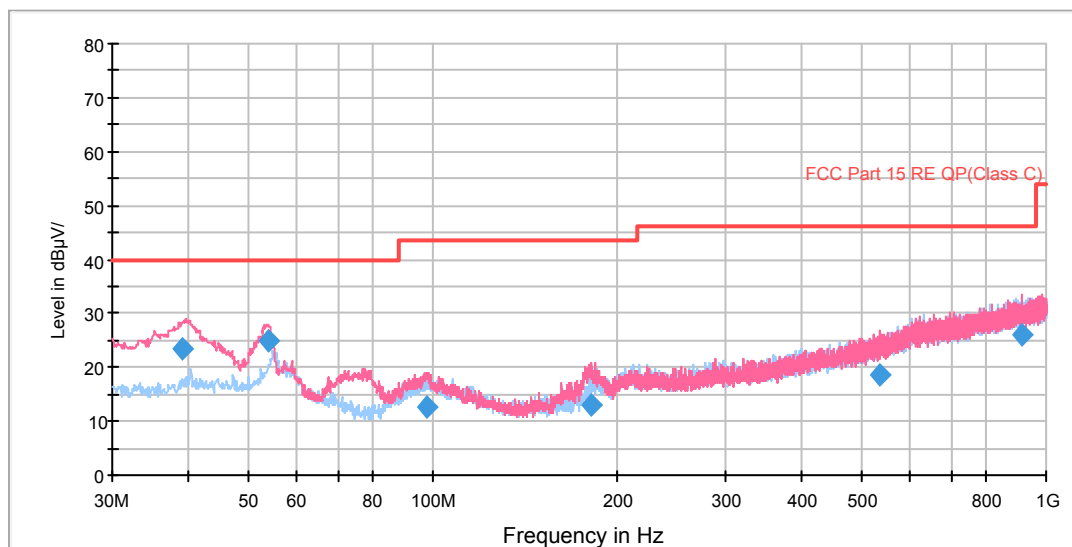
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18039.312500	37.6	V	163.0	39.6	-2.0	16.4	54
20374.687500	36.0	H	289.0	42.1	-6.1	18.0	54
20720.000000	36.3	H	59.0	43.0	-6.7	17.7	54
21955.687500	36.9	H	36.0	44.9	-8.0	17.1	54
23502.687500	35.6	V	0.0	41.5	-5.9	18.4	54
25958.125000	37.1	H	86.0	42.5	-5.4	16.9	54

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

802.11g CH1

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

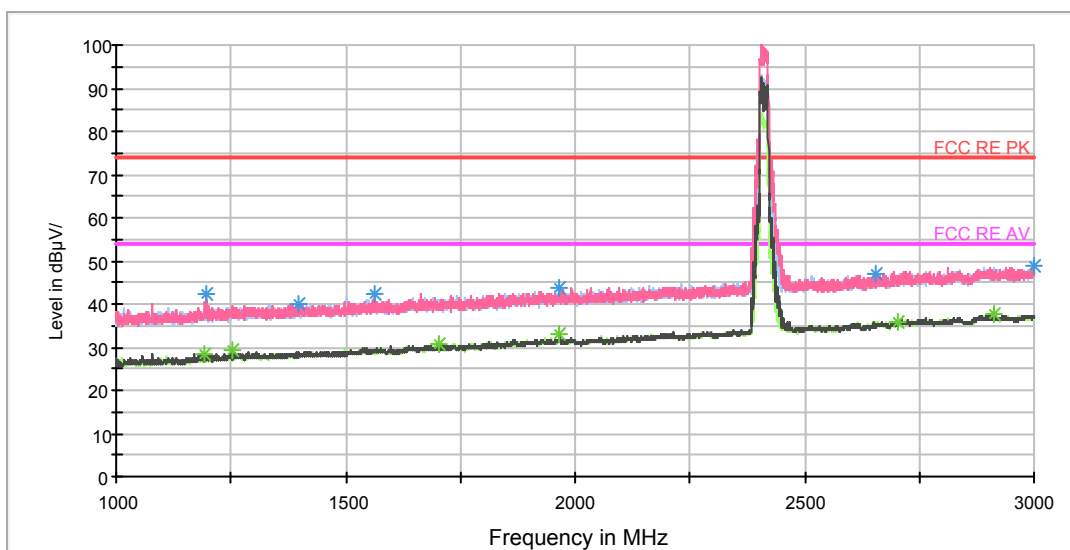
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
38.978750	23.5	100.0	V	312.0	10.5	13.0	16.5	40.0
54.006250	24.7	100.0	V	114.0	11.7	13.0	15.3	40.0
97.421250	12.5	125.0	V	0.0	-0.4	12.9	31.0	43.5
181.000000	13.0	100.0	V	20.0	1.9	11.1	30.5	43.5
533.953750	18.6	100.0	V	341.0	-2.7	21.3	27.4	46.0
915.851250	25.9	100.0	V	312.0	-1.1	27.0	20.1	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

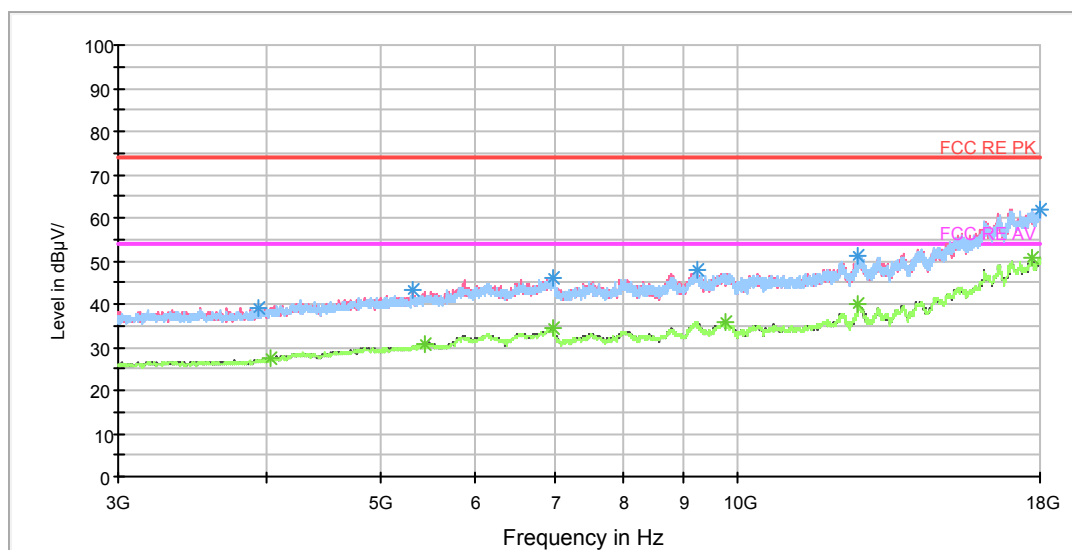
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.000000	42.1	100.0	V	1.0	50.3	-8.2	31.9	74
1398.500000	40.1	100.0	V	174.0	47.2	-7.1	33.9	74
1565.000000	42.3	100.0	V	211.0	48.9	-6.6	31.7	74
1964.250000	43.9	100.0	H	217.0	47.2	-3.3	30.1	74
2656.500000	47.1	100.0	V	59.0	46.7	0.4	26.9	74
2999.500000	48.6	100.0	H	359.0	46.3	2.3	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)
1190.000000	28.5	100.0	H	227.0	36.7	-8.2	25.5	54
1251.250000	29.4	100.0	V	0.0	37.4	-8.0	24.6	54
1702.750000	30.5	100.0	V	77.0	35.4	-4.9	23.5	54
1967.000000	32.9	100.0	V	192.0	36.4	-3.5	21.1	54
2702.250000	35.8	100.0	H	0.0	35.8	0.0	18.2	54
2914.000000	37.5	100.0	V	1.0	35.7	1.8	16.5	54

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

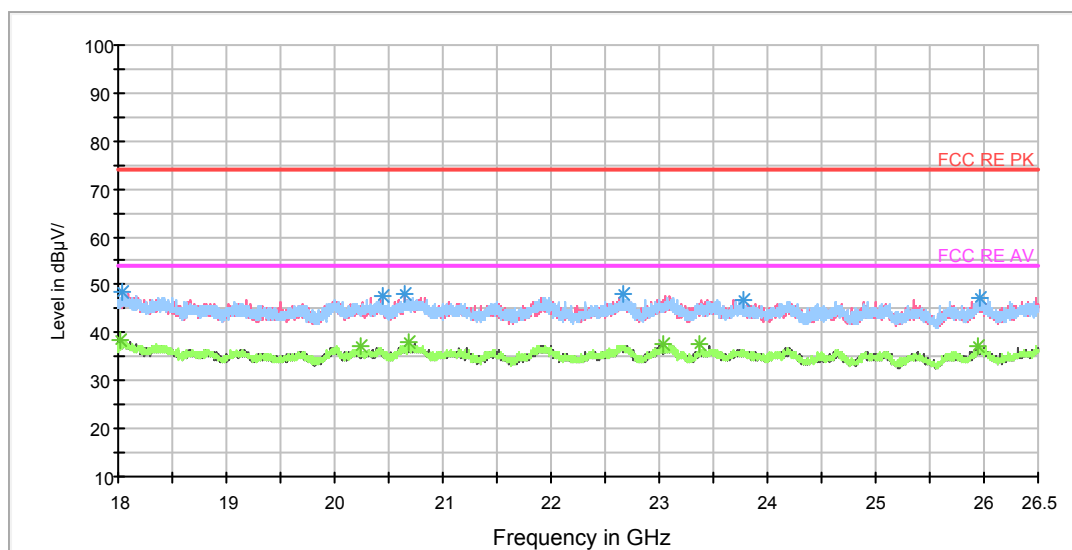
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3933.750000	39.3	100.0	V	0.0	40.4	-1.1	34.7	74
5321.250000	43.3	100.0	V	254.0	40.9	2.4	30.7	74
6995.625000	46.1	100.0	H	0.0	39.6	6.5	27.9	74
9238.125000	47.8	100.0	H	0.0	37.9	9.9	26.2	74
12648.750000	51.0	100.0	H	86.0	36.8	14.2	23.0	74
17973.750000	62.1	100.0	H	114.0	37.2	24.9	11.9	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3933.750000	26.8	100.0	V	0.0	27.9	-1.1	27.2	54
5321.250000	29.9	100.0	V	254.0	27.5	2.4	24.1	54
6995.625000	33.9	100.0	H	0.0	27.4	6.5	20.1	54
9238.125000	35.5	100.0	H	0.0	25.6	9.9	18.5	54
12648.750000	39.3	100.0	H	86.0	25.1	14.2	14.7	54
17973.750000	49.5	100.0	H	114.0	24.6	24.9	4.5	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18035.062500	48.5	V	256.0	50.4	-1.9	25.5	74
20446.937500	47.6	H	263.0	53.7	-6.1	26.4	74
20652.000000	47.9	V	294.0	54.5	-6.6	26.1	74
22669.687500	48.2	H	289.0	54.8	-6.6	25.8	74
23778.937500	47.0	H	93.0	52.9	-5.9	27.0	74
25956.000000	47.3	H	302.0	52.7	-5.4	26.7	74

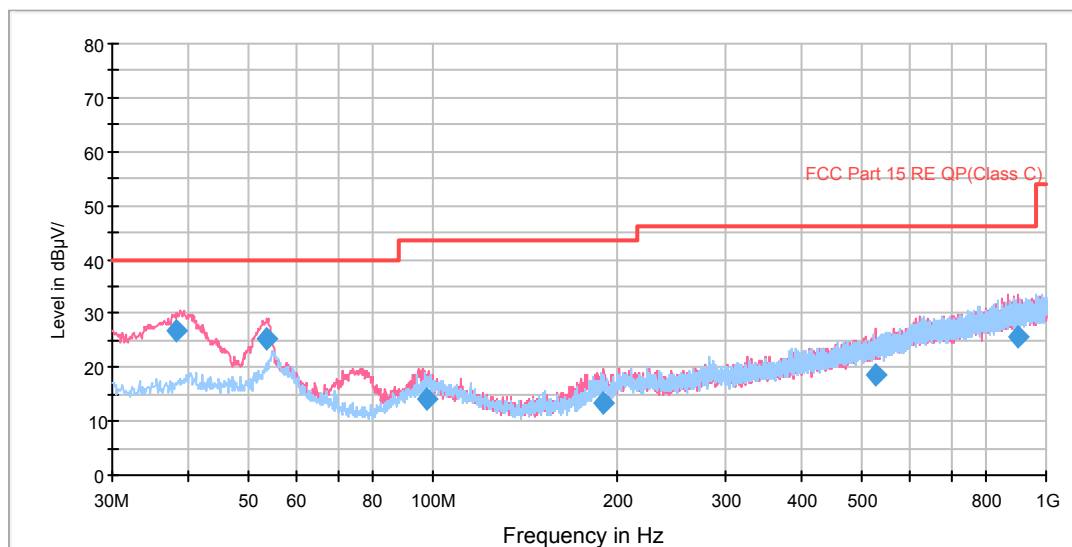
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18035.062500	36.9	V	256.0	38.8	-1.9	17.1	54
20446.937500	36.1	H	263.0	42.2	-6.1	17.9	54
20652.000000	36.3	V	294.0	42.9	-6.6	17.7	54
22669.687500	36.2	H	289.0	42.8	-6.6	17.8	54
23778.937500	35.8	H	93.0	41.7	-5.9	18.2	54
25956.000000	36.2	H	302.0	41.6	-5.4	17.8	54

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

802.11g CH6

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

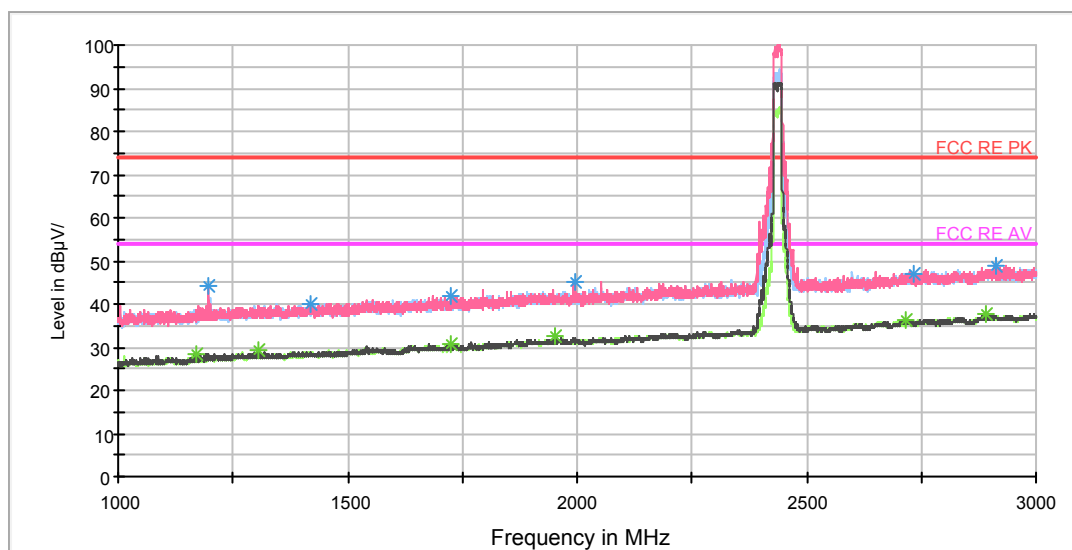
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
38.210000	26.8	100.0	V	154.0	14.1	12.7	13.2	40.0
53.566250	25.4	100.0	V	126.0	12.6	12.8	14.6	40.0
97.542500	14.0	100.0	V	264.0	1.1	12.9	29.5	43.5
189.811250	13.2	100.0	V	65.0	1.7	11.5	30.3	43.5
527.005000	18.5	114.0	V	84.0	-2.6	21.1	27.5	46.0
899.808750	25.6	125.0	V	99.0	-1.2	26.8	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

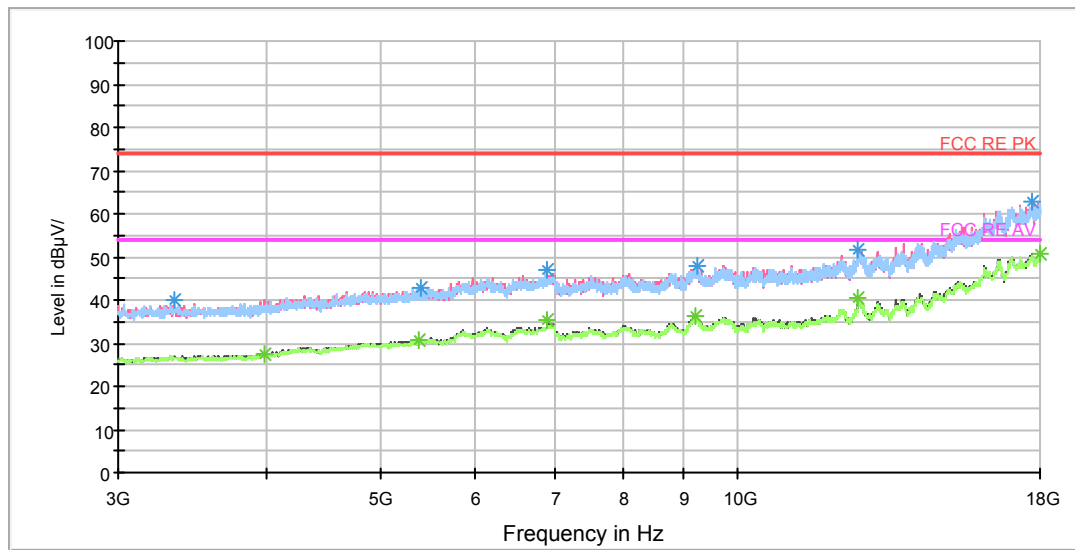
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.000000	44.3	100.0	V	36.0	52.5	-8.2	29.7	74
1421.000000	40.1	100.0	V	0.0	47.0	-6.9	33.9	74
1726.000000	41.9	100.0	V	163.0	47.0	-5.1	32.1	74
1996.500000	45.3	100.0	V	218.0	48.6	-3.3	28.7	74
2734.250000	47.0	100.0	H	91.0	46.4	0.6	27.0	74
2911.750000	49.0	100.0	H	208.0	47.1	1.9	25.0	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1172.250000	28.4	100.0	V	126.0	36.5	-8.1	25.6	54
1306.000000	29.1	100.0	V	0.0	36.9	-7.8	24.9	54
1726.000000	30.7	100.0	V	163.0	35.8	-5.1	23.3	54
1952.750000	32.7	100.0	V	191.0	36.3	-3.6	21.3	54
2715.500000	36.1	100.0	V	135.0	35.9	0.2	17.9	54
2890.250000	37.7	100.0	H	343.0	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

