

FCC TEST REPORT  
for  
Shenzhen Bominwell Robotics Co., Ltd.  
Peek Quickview Inspection System  
Model No.: Peek

Prepared for : Shenzhen Bominwell Robotics Co., Ltd.  
Address : JK Units, 5F, Building 7, Baoneng Sci&Tech Park, Longhua  
Dist., Shenzhen, China

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Report Number : R011605879Y  
Date of Test : Jun. 02~ 22, 2016  
Date of Report : Jun. 23, 2016

**TABLE OF CONTENT**

Description	Page
Test Report	
<b>1. GENERAL INFORMATION.....</b>	<b>4</b>
1.1. Description of Device (EUT).....	4
1.2. Auxiliary Equipment Used during Test.....	5
1.3. Description of Test Facility.....	5
1.4. Measurement Uncertainty.....	5
<b>2. TEST METHODOLOGY.....</b>	<b>6</b>
2.1. Summary of Test Results.....	6
2.2. Description of Test Modes.....	6
2.3. List of channels:.....	7
<b>3. CONDUCTED EMISSION TEST.....</b>	<b>8</b>
3.1. Block Diagram of Test Setup.....	8
3.2. Power Line Conducted Emission Measurement Limits (15.207).....	8
3.3. Configuration of EUT on Measurement.....	8
3.4. Operating Condition of EUT.....	8
3.5. Test Procedure.....	9
3.6. Test equipment.....	9
3.7. Power Line Conducted Emission Measurement Results.....	9
<b>4. FCC Part 15.247 Requirements for DSSS &amp; OFDM Modulation.....</b>	<b>14</b>
4.1 Test Setup.....	14
4.2 6dB Bandwidth.....	14
4.3. Maximum Output Power Test.....	28
4.4. Band Edges Measurement.....	36
4.5. Peak Power Spectral Density.....	106
4.6. Radiated Emissions.....	114
<b>5. ANTENNA APPLICATION.....</b>	<b>131</b>
5.1. Antenna requirement.....	131
4.2. Result.....	131
<b>6. PHOTOGRAPH.....</b>	<b>133</b>
6.1. Photo of Conducted Emission Measurement.....	133
6.2. Photo of Radiation Emission Test.....	133
<b>APPENDIX I (EXTERNAL PHOTOS).....</b>	<b>135</b>
<b>APPENDIX II (INTERNAL PHOTOS).....</b>	<b>139</b>

## TEST REPORT

Applicant : Shenzhen Bominwell Robotics Co., Ltd.  
Manufacturer : Shenzhen Bominwell Robotics Co., Ltd.  
EUT : Peek Quickview Inspection System  
Model No. : Peek  
Serial No. : N.A.  
Trade Mark : Bominwell  
Rating : DC 12V , 2.5 A Via Adapter  
(Input: AC 100-240V, 50/60Hz, 1.6A,  
Output: DC 12.6V, 5A)

Measurement Procedure Used:  
FCC Part15 Subpart C 2015, Paragraph 15.247

The device described above is tested by Shenzhen Anbotek Compliance Laboratory Limited to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The measurement results are contained in this test report and Shenzhen Anbotek Compliance Laboratory Limited is assumed full of responsibility for the accuracy and completeness of these measurements. Also, this report shows that the EUT (Equipment Under Test) is technically compliant with the FCC Part 15 Subpart C requirements.

This report applies to above tested sample only and shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Test : Jun. 02~ 22, 2016

Prepared by :

Kebo Zhang

(Tested Engineer / Kebo Zhang)

Reviewer :

Amy Ding

(Project Manager / Amy Ding)

Approved & Authorized Signer :

Tom Chen

(Manager / Tom Chen)

## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

EUT	: Peek Quickview Inspection System
Model Number	: Peek
Test Power Supply	: AC 120V, 60Hz for adapter/ AC 240V, 60Hz for adapter/ DC 12.6V Battery Inside
Adapter	: Model: JZ-12650 Input: 100-240V~, 50/60Hz, 1.6A Output: DC 12.6V, 5A
RF Transmission Frequency	: 2412MHz~2462MHz (802.11b/802.11g/802.11n(HT20)) 2422MHz~2452MHz ( 802.11n(HT40)) 433.92MHz
Channels	: 11 For (802.11b/802.11g/802.11n(HT20)) 7 For (802.11n(HT40)) 1 For (433.92MHz)
Modulation	WiFi: 802.11b CCK; 802.11g OFDM; 802.11n MCS 433.92MHz: ASK
Antenna Gain:	: 2 dBi for WiFi (ANT A, ANT B) 1 dBi For (433.92MHz)
Applicant Address	: Shenzhen Bominwell Robotics Co., Ltd. JK Units, 5F, Building 7, Baoneng Sci&Tech Park, Longhua Dist., Shenzhen, China
Manufacturer Address	: Shenzhen Bominwell Robotics Co., Ltd. JK Units, 5F, Building 7, Baoneng Sci&Tech Park, Longhua Dist., Shenzhen, China
Factory Address	: Shenzhen Bominwell Robotics Co., Ltd. JK Units, 5F, Building 7, Baoneng Sci&Tech Park, Longhua Dist., Shenzhen, China
Date of receipt	: Jun. 02, 2016
Date of Test	: Jun. 02~ 22, 2016

## 1.2. Auxiliary Equipment Used during Test

N/A

## 1.3. Description of Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

### **FCC-Registration No.: 752021**

Shenzhen Anbotek Compliance Laboratory Limited, EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 752021, July 06, 2016.

### **IC-Registration No.: 8058A-1**

Shenzhen Anbotek Compliance Laboratory Limited., EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration 8058A-1, Jun. 13, 2016.

### **Test Location**

All Emissions tests were performed at Shenzhen Anbotek Compliance Laboratory Limited. at 1/F., Building 1, SEC Industrial Park, No.0409 Qianhai Road, Nanshan District, Shenzhen, Guangdong, China

## 1.4. Measurement Uncertainty

Radiation Uncertainty : Ur = 4.1 dB (Horizontal)  
Ur = 4.3 dB (Vertical)

Conduction Uncertainty : Uc = 3.4dB

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10: 2013 and FCC Part 15, Paragraph 15.247.

### 2.1. Summary of Test Results

The EUT has been tested according to the following specifications:

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107, 15.207	Conducted Emission Test	PASS	Complies
FCC Part 15, Paragraph 15.247(b)(1)	Maximum Output Power	PASS	Complies
FCC Part 15, Paragraph 15.247(a)(2)	6dB Bandwidth	PASS	Complies
FCC Part 15, Paragraph 15.247(c)	100kHz Bandwidth of Frequency Band Edges	PASS	Complies
FCC Part 15, Paragraph 15.209(a)(f)	Spurious Emission	PASS	Complies
FCC Part 15, Paragraph 15.247(a)(1)	Frequency Separation	-	N/A
FCC Part 15, Paragraph 15.247(a)(1)(iii)	Number of Hopping Frequency	-	N/A
FCC Part 15, Paragraph 15.247(a)(1)(iii)	Time of Occupancy	-	N/A
FCC Part 15, Paragraph 15.247(c)	Peak Power Density	PASS	Complies

### 2.2. Description of Test Modes

The EUT has been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

IEEE802.11b: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 1 Mbps lowest data rate (worst case) are chosen for the final testing.

IEEE802.11g: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 6 Mbps lowest data rate (the worst case) are chosen for the final testing.

IEEE802.11n (HT20): Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with MCS 0 Mbps lowest data rate (the worst case) are chosen for the final testing.

IEEE802.11n (HT40): Channel 3(2422MHz), Channel 6(2437MHz) and Channel 9(2452MHz) with MCS 0 Mbps lowest data rate (the worst case) are chosen for the final testing.

## 2.3. List of channels:

√ - available

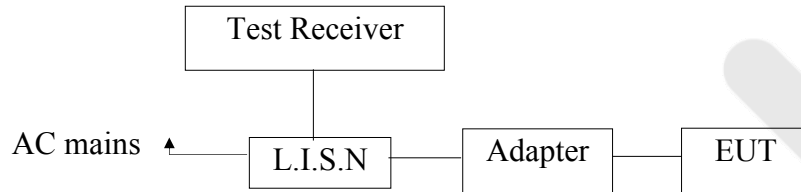
X - tested

Number	Frequency(MHz)		802.11 b/g/n (HT20)	802.11 b/g/n (HT40)
1	2412	√	X	
2	2417	√		
3	2422	√		X
4	2427	√		
5	2432	√		
6	2437	√	X	X
7	2442	√		
8	2447	√		
9	2452	√		X
10	2457	√		
11	2462	√	X	

### 3. Conducted Emission Test

#### 3.1. Block Diagram of Test Setup

##### 3.1.1. Block diagram of connection between the EUT and simulators



#### 3.2. Power Line Conducted Emission Measurement Limits (15.207)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. \*Decreasing linearly with logarithm of frequency.  
2. The lower limit shall apply at the transition frequencies.

#### 3.3. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

#### 3.4. Operating Condition of EUT

- 3.4.1. Setup the EUT and simulator as shown as Section 3.1.
- 3.4.2. Turn on the power of all equipment.
- 3.4.3. Let the EUT work in test mode (Charging) and measure it.

### 3.5. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.10-2013 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9KHz.

The frequency range from 150KHz to 30MHz is checked.

The test results are reported on Section 3.6.

### 3.6. Test equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Two-Line V-network	Rohde & Schwarz	ENV216	100055	Apr. 17, 2016	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Apr. 17, 2016	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Apr. 17, 2016	1 Year

### 3.7. Power Line Conducted Emission Measurement Results

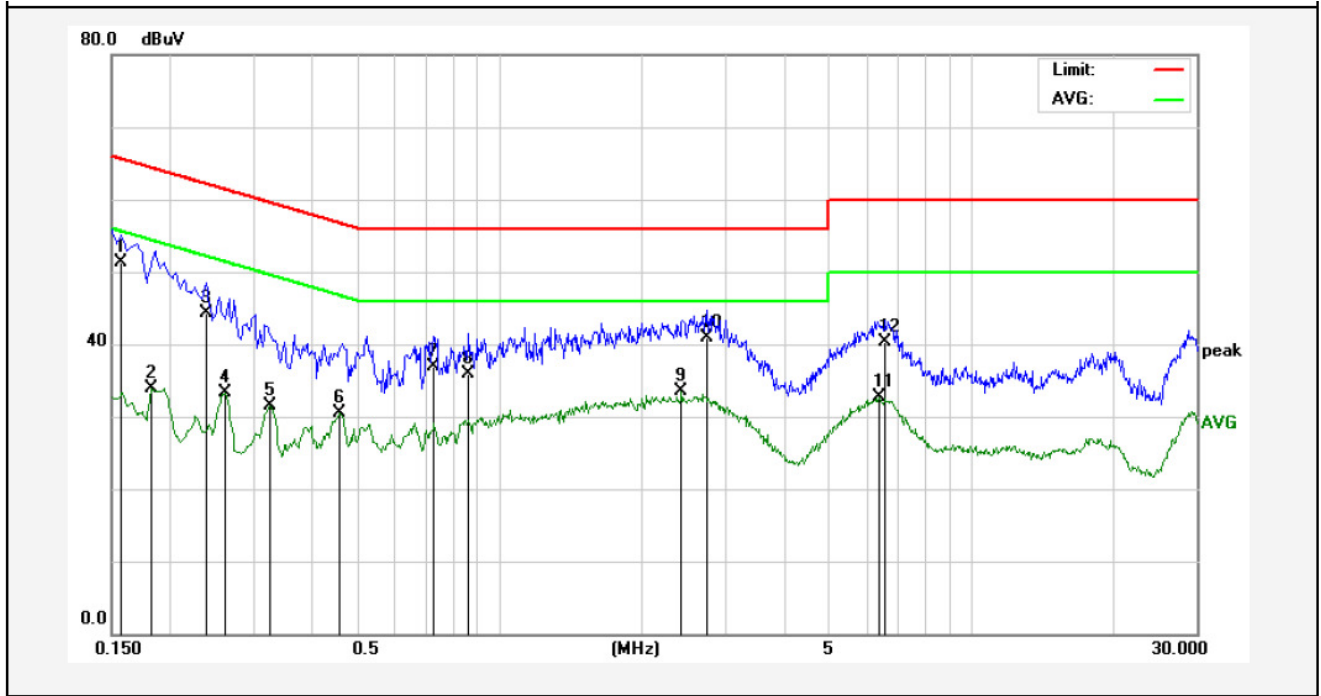
**PASS.**

The frequency range from 150KHz to 30 MHz is investigated.

Please refer the following pages.

**CONDUCTED EMISSION TEST DATA**

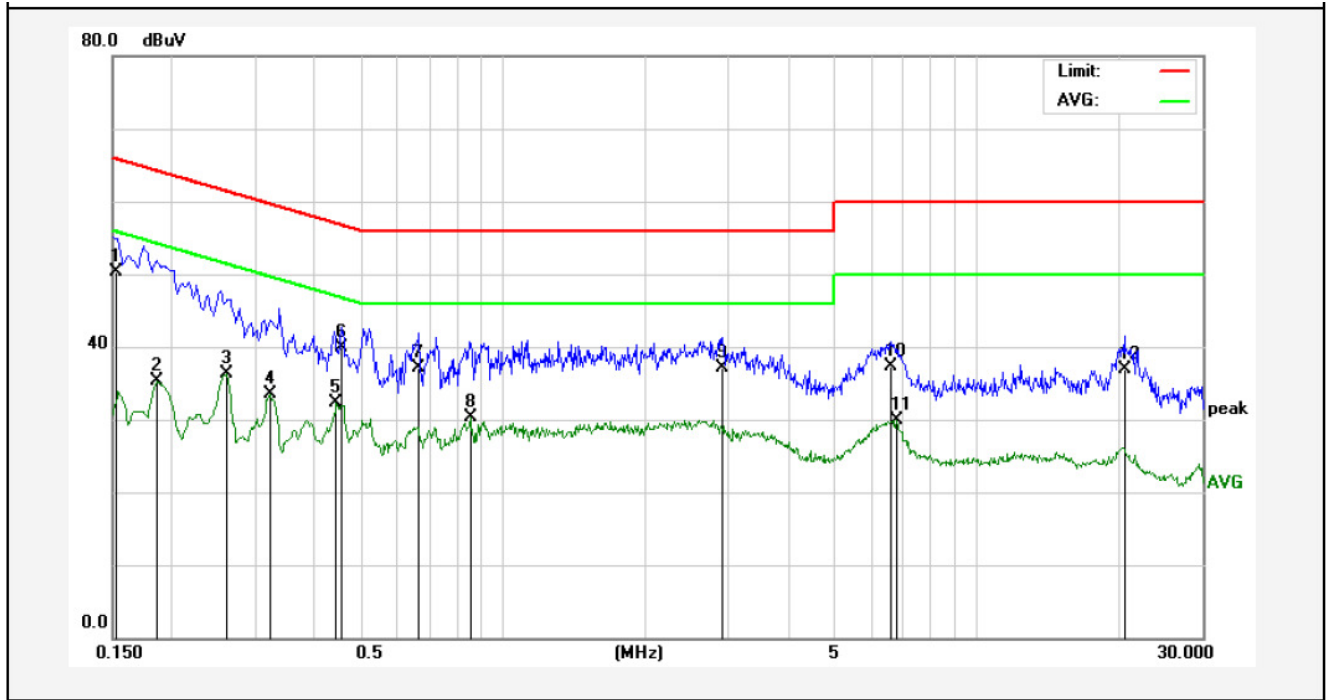
Test Site: 1# Shielded Room  
 Operating Condition: Charging  
 Test Specification: AC 120V, 60Hz for adapter  
 Comment: Live Line  
 Tem.:24°C Hum.:49%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	0.1580	51.29	0.00	51.29	65.56	-14.27	QP	
2	0.1819	33.92	0.00	33.92	54.39	-20.47	AVG	
3	0.2380	44.36	0.00	44.36	62.16	-17.80	QP	
4	0.2620	33.32	0.00	33.32	51.36	-18.04	AVG	
5	0.3260	31.41	0.00	31.41	49.55	-18.14	AVG	
6	0.4580	30.45	0.00	30.45	46.73	-16.28	AVG	
7	0.7260	37.00	0.00	37.00	56.00	-19.00	QP	
8	0.8580	35.99	0.00	35.99	56.00	-20.01	QP	
9	2.4219	33.41	0.00	33.41	46.00	-12.59	AVG	
10	2.7580	40.96	0.00	40.96	56.00	-15.04	QP	
11	6.3740	32.65	0.00	32.65	50.00	-17.35	AVG	
12	6.5740	40.25	0.00	40.25	60.00	-19.75	QP	

**CONDUCTED EMISSION TEST DATA**

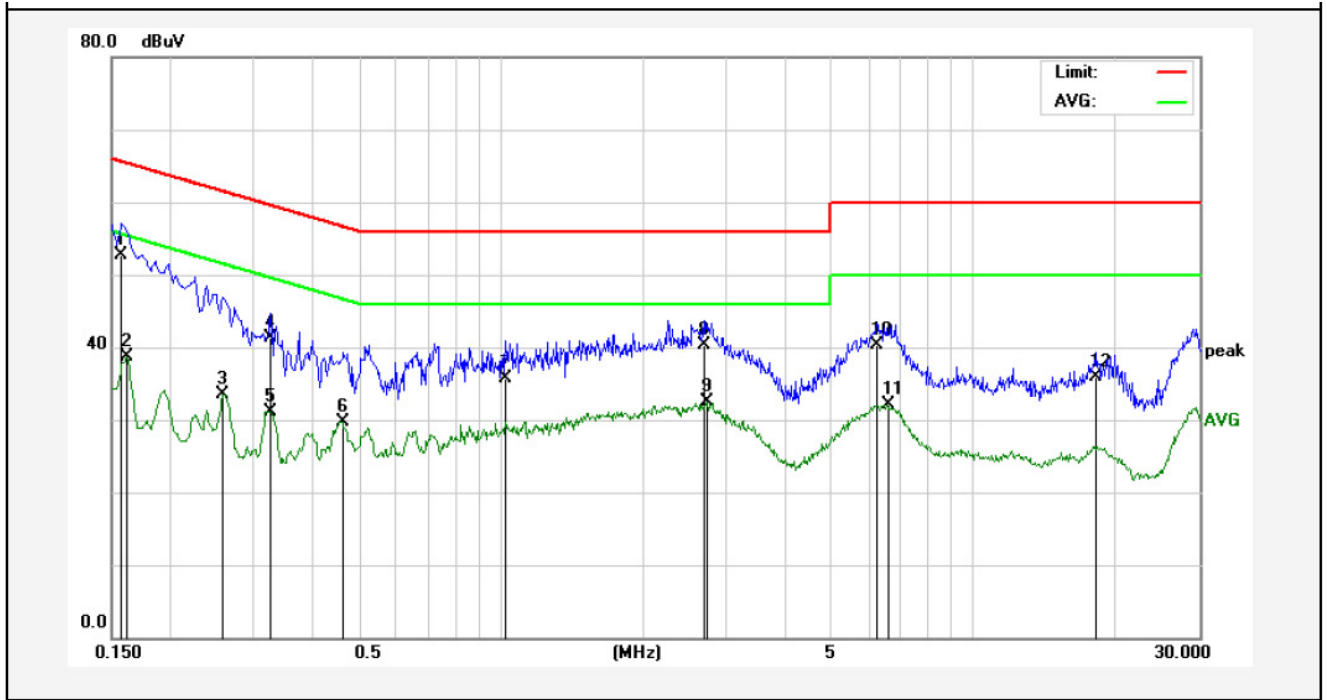
Test Site: 1# Shielded Room  
 Operating Condition: Charging  
 Test Specification: AC 120V, 60Hz for adapter  
 Comment: Neutral Line  
 Tem.:24°C Hum.:49%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	0.1524	50.36	0.00	50.36	65.86	-15.50	QP	
2	0.1860	35.36	0.00	35.36	54.21	-18.85	AVG	
3	0.2620	36.26	0.00	36.26	51.36	-15.10	AVG	
4	0.3220	33.45	0.00	33.45	49.65	-16.20	AVG	
5	0.4460	32.25	0.00	32.25	46.95	-14.70	AVG	
6	0.4580	40.00	0.00	40.00	56.73	-16.73	QP	
7	0.6660	37.01	0.00	37.01	56.00	-18.99	QP	
8	0.8540	30.29	0.00	30.29	46.00	-15.71	AVG	
9	2.9060	37.02	0.00	37.02	56.00	-18.98	QP	
10	6.6100	37.21	0.00	37.21	60.00	-22.79	QP	
11	6.7820	29.92	0.00	29.92	50.00	-20.08	AVG	
12	20.5820	37.00	0.00	37.00	60.00	-23.00	QP	

**CONDUCTED EMISSION TEST DATA**

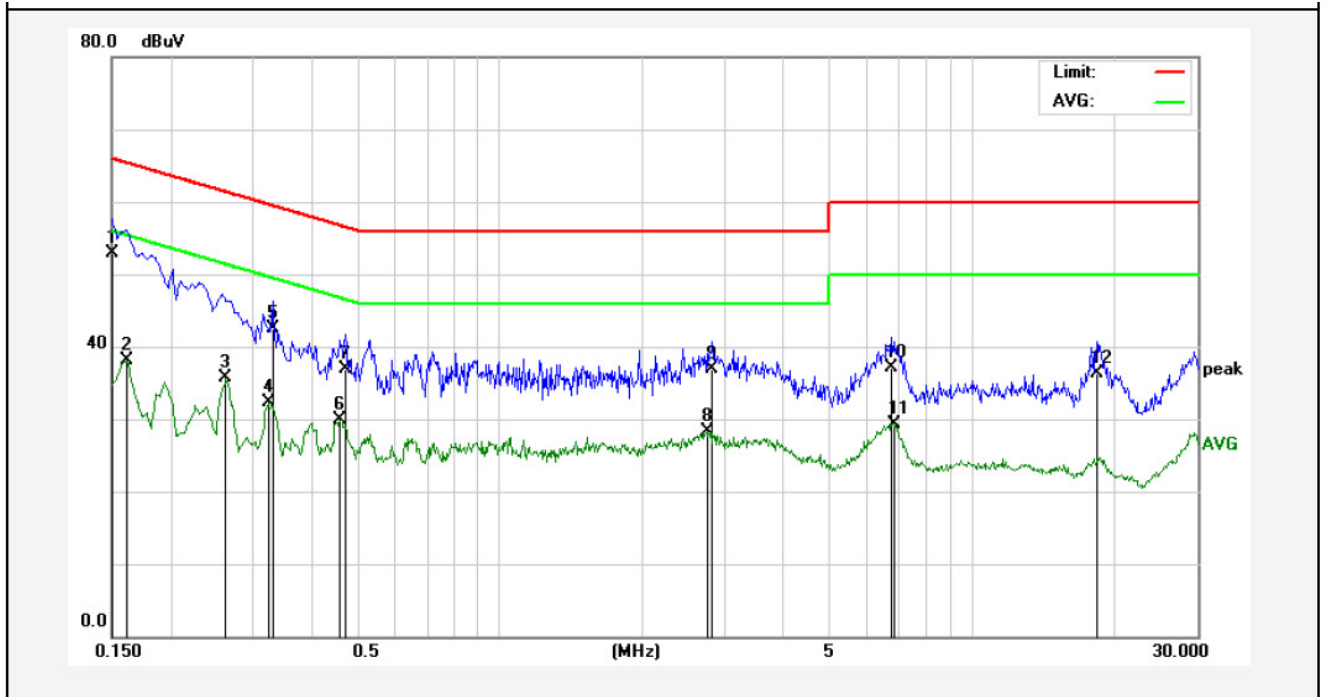
Test Site: 1# Shielded Room  
 Operating Condition: Charging  
 Test Specification: AC 240V, 60Hz for adapter  
 Comment: Live Line  
 Tem.:24°C Hum.:49%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	0.1580	52.69	0.00	52.69	65.56	-12.87	QP	
2	0.1620	38.71	0.00	38.71	55.36	-16.65	AVG	
3	0.2580	33.54	0.00	33.54	51.49	-17.95	AVG	
4	0.3260	41.22	0.00	41.22	59.55	-18.33	QP	
5	0.3260	31.14	0.00	31.14	49.55	-18.41	AVG	
6	0.4620	29.74	0.00	29.74	46.66	-16.92	AVG	
7	1.0260	35.69	0.00	35.69	56.00	-20.31	QP	
8	2.6820	40.21	0.00	40.21	56.00	-15.79	QP	
9	2.7220	32.48	0.00	32.48	46.00	-13.52	AVG	
10	6.2300	40.21	0.00	40.21	60.00	-19.79	QP	
11	6.5740	32.16	0.00	32.16	50.00	-17.84	AVG	
12	18.2060	36.00	0.00	36.00	60.00	-24.00	QP	

**CONDUCTED EMISSION TEST DATA**

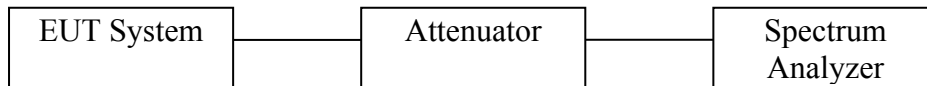
Test Site: 1# Shielded Room  
 Operating Condition: Charging  
 Test Specification: AC 240V, 60Hz for adapter  
 Comment: Neutral Line  
 Tem.:24°C Hum.:49%



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Over Limit (dB)	Detector	Remark
1	0.1500	52.96	0.00	52.96	65.99	-13.03	QP	
2	0.1620	38.01	0.00	38.01	55.36	-17.35	AVG	
3	0.2620	35.74	0.00	35.74	51.36	-15.62	AVG	
4	0.3220	32.23	0.00	32.23	49.65	-17.42	AVG	
5	0.3300	42.58	0.00	42.58	59.45	-16.87	QP	
6	0.4580	29.93	0.00	29.93	46.73	-16.80	AVG	
7	0.4700	37.00	0.00	37.00	56.51	-19.51	QP	
8	2.7460	28.31	0.00	28.31	46.00	-17.69	AVG	
9	2.8140	37.00	0.00	37.00	56.00	-19.00	QP	
10	6.7500	37.01	0.00	37.01	60.00	-22.99	QP	
11	6.7900	29.34	0.00	29.34	50.00	-20.66	AVG	
12	18.3819	36.21	0.00	36.21	60.00	-23.79	QP	

## 4. FCC Part 15.247 Requirements for DSSS & OFDM Modulation

### 4.1 Test Setup



### 4.2 6dB Bandwidth

#### a. Limit

For the direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz.

#### b. Test Procedure

1. Place the EUT on the table and set it in the transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set the spectrum analyzer as:  
RBW = 100kHz, VBW $\geq$ 3\*RBW =300kHz,  
Detector= Peak  
Trace mode= Max hold.  
Sweep- auto couple.
4. Mark the peak frequency and -6dB (upper and lower) frequency.
5. Repeat until all the rest channels are investigated.

#### 20dB Bandwidth:

##### C63.10

#### Occupied Bandwidth (OBW=20dB Bandwidth)

1. Set RBW=1%~5% OBW
2. Set the VBW $\geq$ 3\*RBW
3. Set the span range between 2 times and 5 times of the OBW
4. Sweep Time= Auto  
Detector= Peak  
Trace= Max hold
5. Once the reference level is established, the equipment is conditioned with typical modulating signals to produce the worst case (i.e. the widest) bandwidth. Unless otherwise specified for an unlicensed wireless device, measure the bandwidth at the -20dB levels with respect to the reference level.

**c. Test Setup See 4.1**

**d. Test Equipment**

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analysis	Agilent	E4407B	US39390582	Apr. 17, 2016	1 Year
2.	Preamplifier	Instruments corporation	EMC011830	980100	Apr. 17, 2016	1 Year
3.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 17, 2016	1 Year
4.	Double Ridged Horn Antenna	Instruments corporation	GTH-0118	351600	Apr. 20, 2016	1 Year
5.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	Apr. 20, 2016	1 Year
6.	Pre-amplifier	SONOMA	310N	186860	Apr. 17, 2016	1 Year
7.	EMI Test Software EZ-EMC	SHURPLE	N/A	N/A	N/A	N/A
8	Power Sensor	DAER	RPR3006W	15I00041SN046	Jun 30, 2015	1 Year
9	MXA Spectrum Analysis	Agilent	N9020A	MY51170037	Jun 30, 2015	1 Year
10	MXG RF Vector Signal Generator	Agilent	N5182A	MY48180656	Jun 30, 2015	1 Year
11	Signal Generator	Agilent	E4421B	MY41000743	Jun 30, 2015	1 Year
12	DC Power supply	IV	IV-8080	YQSB0096	Jun 30, 2015	1 Year
13	TEMP&HUMI PROGRAMMABLE CHAMBER	Bell Group	BE-THK-150M8	SE-0137	Mar 16, 2016	1 Year

**e. Test Results**

Pass.

**f. Test Data**  
**6dB Bandwidth**

ANT A

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	9.561	>500	Pass
Mid	2437	9.55		Pass
High	2462	10.03		Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	16.05	>500	Pass
Mid	2437	15.39		Pass
High	2462	15.14		Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	16.30	>500	Pass
Mid	2437	16.39		Pass
High	2462	15.42		Pass

Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2422	35.35	>500	Pass
Mid	2437	35.17		Pass
High	2452	35.18		Pass

Test Plots See the following page.

ANT B

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	9.558		Pass
Mid	2437	10.01	>500	Pass
High	2462	9.529		Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	16.39		Pass
Mid	2437	16.38	>500	Pass
High	2462	16.38		Pass

Test mode: IEEE 802.11n (HT20)

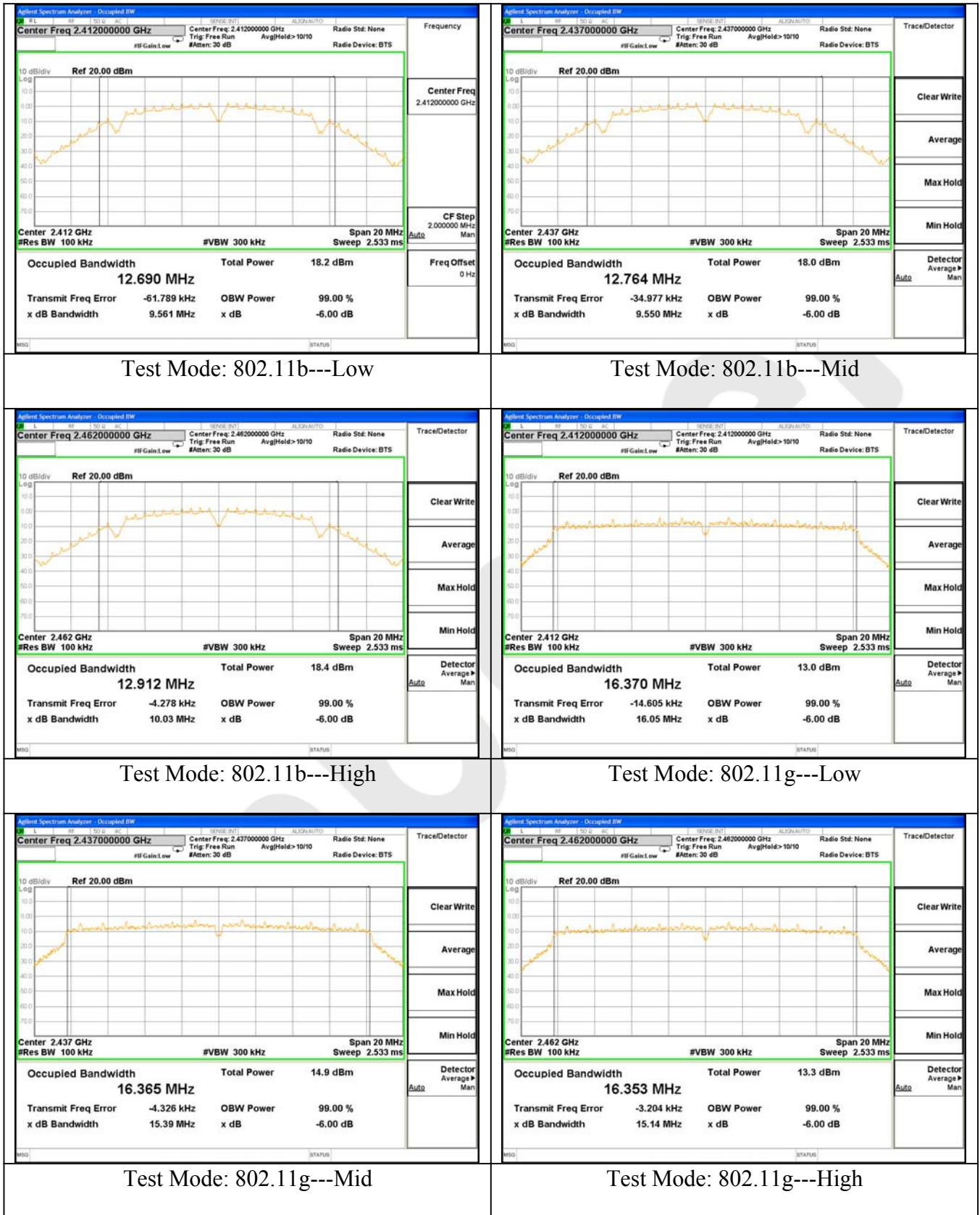
Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2412	15.45		Pass
Mid	2437	17.62	>500	Pass
High	2462	17.62		Pass

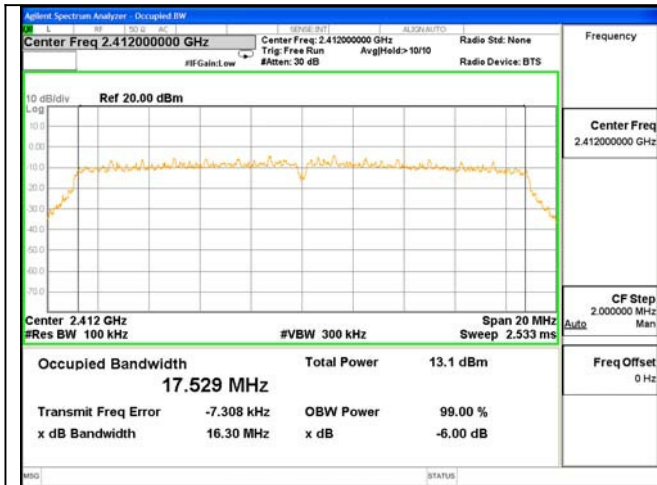
Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Bandwidth (MHz)	Limit (kHz)	Results
Low	2422	36.31		Pass
Mid	2437	36.31	>500	Pass
High	2452	36.33		Pass

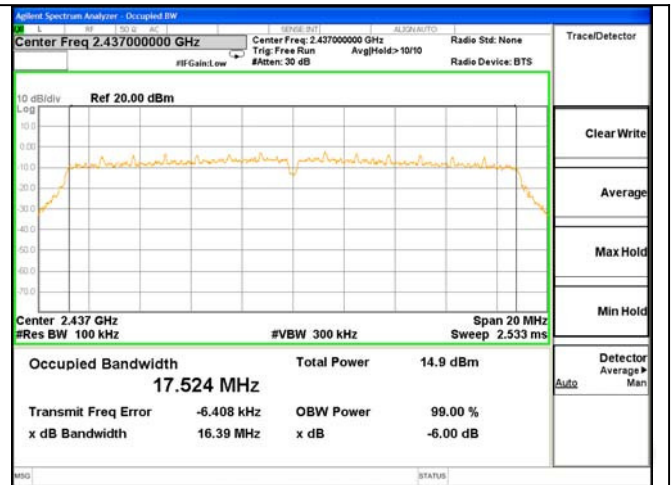
Test Plots See the following page.

