

FCC TEST REPORT

For

Guangzhou SOUTH Surveying & Mapping Instrument Co., Ltd.

GNSS RECEIVER

Test Model: GALAXY G6

Additional Model: G6, T68, R8, TX20, G1, T66, R6, K9mini, K98mini, K5plus,
K58plus, TX10

| | | |
|--------------------------------|---|---|
| Prepared for | : | Guangzhou SOUTH Surveying & Mapping Instrument Co., Ltd. |
| Address | : | Room 301 South Building, No.24-26 Keyun Road, Tian He District, Guangzhou |
| Prepared by | : | Shenzhen LCS Compliance Testing Laboratory Ltd. |
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| Mail | : | webmaster@LCS-cert.com |
| Date of receipt of test sample | : | December 28, 2015 |
| Number of tested samples | : | 1 |
| Serial number | : | Prototype |
| Date of Test | : | December 28, 2015 - May 20, 2016 |
| Date of Report | : | May 20, 2016 |

FCC TEST REPORT**FCC CFR 47 PART 15 C(15.247): 2014****Report Reference No.** : LCS1603080655E

Date of Issue : May 20, 2016

Testing Laboratory Name : Shenzhen LCS Compliance Testing Laboratory Ltd.Address : 1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue,
Bao'an District, Shenzhen, Guangdong, ChinaTesting Location/ Procedure : Full application of Harmonised standards
Partial application of Harmonised standards
Other standard testing method **Applicant's Name** : Guangzhou SOUTH Surveying & Mapping Instrument Co., Ltd.Address : Room 301 South Building, No.24-26 Keyun Road, Tian He
District, Guangzhou**Test Specification**

Standard : FCC CFR 47 PART 15 C(15.247): 2014 / ANSI C63.10: 2013

Test Report Form No. : LCSEMC-1.0

TRF Originator : Shenzhen LCS Compliance Testing Laboratory Ltd.

Master TRF : Dated 2011-03

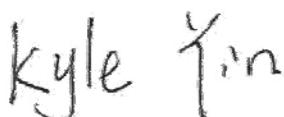
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Test Item Description : GNSS RECEIVER

Trade Mark : SOUTH

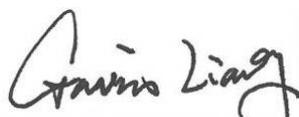
Test Model : GALAXY G6

Ratings : DC 7.4V by Lithium ion polymer battery(6800mAh)
Recharge Voltage: DC 8.4V/2AResult : **Positive****Compiled by:**

Kyle Yin / File administrators

Supervised by:

Glin Lu/ Technique principal

Approved by:

Gavin Liang/ Manager

FCC -- TEST REPORT

Test Report No. : LCS1603080655EMay 20, 2016

Date of issue

Test Model..... : GALAXY G6

EUT..... : GNSS RECEIVER

Applicant..... : Guangzhou SOUTH Surveying & Mapping Instrument Co., Ltd.Address..... : Room 301 South Building, No.24-26 Keyun Road, Tian He District,
Guangzhou

Telephone..... : /

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Manufacturer..... : Guangzhou SOUTH Surveying & Mapping Instrument Co., Ltd.Address..... : Room 301 South Building, No.24-26 Keyun Road, Tian He District,
Guangzhou

Telephone..... : /

Fax..... : /

Factory..... : Guangzhou SOUTH Surveying & Mapping Instrument Co., Ltd.Address..... : Room 301 South Building, No.24-26 Keyun Road, Tian He District,
Guangzhou

Telephone..... : /

Fax..... : /

Test Result**Positive**

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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1. GENERAL INFORMATION

1.1. Description of Device (EUT)

| | |
|-----------------------|---|
| EUT | : GNSS RECEIVER |
| Test Model | : GALAXY G6 |
| Additional Model | Galaxy T68, R8, TX20, G1 |
| Model Declaration | : PCB board, structure and internal of the related model(s) are the same, So no additional models were tested. |
| Hardware Version | : GALAXY1.4 |
| Software Version | : 1.05.150827.RG60GL.img |
| Power Supply | : DC 7.4V by Lithium ion polymer battery(6800mAh) Recharge Voltage: DC 8.4V/2A |
| EUT Support | : GPRS/EGPRS/ |
| Radios Application | WCDMA/HSUPA/HSDPA/ /WIFI/Bluetooth/UHF Radio/GPS(Only RX)/BD(Only RX)/ GLONASS(Only RX)/NFC(Only RX) |
| Bluetooth | : |
| Frequency Range | : 2402.00-2480.00MHz |
| Channel Spacing | : 2MHz |
| Channel Number | : 40 |
| Modulation Technology | : GFSK |
| Bluetooth Version | : This report is only for Bluetooth V4.0 BLE part. For Bluetooth V3.0 part, please see another separate report. |
| Antenna Description | : Ceramic Antenna, 3 dBi (Max.) |
| WIFI Technology | : |
| Operating Frequency | : 2412.00-2462.00MHz |
| Channel Spacing | : 5MHz |
| Channel Number | : 11 Channels for 20MHz Bandwidth 802.11b: DSSS(CCK,DQPSK,DBPSK) |
| Modulation Technology | : 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) 802.11n: OFDM (64QAM, 16QAM,QPSK,BPSK) 802.11b: 1-11Mbps 802.11g: 6-54Mbps 802.11n: MCS0-MCS7 |
| Data Rates | |
| Antenna Description | : Ceramic Antenna, 2 dBi (Max.) |

1.2. Host System Configuration List and Details

| Manufacturer | Description | Model | Serial Number | Certificate |
|-----------------------------|-------------|--------------|---------------|-------------|
| DEE VAN ENTERPRISE CO.,LTD. | Charger | DSA-60PFC-12 | -- | DOC |

1.3. External I/O

| I/O Port Description | Quantity | Cable |
|----------------------|----------|-------|
| USB Port | 1 | N/A |
| SIM Card Slot | 1 | N/A |
| TF Card Slot | 1 | N/A |
| Earphone Port | 1 | N/A |

1.4. Description of Test Facility

CNAS Registration Number. is L4595.

FCC Registration Number. is 899208.

Industry Canada Registration Number. is 9642A-1.

VCCI Registration Number. is C-4260 and R-3804.

ESMD Registration Number. is ARCB0108.

UL Registration Number. is 100571-492.

TUV SUD Registration Number. is SCN1081.

TUV RH Registration Number. is UA 50296516-001

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.4:2014 and CISPR 16-1-4:2010 SVSWR requirement for radiated emission above 1GHz.

1.5. Statement of The Measurement Uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. To CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS quality system acc. To DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

1.6. Measurement Uncertainty

| Test Item | Frequency Range | Uncertainty | Note |
|--------------------------|-----------------|-------------|------|
| Radiation Uncertainty : | 9KHz~30MHz | 3.10dB | (1) |
| | 30MHz~200MHz | 2.96dB | (1) |
| | 200MHz~1000MHz | 3.10dB | (1) |
| | 1GHz~26.5GHz | 3.80dB | (1) |
| | 26.5GHz~40GHz | 3.90dB | (1) |
| Conduction Uncertainty : | 150kHz~30MHz | 1.63dB | (1) |
| Power disturbance | 30MHz~300MHz | 1.60dB | (1) |

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.7. Description Of Test Modes

The EUT has been tested under operating condition.

The EUT was set to transmit at 100% duty cycle. This test was performed with EUT in X, Y, Z position and the worse case was found when EUT in X position.

Worst-case mode and channel used for 150 kHz-30 MHz power line conducted emissions was the mode and channel with the highest output power, which was determined to be 802.11b mode (High Channel).

Worst-case mode and channel used for 9kHz-1000 MHz radiated emissions was the mode and channel with the highest output power, that was determined to be 802.11b mode(High Channel).

Worst-Case data rates were utilized from preliminary testing of the Chipset, worst-case data rates used during the testing are as follows:

802.11b Mode : 1 Mbps, DSSS.

802.11g Mode : 6 Mbps, OFDM.

802.11n Mode HT20:.MCS0, OFDM.

AC Main conducted emission pre-test at both AC 120V/60Hz and AC 240V/50Hz, recorded worst case at AC 120V/60Hz.

Channel List & Frequency BLE 4.0

| Frequency Band | Channel No. | Frequency(MHz) | Channel No. | Frequency(MHz) |
|----------------|-------------|----------------|-------------|----------------|
| 2402~2480MHz | 1 | 2402 | 21 | 2442 |
| | 2 | 2404 | -- | -- |
| | 3 | 2406 | -- | -- |
| | -- | -- | 38 | 2476 |
| | -- | -- | 39 | 2478 |
| | 20 | 2440 | 40 | 2480 |

802.11b/g/n(HT20)

| Frequency Band | Channel No. | Frequency(MHz) | Channel No. | Frequency(MHz) |
|----------------|-------------|----------------|-------------|----------------|
| 2412~2462MHz | 1 | 2412 | 7 | 2442 |
| | 2 | 2417 | 8 | 2447 |
| | 3 | 2422 | 9 | 2452 |
| | 4 | 2427 | 10 | 2457 |
| | 5 | 2432 | 11 | 2462 |
| | 6 | 2437 | -- | -- |

***Note: Using a temporary antenna connector for the EUT when the conducted measurements are performed.

2. TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.10: 2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

The radiated testing was performed at an antenna-to-EUT distance of 3 meters. All radiated and conducted emissions measurement was performed at Shenzhen LCS Compliance Testing Laboratory Ltd.

2.1. EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

2.2. EUT Exercise

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

According to FCC's request, Test Procedure KDB558074 D01 DTS Meas Guidance v03r02 is required to be used for this kind of FCC 15.247 digital modulation device.

According to its specifications, the EUT must comply with the requirements of the Section 15.203, 15.205, 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

2.3. General Test Procedures

2.3.1 Conducted Emissions

According to the requirements in Section 6.2 of ANSI C63.10: 2013, AC power-line conducted emissions shall be measured in the frequency range between 0.15 MHz and 30MHz using Quasi-peak and average detector modes.

2.3.2 Radiated Emissions

The EUT is placed on a turn table and the turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 6.3 of ANSI C63.10: 2013

3. SYSTEM TEST CONFIGURATION

3.1. Justification

The system was configured for testing in a continuous transmits condition.

3.2. EUT Exercise Software

N/A

3.3. Special Accessories

N/A

3.4. Block Diagram/Schematics

Please refer to the related document

3.5. Equipment Modifications

Shenzhen LCS Compliance Testing Laboratory Ltd. has not done any modification on the EUT.

3.6. Test Setup

Please refer to the test setup photo.

4. SUMMARY OF TEST RESULTS

| Applied Standard: FCC Part 15 Subpart C | | |
|---|---|-----------|
| FCC Rules | Description of Test | Result |
| §15.247(b)(3) | Maximum Conducted Output Power | Compliant |
| §15.247(e) | Power Spectral Density | Compliant |
| §15.247(a)(2) | 6dB Bandwidth | Compliant |
| §15.209, §15.247(d) | Radiated and Conducted Spurious Emissions | Compliant |
| §15.205 | Emissions at Restricted Band | Compliant |
| §15.207(a) | Line Conducted Emissions | Compliant |
| §15.203 | Antenna Requirements | Compliant |

5. TEST RESULT

5.1. Maximum Conducted Output Power Measurement

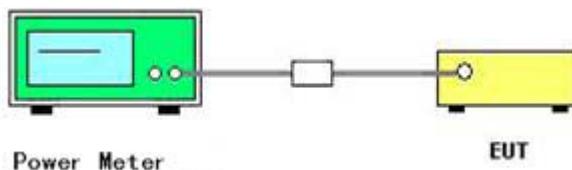
5.1.1. Standard Applicable

According to §15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850MHz bands: 1 Watt.

5.1.2. Test Procedures

The transmitter output (antenna port) was connected to the power meter.

