

9 SPURIOUS EMISSION - RF CONDUCTED MEASUREMENT

9.1 Standard Applicable

According to 15.247 (c) , in any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

9.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in figure 2. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. Set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

9.3 Measurement Equipment

Equipment	Manufacturer	Model No.	Next Cal. Due
Spectrum Analyzer	Hewlett-Packard	8564EC	09/16/2005

9.4 Measurement Data

Test Date: Jun. 24, 2004Temperature: 23Humidity: 59 %

(1) IEEE 802.11b

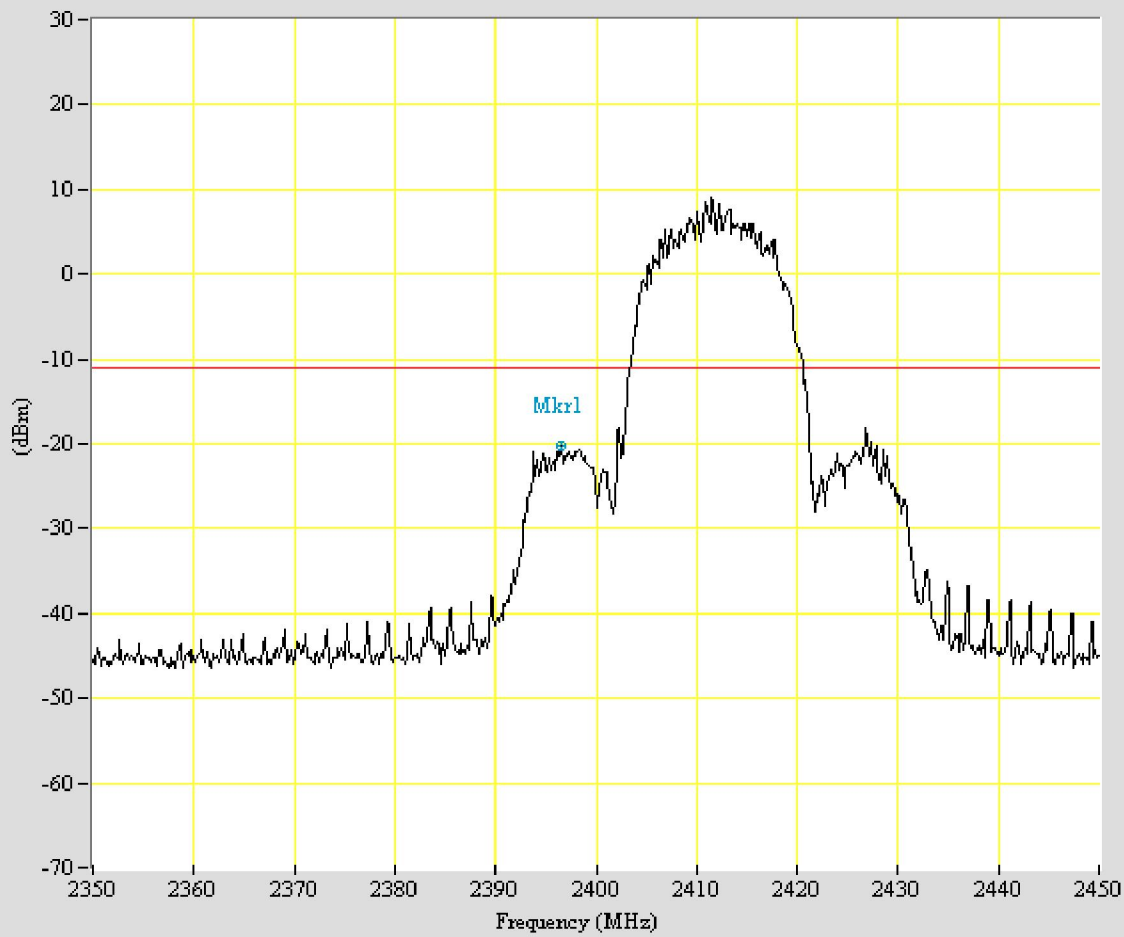
Channel	Frequency(MHz)	Chart
1	2412	Page 51, Page 53
6	2437	Page 54
11	2462	Page 52, Page 55

(2) IEEE 802.11g

Channel	Frequency(MHz)	Chart
1	2412	Page 56, Page 58
6	2437	Page 59
11	2462	Page 57, Page 60

All out-of -band conducted emissions were more than 20dB below the carrier.

Note: Please refer to page 51 to page 60 for chart



*Center 2400.0000MHz

*SPAN 100.0000MHz

*RBW 100.00kHz

*VBW 300.00kHz

*SWP 50.00msec

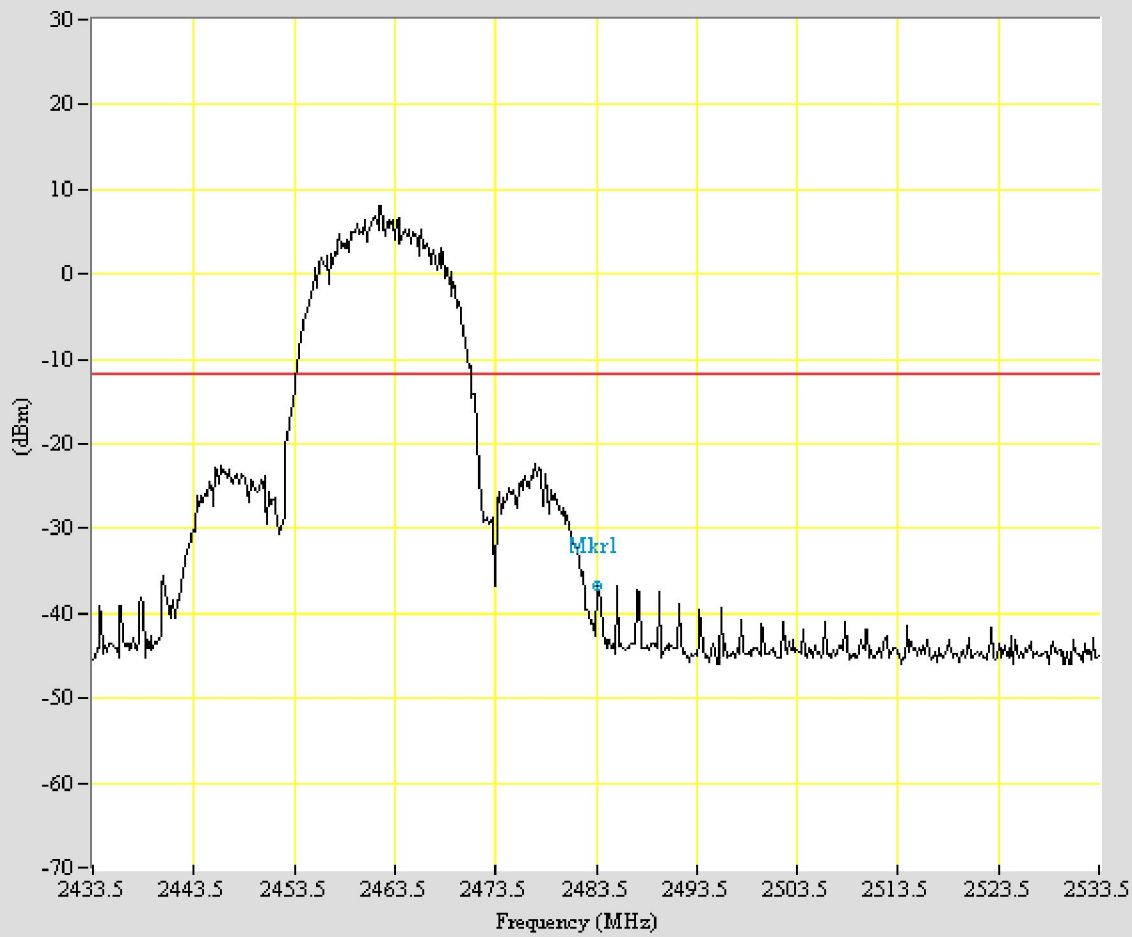
*ATTEN 40.00dB

*RL 30.00dBm

Display Line -11.000dBm

Marker 2396.500MHz -20.160dBm

EUT: WLG100
Purpose: Band_Edge
Condition: 802,11b_CH01
Note:



*Center 2483.5000MHz

*SPAN 100.0000MHz

*RBW 100.00kHz

*VBW 300.00kHz

*SWP 50.00msec

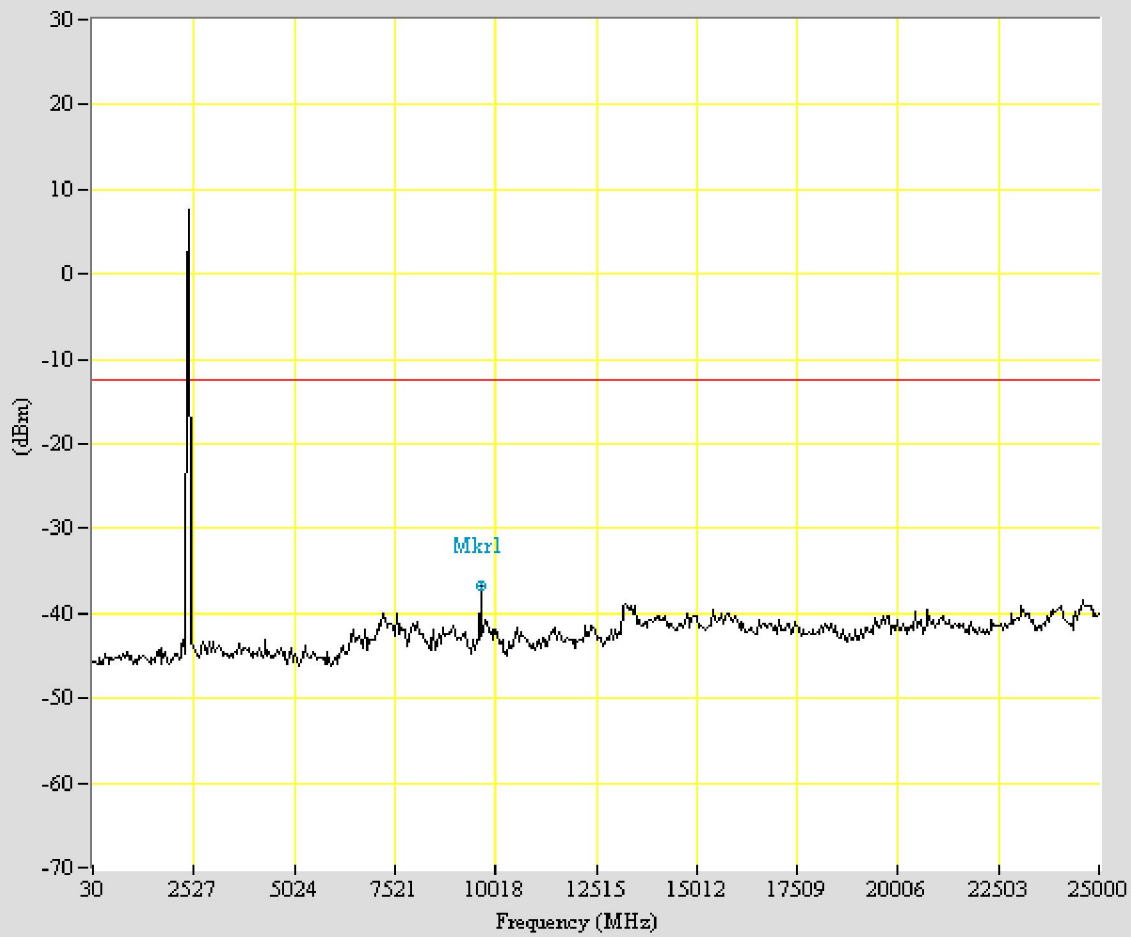
*ATTEN 40.00dB

*RL 30.00dBm

Display Line -11.830dBm

Marker 2483.667MHz -36.660dBm

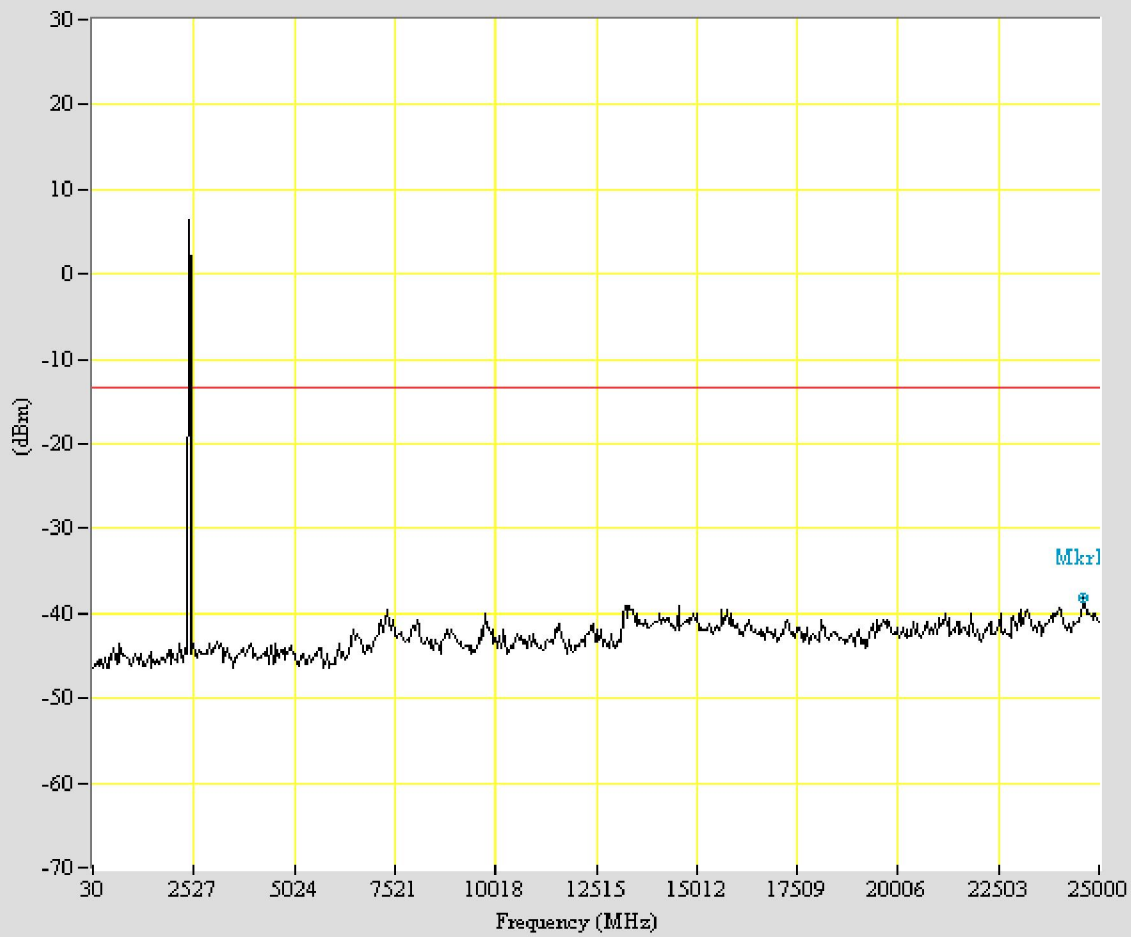
EUT: WLG100
Purpose: Band_Edge
Condition: 802,11b_CH11
Note:



*Center 12515.0000MHz
 *SPAN 24970.0000MHz
 *RBW 100.00kHz
 *VBW 300.00kHz
 *SWP 6300.00msec
 *ATTEN 40.00dB
 *RL 30.00dBm

Display Line -12.500dBm
 Marker 9643.450MHz -36.660dBm

EUT: WLG100
 Purpose: Band_Edge_All
 Condition: 802,11b_CH01
 Note:



```

*Center 12515.0000MHz
*SPAN 24970.0000MHz
*RBW 100.00kHz
*VBW 300.00kHz
*SWP 6300.00msec
*ATTEN 40.00dB
*RL 30.00dBm

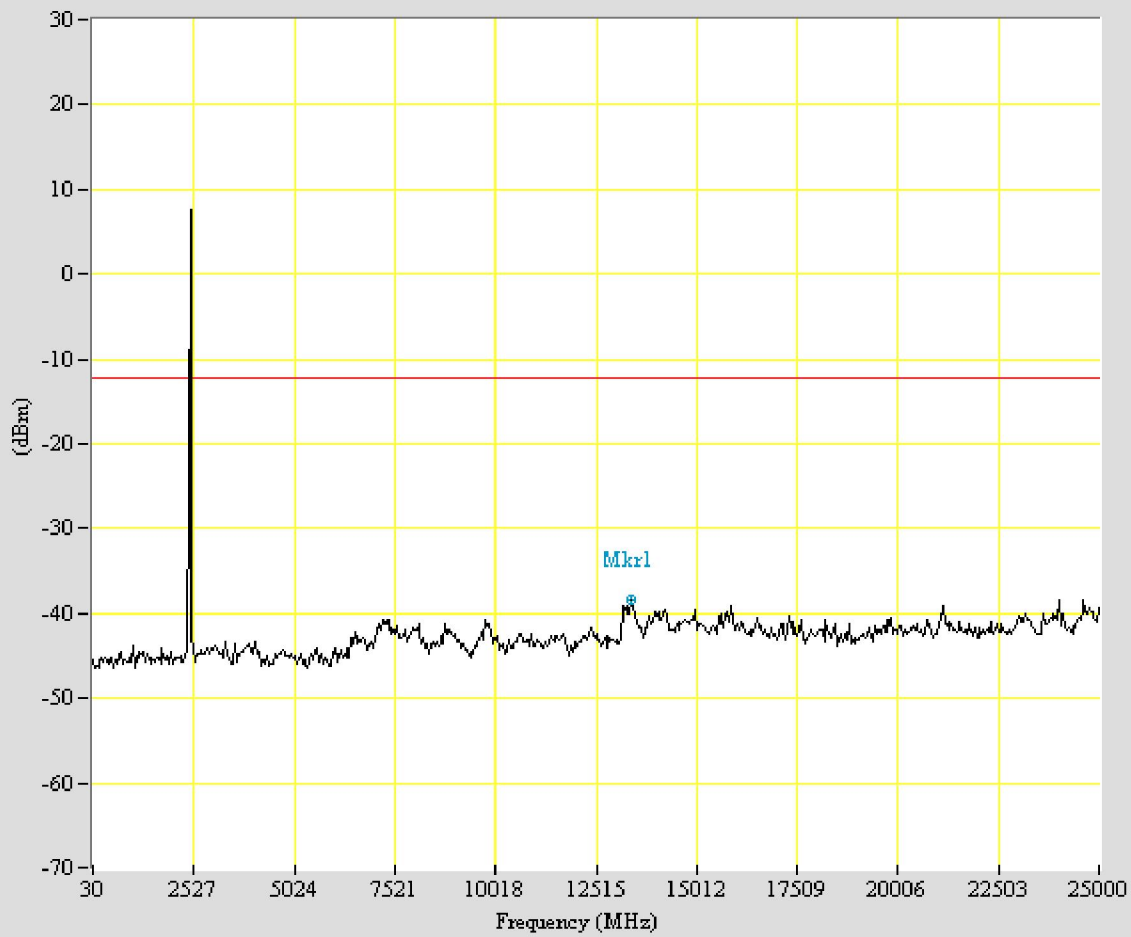
```

```

Display Line -13.500dBm
Marker 24625.450MHz -38.160dBm

```

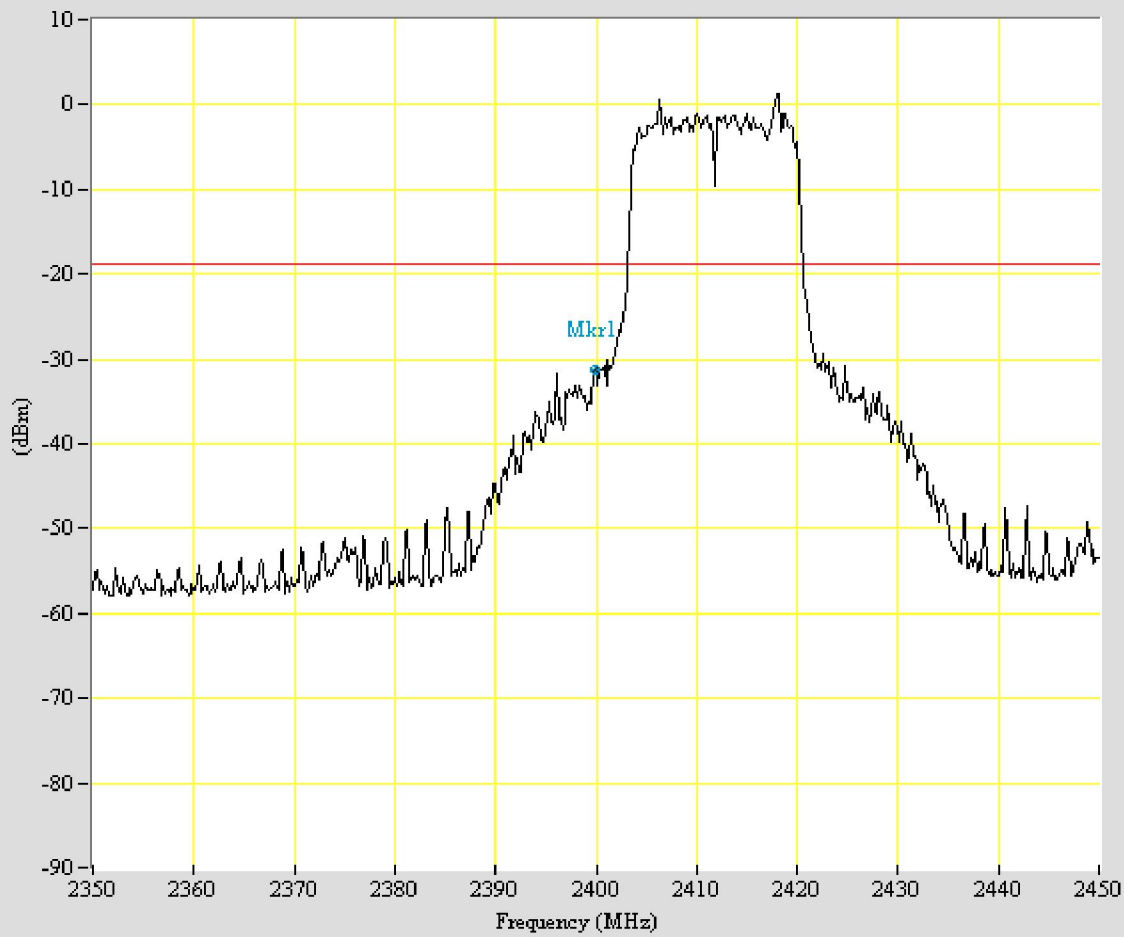
EUT: WLG100
 Purpose: Band_Edge_All
 Condition: 802,11b_CH06
 Note:



*Center 12515.0000MHz
 *SPAN 24970.0000MHz
 *RBW 100.00kHz
 *VBW 300.00kHz
 *SWP 6300.00msec
 *ATTEN 40.00dB
 *RL 30.00dBm

Display Line -12.330dBm
 Marker 13388.950MHz -38.500dBm

EUT: WLG100
 Purpose: Band_Edge_All
 Condition: 802,11b_CH11
 Note:



*Center 2400.0000MHz

*SPAN 100.0000MHz

*RBW 100.00kHz

*VBW 300.00kHz

*SWP 50.00msec

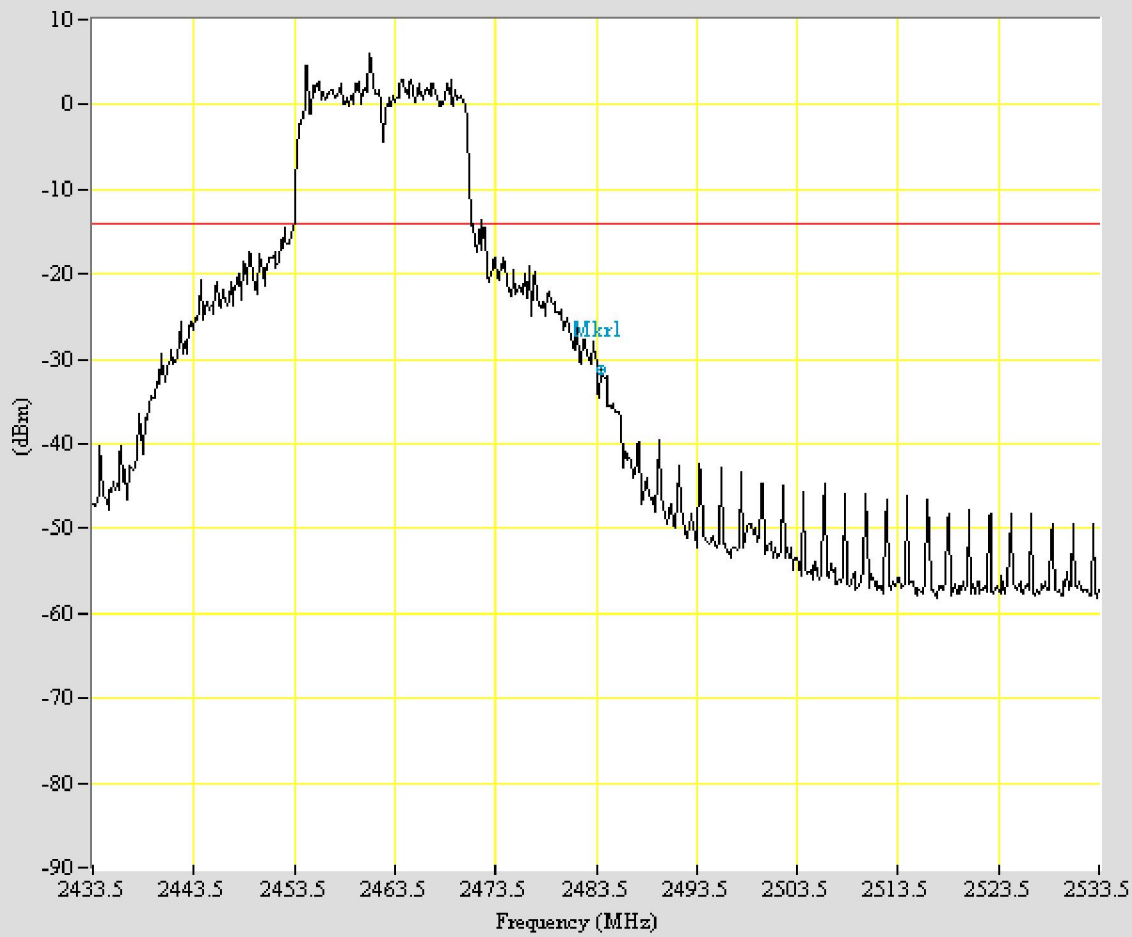
*ATTEN 20.00dB

*RL 10.00dBm

Display Line -18.660dBm

Marker 2399.833MHz -31.330dBm

EUT: WLG100
Purpose: Band_Edge
Condition: 802,11g_CH01
Note:



*Center 2483.5000MHz

*SPAN 100.0000MHz

*RBW 100.00kHz

*VBW 300.00kHz

*SWP 50.00msec

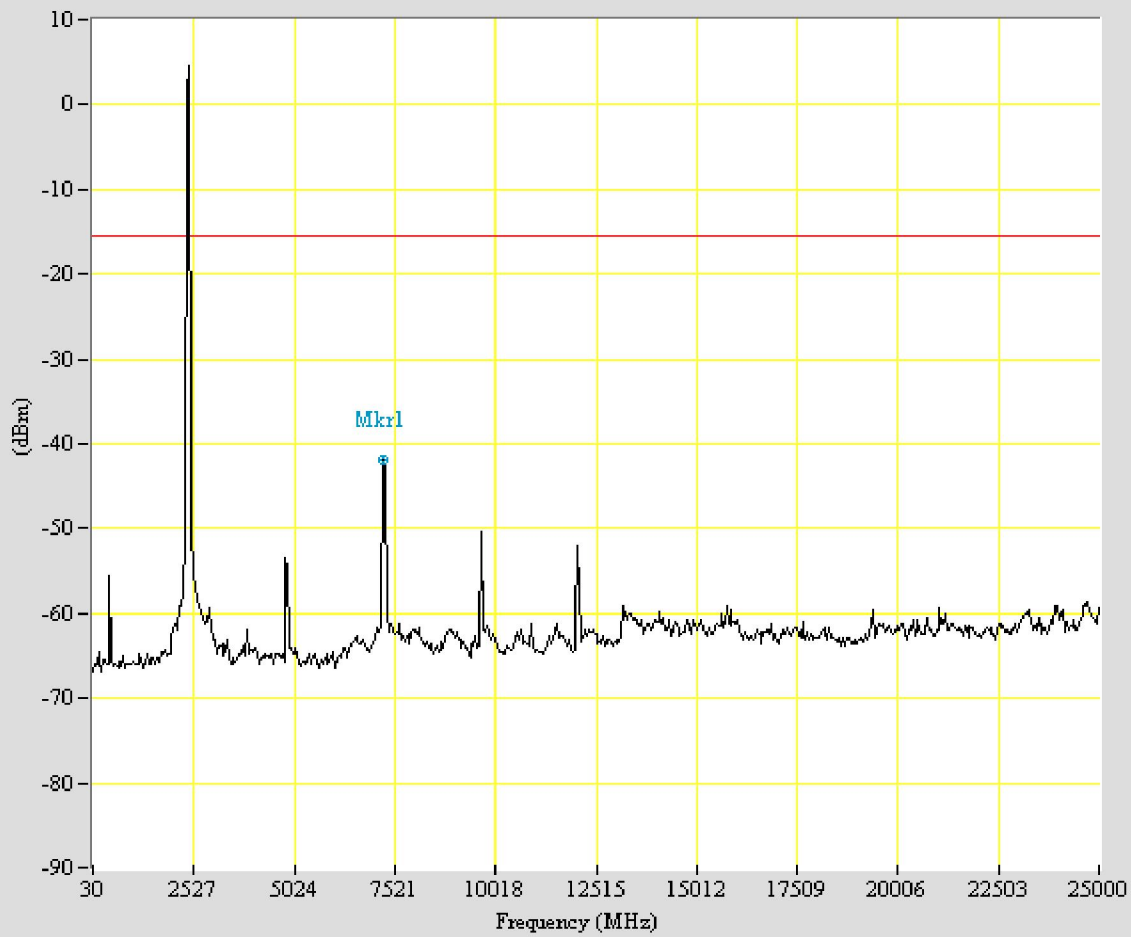
*ATTEN 20.00dB

*RL 10.00dBm

Display Line -14.000dBm

Marker 2484.000MHz -31.330dBm

EUT: WLG100
Purpose: Band_Edge
Condition: 802,11g_CH11
Note:



*Center 12515.0000MHz

*SPAN 24970.0000MHz

*RBW 100.00kHz

*VBW 300.00kHz

*SWP 6300.00msec

*ATTEN 20.00dB

*RL 10.00dBm

Display Line -15.500dBm

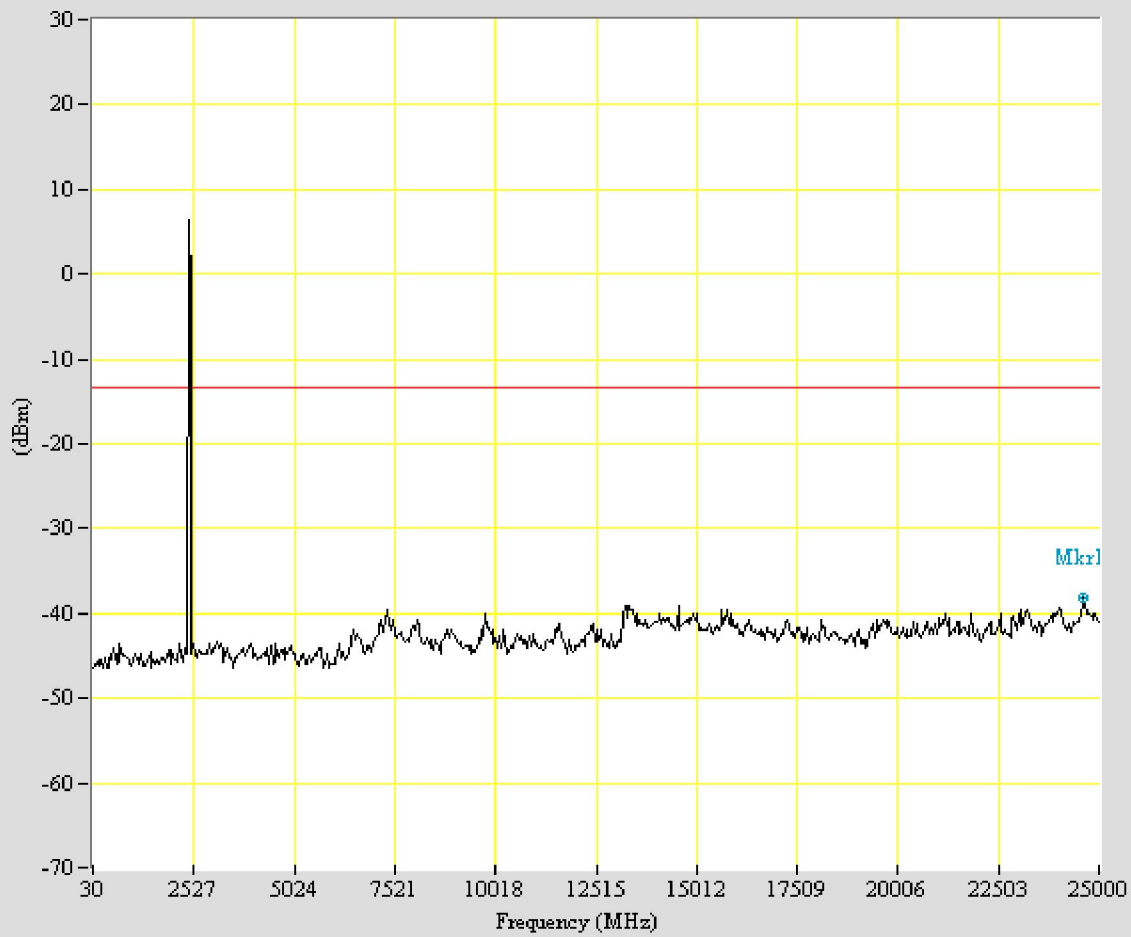
Marker 7229.683MHz -41.830dBm

EUT: WLG100

Purpose: Band_Edge_All

Condition: 802,11g_CH01

Note:



```

*Center 12515.0000MHz
*SPAN 24970.0000MHz
*RBW 100.00kHz
*VBW 300.00kHz
*SWP 6300.00msec
*ATTEN 40.00dB
*RL 30.00dBm

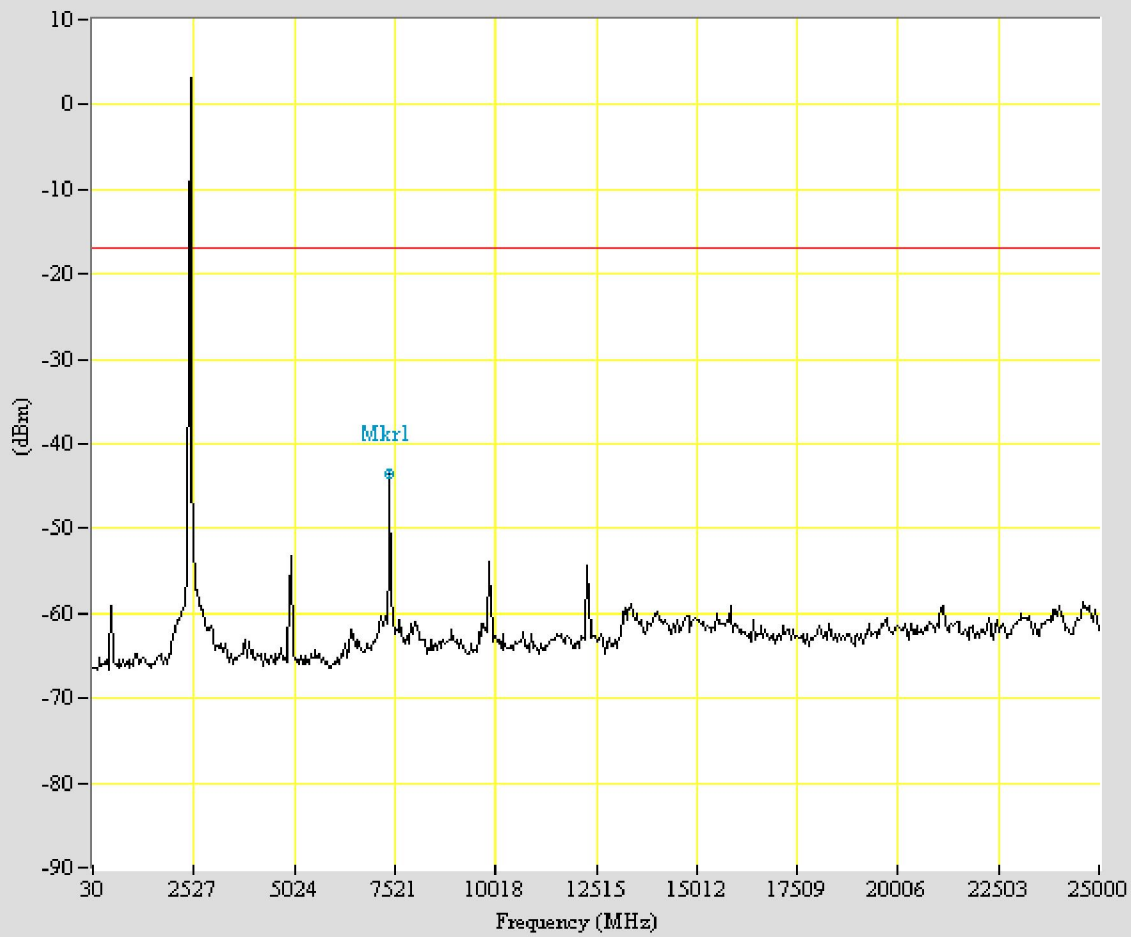
```

```

Display Line -13.500dBm
Marker 24625.450MHz -38.160dBm

```

EUT: WLG100
 Purpose: Band_Edge_All
 Condition: 802,11b_CH06
 Note:



*Center 12515.0000MHz

*SPAN 24970.0000MHz

*RBW 100.00kHz

*VBW 300.00kHz

*SWP 6300.00msec

*ATTEN 20.00dB

*RL 10.00dBm

Display Line -16.830dBm

Marker 7396.150MHz -43.500dBm

EUT: WLG100

Purpose: Band_Edge_All

Condition: 802,11g_CH11

Note:

10 RADIATED EMISSION MEASUREMENT

10.1 Standard Applicable

For unintentional radiator, the radiated emission shall comply with §15.109(a).

For intentional radiators, according to §15.247 (a), operation under this provision is limited to frequency hopping and direct sequence spread spectrum, and the out band emission shall be comply with §15.247 (c)

10.2 Measurement Procedure

1. Setup the configuration per figure 3 and 4 for frequencies measured below and above 1 GHz respectively.
2. For emission frequencies measured below 1 GHz, it is performed in a semi-anechoic chamber to determine the accurate frequencies of higher emissions. For emission frequencies measured above 1 GHz, a pre-scan be performed with a 1 meter measuring distance before final test.
3. For emission frequencies measured below and above 1 GHz, set the spectrum analyzer on a 120 kHz and 1 MHz resolution bandwidth respectively for each frequency measured in step 2.
4. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on spectrum analyzer, then change the orientation of EUT on test table over a range from 0° to 360° with a speed as slow as possible, and keep the azimuth that highest emission is indicated on the spectrum analyzer. Vary the antenna position again and record the highest value as a final reading. A RF test receiver is also used to confirm emissions measured.

Note : A filter was used to avoid pre-amplifier saturated when measure TX operation mode.

5. Repeat step 4 until all frequencies need to be measured were complete.
6. Repeat step 5 with search antenna in vertical polarized orientations.
7. Check the three frequencies of highest emission with varying the datarate, placement of ANT. cables associated with EUT to obtain the worse case and record the result.

Figure 3 : Frequencies measured below 1 GHz configuration

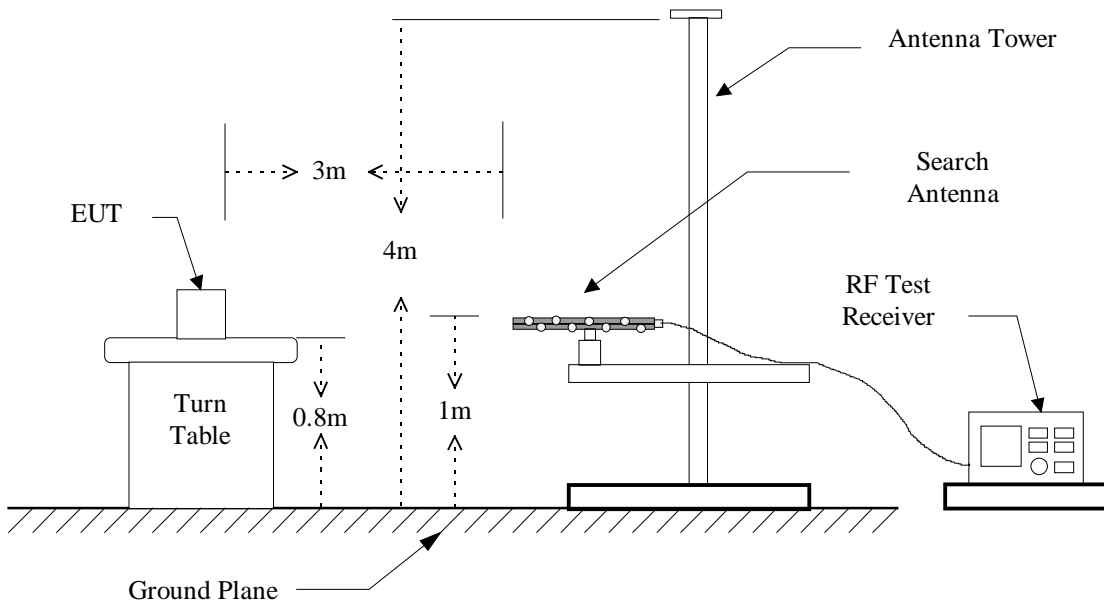
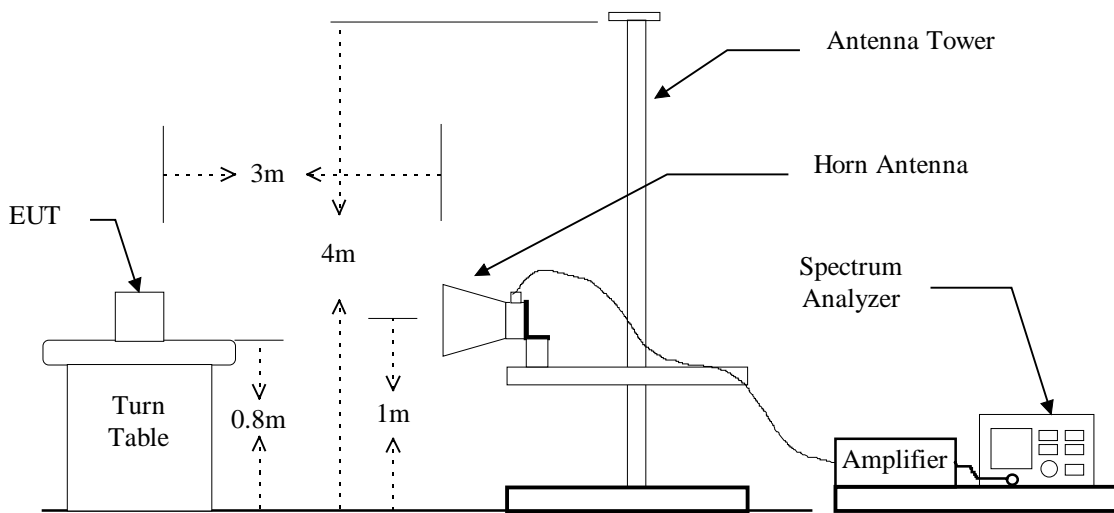