ANT A

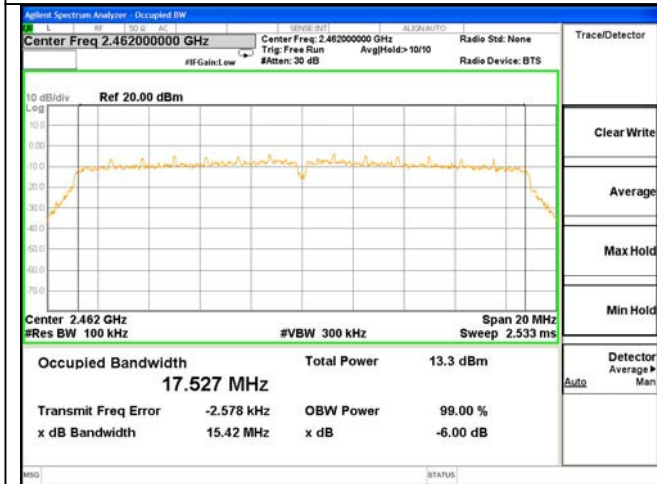




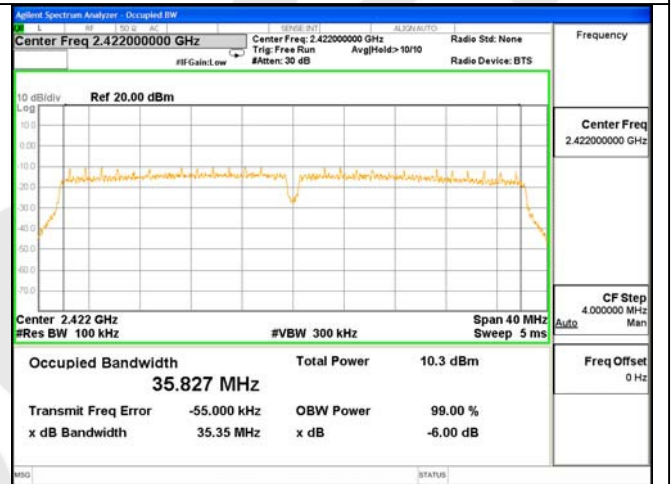
Test Mode: 802.11n20---Low



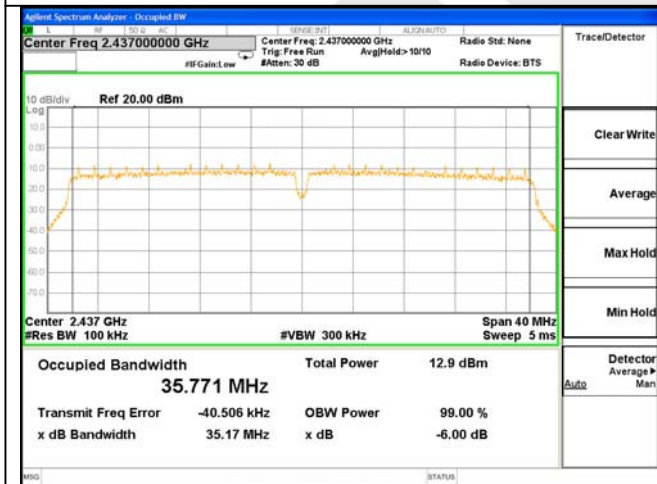
Test Mode: 802.11n20---Mid



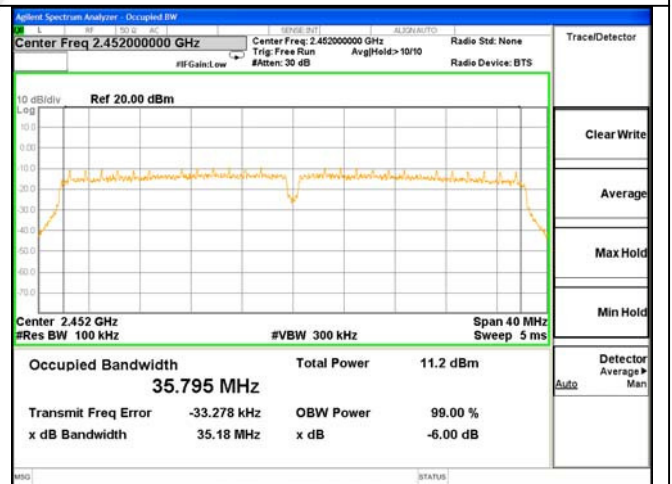
Test Mode: 802.11n20---High



Test Mode: 802.11n40---Low

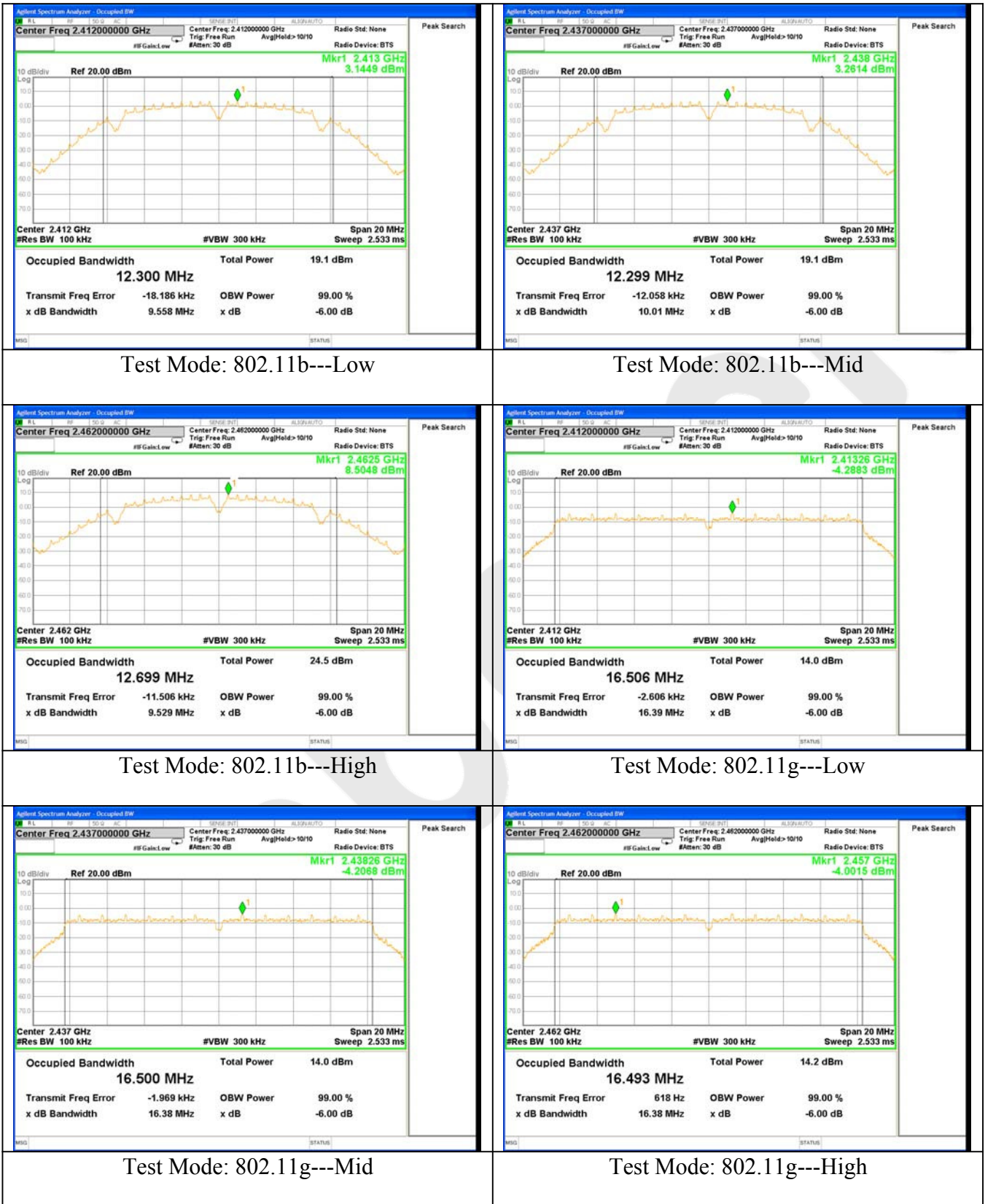


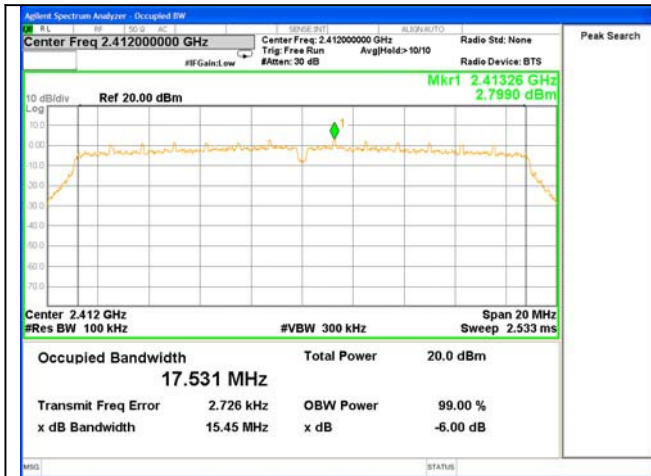
Test Mode: 802.11n40---Mid



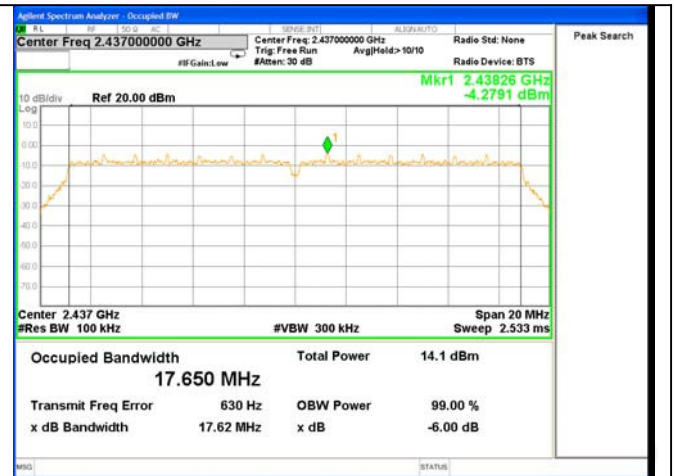
Test Mode: 802.11n40---High

ANT B

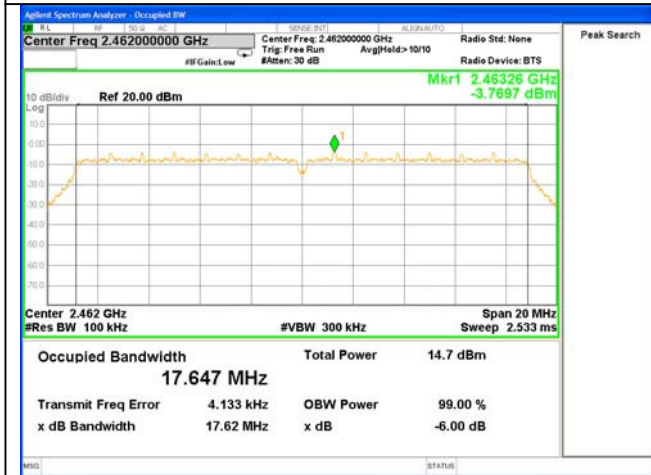




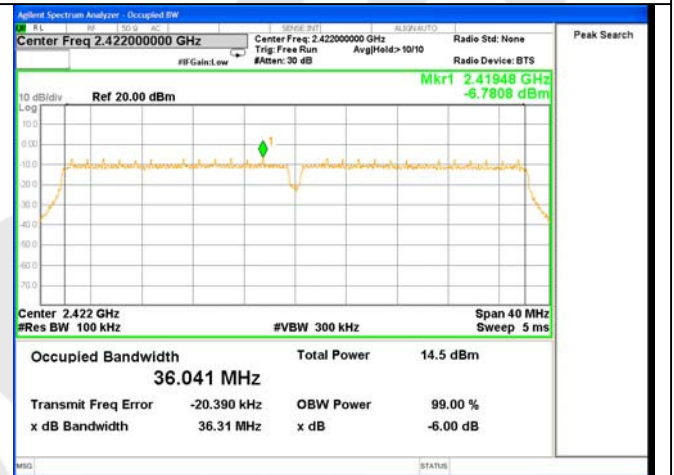
Test Mode: 802.11n20---Low



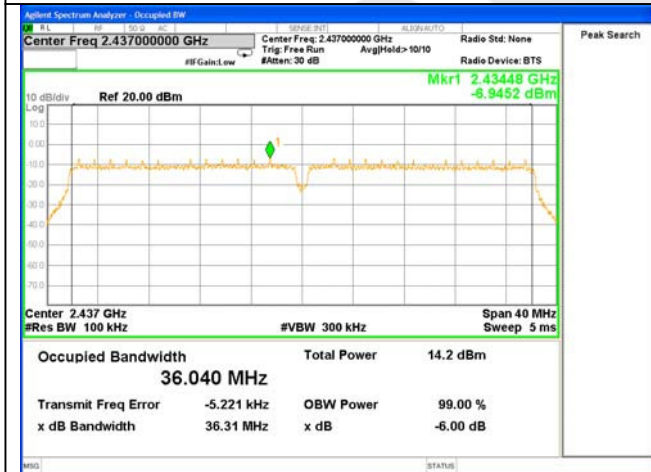
Test Mode: 802.11n20---Mid



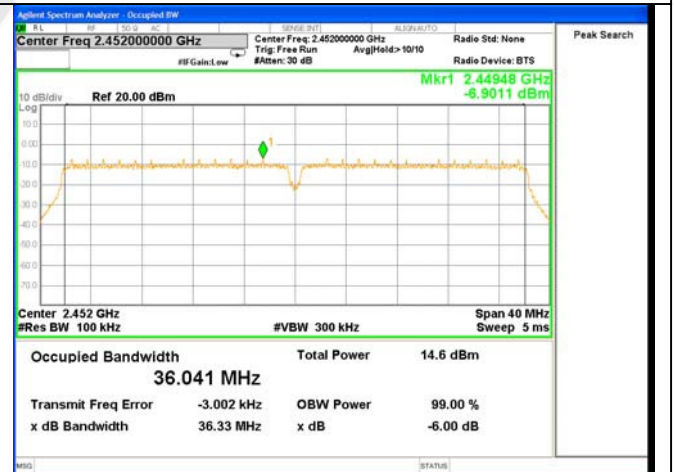
Test Mode: 802.11n20---High



Test Mode: 802.11n40---Low



Test Mode: 802.11n40---Mid



Test Mode: 802.11n40---High

**20dB Bandwidth**

ANT A

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	14.35	Pass
Mid	2437	14.72	Pass
High	2462	15.12	Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	18.63	Pass
Mid	2437	18.87	Pass
High	2462	18.64	Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	19.13	Pass
Mid	2437	19.27	Pass
High	2462	19.28	Pass

Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2422	37.25	Pass
Mid	2437	38.23	Pass
High	2452	37.31	Pass

Test Plots See the following page.

ANT B

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	14.21	Pass
Mid	2437	14.21	Pass
High	2462	14.18	Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	19.18	Pass
Mid	2437	19.23	Pass
High	2462	19.28	Pass

Test mode: IEEE 802.11n (HT20)

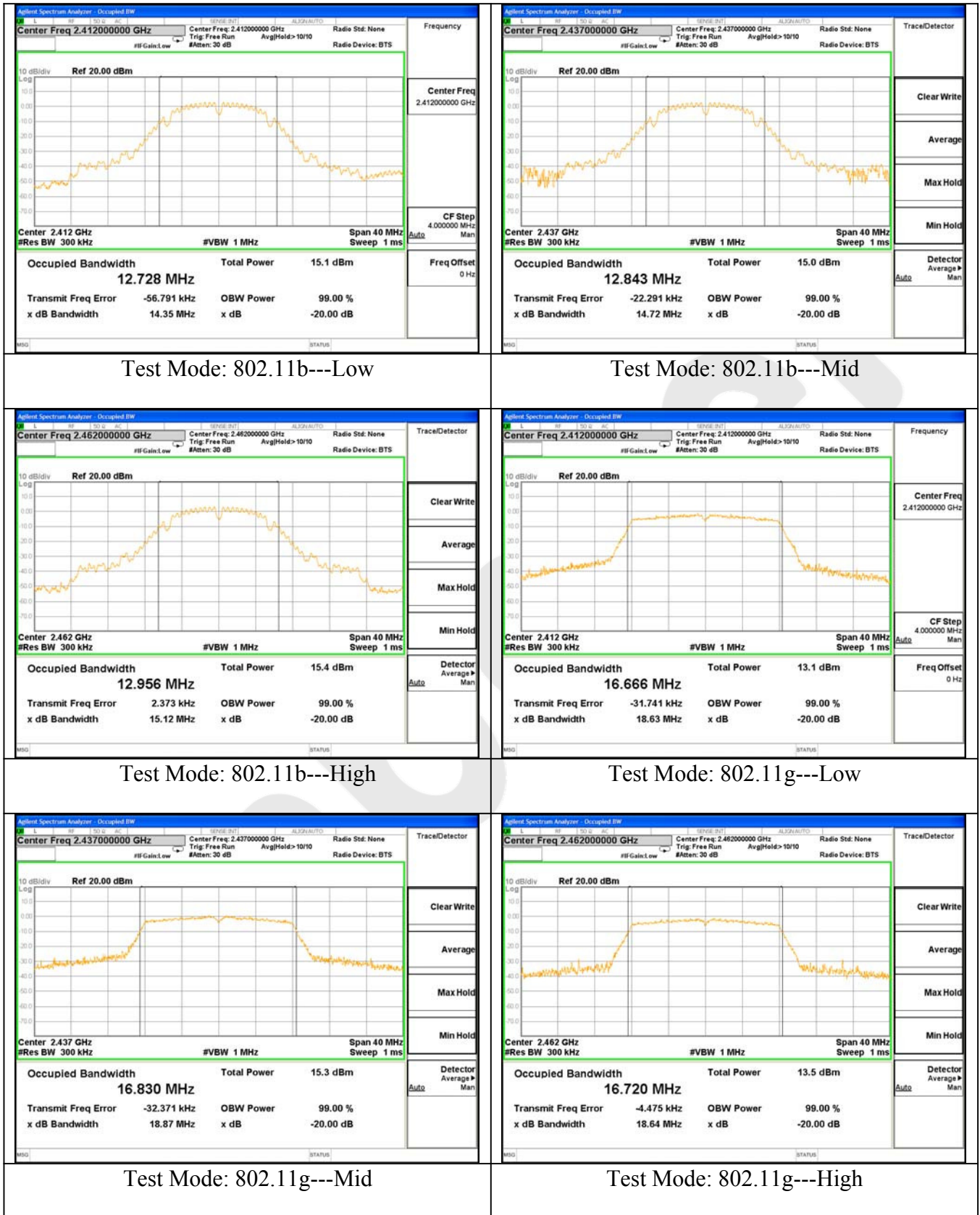
Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2412	19.33	Pass
Mid	2437	19.42	Pass
High	2462	19.37	Pass

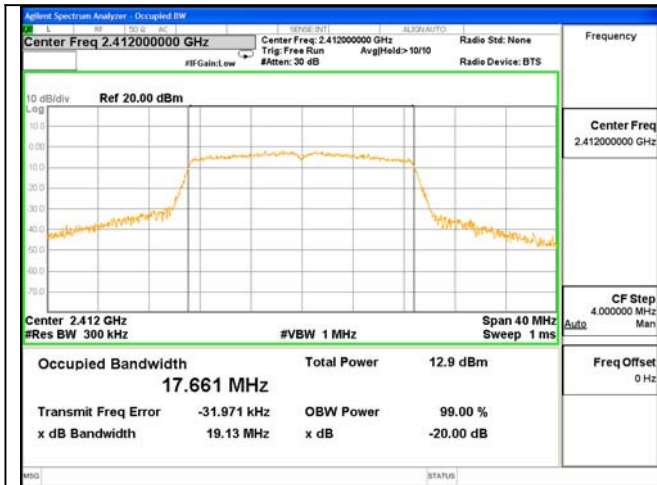
Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Bandwidth (MHz)	Results
Low	2422	38.31	Pass
Mid	2437	38.24	Pass
High	2452	38.24	Pass

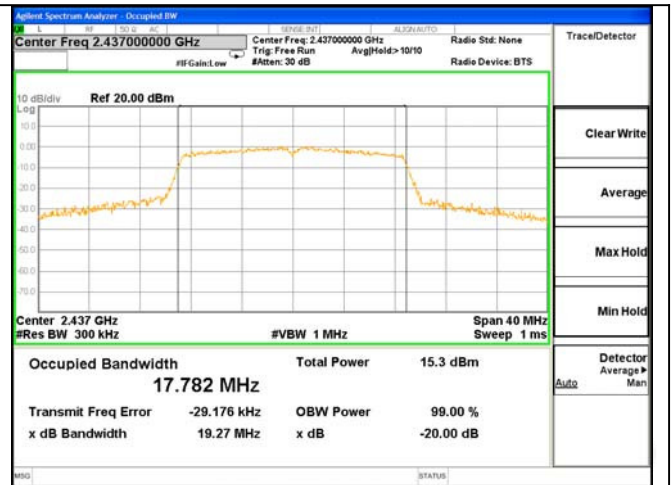
Test Plots See the following page.

ANT A

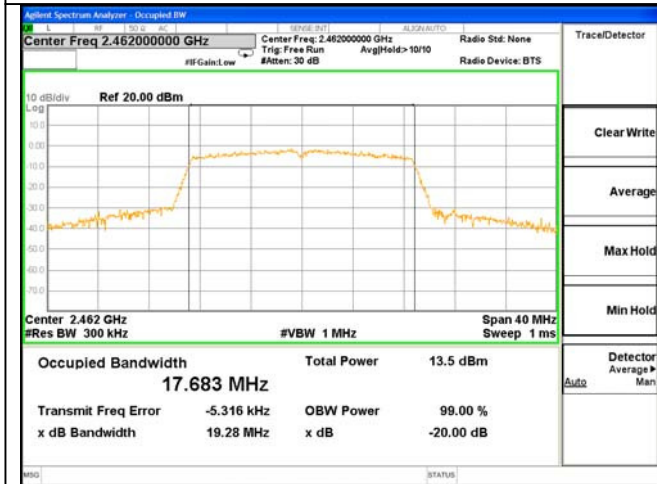




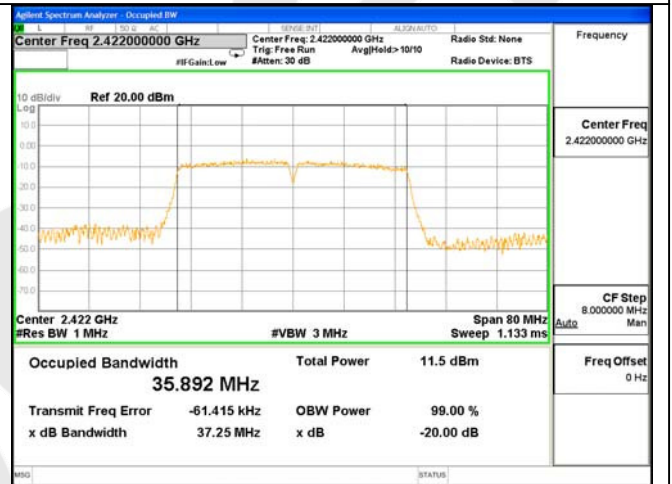
Test Mode: 802.11n20---Low



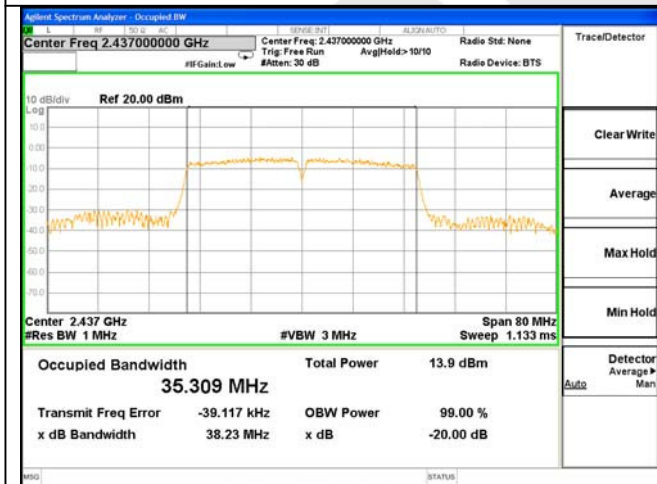
Test Mode: 802.11n20---Mid



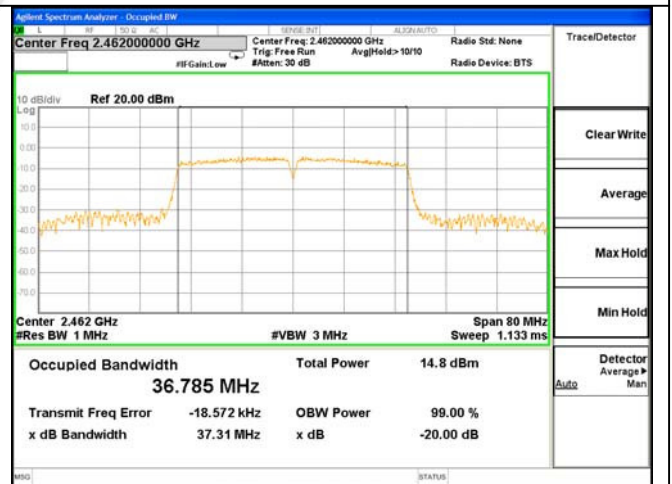
Test Mode: 802.11n20---High



Test Mode: 802.11n40---Low

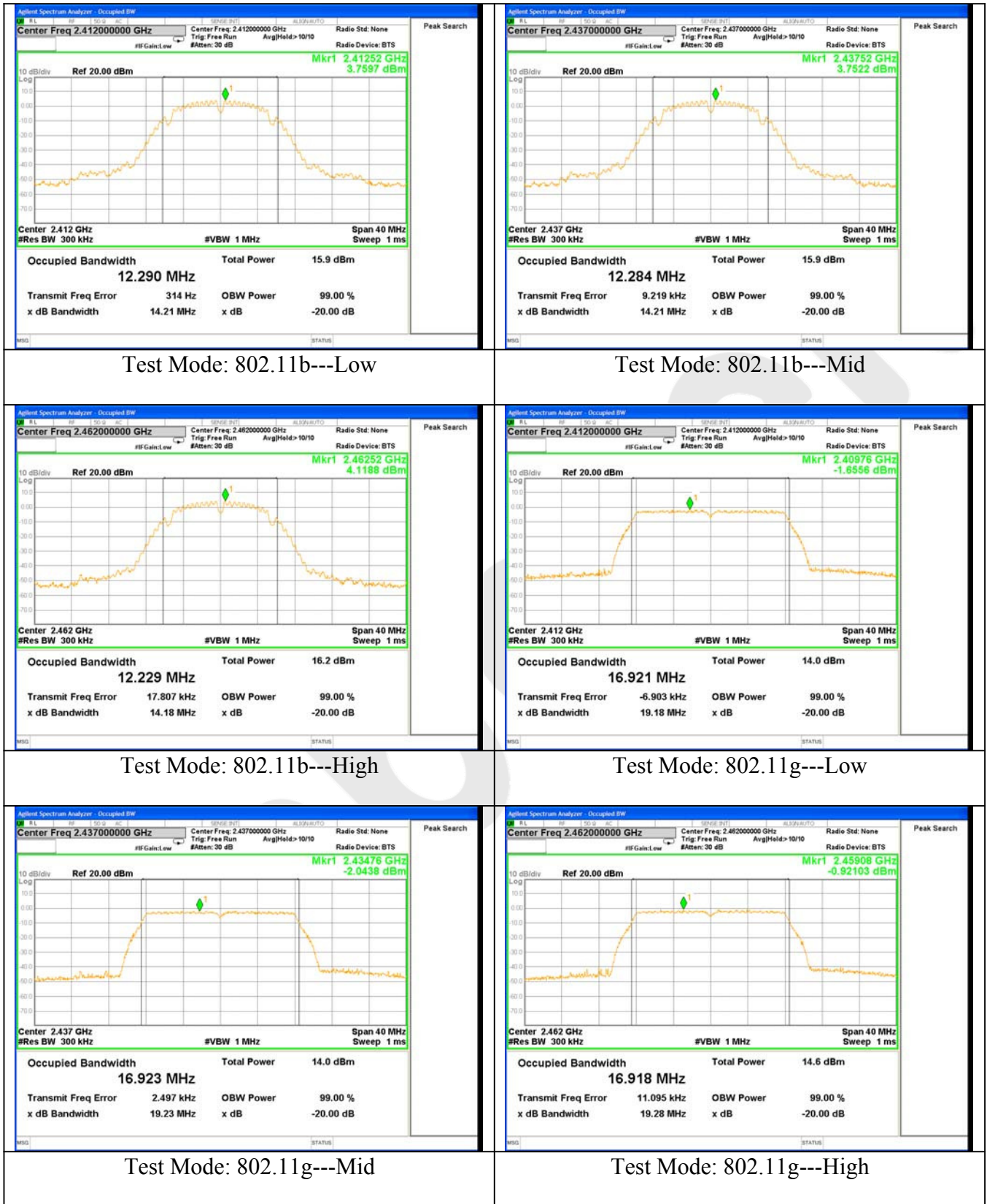


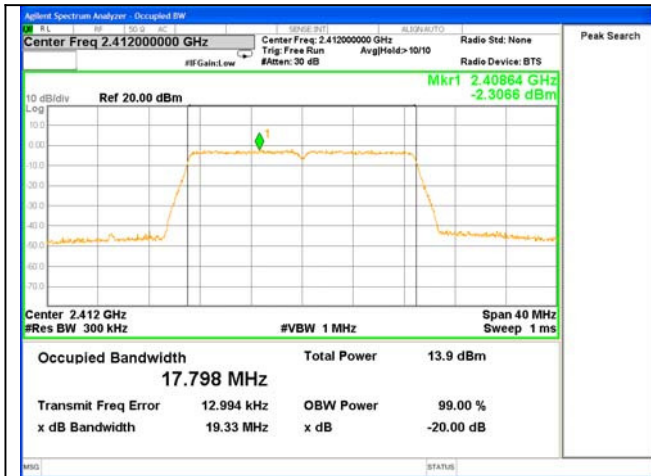
Test Mode: 802.11n40---Mid



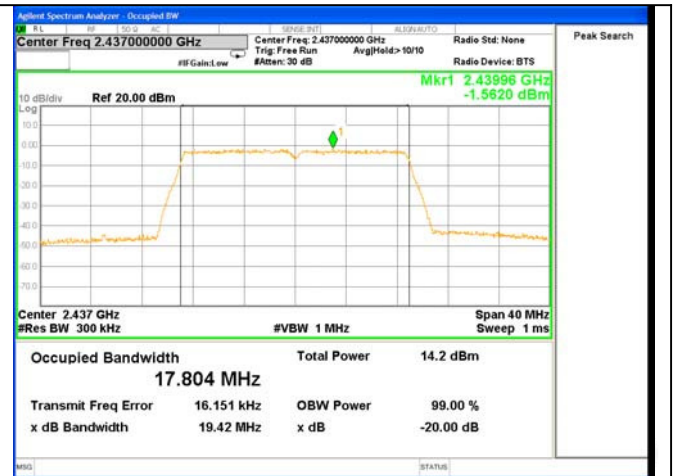
Test Mode: 802.11n40---High

ANT B

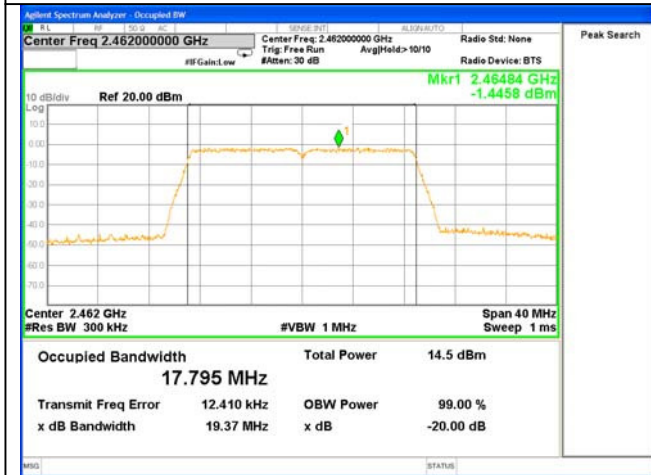




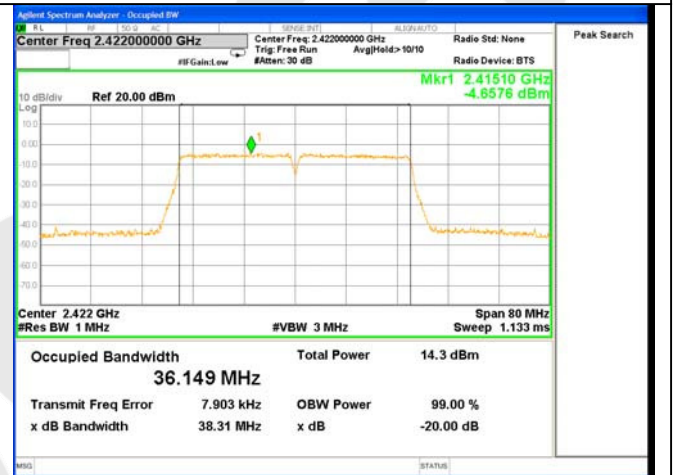
Test Mode: 802.11n20---Low



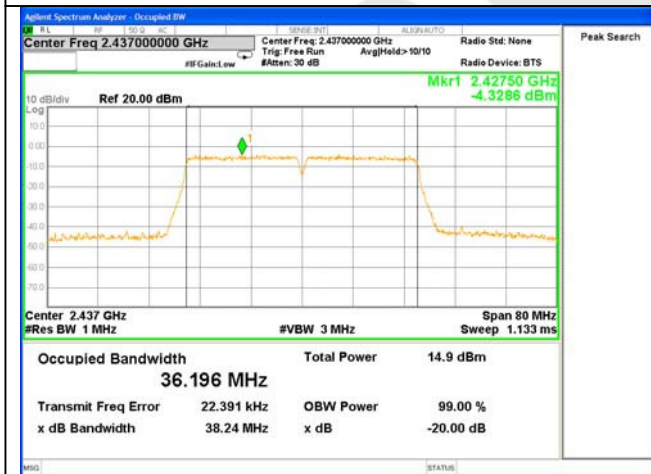
Test Mode: 802.11n20---Mid



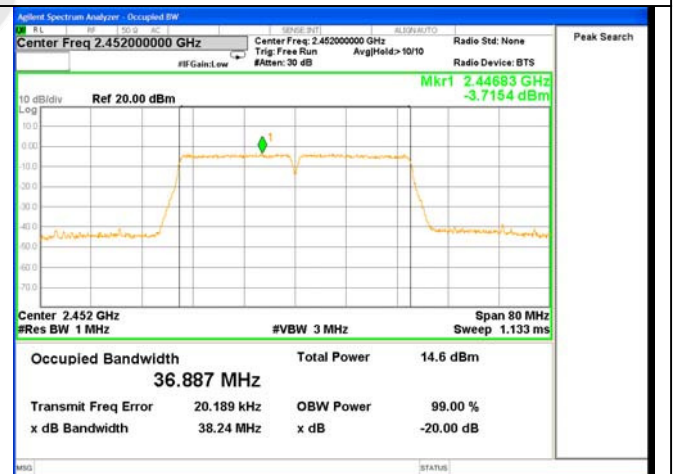
Test Mode: 802.11n20---High



Test Mode: 802.11n40---Low



Test Mode: 802.11n40---Mid



Test Mode: 802.11n40---High

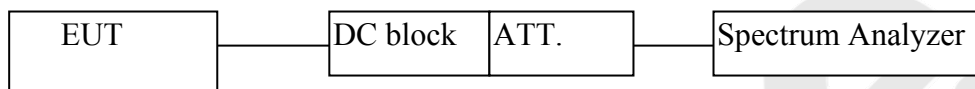
### 4.3. Maximum Output Power Test

#### a. Limit

The maximum output power of the intentional radiator shall not exceed the following:

1. For systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 watt (30dBm).
2. Except as shown in paragraphs (b)(3) (i), (ii) and (iii) of this section, if transmitting antenna of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### b. Configuration of Measurement



#### c. Data Rates

IEEE802.11b: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 1 Mbps data rate (worst case) are chosen for the final testing.

IEEE802.11g: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 6 Mbps data rate (the worst case) are chosen for the final testing.

IEEE802.11n (HT20): Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 6.5Mbps data rate (the worst case) are chosen for the final testing.

IEEE802.11n (HT40): Channel 3(2422MHz), Channel 6(2437MHz) and Channel 9(2452MHz) with 13.5Mbps data rate (the worst case) are chosen for the final testing.

#### d. Test Procedure

**This test was according the kDB 558074 D01 DTS Meas Guidance v03r05 9.1.1:**

1. Set span to at least 1.5 times the OBW.
2. Set the RBW =1~5% of the OBW, not to exceed 1MHz.
3. Set  $VBW \geq 3 * RBW$ .
4. Detector = Average.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.

#### e. Test Equipment

Same as the equipment listed in 4.2.

#### f. Test Results

Pass.

