

Date: Tue, 20 Mar 2001 16:31:58 -0500 (EST)
From: OET <oetech@fccsun07w.fcc.gov>
To: jmoulton@qcpi.com
Subject:

To: Jay Moulton, Kyocera Wireless Corp.
From: Joe Dichoso
jdichoso@fcc.gov
FCC Application Processing Branch

Re: FCC ID OVFPQP-3035A
Applicant: Kyocera Wireless Corp
Correspondence Reference Number: 18469
731 Confirmation Number: EA100274

1) Indicate the differences between this pending application FCC ID: OVFPQP-3035 and the granted application FCC ID: OVFPQP-3035A. The test reports, photo are all the same but the SAR report is different? New radiated and output data and also photo's are required if changes are made such as shielding, adding speakers or changing output power.

1A) The pending application is FCC ID: OVFPQP-3035A and the granted application is FCC ID: OVFPQP-3035. The only difference is that the pending application FCC ID: OVFPQP-3035A has a different metalization pattern on the inside of the phone's front cover for SAR purposes. Photos of the new metalization pattern were included in the new SAR report. In a meeting between Jay Moulton of Kyocera and Kwok Chan & Ken Nickels of the FCC, both parties agreed that only a new SAR report was needed for this filing and that measurements such as radiated spurious emissions were not needed. Included in the new SAR report is the ERP and EIRP radiated output power measurements.

Many of the following items are similar to what was previously asked for.

2) Compliance with the E911 requirements in Section 22.921.

2A) QCP-3035 is compliant with E911 requirement specified in CFR 47, Section 22.921. The following capture is taken from QCP-3035 compatibility software application notes.

FCC compliance Emergency 911

When an emergency 911 call is originated by the user, the mobile will attempt to acquire any available system and originate the emergency call on that system, disregarding restrictions set by the roaming list. The FCC NPRM WT99-13, CC94-102 automatic analog A/B roaming option has been implemented for 911 emergency calls. Note that the QCP-3035 does not have Global Positioning System (GPS) support.

3) The "description" in the confidential letter is missing and needs clarification. What is the "description" Submit the "description" in the operational description folder of the electronic file. Any confidential description in the Test report must be separated and submitted separately from the test report exhibit.

3A) The word, "description" should not have been in the confidential letter. Kyocera does not want any "description" in the Test Report to be held confidential.

Request of Confidentiality

Federal Communications Commission
Authorization and Evaluation Division

Re: Request of Confidentiality

Pursuant to Sections 0.457 and 0.459 of the Commission's Rules, the Applicant hereby requests confidential treatment of information accompanying this Application as outlined below:

All schematics/block diagrams
All parts lists

The above materials contain trade secrets and proprietary information not customarily released to the public. The public disclosure of these matters might be harmful to the Applicant and provide unjustified benefits to its competitors.

The Applicant understands that pursuant to Rule 0.457, disclosure of this Application and all accompanying documentation will not be made before the date of the Grant for this Application.

Kyocera Wireless Corporation

Robert J Scodellaro
EMC Engineer, Staff/Manager

3) Resolve any output power output power discrepancies between the data in the radiated emissions exhibit, the SAR report and the test report and the requested output power. The ERP measurements in the test report incorrectly uses 49.8 instead of 49.2 for the ERP calculations. Please resolve/explain/correct all ERP and EIRP output powers. The requested output powers must agree with all exhibits.

3A) The original ERP and EIRP radiated output power amplitude levels were always correct, it was the test method in the original submittal report that was incorrect. The ERP and EIRP radiated output power was never measured on an OATS site. It was measured in an antenna range anechoic chamber. You can check in the original submittal data package and see that on page 12 of the SAR report the conducted output power and on page 13 the ERP and EIRP radiated output power that SAR was tested at. Kyocera always measures SAR with the phone set to an ERP and EIRP level that is 0.7 dB above the ERP and EIRP radiated output power that should be on the grant. This 0.7 dB is to insure compliance to SAR requirements with manufacturing tolerance. I have included the data sheets and test procedure.

Transmitter RF Power Output - FCC part 2, Paragraph 2.1046

Transmitter RF Power Output - FCC part 2, Paragraph 2.1046

7/20/2000

Radiated Power --

The RF output power (**ERP**) was measured in an antenna range anechoic chamber.

carrier frequency (MHz)	channel	RF output power (W) – Cellular ERP Measured	
		FM	CDMA
824.04	991	0.646	
824.7	1013		0.479
836.49	383	0.537	0.407
848.31	777		0.407
848.97	799	0.513	

Transmitter RF Power Output - FCC part 24, Paragraph 2.1046, 24.232 (b)

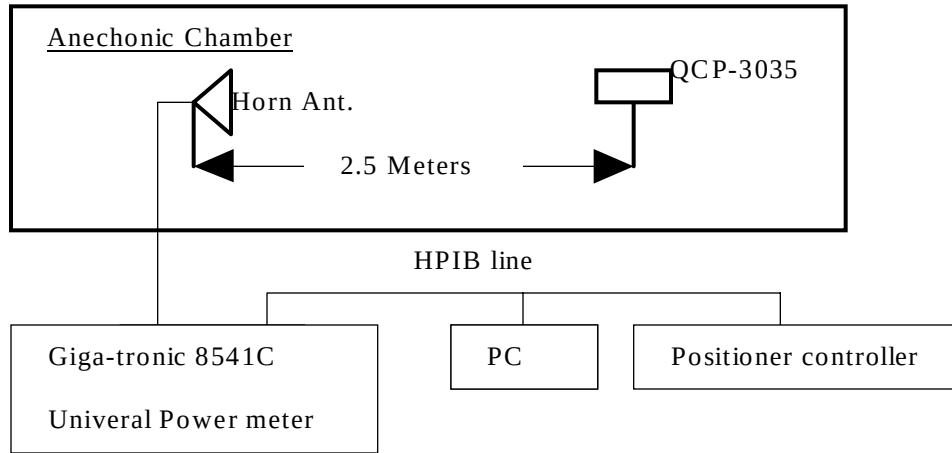
Transmitter RF Power Output - FCC part 24, Paragraph 2.1046, 24.232 (b)

