



JAPAN QUALITY ASSURANCE ORGANIZATION
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REPORT OF MEASUREMENTS

Date : March 1, 1999
Issue in : Tokyo, Japan

JQA APPLICATION NO.: 80-80804

Applicant : Oi Electric Co., Ltd.
3-16, Kikuna, 7-chome, Kohoku-ku,
Yokohama, 222-0011, Japan

Manufacturer : Oi Electric Co., Ltd. Mizusawa Factory
106-3, Shinjoorii, Mizusawa,
Iwate Prefecture 023-0841, Japan

Description of Equipment : Pager

FCC ID : GSIPB2320
Trade Name : PB2320
Model No. : PB2320
Serial No. : BVC1902006
Tuning Frequency : 931.4875 MHz
Power Supply : 1.5 VDC

Applicable Rule : FCC Rules & Regulations Part 15
Subpart B (June 23, 1989)

Place of Measurement : JQA EMC Engineering Dept.

Date of Measurement : February 18, 1999

Total Pages of This Report : 6 (including this page)

I certify that I am authorized to sign for the report and that all the statement in this report and in the exhibits hereto are true and correct to the best my knowledge and belief.

Shigeru Osawa, Assistant Manager
Testing Div.
EMC Engineering Dept.

1. Radiated Spurious Emissions: [§15.109(a)]

Measurement Method Employed:

Measurements were made under the conditions specified ANSI C63.4.

The field strength measurements of the equipment under test were made at the distance of 3 meters away from the device which was placed on the wooden turntable 0.8 meter in height.

The receiving antenna polarized horizontally was varied from 1 to 4 meters and the wooden turntable was rotated through 360 degrees to obtain the highest reading on the field strength meter. The device was tested three orthogonal planes.

These measurements were repeated with the receiving antenna polarized vertically.

The internal pre-amplifier was used from 30 MHz up to 2000 MHz.

Measurement Results:

Tuning Frequency : 931.4875 MHz

Distance of Measurement : 3.0 meters

Frequency (MHz)	Antenna Factor (dB)	Meter Reading		Field Strength at 3 m	
		Horizontal (dB/μV)	Vertical (dB/μV)	Horizontal (μV/m)	Vertical (μV/m)
910.088	32.3	7.9	7.3	102.3	95.5
1820.175	30.7	< 5.0	< 5.0	< 61.0	< 61.0

Note: 1. The spectrum was checked from 30 MHz to 2nd harmonics.

All emissions not listed were found to be more than 20 dB below the limits.

2. The symbol of "<" means "or less".

3. The cable loss was included in the antenna factor.

4. Sample calculation :

At 910.088 MHz

$$10(Af+Mr)/20 = 10(32.3+7.9)/20 = 102.3 \mu V/m$$

Where,

Af = Antenna Factor including the cable loss.