**g. Test Data**

**Antenna A Gain= 2 dBi**

**Antenna B Gain= 2 dBi**

**Array Gain= 5.01 dBi=  $G_{ANT}+10*\log(N_{ANT})$ dBi**

ANT A

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Maximum transmit power (dBm)	Limit		Result
			(dBm)	(watts)	
Low	2412	15.13	30	1	Pass
Mid	2437	14.99			Pass
High	2462	15.08			Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Maximum transmit power (dBm)	Limit		Result
			(dBm)	(watts)	
Low	2412	12.23	30	1	Pass
Mid	2437	14.46			Pass
High	2462	13.00			Pass

Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Maximum transmit power (dBm)	Limit		Result
			(dBm)	(watts)	
Low	2412	11.87	30	1	Pass
Mid	2437	14.52			Pass
High	2462	12.77			Pass

Test mode: IEEE 802.11n (HT40)

Channel	Frequency (MHz)	Maximum transmit power (dBm)	Limit		Result
			(dBm)	(watts)	
Low	2422	10.75	30	1	Pass
Mid	2437	12.45			Pass
High	2452	10.32			Pass

ANT B

Test mode: IEEE 802.11b

Channel	Frequency (MHz)	Maximum transmit power (dBm)	Limit		Result
			(dBm)	(watts)	
Low	2412	15.88	30	1	Pass
Mid	2437	15.88			Pass
High	2462	15.36			Pass

Test mode: IEEE 802.11g

Channel	Frequency (MHz)	Maximum transmit power (dBm)	Limit		Result
			(dBm)	(watts)	
Low	2412	13.94	30	1	Pass
Mid	2437	13.99			Pass
High	2462	14.22			Pass

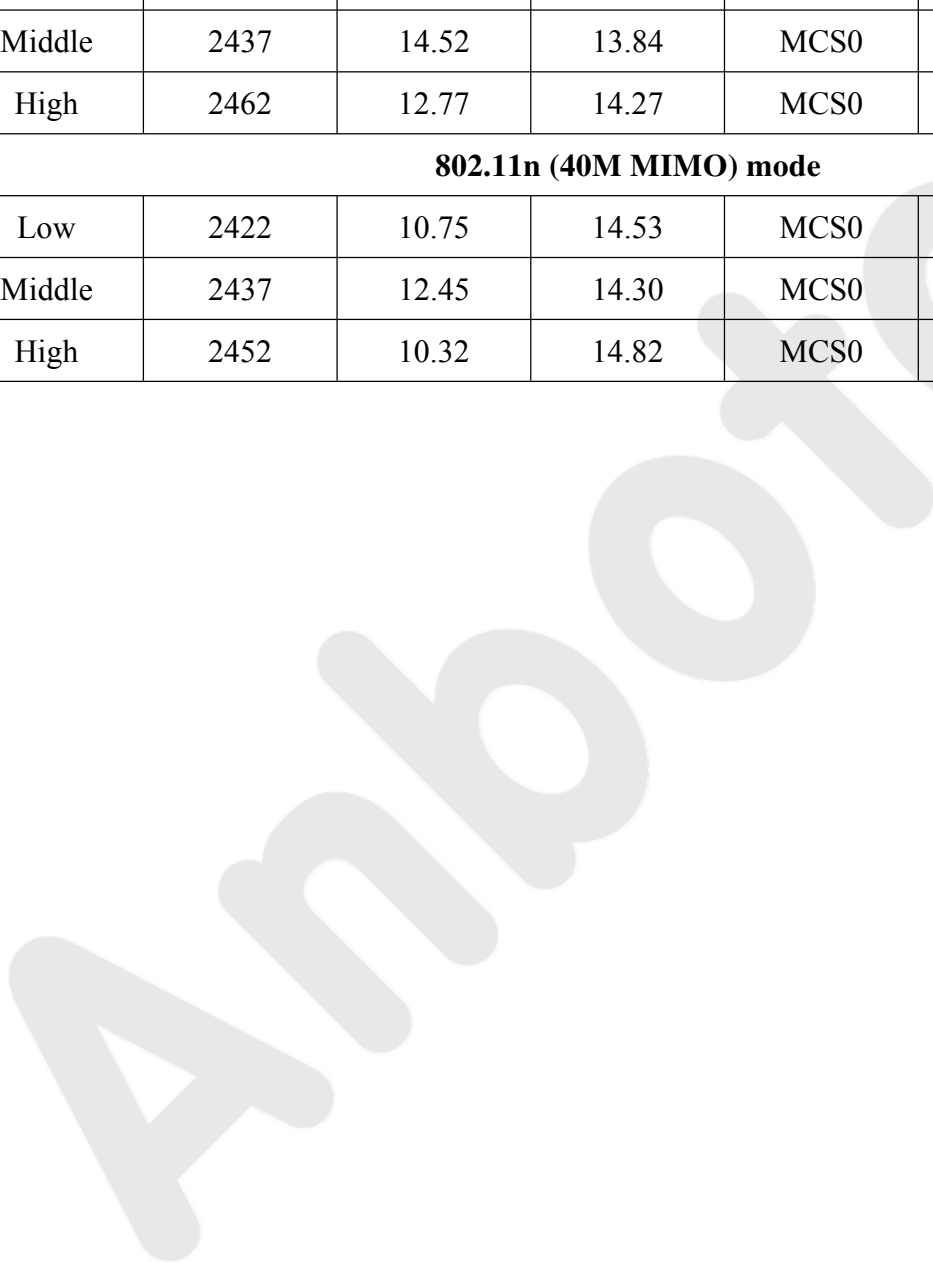
Test mode: IEEE 802.11n (HT20)

Channel	Frequency (MHz)	Maximum transmit power (dBm)	Limit		Result
			(dBm)	(watts)	
Low	2412	13.93	30	1	Pass
Mid	2437	13.84			Pass
High	2462	14.27			Pass

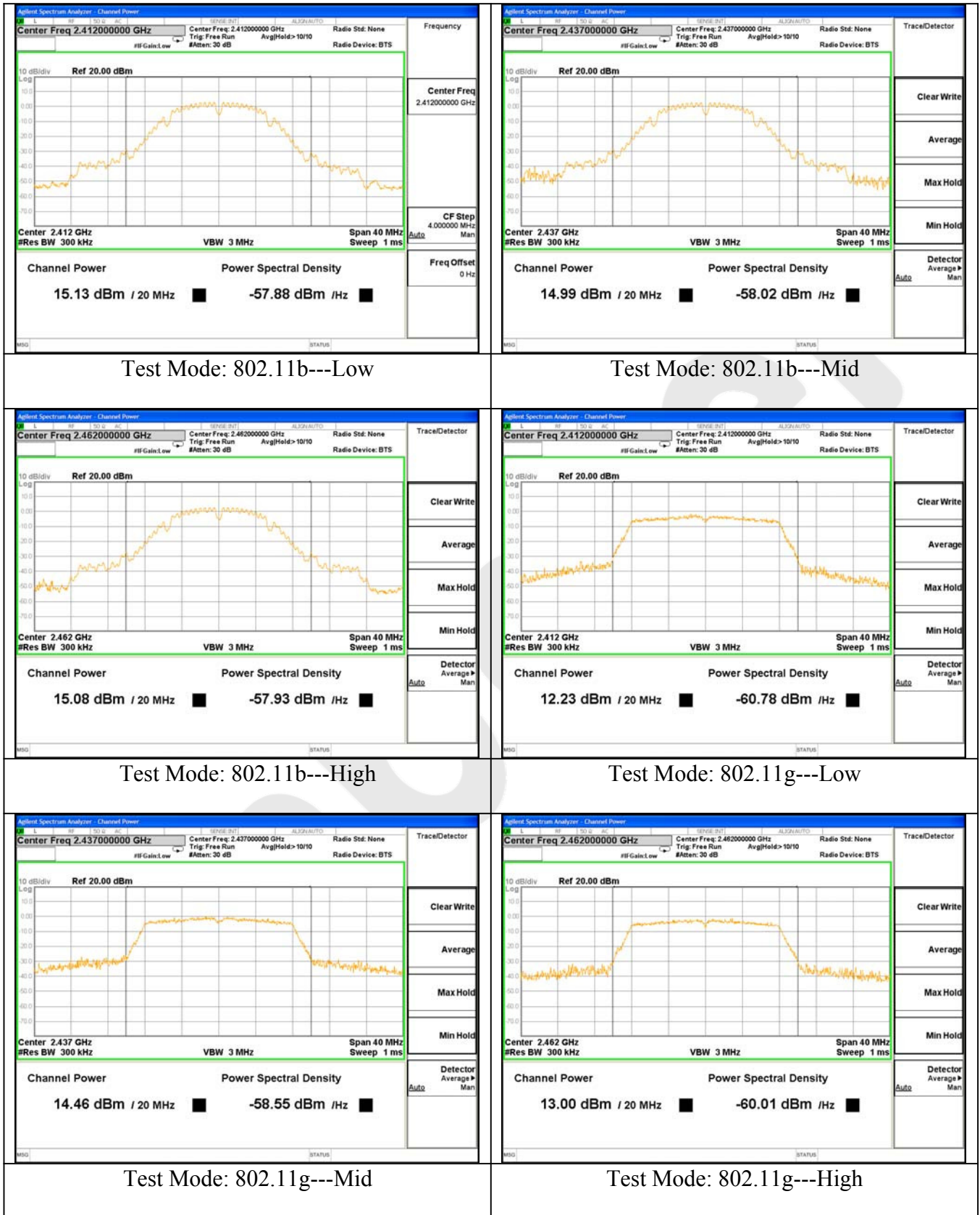
Test mode: IEEE 802.11n (HT40)

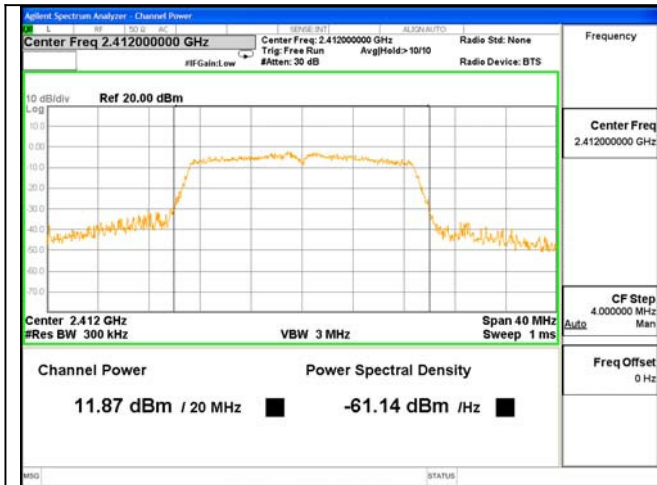
Channel	Frequency (MHz)	Maximum transmit power (dBm)	Limit		Result
			(dBm)	(watts)	
Low	2422	14.53	30	1	Pass
Mid	2437	14.30			Pass
High	2452	14.82			Pass

Channel	Channel Frequency (MHz)	ANT A Output Power (dBm)	ANT B Output Power (dBm)	Data Rate (Mbps)	MIMO Output Power (dBm)	Limit (dBm)
<b>802.11n (20M MIMO) mode</b>						
Low	2412	11.87	13.93	MCS0	16.03	30
Middle	2437	14.52	13.84	MCS0	17.20	30
High	2462	12.77	14.27	MCS0	16.59	30
<b>802.11n (40M MIMO) mode</b>						
Low	2422	10.75	14.53	MCS0	16.05	30
Middle	2437	12.45	14.30	MCS0	16.48	30
High	2452	10.32	14.82	MCS0	16.14	30



ANT A





Test Mode: 802.11n20---Low



Test Mode: 802.11n20---Mid



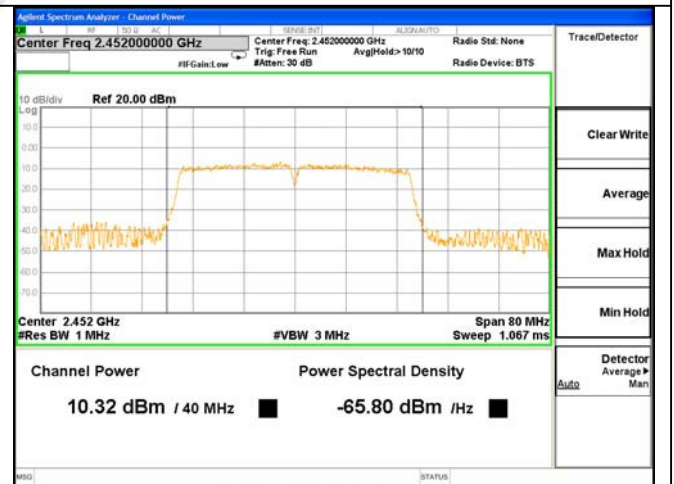
Test Mode: 802.11n20---High



Test Mode: 802.11n40---Low

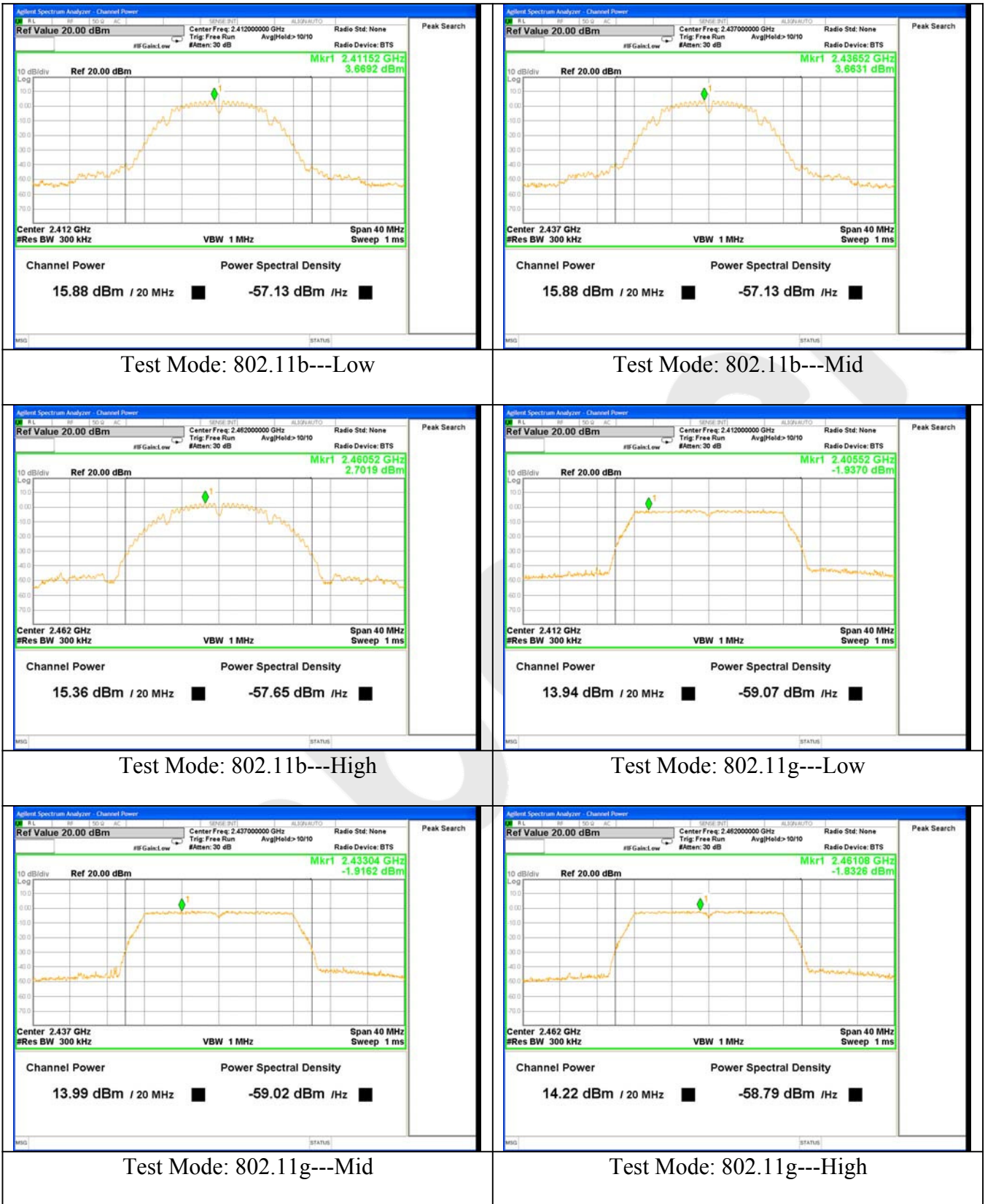


Test Mode: 802.11n40---Mid



Test Mode: 802.11n40---High

ANT B

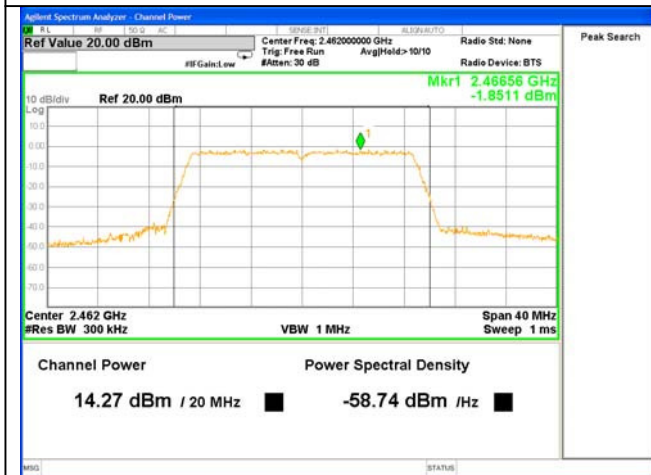




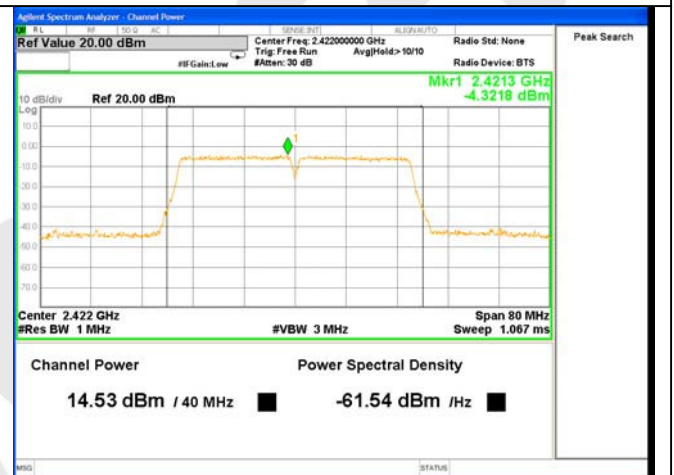
Test Mode: 802.11n20---Low



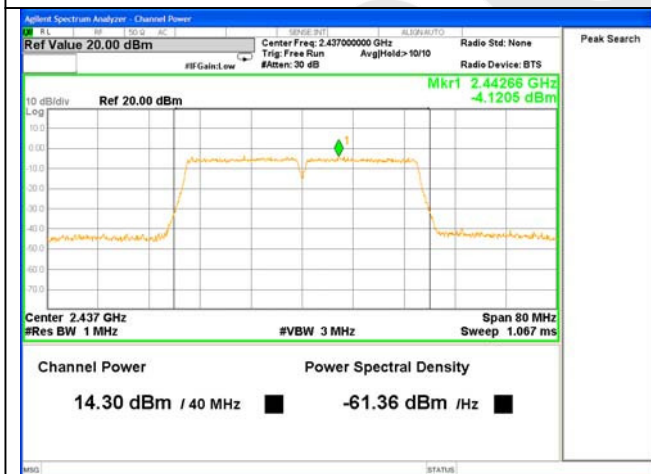
Test Mode: 802.11n20---Mid



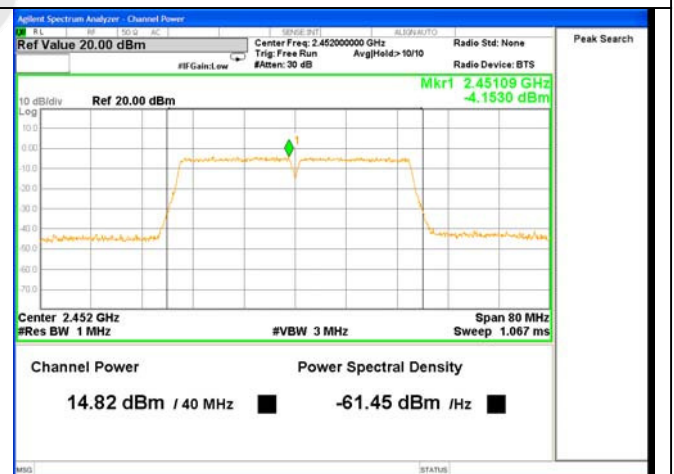
Test Mode: 802.11n20---High



Test Mode: 802.11n40---Low



Test Mode: 802.11n40---Mid



Test Mode: 802.11n40---High

#### 4.4. Band Edges Measurement

##### a. Limit

According to §15.247(c), in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum 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, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

##### b. Test Procedure

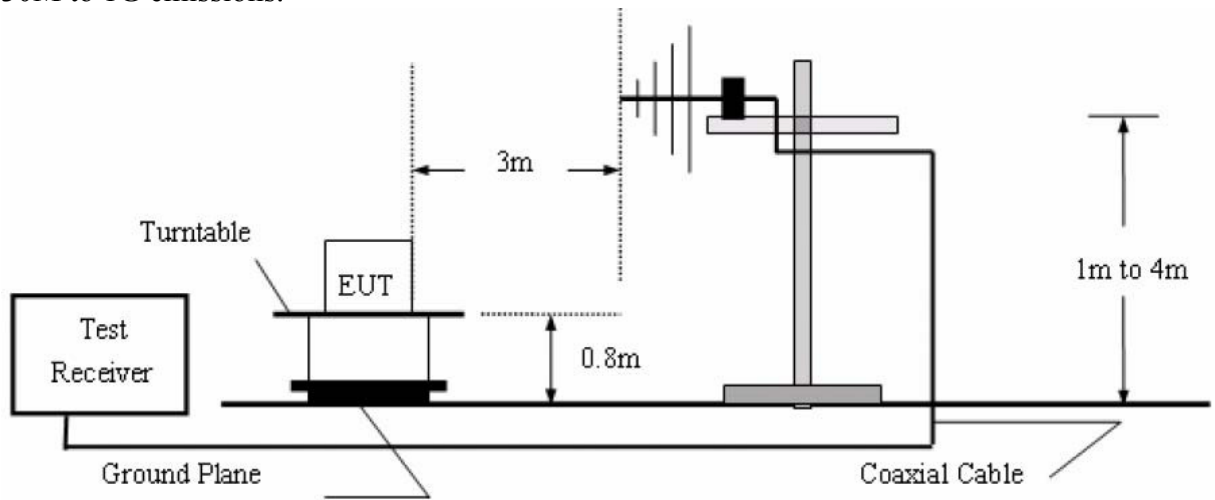
###### 1. Conducted Method:

- 1) Set RBW=100KHz, VBW=300KHz
- 2) Detector=peak
- 3) Sweep time= auto
- 4) Trace mode=max hold.

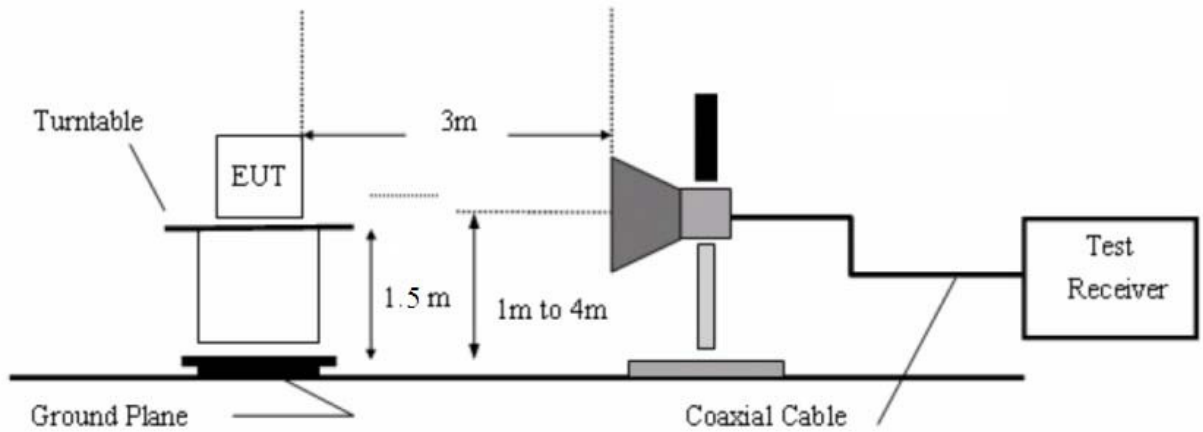
###### 2. Radiated Method:

- 1) For below 1GHz: The EUT is placed on a turntable, which is 0.8m above the ground plane. The EUT is tested in 9\*6\*6 Chamber.  
For above 1GHz: The EUT is placed on a turntable, which is 1.5m above the ground plane. The EUT is tested in 9\*6\*6 Chamber.
- 2) The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4) Peak detector: RBW=1MHz, VBW=3MHz, SWT=AUTO  
Average detector: RBW=1MHz, VBW=10Hz, SWT=AUTO  
The EUT is tested in 9\*6\*6 Chamber.
- 5) Repeat the procedures until all the PEAK and AVERAGE versus POLARIZATION are measured.

30M to 1G emissions:



1G to 40G emissions:



**c. Test Equipment**

Same as the equipment listed in 4.2.

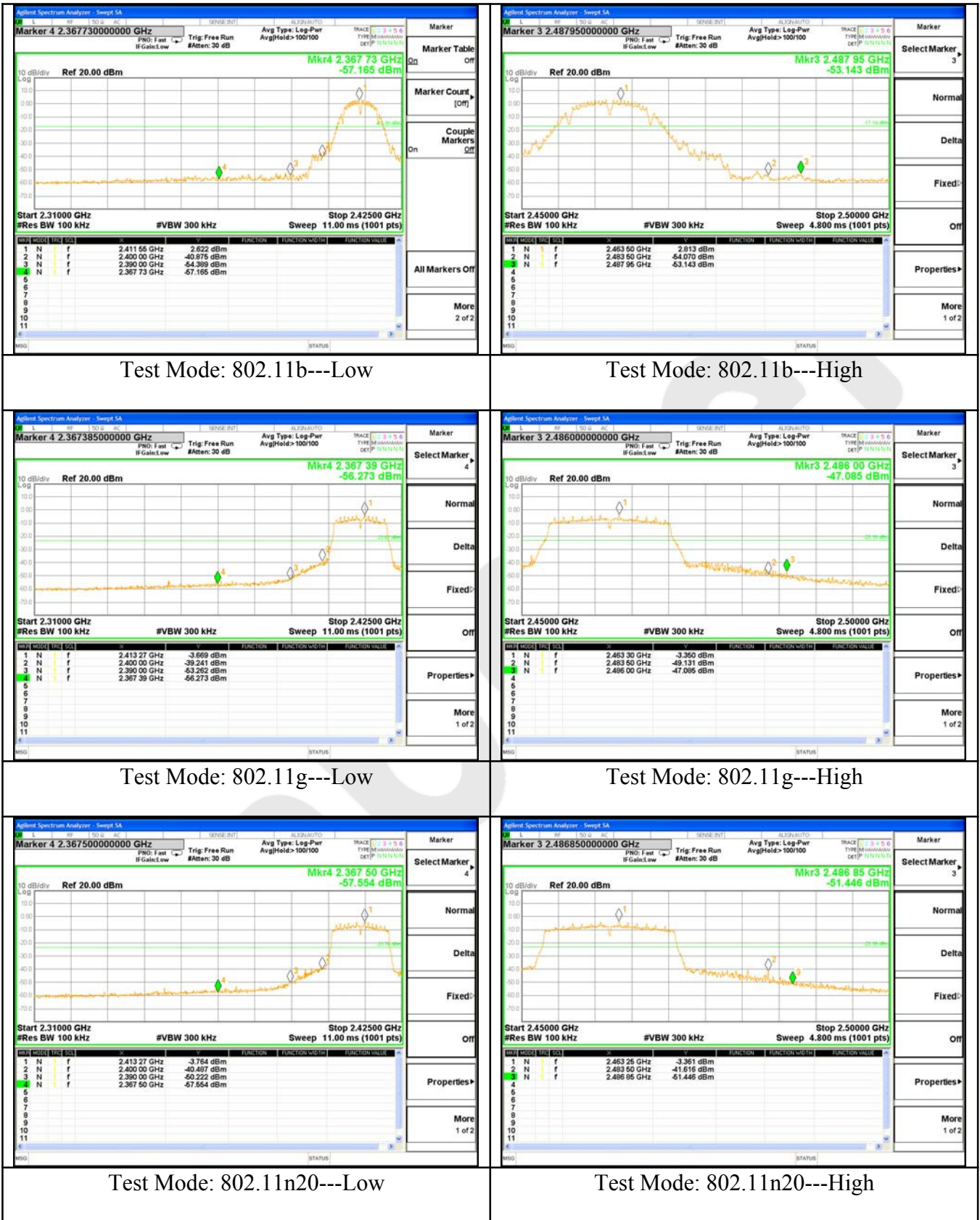
**d. Test Results**

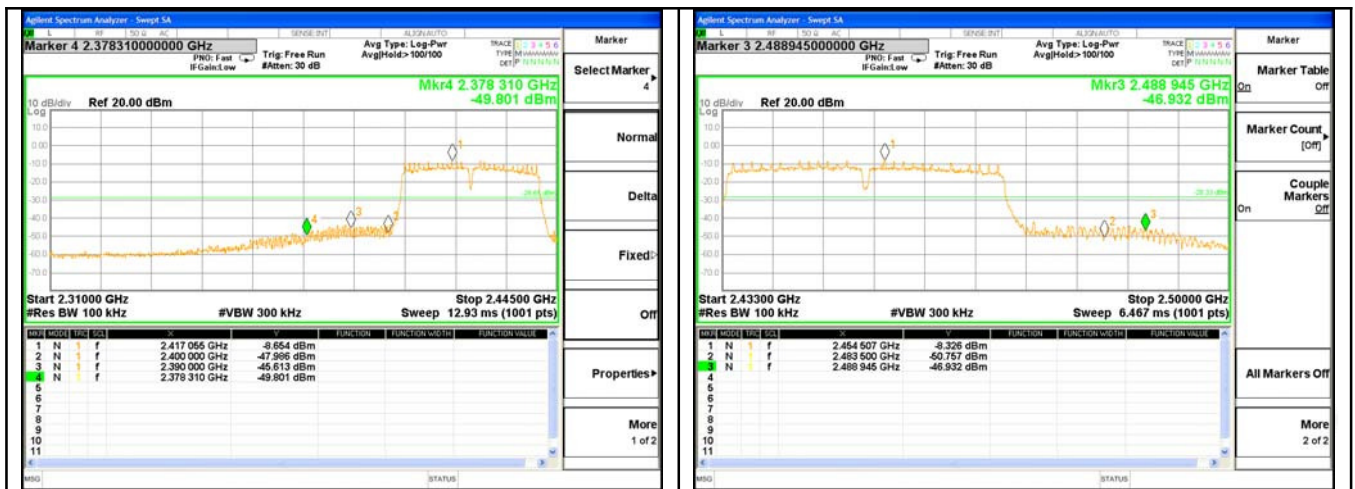
Pass.

**e. Test Plots**

See the following page.

ANT A



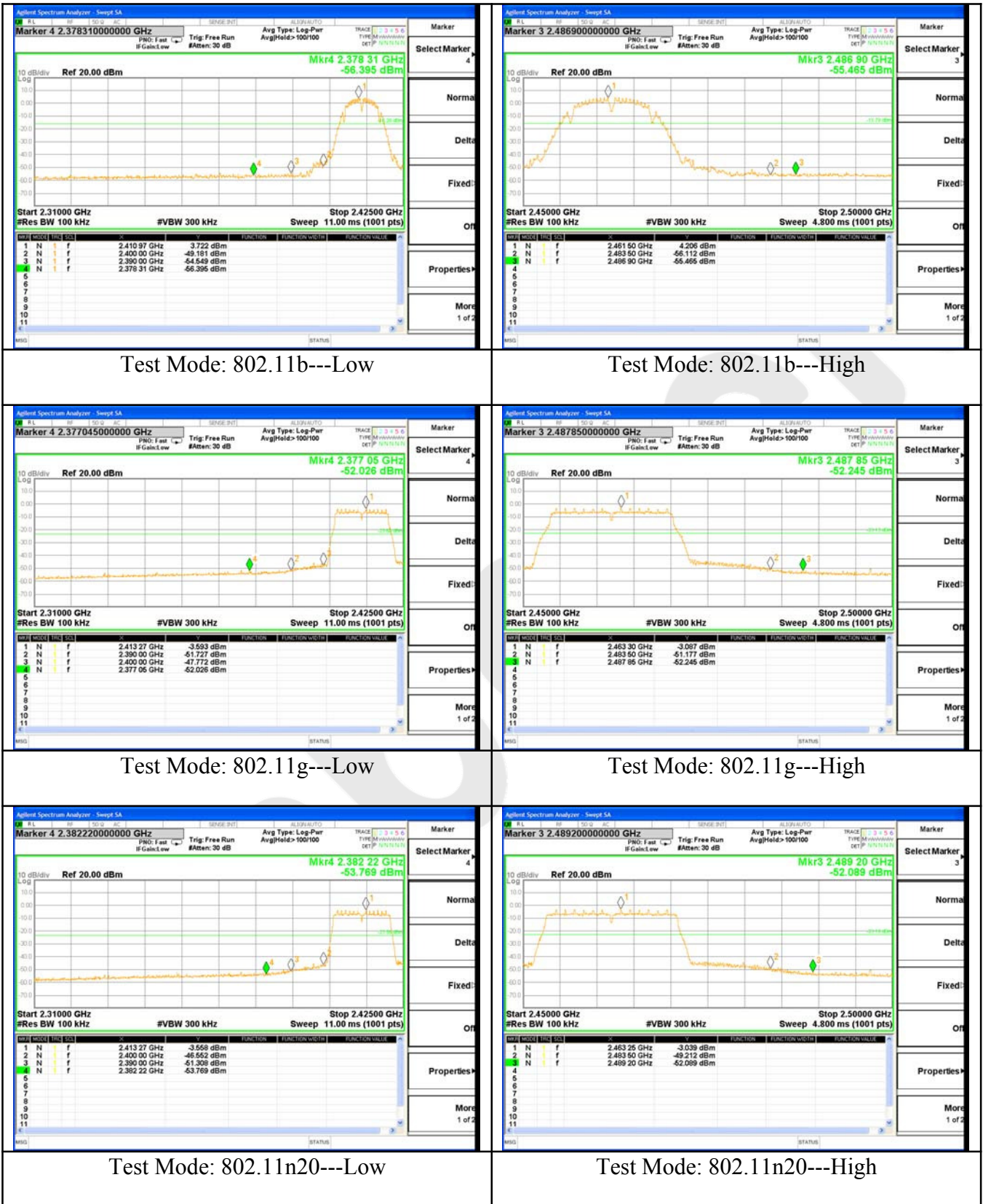


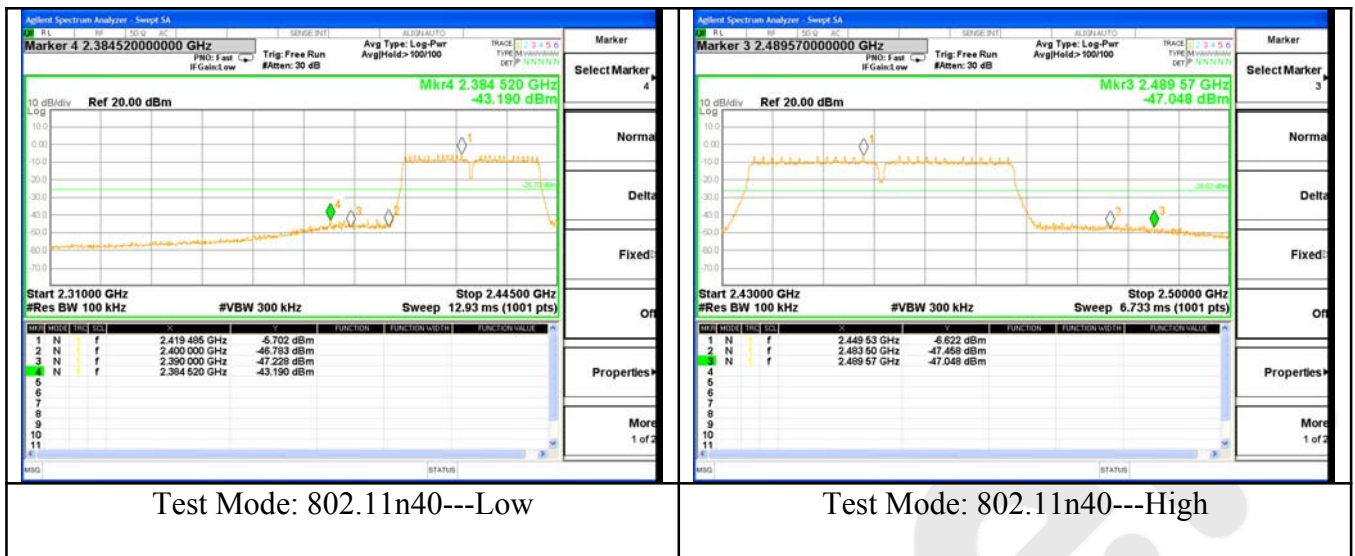
Test Mode: 802.11n40---Low

Test Mode: 802.11n40---High



ANT B



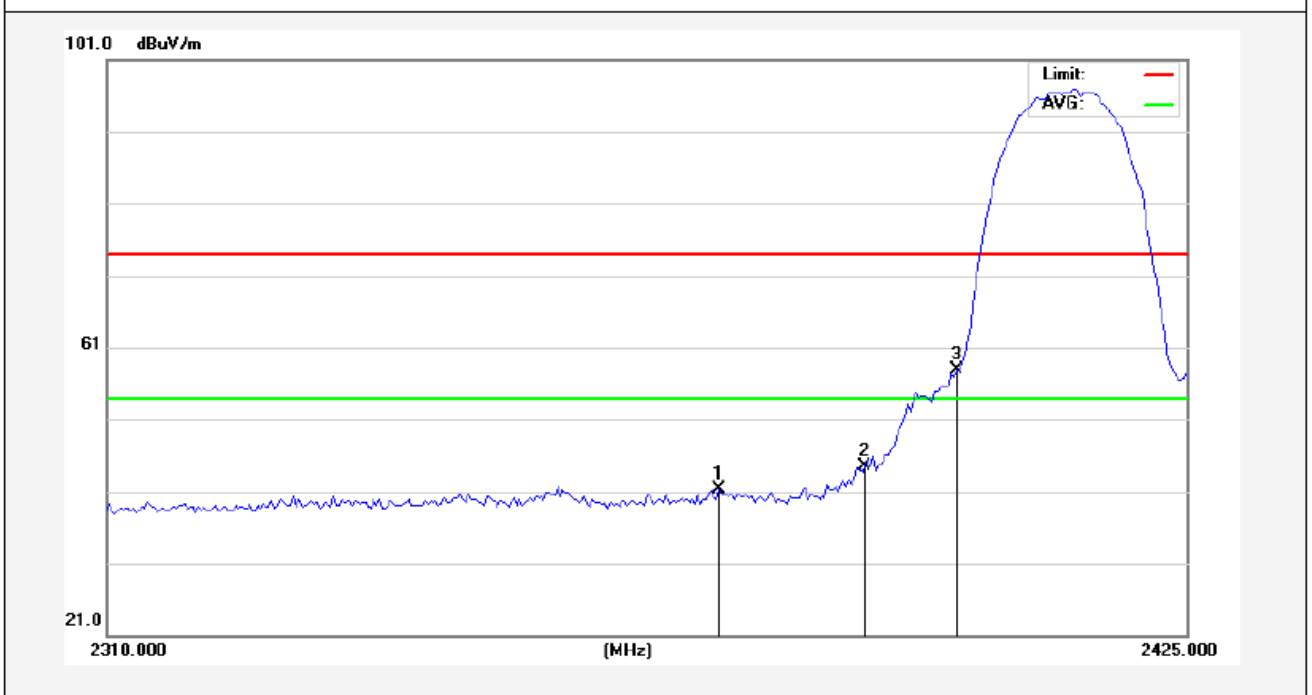


ANT A

Test Mode: 802.11b

2412MHz

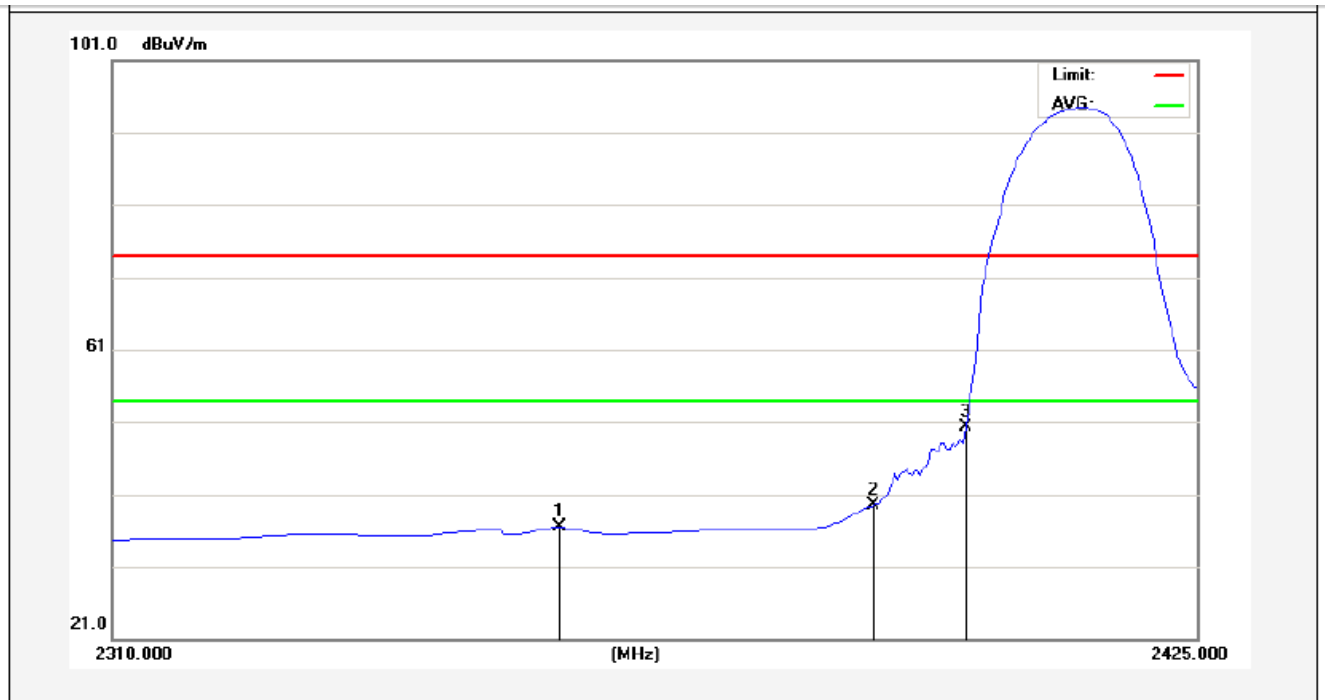
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2374.688	43.85	-2.55	41.30	74.00	-32.70	peak			
2	2390.000	47.08	-2.51	44.57	74.00	-29.43	peak			
3	2400.000	60.35	-2.49	57.86	74.00	-16.14	peak			

