



## 14 FCC RULES AND REGULATIONS PART 1.1307, 1.1310, 2.1091 AND 2.1093: RF EXPOSURE COMPLIANCE

### 14.1 GENERAL INFORMATION:

- FCCID: PUX-70TX-M1
- Environment: General Population/Uncontrolled Exposure
- Device category: Mobile

### 14.2 OPERATING CONFIGURATIONS AND TEST CONDITIONS:

#### 14.2.1 ANTENNA TYPES:

Antenna	Type	Gain (dBi)
N/A	Omni	0

#### 14.2.2 OPERATING CONDITIONS:

This transmitter has been designed as an OEM module for use by various OEM integrators. The device must operate with the quarterwave whip antenna tested for this filing for satisfying the RF exposure requirements.

#### 14.2.3 TEST SIGNAL, TIME-AVERAGING, MAX. MEASURED OUTPUT:

Mode: FM

Frequency Range	Rule Part	Output Power (W) Conducted	Freq. Tolerance	Emission Designator
420-510	90	0.013		16K0F1D

### 14.3 MPE CALCULATION:

The maximum distance, from the antenna at which MPE is met or exceeded, is calculated from the equation relating field strength E in V/m, transmit power P in Watts, transmit antenna numeric gain G, and separation distance in meters:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d}$$

$$\text{POWER DENSITY: } P_d (mW/cm^2) = \frac{E^2}{3770}$$

Frequency<sup>A</sup> 420 MHz

The limit for general population/uncontrolled exposure environment above 1500MHz is  $0.28 \text{ mW/cm}^2$ .

#### SEPARATION DISTANCE:

Separation Distance <sup>A</sup>	Antenna Gain (dBi)	
	0	
Power <sup>B</sup> (Watt)	(in)	(cm)
0.013	1	2

Notes:

<sup>A</sup> = Distances are calculated for the largest (worst-case) separation distance

<sup>B</sup> = Measured output power conducted – ERP was measured at 0.007 Watts

#### CONCLUSION:

This transmitter complies with the FCC RF exposure requirements by providing a safe separation distance between the antenna (including any radiating structure) and any persons.