

1.7 TEST CONFIGURATION / OPERATION OF EUT

1.7.1 Test Configuration

The equipment under test (EUT) consists of :

Symbol	Item	Manufacturer	Model No.	Serial No.
A	Immobilizer	MITSUBISHI ELECTRIC CORPORATION	IMB122-02	-

The measurement was carried out with the following support equipment connected :

Symbol	Item	Manufacturer	Model No.	Serial No.
B	DC Power Supply	KIKUSUI ELECTRONICS	PAB 18-2.5DU	30079912

Type of Cable :

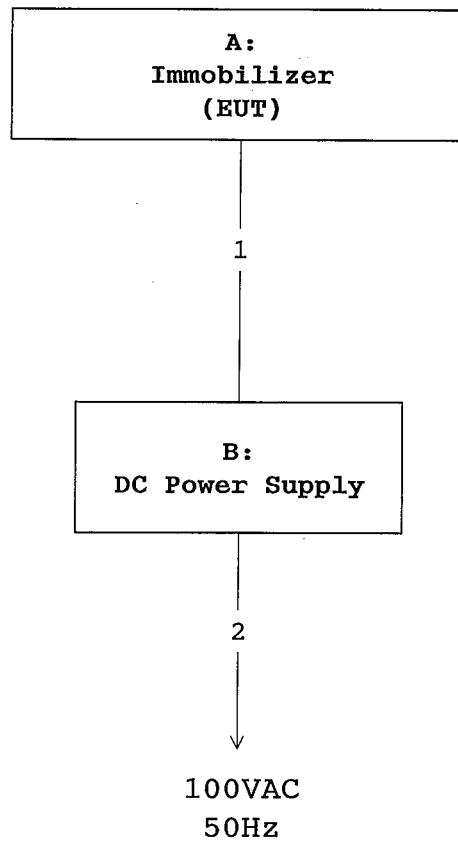
Symbol	Description	Identification (Manufacturer etc.)	Shielded YES / NO	Ferrite Core	Connector type Shielded YES / NO	Length (m)
1	DC Power Cable(for EUT)	-	NO	NO	NO	1.0
2	AC Power Cable	-	NO	NO	NO	1.8

1.7.2 Operating condition

Power supply Voltage : 12.0 VDC(from DC Power Supply)

The tests have been carried out under the transmitting condition.

1.8 EUT ARRANGEMENT (DRAWINGS)



1.9 PRELIMINARY TEST AND TEST-SETUP (DRAWINGS)

1.9.1 AC Power Line Conducted Emission (450 kHz - 30 MHz) :

According to description of ANSI C63.4-1992 sec.13.1.3.1, the AC power line preliminary conducted emissions measurements were carried out.

