

REPORT OF MEASUREMENT

Date: July 8, 1998
Issued in: Tokyo, Japan

JQA APPLICATION NO.: 80-80274

1. Applicant : NIKKO CO., LTD.
1-7-14, Mizumoto, Katsushika-ku
Tokyo 125-0032, Japan
2. Manufacturer : NIKKO ELECTRONICS BHD.
PLOT 497, PRAI FREE TRADE ZONE, PRAI INDUSTRIAL
ESTATE, 13600 PRAI, PENANG, MALAYSIA
3. Description of Device : Radio Controlled Toy Receiver
: (Superregenerative Type)
 - a) Trade Name : NIKKO
 - b) Model No. : RN6220
 - c) FCC ID : CVTRN6220
 - d) Power Supply : 9.6 VDC
4. Applicable Rules : FCC Rules & Regulations Part15, Subpart B
(June 23, 1989)
5. Date of Measurement : July 2, 1998 (Completed)
6. I HEREBY STATE THAT: The measurement were made in accordance with
procedures indicated and the energy emitted by the device was
found to be the completeness of these measurements.

Shigeru Osawa
Shigeru Osawa, Assistant Manager
Testing Division
EMC Engineering Department

Receiver Radiated Spurious Emission : [Section 15.109(a)]

Measurement Method Employed:

The field strength measurements of the receiver spurious radiation were made at the distance of 3 meters away from the device under test 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 for the highest reading on the field strength meter.

These measurements were repeated with the receiving antenna polarized vertically.

The internal pre-amplifier was used from 30 MHz up to 1000 MHz.

During these measurements, the signal generator was used in order to stabilize the receiver circuit of the EUT.

Measurement Results:

Tuning Frequency : 49.860 MHz

Distance of Measurement : 3 meters

Frequency (MHz)	Antenna Factor (dB)	Meter Reading Horizontal (dB/uV)	Meter Reading Vertical (dB/uV)	Field Strength at 3 m Horizontal (uV/m)	Field Strength at 3 m Vertical (uV/m)
43.000	2.8	< -5.0	4.0	<	0.8
46.000	3.4	0.5	11.6	1.6	5.6
50.400	4.3	0.9	10.2	1.8	5.3
52.500	4.6	0.8	8.3	1.9	4.4
91.200	10.0	< -5.0	11.5	< 1.8	11.9
100.400	10.9	< -5.0	7.3	< 2.0	8.1
105.400	11.4	< -5.0	6.4	< 2.1	7.8
223.600	19.2	< -5.0	3.6	< 5.1	13.8
231.300	19.6	< -5.0	4.3	< 5.4	15.7
266.300	21.1	6.9	7.9	25.1	28.2
276.200	21.5	1.3	2.5	13.8	15.8
300.000	22.4	< -5.0	< -5.0	< 7.4	< 7.4
400.000	25.6	< -5.0	< -5.0	< 10.7	< 10.7
500.000	28.1	< -5.0	< -5.0	< 14.3	< 14.3
700.000	32.6	< -5.0	< -5.0	< 24.0	< 24.0
1000.000	37.4	< -5.0	< -5.0	< 41.7	< 41.7

Notes: 1. The spectrum was checked from 30 MHz to 1000 MHz.
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 including in the antenna factor.
4. Sample calculation:

