



**DIGITAL EMC CO., LTD.**

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**CERTIFICATION OF COMPLIANCE**

**LG Electronics USA.**

1000 Sylvan Avenue Englewood Cliffs New Jersey United States

Dates of Tests: July 30 ~ August 7, 2008

Test Report S/N: DR50110808I

Test Site : DIGITAL EMC CO., LTD.

FCC ID

**BEJHBM520**

APPLICANT

**LG Electronics USA.**

- FCC Equipment Class** : **Part 15 Spread Spectrum Transmitter(DSS)**
- Device name** : **Bluetooth Mono Headset**
- Manufacturer** : **LG Electronics Inc.**
- FCC ID** : **BEJHBM520**
- Model name** : **HBM-520**
- Test Device Serial number** : **Identical prototype**
- FCC Rule Part(s)** : **FCC Part 15.247 Subpart C**  
**ANSI C63.4-2003**
- Frequency Range** : **2402 ~ 2480 MHz**
- Max. Output power** : **4.06 dBm Conducted**
- Data of issue** : **August 13, 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

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**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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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”.

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

**Test operator: engineer**

August 13, 2008

Dong -Chul CHA



Data

Name

Signature

**Report Reviewed By: manager**

August 13, 2008

Harvey Sung



Data

Name

Signature

Ordering party:

Company name : LG Electronics Inc.

Address : LG Twin Tower West Tower 22F Yoido-dong, Youngdungpo-gu

City/town : Seoul

Country : Korea

Date of order : July 29, 2008

## 2. Information about test item

### BEJHBM520

#### 2.1 Equipment information

Equipment model no.	HBM-520
Equipment serial no.	Identical prototype
Type of equipment	Bluetooth Mono Headset
Frequency band	2402 ~ 2480 MHz
Type of Modulation	GFSK
Spread Spectrum	Frequency Hopping
Channel Spacing	1.0 MHz
Type of antenna	Chip Antenna

- This device does not have EDR function.

#### 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	: 3.7 V DC

#### 2.4 Ancillary Equipment

Equipment	Model No.	Serial No.	Manufacturer
Adapter	STA-U32WR	RA83060294	SULIN ELE.CO.,LTD

#### 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)
<b>I. Test Items</b>				
15.247(a)	Carrier Frequency Separation	$\geq 20\text{dB BW}$ or $\geq$ Two-Thirds of the 20dB BW	Conducted	C
	Number of Hopping Frequencies	$\geq 15$ hops		C
	20 dB Bandwidth	None		C
	Dwell Time	$\leq 0.4$ seconds		C
15.247(b)	Transmitter Output Power	$\leq 1\text{Watt}$ , if CHs $\geq 75$ Others $\leq 0.125\text{W}$		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=Comply    NC=Not Comply    NT=Not Tested    NA=Not Applicable				

The sample was tested according to the following specification:

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
2440.025	2441.042	1.017	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**

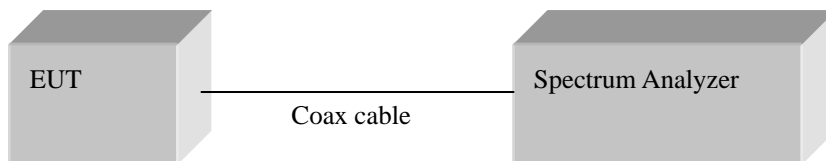
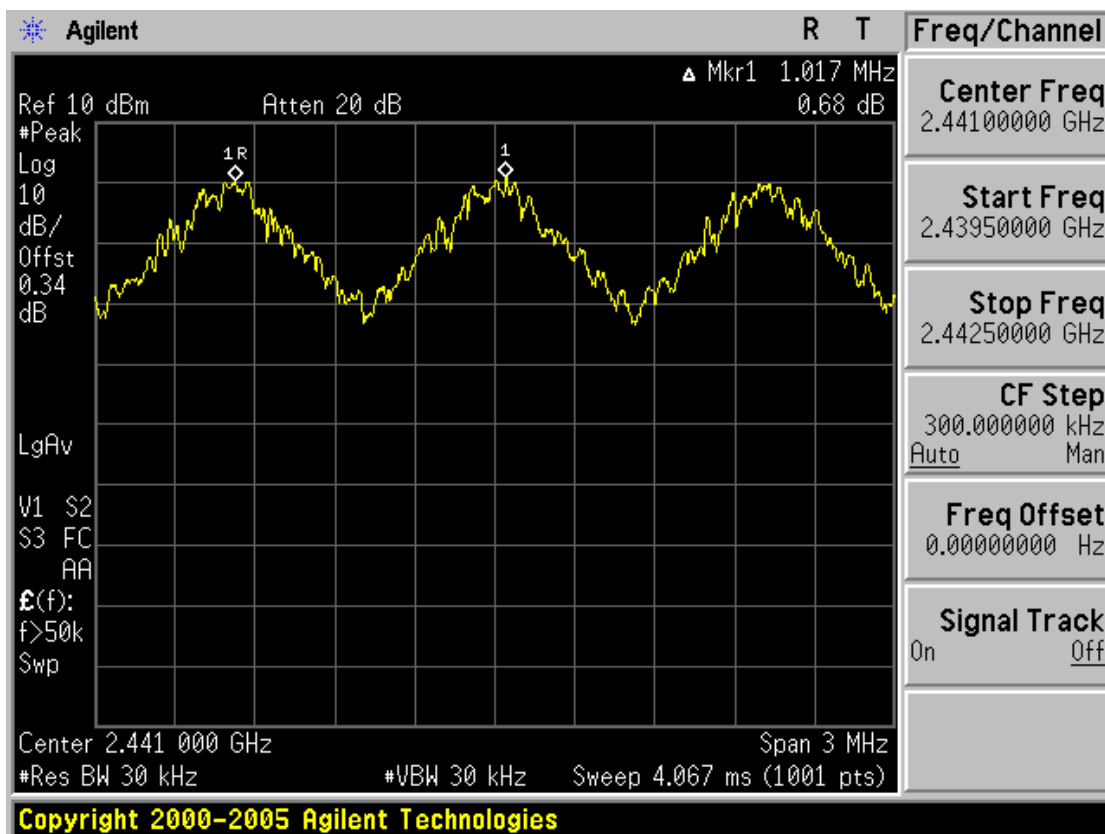


Figure 1: Measurement setup for the carrier frequency separation

### 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: Comply**

<b>Total number of Hopping Channels</b>	79
---	----

- See next pages for actual measured spectrum plots.

**Minimum Standard:**

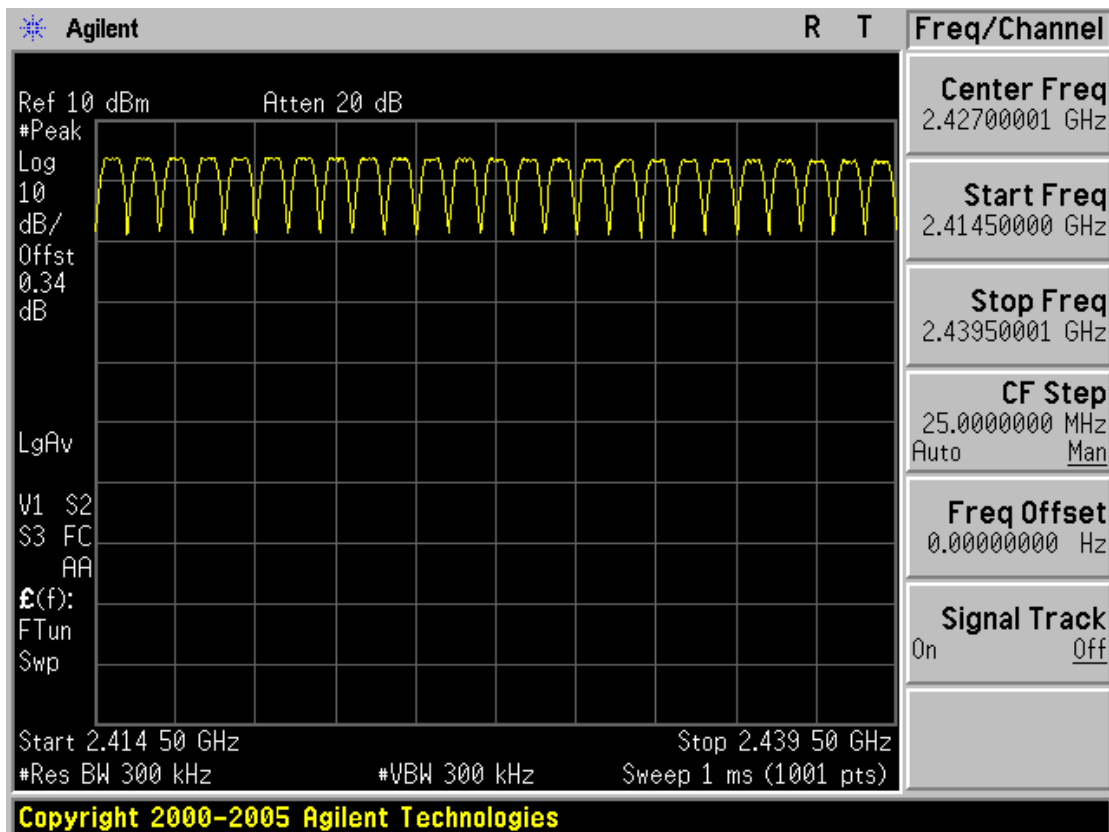
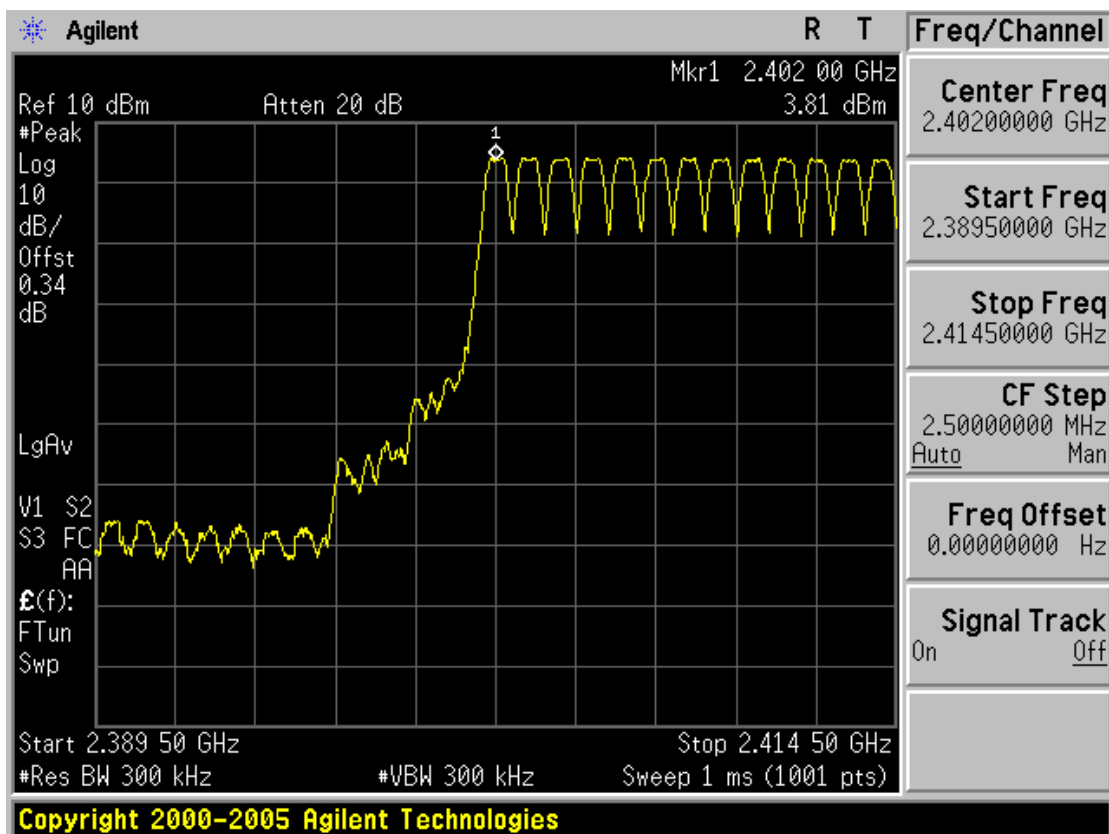
At least 15 hopes
-------------------

