



# FCC TEST REPORT

According to

## FCC CFR Title 47 Part 15 Subpart C

Applicant	:	Rocket Education Content
Address	:	PMB 425 #138 Winston Churchill Ave. San Juan, PR 00926 United States
Manufacturer	:	Darton Group
Address	:	3/F,Darton Tower,4 Tai Yip Street,Kwun Tong,Kowloon,Hong Kong
Equipment	:	8-inch Tablet
Model No.	:	E-CCH-0013
FCC ID	:	Z5U-3652222

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## Document history

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Applicant	: Rocket Education Content
Address	: PMB 425 #138 Winston Churchill Ave. San Juan, PR 00926 United States
Manufacturer	: Darton Group
Address	: 3/F,Darton Tower,4 Tai Yip Street,Kwun Tong,Kowloon,Hong Kong
Equipment	: 8-inch Tablet
Model No.	: E-CCH-0013
FCC ID	: Z5U-3652222

### I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4 – 2003** and the energy emitted by this equipment was **passed** **CISPR PUB. 22 and FCC Part 15** in both radiated and conducted emission class B limits. Testing was carried out on Oct 18, 2011 at **Cerpass Technology Corp.**

Documented By:

Jeff Fang/ Administration

Approved By:

Miro Chueh / Technical director



## 1. Report of Measurements and Examinations

<b>FCC CFR Title 47 Part 15 Subpart C: 2007</b>			
<b>ANSI C63.4: 2003</b>			
Clause	Test Parameter	Test Performed	Remark
15.207	Conducted Emission	YES	PASS
15.209	Radiated Emission	YES	PASS
15.247(a) 15.215(c)	Occupied Bandwidth	YES	PASS
15.247(b)	Maximum Peak Output Power	YES	PASS
15.247(c)	Band Edges	YES	PASS
15.247(c)	RF antenna conducted	YES	PASS
15.247(d)	Power Spectral Density	YES	PASS



## 2. Test Configuration of Equipment under Test

### 2.1. Feature of Equipment under Test

8-inch Tablet	Model No:	E-CCH-0013
Power Adapter	Model No.:	GDJ0501500
	Input:	100-240V~50-60Hz
	Output:	5.0V $\overline{\text{---}}$ 1500mA
Power supply cable	Non-Shielded, 1.5m	
Remark	N/A	

WLAN	USI/WM-N-BM-01
Spreading	802.11b: CCK, DQPSK, DBPSK 802.11g: 64 QAM, 16 QAM, QPSK, BPSK 802.11n: BPSK, QPSK, 16-QAM, 64-QAM
Frequency Range	802.11b/g/n(20MHz): 2412-2462MHz 802.11n(40MHz): 2422-2452MHz
Number of Channels	802.11b/g/n (20MHz): 11 802.11n (40MHz): 7
Data Rate	802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps 802.11n: MCS0~MCS7
Antenna	PIFA Antenna (-0.62dBi)



## 2.2. Carrier Frequency of Channels

For 2.4G 802.11b, 802.11g, 802.11n (20MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	2412	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	11	2462
06	2437	---	---

For 2.4G 802.11n (40MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	---	08	2447
02	---	09	2452
03	2422	---	---
04	2427	---	---
05	2432	---	---
06	2437	---	---
07	2442	---	---





### 2.3. Test Manner

Test Manner	
a	During testing, the interface cables and equipment positions were varied according to 47 CFR, Part 2, Part 15
b	Adjust the EUT at the test mode and the test channel. Then test.
The test modes:	
<p>The EUT transmitting and receiving with one antenna working at b/g/N mode, so one antenna working configuration was used for b/g/N mode testing in this report.</p> <p>The worst-case data rates are determined to be as follows for each mode based on investigation by measuring the average power, peak power and PPSD across all data rates, bandwidths, and modulations.</p> <p>The worst-case data rates:</p> <p>IEEE802.11b mode: Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 11 Mbps data rate were chosen for full testing.</p> <p>IEEE802.11g mode: Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with 54Mbps data rate were chosen for full testing.</p> <p>IEEE 802.11gn Standard-20 MHz Channel mode: Channel Low (2412MHz), Channel Mid (2437MHz) and Channel High (2462MHz) with MCS0 data rate were chosen for full testing.</p> <p>IEEE 802.11gn Wide-40 MHz Channel mode: Channel Low (2422MHz), Channel Mid (2437MHz) and Channel High (2452MHz) with MCS0 data rate were chosen for full testing.</p> <p>Then, the EUT configuration and cable configuration of the above highest emission mode was recorded for all final test items.</p>	



## 2.4. Description of Test System

No	Device	Manufacturer	Model No.	Description
1	N/A	N/A	N/A	N/A

**2.5. General Information of Test**

Test Site:	CerpPASS Technology Corp.
Performand Location :	No.66,Tangzhuang Road, Suzhou Industrial Park, Jiangsu 215006, China
NVLAP LAB Code :	200814-0
FCC Registration Number :	916572, 331395
IC Registration Number :	7290A-1, 7290A-2
VCCI Registration Number :	T-1945 for Telecommunication Test C-2919 for Conducted emission test R-2670 for Radiated emission test below 1GHz G-227 for Radiated emission test above 1GHz

Laboratory accreditation

**2.6. Measurement Uncertainty**

Measurement Item	Measurement Frequency	Polarization	Uncertainty
Conducted Emission	9 kHz ~ 30 MHz	LINE/NEUTRAL	±2.71 dB
Radiated Emission	30 MHz ~ 25GHz	Vertical	±4.11 dB
		Horizontal	±4.10 dB
Occupied Bandwidth	---	---	±7500 Hz
Maximum Peak Output Power	---	---	±1.4 dB
Band Edges	---	---	±2.2 dB
Power Spectral Density	---	---	±2.2 dB



### 3. Test of Conducted Emission

#### 3.1. Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2003 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB $\mu$ V)	Average (dB $\mu$ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

\*Decreases with the logarithm of the frequency.

#### 3.2. Test Procedures

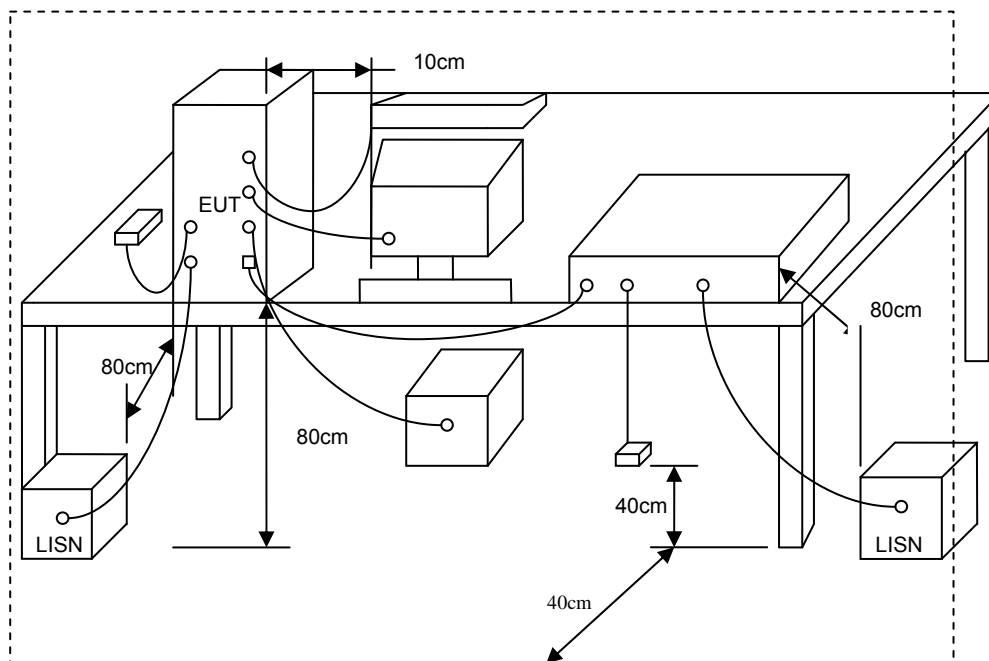
The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.



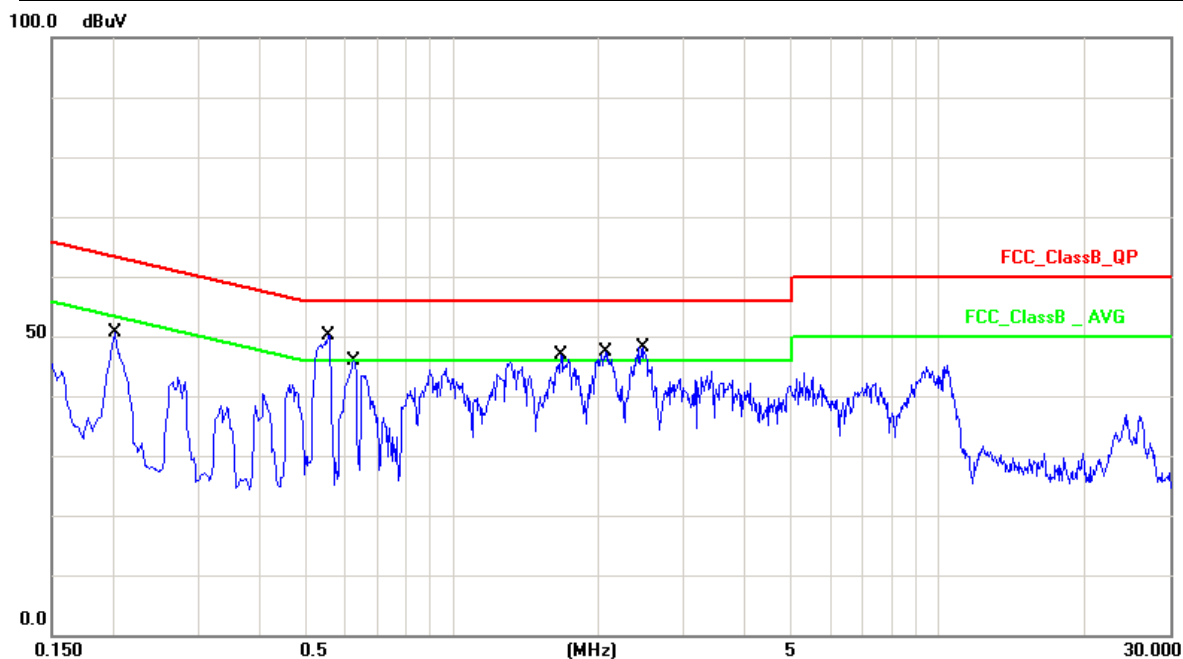
### 3.4. Measurement Equipment

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date
Test Receiver	R&S	ESCI	100565	2011.01.15
AMN	R&S	ESH2-Z5	100182	2011.06.23
Two-Line V-Network	R&S	ENV216	100325	2011.04.18
ISN	FCC	FCC-TLISN-T2-02	20379	2011.06.23
ISN	FCC	FCC-TLISN-T4-02	20380	2011.06.23
ISN	FCC	FCC-TLISN-T8-02	20381	2011.06.23
Attenuator	R&S	ESH3-Z2	100529	2011.01.11
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-004	2011.08.14



### 3.5. Test Result and Data

Test Mode :	Mode : Normal Link		
AC Power :	AC 230V/60Hz	Phase :	L
Temperature :	22°C	Humidity :	51%
Pressur(mbar) :	1002	Date :	2011/10/18

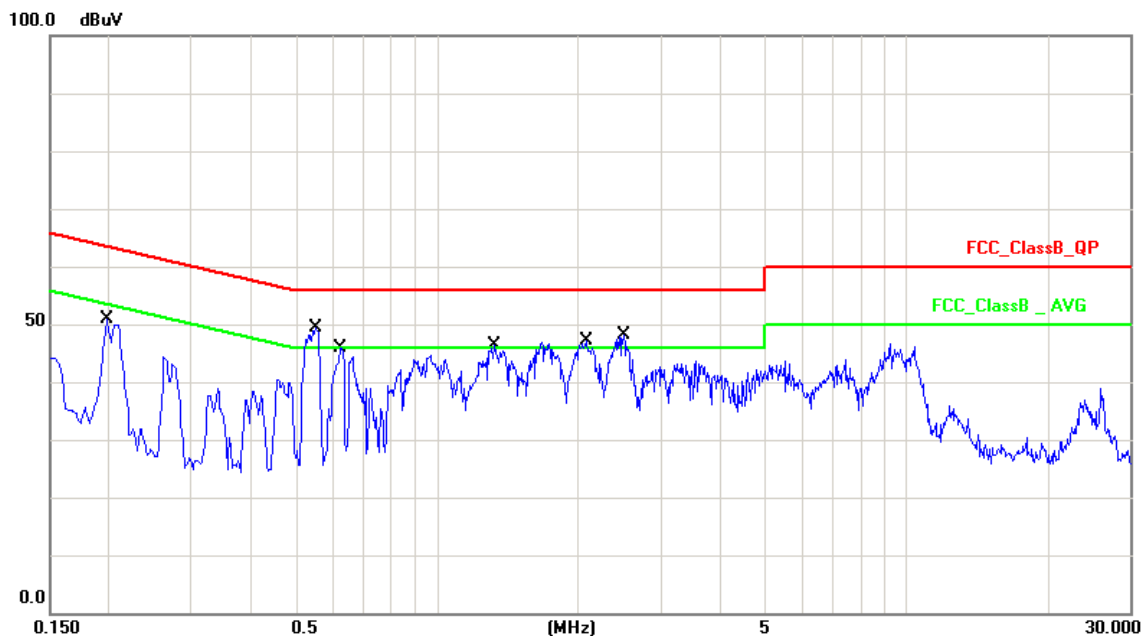


No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.2020	19.87	27.70	47.57	63.52	-15.95	QP
2	0.2020	19.87	19.62	39.49	53.52	-14.03	AVG
3	0.5580	19.85	27.12	46.97	56.00	-9.03	QP
4	0.5580	19.85	13.48	33.33	46.00	-12.67	AVG
5	0.6300	19.85	24.04	43.89	56.00	-12.11	QP
6	0.6300	19.85	8.65	28.50	46.00	-17.50	AVG
7	1.6740	19.72	24.49	44.21	56.00	-11.79	QP
8	1.6740	19.72	9.10	28.82	46.00	-17.18	AVG
9	2.0740	19.71	24.62	44.33	56.00	-11.67	QP
10	2.0740	19.71	7.22	26.93	46.00	-19.07	AVG
11	2.4660	19.71	24.02	43.73	56.00	-12.27	QP
12	2.4660	19.71	3.89	23.60	46.00	-22.40	AVG

Note: Measurement Level = Reading Level + Correct Factor



Test Mode :	Mode : Normal Link		
AC Power :	AC 230V/60Hz	Phase :	N
Temperature :	22°C	Humidity :	51%
Pressur(mbar) :	1002	Date :	2011/10/18



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1980	19.50	28.62	48.12	63.69	-15.57	QP
2	0.1980	19.50	18.71	38.21	53.69	-15.48	AVG
3	0.5540	19.50	27.18	46.68	56.00	-9.32	QP
4	0.5540	19.50	14.62	34.12	46.00	-11.88	AVG
5	0.6220	19.50	23.26	42.76	56.00	-13.24	QP
6	0.6220	19.50	10.40	29.90	46.00	-16.10	AVG
7	1.3300	19.46	24.62	44.08	56.00	-11.92	QP
8	1.3300	19.46	10.07	29.53	46.00	-16.47	AVG
9	2.0820	19.51	24.99	44.50	56.00	-11.50	QP
10	2.0820	19.51	8.66	28.17	46.00	-17.83	AVG
11	2.5100	19.53	25.18	44.71	56.00	-11.29	QP
12	2.5100	19.53	6.86	26.39	46.00	-19.61	AVG



## 4. Test of Radiated Emission

### 4.1. Test Limit

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defines in ANSI C63.4-2003. The EUT was placed, 0.8 meter above the ground plane, as shown in section 5.6.3. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions for unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

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

**Remark:** Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

### 4.2. Test Procedures

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless





otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, then the video bandwidth is set to 1MHz for peak measurements and 10Hz for average measurements.

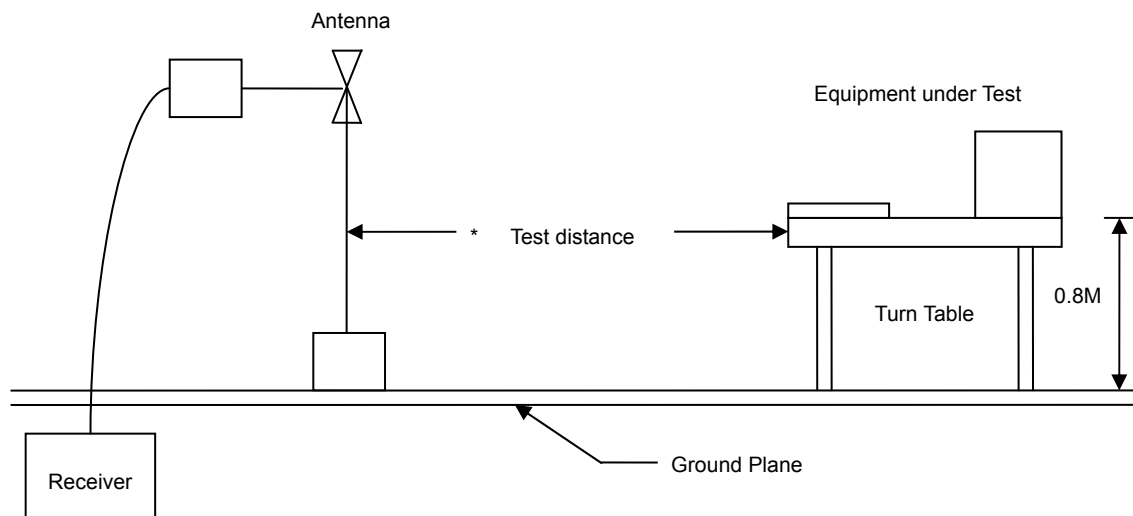
The spectrum from 30MHz to 26GHz is investigated with the transmitter set to the lowest, middle and highest channels in the 2.4GHz band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are

Made with the antenna polarized in both the vertical and the horizontal positions.

When performing radiated measurements >1 GHz, the EUT always remains within the 3dB beam-width of the measuring antenna.

#### 4.3. Typical Test Setup



**4.4. Measurement Equipment**

Instrument	Model No.	Manufacturer	Serial No.	Calibration Date
EMI Test Receiver	R&S	ESCI	100563	2011.06.23
H64 Amplifier	HP	8447F	3113A05582	2011.08.14
Preamplifier	Agilent	8449B	ED-HE-EMI-077	2011.02.10
Preamplifier	Agilent	8449B	3008A02342	2011.02.10
Ultra Broadband Antenna	R&S	HL562	100362	2011.11.25
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-619	2011.11.10
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	9170-347	2011.10.15
Spectrum Analyzer	R&S	FSP40	100324	2011.08.14
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2011.08.17



#### 4.5. Test Result and Data

Under 1G:

Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Normal Link

Freq. (MHz)	Ant.Pol. H/V	Reading Level (dBuV)	Correct Factor (dB)	Measure Level (dBuV/m)	Limit 3m (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
40.67	V	47.83	-11.86	35.97	40	-4.03	Peak
73.65	V	51.52	-16.47	35.05	40	-4.95	Peak
222.06	V	55.34	-14.06	41.28	46	-4.72	Peak
371.44	V	50.32	-8.49	41.83	46	-4.17	Peak
519.85	V	46.55	-4.39	42.16	46	-3.84	Peak
742.95	V	42.53	0.16	42.69	46	-3.31	Peak
71.812	H	50.26	-16.73	33.53	40	-6.47	Peak
148.34	H	54.27	-15.36	38.91	43.5	-4.59	Peak
296.34	H	50.21	-11.04	39.17	46	-6.83	Peak
447.34	H	46.28	-6.25	40.03	46	-5.97	Peak
668.33	H	43.33	-1.2	42.13	46	-3.87	Peak
720.53	H	39.32	-0.2	39.12	46	-6.88	Peak

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor

### Above 1G:

Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11b (2412MHz)

[illegible]

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor



Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Mode1: Transmit by 802.11b (2437MHz)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
					Peak (dBuV/m)	AV (dBuV/m)				
1319.02	V	59.57	46.52	-4.77	54.80	41.75	74.00	54.00	-12.25	average
4875.02	V	49.02	36.22	6.85	55.87	43.07	74.00	54.00	-10.93	average
1318.06	H	58.32	45.99	-4.77	53.55	41.22	74.00	54.00	-12.78	average
4874.89	H	47.69	35.05	6.85	54.54	41.90	74.00	54.00	-12.10	average

## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor

<b>Engineer : Jeson</b>	
<b>Site : EMC Lab AC 102</b>	<b>Time : 2011/10/25</b>
<b>Limit : FCC_15_03M_PK</b>	<b>Margin : 6</b>
<b>EUT : 8-inch Tablet</b>	<b>Probe : VERTICAL/ HORIZONTAL</b>
<b>Power : AC 230V/60Hz</b>	<b>Note : Mode1: Transmit by 802.11b (2462MHz)</b>

[illegible]

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor



Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11g (2412MHz)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
					Peak (dBuV/m)	AV (dBuV/m)				
1318.00	V	58.12	48.69	-4.77	53.35	43.92	74.00	54.00	-10.08	average
4825.10	V	45.67	35.02	6.53	52.20	41.55	74.00	54.00	-12.45	average
1318.22	H	57.89	47.22	-4.77	53.12	42.45	74.00	54.00	-11.55	average
4825.00	H	44.77	33.69	6.53	51.30	40.22	74.00	54.00	-13.78	average

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor



Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11g (2437MHz)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
					Peak (dBuV/m)	AV (dBuV/m)				
1319.12	V	59.02	49.30	-4.77	54.25	44.53	74.00	54.00	-9.47	average
4874.45	V	44.56	35.78	6.85	51.41	42.63	74.00	54.00	-11.37	average
1320.35	H	56.37	46.02	-5.72	50.65	40.30	74.00	54.00	-13.70	average
4875.11	H	43.68	35.25	6.85	50.53	42.10	74.00	54.00	-11.90	average