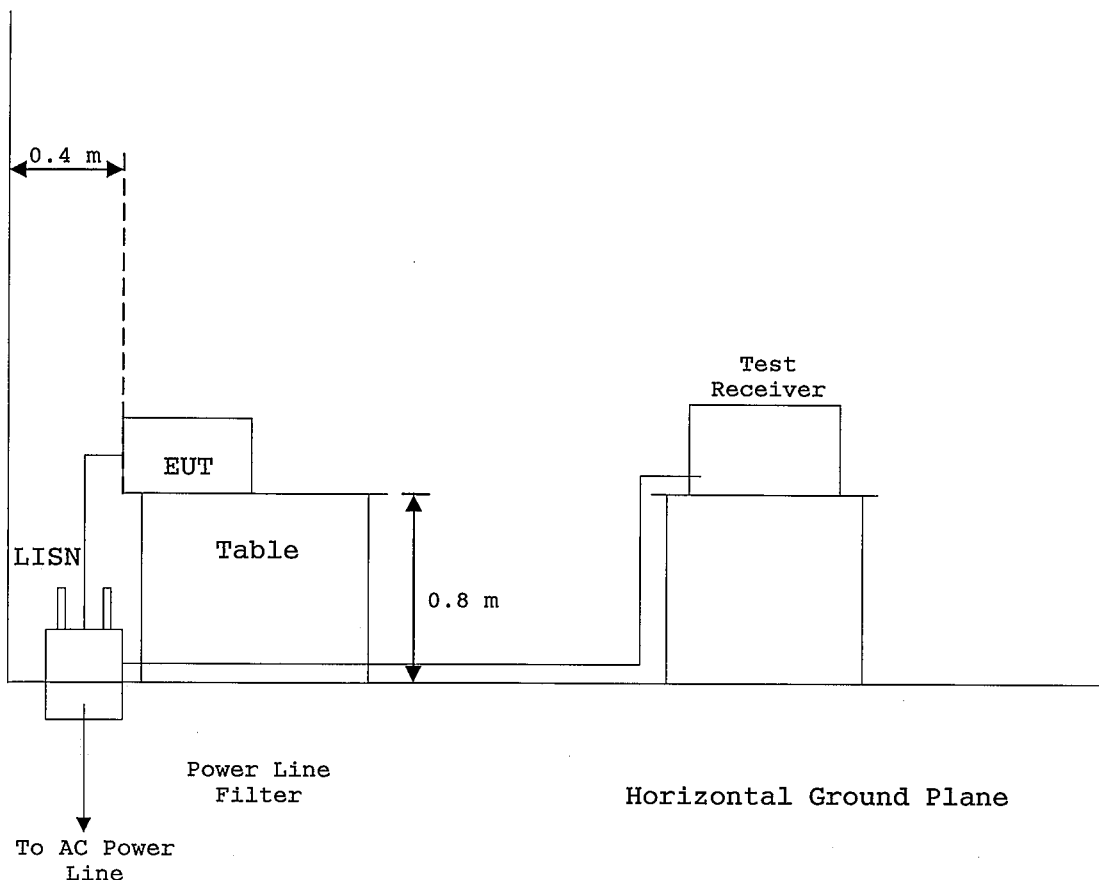
The preliminary conducted measurements were performed using the spectrum analyzer to observe the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for final AC power line conducted emissions measurements.

Shielded Enclosure

- Side View -

Vertical
Ground
Plane

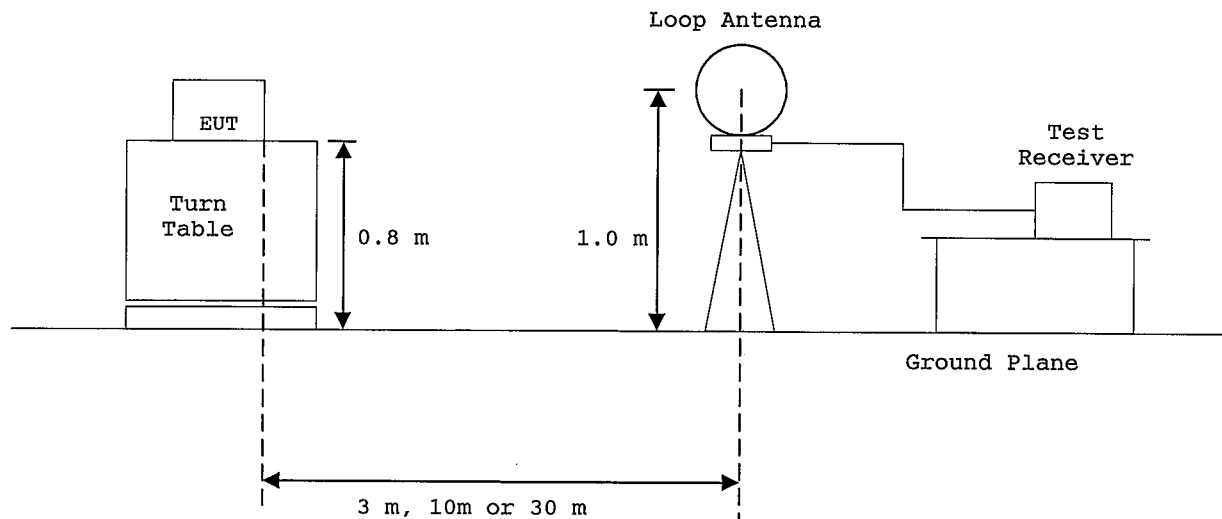


1.9.2 Radiated Emission (9 kHz - 30 MHz) :

According to description of ANSI C63.4-1992 sec.13.1.4.1, the preliminary radiated emissions measurement were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements.