7/21/2000

Radiated power --

The RF output power (**EIRP**) was measured in an antenna range anechoic chamber.

		RF output power (W) – PCS EIRP
carrier frequency (MHz)	channel	CDMA
		measured
1851.25	25	0.400
1880	600	0.302
1908.75	1175	0.240



ERP/EIRP measurement

Test Setup -

Measurement Method -

Set QCP-3035 conducted power level using phone_t software (KWC phone control software), then mount it on PVC pipe inside the antenna range anechoic chamber, rotate the phone 360degree in azimuth and elevation. The horn antenna receives the handset signal from 2.5 meters away. The computer will record the maximum radiated power taking into consideration of all path losses, ERP for 800MHz cellular band and EIRP for PCS band. The entire measurement is controlled by 959 automated antenna measurement workstation software by Flam & Russel Inc.

Minimum Standard -

The maximum output power in a FM mode in cellular band shall be no more than -2 dBw. The maximum output power in a CDMA mode in cellular band shall be in the range of -7 dBw to 0 dBw. The maximum output power in a CDMA mode in PCS band shall be in the range of -7 dBw to 0 dBw.

RF safety only.

Please place your reply in the RF exposure info folder.

Kyocera, EA 100024 -

4. Please submit a photo of the belt-clip tested with this device for body-worn SAR compliance and indicate the location where a separation distance of 23.5 mm was measured, as reported in the SAR report.

4A) The 23.5mm distance was measured between the flat phantom and the back of the phone at the base of the antenna. This distance is shown in the photo below where the ruler is held next to the phone.

1) SAR test set-up photos

Photo 1



5. Body-worn SAR plots have device illustrated with its antenna placed on the wrong side and plots for PCS band with antenna OUT are indicating peak SAR locations shifted and extended outside of the typical regions of the device and its belt-clip; please review results and clarify.

5A) In the SAR report for the pending application FCC ID: OVFQCP-3035A, the antenna is in the correct position on the SAR plots and the peak SAR location is clearly shown on all plots.

6. Body-worn SAR was tested with a specific Kyocera belt-clip accessory. The proposed body-worn RF exposure info (in the manual) suggests use of other belt-clip or similar accessories with no metallic component is OK provided they can maintain 22.75 mm separation. The separation distance provided by the tested belt-clip and indicated in the SAR report is 23.5 mm. The use of other belt-clips with the proposed conditions will require separate body-worn SAR testing with the proposed separation distance (without any belt-clip). Existing body-worn SAR results using a specific belt-clip, if containing any metallic component in its assembly, would typically result in different SAR distributions than others with different separation distance or component assembly. Please revise the proposed statement to indicate other belt-clips, holsters or similar accessories that have not been tested for body-worn SAR may not comply with FCC RF exposure limit and should be avoided.

6A) Revised User's Manual

The QCP-3035's user guide has been revised to include a statement that other belt-clips, holsters or similar accessories that have not been tested for body-worn SAR may not comply with FCC RF exposure limit and should be avoided.

The following caption is incorporated into the user's guide:

To comply with FCC radiation exposure requirements, use of this device for body-worn operational configurations is limited to accessories tested and approved by Kyocera Wireless Corp. Other accessories used with this device for body-worn operations must not contain any metallic components and must provide at least 23.5mm separation distance including the antenna and the user's body. Other accessories that have not been tested for body-worn SAR may not comply with FCC RF exposure limit and should be avoided.

Note: Output is 600 mW ERP for AMPS mode, 479 mW ERP for CDMA mode and 400 mW EIRP for PCS/CDMA.

Proposed Grant Conditions - Output is ERP for Part 22 and EIRP for Part 24. For AMPS mode operation, units produced must not exceed 501 mW conducted output, as tested for this filing, for satisfying RF exposure requirement. SAR compliance for body-worn operating configurations is limited to the specific belt-clip tested for this filing. End-users must be informed of the body-worn operating requirements for satisfying RF exposure compliance.

The highest reported SAR values are -

AMPS/CDMA modes (Part 22) - Head: 1.56 W/kg; Body-worn: 0.701 W/kg

PCS/CDMA mode (Part 24) - Head: 1.42 W/kg; Body-worn: 0.703 W/kg

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 60 days of the original e-mail date may result in application dismissal pursuant to Section 2.917 (c) and forfeiture of the filing fee pursuant to section 1.1108.

DO NOT reply to this e-mail by using the Reply button. In order for your response to be processed expeditiously, you must upload your response via the Internet at www.fcc.gov, Electronic Filing, OET Equipment Authorization Electronic Filing. If the response is submitted through Add Attachments, in order to expedite processing, a message which informs the processing staff that a new exhibit has been submitted must also be submitted via Submit Correspondence. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.