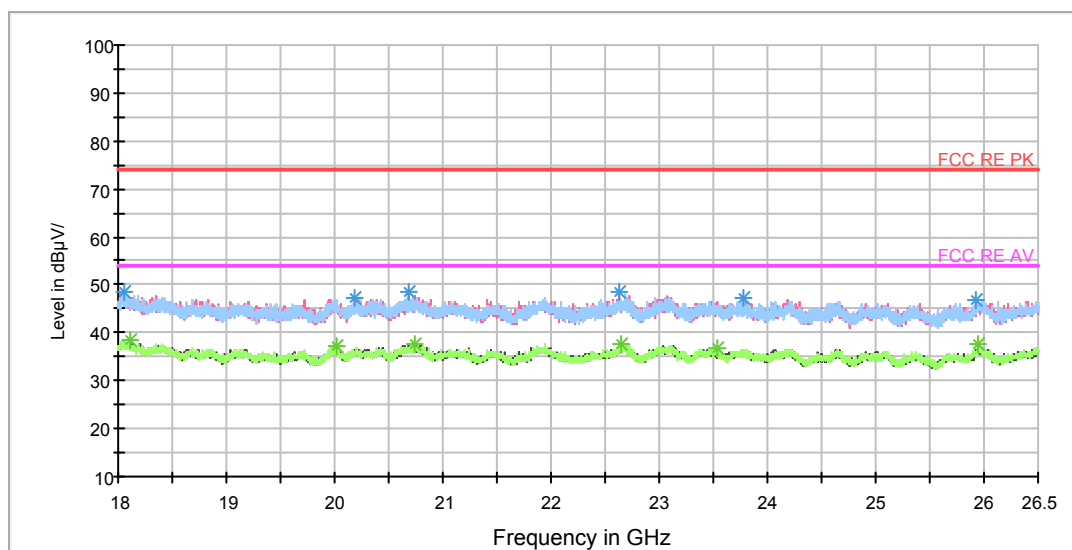
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3345.000000	39.9	100.0	H	191.0	42.3	-2.4	34.1	74
5392.500000	43.0	100.0	H	274.0	40.6	2.4	31.0	74
6915.000000	47.2	100.0	V	247.0	41.0	6.2	26.8	74
9232.500000	47.8	100.0	H	0.0	37.9	9.9	26.2	74
12637.500000	51.5	100.0	V	356.0	37.2	14.3	22.5	74
17692.500000	62.6	100.0	H	0.0	38.0	24.6	11.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3345.000000	26.5	100.0	H	191.0	28.9	-2.4	27.5	54
5392.500000	30.3	100.0	H	274.0	27.9	2.4	23.7	54
6915.000000	35.3	100.0	V	247.0	29.1	6.2	18.7	54
9232.500000	35.5	100.0	H	0.0	25.6	9.9	18.5	54
12637.500000	40.3	100.0	V	356.0	26.0	14.3	13.7	54
17692.500000	49.9	100.0	H	0.0	25.3	24.6	4.1	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18060.562500	48.5	V	185.0	50.6	-2.1	25.5	74
20194.062500	47.2	V	348.0	53.1	-5.9	26.8	74
20692.375000	48.5	V	311.0	55.2	-6.7	25.5	74
22635.687500	48.7	V	211.0	55.4	-6.7	25.3	74
23770.437500	47.2	V	185.0	53.1	-5.9	26.8	74
25923.062500	46.7	V	13.0	52.1	-5.4	27.3	74

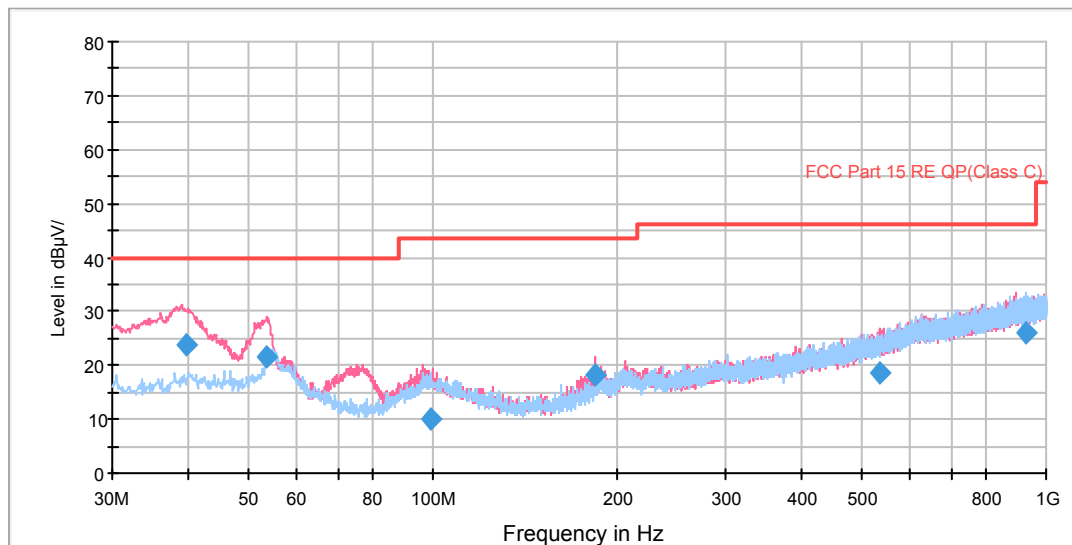
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18060.562500	37.7	V	185.0	39.8	-2.1	16.3	54
20194.062500	35.7	V	348.0	41.6	-5.9	18.3	54
20692.375000	36.4	V	311.0	43.1	-6.7	17.6	54
22635.687500	36.8	V	211.0	43.5	-6.7	17.2	54
23770.437500	35.6	V	185.0	41.5	-5.9	18.4	54
25923.062500	36.2	V	13.0	41.6	-5.4	17.8	54

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

802.11g CH11

FCC RE 0.03-1GHz QP Class C

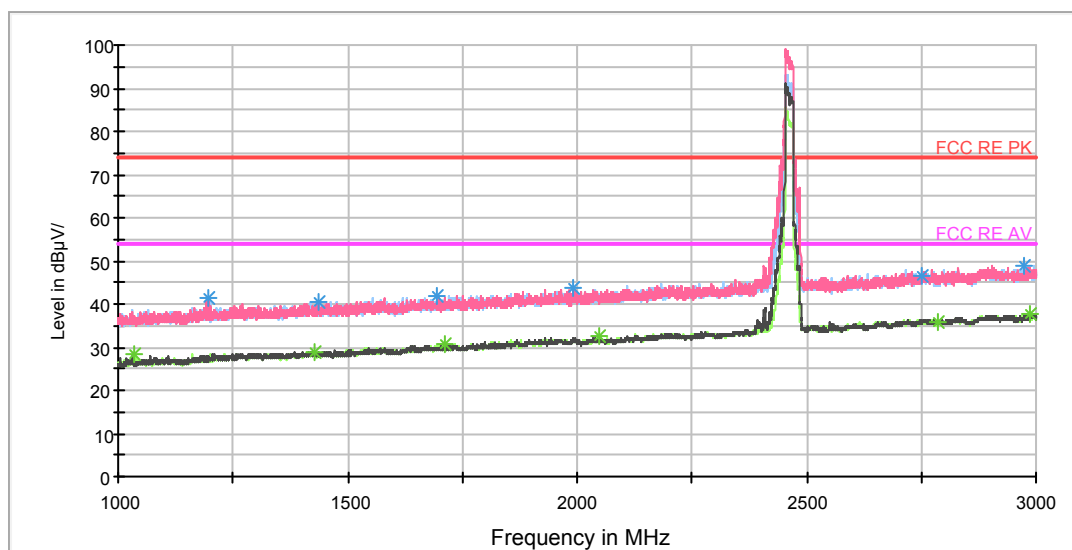


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
39.532500	23.7	100.0	V	159.0	10.6	13.1	16.3	40.0
53.528750	21.6	100.0	V	140.0	8.8	12.8	18.4	40.0
99.240000	9.9	125.0	V	254.0	-3.2	13.1	33.6	43.5
184.270000	18.3	100.0	V	0.0	7.2	11.1	25.2	43.5
535.816250	18.6	100.0	V	239.0	-2.7	21.3	27.4	46.0
927.973750	25.9	125.0	H	100.0	-1.1	27.0	20.1	46.0

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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

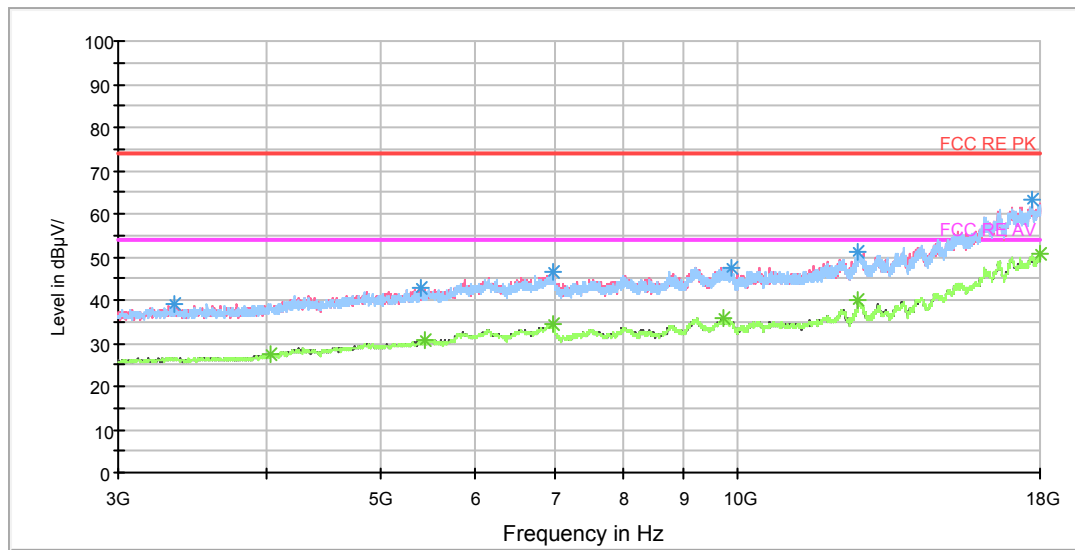
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.250000	41.4	100.0	H	160.0	49.6	-8.2	32.6	74
1438.250000	40.6	100.0	V	248.0	47.5	-6.9	33.4	74
1696.500000	42.0	100.0	H	110.0	47.0	-5.0	32.0	74
1990.750000	43.5	100.0	V	14.0	46.8	-3.3	30.5	74
2751.000000	46.7	100.0	H	0.0	45.8	0.9	27.3	74
2974.000000	48.9	100.0	H	0.0	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)
1037.000000	28.4	100.0	H	252.0	37.5	-9.1	25.6	54
1427.000000	29.0	100.0	H	260.0	35.9	-6.9	25.0	54
1710.250000	30.6	100.0	V	102.0	35.4	-4.8	23.4	54
2048.750000	32.5	100.0	H	332.0	35.7	-3.2	21.5	54
2788.000000	36.0	100.0	V	228.0	35.0	1.0	18.0	54
2985.000000	37.5	100.0	V	0.0	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

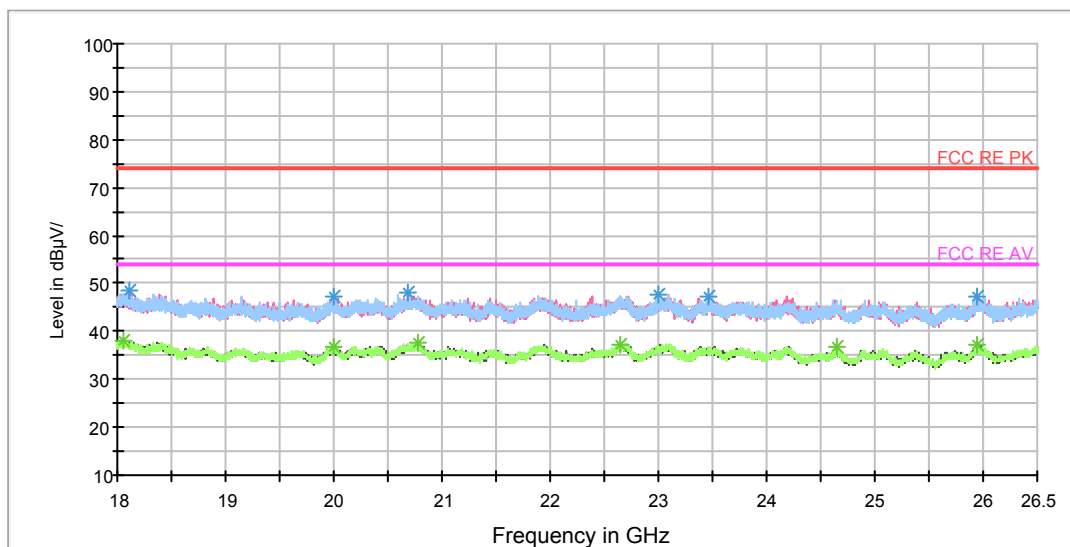
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3346.875000	39.2	100.0	H	59.0	41.5	-2.3	34.8	74
5411.250000	42.7	100.0	V	0.0	40.1	2.6	31.3	74
6990.000000	46.3	100.0	V	246.0	39.8	6.5	27.7	74
9877.500000	47.7	100.0	V	0.0	37.4	10.3	26.3	74
12628.125000	51.3	100.0	H	196.0	38.1	13.2	22.7	74
17698.125000	63.3	100.0	V	0.0	38.6	24.7	10.7	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3346.875000	26.3	100.0	H	59.0	28.6	-2.3	27.7	54
5411.250000	30.3	100.0	V	0.0	27.7	2.6	23.7	54
6990.000000	33.9	100.0	V	246.0	27.4	6.5	20.1	54
9877.500000	34.8	100.0	V	0.0	24.5	10.3	19.2	54
12628.125000	38.5	100.0	H	196.0	25.3	13.2	15.5	54
17698.125000	49.9	100.0	V	0.0	25.2	24.7	4.1	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18115.812500	48.4	V	234.0	50.7	-2.3	25.6	74
19993.250000	47.2	H	1.0	52.9	-5.7	26.8	74
20687.062500	48.2	V	118.0	54.9	-6.7	25.8	74
23000.125000	47.7	H	1.0	53.9	-6.2	26.3	74
23462.312500	47.2	V	309.0	53.1	-5.9	26.8	74
25950.687500	47.1	V	0.0	52.5	-5.4	26.9	74

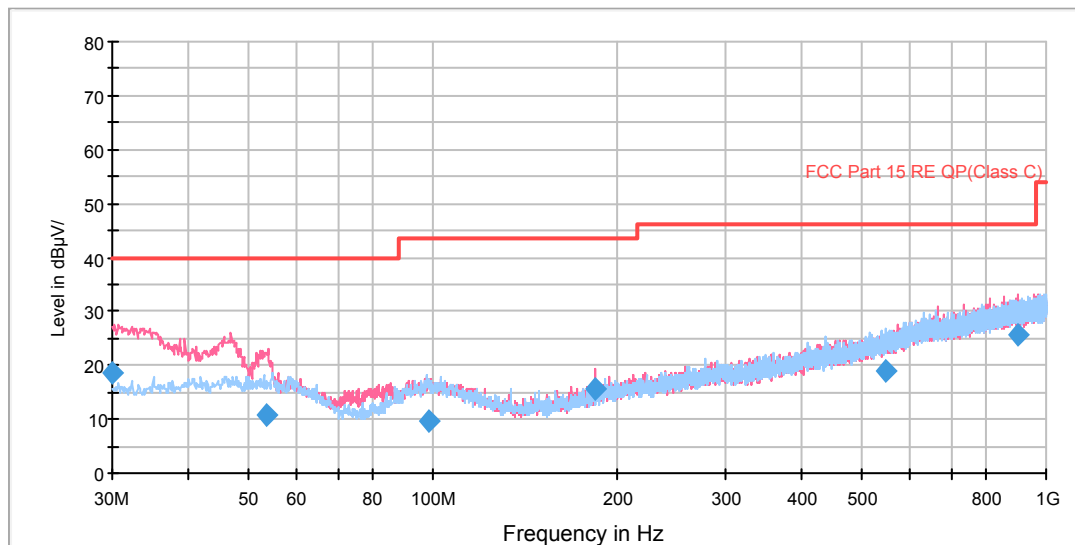
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18115.812500	37.0	V	234.0	39.3	-2.3	17.0	54
19993.250000	36.0	H	1.0	41.7	-5.7	18.0	54
20687.062500	36.6	V	118.0	43.3	-6.7	17.4	54
23000.125000	36.6	H	1.0	42.8	-6.2	17.4	54
23462.312500	36.0	V	309.0	41.9	-5.9	18.0	54
25950.687500	36.1	V	0.0	41.5	-5.4	17.9	54