ANT A

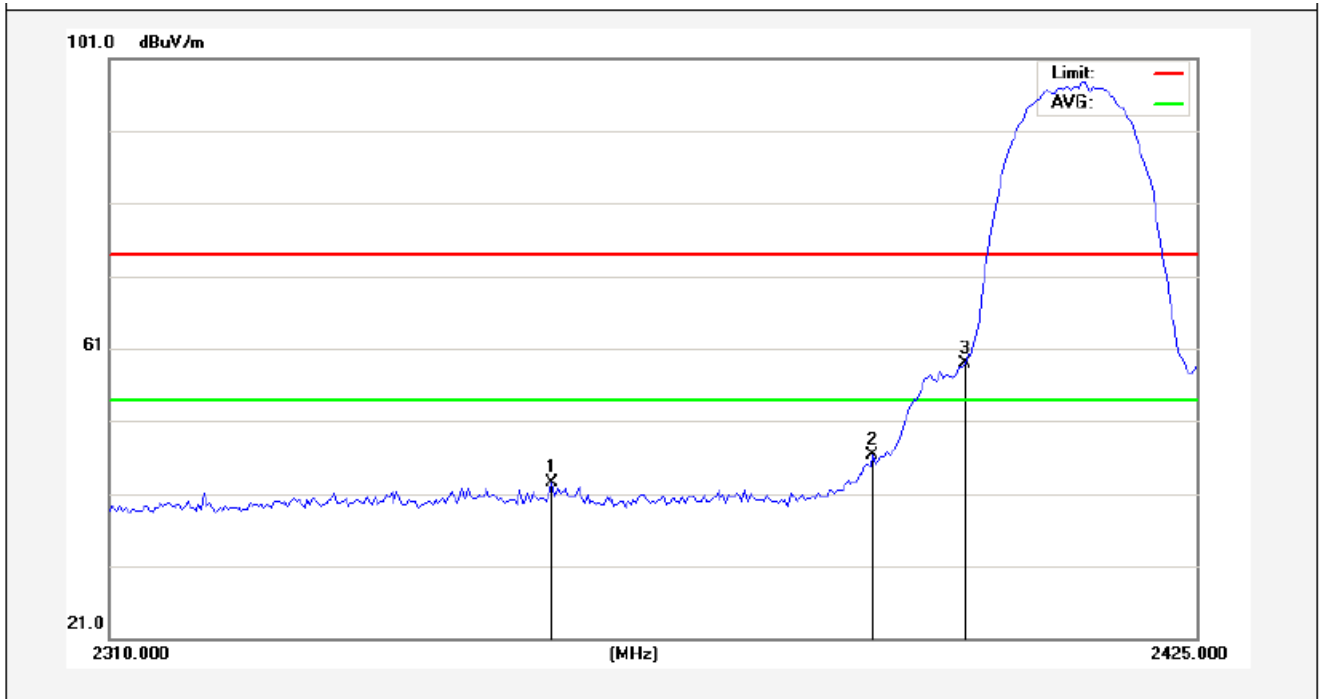
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2356.863	39.04	-2.59	36.45	54.00	-17.55	AVG			
2	2390.000	42.02	-2.51	39.51	54.00	-14.49	AVG			
3	2400.000	52.84	-2.49	50.35	54.00	-3.65	AVG			

Anbotek

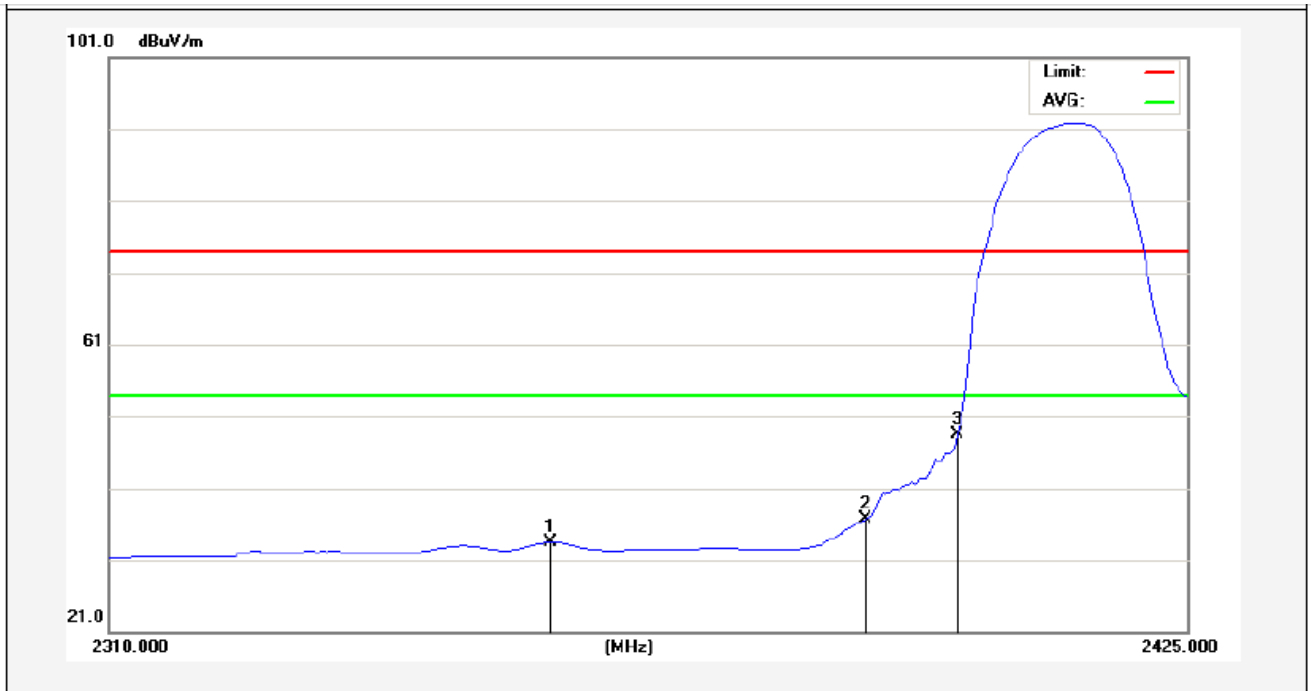
Test Mode: 802.11b  
2412MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2356.287	45.15	-2.59	42.56	74.00	-31.44	peak			
2	2390.000	48.84	-2.51	46.33	74.00	-27.67	peak			
3	2400.000	61.46	-2.49	58.97	74.00	-15.03	peak			

ANBOT

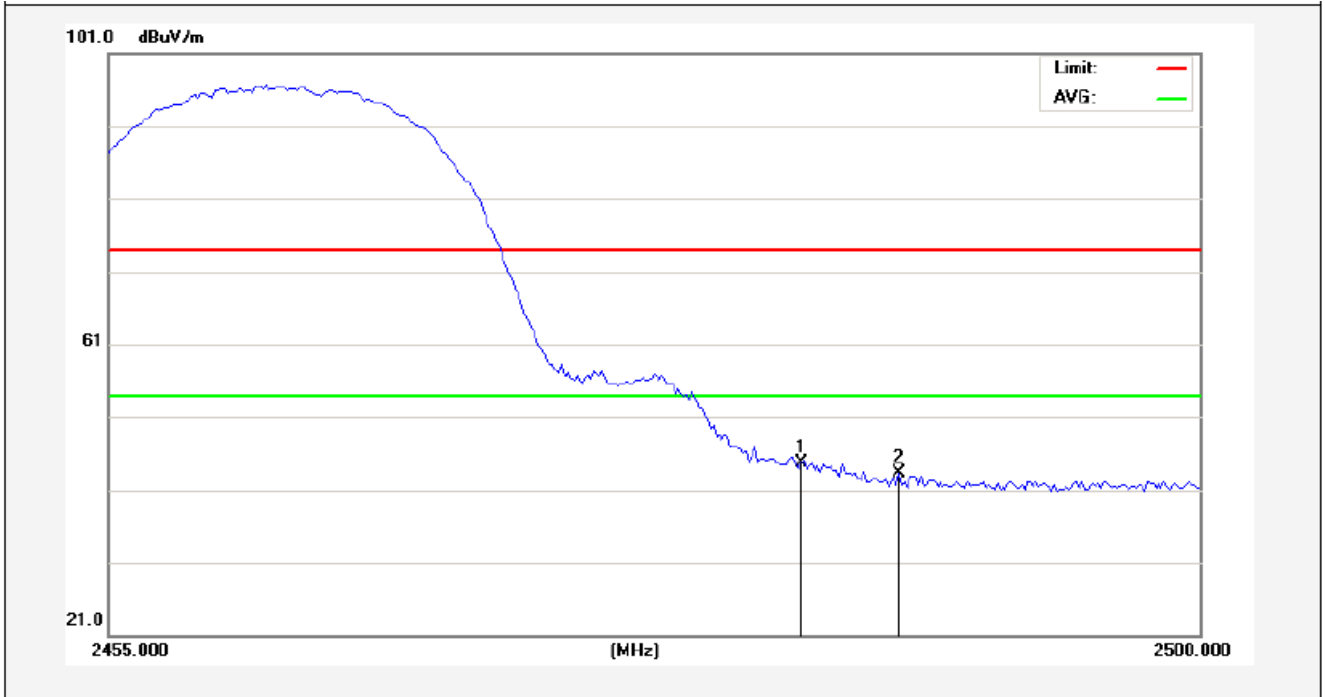
Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2356.575	36.12	-2.59	33.53	54.00	-20.47	AVG			
2	2390.000	39.16	-2.51	36.65	54.00	-17.35	AVG			
3	2400.000	51.02	-2.49	48.53	54.00	-5.47	AVG			

Anbotek

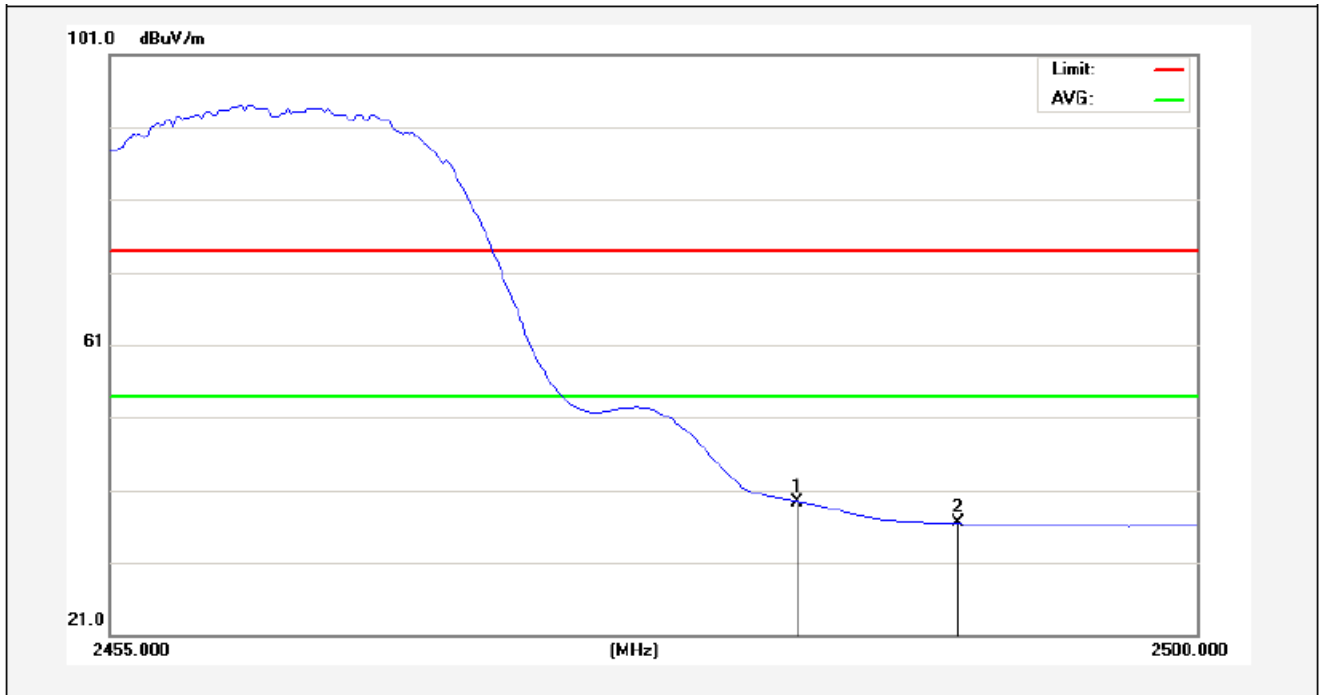
Test Mode: 802.11b  
2462MHz  
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	47.11	-2.31	44.80	74.00	-29.20	peak			
2	2487.625	45.67	-2.30	43.37	74.00	-30.63	peak			

Anbotek

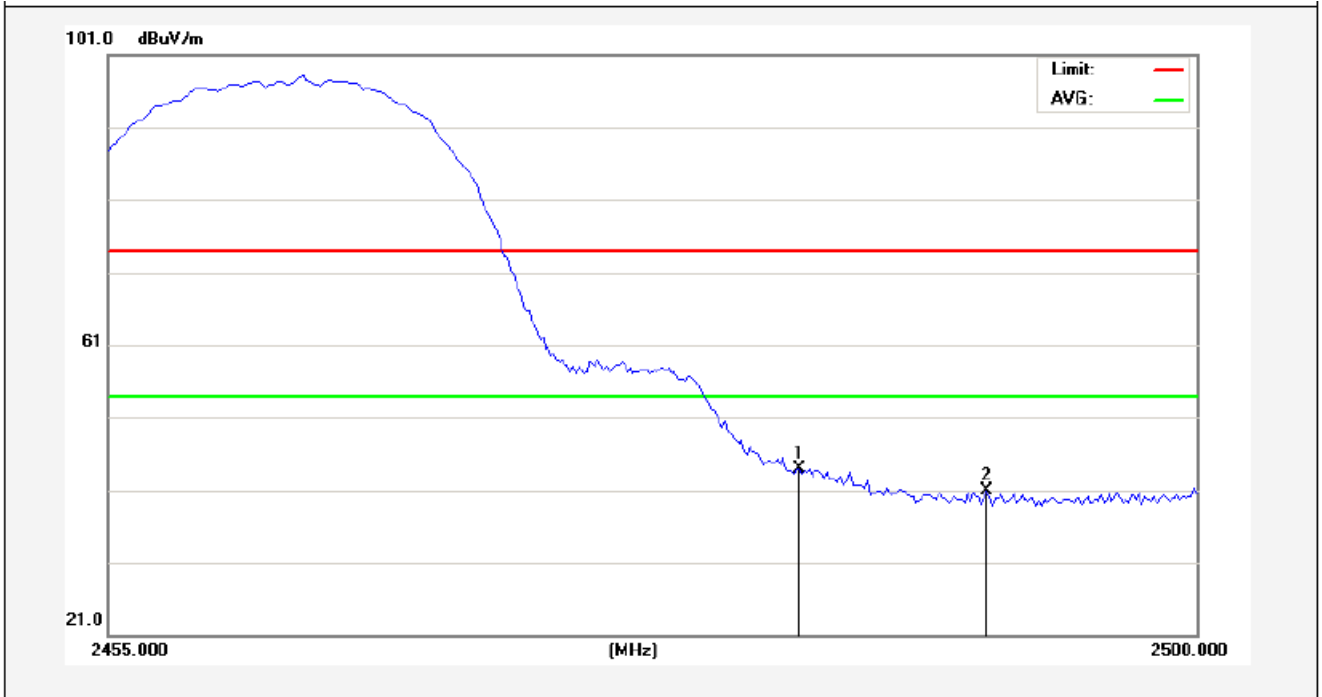
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	41.70	-2.31	39.39	54.00	-14.61	AVG			
2	2490.100	38.74	-2.29	36.45	54.00	-17.55	AVG			

Anbotek

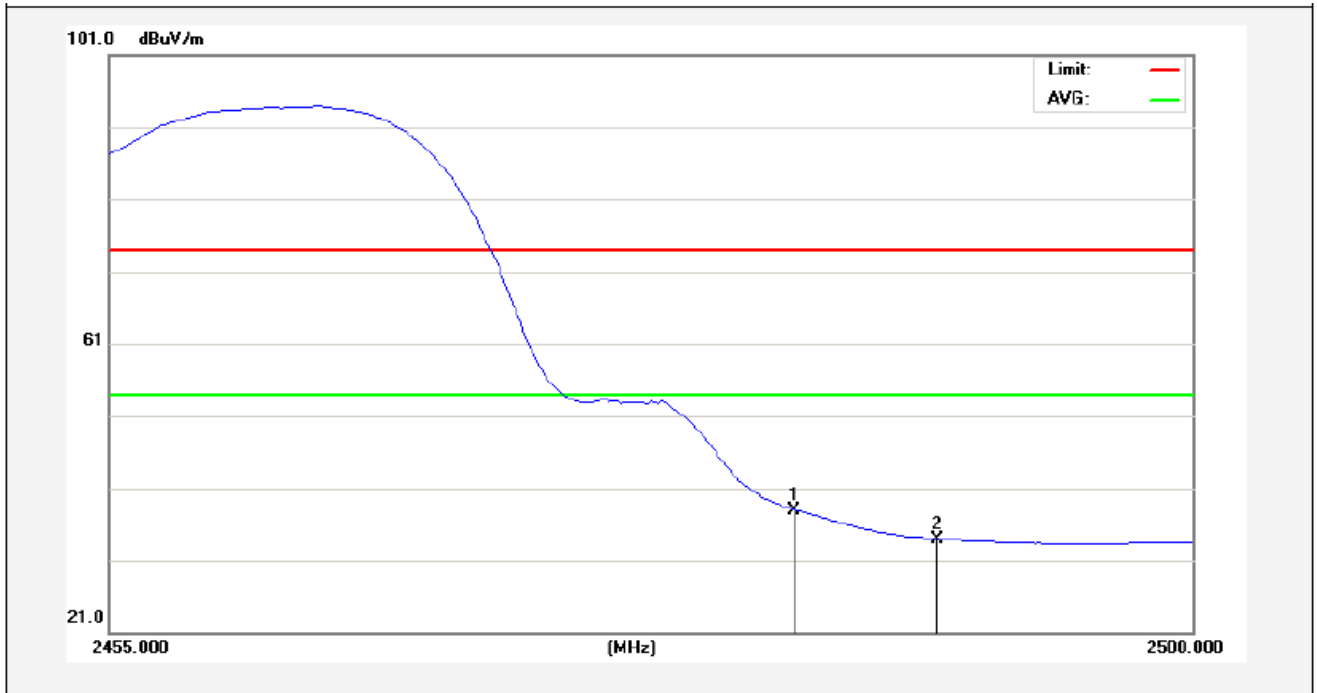
Test Mode: 802.11b  
2462MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	46.27	-2.31	43.96	74.00	-30.04	peak			
2	2491.338	43.22	-2.29	40.93	74.00	-33.07	peak			

Anbotek

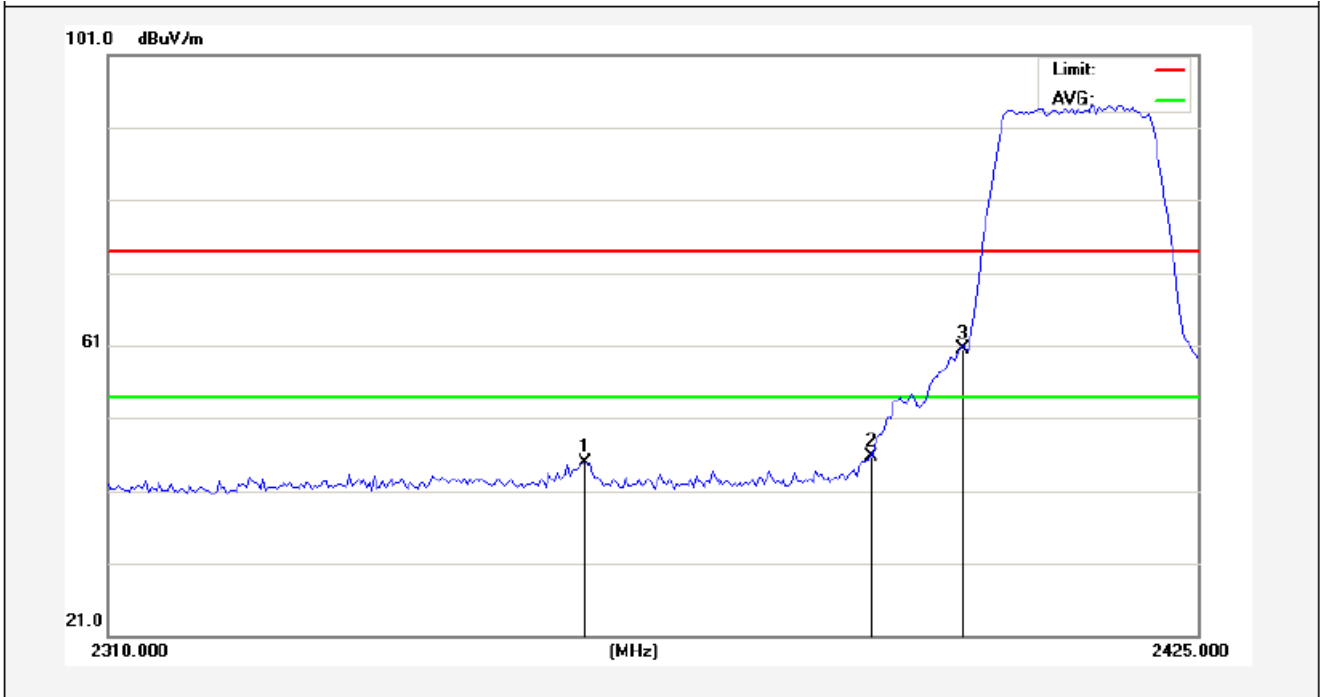
Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	40.24	-2.31	37.93	54.00	-16.07	AVG			
2	2489.537	36.26	-2.29	33.97	54.00	-20.03	AVG			

Anbotek

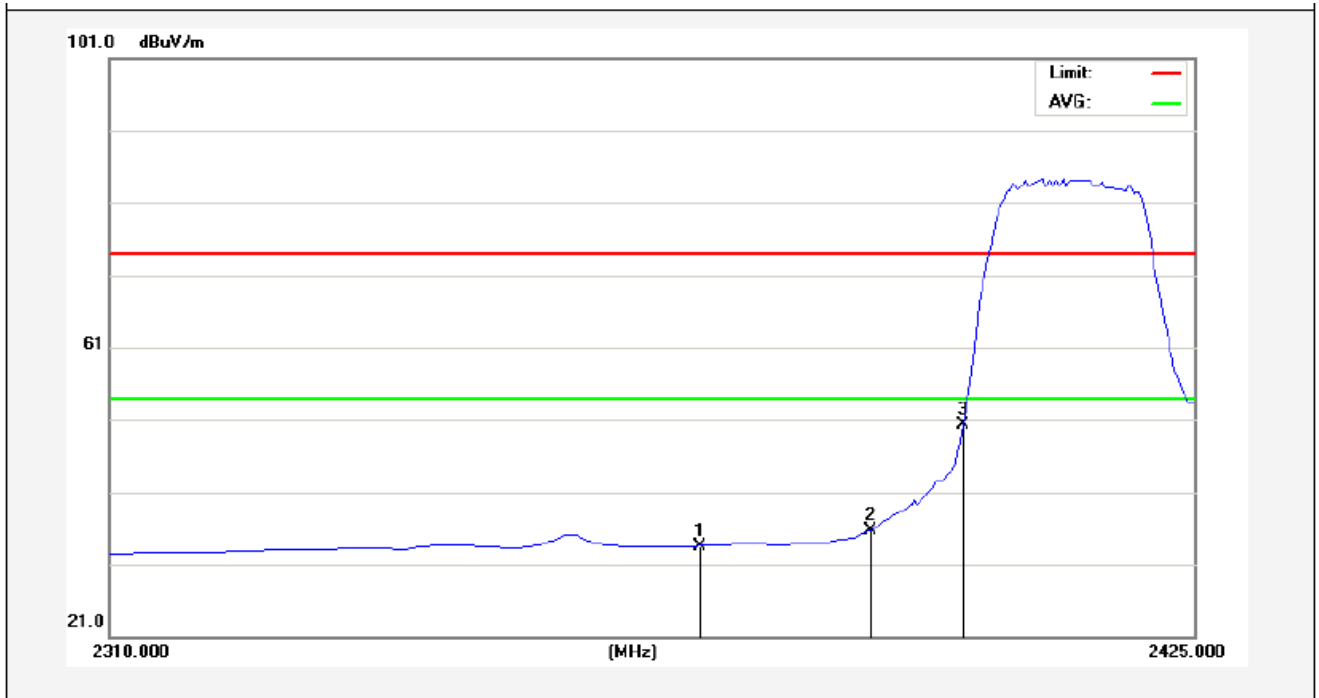
Test Mode: 802.11g  
2412MHz  
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2359.738	47.51	-2.58	44.93	74.00	-29.07	peak			
2	2390.000	48.27	-2.51	45.76	74.00	-28.24	peak			
3	2400.000	63.05	-2.49	60.56	74.00	-13.44	peak			

Anbotek

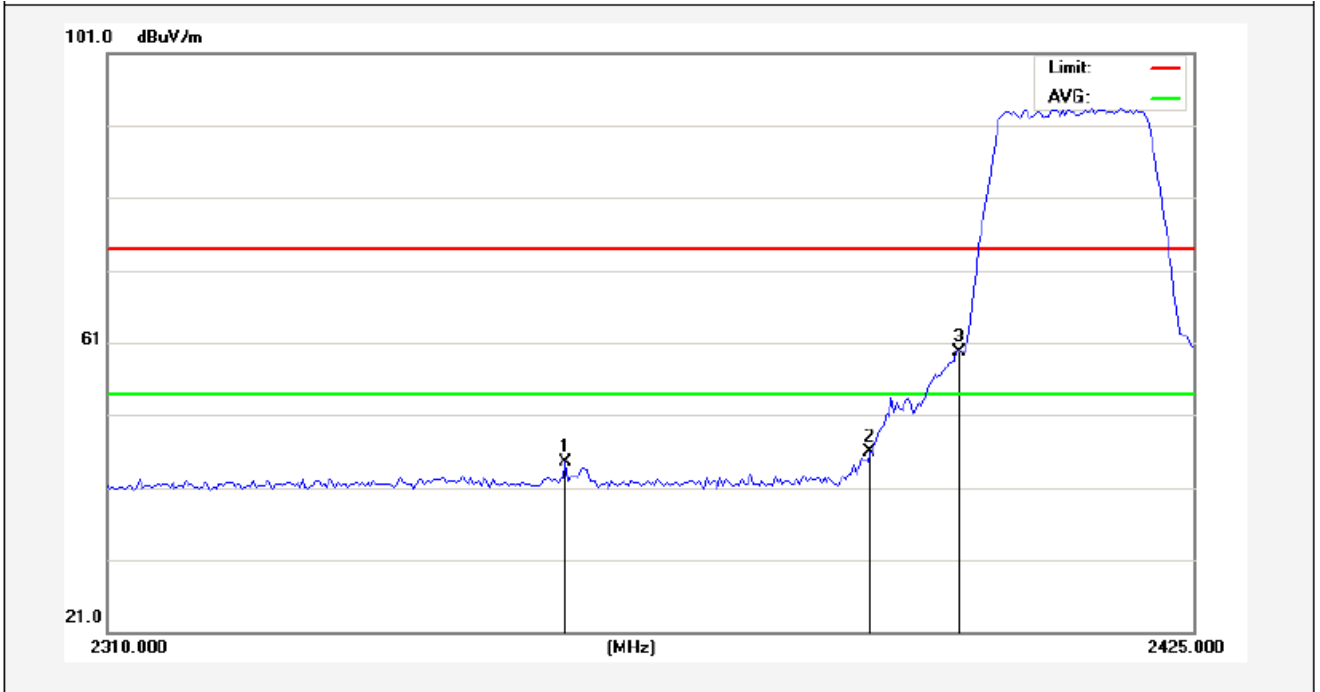
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2371.813	36.14	-2.55	33.59	54.00	-20.41	AVG			
2	2390.000	38.30	-2.51	35.79	54.00	-18.21	AVG			
3	2400.000	52.71	-2.49	50.22	54.00	-3.78	AVG			

Anbotek

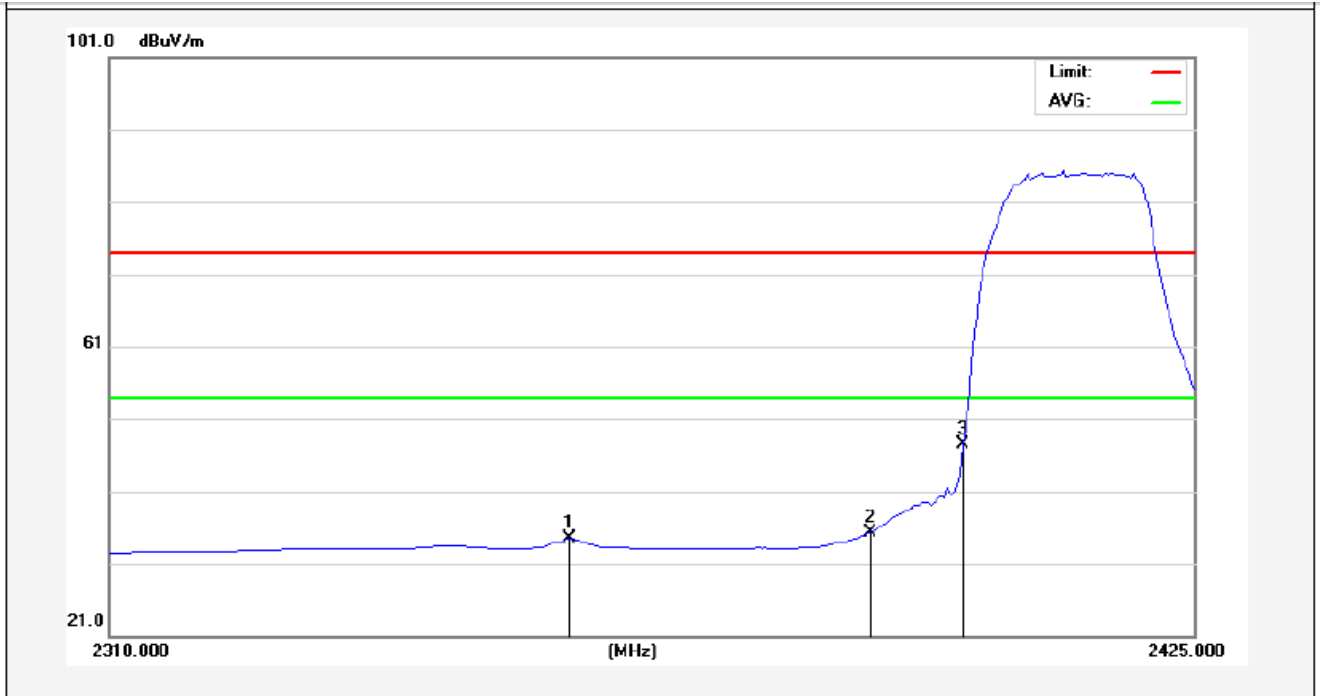
Test Mode: 802.11g  
2412MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2358.012	47.09	-2.59	44.50	74.00	-29.50	peak			
2	2390.000	48.47	-2.51	45.96	74.00	-28.04	peak			
3	2400.000	62.19	-2.49	59.70	74.00	-14.30	peak			

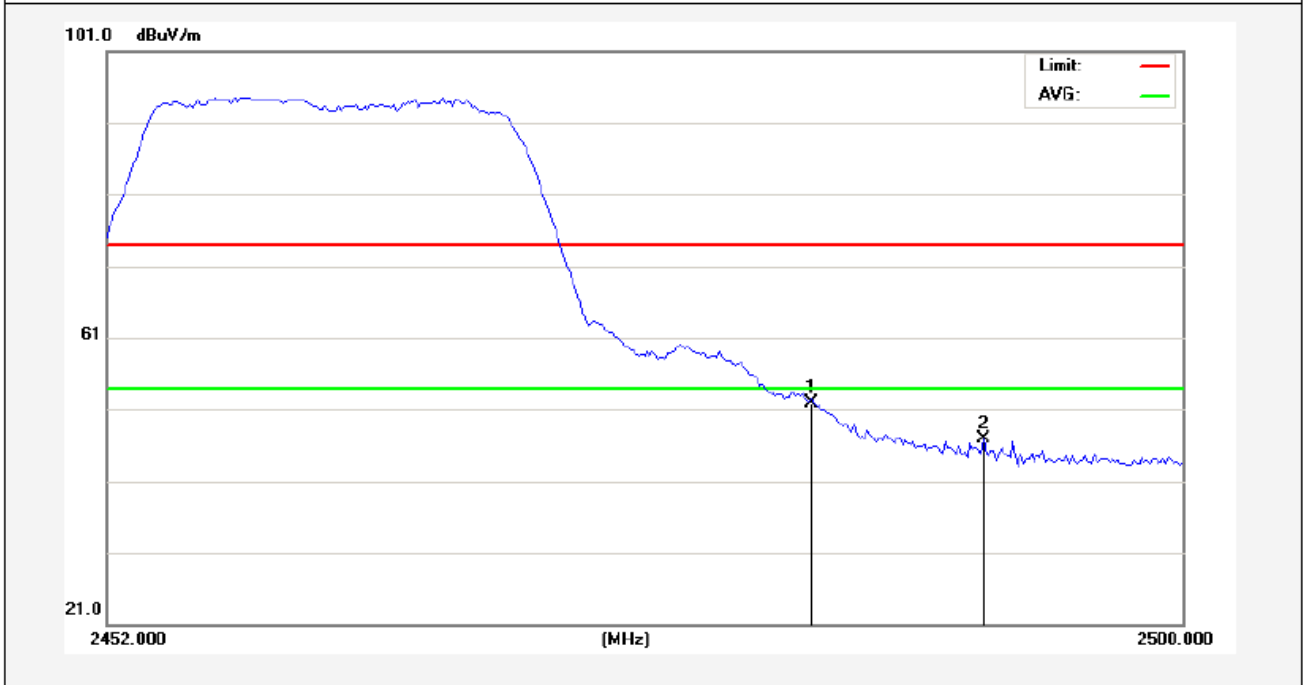
Anbotek

Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2358.300	37.02	-2.58	34.44	54.00	-19.56	AVG			
2	2390.000	37.88	-2.51	35.37	54.00	-18.63	AVG			
3	2400.000	49.94	-2.49	47.45	54.00	-6.55	AVG			

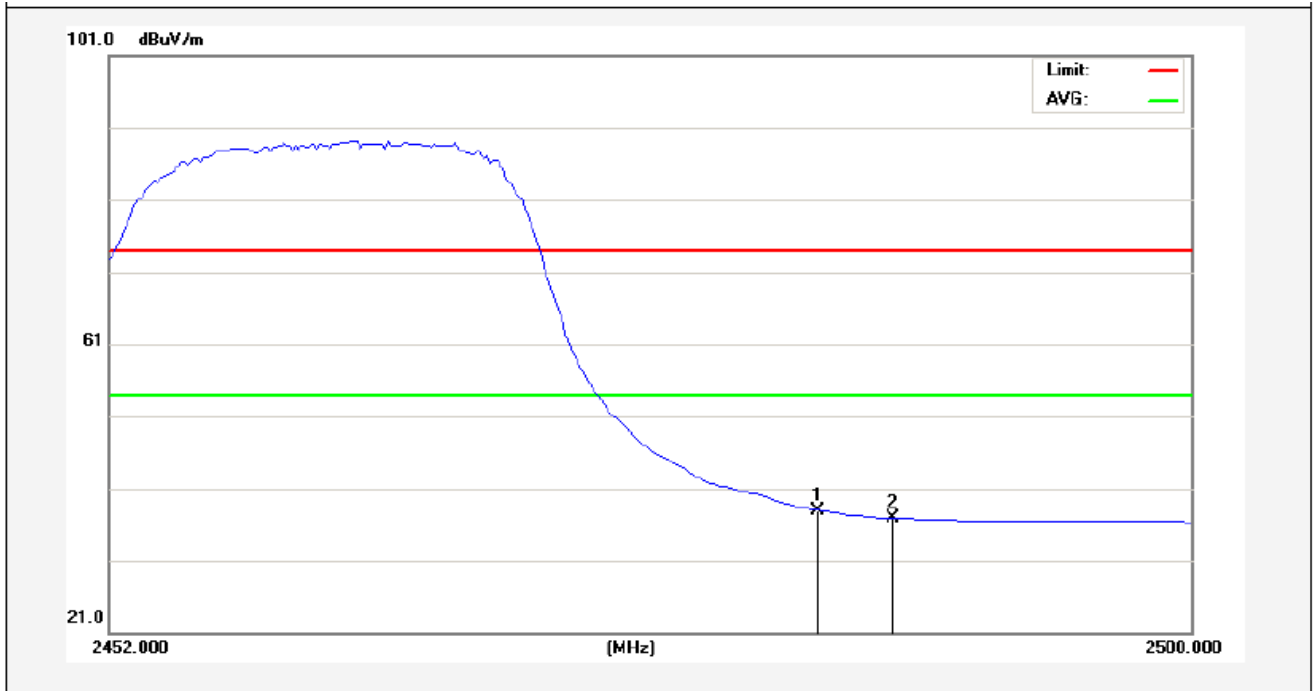
Test Mode: 802.11g  
2462MHz  
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	54.18	-2.31	51.87	74.00	-22.13	peak			
2	2491.120	49.17	-2.29	46.88	74.00	-27.12	peak			

Anbotek

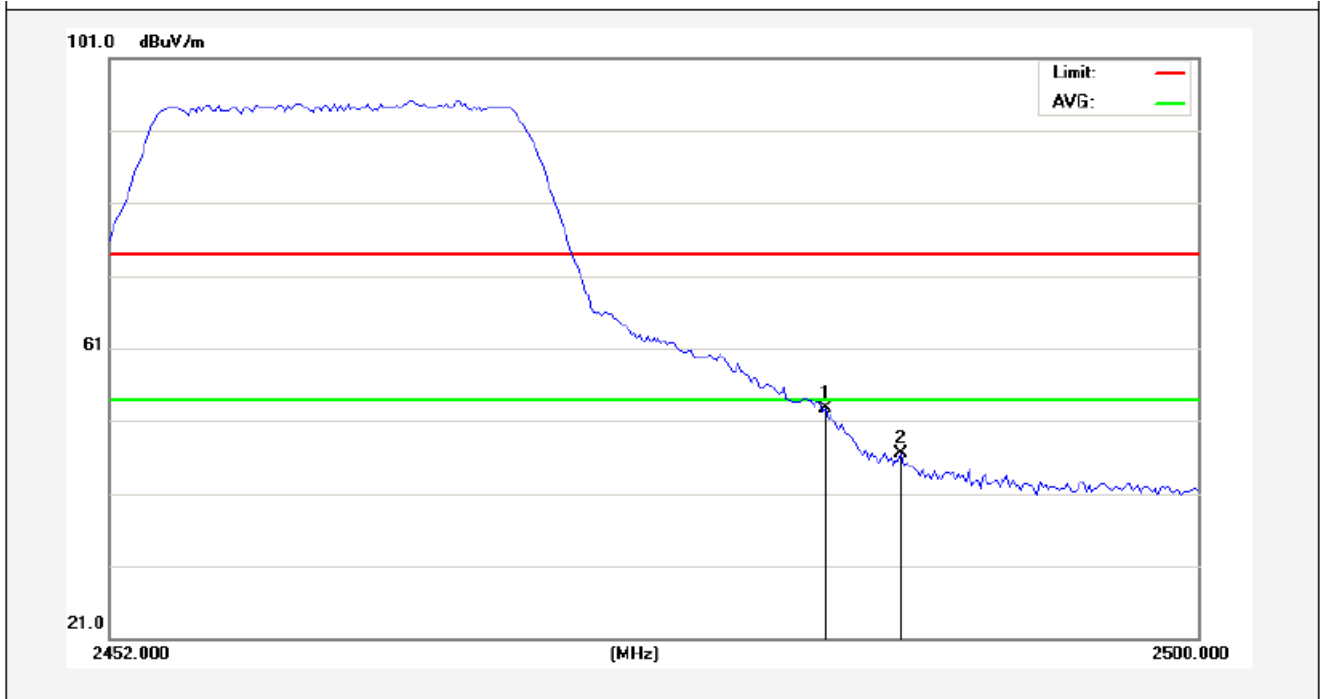
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	40.30	-2.31	37.99	54.00	-16.01	AVG			
2	2486.800	39.18	-2.30	36.88	54.00	-17.12	AVG			

