

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)	Battery Type
824.04	-33.40	31.65	V	183031	0.00614	7.87	Extended
836.49	-33.40	31.81	V	186340	0.00637	8.03	Extended
848.97	-33.90	31.96	V	179104	0.00588	7.68	Extended

B. POWER High (Analog Mode)

Freq. Tuned (MHz)	LEVEL (dBm)	AFCL (dB)	POL (H/V)	F/S (μV/m)	ERP (W)	ERP (dBm)	Battery Type
824.04	-13.70	31.65	V	1768174	0.57327	27.57	Extended
836.49	-13.70	31.81	V	1800140	0.59418	27.73	Extended
848.97	-14.20	31.96	V	1730240	0.54893	27.38	Extended
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:

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

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

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