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor





Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11g (2462MHz)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
					Peak (dBuV/m)	AV (dBuV/m)				
1319.36	V	58.11	48.32	-5.72	52.39	42.60	74.00	54.00	-11.40	average
4924.87	V	46.13	35.66	6.99	53.12	42.65	74.00	54.00	-11.35	average
1318.14	H	56.47	47.02	-4.77	51.70	42.25	74.00	54.00	-11.75	average
4924.67	H	45.02	35.48	6.99	52.01	42.47	74.00	54.00	-11.53	average

## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor



Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11n (20MHz) (2412MHz)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
					Peak (dBuV/m)	AV (dBuV/m)				
1318.59	V	60.12	48.69	-4.77	55.35	43.92	74.00	54.00	-10.08	average
4824.57	V	47.34	35.69	6.53	53.87	42.22	74.00	54.00	-11.78	average
1317.87	H	58.58	47.36	-4.77	53.81	42.59	74.00	54.00	-11.41	average
4824.58	H	46.21	35.25	6.53	52.74	41.78	74.00	54.00	-12.22	average

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor



Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11n (20MHz) (2437MHz)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
					Peak (dBuV/m)	AV (dBuV/m)				
1318.66	V	60.11	49.25	-4.77	55.34	44.48	74.00	54.00	-9.52	average
4874.28	V	47.89	35.96	6.85	54.74	42.81	74.00	54.00	-11.19	average
1318.02	H	59.44	48.74	-4.77	54.67	43.97	74.00	54.00	-10.03	average
4875.11	H	46.13	36.52	6.85	52.98	43.37	74.00	54.00	-10.63	average

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor



Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11n (20MHz) (2462MHz)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
					Peak (dBuV/m)	AV (dBuV/m)				
1321.54	V	59.32	48.32	-5.75	53.57	42.57	74.00	54.00	-11.43	average
4925.39	V	45.12	35.29	6.99	52.11	42.28	74.00	54.00	-11.72	average
1320.58	H	58.62	47.25	-5.76	52.86	41.49	74.00	54.00	-12.51	average
4925.36	H	45.32	34.42	6.99	52.31	41.41	74.00	54.00	-12.59	average

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor



Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11n (40MHz) (2422MHz)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
					Peak (dBuV/m)	AV (dBuV/m)				
1319.25	V	60.13	48.57	-4.77	55.36	43.80	74.00	54.00	-10.20	average
4844.54	V	46.25	36.02	6.61	52.86	42.63	74.00	54.00	-11.37	average
1321.36	H	58.79	46.85	-5.72	53.07	41.13	74.00	54.00	-12.87	average
4845.01	H	43.15	34.25	6.61	49.76	40.86	74.00	54.00	-13.14	average

## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor

Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11n (40MHz) (2437MHz)

[illegible]

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor



Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011/10/25
Limit : FCC_15_03M_PK	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL/ HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11n (40MHz) (2452MH)

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Safe Margin (dB)	Detector Mode (PK/QP)
					Peak (dBuV/m)	AV (dBuV/m)				
1318.66	V	58.79	47.69	-4.77	54.02	42.92	74.00	54.00	-11.08	average
4904.34	V	45.03	34.25	6.92	51.95	41.17	74.00	54.00	-12.83	average
1319.25	H	57.86	47.36	-5.72	52.14	41.64	74.00	54.00	-12.36	average
4904.57	H	44.78	34.02	6.92	51.70	40.94	74.00	54.00	-13.06	average

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. Measurement Level = Reading Level + Correct Factor



## 5. Occupied Bandwidth

### 5.1. Test Limit

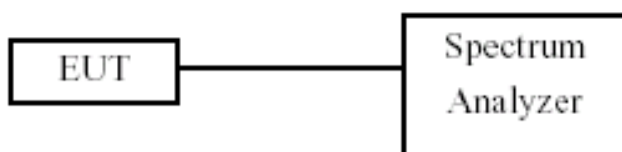
Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725- 5850 MHz band. The minimum 6 dB bandwidth shall be at least 500 kHz.

### 5.2. Test Procedures

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Span greater than RBW.

### 5.3. Test Setup Layout



### 5.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date
Spectrum Analyzer	R&S	FSP40	100324	2011.08.14
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2011.08.17



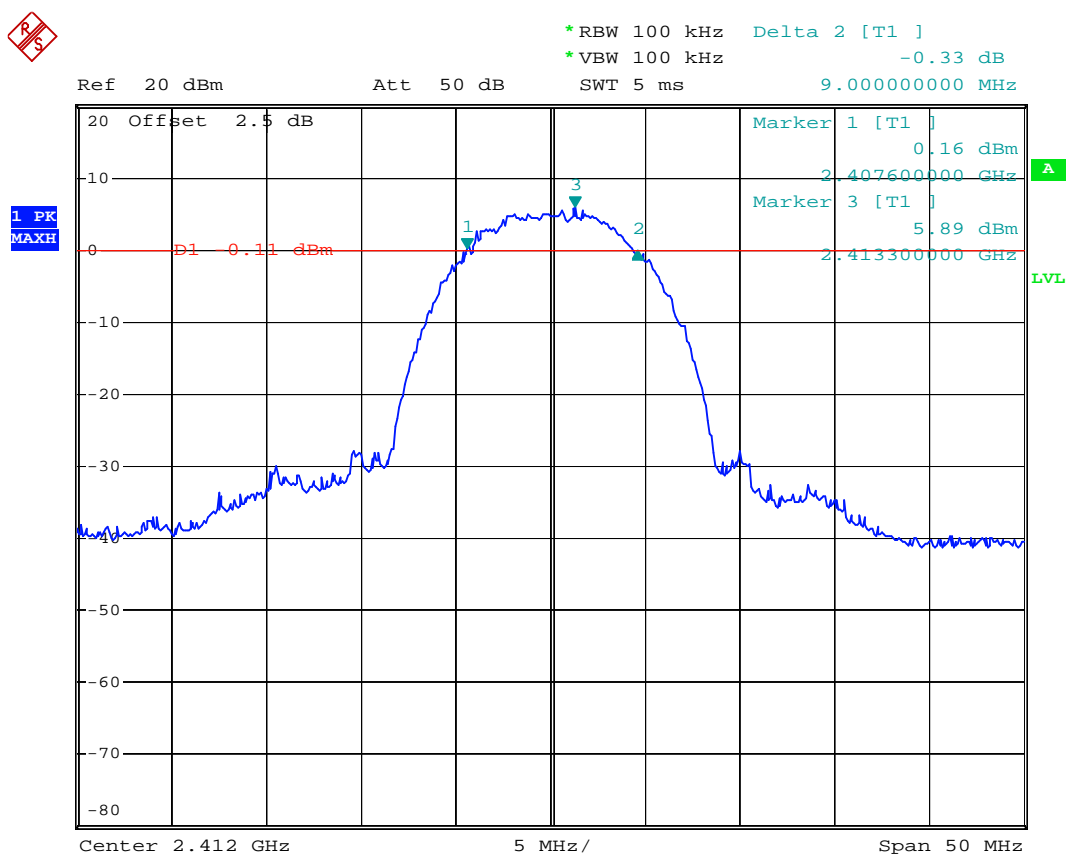


### 5.5. Test Result and Data

Test Item	Occupied Bandwidth
Test Mode	Transmit by 802.11b
Test Date	2011-10-24

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	9000	500	Pass
06	2437	8900	500	Pass
11	2462	8800	500	Pass

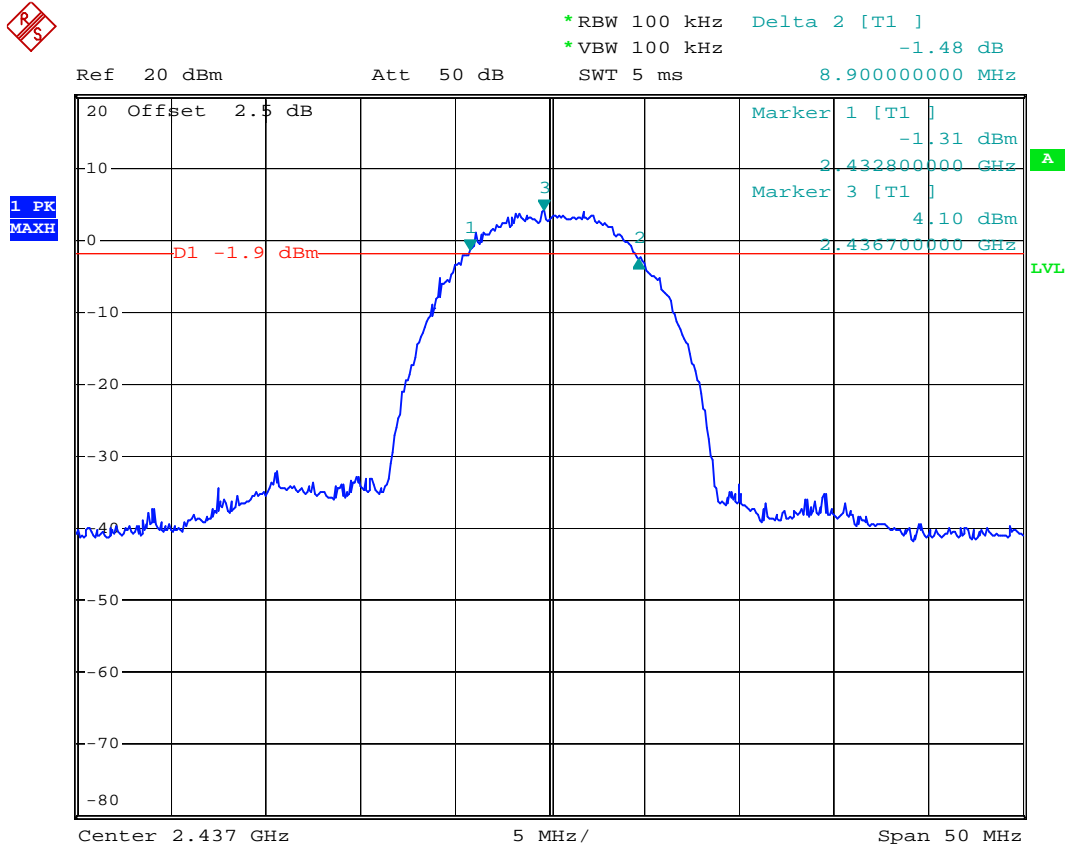
#### Channel 01 (2412MHz)



Date: 24.OCT.2011 15:21:01



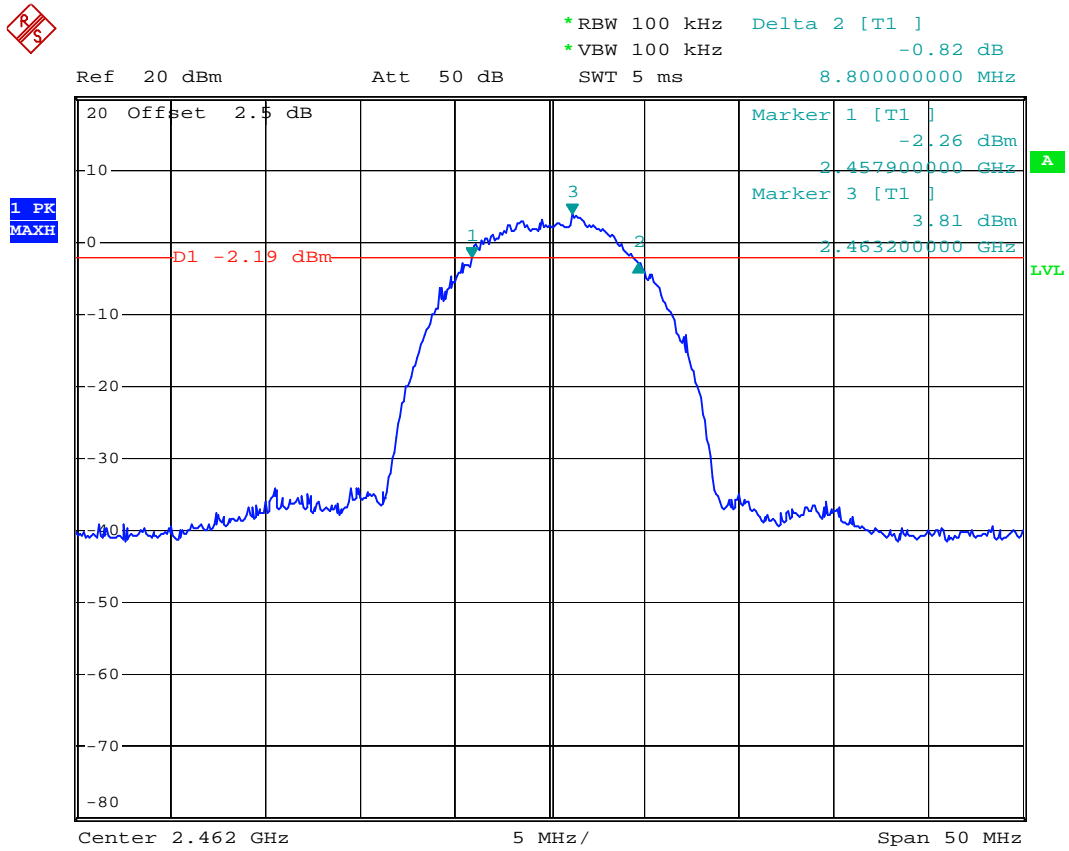
Channel 06 (2437MHz)



Date: 24.OCT.2011 15:24:03



Channel11(2462MHz)



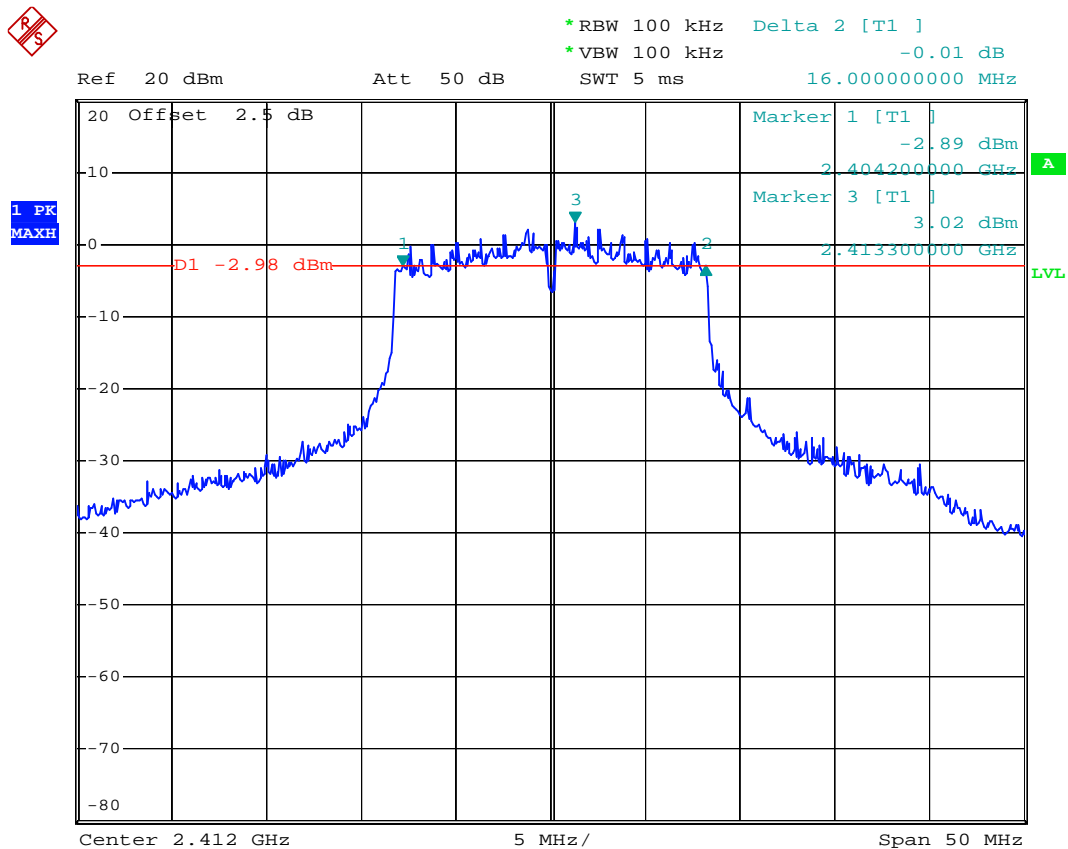
Date: 24.OCT.2011 15:27:25



Test Item	Occupied Bandwidth
Test Mode	Transmit by 802.11g
Test Date	2011-10-24

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	16000	500	Pass
06	2437	16000	500	Pass
11	2462	15900	500	Pass

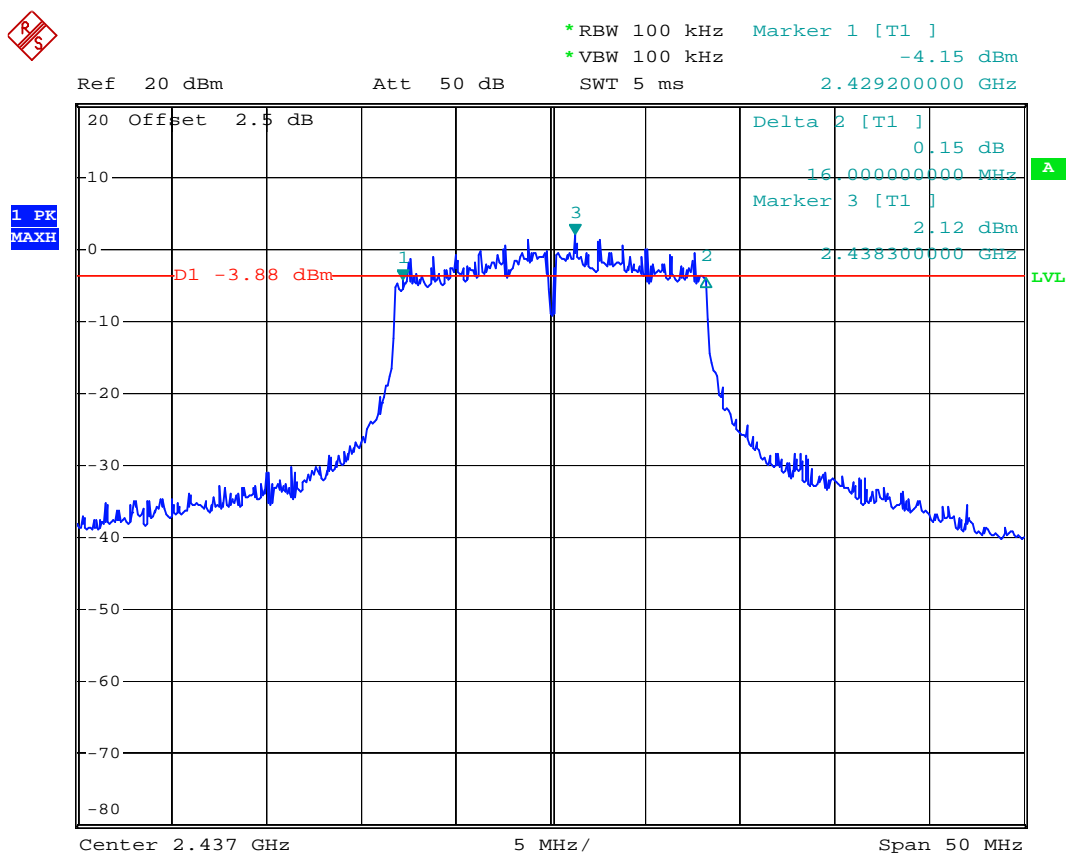
## Channel 01 (2412MHz)



Date: 24.OCT.2011 15:32:44



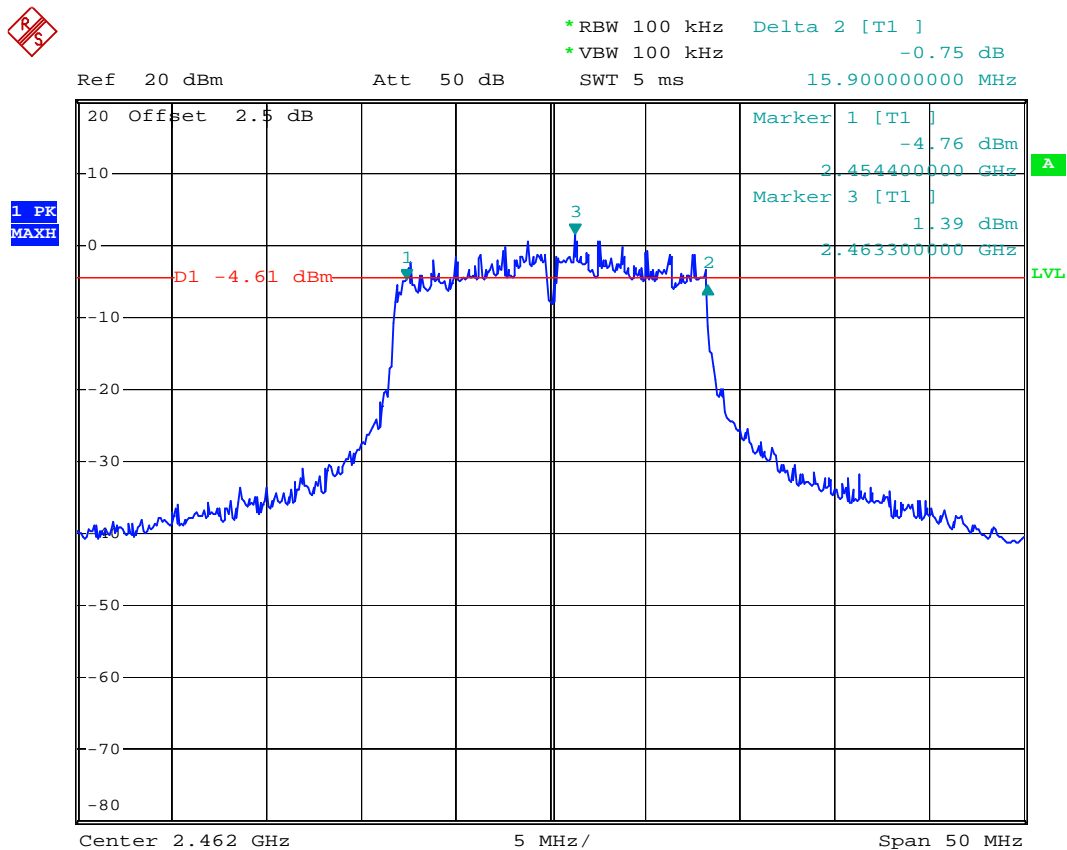
## Channel 06 (2437MHz)



