

RADIATED MEASUREMENT AT BANDEGE WITH FUNDAMENTAL FREQUENCIES

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).

2. Measurement Procedure

1. Setup the configuration per the setup photo at OATS for 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 modes need to be measured was complete.
5. Repeat step 4 with search antenna in vertical polarized orientations.

3. Measuring Instrument

The following instrument are used for radiated emissions measurement:

Equipment	Manufacturer	Model No.	Next Cal. Due
Horn Antenna	EMCO	3115	05/09/2005
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
2483.5	Spectrum Analyzer	Peak	1 MHz	1 MHz
	Spectrum Analyzer	Average	1 MHz	10 Hz

4. Radiated Emission Data

(1) IEEE 802.11b

Test Date: Sep. 30, 2004Temperature: 31Humidity: 45 %

Operation Mode: Receiving /Transmitting

Channel	Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)
		H		V			Peak	Ave	Peak	Ave.	
		Peak	Ave	Peak	Ave						
CH 11	2484.700	38.5	23.3	37.5	22.3	28.3	66.8	51.6	74.0	54.0	-2.4

(2) IEEE 802.11g

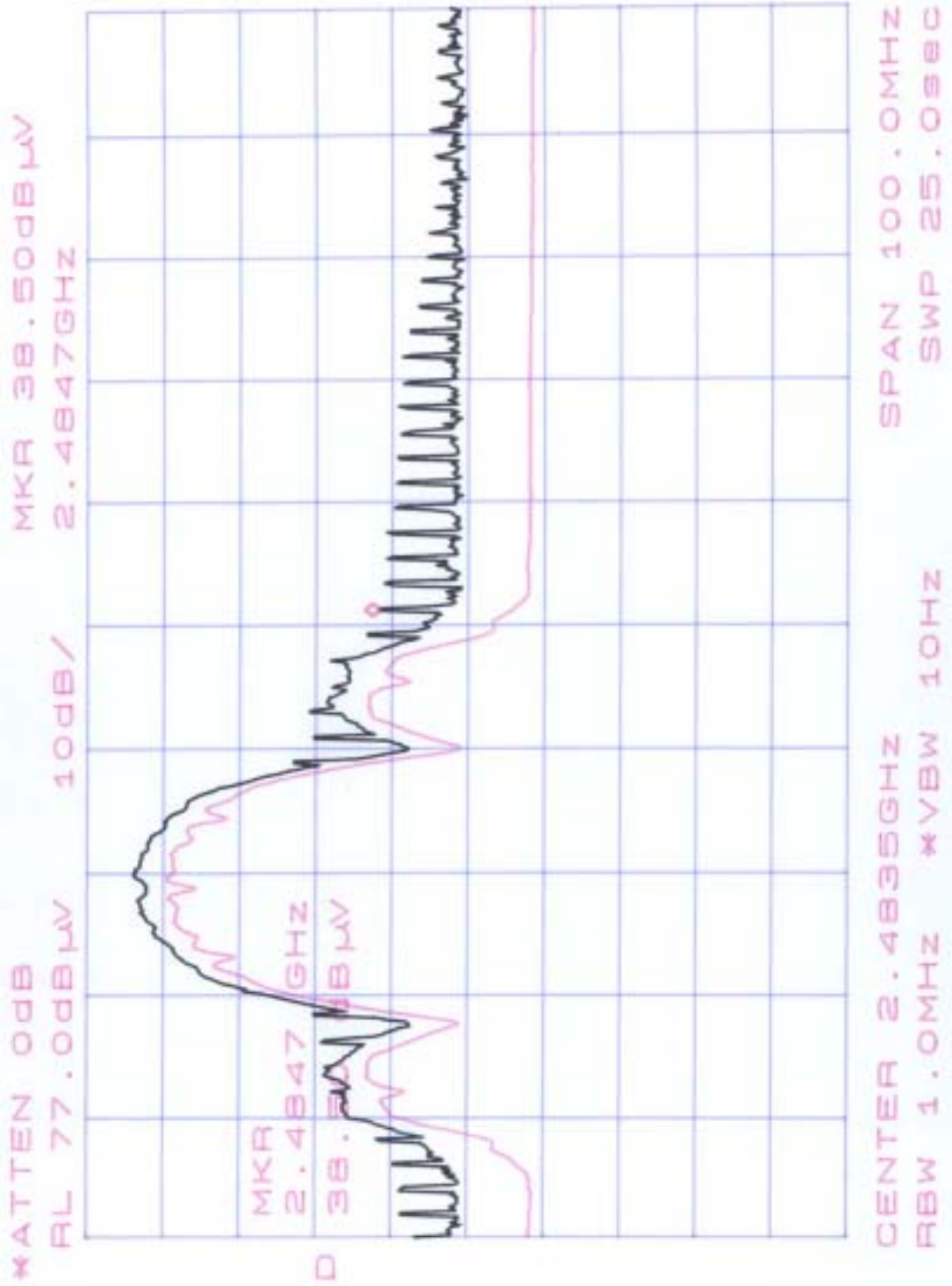
Test Date: Sep. 30, 2004Temperature: 31Humidity: 45 %