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

802.11n (HT20) CH1

FCC RE 0.03-1GHz QP Class C

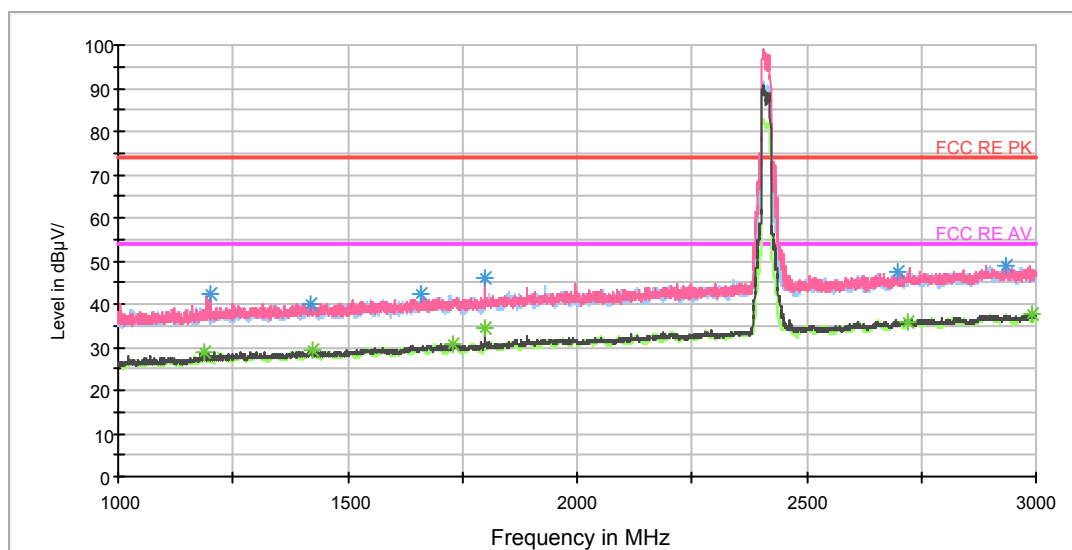


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
30.000000	18.5	100.0	V	98.0	6.4	12.1	21.5	40.0
53.606250	10.8	100.0	V	102.0	-2.0	12.8	29.2	40.0
98.138750	9.9	111.0	H	37.0	-3.2	13.1	33.6	43.5
184.270000	15.8	100.0	V	28.0	4.7	11.1	27.7	43.5
547.976250	18.9	125.0	H	55.0	-2.6	21.5	27.1	46.0
899.893750	25.6	125.0	V	234.0	-1.2	26.8	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

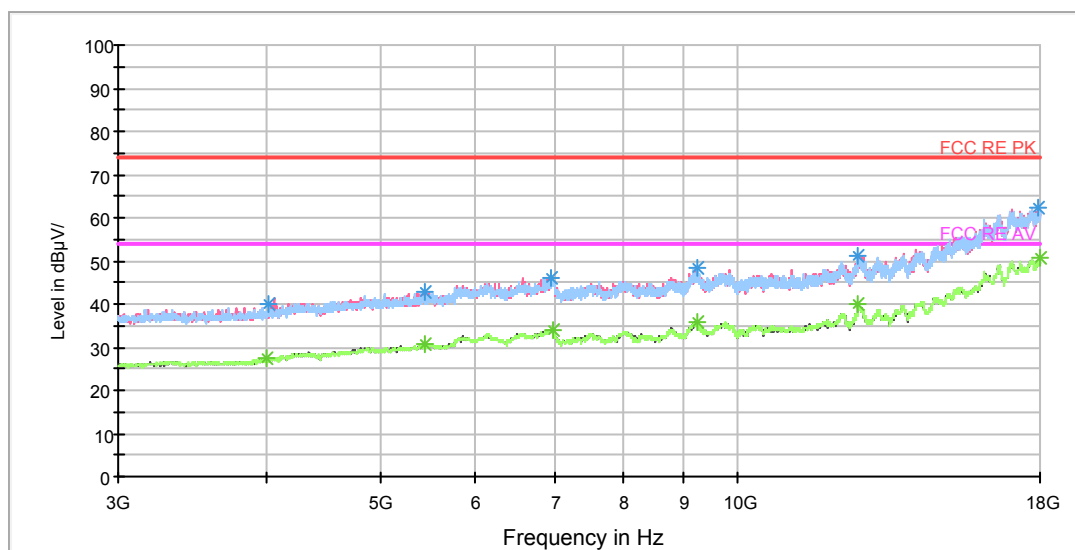
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.000000	42.3	100.0	V	173.0	50.5	-8.2	31.7	74
1418.500000	40.2	100.0	H	0.0	47.1	-6.9	33.8	74
1659.750000	42.1	100.0	H	0.0	47.3	-5.2	31.9	74
1799.750000	46.0	100.0	V	200.0	49.9	-3.9	28.0	74
2699.500000	47.2	100.0	H	171.0	47.2	0.0	26.8	74
2934.750000	49.1	100.0	H	261.0	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)
1188.750000	28.6	100.0	V	0.0	36.8	-8.2	25.4	54
1423.500000	29.1	100.0	H	0.0	36.0	-6.9	24.9	54
1729.750000	30.7	100.0	H	163.0	35.7	-5.0	23.3	54
1799.750000	34.5	100.0	V	200.0	38.4	-3.9	19.5	54
2722.000000	35.6	100.0	H	117.0	35.3	0.3	18.4	54
2989.750000	37.7	100.0	V	75.0	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

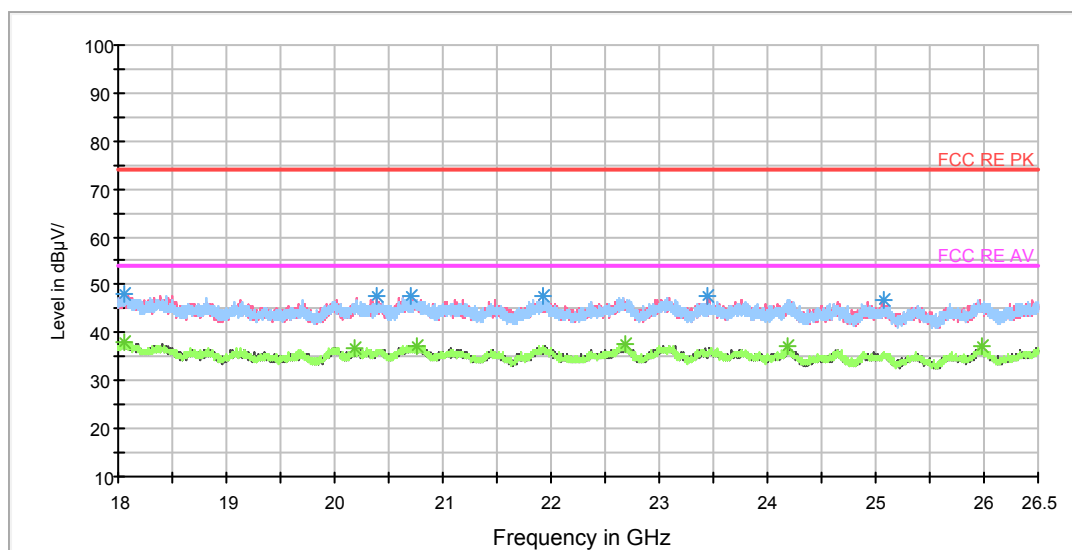
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4020.000000	40.0	100.0	H	85.0	41.2	-1.2	34.0	74
5435.625000	43.0	100.0	V	0.0	40.1	2.9	31.0	74
6969.375000	46.2	100.0	H	307.0	39.9	6.3	27.8	74
9240.000000	48.2	100.0	H	0.0	38.3	9.9	25.8	74
12639.375000	51.3	100.0	H	140.0	36.8	14.5	22.7	74
17911.875000	62.3	100.0	H	0.0	36.8	25.5	11.7	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4020.000000	26.8	100.0	H	85.0	28.0	-1.2	27.2	54
5435.625000	30.1	100.0	V	0.0	27.2	2.9	23.9	54
6969.375000	33.6	100.0	H	307.0	27.3	6.3	20.4	54
9240.000000	35.5	100.0	H	0.0	25.6	9.9	18.5	54
12639.375000	39.6	100.0	H	140.0	25.1	14.5	14.4	54
17911.875000	49.8	100.0	H	0.0	24.3	25.5	4.2	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18055.250000	48.2	V	291.0	50.2	-2.0	25.8	74
20389.562500	47.5	V	329.0	53.6	-6.1	26.5	74
20707.250000	47.8	H	0.0	54.5	-6.7	26.2	74
21931.250000	47.8	H	32.0	55.8	-8.0	26.2	74
23437.875000	47.7	V	329.0	53.6	-5.9	26.3	74
25073.062500	46.8	V	354.0	52.7	-5.9	27.2	74

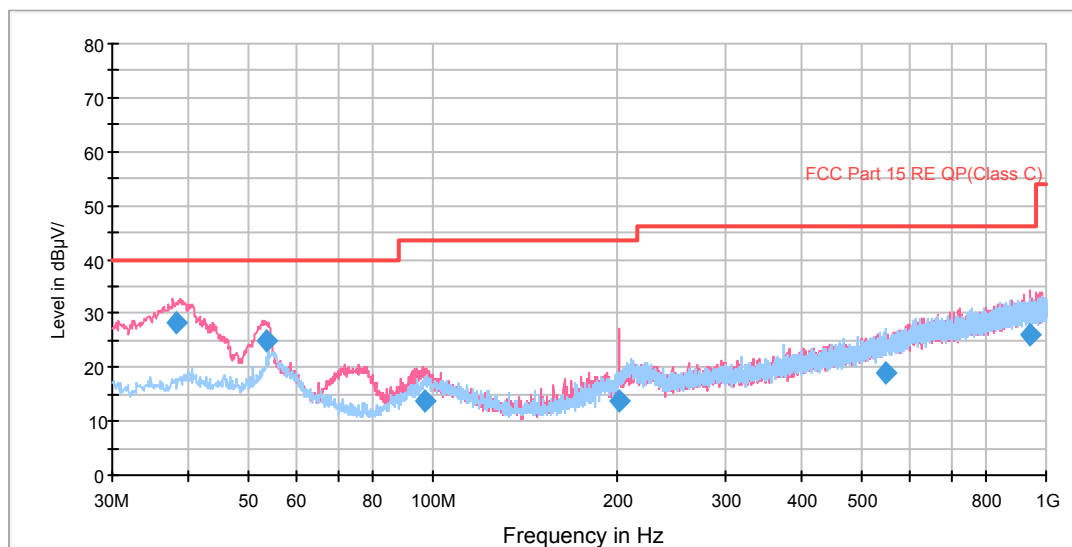
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18055.250000	37.1	V	291.0	39.1	-2.0	16.9	54
20389.562500	36.2	V	329.0	42.3	-6.1	17.8	54
20707.250000	36.3	H	0.0	43.0	-6.7	17.7	54
21931.250000	36.7	H	32.0	44.7	-8.0	17.3	54
23437.875000	35.9	V	329.0	41.8	-5.9	18.1	54
25073.062500	35.9	V	354.0	41.8	-5.9	18.1	54

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

802.11n (HT20) CH6

FCC RE 0.03-1GHz QP Class C

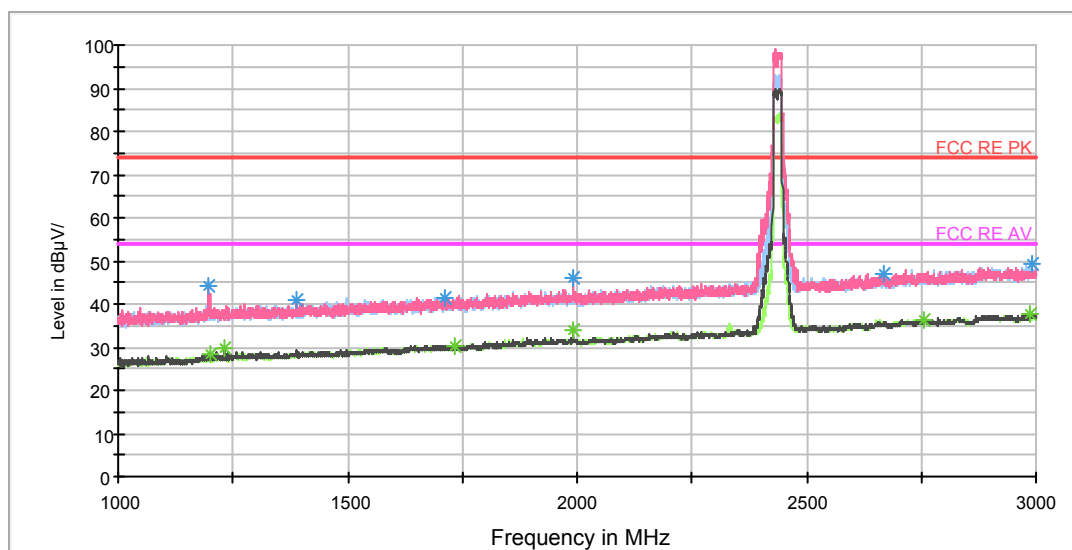


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
38.238750	28.3	100.0	V	155.0	15.5	12.8	11.7	40.0
53.566250	24.8	100.0	V	127.0	12.0	12.8	15.2	40.0
96.975000	13.6	125.0	V	174.0	0.7	12.9	29.9	43.5
201.686250	13.9	100.0	V	74.0	1.7	12.2	29.6	43.5
545.758750	19.0	114.0	H	10.0	-2.6	21.6	27.0	46.0
944.990000	26.2	113.0	V	0.0	-1.0	27.2	19.8	46.0

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

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

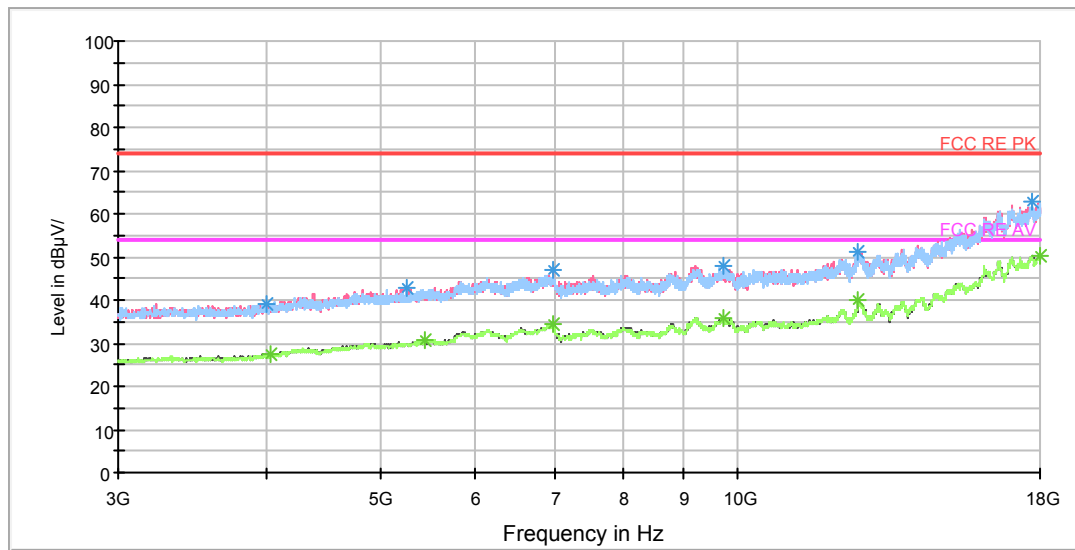
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.750000	44.3	100.0	V	17.0	52.5	-8.2	29.7	74
1388.500000	40.9	100.0	V	61.0	47.9	-7.0	33.1	74
1711.000000	41.5	100.0	V	17.0	46.3	-4.8	32.5	74
1991.500000	46.3	100.0	V	95.0	49.6	-3.3	27.7	74
2669.000000	47.0	100.0	V	246.0	46.7	0.3	27.0	74
2989.750000	49.2	100.0	H	0.0	47.0	2.2	24.8	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)
1198.750000	28.3	100.0	V	139.0	36.5	-8.2	25.7	54
1230.750000	29.7	100.0	V	246.0	37.4	-7.7	24.3	54
1732.000000	30.5	100.0	H	0.0	35.3	-4.8	23.5	54
1991.750000	33.8	100.0	V	228.0	37.1	-3.3	20.2	54
2755.000000	36.1	100.0	H	0.0	35.2	0.9	17.9	54
2988.750000	37.5	100.0	V	52.0	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

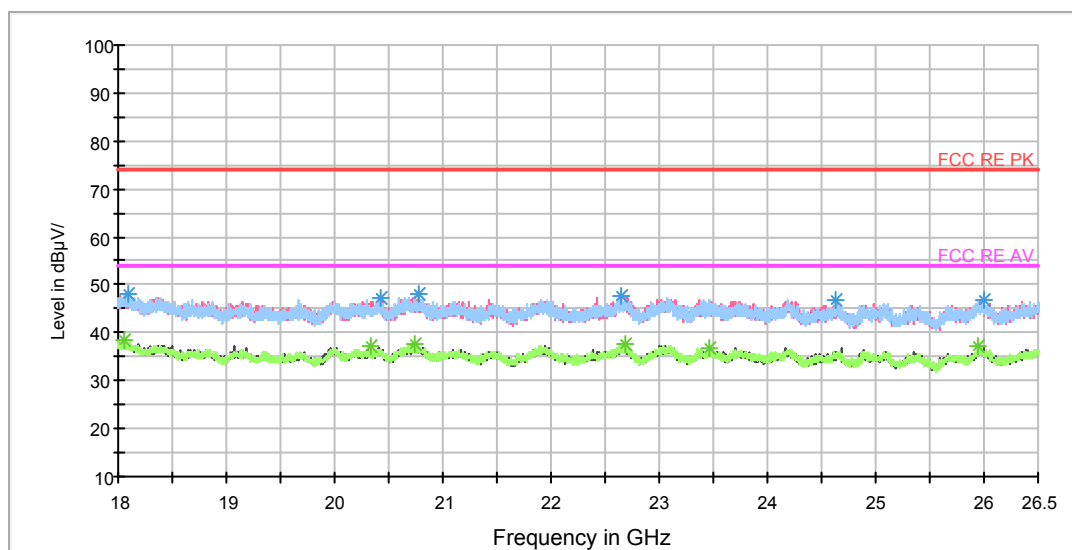
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4003.125000	39.1	100.0	V	331.0	40.2	-1.1	34.9	74
5248.125000	42.7	100.0	H	55.0	40.6	2.1	31.3	74
6993.750000	47.0	100.0	V	276.0	40.5	6.5	27.0	74
9738.750000	47.9	100.0	H	81.0	37.9	10.0	26.1	74
12639.375000	51.1	100.0	V	164.0	36.6	14.5	22.9	74
17709.375000	62.7	100.0	V	164.0	38.0	24.7	11.3	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)
4003.125000	26.9	100.0	V	331.0	28.0	-1.1	27.1	54
5248.125000	29.6	100.0	H	55.0	27.5	2.1	24.4	54
6993.750000	33.9	100.0	V	276.0	27.4	6.5	20.1	54
9738.750000	35.5	100.0	H	81.0	25.5	10.0	18.5	54
12639.375000	39.6	100.0	V	164.0	25.1	14.5	14.4	54
17709.375000	50.3	100.0	V	164.0	25.6	24.7	3.7	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18083.937500	48.1	H	173.0	50.3	-2.2	25.9	74
20431.000000	47.1	H	15.0	53.2	-6.1	26.9	74
20785.875000	48.2	V	0.0	55.1	-6.9	25.8	74
22651.625000	47.6	V	140.0	54.2	-6.6	26.4	74
24635.312500	47.0	H	59.0	53.0	-6.0	27.0	74
26007.000000	46.8	H	123.0	52.2	-5.4	27.2	74

