

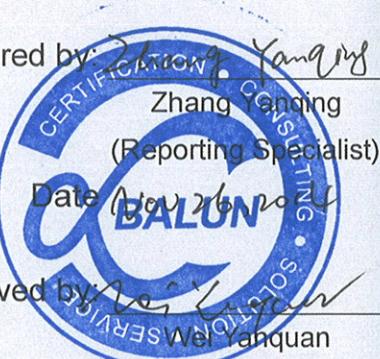
FCC

RF

TEST REPORT

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Date Nov 26, 2014

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Date Nov 26, 2014



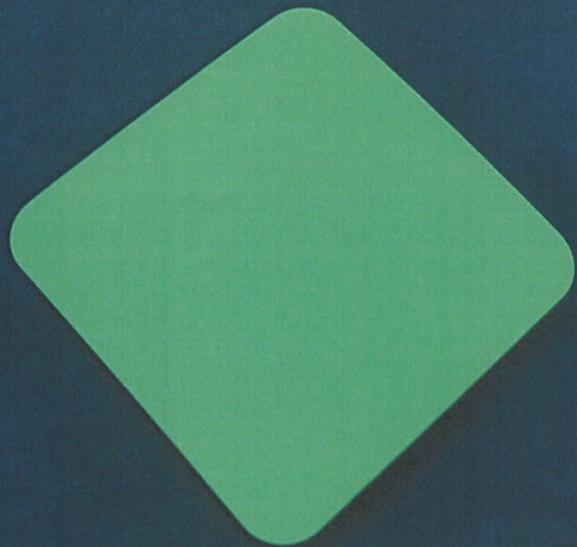
ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
Share Foil

ISSUED TO
Trend Power Limited

Flat 1, 3/F, Kwai Cheong Ctr, 40-52 Kwai Cheong Rd, Kwai Chung, N.T.,
HK



| | |
|------------------|--|
| Report No.: | BL-SZ14A0119-601 |
| EUT Type: | Share Foil |
| Model Name: | SHAREFOIL-1403-01Y, SHAREFOIL-1403-01B, SHAREFOIL-1403-01G, SHAREFOIL-1403-01O, SHAREFOIL-1403-01P |
| Brand Name: | Power Trend |
| Test Standard: | 47 CFR Part 15 Subpart C |
| FCC ID: | SZJ-SHAREFOIL01 |
| Test conclusion: | PASS |
| Test Date: | Nov 4, 2014 ~ Nov 25, 2014 |
| Date of Issue: | Nov 26, 2014 |

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Revision History

| Version | Issue Date | Revisions |
|----------------|---------------------|----------------------|
| <u>Rev. 01</u> | <u>Nov 26, 2014</u> | <u>Initial Issue</u> |

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1 ADMINISTRATIVE DATA (GENERAL INFORMATION)

1.1 Identification of the Testing Laboratory

| | |
|--------------|--|
| Company Name | Shenzhen BALUN Technology Co.,Ltd. |
| Address | Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province,P. R. China |
| Phone Number | +86 755 6683 3402 |
| Fax Number | +86 755 6182 4271 |

1.2 Identification of the Responsible Testing Location

| | |
|---------------------------|--|
| Test Location | Shenzhen BALUN Technology Co.,Ltd. |
| Address | Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province,P. R. China |
| Accreditation Certificate | The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory has been listed by US Federal Communications Commission to perform electromagnetic emission measurements. The recognition numbers of test site are 832625. The laboratory has met the requirements of the IAS Accreditation Criteria for Testing Laboratories (AC89), has demonstrated compliance with ISO/IEC Standard 17025:2005. The accreditation certificate number is TL-588. The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791. |
| Description | All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055 |

1.3 Announce

- (1) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (2) The test report is invalid if there is any evidence and/or falsification.
- (3) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (4) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (5) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

2 PRODUCT INFORMATION

2.1 Applicant

| | |
|-----------|--|
| Applicant | Trend Power Limited |
| Address | Flat 1, 3/F, Kwai Cheong Ctr, 40-52 Kwai Cheong Rd, Kwai Chung, N.T., HK |

2.2 Manufacturer

| | |
|-----------|--|
| Applicant | Trend Power Limited |
| Address | Flat 1, 3/F, Kwai Cheong Ctr, 40-52 Kwai Cheong Rd, Kwai Chung, N.T., HK |

2.3 General Description for Equipment under Test (EUT)

| | |
|---|---|
| EUT Type | Share Foil |
| Brand Name | Power Trend |
| The Under Test Model Name | SHAREFOIL-1403-01Y |
| Series Model Name | SHAREFOIL-1403-01Y, SHAREFOIL-1403-01B, SHAREFOIL-1403-01G, SHAREFOIL-1403-01O, SHAREFOIL-1403-01P |
| Description of Model name differentiation | The equipment model SHAREFOIL-1403-01Y and SHAREFOIL-1403-01B, SHAREFOIL-1403-01G, SHAREFOIL-1403-01O, SHAREFOIL-1403-01P are Sharebeat, the electrical parameters and internal structure of circuit are same, only the color is different. |
| Hardware Version | V0.4 |
| Software Version | V1403.112 |
| Network and Wireless connectivity | WIFI 802.11b, 802.11g and 802.11n (HT20/40) |
| About the Product | The EUT is the Share Stick with two Antennas, We define as Antenna 0 and Antenna 1, and two antennas can be fired at the same time, we test the two Antennas separately. |

2.4 Technical Information

| | | |
|------------------------|-----------|---|
| TX/ RX Operating Range | | 802.11b/g/n(20MHz): 2.412GHz - 2.462GHz $f_c = 2412 \text{ MHz} + (N-1)*5 \text{ MHz}$, where - f_c = "Operating Frequency" in MHz, - N = "Channel Number" with the range from 1 to 11. 802.11n(40MHz): 2.422GHz - 2.452GHz $f_c = 2412 \text{ MHz} + (N-1)*5 \text{ MHz}$, where - f_c = "Operating Frequency" in MHz, - N = "Channel Number" with the range from 3 to 9. |
| Modulation Type | | DSSS, OFDM |
| Antenna Type | Antenna 0 | Patch Antenna |
| | Antenna 1 | |
| Antenna Gain | Antenna 0 | 3dBi |
| | Antenna 1 | |

| Modulation technology | Modulation Type | Transfer Rate (Mbps) | The Frequency Equal to the Transmission Rate of Modulation Signal |
|-----------------------|-----------------|----------------------|---|
| DSSS (802.11b) | DBPSK | 1 | 1MHz |
| | DQPSK | 2 | |
| | CCK | 5.5 / 11 | |
| OFDM (802.11g) | BPSK | 6 / 9 | 1MHz |
| | QPSK | 12 / 18 | |
| | 16QAM | 24 / 36 | |
| | 64QAM | 48 / 54 | |
| OFDM (802.11n-20MHz) | BPSK | 6.5 | 1MHz |
| | QPSK | 13/19.5 | |
| | 16QAM | 26/39 | |
| | 64QAM | 52/58.5/65 | |
| OFDM (802.11n-40MHz) | BPSK | 13.5 | 1MHz |
| | QPSK | 27/40.5 | |
| | 16QAM | 54/81/108 | |
| | 64QAM | 121.5/135 | |

Note: Preliminary tests were performed in different data rate in above table to find the worst radiated emission. The data rate shown in the table below is the worst-case rate with respect to the specific test item. Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

| Test Items | Mode | Data Rate | Channel | |
|------------------------------|-----------------------|------------------|---------|-------|
| Output Power | 11b / 11g/11n20/11n40 | 11/54/65/135Mbps | 1/6/11 | 3/6/9 |
| 6dB Bandwidth | 11b / 11g/11n20/11n40 | 11/54/65/135Mbps | 1/6/11 | 3/6/9 |
| Conducted Spurious Emission | 11b / 11g/11n20/11n40 | 11/54/65/135Mbps | 1/6/11 | 3/6/9 |
| Conducted Emission | 11b / 11g/11n20/11n40 | 11/54/65/135Mbps | 1/6/11 | 3/6/9 |
| Radiated Spurious Emission | 11b / 11g/11n20/11n40 | 11/54/65/135Mbps | 1/6/11 | 3/6/9 |
| Band Edge | 11b / 11g/11n20/11n40 | 11/54/65/135Mbps | 1/6/11 | 3/6/9 |
| Power spectral density (PSD) | 11b / 11g/11n20/11n40 | 11/54/65/135Mbps | 1/6/11 | 3/6/9 |

Note: The above EUT information in section 2.3 and 2.4 was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

2.5 Ancillary Equipment

| Ancillary Equipment 1 | Battery | |
|-----------------------|-----------------|-----------------------|
| | Brand Name | N/A |
| | Model No | 516780 |
| | Serial No | N/A |
| | Capacitance | 6600mAh |
| | Rated Voltage | 3.7V |
| | Extreme Voltage | Low: 3.3V / High:4.2V |

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

| No. | Identity | Document Title |
|-----|--|---|
| 1 | 47 CFR Part 15, Subpart C (12-30-13 Edition) | Miscellaneous Wireless Communications Services |
| 2 | KDB Publication 558074 D01v03r02 | Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under §15.247 |
| 3 | ANSI C63.4-2014 | American National Standard for Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz |
| 4 | ANSI C63.10-2013 | American National Standard for Testing Unlicensed Wireless Devices |

3.2 Verdict

| No. | Description | FCC Part No. | Test Result | Verdict |
|-----|------------------------------|---------------------|-------------|---------|
| 1 | Antenna Requirement | 15.203 15.247(b) | Note1 | PASS |
| 2 | Output Power | 15.247(b) | ANNEX A.1 | PASS |
| 3 | 6dB Bandwidth | 15.247(a) | ANNEX A.2 | PASS |
| 4 | Conducted Spurious Emission | 15.247(d) | ANNEX A.3 | PASS |
| 5 | Conducted Emission | 15.207 | ANNEX A.4 | PASS |
| 6 | Radiated Spurious Emission | 15.209 15.247(d) | ANNEX A.5 | PASS |
| 7 | Band Edge | 15.209 15.247(d) | ANNEX A.6 | PASS |
| 8 | Power spectral density (PSD) | 15.247(e) | ANNEX A.7 | PASS |

Note 1: Please refer to section 5.1

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

During the measurement, the normal environmental conditions were within the listed ranges:

| Description | EUT working conditions | | Test site follow standard of requirements | The actual record Conditions of Site |
|--------------------------------|------------------------|----------|---|--------------------------------------|
| Relative Humidity (%) | 45 to 55 | | 30 to 60 | 45 to 55 |
| Atmospheric Pressure (kPa) | 90 to 96 | | 86 to 106 | 90 to 96 |
| Temperature (°C) | NT(Normal Temperature) | 23 to 25 | 15 to 35 | 23 to 25 |
| Working Voltage of the EUT (V) | NV (Normal Voltage) | 3.7 | NOTE | NOTE |

NOTE: The normal/extremes the power source voltage range as declared by the manufacturer.

4.2 Test Equipment List

| Description | Manufacturer | Model | Serial No. | Cal. Date | Cal. Due |
|----------------------------------|----------------------|------------|------------|------------|------------|
| Spectrum Analyzer | AGILENT | E4440A | MY45304434 | 2014.07.07 | 2015.07.06 |
| Spectrum Analyzer | ROHDE&SCHWARZ | FSL3 | 103640/003 | 2014.07.07 | 2015.07.06 |
| Power Splitter | KMW | DCPD-LDC | 1305003215 | 2014.07.07 | 2015.07.06 |
| Power Sensor | ROHDE&SCHWARZ | NRP-Z21 | 103971 | 2014.07.07 | 2015.07.06 |
| Attenuator (20dB) | KMW | ZA-S1-201 | 110617091 | -- | -- |
| Attenuator (6dB) | KMW | ZA-S1-61 | 1305003189 | -- | -- |
| DC Power Supply | ROHDE&SCHWARZ | HMP2020 | 018141664 | 2014.07.07 | 2015.07.06 |
| Temperature Chamber | ANGELANTIONI SCIENCE | NTH64-40A | 1310 | 2014.07.07 | 2015.07.06 |
| Test Antenna-Loop(9kHz-30MHz) | SCHWARZBECK | FMZB 1519 | 1519-037 | 2013.07.02 | 2015.07.01 |
| Test Antenna-Bi-Log(30MHz-3G Hz) | SCHWARZBECK | VULB 9163 | 9163-624 | 2013.07.03 | 2015.07.02 |
| Test Antenna-Horn(1-18GHz) | SCHWARZBECK | BBHA 9120D | 9120D-1148 | 2013.07.02 | 2015.07.01 |
| Test Antenna-Horn(15-26.5GHz) | SCHWARZBECK | BBHA 9170 | 9170-305 | 2013.07.02 | 2015.07.01 |
| Anechoic Chamber | RAINFORD | 9m*6m*6m | N/A | 2014.10.07 | 2015.10.06 |

4.3 Test Configurations

| Test Configurations (TC) NO. | Description | |
|------------------------------|---------------------------------|---------------------|
| | Signal Description | Operating Frequency |
| Transmitter | | |
| TC01 | DSSS modulation, 802.11b | Ch No. 1/ 2412MHz |
| TC02 | DSSS modulation, 802.11b | Ch No. 6/ 2437MHz |
| TC03 | DSSS modulation, 802.11b | Ch No. 11/ 2462MHz |
| TC04 | OFDM modulation, 802.11g | Ch No. 1/ 2412MHz |
| TC05 | OFDM modulation, 802.11g | Ch No. 6/ 2437MHz |
| TC06 | OFDM modulation, 802.11g | Ch No. 11/ 2462MHz |
| TC07 | OFDM modulation, 802.11n(20MHz) | Ch No. 1/ 2412MHz |
| TC08 | OFDM modulation, 802.11n(20MHz) | Ch No. 6/ 2437MHz |
| TC09 | OFDM modulation, 802.11n(20MHz) | Ch No. 11/ 2462MHz |
| TC10 | OFDM modulation, 802.11n(40MHz) | Ch No. 3/ 2422MHz |
| TC11 | OFDM modulation, 802.11n(40MHz) | Ch No. 6/ 2437MHz |
| TC12 | OFDM modulation, 802.11n(40MHz) | Ch No. 9/ 2452MHz |

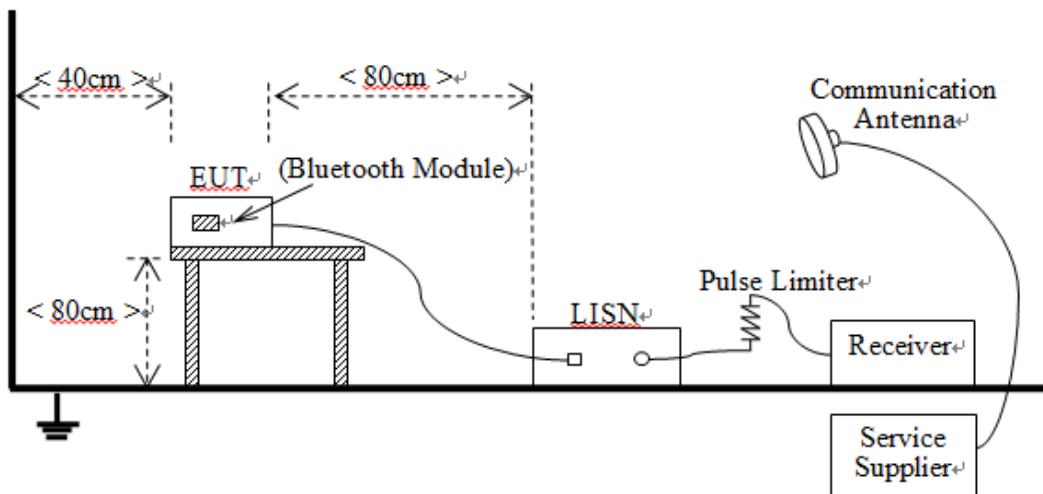
4.4 Description of Test Setup

4.4.1 For Antenna Port Test



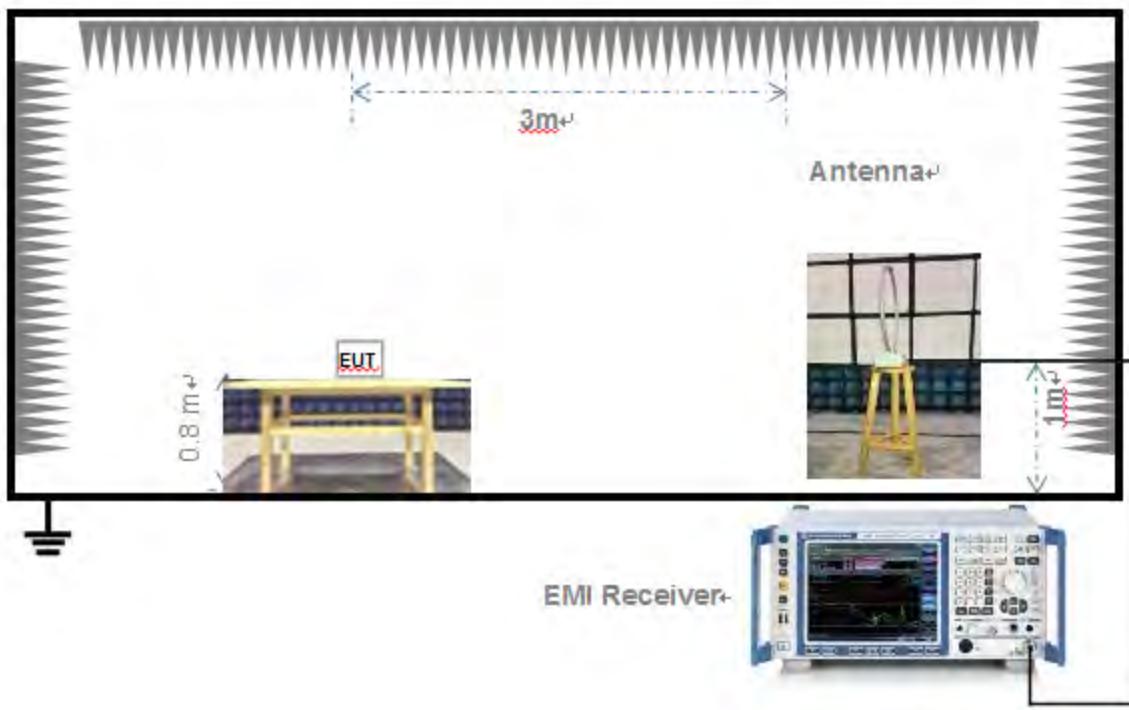
(Diagram 1)

4.4.2 For AC Power Supply Port Test



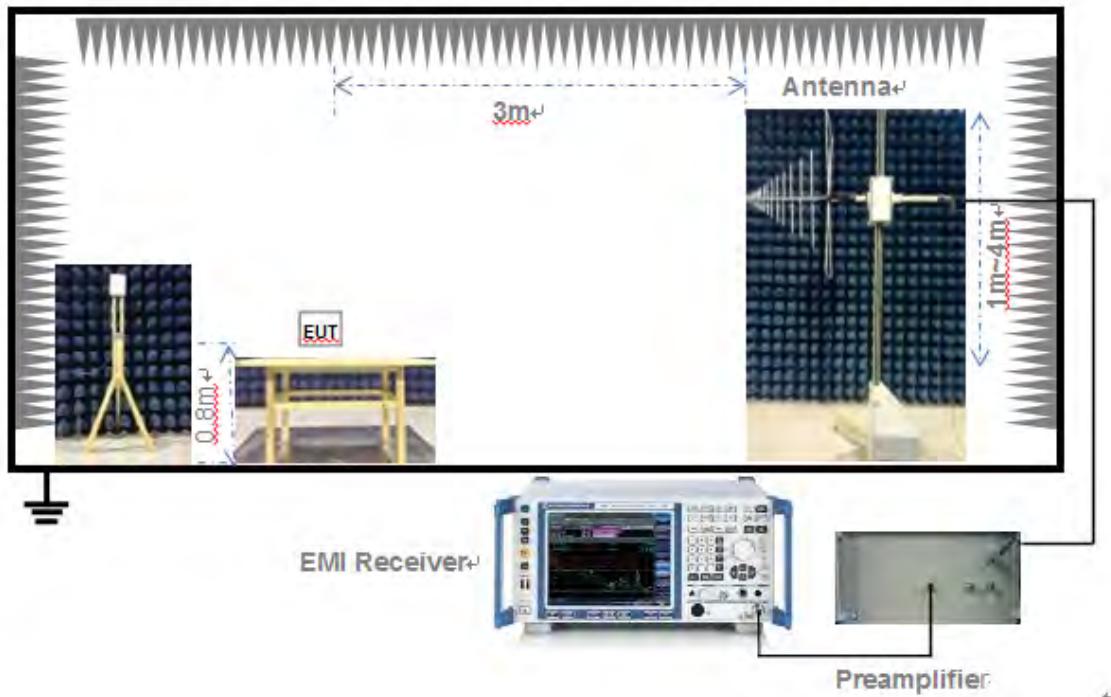
(Diagram 2)

4.4.3 For Radiated Test (Below 30MHz)



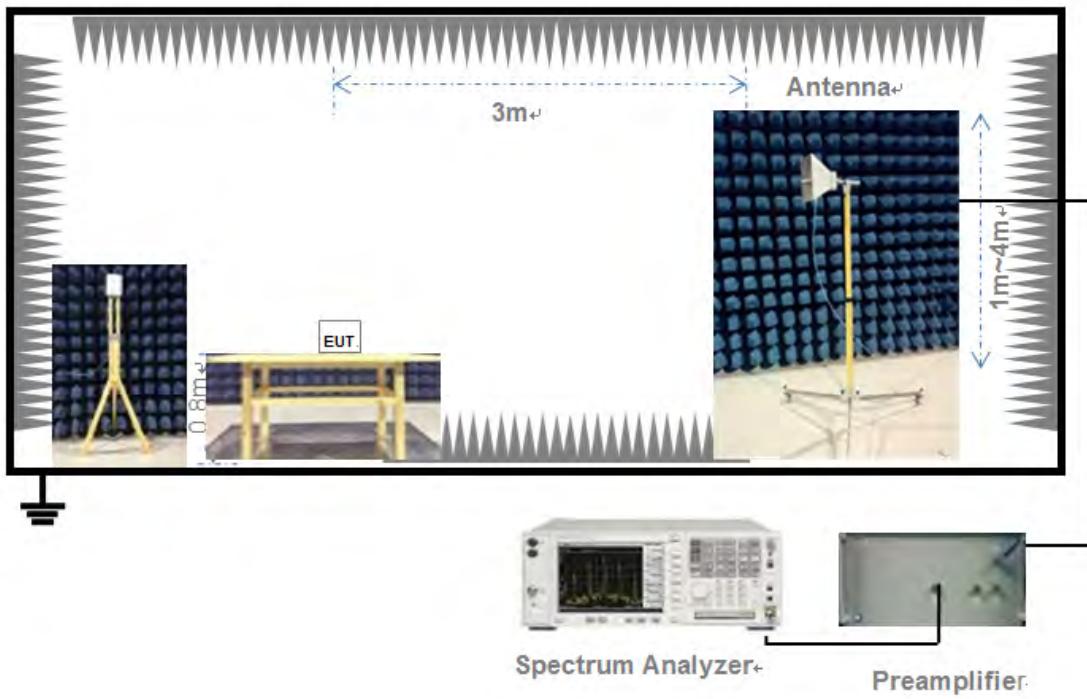
(Diagram 3)

4.4.4 For Radiated Test (30MHz-1GHz)



(Diagram 4)

4.4.5 For Radiated Test (Above 1GHz)



(Diagram 5)

4.5 Test Conditions

| Test Case | Test Conditions | | |
|------------------------------|-----------------|--|--|
| | Test Env. | Test Setup ^{Note 1} | Test Configuration ^{Note 2} |
| Peak Output Power | NTNV | Test Setup 1 | TC01~TC12 |
| Occupied Bandwidth | NTNV | Test Setup 1 | TC01~TC12 |
| Conducted Spurious Emission | NTNV | Test Setup 1 | TC01~TC12 |
| Conducted Emission | NTNV | Test Setup 2 | TC01~TC12 |
| Radiated Spurious Emission | NTNV | Test Setup 3 Test Setup 4 Test Setup 5 | TC01~TC12 |
| Band Edge | NTNV | Test Setup 1 | TC01, TC03, TC04, TC06, TC07, TC09, TC10, TC12 |
| Power spectral density (PSD) | NTNV | Test Setup 2 | TC01~TC12 |

Note:

1. Please refer to section 4.4 for test setup details.
2. Please refer to section 4.3 for test setup details.

5 TEST ITEMS

5.1 Antenna Requirements

5.1.1 Standard Applicable

FCC §15.203 & 15.247(b)

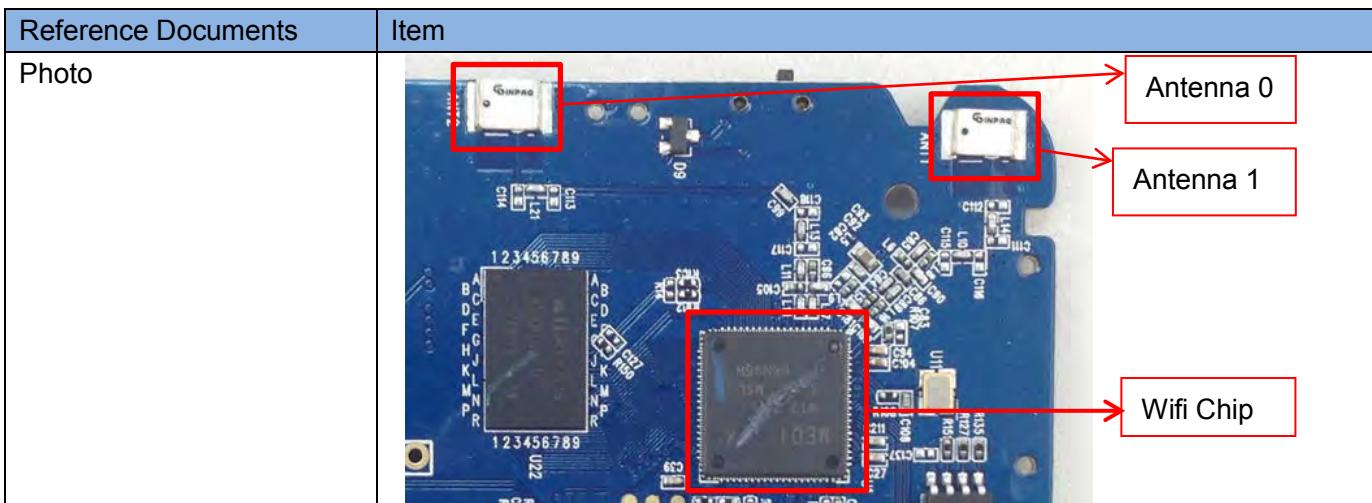
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

5.1.2 Antenna Anti-Replacement Construction

The Antenna Anti-Replacement as following method:

| Protected Method | Description |
|--------------------------------|--|
| The antenna is An embedded-in. | These two antennas are embedded-in antenna design is used. |



5.1.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

5.2 Output Power

5.2.1 Test Limit

FCC § 15.247(b)

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements.

5.2.2 Test Procedure

Maximum peak conducted output power

This procedure may be used when the maximum available RBW of the measurement instrument is less than the DTS bandwidth.

Set the RBW = 1 MHz

Set the VBW ≥ 3 RBW

Set the span $\geq 1.5 \times$ DTS bandwidth.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select peak detector).

Maximum conducted (average) output power (Reporting Only)

This method applied by the transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than ± 2 percent.

Measure the duty cycle, x , of the transmitter output signal as described in 6.0(KDB Publication 558074 D01v03r01).

Set span to at least 1.5 times the OBW.

Set RBW = 1-5% of the OBW, not to exceed 1 MHz.

Set VBW $\geq 3 \times$ RBW.

Number of points in sweep ≥ 2 span / RBW. (This gives bin-to-bin spacing $\leq RBW/2$, so that narrowband signals are not lost between frequency bins.)

Sweep time = auto.

Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.

Do not use sweep triggering. Allow the sweep to “free run”.

Trace average at least 100 traces in power averaging (i.e., RMS) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the on and off periods of the transmitter.

Compute power by integrating the spectrum across the OBW of the signal using the instrument’s band power measurement function with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

Add $10 \log (1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \log (1/0.25) = 6 \text{ dB}$ if the duty cycle is 25 %.

Measurements of duty cycle

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal.

Set the center frequency of the instrument to the center frequency of the transmission.

Set $\text{RBW} \geq \text{OBW}$ if possible; otherwise, set RBW to the largest available value.

Set $\text{VBW} \geq \text{RBW}$. Set detector = peak or average.

The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7 \text{ microseconds}$.)

5.3 6dB Bandwidth

5.3.1 Limit

FCC §15.247(a)

Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW. The 6 dB bandwidth must be greater than 500 kHz.

5.3.2 Test Procedure

Use the following spectrum analyzer settings:

Set RBW = 100 kHz.

Set the video bandwidth (VBW) ≥ 3 RBW.

Detector = Peak.

Trace mode = max hold.

Sweep = auto couple.

Allow the trace to stabilize.

Measure 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 6 dB relative to the maximum level measured in the fundamental emission.

5.4 Conducted Spurious Emission

5.4.1 Limit

FCC §15.247(d)

In any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.4.2 Test Procedure

The DTS rules specify that in any 100 kHz bandwidth outside of the authorized frequency band, the power shall be attenuated according to the following conditions:

- a) If the maximum peak conducted output power procedure was used to demonstrate compliance as described in 9.1, then the peak output power measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 20 dBc).
- b) If maximum conducted (average) output power was used to demonstrate compliance as described in 9.2, then the peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz (i.e., 30 dBc).
- c) In either case, attenuation to levels below the 15.209 general radiated emissions limits is not required.

The following procedures shall be used to demonstrate compliance to these limits. Note that these procedures can be used in either an antenna-port conducted or radiated test set-up. Radiated tests must conform to the test site requirements and utilize maximization procedures defined herein.

Reference level measurement

Establish a reference level by using the following procedure:

Set instrument center frequency to DTS channel center frequency.

Set the span to ≥ 1.5 times the DTS bandwidth.

Set the RBW = 100 kHz.

Set the VBW $\geq 3 \times$ RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum PSD level.

Emission level measurement

Use the following spectrum analyzer settings:

Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.

Set the RBW = 100 kHz.

Set the VBW $\geq 3 \times$ RBW.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements specified in 11.1 a) or 11.1 b). Report the three highest emissions relative to the limit.

5.5 Conducted Emission

5.5.1 Limit

FCC §15.207

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 Ω line impedance stabilization network (LISN).

| Frequency range (MHz) | Conducted Limit (dB μ V) | |
|--------------------------|------------------------------|----------|
| | Quai-peak | Average |
| 0.15 - 0.50 | 66 to 56 | 56 to 46 |
| 0.50 - 5 | 56 | 46 |
| 0.50 - 30 | 60 | 50 |

5.5.2 Test Procedure

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Refer to recorded points and plots below.

5.6 Radiated Spurious Emission

5.6.1 Limit

FCC §15.209&15.247(d)

Radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength (μ V/m) | Measurement Distance (m) |
|-----------------|-----------------------------|--------------------------|
| 0.009 - 0.490 | $2400/F(\text{kHz})$ | 300 |
| 0.490 - 1.705 | $24000/F(\text{kHz})$ | 30 |
| 1.705 - 30.0 | 30 | 30 |
| 30 - 88 | 100 | 3 |
| 88 - 216 | 150 | 3 |
| 216 - 960 | 200 | 3 |
| Above 960 | 500 | 3 |

Note:

1. Field Strength ($\text{dB}\mu\text{V}/\text{m}$) = $20*\log[\text{Field Strength } (\mu\text{V}/\text{m})]$.
2. In the emission tables above, the tighter limit applies at the band edges.
3. For Above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
4. For above 1000MHz, limit field strength of harmonics: 54dB μ V/m@3m (AV) and 74dB μ V/m@3m (PK).

5.6.2 Test Procedure

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360° , and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

The power of the EUT transmitting frequency should be ignored.

All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

Use the following spectrum analyzer settings:

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz

VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3dB lower than the applicable limit, the peak emission level will be reported, Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

5.7 Band Edge

5.7.1 Limit

FCC §15.209&15.247(d)

In any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.7.2 Test Procedure

The following procedures may be used to determine the peak or average field strength or power of an unwanted emission that is within 2 MHz of the authorized band edge. If a peak detector is utilized, use the procedure described in 13.2.1. Use the procedure described in 13.2.2 when using an average detector and the EUT can be configured to transmit continuously (i.e., duty cycle $\geq 98\%$). Use the procedure described in 13.2.3 when using an average detector and the EUT cannot be configured to transmit continuously but the duty cycle is constant (i.e., duty cycle variations are less than ± 2 percent). Use the procedure described in 13.2.4 when using an average detector for those cases where the EUT cannot be configured to transmit continuously and the duty cycle is not constant (duty cycle variations equal or exceed 2 percent).

When using a peak detector to measure unwanted emissions at or near the band edge (within 2 MHz of the authorized band), the following integration procedure can be used.

Set instrument center frequency to the frequency of the emission to be measured (must be within 2 MHz of the authorized band edge).

Set span to 2 MHz

RBW = 100 kHz.

VBW $\geq 3 \times$ RBW.

Detector = peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweep to continue until the trace stabilizes (required measurement time may increase for low duty cycle applications)

Compute the power by integrating the spectrum over 1 MHz using the analyzer's band power measurement function with band limits set equal to the emission frequency (f_{emission}) ± 0.5 MHz. If the instrument does not have a band power function, then sum the amplitude levels (in power units) at 100 kHz intervals extending across the 1 MHz spectrum defined by $f_{\text{emission}} \pm 0.5$ MHz.

5.8 Power Spectral density (PSD)

5.8.1 Limit

FCC §15.247(e)

The same method of determining the conducted output power shall be used to determine the power spectral density. If a peak output power is measured, then a peak power spectral density measurement is required. If an average output power is measured, then an average power spectral density measurement should be used.

5.8.2 Test Procedure

Set analyzer center frequency to DTS channel center frequency.

Set the span to 1.5 times the DTS bandwidth.

Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.

Set the VBW $\geq 3 \text{ RBW}$.

Detector = peak.

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

ANNEX A TEST RESULT

A.1 Output Power

Duty Cycle

| ANTENNA | Mode | Duty Cycle (%) | T(μs) | 1/T(kHz) |
|---------|--------------|----------------|-------|----------|
| ANT 0 | 802.11b | 82.2 | 0.95 | 1.05 |
| | 802.11g | 46.6 | 0.18 | 5.65 |
| | 802.11n HT20 | 45.4 | 0.17 | 5.95 |
| | 802.11n HT40 | 33.1 | 0.10 | 10.00 |
| ANT 1 | 802.11b | 82.2 | 0.95 | 1.05 |
| | 802.11g | 46.6 | 0.18 | 5.65 |
| | 802.11n HT20 | 45.4 | 0.17 | 5.95 |
| | 802.11n HT40 | 33.1 | 0.10 | 10.00 |

Peak Power Test Data

802.11b Mode:

| Channel | Measured Output Peak Power Of ANT 0 | | Measured Output Peak Power Of ANT 1 | | Total of output power | | Limit | | Verdict |
|---------|-------------------------------------|--------|-------------------------------------|--------|-----------------------|--------|-------|------|---------|
| | dBm | mW | dBm | mW | dBm | mW | | | |
| Low | 18.85 | 76.74 | 20.75 | 118.85 | 22.91 | 195.59 | 30 | 1000 | PASS |
| Middle | 19.49 | 88.92 | 19.78 | 95.06 | 22.65 | 183.98 | | | PASS |
| High | 22.03 | 159.59 | 21.31 | 135.21 | 24.70 | 294.80 | | | PASS |

802.11g Mode:

| Channel | Measured Output Peak Power Of ANT 0 | | Measured Output Peak Power Of ANT 1 | | Total of output power | | Limit | | Verdict |
|---------|-------------------------------------|--------|-------------------------------------|--------|-----------------------|--------|-------|------|---------|
| | dBm | mW | dBm | mW | dBm | mW | | | |
| Low | 18.53 | 71.29 | 20.96 | 124.74 | 22.92 | 196.03 | 30 | 1000 | PASS |
| Middle | 19.09 | 81.10 | 19.58 | 90.78 | 22.35 | 171.88 | | | PASS |
| High | 21.30 | 134.90 | 20.75 | 118.85 | 24.04 | 253.75 | | | PASS |

802.11n-20MHz Mode:

| Channel | Measured Output Peak Power Of ANT 0 | | Measured Output Peak Power Of ANT 1 | | Total of output power | | Limit | | Verdict |
|---------|-------------------------------------|--------|-------------------------------------|--------|-----------------------|--------|-------|------|---------|
| | dBm | mW | dBm | mW | dBm | mW | | | |
| Low | 18.47 | 70.31 | 20.80 | 120.23 | 22.80 | 190.54 | 30 | 1000 | PASS |
| Middle | 18.95 | 78.52 | 19.50 | 89.13 | 22.24 | 167.65 | | | PASS |
| High | 21.10 | 128.82 | 21.02 | 126.47 | 24.07 | 255.29 | | | PASS |

802.11n-40MHz Mode:

| Channel | Measured Output Peak Power Of ANT 0 | | Measured Output Peak Power Of ANT 1 | | Total of output power | | Limit | | Verdict |
|---------|-------------------------------------|-------|-------------------------------------|--------|-----------------------|--------|-------|------|---------|
| | dBm | mW | dBm | mW | dBm | mW | | | |
| Low | 17.68 | 58.61 | 19.83 | 96.16 | 21.90 | 154.77 | 30 | 1000 | PASS |
| Middle | 18.15 | 65.31 | 19.51 | 89.33 | 21.89 | 154.64 | | | PASS |
| High | 19.09 | 81.10 | 20.69 | 117.22 | 22.97 | 198.32 | | | PASS |

Average Power Test Data (Reporting Only)

802.11b Mode:

| Channel | Duty Factor($10 \log(1/x)$) | | Measured Output Average Power Of ANT 0 | | Measured Output Average Power Of ANT 1 | | Total of output power | | Verdict |
|---------|-------------------------------|-------|--|-------|--|-------|-----------------------|-------|---------|
| | ANT 0 | ANT 1 | dBm | mW | dBm | mW | dBm | mW | |
| Low | 0.85 | 0.85 | 12.45 | 17.58 | 14.11 | 25.76 | 16.37 | 43.34 | PASS |
| Middle | 0.85 | 0.85 | 13.11 | 20.46 | 13.20 | 20.89 | 16.16 | 41.35 | PASS |
| High | 0.85 | 0.85 | 15.59 | 36.22 | 14.98 | 31.48 | 18.31 | 67.70 | PASS |

802.11g Mode:

| Channel | Duty Factor($10 \log(1/x)$) | | Measured Output Average Power Of ANT 0 | | Measured Output Average Power Of ANT 1 | | Total of output power | | Verdict |
|---------|-------------------------------|-------|--|-------|--|-------|-----------------------|-------|---------|
| | ANT 0 | ANT 1 | dBm | mW | dBm | mW | dBm | mW | |
| Low | 3.32 | 3.32 | 9.49 | 8.89 | 11.88 | 15.42 | 13.86 | 24.31 | PASS |
| Middle | 3.32 | 3.32 | 9.84 | 9.64 | 10.58 | 11.43 | 13.24 | 21.07 | PASS |
| High | 3.32 | 3.32 | 12.21 | 16.63 | 12.34 | 17.14 | 15.29 | 33.77 | PASS |

802.11n-20MHz Mode:

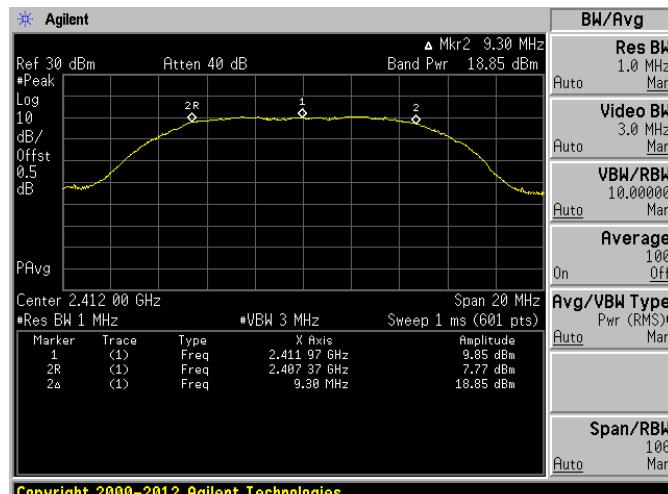
| Channel | Duty Factor(10 log (1/x)) | | Measured Output Average Power Of ANT 0 | | Measured Output Average Power Of ANT 1 | | Total of output power | | Verdict |
|---------|---------------------------|-------|--|-------|--|-------|-----------------------|-------|---------|
| | ANT 0 | ANT 1 | dBm | mW | dBm | mW | dBm | mW | |
| Low | 3.43 | 3.43 | 9.56 | 9.04 | 11.99 | 15.81 | 13.95 | 24.85 | PASS |
| Middle | 3.43 | 3.43 | 9.92 | 9.82 | 10.70 | 11.75 | 13.34 | 21.57 | PASS |
| High | 3.43 | 3.43 | 12.45 | 17.58 | 12.41 | 17.42 | 15.44 | 35.00 | PASS |

802.11n-40MHz Mode:

| Channel | Duty Factor(10 log (1/x)) | | Measured Output Average Power Of ANT 0 | | Measured Output Average Power Of ANT 1 | | Total of output power | | Verdict |
|---------|---------------------------|-------|--|-------|--|-------|-----------------------|-------|---------|
| | ANT 0 | ANT 1 | dBm | mW | dBm | mW | dBm | mW | |
| Low | 4.80 | 4.80 | 9.97 | 9.93 | 11.18 | 13.12 | 13.63 | 23.05 | PASS |
| Middle | 4.80 | 4.80 | 10.19 | 10.45 | 10.68 | 11.69 | 13.45 | 22.14 | PASS |
| High | 4.80 | 4.80 | 11.39 | 13.77 | 11.61 | 14.49 | 14.51 | 28.26 | PASS |

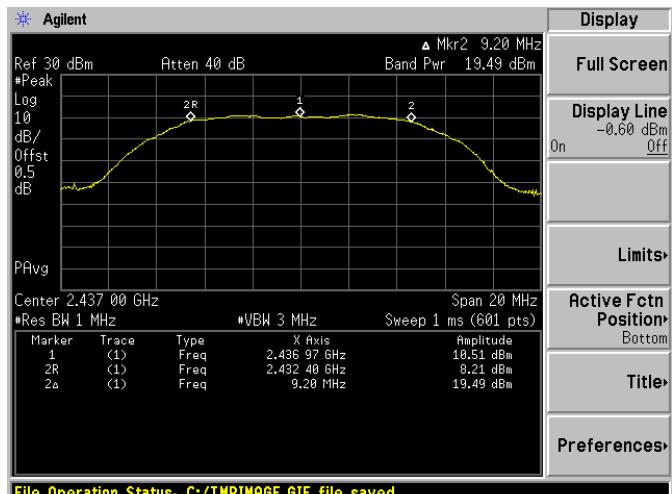
Peak Power Test Plots (ANT 0)

802.11b LOW CHANNEL

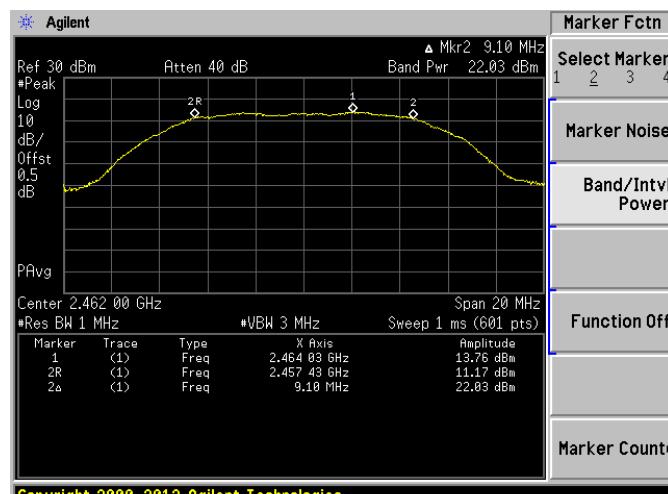


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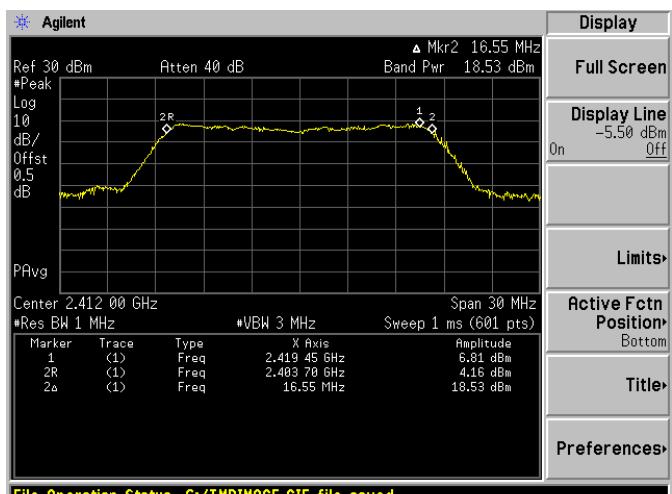
802.11b MID CHANNEL