5.1.3. Test Setup Layout



5.1.4. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.1.5. Test Result of Maximum Conducted Output Power

| | | | |
|---------------|------|----------------|-----------------|
| Temperature | 25°C | Humidity | 60% |
| Test Engineer | Kyle | Configurations | 802.11b/g/n/BLE |

BLE 4.0

| Channel | Frequency (MHz) | Conducted Power (dBm, Peak) | Max. Limit (dBm) | Result |
|---------|-----------------|-----------------------------|------------------|----------|
| 1 | 2402 | 0.32 | 30 | Complies |
| 20 | 2440 | 0.35 | 30 | Complies |
| 40 | 2480 | 0.25 | 30 | Complies |

802.11b

| Channel | Frequency (MHz) | Conducted Power (dBm, Peak) | Max. Limit (dBm) | Result |
|---------|-----------------|-----------------------------|------------------|----------|
| 1 | 2412 | 15.36 | 30 | Complies |
| 6 | 2437 | 15.58 | 30 | Complies |
| 11 | 2462 | 15.45 | 30 | Complies |

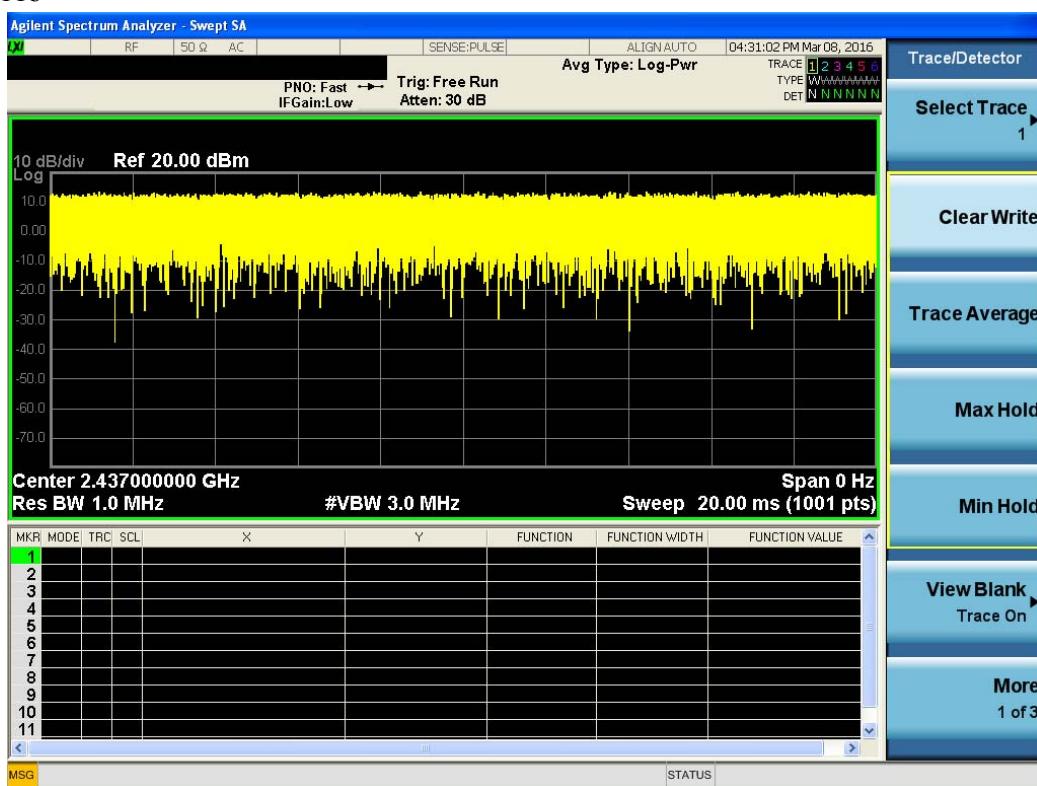
802.11g

| Channel | Frequency (MHz) | Conducted Power (dBm, Peak) | Max. Limit (dBm) | Result |
|---------|-----------------|-----------------------------|------------------|----------|
| 1 | 2412 | 20.65 | 30 | Complies |
| 6 | 2437 | 20.87 | 30 | Complies |
| 11 | 2462 | 20.45 | 30 | Complies |

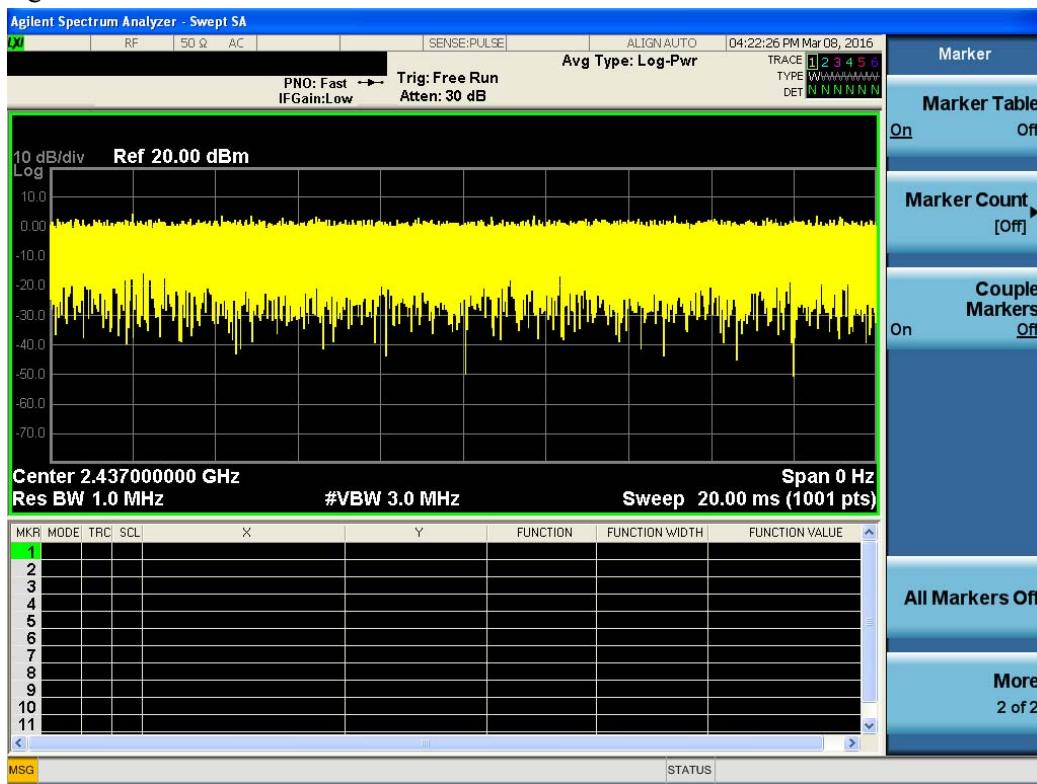
802.11n HT20

| Channel | Frequency (MHz) | Conducted Power (dBm, Peak) | Max. Limit (dBm) | Result |
|---------|-----------------|-----------------------------|------------------|----------|
| 1 | 2412 | 21.12 | 30 | Complies |
| 6 | 2437 | 20.96 | 30 | Complies |
| 11 | 2462 | 21.47 | 30 | Complies |

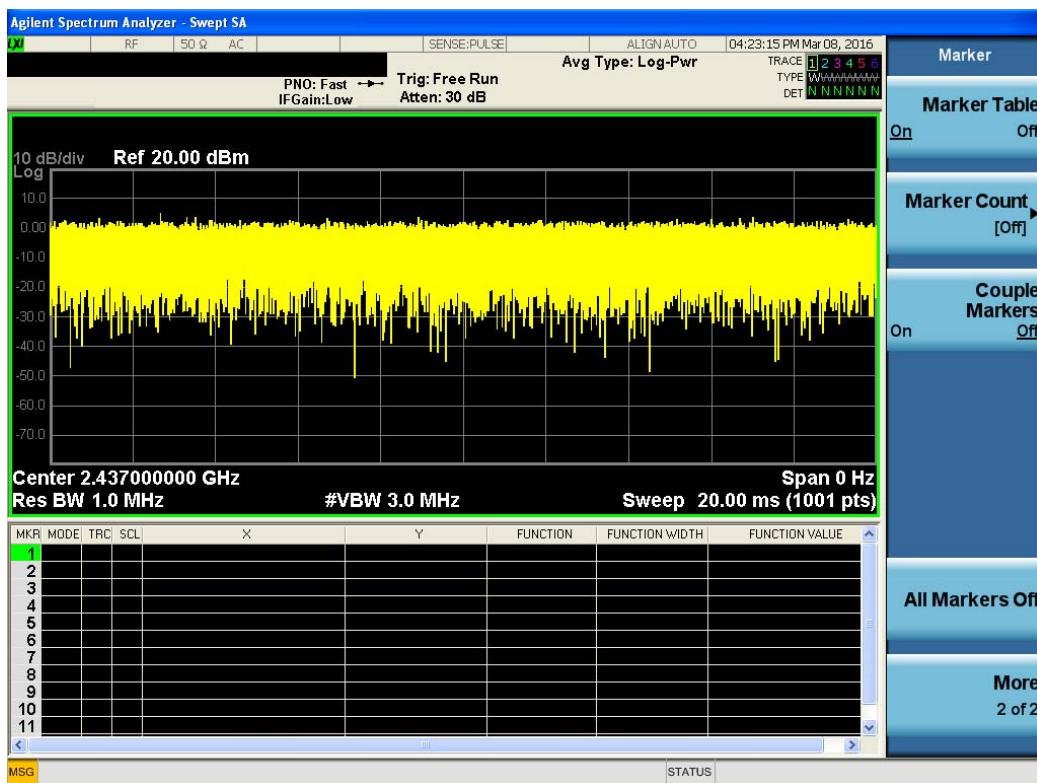
100% Duty Cycle
802.11b



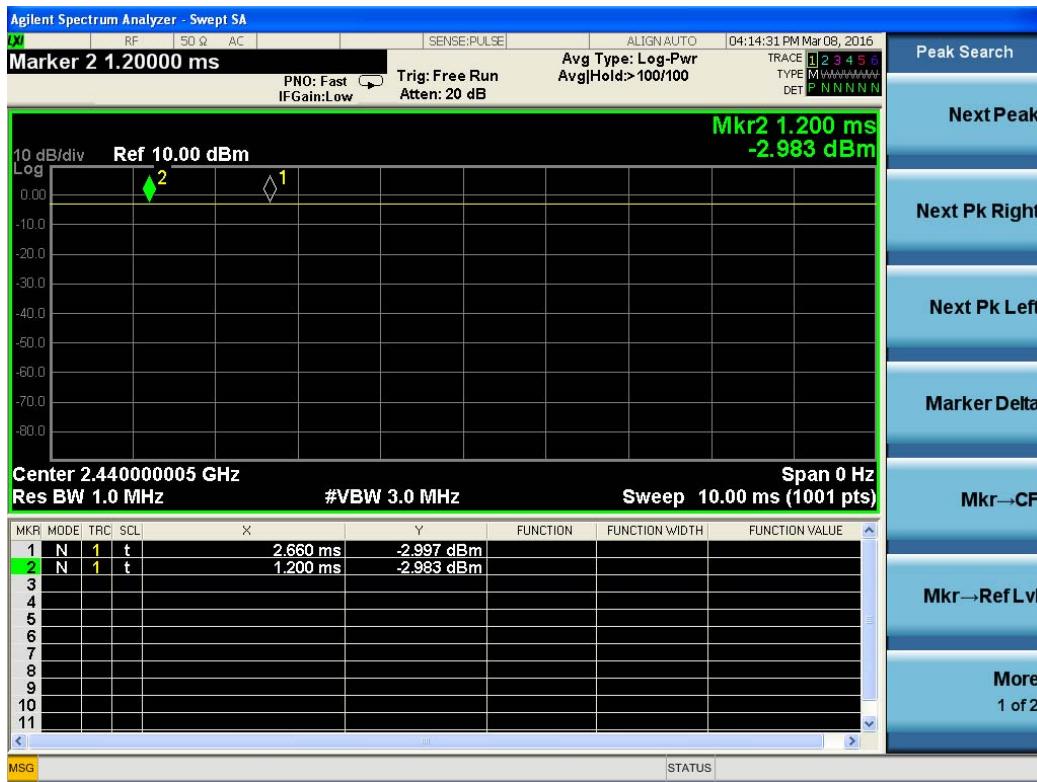
802.11g



802.11n20



BLE



5.2. Power Spectral Density Measurement

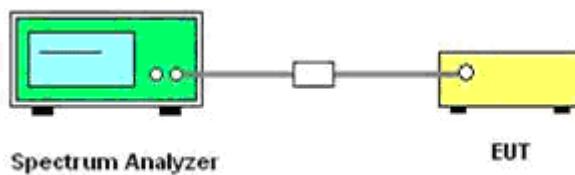
5.2.1. Standard Applicable

According to §15.247(e): 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.