Figure 4 : Frequencies measured above 1 GHz configuration



10.3 Measuring Instrument

The following instrument are used for radiated emissions measurement :

Equipment	Manufacturer	Model No.	Next Cal. Due
EMI Test Receiver	Hewlett-Packard	8546A	01/31/2005
BiconiLog Antenna	Schwarzbeck	9160	10/18/2004
Horn Antenna	EMCO	3115	05/09/2005
Horn Antenna	EMCO	3116	06/28/2005
Preamplifier	Hewlett-Packard	8449B	09/17/2005
Spectrum Analyzer	Hewlett-Packard	8564EC	09/16/2005

Measuring instrument setup in measured frequency band when specified detector function is used :

Frequency Band (MHz)	Instrument	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	RF Test Receiver	Quasi-Peak	120 kHz	300 kHz
	Spectrum Analyzer	Peak	120 kHz	300 kHz
Above 1000	Spectrum Analyzer	Peak	1 MHz	1 MHz
	Spectrum Analyzer	Average	1 MHz	10 Hz

10.4 Radiated Emission Data**10.4.1 Harmonic**

10.4.1.1 IEEE 802.11b

Operation Mode: Receiving /Transmitting

Test Date: Jun. 18, 2004Temperature: 24Humidity: 59 %

a) Channel 1

Fundamental Frequency: 2412 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H		V			Peak	Ave	Peak	Ave.			
	Peak	Ave	Peak	Ave								
4824.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
7236.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
12060.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
14472.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
19296.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---

b) Channel 6

Fundamental Frequency: 2437 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H		V			Peak	Ave	Peak	Ave.			
	Peak	Ave	Peak	Ave								
4874.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
7311.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
12185.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
19496.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---

c) Channel 11

Fundamental Frequency: 2462 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H		V			Peak	Ave	Peak	Ave.			
	Peak	Ave	Peak	Ave								
4924.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
7386.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
19696.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
22158.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
19296.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---

Note :

1. Item of margin shown in above table refer to average limit.
2. Remark “---” means that the emissions level is too low to be measured.
3. Item “Margin” referred to Average limit while there is only peak result.

10.4.1.2 IEEE 802.11g

Operation Mode: Receiving /Transmitting

Test Date: Jun. 18, 2004Temperature: 24Humidity: 59 %

a) Channel 1

Fundamental Frequency: 2412 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H		V			Peak	Ave	Peak	Ave.			
	Peak	Ave	Peak	Ave								
4824.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
7236.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
12060.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
14472.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
19296.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---

b) Channel 6

Fundamental Frequency: 2437 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H		V			Peak	Ave	Peak	Ave.			
	Peak	Ave	Peak	Ave								
4874.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
7311.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
12185.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
19496.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---

c) Channel 11

Fundamental Frequency: 2462 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H		V			Peak	Ave	Peak	Ave.			
	Peak	Ave	Peak	Ave								
4924.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
7386.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
19696.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
22158.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---
19296.000	---	---	---	---	---	---	---	74.0	54.0	---	---	---

Note :

1. Item of margin shown in above table refer to average limit.
2. Remark “---” means that the emissions level is too low to be measured.
3. Item “Margin” referred to Average limit while there is only peak result.

10.4.2 Spurious Emission

10.4.2.1 IEEE 802.11b

Test Date: Jun. 18, 2004Temperature: 24Humidity: 59 %

a) Emission frequencies below 1 GHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result @3m (dBuV/m)	Limit @3m (dBuV/m)	Margin (dB)
240.490	H	22.8	14.6	37.4	46.0	-8.6
271.530	H	22.7	15.7	38.4	46.0	-7.6
285.110	H	25.9	15.7	41.6	46.0	-4.4
286.080	V	23.2	15.7	38.9	46.0	-7.1
402.480	H	22.9	19.4	42.3	46.0	-3.7
407.330	V	22.7	19.4	42.1	46.0	-3.9
431.580	H	17.8	20.1	37.9	46.0	-8.1
434.490	V	21.8	20.1	41.9	46.0	-4.1
504.330	V	15.3	21.5	36.8	46.0	-9.2
667.290	V	13.9	25.7	39.6	46.0	-6.4
793.390	H	10.8	27.6	38.4	46.0	-7.6
793.390	V	12.7	27.6	40.3	46.0	-5.7

b) Emission frequencies above 1 GHz

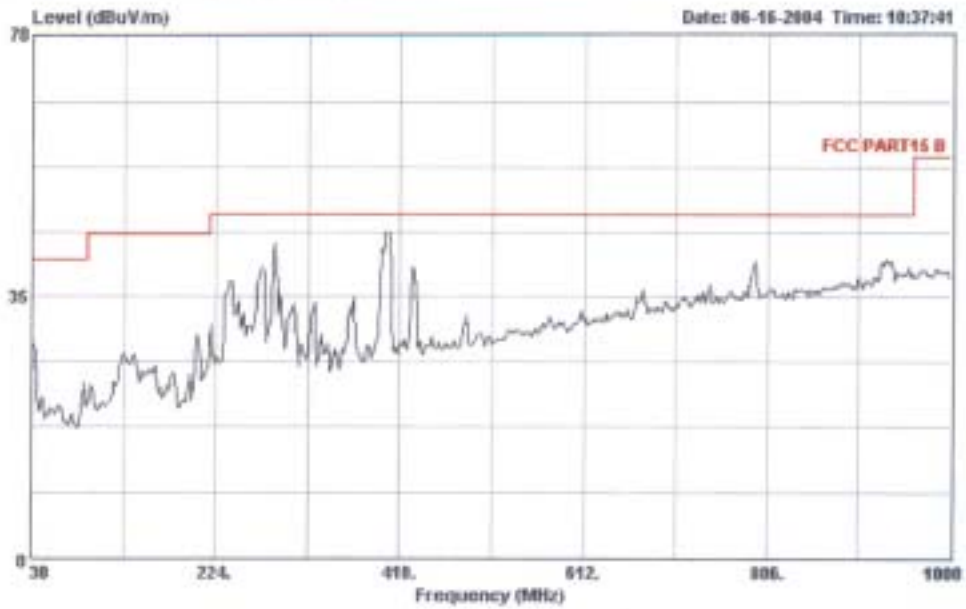
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result @3m (dBuV/m)	Limit @3m (dBuV/m)	Margin (dB)
Radiated emission frequencies above 1 GHz to 25 GHz were too low to be measured.						

Note : Please refer to page 67 to page 71 for chart



ETC TEST LABORATORY

Data#: 41 File#: C:\GEORGE\2004.eml

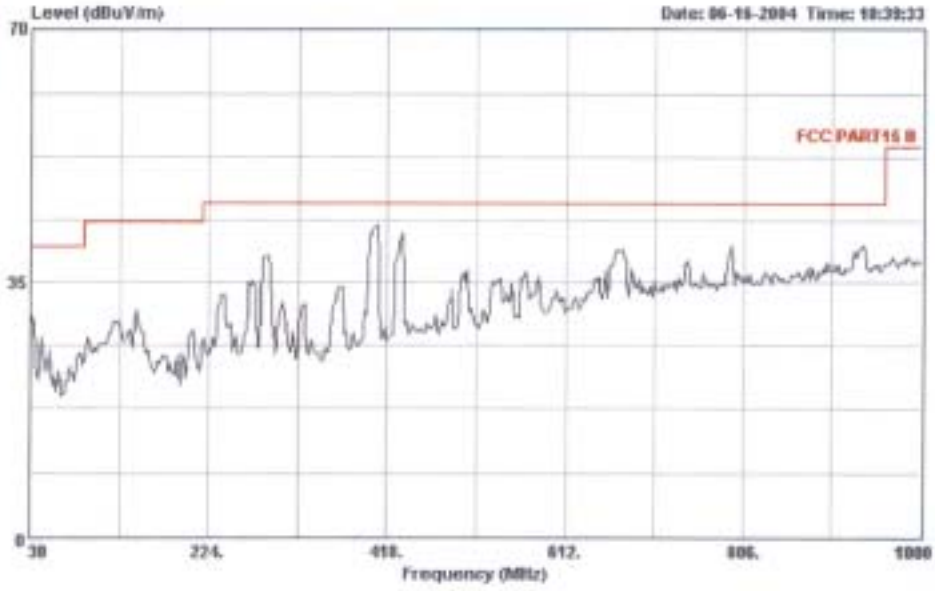


Site : M00 SITE
Condition : FCC PART15 B 3m HORIZONTAL
EUT : WLG 100 - 3A
MODEL : 002.11b (CH5)
Memo :

