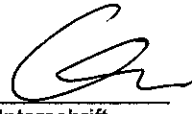
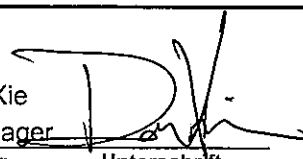


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<b>Test Report No.:</b>													
<b>Auftraggeber:</b> <i>Client:</i>	Desay A&V Science and Technology Co., Ltd. DESAY 3rd Industry Zone, Chenjiang Town, Huizhou City, Guandong, P.R. China												
<b>Gegenstand der Prüfung:</b> Blu-ray Disc Player <i>Test item:</i>													
<b>Bezeichnung:</b> <i>Identification:</i>	NS-WBRDVD2 NS-WBRDVD2-CA	<b>Certificate Number:</b> <i>Certificate Number</i>	FCC ID: XJGDS0003 IC: 8990A-DSB082A										
<b>Wareneingangs-Nr.:</b> <i>Receipt No.:</i>	173052826	<b>Eingangsdatum:</b> <i>Date of receipt:</i>	May 5, 2010										
<b>Prüfört:</b> <i>Testing location:</i>	TÜV Rheinland (Guangdong) Ltd. EMC Laboratory Guangzhou Auto Market, Yuan Gang Section of Guangshan Road, Guangzhou 510650, P. R. China		Listed test laboratory according to FCC rules section 2.948 and RSS-Gen, for measuring devices.										
<b>Prüfgrundlage:</b> <i>Test specification:</i>	ANSI C63.4: 2003 FCC Part 15: July 10, 2008, Subpart C section 15.207, 15.209 and 15.247  RSS-GEN Issue 2, June 2007 RSS-210 Issue 7, June 2007 RSS-102 Issue 2, November 2005												
<b>Prüfergebnis:</b> <i>Test Result:</i>	Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). The test item passed the test specification(s).												
<b>Prüflaboratorium:</b> <i>Testing Laboratory:</i>	TÜV Rheinland (Guangdong) Ltd.												
<b>geprüft/ tested by:</b>		<b>kontrolliert/ reviewed by:</b>											
<div style="display: flex; justify-content: space-between;"> <div> <p>Ken Kuang Project Engineer</p> <p><i>Jun. 29, 2010</i></p> </div> <div>  <p><i>30. Jun. 2010</i></p> </div> </div> <table style="width: 100%; font-size: small;"> <tr> <td>Datum</td> <td>Name/Stellung</td> <td>Unterschrift</td> </tr> <tr> <td>Date</td> <td>Name/Position</td> <td>Signature</td> </tr> </table>	Datum	Name/Stellung	Unterschrift	Date	Name/Position	Signature	<div style="display: flex; justify-content: space-between;"> <div> <p>Liangdong Xie Project Manager</p> <p><i>30. Jun. 2010</i></p> </div> <div>  </div> </div> <table style="width: 100%; font-size: small;"> <tr> <td>Datum</td> <td>Name/Stellung</td> <td>Unterschrift</td> </tr> <tr> <td>Date</td> <td>Name/Position</td> <td>Signature</td> </tr> </table>	Datum	Name/Stellung	Unterschrift	Date	Name/Position	Signature
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Date	Name/Position	Signature											
Datum	Name/Stellung	Unterschrift											
Date	Name/Position	Signature											
<b>Sonstiges/ Other Aspects:</b>													
<table style="width: 100%; font-size: x-small;"> <tr> <td style="width: 50%;"> <b>Abkürzungen:</b> P(ass) = entspricht Prüfgrundlage  F(ail) = entspricht nicht Prüfgrundlage  N/A = nicht anwendbar  N/T = nicht getestet </td> <td style="width: 50%;"> <b>Abbreviations:</b> P(ass) = passed  F(ail) = failed  N/A = not applicable  N/T = not tested </td> </tr> </table>				<b>Abkürzungen:</b> P(ass) = entspricht Prüfgrundlage F(ail) = entspricht nicht Prüfgrundlage N/A = nicht anwendbar N/T = nicht getestet	<b>Abbreviations:</b> P(ass) = passed F(ail) = failed N/A = not applicable N/T = not tested								
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<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</p> <p><i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i></p>													

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## Test Summary

FCC and IC test specification		Test items	Result
FCC rules	RSS rules		
Part 15 Per Section 15.207(a)	RSS-Gen Per Section 7.2.2	AC Power Conducted Emission	Pass
Part 15 Per Section 15.209(a)	RSS-210 Issue 7 Section 2.6	Transmitter Radiated Spurious Emission	Pass
	RSS-210 Issue 7 Section 2.3	Receiver Radiated Spurious Emission	Pass
Part 15 Per Section 15.203		Antenna Requirement	Pass
Part 15 Per Section 15.247(b)(3)	RSS-210 Issue 7 Section A8.4 (4)	Maximum Peak Conducted Output Power	Pass
Part 15 Per Section 15.247(a)(2)	RSS-210 Issue 7 Section A8.2 (a)	6dB Bandwidth	Pass
Part 15 Per Section 15.247(e)	RSS-210 Issue 7 Section A8.2 (b)	Power Spectral Density	Pass
Part 15 Per Section 15.247(d)	RSS-210 Issue 7 A8.5	Out-Of-Band Emission measurement	Pass
	RSS-102 Issue 2 Section 2.5.2	Exemption from Routine Evaluation Limits – RF Exposure Evaluation	Pass

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## **1 General Remarks**

### **1.1 Complementary Materials**

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix 1: Test result

## **2 Test Sites**

### **2.1 Test Facilities**

**TÜV Rheinland (Guangdong) Ltd. EMC Laboratory**

Guangzhou Auto Market, Yuan Gang Section of Guangshan Road  
Guangzhou 510650

P. R. China

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## 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

Kind of Equipment	Type	Manufacturer	S/N	Calibrated until	Calibrated Interval
EMI Test Receiver	ESCI-3	Rohde & Schwarz	100216	2011-03-16	1 year
Spectrum Analyzer	FSP30	Rohde & Schwarz	100286	2011-03-16	1 year
Loop Antenna	HFH2-Z2	Rohde & Schwarz	100111	2011-03-16	1 year
Trilog-Broadband Antenna	VULB9168	SCHWARZBECK MESS- ELEKTRONIK	209	2011-08-21	2 years
Double-Ridged Waveguide Horn Antenna	HF906	Rohde & Schwarz	100385	2011-08-24	2 years
Pre-amplifier	AFS42-00101800-25-S-42	MITEQ	1101599	2011-03-16	2 years
Band Reject Filter	BRM50702	Micro-Tronics	023	2011-03-16	2 years
Standard Gain Horn Antenna	3160-09	EMCO	21642	2014-06-26	5 years
Pre-amplifier	AFS33-18002650-30-8P-44	MITEQ	1108282	2011-03-16	2 years
3m Anechoic Chamber	N/A	Albatross Project GmbH	N/A	2011-03-16	1 year
Spectrum Analyzer	E4404B	Agilent	MY414 40753	2011-03-16	1 year

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIST or where calibration is performed outside the United States, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

## **2.4 Calibration**

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## **2.5 Measurement Uncertainty**

Uncertainty for conducted emissions measurements is  $\pm 2.68\text{dB}$ .

Uncertainty for radiated emissions measurements is  $\pm 4.94\text{dB}$  (30MHz-1GHz),  $\pm 4.88\text{dB}$  (>1GHz).

The reported expanded uncertainty is based on a standard uncertainty multiply by a coverage factor  $k=2$ , providing a level of confidence of approximately 95%.

## **2.6 Location of original data**

The original copies of test data taken during actual testing were attached at Appendix 1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Guangdong) file for certification follow-up purposes.

## **2.7 Status of facility used for testing**

TÜV Rheinland (Guangdong) Ltd. EMC Laboratory; Guangzhou Auto Market, Yuan Gang Section of Guangshan Road, Guangzhou 510650, P. R. China is listed on the US Federal Communications Commission list of facilities approved to perform measurements, the register no. 833845

TÜV Rheinland (Guangdong) Ltd. EMC Laboratory; Guangzhou Auto Market, Yuan Gang Section of Guangshan Road, Guangzhou 510650, P. R. China is listed on Certification and Engineering Bureau of Canada, whose file number is IC 2932C.

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### 3 General Product Information

The submitted sample NS-WBRDVD2 and NS-WBRDVD2-CA are Blu-ray Disc players with wireless module.

NS-WBRDVD2 is identical to NS-WBRDVD2-CA except for model name.

#### 3.1 Product Function and Intended Use

Following function is provided:

1. DVD playback.
2. Wired / wireless network connection.

Refer to user manual for more information.

#### 3.2 Ratings and System Details

Frequency range	:	IEEE 802.11b/g /n(HT20): 2412MHz---2462MHz IEEE 802.11n (HT40): 2422MHz-----2452MHz
Number of employed channels	:	IEEE 802.11b/g ,802.11n (HT20): 11 IEEE802.11n (HT40): 7
Modulation Type	:	DSSS, OFDM
Mode of RF Operation (Simplex/ Duplex)	:	Duplex
Category of equipment	:	Low-power License-exempt Radio communication Devices(All Frequency Bands):Category I equipment (refer to RSS-Gen, clause 2)
Type of antenna	:	Integral antennas (Ant#0 & Ant#1)
Antenna Gain	:	2dBi
Power supply	:	AC 110V-120V 50/60Hz
Ports	:	AC mains Ethernet HDMI USB Audio/Video output optical output Coaxial output
Protection Class	:	II

The above information was declared by client. Refer to the Technical Documentation for further information



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### **3.3 Independent Operation Modes**

Off

On (802.11b / 802.11g / 802.11n HT20 / 802.11n HT40)

The basic operation modes for wireless connection:  
Transmitting and receiving

For further information refer to User Manual

### **3.4 Submitted Documents**

Operation Description

Block Diagram

Schematics

FCC and IC label and its location

User Manual

Internal Photos

External Photos

Application form

## **4 Test Set-up and Operation Mode**

### **4.1 Principle of Configuration Selection**

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### **4.2 Test Operation and Test Software**

Refer to test set-up in chapter 5.

### **4.3 Special Accessories and Auxiliary Equipment**

The product has been tested together with the following auxiliary equipment.

1. Laptop PC:

Manufacturer: IBM  
Model Number: R40e  
Serial Number: 99-CYY55

2. Test software: Arcadyan \_FCC\_command provided by client.

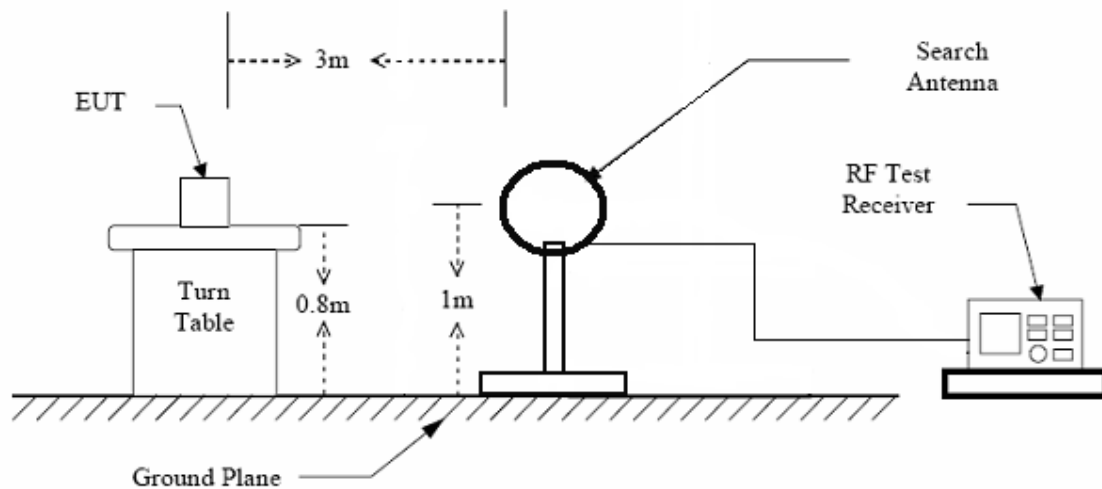
Note: During the test, the RF output power was set to the max. level, which was declared by client, via these commands.

### **4.4 Countermeasures to achieve EMC Compliance**

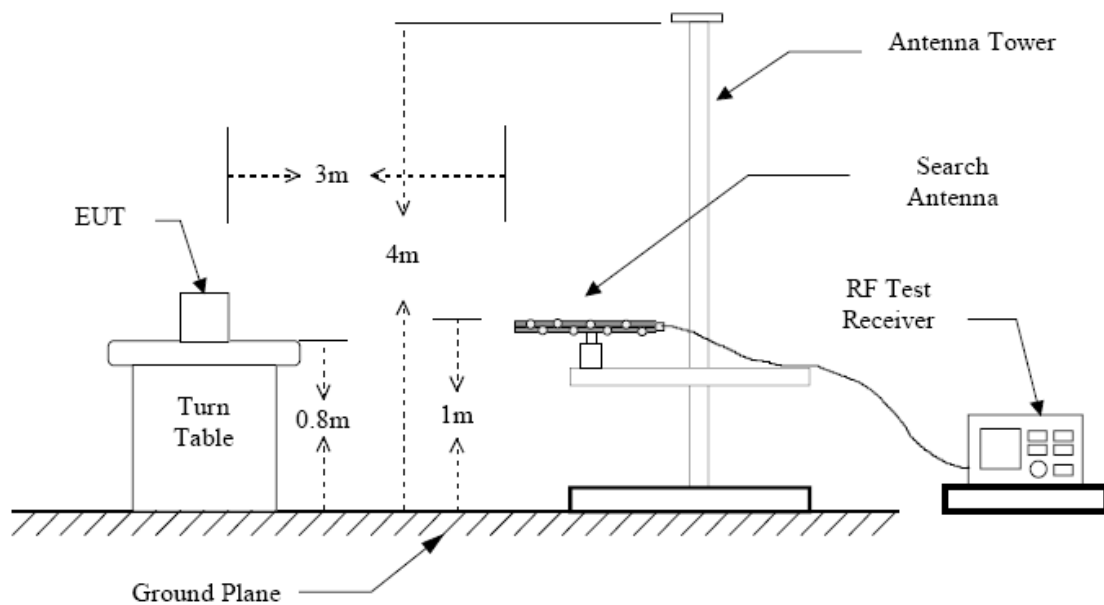
The test sample, which has been tested, contained the noise suppression parts as described in the technical document. No additional measures were employed to achieve compliance.

## 4.5 Test set-up

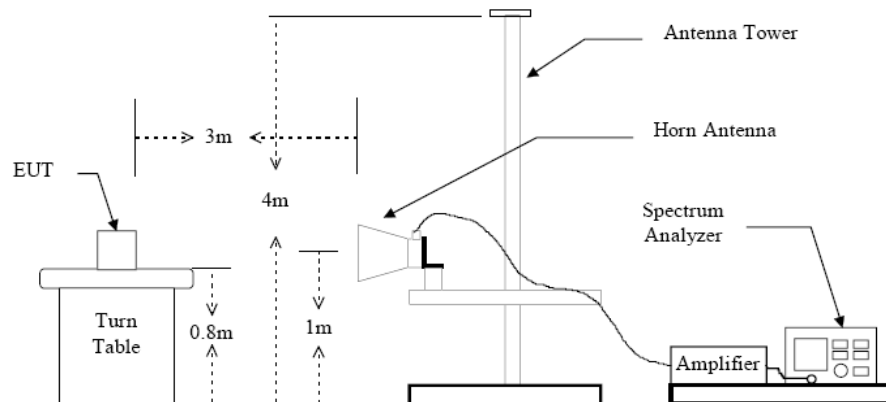
### Diagram 1 of Configuration for Testing Radiated Emission below 30MHz



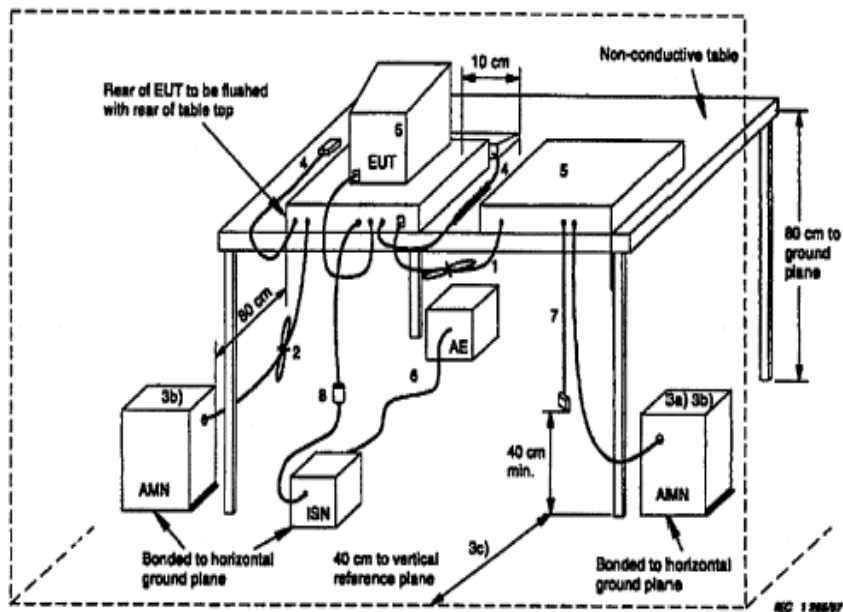
### Diagram 2 of Configuration for Testing Radiated Emission from 30MHz to 1 GHz



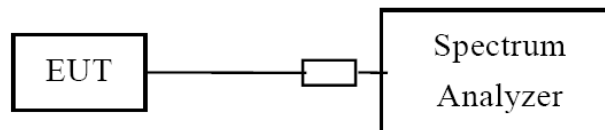
### Diagram 3 of Configuration for Testing Radiated Emission above 1 GHz