Date: 24.OCT.2011 15:36:56



## Channel 11 (2462MHz)



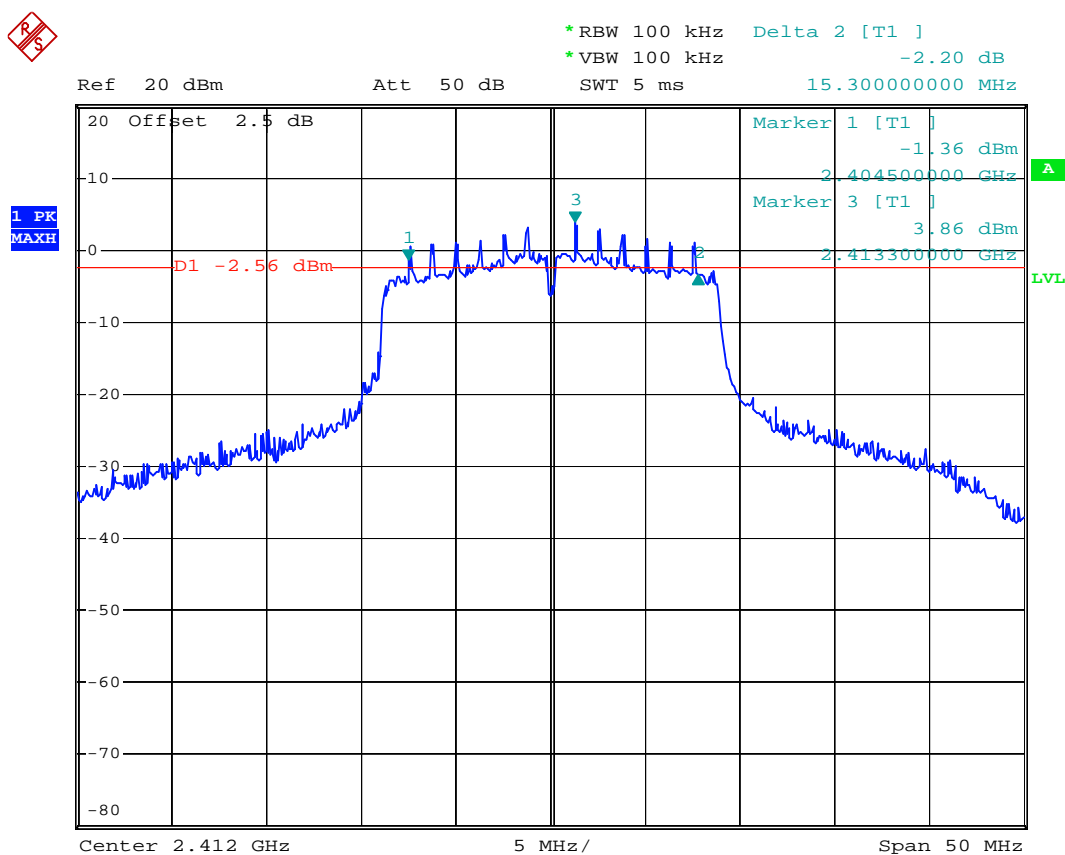
Date: 24.OCT.2011 15:49:55



Test Item	Occupied Bandwidth
Test Mode	Transmit by 802.11n (20MHz)
Test Date	2011-10-24

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
01	2412	15300	500	Pass
06	2437	15200	500	Pass
11	2462	15300	500	Pass

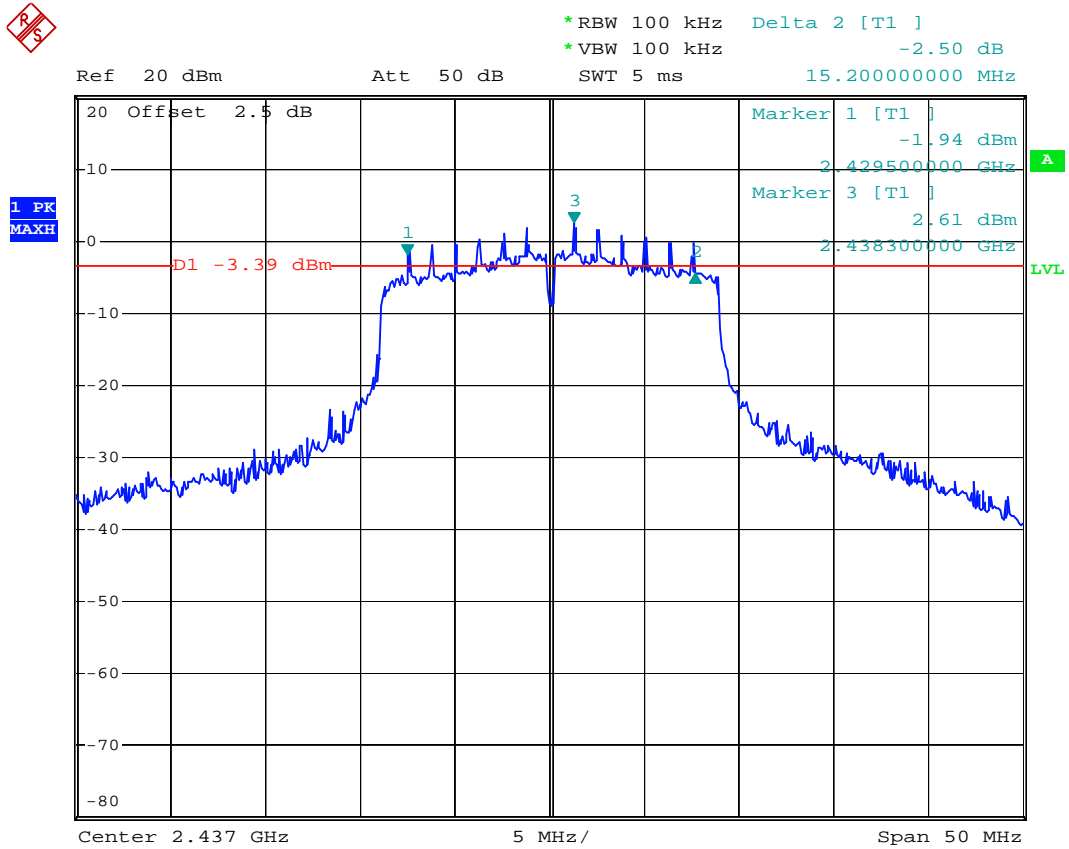
## Channel 01 (2412MHz)



Date: 24.OCT.2011 15:52:24



Channel 06 (2437MHz)

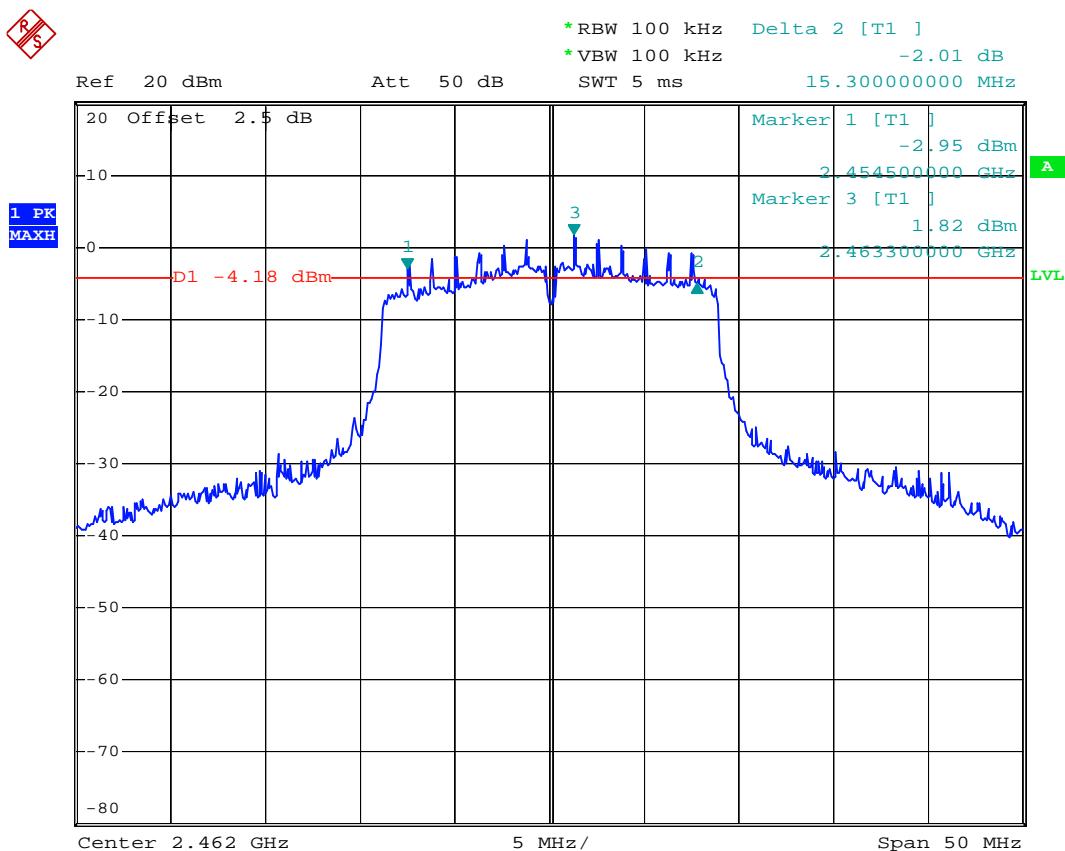


Date: 24.OCT.2011 15:54:17





Channel 11 (2462MHz)



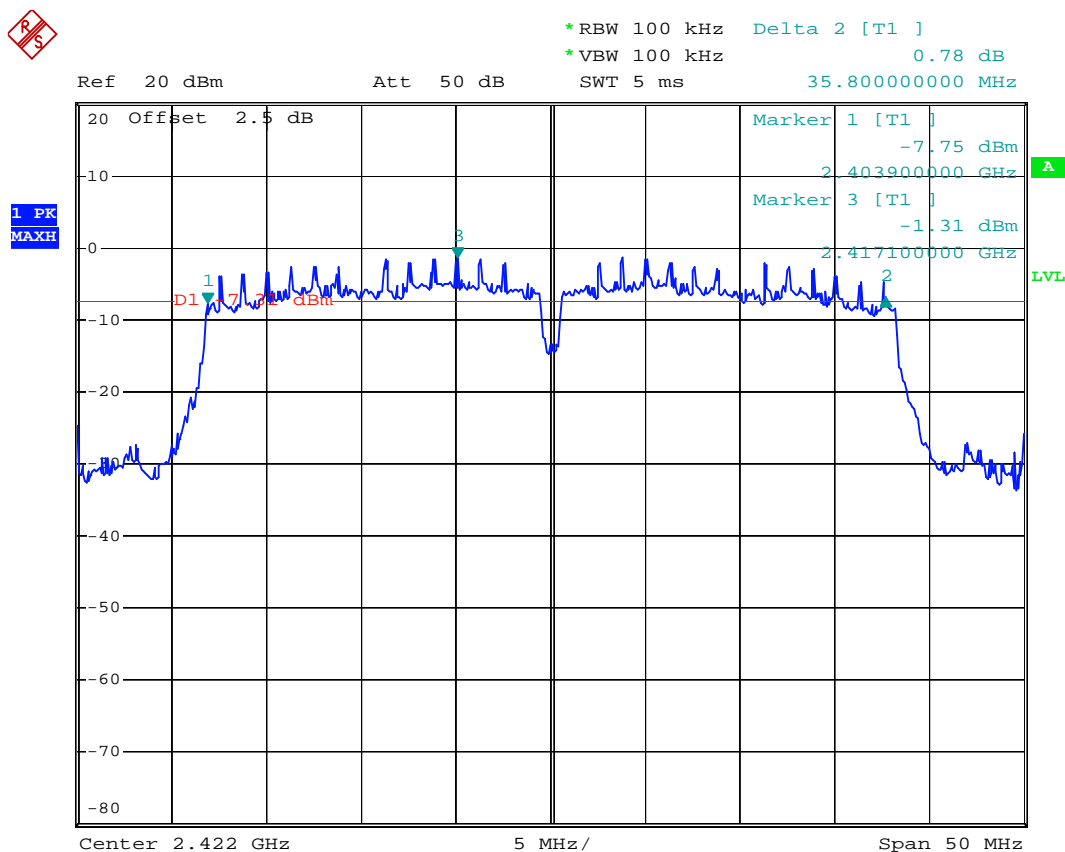
Date: 24.OCT.2011 15:55:39



Test Item	Occupied Bandwidth
Test Mode	Transmit by 802.11n (40MHz)
Test Date	2011-10-24

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
03	2422	35800	500	Pass
06	2437	35300	500	Pass
09	2452	35400	500	Pass

## Channel 03 (2422MHz)



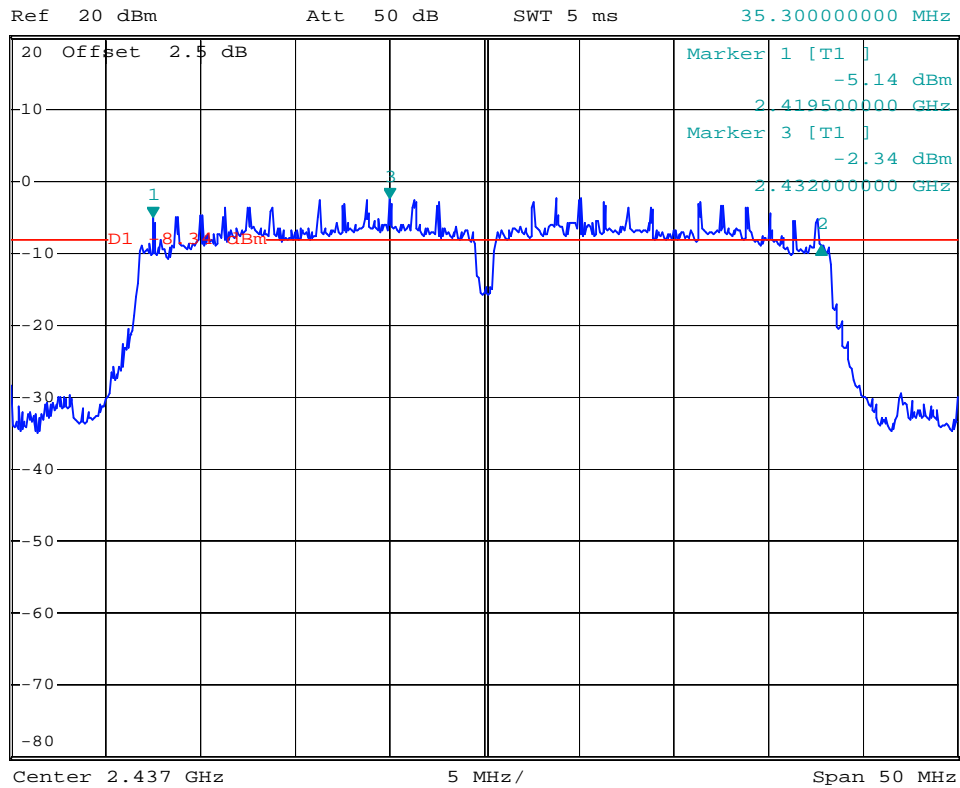
Date: 24.OCT.2011 16:04:21



Channel 06 (2437MHz)



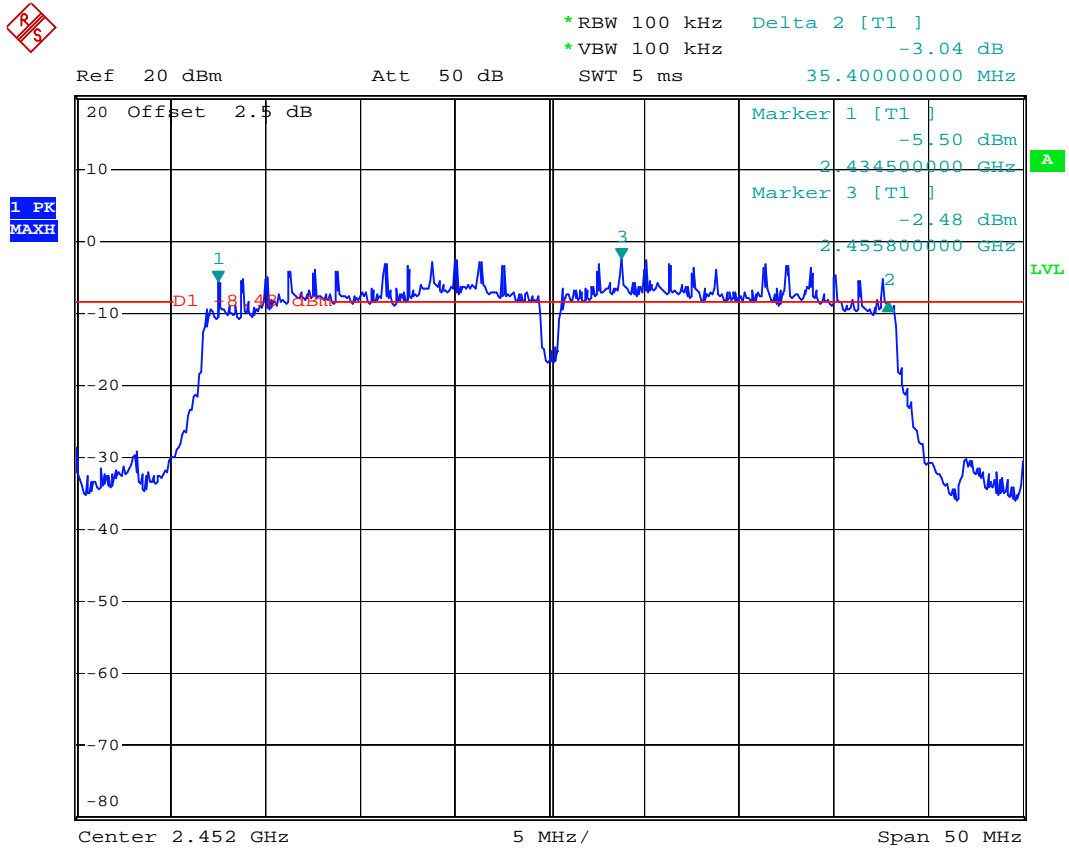
\*RBW 100 kHz Delta 2 [T1 ]  
\*VBW 100 kHz -3.92 dB  
SWT 5 ms 35.30000000 MHz



Date: 24.OCT.2011 16:06:10



Channel 9 (2452MHz)



Date: 24.OCT.2011 16:07:22



## 6. Maximum Peak Output Power

### 6.1. Test Limit

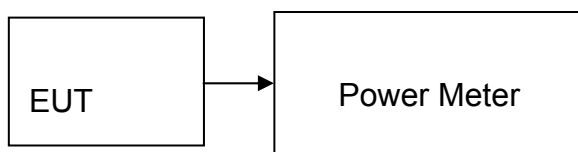
The maximum peak power shall be less 1Watt (30dBm).

The conducted output power limit is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of standard FCC part 15.247, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power of the intentional radiator is reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6 dBi.

### 6.2. Test Procedure

The transmitter output is connected to the Power Meter.

### 6.3. Test Setup Layout



### 6.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date
Power Meter	NRP	R&S	CCE013	2011.01.15
Power Sensor	NRP-Z91	R&S	100385	2011.01.15
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2011.08.17



## 6.5. Test Result and Data

Test Item	Maximum Peak Output Power
Test Mode	Transmit by 802.11b
Test Date	2011-10-24

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit (dBm)	Result
01	2412	<b>17.25</b>	30	Pass
06	2437	16.45	30	Pass
11	2462	16.14	30	Pass

Test Item	Maximum Peak Output Power
Test Mode	Transmit by 802.11g
Test Date	2011-10-24

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit (dBm)	Result
01	2412	<b>14.12</b>	30	Pass
06	2437	13.47	30	Pass
11	2462	12.89	30	Pass

Test Item	Maximum Peak Output Power
Test Mode	Transmit by 802.11n (20MHz)
Test Date	2011-10-24

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit(dBm)	Result
01	2412	<b>14.27</b>	30	Pass
06	2437	13.86	30	Pass
11	2462	13.27	30	Pass



Test Item	Maximum Peak Output Power
Test Mode	Transmit by 802.11n (40MHz)
Test Date	2011-10-24

Channel No.	Frequency (MHz)	Measurement (dBm)	Required Limit(dBm)	Result
03	2422	<b>14.78</b>	30	Pass
06	2437	13.81	30	Pass
09	2452	12.88	30	Pass



## 7. Band Edges

### 7.1. Test Limit

**For RF Conducted requirement:**

20 dB bandwidth of the emission is contained within the operation frequency band.

**For RF Radiated requirement:**

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

### 7.2. Test Procedure

**For RF Conducted Measurement:**

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Span greater than RBW.

**For RF Radiated Measurement:**

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, then the video bandwidth is set to 1MHz for peak measurements and 10Hz for average measurements.