Mr = Meter Reading

5. Measuring Instrument Setting:

Below 1000 MHz

Detector function : CISPR quasi-peak

IF Bandwidth : 120 kHz

Above 1000 MHz

Detector function : Average

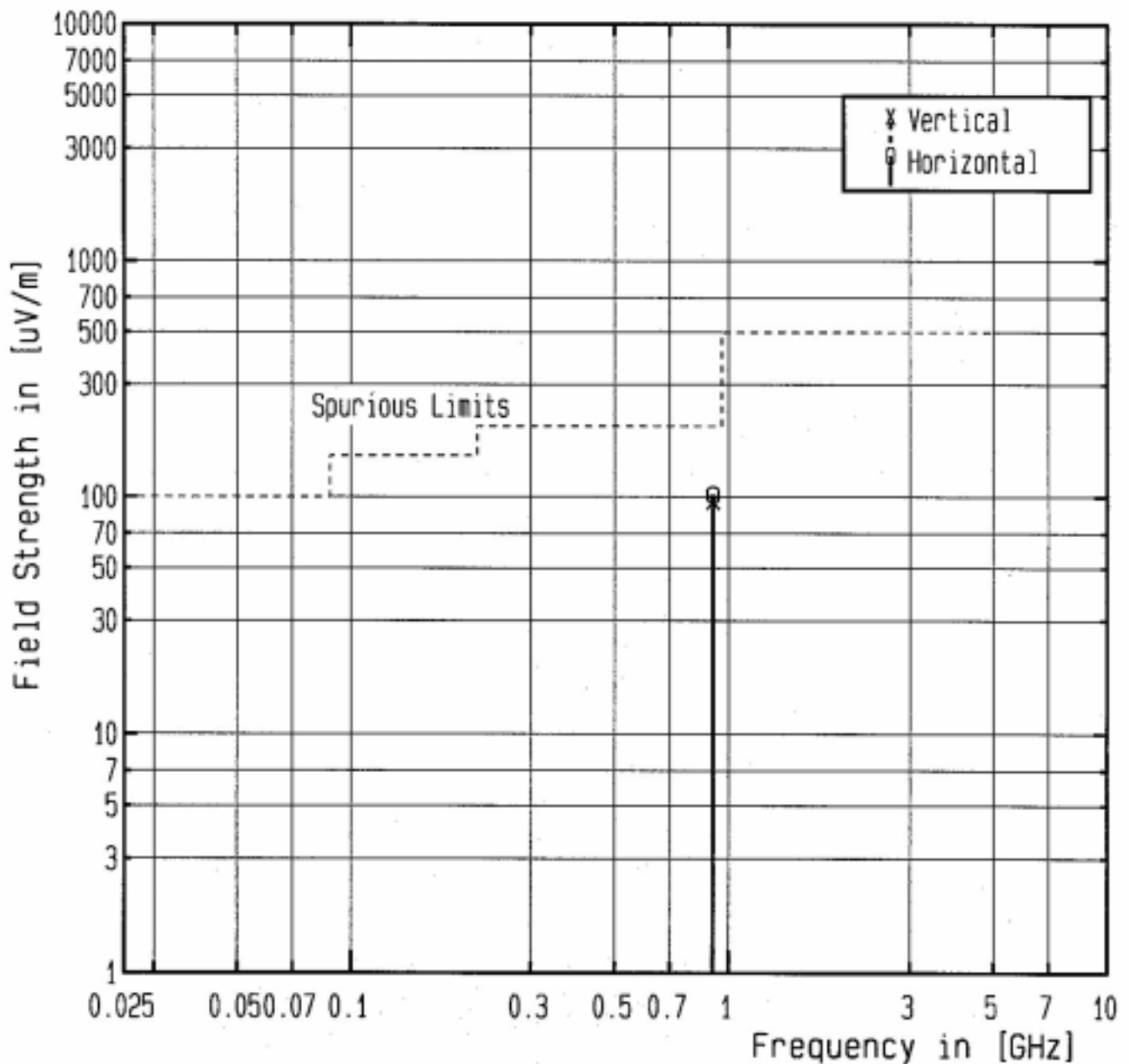
IF Bandwidth : 1 MHz

Radiated Spurious Emissions

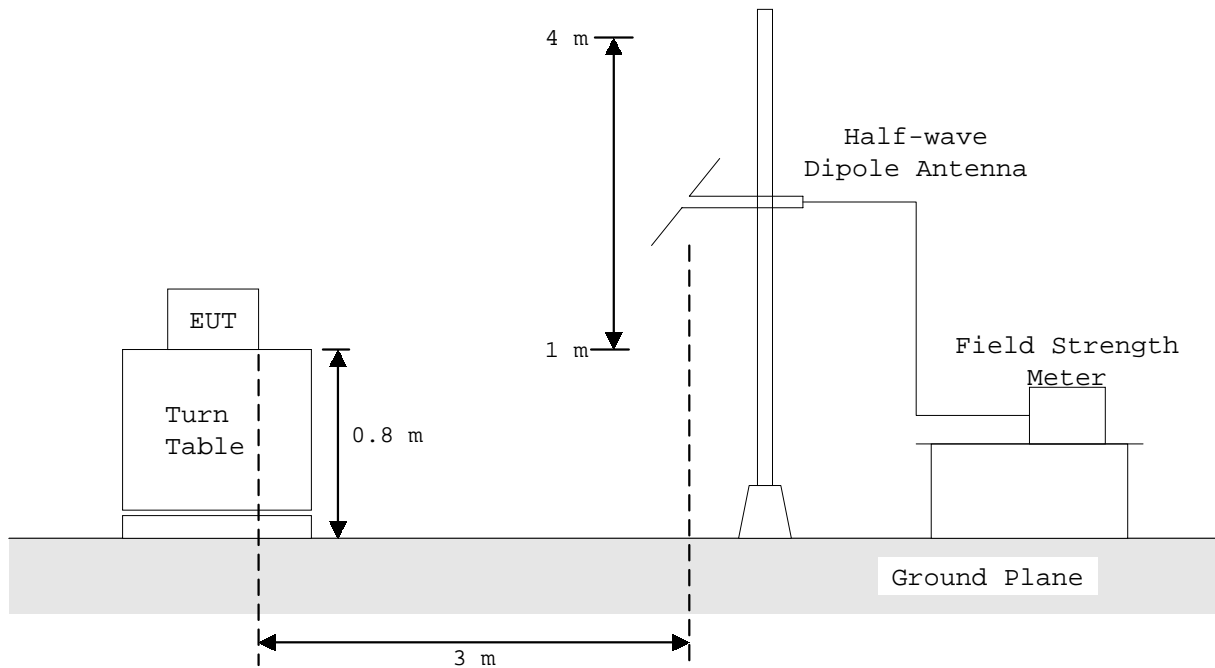
FCC ID : GSIPB2320

Tuning Frequency : 931.4875 MHz

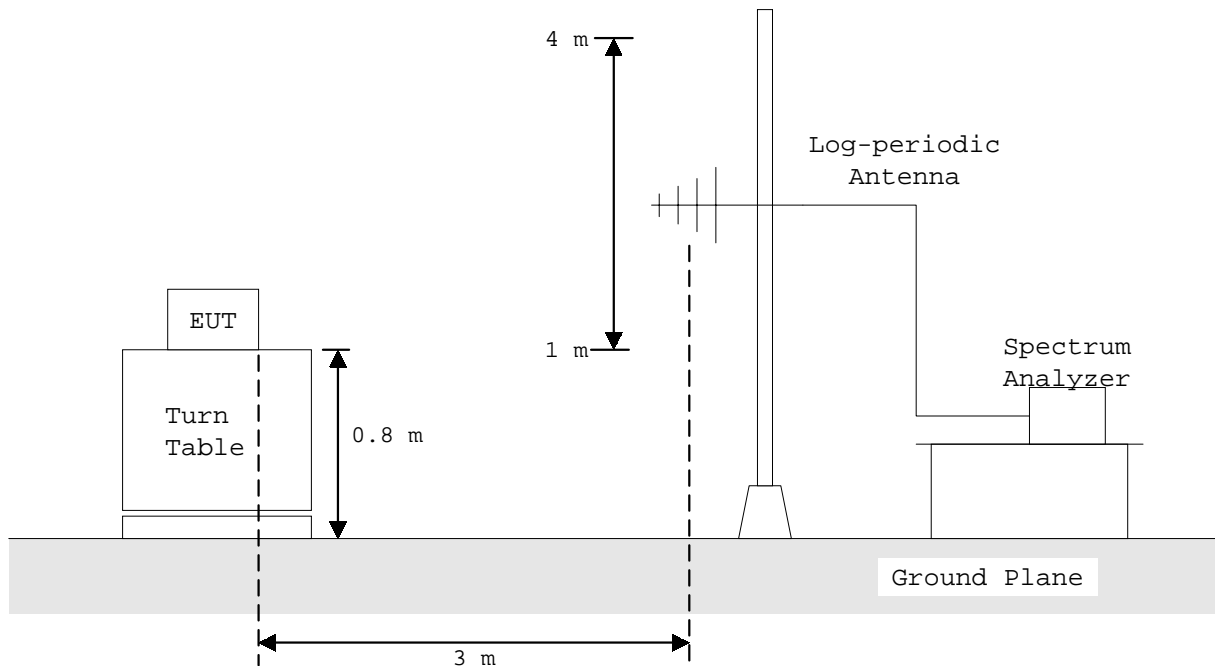
Test Condition :



MESUREMENT SET-UP FOR UP TO 1 GHz



MESUREMENT SET-UP FOR ABOVE 1 GHz





for horizontal plane



for vertical plane



LIST OF MEASUREMENT EQUIPMENT

<u>Equipment (Model No.)</u>	<u>Manufacturer</u>	<u>Date of Cal.</u>
1. Field Strength Meter		
ESVP	Rohde & Schwarz	May 1998
2. Spectrum Analyzer		
8566B	Hewlett Packard Inc.	April 1998
3. Tuned Dipole Antenna		
KBA-511	Kyoritsu Electrical Works	November 1998
KBA-611	Kyoritsu Electrical Works	November 1998
4. Log-periodic Antenna		
HL 025	Rohde & Schwarz	November 1998