

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 (μV/m)	ERP (W)	ERP (dBm)
824.04	-33.2	31.65	V	187294	0.00643	8.07
836.49	-33.6	31.81	V	182098	0.00608	7.83
848.97	-33.6	31.96	V	185399	0.00630	7.98

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	-13.6	31.65	V	1788648	0.58662	27.67	Extended
836.49	-13.7	31.81	V	1804290	0.59693	27.75	Extended
848.97	-13.9	31.96	V	1791044	0.58819	27.68	Extended
824.04	-13.7	31.65	V	1768072	0.57320	27.57	Slim
824.04	-13.6	31.65	V	1788546	0.58655	27.67	Standard

NOTES:

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

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

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

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