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RE: FCC ID: QDS-BRCM1007 (EA453070)

1) Thank you for internal antenna position info. Now please submit photos or sketches showing relative location(s) of card slot(s) (PCMCIA, Compactflash, SD, etc). Please submit in Exhibit 3 external photos of laptop host.

Photos DCP_0229 and 0230, which have been uploaded, show this information.

2) Please consider to include antenna location info as part user manual info to facilitate 2.5cm of pdf pg 73.

Thank you, Broadcom will speak to Dell about this.

3) Further to crn 24812 reply 4, user manual states:

" NOTE-This Dell TrueMobile WLAN Card device must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product."

How is this compatible with 15.407(d) integral-antenna requirements? May need revision.

We have uploaded a revised manual with the statements about installing a WLAN card removed.

4) Dec23 and Feb11 2.4ghz SAR reports not applicable to this application - delete.

We do not know how to delete exhibits to the filing. We request that you delete them.

5) Output power inconsistent across filing: Form 731 = 158mW, op desc pg 3 = 25mW, op desc pg 1 = 100mW, Feb25 SAR pg 22 = 158mW

Please explain, and revise exhibits if appropriate.

The power level ratings in the Operational description are how Broadcom specify the product internally. The power references are "Average power in the TX packet". Due to the peak to average ratio of OFDM signaling the Peak power will be approx. 8dB higher than the rated average (i.e. 22dBm). This does therefore correspond to the 158mW on the other documents. We have uploaded a revised Operational description detailing the units (in terms of average).

6) What is sys. check dipole target value and how obtained?

There is currently no target values specified for 5.24GHz muscle or brain tissue and in previous correspondence between Victor Kee and Tim Harrington on the target value appropriate, it was decided to refer the target value determination to the IEEE SCC 34.2 committee as an action item. This action item was recently refiled with the IEEE SCC 34.2 committee by Tim Harrington on Ultratech's behalf but the target validation values may take sometime to be formulated and ratified.

7) Please submit photo of 5GHz dipole in position at phantom.

File has been uploaded.

8) SAR sec 6 prescans: are those 1g SAR?

Unless otherwise specified, all the SAR values in the report were the peak spatial-average 1g SAR.

9) SAR sec. 7 contains only aux-antenna data, while sec. 6 shows main antenna has higher SAR. Please submit revised sec. 7 including main antenna results.

The result shown in Sec 7 indicated the exposure was higher for the aux antenna. Please refer to Sec. 6.3.1. The maximum SAR for the MAIN antenna in touch position was found to be 1.070 W/Kg while the maximum SAR for the AUX antenna in touch position was found to exceed FCC limit (1.6W/Kg). As per discussion between Mr. Tim Harrington in FCC and Victor Kee in Ultratech, we were recommended not to show any number exceeding 1.6 W/Kg in the report so we now just place an indication that the SAR was found to be in excess of the limit. This is also at Mr.Kwok Chan's recommendations. In addition, the penetration depth at 5Ghz is found to be very shallow so that a small increment (5 mm) in the distance either in tissue or in air will result in radically low SAR values measured.

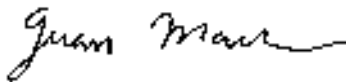
10) SAR sec. 6 lists Bluetooth simult. with aux-antenna. Is BT antenna closer to main antenna? What is BT output power?

The main antenna is slightly closer to the BT antenna than the Aux however; the SAR measurements were worst case for BT operating in conjunction with the Aux antenna. The BT output power is 0.8mW.

In addition to the above, we are uploading for your review emissions data and SAR reports for an additional laptop model: Dell PP02X.

If you need further information or clarification, please do not hesitate to contact us via doc@elliottlabs.com.

Regards



Juan Martinez