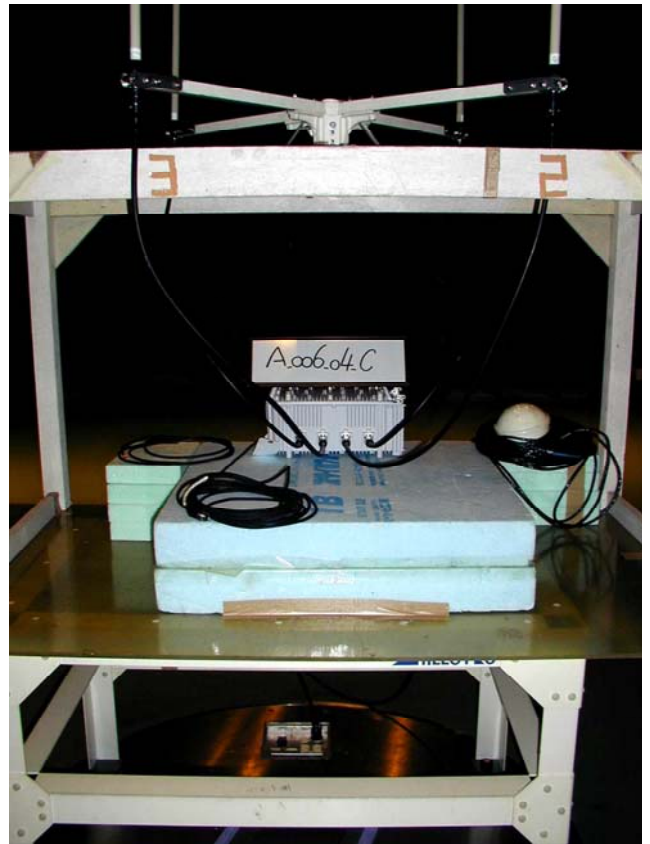
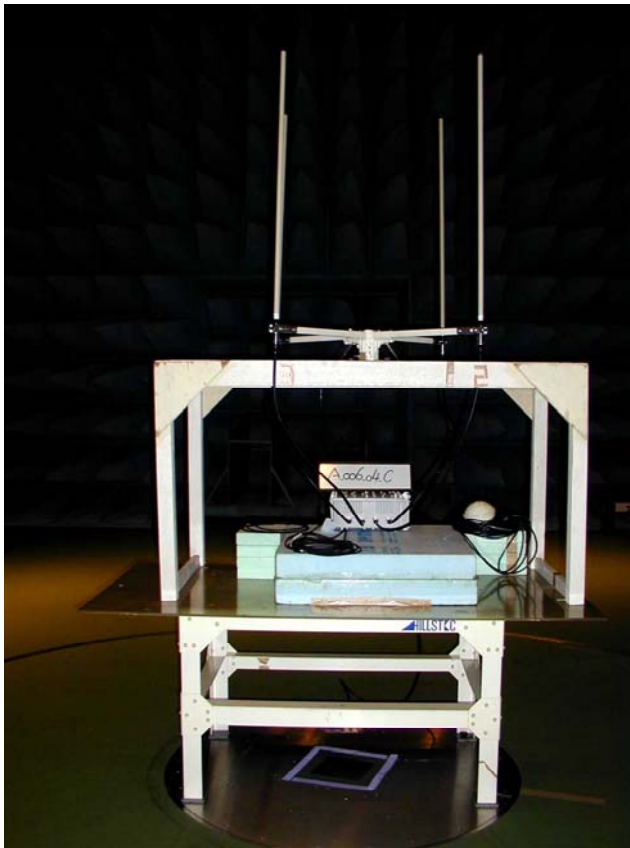


1. APPENDIX Photographs of EUT System Configuration

Tested Item

- Transmit Power (EIRP) measurement
- Radiated Spurious (EIRP) measurement
- Radiated Emission measurement

