

## Regarding FCC question 1.

1. Please discuss the radio standard. How did the test codes represent operational configurations?

▷ LGE's reply is as follows :

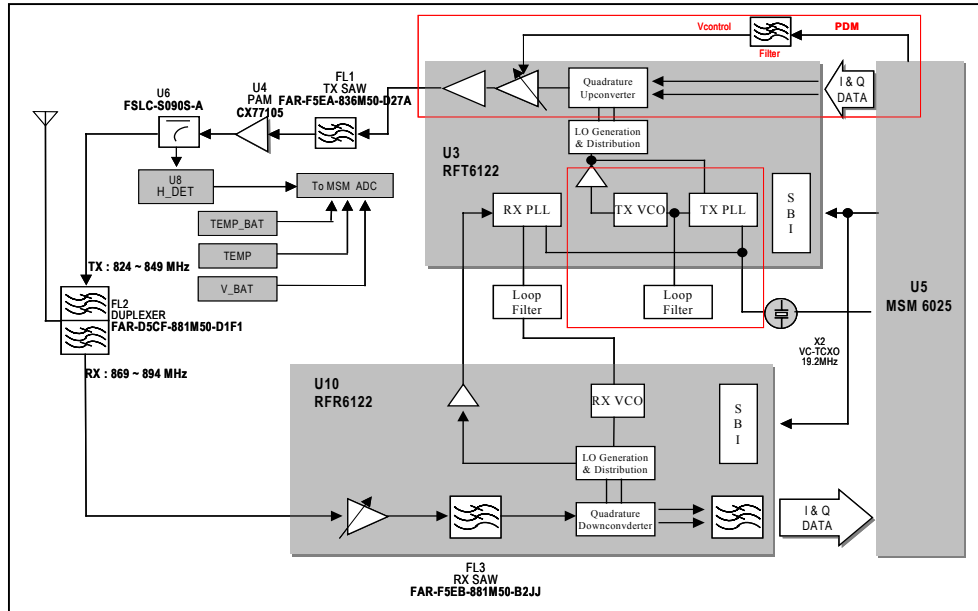


Figure-1. Operational configuration on EUT(LST-260)

### ■ FCC Test Mode Operation

#### 1. Channel Setting

When channel number(1~1024) is entered, MSM6025 chip controls Tx PLL (Phase Lock Loop) synthesizer. So, frequency is locked according to channel number.

#### 2. AGC Control

When we change AGC setting (1~511), MSM6025(U5) in figure-1 is changed pulse density modulation(PDM) signal. After PDM signal passed filter, PDM signal is changed DC value. DC component at filter output is proportional to average pulse density modulation signal as figure-2. According to DC value, RFT6122(U3) output power is changed.

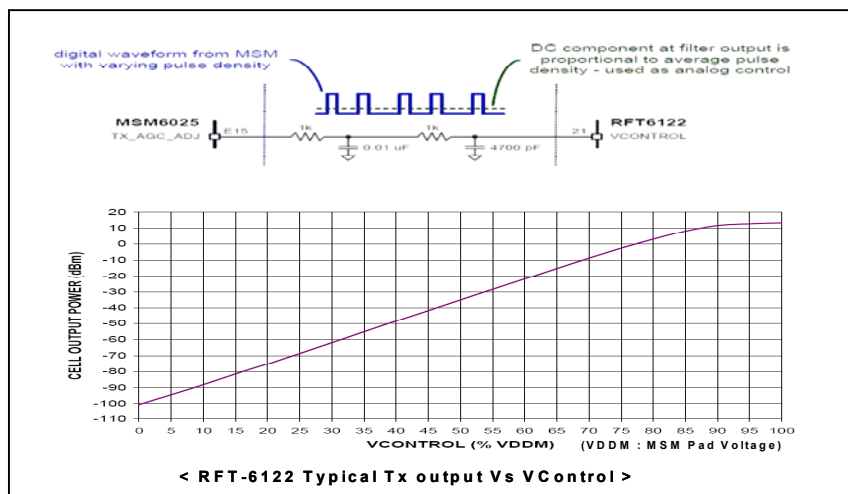


Figure-2. Output Power control

2. How will an AGC setting reflect maximum power in production devices?

▷ LGE's reply is as follows :

Maximum power in production devices shall be decided when R&D engineers develop those. A R&D engineer informs us of the decided maximum power on the production devices when it needs to be tested for FCC submission.

When we do testing, we adjust AGC setting from 1 to 511 to get the same maximum power that has been announced by the R&D engineers by means of test configuration in figure-3. Equipment such as E5515 and PSA(spectrum analyzer) has function to measure RF power.

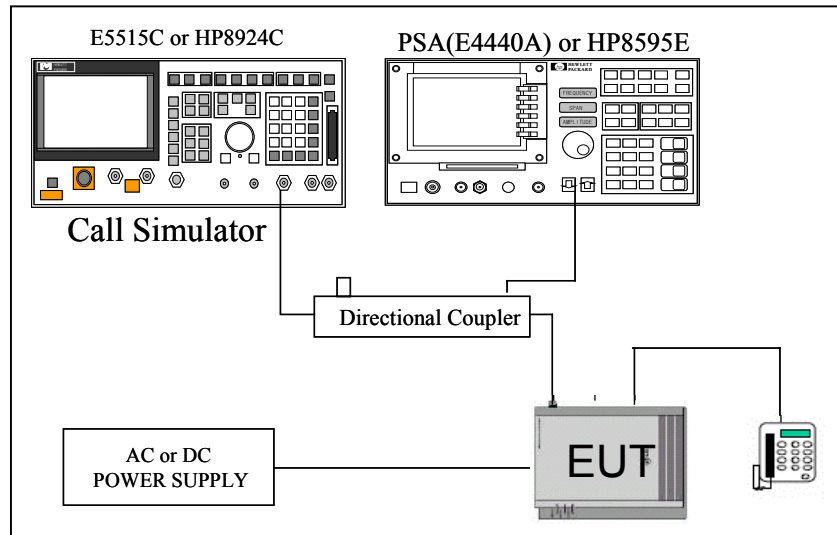


Figure-3. Test configuration to get maximum power

#### Regarding LST-260 model.

We got information that maximum power of LST-260 is 24.5 dBm from a R&D engineer. When we did testing with the model, we also adjusted AGC setting to get 24.5 dBm.

#### ■ The other way

There is another method to get maximum power. That is to use a call simulator.

Using the test configuration in figure-3, we set test parameters as follows into the call simulator to get its maximum power:

1. System ID : System operator's ID
2. System Type : IS-2000
3. Operating mode : Active cell
4. Cell power : -104 dBm/ 1.23 MHz
5. Reverse Power Control : All up bits
6. Cell Band : US Cellular
7. Protocol : IS-2000-0
8. Radio configuration : Fwd2, Rvs2, SO9(Service Option 9)

Although we use one of the two methods in order to get maximum power, we can get same results.