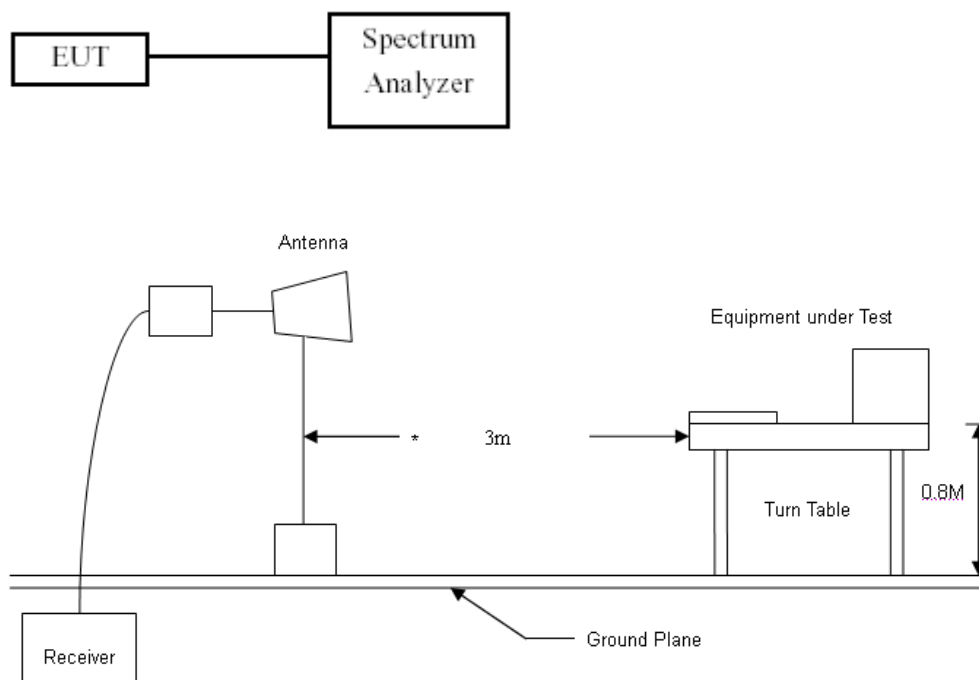
The spectrum from 30MHz to 26GHz is investigated with the transmitter set to the lowest, middle and highest channels in the 2.4GHz band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are Made with the antenna polarized in both the vertical and the horizontal positions.





### 7.3. Test Setup Layout



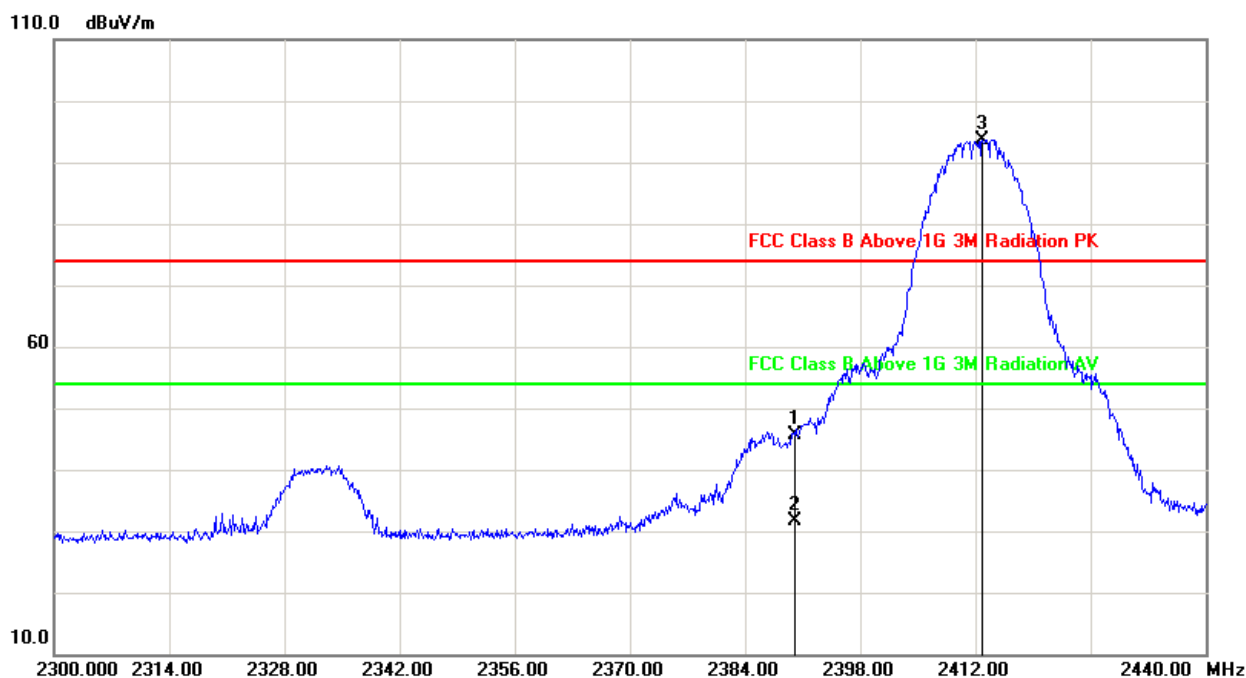
### 7.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date
Spectrum Analyzer	R&S	FSP40	100324	2011.08.14
H64 Amplifier	HP	8447F	3113A05582	2011.08.14
Preamplifier	Agilent	8449B	ED-HE-EMI-077	2011.02.10
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-619	2011.11.10
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2011.08.17



## 7.5. Test Result and Data

Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL
Power : AC 230V/60Hz	Note : Transmit by 802.11b (2412MHz)



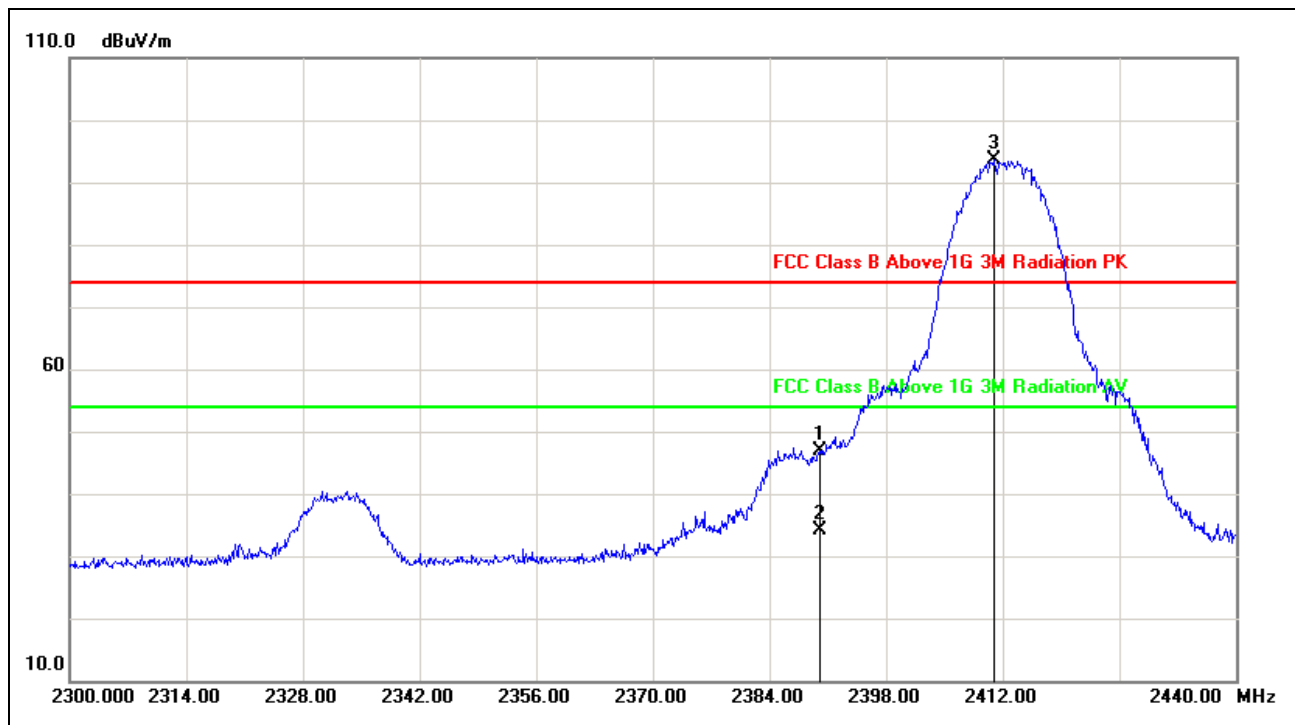
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2390.000	-12.19	57.88	45.69	74.00	-28.31	peak
2	2390.000	-12.19	43.81	31.62	54.00	-22.38	AVG
3	2412.840	-12.09	105.75	93.66	N/A	N/A	peak

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11b (2412MHz)



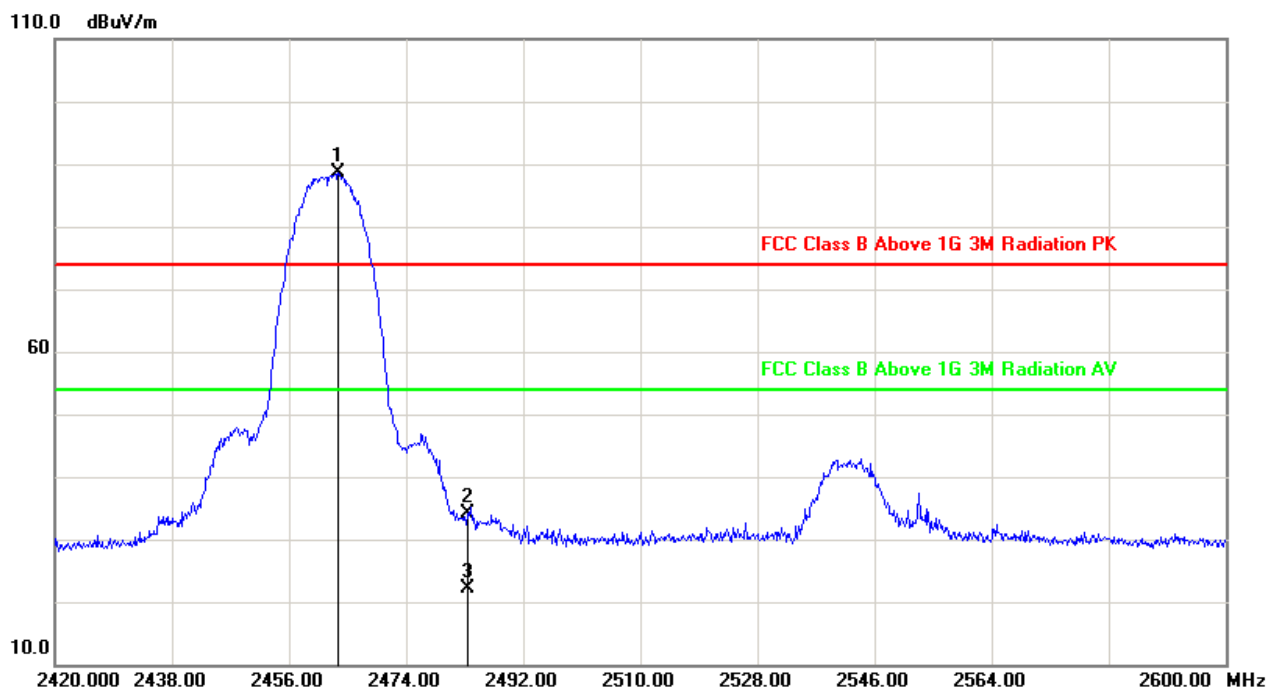
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2390.000	-12.19	59.10	46.91	74.00	-27.09	peak
2	2390.000	-12.19	46.42	34.23	54.00	-19.77	AVG
3	2410.880	-12.10	105.61	93.51	N/A	N/A	peak

## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL
Power : AC 230V/60Hz	Note :Transmit by 802.11b (2462MHz)



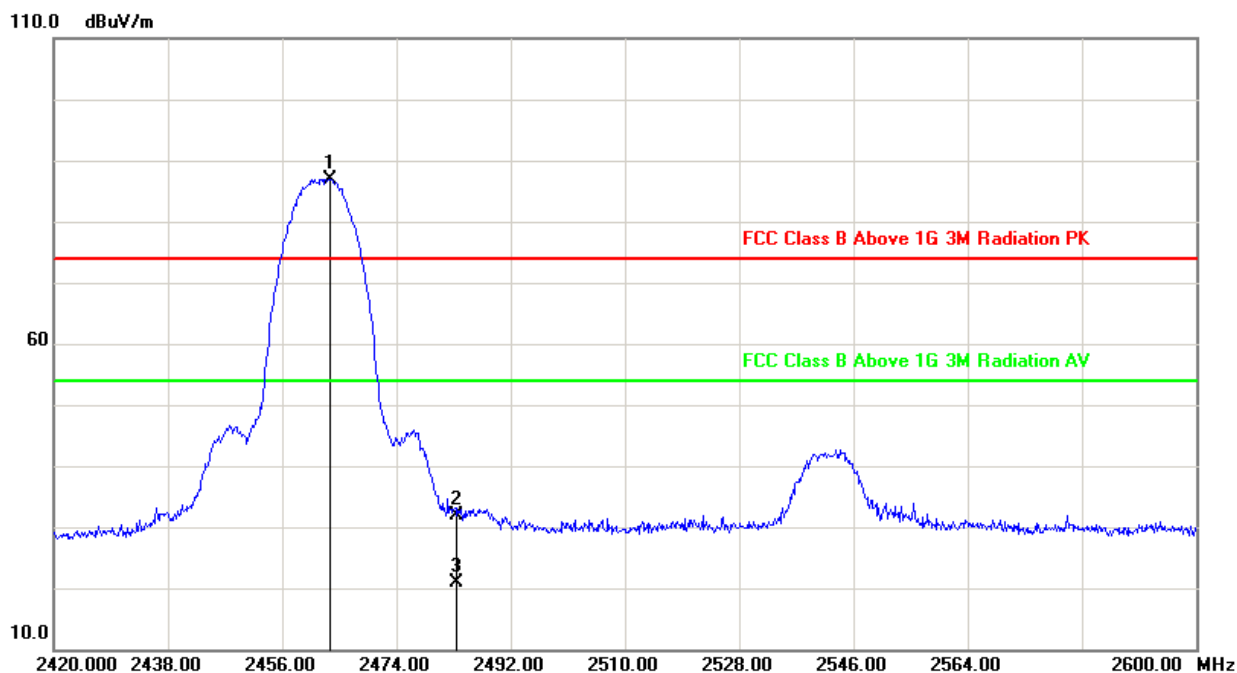
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2463.560	-11.87	100.53	88.66	N/A	N/A	peak
2	2483.500	-11.78	45.79	34.01	74.00	-39.99	peak
3	2483.500	-11.78	33.82	22.04	54.00	-31.96	AVG

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11b (2462MHz)



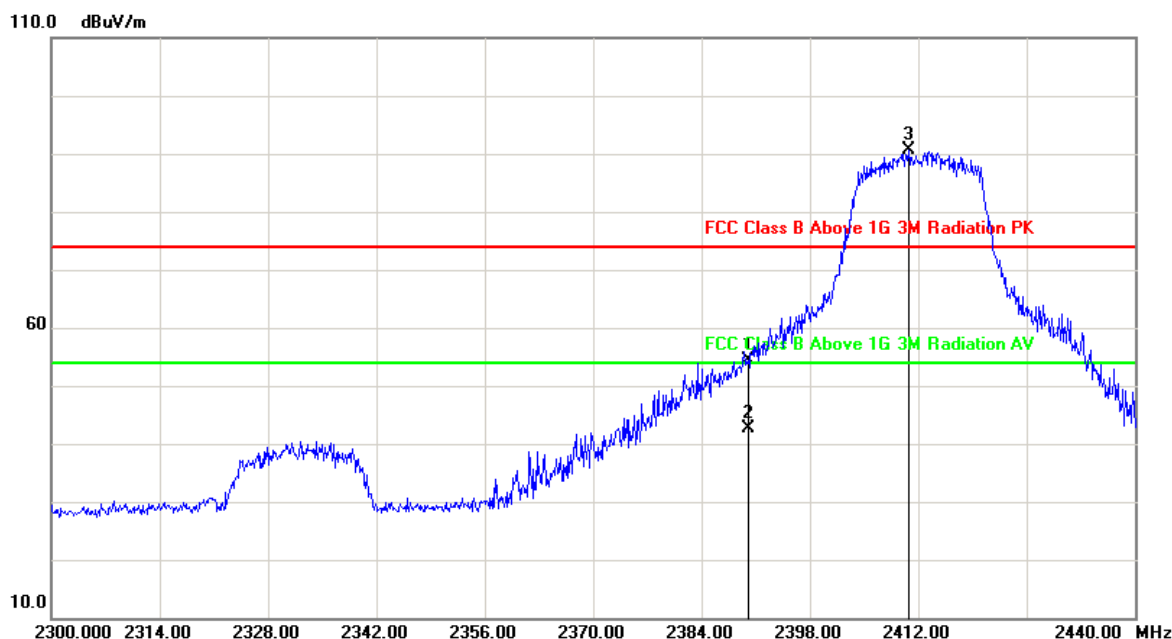
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2463.560	-11.87	98.83	86.96	N/A	N/A	peak
2	2483.500	-11.78	43.73	31.95	74.00	-42.05	peak
3	2483.500	-11.78	32.63	20.85	54.00	-33.15	AVG

## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL
Power : AC 230V/60Hz	Note : Transmit by 802.11g (2412MHz)



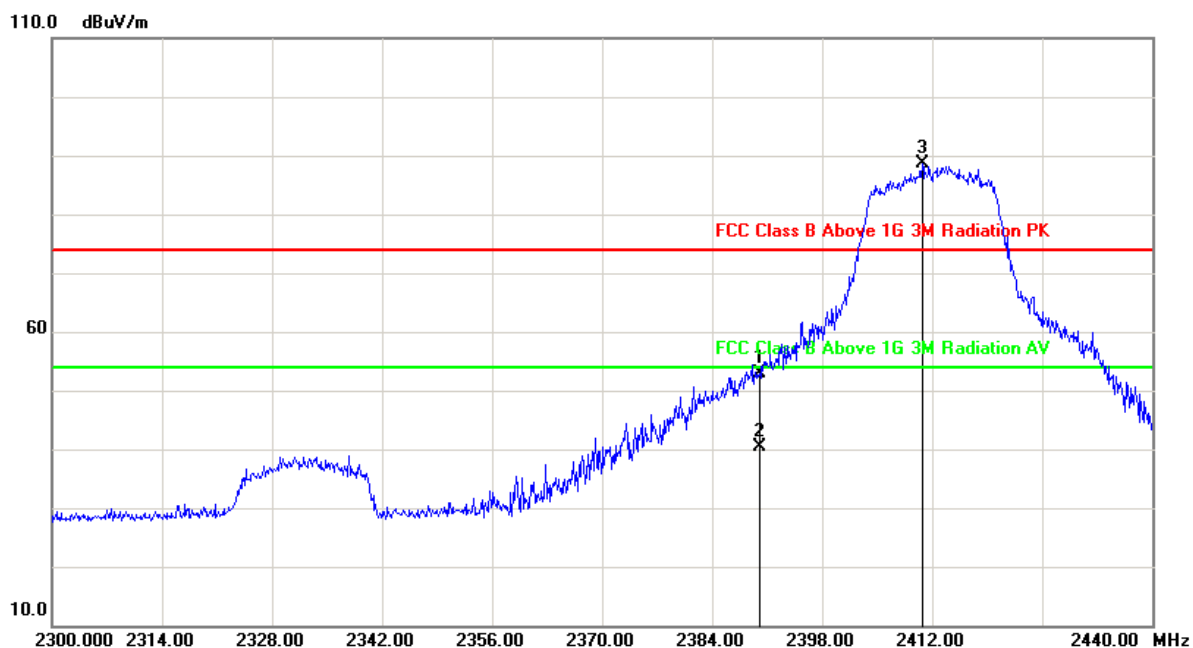
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2390.000	-12.19	66.54	54.35	74.00	-19.65	peak
2	2390.000	-12.19	54.81	42.62	54.00	-11.38	AVG
3	2410.740	-12.10	102.75	90.65	N/A	N/A	peak

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe :HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11g (2412MHz)



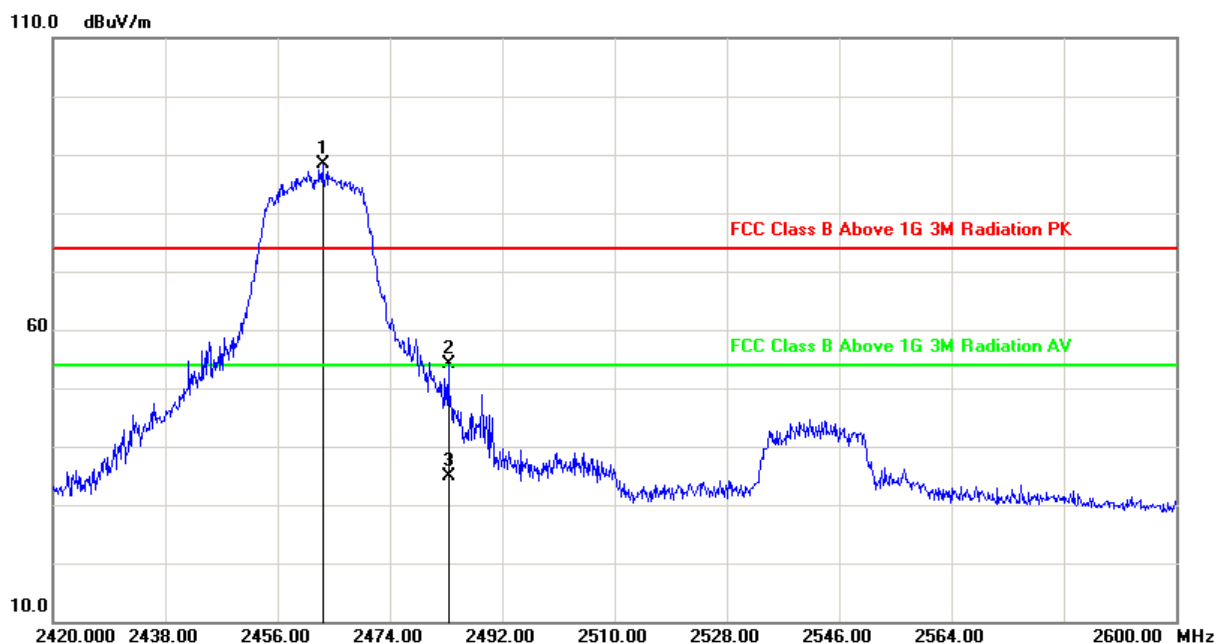
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2390.000	-12.19	65.18	52.99	74.00	-21.01	peak
2	2390.000	-12.19	52.49	40.30	54.00	-13.70	AVG
3	2410.740	-12.10	100.69	88.59	N/A	N/A	peak

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : VERTICAL
Power : AC 230V/60Hz	Note : Transmit by 802.11g (2462MHz)



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2463.200	-11.87	100.15	88.28	N/A	N/A	peak
2	2483.360	-11.78	66.01	54.23	74.00	-19.77	peak
3	2483.360	-11.78	46.73	34.95	54.00	-19.05	AVG