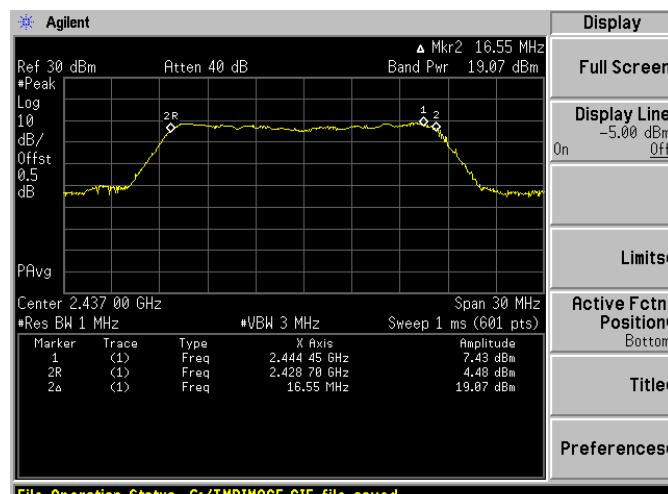
802.11b HIGH CHANNEL



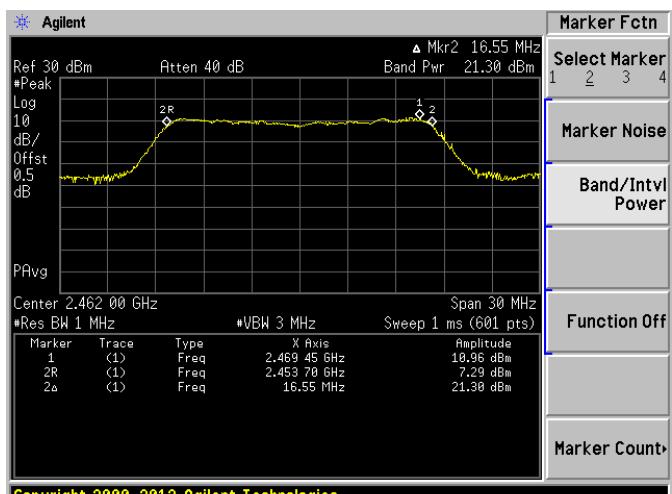
802.11g LOW CHANNEL



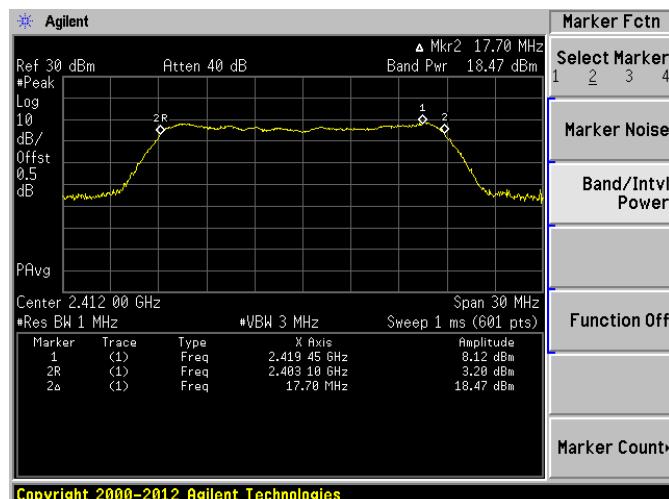
802.11g MID CHANNEL



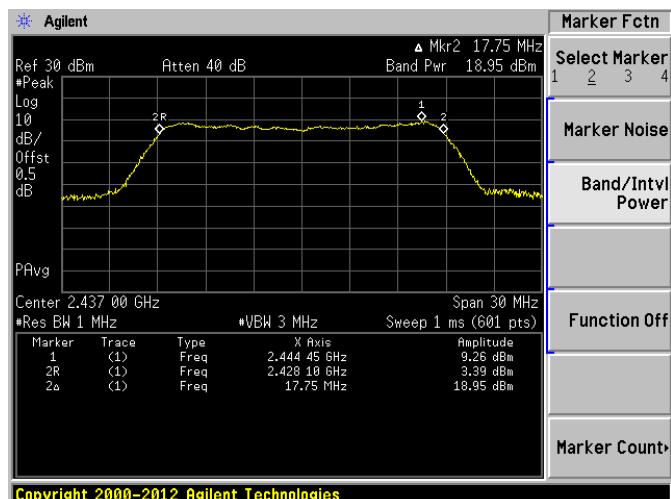
802.11g HIGH CHANNEL



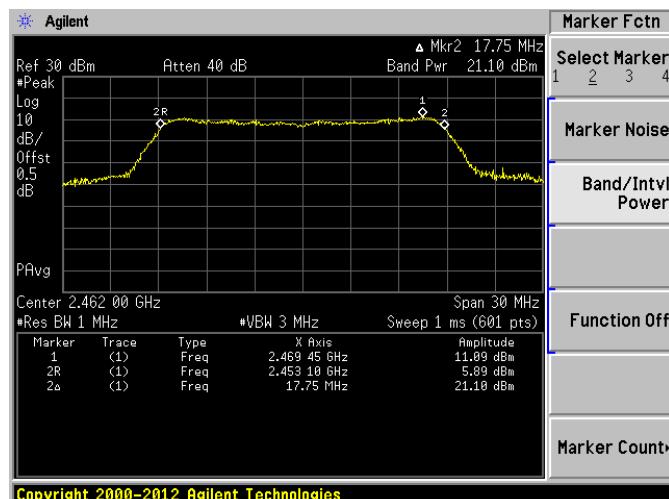
802.11n 20MHz LOW CHANNEL



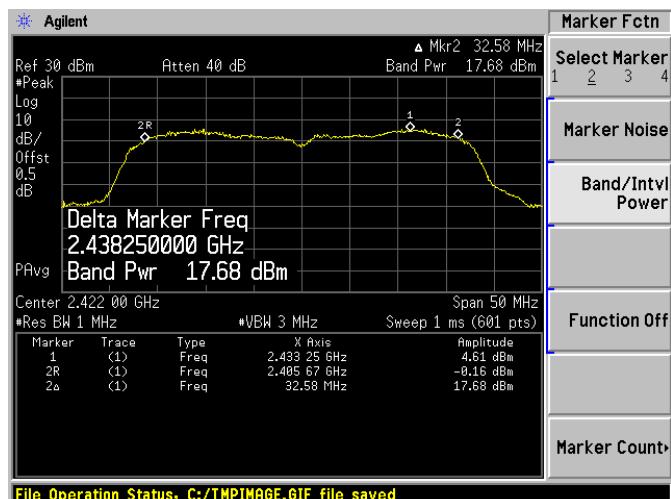
802.11 n 20MHz MID CHANNEL



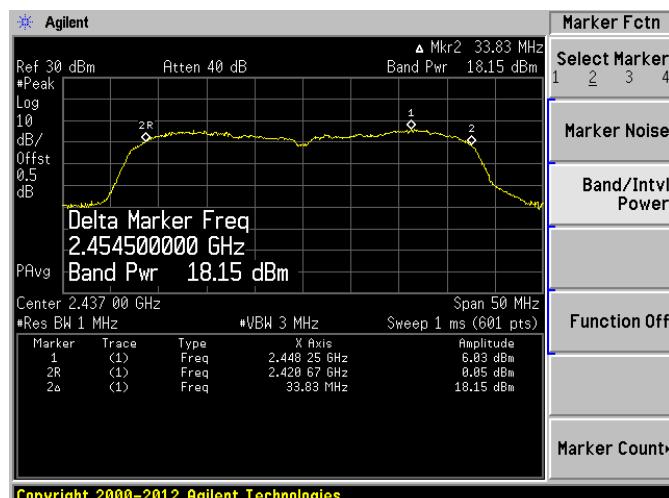
802.11 n 20MHz HIGH CHANNEL



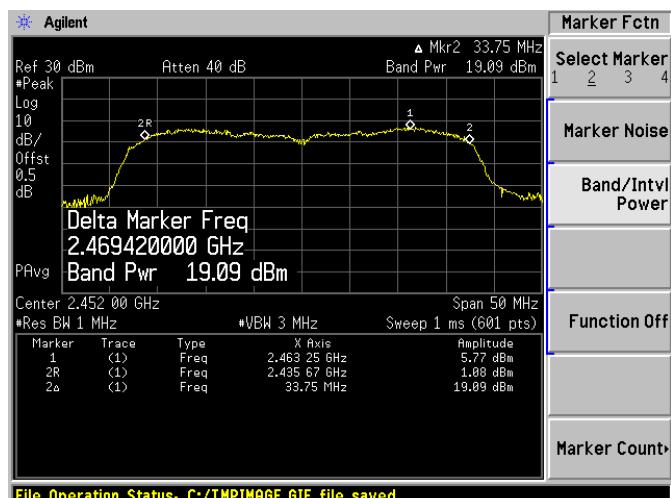
802.11 n 40MHz LOW CHANNEL



802.11 n 40MHz MID CHANNEL

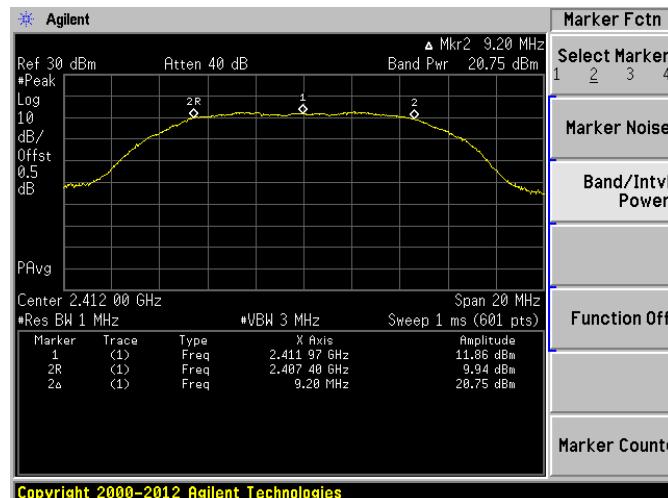


802.11 n 40MHz HIGH CHANNEL



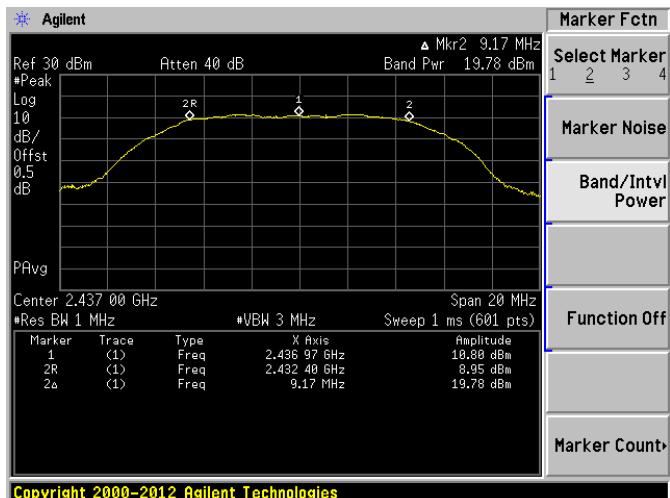
Peak Power Test Plots (Ant 1)

802.11b LOW CHANNEL



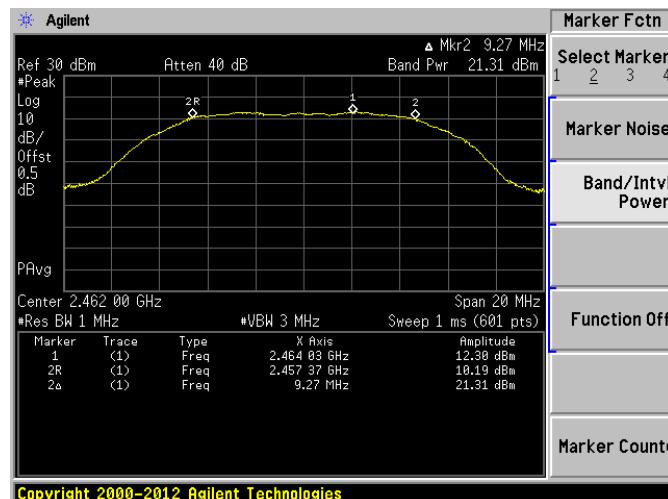
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802.11b MID CHANNEL



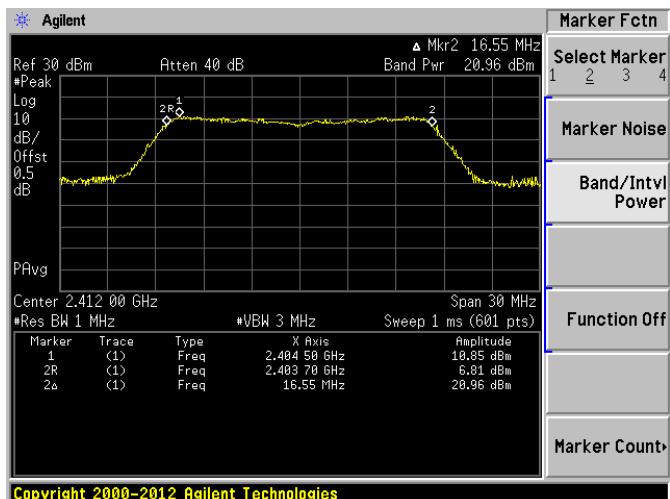
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802.11b HIGH CHANNEL



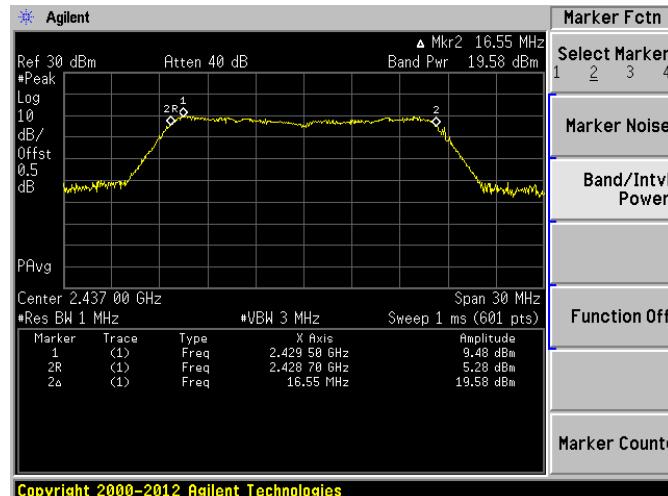
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802.11g LOW CHANNEL



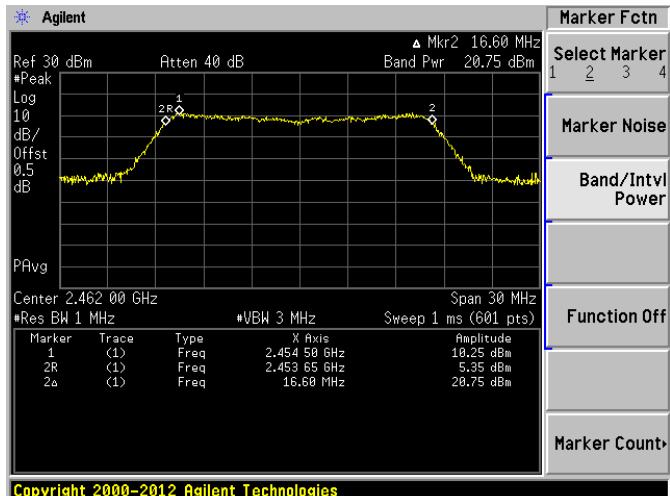
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802.11g MID CHANNEL



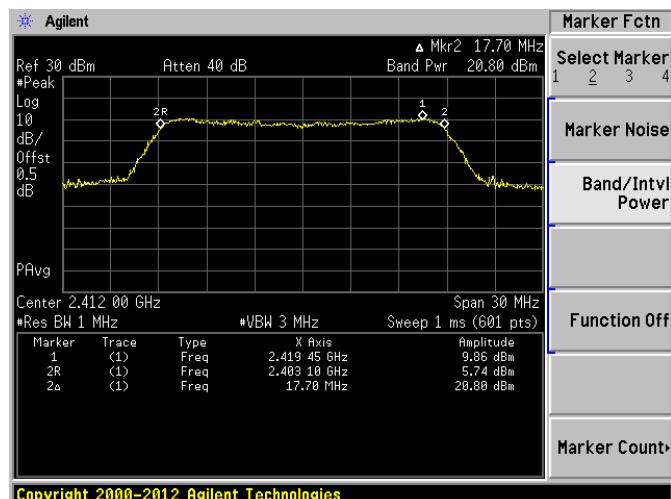
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802.11g HIGH CHANNEL

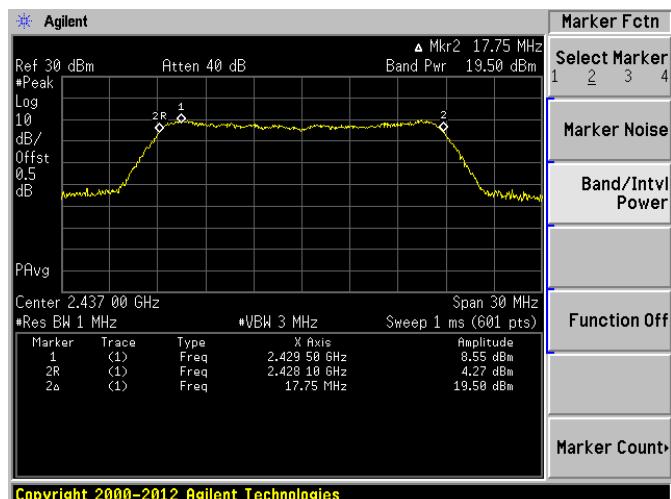


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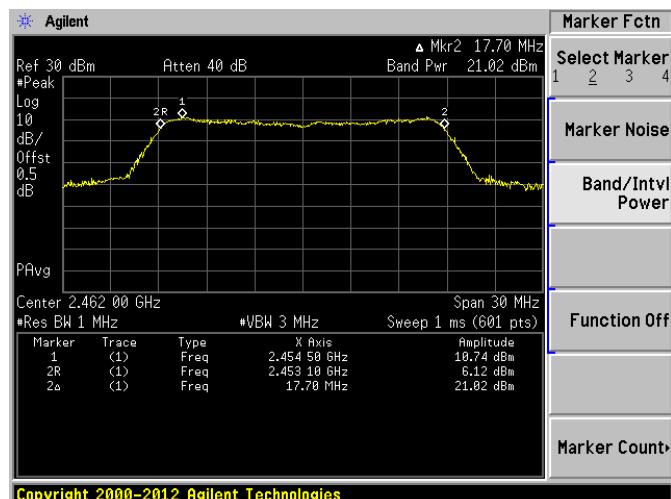
802.11n 20MHz LOW CHANNEL



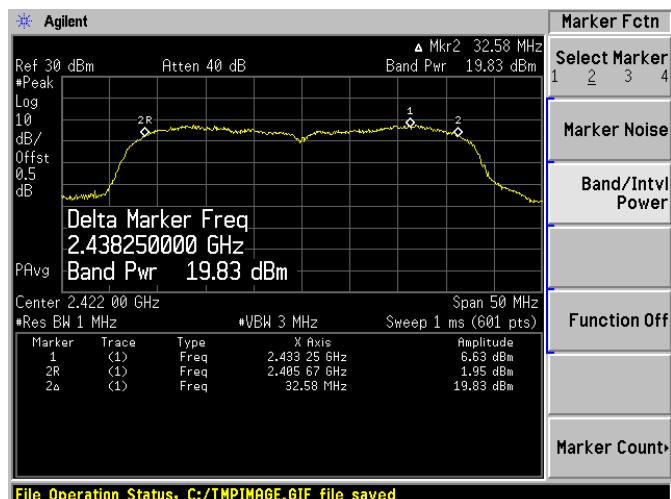
802.11 n 20MHz MID CHANNEL



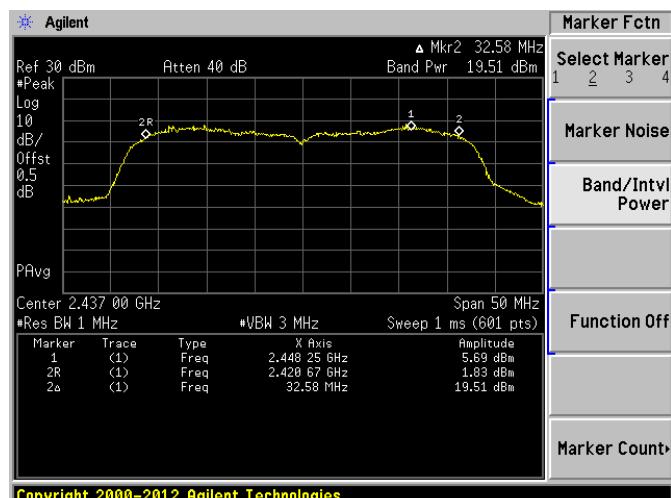
802.11 n 20MHz HIGH CHANNEL



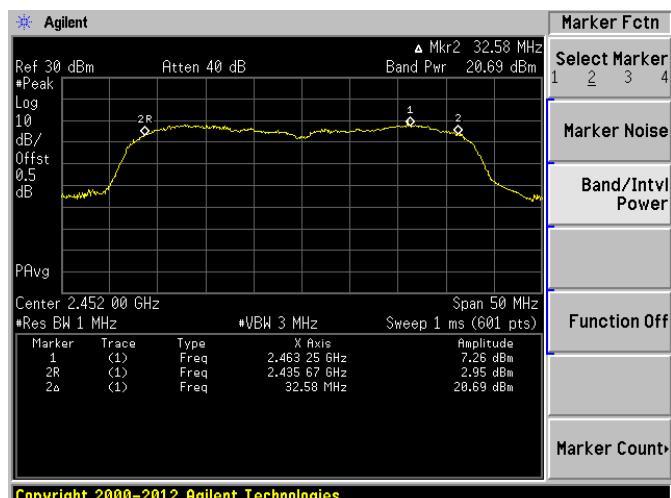
802.11 n 40MHz LOW CHANNEL



802.11 n 40MHz MID CHANNEL



802.11 n 40MHz HIGH CHANNEL



A.2 Bandwidth

Test Data (ANT 0)

802.11b Mode:

| Channel | 6 dB Bandwidth (MHz) | Limits (kHz) | Verdict |
|---------|----------------------|--------------|---------|
| Low | 9.30 | ≥500 | PASS |
| Middle | 9.20 | ≥500 | PASS |
| High | 9.10 | ≥500 | PASS |

802.11g Mode:

| Channel | 6 dB Bandwidth (MHz) | Limits (kHz) | Verdict |
|---------|----------------------|--------------|---------|
| Low | 16.55 | ≥500 | PASS |
| Middle | 16.55 | ≥500 | PASS |
| High | 16.55 | ≥500 | PASS |

802.11n-20MHz Mode:

| Channel | 6 dB Bandwidth (MHz) | Limits (kHz) | Verdict |
|---------|----------------------|--------------|---------|
| Low | 17.70 | ≥500 | PASS |
| Middle | 17.75 | ≥500 | PASS |
| High | 17.75 | ≥500 | PASS |

802.11n-40MHz Mode:

| Channel | 6 dB Bandwidth (MHz) | Limits (kHz) | Verdict |
|---------|----------------------|--------------|---------|
| Low | 32.58 | ≥500 | PASS |
| Middle | 33.83 | ≥500 | PASS |
| High | 33.75 | ≥500 | PASS |

Test Data (ANT 1)

802.11b Mode:

| Channel | 6 dB Bandwidth (MHz) | Limits (kHz) | Verdict |
|---------|----------------------|--------------|---------|
| Low | 9.20 | ≥500 | PASS |
| Middle | 9.17 | ≥500 | PASS |
| High | 9.27 | ≥500 | PASS |

802.11g Mode:

| Channel | 6 dB Bandwidth (MHz) | Limits (kHz) | Verdict |
|---------|----------------------|--------------|---------|
| Low | 16.55 | ≥500 | PASS |
| Middle | 16.55 | ≥500 | PASS |
| High | 16.60 | ≥500 | PASS |

802.11n-20MHz Mode:

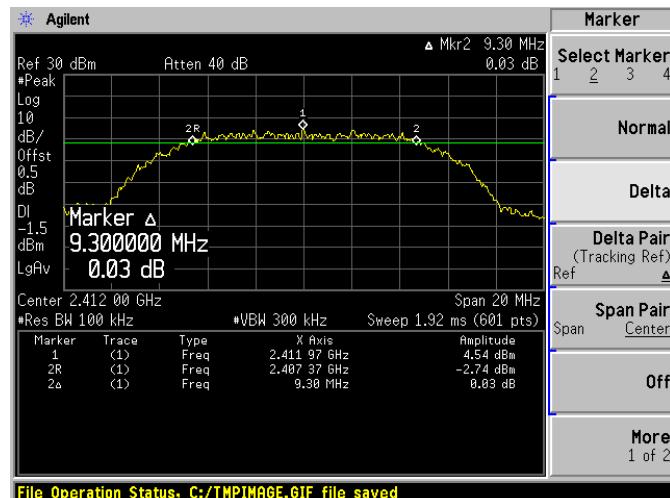
| Channel | 6 dB Bandwidth (MHz) | Limits (kHz) | Verdict |
|---------|----------------------|--------------|---------|
| Low | 17.70 | ≥500 | PASS |
| Middle | 17.75 | ≥500 | PASS |
| High | 17.70 | ≥500 | PASS |

802.11n-40MHz Mode:

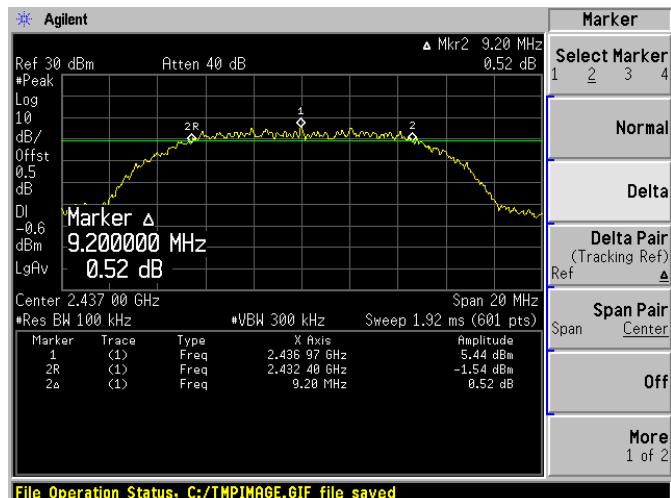
| Channel | 6 dB Bandwidth (MHz) | Limits (kHz) | Verdict |
|---------|----------------------|--------------|---------|
| Low | 32.58 | ≥500 | PASS |
| Middle | 32.58 | ≥500 | PASS |
| High | 32.58 | ≥500 | PASS |

Test plots (ANT 0)

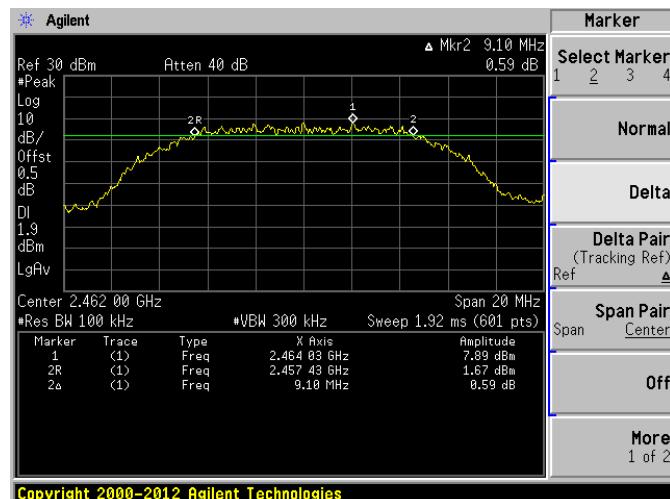
802.11b LOW CHANNEL



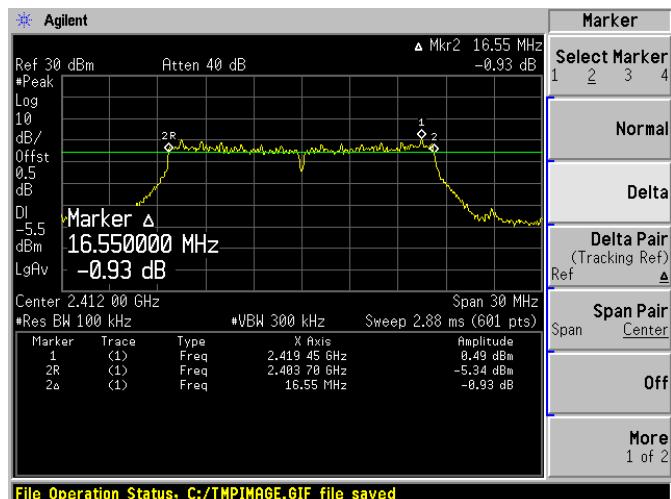
802.11b MID CHANNEL



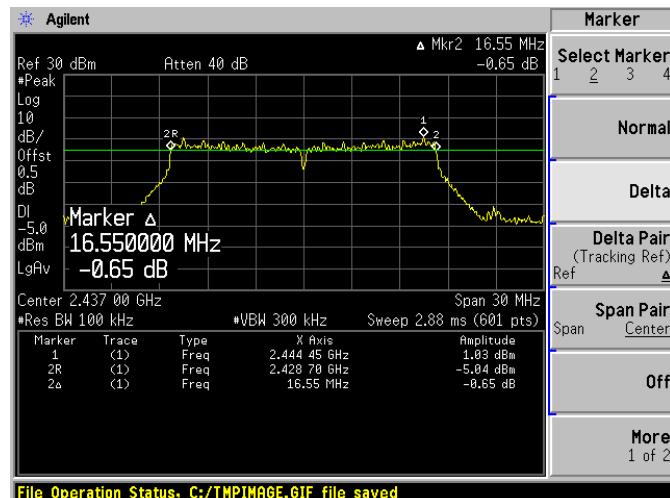
802.11b HIGH CHANNEL



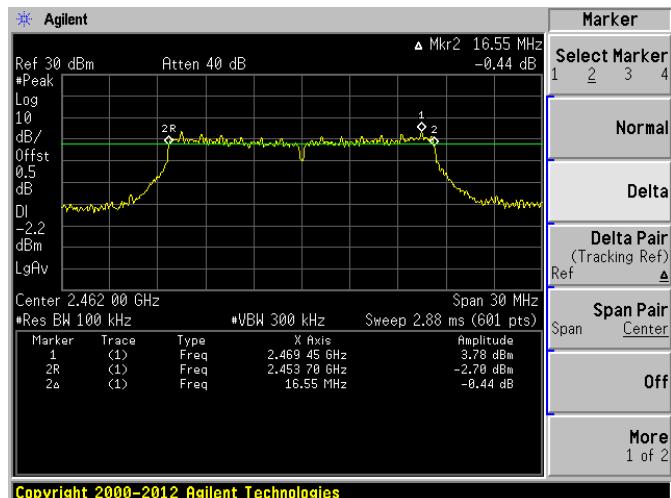
802.11g LOW CHANNEL



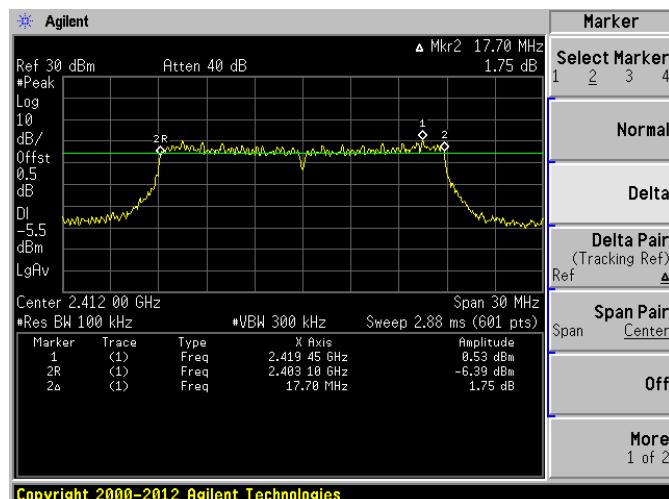
802.11g MID CHANNEL



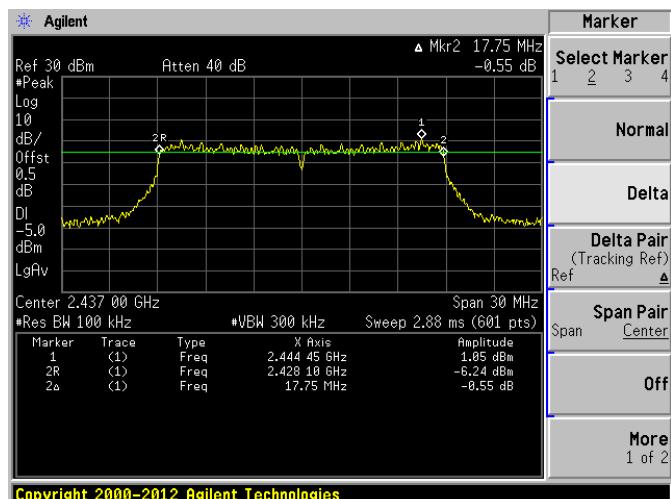
802.11g HIGH CHANNEL



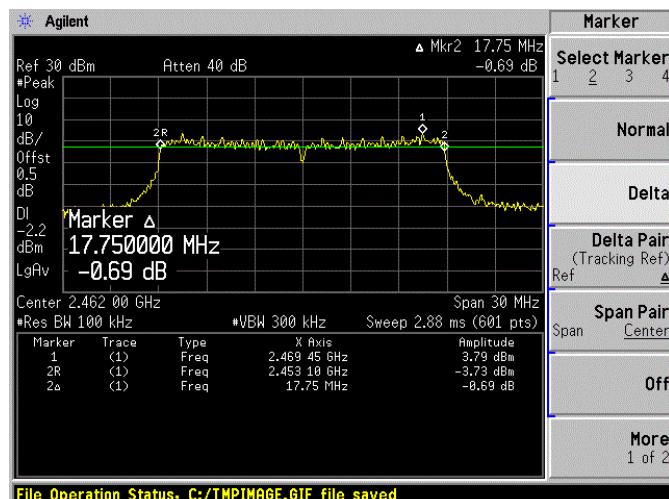
802.11n-20MHz LOW CHANNEL



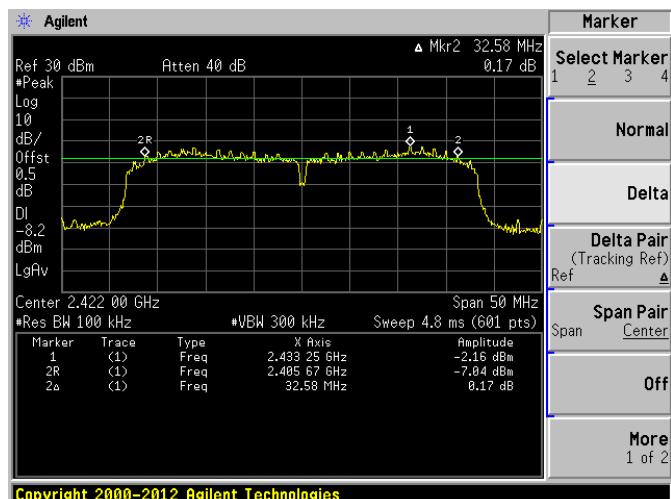
802.11 n-20MHz MID CHANNEL



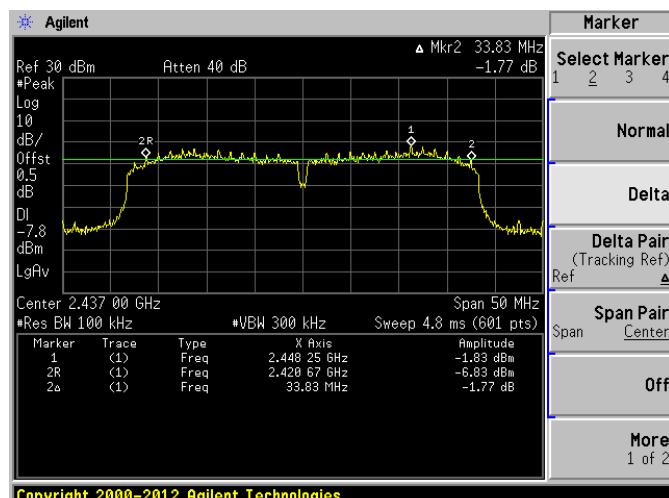
802.11n-20MHz HIGH CHANNEL



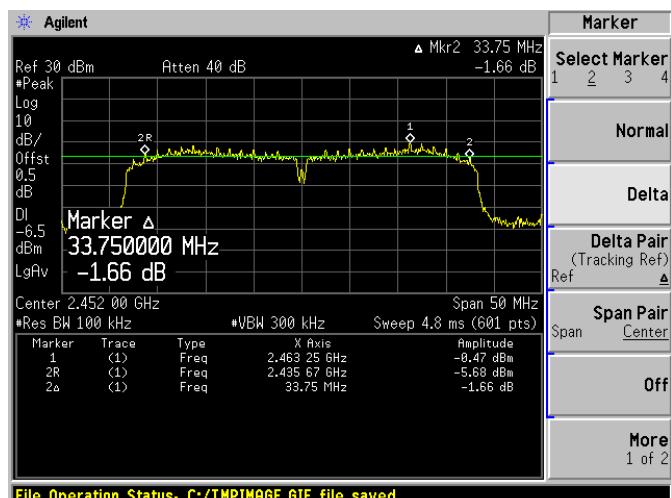
802.11n-40MHz LOW CHANNEL



802.11n-40MHz MID CHANNEL

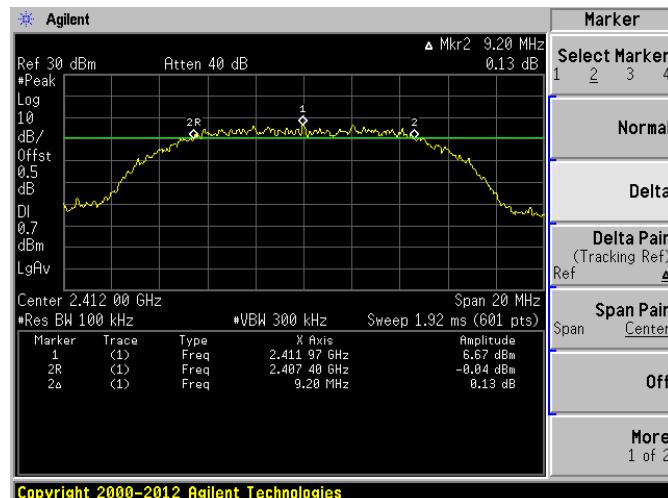


802.11n-40MHz HIGH CHANNEL

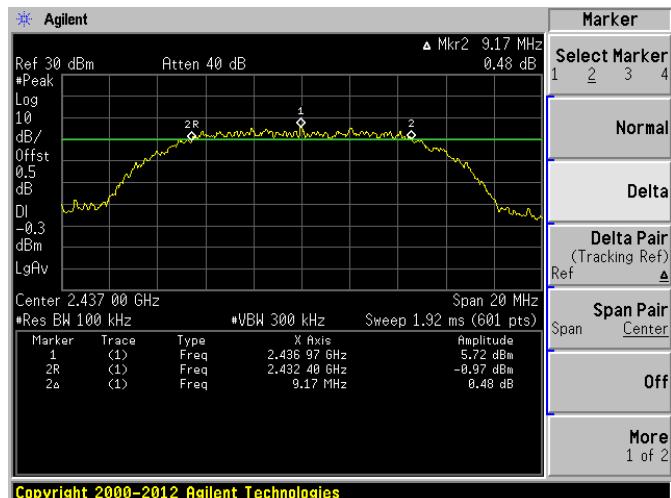


Test plots (ANT 1)

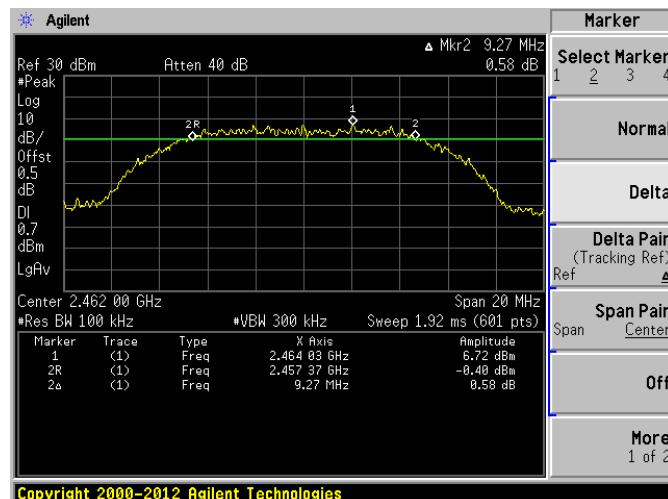
802.11b LOW CHANNEL



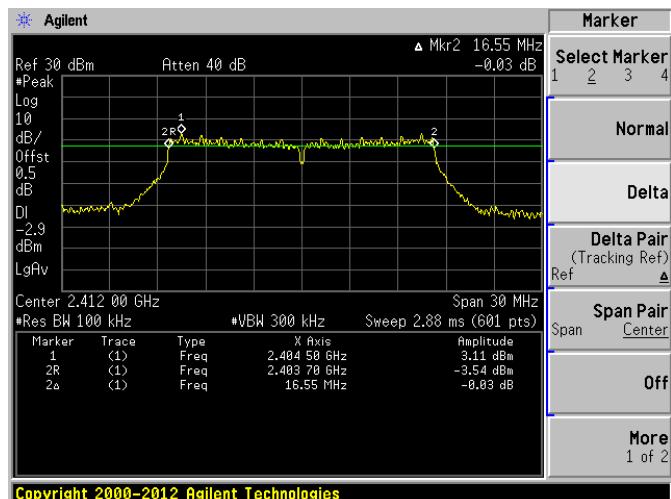
802.11b MID CHANNEL



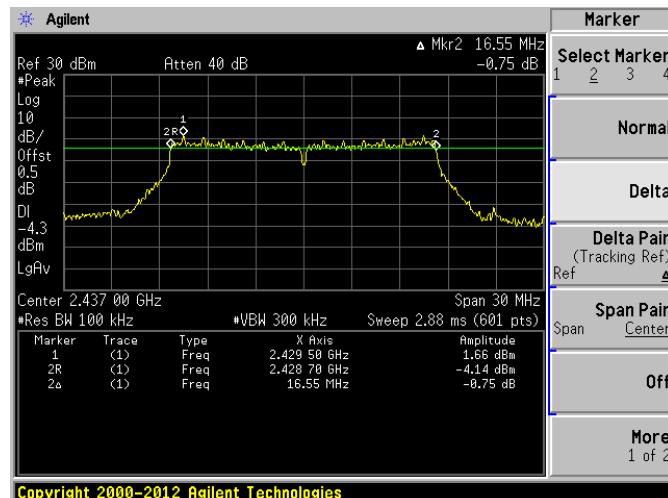
802.11b HIGH CHANNEL



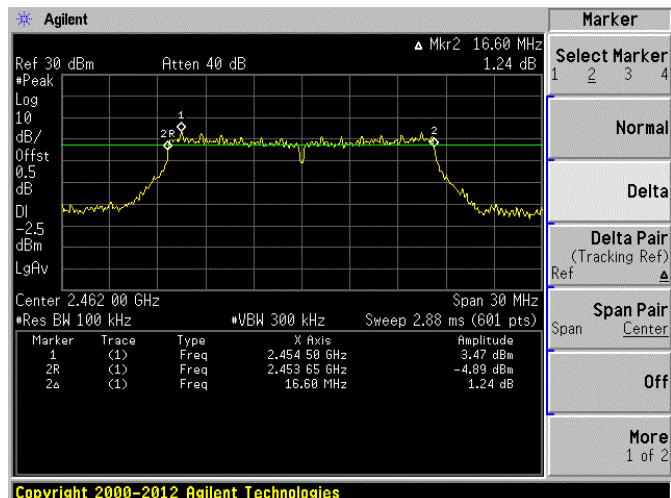
802.11g LOW CHANNEL



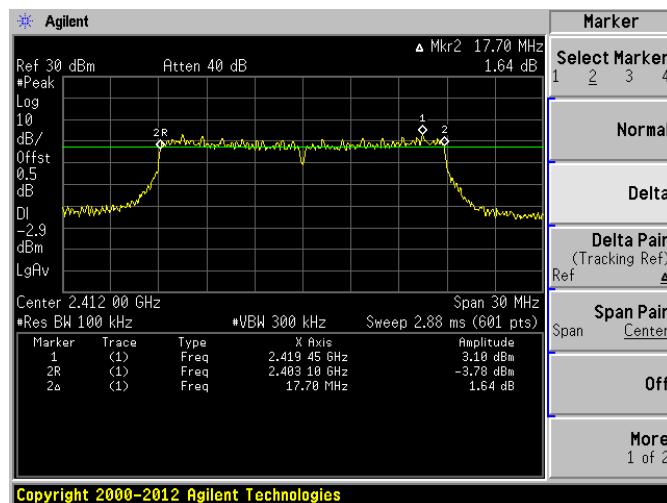
802.11g MID CHANNEL



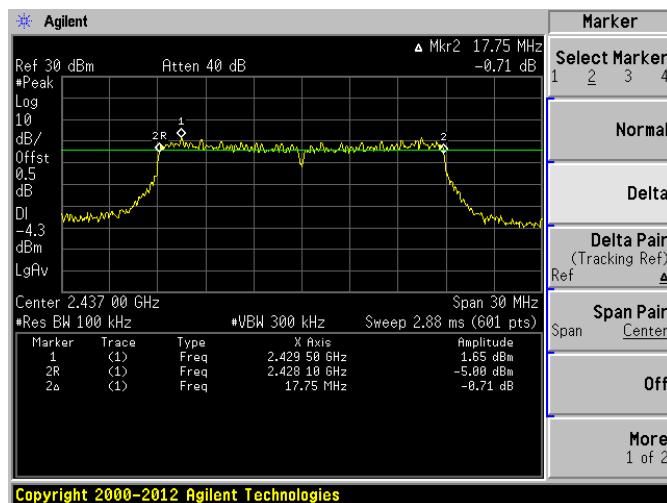
802.11g HIGH CHANNEL



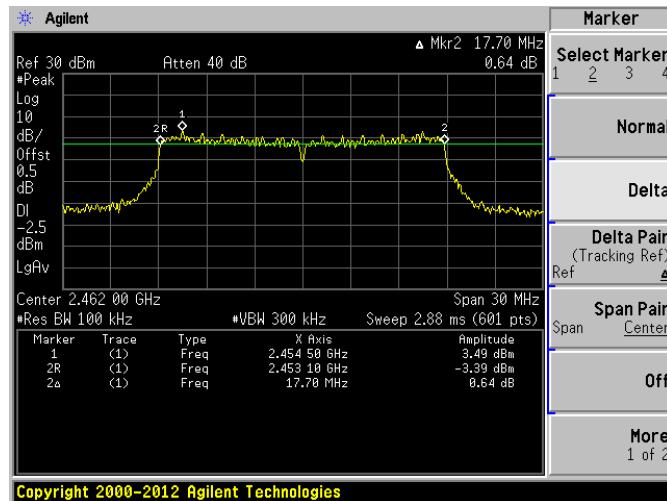
802.11n-20MHz LOW CHANNEL



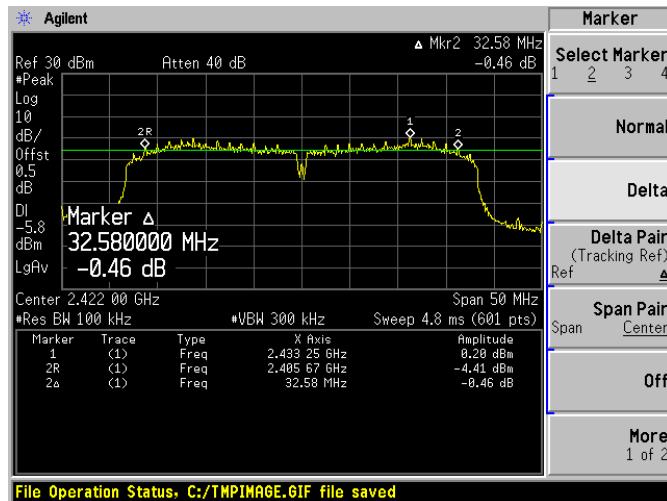
802.11 n-20MHz MID CHANNEL



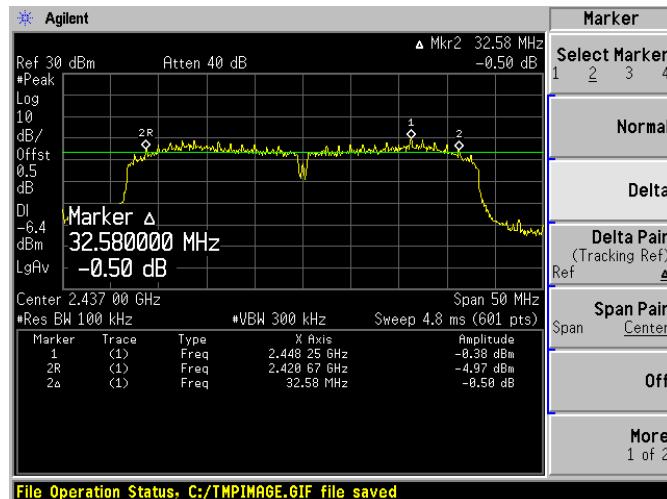
802.11n-20MHz HIGH CHANNEL



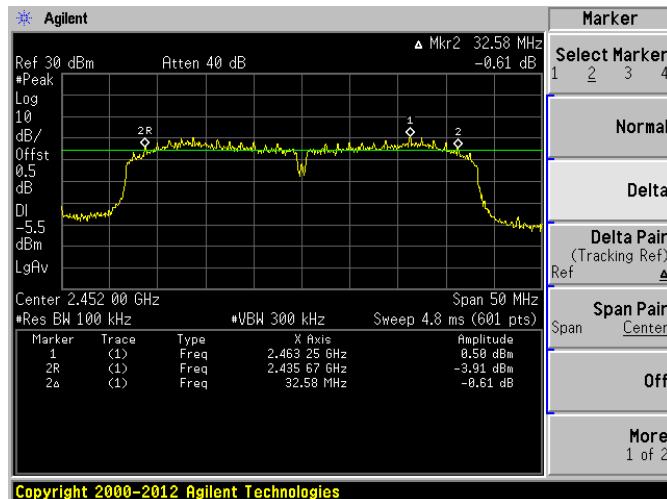
802.11n-40MHz LOW CHANNEL



802.11n-40MHz MID CHANNEL



802.11n-40MHz HIGH CHANNEL



A.3 Conducted Spurious Emissions

Test Data (ANT 0)

