Test Report S/N: SAR.210502268.MBU Test Dates: May 02-04, 2001

### 13.1 SAR TEST DATA SUMMARY

Ambient TEMPERATURE (°C) _	23.1	
Relative HUMIDITY (%)_	59.5	-
Atmospheric PRESSURE (kPa)	99.0	

**Mixture Type:** 835MHz Brain

**Dielectric Constant:** 41.5

0.90 **Conductivity:** 

> Closest Distance (between E-Probe & EUT Antenna): 1.6 cm

## 13.2 Measurement Results (AMPS Head SAR)

FREQL	JENCY	Modulation	ation POWER Phantom		Antenna SAR	SAR
MHz	Ch.		(dBm)	Position	Position	(W/kg)
824.04	0991	AMPS	27.0 [Standard Battery]	Left Ear	In	0.655
824.04	0991	AMPS	27.0 [Standard Battery]	Left Ear	Out	0.426
836.49	0383	AMPS	27.0 [Standard Battery]	Left Ear	In	0.649
836.49	0383	AMPS	27.0 [Standard Battery]	Left Ear	Out	0.454
848.97	0799	AMPS	27.0 [Standard Battery]	Left Ear	In	0.895
848.97	0799	AMPS	27.0 [Standard Battery]	Left Ear	Out	0.575
848.97	0799	AMPS	27.0 [Extended Battery]	Left Ear	In	0.825
848.97	0799	AMPS	27.0 [Extended Battery]	Left Ear	Out	0.550
ANSI / IEEE C95.1 1992 - SAFETY LIMIT		Brain				
Unco	Spatial Peak Uncontrolled Exposure/General Population		1.6 W/kg (mW/g) averaged over 1 gram			

#### **NOTES**:

4.

The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration.

Conducted

All modes of operation were investigated and the worst-case are reported. 2.

 $\times$ 

X

- 3. **Battery Type**
- Standard X
- Extended X **EIRP**
- **ERP**

- Power Measured 5. SAR Measurement System SAR Configuration
- X **SPEAG** Head
- IDX Body

Hand

Randy Ortanez President & Chief Engineer



Figure 17. Head SAR Test Setup

Test Report S/N: SAR.210502268.MBU Test Dates: May 02-04, 2001

# 13.1 SAR TEST DATA SUMMARY (Continued)

Ambient TEMPERATURE (°C)	23.1	
Relative HUMIDITY (%)	59.5	
Atmospheric PRESSURE (kPa)	99.0	

**Mixture Type:** 835MHz Brain

**Dielectric Constant:** 41.5

0.90 **Conductivity:** 

> Closest Distance (between E-Probe & EUT Antenna): 1.6 cm

## 13.3 Measurement Results (Cellular CDMA Head SAR)

FREQU	JENCY	Modulation	POWER	Phantom	Antenna	SAR
MHz	Ch.		(dBm)	Position	Position	(W/kg)
824.70	1013	CDMA	25.0 [Standard Battery]	Left Ear	In	0.424
824.70	1013	CDMA	25.0 [Standard Battery]	Left Ear	Out	0.337
836.49	0383	CDMA	25.0 [Standard Battery]	Left Ear	In	0.437
836.49	0383	CDMA	25.0 [Standard Battery]	Left Ear	Out	0.334
848.31	0777	CDMA	25.0 [Standard Battery]	Left Ear	In	0.530
848.31	0777	CDMA	25.0 [Standard Battery]	Left Ear	Out	0.360
848.31	0777	CDMA	25.0 [Extended Battery]	Left Ear	In	0.457
848.31	0777	CDMA	25.0 [Extended Battery]	Left Ear	Out	0.336
ANS	ANSI / IEEE C95.1 1992 - SAFETY LIMIT		Brain			
Spatial Peak Uncontrolled Exposure/General Population		1.6 W/kg (mW/g) averaged over 1 gram				

#### **NOTES:**

4.

The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration.

Conducted

All modes of operation were investigated and the worst-case are reported. 2.

X

- **Battery Type** 3.
- Standard X
- Extended X **EIRP**
- ERP

Power Measured 5. 