**Measurement Setup**

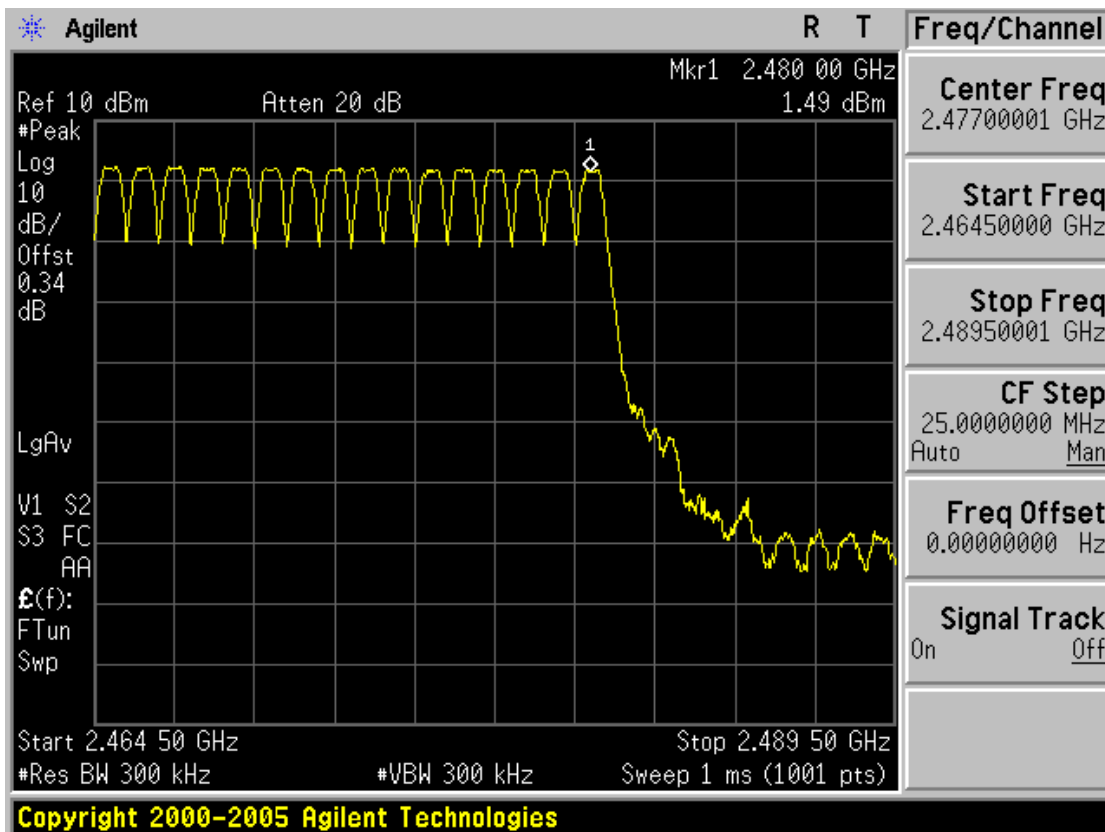
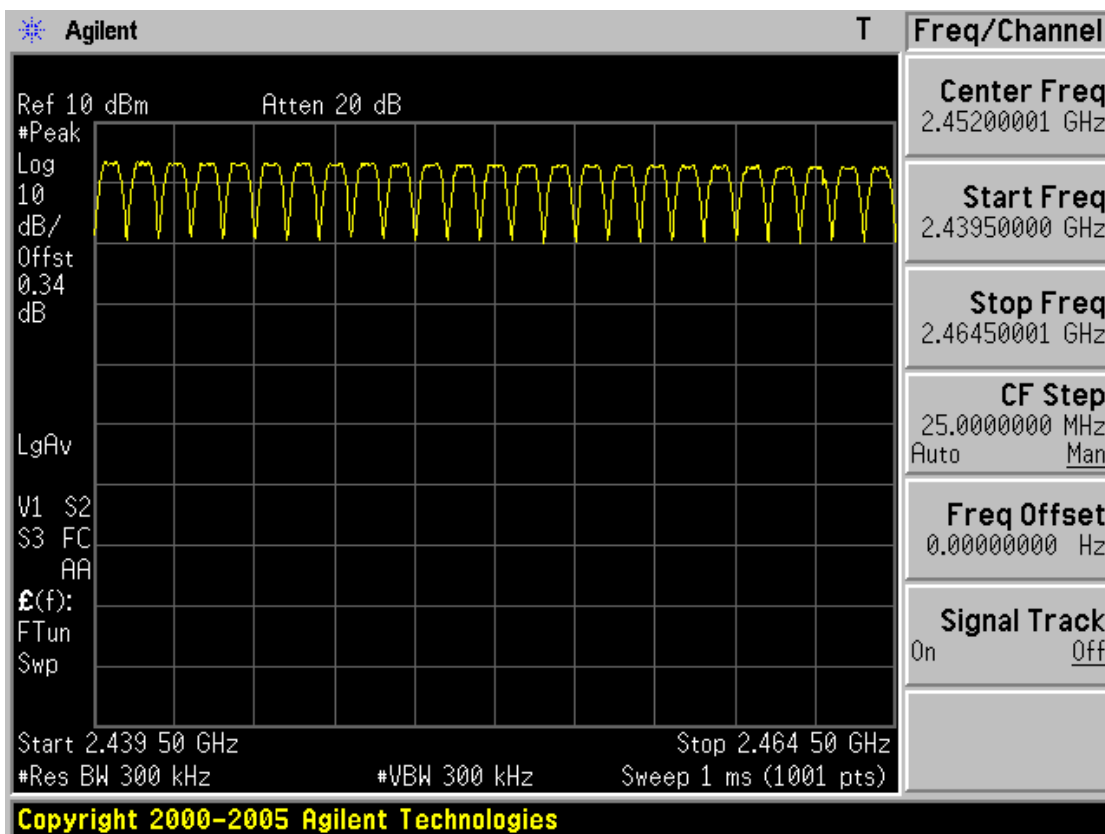
Same as the Chapter 3.2.1 (Figure 1)



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 (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	0.935	Comply
2441	40	0.940	Comply
2480	79	0.930	Comply

- See next pages for actual measured spectrum plots.

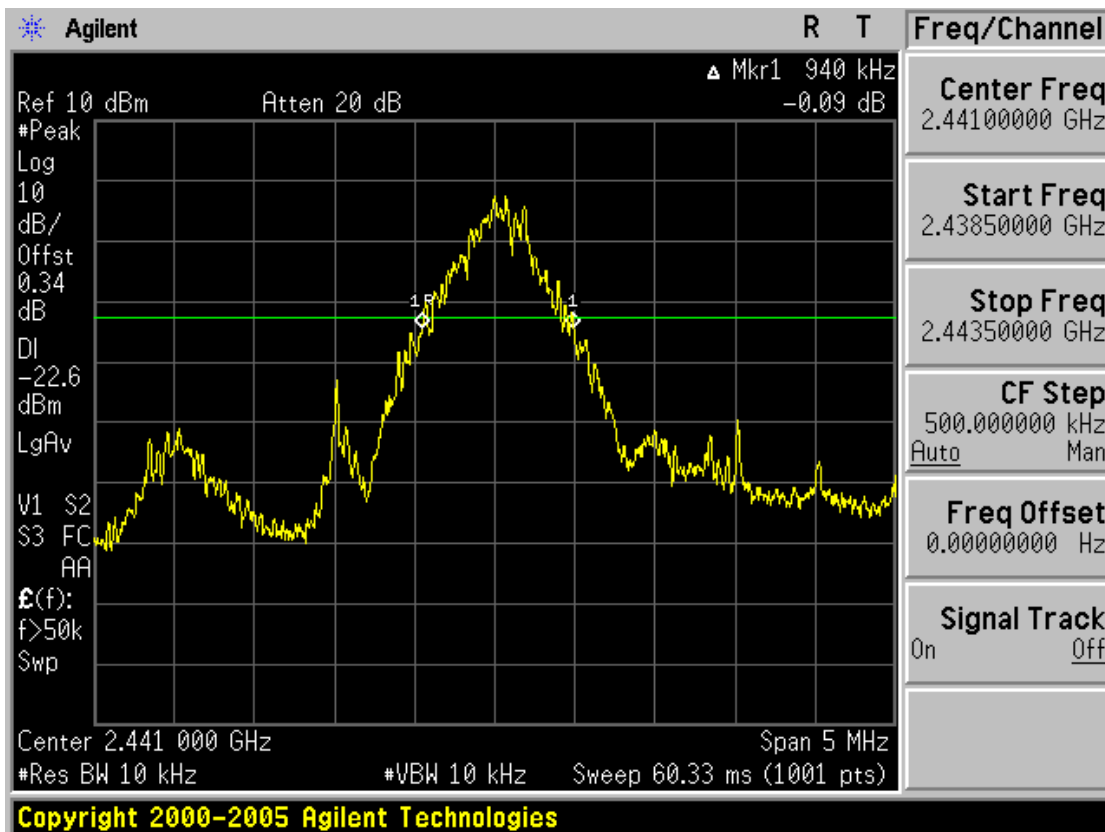
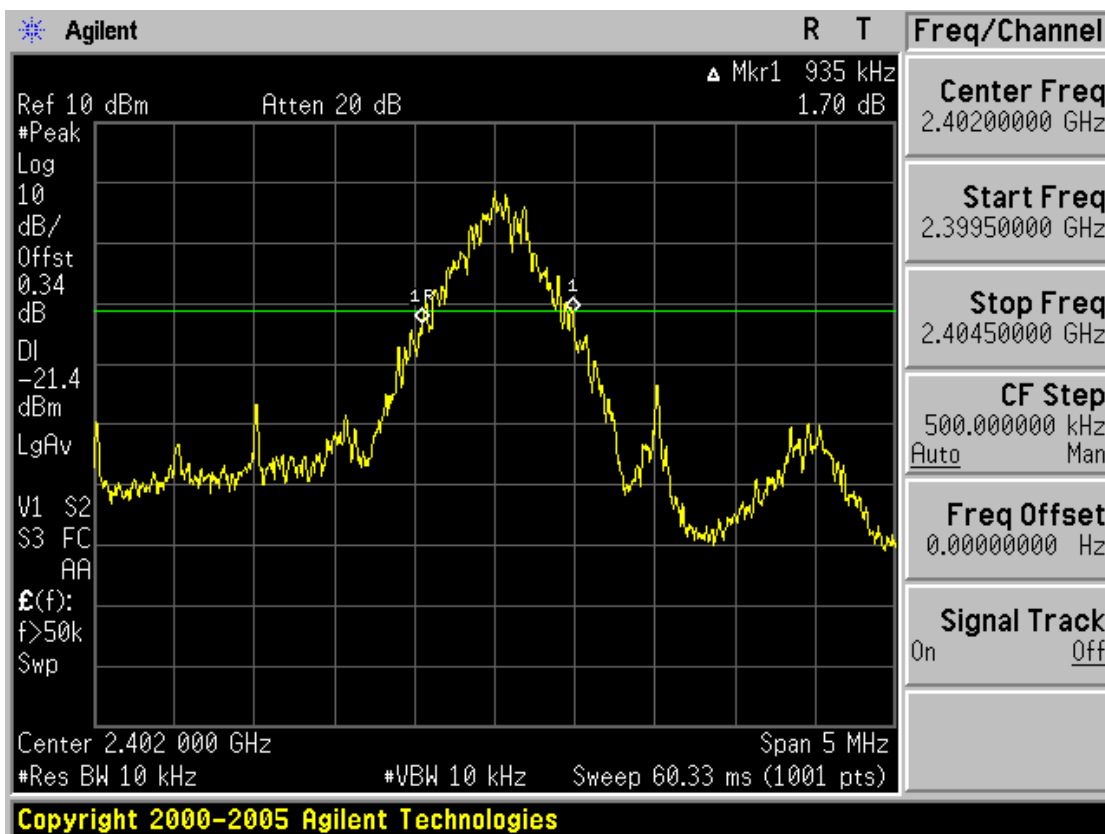
**Minimum Standard:**

None
------

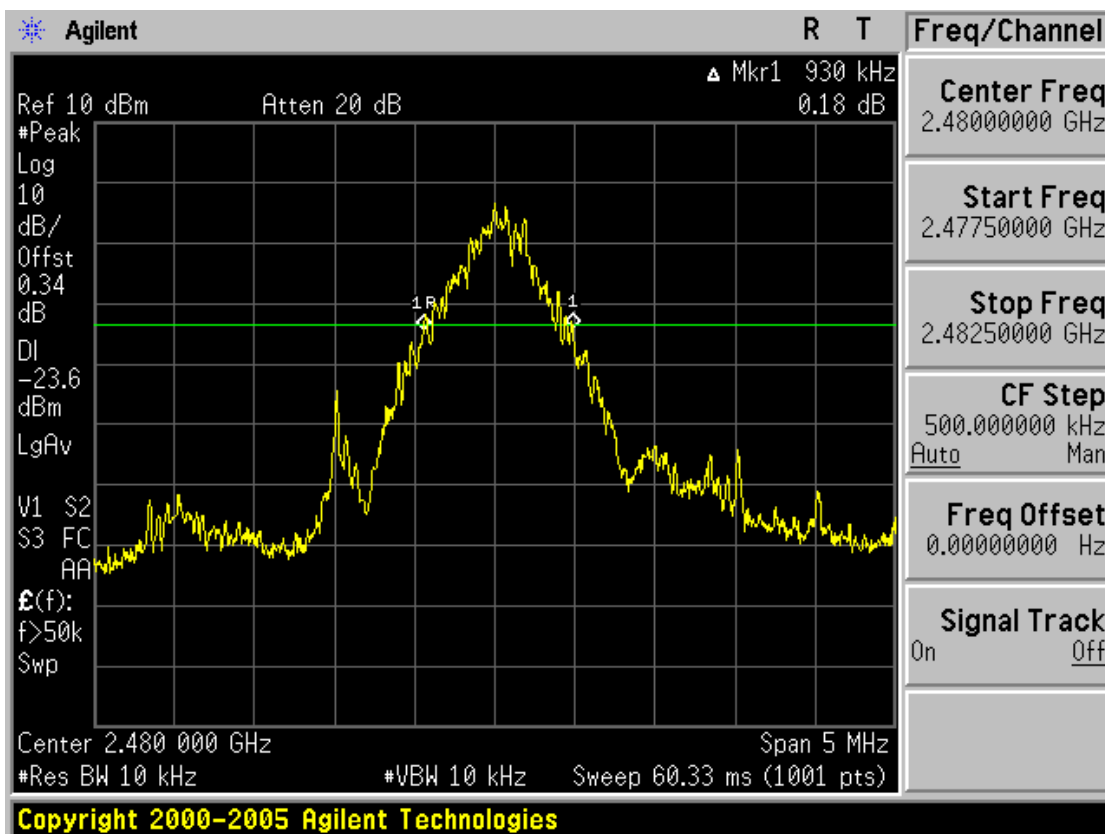
**Measurement Setup**

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 1	0.400	1.245	79	0.129	Comply
DH 3	1.659	2.513	79	0.264	Comply
DH 5	2.910	3.740	79	0.311	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.  $DWELL\ TIME = (0.4 \times \text{Number of hopping Channels}) \times \text{Burst On time} / (\text{period} \times \text{Number of hopping Channels})$

