

# TEST REPORT

Reference No..... : WTS20X09065420W-1  
FCC ID ..... : ZLZ-WLINK  
Applicant ..... : Shenzhen Mindray Bio-Medical Electronics Co., Ltd.  
Address ..... : Mindray Building, Keji 12th Road South, High-tech Industrial Park, Nanshan,  
Shenzhen 518057, PEOPLE'S REPUBLIC OF CHINA  
Product Name ..... : wireless module  
Test Model. .... : Wlink  
Standards ..... : FCC Part 15.407  
Date of Receipt sample .... : Oct. 10, 2020  
Date of Test..... : Oct. 10, 2020 to Jan.25, 2021  
Date of Issue ..... : Jan.26, 2021  
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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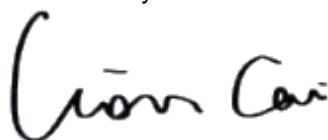
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**Report version**

Version No.	Date of issue	Description
Rev.00	Jan.26, 2021	Original
/	/	/

## 1. GENERAL INFORMATION

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### 1.1 Product Description for Equipment Under Test (EUT)

#### Client Information

Applicant: Shenzhen Mindray Bio-Medical Electronics Co., Ltd.  
Address of applicant: Mindray Building, Keji 12th Road South, High-tech Industrial Park, Nanshan, Shenzhen 518057, PEOPLE'S REPUBLIC OF CHINA

Manufacturer: Shenzhen Mindray Bio-Medical Electronics Co., Ltd.  
Address of manufacturer: 1203 Nanhuan Avenue, Guangming District, Shenzhen, PEOPLE'S REPUBLIC OF CHINA

General Description of EUT	
Product Name:	wireless module
Trade Name:	/
Model No.:	Wlink
Adding Model(s):	/
Rated Voltage:	DC3.3V
Battery Capacity:	/
Power Adapter:	/
Software Version:	V1.0
Hardware Version:	V1.0
<i>Note: The test data is gathered from a production sample, provided by the manufacturer.</i>	

<b>Technical Characteristics of EUT</b>	
Support Standards:	802.11a, 802.11n(HT20), 802.11n-HT40
Frequency Range:	5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz
RF Output Power:	12.70dBm (Conducted)
Type of Modulation:	BPSK, QPSK,16QAM,64QAM
Data Rate:	6-54Mbps, up to 150Mbps
Type of Antenna:	ANT 1: FPC dipole ANT 2: FPC dipole ANT 3: FPC dipole ANT 4: Copper pipe dipole ANT 5: Copper pipe dipole ANT 6: FPC PIFA ANT 7: FPC PIFA
Antenna Gain:	ANT 1: 3.38dBi ANT 2: 3.38dBi ANT 3: 3.1dBi ANT 4: 2.75dBi ANT 5: 0.94dBi ANT 6: 1dBi ANT 7: 4.17dBi

## 1.2 Test Standards

The tests were performed according to following standards:

**FCC Rules Part 15.407**: General technical requirements.

**ANSI C63.10-2013**: American National Standard for Testing Unlicensed Wireless Devices.

**KDB789033 D02 v02r01**: GUIDELINES FOR COMPLIANCE TESTING OF UNLICENSED NATIONAL INFORMATION INFRASTRUCTURE (U-NII) DEVICES PART 15, SUBPARTE.

**Maintenance of compliance** is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

## 1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, KDB789033 D02 v02r01. The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

## 1.4 Table for parameters of Test Software setting

Connect the cable to the test board, connect the USB-to-serial adapter board to the cable, connect the USB-to-serial board to the USB interface on the PC, copy the test function script package to the PC, identify the com port, and click the relative file. The script will be launched. (Script can edit channel, baud rate, power, bandwidth )

Mode	Test Frequency (MHz)												
	NCB: 20MHz												
	5180	5200	5240	5260	5300	5320	5500	5600	5700	5720	5745	5785	5825
802.11a 54Mbps	49	49	49	50	50	50	49	49	49	49	49	49	49
802.11n-HT20 MCS7	49	49	49	50	50	50	49	49	49	49	49	49	49
Mode	NCB: 40MHz												
	5190	5230	5270	5310	5510	5590	5670	5710	5755	5795			
802.11n-HT40 MCS7	49	49	50	50	49	49	49	49	49	49			

## **1.5 EUT Operating during test**

EUT was programmed to be in continuously transmitting mode. During the test, EUT operation to normal function and programs under Android were executed.

## **1.6 Test Facility**

### **Address of the test laboratory**

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

### **FCC – Registration No.: 125990**

Waltek Testing Group (Shenzhen) Co., Ltd. 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. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

### **Industry Canada (IC) Registration No.: 11464A**

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

## 1.7 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, with a duty cycle equal to 100%, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	802.11a-54Mbps	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM2	802.11n-HT20-MCS7	5180MHz,5200MHz,5240MHz,5260MHz,5280MHz,5320MHz,5500MHz,5600MHz,5700MHz,5745MHz, 5785MHz,5825MHz
TM3	802.11n-HT40-MCS7	5190MHz,5230MHz,5270MHz,5310MHz,5510MHz,5590MHz,5670MHz,5755MHz,5795MHz

Note: All test modes (different data rate and different modulation) are performed, but only the worst case is recorded in this report.

Test Conditions	
Temperature:	22~25 °C
Relative Humidity:	50~55 %.
ATM Pressure:	1019 mbar

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
Notebook	Lenovo	TianYi310-14ISK	/



## 1.8 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	$\pm 0.42\text{dB}$
Occupied Bandwidth	Conducted	$\pm 1.5\%$
Power Spectral Density	Conducted	$\pm 1.8\text{dB}$
Conducted Spurious Emission	Conducted	$\pm 2.17\text{dB}$
Conducted Emissions	Conducted	9-150kHz $\pm 3.74\text{dB}$
		0.15-30MHz $\pm 3.34\text{dB}$
Transmitter Spurious Emissions	Radiated	30-200MHz $\pm 4.52\text{dB}$
		0.2-1GHz $\pm 5.56\text{dB}$
		1-6GHz $\pm 3.84\text{dB}$
		6-18GHz $\pm 3.92\text{dB}$

**1.9 Test Equipment List and Details**

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2020-04-28	2021-04-27
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2020-04-28	2021-04-27
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2020-04-28	2021-04-27
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2020-04-28	2021-04-27
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2020-04-28	2021-04-27
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2019-05-05	2021-05-04
SEMT-1042	Horn Antenna	ETS	3117	00086197	2019-05-05	2021-05-04
SEMT-1121	Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170582	2019-05-05	2021-05-04
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2019-05-05	2021-05-04
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2020-04-28	2021-04-27
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2020-04-28	2021-04-27
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2020-04-28	2021-04-27
SEMT-1168	Pre-amplifier	Direction Systems Inc.	PAP-0126	14141-12838	2020-04-28	2021-04-27
SEMT-1169	Pre-amplifier	Direction Systems Inc.	PAP-2640	14145-14153	2020-04-28	2021-04-27
SEMT-1163	Spectrum Analyzer	Rohde & Schwarz	FSP40	100612	2020-04-28	2021-04-27
SEMT-1170	DRG Horn Antenna	A.H. SYSTEMS	SAS-574	571	2019-05-05	2021-05-04
SEMT-1166	Power Limiter	Agilent	N9356B	MY45450376	2020-04-28	2021-04-27
SEMT-1048	RF Limiter	ATTEN	AT-BSF-2400~2500	/	2020-04-28	2021-04-27
SEMT-1076	RF Switcher	Top Precision	RCS03-A2	/	2020-04-28	2021-04-27
SEMT-C001	Cable	Zheng DI	LL142-07-07-10M(A)	/	2020-03-17	2021-03-16
SEMT-C002	Cable	Zheng DI	ZT40-2.92J-2.92J-6M	/	2020-03-17	2021-03-16
SEMT-C003	Cable	Zheng DI	ZT40-2.92J-2.92J-2.5M	/	2020-03-17	2021-03-16
SEMT-C004	Cable	Zheng DI	2M0RFC	/	2020-03-17	2021-03-16
SEMT-C005	Cable	Zheng DI	1M0RFC	/	2020-03-17	2021-03-16
SEMT-C006	Cable	Zheng DI	1M0RFC	/	2020-03-17	2021-03-16

<b>Software List</b>			
<b>Description</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Version</b>
EMI Test Software (Radiated Emission)*	Farad	EZ-EMC	RA-03A1
EMI Test Software (Conducted Emission)*	Farad	EZ-EMC	RA-03A1

\*Remark: indicates software version used in the compliance certification testing

## 2. SUMMARY OF TEST RESULTS

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<b>FCC Rules</b>	<b>Description of Test Item</b>	<b>Result</b>
§15.203; §15.405	Antenna Requirement	Compliant
15.407 (c)	Automatically Discontinue Transmission	Compliant
§15.207; §15.407(b)(6)	Conducted Emission	Compliant
§15.407(a)(1),(2)	Power Spectral Density	Compliant
§15.407(e)	Emission Bandwidth and Occupied Bandwidth	Compliant
§15.407(a)(1),(2)	Maximum Conducted Output Power	Compliant
§15.407(b)(1),(2),(3),(4)	Undesirable emission	Compliant
§15.205; §15.407(b)(1),(2),(3)	Radiated Emission	Compliant
§15.407(g)	Frequency Stability	Compliant
§15.407(h)	Dynamic Frequency Selection (DFS)	Compliant

N/A: Not applicable

### **3. RF Exposure**

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#### **3.1 Standard Applicable**

According to §1.1307 and §2.1093, the portable transmitter must comply the RF exposure requirements.

#### **3.2 Test Result**

This product complied with the requirement of the RF exposure, please see the MPE Report.

## **4. Antenna Requirement**

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### **4.1 Standard Applicable**

According to FCC Part 15.203, 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.

### **4.2 Evaluation Information**

This product has an external antenna, fulfill the requirement of this section.

## **5. Automatically Discontinue Transmission**

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### **5.1 Standard Applicable**

According to FCC Part 15.407(c), the device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

### **5.2 Summary of Test Results**

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

## 6. Conducted Emissions

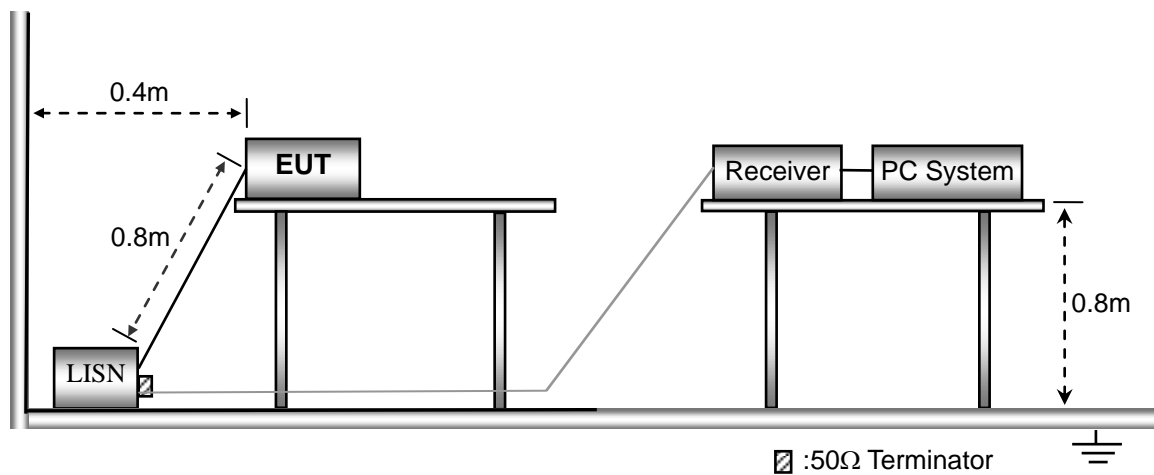
### 6.1 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

### 6.2 Basic Test Setup Block Diagram



### 6.3 Test Receiver Setup

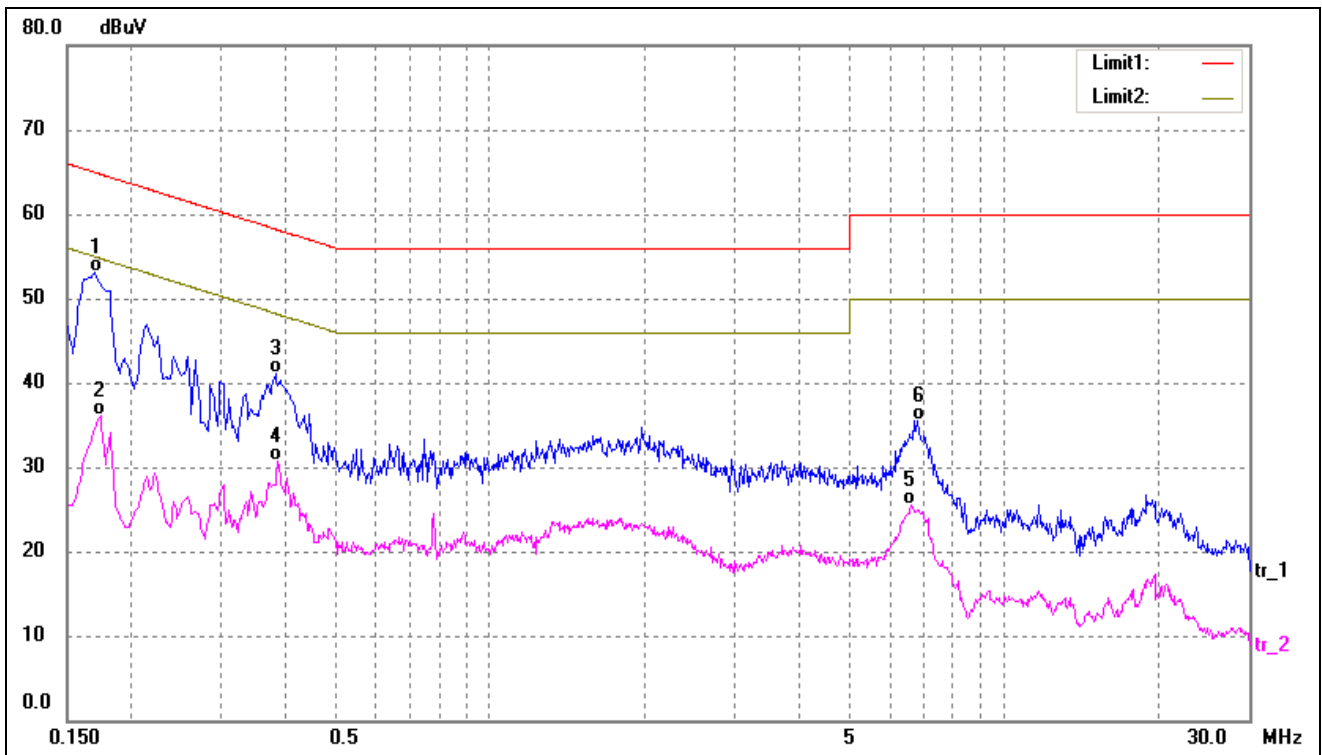
During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency .....	150 kHz
Stop Frequency .....	30 MHz
Sweep Speed .....	Auto
IF Bandwidth.....	10 kHz
Quasi-Peak Adapter Bandwidth .....	9 kHz
Quasi-Peak Adapter Mode .....	Normal

### 6.4 Summary of Test Results/Plots

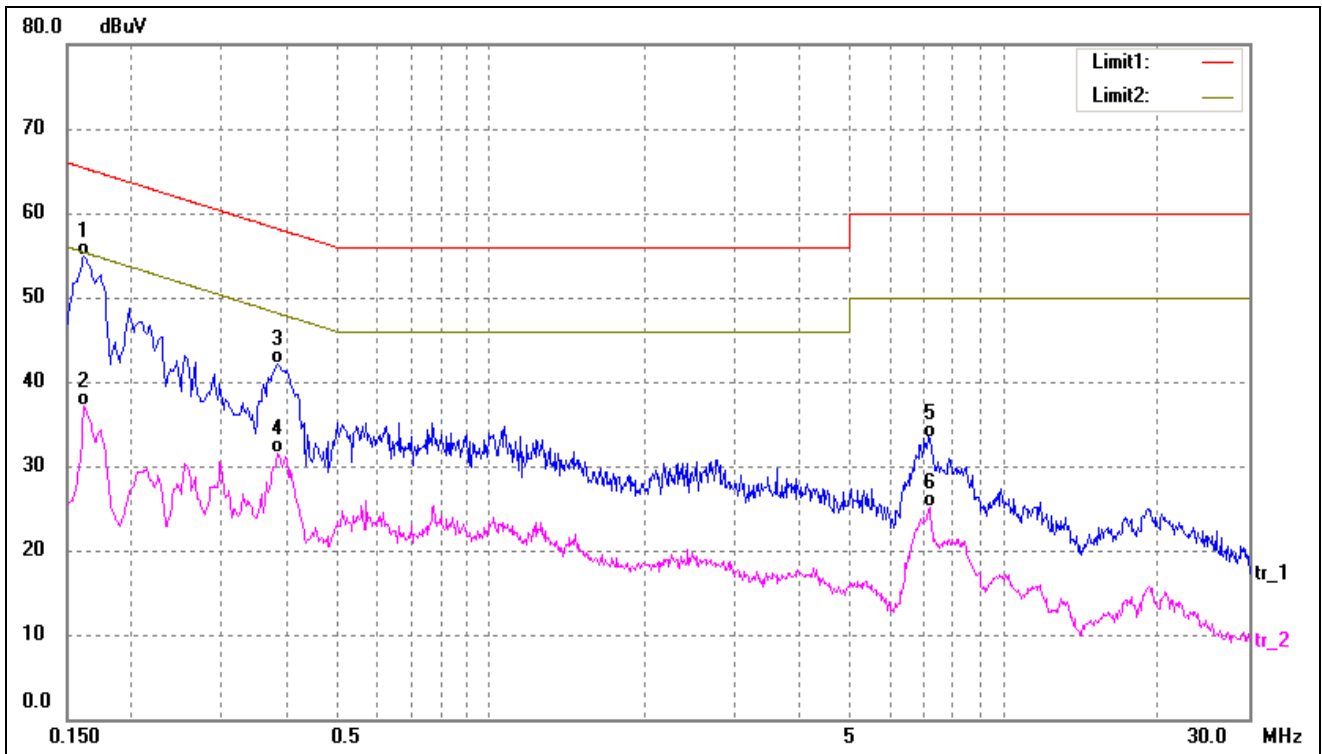


Test Mode	Communication	AC120V 60Hz	Polarity:	Neutral
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1700	42.76	10.25	53.01	64.96	-11.95	QP
2	0.1740	25.86	10.25	36.11	54.77	-18.66	AVG
3	0.3820	30.85	10.23	41.08	58.24	-17.16	QP
4	0.3860	20.47	10.23	30.70	48.15	-17.45	AVG
5	6.6260	15.33	10.24	25.57	50.00	-24.43	AVG
6	6.8020	25.23	10.25	35.48	60.00	-24.52	QP

Test Mode	Communication	AC120V 60Hz	Polarity:	Line
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No.	Frequency (MHz)	Reading (dBuV)	Correct (dB/m)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1*	0.1620	44.73	10.26	54.99	65.36	-10.37	QP
2	0.1620	26.86	10.26	37.12	55.36	-18.24	AVG
3	0.3860	31.90	10.23	42.13	58.15	-16.02	QP
4	0.3860	21.22	10.23	31.45	48.15	-16.70	AVG
5	7.1340	23.15	10.25	33.40	60.00	-26.60	QP
6	7.1780	14.82	10.25	25.07	50.00	-24.93	AVG

## 7. Power Spectral Density

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### 7.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25 GHz.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### 7.2 Test Procedure

According to 789033 D02 v02r01 General UNII Test Procedures New Rules v02, the following is the measurement procedure.

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500

kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500kHz bandwidth, the following adjustments to the procedures apply:

- a) Set RBW  $\geq 1/T$ , where T is defined in section II.B.1.a).
- b) Set VBW  $\geq 3$  RBW.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10\log(500\text{kHz}/\text{RBW})$  to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add  $10\log(1\text{MHz}/\text{RBW})$  to the measured result, whereas RBW (< 1 MHz) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 kHz for the sections 5.c) and 5.d) above, since RBW=100 kHz is available on nearly all spectrum analyzers.

### 7.3 Summary of Test Results/Plots

<b>U-NII-1:5150-5250MHz</b>			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a_54Mbps	5180	8.916	11
	5200	5.523	11
	5240	7.664	11
802.11n-HT20_MCS7	5180	7.620	11
	5200	7.770	11
	5240	7.899	11
802.11n-HT40_MCS7	5190	3.269	11
	5230	5.230	11

<b>U-NII-2A: 5250-5350MHz</b>			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a_54Mbps	5260	7.288	11
	5280	7.752	11
	5320	6.537	11
802.11n-HT20_MCS7	5260	8.421	11
	5280	7.513	11
	5320	7.591	11
802.11n-HT40_MCS7	5270	4.729	11
	5310	5.085	11

<b>U-NII-2C: 5470-5725MHz</b>			
Operating mode	Test Channel	Power Spectral Density dBm/MHz	Limit (dBm/MHz)
802.11a_54Mbps	5500	6.981	11
	5600	6.316	11
	5700	6.971	11
802.11n-HT20_MCS7	5500	6.990	11
	5600	6.672	11
	5700	6.662	11
802.11n-HT40_MCS7	5510	1.815	11
	5590	1.289	11
	5670	1.274	11

<b>U-NII-3: 5725-5850MHz</b>					
Operating mode	Test Channel	Power Spectral Density dBm/300kHz	Factor	Power Spectral Density* dBm/500kHz	Limit dBm/500kHz
802.11a_54Mbps	5745	-4.148	2.22	-1.928	30
	5785	-3.821	2.22	-1.601	30
	5825	-4.677	2.22	-2.457	30
802.11n-HT20_MCS7	5745	-3.995	2.22	-1.775	30
	5785	0.007	2.22	2.227	30
	5825	1.309	2.22	3.529	30
802.11n-HT40_MCS7	5755	-5.802	2.22	-3.582	30
	5795	-5.635	2.22	-3.415	30

\*Note: Maximum PSD=PSD(dBm/300kHz)+10log(500kHz/300kHz)=2.22

➤ 5150-5250MHz

Mode:		802.11a
5180MHz		
5200MHz		
5240MHz		

Mode:		802.11n-HT20
5180MHz		<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.18604 GHz 7.62 dBm</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.186040000 GHz 7.62 dBm</p> <p>Center 5.18 GHz Span 40 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
5200MHz		<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.20148 GHz 7.77 dBm</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.201480000 GHz 7.77 dBm</p> <p>Center 5.2 GHz Span 40 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
5240MHz		<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.23820 GHz 7.899 dBm</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.238200000 GHz 7.899 dBm</p> <p>Center 5.24 GHz Span 40 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>

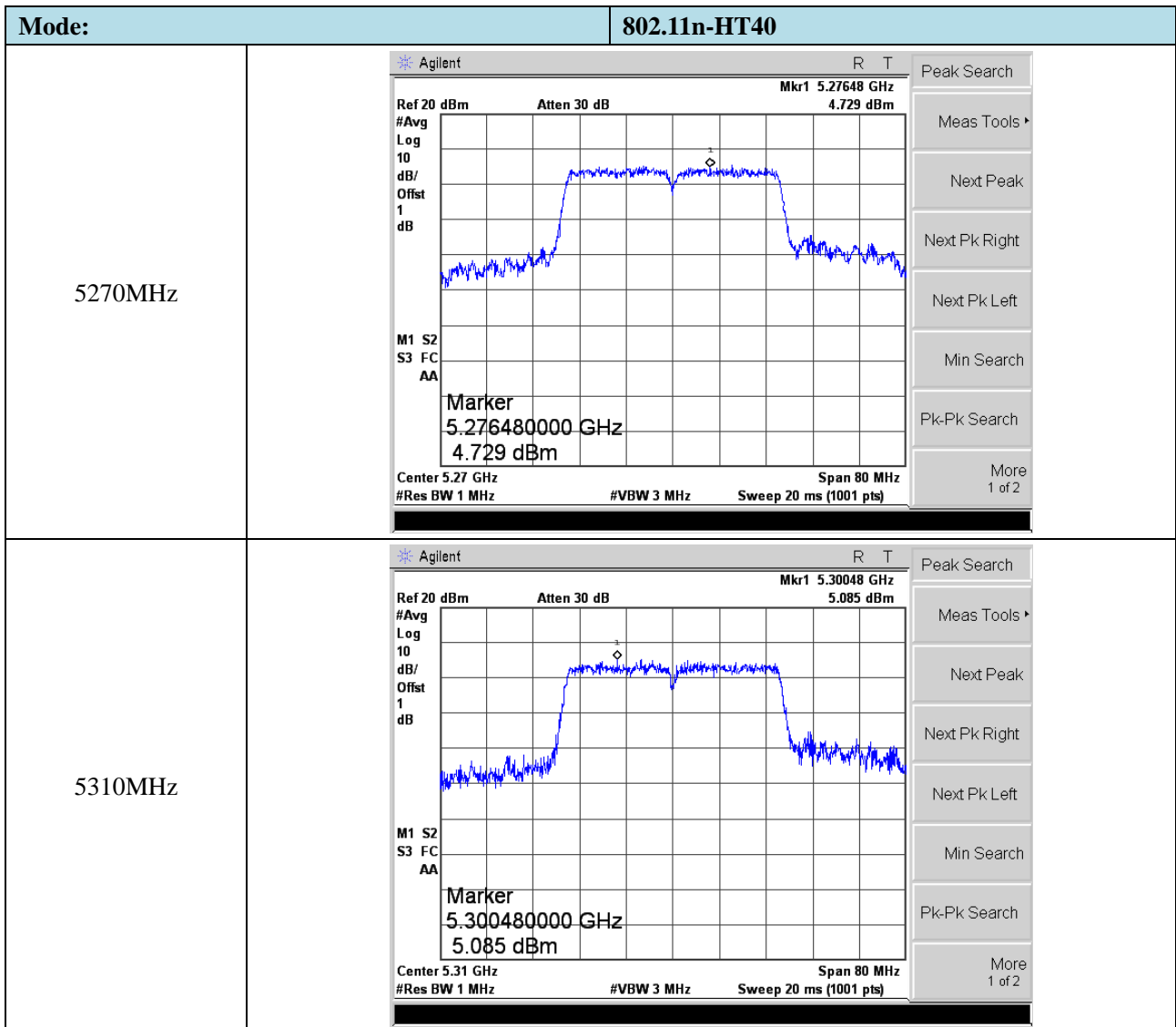
Mode:		802.11n-HT40
5190 MHz		<p>Agilent R T            Ref 20 dBm Atten 30 dB Mkr1 5.18584 GHz 3.269 dBm            #Avg Log dB/Offst 1 dB            M1 S2 S3 FC AA            Center 5.19 GHz Span 80 MHz            #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p>
5230 MHz		<p>Agilent R T            Ref 20 dBm Atten 30 dB Mkr1 5.22392 GHz 5.23 dBm            #Avg Log dB/Offst 1 dB            M1 S2 S3 FC AA            Marker            5.223920000 GHz            5.23 dBm            Center 5.23 GHz Span 80 MHz            #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p>



➤ 5250-5350MHz

Mode:		802.11a
5260MHz		
5280MHz		
5320MHz		

Mode:		802.11n-HT20	
5260MHz		<p>Agilent R T            Ref 20 dBm Atten 30 dB Mkr1 5.25908 GHz            8.421 dBm            #Avg 10            Log dB/ Offst 1 dB            M1 S2            S3 FC            AA  <b>Marker</b>            5.259080000 GHz            8.421 dBm            Center 5.26 GHz Span 40 MHz            #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p>	Peak Search Meas Tools ▶ Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2
5280MHz		<p>Agilent R T            Ref 20 dBm Atten 30 dB Mkr1 5.27644 GHz            7.513 dBm            #Avg 10            Log dB/ Offst 1 dB            M1 S2            S3 FC            AA  <b>Marker</b>            5.276440000 GHz            7.513 dBm            Center 5.28 GHz Span 40 MHz            #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p>	Peak Search Meas Tools ▶ Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2
5320MHz		<p>Agilent R T            Ref 20 dBm Atten 30 dB Mkr1 5.31920 GHz            7.591 dBm            #Avg 10            Log dB/ Offst 1 dB            M1 S2            S3 FC            AA  <b>Marker</b>            5.319200000 GHz            7.591 dBm            Center 5.32 GHz Span 40 MHz            #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p>	Peak Search Meas Tools ▶ Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2



➤ 5470-5725MHz

Mode:		802.11a
5500MHz	<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.49364 GHz 6.981 dBm</p> <p>#Avg 10 Log dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.493640000 GHz 6.981 dBm</p> <p>Center 5.5 GHz Span 40 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p>	<p>Peak Search</p> <p>Meas Tools ▶</p> <p>Next Peak</p> <p>Next Pk Right</p> <p>Next Pk Left</p> <p>Min Search</p> <p>Pk-Pk Search</p> <p>More 1 of 2</p>
5600MHz	<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.59532 GHz 6.316 dBm</p> <p>#Avg 10 Log dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.595320000 GHz 6.316 dBm</p> <p>Center 5.6 GHz Span 40 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p>	<p>Peak Search</p> <p>Meas Tools ▶</p> <p>Next Peak</p> <p>Next Pk Right</p> <p>Next Pk Left</p> <p>Min Search</p> <p>Pk-Pk Search</p> <p>More 1 of 2</p>
5700MHz	<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.69904 GHz 6.971 dBm</p> <p>#Avg 10 Log dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.699040000 GHz 6.971 dBm</p> <p>Center 5.7 GHz Span 40 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p>	<p>Peak Search</p> <p>Meas Tools ▶</p> <p>Next Peak</p> <p>Next Pk Right</p> <p>Next Pk Left</p> <p>Min Search</p> <p>Pk-Pk Search</p> <p>More 1 of 2</p>

Mode:		802.11n-HT20
5500MHz	<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.50416 GHz 6.99 dBm</p> <p>#Avg Log dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.504160000 GHz 6.99 dBm</p> <p>Center 5.5 GHz Span 40 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>	
5600MHz	<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.59724 GHz 6.672 dBm</p> <p>#Avg Log dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.597240000 GHz 6.672 dBm</p> <p>Center 5.6 GHz Span 40 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>	
5700MHz	<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.69868 GHz 6.62 dBm</p> <p>#Avg Log dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.698680000 GHz 6.62 dBm</p> <p>Center 5.7 GHz Span 40 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>	

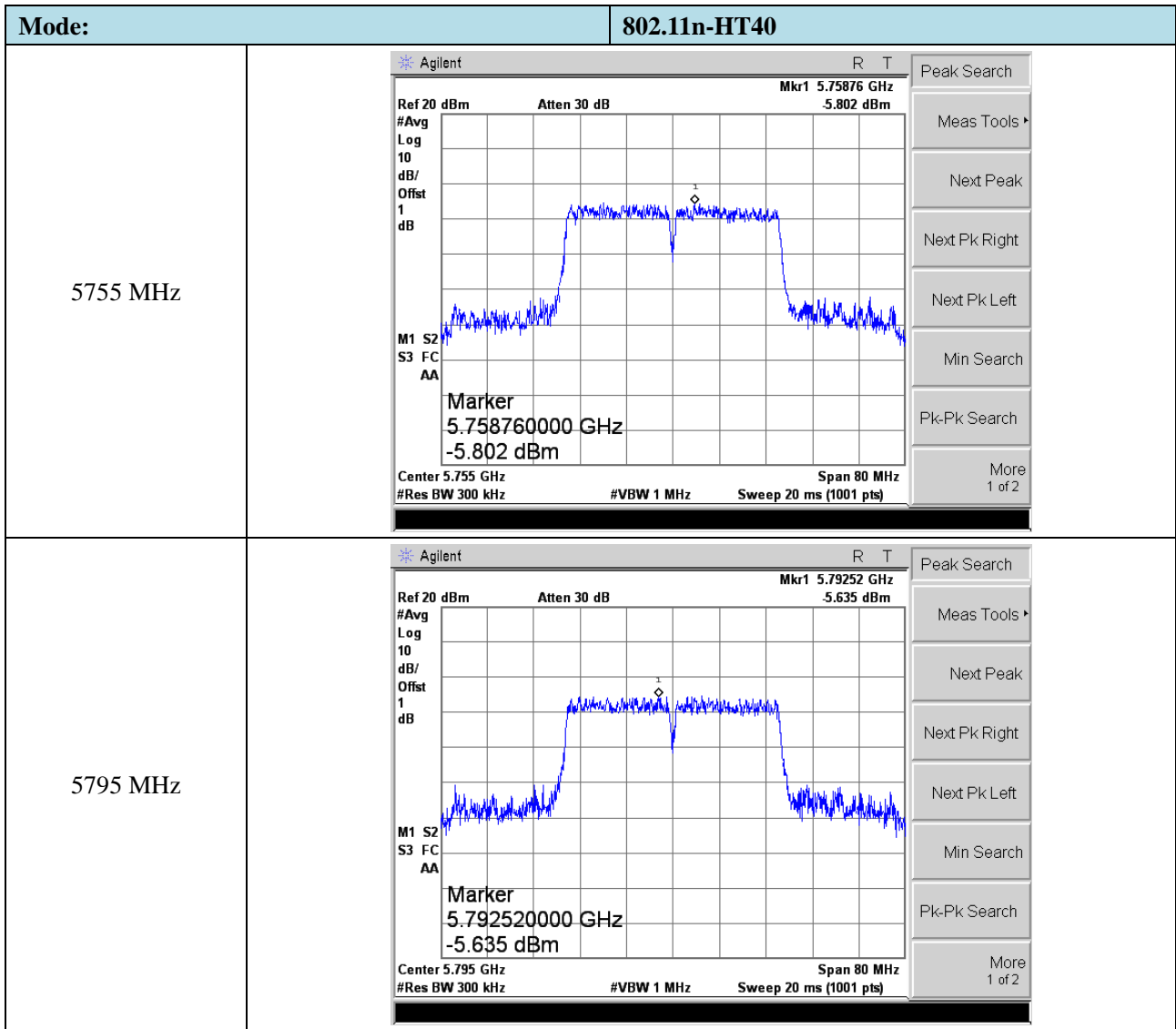
Mode:		802.11n-HT40
5510MHz		<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.49600 GHz 1.815 dBm</p> <p>#Avg Log dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.49600000 GHz 1.815 dBm</p> <p>Center 5.51 GHz Span 80 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
5590MHz		<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.58808 GHz 1.289 dBm</p> <p>#Avg Log dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.58808000 GHz 1.289 dBm</p> <p>Center 5.59 GHz Span 80 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
5670MHz		<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.65616 GHz 1.274 dBm</p> <p>#Avg Log dB/Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.65616000 GHz 1.274 dBm</p> <p>Center 5.67 GHz Span 80 MHz #Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>

➤ 5725-5850MHz

Mode:		802.11a
5745MHz		<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.75040 GHz 4.148 dBm</p> <p>#Avg 10 Log dB/ Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.750400000 GHz -4.148 dBm</p> <p>Center 5.745 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
5785MHz		<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.79060 GHz 3.821 dBm</p> <p>#Avg 10 Log dB/ Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.790600000 GHz -3.821 dBm</p> <p>Center 5.785 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>
5825MHz		<p>Agilent R T</p> <p>Ref 20 dBm Atten 30 dB Mkr1 5.83088 GHz 4.677 dBm</p> <p>#Avg 10 Log dB/ Offst 1 dB</p> <p>M1 S2 S3 FC AA</p> <p>Marker 5.830880000 GHz -4.677 dBm</p> <p>Center 5.825 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 20 ms (1001 pts)</p> <p>Peak Search Meas Tools Next Peak Next Pk Right Next Pk Left Min Search Pk-Pk Search More 1 of 2</p>

Mode:		802.11n-HT20
5745MHz		
5785MHz		
5825MHz		





## 8. Emission Bandwidth and Occupied Bandwidth

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### 8.1 Standard Applicable

According to 15.407(a) and (e):

(1) For the band 5.15-5.25 GHz.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(e) Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

### 8.2 Test Procedure

According to 789033 D02 v02r0r section C&D, the following is the measurement procedure.

1. Emission Bandwidth (EBW)

- a) Set RBW = approximately 1% of the emission bandwidth.
- b) Set the VBW > RBW.
- c) Detector = Peak.

- d) Trace mode = max hold.
- e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

## 2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.715-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) 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.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described above.

