DIGITAL EMC CO., LTD.

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CERTIFICATION OF COMPLIANCE

TELIAN CORPORATION.
4th Fl, Nam Jeun B/D 53-3 Haan-Dong,
Kwang Myung-Si, Kyung Gi-Do, Korea

Dates of Tests: January 16~26 2008
Test Report S/N: DR50110802B
Test Site : DIGITAL EMC CO., LTD.

FCC ID **NPQK3000**

APPLICANT **TELIAN CORPORATION.**

FCC Classification	:	**Frequency Hopping Spread Spectrum (FHSS)**
Device name	:	**GSM850 / PCS1900 Dual Band GPRS Terminal Equipment with Bluetooth**
Manufacturer	:	**TELIAN CORPORATION.**
FCC ID	:	**NPQK3000**
Model name	:	**E4600**
Test Device Serial number	:	**Identical prototype**
FCC Rule Part(s)	:	**FCC Part 15.247 Subpart C**
		ANSI C-63.4-2003
Frequency Range	:	**2402 ~ 2480 MHz**
Max. Output power	:	**-2.37 dBm Conducted**
Data of issue	:	**February 01, 2008**

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

NVLAP LAB CODE 200559-0

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
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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".
This laboratory is accredited by NVLAP for NVLAP Lab. Code : 200559-0.

Test operator: engineer

Data	Name	Signature
February 01, 2008	D.C.Cha	

Report Reviewed By: manager

Data	Name	Signature
February 01, 2008	Harvay Sung	

Ordering party:

Company name	:	TELIAN CORPORATION
Address	:	4th Fl, Nam Jeun B/D 53-3 Haan-Dong, Kwang Myung-Si
City/town	:	Kyung Gi-Do
Country	:	Korea
Date of order	:	January 16, 2008

2. Information about test item

NPQK3000

2.1 Equipment information

Equipment model no.	E4600
Equipment serial no.	Identical prototype
Type of equipment	GSM850 / PCS1900 Dual Band GSM Terminal Equipment with Bluetooth
Frequency band	2402 ~ 2480 MHz
Type of Modulation	GFSK
Channel Access Protocol	Frequency Hopping
Channel Spacing	1.0 MHz
Type of antenna	Chip Antenna

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 (^{o}C)
Relative humidity content	:	20 ~ 75 %
Air pressure	:	86 ~ 103 kPa
Details of power supply	:	3.7 V 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 Section(s)	Parameter	Limit (Using in 2400 ~ 2483.5MHz)	Test Condition	Status (note 1)
I. Test Items				
15.247(a)	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 within a 30 second period per any frequency		C
15.247(b)	Transmitter Output Power	=< 1Watt , if CHs >= 75 Others =<0.125W		C
15.247(c)	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	Radiated Emissions	FCC 15.209 Limits	Radiated	C
15.207	AC Conducted Emissions	EN 55022	AC Line Conducted	C

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

The sample was tested according to the following specification:

FCC Parts 15.247; ANSI C-63.4-2003

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 (1% of the span or more) 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
2439.989	2440.994	1.005	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

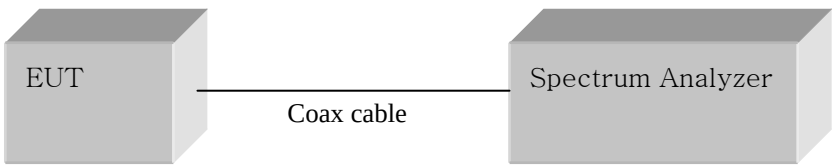
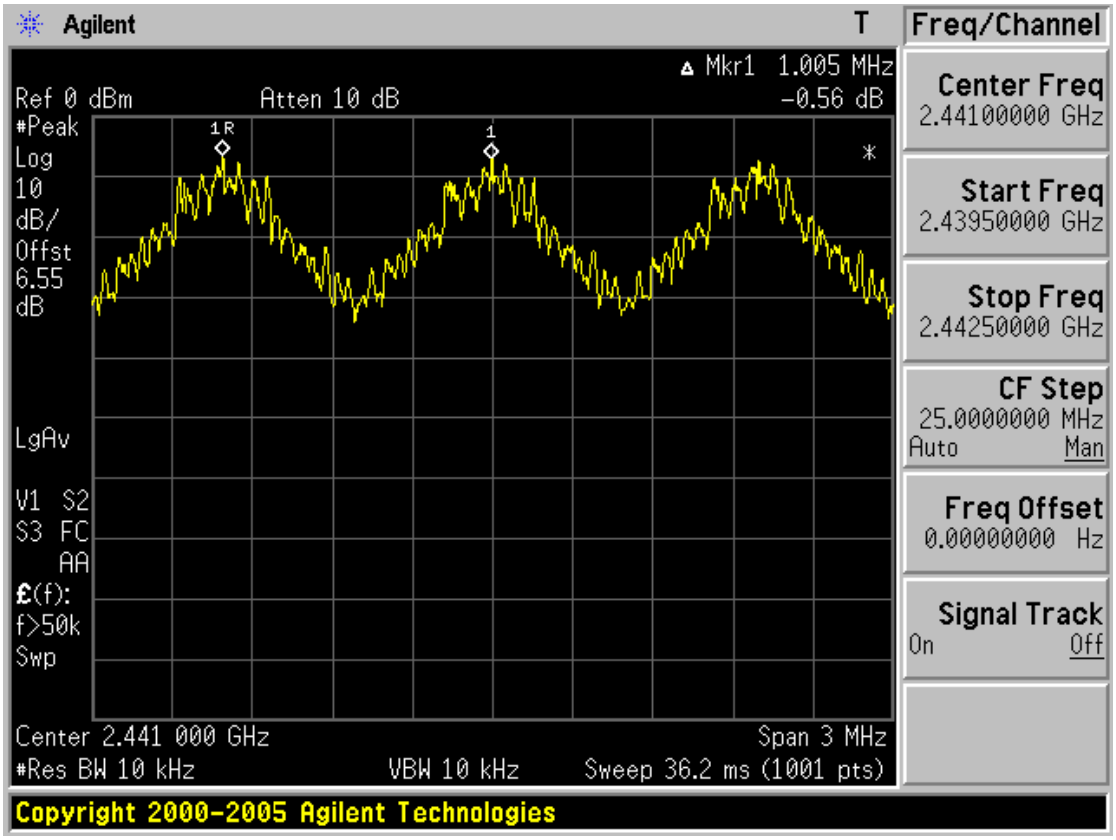


Figure 1: Measurement setup for the carrier frequency separation

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 enabled.

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: Complies

Total number of Hopping Channels	79

- See next pages for actual measured spectrum plots.

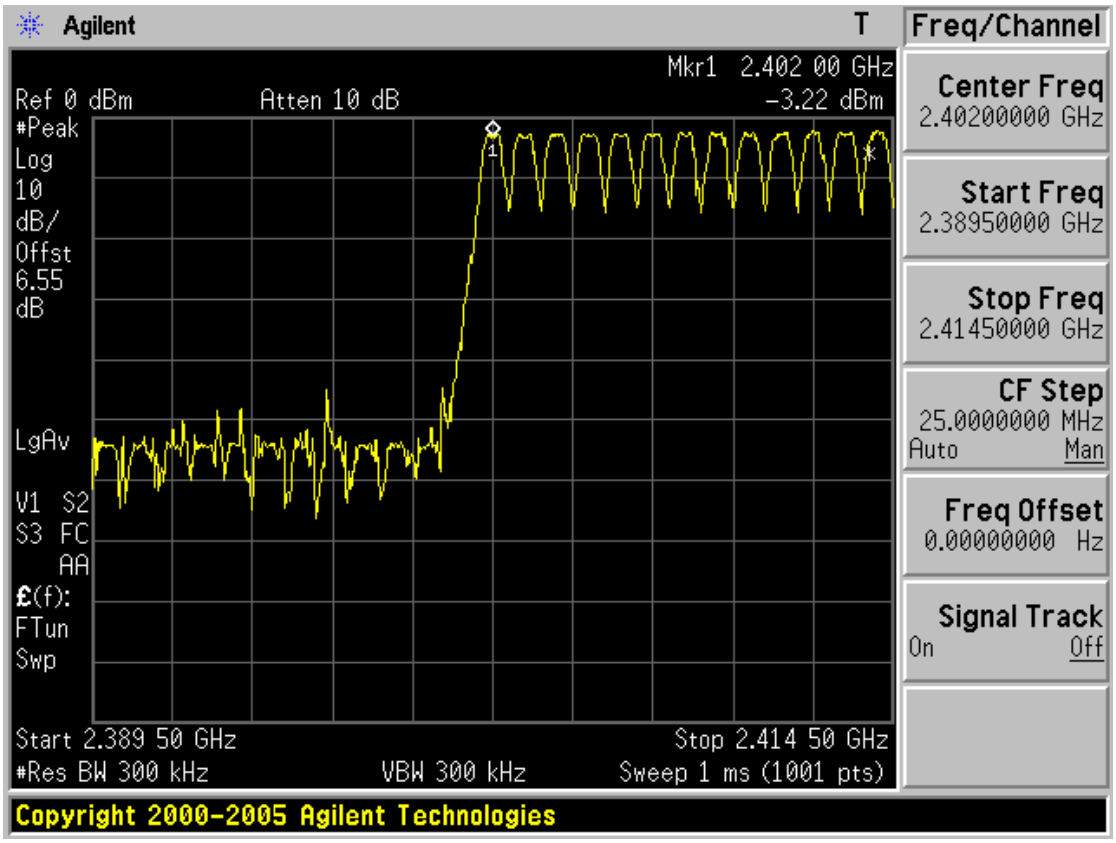
Minimum Standard:

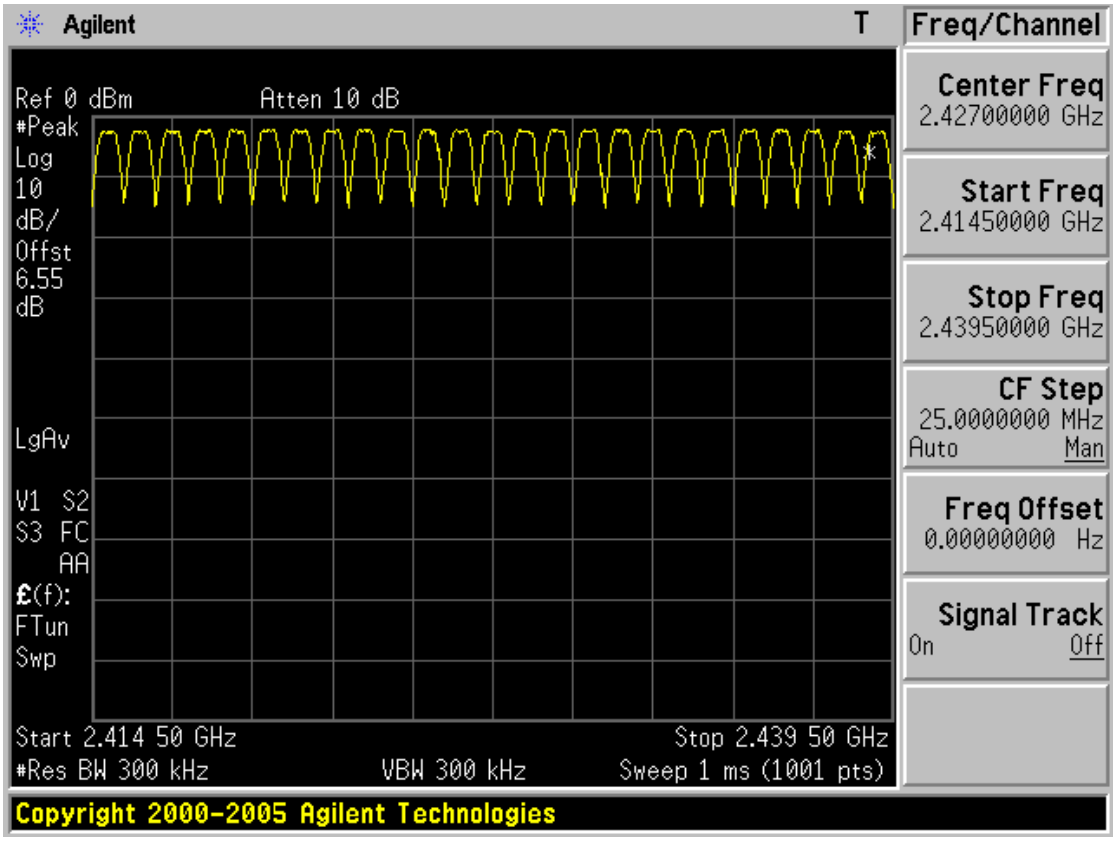
At least 15 hopes

Measurement Setup

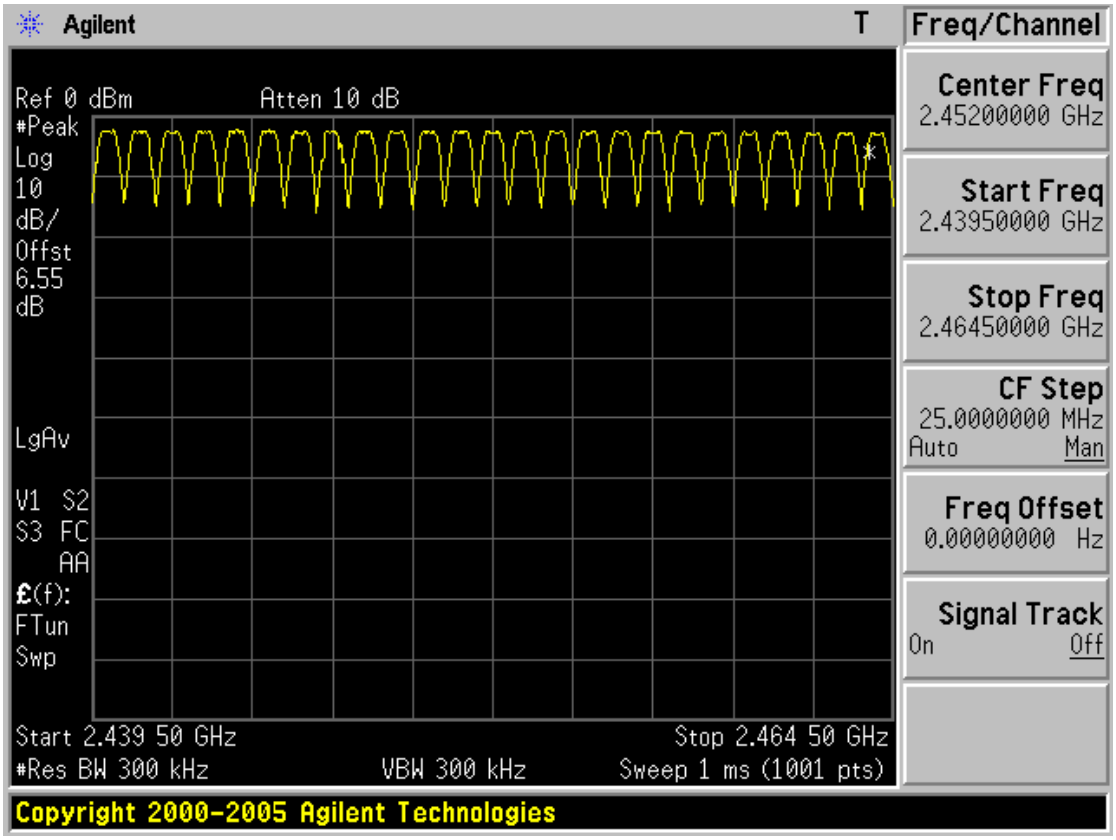
Same as the Chapter 3.2.1 (Figure 1)

