

14 January, 2000

Mr. Frank Coperich
FCC Application Processing Branch

Re: Questions from the FCC

FCC ID: N5WNP16PSBDMHJKH2
Applicant: Neopoint Inc.
Correspondence Reference Number: 11429
731 Confirmation Number EA95150
Date of Original E-Mail: 01/11/2000

Dear Mr. Coperich:

Pursuant to your e-mail to Neopoint's Sai Kwok and our Mr. Jay Sarkar I am forwarding to you our responses:

1. A revised page with a warning/caution statement is in the manual which shall be uploaded to you along with this letter.
2. We have reviewed extensively your concern regarding the various output levels indicated in the SAR and EMC reports and the 2 dB antenna gain. The answers to your concerns are as follows:
 - 2.a. The 25 dBm shown in the SAR report for CDMA should have been 26 dBm, and correspondingly instead of 318 mW we should have 389 mW. There was also a typographical error in the EMC report: 398 mW should have been 389 mW (the "8" and "9" are transposed).
 - 2.b. The discrepancies we observed in the various output levels fall within the expected measurement uncertainties of:
 - i) APREL measurement accuracy of the ERP is ± 1.5 dB or better.
 - ii) The antenna gain measurement accuracy of the manufacturer is reasonably estimated to be more than ± 0.5 dB or worse.
 - iii) Matching/coupling efficiency between the device power source and the antenna introduces uncertainty. If not optimally matched, there will be a loss of power when transferring from source to antenna of at least 0.2 dB.

A theoretical estimation of the ERP based on the conducted power plus the 2-2.5 dB free space antenna gain would lead one to expect an ERP of about 0 - 0.5 dB above the measured conducted power. In this case the measured ERP is lower than the measured conducted power; we reported a 0.6 dB drop for AMPS and 0.7 dB drop for CDMA. The maximum discrepancy of 1.2 dB easily falls within the total measurement uncertainty. This is due to the factors as described above: measurement uncertainty of ERP measurement ($<\pm 1.5$ dB), Antenna Specification uncertainty ($>\pm 0.5$ dB), and mismatch between phone and antenna ($>\pm 0.2$ dB). Thus a total of up to ~ 2.2 dB of uncertainty is not unexpected. The variation between the measured conducted power and the measured ERP as reported in the two reports are within this uncertainty.

Note. There appears to be a conversion error in your note. Your 467 mW ERP corresponds to 26.7 dBd compared to the 26.4 dBd we reported which corresponds to 436 mW.

In conclusion, we are asking for the grant to specify an AMPS ERP of 436 mW (26.4 dBd) and a CDMA ERP of 339 mW (25.3) dBd.

Regards,

Paul G. Cardinal, Ph.D
Director, Operations

Jay Sarkar
Director, Standards and Certification