802.11b Mode:

| Channel | Measured Max. Out of Band Emission (dBm) | Limit (dBm) | | Verdict |
|---------|--|---------------|-------------------------|---------|
| | | Carrier Level | Calculated 20 dBc Limit | |
| Low | -45.18 | 4.74 | -15.3 | PASS |
| Middle | -46.22 | 5.68 | -14.3 | PASS |
| High | -46.60 | 8.02 | -12.0 | PASS |

802.11g Mode:

| Channel | Measured Max. Out of Band Emission (dBm) | Limit (dBm) | | Verdict |
|---------|--|---------------|-------------------------|---------|
| | | Carrier Level | Calculated 20 dBc Limit | |
| Low | -47.93 | 0.68 | -19.3 | PASS |
| Middle | -48.94 | 1.31 | -18.7 | PASS |
| High | -48.60 | 3.91 | -16.1 | PASS |

802.11n-20MHz Mode:

| Channel | Measured Max. Out of Band Emission (dBm) | Limit (dBm) | | Verdict |
|---------|--|---------------|-------------------------|---------|
| | | Carrier Level | Calculated 20 dBc Limit | |
| Low | -48.52 | 1.02 | -19.0 | PASS |
| Middle | -48.55 | 1.27 | -18.7 | PASS |
| High | -48.39 | 3.92 | -16.1 | PASS |

802.11n-40MHz Mode:

| Channel | Measured Max. Out of Band Emission (dBm) | Limit (dBm) | | Verdict |
|---------|--|---------------|-------------------------|---------|
| | | Carrier Level | Calculated 20 dBc Limit | |
| Low | -52.71 | -1.09 | -21.1 | PASS |
| Middle | -51.80 | -0.79 | -20.8 | PASS |
| High | -53.14 | 0.40 | -19.6 | PASS |

Test Data (ANT 1)

802.11b Mode:

| Channel | Measured Max. Out of Band Emission (dBm) | Limit (dBm) | | Verdict |
|---------|--|---------------|-------------------------|---------|
| | | Carrier Level | Calculated 20 dBc Limit | |
| Low | -33.55 | 6.82 | -13.2 | PASS |
| Middle | -34.25 | 5.62 | -14.4 | PASS |
| High | -32.02 | 7.03 | -13.0 | PASS |

802.11g Mode:

| Channel | Measured Max. Out of Band Emission (dBm) | Limit (dBm) | | Verdict |
|---------|--|---------------|-------------------------|---------|
| | | Carrier Level | Calculated 20 dBc Limit | |
| Low | -44.38 | 2.99 | -17.0 | PASS |
| Middle | -45.69 | 1.49 | -18.5 | PASS |
| High | -42.60 | 3.35 | -16.6 | PASS |

802.11n-20MHz Mode:

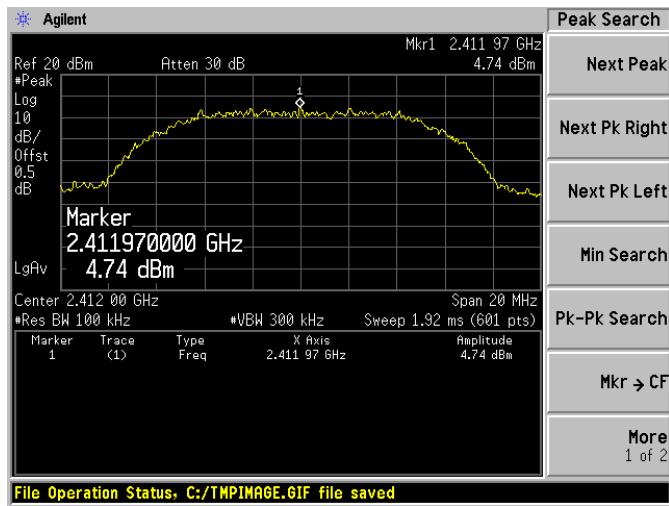
| Channel | Measured Max. Out of Band Emission (dBm) | Limit (dBm) | | Verdict |
|---------|--|---------------|-------------------------|---------|
| | | Carrier Level | Calculated 20 dBc Limit | |
| Low | -47.55 | 3.03 | -17.0 | PASS |
| Middle | -48.63 | 1.46 | -18.5 | PASS |
| High | -41.01 | 3.38 | -16.6 | PASS |

802.11n-40MHz Mode:

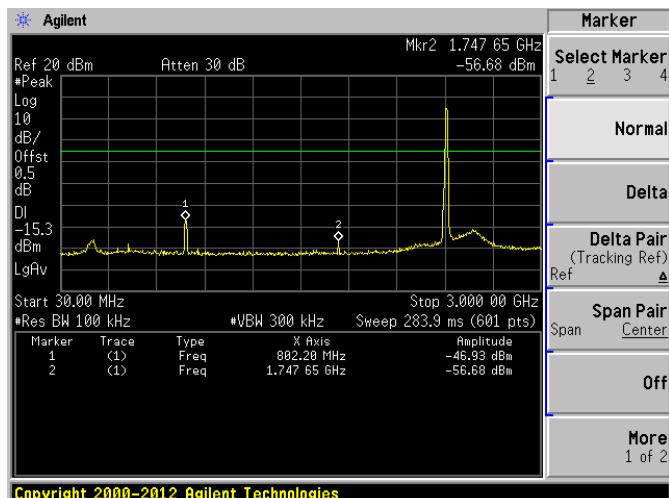
| Channel | Measured Max. Out of Band Emission (dBm) | Limit (dBm) | | Verdict |
|---------|--|---------------|-------------------------|---------|
| | | Carrier Level | Calculated 20 dBc Limit | |
| Low | -45.93 | 0.04 | -20 | PASS |
| Middle | -45.05 | -0.61 | -20.6 | PASS |
| High | -44.48 | 0.40 | -19.6 | PASS |

Test Plots (ANT 0)

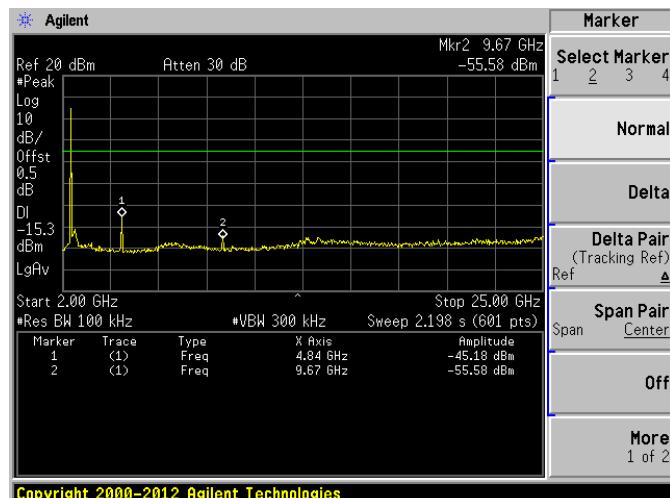
802.11b LOW CHANNEL CARRIER LEVEL



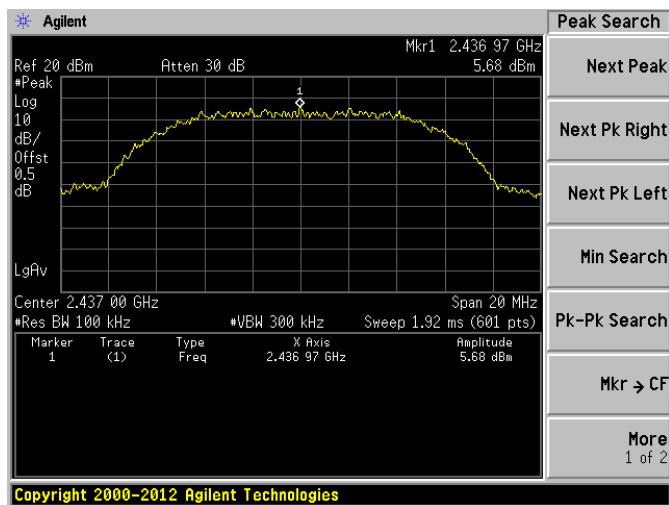
802.11b LOW CHANNEL, SPURIOUS 30MHz~3GHz



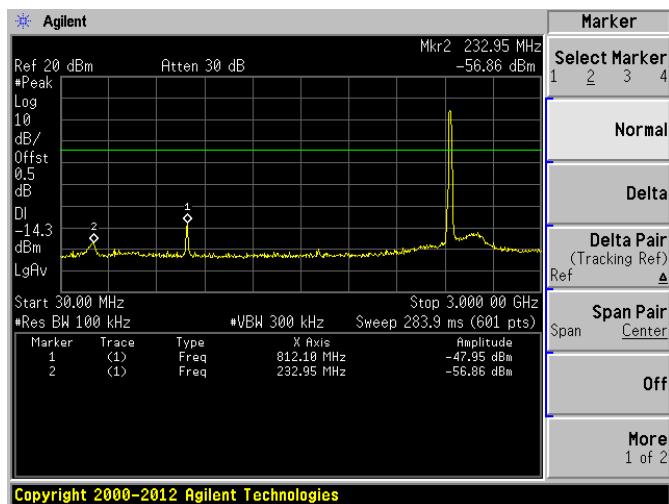
802.11b LOW CHANNEL, SPURIOUS 2GHz~25GHz



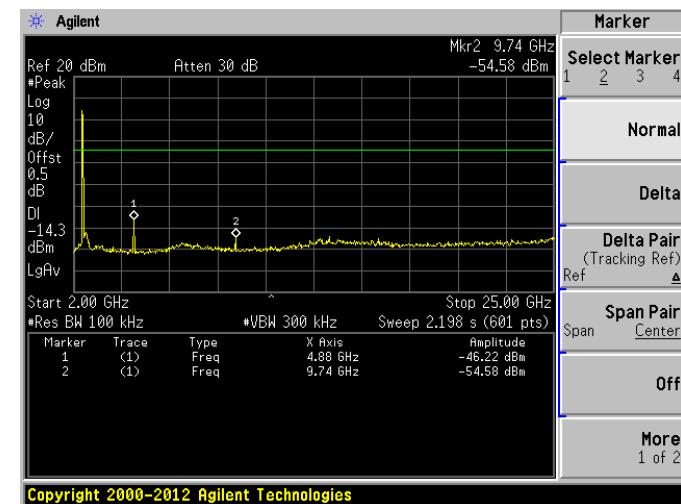
802.11b MID CHANNEL CARRIER LEVEL



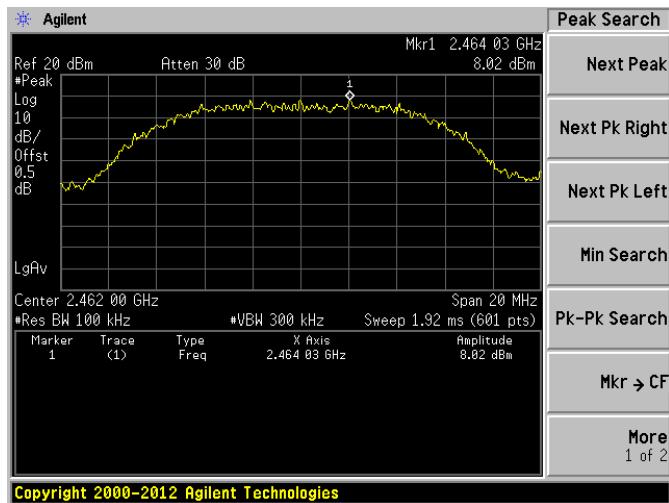
802.11b MID CHANNEL, SPURIOUS 30MHz~3GHz



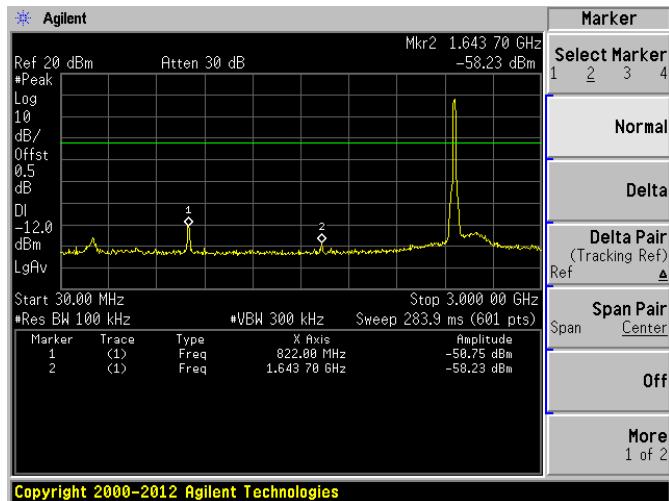
802.11b MID CHANNEL, SPURIOUS 2GHz~25GHz



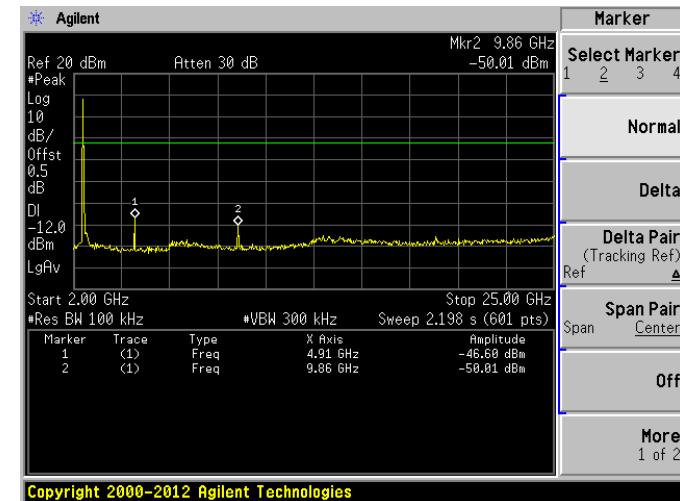
802.11b HIGH CHANNEL CARRIER LEVEL



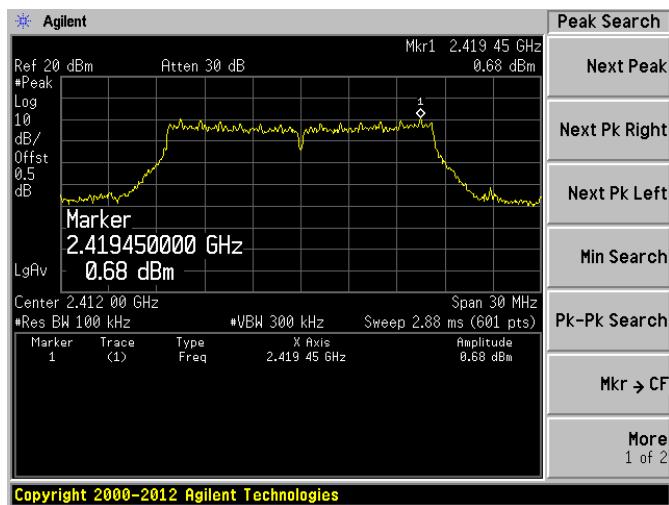
802.11b HIGH CHANNEL, SPURIOUS 30MHz~3GHz



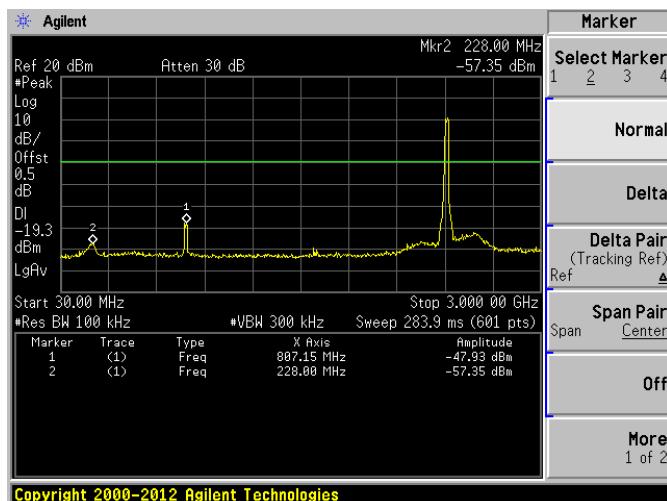
802.11b HIGH CHANNEL, SPURIOUS 2GHz~25GHz



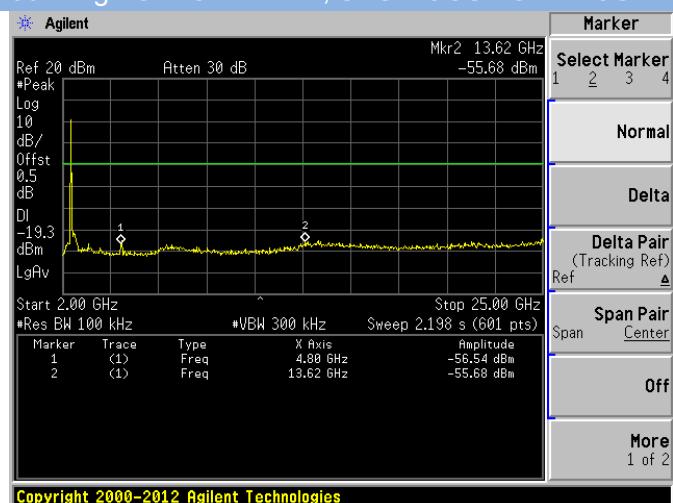
802.11g LOW CHANNEL CARRIER LEVEL



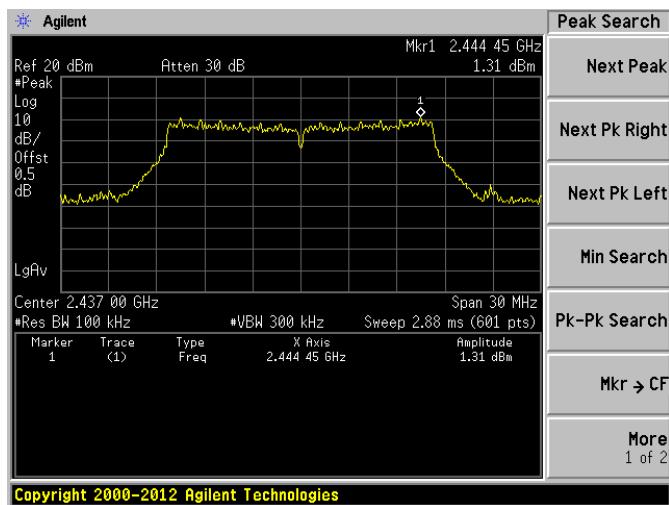
802.11g LOW CHANNEL, SPURIOUS 30MHz~3GHz



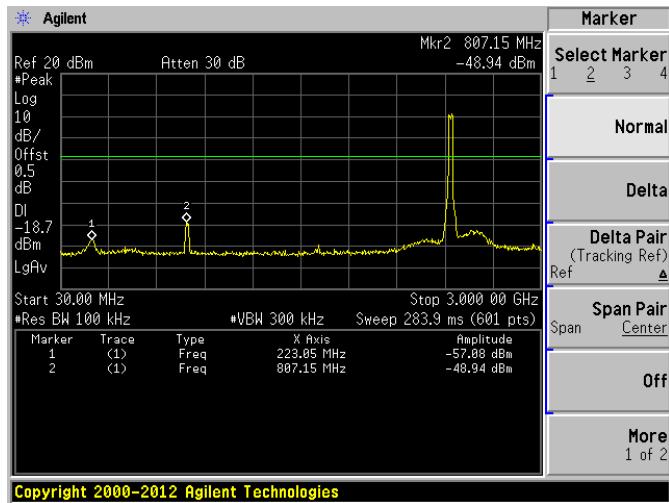
802.11g LOW CHANNEL, SPURIOUS 2GHz~25GHz



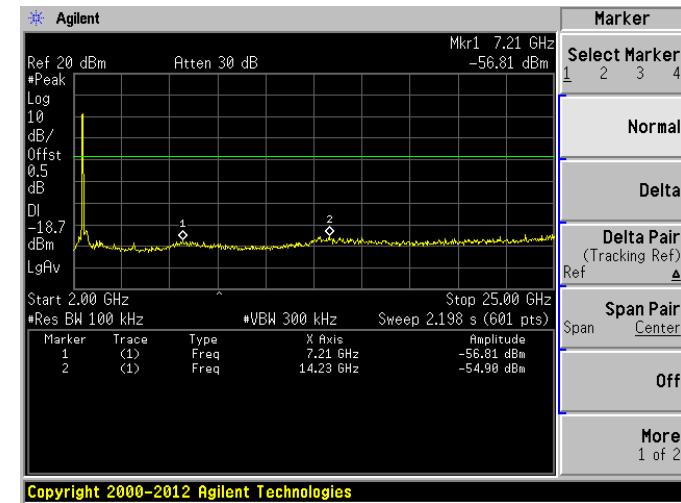
802.11g MID CHANNEL CARRIER LEVEL



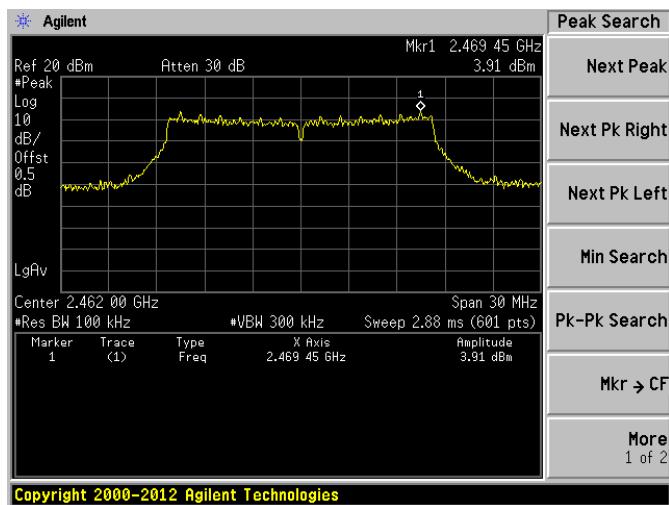
802.11g MID CHANNEL, SPURIOUS 30MHz~3GHz



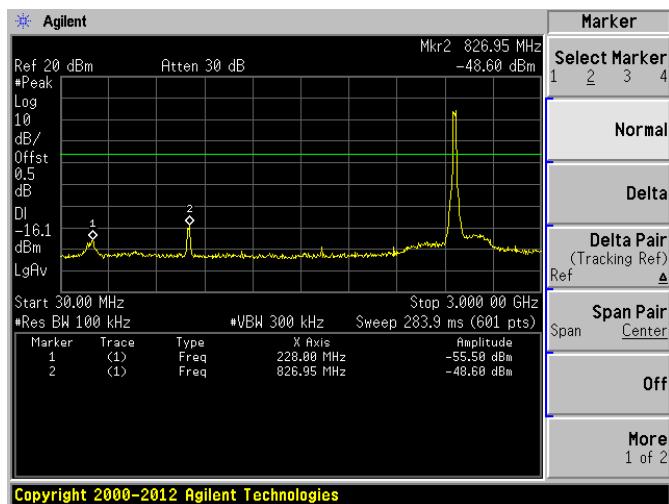
802.11g MID CHANNEL, SPURIOUS 2GHz~25GHz



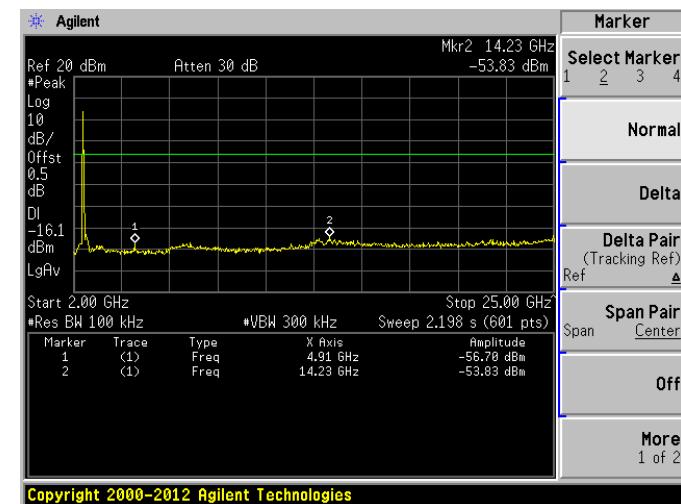
802.11g HIGH CHANNEL CARRIER LEVEL



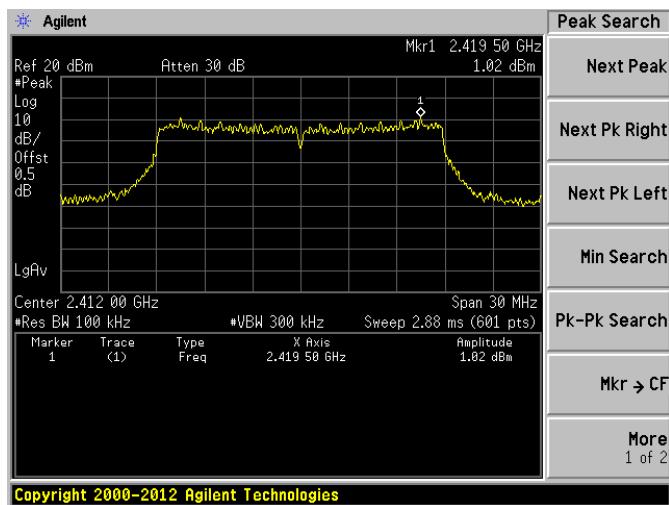
802.11g HIGH CHANNEL, SPURIOUS 30MHz~3GHz



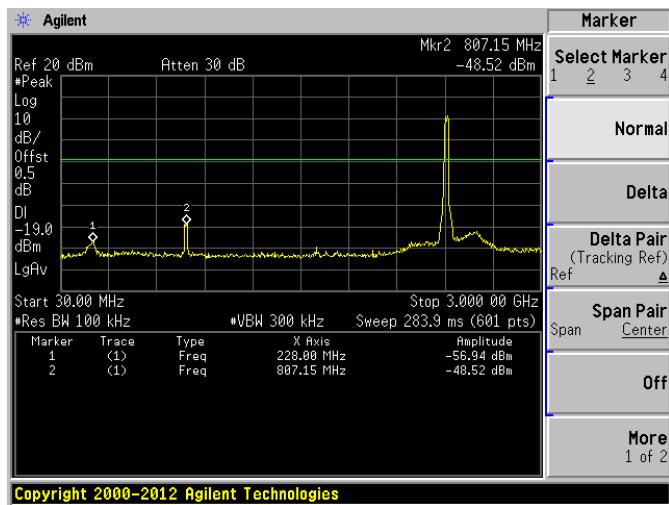
802.11g HIGH CHANNEL, SPURIOUS 2GHz~25GHz



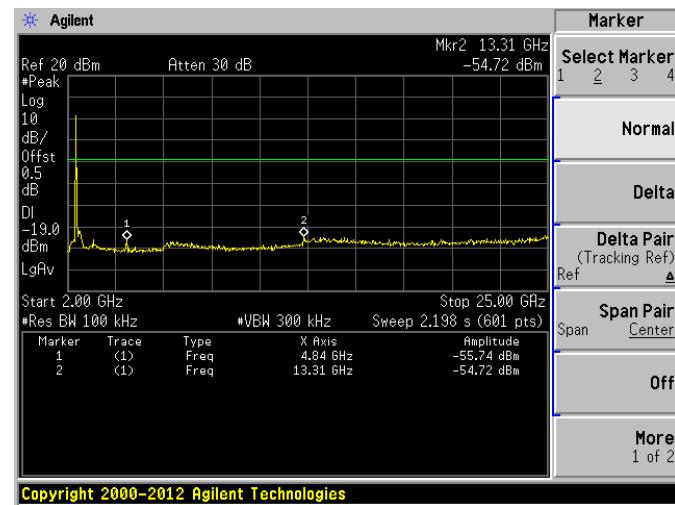
802.11n 20MHz LOW CHANNEL CARRIER LEVEL



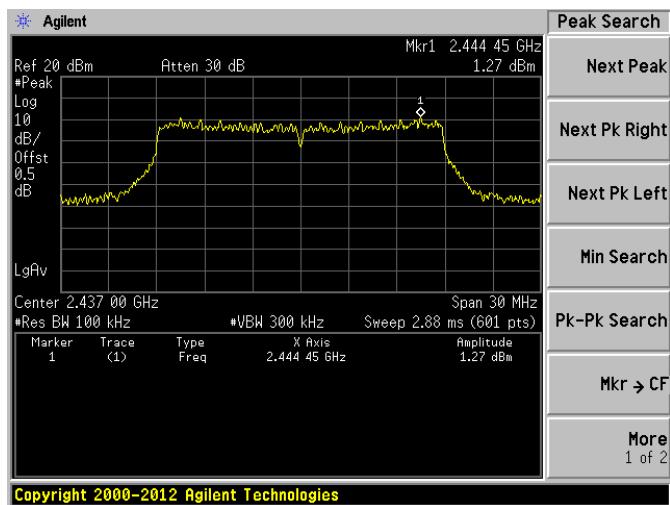
802.11 n 20MHz LOW CHANNEL, SPURIOUS 30MHz~3GHz



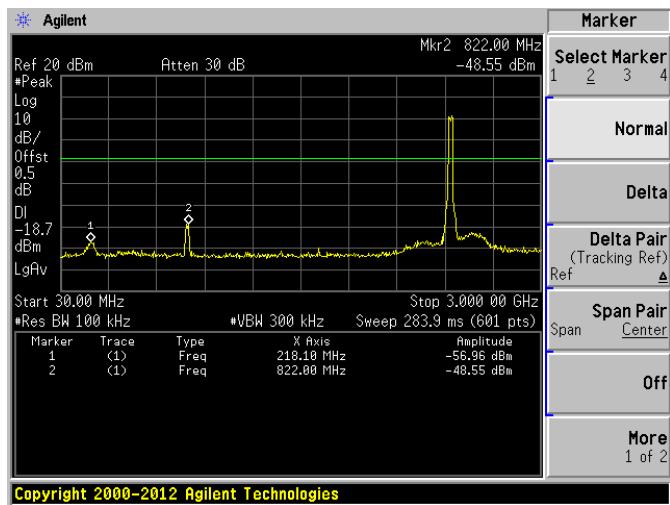
802.11 n 20MHz LOW CHANNEL, SPURIOUS 2GHz~25GHz



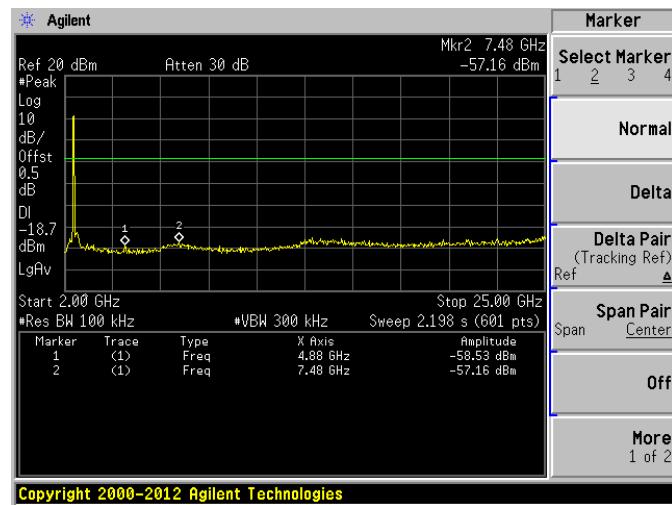
802.11 n 20MHz MID CHANNEL CARRIER LEVEL



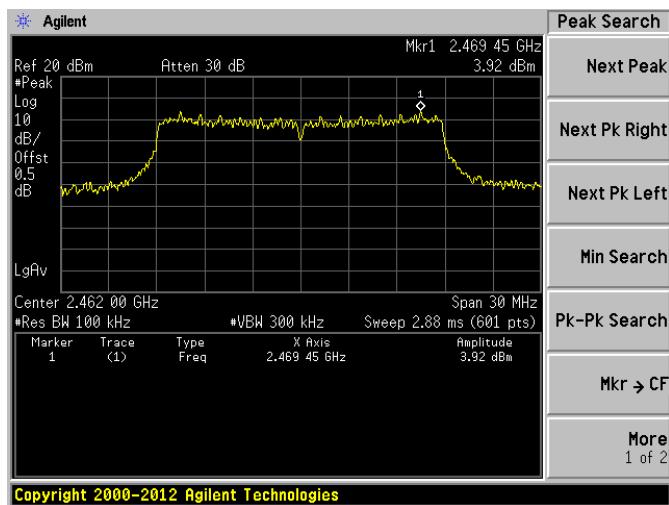
802.11 n 20MHz MID CHANNEL, SPURIOUS 30MHz~3GHz



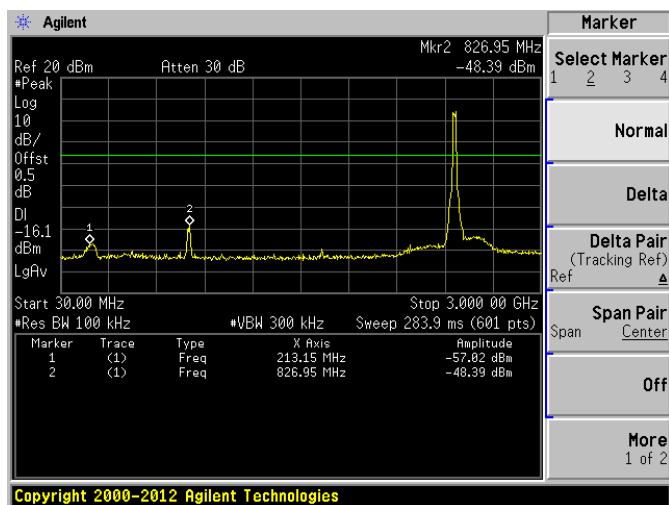
802.11 n 20MHz MID CHANNEL, SPURIOUS 2GHz~25GHz



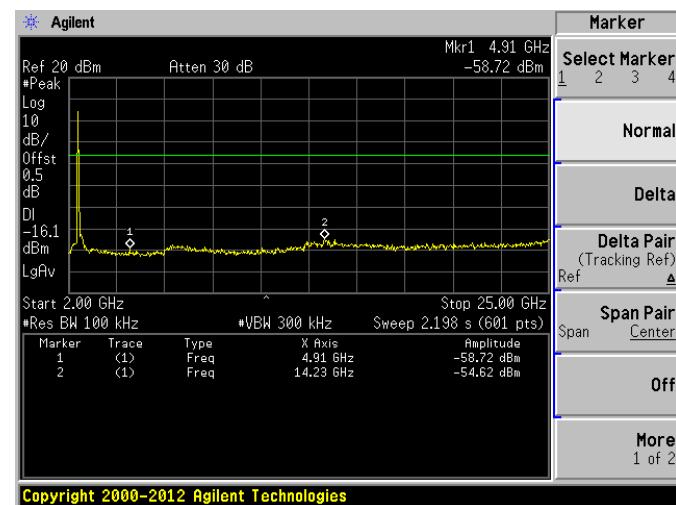
802.11 n 20MHz HIGH CHANNEL CARRIER LEVEL



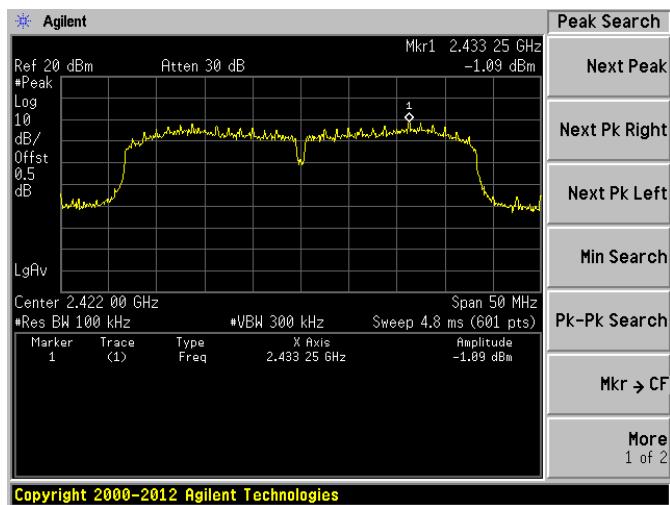
802.11 n 20MHz HIGH CHANNEL, SPURIOUS 30MHz~3GHz



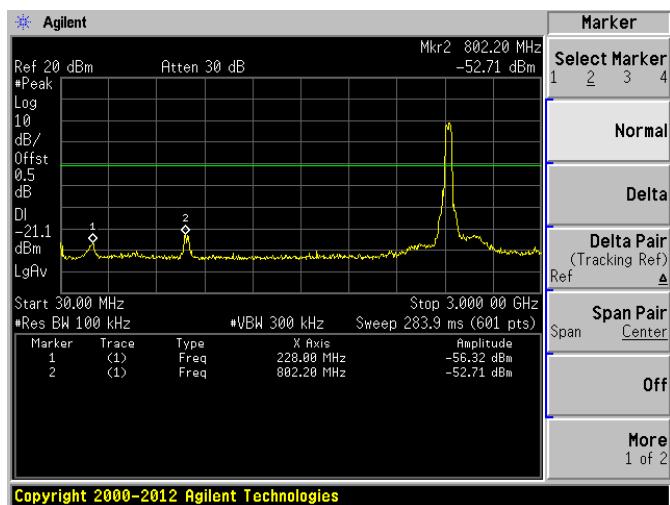
802.11 n 20MHz HIGH CHANNEL, SPURIOUS 2GHz~25GHz



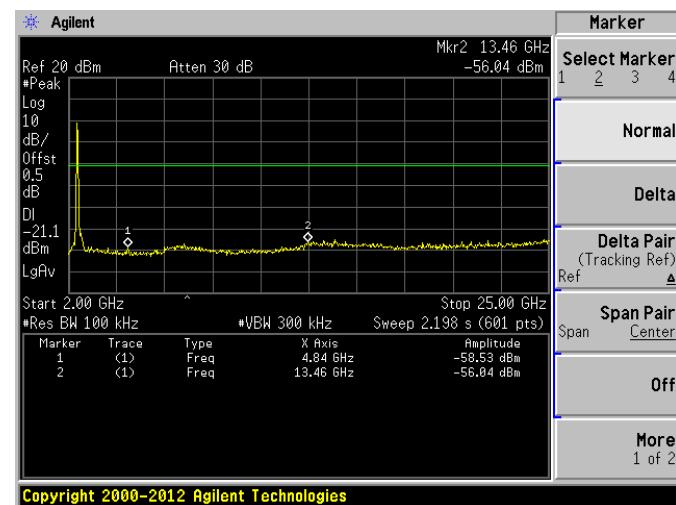
802.11n 40MHz LOW CHANNEL CARRIER LEVEL



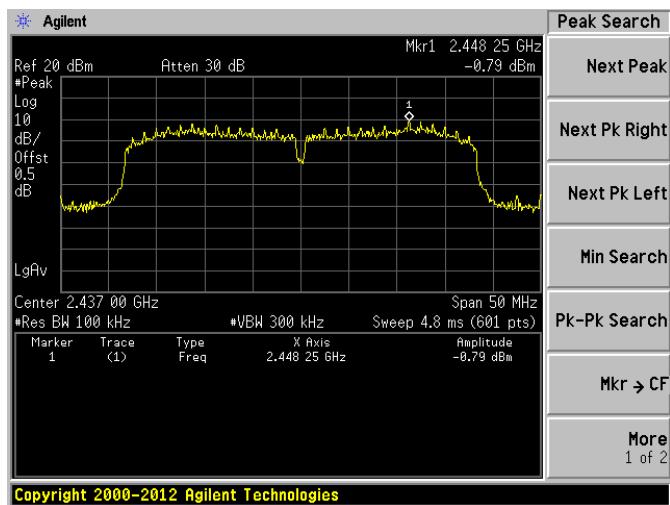
802.11 n 40MHz LOW CHANNEL, SPURIOUS 30MHz~3GHz



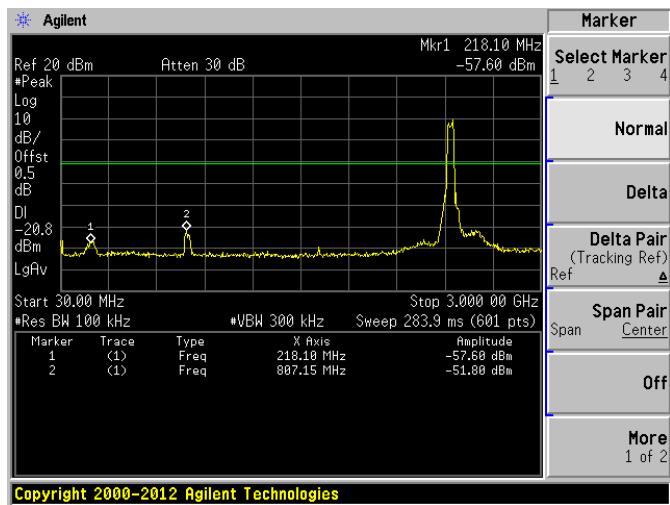
802.11 n 40MHz LOW CHANNEL, SPURIOUS 2GHz~25GHz



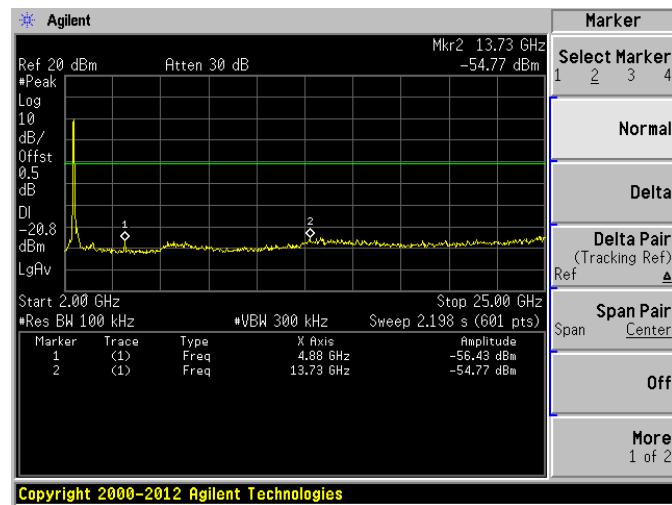
802.11 n 40MHz MID CHANNEL CARRIER LEVEL



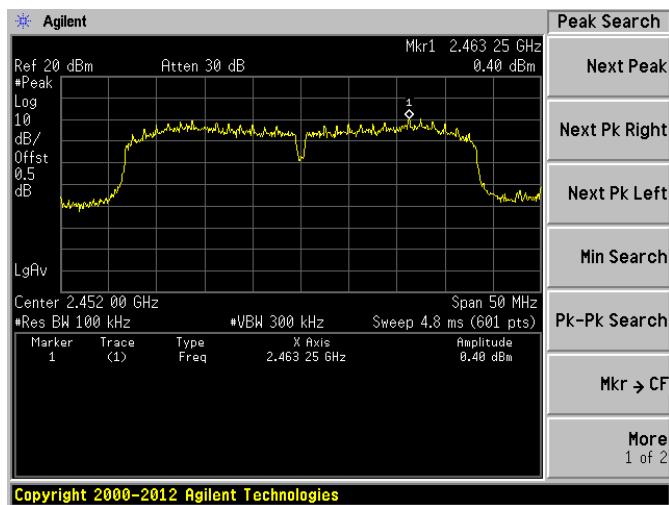
802.11 n 40MHz MID CHANNEL, SPURIOUS 30MHz~3GHz



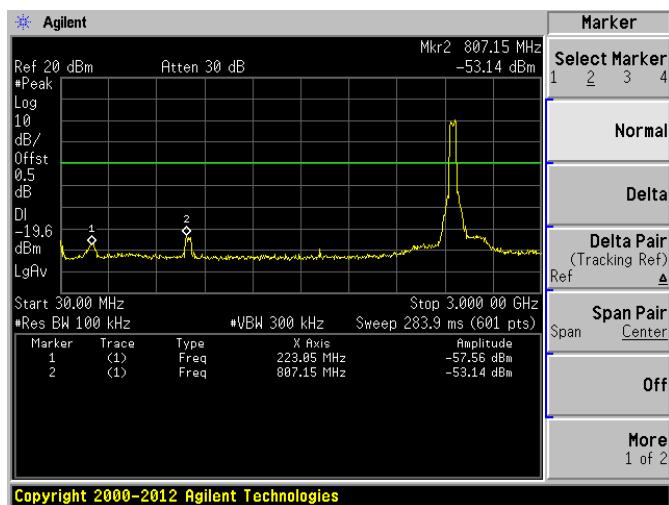
802.11 n 40MHz MID CHANNEL, SPURIOUS 2GHz~25GHz



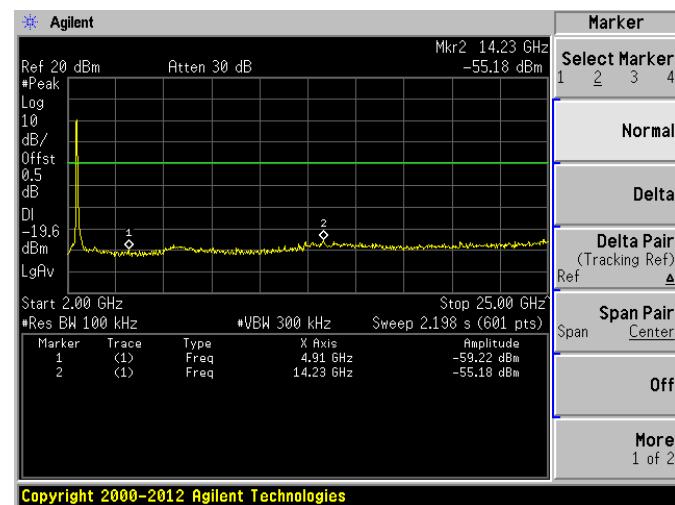
802.11 n 40MHz HIGH CHANNEL CARRIER LEVEL



802.11 n 40MHz HIGH CHANNEL, SPURIOUS 30MHz~3GHz

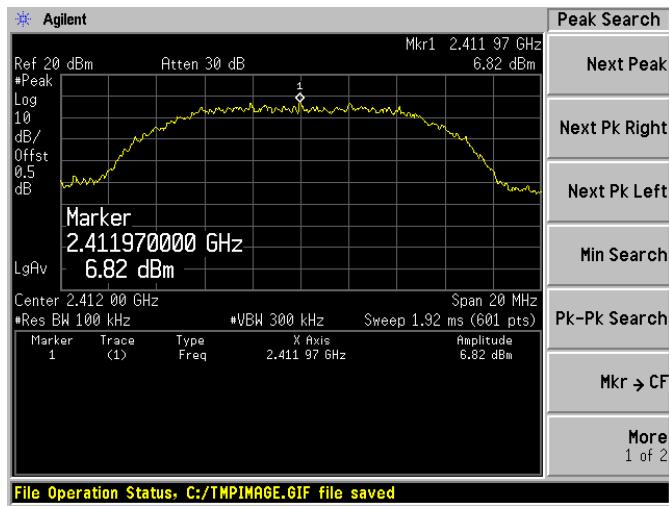


802.11 n 40MHz HIGH CHANNEL, SPURIOUS 2GHz~25GHz

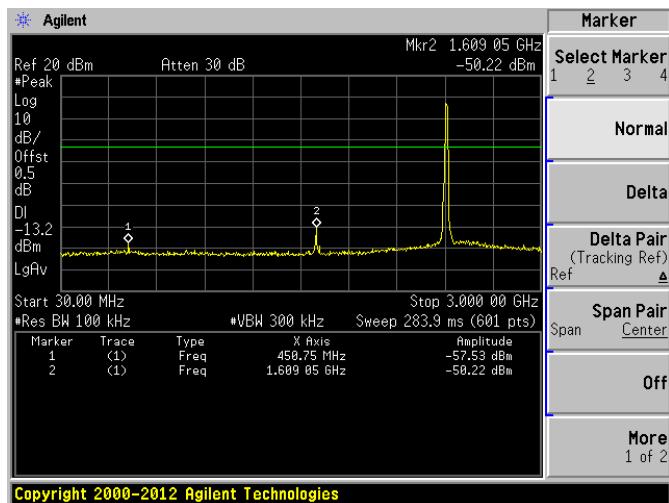


Test Plots (ANT 1)

