

This document was generated in response to a request from Frank Coperich for additional technical information in regards to the Part22 type approval of the QSec 800 (fcc ID: J9CQSEC800). This document includes the email received by Mr. Coperich and the response to each question.

Email received July 26, 2000:

Date: Wed, 26 Jul 2000 11:10:09 -0400
From: oetech@fccsun07w.fcc.gov (OET)
To: jforrester
Subject:

To: John Forrester, Qualcomm Incorporated
From: Frank Coperich
fcoperic@fcc.gov
FCC Application Processing Branch

Re: FCC ID J9CQSEC800
Applicant: Qualcomm Incorporated
Correspondence Reference Number: 15275
731 Confirmation Number: EA98117
Date of Original E-Mail: 07/26/2000

1.) Please submit evidence of compliance with the E-911 requirements under Section 22.921 of the Commission's R&R.

2.) Please submit a measurement of ERP for operation in the AMPs. mode. Normally this is done with the substitution method. If we convert the field strength reading of 125.4 dBuV/M listed in your radiated emissions test, the ERP value is greater than the .6 W specification for a Class III unit and different from the .398 W requested..

3.) Please submit a measurement of ERP for operation in the CDMA mode. Normally this is done with the substitution method. If we convert the field strength reading of 124 dBuV/M listed in your radiated emissions test, the ERP is about .49 W and different from the .251 W value requested.

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.

Responses:

Question:

1) Please submit evidence of compliance with the E-911 requirements under Section 22.921 of the Commission's R&R.

Response:

The Qsec 800 meets the requirements of 22.921 by using the "Adequate/Strongest Signal" method approved by the Commission. The system software recognizes when a "911" call is made and overrides programming for "non-911" calls. The phone will then scan the control channels for the preferred carrier, and will complete the "911" call if a signal of at least -85dBm is detected. If the preferred carrier's signal strength is lower than -85 dBm, the handset will attempt to complete the "911" call using a non-preferred carrier.

Please see the attached letter of declaration of compliance with 22.921.

Question:

2.) Please submit a measurement of ERP for operation in the AMPs. mode. Normally this is done with the substitution method. If we convert the field strength reading of 125.4 dBuV/M listed in your radiated emissions test, the ERP value is greater than the .6 W specification for a Class III unit and different from the .398 W requested.

Response:

The intention of the reported AMPs mode ERP measurement was to demonstrate the worst case radiated spurious emissions profile of the QSec 800. The QSec 800 was configured to transmit at a power level where the phone's power amplifier was operating close to its point of saturation. The transmitter generated harmonics and other related emissions were thus measured at their maximum possible levels. These measurements represent an output power level the QSec 800 is not designed to operate at. A production QSec 800 is calibrated to operate with a radiated ERP value of 0.398 Watts. At this power level, the spurious emissions will never exceed the values in the submitted measurements.

Based on this test methodology, additional testing of the QSec 800 at a lower transmit power level of 0.398 watts is extraneous since the phone has already demonstrated compliance to Part 22 radiated emissions requirements at a higher transmit power level than requested for the type acceptance grant.

If you feel the additional test data is absolutely required, the unit can be re-tested at the lower power level.

Question:

3.) Please submit a measurement of ERP for operation in the CDMA mode. Normally this is done with the substitution method. If we convert the field strength reading of 124 dBuV/M listed in your radiated emissions test, the ERP is about .49 W and different from the .251 W value requested.

Response:

The intention of the reported CDMA mode ERP measurement was to demonstrate the worst case radiated spurious emissions profile of the QSec 800. The QSec 800 was configured to transmit at a power level where the phone's power amplifier was operating close to its point of saturation. The transmitter generated harmonics and other related emissions were thus measured at their maximum possible levels. These measurements represent an output power level the QSec 800 is not designed to operate at. A production QSec 800 is calibrated to operate with a radiated ERP value of 0.251 Watts. At this power level, the spurious emissions will never exceed the values in the submitted measurements.

Based on this test methodology, additional testing of the QSec 800 at a lower transmit power level of 0.251 watts is extraneous since the phone has already demonstrated compliance to Part 22 radiated emissions requirements at a higher transmit power level than requested for the type acceptance grant.

If you feel the additional test data is absolutely required, the unit can be re-tested at the lower power level.



QUALCOMM Incorporated

5775 Morehouse Drive
San Diego, CA 92121-1714

www.qualcomm.com

July 9, 2000

Federal Communication Commission
FCC Application Processing Branch
445 12TH ST SW
Washington DC 20554

Mr. Frank Coperich:

Qualcomm Inc. certifies that the QSec 800 (FCC ID: J9CQSEC800) meets the E-911 requirements stated in CFR47: Part 22.921. The QSec 800 uses the "Adequate/Strongest Signal" method for improving E-911 performance. The system software recognizes when a "911" call is made and overrides programming for non-911 calls. The phone will then scan the control channels for the preferred carrier, and will complete the 911 call if a signal of at least -85dBm is detected. If the preferred carrier's signal strength is lower than -85 dBm, the handset will attempt to complete the "911" call using a non-preferred carrier.

If there are any questions, please contact John Forrester.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Forrester', with a long horizontal flourish extending to the right.

John Forrester
EMC/Regulatory Engineer
Qualcomm, Inc.

A handwritten signature in black ink, appearing to read 'P. Guckian', with a stylized, cursive script.

Paul Guckian
Director Regulatory Engineering
Qualcomm, Inc.