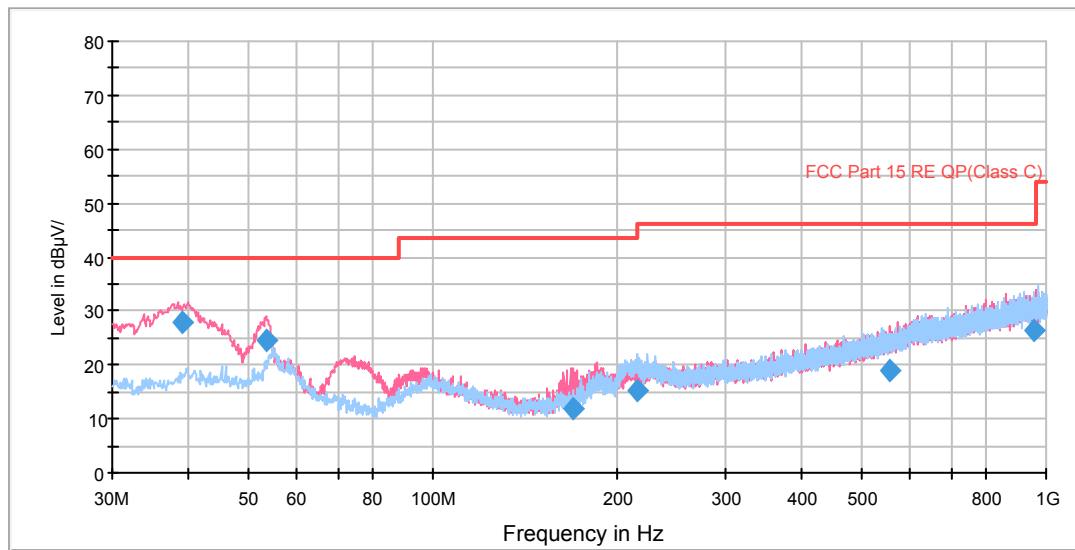
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18083.937500	36.9	H	173.0	39.1	-2.2	17.1	54
20431.000000	36.0	H	15.0	42.1	-6.1	18.0	54
20785.875000	36.5	V	0.0	43.4	-6.9	17.5	54
22651.625000	36.6	V	140.0	43.2	-6.6	17.4	54
24635.312500	35.6	H	59.0	41.6	-6.0	18.4	54
26007.000000	35.4	H	123.0	40.8	-5.4	18.6	54

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

802.11n (HT20) CH11

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

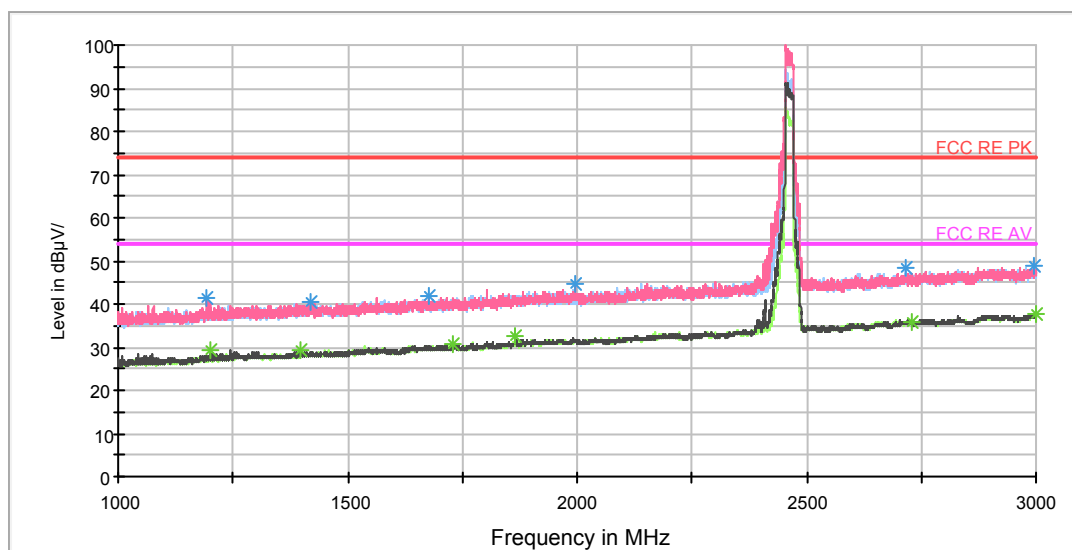
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
38.966250	27.8	100.0	V	144.0	14.8	13.0	12.2	40.0
53.526250	24.6	100.0	V	139.0	11.8	12.8	15.4	40.0
169.881250	11.8	100.0	V	140.0	1.3	10.5	31.7	43.5
215.997500	15.2	113.0	H	0.0	2.3	12.9	28.3	43.5
554.971250	19.1	125.0	V	43.0	-2.7	21.8	26.9	46.0
955.577500	26.3	100.0	H	0.0	-1.0	27.3	19.7	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

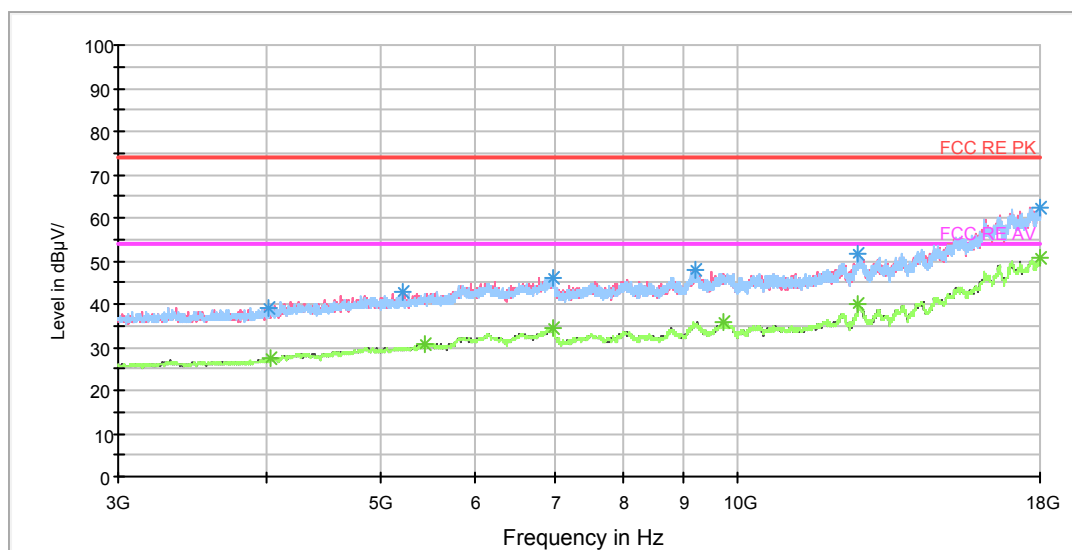
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.250000	41.5	100.0	V	0.0	49.7	-8.2	32.5	74
1419.000000	40.6	100.0	V	0.0	47.5	-6.9	33.4	74
1676.500000	41.7	100.0	V	50.0	46.8	-5.1	32.3	74
1995.750000	44.7	100.0	V	148.0	48.0	-3.3	29.3	74
2715.250000	48.2	100.0	H	0.0	48.0	0.2	25.8	74
2995.500000	48.7	100.0	H	341.0	46.4	2.3	25.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1200.500000	29.4	100.0	H	150.0	37.6	-8.2	24.6	54
1396.000000	29.5	100.0	V	247.0	36.6	-7.1	24.5	54
1731.000000	30.6	100.0	H	170.0	35.5	-4.9	23.4	54
1862.750000	32.3	100.0	V	229.0	36.0	-3.7	21.7	54
2729.750000	35.8	100.0	H	314.0	35.3	0.5	18.2	54
2999.250000	37.6	100.0	V	175.0	35.3	2.3	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

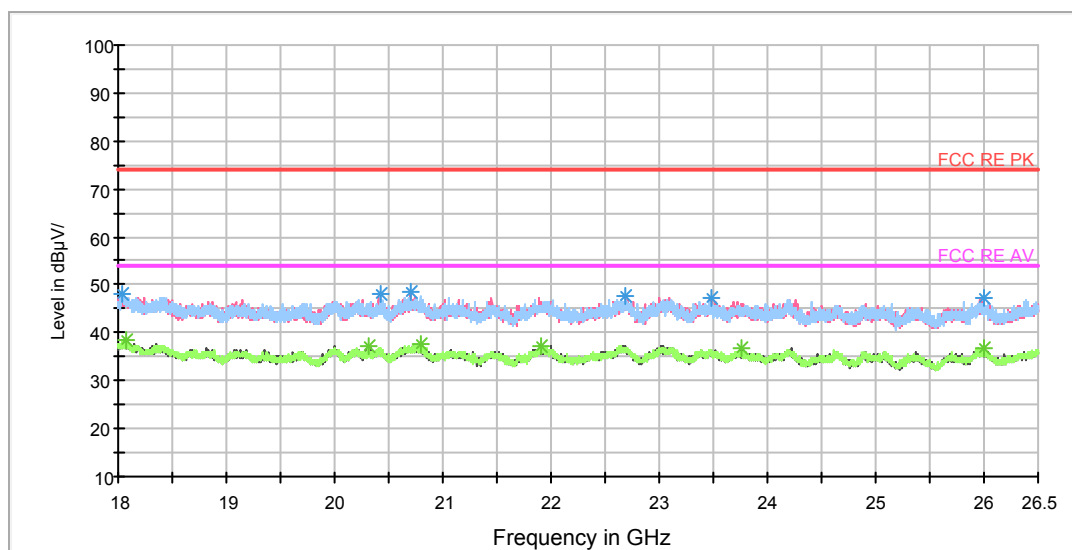
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4016.250000	39.2	100.0	H	0.0	40.4	-1.2	34.8	74
5212.500000	42.6	100.0	V	0.0	40.5	2.1	31.4	74
6973.125000	46.2	100.0	H	196.0	39.9	6.3	27.8	74
9195.000000	48.0	100.0	H	0.0	37.8	10.2	26.0	74
12652.500000	51.4	100.0	H	0.0	37.3	14.1	22.6	74
18000.000000	62.3	100.0	V	163.0	36.8	25.5	11.7	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4016.250000	26.7	100.0	H	0.0	27.9	-1.2	27.3	54
5212.500000	29.7	100.0	V	0.0	27.6	2.1	24.3	54
6973.125000	33.7	100.0	H	196.0	27.4	6.3	20.3	54
9195.000000	35.2	100.0	H	0.0	25.0	10.2	18.8	54
12652.500000	39.2	100.0	H	0.0	25.1	14.1	14.8	54
18000.000000	50.4	100.0	V	163.0	24.9	25.5	3.6	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18041.437500	48.0	V	289.0	50.0	-2.0	26.0	74
20432.062500	48.2	H	199.0	54.3	-6.1	25.8	74
20694.500000	48.4	V	227.0	55.1	-6.7	25.6	74
22690.937500	47.6	V	0.0	54.2	-6.6	26.4	74
23480.375000	47.4	V	177.0	53.3	-5.9	26.6	74
25997.437500	47.3	H	84.0	52.7	-5.4	26.7	74

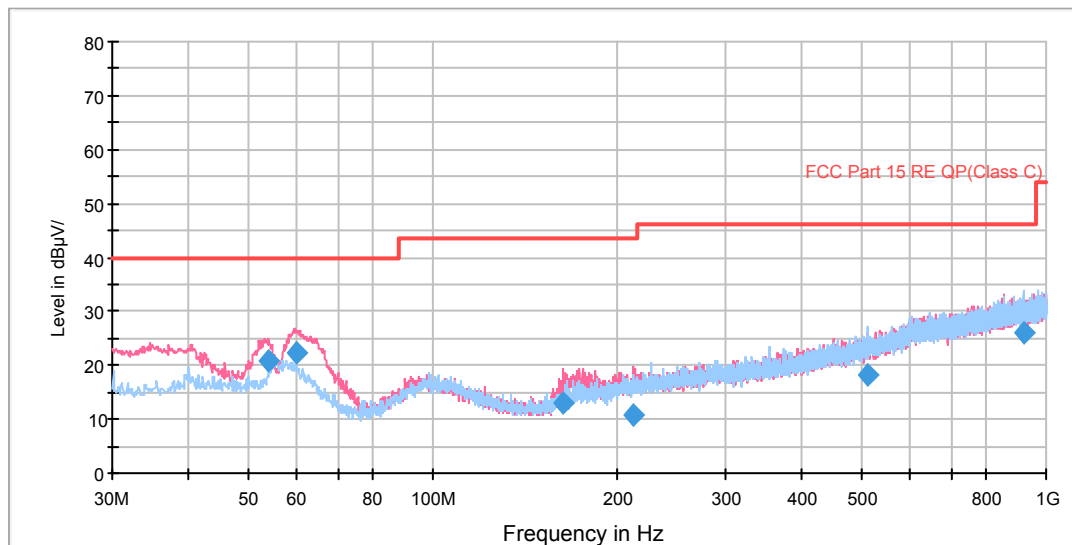
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18041.437500	37.2	V	289.0	39.2	-2.0	16.8	54
20432.062500	36.1	H	199.0	42.2	-6.1	17.9	54
20694.500000	36.3	V	227.0	43.0	-6.7	17.7	54
22690.937500	36.2	V	0.0	42.8	-6.6	17.8	54
23480.375000	35.6	V	177.0	41.5	-5.9	18.4	54
25997.437500	35.7	H	84.0	41.1	-5.4	18.3	54

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

BLE-Channel 0

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

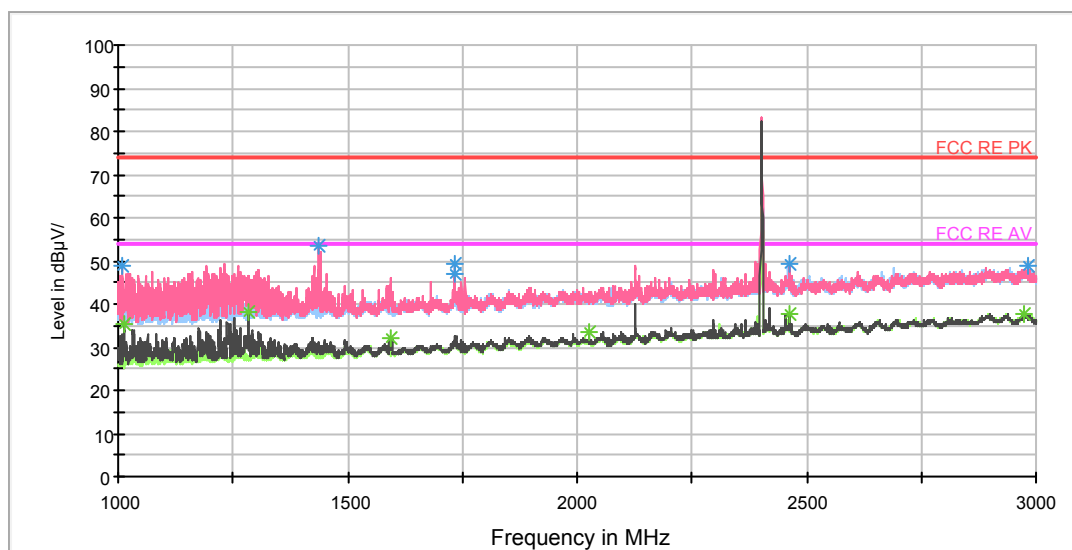
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
53.760000	20.7	100.0	V	58.0	7.9	12.8	19.3	40.0
59.942500	22.3	100.0	V	170.0	9.7	12.6	17.7	40.0
162.972500	13.0	100.0	V	103.0	3.0	10.0	30.5	43.5
212.353750	10.9	100.0	V	0.0	-1.7	12.6	32.6	43.5
513.425000	18.1	100.0	H	10.0	-2.8	20.9	27.9	46.0
917.306250	25.9	100.0	H	192.0	-1.1	27.0	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

