12th March 2003

Mr. James Baer

Intel Corporation
2300 Corporate Center Drive
Thousand Oaks, CA 91320

Reference FCC ID: PD9WCF2011BM

Dear Mr. Baer,

Enclosed are the responses to the questions set by Mr. Timothy Johnson ATCB.

Question 1.
Please provide a justification for not providing all test plots (i.e, did the channels tested for each configuration have similar SAR distributions). If not, additional plots should be included to document the different SAR distributions and identify peak locations relative to device and phantom.

The DUI was the Intel PRO/Wireless 2100B LAN CF Card and not the PDA(s)/PCMCIA extender card. As the investigation was in respect to the above DUI all distributions were similar as the resonating structure did not change over the test process. The only change to the test configuration was the DUI host, where the form factor of the host would be the only contributing factor to the change in measured SAR and not necessarily the SAR distribution. As all measured plots and values were similar it was the intention of APREL Laboratories to show the configuration where the SAR assessed was conservative.

Question 2.
Please provide information regarding the probe tip distance to phantom inner surface.

The distance from the probe tip to the phantom surface is 2.6mm. The compounded distance from the centre of the sensor to the phantom surfaces is 5mm.

This equates to 2.4mm Sd + 2.6mm Md = 5mm compounded.

Question 3.
The test report should clearly identify the following:
a) if testing was for Occupational/Controlled OR General Population/Uncontrolled limits?
b) if the test device is a production unit or identical prototype (47 CFR §2.908)?

Page 6 Applicable Documents references the standards to which the device was assessed. To provide value added benefits to clients APREL follow these guide/standards to allow a generic format for reporting.

The device was assessed for a class two permissive change to allow use for PDA type devices, so it was a production unit, which was assessed.

Question 8.
Information on SAR plot is considered incomplete. Please update SAR plots to include the following:
a) Crest factor applied
b) Date of test on all plots
c) Liquid parameters listed (typically ρ =1)
d) Ambient and liquid temperatures
e) z-axis scan at max SAR location
f) PLOTS MUST SHOW PROBE FACTORS (e.g., ConvF)

Previous engineering reviews by the FCC have stated that information contained within the graphic plot page has been excessive and the information does not need to be repeated. This is why APREL have tried to reach a compromise where all information needed to perform a review of the report is contained within the document. A number of the parameters listed above do not change and are applied throughout the assessment process. APREL laboratories modified the template for required information on the graphic plot page to meet the requirements as set forth by Mr. Denis Ward ATCB, to ensure that the obligations and requirements of both the assessment laboratory and ATCB are met. In the interest of expediting the review process for projects it would be advisable for future reference if ATCB were to harmonise the required information needed on the graphic plot page. APREL will ensure that the next set of engineering reports incorporate the above-required fields on the SAR plots.

a) Page 2. Engineering Summary, provides data concerning the Duty Cycle, which was used for the DUI. This was set for all assessed values.

b) Page 27 Conclusions, provides the dates in which the analysis was made of the DUI. In line with the requirements of OET Sup C and IEEE P-1528 all testing which exceeded a 24 hr period was supported with an additional system validation to prove conformity.

c) Page 17 Simulated Tissue, provides all the relevant information concerning the medium used during the assessment of the DUI. The epsilon and sigma values for tissue within a well-controlled environment are assumed not to change within a 24hr period hence the detailed information being contained within this section of the report. When the analysis exceeds 24hrs then a new assessment is executed and the data included within this section.

d) See above response and Page 17 Simulated Tissue.

e) Page 41 contains the details of the Z-axis scan for the conservative SAR measured and reported.

f) See Page 17 Simulated tissue for probe conversion factor. Please note that this is a calibrated value as described in the probe calibration document contained in Appendix E, and remains as a fixed value which does NOT change.

If ATCB still require additional information, or changes to the report to include the above information on the graphic plot pages APREL shall amend the reports.

Regards,

Stuart Nicol

Director Product Development,
Dosimetric R&D.