



RF TEST REPORT

| | |
|-------------------|---|
| Applicant | ZTE Corporation |
| FCC ID | SRQ -VFD510S-D |
| Brand | ZTE |
| Product | LTE/WCDMA/GSM (GPRS) Multi-Mode Digital Mobile Phone |
| Model | VFD 510 |
| Report No. | RXC1703-0086RF01R2 |
| Issue Date | May 24 ,2017 |

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

Performed by: Xianqing Li

Approved by: Kai Xu

TA Technology (Shanghai) Co., Ltd.

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

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

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



TABLE OF CONTENT

- 1. Test Laboratory 4
 - 1.1. Notes of the test report..... 4
 - 1.2. Test facility 4
 - 1.3. Testing Location..... 5
- 2. General Description of Equipment under Test..... 6
- 3. Applied Standards 8
- 4. Test Configuration 9
- 5. Test Case Results 10
 - 5.1. Average Power Output –Conducted..... 10
 - 5.2. 6dB Bandwidth 14
 - 5.3. Band Edge 18
 - 5.4. Power Spectral Density 20
 - 5.5. Spurious RF Conducted Emissions..... 24
 - 5.6. Radiated Emissions in the Restricted Band 30
 - 5.7. Radiates Emission 34
 - 5.8. Conducted Emission 85
- 6. Main Test Instruments..... 92
- ANNEX A: EUT Appearance and Test Setup 93
 - A.1 EUT Appearance 93
 - A.2 Test Setup 95

Summary of measurement results

| Number | Summary of measurements of results | Clause in FCC rules | Verdict |
|---|--|-------------------------|---------|
| 1 | Maximum Average conducted output power | 15.247(b)(3) | PASS |
| 2 | 6 dB bandwidth | 15.247(a)(2) | PASS |
| 3 | Power spectral density | 15.247(e) | PASS |
| 4 | Band Edge | 15.247(d) | PASS |
| 5 | Spurious RF Conducted Emissions | 15.247(d) | PASS |
| 6 | Radiated Emissions in restricted frequency bands | 15.247(d),15.205,15.209 | PASS |
| 7 | Radiated Emissions | 15.247(d),15.205,15.209 | PASS |
| 8 | Conducted Emissions | 15.207 | PASS |
| Date of Testing: March 30, 2017~ May 10, 2017 | | | |

1. Test Laboratory

1.1. Notes of the test report

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

1.2. Test facility

CNAS (accreditation number: L2264)

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

FCC (recognition number is 428261)

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

IC (recognition number is 8510A)

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

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

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

A2LA (Certificate Number: 3857.01)

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



1.3. Testing Location

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

2. General Description of Equipment under Test

Client Information

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

General information

| EUT Description | |
|------------------------------|--|
| Model: | VFD 510 |
| IMEI: | 357849080011835 |
| Hardware Version: | VFD 510 MP |
| Software Version: | VFD-510_ATPB03 |
| Power Supply: | Battery/AC adapter |
| Antenna Type: | Internal Antenna (FPC antenna) |
| Antenna Connector: | A permanently attached antenna (meet with the standard FCC Part 15.203 requirement) |
| additional beamforming gain: | 0 dB |
| Test Mode: | Bluetooth(Low Energy) 802.11b 802.11g, 802.11n(HT20); |
| Modulation Type: | BLE :GFSK 802.11b: DSSS; 802.11g/n(HT20): OFDM |
| Max. Conducted Power | Wi-Fi 2.4G :14.07dBm BLE : -1.15 dBm |
| Operating Frequency Range(s) | 802.11b/g/n(HT20): 2412 ~ 2462 MHz BLE: 2402 ~2480 MHz |
| EUT Accessory | |
| Adapter (Note 3) | Manufacturer: DOKOCOM Model: STC-A51-I Input power:100-240 V ~ 50/60Hz 250mA |
| Battery | Manufacturer: BYD Model: Li3822T43P4h736040 Power Rating: DC 3.8V, 2200mAh, Li-ion |



Earphone

Manufacturer: Shen zhen FDC Electronic Co.,Ltd.

Model: DEM-94A

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

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

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

3. Applied Standards

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

Test standards

- **FCC CFR47 Part 15C (2017) Radio Frequency Devices**
- **ANSI C63.10 (2013)**
- **KDB 558074 D01 DTS Meas Guidance v04**
- **KDB 662911 D01 Multiple Transmitter Output v02r01**

4. Test Configuration

Test Mode

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

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

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

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

Worst-case data rates are shown as following table.

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

5. Test Case Results

5.1. Average Power Output –Conducted

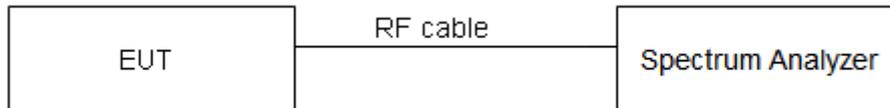
Ambient condition

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

Methods of Measurement

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

Test Setup



Limits

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

| | |
|----------------------|-------------------|
| Average Output Power | $\leq 1W$ (30dBm) |
|----------------------|-------------------|

Measurement Uncertainty

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

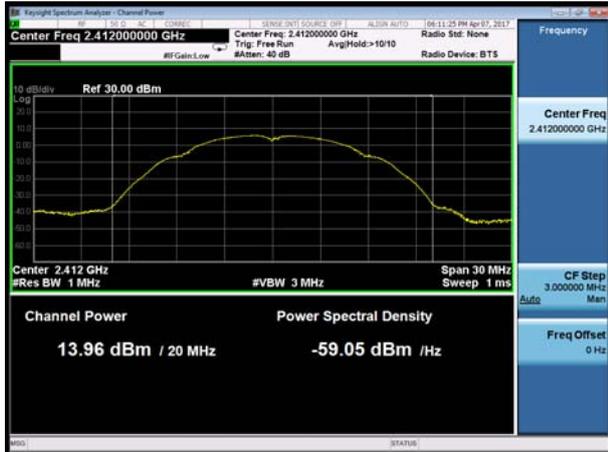
Test Results

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

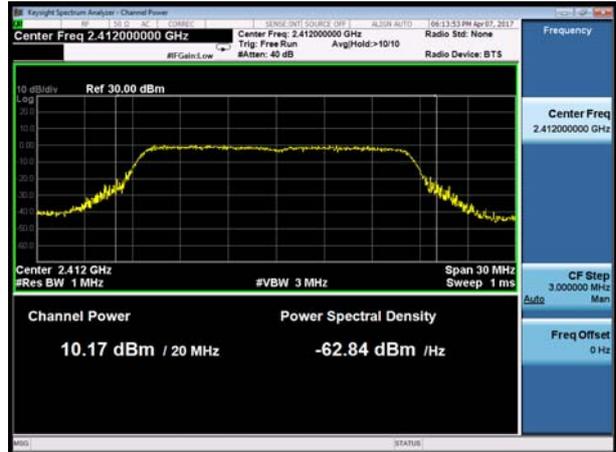
| Network Standards | Carrier frequency (MHz) | Average Output Power (dBm) | Limit (dBm) | Conclusion |
|------------------------|-------------------------|----------------------------|-------------|------------|
| 802.11b | 2412 | 13.96 | 30 | PASS |
| | 2437 | 14.06 | 30 | PASS |
| | 2462 | 14.07 |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



802.11b, Carrier frequency (MHz): 2412



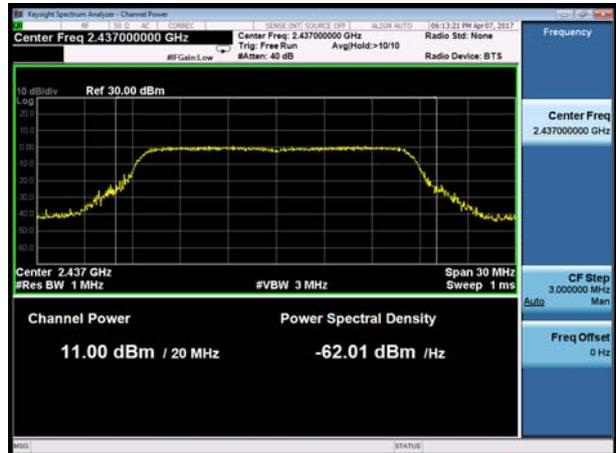
802.11g, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



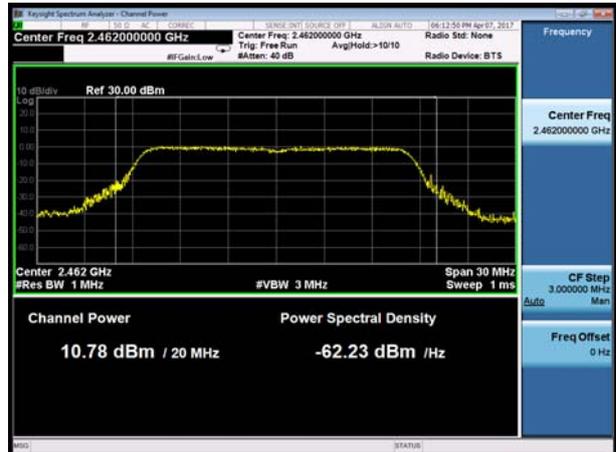
802.11g, Carrier frequency (MHz): 2437



802.11b, Carrier frequency (MHz): 2462

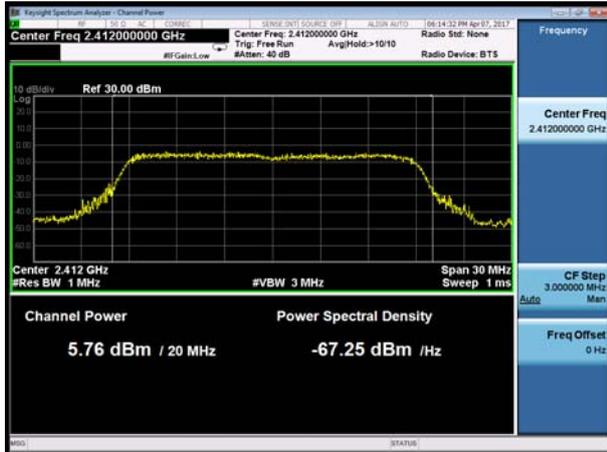


802.11g, Carrier frequency (MHz): 2462

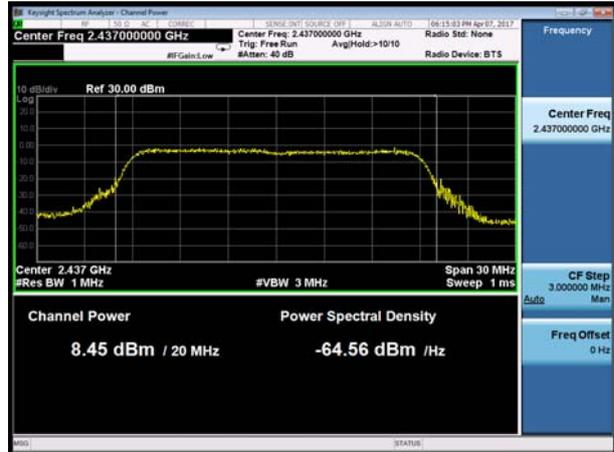




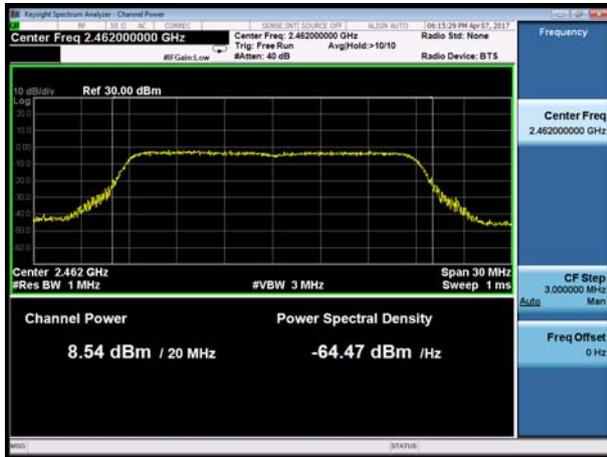
802.11n(HT20), Carrier frequency (MHz): 2412



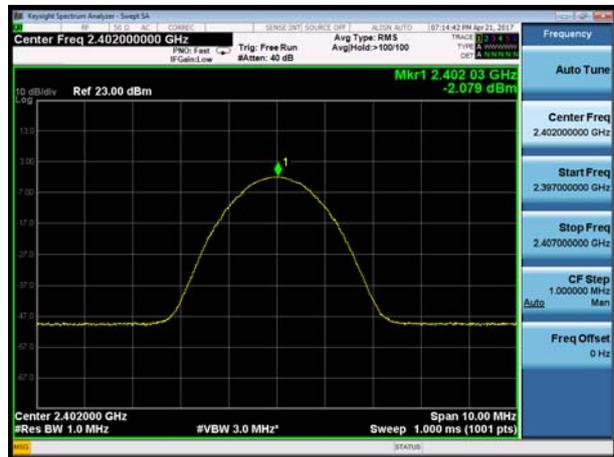
802.11n(HT20), Carrier frequency (MHz): 2437



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



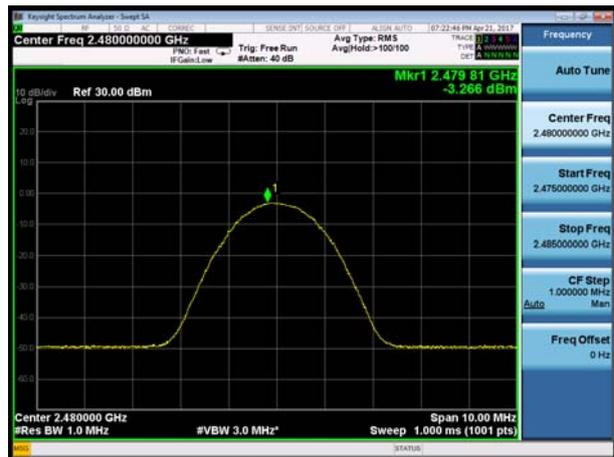
Carrier frequency (MHz): 2402
Channel No.:0



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



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



5.2. 6dB Bandwidth

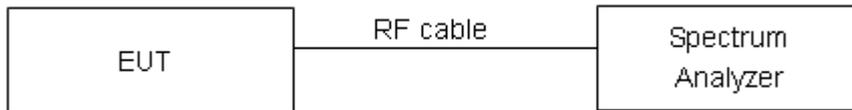
Ambient condition

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

Method of Measurement

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

Test Setup



Limits

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

| | |
|------------------------|-----------|
| minimum 6 dB bandwidth | ≥ 500 kHz |
|------------------------|-----------|

Measurement Uncertainty

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

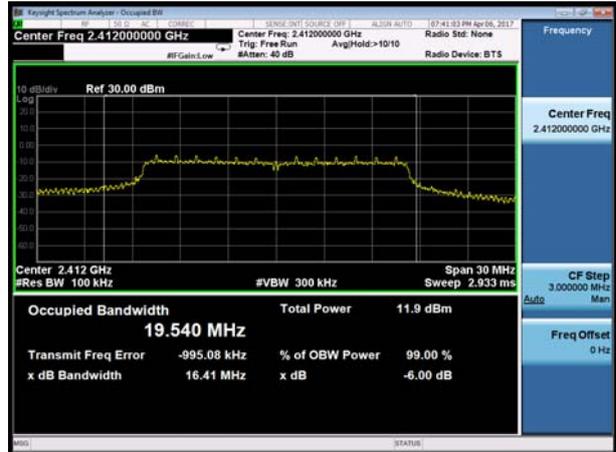
Test Results:

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

802.11b, Carrier frequency (MHz): 2412



802.11g, Carrier frequency (MHz): 2412



802.11b, Carrier frequency (MHz): 2437



802.11g, Carrier frequency (MHz): 2437



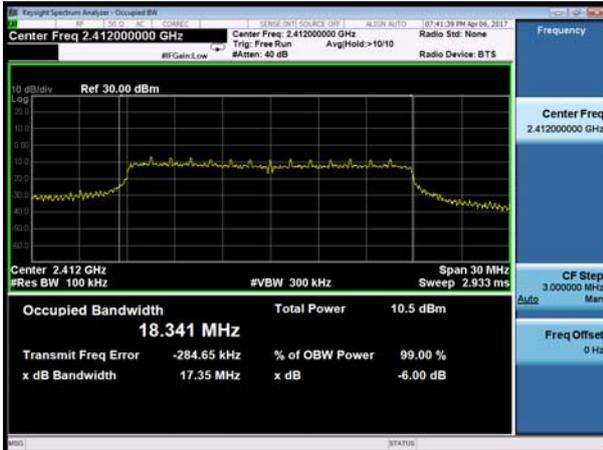
802.11b, Carrier frequency (MHz): 2462



802.11g, Carrier frequency (MHz): 2462



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



BLE Carrier frequency (MHz): 2402



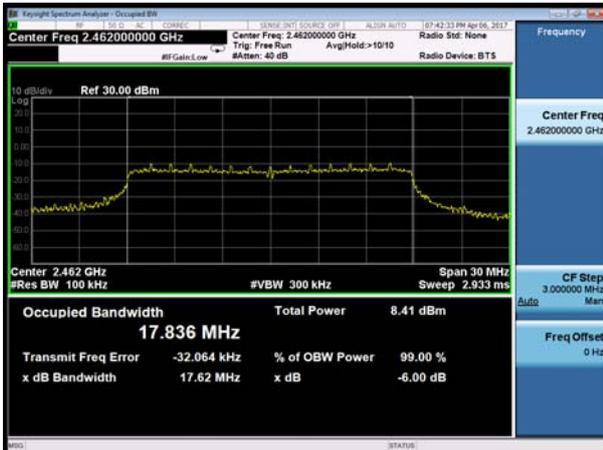
802.11n(HT20), Carrier frequency (MHz): 2437



BLE Carrier frequency (MHz): 2440



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



BLE Carrier frequency (MHz): 2480



5.3. Band Edge

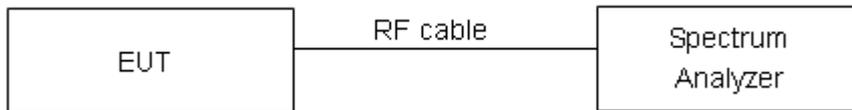
Ambient condition

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

Method of Measurement

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

Test Setup



Limits

Rule Part 15.247(d) specifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.”

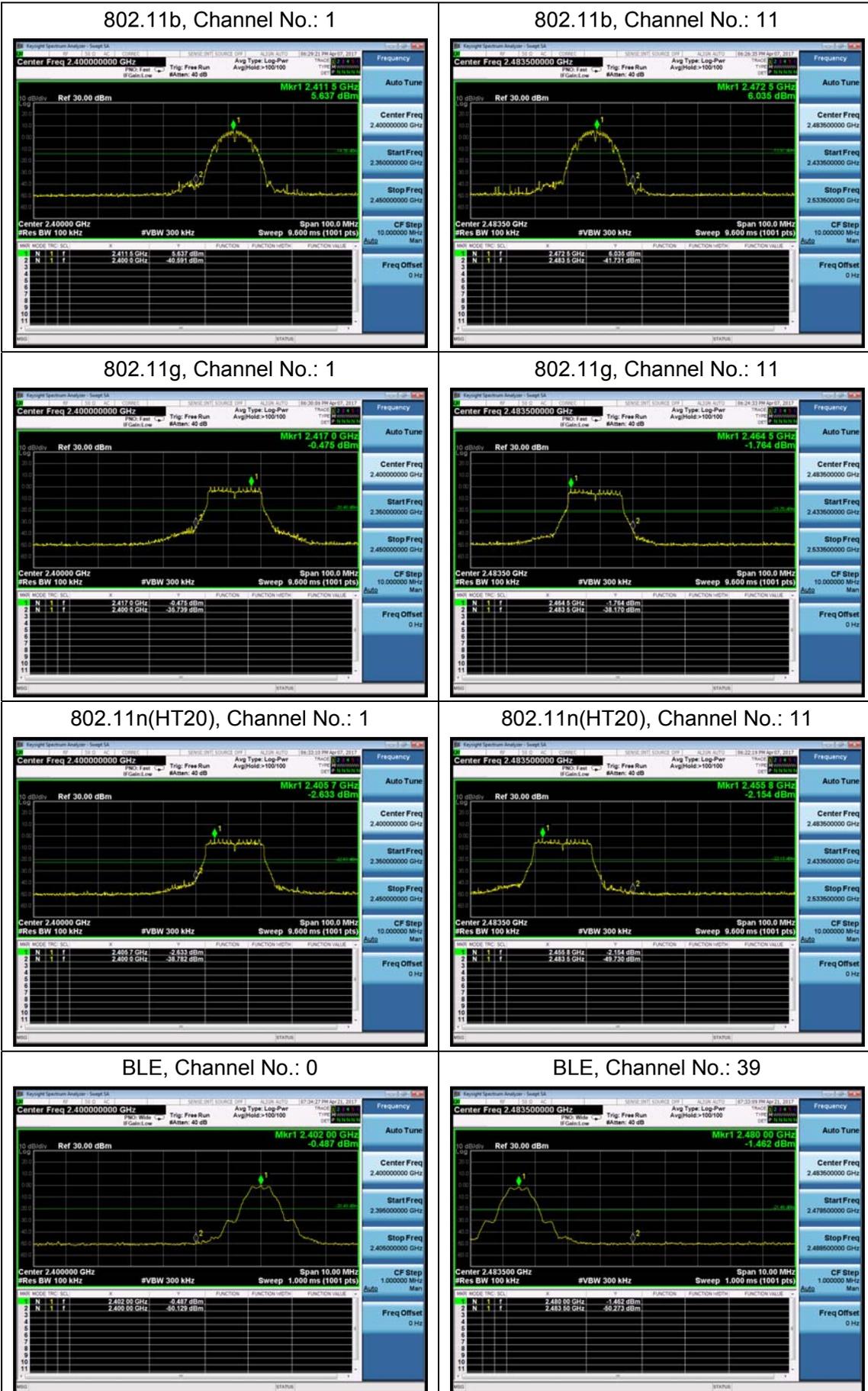
Measurement Uncertainty

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

| Frequency | Uncertainty |
|-----------|-------------|
| 2GHz-3GHz | 1.407 dB |



Test Results: PASS



5.4. Power Spectral Density

Ambient condition

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

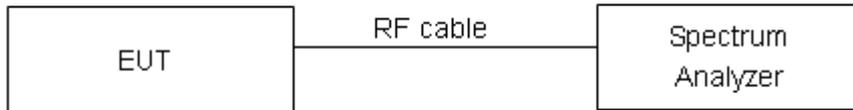
Method of Measurement

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

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

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

Test setup



Limits

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

| | |
|--------|----------------|
| Limits | ≤ 8 dBm / 3kHz |
|--------|----------------|

Measurement Uncertainty

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

**Test Results:**

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



802.11b, Channel No.: 1



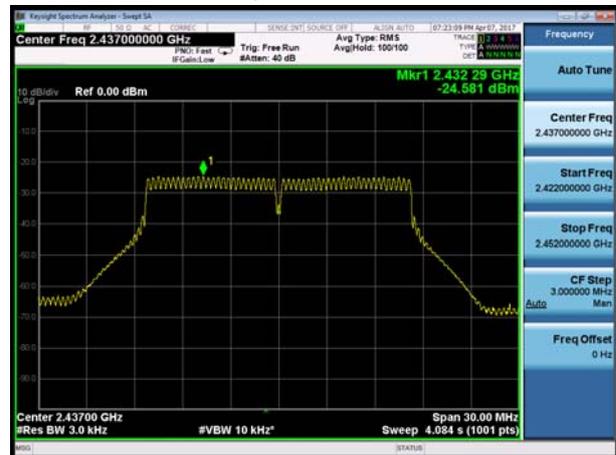
802.11g, Channel No.: 1



802.11b, Channel No.: 6



802.11g, Channel No.: 6



802.11b, Channel No.: 11



802.11g, Channel No.: 11



802.11n(HT20), Channel No. 1



802.11n(HT20), Channel No. 6



802.11n(HT20), Channel No. 11



BLE, Channel No.: 0



BLE, Channel No.: 19



BLE, Channel No.: 39



5.5. Spurious RF Conducted Emissions

Ambient condition

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

Method of Measurement

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

The test is in transmitting mode.

Test setup



Limits

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

| Network Standards | Carrier frequency (MHz) | Reference value (dBm) | Limit |
|------------------------|-------------------------|-----------------------|---------|
| 802.11b | 2412 | 3.278 | -16.722 |
| | 2437 | 3.913 | -16.087 |
| | 2462 | 3.258 | -16.742 |
| 802.11g | 2412 | 1.756 | -18.244 |
| | 2437 | -2.037 | -22.037 |
| | 2462 | -1.294 | -21.294 |
| 802.11n HT20 | 2412 | -4.089 | -24.089 |
| | 2437 | -3.825 | -23.825 |
| | 2462 | -4.23 | -24.230 |
| Bluetooth (Low Energy) | 2402 | -1.653 | -21.653 |
| | 2440 | -0.504 | -20.504 |
| | 2480 | -0.888 | -20.888 |

**Measurement Uncertainty**

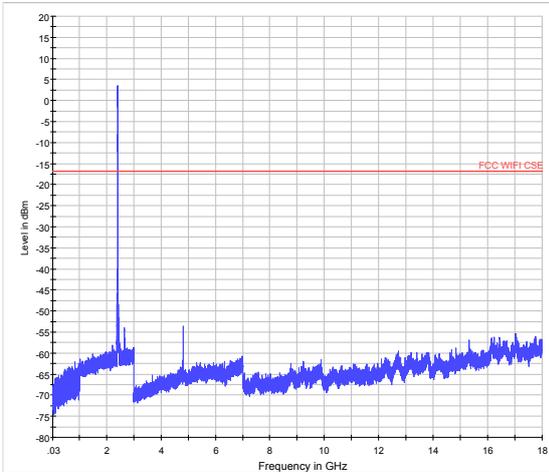
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

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

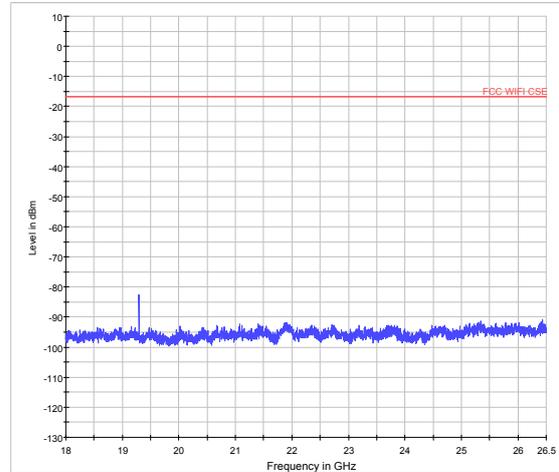


Test Results:

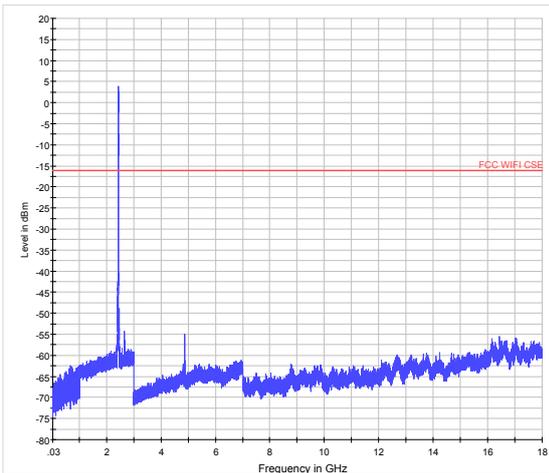
If disturbances were found more than 20dB below limit line, the mark is not required for the EUT.
The signal beyond the limit is carrier.



