August 1, 2000

William H. Graff AmericanTCB, Inc. 6731 Whittier Avenue McLean, VA 22101

This is in response to the comments made by AmericanTCB concerning the application for FCC ID: LDKVP1900XX.

1. The output powers, frequency range and emission designator are as follows:

Power (EIRP)	Frequency range	Emission Designator
0.871 Watts	1930.2 – 1989.8 MHz	236KX7D

Note: All measurements of power were made using peak detection. There is no other power setting for this device. To more clearly delinate the output power of the device, three pages of the test data have been changed and are attached.

Regarding the statement about measuring the radiated and conducted power on 3 channels. I submit that there is no basis for requiring this. First, the antenna gain is not being measured since conducted power is done without the antenna and radiated measurements were made with a load connected to the output. Second, there is no requirement for measuring multiple channels in the FCC rules or in TIA/EIA 603-1992. Is this requirement being stated based on FCC Section 15.31(m)? If so, then it is not applicable.

- 2. There is currently no requirement for measurement uncertainties above 1 GHz. There are no site requirements above 1 GHz, so it seems
- 3. None of the measurements made on the device were average measurements so 1MHz/10Hz bandwidth settings were never actually used. These settings would only be used when the rules required measurements using an average detector. This statement is only to show what method would be used for making an average measurement.
- 4. The description of the EUT as a dual transceiver was provided by Cisco. Our understanding was that there were dual transceivers, one for each antenna.
- 5. None of the measurements above 1 GHz were made with 1MHz/10Hz settings. See item 3.

- 6. While we know that the ground plane will affect the measured levels, we used the standard site compliant with ANSI C63.4-192 Clause 5.4 as stated in TIA/EIA-603-1-1998. Clause 5.4 says use a table of the correct height which is specifed as 0.8 meters in clause 6.2.1. Would you prefer that we use a 1 meter table per clause 1.5.30 of TIA/EIA-603-1992?
- 7. I have modified page 11 of the report to include EIRP calculations and this page is attached.
- 8. Somehow, the list of equipment in Exhibit 1 failed to include the equipment for measurements above 1 GHz. This page has been corrected and is attached.
- 9. Thanks for the input. It was easy to test both because we set the two transceivers of the unit to the lowest and highest channels.
- 10. Exhibit 2, page 6 provides both 1 MHz and 3 kHz P_{out} data. The reported power output was based on the 1 MHz bandwidth data. The data for 3 kHz was necessary to make the band edge measurements per 24.238(b).
- 11. Band edge data was provided in Graphs T37895–5 and –6, but the provided plot only showed 50 kHz of out of the band data. During testing, we observed that the highest level in the 1 MHz band below 1930 MHz and above 1990 MHz was at the band edge. To provide more detail in the plots, we used the narrower span. We will provide wider span plots to show the full 1 MHz below 1930 and above 1990 MHz. These plots use the same 3 kHz bandwidth as the one set of the P_{out} data per 24.238(b).

Sincerely,

David W. Bare Principal Engineer