DIGITAL EMC CO., LTD.

683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080
Tel: +82-31-321-2664 Fax: +82-31-321-1664
http://www.digitalemc.com

CERTIFICATION OF COMPLIANCE

LG-Nortel Co. Ltd.
533, Hogye-1dong, Dongan-gu, Anyang-Shi
Kyungki-do, 431-749, Korea

Dates of Tests: February 09 ~ 18, 2009
Test Report S/N: DR50110903E
Test Site : DIGITAL EMC CO., LTD.

FCC ID **TUILDP-7000BTU**

APPLICANT **LG-Nortel Co. Ltd.**

FCC Equipment Class	:	**Part 15 Spread Spectrum Transmitter(DSS)**
Device name	:	**KEY TELEPHONE UNIT**
Manufacturer	:	**LG-Nortel Co. Ltd.**
FCC ID	:	**TUILDP-7000BTU**
IC ID	:	**6241A-LDP7000BTU**
Test Device Serial number	:	**Identical prototype**
FCC Rule Part(s)	:	**FCC Part 15.247 Subpart C**
		ANSI C63.4-2003
		RSS-210
Frequency Range	:	**2402 ~ 2480 MHz**
Max. Output power	:	**-6.59 dBm Conducted**
Data of issue	:	**March 3, 2009**

TABLE OF CONTENTS

1. General information

This report contains the result of tests performed by:

DIGITAL EMC CO., LTD.
Address: 683-3, Yubang-Dong, Yongin-Si, Kyunggi-Do, Korea. 449-080
http://www.digitalemc.com E-mail: Harveysung@digitalemc.com
Tel: +82-31-321-2664 Fax: +82-31-321-1664

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

Tested by: Engineer

Data	Name	Signature
March 3, 2009	D.C. Cha	

Reviewed by: Technical Director

Data	Name	Signature
March 3, 2009	Harvey Sung	

Ordering party:

Company name	:	LG-Nortel Co. Ltd.
Address	:	533, Hogye-1dong, Dongan-gu,
City/town	:	Anyang-Shi, Kyungki-do, 431-749
Country	:	Korea
Date of order	:	December 20, 2008

2. Information about test item

TUILDP-7000BTU

2.1 Equipment information

Equipment model name.	LDP-7024BD Note.1
	LDP-7024LBD Note.1
Add model. (Original model)	VW-E700-24B (LDP-7024BD)
	VW-E700-L24B (LDP-7024LBD)
Equipment serial no.	Identical prototype
Type of equipment	KEY TELEPHONE UNIT
Frequency band	2402 ~ 2480 MHz
Type of Modulation	GFSK
Spread Spectrum	Frequency Hopping
Channel Spacing	1.0 MHz
Type of antenna	MONO POLE Antenna

- Note 1: LDP-7024BD and LDP-7024LBD are basically identical except LCD size and some LCD driving circuit.

2.2 Tested frequency

Frequency	TX	RX
Low frequency	2402MHz	2402MHz
Middle frequency	2441MHz	2441MHz
High frequency	2480MHz	2480MHz

2.3 Tested environment

Temperature	:	15 ~ 35 (°C)
Relative humidity content	:	20 ~ 75 %
Air pressure	:	86 ~ 103 kPa
Details of power supply	:	30V DC

2.4 Ancillary Equipment

Equipment	Model No.	Serial No.	Manufacturer
-	-	-	-

2.5 EMI Suppression Device(s)/Modifications

EMI suppression device(s) added and/or modifications made during testing

-> None

3. Test Report

3.1 Summary of tests

FCC Part / RSS-210 or GEN	Parameter	Limit (Using in 2400 ~ 2483.5MHz)	Test Condition	Status (note 1)
I. Transmit mode (Tx)				
15.247(a) / A8.1(a),(b),(d)	Carrier Frequency Separation	>= 20dB BW or >= Two-Thirds of the 20dB BW	Conducted	C
	Number of Hopping Frequencies	>= 15 hops		C
	20 dB Bandwidth	None		C
	Dwell Time	=< 0.4 seconds		C
15.247(b) / A8.4(2)	Transmitter Output Power	=< 1Watt , if CHs >= 75 Others =<0.125W		C
15.247(c) / A8.5	Band-edge /Conducted	The radiated emission to any 100 kHz of outband shall be at least 20dB below the highest inband spectral density.		C
	Conducted Spurious Emissions			C
15.205,15.209 / A8.5	Radiated Emissions	FCC 15.209	Radiated	C
15.207 / 7.2.2	AC Conducted Emissions	EN 55022	AC Line Conducted	C
RSS Gen Issue 2	Occupied Bandwidth (99%)	Not Applicable	Conducted	C
II. Receive mode (Rx)				
15.107 / 7.2.2	AC Conducted Emissions	EN 55022	Line Conducted	C
15.109 / 7.2.3.2	Receiver Spurious Emissions	< FCC 15.109 limits	Radiated	C

Note 1: C=Comply NC=Not Comply NT=Not Tested NA=Not Applicable

Note 2: RF conducted test data for LDP-7024BD is used for LDP-7024LBD.

But radiated/conducted emission test items were performed separately for each LDP-7024BD and LDP-7024LBD.

Note 3: Class B digital portion were tested and approved by verification procedure.

*The sample was tested according to the following specification:

- RSS-210; FCC Parts 15.247; ANSI C-63.4-2003, DA00-705

3.2 Transmitter requirements

3.2.1 Carrier Frequency Separation

- Procedure:

The carrier frequency separation was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function enabled.

After the trace being stable, the reading value between the peaks of the adjacent channels using the marker-delta function was recorded as the measurement results.

The spectrum analyzer is set to:

Span = 3 MHz (wide enough to capture the peaks of two adjacent channels)

RBW = 30 kHz Sweep = auto

VBW = 30 kHz Detector function = peak

Trace = max hold

- Measurement Data:

Frequency of marker #1 (MHz)	Frequency of marker #2 (MHz)	Test Results	
		Carrier Frequency Separation (MHz)	Result
2440.085	2441.087	1.002	Comply

- See next pages for actual measured spectrum plots.

- Minimum Standard:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW

- Measurement Setup

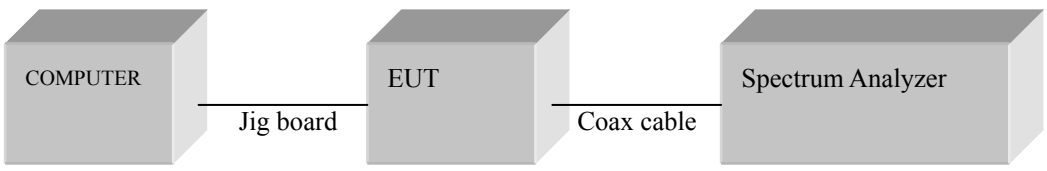
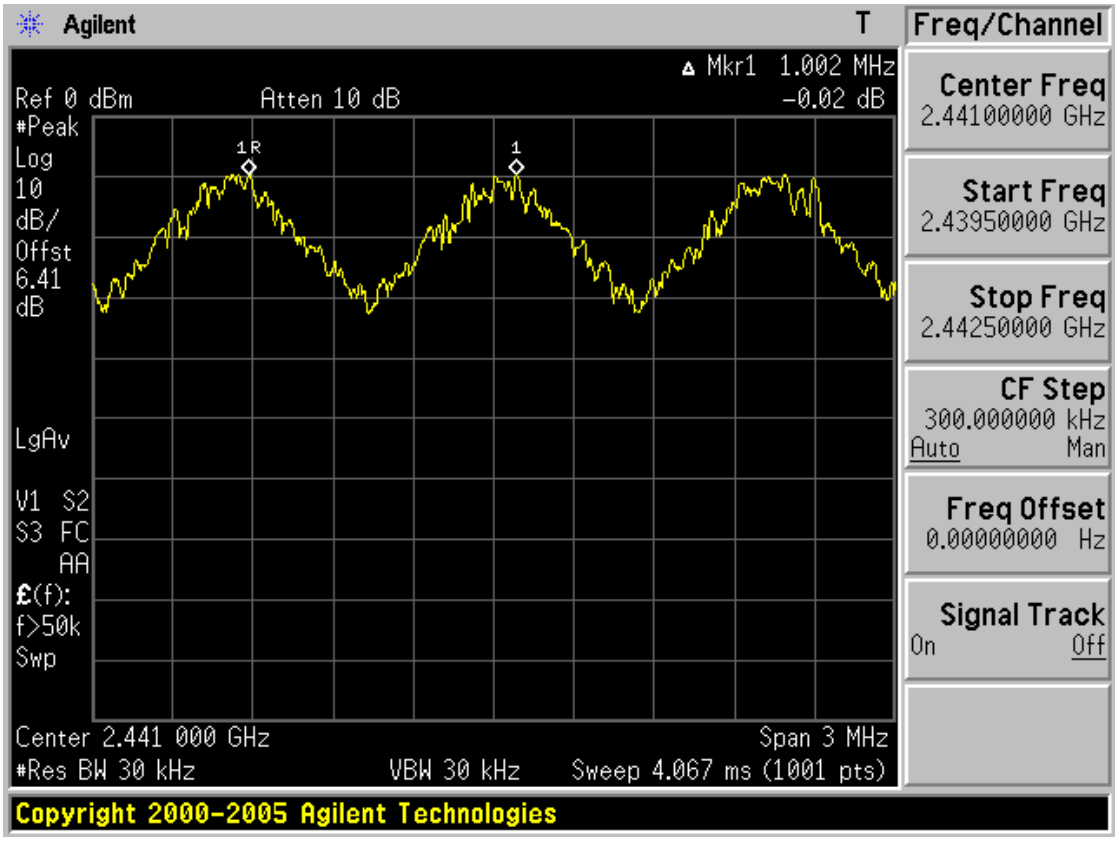


Figure 1: Measurement setup for the carrier frequency separation

Carrier Frequency Separation



3.2.2 Number of Hopping Frequencies

- Procedure:

The number of hopping frequencies was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the middle channel.

To get higher resolution, four frequency ranges within the 2400 ~ 2483.5 MHz FH band were examined.

The spectrum analyzer is set to:

Frequency range 1: Start = 2389.5MHz, Stop = 2414.5 MHz
2: Start = 2414.5MHz, Stop = 2439.5 MHz
3: Start = 2439.5MHz, Stop = 2464.5 MHz
4: Start = 2464.5MHz, Stop = 2489.5 MHz

RBW = 300 kHz (1% of the span or more) Sweep = auto

VBW = 300 kHz (VBW ≥ RBW) Detector function = peak

Trace = max hold Span = 25MHz

- Measurement Data: Comply

Total number of Hopping Channels	79

- See next pages for actual measured spectrum plots.

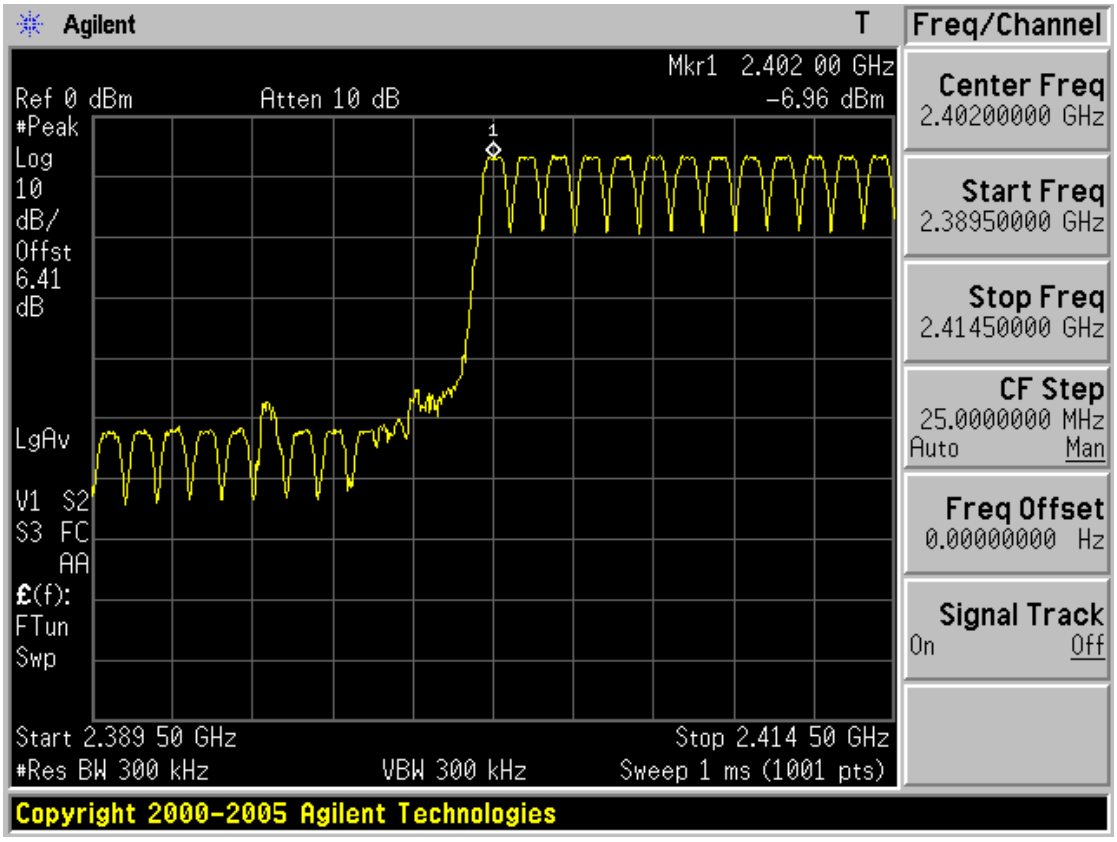
- Minimum Standard:

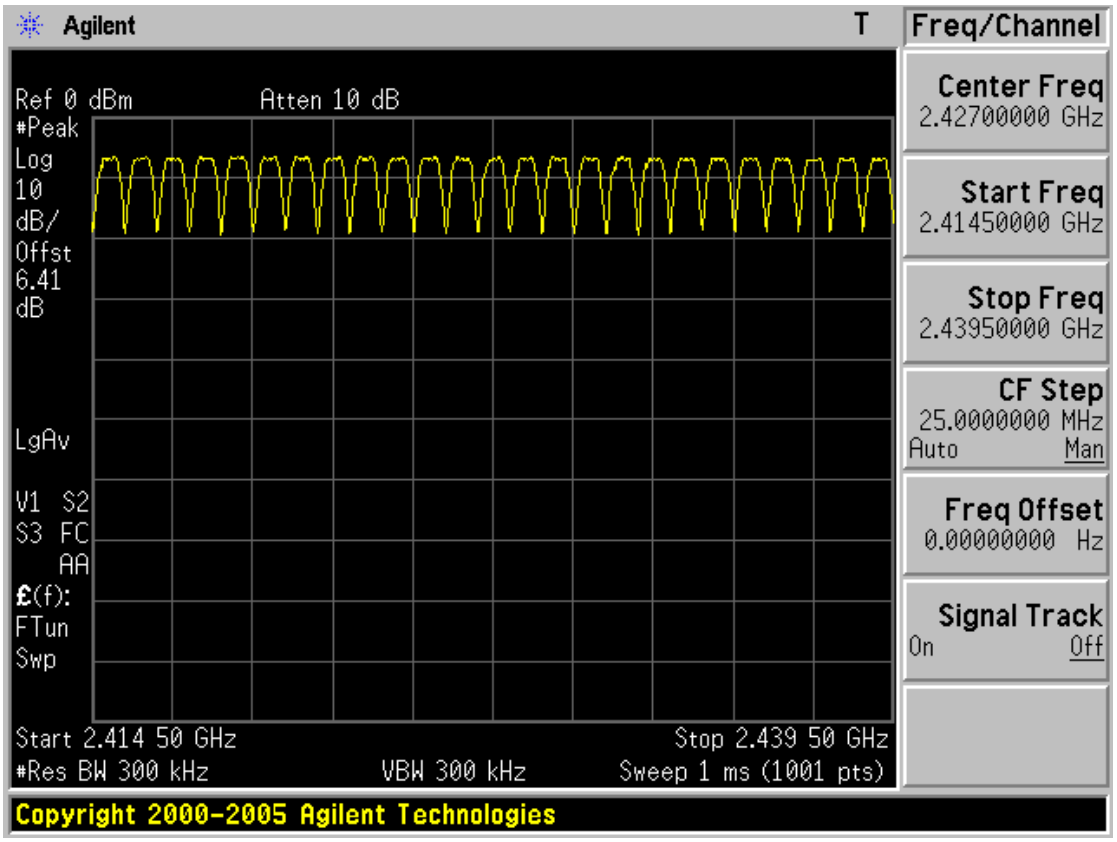
At least 15 hopes

- Measurement Setup

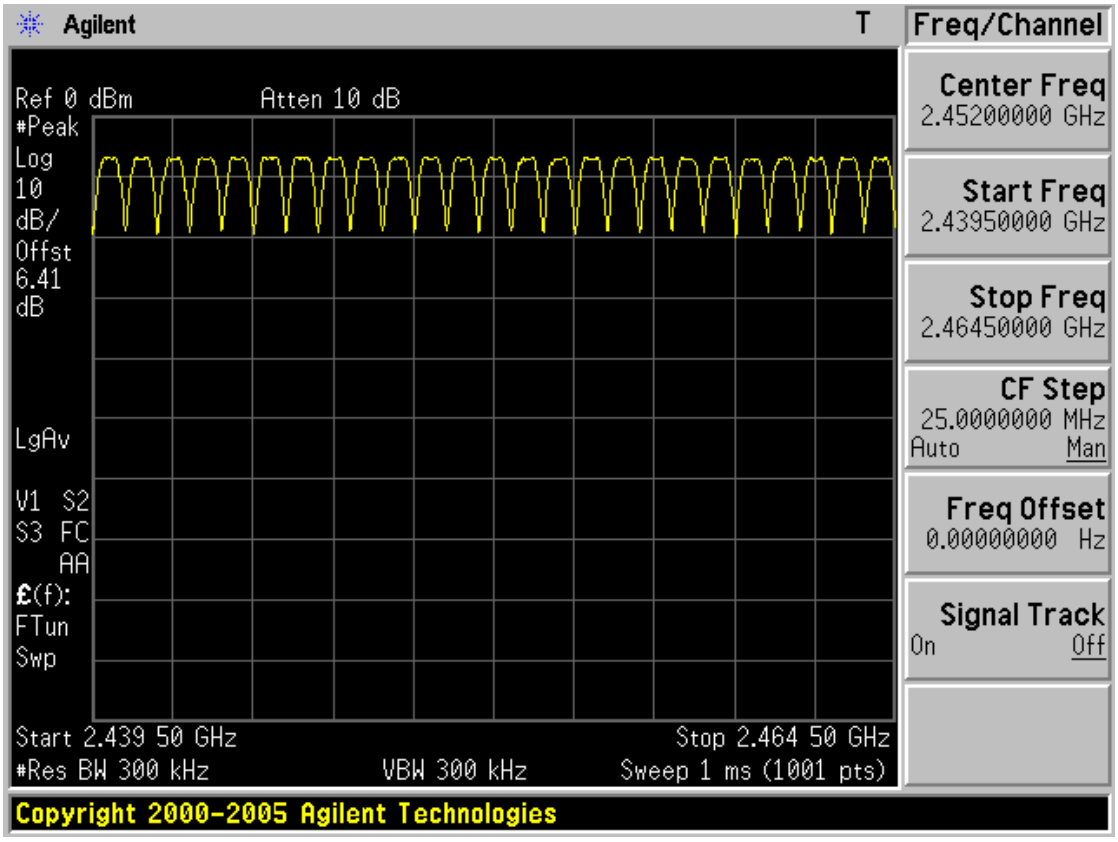
Same as the Chapter 3.2.1 (Figure 1)

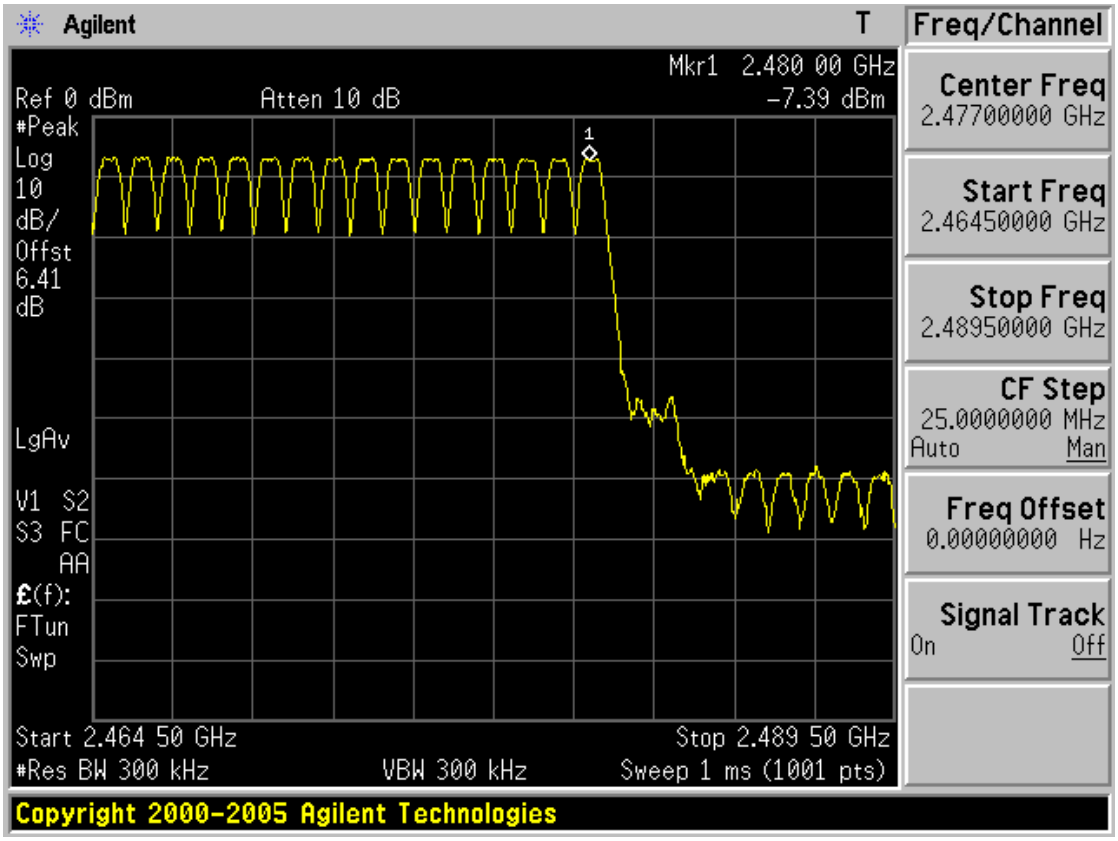
Number of Hopping Frequencies





Number of Hopping Frequencies





3.2.3 20 dB Bandwidth

- Procedure:

The bandwidth at 20 dB below the highest inband spectral density was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels.

After the trace being stable, Use the marker-to-peak function to set the marker to the peak of the emission. Use the marker-delta function to measure 20dB down one side of the emission. Reset the marker-delta function, and move the marker to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 20 dB bandwidth of the emission.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

Span = 5 MHz

RBW = 10 kHz (1% of the 20dB bandwidth or more) Sweep = auto

VBW = 10 kHz (VBW ≥ RBW) Detector function = peak

Trace = max hold

- Measurement Data:

Frequency (MHz)	Channel No.	Test Results	
		Measured Bandwidth (MHz)	Result
2402	**1**	**0.935**	**Comply**
2441	**40**	**0.935**	**Comply**
2480	**79**	**0.930**	**Comply**

- See next pages for actual measured spectrum plots.