**Diagram 4 of Measurement Equipment Configuration for Testing Conducted Emission**



**Diagram 5 of Configuration for Testing other test items**



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## 5 Test Results EMISSION

### 5.1 Conducted Emission on AC mains

**RESULT:**

**Pass**

Date of testing	:	June 6, 2010 to June 10, 2010
Test specification	:	FCC Part 15 Per Section 15.207(a) RSS-Gen Per Section 7.2.2
Limits	:	FCC Part 15 Per Section 15.207(a) RSS-Gen Per Section 7.2.2, table 2
Test procedure	:	Procedure specified in ANSI C63.4/RSS-Gen were followed
Deviations from Standard Test procedures	:	None
Kind of test site	:	Shielded room
Operation mode	:	Normal operation
Power supply	:	AC 120V 60Hz
Temperature	:	21°C
Humidity	:	50%

**Test procedure:**

1. Place the EUT as specified in ANSI C63.4 Clause 7.2.1
2. Plug the LISN to a correct power source.
3. Turn on the EUT.
4. Connect the EUT to LISN and choose N or L1 on the LISN.
5. Connect ESCS30 and LISN via a 50-ohm coaxial cable and a pulse limiter then begin exploratory measurement as specified in ANSI C63.4 Clause 7.2.3
6. Make final measurement as specified in ANSI C63.4 Clause 7.2.4

Note: The EUT with the following two models of optical pick-up:

1. SANYO SF-BD412VT
  2. SONY KEM-460AAA
- were tested separately.

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**Table 2: Disturbance Voltage on AC Mains**

<b>EUT with optical pick-up model SF-BD412VT</b>					
<b>Frequency</b> [MHz]	<b>Line</b> L/N	<b>QP</b> [dBµV]	<b>AV</b> [dBµV]	<b>Quasi Peak Limit</b> [dBµV]	<b>Average Limit</b> [dBµV]
0.159	N	48.3	--	65.6	55.6
0.478	L1	30.2	--	56.4	46.4
0.973	N	23.8	--	56.0	46.0
2.787	N	20.6	--	56.0	46.0
11.053	L1	21.0	--	60.0	50.0
16.633	N	43.8	--	60.0	50.0
*)					
<b>EUT with optical pick-up model KEM-460AAA</b>					
<b>Frequency</b> [MHz]	<b>Line</b> L/N	<b>QP</b> [dBµV]	<b>AV</b> [dBµV]	<b>Quasi Peak Limit</b> [dBµV]	<b>Average Limit</b> [dBµV]
0.154	L1	32.4	--	65.8	55.8
0.460	N	27.1	--	56.7	46.7
1.504	L1	18.7	--	56.0	46.0
2.301	L1	18.1	--	56.0	46.0
12.358	L1	19.1	--	60.0	50.0
20.067	L1	33.8	--	60.0	50.0
*)					

\*) Measurement is made from 150 kHz to 30 MHz. Disturbances other than those mentioned above are small or not detectable. Refer to appendix 1 for the test plot.

If the result of the measurement with the Quasi Peak detector is below the Average limit, the measurement with Average Detector may be omitted.

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## 5.2 Transmitter Radiated Spurious Emission

### RESULT:

**Pass**

Date of testing	:	June 6, 2010 to June 11, 2010
Test specification	:	FCC Part 15 Per Section 15.209(a) RSS-210 Per Section 2.6
Limits	:	FCC Part 15 Per Section 15.209(a) RSS-210 Per Section 2.6, table 2
Test procedure	:	Procedure specified in ANSI C63.4/RSS-Gen were followed
Deviations from Standard Test procedures	:	None
Kind of test site	:	3m Semi-anechoic chamber
Operation mode	:	Below 1GHz: normal operation Above 1GHz: Transmitting at low, middle and high channel ( 802.11b / 802.11g / 802.11n HT20 / 802.11n HT40)
Power supply	:	AC 120V 60Hz
Temperature	:	23°C
Humidity	:	55%

### Test procedure:

1. The EUT was placed on the top of a rotatable table 0.8 meters above the ground with 3-orthogonal direction and be kept close enough to the receiving antenna. The table was rotated 360 degrees to determine the suspected emission frequency and the position of the worst radiation case with both horizontal and vertical antenna polarization.
2. The EUT was then set 3 meters away from the receiving antenna, which was mounted on a variable-height antenna tower.
3. For each suspected emission frequency recorded in step 1, the EUT was arranged to its worst case and:  
for tests below 30MHz the loop antenna is positioned with its plane vertical and the center of it is 1m above the ground. During the tests it is rotated about its vertical axis for maximum response at each azimuth about the EUT;  
for tests above 30MHz the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to read the maximum emission.
4. The RBW and VBW of the test receiver were 120 kHz and 120 kHz for Quasi-peak detection at frequency below 1GHz.  
The RBW and VBW of the test receiver were 1MHz and 3MHz for Peak detection at frequency above 1GHz.  
For Average measurement at frequency above 1GHz. The resolution bandwidth of the test receiver was 1MHz, video bandwidth is 10Hz. If the peak value was below the AV limit, AV measurement was skipped.

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**Table 3: Radiated Emission (802.11b Transmitting at 2412MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBµ V/m]			(H/V)	[dBµ V/m]		
1301.50	N/A	--	45.6	H	N/A	54	74
1658.50	N/A	--	44.4	H	N/A	54	74
1994.50	N/A	--	47.5	H	N/A	54	74
7234.50	N/A	--	52.2	H	N/A	54	74
1306.00	N/A	33.5	54.2	V	N/A	54	74
1661.00	N/A	--	52.8	V	N/A	54	74
1996.50	N/A	--	53.5	V	N/A	54	74
7237.00	N/A	48.1	55.0	V	N/A	54	74
*)---							

**Table 4: Radiated Emission (802.11b Transmitting at 2437MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBµ V/m]			(H/V)	[dBµ V/m]		
1199.5	N/A	--	51.5	H	N/A	54	74
1998.5	N/A	--	45.2	H	N/A	54	74
4130.0	N/A	--	40.5	H	N/A	54	74
7311.00	N/A	--	50.8	H	N/A	54	74
1199.50	N/A	25.8	54.2	V	N/A	54	74
1665.00	N/A	--	52.7	V	N/A	54	74
4874.00	N/A	--	45.7	V	N/A	54	74
7311.00	N/A	--	52.0	V	N/A	54	74
*)---							



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**Table 5: Radiated Emission (802.11b Transmitting at 2462MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBµ V/m]			(H/V)	[dBµ V/m]		
1189.00	N/A	--	45.8	H	N/A	54	74
1994.50	N/A	--	50.6	H	N/A	54	74
6457.00	N/A	--	45.4	H	N/A	54	74
9716.50	N/A	--	49.9	H	N/A	54	74
1199.50	N/A	26.0	54.3	V	N/A	54	74
1661.00	N/A	--	51.8	V	N/A	54	74
3282.00	N/A	--	43.7	V	N/A	54	74
9589.00	N/A	--	49.3	V	N/A	54	74
*)---							

**Table 6: Radiated Emission (802.11g Transmitting at 2412MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBμ V/m]			(H/V)	[dBμ V/m]		
1299.50	N/A	--	45.1	H	N/A	54	74
1627.00	N/A	--	46.2	H	N/A	54	74
7232.50	N/A	--	51.0	H	N/A	54	74
1308.00	N/A	--	52.5	H	N/A	54	74
1665.00	N/A	--	52.1	H	N/A	54	74
1994.50	N/A	--	51.1	H	N/A	54	74
7241.00	N/A	--	51.2	V	N/A	54	74
*)---							

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**Table 7: Radiated Emission (802.11g Transmitting at 2437MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBµ V/m]			(H/V)	[dBµ V/m]		
1299.50	N/A	--	45.5	H	N/A	54	74
1631.00	N/A	--	47.2	H	N/A	54	74
7309.00	N/A	--	51.1	H	N/A	54	74
1299.50	N/A	31.2	54.1	V	N/A	54	74
1624.50	N/A	30.2	58.6	V	N/A	54	74
1990.00	N/A	--	53.2	V	N/A	54	74
7311.00	N/A	41.9	54.1	V	N/A	54	74
*)---							

**Table 8: Radiated Emission (802.11g Transmitting at 2462MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBμ V/m]			(H/V)	[dBμ V/m]		
1299.50	N/A	--	43.3	H	N/A	54	74
1622.50	N/A	--	46.8	H	N/A	54	74
7385.5	N/A	--	53.6	H	N/A	54	74
1199.50	N/A	26.8	55.2	V	N/A	54	74
1633.00	N/A	--	50.8	V	N/A	54	74
1994.50	N/A	--	52.7	V	N/A	54	74
7400.50	N/A	39.2	59.3	V	N/A	54	74
*)---							

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**Table 9: Radiated Emission (802.11n HT20, Transmitting at 2412MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBμV/m]			(H/V)	[dBμV/m]		
1299.50	N/A	--	48.5	H	N/A	54	74
1661.00	N/A	--	51.6	H	N/A	54	74
1992.50	N/A	--	52.8	H	N/A	54	74
7268.50	N/A	--	52.4	H	N/A	54	74
1199.50	N/A	--	51.2	V	N/A	54	74
1663.00	N/A	--	50.2	V	N/A	54	74
1998.50	N/A	--	51.8	V	N/A	54	74
3898.50	N/A	--	42.1	V	N/A	54	74
7266.50	N/A	--	53.5	V	N/A	54	74
*)---							

**Table 10: Radiated Emission (802.11n HT20, Transmitting at 2437MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBμ V/m]			(H/V)	[dBμ V/m]		
1199.50	N/A	--	44.1	H	N/A	54	74
1994.50	N/A	32.3	54.9	H	N/A	54	74
8397.00	N/A	--	48.1	H	N/A	54	74
1329.50	N/A	--	46.3	V	N/A	54	74
1658.50	N/A	--	51.4	V	N/A	54	74
1996.50	N/A	36.3	54.3	V	N/A	54	74
7326.00	N/A	--	52.3	V	N/A	54	74
*)---							

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**Table 11: Radiated Emission (802. 11n HT20, Transmitting at 2462MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBµV/m]			(H/V)	[dBµV/m]		
1304.00	N/A	--	45.6	H	N/A	54	74
1658.50	N/A	--	45.2	H	N/A	54	74
1994.50	N/A	--	49.1	H	N/A	54	74
7358.00	N/A	--	49.0	H	N/A	54	74
1199.50	N/A	--	51.9	V	N/A	54	74
1301.50	N/A	--	51.6	V	N/A	54	74
1618.50	N/A	--	50.5	V	N/A	54	74
1996.50	N/A	--	52.9	V	N/A	54	74
7362.00	N/A	43.0	59.2	V	N/A	54	74
*)---							

**Table 12: Radiated Emission (802. 11n HT40, Transmitting at 2422MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBµV/m]			(H/V)	[dBµV/m]		
1138.00	N/A	--	41.1	H	N/A	54	74
1297.50	N/A	--	46.8	H	N/A	54	74
1661.00	N/A	--	47.6	H	N/A	54	74
3242.00	N/A	--	45.7	H	N/A	54	74
1295.50	N/A	--	49.8	V	N/A	54	74
1620.50	N/A	28.8	59.1	V	N/A	54	74
1996.50	N/A	--	50.2	V	N/A	54	74
4580.50	N/A	--	41.8	V	N/A	54	74
*)---							

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**Table 13: Radiated Emission (802.11n HT40, Transmitting at 2437MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBµ V/m]			(H/V)	[dBµ V/m]		
1301.50	N/A	--	45.5	H	N/A	54	74
1631.00	N/A	--	46.2	H	N/A	54	74
1992.50	N/A	--	47.6	H	N/A	54	74
5660.00	N/A	--	46.6	H	N/A	54	74
1142.50	N/A	--	52.1	V	N/A	54	74
1301.50	N/A	--	52.5	V	N/A	54	74
1622.50	N/A	33.0	59.7	V	N/A	54	74
1998.50	N/A	--	50.6	V	N/A	54	74
3271.50	N/A	--	46.9	V	N/A	54	74
7305.00	N/A	--	48.2	V	N/A	54	74
*)---							

**Table 14: Radiated Emission (802.11n HT40, Transmitting at 2452MHz)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBµ V/m]			(H/V)	[dBµ V/m]		
1199.50	N/A	--	49.9	H	N/A	54	74
1661.00	N/A	--	47.8	H	N/A	54	74
1994.50	N/A	--	46.9	H	N/A	54	74
1244.50	N/A	--	44.6	V	N/A	54	74
1665.00	N/A	33.6	55.8	V	N/A	54	74
1998.50	N/A	--	53.2	V	N/A	54	74
*)---							

\*) Measurement is made from 20MHz to 26 GHz. Disturbances other than those mentioned above are small or not detectable. Refer to appendix 1 for the test plot of measurement from 30MHz to 1GHz.

### 5.3 Receiver Radiated Spurious Emission

**RESULT:**

## Pass

Date of testing	:	June 21, 2010
Test specification	:	RSS-210 Per Section 2.3
Limits	:	RSS-210 Per Section 2.3 RSS-Gen Per Section 7.2.3.2
Test procedure	:	Procedure specified in ANSI C63.4/RSS-Gen were followed
Deviations from Standard Test procedures	:	None
Kind of test site	:	3m Semi-anechoic chamber
Operation mode	:	RF Receiving
Power supply	:	AC 120V 60Hz
Temperature	:	23°C
Humidity	:	55%

**Test procedure:**

1. The EUT was placed on the top of a rotatable table 0.8 meters above the ground with 3-orthogonal direction and be kept close enough to the receiving antenna. The table was rotated 360 degrees to determine the suspected emission frequency and the position of the worst radiation case with both horizontal and vertical antenna polarization.
2. The EUT was then set 3 meters away from the receiving antenna, which was mounted on a variable-height antenna tower.
3. For each suspected emission frequency recorded in step 1, the EUT was arranged to its worst case that the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to read the maximum emission.

**Table 15: Receiver Radiated Emission (receiving at middle channel)**

Frequency	QP	AV	PK	Polarity	Limit		
					QP	AV	PK
[MHz]	[dBμV/m]			(H/V)	[dBμV/m]		
1199.5	N/A	24.3	41.5	H	N/A	54	74
1664.0	N/A	25.8	43.0	H	N/A	54	74
1995.0	N/A	34.3	51.4	H	N/A	54	74
1329.5	N/A	22.2	43.2	V	N/A	54	74
1658.5	N/A	28.4	46.8	V	N/A	54	74
1995.0	N/A	26.8	51.2	V	N/A	54	74
*)---							

\*) Measurement is made from 30 MHz to 8GHz. Disturbances other than those mentioned above are small or not detectable.

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## 5.4 Antenna requirement

### RESULT:

**Pass**

Date of testing : ---  
Test specification : FCC Part 15 Per Section 15.203  
FCC Part 15 Per Section 15.247(b)

For intentional device, according to 15.203, and intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to 15.247(b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by amount in dB than the directional gain of the antenna exceeds of 6dBi.

As the antenna is permanently mounted on RF Board, there is no possibility of replacement.

And the max gain of the antenna is 2dBi.

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## 5.5 Maximum Peak Conducted Output Power

### RESULT:

**Pass**

Date of testing : June 22, 2010  
 Test specification : FCC Part 15 Per Section 15.247(b)(3)  
 RSS-210 Issue 7 Section A8.4 (4)  
 Limits : FCC Part 15 Per Section 15.247(b)(3)  
 RSS-210 Issue 7 Section A8.4 (4)  
 For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz, the max. peak conducted output power shall not exceed 1 Watt.  
 Deviations from Standard Test procedures : None  
 Test procedure : Procedure specified in ANSI C63.4/RSS-Gen were followed  
 Kind of test site : Shielded room  
 Operation mode : Transmitting at low, middle and high channel  
 ( 802.11b / 802.11g / 802.11n HT20 / 802.11n HT40)  
 Power supply : AC 120V 60Hz  
 Temperature : 22°C  
 Humidity : 50%

### Test procedure:

1. Connect the antenna output of the EUT to the power meter by a low lost cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Read the power from power meter and add the cable loss correction.