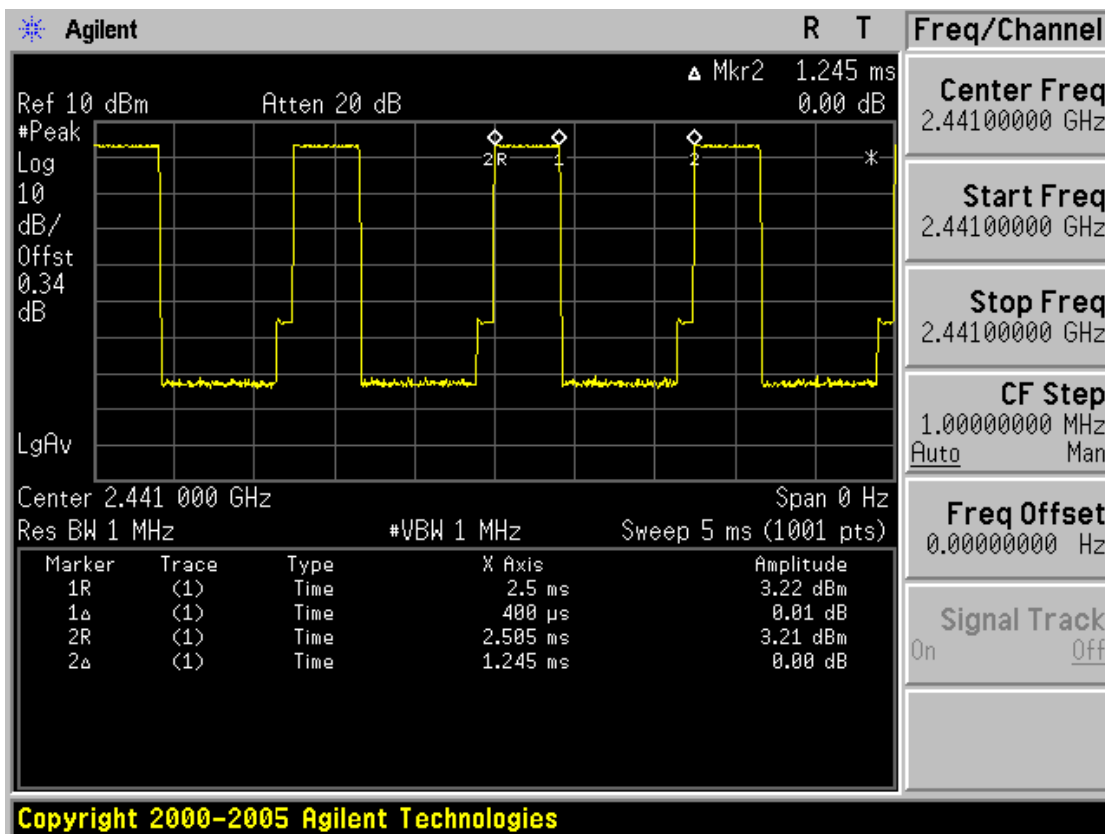
**Minimum Standard:**

No greater than 0.4 seconds
-----------------------------

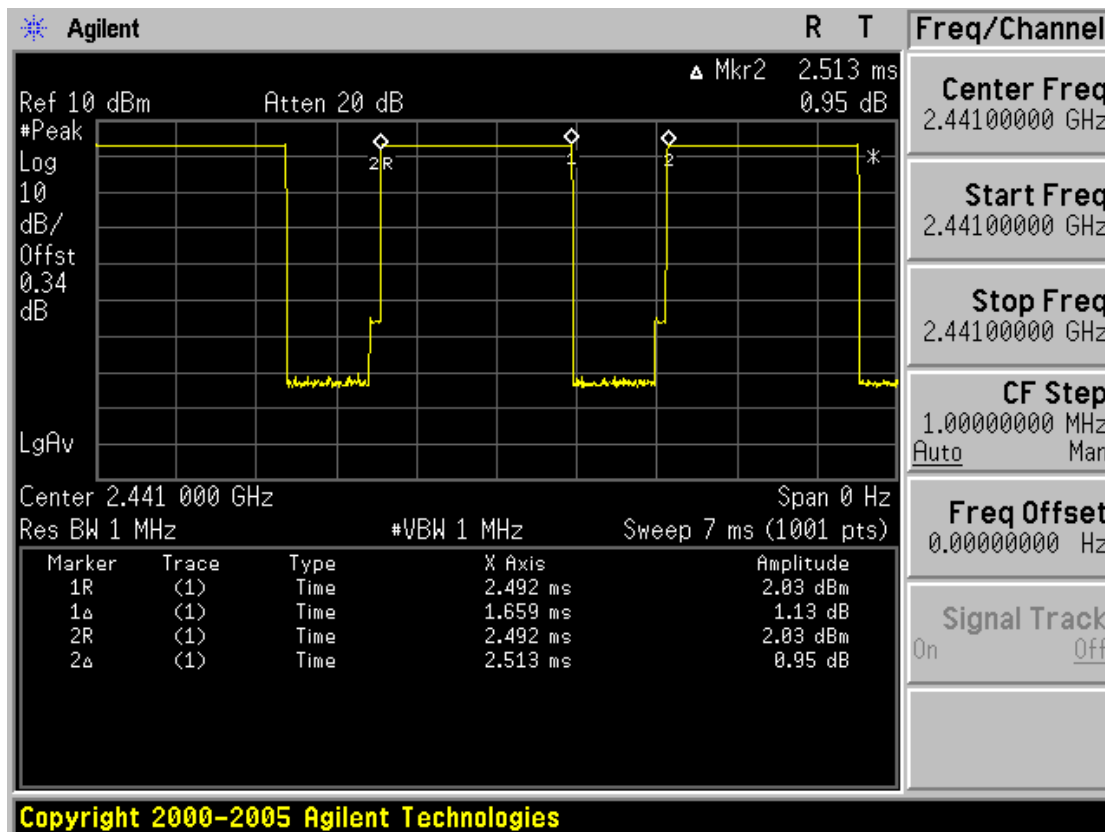
**Measurement Setup**

Same as the Chapter 3.2.1 (Figure 1)

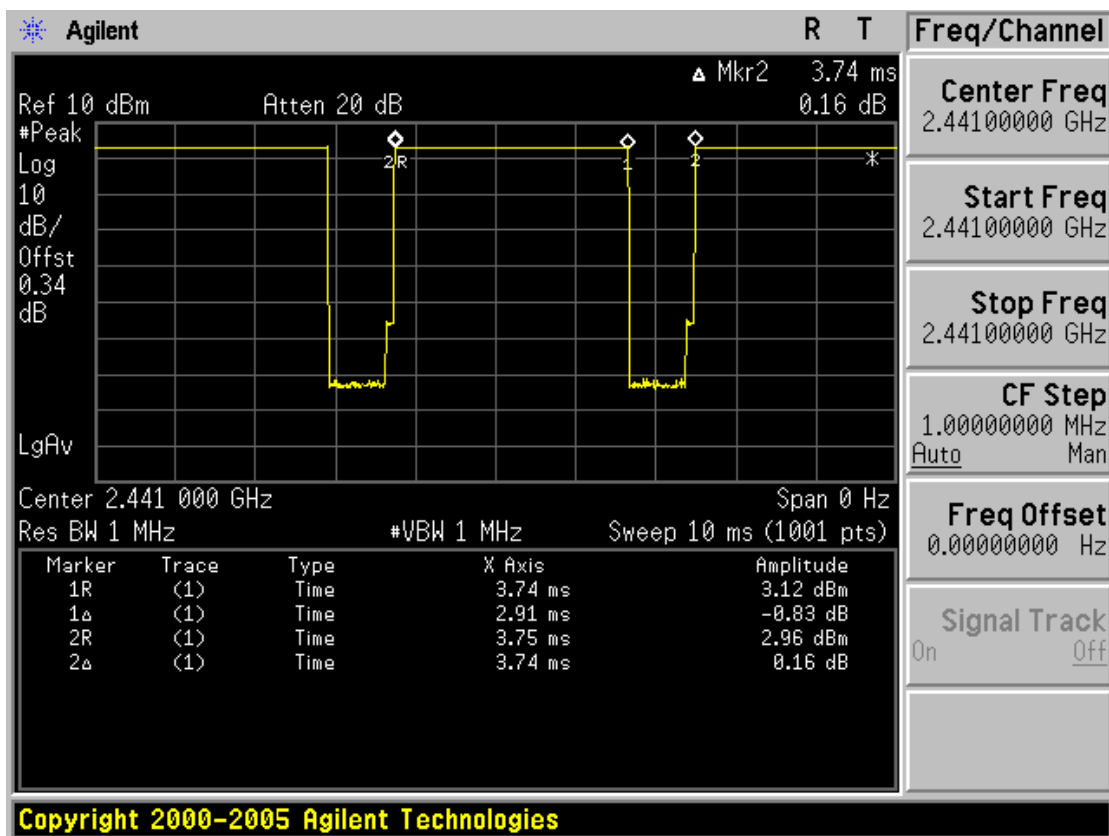
### Time of Occupancy for Packet Type DH 1



### Time of Occupancy for Packet Type DH 3



**Time of Occupancy for Packet Type DH 5**



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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	<b>4.06</b>	<b>2.547</b>	<b>Comply</b>
2441	40	<b>3.26</b>	<b>2.118</b>	<b>Comply</b>
2480	79	<b>2.00</b>	<b>1.585</b>	<b>Comply</b>

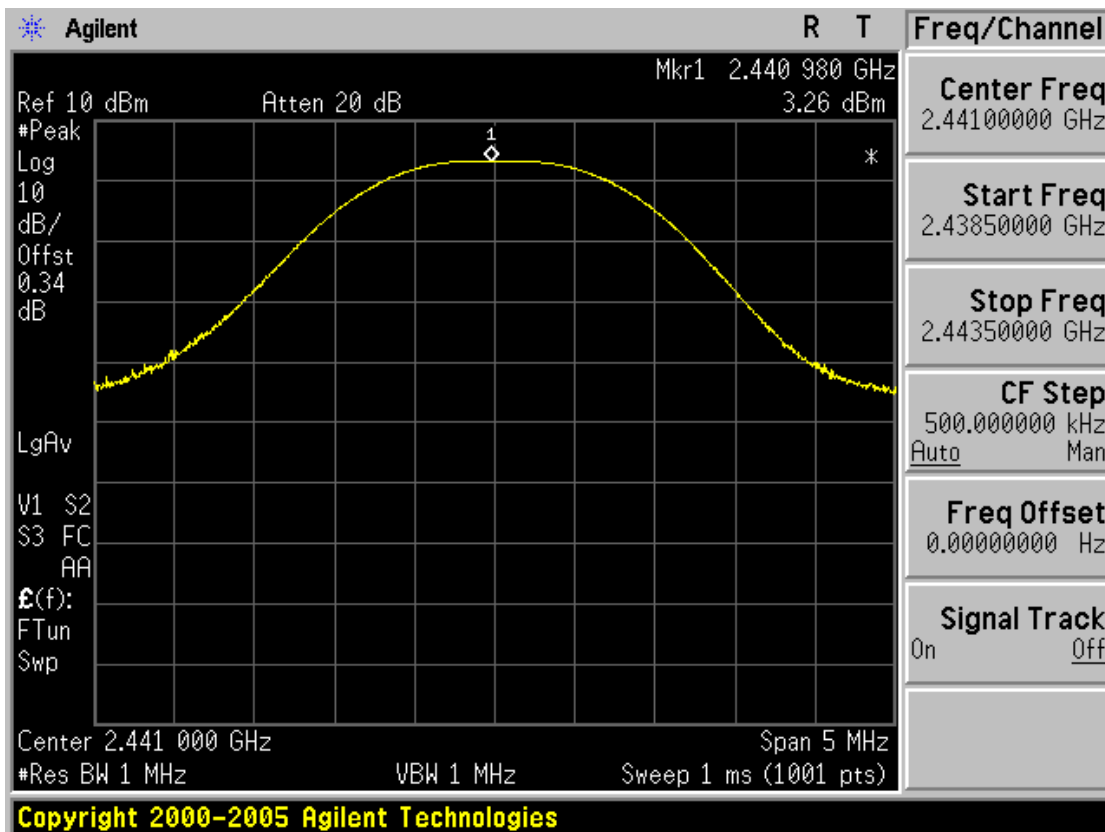
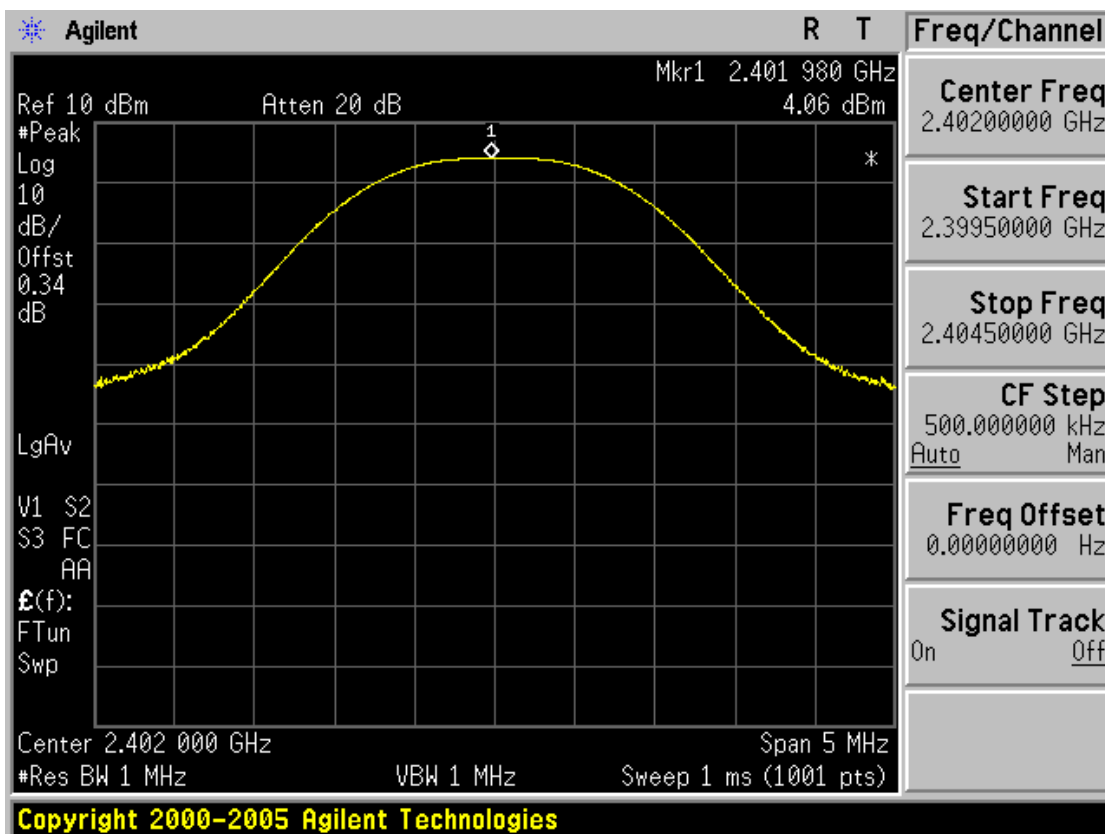
- See next pages for actual measured spectrum plots.

