

## Measurement Data For Transmitter

### 6.1 Measurement Data For Transmitter {2.983(e)}

| Section Number | Item                                   | Measurement Results | Procedure Exhibit # |
|----------------|----------------------------------------|---------------------|---------------------|
| 2.985(a)       | 1 Radio Frequency Power Output         | Table 6.2.2         | 7.1                 |
| 2.993          | 3 Field Strength of Spurious Radiation | Table 6.7.1 ~ 6.7.3 | 7.4                 |
|                | 4 SAR                                  | See Exhibit 11      | See Exhibit 11      |

### 6.2 Radio Frequency Power Output Measurement Data {2.985(a)}

#### 6.2.1 Conducted Power Output Measurement

| Power Control Level | Nominal Peak Output Power (dBm) | Tolerance (dB) |
|---------------------|---------------------------------|----------------|
| 0                   | 30                              | ±2             |
| 7                   | 16                              | ±3             |
| 15                  | 0                               | ±5             |

**Table 6.2.1** Radio Frequency Power Output Measurement Limits

| Frequency (MHz) | Channel # | Power Control Level | Peak Output Power (dBm) |
|-----------------|-----------|---------------------|-------------------------|
| 1850.2          | 512       | 0                   | 29.62                   |
|                 |           | 7                   | 16.12                   |
|                 |           | 15                  | 0.42                    |
| 1880.0          | 661       | 0                   | 29.30                   |
|                 |           | 7                   | 15.69                   |
|                 |           | 15                  | -0.05                   |
| 1909.8          | 810       | 0                   | 29.65                   |
|                 |           | 7                   | 16.14                   |
|                 |           | 15                  | 0.41                    |

**Table 6.2.2** Conducted Power Measurement Results

**6.2.2 Radiated Output Power Measurement**

| Ant. Pol. (V/H) | Frequency (MHz) | Reading (dBuV) | Antenna Factor (dB) | Cable Loss (dB) | Pre-amp Factor (dB) | External Atten. (dB) | Net dBuV/m | Limit dBuV/m | Margin (dB) |
|-----------------|-----------------|----------------|---------------------|-----------------|---------------------|----------------------|------------|--------------|-------------|
| V               | 1850.2          | 96.1           | 28.6                | 5.0             | 0                   | 0                    | 129.6      | N/A          | N/A         |
| V               | 1880.0          | 95.5           | 28.8                | 5.0             | 0                   | 0                    | 129.3      | N/A          | N/A         |
| V               | 1909.8          | 93.6           | 29.0                | 5.1             | 0                   | 0                    | 127.6      | N/A          | N/A         |

**Substitution Method**

| Ant. Pol. (V/H) | Frequency (MHz) | EUT Measured Reading (dBuV) | Forward Power Reading (dBm) | Antenna Gain (dBi) | Forward Power (dBm) | Radiated Power in (Watts) |
|-----------------|-----------------|-----------------------------|-----------------------------|--------------------|---------------------|---------------------------|
| V               | 1850.2          | 129.6                       | 23.1                        | 6.4                | 29.5                | 0.891                     |
| V               | 1880.0          | 129.3                       | 22.6                        | 6.3                | 28.9                | 0.776                     |
| V               | 1909.8          | 127.6                       | 22.8                        | 6.2                | 29.0                | 0.794                     |

**Comments**

- 1) Forward power meter reading(dBm) refers to signal level measured on the power meter at the input of transmitting antenna
- 2) Tx. Ant Gain(dBi) refers to transmitting antenna gain in dBi.
- 3) Simple radiated power calculation  
 $\text{Radiated Power(dBm)} = \text{Forward power reading level(dBm)} + \text{Transmitting antenna gain(dBi)}$

if the forward power reading level(dBm) = 23.1 dBm and  
the transmitting antenna gain = 6.4 dBi, then

$\text{Radiated Power(dBm)} = 23.1 \text{ dBm} + 6.4 \text{ dBi} = 29.5 \text{ dBm}$  or approximately 1 Watt

**Table 6.2.3 Radiated Power Measurement Results**