5.2.2. Test Procedures

- 1) The transmitter was connected directly to a Spectrum Analyzer through a directional couple.
- 2) The power was monitored at the coupler port with a Spectrum Analyzer. The power level was set to the maximum level.
- 3) Set the RBW = 3 kHz.
- 4) Set the VBW $\geq 3 \times \text{RBW}$
- 5) Set the span to 1.5 times the DTS channel bandwidth.
- 6) Detector = peak.
- 7) Sweep time = auto couple.
- 8) Trace mode = max hold.
- 9) Allow trace to fully stabilize.
- 10) Use the peak marker function to determine the maximum power level in any 3 kHz band segment within the fundamental EBW.

5.2.3. Test Setup Layout



5.2.4. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.2.5. Test Result of Power Spectral Density

| | | | |
|---------------|------|----------------|-----------------|
| Temperature | 25°C | Humidity | 60% |
| Test Engineer | Kyle | Configurations | 802.11b/g/n/BLE |

BLE 4.0

| Channel | Frequency (MHz) | Power Density (dBm/3KHz) | Max. Limit (dBm/3KHz) | Result |
|---------|-----------------|--------------------------|-----------------------|----------|
| 1 | 2402 | -18.585 | 8 | Complies |
| 20 | 2440 | -18.189 | 8 | Complies |
| 40 | 2480 | -19.137 | 8 | Complies |

802.11b

| Channel | Frequency (MHz) | Power Density (dBm/3KHz) | Max. Limit (dBm/3KHz) | Result |
|---------|-----------------|--------------------------|-----------------------|----------|
| 1 | 2412 | -11.832 | 8 | Complies |
| 6 | 2437 | -11.829 | 8 | Complies |
| 11 | 2462 | -11.582 | 8 | Complies |

802.11g

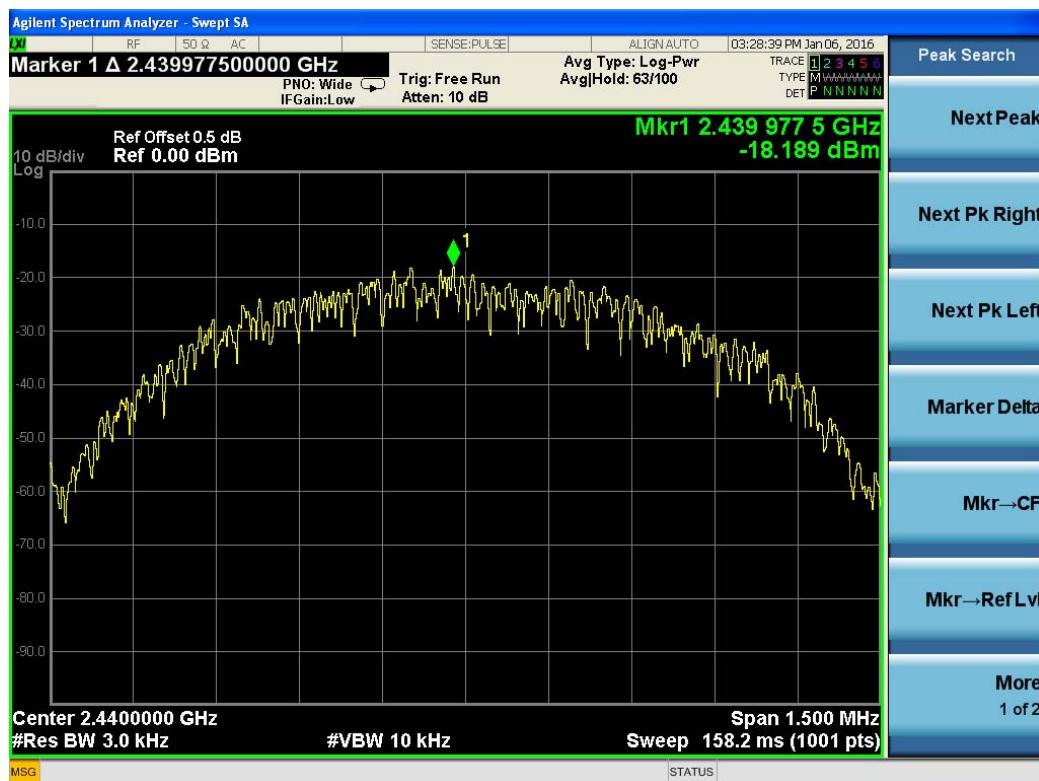
| Channel | Frequency (MHz) | Power Density (dBm/3KHz) | Max. Limit (dBm/3KHz) | Result |
|---------|-----------------|--------------------------|-----------------------|----------|
| 1 | 2412 | -19.465 | 8 | Complies |
| 6 | 2437 | -19.126 | 8 | Complies |
| 11 | 2462 | -19.553 | 8 | Complies |

802.11n HT20

| Channel | Frequency (MHz) | Power Density (dBm/3KHz) | Max. Limit (dBm/3KHz) | Result |
|---------|-----------------|--------------------------|-----------------------|----------|
| 1 | 2412 | -18.554 | 8 | Complies |
| 6 | 2437 | -18.613 | 8 | Complies |
| 11 | 2462 | -18.591 | 8 | Complies |

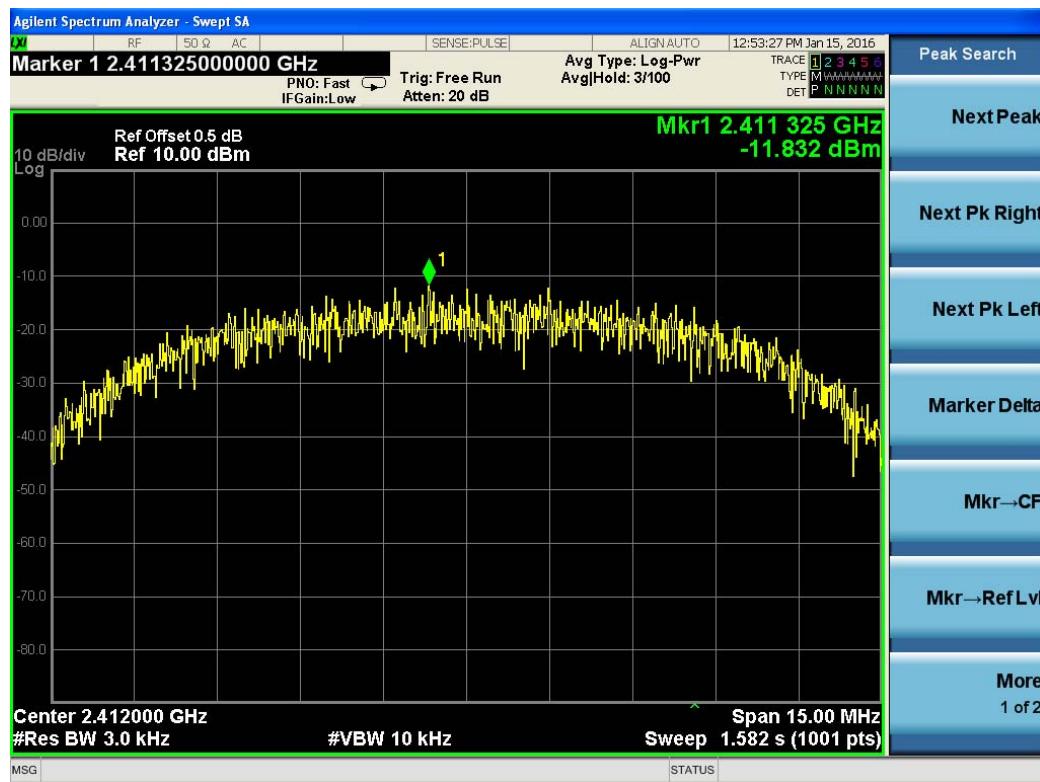
Note: The measured power density (dBm) has the offset with cable loss already.

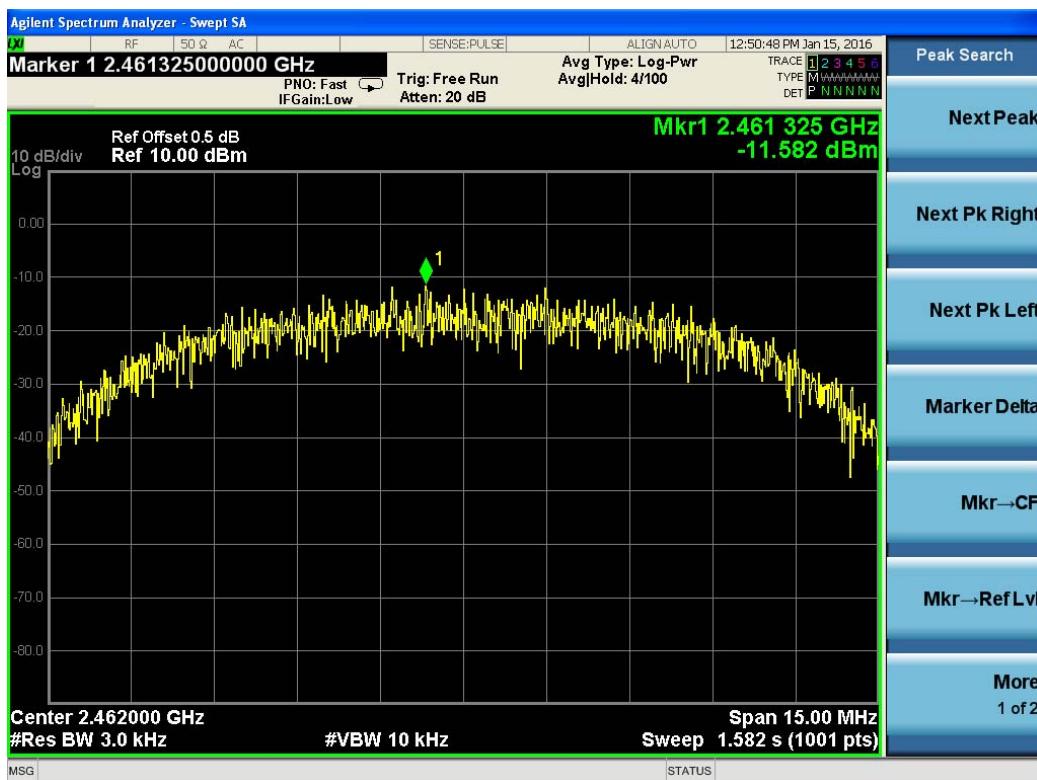
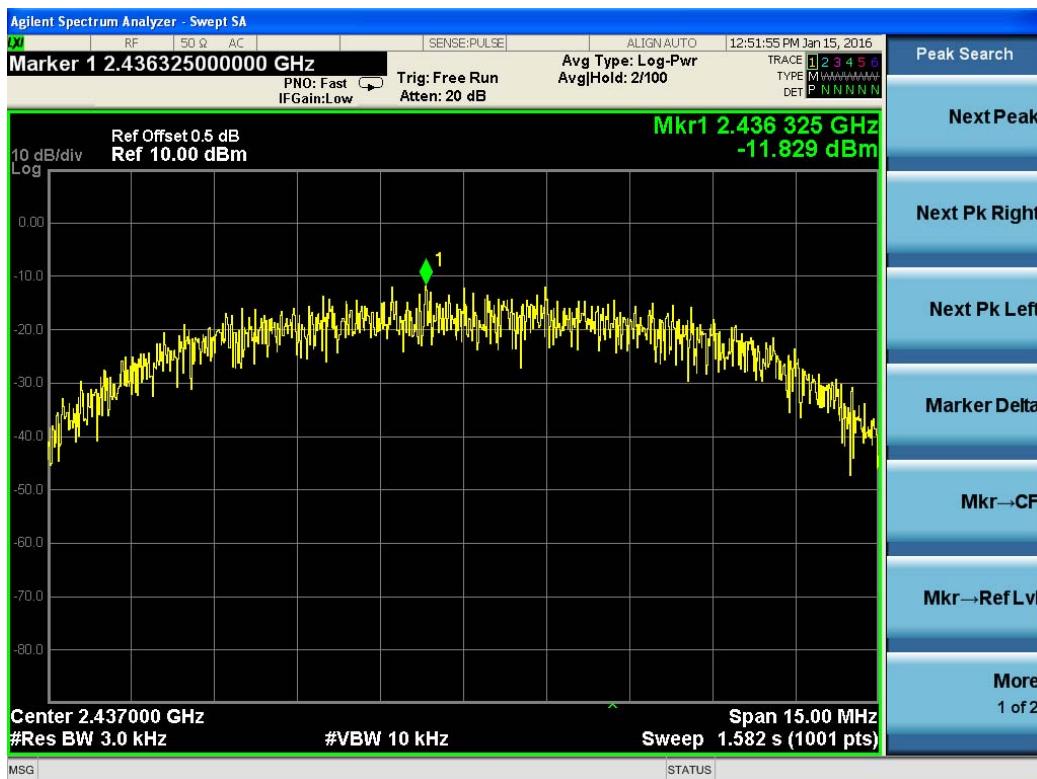
BLE 4.0 power density