Anbotek

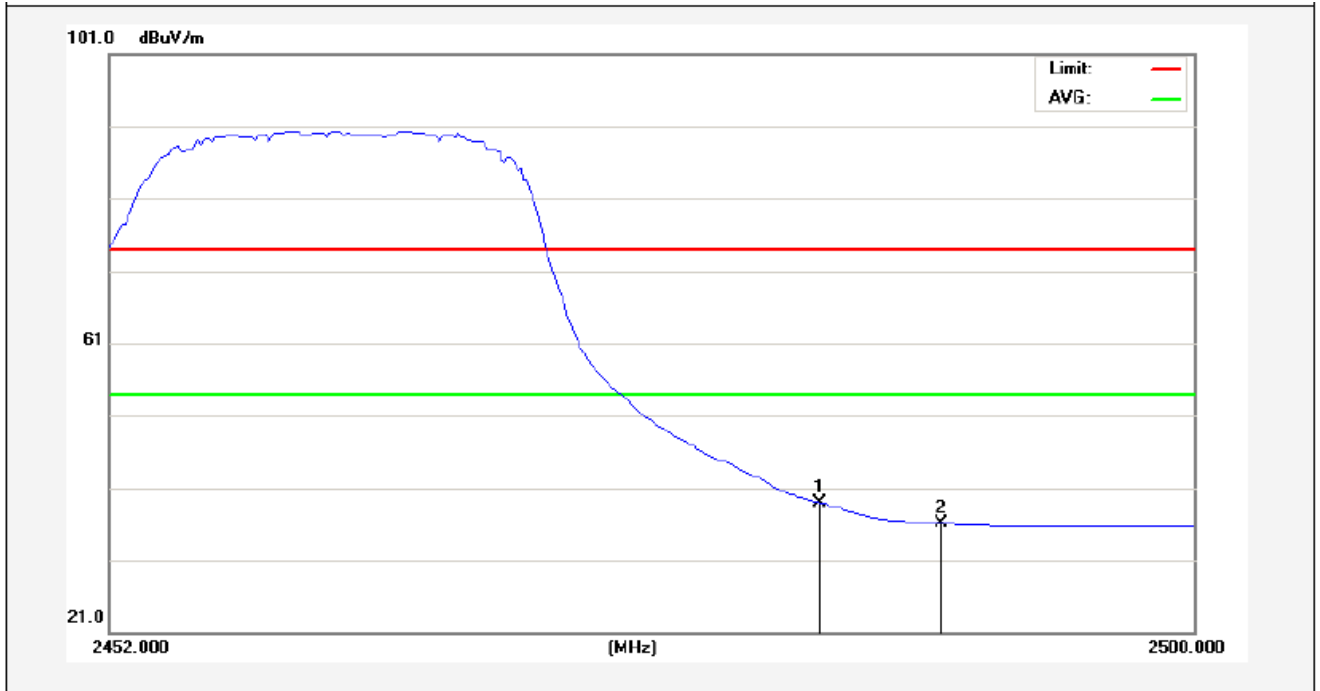
Test Mode: 802.11g  
2462MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	55.01	-2.31	52.70	74.00	-21.30	peak			
2	2486.920	48.79	-2.30	46.49	74.00	-27.51	peak			

Anbotek

Vertical-AV:



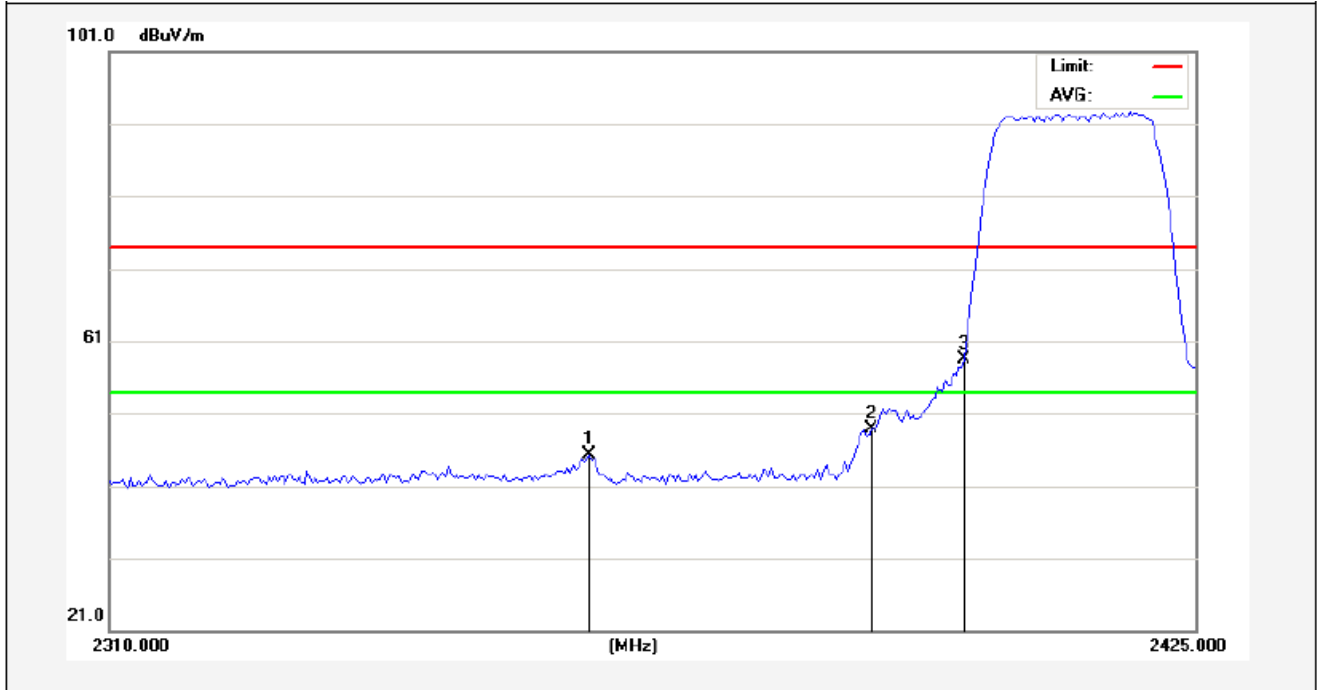
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	41.20	-2.31	38.89	54.00	-15.11	AVG			
2	2488.840	38.35	-2.29	36.06	54.00	-17.94	AVG			

Anbotek

Test Mode: 802.11n (HT20)

2412MHz

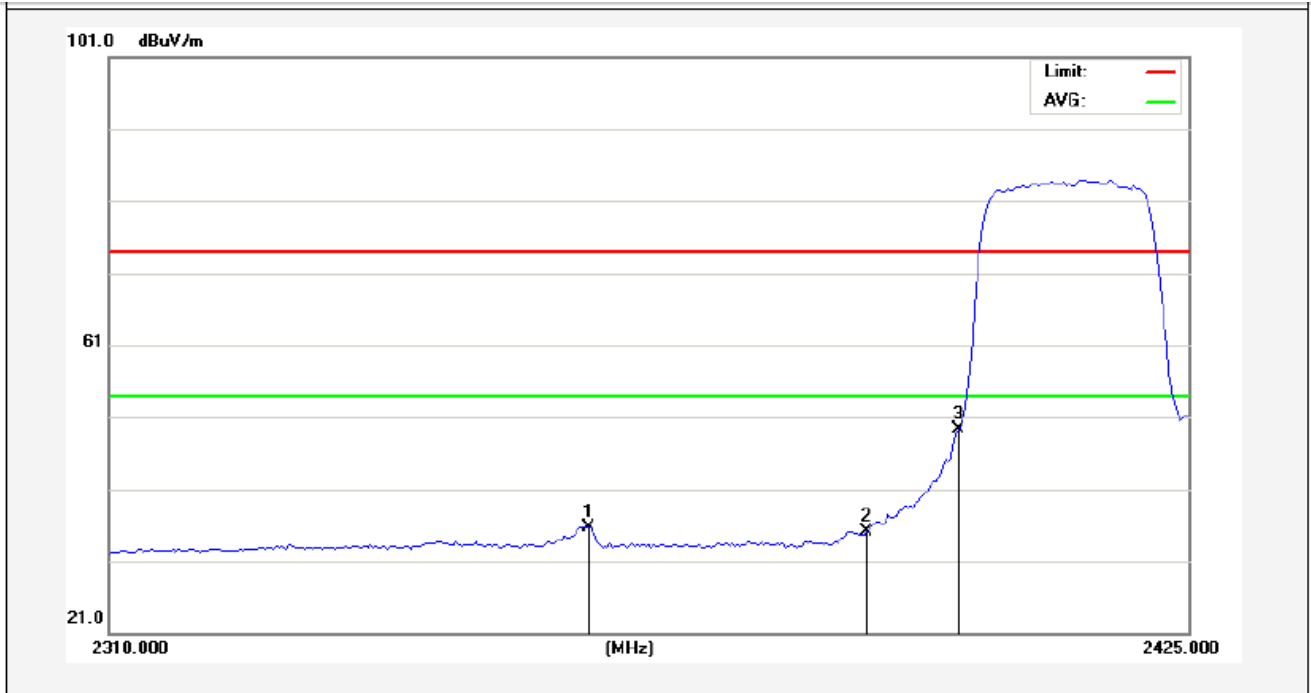
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2360.313	47.92	-2.58	45.34	74.00	-28.66	peak			
2	2390.000	51.36	-2.51	48.85	74.00	-25.15	peak			
3	2400.000	61.07	-2.49	58.58	74.00	-15.42	peak			

Anbotek

Horizontal-AV:



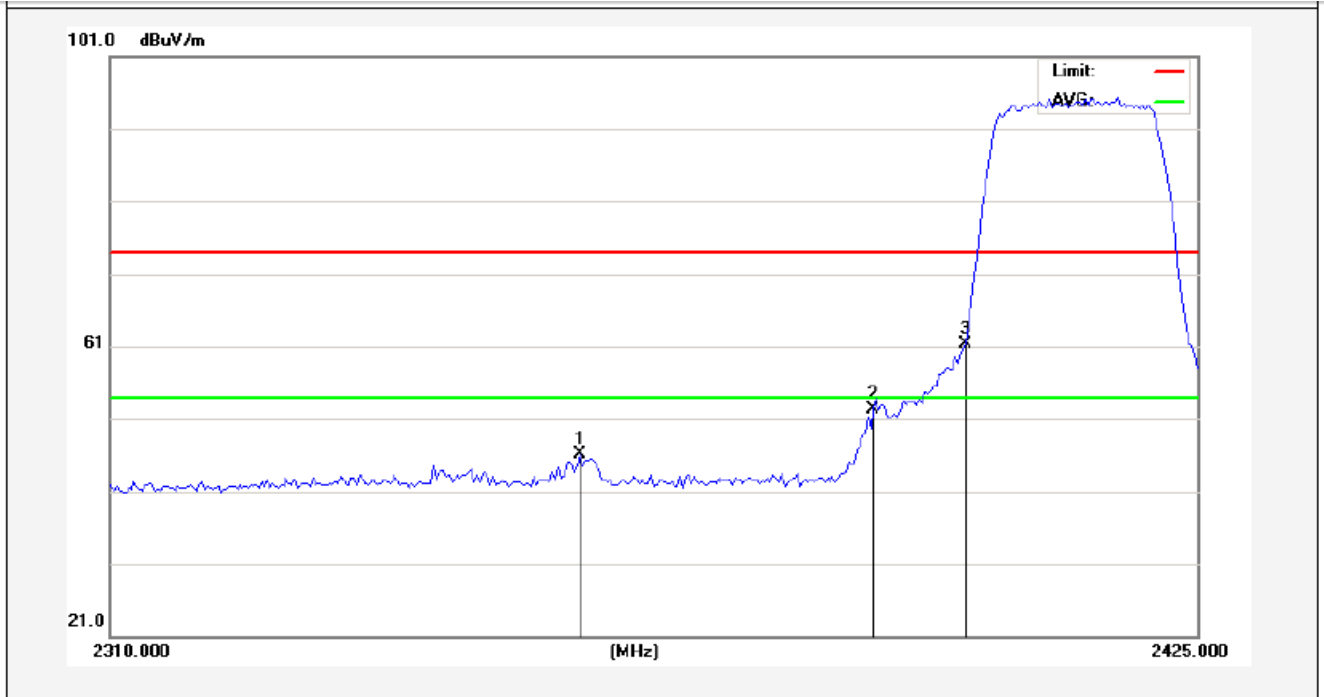
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2360.600	38.34	-2.58	35.76	54.00	-18.24	AVG			
2	2390.000	37.68	-2.51	35.17	54.00	-18.83	AVG			
3	2400.000	51.80	-2.49	49.31	54.00	-4.69	AVG			

Anbotek

Test Mode: 802.11n (HT20)

2412MHz

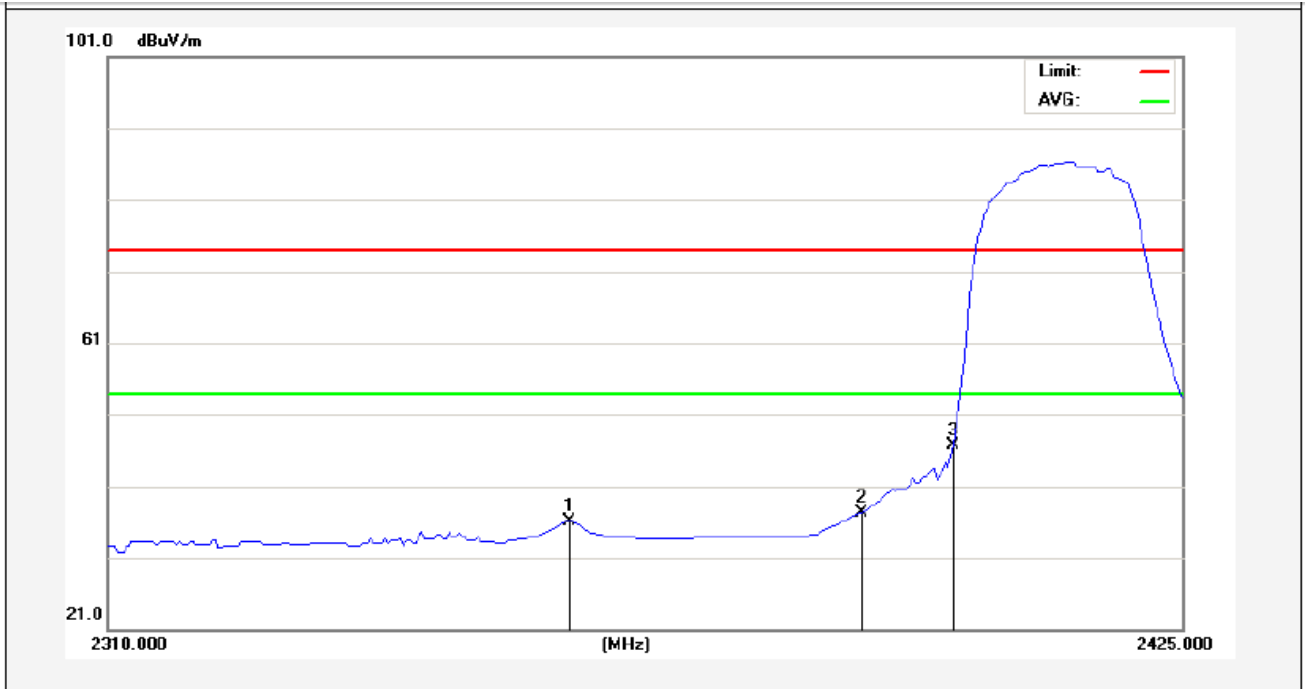
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2359.162	48.66	-2.58	46.08	74.00	-27.92	peak			
2	2390.000	54.86	-2.51	52.35	74.00	-21.65	peak			
3	2400.000	63.89	-2.49	61.40	74.00	-12.60	peak			

Anbotek

Vertical-AV:



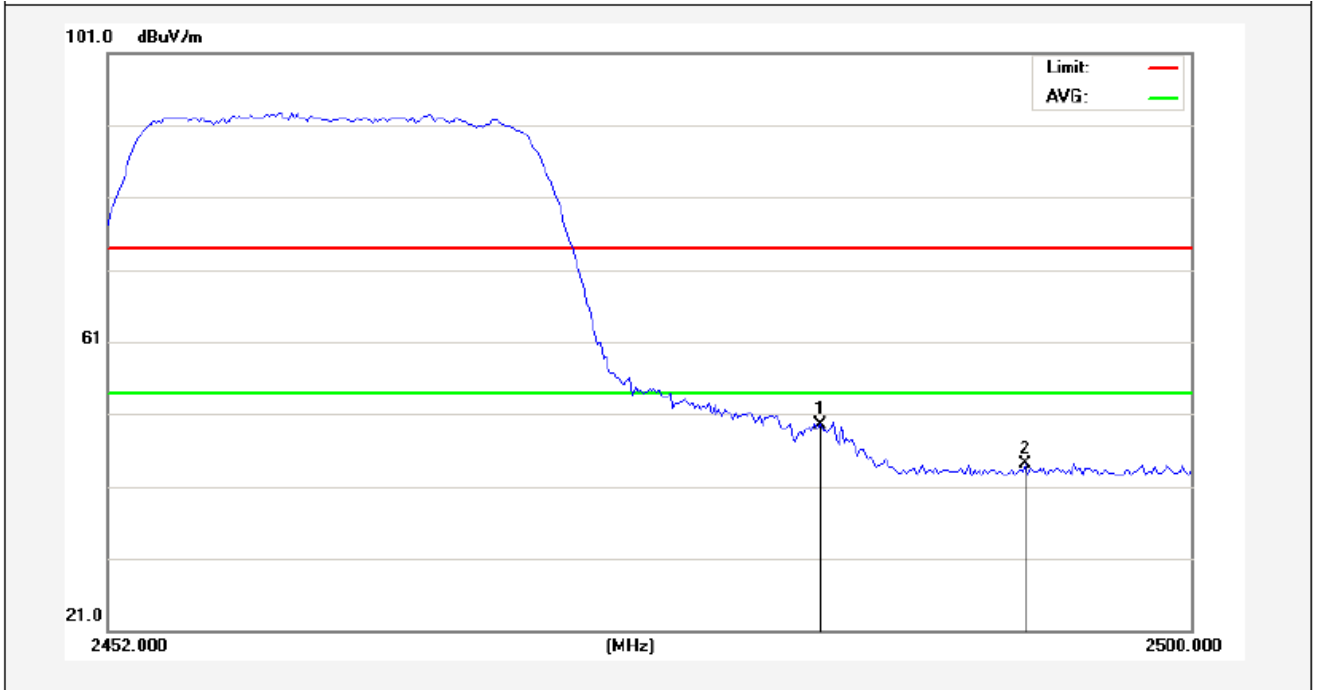
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2358.875	38.68	-2.58	36.10	54.00	-17.90	AVG			
2	2390.000	39.91	-2.51	37.40	54.00	-16.60	AVG			
3	2400.000	49.15	-2.49	46.66	54.00	-7.34	AVG			

Anbotek

Test Mode: 802.11n (HT20)

2462MHz

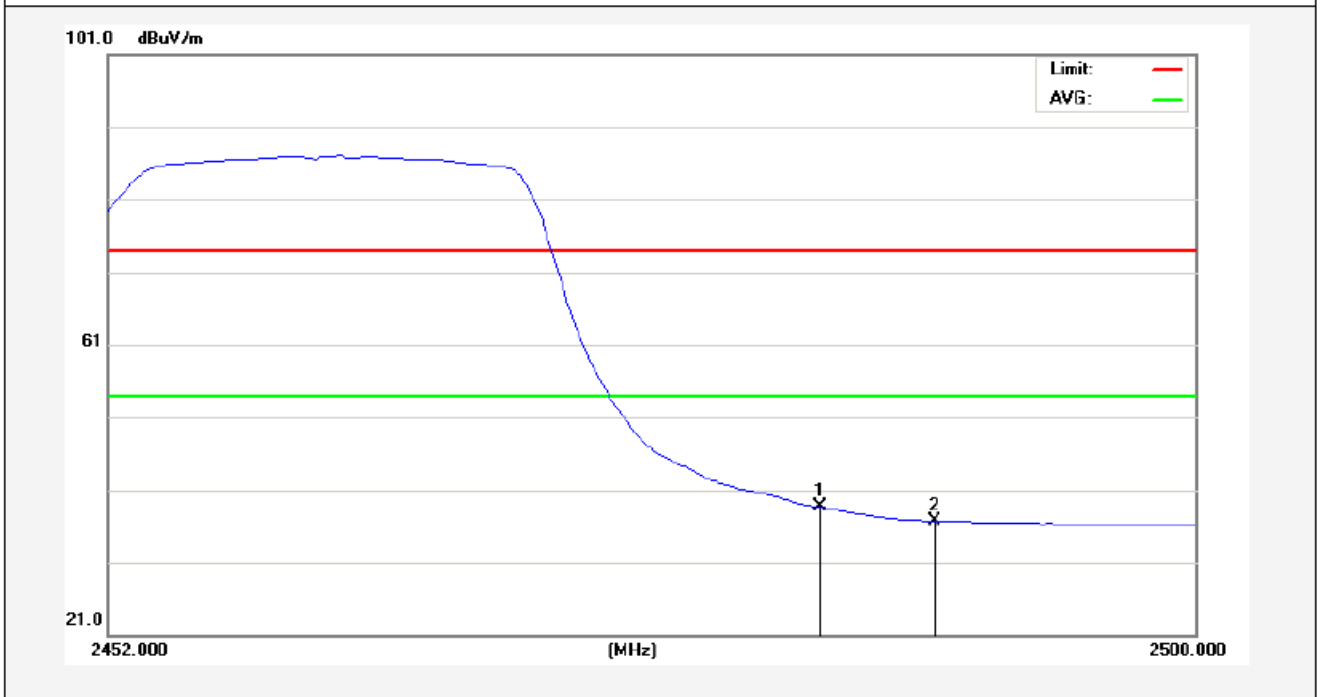
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	51.91	-2.31	49.60	74.00	-24.40	peak			
2	2492.680	46.31	-2.29	44.02	74.00	-29.98	peak			

Anbotek

Horizontal-AV:



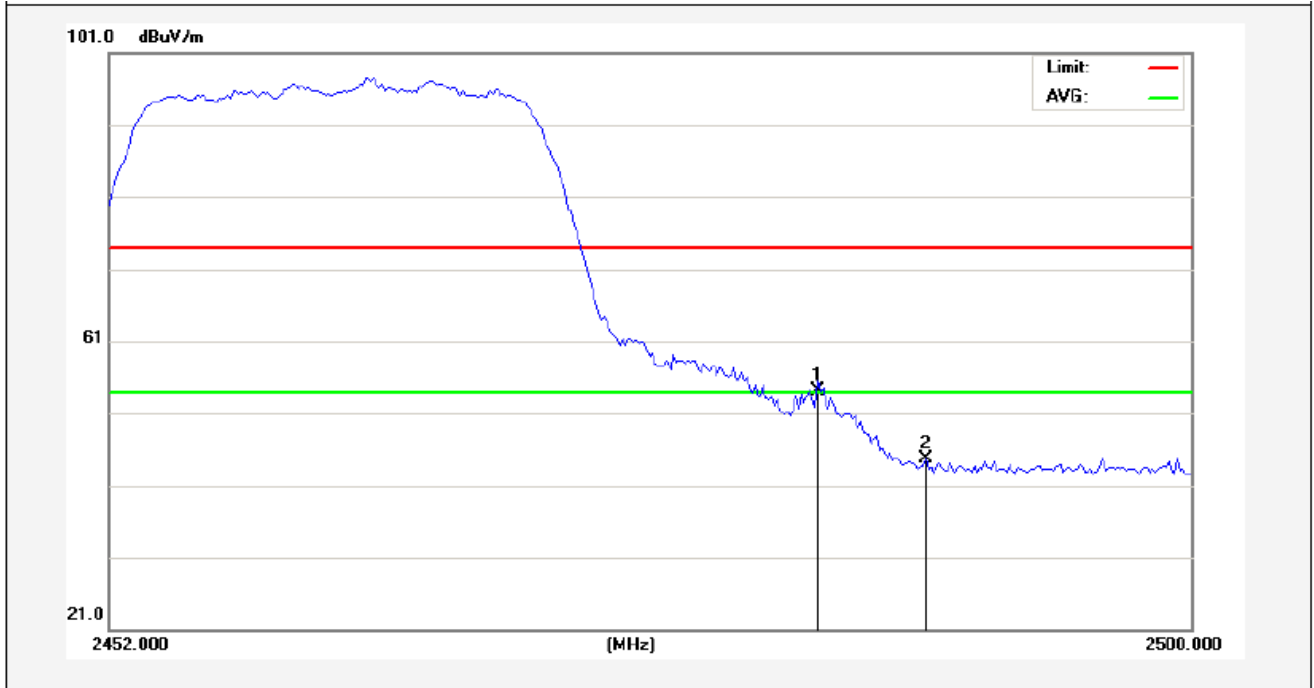
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	40.94	-2.31	38.63	54.00	-15.37	AVG			
2	2488.480	39.05	-2.30	36.75	54.00	-17.25	AVG			

Anbotek

Test Mode: 802.11n (HT20)

2462MHz

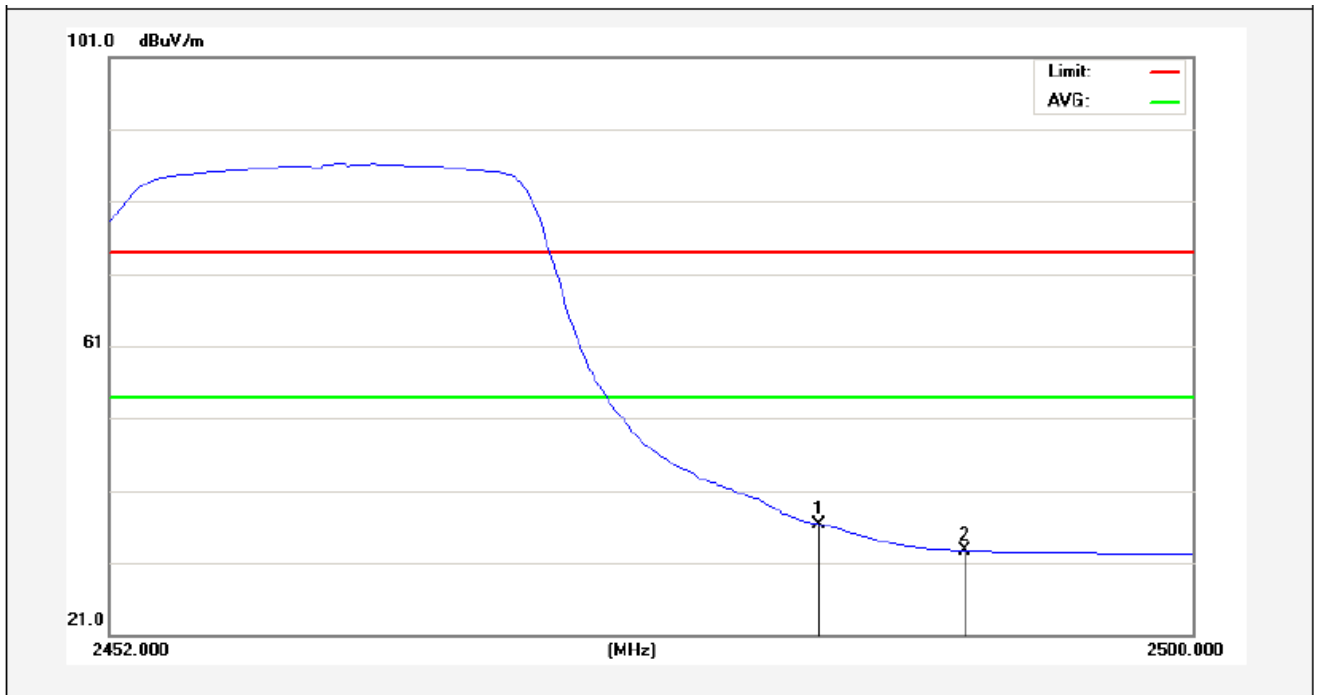
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	56.50	-2.31	54.19	74.00	-19.81	peak			
2	2488.240	46.92	-2.30	44.62	74.00	-29.38	peak			

Anbotek

Vertical-AV:



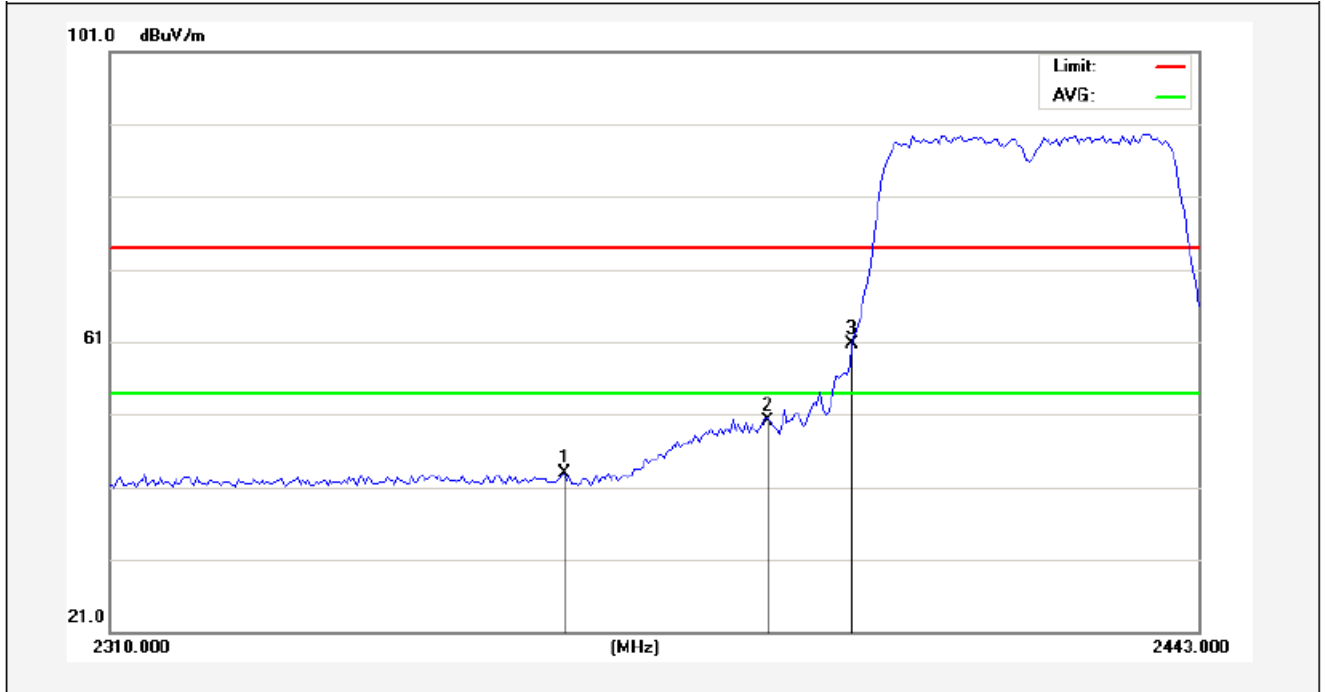
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	38.57	-2.31	36.26	54.00	-17.74	AVG			
2	2489.920	35.04	-2.29	32.75	54.00	-21.25	AVG			

Anbotek

Test Mode: 802.11n (HT40)

2422MHz

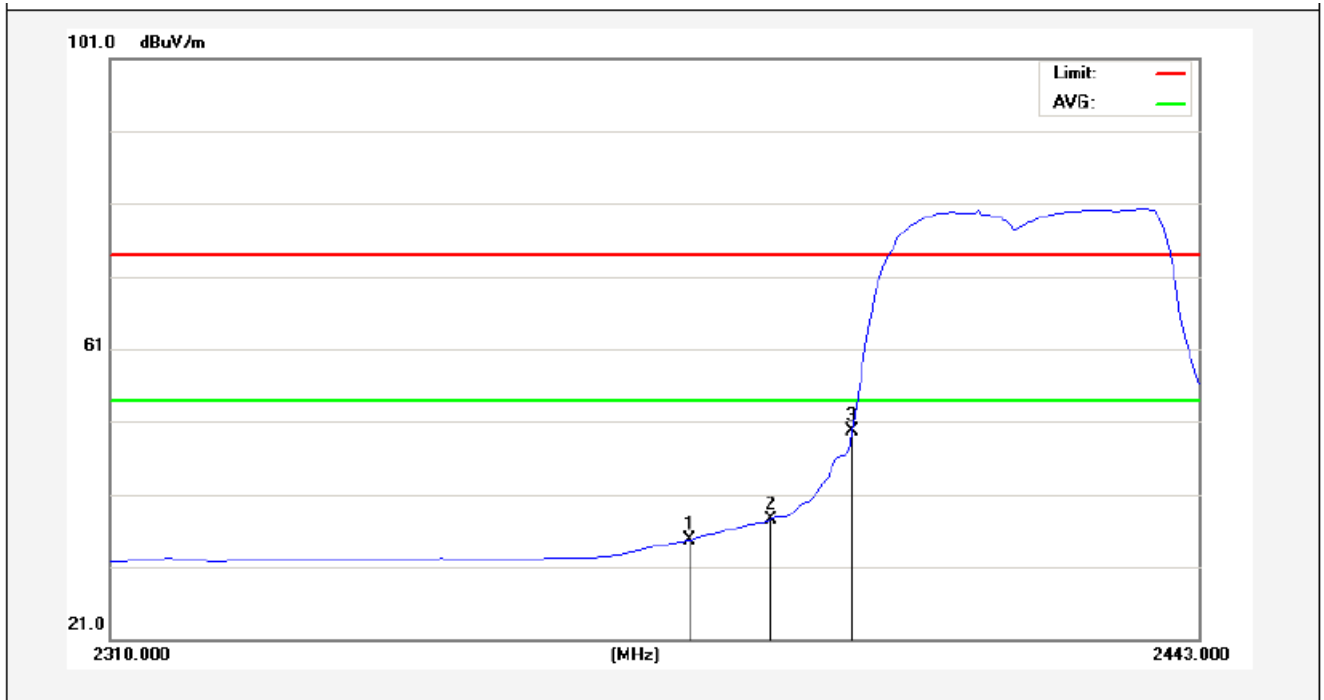
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2364.863	45.48	-2.57	42.91	74.00	-31.09	peak			
2	2390.000	52.60	-2.51	50.09	74.00	-23.91	peak			
3	2400.000	63.10	-2.49	60.61	74.00	-13.39	peak			

Anbotek

Horizontal-AV:



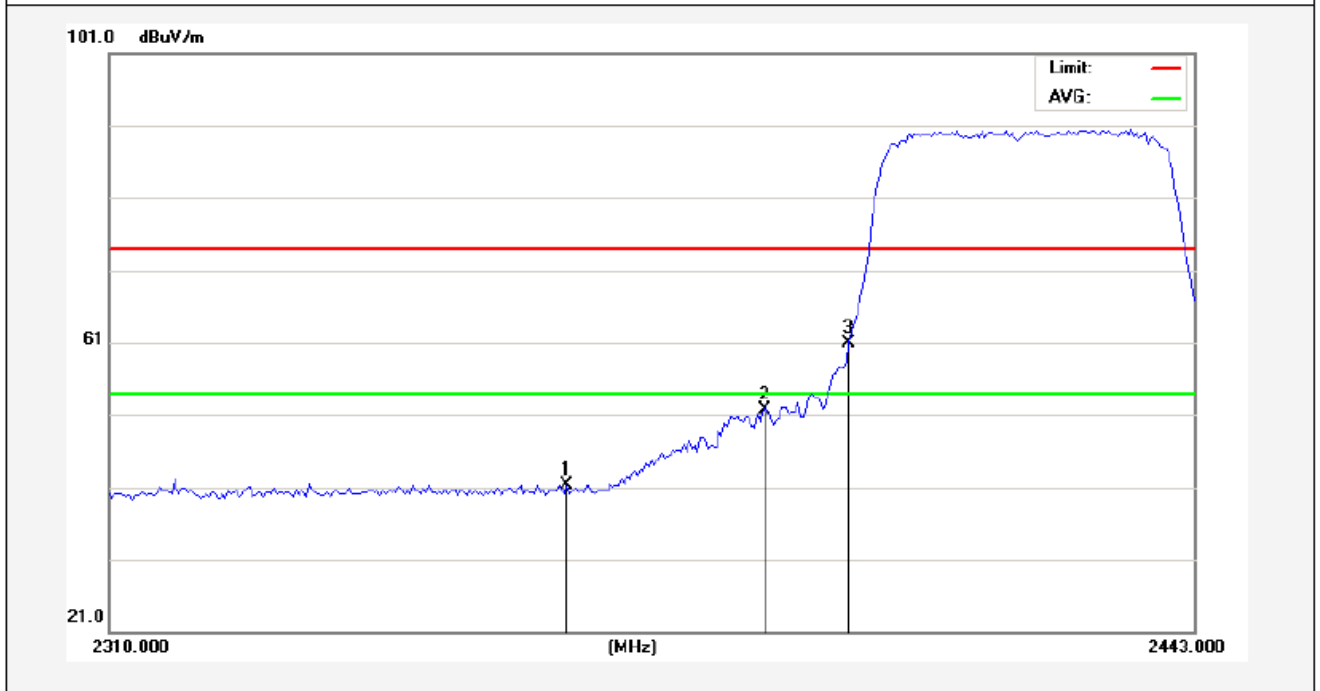
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2379.825	37.15	-2.54	34.61	54.00	-19.39	AVG			
2	2390.000	40.06	-2.51	37.55	54.00	-16.45	AVG			
3	2400.000	52.12	-2.49	49.63	54.00	-4.37	AVG			