**Table 16: Peak Conducted Power (802.11b)**

Channel	Frequency(MHz)	Power Reading (dBm)	Cable Loss (dB)	Output Power		Limit (mW)
				(dBm)	(mW)	
Low	2412	19.62	0.5	20.12	102.80	<1000
Mid	2437	19.73	0.5	20.23	105.44	<1000
High	2462	20.01	0.5	20.51	112.46	<1000

**Table 17: Peak Conducted Power (802.11g)**

Channel	Frequency(MHz)	Power Reading (dBm)	Cable Loss (dB)	Output Power		Limit (mW)
				(dBm)	(mW)	
Low	2412	17.84	0.5	18.34	68.23	<1000
Mid	2437	18.02	0.5	18.52	71.12	<1000
High	2462	17.92	0.5	18.42	69.50	<1000



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**Table 18: Peak Conducted Power (802.11n HT20)**

Channel	Frequency(MHz)	Power Reading(dBm)		Cable Loss (dB)	Output Power of Ant#0		Output Power of Ant#1		Total output power (mW)	Limit (mW)
		Ant#0	Ant#1		(dBm)	(mW)	(dBm)	(mW)		
Low	2412	22.84	22.32	0.5	23.34	215.77	22.82	191.43	407.20	<1000
Mid	2437	22.43	22.76	0.5	22.93	196.33	23.26	211.83	408.16	<1000
High	2462	22.54	22.56	0.5	23.04	201.37	23.06	202.30	403.47	<1000

**Table 19: Peak Conducted Power (802.11n HT40)**

Channel	Frequency(MHz)	Power Reading(dBm)		Cable Loss (dB)	Output Power of Ant#0		Output Power of Ant#1		Total output power (mW)	Limit (mW)
		Ant#0	Ant#1		(dBm)	(mW)	(dBm)	(mW)		
Low	2422	15.80	15.01	0.5	16.30	42.66	15.51	35.56	78.22	<1000
Mid	2437	15.71	15.83	0.5	16.21	41.78	16.33	42.95	84.73	<1000
High	2452	15.01	15.62	0.5	15.51	35.56	16.12	40.93	76.49	<1000

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## 5.6 6dB Bandwidth

### RESULT:

**Pass**

Date of testing : June 7, 2010  
Test specification : FCC Part 15 Per Section 15.247(a)(2)  
RSS-210 Issue 7 Section A8.2 (a)  
Limits : FCC Part 15 Per Section 15.247(a)(2)  
RSS-210 Issue 7 Section A8.2 (a)  
The minimum 6 dB bandwidth shall be at least 500 kHz.  
Deviations from Standard Test procedures : None  
Test procedure : Procedure specified in ANSI C63.4/RSS-Gen were followed  
Operation mode : Transmitting at low, middle and high channel  
( 802.11b / 802.11g / 802.11n HT20 / 802.11n HT40)  
Kind of test site : Shielded room  
Power supply : AC 120V 60Hz  
Temperature : 23°C  
Humidity : 50%

### Test procedure:

1. Connect the antenna output of the EUT to the spectrum analyzer by a low loss cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: Centered Frequency= measured channel, RBW=100kHz, VBW=100kHz.
4. Mark the peak power frequency point and the -6dB upper and lower frequency points.
5. Read the frequency delta value between the -6dB upper and lower frequency points.
6. Repeat step 2 to 5 until all the channels required are finished.

**Table 20: 6dB Bandwidth (802.11b)**

Channel	Frequency (MHz)	Test Result (MHz)	Limit (kHz)
Low	2412.000	8.039	>500
Mid	2437.000	8.082	>500
High	2462.000	8.084	>500

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**Table 21: 6dB Bandwidth (802.11g)**

Channel	Frequency (MHz)	Test Result (MHz)	Limit (kHz)
Low	2412.000	16.376	>500
Mid	2437.000	16.376	>500
High	2462.000	16.349	>500

**Table 22: 6dB Bandwidth (802.11n HT20)**

Channel	Frequency (MHz)	Test Result (MHz)	Limit (kHz)
Low	2412.000	16.359	>500
Mid	2437.000	16.957	>500
High	2462.000	16.988	>500

**Table 23: 6dB Bandwidth (802.11n HT40)**

Channel	Frequency (MHz)	Test Result (MHz)	Limit (kHz)
Low	2422.000	35.150	>500
Mid	2437.000	35.194	>500
High	2452.000	35.353	>500

Please refer to Appendix 1 for measurement data.

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## 5.7 Power Spectral Density

### RESULT:

**Pass**

Date of testing	:	June 8, 2010
Test specification	:	FCC Part 15 Per Section 15.247(e) RSS-210 Issue 7 Section A8.2 (b)
Limits	:	FCC Part 15 Per Section 15.247(e) RSS-210 Issue 7 Section A8.2 (b) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission
Deviations from Standard Test procedures	:	None
Test procedure	:	Procedure specified in ANSI C63.4/RSS-Gen were followed
Kind of test site	:	Shielded room
Operation mode	:	Transmitting at low, middle and high channel ( 802.11b / 802.11g / 802.11n HT20 / 802.11n HT40)
Power supply	:	AC 120V 60Hz
Temperature	:	23°C
Humidity	:	50%

### Test procedure:

1. Connect the antenna output of the EUT to the spectrum analyzer by a low lost cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: Centered Frequency= measured channel, RBW= 3kHz, VBW=10kHz.. Span = 600kHz, Sweep Time = 200s.
4. Mark the max. peak point.
5. Repeat step 2 to 4 until all the channels required are finished.

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**Table 24: Power spectral density (802.11b)**

Channel	Frequency (MHz)	Test Result (dBm)	Limit (dBm)
Low	2412.000	-2.039	<8
Mid	2437.000	-1.517	<8
High	2462.000	-1.368	<8

**Table 25: Power spectral density (802.11g)**

Channel	Frequency (MHz)	Test Result (dBm)	Limit (dBm)
Low	2412.000	-6.753	<8
Mid	2437.000	-6.764	<8
High	2462.000	-6.699	<8

**Table 26: Power spectral density (802.11n HT20)**

Channel	Frequency (MHz)	Test Result (dBm)	Limit (dBm)
Low	2412.000	-9.138	<8
Mid	2437.000	-9.500	<8
High	2462.000	-9.249	<8

**Table 27: Power spectral density (802.11n HT40)**

Channel	Frequency (MHz)	Test Result (dBm)	Limit (dBm)
Low	2422.000	-14.770	<8
Mid	2437.000	-13.940	<8
High	2452.000	-12.640	<8

Please refer to Appendix 1 for measurement data.

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## 5.8 Out-of-Band Emission

### RESULT:

**Pass**

Date of testing : June 18, 2010  
Test specification : FCC Part 15 Per Section 15.247(d)  
RSS-210 Issue 7 A8.5  
Limits : FCC Part 15 Per Section 15.247(d)  
RSS-210 Issue 7 A8.5

In any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

In addition:

FCC Part 15 - radiated emission which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a).

RSS-210 Section 2.2- Unwanted emissions falling into restricted bands of Table 1 shall meet Tables 2 and 3 limits.

Deviations from Standard Test

procedures : None  
Test Procedure : Procedure specified in ANSI C63.4/RSS-Gen were followed  
Kind of test site : Shielded room  
Operation mode : Transmitting at low, middle and high channel ( 802.11b / 802.11g / 802.11n HT20 / 802.11n HT40)  
Power supply : AC 120V 60Hz  
Temperature : 22°C  
Humidity : 50%

### Test procedure:

1. Connect the antenna port of the EUT to the spectrum analyzer by a low loss cable.
2. Set the EUT to proper test mode with relative test software and hardware.
3. Spectrum analyzer setting: RBW = 100 kHz, VBW ≥ RBW.
4. Set proper frequency span respectively for out-of-band emission measurement of the band edge and the whole range (up to 10 times of the carrier frequency.)
5. Set the trace mode to Max Hold and mark the peak reading of any spurious emission recorded.
6. The band edge radiated emission was measured according to the procedure in clause 5.2 of this report.

**Table 28: Out-Of-Band Emission measurement (conducted)**

Emission (Max reading among Channel low, mid and high)	Attenuation	Limit (dB)
30MHz to 25GHz	All emission in this 100kHz bandwidth are attenuated more than 20dB from the carrier	$\Delta \geq 20$

**Table 29: Band Edges Emission in the Restricted Bands 2483.5-2500MHz and 2310-2390MHz (802.11b)**

[illegible]

**Table 30: Band Edges Emission in the Restricted Bands 2483.5-2500MHz and 2310-2390MHz (802.11g)**

[illegible]

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**Table 31: Band Edges Emission in the Restricted Bands 2483.5-2500MHz and 2310-2390MHz (802.11n HT20)**

Restricted band	Frequency [MHz]	PK [dBμV/m]	AV [dBμV/m]	Polarity (H/V)	PK limit [dBμV/m]	AV limit [dBμV/m]
Low band	2389.68	64.60	50.02	H	74	54
Low band	2389.68	62.22	48.45	V	74	54
High band	2484.44	63.90	50.99	H	74	54
High band	2484.44	58.26	48.91	V	74	54
<b>Remark:--</b>						

**Table 32: Band Edges Emission in the Restricted Bands 2483.5-2500MHz and 2310-2390MHz (802.11n HT40)**

Restricted band	Frequency [MHz]	PK [dBμV/m]	AV [dBμV/m]	Polarity (H/V)	PK limit [dBμV/m]	AV limit [dBμV/m]
Low band	2390.08	58.42	50.89	H	74	54
Low band	2390.08	55.59	45.84	V	74	54
High band	2488.80	59.40	50.94	H	74	54
High band	2489.92	56.81	48.24	V	74	54
<b>Remark:--</b>						

**\* Note:** Please refer to the Appendix 1 for the plot of the peak value.  
Disturbances other than those mentioned above are small or not detectable.



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## 5.9 Exemption from Routine Evaluation Limits – RF Exposure Evaluation

### RESULT:

**Pass**

Date of testing : June 22, 2010  
Test specification : RSS-102 Issue 2 Section 2.5.2  
Limits : RSS-102 Issue 2 Section 2.5.2

RF exposure evaluation is required if the separation distance between the user and the device is greater than 20 cm, except when the device operates:

Below 1.5 GHz and its e.i.r.p. is equal to or less than 2.5 W;

At or above 1.5 GHz and the e.i.r.p. of the device is equal to or less than 5 W.

The EUT is a blu-ray player which separation between it and the user is greater than 20 cm.

**Table 33: e.i.r.p**

Mode	Channel	Frequency	Peak Conducted Output Power( $P_1$ )	Antenna Gain( $G$ )	e.i.r.p ( $P_2$ )	Limit
		(MHz)	(mW)	(dBi)	(mW)	(W)
802.11b	Low	2412.120	102.80	2	162.93	5
	Mid	2437.100	105.44	2	167.11	5
	High	2462.880	112.46	2	178.24	5
802.11g	Low	2412.120	68.23	2	108.14	5
	Mid	2437.100	71.12	2	112.72	5
	High	2462.880	69.50	2	110.15	5
802.11n HT20	Low	2412.120	407.20	2	645.37	5
	Mid	2437.100	408.16	2	646.89	5
	High	2462.880	403.47	2	639.46	5
802.11n HT40	Low	2422.120	78.22	2	123.97	5
	Mid	2437.100	84.73	2	134.29	5
	High	2452.880	76.49	2	121.23	5

Note:  $P_2 = P_1 \cdot 10^{G/10}$

Since the user's manual specifies a minimum distance between user and device of at least 20cm, also the calculation above showed the e.i.r.p of the device is less than 5W, the RF exposure evaluation is not required.

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## 6 Photographs of the Test Set-Up

**Photograph 1: Set-up for Conducted Emission Measurement**

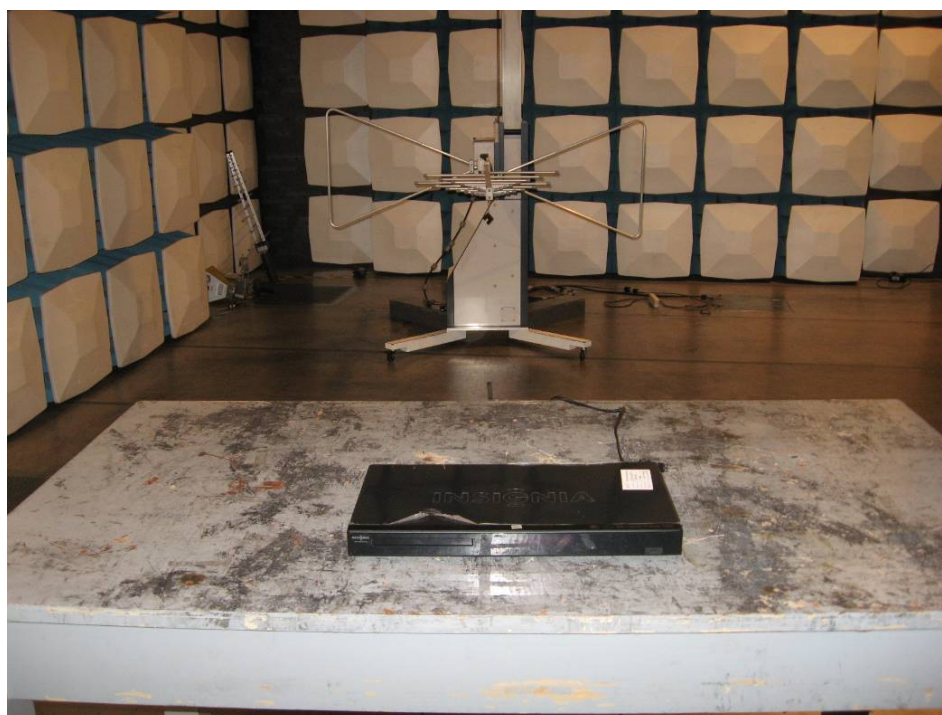


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**Photograph 2: Set-up for Radiation Measurement below 1GHz**



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**Photograph 3: Set-up for Radiation Measurement above 1GHz**



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## AC power conducted emission

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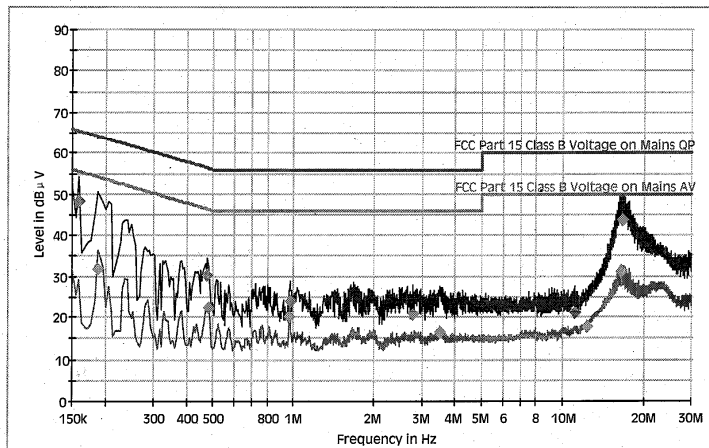
## EMC Test Record (EMISSION)

### Test Information

Manufacturer: Desay  
Test Item: DVD Player  
Identification: NS-WBRDVD2  
Test Standard: FCC Part 15  
Test Detail: Conducted Emission  
Operation Mode: A (Normal operation)  
Climate Condition: 21°C; 50%RH; 101kPa.  
Test Voltage/ Freq.: Ac120 V/ 60 Hz  
Port / Line: AC Mains  
Receipt No.: 16023351 001  
Report No.: /  
Result: Pass  
Comment: Sample 1 (Optical pick-up SF-BD42VT)

Hardware Setup: 1phase LISN ESH3-Z5 to ESCS30  
Level Unit: dB  $\mu$  V

Subrange	Detectors	IF Bandwidth	Step Size	Meas. Time	Receiver
150kHz - 30MHz	Peak; Average	9kHz	4.5kHz	10ms	ESCS 30



2010-6-6, 15:51:58

Tested by:



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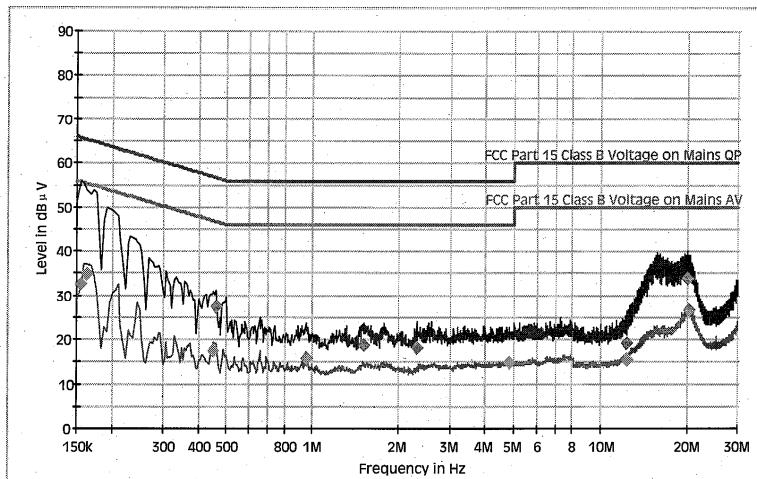
## EMC Test Record (EMISSION)

### Test Information

Manufacturer: Desay  
Test Item: DVD Player  
Identification: NS-WBRDVD2  
Test Standard: FCC Part 15  
Test Detail: Conducted Emission  
Operation Mode: A (Normal operation)  
Climate Condition: 21°C; 50%RH; 101kPa.  
Test Voltage/ Freq.: AC120 V/ 60 Hz  
Port / Line: AC Mains  
Receipt No.: 16023351 001  
Report No.: /  
Result: Pass  
Comment: Sample 2 (optical pick-up: KEM-460AAA).

