

1. AMPS(FM)

TEST ITEMS	PROCEDURE														
1. PREPARATION	Set test equipments up. "4 7 * 8 6 9 # 1 2 3 5" : Enter the Test Mode "0 1" : Suspend Confirm that the phone is in the Analog Mode! ("10000" or "10001" at Test Command "20".) "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 Q 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 (0~7). Measurement of the Power Output Levels <table> <tr> <th>Level</th><th>RF Power</th></tr> <tr> <td>0 - 2</td><td>+25.6 dBm +0.2/-4 dB</td></tr> <tr> <td>3</td><td>+ 24 dBm +1/-4 dB</td></tr> <tr> <td>4</td><td>+ 20 dBm +2/-4 dB</td></tr> <tr> <td>5</td><td>+ 16 dBm +2/-4 dB</td></tr> <tr> <td>6</td><td>+ 12 dBm +2/-4 dB</td></tr> <tr> <td>7</td><td>+ 8 dBm +2/-4 dB</td></tr> </table> "0 8" : Carrier off Note 1 : In case of using the antenna cable, compensation for the cable loss should be added (about 1.4dB). 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.	Level	RF Power	0 - 2	+25.6 dBm +0.2/-4 dB	3	+ 24 dBm +1/-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
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3. TX FREQUENCY	"0 1" : Suspend. "4 6" : Initialize Vocoder in Analog mode. "0 9 Q 3 6 3 #" : Set channel to 363. "0 7" : Carrier On. Measure the TX frequency : 835.89 MHz±2.5ppm.														

1-2. AMPS

1-2-1. General

Frequency Range

.Transmitter : 824-849 MHz

.Receiver : 869 ~ 894MHz

Channel Spacing :30kHz

Number of Channels : 832

Duplex Spacing :45MHz

Frequency Stability : $\pm 2.5\text{ppm}$ (-30 °C ~ 60 °C, -22° F ~ 140° F)

Modulation/Demodulation

.Voice : PM

.Data : FM

Operating Temperature : -30°C ~ 60 °C, -220 F ~ 1400 F

Supply Voltage : 3.6V

1-2-2. Transmitter

RF output power : 0.365W(+ 0.2/-4dB)

Carrier ON/OFF conditions

"ON" Condition : within $\pm 3\text{dB}$ of specification output(in 2 ms)

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

Compressor

Compression Rate : 2 : 1

Attack Time : 3ms

Recovery Time : 13.5ms

Reference Input : input power level for producing a nominal $\pm 2.9\text{kHz}$

: peak frequency deviation of transmitted carrier

Preamphasis : 6dB/OCT within 0.3 ~ 3 kHz

Maximum Frequency Deviation

F3 of G3 : $\pm 12\text{ kHz}$

Supervisory Audio Tone : $\pm 2\text{ kHz}$ ($\pm 10\%$)

Signaling Tone : $\pm 8\text{ kHz}$ ($\pm 10\%$)

Wideband Data : $\pm 8\text{ kHz}$ ($\pm 10\%$)

1-3. PCS

1-3-1. General

Frequency Range

.Transmitter : 1850 ~ 1910 MHz

.Receiver : 1930-1990 MHz

Channel Spacing : 50kHz

Number of Channels : 1200

Duplex Spacing : 80MHz

Frequency Stability : $(F_{RX} - 80\text{MHz}) \pm 150\text{Hz}$

Operating Temperature : $-30^{\circ}\text{C} \sim 60^{\circ}\text{C}$, $-22^{\circ}\text{F} \sim 140^{\circ}\text{F}$

Supply Voltage : 3.6V

1-3-2. Transmitter

Waveform Quality : 0.944 or more

Open Loop Power Control Range

. -25dBm : -60.5dBm ~ -41.5dBm

. -65dBm : -20.5dBm ~ +1.5dBm

. -104dBm : +15.0dBm ~ +30dBm

Minimum Tx Power Control : below -50dBm below

Closed Loop Power Control Range : $\pm 24\text{dB}$

Maximum RF Output Power : 250 mW(+24 dBm)

