

## 7.1 Test Data

### 7.2 § 22.913 Effective Radiated Power Output

A. POWER: **Low (Analog Mode)**

| Freq.<br>Tuned<br>(MHz) | LEVEL<br>(dBm) | AFCL<br>(dB) | POL<br>(H/V) | F/S<br>( $\mu$ V/m) | ERP<br>(W) | ERP<br>(dBm) |
|-------------------------|----------------|--------------|--------------|---------------------|------------|--------------|
| 824.04                  | -33.6          | 31.65        | V            | 178865              | 0.00587    | 7.67         |
| 836.49                  | -33.6          | 31.81        | V            | 181680              | 0.00605    | 7.81         |
| 848.97                  | -34.6          | 31.96        | V            | 165237              | 0.00501    | 6.98         |

B. POWER: **High (Analog Mode)**

| Freq.<br>Tuned<br>(MHz) | LEVEL<br>(dBm) | AFCL<br>(dB) | POL<br>(H/V) | F/S<br>( $\mu$ V/m) | ERP<br>(W) | ERP<br>(dBm) | BATTERY  |
|-------------------------|----------------|--------------|--------------|---------------------|------------|--------------|----------|
| 824.04                  | -13.60         | 31.65        | V            | 1788648             | 0.58662    | 27.67        | Extended |
| 836.49                  | -13.62         | 31.81        | V            | 1816796             | 0.60523    | 27.81        | Extended |
| 848.97                  | -14.60         | 31.96        | V            | 1652366             | 0.50063    | 26.98        | Extended |
| 836.49                  | -13.65         | 31.81        | V            | 1811340             | 0.60160    | 27.78        | Standard |
| 836.49                  | -13.72         | 31.81        | V            | 1796801             | 0.59198    | 27.71        | Slim     |

#### NOTES:

The EUT is placed 3m. away from the receiving antenna and the ERP is calculated using the formula:

$$\text{ERP (dBm)} = 10 \log_{10} \left( \left( \frac{r(\text{mV/m})}{1 \times 10^6} \right)^2 / 49.2 / 1 \times 10^{-3} \right)$$

$$\text{ERP (dBm)} = 10 \log_{10} \left[ \left( \frac{3 \times \text{FS}}{1 \times 10^6} \right)^2 / (49.2) \times 1000 \right]$$

$$\text{ERP (Watts)} = \left\{ \left( \frac{3 \times \text{FS}}{1 \times 10^6} \right)^2 / 49.2 \right\}$$

## 7.1 Test Data (Continued)

### 7.3 § 22.913 Effective Radiated Power Output

#### B. POWER: High (CDMA Mode)

| Freq. Tuned<br>(MHz) | LEVEL<br>(dBm) | AFCL<br>(dB) | POL<br>(H/V) | F/S<br>( $\mu$ V/m) | ERP<br>(W) | ERP<br>(dBm) | BATTERY  |
|----------------------|----------------|--------------|--------------|---------------------|------------|--------------|----------|
| 824.70               | -16.00         | 31.66        | V            | 1358118             | 0.33821    | 25.28        | Extended |
| 835.89               | -16.00         | 31.80        | V            | 1380166             | 0.34928    | 25.42        | Extended |
| 848.31               | -16.38         | 31.95        | V            | 1344912             | 0.33166    | 25.20        | Extended |
| 835.89               | -16.05         | 31.80        | V            | 1372461             | 0.34539    | 25.37        | Standard |
| 835.89               | -16.12         | 31.80        | V            | 1361229             | 0.33976    | 25.30        | Slim     |

#### NOTES:

The bandwidth is set with RBW = 3MHz and VBW = 3MHz.

The EUT is placed 3m. away from the receiving antenna and the ERP

is calculated using the formula:

$$\text{ERP (dBm)} = 10 \log_{10} (((r(\text{mV/m})/1 \times 10^6)^2 / 49.2/1 \times 10^{-3})$$

$$\text{ERP (dBm)} = 10 \log_{10} [ (3 \times \text{FS}/1 \times 10^6)^2 / (49.2) \times 1000]$$

$$\text{ERP (Watts)} = \{(3 \times \text{FS})/1 \times 10^6\}^2 / 49.2$$

## 8.1 Test Data

### 8.2 Radiated Measurements

#### § 1.1053 Field Strength of SPURIOUS Radiation (CDMA)

OPERATING FREQUENCY: 824.70 MHz  
 CHANNEL: 1013 (Low)  
 MEASURED OUTPUT POWER: 25.5 dBm = 0.35 W  
 MODULATION SIGNAL: CDMA (Internal)  
 DISTANCE: 3 meters  
 LIMIT:  $43 + 10 \log_{10} (W) =$  38.50 dBc

