

Test Data

§ 22.913 Effective Radiated Power Output

A. POWER: Low (Analog Mode)

Freq. Tuned (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μ V/m)	ERP (W)	ERP (dBm)
824.04	-33.80	31.65	V	174793	0.00560	7.47
836.49	-33.65	31.81	V	181053	0.00601	7.78
848.97	-34.40	31.96	V	169085	0.00524	7.18

B. POWER: High (Analog Mode)

Freq. Tuned (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μ V/m)	ERP (W)	ERP (dBm)	BATTERY
824.04	-13.80	31.65	V	1747934	0.56022	27.47	Extended
836.49	-13.65	31.81	V	1810532	0.60106	27.78	Extended
848.97	-14.40	31.96	V	1690855	0.52423	27.18	Extended
824.04	-13.87	31.65	V	1733904	0.55126	27.40	Mid
824.04	-13.90	31.65	V	1727925	0.54747	27.37	Standard
836.49	-13.72	31.81	V	1796000	0.59145	27.71	Mid
836.49	-13.75	31.81	V	1789807	0.58738	27.68	Standard

NOTES:

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

is calculated using the formula:

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

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

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