<b>Minimum Standard:</b>	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: <b>1 Watt</b> . For all other frequency hopping systems in the 2400-2483.5 MHz band: <b>0.125 Watts</b>
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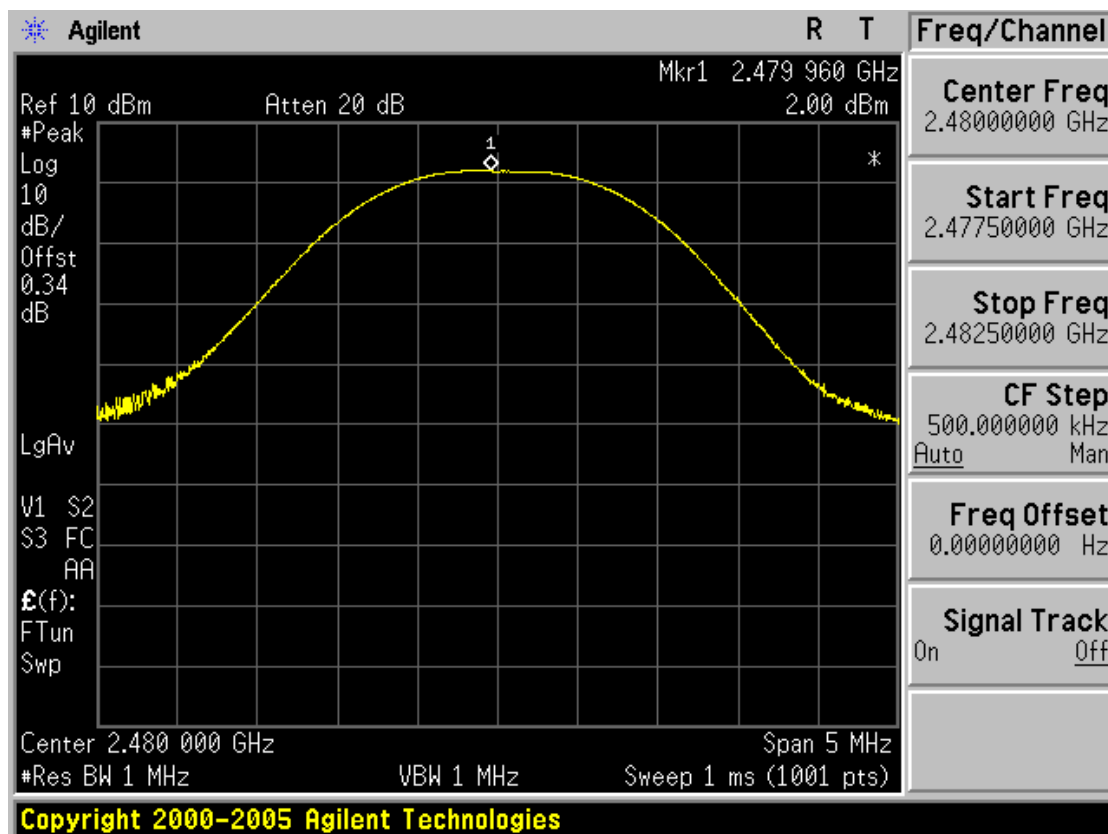
**Measurement Setup**

Same as the Chapter 3.2.1 (Figure 1)

