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RE: Microwave Data Systems, Inc.

FCC ID: E5MDS-EL806-24

1) Although professional installation a major part of the installation, the manual must still clearly identify factors in the installation necessary to maintain compliance (such as cable loss and power reduction). Professional installation by itself does not elevate this requirement. The manual mentions approved antennas that must be used, but is not clear that the installer must take into consideration verify/checking/adjusting the output power since the current version of the manual (section 6.8) does not require any reduction even for a +10 dBi gain antenna (conducted power + 10 dBi gain antenna = +37 dBi EIRP). Please note that the original users manual did identify a +1 dBi loss that must be included in the installation but the current version of the manual no longer includes this information. Even if a 1 dB loss will likely exist in most expected applications, since this device is being sold as a module to other companies Microwave Data Systems can not guarantee that ALL installations will include this loss. Since it is the manufacture who receives the grant of authorization and not an installer, it is the manufactures responsibility to ensure all necessary regulatory installation issues necessary are adequately presented in the manual. Please note that the original manual did address the 1 dB loss issue, except the fact that this issue must be addressed by the installer and not the user (Original comment given on March 17, item 7). Additional Note: It is also assumed that the Yagi will also abide by the + 36 dBi requirement and that it will not to be installed using the higher power point to point limits allowed since the users manual does not address items 15.2479(b)(4)(iii).

Answer:
Uploaded the manual with the explicitly change to support exactly what is being requested above. The EIRP information in its own section, now appears in Page 23. There is a reference to this section in the front matter, just as before.

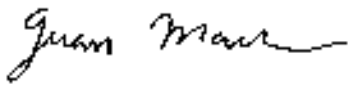
2) Section 15.15(b) has not be adequately addressed. If an installation exists where there is a power reduction required by the installer, please explain how the end user is kept from having the capability of adjusting the power once the installation is complete.

Answer:
Changed the software access to lock out the RF power control to the end user. Will require a password to access the transmitter parameters, which the end user does not know.

3) Regarding Previous item #3, the concern is that the RX bandwidth is not greater than the TX bandwidth. Typically this can be determined by reviewing the filters on the TX/RX paths to ensure they match, but this information was not discernible from the Block Diagram itself. There have been cases where a manufacturer designs a RX that covers wider bandwidths in an attempt to not require hopping or only a subset of hopping, perform FFT RX analysis to determine the correct RX frequency, or build multiple RX each only receiving a single channel at each location, to mention but a few. These do not meet the intent of the rules. The FCC requires that the RX hop in synchronization with the TX (which is verified in this application) and also provide information that the RX input bandwidth matches the channel bandwidth of the TX. What is the effective filter bandwidths associated with the RX path.

Answer:
Uploaded a scanned image of the “Rx schematic” with the bandwidths marked on it for review.

Regards,



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