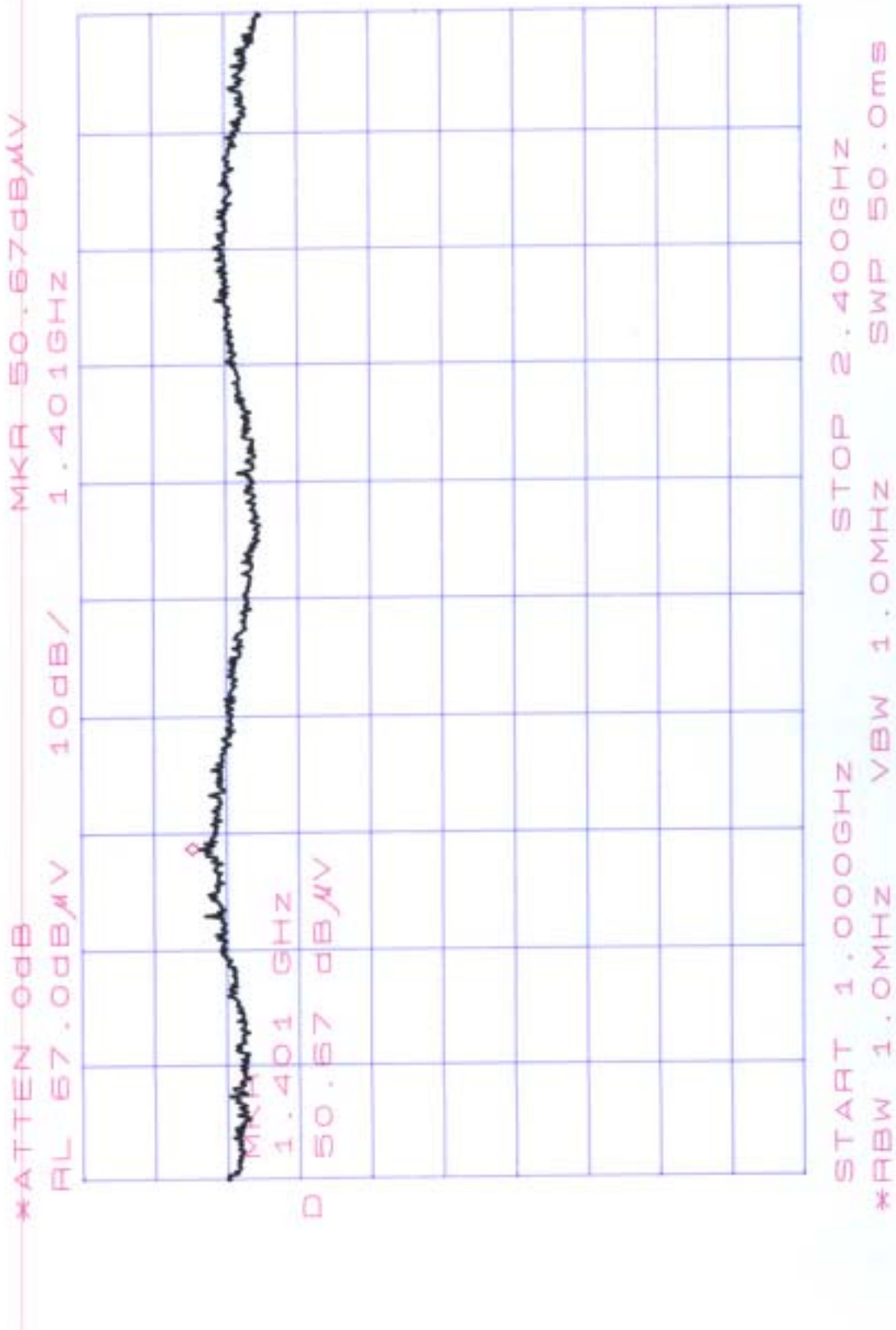


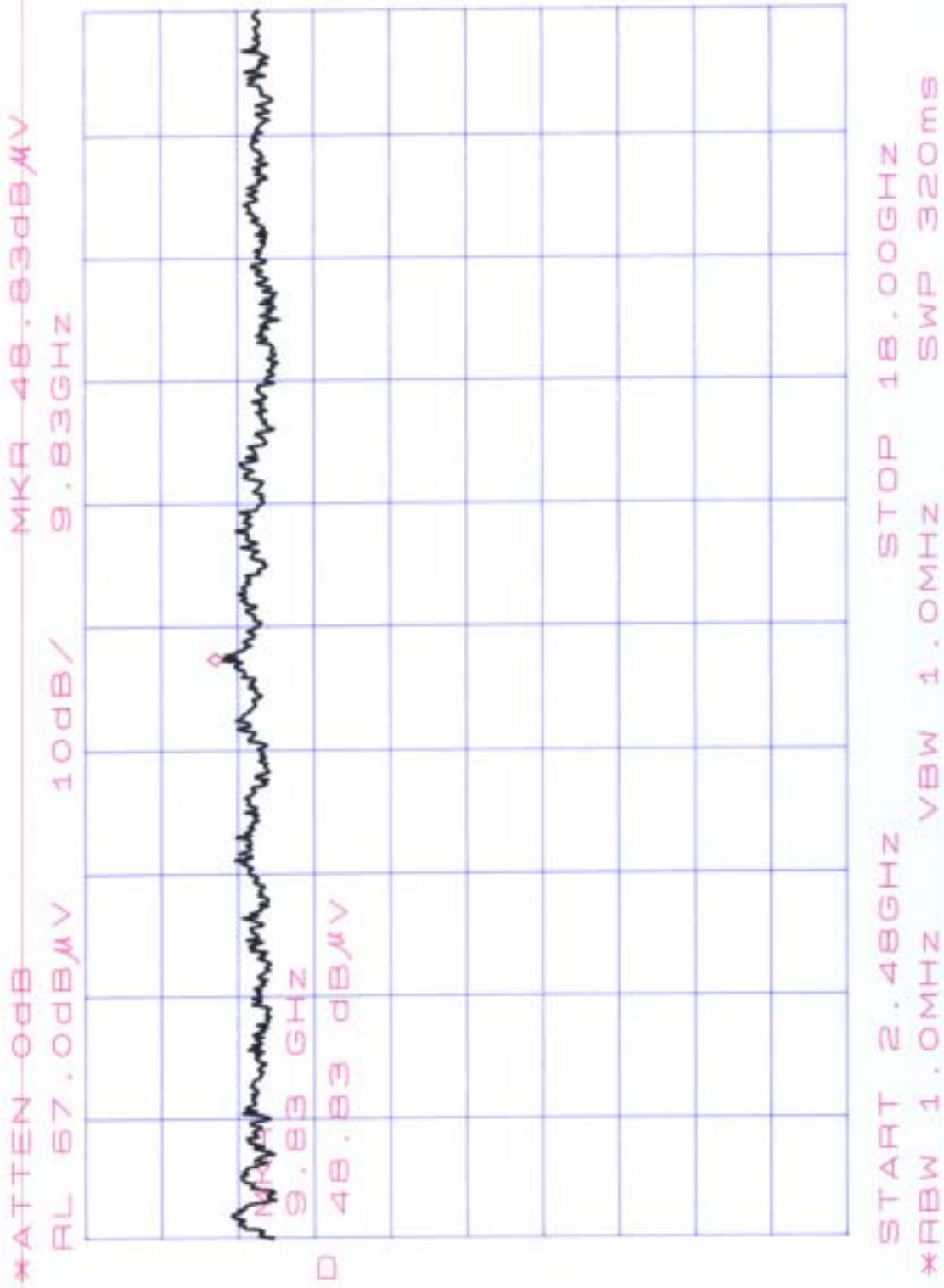
ETC TEST LABORATORY

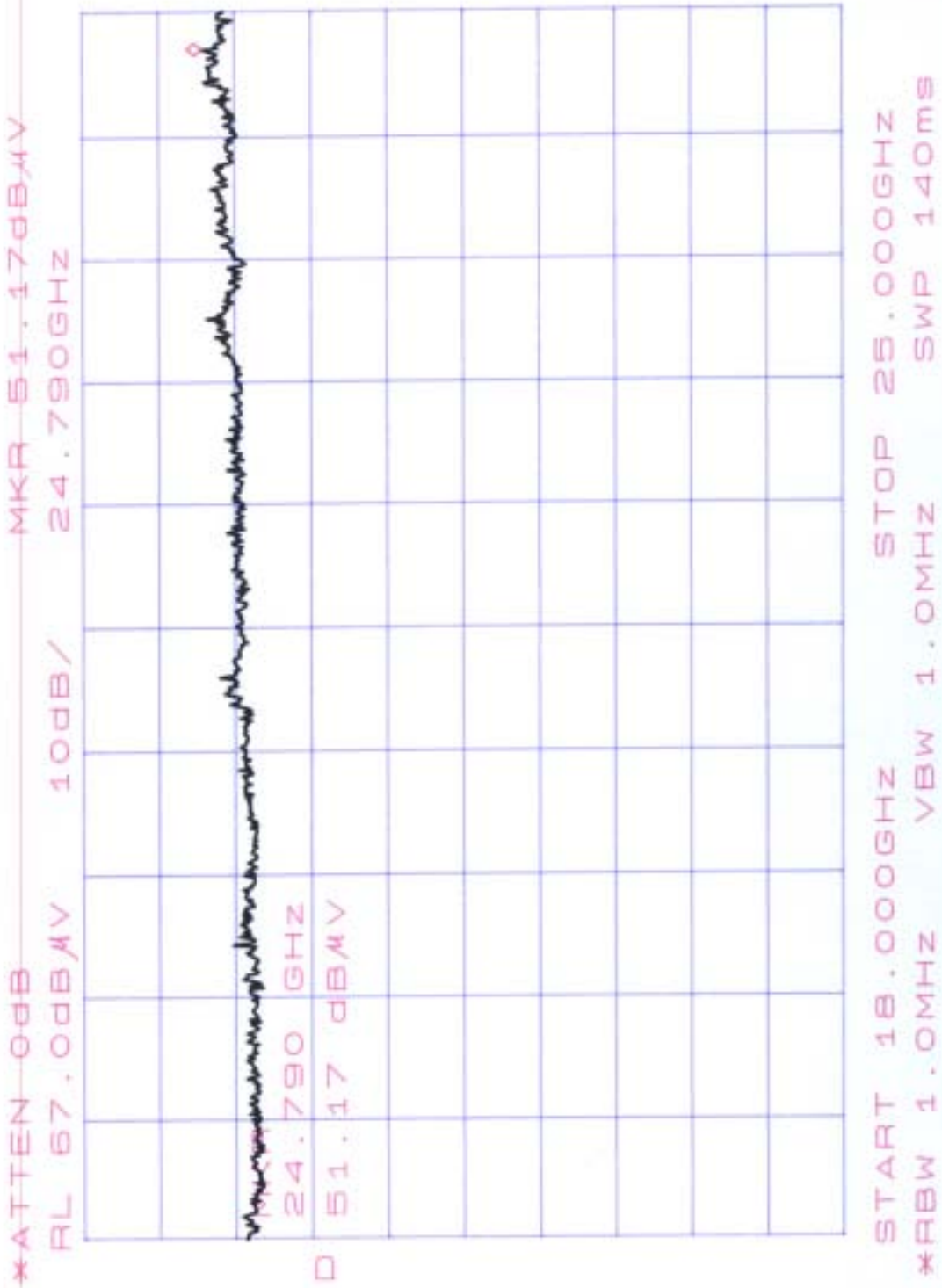
Data#: 43 File#: C:\GEORGE\2004.emi



Site : M00 SITE
Condition : FCC PART15 B 3m VERTICAL
EUT : WLG 100 - 3A
MODEL : 802.11b (CH6)
Memo :