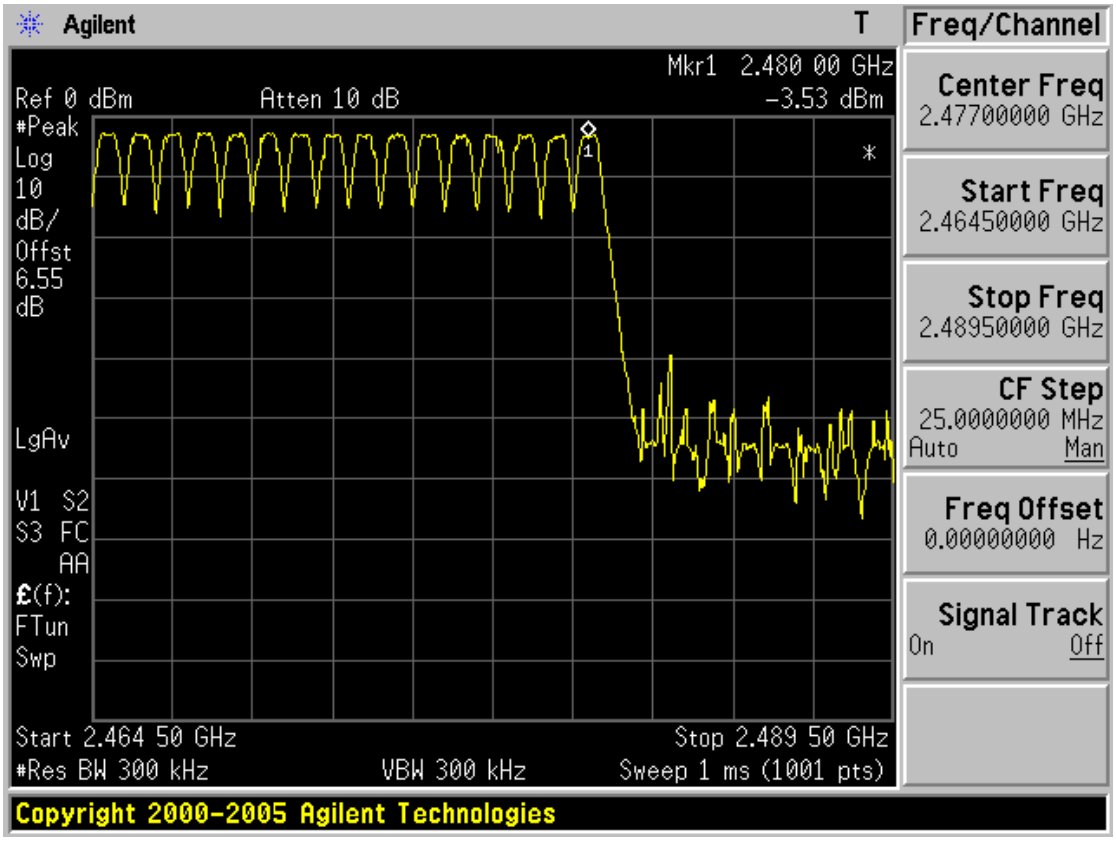
Number of Hopping Frequencies





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 = 2 MHz (approximately 2 or 3 times of the 20 dB bandwidth)

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

VBW = 30 kHz (VBW ≥ RBW) Detector function = peak

Trace = max hold

Measurement Data:

Frequency (MHz)	Channel No.	Test Results	
		Measured Bandwidth (MHz)	Result
2402	1	0.915	Comply
2441	40	0.920	Comply
2480	79	0.915	Comply

- See next pages for actual measured spectrum plots.

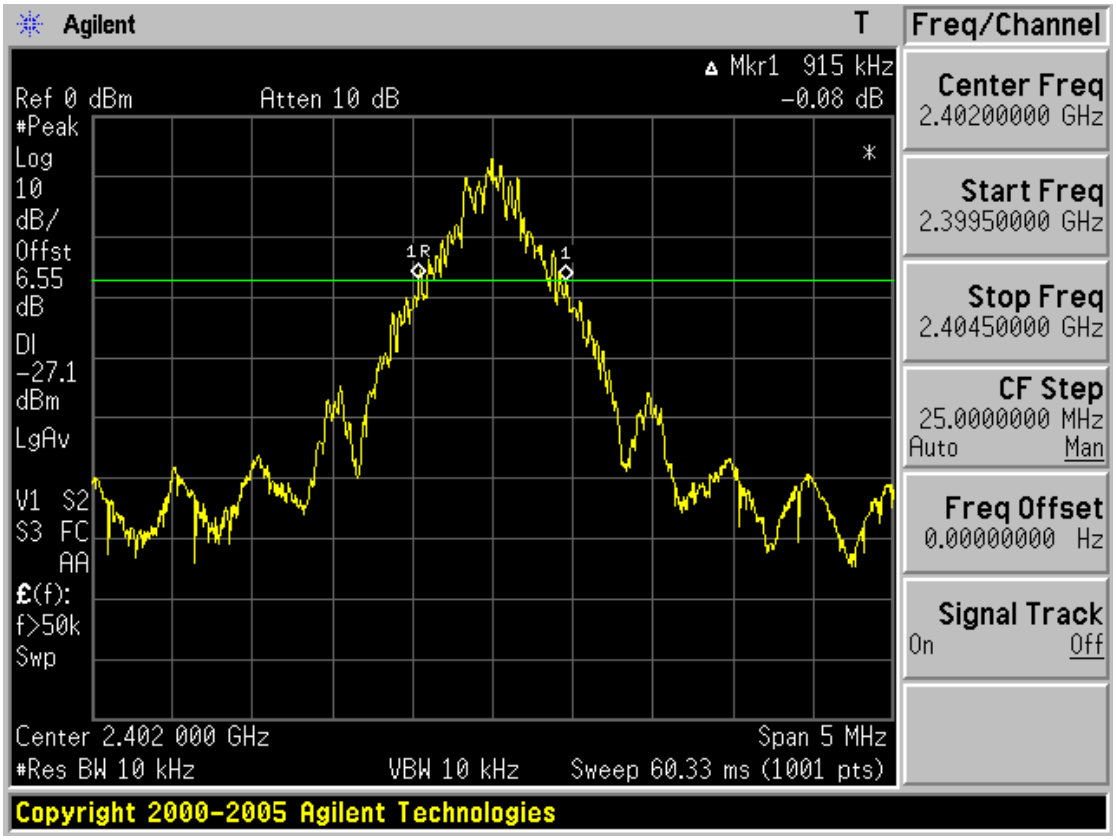
Minimum Standard:

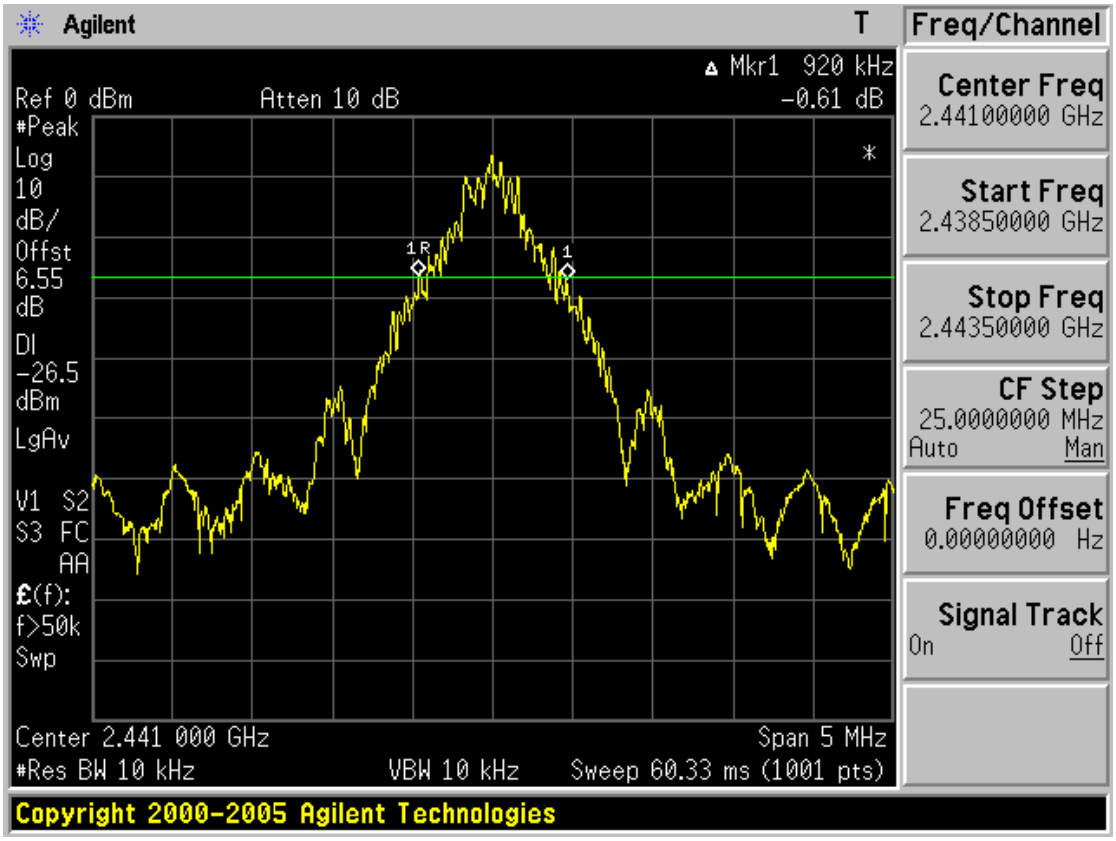
None

Measurement Setup

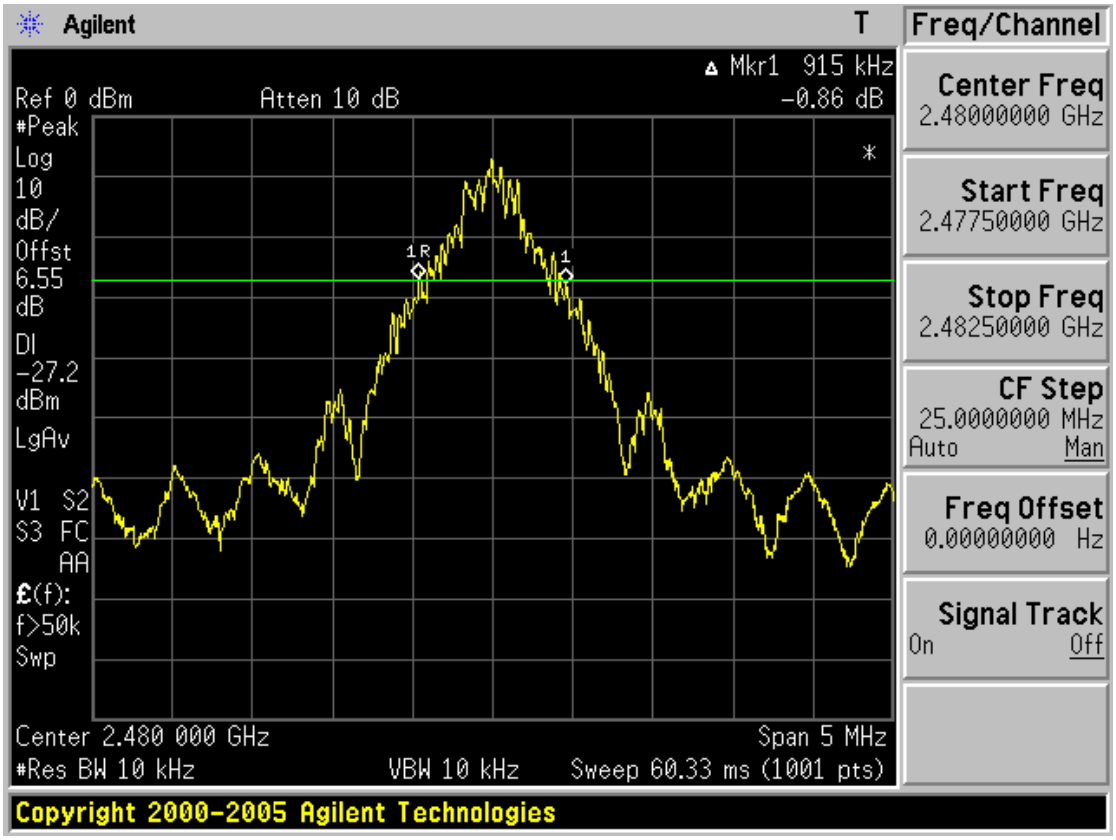
Same as the Chapter 3.2.1 (Figure 1)

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:

Packet Type	Burst duration in one hop (us)	Test Results	
		Dwell Time (ms)	Result
DH 1	436	139.568	Comply
DH 3	1698	273.650	Comply
DH 5	2944	313.507	Comply

- See next pages for actual measured spectrum plots.

Minimum Standard:

0.4 seconds within a 30 second period per any frequency

Measurement Setup

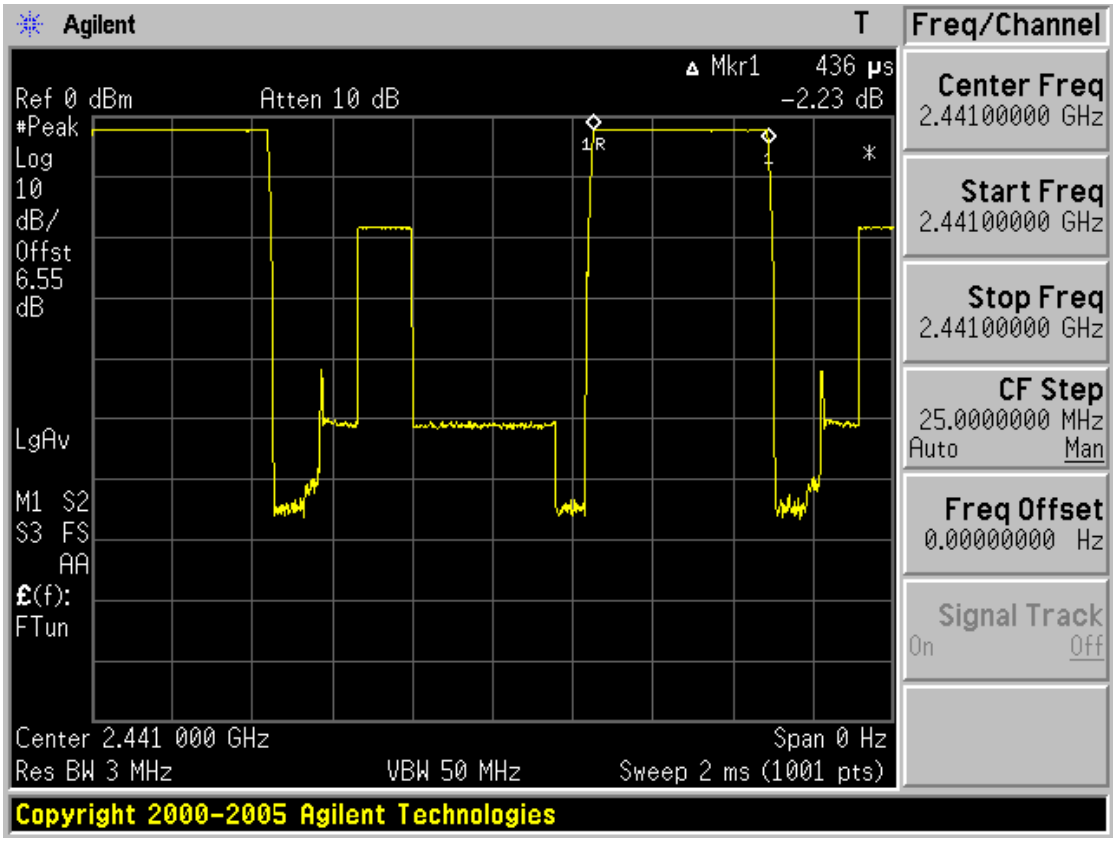
Same as the Chapter 3.2.1 (Figure 1)

Time of Occupancy for Packet Type DH 1

The system makes worst case 1600 hopes per second or 1 time slot has a length of 625 us with 79 channels. A DH 1 Packet need 1 time slot for transmitting and 1 time slot for receiving. Then the system makes worst case 1600/2 = 800 hops per second with 79 channels. So you have each channel 800/79 = 10.13 times per second and so for a period of 0.4 x 79 = 31.6 seconds you have 10.13 x 31.6 = 320.11 times of appearance.

