X-Sender: sgalati@maill.qualcomm.com X-Priority: 1 (Highest) Date: Mon, 21 Aug 2000 15:45:00 -0700 To: mortlieb From: Suzanne Galati <sgalati> Subject: Email for pdf: MPE Analysis for Module

Errol Chang,

This e-mail will be printed to disk using PDFWriter and submitted as an attachment pdf file along with attachments via the filing submissions webpage. It is also being sent to you directly in parallel so that we will have a record of what was submitted, that being something the Webpage does not always provide due to time-out problems. My responses to your specific questions and comments are interleaved below in blue italics so that they may be more readily discerned.

Re:FCC ID J9CGSPDM1Applicant:Qualcomm IncorporatedCorrespondence Reference Number:15705731 Confirmation Number:EA97895Date of Original E-Mail:08/21/2000

This request is based only on the RF exposure aspects.

1. Please confirm output inconsistency in Table 2 of the MPE report - 26.5 dBm is not equal to 631 mW. When including the antenna gain (7 dBic), 34.5 dBm does not relate to neither 26.5 dBm nor 631 mW.

As you have pointed out there is an error in Table 2 which has now been corrected to read "26.5 dBm (446.7mW)". See revised RF analysis report exhibit 7.

The 34.5 dBm is the sum of the antenna gain (7dBic), conducted power (26.5dBm Max; factory set point) and 1dB for factory error in setting the conducted power level during the manufacturing/calibration process. This is the worst case EIRP value for Modems operating in the field and so this was the value derived and used in the RF analysis.

2. Please revise proposed RF exposure instruction to indicate the antenna should be installed to provide the proposed distance instead of asking the user to maintain that distance.

Please see the correction notice for the Installation guide/User Manual exhibit 11a.

3. Please confirm the antenna is for vehicle-mount configurations only.

The Modem (including antenna) is designed for use in Supervisory Control and

Data Acquisition (SCADA), remote telemetry / monitoring, asset tracking and monitoring and other vertical market applications and could be used on a number of vehicles (buses, trains, RV's) as well as in fixed sites where the antenna could be mounted on elevated structures (towers or buildings). Some typical applications are listed below:

Electric Utility Industry Pipelines, Offshore Platforms Water Treatment Plants Remote Inventory Management Electronic Billboards Highway Traffic Monitoring Remote Security Systems Monitoring Energy Management Retail Point of Sale (POS) Transactions Remote Banking

System performance dictates that the Antenna must have a clear site of the sky from 10 degrees elevation up and this is clearly described in the user guide. I can confirm that this antenna will never be used for any handheld or body worn applications and that the installation instructions clearly define a separation distance of 21.5 cm or more for RF exposure requirements.

Note: Filing is requesting for 2.82 W EIRP.

Proposed Grant Comments - Output is EIRP. Device is a satellite modem module operating with a specific 7 dBic, vehicle-mount antenna installed to provide a separation distance of 21.5 cm or more from persons for satisfying RF exposure requirements.

Based on the response shown for question 3, would it be appropriate to delete the reference to "vehicle-mount"?.

Regards,

Paul Guckian Director, Engineering, Qualcomm Inc.



GSP-1620User\_Guide\_MPEFCCcorr 1

3