MOTOROLA

Date: 8th July 2010

Gregory Czumak
PCTEST Engineering Laboratory, Inc.
6660-B Dobbin Road
Columbia, MD 21045

Re: Correspondence Number AZ4100814-A with FCC ID: AZ492FT7041
     Confirmation Number: Y1007020814-15

Dear Mr. Czumak;

Motorola Inc., 8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322, herein submits its response to the 8TH July 2010 request for information in Correspondence Number AZ4100814-A.

Q1.   Please submit the Tune- Up Procedure for the WiMAX transmitter, listing the maximum output power target levels as set at the factory (including permissible tolerance) for each WiMAX emission type.

R1.   Please find Beceem output power calibration, we are following the instructions provided by Beceem. The calibration is done to output power of 29.5dBm with +/-0.5dB tolerance (The Beceem internal attenuator has 0.25dB accuracy).

Q2.   The WiMAX conducted output power measurement tables include varying antenna gains for each channel. Where do these values come from? The application indicates an antenna with max gain of +5 dBi.

R2. See table below:

Channel	Frequency [MHz]	Output Power* [dBm]	Output Power* [mW]	Antenna Gain** [dBi]	EIRP calculated [dBm]	Limit [dBm]	Margin [dB]
WiMAX 802.16e (5MHz), OFDMA, 16 QAM, Duty Cycle 32%							
Low	2497.5	29.23	837.53	1.71	30.94	33	-2.06
Middle	2600.0	29.61	914.11	2.55	32.16	33	-0.84
High	2687.5	29.21	833.68	1.71	30.92	33	-2.08
WiMAX 802.16e (10MHz), OFDMA, 16 QAM, Duty Cycle 27%							
Low	2500	29.34	859.01	1.71	31.05	33	-1.95
Middle	2600	29.22	835.60	2.55	31.77	33	-1.23
High	2685	28.83	763.84	1.73	30.56	33	-2.44

* Corrected for external attenuations.
** As provided by the manufacturer (including cable loss).

The variations of antenna gains are the actual gains according to different frequencies, taking into account the cable loss.

Q3.   The application lists an external antenna for use with the EUT with a max gain of +5 dBi. The use of an antenna with this gain would result in EIRP levels that exceed the 2 W EIRP limit specified in Section 27.50(h)(2). Please address.

R3.   We need to take into account the antenna cable, which has 12 feet length (The length should not be modified by installer). The cable loss is ~2.5dB. So, total power is 29.5 -2.5 + 5 = 32dBm.

Please contact me at (954) 723-5793 if you require any additional information.

Sincerely,
/s/ Mike Ramnath (signed)
Manager, Regulatory Compliance
Email: Mike.Ramnath@motorola.com