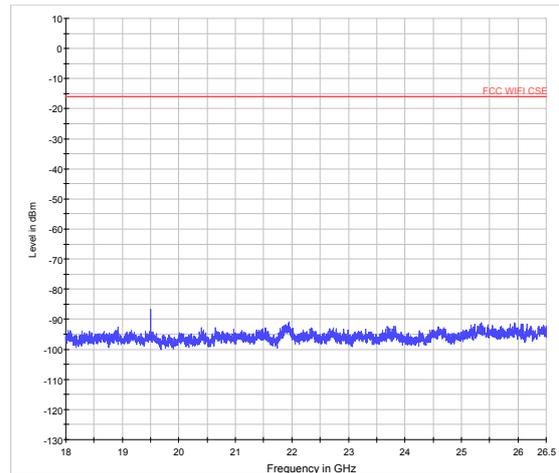
802.11b CH1 30MHz to 18GHz



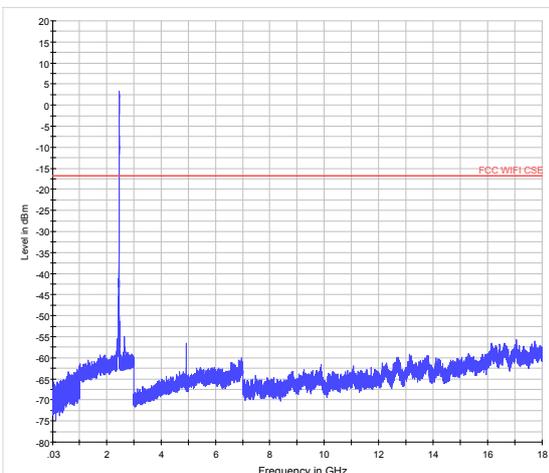
802.11b CH1 18GHz to 26.5GHz



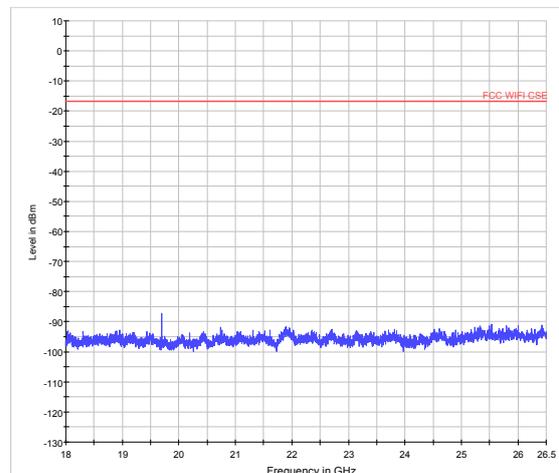
802.11b CH6 30MHz to 18GHz



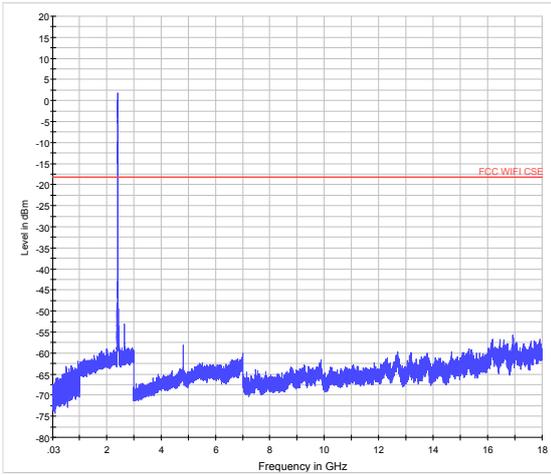
802.11b CH6 18GHz to 26.5GHz



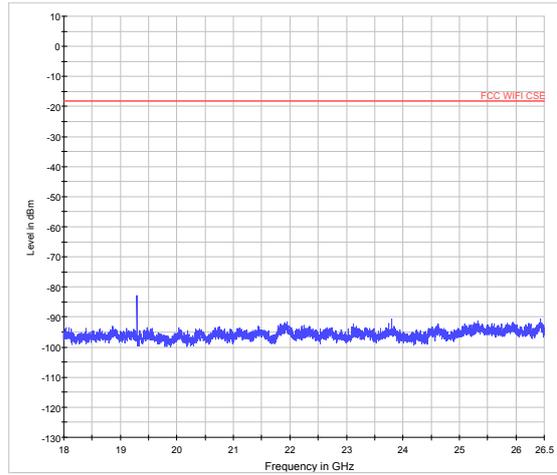
802.11b CH11 30MHz to 18GHz



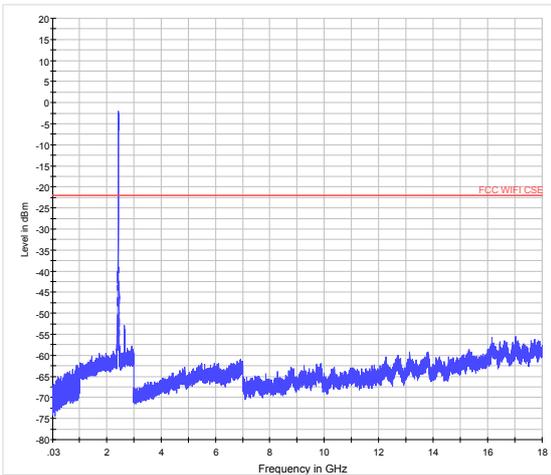
802.11b CH11 18GHz to 26.5GHz



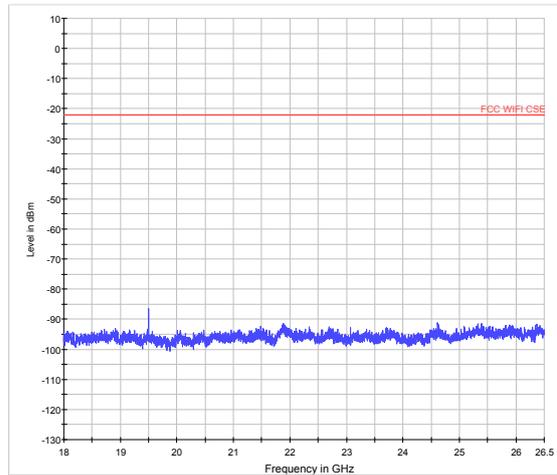
802.11g CH1 30MHz to 18GHz



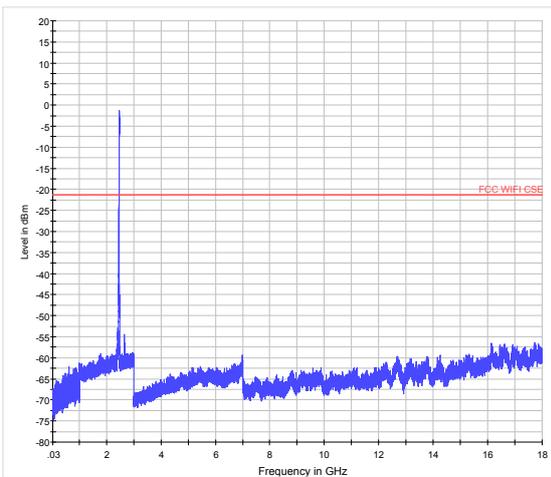
802.11g CH1 18GHz to 26.5GHz



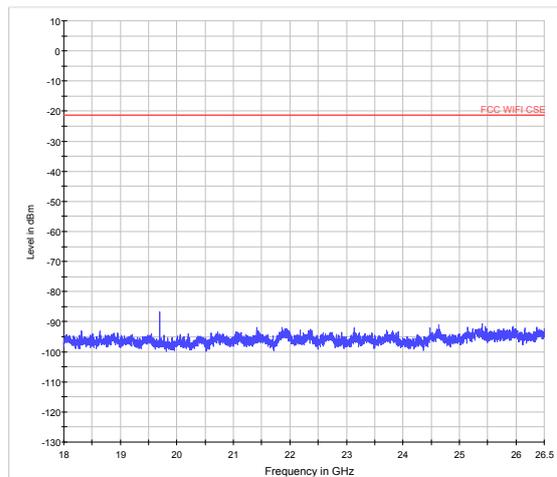
802.11g CH6 30MHz to 18GHz



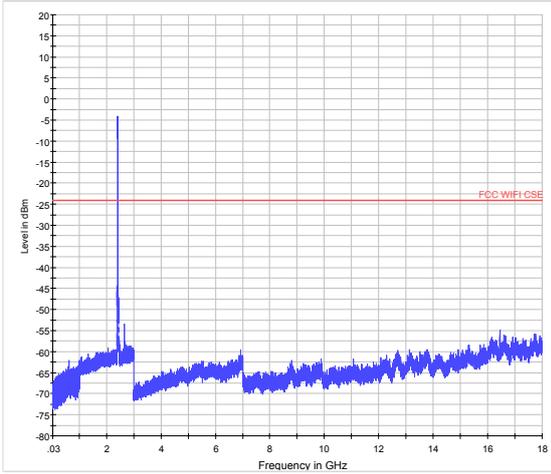
802.11g CH6 18GHz to 26.5GHz



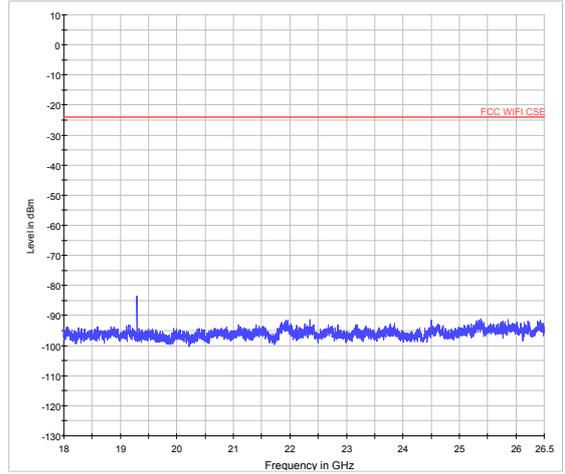
802.11g CH11 30MHz to 18GHz



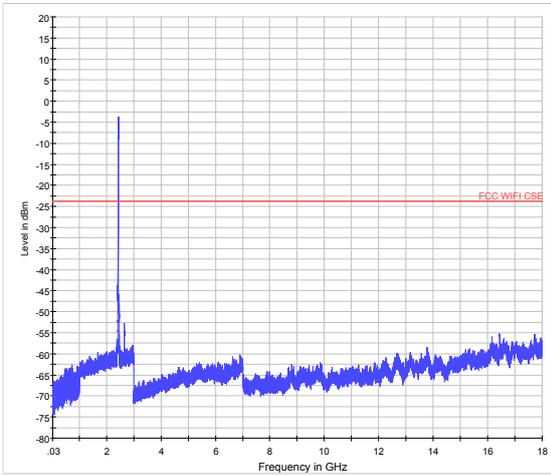
802.11g CH11 18GHz to 26.5GHz



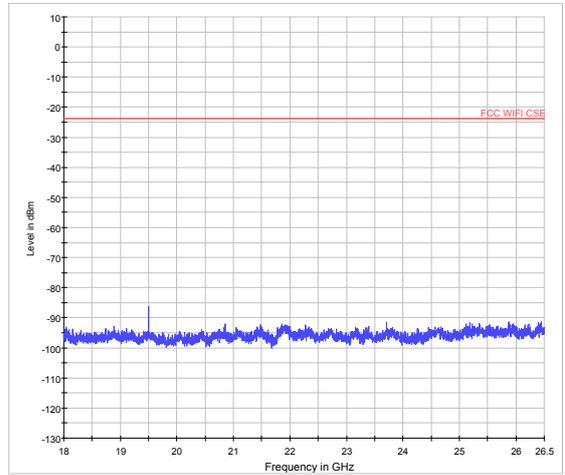
802.11n (HT20) CH1 30MHz to 18GHz



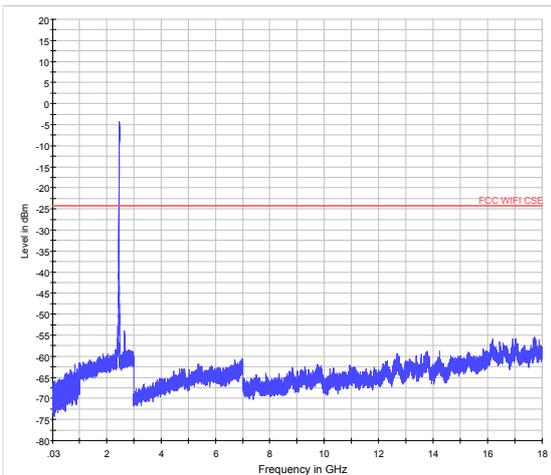
802.11n (HT20) CH1 18GHz to 26.5GHz



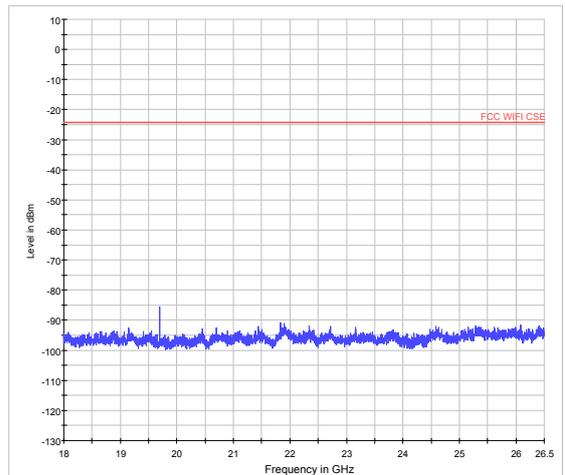
802.11n (HT20) CH6 30MHz to 18GHz



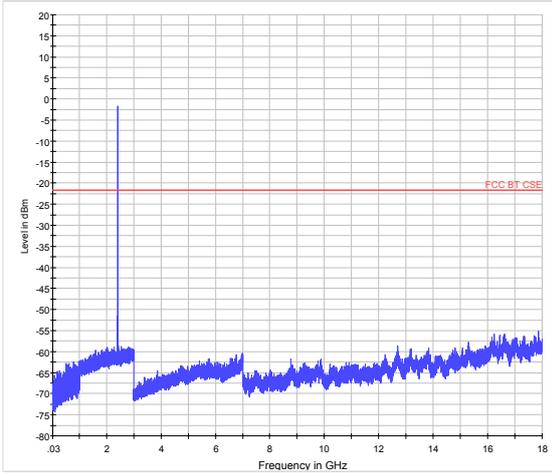
802.11n (HT20) CH6 18GHz to 26.5GHz



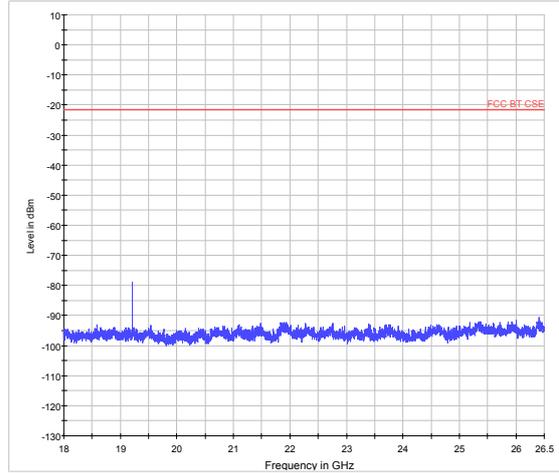
802.11n (HT20) CH11 30MHz to 18GHz



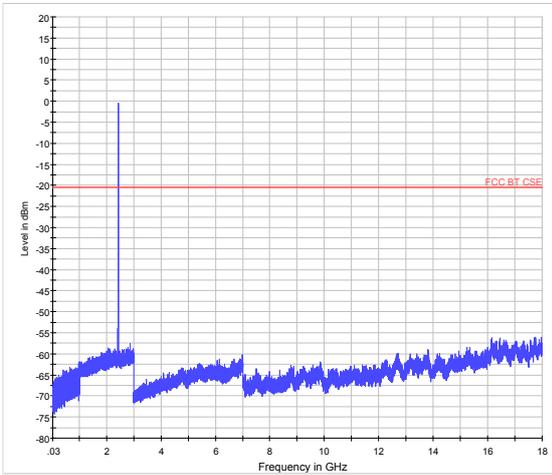
802.11n (HT20) CH11 18GHz to 26.5GHz



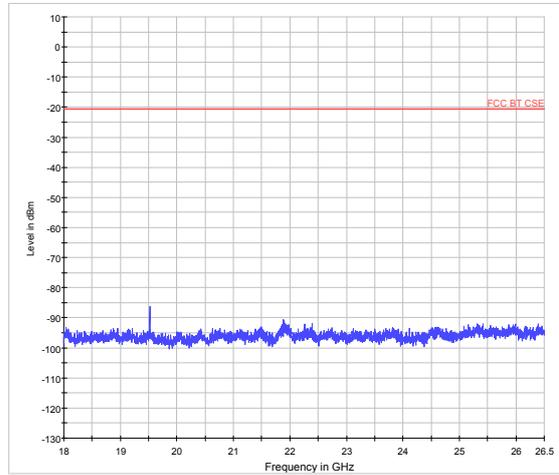
BLE CH0 30MHz to 18GHz



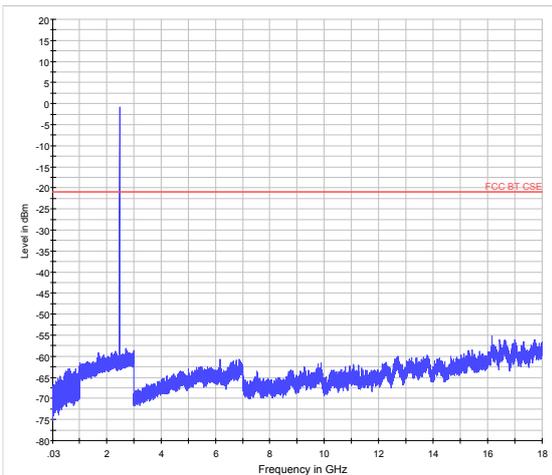
BLE CH0 18GHz to 26.5GHz



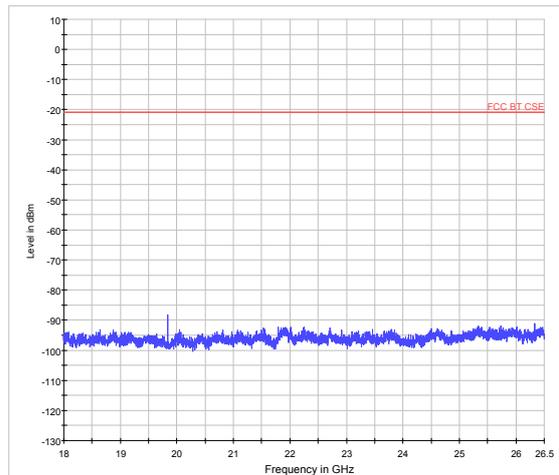
BLE CH19 30MHz to 18GHz



BLE CH19 18GHz to 26.5GHz



BLE CH39 30MHz to 18GHz



BLE CH39 18GHz to 26.5GHz

5.6. Radiated Emissions in the Restricted Band

Ambient condition

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

Method of Measurement

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

Set the spectrum analyzer in the following:

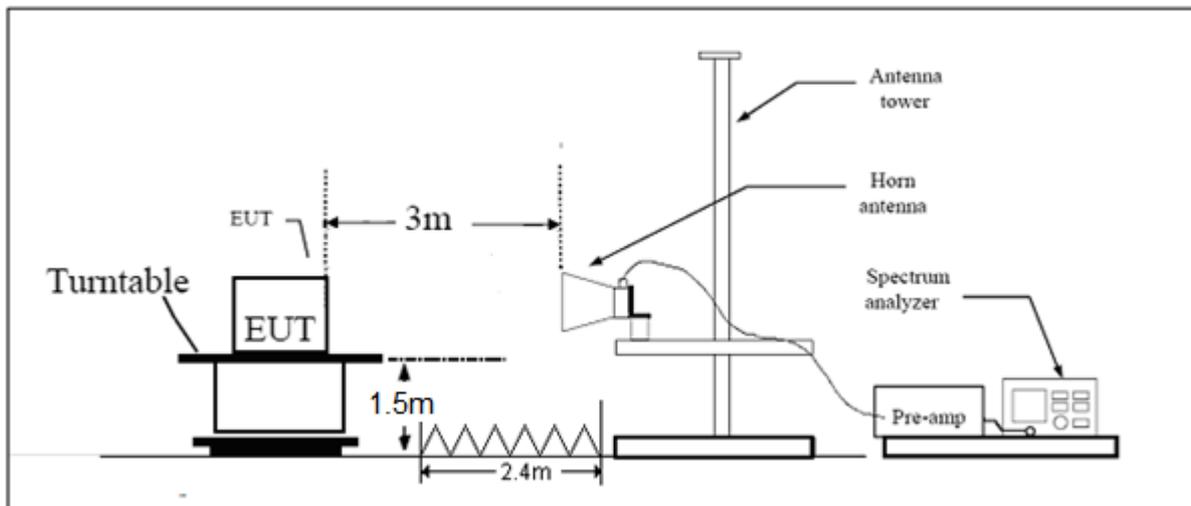
- (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
- (b) AVERAGE: RBW=1MHz / VBW=1MHz / Sweep=AUTO

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

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

The test is in transmitting mode.

Test setup



Note: Area side: 2.4mX3.6m

Limits

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

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

Limit in restricted band

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

§15.35(b)

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

Peak Limit=74 dBuV/m

Average Limit=54 dBuV/m

Measurement Uncertainty

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

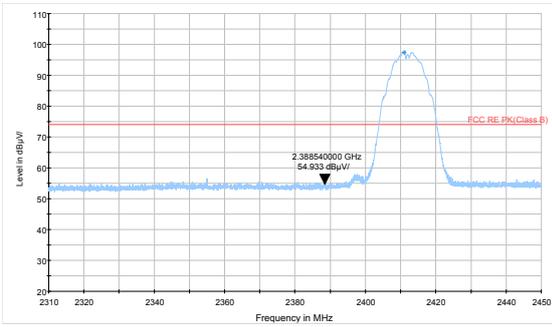


Test Results:

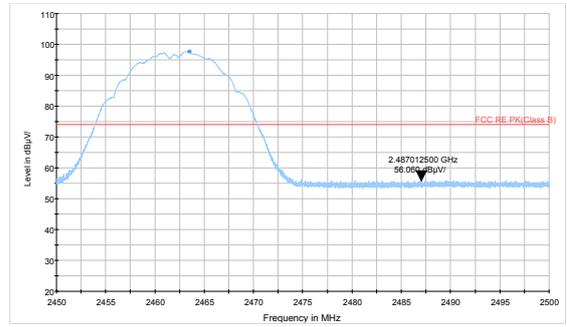
PASS

The signal beyond the limit is carrier.

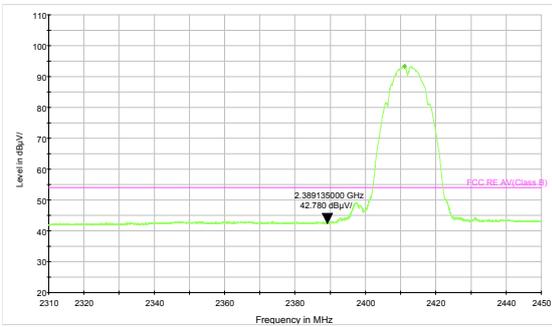
802.11b-Channel 1: Peak



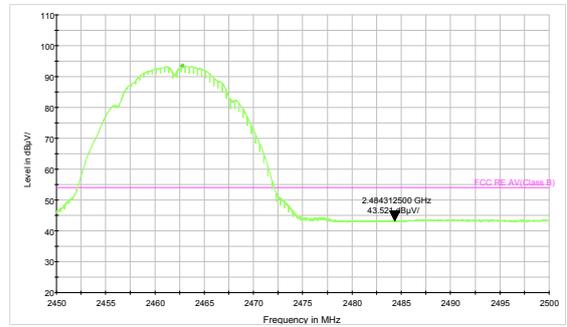
802.11b-Channel 11: Peak



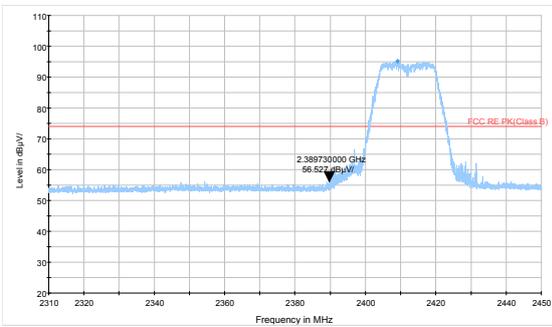
802.11b-Channel 1: Average



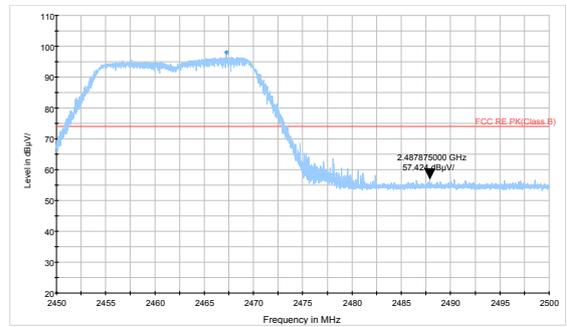
802.11b-Channel 11: Average



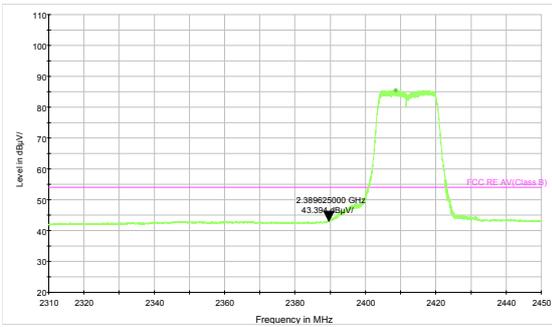
802.11g-Channel 1: Peak



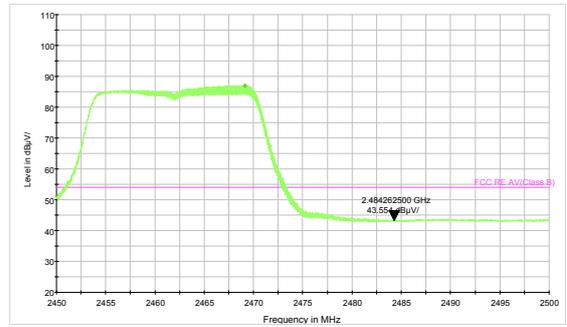
802.11g-Channel 11: Peak



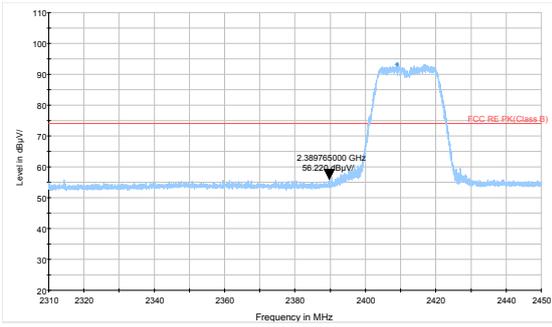
802.11g-Channel 1: Average



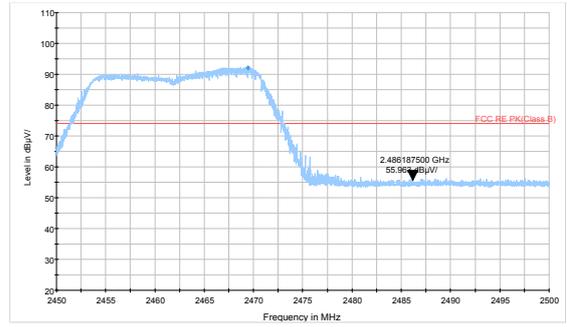
802.11g-Channel 11: Average



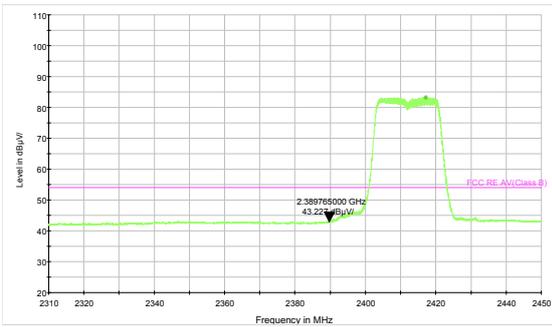
802.11n HT20 -Channel 1: Peak



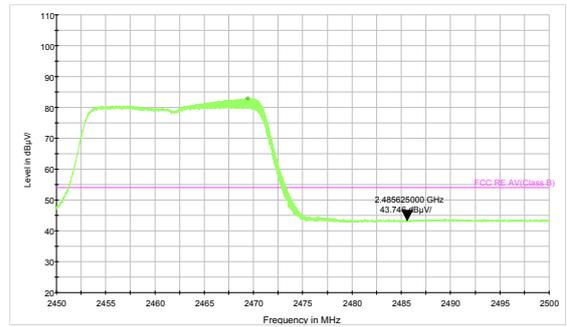
802.11n HT20-Channel 11: Peak



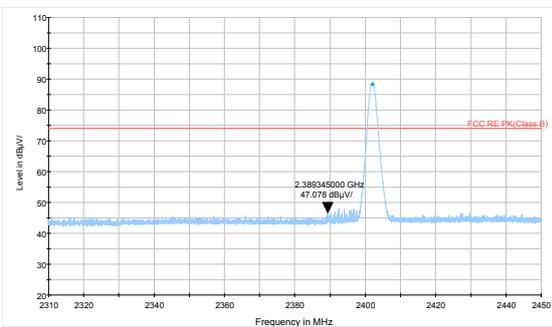
802.11n HT20-Channel 1: Average



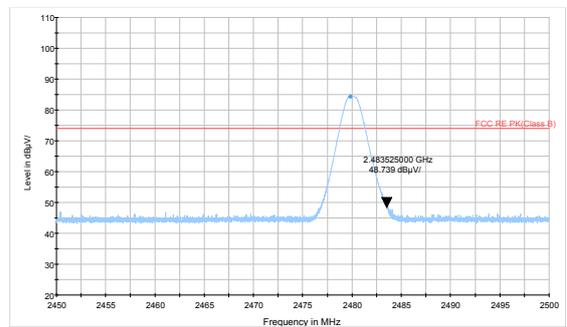
802.11n HT20-Channel 11: Average



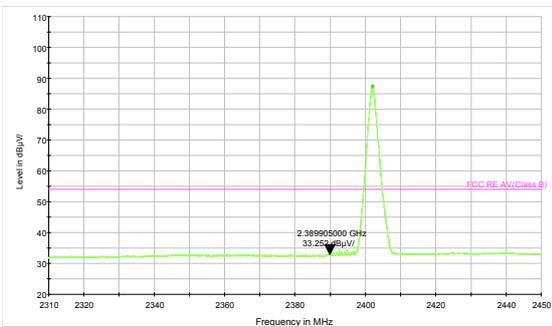
BLE -Channel 0: Peak



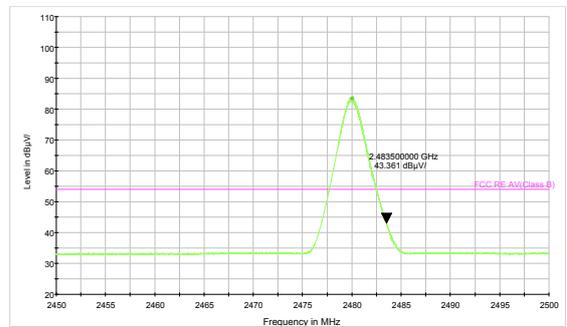
BLE -Channel 39: Peak



BLE -Channel 0: Average



BLE -Channel 39: Average



5.7. Radiates Emission

Ambient condition

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

Method of Measurement

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

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

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

Set the spectrum analyzer in the following:

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

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

Above 1GHz (detector: Peak):

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

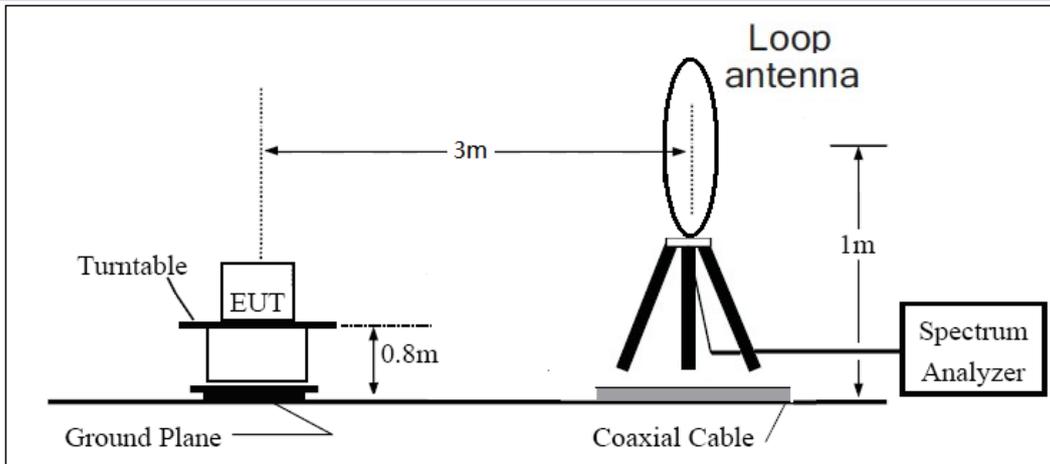
(b) AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO

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

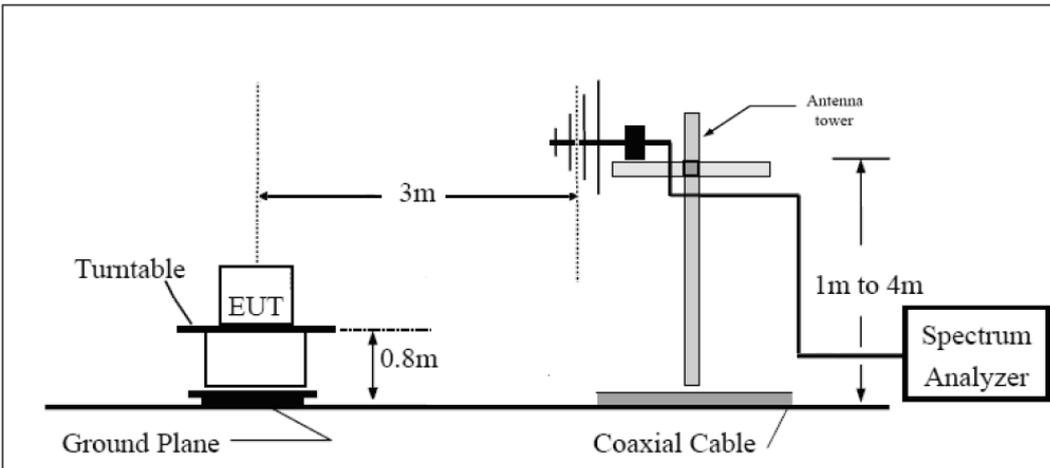
The test is in transmitting mode.

Test setup

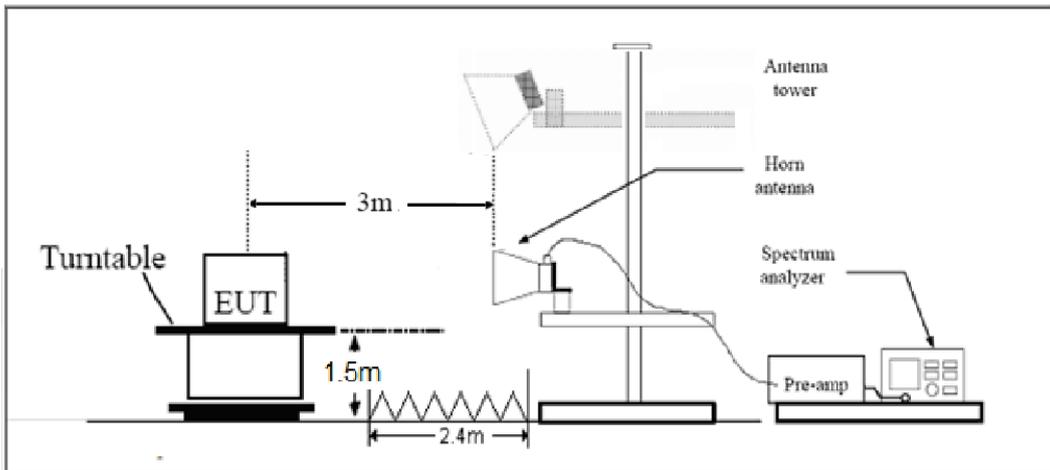
9KHz ~ 30MHz



30MHz ~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

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

Limit in restricted band

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

§15.35(b)

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

Measurement Uncertainty

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

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

Test result

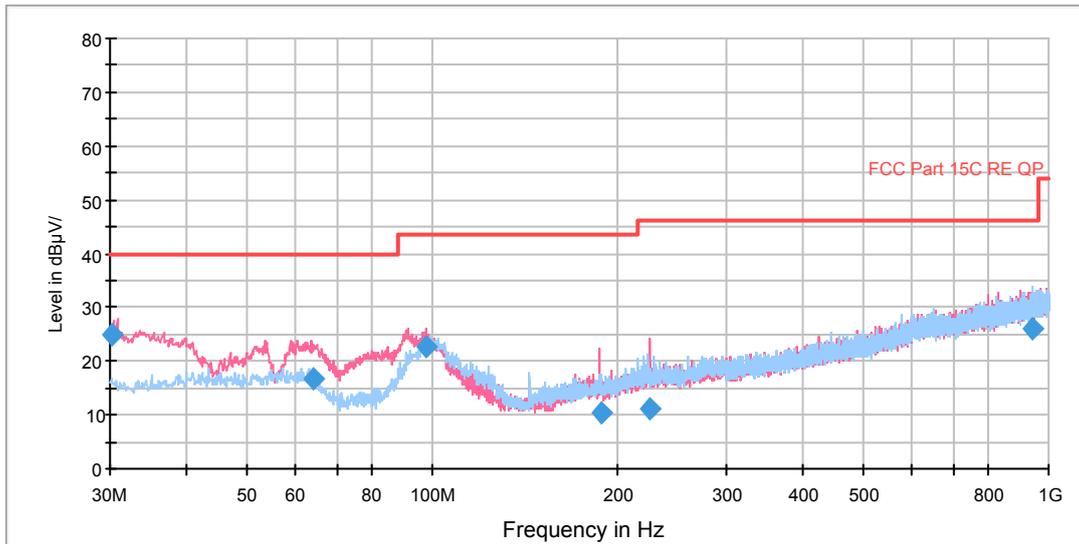
Sweep from 9 kHz to 30MHz, and the emissions more than 20 dB below the permissible value are not reported.

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

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

802.11b CH1

FCC RE 0.03-1GHz QP Class C



Radiates Emission from 30MHz to 1GHz

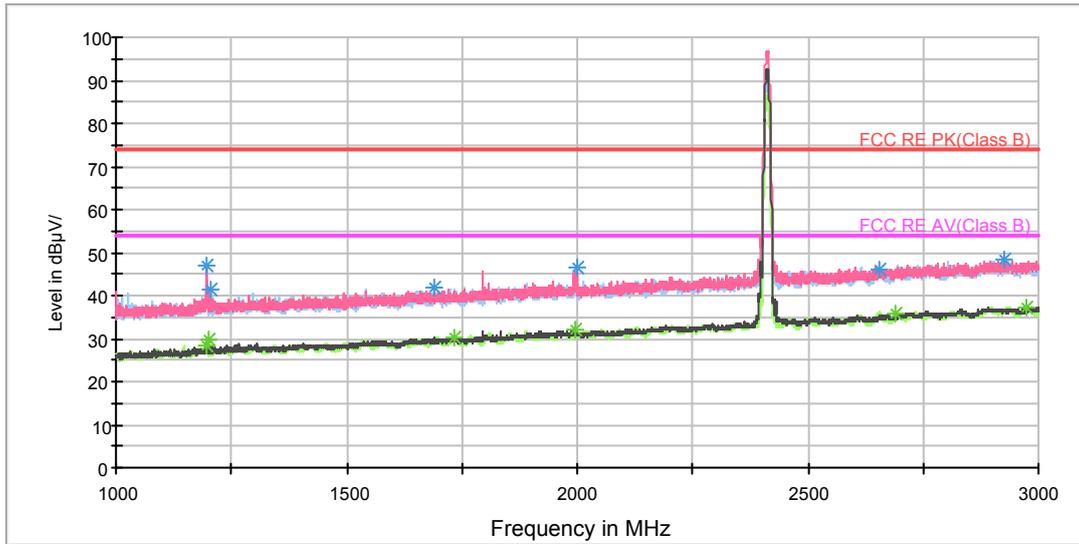
| Frequency (MHz) | Quasi-Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 30.288750 | 24.9 | 100.0 | V | 116.0 | 12.8 | 12.1 | 15.1 | 40.0 |
| 64.027500 | 16.8 | 100.0 | V | 117.0 | 5.7 | 11.1 | 23.2 | 40.0 |
| 98.098750 | 22.6 | 125.0 | V | 87.0 | 9.5 | 13.1 | 20.9 | 43.5 |
| 187.620000 | 10.6 | 100.0 | V | 113.0 | -0.8 | 11.4 | 32.9 | 43.5 |
| 226.056250 | 11.2 | 125.0 | V | 261.0 | -1.9 | 13.1 | 34.8 | 46.0 |
| 939.900000 | 25.9 | 125.0 | H | 104.0 | -1.2 | 27.1 | 20.1 | 46.0 |

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

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

3. Margin = Limit – Quasi-Peak

RE 1G-3GHz PK+AV



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

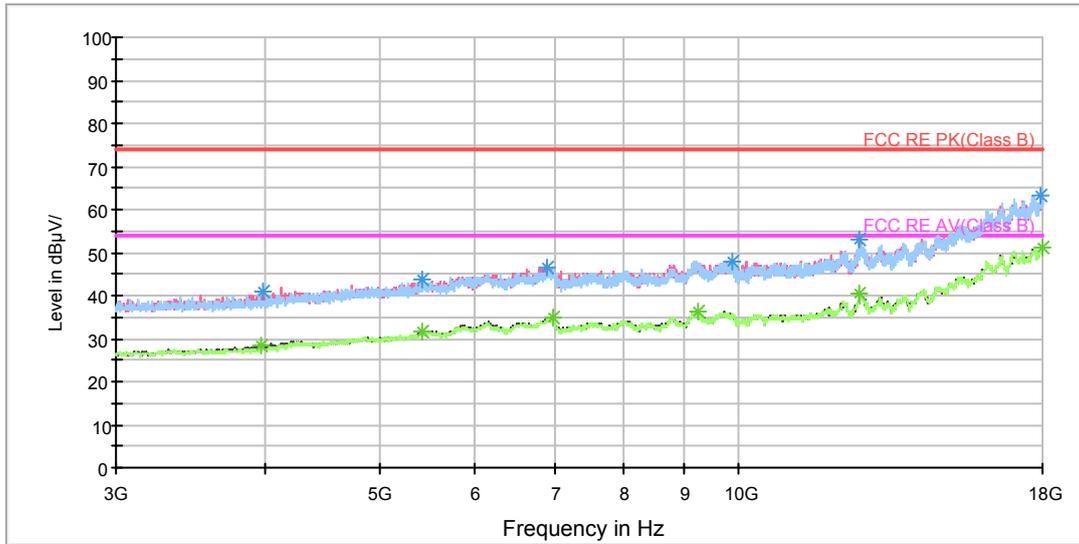
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1196.500000 | 47.1 | 101.0 | H | 20.0 | 55.3 | -8.2 | 26.9 | 74 |
| 1206.250000 | 41.5 | 101.0 | H | 0.0 | 49.6 | -8.1 | 32.5 | 74 |
| 1691.250000 | 42.0 | 101.0 | H | 332.0 | 47.0 | -5.0 | 32.0 | 74 |
| 2000.000000 | 46.4 | 101.0 | V | 103.0 | 49.8 | -3.4 | 27.6 | 74 |
| 2654.500000 | 46.2 | 101.0 | H | 135.0 | 45.8 | 0.4 | 27.8 | 74 |
| 2927.500000 | 48.1 | 101.0 | V | 295.0 | 46.4 | 1.7 | 25.9 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1197.500000 | 28.5 | 101.0 | V | 173.0 | 36.7 | -8.2 | 25.5 | 54 |
| 1202.250000 | 29.5 | 101.0 | H | 0.0 | 37.7 | -8.2 | 24.5 | 54 |
| 1731.500000 | 30.4 | 101.0 | H | 299.0 | 35.2 | -4.8 | 23.6 | 54 |
| 1996.000000 | 32.1 | 101.0 | V | 23.0 | 35.4 | -3.3 | 21.9 | 54 |
| 2690.750000 | 35.6 | 101.0 | H | 307.0 | 35.5 | 0.1 | 18.4 | 54 |
| 2971.750000 | 37.2 | 101.0 | H | 0.0 | 35.0 | 2.2 | 16.8 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

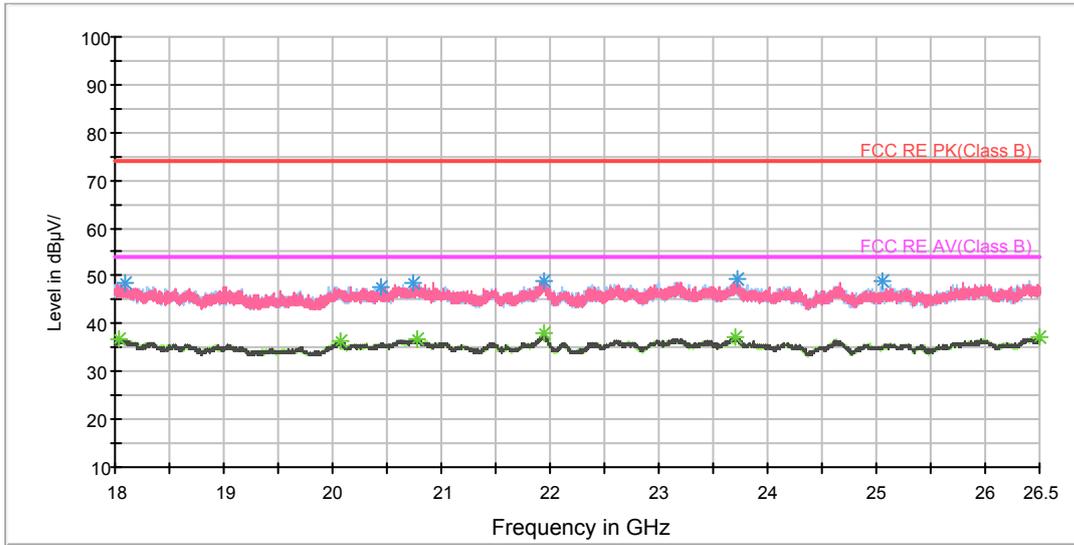
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3993.750000 | 40.8 | 101.0 | V | 220.0 | 41.9 | -1.1 | 33.2 | 74 |
| 5428.125000 | 44.0 | 101.0 | V | 0.0 | 41.2 | 2.8 | 30.0 | 74 |
| 6911.250000 | 46.5 | 101.0 | H | 0.0 | 40.3 | 6.2 | 27.5 | 74 |
| 9894.375000 | 48.0 | 101.0 | V | 0.0 | 37.7 | 10.3 | 26.0 | 74 |
| 12635.625000 | 52.9 | 101.0 | V | 0.0 | 38.8 | 14.1 | 21.1 | 74 |
| 17947.500000 | 63.1 | 101.0 | V | 165.0 | 38.2 | 24.9 | 10.9 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3971.250000 | 28.5 | 101.0 | V | 274.0 | 29.4 | -0.9 | 25.5 | 54 |
| 5431.875000 | 31.4 | 101.0 | V | 52.0 | 28.6 | 2.8 | 22.6 | 54 |
| 6997.500000 | 34.8 | 101.0 | V | 0.0 | 28.3 | 6.5 | 19.2 | 54 |
| 9236.250000 | 36.4 | 101.0 | V | 0.0 | 26.5 | 9.9 | 17.6 | 54 |
| 12639.375000 | 40.4 | 101.0 | H | 0.0 | 25.9 | 14.5 | 13.6 | 54 |
| 17998.125000 | 51.2 | 101.0 | V | 137.0 | 25.8 | 25.4 | 2.8 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18098.812500 | 48.5 | V | 18.0 | 50.7 | -2.2 | 25.5 | 74 |
| 20451.187500 | 47.7 | V | 114.0 | 53.8 | -6.1 | 26.3 | 74 |
| 20740.187500 | 48.6 | H | 327.0 | 55.4 | -6.8 | 25.4 | 74 |
| 21947.187500 | 48.9 | V | 0.0 | 56.9 | -8.0 | 25.1 | 74 |
| 23716.250000 | 49.2 | H | 358.0 | 55.1 | -5.9 | 24.8 | 74 |
| 25050.750000 | 48.9 | H | 0.0 | 54.8 | -5.9 | 25.1 | 74 |

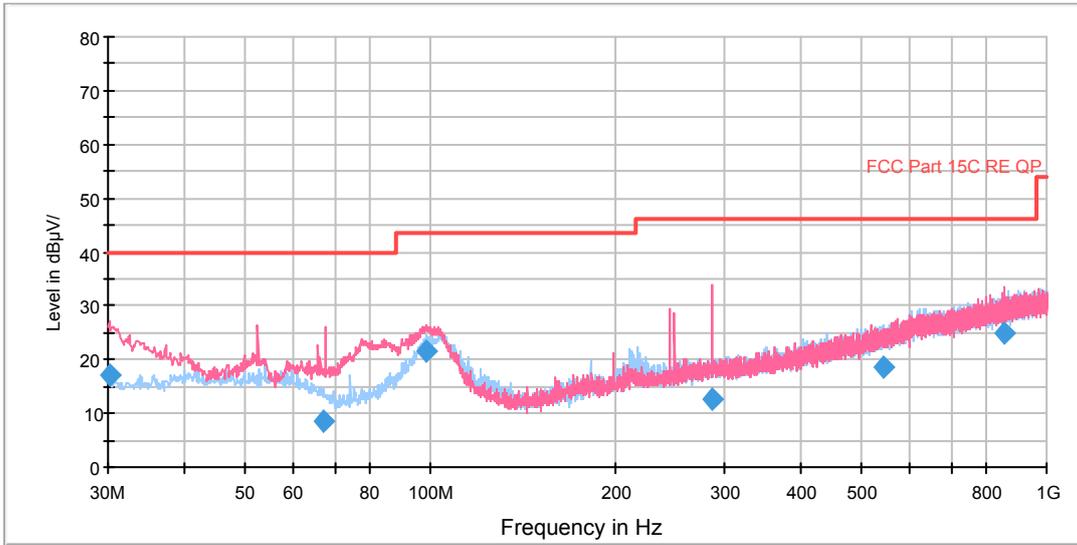
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

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

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

802.11b CH6

FCC RE 0.03-1GHz QP Class C

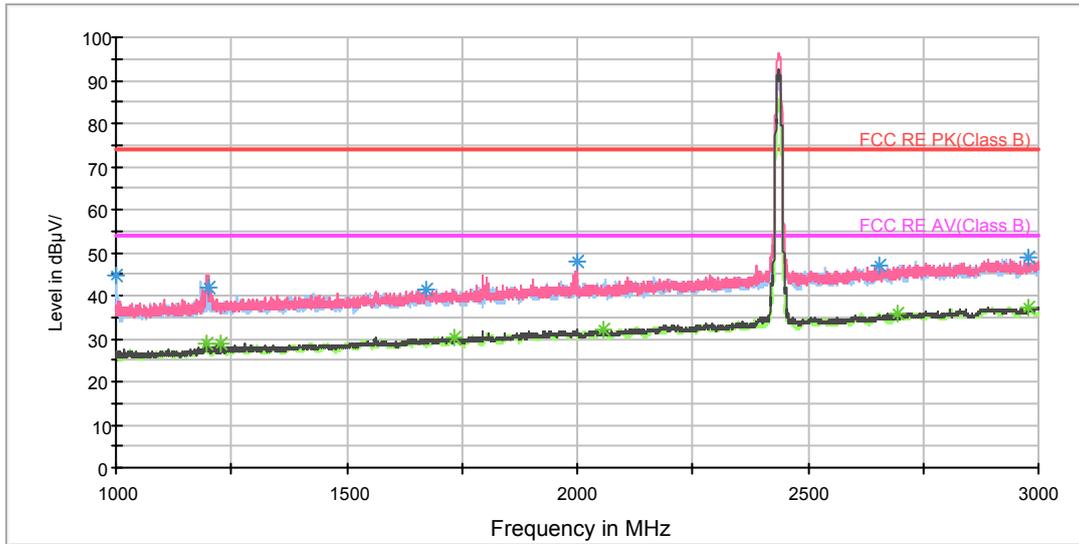


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

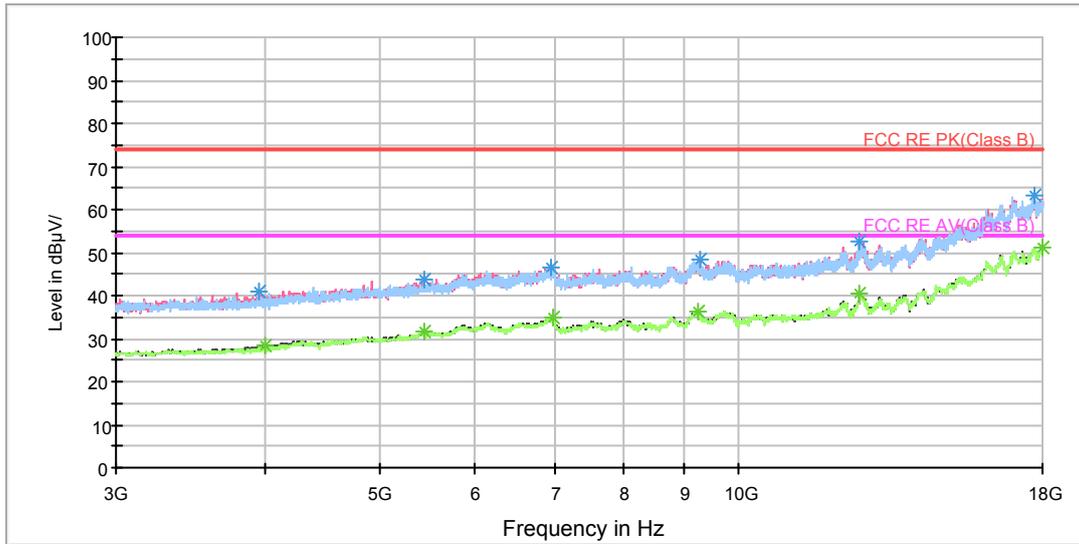
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1000.250000 | 44.7 | 101.0 | H | 30.0 | 53.9 | -9.2 | 29.3 | 74 |
| 1202.000000 | 42.0 | 101.0 | V | 49.0 | 50.2 | -8.2 | 32.0 | 74 |
| 1672.250000 | 41.6 | 101.0 | V | 219.0 | 46.7 | -5.1 | 32.4 | 74 |
| 1999.500000 | 48.0 | 101.0 | V | 85.0 | 51.4 | -3.4 | 26.0 | 74 |
| 2653.750000 | 46.8 | 101.0 | H | 0.0 | 46.4 | 0.4 | 27.2 | 74 |
| 2977.000000 | 48.9 | 101.0 | H | 300.0 | 46.7 | 2.2 | 25.1 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1197.500000 | 29.0 | 101.0 | V | 58.0 | 37.2 | -8.2 | 25.0 | 54 |
| 1226.250000 | 28.9 | 101.0 | H | 19.0 | 36.7 | -7.8 | 25.1 | 54 |
| 1732.000000 | 30.3 | 101.0 | H | 0.0 | 35.1 | -4.8 | 23.7 | 54 |
| 2055.000000 | 32.1 | 101.0 | H | 300.0 | 35.3 | -3.2 | 21.9 | 54 |
| 2693.750000 | 35.6 | 101.0 | H | 205.0 | 35.5 | 0.1 | 18.4 | 54 |
| 2977.250000 | 37.3 | 101.0 | H | 257.0 | 35.1 | 2.2 | 16.7 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

