7.1 Test Data

7.2 § 22.913 Effective Radiated Power Output

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

Freq. Tuned (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (W)	ERP (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. Tuned (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (W)	ERP (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:

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

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

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

7.1 Test Data (Continued)

7.3 § 22.913 Effective Radiated Power Output

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

Freq. Tuned (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (W)	ERP (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:

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

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

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

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 log10 (W) = _____38.50_____ dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (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:

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:

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

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 log10 (W) = _38.50_ dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (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:

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:

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

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

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

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. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (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:

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:

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

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 log10 (W) =   40.81   dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (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:

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:

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

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

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

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 log10 (W) =	40.81	dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (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:

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

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

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

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 log10 (W) = 40.81 dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (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:

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:

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

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

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