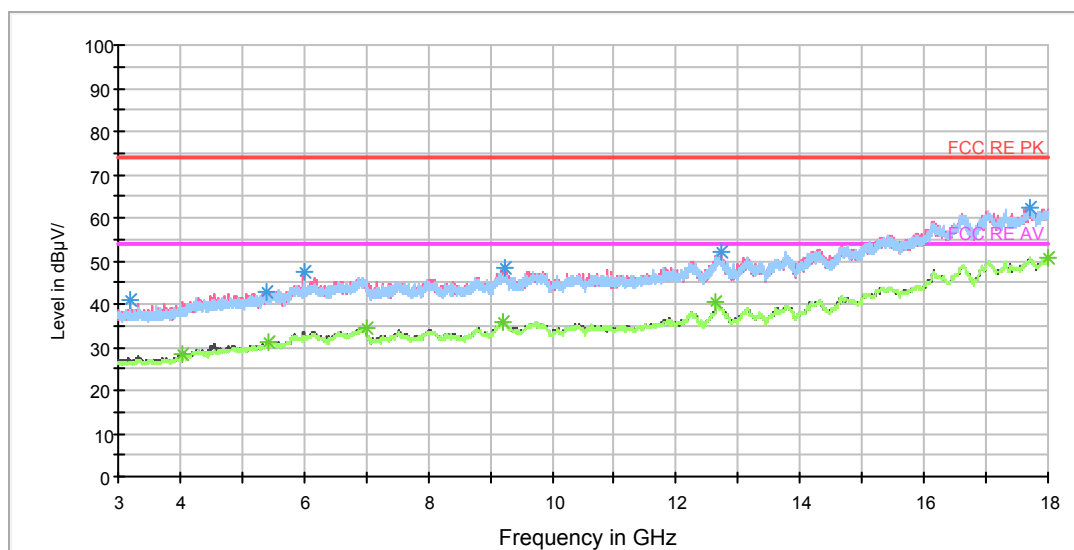
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1010.250000	48.7	100.0	V	281.0	58.0	-9.3	25.3	74
1435.500000	53.5	100.0	V	0.0	60.4	-6.9	20.5	74
1732.000000	47.2	100.0	V	0.0	52.0	-4.8	26.8	74
1734.250000	49.3	100.0	V	0.0	54.0	-4.7	24.7	74
2463.500000	49.2	100.0	V	152.0	49.7	-0.5	24.8	74
2982.750000	48.7	100.0	V	260.0	46.5	2.2	25.3	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1013.000000	35.1	100.0	V	77.0	44.3	-9.2	18.9	54
1282.750000	38.2	100.0	V	0.0	45.8	-7.6	15.8	54
1594.500000	32.2	100.0	V	0.0	38.6	-6.4	21.8	54
2025.000000	33.7	100.0	V	188.0	37.2	-3.5	20.3	54
2462.750000	37.8	100.0	V	160.0	38.3	-0.5	16.2	54
2975.250000	37.7	100.0	H	195.0	35.5	2.2	16.3	54

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

RE 3-18GHz PK+AV_BELL SWEEP



Radiates Emission from 3GHz to 18GHz

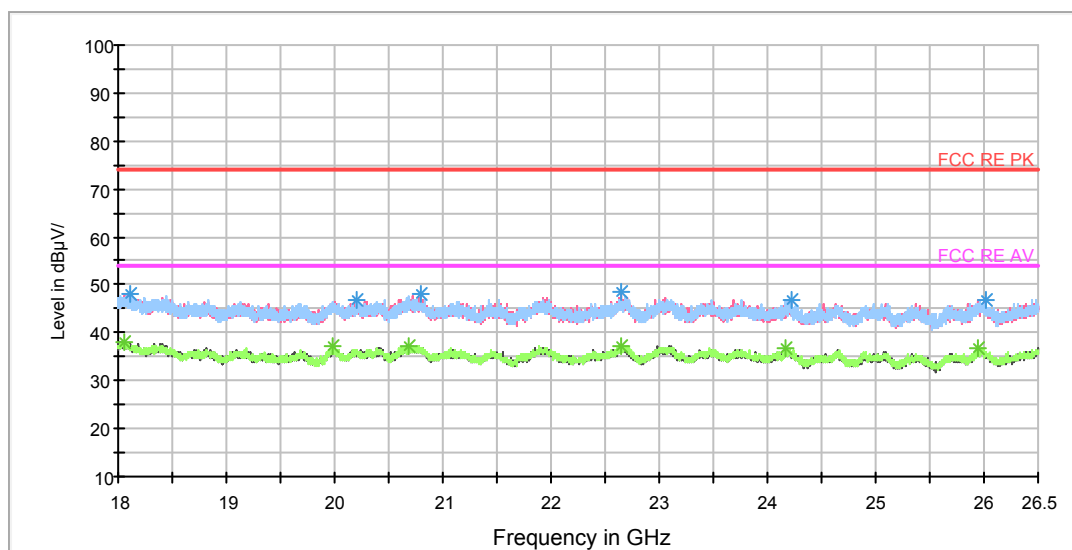
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3191.250000	41.1	105.0	V	218.0	44.0	-2.9	32.9	74
5400.000000	42.9	105.0	H	58.0	40.4	2.5	31.1	74
5998.125000	47.4	105.0	V	163.0	42.5	4.9	26.6	74
9232.500000	48.2	105.0	V	246.0	38.3	9.9	25.8	74
12729.375000	51.9	105.0	V	274.0	37.9	14.0	22.1	74
17701.875000	62.5	105.0	H	0.0	37.8	24.7	11.5	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4036.875000	28.5	105.0	V	218.0	29.5	-1.0	25.5	54
5431.875000	31.2	105.0	V	218.0	28.4	2.8	22.8	54
6997.500000	34.5	105.0	V	274.0	28.0	6.5	19.5	54
9211.875000	36.0	105.0	V	108.0	25.9	10.1	18.0	54
12639.375000	40.3	105.0	H	0.0	25.8	14.5	13.7	54
17994.375000	50.8	105.0	H	167.0	25.5	25.3	3.2	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18105.187500	48.0	V	217.0	50.2	-2.2	26.0	74
20200.437500	47.0	H	35.0	52.9	-5.9	27.0	74
20795.437500	48.2	V	280.0	55.1	-6.9	25.8	74
22652.687500	48.3	V	293.0	54.9	-6.6	25.7	74
24213.500000	46.9	H	22.0	52.8	-5.9	27.1	74
26012.312500	46.9	H	133.0	52.3	-5.4	27.1	74

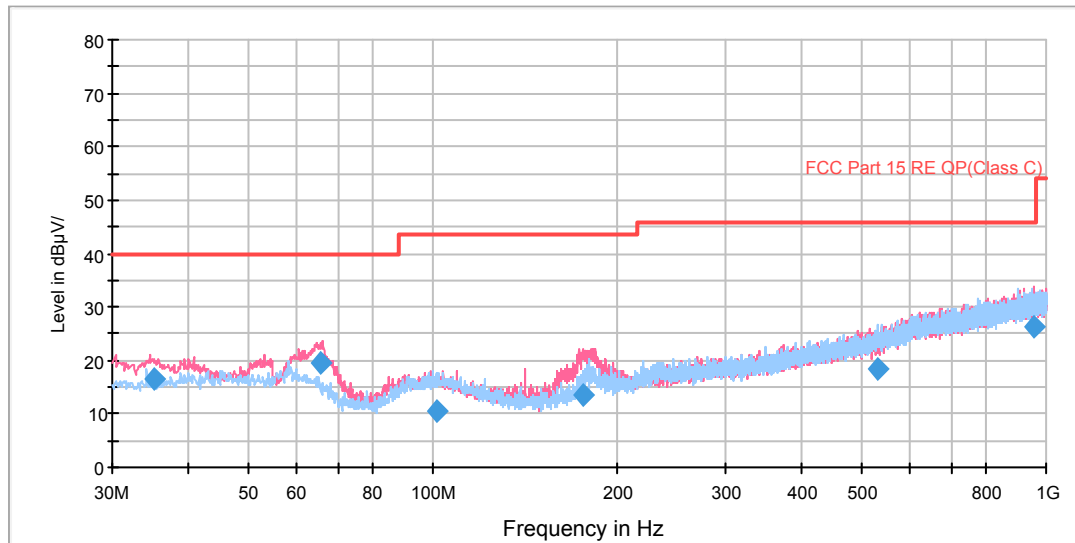
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18105.187500	37.1	V	217.0	39.3	-2.2	16.9	54
20200.437500	36.1	H	35.0	42.0	-5.9	17.9	54
20795.437500	36.3	V	280.0	43.2	-6.9	17.7	54
22652.687500	35.9	V	293.0	42.5	-6.6	18.1	54
24213.500000	35.9	H	22.0	41.8	-5.9	18.1	54
26012.312500	35.3	H	133.0	40.7	-5.4	18.7	54

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

BLE-Channel 19

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

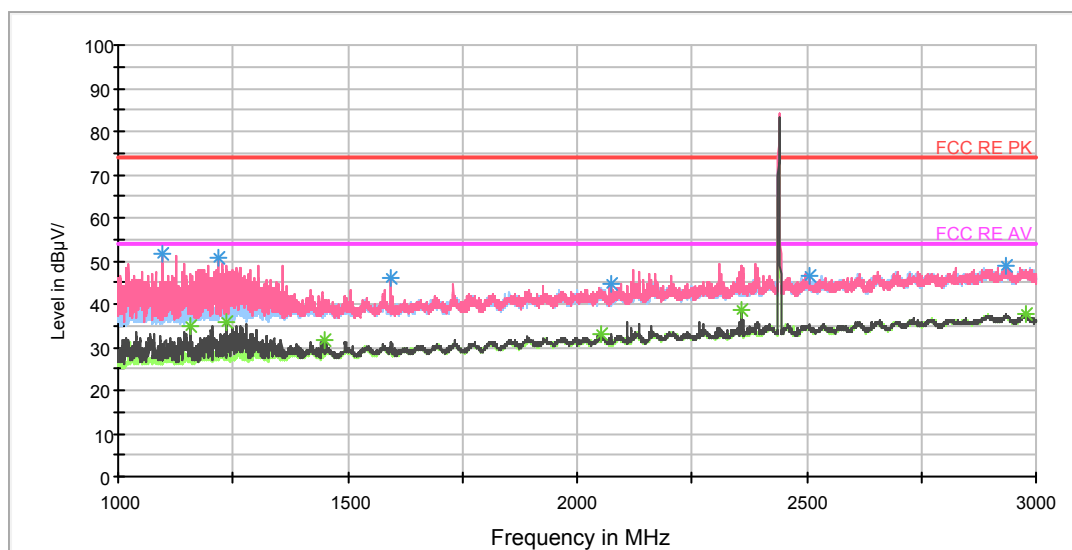
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
35.127500	16.4	100.0	V	0.0	4.3	12.1	23.6	40.0
65.411250	19.3	100.0	V	116.0	8.9	10.4	20.7	40.0
101.253750	10.5	125.0	H	0.0	-2.7	13.2	33.0	43.5
175.737500	13.4	100.0	V	10.0	2.7	10.7	30.1	43.5
530.963750	18.5	125.0	H	269.0	-2.7	21.2	27.5	46.0
955.616250	26.3	114.0	V	10.0	-1.0	27.3	19.7	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

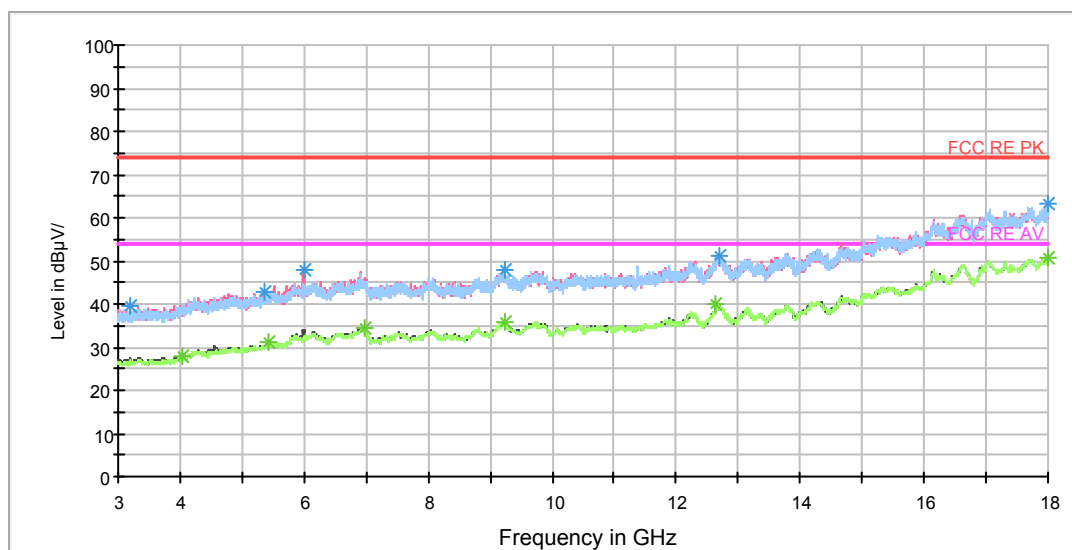
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1097.500000	51.7	100.0	V	1.0	60.6	-8.9	22.3	74
1216.500000	50.8	100.0	V	261.0	58.7	-7.9	23.2	74
1595.250000	46.0	100.0	V	52.0	52.4	-6.4	28.0	74
2074.000000	44.6	100.0	V	160.0	47.7	-3.1	29.4	74
2506.000000	46.3	100.0	H	156.0	46.5	-0.2	27.7	74
2936.500000	48.9	100.0	H	280.0	47.1	1.8	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)
1158.750000	35.1	100.0	V	178.0	43.5	-8.4	18.9	54
1235.000000	36.0	100.0	V	271.0	43.9	-7.9	18.0	54
1450.250000	31.7	100.0	V	0.0	38.3	-6.6	22.3	54
2053.750000	33.2	100.0	V	25.0	36.4	-3.2	20.8	54
2357.750000	38.7	100.0	V	178.0	40.1	-1.4	15.3	54
2976.000000	37.7	100.0	H	326.0	35.5	2.2	16.3	54

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

RE 3-18GHz PK+AV_BELL SWEEP



Radiates Emission from 3GHz to 18GHz

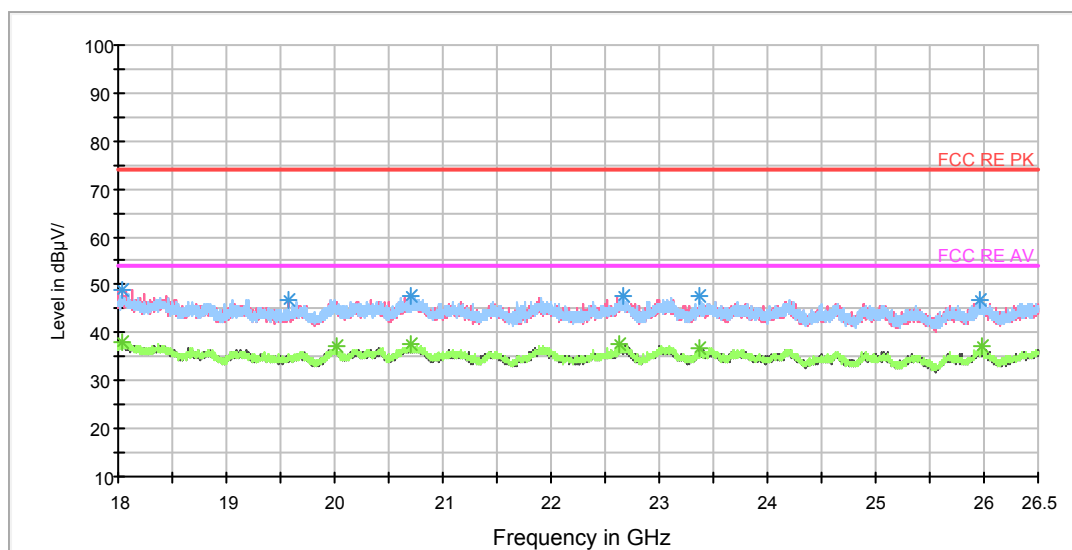
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3185.625000	39.7	105.0	V	0.0	42.6	-2.9	34.3	74
5345.625000	42.9	105.0	V	251.0	40.6	2.3	31.1	74
5990.625000	48.1	105.0	V	169.0	43.3	4.8	25.9	74
9241.875000	47.9	105.0	H	32.0	38.0	9.9	26.1	74
12699.375000	51.2	105.0	H	140.0	37.1	14.1	22.8	74
17998.125000	63.2	105.0	H	0.0	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)
4036.875000	28.0	105.0	V	0.0	29.0	-1.0	26.0	54
5437.500000	31.0	105.0	H	112.0	28.1	2.9	23.0	54
6969.375000	34.5	105.0	V	359.0	28.2	6.3	19.5	54
9240.000000	35.9	105.0	H	112.0	26.0	9.9	18.1	54
12639.375000	40.1	105.0	H	309.0	25.6	14.5	13.9	54
17998.125000	50.8	105.0	V	279.0	25.4	25.4	3.2	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18032.937500	48.8	V	296.0	50.7	-1.9	25.2	74
19579.937500	46.9	V	86.0	53.0	-6.1	27.1	74
20706.187500	47.6	V	165.0	54.3	-6.7	26.4	74
22675.000000	47.6	H	149.0	54.2	-6.6	26.4	74
23375.187500	47.5	H	358.0	53.4	-5.9	26.5	74
25953.875000	46.9	V	308.0	52.3	-5.4	27.1	74

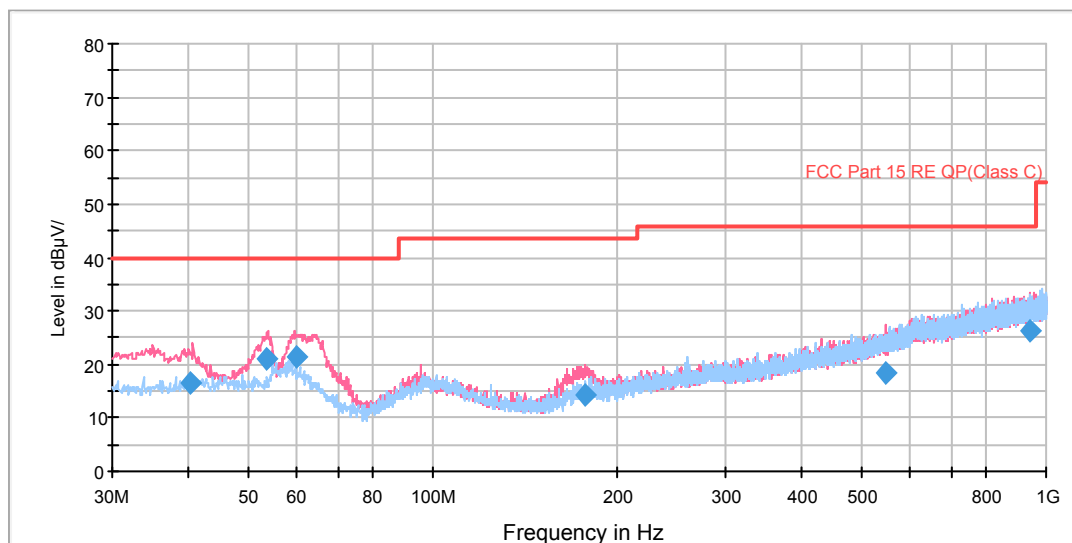
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18032.937500	37.6	V	296.0	39.5	-1.9	16.4	54
19579.937500	34.6	V	86.0	40.7	-6.1	19.4	54
20706.187500	36.4	V	165.0	43.1	-6.7	17.6	54
22675.000000	37.0	H	149.0	43.6	-6.6	17.0	54
23375.187500	35.3	H	358.0	41.2	-5.9	18.7	54
25953.875000	35.7	V	308.0	41.1	-5.4	18.3	54

