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Milpitas, CA 95035

www.palmone.com

To: Mr. Tim Johnson, American TCB
From: David Waitt
Subject: FCC ID: O8FMADECA

Date: October 16, 2004

This letter addresses your compliance concerns regarding the FCC / IC application referenced above. If there are any questions or if additional information is required, please contact me at david.waitt@palmone.com

Regards,

David Waitt
PalmOne Regulatory Engineer

SAR issues

ATCB: Please explain why only the left ear (with Aluminum case) was tested for 800 MHz, and only the right ear (with Aluminum case) for 1900 MHz.

PalmOne: In actuality the SAR test report shows that the aluminum case was tested:
800 MHz Cellular - RIGHT ear
1900 MHz PCS – LEFT ear

The AL case was tested in this manner due to the fact that the highest head SAR for 800MHz was reported for the right ear and the highest head SAR for 1900MHz was reported for the left ear. The AL case was tested on the mid channel of each band and resulted in a SAR more than 3dB below the limit, thus, no additional head testing was performed.

Additionally, body SAR test was performed with the AL case and found to be more than 3dB below the limit on the mid channel of each band.

General

ATCB: Please provide a Tune Up Procedure for this device.

PalmOne: PalmOne does not have access to the tune up procedure for this RF module since it is a purchased part from an outside vendor. That document is confidential to the manufacturer of the RF module.

ATCB: Are schematics available for the Part 22/24 portion of the device. Please explain.

PalmOne: Schematics for the CDMA RF module are proprietary to the designer and manufacturer of the CDMA module. PalmOne does not have access to the schematics for the module.

ATCB: Please provide the DC voltages/currents applied into the transmitter module for normal operation over the power range.

PalmOne: Voltage, Typical: 3.4 VDC , Maximum Current: .677A

ATCB: Temp Stability for both 800 and 1900 MHz does not appear to be shown down to -30 C. Please provide.

PalmOne: An attempt was made to gather data at -30C, however the operational temperature range of the product is -20 to 55 C. The product was did not maintain a call at -30 C. therefore it was not possible to gather data at that temperature.

ATCB: For Digital Device emissions, please comment on the RBW/VBW settings used for the all tests.

PalmOne:

Conducted Emissions:

150kHz to 30 MHz: QP and Avg detector on receiver with 9 kHz IF BW

Radiated Emissions

30 MHz to 1 GHz: Peak and QP detector on receiver with 120kHz IF BW

1GHz to 2 GHz: Peak and Avg detector on receiver with 1 MHz IF BW

ATCB: The users manual appears to be missing the information required by 15.105(b).

PalmOne: The 15.105 Class B statement will be added to the manual as soon as possible at the next revision/printing of the manual. In the mean time, an "insert page" will be placed in the box with the product.

Bluetooth

ATCB: Please address simultaneous TX for CDMA + Bluetooth EMC results

PalmOne: The BT emissions were tested with the CDMA phone transmitting simultaneously with the CDMA phone. This was verified on both of the CDMA operating bands (900 / 1900 MHz)

ATCB: FYI. The RBW shown in the plots doesn't match the table on page 27 of the Bluetooth report.

PalmOne: Table has been corrected with the correct RBW.

ATCB: The average time of occupancy for the Bluetooth report seems to be based upon a 900 MHz DSSS. The time should be calculated based upon $79 * 0.4$ seconds. Please correct.

PalmOne: It has been corrected. Revised data and report uploaded.

ATCB: Run #2 on page 35 (Bluetooth) appears to be Low channel, not middle. Please confirm/correct.

PalmOne: Channel has been properly label.

ATCB: Run #3 on page 36 (Bluetooth) appears to be High channel, not middle. Please confirm/correct.

PalmOne: Channel has been properly label.

ATCB: Why are the fundamental levels on page 34-36 (Bluetooth) using 100 kHz RBW higher than the reported levels in the bandwidth test using 1 MHz RBW.

PalmOne: The table has been removed to avoid any more confusion. The table is to show the limit that will be used for Non-restricted emissions, but the non-restricted emissions meet the 15.209 limits with enough margin, so the tables are not necessary.

ATCB: Please explain the output power results. Is this a substitution method, or conducted power calculated using the far field equations and known antenna gains?

PalmOne: A statement on the start of each data worksheet, has been included. Mainly the field strength of the fundamental was measured at 3 meters. This value is then converted to dBm by subtracting 95.2 dB.