## D. 99 Percent Occupied Bandwidth

The 99-percent occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99-percent occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in section II.G.3.d). Measurements of 99-percent occupied bandwidth may also optionally be used in lieu of the EBW to 789033 D02 v02r01 General UNII Test Procedures New Rules v01 define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in section II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set VBW  $\geq 3 * RBW$
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

**8.3 Summary of Test Results/Plots**

<b>U-NII-1:5150-5250MHz</b>				
<b>Test Mode</b>	<b>Test Channel MHz</b>	<b>26 dB Bandwidth MHz</b>	<b>99% Bandwidth MHz</b>	<b>Limit MHz</b>
802.11a	5180	21.454	16.7798	Pass
	5200	21.328	16.7771	Pass
	5240	21.245	16.7659	Pass
802.11n-HT20	5180	21.714	18.1050	Pass
	5200	21.726	18.1300	Pass
	5240	21.597	18.0830	Pass
802.11n-HT40	5190	42.290	36.8968	Pass
	5230	42.308	36.8315	Pass

<b>U-NII-2A: 5250-5350MHz</b>				
<b>Test Mode</b>	<b>Test Channel MHz</b>	<b>26 dB Bandwidth MHz</b>	<b>99% Bandwidth MHz</b>	<b>Limit MHz</b>
802.11a	5260	26.288	17.3756	Pass
	5280	23.875	17.3356	Pass
	5320	26.024	17.4261	Pass
802.11n-HT20	5260	22.747	18.1816	Pass
	5280	24.561	18.2593	Pass
	5320	24.372	18.2588	Pass
802.11n-HT40	5270	43.181	36.3994	Pass
	5310	51.759	36.9889	Pass

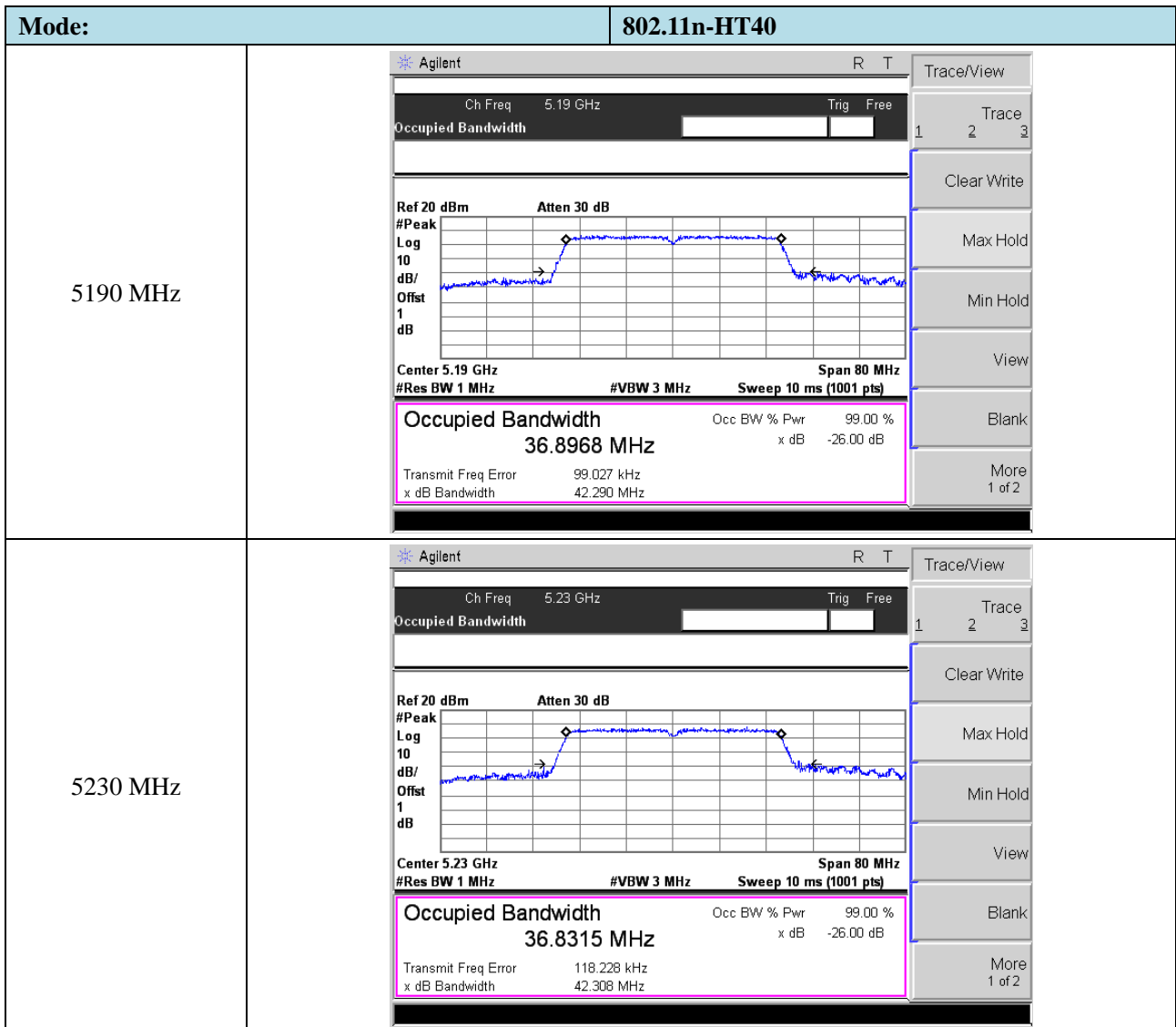
<b>U-NII-2C: 5470-5725MHz</b>				
<b>Test Mode</b>	<b>Test Channel MHz</b>	<b>26 dB Bandwidth MHz</b>	<b>99% Bandwidth MHz</b>	<b>Limit MHz</b>
802.11a	5500	21.419	16.8664	Pass
	5600	21.337	16.7669	Pass
	5700	21.490	16.7843	Pass
802.11n-HT20	5500	22.492	18.2010	Pass
	5600	22.100	18.2141	Pass
	5700	22.584	18.1129	Pass
802.11n-HT40	5510	43.296	36.9265	Pass
	5590	44.750	36.9280	Pass
	5670	45.042	36.9163	Pass

<b>U-NII-3: 5725-5850MHz</b>				
<b>Test Mode</b>	<b>Test Channel MHz</b>	<b>6 dB Bandwidth MHz</b>	<b>99% Bandwidth MHz</b>	<b>Limit MHz</b>
802.11a	5745	16.394	16.8185	≥500
	5785	16.397	16.8757	≥500
	5825	16.392	16.8065	≥500
802.11n-HT20	5745	17.449	18.1028	≥500
	5785	17.716	18.0016	≥500
	5825	17.541	18.0204	≥500
802.11n-HT40	5755	36.185	36.9055	≥500
	5795	35.949	36.9091	≥500

➤ 5150-5250MHz

Mode:		802.11a																
5180MHz		<table border="1"> <tr><td colspan="2">Freq/Channel</td></tr> <tr><td>Center Freq</td><td>5.18000000 GHz</td></tr> <tr><td>Start Freq</td><td>5.16000000 GHz</td></tr> <tr><td>Stop Freq</td><td>5.20000000 GHz</td></tr> <tr><td>CF Step</td><td>4.00000000 MHz</td></tr> <tr><td>Freq Offset</td><td>0.00000000 Hz</td></tr> <tr><td>Signal Track</td><td>On</td></tr> <tr><td>Scale Type</td><td>Log</td></tr> </table>	Freq/Channel		Center Freq	5.18000000 GHz	Start Freq	5.16000000 GHz	Stop Freq	5.20000000 GHz	CF Step	4.00000000 MHz	Freq Offset	0.00000000 Hz	Signal Track	On	Scale Type	Log
Freq/Channel																		
Center Freq	5.18000000 GHz																	
Start Freq	5.16000000 GHz																	
Stop Freq	5.20000000 GHz																	
CF Step	4.00000000 MHz																	
Freq Offset	0.00000000 Hz																	
Signal Track	On																	
Scale Type	Log																	
5200MHz		<table border="1"> <tr><td colspan="2">Trace/View</td></tr> <tr><td>Trace</td><td>1 2 3</td></tr> <tr><td>Clear Write</td><td></td></tr> <tr><td>Max Hold</td><td></td></tr> <tr><td>Min Hold</td><td></td></tr> <tr><td>View</td><td></td></tr> <tr><td>Blank</td><td></td></tr> <tr><td>More</td><td>1 of 2</td></tr> </table>	Trace/View		Trace	1 2 3	Clear Write		Max Hold		Min Hold		View		Blank		More	1 of 2
Trace/View																		
Trace	1 2 3																	
Clear Write																		
Max Hold																		
Min Hold																		
View																		
Blank																		
More	1 of 2																	
5240MHz		<table border="1"> <tr><td colspan="2">Freq/Channel</td></tr> <tr><td>Center Freq</td><td>5.24000000 GHz</td></tr> <tr><td>Start Freq</td><td>5.22000000 GHz</td></tr> <tr><td>Stop Freq</td><td>5.26000000 GHz</td></tr> <tr><td>CF Step</td><td>4.00000000 MHz</td></tr> <tr><td>Freq Offset</td><td>0.00000000 Hz</td></tr> <tr><td>Signal Track</td><td>On</td></tr> <tr><td>Scale Type</td><td>Log</td></tr> </table>	Freq/Channel		Center Freq	5.24000000 GHz	Start Freq	5.22000000 GHz	Stop Freq	5.26000000 GHz	CF Step	4.00000000 MHz	Freq Offset	0.00000000 Hz	Signal Track	On	Scale Type	Log
Freq/Channel																		
Center Freq	5.24000000 GHz																	
Start Freq	5.22000000 GHz																	
Stop Freq	5.26000000 GHz																	
CF Step	4.00000000 MHz																	
Freq Offset	0.00000000 Hz																	
Signal Track	On																	
Scale Type	Log																	

Mode:		802.11n-HT20
5180MHz	<p>Agilent R T</p> <p>Ch Freq 5.18 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offset 1 dB</p> <p>Center 5.18 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p><b>Occupied Bandwidth</b> 18.1050 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error 43.065 kHz</p> <p>x dB Bandwidth 21.714 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.18000000 GHz</p> <p>Start Freq 5.16000000 GHz</p> <p>Stop Freq 5.20000000 GHz</p> <p>CF Step 4.00000000 MHz</p> <p>Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>	
5200MHz	<p>Agilent R T</p> <p>Ch Freq 5.2 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offset 1 dB</p> <p>Center 5.2 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p><b>Occupied Bandwidth</b> 18.1300 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error 35.397 kHz</p> <p>x dB Bandwidth 21.726 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.20000000 GHz</p> <p>Start Freq 5.18000000 GHz</p> <p>Stop Freq 5.22000000 GHz</p> <p>CF Step 4.00000000 MHz</p> <p>Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>	
5240MHz	<p>Agilent R T</p> <p>Ch Freq 5.24 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.240000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offset 1 dB</p> <p>Center 5.24 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p><b>Occupied Bandwidth</b> 18.0830 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error 40.747 kHz</p> <p>x dB Bandwidth 21.597 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.24000000 GHz</p> <p>Start Freq 5.22000000 GHz</p> <p>Stop Freq 5.26000000 GHz</p> <p>CF Step 4.00000000 MHz</p> <p>Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>	





➤ 5250-5350MHz

Mode:		802.11a
5260MHz		<p>Agilent R T</p> <p>Ch Freq 5.26 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.26000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offset 1 dB</p> <p>Center 5.26 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.3756 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 52.723 kHz</p> <p>x dB Bandwidth 26.288 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5280MHz		<p>Agilent R T</p> <p>Ch Freq 5.28 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.28000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offset 1 dB</p> <p>Center 5.28 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.3356 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 37.500 kHz</p> <p>x dB Bandwidth 23.875 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.28000000 GHz</p> <p>Start Freq 5.26000000 GHz</p> <p>Stop Freq 5.30000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>
5320MHz		<p>Agilent R T</p> <p>Ch Freq 5.32 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.32000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offset 1 dB</p> <p>Center 5.32 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 17.4261 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 65.224 kHz</p> <p>x dB Bandwidth 26.024 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.32000000 GHz</p> <p>Start Freq 5.30000000 GHz</p> <p>Stop Freq 5.34000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>

Mode:		802.11n-HT20
5260MHz		<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5280MHz		<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5320MHz		<p>Freq/Channel</p> <p>Center Freq 5.3200000 GHz</p> <p>Start Freq 5.3000000 GHz</p> <p>Stop Freq 5.3400000 GHz</p> <p>CF Step 4.0000000 MHz</p> <p>Auto Man</p> <p>Freq Offset 0.0000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>

Mode:		802.11n-HT40
5270MHz		<p>Agilent R T Trace/View</p> <p>Ch Freq 5.27 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Span 80.00000000 MHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offset 1</p> <p>dB</p> <p>Center 5.27 GHz Span 80 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 36.3994 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 63.497 kHz</p> <p>x dB Bandwidth 43.181 MHz</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5310MHz		<p>Agilent R T Trace/View</p> <p>Ch Freq 5.31 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.31000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offset 1</p> <p>dB</p> <p>Center 5.31 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 36.9889 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 123.459 kHz</p> <p>x dB Bandwidth 51.759 MHz</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

➤ 5470-5725MHz

Mode:		802.11a																
5500MHz		<table border="1"> <tr><td colspan="2">Freq/Channel</td></tr> <tr><td>Center Freq</td><td>5.50000000 GHz</td></tr> <tr><td>Start Freq</td><td>5.48000000 GHz</td></tr> <tr><td>Stop Freq</td><td>5.52000000 GHz</td></tr> <tr><td>CF Step</td><td>4.00000000 MHz</td></tr> <tr><td>Freq Offset</td><td>0.00000000 Hz</td></tr> <tr><td>Signal Track</td><td>On</td></tr> <tr><td>Scale Type</td><td>Log</td></tr> </table>	Freq/Channel		Center Freq	5.50000000 GHz	Start Freq	5.48000000 GHz	Stop Freq	5.52000000 GHz	CF Step	4.00000000 MHz	Freq Offset	0.00000000 Hz	Signal Track	On	Scale Type	Log
Freq/Channel																		
Center Freq	5.50000000 GHz																	
Start Freq	5.48000000 GHz																	
Stop Freq	5.52000000 GHz																	
CF Step	4.00000000 MHz																	
Freq Offset	0.00000000 Hz																	
Signal Track	On																	
Scale Type	Log																	
5600MHz		<table border="1"> <tr><td colspan="2">Freq/Channel</td></tr> <tr><td>Center Freq</td><td>5.60000000 GHz</td></tr> <tr><td>Start Freq</td><td>5.58000000 GHz</td></tr> <tr><td>Stop Freq</td><td>5.62000000 GHz</td></tr> <tr><td>CF Step</td><td>4.00000000 MHz</td></tr> <tr><td>Freq Offset</td><td>0.00000000 Hz</td></tr> <tr><td>Signal Track</td><td>On</td></tr> <tr><td>Scale Type</td><td>Log</td></tr> </table>	Freq/Channel		Center Freq	5.60000000 GHz	Start Freq	5.58000000 GHz	Stop Freq	5.62000000 GHz	CF Step	4.00000000 MHz	Freq Offset	0.00000000 Hz	Signal Track	On	Scale Type	Log
Freq/Channel																		
Center Freq	5.60000000 GHz																	
Start Freq	5.58000000 GHz																	
Stop Freq	5.62000000 GHz																	
CF Step	4.00000000 MHz																	
Freq Offset	0.00000000 Hz																	
Signal Track	On																	
Scale Type	Log																	
5700MHz		<table border="1"> <tr><td colspan="2">Freq/Channel</td></tr> <tr><td>Center Freq</td><td>5.70000000 GHz</td></tr> <tr><td>Start Freq</td><td>5.68000000 GHz</td></tr> <tr><td>Stop Freq</td><td>5.72000000 GHz</td></tr> <tr><td>CF Step</td><td>4.00000000 MHz</td></tr> <tr><td>Freq Offset</td><td>0.00000000 Hz</td></tr> <tr><td>Signal Track</td><td>On</td></tr> <tr><td>Scale Type</td><td>Log</td></tr> </table>	Freq/Channel		Center Freq	5.70000000 GHz	Start Freq	5.68000000 GHz	Stop Freq	5.72000000 GHz	CF Step	4.00000000 MHz	Freq Offset	0.00000000 Hz	Signal Track	On	Scale Type	Log
Freq/Channel																		
Center Freq	5.70000000 GHz																	
Start Freq	5.68000000 GHz																	
Stop Freq	5.72000000 GHz																	
CF Step	4.00000000 MHz																	
Freq Offset	0.00000000 Hz																	
Signal Track	On																	
Scale Type	Log																	

Mode:		802.11n-HT20
5500MHz	<p>Agilent R T</p> <p>Ch Freq 5.5 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>x dB -26.00 dB</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offst 1</p> <p>dB</p> <p>Center 5.5 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 18.2010 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 30.107 kHz</p> <p>x dB Bandwidth 22.492 MHz</p> <p>Meas Setup</p> <p>Avg Number 10 On Off</p> <p>Avg Mode Repeat Exp</p> <p>Max Hold On Off</p> <p>Occ BW % Pwr 99.00 %</p> <p>OBW Span 40.0000000 MHz</p> <p>x dB -26.00 dB</p> <p>Optimize Ref Level</p>	
5600MHz	<p>Agilent R T</p> <p>Ch Freq 5.6 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offst 1</p> <p>dB</p> <p>Center 5.6 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 18.2141 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 31.658 kHz</p> <p>x dB Bandwidth 22.100 MHz</p> <p>Freq/Channel</p> <p>Center Freq 5.6000000 GHz</p> <p>Start Freq 5.5800000 GHz</p> <p>Stop Freq 5.6200000 GHz</p> <p>CF Step 4.0000000 MHz Auto Man</p> <p>Freq Offset 0.0000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>	
5700MHz	<p>Agilent R T</p> <p>Ch Freq 5.7 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10</p> <p>dB/</p> <p>Offst 1</p> <p>dB</p> <p>Center 5.7 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 18.1129 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 7.410 kHz</p> <p>x dB Bandwidth 22.584 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	

Mode:		802.11n-HT40
5510MHz	<p>Agilent R T</p> <p>Ch Freq 5.51 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offset 1 dB</p> <p>Center 5.51 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p><b>Occupied Bandwidth</b> Occ BW % Pwr 99.00 %</p> <p><b>36.9265 MHz</b> x dB -26.00 dB</p> <p>Transmit Freq Error 90.765 kHz</p> <p>x dB Bandwidth 43.296 MHz</p>	<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5590MHz	<p>Agilent R T</p> <p>Ch Freq 5.59 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offset 1 dB</p> <p>Center 5.59 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p><b>Occupied Bandwidth</b> Occ BW % Pwr 99.00 %</p> <p><b>36.9280 MHz</b> x dB -26.00 dB</p> <p>Transmit Freq Error 92.676 kHz</p> <p>x dB Bandwidth 44.750 MHz</p>	<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5670MHz	<p>Agilent R T</p> <p>Ch Freq 5.67 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offset 1 dB</p> <p>Center 5.67 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 10 ms (1001 pts)</p> <p><b>Occupied Bandwidth</b> Occ BW % Pwr 99.00 %</p> <p><b>36.9163 MHz</b> x dB -26.00 dB</p> <p>Transmit Freq Error 55.343 kHz</p> <p>x dB Bandwidth 45.042 MHz</p>	<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

➤ 5725-5850MHz : 6 dB Bandwidth

Mode:		802.11a
5745MHz		
5785MHz		
5825MHz		

Mode:		802.11n-HT20
5745MHz	<p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p><b>Occupied Bandwidth</b> Occ BW % Pwr 99.00 %</p> <p><b>17.6825 MHz</b> x dB -6.00 dB</p> <p>Transmit Freq Error 16.221 kHz</p> <p>x dB Bandwidth 17.499 MHz</p>	<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5785MHz	<p>Agilent R T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.785 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p><b>Occupied Bandwidth</b> Occ BW % Pwr 99.00 %</p> <p><b>17.6794 MHz</b> x dB -6.00 dB</p> <p>Transmit Freq Error 23.634 kHz</p> <p>x dB Bandwidth 17.716 MHz</p>	<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5825MHz	<p>Agilent R T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.825 GHz Span 40 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <p><b>Occupied Bandwidth</b> Occ BW % Pwr 99.00 %</p> <p><b>17.6691 MHz</b> x dB -6.00 dB</p> <p>Transmit Freq Error 30.369 kHz</p> <p>x dB Bandwidth 17.541 MHz</p>	<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>



Mode:		802.11n-HT40												
<p>5755 MHz</p>		<p>Agilent R T</p> <p>Ch Freq 5.755 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p><b>Center 5.75500000 GHz</b></p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.755 GHz Span 80 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td><b>Occupied Bandwidth</b></td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td><b>35.8920 MHz</b></td> <td>x dB</td> <td>-6.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>17.762 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>36.185 MHz</td> <td></td> </tr> </table> <p>Freq/Channel</p> <p>Center Freq 5.75500000 GHz</p> <p>Start Freq 5.71500000 GHz</p> <p>Stop Freq 5.79500000 GHz</p> <p>CF Step 8.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>	<b>Occupied Bandwidth</b>	Occ BW % Pwr	99.00 %	<b>35.8920 MHz</b>	x dB	-6.00 dB	Transmit Freq Error	17.762 kHz		x dB Bandwidth	36.185 MHz	
<b>Occupied Bandwidth</b>	Occ BW % Pwr	99.00 %												
<b>35.8920 MHz</b>	x dB	-6.00 dB												
Transmit Freq Error	17.762 kHz													
x dB Bandwidth	36.185 MHz													
<p>5795 MHz</p>		<p>Agilent R T</p> <p>Ch Freq 5.795 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p><b>VBW 300.0000000 kHz</b></p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 1 dB</p> <p>Center 5.795 GHz Span 80 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 10 ms (1001 pts)</p> <table border="1"> <tr> <td><b>Occupied Bandwidth</b></td> <td>Occ BW % Pwr</td> <td>99.00 %</td> </tr> <tr> <td><b>36.1980 MHz</b></td> <td>x dB</td> <td>-6.00 dB</td> </tr> <tr> <td>Transmit Freq Error</td> <td>7.508 kHz</td> <td></td> </tr> <tr> <td>x dB Bandwidth</td> <td>35.949 MHz</td> <td></td> </tr> </table> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	<b>Occupied Bandwidth</b>	Occ BW % Pwr	99.00 %	<b>36.1980 MHz</b>	x dB	-6.00 dB	Transmit Freq Error	7.508 kHz		x dB Bandwidth	35.949 MHz	
<b>Occupied Bandwidth</b>	Occ BW % Pwr	99.00 %												
<b>36.1980 MHz</b>	x dB	-6.00 dB												
Transmit Freq Error	7.508 kHz													
x dB Bandwidth	35.949 MHz													

➤ 5725-5850MHz : 99% Bandwidth

Mode:		802.11a
5745MHz	<p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>x dB -26.00 dB</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.8185 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 40.504 kHz</p> <p>x dB Bandwidth 21.582 MHz</p>	<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5785MHz	<p>Agilent R T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>x dB -26.00 dB</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.785 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.8757 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 48.456 kHz</p> <p>x dB Bandwidth 21.646 MHz</p>	<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5825MHz	<p>Agilent R T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Center 5.82500000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.825 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 16.8065 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 47.488 kHz</p> <p>x dB Bandwidth 21.190 MHz</p>	<p>Freq/Channel</p> <p>Center Freq 5.82500000 GHz</p> <p>Start Freq 5.80500000 GHz</p> <p>Stop Freq 5.84500000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>

Mode:		802.11n-HT20
5745MHz		<p>Agilent R T</p> <p>Ch Freq 5.745 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>x dB -26.00 dB</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.745 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 18.1028 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 15.987 kHz</p> <p>x dB Bandwidth 21.678 MHz</p> <p>Meas Setup</p> <p>Avg Number 10 On Off</p> <p>Avg Mode Exp Repeat</p> <p>Max Hold On Off</p> <p>Occ BW % Pwr 99.00 %</p> <p>OBW Spar 40.0000000 MHz</p> <p>x dB -26.00 dB</p> <p>Optimize Ref Level</p>
5785MHz		<p>Agilent R T</p> <p>Ch Freq 5.785 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>x dB -26.00 dB</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.785 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 18.0016 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 19.205 kHz</p> <p>x dB Bandwidth 21.769 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5825MHz		<p>Agilent R T</p> <p>Ch Freq 5.825 GHz Trig Free</p> <p>Occupied Bandwidth</p> <p>x dB -26.00 dB</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log 10 dB/</p> <p>Offst 1 dB</p> <p>Center 5.825 GHz Span 40 MHz</p> <p>#Res BW 300 kHz #VBW 1 MHz Sweep 10 ms (1001 pts)</p> <p>Occupied Bandwidth 18.0204 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 1.620 kHz</p> <p>x dB Bandwidth 26.842 MHz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

Mode:		802.11n-HT40
5755 MHz		
5795 MHz		

## 9. Maximum Conducted Output Power

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### 9.1 Standard Applicable

Section 15.407(a) Power limits:

(1) For the band 5.15-5.25 GHz.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### 9.2 Test Procedure

According to KDB789033 D02 v02r01 section E, the following is the measurement procedure.

- (i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- (ii) Set RBW = 1 MHz.
- (iii) Set VBW  $\geq$  3 MHz.
- (iv) Number of points in sweep  $\geq$  2 Span / RBW. (This ensures that bin-to-bin spacing is  $\leq$  RBW/2, so that narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

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

(vii) If transmit duty cycle < 98 percent, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle  $\geq$  98 percent, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run”.

(viii) Trace average at least 100 traces in power averaging (i.e., RMS) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

### 9.3 Summary of Test Results/Plots

<b>U-NII-1:5150-5250MHz</b>				
Test mode	Frequency MHz	Output Power dBm	Output Power mW	Limit mW
802.11a	5180	11.85	15.31	250
	5200	11.36	13.68	250
	5240	11.68	14.72	250
802.11n-HT20	5180	11.13	12.97	250
	5200	11.54	14.26	250
	5240	11.51	14.16	250
802.11n-HT40	5190	11.24	13.30	250
	5230	11.90	15.49	250

<b>U-NII-2A: 5250-5350MHz</b>				
Test mode	Frequency MHz	Output Power dBm	Output Power mW	Limit mW
802.11a	5260	12.07	16.11	250
	5280	12.13	16.33	250
	5320	12.16	16.44	250
802.11n-HT20	5260	12.56	18.03	250
	5280	12.50	17.78	250
	5320	12.04	16.00	250
802.11n-HT40	5270	11.38	13.74	250
	5310	11.02	12.65	250

<b>U-NII-2C: 5470-5725MHz</b>				
Test mode	Frequency MHz	Output Power dBm	Output Power mW	Limit mW
802.11a	5500	12.22	16.67	250
	5600	12.53	17.91	250
	5700	12.60	18.20	250
802.11n-HT20	5500	12.04	16.00	250
	5600	12.64	18.37	250
	5700	12.65	18.41	250
802.11n-HT40	5510	12.21	16.63	250
	5590	12.67	18.49	250
	5670	12.70	18.62	250

<b>U-NII-3: 5725-5850MHz</b>				
Test mode	Frequency MHz	Output Power dBm	Output Power mW	Limit mW
802.11a	5745	11.64	14.59	1000
	5785	11.48	14.06	1000
	5825	11.62	14.52	1000
802.11n-HT20	5745	11.13	12.97	1000
	5785	11.50	14.13	1000
	5825	11.72	14.86	1000
802.11n-HT40	5755	11.25	13.34	1000
	5795	11.38	13.74	1000

➤ 5150-5250MHz

Mode:		802.11a
5180MHz		<p>Agilent R T Trace/View</p> <p>Ch Freq 5.18 GHz Trig Free</p> <p>Channel Power [ ] [ ]</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offset 1 dB</p> <p>Center 5.18 GHz Span 40 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>11.85 dBm / 20.0000 MHz -61.17 dBm/Hz</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5200MHz		<p>Agilent R T Trace/View</p> <p>Ch Freq 5.2 GHz Trig Free</p> <p>Channel Power [ ] [ ]</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offset 1 dB</p> <p>Center 5.2 GHz Span 40 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>11.36 dBm / 20.0000 MHz -61.65 dBm/Hz</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5240MHz		<p>Agilent R T Trace/View</p> <p>Ch Freq 5.24 GHz Trig Free</p> <p>Channel Power [ ] [ ]</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offset 1 dB</p> <p>Center 5.24 GHz Span 40 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>11.68 dBm / 20.0000 MHz -61.33 dBm/Hz</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>



Mode:		802.11n-HT20
5180MHz		<p>Freq/Channel</p> <p>Center Freq 5.18000000 GHz</p> <p>Start Freq 5.16000000 GHz</p> <p>Stop Freq 5.20000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>
5200MHz		<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5240MHz		<p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

Mode:		802.11n-HT40
<p>5190 MHz</p>		<p>Agilent R T</p> <p>Ch Freq 5.19 GHz Trig Free</p> <p>Channel Power</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offset 1 dB</p> <p>Center 5.19 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>11.24 dBm / 40.0000 MHz -64.78 dBm/Hz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>5230 MHz</p>		<p>Agilent R T</p> <p>Ch Freq 5.23 GHz Trig Free</p> <p>Channel Power</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offset 1 dB</p> <p>Center 5.23 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>11.90 dBm / 40.0000 MHz -64.12 dBm/Hz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

➤ 5250-5350MHz

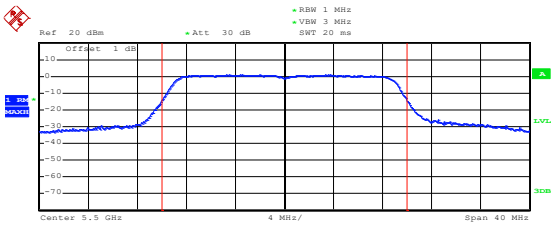
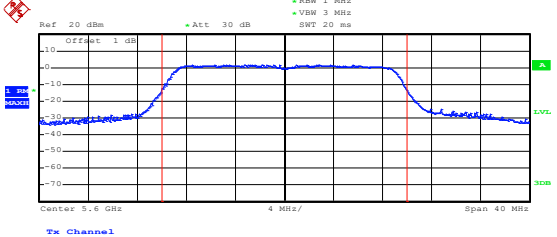
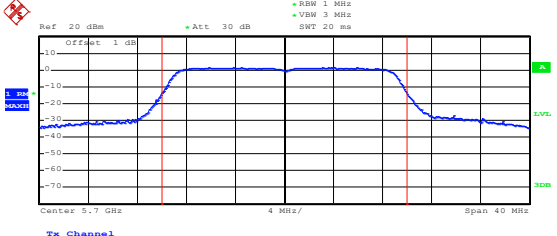
Mode:		802.11a
5260MHz		<p>Agilent R T Trace/View</p> <p>Ch Freq 5.26 GHz Trig Free</p> <p>Channel Power [ ] [ ]</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>Center 5.26 GHz Span 40 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>12.07 dBm / 20.0000 MHz -60.95 dBm/Hz</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5280MHz		<p>Agilent R T Trace/View</p> <p>Ch Freq 5.28 GHz Trig Free</p> <p>Channel Power [ ] [ ]</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>Center 5.28 GHz Span 40 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>12.13 dBm / 20.0000 MHz -60.88 dBm/Hz</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
5320MHz		<p>Agilent R T Trace/View</p> <p>Ch Freq 5.32 GHz Trig Free</p> <p>Channel Power [ ] [ ]</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>Center 5.32 GHz Span 40 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>12.16 dBm / 20.0000 MHz -60.99 dBm/Hz</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>

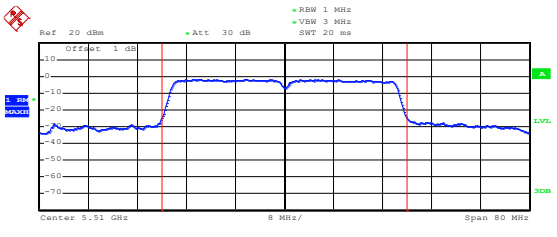
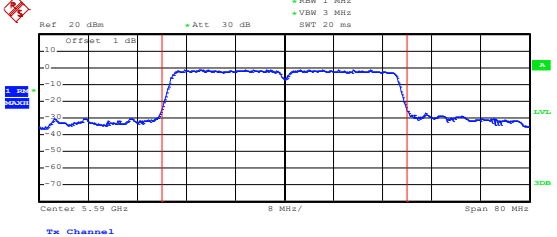
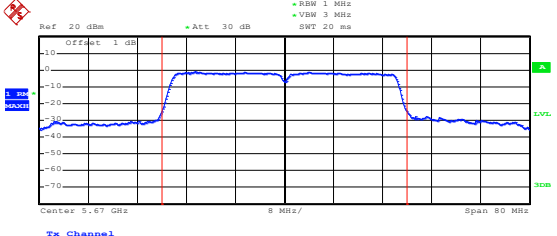
Mode:		802.11n-HT20
5260MHz	<p>Agilent R T</p> <p>Ch Freq 5.26 GHz Trig Free</p> <p>Channel Power</p> <p>Center 5.26000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>Center 5.26 GHz Span 40 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>12.56 dBm / 20.0000 MHz -60.45 dBm/Hz</p> <p>Freq/Channel</p> <p>Center Freq 5.26000000 GHz</p> <p>Start Freq 5.24000000 GHz</p> <p>Stop Freq 5.28000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>	
5280MHz	<p>Agilent R T</p> <p>Ch Freq 5.28 GHz Trig Free</p> <p>Channel Power</p> <p>Center 5.28000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>Center 5.28 GHz Span 40 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>12.50 dBm / 20.0000 MHz -60.51 dBm/Hz</p> <p>Freq/Channel</p> <p>Center Freq 5.28000000 GHz</p> <p>Start Freq 5.26000000 GHz</p> <p>Stop Freq 5.30000000 GHz</p> <p>CF Step 4.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>	
5320MHz	<p>Agilent R T</p> <p>Ch Freq 5.32 GHz Trig Free</p> <p>Channel Power</p> <p>Center 5.32 GHz Span 40 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>12.04 dBm / 20.0000 MHz -60.97 dBm/Hz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>	

Mode:		802.11n-HT40
<p>5270MHz</p>		<p>Agilent R T</p> <p>Ch Freq 5.27 GHz Trig Free</p> <p>Channel Power</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>Center 5.27 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>11.38 dBm / 40.0000 MHz -64.64 dBm/Hz</p> <p>Trace/View</p> <p>Trace 1 2 3</p> <p>Clear Write</p> <p>Max Hold</p> <p>Min Hold</p> <p>View</p> <p>Blank</p> <p>More 1 of 2</p>
<p>5310MHz</p>		<p>Agilent R T</p> <p>Ch Freq 5.31 GHz Trig Free</p> <p>Channel Power</p> <p>Center 5.31000000 GHz</p> <p>Ref 20 dBm Atten 30 dB</p> <p>#Avg Log 10 dB/ Offst 1 dB</p> <p>Center 5.31 GHz Span 80 MHz</p> <p>#Res BW 1 MHz #VBW 3 MHz Sweep 20 ms (1001 pts)</p> <p>Channel Power Power Spectral Density</p> <p>11.02 dBm / 40.0000 MHz -65.00 dBm/Hz</p> <p>Freq/Channel</p> <p>Center Freq 5.31000000 GHz</p> <p>Start Freq 5.27000000 GHz</p> <p>Stop Freq 5.35000000 GHz</p> <p>CF Step 8.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Scale Type Log Lin</p>

➤ 5470-5725MHz

Mode:		802.11a
5500MHz	<p style="text-align: center;">Date: 17.NOV.2020 14:57:21</p>	
5600MHz	<p style="text-align: center;">Date: 23.NOV.2020 09:33:50</p>	
5700MHz	<p style="text-align: center;">Date: 17.NOV.2020 15:06:23</p>	

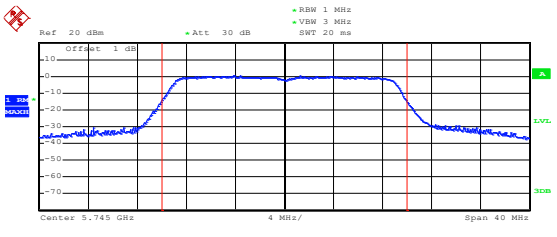
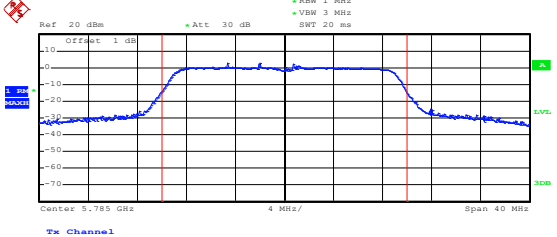
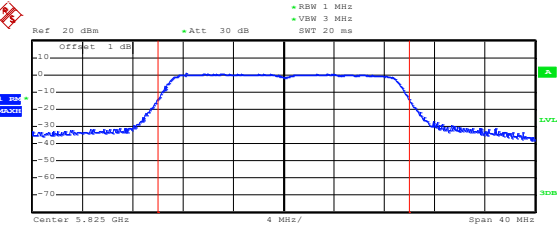
Mode:		802.11n-HT20
5500MHz	 <p style="text-align: center;">Date: 17.NOV.2020 15:10:30</p>	
5600MHz	 <p style="text-align: center;">Date: 23.NOV.2020 09:35:10</p>	
5700MHz	 <p style="text-align: center;">Date: 17.NOV.2020 15:07:40</p>	

Mode:		802.11n-HT40
5510MHz	 <p style="text-align: center;">Date: 17.NOV.2020 15:14:59</p>	
5590MHz	 <p style="text-align: center;">Date: 23.NOV.2020 09:37:40</p>	
5670MHz	 <p style="text-align: center;">Date: 17.NOV.2020 15:20:31</p>	



➤ 5725-5850MHz

Mode:		802.11a
5745MHz	<p style="text-align: center;">Date: 24.SEP.2020 11:17:34</p>	
5785MHz	<p style="text-align: center;">Date: 24.SEP.2020 11:19:41</p>	
5825MHz	<p style="text-align: center;">Date: 24.SEP.2020 11:20:24</p>	

Mode:		802.11n-HT20
5745MHz	 <p style="text-align: center;">Date: 24.SEP.2020 11:23:12</p>	
5785MHz	 <p style="text-align: center;">Date: 24.SEP.2020 11:22:34</p>	
5825MHz	 <p style="text-align: center;">Date: 24.SEP.2020 11:21:35</p>	

Mode:		802.11n-HT40
5755 MHz	<p>Ref: 20 dBm    +Att: 30 dB    RBW: 1 MHz    VBW: 3 MHz    SWT: 20 ms</p> <p>Offset: 1 dB</p> <p>Center: 5.755 GHz    8 MHz/    Span: 80 MHz</p> <p>Tx Channel Bandwidth: 40 MHz    Power: 11.25 dBm</p> <p>Date: 24.SEP.2020 11:15:22</p>	
5795 MHz	<p>Ref: 20 dBm    +Att: 30 dB    RBW: 1 MHz    VBW: 3 MHz    SWT: 20 ms</p> <p>Offset: 1 dB</p> <p>Center: 5.795 GHz    8 MHz/    Span: 80 MHz</p> <p>Tx Channel Bandwidth: 40 MHz    Power: 11.38 dBm</p> <p>Date: 24.SEP.2020 11:16:16</p>	

## 10. Radiated Spurious Emissions

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### 10.1 Standard Applicable

According to §15.407(b), undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of  $-27$  dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
  - (i) All emissions shall be limited to a level of  $-27$  dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

According to §15.407(b)(6), Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209. Further, any U-NII devices using an AC power line are required to comply also with the conducted limits set forth in §15.207.

According to §15.407(b)(7), The provisions of §15.205 apply to intentional radiators operating under this section.  
789033 D02 v02r01 General UNII Test Procedures New Rules v01

If radiated measurements are performed, field strength is then converted to EIRP as follows:

$$\text{EIRP} = ((E*d)^2) / 30$$

where:

- E is the field strength in V/m;
- d is the measurement distance in meters;
- EIRP is the equivalent isotropically radiated power in watts.