Operation Mode: Receiving /Transmitting

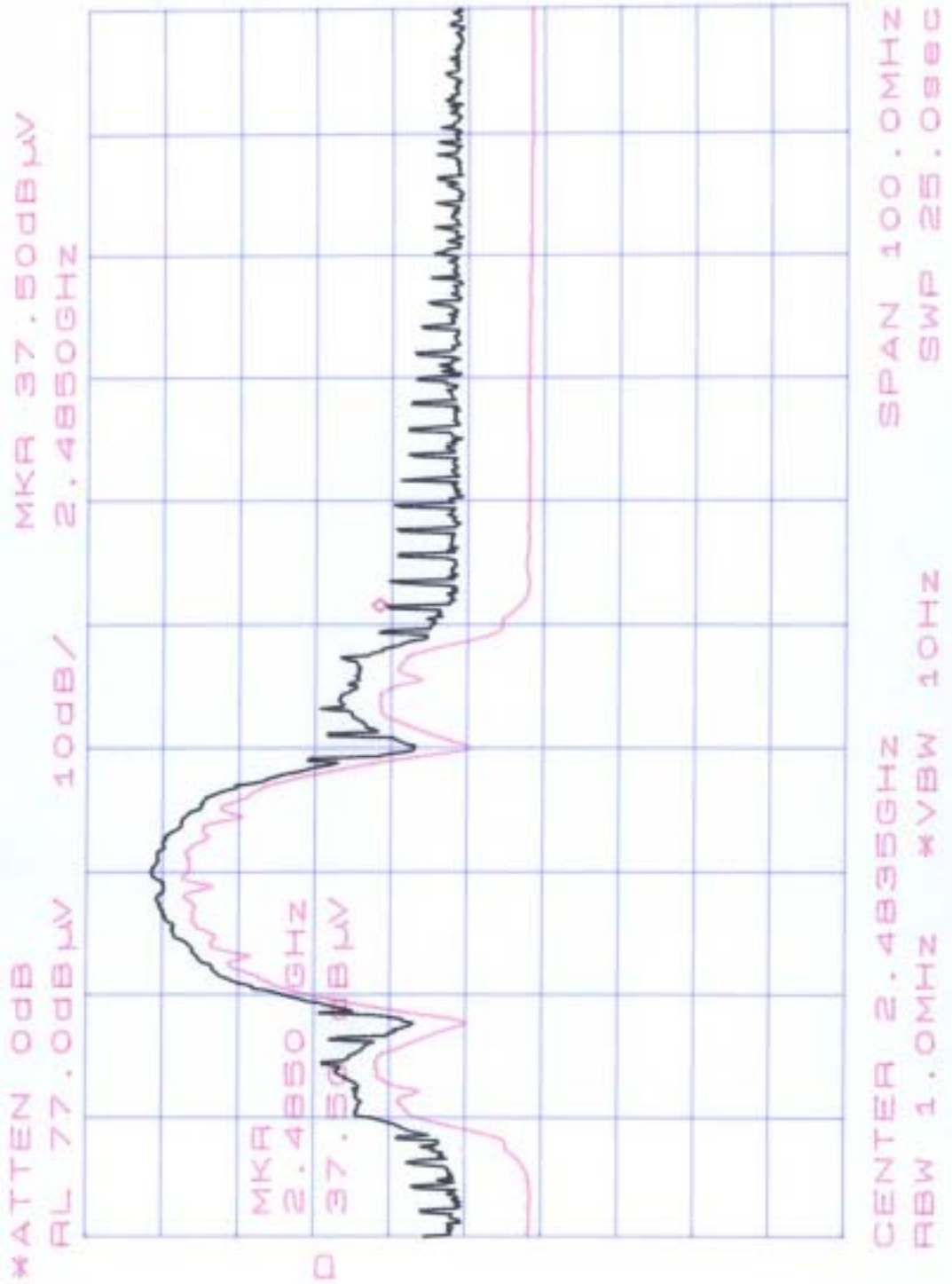
Channel	Frequency (MHz)	Reading (dBuV)				Factor (dB) Corr.	Result @3m (dBuV/m)		Limit @3m (dBuV/m)		Margin (dB)
		H		V			Peak	Ave	Peak	Ave.	
		Peak	Ave	Peak	Ave						
CH 11	2484.300	39.2	23.1	36.5	20.3	28.3	67.5	51.4	74.0	54.0	-2.6