Occupied Bandwidth : 1.23MHz

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

@1.25 MHz : -54dBc/30kHz

1-3-3. Receiver

Rx Sensitivity and Dynamic Range : -104dBm, FER=0.5% or less

: -25dBm, FER=0.5% or less

Conducted Spurious Emission

. 1930 ~ 1990 MHz : <-81dBm

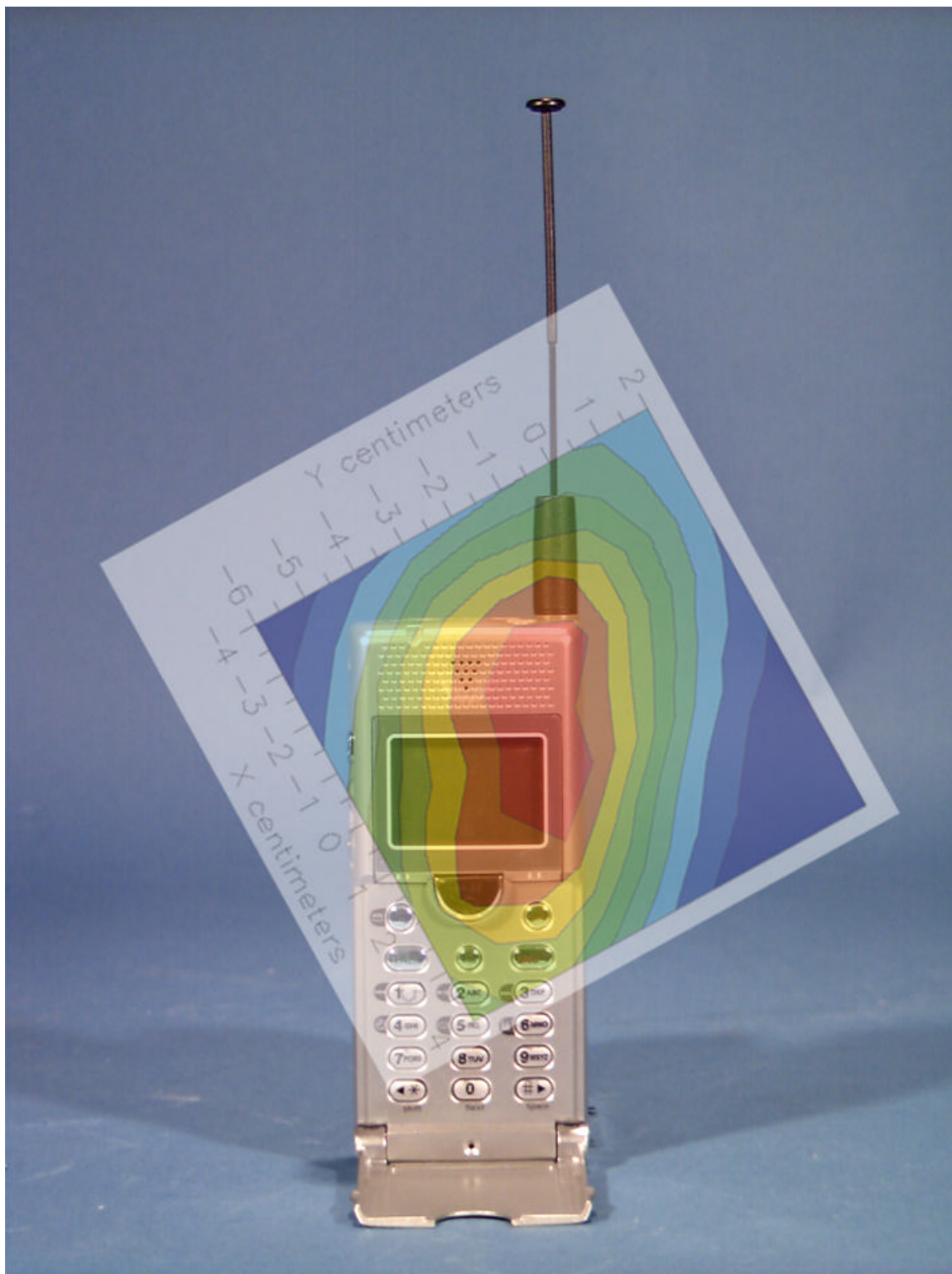
. 1850 ~ 1910 MHz : <-61dBm

. All Other Frequencies : <-47dBm

Single Tone Desensitization : lower than 1 %