Peak Output Power

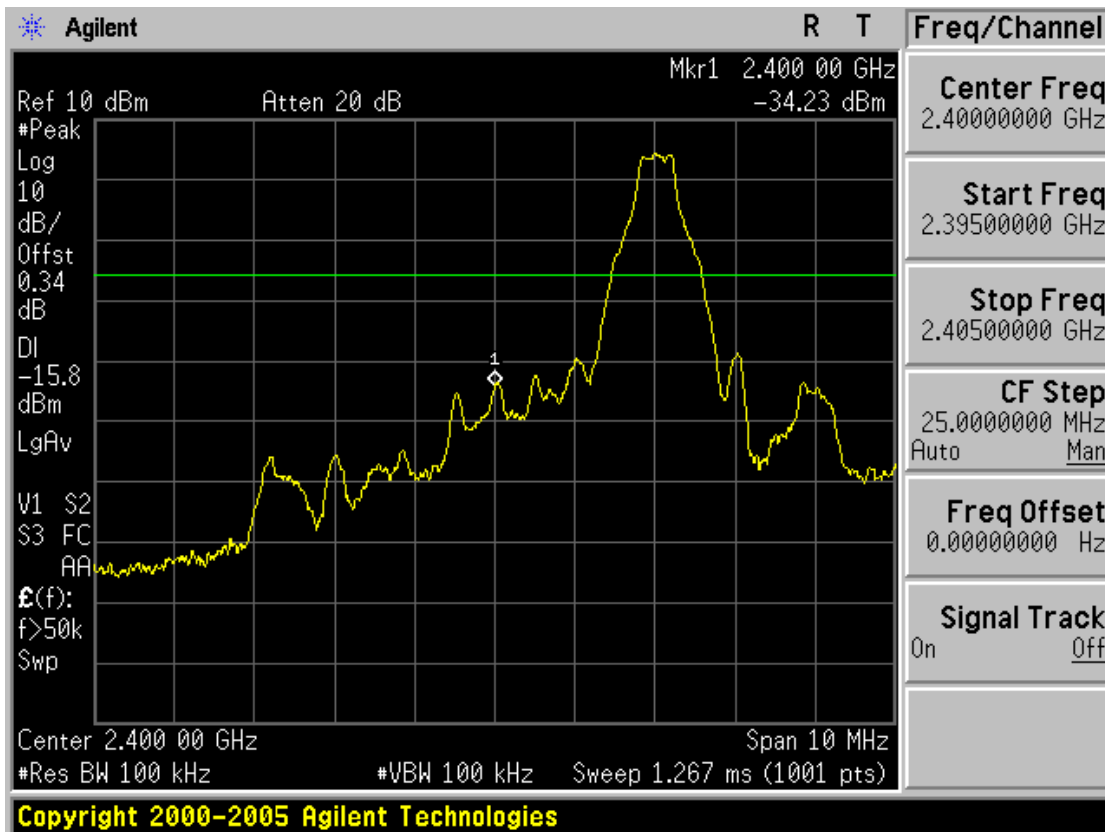


Peak Output Power

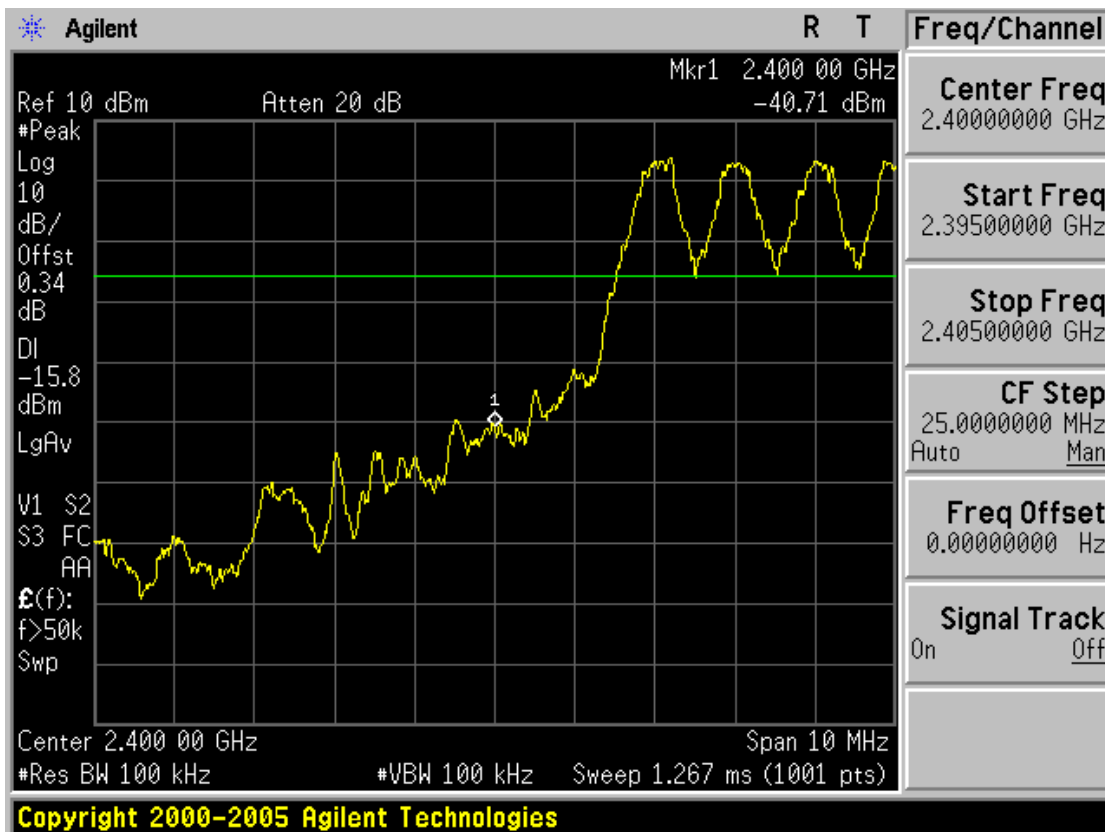




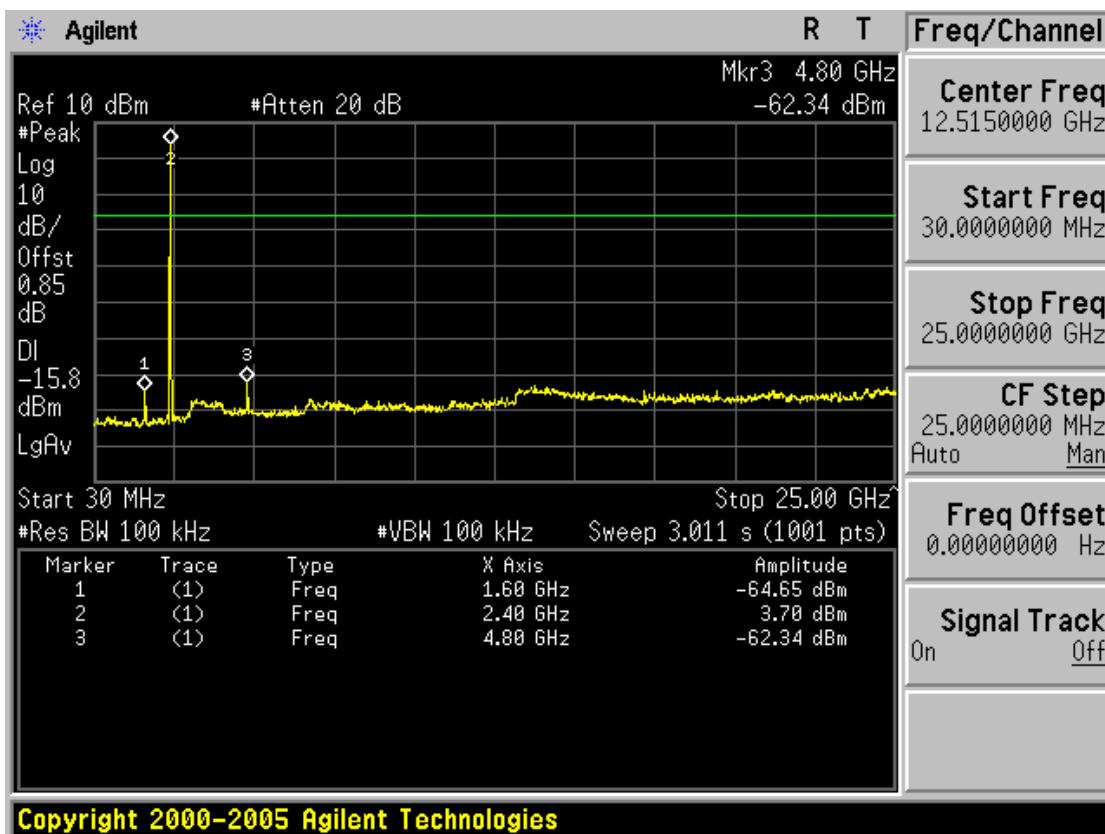
Low band with hopping disabled



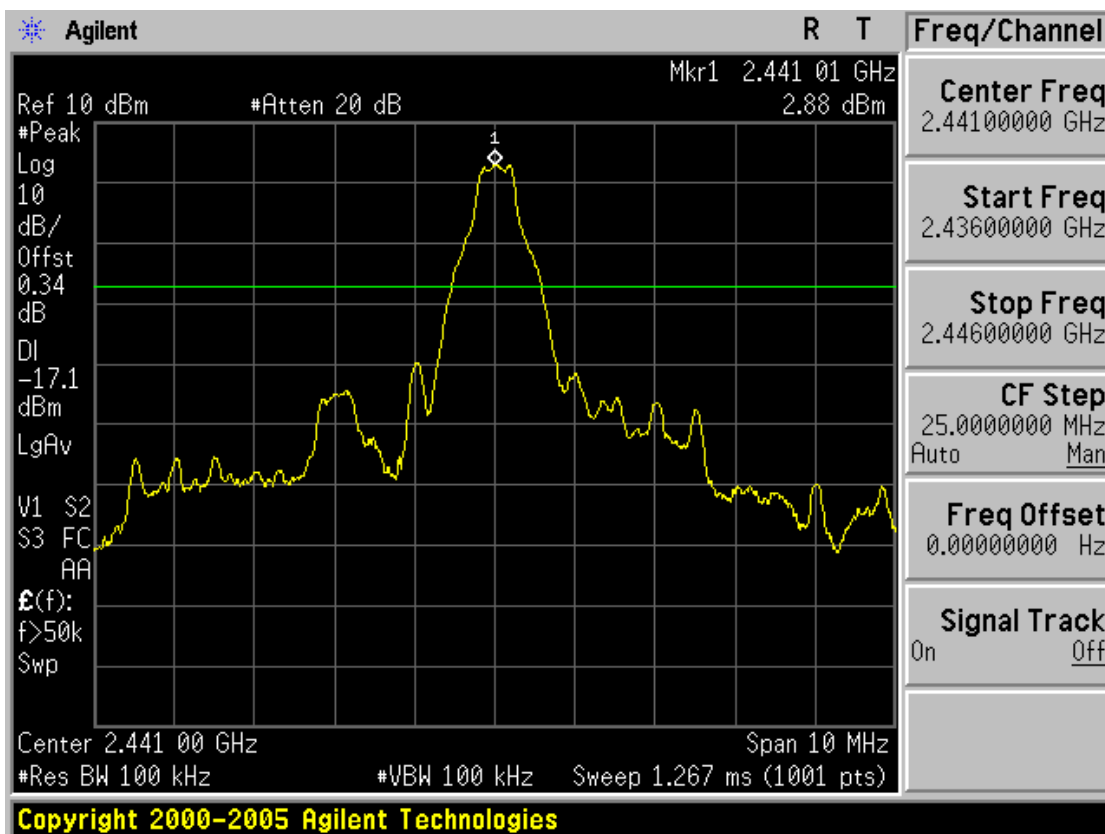
Low band with hopping enabled



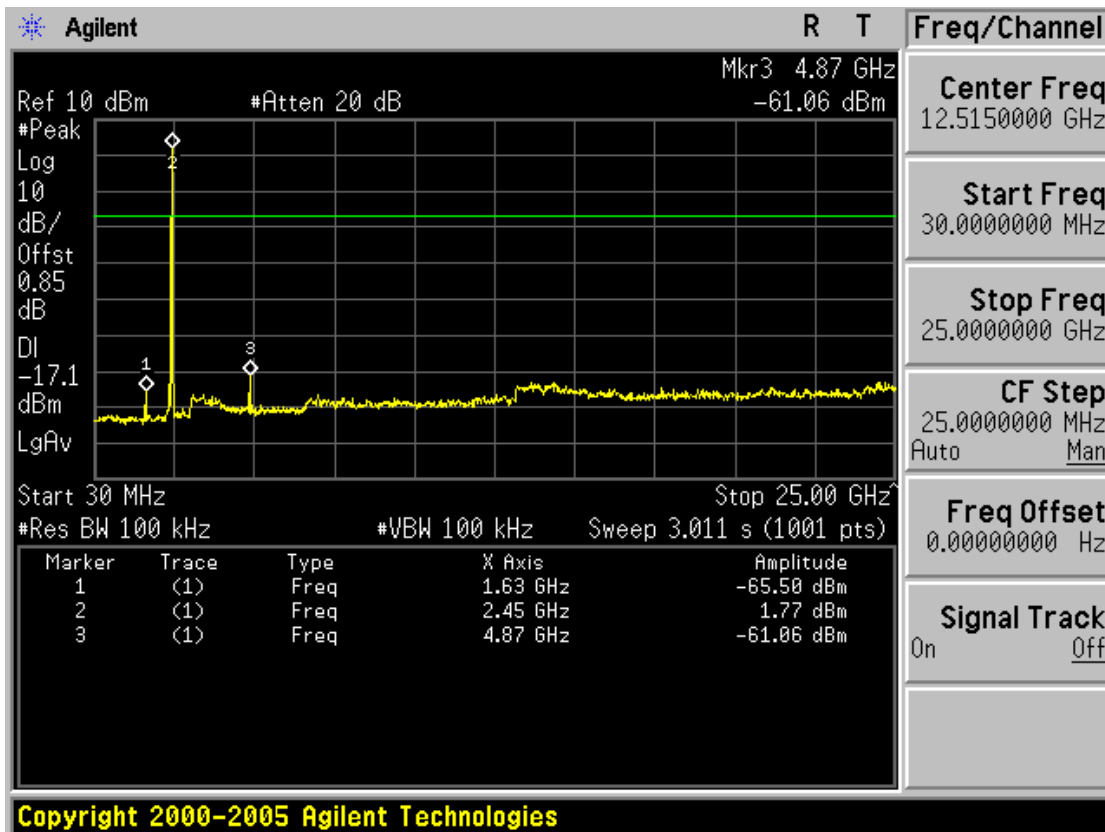
Low channel spurious



Mid channel ref

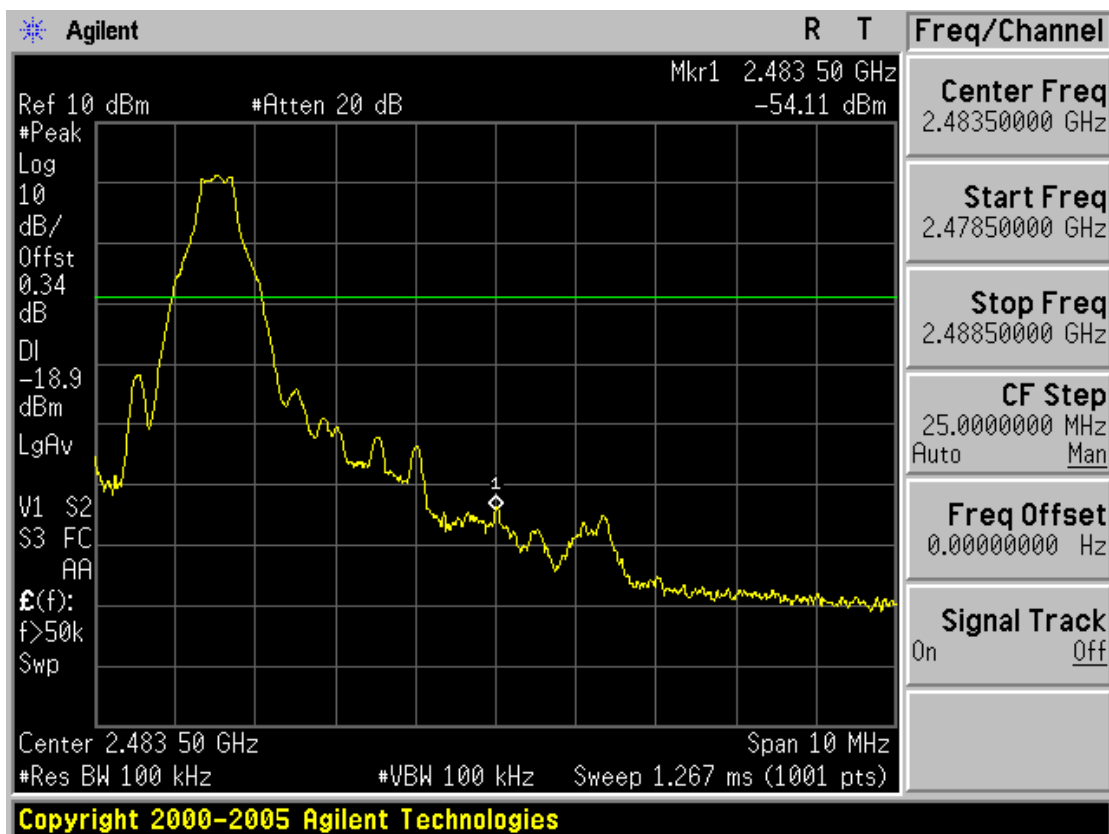


Mid channel spurious

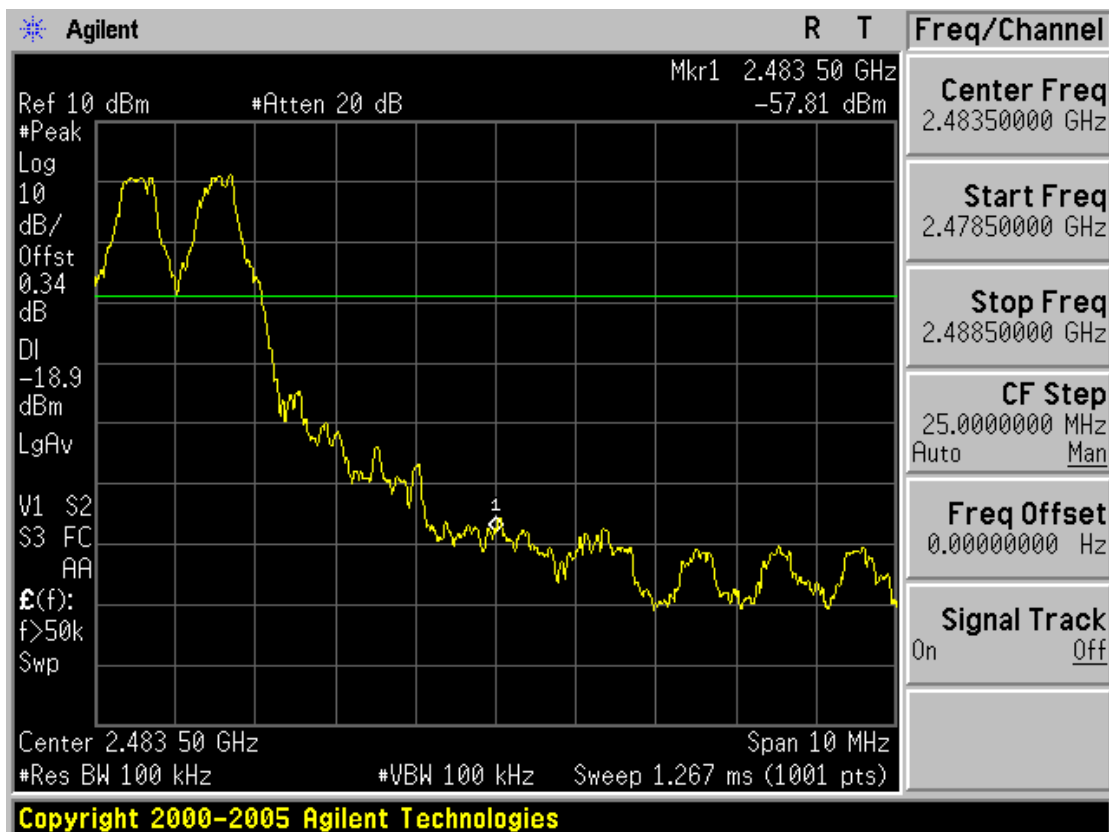




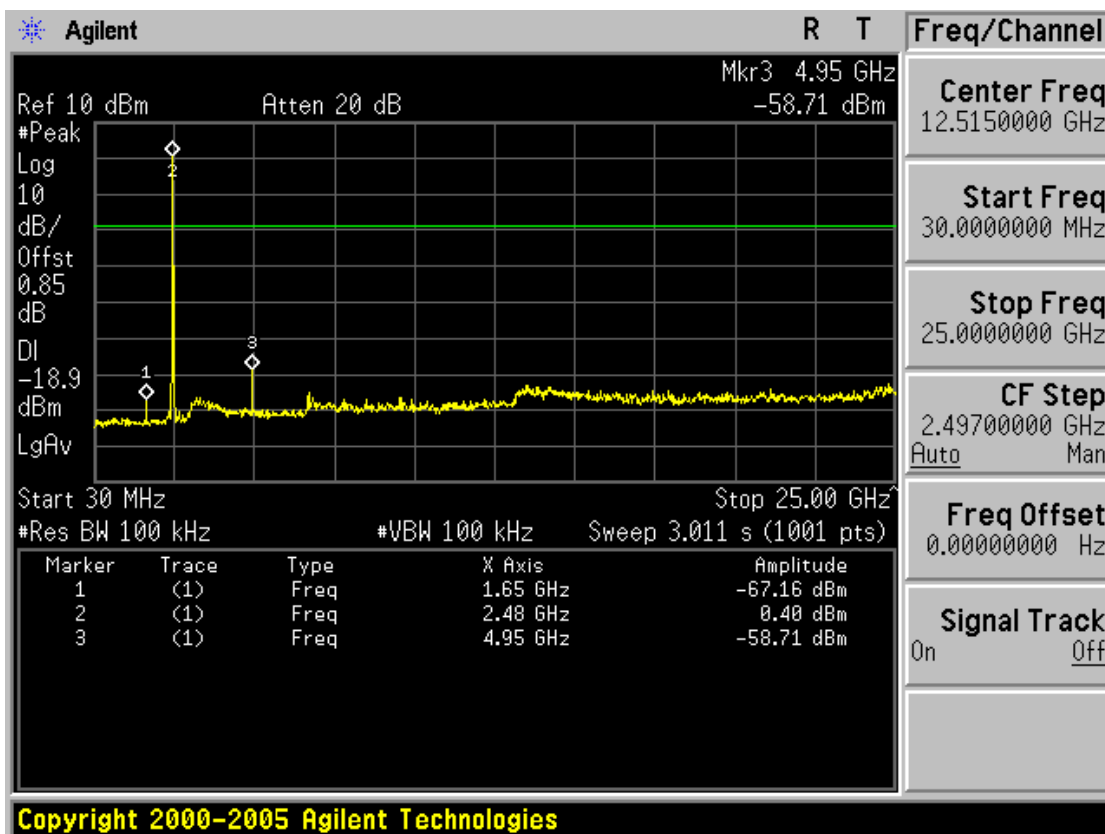
### High band with hopping disabled



### 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 ~ 10<sup>th</sup> harmonic.

RBW = 120 kHz ( 30MHz ~ 1 GHz)

= 1 MHz (1 GHz ~ 10<sup>th</sup> harmonic )

Trace = max hold

VBW ≥ RBW ( Peak)

VBW = 10Hz (Average)

Sweep = auto

**Measurement Data: Comply**

- Refer to the next page.

