

Nokia Mobile Phones – San Diego
Klaus Kettunen

December 18, 2002

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American Telecommunications Certification Body, Inc.
6731 Whittier Avenue
McLean, VA 22101

Re: Nokia Mobile Phones

FCC ID: GMLNPD-4AW

Dear Mr. Johnson,

Following are our responses to your correspondence dated December 11, 2002:

EMC Report/ General:

- (1) Revised Modulation Limiting plot with color coding description for the three traces has been uploaded to ATCB website.
- (2) Revised 'Letter of Confidentiality' has been uploaded to ATCB website.
- (3) Exhibit that shows compliance with 22.919 (Electronic Serial Numbers) has been uploaded to ATCB website.

SAR Report:

- (4) The User Guide has been corrected and uploaded to ACTB website.
- (5) The validation SAR results in the table are from the plots; but these two measurement files mentioned in your comment were unintentionally deleted before completion of the report.
- (6) It is obvious from the shape of the hot spot in the plot, that the max SAR has been scanned. Additionally, the result 0.90 is 20 % below the maximum SAR (1.13) found for this product.
- (7) Z-axis plots are from SAR measurements with regular cover and can be found in the report.
- (8) Device positioning photos have been uploaded to ATCB website.
- (9) Device positioning photos have been uploaded to ATCB website.
- (10) The plots list liquid temperature. The range of ambient temperature (22 +/- 2 degrees centigrade) is informed in the report.
- (11) Optical surface detection was used in the SAR measurements for low band with 1.4 +/- 0.2 mm distance and mechanical surface detection as used for high band with 2 mm distance.
- (12) The measured volume of 32x32x35 mm (cube 5x5x57 contains about 35g of tissue. The first procedure is an extrapolation (include. Boundary correction) to get the points between the lowest measured plan and the surface. The next step uses 3D interpolation to get all points within the measured volume in a 1mm grid (3500 points). In the last step, a 1 g cube is placed numerically into the volume and its averaged SAR is calculated. This cube is then moved around until the highest averaged SAR is found.

We hope that the above responses are sufficient to complete review of this application.

Klaus Kettunen, Product Certification Officer
Nokia Mobile Phones, San Diego