

To: William Graff
From: Andy Leimer
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FCC Equipment Authorization Branch
Re: FCC ID: AXATR-421-A2

Applicant: Ericsson Inc
Correspondence Reference Number: 3431
731 Confirmation Number: TC758957
Date of Original Email: 01/11/2002

Subject: ERP and SAR

1. Semantics: SAR report pg 3 (25) lists Duty Cycle = 3, should be Duty cycle = 1/3, crest factor = 3.

The statement is correct, Duty Cycle should be replaced by Crest Factor or "3" should be substituted by "1/3". Please see correction in updated report.

2. Prefer to have date-of-test listed on all SAR plots.

Please see updated report.

3. Report should include comments/description of how and why final SAR is "Calculated to max. power."

The SAR is calculated to maximum output power by scaling all SAR numbers by the ratio of maximum peak output power (26.25 dBm) to the peak output power in the center of the band. This procedure is followed since, in production, the output power of the phones is calibrated to the center of the band.

4. pg 6 (25) says "For 800 TDMA mode, the maximum power is significantly lower than that of AMPS mode, therefore SAR values are also lower and not listed." pg 3 (25) shows 26.25 max power for both AMPS and TDMA. Please submit TDMA-mode SAR data.

The maximum average output power, which is the one relevant for SAR, in AMPS mode is 26.25 dBm. In TDMA mode, due to the 1/3 duty cycle, the average power would be 1/3 of the linear value of 26.25 dBm. Therefore, this would result in a significantly lower SAR.

5. 900 MHz head and body probe factors were used for 835 MHz-band testing. Please provide analysis of expected change in SAR if 835 MHz ConvF's were used.

SAR would not change since the conversion factor is valid in the frequency range 750 MHz-1000MHz. Please see below screen capture plot of the conversion factor menu.

6. Semantics: procedure pg 6 (14) refers to "extended uncertainty," prefer "expanded uncertainty" per ISO GUM.

"Expanded uncertainty" will be used in future filings.

7. Procedure pg 7 (14) refers to "laboratory setup" influence quantity. This does not seem to be in draft IEEE Std 1528. Please describe.

Please refer to annex X3.1.2 Source Uncertainty : " The measurement protocols in Annex E5.1 requires that this type of source uncertainty be 3% or less with monitoring and periodic site evaluation."

- 8) Correct the ERP on the Grant for AMPS mode. The Test Report lists ERP as 0.275 Watts.

The ERP is 0.275 Watts

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal pursuant to Section 2.917©.

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