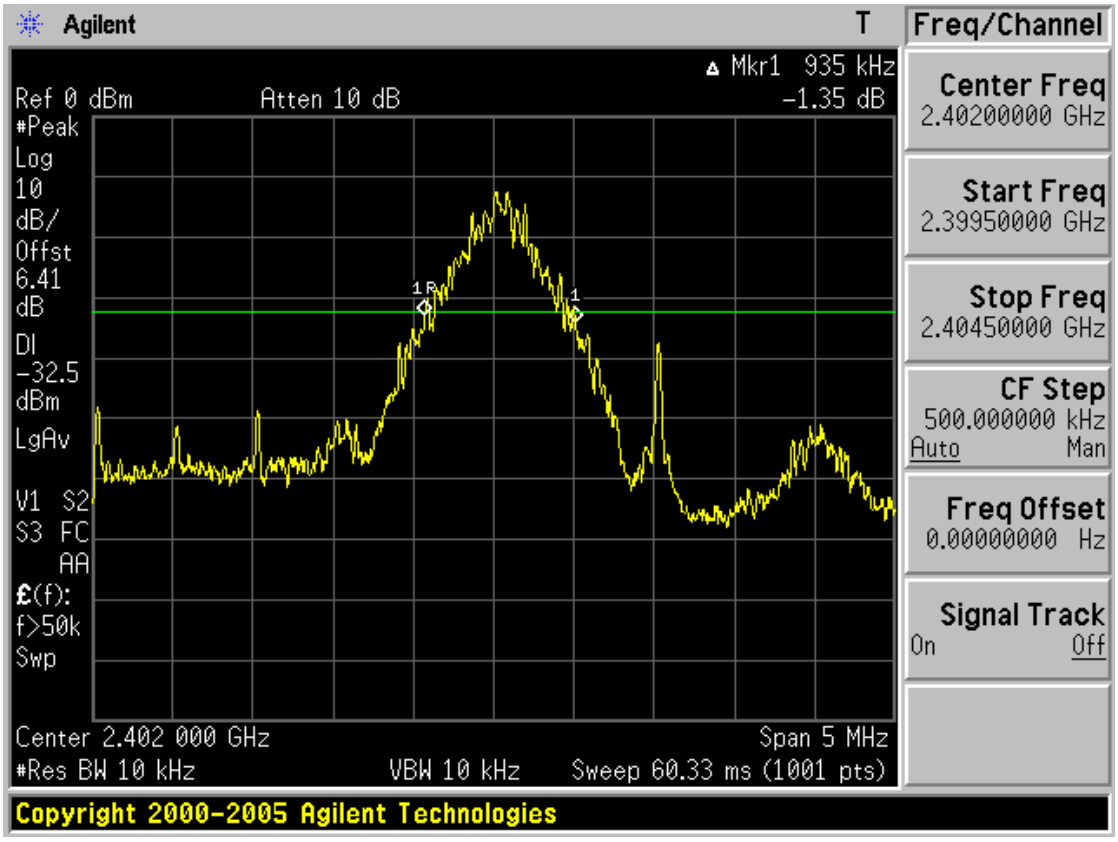
- Minimum Standard:

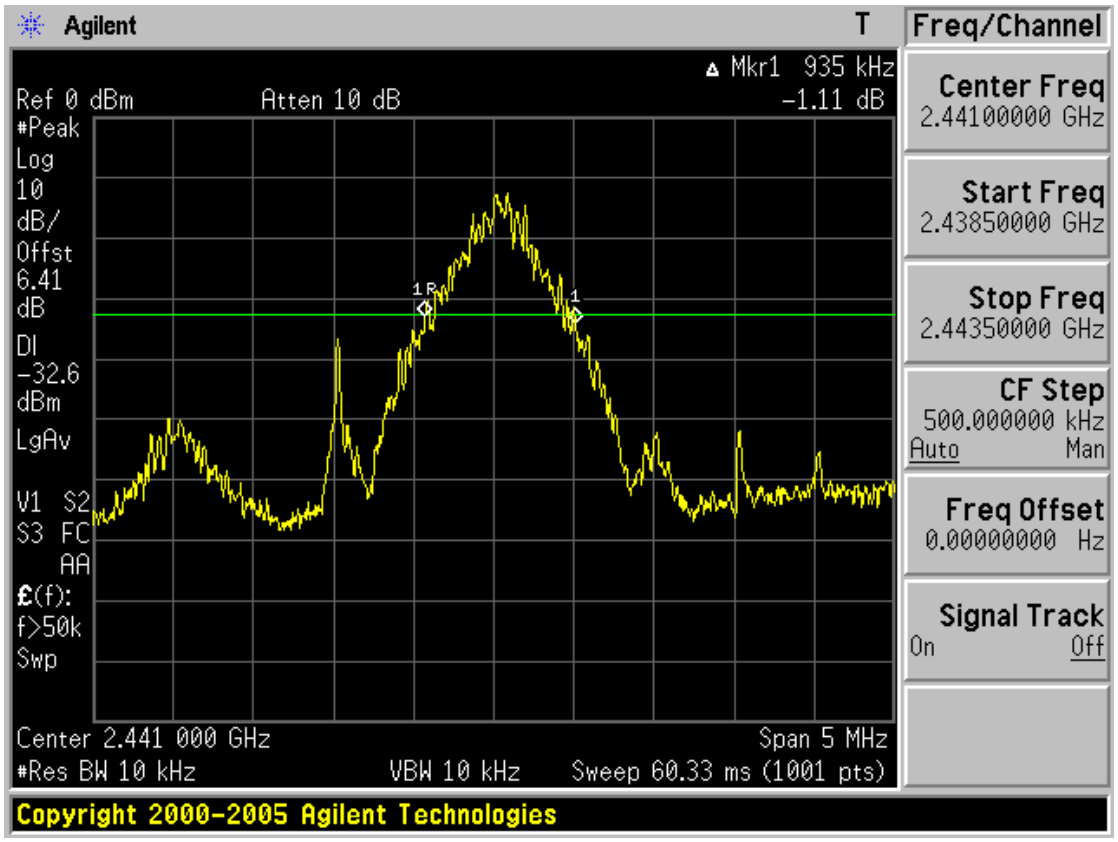
None

- Measurement Setup

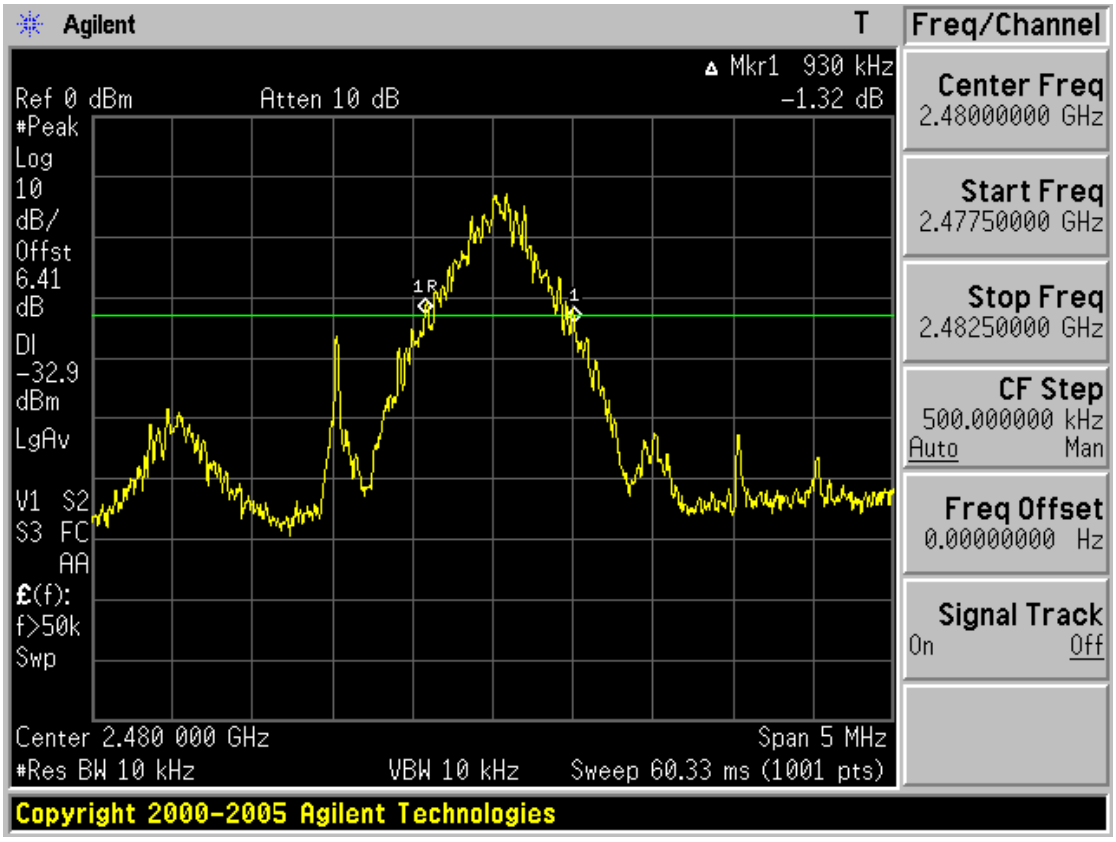
Same as the Chapter 3.2.1 (Figure 1)

20 dB Bandwidth





20 dB Bandwidth



3.2.4 Time of Occupancy (Dwell Time)

- Procedure:

The dwell time was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function enabled.

The spectrum analyzer is set to:

Center frequency = 2441 MHz — Span = zero

RBW = 1 MHz — VBW = 1 MHz (VBW ≥ RBW)

Trace = max hold — Detector function = peak

- Measurement Data: See next pages for actual measured spectrum plots.

Packet Type	Burst On Time (ms)	Period (ms)	Number of hopping Channels	DWELL TIME (s)	Result
DH 5	**2.90**	**3.75**	**79**	**0.309**	**Comply**

Note: Each new transmission event begins on the next channel in the hopping sequence after the final channel used in the previous transmission event.

DWELL TIME=(0.4 x Number of hopping Channels) x Burst On time / (period x Number of hopping Channels)

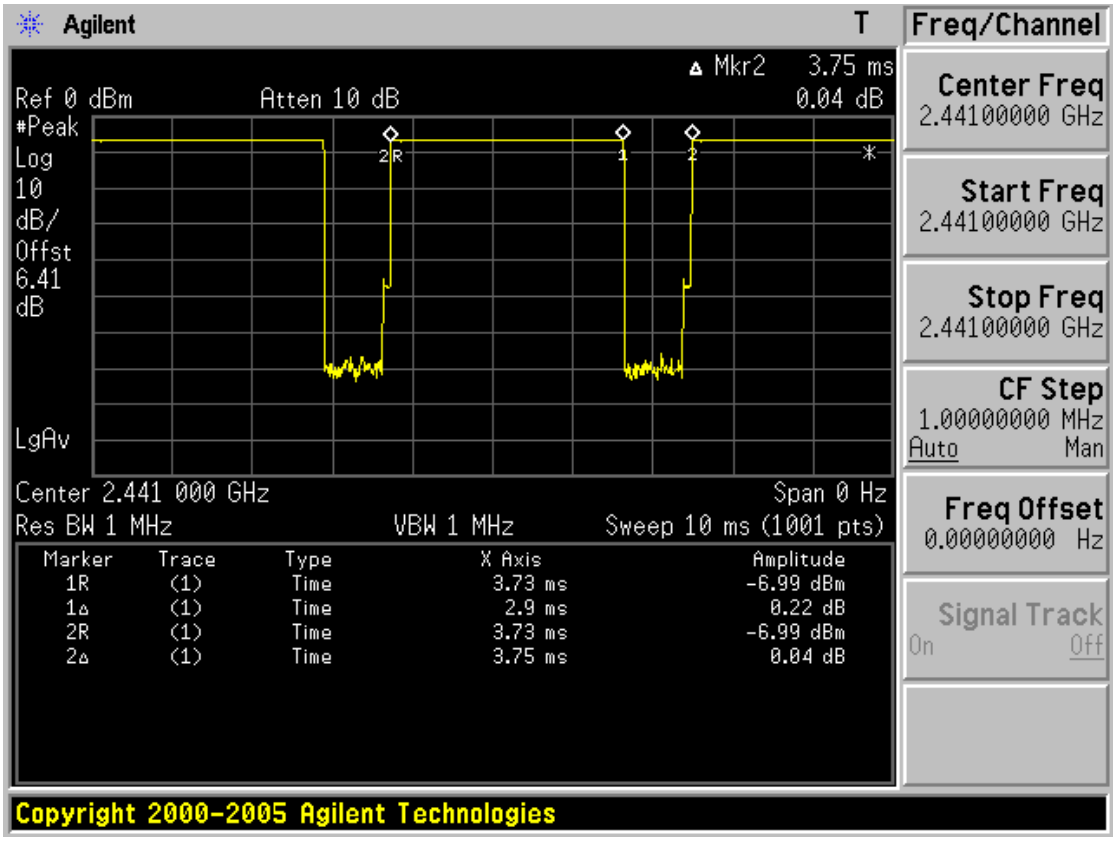
- Minimum Standard:

No greater than 0.4 seconds

- Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)

Time of Occupancy for Packet Type DH 5



3.2.5 Peak Output Power

- Procedure:

The peak output power was measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels.

After the trace being stable, Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

Span = 5 MHz (approximately 5 times of the 20 dB bandwidth)

RBW = 1 MHz (greater than the 20dB bandwidth of the emission being measured)

VBW = 1 MHz (VBW ≥ RBW) Detector function = peak

Trace = max hold Sweep = auto

- Measurement Data:

Frequency (MHz)	Ch.	Test Results		
		dBm	mW	Result
2402	**1**	**-6.59**	**0.219**	**Comply**
2441	40	-6.61	0.218	**Comply**
2480	79	-6.90	0.204	**Comply**

- See next pages for actual measured spectrum plots.

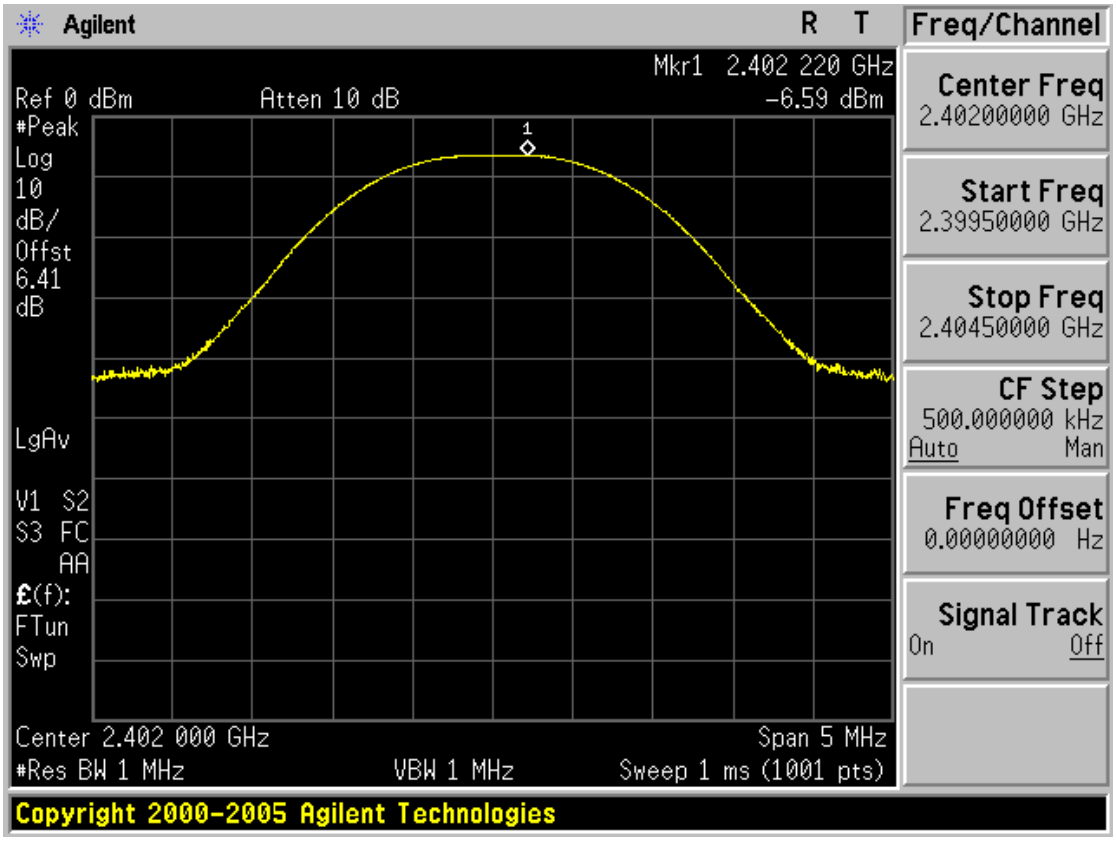
- Minimum Standard:

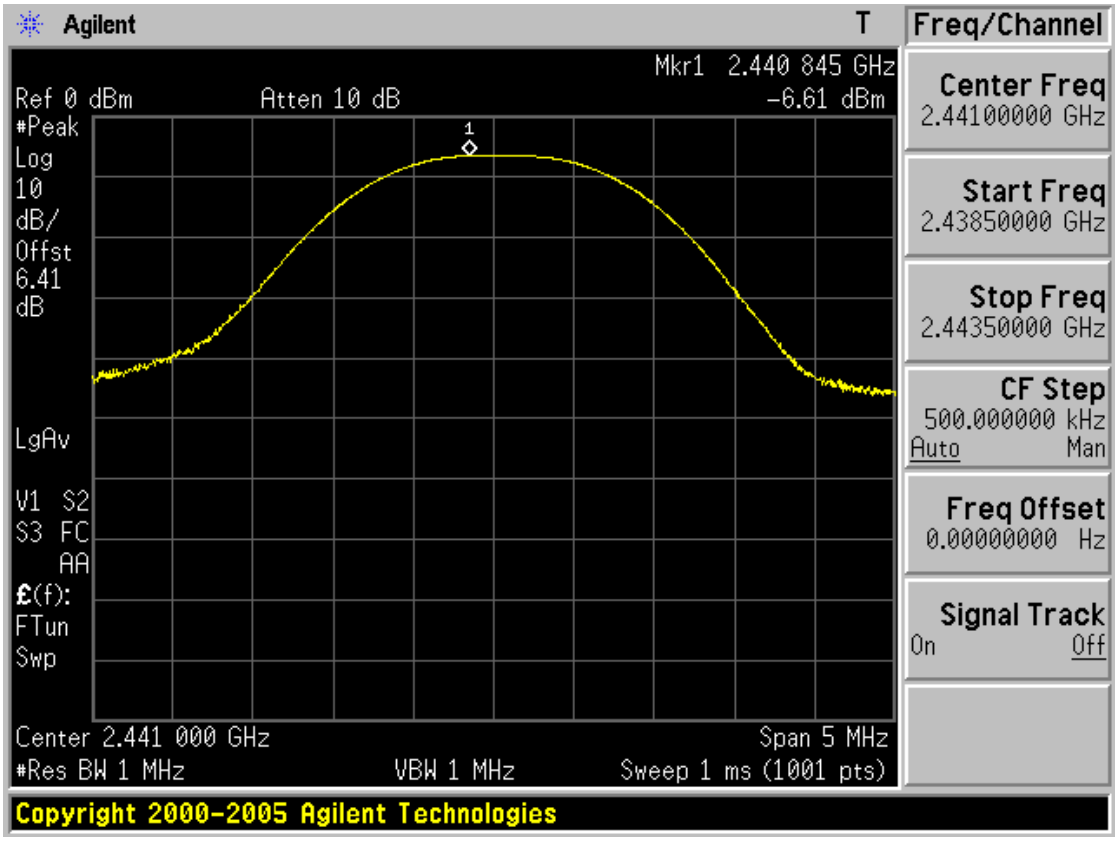
For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: **1 Watt**. For all other frequency hopping systems in the 2400-2483.5 MHz band: **0.125 Watts**

- Measurement Setup

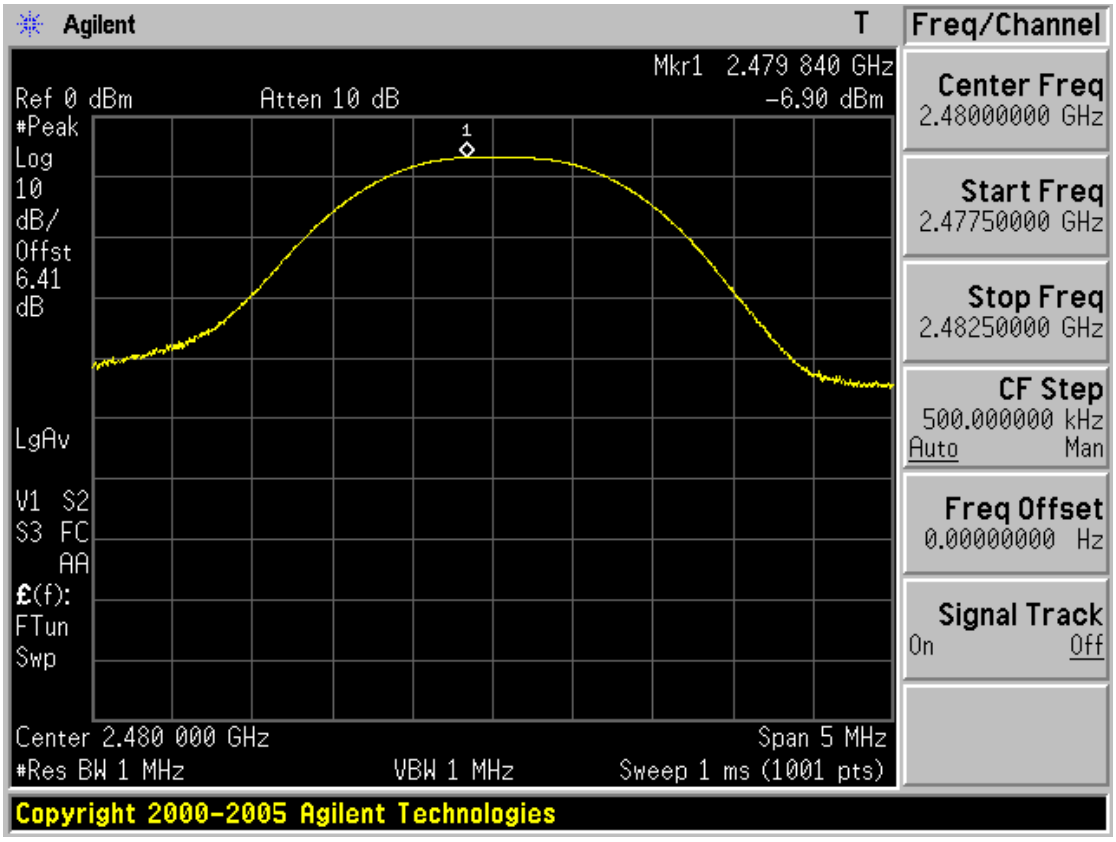
Same as the Chapter 3.2.1 (Figure 1)

Peak Output Power





Peak Output Power



3.2.6 Conducted Spurious Emissions

- Procedure:

The bandwidth at 20dB down from the highest inband spectral density is measured with a spectrum analyzer connected to the antenna terminal, while EUT had its hopping function disabled at the highest, middle and the lowest available channels.

After the trace being stable, Use the marker-to-peak function to measure 20 dB down both sides of the intentional emission.

The spectrum analyzer is set to:

Center frequency = the highest, middle and the lowest channels

RBW = 100 kHz VBW = 100 kHz

Detector function = peak

Trace = max hold Sweep = auto

- Measurement Data: Comply

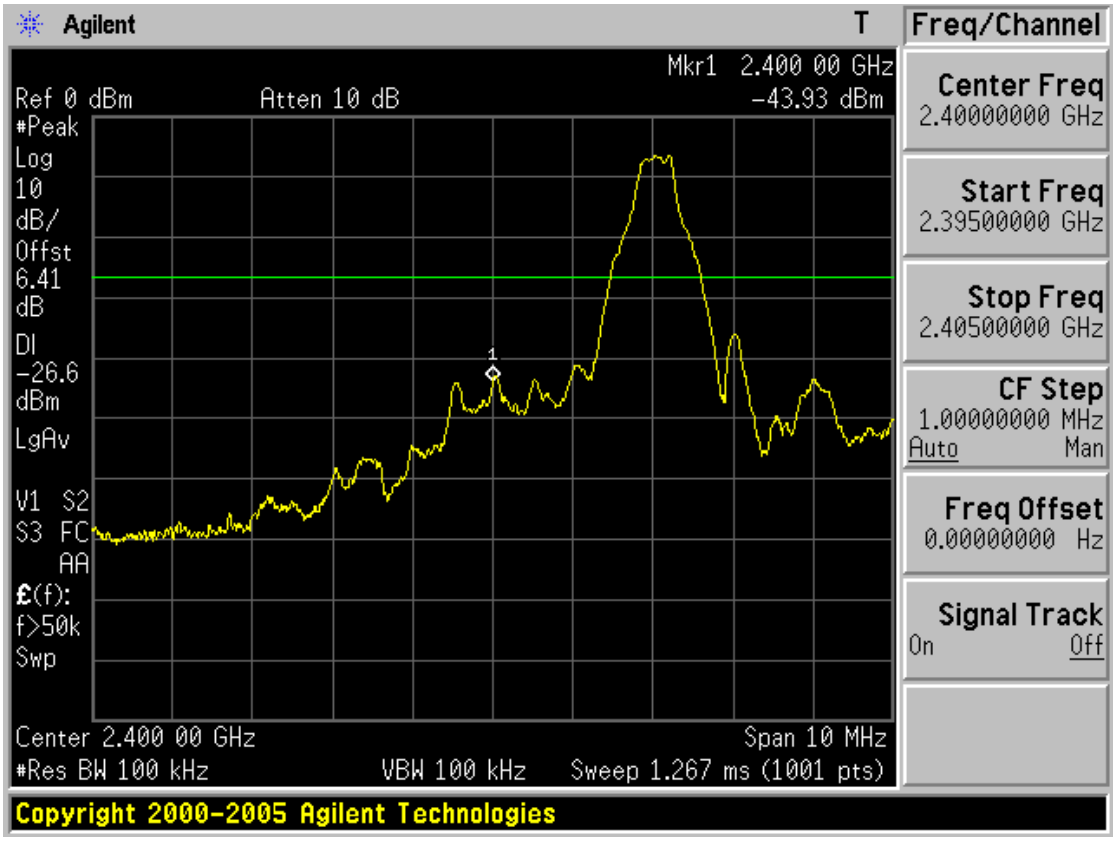
- See next pages for actual measured spectrum plots.