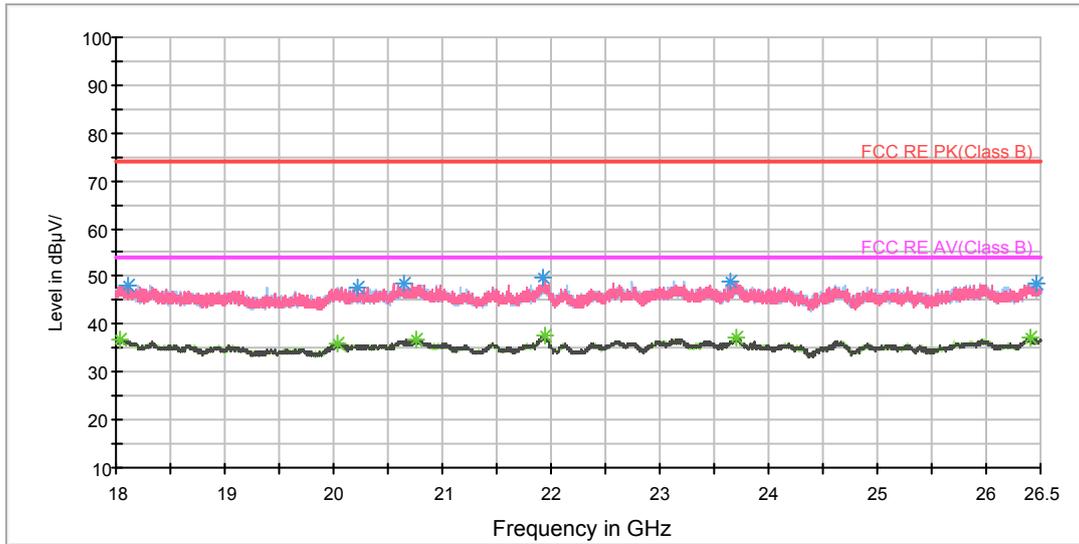
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3948.750000 | 40.8 | 101.0 | H | 2.0 | 41.9 | -1.1 | 33.2 | 74 |
| 5437.500000 | 43.8 | 101.0 | V | 327.0 | 40.9 | 2.9 | 30.2 | 74 |
| 6960.000000 | 46.5 | 101.0 | H | 168.0 | 40.3 | 6.2 | 27.5 | 74 |
| 9283.125000 | 48.2 | 101.0 | V | 272.0 | 38.9 | 9.3 | 25.8 | 74 |
| 12646.875000 | 52.6 | 101.0 | V | 0.0 | 38.3 | 14.3 | 21.4 | 74 |
| 17711.250000 | 63.1 | 101.0 | H | 0.0 | 38.4 | 24.7 | 10.9 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3999.375000 | 28.4 | 101.0 | V | 218.0 | 29.5 | -1.1 | 25.6 | 54 |
| 5433.750000 | 31.5 | 101.0 | V | 0.0 | 28.7 | 2.8 | 22.5 | 54 |
| 6997.500000 | 34.7 | 101.0 | V | 0.0 | 28.2 | 6.5 | 19.3 | 54 |
| 9232.500000 | 36.3 | 101.0 | H | 0.0 | 26.4 | 9.9 | 17.7 | 54 |
| 12639.375000 | 40.5 | 101.0 | V | 0.0 | 26.0 | 14.5 | 13.5 | 54 |
| 17998.125000 | 51.1 | 101.0 | V | 0.0 | 25.7 | 25.4 | 2.9 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18119.000000 | 48.3 | V | 198.0 | 50.6 | -2.3 | 25.7 | 74 |
| 20228.062500 | 47.8 | V | 134.0 | 53.7 | -5.9 | 26.2 | 74 |
| 20657.312500 | 48.5 | H | 71.0 | 55.1 | -6.6 | 25.5 | 74 |
| 21933.375000 | 49.7 | H | 345.0 | 57.7 | -8.0 | 24.3 | 74 |
| 23649.312500 | 48.9 | H | 0.0 | 54.8 | -5.9 | 25.1 | 74 |
| 26470.250000 | 48.4 | V | 12.0 | 53.8 | -5.4 | 25.6 | 74 |

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

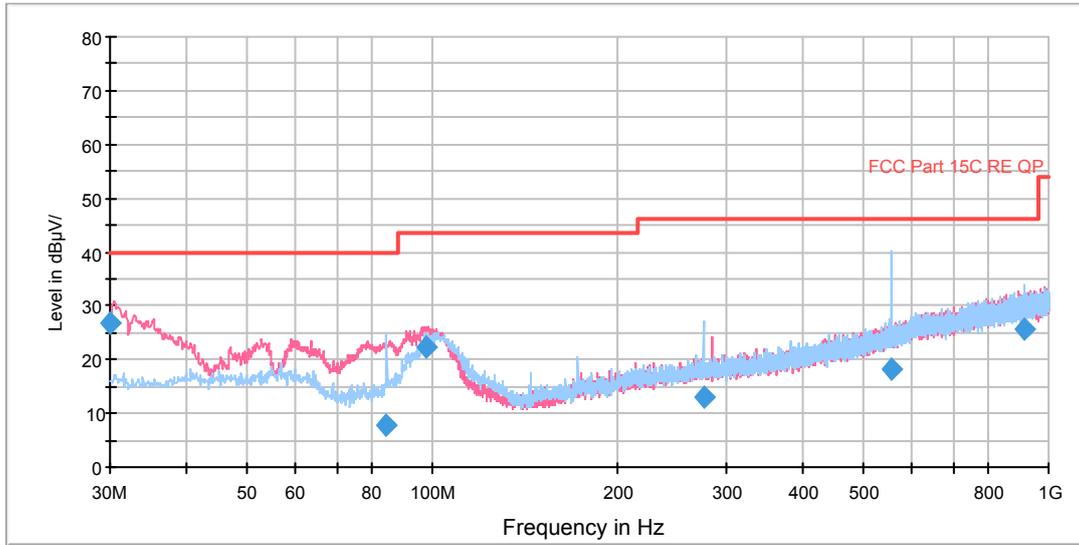
| Frequency (MHz) | Average (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18038.250000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

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



802.11b CH11

FCC RE 0.03-1GHz QP Class C

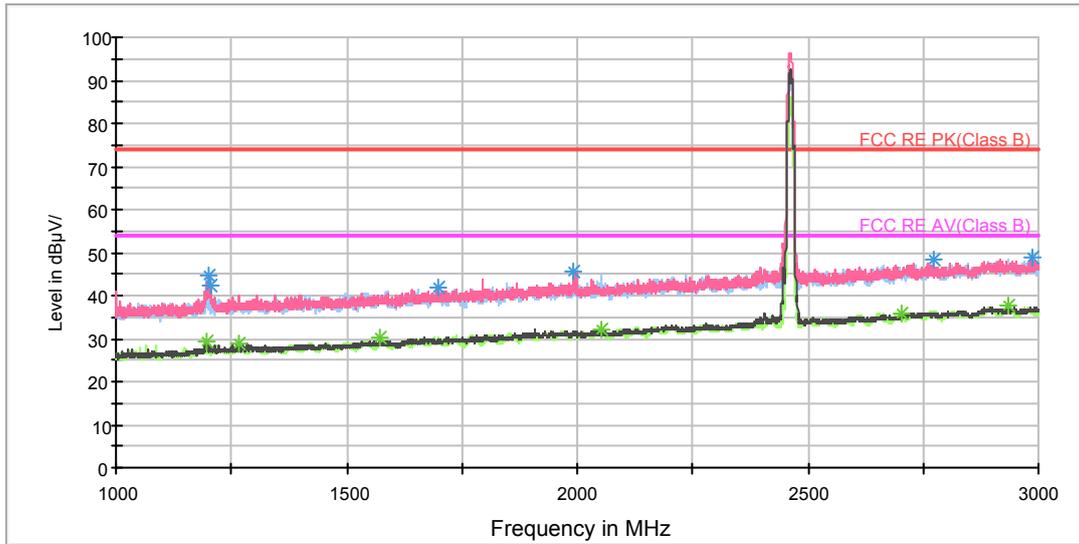


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

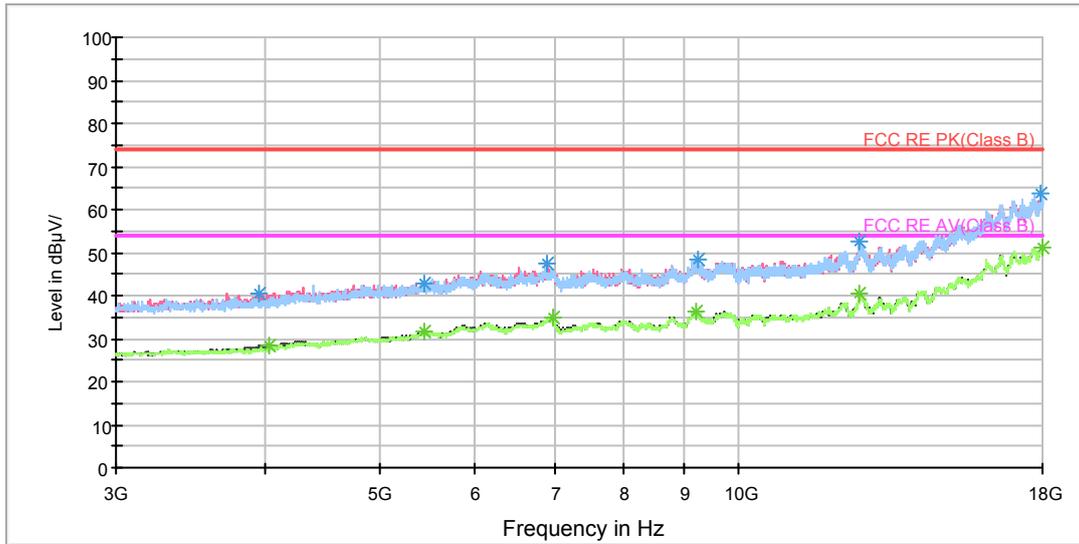
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1200.000000 | 44.6 | 101.0 | V | 16.0 | 52.8 | -8.2 | 29.4 | 74 |
| 1204.250000 | 42.2 | 101.0 | V | 69.0 | 50.4 | -8.2 | 31.8 | 74 |
| 1700.250000 | 42.0 | 101.0 | V | 24.0 | 46.9 | -4.9 | 32.0 | 74 |
| 1992.500000 | 45.8 | 101.0 | V | 105.0 | 49.1 | -3.3 | 28.2 | 74 |
| 2770.750000 | 48.2 | 101.0 | H | 338.0 | 47.4 | 0.8 | 25.8 | 74 |
| 2987.000000 | 49.0 | 101.0 | V | 87.0 | 46.8 | 2.2 | 25.0 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1194.500000 | 29.1 | 101.0 | V | 69.0 | 37.3 | -8.2 | 24.9 | 54 |
| 1266.000000 | 29.0 | 101.0 | V | 167.0 | 36.7 | -7.7 | 25.0 | 54 |
| 1573.000000 | 30.5 | 101.0 | H | 216.0 | 37.0 | -6.5 | 23.5 | 54 |
| 2053.250000 | 32.3 | 101.0 | H | 321.0 | 35.5 | -3.2 | 21.7 | 54 |
| 2701.500000 | 35.8 | 101.0 | H | 294.0 | 35.8 | 0.0 | 18.2 | 54 |
| 2932.750000 | 37.5 | 101.0 | H | 171.0 | 35.7 | 1.8 | 16.5 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

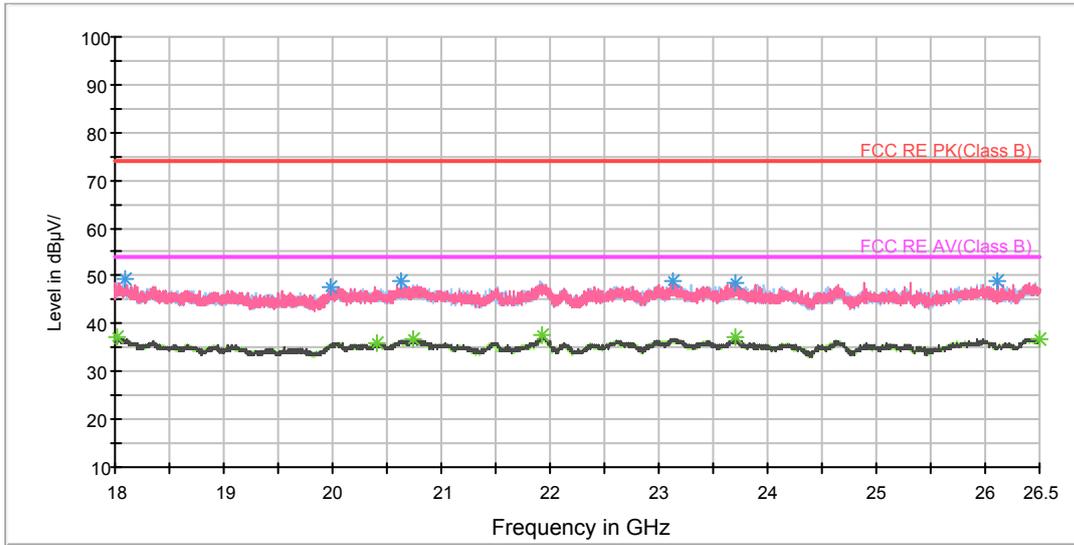
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3956.250000 | 40.6 | 101.0 | V | 356.0 | 41.6 | -1.0 | 33.4 | 74 |
| 5437.500000 | 42.8 | 101.0 | V | 0.0 | 39.9 | 2.9 | 31.2 | 74 |
| 6916.875000 | 47.6 | 101.0 | V | 329.0 | 41.4 | 6.2 | 26.4 | 74 |
| 9236.250000 | 48.4 | 101.0 | H | 0.0 | 38.5 | 9.9 | 25.6 | 74 |
| 12639.375000 | 52.7 | 101.0 | V | 356.0 | 38.2 | 14.5 | 21.3 | 74 |
| 17910.000000 | 63.7 | 101.0 | H | 0.0 | 38.2 | 25.5 | 10.3 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 4036.875000 | 28.5 | 101.0 | V | 301.0 | 29.5 | -1.0 | 25.5 | 54 |
| 5435.625000 | 31.4 | 101.0 | V | 219.0 | 28.5 | 2.9 | 22.6 | 54 |
| 6995.625000 | 34.9 | 101.0 | V | 0.0 | 28.4 | 6.5 | 19.1 | 54 |
| 9226.875000 | 36.4 | 101.0 | V | 109.0 | 26.5 | 9.9 | 17.6 | 54 |
| 12639.375000 | 40.4 | 101.0 | H | 54.0 | 25.9 | 14.5 | 13.6 | 54 |
| 17998.125000 | 51.2 | 101.0 | V | 165.0 | 25.8 | 25.4 | 2.8 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18083.937500 | 49.3 | H | 165.0 | 51.5 | -2.2 | 24.7 | 74 |
| 19990.062500 | 47.7 | H | 259.0 | 53.4 | -5.7 | 26.3 | 74 |
| 20633.937500 | 48.8 | V | 118.0 | 55.3 | -6.5 | 25.2 | 74 |
| 23129.750000 | 49.1 | V | 72.0 | 55.2 | -6.1 | 24.9 | 74 |
| 23709.875000 | 48.6 | H | 0.0 | 54.5 | -5.9 | 25.4 | 74 |
| 26119.625000 | 49.0 | V | 0.0 | 54.4 | -5.4 | 25.0 | 74 |

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

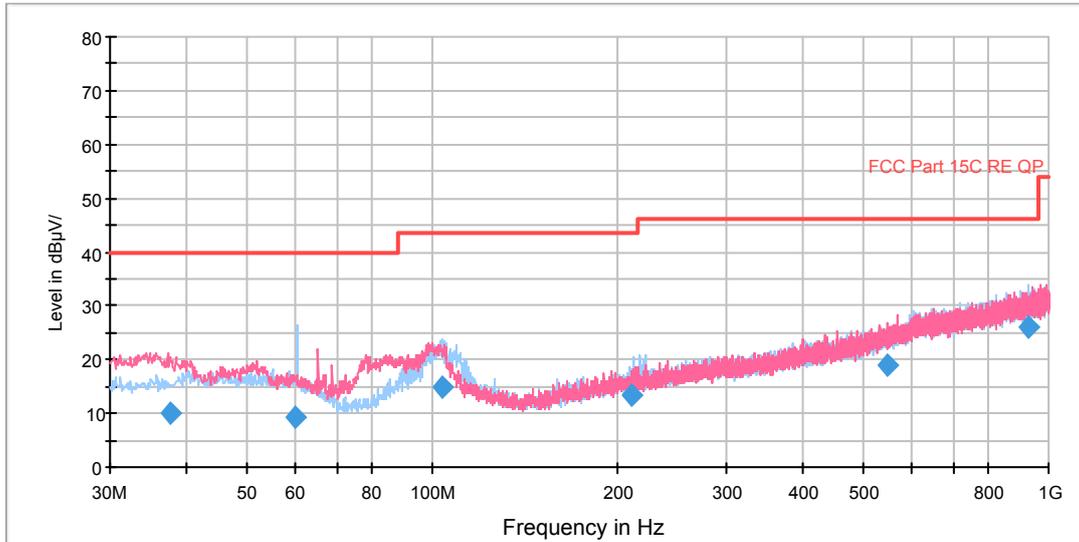
| Frequency (MHz) | Average (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18024.437500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

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



802.11g CH1

FCC RE 0.03-1GHz QP Class C

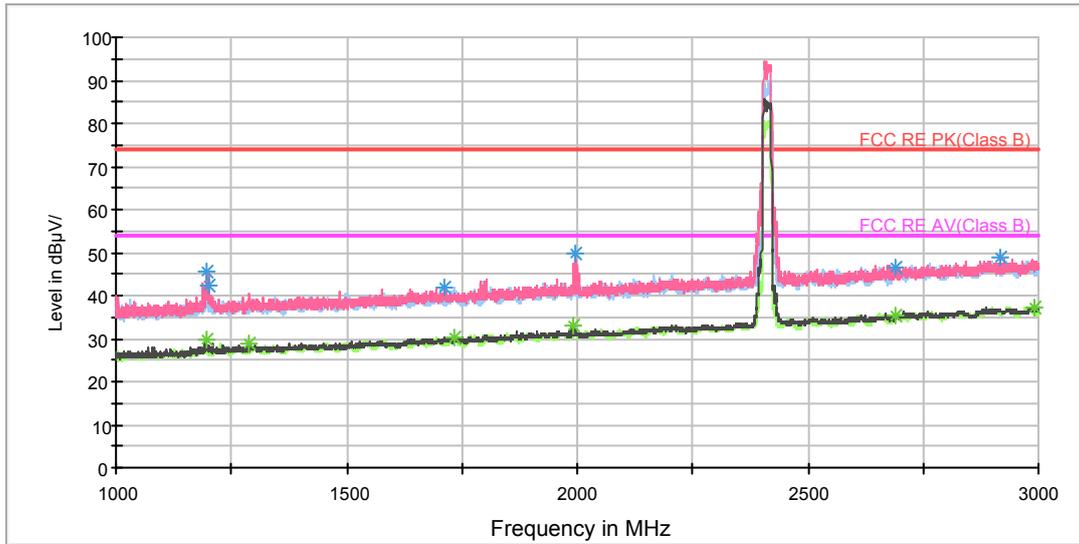


Radiates Emission from 30MHz to 1GHz

| Frequency (MHz) | Quasi-Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 37.675000 | 10.1 | 100.0 | V | 156.0 | -2.6 | 12.7 | 29.9 | 40.0 |
| 59.872500 | 9.2 | 114.0 | H | 98.0 | -3.4 | 12.6 | 30.8 | 40.0 |
| 103.758750 | 14.9 | 125.0 | H | 25.0 | 2.0 | 12.9 | 28.6 | 43.5 |
| 211.352500 | 13.4 | 125.0 | H | 49.0 | 0.8 | 12.6 | 30.1 | 43.5 |
| 546.927500 | 18.8 | 100.0 | V | 100.0 | -2.7 | 21.5 | 27.2 | 46.0 |
| 929.995000 | 25.9 | 114.0 | H | 17.0 | -1.2 | 27.1 | 20.1 | 46.0 |

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

RE 1G-3GHz PK+AV



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

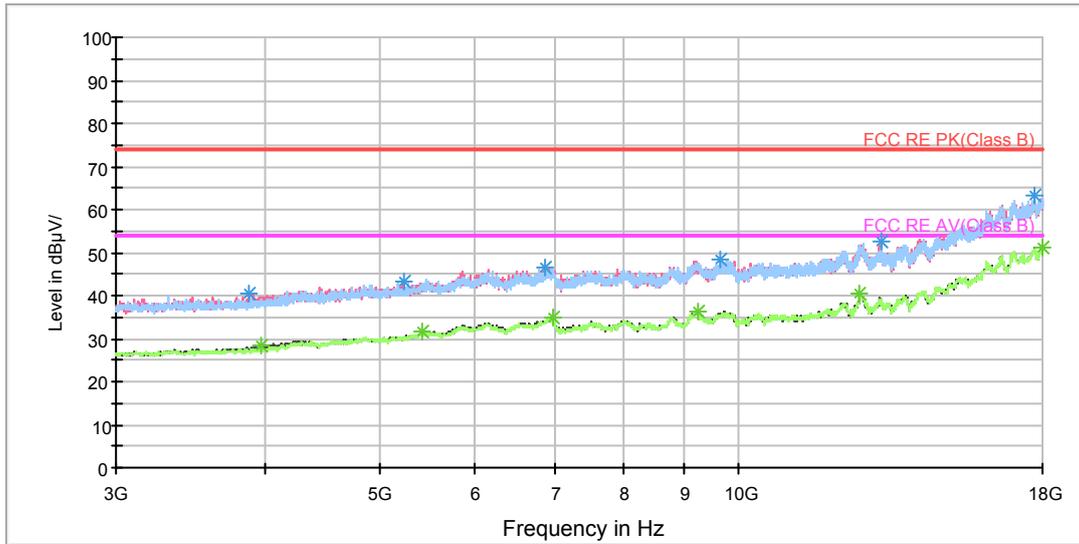
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1196.750000 | 45.5 | 101.0 | V | 147.0 | 53.7 | -8.2 | 28.5 | 74 |
| 1202.250000 | 42.3 | 101.0 | V | 57.0 | 50.5 | -8.2 | 31.7 | 74 |
| 1713.250000 | 41.8 | 101.0 | V | 13.0 | 46.7 | -4.9 | 32.2 | 74 |
| 1994.000000 | 49.8 | 101.0 | V | 85.0 | 53.0 | -3.2 | 24.2 | 74 |
| 2691.500000 | 46.7 | 101.0 | H | 0.0 | 46.6 | 0.1 | 27.3 | 74 |
| 2915.750000 | 48.7 | 101.0 | V | 165.0 | 46.9 | 1.8 | 25.3 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1195.000000 | 29.6 | 101.0 | H | 357.0 | 37.8 | -8.2 | 24.4 | 54 |
| 1289.250000 | 28.7 | 101.0 | V | 0.0 | 36.4 | -7.7 | 25.3 | 54 |
| 1731.750000 | 30.3 | 101.0 | H | 284.0 | 35.1 | -4.8 | 23.7 | 54 |
| 1992.250000 | 32.9 | 101.0 | V | 165.0 | 36.2 | -3.3 | 21.1 | 54 |
| 2690.750000 | 35.3 | 101.0 | V | 201.0 | 35.2 | 0.1 | 18.7 | 54 |
| 2990.750000 | 37.3 | 101.0 | V | 0.0 | 35.1 | 2.2 | 16.7 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

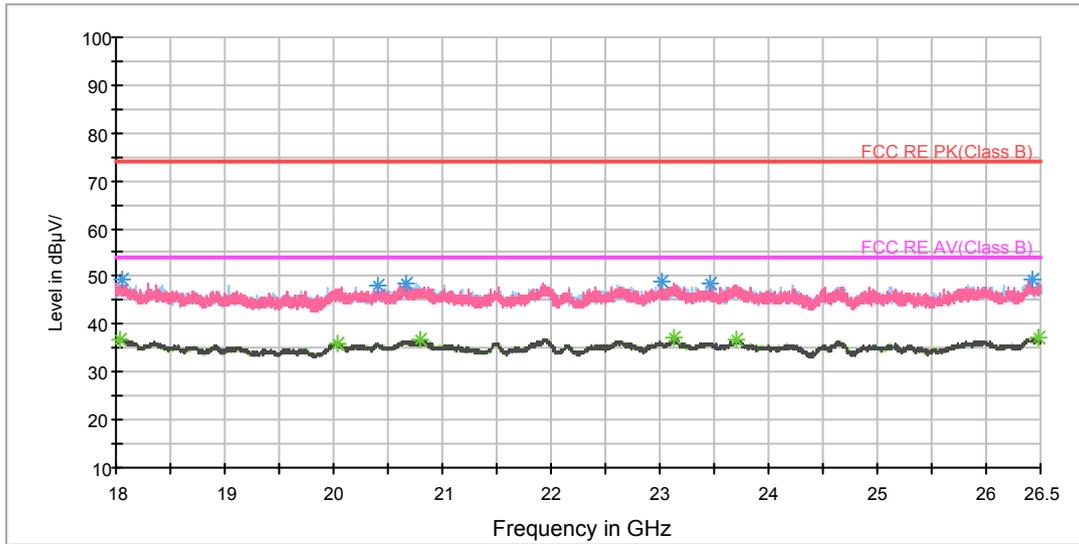
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3886.875000 | 40.4 | 101.0 | V | 275.0 | 41.7 | -1.3 | 33.6 | 74 |
| 5240.625000 | 43.0 | 101.0 | V | 302.0 | 40.9 | 2.1 | 31.0 | 74 |
| 6868.125000 | 46.4 | 101.0 | H | 0.0 | 40.5 | 5.9 | 27.6 | 74 |
| 9648.750000 | 48.2 | 101.0 | V | 329.0 | 38.4 | 9.8 | 25.8 | 74 |
| 13158.750000 | 52.4 | 101.0 | V | 164.0 | 38.3 | 14.1 | 21.6 | 74 |
| 17698.125000 | 63.3 | 101.0 | V | 0.0 | 38.6 | 24.7 | 10.7 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3969.375000 | 28.4 | 101.0 | V | 191.0 | 29.3 | -0.9 | 25.6 | 54 |
| 5428.125000 | 31.5 | 101.0 | V | 0.0 | 28.7 | 2.8 | 22.5 | 54 |
| 6997.500000 | 35.0 | 101.0 | V | 0.0 | 28.5 | 6.5 | 19.0 | 54 |
| 9241.875000 | 36.4 | 101.0 | H | 58.0 | 26.5 | 9.9 | 17.6 | 54 |
| 12639.375000 | 40.5 | 101.0 | V | 302.0 | 26.0 | 14.5 | 13.5 | 54 |
| 17998.125000 | 51.3 | 101.0 | H | 140.0 | 25.9 | 25.4 | 2.7 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18060.562500 | 49.4 | H | 0.0 | 51.5 | -2.1 | 24.6 | 74 |
| 20407.625000 | 48.1 | V | 260.0 | 54.2 | -6.1 | 25.9 | 74 |
| 20664.750000 | 48.4 | V | 162.0 | 55.0 | -6.6 | 25.6 | 74 |
| 23018.187500 | 49.0 | H | 322.0 | 55.1 | -6.1 | 25.0 | 74 |
| 23463.375000 | 48.7 | V | 349.0 | 54.6 | -5.9 | 25.3 | 74 |
| 26420.312500 | 49.2 | H | 30.0 | 54.6 | -5.4 | 24.8 | 74 |