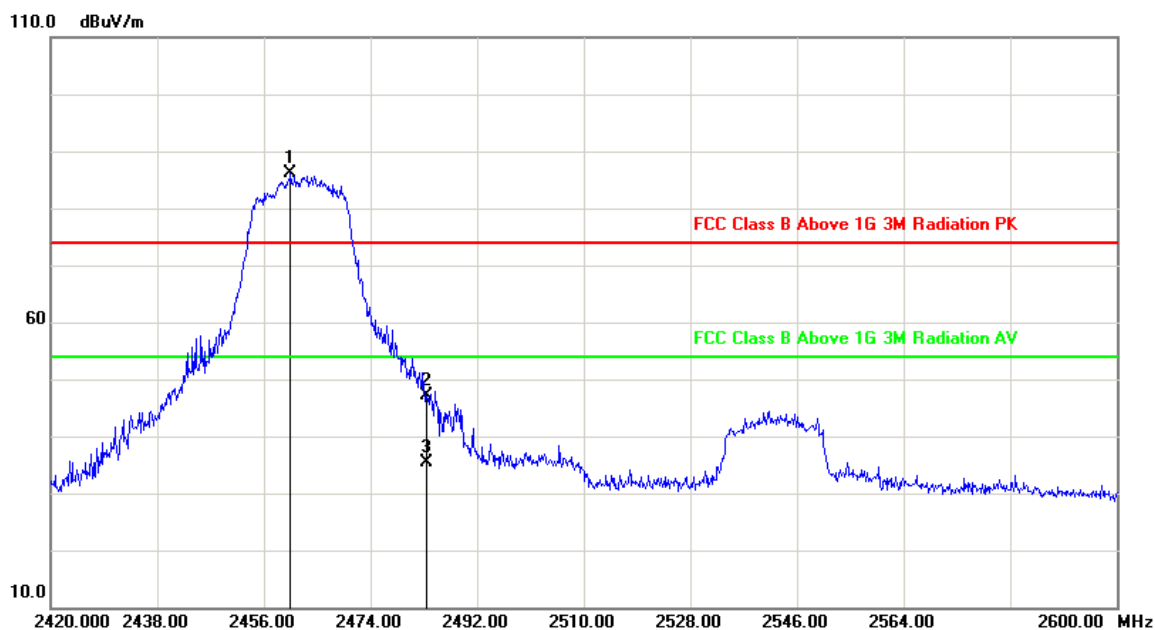
**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor





Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : HORIZONTAL
Power : AC 230V/60Hz	Note : Transmit by 802.11g (2462MHz)



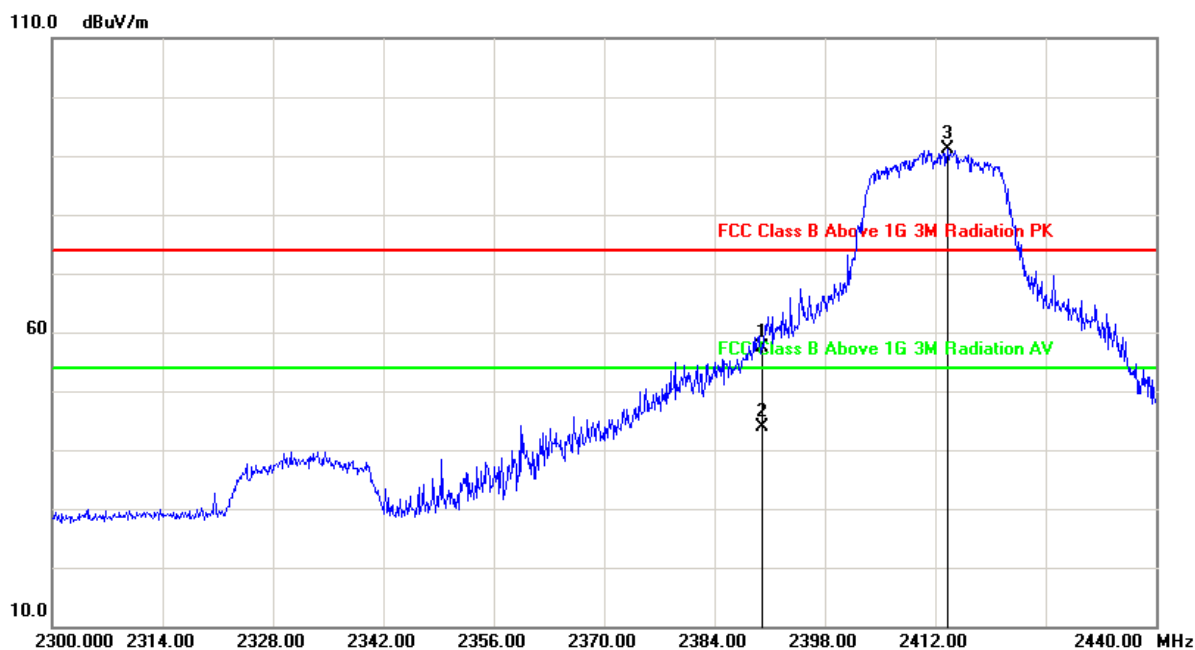
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2460.500	-11.88	97.99	86.11	N/A	N/A	peak
2	2483.500	-11.78	58.82	47.04	74.00	-26.96	peak
3	2483.500	-11.78	47.04	35.26	54.00	-18.74	AVG

## Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : Vertical
Power : AC 230V/60Hz	Note : Transmit by 802.11n (20MHz) (2412MHz)



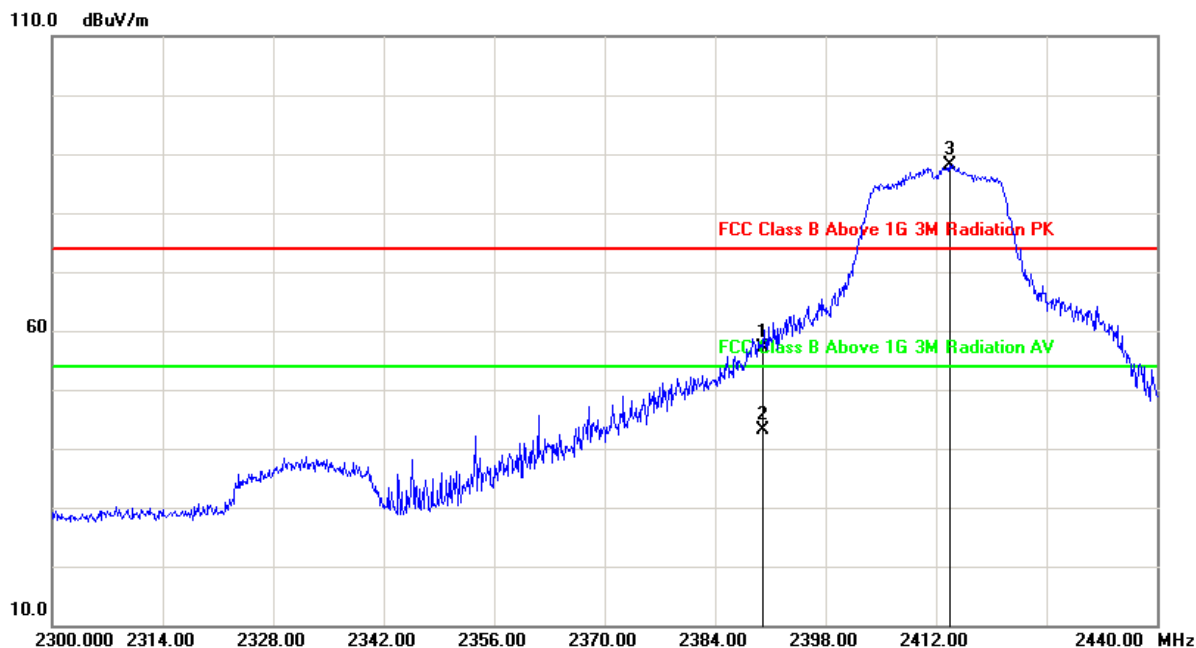
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2390.000	-12.19	69.60	57.41	74.00	-16.59	peak
2	2390.000	-12.19	56.04	43.85	54.00	-10.15	AVG
3	2413.540	-12.09	103.24	91.15	N/A	N/A	peak

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : Horizontal
Power : AC 230V/60Hz	Note : Transmit by 802.11n (20MHz) (2412MHz)



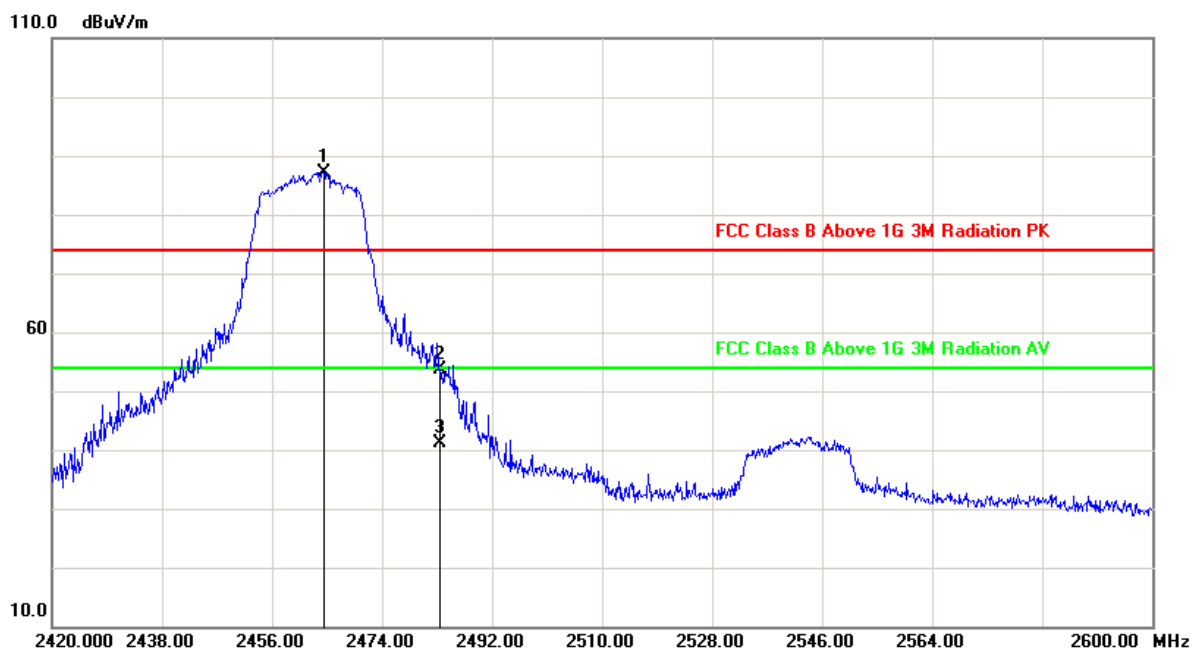
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2390.000	-12.19	69.43	57.24	74.00	-16.76	peak
2	2390.000	-12.19	55.35	43.16	54.00	-10.84	AVG
3	2413.680	-12.08	100.26	88.18	N/A	N/A	peak

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeson	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : Vertical
Power : AC 230V/60Hz	Note : Transmit by 802.11n (20MHz) (2462MHz)



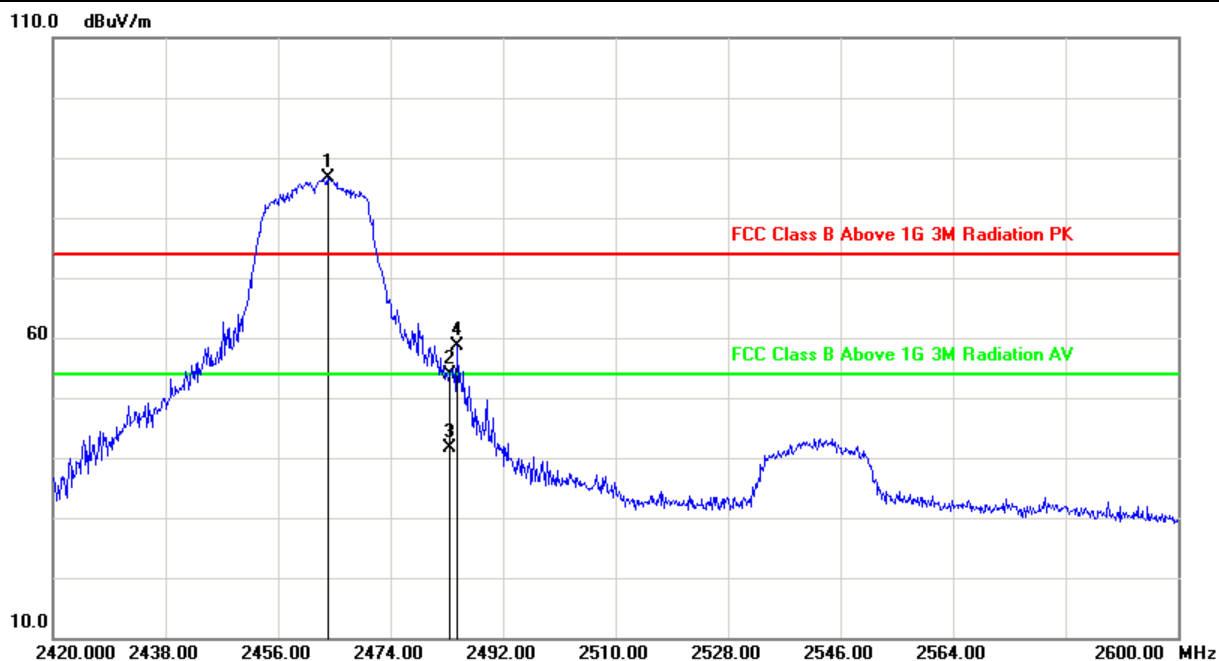
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2464.460	-11.86	99.10	87.24	N/A	N/A	peak
2	2483.500	-11.78	65.30	53.52	74.00	-20.48	peak
3	2483.500	-11.78	52.83	41.05	54.00	-12.95	AVG

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : Horizontal
Power : AC 230V/60Hz	Note : Transmit by 802.11n (20MHz) (2462MHz)



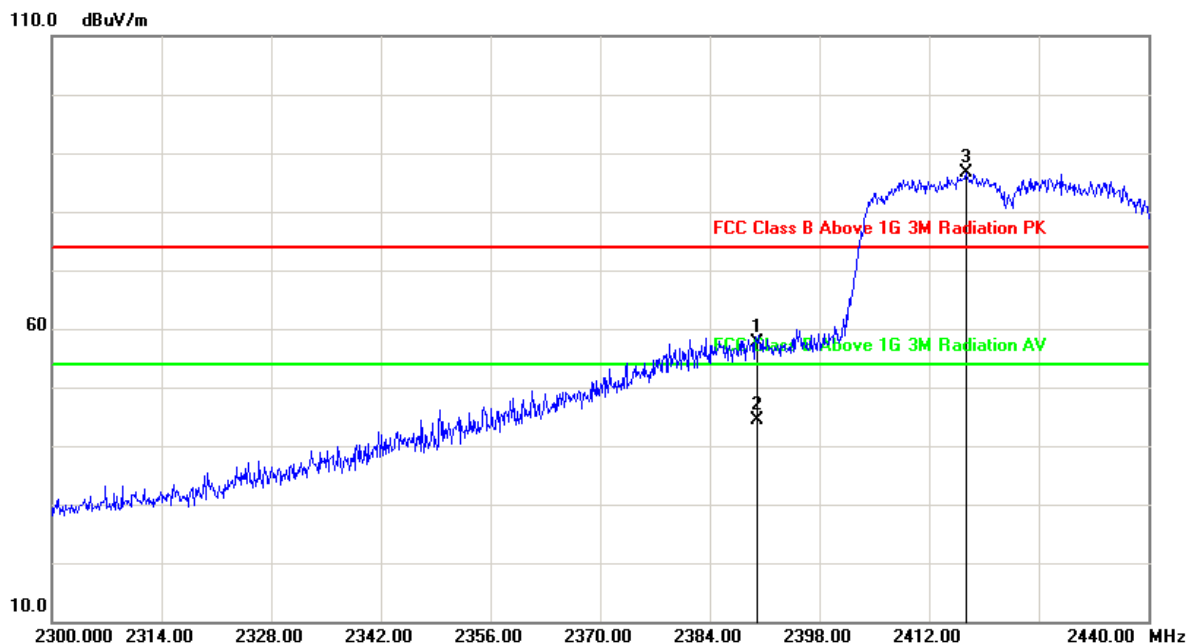
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2463.920	-11.87	98.54	86.67	N/A	N/A	peak
2	2483.500	-11.78	65.62	53.84	74.00	-20.16	peak
3	2483.500	-11.78	53.38	41.60	54.00	-12.40	AVG
4	2484.620	-11.78	70.30	58.52	74.00	-15.48	peak

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : Vertical
Power : AC 230V/60Hz	Note : Transmit by 802.11n (40MHz) (2422MHz)



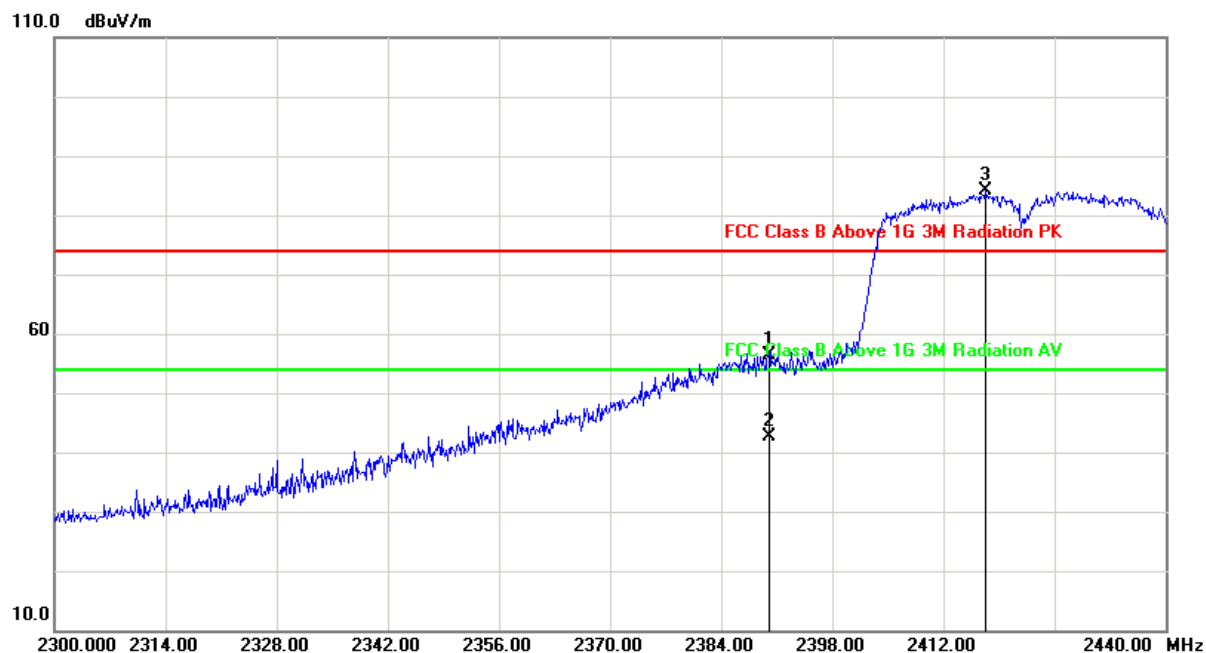
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2390.000	-12.19	69.75	57.56	74.00	-16.44	peak
2	2390.000	-12.19	56.49	44.30	54.00	-9.70	AVG
3	2416.760	-12.07	98.72	86.65	74.00	12.65	peak

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : Horizontal
Power : AC 230V/60Hz	Note : Transmit by 802.11n (40MHz) (2422MHz)



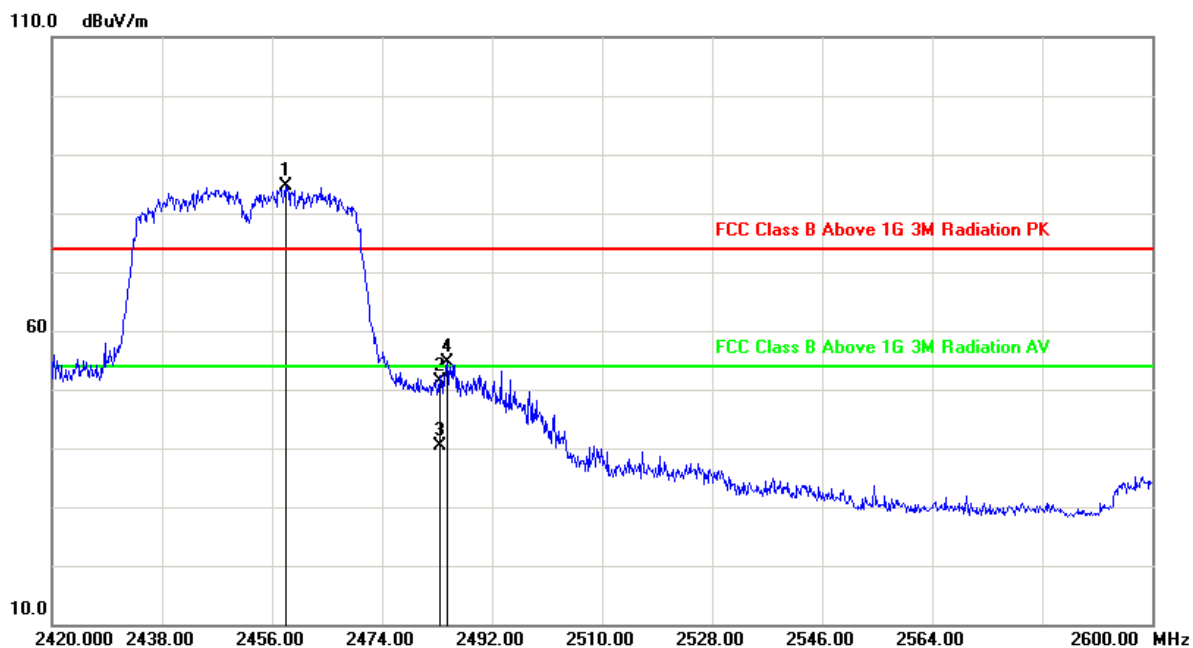
No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2390.000	-12.19	68.50	56.31	74.00	-17.69	peak
2	2390.000	-12.19	54.79	42.60	54.00	-11.40	AVG
3	2417.320	-12.07	96.18	84.11	N/A	N/A	peak