Minimum Standard:	> 20 dBc

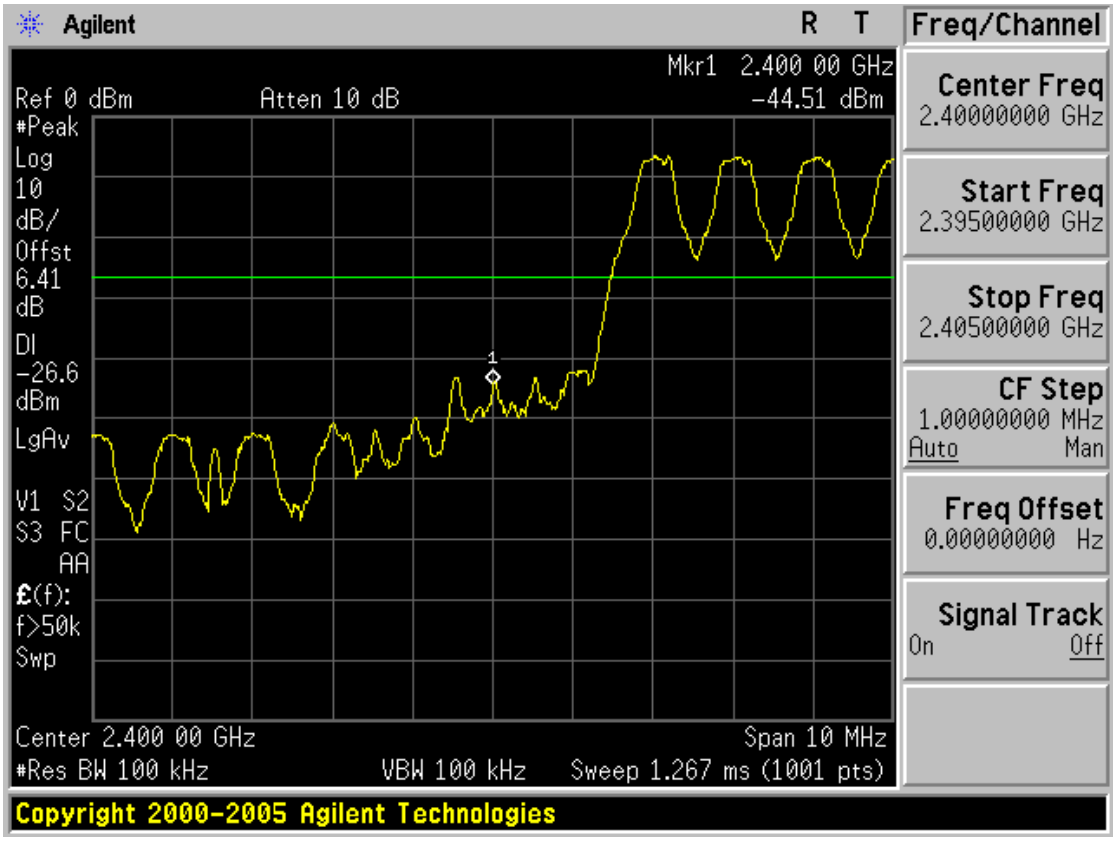
- Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)