At 43.000 MHz

$$10 \text{ (Af} + \text{Mr})/20 = 10 (2.8 + 4.0)/20 = 2.2 \text{ uV/m}$$

$$2.2 \times (D-1 / D-2) \text{ in meter} = 2.2 \text{ uV/m}$$

Where,

Af = Antenna Factor including the cable loss

Mr = Meter reading

D-1 = Measured distance in meter : 3 m

D-2 = Specified distance in meter : 3 m

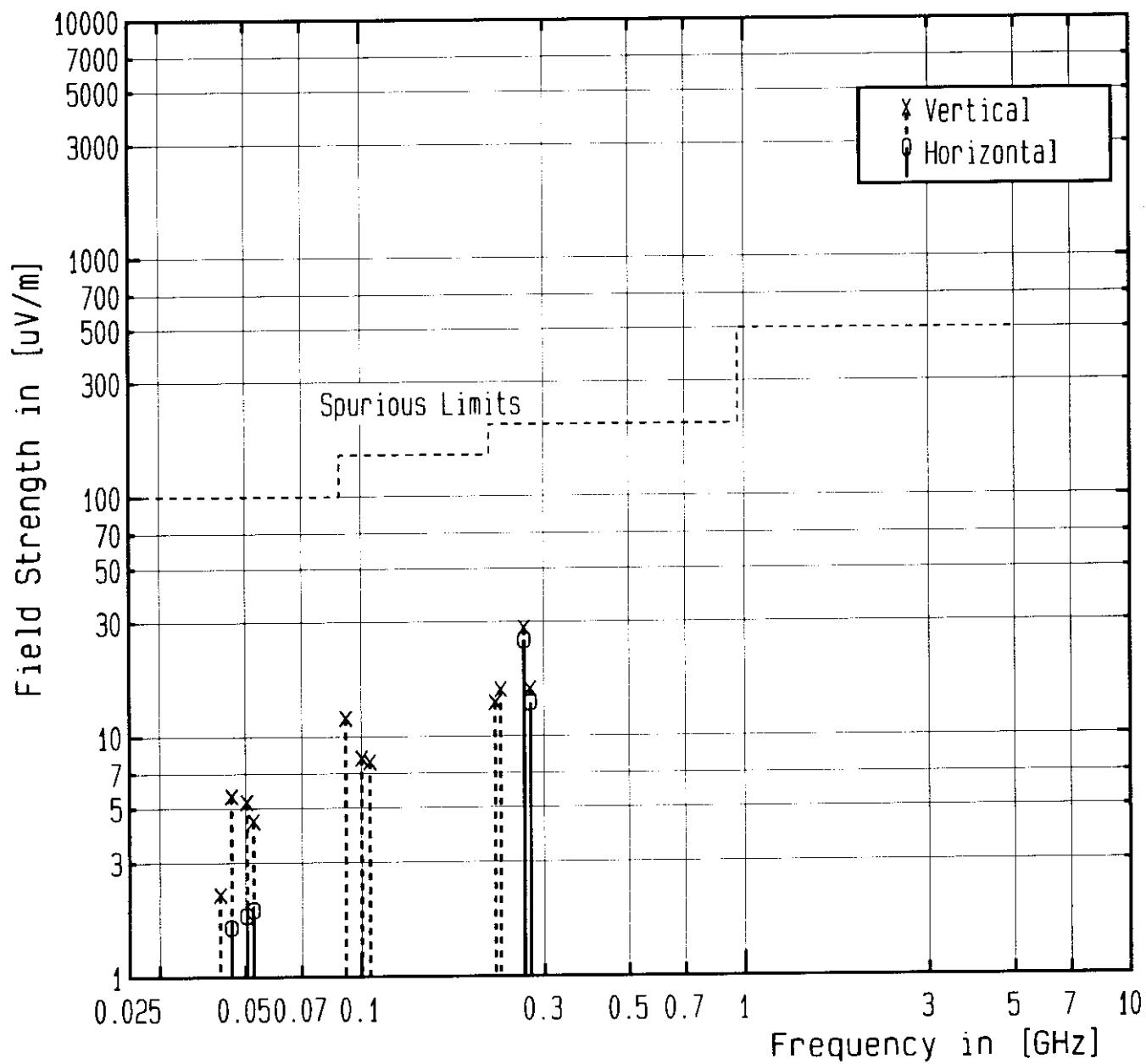
5. Measuring Instrument Setting:

Detector function : CISPR quasi-peak

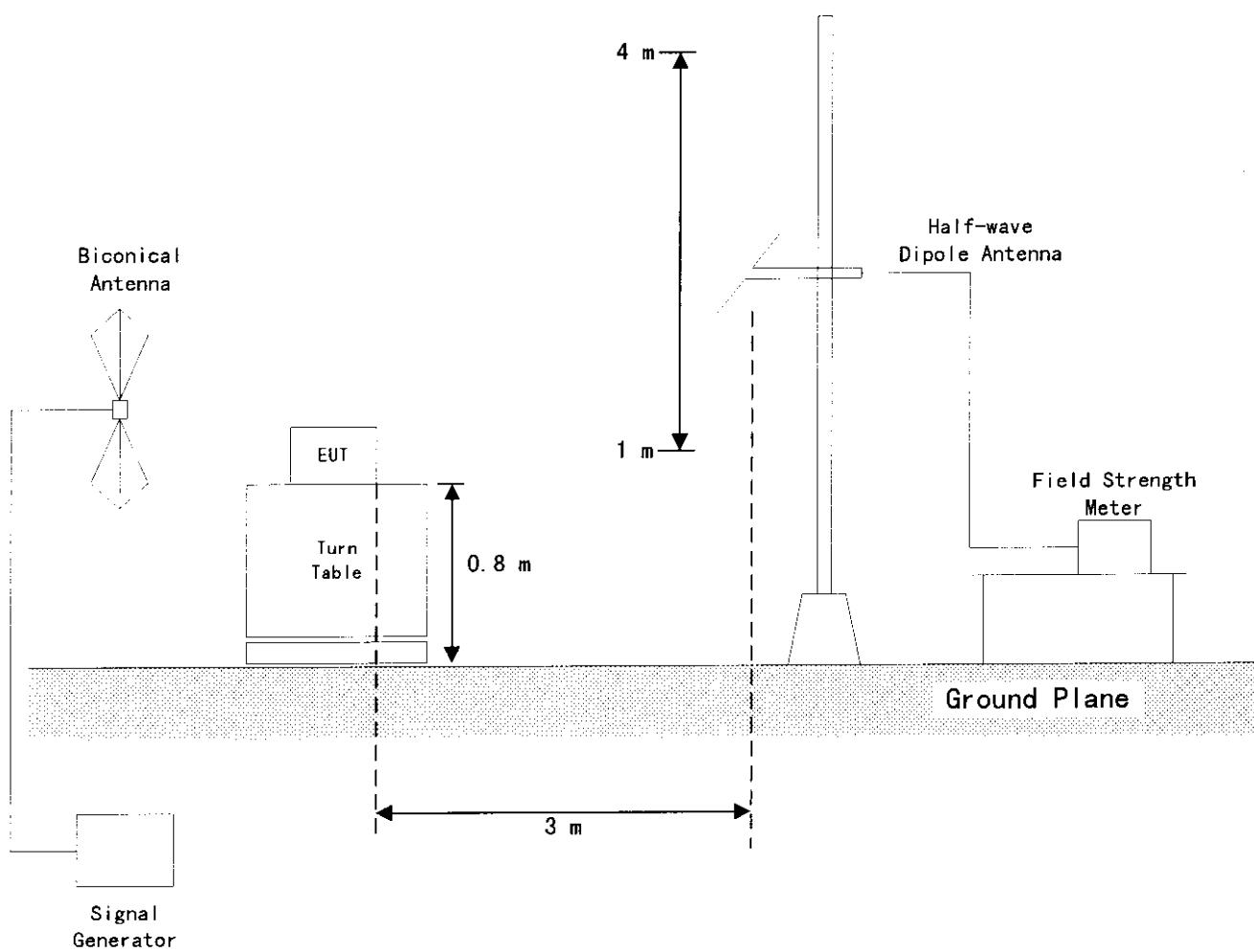
IF Bandwidth : 120 kHz

Radiated Spurious Emissions

FCC ID : CVTRN6220
Tuning Frequency : 49.860 MHz
Test Condition :



MEASUREMENT SET-UP FOR RADIATED EMISSIONS



List of Measuring Equipment

<u>Equipment (Model No.)</u>	<u>Manufacturer</u>	<u>Date of Cal.</u>
1. Field Strength Meter		
ESVP	Rohde & Schwarz	May 1998
2. Signal Generator		
TR4511	ADVANTEST	May 1998
3. Half-wave Dipole Antenna		
KBA-511	Kyoritsu Electricl Works	November 1997
KBA-611	Kyoritsu Electricl Works	November 1997
4. Biconical Antenna		
94455-1	EMCO	-