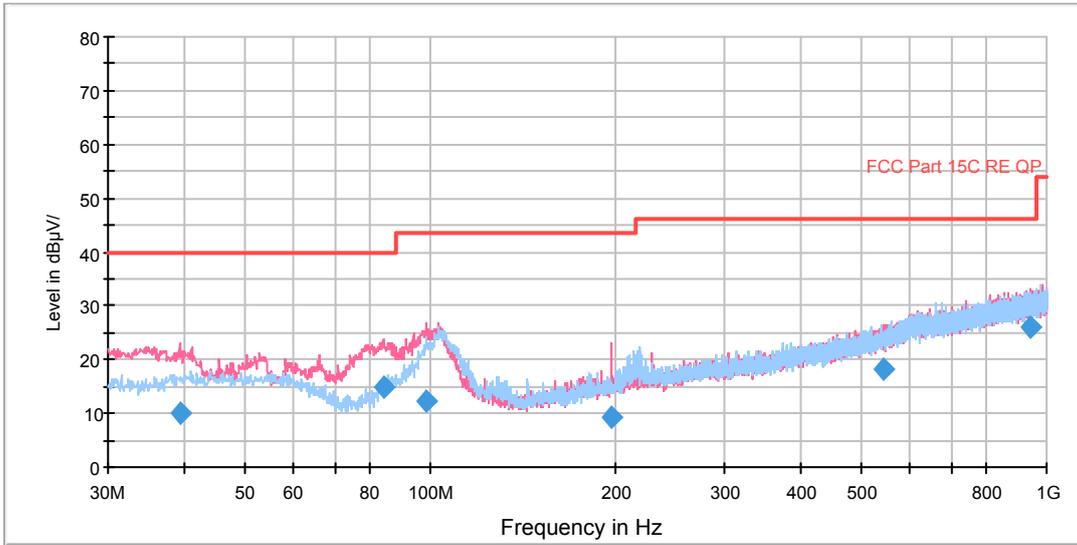
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

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

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

802.11g CH6

FCC RE 0.03-1GHz QP Class C

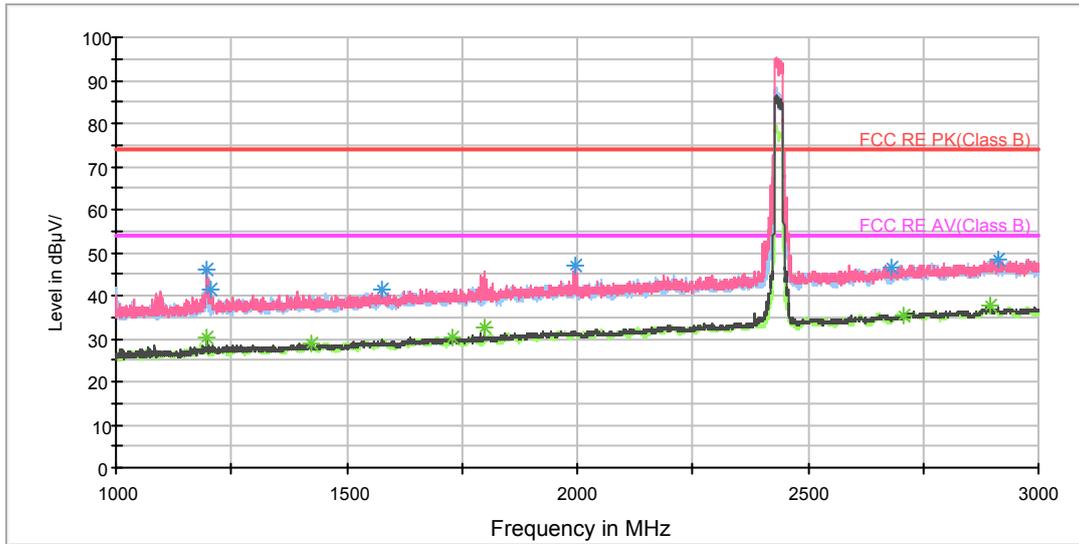


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

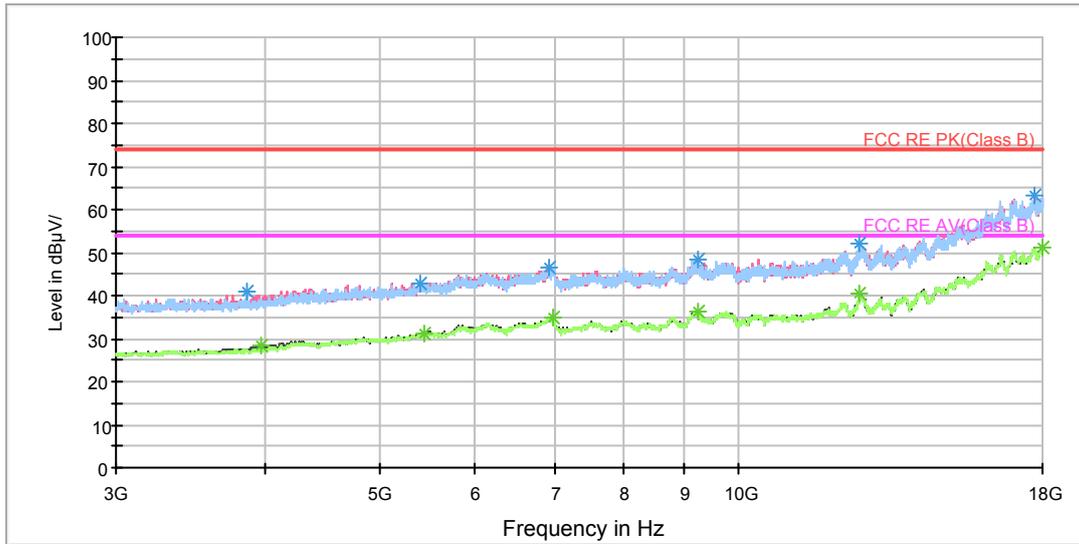
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1197.250000 | 45.9 | 101.0 | V | 8.0 | 54.1 | -8.2 | 28.1 | 74 |
| 1204.000000 | 41.5 | 101.0 | V | 61.0 | 49.7 | -8.2 | 32.5 | 74 |
| 1578.250000 | 41.4 | 101.0 | V | 0.0 | 47.7 | -6.3 | 32.6 | 74 |
| 1993.500000 | 46.8 | 101.0 | V | 77.0 | 50.1 | -3.3 | 27.2 | 74 |
| 2683.000000 | 46.6 | 101.0 | V | 42.0 | 46.5 | 0.1 | 27.4 | 74 |
| 2913.500000 | 48.5 | 101.0 | V | 104.0 | 46.7 | 1.8 | 25.5 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1198.250000 | 30.4 | 101.0 | V | 77.0 | 38.6 | -8.2 | 23.6 | 54 |
| 1424.500000 | 28.8 | 101.0 | H | 276.0 | 35.7 | -6.9 | 25.2 | 54 |
| 1731.250000 | 30.3 | 101.0 | H | 294.0 | 35.2 | -4.9 | 23.7 | 54 |
| 1799.250000 | 32.5 | 101.0 | V | 33.0 | 36.5 | -4.0 | 21.5 | 54 |
| 2708.500000 | 35.5 | 101.0 | V | 141.0 | 35.4 | 0.1 | 18.5 | 54 |
| 2896.250000 | 37.7 | 101.0 | H | 0.0 | 35.6 | 2.1 | 16.3 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

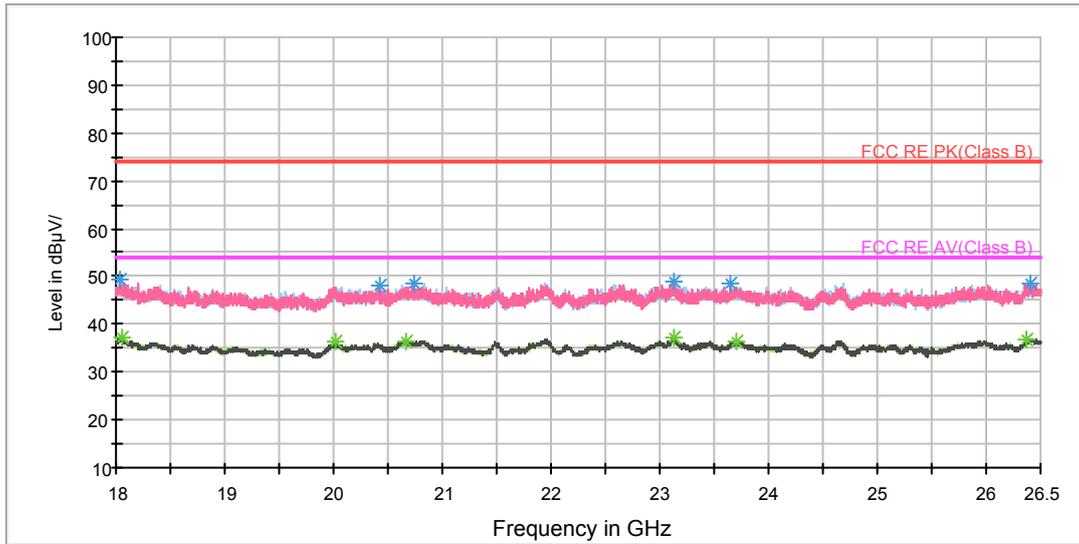
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3858.750000 | 40.9 | 101.0 | H | 59.0 | 42.5 | -1.6 | 33.1 | 74 |
| 5400.000000 | 43.0 | 101.0 | V | 0.0 | 40.5 | 2.5 | 31.0 | 74 |
| 6924.375000 | 46.5 | 101.0 | V | 274.0 | 40.3 | 6.2 | 27.5 | 74 |
| 9234.375000 | 48.4 | 101.0 | V | 219.0 | 38.5 | 9.9 | 25.6 | 74 |
| 12641.250000 | 51.9 | 101.0 | H | 223.0 | 37.4 | 14.5 | 22.1 | 74 |
| 17713.125000 | 63.3 | 101.0 | V | 165.0 | 38.7 | 24.6 | 10.7 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3973.125000 | 28.5 | 101.0 | V | 0.0 | 29.4 | -0.9 | 25.5 | 54 |
| 5433.750000 | 31.2 | 101.0 | V | 165.0 | 28.4 | 2.8 | 22.8 | 54 |
| 6993.750000 | 34.7 | 101.0 | V | 274.0 | 28.2 | 6.5 | 19.3 | 54 |
| 9232.500000 | 36.5 | 101.0 | V | 192.0 | 26.6 | 9.9 | 17.5 | 54 |
| 12639.375000 | 40.6 | 101.0 | H | 5.0 | 26.1 | 14.5 | 13.4 | 54 |
| 18000.000000 | 51.2 | 101.0 | H | 196.0 | 25.7 | 25.5 | 2.8 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18029.750000 | 49.5 | V | 349.0 | 51.4 | -1.9 | 24.5 | 74 |
| 20433.125000 | 48.3 | V | 213.0 | 54.4 | -6.1 | 25.7 | 74 |
| 20741.250000 | 48.5 | V | 130.0 | 55.3 | -6.8 | 25.5 | 74 |
| 23129.750000 | 48.9 | V | 213.0 | 55.0 | -6.1 | 25.1 | 74 |
| 23655.687500 | 48.6 | V | 67.0 | 54.5 | -5.9 | 25.4 | 74 |
| 26410.750000 | 48.4 | V | 0.0 | 53.8 | -5.4 | 25.6 | 74 |

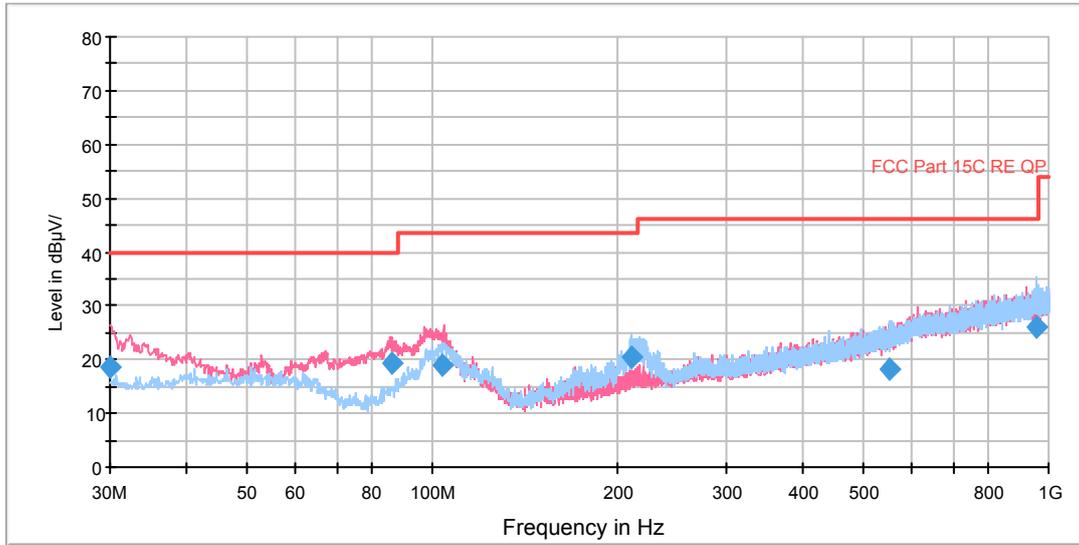
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

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

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

802.11g CH11

FCC RE 0.03-1GHz QP Class B

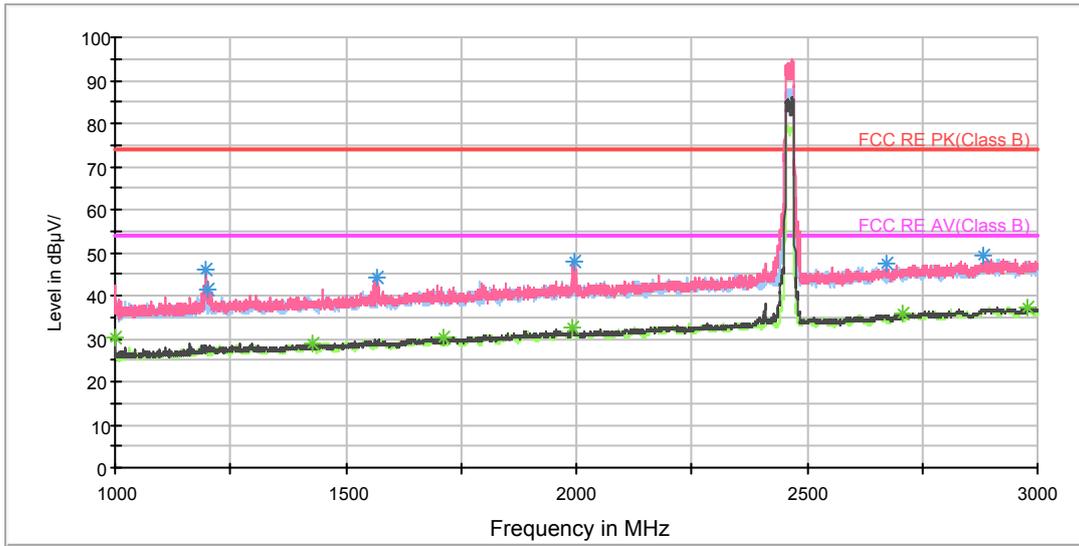


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

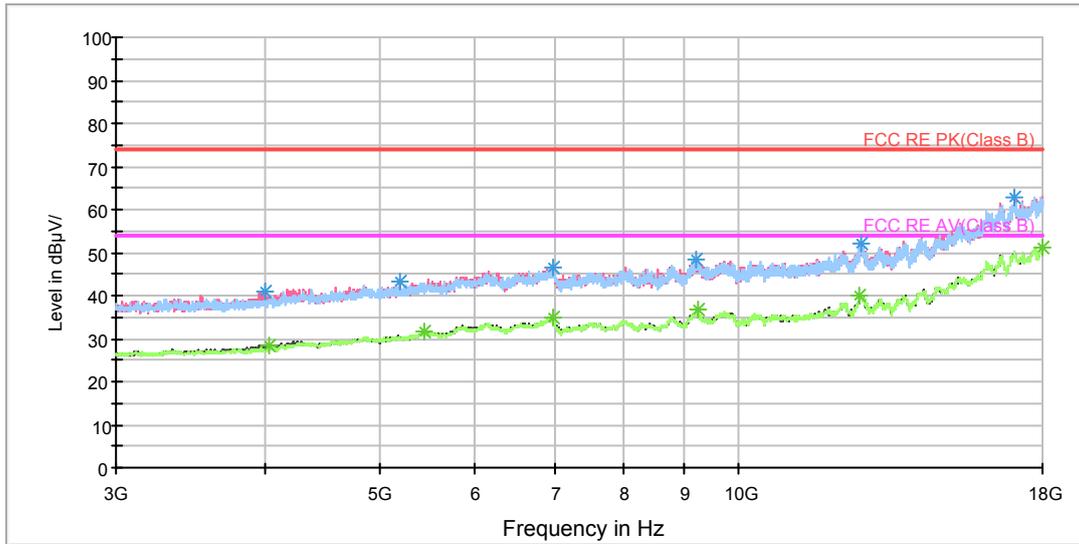
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1198.500000 | 46.0 | 101.0 | V | 7.0 | 54.2 | -8.2 | 28.0 | 74 |
| 1201.750000 | 41.4 | 101.0 | V | 43.0 | 49.6 | -8.2 | 32.6 | 74 |
| 1569.750000 | 44.1 | 101.0 | V | 150.0 | 50.7 | -6.6 | 29.9 | 74 |
| 1996.500000 | 48.1 | 101.0 | V | 167.0 | 51.4 | -3.3 | 25.9 | 74 |
| 2674.250000 | 47.2 | 101.0 | V | 61.0 | 47.0 | 0.2 | 26.8 | 74 |
| 2881.000000 | 49.3 | 101.0 | V | 194.0 | 47.0 | 2.3 | 24.7 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1001.500000 | 30.3 | 101.0 | V | 248.0 | 39.5 | -9.2 | 23.7 | 54 |
| 1426.000000 | 28.8 | 101.0 | V | 167.0 | 35.7 | -6.9 | 25.2 | 54 |
| 1713.000000 | 30.4 | 101.0 | V | 17.0 | 35.2 | -4.8 | 23.6 | 54 |
| 1993.000000 | 32.4 | 101.0 | V | 79.0 | 35.7 | -3.3 | 21.6 | 54 |
| 2708.250000 | 35.8 | 101.0 | V | 61.0 | 35.7 | 0.1 | 18.2 | 54 |
| 2976.750000 | 37.3 | 101.0 | H | 0.0 | 35.1 | 2.2 | 16.7 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

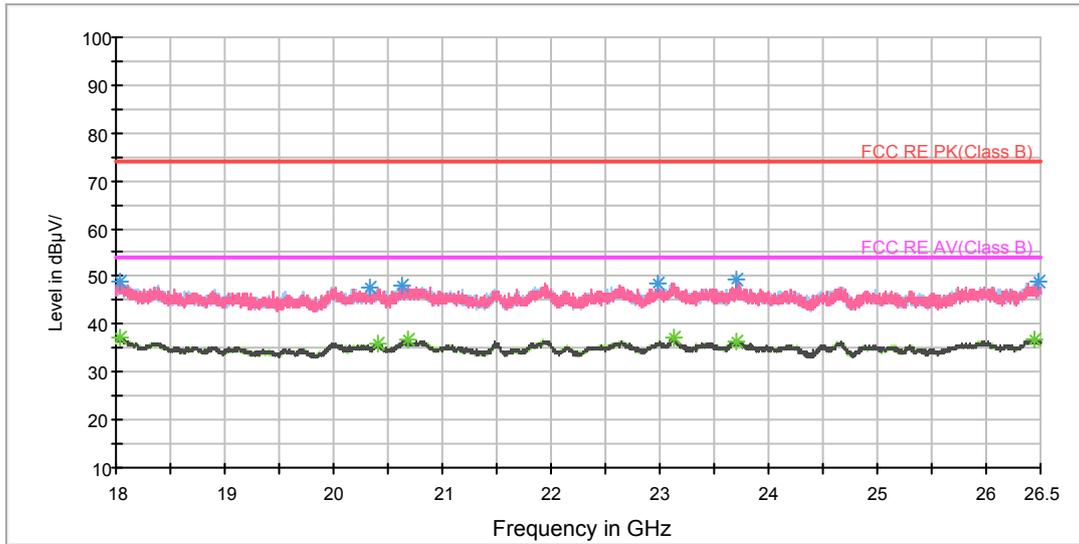
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 4005.000000 | 40.8 | 101.0 | V | 0.0 | 41.9 | -1.1 | 33.2 | 74 |
| 5188.125000 | 43.2 | 101.0 | V | 0.0 | 41.1 | 2.1 | 30.8 | 74 |
| 6995.625000 | 46.5 | 101.0 | H | 308.0 | 40.0 | 6.5 | 27.5 | 74 |
| 9210.000000 | 48.2 | 101.0 | V | 0.0 | 38.1 | 10.1 | 25.8 | 74 |
| 12701.250000 | 52.1 | 101.0 | V | 110.0 | 38.0 | 14.1 | 21.9 | 74 |
| 17053.125000 | 63.0 | 101.0 | H | 0.0 | 38.6 | 24.4 | 11.0 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 4033.125000 | 28.4 | 101.0 | V | 300.0 | 29.5 | -1.1 | 25.6 | 54 |
| 5441.250000 | 31.5 | 101.0 | H | 86.0 | 28.6 | 2.9 | 22.5 | 54 |
| 6995.625000 | 34.8 | 101.0 | H | 308.0 | 28.3 | 6.5 | 19.2 | 54 |
| 9238.125000 | 36.6 | 101.0 | V | 328.0 | 26.7 | 9.9 | 17.4 | 54 |
| 12637.500000 | 40.2 | 101.0 | H | 0.0 | 25.9 | 14.3 | 13.8 | 54 |
| 17998.125000 | 51.3 | 101.0 | H | 0.0 | 25.9 | 25.4 | 2.7 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18028.687500 | 48.8 | V | 181.0 | 50.7 | -1.9 | 25.2 | 74 |
| 20329.000000 | 47.8 | V | 181.0 | 53.8 | -6.0 | 26.2 | 74 |
| 20630.750000 | 48.2 | V | 101.0 | 54.7 | -6.5 | 25.8 | 74 |
| 22979.937500 | 48.4 | H | 267.0 | 54.6 | -6.2 | 25.6 | 74 |
| 23698.187500 | 49.5 | H | 172.0 | 55.4 | -5.9 | 24.5 | 74 |
| 26477.687500 | 49.0 | H | 298.0 | 54.4 | -5.4 | 25.0 | 74 |

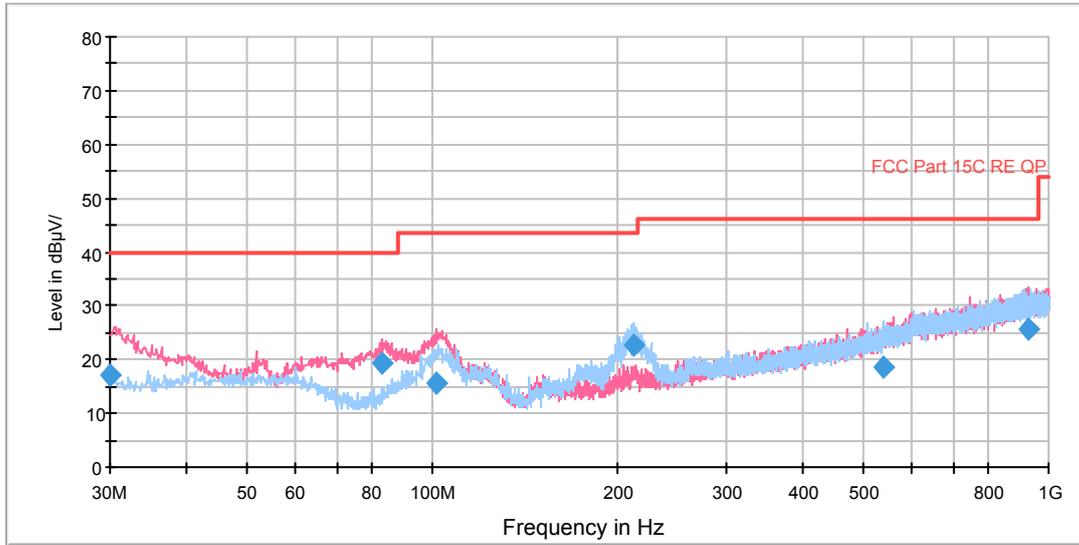
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

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

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

802.11n (HT20) CH1

FCC RE 0.03-1GHz QP Class B

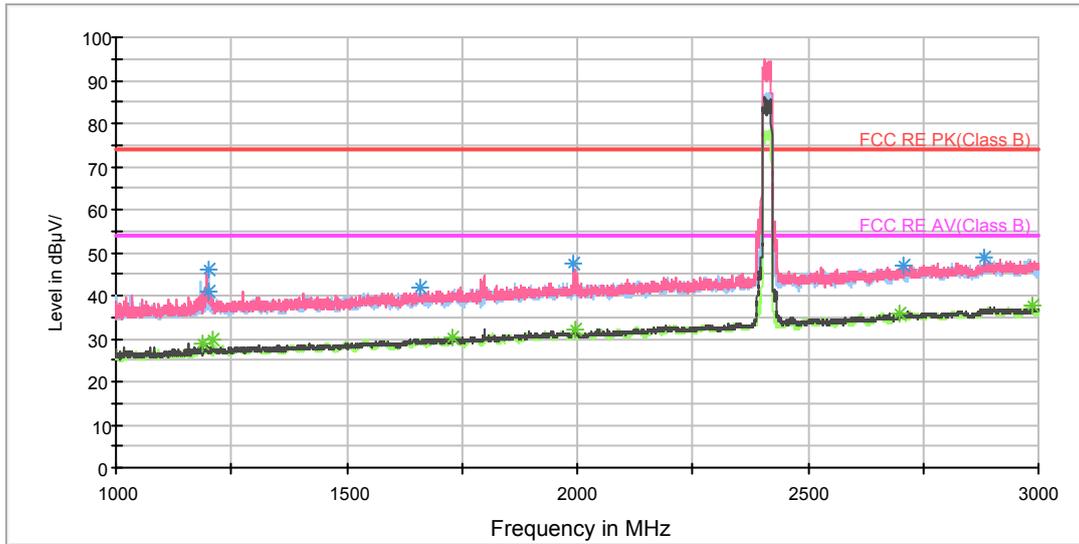


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

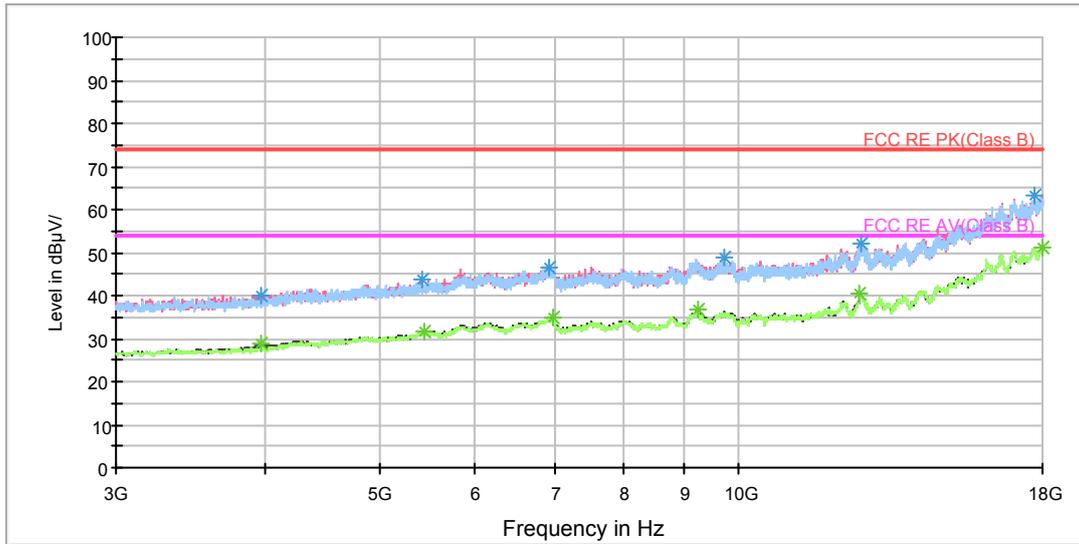
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1199.750000 | 46.1 | 101.0 | H | 19.0 | 54.3 | -8.2 | 27.9 | 74 |
| 1202.000000 | 41.0 | 101.0 | V | 67.0 | 49.2 | -8.2 | 33.0 | 74 |
| 1657.500000 | 41.7 | 101.0 | V | 0.0 | 46.9 | -5.2 | 32.3 | 74 |
| 1991.500000 | 47.4 | 101.0 | V | 164.0 | 50.7 | -3.3 | 26.6 | 74 |
| 2708.000000 | 46.9 | 101.0 | V | 76.0 | 46.8 | 0.1 | 27.1 | 74 |
| 2884.250000 | 48.9 | 101.0 | V | 172.0 | 46.7 | 2.2 | 25.1 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1187.000000 | 28.8 | 101.0 | H | 223.0 | 36.9 | -8.1 | 25.2 | 54 |
| 1211.250000 | 29.6 | 101.0 | H | 61.0 | 37.6 | -8.0 | 24.4 | 54 |
| 1730.750000 | 30.3 | 101.0 | H | 0.0 | 35.2 | -4.9 | 23.7 | 54 |
| 1995.750000 | 32.2 | 101.0 | V | 0.0 | 35.5 | -3.3 | 21.8 | 54 |
| 2698.750000 | 35.6 | 101.0 | H | 302.0 | 35.6 | 0.0 | 18.4 | 54 |
| 2985.250000 | 37.8 | 101.0 | V | 128.0 | 36.9 | 2.2 | 16.2 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

