MPE Calculations for CDMA 1x

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the body of the user. The MPE calculation for this exposure is shown below.

The peak radiated output power (ERP) was tested according to ANSI/TIA/EIA-603-C-2004.

The maximum peak radiated output power (ERP) is recorded and EIRP is calculated as follows.

ERP = 24.08dBm(256mW)
EIRP = ERP + 2.15dB = 24.08 + 2.15 = 26.23(420mW)

Power density at the specific separation:

	Where,
$S = (EIRP)/(4R^2\pi)$	S = Maximum power density (mW/cm^2)
$S = (420) / (4 * 20^2 * \pi)$	$EIRP$ = Maximum Peak radiated output power(mW)
	R = Distance to the center of the radiation of the antenna
S = 0.08 mW/cm^2	(20cm)

Conclusion:

The Maximum permissible exposure (MPE) for the general Population/Uncontrolled is

0.55 mW/cm^2 (=f/1500=824/1500).The power density at 20cm does not exceed the 0.55 mW/cm^2.

Therefore, the exposure condition of this EUT is compliant with FCC rules.