SPORTON LAB

Response For FCC Application 2004/12/14

RE: Compal FCC ID: GKRTG7E

- 1. Has been uploaded
- 2. The formula is as follows:

$$EIRP = P_S + E_t - E_S + G_S = P_S + R_t - R_S + G_S$$
 where

Ps (dBm): Input Power to Substitution Antenna

Gs (dBi): Substitution Antenna Gain

Et = Rt + AFEs = Rs + AF

AF (dB/m): Receive Antenna Factor

Rt: the highest received signal in Spectrum Analyzer (SA) for EUT

Rs: the highest received signal in Spectrum Analyzer for Substitution Antenna

The substitution antenna input power is about -3.5 dBm and its antenna gain is about 6.6 dBi. In this EIRP table, all the related values are factored in. We use the same measurement method as the previous cases, but using different testing software.

- 3. The step 8 for substitution antenna is to make sure that the reading on the SA is the maximum for this antenna
- 4. Actually, we repeated the substitution antenna measurement for horizontal polarization and vertical polarization of each obvious spurious emission frequency of EUT to complete the whole radiated spurious emission. Besides, tuning the power of signal generator to the same SA reading of each spurious emission of EUT and take the input power level of substitution antenna plus the substitution antenna gain as records.
- 5. TG7E is the serial model of TG7C, and they have the same RF portion, main board and the same antenna as described in the report. Therefore, we refer the SAR data of TG7C and re-test some worst cases to verify its compliance.
- 6. The blue color box is the EUT in the plottings and it is located right under the hot spot.

Sincerely Yours
Daniel Lee
EMC/SAR Manager