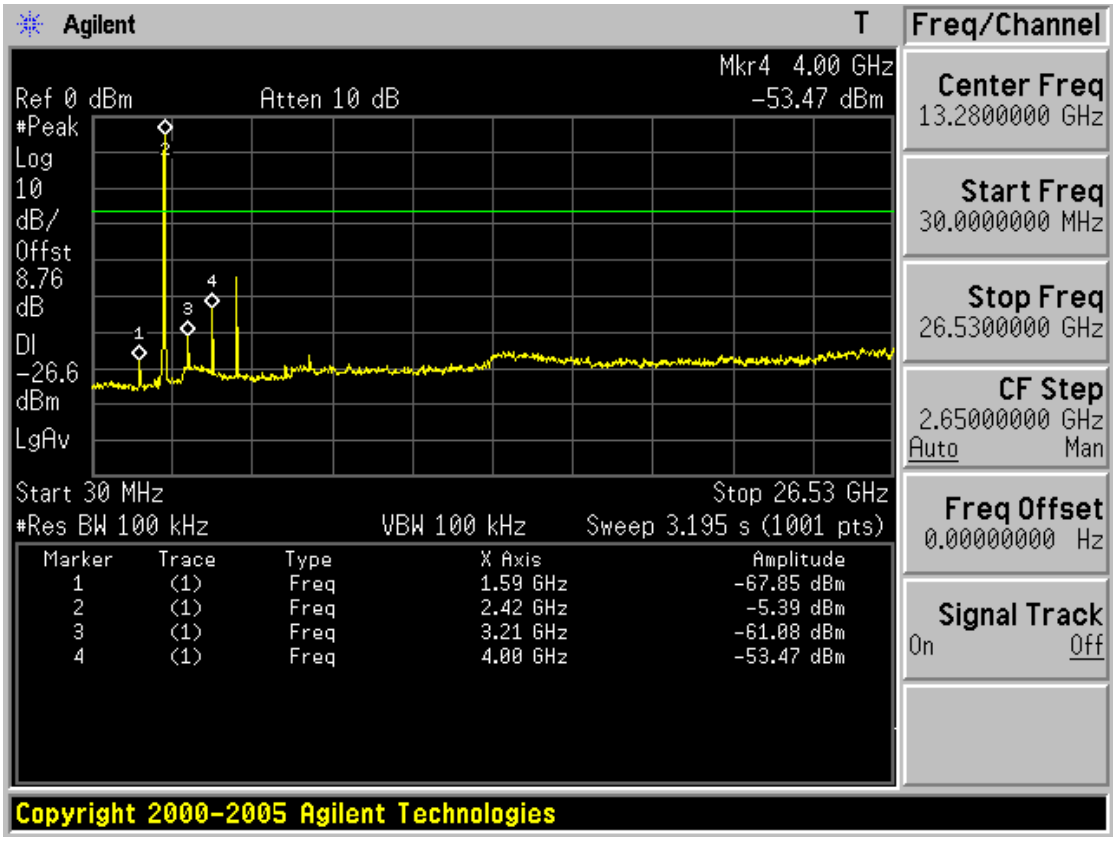
Low band with hopping disabled

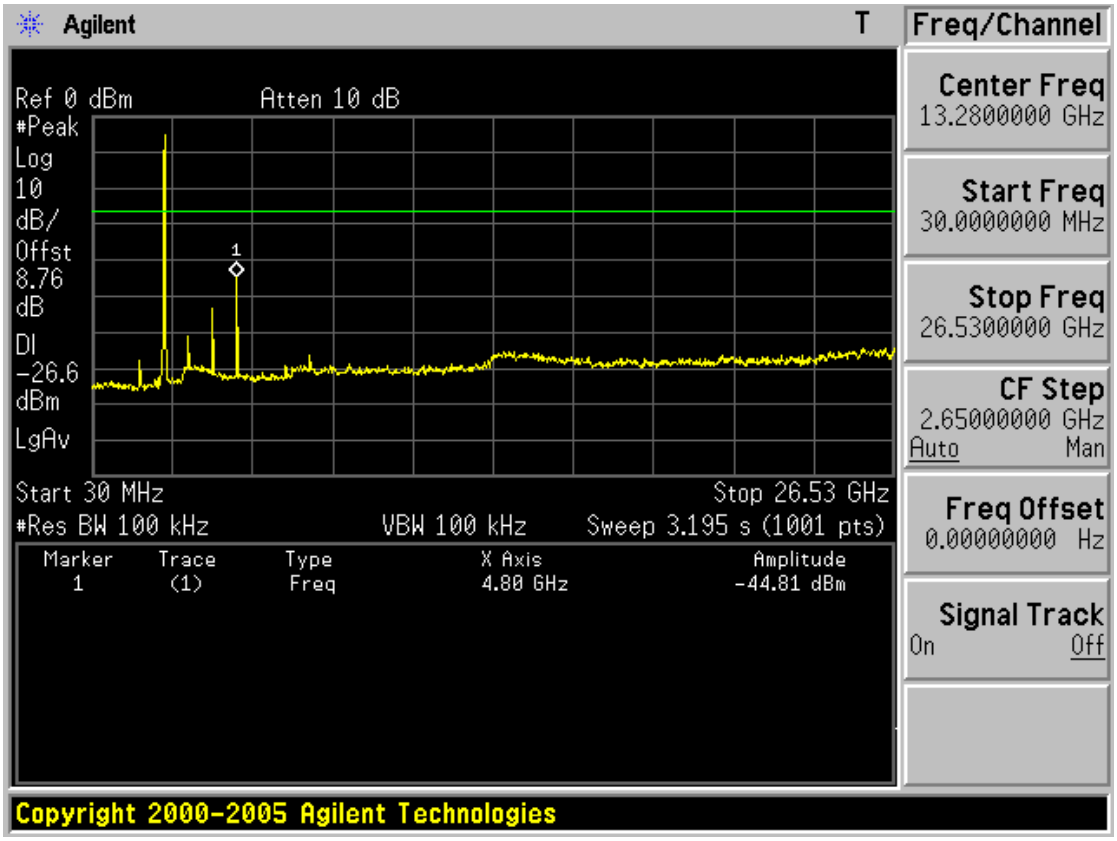


Low band with hopping enabled

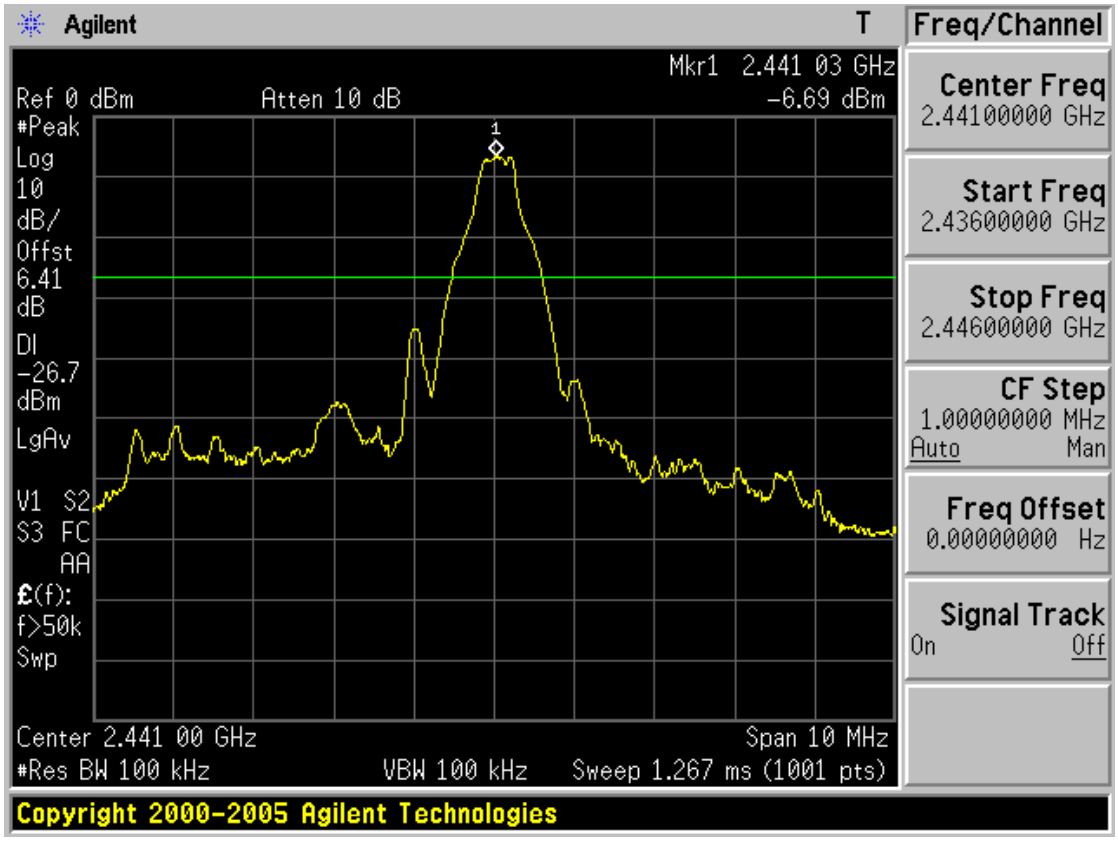


Low channel spurious

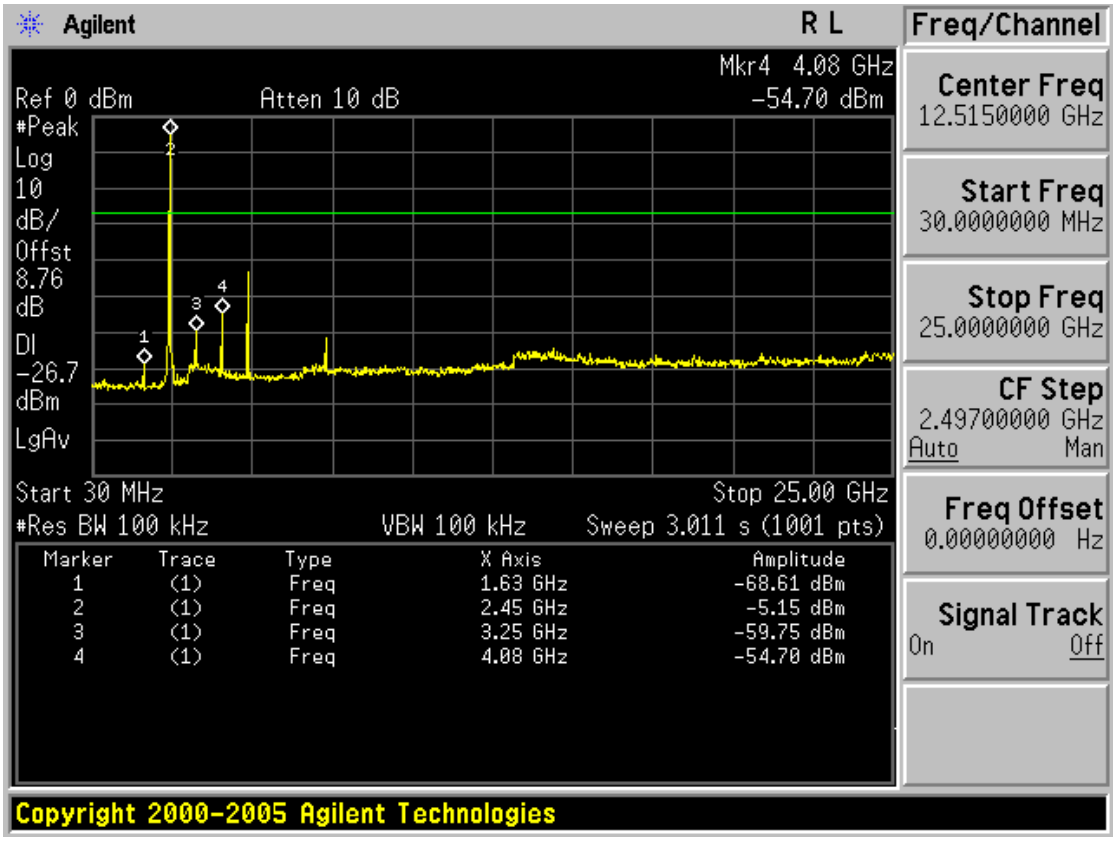


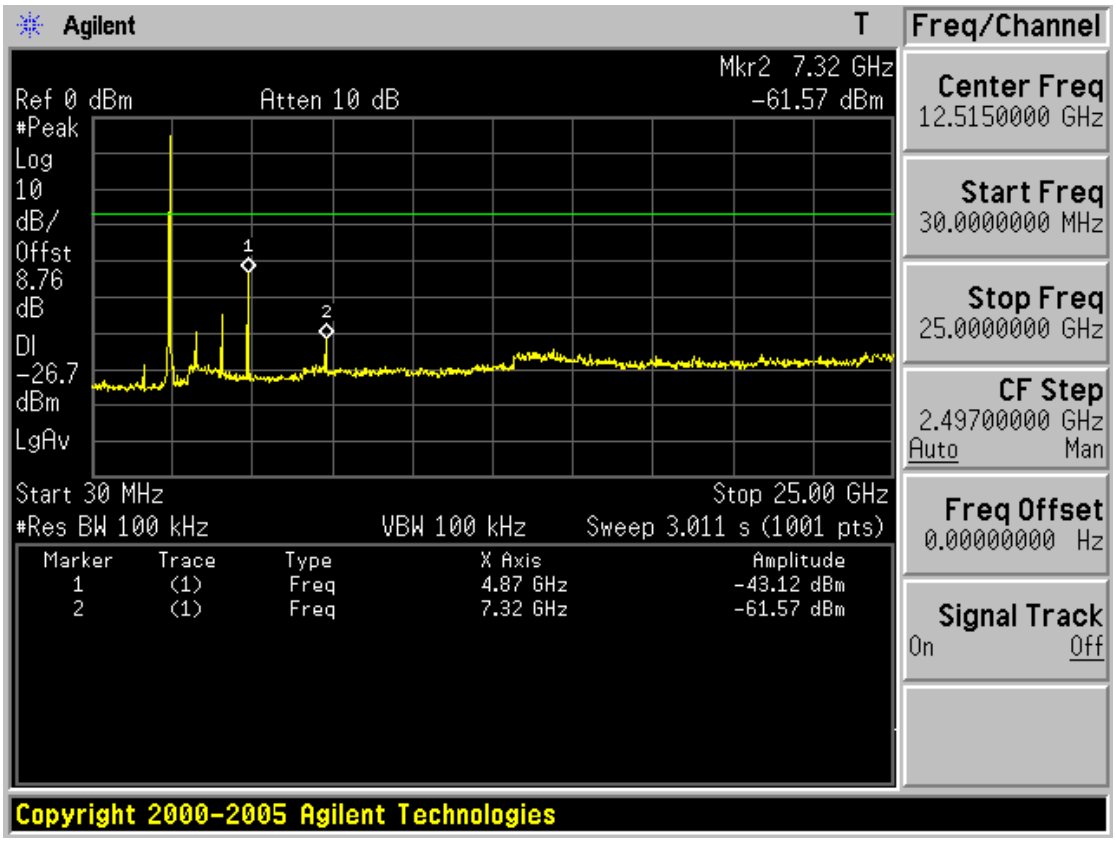


Mid channel ref

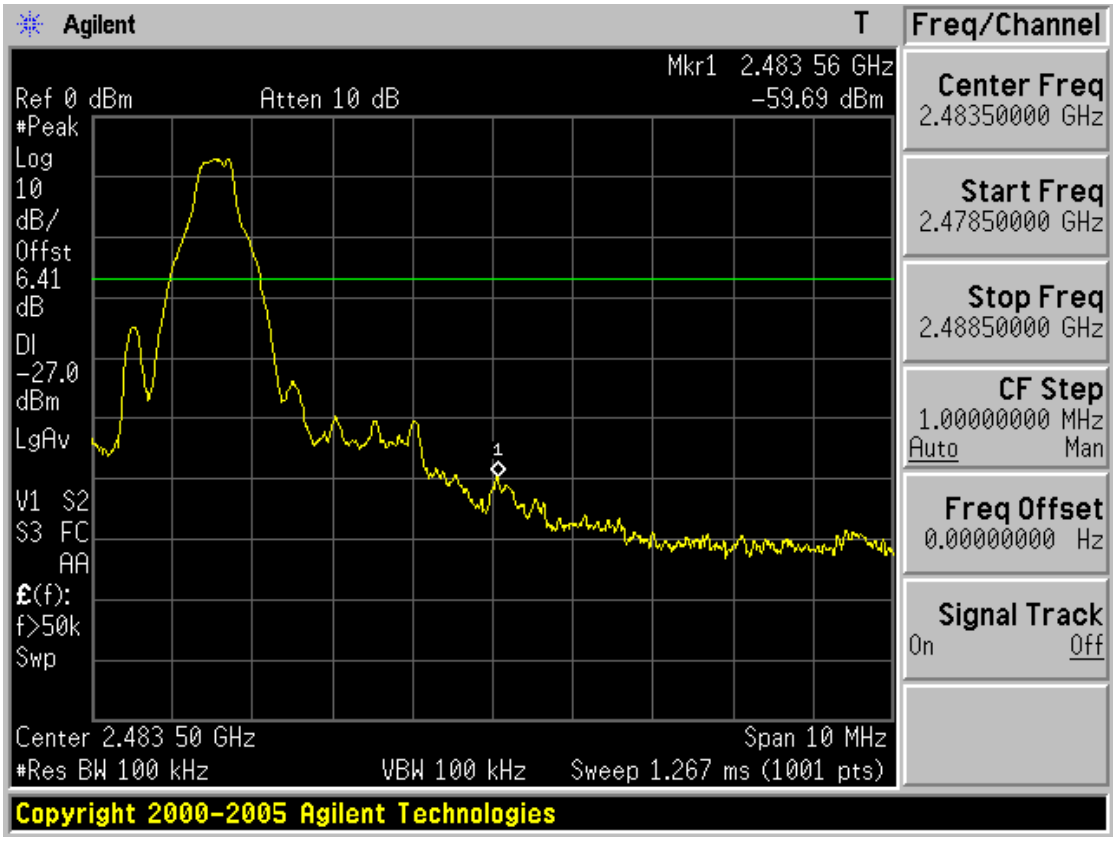


Mid channel spurious

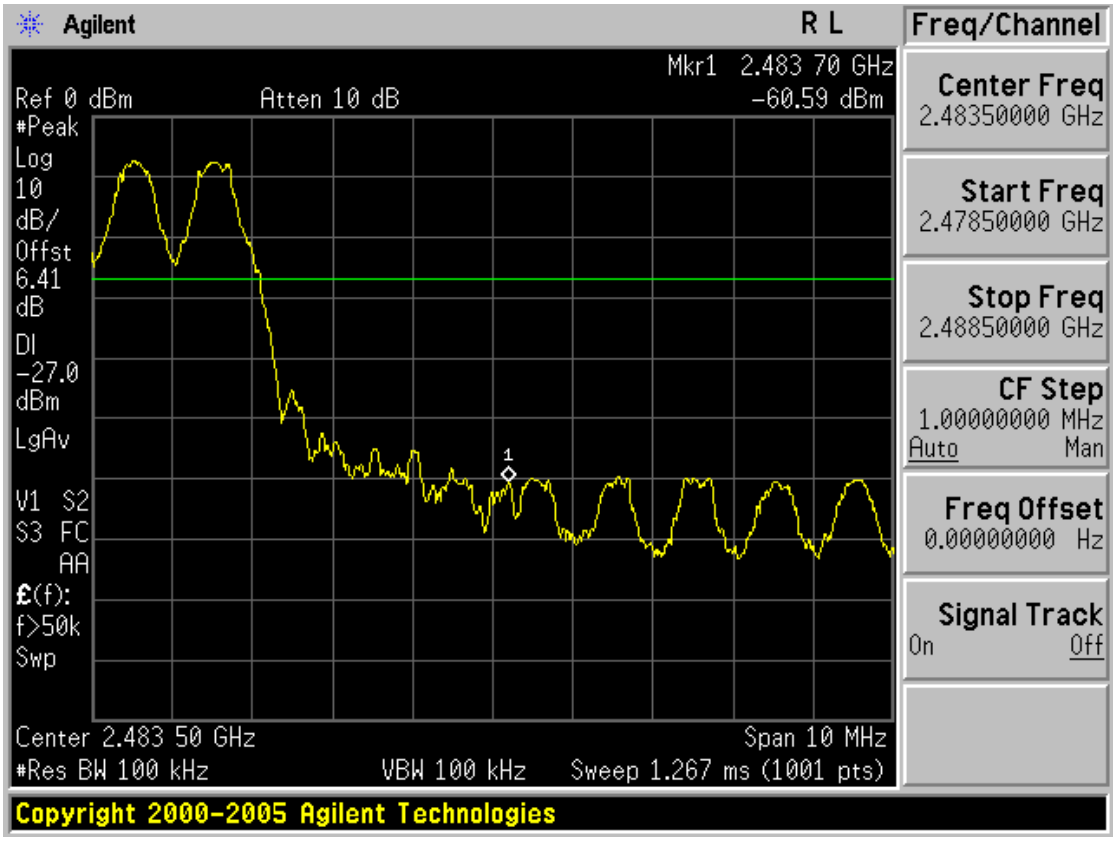




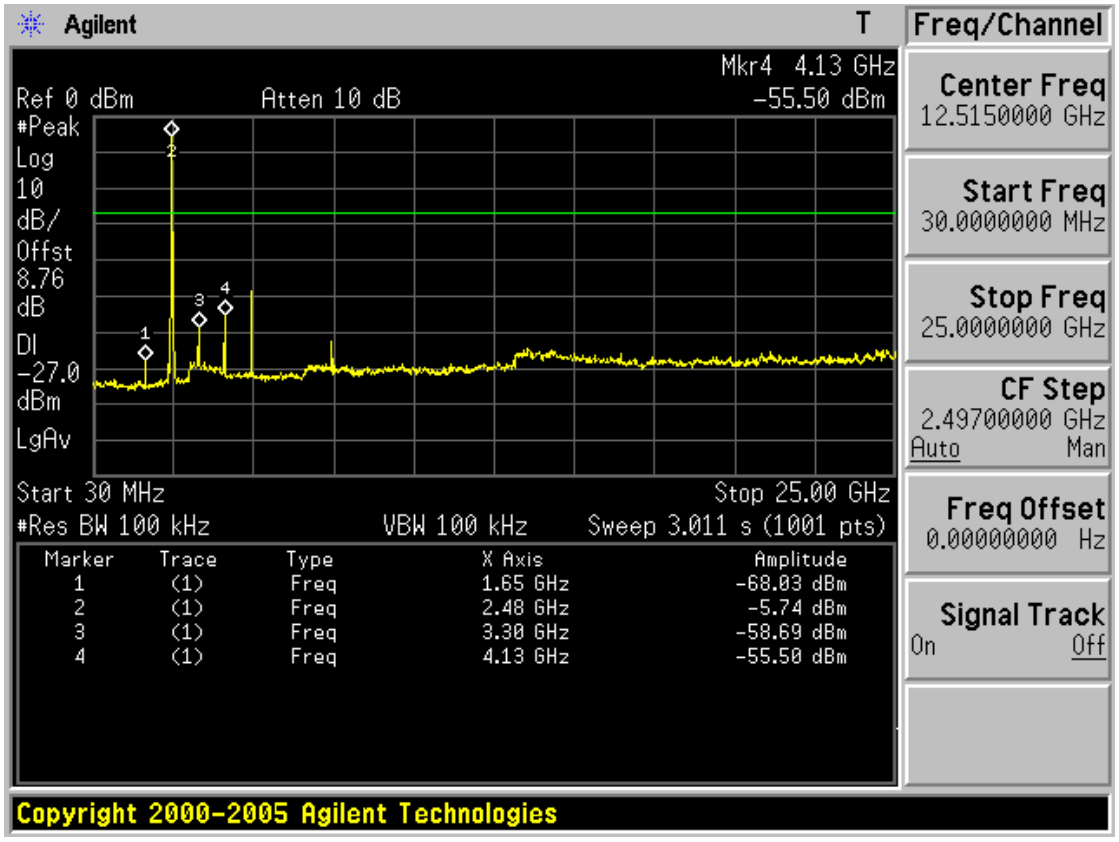
High band with hopping disabled

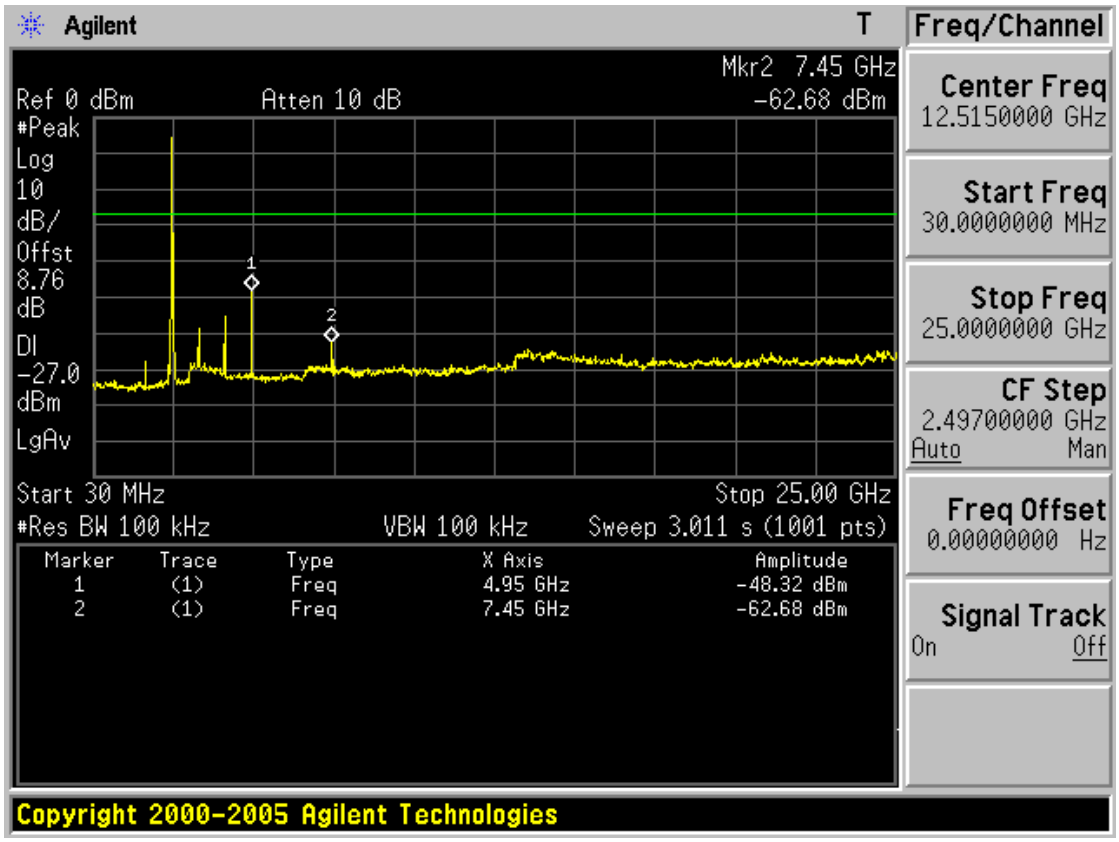


High band with hopping enabled



High channel spurious





3.2.7 Radiated Emissions

- Procedure:

The EUT was placed on a 0.8m high wooden table inside a shielded enclosure. An antenna was placed near the EUT and measurements of frequencies and amplitudes of field strengths were recorded for reference during final measurements. For final radiated testing, measurements were performed in OATS. Measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst-case orientation for maximum emissions.

The spectrum analyzer is set to:
Center frequency = the worst channel
RBW = 120 kHz (30MHz ~ 1 GHz)
RBW = 1 MHz (1 GHz ~ 10th harmonic)
Trace = max hold

Frequency Range = 30 MHz ~ 10th harmonic.
VBW ≥ RBW (Peak)
VBW = 10Hz (Average)
Sweep = auto

- Measurement Data: Comply (Refer to the next page.)

Note. 1: This test item was performed with following 2 configurations
- Test Case 1: LDP-7024LBD (Large LCD)
- Test Case 2: LDP-7024BD (Small LCD)

Note. 2: Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea. So it's not an emission from this device.

- Minimum Standard:

- **FCC Part 15.209(a) and (b)**

Frequency (MHz)	Limit (uV/m) @ 3m
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88MHz, 174-216MHz or 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

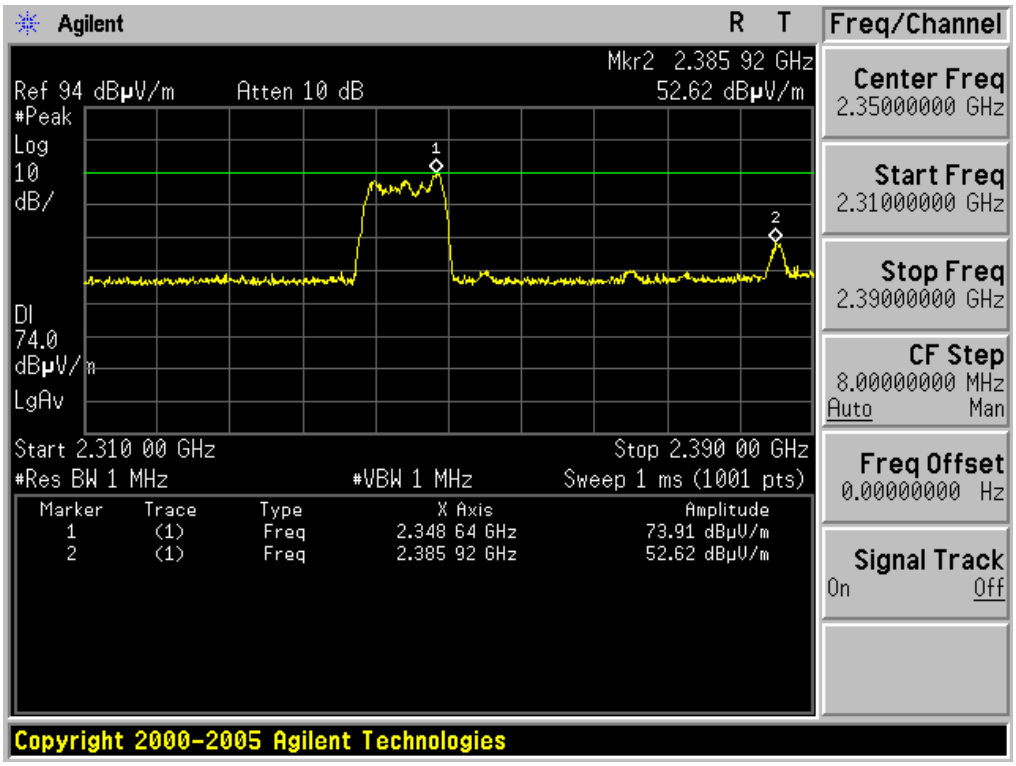
- **FCC Part 15.205 (a):** Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	MHz	GHz	GHz
0.009 ~ 0.110	12.29 ~ 12.293	149.9 ~ 150.05	1645.5 ~ 1646.5	4.5 ~ 5.15	14.47 ~ 14.5
0.495 ~ 0.505	12.51975 ~ 12.52025	156.52475 ~ 156.52525	1660 ~ 1710	5.35 ~ 5.46	15.35 ~ 16.2
2.1735 ~ 2.1905	12.57675 ~ 12.57725	156.7 ~ 156.9	1718.8 ~ 1722.2	7.25 ~ 7.75	17.7 ~ 21.4
4.125 ~ 4.128	13.36 ~ 13.41	162.0125 ~ 167.17	2200 ~ 2300	8.025 ~ 8.5	22.01 ~ 23.12
4.17725 ~ 4.17775	16.42 ~ 16.423	167.72 ~ 173.2	2310 ~ 2390	9.0 ~ 9.2	23.6 ~ 24.0
4.20725 ~ 4.20775	16.69475 ~ 16.69525	240 ~ 285	2483.5 ~ 2500	9.3 ~ 9.5	31.2 ~ 31.8
6.215 ~ 6.218	16.80425 ~ 16.80475	322 ~ 335.4	2655 ~ 2900	10.6 ~ 12.7	36.43 ~ 36.5
6.26775 ~ 6.26825	25.5 ~ 25.67	399.90 ~ 410	3260 ~ 3267	13.25 ~ 13.4	Above 38.6
6.31175 ~ 6.31225	37.5 ~ 38.25	608 ~ 614	3332 ~ 3339		
8.291 ~ 8.294	73 ~ 74.6	960 ~ 1240	3345.8 ~ 3358		
8.362 ~ 8.366	74.8 ~ 75.2	1300 ~ 1427	3600 ~ 4400		
8.37625 ~ 8.38675	108 ~ 121.94	1435 ~ 1626.5			
8.41425 ~ 8.41475	123 ~ 138				

- **FCC Part 15.205(b):** The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

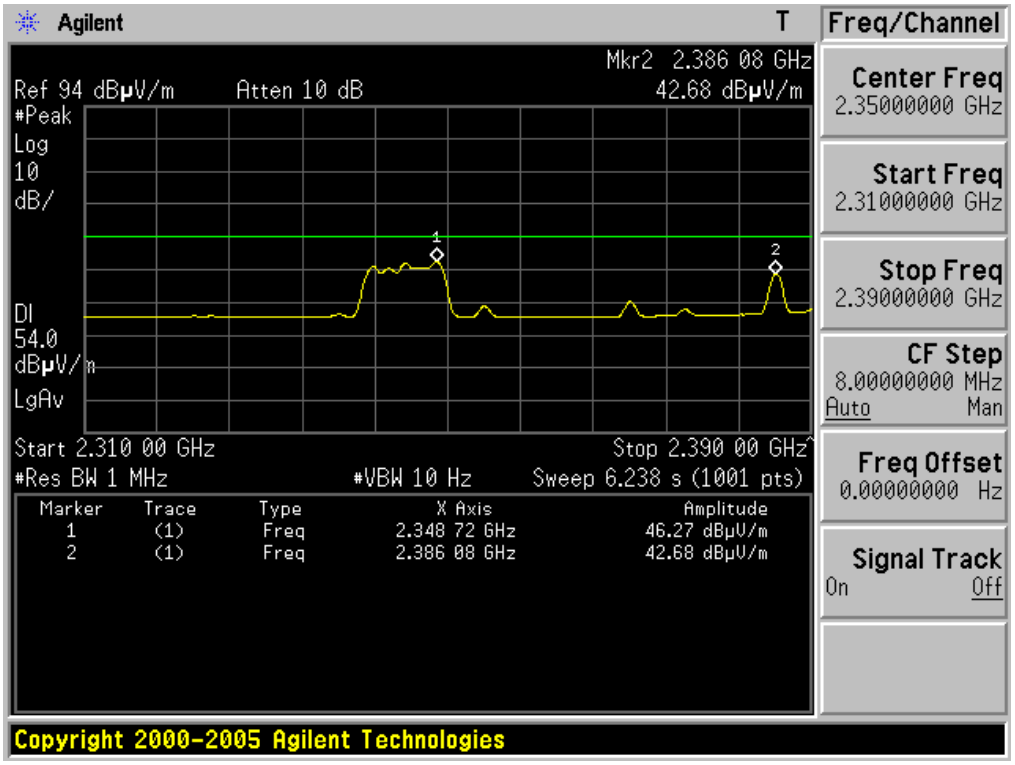
TEST CASE 1

Restricted Band Edge: Low Channel (Peak, Horizontal)



Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

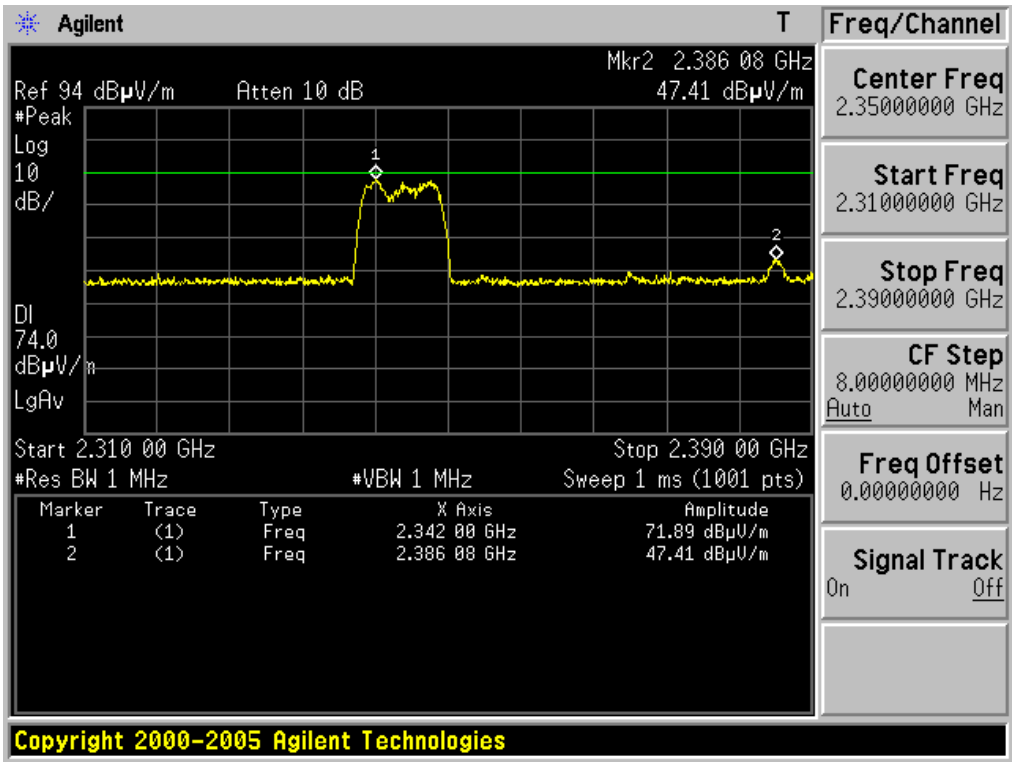
Restricted Band Edge: Low Channel (Average, Horizontal)



Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

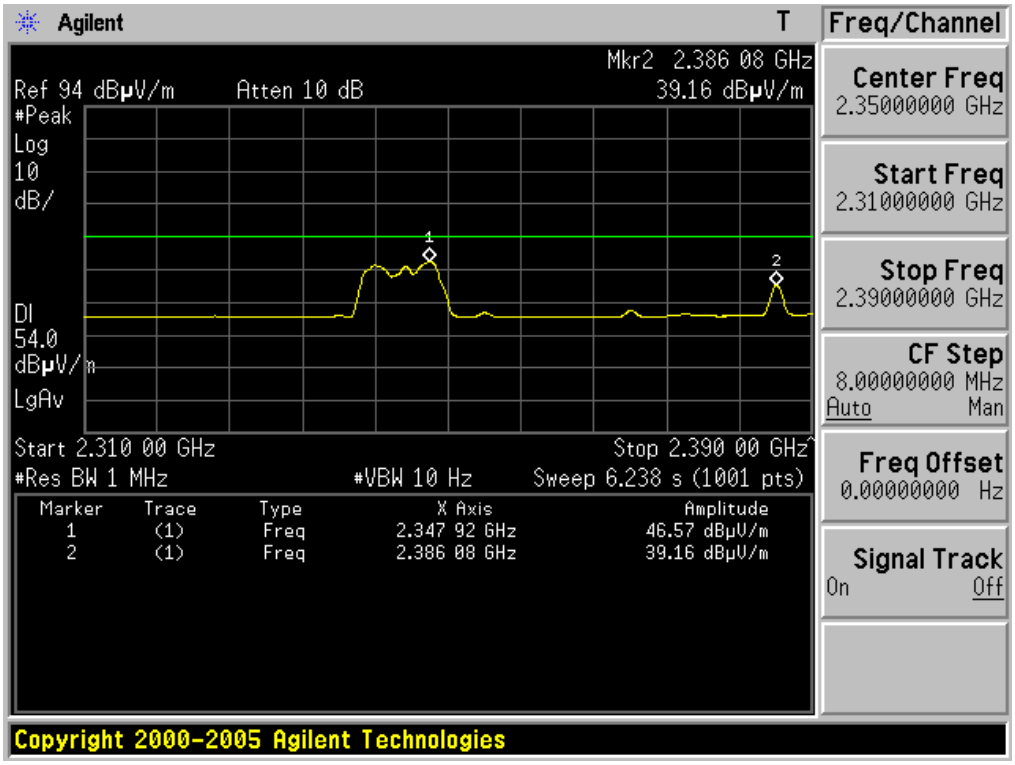
TEST CASE 1

Restricted Band Edge: Low Channel (Peak, Vertical)



Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

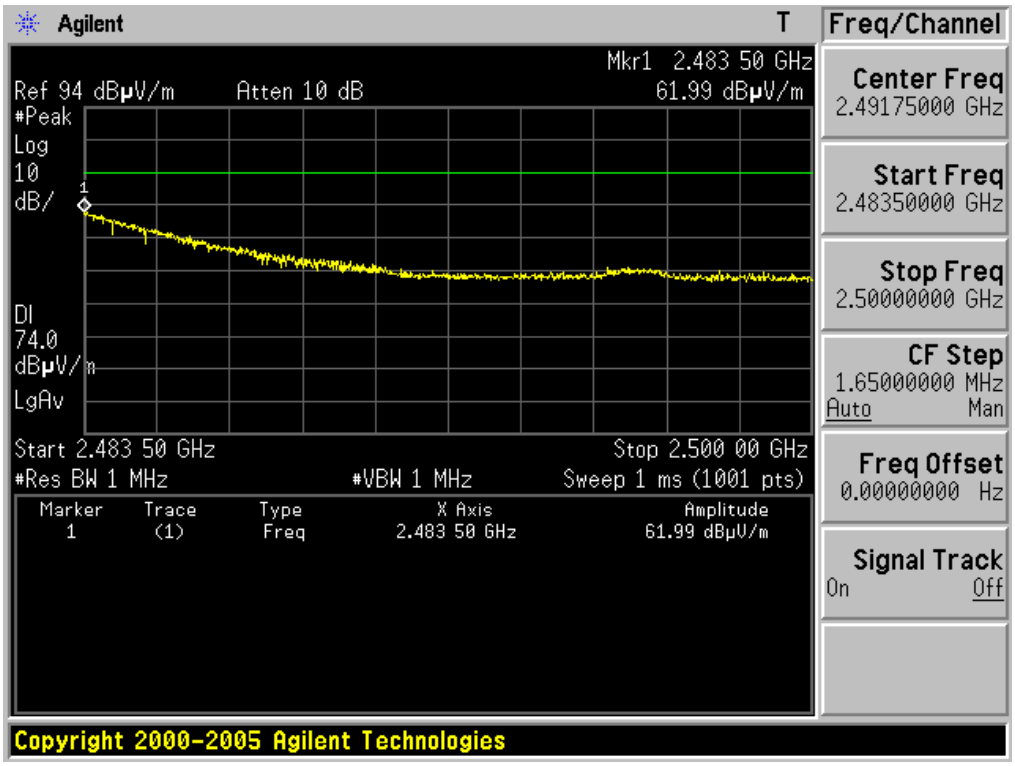
Restricted Band Edge: Low Channel (Average, Vertical)