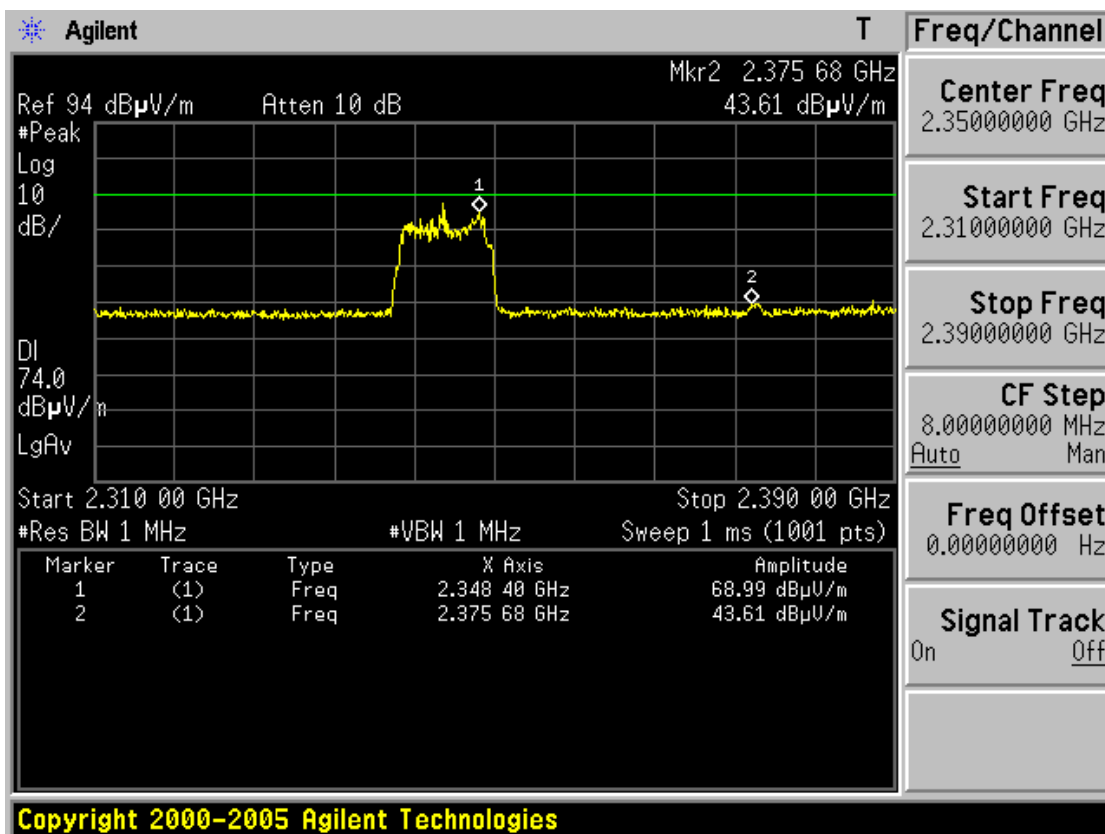
**Minimum Standard: FCC Part 15.205 (a), 15.205(b), 15.209(a) and (b)**

**Limit : FCC P15.209(a)**

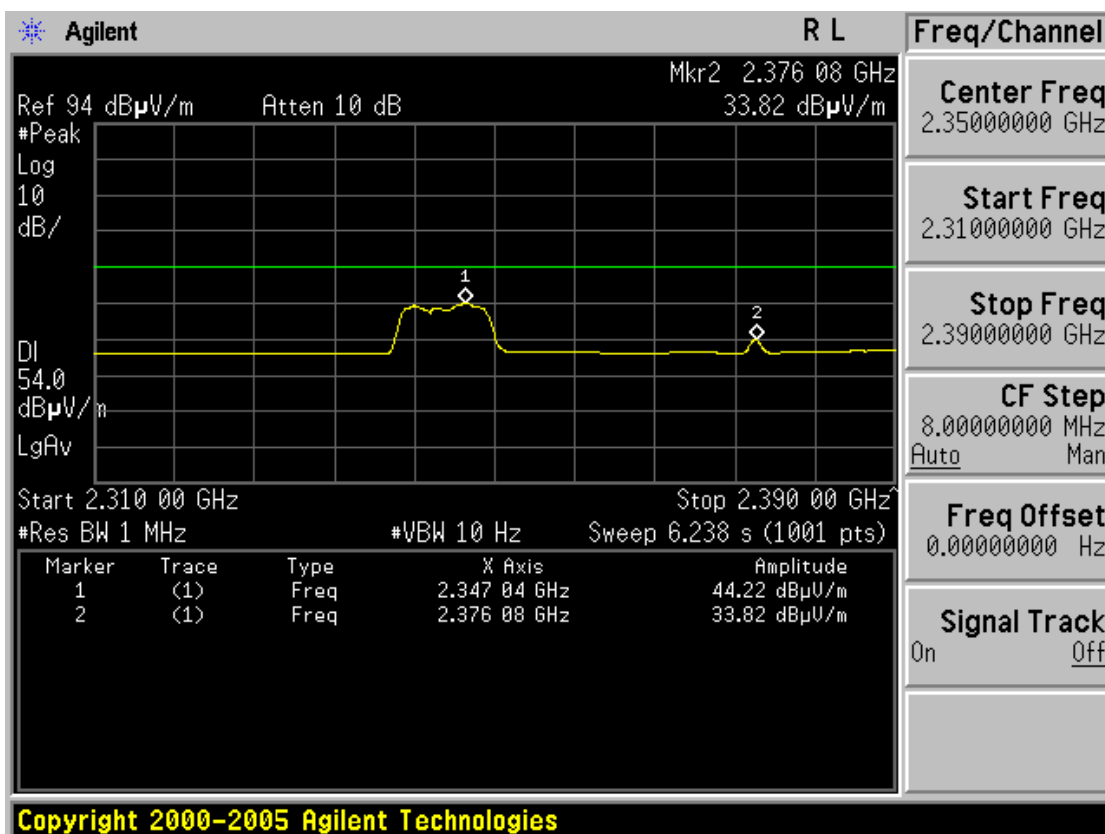
Frequency (MHz)	Limit (uV/m) @ 3m
30 ~ 88	100 **
88 ~ 216	150 **
216 ~ 960	200 **
Above 960	500

\*\* 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.

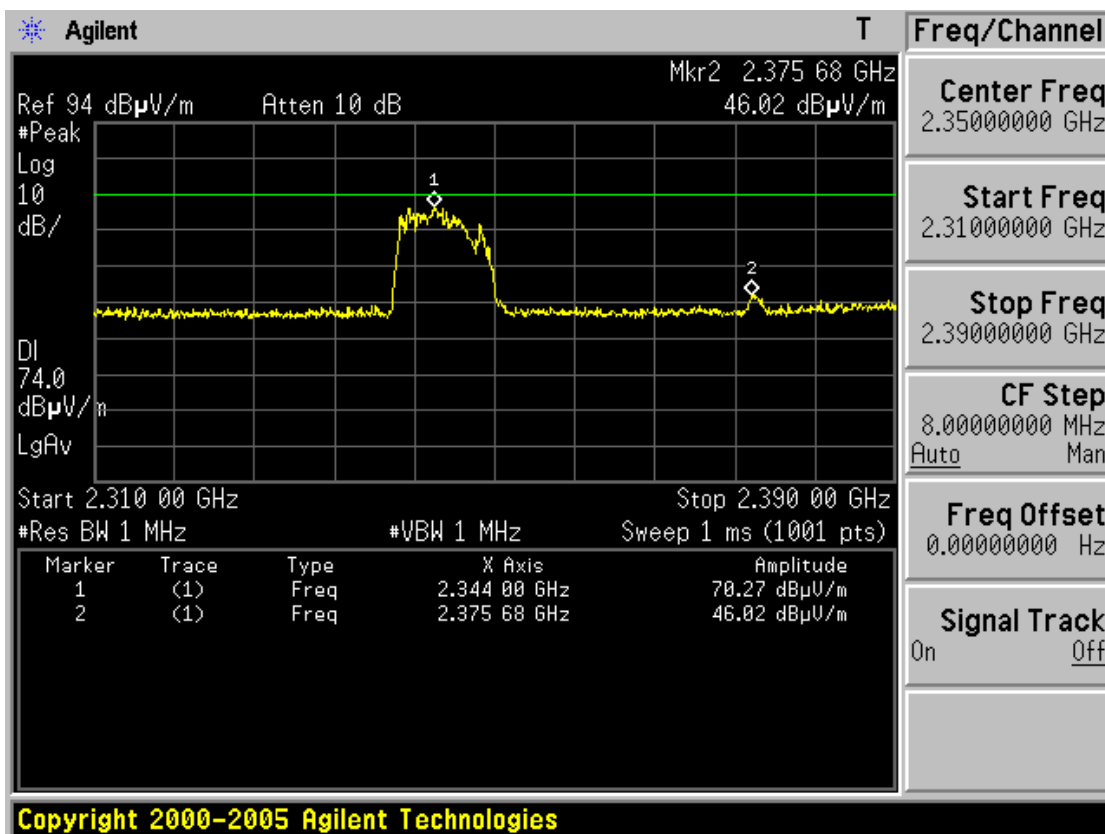
**Restricted Band Edge: Low Channel (Peak, Horizontal)**



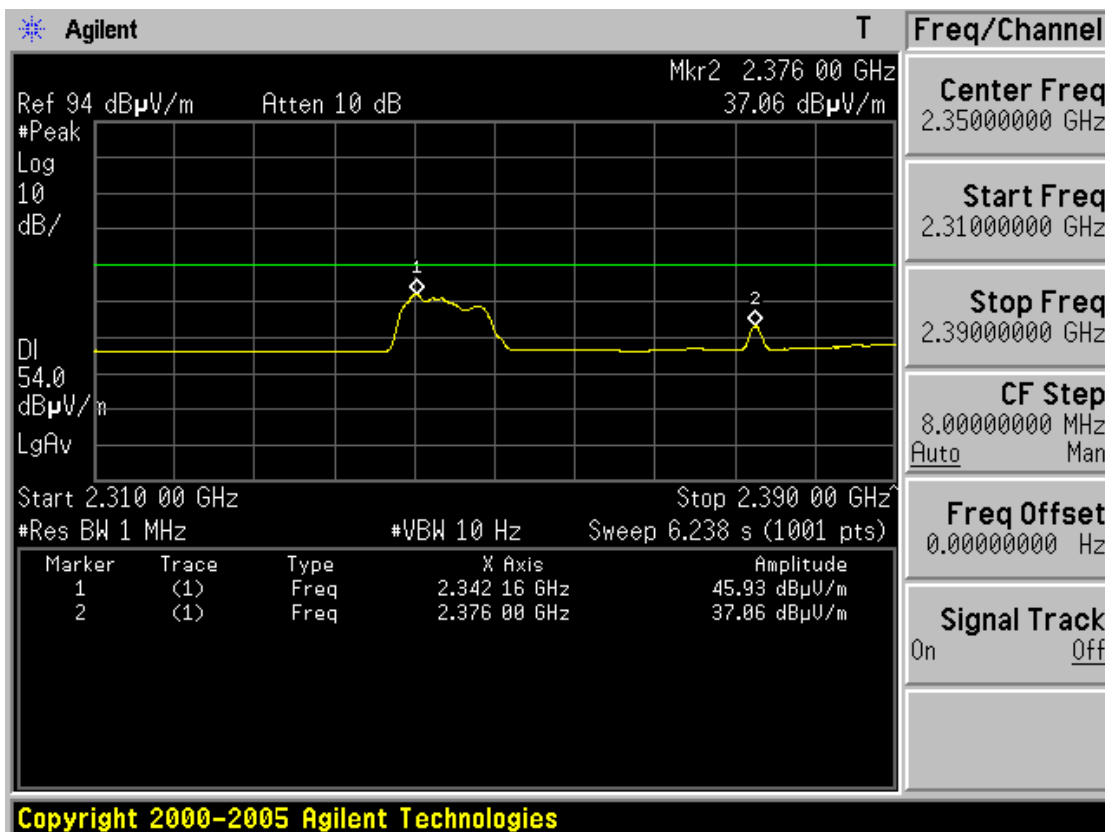
**Restricted Band Edge: Low Channel (Average, Horizontal)**