10.4.2.2 IEEE 802.11g

Test Date: Jun. 18, 2004Temperature: 24Humidity: 59 %

a) Emission frequencies below 1 GHz

Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result @3m (dBuV/m)	Limit @3m (dBuV/m)	Margin (dB)
237.580	H	23.5	13.7	37.2	46.0	-8.8
237.580	V	18.7	13.7	32.4	46.0	-13.6
286.080	H	27.0	15.7	42.7	46.0	-3.3
286.080	V	23.4	15.7	39.1	46.0	-6.9
361.740	V	17.3	18.1	35.4	46.0	-10.6
400.540	H	23.5	19.4	42.9	46.0	-3.1
407.330	V	22.2	19.4	41.6	46.0	-4.4
431.580	H	17.5	20.1	37.6	46.0	-8.4
431.580	V	22.2	20.1	42.3	46.0	-3.7
790.480	V	15.5	27.6	43.1	46.0	-2.9
793.390	H	11.6	27.6	39.2	46.0	-6.8
929.190	H	10.5	29.4	39.9	46.0	-6.1

b) Emission frequencies above 1 GHz

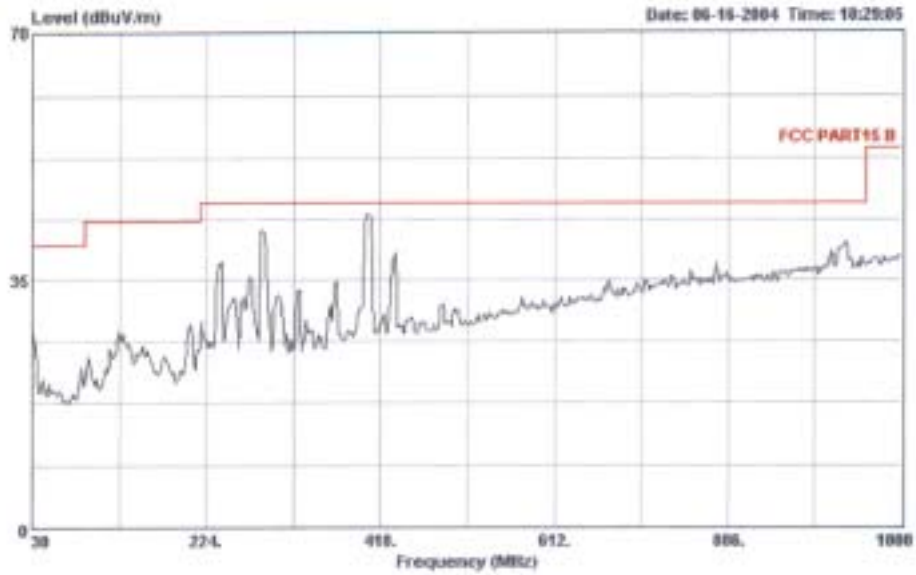
Frequency (MHz)	Ant-Pol H/V	Meter Reading (dBuV)	Corrected Factor (dB)	Result @3m (dBuV/m)	Limit @3m (dBuV/m)	Margin (dB)
Radiated emission frequencies above 1 GHz to 25 GHz were too low to be measured.						

Note : Please refer to page 73 to page 77 for chart



ETC TEST LABORATORY

Data#: 33 File#: C:\GEORGE\2004.em1

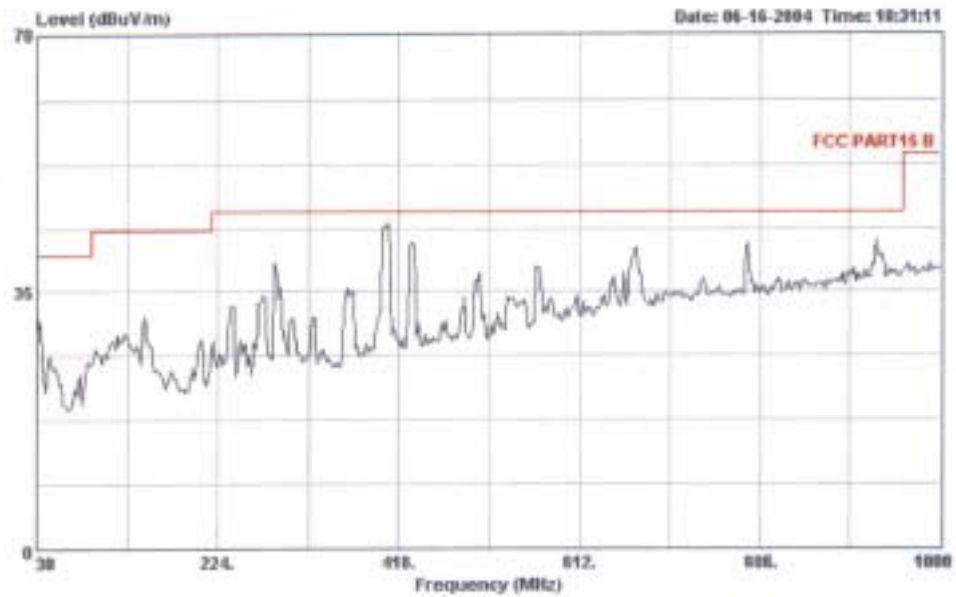


Site : HQ SITE
Condition : FCC PART 15 B 3m HORIZONTAL
EUT : WLG 100 - 3A
MODEL : 002.11g (CH1)
Resp :