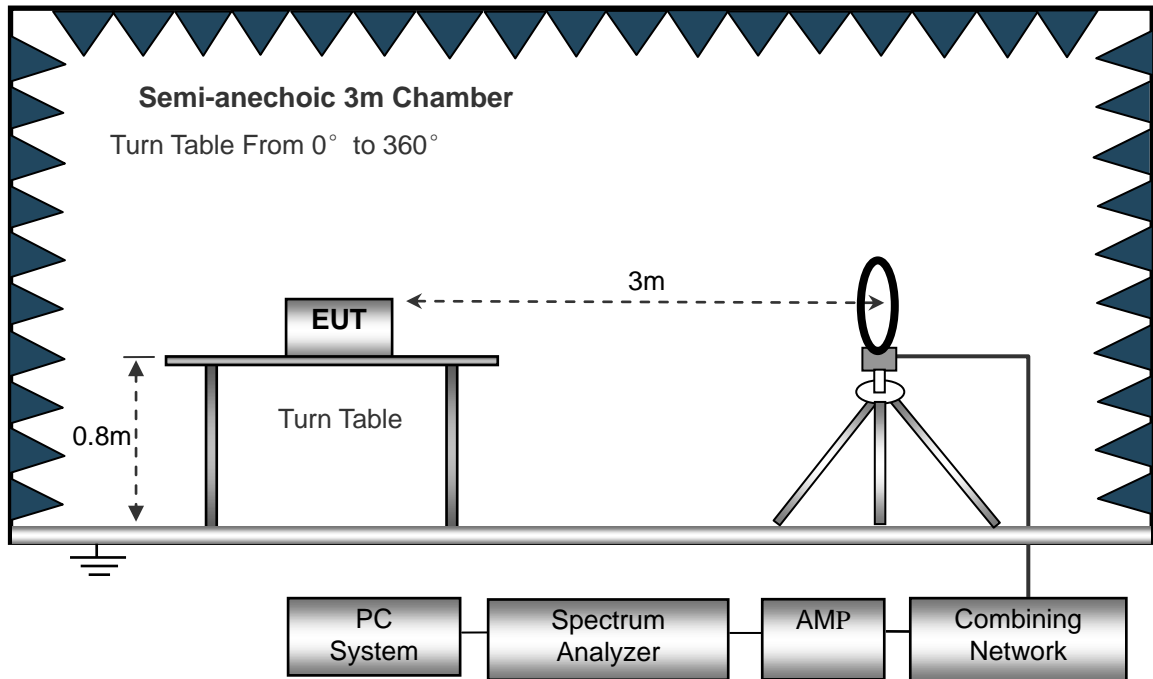
### 10.2 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.407(b)(6) and FCC Part 15.209 Limit..

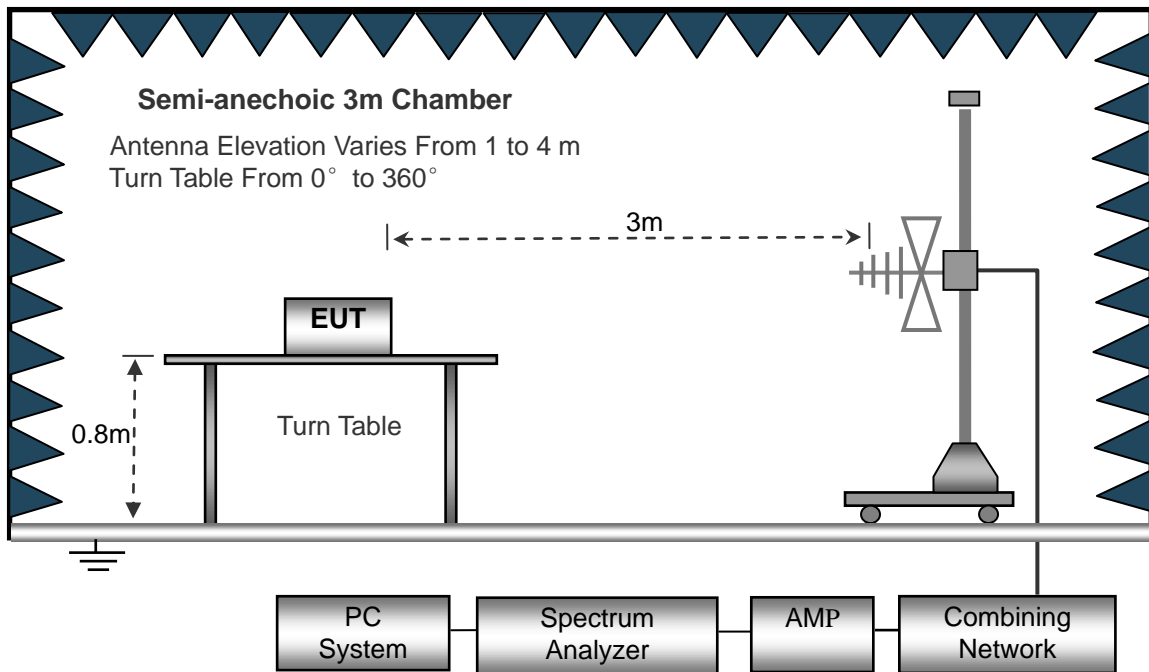
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

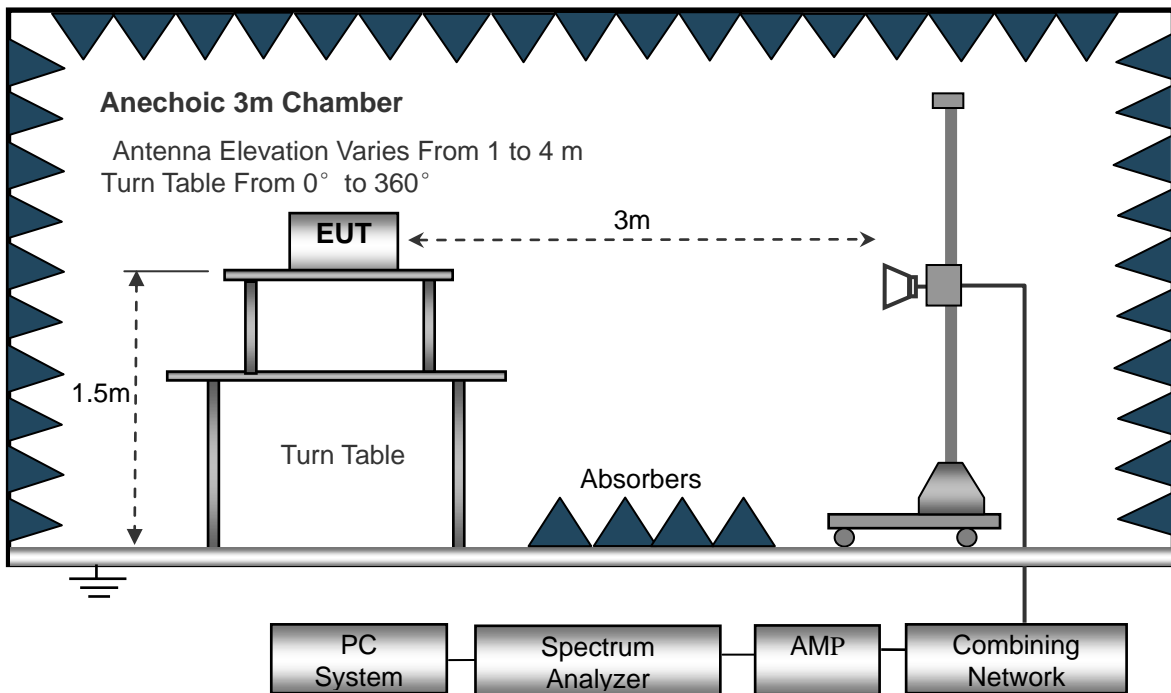
The test setup for emission measurement below 30MHz..



The test setup for emission measurement from 30 MHz to 1 GHz..



The test setup for emission measurement above 1 GHz..



### 10.3 Test Receiver Setup

During the radiated emission test for above 1GHz, the test receiver was set with the following configurations:

For peak detector:

RBW = 1000kHz, VBW = 3000kHz, Sweep Time = Auto

For average detector:

RBW = 1000kHz, VBW = 10Hz, Sweep Time = Auto

### 10.4 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dB $\mu$ V means the emission is 6dB $\mu$ V below the maximum limit for Class B. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15 Limit}$$

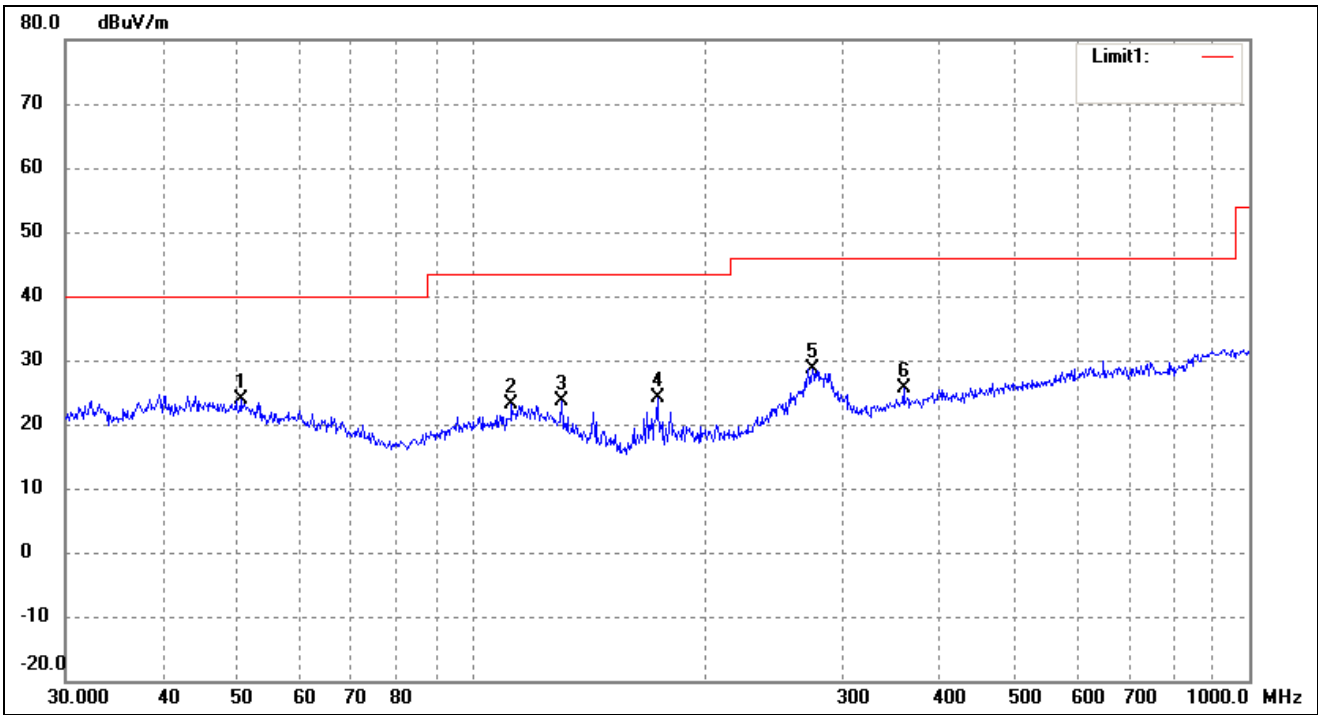
### 10.5 Summary of Test Results/Plots

*Note: this EUT was tested in 3 orthogonal positions and the worst case position data was reported.*

➤ Spurious Emission From 30 MHz to 1 GHz

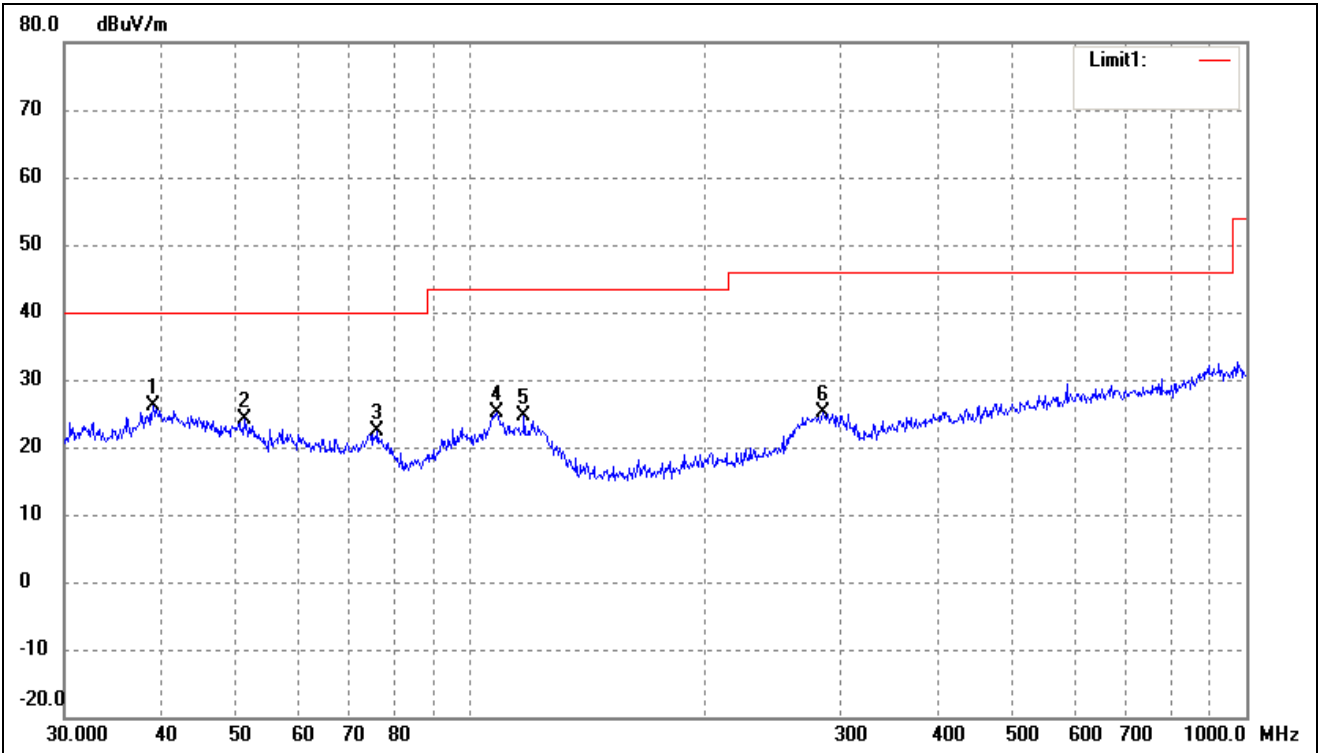
➤ ANT 1\_5150-5250MHz

802.11a			
Test Channel	5180MHz(Worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	50.4089	35.45	-11.65	23.80	40.00	-16.20	-	-	peak
2	112.5244	36.67	-13.56	23.11	43.50	-20.39	-	-	peak
3	130.3789	40.47	-16.94	23.53	43.50	-19.97	-	-	peak
4	173.2051	38.93	-14.79	24.14	43.50	-19.36	-	-	peak
5	274.1939	39.45	-10.77	28.68	46.00	-17.32	-	-	peak
6	359.1860	32.95	-7.34	25.61	46.00	-20.39	-	-	peak

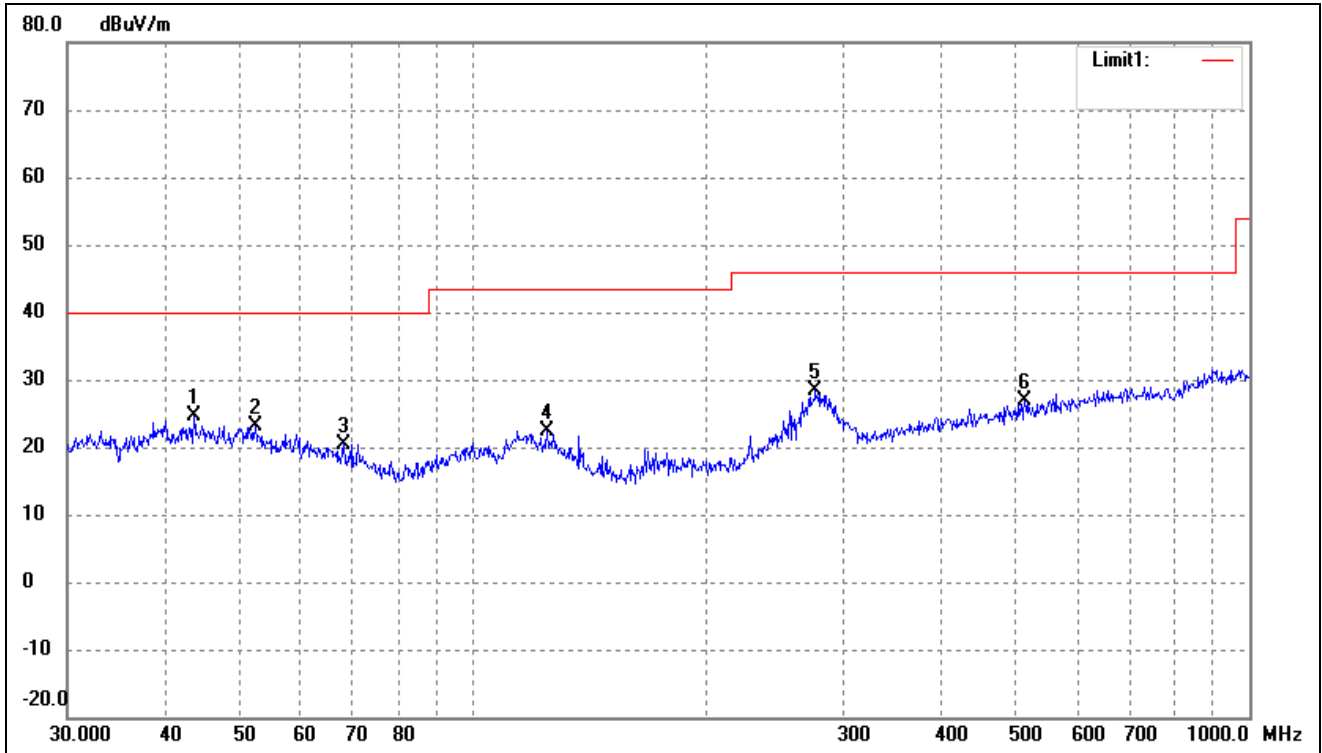
802.11a			
Test Channel	5180MHz(Worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.0245	38.37	-12.35	26.02	40.00	-13.98	-	-	peak
2	51.1209	35.87	-11.85	24.02	40.00	-15.98	-	-	peak
3	75.9773	38.66	-16.18	22.48	40.00	-17.52	-	-	peak
4	108.2667	38.35	-13.31	25.04	43.50	-18.46	-	-	peak
5	117.3603	38.56	-14.04	24.52	43.50	-18.98	-	-	peak
6	284.9767	35.06	-10.03	25.03	46.00	-20.97	-	-	peak

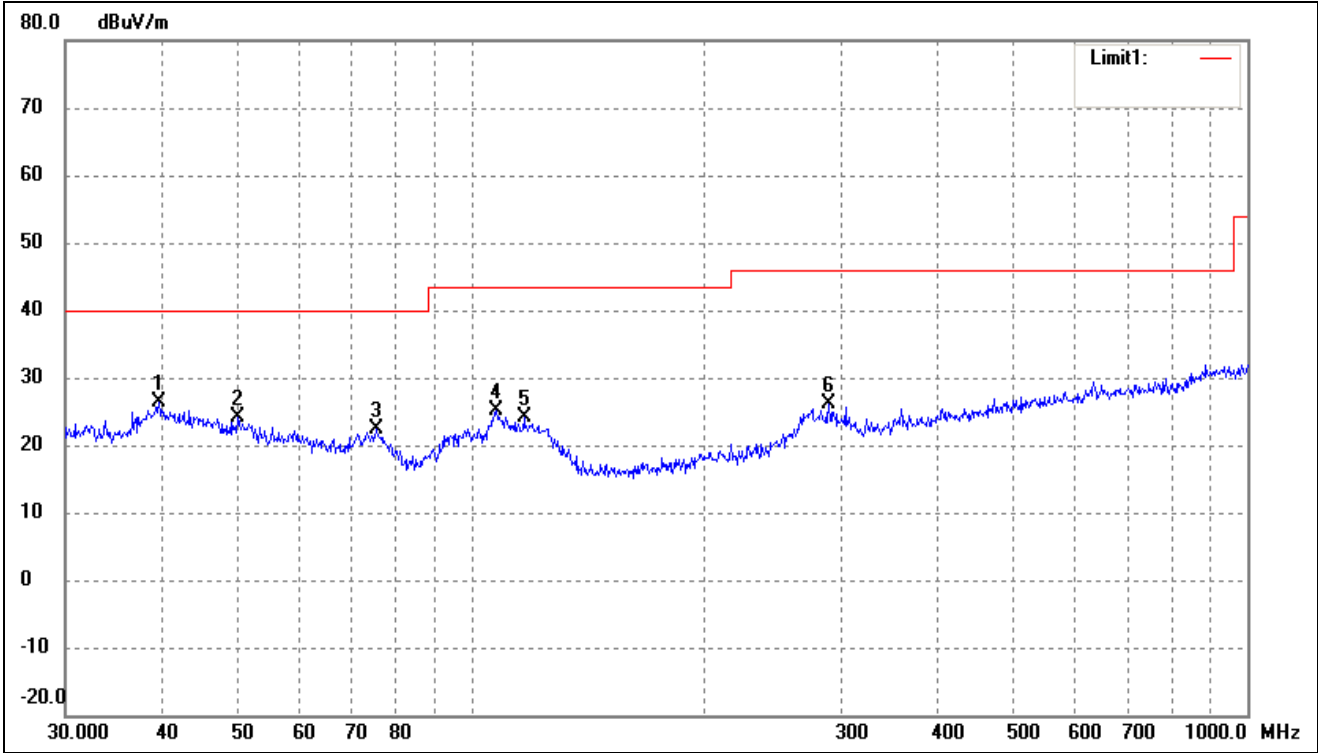


802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Horizontal



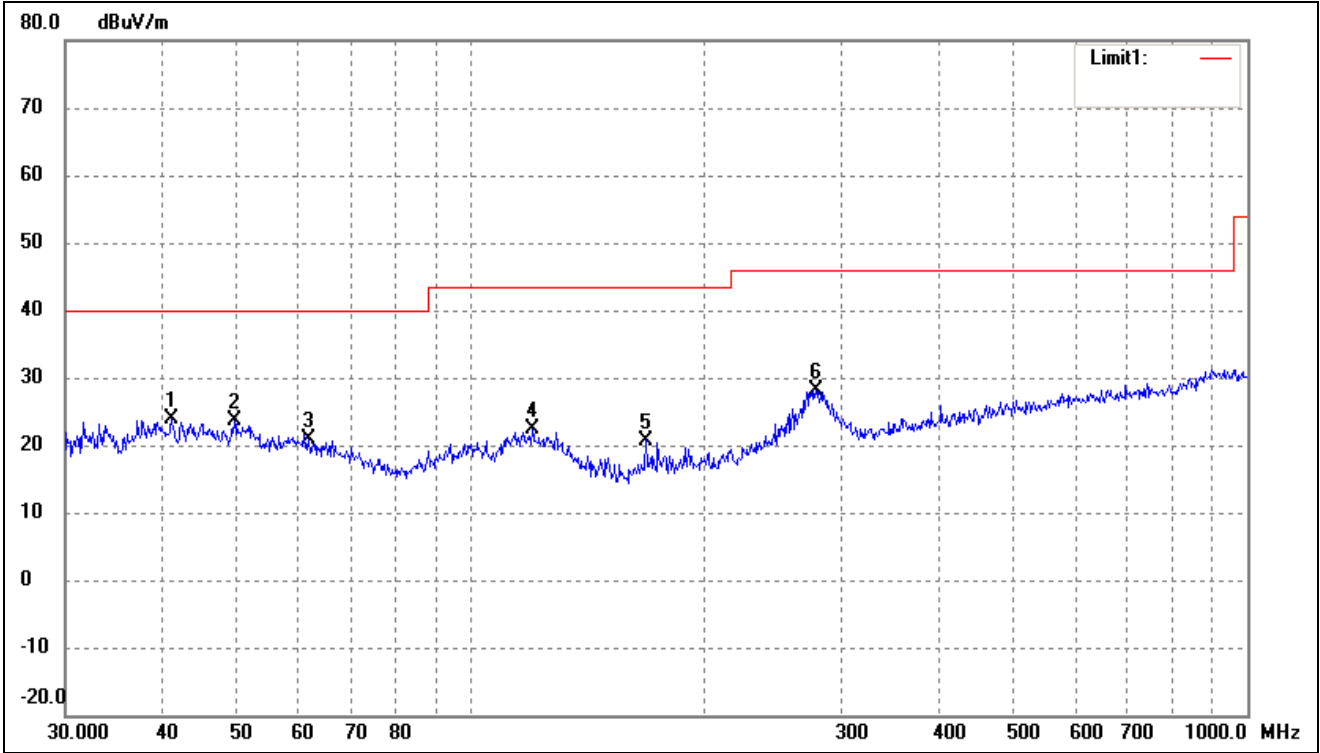
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	43.6585	36.35	-11.84	24.51	40.00	-15.49	-	-	peak
2	52.3913	35.40	-12.20	23.20	40.00	-16.80	-	-	peak
3	68.1514	34.87	-14.37	20.50	40.00	-19.50	-	-	peak
4	124.5690	37.92	-15.52	22.40	43.50	-21.10	-	-	peak
5	276.1236	39.01	-10.68	28.33	46.00	-17.67	-	-	peak
6	513.6331	30.91	-4.12	26.79	46.00	-19.21	-	-	peak

802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Vertical



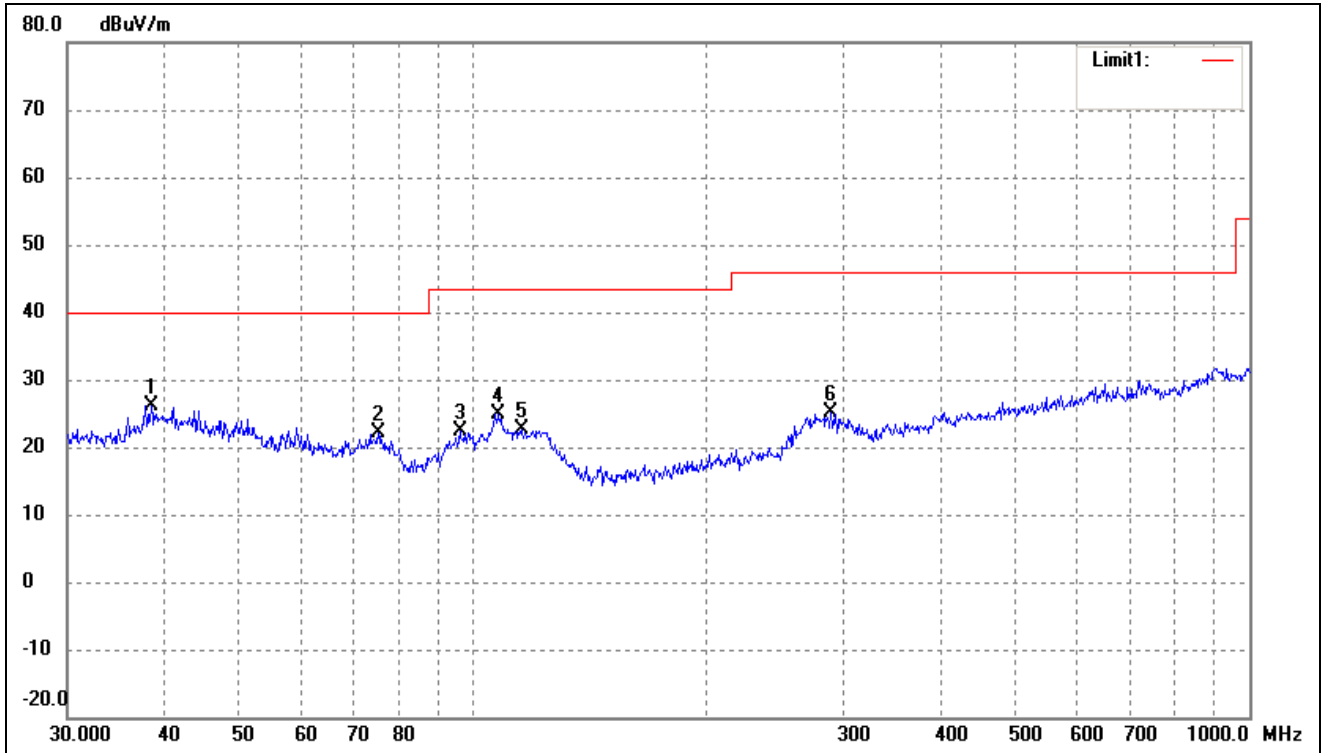
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.5757	38.56	-12.14	26.42	40.00	-13.58	-	-	peak
2	50.0566	35.56	-11.55	24.01	40.00	-15.99	-	-	peak
3	75.4464	38.41	-16.11	22.30	40.00	-17.70	-	-	peak
4	107.8877	38.34	-13.31	25.03	43.50	-18.47	-	-	peak
5	116.9495	38.23	-13.99	24.24	43.50	-19.26	-	-	peak
6	289.0021	35.76	-9.72	26.04	46.00	-19.96	-	-	peak

802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	41.1320	35.79	-11.94	23.85	40.00	-16.15	-	-	peak
2	49.5328	35.18	-11.56	23.62	40.00	-16.38	-	-	peak
3	61.7781	34.23	-13.32	20.91	40.00	-19.09	-	-	peak
4	119.8556	36.78	-14.28	22.50	43.50	-21.00	-	-	peak
5	167.8243	35.89	-15.14	20.75	43.50	-22.75	-	-	peak
6	278.0669	38.70	-10.53	28.17	46.00	-17.83	-	-	peak

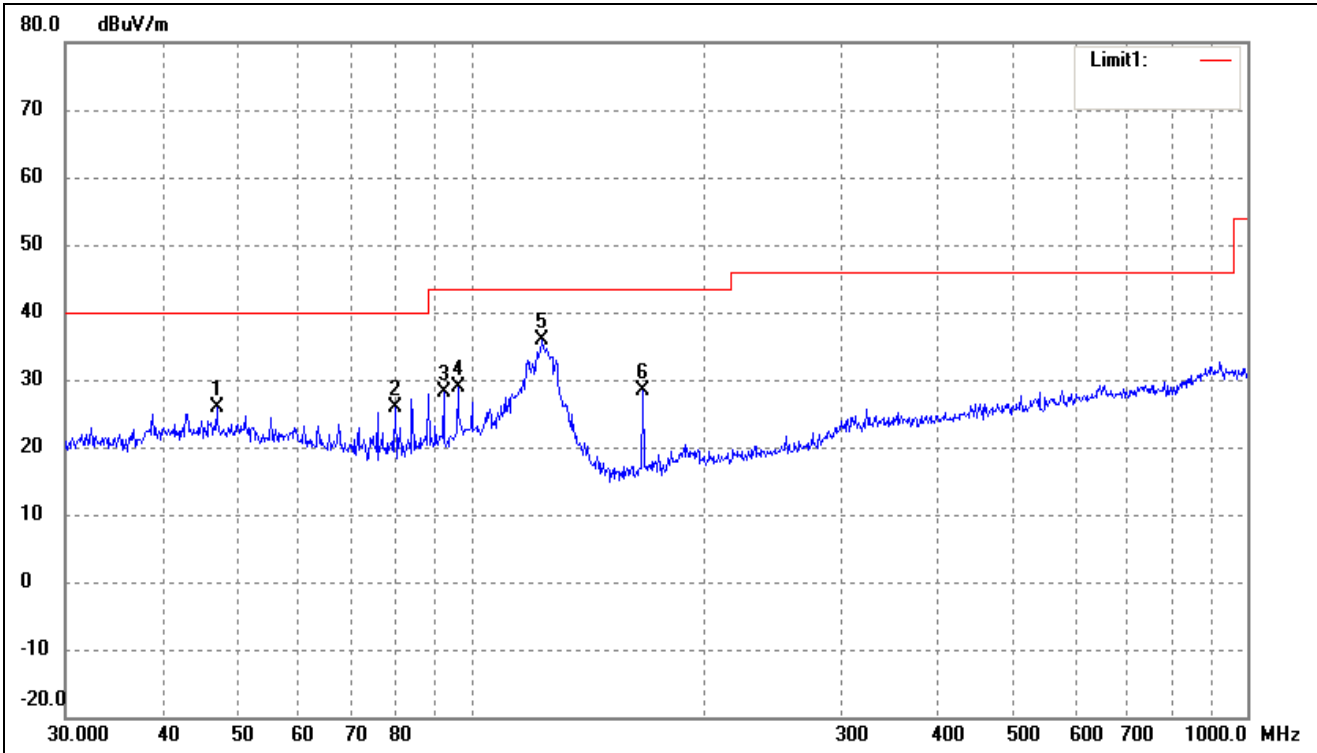
802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	38.4809	38.75	-12.56	26.19	40.00	-13.81	-	-	peak
2	75.4464	38.16	-16.11	22.05	40.00	-17.95	-	-	peak
3	96.0986	36.22	-13.96	22.26	43.50	-21.24	-	-	peak
4	107.8877	38.15	-13.31	24.84	43.50	-18.66	-	-	peak
5	115.3205	36.35	-13.84	22.51	43.50	-20.99	-	-	peak
6	289.0021	34.74	-9.72	25.02	46.00	-20.98	-	-	peak

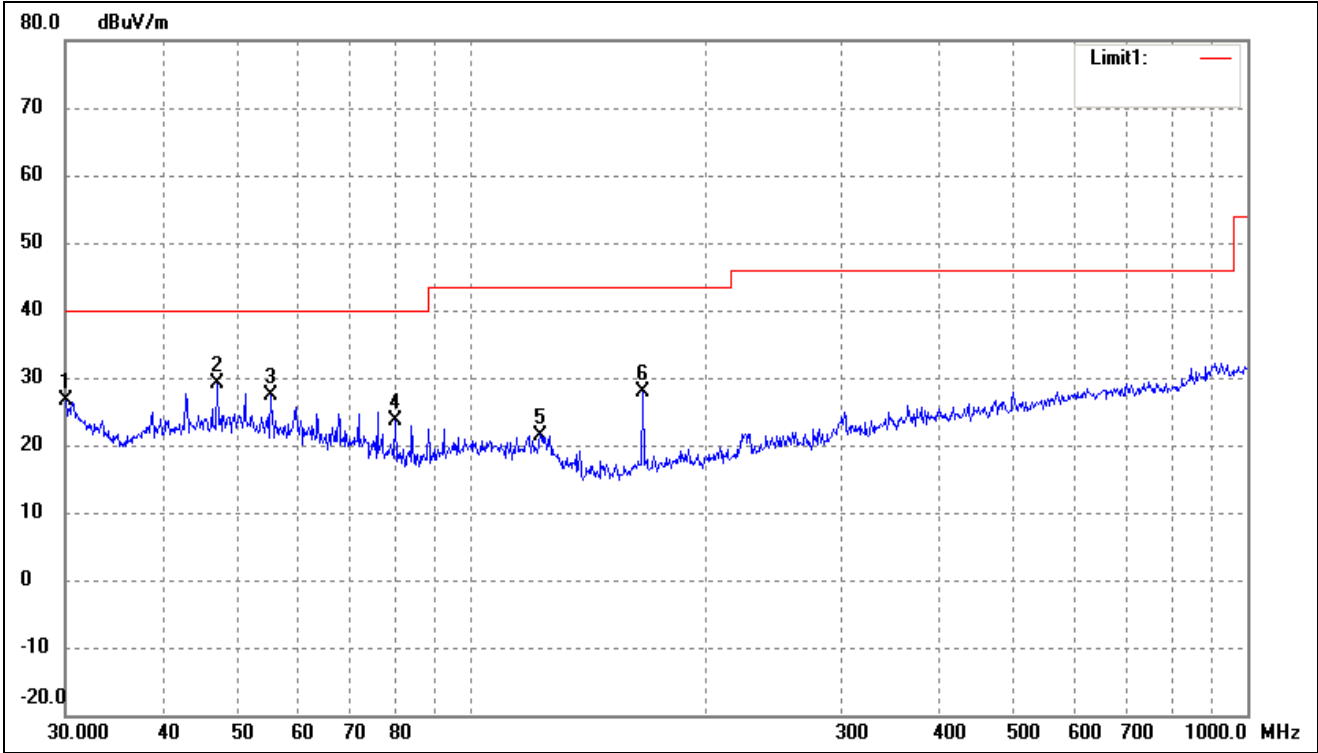
➤ ANT 1\_5250-5350MHz

802.11a			
Test Channel	5260MHz(Worst case)	Polarity:	Horizontal



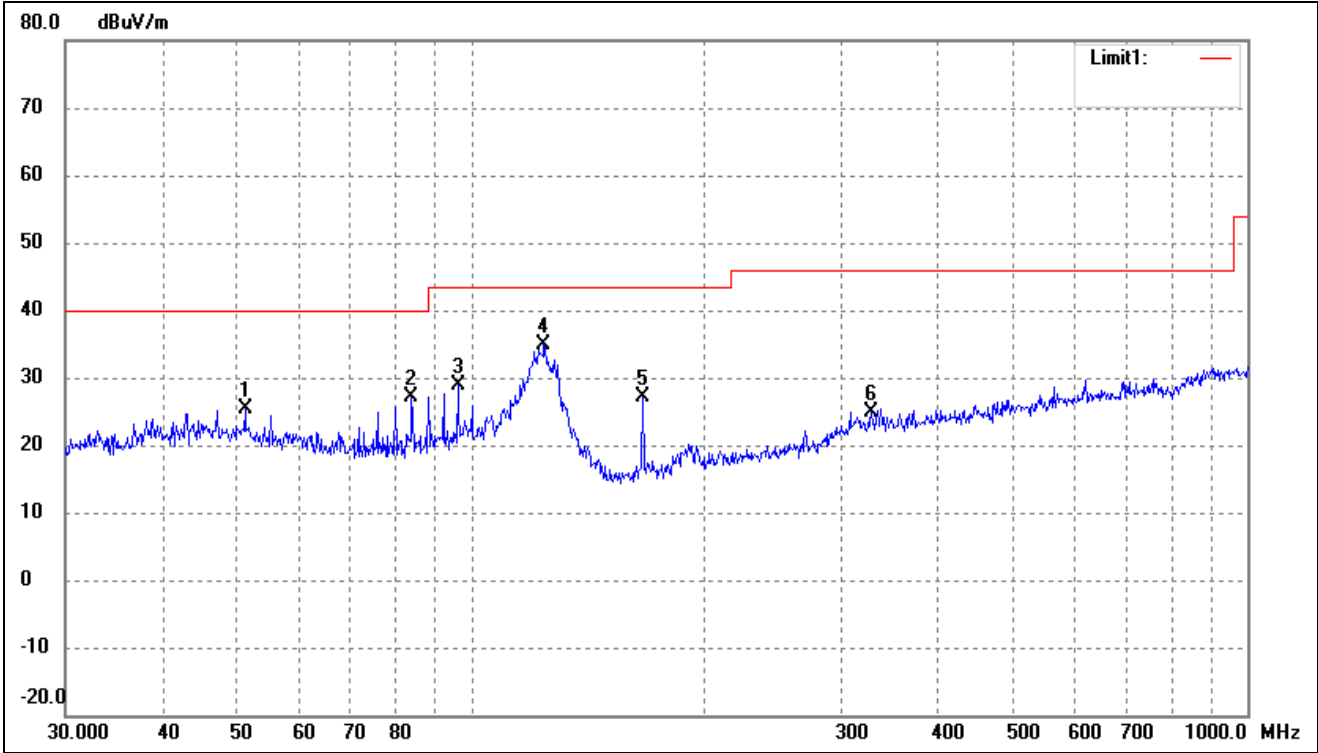
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.9948	37.46	-11.69	25.77	40.00	-14.23	-	-	peak
2	79.8003	42.53	-16.77	25.76	40.00	-14.24	-	-	peak
3	92.1388	42.80	-14.61	28.19	43.50	-15.31	-	-	peak
4	96.0986	42.73	-13.96	28.77	43.50	-14.73	-	-	peak
5	123.2655	51.10	-15.17	35.93	43.50	-7.57	-	-	peak
6	166.6514	43.50	-15.20	28.30	43.50	-15.20	-	-	peak