Hardware Setup: 1phase LISN ESH3-Z5 to ESCS30  
Level Unit: dB  $\mu$  V

Subrange	Detectors	IF Bandwidth	Step Size	Meas. Time	Receiver
150kHz - 30MHz	Peak; Average	9kHz	4.5kHz	10ms	ESCS 30



2010-6-10, 22:03:35

Tested by:



Reviewed by:



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Radiated emission (below 1 GHz)

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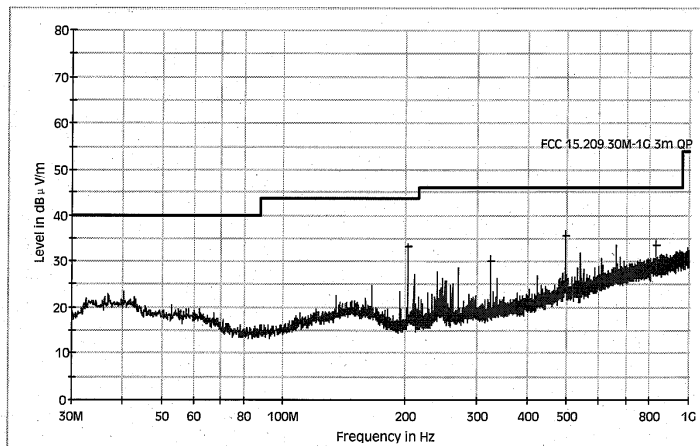
EMC Test Record (EMISSION)

Test Information

Manufacturer: Desay  
Test Item: DVD player  
Identification: NS-WBRDVD2  
Test Standard: FCC Part 15  
Test Detail: RE  
Operation Mode: Normal Operation  
Climate Condition: 23 °C; 50 %RH; 101 kPa.  
Test Voltage / Freq.: AC 120V / 50Hz  
Receipt No.: 173052826  
Report No.: 16023351 001  
Result: Pass  
Comment: Horizontal

Subrange 1

Frequency Range: 30MHz - 1GHz  
Receiver: TUV ESCI 3  
Transducer: TUV SAC UVLB 9168 / TUV ESCI3 -TUV SAC UVLB 9168



Limit and Margin QP

Frequency (MHz)	QuasiPeak (dB μV/m)	Corr. (dB)	Margin (dB)	Limit (dB μV/m)	Polarity
202.500000	33.3	11.7	10.2	43.5	H
324.000000	30.1	15.7	15.9	46.0	H
496.200000	35.4	19.4	10.6	46.0	H
827.000000	33.4	24.8	12.6	46.0	H

Date: 6/11/2010 - Time: 5:51:47 PM

Tested by:



Reviewed by:





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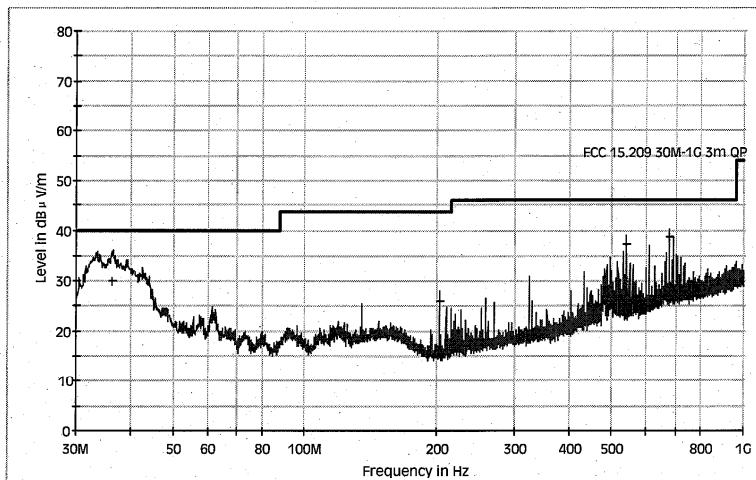
## EMC Test Record (EMISSION)

### Test Information

Manufacturer: Desay  
Test Item: DVD player  
Identification: NS-WBRDVD2  
Test Standard: FCC Part 15  
Test Detail: RE  
Operation Mode: *Normal operation*  
Climate Condition: 23 °C; 50 %RH; 101 kPa.  
Test Voltage / Freq.: AC 120V / 50Hz  
Receipt No.: 173052826  
Report No.: 16023351 001  
Result: Pass  
Comment: Vertical

#### Subrange 1

Frequency Range: 30MHz - 1GHz  
Receiver: TUV ESCI 3  
Transducer: TUV SAC UVLB 9168 / TUV ESCI3 -TUV SAC UVLB 9168



### Limit and Margin QP

Frequency (MHz)	QuasiPeak (dB μV/m)	Corr. (dB)	Margin (dB)	Limit (dB μV/m)	Polarity
36.200000	30.0	14.2	10.0	40.0	V
202.500000	26.1	11.7	17.4	43.5	V
540.000000	37.2	20.3	8.8	46.0	V
675.000000	38.8	22.9	7.2	46.0	V

Date: 6/11/2010 - Time: 5:28:20 PM

Tested by:



Reviewed by:



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## Band Edge Emission

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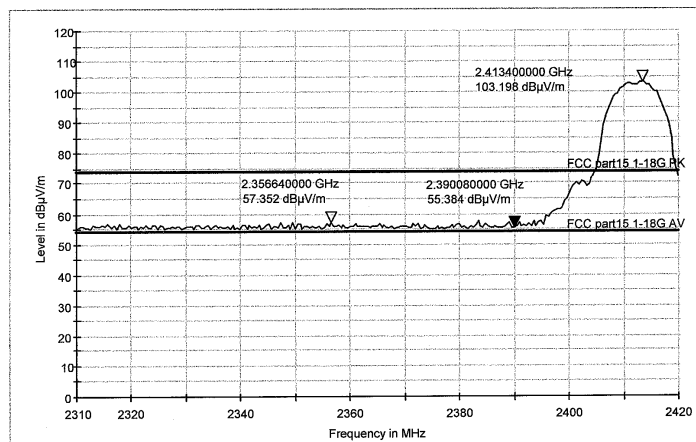
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(b mode-ant1)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Horizontal

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 4:49:09 PM

Tested by:



Reviewed by:



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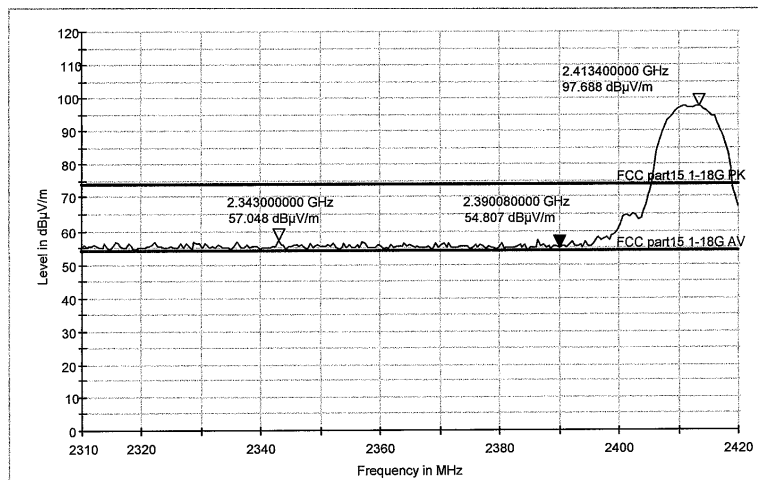
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(b mode-ant1)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Vertical

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 4:50:18 PM

Tested by:



Reviewed by:



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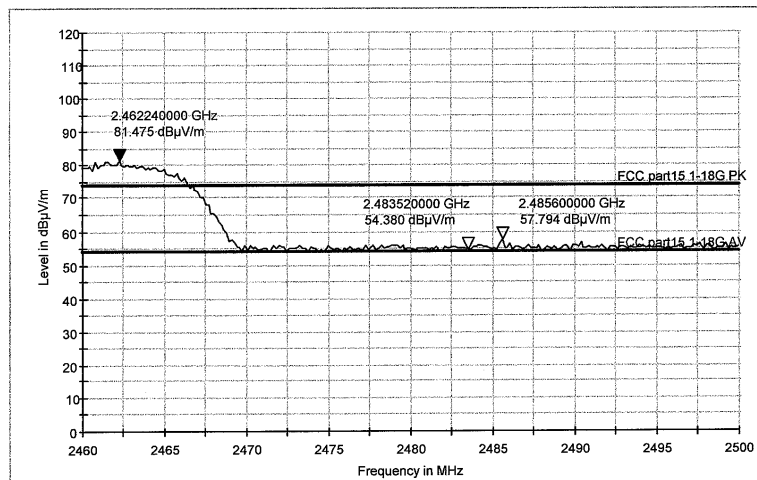
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification:	NS-WBRDVD2(b mode-ant1)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ High channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Horizontal

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 4:46:11 PM

Tested by:



Reviewed by:



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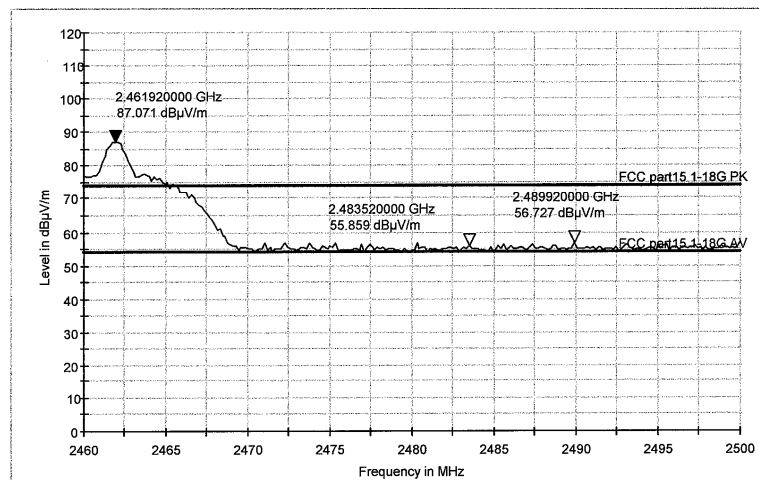
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(b mode-ant1)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ High channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Vertical

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 4:47:21 PM

Tested by:



Reviewed by:



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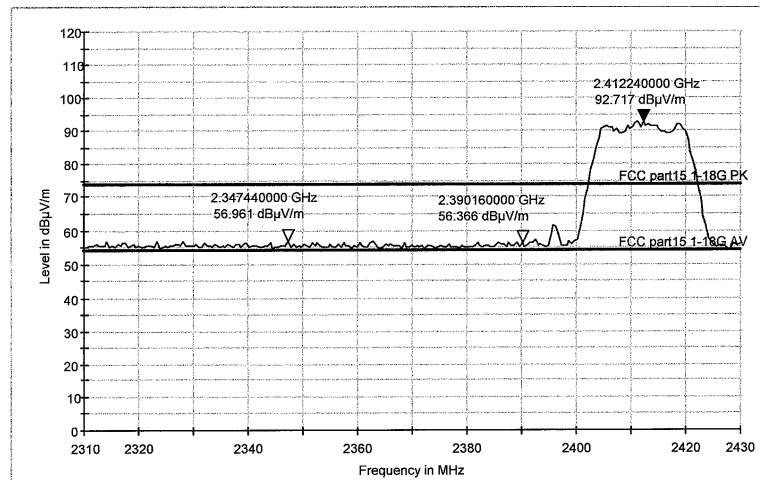
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(g mode-ant1)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Horizontal

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 5:07:48 PM

Tested by:



Reviewed by:



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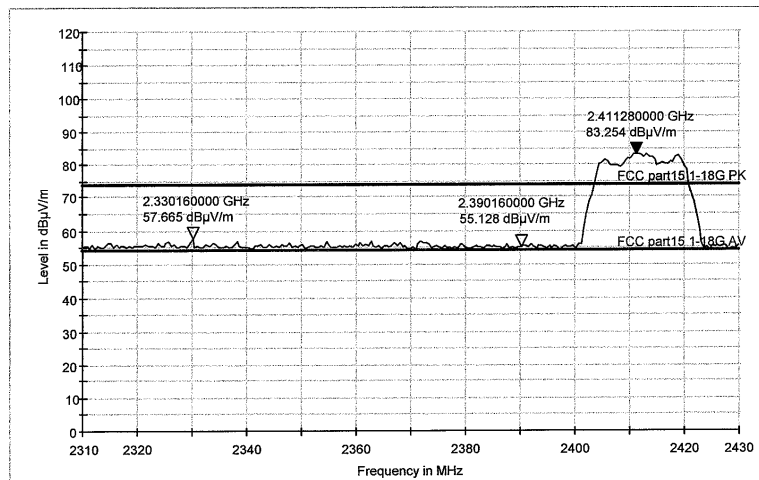
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(g mode-ant1)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Vertical

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 5:08:52 PM

Tested by:



Reviewed by:



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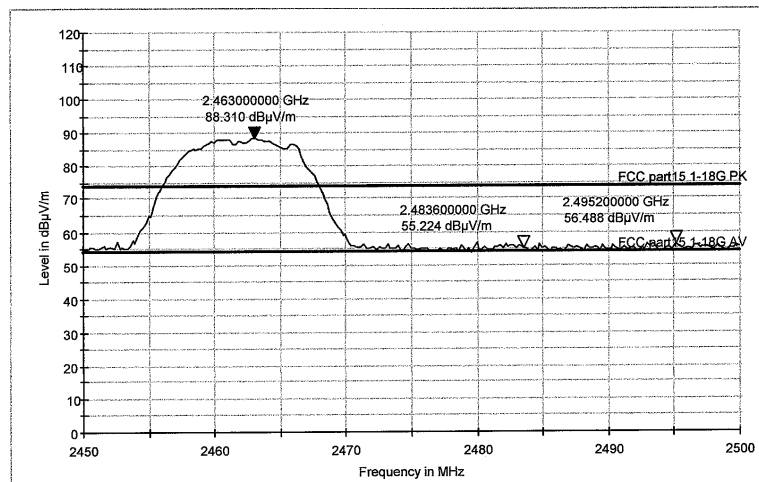
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification:	NS-WBRDVD2(g mode-ant1)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ High channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Horizontal

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906

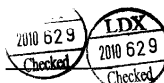


Date: 6/28/2010 - Time: 5:05:42 PM

Tested by:



Reviewed by:





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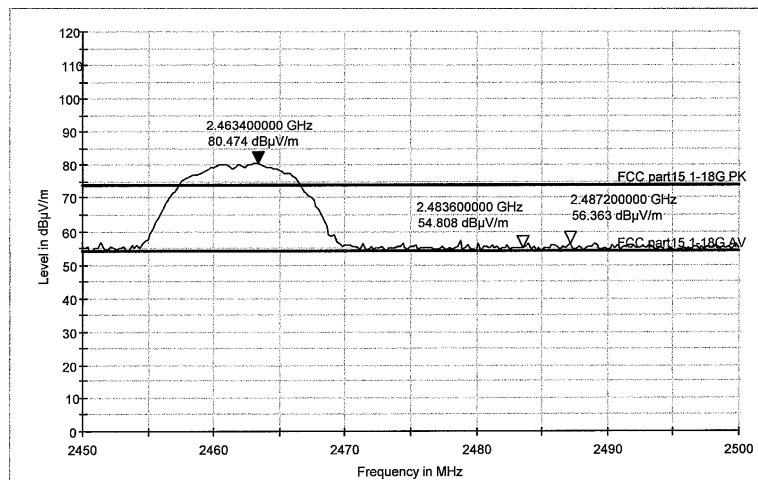
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(g mode-ant1)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ High channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Vertical

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 5:06:51 PM

Tested by:



Reviewed by:



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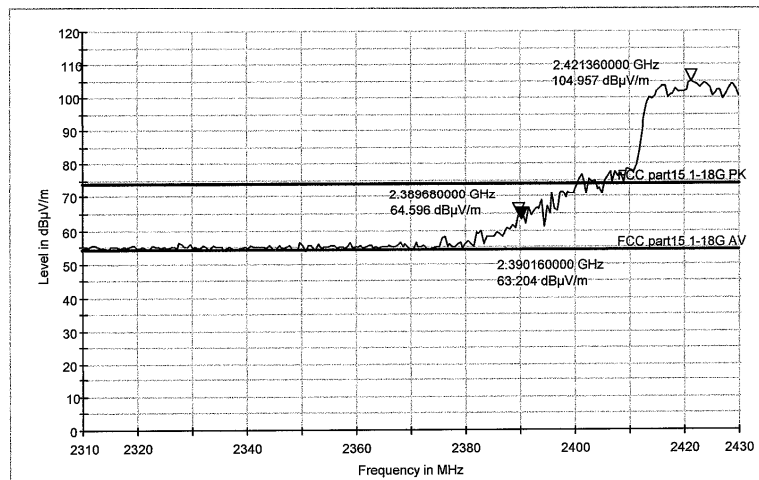
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(n20MHz mode)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Horizontal

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 4:58:28 PM

Tested by:



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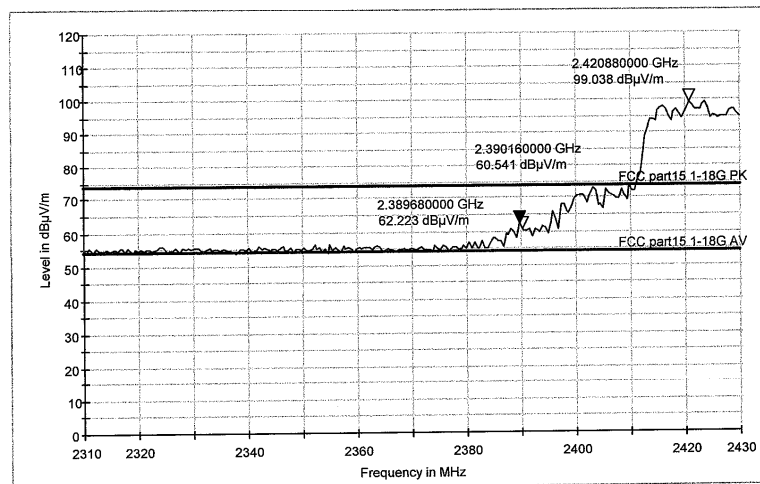
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(n20MHz mode)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Vertical

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 4:59:46 PM

Tested by:



Reviewed by:



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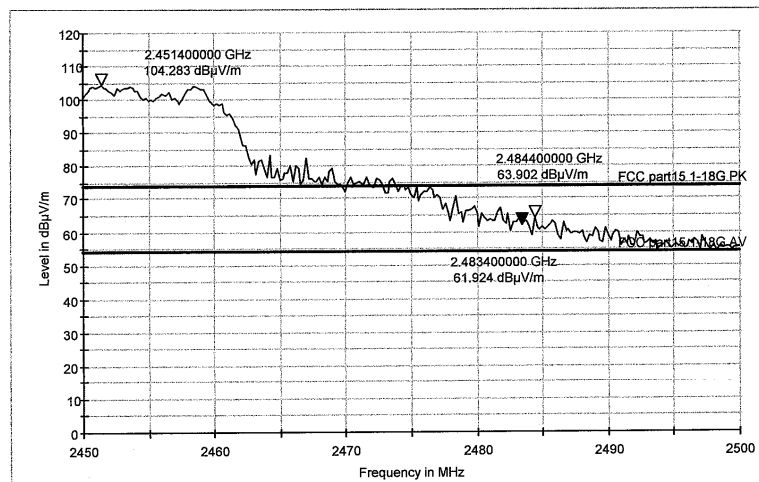
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(n20MHz mode)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ High channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Horizontal