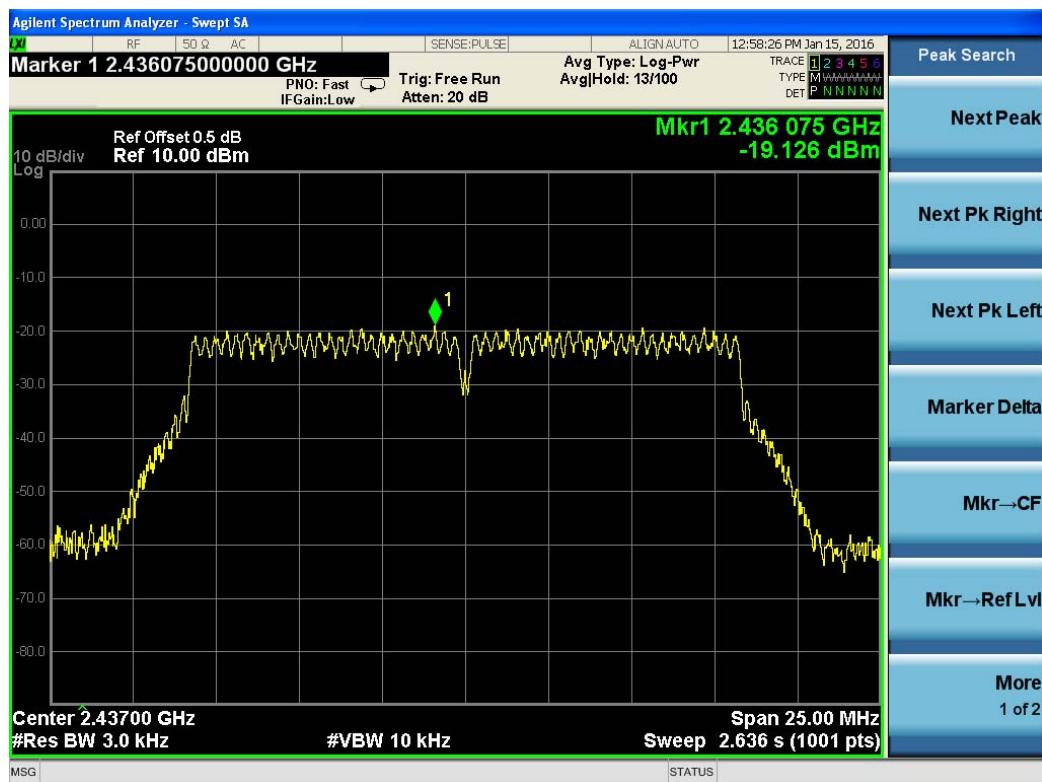
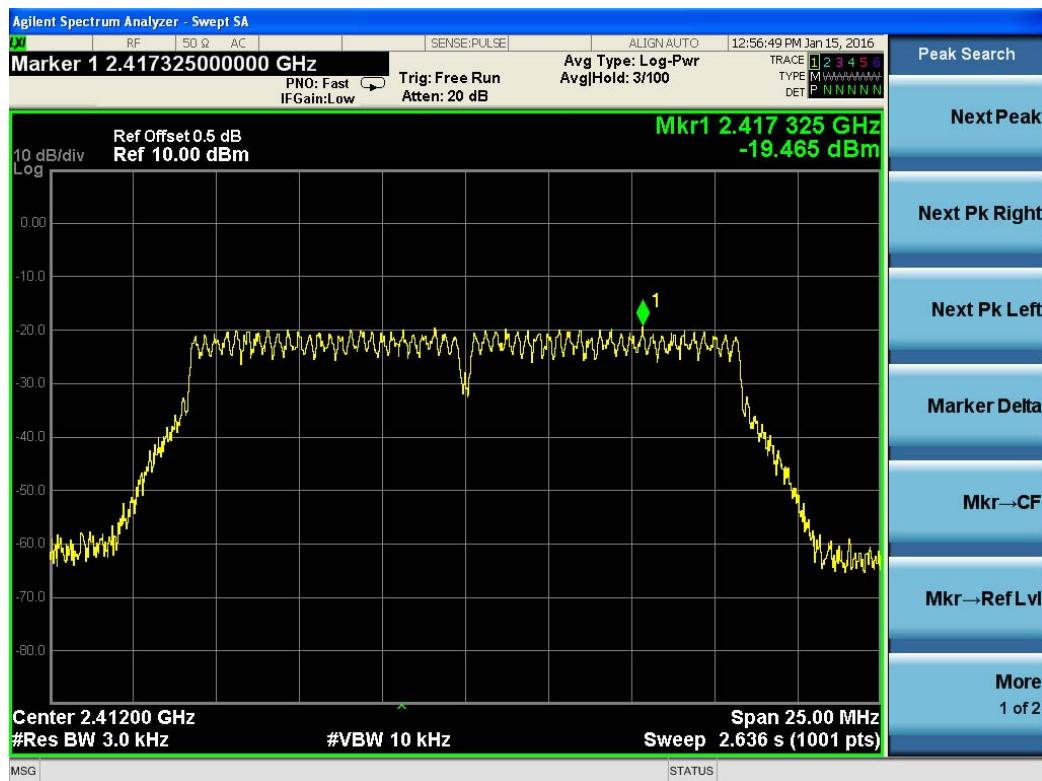