802.11a			
Test Channel	5260MHz(Worst case)	Polarity:	Vertical



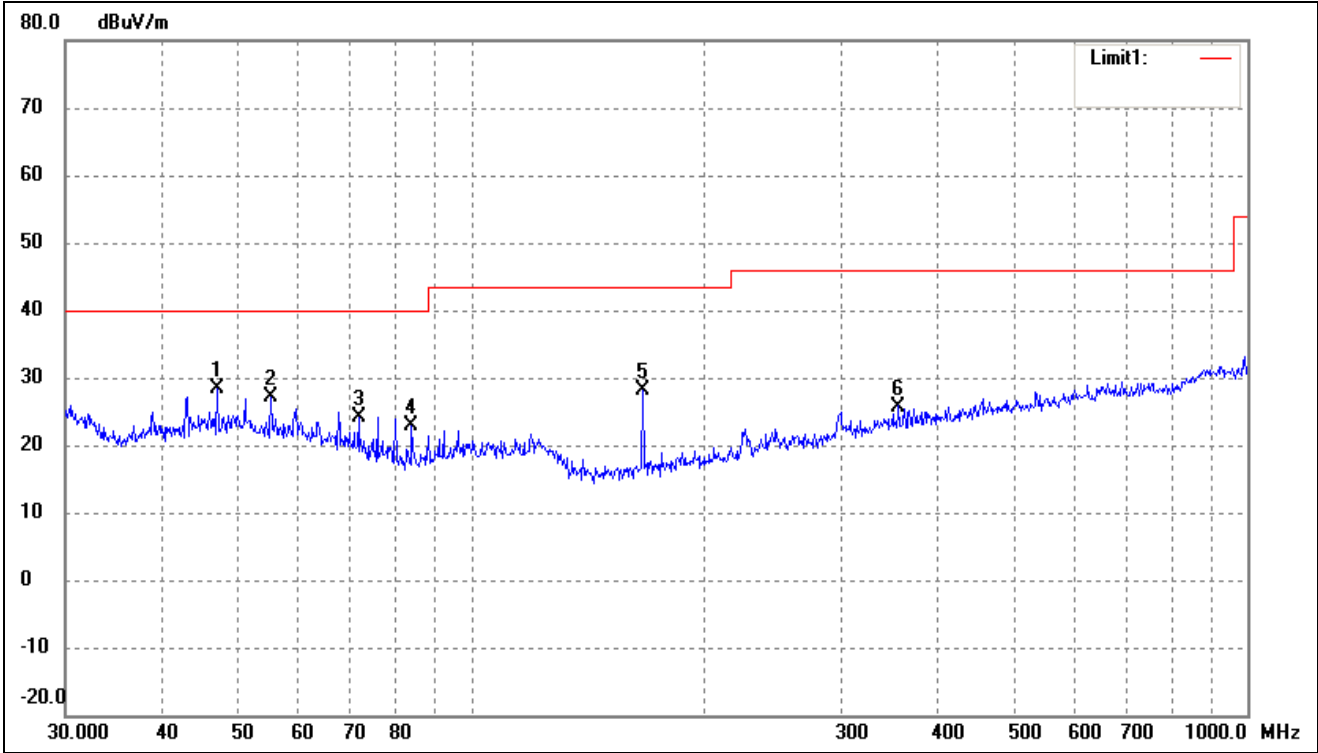
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	30.1054	40.71	-14.15	26.56	40.00	-13.44	-	-	peak
2	46.9948	40.86	-11.69	29.17	40.00	-10.83	-	-	peak
3	55.2207	40.30	-12.95	27.35	40.00	-12.65	-	-	peak
4	79.8003	40.47	-16.77	23.70	40.00	-16.30	-	-	peak
5	122.8340	36.55	-15.05	21.50	43.50	-22.00	-	-	peak
6	166.6514	43.03	-15.20	27.83	43.50	-15.67	-	-	peak

802.11n-HT20			
Test Channel	5260MHz(Worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	51.1209	37.13	-11.85	25.28	40.00	-14.72	-	-	peak
2	83.8156	43.32	-16.22	27.10	40.00	-12.90	-	-	peak
3	96.0986	42.75	-13.96	28.79	43.50	-14.71	-	-	peak
4	124.1330	50.40	-15.40	35.00	43.50	-8.50	-	-	peak
5	166.0680	42.40	-15.23	27.17	43.50	-16.33	-	-	peak
6	327.8873	33.73	-8.78	24.95	46.00	-21.05	-	-	peak

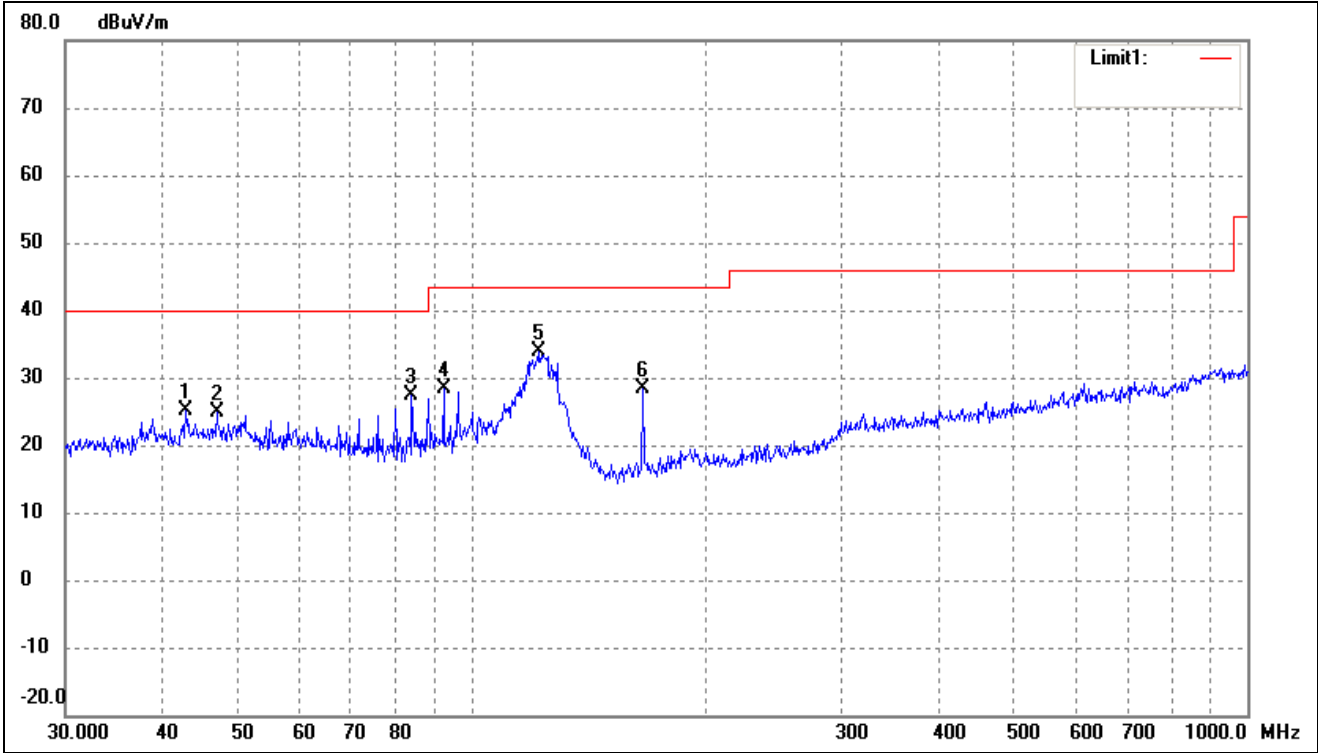
802.11n-HT20			
Test Channel	5260MHz(Worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.9948	40.02	-11.69	28.33	40.00	-11.67	-	-	peak
2	55.2207	40.08	-12.95	27.13	40.00	-12.87	-	-	peak
3	71.5806	39.24	-15.08	24.16	40.00	-15.84	-	-	peak
4	83.8156	39.01	-16.22	22.79	40.00	-17.21	-	-	peak
5	166.6514	43.43	-15.20	28.23	43.50	-15.27	-	-	peak
6	355.4273	33.13	-7.38	25.75	46.00	-20.25	-	-	peak

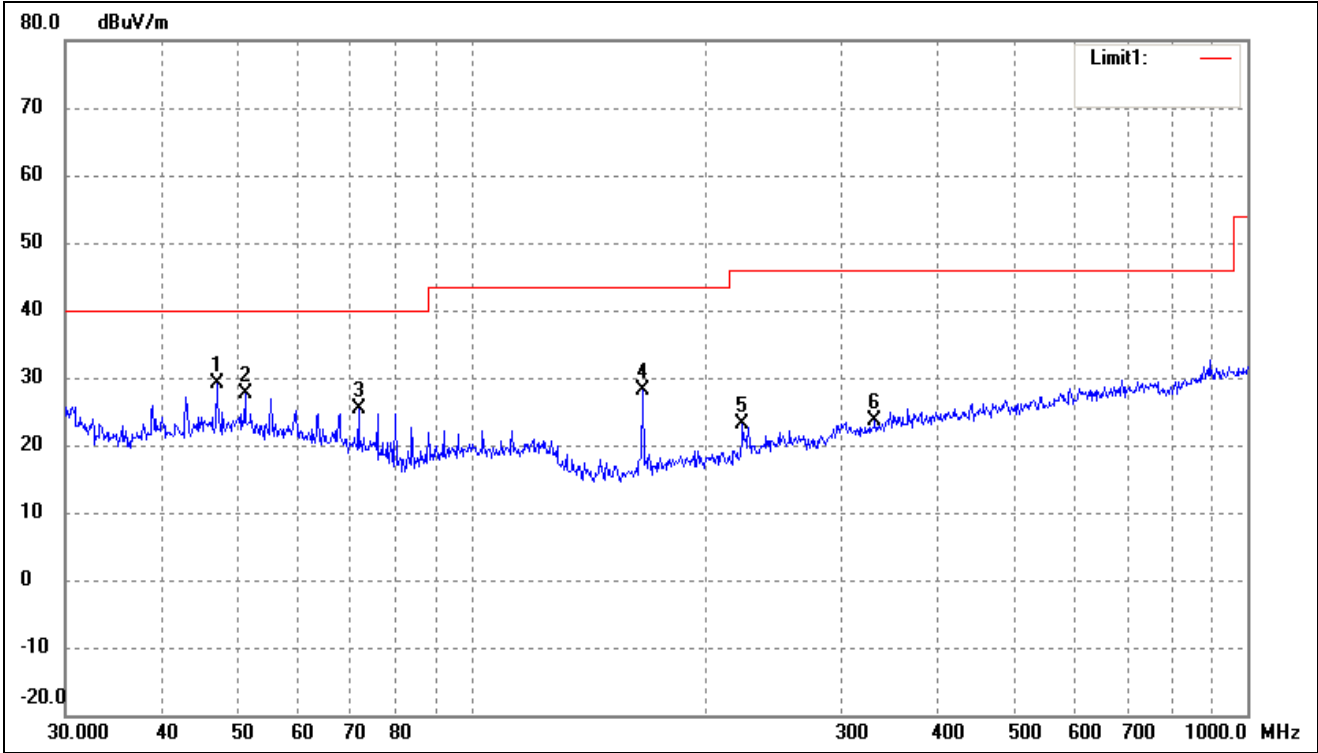


802.11n-HT40			
Test Channel	5270MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	42.8998	36.96	-11.87	25.09	40.00	-14.91	-	-	peak
2	46.9948	36.63	-11.69	24.94	40.00	-15.06	-	-	peak
3	83.8156	43.54	-16.22	27.32	40.00	-12.68	-	-	peak
4	92.1388	42.88	-14.61	28.27	43.50	-15.23	-	-	peak
5	122.4040	48.86	-14.93	33.93	43.50	-9.57	-	-	peak
6	166.6514	43.56	-15.20	28.36	43.50	-15.14	-	-	peak

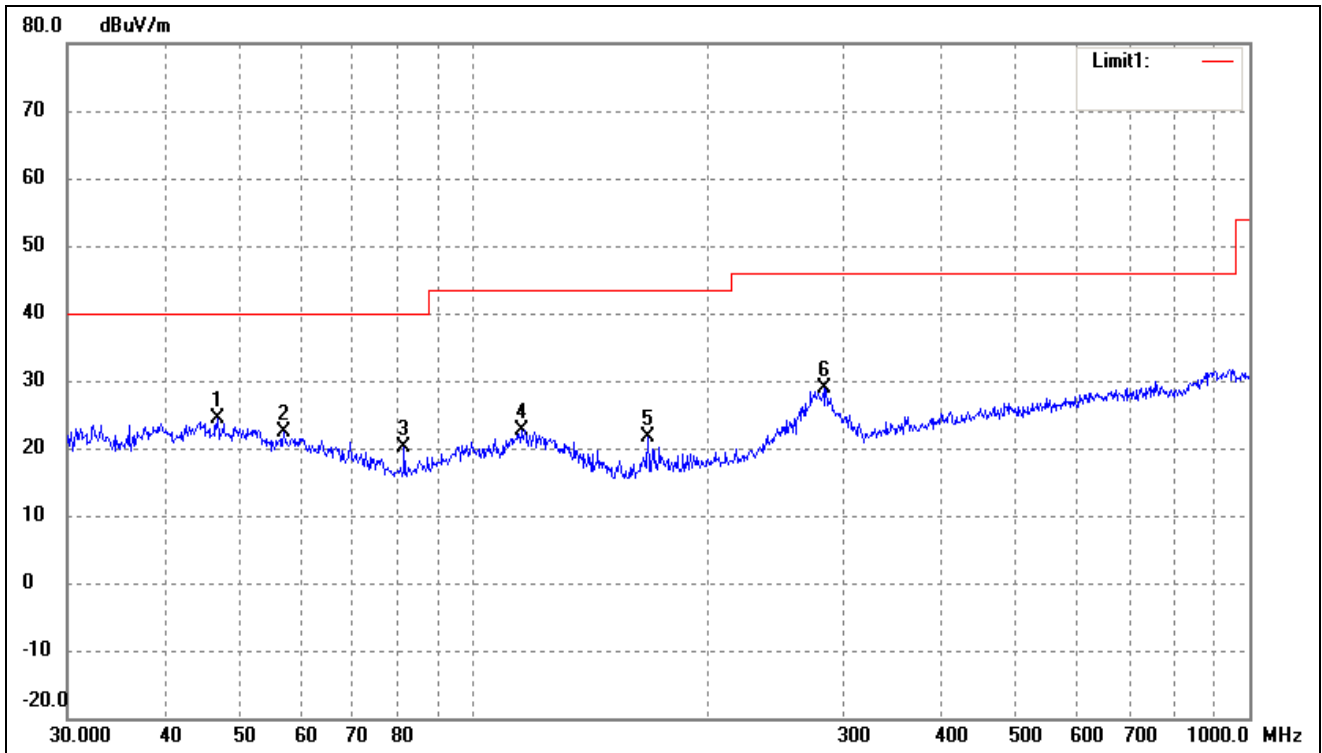
802.11n-HT40			
Test Channel	5270MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.9948	40.83	-11.69	29.14	40.00	-10.86	-	-	peak
2	51.1209	39.38	-11.85	27.53	40.00	-12.47	-	-	peak
3	71.5806	40.37	-15.08	25.29	40.00	-14.71	-	-	peak
4	166.6514	43.36	-15.20	28.16	43.50	-15.34	-	-	peak
5	223.7334	35.22	-12.15	23.07	46.00	-22.93	-	-	peak
6	331.3547	32.28	-8.57	23.71	46.00	-22.29	-	-	peak

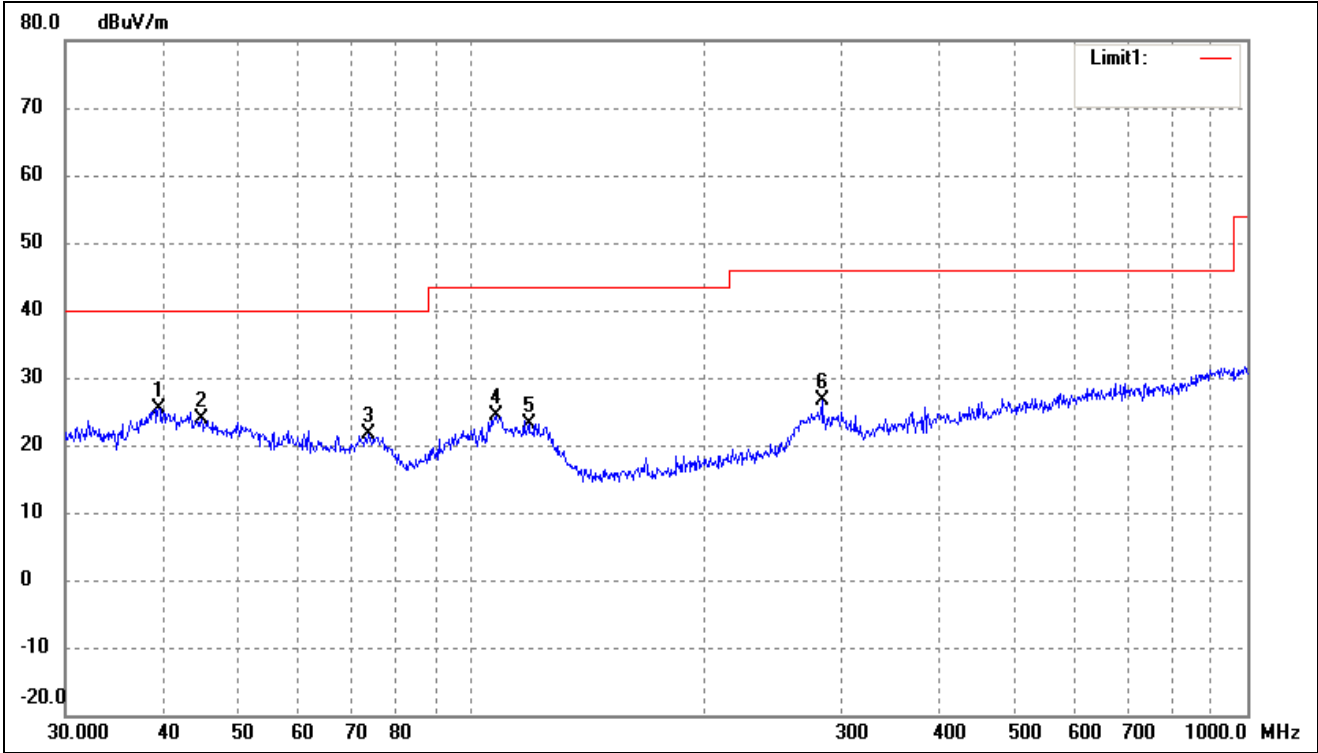
➤ ANT 1\_5470-5725MHz

802.11a			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



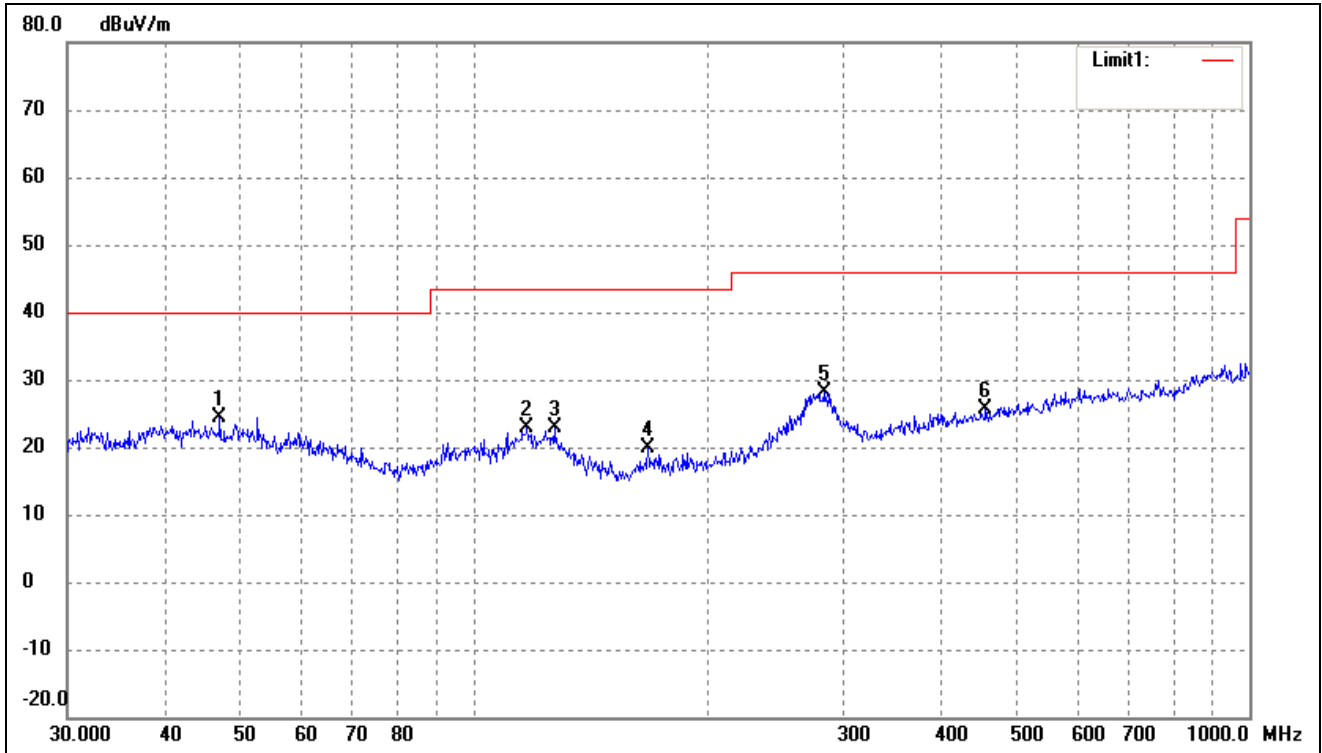
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.8303	36.15	-11.70	24.45	40.00	-15.55	-	-	peak
2	56.9912	35.44	-12.97	22.47	40.00	-17.53	-	-	peak
3	81.4970	36.68	-16.58	20.10	40.00	-19.90	-	-	peak
4	115.3205	36.44	-13.84	22.60	43.50	-20.90	-	-	peak
5	167.8243	36.76	-15.14	21.62	43.50	-21.88	-	-	peak
6	282.9852	39.17	-10.17	29.00	46.00	-17.00	-	-	peak

802.11a			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



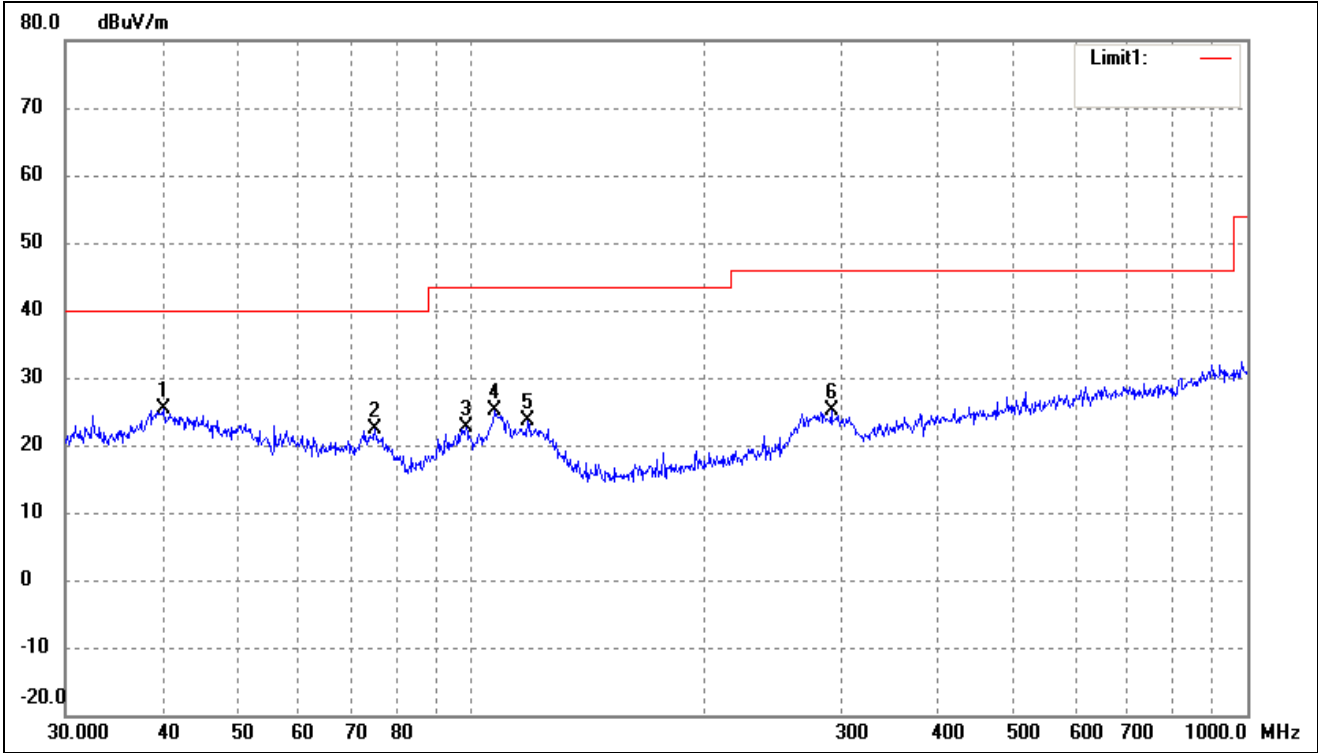
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.5757	37.61	-12.14	25.47	40.00	-14.53	-	-	peak
2	44.9006	35.60	-11.80	23.80	40.00	-16.20	-	-	peak
3	73.6170	37.20	-15.65	21.55	40.00	-18.45	-	-	peak
4	107.8877	37.77	-13.31	24.46	43.50	-19.04	-	-	peak
5	118.6014	37.29	-14.17	23.12	43.50	-20.38	-	-	peak
6	282.9852	36.69	-10.17	26.52	46.00	-19.48	-	-	peak

802.11n-HT20			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



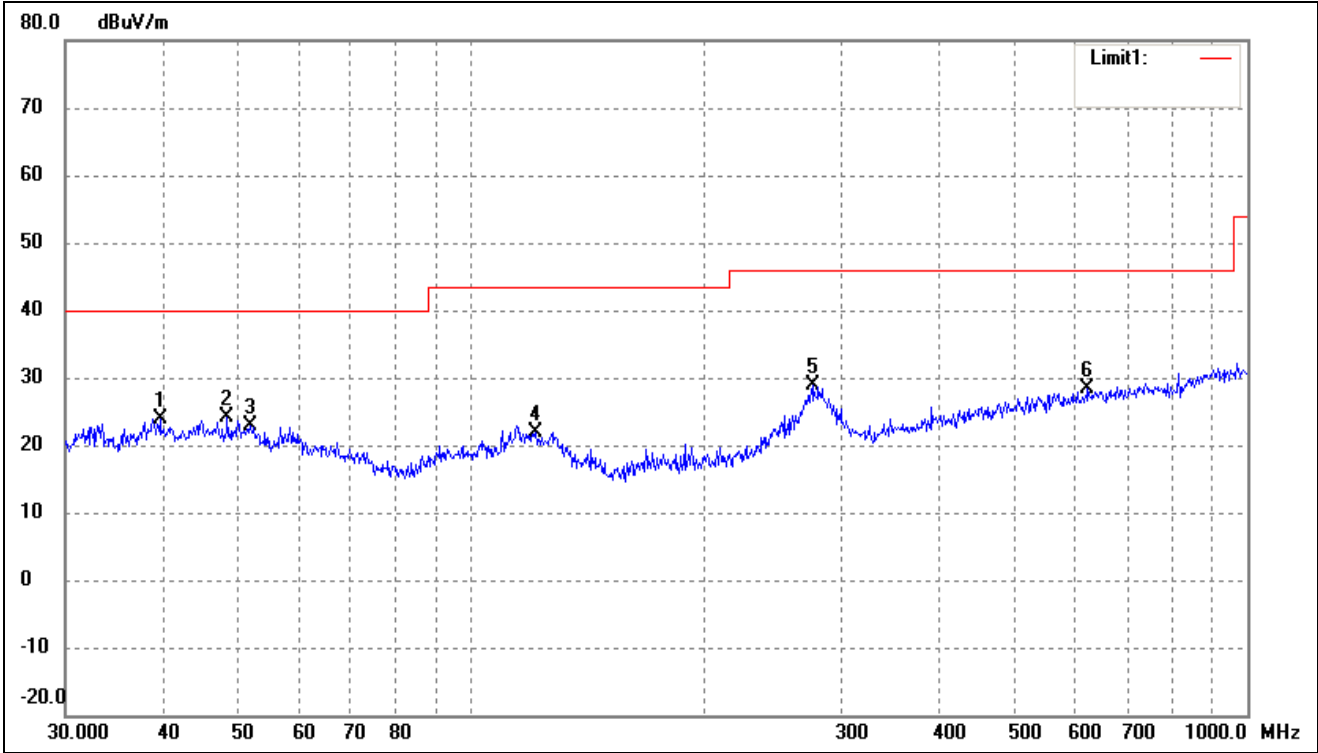
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	47.1599	35.97	-11.68	24.29	40.00	-15.71	-	-	peak
2	117.3603	36.96	-14.04	22.92	43.50	-20.58	-	-	peak
3	127.2176	39.10	-16.22	22.88	43.50	-20.62	-	-	peak
4	167.8243	34.96	-15.14	19.82	43.50	-23.68	-	-	peak
5	282.9852	38.23	-10.17	28.06	46.00	-17.94	-	-	peak
6	457.5073	30.95	-5.35	25.60	46.00	-20.40	-	-	peak

802.11n-HT20			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



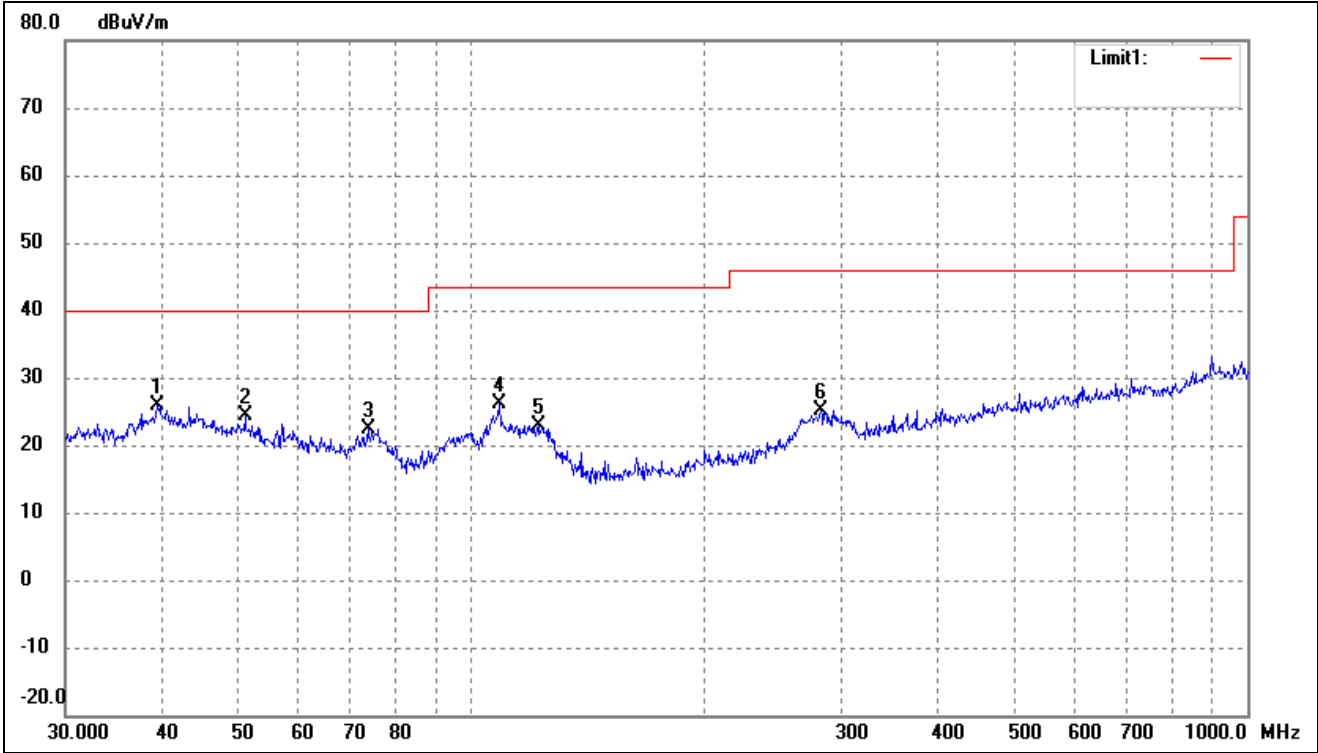
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	40.1347	37.26	-11.98	25.28	40.00	-14.72	-	-	peak
2	75.1823	38.35	-16.07	22.28	40.00	-17.72	-	-	peak
3	98.4866	36.09	-13.57	22.52	43.50	-20.98	-	-	peak
4	107.1337	38.33	-13.31	25.02	43.50	-18.48	-	-	peak
5	118.1862	37.69	-14.12	23.57	43.50	-19.93	-	-	peak
6	291.0360	34.69	-9.58	25.11	46.00	-20.89	-	-	peak

802.11n-HT40			
Test Channel	5510MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.7147	36.02	-12.09	23.93	40.00	-16.07	-	-	peak
2	48.5016	35.66	-11.61	24.05	40.00	-15.95	-	-	peak
3	51.8430	34.98	-12.04	22.94	40.00	-17.06	-	-	peak
4	121.1231	36.44	-14.59	21.85	43.50	-21.65	-	-	peak
5	276.1236	39.56	-10.68	28.88	46.00	-17.12	-	-	peak
6	622.8900	30.61	-2.14	28.47	46.00	-17.53	-	-	peak

802.11n-HT40			
Test Channel	5510MHz(worst case)	Polarity:	Vertical

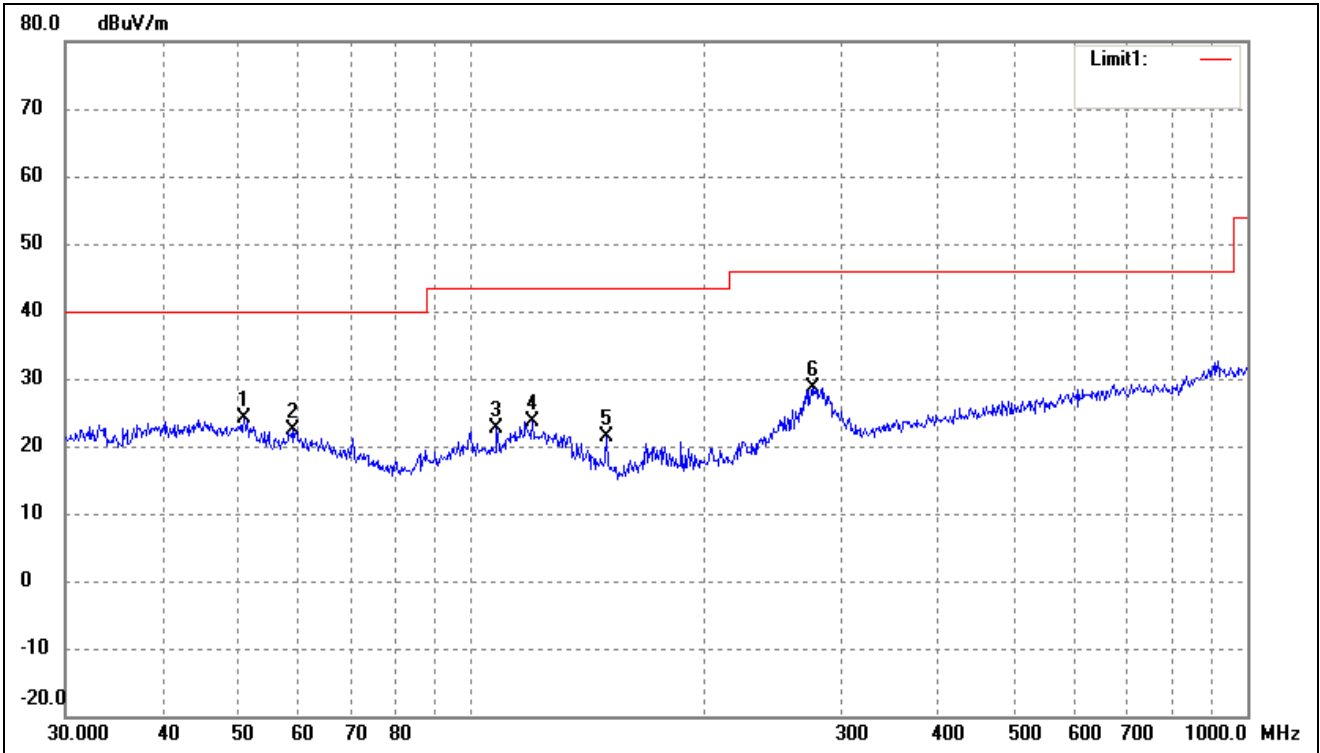


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.4372	38.03	-12.19	25.84	40.00	-14.16	-	-	peak
2	51.1209	36.31	-11.85	24.46	40.00	-15.54	-	-	peak
3	73.6170	38.11	-15.65	22.46	40.00	-17.54	-	-	peak
4	108.6470	39.34	-13.31	26.03	43.50	-17.47	-	-	peak
5	121.9755	37.83	-14.83	23.00	43.50	-20.50	-	-	peak
6	281.9946	35.47	-10.24	25.23	46.00	-20.77	-	-	peak



