

Reply for ATCB Comments of 062605b

1) Please correct the various items on the 731 form:

- a) Section I - 3(a) and 3(b) must list the FCC ID to be Certified. Please correct.
- b) Section II - Please fill in correct address for ATL or the appropriate company in section 2(a).
- c) Section III - Section 6 of the 731 form must be filled in for (a)(b)(c)(d). For Part 22, (a) would be listed for ERP. For Part 24, (b) would be listed as EIRP. Additionally, please fill in Section 4(a)/(b), 7, 8, or 9.
- d) Section IV must be filled in as appropriate.

- 06/30/2005 upload new 731 form

2) Confidentiality is given under section 0.456 and 0.459 of the FCC rules, not Part 15 and 24.

Please correct the confidentiality letter as appropriate.

- will upload new file soon.

3) The block diagram should include the block diagram of the RF portion of the device. Please

update/provide as necessary.

- 06/30/2005 upload new diagram

4) It appears that complete internal photographs have not been provided. The top and bottom of all

boards must be provided. Additionally, photographs showing beneath all subshields should also

be provided. Please provide.

- uploaded

5) It would be recommended that the operational description and BOM also be added to the

confidentiality letter. If this is desirable, please provide an updated confidentiality letter that

included these items.

- we had revise the confidential request and put part list(BOM), Tune up procedure....etc on it.

6) The parts list appears incomplete and only lists some of the RF components. Please provide

a complete parts list.

- 06/30/2005 upload new BOM

7) The schematics appears to contain most of the RF portion of the device, but appears to be

incomplete through to the baseband portion of the device. Please provide further schematics

as necessary.

- 06/30/2005 upload new diagram

8) For the tune up procedure by the manufacturer, please explain whether power is measured

radiated or conducted. It is hard to achieve the necessary accuracy if this is measured in a radiated fashion. Please explain.

- Conducted

9) Please provide a separate test configuration photographs exhibit.

- uploaded

10) This device is capable of connection to a PC and is therefore also considered a PC peripheral

device (in addition to the TX requirements, i.e. Part 24, etc.) and is subject to either a Certification or DoC as a PC peripheral. Therefore the application must clarify if you are asking for:

a) Certification of the device as a TX, and a DoC has been performed by an appropriately accredited test lab for a PC peripheral

b) Certification as a TX + PC peripheral.

Note 1: The option b) would be considered as a composite application and 2 certificates (one for the TX, one for the PC peripheral portion) would be issued. Note that there are additional review costs associated with this additional certification.

Note 2: To qualify to perform DoC applications, the test lab must be accredited (i.e. NVLAP or A2LA) to perform testing under the DoC procedure.

Note 3: Note that for DoC tests, the device is configured with a minimum test configuration as specified by ANSI C63.4 which includes complete computer + 2 I/O devices attached (one may be the EUT) during this particular test. Information appears to be provided that supports this.

Note 4: Each path (DoC or Certification) has particular labeling requirements that must be followed. For DoC authorizations, the label should also include specific DoC labeling information and also the users manual should include information regarding Part 2.1077. If the device is Certified, the FCC ID and current labeling requirements for the TX will cover the labeling requirements. However, additional grants are generated and review costs are higher. Currently labeling and users manual DO NOT support a DoC Authorization.

The manufacturer does have a choice of DoC or Certification, however the device labeling must match the appropriate methods used.

11) If this device is being approved under a DoC, then all the information required by 2.1077

must be placed on a single page in the users manual.

- 15B will be certify not DoC

12) FCC ID specified within the users manual does not match this application. Please correct.

13) Page 66 of the users manual mentions a 20 cm spacing which is not applicable to this device

and should be removed. Please correct.

- will uploaded soon

14) Please provide both the DC voltages and currents applied into the several elements of the final radio frequency amplifying device for normal operation over the power range. If this is already in the application, kindly point to where this information may be found.

[Please reference to Sec.4 point.1](#)

15) Minimum Passing Margin on page 5 of the Part 24 report does not appear correct. Please review.

We corrected

16) ANSI C63.4 does not actually apply to the Part 24 report. Appropriate standards should be listed as EIA/TIA 603 standards. Please review/correct as necessary.

We corrected

17) Where possible, the conducted power should also be measured and documented in the Part 24 report. Please provide.

Please reference to 4.1 page 7

18) Please explain the column "EUT Power Value" on page 10 of the Part 24 report. This column does not appear to be conducted power and other possible uses for this column do not appear to fit the data provided. Please explain as necessary.

EUT Power Value:

1. It means when we put EUT on Chamber that is connected to Base Station, and we receiver value and record from Spectrum. That value is "EUT Power Value"

2. Next, we change EUT to Substitution Antenna, and feeding power from SG.

More detail, please find 6.2(b)

19) On page 13 of the Part 24 report, some correction factors are negative, others are positive. It is believed that all of these should all be the same sign. Please review.

We corrected

20) The plots on page 16, 19, and 22 do not appear to show a high fundamental carrier as expected (i.e. close to 29.2 dBm as specified by the tune up procedure). Note it appears that the sweep time may have been inadequate (too fast) to adequately capture the emissions. Please review/correct/or explain as necessary. Page 3 June 27, 2005

21) For frequency stability tests, please confirm that the device was soaked between temperature settings of adequate time to stabilize both the device and chamber. A soak time (after chamber reaches appropriate temperature) of 1 hours is considered normal.

Please reference to 9.3(a), and we find during our testing a soak time is min 45 minutes.

And, we will setup our procedures is 60 minutes for more stability.

22) Page 22 appears to shows some other spurs of interest other than the fundamental and base station that were not reported. Please review.

We corrected

23) 99% power bandwidth does not appear to be measured based upon below the transmitter power (maximum conducted power – 29.1 dBm as specified in tune up procedure). I have attached an document that helps explain this testing better.

24) It is uncertain if the cable loss and power divider loss were factored into the plots of page 45 and 46. Please explain. Also, are higher resolution plots for this test available. If so, please provide.

Please reference to 12.1

This splitter loss and cable loss are the worst loss 4.5dB in the transmitted path track.

25) FYI....Please note that although we accept jpg images, the preferred file type is still considered pdf documents. This decreases processing time, files sizes, viewing problems, and problems with uploads to the FCC site. In the future, please consider providing images in pdf files.

OK

26) FYI....More equipment than expected have calibration cycles > 1 Year. Although Calibration cycles of > 1 and up to 3 years are possible, it is typically only for equipment that is expected or has shown to change very little over time. For instance, most labs place Bi-log and spectrum analyzers on 1 year calibration cycles. Depending on the use of this equipment, it may be suggestive to adjust these cycle to 1 Year.

We will change our calibration cycles to 1 year.