FRONT VIEW



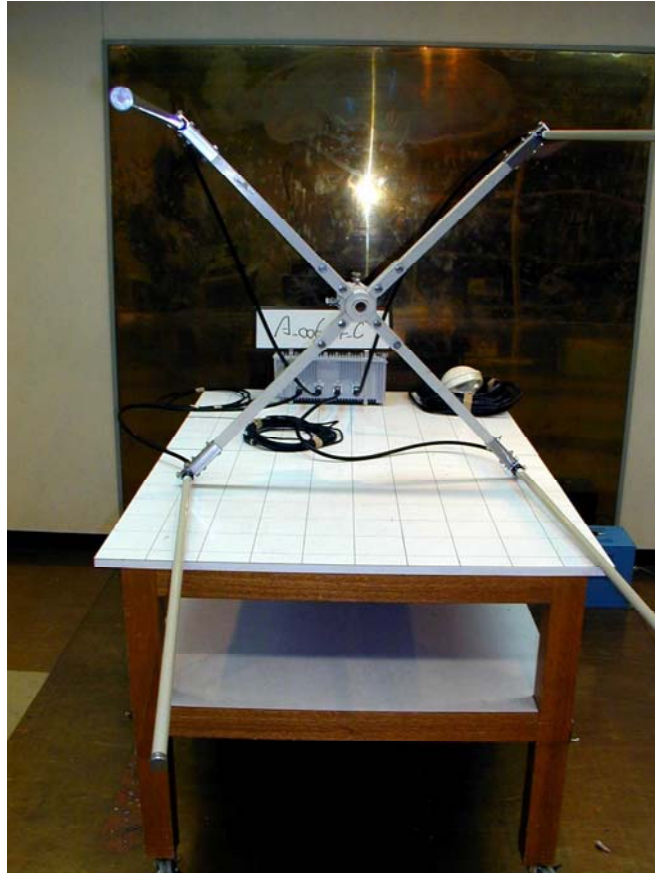
- Continued -

FRONT VIEW

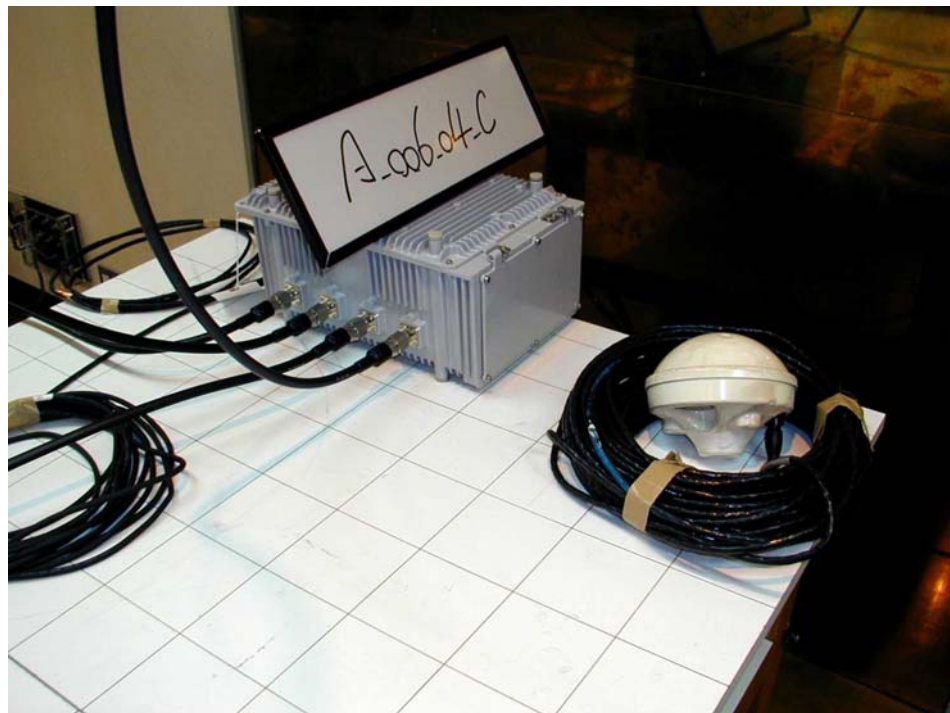


Tested Item

- Conducted Emission measurement



- Continued -



2. APPENDIX MPE

Tested Item

- Transmit Power (EIRP) measurement

Maximum Permissible Exposure (MPE)

The Limit for Maximum Permissible Exposure (MPE) at frequency of 1894.85 MHz is 1.00 mW/cm².
(1.00 mW/cm² for General Population / Uncontrolled environment § 1.1310.)

