

FCC Part 15 Certification
Test Report

910.5MHz – 918.5MHz Multi-Channel Transmitter

FCC ID: RPE1000-7315

FCC Rule Part: 15.249

ACS Report Number: 04-0038-15C249

Manufacturer: VeriFiber, LLC.
Model: VT31XX

RF Exposure Information

General Information:

Applicant: VeriFiber
 ACS Project: 04-0038
 FCC ID: RPE 1000-7315
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Resonant Tank Circuit
 Antenna Gain: -6dBi
 Transmitter Conducted Power: -14.76dBm
 Maximum System EIRP: -20.76dBm
 Operating Configuration: Mounted where wireless sensing of temperature is required.
 Exposure Conditions: Greater than 20 centimeters

MPE Calculation

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 P_x G}}{d} \quad \text{Power Density: } P_d (mW/cm^2) = \frac{E^2}{3770}$$

MPE Distance

MPE Calculator for 916.5MHz Periodic Operated Transmitter Limits for General Population/Uncontrolled Exposure*					
Transmit Freq. (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	MPE Distance (cm)
916.5	-14.76	0.61	-6	0.25	0.0331

Installation Guidelines

The installation manual contains the following text advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

"RF Exposure (Intentional Radiators Only)"

In accordance with FCC requirements of human exposure to radiofrequency fields, the radiating element shall be installed such that a minimum separation distance of (20cm)."

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.