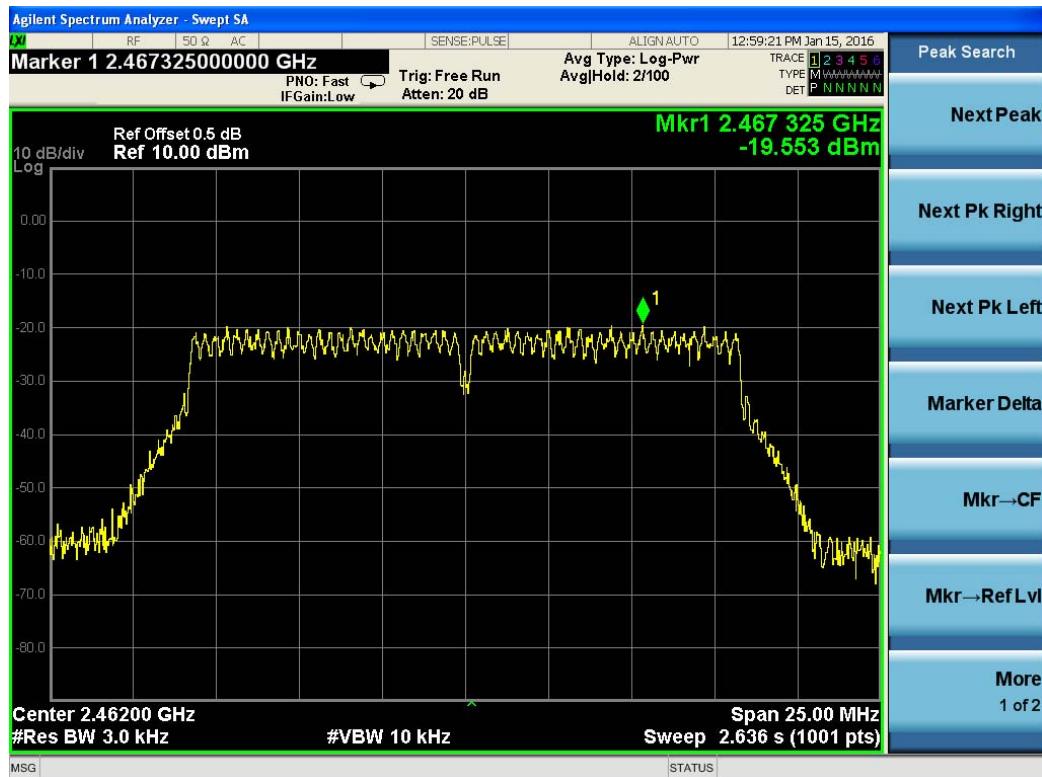
802.11b power density



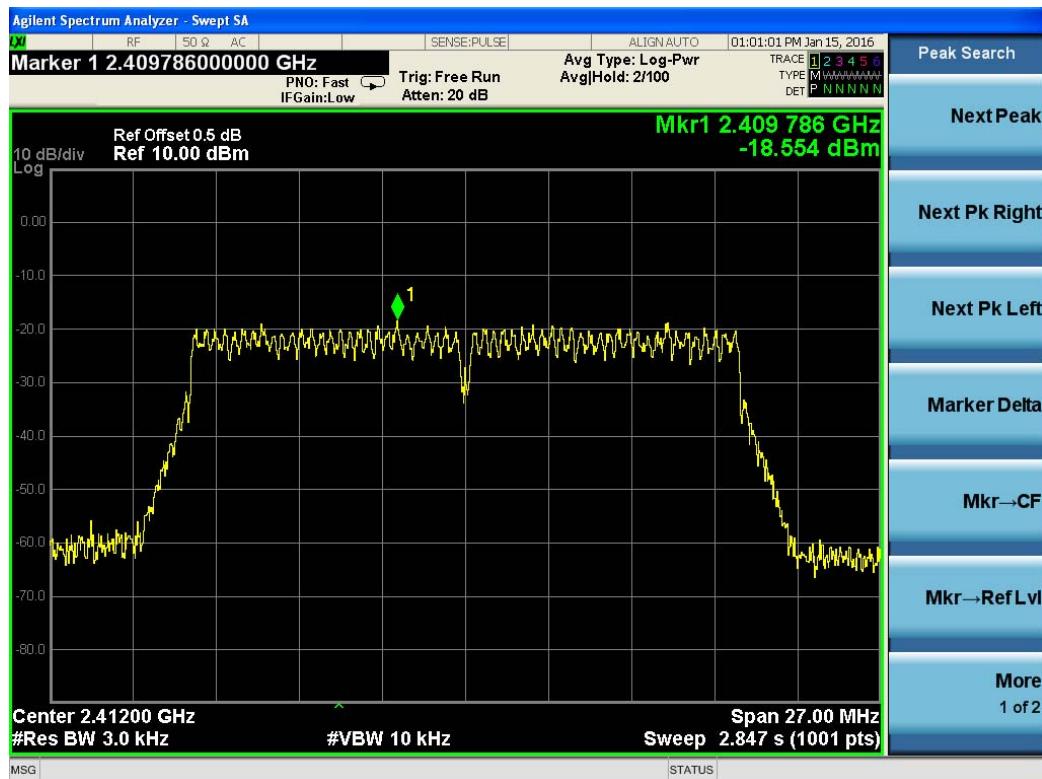


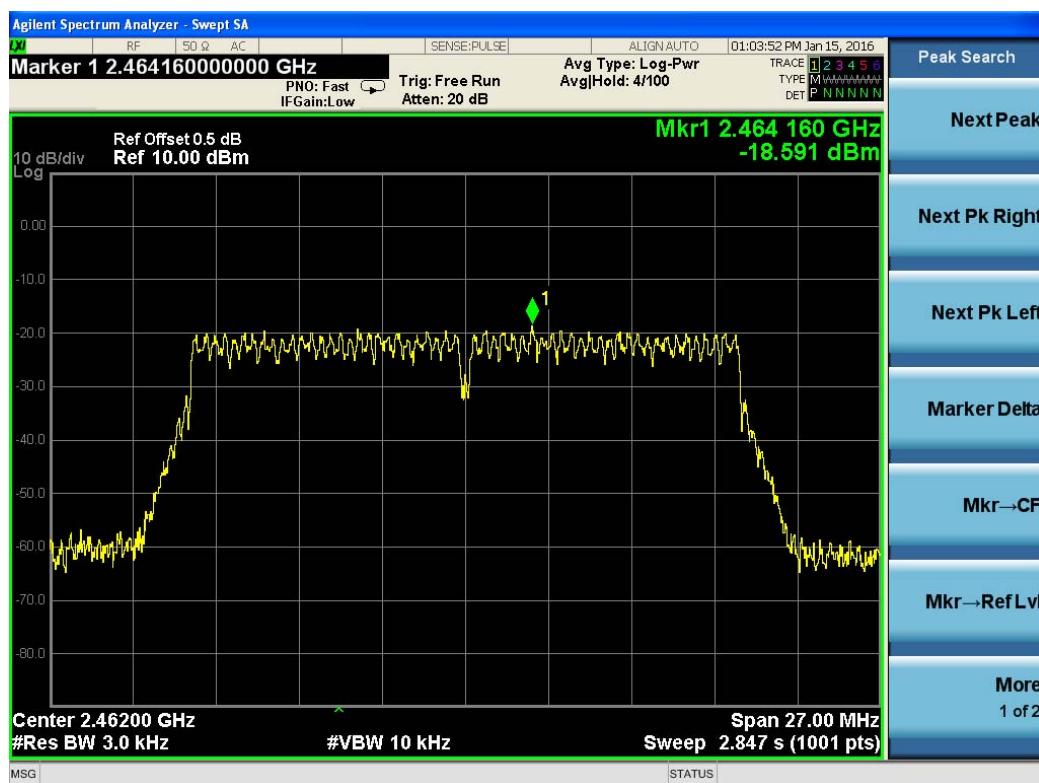
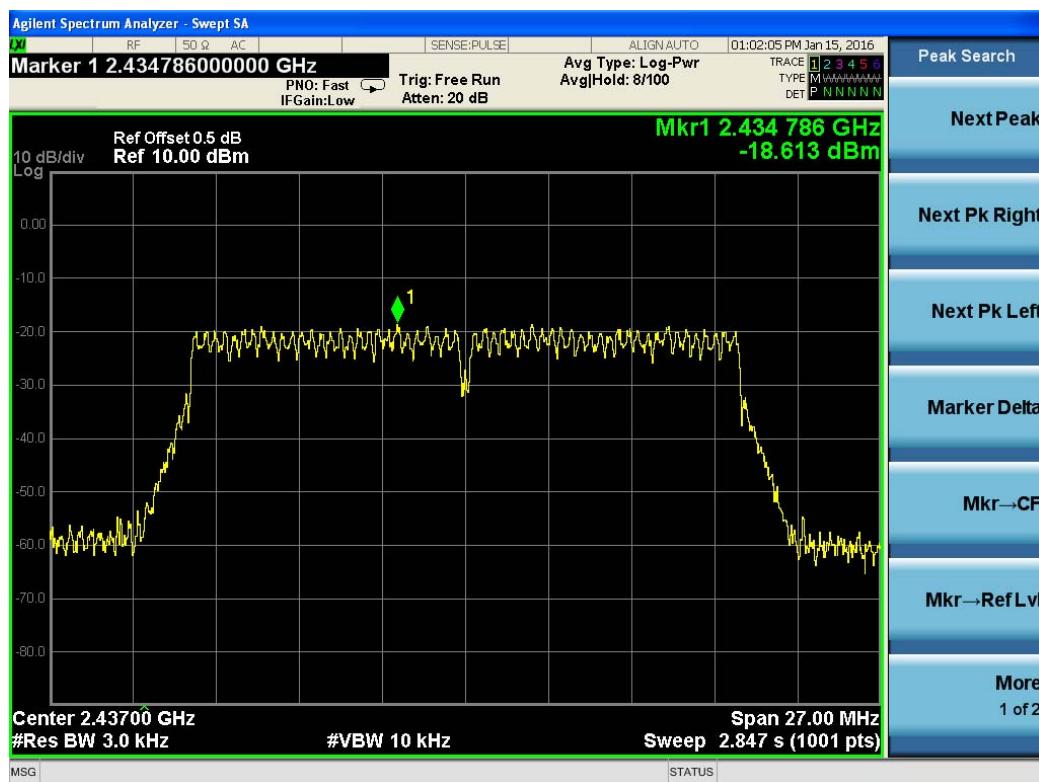
802.11g power density





802.11n HT20 power density





5.3. 6 dB Spectrum Bandwidth Measurement

5.3.1. Standard Applicable

According to §15.247(a)(2): Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5MHz, and 5725-5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

5.3.2. Instruments Setting

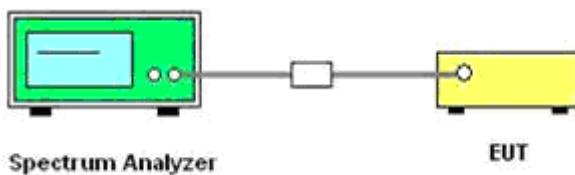
The following table is the setting of the Spectrum Analyzer.

| Spectrum Parameter | Setting |
|--------------------|----------|
| Attenuation | Auto |
| Span Frequency | > RBW |
| Detector | Peak |
| Trace | Max Hold |
| Sweep Time | 100ms |

5.3.3. Test Procedures

- 1) The transmitter output (antenna port) was connected to the spectrum analyzer in peak hold mode.
- 2) The resolution bandwidth and the video bandwidth were set according to KDB558074 D01 DTS Meas. Guidance v03r02.
- 3) Measured the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6dB relative to the maximum level measured in the fundamental emission.
- 4) For 20dB Bandwidth measurement, RBW is set in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW. Measured the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20dB relative to the maximum level measured in the fundamental emission.

5.3.4. Test Setup Layout



5.3.5. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

5.3.6. Test Result of Spectrum Bandwidth

| | | | |
|---------------|------|----------------|-----------------|
| Temperature | 25°C | Humidity | 60% |
| Test Engineer | Kyle | Configurations | 802.11b/g/n/BLE |

BLE 4.0

| Channel | Frequency | 6dB Bandwidth (MHz) | Min. Limit (kHz) | Result |
|---------|-----------|---------------------|------------------|----------|
| 1 | 2402 | 0.70 | 500 | Complies |
| 20 | 2440 | 0.71 | 500 | Complies |
| 40 | 2480 | 0.69 | 500 | Complies |

802.11b

| Channel | Frequency | 6dB Bandwidth (MHz) | Min. Limit (kHz) | Result |
|---------|-----------|---------------------|------------------|----------|
| 1 | 2412 | 9.09 | 500 | Complies |
| 6 | 2437 | 8.91 | 500 | Complies |
| 11 | 2462 | 8.91 | 500 | Complies |

802.11g

| Channel | Frequency | 6dB Bandwidth (MHz) | Min. Limit (kHz) | Result |
|---------|-----------|---------------------|------------------|----------|
| 1 | 2412 | 16.62 | 500 | Complies |
| 6 | 2437 | 16.61 | 500 | Complies |
| 11 | 2462 | 16.63 | 500 | Complies |

802.11n HT20

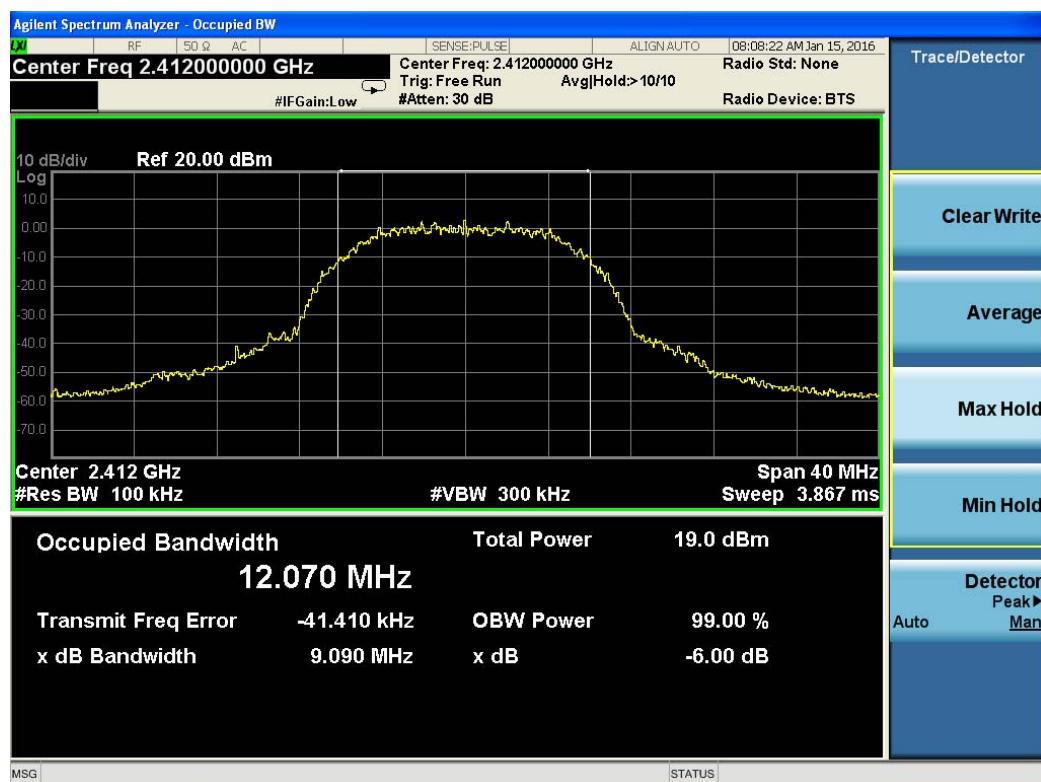
| Channel | Frequency | 6dB Bandwidth (MHz) | Min. Limit (kHz) | Result |
|---------|-----------|---------------------|------------------|----------|
| 1 | 2412 | 17.86 | 500 | Complies |
| 6 | 2437 | 17.81 | 500 | Complies |
| 11 | 2462 | 17.83 | 500 | Complies |

