
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 $P(\text{eirp in watts}) = 0.3 \text{ Esquared}$ (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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