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 4:55:28 PM

Tested by:



Reviewed by:



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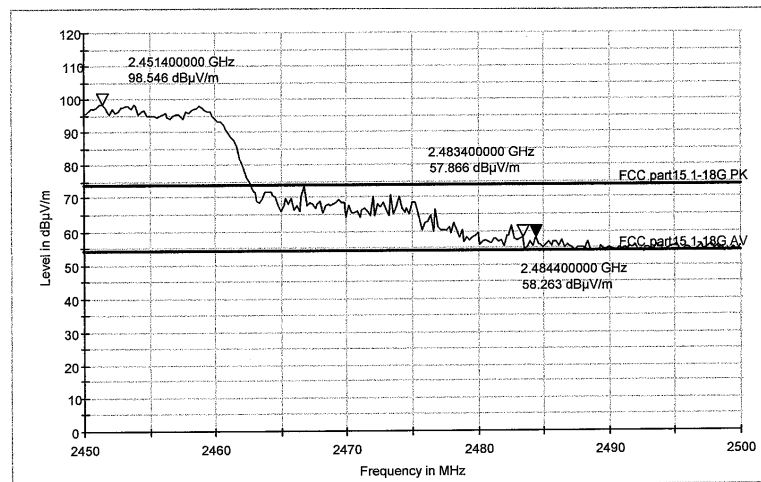
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(n20MHz mode)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ High channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Vertical

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 4:56:58 PM

Tested by:



Reviewed by:



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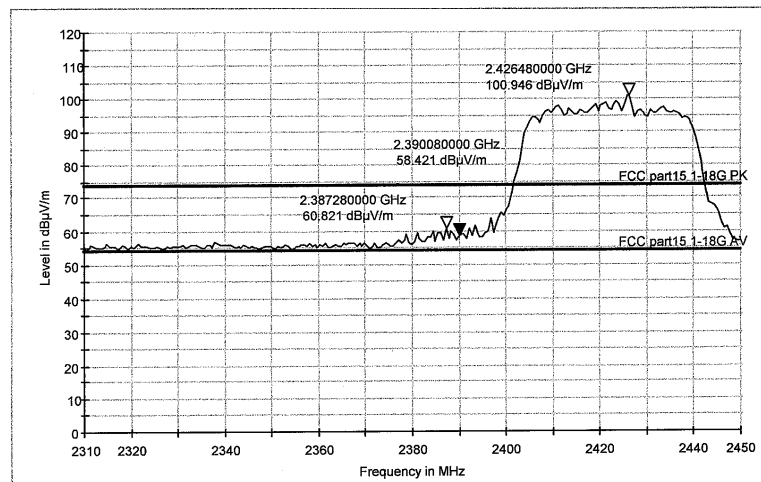
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(n40MHz mode)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Horizontal

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 5:12:31 PM

Tested by:



Reviewed by:



Prüfbericht - Nr.:

16023351 001

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TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

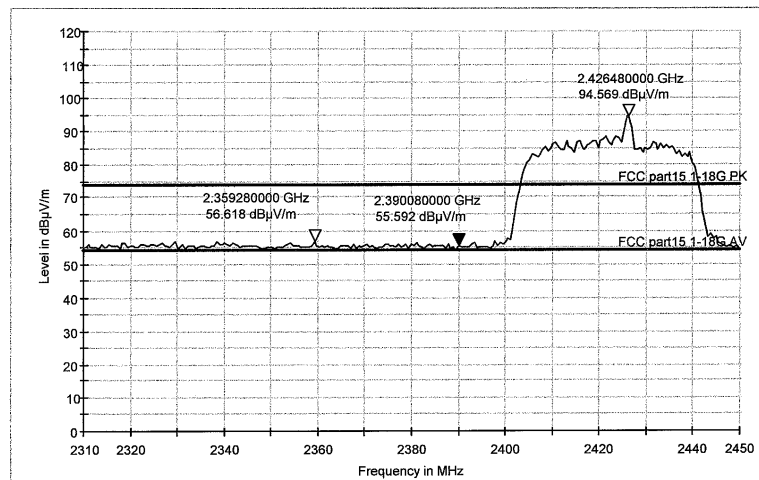
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(n40MHz mode)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ Low channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Vertical

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 5:13:37 PM

Tested by:



Reviewed by:



Prüfbericht - Nr.:

16023351 001

Test Report no.

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TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

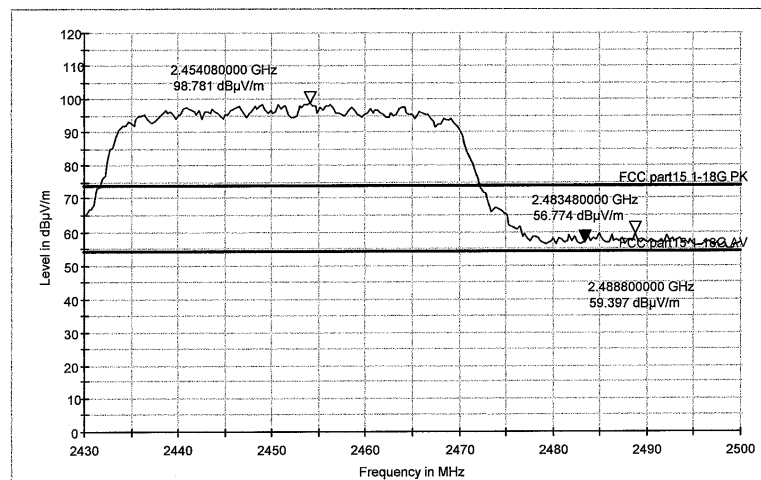
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(n40MHz mode)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ High channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Horizontal

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 5:10:19 PM

Tested by:



Reviewed by:





Prüfbericht - Nr.:

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TUV Rheinland (Guangdong) Ltd.

EMC Test Service Hotline: +86-20-28391188

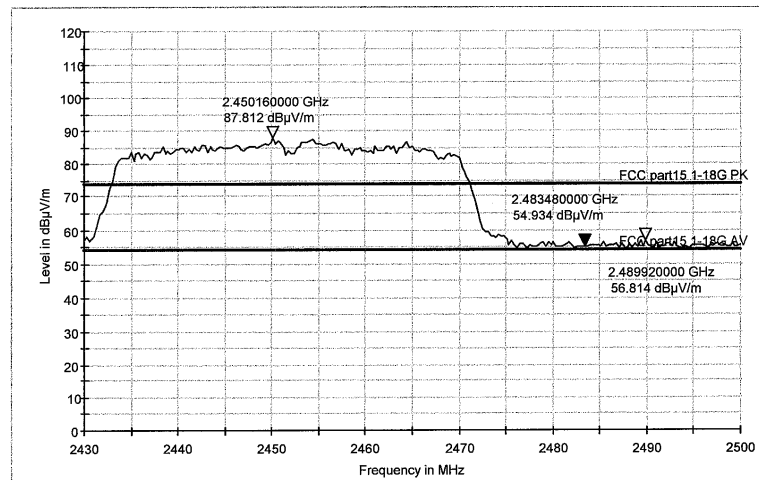
## EMC Test Record (EMISSION)

### Test Information

Manufacturer:	Desay
Test Item:	DVD player
Identification	NS-WBRDVD2(n40MHz mode)
Test Standard:	FCC Part 15
Test Detail:	RE
Operation Mode:	Tx @ High channel
Climate Condition:	23 °C; 50 %RH; 101 kPa.
Test Voltage / Freq. :	AC 120V / 50Hz
Receipt No.:	173052826
Report No.	16023351 001
Result:	Pass
Comment:	Vertical

#### Subrange 1

Frequency Range:	2GHz - 3GHz
Receiver:	TUV FSP 30
Transducer:	TUV SAC HF906 / TUV FSP 30-TUV SAC HF906



Date: 6/28/2010 - Time: 5:11:23 PM

Tested by:



Reviewed by:



Prüfbericht - Nr.:

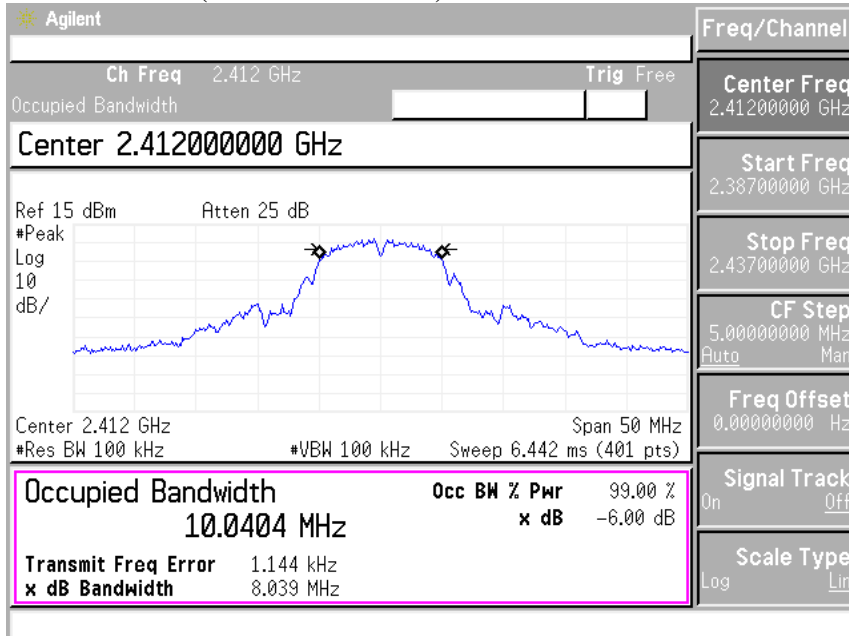
16023351 001

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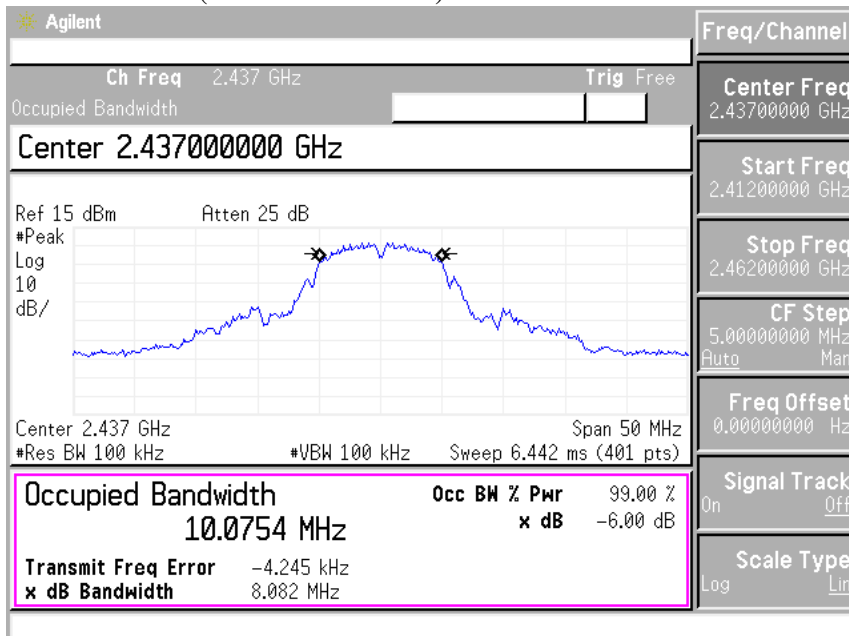
Test Report no.

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6dB bandwidth (802.11b 2412MHz)



6dB bandwidth (802.11b 2437MHz)



Prüfbericht - Nr.:

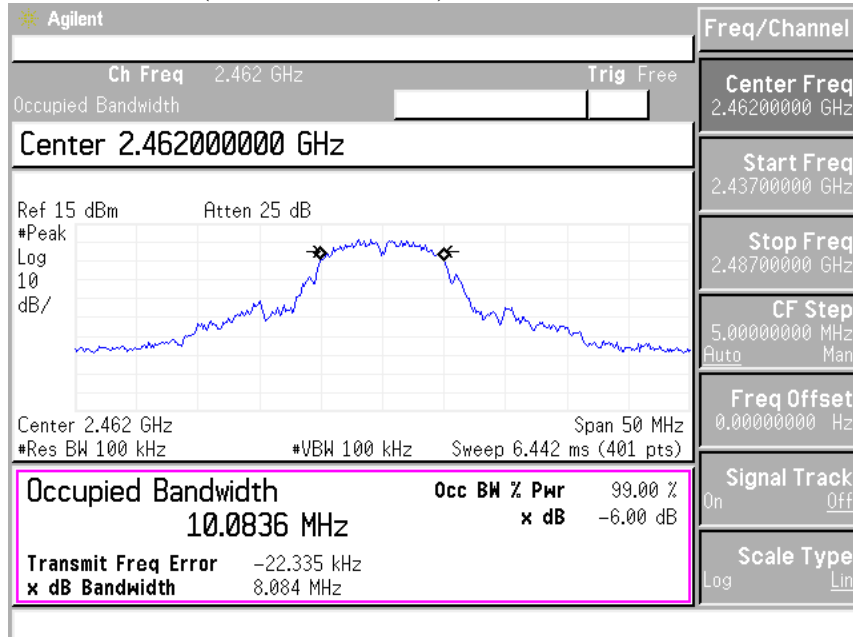
16023351 001

Test Report no.

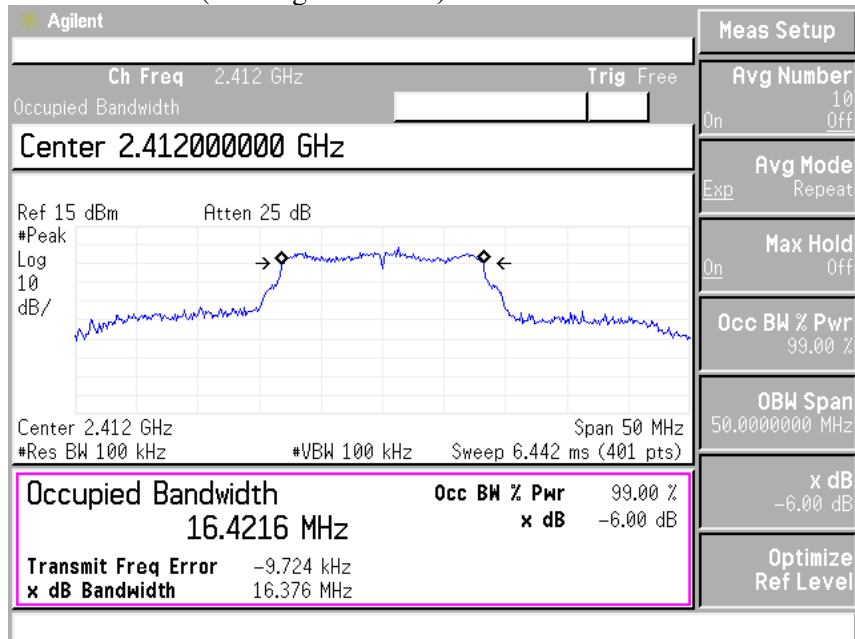
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6dB bandwidth (802.11b 2462MHz)



6dB bandwidth (802.11g 2412MHz)



Prüfbericht - Nr.:

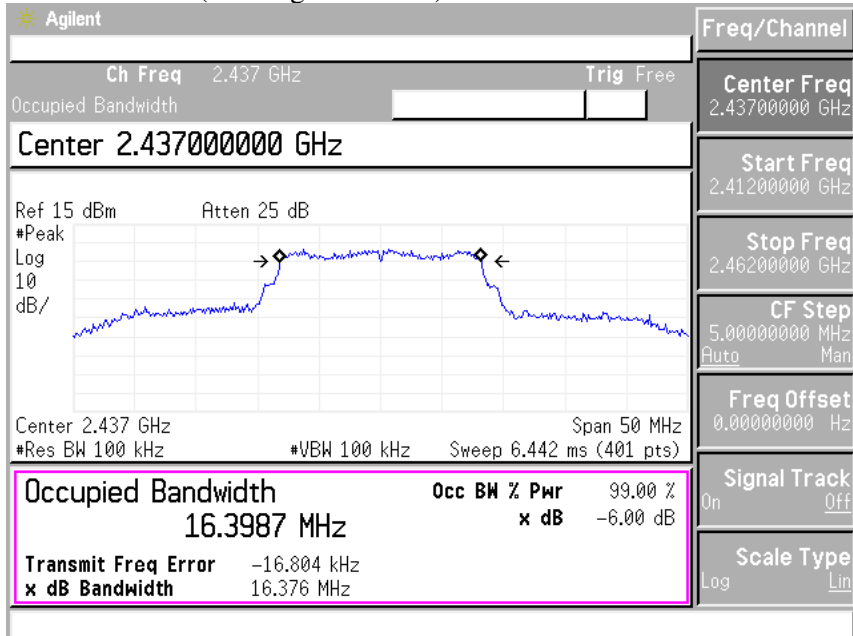
16023351 001

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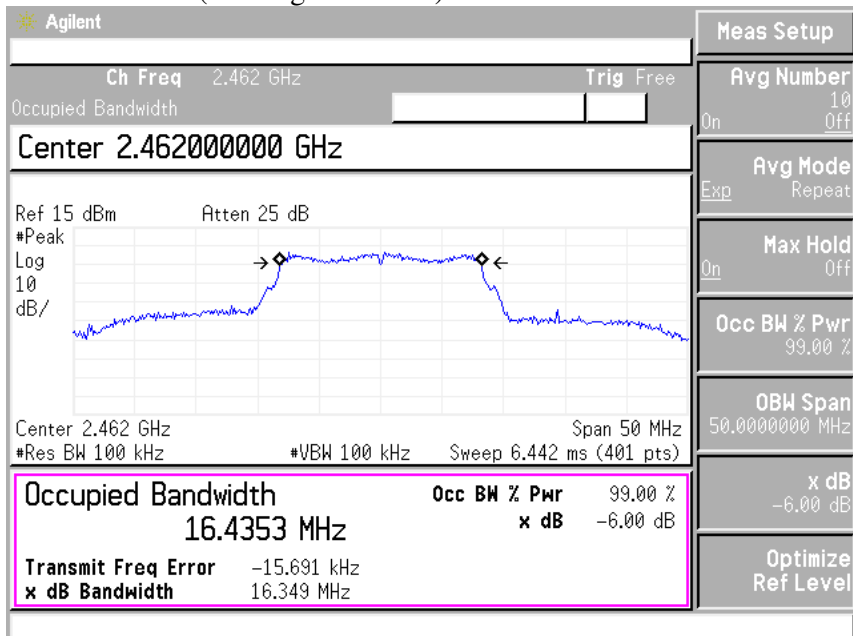
Test Report no.