| FREQ.<br>(MHz) | LEVEL<br>(dBm) | AFCL<br>(dB) | POL<br>(H/V) | F/S<br>( $\mu$ V/m) | ERP<br>(dBm) | (dBc) |
|----------------|----------------|--------------|--------------|---------------------|--------------|-------|
| 1649.40        | -84.2          | 34.5         | V            | 732.8               | -40.08       | 65.57 |
| 2474.10        | -90.2          | 38.8         | V            | 602.6               | -41.78       | 67.27 |
| 3298.80        | -94.0          | 42.5         | V            | 595.7               | -41.88       | 67.37 |
| 4123.50        | -108.2         | 46.1         | V            | 175.8               | -52.48       | 77.97 |
| 4948.20        | < -130         | 48.0         | V            |                     |              |       |
|                |                |              |              |                     |              |       |

#### NOTES:

- The bandwidth is set per §22.917 (RBW = 1MHz, VBW = 1MHz).
- The spectrum was checked from 25 MHz up to the 10th harmonic.
- All emissions not listed were found to be more than 20dB below the limit.
- < -130dBm is below the floor of the spectrum analyzer.
- The EUT is manipulated through 3 orthogonal axis and the worst-case are reported.
- The EUT is placed 3m. away from the receiving antenna and the ERP is calculated using the formula:

$$\begin{aligned} \text{ERP (dBm)} &= 10 \log_{10} (((r(\text{mV/m})/1 \times 10^6)^2 / 49.2/1 \times 10^{-3}) \\ \text{ERP (dBm)} &= 10 \log_{10} [ (3 \times \text{FS}/1 \times 10^6)^2 / (49.2) \times 1000] \\ \text{ERP (Watts)} &= \{(3 \times \text{FS})/1 \times 10^6\}^2 / 49.2 \end{aligned}$$

## 8.1 Test Data (Continued)

### 8.3 Radiated Measurements

#### § 1.1053 Field Strength of SPURIOUS Radiation (CDMA)

OPERATING FREQUENCY: 835.89 MHz  
 CHANNEL: 363 (Middle)  
 MEASURED OUTPUT POWER: 25.5 dBm = 0.35 W  
 MODULATION SIGNAL: CDMA (Internal)  
 DISTANCE: 3 meters  
 LIMIT:  $43 + 10 \log_{10} (W) =$  38.50 dBc

| FREQ.<br>(MHz) | LEVEL<br>(dBm) | AFCL<br>(dB) | POL<br>(H/V) | F/S<br>( $\mu$ V/m) | ERP<br>(dBm) | (dBc) |
|----------------|----------------|--------------|--------------|---------------------|--------------|-------|
| 1671.78        | -82.5          | 34.6         | V            | 901.6               | -38.28       | 63.77 |
| 2507.67        | -88.0          | 39.0         | V            | 794.3               | -39.38       | 64.87 |
| 3343.56        | -94.0          | 42.6         | V            | 602.6               | -41.78       | 67.27 |
| 4179.45        | -110.0         | 46.2         | V            | 144.5               | -54.18       | 79.67 |
| 5015.34        | < -130         | 48.6         | V            |                     |              |       |
|                |                |              |              |                     |              |       |

#### NOTES:

- The bandwidth is set per §22.917 (RBW = 1MHz, VBW = 1MHz).
- The spectrum was checked from 25 MHz up to the 10th harmonic.
- All emissions not listed were found to be more than 20dB below the limit.
- < -130dBm is below the floor of the spectrum analyzer.
- The EUT is manipulated through 3 orthogonal axis and the worst-case are reported.
- The EUT is placed 3m. away from the receiving antenna and the ERP is calculated using the formula:

$$\text{ERP (dBm)} = 10 \log_{10} \left( \left( (r(\text{mV/m})/1 \times 10^6)^2 / 49.2 / 1 \times 10^{-3} \right) \right)$$

$$\text{ERP (dBm)} = 10 \log_{10} \left[ (3 \times \text{FS} / 1 \times 10^6)^2 / (49.2) \times 1000 \right]$$

$$\text{ERP (Watts)} = \{ (3 \times \text{FS}) / 1 \times 10^6 \}^2 / 49.2$$

## 8.1 Test Data (Continued)

### 8.4 Radiated Measurements

#### § 1.1053 Field Strength of SPURIOUS Radiation (CDMA)

OPERATING FREQUENCY: 848.31 MHz  
 CHANNEL: 777 (High)  
 MEASURED OUTPUT POWER: 25.5 dBm = 0.35 W  
 MODULATION SIGNAL: CDMA (Internal)  
 DISTANCE: 3 meters  
 LIMIT:  $43 + 10 \log_{10} (W) = 38.50$  dBc