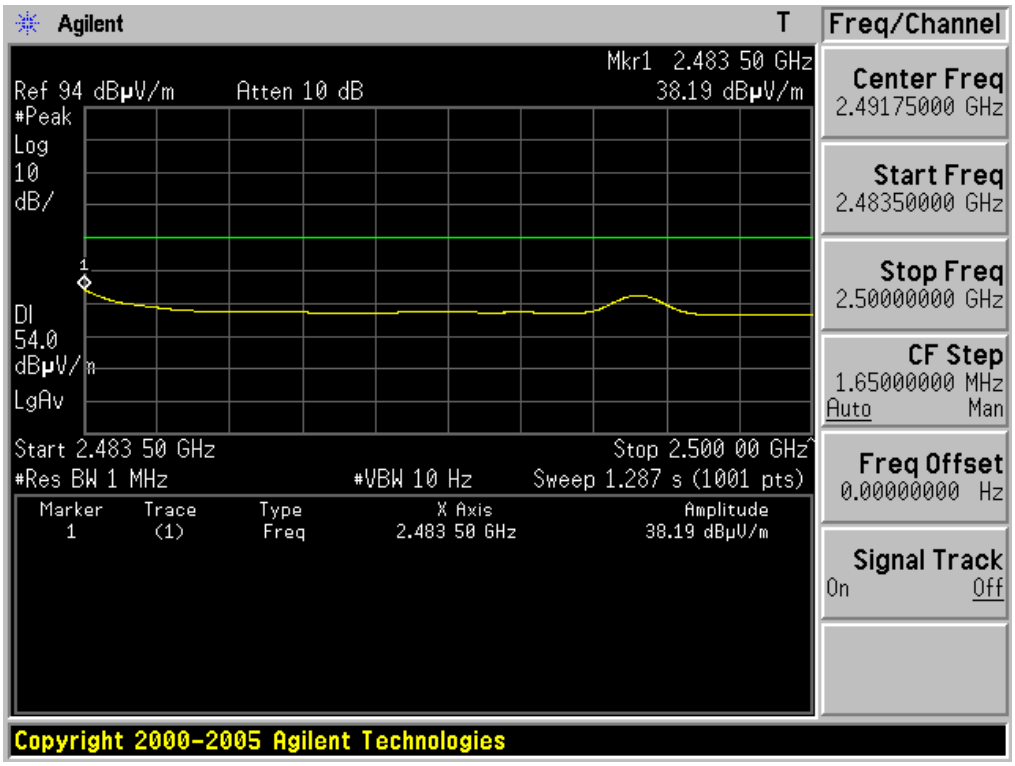
Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

TEST CASE 1

Restricted Band Edge: High Channel (Peak, Horizontal)

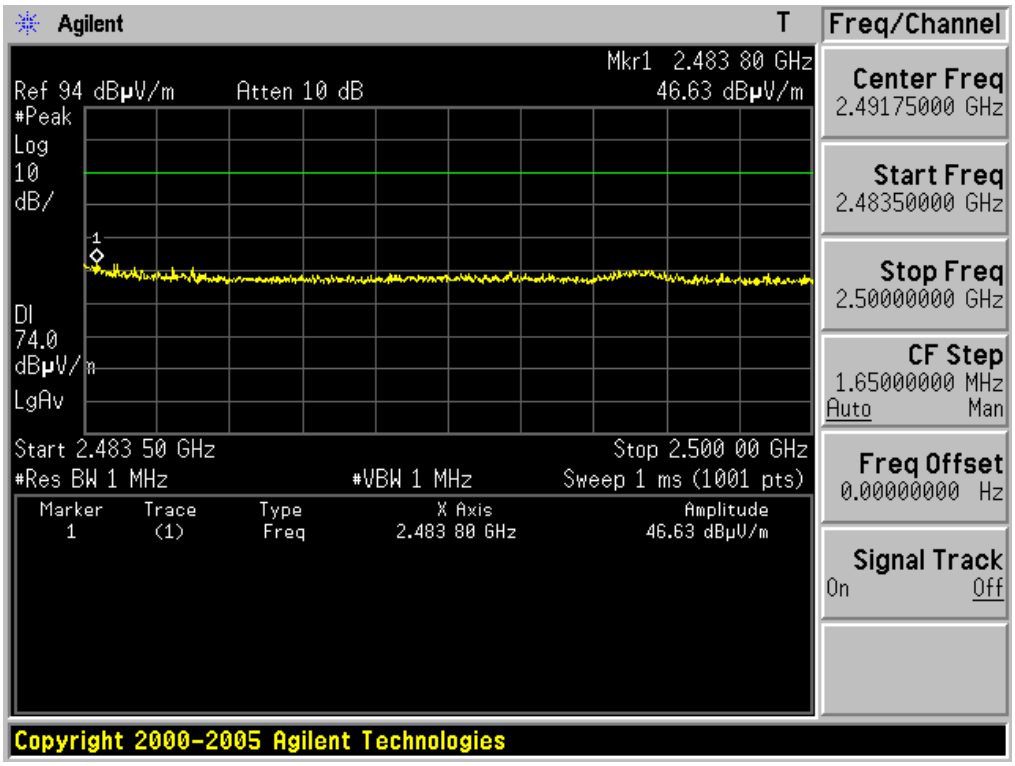


Restricted Band Edge: High Channel (Average, Horizontal)

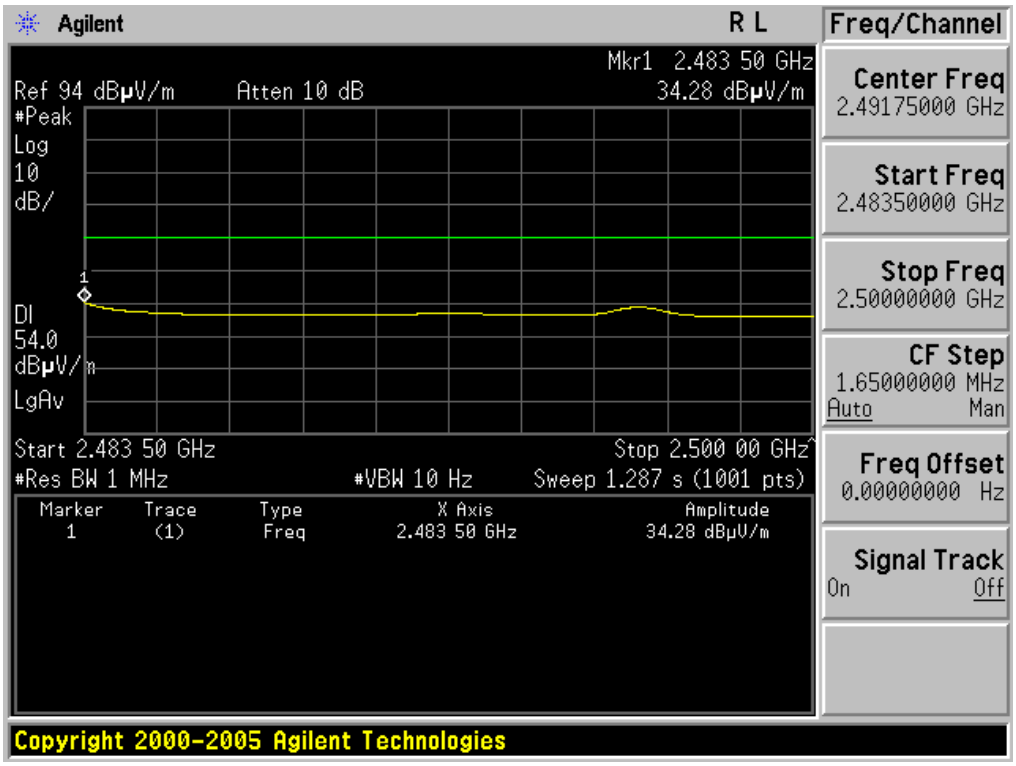


TEST CASE 1

Restricted Band Edge: High Channel (Peak, Vertical)

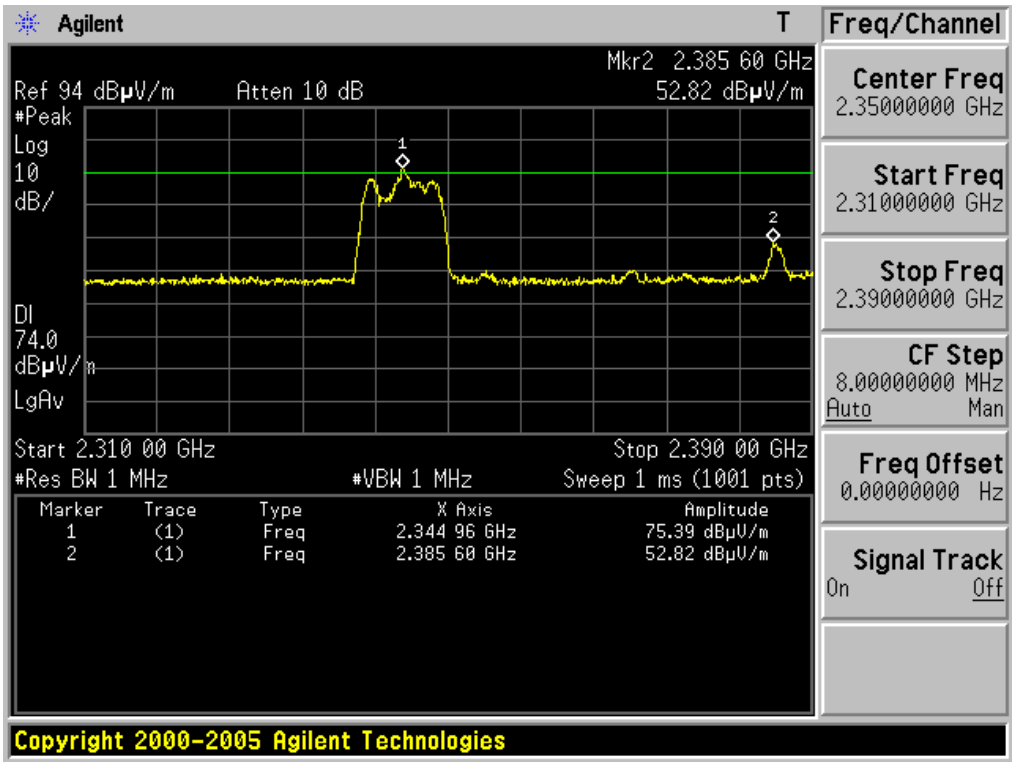


Restricted Band Edge: High Channel (Average, Vertical)



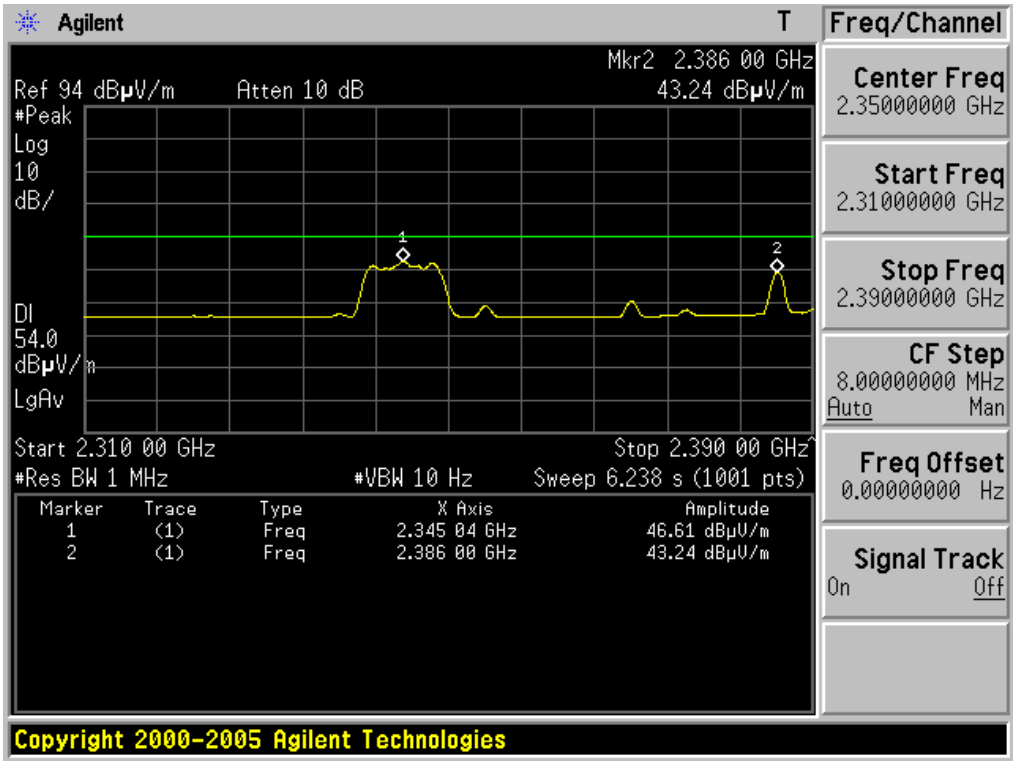
TEST CASE 2

Restricted Band Edge: Low Channel (Peak, Horizontal)



Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

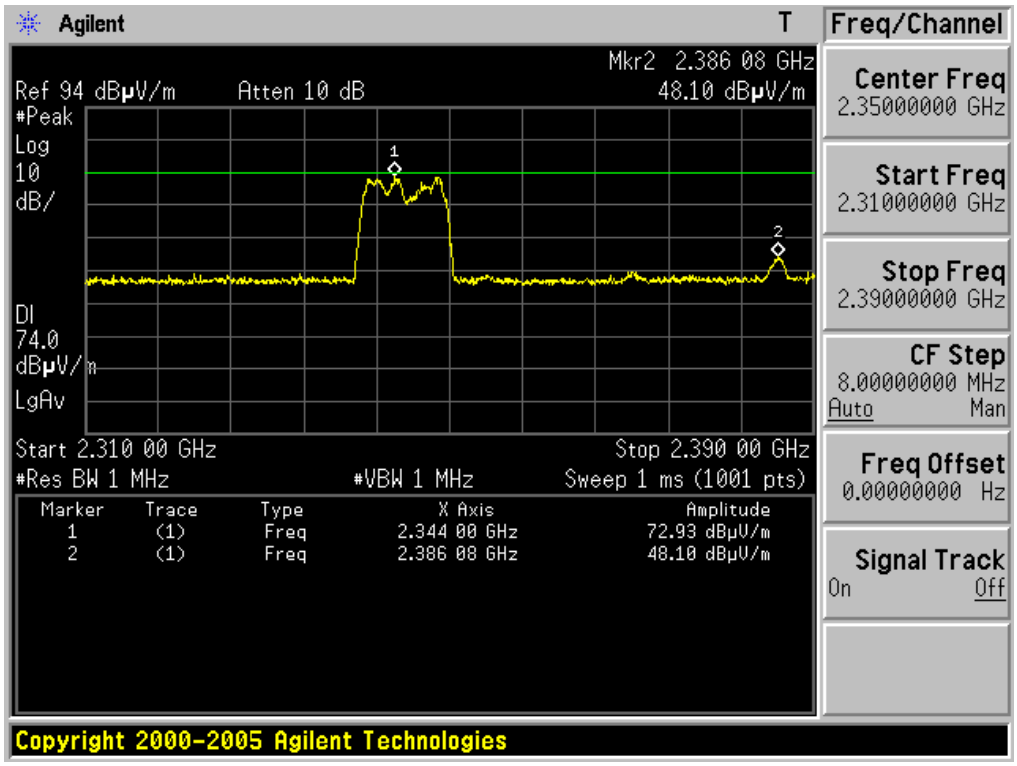
Restricted Band Edge: Low Channel (Average, Horizontal)



Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

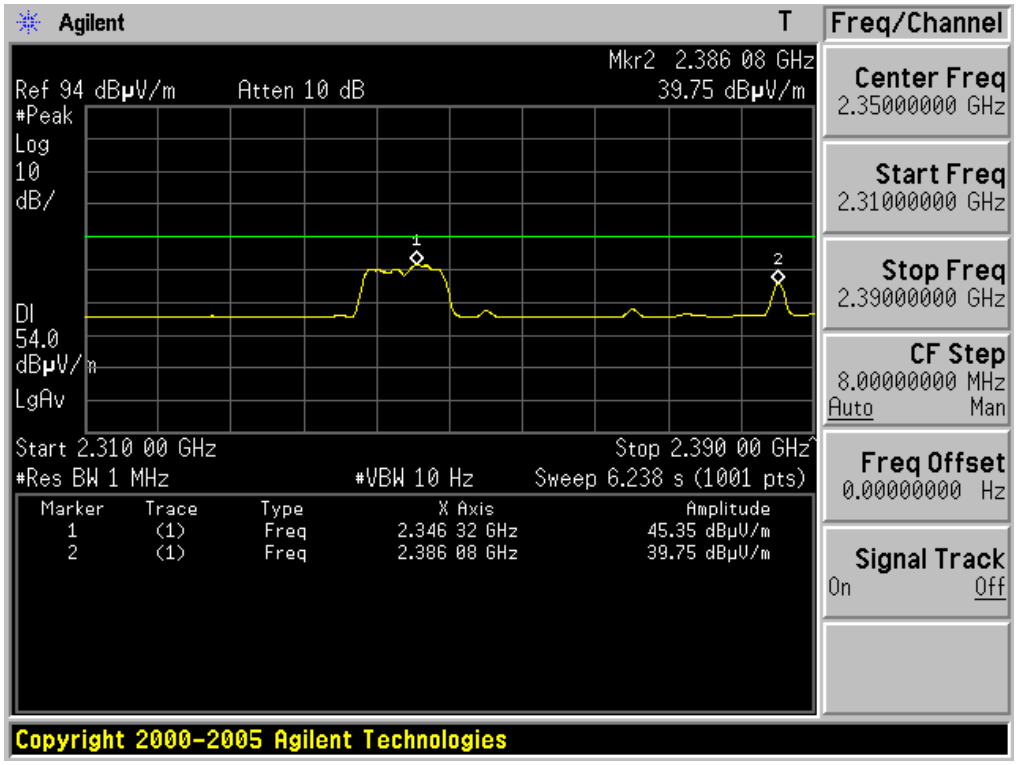
TEST CASE 2

Restricted Band Edge: Low Channel (Peak, Vertical)



Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

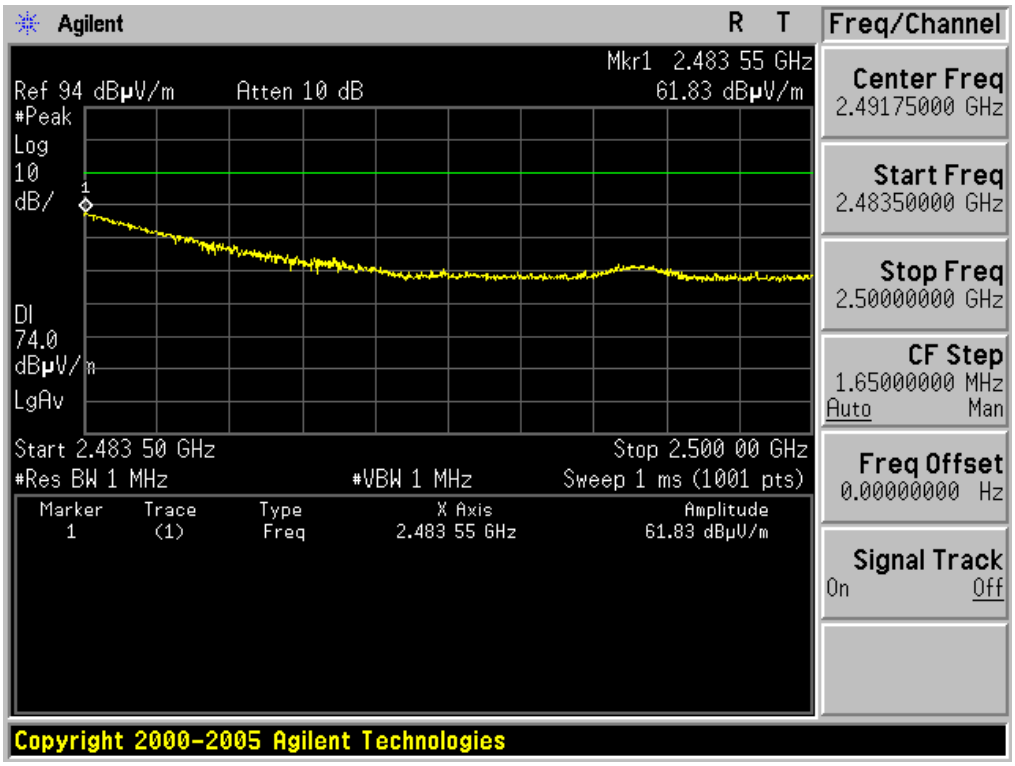
Restricted Band Edge: Low Channel (Average, Vertical)



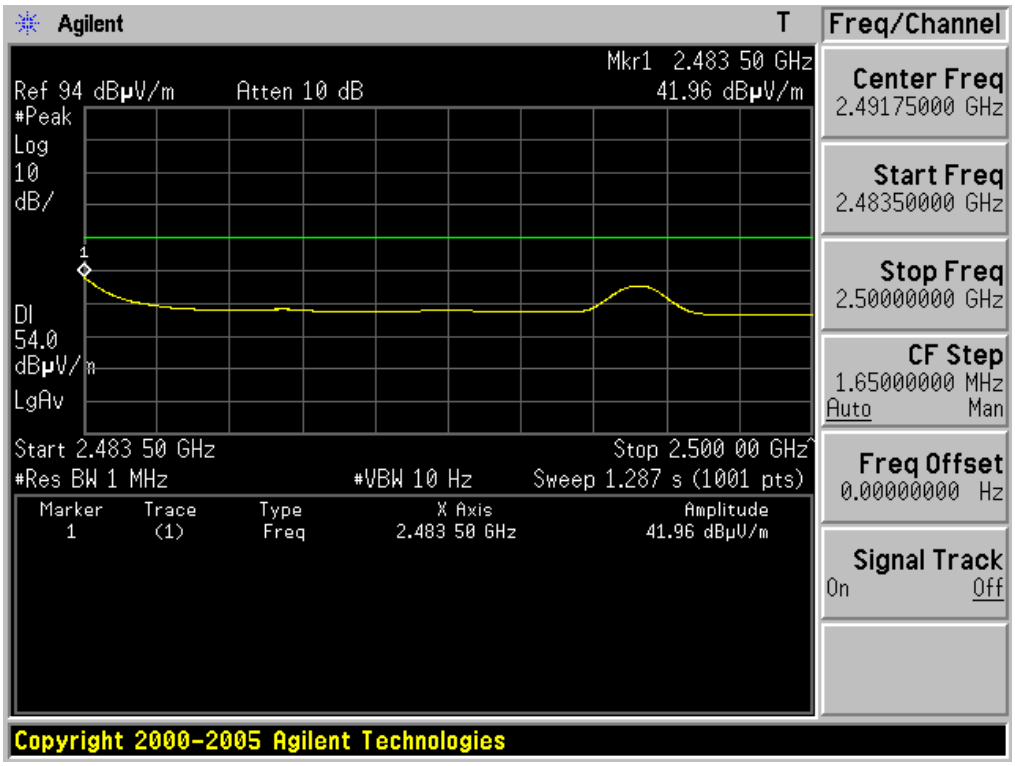
Marker 1's emissions of the low band edge test plots are emissions from WIMAX downlink signal in Korea.