- Side View -



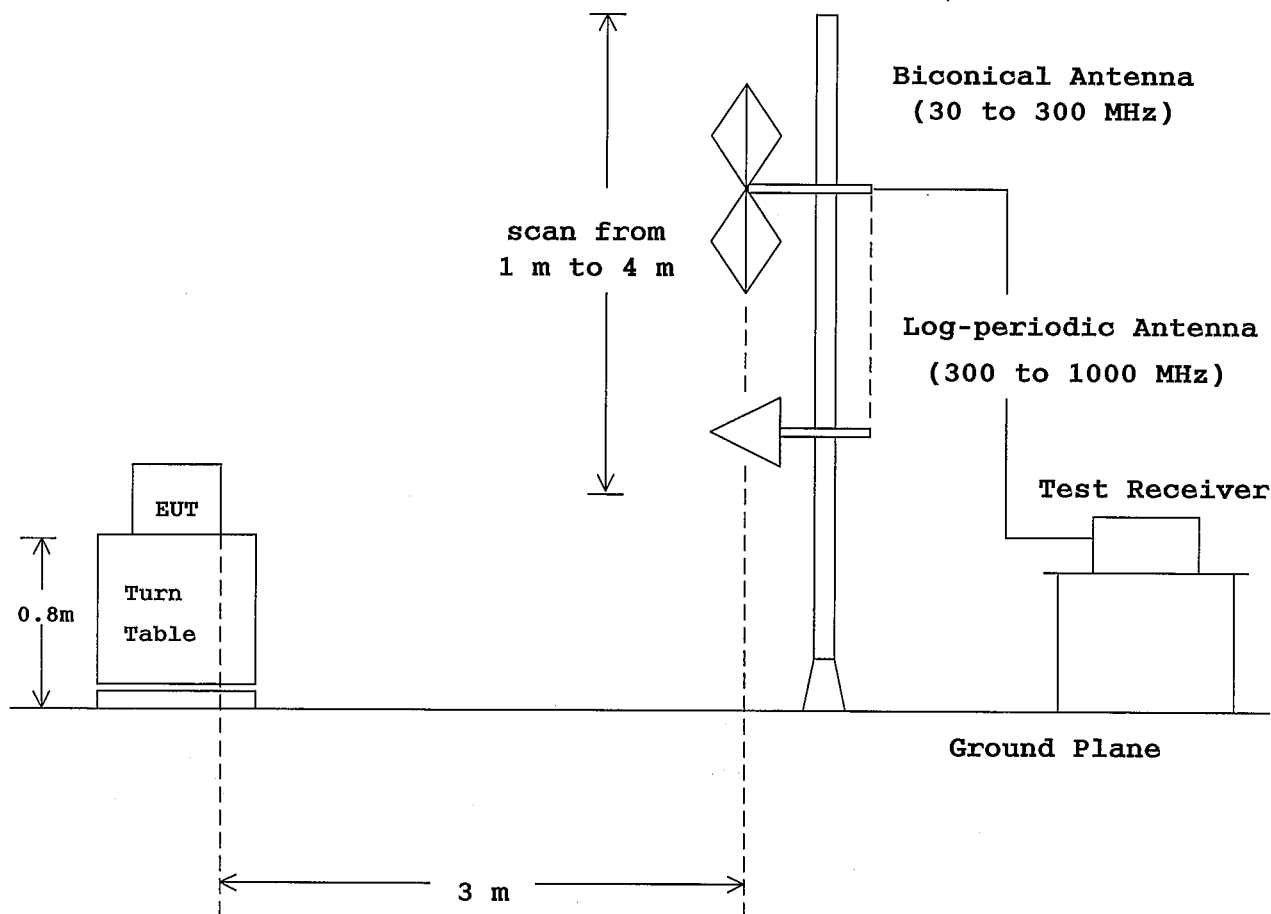
1.9.3 Radiated Emission (30 MHz - 1000 MHz) :

According to description of ANSI C63.4-1992 sec.13.1.4.1, the preliminary radiated emissions measurement were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements.

