

24<sup>th</sup> May 2002

CONSULTING 
RESEARCH 
TRAINING 
CERTIFICATION TESTING

Client: Project Number: Contact: FCC ID: Good Technology GDTB-G100-SAR-3879 Louie Sanguinetti PX3G100

SINCE 1981

Mr Sanguinetti,

Below is the response to the questions posed by the FCC in respect to the G100 portable device.

If you have any further questions correspondence concerning this application in respect to SAR evaluation preformed please feel free to forward them at your convenience.

Regards,

Stuart Nicol.

## Is crest factor correction used with SAR probe? Please describe.

The duty cycle for the device tested is taken into account and is explained on page 8 of the report. In some cases crest factor is incorrectly assumed to be the same as the duty cycle (CF = 1/DC). This can differ greatly to the actual physical value of the duty cycle, where the duty cycle is a function of the Tx uplink allocation within each repetition.

## Please explain how device against flat phantom represents hand. Will hand cover or be within a few cm of antenna in normal use?

The value recorded is a conservative evaluation, for the hand SAR analysis. It could be assumed that the user would have their hand in close proximity to the antenna, and as such the conservative value recorded within the report provides data emulating this scenario. Generally the manufacturer would stipulate within the user manual that the hand must not be in contact with the area where the antenna is located. Performance of the device would be affected if the user were to maintain contact with the antenna throughout use.



## Graph 3 shows "hot spot" outside of device. Please submit zoom scan plots superimposed on device for max SAR configurations.

When a number of peaks are measured during the course scan evaluation process the peak locations are noted and then a secondary analysis is run to evaluate each peak, individually. The value recorded within the report is the conservative SAR value, which was measured as a result of each individual zoom scan evaluation. The image below shows the areas in which the 1 and 10-gram averages (with the zoom scan data superimposed onto the plot form the course area analysis) were located and calculated from. For both peaks, individual zoom scans were executed and the results evaluated.