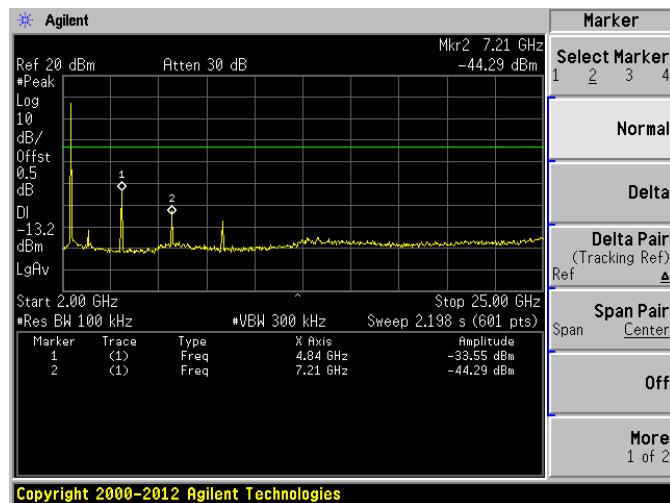
802.11b LOW CHANNEL CARRIER LEVEL



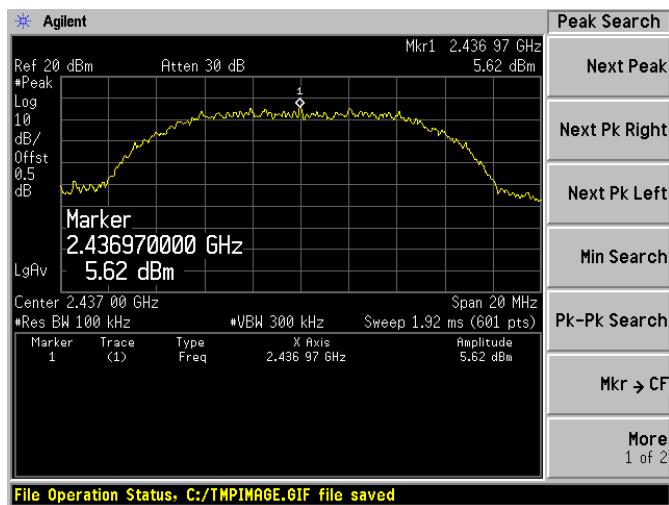
802.11b LOW CHANNEL, SPURIOUS 30MHz~3GHz



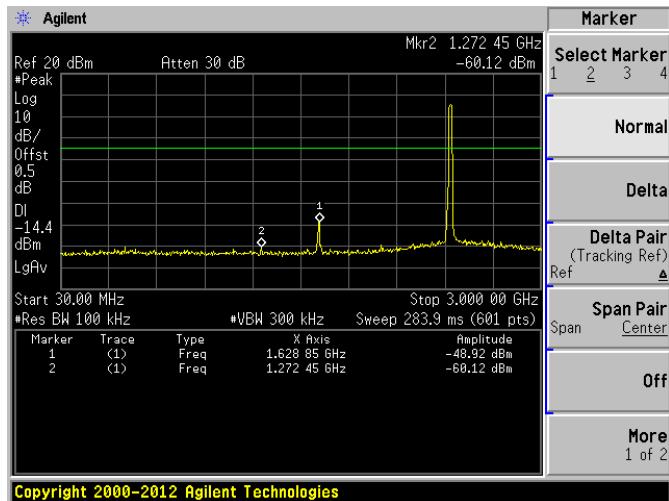
802.11b LOW CHANNEL, SPURIOUS 2GHz~25GHz



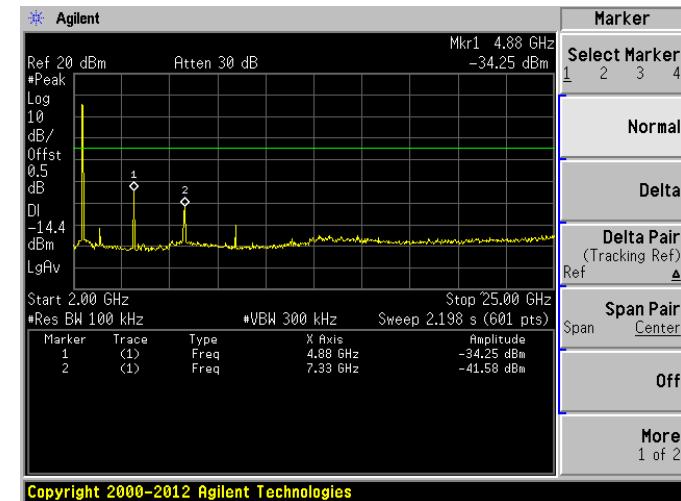
802.11b MID CHANNEL CARRIER LEVEL



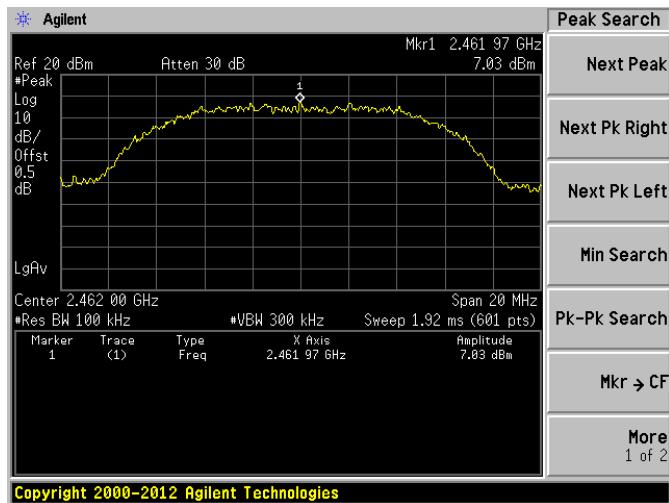
802.11b MID CHANNEL, SPURIOUS 30MHz~3GHz



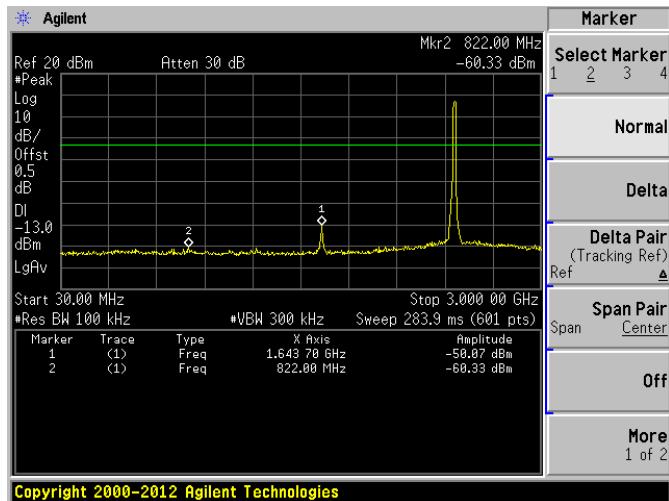
802.11b MID CHANNEL, SPURIOUS 2GHz~25GHz



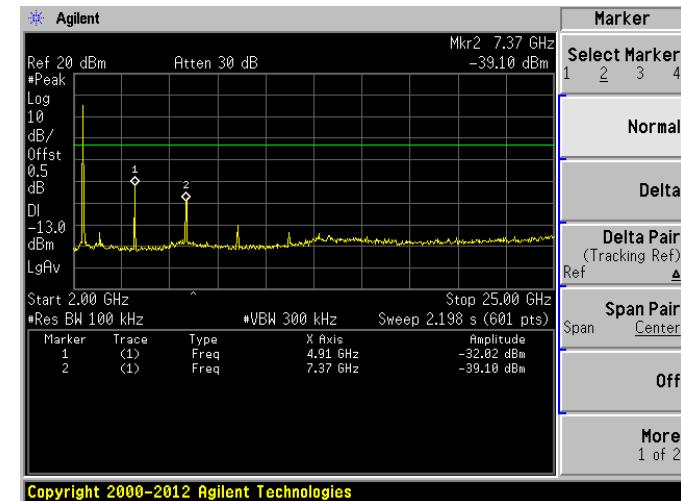
802.11b HIGH CHANNEL CARRIER LEVEL



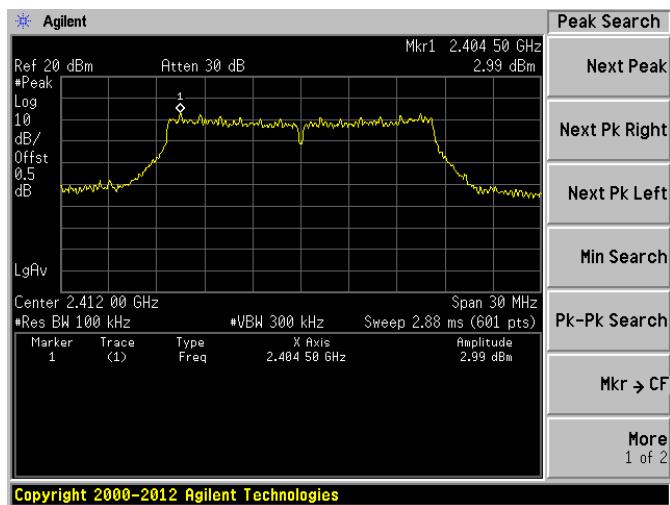
802.11b HIGH CHANNEL, SPURIOUS 30MHz~3GHz



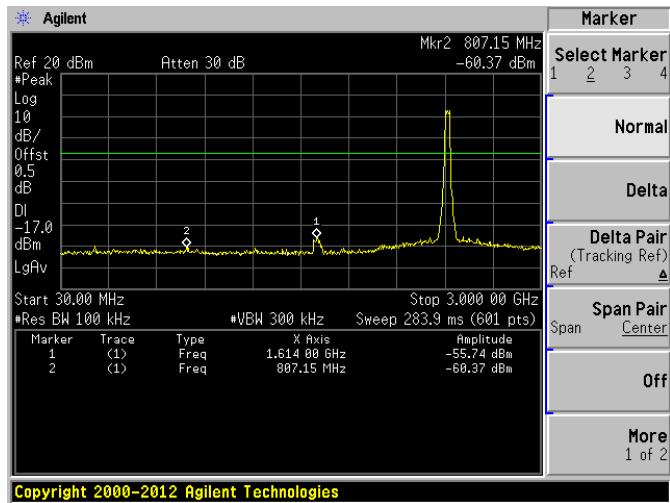
802.11b HIGH CHANNEL, SPURIOUS 2GHz~25GHz



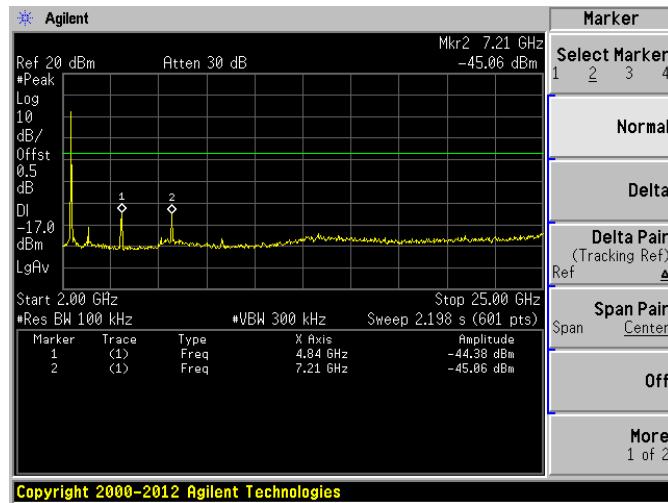
802.11g LOW CHANNEL CARRIER LEVEL



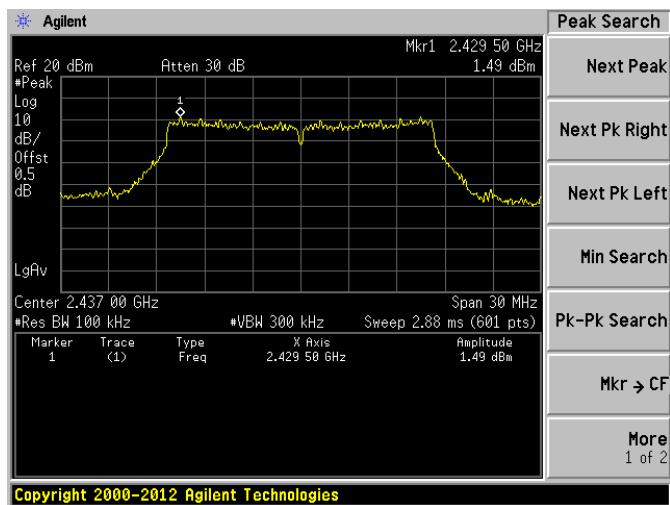
802.11g LOW CHANNEL, SPURIOUS 30MHz~3GHz



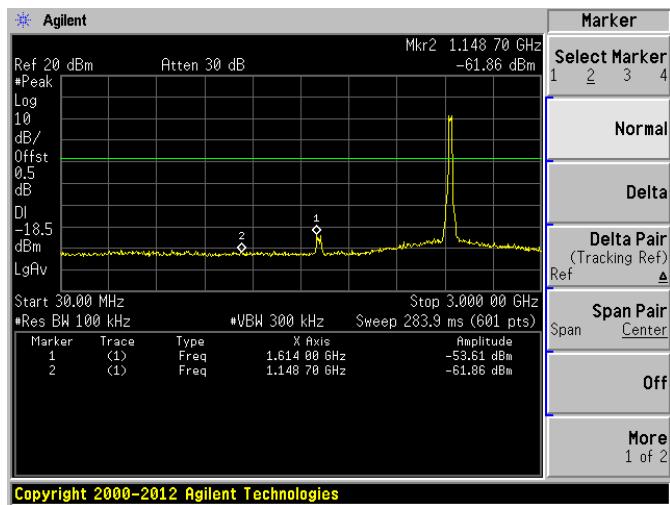
802.11g LOW CHANNEL, SPURIOUS 2GHz~25GHz



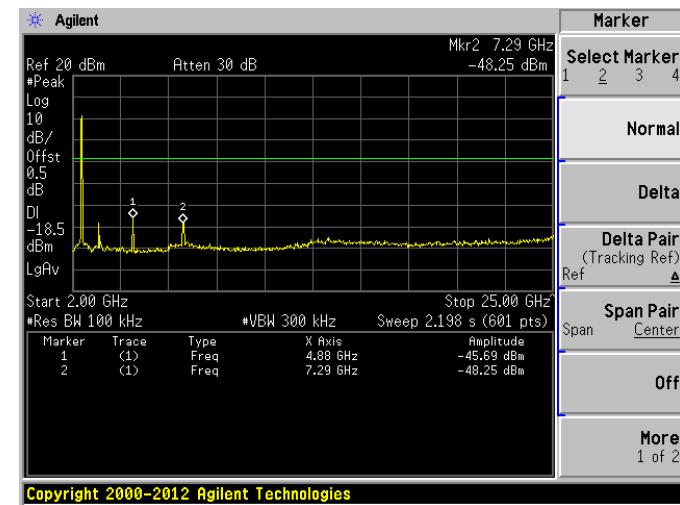
802.11g MID CHANNEL CARRIER LEVEL



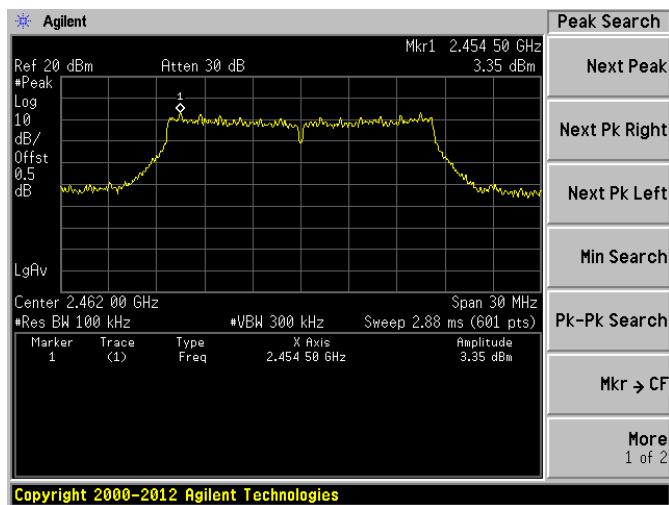
802.11g MID CHANNEL, SPURIOUS 30MHz~3GHz



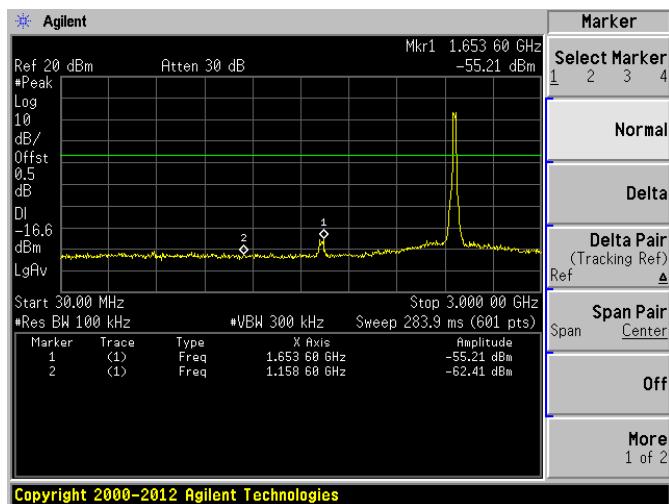
802.11g MID CHANNEL, SPURIOUS 2GHz~25GHz



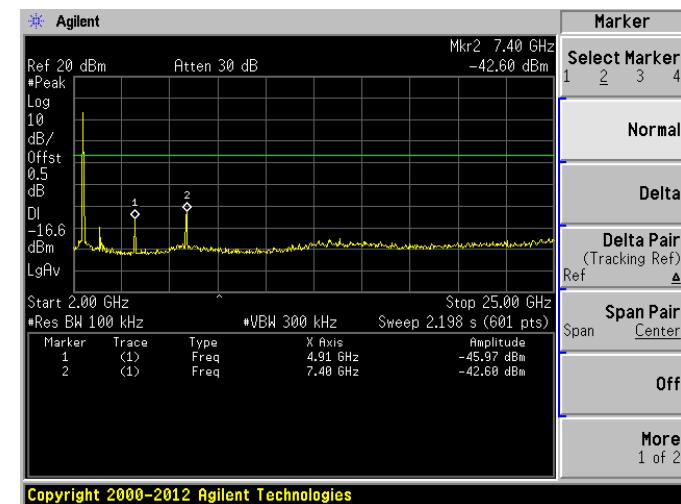
802.11g HIGH CHANNEL CARRIER LEVEL



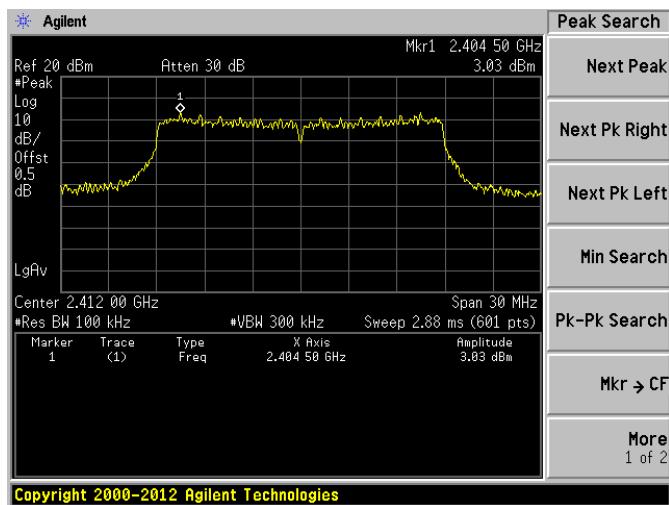
802.11g HIGH CHANNEL, SPURIOUS 30MHz~3GHz



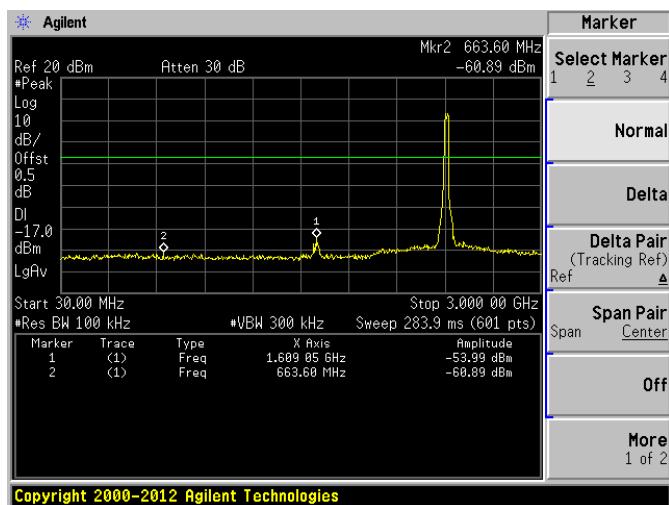
802.11g HIGH CHANNEL, SPURIOUS 2GHz~25GHz



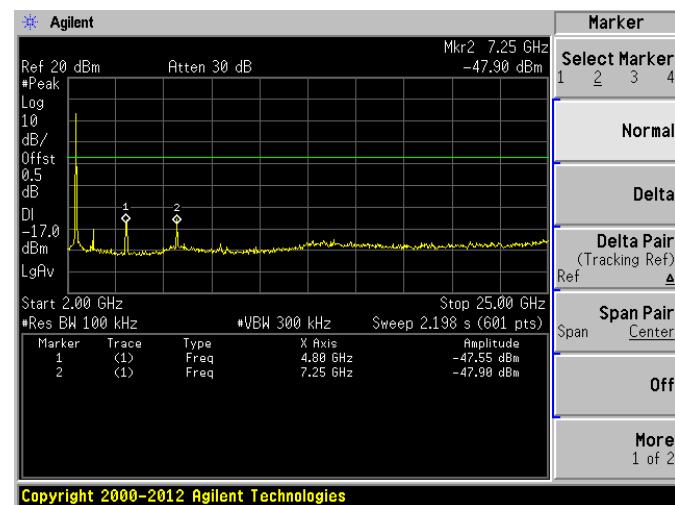
802.11n 20MHz LOW CHANNEL CARRIER LEVEL



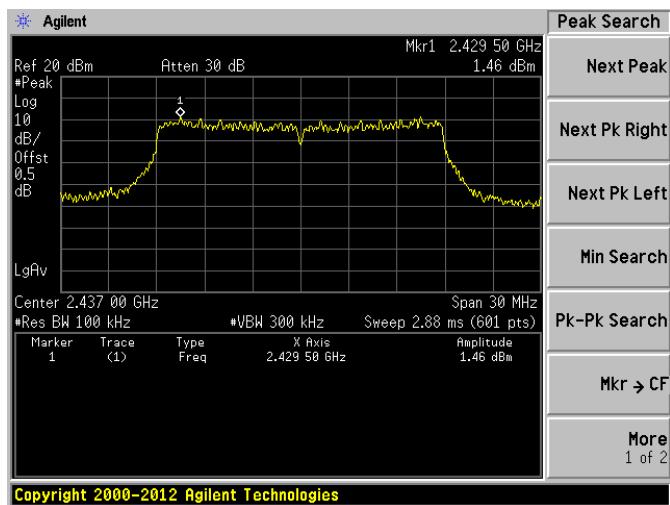
802.11 n 20MHz LOW CHANNEL, SPURIOUS 30MHz~3GHz



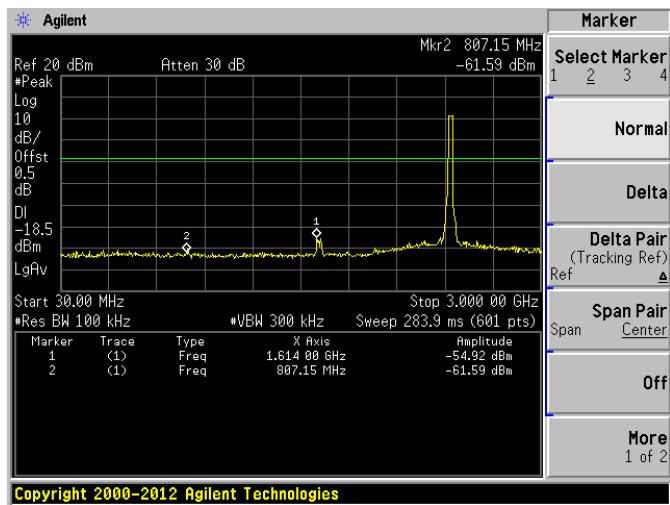
802.11 n 20MHz LOW CHANNEL, SPURIOUS 2GHz~25GHz



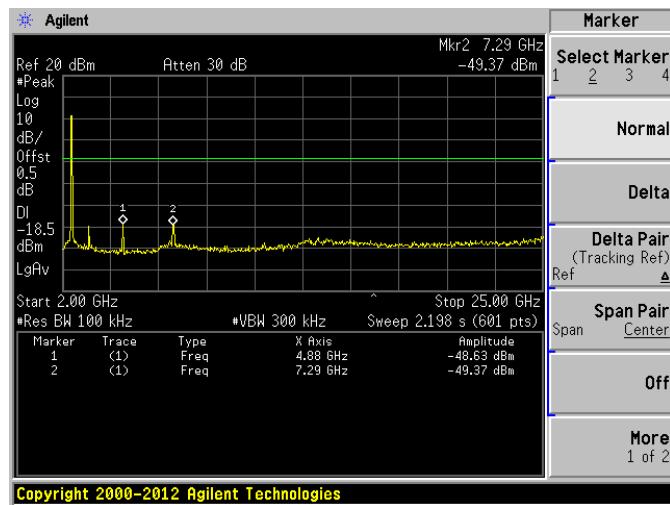
802.11 n 20MHz MID CHANNEL CARRIER LEVEL



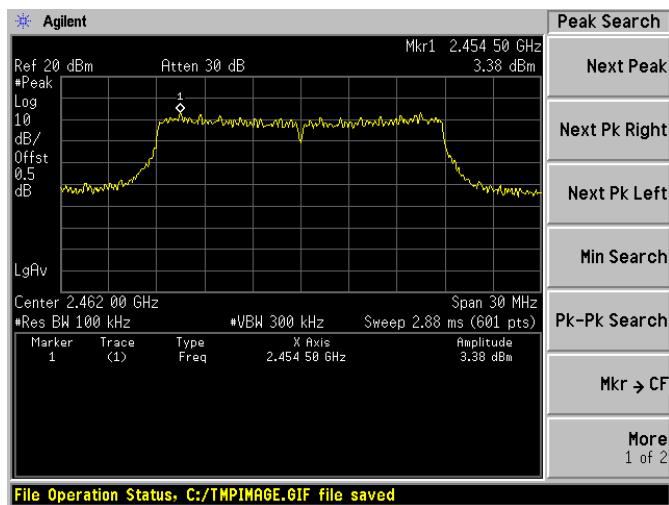
802.11 n 20MHz MID CHANNEL, SPURIOUS 30MHz~3GHz



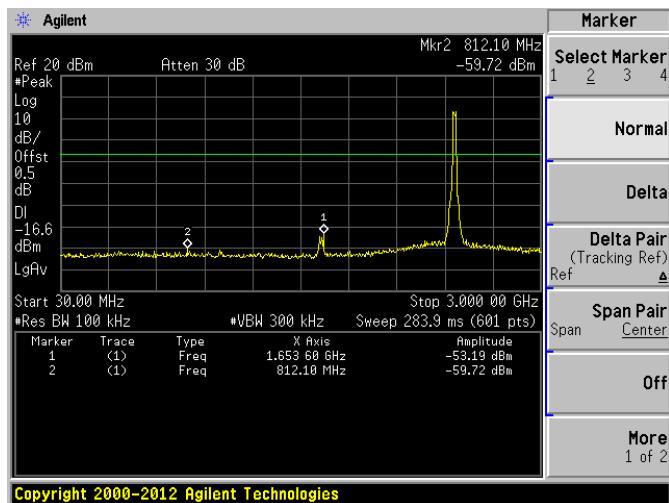
802.11 n 20MHz MID CHANNEL, SPURIOUS 2GHz~25GHz



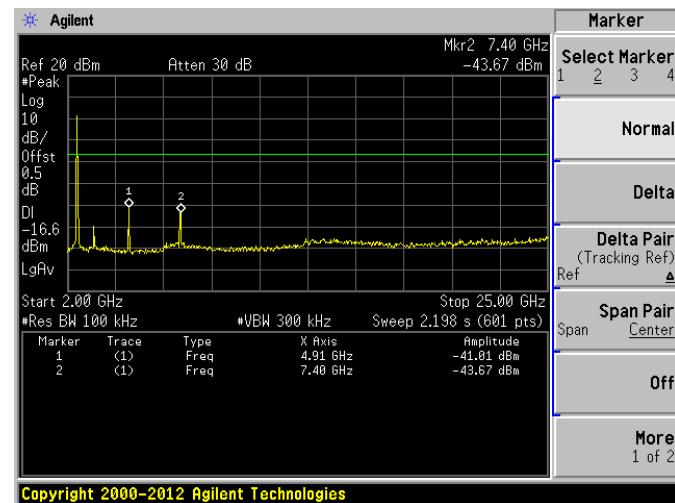
802.11 n 20MHz HIGH CHANNEL CARRIER LEVEL



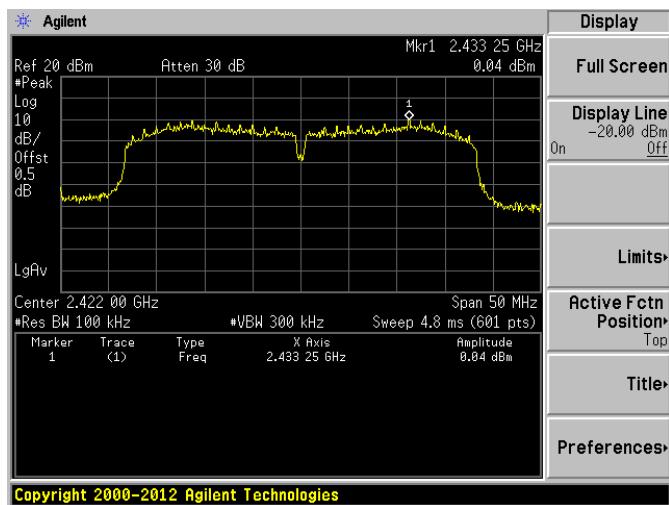
802.11 n 20MHz HIGH CHANNEL, SPURIOUS 30MHz~3GHz



802.11 n 20MHz HIGH CHANNEL, SPURIOUS 2GHz~25GHz

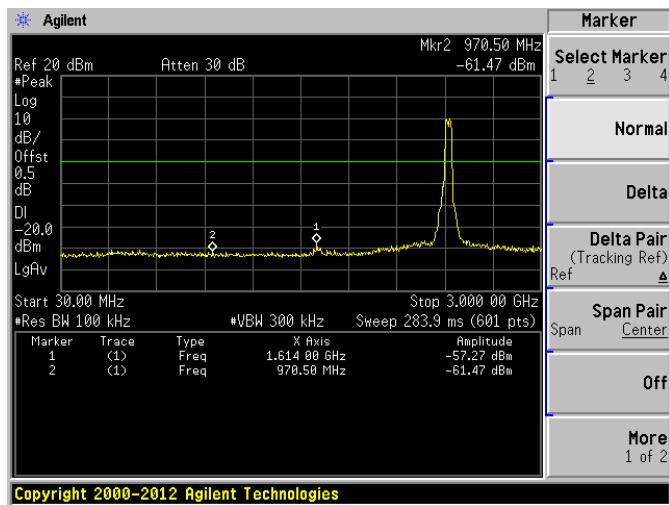


802.11n 40MHz LOW CHANNEL CARRIER LEVEL



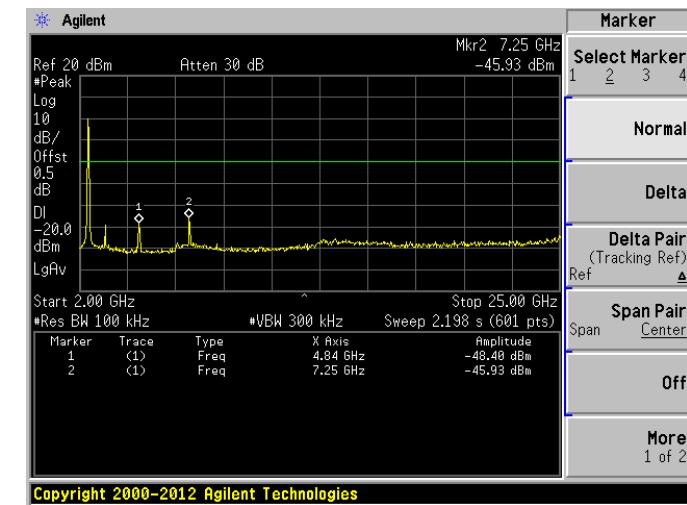
Display
Full Screen
Display Line -20.00 dBm On Off
Limits
Active Fctn Position Top
Title
Preferences

802.11 n 40MHz LOW CHANNEL, SPURIOUS 30MHz~3GHz



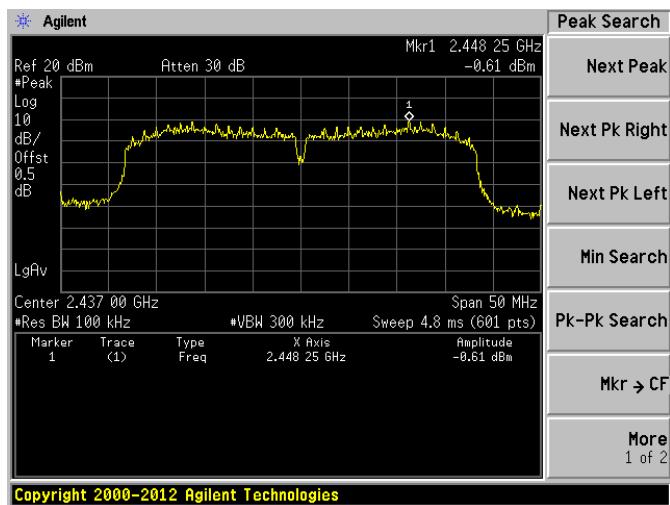
Marker
Select Marker 1 2 3 4
Normal
Delta
Delta Pair (Tracking Ref) Ref ▲
Span Pair Span Center
Off
More 1 of 2

802.11 n 40MHz LOW CHANNEL, SPURIOUS 2GHz~25GHz

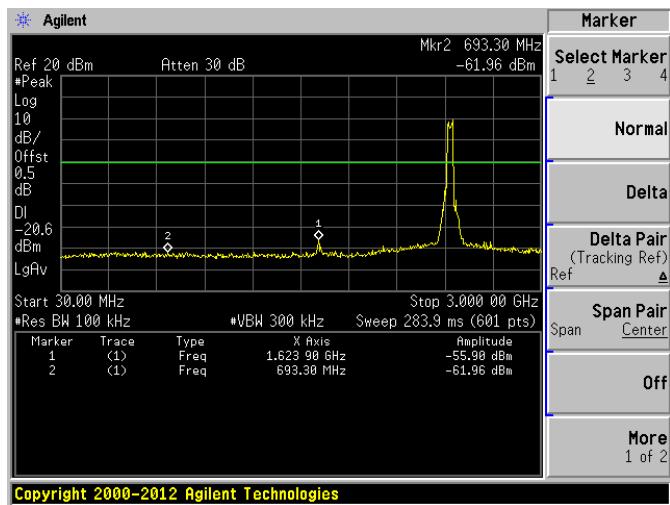


Marker
Select Marker 1 2 3 4
Normal
Delta
Delta Pair (Tracking Ref) Ref ▲
Span Pair Span Center
Off
More 1 of 2

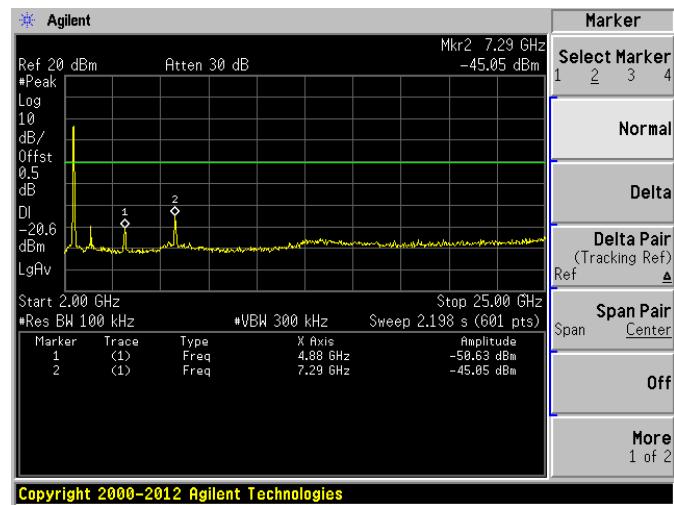
802.11 n 40MHz MID CHANNEL CARRIER LEVEL



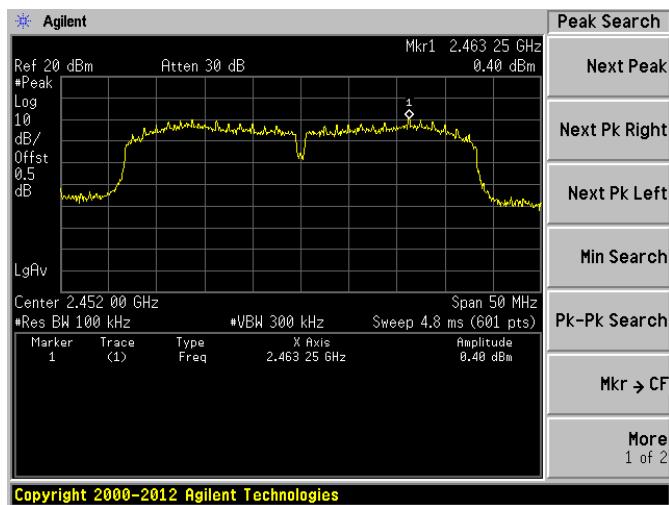
802.11 n 40MHz MID CHANNEL, SPURIOUS 30MHz~3GHz



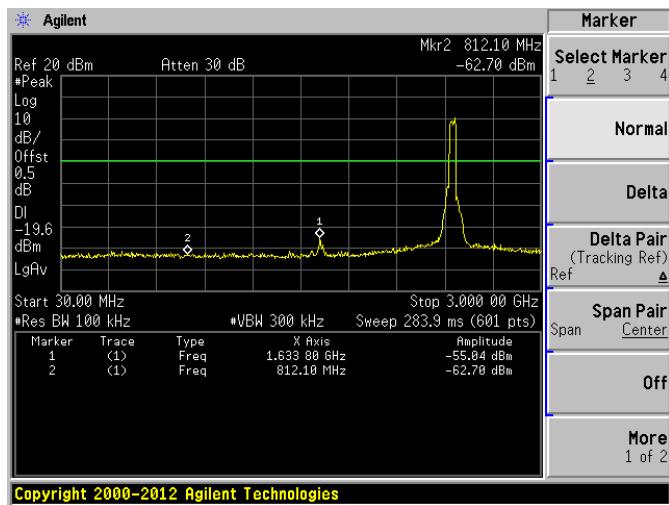
802.11 n 40MHz MID CHANNEL, SPURIOUS 2GHz~25GHz



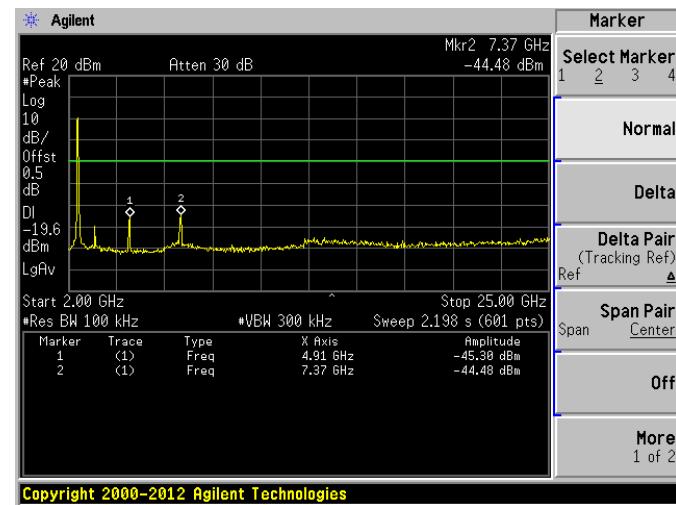
802.11 n 40MHz HIGH CHANNEL CARRIER LEVEL



802.11 n 40MHz HIGH CHANNEL, SPURIOUS 30MHz~3GHz



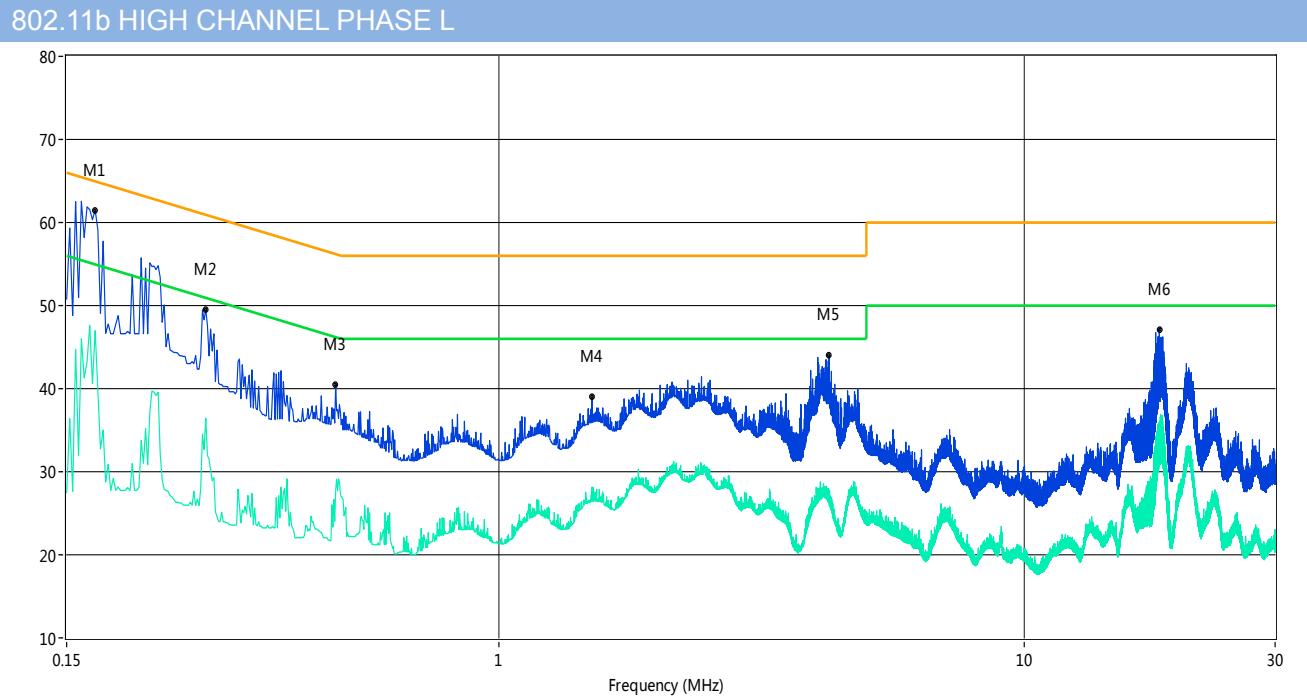
802.11 n 40MHz HIGH CHANNEL, SPURIOUS 2GHz~25GHz



A.4 Conducted Emissions

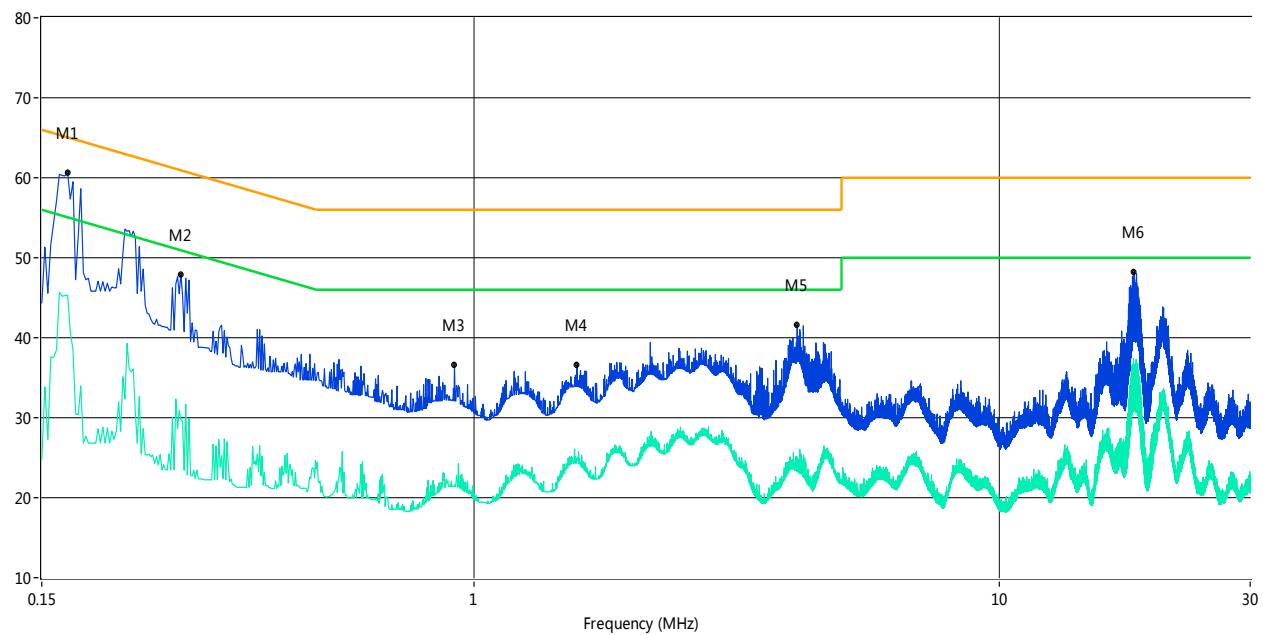
Note: All configurations have been tested, only the worst configuration (802.11b High Channel) shown here.