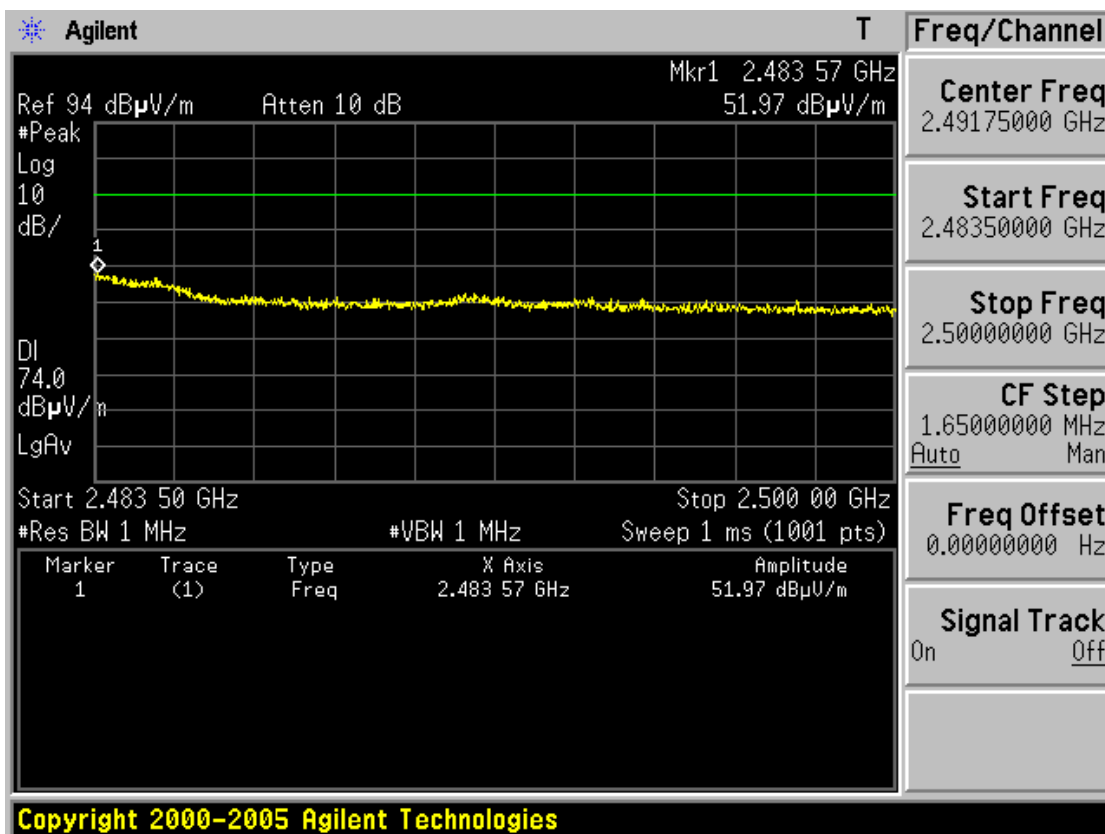
**Restricted Band Edge: Low Channel (Peak, Vertical)**



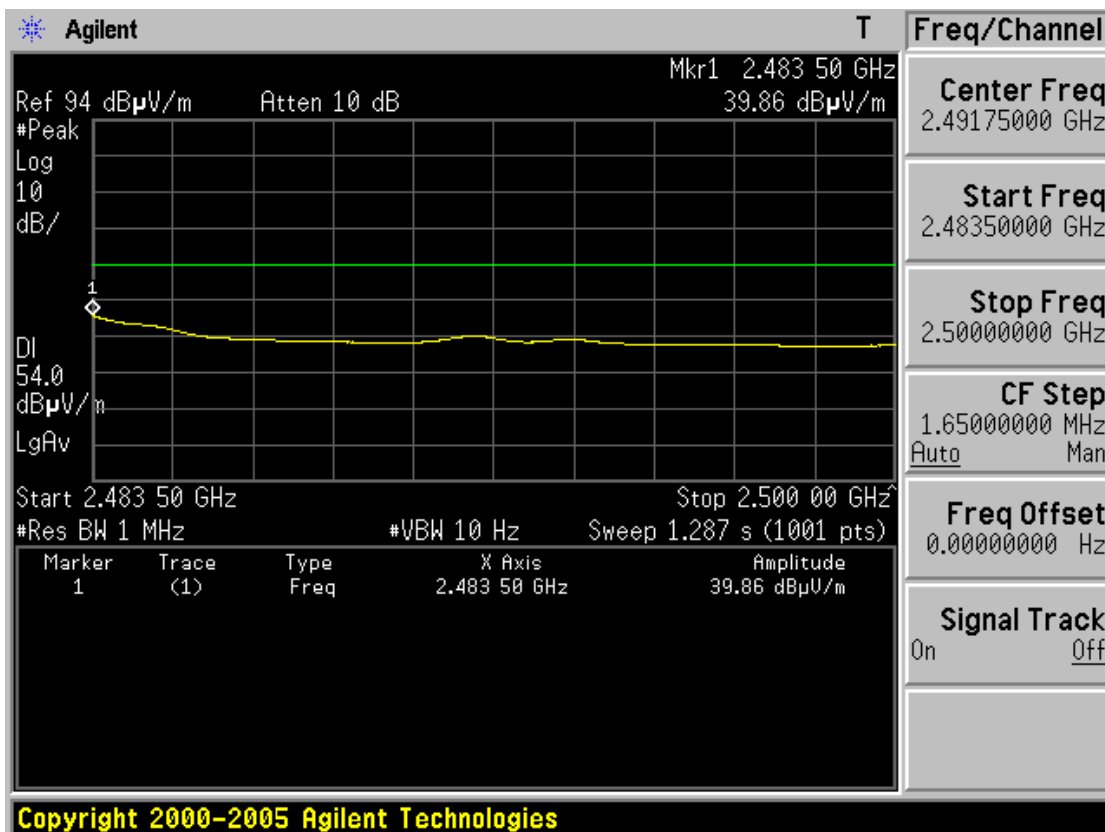
**Restricted Band Edge: Low Channel (Average, Vertical)**



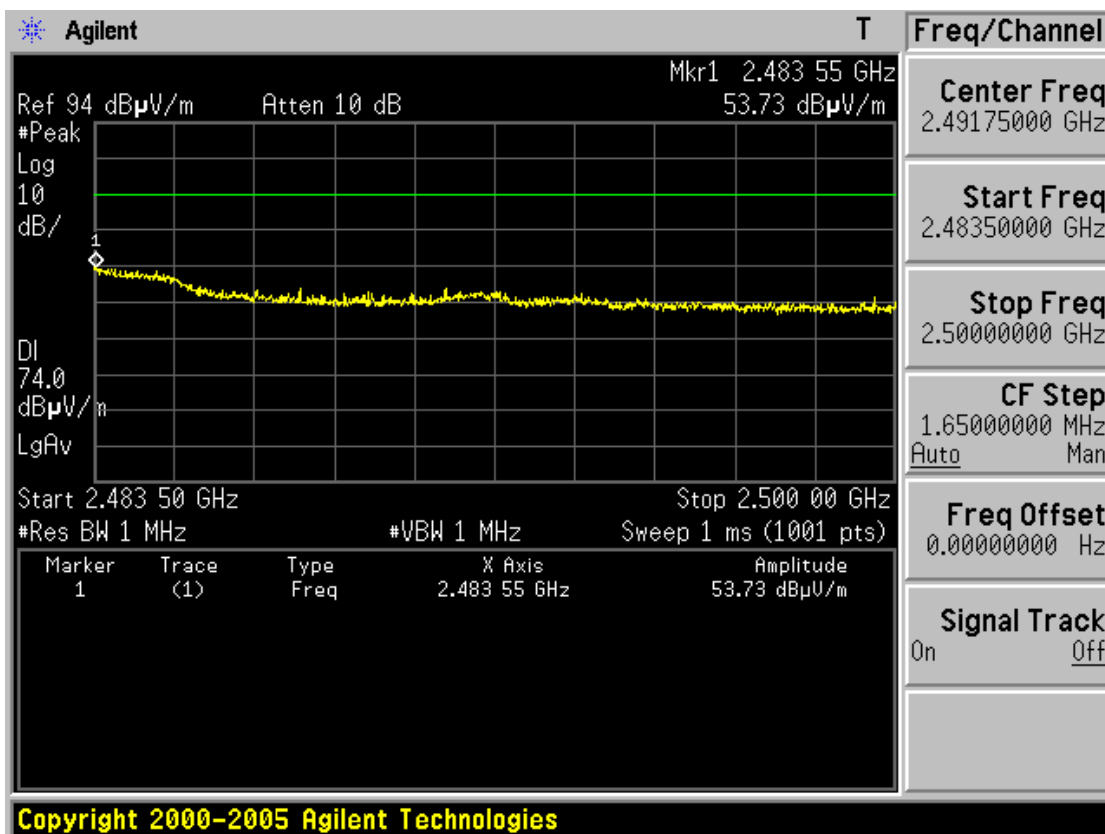
**Restricted Band Edge: High Channel (Peak, Horizontal)**



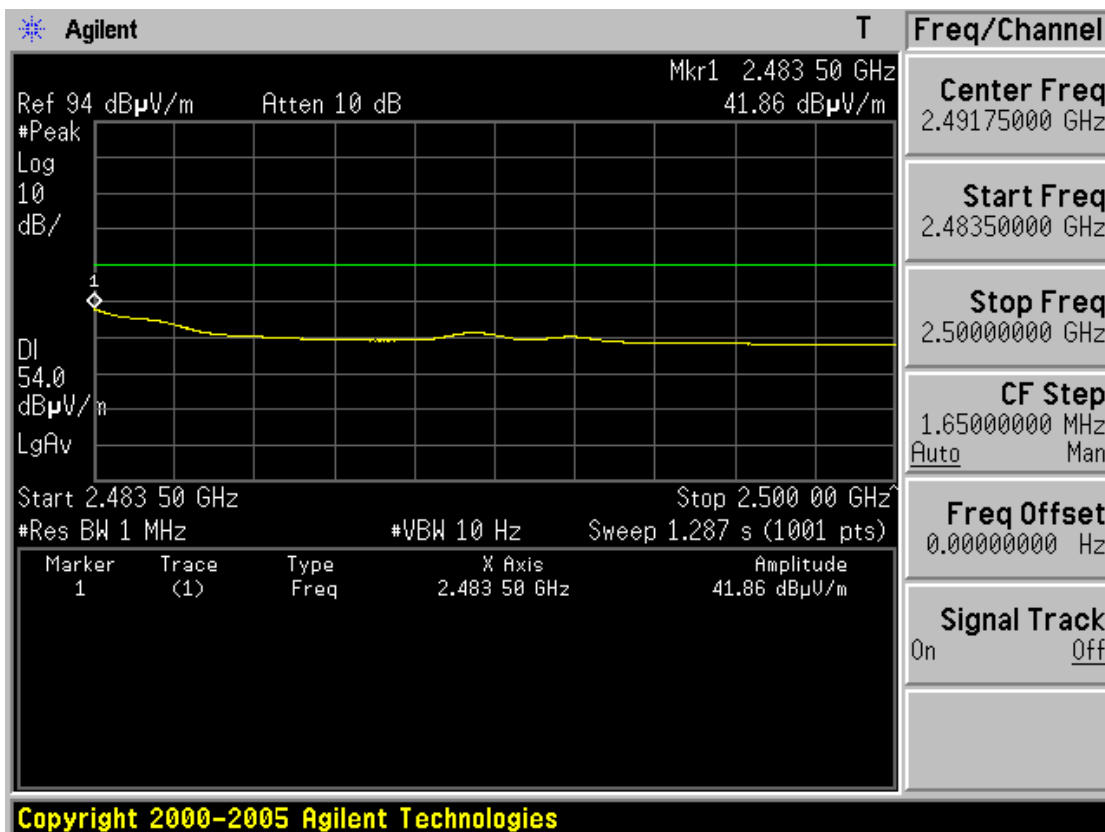
**Restricted Band Edge: High Channel (Average, Horizontal)**



**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
4804	Hor	-	48.26	39.82	7.19	-	55.45	47.01	-	74.00	54.00	-	18.55	6.99
4804	Ver	-	51.11	43.72	7.19	-	58.30	50.91	-	74.00	54.00	-	15.70	3.09
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**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
4882	Hor	-	47.71	39.08	7.48	-	55.19	46.56	-	74.00	54.00	-	18.81	7.44
4882	Ver	-	49.67	41.97	7.48	-	57.15	49.45	-	74.00	54.00	-	16.85	4.55
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**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
4960	Hor	-	46.59	37.83	7.89	-	54.48	45.72	-	74.00	54.00	-	19.52	8.28
4960	Ver	-	47.42	38.68	7.89	-	55.31	46.57	-	74.00	54.00	-	18.69	7.43
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**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.

$$\text{Margin} = \text{Limit} - \text{Result} \quad / \quad \text{Result} = \text{Reading} + \text{T.F} \quad / \quad \text{T.F} = \text{AF} + \text{CL} - \text{AG}$$

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** (See next pages for actual measured spectrum plots.)