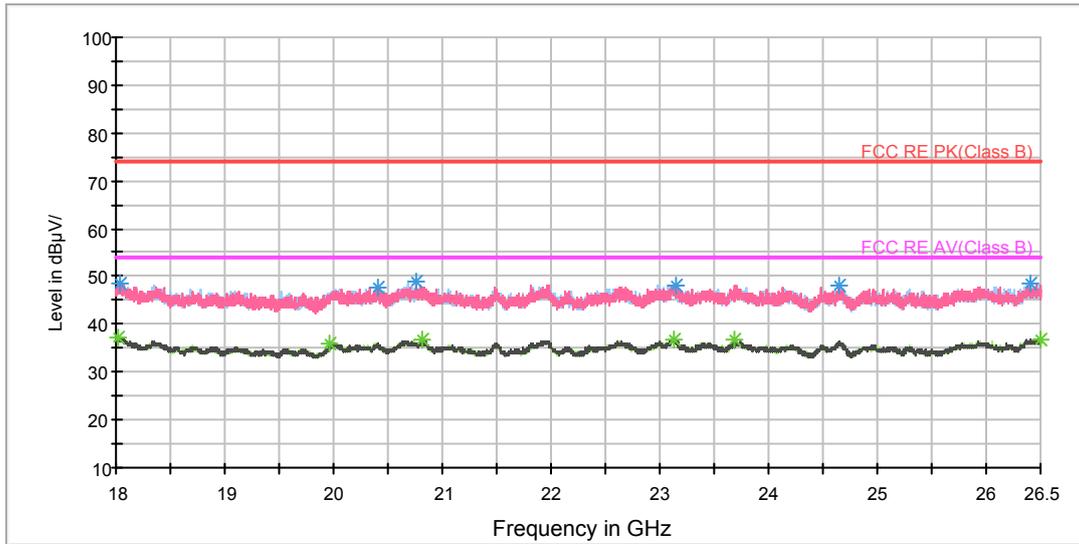
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3971.250000 | 40.1 | 101.0 | H | 114.0 | 41.0 | -0.9 | 33.9 | 74 |
| 5422.500000 | 43.9 | 101.0 | V | 0.0 | 41.2 | 2.7 | 30.1 | 74 |
| 6924.375000 | 46.4 | 101.0 | V | 0.0 | 40.2 | 6.2 | 27.6 | 74 |
| 9733.125000 | 48.7 | 101.0 | V | 219.0 | 38.9 | 9.8 | 25.3 | 74 |
| 12658.125000 | 52.1 | 101.0 | V | 0.0 | 38.2 | 13.9 | 21.9 | 74 |
| 17705.625000 | 63.1 | 101.0 | V | 302.0 | 41.0 | 24.7 | 10.9 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3971.250000 | 28.8 | 101.0 | V | 0.0 | 29.7 | -0.9 | 25.2 | 54 |
| 5433.750000 | 31.7 | 101.0 | V | 0.0 | 28.9 | 2.8 | 22.3 | 54 |
| 6997.500000 | 34.8 | 101.0 | V | 0.0 | 28.3 | 6.5 | 19.2 | 54 |
| 9238.125000 | 36.5 | 101.0 | V | 0.0 | 26.6 | 9.9 | 17.5 | 54 |
| 12639.375000 | 40.4 | 101.0 | V | 0.0 | 25.9 | 14.5 | 13.6 | 54 |
| 18000.000000 | 51.3 | 101.0 | H | 169.0 | 25.8 | 25.5 | 2.7 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18031.875000 | 48.4 | V | 132.0 | 50.3 | -1.9 | 25.6 | 74 |
| 20416.125000 | 47.8 | V | 69.0 | 53.9 | -6.1 | 26.2 | 74 |
| 20761.437500 | 49.1 | V | 244.0 | 55.9 | -6.8 | 24.9 | 74 |
| 23144.625000 | 48.3 | V | 212.0 | 54.4 | -6.1 | 25.7 | 74 |
| 24647.000000 | 48.3 | V | 5.0 | 54.3 | -6.0 | 25.7 | 74 |
| 26402.250000 | 48.4 | H | 0.0 | 53.8 | -5.4 | 25.6 | 74 |

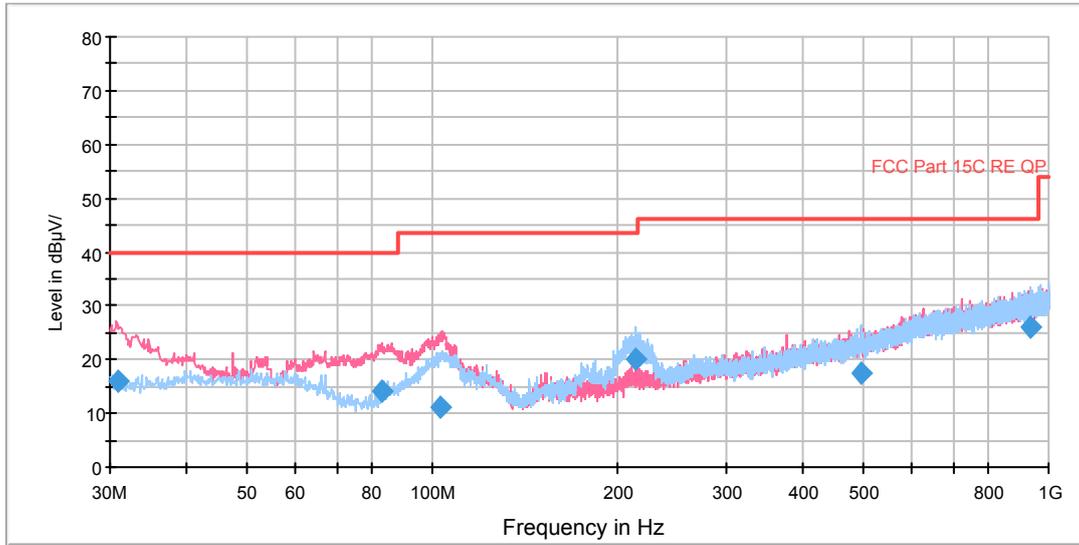
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

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

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

802.11n (HT20) CH6

FCC RE 0.03-1GHz QP Class B

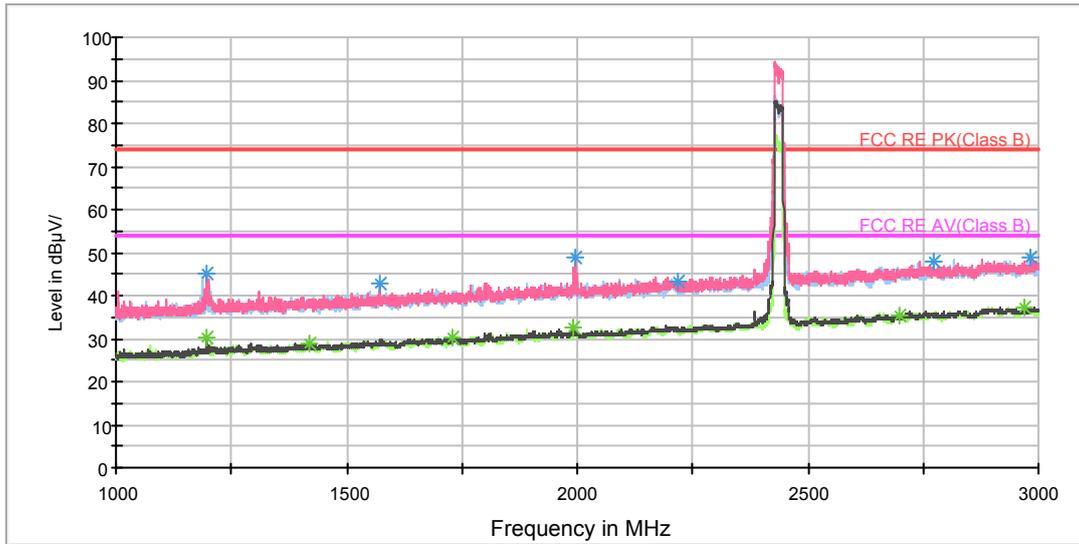


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

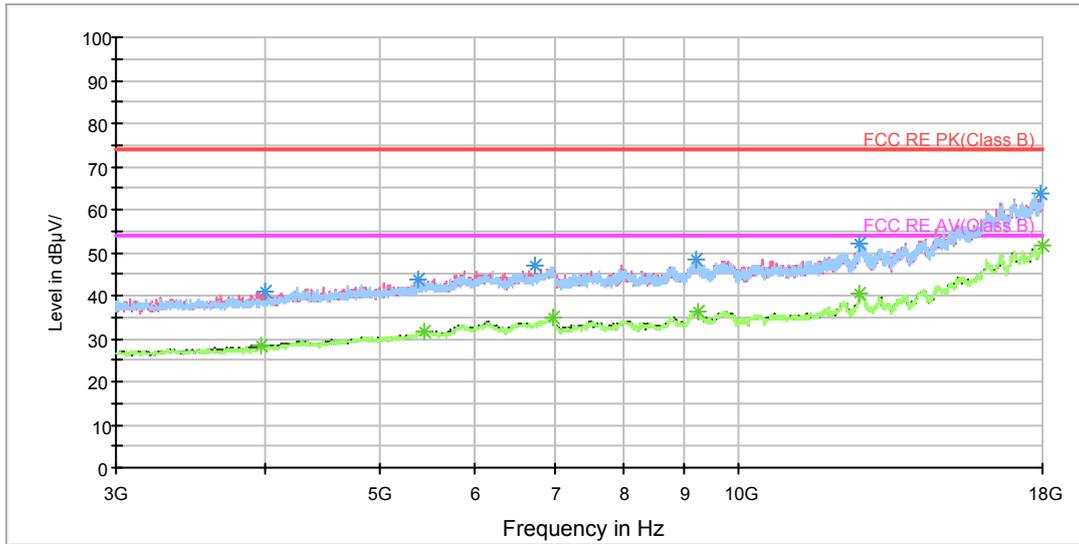
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1197.000000 | 44.9 | 101.0 | V | 19.0 | 53.1 | -8.2 | 29.1 | 74 |
| 1571.250000 | 42.7 | 101.0 | V | 72.0 | 49.2 | -6.5 | 31.3 | 74 |
| 1997.500000 | 48.8 | 101.0 | V | 164.0 | 52.1 | -3.3 | 25.2 | 74 |
| 2219.000000 | 43.2 | 101.0 | H | 0.0 | 45.5 | -2.3 | 30.8 | 74 |
| 2771.750000 | 48.0 | 101.0 | H | 276.0 | 47.2 | 0.8 | 26.0 | 74 |
| 2983.000000 | 48.8 | 101.0 | H | 276.0 | 46.6 | 2.2 | 25.2 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1196.250000 | 30.4 | 101.0 | V | 200.0 | 38.6 | -8.2 | 23.6 | 54 |
| 1417.750000 | 28.9 | 101.0 | H | 70.0 | 35.8 | -6.9 | 25.1 | 54 |
| 1730.250000 | 30.2 | 101.0 | H | 116.0 | 35.2 | -5.0 | 23.8 | 54 |
| 1989.750000 | 32.7 | 101.0 | V | 164.0 | 36.1 | -3.4 | 21.3 | 54 |
| 2697.000000 | 35.6 | 101.0 | H | 332.0 | 35.6 | 0.0 | 18.4 | 54 |
| 2971.000000 | 37.3 | 101.0 | V | 0.0 | 35.1 | 2.2 | 16.7 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

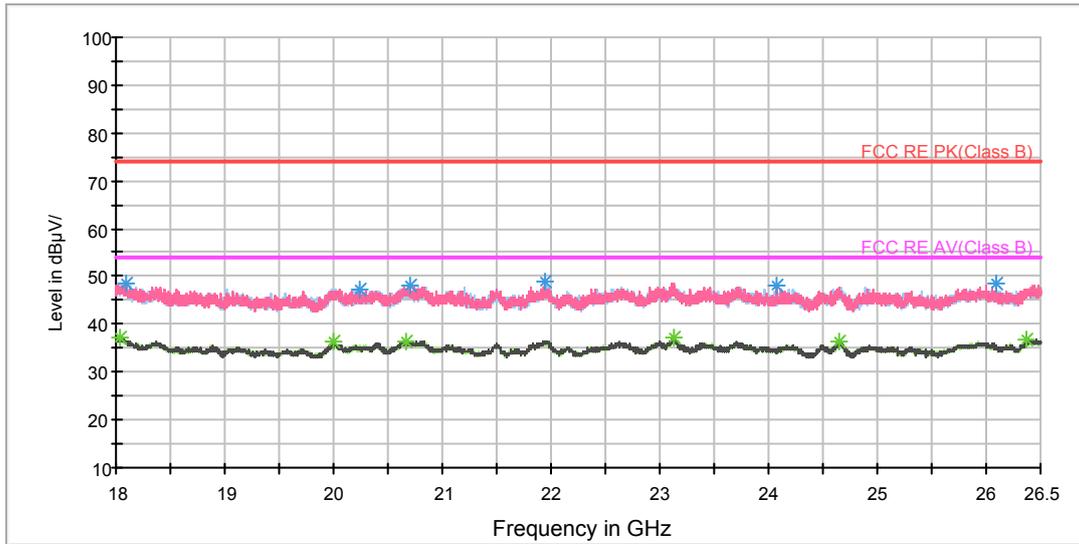
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 4008.750000 | 40.8 | 101.0 | V | 194.0 | 41.9 | -1.1 | 33.2 | 74 |
| 5371.875000 | 43.7 | 101.0 | H | 0.0 | 41.4 | 2.3 | 30.3 | 74 |
| 6755.625000 | 47.0 | 101.0 | V | 0.0 | 41.5 | 5.5 | 27.0 | 74 |
| 9213.750000 | 48.3 | 101.0 | H | 0.0 | 38.3 | 10.0 | 25.7 | 74 |
| 12641.250000 | 52.1 | 101.0 | H | 6.0 | 37.6 | 14.5 | 21.9 | 74 |
| 17910.000000 | 63.7 | 101.0 | H | 6.0 | 38.2 | 25.5 | 10.3 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3971.250000 | 28.6 | 101.0 | V | 276.0 | 29.5 | -0.9 | 25.4 | 54 |
| 5435.625000 | 31.6 | 101.0 | V | 0.0 | 28.7 | 2.9 | 22.4 | 54 |
| 6997.500000 | 34.9 | 101.0 | V | 276.0 | 28.4 | 6.5 | 19.1 | 54 |
| 9232.500000 | 36.4 | 101.0 | H | 33.0 | 26.5 | 9.9 | 17.6 | 54 |
| 12639.375000 | 40.6 | 101.0 | H | 0.0 | 26.1 | 14.5 | 13.4 | 54 |
| 18000.000000 | 51.4 | 101.0 | V | 194.0 | 25.9 | 25.5 | 2.6 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18089.250000 | 48.5 | H | 247.0 | 50.7 | -2.2 | 25.5 | 74 |
| 20233.375000 | 47.4 | V | 91.0 | 53.3 | -5.9 | 26.6 | 74 |
| 20698.750000 | 48.1 | H | 0.0 | 54.8 | -6.7 | 25.9 | 74 |
| 21946.125000 | 48.8 | V | 12.0 | 56.8 | -8.0 | 25.2 | 74 |
| 24074.312500 | 48.0 | V | 0.0 | 53.9 | -5.9 | 26.0 | 74 |
| 26088.812500 | 48.6 | V | 59.0 | 54.0 | -5.4 | 25.4 | 74 |

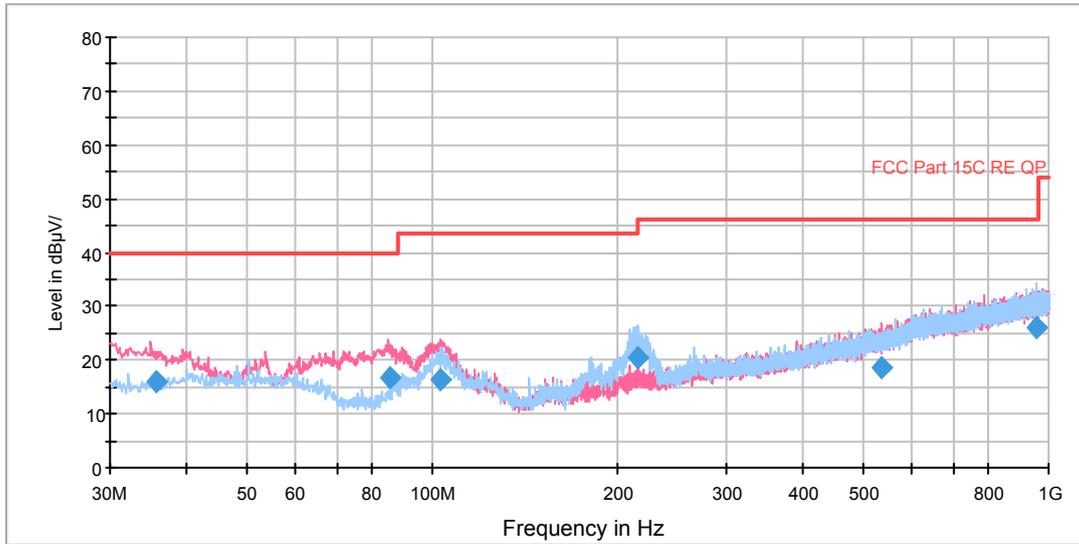
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

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

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

802.11n (HT20) CH11

FCC RE 0.03-1GHz QP Class B

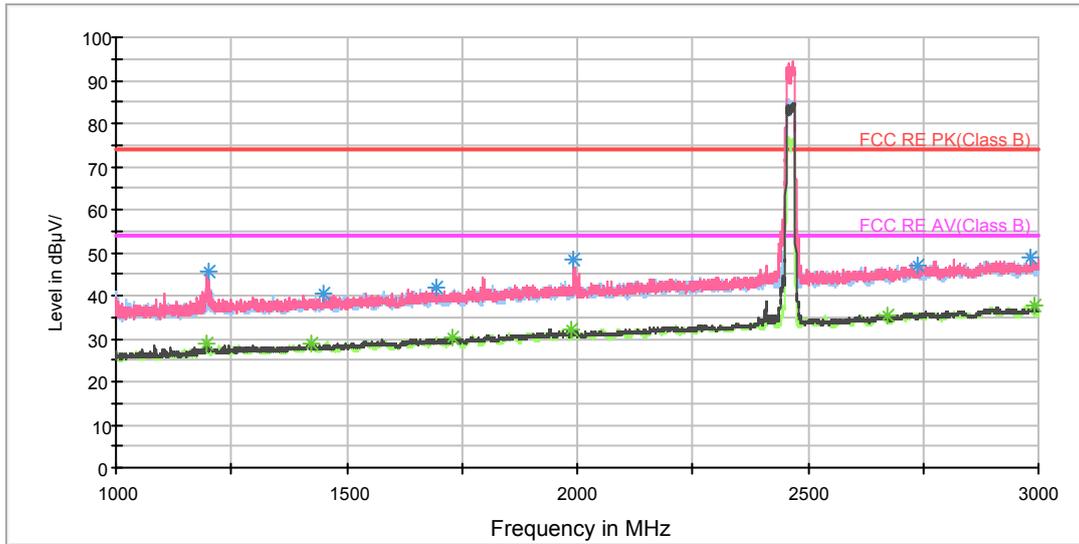


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

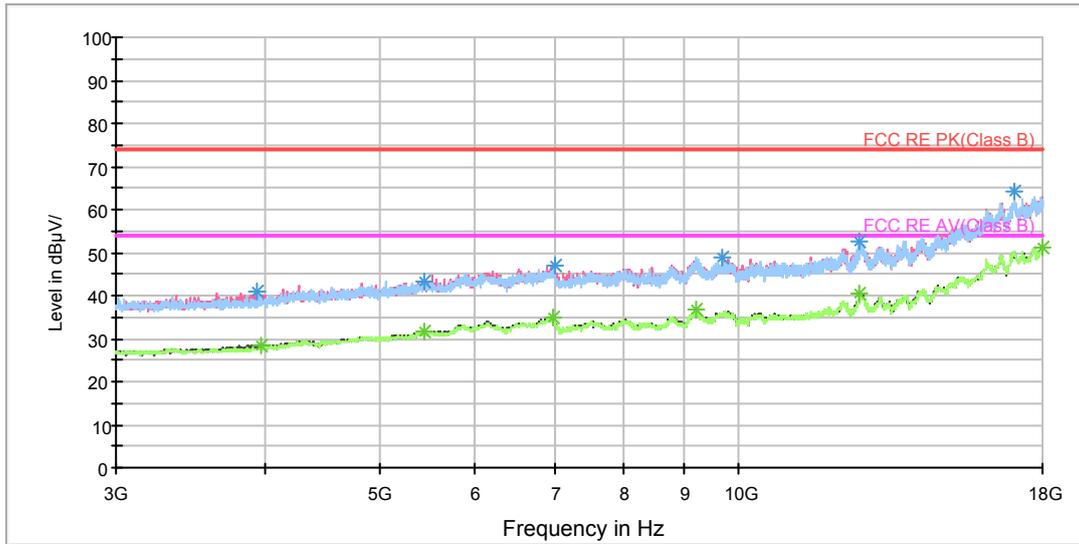
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1198.750000 | 45.5 | 101.0 | H | 52.0 | 53.7 | -8.2 | 28.5 | 74 |
| 1448.000000 | 40.4 | 101.0 | V | 149.0 | 47.1 | -6.7 | 33.6 | 74 |
| 1694.000000 | 41.8 | 101.0 | H | 0.0 | 46.8 | -5.0 | 32.2 | 74 |
| 1992.000000 | 48.5 | 101.0 | V | 87.0 | 51.8 | -3.3 | 25.5 | 74 |
| 2736.750000 | 47.0 | 101.0 | H | 255.0 | 46.4 | 0.6 | 27.0 | 74 |
| 2981.000000 | 48.6 | 101.0 | H | 298.0 | 46.4 | 2.2 | 25.4 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1198.250000 | 28.7 | 101.0 | V | 16.0 | 36.9 | -8.2 | 25.3 | 54 |
| 1425.250000 | 28.7 | 101.0 | H | 0.0 | 35.6 | -6.9 | 25.3 | 54 |
| 1731.000000 | 30.4 | 101.0 | H | 0.0 | 35.3 | -4.9 | 23.6 | 54 |
| 1985.250000 | 32.0 | 101.0 | V | 167.0 | 35.8 | -3.8 | 22.0 | 54 |
| 2673.750000 | 35.4 | 101.0 | V | 0.0 | 35.2 | 0.2 | 18.6 | 54 |
| 2991.000000 | 37.6 | 101.0 | V | 59.0 | 35.4 | 2.2 | 16.4 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

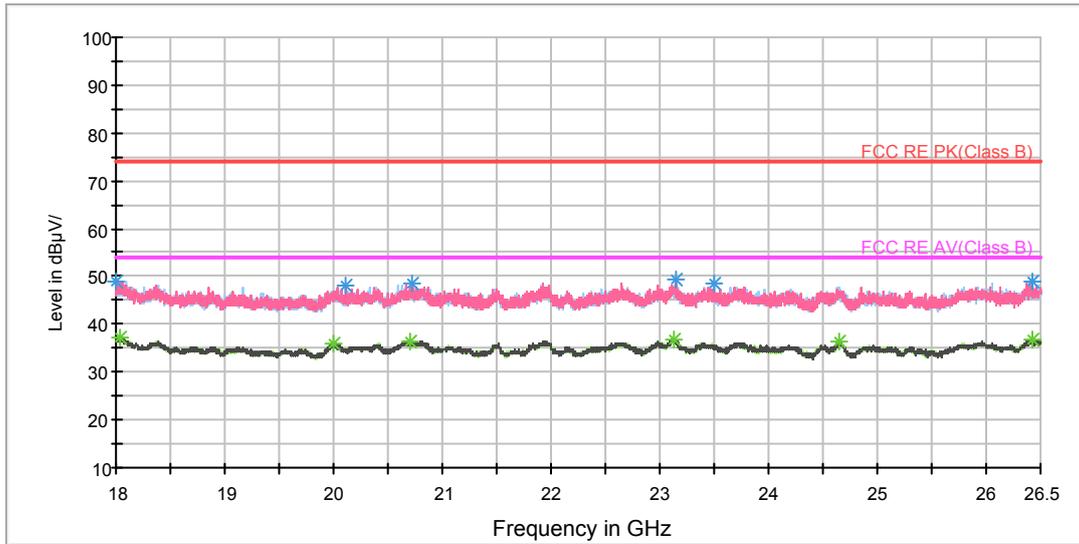
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3933.750000 | 40.8 | 101.0 | V | 22.0 | 41.9 | -1.1 | 33.2 | 74 |
| 5445.000000 | 43.3 | 101.0 | V | 0.0 | 40.4 | 2.9 | 30.7 | 74 |
| 6999.375000 | 46.8 | 101.0 | H | 32.0 | 40.3 | 6.5 | 27.2 | 74 |
| 9686.250000 | 48.9 | 101.0 | H | 0.0 | 39.4 | 9.5 | 25.1 | 74 |
| 12637.500000 | 52.7 | 101.0 | H | 224.0 | 38.4 | 14.3 | 21.3 | 74 |
| 17040.000000 | 64.2 | 101.0 | H | 168.0 | 39.6 | 24.6 | 9.8 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3967.500000 | 28.5 | 101.0 | V | 327.0 | 29.4 | -0.9 | 25.5 | 54 |
| 5433.750000 | 31.6 | 101.0 | V | 0.0 | 28.8 | 2.8 | 22.4 | 54 |
| 6997.500000 | 34.9 | 101.0 | V | 0.0 | 28.4 | 6.5 | 19.1 | 54 |
| 9204.375000 | 36.5 | 101.0 | V | 219.0 | 26.3 | 10.2 | 17.5 | 54 |
| 12641.250000 | 40.5 | 101.0 | V | 355.0 | 26.0 | 14.5 | 13.5 | 54 |
| 18000.000000 | 51.4 | 101.0 | H | 59.0 | 29.4 | 25.5 | 2.6 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18007.437500 | 48.9 | H | 262.0 | 50.7 | -1.8 | 25.1 | 74 |
| 20119.687500 | 48.2 | V | 245.0 | 54.0 | -5.8 | 25.8 | 74 |
| 20730.625000 | 48.4 | V | 182.0 | 55.2 | -6.8 | 25.6 | 74 |
| 23143.562500 | 49.3 | V | 197.0 | 55.4 | -6.1 | 24.7 | 74 |
| 23503.750000 | 48.3 | H | 199.0 | 54.2 | -5.9 | 25.7 | 74 |
| 26426.687500 | 49.0 | H | 50.0 | 54.4 | -5.4 | 25.0 | 74 |