Each Tx-time per appearance is 436 us

So we have 320.11 x 436us = 139.568 ms per 31.6 seconds.

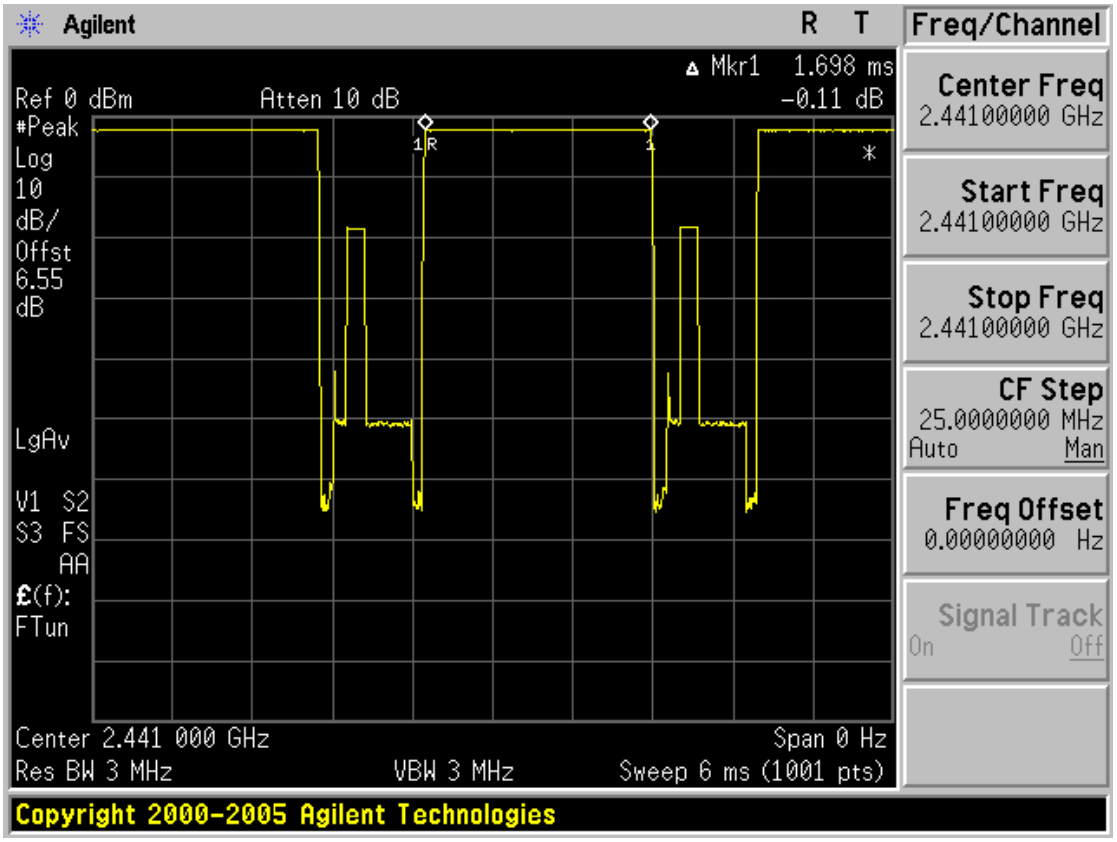


Time of Occupancy for Packet Type DH 3

The system makes worst case 1600 hopes per second or 1 time slot has a length of 625 us with 79 channels. A DH 3 Packet need 3 time slot for transmitting and 1 time slot for receiving. Then the system makes worst case 1600/4 = 400 hops per second with 79 channels. So you have each channel 400/79 = 5.1 times per second and so for a period of 0.4 x 79 = 31.6 seconds you have 5.1 x 31.6 = 161.16 times of appearance.

Each Tx-time per appearance is 1.698 ms

So we have 161.16 x 1.698 ms = 273.650 ms per 31.6 seconds.



Time of Occupancy for Packet Type DH 5

The system makes worst case 1600 hopes per second or 1 time slot has a length of 625 us with 79 channels. A DH 5 Packet need 5 time slot for transmitting and 1 time slot for receiving. Then the system makes worst case 1600/6 = 266.67 hops per second with 79 channels. So you have each channel 266.67/79 = 3.37 times per second and so for a period of 0.4 x 79 = 31.6 seconds you have 3.37 x 31.6 = 106.49 times of appearance.

Each Tx-time per appearance is 2.944 ms

So we have 106.49 x 2.944 ms = 313.507 ms per 31.6 seconds.

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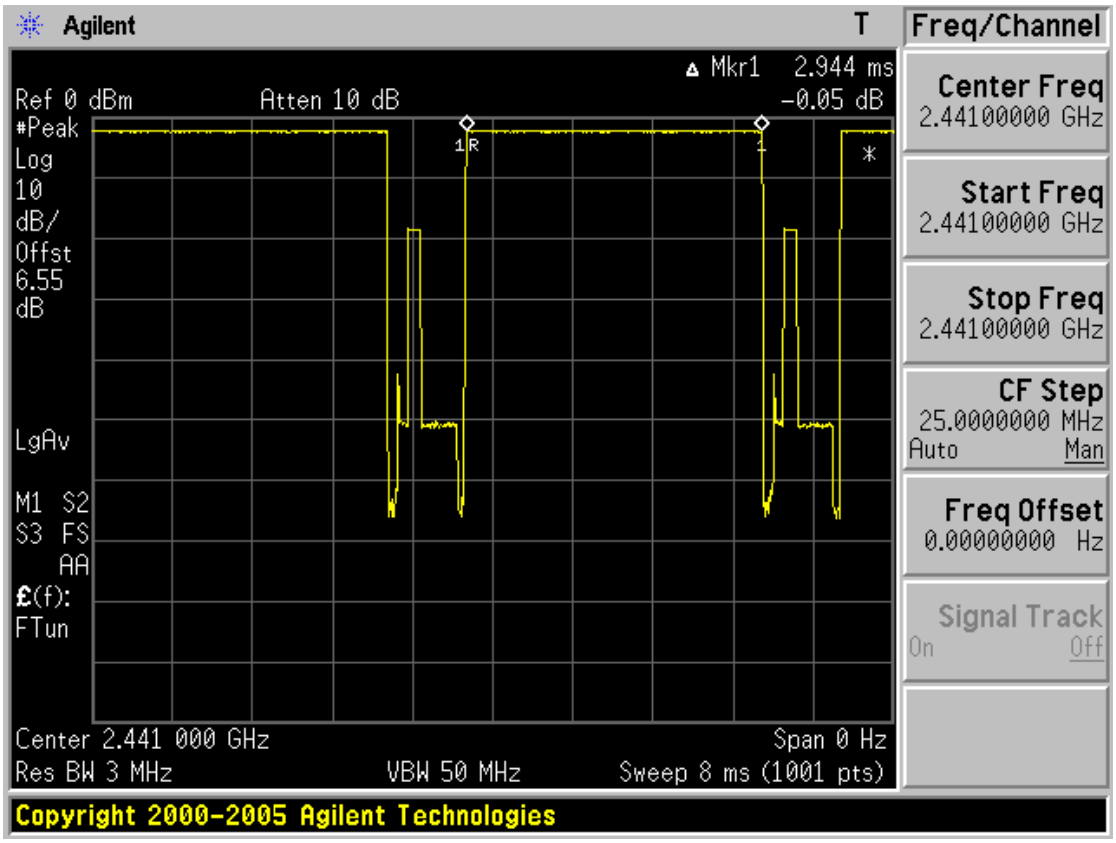


3.2.5 Peak Output Power

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	**-2.76**	**0.530**	**Comply**
2441	40	**-2.37**	**0.579**	**Comply**
2480	79	**-2.99**	**0.502**	**Comply**

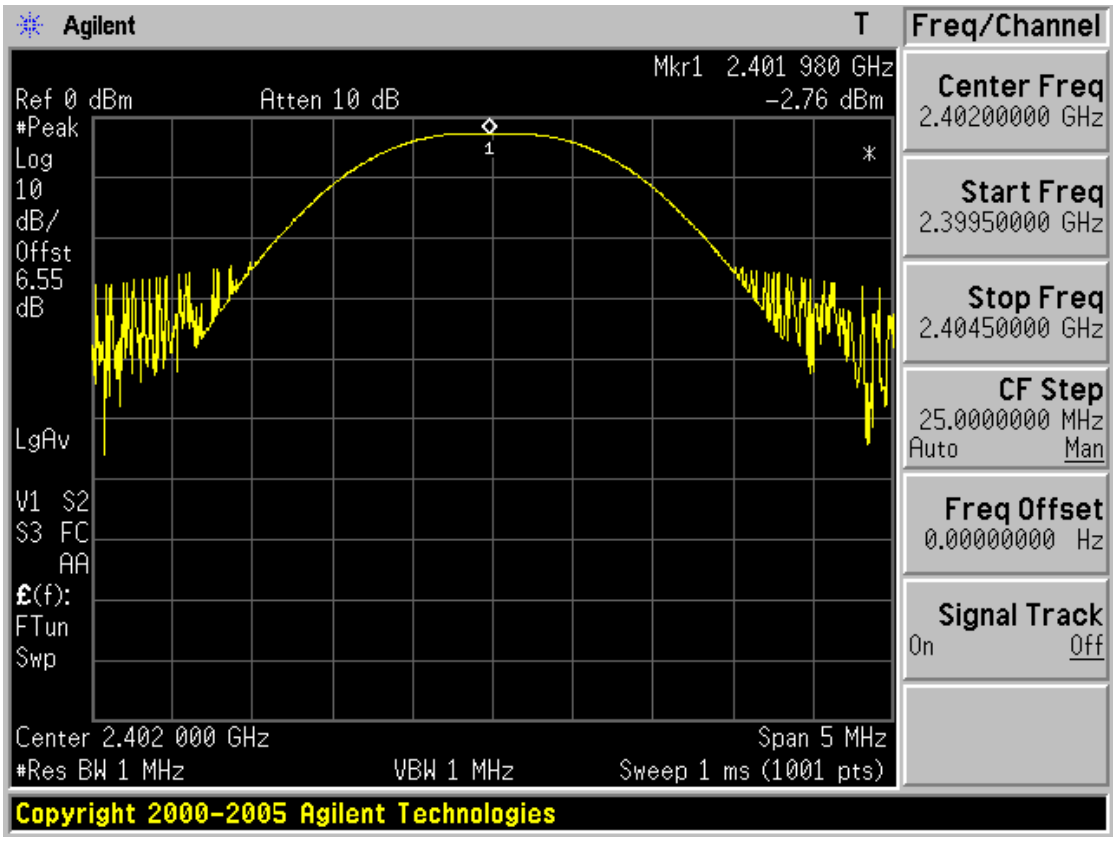
- See next pages for actual measured spectrum plots.

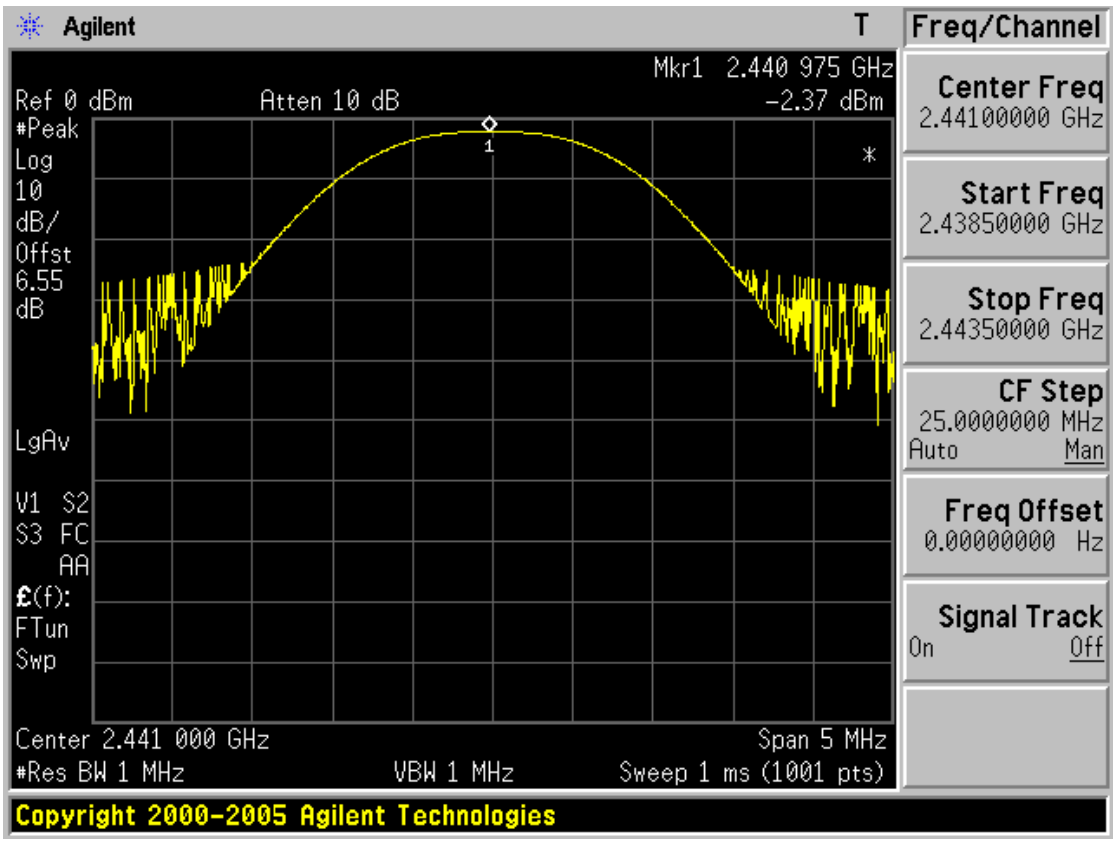
Minimum Standard:	For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: **1 Watt**. For all other frequency hopping systems in the 2400-2483.5 MHz band: **0.125 Watts**