**Note :** When this device is in the charging mode, the Bluetooth function is disabled.

**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**

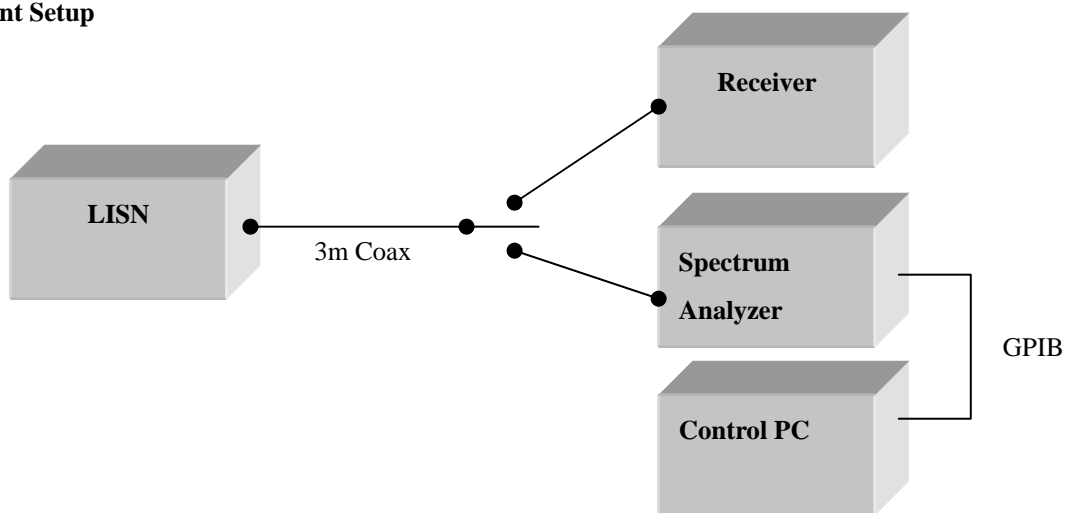
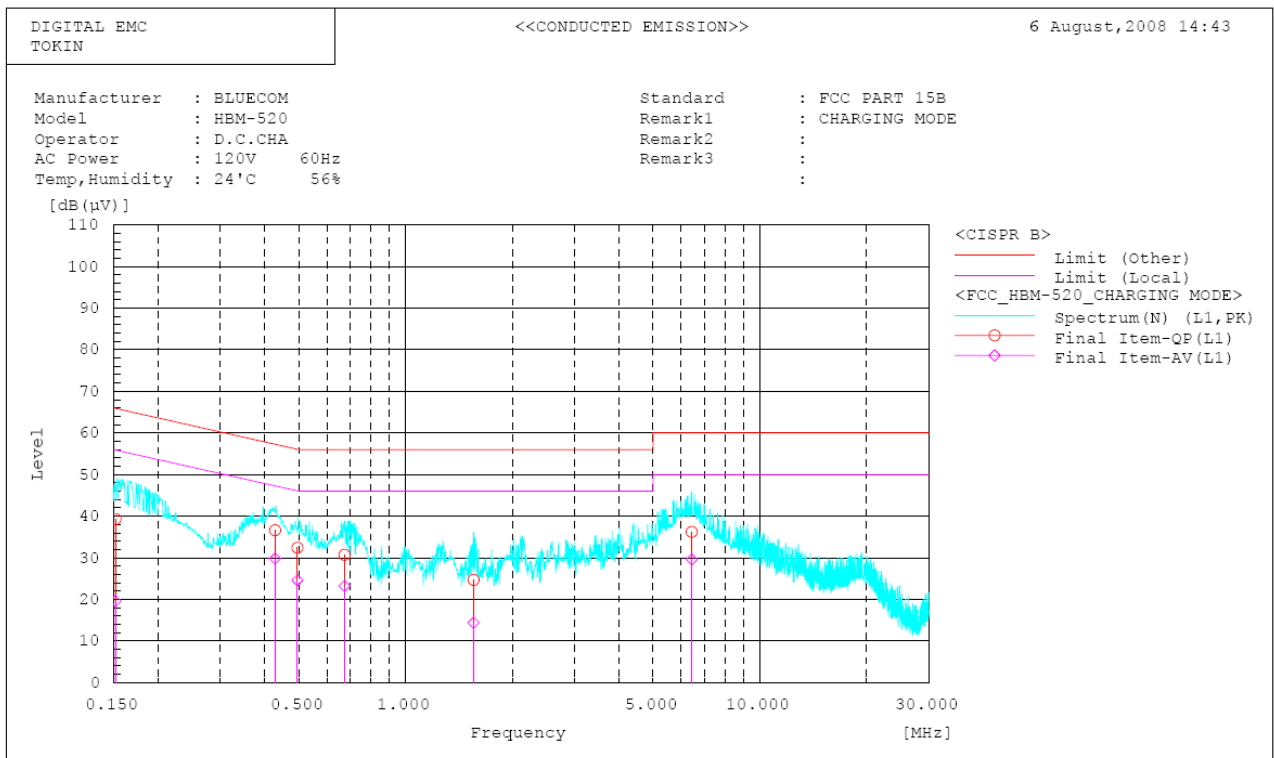
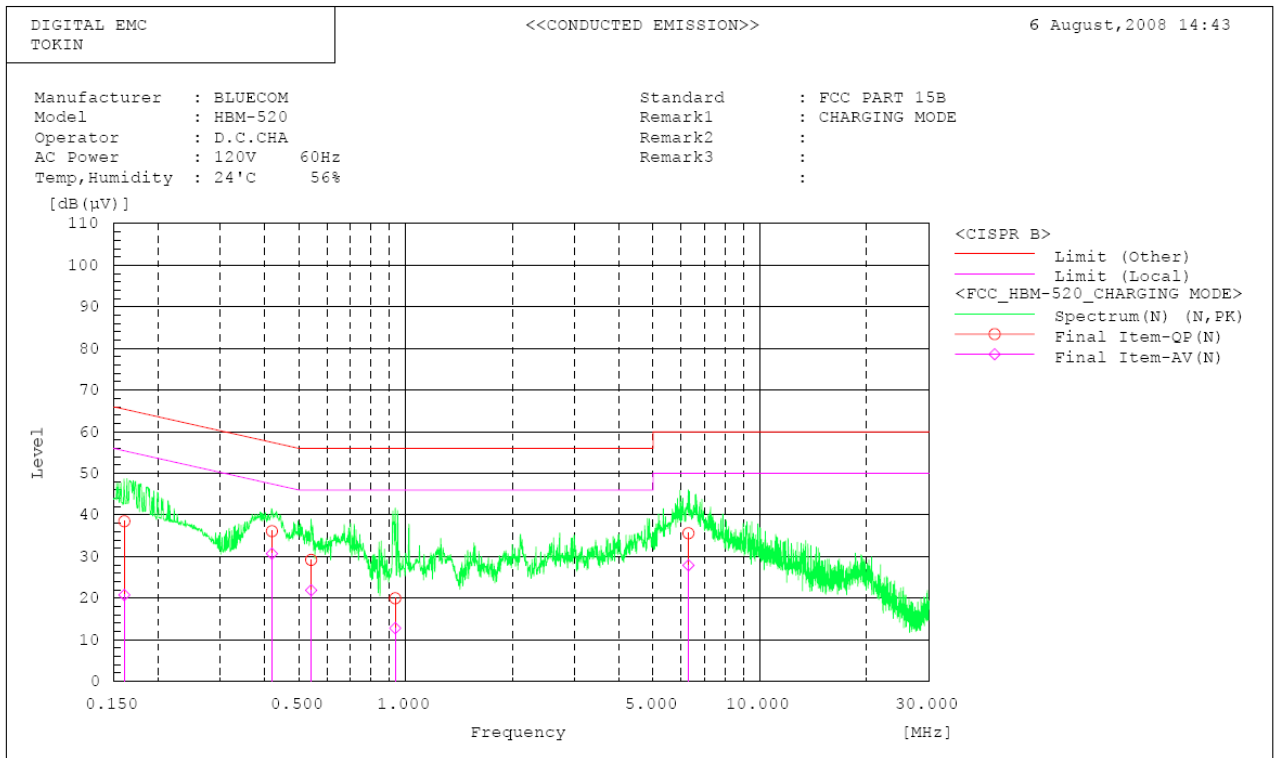


Figure 2: Measurement setup for AC Conducted Emission

- Conducted Emission Graph -



-Conducted Emission List -

\*\*\*\*\* DIGITAL EMC \*\*\*\*\*  
 <<CONDUCTED EMISSION>>

6 August, 2008 14:43

Standard : FCC PART 15B  
 Manufacturer : BLUECOM  
 Model : HEM-520  
 Operator : D.C.CHA  
 AC Power : 120V 60Hz  
 Temp, Humidity : 24°C 56%  
 Remark1 : CHARGING MODE  
 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(µV)]	[dB(µV)]	[dB(µV)]	[dB(µV)]	[dB]	[dB]	
1	0.161	38.4	20.7	0.1	38.5	20.8	65.4	55.4	26.9	34.6	
2	0.420	36.0	30.6	0.1	36.1	30.7	57.4	47.4	21.3	16.7	
3	0.936	19.8	12.6	0.2	20.0	12.8	56.0	46.0	36.0	33.2	
4	6.288	35.2	27.5	0.4	35.6	27.9	60.0	50.0	24.4	22.1	
5	0.542	29.1	21.8	0.1	29.2	21.9	56.0	46.0	26.8	24.1	

--- 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(µV)]	[dB(µV)]	[dB(µV)]	[dB(µV)]	[dB]	[dB]	
1	0.152	39.1	19.4	0.2	39.3	19.6	65.9	55.9	26.6	36.3	
2	0.429	36.4	29.6	0.2	36.6	29.8	57.3	47.3	20.7	17.5	
3	0.496	32.2	24.4	0.2	32.4	24.6	56.1	46.1	23.7	21.5	
4	0.673	30.4	22.9	0.3	30.7	23.2	56.0	46.0	25.3	22.8	
5	1.557	24.3	14.0	0.4	24.7	14.4	56.0	46.0	31.3	31.6	
6	6.426	35.7	29.1	0.5	36.2	29.6	60.0	50.0	23.8	20.4	

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	21/03/08	21/03/09	US41061134
02	Spectrum Analyzer	Agilent	E4440A	15/11/07	15/11/08	MY45304199
03	Spectrum Analyzer	H.P	8563E	09/10/07	09/10/09	3551A04634
04	Spectrum Analyzer	Rohde Schwarz	FSP	06/09/07	06/09/08	100385
05	Spectrum Analyzer	H.P	8591E	26/04/08	26/04/09	3649A05889
06	EMI TEST RECEIVER	R&S	ESU	11/01/08	11/01/09	100014
07	EMI TEST RECEIVER	R&S	ESCI	13/05/08	13/05/09	100364
08	Power Meter	H.P	EMP-442A	10/07/08	10/07/09	GB37170413
09	Power Sensor	H.P	8481A	14/07/08	14/07/09	3318A96566
10	Frequency Counter	H.P	5342A	06/09/07	06/09/08	2119A04450
11	Signal Generator	Rohde Schwarz	SMR20	02/04/08	02/04/09	101251
12	Signal Generator	H.P	ESG-3000A	09/07/08	09/07/09	US37230529
13	Vector Signal Generator	Rohde Schwarz	SMJ100A	17/01/08	17/01/09	100148
14	Audio Analyzer	H.P	8903B	09/07/08	09/07/09	3011A09448
15	Modulation Analyzer	H.P	8901B	18/07/08	18/07/09	3028A03029
16	Oscilloscope	Tektronix	TDS3052	02/11/07	02/11/08	B016821
17	8960 Series 10 Wireless Comms. Test Set	Agilent	E5515C	31/07/07	31/07/09	GB43461134
18	Universal Radio communication Tester	Rohde Schwarz	CMU 200	02/04/08	02/04/09	107631
19	Bluetooth Tester	TESCOM	TC-3000A	01/08/08	01/08/09	3000A4A0121
20	Power Splitter	WEINSCHEL	1593	05/10/07	05/10/08	332
21	Power Splitter	Anritsu	K241B	19/10/07	19/10/08	020611
22	BAND Reject Filter	Microwave Circuits	N0308372	18/10/07	18/10/08	3125-01DC0312
23	BAND Reject Filter	Wainwright	WRCG1750	18/10/07	18/10/08	SN2
24	AC Power supply	DAEKWANG	5KVA	20/03/08	20/03/09	N/A
25	DC Power Supply	H.P	6622A	20/03/08	20/03/09	465487
26	HORN ANT	ETS	3115	13/06/08	13/06/09	6419
27	HORN ANT	ETS	3115	09/10/07	09/10/08	21097
28	HORN ANT	A.H.Systems	SAS-574	13/06/08	13/06/09	154
29	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
30	Dipole Antenna	Schwarzbeck	VHA9103	19/12/07	19/12/08	2116
31	Dipole Antenna	Schwarzbeck	VHA9103	19/12/07	19/12/08	2117
32	Dipole Antenna	Schwarzbeck	UHA9105	20/12/07	20/12/08	2261
33	Dipole Antenna	Schwarzbeck	UHA9105	20/12/07	20/12/08	2262
34	TEMP & HUMIDITY Chamber	JISCO	J-RHC2	02/10/07	02/10/08	021031
35	Log Periodic Antenna	Schwarzbeck	UHALP9108A1	01/10/07	01/10/08	1098
36	Biconical Antenna	Schwarzbeck	VHA9103	01/10/07	01/10/08	2233
37	Digital Multimeter	H.P	34401A	20/03/08	20/03/09	3146A13475
38	Attenuator (10dB)	WEINSCHEL	23-10-34	05/10/07	05/10/08	BP4386
39	Attenuator (10dB)	WEINSCHEL	23-10-34	30/01/08	30/01/09	BP4387
40	High-Pass Filter	ANRITSU	MP526D	08/10/07	08/10/08	MP27756
41	Attenuator (3dB)	Agilent	8491B	15/07/08	15/07/09	58177
42	20dB Attenuator	Aeroflex/Weinschel	86-20-11	25/10/07	25/10/08	432
43	10dB Attenuator	Aeroflex/Weinschel	86-10-11	25/10/07	25/10/08	446
44	10dB Attenuator	Aeroflex/Weinschel	86-10-11	25/10/07	25/10/08	408
45	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0088CAN	11/07/08	11/07/09	788
46	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0185CAN	11/07/08	11/07/09	790
47	Type N Coaxial CIRCULATOR	NOVA MICROWAVE	0215CAN	11/07/08	11/07/09	112
48	Amplifier (25dB)	Agilent	8447D	21/05/08	21/05/09	2944A10144
49	Amplifier (30dB)	Agilent	8449B	25/10/07	25/10/08	3008A01590
50	Amplifier (22dB)	H.P	8447E	27/02/08	27/02/09	2945A02865
51	Position Controller	TOKIN	5901T	N/A	N/A	14173
52	Driver	TOKIN	5902T2	N/A	N/A	14174
53	RFI/FIELD Intensity Meter	Kyorits	KNW-2402	06/09/07	06/09/08	4N-170-3
54	LISN	Kyorits	KNW-407	30/08/07	30/08/08	8-317-8
55	LISN	Kyorits	KNW-242	06/10/07	06/10/08	8-654-15
56	CVCF	NF Electronic	4400	N/A	N/A	344536 4420064
57	Software	ToYo EMI	EP5/RE	N/A	N/A	Ver 2.0.800
58	Software	ToYo EMI	EP5/CE	N/A	N/A	Ver 2.0.801
59	Software	AUDIX	e3	N/A	N/A	Ver 3.0
60	Software	Agilent	Benchlink	N/A	N/A	A.01.09 021211