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : Vertical
Power : AC 230V/60Hz	Note : Transmit by 802.11n (40MHz) (2452MHz)



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2458.160	-11.89	96.40	84.51	N/A	N/A	peak
2	2483.500	-11.78	63.16	51.38	74.00	-22.62	peak
3	2483.500	-11.78	52.28	40.50	54.00	-13.50	AVG
4	2484.620	-11.78	66.51	54.73	74.00	-19.27	peak

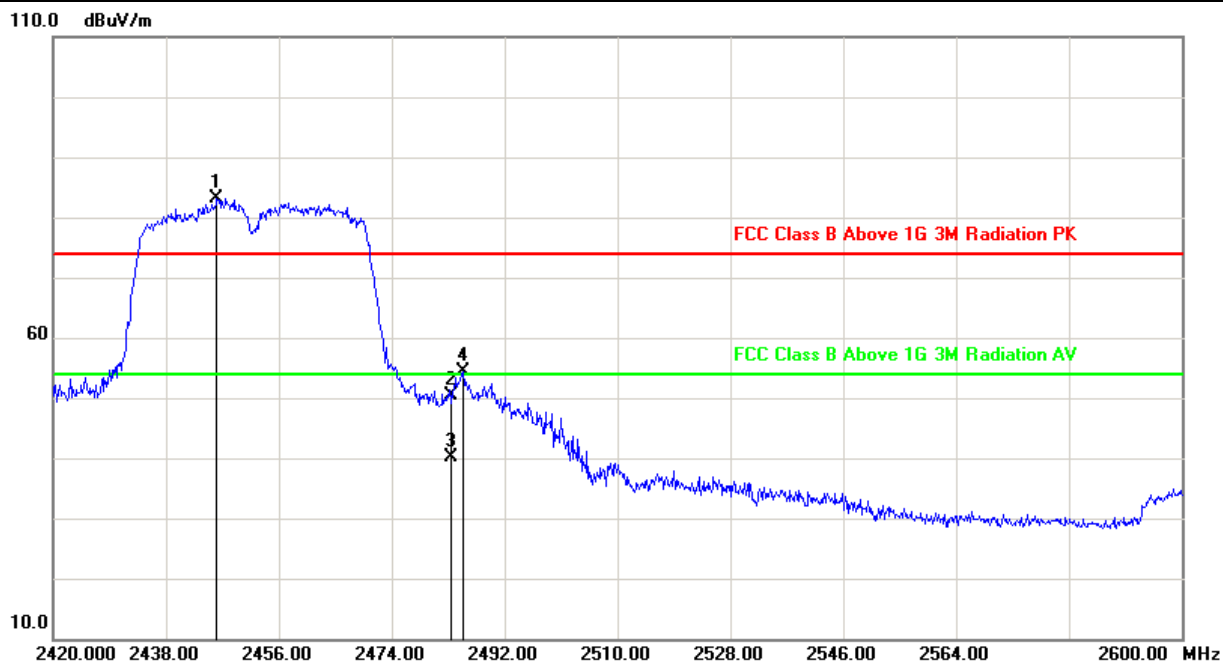
Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor





Engineer : Jeff	
Site : EMC Lab AC 102	Time : 2011-10-25
Limit : FCC_15_03M	Margin : 6
EUT : 8-inch Tablet	Probe : Horizontal
Power : AC 230V/60Hz	Note : Transmit by 802.11n (40MHz) (2452MHz)



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2446.100	-11.94	95.12	83.18	N/A	N/A	peak
2	2483.500	-11.78	62.27	50.49	74.00	-23.51	peak
3	2483.500	-11.78	51.98	40.20	54.00	-13.80	AVG
4	2485.340	-11.77	66.21	54.44	74.00	-19.56	peak

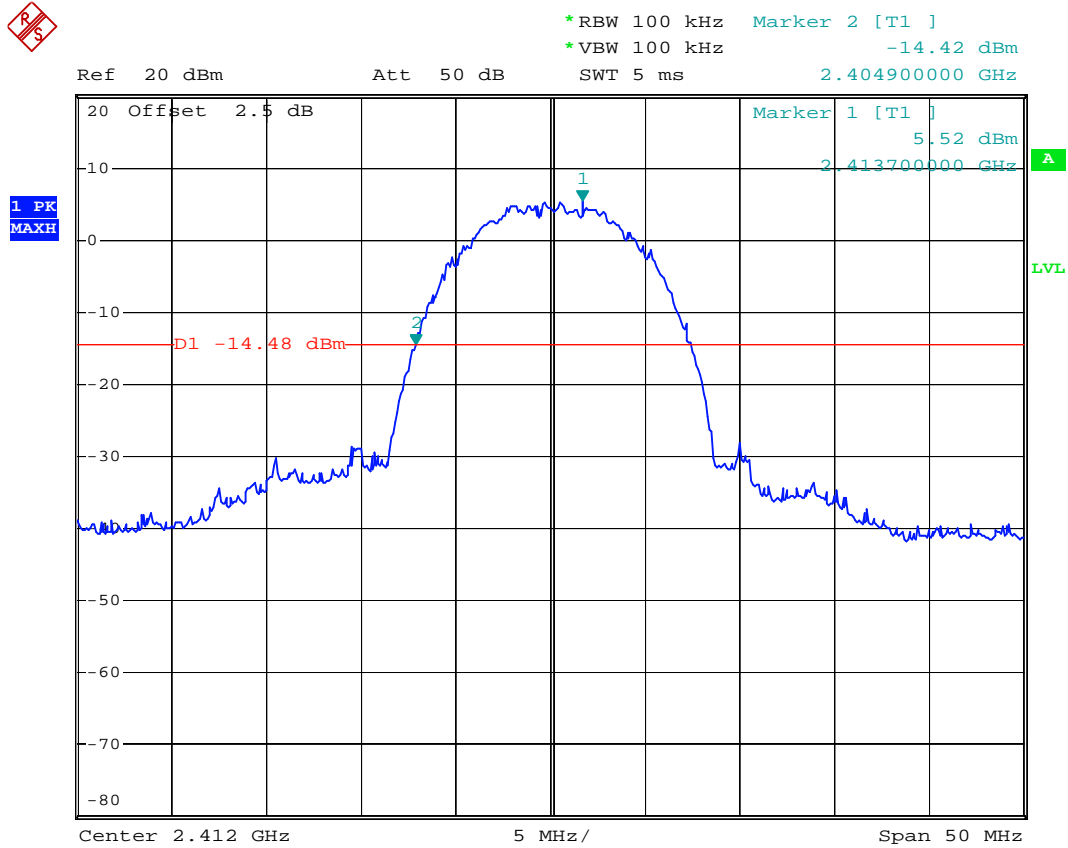
**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " \* ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor



Band Edge (20dBc RF Conducted Measurement)

Mode: Transmit by 802.11b (2412MHz)

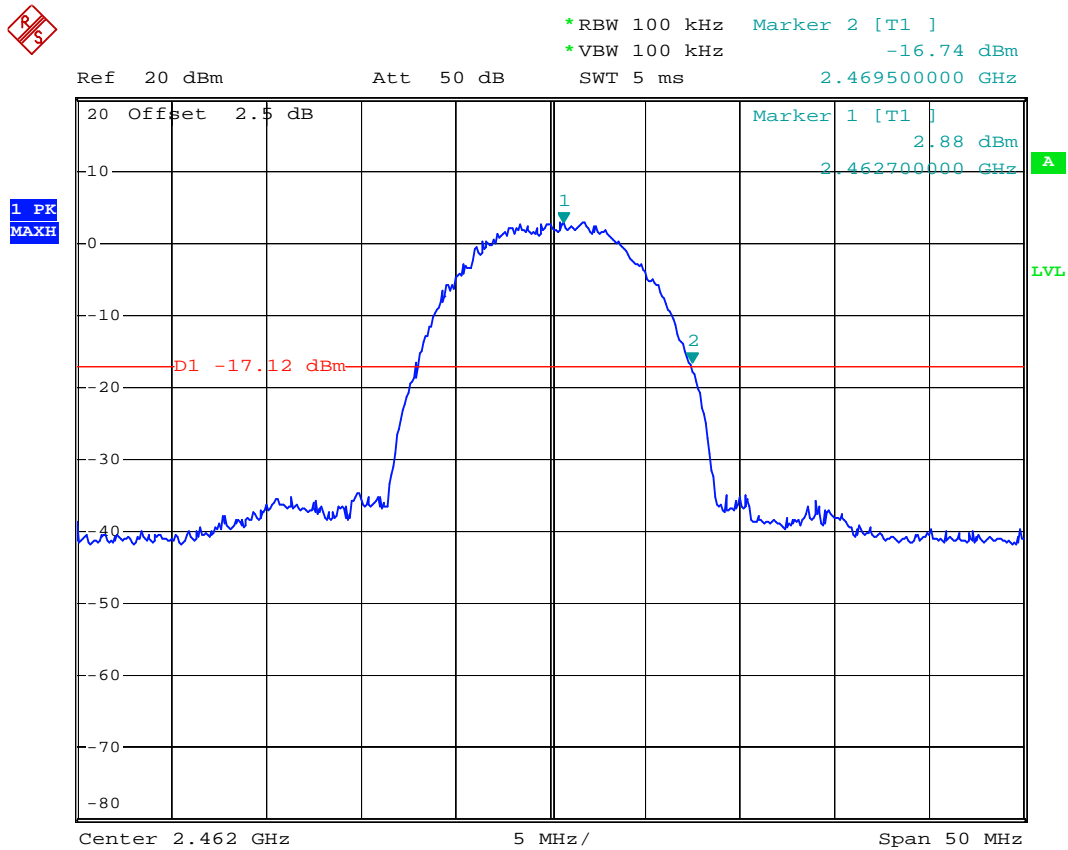


Date: 24.OCT.2011 16:17:59



Band Edge (20dBc RF Conducted Measurement)

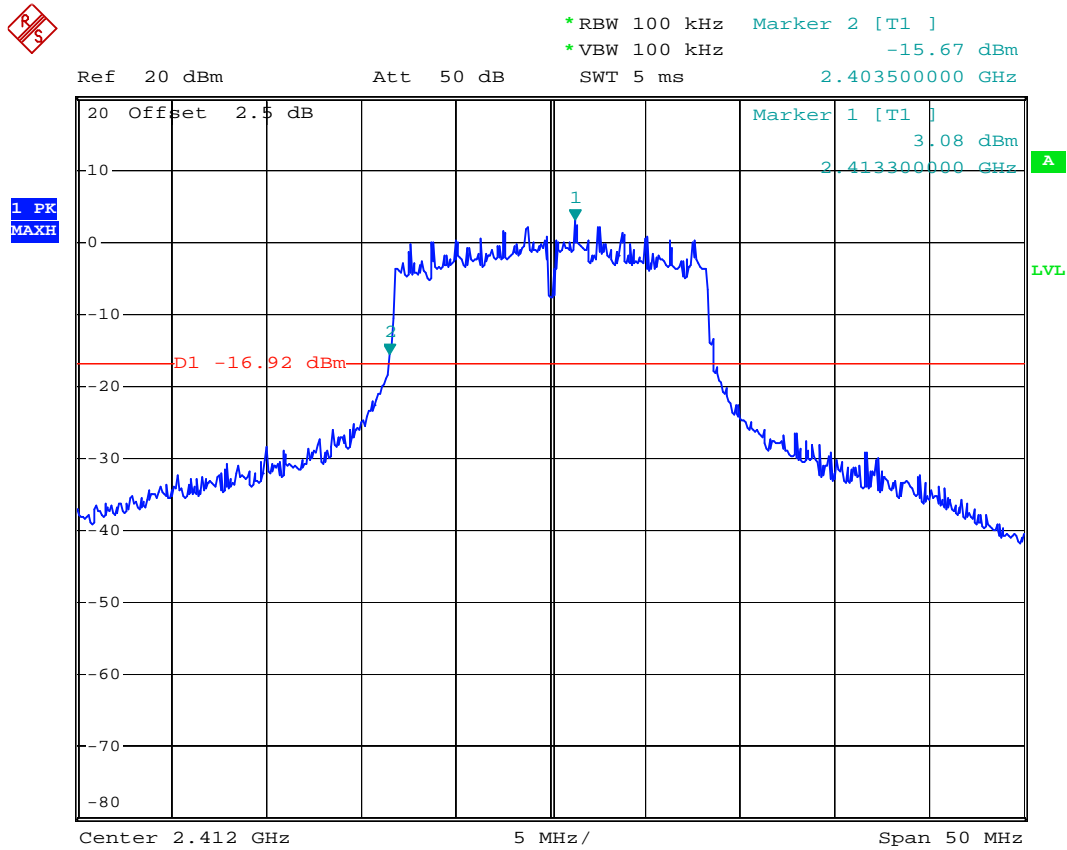
Mode: Transmit by 802.11b (2462MHz)



Date: 24.OCT.2011 16:20:19

### Band Edge (20dBc RF Conducted Measurement)

Mode: Transmit by 802.11g (2412MHz)

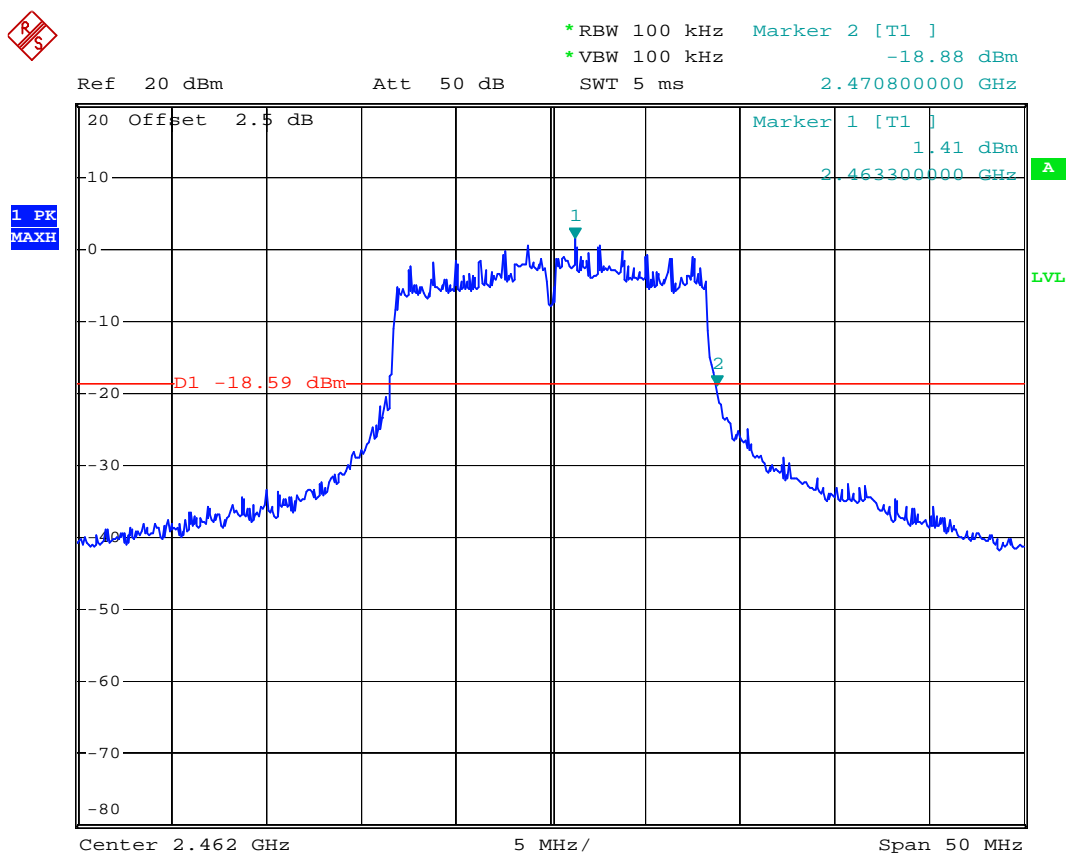


Date: 24.OCT.2011 16:22:55



## Band Edge (20dBc RF Conducted Measurement)

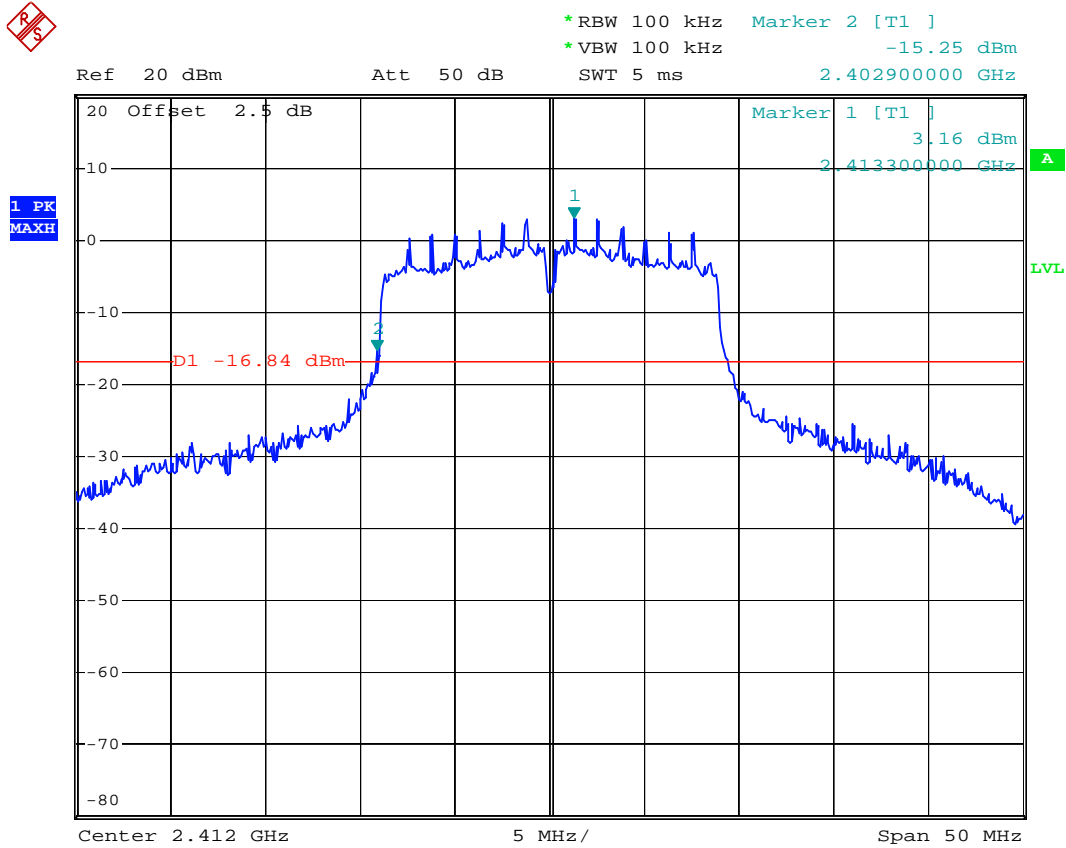
Mode: Transmit by 802.11g (2462MHz)



Date: 24.OCT.2011 16:21:32



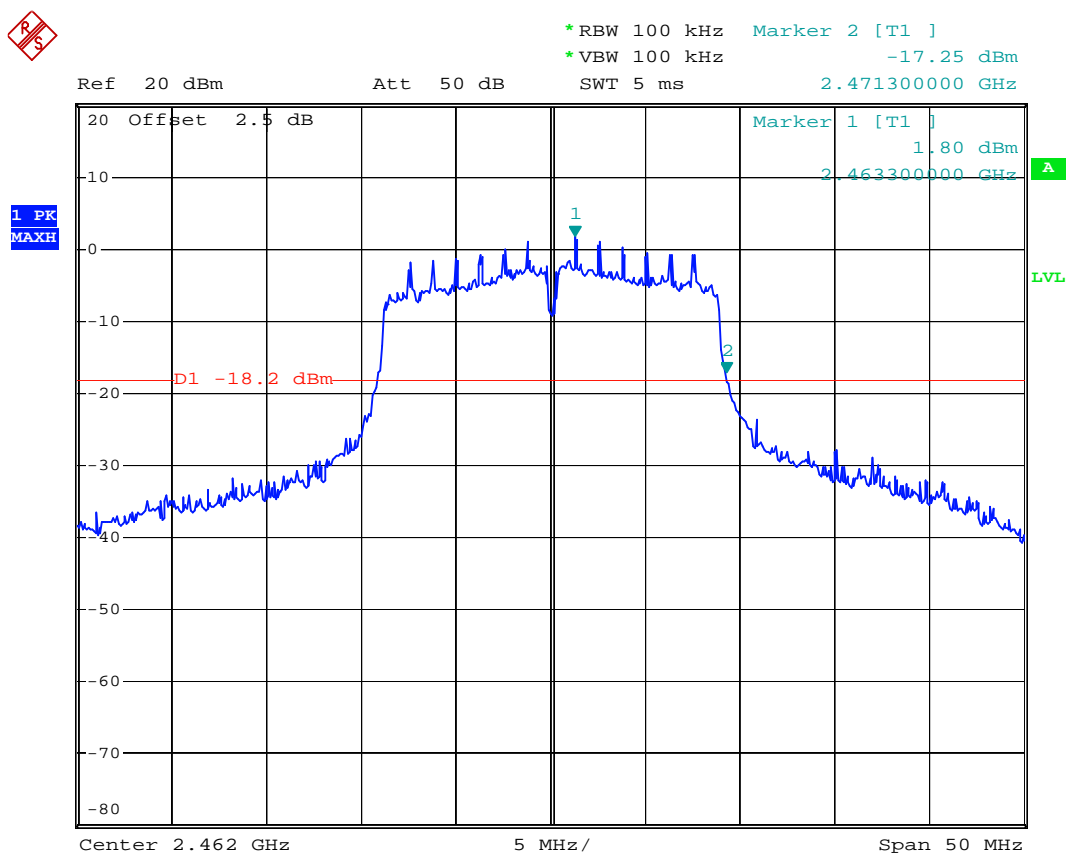
Band Edge (20dBc RF Conducted Measurement)  
Mode: Transmit by 802.11n (20MHz) (2412MHz)