Anbotek

Test Mode: 802.11n (HT40)

2422MHz

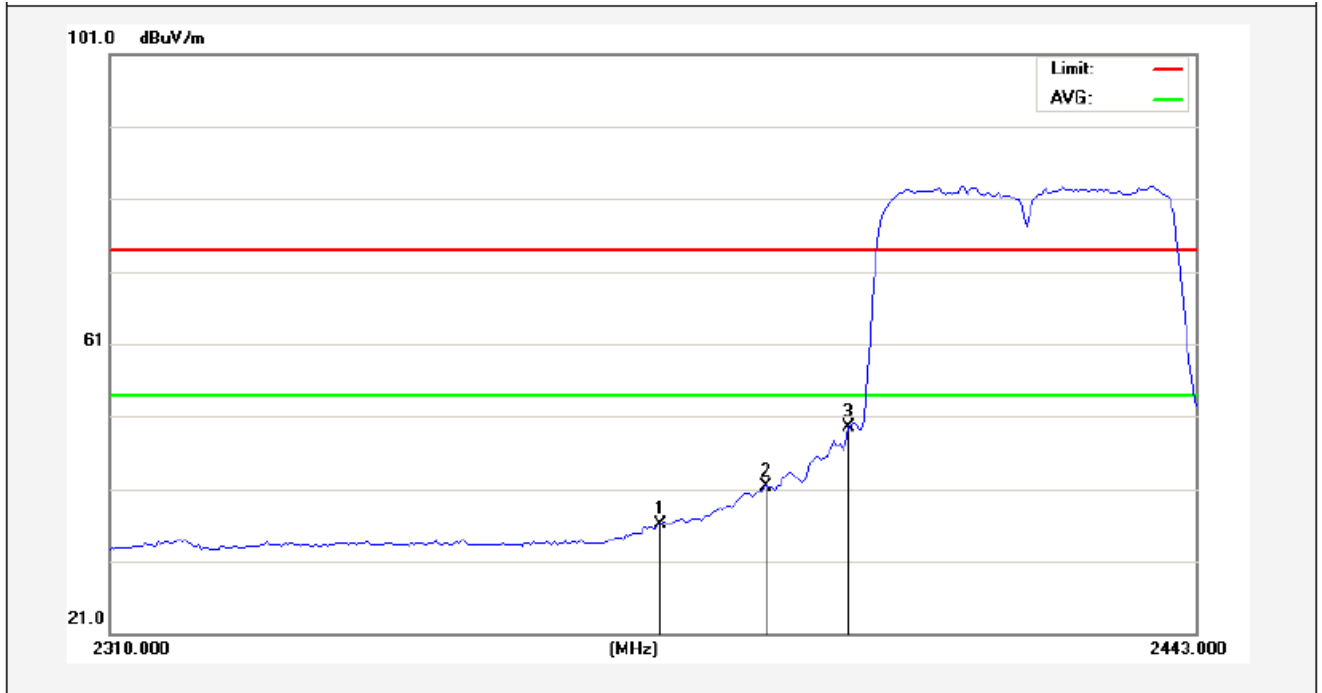
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2365.528	43.95	-2.57	41.38	74.00	-32.62	peak			
2	2390.000	54.28	-2.51	51.77	74.00	-22.23	peak			
3	2400.000	63.45	-2.49	60.96	74.00	-13.04	peak			

Anbotek

Vertical-AV:



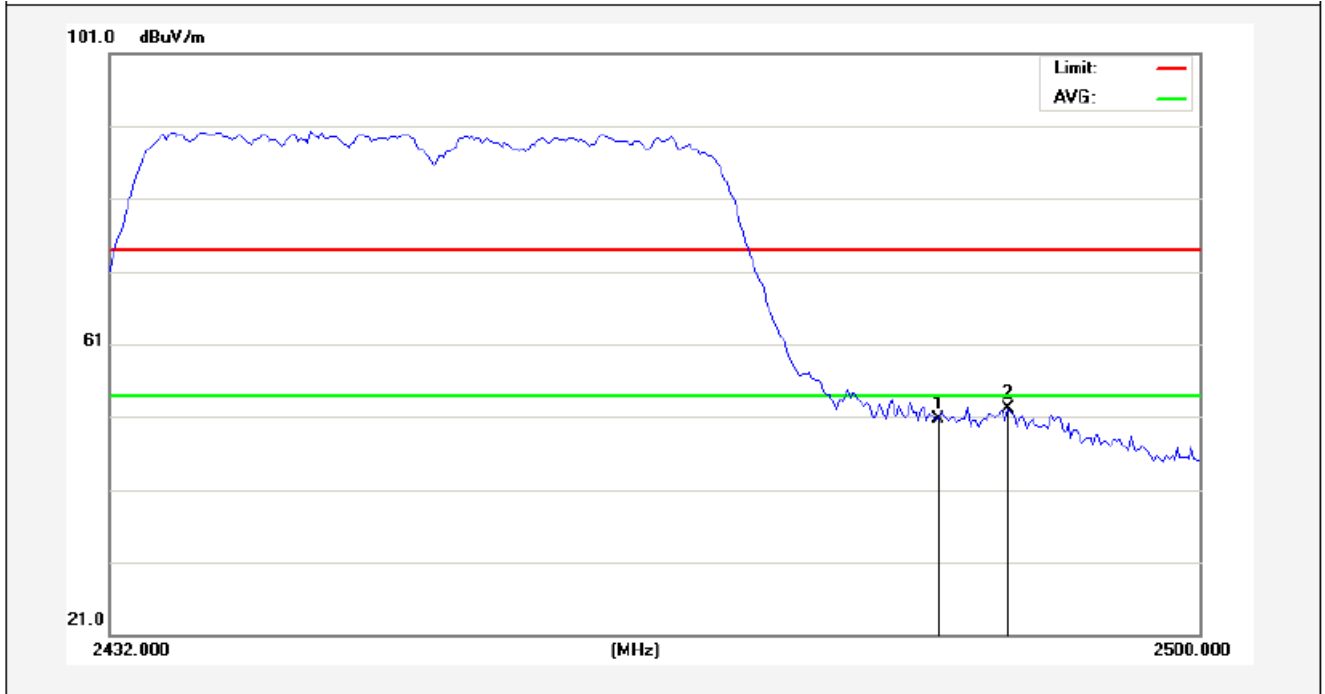
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2376.832	38.71	-2.54	36.17	54.00	-17.83	AVG			
2	2390.000	43.85	-2.51	41.34	54.00	-12.66	AVG			
3	2400.000	52.08	-2.49	49.59	54.00	-4.41	AVG			

Anbotek

Test Mode: 802.11n (HT40)

2452MHz

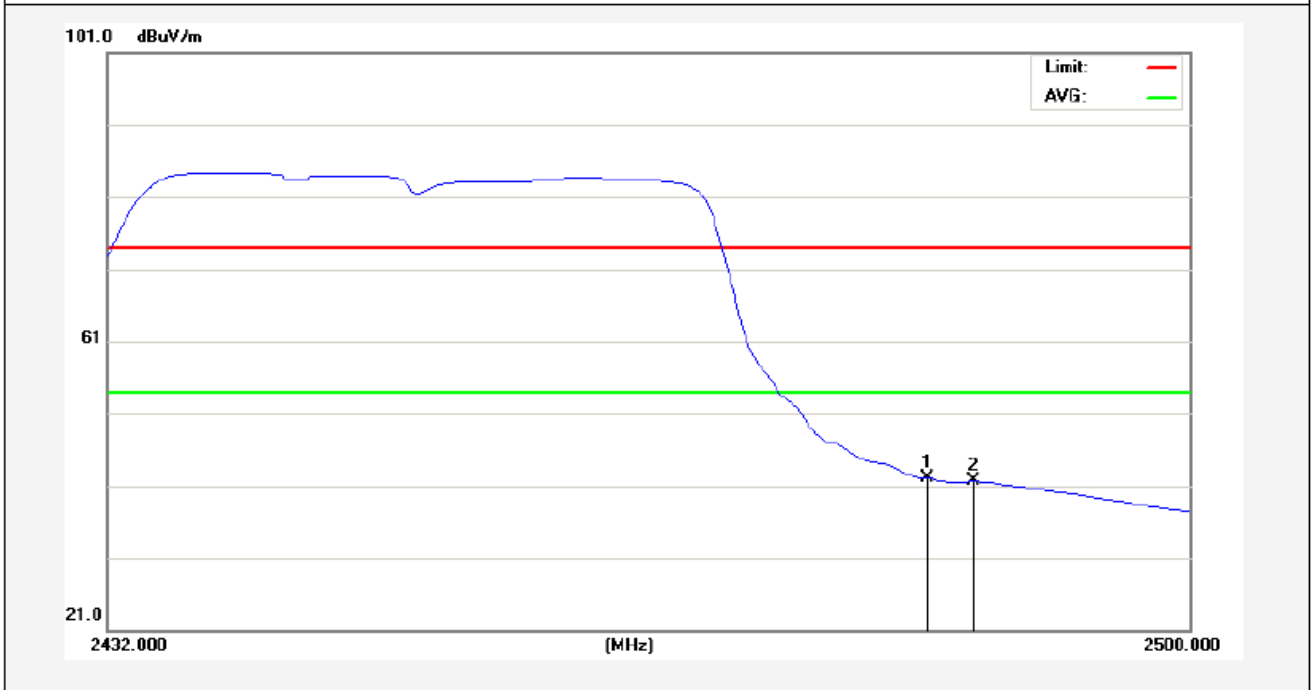
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	53.10	-2.31	50.79	74.00	-23.21	peak			
2	2488.100	54.37	-2.30	52.07	74.00	-21.93	peak			

Anbotek

Horizontal-AV:



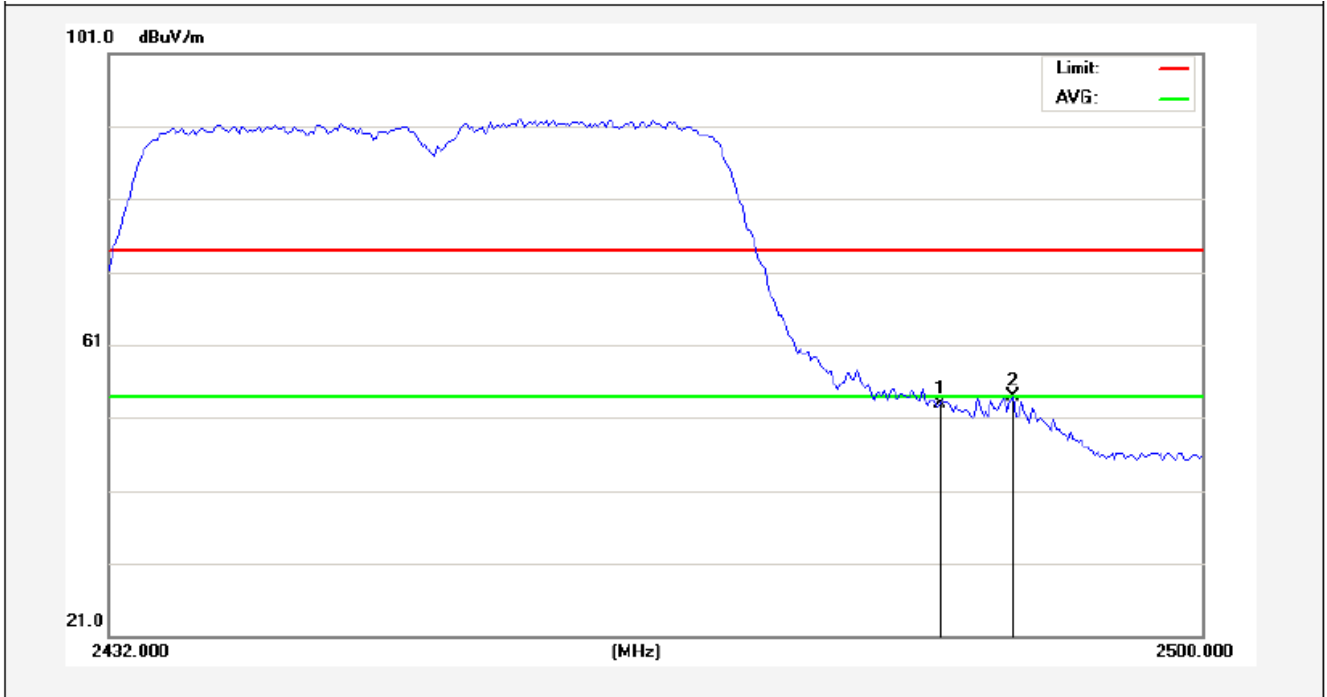
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	44.38	-2.31	42.07	54.00	-11.93	AVG			
2	2486.400	43.92	-2.30	41.62	54.00	-12.38	AVG			

Anbotek

Test Mode: 802.11n (HT40)

2452MHz

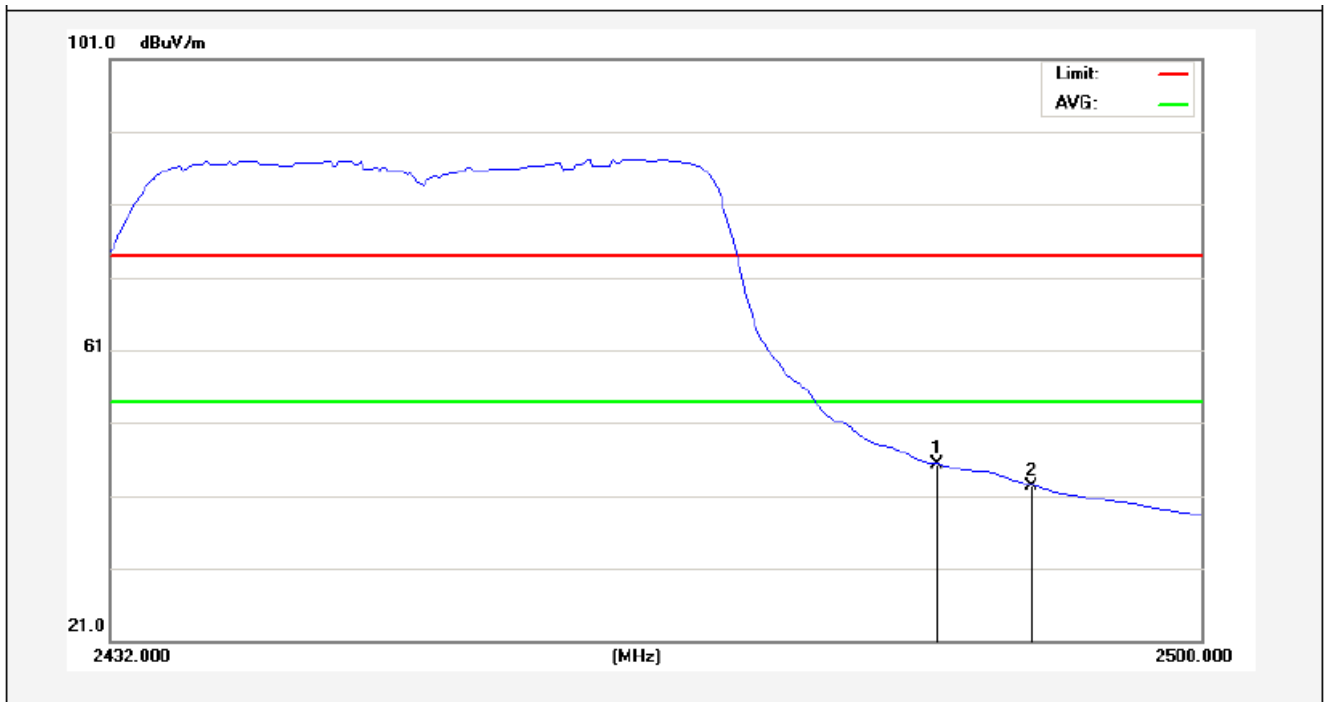
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	55.26	-2.31	52.95	74.00	-21.05	peak			
2	2488.270	56.20	-2.30	53.90	74.00	-20.10	peak			

Anbotek

Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	47.69	-2.31	45.38	54.00	-8.62	AVG			
2	2489.630	44.66	-2.29	42.37	54.00	-11.63	AVG			

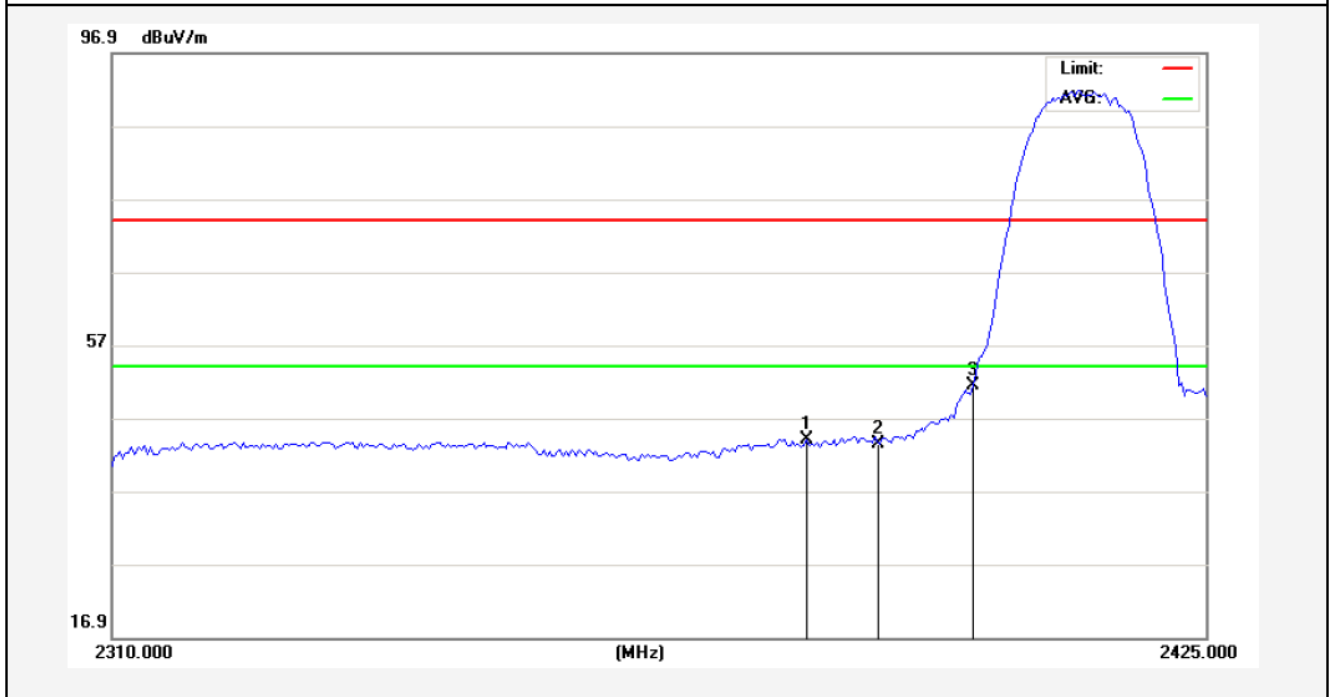
Anbotek

ANT B

Test Mode: 802.11b

2412MHz

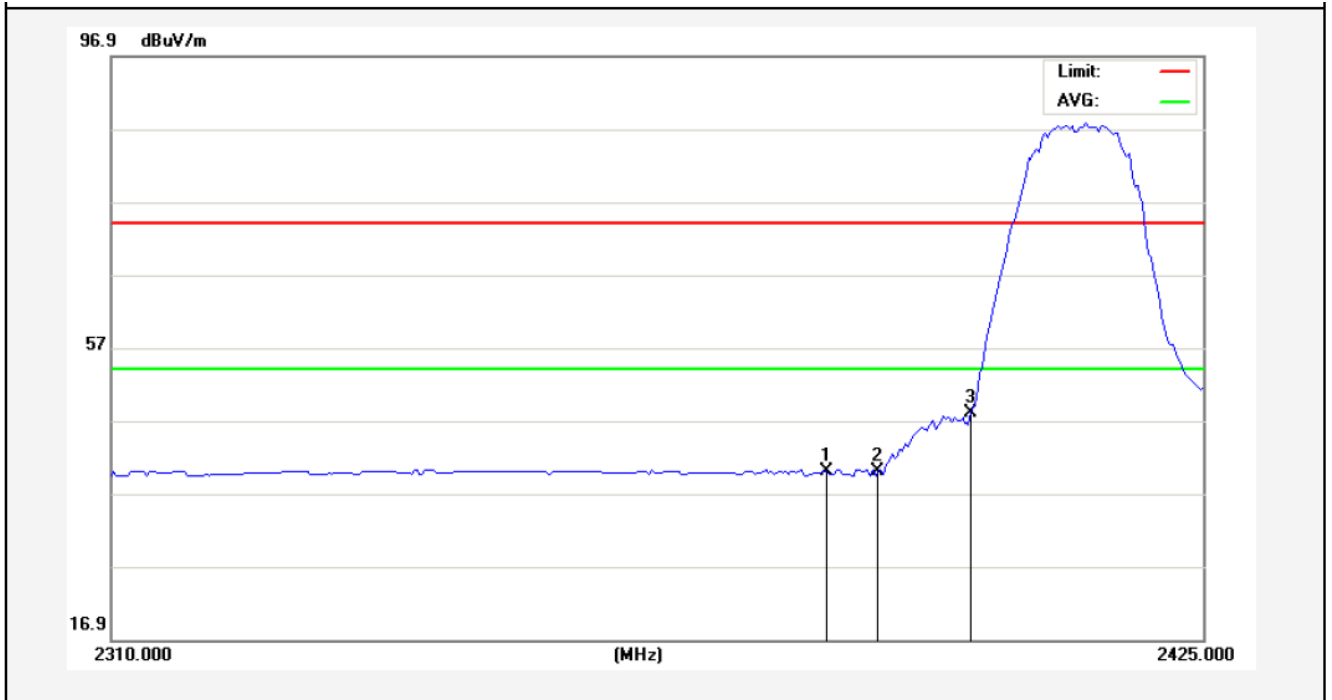
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2382.450	46.52	-2.53	43.99	74.00	-30.01	peak			
2	2390.000	45.88	-2.51	43.37	74.00	-30.63	peak			
3	2400.000	53.82	-2.49	51.33	74.00	-22.67	peak			

ANT B

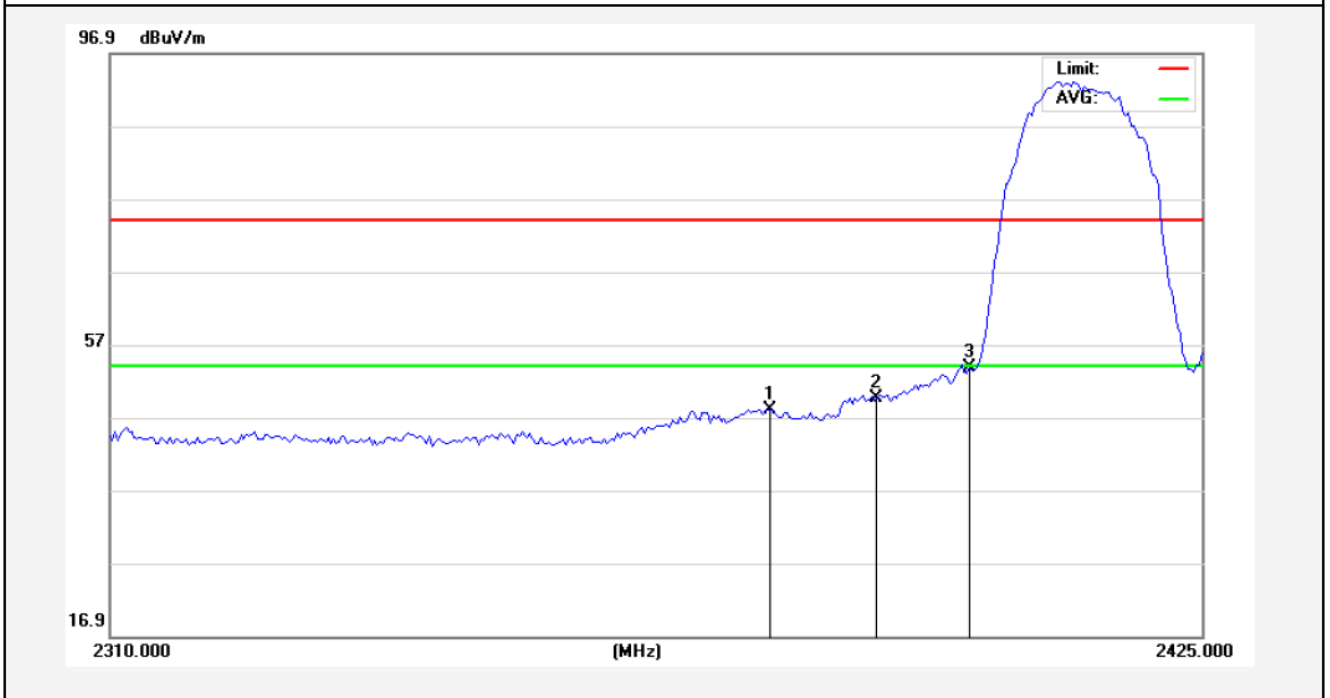
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2384.750	42.57	-2.53	40.04	54.00	-13.96	AVG			
2	2390.000	42.45	-2.51	39.94	54.00	-14.06	AVG			
3	2400.000	50.43	-2.49	47.94	54.00	-6.06	AVG			

Anbotek

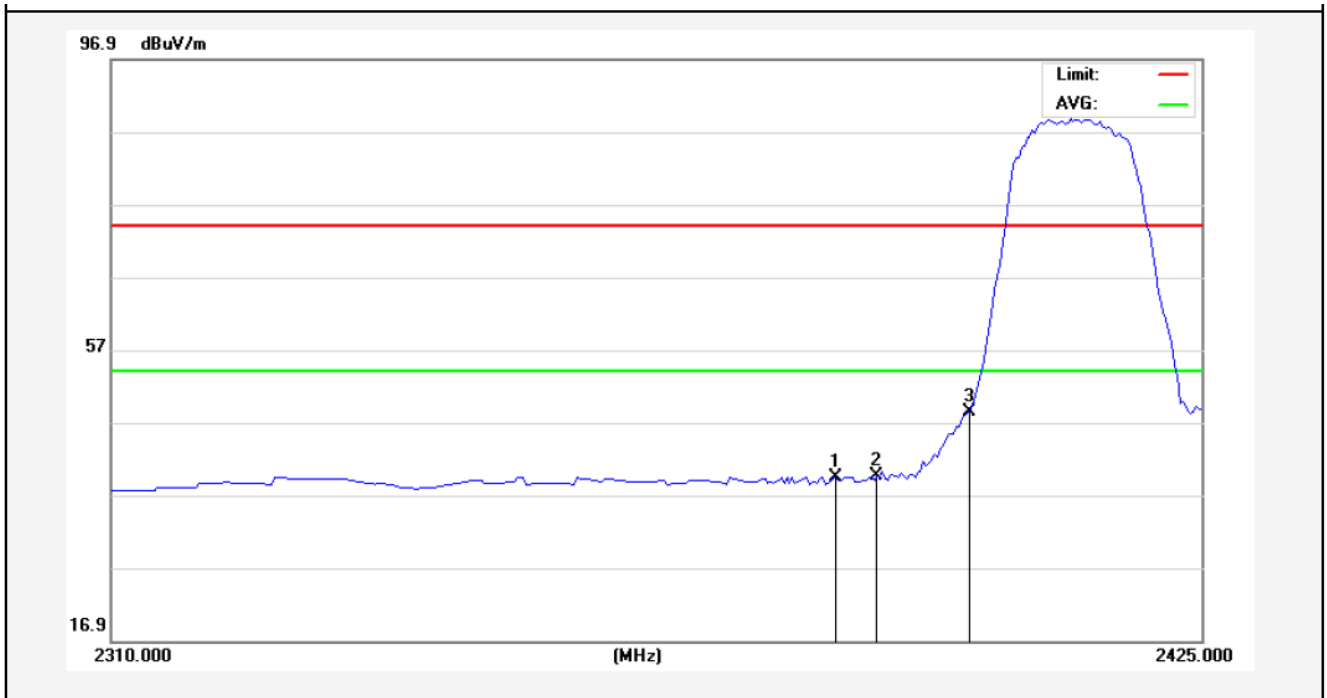
Test Mode: 802.11b  
2412MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2379.000	50.50	-2.54	47.96	74.00	-26.04	peak			
2	2390.000	52.11	-2.51	49.60	74.00	-24.40	peak			
3	2400.000	56.31	-2.49	53.82	74.00	-20.18	peak			

Anbotek

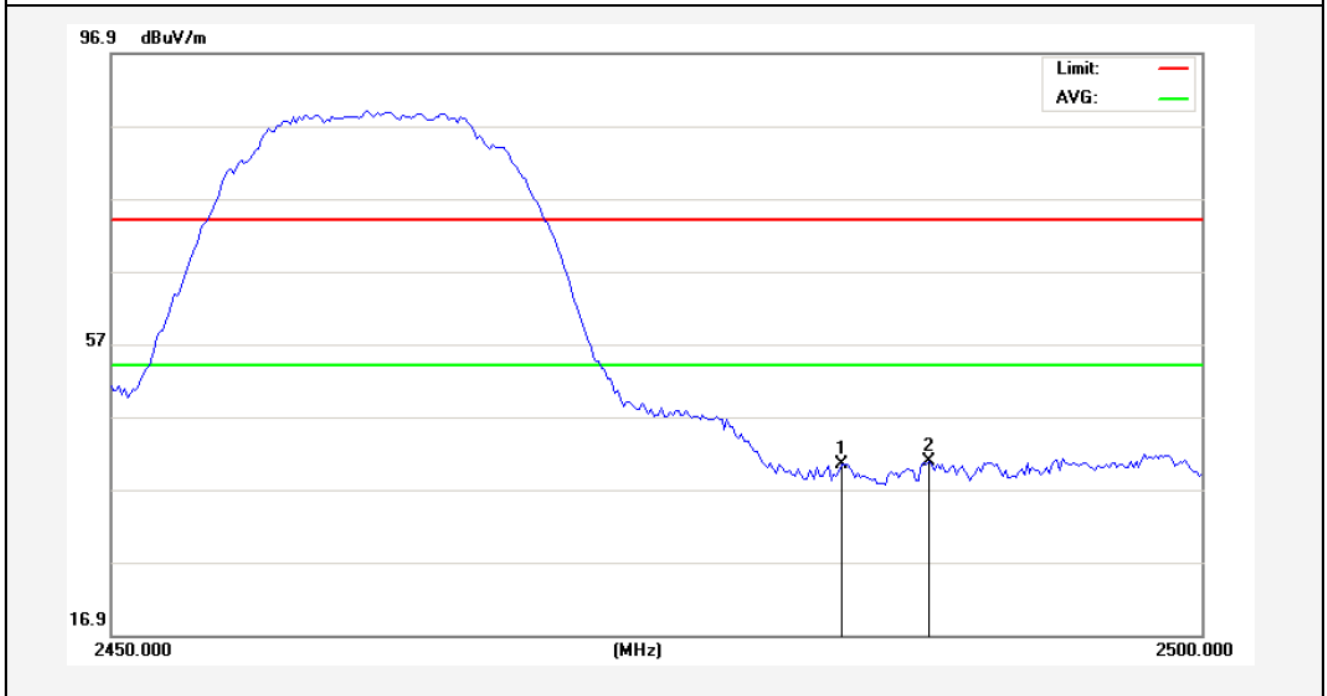
Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2385.900	41.91	-2.52	39.39	54.00	-14.61	AVG			
2	2390.000	42.14	-2.51	39.63	54.00	-14.37	AVG			
3	2400.000	50.96	-2.49	48.47	54.00	-5.53	AVG			

Anbotek

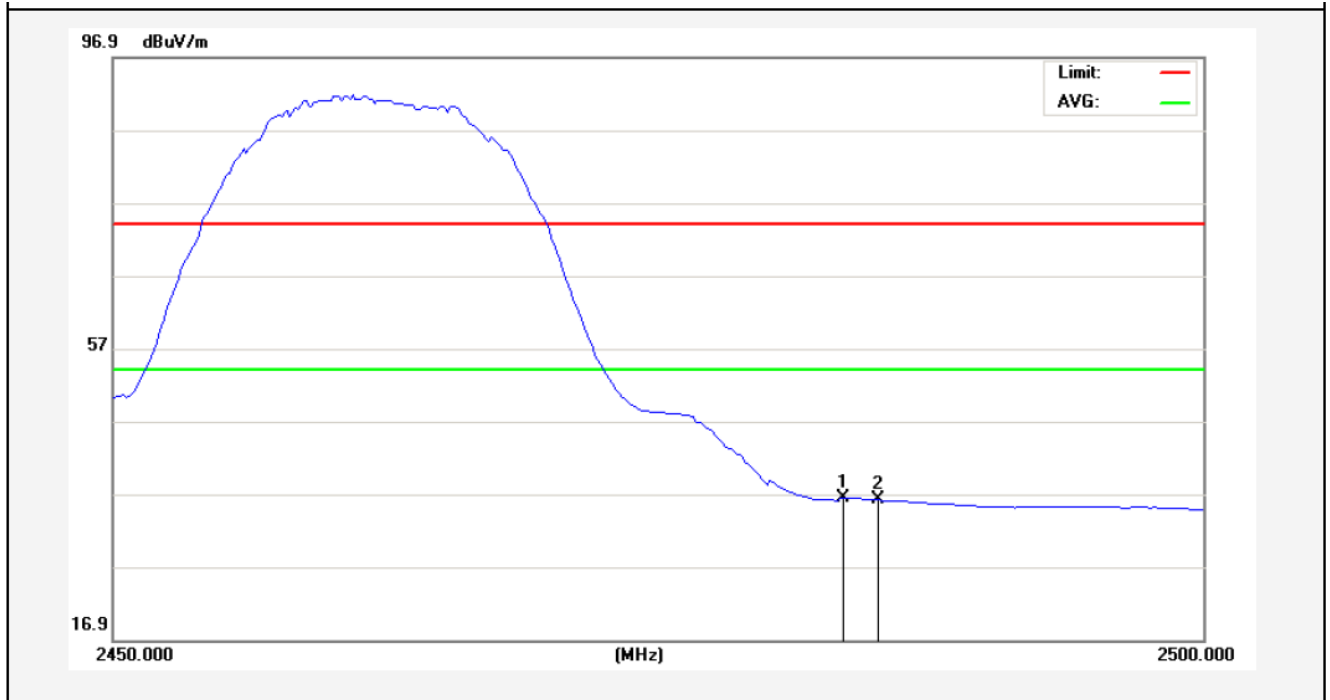
Test Mode: 802.11b  
2462MHz  
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	42.80	-2.31	40.49	74.00	-33.51	peak			
2	2487.500	43.03	-2.30	40.73	74.00	-33.27	peak			

Anbotek

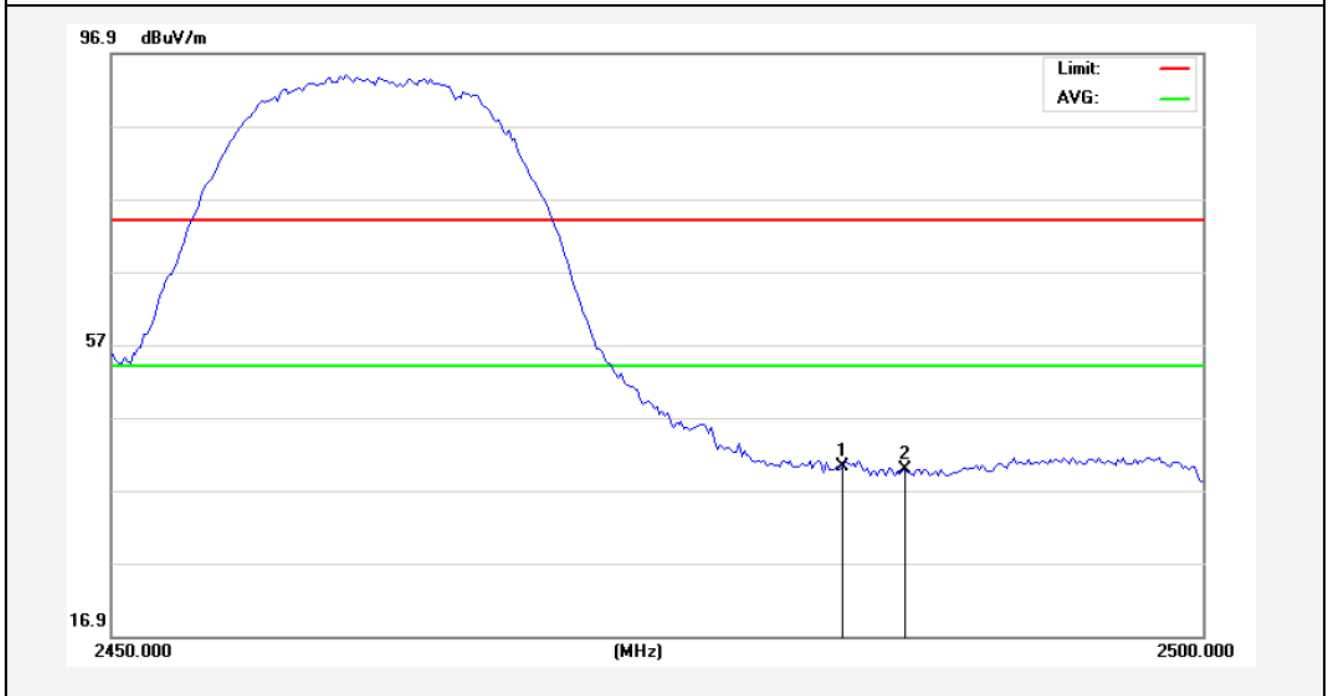
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	38.76	-2.31	36.45	54.00	-17.55	AVG			
2	2485.125	38.41	-2.30	36.11	54.00	-17.89	AVG			

