

 COMPANY:
 AeroComm, Inc.

 FCC ID:
 PJ6-5075TX-F90

 MODEL:
 5075TX-F

 WORK ORDER:
 2001007 / QRTL00-1020 {REV-1}

# APPENDIX A: FCC RULES AND REGULATIONS PART 1.1307, 1.1310, 2.1091, 2.1093: RF EXPOSURES COMPLIANCE

### The manufacturer applies for the General Population/Uncontrolled Exposure Environment.

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:

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

Power density:  $P_d (mW/cm^2) = \frac{E^2}{3770}$ 

The limit for general population/uncontrolled exposure environment applicable

to Bystanders (at 956 MHz) = f(MHz)/1500 in  $mW/cm^2$ 

## TABLE 8: MPE CALCULATION

Antenna: A patch antenna with a calculated gain of -7.6 dBi per the following test data:

- Carrier ERP level is 10.6 mW per substitution method
- The maximum E-field strength at a 3 m distance is 107.6 dBuV/m
- Numerical gain for 100 mW of conducted output power is Gn = 0.1738

## Frequency<sup>A</sup> 956 MHz

Limit for General Population/Uncontrolled Environment (Bystanders): 0.64  $mW/cm^2$ 

#### SEPARATION DISTANCE:

Power <sup>B</sup>	(dBi) Antenna Gain
	-7.6
(Watt)	(cm)
0.1	1

Notes:

 $\frac{A}{2}$  = Distances are calculated for the largest (worst-case) separation distance

<sup>B</sup> = Conducted Output Power delivered to the antenna