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

BLE-Channel 39

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

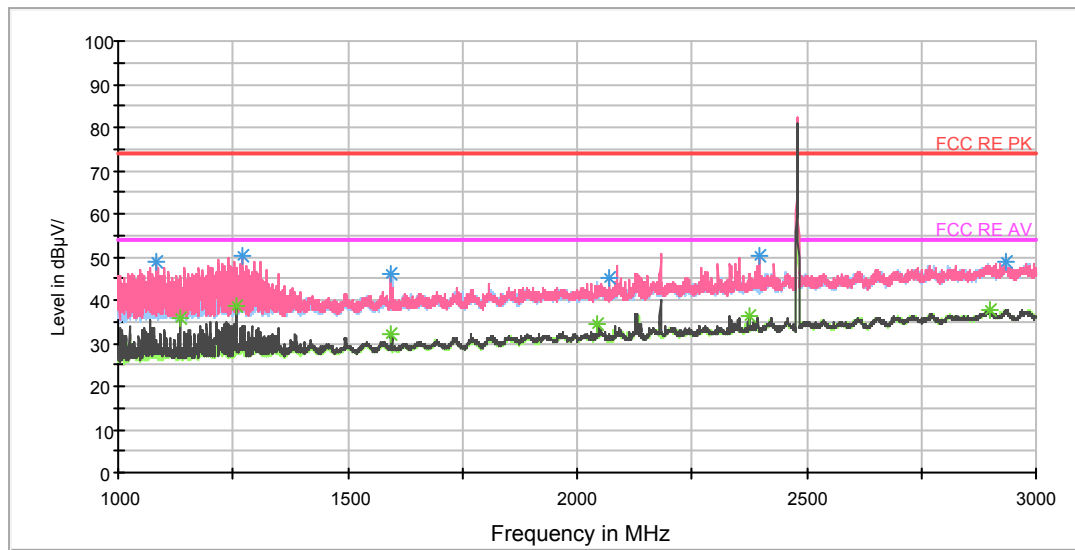
Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
40.110000	16.6	100.0	V	180.0	3.3	13.3	23.4	40.0
53.725000	21.1	100.0	V	72.0	8.3	12.8	18.9	40.0
59.983750	21.6	114.0	V	69.0	9.0	12.6	18.4	40.0
177.801250	14.3	100.0	V	226.0	3.4	10.9	29.2	43.5
546.482500	18.5	113.0	V	0.0	-2.7	21.2	27.5	46.0
943.662500	26.2	100.0	V	39.0	-1.0	27.2	19.8	46.0

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

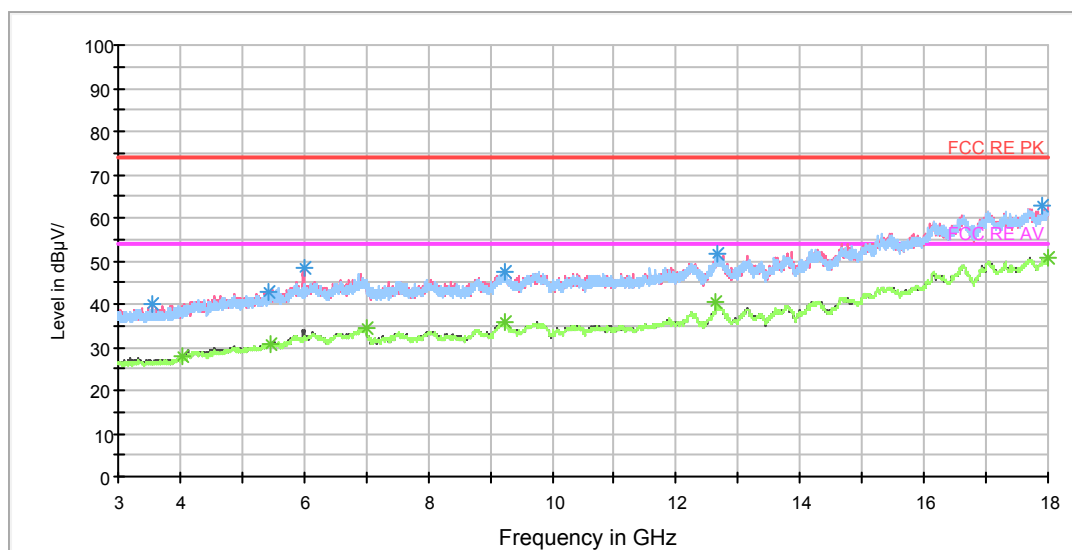
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1082.000000	48.9	100.0	V	268.0	57.8	-8.9	25.1	74
1269.250000	50.4	100.0	V	0.0	58.1	-7.7	23.6	74
1592.750000	45.8	100.0	V	204.0	52.2	-6.4	28.2	74
2070.000000	45.1	100.0	V	160.0	48.2	-3.1	28.9	74
2396.750000	50.4	100.0	V	160.0	51.7	-1.3	23.6	74
2932.500000	48.8	100.0	H	229.0	47.0	1.8	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)
1136.500000	35.6	100.0	V	177.0	44.1	-8.5	18.4	54
1257.000000	38.6	100.0	V	187.0	46.4	-7.8	15.4	54
1594.500000	31.9	100.0	V	0.0	38.3	-6.4	22.1	54
2044.500000	34.6	100.0	H	73.0	37.8	-3.2	19.4	54
2375.750000	36.2	100.0	V	160.0	37.7	-1.5	17.8	54
2897.750000	37.6	100.0	H	0.0	35.5	2.1	16.4	54

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

RE 3-18GHz PK+AV_BELL SWEEP



Radiates Emission from 3GHz to 18GHz

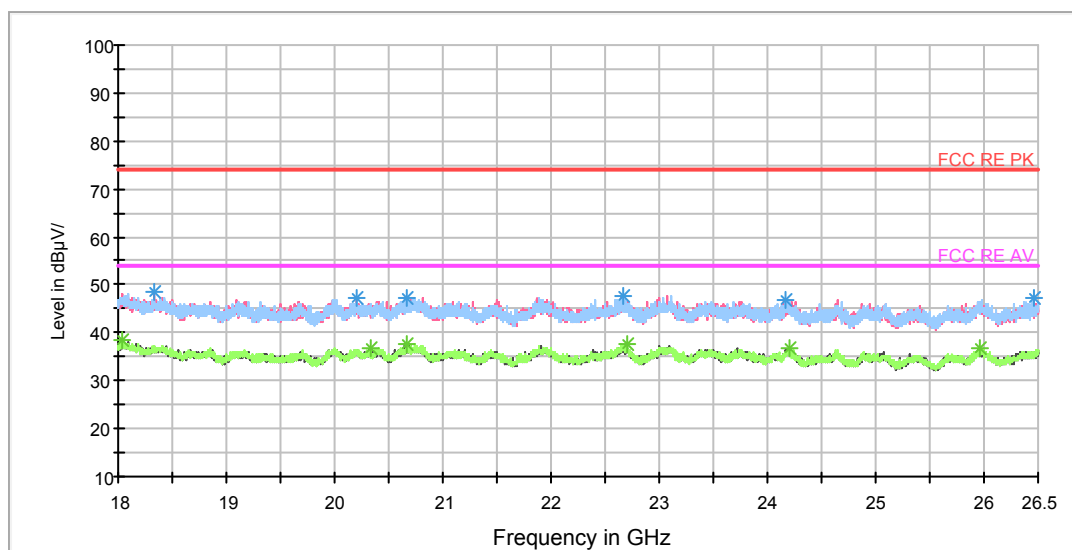
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
3538.125000	39.8	105.0	V	0.0	42.0	-2.2	34.2	74
5409.375000	42.8	105.0	H	113.0	40.2	2.6	31.2	74
5994.375000	48.3	105.0	V	193.0	43.4	4.9	25.7	74
9251.250000	47.6	105.0	V	193.0	38.0	9.6	26.4	74
12656.250000	51.5	105.0	H	0.0	37.6	13.9	22.5	74
17913.750000	62.6	105.0	H	32.0	37.0	25.6	11.4	74

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

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
4035.000000	28.0	105.0	V	0.0	29.0	-1.0	26.0	54
5448.750000	30.8	105.0	V	275.0	28.0	2.8	23.2	54
6997.500000	34.5	105.0	V	0.0	28.0	6.5	19.5	54
9240.000000	35.9	105.0	H	6.0	26.0	9.9	18.1	54
12641.250000	40.3	105.0	V	248.0	25.8	14.5	13.7	54
18000.000000	50.9	105.0	V	0.0	25.4	25.5	3.1	54

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	Peak (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18329.375000	48.5	V	326.0	51.7	-3.2	25.5	74
20201.500000	47.1	V	313.0	53.0	-5.9	26.9	74
20659.437500	47.3	V	148.0	53.9	-6.6	26.7	74
22670.750000	47.8	H	0.0	54.4	-6.6	26.2	74
24161.437500	46.7	V	212.0	52.6	-5.9	27.3	74
26456.437500	47.4	V	161.0	52.8	-5.4	26.6	74

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

Frequency (MHz)	Average (dBuV/m)	Polarization	Azimuth (deg)	Reading value (dBuV/m)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
18329.375000	36.3	V	326.0	39.5	-3.2	17.7	54
20201.500000	35.7	V	313.0	41.6	-5.9	18.3	54
20659.437500	36.7	V	148.0	43.3	-6.6	17.3	54
22670.750000	36.4	H	0.0	43.0	-6.6	17.6	54
24161.437500	35.7	V	212.0	41.6	-5.9	18.3	54
26456.437500	34.7	V	161.0	40.1	-5.4	19.3	54

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

5.8. Conducted Emission

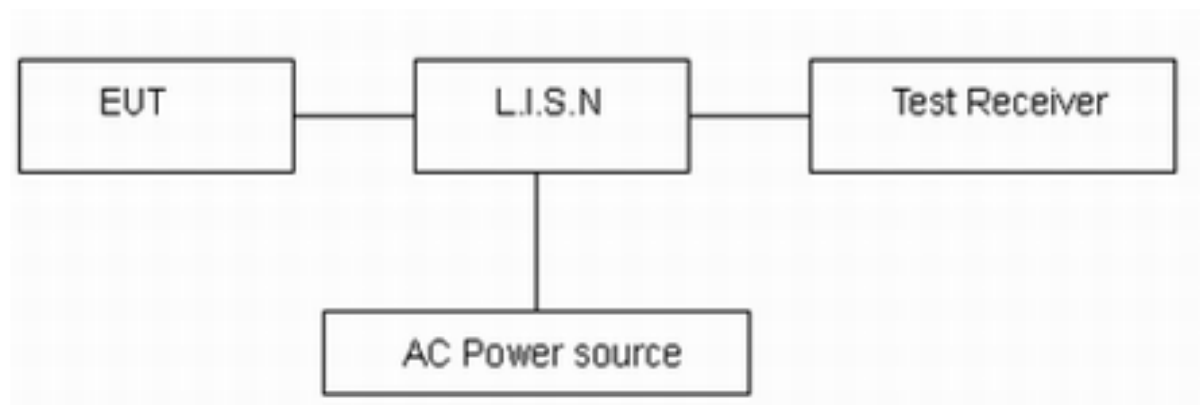
Ambient condition

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

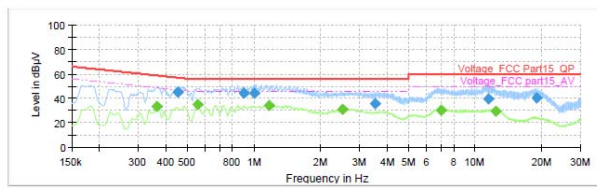
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$, $U = 2.69$ dB.

**Test Results:**

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

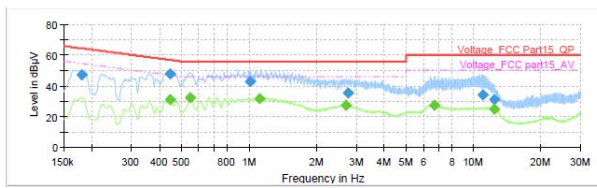
802.11b, Channel No.: 1

L Line

**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.361500	---	33.57	48.69	15.12	1000.0	9.000	L1	ON	19.2
0.451500	44.64	---	56.85	12.21	1000.0	9.000	L1	ON	19.2
0.555000	---	34.93	46.00	11.07	1000.0	9.000	L1	ON	19.3
0.901500	43.80	---	56.00	12.20	1000.0	9.000	L1	ON	19.2
1.000500	44.48	---	56.00	11.52	1000.0	9.000	L1	ON	19.2
1.173750	---	34.07	46.00	11.93	1000.0	9.000	L1	ON	19.2
2.523750	---	30.72	46.00	15.28	1000.0	9.000	L1	ON	19.0
3.531750	35.88	---	56.00	20.12	1000.0	9.000	L1	ON	19.1
7.010250	---	30.31	50.00	19.69	1000.0	9.000	L1	ON	19.2
11.490000	39.75	---	60.00	20.25	1000.0	9.000	L1	ON	19.4
12.439500	---	29.48	50.00	20.52	1000.0	9.000	L1	ON	19.4
18.867750	40.30	---	60.00	19.70	1000.0	9.000	L1	ON	19.6

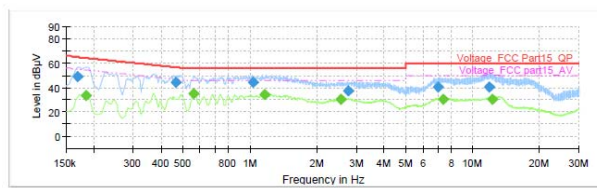
N Line

**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.179250	47.11	---	64.52	17.41	1000.0	9.000	N	ON	19.2
0.444750	47.53	---	56.97	9.44	1000.0	9.000	N	ON	19.2
0.444750	---	30.81	46.97	16.16	1000.0	9.000	N	ON	19.2
0.548250	---	32.20	46.00	13.80	1000.0	9.000	N	ON	19.3
1.016250	42.86	---	56.00	13.14	1000.0	9.000	N	ON	19.2
1.110750	---	31.91	46.00	14.09	1000.0	9.000	N	ON	19.2
2.692500	---	26.98	46.00	19.02	1000.0	9.000	N	ON	19.0
2.753250	35.38	---	56.00	20.62	1000.0	9.000	N	ON	19.0
6.672750	---	27.54	50.00	22.46	1000.0	9.000	N	ON	19.1
10.974750	33.95	---	60.00	26.05	1000.0	9.000	N	ON	19.4
12.376500	---	24.91	50.00	25.09	1000.0	9.000	N	ON	19.4
12.419250	30.89	---	60.00	29.11	1000.0	9.000	N	ON	19.4

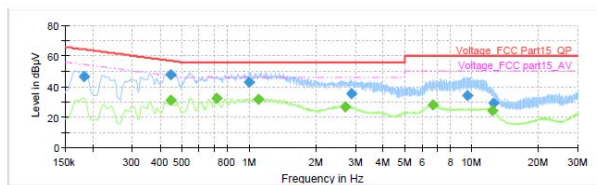
802.11b, Channel No.: 6

L Line

**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.168000	48.94	---	65.06	16.12	1000.0	9.000	L1	ON	19.1
0.183750	---	33.34	54.31	20.98	1000.0	9.000	L1	ON	19.2
0.465000	44.57	---	56.60	12.03	1000.0	9.000	L1	ON	19.2
0.555000	---	34.93	46.00	11.07	1000.0	9.000	L1	ON	19.3
1.029750	44.08	---	56.00	11.92	1000.0	9.000	L1	ON	19.2
1.171500	---	34.25	46.00	11.75	1000.0	9.000	L1	ON	19.2
2.548500	---	30.60	46.00	15.40	1000.0	9.000	L1	ON	19.0
2.751000	37.54	---	56.00	18.46	1000.0	9.000	L1	ON	19.0
6.963000	40.43	---	60.00	19.57	1000.0	9.000	L1	ON	19.2
7.347750	---	30.15	50.00	19.85	1000.0	9.000	L1	ON	19.2
11.892750	40.67	---	60.00	19.33	1000.0	9.000	L1	ON	19.4
12.275250	---	30.39	50.00	19.61	1000.0	9.000	L1	ON	19.4

N Line

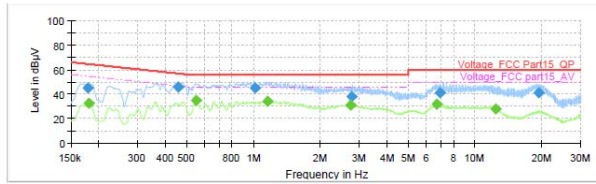
**Final Result**

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.181500	46.76	---	64.42	17.66	1000.0	9.000	N	ON	19.2
0.444750	47.51	---	56.97	9.46	1000.0	9.000	N	ON	19.2
0.444750	---	30.78	46.97	16.19	1000.0	9.000	N	ON	19.2
0.719250	---	32.05	46.00	13.95	1000.0	9.000	N	ON	19.3
0.998250	42.97	---	56.00	13.03	1000.0	9.000	N	ON	19.2
1.108500	---	31.88	46.00	14.12	1000.0	9.000	N	ON	19.2
2.690250	---	26.95	46.00	19.05	1000.0	9.000	N	ON	19.0
2.879250	35.33	---	56.00	20.67	1000.0	9.000	N	ON	19.1
6.659250	---	27.98	50.00	22.02	1000.0	9.000	N	ON	19.1
9.543750	34.25	---	60.00	25.75	1000.0	9.000	N	ON	19.4
12.426000	---	24.20	50.00	25.80	1000.0	9.000	N	ON	19.4
12.567750	29.11	---	60.00	30.89	1000.0	9.000	N	ON	19.4