Test Data and Plots



| Frequency (MHz) | Peak Level (dBuV) | Q-peak Level (dBuV) | Average Level (dBuV) | Factor (dB) | QP Limit (dBuV) | AV Limit (dBuV) | Margin (dB) | Line | Verdict |
|-----------------|-------------------|---------------------|----------------------|-------------|-----------------|-----------------|-------------|--------|---------|
| 0.17 | 61.5 | -- | 47.0 | 10.00 | 65.4 | 55.4 | 8.40 | L Line | PASS |
| 0.28 | 49.5 | -- | 36.5 | 10.00 | 62.4 | 52.4 | 15.90 | L Line | PASS |
| 0.49 | 40.5 | -- | 27.8 | 10.00 | 56.3 | 46.3 | 18.50 | L Line | PASS |
| 1.50 | 39.0 | -- | 28.2 | 10.00 | 56.0 | 46.0 | 17.80 | L Line | PASS |
| 4.24 | 44.0 | -- | 27.8 | 10.00 | 56.0 | 46.0 | 18.20 | L Line | PASS |
| 18.05 | 47.2 | -- | 35.8 | 10.00 | 60.0 | 50.0 | 14.20 | L Line | PASS |

802.11b HIGH CHANNEL PHASE N



| Frequency (MHz) | Peak Level (dBuV) | Q-peak Level (dBuV) | Average Level (dBuV) | Factor (dB) | QP Limit (dBuV) | AV Limit (dBuV) | Margin (dB) | Line | Verdict |
|-----------------|-------------------|---------------------|----------------------|-------------|-----------------|-----------------|-------------|--------|---------|
| 0.17 | 60.6 | -- | 45.3 | 10.00 | 65.5 | 55.5 | 10.20 | N Line | PASS |
| 0.28 | 47.9 | -- | 29.8 | 10.00 | 62.4 | 52.4 | 22.60 | N Line | PASS |
| 0.92 | 36.6 | -- | 21.3 | 10.00 | 56.0 | 46.0 | 24.70 | N Line | PASS |
| 1.57 | 36.6 | -- | 24.6 | 10.00 | 56.0 | 46.0 | 21.40 | N Line | PASS |
| 4.12 | 41.6 | -- | 25.1 | 10.00 | 56.0 | 46.0 | 20.90 | N Line | PASS |
| 18.02 | 48.2 | -- | 35.6 | 10.00 | 60.0 | 50.0 | 14.40 | N Line | PASS |

A.5 Radiated Emission

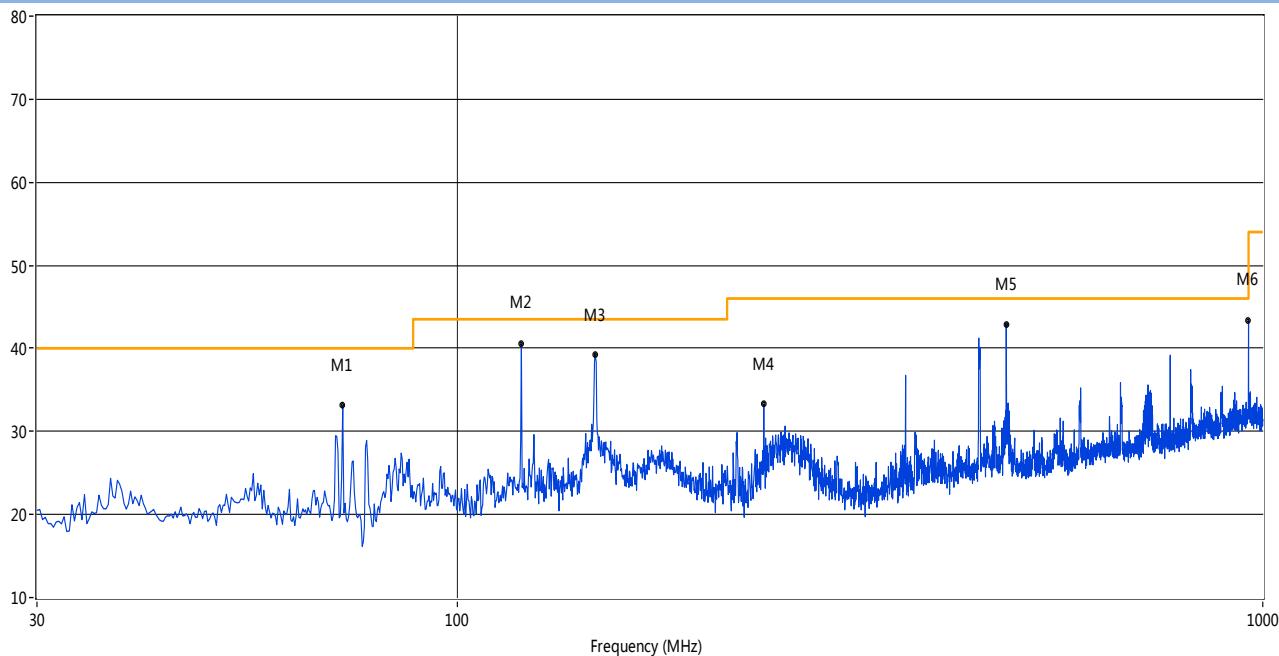
Note 1: The symbol of “--” in the table which means not application.

Note 2: For the test data above 1GHz, According the ANSI C63.4-2014, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 3: The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

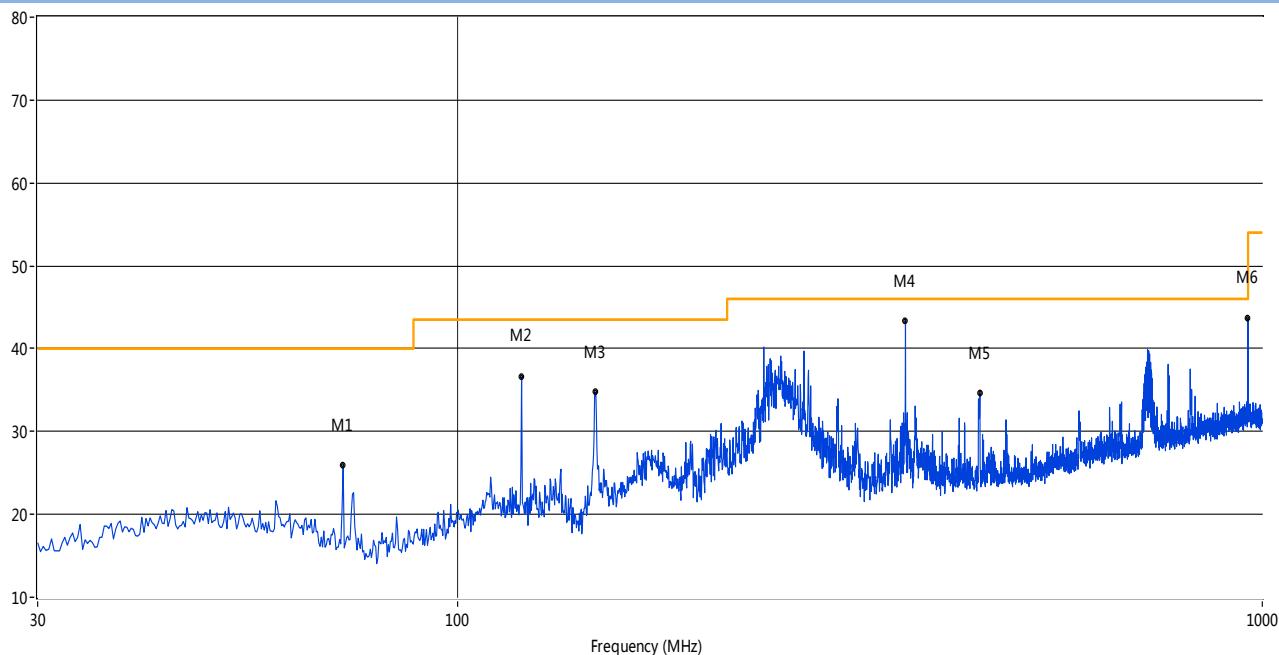
Note 4: All configurations have been tested, only the worst configuration (802.11b High Channel) shown here.

802.11g HIGH CHANNEL 30MHz to 1GHz, ANT V



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 71.94 | 33.14 | -23.90 | 40.0 | 6.86 | Peak | 265.80 | 100 | Vertical | PASS |
| 2 | 119.94 | 40.57 | -21.90 | 43.5 | 2.93 | Peak | 133.00 | 100 | Vertical | PASS |
| 3 | 148.07 | 39.30 | -23.48 | 43.5 | 4.20 | Peak | 4.20 | 100 | Vertical | N/A |
| 4 | 239.95 | 33.29 | -19.12 | 46.0 | 12.71 | Peak | 171.90 | 100 | Vertical | PASS |
| 5 | 479.97 | 42.94 | -14.05 | 46.0 | 3.06 | Peak | 360.00 | 100 | Vertical | PASS |
| 6 | 960.00 | 43.34 | -5.36 | 46.0 | 2.66 | Peak | 357.80 | 100 | Vertical | PASS |

802.11g HIGH CHANNEL 30MHz to 1GHz, ANT H

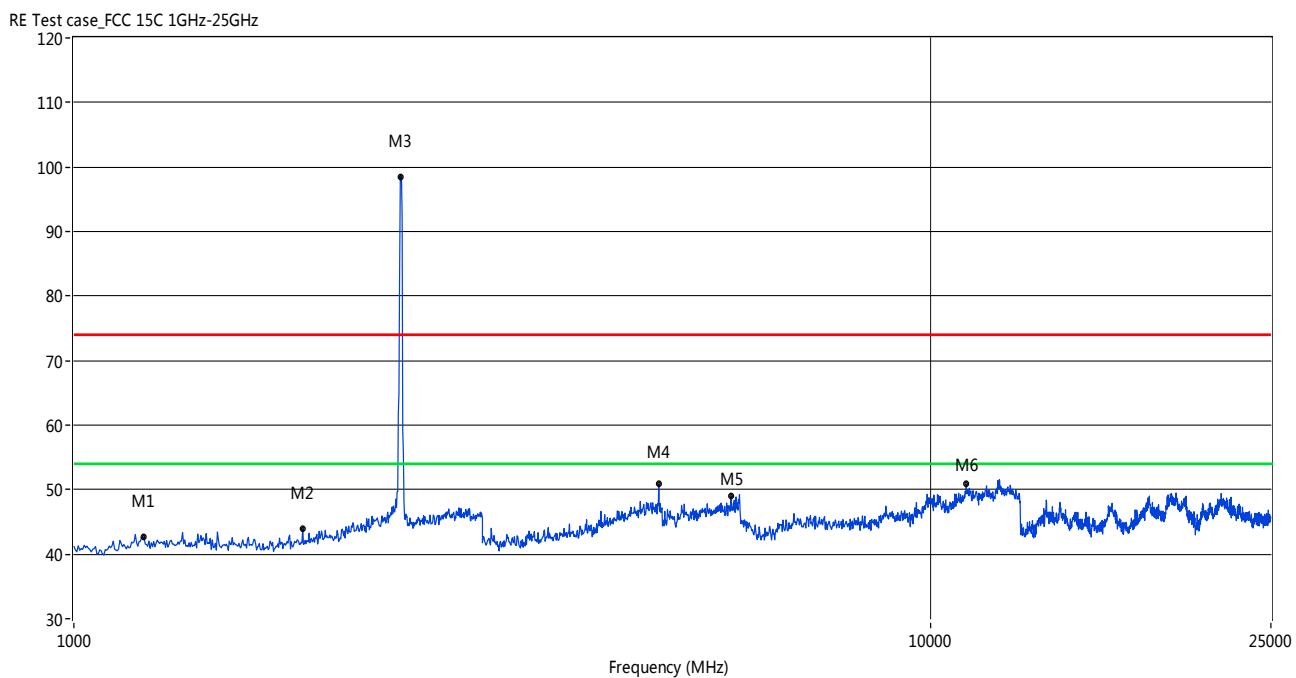


| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 71.94 | 25.89 | -23.90 | 40.0 | 14.11 | Peak | 10.10 | 100 | Horizontal | PASS |
| 2 | 119.94 | 36.58 | -21.90 | 43.5 | 6.92 | Peak | 297.70 | 100 | Horizontal | PASS |
| 3 | 148.31 | 34.78 | -23.78 | 43.5 | 8.72 | Peak | 355.40 | 100 | Horizontal | N/A |
| 4 | 359.96 | 43.42 | -16.19 | 46.0 | 2.58 | Peak | 114.90 | 100 | Horizontal | PASS |
| 5 | 445.54 | 34.61 | -14.48 | 46.0 | 11.39 | Peak | 131.60 | 100 | Horizontal | PASS |
| 6 | 960.00 | 43.74 | -5.36 | 46.0 | 2.26 | Peak | 359.80 | 100 | Horizontal | PASS |

Note: The marked spikes near 2400MHz with circle should be ignored because they are Fundamental signal.

Test Data and Plots

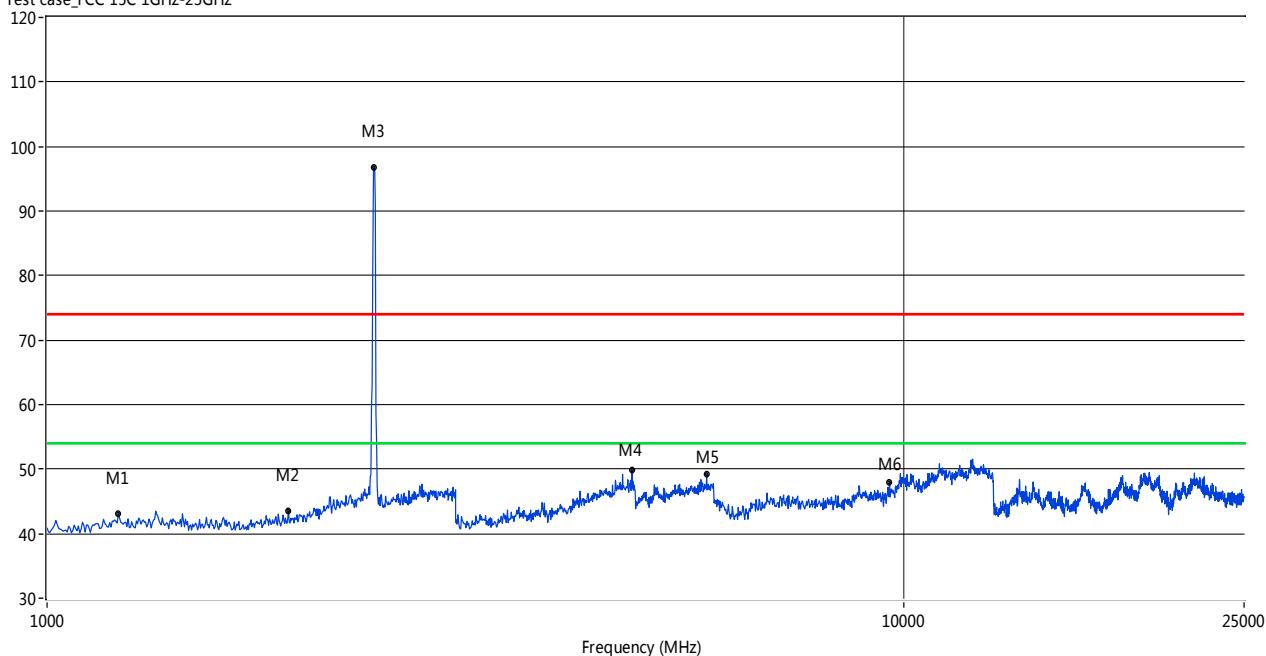
802.11b LOW CHANNEL 1GHz to 25GHz, ANT V



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1207.59 | 42.70 | -5.53 | 74.0 | 31.30 | Peak | -0.00 | 100 | Vertical | PASS |
| 2 | 1850.30 | 43.93 | -3.48 | 74.0 | 30.07 | Peak | 60.10 | 100 | Vertical | PASS |
| 3 | 2409.18 | 98.53 | -0.95 | 74.0 | -24.53 | Peak | 8.40 | 100 | Vertical | N/A |
| 4 | 4820.36 | 50.89 | 13.21 | 74.0 | 23.11 | Peak | 105.80 | 100 | Vertical | PASS |
| 5 | 5856.29 | 49.02 | 15.02 | 74.0 | 24.98 | Peak | 284.80 | 100 | Vertical | PASS |
| 6 | 11020.38 | 50.83 | 20.14 | 74.0 | 23.17 | Peak | 285.90 | 100 | Vertical | PASS |

802.11b LOW CHANNEL 1GHz to 25GHz, ANT H

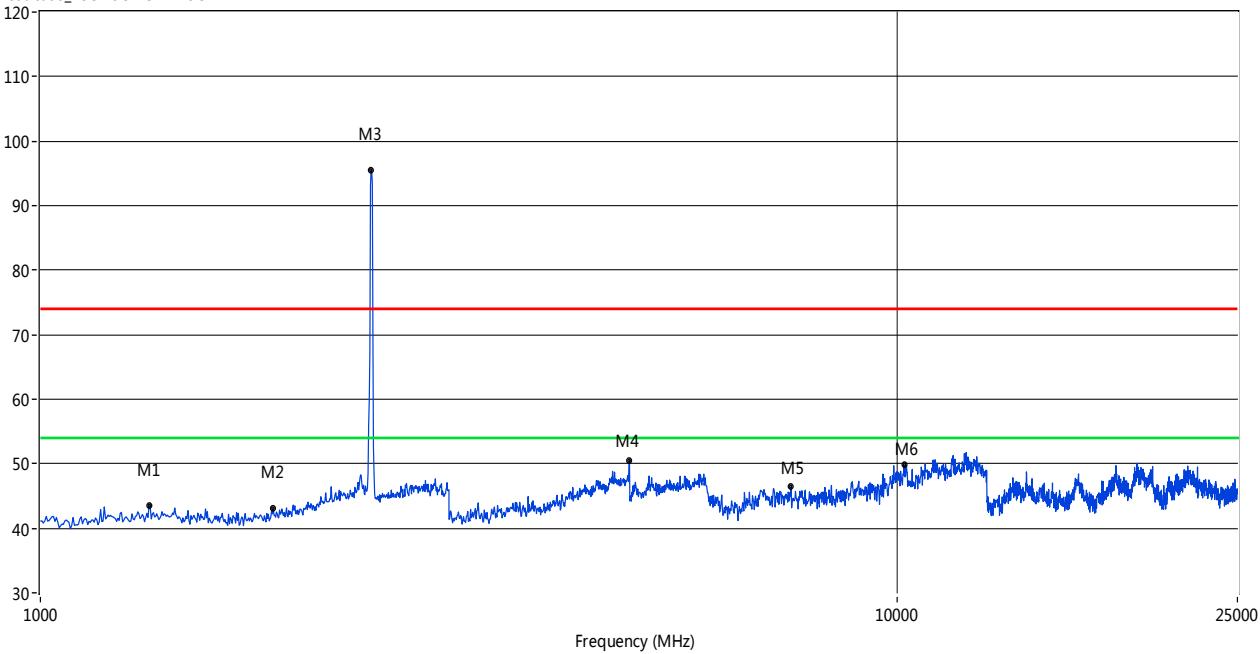
RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1211.58 | 43.10 | -5.34 | 74.0 | 30.90 | Peak | 76.70 | 100 | Horizontal | PASS |
| 2 | 1914.17 | 43.57 | -3.08 | 74.0 | 30.43 | Peak | 44.20 | 100 | Horizontal | PASS |
| 3 | 2409.18 | 96.79 | -0.95 | 74.0 | -22.79 | Peak | -0.00 | 100 | Horizontal | N/A |
| 4 | 4820.36 | 49.89 | 13.21 | 74.0 | 24.11 | Peak | 109.60 | 100 | Horizontal | PASS |
| 5 | 5892.22 | 49.13 | 15.21 | 74.0 | 24.87 | Peak | 30.80 | 100 | Horizontal | PASS |
| 6 | 9638.93 | 47.99 | 17.49 | 74.0 | 26.01 | Peak | 291.20 | 100 | Horizontal | PASS |

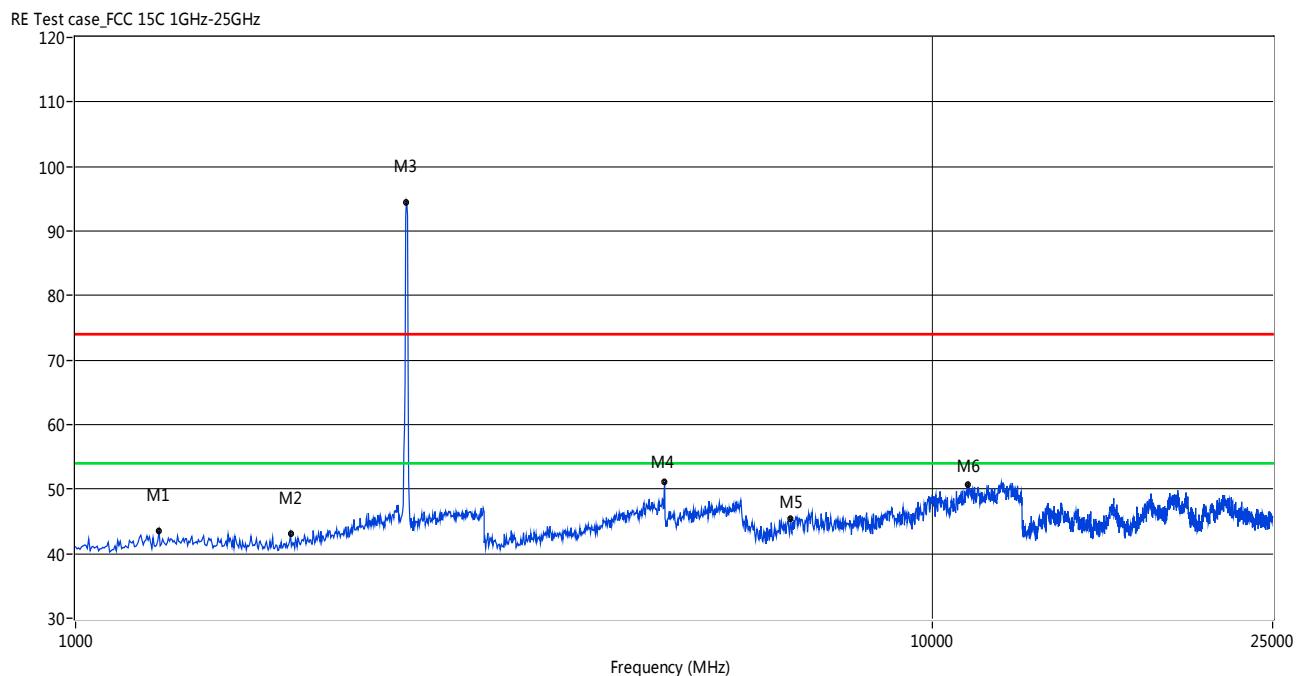
802.11b MID CHANNEL 1GHz to 25GHz, ANT V

RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1339.32 | 43.53 | -4.85 | 74.0 | 30.47 | Peak | 36.90 | 100 | Vertical | PASS |
| 2 | 1870.26 | 43.17 | -3.39 | 74.0 | 30.83 | Peak | 121.80 | 100 | Vertical | PASS |
| 3 | 2433.13 | 95.57 | -0.82 | 74.0 | -21.57 | Peak | 17.90 | 100 | Vertical | N/A |
| 4 | 4874.25 | 50.56 | 13.25 | 74.0 | 23.44 | Peak | 93.60 | 100 | Vertical | PASS |
| 5 | 7527.45 | 46.46 | 14.18 | 74.0 | 27.54 | Peak | 189.40 | 100 | Vertical | PASS |
| 6 | 10200.50 | 49.85 | 18.95 | 74.0 | 24.15 | Peak | 358.60 | 100 | Vertical | PASS |

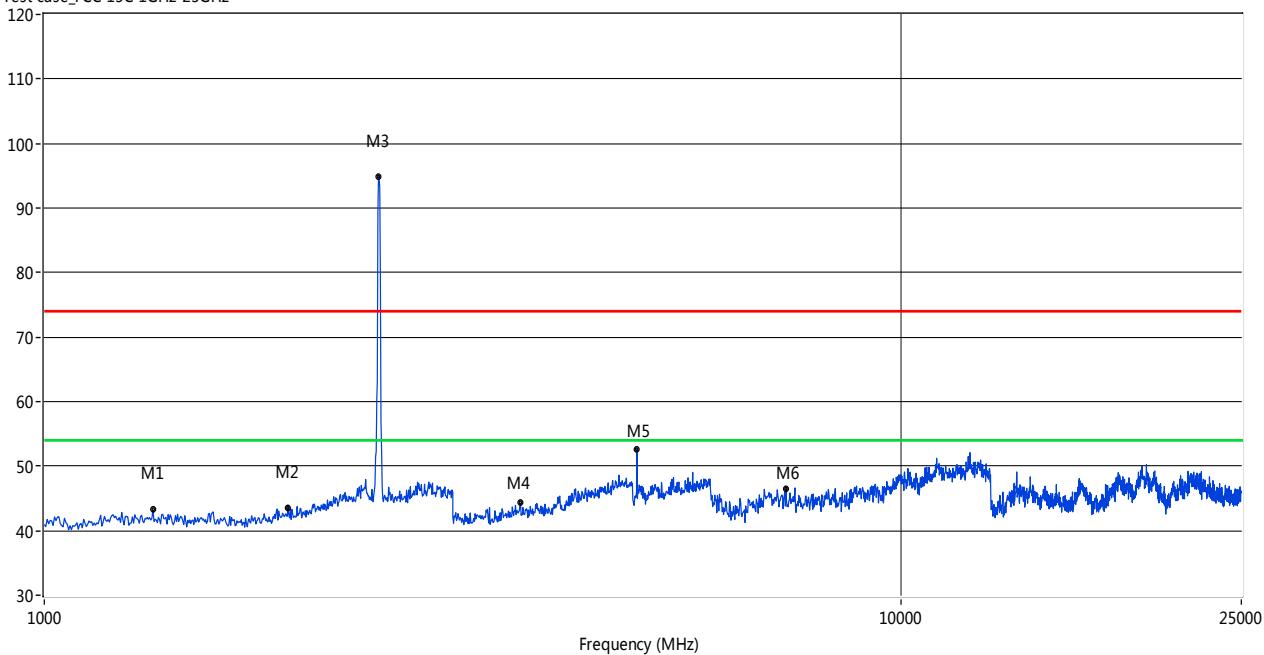
802.11b MID CHANNEL 1GHz to 25GHz, ANT H



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1251.50 | 43.49 | -5.41 | 74.0 | 30.51 | Peak | 127.90 | 100 | Horizontal | PASS |
| 2 | 1782.43 | 43.02 | -4.22 | 74.0 | 30.98 | Peak | 66.70 | 100 | Horizontal | PASS |
| 3 | 2433.13 | 94.53 | -0.82 | 74.0 | -20.53 | Peak | 1.40 | 100 | Horizontal | N/A |
| 4 | 4874.25 | 51.05 | 13.25 | 74.0 | 22.95 | Peak | 94.00 | 100 | Horizontal | PASS |
| 5 | 6842.35 | 45.44 | 14.21 | 74.0 | 28.56 | Peak | 357.50 | 100 | Horizontal | PASS |
| 6 | 11020.38 | 50.73 | 20.14 | 74.0 | 23.27 | Peak | 285.90 | 100 | Horizontal | PASS |

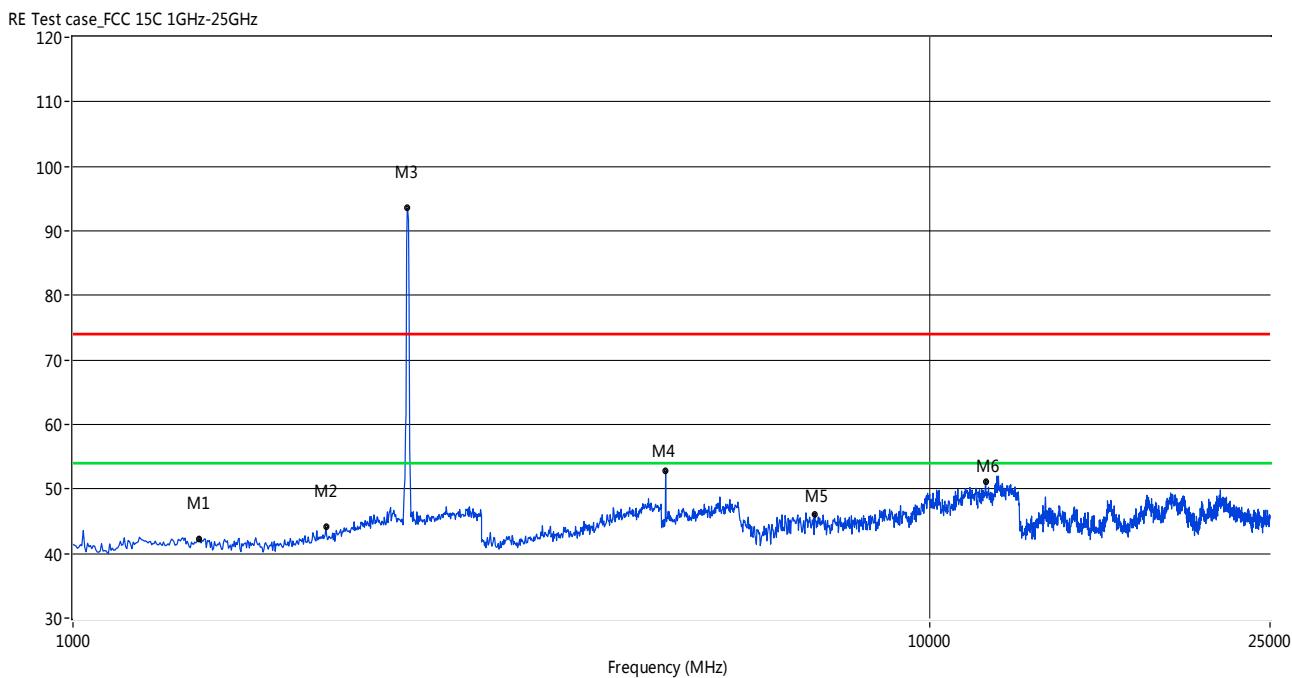
802.11b HIGH CHANNEL 1GHz to 25GHz, ANT V

RE Test case_FCC 15C 1GHz-25GHz



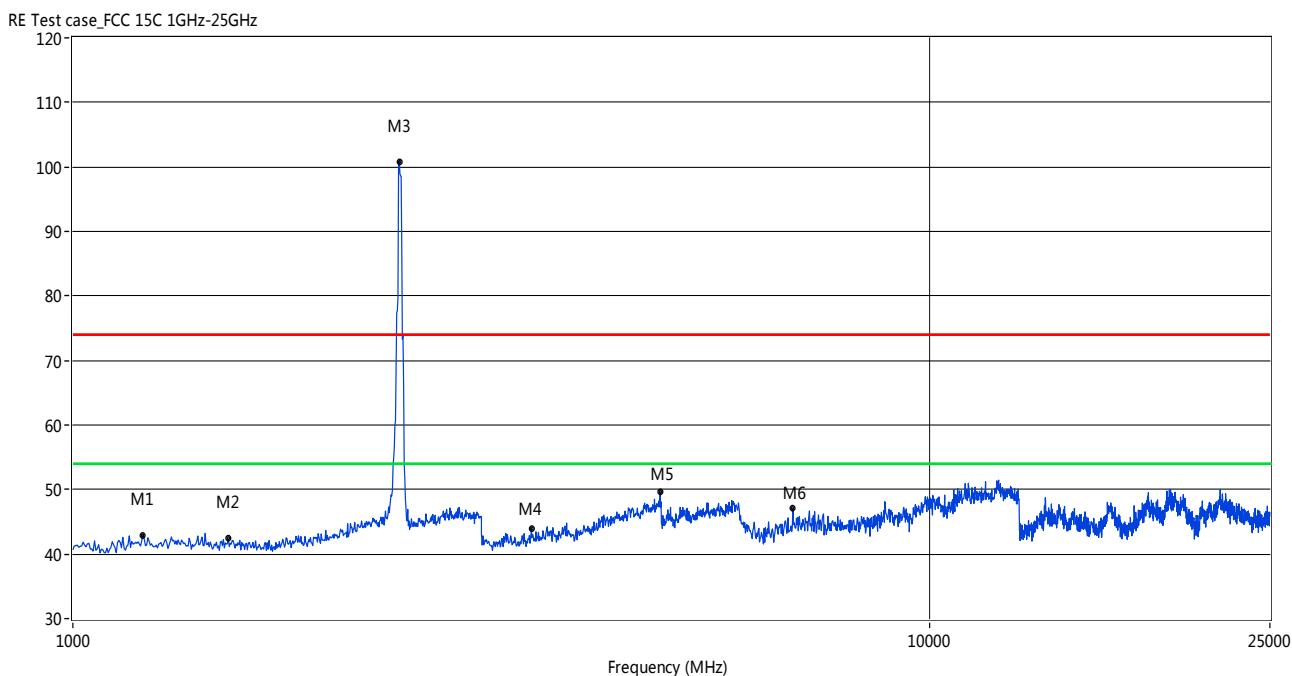
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1339.32 | 43.22 | -4.85 | 74.0 | 30.78 | Peak | 76.60 | 100 | Vertical | PASS |
| 2 | 1926.15 | 43.58 | -3.02 | 74.0 | 30.42 | Peak | 43.40 | 100 | Vertical | PASS |
| 3 | 2457.09 | 94.92 | -0.64 | 74.0 | -20.92 | Peak | 24.70 | 100 | Vertical | N/A |
| 4 | 3598.80 | 44.27 | 9.54 | 74.0 | 29.73 | Peak | 129.10 | 100 | Vertical | PASS |
| 5 | 4922.16 | 52.65 | 13.38 | 74.0 | 21.35 | Peak | 75.20 | 100 | Vertical | PASS |
| 6 | 7347.75 | 46.52 | 14.20 | 74.0 | 27.48 | Peak | 1.70 | 100 | Vertical | PASS |

802.11b HIGH CHANNEL 1GHz to 25GHz, ANT H



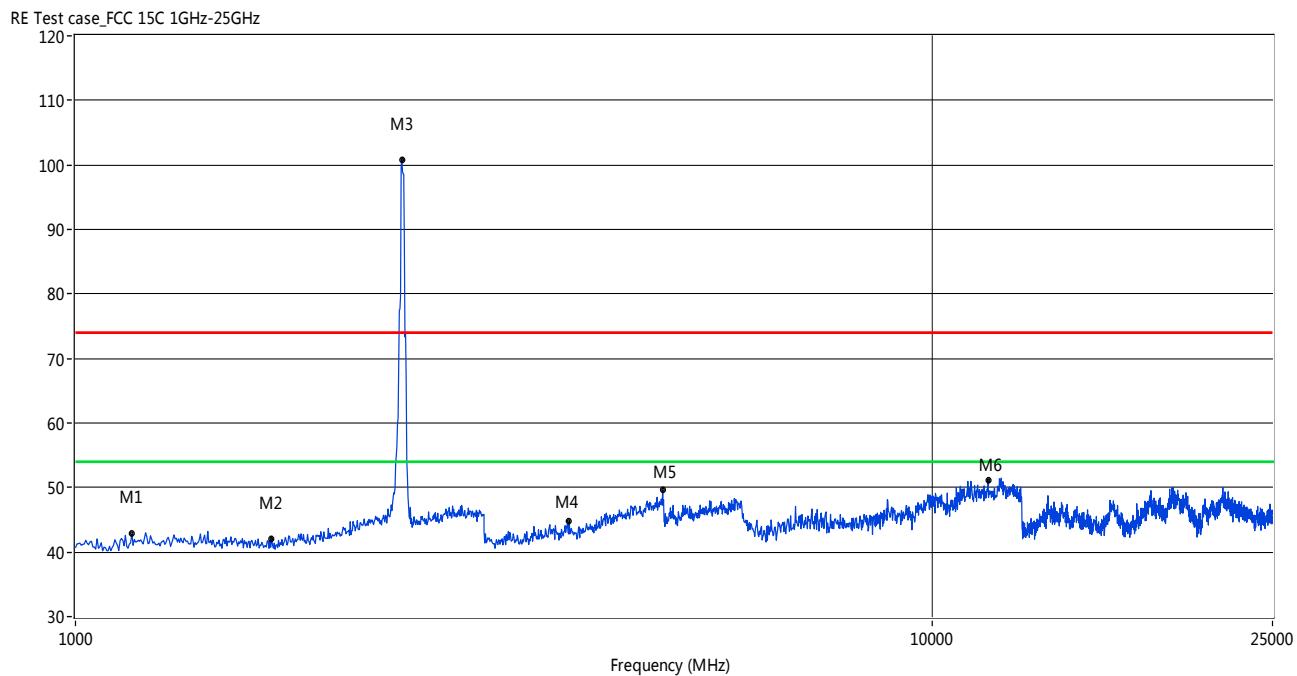
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1403.19 | 42.26 | -4.82 | 74.0 | 31.74 | Peak | 60.90 | 100 | Horizontal | PASS |
| 2 | 1974.05 | 44.06 | -2.47 | 74.0 | 29.94 | Peak | 0.40 | 100 | Horizontal | PASS |
| 3 | 2457.09 | 93.50 | -0.64 | 74.0 | -19.50 | Peak | 2.30 | 100 | Horizontal | N/A |
| 4 | 4922.16 | 52.80 | 13.38 | 74.0 | 21.20 | Peak | 93.40 | 100 | Horizontal | PASS |
| 5 | 7347.75 | 46.15 | 14.20 | 74.0 | 27.85 | Peak | 1.70 | 100 | Horizontal | PASS |
| 6 | 11638.10 | 51.17 | 20.38 | 74.0 | 22.83 | Peak | 340.00 | 100 | Horizontal | PASS |

802.11g LOW CHANNEL 1GHz to 25GHz, ANT V



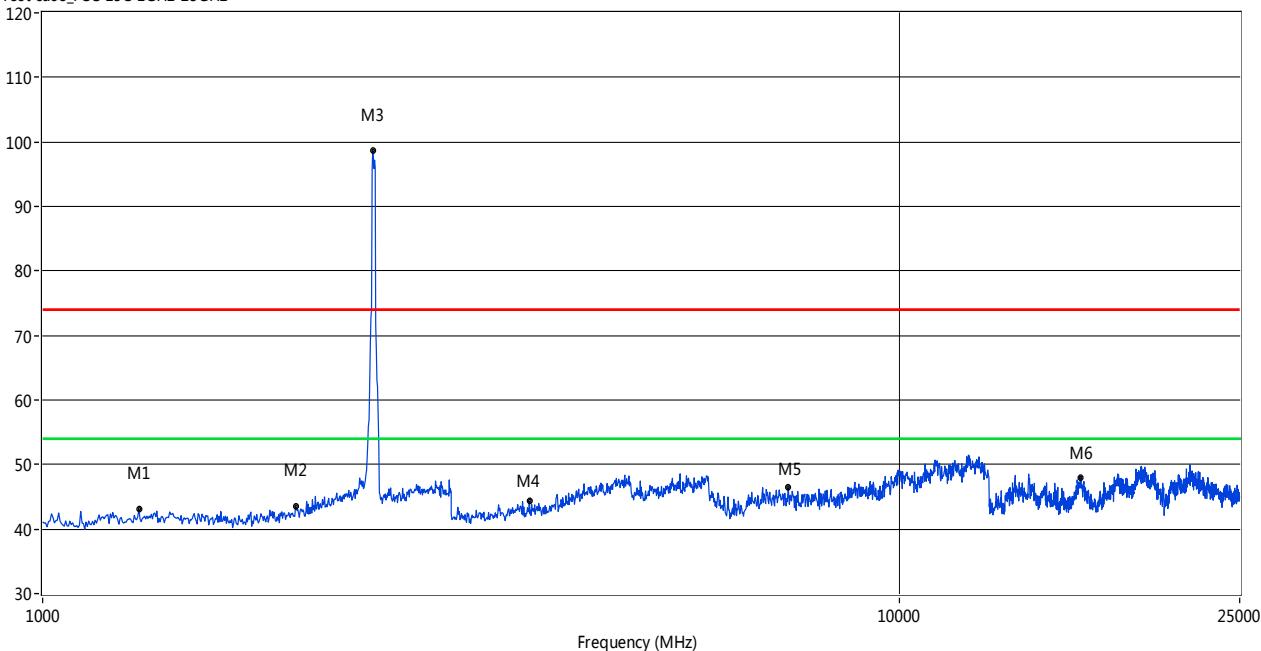
| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1207.59 | 42.98 | -5.53 | 74.0 | 31.02 | Peak | 213.40 | 100 | Vertical | PASS |
| 2 | 1518.96 | 42.36 | -4.75 | 74.0 | 31.64 | Peak | 251.50 | 100 | Vertical | PASS |
| 3 | 2405.19 | 100.86 | -1.01 | 74.0 | -26.86 | Peak | 23.90 | 100 | Vertical | N/A |
| 4 | 3431.14 | 43.97 | 8.82 | 74.0 | 30.03 | Peak | 321.10 | 100 | Vertical | PASS |
| 5 | 4850.30 | 49.64 | 13.11 | 74.0 | 24.36 | Peak | 171.70 | 100 | Vertical | PASS |
| 6 | 6932.20 | 47.07 | 14.23 | 74.0 | 26.93 | Peak | 205.80 | 100 | Vertical | PASS |

802.11g LOW CHANNEL 1GHz to 25GHz, ANT H



802.11g MID CHANNEL 1GHz to 25GHz, ANT V

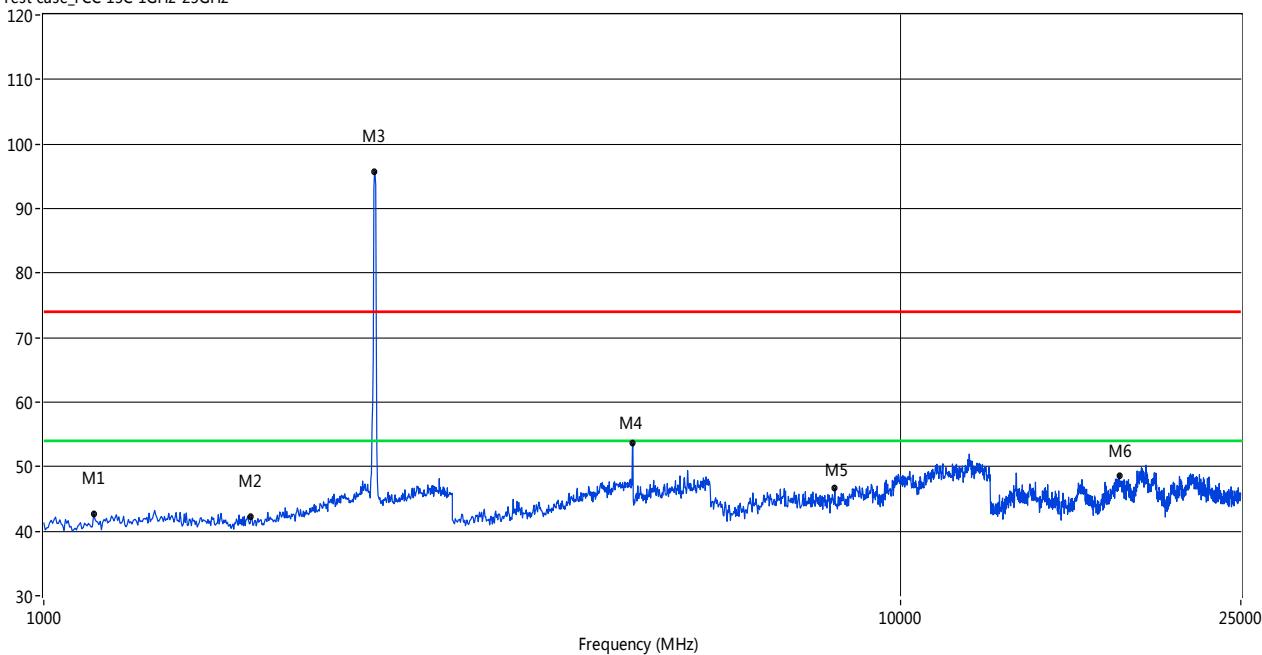
RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1295.41 | 43.05 | -5.18 | 74.0 | 30.95 | Peak | 4.60 | 100 | Vertical | PASS |
| 2 | 1974.05 | 43.50 | -2.47 | 74.0 | 30.50 | Peak | 313.50 | 100 | Vertical | PASS |
| 3 | 2429.14 | 98.73 | -1.09 | 74.0 | -24.73 | Peak | 24.10 | 100 | Vertical | N/A |
| 4 | 3700.60 | 44.31 | 9.83 | 74.0 | 29.69 | Peak | 203.80 | 100 | Vertical | PASS |
| 5 | 7426.37 | 46.51 | 14.22 | 74.0 | 27.49 | Peak | 334.50 | 100 | Vertical | PASS |
| 6 | 16285.77 | 47.97 | 11.59 | 74.0 | 26.03 | Peak | 227.60 | 100 | Vertical | PASS |

802.11g MID CHANNEL 1GHz to 25GHz, ANT H

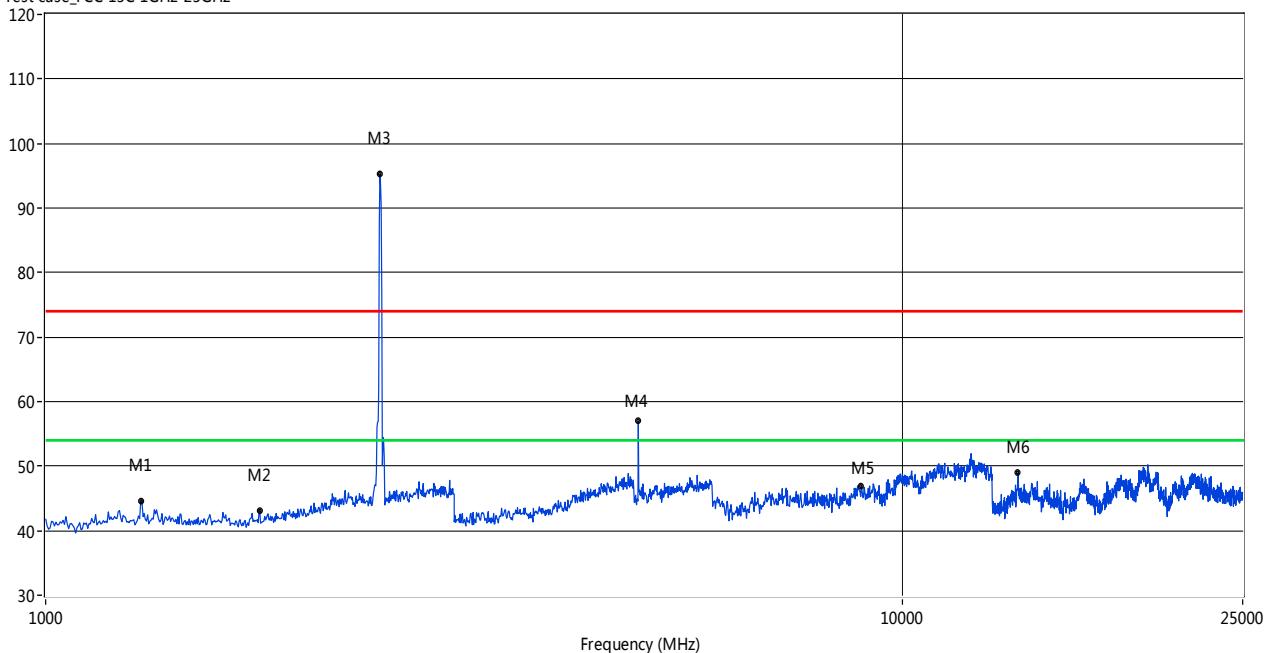
RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dB _B U _V /m) | Factor (dB) | Limit (dB _B U _V /m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|---|-------------|---|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1143.71 | 42.70 | -6.23 | 74.0 | 31.30 | Peak | 65.30 | 100 | Horizontal | PASS |
| 2 | 1746.51 | 42.34 | -4.29 | 74.0 | 31.66 | Peak | 165.10 | 100 | Horizontal | PASS |
| 3 | 2433.13 | 95.70 | -0.82 | 74.0 | -21.70 | Peak | 17.80 | 100 | Horizontal | N/A |
| 4 | 4874.25 | 53.66 | 13.25 | 74.0 | 20.34 | Peak | 26.50 | 100 | Horizontal | PASS |
| 5 | 8392.26 | 46.60 | 15.04 | 74.0 | 27.40 | Peak | 66.80 | 100 | Horizontal | PASS |
| 6 | 18032.86 | 48.60 | 13.23 | 74.0 | 25.40 | Peak | 216.60 | 100 | Horizontal | PASS |

