RE: Cisco Systems Inc.
FCC ID: LDKXSCLCR15

1.) Please submit antenna information covering the antennas described in this application.

Response: antenna info has been provided.

2.) Please submit Tune-up information as specified by 2.1043(c)(9).

Response: The radio has no tuning components. All tuning is control by the Atheros chip AR5414A and scrips. Letter explaining this has been uploaded.

3.) Please submit a cover letter addressing licensed module policy.

Response: Letter has been uploaded. At the moment FCC does not have an official "Licensed" module policy, so they use the Part 15 "Official" unlicensed modular requirement. Because of this we use the "Official" modular list for license modules.

4.) Please note the method for power measurement in 90.1215(b). Please explain
how your measurements meet with the requirement that the results are calibrated
in terms of RMS equivalent voltage.

Response: No other method was used other then the procedural methods stated in the UNII Procedure (DA-02-2138). This method is used if the transmitter cannot be set to 100% duty cycle, which was the case for the 4.9Ghz Mini PCI card.

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Method #3
  Set span to encompass the entire emission bandwidth (EBW) of
the signal.
  Set sweep trigger to "free run".
  Set RBW = 1 MHz. Set VBW ε1/T
  Use linear display mode.
  Use sample detector mode if bin width (i.e., span/number of points in
spectrum) < 0.5 RBW. Otherwise use peak detector mode.
  Set max hold.
  Allow max hold to run for 60 seconds.

Below is an explanation for the use of the Sample detector to simulate
RMS detection.
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Using Power Measurement Functions

RMS Detection

For most power measurements, it is desireable to respond to signals in an RMS fasion. This means that the power measured is accurately reported, whether the signal contains tones, noise, or other signals. If the spectrum analyzer is not configured for RMS detection (also known as power detection), CW-like signals (tones) will be measured correctly, but noise-like signals (including most digitally-modulated signals) will not be correctly measured.
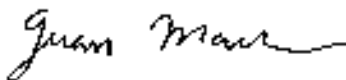
The power measurement functions compute the RMS of all the applicable measurement cells (display buckets). If the data in those cells is unbiased, RMS detection occurs. To keep the data unbiased requires:

*   The detection mode must be SAMPLE. Other modes, such as POSitive PEAK, are biased differently for noise-like signals than for CW-like signals.

*   The video bandwidth (VBW) should be at least 10 times the resolution bandwidth (RBW). If it is not, video filtering of a noise-like signal on a logarithmic (dB) display scale biases the measurement.

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5.) In addition to the RF Exposure evaluation, a statement confirming compliance with the RF Safety requirements for both fundamental and unwanted emissions must be submitted. Please see 90.1217.

Response: Letter stating compliance with the RF exposure has been uploaded.

Regards,

Juan Martinez
Senior EMC Engineer
JM/dmg