

FCC 47 CFR PART 22H and 24E

Product Type : Wireless Inner Structure

Applicant : SCT Wireless Inc

Address : 1894 US Hwy 50 East Building 4 Suite 281 Carson City NV
89701

Trade Name : SCT Wireless

Model Number : Sphere

Test Specification : FCC 47 CFR PART 22H: Oct, 2009
FCC 47 CFR PART 24E: Oct, 2009
CANADA RSS-131 Issue 2: Jul. 2003
ANSI/TIA-603-C 2004

Issue Date : Sep. 24, 2010

Issue by

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Taiwan Accreditation Foundation accreditation number: 1330

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Revision History

Rev.	Issue Date	Revisions	Revised By
00	Sep. 24, 2010	Initial Issue	

Verification of Compliance

Issued Date: 2010/09/24

Product Type : Wireless Inner Structure
Applicant : SCT Wireless Inc
Address : 1894 US Hwy 50 East Building 4 Suite 281 Carson City NV
89701
Trade Name : SCT Wireless
Model Number : Sphere
FCC ID : XZZ-WB-198
IC ID : 9222A-SPTR
EUT Rated Voltage : DC 12V, 1.0A
Test Voltage : 120 Vac / 60 Hz
Applicable : FCC 47 CFR PART 22H: Oct, 2009
Standard : FCC 47 CFR PART 24E: Oct, 2009
CANADA RSS-131 Issue 2: Jul. 2003
ANSI/TIA-603-C 2004
Test Result : Complied
Performing Lab. : A Test Lab Techno Corp.

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1330

<http://www.atl-lab.com.tw/e-index.htm>

The above equipment was tested by A Test Lab Techno Corp. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2003 and the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 22H, Part 24E.

The test results of this report relate only to the tested sample identified in this report.

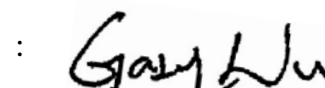
Approved By



(Manager)

(Miller Lee)

Reviewed By



(Testing Engineer)

(Gary Wu)

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1 General Information

1.1. EUT Description

Applicant		SCT Wireless Inc			
Applicant Address		1894 US Hwy 50 East Building 4 Suite 281 Carson City NV 89701			
Manufacturer		Airgoon LTD.			
Manufacturer Address		2207 Concord Pike, Suite 700, Wilmington, DELAWARE			
Product Type		Wireless Inner Structure			
Trade Name		SCT Wireless			
Model Number		Sphere			
FCC ID		XZZ-WB-198			
IC ID		9222A-SPTR			
Mode	WCDMA	Band	UL Frequency (MHz)	DL Frequency (MHz)	Modulation
		Band II	1852.4 ~ 1907.6	1932.4 ~ 1987.6	QPSK
		Band V	826.4 ~ 846.6	871.4 ~ 891.6	QPSK
Channel Control		Auto			
Type of Antenna		Uplink	Ant. #1	Model No.: E3A-W15, Exterior 360° Antenna	
		Downlink	Ant. #2	Model No.: ICA-W8, Exterior 360° Antenna	
Antenna Gain (dBi)		Uplink	Ant. #1	WCDMA Band II / WCDMA Band V : 15dBi	
		Downlink	Ant. #2	WCDMA Band II / WCDMA Band V : 8dBi	
Max. RF Output power		Uplink	WCDMA Band II: 30.10 dBm / 1.023 W WCDMA Band V: 33.03 dBm / 2.009 W		
		Downlink	WCDMA Band II: 14.52 dBm / 0.028 W WCDMA Band V: 17.04 dBm / 0.051 W		
Emission Designator		Uplink	WCDMA Band II: 7M91F9W WCDMA Band V: 4M27F9W		
		Downlink	WCDMA Band II: 4M35F9W WCDMA Band V: 5M03F9W		
Component					
Power Adapter		JANIZARY HOLDINGS INC, HK-C112-A12 Input:100-240Vac, 50/60Hz, 0.35A Output: 12Vdc, 1.0A Cable out: Non-Shielded, 1.86 m			

1.2. Mode of Operation

ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: WCDMA Band II Uplink
Mode 2: WCDMA Band II Downlink
Mode 3: WCDMA Band V Uplink
Mode 4: WCDMA Band V Downlink

Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

Tested System Details

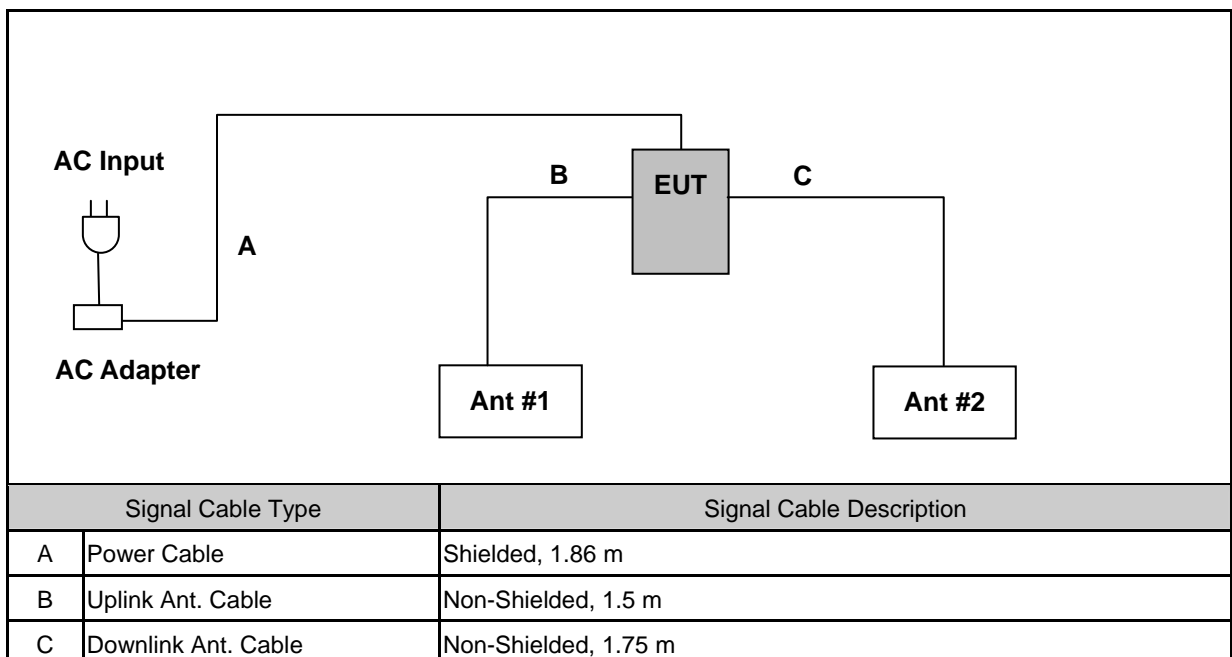
The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model Number	Serial Number	Power Cord
1.	Universal Radio Communication Tester	R&S	CMU200	109369	N/A

1.3. EUT Exercise Software

1.	Setup the EUT and Base Station (CMU200) as shown on 1.4.
2.	Turn on the power of all equipment.

1.4. Configuration of Test System Details



1.5. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	25
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950

1.6. Summary of Test Result

Description	FCC Rule	IC Rule	Result
Conducted Output Power	§2.1046	RSS-131 CI 4.3	Complies
Emissions Limitations	§2.1049	RSS-131 CI 4.2	Complies
Occupied Bandwidth	§2.1049	RSS-131 CI 4.2	Complies
Conducted Spurious Emissions at Antenna Terminals	§2.1051	RSS-131 CI 4.4	Complies
Field Strength of Spurious Radiation	§2.1053	RSS-131 CI 4.4	Complies
Intermodulation	-----	RSS-131 CI 4.3 RSS-131 CI 4.4	Complies
Frequency Stability for Temperature & Voltage	§2.1055 §22.355 §24.235	-----	Complies

2 RF Output Power Test

2.1. Limit

N/A

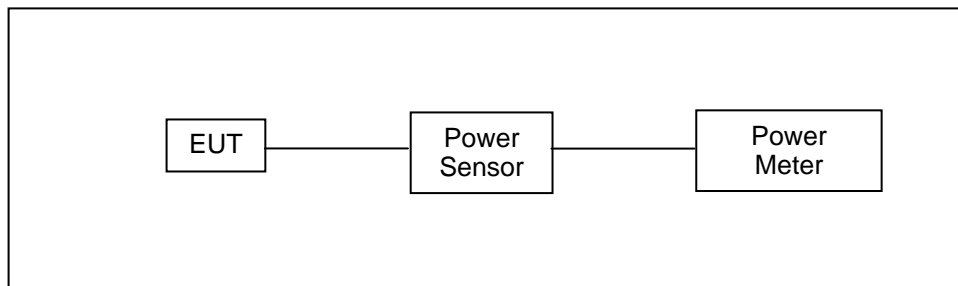
2.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Single Channel PK Power Sensor	Agilent	N1911A	MY45101619	07/19/2010	(1)
Wideband Power Meter	Agilent	N1921A	MY45241957	07/19/2010	(1)
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

2.3. Test Setup



2.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

1. The transmitter output was connected to power meter and base station through power divider.
2. Set base station for EUT at GSM 850: PCL=5 and PCS 1900: PCL=0.
3. Set base station for EUT at WCDMA Band V and WCDMA Band II, power level was set to maximum.
4. Select lowest, middle, and highest channels for each band.

2.5. Uncertainty

The measurement uncertainty is defined as for RF output power measurement is 1.2 dB.

2.6. Test Result

Model Number	Sphere					
Test Item	RF Output Power					
Date of Test	09/23/2010				Test Site	TE02
Bands	Data Mode	Channel	Average Power		Peak Power	
			(dBm)	(W)	(dBm)	(W)
WCDMA Band II	Uplink	Low	22.48	0.177	28.76	0.752
		Middle	24.10	0.257	30.10	1.023
		High	22.25	0.168	28.73	0.746
	Downlink	Low	7.47	0.006	13.13	0.021
		Middle	6.13	0.004	14.52	0.028
		High	3.90	0.002	11.26	0.013
WCDMA Band V	Uplink	Low	21.10	0.129	32.93	1.963
		Middle	21.51	0.142	33.03	2.009
		High	21.42	0.139	32.04	1.600
	Downlink	Low	9.35	0.009	16.65	0.046
		Middle	9.47	0.009	17.04	0.051
		High	9.64	0.009	16.53	0.045

Note: The peak power testing result was used peak detector.

3 Occupied Bandwidth / Band Edge Test

3.1. Limit

The Occupied Bandwidth Limit:

N/A.

The Band Edge Limit:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

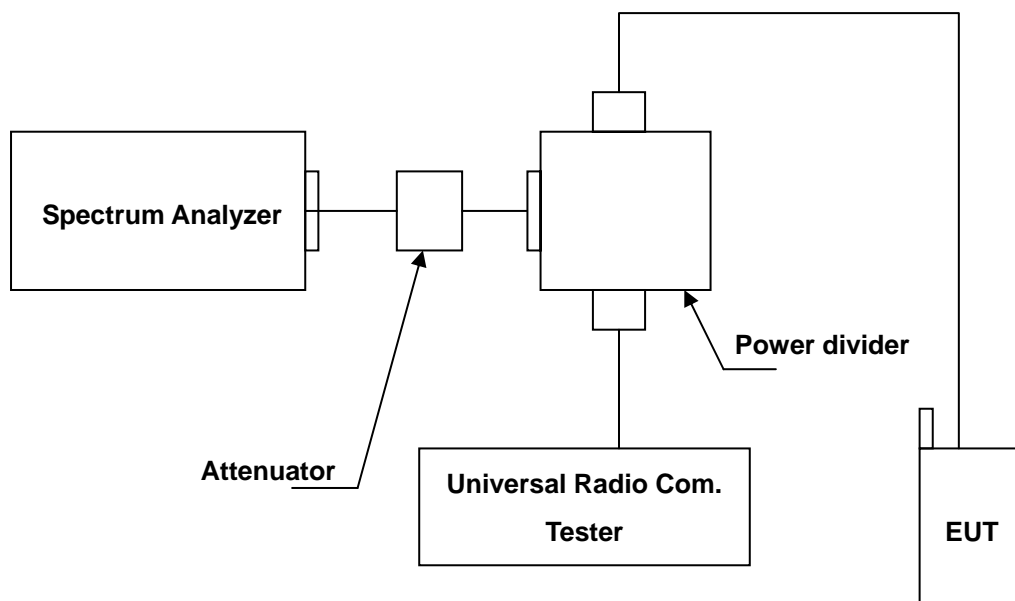
3.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/14/2009	(2)
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

3.3. Setup



3.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The occupied bandwidth of middle channel for the highest and lowest RF powers was measured.
3. The Modulation Characteristics setting: RB=30 kHz; VB=300 kHz.
4. The band edge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.
5. The band edge setting: RB=100 kHz; VB=100 kHz for WCDMA Band V and WCDMA Band II.

3.5. Uncertainty

The measurement uncertainty is defined as $\pm 10\text{Hz}$

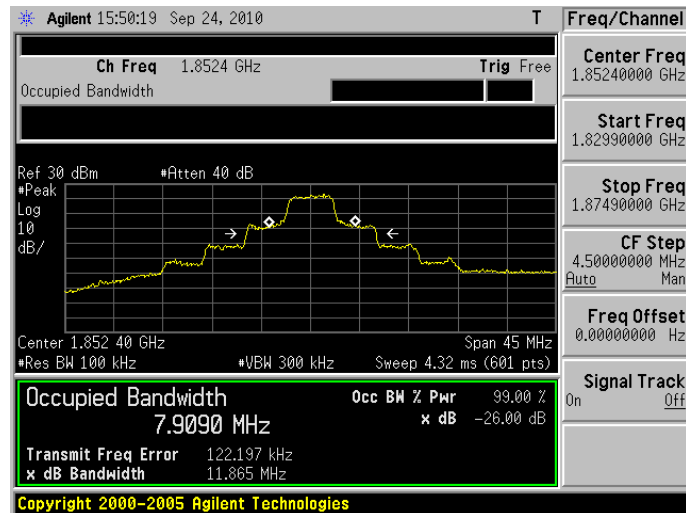
3.6. Test Result

99% Occupied Bandwidth

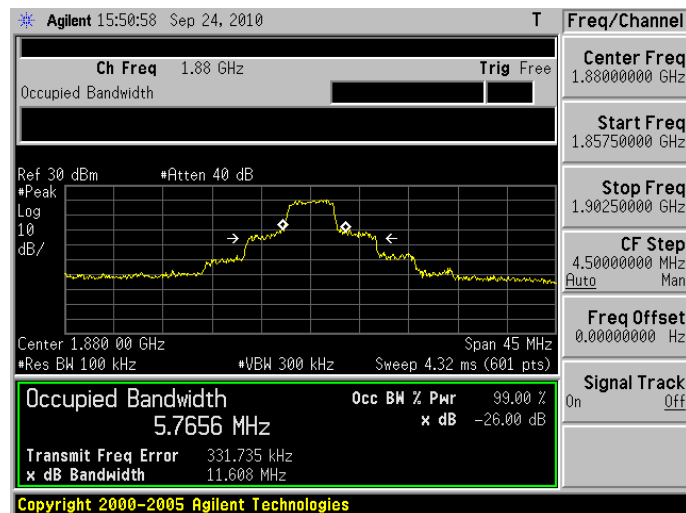
Model Number	Sphere			
Test Item	Occupied Bandwidth			
Date of Test	09/24/2010			Test Site TE02
Band	Data Mode	Channel.	99% Bandwidth (MHz)	Note
WCDMA Band II	Uplink	Low	7.9090	RBW:100KHz , VBW:300KHz
		Middle	5.7656	RBW:100KHz , VBW:300KHz
		High	4.9181	RBW:100KHz , VBW:300KHz
	Downlink	Low	4.2790	RBW:100KHz , VBW:300KHz
		Middle	4.3027	RBW:100KHz , VBW:300KHz
		High	4.3532	RBW:100KHz , VBW:300KHz

Mode 1: WCDMA Band II Uplink

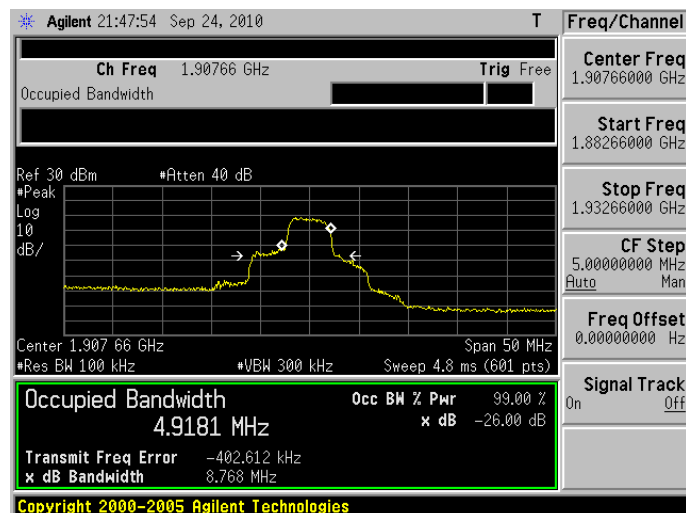
CH Low



CH Middle

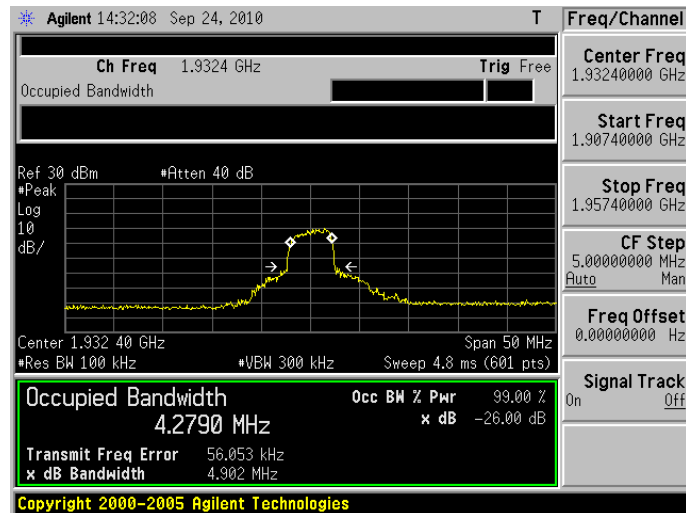


CH High

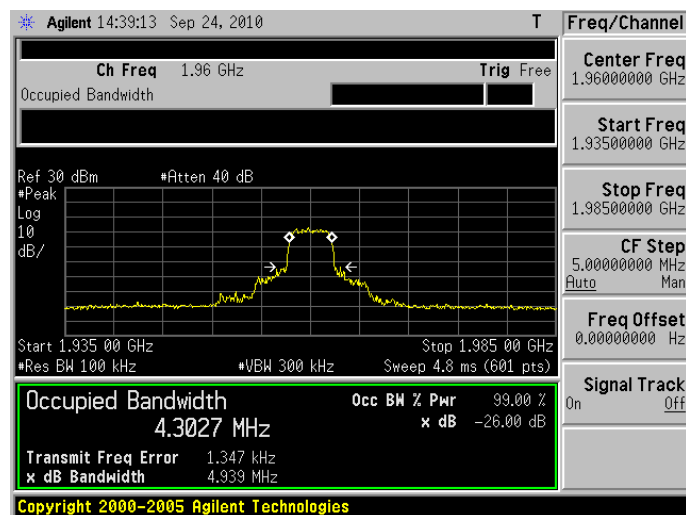


Mode 2: WCDMA Band II Downlink

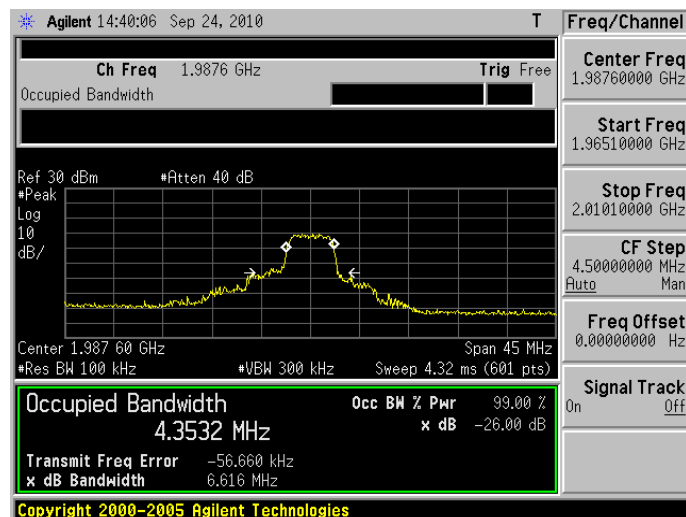
CH Low



CH Middle



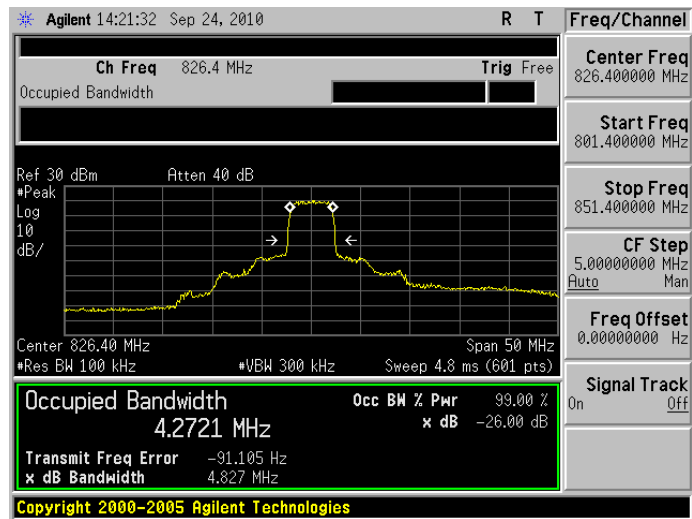
CH High



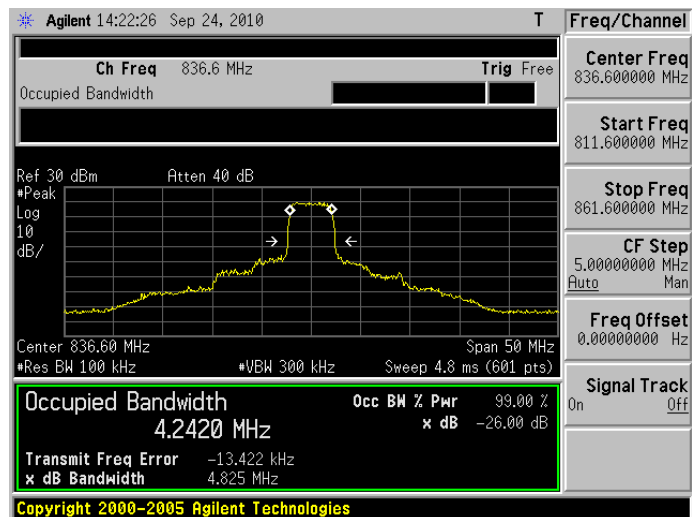
Model Number	Sphere			
Test Item	Occupied Bandwidth			
Date of Test	09/24/2010			Test Site TE02
Band	Data Mode	Channel.	99% Bandwidth (MHz)	Note
WCDMA Band V	Uplink	Low	4.2721	RBW:100KHz , VBW:300KHz
		Middle	4.2420	RBW:100KHz , VBW:300KHz
		High	4.2597	RBW:100KHz , VBW:300KHz
	Downlink	Low	4.3966	RBW:100KHz , VBW:300KHz
		Middle	4.3612	RBW:100KHz , VBW:300KHz
		High	5.0263	RBW:100KHz , VBW:300KHz

Mode 3: WCDMA Band V Uplink

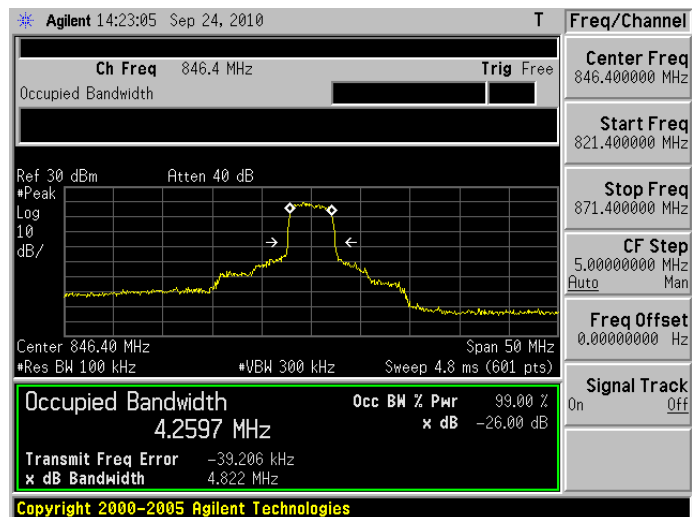
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CH Middle

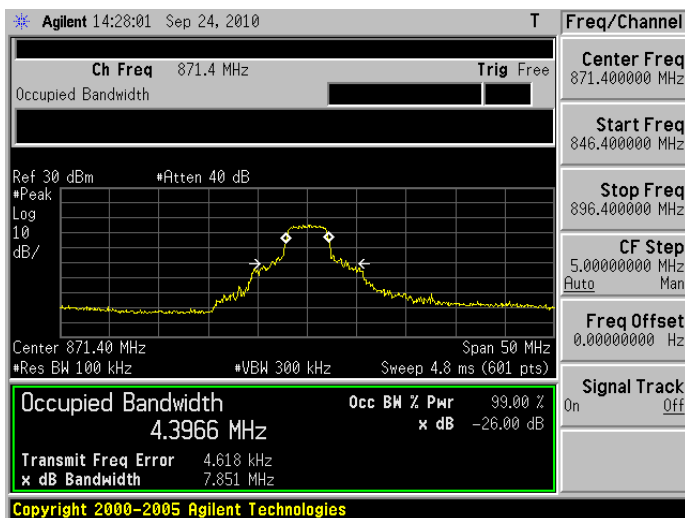


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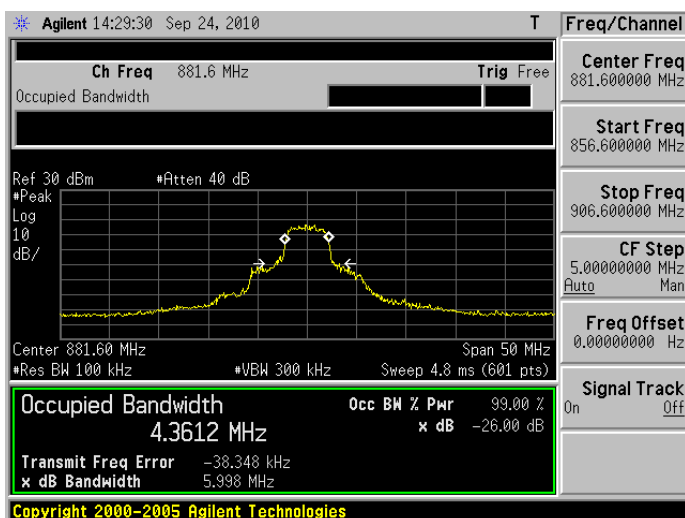


Mode 4: WCDMA Band V Downlink

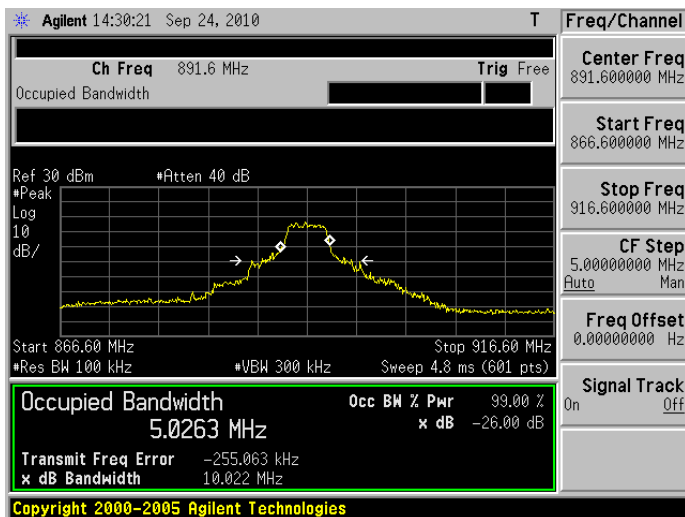
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CH Middle



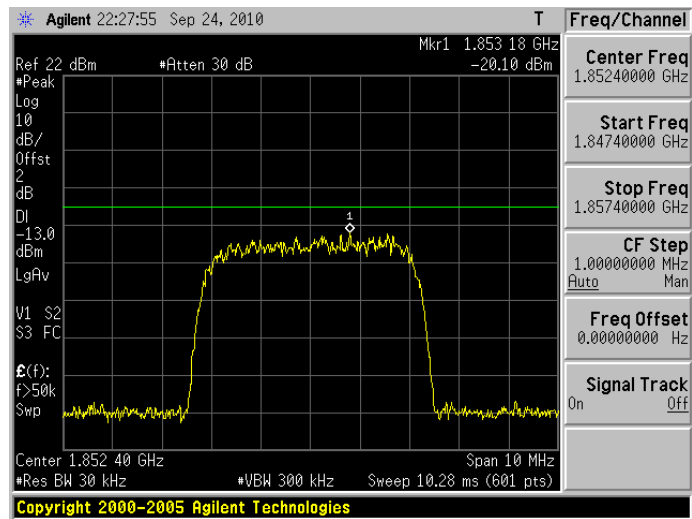
CH High



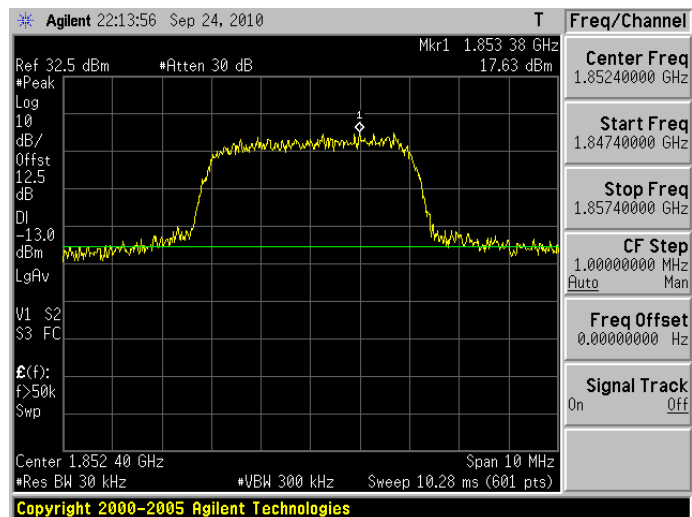
Modulation Characteristics

Mode 1: WCDMA Band II Uplink

CH Low
Input

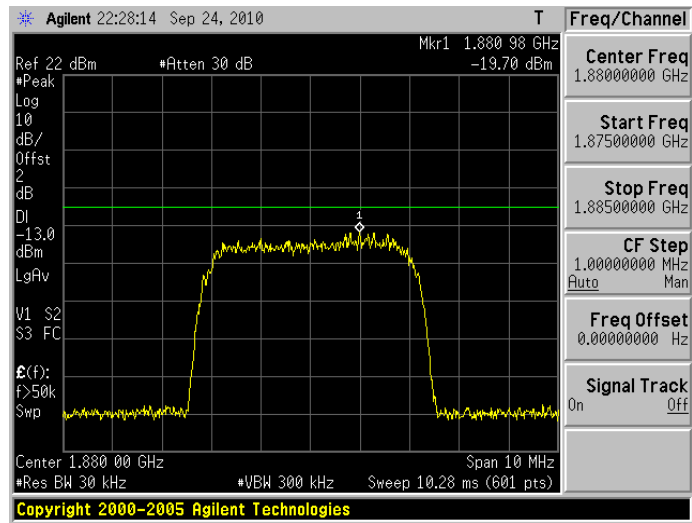


CH Low
Output

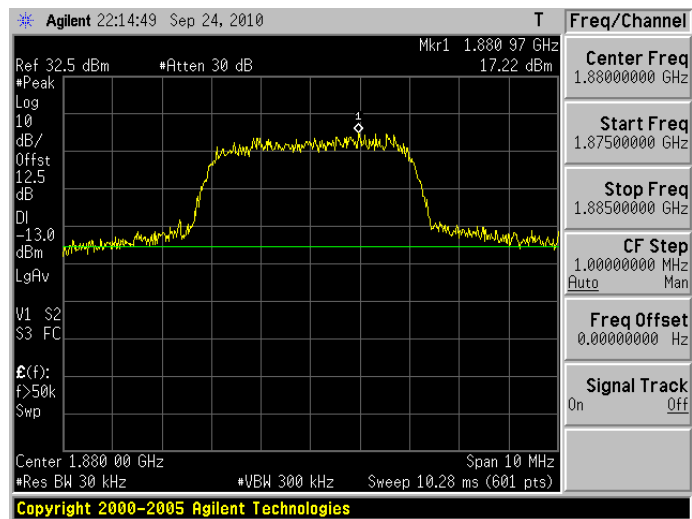


Mode 1: WCDMA Band II Uplink

CH Middle
Input

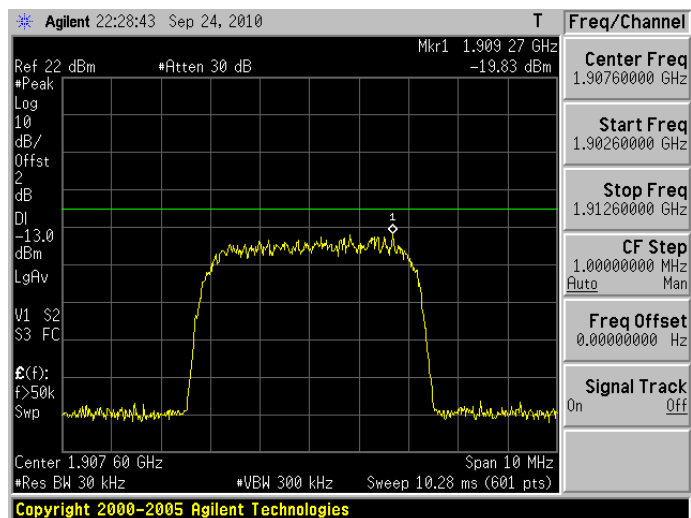


CH Middle
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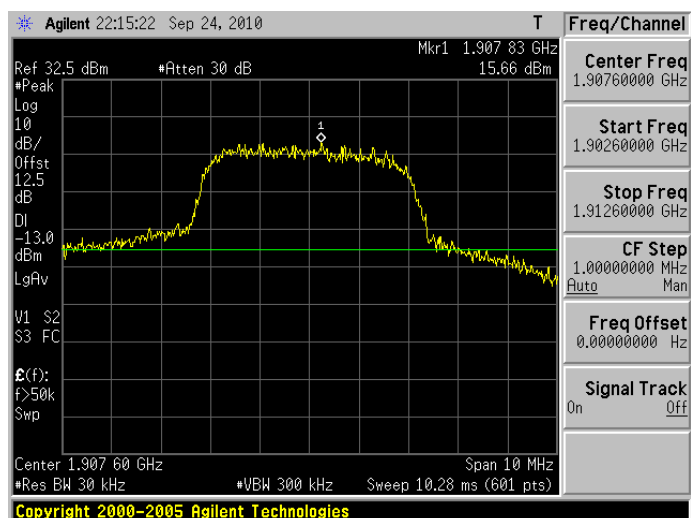