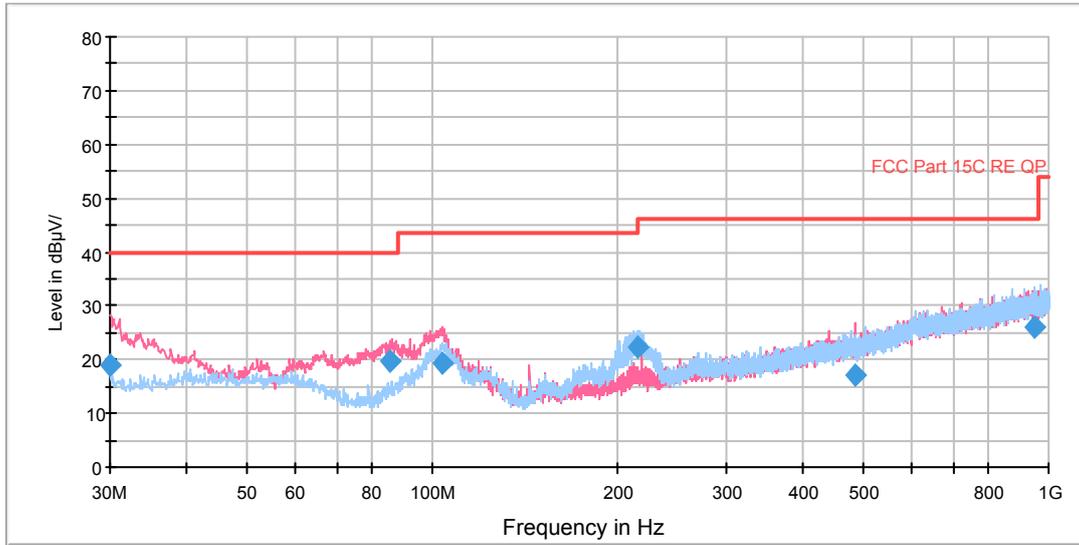
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

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

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

BLE-Channel 0

FCC RE 0.03-1GHz QP Class B

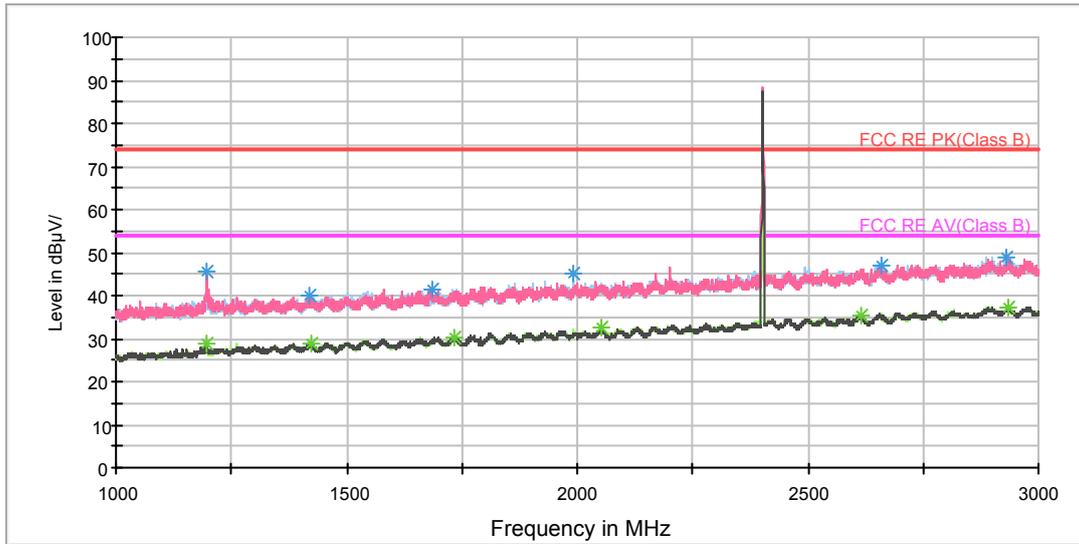


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

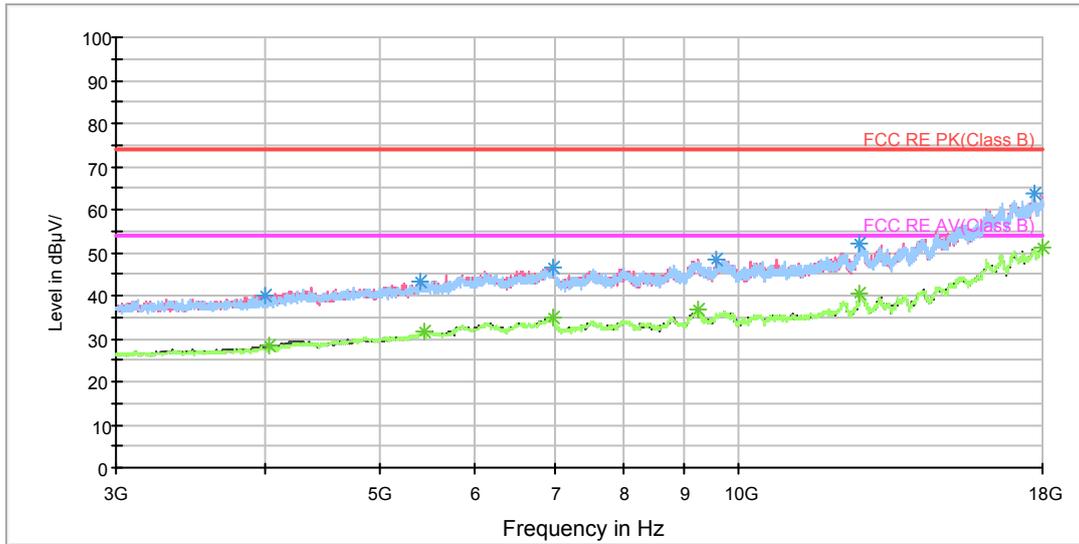
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1196.250000 | 45.7 | 101.0 | V | 278.0 | 53.9 | -8.2 | 28.3 | 74 |
| 1419.500000 | 39.8 | 101.0 | V | 64.0 | 46.7 | -6.9 | 34.2 | 74 |
| 1684.250000 | 41.4 | 101.0 | V | 153.0 | 46.4 | -5.0 | 32.6 | 74 |
| 1991.750000 | 45.2 | 101.0 | H | 240.0 | 48.5 | -3.3 | 28.8 | 74 |
| 2658.750000 | 47.0 | 101.0 | V | 56.0 | 46.6 | 0.4 | 27.0 | 74 |
| 2930.000000 | 48.7 | 101.0 | V | 109.0 | 47.0 | 1.7 | 25.3 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1198.250000 | 28.7 | 101.0 | H | 311.0 | 36.9 | -8.2 | 25.3 | 54 |
| 1424.500000 | 28.9 | 101.0 | V | 215.0 | 35.8 | -6.9 | 25.1 | 54 |
| 1731.750000 | 30.3 | 101.0 | V | 91.0 | 35.1 | -4.8 | 23.7 | 54 |
| 2051.500000 | 32.4 | 101.0 | V | 64.0 | 35.6 | -3.2 | 21.6 | 54 |
| 2615.250000 | 35.5 | 101.0 | V | 0.0 | 35.5 | 0.0 | 18.5 | 54 |
| 2932.500000 | 37.4 | 101.0 | H | 320.0 | 35.6 | 1.8 | 16.6 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

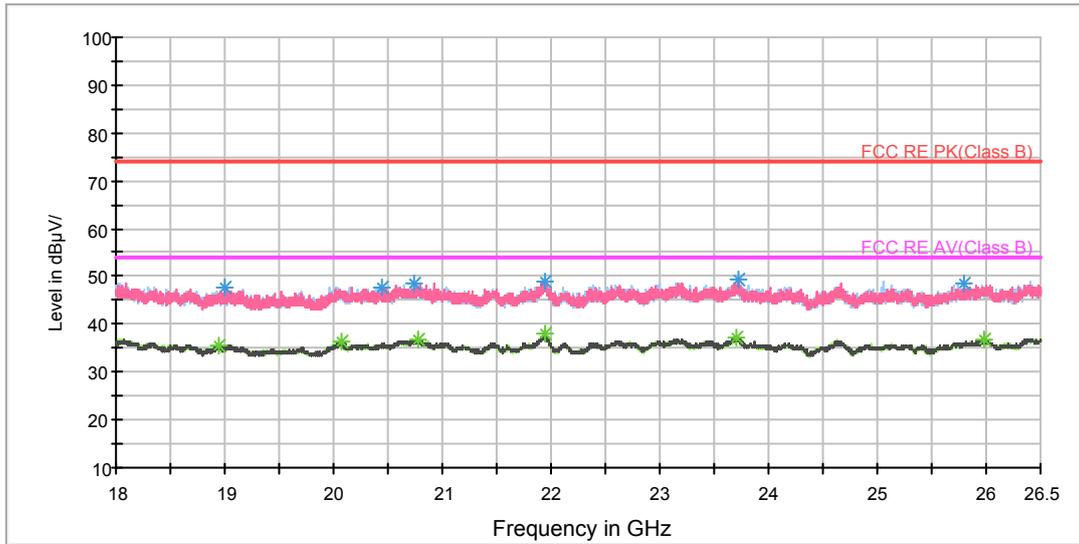
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3995.625000 | 40.1 | 101.0 | V | 192.0 | 41.2 | -1.1 | 33.9 | 74 |
| 5411.250000 | 43.3 | 101.0 | V | 246.0 | 40.7 | 2.6 | 30.7 | 74 |
| 6995.625000 | 46.6 | 101.0 | H | 0.0 | 40.1 | 6.5 | 27.4 | 74 |
| 9583.125000 | 48.4 | 101.0 | V | 219.0 | 38.4 | 10.0 | 25.6 | 74 |
| 12635.625000 | 51.9 | 101.0 | H | 32.0 | 37.8 | 14.1 | 22.1 | 74 |
| 17705.625000 | 63.6 | 101.0 | H | 168.0 | 38.9 | 24.7 | 10.4 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 4038.750000 | 28.4 | 101.0 | V | 136.0 | 29.4 | -1.0 | 25.6 | 54 |
| 5446.875000 | 31.7 | 101.0 | V | 192.0 | 28.9 | 2.8 | 22.3 | 54 |
| 6997.500000 | 34.9 | 101.0 | H | 0.0 | 28.4 | 6.5 | 19.1 | 54 |
| 9238.125000 | 36.5 | 101.0 | V | 246.0 | 26.6 | 9.9 | 17.5 | 54 |
| 12641.250000 | 40.7 | 101.0 | V | 0.0 | 26.2 | 14.5 | 13.3 | 54 |
| 17998.125000 | 51.2 | 101.0 | V | 246.0 | 25.8 | 25.4 | 2.8 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 19001.937500 | 47.7 | V | 145.0 | 52.8 | -5.1 | 26.3 | 74 |
| 20451.187500 | 47.7 | V | 114.0 | 53.8 | -6.1 | 26.3 | 74 |
| 20740.187500 | 48.6 | H | 327.0 | 55.4 | -6.8 | 25.4 | 74 |
| 21947.187500 | 48.9 | V | 0.0 | 56.9 | -8.0 | 25.1 | 74 |
| 23716.250000 | 49.2 | H | 358.0 | 55.1 | -5.9 | 24.8 | 74 |
| 25789.187500 | 48.7 | V | 3.0 | 54.2 | -5.5 | 25.3 | 74 |

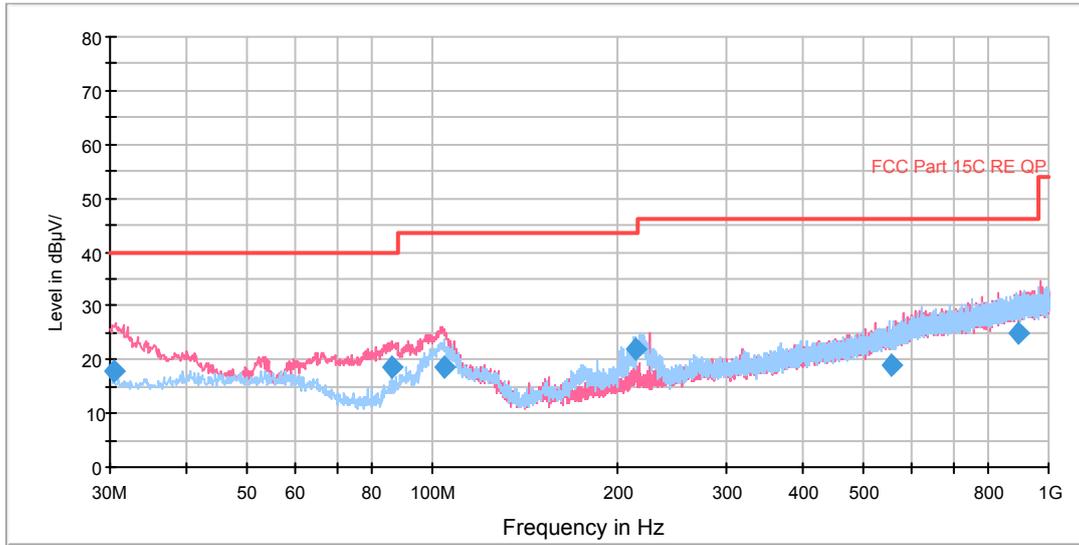
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

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

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

BLE-Channel 19

FCC RE 0.03-1GHz QP Class B

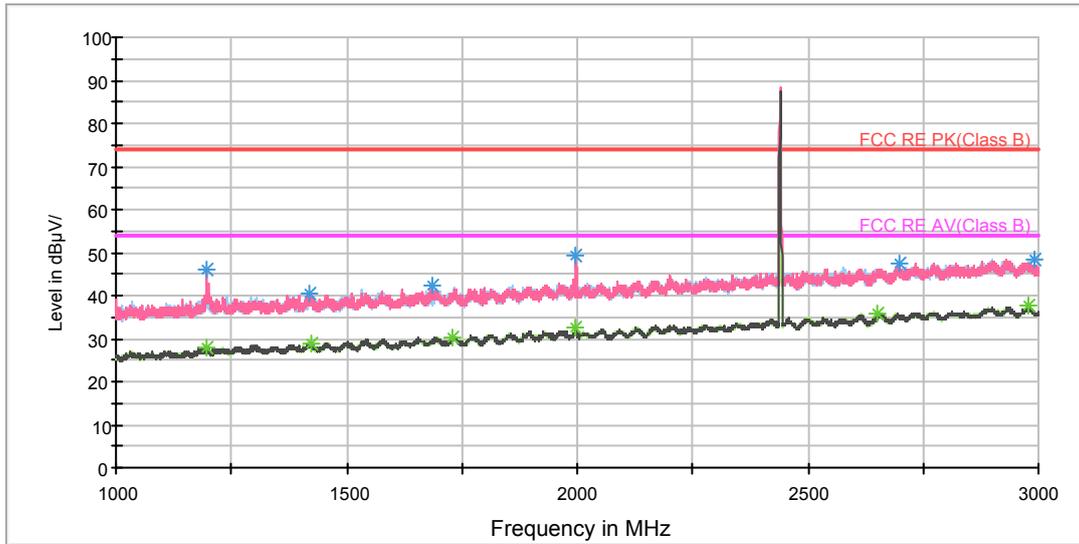


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

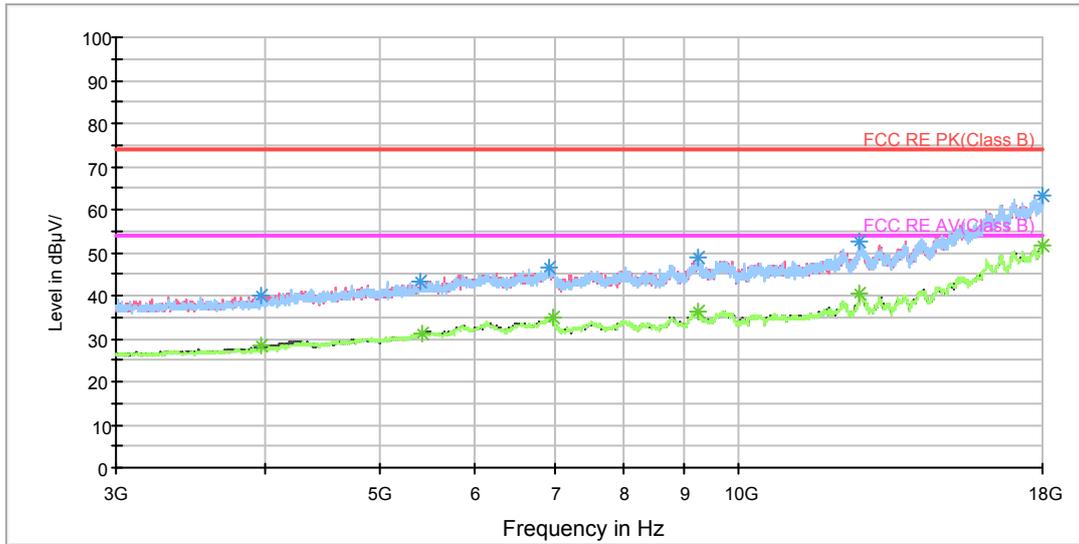
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1197.500000 | 46.0 | 101.0 | V | 279.0 | 54.2 | -8.2 | 28.0 | 74 |
| 1419.750000 | 40.4 | 101.0 | V | 109.0 | 47.3 | -6.9 | 33.6 | 74 |
| 1683.500000 | 42.5 | 101.0 | V | 127.0 | 47.5 | -5.0 | 31.5 | 74 |
| 1997.750000 | 49.5 | 101.0 | V | 260.0 | 52.8 | -3.3 | 24.5 | 74 |
| 2698.750000 | 47.5 | 101.0 | H | 162.0 | 47.5 | 0.0 | 26.5 | 74 |
| 2989.500000 | 48.4 | 101.0 | H | 348.0 | 46.2 | 2.2 | 25.6 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1197.500000 | 28.0 | 101.0 | V | 279.0 | 36.2 | -8.2 | 26.0 | 54 |
| 1424.250000 | 28.7 | 101.0 | V | 100.0 | 35.6 | -6.9 | 25.3 | 54 |
| 1729.750000 | 30.3 | 101.0 | V | 161.0 | 35.3 | -5.0 | 23.7 | 54 |
| 1997.750000 | 32.5 | 101.0 | V | 260.0 | 35.8 | -3.3 | 21.5 | 54 |
| 2652.500000 | 35.9 | 101.0 | V | 260.0 | 35.5 | 0.4 | 18.1 | 54 |
| 2976.000000 | 37.5 | 101.0 | H | 296.0 | 35.3 | 2.2 | 16.5 | 54 |

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

RE 3-18GHz PK+AV



Radiates Emission from 3GHz to 18GHz

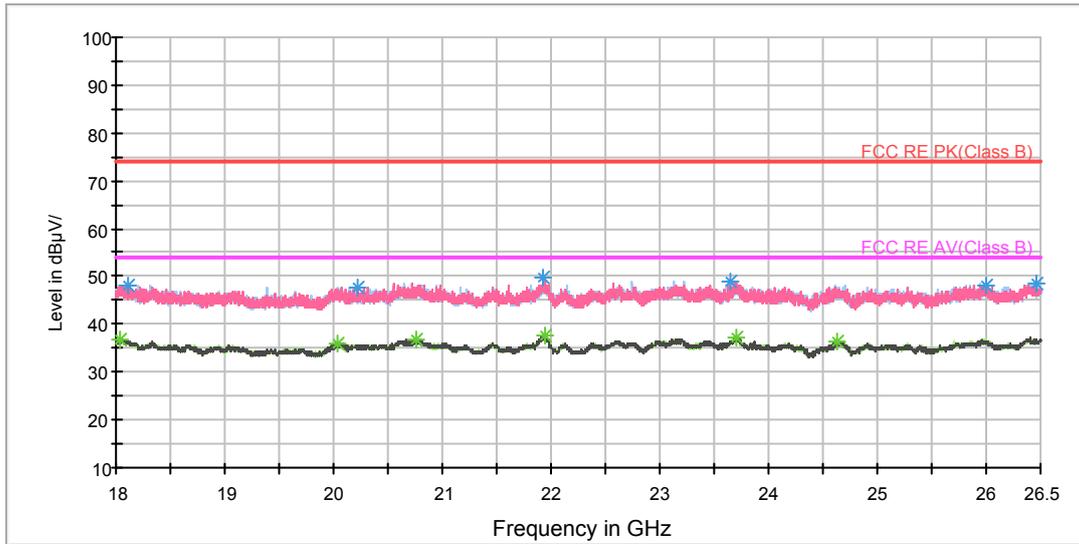
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3967.500000 | 40.2 | 101.0 | V | 301.0 | 41.1 | -0.9 | 33.8 | 74 |
| 5398.125000 | 43.2 | 101.0 | V | 137.0 | 40.7 | 2.5 | 30.8 | 74 |
| 6943.125000 | 46.3 | 101.0 | V | 0.0 | 40.2 | 6.1 | 27.7 | 74 |
| 9241.875000 | 49.0 | 101.0 | V | 274.0 | 39.1 | 9.9 | 25.0 | 74 |
| 12639.375000 | 52.3 | 101.0 | V | 0.0 | 37.8 | 14.5 | 21.7 | 74 |
| 17998.125000 | 63.5 | 101.0 | V | 137.0 | 38.1 | 25.4 | 10.5 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 3969.375000 | 28.4 | 101.0 | V | 0.0 | 29.3 | -0.9 | 25.6 | 54 |
| 5431.875000 | 31.2 | 101.0 | H | 144.0 | 28.4 | 2.8 | 22.8 | 54 |
| 6997.500000 | 35.0 | 101.0 | V | 274.0 | 28.5 | 6.5 | 19.0 | 54 |
| 9232.500000 | 36.5 | 101.0 | V | 0.0 | 26.6 | 9.9 | 17.5 | 54 |
| 12641.250000 | 40.5 | 101.0 | H | 144.0 | 26.0 | 14.5 | 13.5 | 54 |
| 17998.125000 | 51.4 | 101.0 | H | 171.0 | 26.0 | 25.4 | 2.6 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18119.000000 | 48.3 | V | 198.0 | 50.6 | -2.3 | 25.7 | 74 |
| 20228.062500 | 47.8 | V | 134.0 | 53.7 | -5.9 | 26.2 | 74 |
| 21933.375000 | 49.7 | H | 345.0 | 57.7 | -8.0 | 24.3 | 74 |
| 23649.312500 | 48.9 | H | 0.0 | 54.8 | -5.9 | 25.1 | 74 |
| 25992.125000 | 48.2 | V | 0.0 | 53.6 | -5.4 | 25.8 | 74 |
| 26470.250000 | 48.4 | V | 12.0 | 53.8 | -5.4 | 25.6 | 74 |

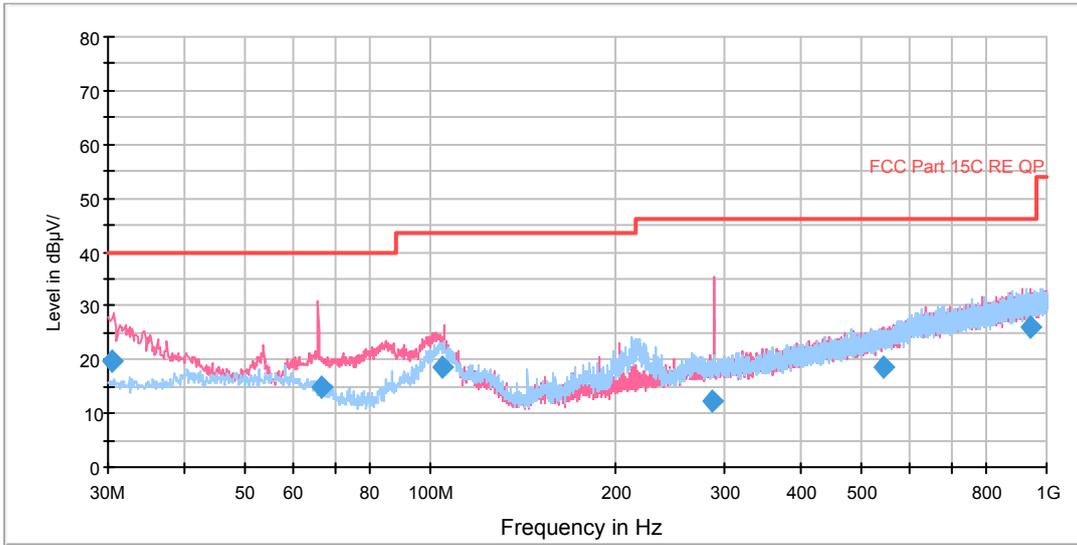
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

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

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

BLE-Channel 39

FCC RE 0.03-1GHz QP Class B

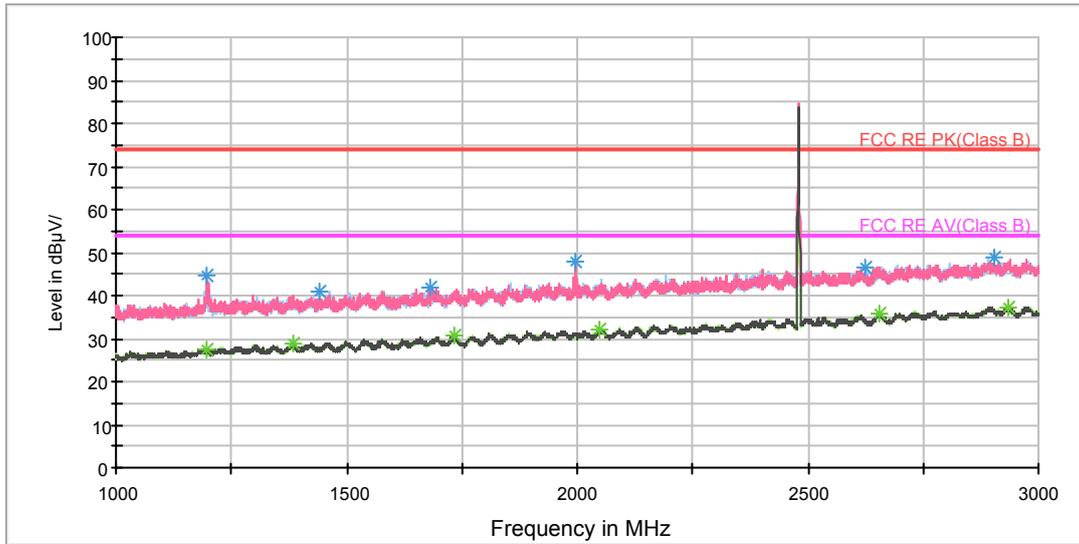


Radiates Emission from 30MHz to 1GHz

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

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

RE 1G-3GHz PK+AV



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

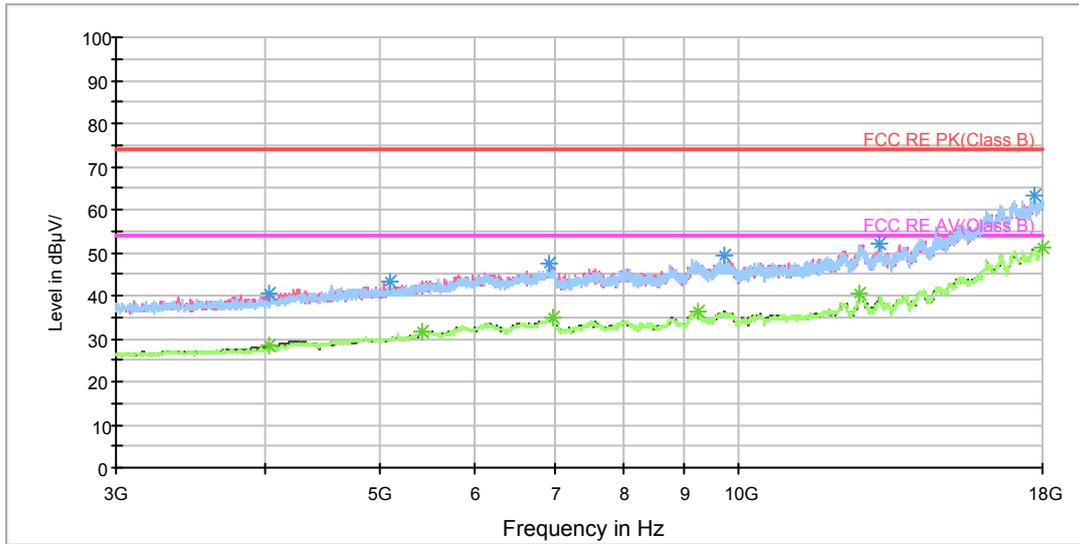
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1195.000000 | 44.7 | 101.0 | V | 123.0 | 52.9 | -8.2 | 29.3 | 74 |
| 1439.750000 | 40.9 | 101.0 | H | 333.0 | 47.8 | -6.9 | 33.1 | 74 |
| 1680.000000 | 41.8 | 101.0 | V | 24.0 | 46.9 | -5.1 | 32.2 | 74 |
| 1995.750000 | 48.1 | 101.0 | V | 213.0 | 51.4 | -3.3 | 25.9 | 74 |
| 2623.000000 | 46.4 | 101.0 | H | 269.0 | 46.5 | -0.1 | 27.6 | 74 |
| 2903.250000 | 48.6 | 101.0 | H | 297.0 | 46.6 | 2.0 | 25.4 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 1196.250000 | 27.6 | 101.0 | V | 16.0 | 35.8 | -8.2 | 26.4 | 54 |
| 1384.500000 | 28.9 | 101.0 | V | 42.0 | 35.9 | -7.0 | 25.1 | 54 |
| 1732.000000 | 30.7 | 101.0 | V | 42.0 | 35.5 | -4.8 | 23.3 | 54 |
| 2049.750000 | 32.0 | 101.0 | V | 51.0 | 35.2 | -3.2 | 22.0 | 54 |
| 2655.250000 | 35.6 | 101.0 | V | 106.0 | 35.2 | 0.4 | 18.4 | 54 |
| 2936.500000 | 37.3 | 101.0 | V | 313.0 | 35.5 | 1.8 | 16.7 | 54 |

