

27 East Lake Hill P.O. Box 3485 Airdrie, Alberta CANADA TB4 2B7 Phone (403) 912-0037 Fax (403) 912-0083

23 October 2001

Subject: Findings re: LoCate frequency deviation with audio input.

Project Number: c05e2295

A LoCate sample was tested 25 July 2001, in accordance with EIA IS-137 Section 3.3.1.2.3.

The audio signal was applied to the input port that is reserved for future use by the modem that is not implemented in the current variant of the device.

The worst case deviation was 11.6 kHz. This occurred on all three carrier frequencies, with a 590 Hz tone applied at 20 dB higher input than that which produced 8 kHz deviation at 1 kHz.

The peak deviation with a 1 kHz tone at 20 dB step to higher input than required for 8 kHz deviation was 9.1 kHz on all three carrier frequencies.

The steady state deviation at 1 kHz with a 20 dB step to higher input than required for 8 kHz deviation was 8.8 kHz.

These measurements were taken with an HP 8920B, serial number US35320686, with calibration due 24 November 2001.

David G. Raynes
Laboratory Supervisor
Electronics Test Centre (Airdrie)