Mode 1: WCDMA Band II Uplink

CH High
Input

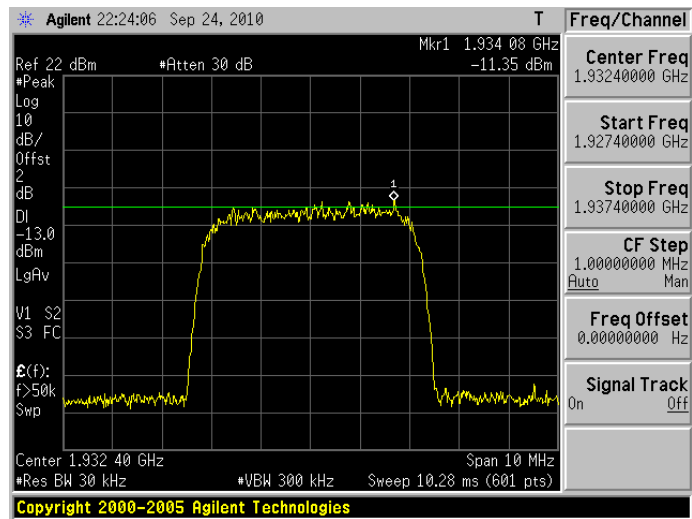


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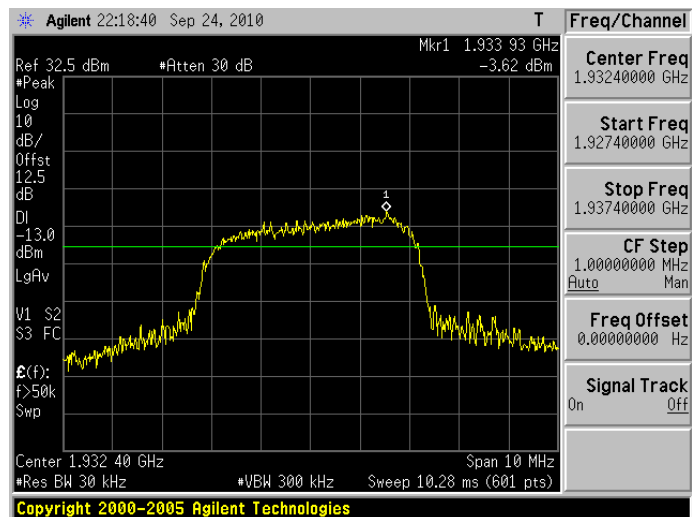


Mode 2: WCDMA Band II Downlink

CH Low
Input

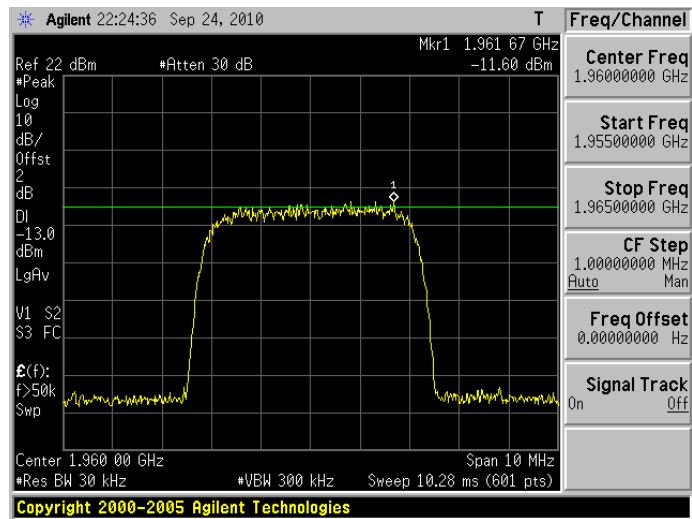


CH Low
Output

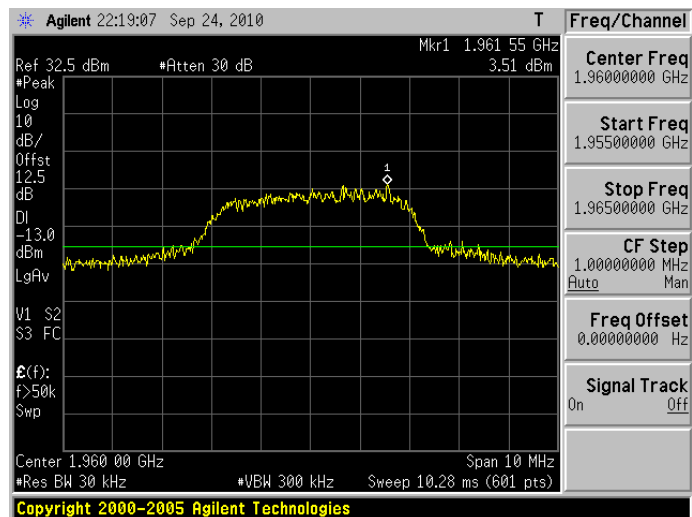


Mode 2: WCDMA Band II Downlink

CH Middle
Input

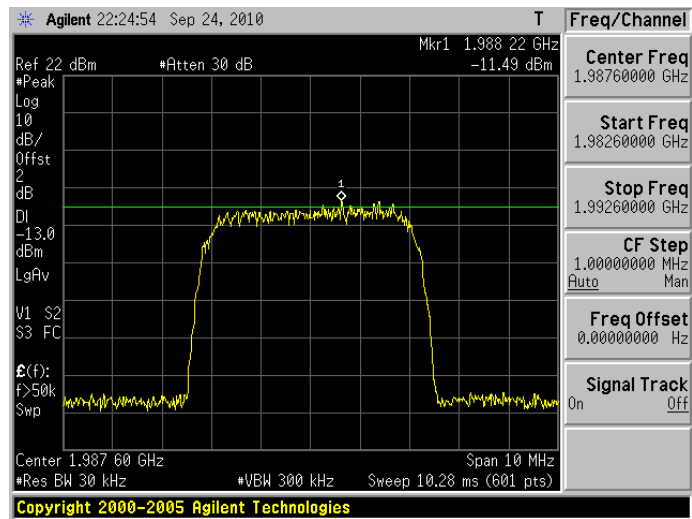


CH Middle
Output

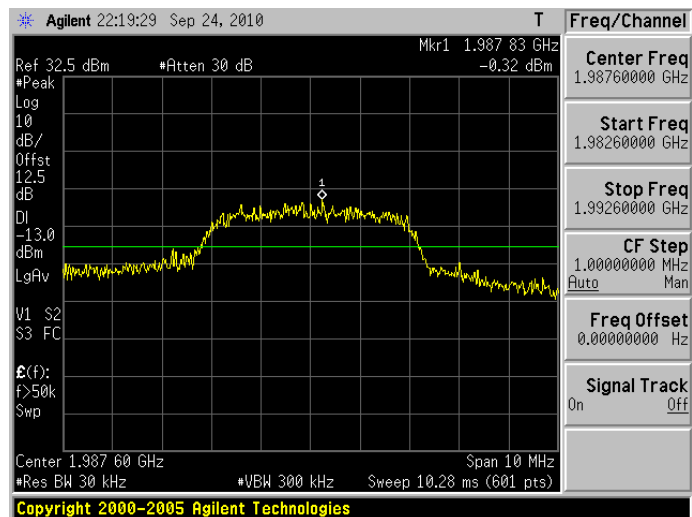


Mode 2: WCDMA Band II Downlink

CH High
Input

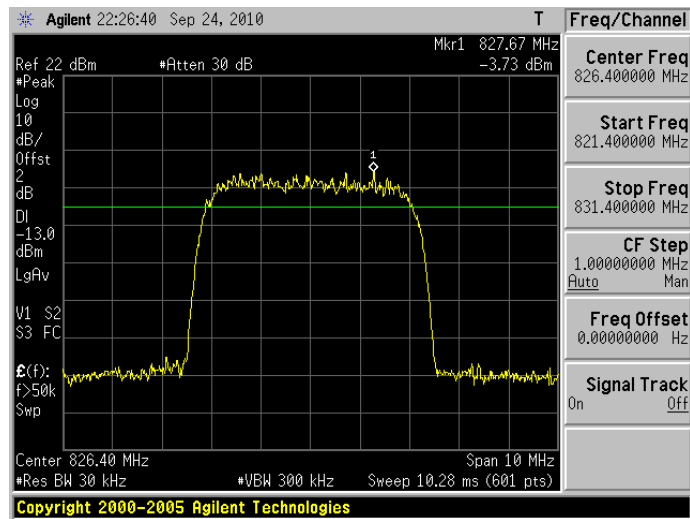


CH High
Output

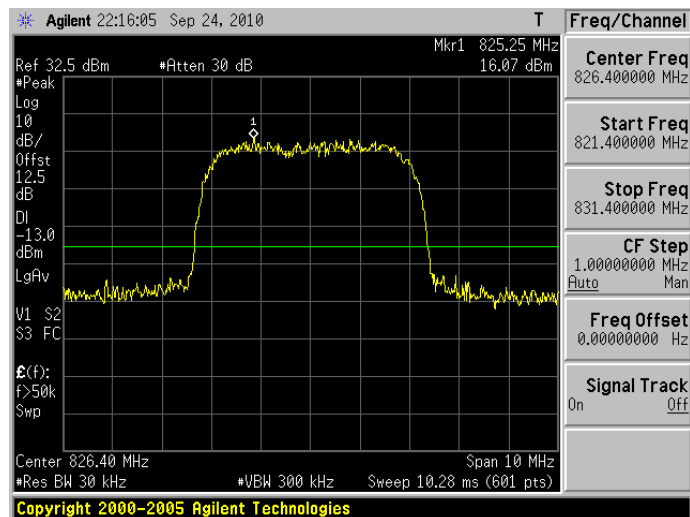


Mode 3: WCDMA Band V Uplink

CH Low
Input

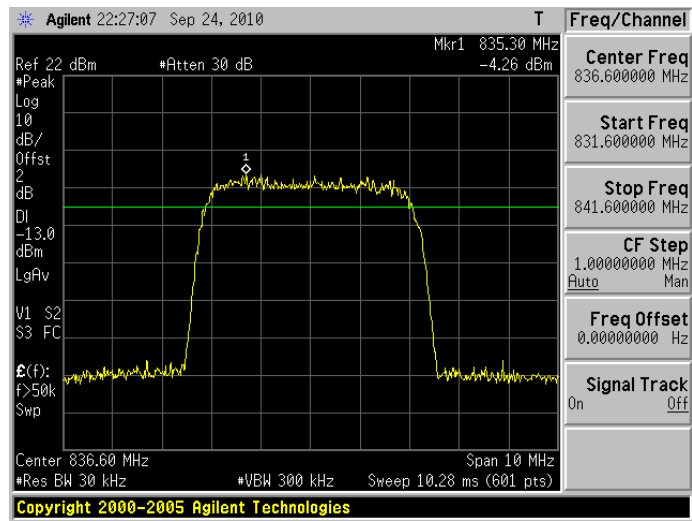


CH Low
Output

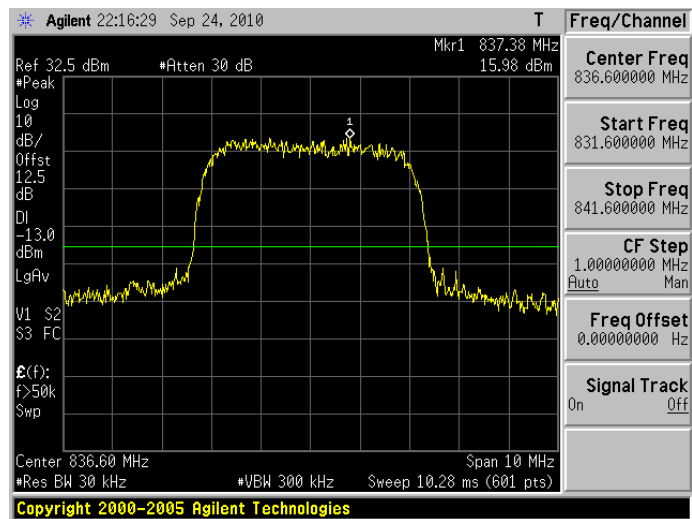


Mode 3: WCDMA Band V Uplink

CH Middle
Input

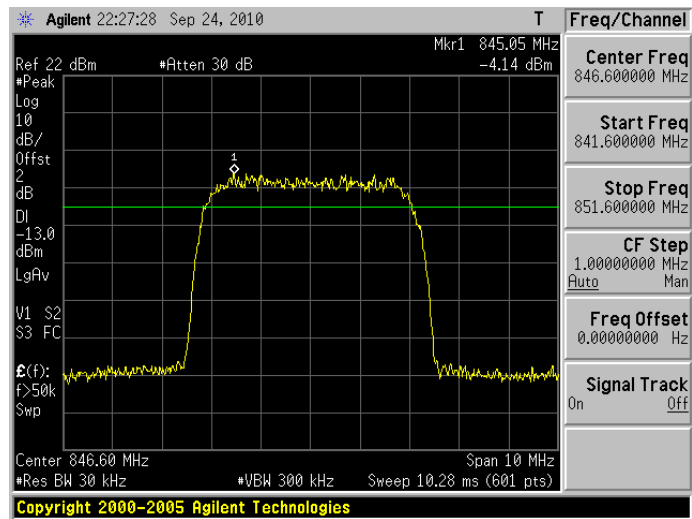


CH Middle
Output

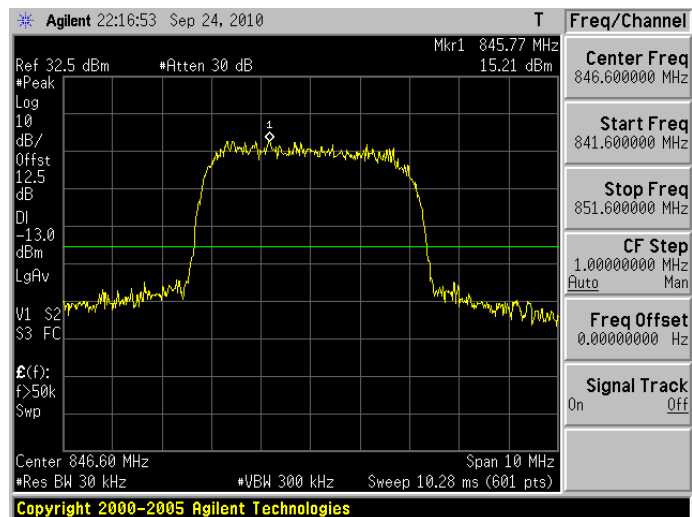


Mode 3: WCDMA Band V Uplink

CH High
Input

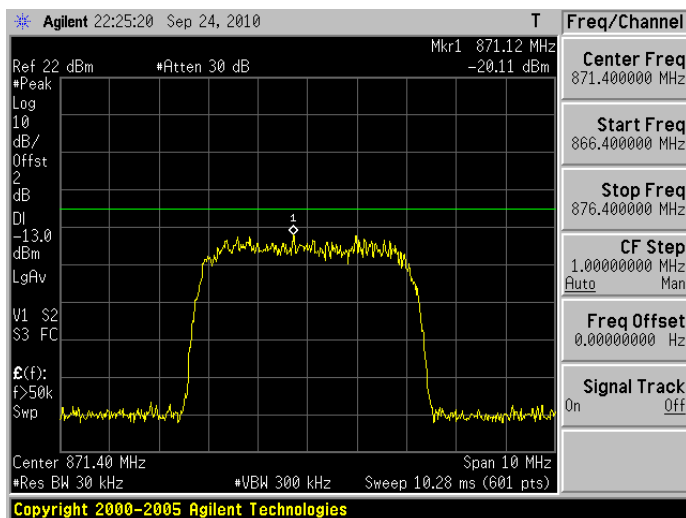


CH High
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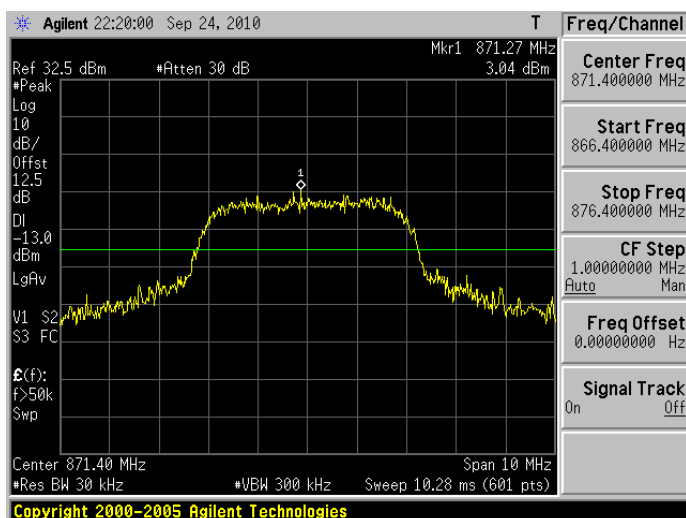


Mode 4: WCDMA Band V Downlink

CH Low
Input

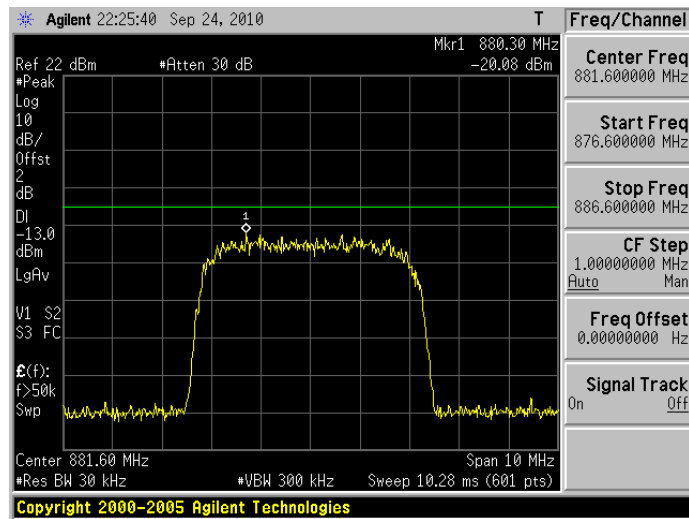


CH Low
Output

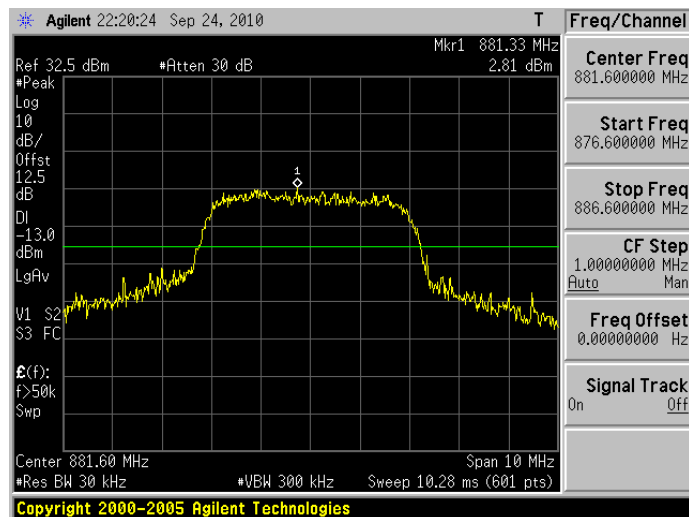


Mode 4: WCDMA Band V Downlink

CH Middle
Input

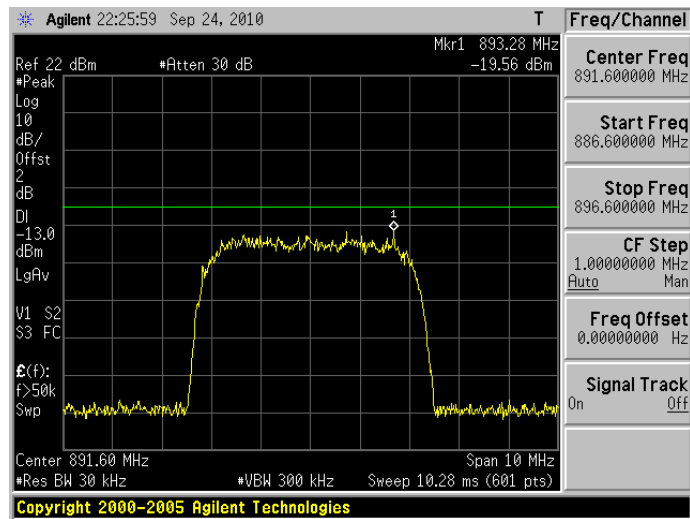


CH Middle
Output

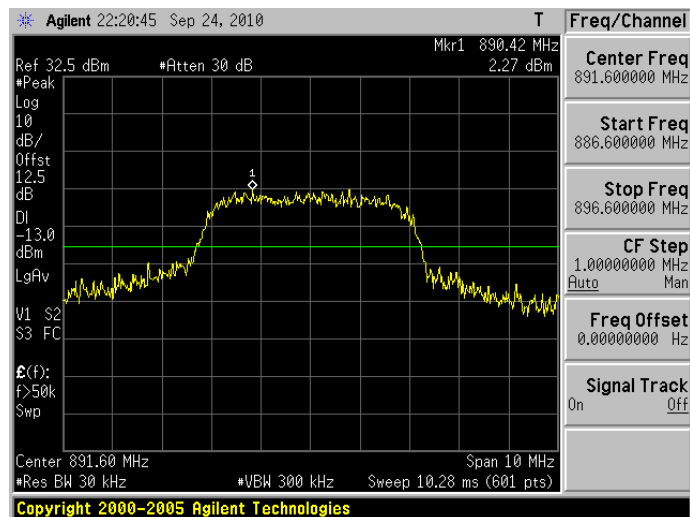


Mode 4: WCDMA Band V Downlink

CH High
Input

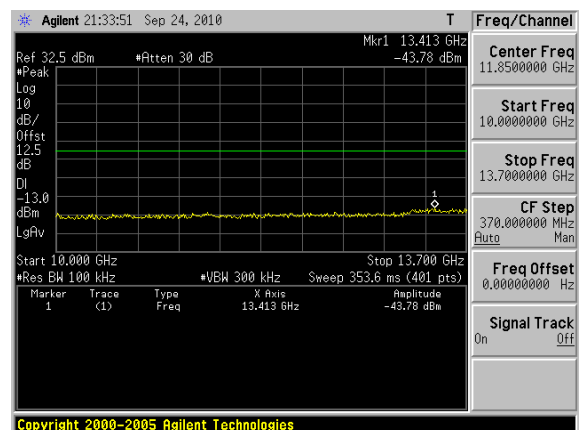
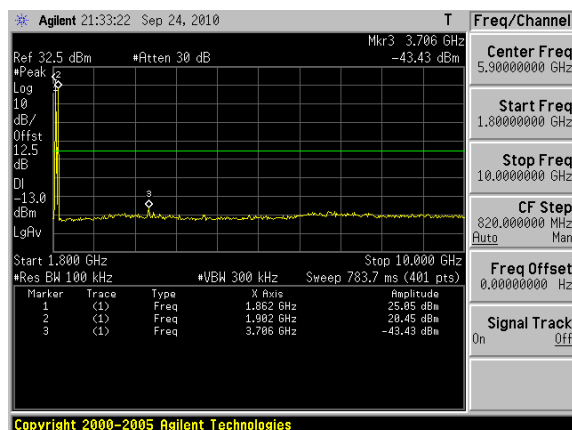
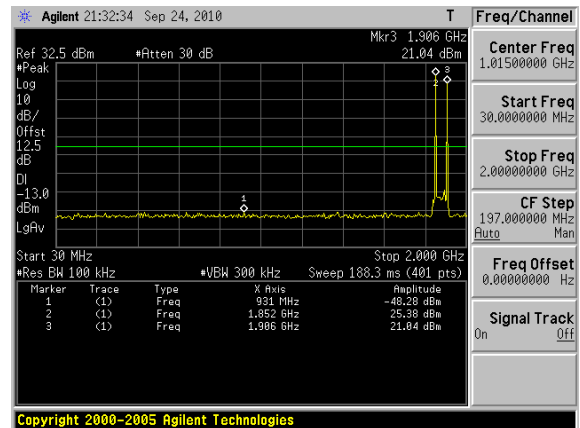
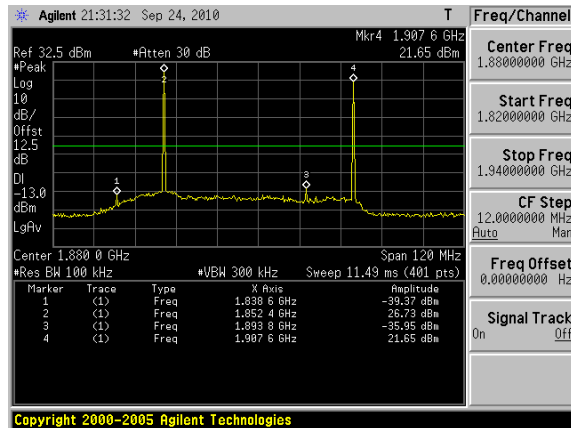


CH High
Output

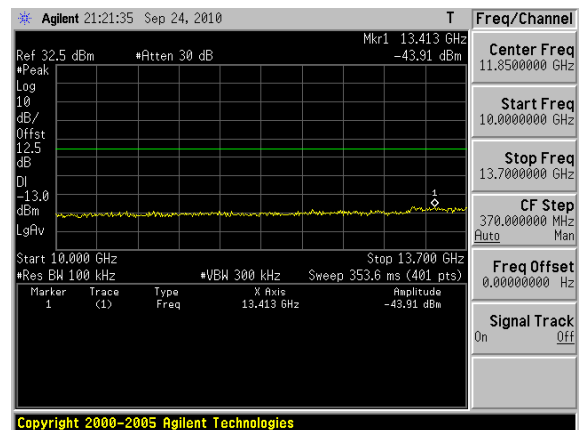
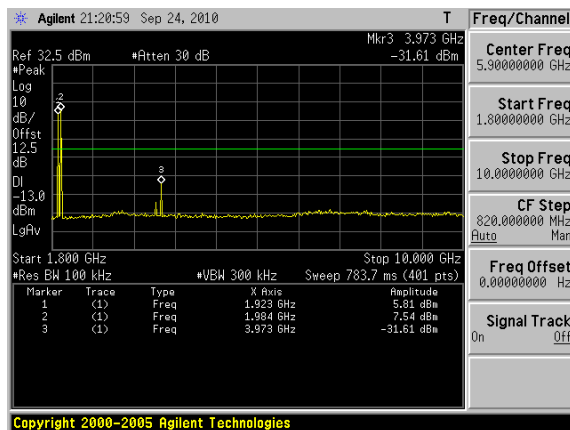
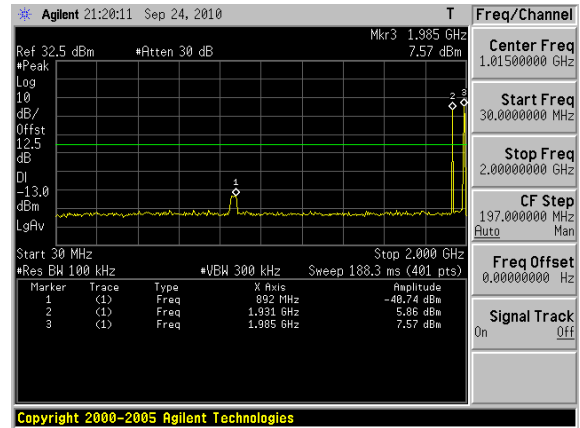
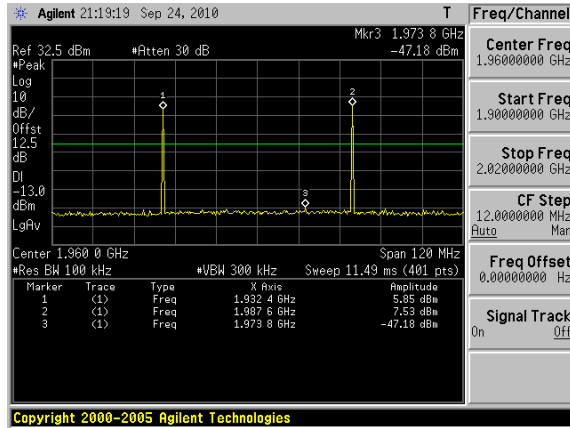


