15 FCC RULES AND REGULATIONS PART 1.1307, 1.1310, 2.1091, 2.1093: RF EXPOSURES

The manufacturer does not specify or sale any antenna with the radio identified in this report.
The manufacturer applies for the General Population/Uncontrolled 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 applicable to Bystanders (at 27.405 MHz) = 180/(f(MHz))^2 in mW/cm^2

15.1 MPE CALCULATION

Antennae: Typical CB antenna available on the market and commonly chosen by end-users for vehicle application.

Frequency ^{A} 27.405 MHz

Limit for General Population/Uncontrolled Environment (Bystanders): 0.24 mW/cm^2

SEPARATION DISTANCE:

Power^B (CW)	(dBi) Antenna Gain^C		(dBi) Antenna Gain^C	
	-4.5		2.15	
(Watt)	(in)	(cm)	(in)	(cm)
3.9	11	27	18	46
1.95 (50%)^D	7	19	13	33

Notes:
^{A} = Distances are calculated for the largest (worst-case) separation distance
^{B} = Conducted Output Power delivered to the antenna
^{C} = Gains are compared to an ideal 1/2-wave dipole (0 dBd = 2.15 dBi)
^{D} = Source-base time-averaging duty factor = 50%

Instructions will be placed in the user manual instructing installers and users to maintain the MPE distances during operation of the EUT.