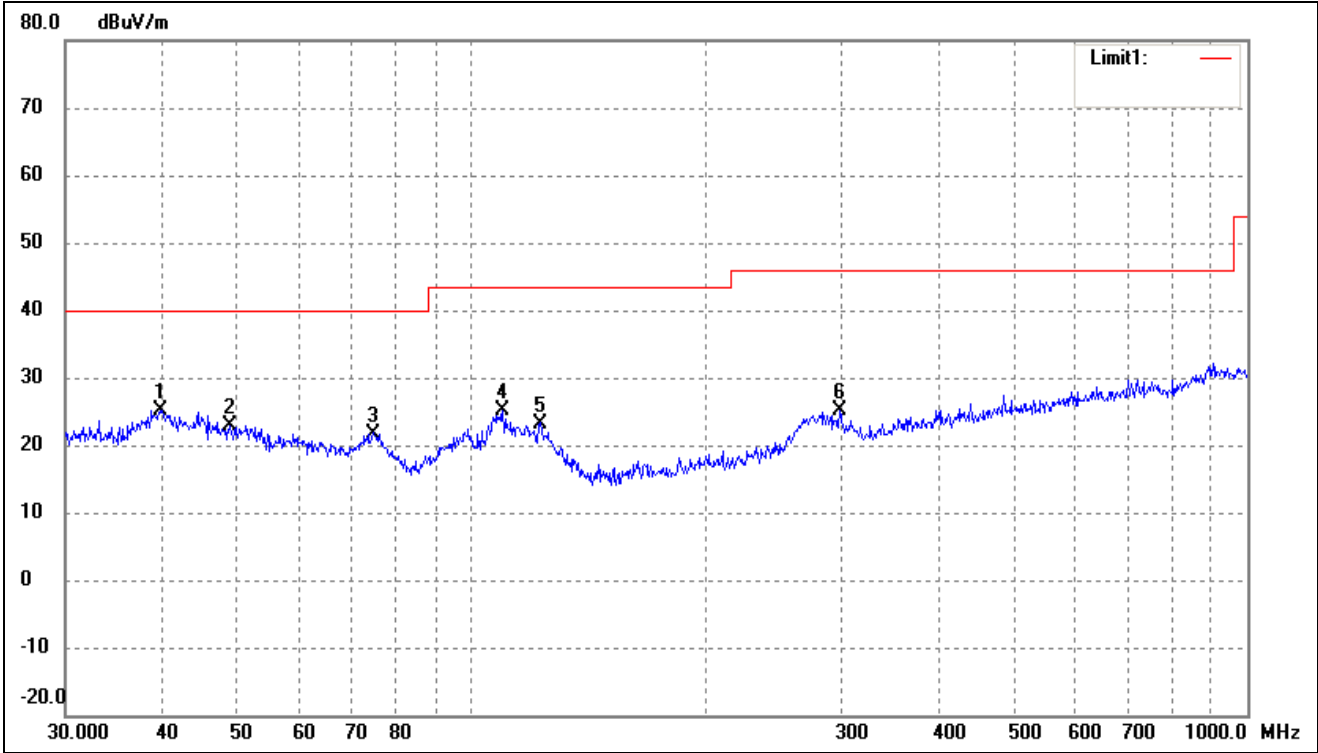
➤ ANT 1\_5725-5850MHz

802.11a			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



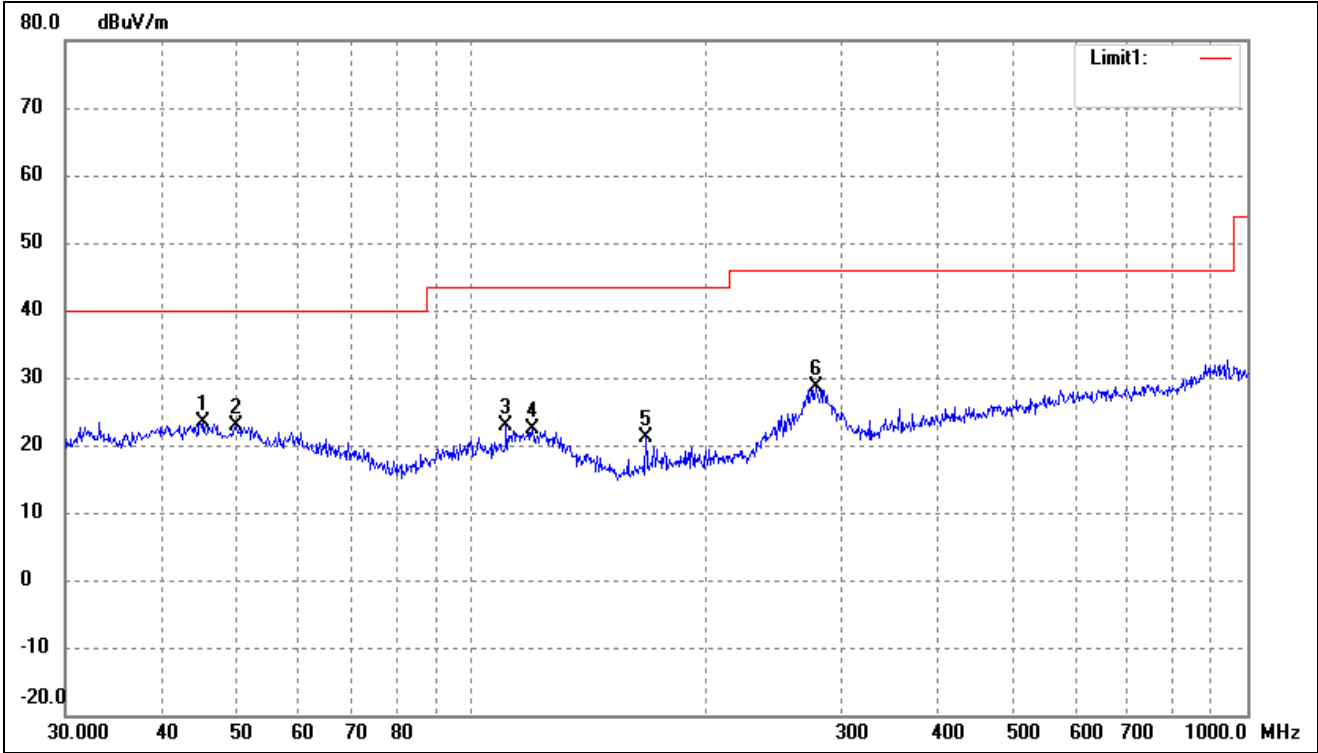
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	50.9420	36.04	-11.80	24.24	40.00	-15.76	-	-	peak
2	58.8185	35.25	-12.97	22.28	40.00	-17.72	-	-	peak
3	107.8877	35.93	-13.31	22.62	43.50	-20.88	-	-	peak
4	119.8556	37.91	-14.28	23.63	43.50	-19.87	-	-	peak
5	149.4857	36.83	-15.49	21.34	43.50	-22.16	-	-	peak
6	276.1236	39.43	-10.68	28.75	46.00	-17.25	-	-	peak

802.11a			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



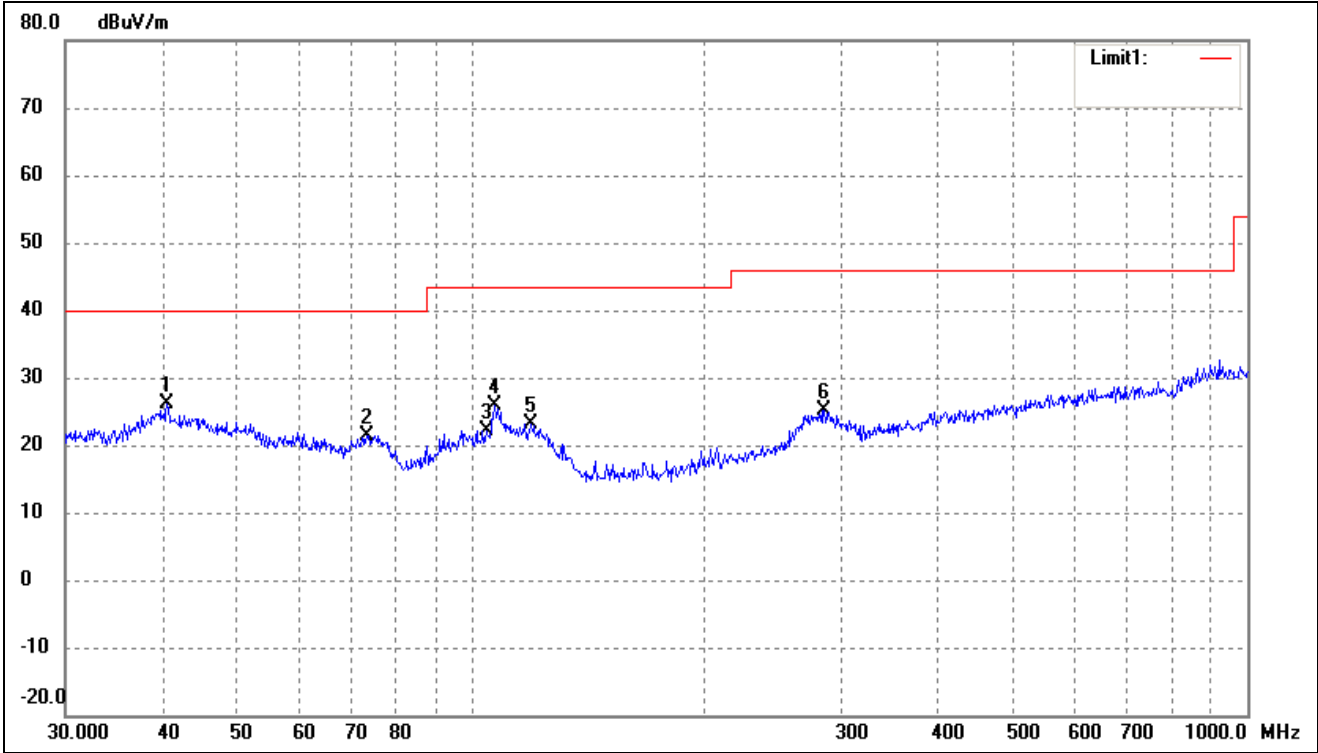
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.8542	37.26	-12.03	25.23	40.00	-14.77	-	-	peak
2	48.8429	34.41	-11.60	22.81	40.00	-17.19	-	-	peak
3	74.9191	37.75	-16.02	21.73	40.00	-18.27	-	-	peak
4	109.7960	38.41	-13.32	25.09	43.50	-18.41	-	-	peak
5	122.8340	38.30	-15.05	23.25	43.50	-20.25	-	-	peak
6	298.2681	34.12	-9.05	25.07	46.00	-20.93	-	-	peak

802.11n-HT20			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



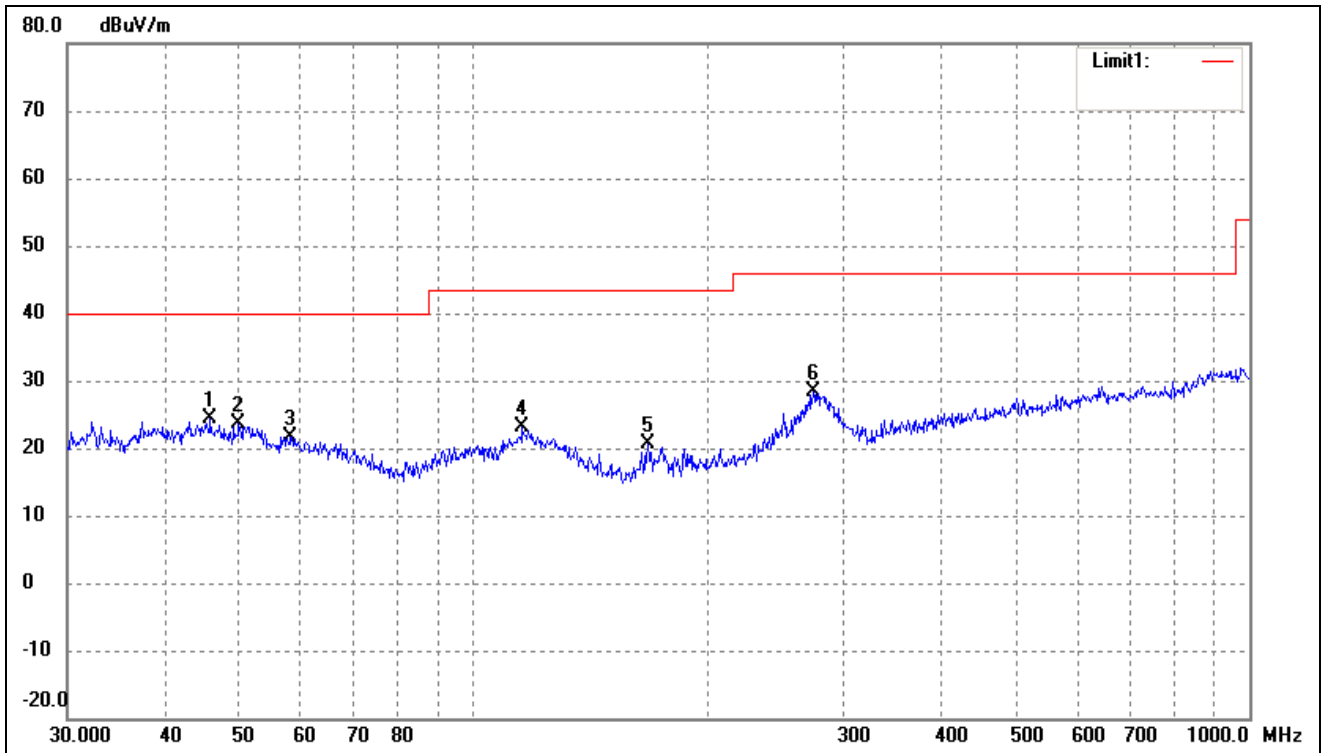
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	45.2166	35.06	-11.79	23.27	40.00	-16.73	-	-	peak
2	49.8814	34.32	-11.54	22.78	40.00	-17.22	-	-	peak
3	110.9571	36.32	-13.41	22.91	43.50	-20.59	-	-	peak
4	119.8556	36.65	-14.28	22.37	43.50	-21.13	-	-	peak
5	167.8243	36.38	-15.14	21.24	43.50	-22.26	-	-	peak
6	278.0669	39.10	-10.53	28.57	46.00	-17.43	-	-	peak

802.11n-HT20			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



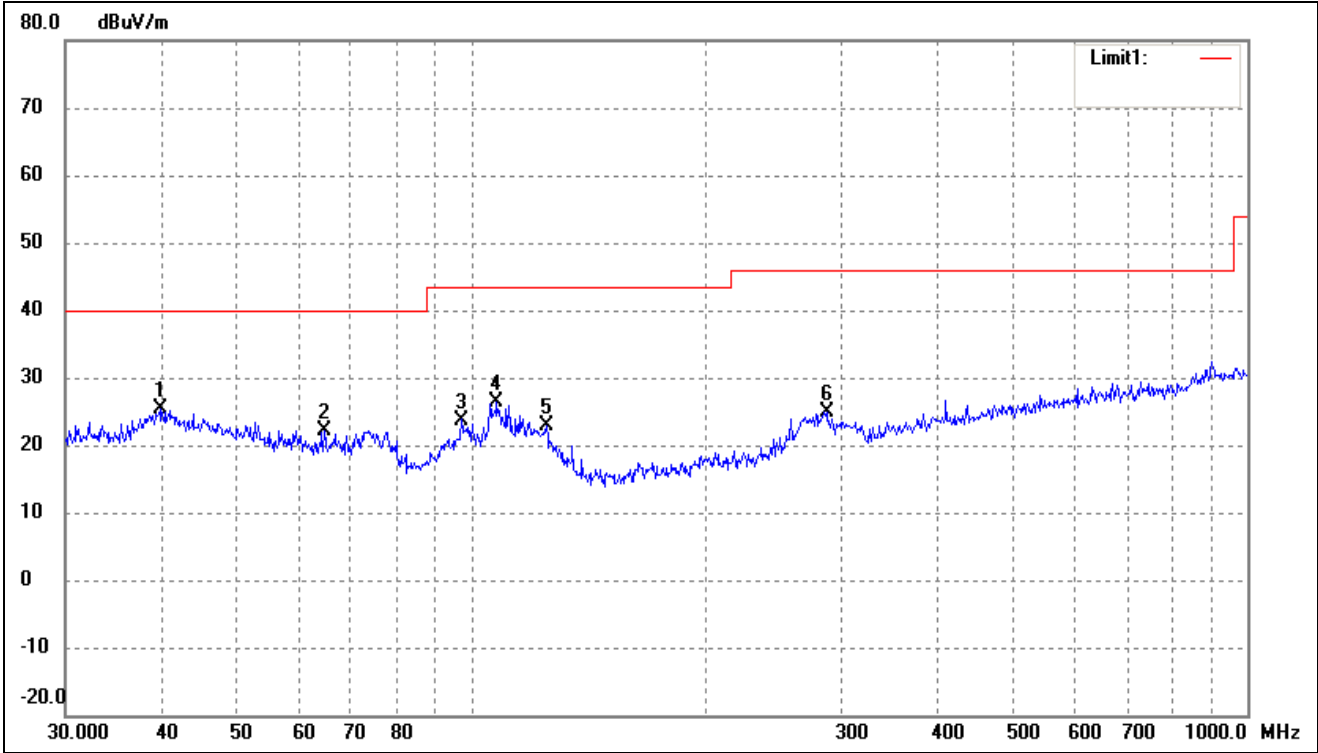
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	40.5591	38.03	-11.97	26.06	40.00	-13.94	-	-	peak
2	73.3593	37.03	-15.57	21.46	40.00	-18.54	-	-	peak
3	104.5361	35.53	-13.32	22.21	43.50	-21.29	-	-	peak
4	107.1337	39.22	-13.31	25.91	43.50	-17.59	-	-	peak
5	119.4361	37.40	-14.24	23.16	43.50	-20.34	-	-	peak
6	284.9767	35.08	-10.03	25.05	46.00	-20.95	-	-	peak

802.11n-HT40			
Test Channel	5755MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	45.8553	36.17	-11.75	24.42	40.00	-15.58	-	-	peak
2	49.8814	35.26	-11.54	23.72	40.00	-16.28	-	-	peak
3	58.2030	34.54	-12.97	21.57	40.00	-18.43	-	-	peak
4	115.7256	36.93	-13.88	23.05	43.50	-20.45	-	-	peak
5	167.8243	35.80	-15.14	20.66	43.50	-22.84	-	-	peak
6	274.1939	39.21	-10.77	28.44	46.00	-17.56	-	-	peak

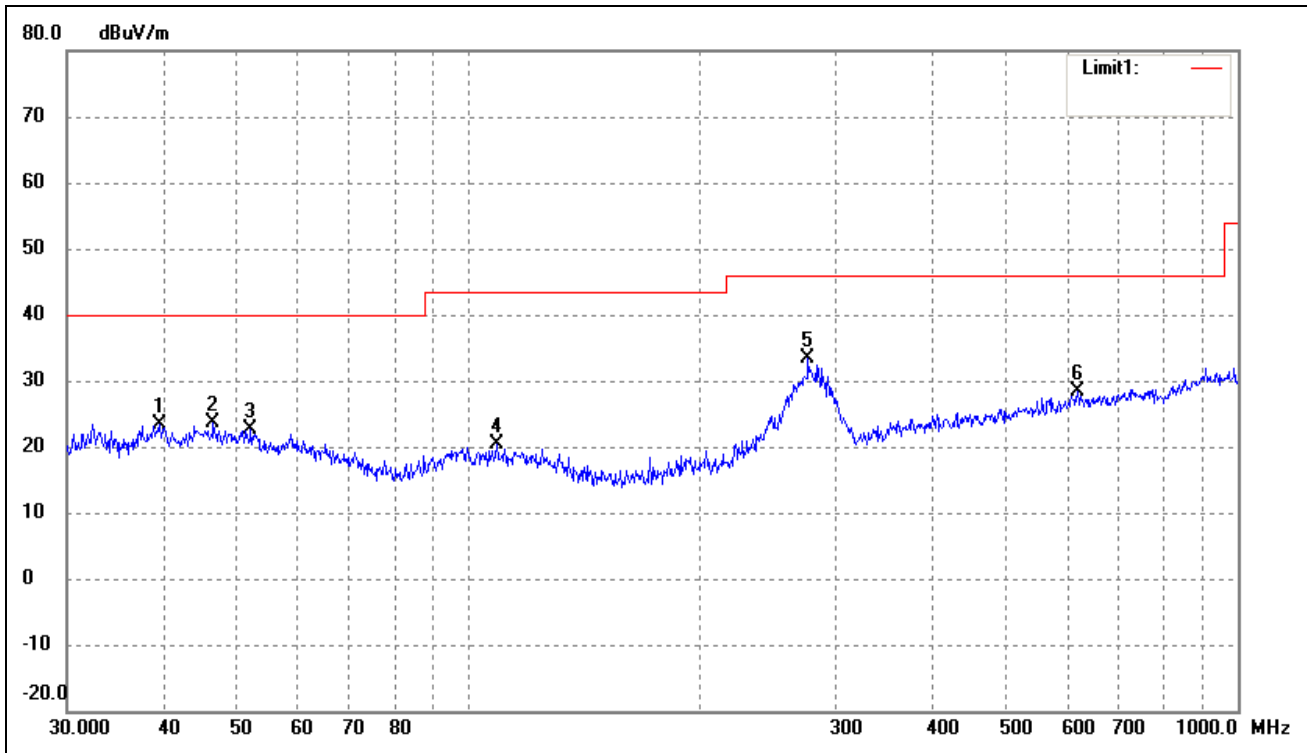
802.11n-HT40			
Test Channel	5755MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.7147	37.56	-12.09	25.47	40.00	-14.53	-	-	peak
2	64.6594	36.04	-13.87	22.17	40.00	-17.83	-	-	peak
3	97.1148	37.55	-13.80	23.75	43.50	-19.75	-	-	peak
4	107.8877	39.59	-13.31	26.28	43.50	-17.22	-	-	peak
5	125.0066	38.40	-15.64	22.76	43.50	-20.74	-	-	peak
6	286.9823	34.82	-9.87	24.95	46.00	-21.05	-	-	peak

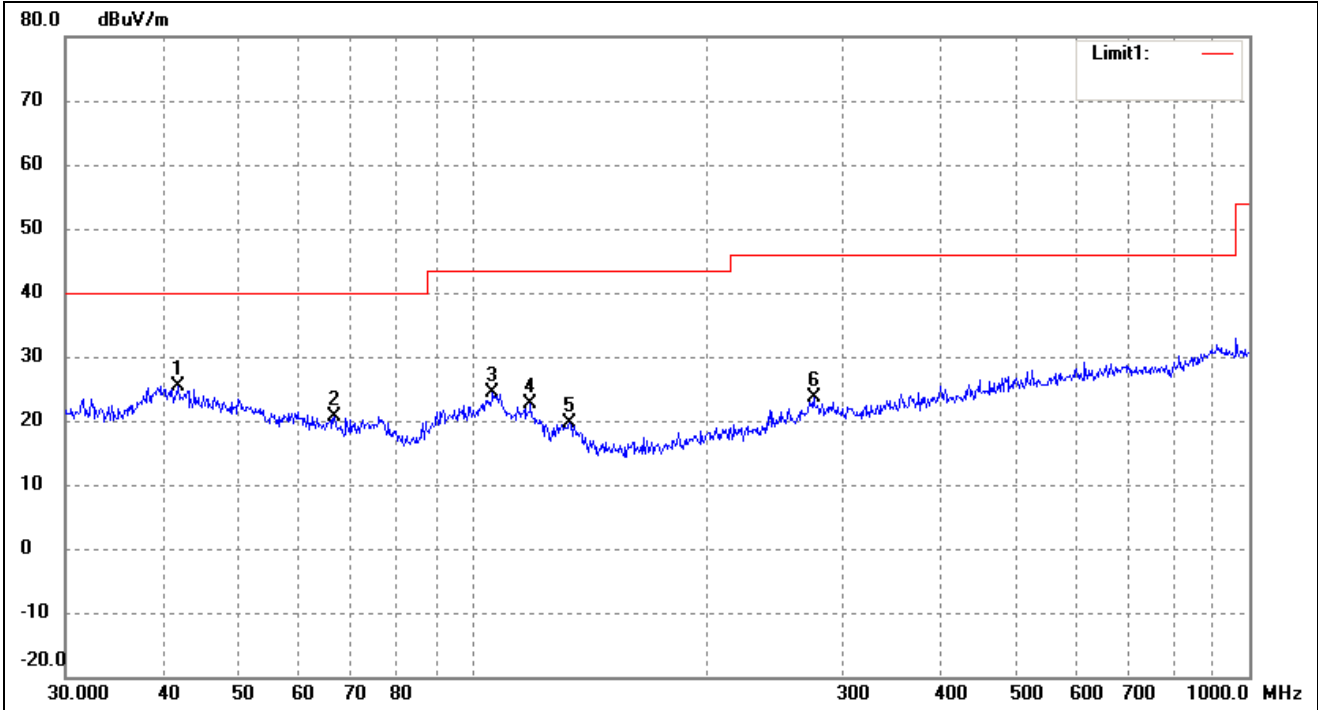
➤ ANT 2\_5150-5250MHz

802.11a			
Test Channel	5180MHz(Worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.5757	35.40	-12.14	23.26	40.00	-16.74	-	-	peak
2	46.5030	35.40	-11.72	23.68	40.00	-16.32	-	-	peak
3	52.0251	34.65	-12.10	22.55	40.00	-17.45	-	-	peak
4	108.6470	33.59	-13.31	20.28	43.50	-23.22	-	-	peak
5	276.1236	43.95	-10.68	33.27	46.00	-12.73	-	-	peak
6	618.5369	30.42	-2.10	28.32	46.00	-17.68	-	-	peak

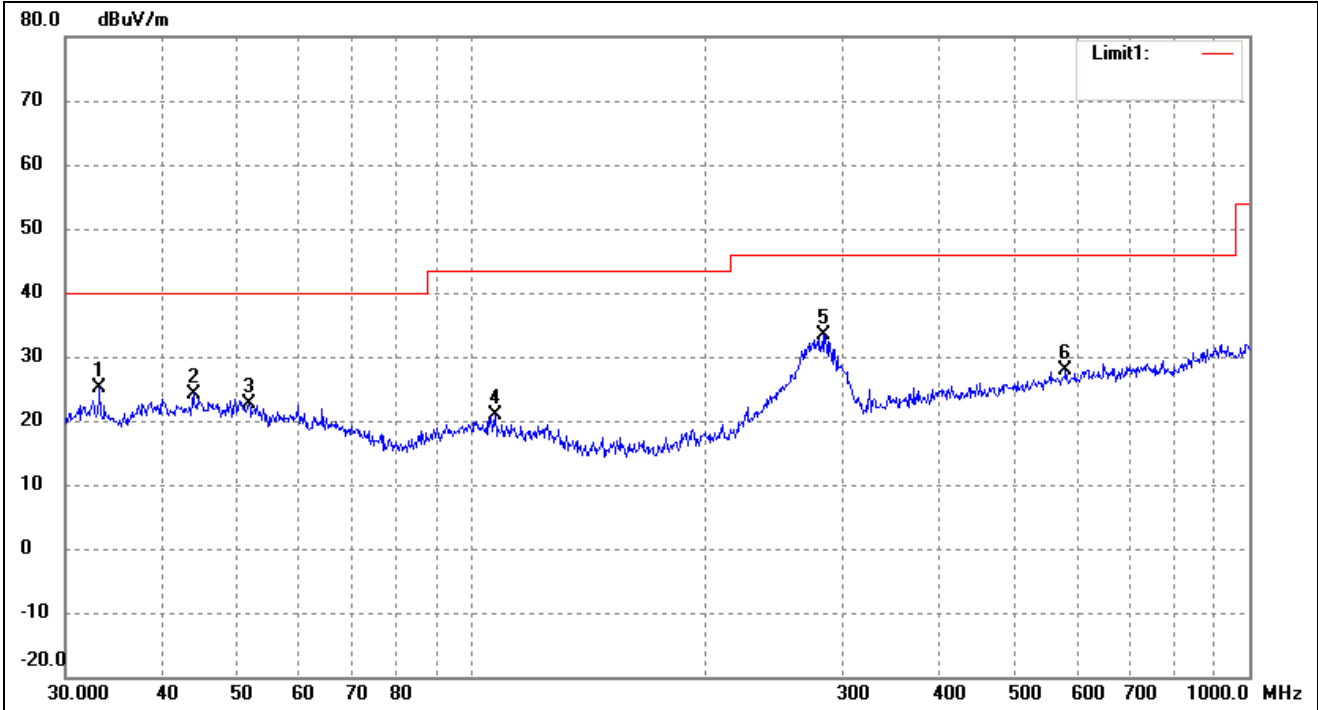
802.11a			
Test Channel	5180MHz(Worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	41.8596	37.26	-11.92	25.34	40.00	-14.66	-	-	peak
2	66.4989	34.88	-14.14	20.74	40.00	-19.26	-	-	peak
3	106.3850	37.63	-13.31	24.32	43.50	-19.18	-	-	peak
4	119.0180	36.84	-14.20	22.64	43.50	-20.86	-	-	peak
5	133.6188	36.26	-16.70	19.56	43.50	-23.94	-	-	peak
6	275.1570	34.46	-10.74	23.72	46.00	-22.28	-	-	peak

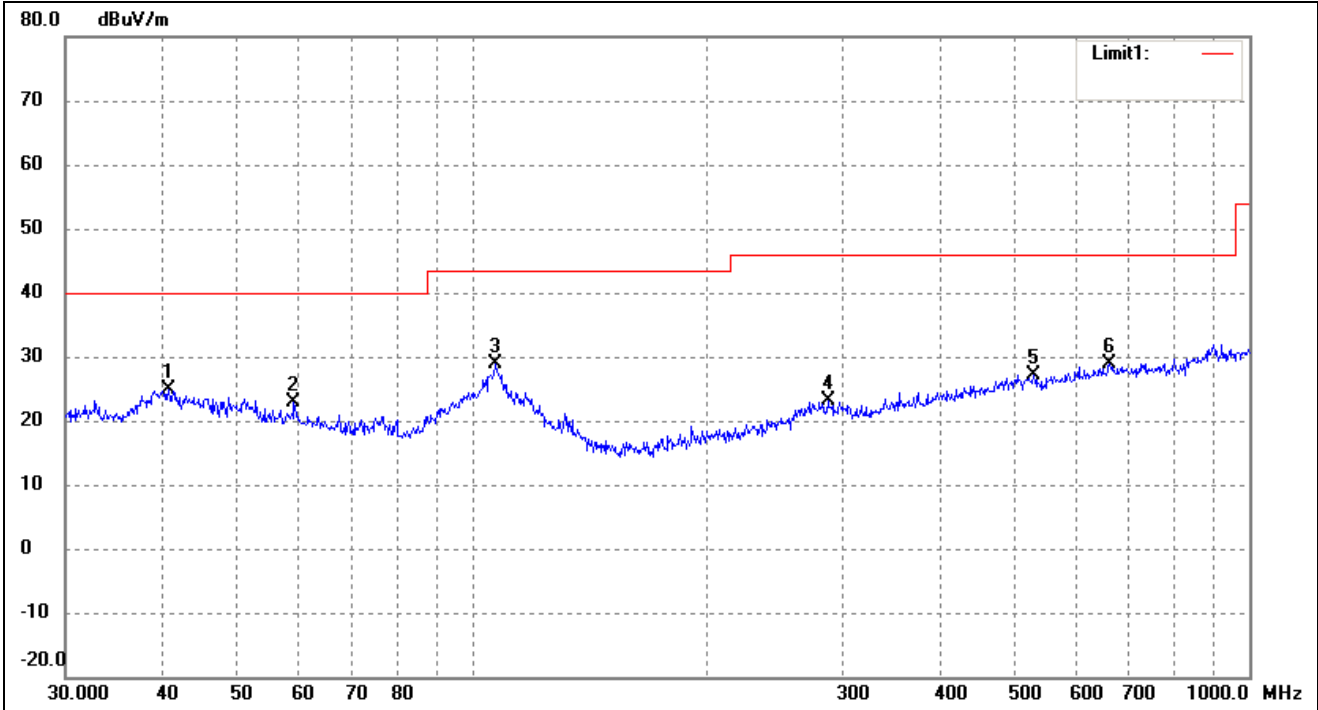


802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Horizontal



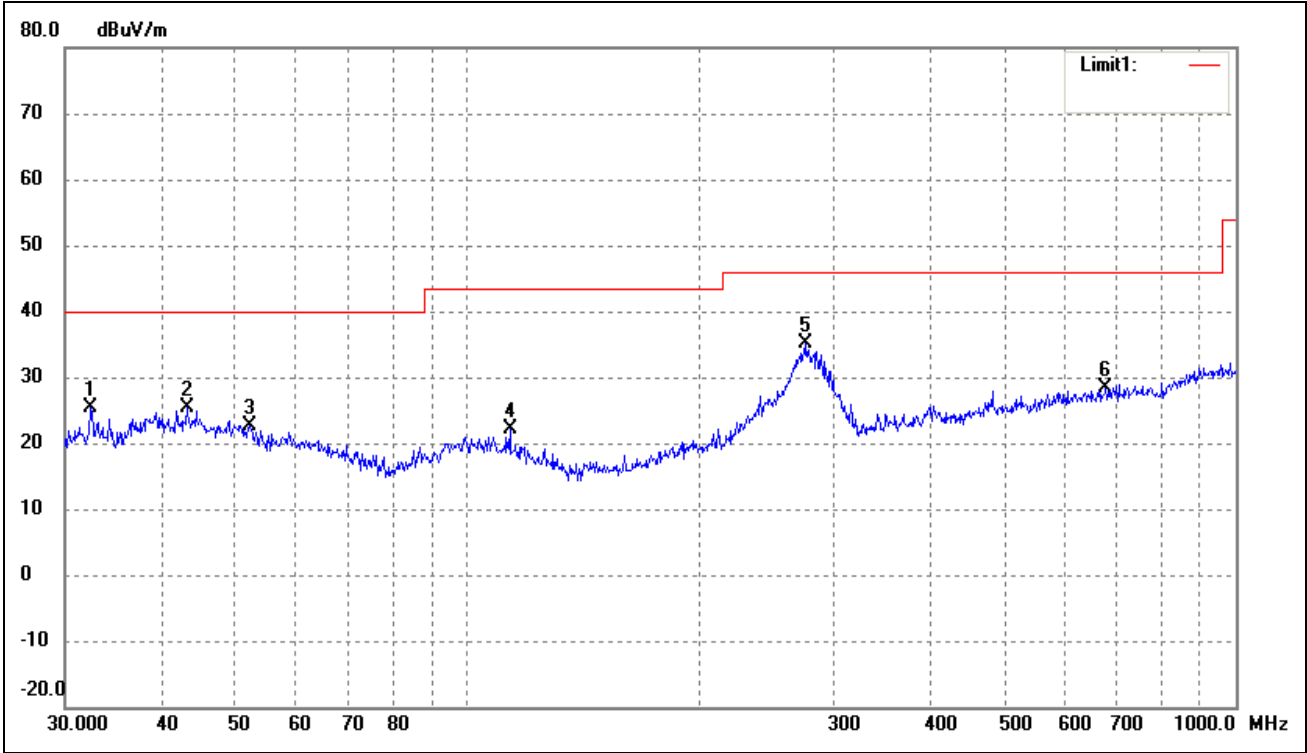
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	33.2112	38.99	-13.97	25.02	40.00	-14.98	-	-	peak
2	43.8119	36.09	-11.84	24.25	40.00	-15.75	-	-	peak
3	51.6616	34.72	-12.00	22.72	40.00	-17.28	-	-	peak
4	107.1337	34.08	-13.31	20.77	43.50	-22.73	-	-	peak
5	282.9852	43.60	-10.17	33.43	46.00	-12.57	-	-	peak
6	580.7026	30.27	-2.42	27.85	46.00	-18.15	-	-	peak