Note : Please refer to page 4 to page 7 for chart

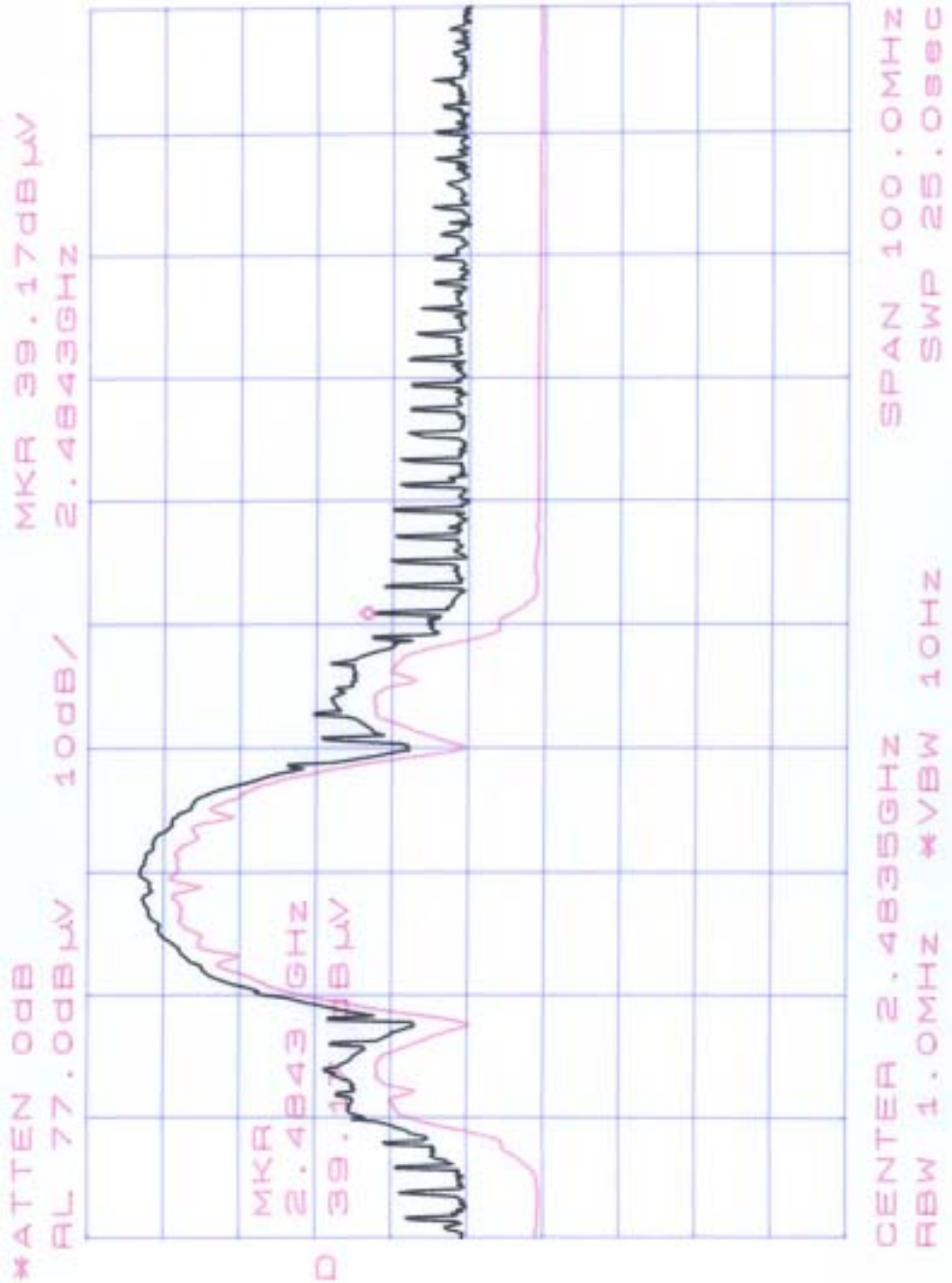
IEEE 802.11b Horizontal CH 11



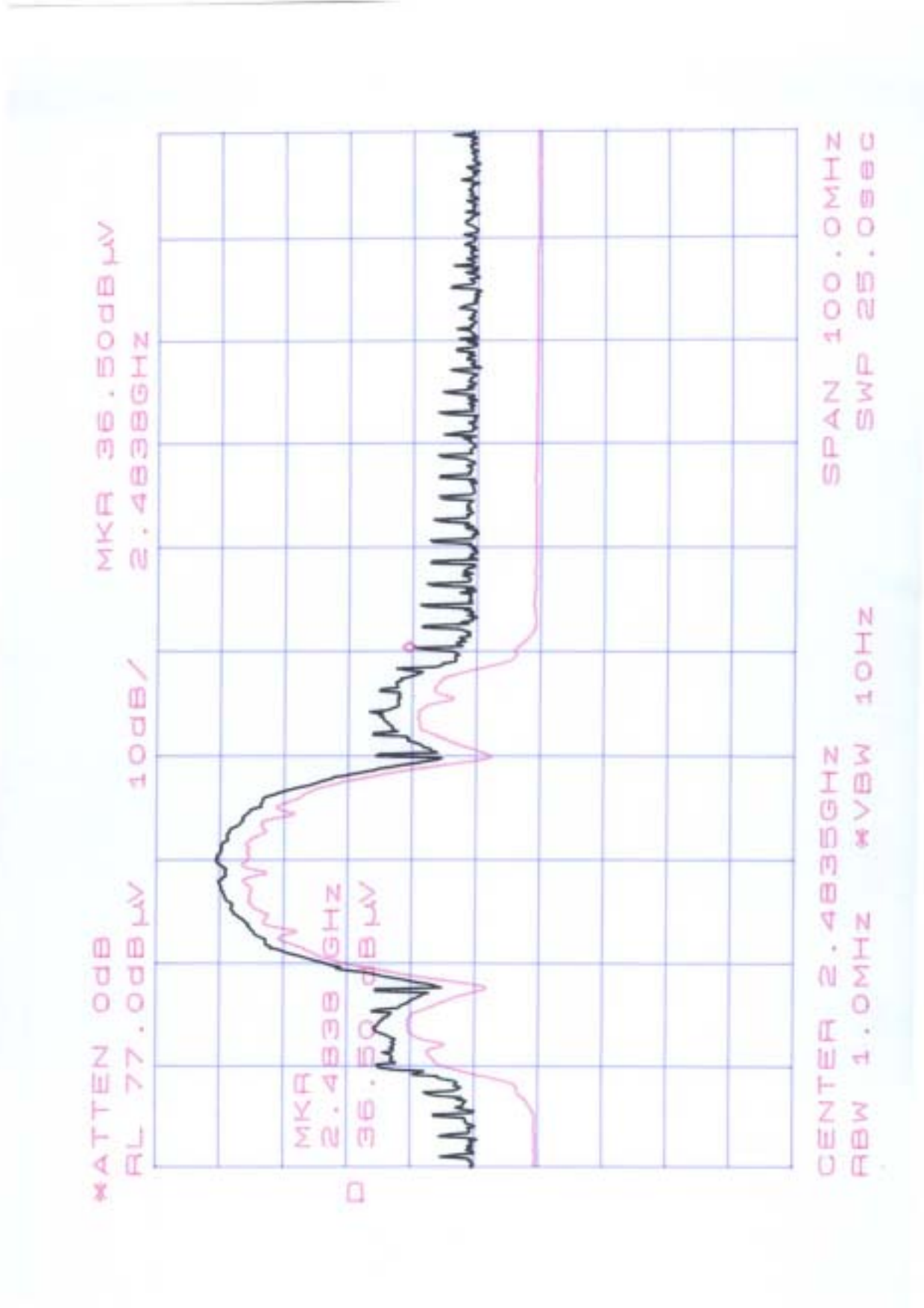
IEEE 802.11b Vertical CH 11



IEEE 802.11g Horizontal CH 11



IEEE 802.11g Vertical CH 11



5. Photos of Radiation Measuring Setup