802.11g HIGH CHANNEL 1GHz to 25GHz, ANT V

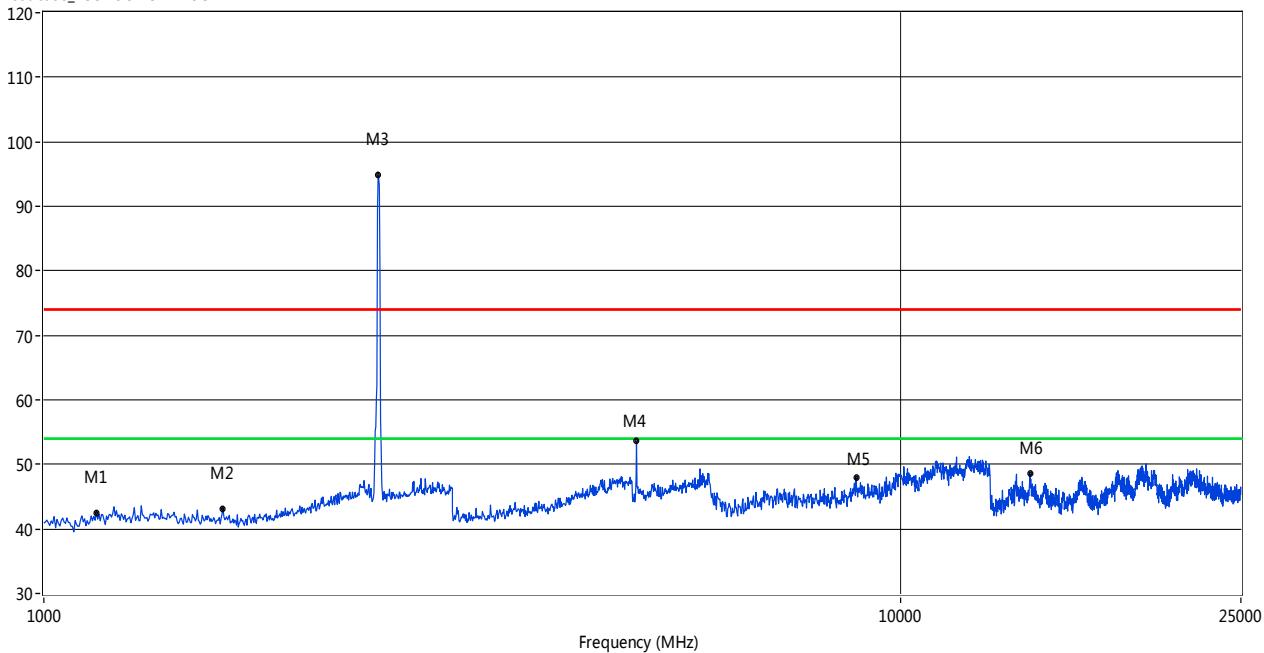
RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1291.42 | 44.63 | -5.24 | 74.0 | 29.37 | Peak | 147.40 | 100 | Vertical | PASS |
| 2 | 1778.44 | 43.15 | -4.04 | 74.0 | 30.85 | Peak | 357.80 | 100 | Vertical | PASS |
| 3 | 2457.09 | 95.22 | -0.64 | 74.0 | -21.22 | Peak | 6.80 | 100 | Vertical | N/A |
| 4 | 4922.16 | 56.95 | 13.38 | 74.0 | 17.05 | Peak | 305.20 | 100 | Vertical | PASS |
| 4* | 4922.16 | 46.87 | 13.38 | 54.0 | 7.13 | AV | 305.20 | 100 | Vertical | PASS |
| 5 | 8965.06 | 46.94 | 17.01 | 74.0 | 27.06 | Peak | 0.00 | 100 | Vertical | PASS |
| 6 | 13665.14 | 49.01 | 9.63 | 74.0 | 24.99 | Peak | -0.20 | 100 | Vertical | PASS |

802.11g HIGH CHANNEL 1GHz to 25GHz, ANT H

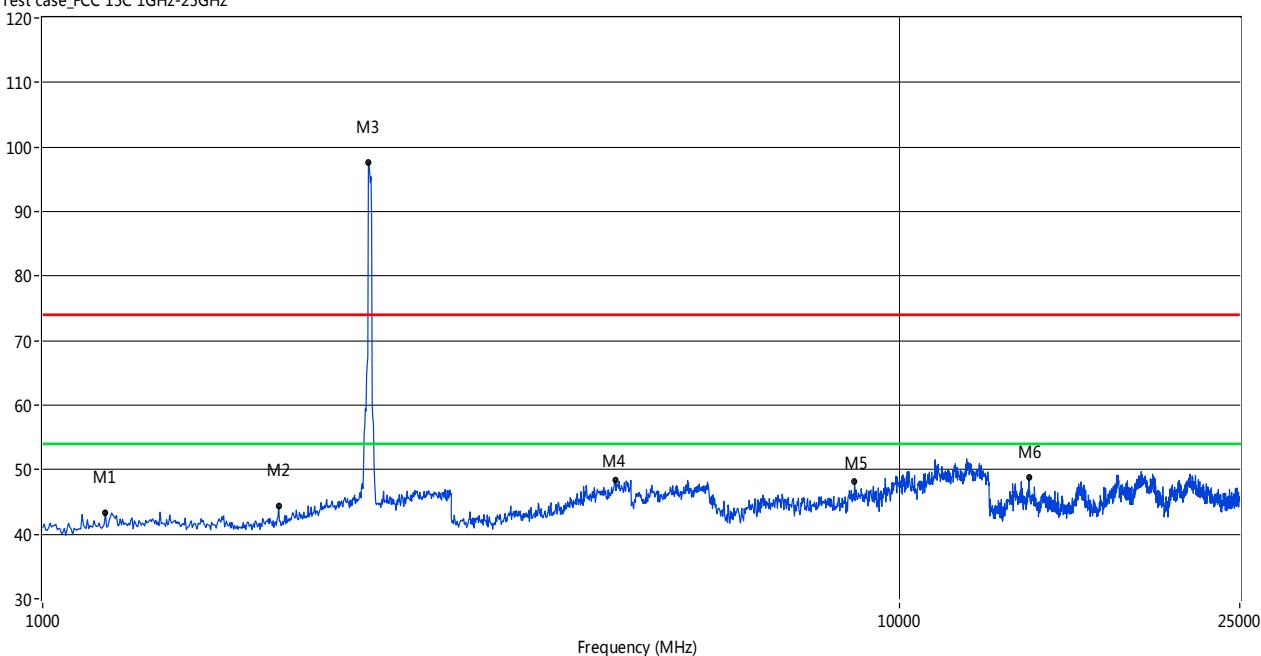
RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1151.70 | 42.52 | -6.51 | 74.0 | 31.48 | Peak | 202.60 | 100 | Horizontal | PASS |
| 2 | 1618.76 | 43.20 | -4.54 | 74.0 | 30.80 | Peak | 98.80 | 100 | Horizontal | PASS |
| 3 | 2457.09 | 94.86 | -0.64 | 74.0 | -20.86 | Peak | 17.90 | 100 | Horizontal | N/A |
| 4 | 4922.16 | 53.61 | 13.38 | 74.0 | 20.39 | Peak | 9.60 | 100 | Horizontal | PASS |
| 5 | 8886.44 | 48.02 | 16.71 | 74.0 | 25.98 | Peak | 61.20 | 100 | Horizontal | PASS |
| 6 | 14174.71 | 48.60 | 9.64 | 74.0 | 25.40 | Peak | 66.90 | 100 | Horizontal | PASS |

802.11n-20MHz LOW CHANNEL 1GHz to 25GHz, ANT V

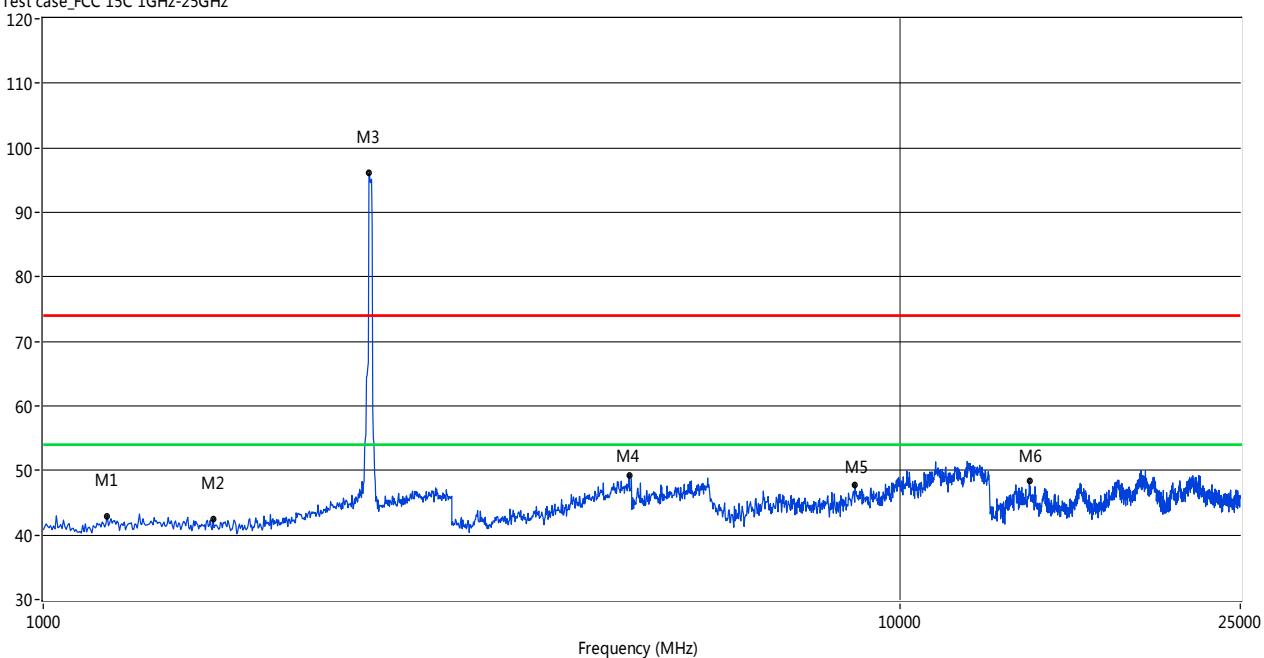
RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1183.63 | 43.35 | -5.66 | 74.0 | 30.65 | Peak | 289.90 | 100 | Vertical | PASS |
| 2 | 1886.23 | 44.33 | -3.28 | 74.0 | 29.67 | Peak | 124.30 | 100 | Vertical | PASS |
| 3 | 2401.20 | 97.60 | -1.26 | 74.0 | -23.60 | Peak | 10.10 | 100 | Vertical | N/A |
| 4 | 4664.67 | 48.34 | 12.61 | 74.0 | 25.66 | Peak | 287.50 | 100 | Vertical | PASS |
| 5 | 8875.21 | 48.10 | 16.68 | 74.0 | 25.90 | Peak | 146.50 | 100 | Vertical | PASS |
| 6 | 14174.71 | 48.81 | 9.64 | 74.0 | 25.19 | Peak | 66.90 | 100 | Vertical | PASS |

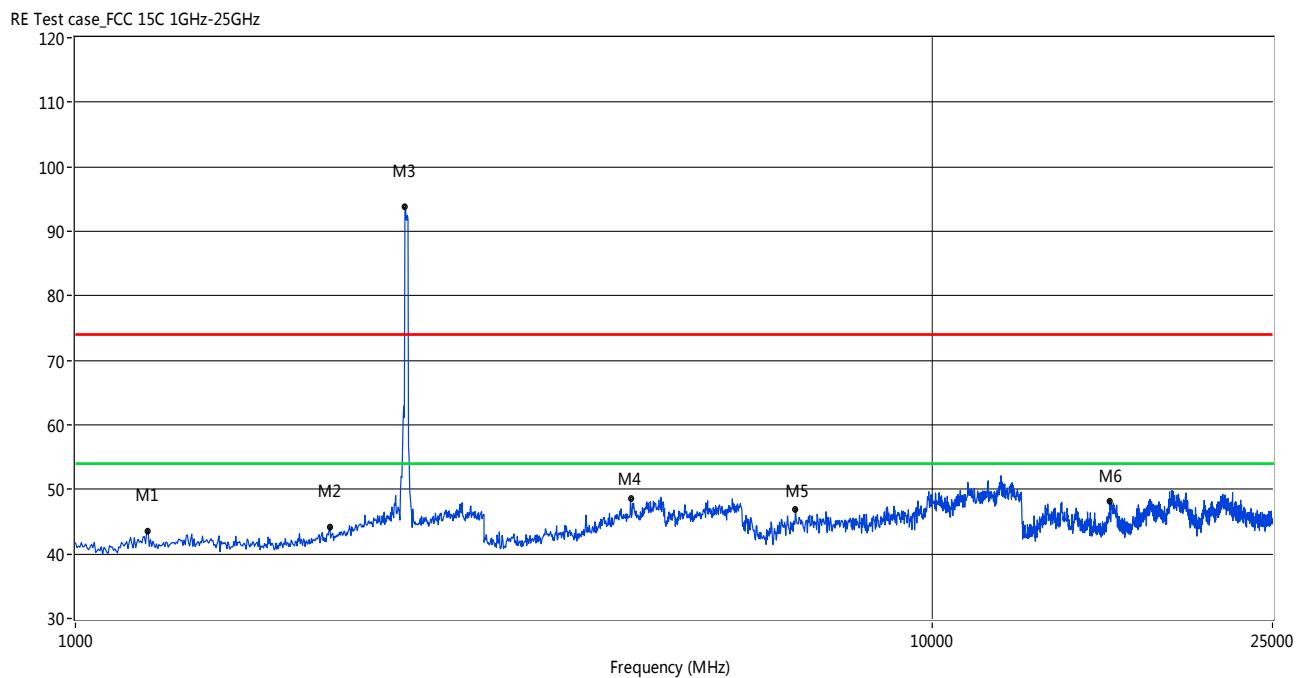
802.11n-20MHz LOW CHANNEL 1GHz to 25GHz, ANT H

RE Test case_FCC 15C 1GHz-25GHz



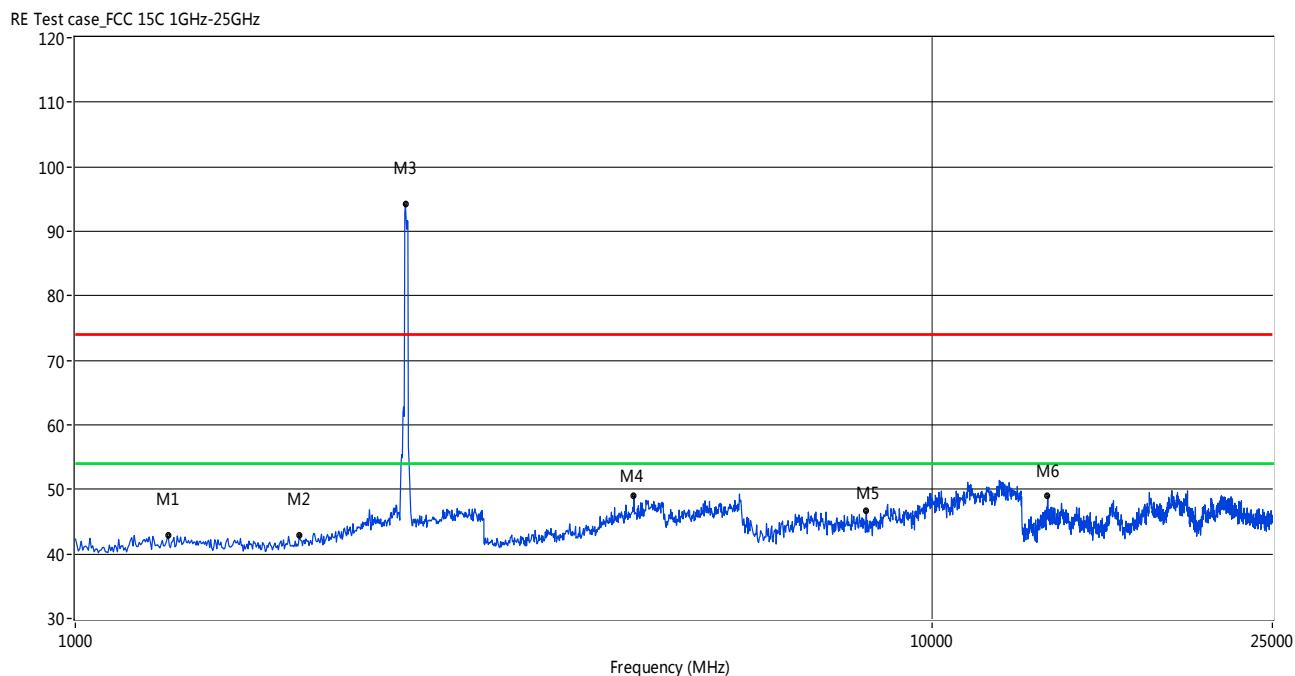
| No. | Frequency (MHz) | Results (dB _{UV} /m) | Factor (dB) | Limit (dB _{UV} /m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|-------------------------------|-------------|-----------------------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1187.62 | 42.94 | -5.74 | 74.0 | 31.06 | Peak | 256.10 | 100 | Horizontal | PASS |
| 2 | 1578.84 | 42.49 | -4.42 | 74.0 | 31.51 | Peak | 303.30 | 100 | Horizontal | PASS |
| 3 | 2401.20 | 96.08 | -1.26 | 74.0 | -22.08 | Peak | 0.30 | 100 | Horizontal | N/A |
| 4 | 4832.34 | 49.25 | 13.13 | 74.0 | 24.75 | Peak | 305.00 | 100 | Horizontal | PASS |
| 5 | 8875.21 | 47.83 | 16.68 | 74.0 | 26.17 | Peak | 146.50 | 100 | Horizontal | PASS |
| 6 | 14174.71 | 48.60 | 9.64 | 74.0 | 25.40 | Peak | 66.90 | 100 | Horizontal | PASS |

802.11n-20MHz MID CHANNEL 1GHz to 25GHz, ANT V



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1215.57 | 43.51 | -5.40 | 74.0 | 30.49 | Peak | 203.90 | 100 | Vertical | PASS |
| 2 | 1982.04 | 44.19 | -2.58 | 74.0 | 29.81 | Peak | 232.30 | 100 | Vertical | PASS |
| 3 | 2425.15 | 93.74 | -1.00 | 74.0 | -19.74 | Peak | 24.10 | 100 | Vertical | N/A |
| 4 | 4449.10 | 48.54 | 11.85 | 74.0 | 25.46 | Peak | 345.60 | 100 | Vertical | PASS |
| 5 | 6932.20 | 46.97 | 14.23 | 74.0 | 27.03 | Peak | 205.80 | 100 | Vertical | PASS |
| 6 | 16150.58 | 48.27 | 10.92 | 74.0 | 25.73 | Peak | 120.40 | 100 | Vertical | PASS |

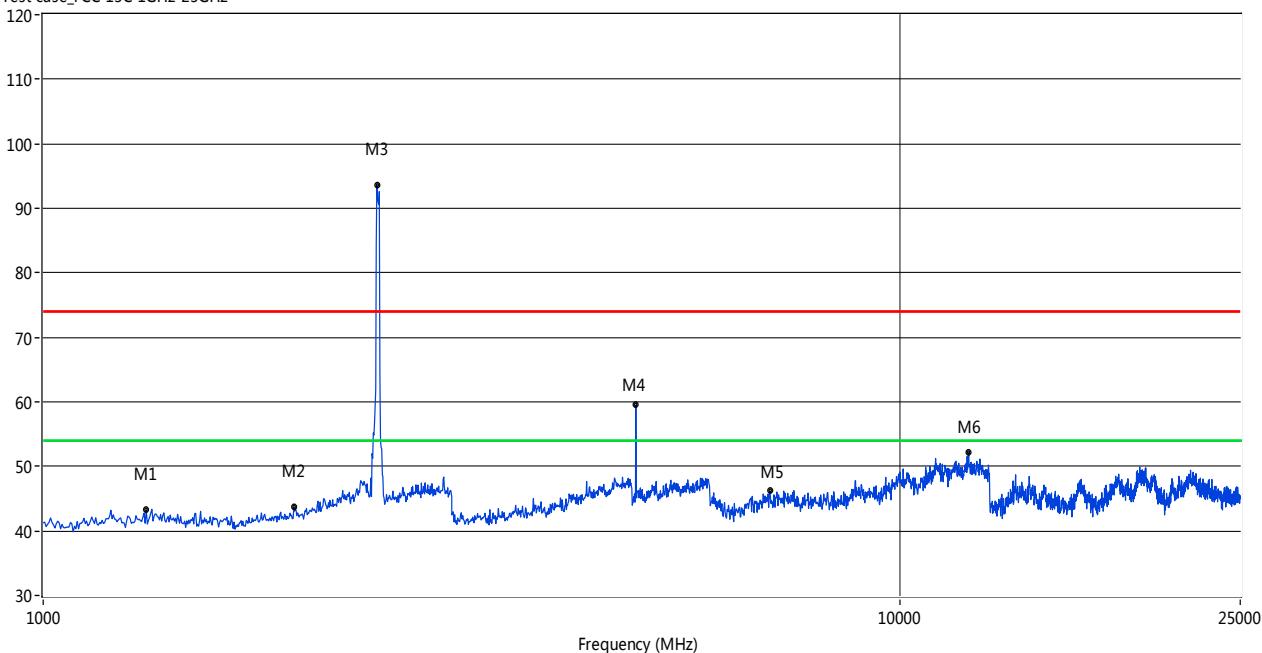
802.11n-20MHz MID CHANNEL 1GHz to 25GHz, ANT H



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1283.43 | 42.80 | -5.05 | 74.0 | 31.20 | Peak | 39.10 | 100 | Horizontal | PASS |
| 2 | 1826.35 | 42.87 | -3.96 | 74.0 | 31.13 | Peak | 109.90 | 100 | Horizontal | PASS |
| 3 | 2429.14 | 94.14 | -1.09 | 74.0 | -20.14 | Peak | 358.90 | 100 | Horizontal | N/A |
| 4 | 4491.02 | 49.03 | 12.14 | 74.0 | 24.97 | Peak | 50.40 | 100 | Horizontal | PASS |
| 5 | 8392.26 | 46.65 | 15.04 | 74.0 | 27.35 | Peak | 66.80 | 100 | Horizontal | PASS |
| 6 | 13665.14 | 48.99 | 9.63 | 74.0 | 25.01 | Peak | -0.20 | 100 | Horizontal | PASS |

802.11n-20MHz HIGH CHANNEL 1GHz to 25GHz, ANT V

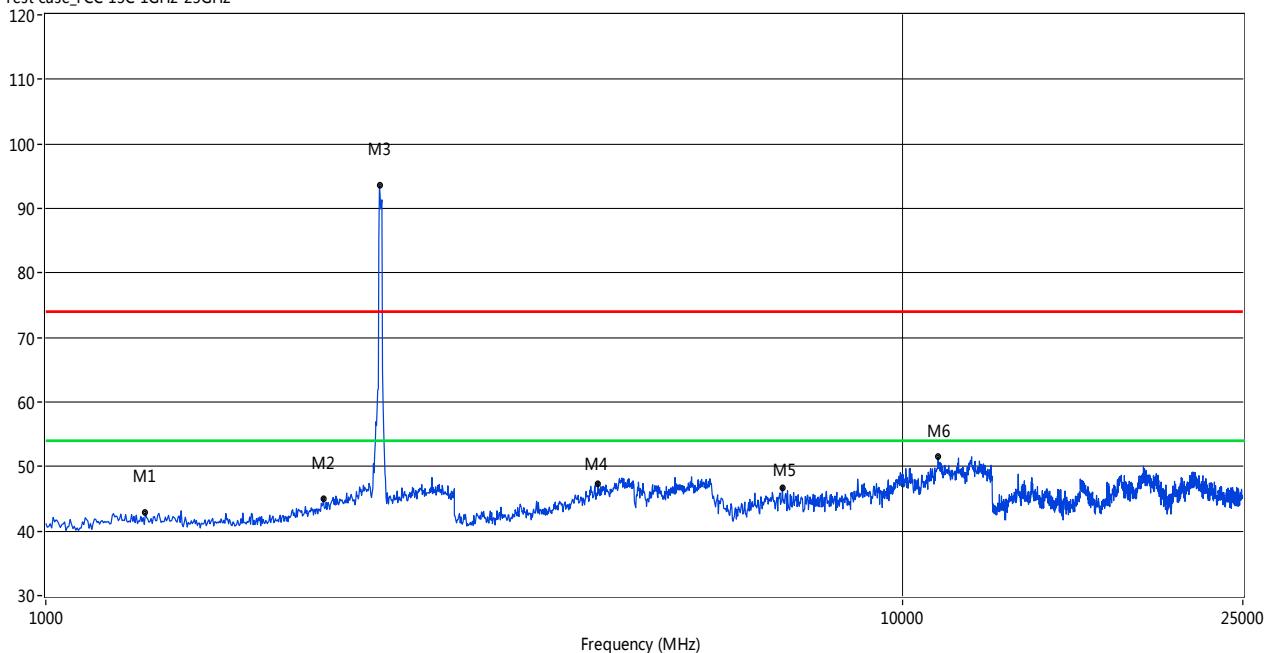
RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1319.36 | 43.26 | -4.96 | 74.0 | 30.74 | Peak | 33.10 | 100 | Vertical | PASS |
| 2 | 1962.08 | 43.64 | -2.79 | 74.0 | 30.36 | Peak | 1.90 | 100 | Vertical | PASS |
| 3 | 2453.09 | 93.62 | -0.68 | 74.0 | -19.62 | Peak | 14.70 | 100 | Vertical | N/A |
| 4 | 4922.16 | 59.51 | 13.38 | 74.0 | 14.49 | Peak | 236.90 | 100 | Vertical | PASS |
| 4* | 4922.16 | 48.96 | 13.38 | 54.0 | 5.04 | AV | 236.90 | 100 | Vertical | PASS |
| 5 | 7055.74 | 46.20 | 14.33 | 74.0 | 27.80 | Peak | 109.40 | 100 | Vertical | PASS |
| 6 | 12042.43 | 52.19 | 20.83 | 74.0 | 21.81 | Peak | 216.60 | 100 | Vertical | PASS |

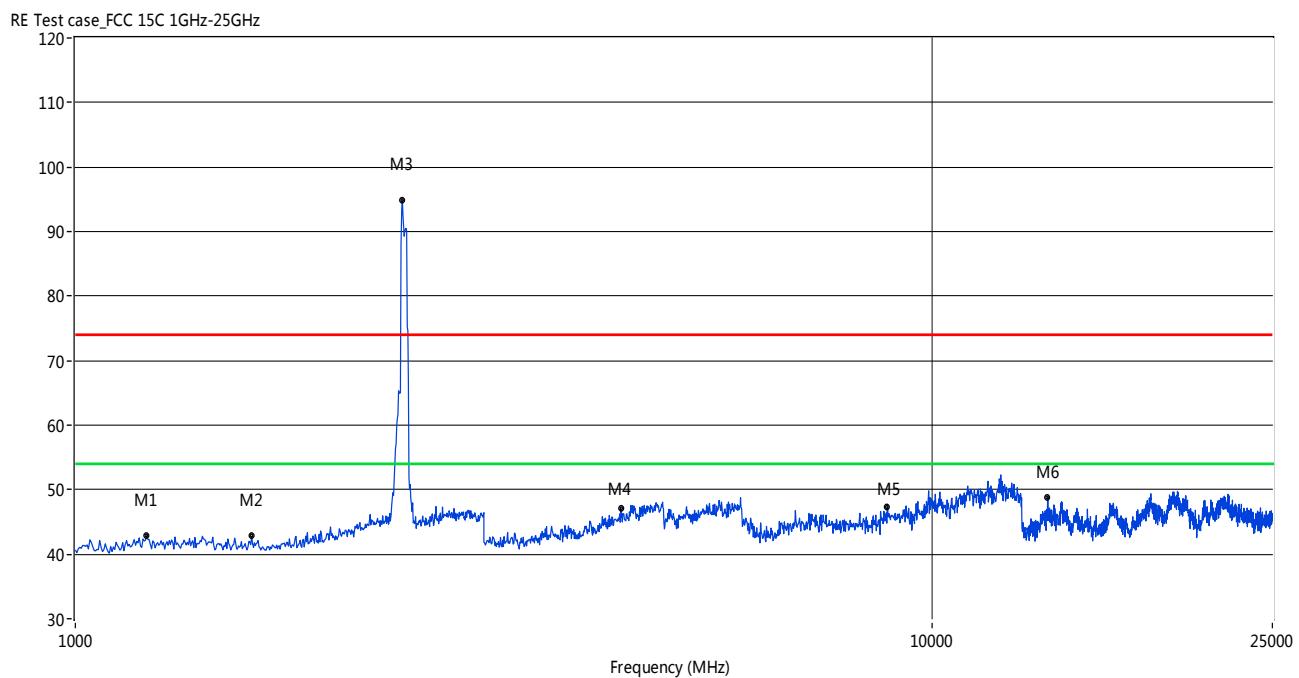
802.11n-20MHz HIGH CHANNEL 1GHz to 25GHz, ANT H

RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1307.38 | 42.82 | -4.93 | 74.0 | 31.18 | Peak | 351.50 | 100 | Horizontal | PASS |
| 2 | 2109.78 | 45.10 | -1.87 | 74.0 | 28.90 | Peak | 359.70 | 100 | Horizontal | PASS |
| 3 | 2453.09 | 93.50 | -0.68 | 74.0 | -19.50 | Peak | 1.90 | 100 | Horizontal | N/A |
| 4 | 4413.17 | 47.36 | 11.64 | 74.0 | 26.64 | Peak | 178.50 | 100 | Horizontal | PASS |
| 5 | 7246.67 | 46.80 | 14.31 | 74.0 | 27.20 | Peak | 183.90 | 100 | Horizontal | PASS |
| 6 | 11020.38 | 51.50 | 20.14 | 74.0 | 22.50 | Peak | 285.90 | 100 | Horizontal | PASS |

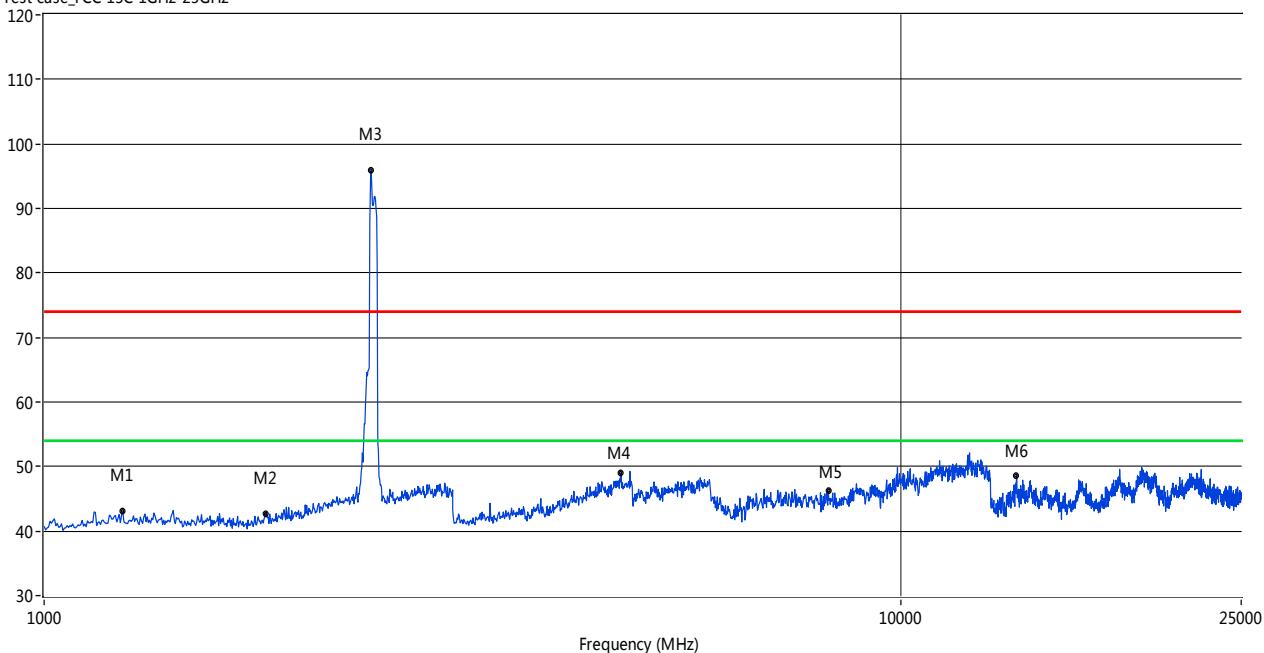
802.11n-40MHz LOW MODE 1GHz to 25GHz, ANT V



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1211.58 | 42.87 | -5.34 | 74.0 | 31.13 | Peak | 345.30 | 100 | Vertical | PASS |
| 2 | 1606.79 | 42.80 | -4.66 | 74.0 | 31.20 | Peak | 180.40 | 100 | Vertical | PASS |
| 3 | 2409.18 | 94.88 | -0.95 | 74.0 | -20.88 | Peak | 24.10 | 100 | Vertical | N/A |
| 4 | 4335.33 | 47.06 | 11.72 | 74.0 | 26.94 | Peak | 100.50 | 100 | Vertical | PASS |
| 5 | 8875.21 | 47.27 | 16.68 | 74.0 | 26.73 | Peak | 146.50 | 100 | Vertical | PASS |
| 6 | 13665.14 | 48.83 | 9.63 | 74.0 | 25.17 | Peak | -0.20 | 100 | Vertical | PASS |

802.11n-40MHz LOW MODE 1GHz to 25GHz, ANT H

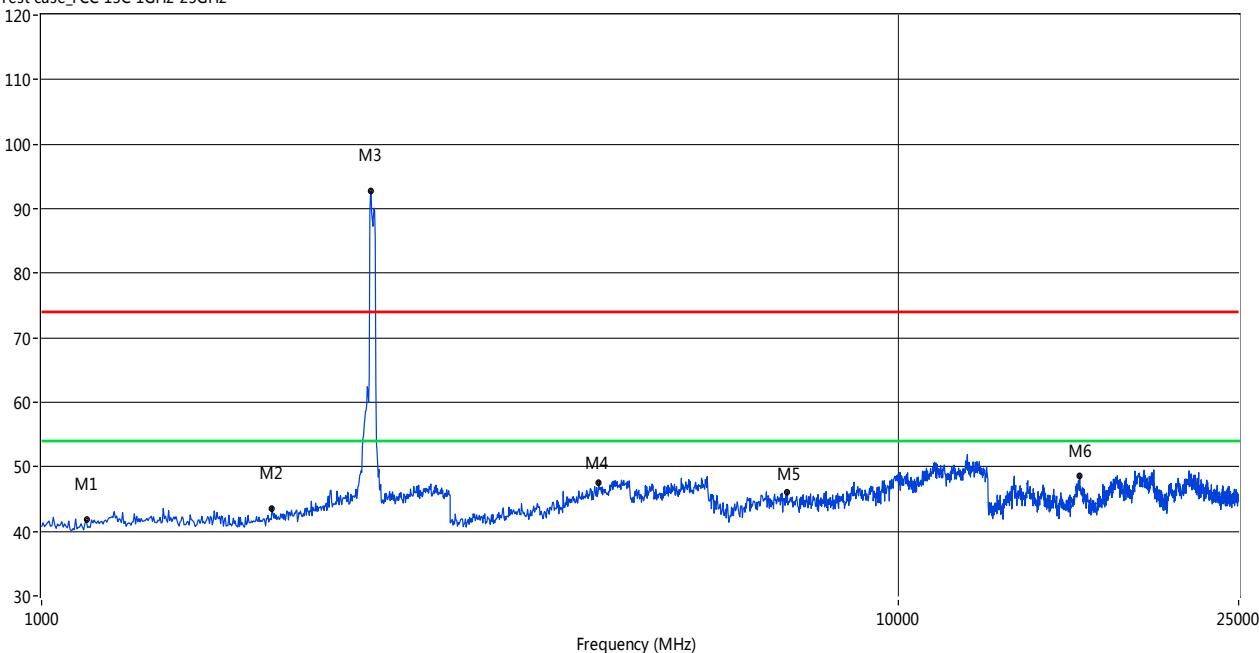
RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1235.53 | 43.00 | -5.50 | 74.0 | 31.00 | Peak | 278.30 | 100 | Horizontal | PASS |
| 2 | 1814.37 | 42.77 | -4.13 | 74.0 | 31.23 | Peak | 154.90 | 100 | Horizontal | PASS |
| 3 | 2409.18 | 95.82 | -0.95 | 74.0 | -21.82 | Peak | 3.00 | 100 | Horizontal | N/A |
| 4 | 4718.56 | 49.04 | 12.82 | 74.0 | 24.96 | Peak | 175.10 | 100 | Horizontal | PASS |
| 5 | 8235.02 | 46.22 | 14.90 | 74.0 | 27.78 | Peak | 358.60 | 100 | Horizontal | PASS |
| 6 | 13665.14 | 48.58 | 9.63 | 74.0 | 25.42 | Peak | -0.20 | 100 | Horizontal | PASS |

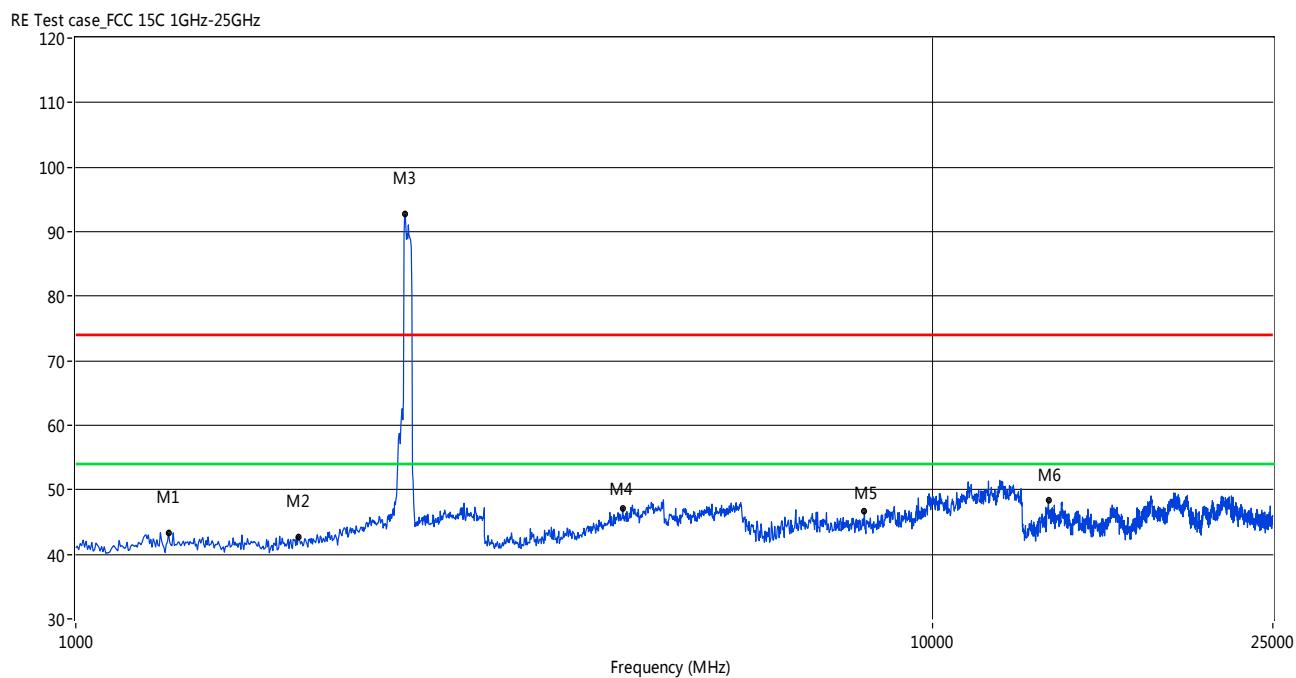
802.11n-40MHz MID MODE 1GHz to 25GHz, ANT V

RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1127.74 | 41.75 | -6.18 | 74.0 | 32.25 | Peak | 212.90 | 100 | Vertical | PASS |
| 2 | 1858.28 | 43.60 | -3.49 | 74.0 | 30.40 | Peak | 99.60 | 100 | Vertical | PASS |
| 3 | 2425.15 | 92.66 | -1.00 | 74.0 | -18.66 | Peak | 18.50 | 100 | Vertical | N/A |
| 4 | 4473.05 | 47.51 | 12.00 | 74.0 | 26.49 | Peak | 226.70 | 100 | Vertical | PASS |
| 5 | 7426.37 | 46.07 | 14.22 | 74.0 | 27.93 | Peak | 334.50 | 100 | Vertical | PASS |
| 6 | 16306.57 | 48.56 | 11.64 | 74.0 | 25.44 | Peak | 243.80 | 100 | Vertical | PASS |

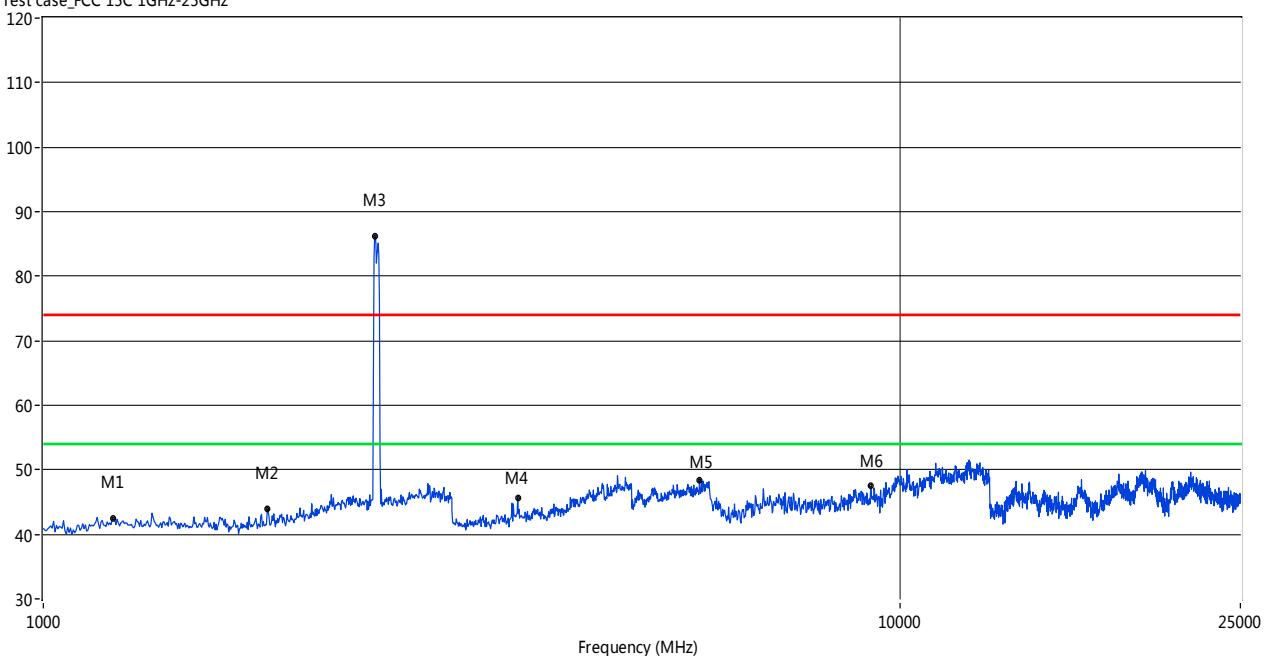
802.11n-40MHz MID MODE 1GHz to 25GHz, ANT H



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1283.43 | 43.30 | -5.05 | 74.0 | 30.70 | Peak | 174.60 | 100 | Horizontal | PASS |
| 2 | 1818.36 | 42.74 | -3.97 | 74.0 | 31.26 | Peak | 302.50 | 100 | Horizontal | PASS |
| 3 | 2425.15 | 92.75 | -1.00 | 74.0 | -18.75 | Peak | 358.80 | 100 | Horizontal | N/A |
| 4 | 4353.29 | 47.18 | 11.70 | 74.0 | 26.82 | Peak | 43.50 | 100 | Horizontal | PASS |
| 5 | 8336.11 | 46.59 | 15.06 | 74.0 | 27.41 | Peak | 23.80 | 100 | Horizontal | PASS |
| 6 | 13675.54 | 48.30 | 9.64 | 74.0 | 25.70 | Peak | 136.60 | 100 | Horizontal | PASS |

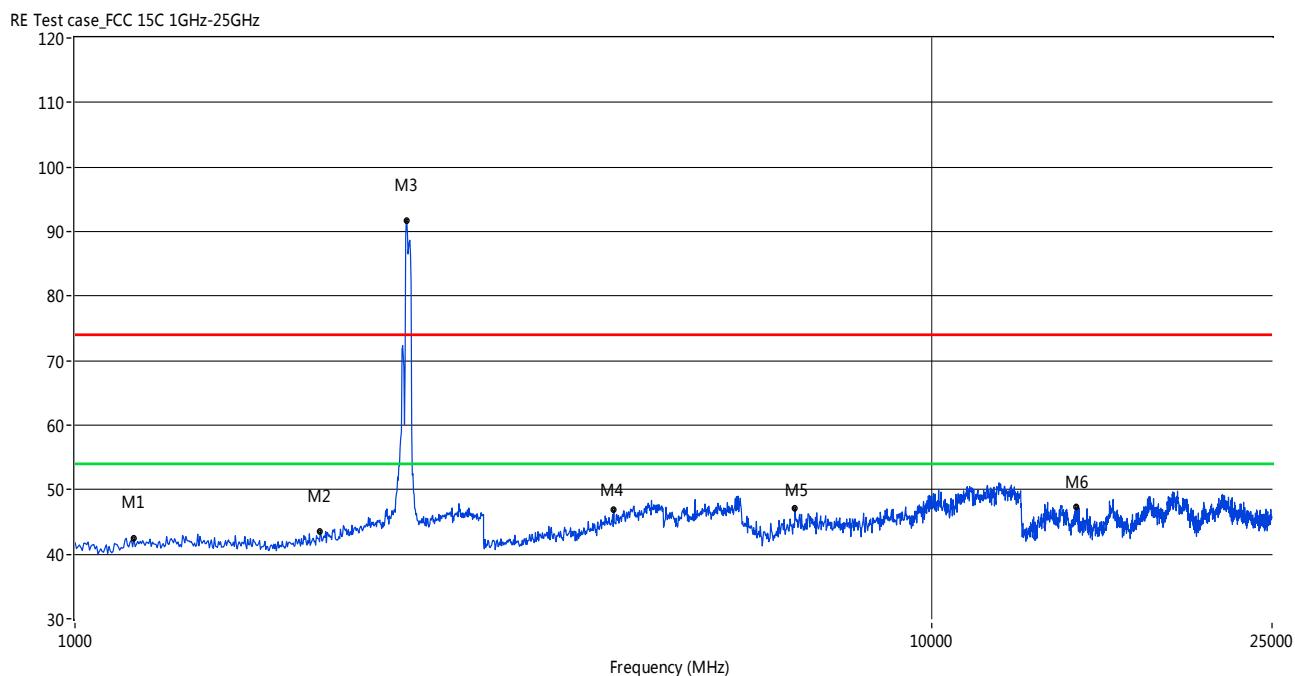
802.11n-40MHz HIGH MODE 1GHz to 25GHz, ANT V

RE Test case_FCC 15C 1GHz-25GHz



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|----------|---------|
| 1 | 1207.59 | 42.37 | -5.53 | 74.0 | 31.63 | Peak | 24.80 | 100 | Vertical | PASS |
| 2 | 1826.35 | 44.01 | -3.96 | 74.0 | 29.99 | Peak | 218.80 | 100 | Vertical | PASS |
| 3 | 2437.13 | 86.15 | -0.83 | 74.0 | -12.15 | Peak | 20.10 | 100 | Vertical | N/A |
| 4 | 3580.84 | 45.67 | 9.59 | 74.0 | 28.33 | Peak | 45.90 | 100 | Vertical | PASS |
| 5 | 5838.32 | 48.45 | 14.91 | 74.0 | 25.55 | Peak | 356.50 | 100 | Vertical | PASS |
| 6 | 9257.07 | 47.44 | 16.96 | 74.0 | 26.56 | Peak | 183.90 | 100 | Vertical | PASS |

