

Test Data

§ 22.913 Effective Radiated Power Output

B. POWER: High (CDMA Mode)

Freq. Tuned (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μ V/m)	ERP (W)	ERP (dBm)
824.64	-15.7	31.66	V	1405724	0.36233	25.58
835.89	-15.8	31.80	V	1412314	0.36574	25.62
848.37	-16.0	31.95	V	1405178	0.36205	25.58

NOTES:

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

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

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

$$\text{ERP (Watts)} = \frac{(3 \times \text{FS})^2}{49.2}$$

Test Data

Radiated Measurements

§ 2.993 Field Strength of SPURIOUS Radiation (CDMA)

OPERATING FREQUENCY: 824.64 MHz
 CHANNEL: 005 (Low)
 MEASURED OUTPUT POWER: 25.50 dBm = 0.36 W
 MODULATION SIGNAL: CDMA (Internal)
 DISTANCE: 3 meters
 LIMIT: $43 + 10 \log_{10} (W) =$ 38.51 dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μ V/m)	ERP (dBm)	(dBc)
1649.28	-84.0	34.6	V	758.6	-39.78	65.3
2473.92	-87.2	38.8	V	851.1	-38.78	64.3
3298.56	-92.5	42.6	V	716.1	-40.28	65.8
4123.20	-96.5	46.2	V	683.9	-40.68	66.2
4947.84	< -130					

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:

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

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

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

Test Data

Radiated Measurements

§ 2.993 Field Strength of SPURIOUS Radiation (CDMA)

OPERATING FREQUENCY: 835.89 MHz
 CHANNEL: 363 (Middle)
 MEASURED OUTPUT POWER: 25.50 dBm = 0.36 W
 MODULATION SIGNAL: CDMA (Internal)
 DISTANCE: 3 meters
 LIMIT: $43 + 10 \log_{10} (W) =$ 38.51 dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μ V/m)	ERP (dBm)	(dBc)
1671.78	-84.2	34.8	V	758.6	-39.78	65.3
2507.67	-88.0	39.0	V	794.3	-39.38	64.9
3343.56	-93.2	42.8	V	676.1	-40.78	66.3
4179.45	-96.8	46.2	V	660.7	-40.98	66.5
5015.34	< -130					

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:

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

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

$$\text{ERP (Watts)} = \frac{(3 \times \text{FS})^2}{49.2}$$

Test Data

Radiated Measurements

§ 2.993 Field Strength of SPURIOUS Radiation (CDMA)

OPERATING FREQUENCY: 848.37 MHz
 CHANNEL: 755 (High)
 MEASURED OUTPUT POWER: 25.50 dBm = 0.36 W
 MODULATION SIGNAL: CDMA (Internal)
 DISTANCE: 3 meters
 LIMIT: $43 + 10 \log_{10} (W) =$ 38.51 dBc

FREQ. (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μ V/m)	ERP (dBm)	(dBc)
1696.74	-85.0	34.8	V	691.8	-40.58	66.1
2545.11	-88.2	39.3	V	803.5	-39.28	64.8
3393.48	-92.0	43.0	V	794.3	-39.38	64.9
4241.85	-96.5	46.2	V	683.9	-40.68	66.2
5090.22	< -130					

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:

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

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

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