

General:

What is your lab's zip code? I saw 40510 for the FCC site registration and 40503-2771 for the Industry Canada site registration

40510 is our zip code. I am not sure why the IC zip code is wrong.

FCC:

1) The block diagram has no interconnections between blocks indicated, and does not have any intermediate frequencies between blocks indicated. Please obtain an amended version.

A new block diagram is attached.

2) The user's guide is for the lexmark pro200, which is a printer. It DOES contain all of the required manual statements, which is good, but it is not really evidence that every printer the module is installed in will contain the appropriate statements. The installation guide for the module itself has not been provided. The modular attestation references the user's guide for instructions on how to meet the modular requirements, which would include informing the installer about proper manual statements and also about proper labelling of the host ("Contains FCC ID:XXX-YYYYY"). Since we do not have the installation instructions, we cannot verify that these instructions exist.

Here is the response from the client:

*I am not sure I understand what is needed for this one. The wireless card is installed at the factory and the customer is not able to remove/replace the card. Each product contains the same notifications in the manual and on the label. I have provided a sample similar to what has been done in the past. I can provide manuals and labels for all products if necessary. One other possibility is that the request is for installation instructions from the factory and not for the user. I have not provided anything like this in the past so I am hoping this is not the request.*

*In any case, I will be glad to help provide whatever is needed. If you can help me get a few more details about what needs to be supplied, that would be very helpful.*

3) I was unable to locate a sample calculation for radiated and line-conducted emissions in the test report. Future reports probably should include this for completeness.

Added to report.

4) I was unable to find a reference to the test procedures of KDB 558074 in the test report.

Future reports probably should include this for completeness.

Added to executive summary.

5) Please confirm that a 1 MHz resolution bandwidth was used for radiated emissions testing of harmonics which fell into the restricted bands. I saw a reference to 100 kHz bandwidth in the antenna conducted emissions section, and I see that the band edge plots were made using a 1 MHz RBW, but I did not see any discussion of RBW in the radiated emissions test procedure section. An email response is sufficient.

Added to executive summary.

6) Please clarify about the antenna as the following is unclear to me - the test report indicates that the antenna is integral, on the PCB, but includes output power measured at the antenna port with a power meter as well as conducted emissions at the antenna terminal. Was a temporary antenna port affixed for this testing?

A special test jig provided by the manufacturer was used to perform the conducted emissions.

The schematics indicate that there are two PCB trace antennas, were both antenna ports checked for compliance? For radiated emissions, was the worst case antenna port determined and was the software set up to force transmission on one antenna port without switching during the test? An email response is sufficient.

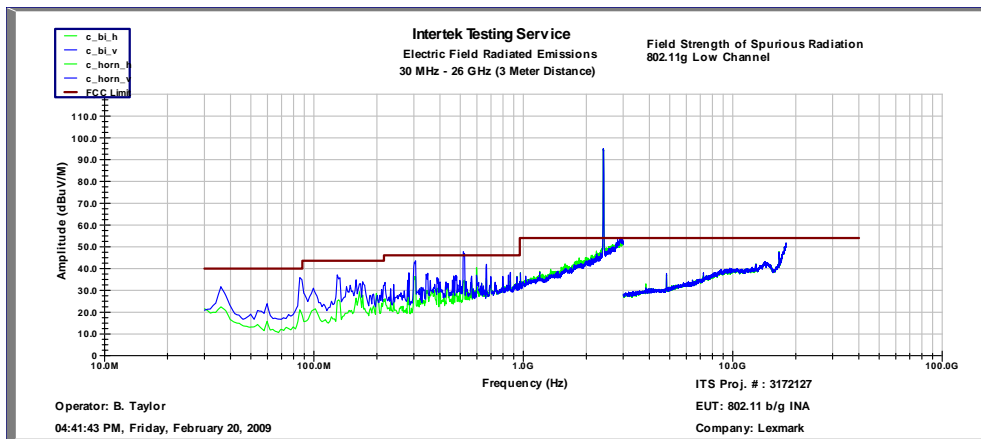
The worst case antenna was used throughout the testing. When running scans using test program, the Tx/Rx antenna is set via commands and does not change without tester intervention.

7) It appears that the output power was measured in each modulation type and data rate, and the worst case was selected from 802.11b and 802.11g modes and tested throughout the rest of the report. I could not find a statement that explicitly states this - can you confirm that this is what was done? An email response is sufficient.

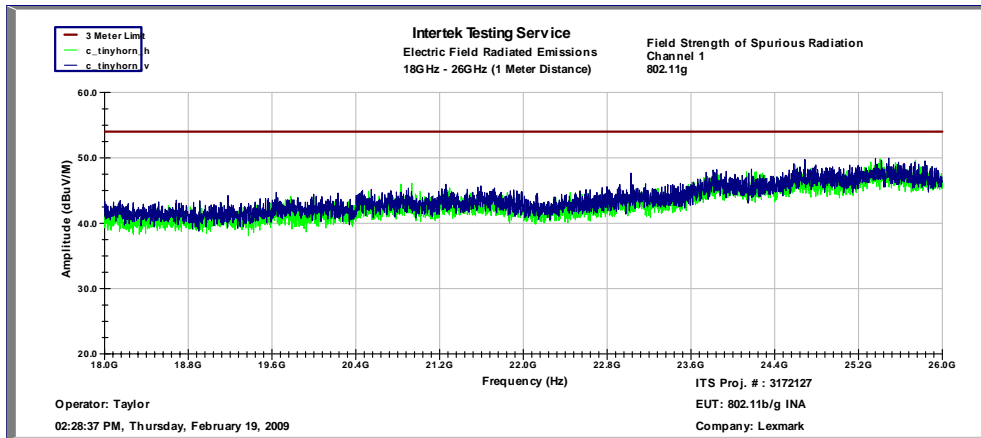
Added the following statement to the procedure of the conducted output power section: The output power was measured in each modulation type and data rate, and the worst case was selected from 802.11b and 802.11g modes and used throughout the remainder of the evaluation.

8) No emissions were detected above the 3rd harmonic, but noise floor data is not presented to show that the instrumentation was capable of seeing below the limit up to 25 GHz. An email response showing the capability is sufficient.

Plots appear below...



30MHz – 18GHz Plot



18GHz – 26GHz Plot