802.11n-40MHz HIGH MODE 1GHz to 25GHz, ANT H



| No. | Frequency (MHz) | Results (dBuV/m) | Factor (dB) | Limit (dBuV/m) | Margin (dB) | Detector | Table (o) | Height (cm) | ANT | Verdict |
|-----|-----------------|------------------|-------------|----------------|-------------|----------|-----------|-------------|------------|---------|
| 1 | 1171.66 | 42.37 | -6.00 | 74.0 | 31.63 | Peak | 169.70 | 100 | Horizontal | PASS |
| 2 | 1934.13 | 43.49 | -2.87 | 74.0 | 30.51 | Peak | 287.80 | 100 | Horizontal | PASS |
| 3 | 2437.13 | 91.77 | -0.83 | 74.0 | -17.77 | Peak | 2.20 | 100 | Horizontal | N/A |
| 4 | 4257.48 | 46.83 | 11.39 | 74.0 | 27.17 | Peak | 247.30 | 100 | Horizontal | PASS |
| 5 | 6932.20 | 47.07 | 14.23 | 74.0 | 26.93 | Peak | 205.80 | 100 | Horizontal | PASS |
| 6 | 14767.47 | 47.23 | 9.08 | 74.0 | 26.77 | Peak | 354.10 | 100 | Horizontal | PASS |

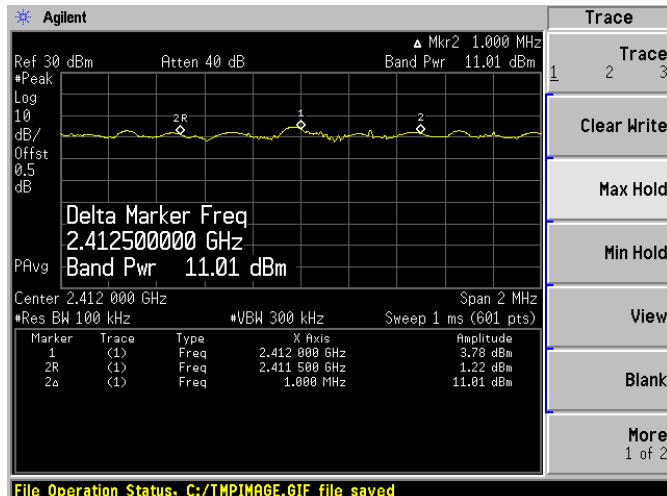
A.6 Band Edge

Test Data

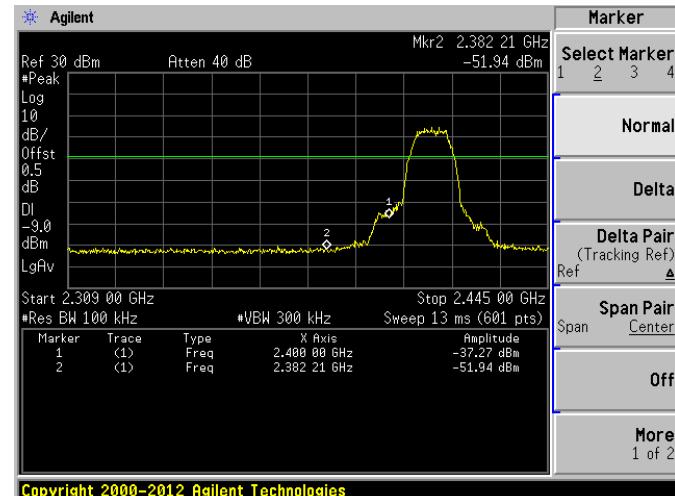
The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Test Plots (ANT 0)

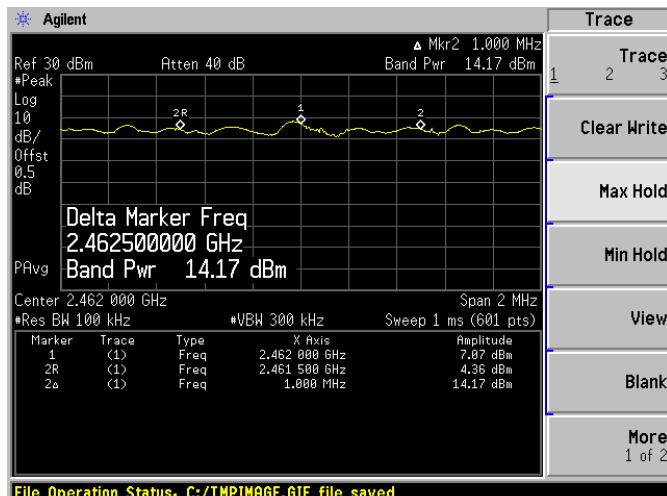
802.11b LOW CHANNEL, Reference level



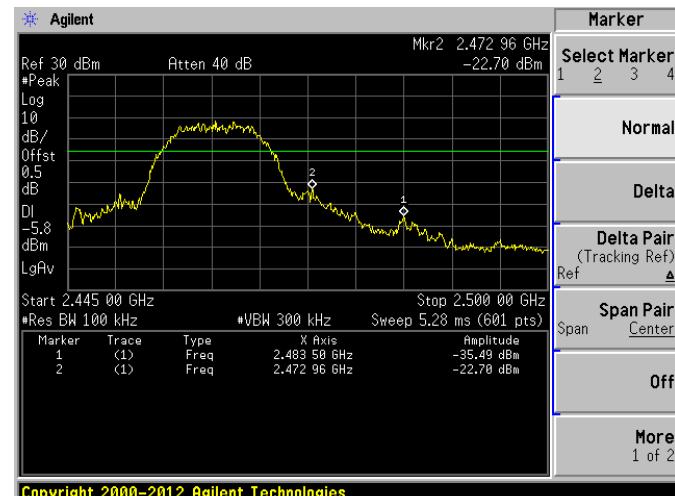
802.11b LOW CHANNEL, Band Edge



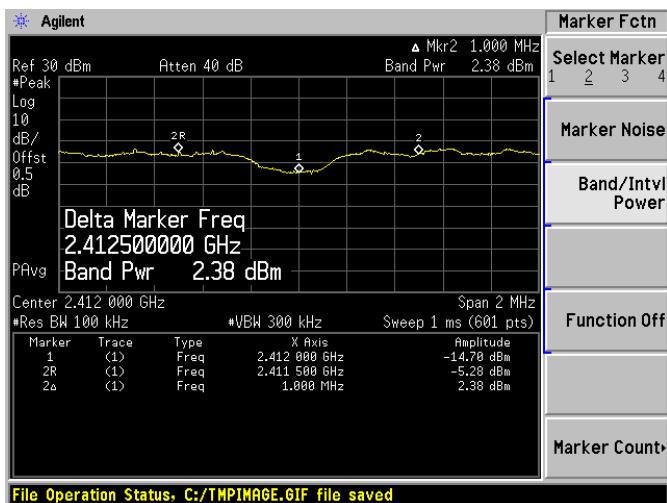
802.11b HIGH CHANNEL, Reference level



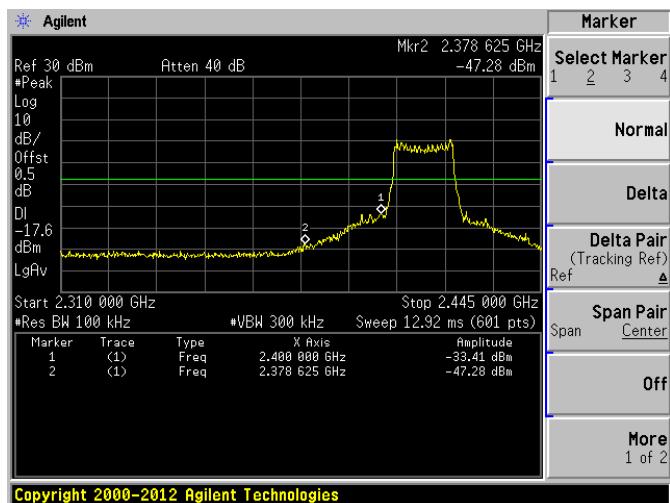
802.11b HIGH CHANNEL, Band Edge



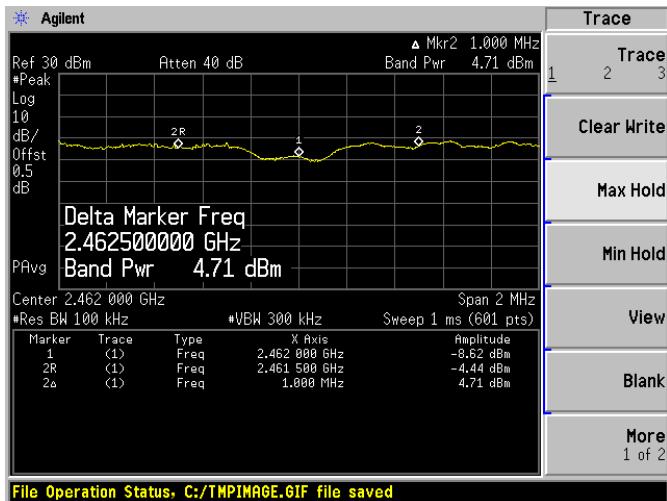
802.11g LOW CHANNEL, Reference level



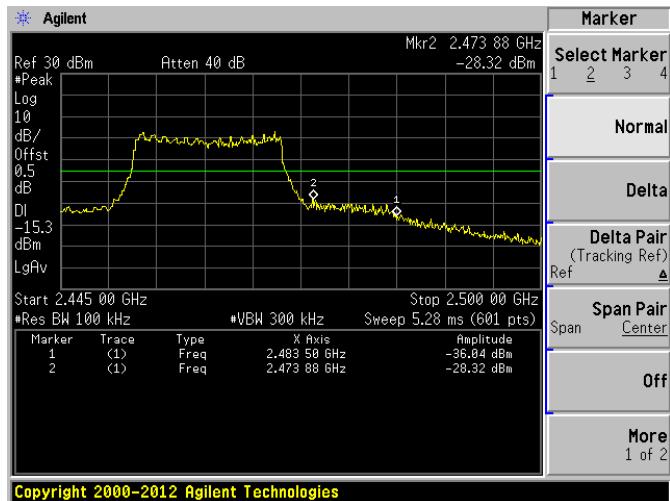
802.11g LOW CHANNEL, Band Edge



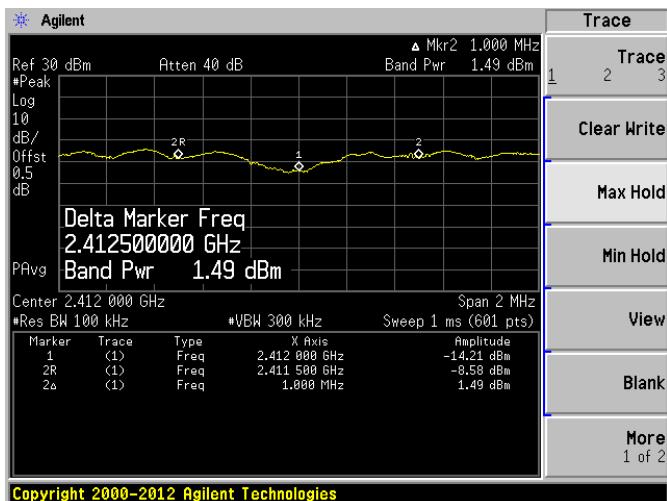
802.11g HIGH CHANNEL, Reference level



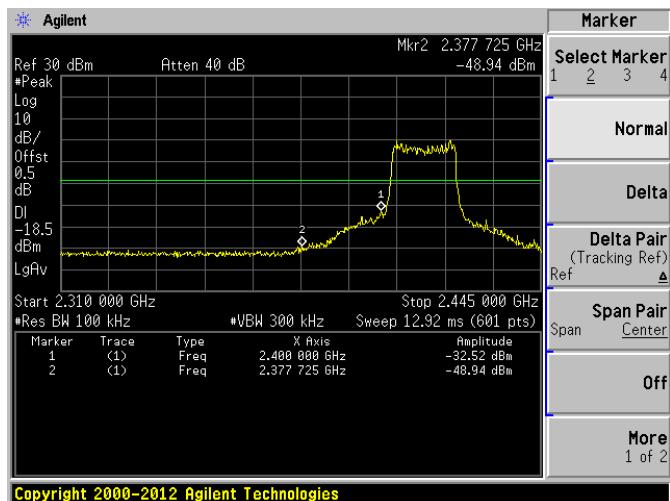
802.11g HIGH CHANNEL, Band Edge



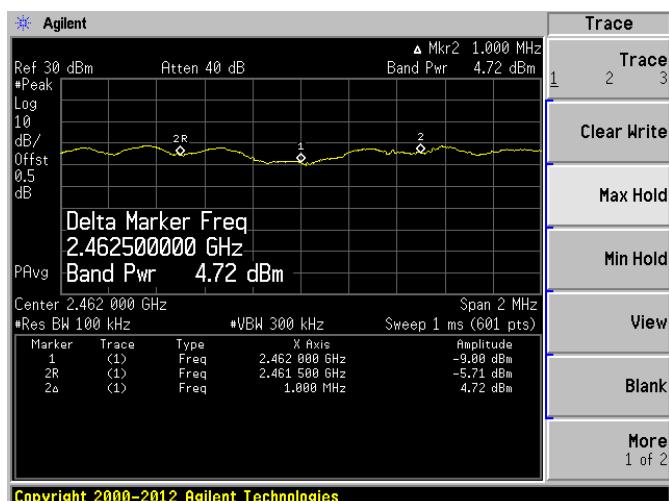
802.11n-20MHz LOW CHANNEL, Reference level



802.11n-20MHz LOW CHANNEL, Band Edge

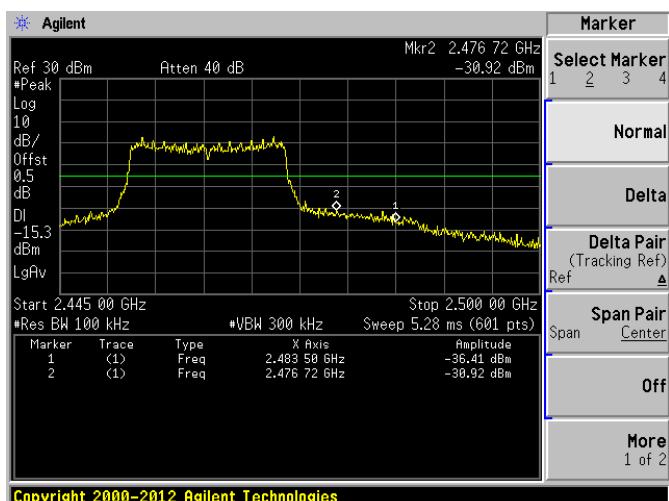


802.11n-20MHz HIGH CHANNEL, Reference level



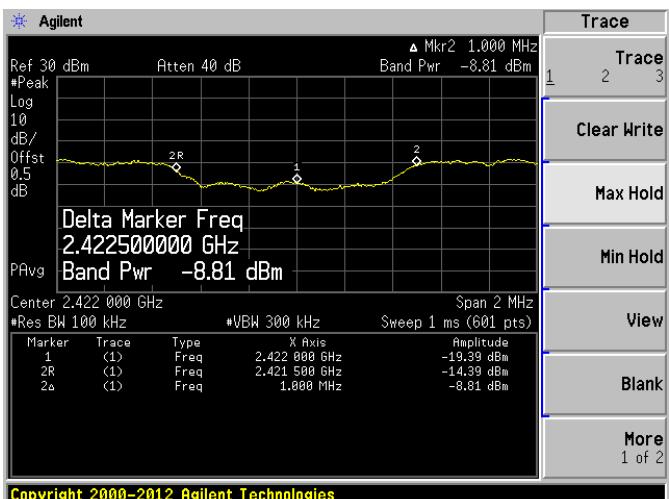
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802.11n-20MHz HIGH CHANNEL, Band Edge



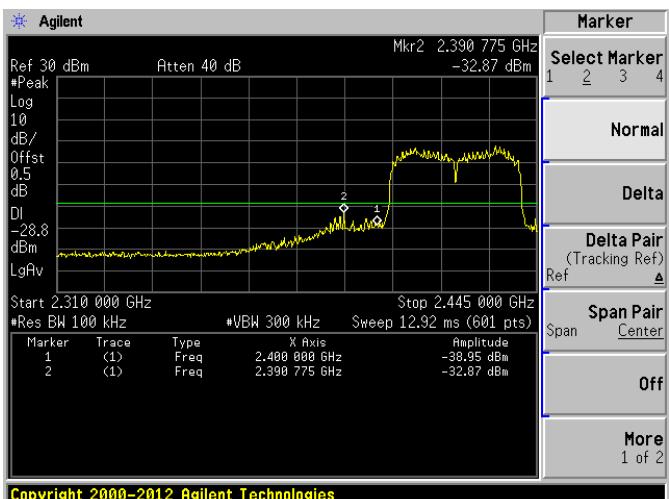
Copyright 2000-2012 Agilent Technologies

802.11n-40MHz LOW CHANNEL, Reference level



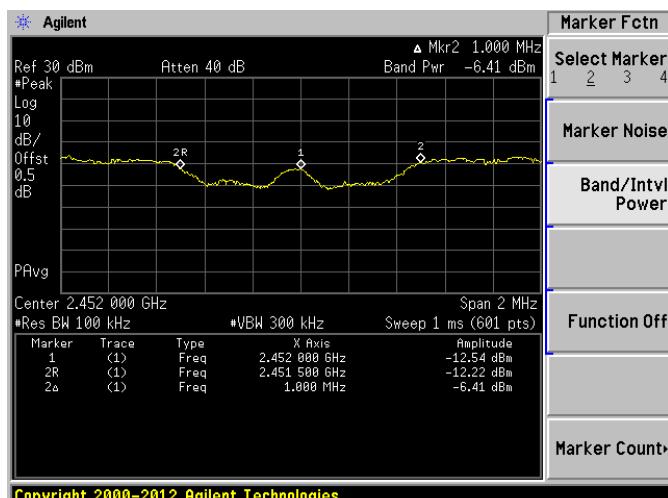
Copyright 2000-2012 Agilent Technologies

802.11n-40MHz LOW CHANNEL, Band Edge



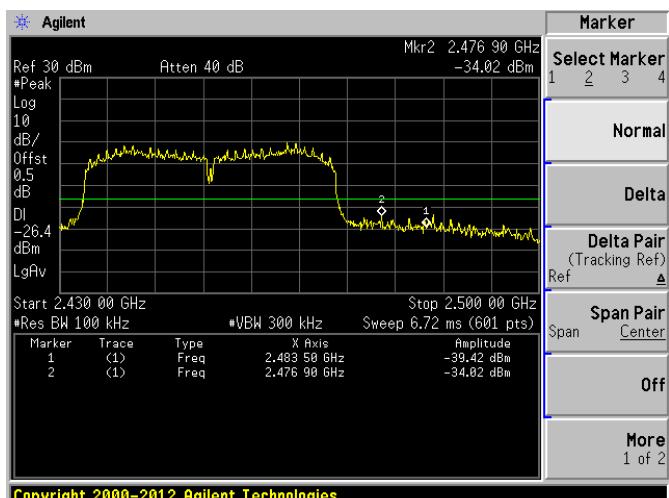
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802.11n-40MHz HIGH CHANNEL, Reference level



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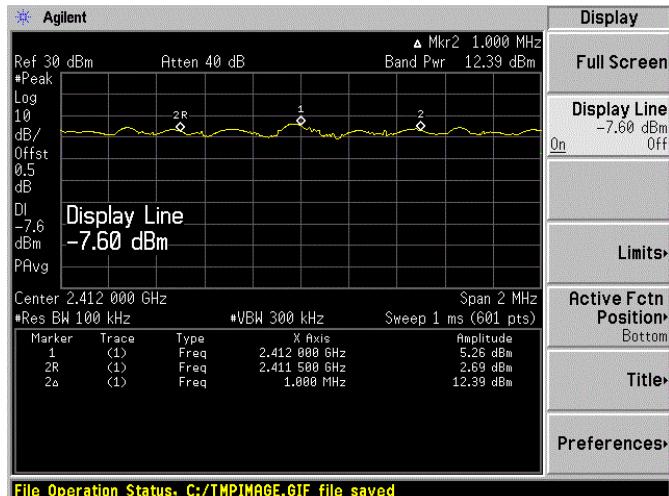
802.11n-40MHz HIGH CHANNEL, Band Edge



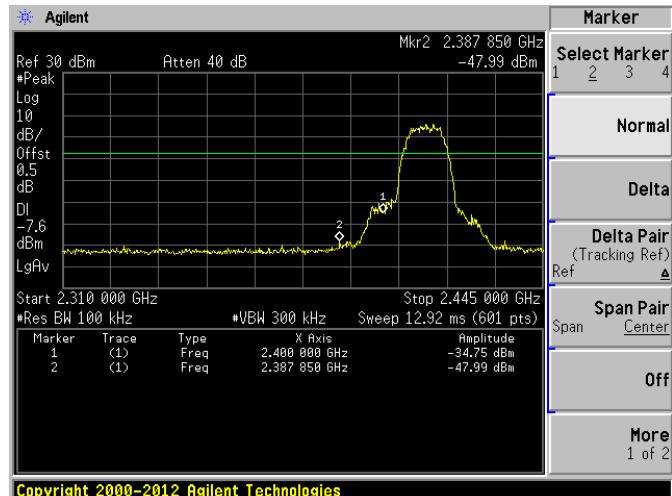
Copyright 2000-2012 Agilent Technologies

Test Plots (ANT 1)

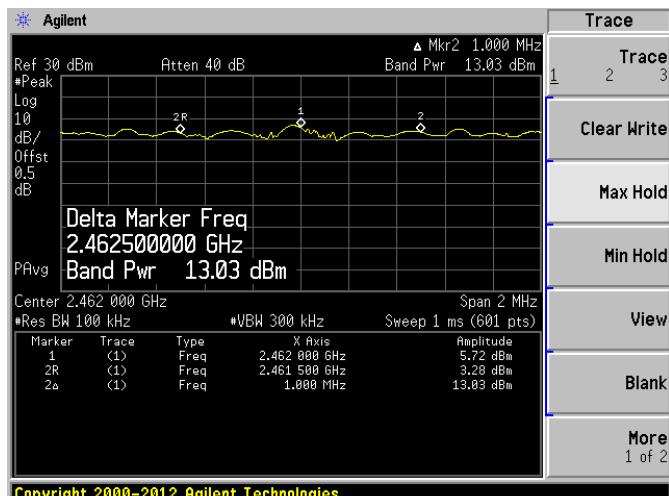
802.11b LOW CHANNEL, Reference level



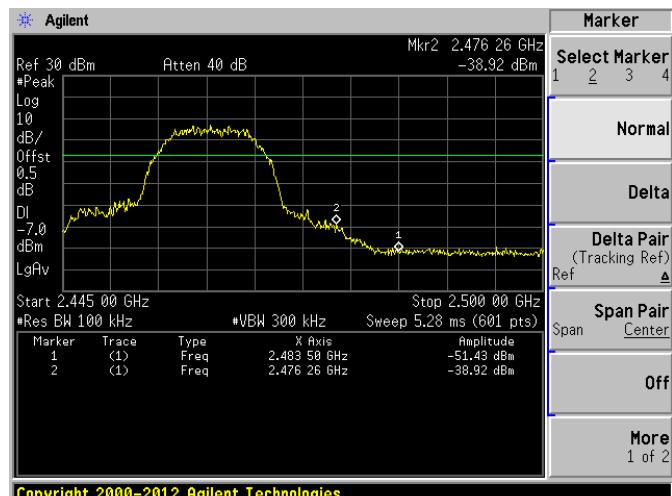
802.11b LOW CHANNEL, Band Edge



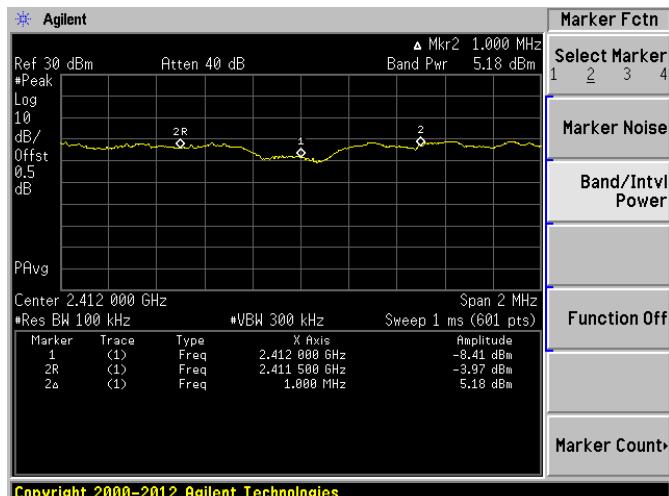
802.11b HIGH CHANNEL, Reference level



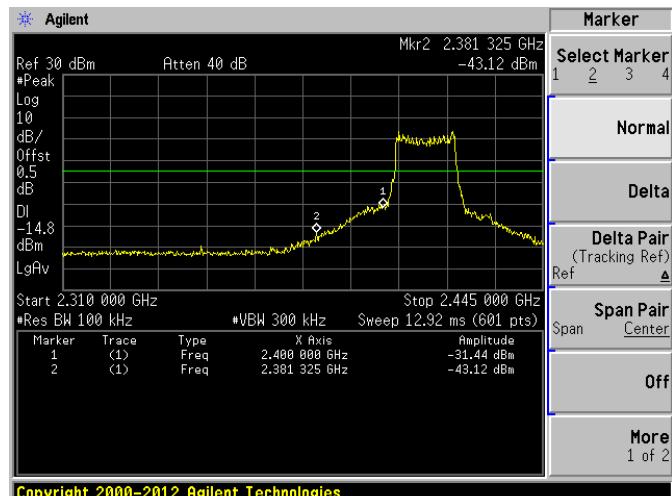
802.11b HIGH CHANNEL, Band Edge



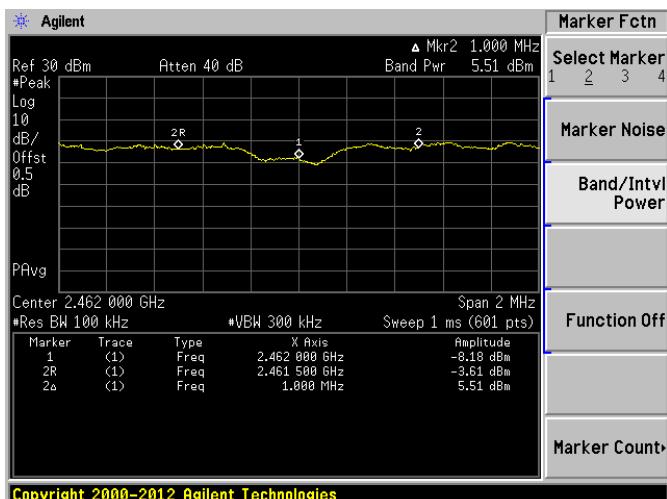
802.11g LOW CHANNEL, Reference level



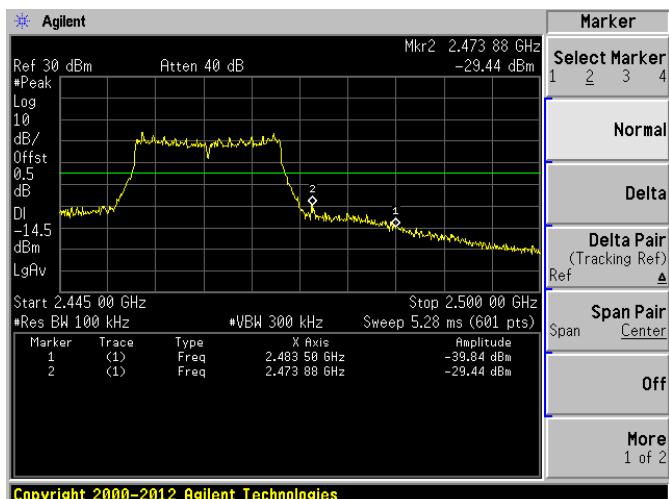
802.11g LOW CHANNEL, Band Edge



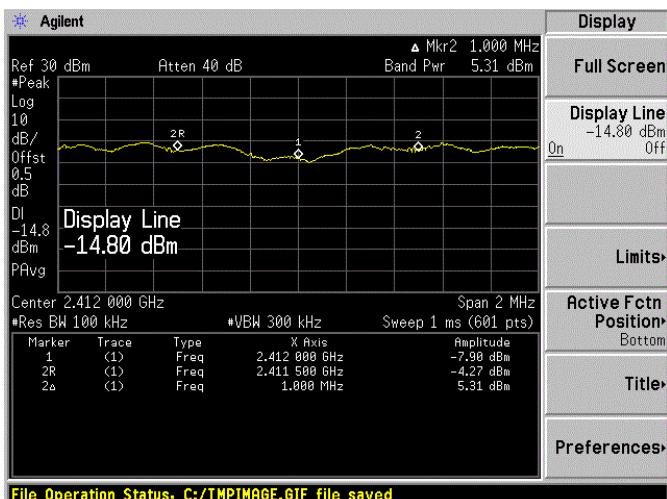
802.11g HIGH CHANNEL, Reference level



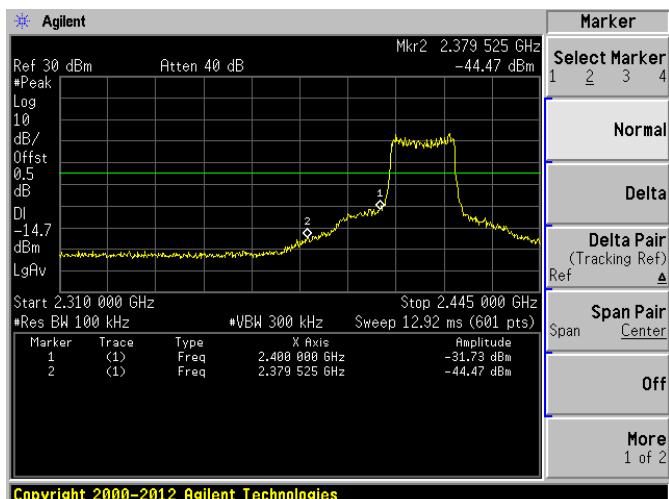
802.11g HIGH CHANNEL, Band Edge



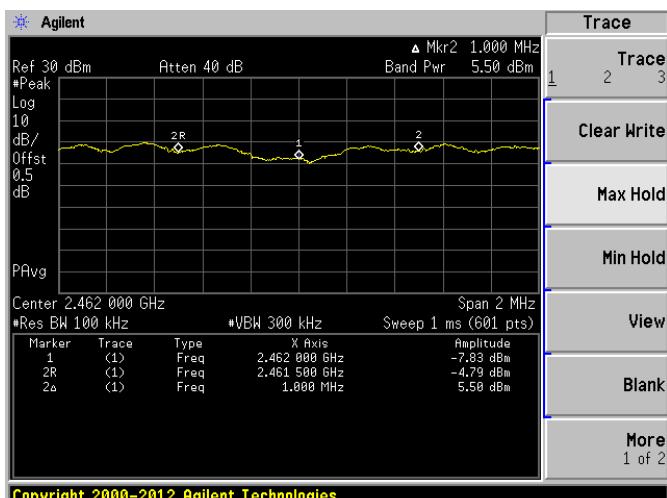
802.11n-20MHz LOW CHANNEL, Reference level



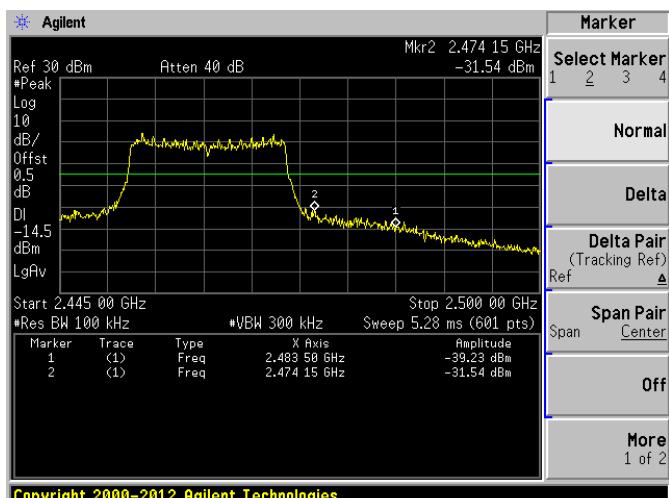
802.11n-20MHz LOW CHANNEL, Band Edge



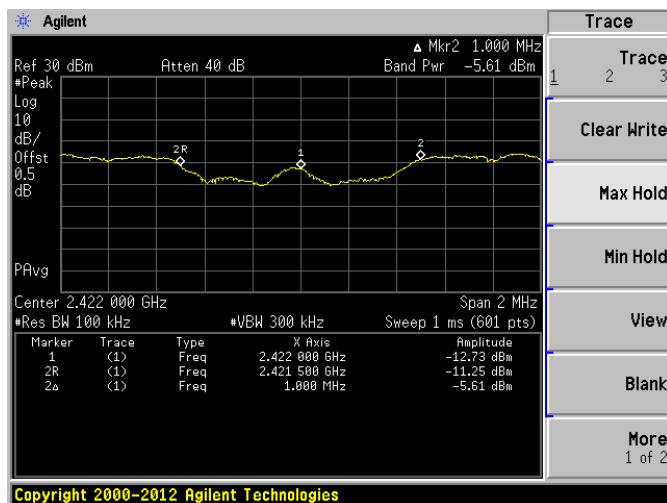
802.11n-20MHz HIGH CHANNEL, Reference level



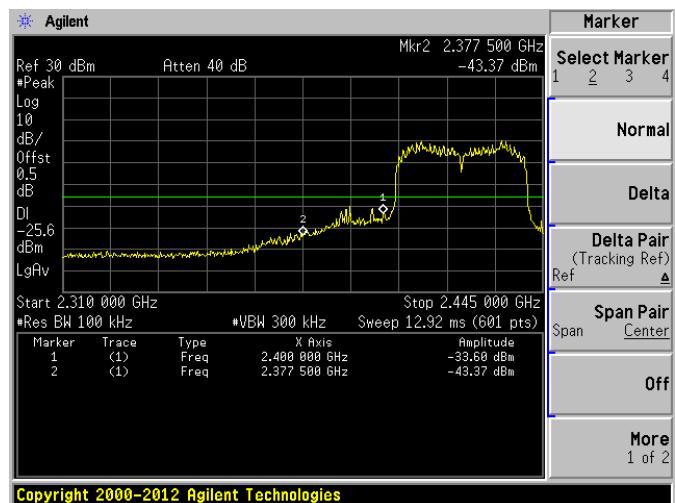
802.11n-20MHz HIGH CHANNEL, Band Edge



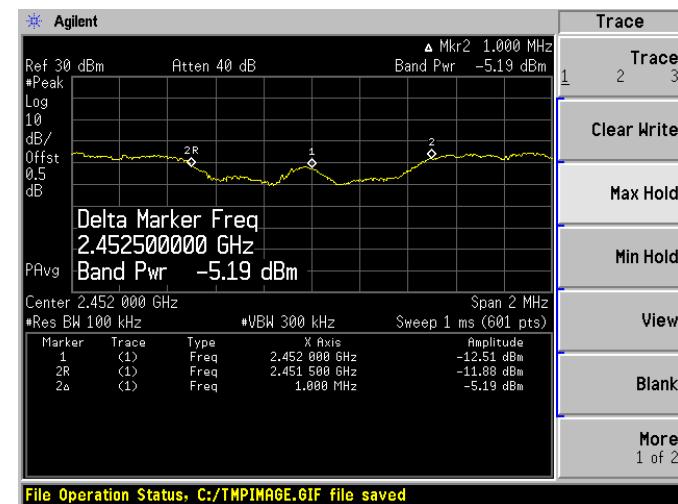
802.11n-40MHz LOW CHANNEL, Reference level



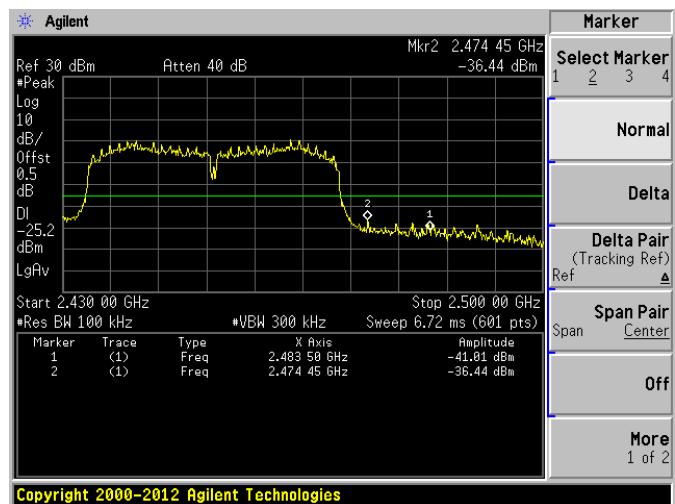
802.11n-40MHz LOW CHANNEL, Band Edge



802.11n-40MHz HIGH CHANNEL, Reference level



802.11n-40MHz HIGH CHANNEL, Band Edge



A.7 Power Spectral Density (PSD)

Test Data (ANT 0)

802.11b Mode:

| Channel | Spectral power density (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|---------|-----------------------------------|------------------|---------|
| Low | -10.25 | 8 | PASS |
| Middle | -9.48 | 8 | PASS |
| High | -7.68 | 8 | PASS |

802.11g Mode:

| Channel | Spectral power density (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|---------|-----------------------------------|------------------|---------|
| Low | -15.56 | 8 | PASS |
| Middle | -15.56 | 8 | PASS |
| High | -13.73 | 8 | PASS |

802.11n-20MHz Mode:

| Channel | Spectral power density (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|---------|-----------------------------------|------------------|---------|
| Low | -16.67 | 8 | PASS |
| Middle | -15.20 | 8 | PASS |
| High | -14.07 | 8 | PASS |

802.11n-40MHz Mode:

| Channel | Spectral power density (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|---------|-----------------------------------|------------------|---------|
| Low | -18.09 | 8 | PASS |
| Middle | -18.28 | 8 | PASS |
| High | -16.79 | 8 | PASS |

Test Data (ANT 1)

802.11b Mode:

| Channel | Spectral power density (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|---------|-----------------------------------|------------------|---------|
| Low | -8.30 | 8 | PASS |
| Middle | -9.60 | 8 | PASS |
| High | -7.92 | 8 | PASS |

802.11g Mode:

| Channel | Spectral power density (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|---------|-----------------------------------|------------------|---------|
| Low | -14.00 | 8 | PASS |
| Middle | -14.77 | 8 | PASS |
| High | -13.46 | 8 | PASS |

802.11n-20MHz Mode:

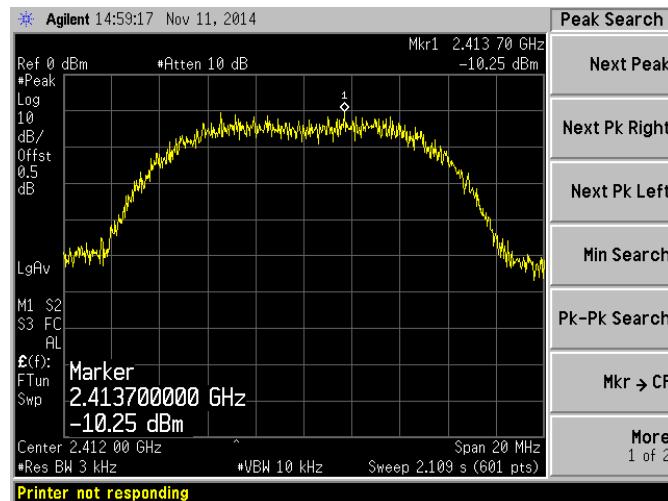
| Channel | Spectral power density (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|---------|-----------------------------------|------------------|---------|
| Low | -13.85 | 8 | PASS |
| Middle | -15.76 | 8 | PASS |
| High | -13.39 | 8 | PASS |

802.11n-40MHz Mode:

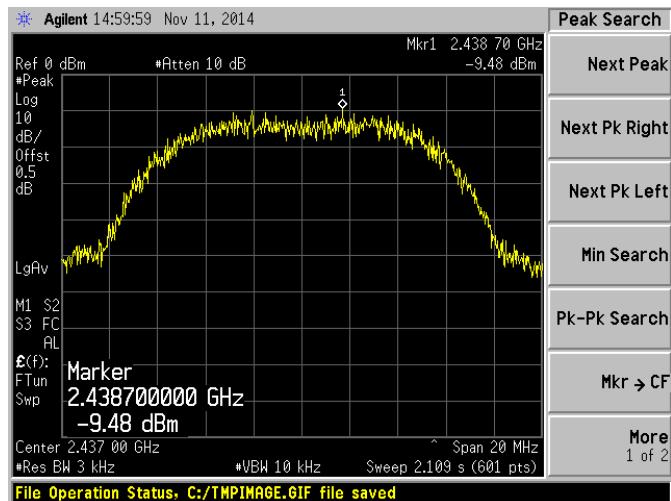
| Channel | Spectral power density (dBm/3kHz) | Limit (dBm/3kHz) | Verdict |
|---------|-----------------------------------|------------------|---------|
| Low | -16.06 | 8 | PASS |
| Middle | -17.39 | 8 | PASS |
| High | -15.66 | 8 | PASS |

Test plots (ANT 0)

