August 30, 2006

ITPD-06-F011A: WLAN Part 15C / DTS / EA313926 ITPD-06-F011B: UNII Part 15E / NII / EA886336

ITPD-06-F011C: HSDPA Parts 22H, 24E / PCB / EA712027

To: Diane Poole / FCC Application Processing Branch

FCC ID: ACJ9TGCF-W52

Applicant: Panasonic Corporation of North America

731 Confirmation Numbers: EA313926 Correspondence Ref Numbers: 31492

Subject: Laptop Computer, Model CF-W5 with Intel WLAN and Novatel HSDPA

1) CF-W5 user manual shows position of WLAN antennas, but not pt22/24 antenna(s) - if updated user manual is available, please submit

Answer: The WLAN Main TX/RX and Aux TX/RX antennas are located in the bottom keyboard; and the HSDPA TX/RX antenna is located in top LCD.

2) What is distance from closest point of pt22/24 antenna(s) to bottom of base of laptop?

<u>Answer</u>: The HSDPA transmitter antenna is located in the LCD and greater than 20 cm from the bottom base of the laptop. Regarding RF exposure evaluation, the WLAN is portable and the HSDPA is mobile.

## FYI

3) This device needs additional line items for PCE EDGE mode 824.2-848.8 MHz and 1850.2- 1909.8 MHz bands. What line items are to be added to the Grant (frequencies, power, tolerance, and emissions designator) for EDGE mode?

<u>Answer:</u> The frequency range for EDGE is the same as GPRS. The frequency tolerances are the same. The powers for EDGE are lower and listed as bold items in attached exhibit. The emission designators are 278KG7W for EDGE 850 MHz and 277KG7W for EEGE PCS band (The X becomes a 7 for EDGE).

## (1) Intel WLAN (a+b+g) Module, Model WM3945ABG

| FCC Rule Part | Freq Range (MHz) | <u>Type</u>         | Conducted Output Watts |
|---------------|------------------|---------------------|------------------------|
| Part 15C      | 2412~2462        | DSSS/OFDM/802.11(b) | 0.0228                 |
| Part 15C      | 2412~2462        | DSSS/OFDM/802.11(g) | 0.0264                 |
| Part 15C      | 5745~5825        | OFDM/802.11(a)      | 0.3490                 |
| Part 15E      | 5180~5240        | UNII Low Band       | 0.0150                 |
| Part 15E      | 5260~5320        | UNII High Band      | 0.0137                 |

## (2) Novatel HSDPA/GPRS/EDGE Module, Model EU730

| FCC Rule Part | Freq Range (MHz) | <u>Type</u>    | Output Watts | Emission Designator |
|---------------|------------------|----------------|--------------|---------------------|
| Part 22H      | 824.20~824.20    | Cellular GPRS  | 1.735 W ERP  | 278KGXW             |
| Part 22H      | 824.20~824.20    | EDGE           | 0.490 W ERP  | 246KG7W             |
| Part 22H      | 826.40~846.60    | Cellular HSDPA | 0.163 W ERP  | 4M17F9W             |
| Part 24E      | 1850.20~1909.80  | PCS GPRS       | 0.779 W EIRP | 277KGXW             |
| Part 24E      | 1850.20~1909.80  | EDGE           | 0.445 W EIRP | 246KG7W             |
| Part 24E      | 1852.40~1907.60  | PCS HSDPA      | 0.235 W EIRP | 4M18F9W             |
|               |                  |                |              |                     |

4) In accordance with OET/Lab grant power listing procedures (e.g., July 2006 TCBC conference call, repeated below for convenience), max radiated power will be listed in grant notes. Please explain and /or revise filing to clarify what are measured maximum radiated powers for this transmitter integrated into this specific final-product. Answer: The Parts 15C and 15E output powers were reported as conducted output power. The Parts 22H and 24E output powers were reported as ERP and EIRP. The highest reported Portable Body SAR values for 2.4 GHz is 0.727 W/kg; 5.3 GHz is 0.651 W/kg; and 5.8 GHz is 1.18 W/kg.