

Test Data

ERP Test Results

Freq. Tuned (MHz)	LEVEL (dBm)	AFCL (dB)	F/S (dBμV/m)	ERP (dBm)	ERP (W)
462.56	-7.85	25.20	1650346	0.49941	26.97

NOTES:

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

$$\text{Level m/Vm @ 3 meters} = \frac{\text{Log } 10^{-1} (\text{dBm} + 107 + \text{AFCL})}{20}$$

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

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

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