SAR Configuration

- IDX Body
- Hand

Randy Ortanez President & Chief Engineer



Figure 18. Head SAR Test Setup

Test Report S/N: SAR.210502268.MBU Test Dates: May 02-04, 2001

# 13.1 SAR TEST DATA SUMMARY (Continued)

Ambient TEMPERATURE (°C)	22.7	
Relative HUMIDITY (%)_	59.5	
Atmospheric PRESSURF (kPa)	99.3	

Mixture Type: 1900MHz Brain

**Dielectric Constant:** 40.4

Conductivity: 1.82

Closest Distance (between E-Probe & EUT Antenna): 1.6 cm

## 13.4 Measurement Results (PCS CDMA Head SAR)

ENCY	Modulation	POWER	Phantom	Antenna SAI	SAR
Ch.		(dBm)	Position	Position	(W/kg)
0025	PCS CDMA	24.5 [Standard Battery]	Left Ear	In	1.340
0025	PCS CDMA	24.5 [Standard Battery]	Left Ear	Out	0.648
0600	PCS CDMA	24.5 [Standard Battery]	Left Ear	In	1.120
0600	PCS CDMA	24.5 [Standard Battery]	Left Ear	Out	0.553
1175	PCS CDMA	24.5 [Standard Battery]	Left Ear	In	1.280
1175	PCS CDMA	24.5 [Standard Battery]	Left Ear	Out	0.489
0025	PCS CDMA	24.5 [Extended Battery]	Left Ear	In	1.280
0025	PCS CDMA	24.5 [Extended Battery]	Left Ear	Out	0.617
ANSI / IEEE C95.1 1992 - SAFETY LIMIT		Brain			
•		1.6 W/kg (mW/g)			
	Ch.  0025  0025  0600  1175  1175  0025  0025	Ch.  0025 PCS CDMA  0025 PCS CDMA  0600 PCS CDMA  1175 PCS CDMA  1175 PCS CDMA  0025 PCS CDMA  0025 PCS CDMA  81 / IEEE C95.1 1992 - 3  Spatial Peak	Ch.         (dBm)           0025         PCS CDMA         24.5 [Standard Battery]           0025         PCS CDMA         24.5 [Standard Battery]           0600         PCS CDMA         24.5 [Standard Battery]           1175         PCS CDMA         24.5 [Standard Battery]           1175         PCS CDMA         24.5 [Standard Battery]           1175         PCS CDMA         24.5 [Standard Battery]           0025         PCS CDMA         24.5 [Extended Battery]           0025         PCS CDMA         24.5 [Extended Battery]	Ch. (dBm) Position  0025 PCS CDMA 24.5 [Standard Battery] Left Ear  0025 PCS CDMA 24.5 [Standard Battery] Left Ear  0600 PCS CDMA 24.5 [Standard Battery] Left Ear  0600 PCS CDMA 24.5 [Standard Battery] Left Ear  1175 PCS CDMA 24.5 [Standard Battery] Left Ear  1175 PCS CDMA 24.5 [Standard Battery] Left Ear  1175 PCS CDMA 24.5 [Standard Battery] Left Ear  0025 PCS CDMA 24.5 [Extended Battery] Left Ear  0025 PCS CDMA 24.5 [Extended Battery] Left Ear  1175 PCS CDMA 24.5 [Extended Battery] Left Ear  0025 PCS CDMA 24.5 [Extended Battery] Left Ear  1175 PCS CDMA 24.5 [Extended Battery] Left Ear  1176 PCS CDMA 24.5 [Extended Battery] Left Ear  1177 Spatial Peak 1.6	Ch. (dBm) Position Position  O025 PCS CDMA 24.5 [Standard Battery] Left Ear In  O025 PCS CDMA 24.5 [Standard Battery] Left Ear Out  O600 PCS CDMA 24.5 [Standard Battery] Left Ear In  O600 PCS CDMA 24.5 [Standard Battery] Left Ear Out  1175 PCS CDMA 24.5 [Standard Battery] Left Ear In  1175 PCS CDMA 24.5 [Standard Battery] Left Ear Out  O025 PCS CDMA 24.5 [Standard Battery] Left Ear Out  O025 PCS CDMA 24.5 [Extended Battery] Left Ear In  O025 PCS CDMA 24.5 [Extended Battery] Left Ear Out  SI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak  Brain  1.6 W/kg (mW.

#### **NOTES**:

- 1. The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration.
- 2. All modes of operation were investigated and the worst-case are reported.
- 4. Power Measured 

  ☐ Conducted ☐ EIRP ☐ ERP
- 5. SAR Measurement System ☑ SPEAG □ IDX
- 6. SAR Configuration ⊠ Head □ Body □ Hand

Randy Ortanez President & Chief Engineer



Figure 19. Head SAR Test Setup