Inter-Modulation

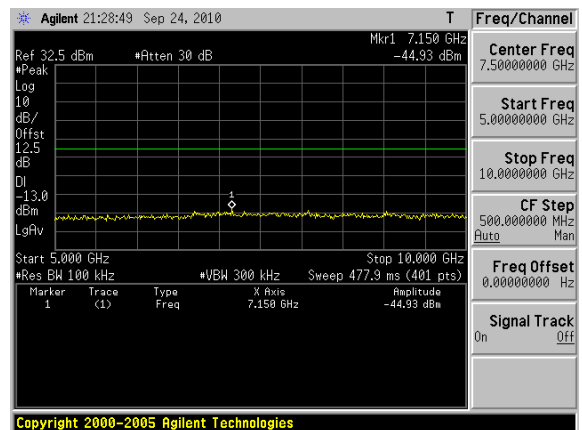
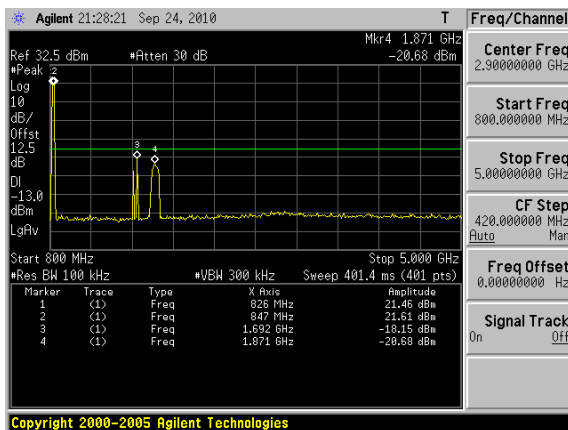
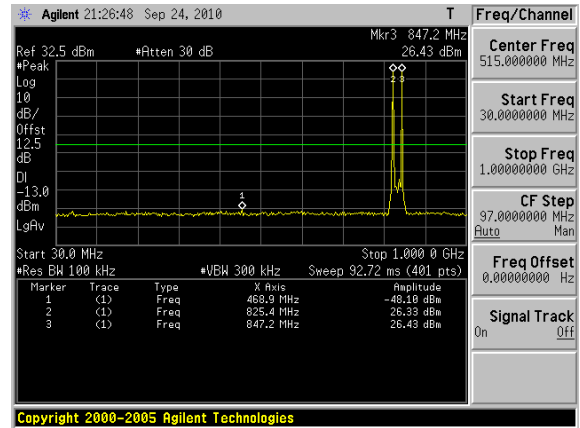
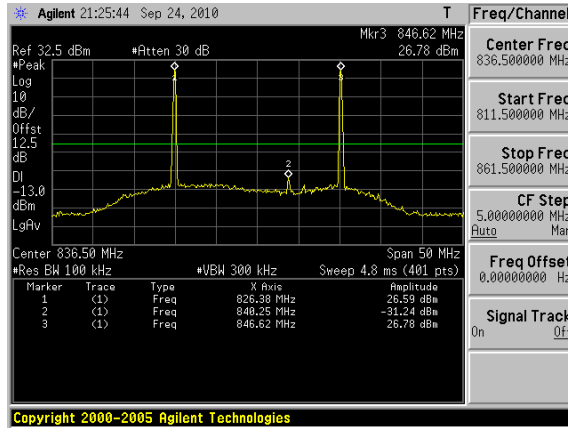
Mode 1: WCDMA Band II Uplink



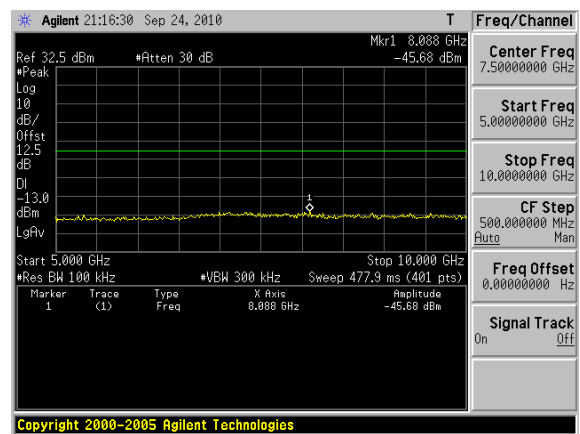
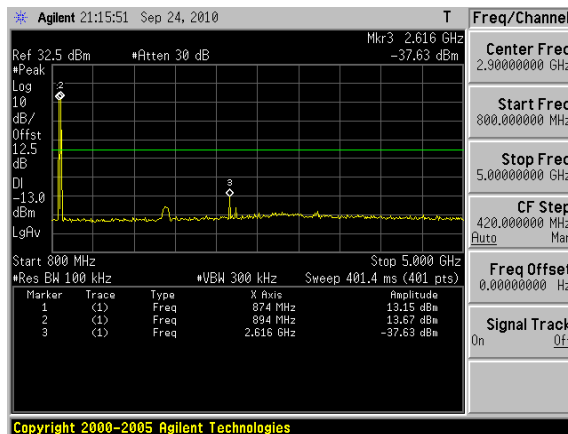
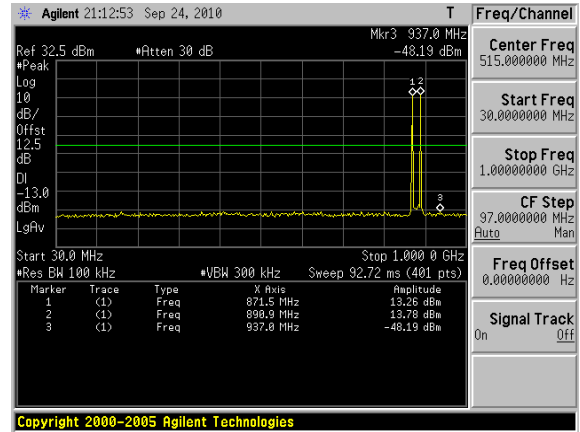
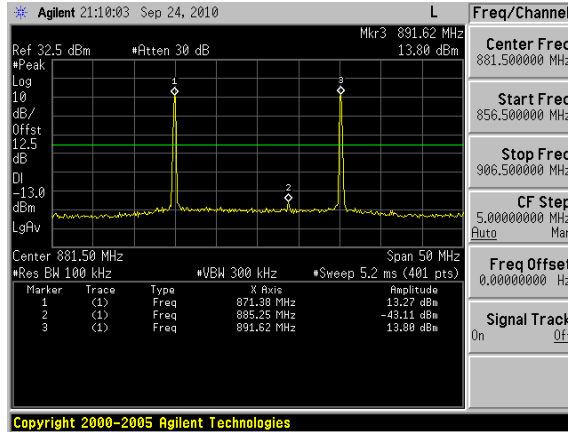
Mode 2: WCDMA Band II Downlink



Mode 3: WCDMA Band V Uplink



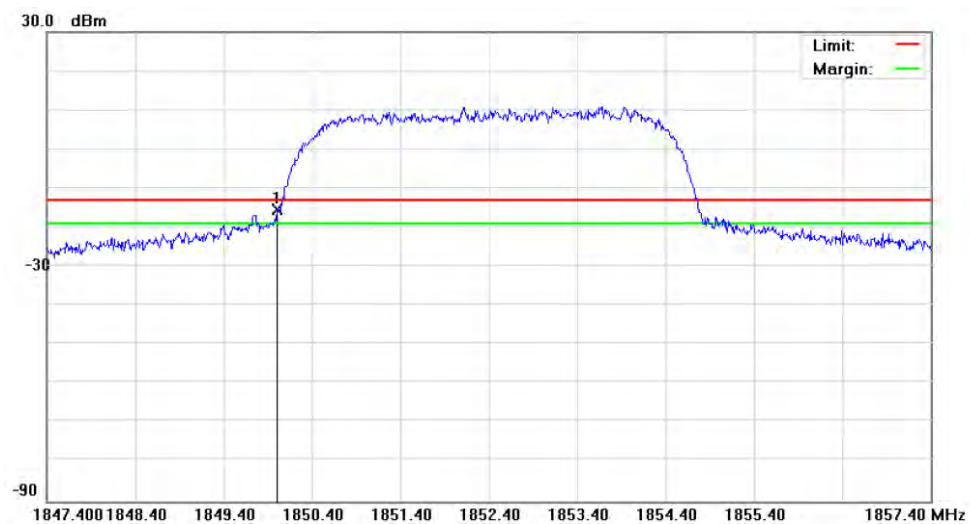
Mode 4: WCDMA Band V Downlink



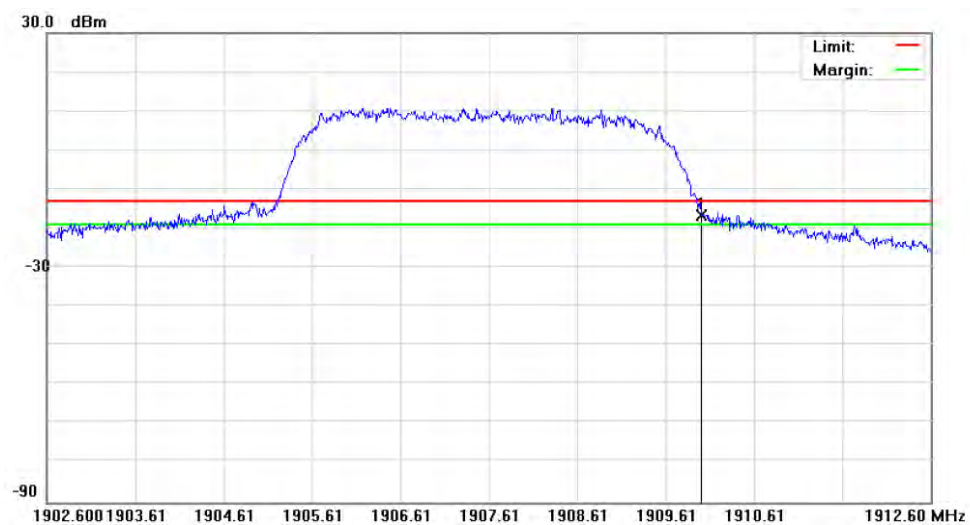
Band Edge

Model Number	Sphere				
Test Item	Band Edge				
Test Mode	Mode 1				
Date of Test	09/24/2010		Test Site	TE02	
Band	Channel	Frequency (MHz)	Bandwidth (dBm)	Limit (dBm)	Result
Lower	9262	1850.000	-15.60	-13	Pass
Higher	9538	1910.000	-16.58	-13	Pass

Lower Band

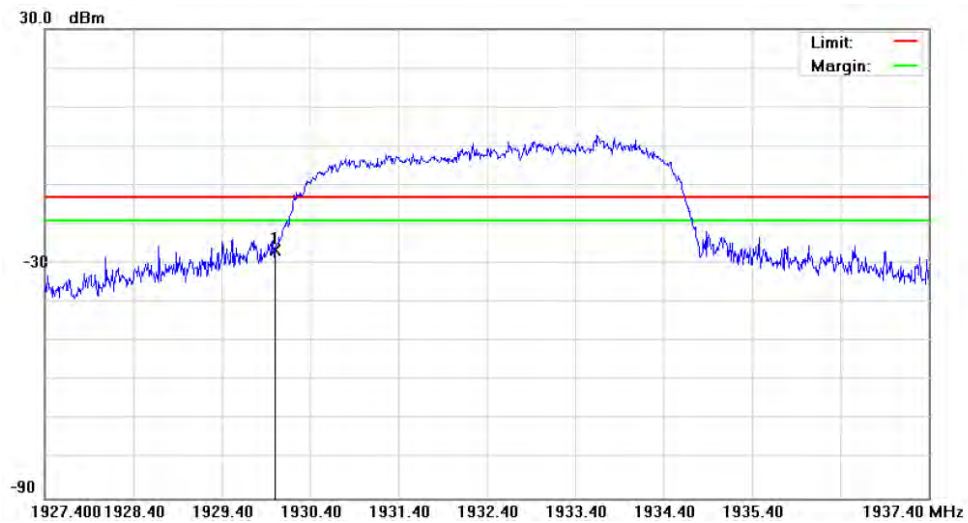


Higher Band

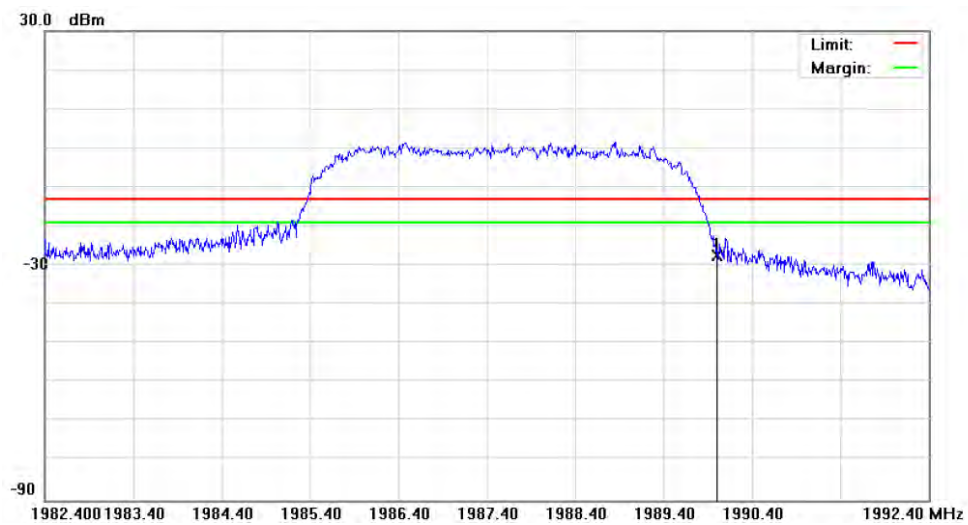


Model Number	Sphere				
Test Item	Band Edge				
Test Mode	Mode 2				
Date of Test	09/24/2010		Test Site	TE02	
Band	Channel	Frequency (MHz)	Bandwidth (dBm)	Limit (dBm)	Result
Lower	9662	1930.000	-26.56	-13	Pass
Higher	9938	1990.000	-27.59	-13	Pass

Lower Band



Higher Band

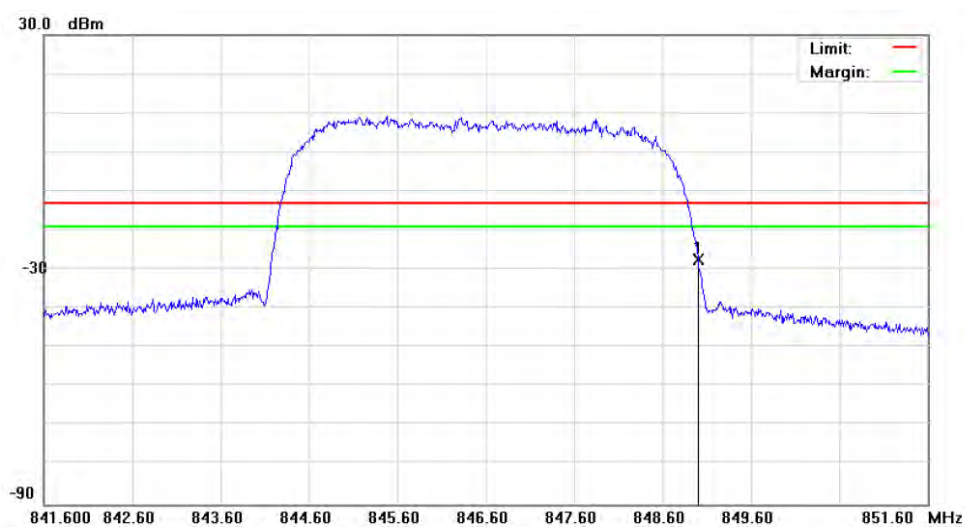


Model Number	Sphere				
Test Item	Band Edge				
Test Mode	Mode 3				
Date of Test	09/24/2010		Test Site	TE02	
Band	Channel	Frequency (MHz)	Bandwidth (dBm)	Limit (dBm)	Result
Lower	4132	824.0000	-26.66	-13	Pass
Higher	4233	849.0000	-27.44	-13	Pass

Lower Band

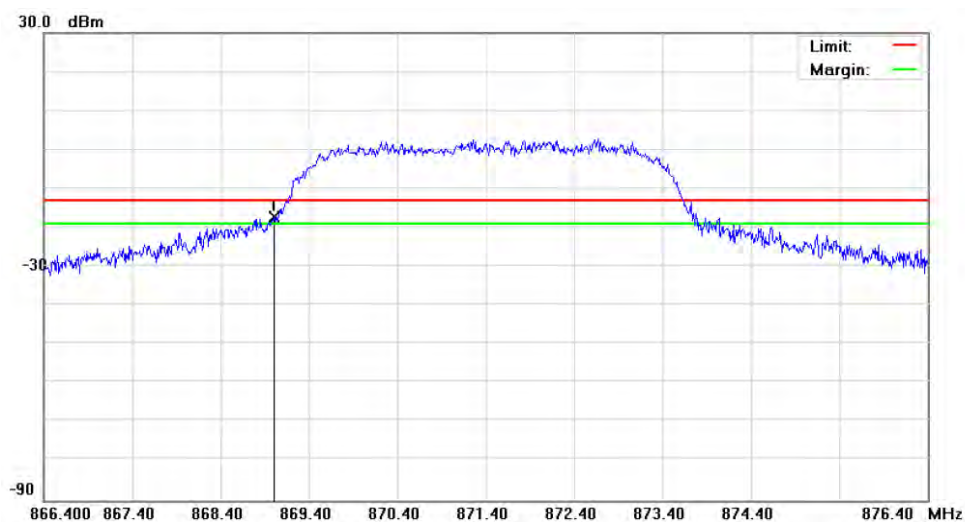


Higher Band

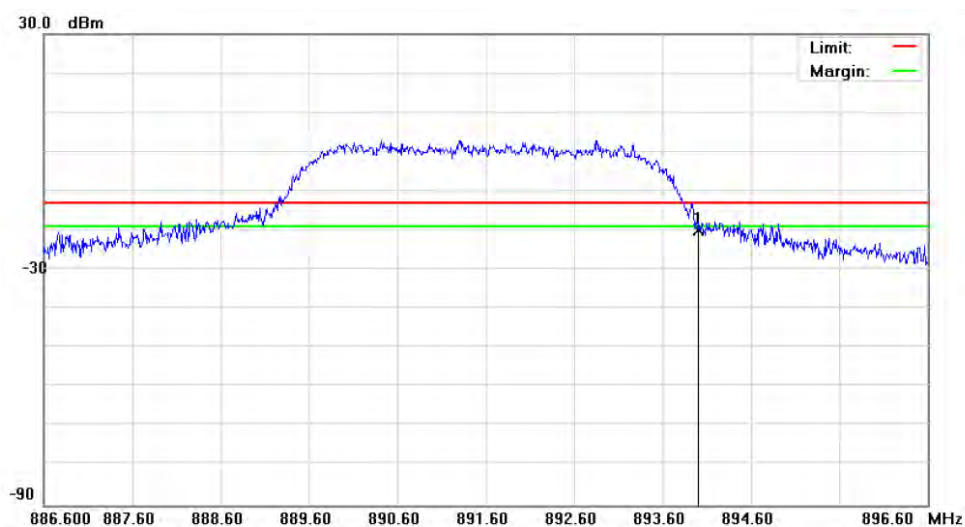


Model Number	Sphere				
Test Item	Band Edge				
Test Mode	Mode 4				
Date of Test	09/24/2010		Test Site	TE02	
Band	Channel	Frequency (MHz)	Bandwidth (dBm)	Limit (dBm)	Result
Lower	4357	869.000	-17.13	-13	Pass
Higher	4458	894.000	-19.85	-13	Pass

Lower Band



Higher Band



4 Conducted Spurious Emissions Test

4.1. Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

4.2. Test Instruments

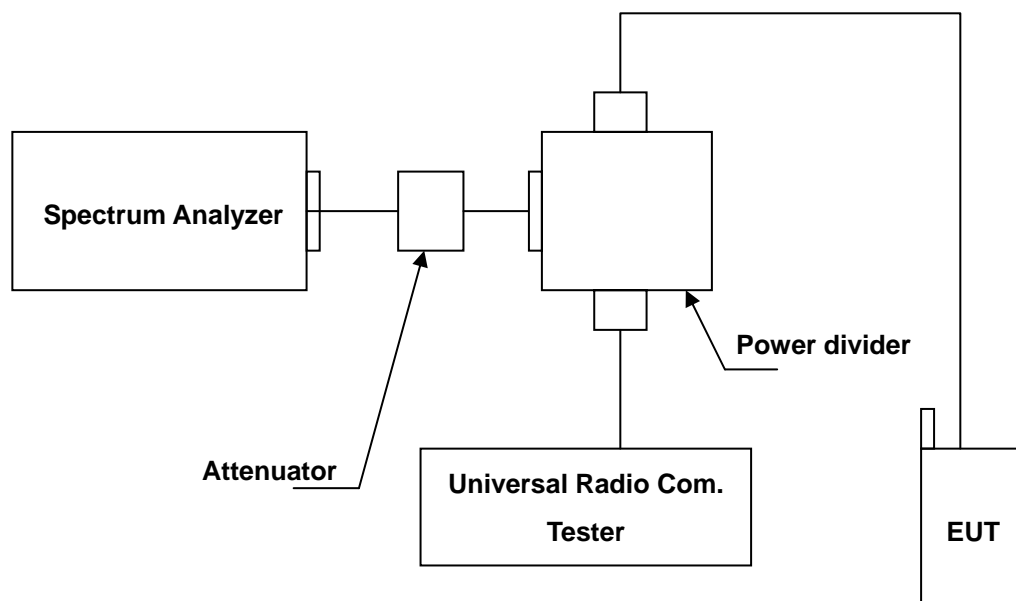
Describe	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/14/2009	(2)
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

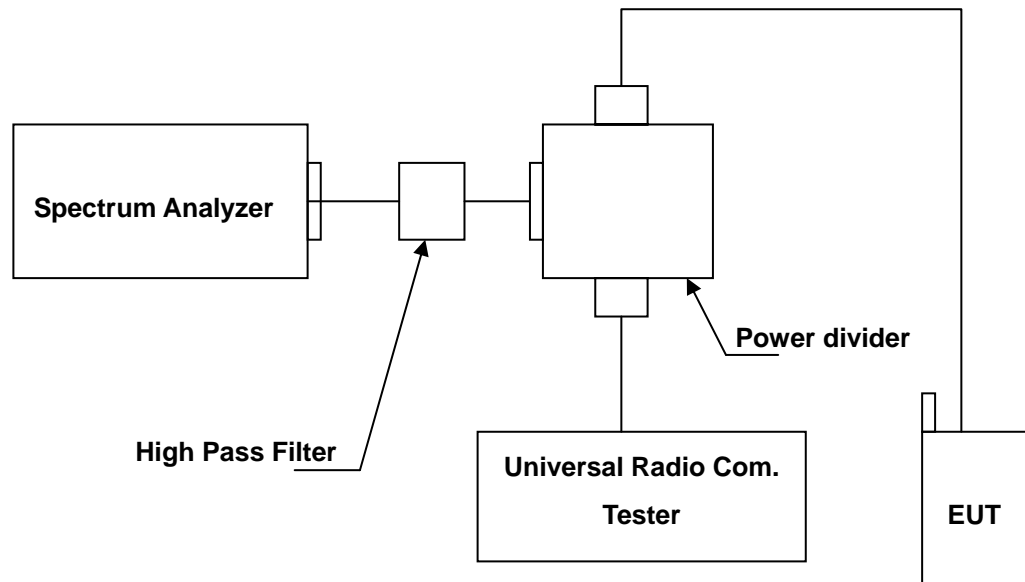
NOTE: N.C.R. = No Calibration Request.

4.3. Setup

Below 2.8GHz



Above 2.8GHz



4.4. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.
4. Test setting at GSM 850 RB>100 kHz, VB>100 kHz; PCS 1900 RB>1MHz, VB>1MHz.

4.5. Uncertainty

The measurement uncertainty is evaluated as ± 2.24 dB.

4.6. Test Result

Model Number	Sphere		
Test Item	Conducted Spurious Emissions		
Mode	Mode 1 / Mode 2 / Mode 3 / Mode 4		
Date of Test	09/24/2010	Test Site	TE02

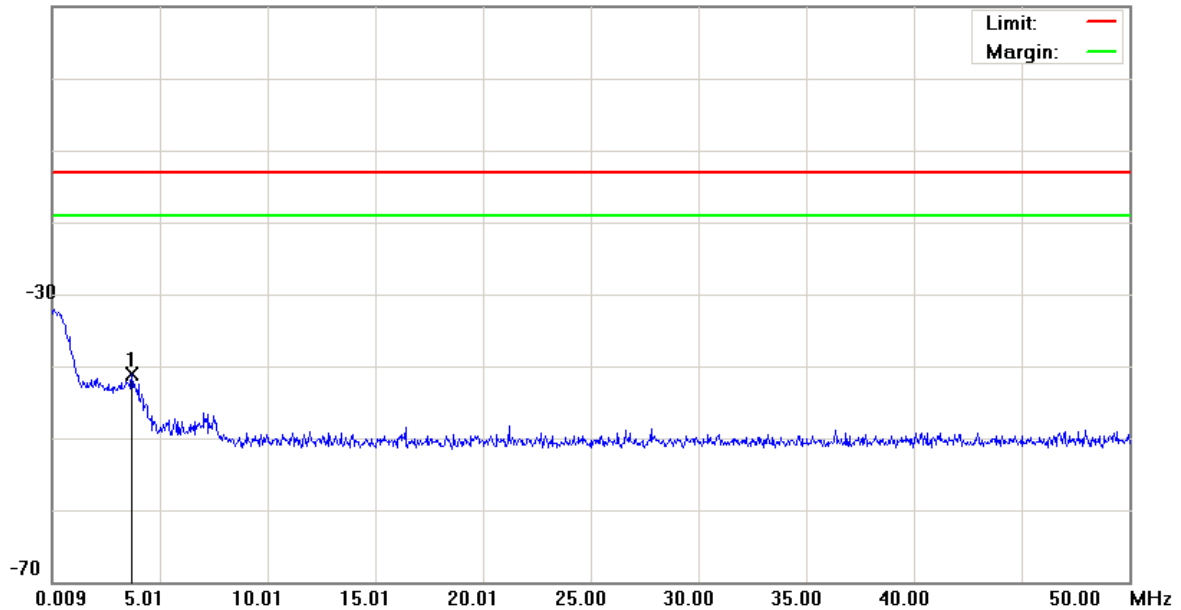
File :IVWA819(9262)

Data :#6

Date: 2010/9/24

Time: PM 04:35:39

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 1

Note: CH9262

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	3.7083	-54.29	13.17	-41.12	-13.00	-28.12	peak		

*:Maximum data x:Over limit !:over margin

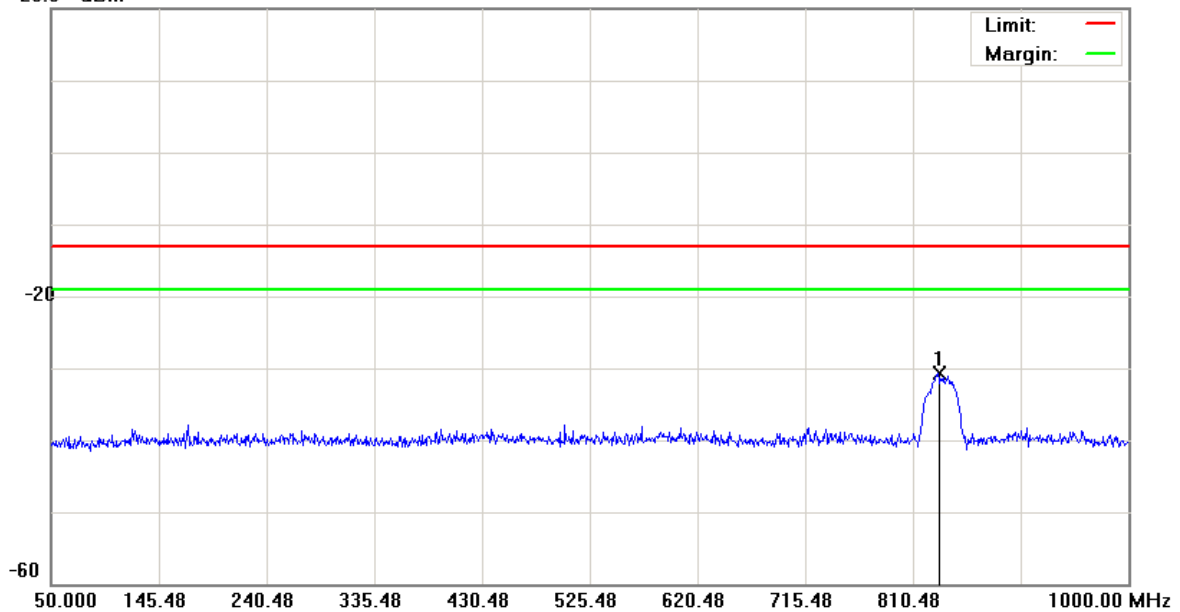
File: IVWA819(9262)_tmp

Data :#3

Date: 2010/9/24

Time: PM 04:36:03

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

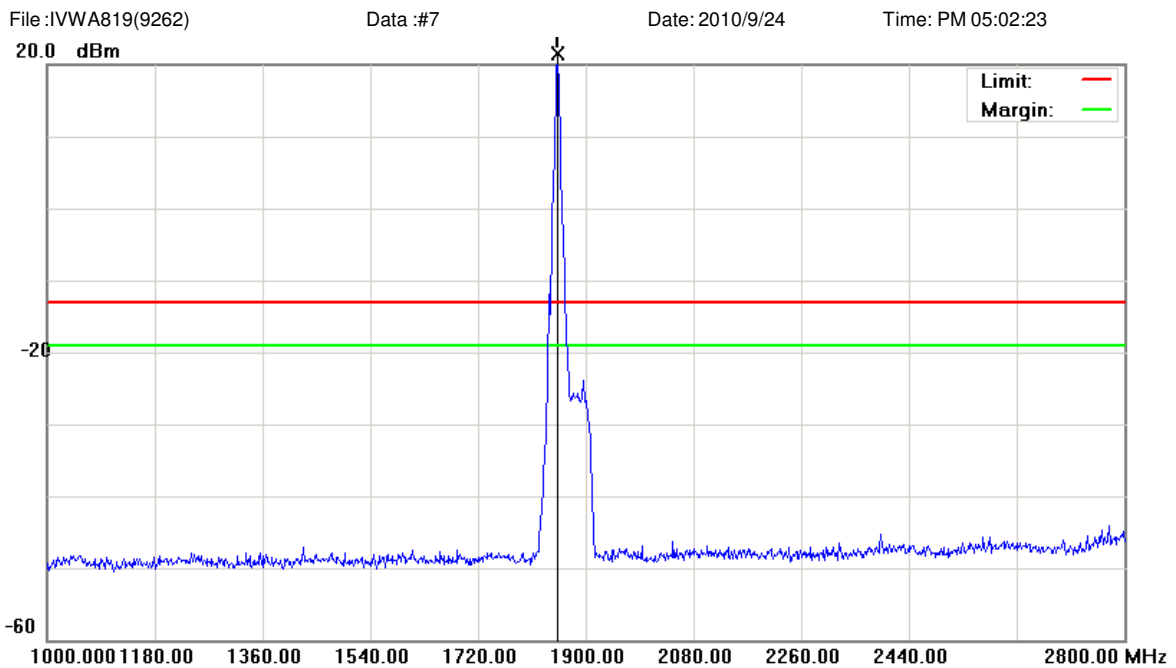
M/N: Sphere

Mode: 1

Note: CH9262

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	832.3250	-43.91	13.18	-30.73	-13.00	-17.73	peak		

*:Maximum data x:Over limit !:over margin



Site: : RF Conducted Polarization: **Conducted po** Temperature: 26 °C
 Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55 %
 EUT: Wireless Inner Structure Distance: RBW: 1000 MHz VBW: 1000 MHz
 M/N: Sphere
 Mode: 1
 Note: CH9262

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	1853.200	17.31	4.28	21.59	-13.00	34.59	peak		