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6dB bandwidth (802.11g 2436MHz)



6dB bandwidth (802.11g 2462MHz)



Prüfbericht - Nr.:

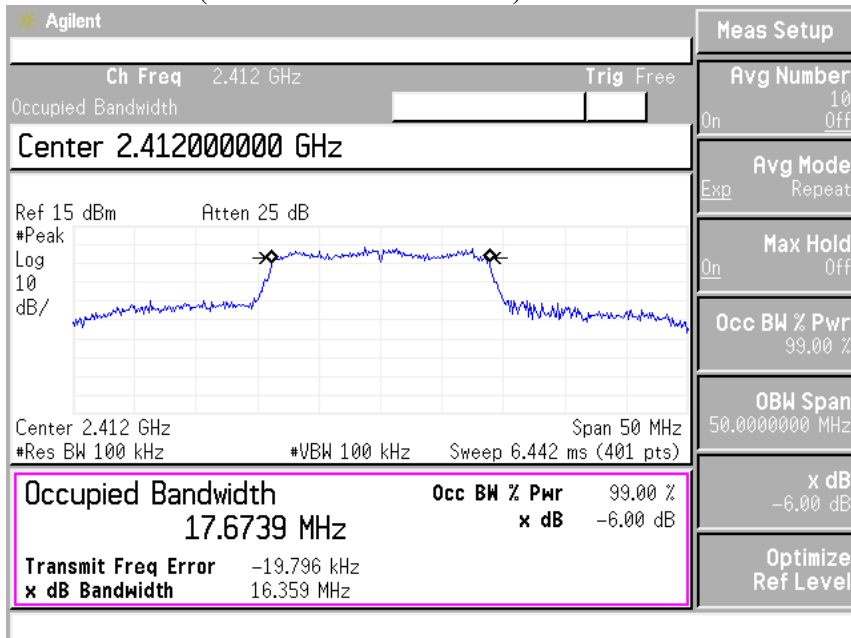
16023351 001

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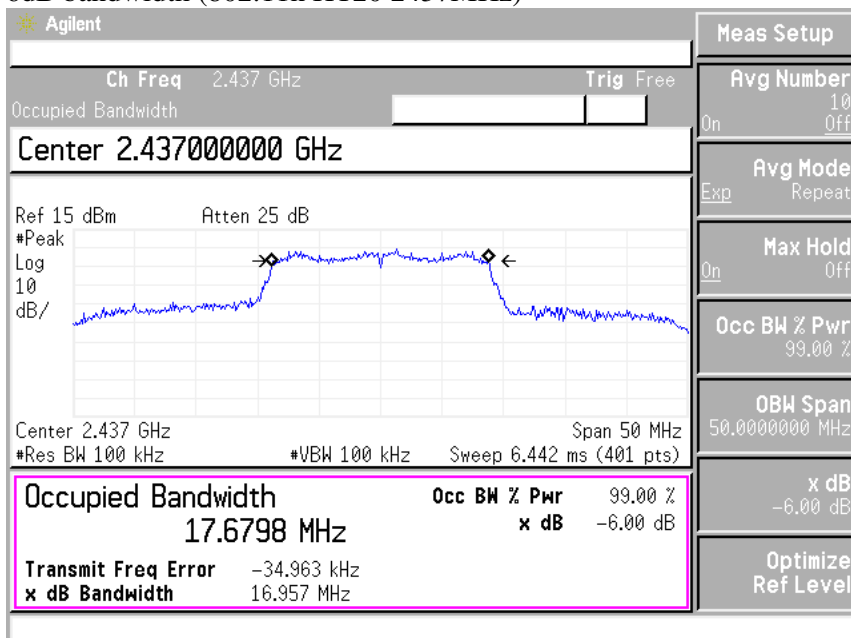
Test Report no.

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6dB bandwidth (802.11n HT20 2412MHz)



6dB bandwidth (802.11n HT20 2437MHz)



Prüfbericht - Nr.:

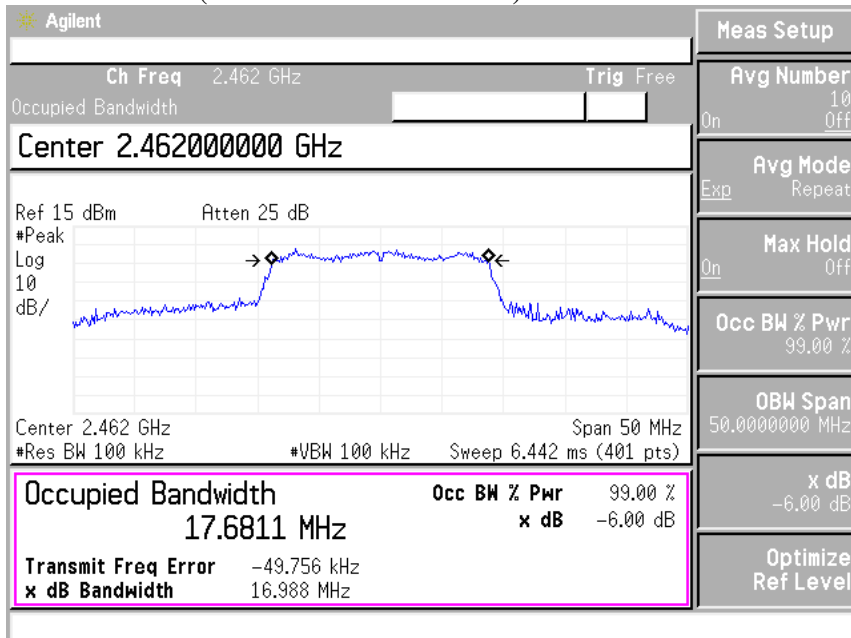
16023351 001

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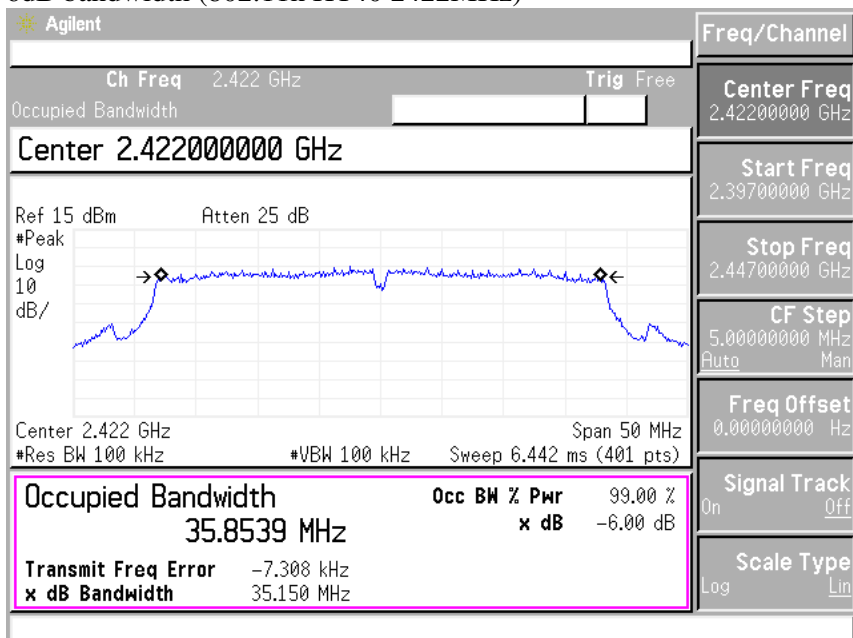
Test Report no.

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6dB bandwidth (802.11n HT20 2462MHz)



6dB bandwidth (802.11n HT40 2422MHz)



Prüfbericht - Nr.:

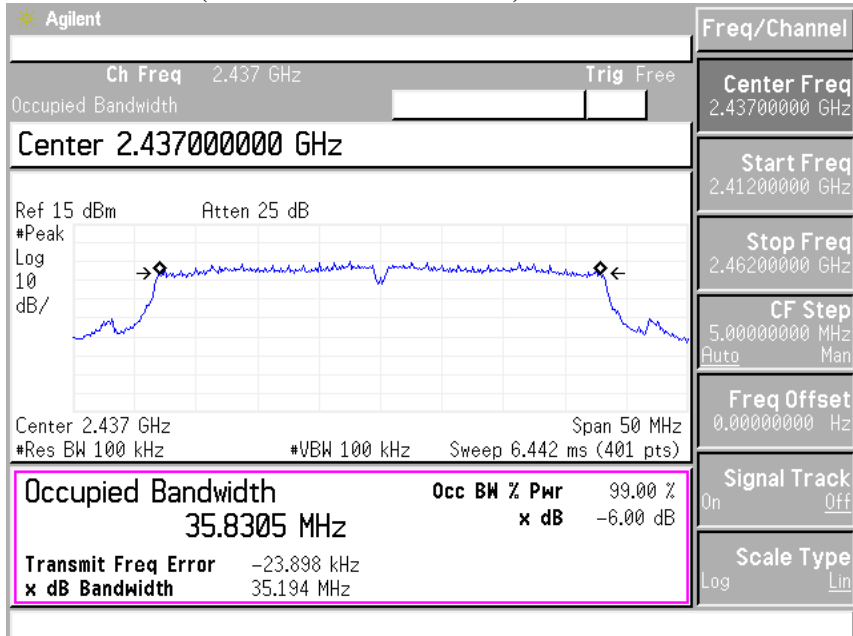
16023351 001

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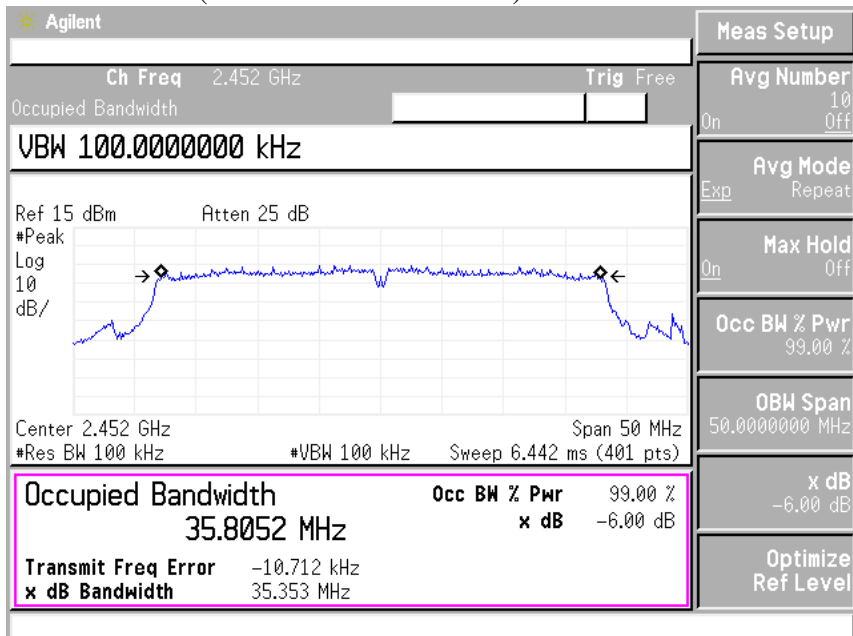
Test Report no.

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6dB bandwidth (802.11n HT20 2437MHz)



6dB bandwidth (802.11n HT20 2452MHz)



**Prüfbericht - Nr.:**

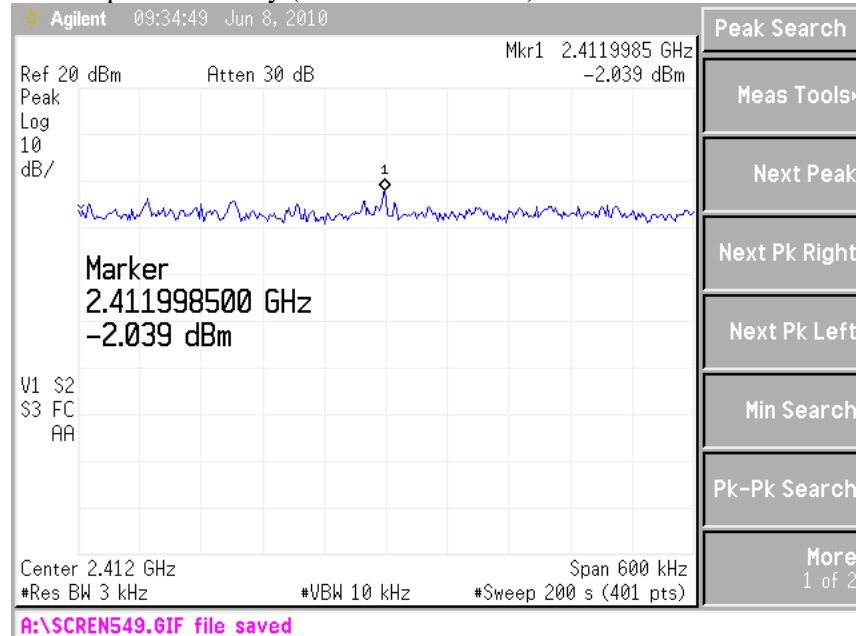
**16023351 001**

*Test Report no.*

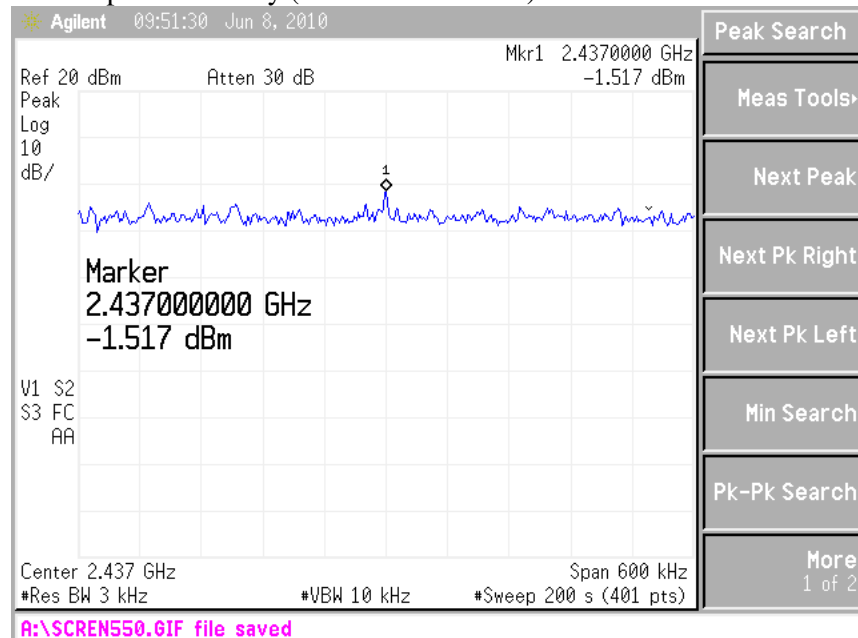
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*Page 27 of 38*

**Power spectral density (802.11b 2412MHz)**



**Power spectral density (802.11b 2437MHz)**





**Prüfbericht - Nr.:**

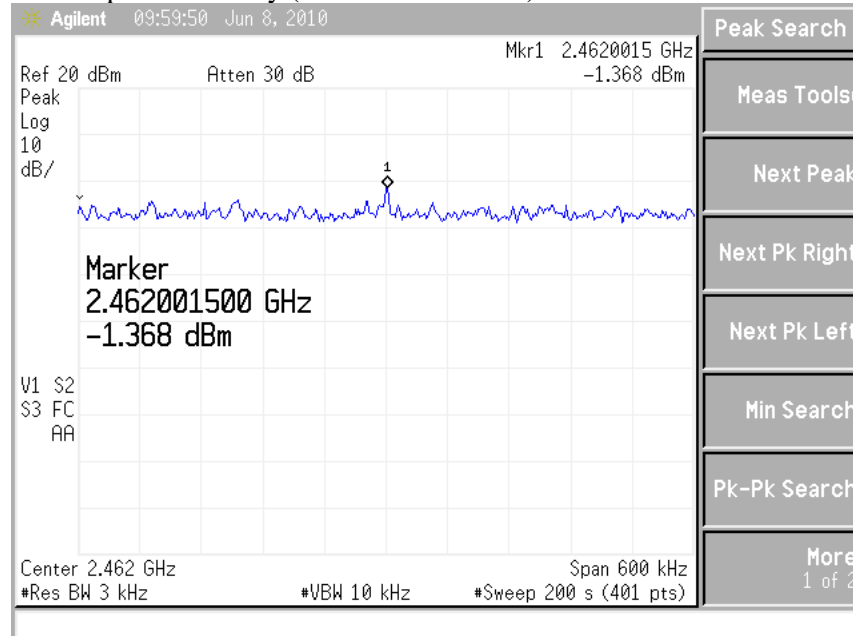
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Test Report no.