802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Vertical



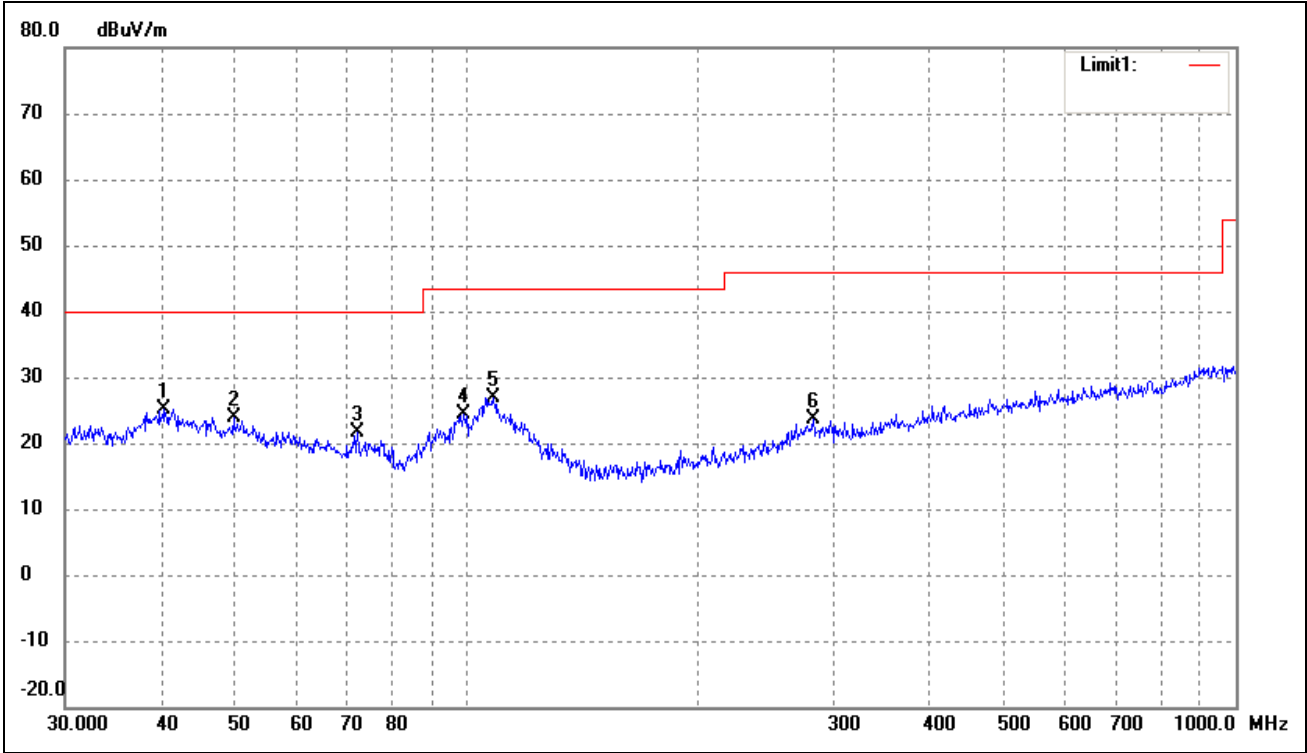
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	40.7016	36.94	-11.96	24.98	40.00	-15.02	-	-	peak
2	59.0251	35.83	-12.97	22.86	40.00	-17.14	-	-	peak
3	107.1337	42.27	-13.31	28.96	43.50	-14.54	-	-	peak
4	286.9823	33.05	-9.87	23.18	46.00	-22.82	-	-	peak
5	528.2458	31.29	-4.13	27.16	46.00	-18.84	-	-	peak
6	661.1505	30.91	-2.15	28.76	46.00	-17.24	-	-	peak

802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	32.4059	39.34	-14.02	25.32	40.00	-14.68	-	-	peak
2	43.2017	37.20	-11.86	25.34	40.00	-14.66	-	-	peak
3	52.2079	34.71	-12.15	22.56	40.00	-17.44	-	-	peak
4	113.7143	35.83	-13.68	22.15	43.50	-21.35	-	-	peak
5	276.1236	45.73	-10.68	35.05	46.00	-10.95	-	-	peak
6	677.5798	30.23	-1.86	28.37	46.00	-17.63	-	-	peak

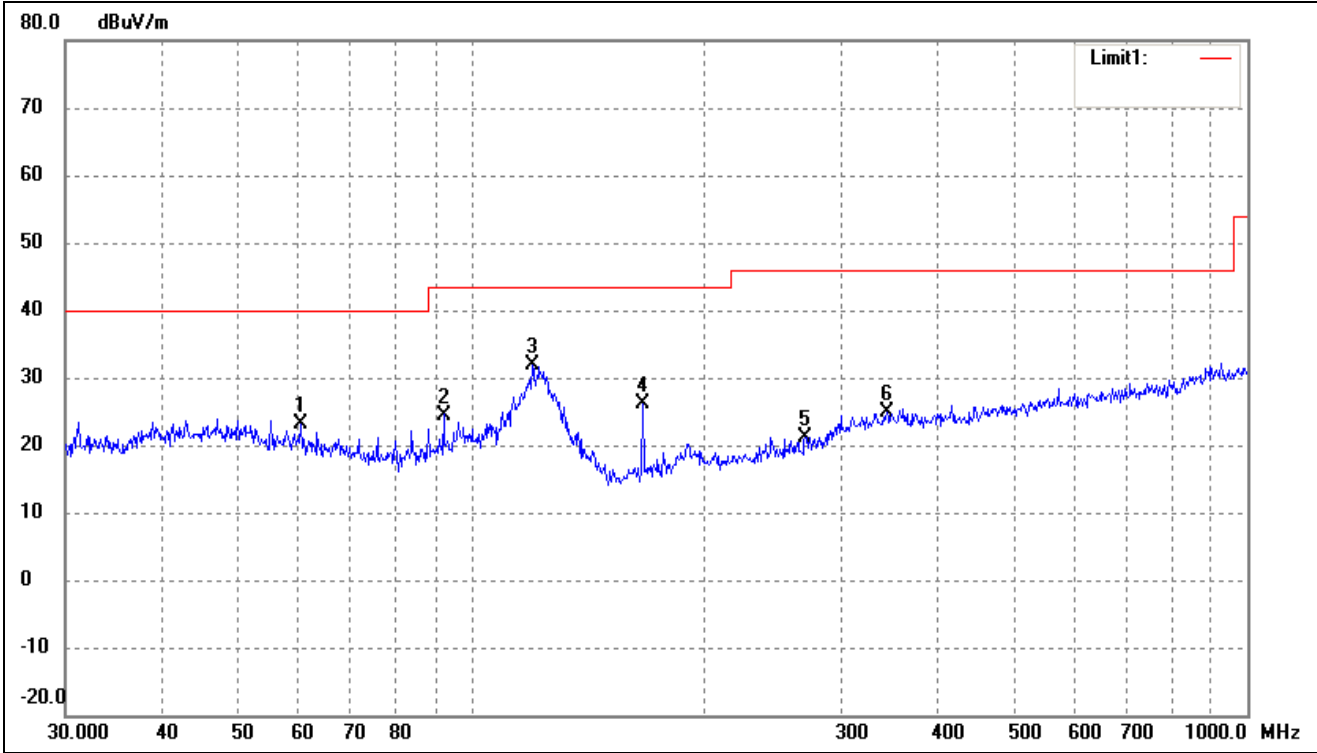
802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	40.2757	37.22	-11.98	25.24	40.00	-14.76	-	-	peak
2	49.7068	35.32	-11.55	23.77	40.00	-16.23	-	-	peak
3	72.0843	36.92	-15.22	21.70	40.00	-18.30	-	-	peak
4	99.1797	37.74	-13.45	24.29	43.50	-19.21	-	-	peak
5	108.2667	40.09	-13.31	26.78	43.50	-16.72	-	-	peak
6	281.9946	33.75	-10.24	23.51	46.00	-22.49	-	-	peak

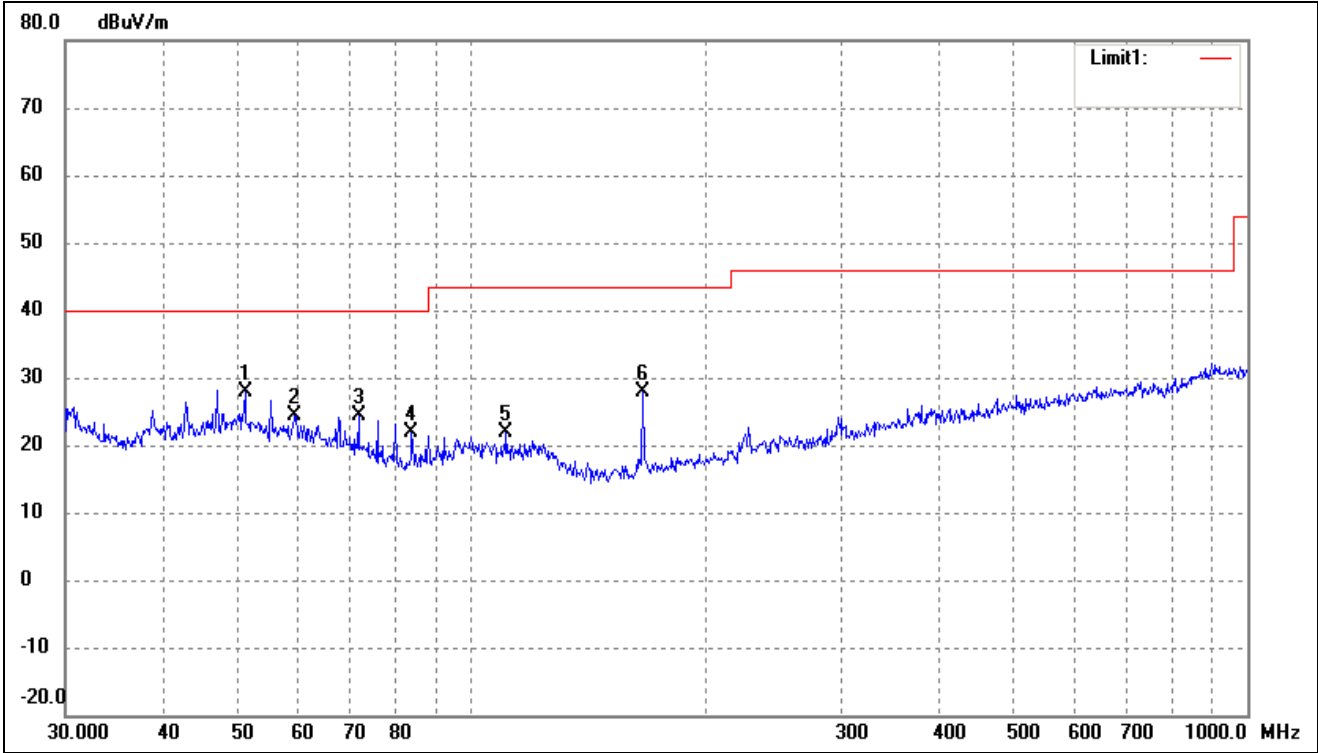
➤ ANT 2\_5250-5350MHz

802.11a			
Test Channel	5260MHz(Worst case)	Polarity:	Horizontal



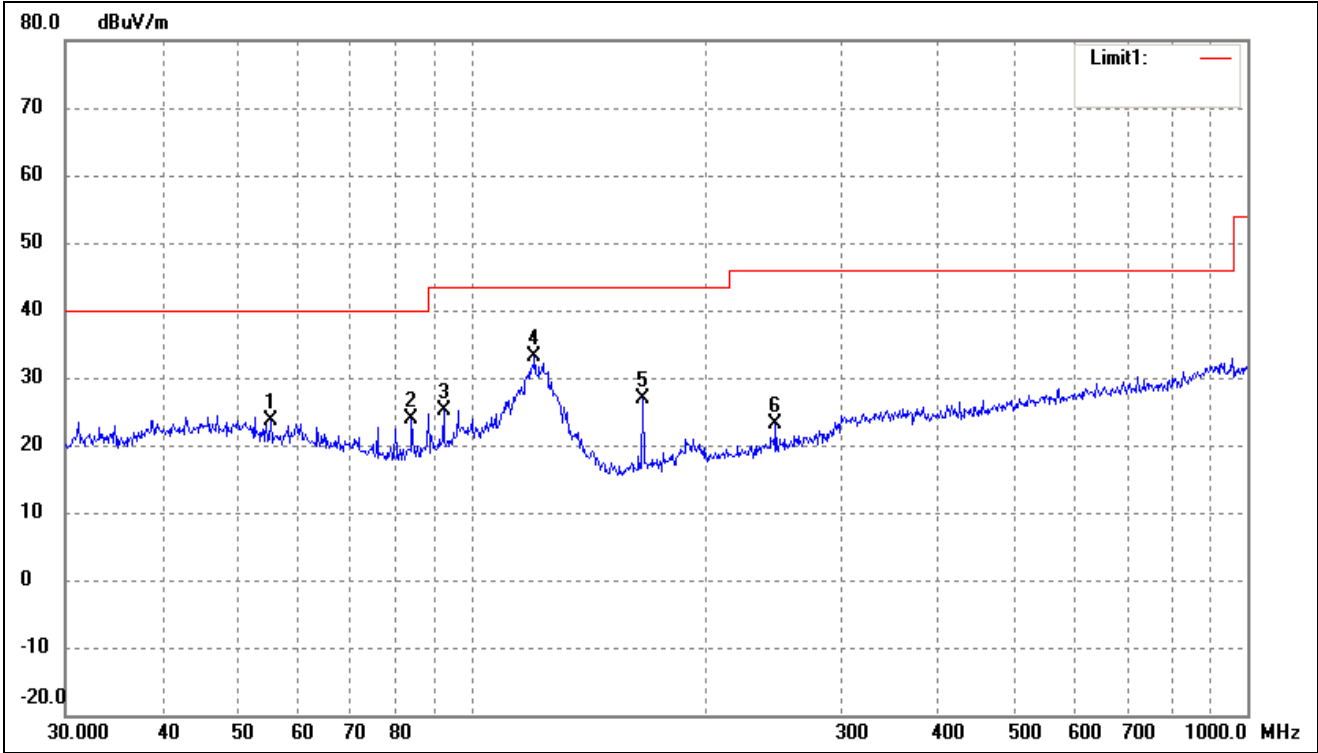
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	60.2801	36.09	-13.04	23.05	40.00	-16.95	-	-	peak
2	92.1388	39.11	-14.61	24.50	43.50	-19.00	-	-	peak
3	119.8556	46.05	-14.28	31.77	43.50	-11.73	-	-	peak
4	166.6514	41.44	-15.20	26.24	43.50	-17.26	-	-	peak
5	269.4284	31.95	-10.79	21.16	46.00	-24.84	-	-	peak
6	343.1800	32.61	-7.84	24.77	46.00	-21.23	-	-	peak

802.11a			
Test Channel	5260MHz(Worst case)	Polarity:	Vertical



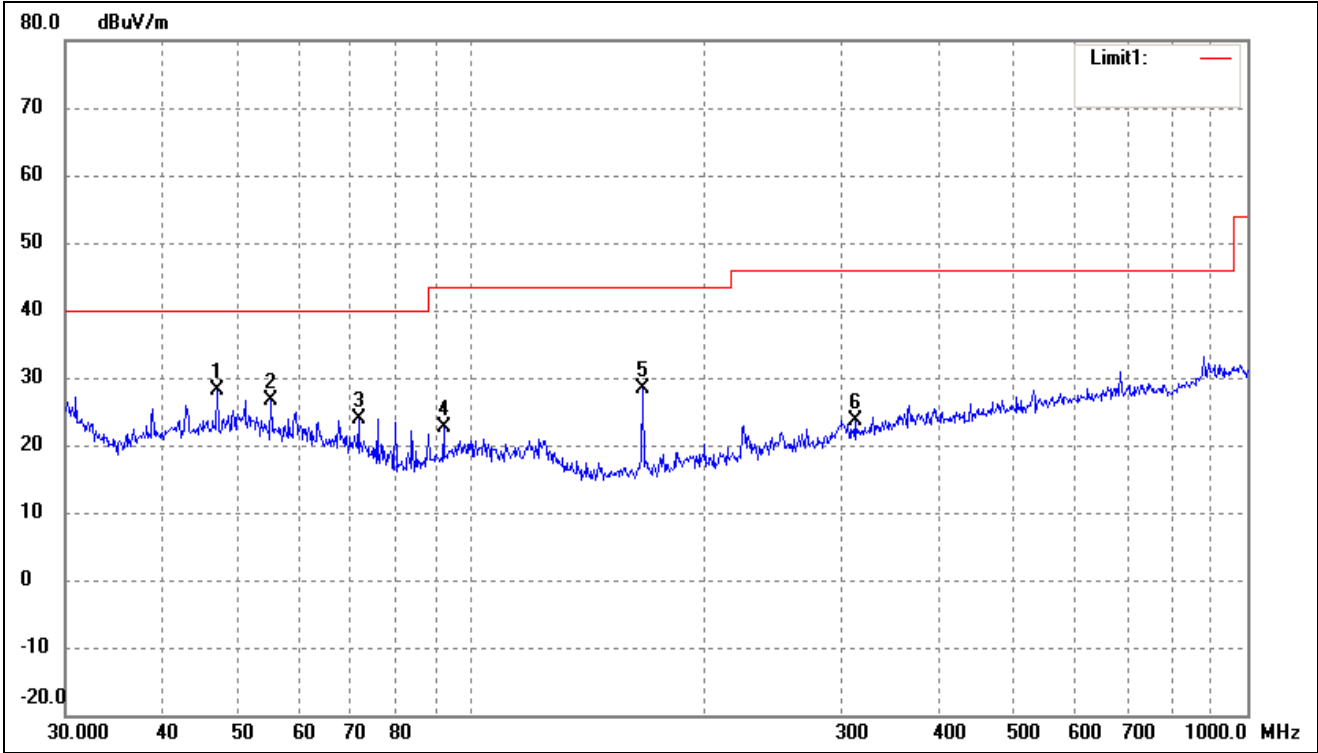
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	51.1209	39.66	-11.85	27.81	40.00	-12.19	-	-	peak
2	59.2325	37.36	-12.98	24.38	40.00	-15.62	-	-	peak
3	71.5806	39.50	-15.08	24.42	40.00	-15.58	-	-	peak
4	83.8156	38.15	-16.22	21.93	40.00	-18.07	-	-	peak
5	110.9571	35.29	-13.41	21.88	43.50	-21.62	-	-	peak
6	166.6514	43.17	-15.20	27.97	43.50	-15.53	-	-	peak

802.11n-HT20			
Test Channel	5260MHz(Worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	55.2207	36.61	-12.95	23.66	40.00	-16.34	-	-	peak
2	83.8156	40.11	-16.22	23.89	40.00	-16.11	-	-	peak
3	92.1388	39.85	-14.61	25.24	43.50	-18.26	-	-	peak
4	120.6991	47.64	-14.50	33.14	43.50	-10.36	-	-	peak
5	166.0680	42.08	-15.23	26.85	43.50	-16.65	-	-	peak
6	246.8149	34.16	-11.09	23.07	46.00	-22.93	-	-	peak

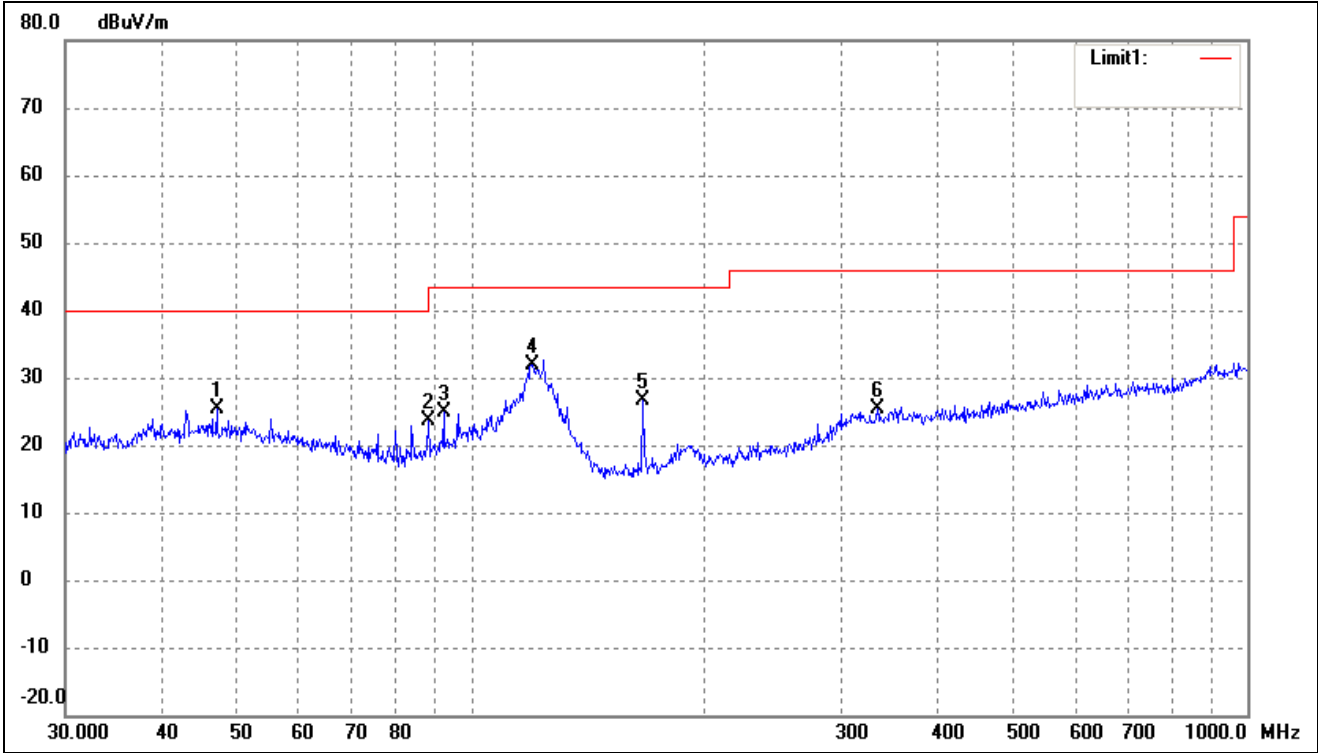
802.11n-HT20			
Test Channel	5260MHz(Worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.9948	39.83	-11.69	28.14	40.00	-11.86	-	-	peak
2	55.2207	39.61	-12.95	26.66	40.00	-13.34	-	-	peak
3	71.5806	39.08	-15.08	24.00	40.00	-16.00	-	-	peak
4	92.1388	37.22	-14.61	22.61	43.50	-20.89	-	-	peak
5	166.0680	43.68	-15.23	28.45	43.50	-15.05	-	-	peak
6	312.1794	32.56	-8.95	23.61	46.00	-22.39	-	-	peak

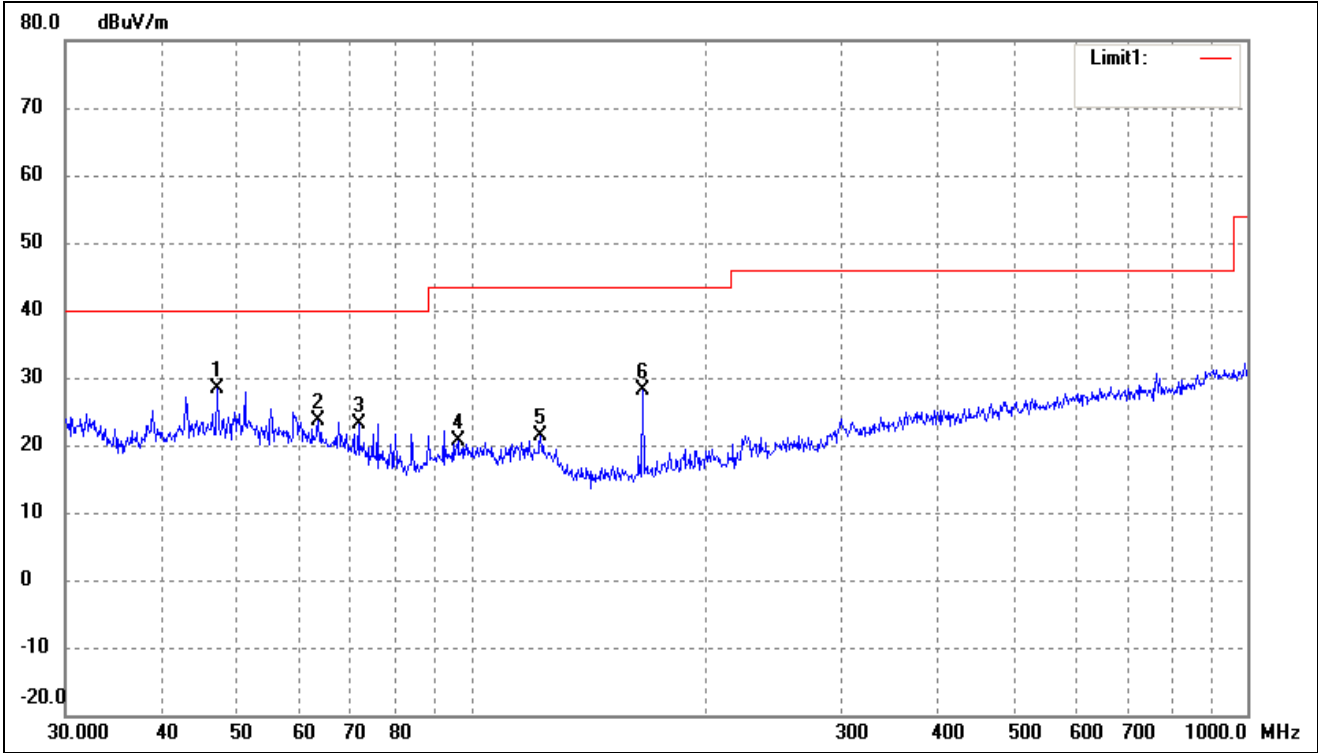


802.11n-HT40			
Test Channel	5270MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.9948	36.99	-11.69	25.30	40.00	-14.70	-	-	peak
2	88.0329	38.94	-15.38	23.56	43.50	-19.94	-	-	peak
3	92.1388	39.51	-14.61	24.90	43.50	-18.60	-	-	peak
4	119.8556	46.17	-14.28	31.89	43.50	-11.61	-	-	peak
5	166.0680	41.96	-15.23	26.73	43.50	-16.77	-	-	peak
6	333.6867	33.75	-8.43	25.32	46.00	-20.68	-	-	peak

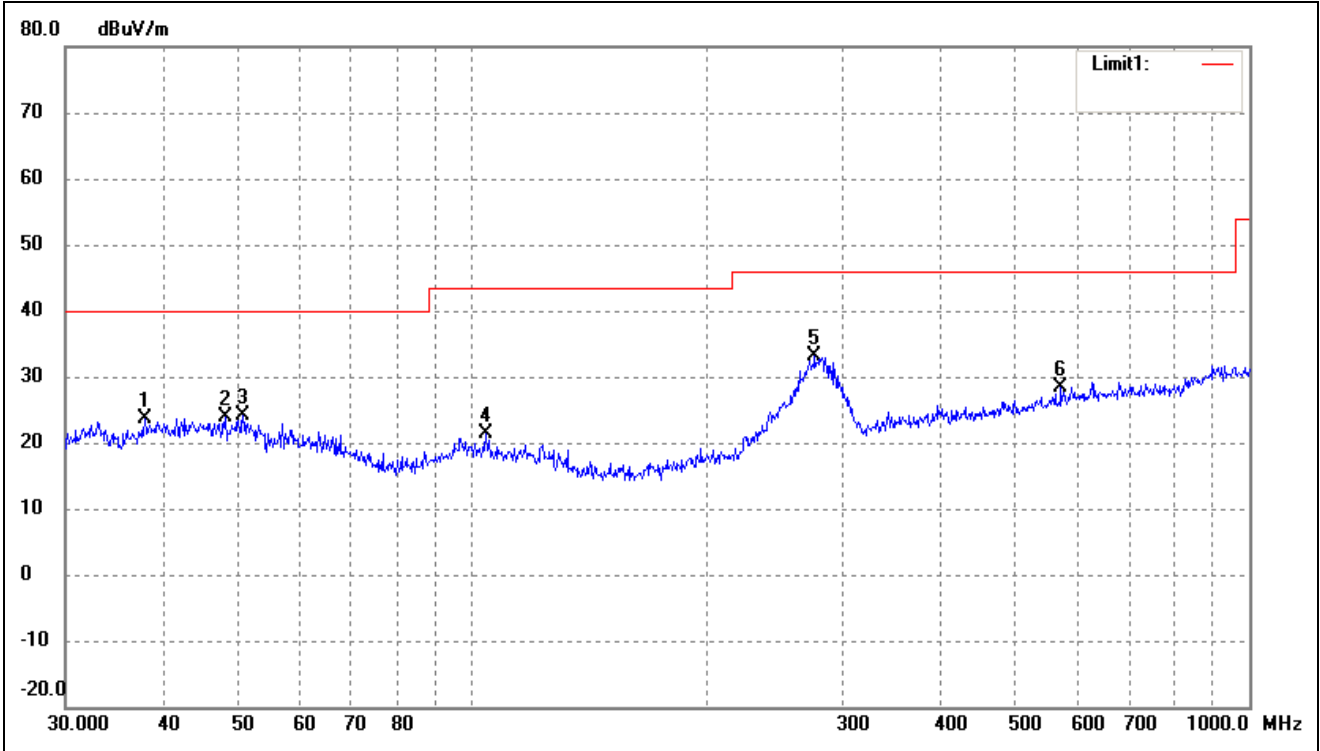
802.11n-HT40			
Test Channel	5270MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.9948	40.15	-11.69	28.46	40.00	-11.54	-	-	peak
2	63.5356	37.25	-13.65	23.60	40.00	-16.40	-	-	peak
3	71.5806	38.19	-15.08	23.11	40.00	-16.89	-	-	peak
4	96.0986	34.60	-13.96	20.64	43.50	-22.86	-	-	peak
5	122.8340	36.32	-15.05	21.27	43.50	-22.23	-	-	peak
6	166.0680	43.30	-15.23	28.07	43.50	-15.43	-	-	peak

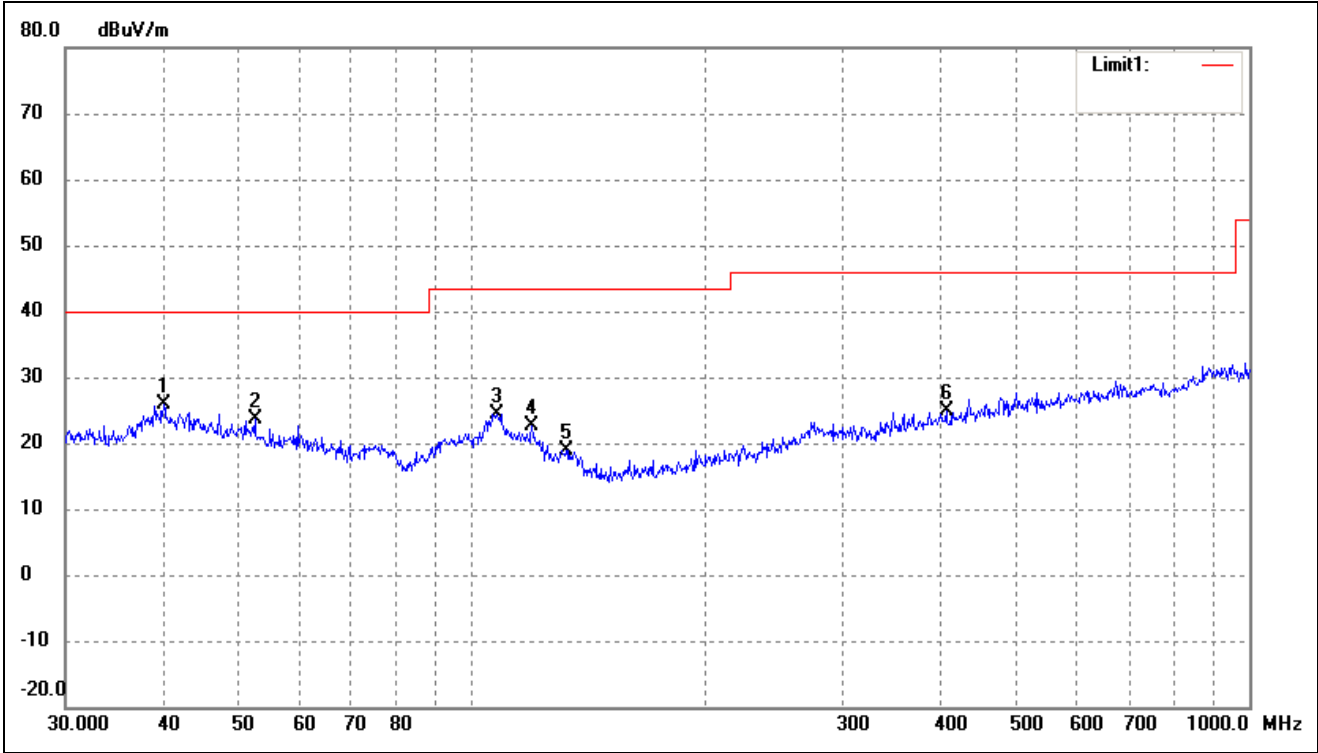
➤ ANT 2\_5470-5725MHz

802.11a			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



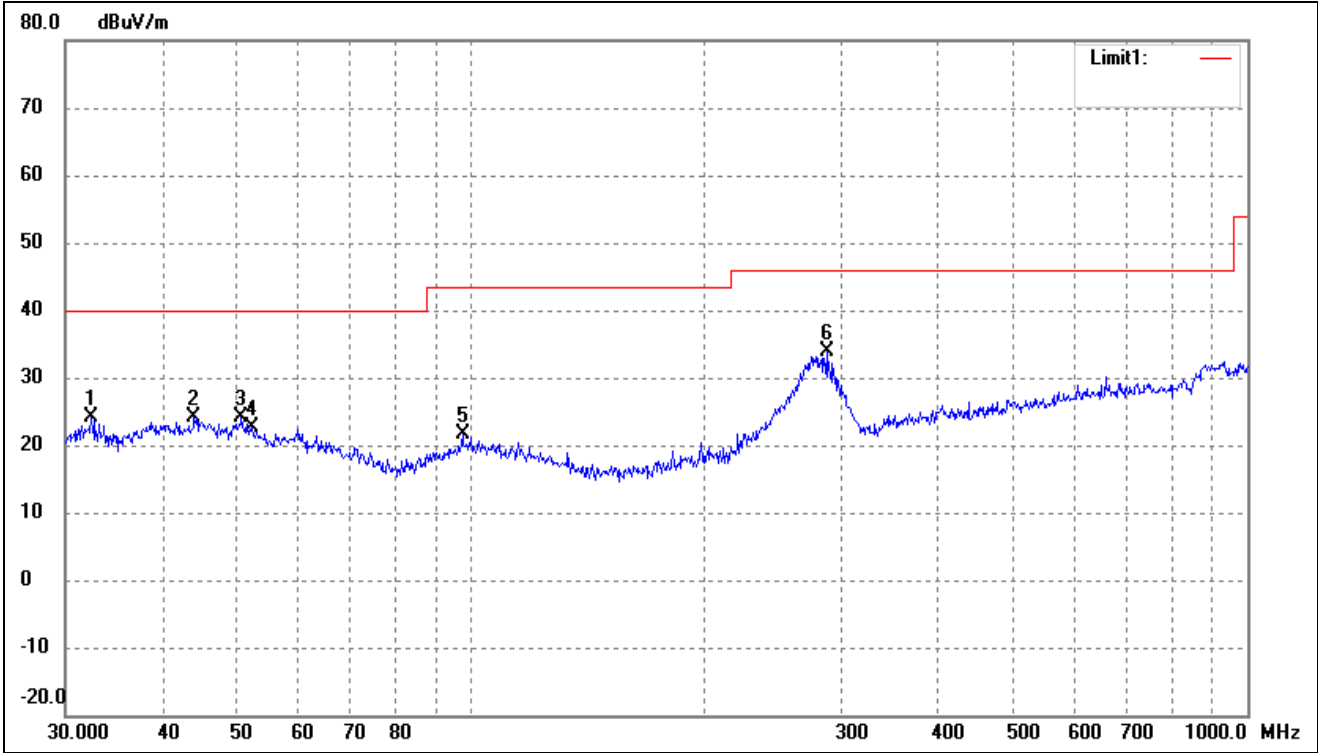
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	37.9450	36.30	-12.76	23.54	40.00	-16.46	-	-	peak
2	48.1626	35.50	-11.63	23.87	40.00	-16.13	-	-	peak
3	50.7637	35.81	-11.75	24.06	40.00	-15.94	-	-	peak
4	104.1701	34.71	-13.31	21.40	43.50	-22.10	-	-	peak
5	276.1236	43.86	-10.68	33.18	46.00	-12.82	-	-	peak
6	572.6144	31.17	-2.67	28.50	46.00	-17.50	-	-	peak

802.11a			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



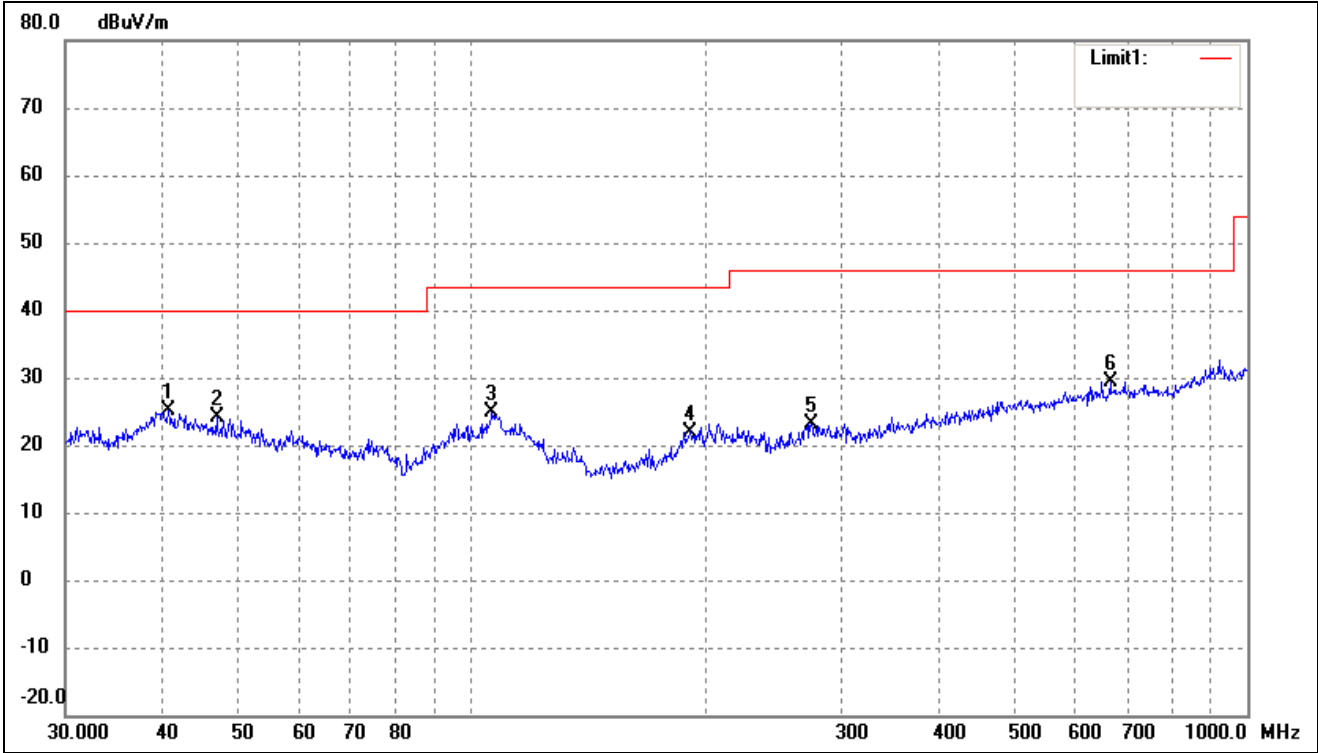
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	40.1347	37.80	-11.98	25.82	40.00	-14.18	-	-	peak
2	52.5753	36.00	-12.25	23.75	40.00	-16.25	-	-	peak
3	107.8877	37.64	-13.31	24.33	43.50	-19.17	-	-	peak
4	119.4361	36.75	-14.24	22.51	43.50	-20.99	-	-	peak
5	132.2206	35.63	-16.81	18.82	43.50	-24.68	-	-	peak
6	407.5145	31.14	-6.28	24.86	46.00	-21.14	-	-	peak