*:Maximum data x:Over limit !:over margin

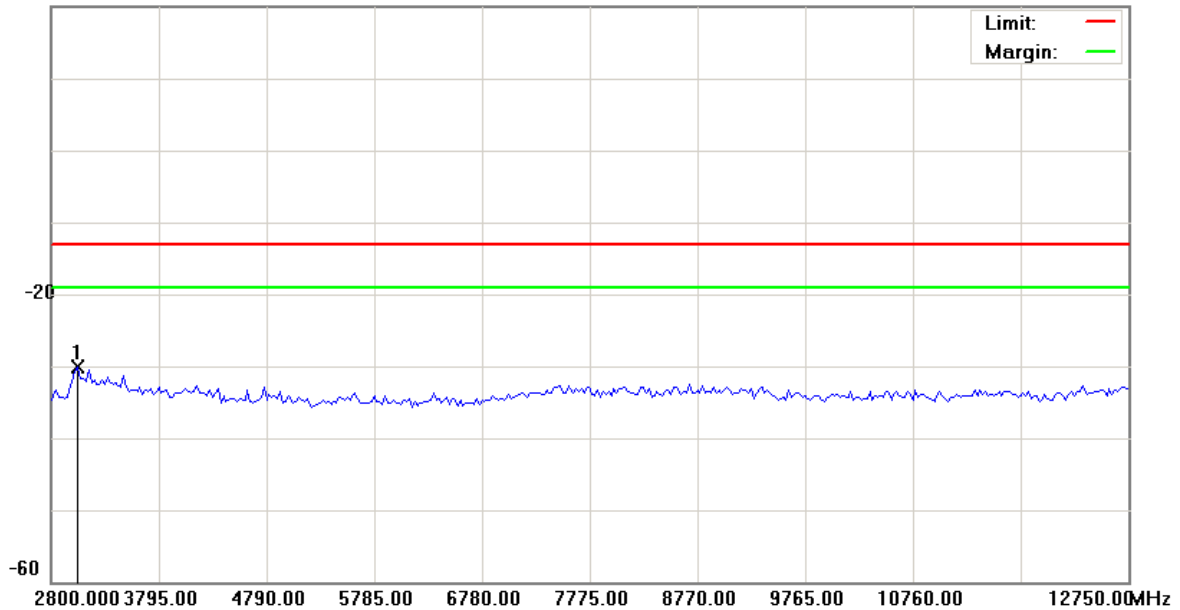
File :IVWA819(9262)

Data :#8

Date: 2010/9/24

Time: PM 05:19:14

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 1

Note: CH9262

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	3048.750	-35.60	5.47	-30.13	-13.00	-17.13	peak		

*:Maximum data x:Over limit !:over margin

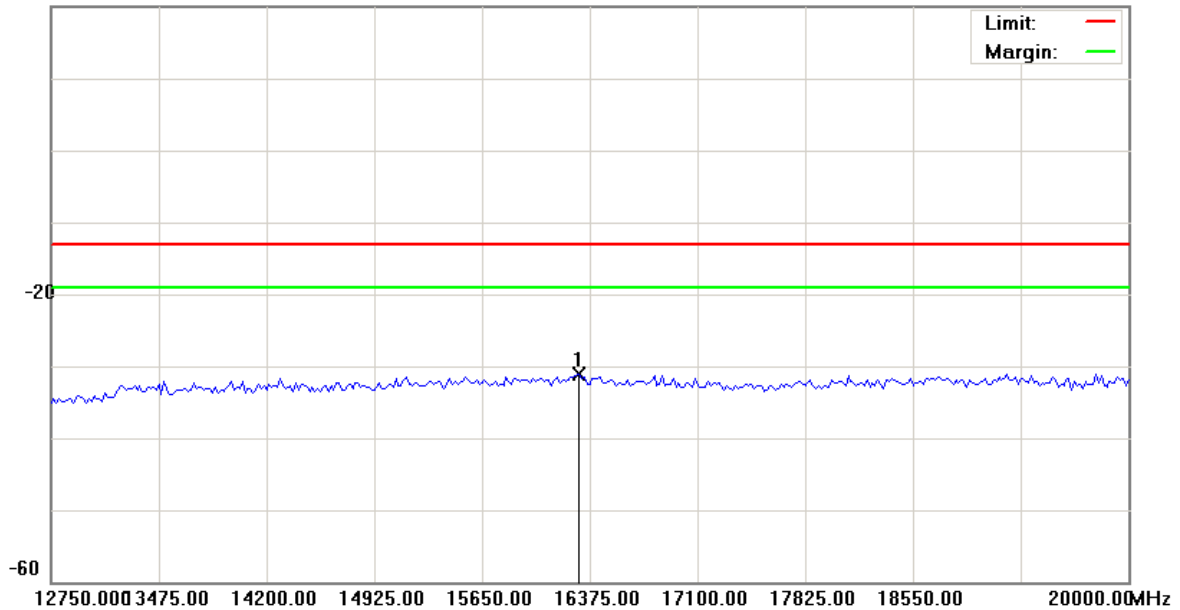
File :IVWA819(9262)

Data :#9

Date: 2010/9/24

Time: PM 05:19:39

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 1

Note: CH9262

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	16302.500	-37.43	6.38	-31.05	-13.00	-18.05	peak		

*:Maximum data x:Over limit !:over margin

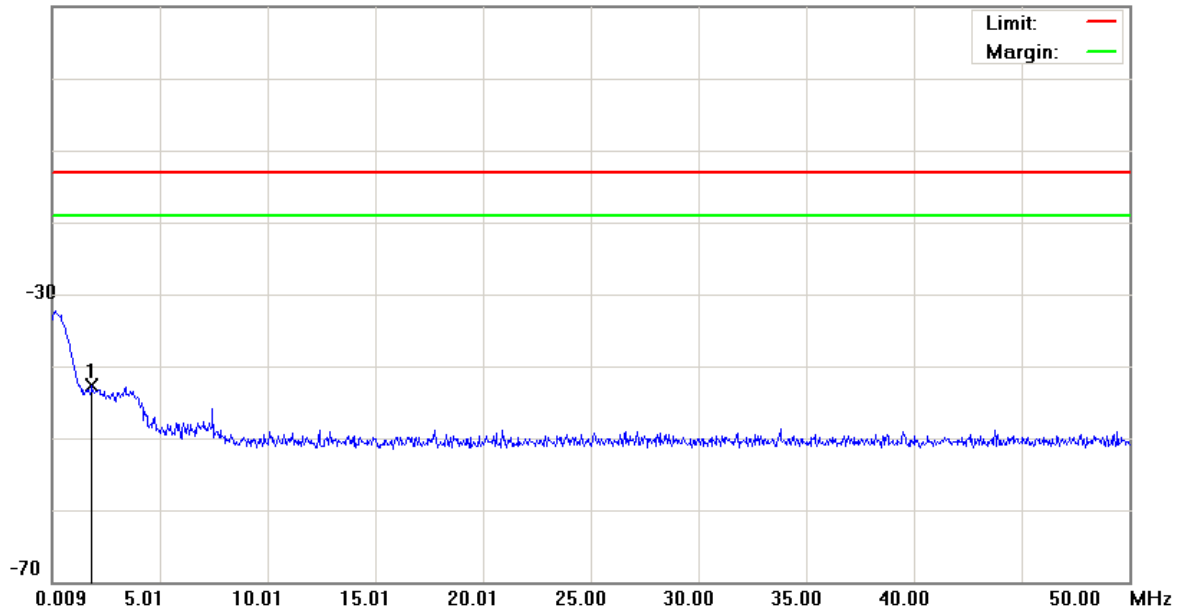
File :IVWA819(9400)

Data :#6

Date: 2010/9/24

Time: PM 04:36:58

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 1

Note: CH9400

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	1.8587	-55.58	12.82	-42.76	-13.00	-29.76	peak		Comment

*:Maximum data x:Over limit !:over margin

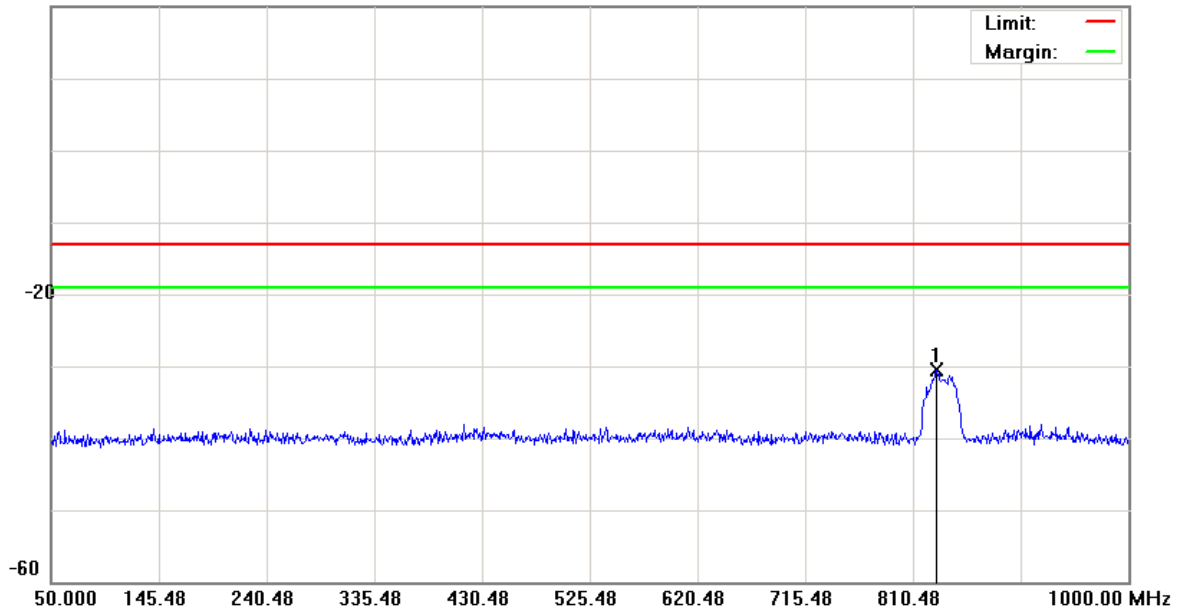
File :IVWA819(9400)

Data :#7

Date: 2010/9/24

Time: PM 04:37:22

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

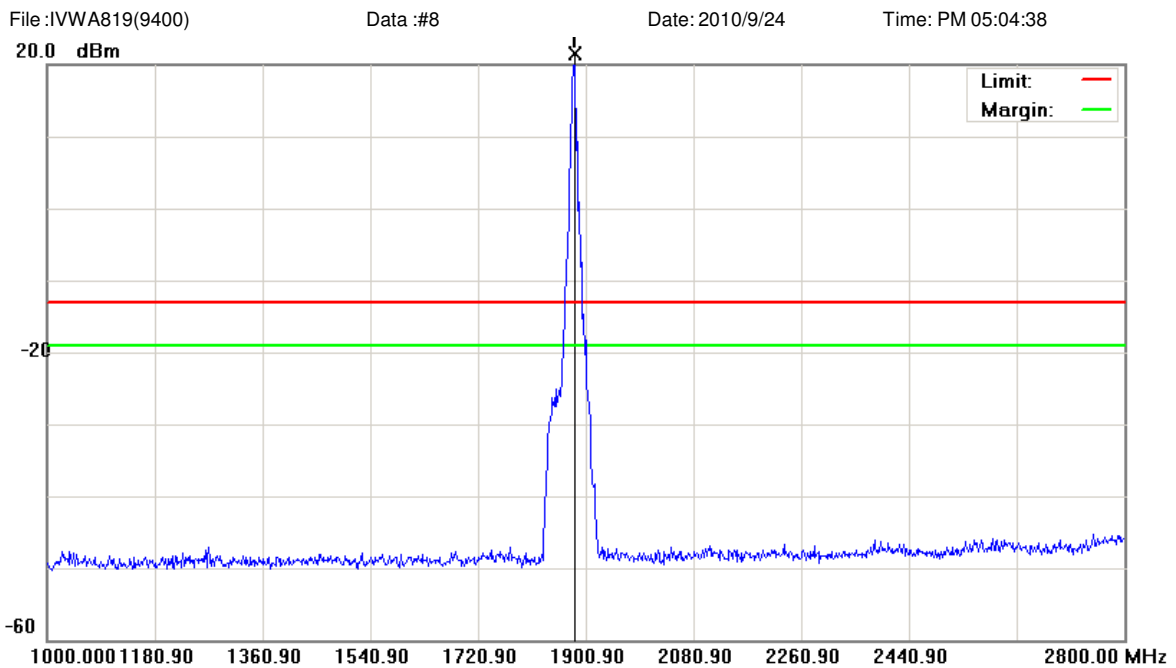
M/N: Sphere

Mode: 1

Note: CH9400

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	830.9000	-43.70	13.18	-30.52	-13.00	-17.52	peak		

*:Maximum data x:Over limit !:over margin



Site: : RF Conducted	Polarization: Conducted po	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55 %
EUT: Wireless Inner Structure	Distance:	RBW: 1000 MHz VBW: 1000 MHz
M/N: Sphere		
Mode: 1		
Note: CH9400		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	1881.100	16.81	4.74	21.55	-13.00	34.55	peak		Comment

*:Maximum data x:Over limit !:over margin

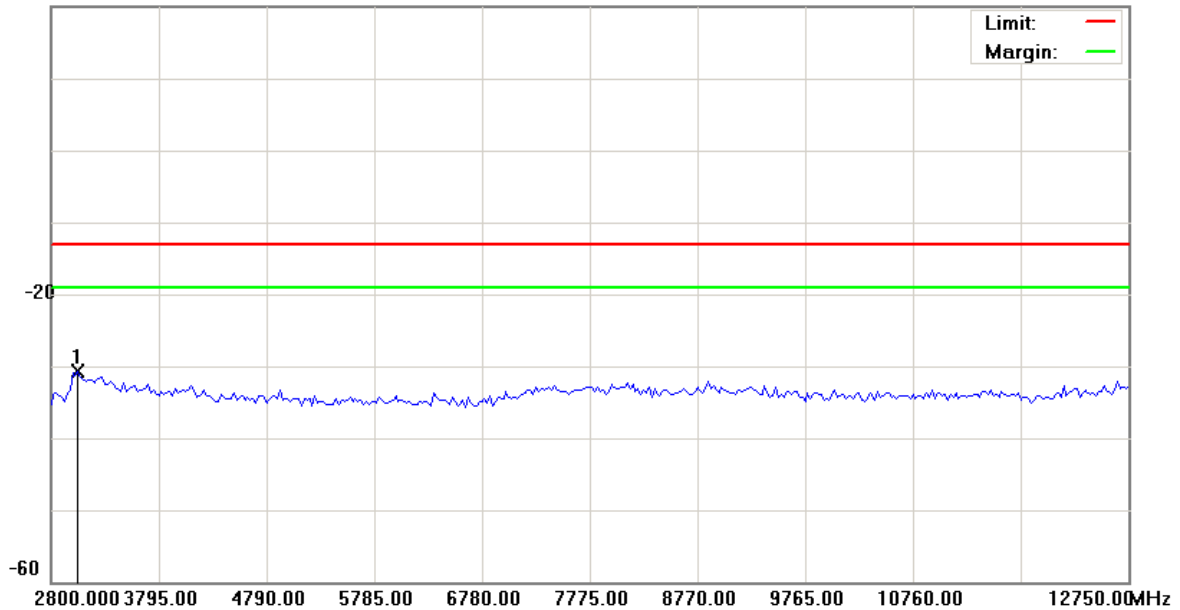
File :IVWA819(9400)

Data :#9

Date: 2010/9/24

Time: PM 05:23:07

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 1

Note: CH9400

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	3048.750	-36.19	5.47	-30.72	-13.00	-17.72	peak		Comment

*:Maximum data x:Over limit !:over margin

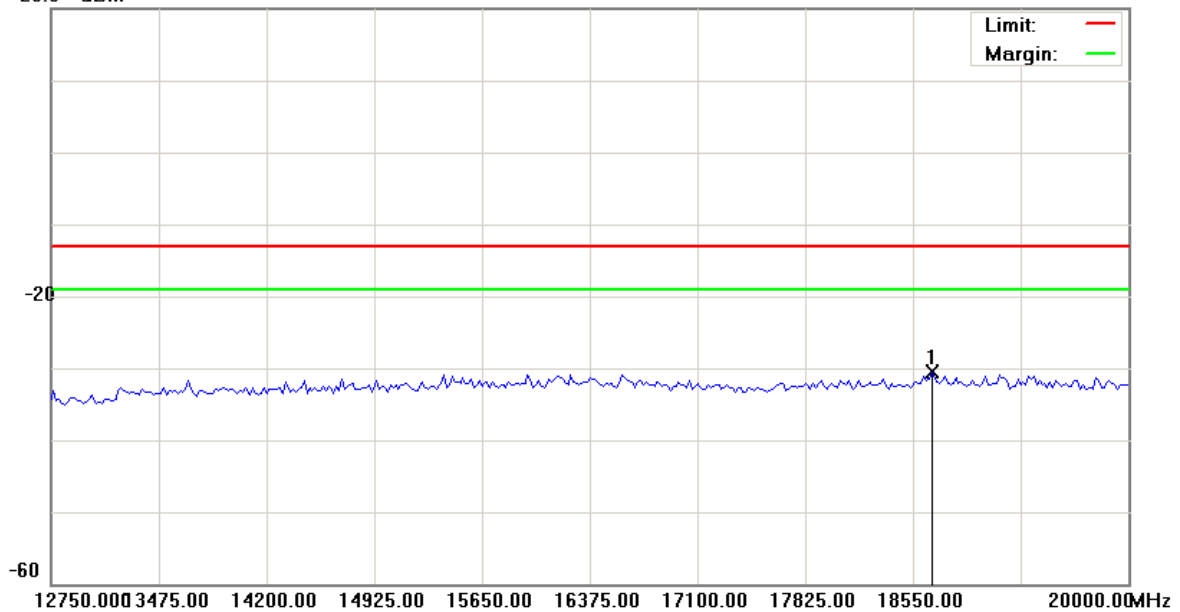
File: IVWA819(9400)

Data: #10

Date: 2010/9/24

Time: PM 05:23:32

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 1

Note: CH9400

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	18676.875	-37.55	7.06	-30.49	-13.00	-17.49	peak		Comment

*:Maximum data x:Over limit !:over margin

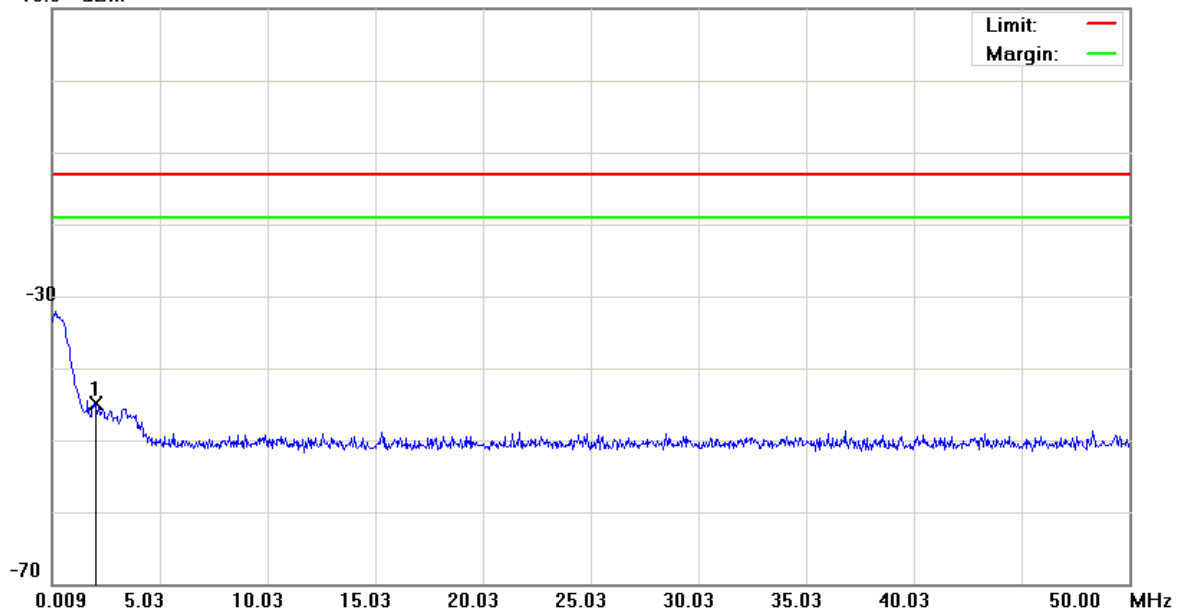
File :IVWA819(9538)

Data :#6

Date: 2010/9/24

Time: PM 04:38:15

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 1

Note: CH9538

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	1.9836	-58.02	13.14	-44.88	-13.00	-31.88	peak		Comment

*:Maximum data x:Over limit !:over margin

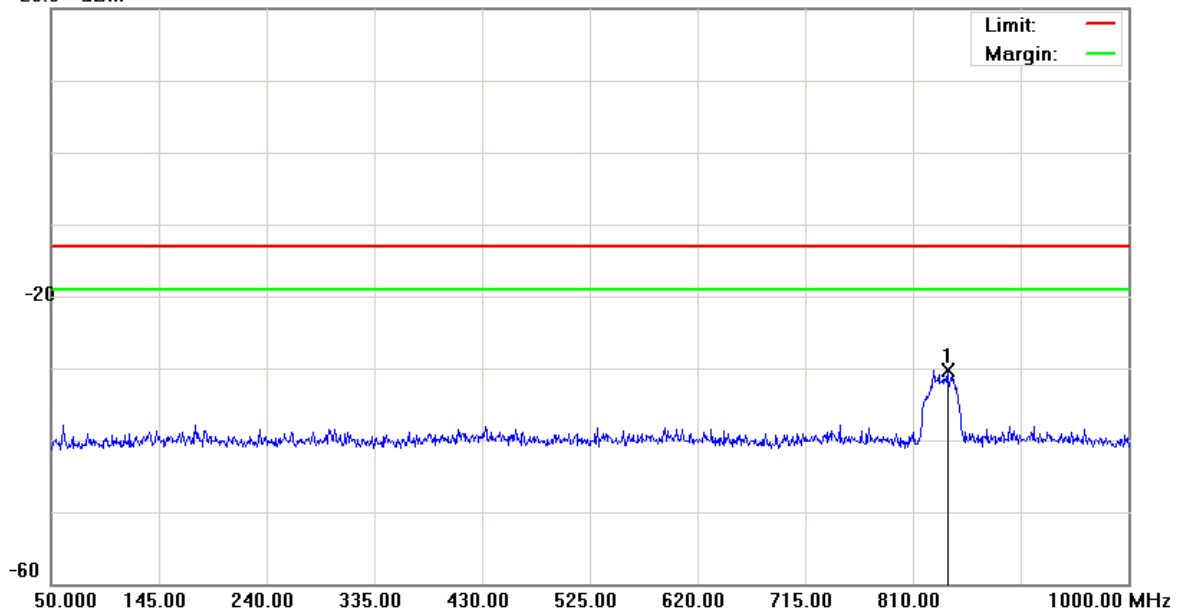
File :IVWA819(9538)

Data :#7

Date: 2010/9/24

Time: PM 04:38:39

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

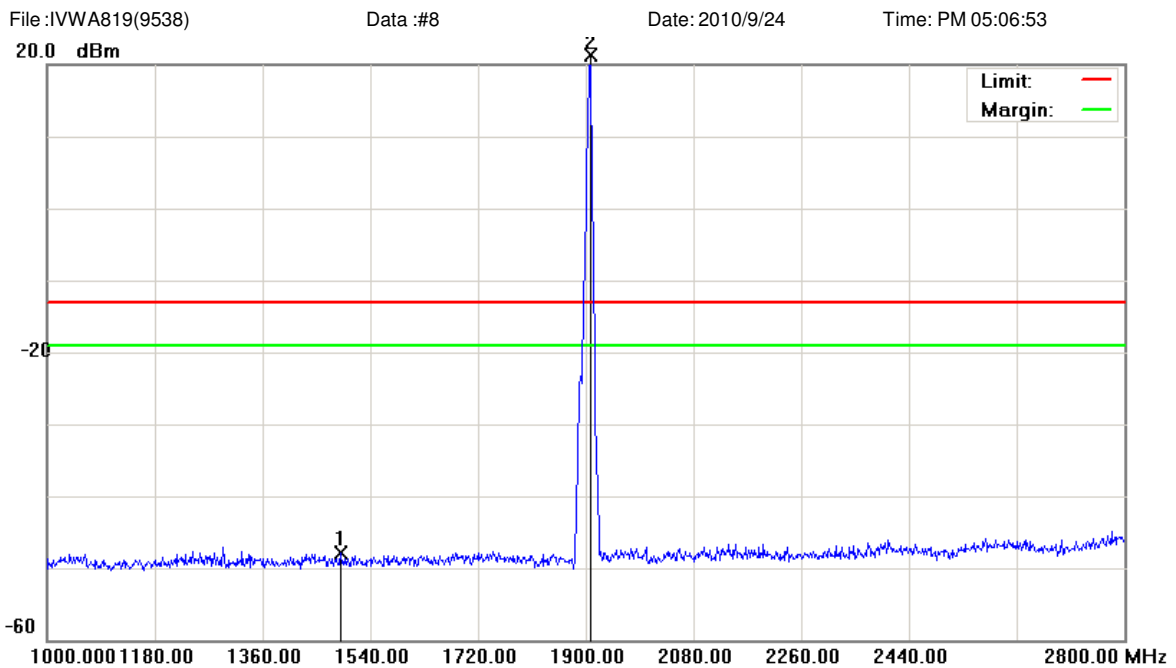
M/N: Sphere

Mode: 1

Note: CH9538

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	840.8750	-43.42	13.22	-30.20	-13.00	-17.20	peak		

*:Maximum data x:Over limit !:over margin



Site: : RF Conducted Polarization: **Conducted po** Temperature: 26 °C
 Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55 %
 EUT: Wireless Inner Structure Distance: RBW: 1000 MHz VBW: 1000 MHz
 M/N: Sphere
 Mode: 1
 Note: CH9538

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		1489.600	-52.26	4.36	-47.90	-13.00	-34.90	peak		
2	*	1906.300	15.33	6.05	21.38	-13.00	34.38	peak		TX

*:Maximum data x:Over limit !:over margin

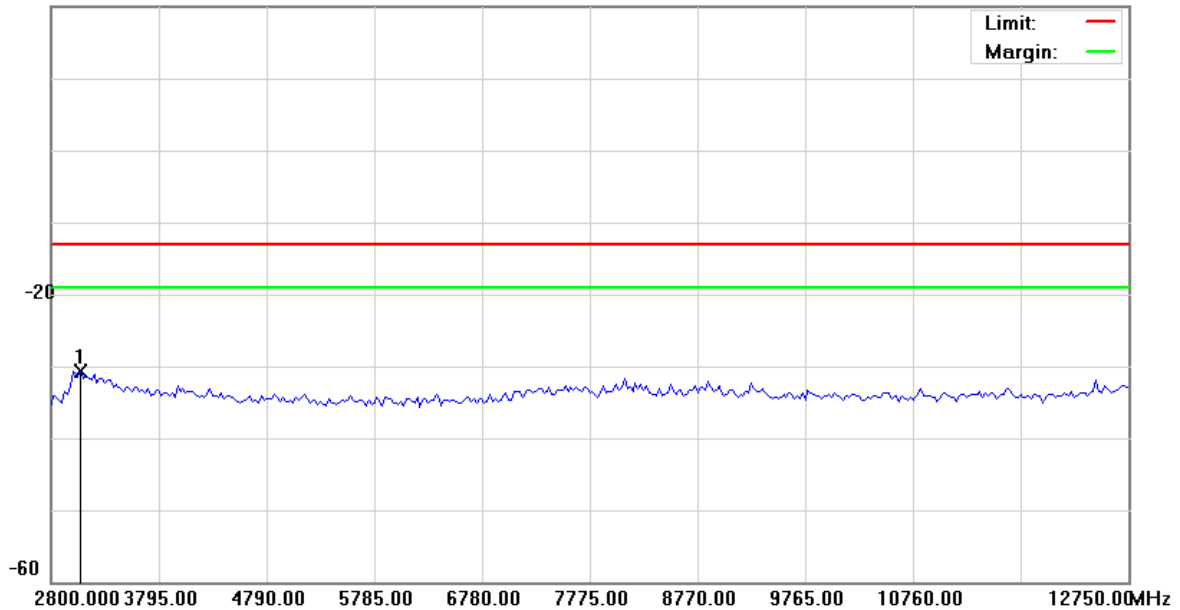
File: IVWA819(9538)

Data: #9

Date: 2010/9/24

Time: PM 05:26:06

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 1

Note: CH9538

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	3073.625	-36.12	5.40	-30.72	-13.00	-17.72	peak		Comment

*:Maximum data x:Over limit !:over margin

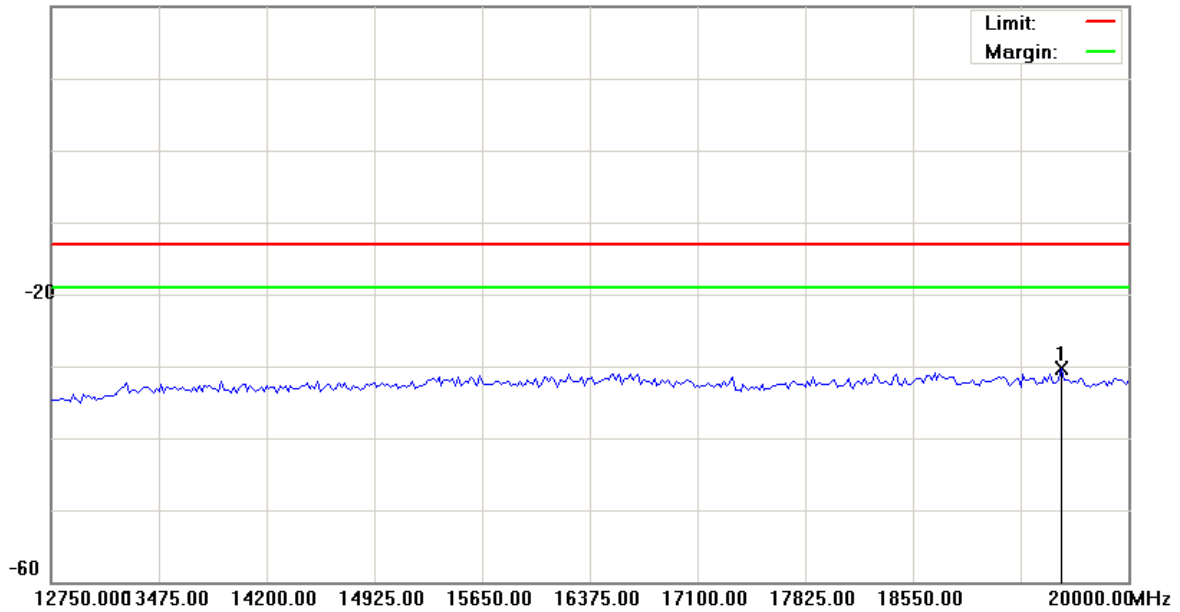
File :IVWA819(9538)

Data :#10

Date: 2010/9/24

Time: PM 05:26:32

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 1

Note: CH9538

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	19546.875	-37.52	7.31	-30.21	-13.00	-17.21	peak		

*:Maximum data x:Over limit !:over margin

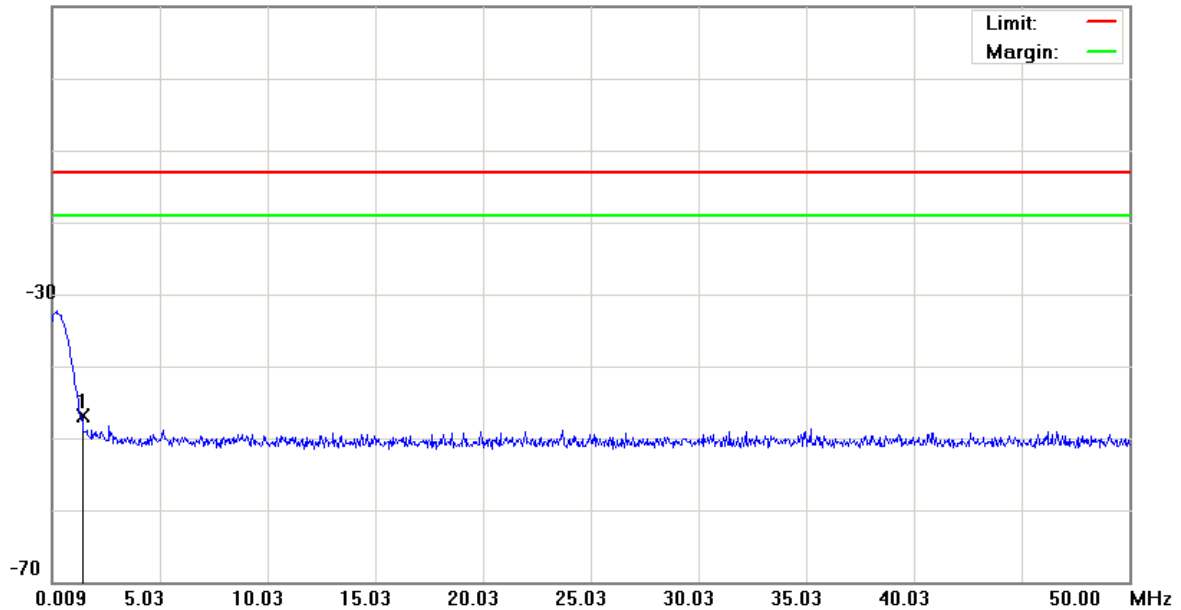
File :IVWA819(9662)