Date: 24.OCT.2011 16:24:09



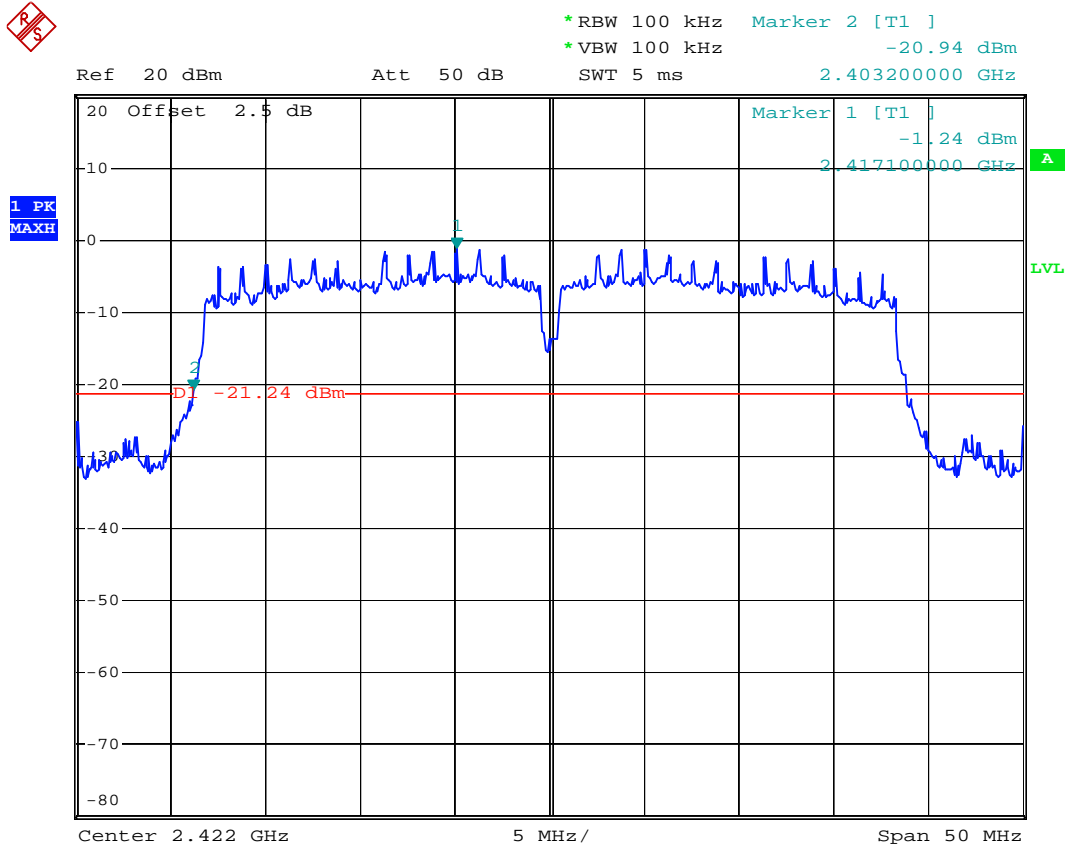
Band Edge (20dBc RF Conducted Measurement)  
Mode: Transmit by 802.11n (20MHz) 2462MHz



Date: 24.OCT.2011 16:26:05



Band Edge (20dBc RF Conducted Measurement)  
Mode: Transmit by 802.11n (40MHz) (2422MHz)

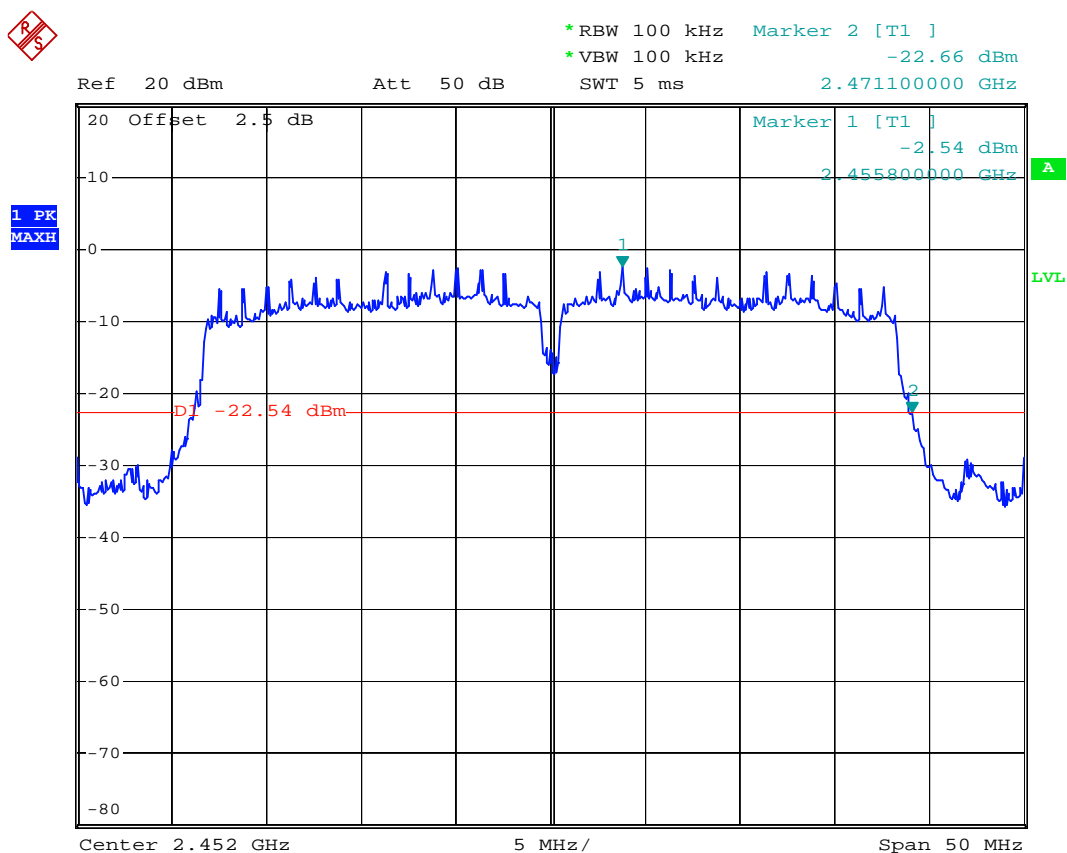


Date: 24.OCT.2011 16:27:50





Band Edge (20dBc RF Conducted Measurement)  
Mode: Transmit by 802.11n (40MHz) 2452MHz



Date: 24.OCT.2011 16:30:10



## 8. Power Spectral Density

### 8.1. Test Limit

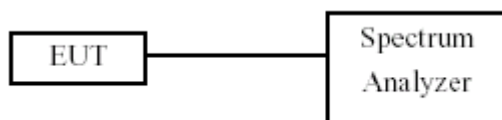
For digitally modulated systems, the power spectral density conducted from the intentional radiated to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

### 8.2. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW= 3 kHz, Set VBW  $\geq$  RBW, Sweep time=SPAN/3kHz, Set detector=Peak detector.

### 8.3. Test Setup Layout



### 8.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date
Spectrum Analyzer	R&S	FSP40	100324	2011.08.14
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2011.08.17

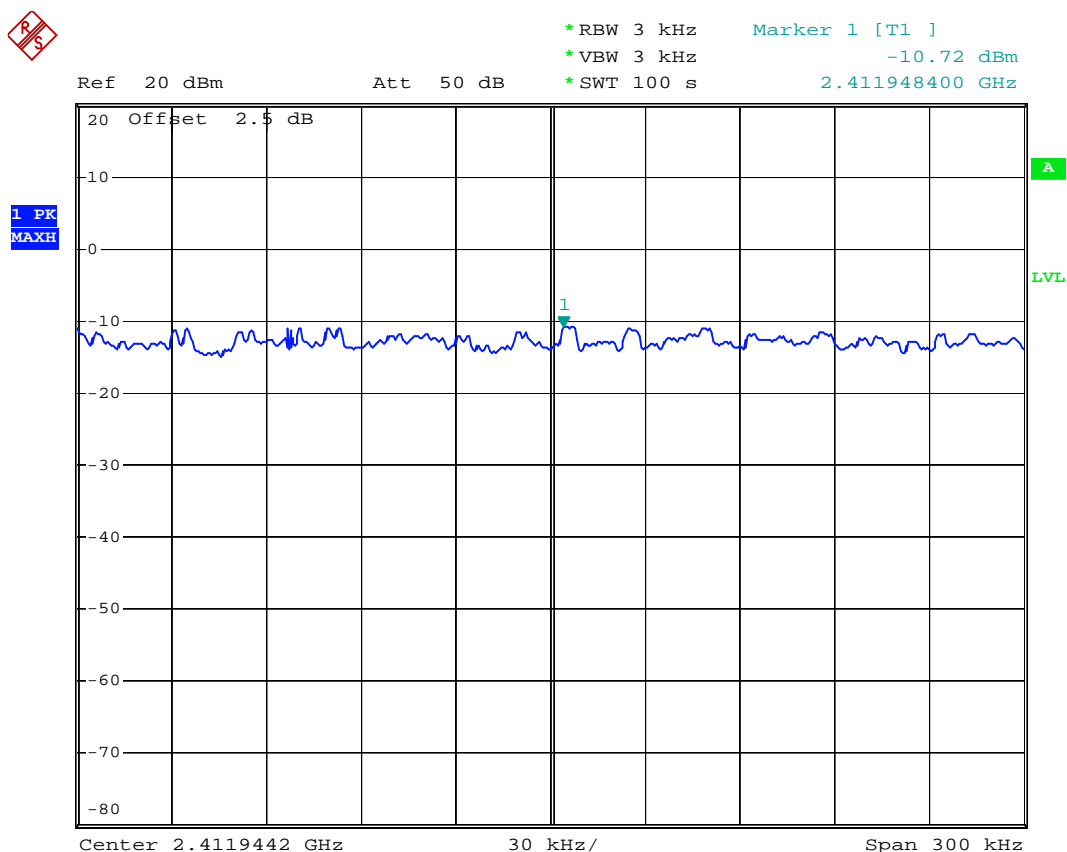


### 8.5. Test Result and Data

Test Item	Power Spectral Density
Test Mode	Transmit by 802.11b
Test Date	2011-10-24

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-10.72	8	Pass
06	2437	-11.29	8	Pass
11	2462	-12.16	8	Pass

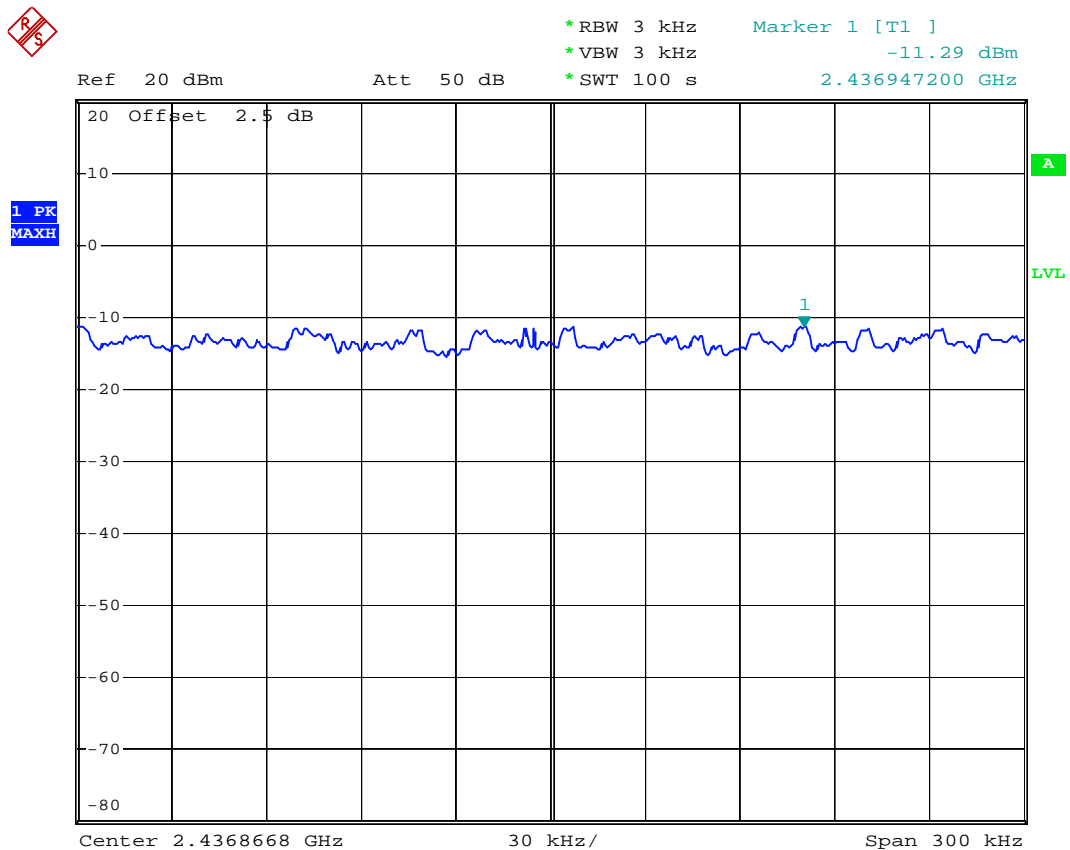
Channel 01 (2412MHz)



Date: 24.OCT.2011 12:00:44



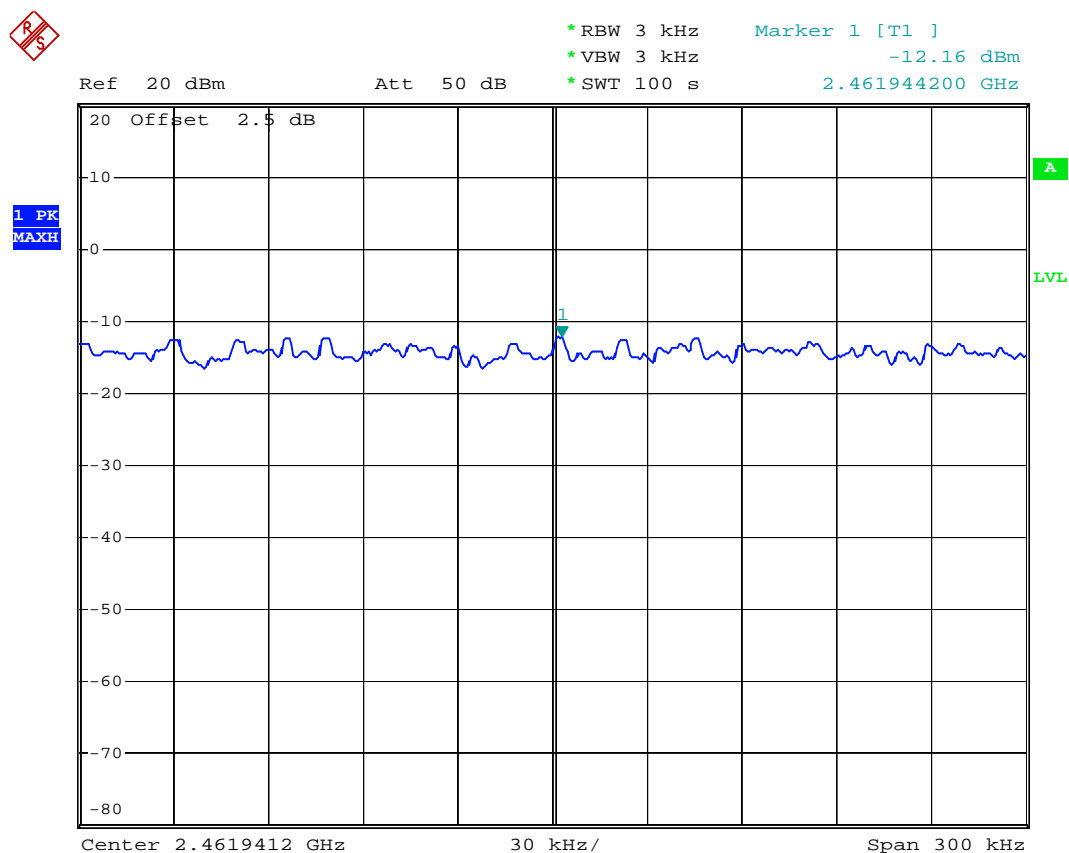
Channel 06 (2437MHz)



Date: 24.OCT.2011 11:56:17



Channel 11 (2462MHz)



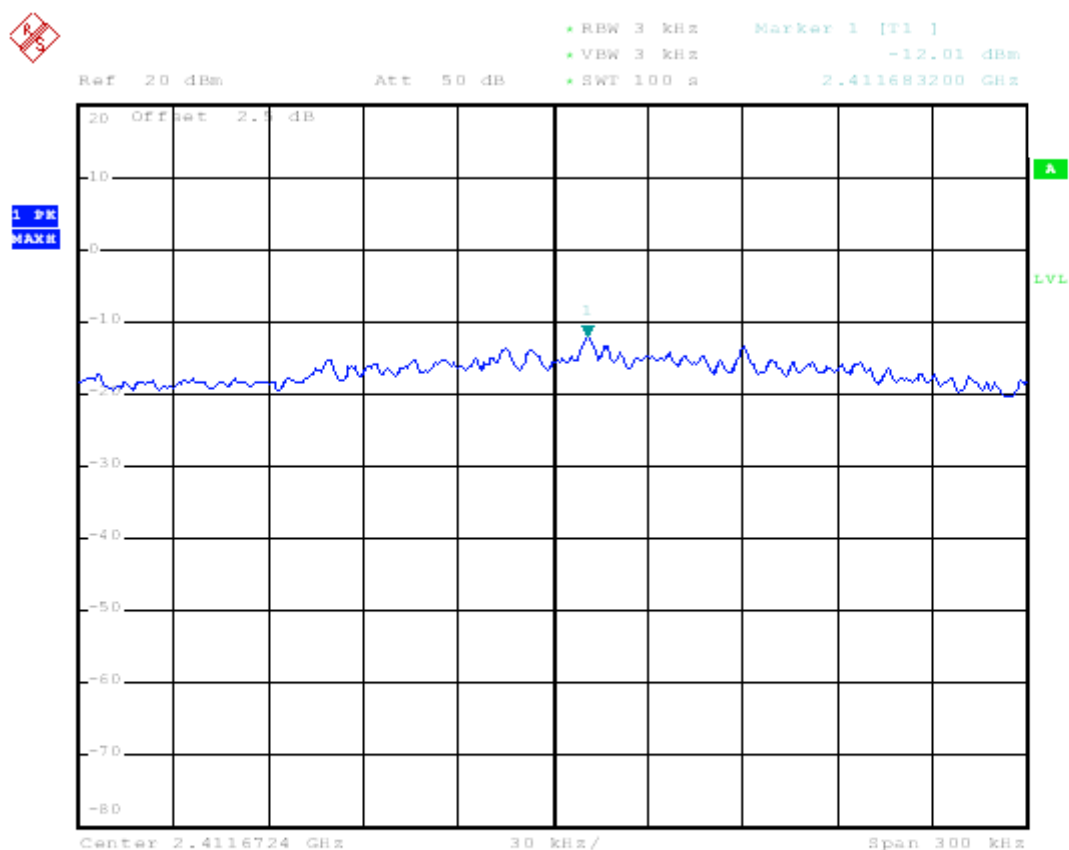
Date: 24.OCT.2011 11:51:57



Test Item	Power Spectral Density
Test Mode	Transmit by 802.11g
Test Date	2011-10-24

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-12.01	8	Pass
06	2437	-12.77	8	Pass
11	2462	-13.83	8	Pass

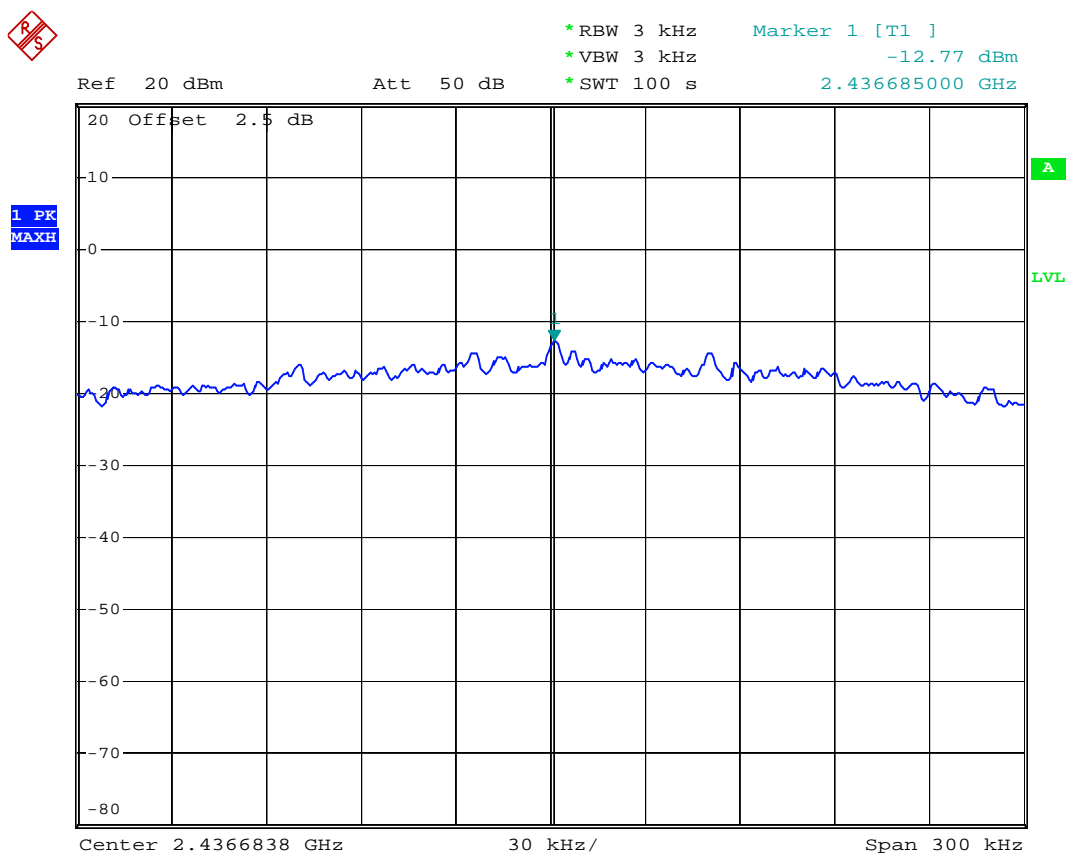
Channel 01 (2412MHz)