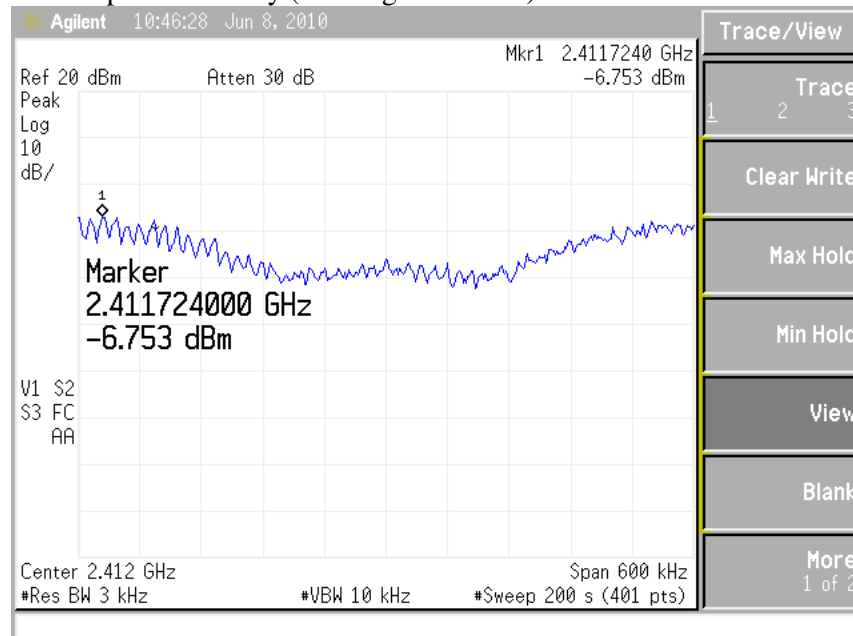
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**Power spectral density (802.11b 2462MHz)**



**Power spectral density (802.11g 2412MHz)**



**Prüfbericht - Nr.:**

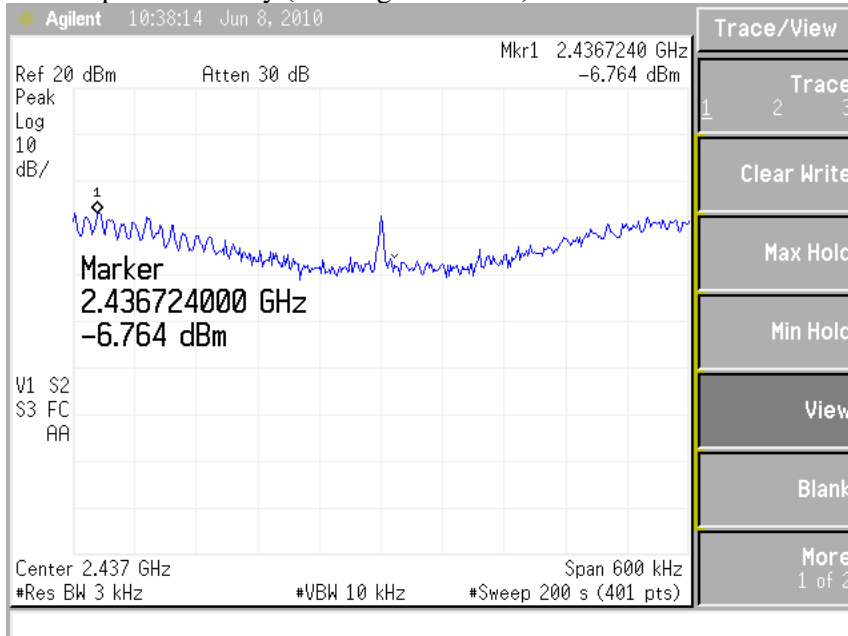
**16023351 001**

*Test Report no.*

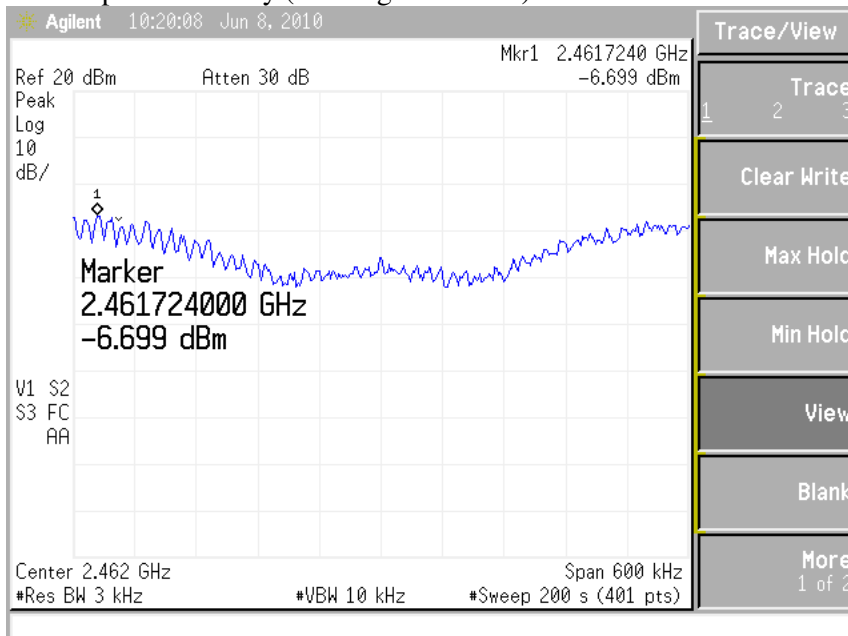
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**Power spectral density (802.11g 2437MHz)**



**Power spectral density (802.11g 2462MHz)**



**Prüfbericht - Nr.:**

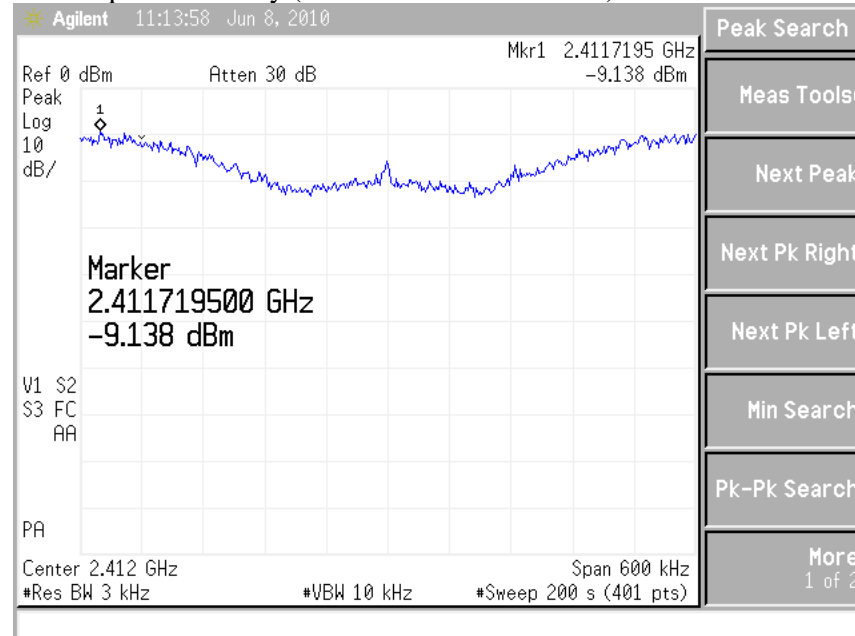
**16023351 001**

Test Report no.

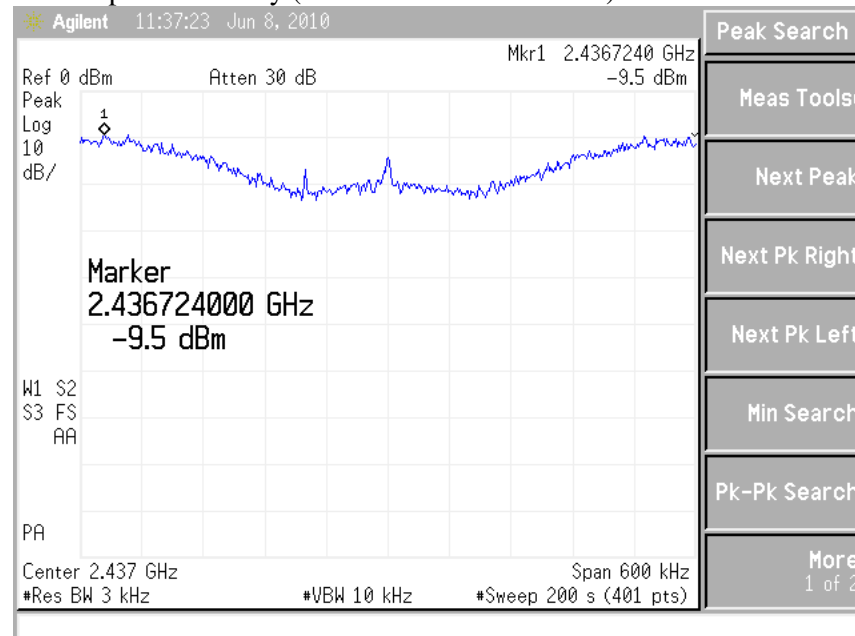
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**Power spectral density (802.11n HT20 2412MHz)**



**Power spectral density (802.11n HT20 2437MHz)**



**Prüfbericht - Nr.:**

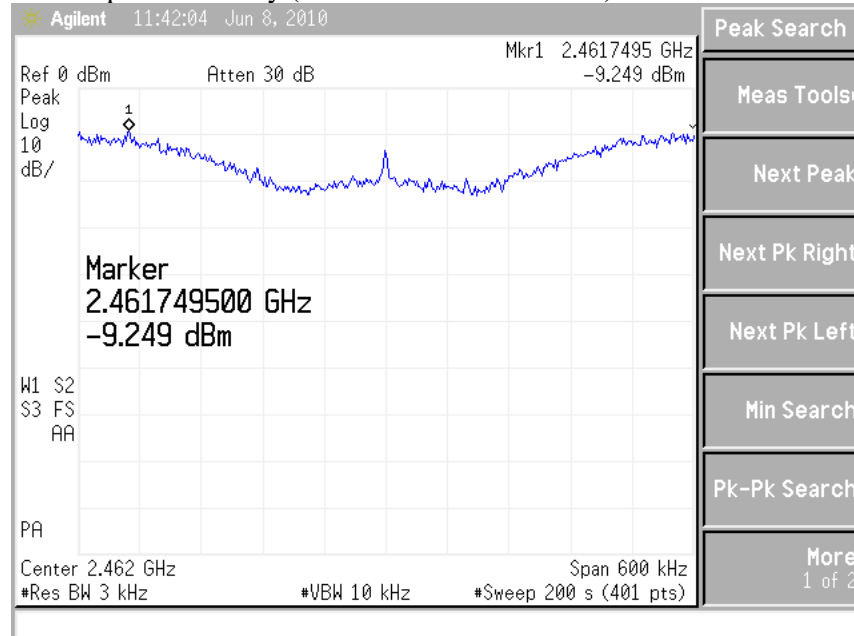
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*Test Report no.*

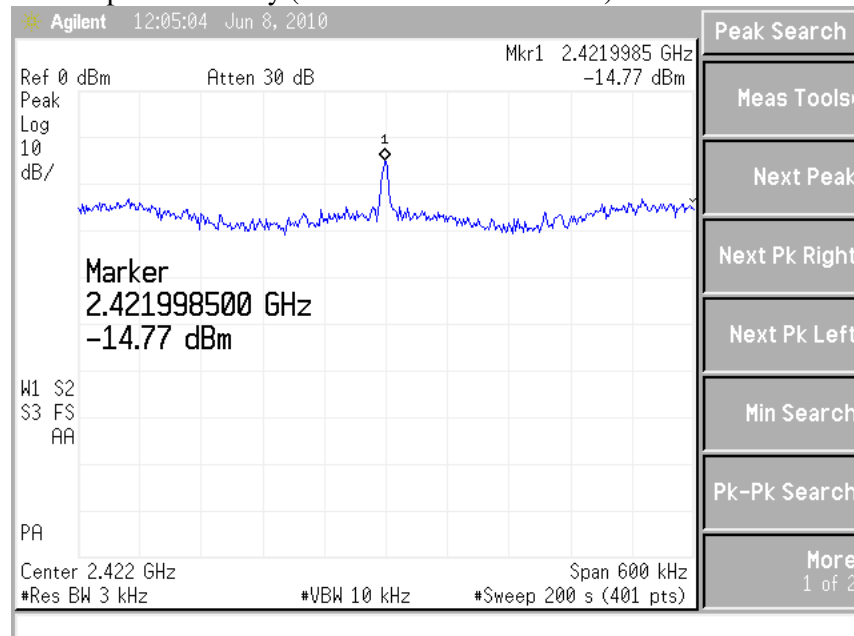
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**Power spectral density (802.11n HT20 2462MHz)**



**Power spectral density (802.11n HT40 2422MHz)**



Prüfbericht - Nr.:

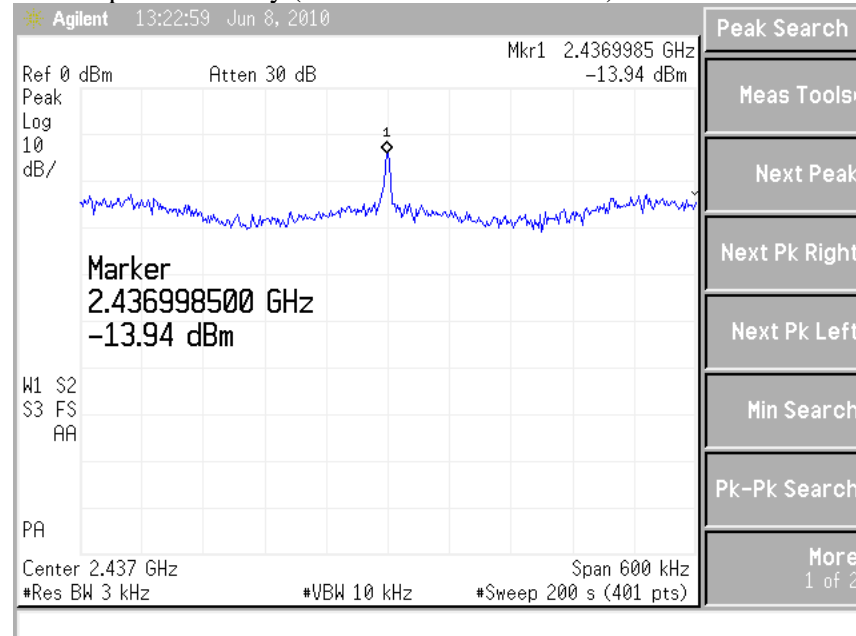
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Test Report no.

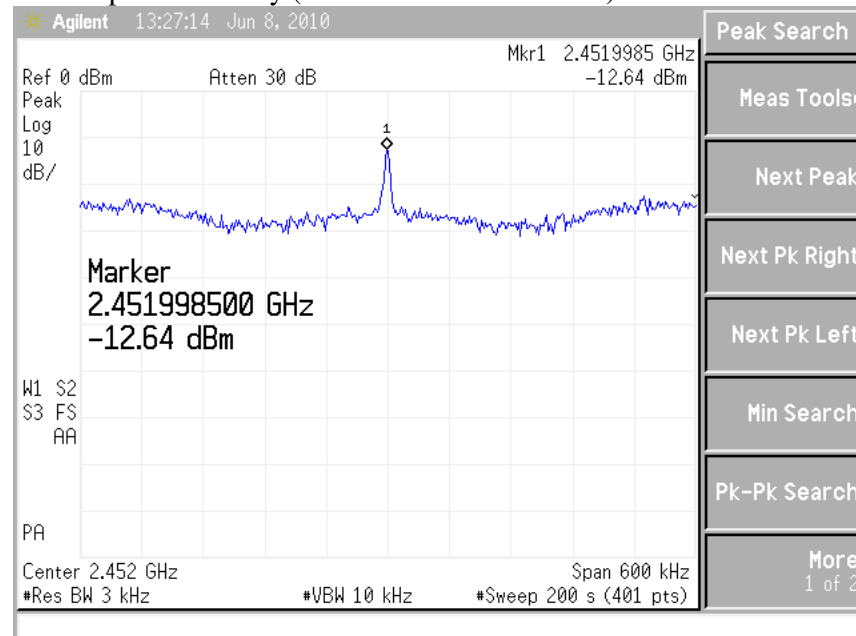
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Power spectral density (802.11n HT20 2437MHz)



Power spectral density (802.11n HT20 2452MHz)



Prüfbericht - Nr.:

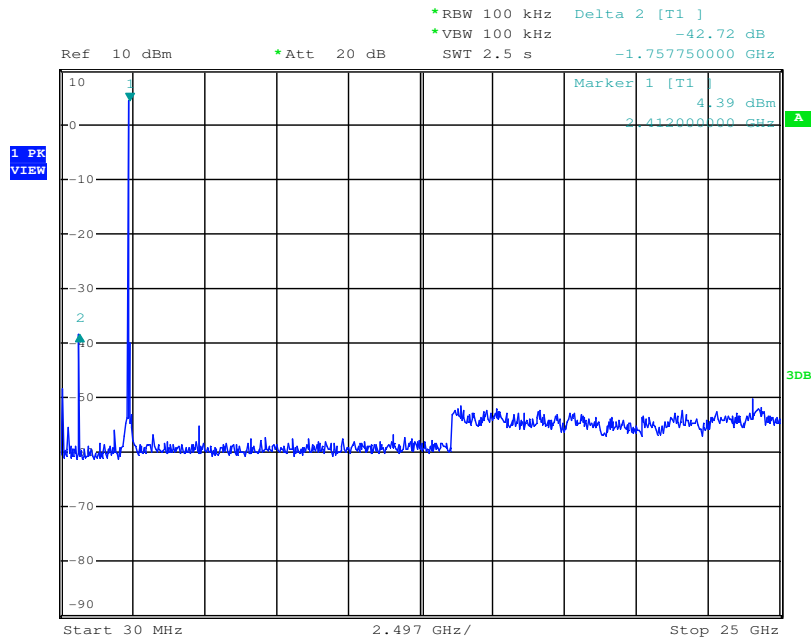
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Test Report no.