Data :#1

Date: 2010/9/24

Time: PM 06:10:28

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9662

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	1.3837	-59.54	12.65	-46.89	-13.00	-33.89	peak		Comment

*:Maximum data x:Over limit !:over margin

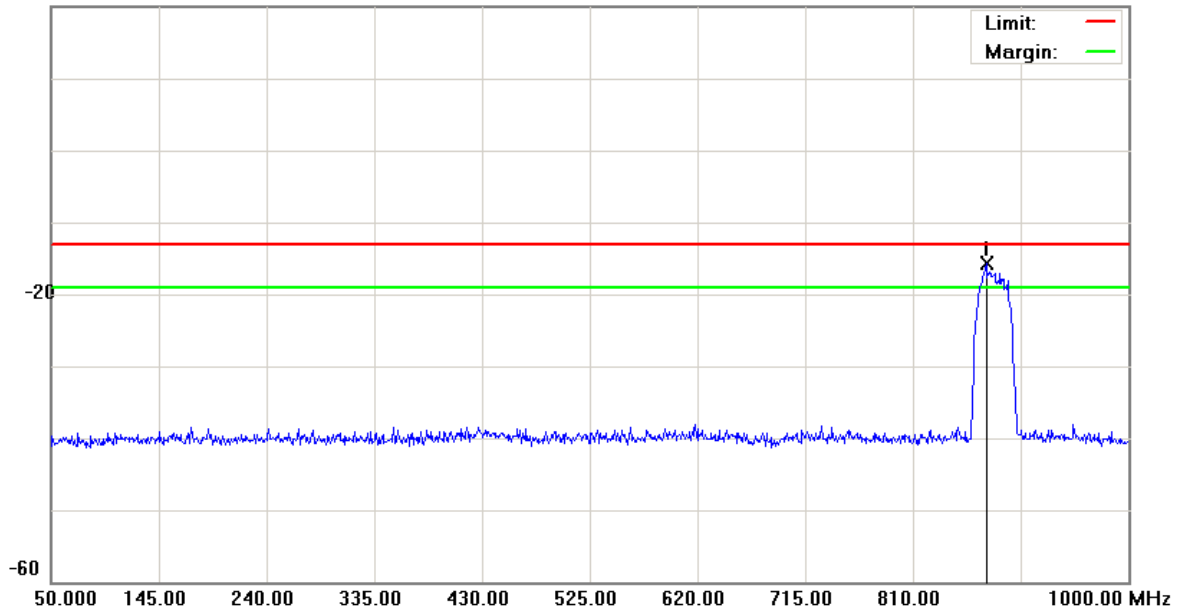
File :IVWA819(9662)

Data :#2

Date: 2010/9/24

Time: PM 06:10:53

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9662

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	874.6000	-29.06	13.27	-15.79	-13.00	-2.79	peak		

*:Maximum data x:Over limit !:over margin

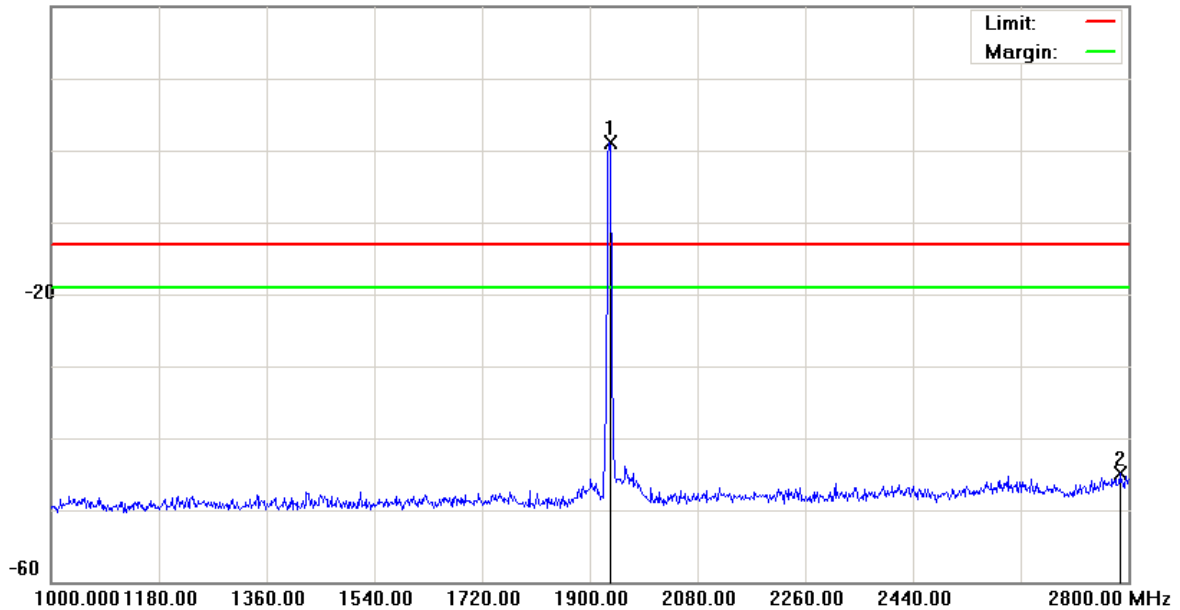
File :IVWA819(9662)

Data :#3

Date: 2010/9/24

Time: PM 06:11:23

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9662

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1933.300	-3.62	4.66	1.04	-13.00	14.04	peak		TX
2		2786.500	-50.83	5.89	-44.94	-13.00	-31.94	peak		

*:Maximum data x:Over limit !:over margin

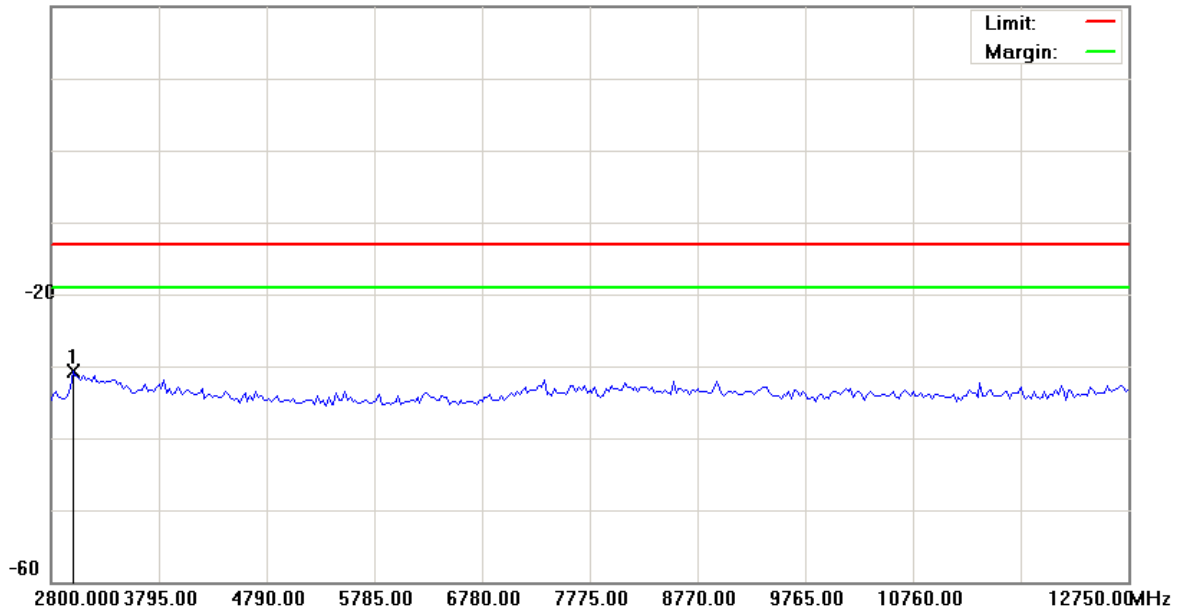
File :IVWA819(9662)

Data :#4

Date: 2010/9/24

Time: PM 06:24:10

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9662

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	2999.000	-36.25	5.48	-30.77	-13.00	-17.77	peak		Comment

*:Maximum data x:Over limit !:over margin

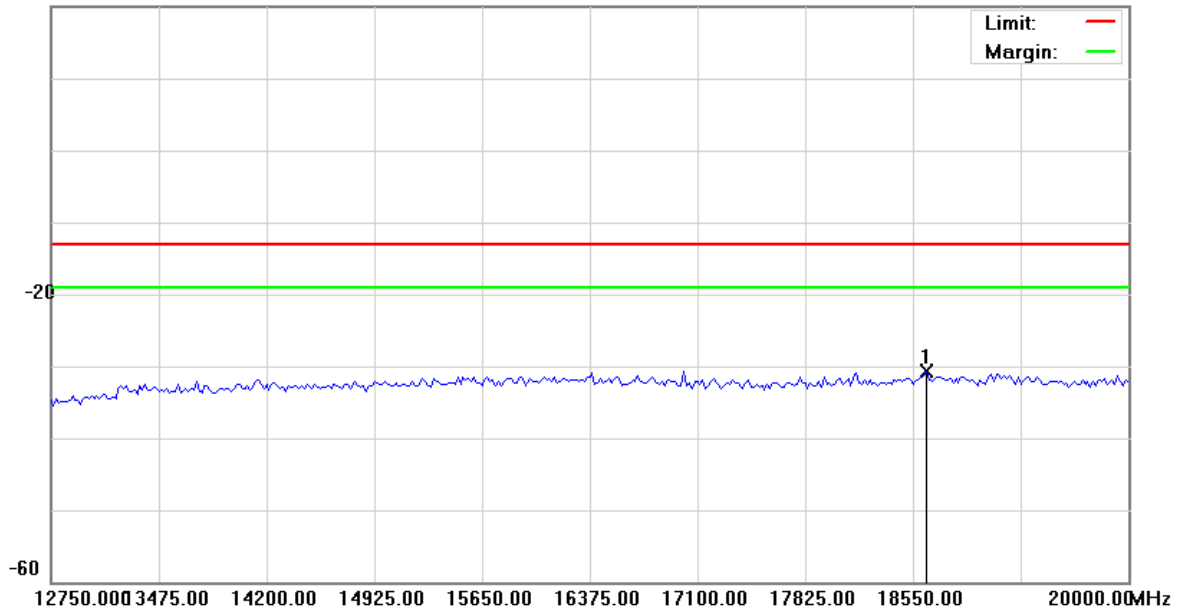
File :IVWA819(9662)

Data :#5

Date: 2010/9/24

Time: PM 06:24:35

20.0 dBm



Site: : RF Conducted

Polarization: Conducted po

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9662

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	18640.625	-37.72	7.05	-30.67	-13.00	-17.67	peak		Comment

*:Maximum data x:Over limit !:over margin

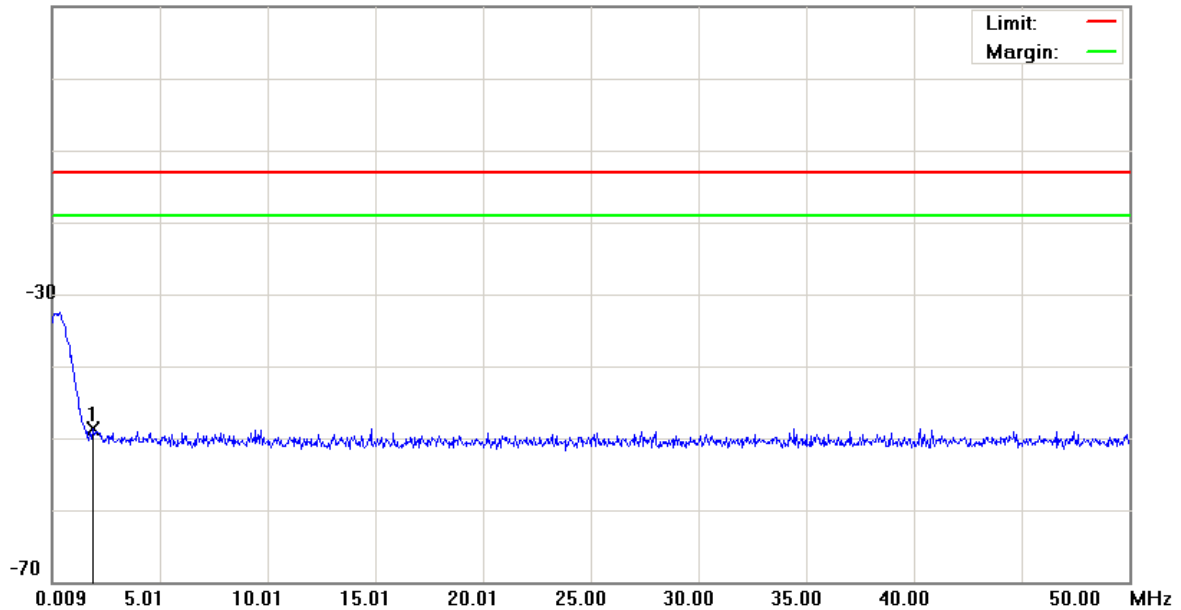
File :IVWA819(9800)

Data :#1

Date: 2010/9/24

Time: PM 06:15:30

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9800

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	1.9087	-61.66	12.95	-48.71	-13.00	-35.71	peak		

*:Maximum data x:Over limit !:over margin

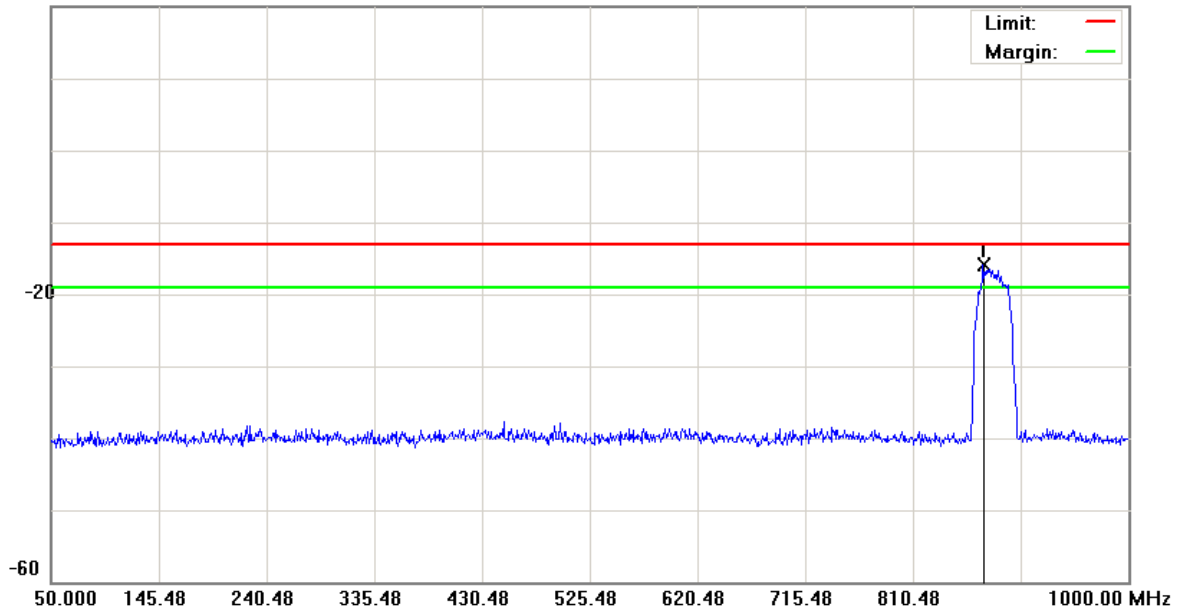
File :IVWA819(9800)

Data :#2

Date: 2010/9/24

Time: PM 06:15:54

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9800

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	872.2250	-29.26	13.27	-15.99	-13.00	-2.99	peak		

*:Maximum data x:Over limit !:over margin

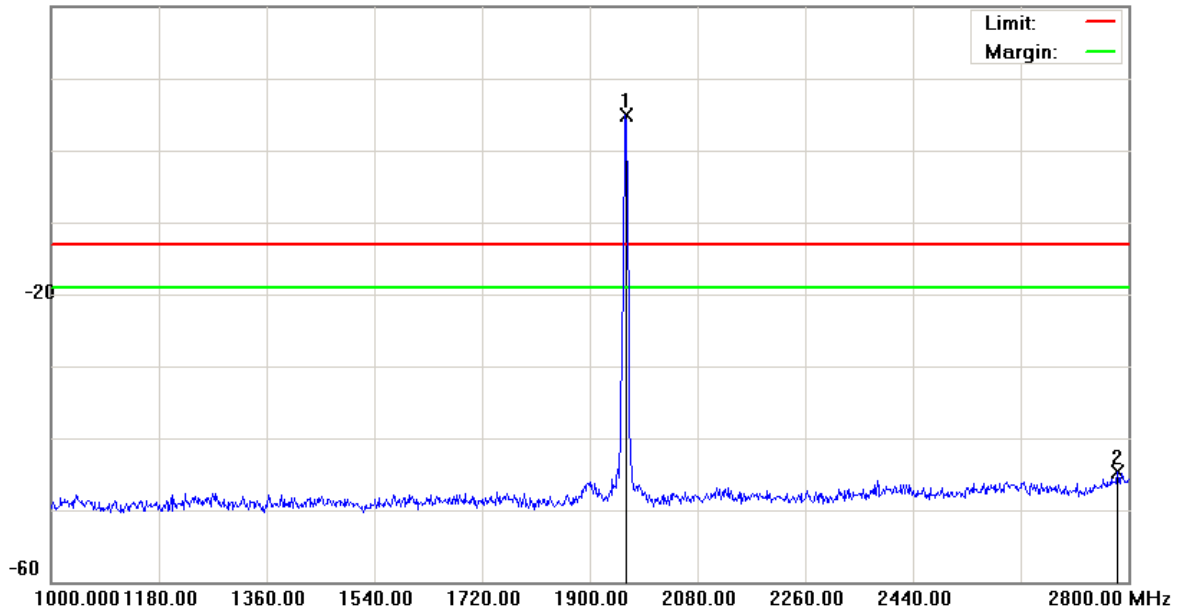
File :IVWA819(9800)

Data :#3

Date: 2010/9/24

Time: PM 06:16:39

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9800

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1960.300	0.10	4.73	4.83	-13.00	17.83	peak		TX
2		2782.000	-50.62	5.88	-44.74	-13.00	-31.74	peak		

*:Maximum data x:Over limit !:over margin

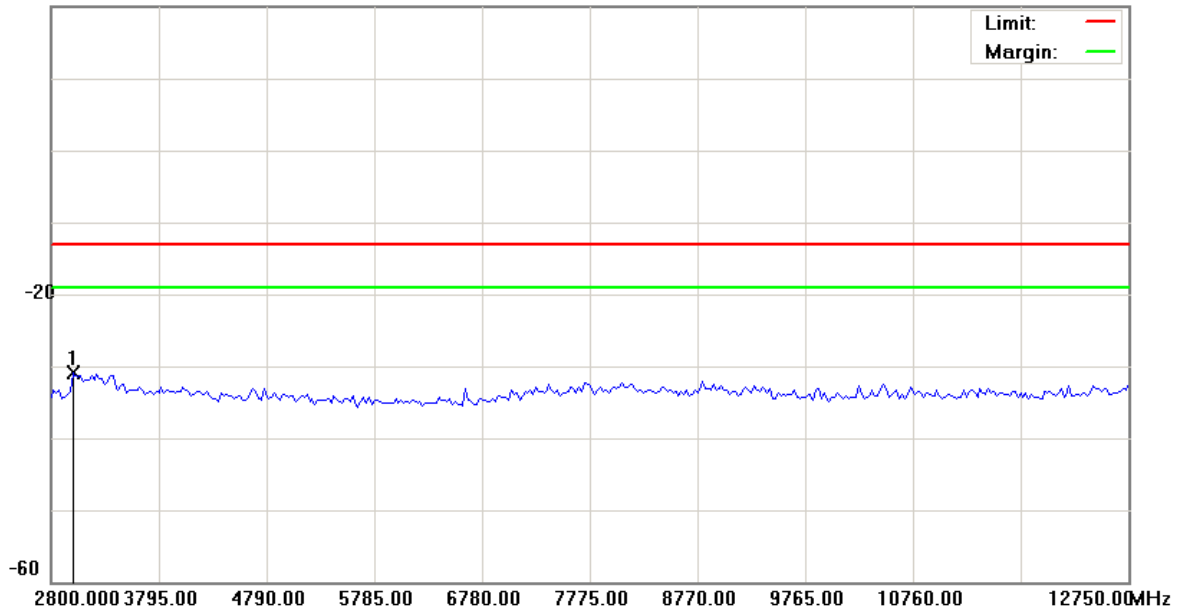
File :IVWA819(9800)

Data :#4

Date: 2010/9/24

Time: PM 06:22:43

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9800

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	2999.000	-36.44	5.48	-30.96	-13.00	-17.96	peak		

*:Maximum data x:Over limit !:over margin

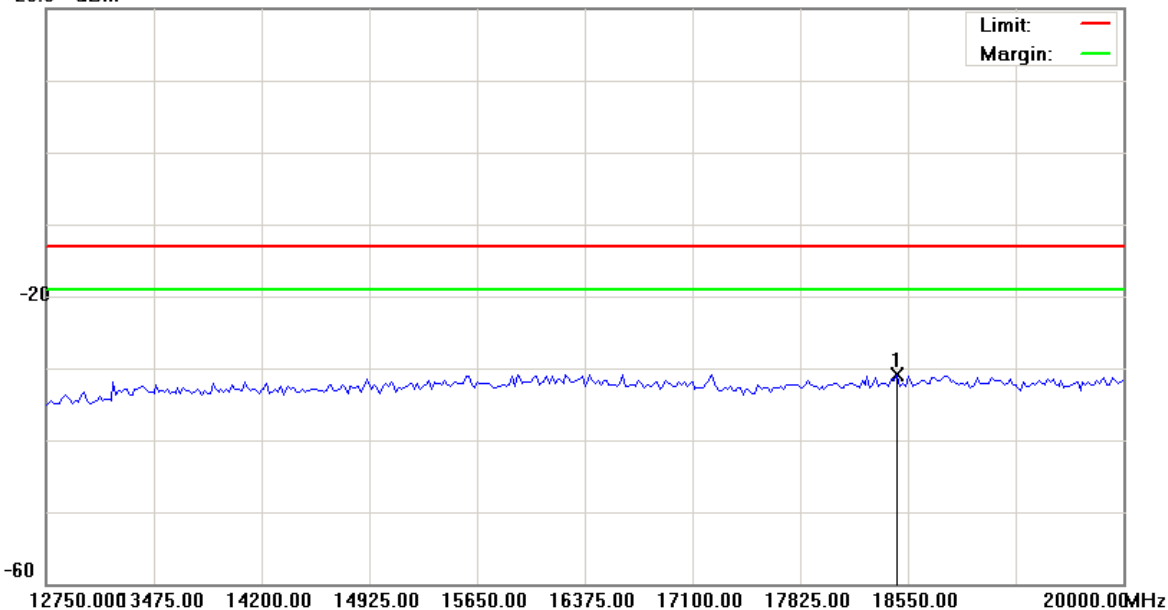
File :IVWA819(9800)

Data :#5

Date: 2010/9/24

Time: PM 06:23:08

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9800

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	18477.500	-37.81	7.01	-30.80	-13.00	-17.80	peak		

*:Maximum data x:Over limit !:over margin

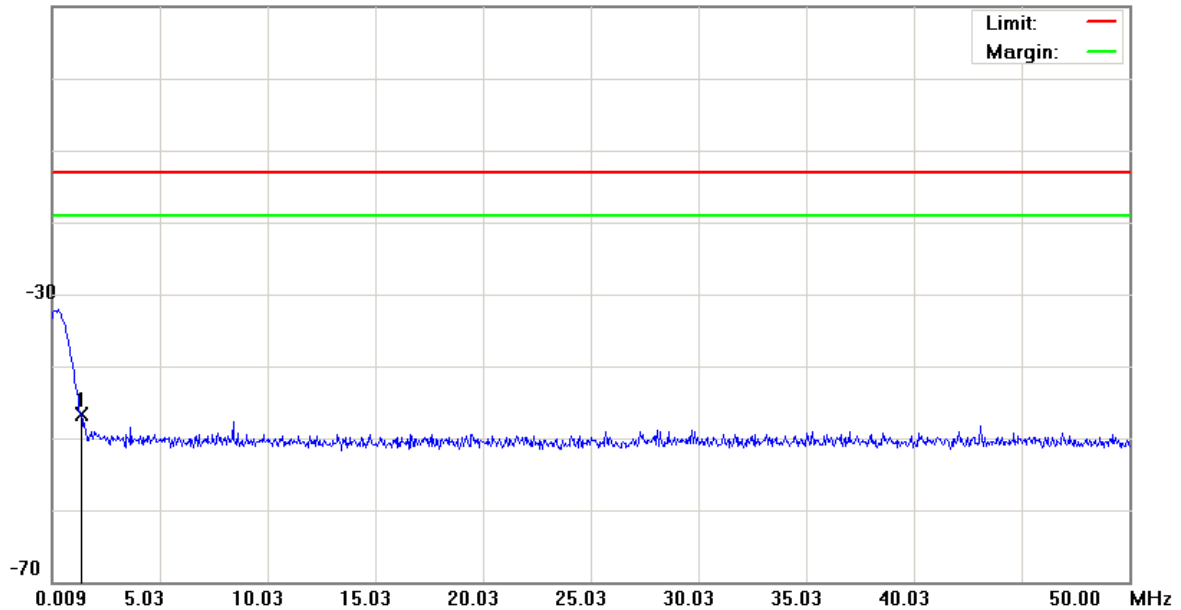
File :IVWA819(9938)

Data :#1

Date: 2010/9/24

Time: PM 06:18:15

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9938

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	1.3588	-59.28	12.66	-46.62	-13.00	-33.62	peak		

*:Maximum data x:Over limit !:over margin

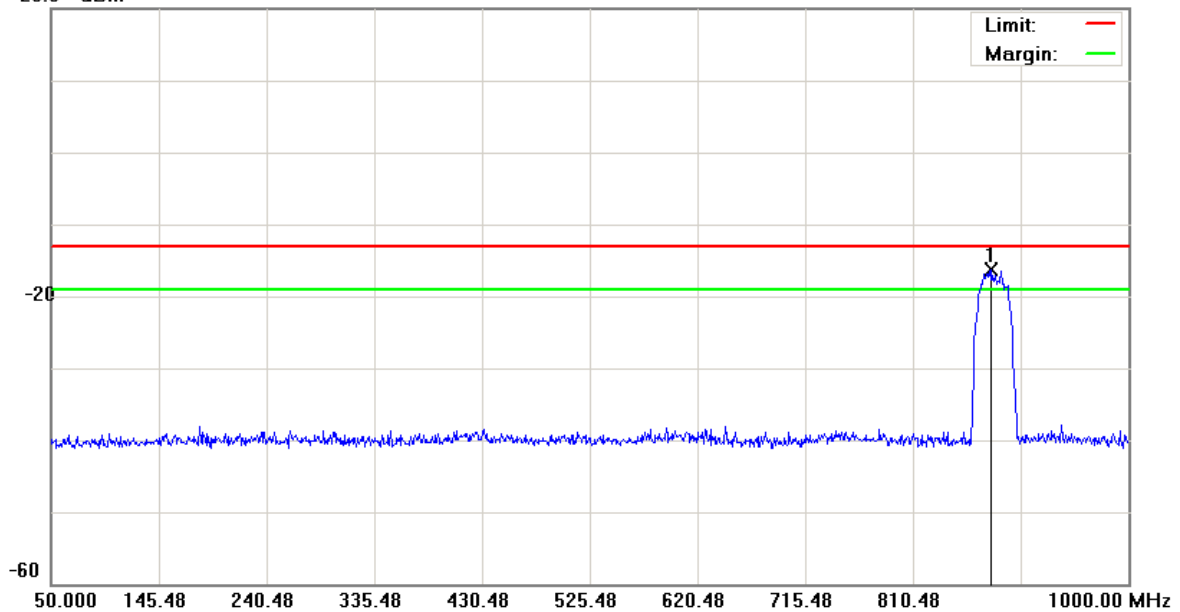
File :IVWA819(9938)

Data :#2

Date: 2010/9/24

Time: PM 06:18:39

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9938

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	879.3500	-29.52	13.20	-16.32	-13.00	-3.32	peak		

*:Maximum data x:Over limit !:over margin

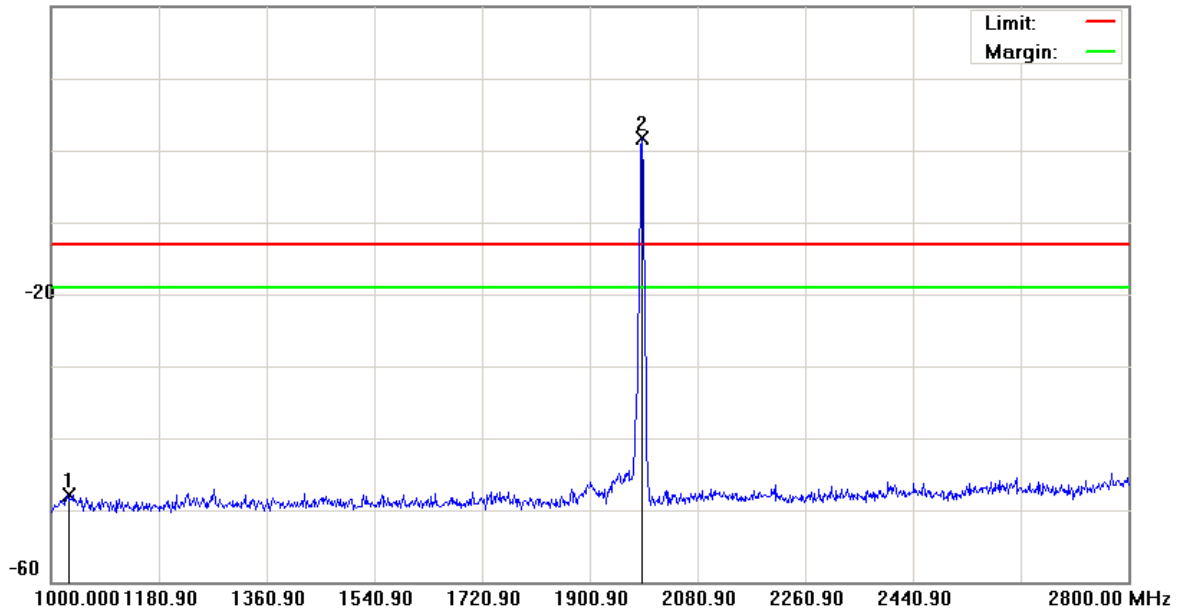
File :IVWA819(9938)

Data :#3

Date: 2010/9/24

Time: PM 06:19:10

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9938

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Detector	Comment
1		1027.900	-52.31	4.36	-47.95	-13.00	-34.95			peak	
2	*	1986.400	-3.03	4.69	1.66	-13.00	14.66			peak	