802.11n-HT20			
Test Channel	5500MHz(worst case)	Polarity:	Horizontal



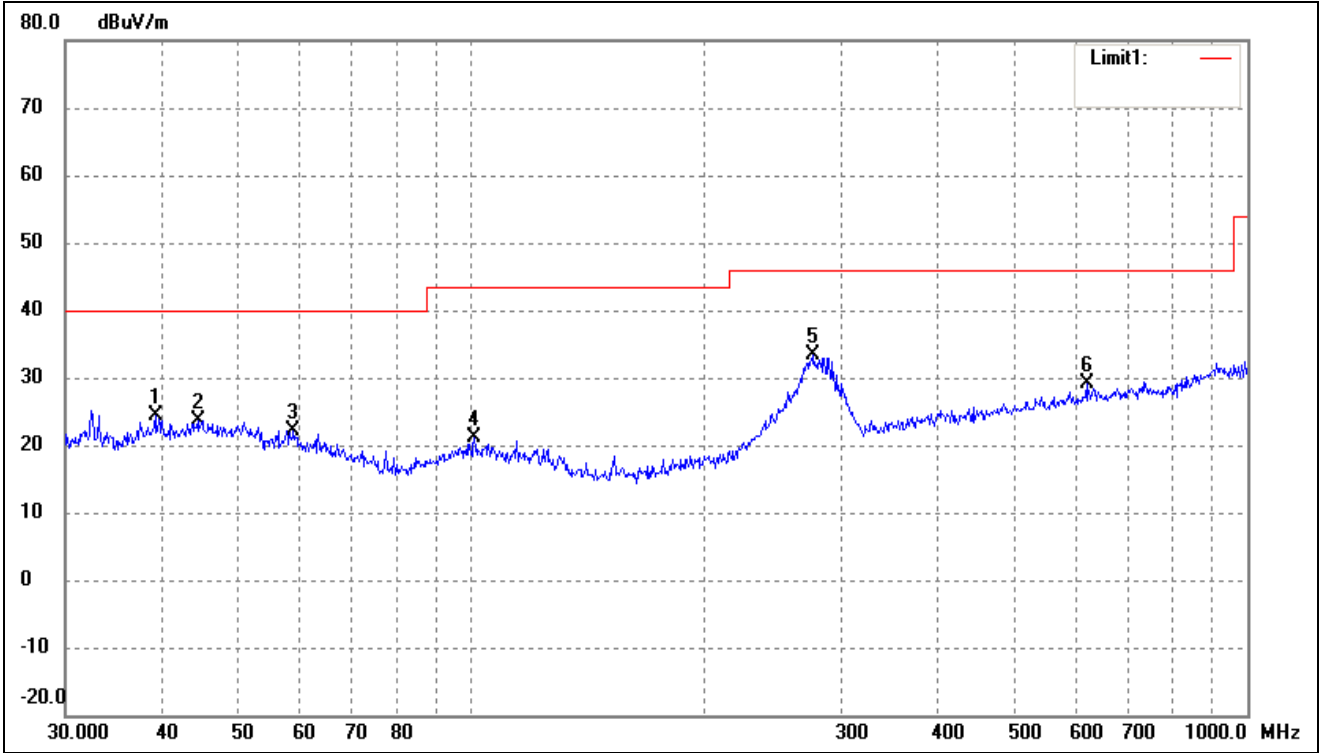
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	32.4059	38.11	-14.02	24.09	40.00	-15.91	-	-	peak
2	43.9658	35.94	-11.83	24.11	40.00	-15.89	-	-	peak
3	50.5860	35.93	-11.69	24.24	40.00	-15.76	-	-	peak
4	52.2079	34.68	-12.15	22.53	40.00	-17.47	-	-	peak
5	97.4560	35.27	-13.75	21.52	43.50	-21.98	-	-	peak
6	286.9823	43.78	-9.87	33.91	46.00	-12.09	-	-	peak

802.11n-HT20			
Test Channel	5500MHz(worst case)	Polarity:	Vertical



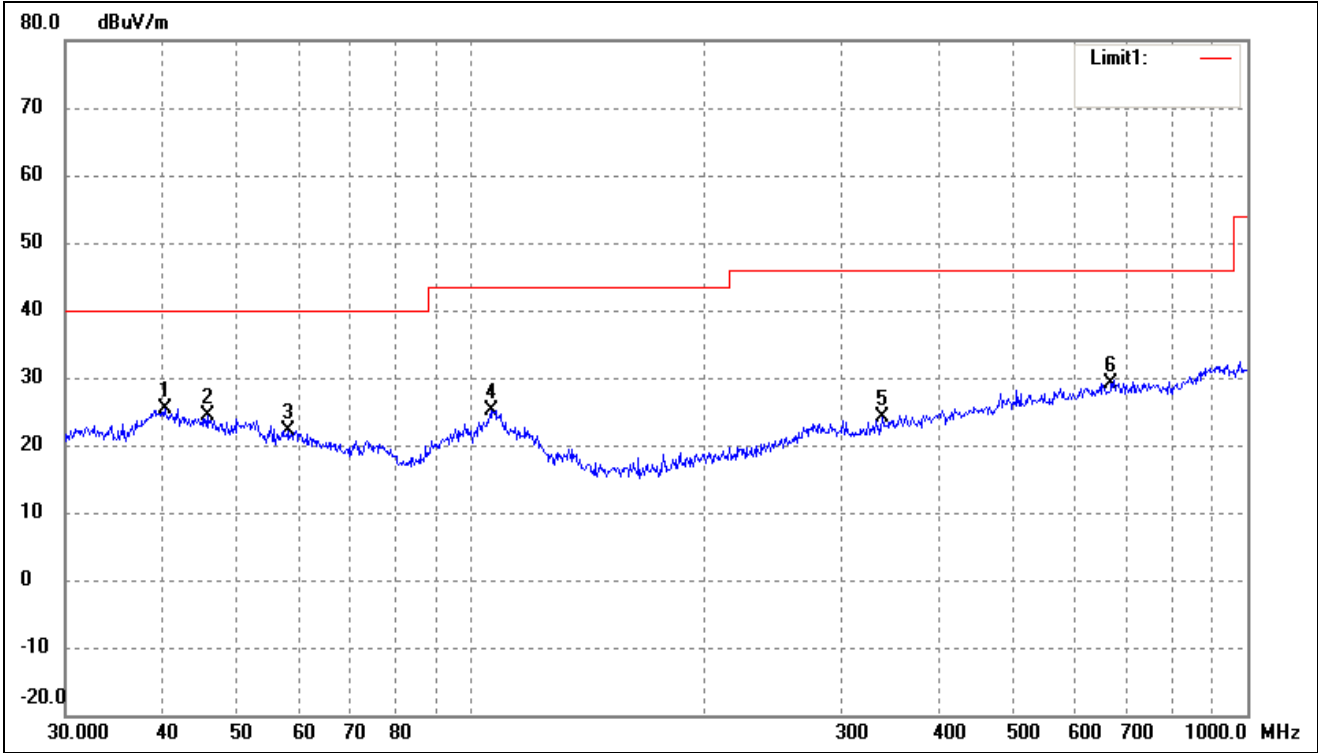
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	40.7016	36.97	-11.96	25.01	40.00	-14.99	-	-	peak
2	46.9948	35.75	-11.69	24.06	40.00	-15.94	-	-	peak
3	106.3850	38.25	-13.31	24.94	43.50	-18.56	-	-	peak
4	191.7450	34.99	-12.99	22.00	43.50	-21.50	-	-	peak
5	274.1939	33.95	-10.77	23.18	46.00	-22.82	-	-	peak
6	665.8034	31.53	-2.05	29.48	46.00	-16.52	-	-	peak

802.11n-HT40			
Test Channel	5510MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.1616	36.62	-12.30	24.32	40.00	-15.68	-	-	peak
2	44.4308	35.40	-11.82	23.58	40.00	-16.42	-	-	peak
3	59.0251	35.10	-12.97	22.13	40.00	-17.87	-	-	peak
4	100.9340	34.50	-13.32	21.18	43.50	-22.32	-	-	peak
5	276.1236	43.98	-10.68	33.30	46.00	-12.70	-	-	peak
6	620.7096	31.15	-2.11	29.04	46.00	-16.96	-	-	peak

802.11n-HT40			
Test Channel	5510MHz(worst case)	Polarity:	Vertical

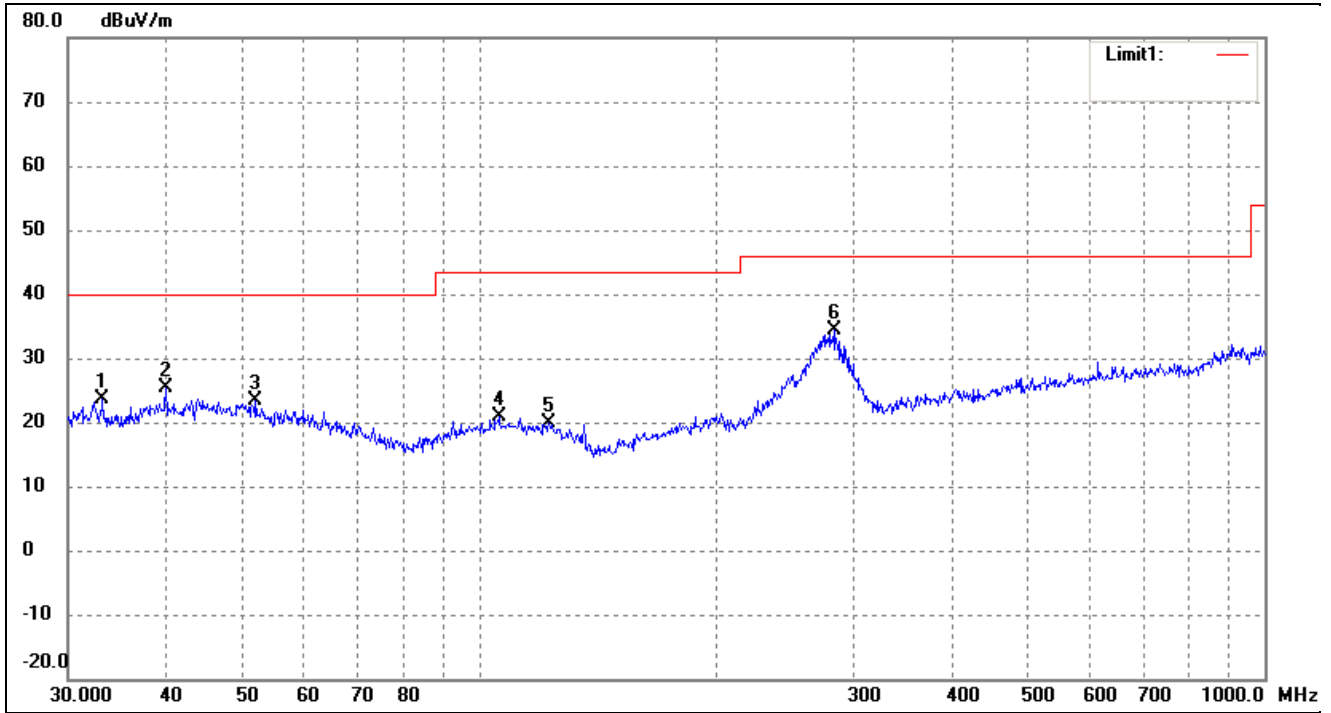


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	40.2757	37.42	-11.98	25.44	40.00	-14.56	-	-	peak
2	45.6948	36.03	-11.76	24.27	40.00	-15.73	-	-	peak
3	57.9993	35.08	-12.97	22.11	40.00	-17.89	-	-	peak
4	106.3850	38.46	-13.31	25.15	43.50	-18.35	-	-	peak
5	338.4001	32.15	-8.14	24.01	46.00	-21.99	-	-	peak
6	668.1423	31.11	-2.01	29.10	46.00	-16.90	-	-	peak



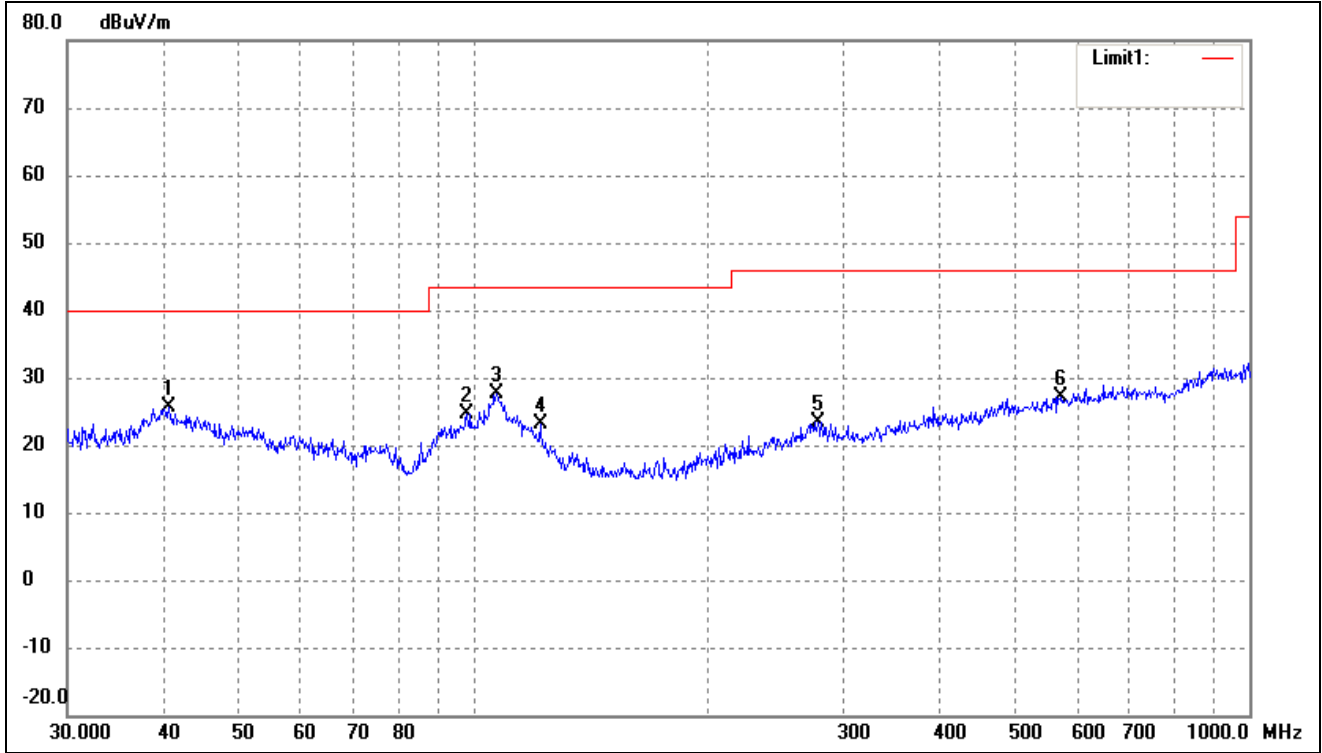
➤ ANT 2\_5725-5850MHz

802.11a			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



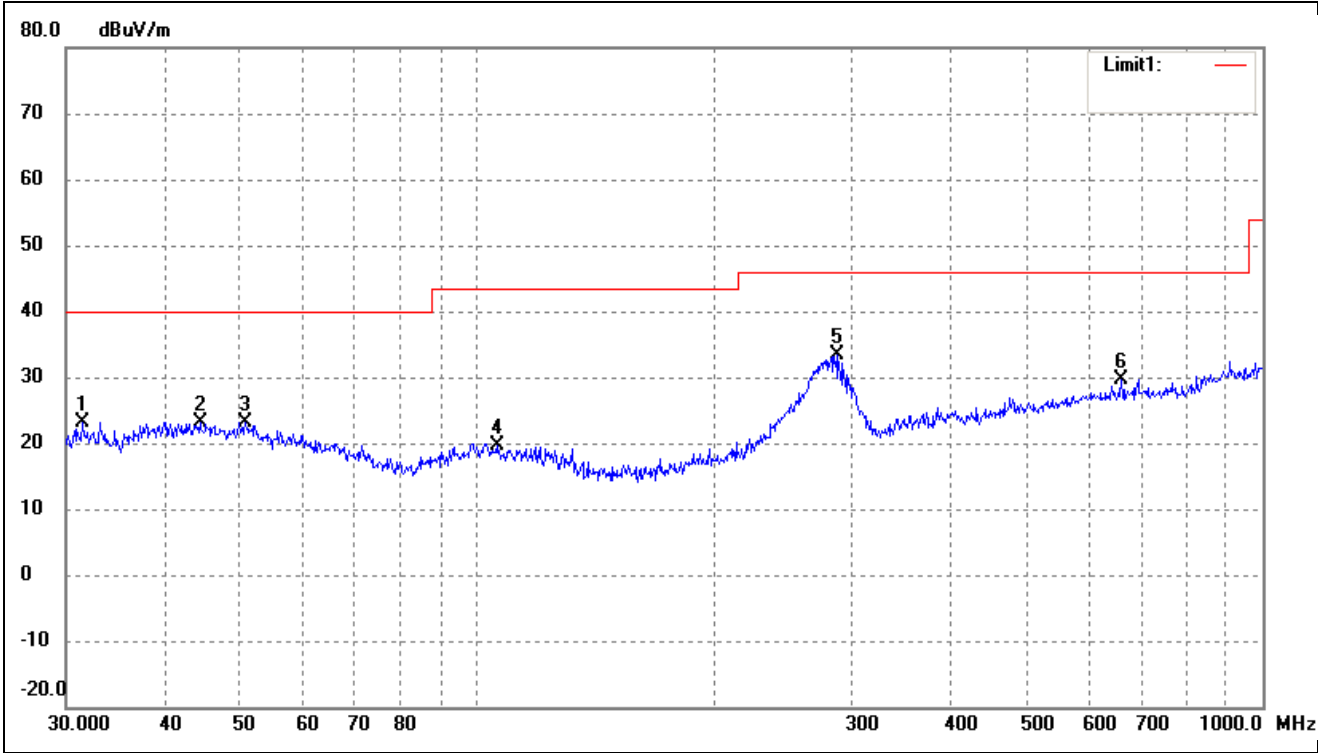
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	33.2112	37.52	-13.97	23.55	40.00	-16.45	-	-	peak
2	39.9942	37.28	-11.98	25.30	40.00	-14.70	-	-	peak
3	52.0251	35.39	-12.10	23.29	40.00	-16.71	-	-	peak
4	106.0126	34.24	-13.31	20.93	43.50	-22.57	-	-	peak
5	122.8340	34.91	-15.05	19.86	43.50	-23.64	-	-	peak
6	282.9852	44.52	-10.17	34.35	46.00	-11.65	-	-	peak

802.11a			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



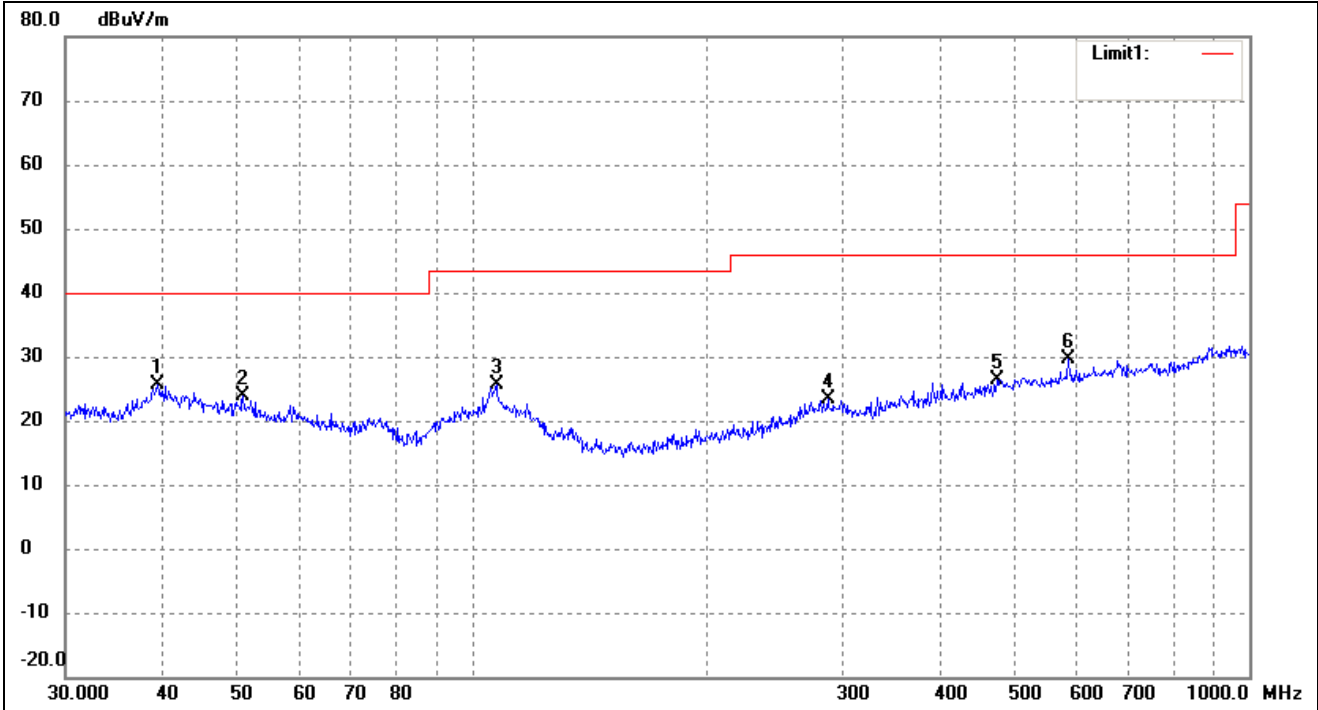
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	40.5591	37.64	-11.97	25.67	40.00	-14.33	-	-	peak
2	98.1419	38.27	-13.62	24.65	43.50	-18.85	-	-	peak
3	107.1337	40.86	-13.31	27.55	43.50	-15.95	-	-	peak
4	121.9755	37.96	-14.83	23.13	43.50	-20.37	-	-	peak
5	278.0669	34.00	-10.53	23.47	46.00	-22.53	-	-	peak
6	572.6144	29.86	-2.67	27.19	46.00	-18.81	-	-	peak

802.11n-HT20			
Test Channel	5745MHz(worst case)	Polarity:	Horizontal



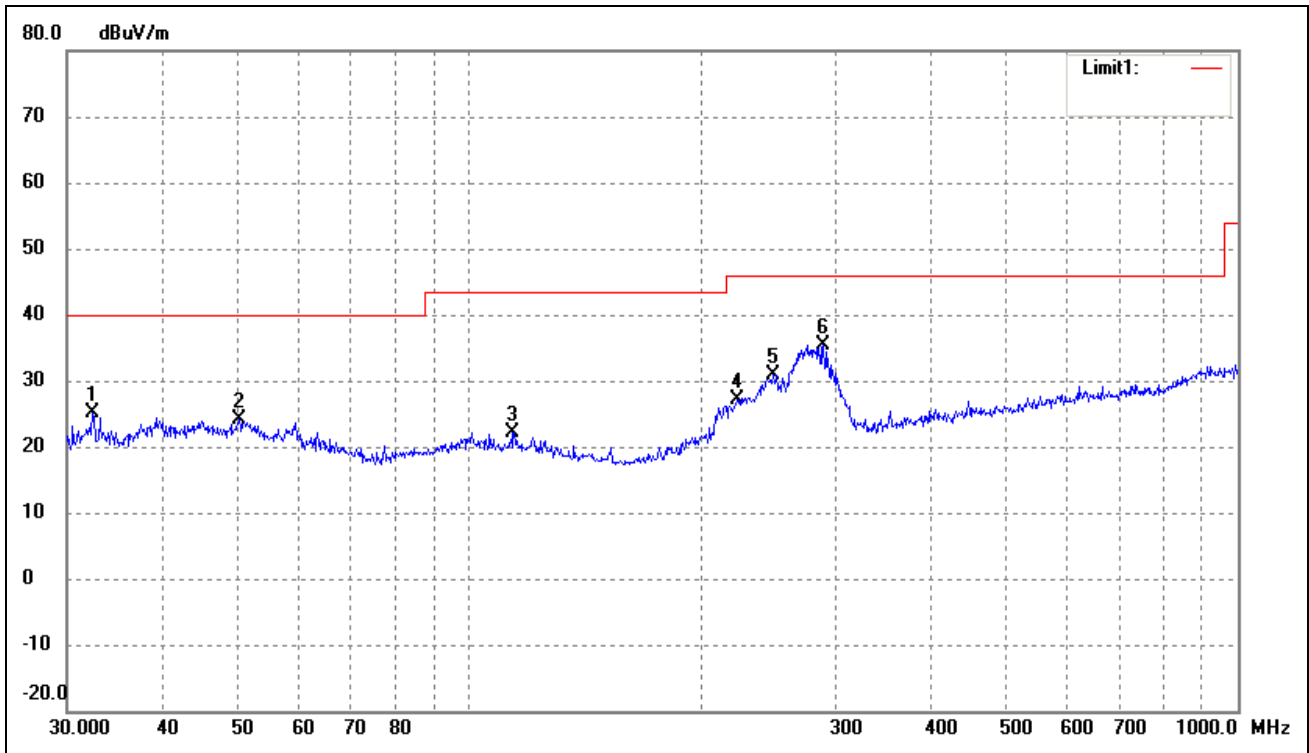
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	31.5095	37.23	-14.06	23.17	40.00	-16.83	-	-	peak
2	44.4308	34.94	-11.82	23.12	40.00	-16.88	-	-	peak
3	50.7637	34.86	-11.75	23.11	40.00	-16.89	-	-	peak
4	106.0126	32.98	-13.31	19.67	43.50	-23.83	-	-	peak
5	286.9823	43.34	-9.87	33.47	46.00	-12.53	-	-	peak
6	661.1505	31.83	-2.15	29.68	46.00	-16.32	-	-	peak

802.11n-HT20			
Test Channel	5745MHz(worst case)	Polarity:	Vertical



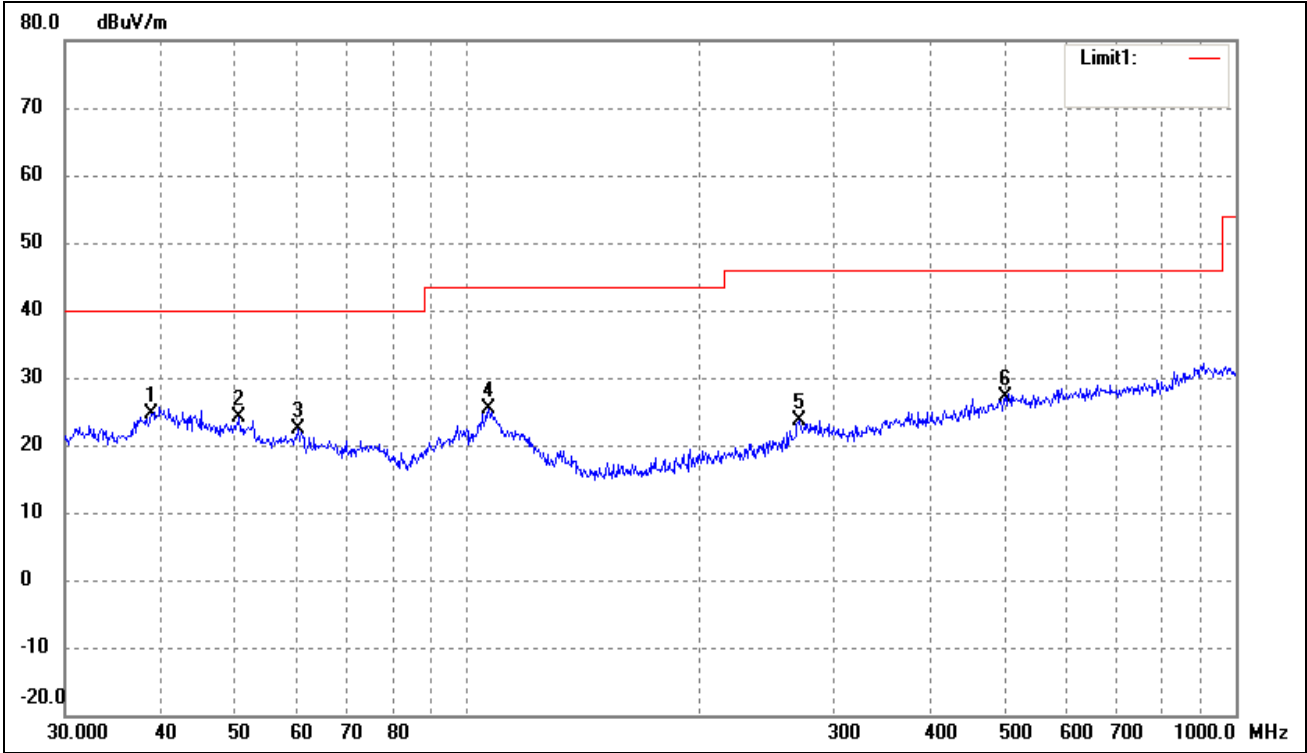
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.4372	37.90	-12.19	25.71	40.00	-14.29	-	-	peak
2	50.7637	35.57	-11.75	23.82	40.00	-16.18	-	-	peak
3	107.5101	38.84	-13.32	25.52	43.50	-17.98	-	-	peak
4	286.9823	33.20	-9.87	23.33	46.00	-22.67	-	-	peak
5	473.8347	31.27	-4.85	26.42	46.00	-19.58	-	-	peak
6	584.7895	31.93	-2.32	29.61	46.00	-16.39	-	-	peak

802.11n-HT40			
Test Channel	5755MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	32.4059	39.09	-14.02	25.07	40.00	-14.93	-	-	peak
2	50.2325	35.63	-11.60	24.03	40.00	-15.97	-	-	peak
3	114.1138	35.76	-13.72	22.04	43.50	-21.46	-	-	peak
4	223.7334	39.36	-12.15	27.21	46.00	-18.79	-	-	peak
5	248.5519	41.87	-10.99	30.88	46.00	-15.12	-	-	peak
6	289.0021	45.09	-9.72	35.37	46.00	-10.63	-	-	peak

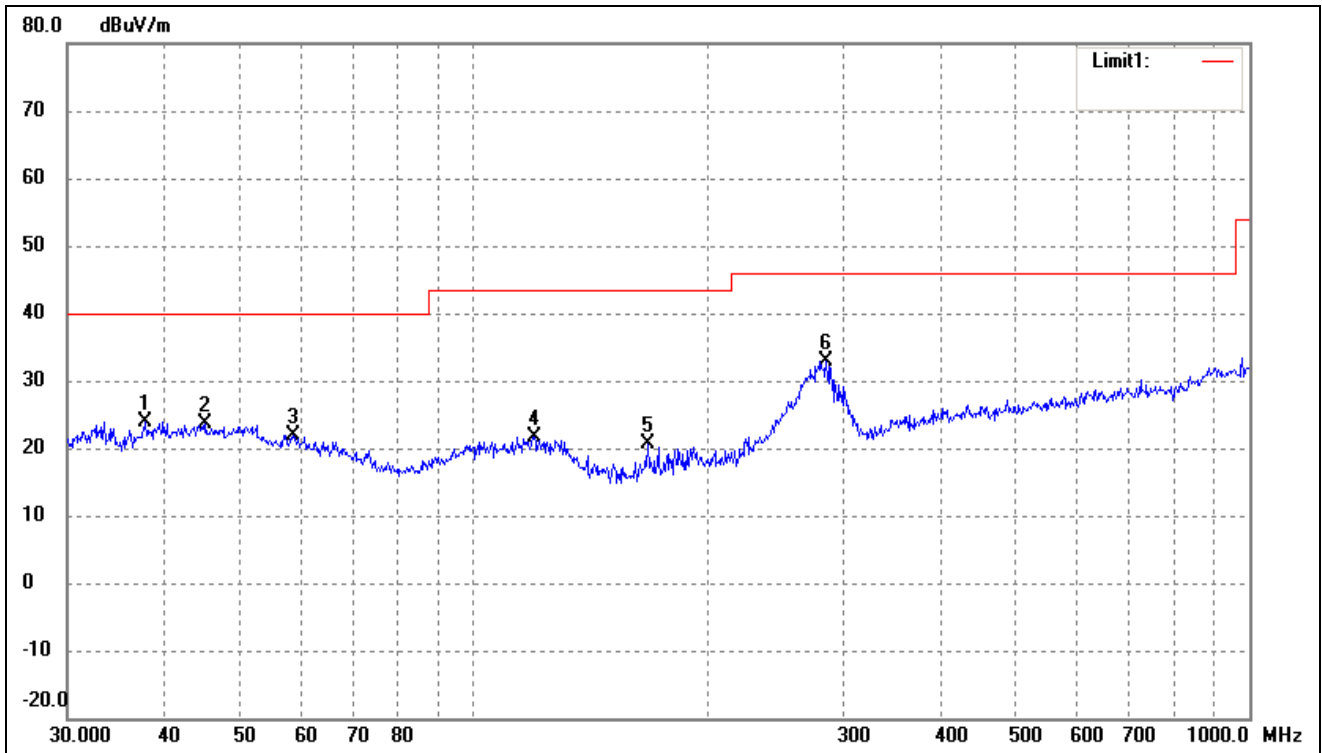
802.11n-HT40			
Test Channel	5755MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	38.8879	36.97	-12.40	24.57	40.00	-15.43	-	-	peak
2	50.5860	35.89	-11.69	24.20	40.00	-15.80	-	-	peak
3	60.2801	35.36	-13.04	22.32	40.00	-17.68	-	-	peak
4	106.7587	38.66	-13.32	25.34	43.50	-18.16	-	-	peak
5	270.3748	34.52	-10.78	23.74	46.00	-22.26	-	-	peak
6	501.1790	31.22	-4.05	27.17	46.00	-18.83	-	-	peak

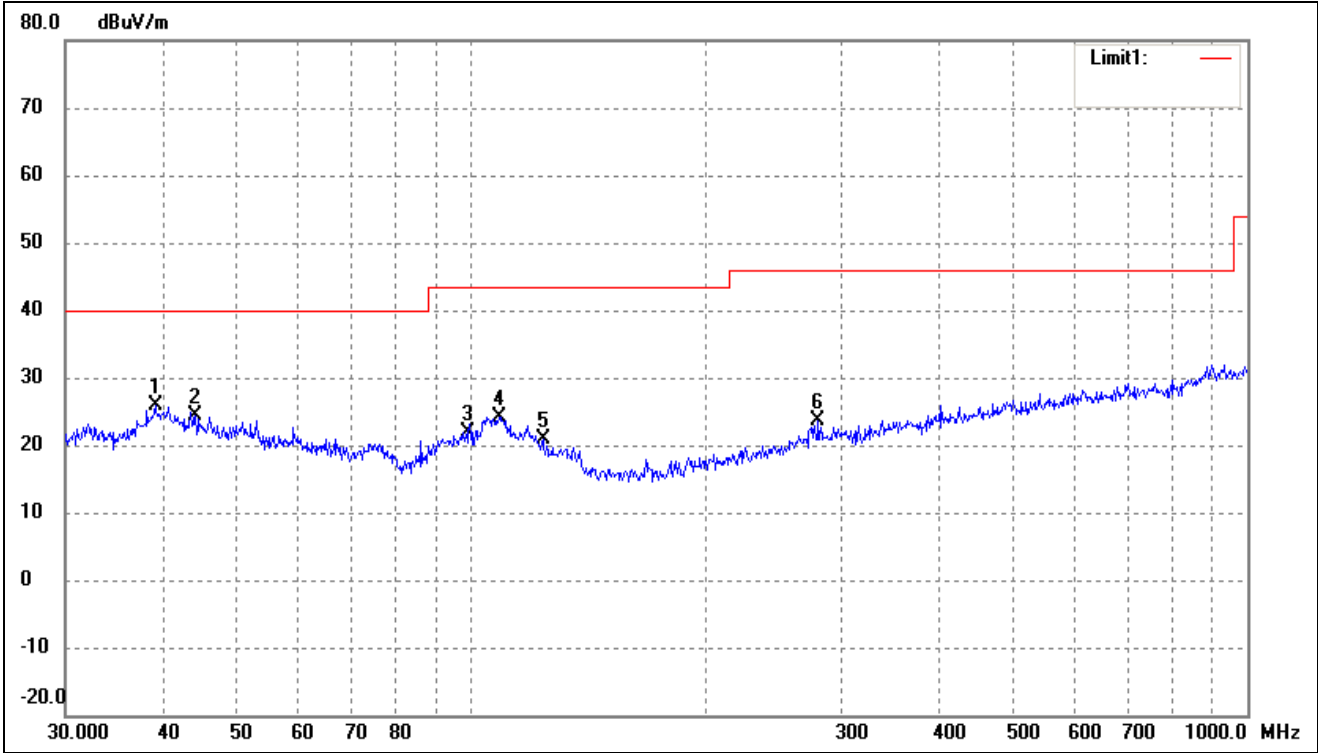
➤ ANT 3\_5150-5250MHz

802.11a			
Test Channel	5180MHz(Worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	37.8121	36.78	-12.81	23.97	40.00	-16.03	-	-	peak
2	45.2166	35.34	-11.79	23.55	40.00	-16.45	-	-	peak
3	58.6126	34.85	-12.98	21.87	40.00	-18.13	-	-	peak
4	119.8556	35.84	-14.28	21.56	43.50	-21.94	-	-	peak
5	167.8243	35.88	-15.14	20.74	43.50	-22.76	-	-	peak
6	284.9767	42.87	-10.03	32.84	46.00	-13.16	-	-	peak