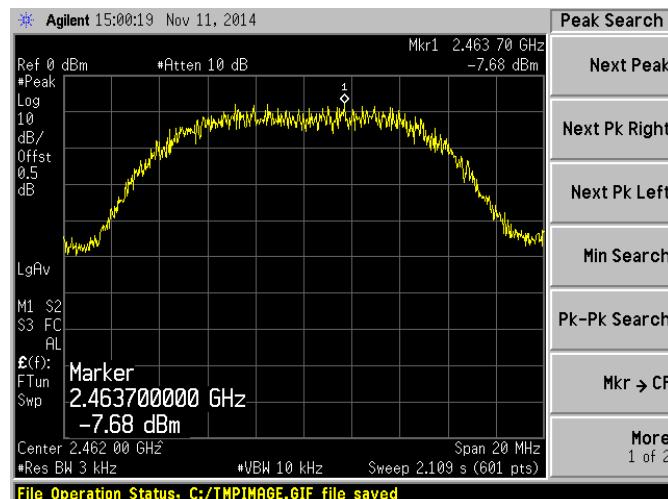
802.11b LOW CHANNEL



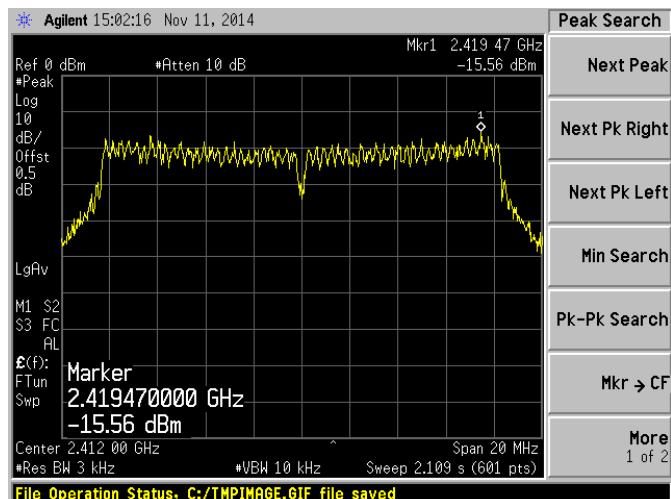
802.11b MID CHANNEL



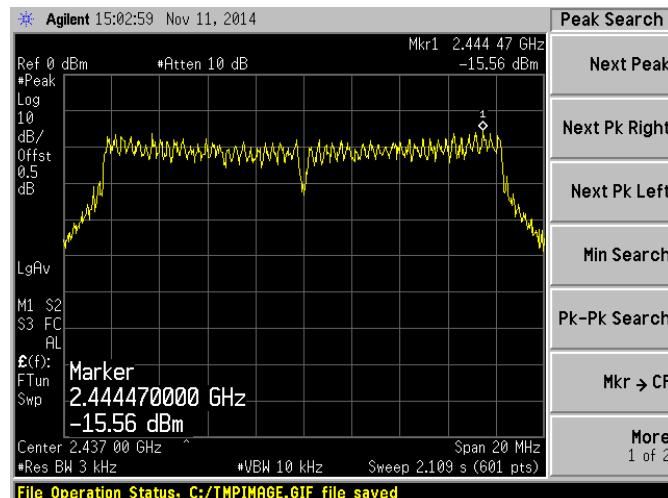
802.11b HIGH CHANNEL



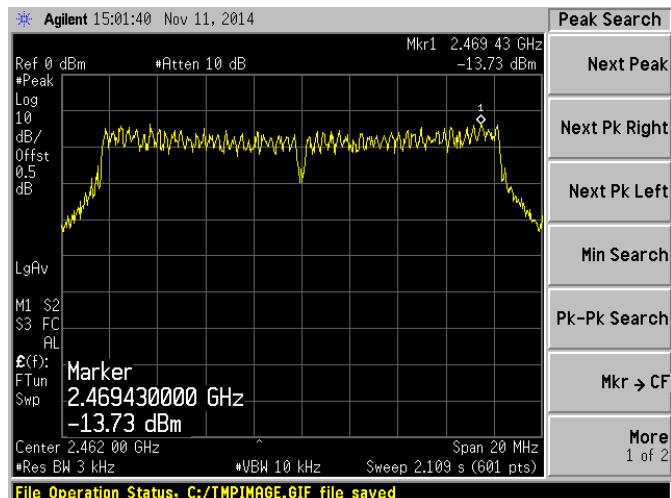
802.11g LOW CHANNEL



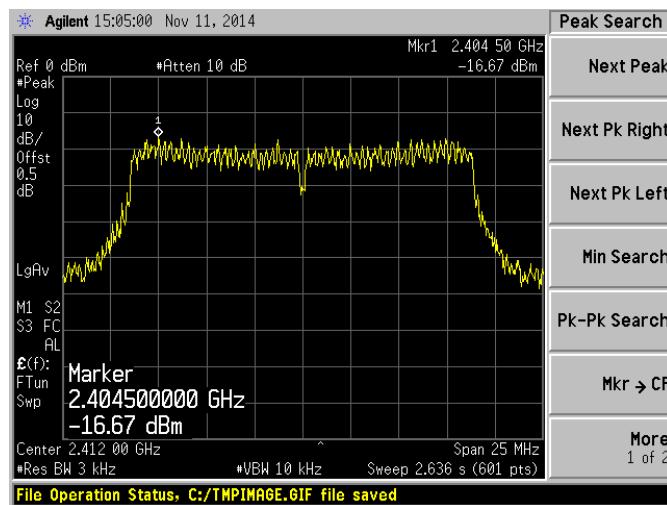
802.11g MID CHANNEL



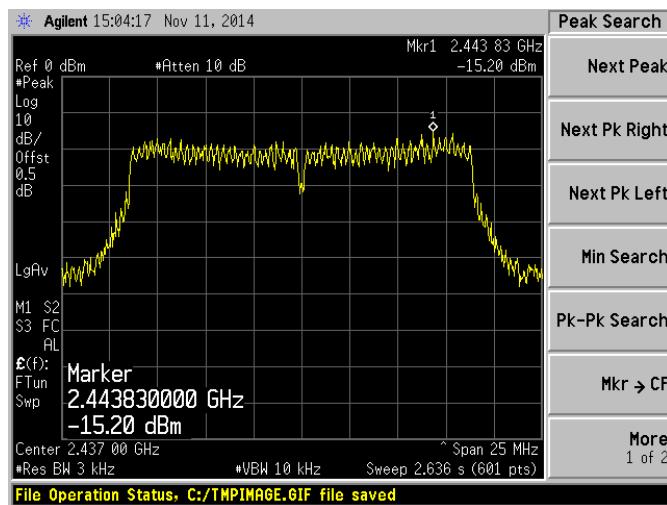
802.11g HIGH CHANNEL



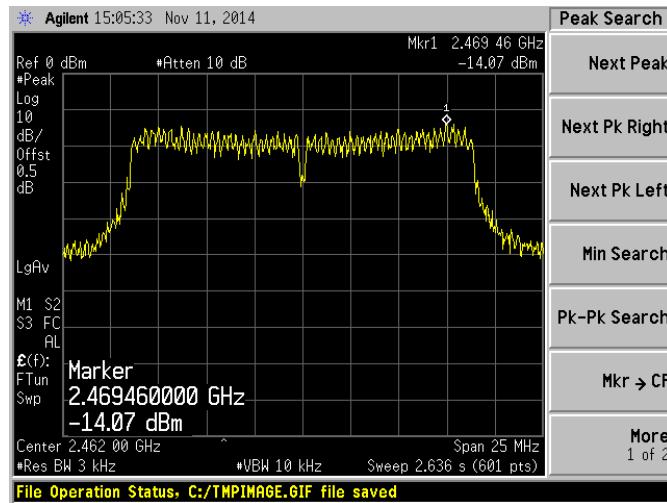
802.11n-20MHz LOW CHANNEL



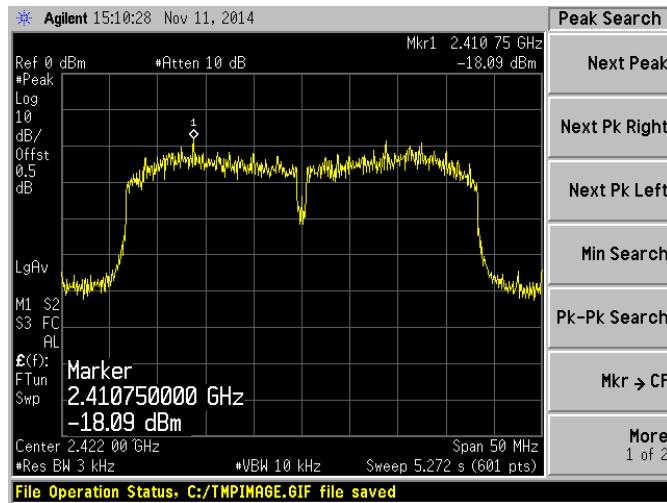
802.11 n-20MHz MID CHANNEL



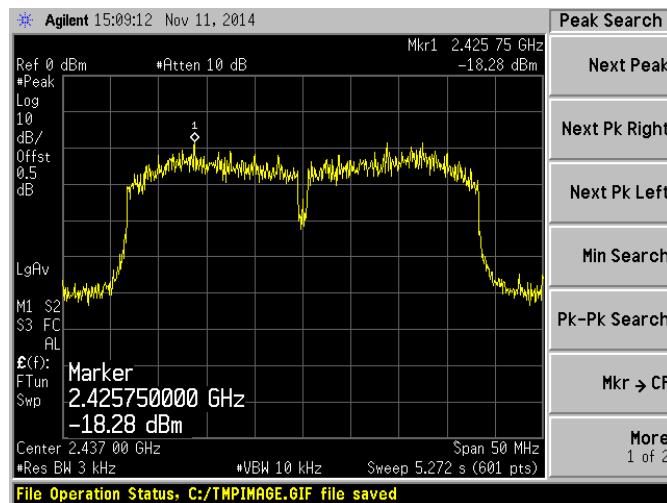
802.11n-20MHz HIGH CHANNEL



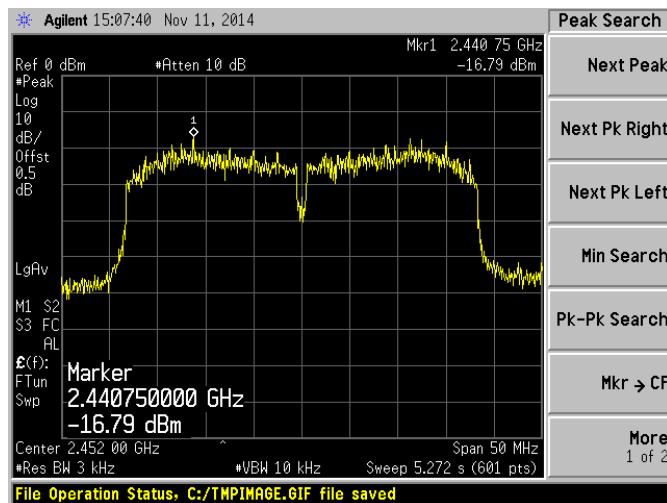
802.11n-40MHz LOW CHANNEL



802.11n-40MHz MID CHANNEL

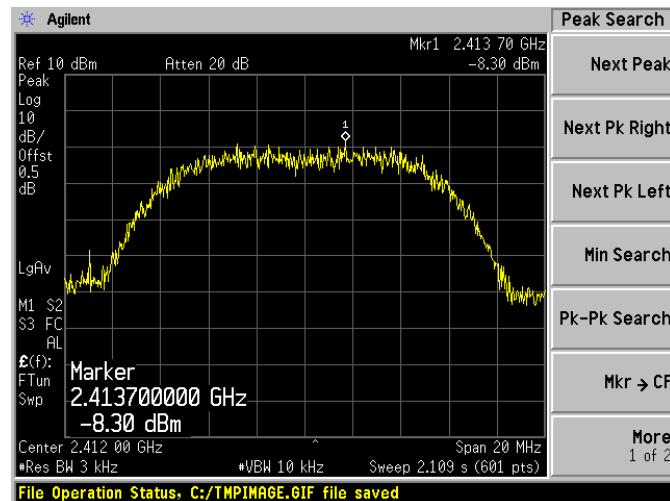


802.11n-40MHz HIGH CHANNEL

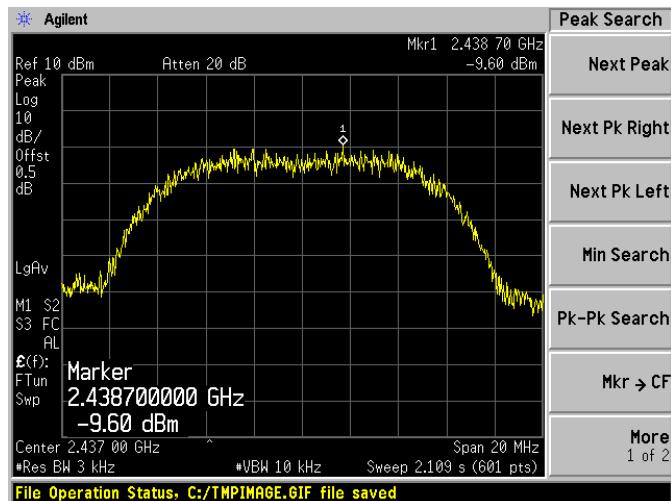


Test plots (ANT 1)

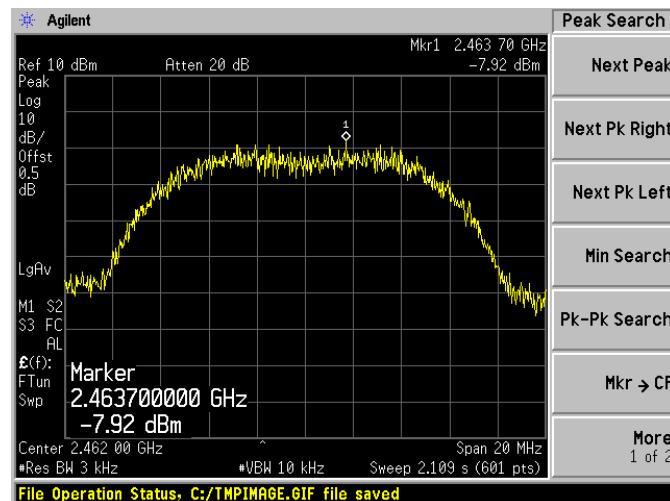
802.11b LOW CHANNEL



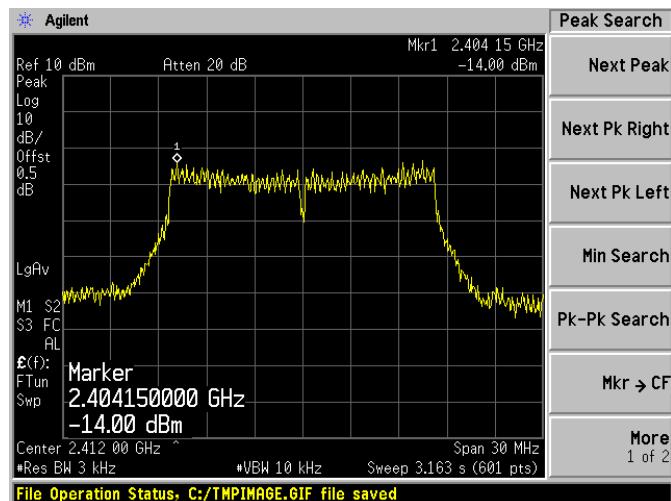
802.11b MID CHANNEL



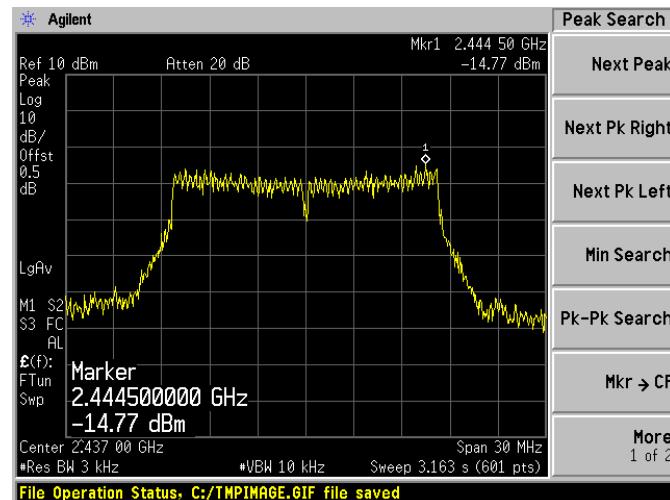
802.11b HIGH CHANNEL



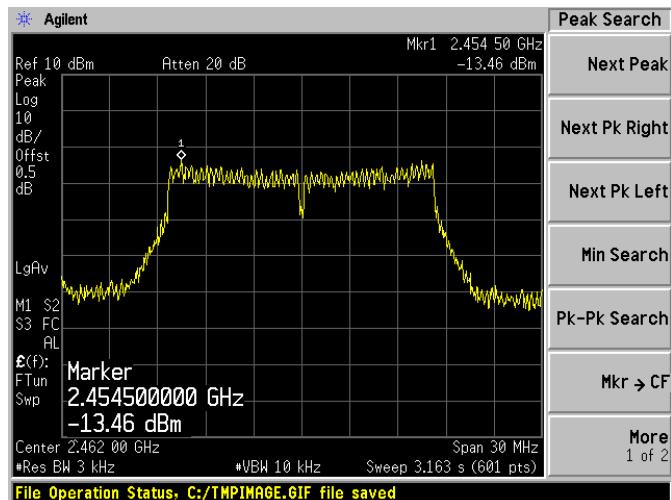
802.11g LOW CHANNEL



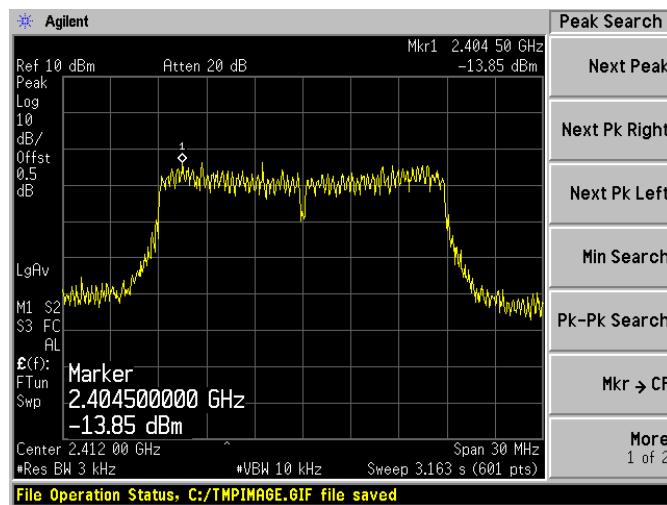
802.11g MID CHANNEL



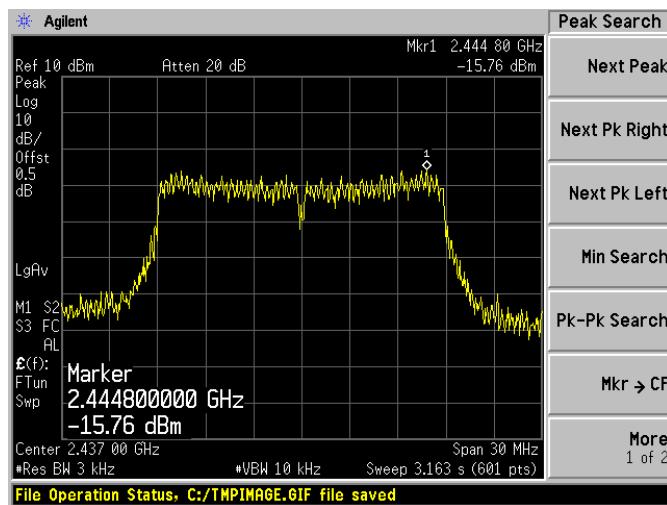
802.11g HIGH CHANNEL



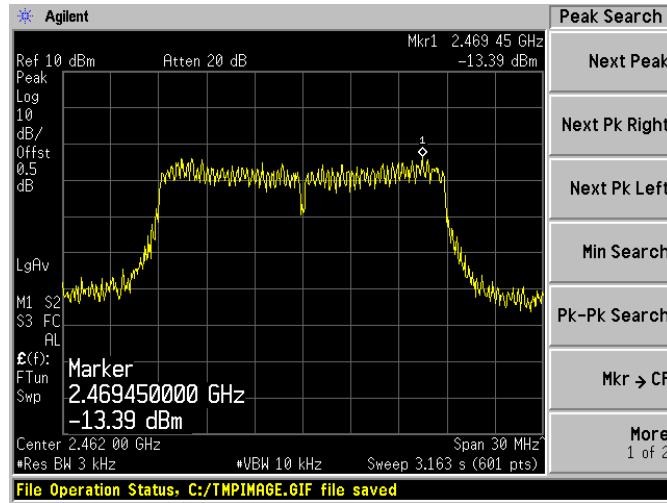
802.11n-20MHz LOW CHANNEL



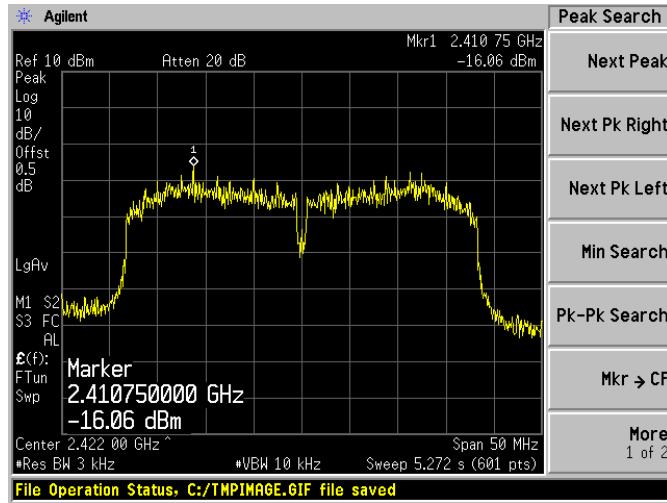
802.11 n-20MHz MID CHANNEL



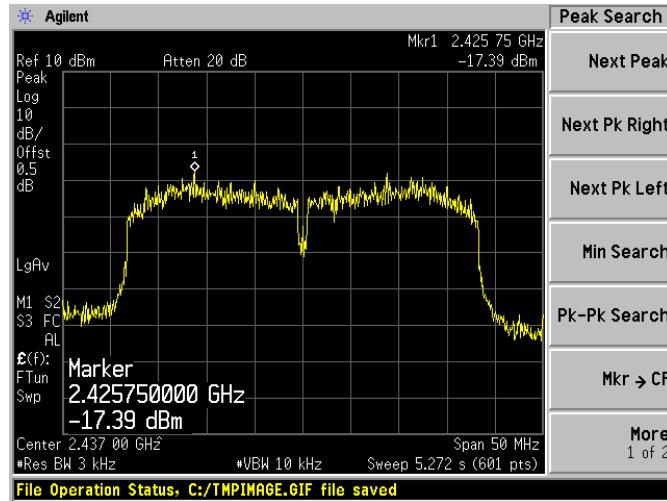
802.11n-20MHz HIGH CHANNEL



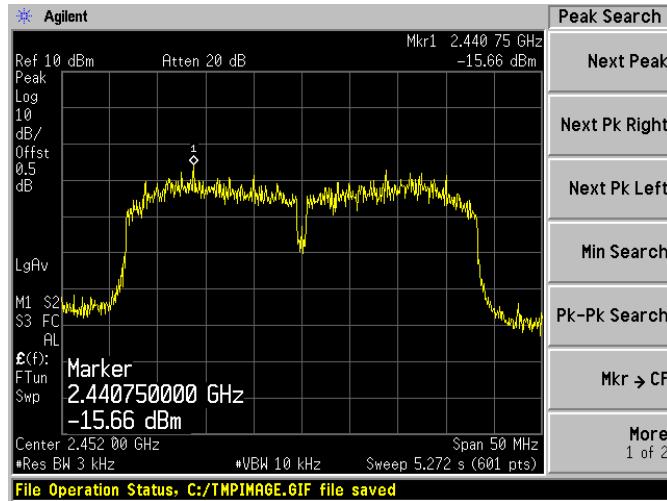
802.11n-40MHz LOW CHANNEL



802.11n-40MHz MID CHANNEL



802.11n-40MHz HIGH CHANNEL



ANNEX B TEST SETUP PHOTOS

B.1. Conducted Test Photo



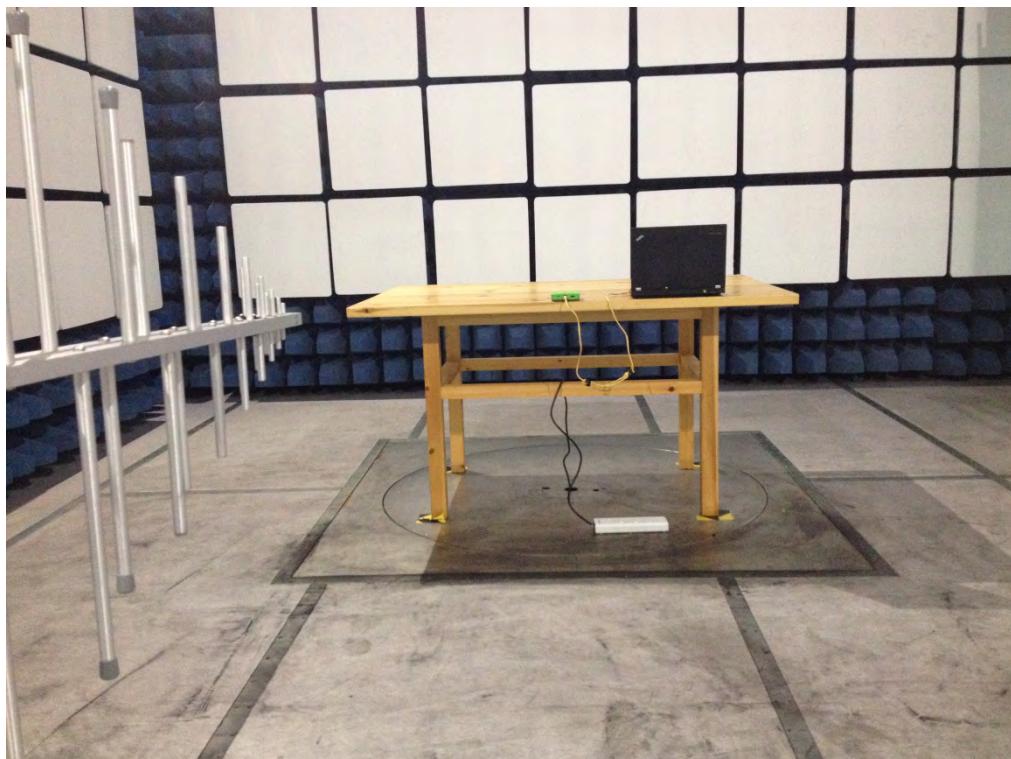
B.2. Conducted Emissions Test Photo



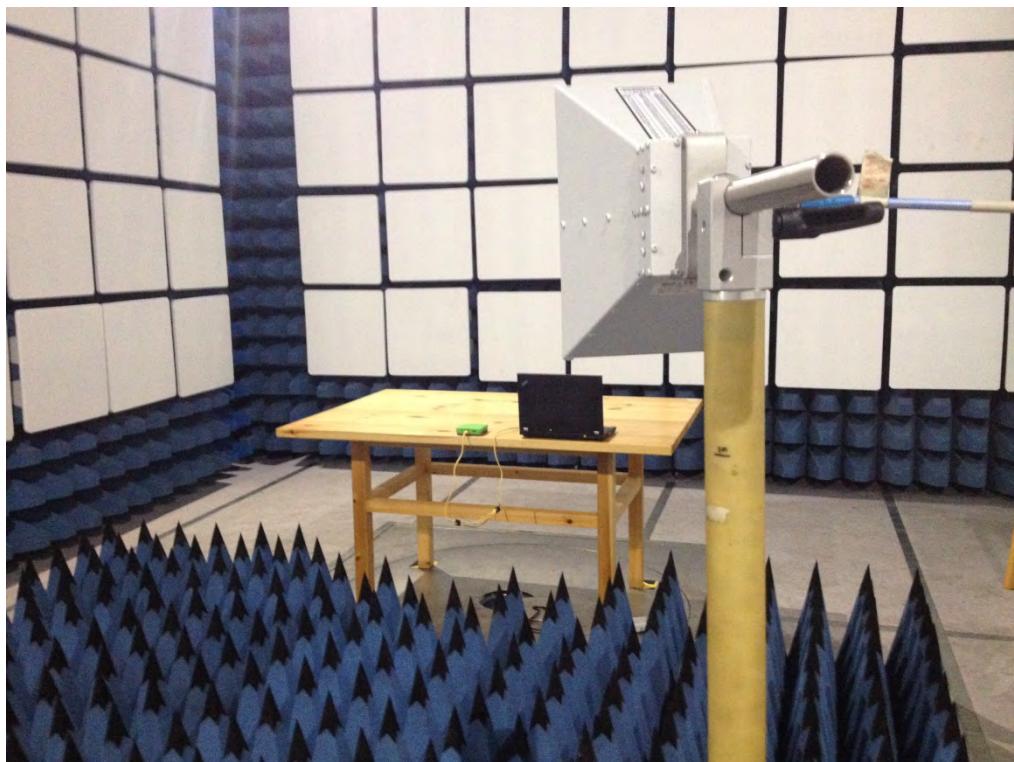
B.3. Radiated Test Photo



Below 30MHz



30MHz to 1GHz



Above 1GHz

ANNEX C EUT PHOTOS

C.1 Appearance of the EUT



THE FRONT OF EUT



THE BACK OF EUT



THE LEFT OF EUT



THE RIGHT OF EUT

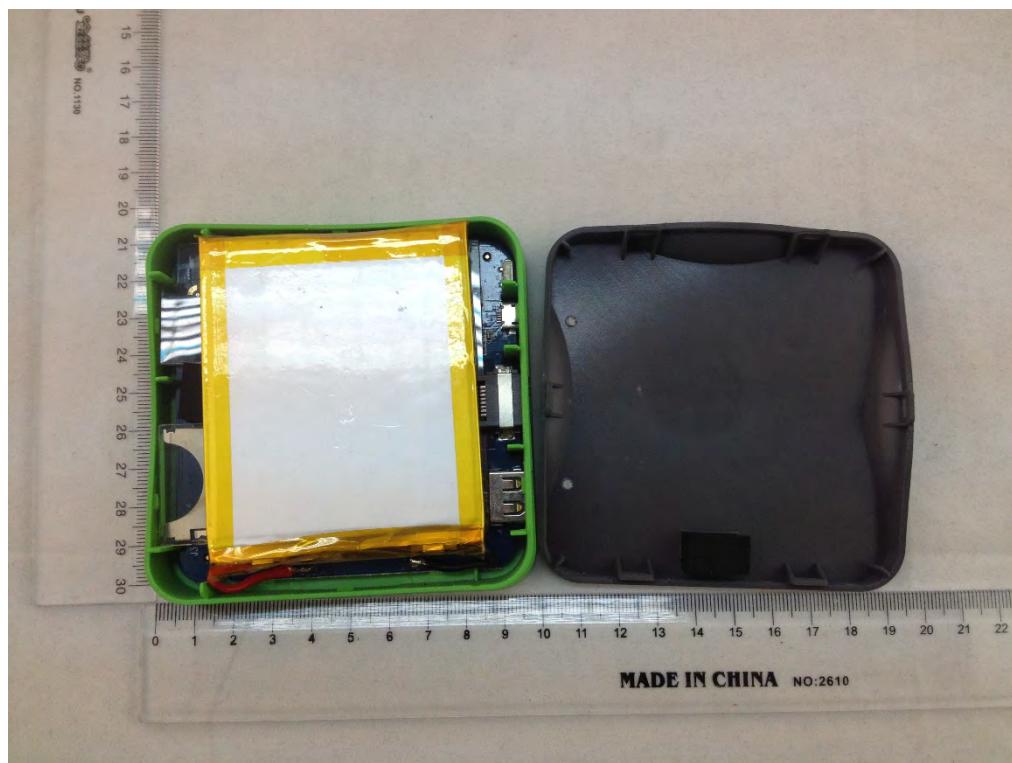


THE UP OF EUT

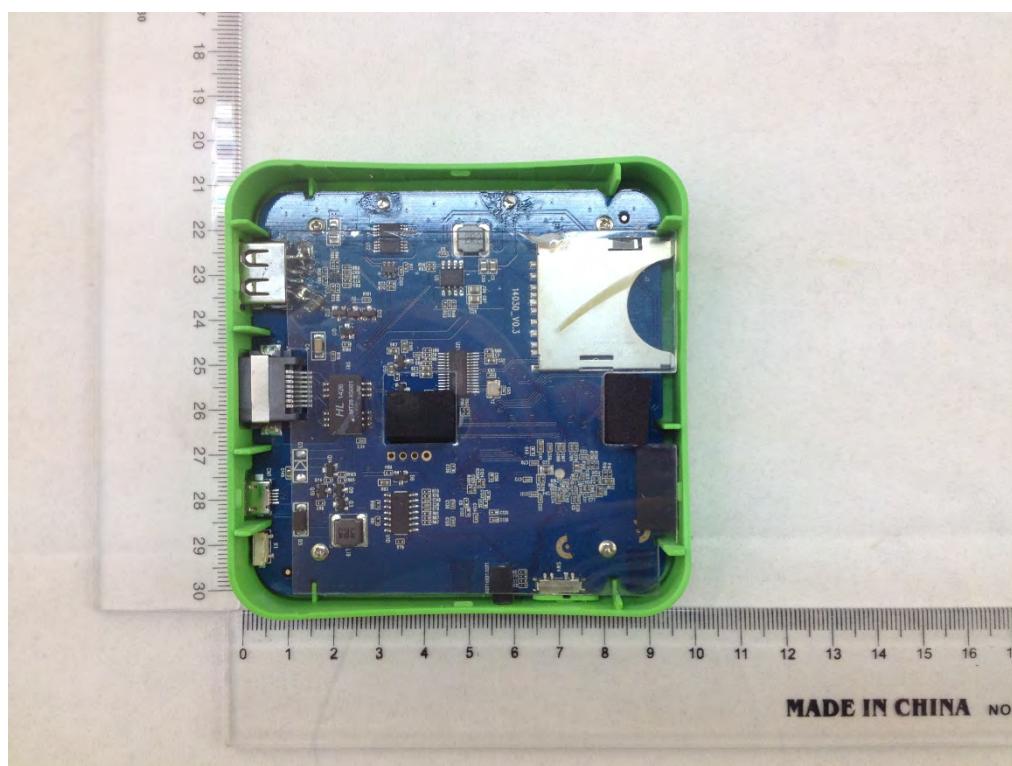


THE DOWN OF EUT

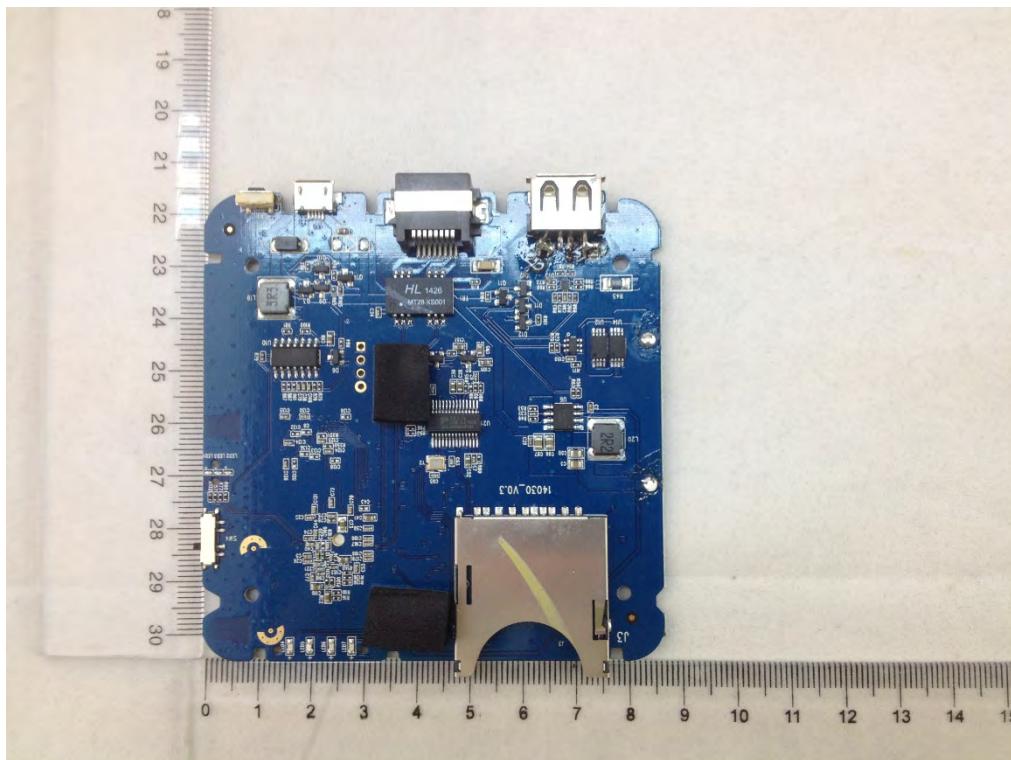
C.2 Inside of the EUT



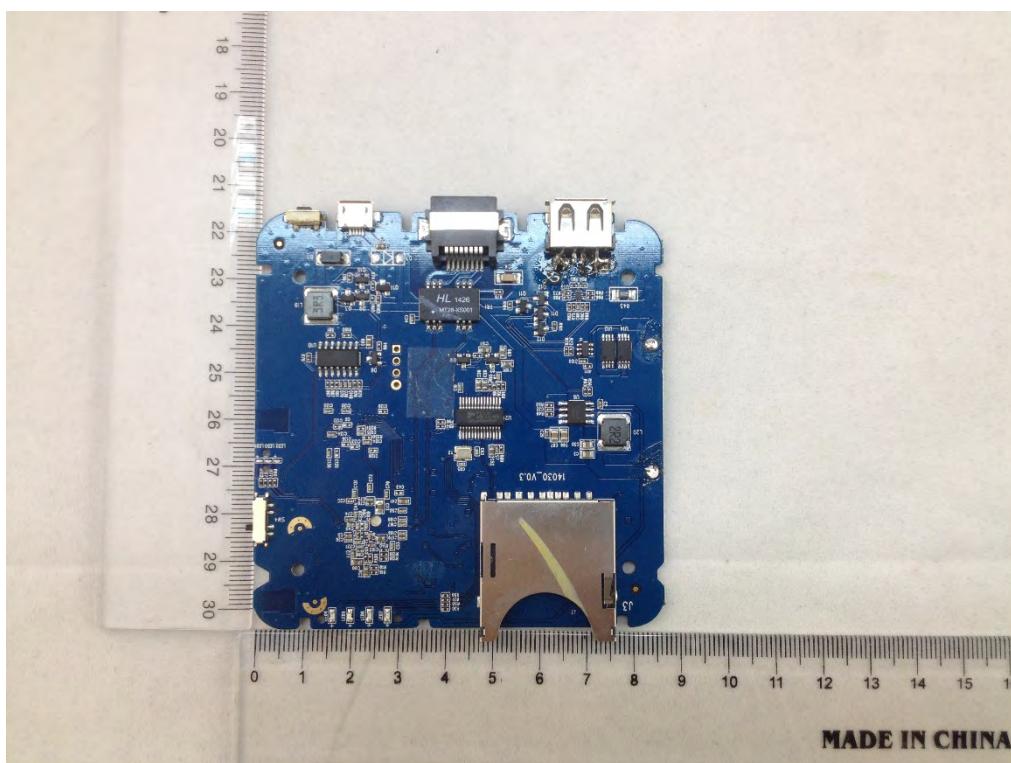
EUT UNCOVER VIEW 1



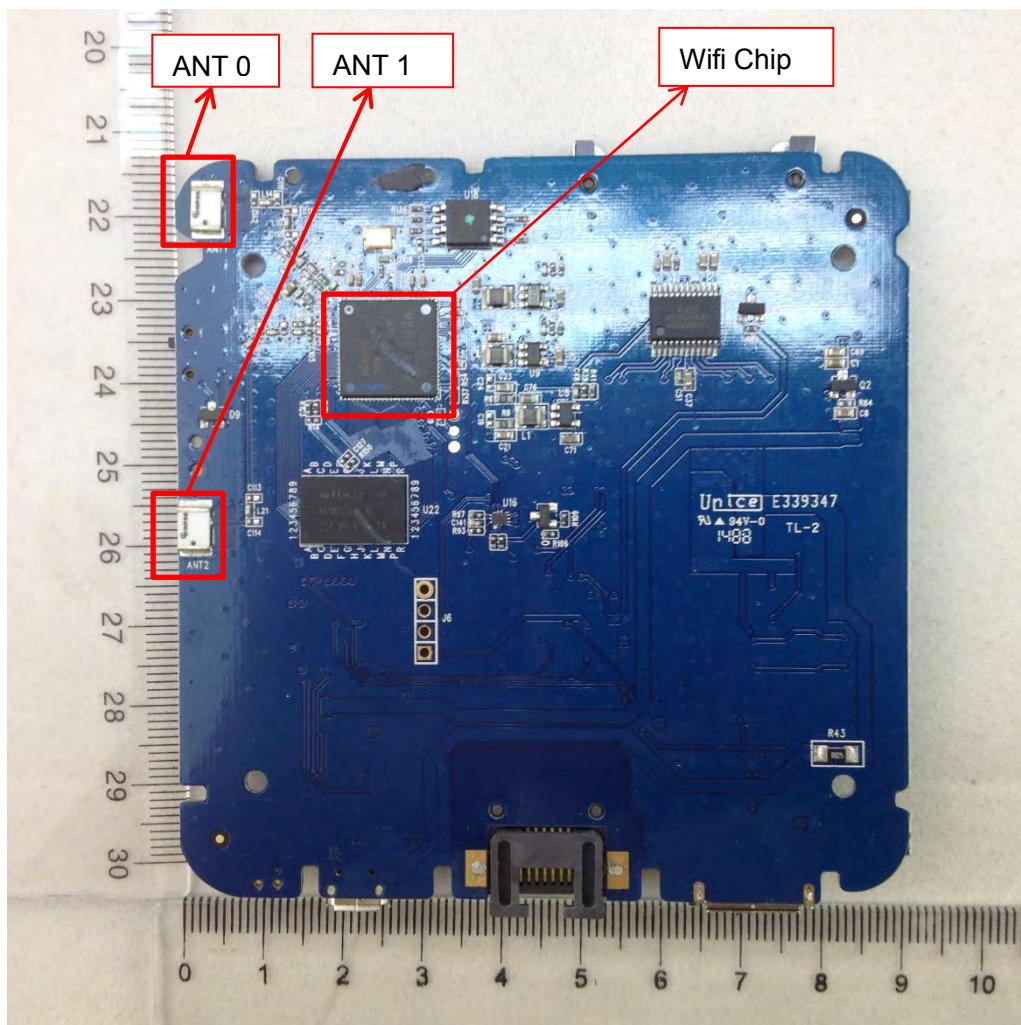
EUT UNCOVER VIEW 2



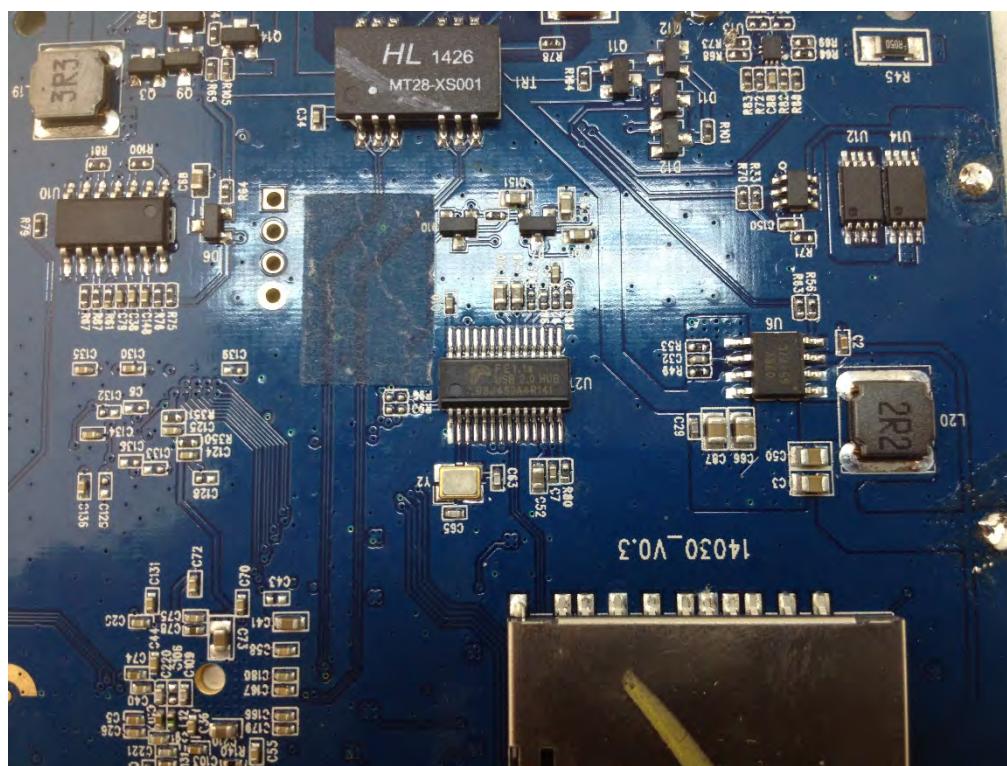
MAIN BOARD TOP VIEW 1

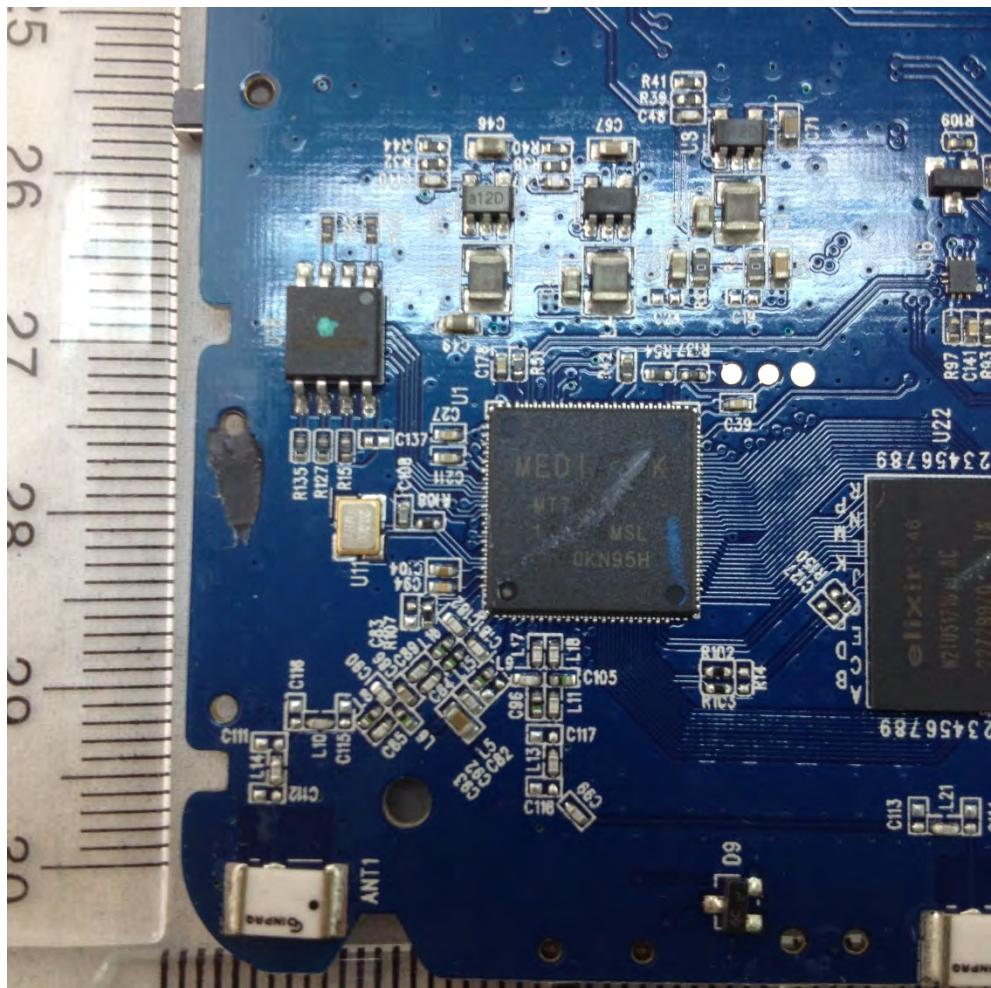


MAIN BOARD TOP VIEW 2

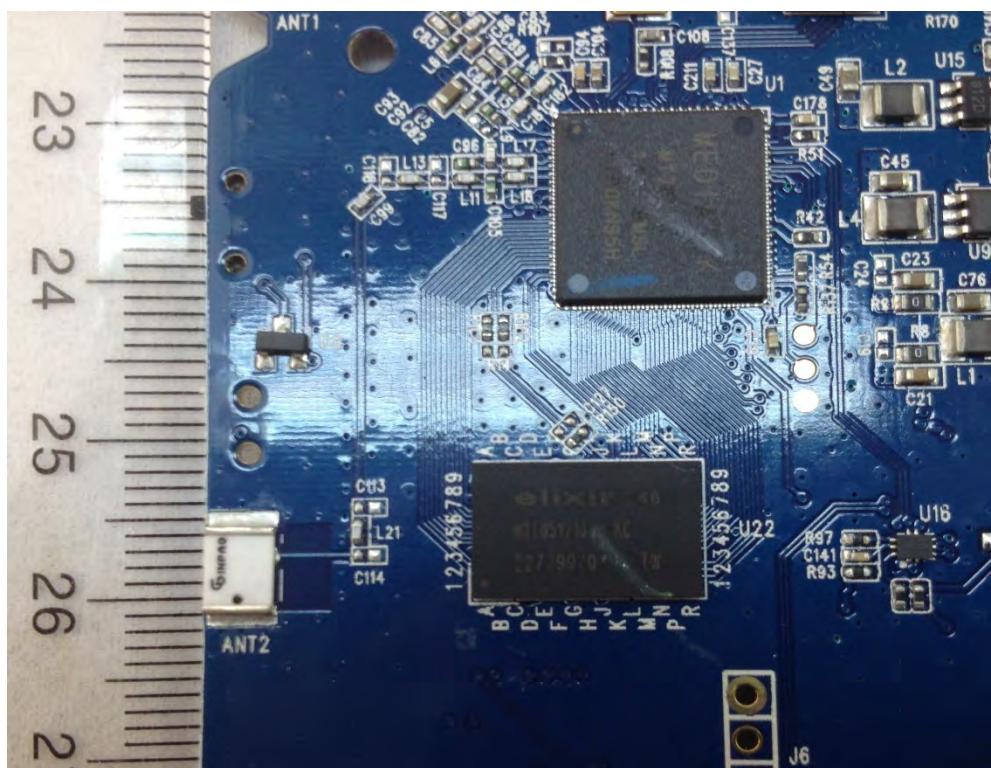


MAIN BOARD BACK VIEW2

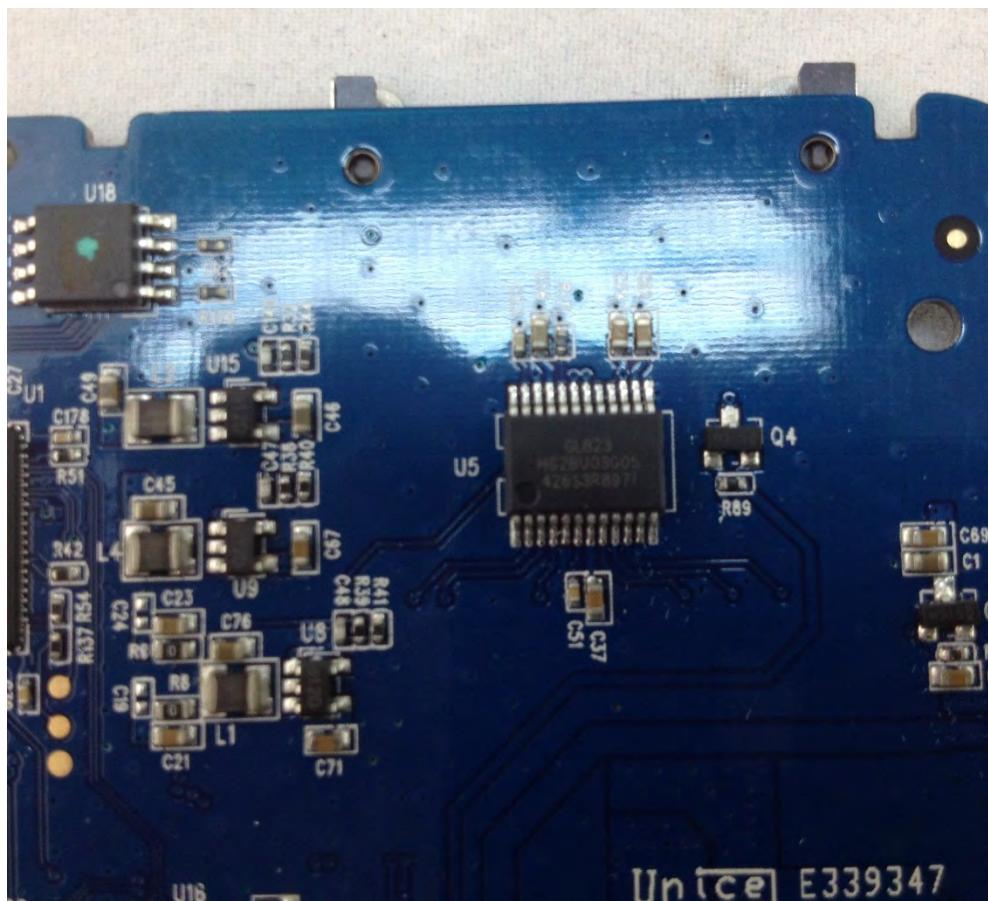




MAIN BOARD VIEW 4



MAIN BOARD VIEW 5



MAIN BOARD VIEW 6



BATTERY

--END OF REPORT--