Anbotek

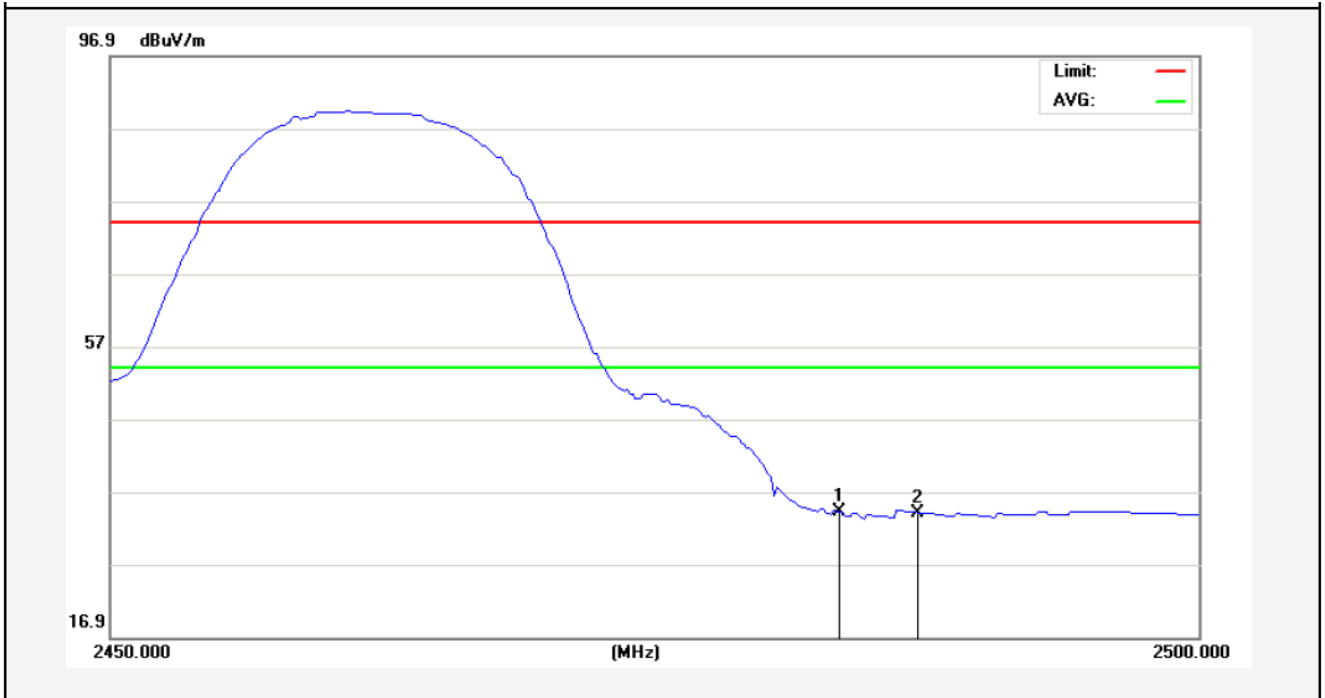
Test Mode: 802.11b  
2462MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	42.53	-2.31	40.22	74.00	-33.78	peak			
2	2486.375	42.16	-2.30	39.86	74.00	-34.14	peak			

Anbotek

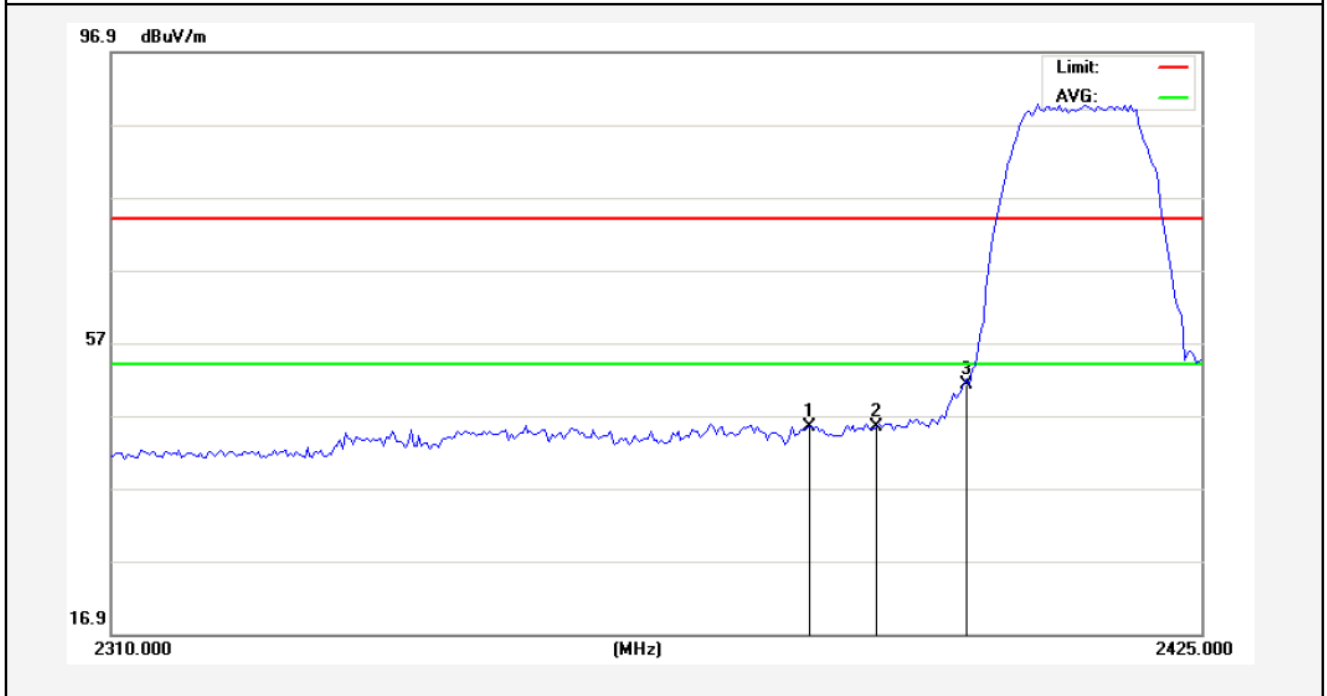
Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	36.58	-2.31	34.27	54.00	-19.73	AVG			
2	2487.125	36.39	-2.30	34.09	54.00	-19.91	AVG			

Anbotek

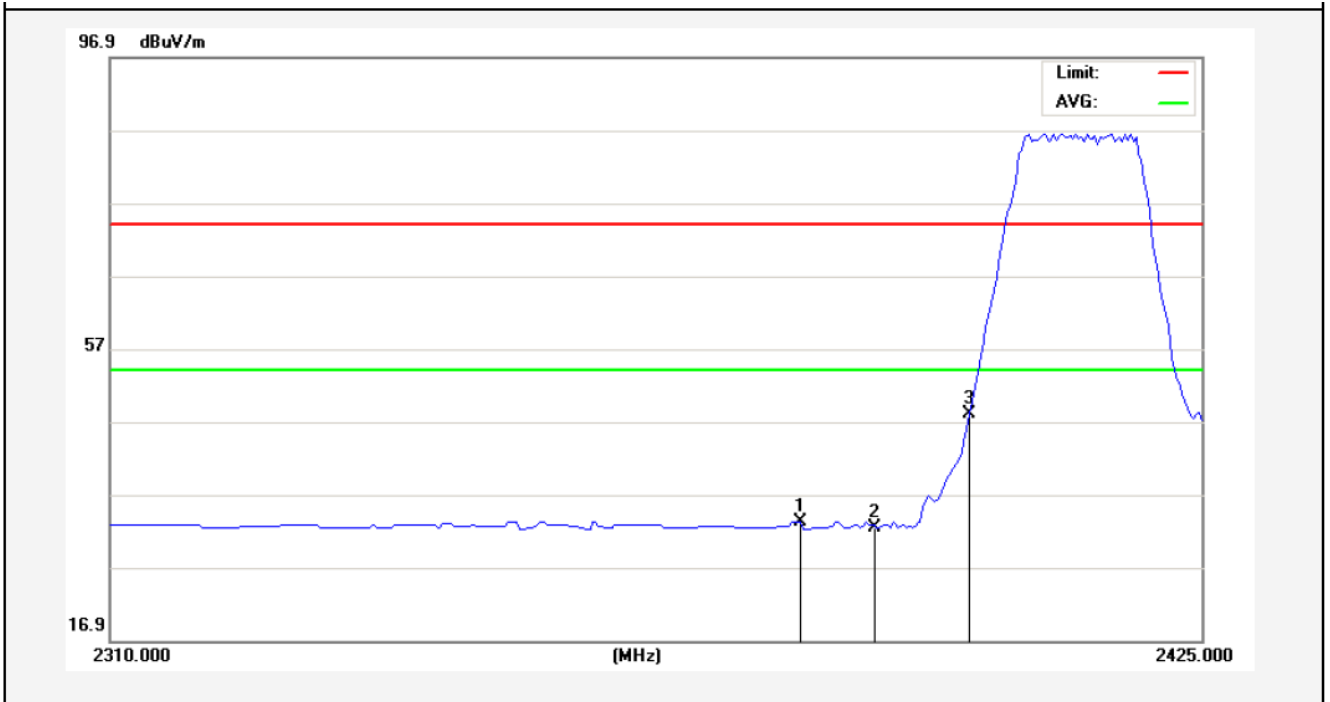
Test Mode: 802.11g  
2412MHz  
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2383.025	47.98	-2.53	45.45	74.00	-28.55	peak			
2	2390.000	47.86	-2.51	45.35	74.00	-28.65	peak			
3	2400.000	53.66	-2.49	51.17	74.00	-22.83	peak			

Anbotek

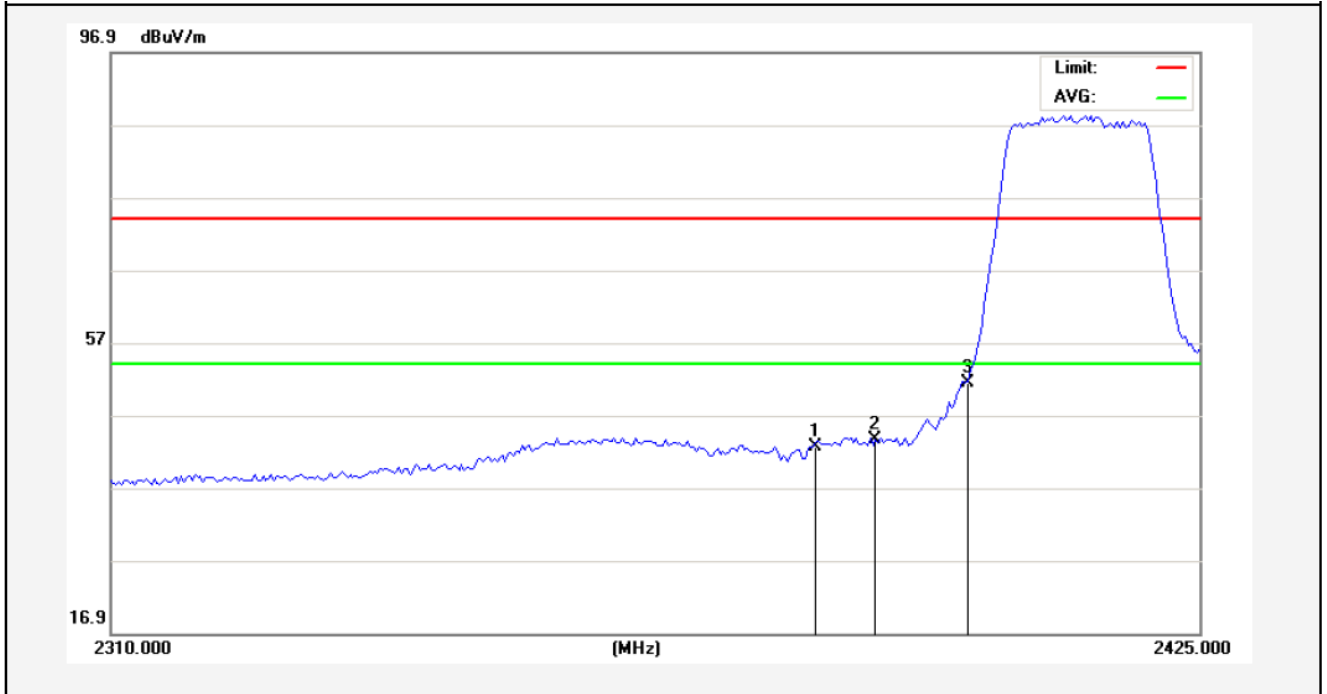
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2382.162	35.72	-2.53	33.19	54.00	-20.81	AVG			
2	2390.000	34.93	-2.51	32.42	54.00	-21.58	AVG			
3	2400.000	50.41	-2.49	47.92	54.00	-6.08	AVG			

Anbotek

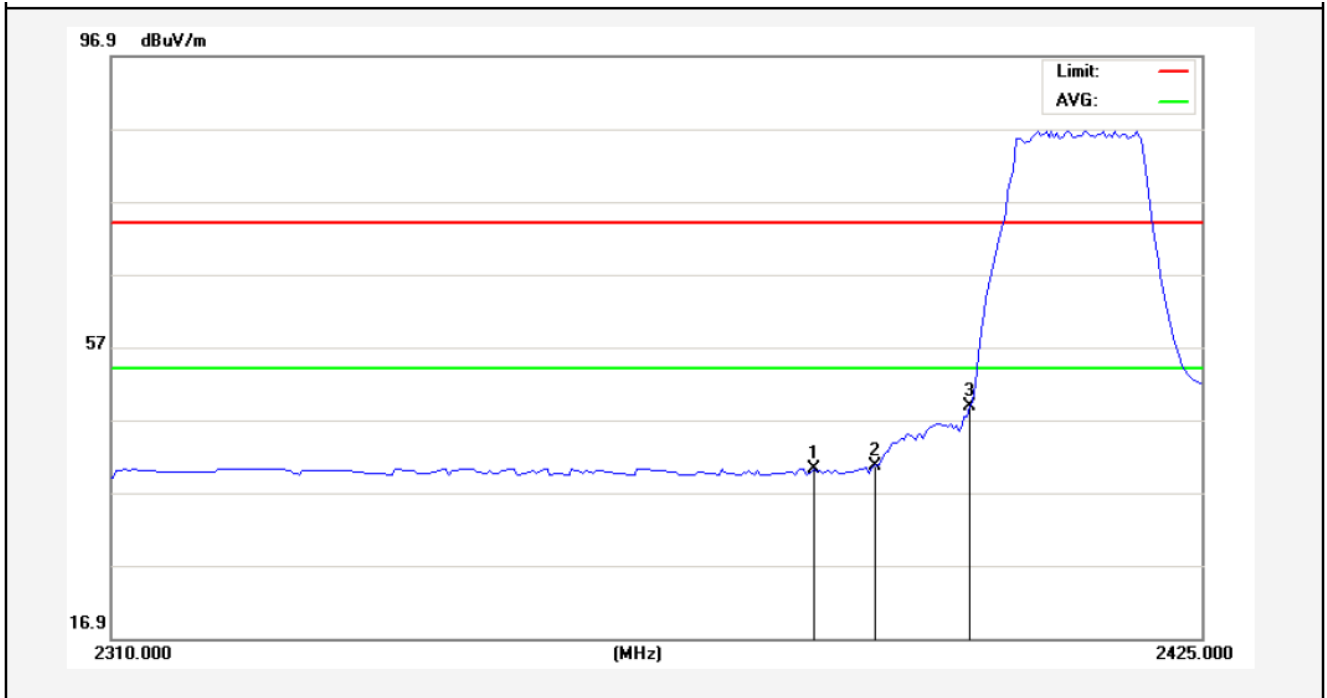
Test Mode: 802.11g  
2412MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2383.600	45.08	-2.53	42.55	74.00	-31.45	peak			
2	2390.000	46.05	-2.51	43.54	74.00	-30.46	peak			
3	2400.000	53.99	-2.49	51.50	74.00	-22.50	peak			

AMB

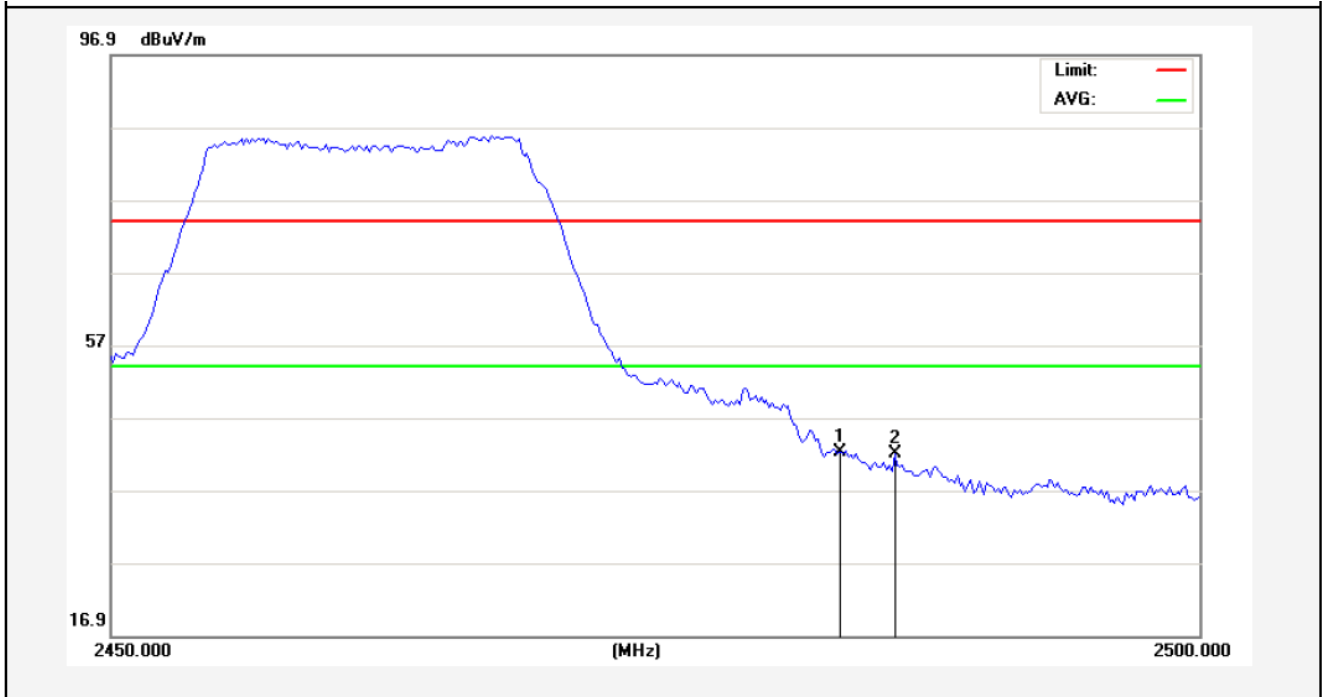
Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2383.600	42.66	-2.53	40.13	54.00	-13.87	AVG			
2	2390.000	43.18	-2.51	40.67	54.00	-13.33	AVG			
3	2400.000	51.29	-2.49	48.80	54.00	-5.20	AVG			

Anbotek

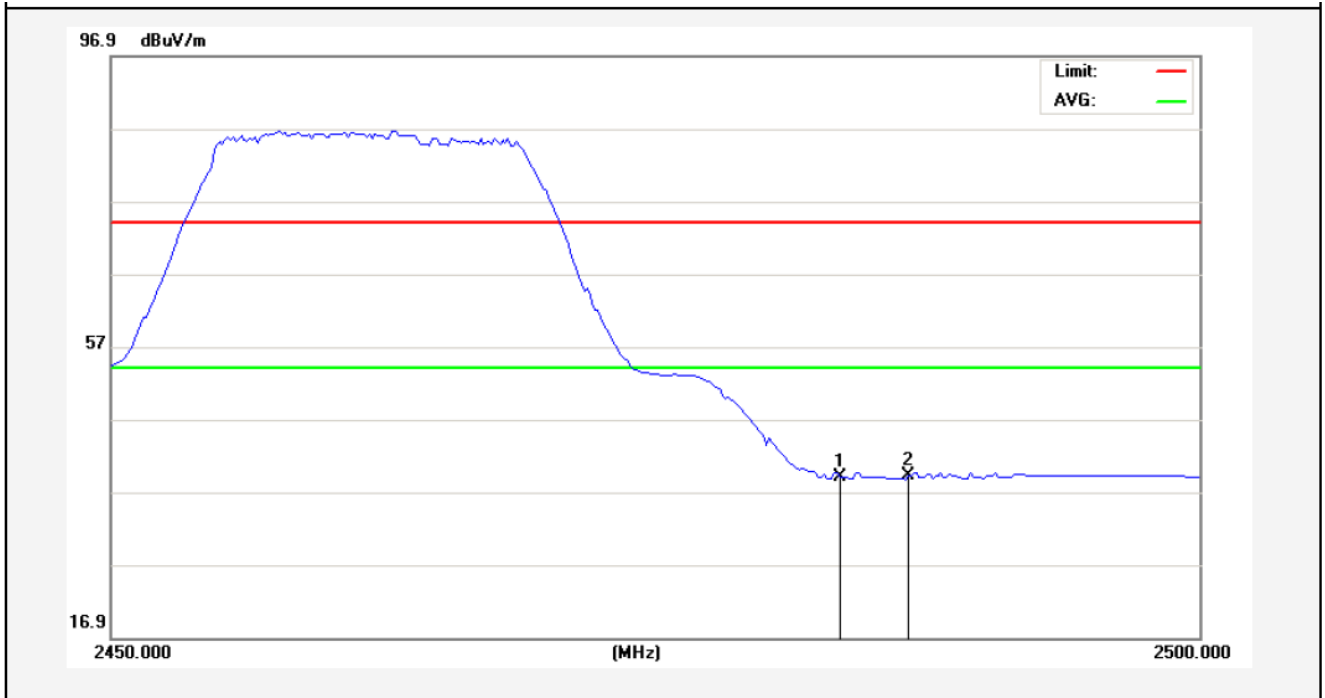
Test Mode: 802.11g  
2462MHz  
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	44.44	-2.31	42.13	74.00	-31.87	peak			
2	2486.000	44.31	-2.30	42.01	74.00	-31.99	peak			

Anbotek

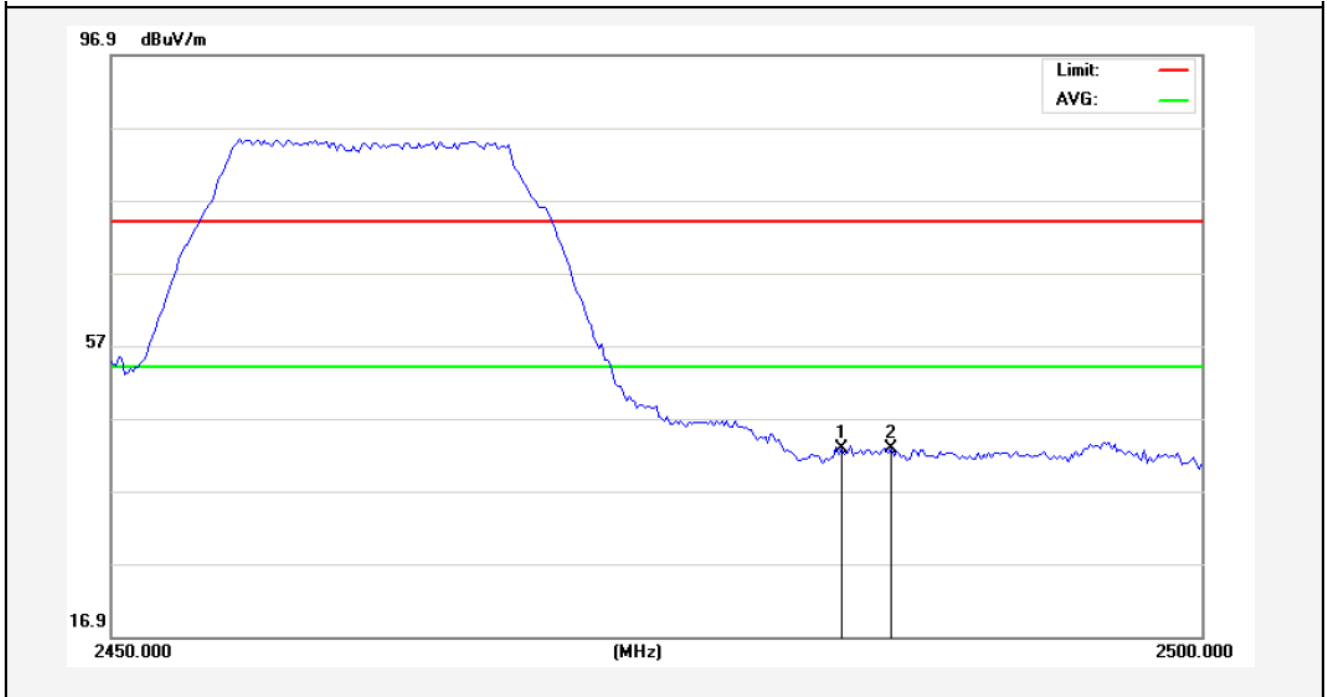
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	41.38	-2.31	39.07	54.00	-14.93	AVG			
2	2486.625	41.46	-2.30	39.16	54.00	-14.84	AVG			

Anbotek

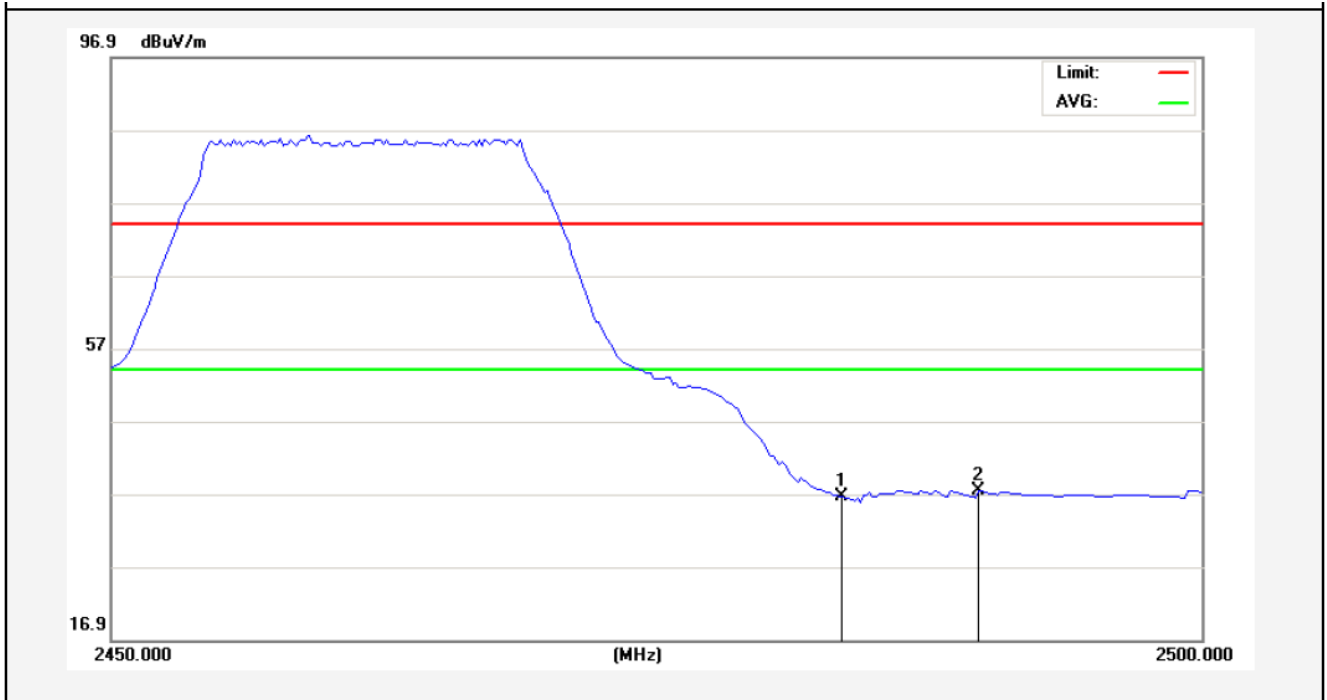
Test Mode: 802.11g  
2462MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	45.07	-2.31	42.76	74.00	-31.24	peak			
2	2485.750	45.10	-2.30	42.80	74.00	-31.20	peak			

Anbotek

Vertical-AV:



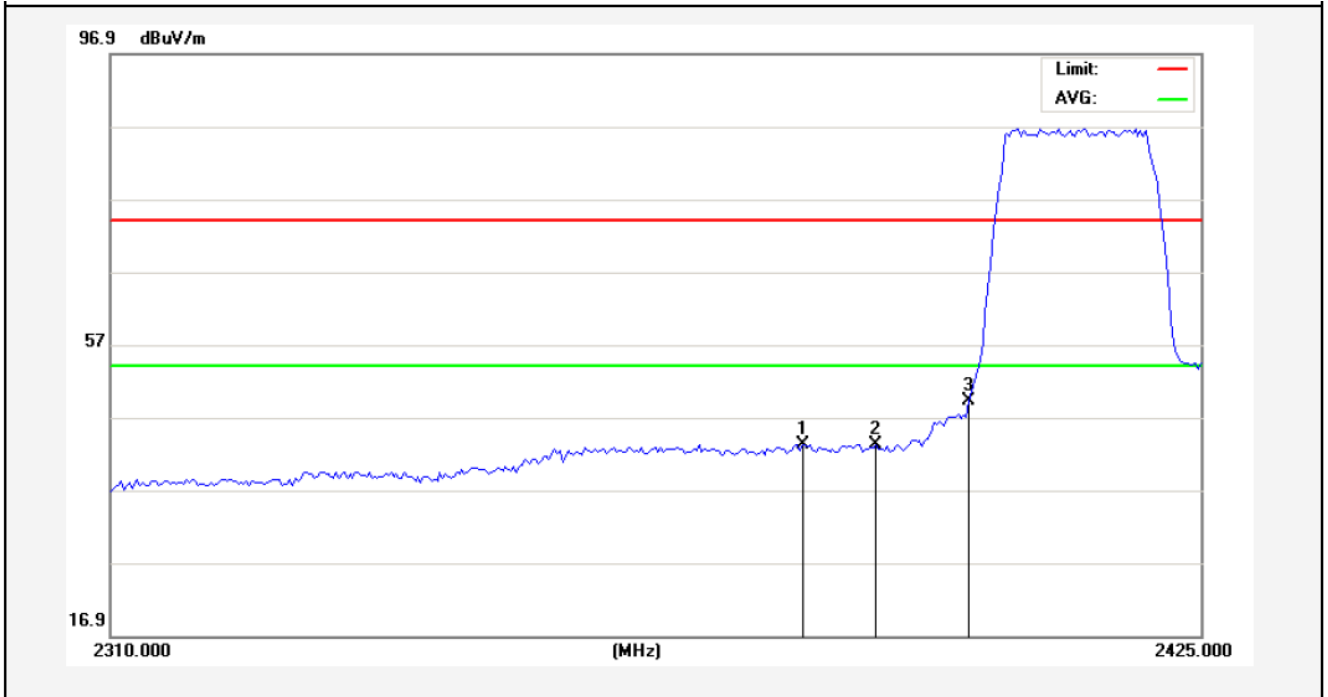
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	38.88	-2.31	36.57	54.00	-17.43	AVG			
2	2489.750	39.68	-2.29	37.39	54.00	-16.61	AVG			

Anbotek

Test Mode: 802.11n (HT20)

2412MHz

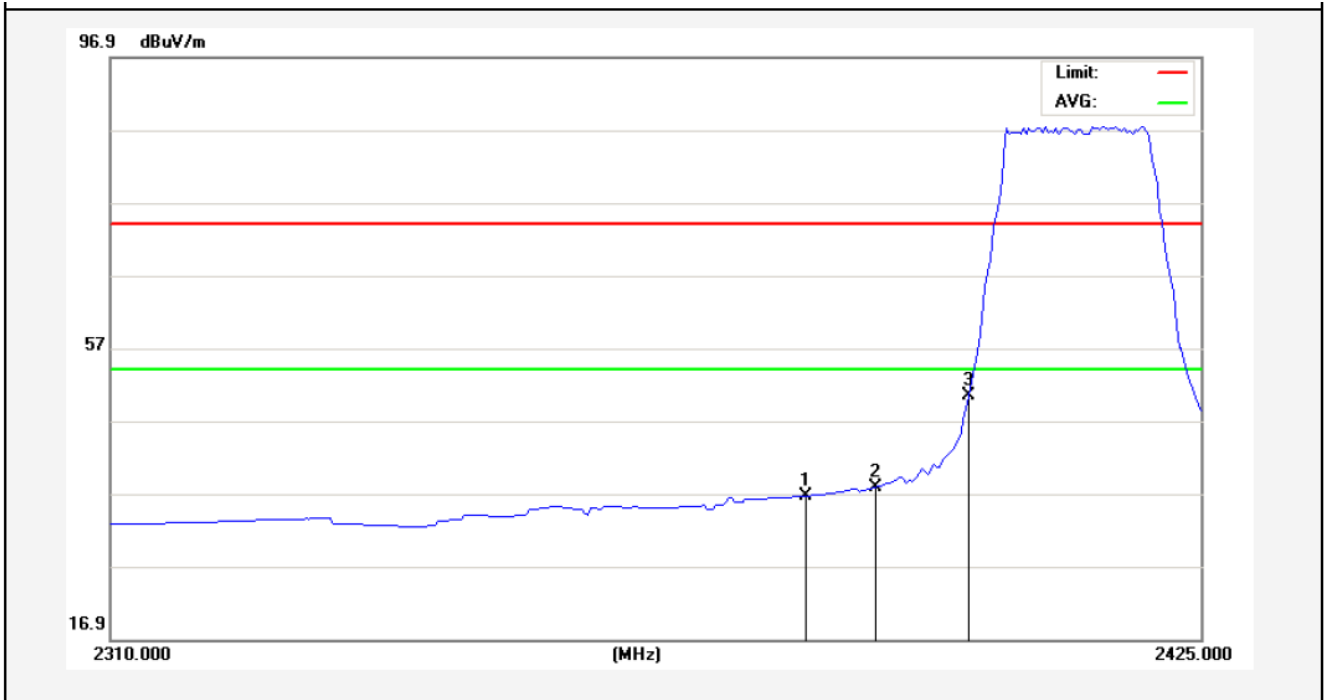
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2382.450	45.72	-2.53	43.19	74.00	-30.81	peak			
2	2390.000	45.63	-2.51	43.12	74.00	-30.88	peak			
3	2400.000	51.75	-2.49	49.26	74.00	-24.74	peak			

Anbotek

Horizontal-AV:



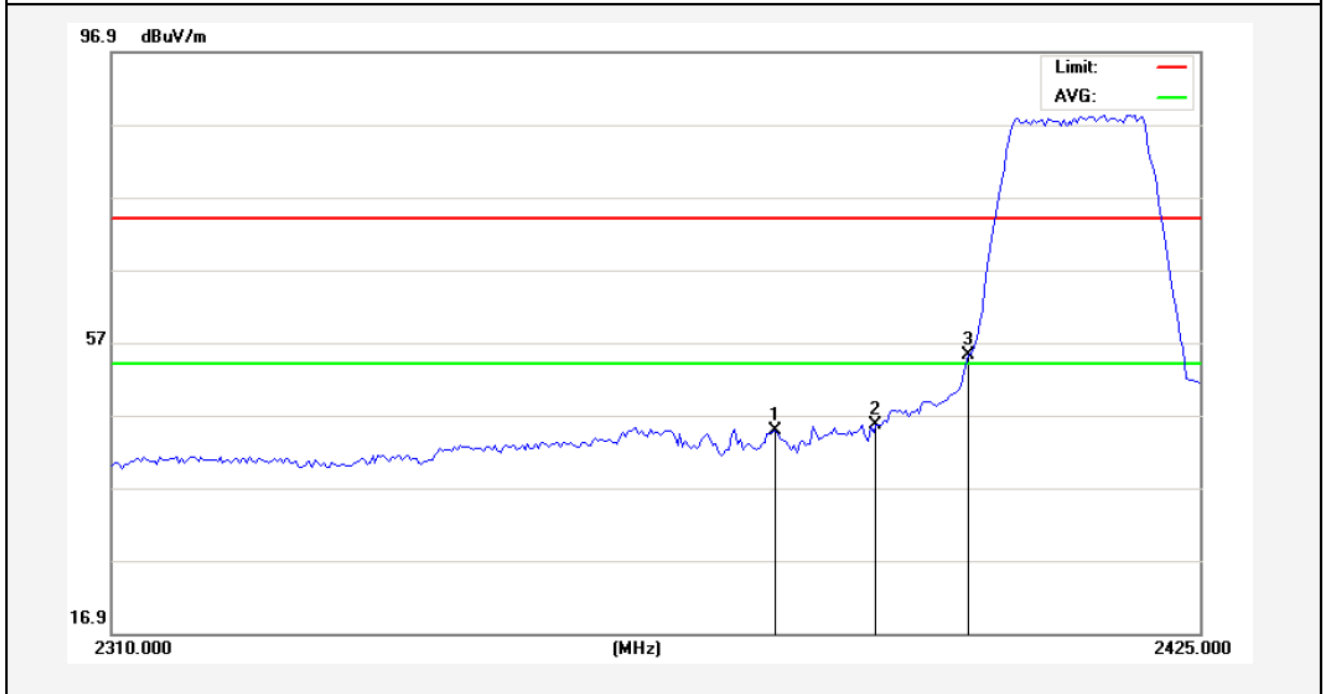
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2382.450	39.15	-2.53	36.62	54.00	-17.38	AVG			
2	2390.000	40.33	-2.51	37.82	54.00	-16.18	AVG			
3	2400.000	52.89	-2.49	50.40	54.00	-3.60	AVG			

Anbotek

Test Mode: 802.11n (HT20)

2412MHz

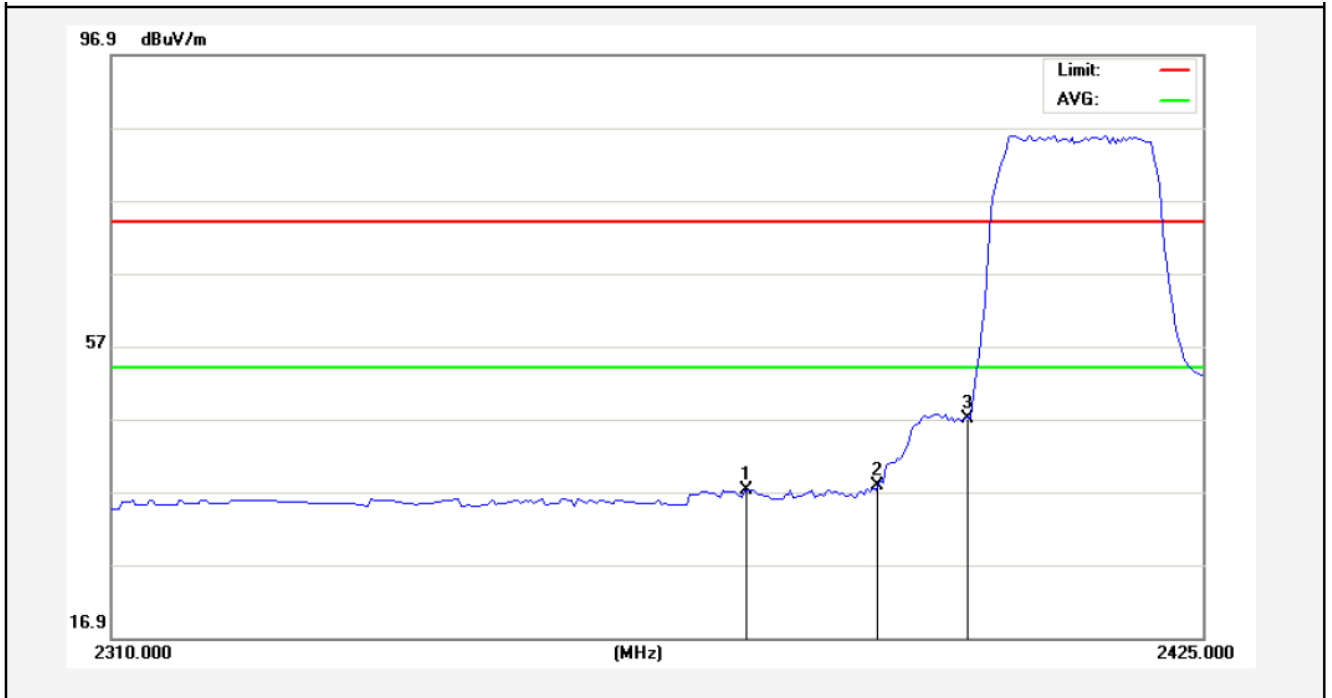
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2379.575	47.35	-2.54	44.81	74.00	-29.19	peak			
2	2390.000	48.13	-2.51	45.62	74.00	-28.38	peak			
3	2400.000	57.73	-2.49	55.24	74.00	-18.76	peak			

