1.AMPS(FM)

TEST ITEMS	PROCEDURE
1. PREPARATION	Set test equipments up. "* 7 5 9 # 8 1 3 5 8 0" : Enter the Test Mode "0 1" : Suspend "0 4" : Current Mode Check Confirm that the phone is in the AMPS Mode . (If not AMPS Mode, Use Test Command "21", 10000 or 10001 and Enter "0 2 to restart) "4 6" : Initialize Vocoder in Analog mode If a wrong key would be selected, press "#", and then enter new command. To exit the Test Mode at any time, just press "0 2 .
2. RF POWER	"0 1" : Suspend. "4 6" : Initialize Vocoder in Analog mode. "0 9 0 3 6 3 #" : Set channel to 363. "0 7" : Carrier On. " 1 0 2" : RF Power level selection, "2" means one of the power levels (O-7). Measurement of the Power Output Levels Level — RF Power 0 - 2 — +26.8 dBm + 0.2/-4 dB 3 — + 24 dBm +2/-4 dB 4 — + 20 dBm +2/-4 dB 5 — + 16 dBm +2/-4 dB 6 — + 12 dBm +2/-4 dB 7 — + 8 dBm +2/-4 dB "0 8 : Carrier off Note 1 : In case of using the antenna cable, compensation for the cable loss should be added (about 1.5dB). Note 2 : To prevent phones from being damaged, they must be measured only by calibrated test equipments. Warning ! Adjustments without calibrated equipments can cause phones to be heated excessively and would void the warranty.
3. TX FREQUENCY	"0 1" : Suspend. 4 6 : Initialize Vocoder in Analog mode. "0 9 0 3 6 3 #" : Set channel to 363. "0 7 : Carrier On. Measure the TX frequency : 835.89 MHz±2.5ppm.

2. 800MHz CDMA

1) General

Frequency Range

.Transmitter : 824 ~ 849 MHz

.Receiver : 869 ~ 894MHz

Channel Bandwidth :1.23MHz

Channel Spacing : 30kHz

Number of Channels : 832

Duplex Seperation : 45 MHz

Type of Emission : 40K0F8W,40K0F1D

Input/Output Impedance : 50 Ω

Intermediate Freequency

.Transmitter : 130.38MHz

.Receiver : 85.38MHz

Local Frequency

.Transmitter : 1st(F_{TX}+130.38MHz), 2nd(260.76MHz)

.Receiver : 1st(F_{RX}+85.38MHz), 2nd(170.76MHz)

TCXO Frequency :19.68MHz

Frequency Stability : (F_{RX}-45MHz) ± 300Hz

Operation Temperature : -30℃ ~ 60℃

Supply Voltage : +3.75V

2) Transmitter

Waveform Quality :0.944 or more

Open Loop Power Control Range

. -25dBm : -57.5dBm ~ -38.5dBm

. -65dBm : -17.5dBm ~ +1.5dBm

. -104dBm : +18.0dBm ~ +30dBm

Minimum Tx Power Control : below -50dBm

Closed Loop Power Control Range : +/- 26 dB

Maximum RF Output Power : 400mW(+26 dBm)

Occupied Bandwidth :1.23MHz

Conducted Spurious Emission @900 KHz : -42dBc/30kHz

@1.25 MHz : -54dBc/30kHz

3. 800MHz AMPS

1) General

Frequency Range

.Transmitter : 824~ 849 MHz

.Receiver : 869~ 894MHz

Channel Spacing :30kHz

Number of Channels : 832

Duplex Spacing :45MHz

Frequency Stability :±2.5ppm(-30℃~60℃,-22。F ~140。F)

Modulation/Demodulation

Voice : PM

.Data : FM

Operating Temperature :-30℃~60℃,-22。F ~140。F

Supply Voltate : 3.75V

2) Transmitter

RF output power : 0.48 W(+0.2/-4dB)

Carrier ON/OFF conditions

ON Condition : within ±3dB of specification output(in 2 ms)

OFF Condition : below -60dBm(in 2ms)

Compresssor

Compression Rate : 2 : 1

Attack Time : 3ms

Recovery Time : 13.5ms

Reference Input : input power level for producing a nominal±2.9kHz

: peak frequency deviation of transmitted carrier

Preamphasis :6dB/OCT within 0.3 ~ 3 kHz

Maximum Frequency Deviation

F3 of G3 : ±12 kHz

Supervisory Audio Tone : ±2 kHz(±10%)

Signaling Tone : ±8 kHz(±10%)

Wideband Data : ±8 kHz(±10%)