Measurement Setup

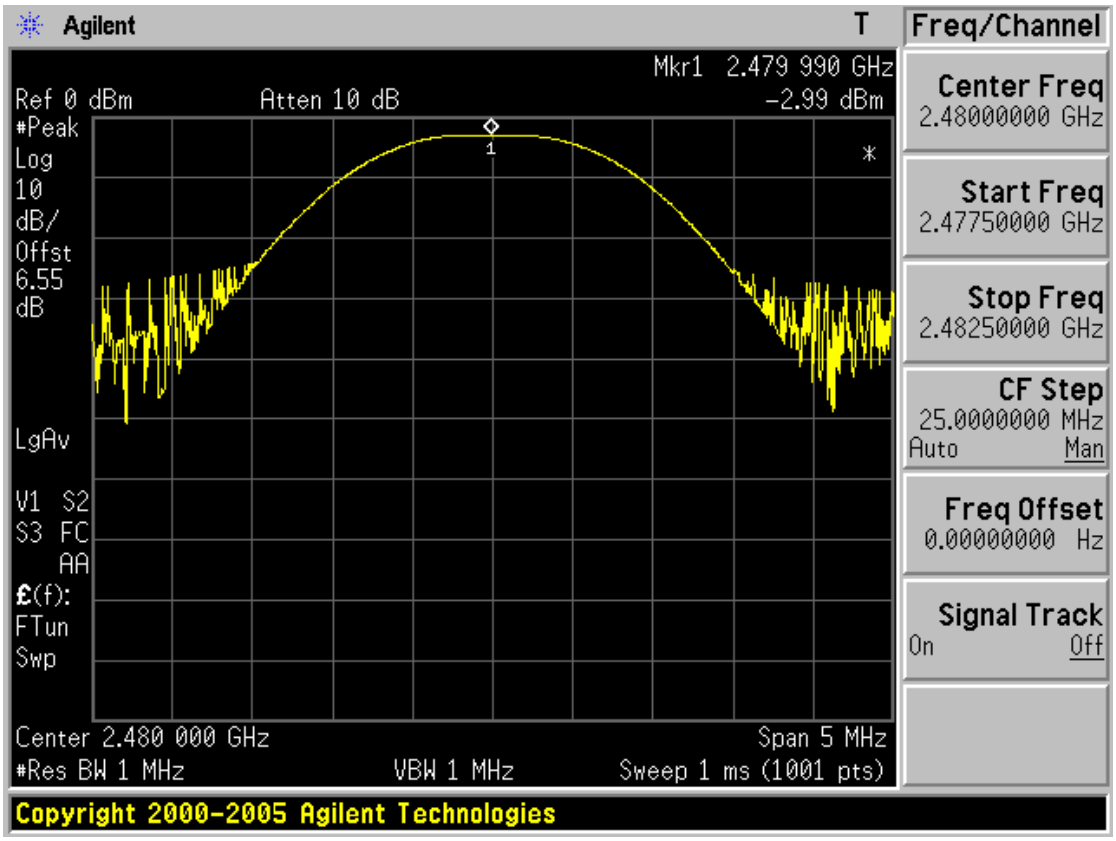
Same as the Chapter 3.2.1 (Figure 1)

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
Span = 100 MHz	Detector function = peak
Trace = max hold	Sweep = auto

Measurement Data: Comply

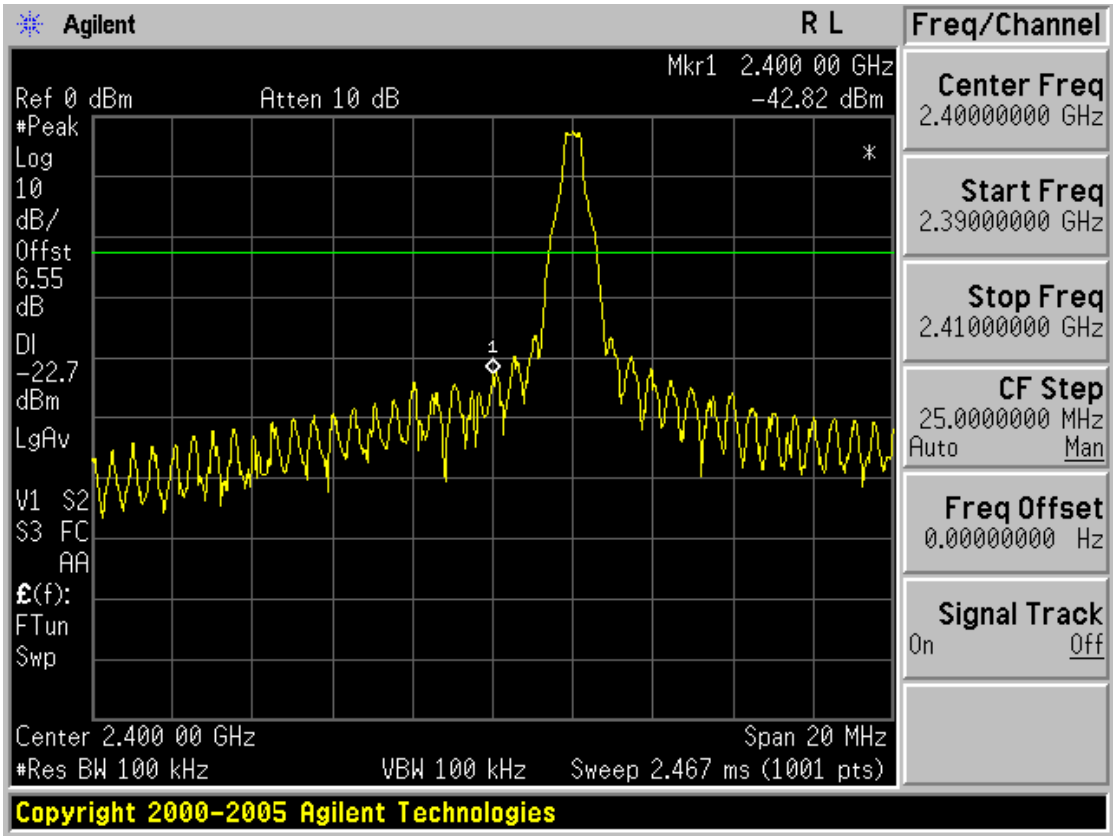
- All conducted emission in any 100kHz bandwidth outside of the spread spectrum band was at least 20dB lower than the highest inband spectral density..
- See next pages for actual measured spectrum plots.

Minimum Standard:	> 20 dBc

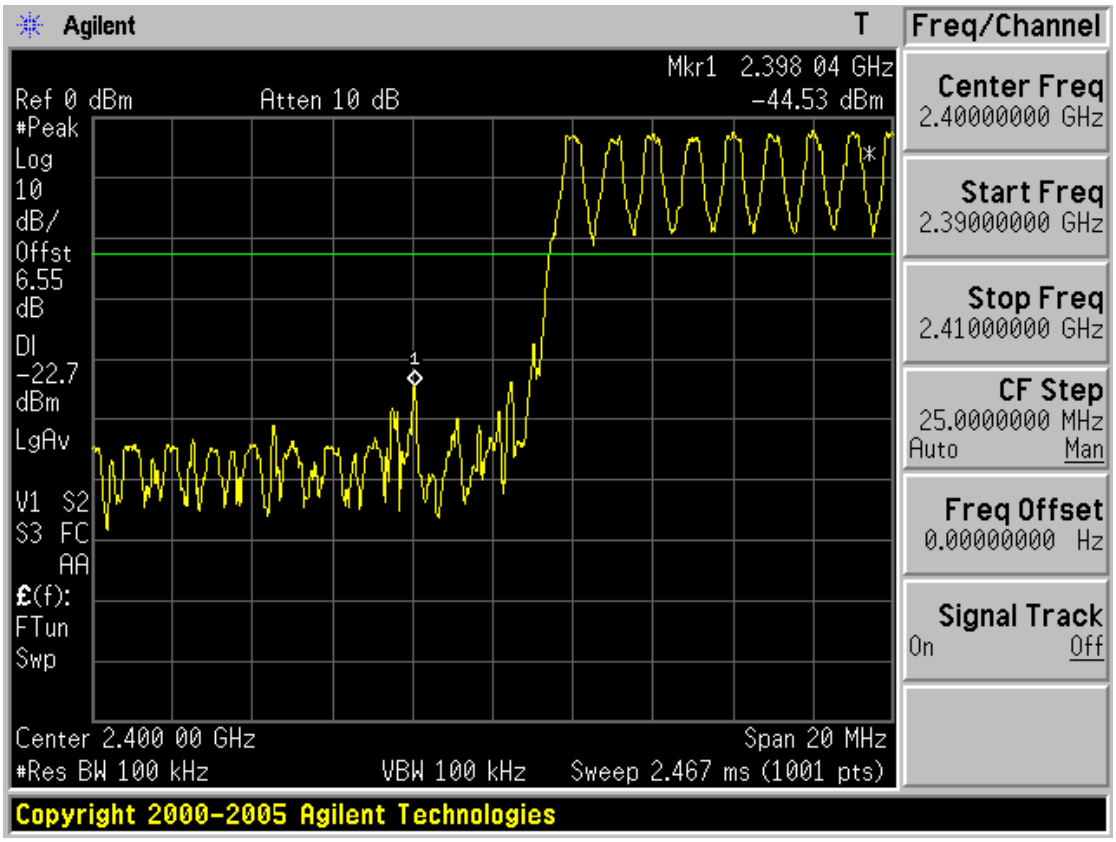
Measurement Setup

Same as the Chapter 3.2.1 (Figure 1)