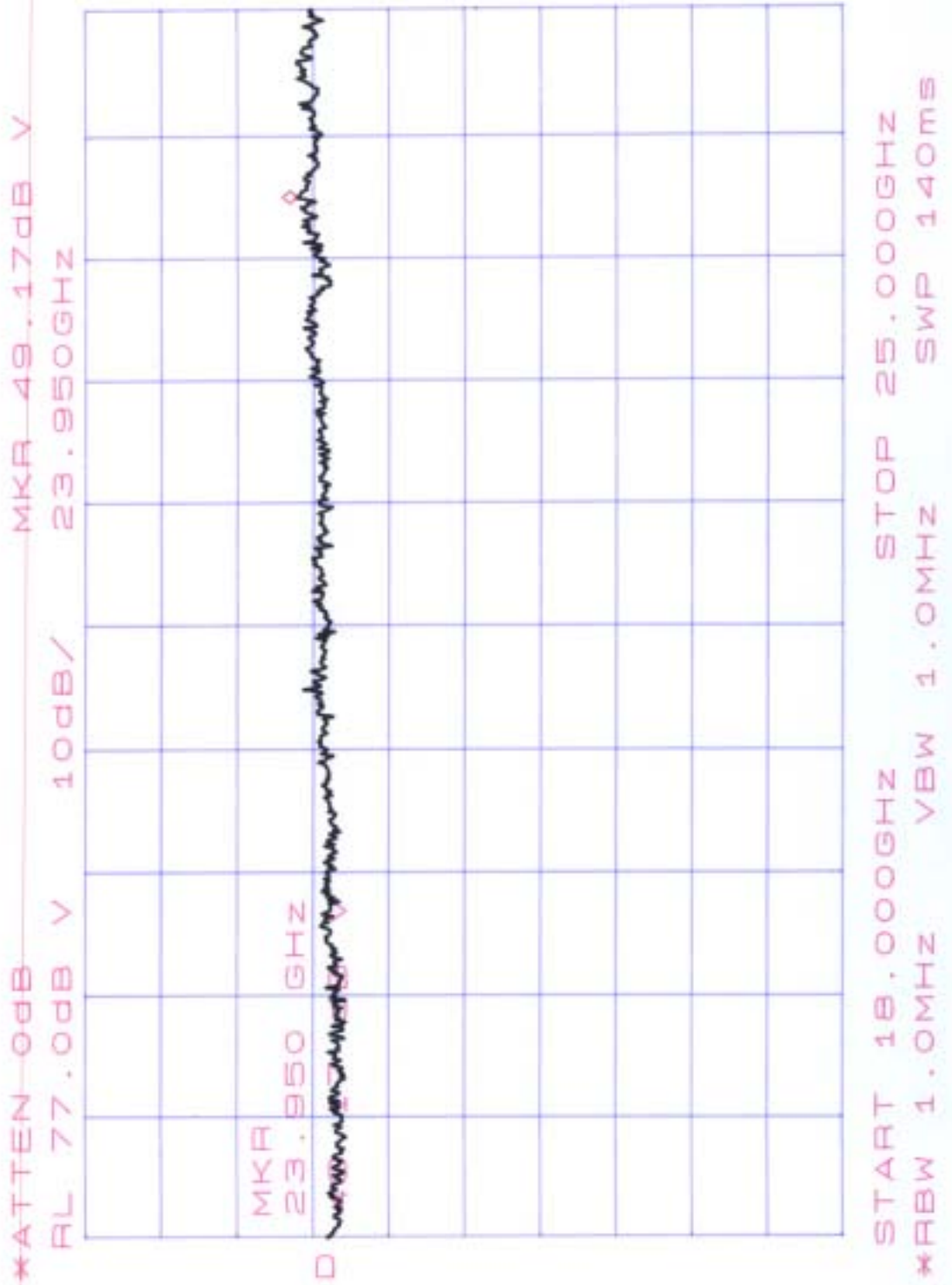


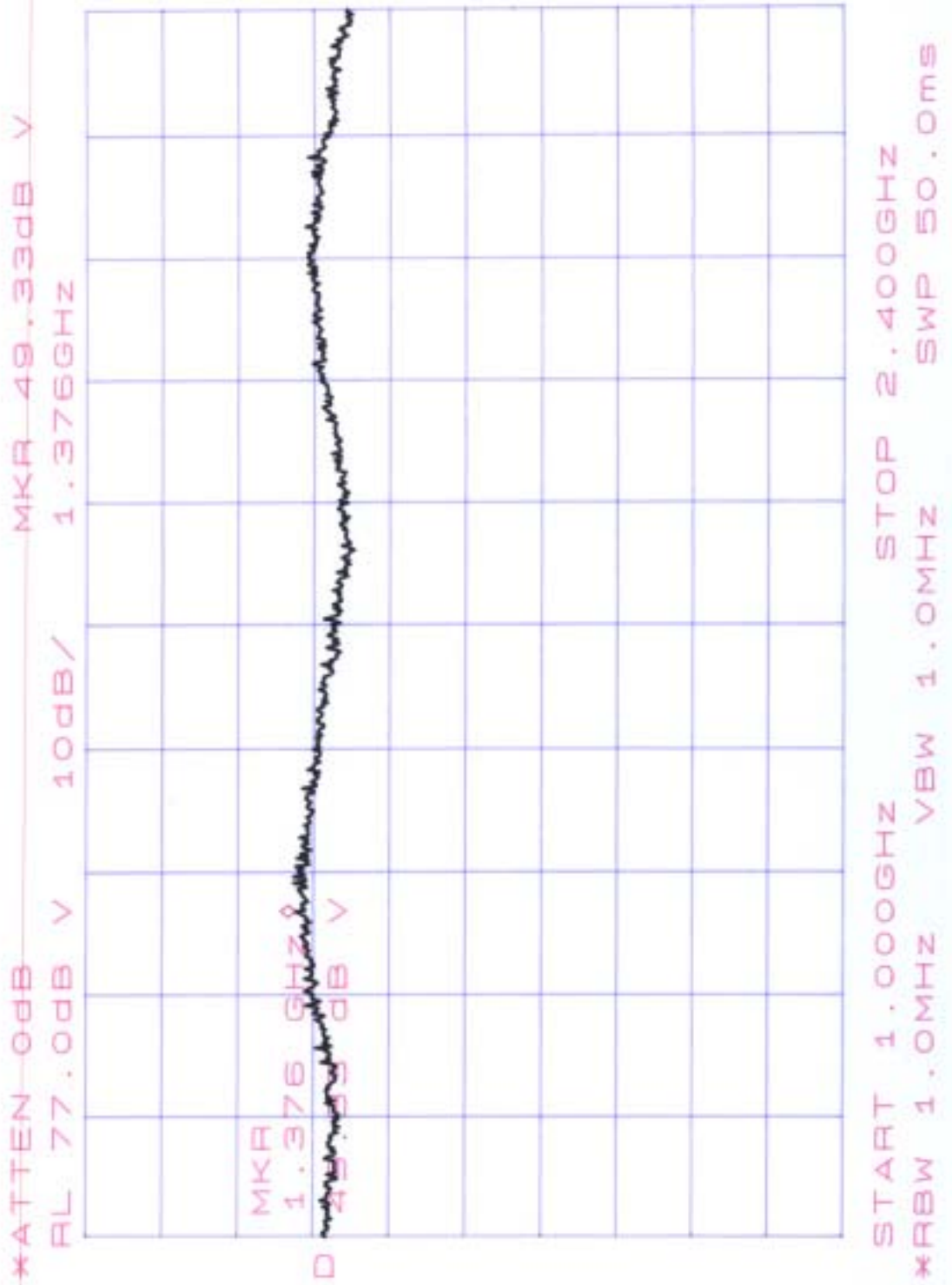
ETC TEST LABORATORY

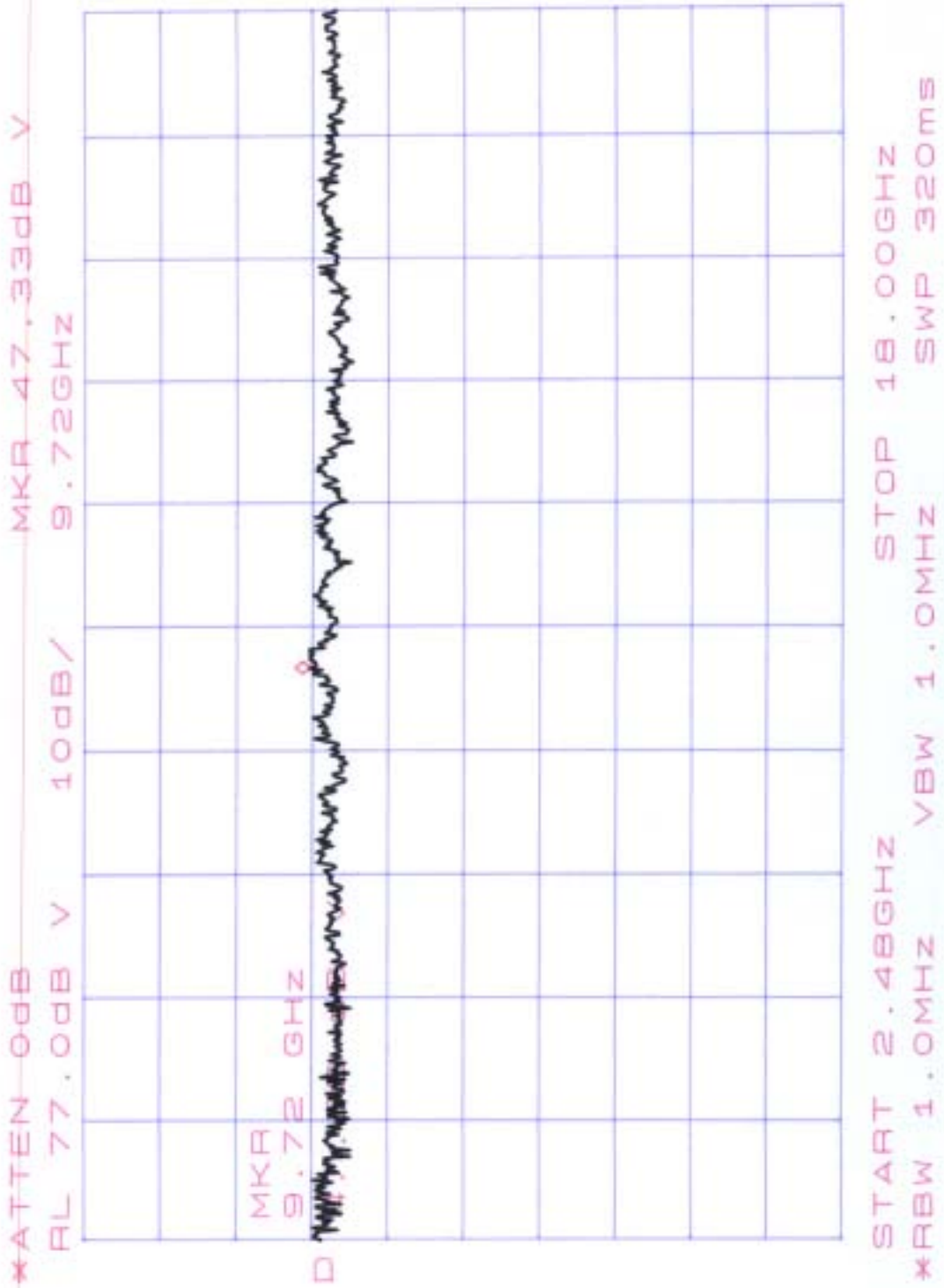
Date#: 35 File#: C:\GEORGE\2004.es1



Site : 800 SITE
Condition : FCC PART15 B 3m VERTICAL
EUT : WLG 100 - 3A
MODEL : 802.11g (CH11)
Memo :







10.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor, High Pass Filter Loss(if used) and Cable Loss, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation calculation is as follows:

$$\mathbf{Result = Reading + Corrected Factor}$$

where

$$\text{Corrected Factor} = \text{Antenna Factor} + \text{Cable Loss} + \text{High Pass Filter Loss} - \text{Amplifier Gain}$$

11 RADIATED MEASUREMENT AT BANDEDGE WITH FUNDAMENTAL FREQUENCIES

11.1 Standard Applicable

According to 15.247(c), radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

11.2 Measurement Procedure

1. Setup the configuration per figure 2 for 2.39GHz and 2.4835GHz measured.
2. Set the spectrum analyzer on 1MHz resolution bandwidth for each frequency measured.
3. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on spectrum analyzer, then change the orientation of EUT on test table over a range from 0° to 360° with a speed as slow as possible, and keep the azimuth that highest emission is indicated on the spectrum analyzer. Vary the antenna position again and record the highest value as a final reading. A RF test receiver is also used to confirm emissions measured.
4. Repeat step 3 until all frequencies need to be measured were complete.
5. Repeat step 4 with search antenna in vertical polarized orientations.
6. Measurement applied to channel 1、 6、 11, recorded the result.

11.3 Measuring Instrument

The following instrument are used for radiated emissions measurement:

Equipment	Manufacturer	Model No.	Next Cal. Due
EMI Test Receiver	Hewlett-Packard	8546A	01/31/2005
Horn Antenna	EMCO	3115	05/09/2005
BiconiLog Antenna	Schwarzbeck	9160	10/18/2004
Horn Antenna	EMCO	3116	06/28/2005
Preamplifier	Hewlett-Packard	8449B	09/17/2005
Spectrum Analyzer	Hewlett-Packard	8564EC	09/16/2005

Measuring instrument setup in measured frequency band when specified detector function is used:

Frequency Band (MHz)	Instrument	Function	Resolution bandwidth	Video Bandwidth
2390 & 2483.5	Spectrum Analyzer	Peak	1 MHz	1 MHz
	Spectrum Analyzer	Average	1 MHz	10 Hz

11.4 Radiated Emission Data

(1) IEEE 802.11b

Test Date: Jun. 18, 2004Temperature: 24Humidity: 59 %

a) Channel 1

Operation Mode: Receiving /Transmitting

Fundamental Frequency: 2412 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H Peak	Ave	V Peak	Ave		Peak	Ave	Peak	Ave.			
2390.000	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---
2483.500	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---

b) Channel 6

Operation Mode: Receiving / Transmitting

Fundamental Frequency: 2437 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H Peak	Ave	V Peak	Ave		Peak	Ave	Peak	Ave.			
2390.000	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---
2483.500	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---

c) Channel 11

Operation Mode: Receiving / Transmitting

Fundamental Frequency: 2462 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H Peak	Ave	V Peak	Ave		Peak	Ave	Peak	Ave.			
2390.000	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---
2483.500	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---

(2) IEEE 802.11g

Test Date: Jun. 18, 2004Temperature: 24Humidity: 59 %

a) Channel 1

Operation Mode: Receiving /Transmitting

Fundamental Frequency: 2412 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H Peak	V Ave	H Peak	V Ave		Peak	Ave	Peak	Ave.			
2375.730	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---
2485.950	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---

b) Channel 6

Operation Mode: Receiving / Transmitting

Fundamental Frequency: 2437 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H Peak	V Ave	H Peak	V Ave		Peak	Ave	Peak	Ave.			
2389.300	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---
2489.140	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---

c) Channel 11

Operation Mode: Receiving / Transmitting

Fundamental Frequency: 2462 MHz

Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)	Table Deg. (Deg.)	Ant. High (m)
	H Peak	V Ave	H Peak	V Ave		Peak	Ave	Peak	Ave.			
2389.500	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---
2488.200	---	---	---	---	28.3	---	---	74.0	54.0	---	---	---