

6.5.4 Test Data

| FUNDAMENTAL FREQUENCY (MHz) | Measured Average Conducted Power (P) – dBm | |
|--------------------------------|--|----------------|
| | Digital | LIMIT (dBm) |
| 824.950 | 35.0 | 38.5 |
| 836.188 | 34.4 | 38.5 |
| 848.000 | 32.7 | 38.5 |

| FUNDAMENTAL FREQUENCY (MHz) | Average ERP (dBm) Transmitter's Antenna Gain of 3 dBi (Substitution Method) | | | Max. EIRP (dBm) | LIMIT (dBm) |
|-----------------------------------|---|------------|---|--------------------|----------------|
| | Vertical | Horizontal | Substitution Dipole Antenna Gain (dBi) | | |
| 824.950 | 35.5 | 35.9 | 1.3 | 37.2 | 38.5 |
| 836.188 | 33.5 | 33.2 | 1.1 | 34.6 | 38.5 |
| 848.000 | 36.2 | 31.3 | 1.0 | 37.2 | 38.5 |

MINIMUM SEPARATION FOR RF EXPOSURE (R)

Maximum power density allowed by FCC = $S = f/1500 = 824.95/1500 = 0.55 \text{ mW/cm}^2$

Max. EIRP = 37.2 dBm = 5248 mW

R = square root of $(\text{EIRP}/4*\text{Pi}*S) = \text{square root of } (5248/(4*3.1416*0.55)) = \mathbf{27.6 \text{ cm}}$

The manufacturer specifies 30 cm minimum separation distance for RF Exposure compliance.