| FREQ.<br>(MHz) | LEVEL<br>(dBm) | AFCL<br>(dB) | POL<br>(H/V) | F/S<br>( $\mu$ V/m) | ERP<br>(dBm) | (dBc) |
|----------------|----------------|--------------|--------------|---------------------|--------------|-------|
| 1696.62        | -82.8          | 34.9         | V            | 901.6               | -38.28       | 63.77 |
| 2544.93        | -91.0          | 39.2         | V            | 575.4               | -42.18       | 67.67 |
| 3393.24        | -95.0          | 42.9         | V            | 555.9               | -42.48       | 67.97 |
| 4241.55        | -111.2         | 46.3         | V            | 127.4               | -55.28       | 80.77 |
| 5089.86        | < -130         | 48.4         | V            |                     |              |       |
|                |                |              |              |                     |              |       |

#### NOTES:

- The bandwidth is set per §22.917 (RBW = 1MHz, VBW = 1MHz).
- The spectrum was checked from 25 MHz up to the 10th harmonic.
- All emissions not listed were found to be more than 20dB below the limit.
- < -130dBm is below the floor of the spectrum analyzer.
- The EUT is manipulated through 3 orthogonal axis and the worst-case are reported.
- The EUT is placed 3m. away from the receiving antenna and the ERP is calculated using the formula:

$$\begin{aligned} \text{ERP (dBm)} &= 10 \log_{10} (((r(\text{mV/m})/1 \times 10^6)^2 / 49.2/1 \times 10^{-3}) \\ \text{ERP (dBm)} &= 10 \log_{10} [ (3 \times \text{FS}/1 \times 10^6)^2 / (49.2) \times 1000] \\ \text{ERP (Watts)} &= \{(3 \times \text{FS})/1 \times 10^6\}^2 / 49.2 \end{aligned}$$

## 8.1 Test Data (Continued)

### 8.5 Radiated Measurements

#### § 1.1053 Field Strength of SPURIOUS Radiation (Analog)

OPERATING FREQUENCY: 824.04 MHz  
 CHANNEL: 991 (Low)  
 MEASURED OUTPUT POWER: 27.80 dBm = 0.60 W  
 MODULATION SIGNAL: ST (Signalling Tone)  
 DISTANCE: 3 meters  
 LIMIT:  $43 + 10 \log_{10} (W) =$  40.81 dBc

| FREQ.<br>(MHz) | LEVEL<br>(dBm) | AFCL<br>(dB) | POL<br>(H/V) | F/S<br>( $\mu$ V/m) | ERP<br>(dBm) | (dBc) |
|----------------|----------------|--------------|--------------|---------------------|--------------|-------|
| 1648.08        | -83.4          | 34.5         | V            | 803.5               | -39.28       | 67.08 |
| 2472.12        | -91.2          | 38.8         | V            | 537.0               | -42.78       | 70.58 |
| 3296.16        | -95.2          | 42.5         | V            | 518.8               | -43.08       | 70.88 |
| 4120.20        | -104.0         | 46.1         | V            | 285.1               | -48.28       | 76.08 |
| 4944.24        | < -130         | 48.0         | V            |                     |              |       |
|                |                |              |              |                     |              |       |

#### NOTES:

- The bandwidth is set per §22.917 (RBW = 1MHz, VBW = 1MHz).
- The spectrum was checked from 25 MHz up to the 10th harmonic.
- All emissions not listed were found to be more than 20dB below the limit.
- < -130dBm is below the floor of the spectrum analyzer.
- The EUT is manipulated through 3 orthogonal axis and the worst-case are reported.
- The EUT is placed 3m. away from the receiving antenna and the ERP is calculated using the formula:

$$\text{ERP (dBm)} = 10 \log_{10} \left( \left( \frac{r(\text{mV/m})}{1 \times 10^6} \right)^2 / 49.2 / 1 \times 10^{-3} \right)$$

$$\text{ERP (dBm)} = 10 \log_{10} \left[ \left( \frac{3 \times \text{FS}}{1 \times 10^6} \right)^2 / (49.2) \times 1000 \right]$$

$$\text{ERP (Watts)} = \left\{ \left( \frac{3 \times \text{FS}}{1 \times 10^6} \right)^2 / 49.2 \right\}$$