*:Maximum data x:Over limit !:over margin

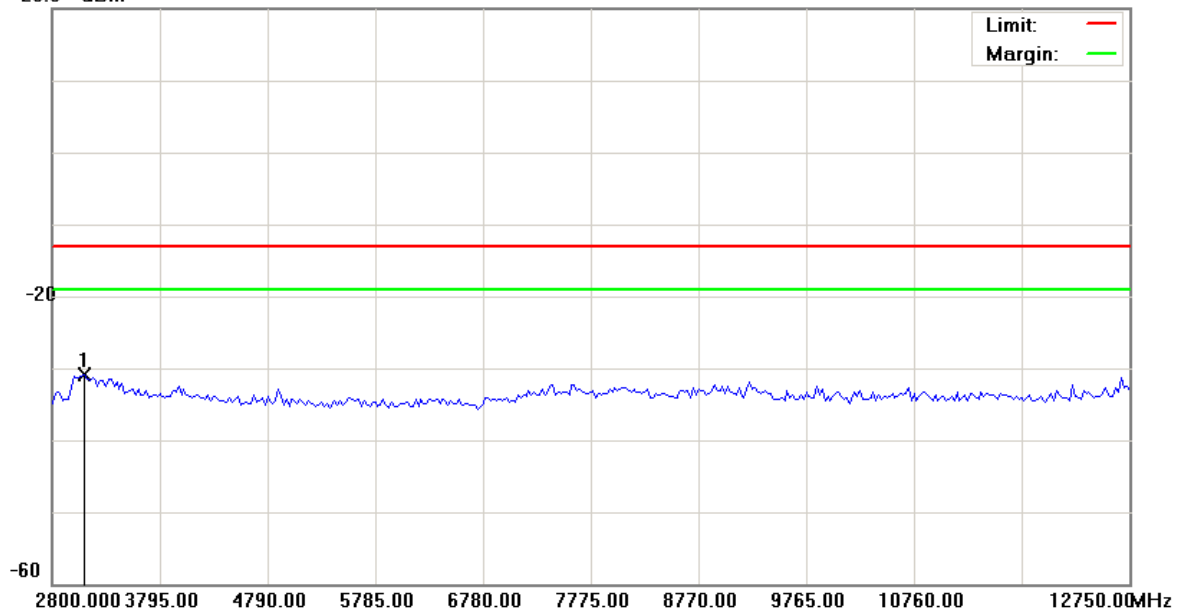
File :IVWA819(9938)

Data :#4

Date: 2010/9/24

Time: PM 06:20:50

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9938

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	3098.500	-36.13	5.32	-30.81	-13.00	-17.81	peak		

*:Maximum data x:Over limit !:over margin

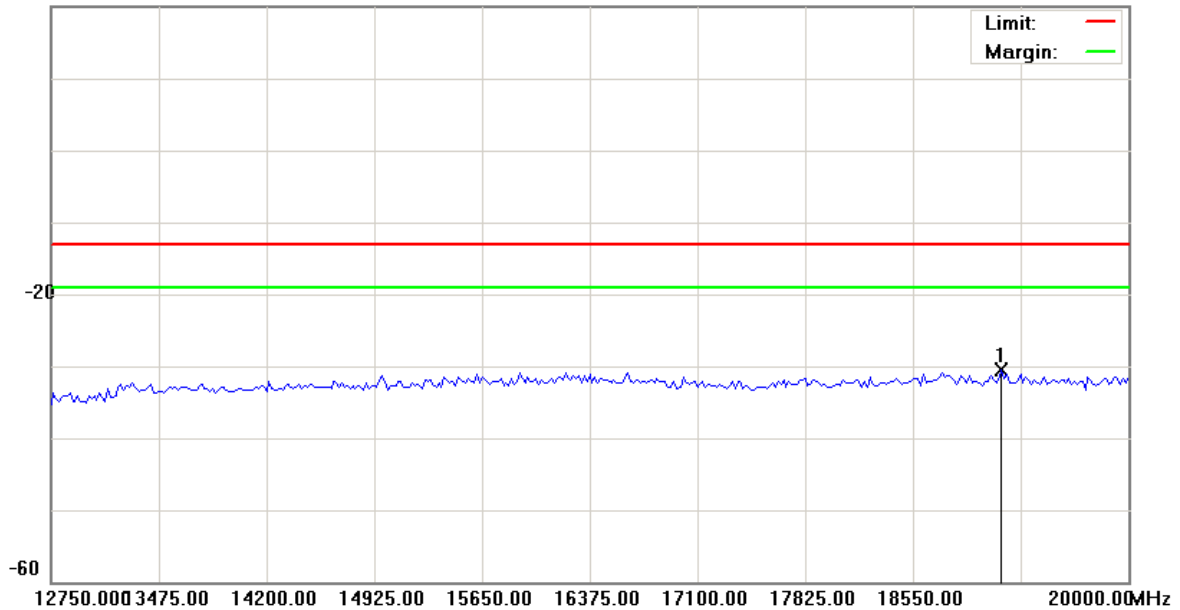
File :IVWA819(9938)

Data :#5

Date: 2010/9/24

Time: PM 06:21:15

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 2

Note: CH9938

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	19148.125	-37.71	7.20	-30.51	-13.00	-17.51	peak		

*:Maximum data x:Over limit !:over margin

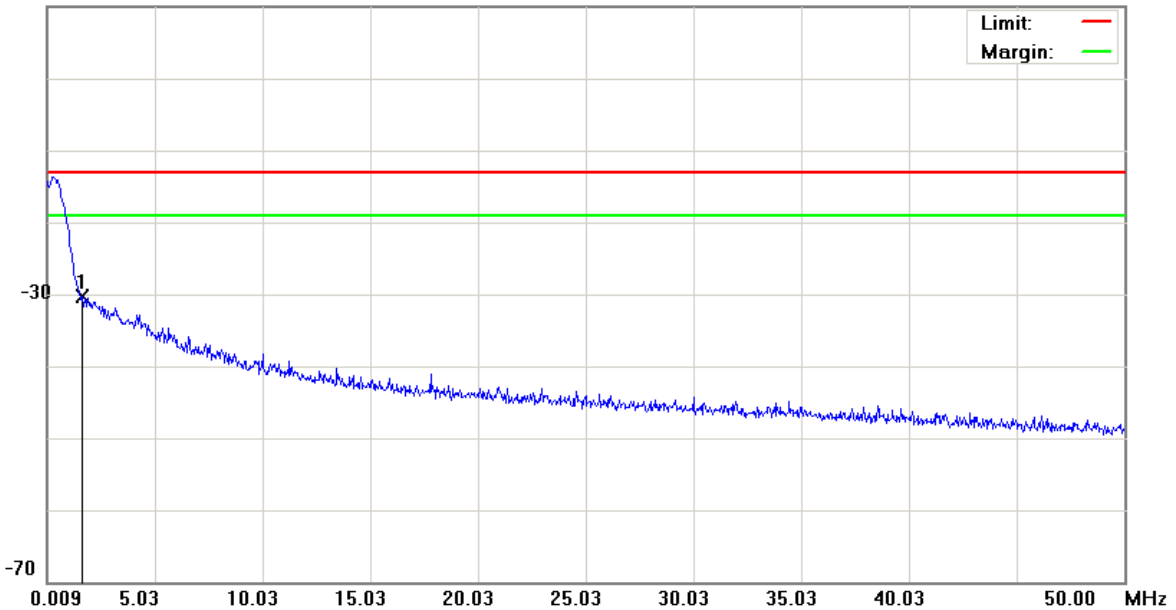
File :IVWA819(4132)

Data :#5

Date: 2010/9/24

Time: PM 04:40:14

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4132

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	1.6587	-61.41	31.10	-30.31	-13.00	-17.31	peak		

*:Maximum data x:Over limit !:over margin

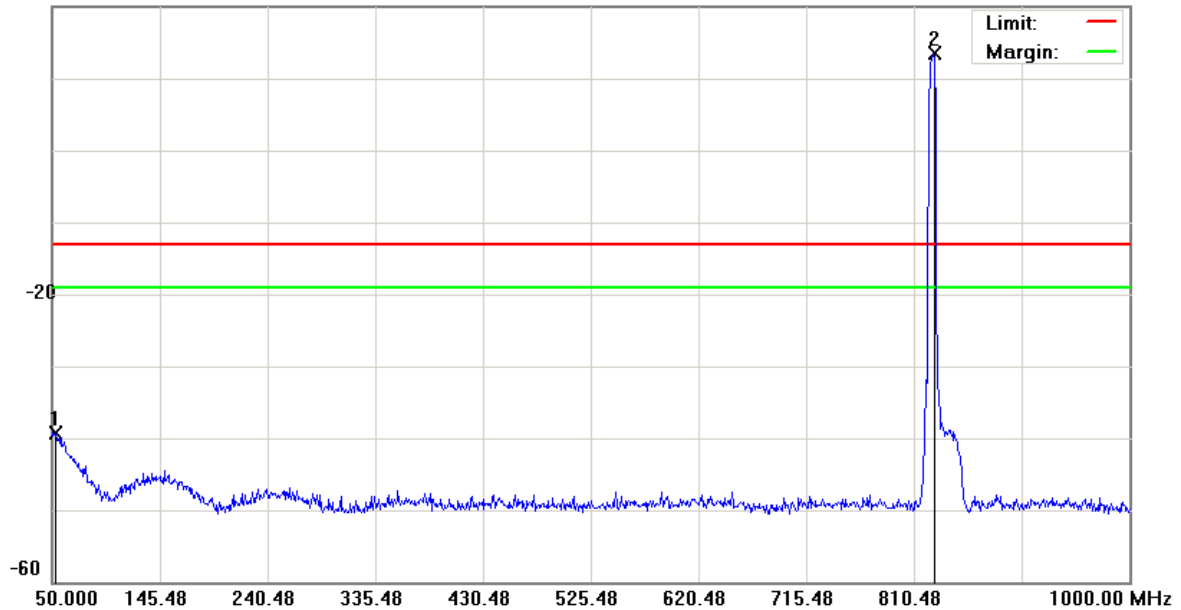
File :IVWA819(4132)

Data :#6

Date: 2010/9/24

Time: PM 04:40:38

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4132

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		52.8500	-53.57	14.19	-39.38	-13.00	-26.38	peak		
2	*	827.5750	9.65	3.87	13.52	-13.00	26.52	peak		TX

*:Maximum data x:Over limit !:over margin

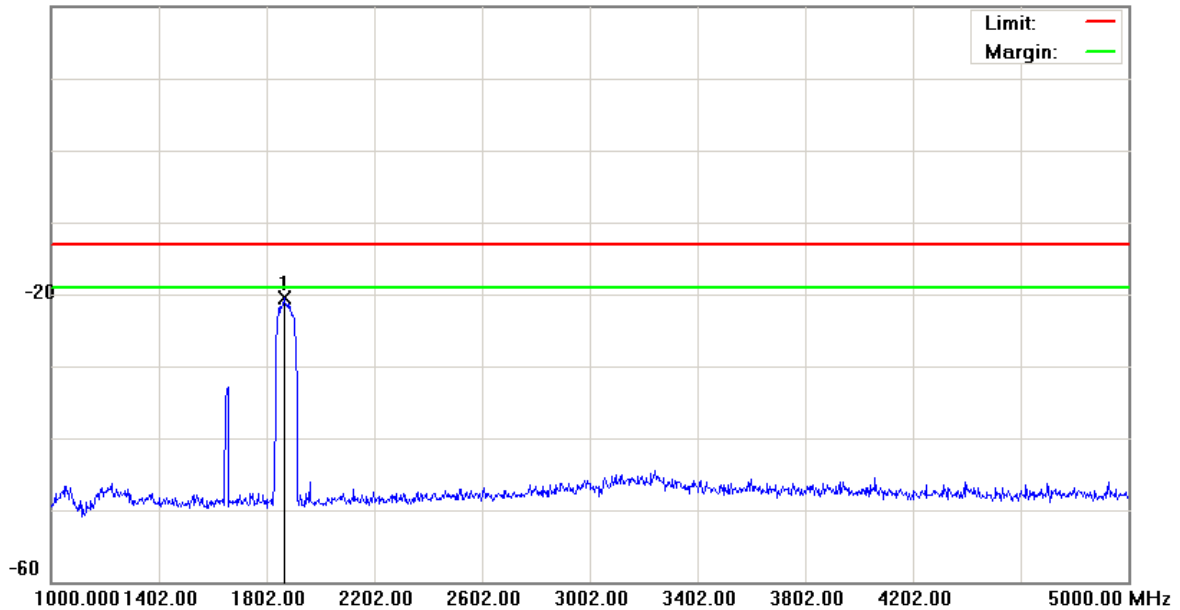
File :IVWA819(4132)

Data :#7

Date: 2010/9/24

Time: PM 04:50:42

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4132

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	1864.000	-24.84	4.34	-20.50	-13.00	-7.50	peak		

*:Maximum data x:Over limit !:over margin

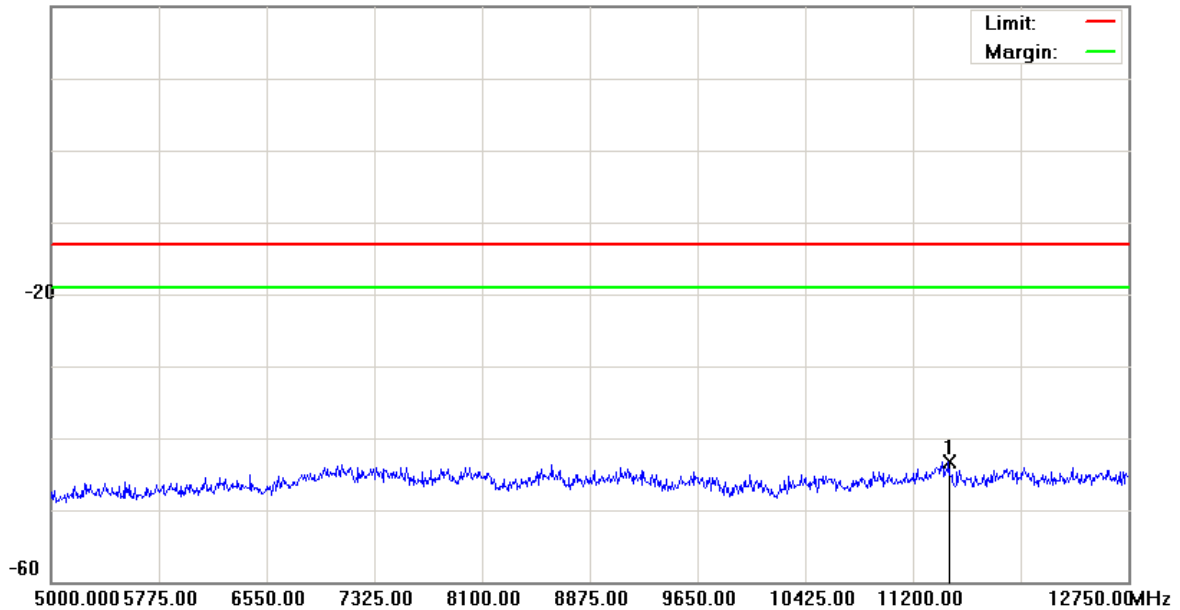
File: IVWA819(4132)

Data: #8

Date: 2010/9/24

Time: PM 04:51:05

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4132

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	11459.625	-48.69	5.41	-43.28	-13.00	-30.28	peak		

*:Maximum data x:Over limit !:over margin

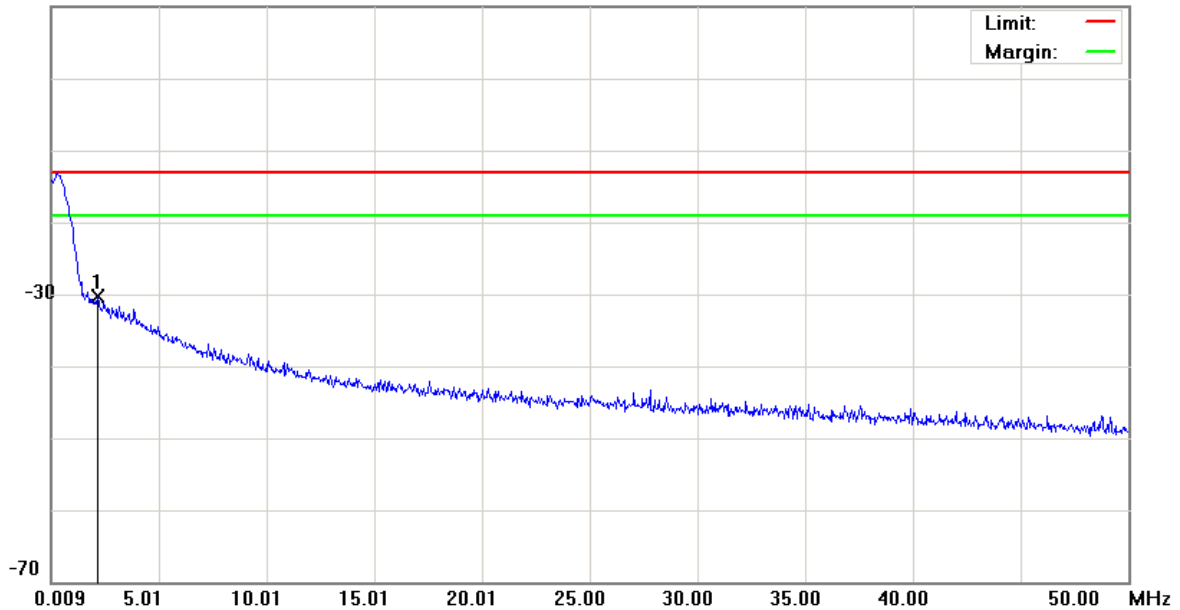
File: IVWA819(4182)

Data: #5

Date: 2010/9/24

Time: PM 04:41:39

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4182

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	2.1586	-61.61	31.41	-30.20	-13.00	-17.20	peak		

*:Maximum data x:Over limit !:over margin

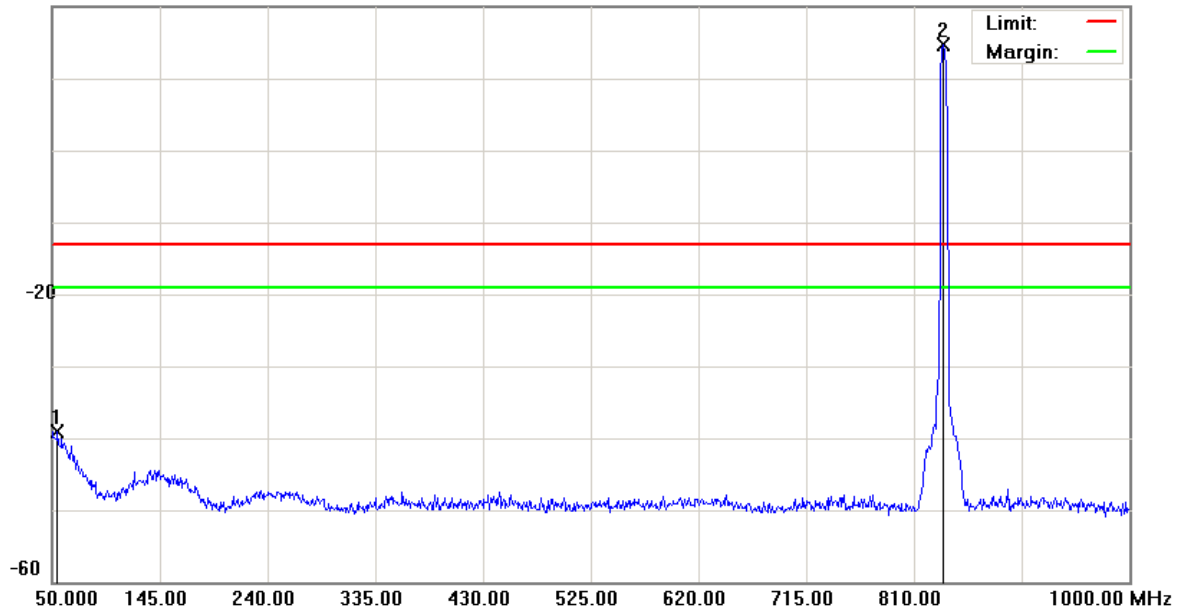
File :IVWA819(4182)

Data :#6

Date: 2010/9/24

Time: PM 04:42:04

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4182

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		54.7500	-52.97	13.85	-39.12	-13.00	-26.12	peak		
2	*	835.6500	10.82	3.95	14.77	-13.00	27.77	peak		TX

*:Maximum data x:Over limit !:over margin

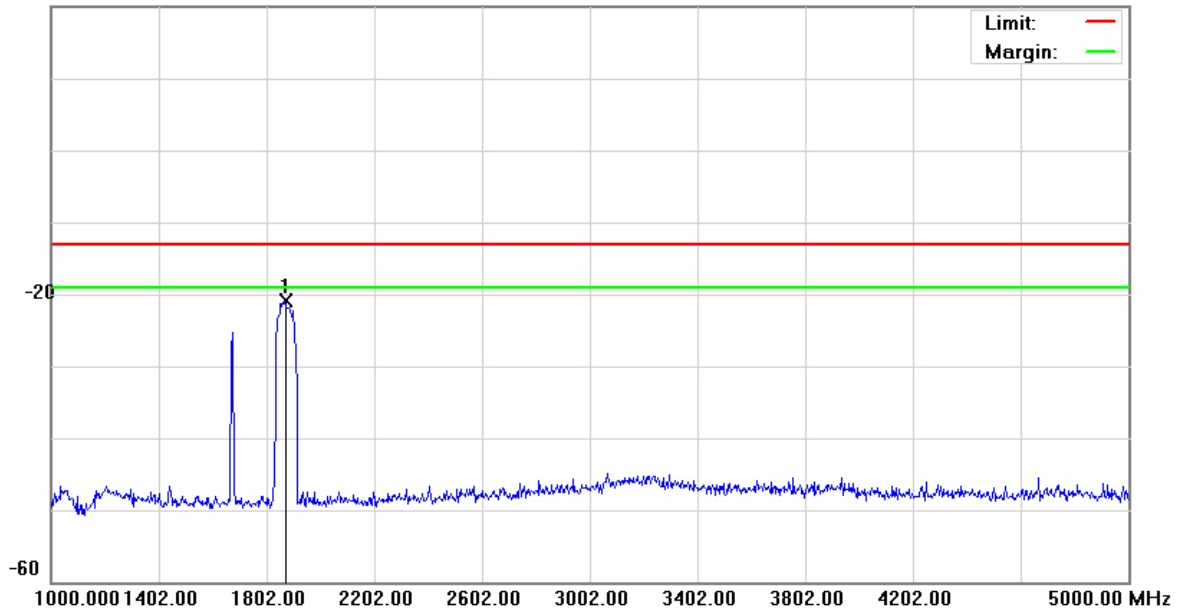
File :IVWA819(4182)

Data :#7

Date: 2010/9/24

Time: PM 04:48:35

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4182

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	1870.000	-25.33	4.34	-20.99	-13.00	-7.99	peak		

*:Maximum data x:Over limit !:over margin

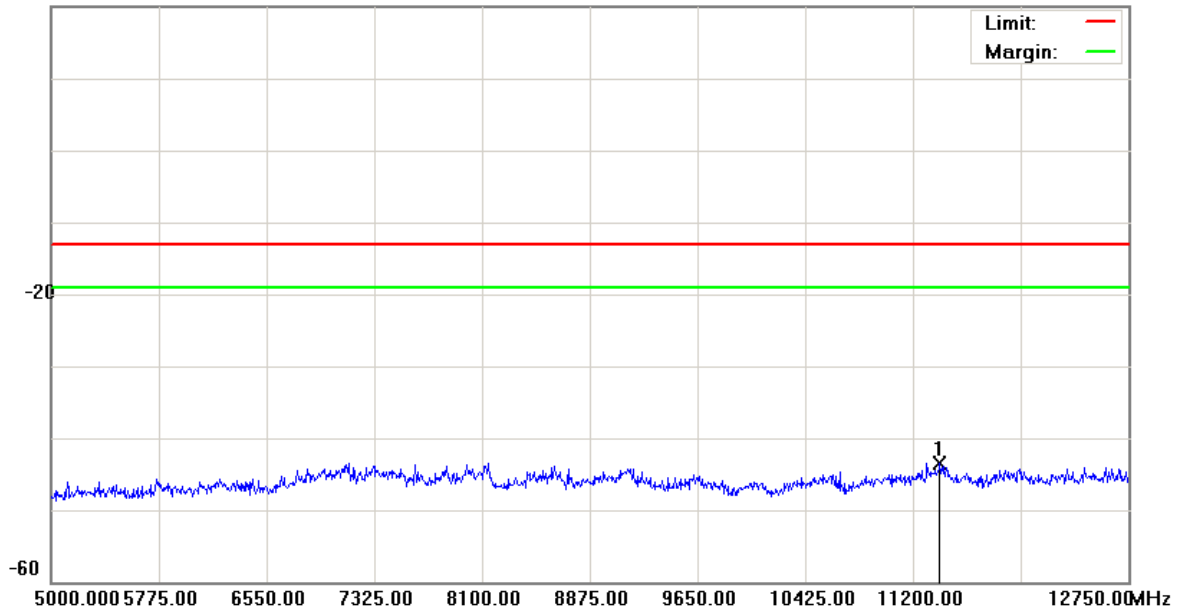
File :IVWA819(4182)

Data :#8

Date: 2010/9/24

Time: PM 04:48:58

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4182

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	11393.750	-48.97	5.53	-43.44	-13.00	-30.44	peak		Comment

*:Maximum data x:Over limit !:over margin

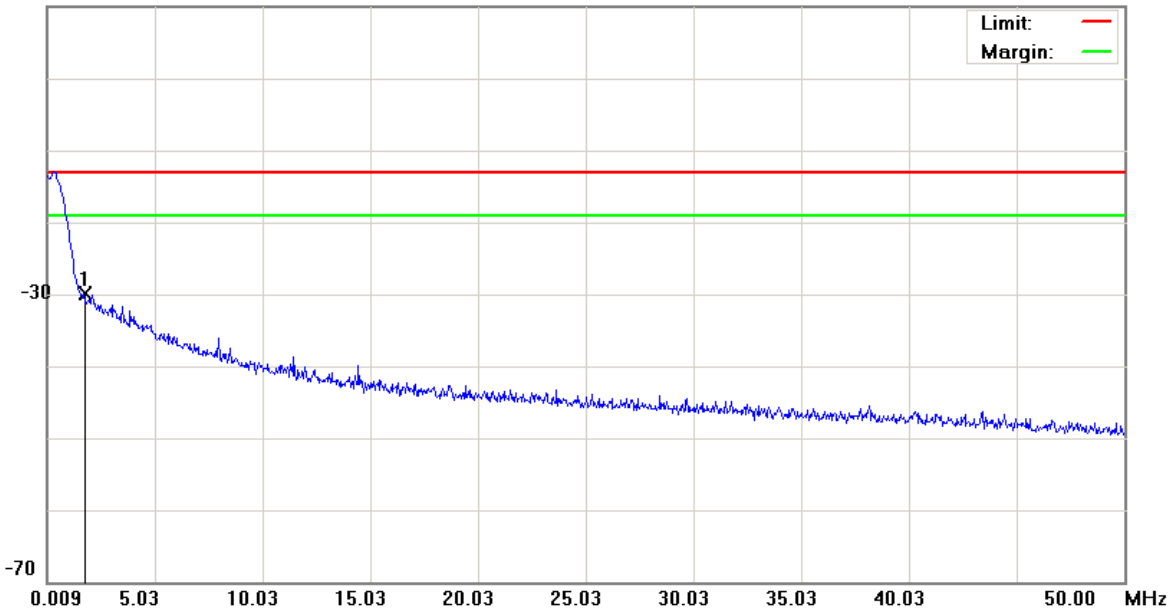
File :IVWA819(4233)

Data :#5

Date: 2010/9/24

Time: PM 04:43:37

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4233

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	1.7337	-61.01	31.02	-29.99	-13.00	-16.99	peak		

*:Maximum data x:Over limit !:over margin

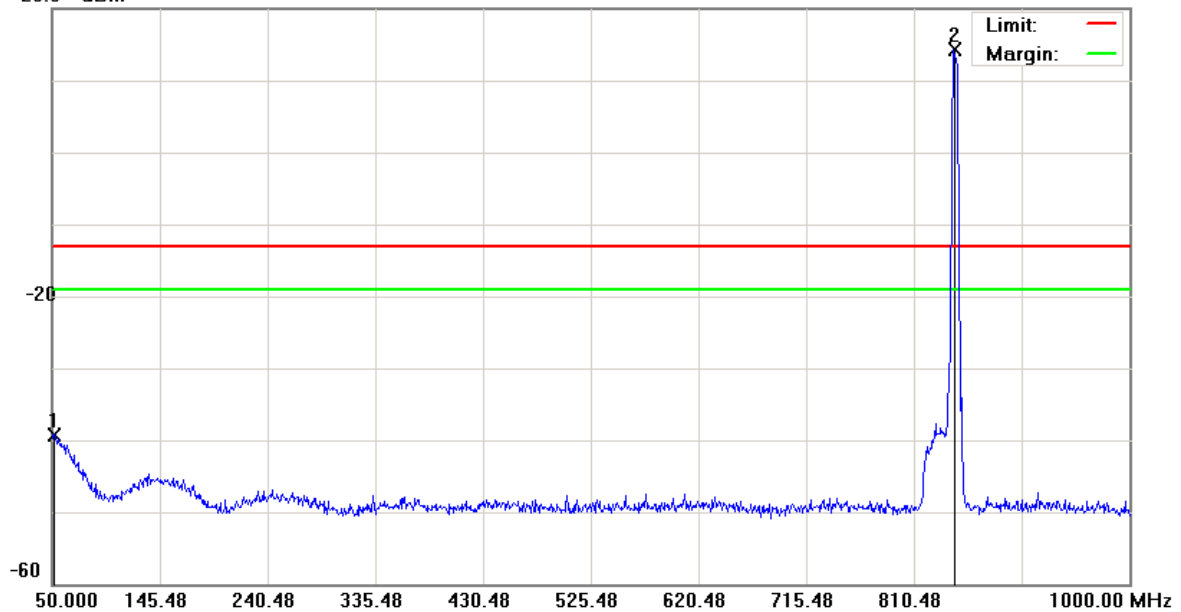
File :IVWA819(4233)

Data :#6

Date: 2010/9/24

Time: PM 04:44:01

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4233

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		51.9000	-53.56	14.36	-39.20	-13.00	-26.20	peak		
2	*	845.6250	10.38	3.99	14.37	-13.00	27.37	peak		TX

*:Maximum data x:Over limit !:over margin

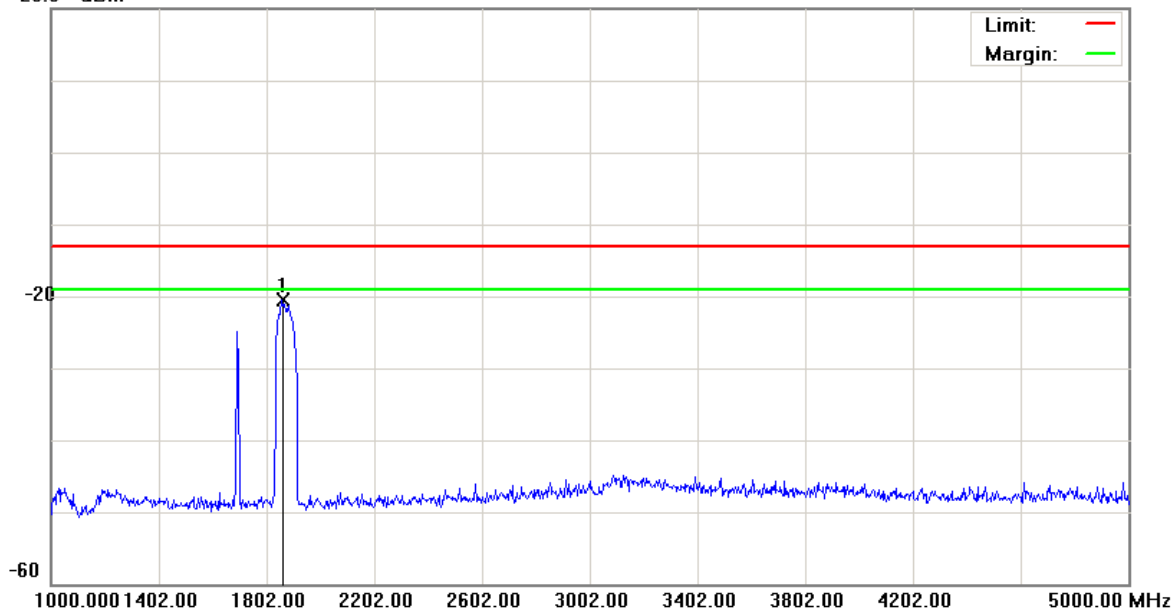
File :IVWA819(4233)

