ERICSSON

To: Greg Czumak
Federal Communications Commission

From: Jim Sponsler
Date: 9-4-98

Correspondence ID 2595 ; Ericsson AXATR-387-A2

A response to the request for additional information dated August 7, 1998 for the AXATR-387-A2 submittal are shown and attached for your reference.

1) The frequency range for Part 24 portion of this device will be listed as 1850.04 to 1909.92MHz.

2) EIRP measurements and procedure is attached for your review. We are requesting the 400mW rating of the mobile. The data for the two tested mobiles supports this request given the 20% window.

3) SAR information is addressed on the FCC Correspondence ID of 3040.

If you have any questions, please contact John Rothgeb or me.

Sincerely,

Jim

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SUPPLEMENTARY TEST DATA: 1900 MHz ISOTROPIC RADIATED POWER

1900 MHz Isotropic Radiated Power (EIRP) of Ericsson Model KRC 113 341 Cellular Telephone (FCC ID: AXATR-387-A2) have been re-measured. The following data have been recorded.

Equipment Under Test:	Ericsson Model KRC 113 341 Cellular Telephone
FCC ID:	AXATR-387-A2
Serial Numbers:	UA200JA9AG and UA200J25W6
Test Facility:	10 meter Anechoic EMC Chamber located at Underwriters Laboratories, 12 Laboratory Drive Research Triangle Park, NC 27709
Test Date:	August 31, 1998
Test Performed By:	Ara Perk, Sr. Staff Eng., Ericsson Inc.

The following is a description of the substitution method used to obtain accurate EIRP readings at the carrier fundamental frequency:

(1) EUT was placed on the turntable, tilted at an angle of 51.3^{o} from the plane, which was believed to be the strongest direction of radiation for this particular model telephone.
(2) DQPSK transmitter was turned on at the maximum output power. Mid-band channel 1000 (1879.98 MHz) was selected.
(3) Measurements were made at 3 m using a calibrated horn antenna and equipment with known cable losses.
(4) A peak measurement was made by raising and lowering the receive antenna and by rotating the EUT 360^{o}.
(5) Horizontal and vertical polarization was tested and the spectrum analyzer reading corresponding to the highest level was recorded.
(6) A signal generator and another horn antenna, were then substituted for the EUT. The peak was found by raising and lowering the receive antenna and by rotating the transmit antenna.
(7) The output of the signal generator was set to calibrated maximum level of +10 dBm and the resultant field strength was measured on the spectrum analyzer.
(8) Final EIRP was than calculated by using transmit antenna gain (dBi) and correcting for the difference between readings of step 5 and 7.

Test Data:

Row				Comments
1	EUT Serial Number	UA200JA9AG	UA200J25W6	Pre-series units
2	Raw Spectrum Analyzer Reading	92.6 dBuV	93.2 dBuV	Source = EUT
3	Signal Generator Output Level	+10 dBm	+10 dBm	1879.98 MHz
4	Transmit Antenna Cable Loss	-5.4 dB	-5.4 dB	
5	Input Level to Transmit Antenna	+4.7 dBm	+4.7 dBm	(Row 3 – Row 4)
6	Transmit Antenna Gain Over Dipole	7.7 dBi	7.7 dBi	
7	Substituted Isotropic Source Level	12.3 dBm	12.3 dBm	(Row 5 + Row 6)
8	Raw Spectrum Analyzer Reading	79.5 dBuV	79.5 dBuV	Source = Substitution Antenna
9	Difference of spectrum analyzer readings	13.1 dB	13.7 dB	Correction factor (Row 2 – Row 8)
10	EIRP in dBm	25.4 dBm	26.0 dBm	(Row 9 + Row 7)
11	**EIRP in Watts**	**0.346 W**	**0.398 W**	Rated Power 0.4 W