## 8.1 Test Data (Continued)

### 8.6 Radiated Measurements

#### § 1.1053 Field Strength of SPURIOUS Radiation (Analog)

OPERATING FREQUENCY: 836.49 MHz  
 CHANNEL: 383 (Middle)  
 MEASURED OUTPUT POWER: 27.80 dBm = 0.60 W  
 MODULATION SIGNAL: ST (Signalling Tone)  
 DISTANCE: 3 meters  
 LIMIT:  $43 + 10 \log_{10} (W) =$  40.81 dBc

| FREQ.<br>(MHz) | LEVEL<br>(dBm) | AFCL<br>(dB) | POL<br>(H/V) | F/S<br>( $\mu$ V/m) | ERP<br>(dBm) | (dBc) |
|----------------|----------------|--------------|--------------|---------------------|--------------|-------|
| 1672.98        | -83.5          | 34.5         | V            | 794.3               | -39.38       | 67.18 |
| 2509.47        | -89.0          | 39.0         | V            | 707.9               | -40.38       | 68.18 |
| 3345.96        | -94.2          | 42.7         | V            | 595.7               | -41.88       | 69.68 |
| 4182.45        | -102.0         | 46.2         | V            | 363.1               | -46.18       | 73.98 |
| 5018.94        | -128.0         | 48.2         | V            | 22.9                | -70.18       | 97.98 |
|                |                |              |              |                     |              |       |

#### NOTES:

1. The bandwidth is set per §22.917 (RBW = 1MHz, VBW = 1MHz).
2. The spectrum was checked from 25 MHz up to the 10th harmonic.
3. All emissions not listed were found to be more than 20dB below the limit.
4. < -130dBm is below the floor of the spectrum analyzer.
5. The EUT is manipulated through 3 orthogonal axis and the worst-case are reported.
6. The EUT is placed 3m. away from the receiving antenna and the ERP is calculated using the formula:

$$\text{ERP (dBm)} = 10 \log_{10} \left( \left( \frac{r(\text{mV/m})}{1 \times 10^6} \right)^2 / 49.2 / 1 \times 10^{-3} \right)$$

$$\text{ERP (dBm)} = 10 \log_{10} \left[ (3 \times \text{FS} / 1 \times 10^6)^2 / (49.2) \times 1000 \right]$$

$$\text{ERP (Watts)} = \{ (3 \times \text{FS}) / 1 \times 10^6 \}^2 / 49.2$$

## 8.1 Test Data (Continued)

### 8.7 Radiated Measurements

#### § 1.1053 Field Strength of SPURIOUS Radiation (Analog)

OPERATING FREQUENCY: 848.97 MHz  
 CHANNEL: 799 (High)  
 MEASURED OUTPUT POWER: 27.80 dBm = 0.60 W  
 MODULATION SIGNAL: ST (Signalling Tone)  
 DISTANCE: 3 meters  
 LIMIT:  $43 + 10 \log_{10} (W) =$  40.81 dBc

| FREQ.<br>(MHz) | LEVEL<br>(dBm) | AFCL<br>(dB) | POL<br>(H/V) | F/S<br>( $\mu$ V/m) | ERP<br>(dBm) | (dBc) |
|----------------|----------------|--------------|--------------|---------------------|--------------|-------|
| 1697.94        | -82.8          | 34.9         | V            | 901.6               | -38.28       | 66.08 |
| 2546.91        | -94.0          | 39.2         | V            | 407.4               | -45.18       | 72.98 |
| 3395.88        | -96.8          | 42.9         | V            | 451.9               | -44.28       | 72.08 |
| 4244.85        | -104.0         | 46.1         | V            | 285.1               | -48.28       | 76.08 |
| 5093.82        | < -130         | 48.6         | V            |                     |              |       |
|                |                |              |              |                     |              |       |

#### NOTES:

- The bandwidth is set per §22.917 (RBW = 1MHz, VBW = 1MHz).
- The spectrum was checked from 25 MHz up to the 10th harmonic.
- All emissions not listed were found to be more than 20dB below the limit.
- < -130dBm is below the floor of the spectrum analyzer.
- The EUT is manipulated through 3 orthogonal axis and the worst-case are reported.
- The EUT is placed 3m. away from the receiving antenna and the ERP is calculated using the formula:

$$\begin{aligned} \text{ERP (dBm)} &= 10 \log_{10} (((r(\text{mV/m})/1 \times 10^6)^2 / 49.2/1 \times 10^{-3}) \\ \text{ERP (dBm)} &= 10 \log_{10} [ (3 \times \text{FS}/1 \times 10^6)^2 / (49.2) \times 1000] \\ \text{ERP (Watts)} &= \{(3 \times \text{FS})/1 \times 10^6\}^2 / 49.2 \end{aligned}$$