Anbotek

Vertical-AV:



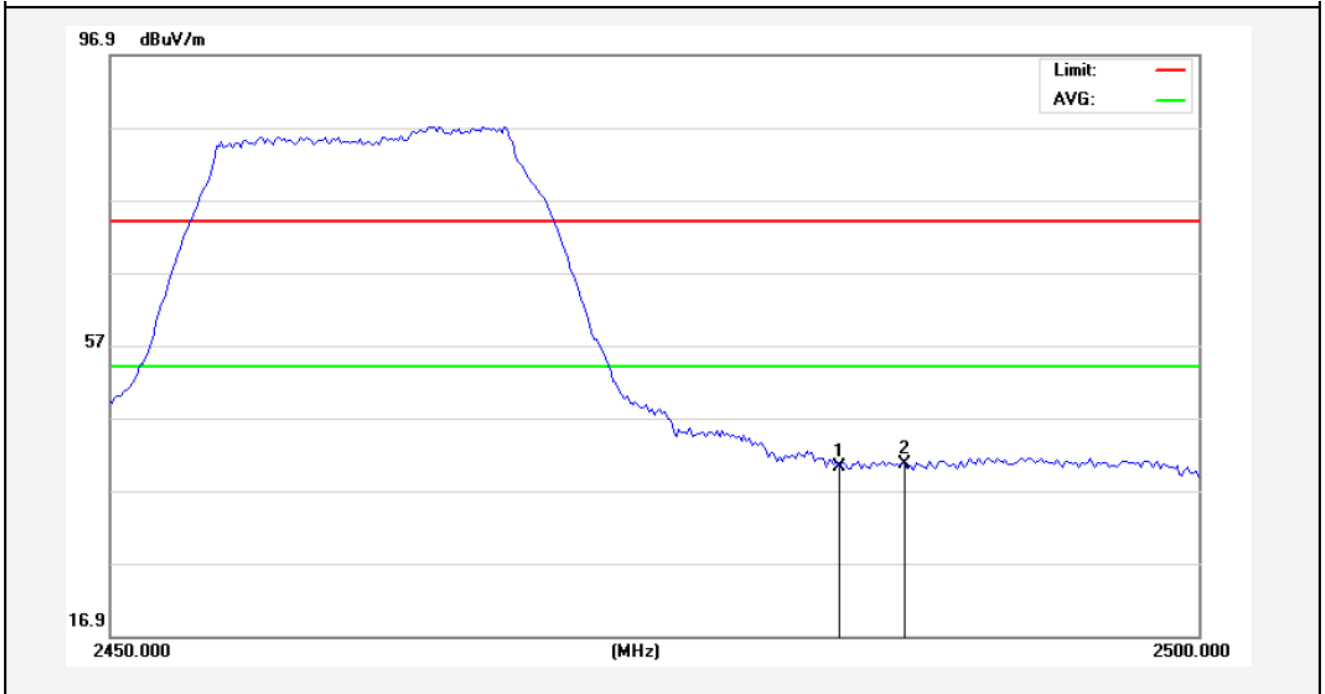
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2376.412	39.71	-2.54	37.17	54.00	-16.83	AVG			
2	2390.000	40.30	-2.51	37.79	54.00	-16.21	AVG			
3	2400.000	49.50	-2.49	47.01	54.00	-6.99	AVG			

Anbotek

Test Mode: 802.11n (HT20)

2462MHz

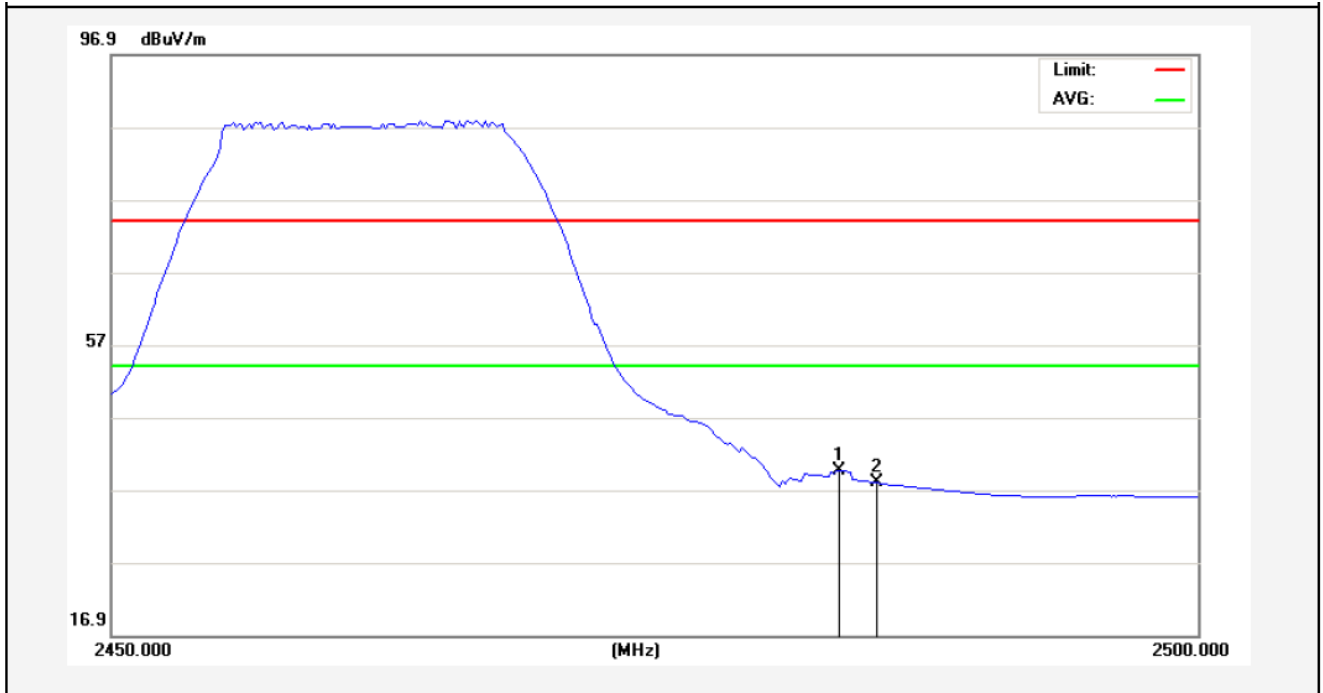
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	42.59	-2.31	40.28	74.00	-33.72	peak			
2	2486.500	42.87	-2.30	40.57	74.00	-33.43	peak			

Anbotek

Horizontal-AV:



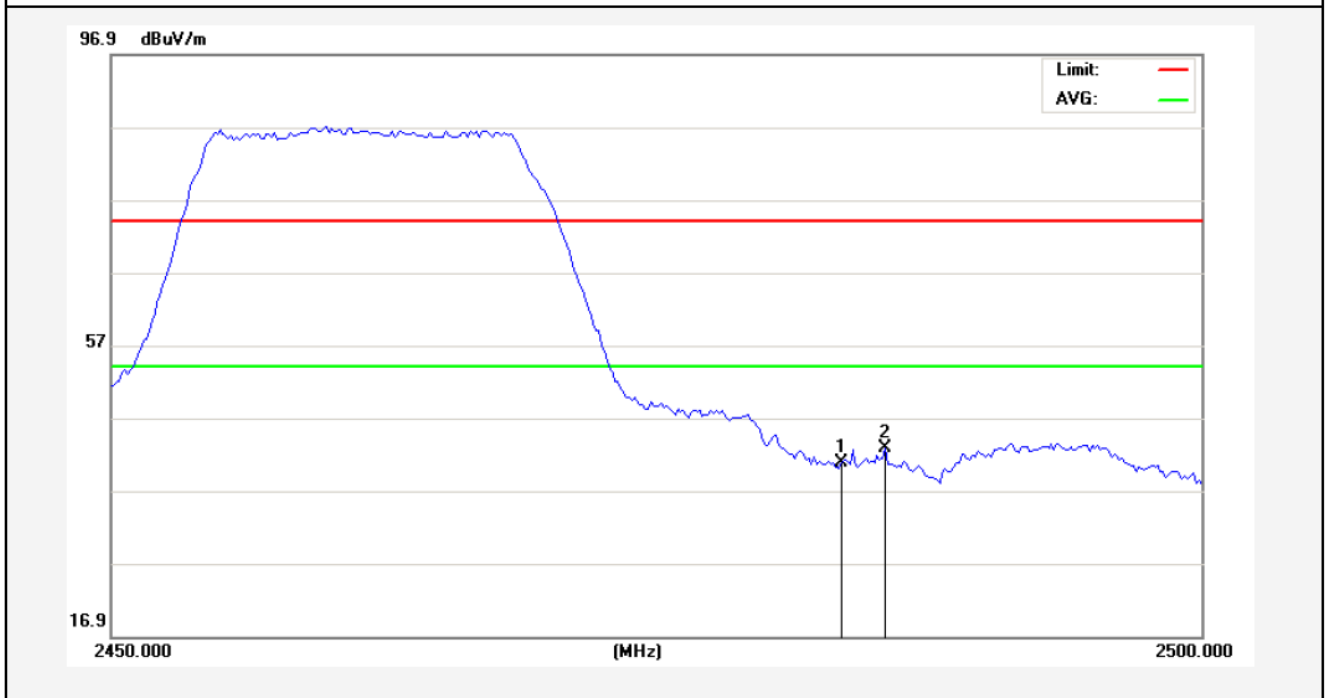
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	41.97	-2.31	39.66	54.00	-14.34	AVG			
2	2485.250	40.24	-2.30	37.94	54.00	-16.06	AVG			

Anbotek

Test Mode: 802.11n (HT20)

2462MHz

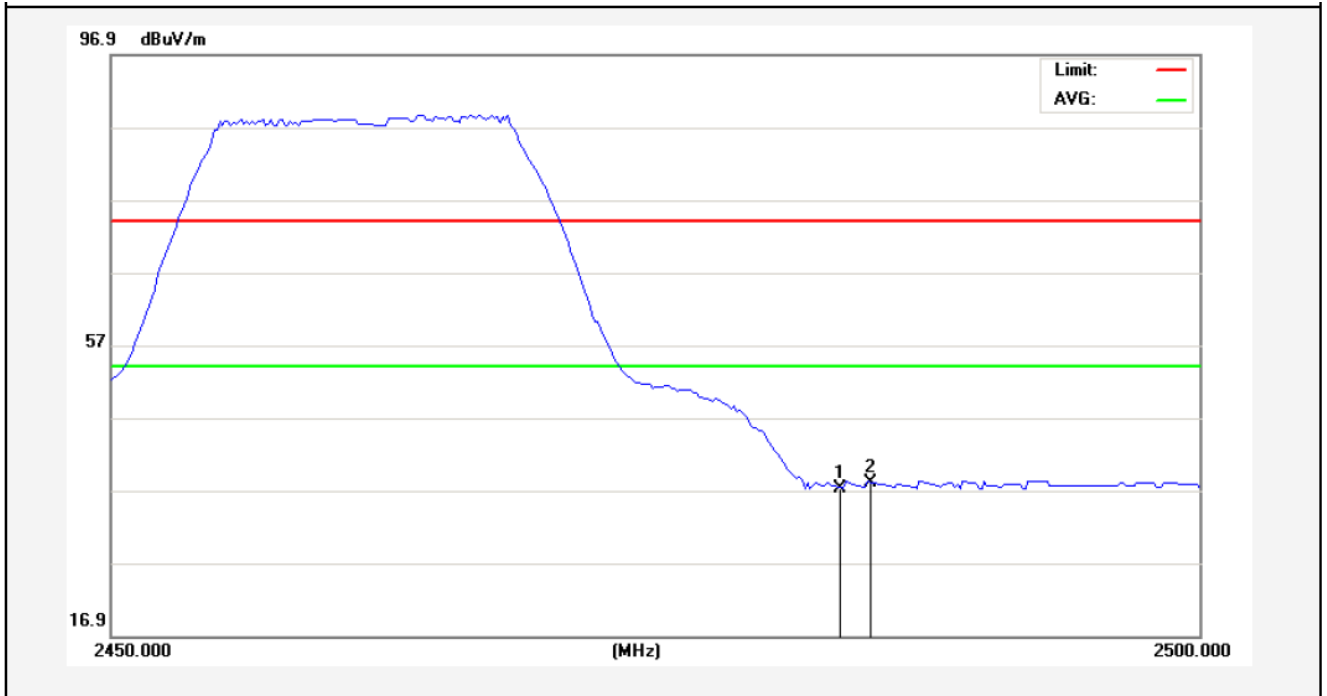
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	43.12	-2.31	40.81	74.00	-33.19	peak			
2	2485.500	45.16	-2.30	42.86	74.00	-31.14	peak			

Anbotek

Vertical-AV:



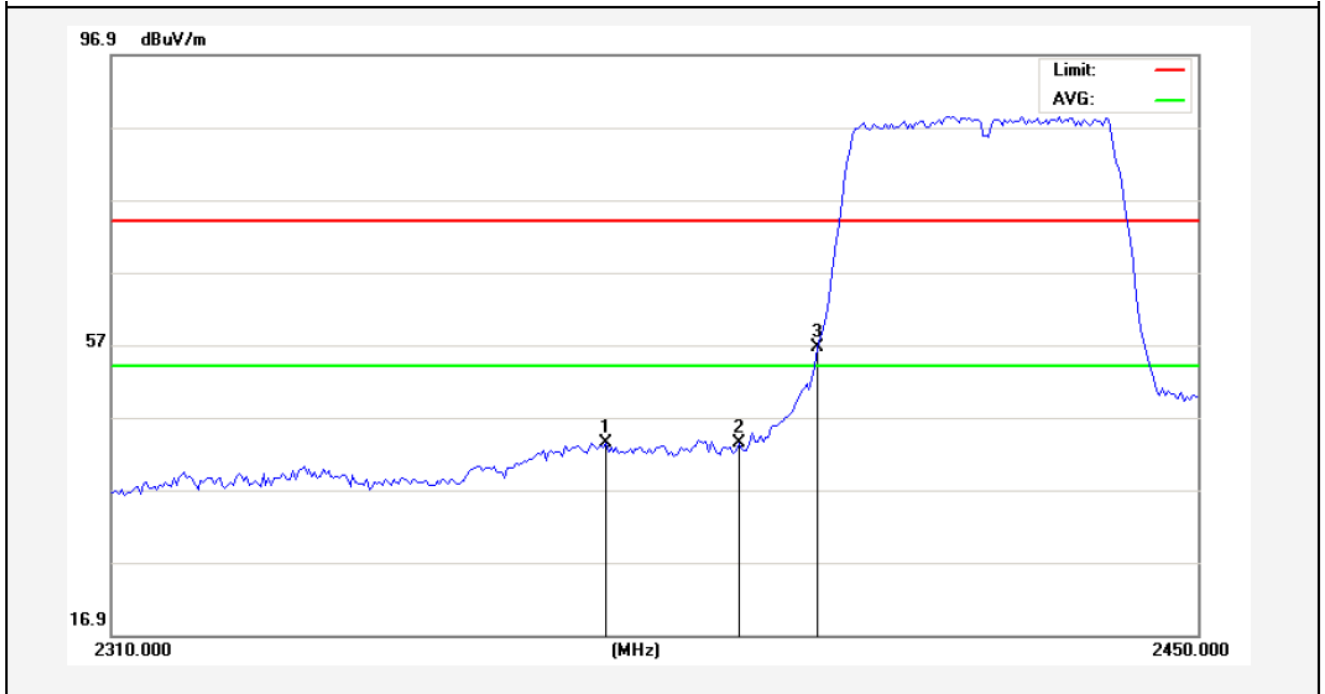
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	39.61	-2.31	37.30	54.00	-16.70	AVG			
2	2484.875	40.38	-2.30	38.08	54.00	-15.92	AVG			

Anbotek

Test Mode: 802.11n (HT40)

2422MHz

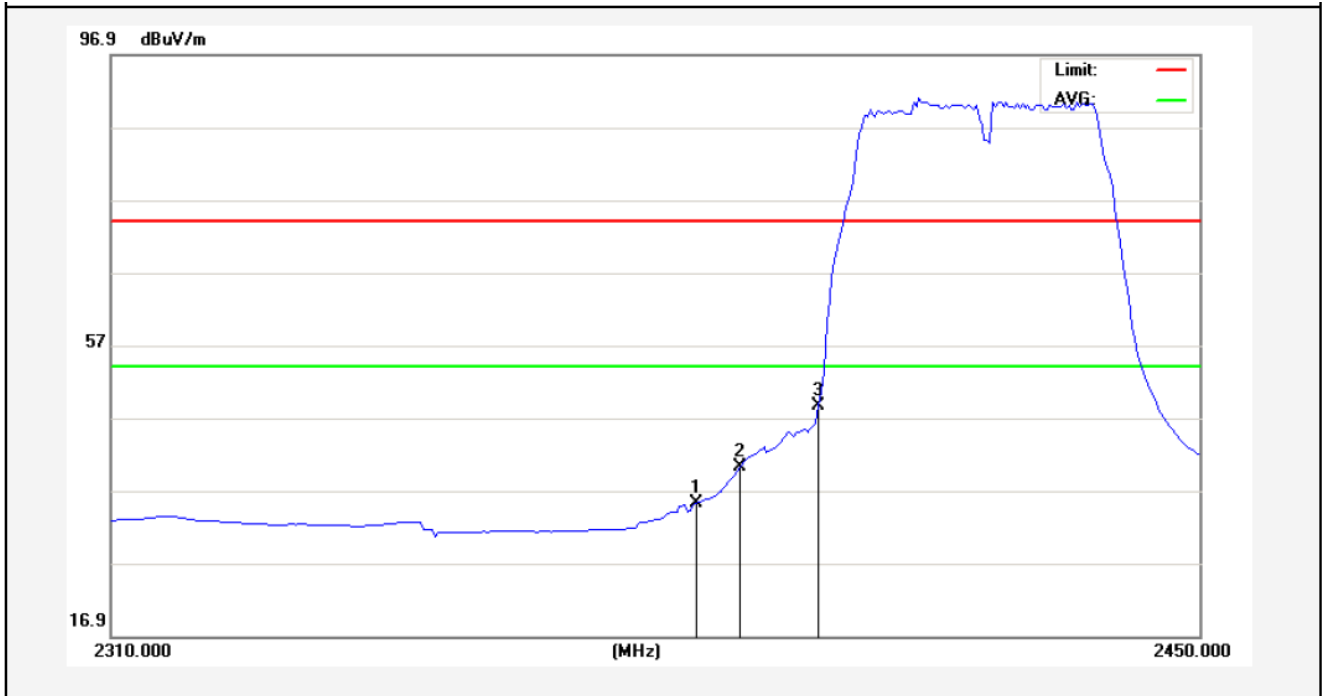
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2373.000	45.93	-2.55	43.38	74.00	-30.62	peak			
2	2390.000	46.01	-2.51	43.50	74.00	-30.50	peak			
3	2400.000	59.01	-2.49	56.52	74.00	-17.48	peak			

Anbotek

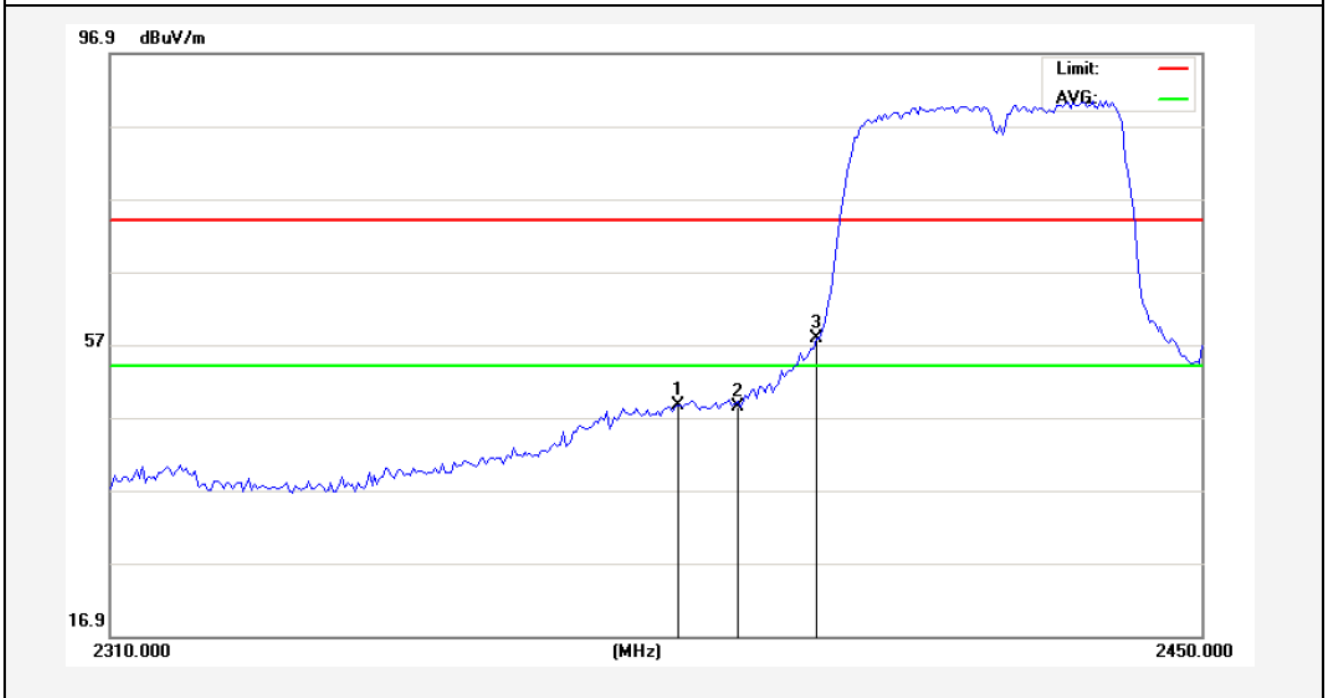
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2384.550	37.67	-2.53	35.14	54.00	-18.86	AVG			
2	2390.000	42.65	-2.51	40.14	54.00	-13.86	AVG			
3	2400.000	51.14	-2.49	48.65	54.00	-5.35	AVG			

Anbotek

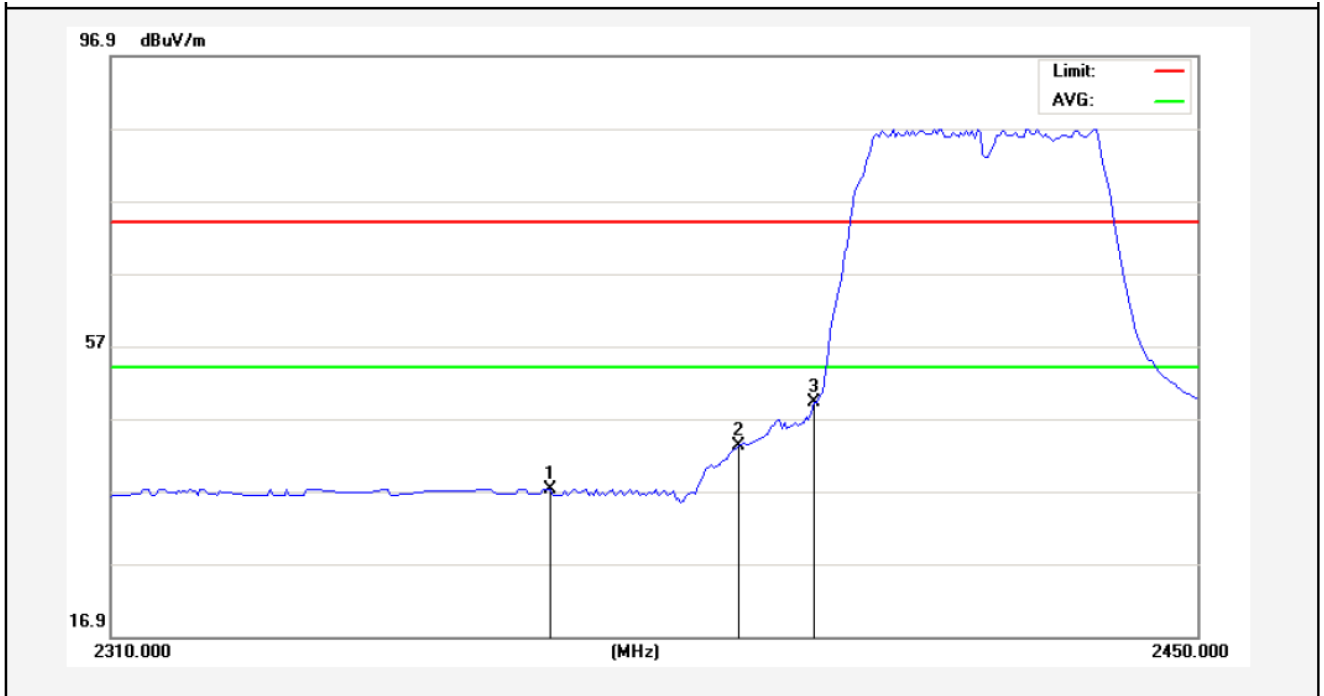
Test Mode: 802.11n (HT40)  
2422MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2382.100	51.19	-2.53	48.66	74.00	-25.34	peak			
2	2390.000	50.96	-2.51	48.45	74.00	-25.55	peak			
3	2400.000	60.22	-2.49	57.73	74.00	-16.27	peak			

Anbotek

Vertical-AV:



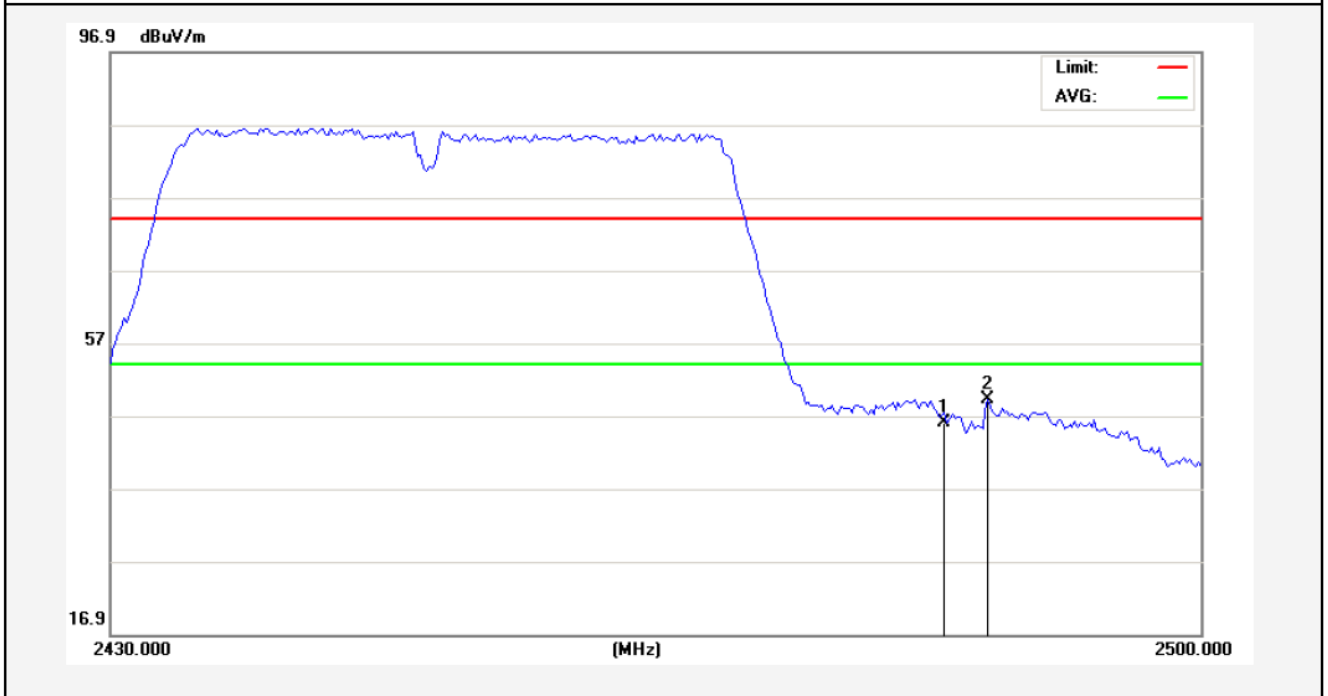
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2366.000	39.87	-2.57	37.30	54.00	-16.70	AVG			
2	2390.000	45.64	-2.51	43.13	54.00	-10.87	AVG			
3	2400.000	51.66	-2.49	49.17	54.00	-4.83	AVG			

Anbotek

Test Mode: 802.11n (HT40)

2452MHz

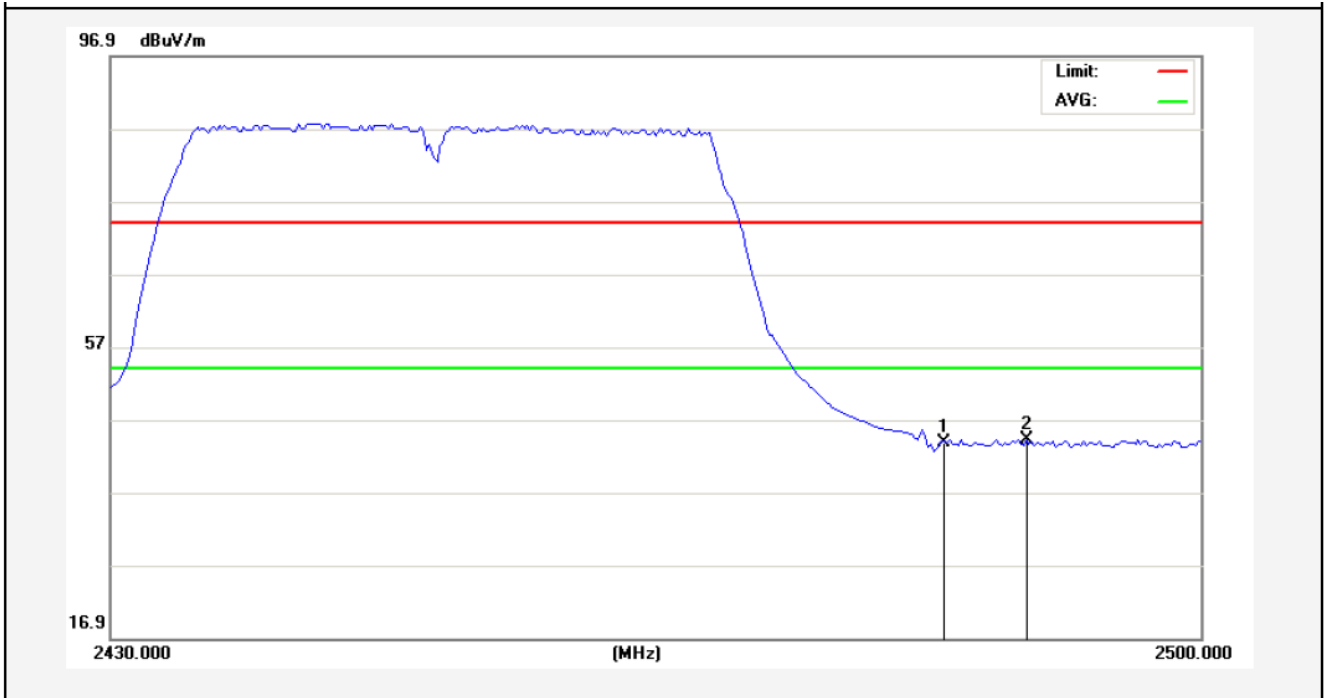
Horizontal-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	48.23	-2.31	45.92	74.00	-28.08	peak			
2	2486.350	51.50	-2.30	49.20	74.00	-24.80	peak			

Anbotek

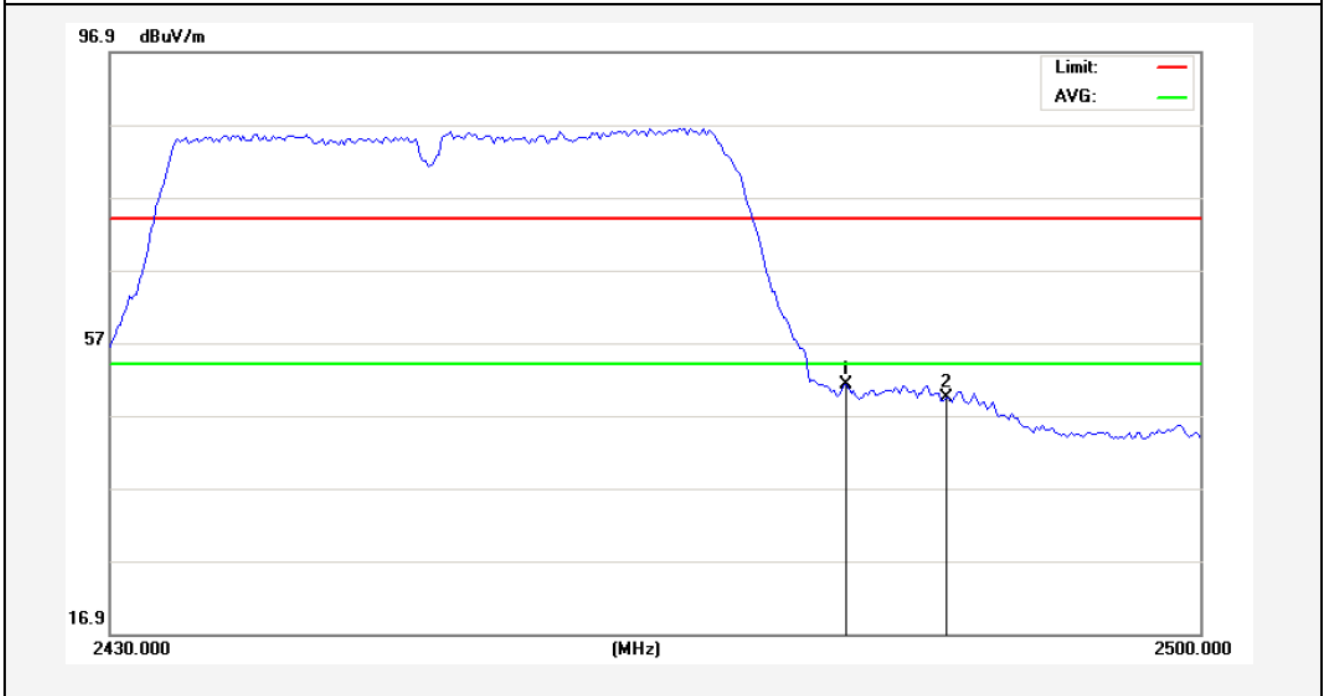
Horizontal-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	46.20	-2.31	43.89	54.00	-10.11	AVG			
2	2488.800	46.56	-2.29	44.27	54.00	-9.73	AVG			

Anbotek

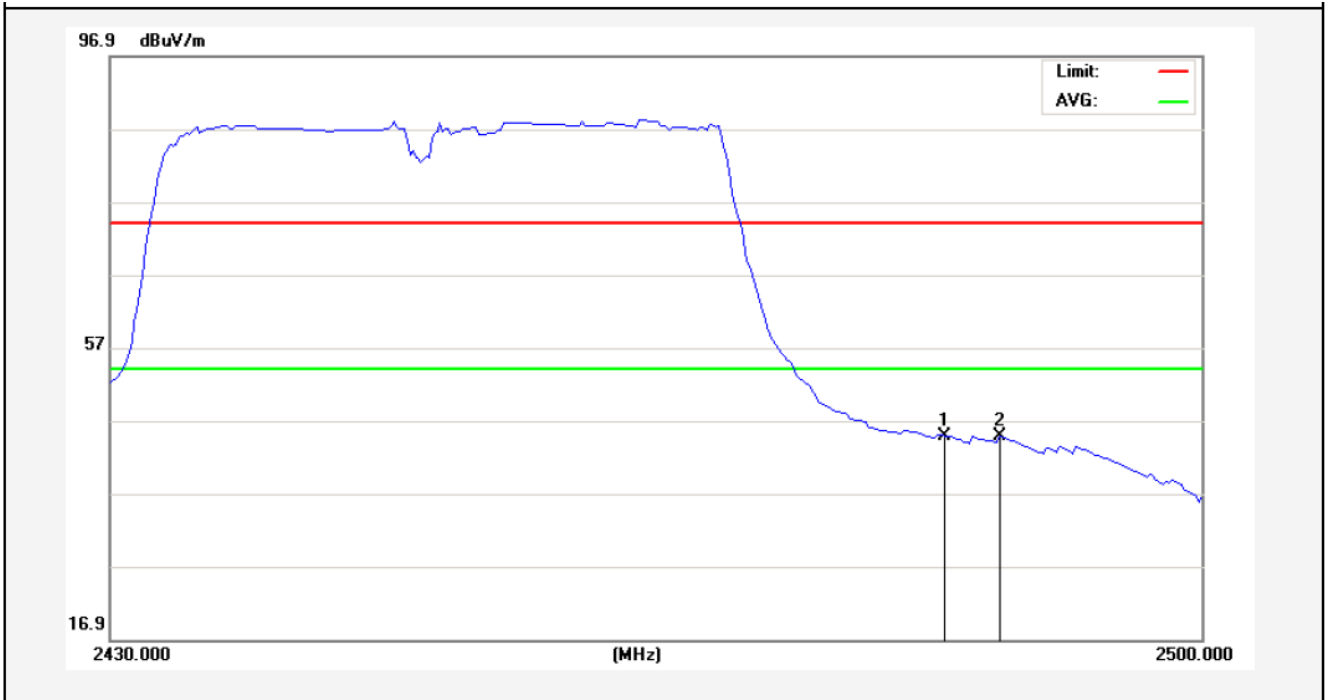
Test Mode: 802.11n (HT40)  
2452MHz  
Vertical-PEAK:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2477.075	53.45	-2.32	51.13	74.00	-22.87	peak			
2	2483.500	51.81	-2.31	49.50	74.00	-24.50	peak			

Anbotek

Vertical-AV:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/)	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	2483.500	47.10	-2.31	44.79	54.00	-9.21	AVG			
2	2487.050	47.09	-2.30	44.79	54.00	-9.21	AVG			

Anbotek