Date: 24.OCT.2011 14:13:27



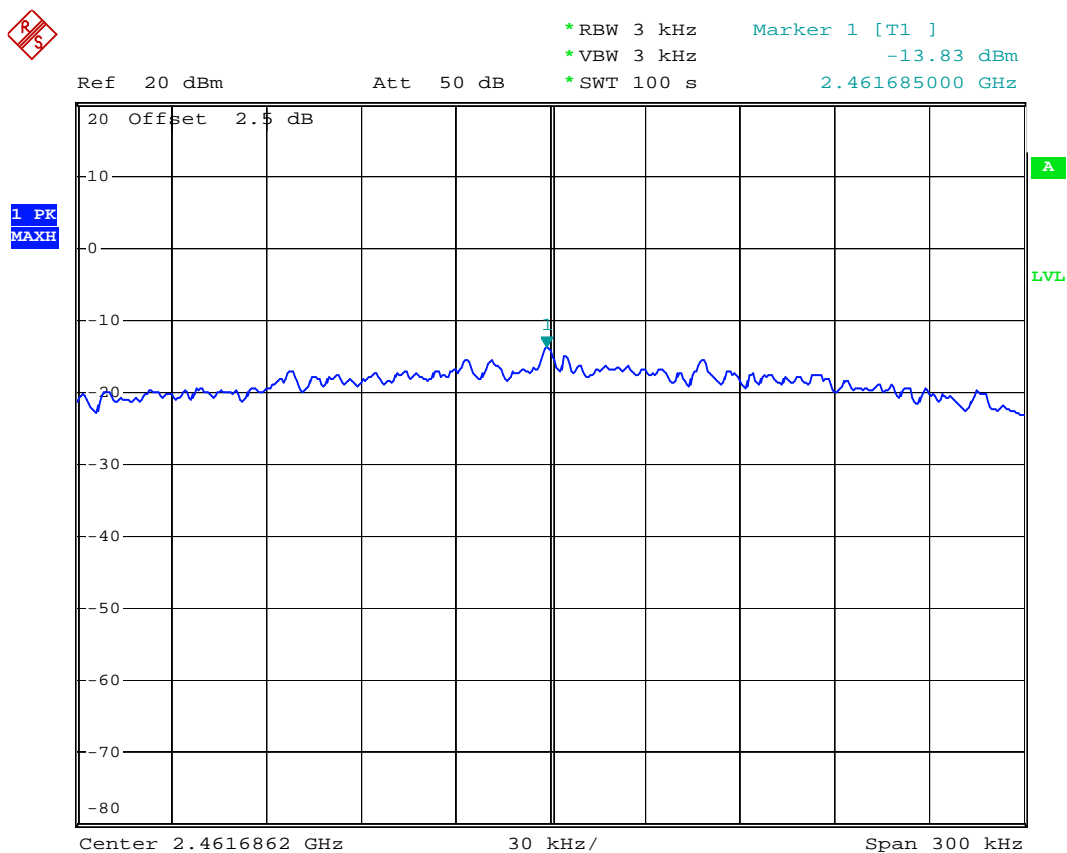
Channel 06 (2437MHz)



Date: 24.OCT.2011 14:18:39



Channel 11 (2462MHz)



Date: 24.OCT.2011 12:58:42

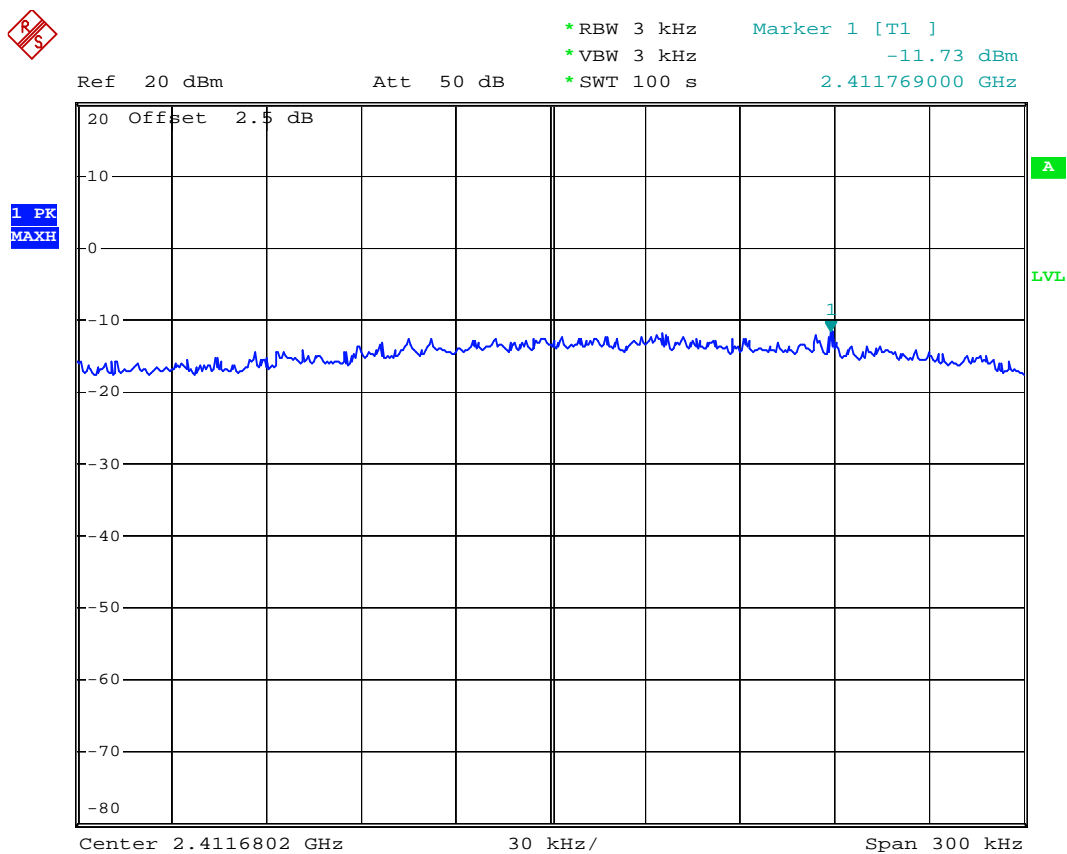




Test Item	Power Spectral Density
Test Mode	Transmit by 802.11n (20MHz)
Test Date	2011-10-24

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
01	2412	-11.73	8	Pass
06	2437	-13.00	8	Pass
11	2462	-13.67	8	Pass

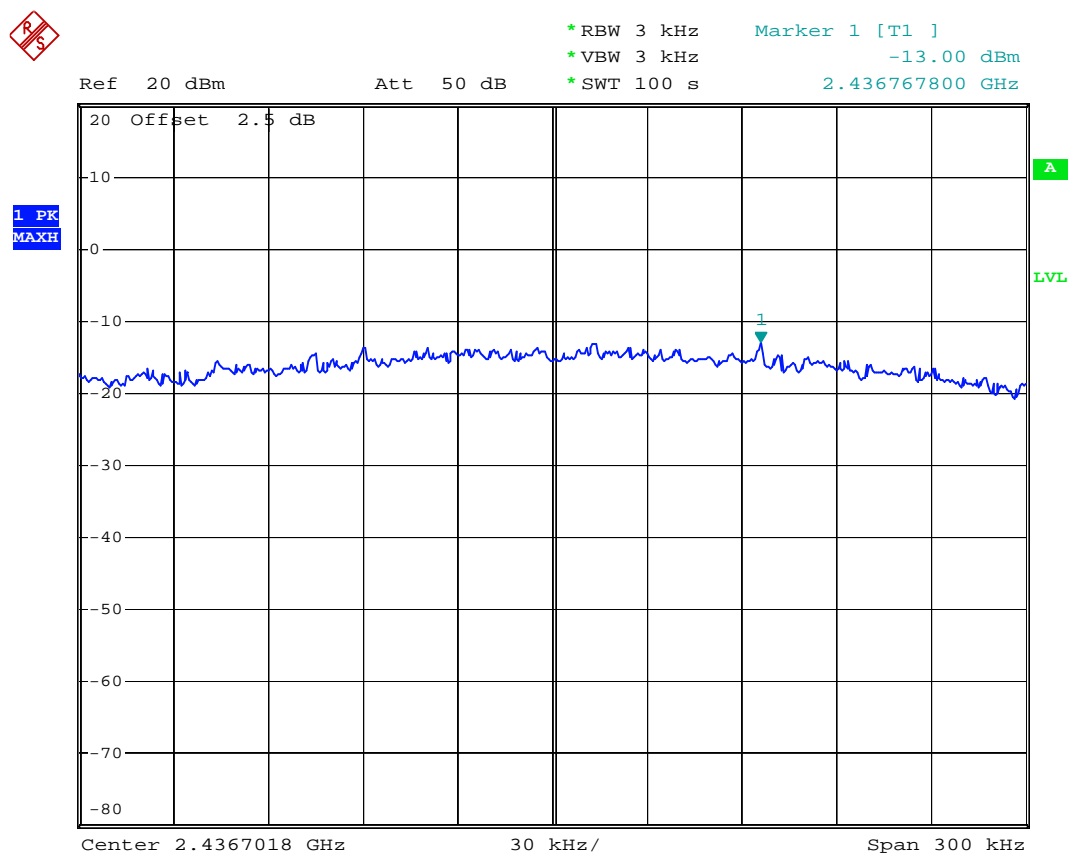
## Channel 01 (2412MHz)



Date: 24.OCT.2011 14:23:02



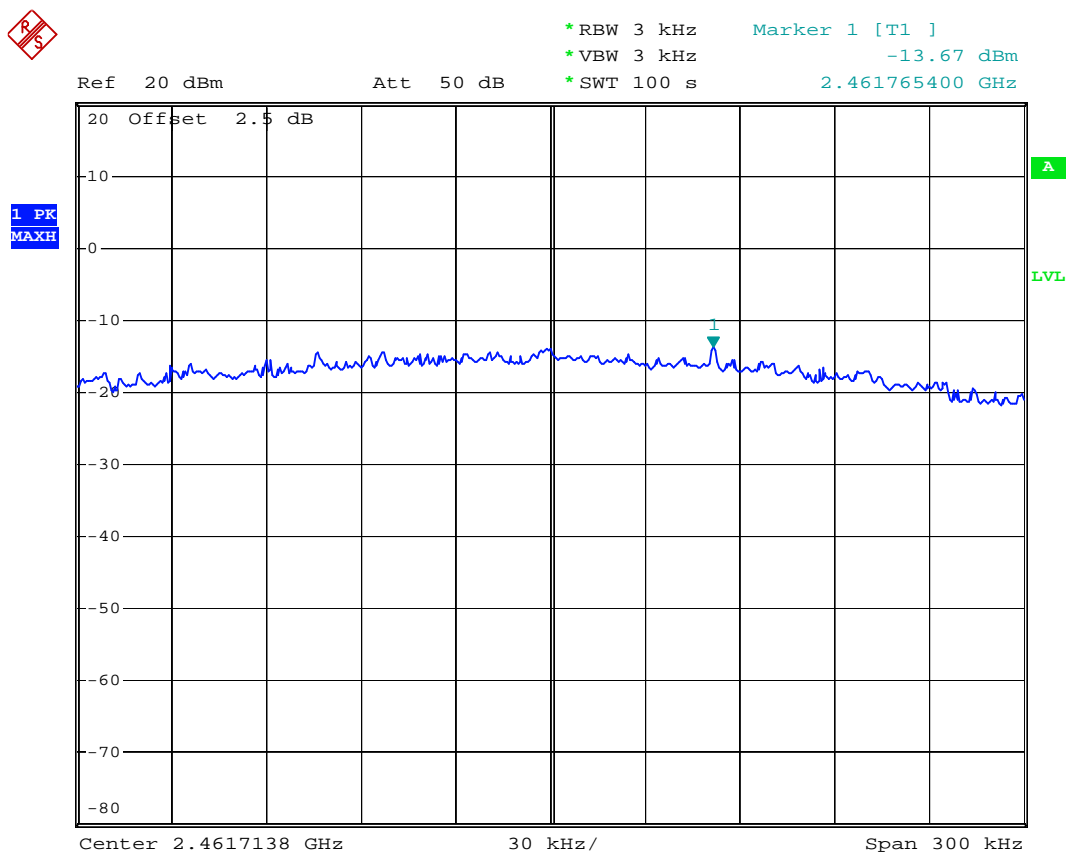
Channel 06 (2437MHz)



Date: 24.OCT.2011 14:27:18



Channel 11 (2462MHz)



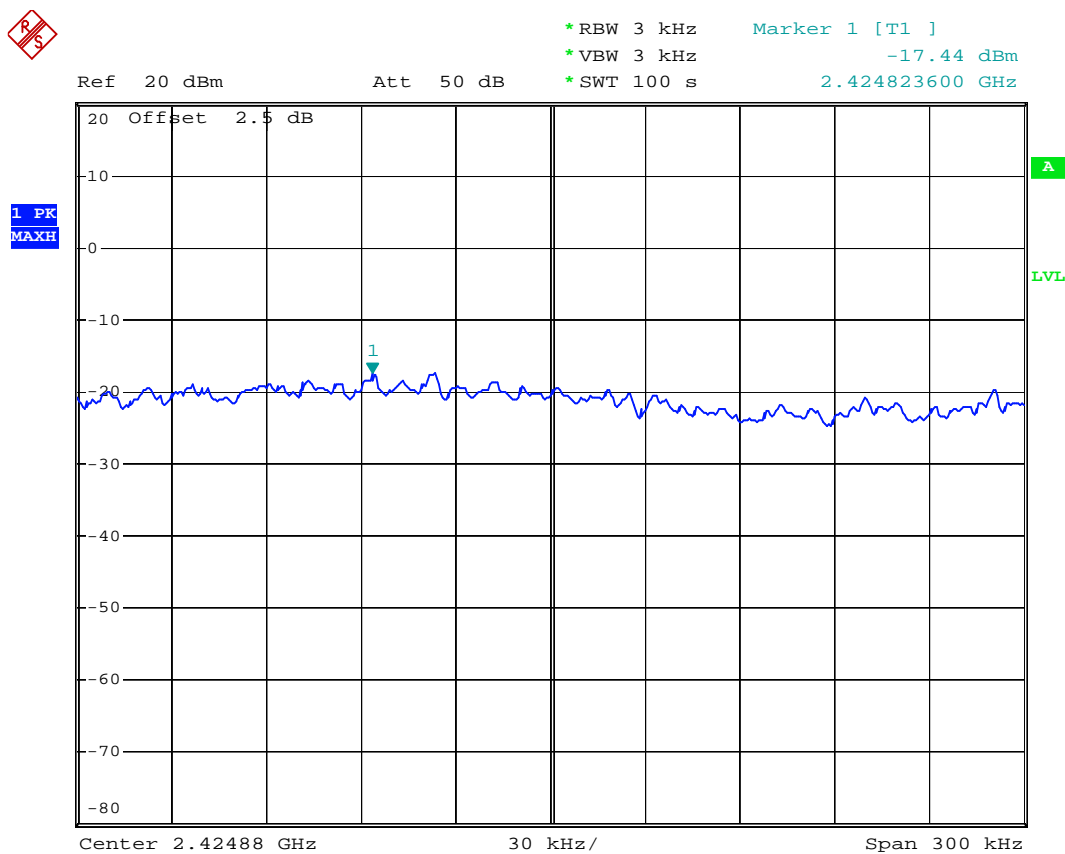
Date: 24.OCT.2011 14:31:22



Test Item	Power Spectral Density
Test Mode	Transmit by 802.11n (40MHz)
Test Date	2011-10-24

Channel	Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
03	2422	-17.44	8	Pass
06	2437	-18.24	8	Pass
09	2452	-18.25	8	Pass

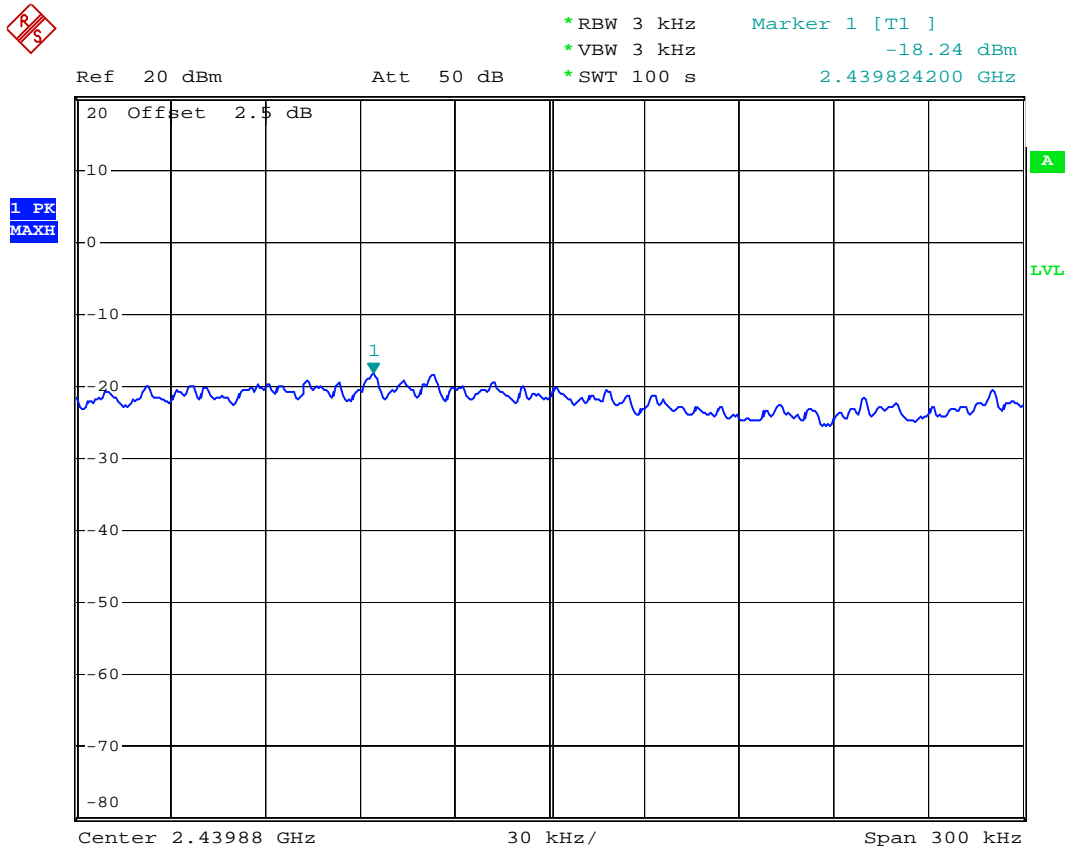
## Channel 03 (2422MHz)



Date: 24.OCT.2011 14:41:53



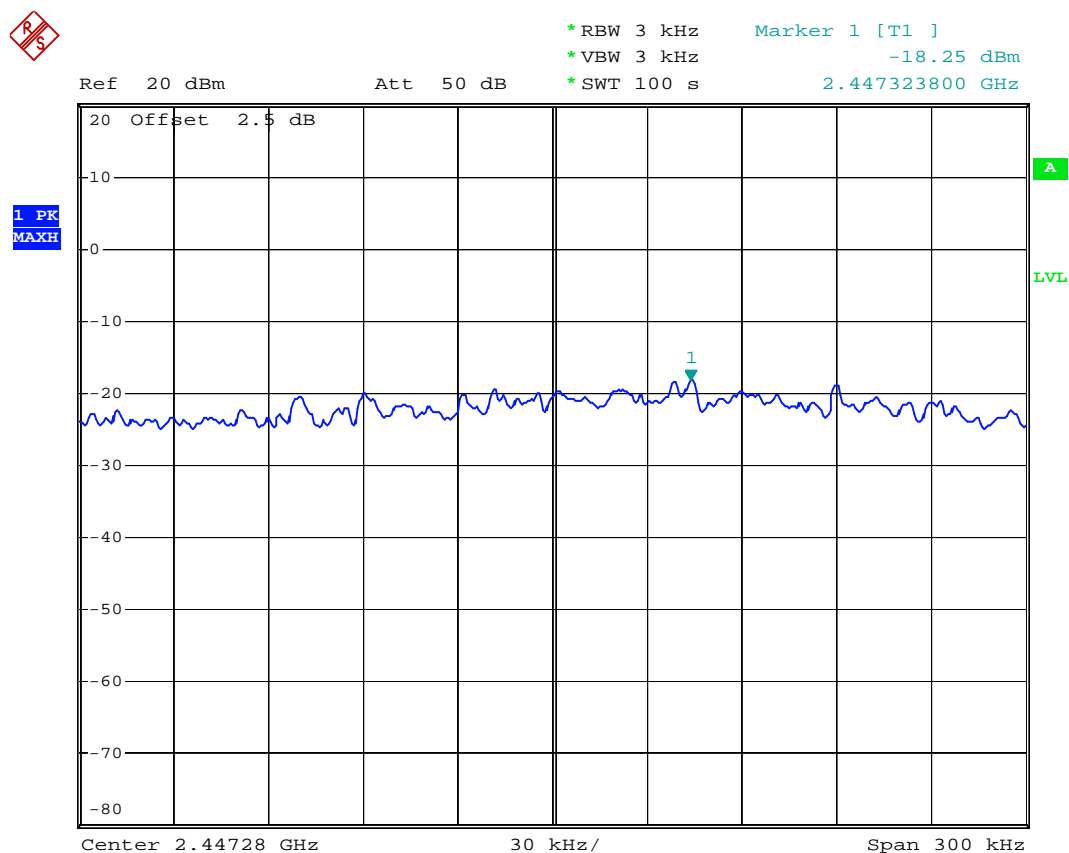
Channel 06 (2437MHz)



Date: 24.OCT.2011 14:47:40



Channel 09 (2452MHz)



Date: 24.OCT.2011 14:53:03