



Date: 2 July 2012

Federal Communications Commission
Office of Equipment Technology
Equipment Authorizations

Sent via E-Mail

Re: Correspondence of 29 June 2012; Job Numbers: 1499UC12, 1501UC12, and 1502UC12, for FCC ID: IHDT56NL2 (Inquiry Number 618521).

Dear Sir or Madam,

Motorola Mobility, Inc., 8000 W. Sunrise Blvd.; Suite A; Plantation, FL, herein submits its response to the FCC's 29 June 2012 request for further information on FCC ID: IHDT56NL2.

Q 1. Please ask the applicant to attest that this FCC ID device does not support 5 GHz operation. Both the block diagram and schematics (Page 9) show 5 GHz circuitry and the Qualcomm chipset WCN3660 does support 5 GHz transmission. No 5 GHz WiFi EMC or SAR data are presented. Since this is a software controlled feature and not mentioned anywhere in the submission, an attestation is highly desirable.

Response:

The requested attestation has been added to the amended Attestation and Certification document. Additional information has been added to the Operational Description as well.

Q 2. Although Wi-Fi and BT transmitters do not transmit simultaneously, but they are capable of operating concurrently in this EUT. SAR evaluations are not instantaneous measurement but rather time averaged events. Therefore, the argument that they are not considered in simultaneous transmission is challengeable. Please provide better justification or add test cases.

Response:

Wi-Fi and Bluetooth can operate concurrently, and SAR evaluations are time average events. However when using FCC KDB 648474, SAR measurements of Bluetooth are not need because the 1-g Body-Worn SAR values for primary transmitters are below 1.2 W/kg. Additionally, as transmissions are concurrent, and not simultaneous, any time spent transmitting a Bluetooth signal would tend to lower SAR, given the higher source-based time average power of the Wi-Fi signal.

Q 3. The statement in the Tune-up procedure that "Motorola makes every effort to set the conducted power levels of the units to within +/- 0.2 dB of the maximum rated power level." is self-contradictory. For example, given the specified CDMA 850 target is 24 dBm and the upper limit is 25 dBm, does the factory reject a unit at production when the measured power is 25.2 dBm? If not, then the maximum should be 25.2 dBm, not 25 dBm. The maximum should be the upper bound specification used in production ATE testing, taking into account component variation. The PCE filing's Tune-up procedure is also missing power levels for 850 and 1900 MHz EVDO modes.

Response:

The Tune-up Procedure has been amended to remove this ambiguity. The intent is to tune the devices as close to their maximum rated powers as possible (within 0.2 dB). During the Factory tuning process, no units are permitted to exceed the stated maximum.

Q 4. Tune-up procedure has the LTE Band 25 maximum output power at 25 dBm but the SAR report uses 24 dBm in the test. Given the reported simultaneous transmission already at 1.59 W/kg, a 1 dB scale-up would exceed the limit. Please clarify.

Response:

The tuning range has been corrected in the Tune-up Exhibit, and now aligns with the maximum power shown in the SAR report.

Q 5. EVDO power reduction target is 5 dB but the measured power reduction is 6.3 dB (Page 9, Supplemental SAR report) for the measured SAR value. A 1.3 dB off the target in power control is a concern for both SAR and EMC compliance. Please elaborate.

Response:

After the power reduction, the SAR value measured 0.33 W/kg. This is outside of our declared measurement uncertainty because of probe calibration range. The Measured Power Reduction should be reviewed with this in mind.

If you have any questions, please contact me at (954) 723-6272, or via e-mail.

Sincerely,

John Lewczak (signed)

Engineering Manager
Product Safety and Compliance
Email: John.Lewczak@motorola.com