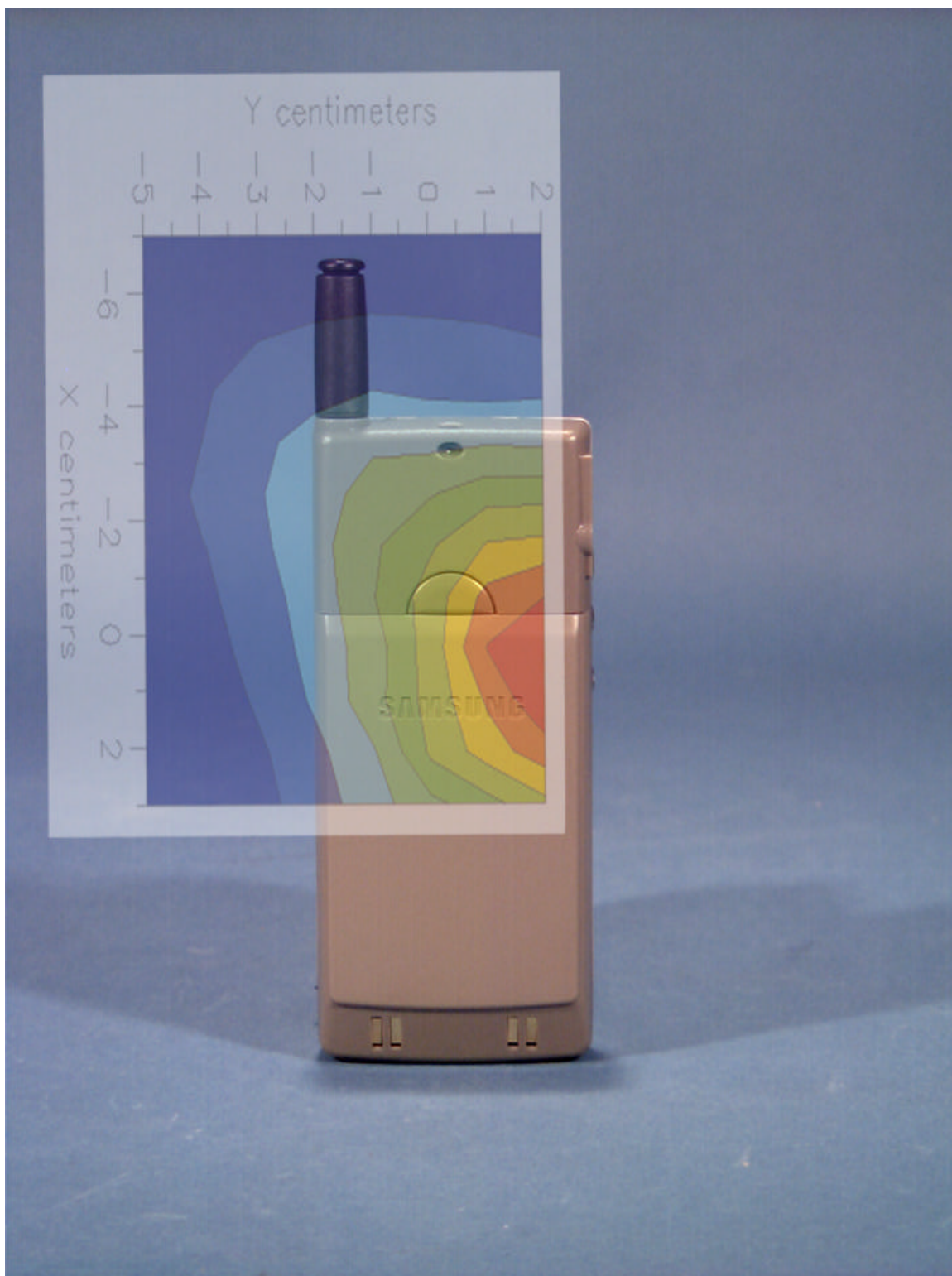
Peak SAR Location

AMPS Head SAR



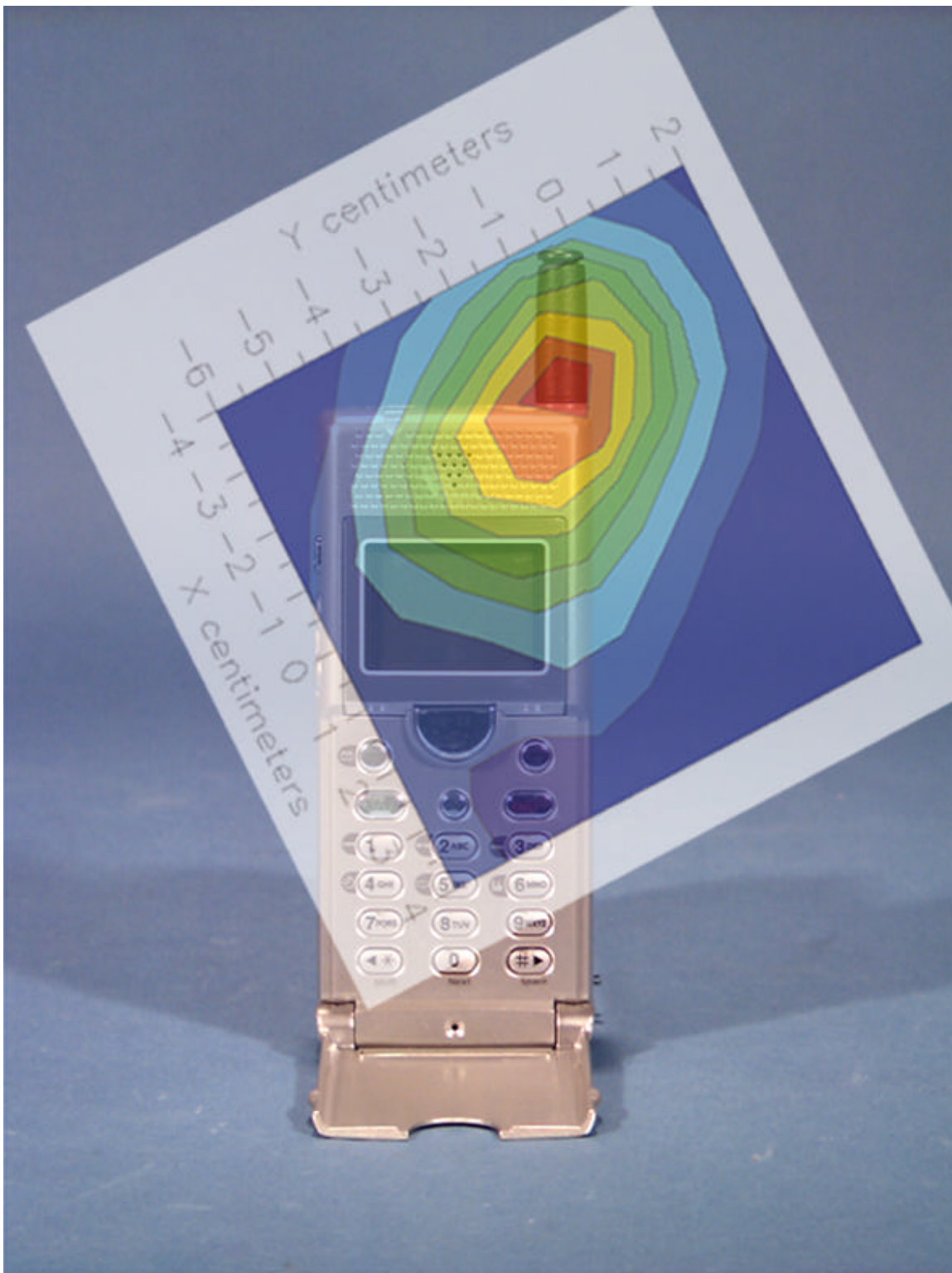
Peak SAR Location

AMPS Body SAR



Peak SAR Location

PCS CDMA Head SAR



Peak SAR Location

PCS CDMA Body SAR