Anechoic Chamber

- Side View -



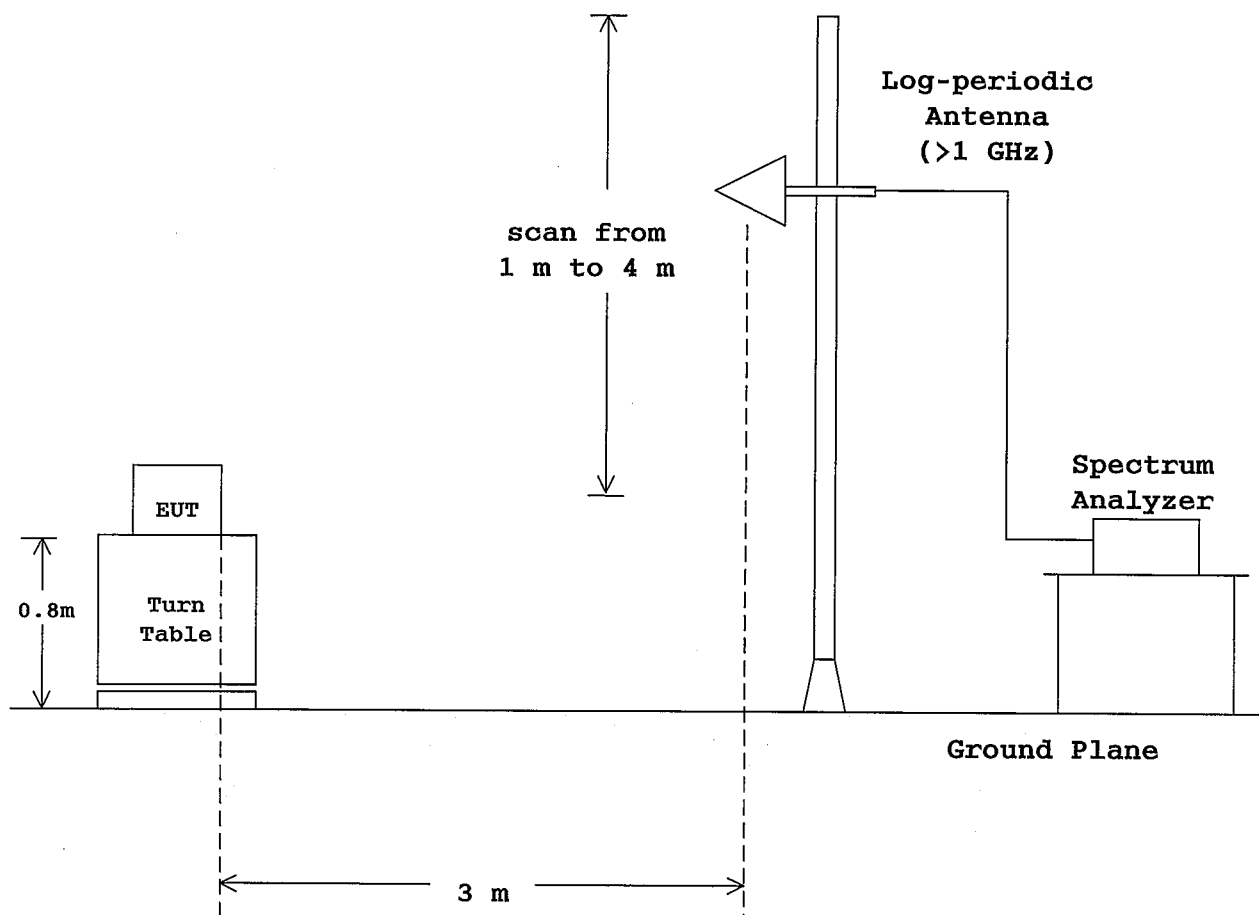
1.9.4 Radiated Emission (Above 1 GHz) :

According to description of ANSI C63.4-1992 sec.13.1.4.1, the preliminary radiated emissions measurements were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements.