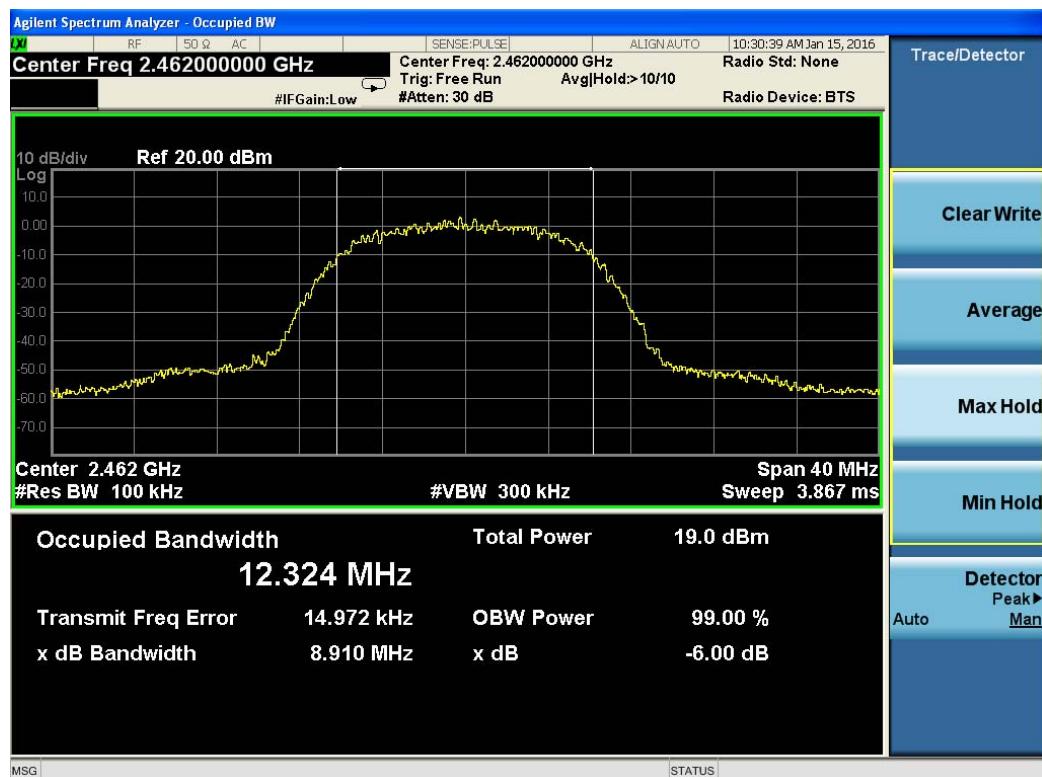
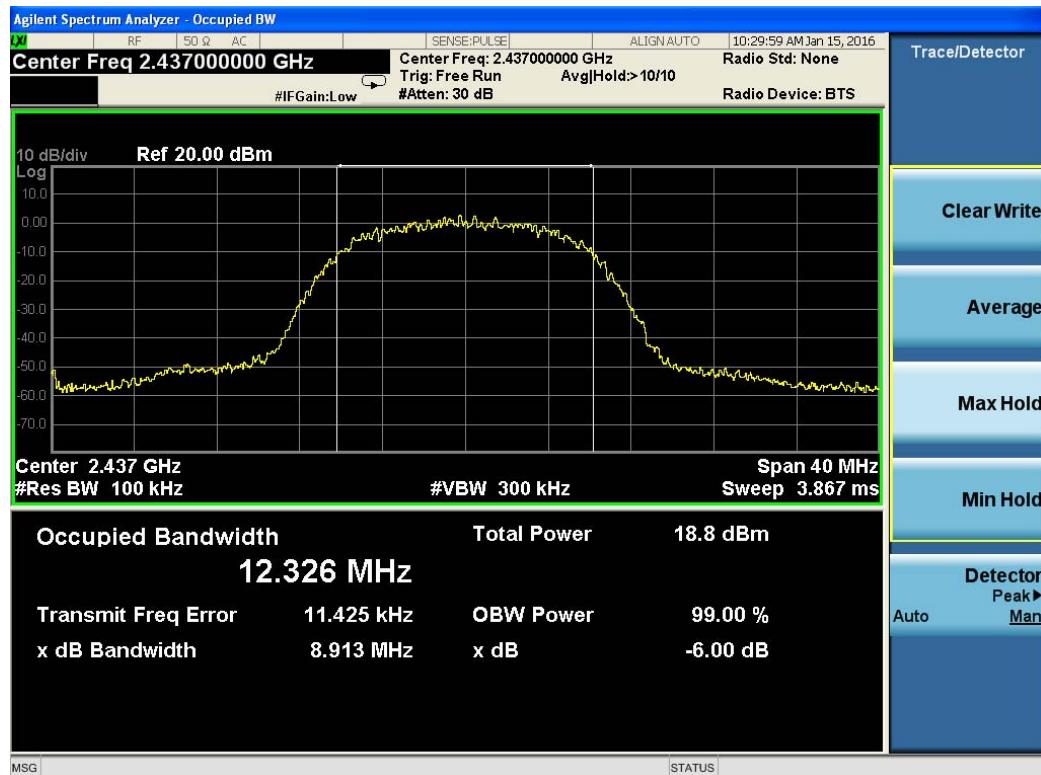
BLE 4.0 channel, 6dB bandwidth



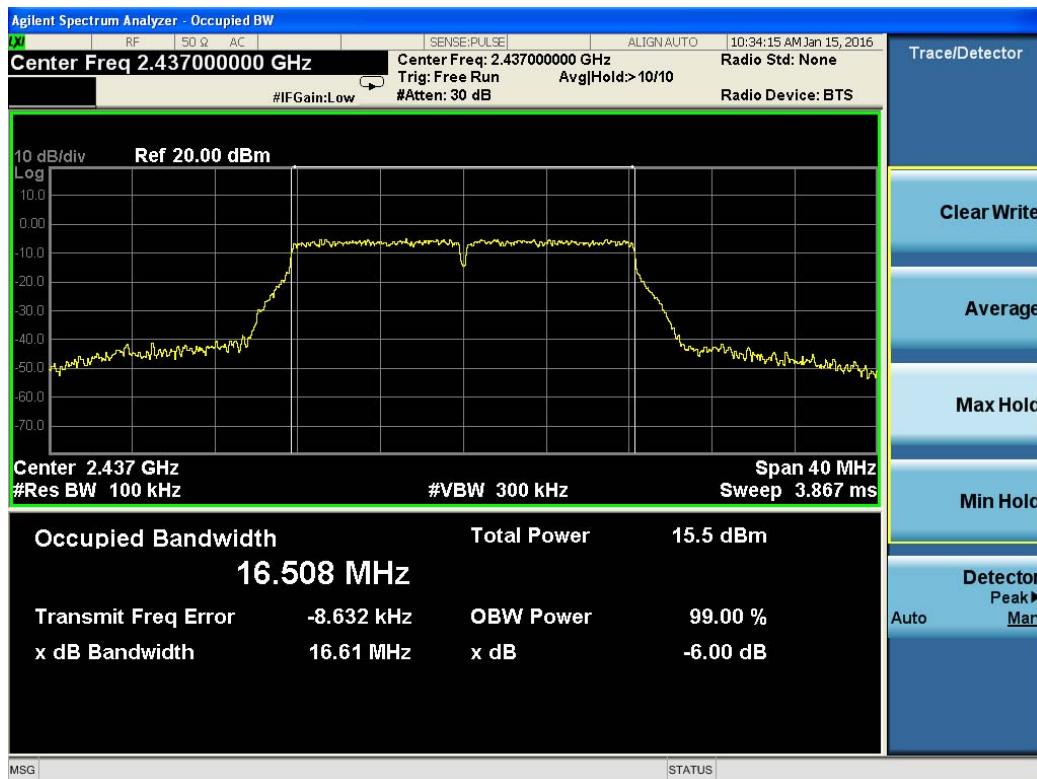
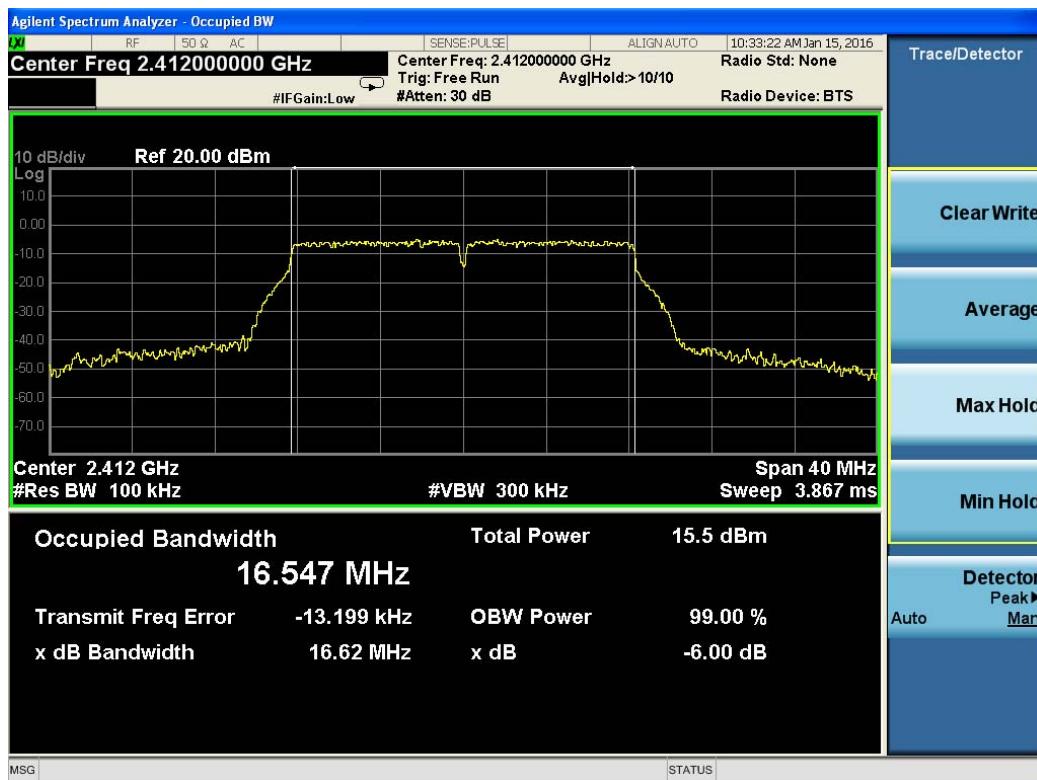


