



360 Herndon Parkway
Suite 1400
Herndon, VA 20170
<http://www.rheintech.com>

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:

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

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

The limit for general population/uncontrolled exposure environment applicable to Bystanders (at 956 MHz) = $f(\text{MHz})/1500$ 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 $G_n = 0.1738$

Frequency^A 956 MHz

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

SEPARATION DISTANCE:

Power ^B (Watt)	(dBi) Antenna Gain
	-7.6
	(cm)
0.1	1

Notes:

^A = Distances are calculated for the largest (worst-case) separation distance

^B = Conducted Output Power delivered to the antenna