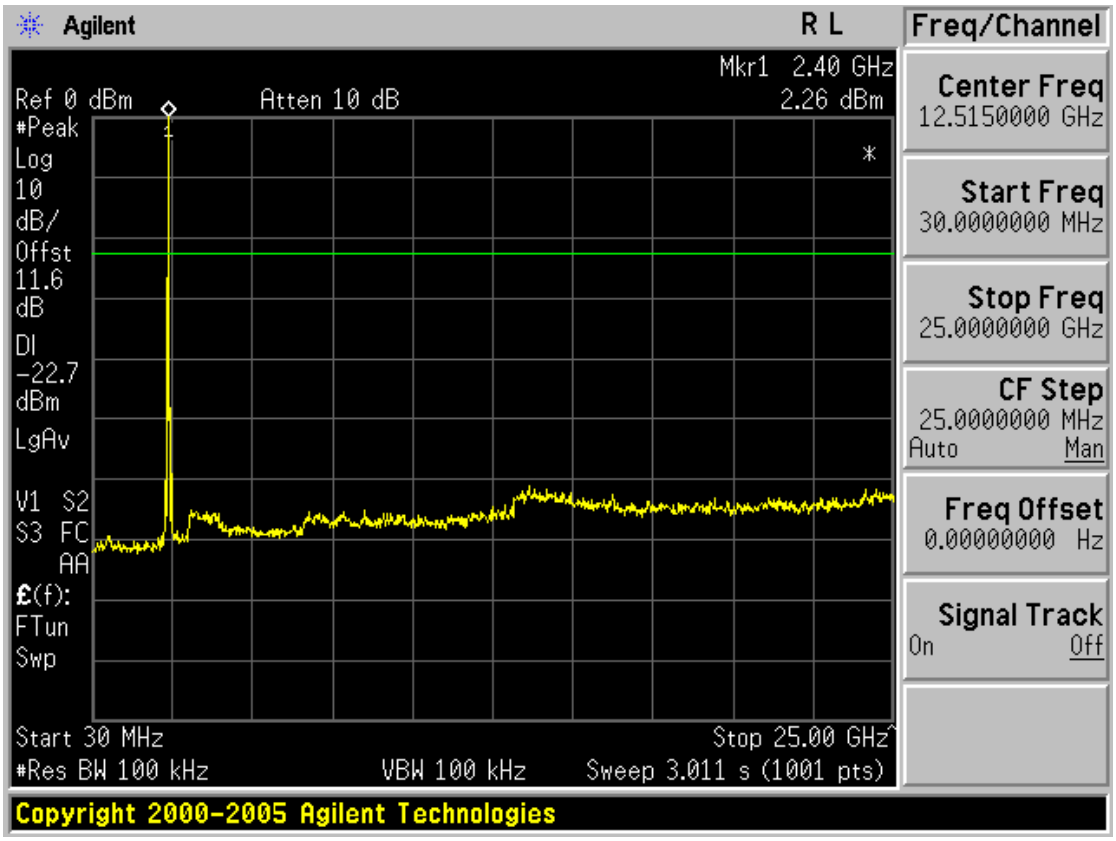
Low band with hopping disabled



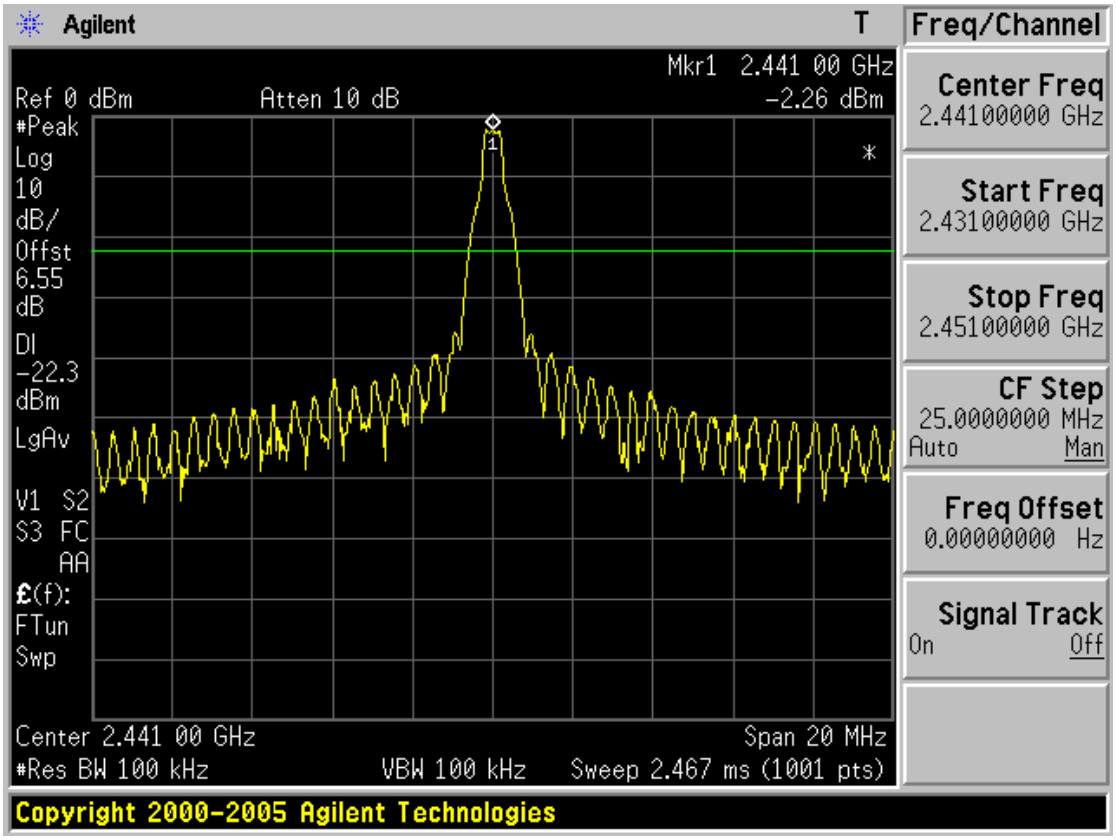
Low band with hopping enabled



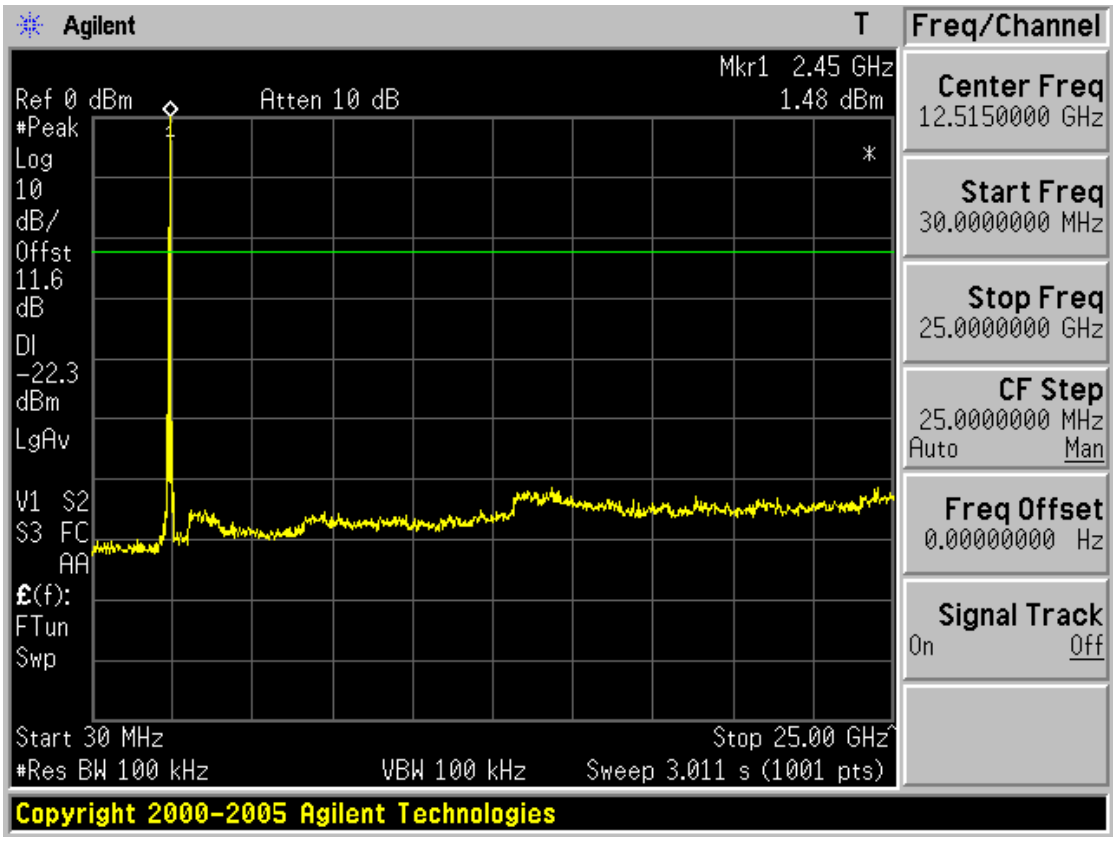
Low channel spurious



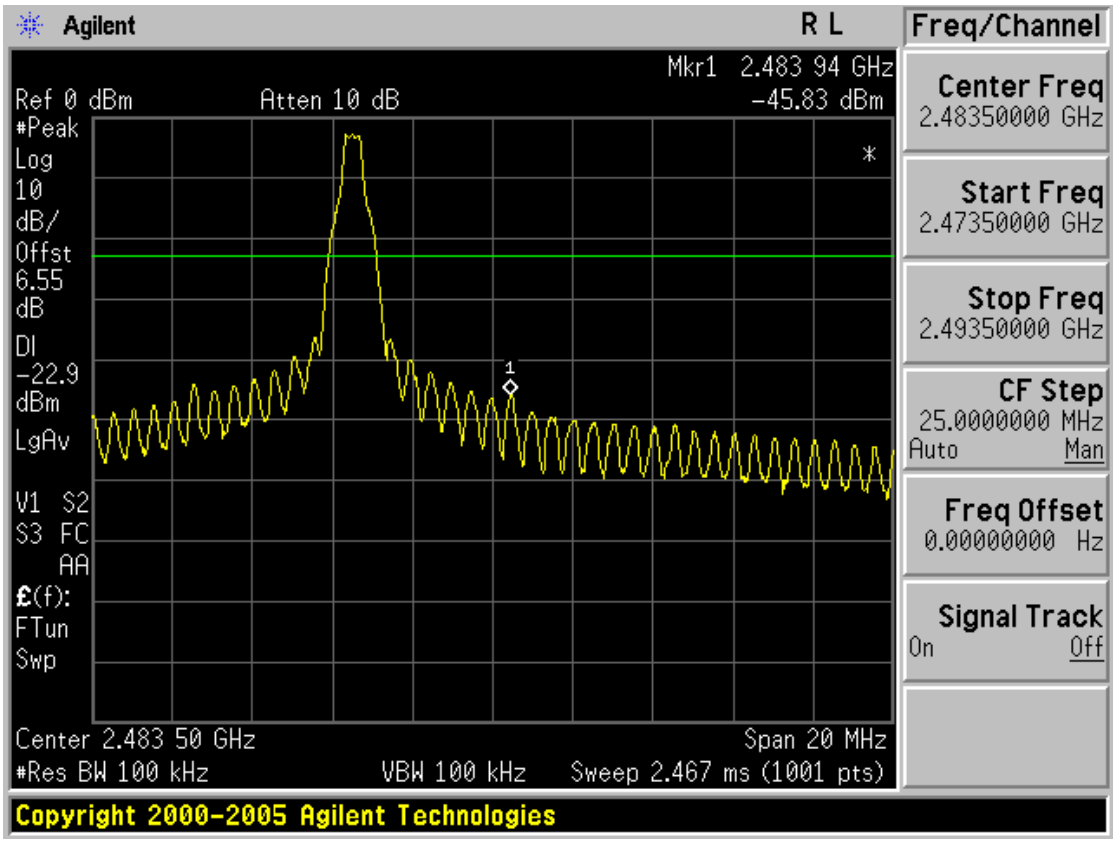
Mid channel ref



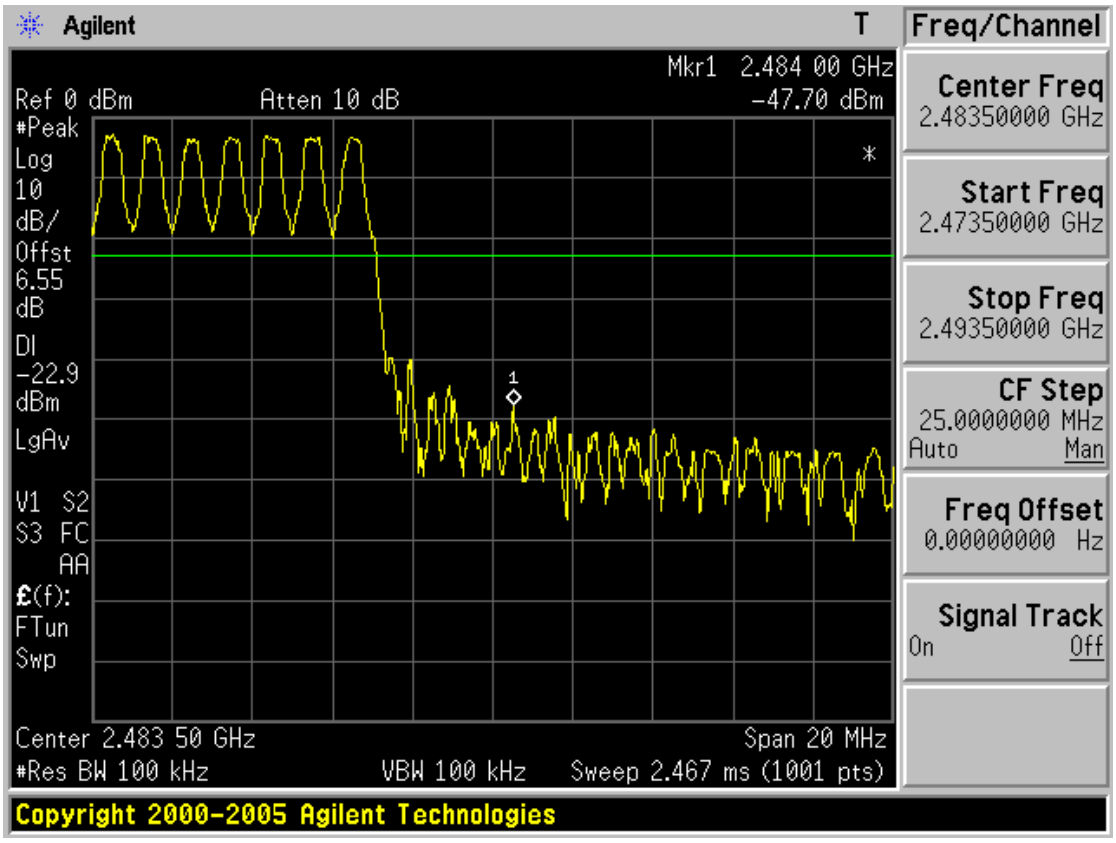
Mid channel spurious



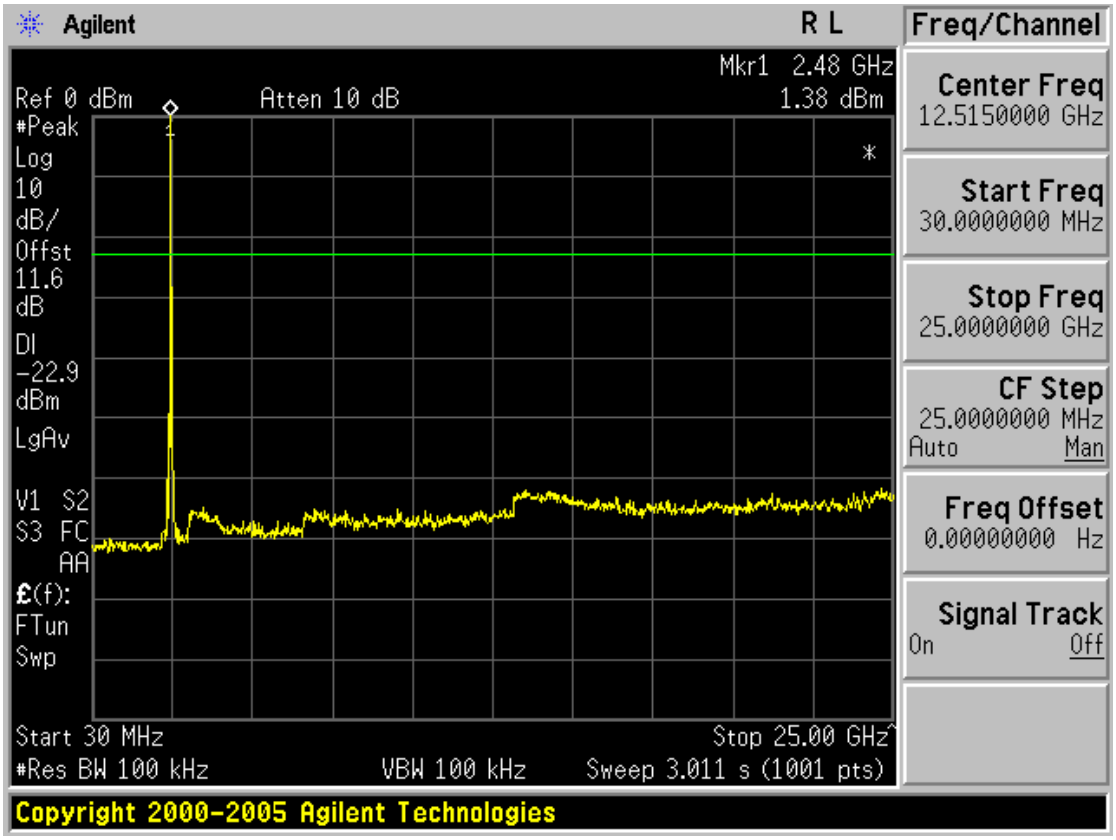
High band with hopping disabled



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

Frequency Range = 30 MHz ~ 10th harmonic.

RBW = 120 kHz (30MHz ~ 1 GHz) VBW ≥ RBW (Peak)

= 1 MHz (1 GHz ~ 10th harmonic) VBW = 10Hz (Average)

Trace = max hold Sweep = auto

Measurement Data: Comply

- Refer to the next page.

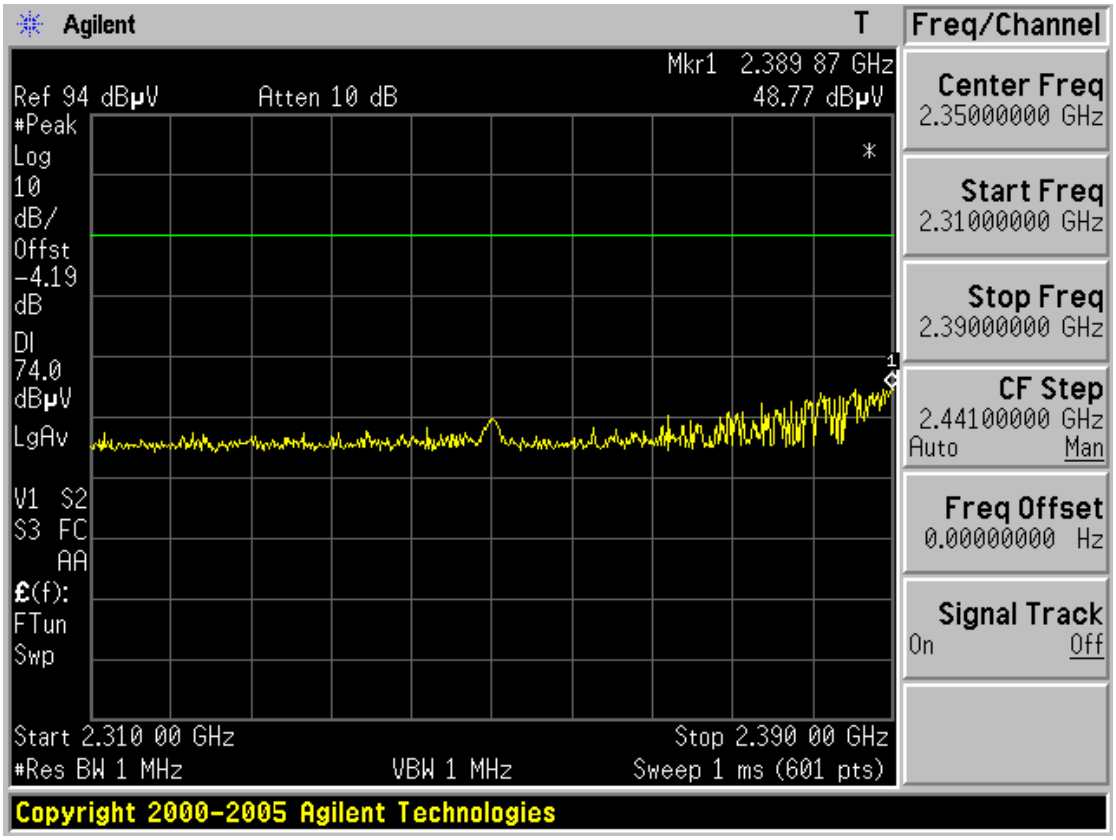
Minimum Standard: FCC Part 15.205 (a), 15.205(b), 15.209(a) and (b)