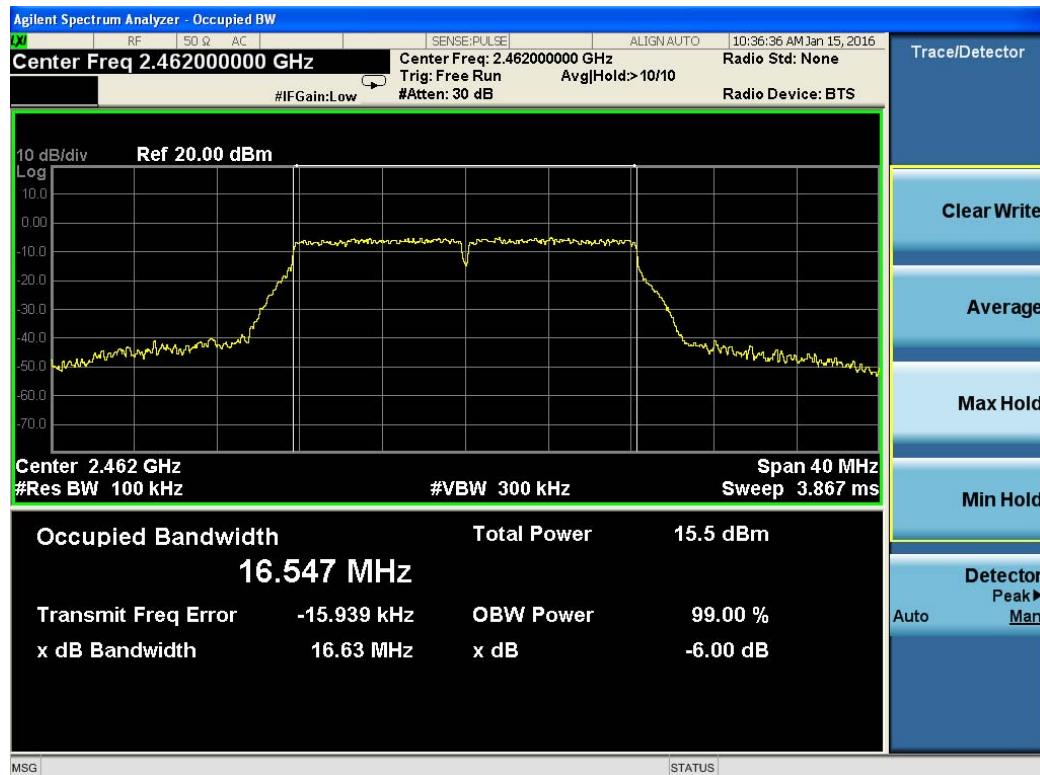
802.11b channel, 6dB bandwidth





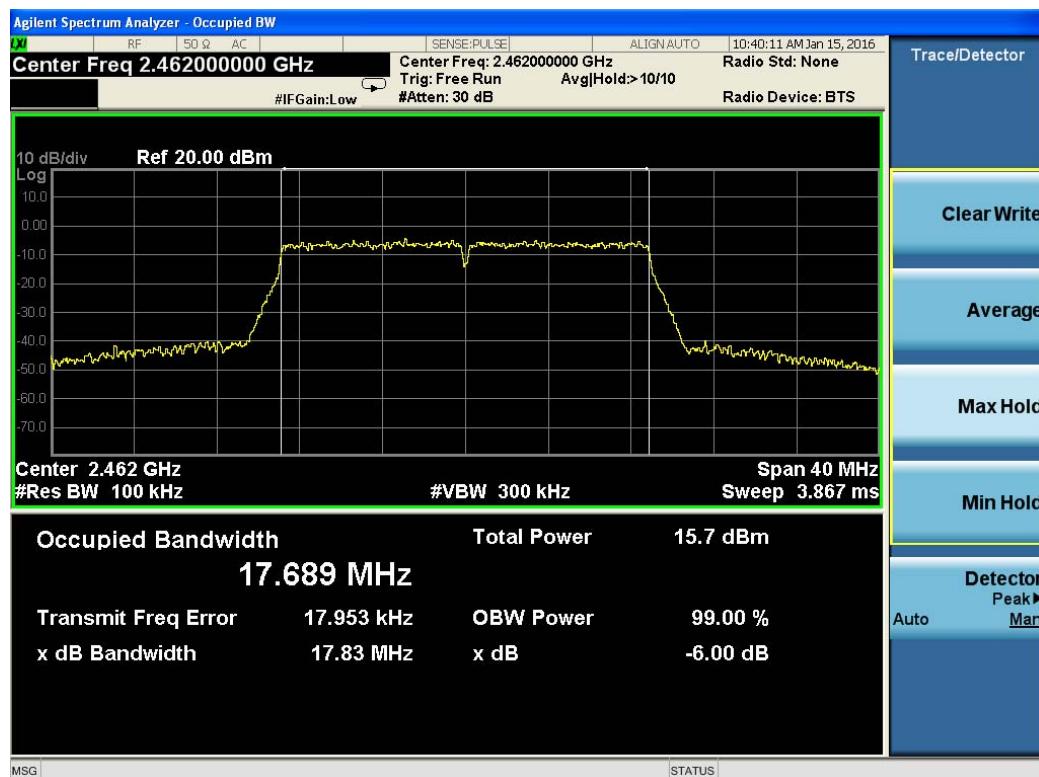
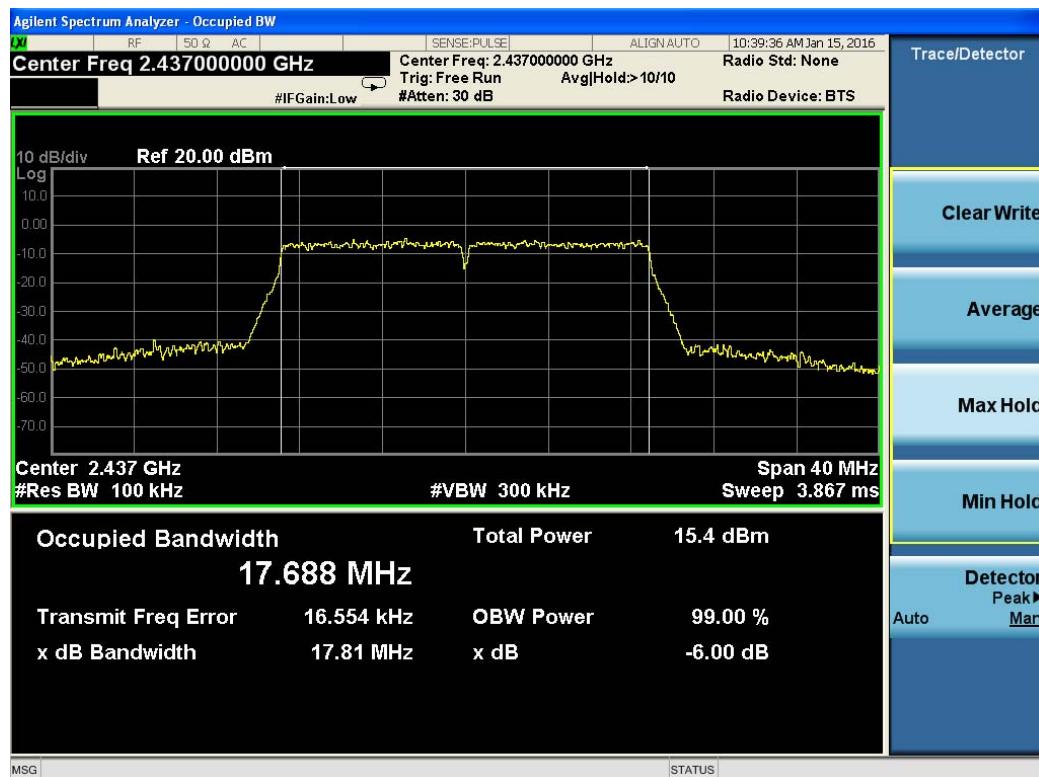
802.11g channel, 6dB bandwidth





802.11n HT20 channel, 6dB bandwidth





BLE 4.0

| Channel | Frequency | 20dB Bandwidth (MHz) | Limit |
|---------|-----------|----------------------|---------------|
| 1 | 2402 | 1.22 | Non-specified |
| 20 | 2440 | 1.22 | |
| 40 | 2480 | 1.22 | |

802.11b

| Channel | Frequency | 20dB Bandwidth (MHz) | Limit |
|---------|-----------|----------------------|---------------|
| 1 | 2412 | 14.17 | Non-specified |
| 6 | 2437 | 14.20 | |
| 11 | 2462 | 14.24 | |

802.11g

| Channel | Frequency | 20dB Bandwidth (MHz) | Limit |
|---------|-----------|----------------------|---------------|
| 1 | 2412 | 19.20 | Non-specified |
| 6 | 2437 | 19.28 | |
| 11 | 2462 | 19.37 | |

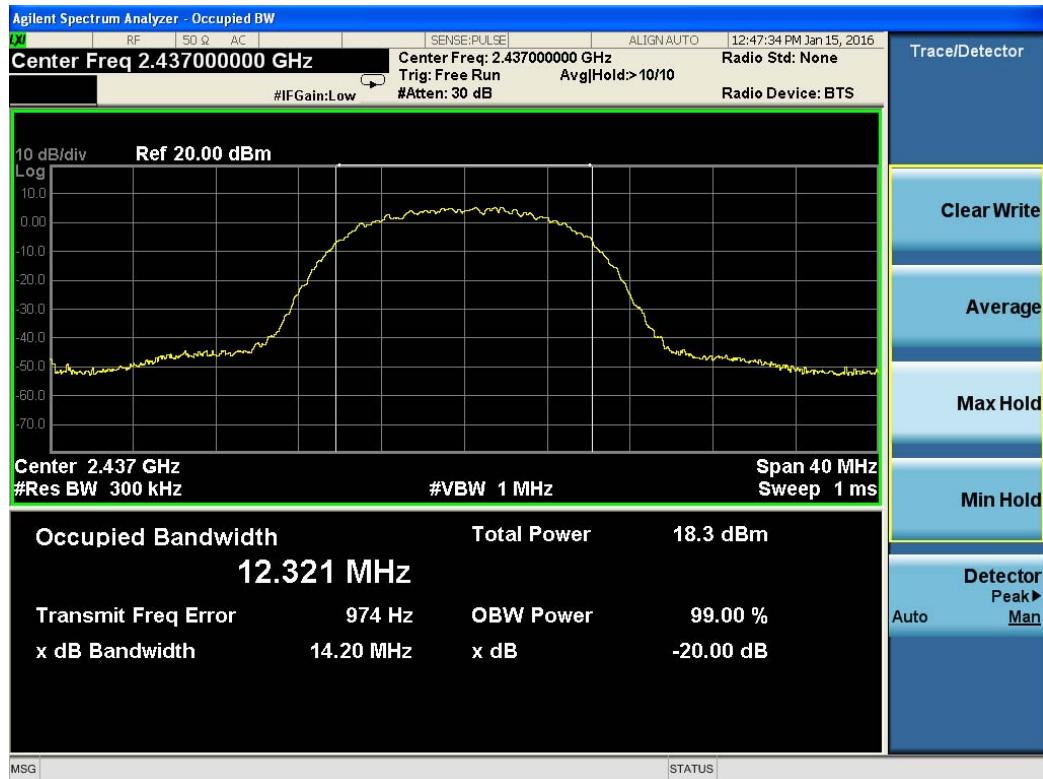
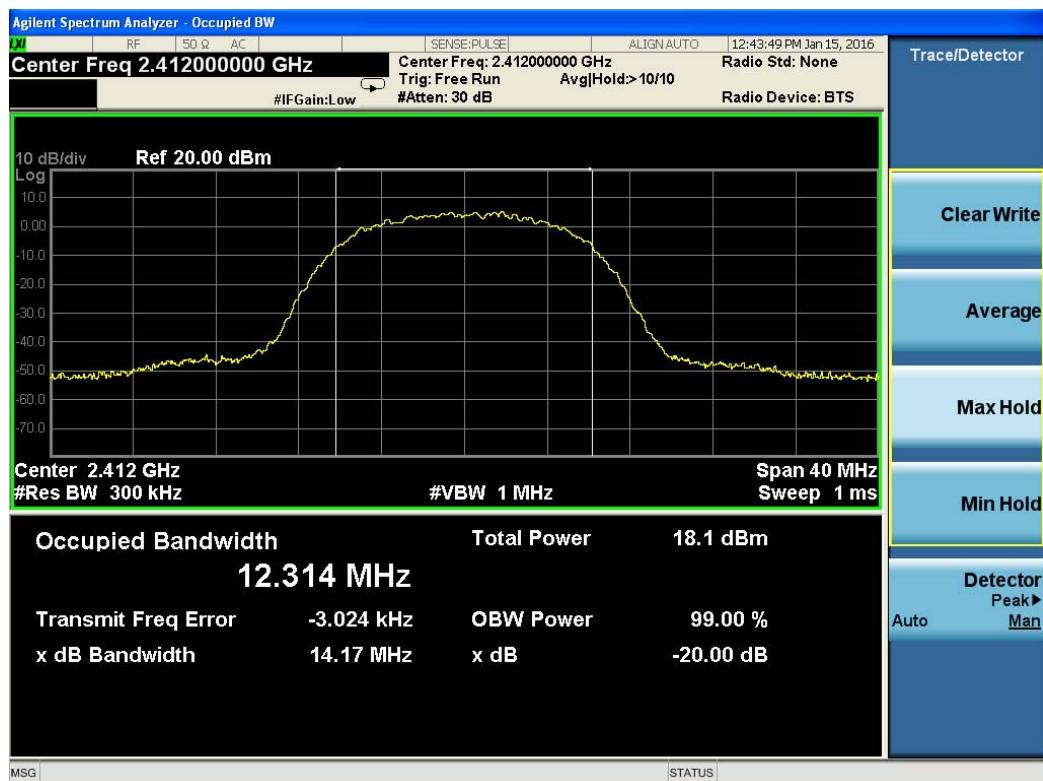
802.11n HT20