Anechoic Chamber

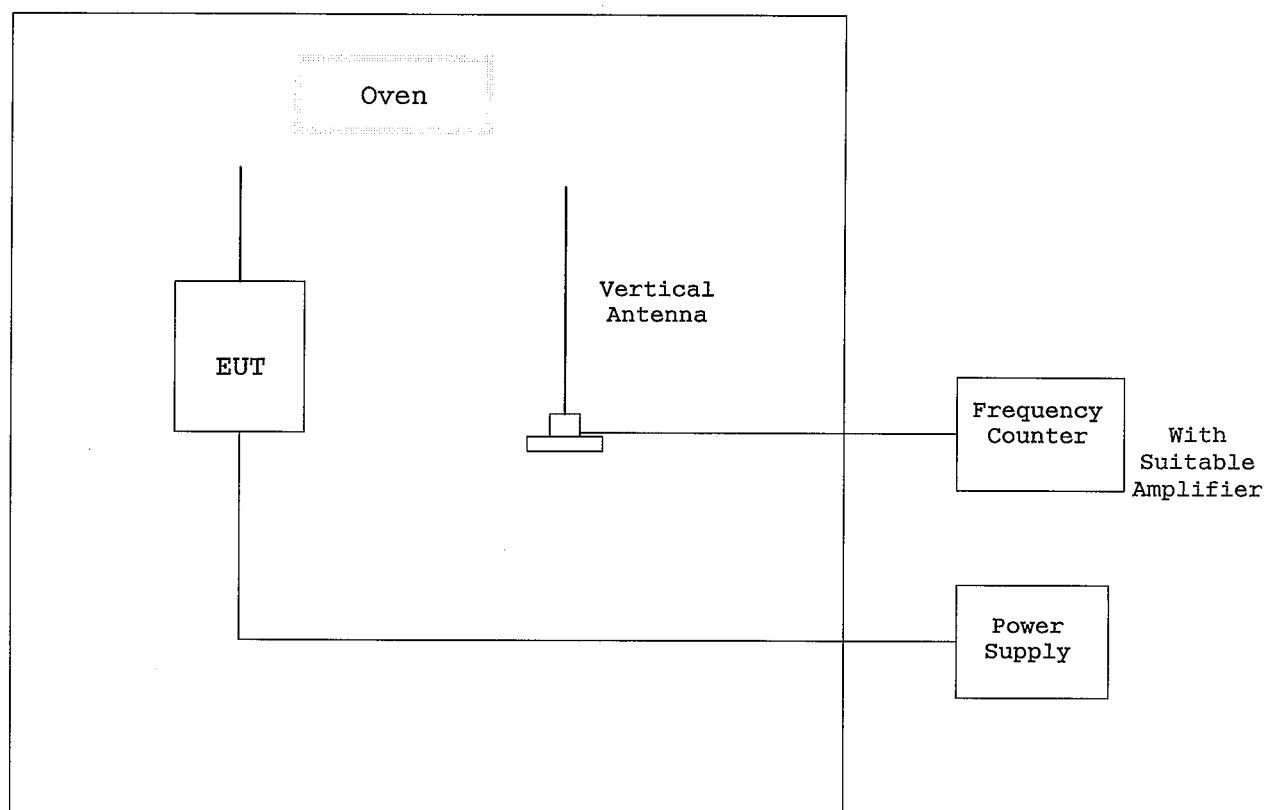
- Side View -



1.9.5 Frequency Stability :

According to description of ANSI C63.4-1992 sec.13.1.5 and sec.13.1.6, the frequency stability measurements were carried out. By using frequency counter with suitable RF amplifier, the carrier frequency of the transmitter under test was measured with a temperature variation of -20°C to $+50^{\circ}\text{C}$ at the normal supply voltage, and if required, with a variation in the primary voltage from 85 % to 115 % the rated supply voltage at the temperature of $+20^{\circ}\text{C}$.

These measurements were carried out after allow sufficient time (approximately 1 hour) for the temperature of the chamber to stabilize.



1.9.6 Occupied Bandwidth :

According to description of ANSI C63.4-1992 sec.13.1.7, the occupied bandwidth measurements were carried out. By using a spectrum analyzer with a vertical antenna for picking up the signal, the measurements of the emission were made under the transmitting modes of the EUT.

The resolution bandwidth of spectrum analyzer was set to the value specified in sec.13.1.7.