TEST CASE 2

Restricted Band Edge: High Channel (Peak, Horizontal)

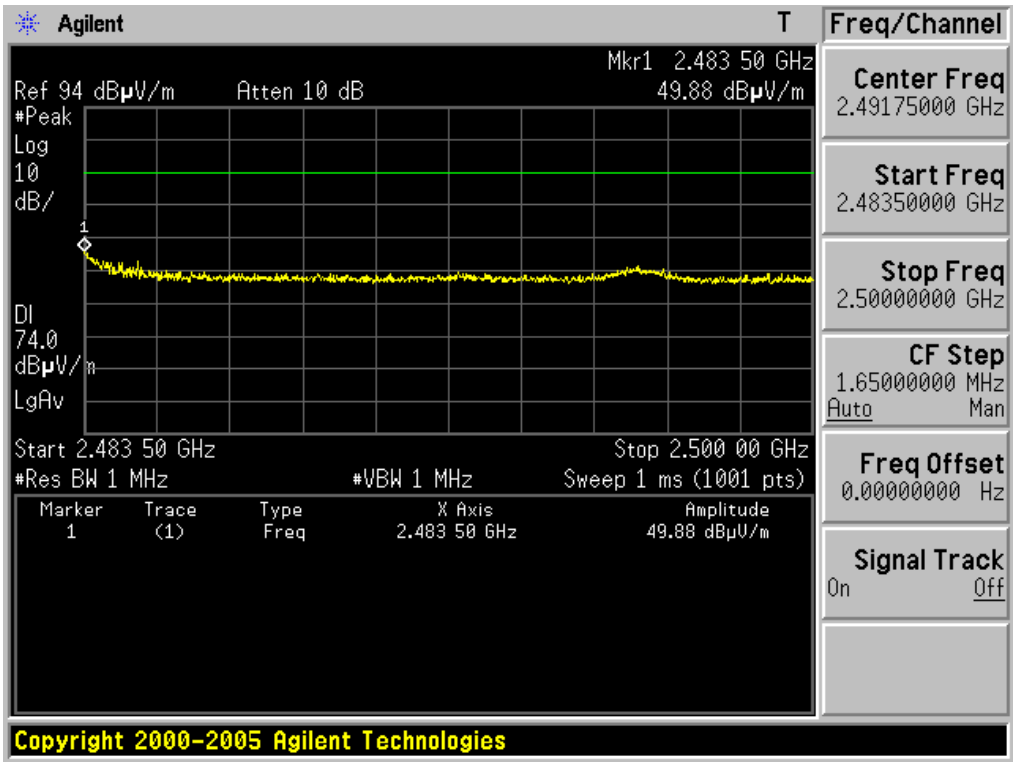


Restricted Band Edge: High Channel (Average, Horizontal)

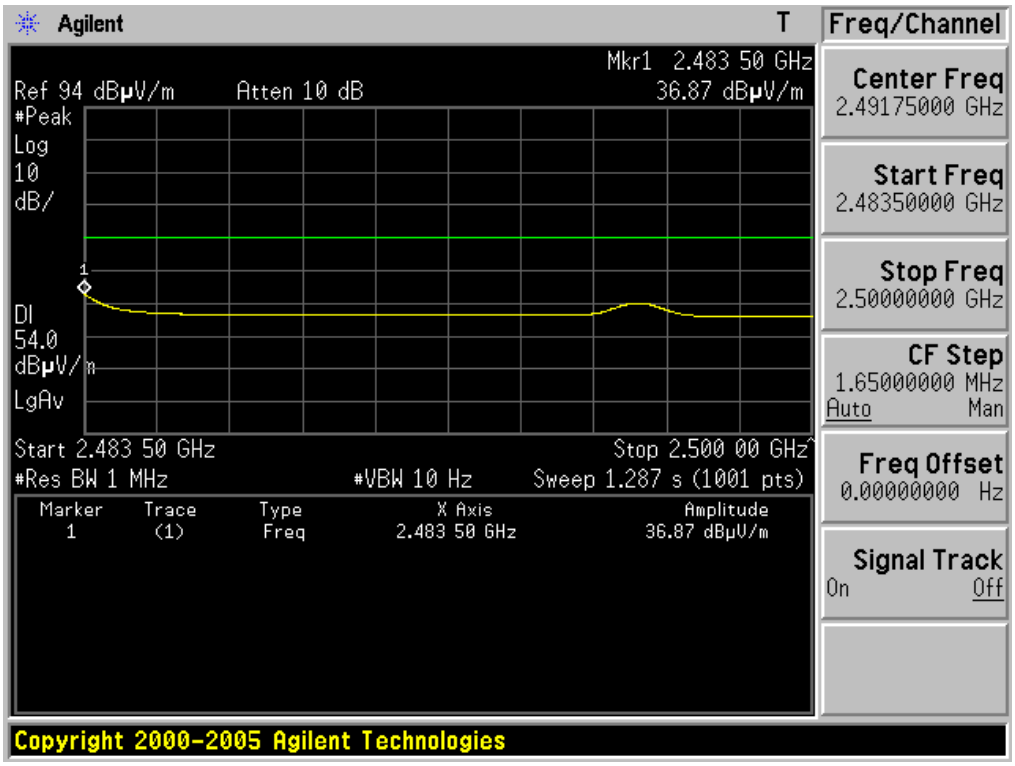


TEST CASE 2

Restricted Band Edge: High Channel (Peak, Vertical)



Restricted Band Edge: High Channel (Average, Vertical)



- Measurement Data: Test Case 1

Harmonic and other emissions Measurement Data: Fundamental Frequency = 2402MHz

Frequency (MHz)	ANT Pol	Reading(dBuV)			T.F (dB/m)	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)		
		QP	PK	AV		QP	PK	AV	QP	PK	AV	QP	PK	AV
50.160	Ver	41.40	-	-	-14.70	26.70	-	-	40.00	-	-	13.30	-	-
75.000	Hor	44.81	-	-	-18.41	26.40	-	-	40.00	-	-	13.60	-	-
76.040	Ver	47.66	-	-	-18.36	29.30	-	-	40.00	-	-	10.70	-	-
98.600	Hor	50.88	-	-	-15.08	35.80	-	-	43.50	-	-	7.70	-	-
111.020	Ver	46.30	-	-	-13.30	33.00	-	-	43.50	-	-	10.50	-	-
161.560	Hor	36.75	-	-	-8.55	28.20	-	-	43.50	-	-	15.30	-	-
171.600	Ver	40.61	-	-	-7.91	32.70	-	-	43.50	-	-	10.80	-	-
295.780	Ver	41.03	-	-	-3.33	37.70	-	-	46.00	-	-	8.30	-	-
295.800	Hor	47.23	-	-	-3.33	43.90	-	-	46.00	-	-	2.10	-	-
312.000	Hor	36.59	-	-	-7.89	28.70	-	-	46.00	-	-	17.30	-	-
489.000	Ver	33.40	-	-	-4.00	29.40	-	-	46.00	-	-	16.60	-	-
4804	Hor	-	48.93	41.04	6.37	-	55.30	47.41	-	74.00	54.00	-	18.70	6.59
4804	Ver	-	52.05	44.53	6.37	-	58.42	50.90	-	74.00	54.00	-	15.58	3.10

Harmonic and other emissions Measurement Data: Fundamental Frequency = 2441MHz

Frequency (MHz)	ANT Pol	Reading(dBuV)			T.F (dB/m)	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)		
		QP	PK	AV		QP	PK	AV	QP	PK	AV	QP	PK	AV
30.800	Ver	39.17	-	-	-7.57	31.60	-	-	40.00	-	-	8.40	-	-
75.920	Hor	45.47	-	-	-18.37	27.10	-	-	40.00	-	-	12.90	-	-
90.840	Ver	44.78	-	-	-16.28	28.50	-	-	43.50	-	-	15.00	-	-
98.800	Hor	49.05	-	-	-15.05	34.00	-	-	43.50	-	-	9.50	-	-
109.000	Ver	38.48	-	-	-13.58	24.90	-	-	43.50	-	-	18.60	-	-
171.520	Ver	37.72	-	-	-7.92	29.80	-	-	43.50	-	-	13.70	-	-
171.680	Hor	35.00	-	-	-7.90	27.10	-	-	43.50	-	-	16.40	-	-
294.040	Ver	39.61	-	-	-3.41	36.20	-	-	46.00	-	-	9.80	-	-
295.700	Hor	45.94	-	-	-3.34	42.60	-	-	46.00	-	-	3.40	-	-
361.430	Hor	36.58	-	-	-6.58	30.00	-	-	46.00	-	-	16.00	-	-
489.880	Ver	33.58	-	-	-3.98	29.60	-	-	46.00	-	-	16.40	-	-
4882	Hor	-	48.78	40.56	6.69	-	55.47	47.25	-	74.00	54.00	-	18.53	6.75
4882	Ver	-	53.21	46.10	6.69	-	59.90	52.79	-	74.00	54.00	-	14.10	1.21

- Measurement Data: Test Case 1 (Continued…)

Harmonic and other emissions Measurement Data: Fundamental Frequency = 2480MHz

Frequency (MHz)	ANT Pol	Reading(dBuV)			T.F (dB/m)	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)		
		QP	PK	AV		QP	PK	AV	QP	PK	AV	QP	PK	AV
30.780	Ver	38.86	-	-	-7.56	31.30	-	-	40.00	-	-	8.70	-	-
40.000	Hor	33.82	-	-	-10.72	23.10	-	-	40.00	-	-	16.90	-	-
56.630	Ver	40.35	-	-	-16.85	23.50	-	-	40.00	-	-	16.50	-	-
77.200	Hor	45.69	-	-	-18.29	27.40	-	-	40.00	-	-	12.60	-	-
98.440	Hor	44.10	-	-	-15.10	29.00	-	-	43.50	-	-	14.50	-	-
111.025	Ver	46.90	-	-	-13.30	33.60	-	-	43.50	-	-	9.90	-	-
111.032	Hor	46.60	-	-	-13.30	33.30	-	-	43.50	-	-	10.20	-	-
171.597	Ver	40.81	-	-	-7.91	32.90	-	-	43.50	-	-	10.60	-	-
295.780	Ver	41.13	-	-	-3.33	37.80	-	-	46.00	-	-	8.20	-	-
295.800	Hor	42.73	-	-	-3.33	39.40	-	-	46.00	-	-	6.60	-	-
353.240	Hor	35.40	-	-	-6.80	28.60	-	-	46.00	-	-	17.40	-	-
489.960	Ver	33.88	-	-	-3.98	29.90	-	-	46.00	-	-	16.10	-	-
4960	Hor	-	48.10	40.21	7.18	-	55.28	47.39	-	74.00	54.00	-	18.72	6.61
4960	Ver	-	52.92	46.02	7.18	-	60.10	53.20	-	74.00	54.00	-	13.90	0.80

Note.

1. No other spurious and harmonic emissions were detected at a level greater than 20dB below limit.
2. If peak result meet AV limit, AV measurement is omitted.
3. Sample Calculation.

   Margin = Limit – Result / Result = Reading + T.F / T.F = AF + CL - AG

   Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain

- Measurement Data: Test Case 2 (Continued…)

Harmonic and other emissions Measurement Data: Fundamental Frequency = 2402MHz

Frequency (MHz)	ANT Pol	Reading(dBuV)			T.F (dB/m)	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)		
		QP	PK	AV		QP	PK	AV	QP	PK	AV	QP	PK	AV
32.746	Ver	38.40	-	-	-8.20	30.20	-	-	40.00	-	-	9.80	-	-
41.720	Ver	39.92	-	-	-11.42	28.50	-	-	40.00	-	-	11.50	-	-
49.860	Ver	42.79	-	-	-14.59	28.20	-	-	40.00	-	-	11.80	-	-
76.160	Ver	44.65	-	-	-18.35	26.30	-	-	40.00	-	-	13.70	-	-
95.940	Hor	41.69	-	-	-15.49	26.20	-	-	43.50	-	-	17.30	-	-
164.340	Hor	34.67	-	-	-8.37	26.30	-	-	43.50	-	-	17.20	-	-
168.980	Ver	34.87	-	-	-8.07	26.80	-	-	43.50	-	-	16.70	-	-
237.040	Hor	37.87	-	-	-5.97	31.90	-	-	46.00	-	-	14.10	-	-
249.800	Hor	34.67	-	-	-5.57	29.10	-	-	46.00	-	-	16.90	-	-
262.180	Hor	35.87	-	-	-4.97	30.90	-	-	46.00	-	-	15.10	-	-
295.780	Ver	41.63	-	-	-3.33	38.30	-	-	46.00	-	-	7.70	-	-
295.820	Hor	46.23	-	-	-3.33	42.90	-	-	46.00	-	-	3.10	-	-
307.200	Ver	40.83	-	-	-8.03	32.80	-	-	46.00	-	-	13.20	-	-
328.700	Hor	40.94	-	-	-7.44	33.50	-	-	46.00	-	-	12.50	-	-
361.580	Hor	36.97	-	-	-6.57	30.40	-	-	46.00	-	-	15.60	-	-
489.021	Hor	32.50	-	-	-4.00	28.50	-	-	46.00	-	-	17.50	-	-
489.961	Ver	33.68	-	-	-3.98	29.70	-	-	46.00	-	-	16.30	-	-
4804	Hor	-	47.62	39.66	6.37	-	53.99	46.03	-	74.00	54.00	-	20.01	7.97
4804	Ver	-	49.65	42.18	6.37	-	56.02	48.55	-	74.00	54.00	-	17.98	5.45

- Measurement Data: Test Case 2 (Continued…)

Harmonic and other emissions Measurement Data: Fundamental Frequency = 2441MHz

Frequency (MHz)	ANT Pol	Reading(dBuV)			T.F (dB/m)	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)		
		QP	PK	AV		QP	PK	AV	QP	PK	AV	QP	PK	AV
40.230	Ver	37.61	-	-	-10.81	26.80	-	-	40.00	-	-	13.20	-	-
65.500	Ver	43.66	-	-	-18.36	25.30	-	-	40.00	-	-	14.70	-	-
76.560	Ver	44.94	-	-	-18.34	26.60	-	-	40.00	-	-	13.40	-	-
87.540	Ver	42.84	-	-	-16.84	26.00	-	-	40.00	-	-	14.00	-	-
153.610	Ver	35.04	-	-	-9.04	26.00	-	-	43.50	-	-	17.50	-	-
199.220	Ver	33.66	-	-	-7.16	26.50	-	-	43.50	-	-	17.00	-	-
237.050	Hor	37.77	-	-	-5.97	31.80	-	-	46.00	-	-	14.20	-	-
237.730	Ver	35.16	-	-	-5.96	29.20	-	-	46.00	-	-	16.80	-	-
295.800	Ver	42.63	-	-	-3.33	39.30	-	-	46.00	-	-	6.70	-	-
295.820	Hor	46.13	-	-	-3.33	42.80	-	-	46.00	-	-	3.20	-	-
299.790	Hor	36.65	-	-	-5.15	31.50	-	-	46.00	-	-	14.50	-	-
322.540	Ver	43.22	-	-	-7.62	35.60	-	-	46.00	-	-	10.40	-	-
328.690	Ver	40.94	-	-	-7.44	33.50	-	-	46.00	-	-	12.50	-	-
350.150	Ver	37.78	-	-	-6.88	30.90	-	-	46.00	-	-	15.10	-	-
424.770	Hor	35.53	-	-	-5.13	30.40	-	-	46.00	-	-	15.60	-	-
489.931	Ver	33.48	-	-	-3.98	29.50	-	-	46.00	-	-	16.50	-	-
4882	Hor	-	46.88	38.47	6.69	-	53.57	45.16	-	74.00	54.00	-	20.43	8.84
4882	Ver	-	52.21	44.72	6.69	-	58.90	51.41	-	74.00	54.00	-	15.10	2.59

- Measurement Data: Test Case 2

Harmonic and other emissions Measurement Data: Fundamental Frequency = 2480MHz

Frequency (MHz)	ANT Pol	Reading(dBuV)			T.F (dB/m)	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)		
		QP	PK	AV		QP	PK	AV	QP	PK	AV	QP	PK	AV
30.730	Ver	36.34	-	-	-7.54	29.10	-	-	40.00	-	-	10.90	-	-
52.050	Hor	40.82	-	-	-15.32	25.50	-	-	40.00	-	-	14.50	-	-
52.160	Ver	40.46	-	-	-15.36	25.10	-	-	40.00	-	-	14.90	-	-
75.530	Hor	44.58	-	-	-18.38	26.20	-	-	40.00	-	-	13.80	-	-
75.640	Ver	44.08	-	-	-18.38	25.70	-	-	40.00	-	-	14.30	-	-
161.500	Ver	34.85	-	-	-8.55	26.30	-	-	43.50	-	-	17.20	-	-
162.710	Hor	33.77	-	-	-8.47	25.30	-	-	43.50	-	-	18.20	-	-
295.790	Hor	40.43	-	-	-3.33	37.10	-	-	46.00	-	-	8.90	-	-
295.800	Ver	40.73	-	-	-3.33	37.40	-	-	46.00	-	-	8.60	-	-
424.600	Hor	33.03	-	-	-5.13	27.90	-	-	46.00	-	-	18.10	-	-
489.800	Ver	33.48	-	-	-3.98	29.50	-	-	46.00	-	-	16.50	-	-
4960	Hor	-	46.91	38.05	7.18	-	54.09	45.23	-	74.00	54.00	-	19.91	8.77
4960	Ver	-	53.03	45.09	7.18	-	60.21	52.27	-	74.00	54.00	-	13.79	1.73

Note.

1. No other spurious and harmonic emissions were detected at a level greater than 20dB below limit.
2. If peak result meet AV limit, AV measurement is omitted.
3. Sample Calculation.

   Margin = Limit – Result / Result = Reading + T.F / T.F = AF + CL - AG

   Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain

3.2.8 AC Line Conducted Emissions

- Procedure:

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its hopping function disabled at the middle channels in line with Section 15.31(m). Emissions closest to the limit are measured in the quasi-peak and average detector mode with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

- Measurement Data: Comply(Refer to the next page.)

Note. 1: This test item was performed with following 2 configurations
- Test Case 1: LDP-7024LBD (Large LCD)
- Test Case 2: LDP-7024BD (Small LCD)

- Minimum Standard: FCC Part 15.207(a)/EN 55022

Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

- Measurement Setup

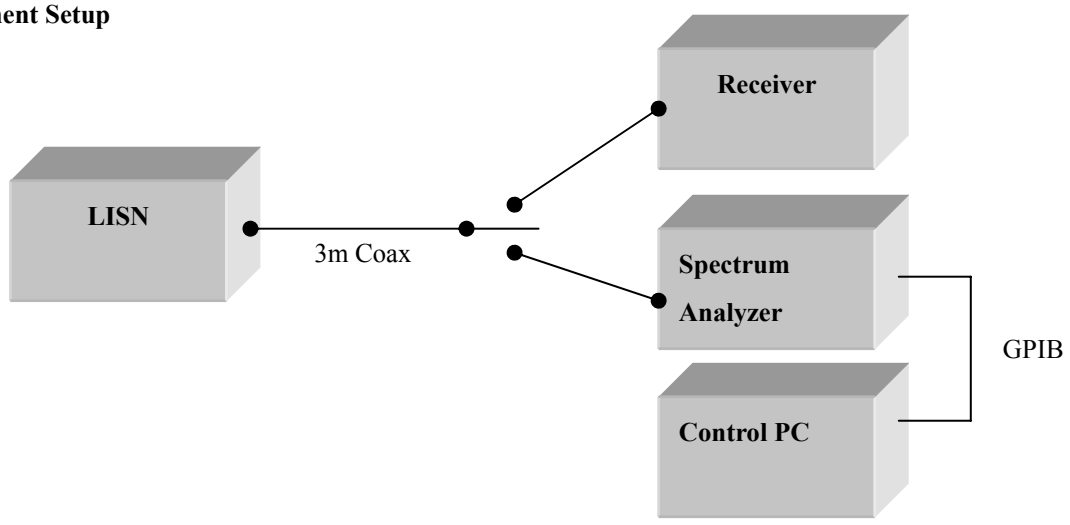
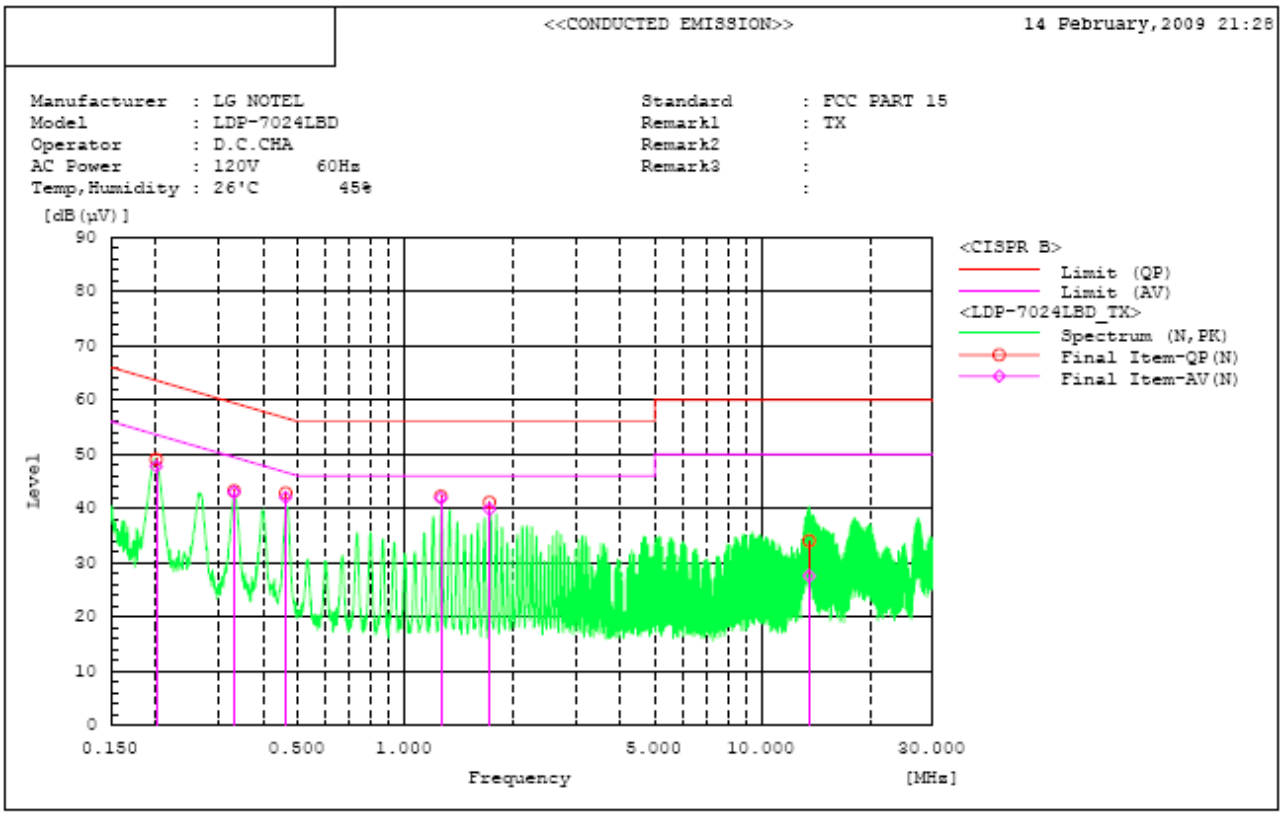
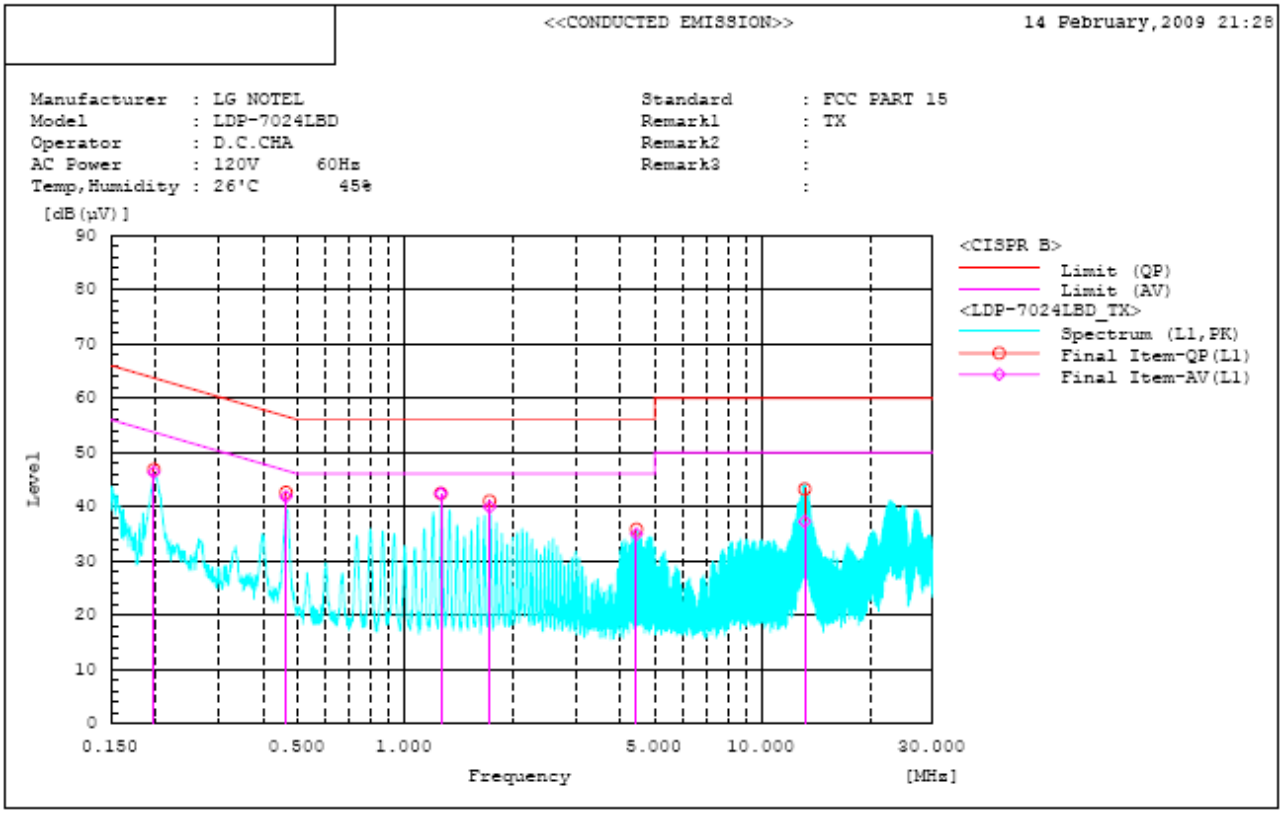