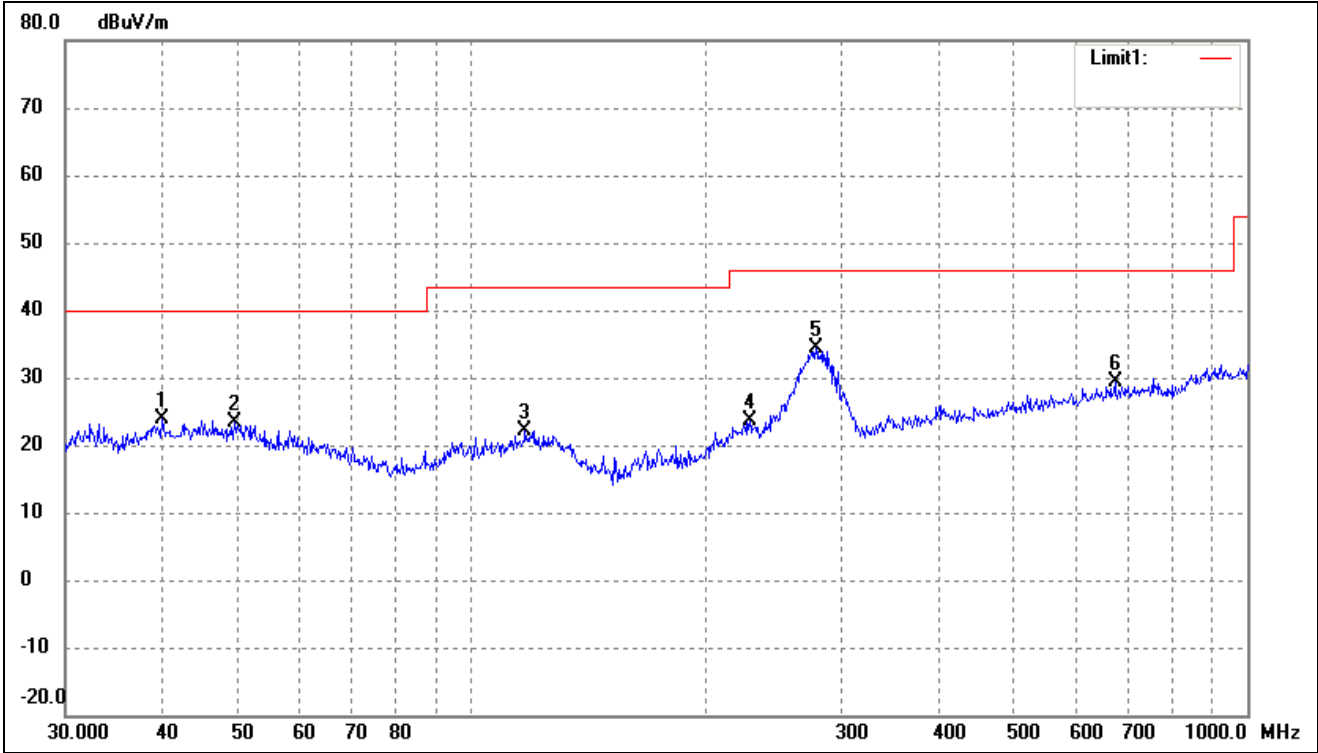
802.11a			
Test Channel	5180MHz(Worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.1616	38.10	-12.30	25.80	40.00	-14.20	-	-	peak
2	44.1202	36.23	-11.84	24.39	40.00	-15.61	-	-	peak
3	99.1797	35.30	-13.45	21.85	43.50	-21.65	-	-	peak
4	108.6470	37.49	-13.31	24.18	43.50	-19.32	-	-	peak
5	123.6985	36.22	-15.30	20.92	43.50	-22.58	-	-	peak
6	280.0238	33.95	-10.39	23.56	46.00	-22.44	-	-	peak

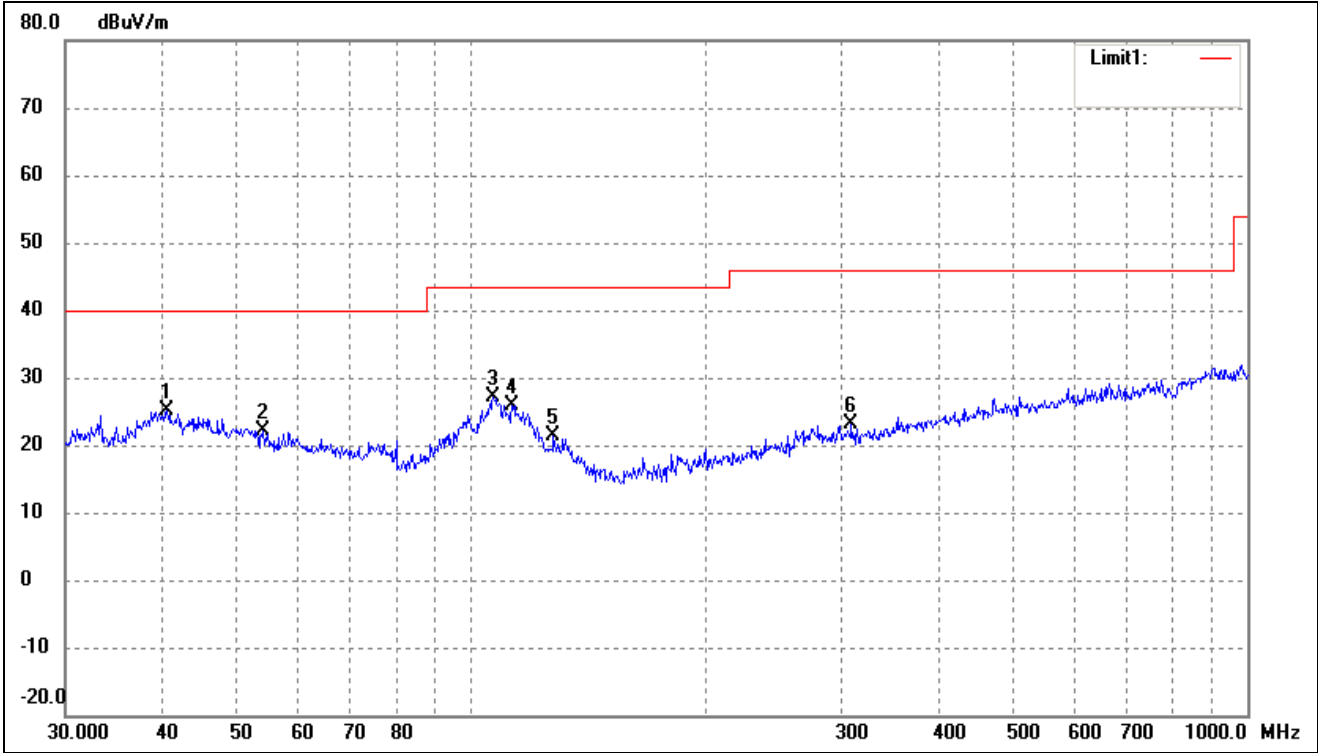


802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Horizontal



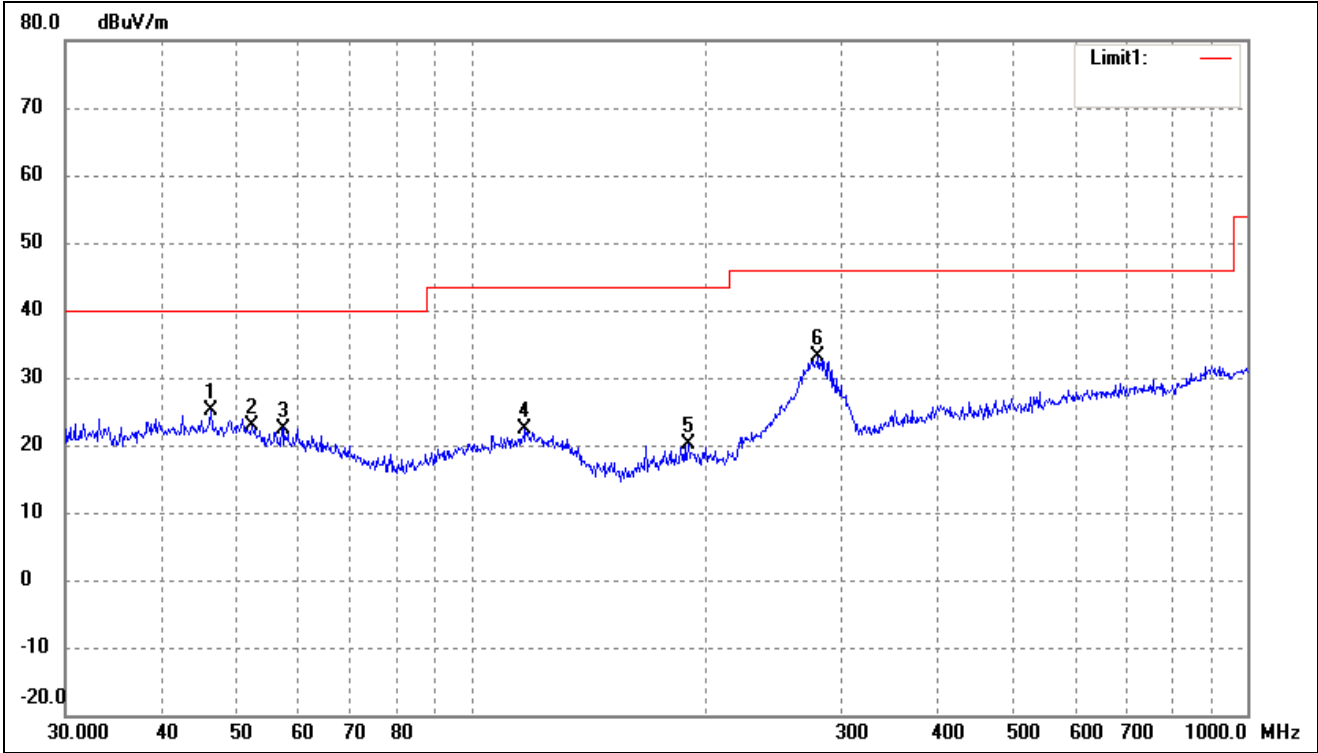
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	39.9942	35.74	-11.98	23.76	40.00	-16.24	-	-	peak
2	49.5328	34.90	-11.56	23.34	40.00	-16.66	-	-	peak
3	117.3603	36.26	-14.04	22.22	43.50	-21.28	-	-	peak
4	228.4904	35.65	-11.96	23.69	46.00	-22.31	-	-	peak
5	278.0669	45.01	-10.53	34.48	46.00	-11.52	-	-	peak
6	675.2080	31.19	-1.87	29.32	46.00	-16.68	-	-	peak

802.11n-HT20			
Test Channel	5180MHz(worst case)	Polarity:	Vertical



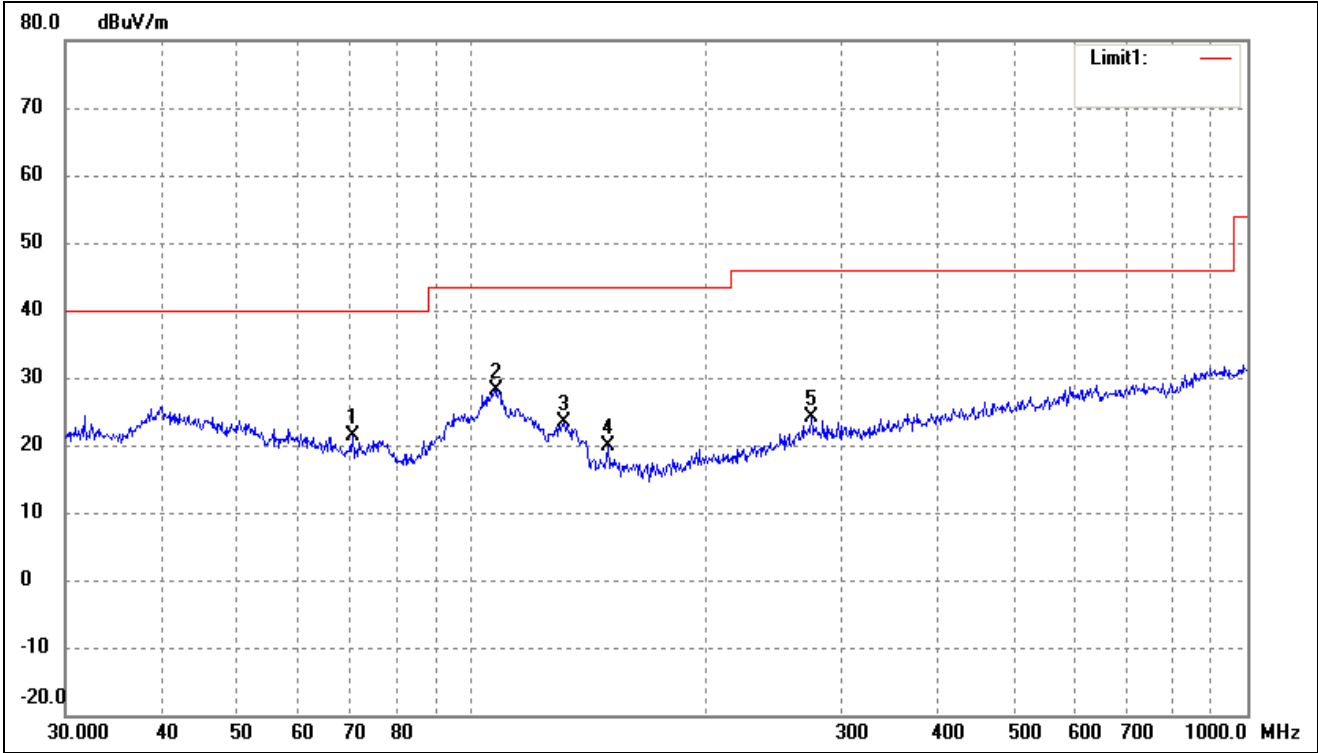
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	40.5591	37.03	-11.97	25.06	40.00	-14.94	-	-	peak
2	53.8818	34.86	-12.63	22.23	40.00	-17.77	-	-	peak
3	106.7587	40.40	-13.32	27.08	43.50	-16.42	-	-	peak
4	112.9196	39.48	-13.60	25.88	43.50	-17.62	-	-	peak
5	127.6645	37.62	-16.35	21.27	43.50	-22.23	-	-	peak
6	308.9126	32.01	-8.94	23.07	46.00	-22.93	-	-	peak

802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.1780	36.85	-11.73	25.12	40.00	-14.88	-	-	peak
2	52.2079	34.96	-12.15	22.81	40.00	-17.19	-	-	peak
3	57.1914	35.47	-12.97	22.50	40.00	-17.50	-	-	peak
4	117.3603	36.44	-14.04	22.40	43.50	-21.10	-	-	peak
5	190.4050	33.21	-13.09	20.12	43.50	-23.38	-	-	peak
6	280.0238	43.60	-10.39	33.21	46.00	-12.79	-	-	peak

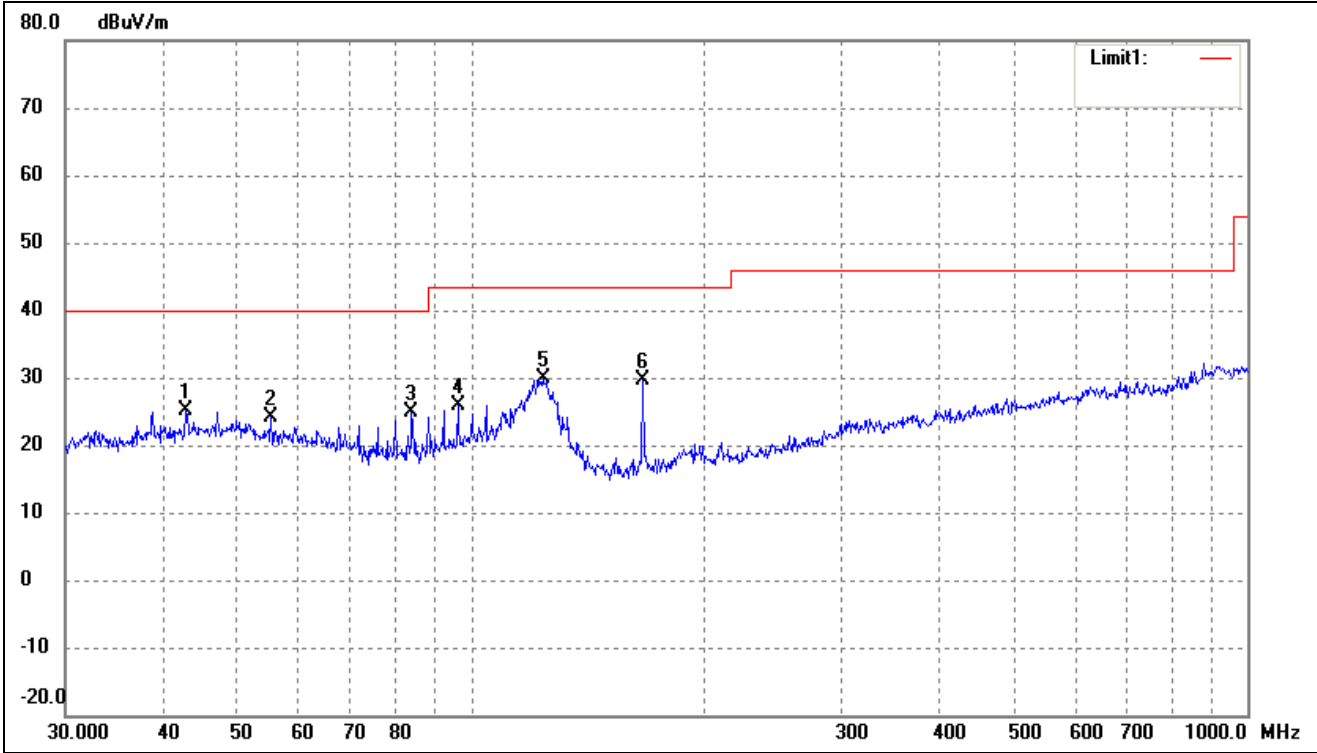
802.11n-HT40			
Test Channel	5190MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	70.3365	36.13	-14.73	21.40	40.00	-18.60	-	-	peak
2	107.5101	41.50	-13.32	28.18	43.50	-15.32	-	-	peak
3	131.7577	40.18	-16.83	23.35	43.50	-20.15	-	-	peak
4	150.0108	35.21	-15.43	19.78	43.50	-23.72	-	-	peak
5	274.1939	34.91	-10.77	24.14	46.00	-21.86	-	-	peak

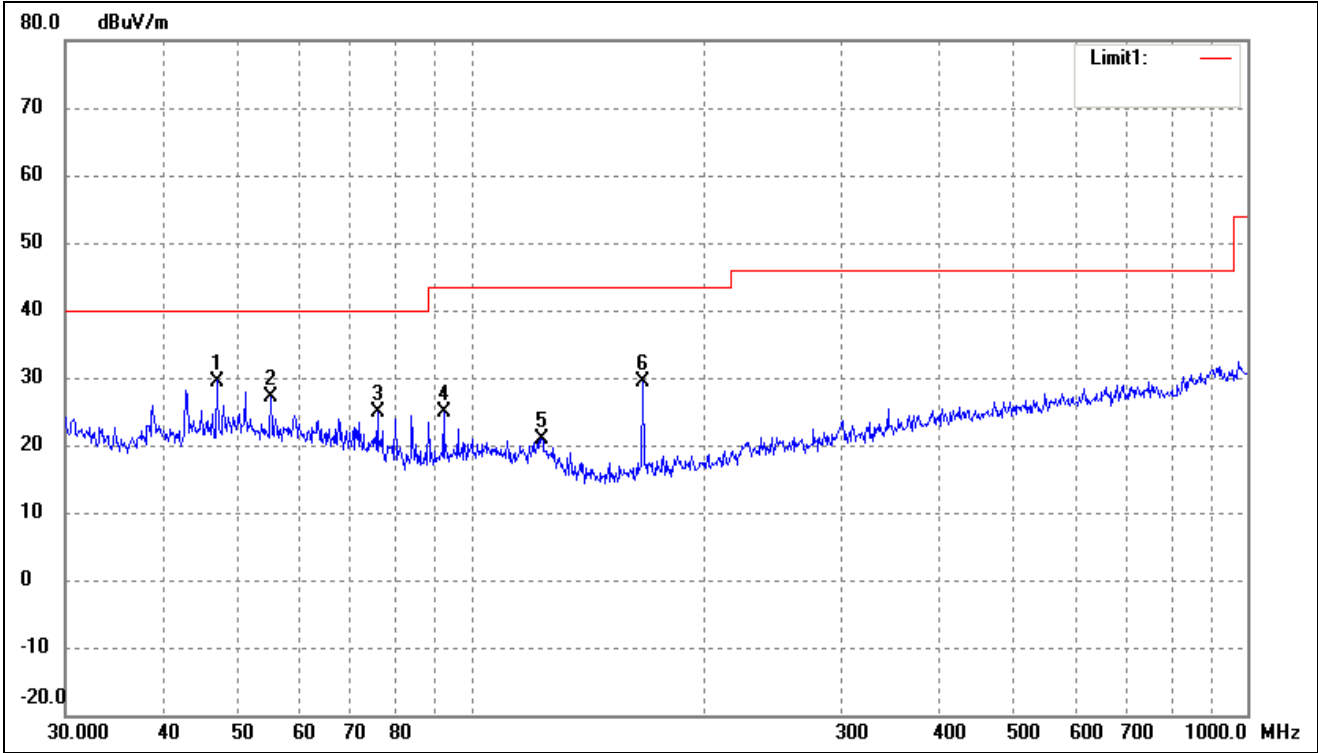
➤ ANT 3\_5250-5350MHz

802.11a			
Test Channel	5260MHz(Worst case)	Polarity:	Horizontal



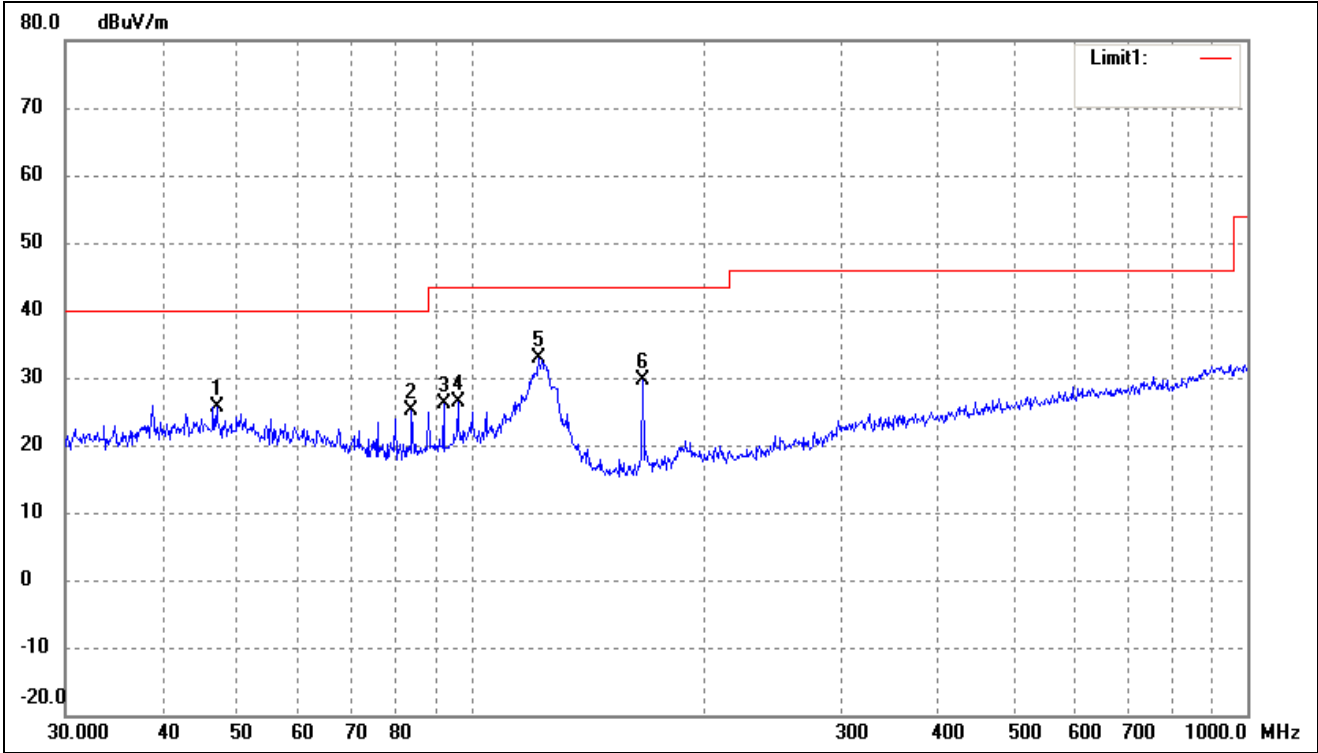
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	42.8998	36.97	-11.87	25.10	40.00	-14.90	-	-	peak
2	55.2207	36.96	-12.95	24.01	40.00	-15.99	-	-	peak
3	83.8156	41.02	-16.22	24.80	40.00	-15.20	-	-	peak
4	96.0986	39.73	-13.96	25.77	43.50	-17.73	-	-	peak
5	123.6985	45.09	-15.30	29.79	43.50	-13.71	-	-	peak
6	166.0680	44.75	-15.23	29.52	43.50	-13.98	-	-	peak

802.11a			
Test Channel	5260MHz(Worst case)	Polarity:	Vertical



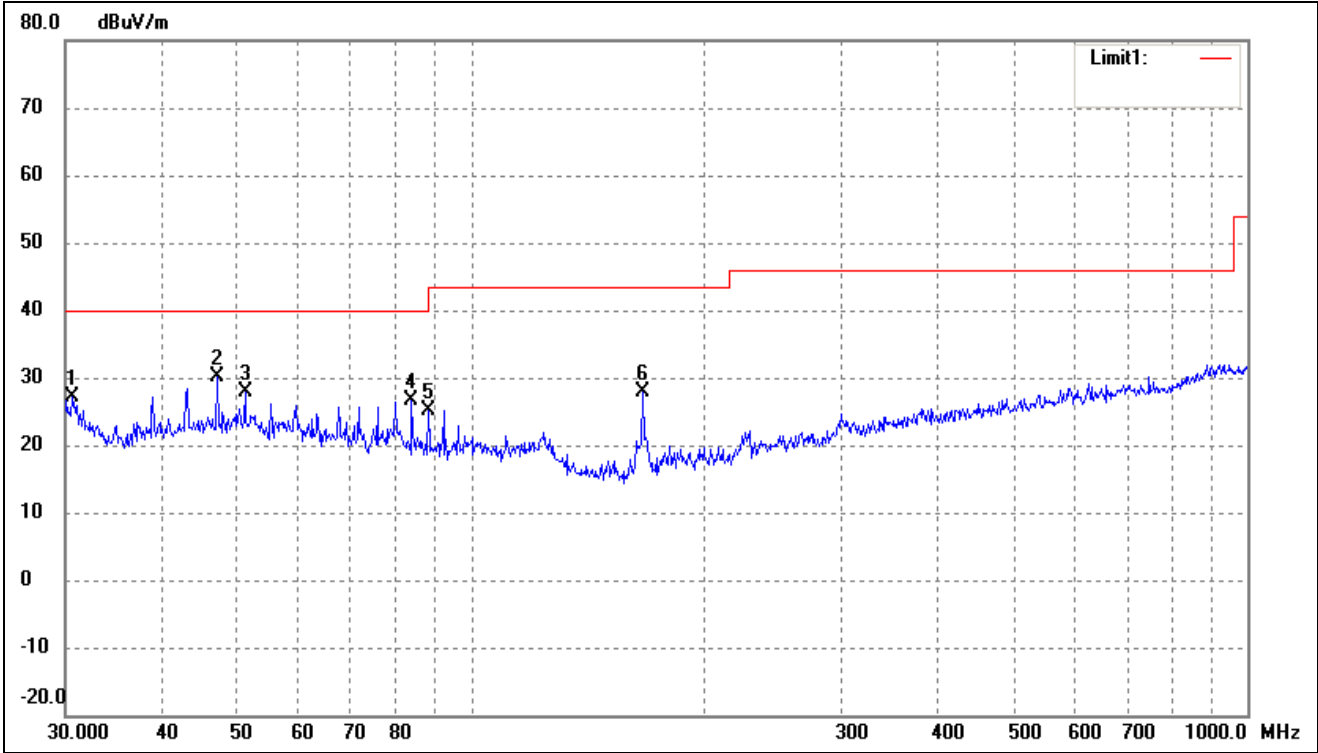
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.9948	41.19	-11.69	29.50	40.00	-10.50	-	-	peak
2	55.2207	40.00	-12.95	27.05	40.00	-12.95	-	-	peak
3	75.7114	41.09	-16.14	24.95	40.00	-15.05	-	-	peak
4	92.1388	39.56	-14.61	24.95	43.50	-18.55	-	-	peak
5	123.2655	36.17	-15.17	21.00	43.50	-22.50	-	-	peak
6	166.6514	44.51	-15.20	29.31	43.50	-14.19	-	-	peak

802.11n-HT20			
Test Channel	5260MHz(Worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.9948	37.36	-11.69	25.67	40.00	-14.33	-	-	peak
2	83.8156	41.38	-16.22	25.16	40.00	-14.84	-	-	peak
3	92.1388	40.63	-14.61	26.02	43.50	-17.48	-	-	peak
4	96.0986	40.33	-13.96	26.37	43.50	-17.13	-	-	peak
5	121.9755	47.82	-14.83	32.99	43.50	-10.51	-	-	peak
6	166.6514	44.87	-15.20	29.67	43.50	-13.83	-	-	peak

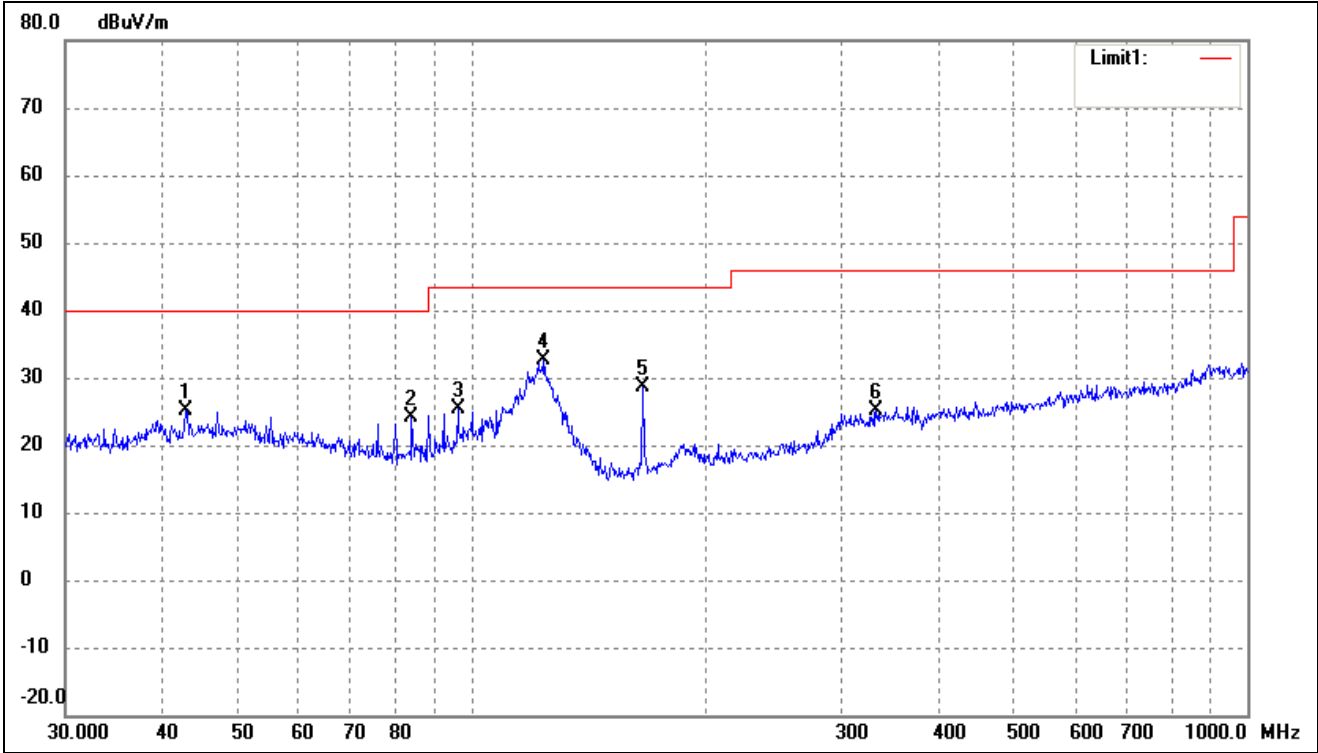
802.11n-HT20			
Test Channel	5260MHz(Worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	30.6379	41.22	-14.11	27.11	40.00	-12.89	-	-	peak
2	46.9948	41.91	-11.69	30.22	40.00	-9.78	-	-	peak
3	51.1209	39.67	-11.85	27.82	40.00	-12.18	-	-	peak
4	83.8156	42.73	-16.22	26.51	40.00	-13.49	-	-	peak
5	88.0329	40.61	-15.38	25.23	43.50	-18.27	-	-	peak
6	166.6514	43.06	-15.20	27.86	43.50	-15.64	-	-	peak

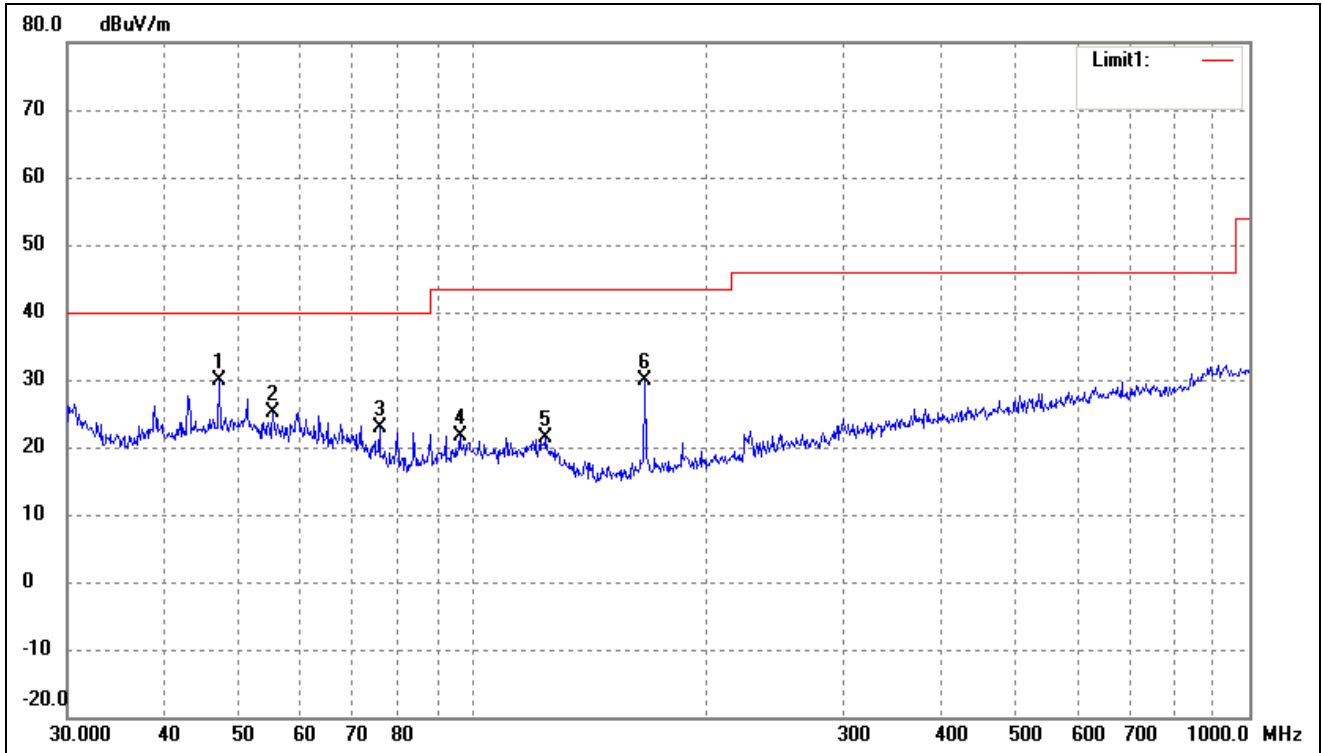


802.11n-HT40			
Test Channel	5270MHz(worst case)	Polarity:	Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	42.8998	37.01	-11.87	25.14	40.00	-14.86	-	-	peak
2	83.8156	40.45	-16.22	24.23	40.00	-15.77	-	-	peak
3	96.0986	39.35	-13.96	25.39	43.50	-18.11	-	-	peak
4	124.1330	48.03	-15.40	32.63	43.50	-10.87	-	-	peak
5	166.6514	43.84	-15.20	28.64	43.50	-14.86	-	-	peak
6	332.5187	33.61	-8.50	25.11	46.00	-20.89	-	-	peak

802.11n-HT40			
Test Channel	5270MHz(worst case)	Polarity:	Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ( )	Height (cm)	Remark
1	46.9948	41.66	-11.69	29.97	40.00	-10.03	-	-	peak
2	55.2207	38.14	-12.95	25.19	40.00	-14.81	-	-	peak
3	75.7114	38.96	-16.14	22.82	40.00	-17.18	-	-	peak
4	96.0986	35.58	-13.96	21.62	43.50	-21.88	-	-	peak
5	124.1330	36.87	-15.40	21.47	43.50	-22.03	-	-	peak
6	166.6514	45.03	-15.20	29.83	43.50	-13.67	-	-	peak