APPENDIX A: FCC PART 1.1307, 1.1310, 2.1091, 2.1093: RF EXPOSURE

From FCC 1.1310 Table 1A, the maximum permissible RF exposure for an uncontrolled environment is 1 mW/cm^2 . The Electric field generated for a 1 mW/cm^2 exposure (S) is calculated as follows:

$$S = (P \times G)/(4 \times \pi \times d^2)$$

where:
S = Power density
P = Transmitter conducted power in watts
G = Numeric gain
d = distance to radiation center

Fundamental Operating Frequency: (421-510 MHz); the worst case RF exposure limit at 421 MHz is used to determine compliance.
Maximum Rated Output Power ERP: .0.0085 Watts (8.5 mW)

S = (8.5)/ (4 x Pi X 20^2) = 0.8 mW/cm^2

Under normal operating conditions, the antenna is designed to maintain a separation distance of 20 cm from all persons. The EUT is mobile and fixed.

Calculated Power Density:

Radiated ERP Power (milli-Watt) = 8.5	
Separation Distance = 20 cm	
FCC Power density Limit	Calculated Power density at 20 cm distance
0.002mW/cm^2	0.28 mW/cm^2

GENERAL INFORMATION:

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

ANTENNA TYPES:

Antenna	Type	Gain (dBi)
17mm wire length	Whip	0

OPERATING CONDITIONS:

This transmitter has been designed as an OEM mobile transmitter. The device must operate with the quarter wave whip antenna tested for this filing for satisfying the RF exposure requirements.

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