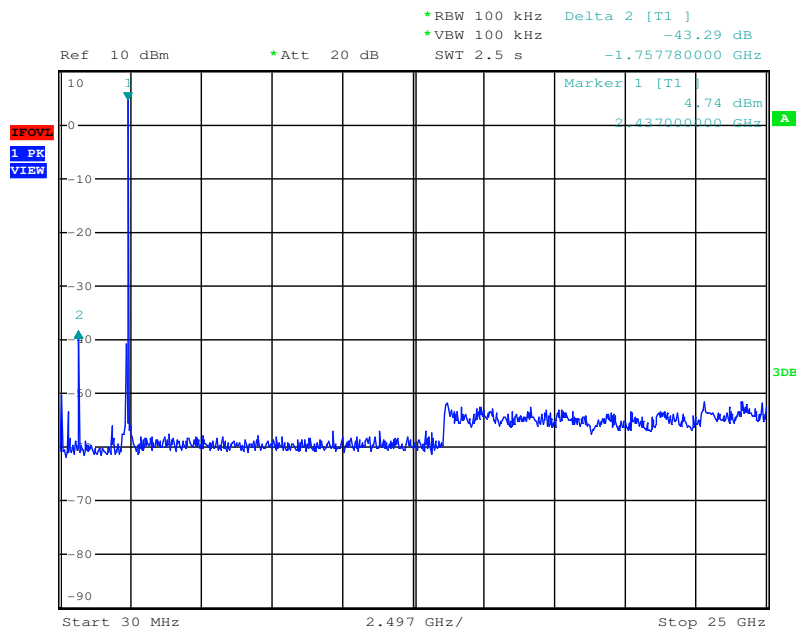
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### Out of band conducted emission (802.11b 2412MHz)



### Out of band conducted emission (802.11b 2437MHz)



Prüfbericht - Nr.:

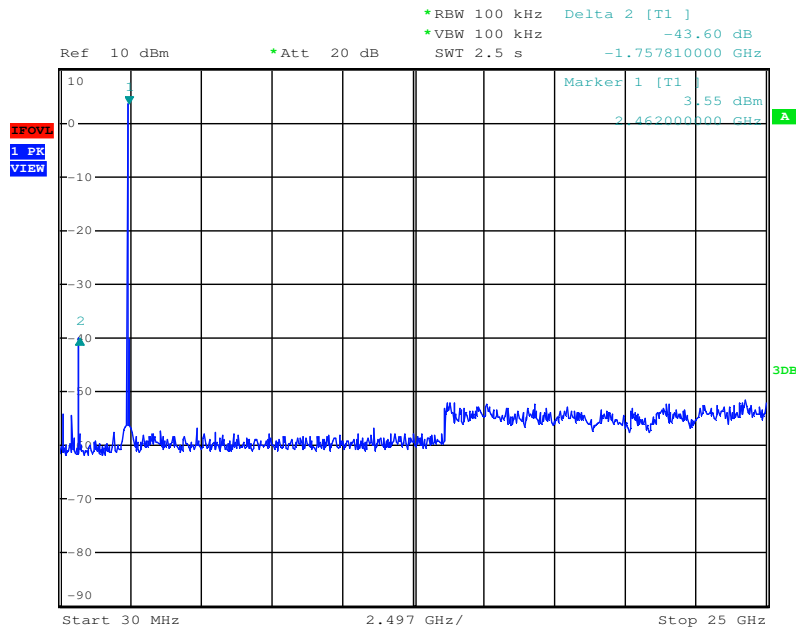
16023351 001

Test Report no.

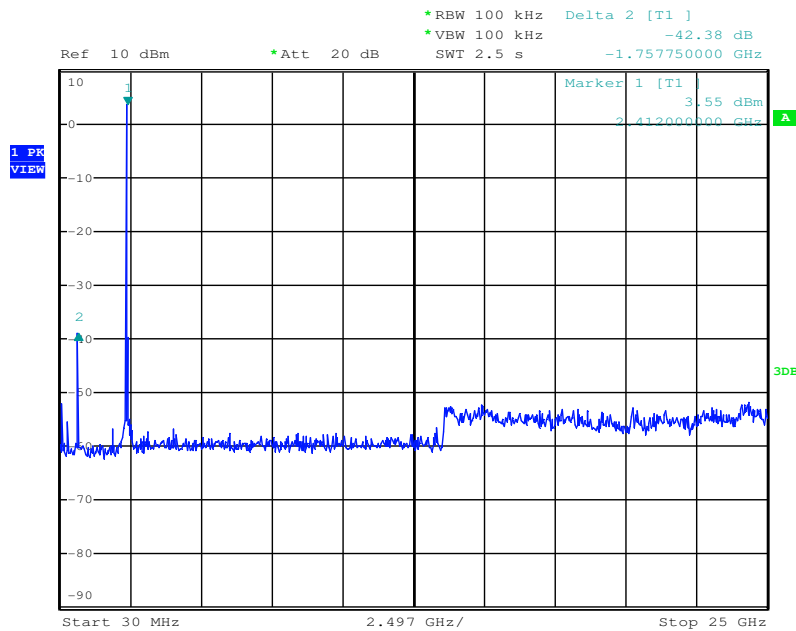
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Out of band conducted emission (802.11b 2462MHz)



Out of band conducted emission (802.11g 2412MHz)



Prüfbericht - Nr.:

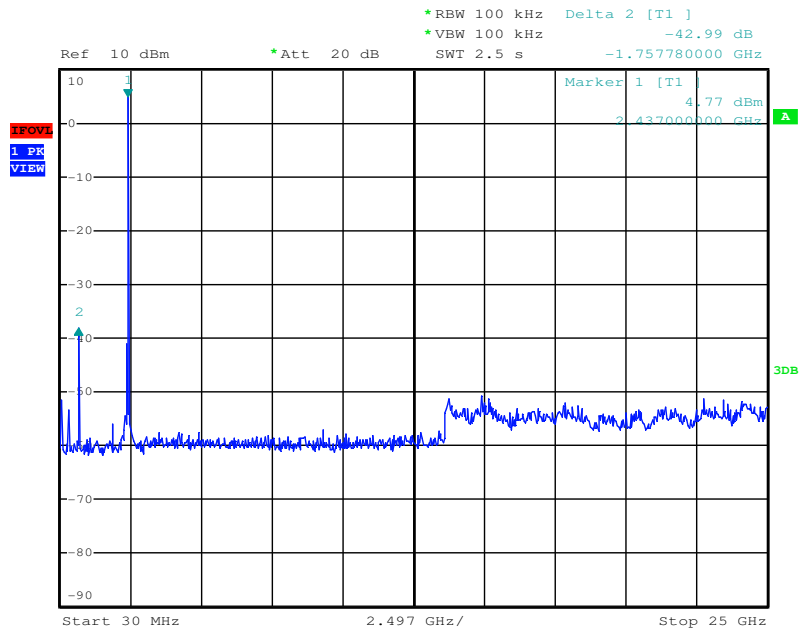
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Test Report no.

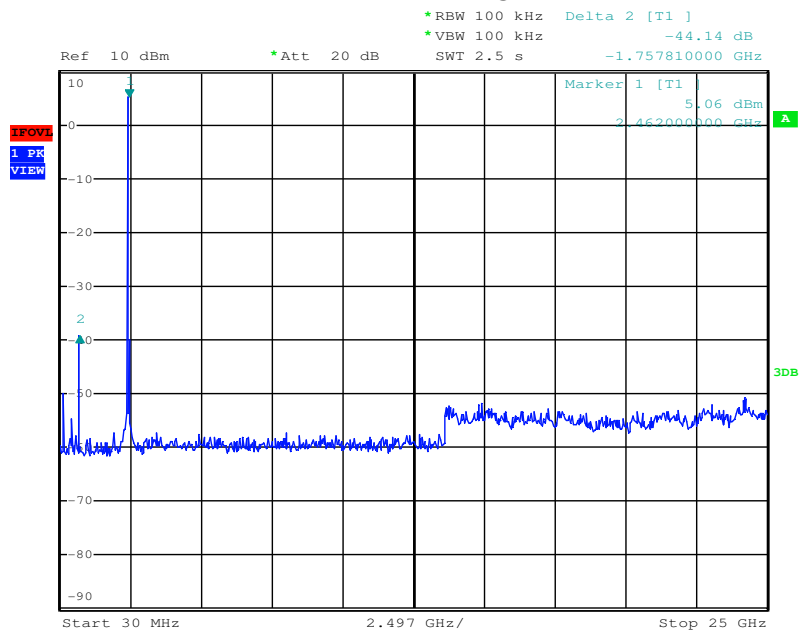
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### Out of band conducted emission (802.11g 2437MHz)



### Out of band conducted emission (802.11g 2462MHz)





Prüfbericht - Nr.:

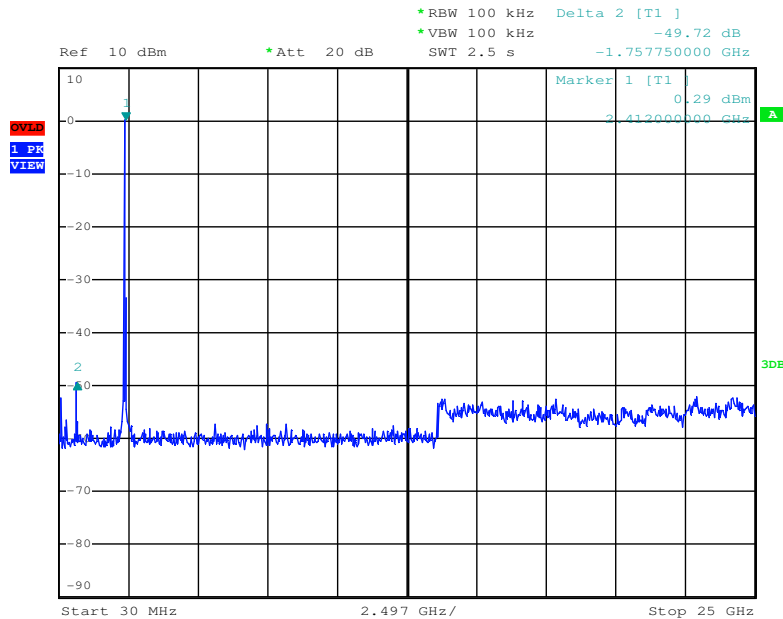
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Test Report no.

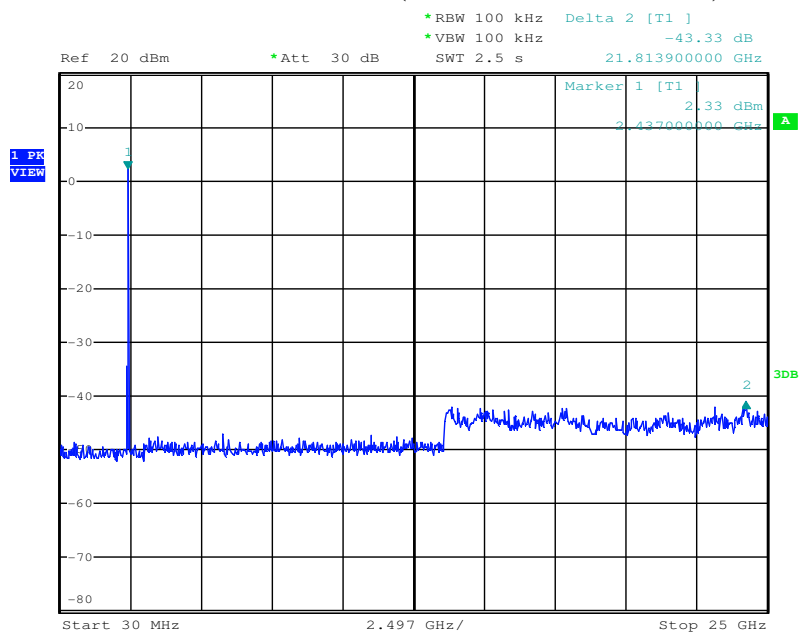
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### Out of band conducted emission(802.11n HT20 2412MHz)



### Out of band conducted emission(802.11n HT20 2437MHz)



Prüfbericht - Nr.:

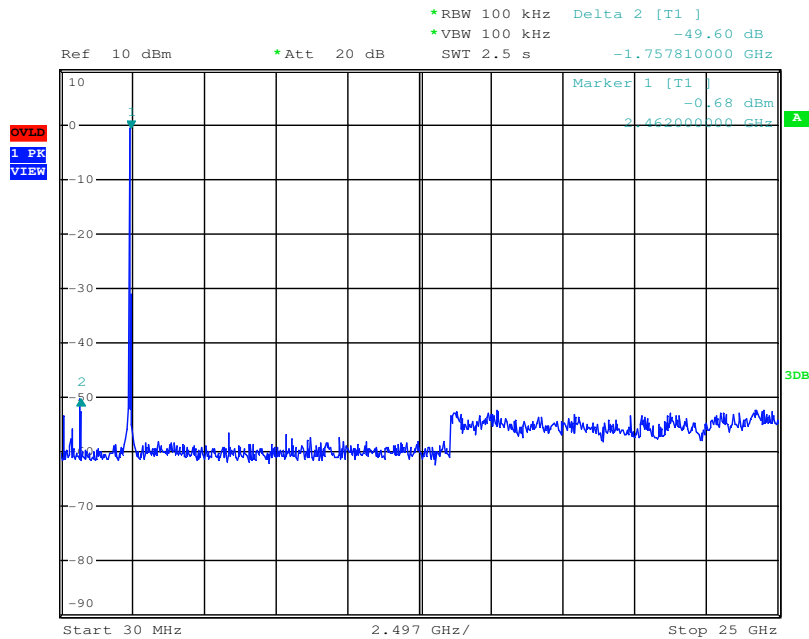
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Test Report no.

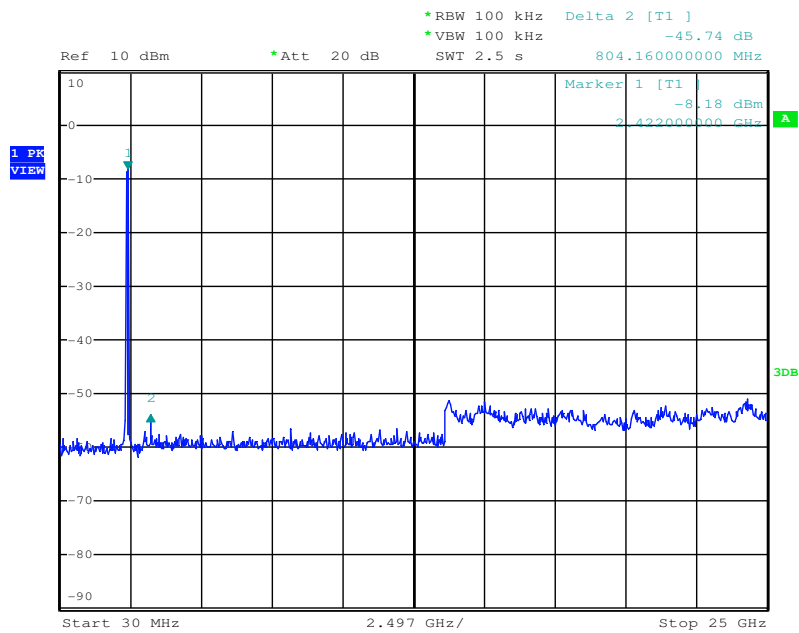
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### Out of band conducted emission(802.11n HT20 2462MHz)



### Out of band conducted emission(802.11n HT40 2422MHz)

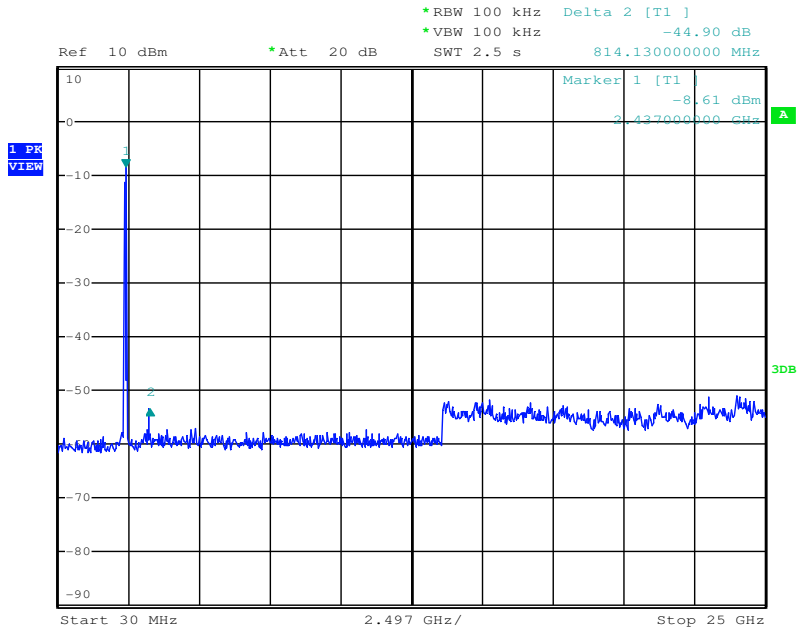


Prüfbericht - Nr.:  
Test Report no.

16023351 001

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Out of band conducted emission(802.11n HT40 2437MHz)



Out of band conducted emission(802.11n HT40 2452MHz)