802.11b, Channel No.: 11

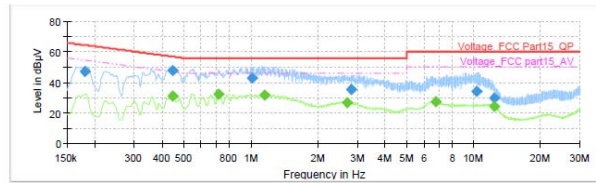
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.179250	45.06	---	64.52	19.46	1000.0	9.000	L1	ON	19.2
0.181500	---	32.37	54.42	22.05	1000.0	9.000	L1	ON	19.2
0.456000	45.68	---	56.77	11.08	1000.0	9.000	L1	ON	19.2
0.548250	---	34.67	46.00	11.33	1000.0	9.000	L1	ON	19.3
1.011750	44.63	---	56.00	11.37	1000.0	9.000	L1	ON	19.2
1.158000	---	34.33	46.00	11.67	1000.0	9.000	L1	ON	19.2
2.744250	---	30.87	46.00	15.13	1000.0	9.000	L1	ON	19.0
2.782500	37.74	---	56.00	18.26	1000.0	9.000	L1	ON	19.0
6.713250	---	31.66	50.00	18.34	1000.0	9.000	L1	ON	19.1
6.927000	41.41	---	60.00	18.59	1000.0	9.000	L1	ON	19.2
12.349500	---	28.11	50.00	21.89	1000.0	9.000	L1	ON	19.4
19.295250	41.39	---	60.00	18.61	1000.0	9.000	L1	ON	19.6

N Line

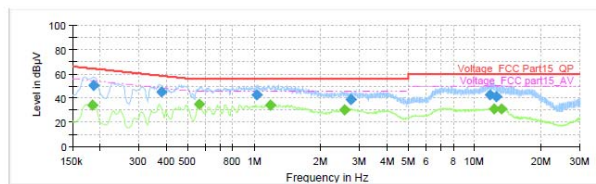


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.179250	46.96	---	64.52	17.56	1000.0	9.000	N	ON	19.2
0.444750	47.50	---	56.97	9.47	1000.0	9.000	N	ON	19.2
0.444750	---	30.80	46.97	16.18	1000.0	9.000	N	ON	19.2
0.719250	---	32.05	46.00	13.95	1000.0	9.000	N	ON	19.3
1.014000	43.00	---	56.00	13.00	1000.0	9.000	N	ON	19.2
1.158000	---	31.88	46.00	14.12	1000.0	9.000	N	ON	19.2
2.703750	---	26.95	46.00	19.05	1000.0	9.000	N	ON	19.0
2.820750	35.29	---	56.00	20.71	1000.0	9.000	N	ON	19.0
6.714000	---	27.43	50.00	22.57	1000.0	9.000	N	ON	19.1
10.326750	34.16	---	60.00	25.84	1000.0	9.000	N	ON	19.4
12.383250	---	24.06	50.00	25.94	1000.0	9.000	N	ON	19.4
12.383250	29.91	---	60.00	30.09	1000.0	9.000	N	ON	19.4

802.11g, Channel No.: 1

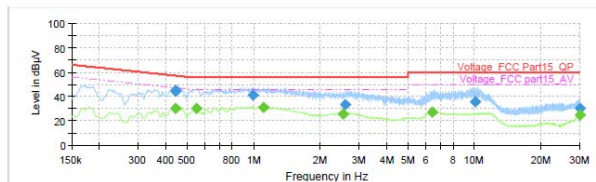
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.183750	---	33.81	54.31	20.50	1000.0	9.000	L1	ON	19.2
0.186000	50.38	---	64.21	13.83	1000.0	9.000	L1	ON	19.2
0.379500	44.74	---	58.29	13.55	1000.0	9.000	L1	ON	19.2
0.564000	---	34.75	46.00	11.25	1000.0	9.000	L1	ON	19.3
1.020750	42.98	---	56.00	13.02	1000.0	9.000	L1	ON	19.2
1.180500	---	34.18	46.00	11.82	1000.0	9.000	L1	ON	19.2
2.568750	---	30.16	46.00	15.84	1000.0	9.000	L1	ON	19.0
2.730750	38.44	---	56.00	17.56	1000.0	9.000	L1	ON	19.0
11.710500	42.49	---	60.00	17.51	1000.0	9.000	L1	ON	19.4
12.293250	---	30.98	50.00	19.02	1000.0	9.000	L1	ON	19.4
12.477750	40.73	---	60.00	19.27	1000.0	9.000	L1	ON	19.4
13.224750	---	30.69	50.00	19.31	1000.0	9.000	L1	ON	19.5

N Line



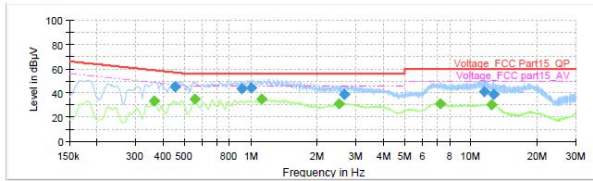
Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.442500	44.72	---	57.02	12.29	1000.0	9.000	N	ON	19.2
0.444750	---	30.27	46.97	16.71	1000.0	9.000	N	ON	19.2
0.444750	44.31	---	56.97	12.66	1000.0	9.000	N	ON	19.2
0.552750	---	30.29	46.00	15.71	1000.0	9.000	N	ON	19.3
0.996000	41.17	---	56.00	14.83	1000.0	9.000	N	ON	19.2
1.106250	---	31.22	46.00	14.78	1000.0	9.000	N	ON	19.2
2.544000	---	25.54	46.00	20.46	1000.0	9.000	N	ON	19.0
2.609250	33.62	---	56.00	22.38	1000.0	9.000	N	ON	19.0
6.443250	---	26.79	50.00	23.21	1000.0	9.000	N	ON	19.1
10.041000	35.80	---	60.00	24.20	1000.0	9.000	N	ON	19.4
29.969250	---	24.52	50.00	25.48	1000.0	9.000	N	ON	19.7
29.991750	30.54	---	60.00	29.46	1000.0	9.000	N	ON	19.7



802.11g, Channel No.: 6

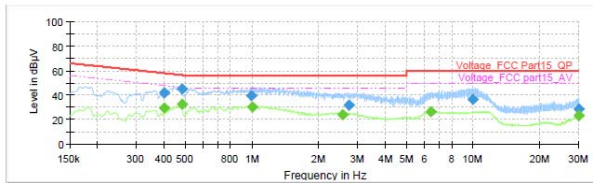
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.361500	---	33.49	48.69	15.21	1000.0	9,000	L1	ON	19.2
0.451500	44.99	---	56.85	11.85	1000.0	9,000	L1	ON	19.2
0.555000	---	35.14	46.00	10.86	1000.0	9,000	L1	ON	19.3
0.906000	43.69	---	56.00	12.31	1000.0	9,000	L1	ON	19.2
1.002750	44.43	---	56.00	11.57	1000.0	9,000	L1	ON	19.2
1.115250	---	34.63	46.00	11.37	1000.0	9,000	L1	ON	19.2
2.526000	---	30.78	46.00	15.22	1000.0	9,000	L1	ON	19.0
2.649750	38.56	---	56.00	17.44	1000.0	9,000	L1	ON	19.0
7.219500	---	30.92	50.00	19.08	1000.0	9,000	L1	ON	19.2
11.431500	40.73	---	60.00	19.27	1000.0	9,000	L1	ON	19.4
12.423750	---	30.20	50.00	19.80	1000.0	9,000	L1	ON	19.4
12.619500	38.49	---	60.00	21.51	1000.0	9,000	L1	ON	19.5

N Line

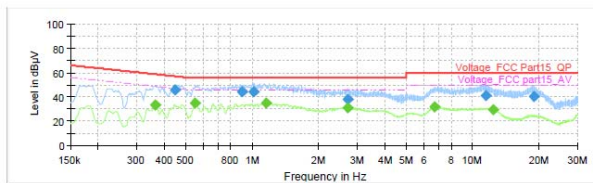


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.399750	---	41.54	---	57.86	16.32	1000.0	N	ON	19.2
0.402000	---	29.39	47.81	18.42	1000.0	9,000	N	ON	19.2
0.480750	---	32.18	46.33	14.14	1000.0	9,000	N	ON	19.2
0.483000	45.07	---	56.29	11.22	1000.0	9,000	N	ON	19.2
0.988250	39.39	---	56.00	16.61	1000.0	9,000	N	ON	19.2
1.005000	---	29.89	46.00	16.11	1000.0	9,000	N	ON	19.2
2.571000	---	23.96	46.00	22.04	1000.0	9,000	N	ON	19.0
2.744250	32.12	---	56.00	23.88	1000.0	9,000	N	ON	19.0
6.427500	---	26.67	50.00	23.33	1000.0	9,000	N	ON	19.1
9.910500	36.55	---	60.00	23.45	1000.0	9,000	N	ON	19.4
29.960250	28.93	---	60.00	31.07	1000.0	9,000	N	ON	19.7
29.988500	---	23.25	50.00	26.75	1000.0	9,000	N	ON	19.7

802.11g, Channel No.: 11

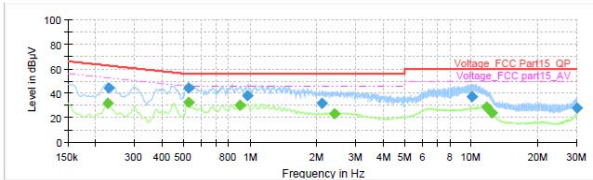
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.361500	---	33.47	48.69	15.23	1000.0	9,000	L1	ON	19.2
0.449250	45.44	---	56.89	11.45	1000.0	9,000	L1	ON	19.2
0.552750	---	35.08	46.00	10.92	1000.0	9,000	L1	ON	19.3
0.901500	43.86	---	56.00	12.14	1000.0	9,000	L1	ON	19.2
1.014000	44.39	---	56.00	11.61	1000.0	9,000	L1	ON	19.2
1.160250	---	34.60	46.00	11.40	1000.0	9,000	L1	ON	19.2
2.699250	---	31.00	46.00	15.00	1000.0	9,000	L1	ON	19.0
2.724000	38.23	---	56.00	17.77	1000.0	9,000	L1	ON	19.0
6.733750	---	31.68	50.00	18.32	1000.0	9,000	L1	ON	19.1
11.429250	40.78	---	60.00	19.22	1000.0	9,000	L1	ON	19.4
12.347250	---	29.59	50.00	20.41	1000.0	9,000	L1	ON	19.4
18.991500	39.99	---	60.00	20.01	1000.0	9,000	L1	ON	19.6

N Line

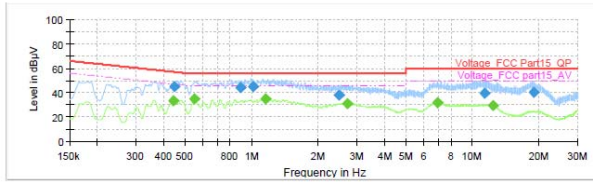


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.226500	---	31.58	52.58	21.00	1000.0	9,000	N	ON	19.1
0.228750	43.84	---	62.50	18.66	1000.0	9,000	N	ON	19.1
0.528000	---	32.41	46.00	13.59	1000.0	9,000	N	ON	19.2
0.528000	44.09	---	56.00	11.91	1000.0	9,000	N	ON	19.2
0.903750	---	29.86	46.00	16.14	1000.0	9,000	N	ON	19.2
0.969000	38.10	---	56.00	17.90	1000.0	9,000	N	ON	19.2
2.098500	32.10	---	56.00	23.90	1000.0	9,000	N	ON	19.1
2.413500	---	22.91	46.00	23.09	1000.0	9,000	N	ON	19.0
10.016250	36.88	---	60.00	23.12	1000.0	9,000	N	ON	19.4
11.672250	---	29.07	50.00	20.93	1000.0	9,000	N	ON	19.4
12.367500	---	24.35	50.00	25.65	1000.0	9,000	N	ON	19.4
29.865750	28.07	---	60.00	31.93	1000.0	9,000	N	ON	19.7

802.11n(HT20), Channel No.: 1

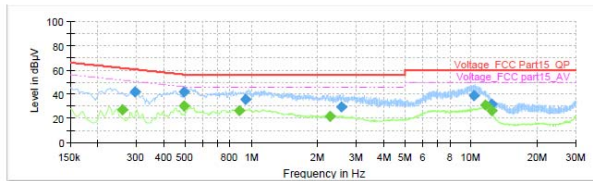
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.444750	---	33.16	46.97	13.81	1000.0	9.000	L1	ON	19.2
0.449250	45.14	---	56.89	11.75	1000.0	9.000	L1	ON	19.2
0.550500	---	34.97	46.00	11.03	1000.0	9.000	L1	ON	19.3
0.890250	44.43	---	56.00	11.57	1000.0	9.000	L1	ON	19.2
1.016250	44.64	---	56.00	11.36	1000.0	9.000	L1	ON	19.2
1.160250	---	34.73	46.00	11.27	1000.0	9.000	L1	ON	19.2
2.490000	38.14	---	56.00	17.86	1000.0	9.000	L1	ON	19.0
2.703750	---	30.97	46.00	15.03	1000.0	9.000	L1	ON	19.0
6.954000	---	31.78	50.00	18.22	1000.0	9.000	L1	ON	19.2
11.377500	39.21	---	60.00	20.79	1000.0	9.000	L1	ON	19.4
12.378750	---	29.22	50.00	20.78	1000.0	9.000	L1	ON	19.4
18.939750	40.55	---	60.00	19.45	1000.0	9.000	L1	ON	19.6

N Line

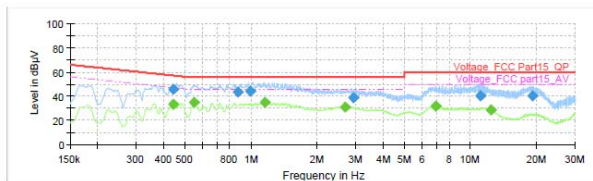


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.260250	---	27.32	51.42	24.10	1000.0	9.000	N	ON	19.1
0.294000	41.68	---	60.41	18.73	1000.0	9.000	N	ON	19.2
0.492000	---	30.13	46.13	16.00	1000.0	9.000	N	ON	19.2
0.494250	42.22	---	56.10	13.87	1000.0	9.000	N	ON	19.2
0.883500	---	26.54	46.00	19.46	1000.0	9.000	N	ON	19.2
0.935250	35.33	---	56.00	20.67	1000.0	9.000	N	ON	19.2
2.276250	---	22.03	46.00	23.97	1000.0	9.000	N	ON	19.1
2.562000	29.52	---	56.00	26.48	1000.0	9.000	N	ON	19.0
10.212750	39.01	---	60.00	20.99	1000.0	9.000	N	ON	19.4
11.650750	---	31.05	50.00	18.95	1000.0	9.000	N	ON	19.4
12.358500	---	26.17	50.00	23.83	1000.0	9.000	N	ON	19.4
12.392250	31.51	---	60.00	28.49	1000.0	9.000	N	ON	19.4

802.11n(HT20), Channel No.: 6

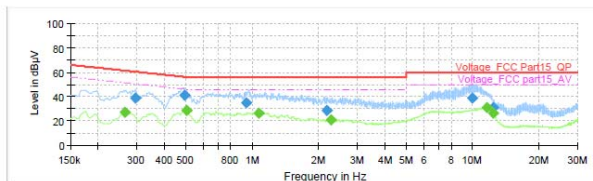
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.444750	---	33.23	46.97	13.74	1000.0	9.000	L1	ON	19.2
0.444750	46.11	---	56.97	10.86	1000.0	9.000	L1	ON	19.2
0.550500	---	34.97	46.00	11.03	1000.0	9.000	L1	ON	19.3
0.872250	43.50	---	56.00	12.50	1000.0	9.000	L1	ON	19.2
0.996000	44.56	---	56.00	11.44	1000.0	9.000	L1	ON	19.2
1.158000	---	34.75	46.00	11.25	1000.0	9.000	L1	ON	19.2
2.692500	---	31.15	46.00	14.85	1000.0	9.000	L1	ON	19.0
2.926500	38.49	---	56.00	17.51	1000.0	9.000	L1	ON	19.1
6.945000	---	31.73	50.00	18.27	1000.0	9.000	L1	ON	19.2
11.159250	40.33	---	60.00	19.67	1000.0	9.000	L1	ON	19.4
12.428250	---	28.52	50.00	21.48	1000.0	9.000	L1	ON	19.4
19.191750	40.67	---	60.00	19.33	1000.0	9.000	L1	ON	19.6

N Line



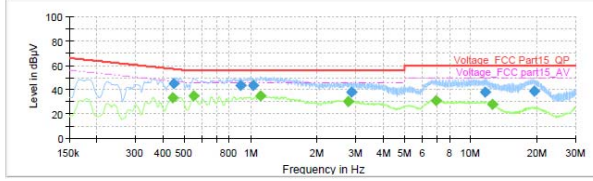
Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.264750	---	27.12	51.28	24.16	1000.0	9.000	N	ON	19.1
0.294000	39.12	---	60.41	21.29	1000.0	9.000	N	ON	19.2
0.492000	41.13	---	56.13	15.00	1000.0	9.000	N	ON	19.2
0.505500	---	28.85	46.00	17.15	1000.0	9.000	N	ON	19.2
0.942000	34.63	---	56.00	21.37	1000.0	9.000	N	ON	19.2
1.074750	---	26.28	46.00	19.72	1000.0	9.000	N	ON	19.2
2.177250	28.92	---	56.00	27.08	1000.0	9.000	N	ON	19.1
2.278500	---	21.26	46.00	24.74	1000.0	9.000	N	ON	19.1
9.969000	38.64	---	60.00	21.36	1000.0	9.000	N	ON	19.4
11.647500	---	31.14	50.00	18.86	1000.0	9.000	N	ON	19.4
12.331500	---	26.61	50.00	23.39	1000.0	9.000	N	ON	19.4
12.383250	31.38	---	60.00	28.62	1000.0	9.000	N	ON	19.4