Figure 2: Measurement setup for AC Conducted Emission

Test Case 1

- Conducted Emission Graph -





Test Case 1

- Conducted Emission Data -

<<CONDUCTED EMISSION>>

14 February,2009 21:28

Standard : FCC PART 15
Manufacturer : LG NOTEL
Model : LDP-7024LBD
Operator : D.C.CHA
AC Power : 120V 60Hz
Temp,Humidity : 26'C 45%
Remark1 : TX
Remark2 :
Remark3 :

Final Result

--- N Phase ---

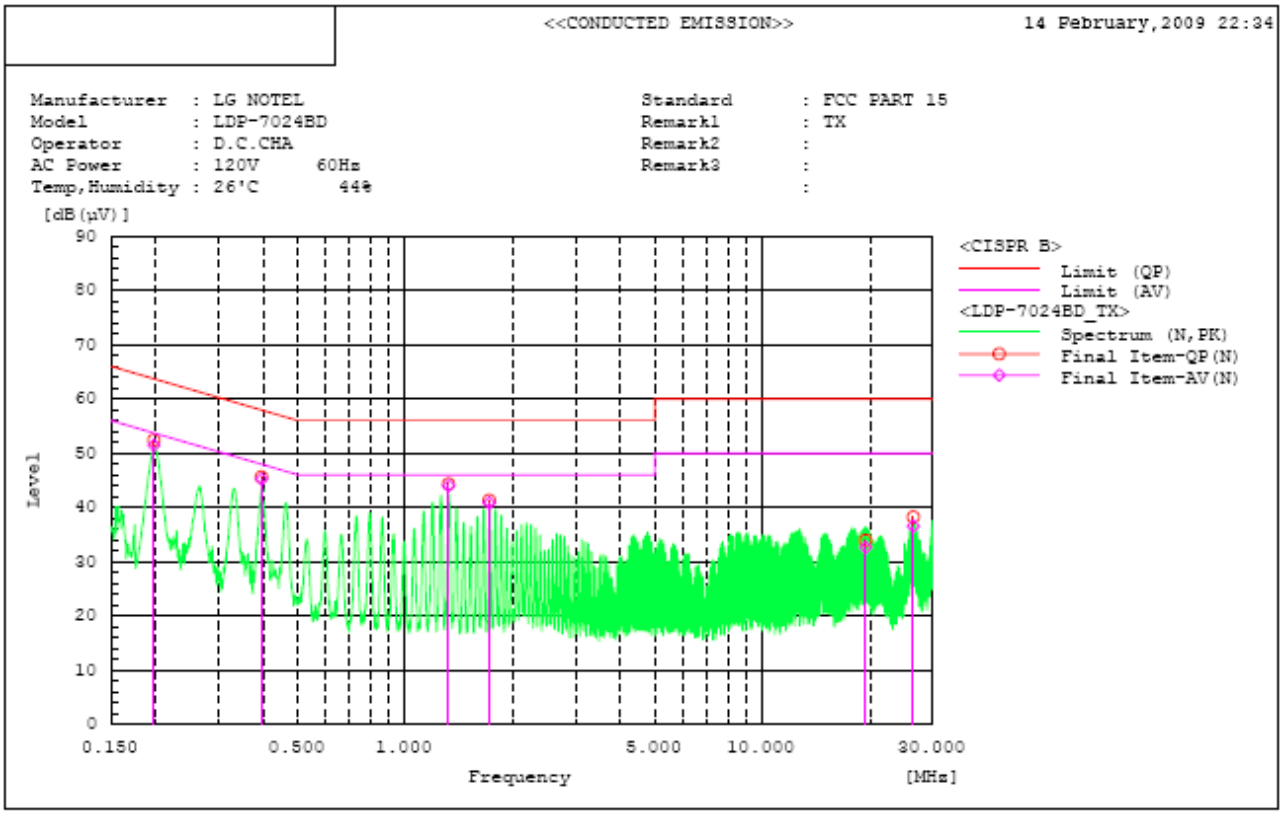
No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]	Remark
1	0.201	48.9	47.6	0.1	49.0	47.7	63.6	53.6	14.6	5.9	
2	0.332	43.0	42.8	0.2	43.2	43.0	59.4	49.4	16.2	6.4	
3	0.463	42.6	41.8	0.2	42.8	42.0	56.6	46.6	13.8	4.6	
4	1.259	42.0	41.7	0.2	42.2	41.9	56.0	46.0	13.8	4.1	
5	1.722	40.8	39.5	0.3	41.1	39.8	56.0	46.0	14.9	6.2	
6	13.507	33.4	26.9	0.6	34.0	27.5	60.0	50.0	26.0	22.5	

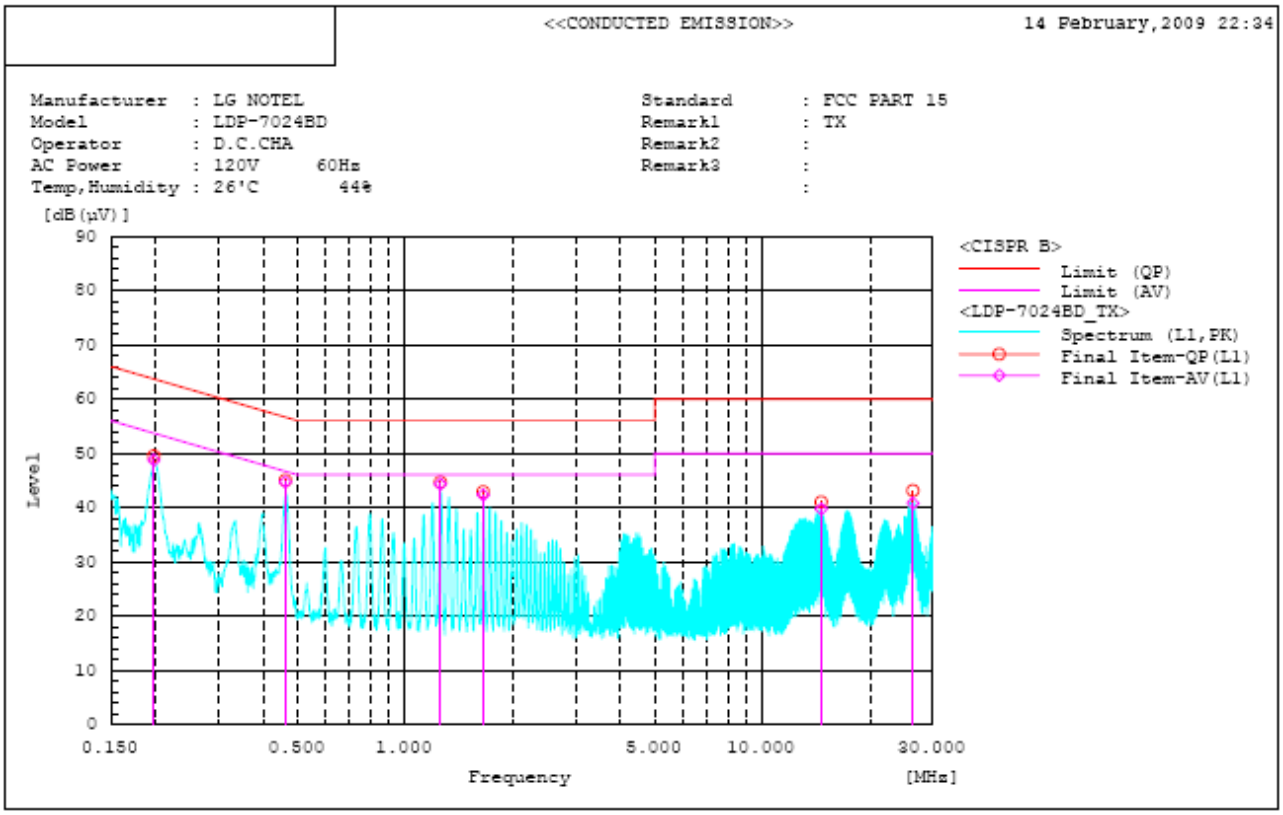
--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]	Remark
1	0.198	46.4	45.9	0.4	46.8	46.3	63.7	53.7	16.9	7.4	
2	0.464	42.2	41.4	0.4	42.6	41.8	56.6	46.6	14.0	4.8	
3	1.259	41.9	41.9	0.5	42.4	42.4	56.0	46.0	13.6	3.6	
4	1.724	40.5	39.4	0.5	41.0	39.9	56.0	46.0	15.0	6.1	
5	4.441	35.2	34.3	0.6	35.8	34.9	56.0	46.0	20.2	11.1	
6	13.133	42.4	36.4	0.8	43.2	37.2	60.0	50.0	16.8	12.8	

Test Case 2

- Conducted Emission Graph -





Test Case 2

- Conducted Emission Data -

<<CONDUCTED EMISSION>>

14 February,2009 22:34

Standard : FCC PART 15
Manufacturer : LG NOTEL
Model : LDP-7024BD
Operator : D.C.CHA
AC Power : 120V 60Hz
Temp,Humidity : 26'C 44%
Remark1 : TX
Remark2 :
Remark3 :

Final Result

--- N Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]	Remark
1	0.198	52.3	51.3	0.1	52.4	51.4	63.7	53.7	11.3	2.3	
2	0.396	45.4	45.0	0.2	45.6	45.2	57.9	47.9	12.3	2.7	
3	1.322	44.1	43.8	0.2	44.3	44.0	56.0	46.0	11.7	2.0	
4	1.719	41.0	40.6	0.3	41.3	40.8	56.0	46.0	14.7	5.2	
5	26.440	37.0	35.3	1.2	38.2	36.5	60.0	50.0	21.8	13.5	
6	19.434	32.9	31.6	1.0	33.9	32.6	60.0	50.0	26.1	17.4	

--- L1 Phase ---

No.	Frequency [MHz]	Reading QP [dB(μV)]	Reading AV [dB(μV)]	c.f [dB]	Result QP [dB(μV)]	Result AV [dB(μV)]	Limit QP [dB(μV)]	Limit AV [dB(μV)]	Margin QP [dB]	Margin AV [dB]	Remark
1	0.198	49.1	48.3	0.4	49.5	48.7	63.7	53.7	14.2	5.0	
2	0.462	44.6	44.3	0.4	45.0	44.7	56.7	46.7	11.7	2.0	
3	1.255	44.2	43.8	0.5	44.7	44.3	56.0	46.0	11.3	1.7	
4	1.652	42.4	41.8	0.5	42.9	42.3	56.0	46.0	13.1	3.7	
5	26.377	41.8	39.5	1.3	43.1	40.8	60.0	50.0	16.9	9.2	
6	14.610	40.2	38.9	0.8	41.0	39.7	60.0	50.0	19.0	10.3	

3.2.9 Occupied Bandwidth(99%)

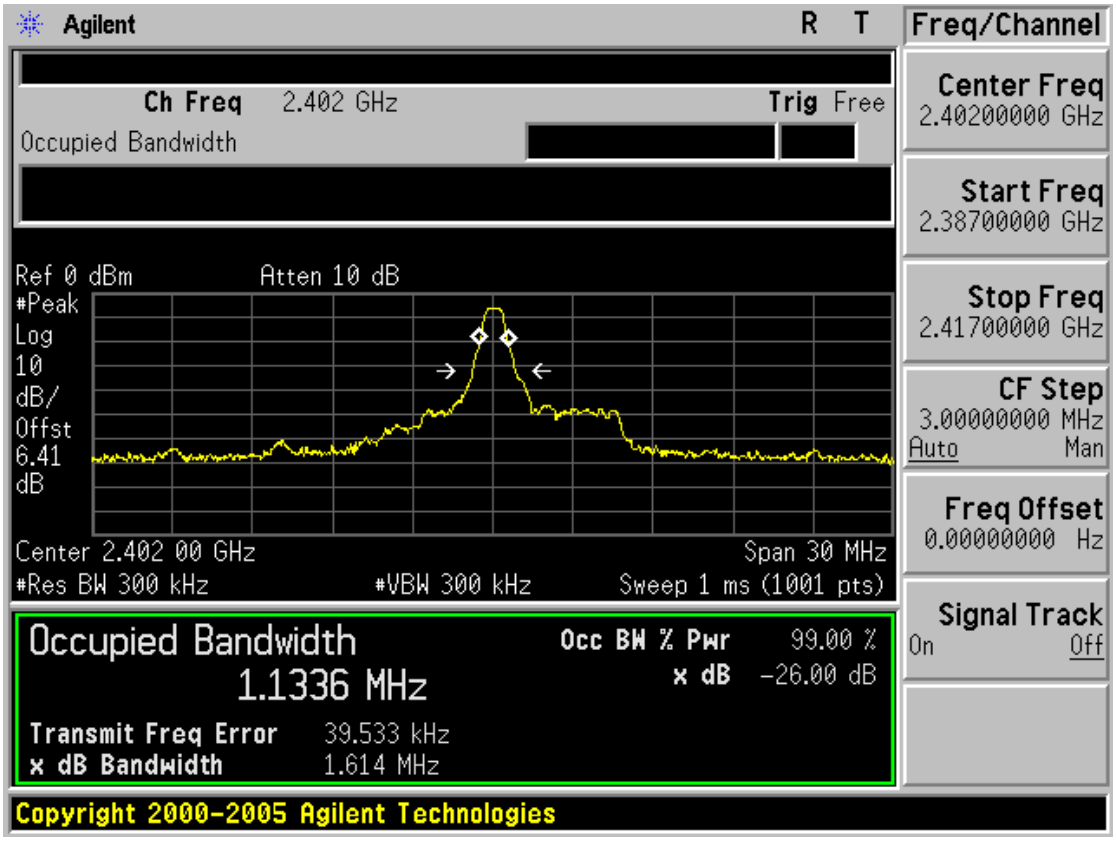
Procedure: (RSS-Gen Issue 2 Clause 4.6)

- The 99% power bandwidth was measured with a calibrated spectrum analyzer.
- Spectrum analyzer plots are included on the following pages.

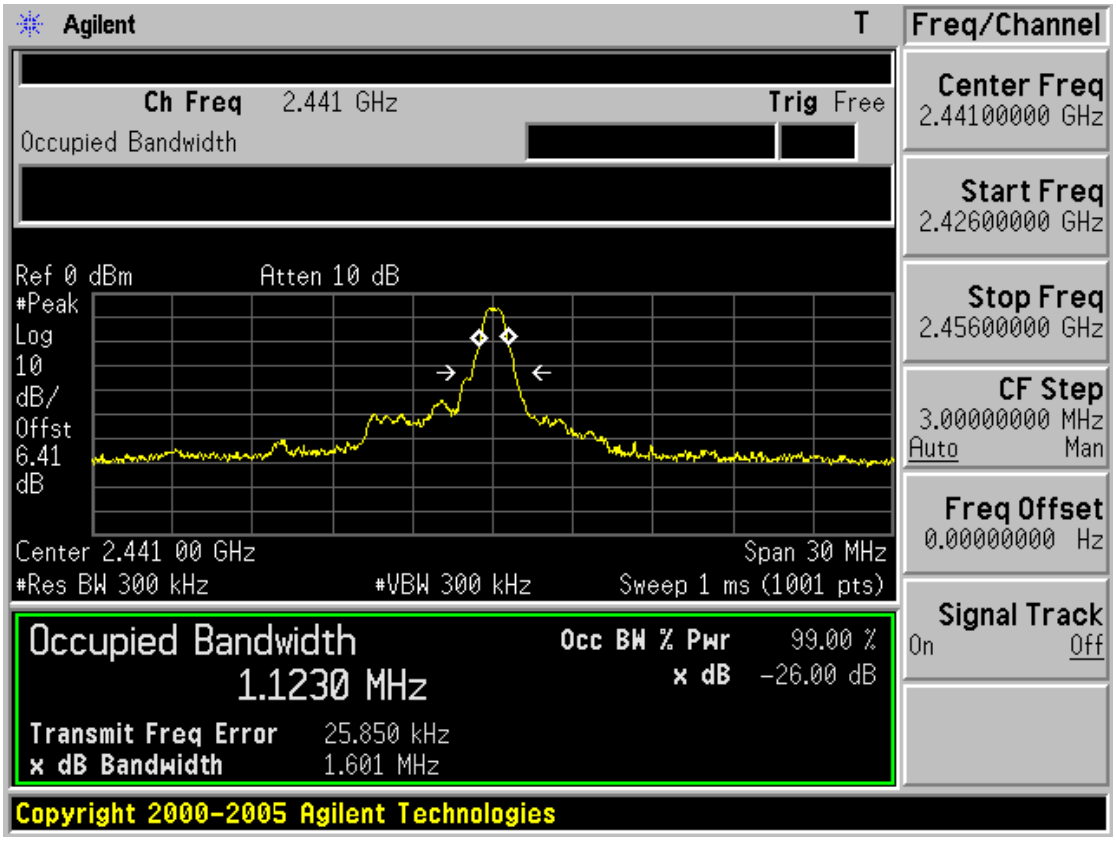
Measurement Data: Comply

Channel	Frequency (MHz)	99% Bandwidth
		(kHz)
Low	2402MHz	**1.1336**
Middle	2441MHz	**1.1230**
High	2480MHz	**1.1316**

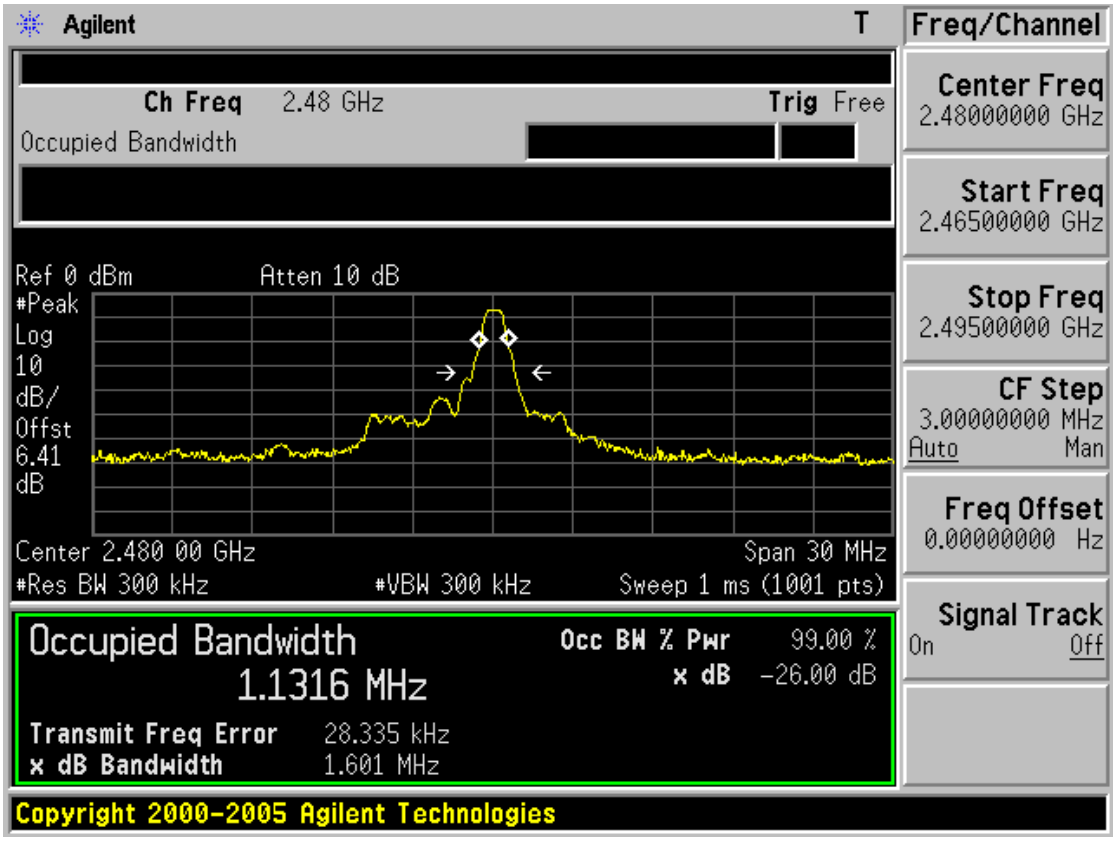
99 % Bandwidth Low CH



99 % Bandwidth Middle CH



99 % Bandwidth High CH



3.3 Receiver requirements

3.3.1 AC Conducted Emissions (Receiver Mode)

- Procedure:

The conducted emissions are measured in the shielded room with a spectrum analyzer in peak hold. While the measurement, EUT had its receiving function. Emissions closest to the limit are measured in the quasi-peak mode (QP) and average mode (AV) with the tuned receiver using a bandwidth of 9 kHz. The emissions are maximized further by cable manipulation and Exerciser operation. The highest emissions relative to the limit are listed.

- Measurement Data: Comply(Refer to the next page.)

