

Aug 26, 2005

NOKIA, INC. 6000 Connection Drive Irving, Texas 75039 972-894-5000

RE: FCC ID: QMNRM-19

Responses to FCC Questions:

(Correspondence Reference Number: 22231, 731 Confirmation Number: TC422805)

Dated Aug 8, 2005

A) Please explain any differences in power from the HAC, SAR and EMC reports. Samples used for testing are tuned similarly. Considering the factors of measurement uncertainty, the samples were within an acceptable range (within 0.4dBm) for testing.

B) Please detail how drift was measured.

The Speag system has been set up to measure the power before the start of the HAC test and at the end of the test at the same location. The difference accounts for the drift.

- C) Please describe the test sample to include the stage in production it is from. Prototypes (pre-production) used are set up as closely as is known to what production samples will be.
- D) Please justify probe measurement at the center of the sensor. C63.19 recommends measurement at the nearest element point. Please include additional illustrations of the probe/elements showing more detail of the probe tip area.

See updated test report.

E) Please provide details of the WD's signal. Include wideband and 0 span spectrum analyzer plots. How was the signal set up and controlled? What settings were used i.e. power control modes, and radio service mode. Also, please include details of what exact standard the CDMA radio is capable of using i.e. IS-95.

See updated test report. The CDMA radio is capable of using IS2000.

F) Please provide additional details justifying the conversion to peak; particularly the procedure used to measure power. Provide 0 span spectrum plots or power meter details if applicable.

See updated test report.

G) Please explain two CW field values measured under system verification for unmodulated and modulated cases.

See updated test report.

- H) Please provide details of the dipoles used and justification of target values. **See updated test report**.
- I) Please provide system verification targets/discussions for all three signal types recommended by C63.19. For the WD signal please detail the source for the WD signal for system verification and how it compares to the actual signal from the WD. **See updated test report**.



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- J) To help clarify dynamic range issues, if possible, please state the highest measured voltage at the diode compared to it compression point.

 See updated test report.
- L) Please demonstrate that 5 mm step size is sufficient for verification. One means might be though use of a two dimensional plot of field strength versus distance in a direction perpendicular to the length of the dipole. Was any interpolation used? **See updated test report**.
- M) Please discuss how the composite DSS is addressed in this filing. This product is a composite device, consisting of a Bluetooth transmitter. The Bluetooth device of the product has no affect the HAC compatibility of the product, due to its low power output.
- N) Please describe how probe rotation was accounted for in the filing. Show the grid location where the probe rotation was made. Probe rotation should take place at the peak after exclusion for at least the worst case configuration. Reported result should account for this rotation.

See updated test report.

0) Please update the user instruction to address the antenna extended requirement consistent with testing.

Please review UG antenna information on pg. 14 "Antenna information" and Pg. 17 "Make a call Note: Before making or receiving a call, fully extend the whip antenna." Please advise if this information is sufficient.

- P) Please describe how the measurement plane was established and maintained. **See updated test report**.
- Q) Please include a discussion of probe modulation factor in the report. **See updated test report**.

Elizabeth Parish Product Certification Officer Nokia Dallas