802.11n(HT20), Channel No.: 11

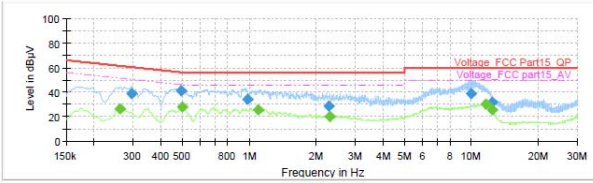
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.444750	---	33.34	46.97	13.63	1000.0	9.000	L1	ON	19.2
0.449250	44.66	---	56.89	12.23	1000.0	9.000	L1	ON	19.2
0.548250	---	34.92	46.00	11.08	1000.0	9.000	L1	ON	19.3
0.899250	43.35	---	56.00	12.65	1000.0	9.000	L1	ON	19.2
1.020750	43.19	---	56.00	12.81	1000.0	9.000	L1	ON	19.2
1.108500	---	34.58	46.00	11.42	1000.0	9.000	L1	ON	19.2
2.764500	---	30.36	46.00	15.64	1000.0	9.000	L1	ON	19.0
2.852250	37.67	---	56.00	18.33	1000.0	9.000	L1	ON	19.0
6.936000	---	30.68	50.00	19.32	1000.0	9.000	L1	ON	19.2
11.631750	38.19	---	60.00	21.81	1000.0	9.000	L1	ON	19.4
12.466500	---	27.72	50.00	22.28	1000.0	9.000	L1	ON	19.4
19.326750	38.83	---	60.00	21.17	1000.0	9.000	L1	ON	19.6

N Line

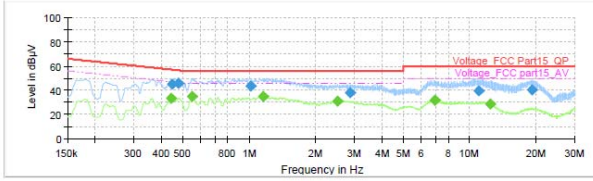


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.262500	---	26.65	51.35	24.70	1000.0	9.000	N	ON	19.1
0.294000	38.75	---	60.41	21.66	1000.0	9.000	N	ON	19.2
0.492000	40.83	---	56.13	15.30	1000.0	9.000	N	ON	19.2
0.501000	---	28.23	46.00	17.77	1000.0	9.000	N	ON	19.2
0.984750	34.04	---	56.00	21.96	1000.0	9.000	N	ON	19.2
1.095000	---	25.62	46.00	20.38	1000.0	9.000	N	ON	19.2
2.276250	28.63	---	56.00	27.37	1000.0	9.000	N	ON	19.1
2.301000	---	20.51	46.00	25.49	1000.0	9.000	N	ON	19.0
9.955500	38.51	---	60.00	21.49	1000.0	9.000	N	ON	19.4
11.602500	---	30.57	50.00	19.43	1000.0	9.000	N	ON	19.4
12.378750	31.41	---	60.00	28.59	1000.0	9.000	N	ON	19.4
12.387750	---	25.86	50.00	24.14	1000.0	9.000	N	ON	19.4

BLE, Channel No.: 0

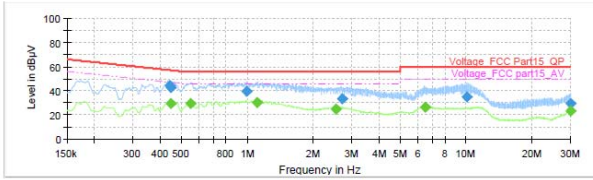
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.444750	---	33.09	46.97	13.89	1000.0	9.000	L1	ON	19.2
0.449250	44.99	---	56.89	11.90	1000.0	9.000	L1	ON	19.2
0.476250	46.03	---	56.40	10.37	1000.0	9.000	L1	ON	19.2
0.550500	---	34.87	46.00	11.13	1000.0	9.000	L1	ON	19.3
1.009500	43.76	---	56.00	12.24	1000.0	9.000	L1	ON	19.2
1.160250	---	34.64	46.00	11.36	1000.0	9.000	L1	ON	19.2
2.503500	---	30.73	46.00	15.27	1000.0	9.000	L1	ON	19.0
2.868000	38.09	---	56.00	17.91	1000.0	9.000	L1	ON	19.1
6.945000	---	31.86	50.00	18.14	1000.0	9.000	L1	ON	19.2
10.936500	39.87	---	60.00	20.13	1000.0	9.000	L1	ON	19.4
12.320250	---	28.80	50.00	21.20	1000.0	9.000	L1	ON	19.4
19.110750	40.53	---	60.00	19.47	1000.0	9.000	L1	ON	19.6

N Line



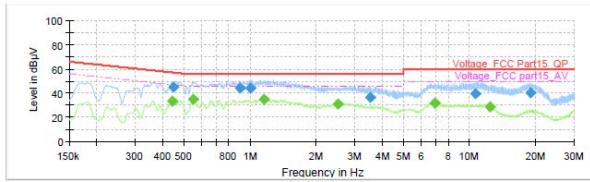
Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.442500	43.92	---	57.02	13.10	1000.0	9.000	N	ON	19.2
0.447000	---	29.74	46.93	17.19	1000.0	9.000	N	ON	19.2
0.447000	43.02	---	56.93	13.91	1000.0	9.000	N	ON	19.2
0.552750	---	29.74	46.00	16.26	1000.0	9.000	N	ON	19.3
0.991500	39.68	---	56.00	16.32	1000.0	9.000	N	ON	19.2
1.108500	---	30.50	46.00	15.50	1000.0	9.000	N	ON	19.2
2.550750	---	25.04	46.00	20.96	1000.0	9.000	N	ON	19.0
2.719500	33.67	---	56.00	22.33	1000.0	9.000	N	ON	19.0
6.490500	---	26.67	50.00	23.33	1000.0	9.000	N	ON	19.1
10.081500	35.08	---	60.00	24.92	1000.0	9.000	N	ON	19.4
29.877000	---	23.31	50.00	26.69	1000.0	9.000	N	ON	19.7
29.978250	29.54	---	60.00	30.46	1000.0	9.000	N	ON	19.7



BLE, Channel No.: 19

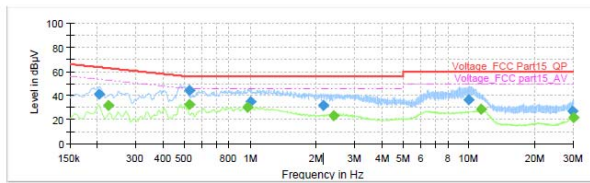
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.444750	---	33.18	46.97	13.79	1000.0	9.000	L1	ON	19.2
0.449250	44.98	---	56.89	11.91	1000.0	9.000	L1	ON	19.2
0.550500	---	34.82	46.00	11.18	1000.0	9.000	L1	ON	19.3
0.899250	43.82	---	56.00	12.18	1000.0	9.000	L1	ON	19.2
1.002750	44.22	---	56.00	11.78	1000.0	9.000	L1	ON	19.2
1.158000	---	34.76	46.00	11.24	1000.0	9.000	L1	ON	19.2
2.508000	---	30.74	46.00	15.26	1000.0	9.000	L1	ON	19.0
3.522750	36.64	---	56.00	19.36	1000.0	9.000	L1	ON	19.1
6.945000	---	31.69	50.00	18.31	1000.0	9.000	L1	ON	19.2
10.605750	39.69	---	60.00	20.31	1000.0	9.000	L1	ON	19.4
12.342750	---	28.60	50.00	21.40	1000.0	9.000	L1	ON	19.4
18.971250	40.69	---	60.00	19.31	1000.0	9.000	L1	ON	19.6

N Line

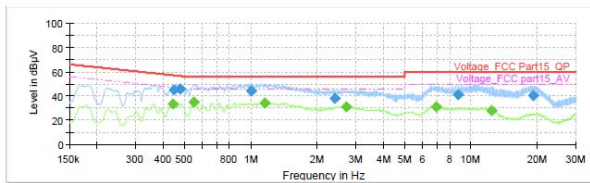


Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.204900	40.82	---	63.45	22.63	1000.0	9.000	N	ON	19.2
0.224250	---	31.96	52.66	20.70	1000.0	9.000	N	ON	19.1
0.525750	---	32.28	46.00	13.72	1000.0	9.000	N	ON	19.2
0.525750	44.48	---	56.00	11.52	1000.0	9.000	N	ON	19.2
0.973500	---	30.05	46.00	15.95	1000.0	9.000	N	ON	19.2
1.005000	34.78	---	56.00	21.22	1000.0	9.000	N	ON	19.2
2.152500	32.06	---	56.00	23.94	1000.0	9.000	N	ON	19.1
2.411250	---	23.09	46.00	22.91	1000.0	9.000	N	ON	19.0
9.564500	36.67	---	60.00	23.33	1000.0	9.000	N	ON	19.4
11.402250	---	28.68	50.00	21.32	1000.0	9.000	N	ON	19.4
29.805000	26.85	---	60.00	33.15	1000.0	9.000	N	ON	19.7
29.933250	---	22.04	50.00	27.96	1000.0	9.000	N	ON	19.7

BLE, Channel No.: 39

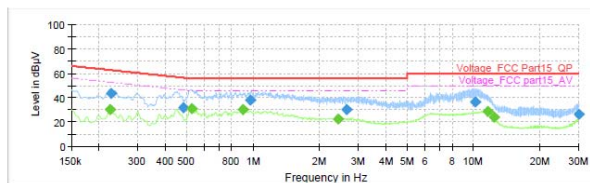
L Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.444750	---	33.34	46.97	13.64	1000.0	9.000	L1	ON	19.2
0.449250	44.98	---	56.89	11.91	1000.0	9.000	L1	ON	19.2
0.476250	45.96	---	56.40	10.45	1000.0	9.000	L1	ON	19.2
0.550500	---	34.91	46.00	11.09	1000.0	9.000	L1	ON	19.3
1.002750	44.28	---	56.00	11.72	1000.0	9.000	L1	ON	19.2
1.158000	---	34.42	46.00	11.58	1000.0	9.000	L1	ON	19.2
2.397750	37.74	---	56.00	18.26	1000.0	9.000	L1	ON	19.0
2.703750	---	30.79	46.00	15.21	1000.0	9.000	L1	ON	19.0
6.940500	---	31.25	50.00	18.75	1000.0	9.000	L1	ON	19.2
8.749500	40.84	---	60.00	19.16	1000.0	9.000	L1	ON	19.3
12.318000	---	28.27	50.00	21.73	1000.0	9.000	L1	ON	19.4
19.268250	40.25	---	60.00	19.75	1000.0	9.000	L1	ON	19.6

N Line



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.224250	---	30.08	52.66	22.58	1000.0	9.000	N	ON	19.1
0.226500	43.69	---	62.58	18.89	1000.0	9.000	N	ON	19.1
0.483000	31.91	---	56.29	24.38	1000.0	9.000	N	ON	19.2
0.528000	---	30.80	46.00	15.20	1000.0	9.000	N	ON	19.2
0.901500	---	29.99	46.00	16.01	1000.0	9.000	N	ON	19.2
0.975750	38.29	---	56.00	17.71	1000.0	9.000	N	ON	19.2
2.436000	---	22.11	46.00	23.89	1000.0	9.000	N	ON	19.0
2.547500	30.35	---	56.00	25.65	1000.0	9.000	N	ON	19.0
10.135500	36.72	---	60.00	23.28	1000.0	9.000	N	ON	19.4
11.557500	---	28.53	50.00	21.47	1000.0	9.000	N	ON	19.4
12.327000	---	23.82	50.00	26.18	1000.0	9.000	N	ON	19.4
29.868000	26.58	---	60.00	33.42	1000.0	9.000	N	ON	19.7

6. Main Test Instruments

Name	Type	Manufacturer	Serial Number	Calibration Date	Expiration Time
Spectrum Analyzer	FSV30	R&S	100815	2016-12-16	2017-12-15
EMI Test Receiver	ESCI	R&S	100948	2016-06-01	2017-05-31
TRILOG Broadband Antenna	VULB 9163	Schwarzbeck	9163-201	2014-12-06	2017-12-05
Double Ridged Waveguide Horn Antenna	HF907	R&S	100126	2014-12-06	2017-12-05
Loop Antenna	FMZB1519	SCHWARZBECK	1519-047	2017-02-18	2020-02-17
Standard Gain Horn	3160-09	ETS-Lindgren	00102644	2015-01-30	2018-01-29
EMI Test Receiver	ESCS30	R&S	100138	2016-06-01	2017-05-31
LISN	ENV216	R&S	101171	2016-12-17	2019-12-16
Spectrum Analyzer	N9010A	Agilent	MY47191109	2016-05-21	2017-05-20
RF Cable	SMA 15cm	Agilent	0001	2017-01-04	2017-04-03

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

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



Front Side



Back Side

a: EUT



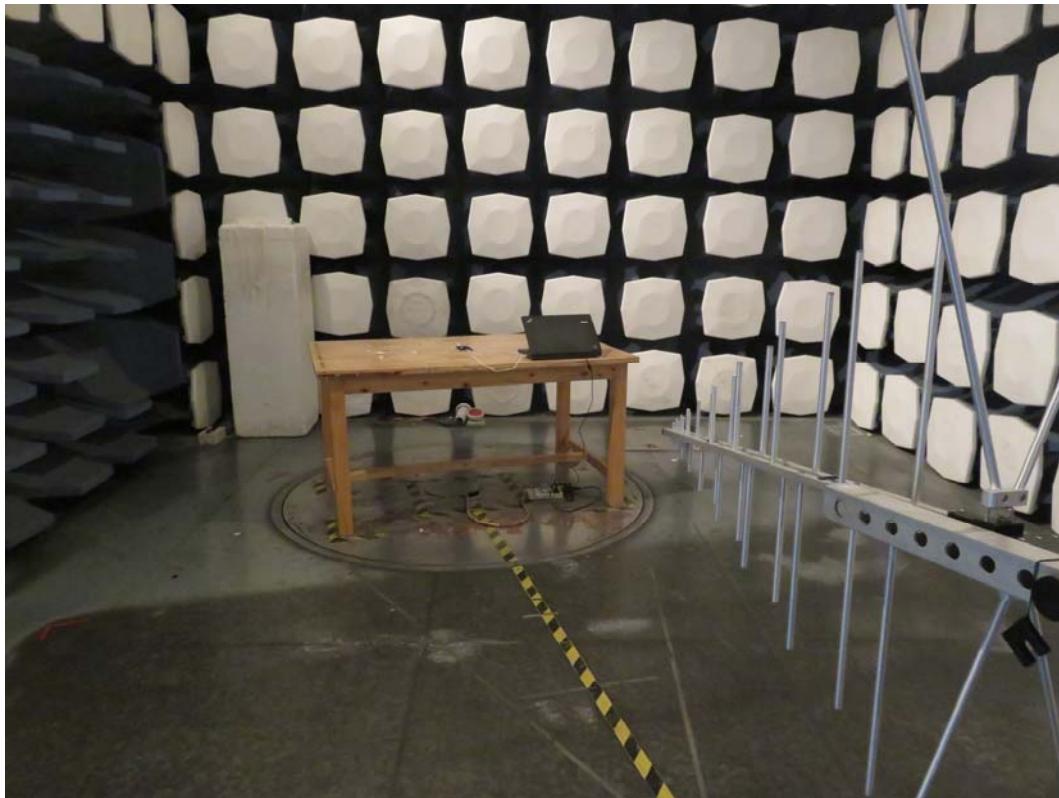
b: Adapter



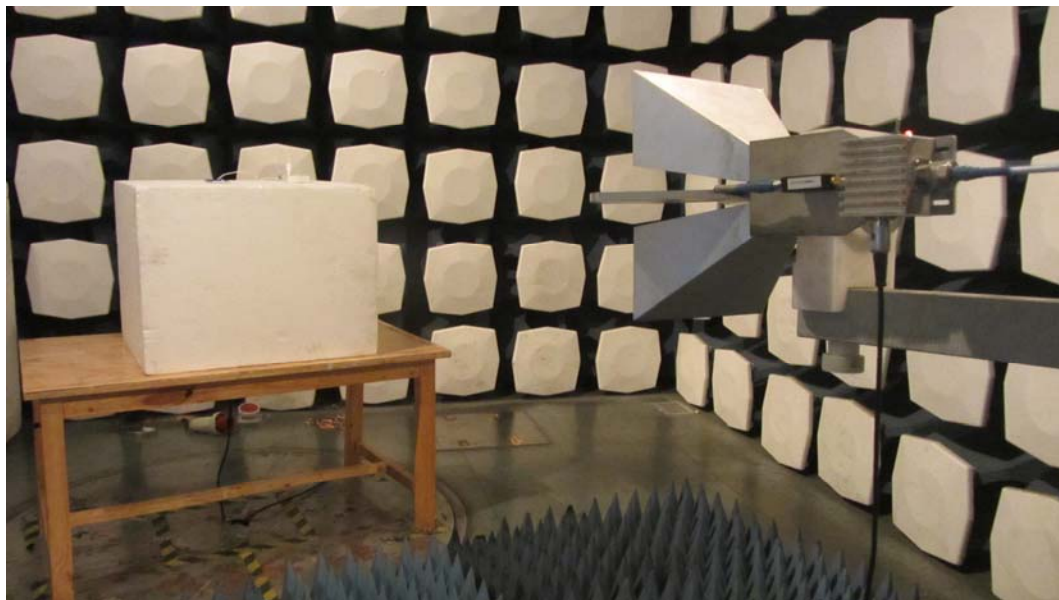
c: USB Cable

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