Limit : FCC P15.209(a)

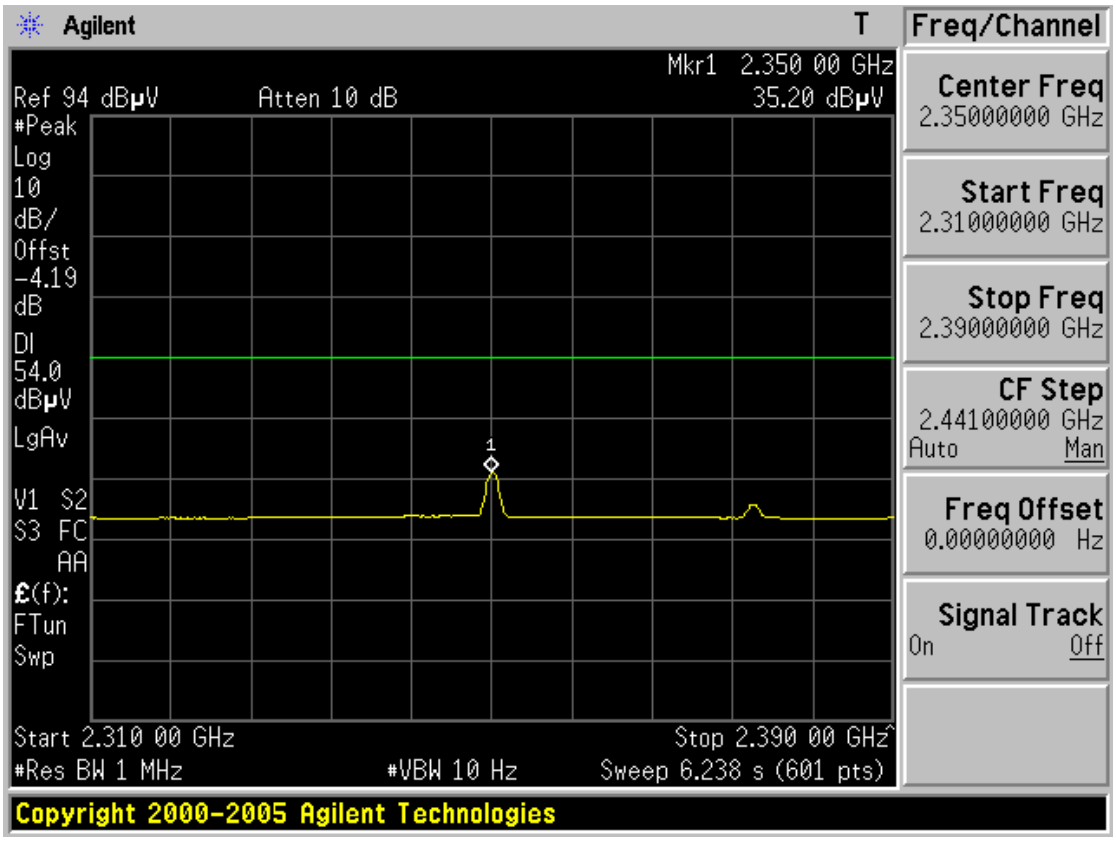
Frequency (MHz)	Limit (uV/m) @ 3m
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

** 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.

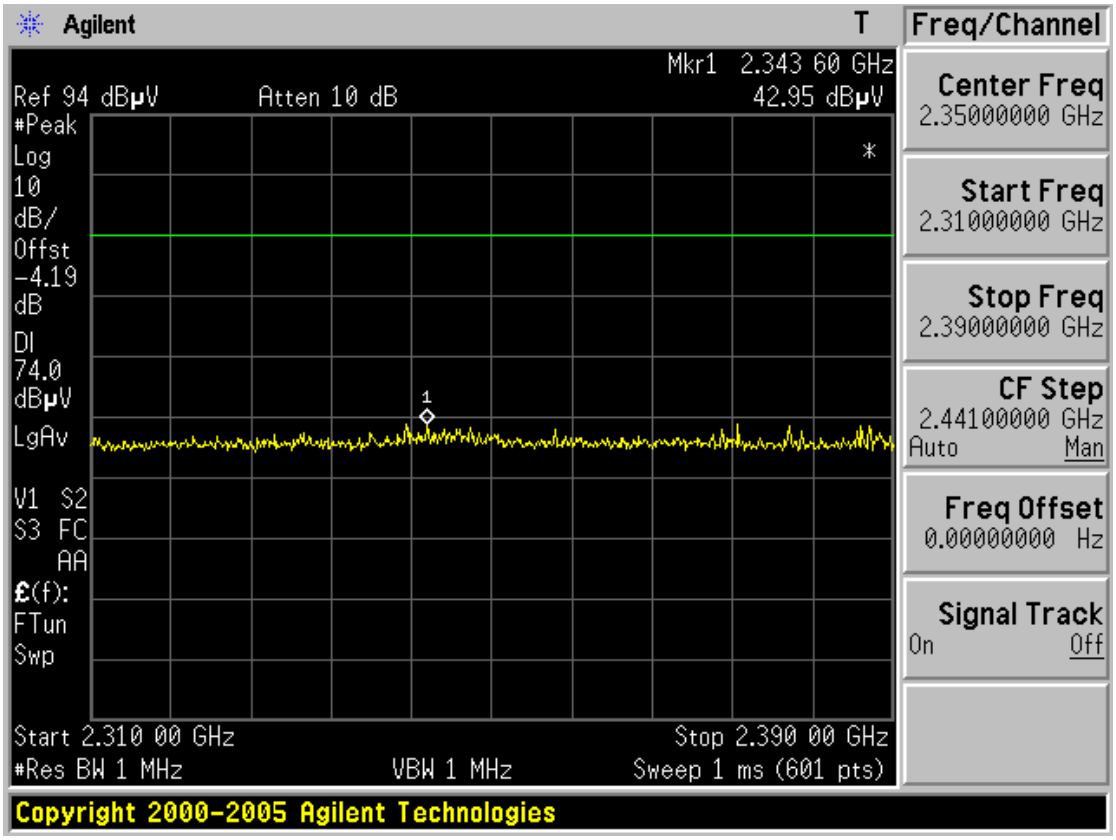
Restricted Band Edge: Low Channel (Peak, Horizontal)



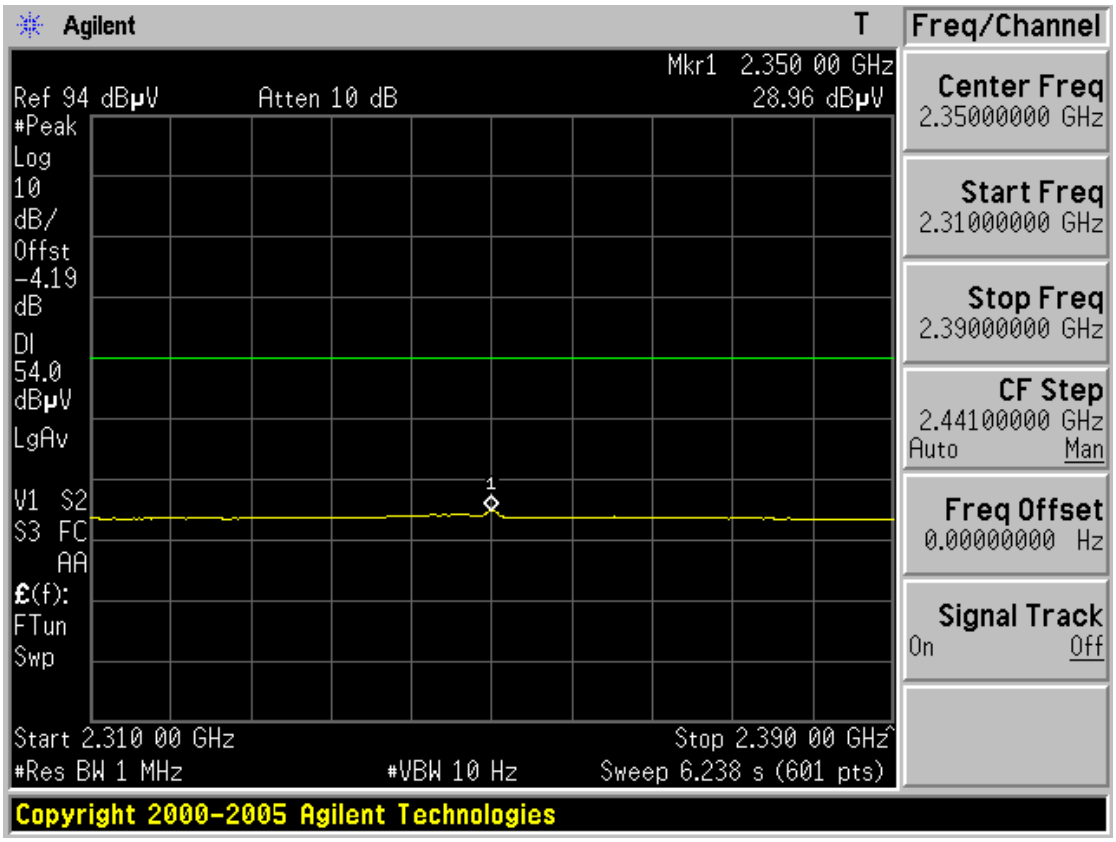
Restricted Band Edge: Low Channel (Average, Horizontal)



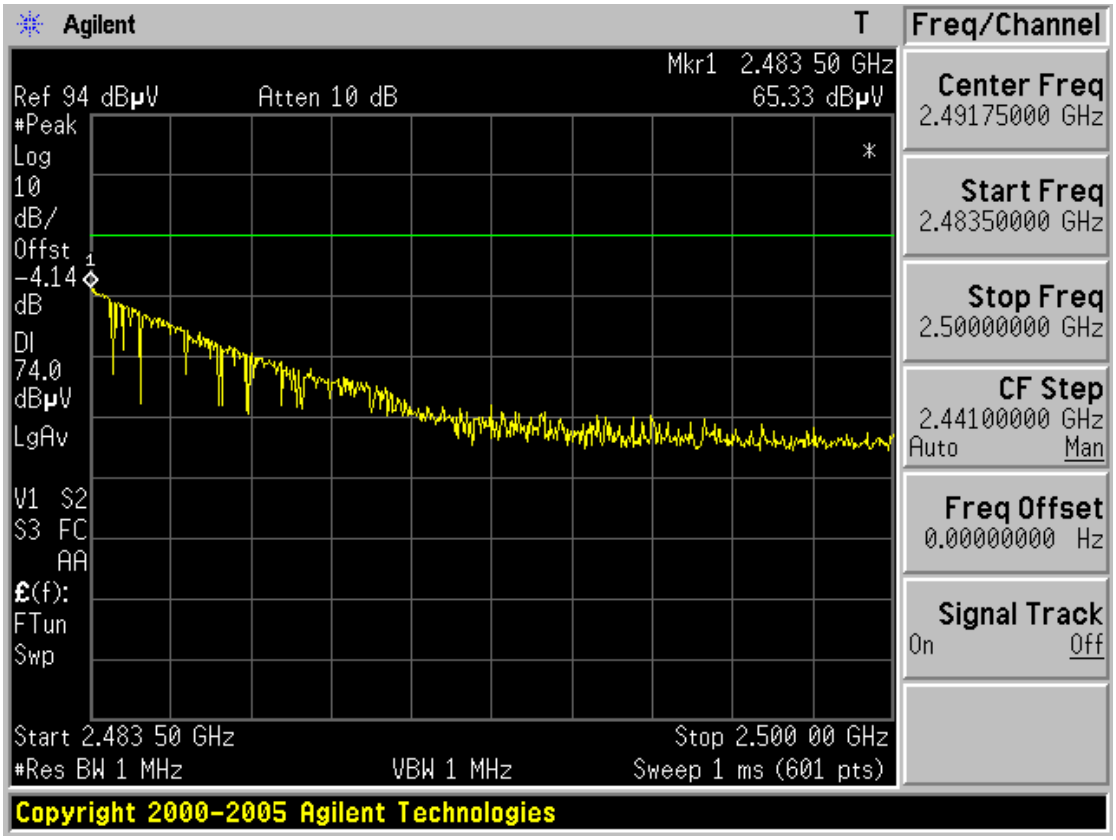
Restricted Band Edge: Low Channel (Peak, Vertical)



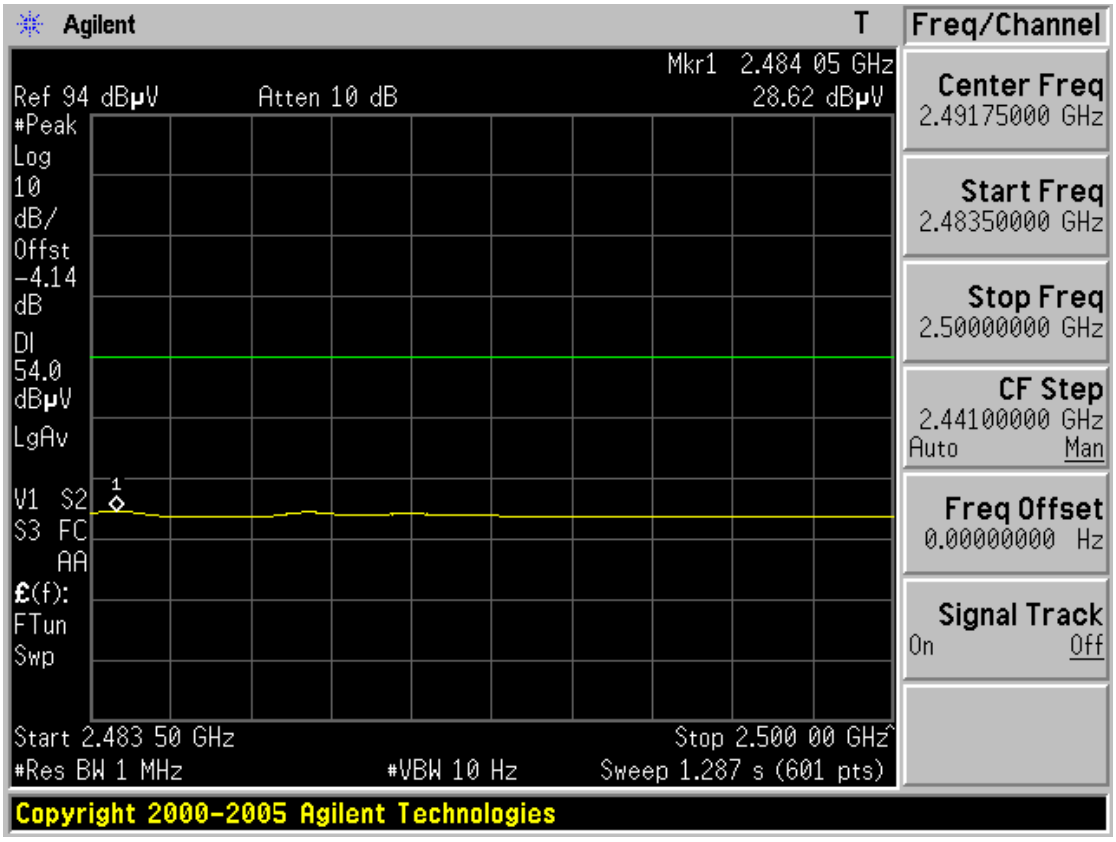
Restricted Band Edge: Low Channel (Average, Vertical)