Data :#7

Date: 2010/9/24

Time: PM 04:45:02

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4233

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	1858.000	-24.91	4.34	-20.57	-13.00	-7.57	peak		

*:Maximum data x:Over limit !:over margin

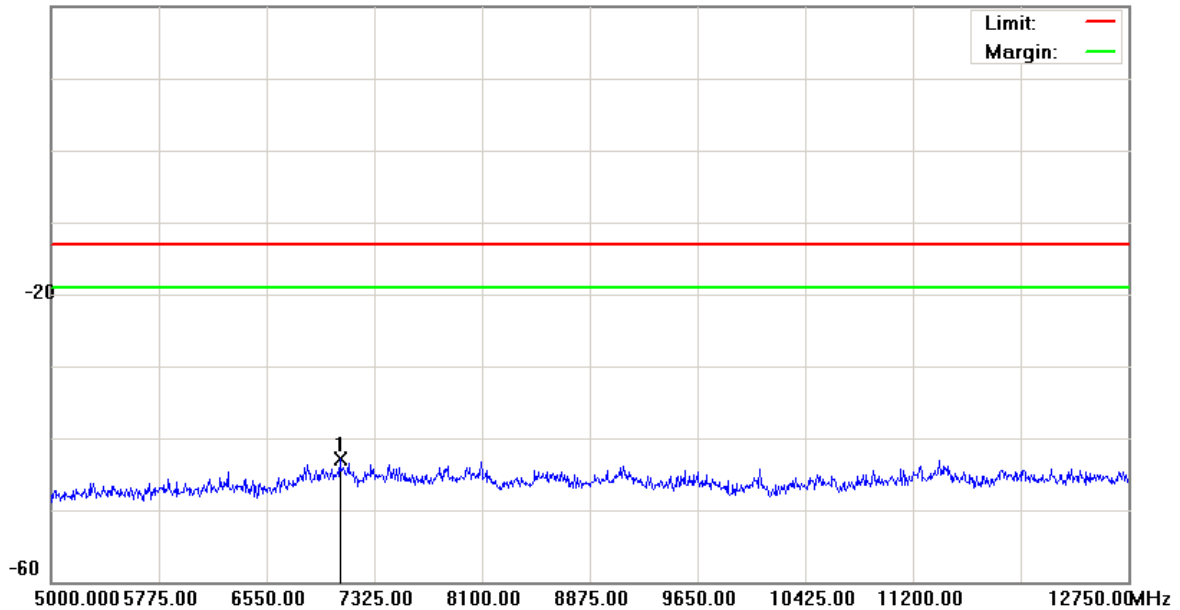
File: IVWA819(4233)

Data: #8

Date: 2010/9/24

Time: PM 04:45:25

20.0 dBm



Site: : RF Conducted

Polarization: Conducted po

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 3

Note: CH4233

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	7080.875	-47.89	4.98	-42.91	-13.00	-29.91	peak		Comment

*:Maximum data x:Over limit !:over margin

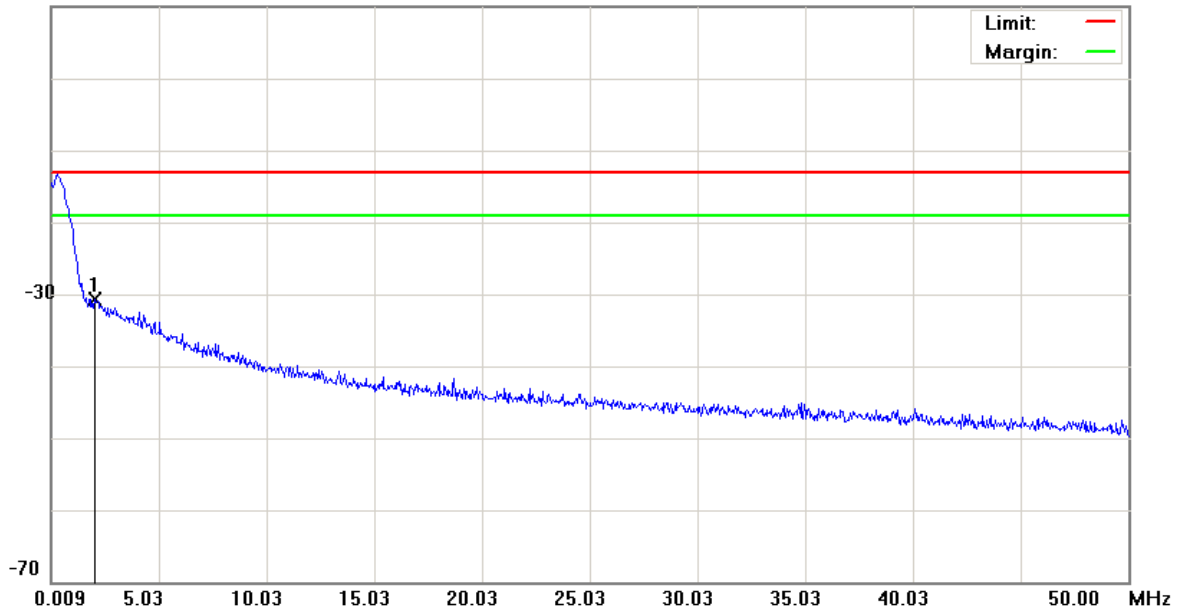
File :IVWA819(4357)

Data :#1

Date: 2010/9/24

Time: PM 05:59:04

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4357

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	2.0085	-61.99	31.37	-30.62	-13.00	-17.62	peak		

*:Maximum data x:Over limit !:over margin

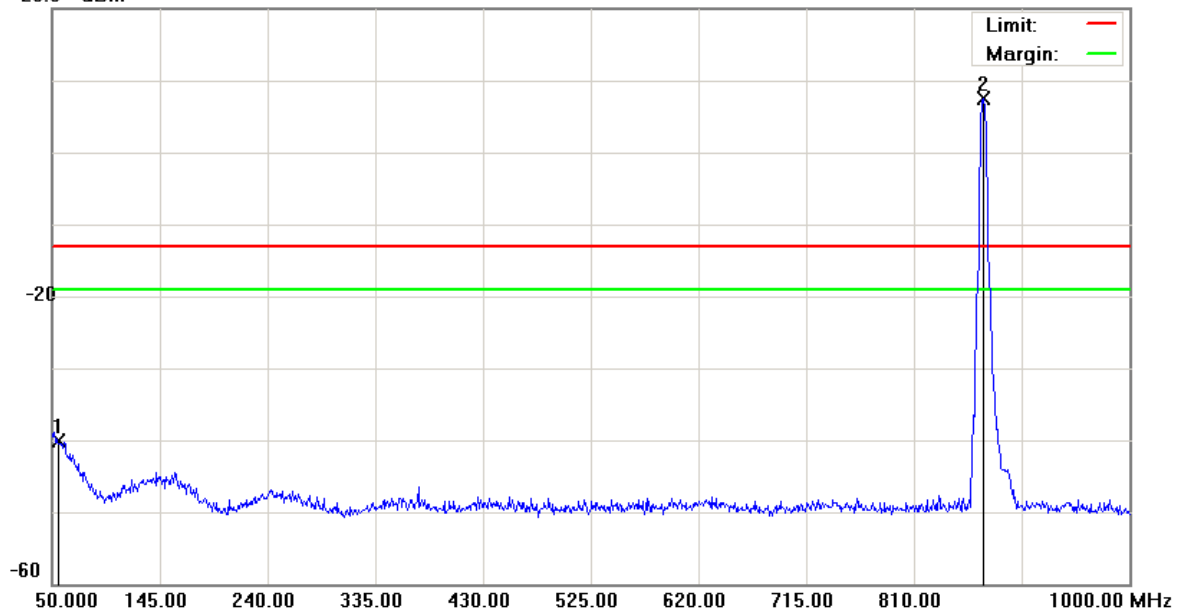
File :IVWA819(4357)

Data :#2

Date: 2010/9/24

Time: PM 05:59:28

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4357

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		55.2250	-53.82	13.77	-40.05	-13.00	-27.05	peak		
2	*	871.2750	3.56	3.89	7.45	-13.00	20.45	peak		TX

*:Maximum data x:Over limit !:over margin

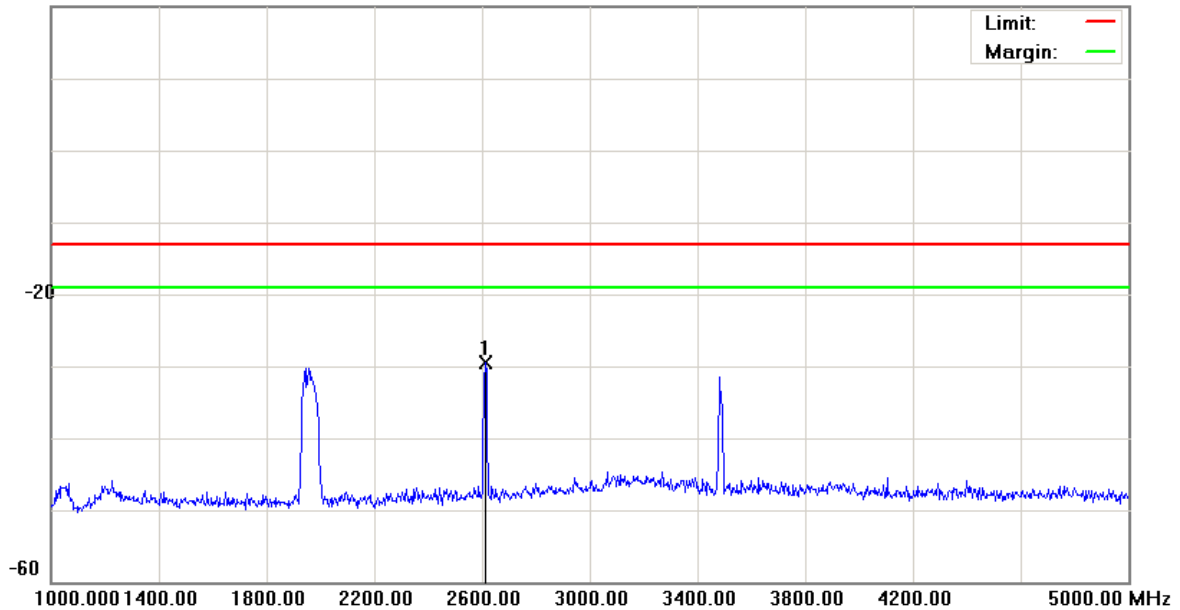
File :IVWA819(4357)

Data :#3

Date: 2010/9/24

Time: PM 06:00:27

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4357

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	2612.000	-33.95	4.53	-29.42	-13.00	-16.42	peak		

*:Maximum data x:Over limit !:over margin

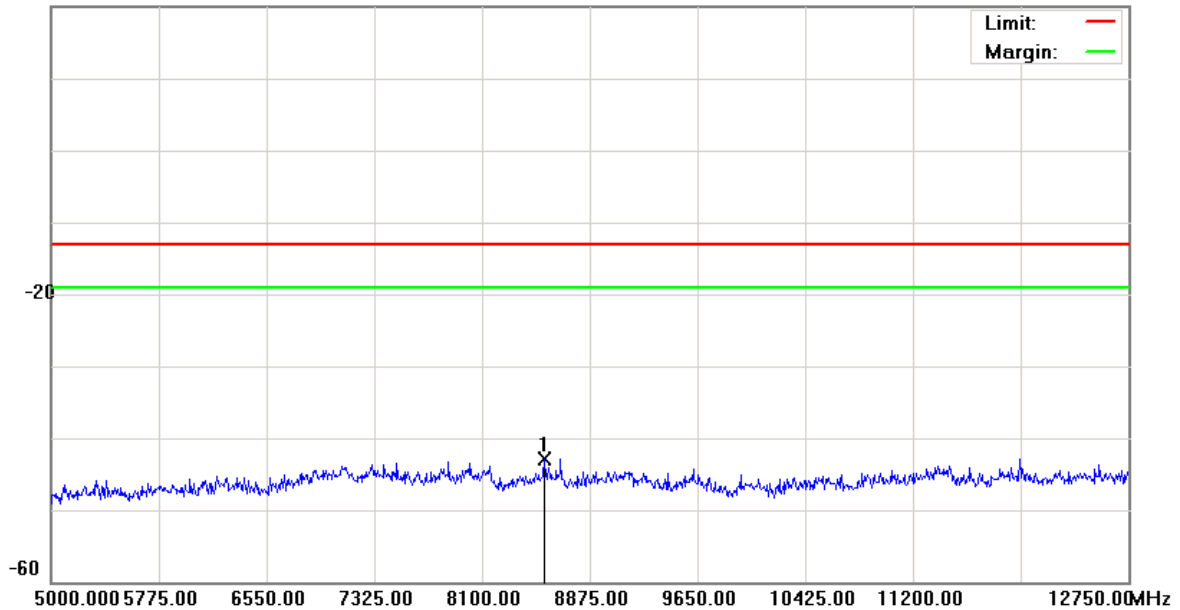
File :IVWA819(4357)

Data :#4

Date: 2010/9/24

Time: PM 06:00:50

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4357

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	8549.500	-48.72	5.77	-42.95	-13.00	-29.95	peak		Comment

*:Maximum data x:Over limit !:over margin

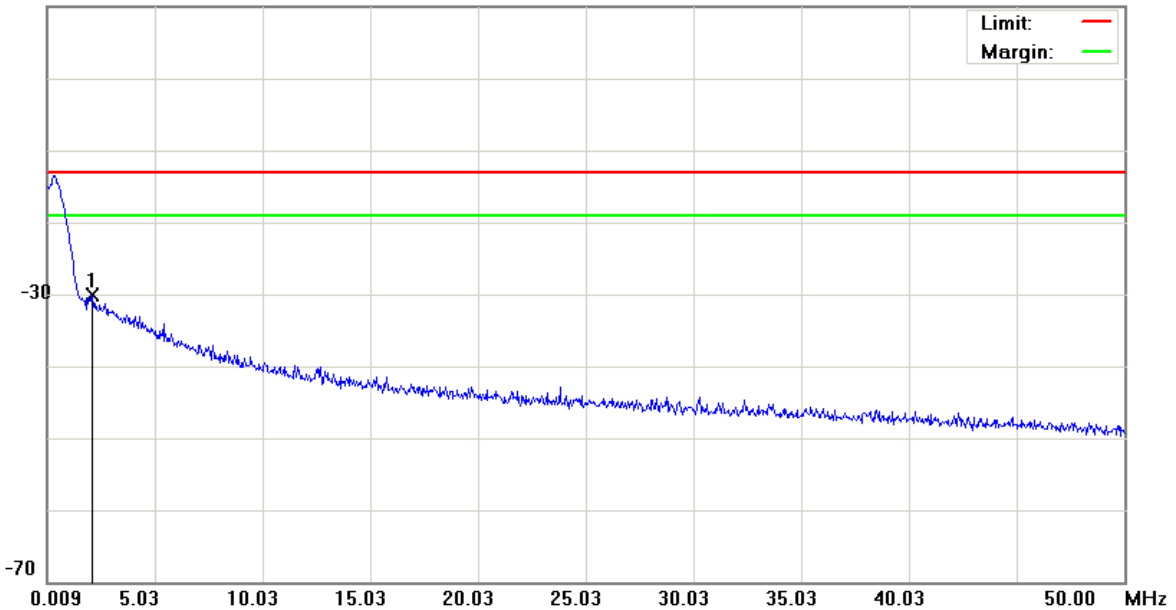
File :IVWA819(4408)

Data :#1

Date: 2010/9/24

Time: PM 05:51:17

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4357

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	2.0836	-61.54	31.50	-30.04	-13.00	-17.04	peak		Comment

*:Maximum data x:Over limit !:over margin

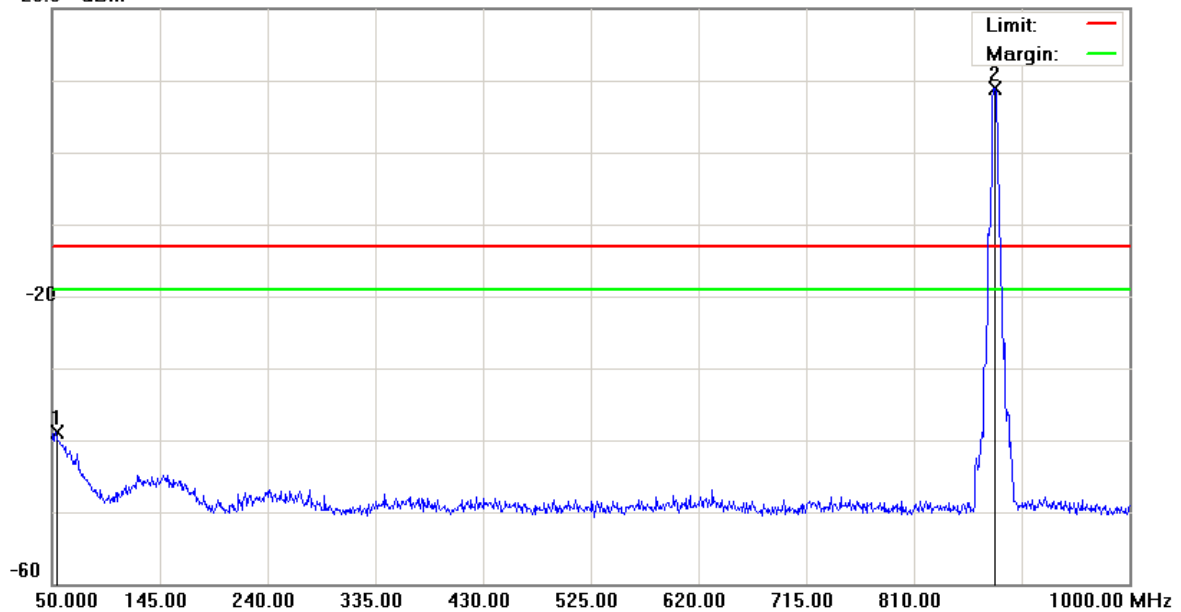
File :IVWA819(4408)

Data :#2

Date: 2010/9/24

Time: PM 05:51:41

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4408

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		53.3250	-53.06	14.10	-38.96	-13.00	-25.96	peak		
2	*	880.7750	4.70	4.26	8.96	-13.00	21.96	peak		TX

*:Maximum data x:Over limit !:over margin

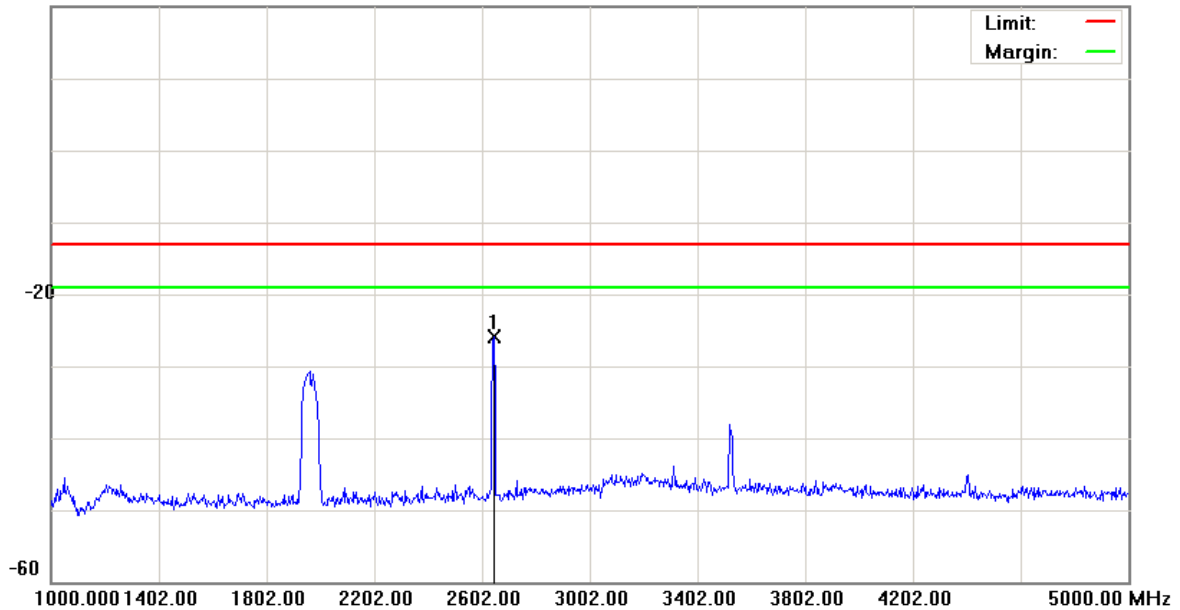
File :IVWA819(4408)

Data :#3

Date: 2010/9/24

Time: PM 05:56:16

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4408

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	2644.000	-30.40	4.44	-25.96	-13.00	-12.96	peak		Comment

*:Maximum data x:Over limit !:over margin

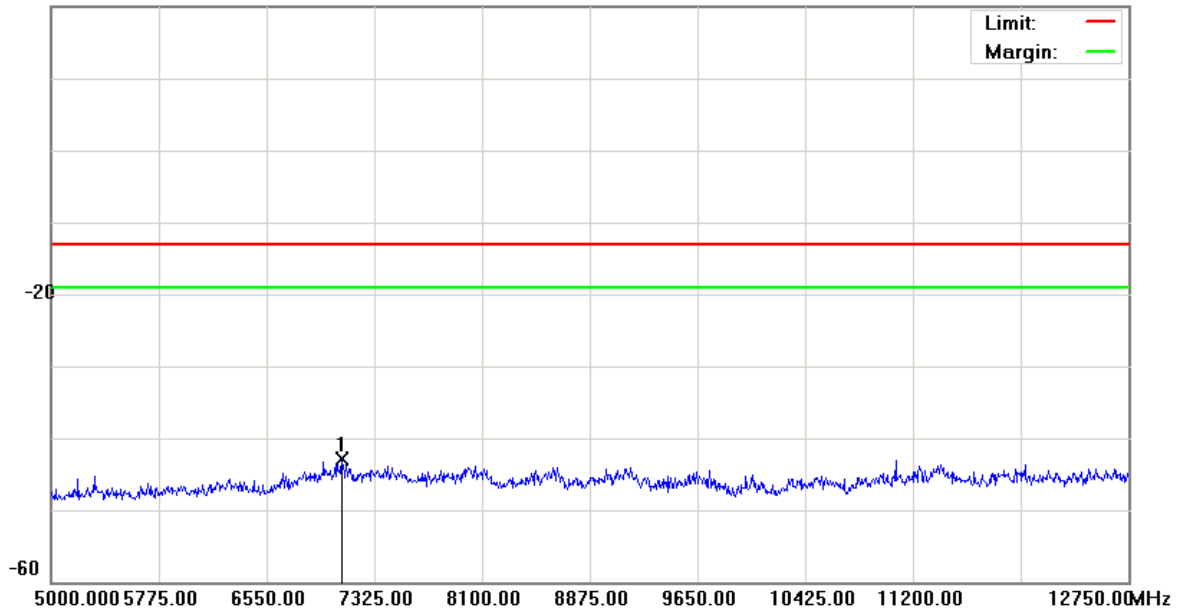
File :IVWA819(4408)

Data :#4

Date: 2010/9/24

Time: PM 05:56:39

20.0 dBm



Site: : RF Conducted

Polarization: Conducted po

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4408

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	7092.500	-47.86	5.05	-42.81	-13.00	-29.81	peak		Comment

*:Maximum data x:Over limit !:over margin

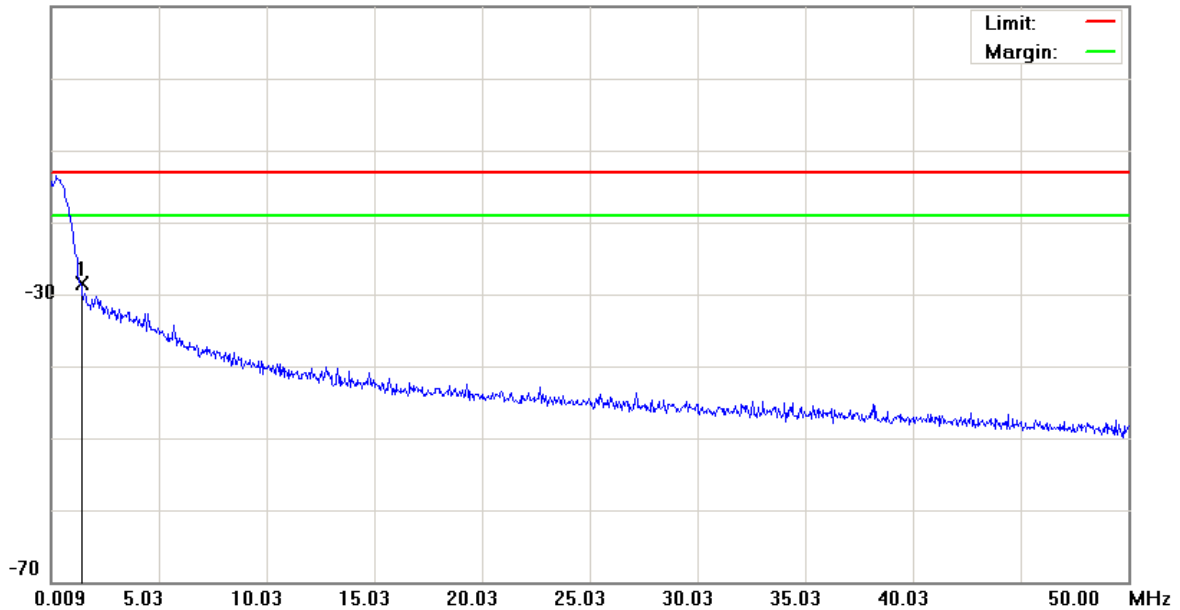
File :IVWA819(4458)

Data :#1

Date: 2010/9/24

Time: PM 06:02:18

10.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4458

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	Comment
1	*	1.3837	-59.92	31.37	-28.55	-13.00	-15.55	peak		

*:Maximum data x:Over limit !:over margin

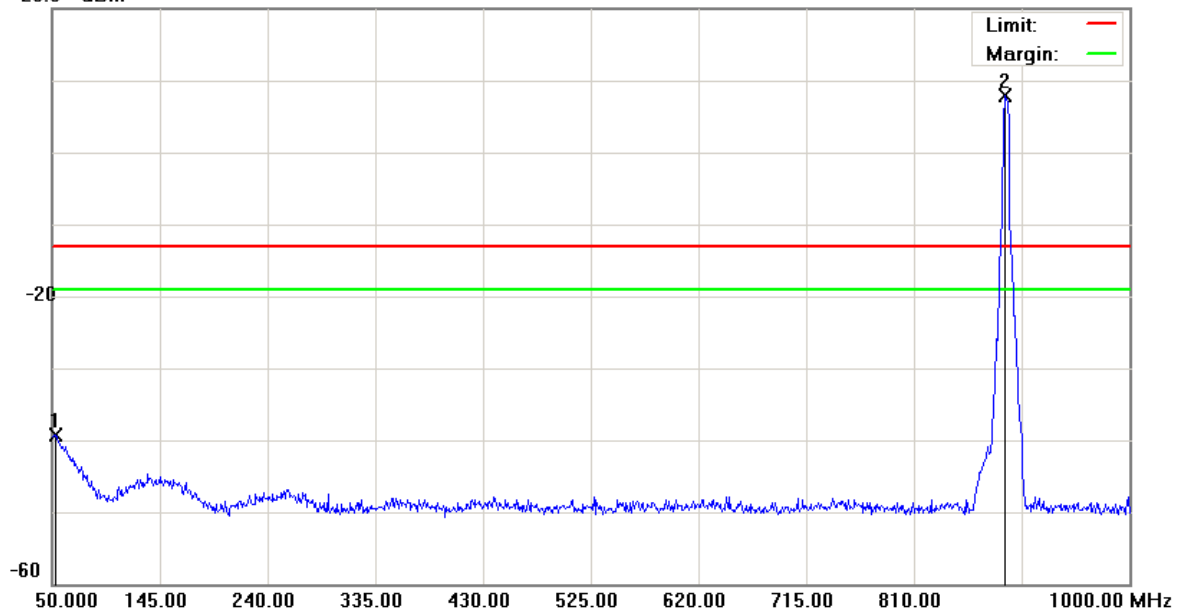
File :IVWA819(4458)

Data :#2

Date: 2010/9/24

Time: PM 06:02:43

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4458

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1		52.8500	-53.49	14.19	-39.30	-13.00	-26.30	peak		
2	*	890.7500	3.92	3.97	7.89	-13.00	20.89	peak		TX

*:Maximum data x:Over limit !:over margin

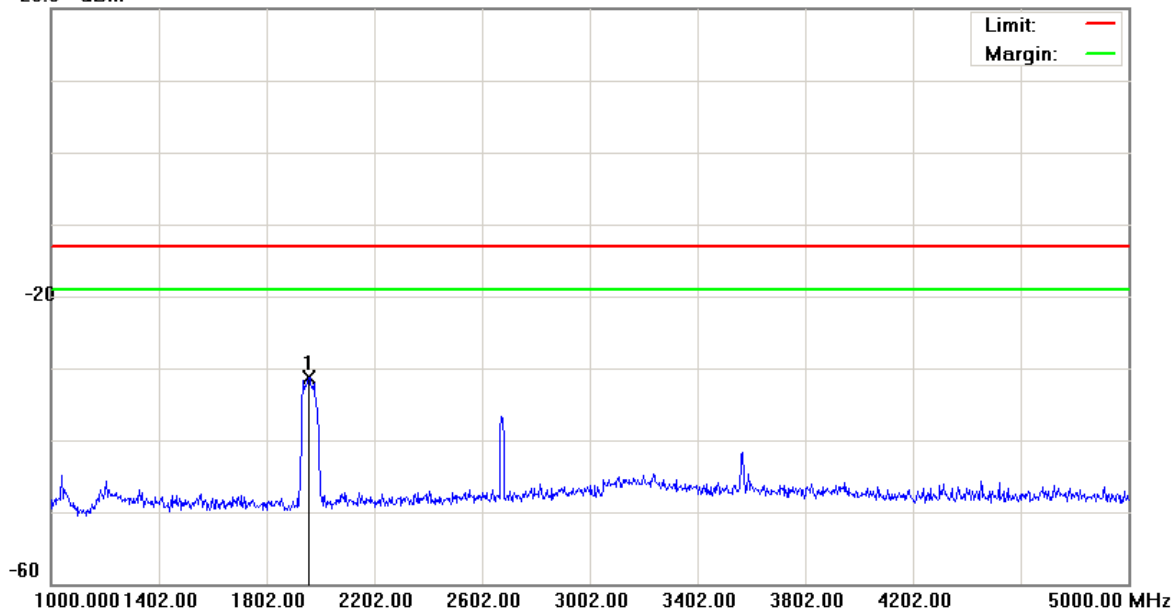
File :IVWA819(4458)

Data :#3

Date: 2010/9/24

Time: PM 06:03:43

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4458

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	1956.000	-35.61	4.34	-31.27	-13.00	-18.27	peak		Comment