The conversion from power to power density uses the following equation :

$$PD = (TP \times G) / 4\pi r^2 = EIRP / 4\pi r^2$$

$$r = \text{SQRT} (EIRP / 4\pi PD)$$

Where : PD : Power Density at the Minimum Save-distance (W/m²)
 TP : Transmitted Power (W)
 G : Numeric gain of the antenna
 EIRP : Equivalent Isotropic ally Radiated Power
 r : Minimum Save-distance (in m)

The conversion from mW / cm² to W / m² is : 1mW/cm² = 10W / m² Maximum EIRP^{*1}

[Note] *1 : Measured Value

Items	Value
EIRP (W)	53.7
PD (mW / cm ²)	1.00
PD (W / m ²)	10.00
r (m)	0.65

MPE evaluation

Minimum Save-distance : 0.65m

3. APPENDIX Theoretical EIRP calculation

This cell station transmits signals with Antenna selective diversity technology from one of the four antennas. The average transmission power per one antenna is maximum 500mW. As a result, the peak power becomes 4W.

[Calculation]

This cell station specifies its transmission output level by TDMA time-average of PHS.

Since TDMA format of PHS is divided into 8 slots, transmission output of our cell station is described as below.

Average output : 500mW/antenna : conducted RF
Maximum peak output : 4W/antenna (500mW*8 = 4W) : conducted RF

Also, we use the one which antenna gain is 10(9.45) dBi for this data.

Considering those 3 points described as above, the maximum EIRP is as indicated below.

$4W * 8.8(=9.45\text{dB}) = 35.2W$: EIRP

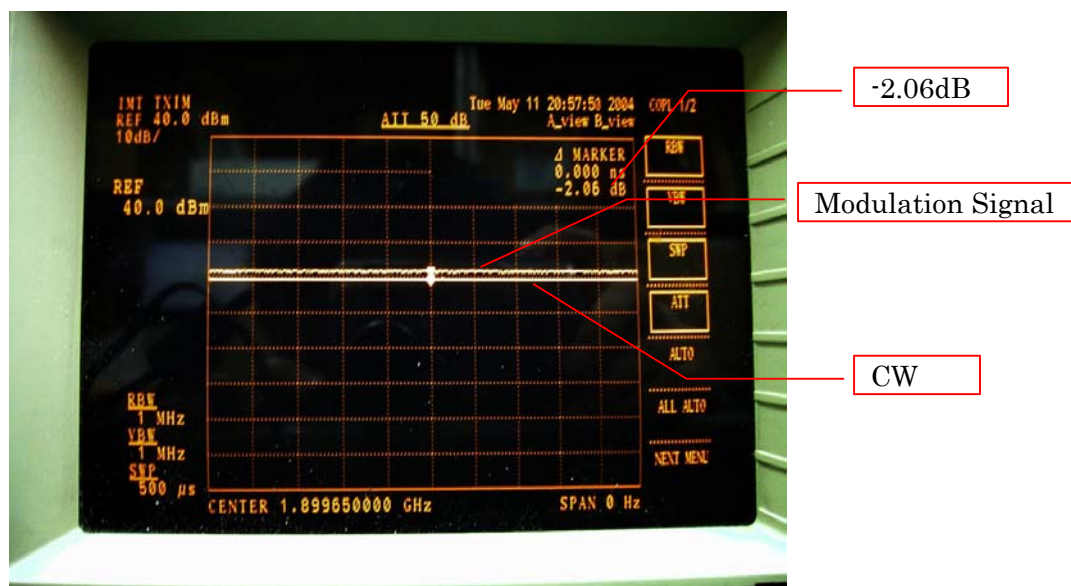
Theoretically, output power level will be calculated as above.

In reality, output power level of the cell station is adjusted by the average value measured by power meter. In test report, peak value is measured by using Spectrum analyzer. As you know, a modulated signal has different output level in each second. Accordingly, it is obvious that there is some difference between average value and instantaneous value.

We know that the difference will be effected by spectrum analyzer setup. Inputting the modulated signal and CW wave into the spectrum analyzer, there was 2.1dB difference between those values.

Based on above, theoretical value should be calculated with measurement difference, it will be shown as follows.

Maximum peak output : $4W * 1.6(=2.1\text{dB}) = 6.4W$: conducted RF
 $35.2W * 1.6(=2.1\text{dB}) = 56.3W$: EIRP



*output power levels are : 20,32,50,80,125,200,315,500mW (average value of conducted RF)
(increase by 2 dB)