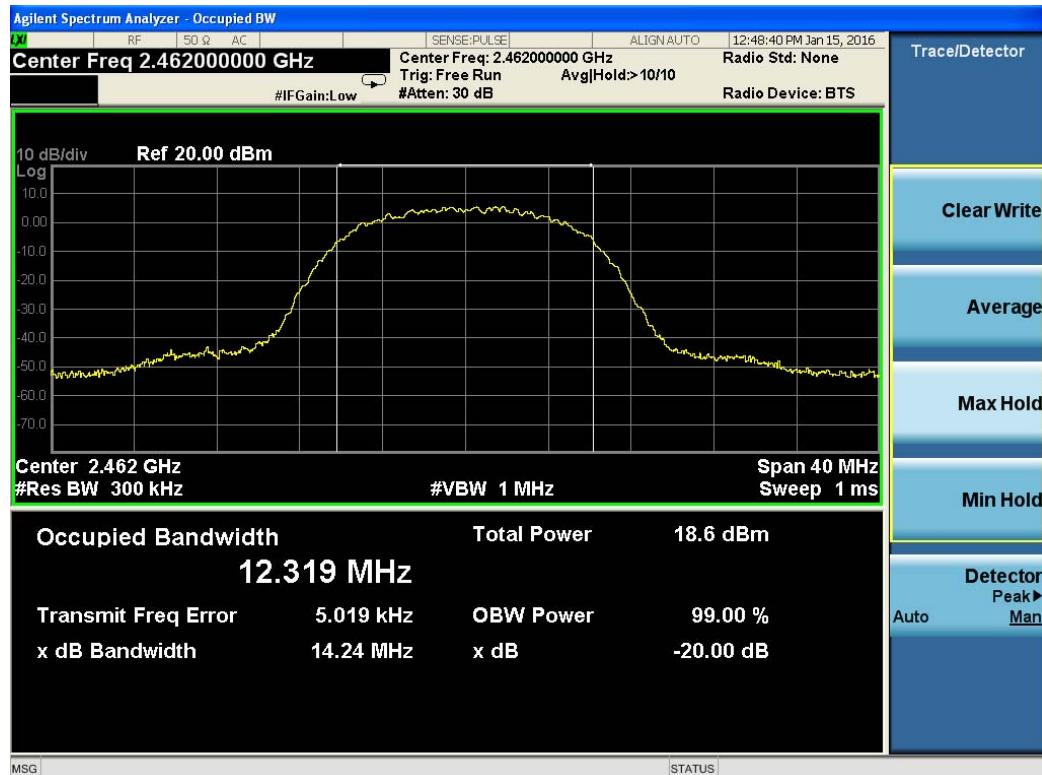
| Channel | Frequency | 20dB Bandwidth (MHz) | Limit |
|---------|-----------|----------------------|---------------|
| 1 | 2412 | 19.44 | Non-specified |
| 6 | 2437 | 19.45 | |
| 11 | 2462 | 19.36 | |

BLE 4.0 channel, 20dB bandwidth



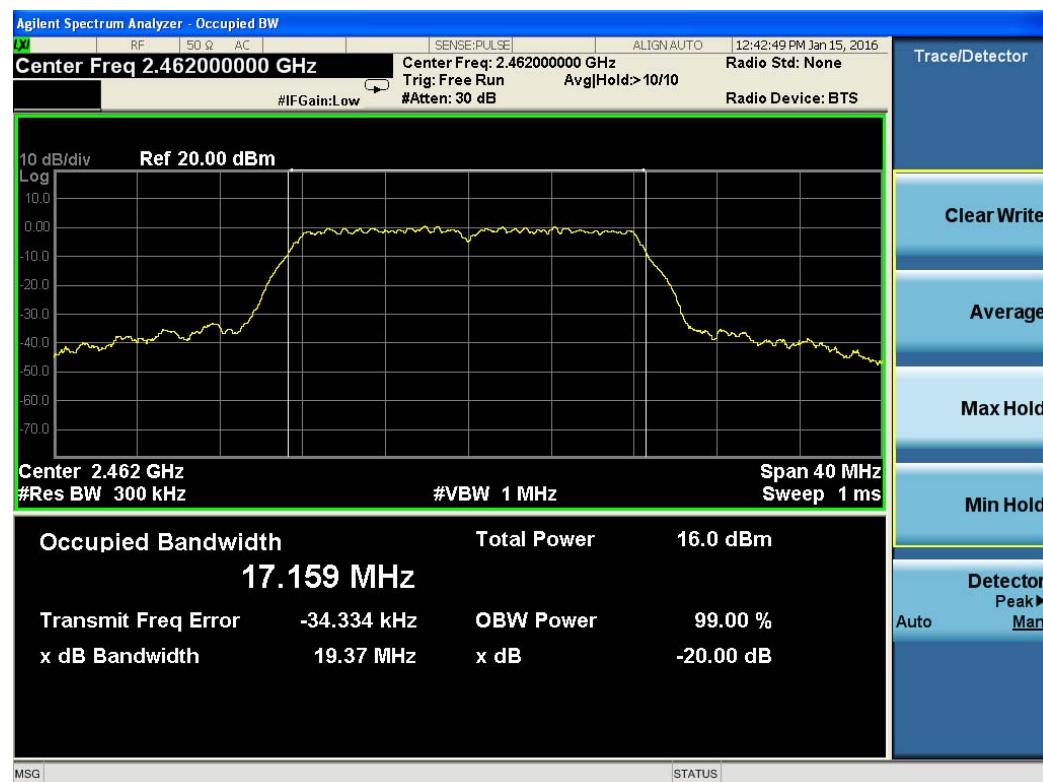
802.11b channel, 20dB bandwidth



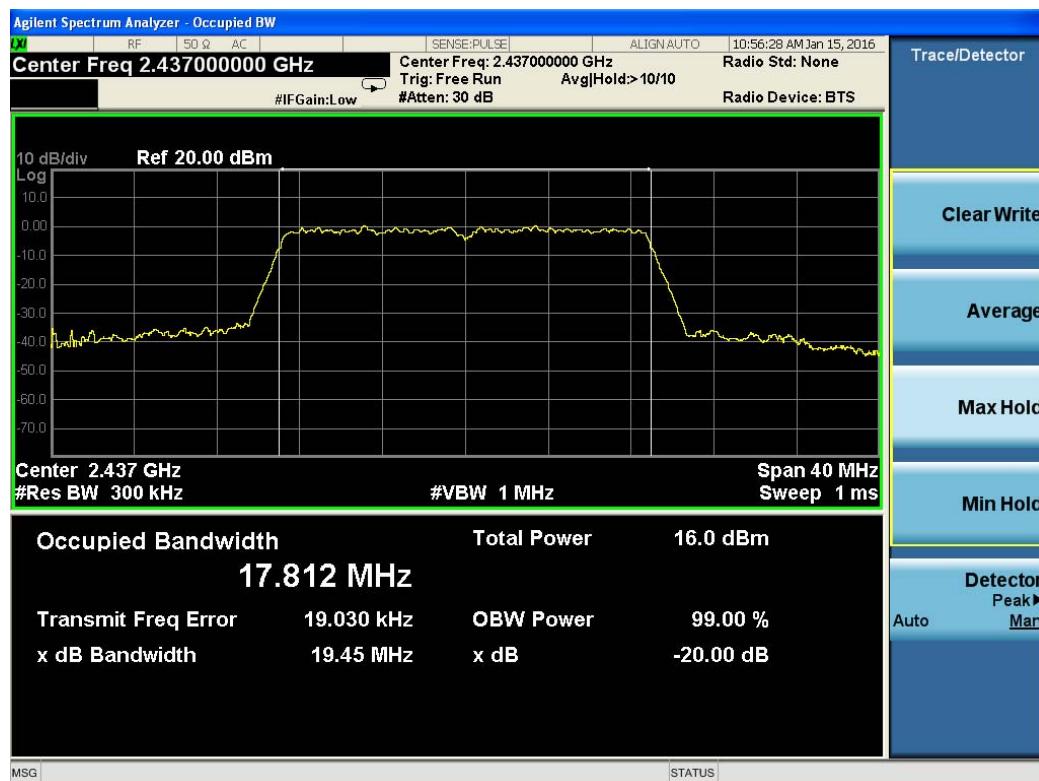
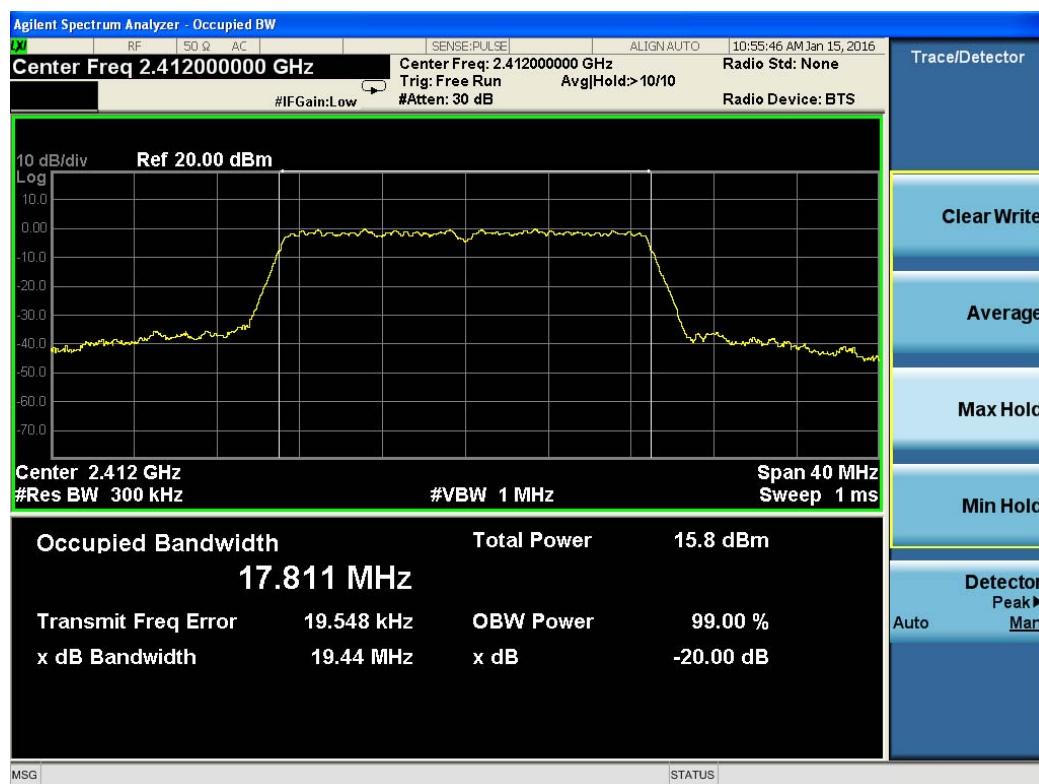


802.11g channel, 20dB bandwidth





802.11n HT20 channel, 20dB bandwidth





5.4. Radiated Emissions Measurement

5.4.1. Standard Applicable

According to §15.247 (d): 20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Frequencies(MHz) | Field Strength(microvolts/meter) | Measurement Distance(meters) |
|------------------|----------------------------------|------------------------------|
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above 960 | 500 | 3 |

5.4.2. Instruments Setting

The following table is the setting of spectrum analyzer and receiver.

| Spectrum Parameter | Setting |
|---|--|
| Attenuation | Auto |
| Start Frequency | 1000 MHz |
| Stop Frequency | 10th carrier harmonic |
| RB / VB (Emission in restricted band) | 1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average |
| RB / VB (Emission in non-restricted band) | 1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average |

| Receiver Parameter | Setting |
|------------------------|--|
| Attenuation | Auto |
| Start ~ Stop Frequency | 9kHz~150kHz / RB/VB 200Hz/1KHz for QP/Average |
| Start ~ Stop Frequency | 150kHz~30MHz / RB/VB 9kHz/30KHz for QP/Average |
| Start ~ Stop Frequency | 30MHz~1000MHz / RB/VB 120kHz/1MHz for QP |

5.4.3. Test Procedures

1) Sequence of testing 9 kHz to 30 MHz

Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 0.8 m height is used.
- If the EUT is a floor standing device, it is placed on the ground.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions.
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 3 meter.
- The EUT was set into operation.

Premeasurement:

- The turntable rotates from 0° to 315° using 45° steps.
- The antenna height is 0.8 meter.
- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Final measurement:

- Identified emissions during the premeasurement the software maximizes by rotating the turntable position (0° to 360°) and by rotating the elevation axes (0° to 360°).
- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QPK detector.
- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.