*:Maximum data x:Over limit !:over margin

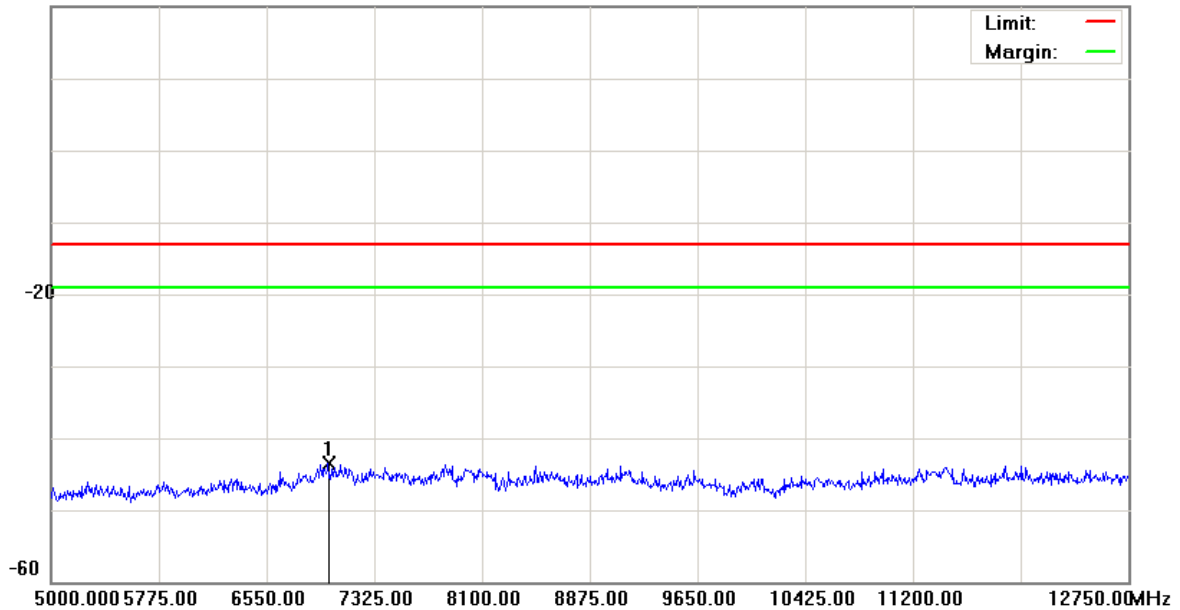
File :IVWA819(4458)

Data :#4

Date: 2010/9/24

Time: PM 06:04:06

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 26 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55 %

EUT: Wireless Inner Structure

Distance:

RBW: 1000 MHz VBW: 1000 MHz

M/N: Sphere

Mode: 4

Note: CH4458

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree
1	*	6995.625	-48.52	4.93	-43.59	-13.00	-30.59	peak		Comment

*:Maximum data x:Over limit !:over margin

5 Field Strength of Spurious Radiation Test

5.1. Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

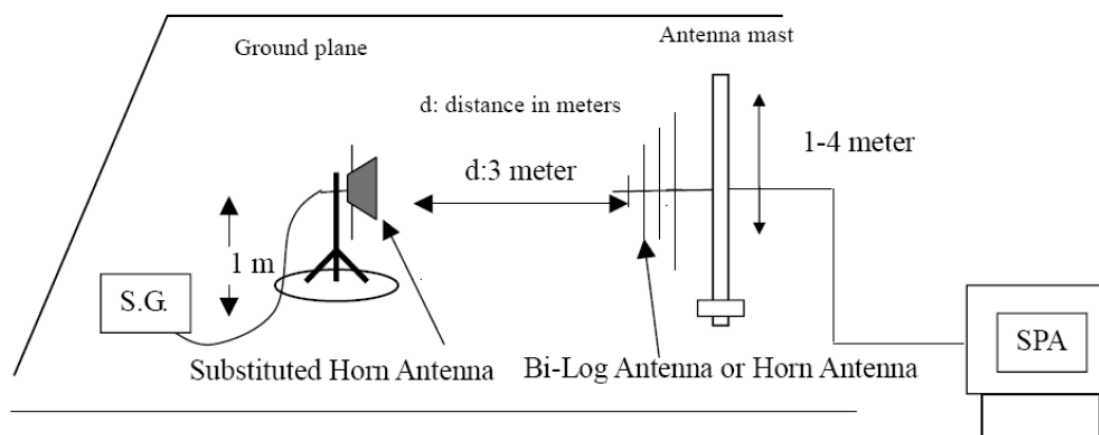
5.2. Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
RF Pre-selector	Agilent	N9039A	MY46520256	01/07/2009	(2)
Spectrum Analyzer	Agilent	E4446A	MY46180578	02/24/2010	(1)
Pre Amplifier	Agilent	8449B	3008A02237	02/24/2010	(1)
Pre Amplifier	Agilent	8447D	2944A10961	02/24/2010	(1)
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	08/02/2010	(1)
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/29/2010	(1)
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/29/2010	(1)
Test Site	ATL	TE01	888001	07/30/2010	(1)

Remark: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

5.3. Setup



5.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

The equipment under test is placed inside the semi-anechoic chamber on a wooden table at the turntable center. For each spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters and the turntable is rotated 360 degrees to obtain a maximum reading on the spectrum analyzer. This is repeated for both horizontal and vertical polarizations of the receive antenna.

The equipment under test is then replaced with a substitution antenna fed by a signal generator. With the signal generator tuned to a particular spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters to obtain a maximum reading at the spectrum analyzer. The output of the signal generator is then adjusted until a reading identical to that obtained with the actual transmitter is achieved.

The power in dBm of each spurious emission is calculated by correcting the signal generator level for cable loss and gain of the substitution antenna referenced to a dipole. A fully charged battery was used for the supply voltage.

The settings of the receiver were as follows:

Units	dBm
Resolution Bandwidth	1 MHz
Video Bandwidth	Auto
Sweep Time	Auto

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in **lie-down position (X axis)** and the worst case was recorded.

5.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is ± 3.072 dB.

5.6. Test Result

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 1	Date:	2010/09/24
Channel:	Low	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	49.40	-56.81	39.31	-17.50	-13.00	-4.50	peak	H
2	91.11	-52.17	13.15	-39.02	-13.00	-26.02	peak	H
3	335.55	-54.59	7.02	-47.57	-13.00	-34.57	peak	H
4	486.87	-55.60	22.12	-33.48	-13.00	-20.48	peak	H
5	916.58	-55.81	31.47	-24.34	-13.00	-11.34	peak	H
6	969.93	-54.97	28.84	-26.13	-13.00	-13.13	peak	H
7	1154.00	-41.24	11.28	-29.96	-13.00	-16.96	peak	H
8	2782.00	-40.52	12.97	-27.55	-13.00	-14.55	peak	H
9	4020.00	-40.18	16.47	-23.71	-13.00	-10.71	peak	H
1	38.73	-46.31	17.22	-29.09	-13.00	-16.09	peak	V
2	51.34	-53.67	22.43	-31.24	-13.00	-18.24	peak	V
3	107.60	-50.36	9.75	-40.61	-13.00	-27.61	peak	V
4	271.53	-54.93	12.89	-42.04	-13.00	-29.04	peak	V
5	743.92	-55.07	22.89	-32.18	-13.00	-19.18	peak	V
6	951.50	-54.63	24.98	-29.65	-13.00	-16.65	peak	V
7	1382.00	-40.89	4.83	-36.06	-13.00	-23.06	peak	V
8	2520.00	-40.08	12.30	-27.78	-13.00	-14.78	peak	V
9	4050.00	-39.84	20.74	-19.10	-13.00	-6.10	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 1	Date:	2010/09/24
Channel:	Middle	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	50.37	-57.01	39.23	-17.78	-13.00	-4.78	peak	H
2	90.14	-52.70	12.97	-39.73	-13.00	-26.73	peak	H
3	343.31	-54.94	7.54	-47.40	-13.00	-34.40	peak	H
4	496.57	-55.05	21.85	-33.20	-13.00	-20.20	peak	H
5	758.47	-54.79	18.46	-36.33	-13.00	-23.33	peak	H
6	899.12	-55.63	31.77	-23.86	-13.00	-10.86	peak	H
7	1260.00	-40.25	10.99	-29.26	-13.00	-16.26	peak	H
8	2786.00	-40.01	12.99	-27.02	-13.00	-14.02	peak	H
9	3790.00	-38.39	15.96	-22.43	-13.00	-9.43	peak	H
1	37.76	-45.74	16.84	-28.90	-13.00	-15.90	peak	V
2	51.34	-53.95	22.43	-31.52	-13.00	-18.52	peak	V
3	102.75	-51.58	10.78	-40.80	-13.00	-27.80	peak	V
4	296.75	-54.74	12.52	-42.22	-13.00	-29.22	peak	V
5	679.90	-54.70	21.89	-32.81	-13.00	-19.81	peak	V
6	957.32	-55.10	25.15	-29.95	-13.00	-16.95	peak	V
7	1322.00	-41.16	4.45	-36.71	-13.00	-23.71	peak	V
8	2704.00	-40.26	13.80	-26.46	-13.00	-13.46	peak	V
9	3850.00	-39.42	20.20	-19.22	-13.00	-6.22	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 1	Date:	2010/09/24
Channel:	High	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	49.40	-57.15	39.31	-17.84	-13.00	-4.84	peak	H
2	90.14	-51.81	12.97	-38.84	-13.00	-25.84	peak	H
3	349.13	-55.36	7.38	-47.98	-13.00	-34.98	peak	H
4	498.51	-55.17	21.79	-33.38	-13.00	-20.38	peak	H
5	790.48	-54.96	19.85	-35.11	-13.00	-22.11	peak	H
6	914.64	-55.40	31.51	-23.89	-13.00	-10.89	peak	H
7	1484.00	-40.60	10.40	-30.20	-13.00	-17.20	peak	H
8	2768.00	-40.80	12.93	-27.87	-13.00	-14.87	peak	H
9	3860.00	-38.62	16.13	-22.49	-13.00	-9.49	peak	H
1	37.76	-45.62	16.84	-28.78	-13.00	-15.78	peak	V
2	52.31	-52.25	21.28	-30.97	-13.00	-17.97	peak	V
3	102.75	-51.99	10.78	-41.21	-13.00	-28.21	peak	V
4	283.17	-54.80	13.32	-41.48	-13.00	-28.48	peak	V
5	744.89	-55.26	22.88	-32.38	-13.00	-19.38	peak	V
6	956.35	-54.99	25.12	-29.87	-13.00	-16.87	peak	V
7	1236.00	-41.51	3.92	-37.59	-13.00	-24.59	peak	V
8	2500.00	-39.78	12.13	-27.65	-13.00	-14.65	peak	V
9	3830.00	-38.90	20.16	-18.74	-13.00	-5.74	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 2	Date:	2010/09/24
Channel:	Low	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	49.40	-56.70	39.31	-17.39	-13.00	-4.39	peak	H
2	91.11	-52.96	13.15	-39.81	-13.00	-26.81	peak	H
3	338.46	-54.93	7.41	-47.52	-13.00	-34.52	peak	H
4	497.54	-53.65	21.83	-31.82	-13.00	-18.82	peak	H
5	743.92	-54.15	17.93	-36.22	-13.00	-23.22	peak	H
6	898.15	-54.98	31.66	-23.32	-13.00	-10.32	peak	H
7	1306.00	-40.62	10.88	-29.74	-13.00	-16.74	peak	H
8	2880.00	-39.97	13.31	-26.66	-13.00	-13.66	peak	H
9	3860.00	-39.40	16.13	-23.27	-13.00	-10.27	peak	H
1	37.76	-46.22	16.84	-29.38	-13.00	-16.38	peak	V
2	104.69	-51.10	10.37	-40.73	-13.00	-27.73	peak	V
3	276.38	-54.62	13.24	-41.38	-13.00	-28.38	peak	V
4	341.37	-54.89	12.65	-42.24	-13.00	-29.24	peak	V
5	783.69	-54.22	22.08	-32.14	-13.00	-19.14	peak	V
6	981.57	-55.41	26.02	-29.39	-13.00	-16.39	peak	V
7	1342.00	-41.28	4.59	-36.69	-13.00	-23.69	peak	V
8	2782.00	-40.44	14.43	-26.01	-13.00	-13.01	peak	V
9	3840.00	-38.38	20.19	-18.19	-13.00	-5.19	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 2	Date:	2010/09/24
Channel:	Middle	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	49.40	-56.60	39.31	-17.29	-13.00	-4.29	peak	H
2	91.11	-52.84	13.15	-39.69	-13.00	-26.69	peak	H
3	190.05	-53.71	-1.15	-54.86	-13.00	-41.86	peak	H
4	480.08	-55.71	22.31	-33.40	-13.00	-20.40	peak	H
5	836.07	-55.41	24.60	-30.81	-13.00	-17.81	peak	H
6	897.18	-55.26	31.54	-23.72	-13.00	-10.72	peak	H
7	1224.00	-41.54	11.09	-30.45	-13.00	-17.45	peak	H
8	2734.00	-40.04	12.81	-27.23	-13.00	-14.23	peak	H
9	3920.00	-38.15	16.26	-21.89	-13.00	-8.89	peak	H
1	37.76	-45.05	16.84	-28.21	-13.00	-15.21	peak	V
2	52.31	-52.18	21.28	-30.90	-13.00	-17.90	peak	V
3	104.69	-51.05	10.37	-40.68	-13.00	-27.68	peak	V
4	268.62	-54.77	12.67	-42.10	-13.00	-29.10	peak	V
5	738.10	-54.22	22.83	-31.39	-13.00	-18.39	peak	V
6	997.09	-54.92	26.70	-28.22	-13.00	-15.22	peak	V
7	1414.00	-40.86	5.02	-35.84	-13.00	-22.84	peak	V
8	2708.00	-39.93	13.83	-26.10	-13.00	-13.10	peak	V
9	3910.00	-39.43	20.35	-19.08	-13.00	-6.08	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 2	Date:	2010/09/24
Channel:	High	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	49.40	-57.03	39.31	-17.72	-13.00	-4.72	peak	H
2	90.14	-52.17	12.97	-39.20	-13.00	-26.20	peak	H
3	349.13	-55.72	7.38	-48.34	-13.00	-35.34	peak	H
4	491.72	-55.41	21.98	-33.43	-13.00	-20.43	peak	H
5	843.83	-55.92	25.60	-30.32	-13.00	-17.32	peak	H
6	919.49	-55.12	31.41	-23.71	-13.00	-10.71	peak	H
7	1308.00	-41.51	10.87	-30.64	-13.00	-17.64	peak	H
8	2758.00	-40.16	12.89	-27.27	-13.00	-14.27	peak	H
9	3840.00	-39.42	16.09	-23.33	-13.00	-10.33	peak	H
1	37.76	-45.67	16.84	-28.83	-13.00	-15.83	peak	V
2	52.31	-53.03	21.28	-31.75	-13.00	-18.75	peak	V
3	101.78	-52.03	10.99	-41.04	-13.00	-28.04	peak	V
4	275.41	-55.26	13.17	-42.09	-13.00	-29.09	peak	V
5	738.10	-54.60	22.83	-31.77	-13.00	-18.77	peak	V
6	960.23	-54.79	25.23	-29.56	-13.00	-16.56	peak	V
7	1438.00	-41.19	5.17	-36.02	-13.00	-23.02	peak	V
8	2766.00	-40.70	14.30	-26.40	-13.00	-13.40	peak	V
9	3890.00	-38.78	20.30	-18.48	-13.00	-5.48	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	2010/09/24
Channel:	Low	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	50.37	-56.60	39.23	-17.37	-13.00	-4.37	peak	H
2	97.90	-51.71	14.43	-37.28	-13.00	-24.28	peak	H
3	339.43	-55.69	7.54	-48.15	-13.00	-35.15	peak	H
4	489.78	-54.60	22.04	-32.56	-13.00	-19.56	peak	H
5	760.41	-54.55	18.53	-36.02	-13.00	-23.02	peak	H
6	918.52	-55.48	31.43	-24.05	-13.00	-11.05	peak	H
7	1402.00	-40.97	10.62	-30.35	-13.00	-17.35	peak	H
8	2826.00	-39.85	13.12	-26.73	-13.00	-13.73	peak	H
9	3820.00	-39.19	16.03	-23.16	-13.00	-10.16	peak	H
1	50.37	-53.73	23.59	-30.14	-13.00	-17.14	peak	V
2	86.26	-43.64	2.66	-40.98	-13.00	-27.98	peak	V
3	279.29	-56.33	13.46	-42.87	-13.00	-29.87	peak	V
4	630.43	-54.94	19.74	-35.20	-13.00	-22.20	peak	V
5	740.04	-50.16	22.91	-27.25	-13.00	-14.25	peak	V
6	911.73	-52.79	24.01	-28.78	-13.00	-15.78	peak	V
7	1334.00	-41.07	4.53	-36.54	-13.00	-23.54	peak	V
8	2736.00	-40.20	14.06	-26.14	-13.00	-13.14	peak	V
9	3910.00	-39.18	20.35	-18.83	-13.00	-5.83	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	2010/09/24
Channel:	Middle	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	50.37	-56.70	39.23	-17.47	-13.00	-4.47	peak	H
2	95.96	-51.44	14.07	-37.37	-13.00	-24.37	peak	H
3	347.19	-55.01	7.44	-47.57	-13.00	-34.57	peak	H
4	484.93	-55.35	22.18	-33.17	-13.00	-20.17	peak	H
5	787.57	-55.45	19.74	-35.71	-13.00	-22.71	peak	H
6	905.91	-55.27	31.73	-23.54	-13.00	-10.54	peak	H
7	1270.00	-40.75	10.97	-29.78	-13.00	-16.78	peak	H
8	2806.00	-40.51	13.06	-27.45	-13.00	-14.45	peak	H
9	3960.00	-39.01	16.36	-22.65	-13.00	-9.65	peak	H
1	50.37	-52.62	23.59	-29.03	-13.00	-16.03	peak	V
2	85.29	-42.98	1.92	-41.06	-13.00	-28.06	peak	V
3	297.72	-54.72	12.47	-42.25	-13.00	-29.25	peak	V
4	625.58	-54.75	19.54	-35.21	-13.00	-22.21	peak	V
5	751.68	-50.54	22.85	-27.69	-13.00	-14.69	peak	V
6	991.27	-55.24	26.44	-28.80	-13.00	-15.80	peak	V
7	1272.00	-41.00	4.15	-36.85	-13.00	-23.85	peak	V
8	2800.00	-40.94	14.59	-26.35	-13.00	-13.35	peak	V
9	3870.00	-39.19	20.25	-18.94	-13.00	-5.94	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 3	Date:	2010/09/24
Channel:	High	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	49.40	-57.27	39.31	-17.96	-13.00	-4.96	peak	H
2	97.90	-50.88	14.43	-36.45	-13.00	-23.45	peak	H
3	350.10	-55.60	7.36	-48.24	-13.00	-35.24	peak	H
4	486.87	-54.73	22.12	-32.61	-13.00	-19.61	peak	H
5	774.96	-55.38	19.19	-36.19	-13.00	-23.19	peak	H
6	908.82	-55.25	31.65	-23.60	-13.00	-10.60	peak	H
7	1164.00	-40.46	11.25	-29.21	-13.00	-16.21	peak	H
8	2822.00	-40.61	13.11	-27.50	-13.00	-14.50	peak	H
9	4020.00	-39.71	16.47	-23.24	-13.00	-10.24	peak	H
1	51.34	-52.23	22.43	-29.80	-13.00	-16.80	peak	V
2	85.29	-43.18	1.92	-41.26	-13.00	-28.26	peak	V
3	269.59	-54.64	12.74	-41.90	-13.00	-28.90	peak	V
4	338.46	-54.98	12.53	-42.45	-13.00	-29.45	peak	V
5	763.32	-51.88	22.69	-29.19	-13.00	-16.19	peak	V
6	930.16	-52.64	24.43	-28.21	-13.00	-15.21	peak	V
7	1496.00	-41.43	5.52	-35.91	-13.00	-22.91	peak	V
8	2724.00	-40.36	13.96	-26.40	-13.00	-13.40	peak	V
9	3740.00	-38.83	19.92	-18.91	-13.00	-5.91	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	2010/09/24
Channel:	Low	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	49.40	-57.07	39.31	-17.76	-13.00	-4.76	peak	H
2	91.11	-52.34	13.15	-39.19	-13.00	-26.19	peak	H
3	344.28	-56.10	7.50	-48.60	-13.00	-35.60	peak	H
4	480.08	-55.31	22.31	-33.00	-13.00	-20.00	peak	H
5	757.50	-54.41	18.42	-35.99	-13.00	-22.99	peak	H
6	912.70	-55.36	31.56	-23.80	-13.00	-10.80	peak	H
7	1344.00	-40.51	10.78	-29.73	-13.00	-16.73	peak	H
8	2584.00	-40.00	12.28	-27.72	-13.00	-14.72	peak	H
9	3990.00	-39.29	16.43	-22.86	-13.00	-9.86	peak	H
1	38.73	-46.13	17.22	-28.91	-13.00	-15.91	peak	V
2	105.66	-50.54	10.16	-40.38	-13.00	-27.38	peak	V
3	285.11	-55.70	13.21	-42.49	-13.00	-29.49	peak	V
4	614.91	-55.30	18.96	-36.34	-13.00	-23.34	peak	V
5	743.92	-53.86	22.89	-30.97	-13.00	-17.97	peak	V
6	999.03	-55.32	26.79	-28.53	-13.00	-15.53	peak	V
7	1422.00	-40.87	5.07	-35.80	-13.00	-22.80	peak	V
8	2738.00	-39.40	14.07	-25.33	-13.00	-12.33	peak	V
9	3850.00	-38.28	20.20	-18.08	-13.00	-5.08	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	2010/09/24
Channel:	Middle	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	50.37	-57.08	39.23	-17.85	-13.00	-4.85	peak	H
2	92.08	-51.90	13.33	-38.57	-13.00	-25.57	peak	H
3	342.34	-55.47	7.56	-47.91	-13.00	-34.91	peak	H
4	484.93	-55.77	22.18	-33.59	-13.00	-20.59	peak	H
5	764.29	-54.55	18.72	-35.83	-13.00	-22.83	peak	H
6	932.10	-55.12	30.83	-24.29	-13.00	-11.29	peak	H
7	1264.00	-40.93	10.99	-29.94	-13.00	-16.94	peak	H
8	2744.00	-40.08	12.84	-27.24	-13.00	-14.24	peak	H
9	3840.00	-38.96	16.09	-22.87	-13.00	-9.87	peak	H
1	36.79	-44.55	16.44	-28.11	-13.00	-15.11	peak	V
2	105.66	-51.05	10.16	-40.89	-13.00	-27.89	peak	V
3	287.05	-55.18	13.10	-42.08	-13.00	-29.08	peak	V
4	643.04	-54.22	20.24	-33.98	-13.00	-20.98	peak	V
5	843.83	-54.64	22.44	-32.20	-13.00	-19.20	peak	V
6	987.39	-55.16	26.28	-28.88	-13.00	-15.88	peak	V
7	1468.00	-41.11	5.36	-35.75	-13.00	-22.75	peak	V
8	2716.00	-40.28	13.89	-26.39	-13.00	-13.39	peak	V
9	3850.00	-38.17	20.20	-17.97	-13.00	-4.97	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	Sphere	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	Mode 4	Date:	2010/09/24
Channel:	High	Test By:	Gary Wu

No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	49.40	-57.49	39.31	-18.18	-13.00	-5.18	peak	H
2	91.11	-52.51	13.15	-39.36	-13.00	-26.36	peak	H
3	341.37	-55.76	7.59	-48.17	-13.00	-35.17	peak	H
4	482.99	-54.41	22.22	-32.19	-13.00	-19.19	peak	H
5	798.24	-54.03	20.18	-33.85	-13.00	-20.85	peak	H
6	920.46	-55.59	31.37	-24.22	-13.00	-11.22	peak	H
7	1178.00	-39.70	11.22	-28.48	-13.00	-15.48	peak	H
8	2732.00	-39.79	12.79	-27.00	-13.00	-14.00	peak	H
9	3880.00	-39.29	16.18	-23.11	-13.00	-10.11	peak	H
1	37.76	-45.62	16.84	-28.78	-13.00	-15.78	peak	V
2	100.81	-52.12	11.18	-40.94	-13.00	-27.94	peak	V
3	327.79	-53.83	11.43	-42.40	-13.00	-29.40	peak	V
4	650.80	-54.67	20.55	-34.12	-13.00	-21.12	peak	V
5	735.19	-53.91	22.70	-31.21	-13.00	-18.21	peak	V
6	976.72	-55.50	25.83	-29.67	-13.00	-16.67	peak	V
7	1318.00	-40.82	4.42	-36.40	-13.00	-23.40	peak	V
8	2802.00	-39.46	14.61	-24.85	-13.00	-11.85	peak	V
9	3840.00	-38.55	20.19	-18.36	-13.00	-5.36	peak	V

6 Frequency Stability (Temperature Variation) Test

6.1. Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block.

The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

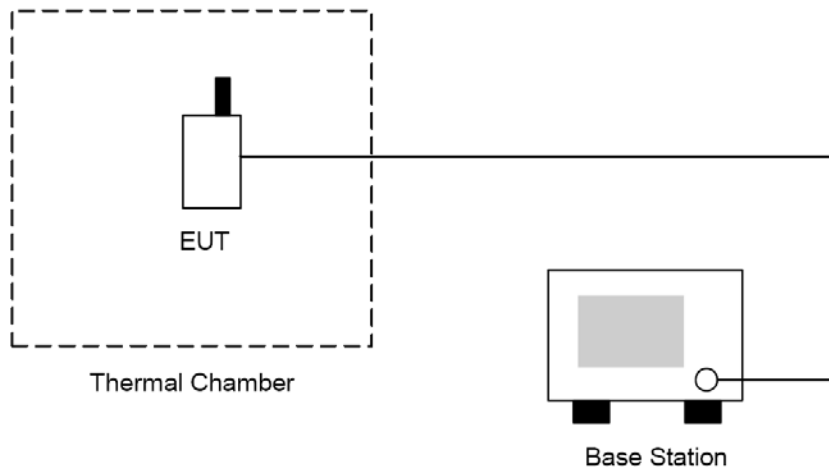
6.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	08/26/2009	(2)
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

6.3. Setup



6.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was note within one minute.
3. With power OFF, the temperature was raised in 10°C steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The temperature tests were performed for the worst case.
5. Test data was recorded.

6.5. Uncertainty

The measurement uncertainty is defined as for Frequency Stability (Temperature Variation) measurement is $\pm 10\text{Hz}$.

6.6. Test Result

Model Number	Sphere			
Test Item	Frequency Stability (Temperature Variation)			
Test Mode	Mode 1			
Date of Test	09/24/2010		Test Site	TE02
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
-30	21.36	0.011	±2.5	Pass
-20	25.89	0.014	±2.5	Pass
-10	37.25	0.020	±2.5	Pass
0	27.68	0.015	±2.5	Pass
10	31.26	0.017	±2.5	Pass
20	33.14	0.018	±2.5	Pass
30	26.54	0.014	±2.5	Pass
40	37.56	0.020	±2.5	Pass
50	38.12	0.020	±2.5	Pass

Model Number	Sphere			
Test Item	Frequency Stability (Temperature Variation)			
Test Mode	Mode 2			
Date of Test	09/24/2010		Test Site	TE02
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
-30	20.97	0.011	±2.5	Pass
-20	21.64	0.011	±2.5	Pass
-10	31.23	0.016	±2.5	Pass
0	31.44	0.016	±2.5	Pass
10	33.53	0.017	±2.5	Pass
20	30.36	0.015	±2.5	Pass
30	28.34	0.014	±2.5	Pass
40	27.36	0.014	±2.5	Pass
50	24.69	0.013	±2.5	Pass

Model Number	Sphere			
Test Item	Frequency Stability (Temperature Variation)			
Date of Test	09/24/2010		Test Site	TE02
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
-30	23.56	0.028	±2.5	Pass
-20	24.85	0.030	±2.5	Pass
-10	23.65	0.028	±2.5	Pass
0	24.32	0.029	±2.5	Pass
10	25.14	0.030	±2.5	Pass
20	27.48	0.033	±2.5	Pass
30	30.26	0.036	±2.5	Pass
40	35.29	0.042	±2.5	Pass
50	33.25	0.040	±2.5	Pass

Model Number	Sphere			
Test Item	Frequency Stability (Temperature Variation)			
Test Mode	Mode 4			
Date of Test	09/24/2010		Test Site	TE02
Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
-30	23.46	0.027	±2.5	Pass
-20	27.36	0.031	±2.5	Pass
-10	28.67	0.033	±2.5	Pass
0	30.87	0.035	±2.5	Pass
10	26.53	0.030	±2.5	Pass
20	21.96	0.025	±2.5	Pass
30	23.68	0.027	±2.5	Pass
40	26.64	0.030	±2.5	Pass
50	33.42	0.038	±2.5	Pass

7 Frequency Stability (Voltage Variation) Test

7.1. Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block.

The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

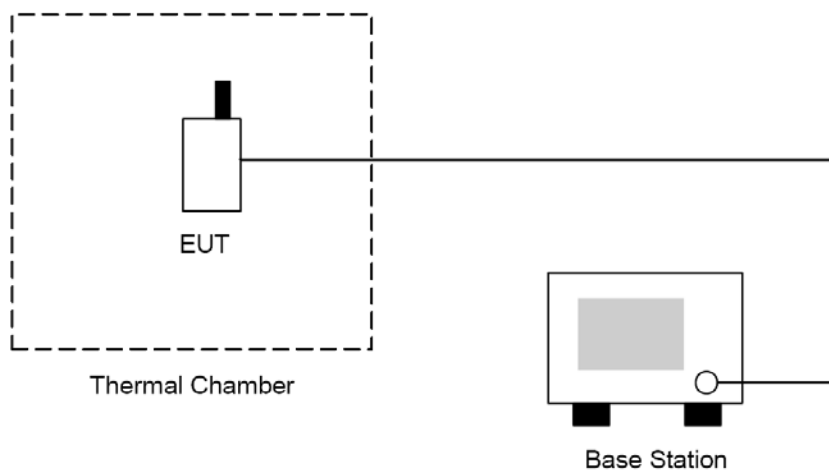
7.2. Test Instruments

Describe	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	109369	08/10/2010	(2)
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	08/26/2009	(2)
Test Site	ATL	TE02	TE02	N.C.R.	-----

Remark: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

NOTE: N.C.R. = No Calibration Request.

7.3. Setup



7.4. Test Procedure

1. The EUT was placed in a temperature chamber at $25 \pm 5^\circ\text{C}$ and connected as the following section.
2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

7.5. Uncertainty

The measurement uncertainty is defined as for Frequency Stability (Voltage Variation) measurement is $\pm 10\text{Hz}$.

7.6. Test Result

Model Number	Sphere				
Test Item	Frequency Stability (Voltage Variation)				
Test Mode	Mode 1				
Date of Test	09/24/2010		Test Site	TE02	
Level	Voltage [Vdc]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result
Battery full point	13.80	25.49	0.014	± 2.5	Pass
Normal	12.00	26.38	0.014	± 2.5	Pass
Battery cut-off point	10.20	23.55	0.013	± 2.5	Pass

Model Number	Sphere				
Test Item	Frequency Stability (Voltage Variation)				
Test Mode	Mode 2				
Date of Test	09/24/2010		Test Site	TE02	
Level	Voltage [Vdc]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result
Battery full point	13.80	25.34	0.013	± 2.5	Pass
Normal	12.00	22.67	0.012	± 2.5	Pass
Battery cut-off point	10.20	27.53	0.014	± 2.5	Pass

Model Number	Sphere				
Test Item	Frequency Stability (Voltage Variation)				
Test Mode	Mode 3				
Date of Test	09/24/2010		Test Site	TE02	
Level	Voltage [Vdc]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result
Battery full point	13.80	25.54	0.031	±2.5	Pass
Normal	12.00	23.89	0.029	±2.5	Pass
Battery cut-off point	10.20	26.34	0.031	±2.5	Pass

Model Number	Sphere				
Test Item	Frequency Stability (Voltage Variation)				
Test Mode	Mode 4				
Date of Test	09/24/2010		Test Site	TE02	
Level	Voltage [Vdc]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]	Result
Battery full point	13.80	29.87	0.034	±2.5	Pass
Normal	12.00	30.72	0.035	±2.5	Pass
Battery cut-off point	10.20	28.37	0.032	±2.5	Pass