

17 January 2007

American TCB  
6731 Whittier Avenue  
McLean VA 22101

RE: Wallace Technologies  
Response to 15 January 2007 Comments

FCC ID: UUM10156V10

In response to your comments on the above submittal from 15 January 2007.

1. ATCB Comments: Regarding equipment labeling for Canada, the label must contain 3 items. The label should contain the applicant, Certification Number, and model number as certified and shown on the IC form. Currently the label does not show a complete certification number, model number as shown on the form, or the applicant. Please correct.

**RESPONSE: Revised label has been uploaded.**

2. ATCB Comments: Being a device under 15.247 with RF exposure requirements, the users manual should generally instruct the user no to co-locate the device with other transmitters.

**RESPONSE: Revised manual has been uploaded.**

3. ATCB Comments: Please provide calculations and information to show how final output power was measured and calculated. Was this radiated? Did it use the FCC required far field equations?

**RESPONSE: The output power and spurious emissions had to be made as a radiated measurement. Attempts to connect rf connector to the EUT rf output were unsuccessful. We used OET 63 formula  $P(\text{eirp in watts}) = 0.3 E_{\text{sq}}^2$  (field strength in v/m), using unity antenna gain in calculation, 3 meters distance. This has been put in both reports on output power page and revised reports have been uploaded.**

4. ATCB Comments: A large difference is noted between peak and average readings. This suggests that the signals may have actually had a duty cycle associated with them. If so, the average should have actually been derived using worse case duty cycle calculations. Please review/explain/correct as necessary.

**RESPONSE: The average measurements are made using a 1 MHz resolution bandwidth and a 10 Hz video bandwidth per FCC guidelines. This has been put in both reports on Appendix C page. The mfr. instructed us the worst case mode was being tested. Since measured levels are compliant, and believed to be worst case, we did not pursue duty cycle calculations.**

5. ATCB Comments: Cited output power given on the 731 form is about 9 dB below the operational description which cites output power is maximum of +4 dBm. Was device properly operating and/or configured at maximum output power? Was RBW > 6 dB bandwidth with VBW > RBW? FCC expects device to be at maximum output power. Please review/correct as necessary.

**RESPONSE: The level on the 731 was erroneously put on as the erp, eirp would be 700 microwatts, or -1 dBm. This would be close to typical value in operating description of 0 dBm. We can revise Form 731. Is this acceptable, or do we need Wallace to state that their product will not be putting out 4 dBm (maximum on chip spec). 6 dB bw = 542 kHz, rbw used to make peak measurement was 1 MHz.**

6. ATCB Comments: It is uncertain if bandedge emissions for bandedge restricted bands has been provided. Please review/explain as necessary.

**RESPONSE: P. 22 of 38 demonstrates low channel is >-20dBc at 2400 MHz. I have edited P. 24 of 38 to demonstrate high channel measurement is below 15.209 limit at 2483.5 MHz.**

7. ATCB Comments: It does not appear that RX emissions per RSS-210 and RSS-GEN have been provided. Please explain/review/correct.

**RESPONSE: Receiver is always on, is covered in spurious emission testing.**

The above referenced documents have been uploaded to the website at the same time as this response.

Please let us know if anything further is required.

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