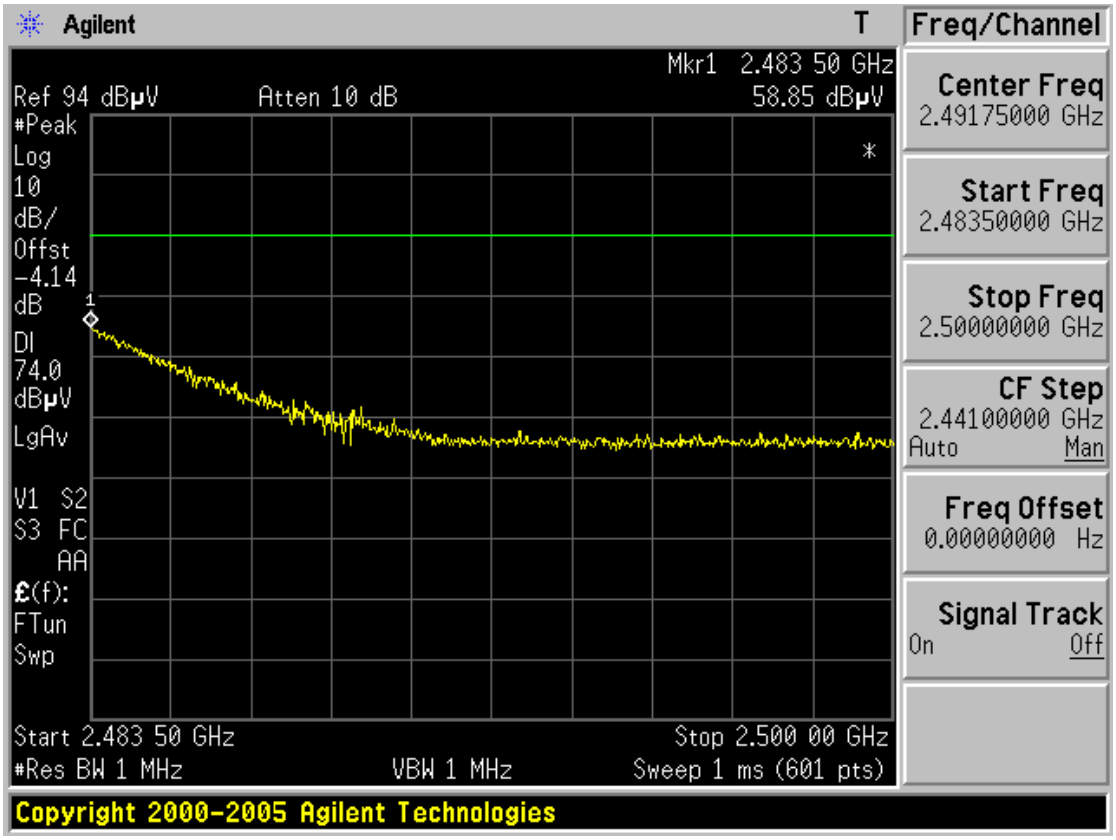
Restricted Band Edge: High Channel (Peak, Horizontal)



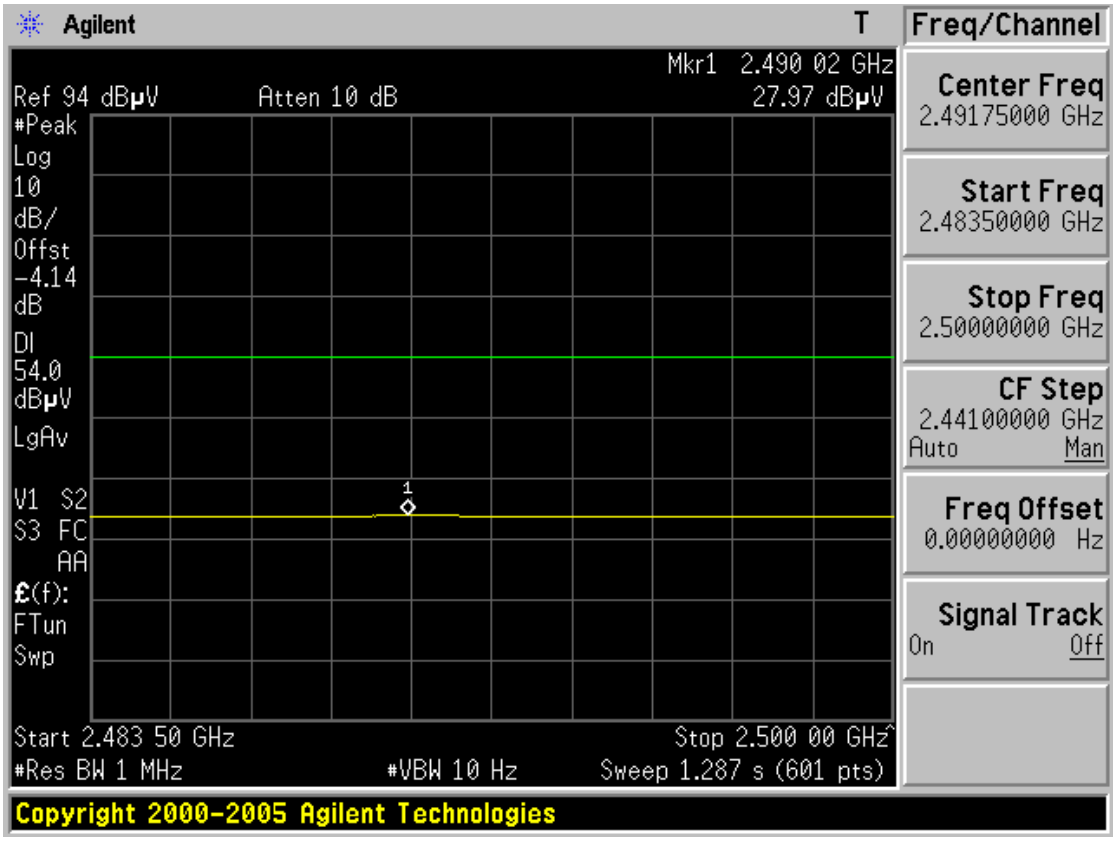
Restricted Band Edge: High Channel (Average, Horizontal)



Restricted Band Edge: High Channel (Peak, Vertical)



Restricted Band Edge: High Channel (Average, Vertical)



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

Frequency (MHz)	ANT Pol	Reading(dBuV)			T.F (dB)	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)		
		QP	PK	AV		QP	PK	AV	QP	PK	AV	QP	PK	AV
34.450	V	47.0	-	-	-11.5	35.5	-	-	40	-	-	4.5	-	-
4804	H	-	45.82	32.5	2.79	-	48.61	35.29	-	74	54	-	25.39	18.71
4804	V	-	45.36	32.86	2.79	-	48.15	35.65	-	74	54	-	25.85	18.35
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Frequency (MHz)	ANT Pol	Reading(dBuV)			T.F (dB)	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)		
		QP	PK	AV		QP	PK	AV	QP	PK	AV	QP	PK	AV
32.425	H	43.5	-	-	-9.7	33.8	-	-	40	-	-	6.2	-	-
42.125	H	43.5	-	-	-11.3	32.2	-	-	40	-	-	7.8	-	-
4882	H	-	45.13	31.99	2.95	-	48.08	34.94	-	74	54	-	25.92	19.06
4882	V	-	46.48	33.81	2.95	-	49.43	36.76	-	74	54	-	24.57	17.24
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Frequency (MHz)	ANT Pol	Reading(dBuV)			T.F (dB)	Result(dBuV/m)			Limit(dBuV/m)			Margin(dB)		
		QP	PK	AV		QP	PK	AV	QP	PK	AV	QP	PK	AV
34.450	V	47.0	-	-	-11.5	35.5	-	-	40	-	-	4.5	-	-
51.825	V	46.9	-	-	-11.8	35.1	-	-	40	-	-	4.9	-	-
4960	H	-	46.24	32.01	2.97	-	49.21	34.98	-	74	54	-	24.79	19.02
4960	V	-	44.52	32.13	2.97	-	47.49	35.10	-	74	54	-	26.51	18.90
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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.

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

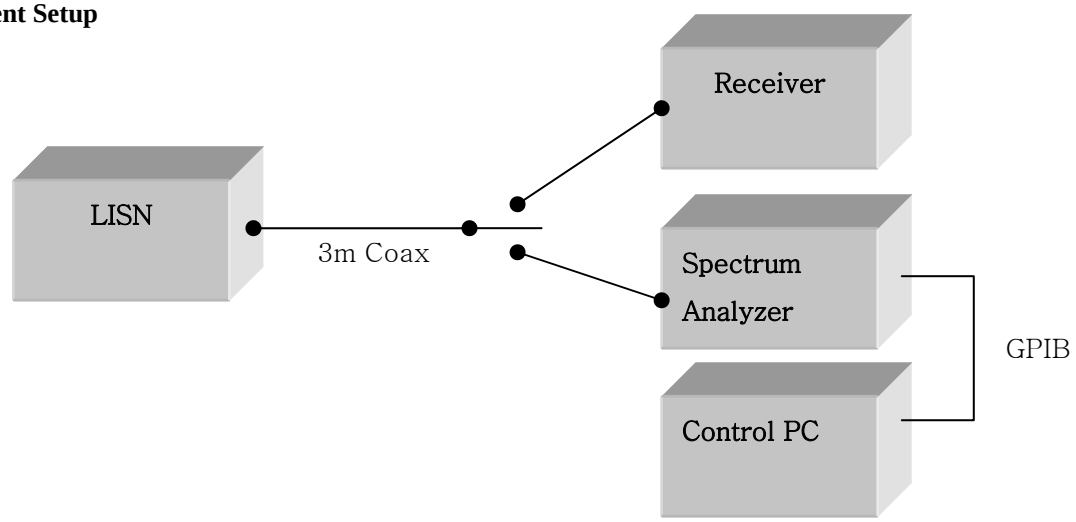
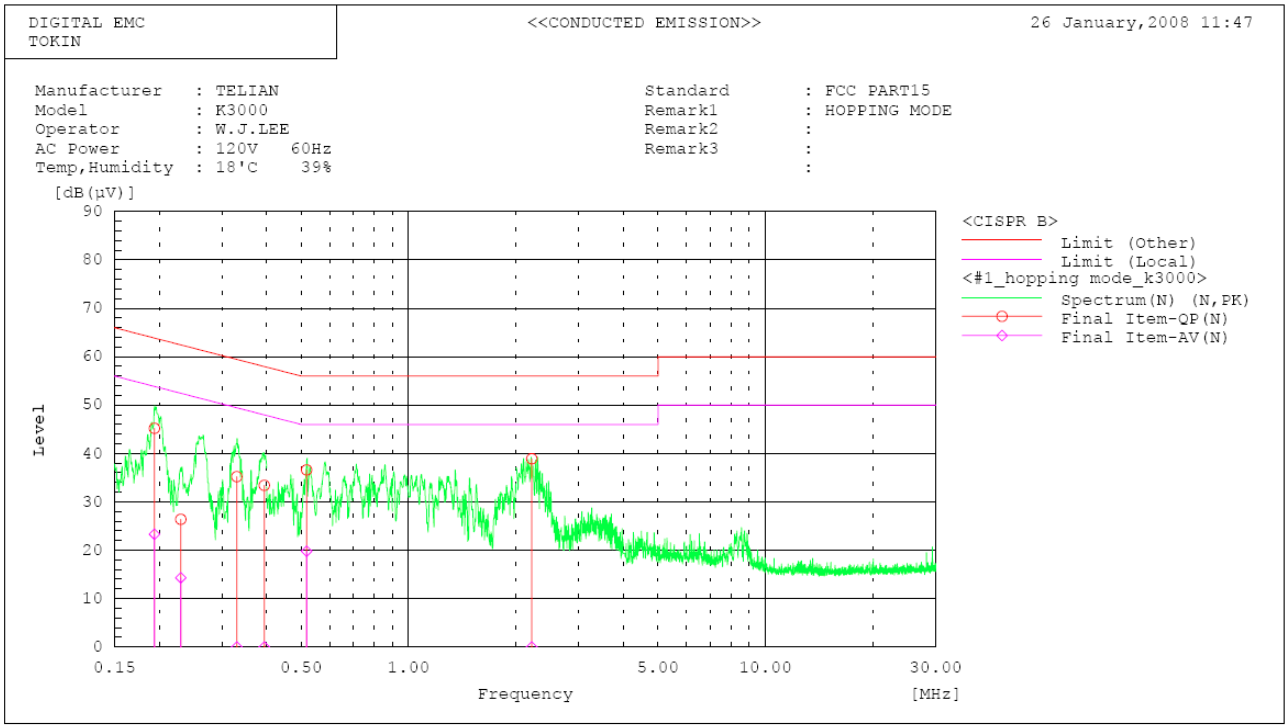
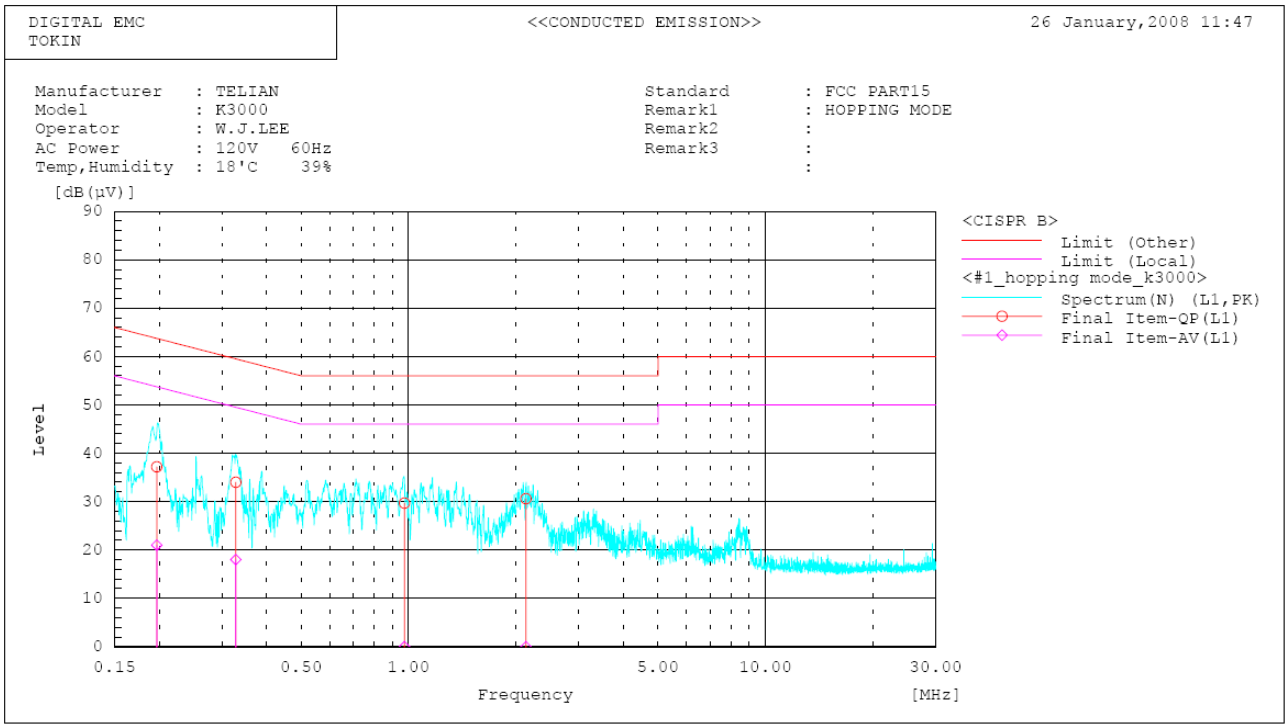