Note. 1: This test item was performed with following 2 configurations
- Test Case 1: LDP-7024LBD (Large LCD)
- Test Case 2: LDP-7024BD (Small LCD)

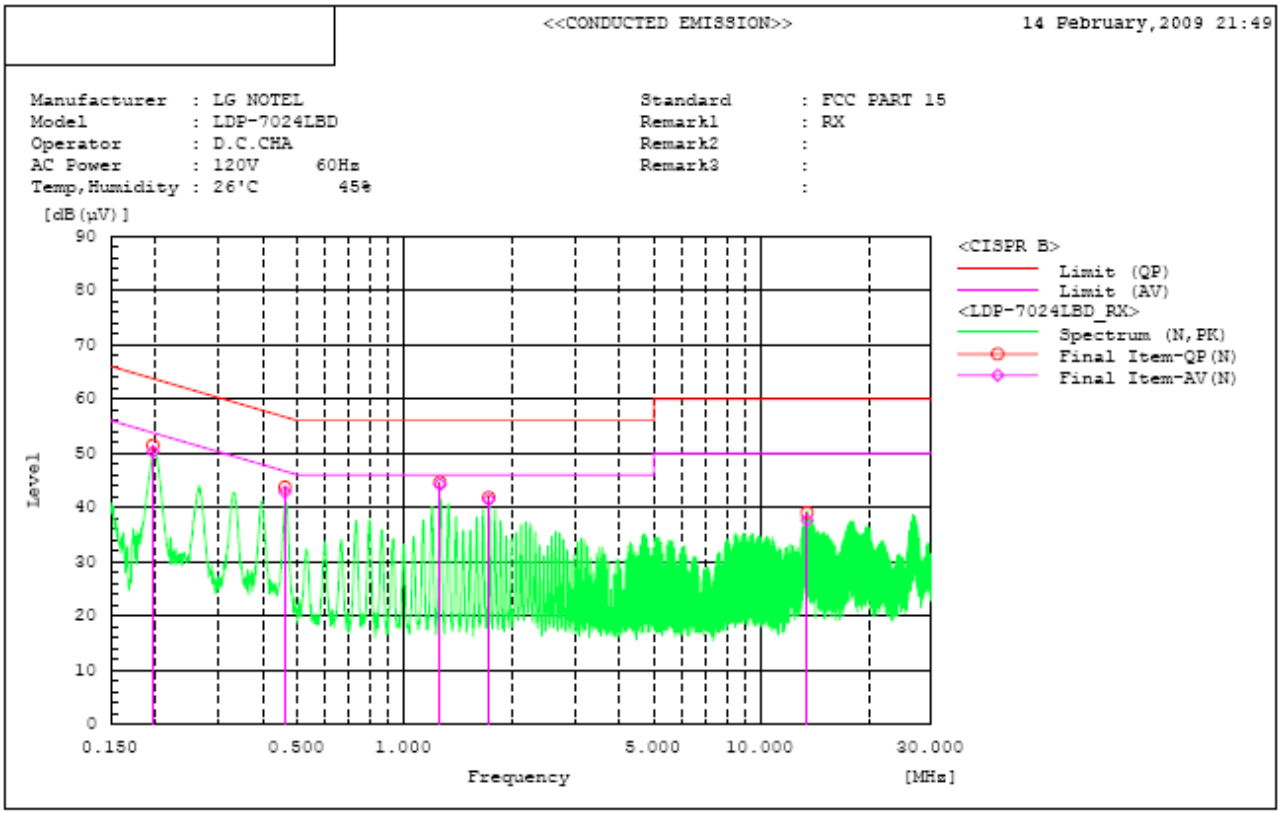
- Minimum Standard: FCC Part 15.207(a)/EN 55022

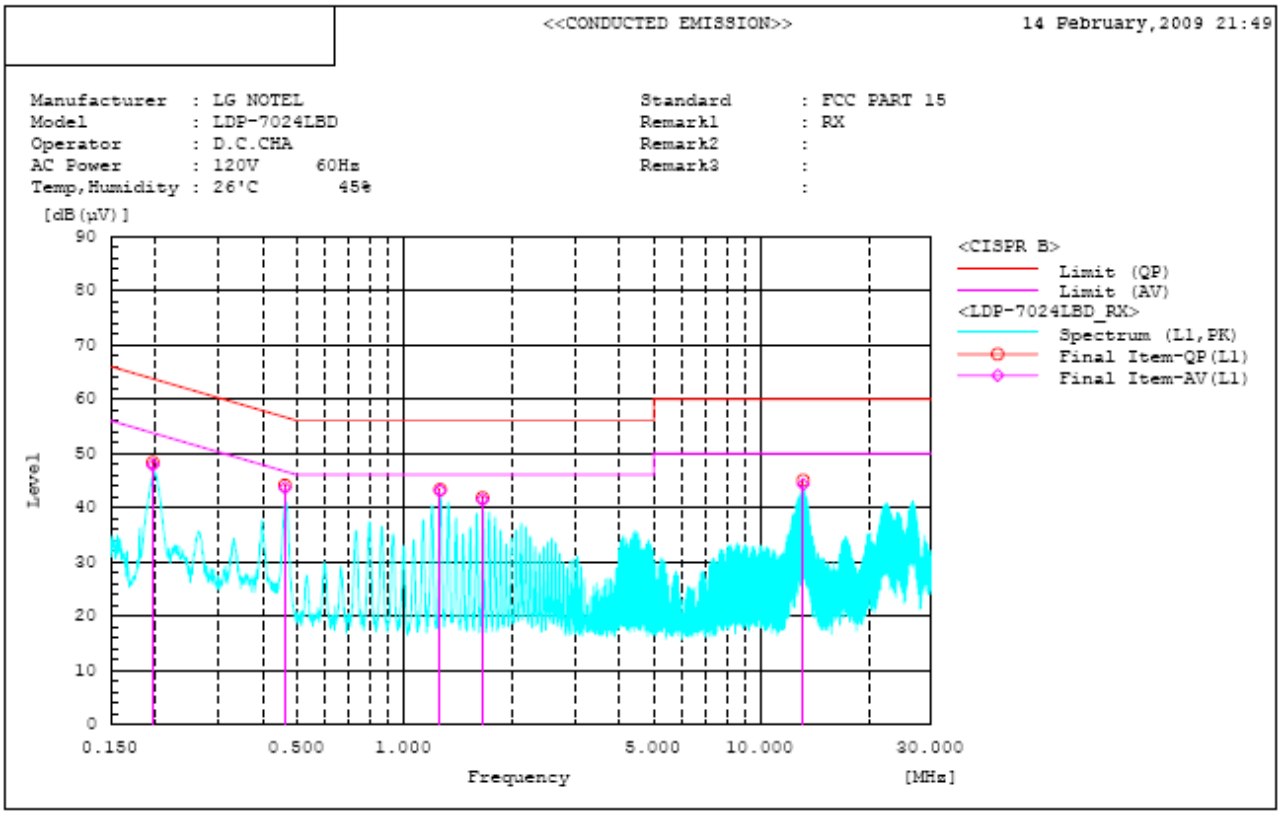
Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

Test Case 1

- Conducted Emission Graph -





Test Case 1

- Conducted Emission Data -

<<CONDUCTED EMISSION>>

14 February,2009 21:49

Standard : FCC PART 15
Manufacturer : LG NOTEL
Model : LDP-7024LBD
Operator : D.C.CHA
AC Power : 120V 60Hz
Temp,Humidity : 26'C 46%
Remark1 : RX
Remark2 :
Remark3 :

Final Result

--- N Phase ---

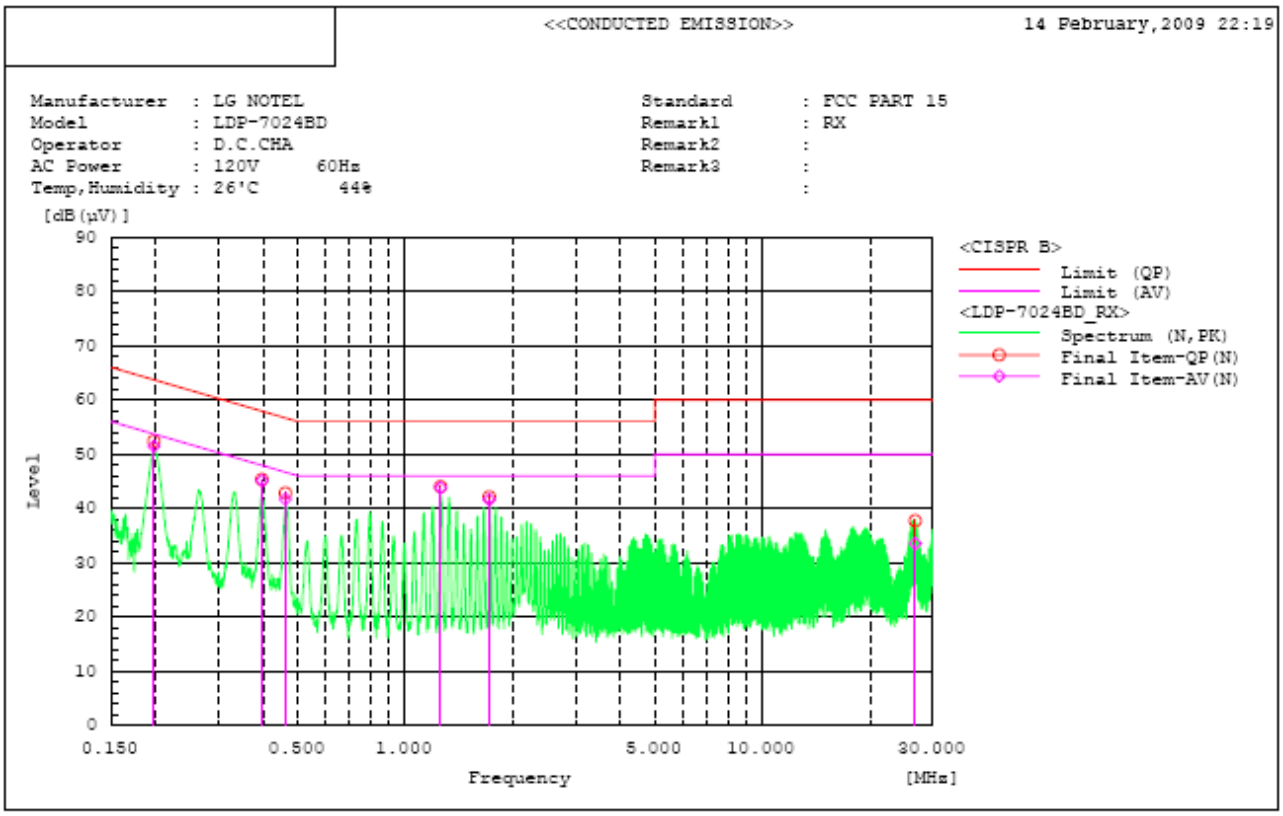
No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.197	51.3	50.1	0.1	51.4	50.2	63.7	53.7	12.3	3.5	
2	0.462	43.5	42.6	0.2	43.7	42.8	56.7	46.7	13.0	3.9	
3	1.257	44.4	44.0	0.2	44.6	44.2	56.0	46.0	11.4	1.8	
4	1.720	41.5	41.1	0.3	41.8	41.4	56.0	46.0	14.2	4.6	
5	13.432	38.4	37.0	0.6	39.0	37.6	60.0	50.0	21.0	12.4	

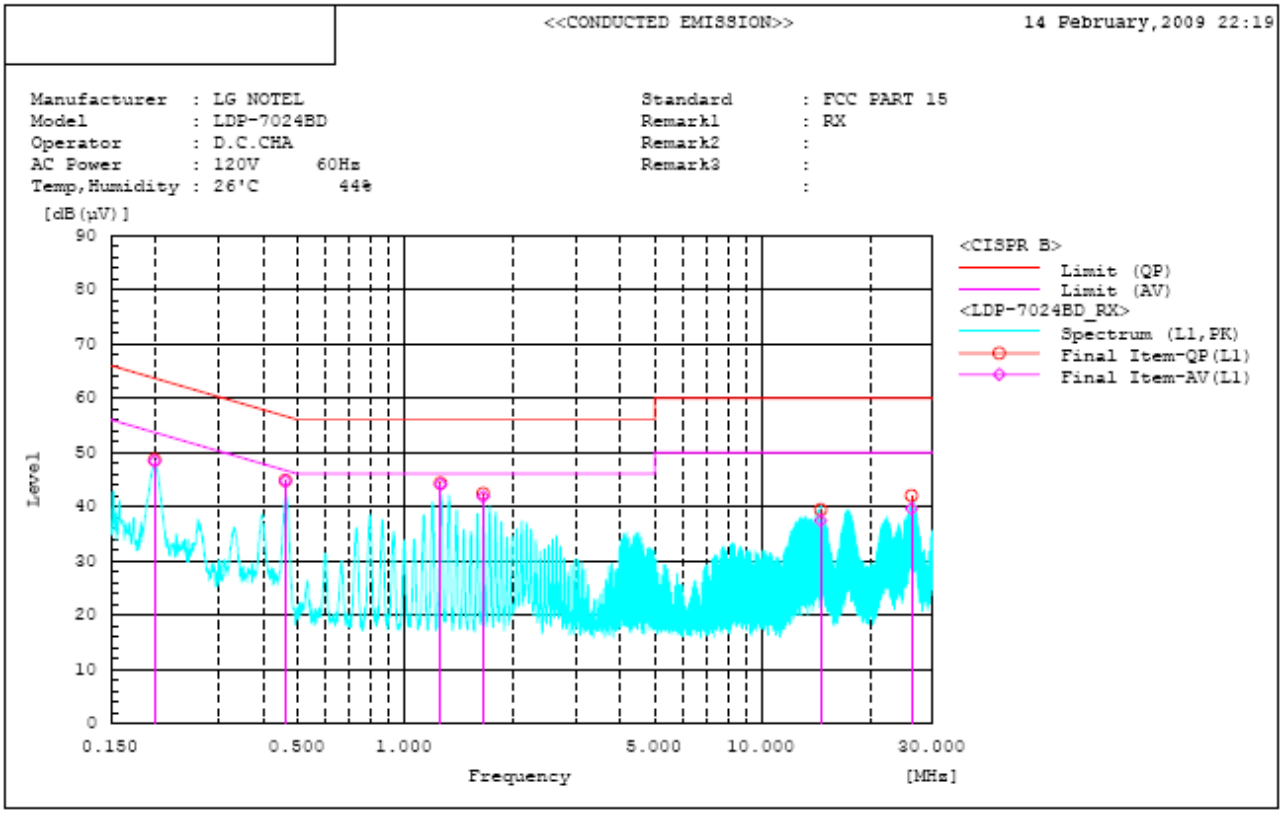
--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.197	47.9	47.4	0.4	48.3	47.8	63.7	53.7	15.4	5.9	
2	0.462	43.7	43.2	0.4	44.1	43.6	56.7	46.7	12.6	3.1	
3	1.258	42.8	42.6	0.5	43.3	43.1	56.0	46.0	12.7	2.9	
4	1.654	41.3	40.9	0.5	41.8	41.4	56.0	46.0	14.2	4.6	
5	13.105	44.2	43.4	0.8	45.0	44.2	60.0	50.0	15.0	5.8	

Test Case 2

- Conducted Emission Graph -





Test Case 2

- Conducted Emission Data -

<<CONDUCTED EMISSION>>

14 February,2009 22:19

Standard : FCC PART 15
Manufacturer : LG NOTEL
Model : LDP-7024BD
Operator : D.C.CHA
AC Power : 120V 60Hz
Temp,Humidity : 26'C 44%
Remark1 : RX
Remark2 :
Remark3 :
:

Final Result

--- N Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.198	52.3	51.3	0.1	52.4	51.4	63.7	53.7	11.3	2.3	
2	0.397	45.1	44.9	0.2	45.3	45.1	57.9	47.9	12.6	2.8	
3	1.256	43.8	43.6	0.2	44.0	43.8	56.0	46.0	12.0	2.2	
4	1.719	41.8	41.3	0.3	42.1	41.6	56.0	46.0	13.9	4.4	
5	0.462	42.6	41.5	0.2	42.8	41.7	56.7	46.7	13.9	5.0	
6	26.776	36.5	32.3	1.2	37.7	33.5	60.0	50.0	22.3	16.5	

--- L1 Phase ---

No.	Frequency	Reading QP	Reading AV	c.f	Result QP	Result AV	Limit QP	Limit AV	Margin QP	Margin AV	Remark
	[MHz]	[dB(μV)]	[dB(μV)]	[dB]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB(μV)]	[dB]	[dB]	
1	0.199	48.2	48.0	0.4	48.6	48.4	63.7	53.7	15.1	5.3	
2	0.462	44.4	44.3	0.4	44.8	44.7	56.7	46.7	11.9	2.0	
3	1.256	43.8	43.6	0.5	44.3	44.1	56.0	46.0	11.7	1.9	
4	1.653	41.9	41.3	0.5	42.4	41.8	56.0	46.0	13.6	4.2	
5	26.127	40.8	38.4	1.2	42.0	39.6	60.0	50.0	18.0	10.4	
6	14.550	38.6	36.6	0.8	39.4	37.4	60.0	50.0	20.6	12.6	

3.3.2 Out of Band Emissions – Radiated (Receiver Mode)

- Procedure:

The EUT was placed on a 0.8m high wooden table inside a shielded enclosure. An antenna was placed near the EUT and measurements of frequencies and amplitudes of field strengths were recorded for reference during final measurements. For final radiated testing, measurements were performed in a OATS. Measurements were performed with the EUT oriented in 3 orthogonal axis and rotated 360 degrees to determine worst-case orientation for maximum emissions.

The spectrum analyzer is set to:

Frequency Range = 30 MHz ~ 10th harmonic.

RBW = 120 kHz (30MHz ~ 1 GHz)

= 1 MHz (1 GHz ~ 10th harmonic)

VBW = 10Hz (Average), VBW ≥ RBW (Peak)

Trace = max hold

Detector function = peak

Sweep = auto

- Measurement Data: **Comply** (Refer to the Next page)

Note. 1: This test item was performed with following 2 configurations

- Test Case 1: LDP-7024LBD (Large LCD)
- Test Case 2: LDP-7024BD (Small LCD)

- Minimum Standard: FCC Part 15.109(a)

Frequency (MHz)	Limit (uV/m) @ 3m
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88MHz, 174-216MHz or 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

- Measurement Data: Test Case 1

Frequency	P	Reading	C.F	Result	Limit	Margin
30.092	V	37.70	-7.34	30.36	40.00	9.64
30.212	H	36.40	-7.38	29.02	40.00	10.98
35.435	V	38.10	-9.08	29.02	40.00	10.98
48.773	V	36.90	-14.17	22.73	40.00	17.27
95.018	V	44.69	-15.63	29.06	43.50	14.44
96.005	H	44.61	-15.49	29.12	43.50	14.38
161.591	H	40.11	-8.55	31.56	43.50	11.94
232.791	H	37.00	-6.11	30.89	46.00	15.11
294.613	H	40.20	-3.39	36.81	46.00	9.19
295.310	V	43.20	-3.35	39.85	46.00	6.15
312.544	H	37.90	-7.88	30.02	46.00	15.98

Note. No other emissions were detected at a level greater than 20dB below limit.

- Measurement Data: Test Case 2

Frequency	P	Reading	C.F	Result	Limit	Margin
31.455	H	33.11	-7.79	25.32	40.00	14.68
31.860	V	34.71	-7.92	26.79	40.00	13.21
35.001	V	31.30	-8.92	22.38	40.00	17.62
65.570	V	40.39	-18.36	22.03	40.00	17.97
87.924	H	37.00	-16.78	20.22	40.00	19.78
293.679	V	40.81	-3.44	37.37	46.00	8.63
296.691	H	47.50	-3.29	44.21	46.00	1.79
363.005	H	36.19	-6.53	29.66	46.00	16.34
424.512	H	34.30	-5.13	29.17	46.00	16.83

Note. No other emissions were detected at a level greater than 20dB below limit.

APPENDIX

TEST EQUIPMENT FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment.

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
☒	Spectrum Analyzer	Agilent	E4440A	06/11/08	06/11/09	MY45304199
☐	Spectrum Analyzer(RE)	H.P	8563E	13/10/08	13/10/09	3551A04634
☐	Spectrum Analyzer	Rohde Schwarz	FSP	09/09/08	09/09/09	100385
☐	Power Meter	H.P	EMP-442A	10/07/08	10/07/09	GB37170413
☐	Power Sensor	H.P	8481A	14/07/08	14/07/09	3318A96332
☐	Power Divider	Agilent	11636B	04/12/08	04/12/09	56471
☒	Power Splitter	Anritsu	K241B	14/10/08	14/10/09	020611
☐	Frequency Counter	H.P	5342A	16/09/08	16/09/09	2119A04450
☐	TEMP & HUMIDITY Chamber	JISCO	KR-100/J-RHC2	10/10/08	10/10/09	30604493/021031
☒	Digital Multimeter	H.P	34401A	20/03/08	20/03/09	3146A13475
☐	Thermo hygrometer	BODYCOM	BJ5478	06/02/09	06/02/10	090205-3
☒	Thermo hygrometer	BODYCOM	BJ5478	06/02/09	06/02/10	090205-2
☐	Thermo hygrometer	BODYCOM	BJ5478	06/02/09	06/02/10	090205-4
☐	Multifuction Synthesizer	HP	8904A	06/10/08	06/10/09	3633A08404
☒	Signal Generator	Rohde Schwarz	SMR20	02/04/08	02/04/09	101251
☒	Signal Generator	H.P	ESG-3000A	09/07/08	09/07/09	US37230529
☐	Vector Signal Generator	Rohde Schwarz	SMJ100A	02/02/09	02/02/10	100148
☐	Audio Analyzer	H.P	8903B	09/07/08	09/07/09	3011A09448
☐	Modulation Analyzer	H.P	8901B	18/07/08	18/07/09	3028A03029
☐	8960 Series 10 Wireless Comms. Test Set	Agilent	E5515C	31/07/08	31/07/09	GB43461134
☐	Universal Radio communication Tester	Rohde Schwarz	CMU 200	02/04/08	02/04/09	107631
☒	Bluetooth Tester	TESCOM	TC-3000A	16/12/08	16/12/09	3000A4A0121
☐	BAND Reject Filter	Microwave Circuits	N0308372	06/10/08	06/10/09	3125-01DC0352
☐	BAND Reject Filter	Wainwright	WRCG1750	06/10/08	06/10/09	2
☐	High-Pass Filter	ANRITSU	MP526D	06/10/08	06/10/09	MP27756
☐	High-pass filter	Wainwright	WHKX2.1	N/A	N/A	1
☐	High-Pass Filter	Wainwright	WHKX3.0	N/A	N/A	9
☐	Tunable Notch Filter	Wainwright	WRCT800.0 /960.0-0.2/40-8SSK	N/A	N/A	10
☐	Tunable Notch Filter	Wainwright	WRCD1700.0 /2000.0-0.2/40-10SSK	N/A	N/A	27
☐	Tunable Notch Filter	Wainwright	WRCT1900.0/ 2200.0-5/40-10SSK	N/A	N/A	7
☐	AC Power supply	DAEKWANG	5KVA	20/03/08	20/03/09	20060321-1
☒	DC Power Supply	HP	6622A	20/03/08	20/03/09	3448A03760
☐	DC Power Supply	HP	6633A	20/03/08	20/03/09	3524A06634
☒	HORN ANT	ETS	3115	13/06/08	13/06/09	6419
☐	HORN ANT	ETS	3115	10/09/08	10/09/09	21097
☐	HORN ANT	A.H.Systems	SAS-574	13/06/08	13/06/09	154
☐	HORN ANT	A.H.Systems	SAS-574	13/06/08	13/06/09	155

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
☐	Dipole Antenna	Schwarzbeck	VHA9103	25/11/08	25/11/09	2116
☐	Dipole Antenna	Schwarzbeck	VHA9103	25/11/08	25/11/09	2117
☐	Dipole Antenna	Schwarzbeck	UHA9105	25/11/08	25/11/09	2261
☐	Dipole Antenna	Schwarzbeck	UHA9105	25/11/08	25/11/09	2262
☐	Coaxial Fixed Attenuators	Agilent	8491B	01/08/08	01/08/09	MY39260700
☐	Coaxial Fixed Attenuators	Agilent	8491B	15/07/08	15/07/09	MY39260699
☐	Attenuator (10dB)	WEINSCHEL	23-10-34	01/10/08	01/10/09	BP4386
☐	Attenuator (20dB)	WEINSCHEL	86-20-11	06/10/08	06/10/09	432
☐	Attenuator (10dB)	WEINSCHEL	86-10-11	06/10/08	06/10/09	446
☐	Attenuator (10dB)	WEINSCHEL	86-10-11	06/10/08	06/10/09	408
☐	Attenuator (40dB)	WEINSCHEL	57-40-33	01/10/08	01/10/09	NN837
☐	Attenuator (30dB)	JFW	50FH-030-300	24/03/08	24/03/09	060320-1
☐	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0088CAN	11/07/08	11/07/09	788
☐	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0185CAN	11/07/08	11/07/09	790
☐	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0215CAN	11/07/08	11/07/09	112
☒	Amplifier (30dB)	Agilent	8449B	13/10/08	13/10/09	3008A01590
☐	RF Power Amplifier	OPHIRRF	5069F	09/07/08	09/07/09	1006
☐	Software	Agilent	Benchlink	N/A	N/A	A.01.09 021211
☐	EMI TEST RECEIVER	R&S	ESU	02/02/09	02/02/10	100014
☒	BILOG ANTENNA	SCHAFFNER	CBL6112B	13/06/08	13/06/09	2737
☐	Amplifier (22dB)	H.P	8447E	05/02/09	05/02/10	2945A02865
☐	Position Controller	TOKIN	5905A	N/A	N/A	N/A
☐	Software	ToYo EMI	EP5/RE	N/A	N/A	Ver 2.0.800
☐	EMI TEST RECEIVER	R&S	ESCI	13/05/08	13/05/09	100364
☐	Log Periodic Antenna	Schwarzbeck	UHALP9108A1	30/09/08	30/09/09	1098
☐	Biconical Antenna	Schwarzbeck	VHA9103	13/06/08	13/06/09	2233
☒	Low Noise Pre Amplifer	TSJ	MLA-100K01-B01-2	24/03/08	24/03/09	1252741
☐	Amplifier (25dB)	Agilent	8447D	18/08/08	18/08/09	2648A04922
☒	Position Controller	TOKIN	5901T	N/A	N/A	14173
☒	Software	AUDIX	e3	N/A	N/A	Ver 3.0
☒	Driver	TOKIN	5902T2	N/A	N/A	14174
☒	Spectrum Analyzer(CE)	H.P	8591E	26/04/08	26/04/09	3649A05889
☐	LISN	Kyorits	KNW-407	04/08/08	04/08/09	8-317-8
☒	LISN	Kyorits	KNW-242	11/09/08	11/09/09	8-654-15
☒	CVCF	NF Electronic	4420	21/03/08	21/03/09	304935/337980
☒	Software	ToYo EMI	EP5/CE	N/A	N/A	Ver 2.0.801
☒	DC BLOCK	Hyuplip	KEL-007	N/A	N/A	7-1581-5
☒	50 ohm Terminator	HME	CT-01	22/01/09	22/01/10	N/A
☒	RFI/FIELD Intensity Meter	Kyorits	KNW-2402	11/09/08	11/09/09	4N-170-3