

RE: D Link Corporation  
FCC ID: KA22001120010-1

1) The manual makes mention of a modular application, 2 antennas (page vii & viii), and a different FCC ID which do not match this application. However, this is in reference to the modular MINI PCI module contained within this application. Please comment on if the antenna and cable utilized as part of this EUT are exactly those submitted in the modular approval for the MINI PCI Card. Additional information should be added to the manual (page viii) that strongly advises that that module (not the entire EUT) is approved only as a mobile device and clearly advise what the installation criteria must be to maintain compliance. The information in the manual also mentions 2 antennas, but if the manual is being provided with this product, it will only have 1 antenna provided as shown in this application.

***This application pertains to the PCI Card. The user manual statement has been change to reflect the use of a modular device with a PCI Card and to use only the provided antenna. Also, only one antenna is specified, which is the 3 dBi. The FCC ID pertains to the modular device that will be used with the PCI Card. D-link requested a submission for the PCI Card, with it's own FCC ID number, even though the Modular Mini PCI application will have cover this particular configuration.***

2) The sales literature mentions a single + 5 dBi gain antenna, the RF exposure states +3 dBi, and the test report states both +3 & +4 dBi (page 2 of 52, page 5 of 18, page 9 of 52 and many more). Please provide a thorough description of the antenna used for this configuration and correct the affected exhibits.

***Literature has been change to reflect only 3 dBi antenna. All exhibits have been corrected to reflect the 3 dBi antenna only. Report has been corrected and MPE exposure has also been corrected.***

3) The model number in the sales literature does not match the model number in the test report/manual. Please comment.

***An additional literature has been uploaded to reflect the other missing model number. So, a total of two literatures have been provided one for the DW-590 and one for the DWL-A520.***

4) The theory of operation states that the EUT uses 8 channels between 5180-5320, while the sales literature states 11 channels. Please explain.

***Literature has been revised to reflect only 8 channels for US and Canada.***

5) It appears in the manual that the software allows a pull down menu to program the unit for use on different frequency sets for U.S., Canada, and Japan. This control capability should normally not be given to the end user if it will cause the radio to transmit on frequencies not authorized in the U.S. The FCC has recently stated in a Report and Order regarding software defined radios that the manufacturer will be held responsible for keeping the integrity of its programming intact. If the device could be hacked or programmed in an unauthorized manner, the responsibility for such action would rest with the manufacturer, and the FCC would go to the manufacturer for fines or forfeiture actions if either action were necessary. The FCC has further explained to TCBs to also apply the philosophy of the R&O with regard to protecting multiple-capable programming and existing devices that they are approving (**not just software defined radios**). Please comment.

***This control capability will not be available to the end-user and will be removed from the manual. Old manual had Chapter 9 for Country selection. This has been removed on the revised user manual.***

6) Since the EUT transmits in the 5.15-5.25 MHz band, the EUT is required to meet the antenna requirement for 15.407(d). The FCC defines this as "An antenna that attaches with a connector inside of a case is acceptable, provided that there is no need for the user to ever open the case." The test report states that the EUT utilizes a non-standard reverse sex connector. This does not meet with the FCC's intended definition. Please comment.

***Please refer to "D-link letter" uploaded.***

7) The EUT seems to have much less power (almost 10 dB) than the level output by the PA (specified in the theory of operation). Please comment.

***The PA is capable of much more power. At the higher power levels the band-edge and harmonics no longer meet the FCC's rules. The power limitation is due, therefore, to the FCC's requirements rather than the limitations of the PA.***

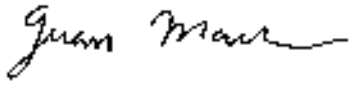
***Taken out from the Revised Theory of Operation (Page 5 of 6): The PA has 29.5dB nominal gain and maximum output power of 22.5dBm. Due to the highly linearity restrict of the high level modulation scheme, The PA normally operating on a linearity region of 10 to 17 dBm output power, This device draws about 180mA when enabled by the XPAA signal.***

8) Given that the center channel (5250 MHz) is not limited to the 5150-5250 or 5250-5350 band, the grant will be listed as 5210 MHz - 5290 MHz @ 31 mW & 5180 MHz - 5320 MHz @ 17 mW. Please adjust the 731 form to match.

***731 form has been change and uploaded.***

Hopefully this answers all of your questions. Please contact me via [doc@elliottlabs.com](mailto:doc@elliottlabs.com) if you require more information.

Regards,

A handwritten signature in black ink that reads "Juan Martinez". The signature is written in a cursive style with a long horizontal flourish at the end.

Juan Martinez  
Sr. EMC Engineer