Figure 2: Measurement setup for AC Conducted Emission

AC Conducted Emissions

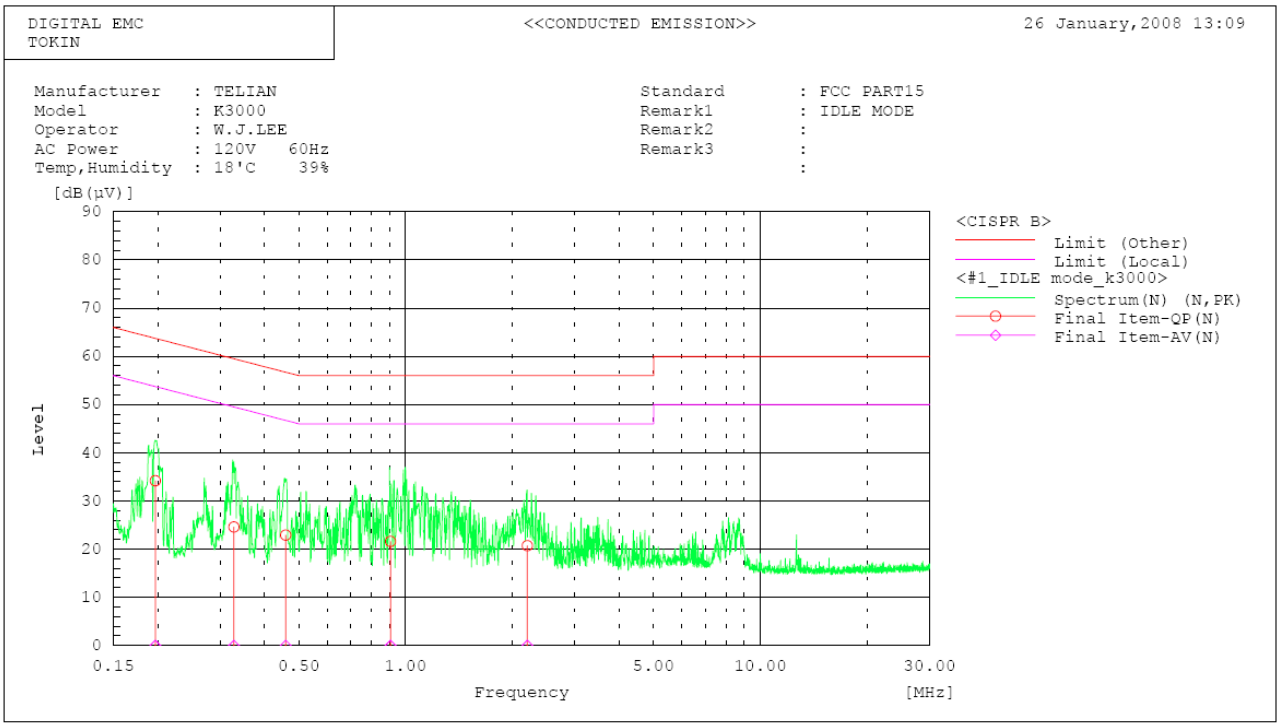


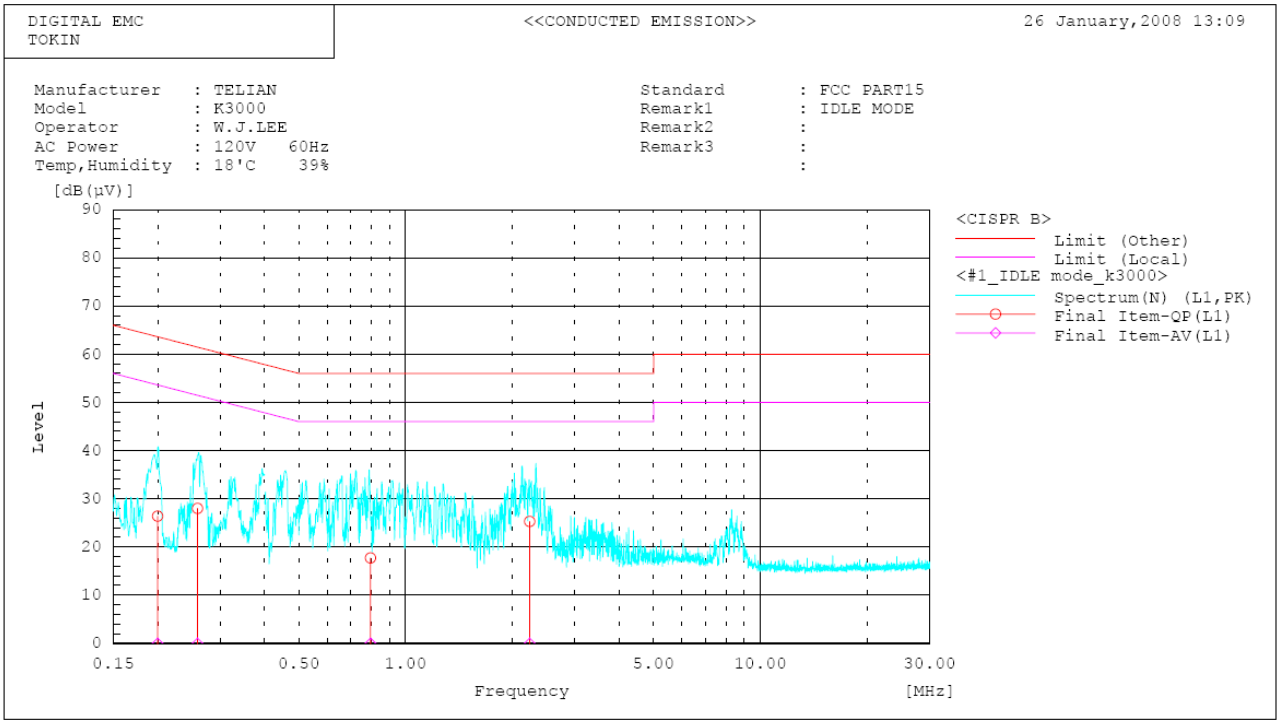


AC Conducted Emissions

```
********************************************************************** DIGITAL EMC **********************************************************************
                                                        <<CONDUCTED EMISSION>>
                                                                                                                        26 January,2008 11:47

Standard            : FCC PART15
Manufacturer        : TELIAN
Model               : K3000
Operator            : W.J.LEE
AC Power            : 120V   60Hz
Temp,Humidity       : 18'C    39%
Remark1             : HOPPING MODE
Remark2             :
Remark3             :
                    :
********************************************************************************************************************************************************
Final Result

--- N Phase ---
No.  Frequency   Reading   Reading    c.f     Result    Result     Limit     Limit    Margin   Margin  Remark
                  QP        AV                 QP        AV        QP        AV        QP       AV
       [MHz]   [dB(µV)]  [dB(µV)]   [dB]   [dB(µV)]  [dB(µV)]  [dB(µV)]  [dB(µV)]   [dB]     [dB]
  1     0.194     45.1      23.2      0.1      45.2      23.3      63.9      53.9     18.7     30.6
  2     0.230     26.3      14.2      0.1      26.4      14.3      62.4      52.4     36.0     38.1
  3     0.330     35.1       0.0      0.1      35.2       0.0      59.5      49.5     24.3      0.0
  4     0.394     33.3       0.0      0.1      33.4       0.0      58.0      48.0     24.6      0.0
  5     2.213     38.8       0.0      0.1      38.9       0.0      56.0      46.0     17.1      0.0
  6     0.518     36.5      19.7      0.1      36.6      19.8      56.0      46.0     19.4     26.2

--- L1 Phase ---
No.  Frequency   Reading   Reading    c.f     Result    Result     Limit     Limit    Margin   Margin  Remark
                  QP        AV                 QP        AV        QP        AV        QP       AV
       [MHz]   [dB(µV)]  [dB(µV)]   [dB]   [dB(µV)]  [dB(µV)]  [dB(µV)]  [dB(µV)]   [dB]     [dB]
  1     0.197     37.0      20.8      0.2      37.2      21.0      63.7      53.7     26.5     32.7
  2     0.328     33.8      17.8      0.2      34.0      18.0      59.5      49.5     25.5     31.5
  3     2.132     30.3       0.0      0.3      30.6       0.0      56.0      46.0     25.4      0.0
  4     0.973     29.5       0.0      0.2      29.7       0.0      56.0      46.0     26.3      0.0
```


AC Conducted Emissions





AC Conducted Emissions

DIGITAL EMC
<<CONDUCTED EMISSION>>

26 January,2008 13:09

Standard : FCC PART15
Manufacturer : TELIAN
Model : K3000
Operator : W.J.LEE
AC Power : 120V 60Hz
Temp,Humidity : 18'C 39%
Remark1 : IDLE MODE
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	0.197	34.1	0.0	0.1	34.2	0.0	63.7	53.7	29.5	0.0	
2	0.328	24.5	0.0	0.1	24.6	0.0	59.5	49.5	34.9	0.0	
3	0.906	21.5	0.0	0.1	21.6	0.0	56.0	46.0	34.4	0.0	
4	0.459	22.8	0.0	0.1	22.9	0.0	56.7	46.7	33.8	0.0	
5	2.203	20.6	0.0	0.1	20.7	0.0	56.0	46.0	35.3	0.0	

--- 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	0.200	26.2	0.0	0.2	26.4	0.0	63.6	53.6	37.2	0.0	
2	0.259	27.8	0.0	0.2	28.0	0.0	61.5	51.5	33.5	0.0	
3	0.796	17.5	0.0	0.2	17.7	0.0	56.0	46.0	38.3	0.0	
4	2.236	25.0	0.0	0.3	25.3	0.0	56.0	46.0	30.7	0.0	

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
01	Spectrum Analyzer	Agilent	E4404B	17/04/07	17/04/08	US41061134
02	Spectrum Analyzer	Agilent	E4440A	15/11/07	15/11/08	MY45304199
03	Spectrum Analyzer	H.P	8563E	09/10/07	09/10/08	3551A04634
04	Spectrum Analyzer	H.P	8591E	16/04/07	16/04/08	3649A05889
05	EMI Test Receiver	R&S	ESCI	27/04/07	27/04/08	100364
06	EMI Test Receiver	R&S	ESU	18/01/08	18/01/09	100014
07	Power Meter	H.P	EPM-442A	10/07/07	10/07/08	GB37170413
08	Power Sensor	H.P	8481A	11/07/07	11/07/08	3318A96332
09	Frequency Counter	H.P	5342A	06/09/07	06/09/08	2119A04450
10	Multifunction Synthesizer	H.P	8904A	23/11/07	23/11/08	3633A08404
11	Signal Generator	Rohde Schwarz	SMR20	21/03/07	21/03/08	101251
12	Signal Generator	H.P	E4421A	10/07/07	10/07/08	US37230529
13	Audio Analyzer	H.P	8903B	10/07/07	10/07/08	3011A09448
14	Modulation Analyzer	H.P	8901B	14/07/07	14/07/08	3028A03029
15	8960 Series 10 Wireless Comms Test Set	Agilent	Z5515C	18/07/07	18/07/09	GB43461134
16	Universal Radio Communication Test	Rohde Schwarz	CMU200	24/04/07	24/04/08	107631
17	Multi system UE Tester	Japan Radid Co., Ltd	NJZ-2000	N/A	N/A	ET00095
18	Power Splitter	WEINSCHEL	1593	05/10/07	05/10/08	332
19	BAND Reject Filter	Microwave Circuits	N0308372	18/10/07	18/10/08	3125-01DC0312
20	BAND Reject Filter	Wainwright	WRCG1750	18/10/07	18/10/08	SN2
21	AC Power supply	DAEKWANG	5KVA	20/03/07	20/03/08	N/A
22	DC Power Supply	H.P	6622A	20/03/07	20/03/08	465487
23	HORN ANT	EMCO	3115	10/08/07	10/08/08	6419
24	HORN ANT	EMCO	3115	09/10/07	09/10/08	21097
25	HORN ANT	A.H.Systems	SAS-574	20/08/07	20/08/08	154
26	HORN ANT	A.H.Systems	SAS-574	20/08/07	20/08/08	155
27	Dipole Antenna	Schwarzbeck	VHA9103	27/11/07	27/11/08	2116
28	Dipole Antenna	Schwarzbeck	VHA9103	27/11/07	27/11/08	2117
29	Dipole Antenna	Schwarzbeck	UHA9105	27/11/07	27/11/08	2261
30	Dipole Antenna	Schwarzbeck	UHA9105	27/11/07	27/11/08	2262
31	Loop Antenna	ETS	6502	30/10/07	30/10/08	3471

	Type	Manufacturer	Model	Cal.Due.Date (dd/mm/yy)	Next.Due.Date (dd/mm/yy)	S/N
32	TEMP & HUMIDITY Chamber	JISCO	J-RHC2	02/10/07	02/10/08	021031
33	Oscilloscope	Tektronix	TDS3052	02/11/07	02/11/08	B016821
34	Frequency Converter	Kyorits	KCV-604C	21/07/07	21/07/08	4-230-3
35	Log Periodic Antenna	Schwarzbeck	UHALP9108A1	08/06/07	08/06/08	1098
36	Biconical Antenna	Schwarzbeck	VHA9103	01/10/07	01/10/08	2233
37	Digital Multimeter	H.P	34401A	20/03/07	20/03/08	3146A13475
38	Attenuator (10dB)	WEINSCHEL	23-10-34	05/10/07	05/10/08	BP4386
39	High-Pass Filter	ANRITSU	MP526D	08/10/07	08/10/08	M27756
40	Attenuator (3dB)	Agilent	8491B	12/07/07	12/07/08	58177
41	Attenuator (10dB)	WEINSCHEL	23-10-34	26/01/07	26/01/08	BP4387
42	Amplifier (25dB)	Agilent	8447D	08/08/07	08/08/08	2443A03690
43	Amplifier (30dB)	Agilent	8449B	25/10/07	25/10/08	3008A01590
44	Position Controller	TOKIN	5901T	N/A	N/A	14173
45	Driver	TOKIN	5902T2	N/A	N/A	14174
46	Spectrum Analyzer	H.P	8591E	16/04/07	16/04/08	3649A05889
47	RFI/FIELD Intensity Meter	Kyorits	KNW-2402	06/09/07	06/09/08	4N-170-3
48	LISN	Kyorits	KNW-407	30/08/07	30/08/08	8-317-8
49	LISN	Kyorits	KNW-242	06/10/07	06/10/08	8-654-15
50	CVCF	NF Electronic	4400	N/A	N/A	344536 4420064
51	Software	ToYo EMI	EP5/RE	N/A	N/A	Ver 2.0.800
52	Software	ToYo EMI	EP5/CE	N/A	N/A	Ver 2.0.801
53	Software	AUDIX	e3	N/A	N/A	Ver 3.0
54	Software	Agilent	Benchlink	N/A	N/A	A.01.09 021211