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

RE 3-18GHz PK+AV



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

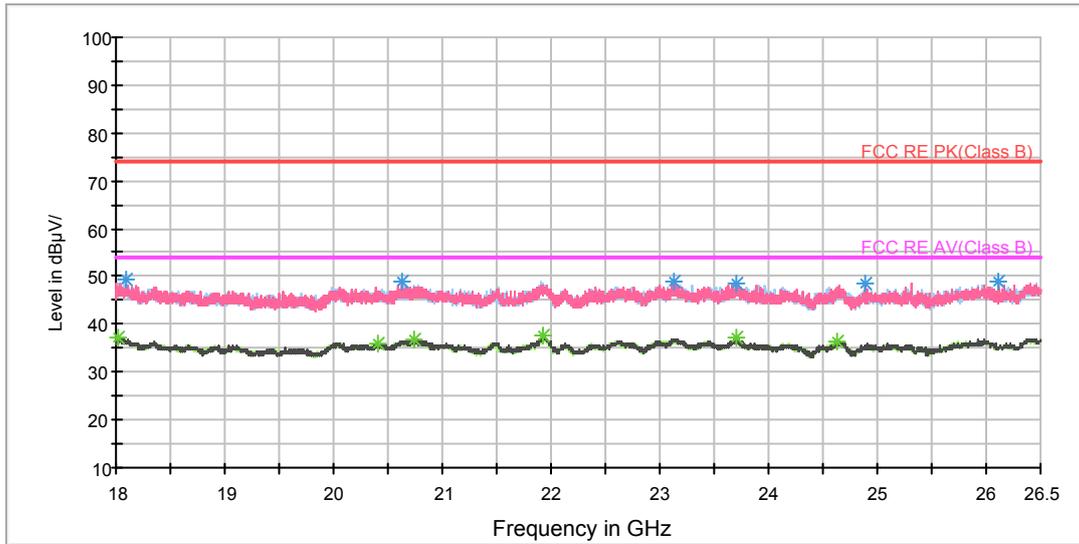
| Frequency (MHz) | Peak (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 4033.125000 | 40.5 | 101.0 | V | 192.0 | 41.6 | -1.1 | 33.5 | 74 |
| 5096.250000 | 43.5 | 101.0 | V | 0.0 | 41.7 | 1.8 | 30.5 | 74 |
| 6933.750000 | 47.4 | 101.0 | H | 33.0 | 41.2 | 6.2 | 26.6 | 74 |
| 9738.750000 | 49.2 | 101.0 | H | 33.0 | 39.2 | 10.0 | 24.8 | 74 |
| 13151.250000 | 51.9 | 101.0 | V | 358.0 | 37.7 | 14.2 | 22.1 | 74 |
| 17716.875000 | 63.1 | 101.0 | H | 87.0 | 38.5 | 24.6 | 10.9 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Height (cm) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|-------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 4036.875000 | 28.2 | 101.0 | V | 0.0 | 29.2 | -1.0 | 25.8 | 54 |
| 5430.000000 | 31.4 | 101.0 | V | 0.0 | 28.6 | 2.8 | 22.6 | 54 |
| 6995.625000 | 34.8 | 101.0 | V | 136.0 | 28.3 | 6.5 | 19.2 | 54 |
| 9238.125000 | 36.4 | 101.0 | H | 60.0 | 26.5 | 9.9 | 17.6 | 54 |
| 12639.375000 | 40.7 | 101.0 | V | 0.0 | 26.2 | 14.5 | 13.3 | 54 |
| 17998.125000 | 51.3 | 101.0 | V | 304.0 | 25.9 | 25.4 | 2.7 | 54 |

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

RE 18-26.5GHz PK+AV



Radiates Emission from 18GHz to 26.5GHz

| Frequency (MHz) | Peak (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|---------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18083.937500 | 49.3 | H | 165.0 | 51.5 | -2.2 | 24.7 | 74 |
| 20633.937500 | 48.8 | V | 118.0 | 55.3 | -6.5 | 25.2 | 74 |
| 23129.750000 | 49.1 | V | 72.0 | 55.2 | -6.1 | 24.9 | 74 |
| 23709.875000 | 48.6 | H | 0.0 | 54.5 | -5.9 | 25.4 | 74 |
| 24891.375000 | 48.6 | V | 197.0 | 54.5 | -5.9 | 25.4 | 74 |
| 26119.625000 | 49.0 | V | 0.0 | 54.4 | -5.4 | 25.0 | 74 |

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

| Frequency (MHz) | Average (dBuV/m) | Polarization | Azimuth (deg) | Reading value (dBuV/m) | Correct Factor (dB) | Margin (dB) | Limit (dBuV/m) |
|-----------------|------------------|--------------|---------------|------------------------|---------------------|-------------|----------------|
| 18024.437500 | 37.1 | H | 244.0 | 39.0 | -1.9 | 16.9 | 54 |
| 20407.625000 | 36.1 | V | 0.0 | 42.2 | -6.1 | 17.9 | 54 |
| 20734.875000 | 37.0 | H | 228.0 | 43.8 | -6.8 | 17.0 | 54 |
| 21931.250000 | 37.6 | H | 307.0 | 45.6 | -8.0 | 16.4 | 54 |
| 23696.062500 | 37.2 | H | 275.0 | 43.1 | -5.9 | 16.8 | 54 |
| 24626.812500 | 36.4 | V | 0.0 | 42.4 | -6.0 | 17.6 | 54 |

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

5.8. Conducted Emission

Ambient condition

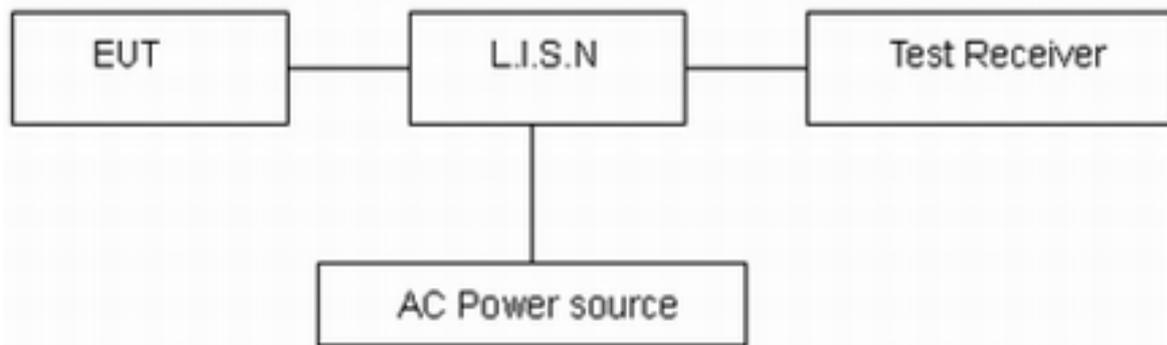
| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 23°C ~25°C | 45%~50% | 101.5kPa |

Methods of Measurement

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

The test is in transmitting mode.

Test Setup



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

Limits

| Frequency (MHz) | Conducted Limits(dBμV) | |
|-----------------|------------------------|-----------|
| | Quasi-peak | Average |
| 0.15 - 0.5 | 66 to 56 * | 56 to 46* |
| 0.5 - 5 | 56 | 46 |
| 5 - 30 | 60 | 50 |

*: Decreases with the logarithm of the frequency.

Measurement Uncertainty

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

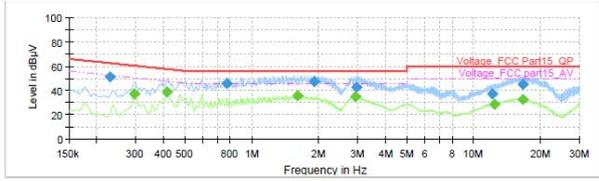


Test Results:

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

802.11b, Channel No.: 1

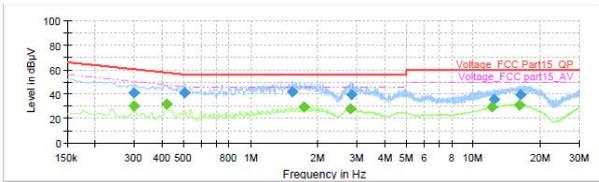
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.

N Line

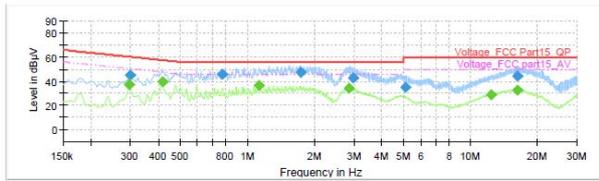


Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.

802.11b, Channel No.: 6

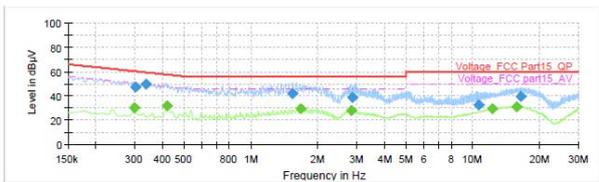
L Line



Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.

N Line



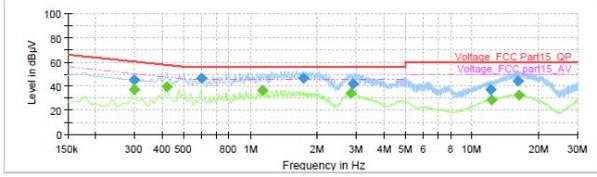
Final Result

Table with 10 columns: Frequency (MHz), QuasiPeak (dBµV), Average (dBµV), Limit (dBµV), Margin (dB), Meas. Time (ms), Bandwidth (kHz), Line, Filter, Corr. (dB). Contains 14 rows of test data.



802.11b, Channel No.: 11

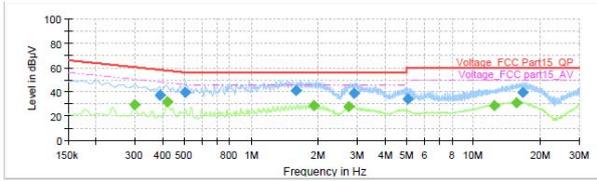
L Line



Final Result

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

N Line

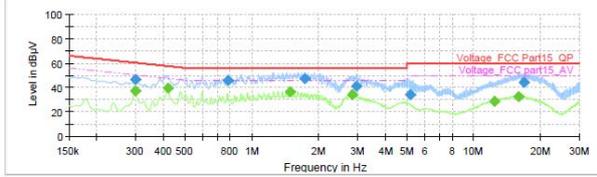


Final Result

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

802.11g, Channel No.: 1

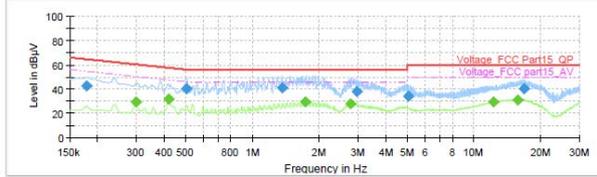
L Line



Final Result

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

N Line



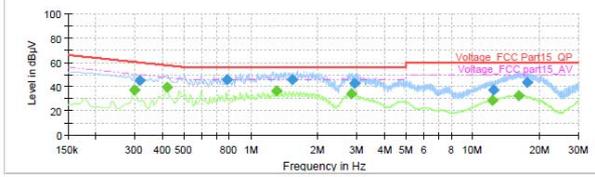
Final Result

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



802.11g, Channel No.: 6

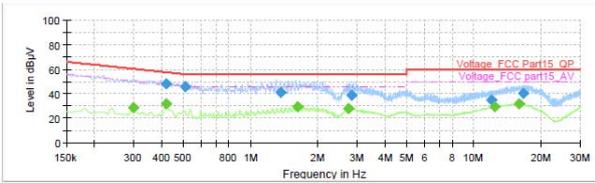
L Line



Final Result

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

N Line

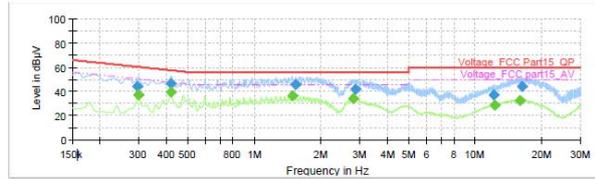


Final Result

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

802.11g, Channel No.: 11

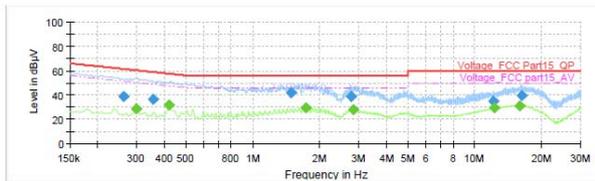
L Line



Final Result

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

N Line



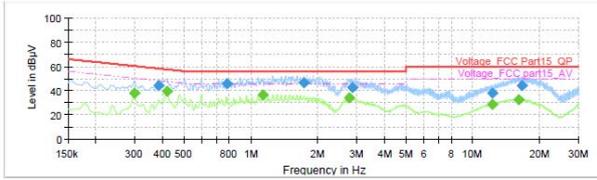
Final Result

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



802.11n(HT20), Channel No.: 1

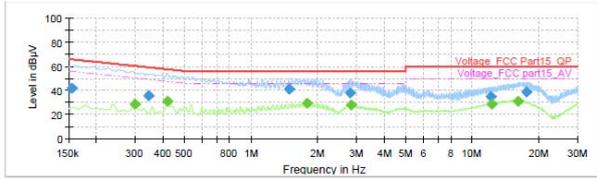
L Line



Final Result

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

N Line

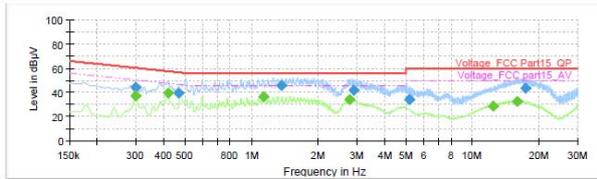


Final Result

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

802.11n(HT20), Channel No.: 6

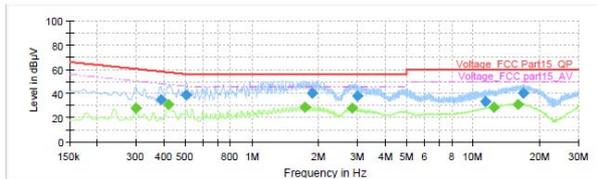
L Line



Final Result

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

N Line



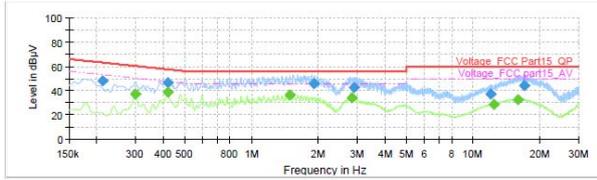
Final Result

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



802.11n(HT20), Channel No.: 11

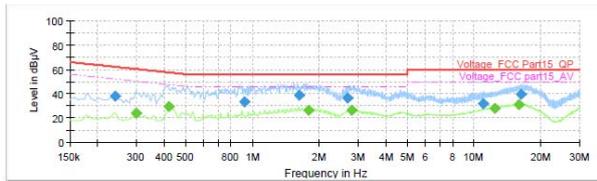
L Line



Final Result

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

N Line

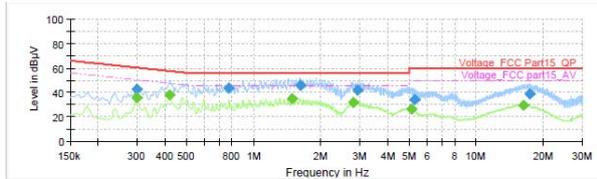


Final Result

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

BLE, Channel No.: 0

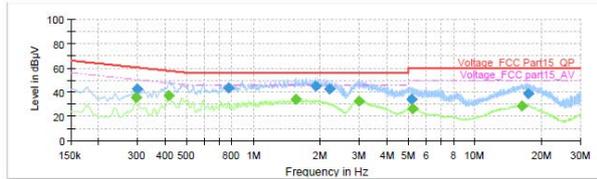
L Line



Final Result

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

N Line



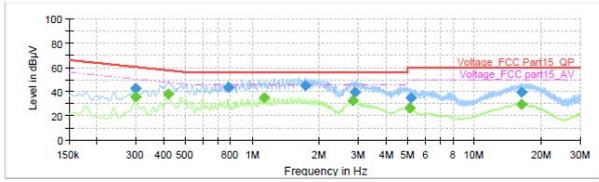
Final Result

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



BLE, Channel No.: 19

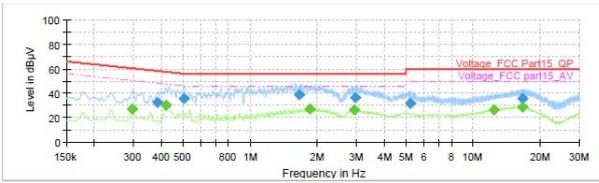
L Line



Final Result

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

N Line

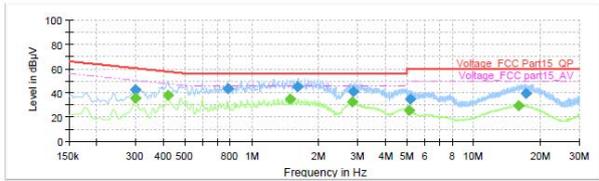


Final Result

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

BLE, Channel No.: 39

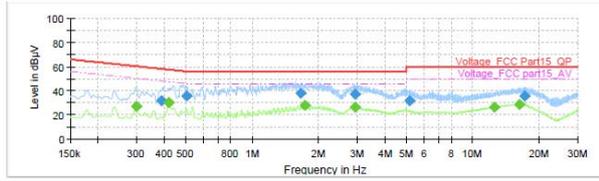
L Line



Final Result

| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.298500 | --- | 35.75 | 50.28 | 14.54 | 1000.0 | 9.000 | L1 | ON | 19.2 |
| 0.298500 | 42.58 | --- | 60.28 | 17.70 | 1000.0 | 9.000 | L1 | ON | 19.2 |
| 0.417750 | --- | 37.72 | 47.49 | 9.78 | 1000.0 | 9.000 | L1 | ON | 19.2 |
| 0.777750 | 43.72 | --- | 56.00 | 12.28 | 1000.0 | 9.000 | L1 | ON | 19.2 |
| 1.493250 | --- | 34.76 | 46.00 | 11.24 | 1000.0 | 9.000 | L1 | ON | 19.2 |
| 1.612500 | 45.18 | --- | 56.00 | 10.82 | 1000.0 | 9.000 | L1 | ON | 19.2 |
| 2.820750 | --- | 32.30 | 46.00 | 13.70 | 1000.0 | 9.000 | L1 | ON | 19.0 |
| 2.872500 | 41.26 | --- | 56.00 | 14.74 | 1000.0 | 9.000 | L1 | ON | 19.1 |
| 5.091000 | --- | 25.93 | 50.00 | 24.07 | 1000.0 | 9.000 | L1 | ON | 19.1 |
| 5.154000 | 34.69 | --- | 60.00 | 25.31 | 1000.0 | 9.000 | L1 | ON | 19.1 |
| 15.902250 | --- | 29.50 | 50.00 | 20.50 | 1000.0 | 9.000 | L1 | ON | 19.4 |
| 17.232000 | 39.23 | --- | 60.00 | 20.77 | 1000.0 | 9.000 | L1 | ON | 19.6 |

N Line



Final Result

| Frequency (MHz) | QuasiPeak (dBµV) | Average (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Filter | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|--------|------------|
| 0.298500 | --- | 27.38 | 50.28 | 22.90 | 1000.0 | 9.000 | N | ON | 19.2 |
| 0.388500 | 31.43 | --- | 58.10 | 26.66 | 1000.0 | 9.000 | N | ON | 19.2 |
| 0.417750 | --- | 30.19 | 47.49 | 17.31 | 1000.0 | 9.000 | N | ON | 19.2 |
| 0.505500 | 35.40 | --- | 56.00 | 20.60 | 1000.0 | 9.000 | N | ON | 19.2 |
| 1.659750 | 38.03 | --- | 56.00 | 17.97 | 1000.0 | 9.000 | N | ON | 19.2 |
| 1.731750 | --- | 27.54 | 46.00 | 18.46 | 1000.0 | 9.000 | N | ON | 19.2 |
| 2.931000 | 37.49 | --- | 56.00 | 18.51 | 1000.0 | 9.000 | N | ON | 19.1 |
| 2.942250 | --- | 26.33 | 46.00 | 19.67 | 1000.0 | 9.000 | N | ON | 19.1 |
| 5.185500 | 31.89 | --- | 60.00 | 28.11 | 1000.0 | 9.000 | N | ON | 19.1 |
| 12.455250 | --- | 26.45 | 50.00 | 23.55 | 1000.0 | 9.000 | N | ON | 19.4 |
| 16.307250 | --- | 28.61 | 50.00 | 21.39 | 1000.0 | 9.000 | N | ON | 19.4 |
| 17.146500 | 35.47 | --- | 60.00 | 24.53 | 1000.0 | 9.000 | N | ON | 19.5 |



6. Main Test Instruments

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

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

ANNEX A: EUT Appearance and Test Setup

A.1 EUT Appearance



Front Side



Back Side

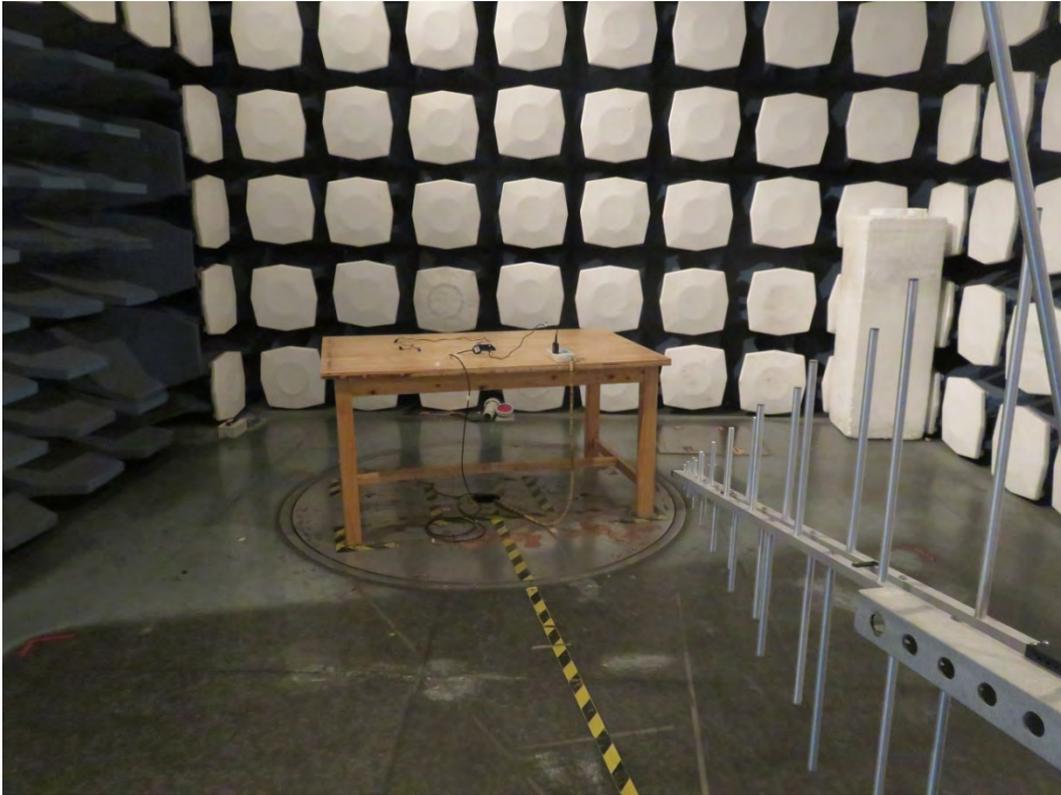
a: EUT



b: Battery

Picture 1 EUT and Accessory

A.2 Test Setup

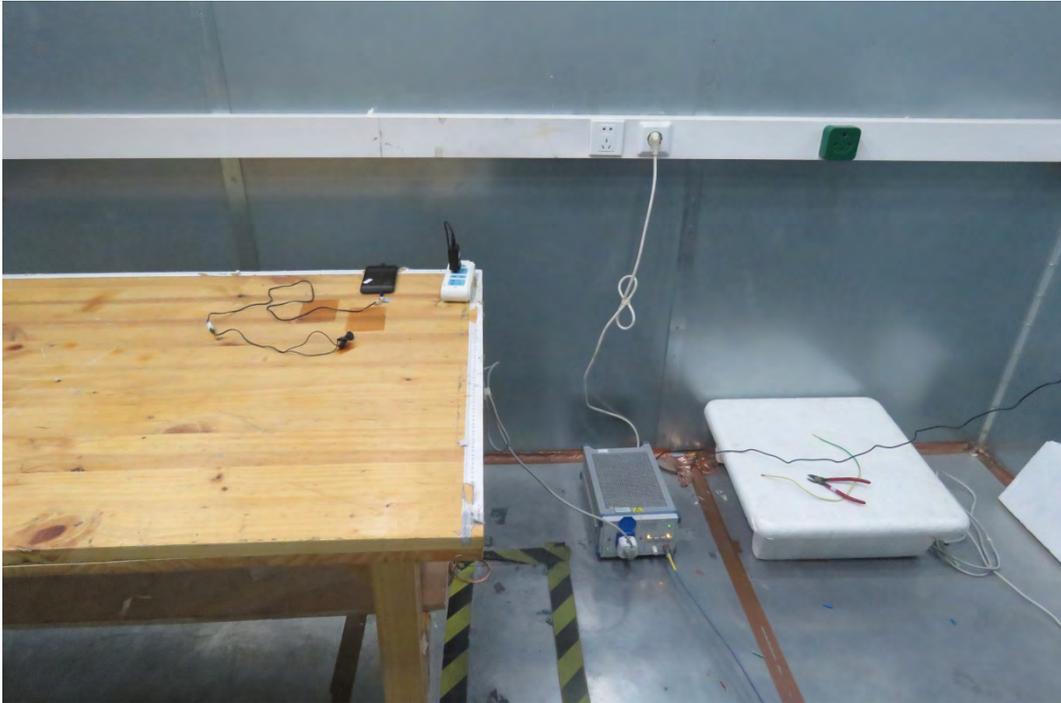


Below 1GHz



Above 1GHz

Picture 2 Radiated Emission Test Setup



Picture 3 Conducted Emission Test Setup