

# SAR TEST DATA SUMMARY

Ambient TEMPERATURE (°C)	21.0
Relative HUMIDITY (%)	43.4
Atmospheric PRESSURE (kPa)	101.0

**Measured Values:**

**Mixture Type:** Brain

**Dielectric Constant:** 41.5

**Conductivity:** 0.90

**Liquid Depth:** 15.1 cm


Closest Distance (between E-Probe & Phone): 1.9 cm

## Measurement Results (AMPS Head SAR)

FREQUENCY		Modulation	POWER (dBm)	Phantom Position	Antenna Position	SAR (W/kg)
MHz	Ch.					
848.97	799	AMPS	26.2	Right Ear	IN	0.6179
848.97	799	AMPS	26.2	Right Ear	OUT	1.0555
<b>ANSI / IEEE C95.1 1992 - SAFETY LIMIT</b> <b>Spatial Peak</b> <b>Uncontrolled Exposure/General Population</b>					<b>Brain</b> <b>1.6 W/kg (mW/g)</b> averaged over 1 gram	

NOTES:

- The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration.
- All modes of operation were investigated and the worst-case are reported.
- Power Measured  Conducted  EIRP  ERP
- SAR Measurement System  SPEAG  IDX
- SAR Configuration  Head  Body  Hand

  
 Randy Ortanez  
 President



**Fig. A**  
**Head SAR Test Setup**

File : c:/idx3/SYSTEM/SARMEAS3/data/Normal/01110617\_ZOOM.VLT  
Start : 6-Nov-101 03:28:54 pm End : 6-Nov-101 03:37:53 pm

Radio Type : SAMSUNG  
Model Number : STH-A225  
Serial Number : 2  
Frequency : 848.97 MHz  
Peak Trans. Pwr : 0.420 W  
Start Trans. Pwr : 0.420 W  
Antenna Type : Helical  
Antenna Posn. : Out  
Phantom Type : Head  
Phantom Posn. : Right Ear  
Scan Type : ZOOM/SAR  
Probe Name : PCTEST  
Field Type : E Field  
Orientation : 0 Degrees

Mixture Type = Brain  
Mixture Dielectric Constant = 41.500  
Mixture Conductivity = 0.900

Comment :  
SAMSUNG DUAL-MODE PHONE - AMPS MODE  
CH 0799 Conducted 26.2 dBm  
SAMSUNG DUAL-MODE PHONE

Robot : PCTEST

Probe Offset = 0.20 cm  
Sensor Factor = 0.0108  
Conversion Factor = 0.325

PCTEST Amplifier Channel Settings : 0.239 0.278 0.294

Max Location : X = -3.500, Y = -3.000, Z = 0.000 (cm) Value = 43.527

Measured Values (volts) =  
4.048E-002 2.948E-002 2.485E-002 2.142E-002 1.856E-002 1.583E-002  
1.398E-002 1.210E-002 1.063E-002 9.444E-003 8.469E-003 7.523E-003  
6.906E-003 5.857E-003 5.427E-003 4.824E-003 4.519E-003 4.630E-003  
3.837E-003 3.889E-003 3.409E-003

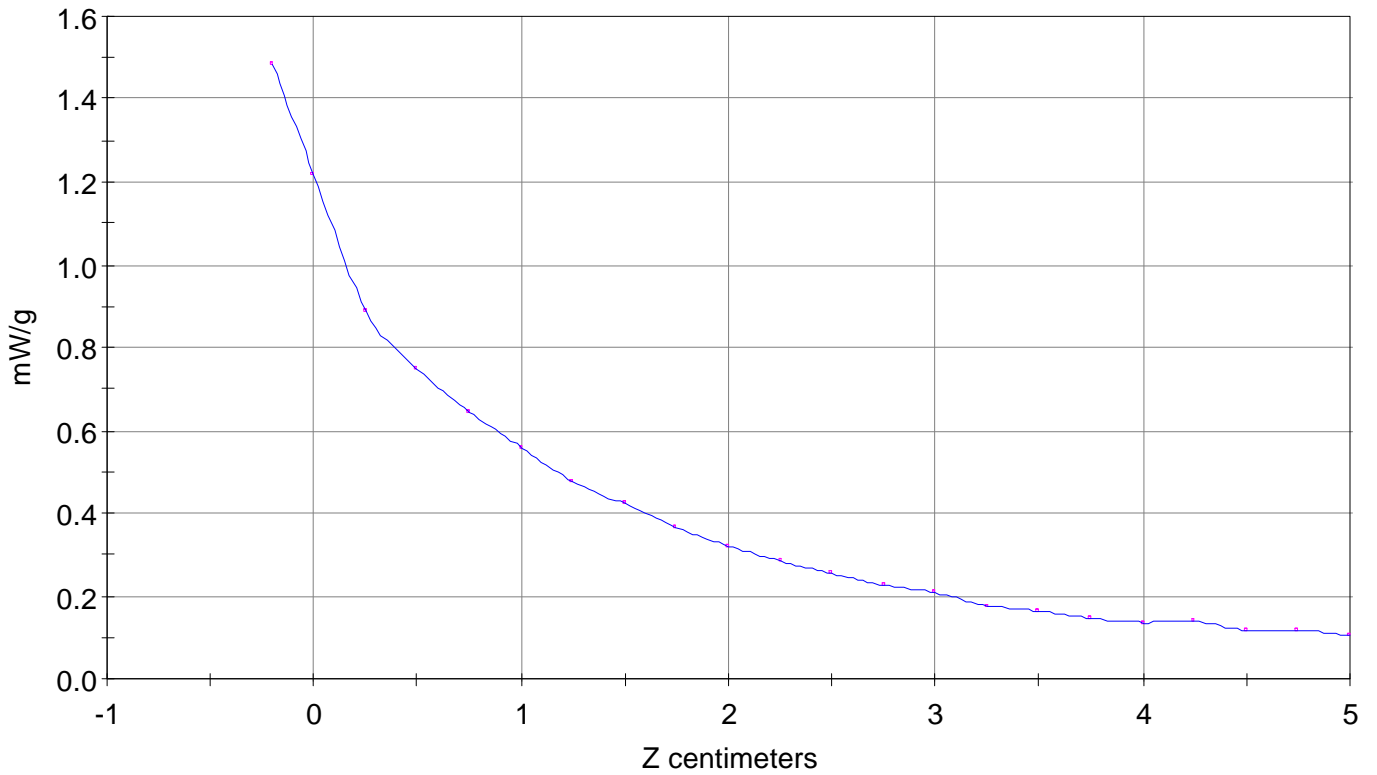
Calc. Voltage @ Surface (Vs) = 0.0493

Voltage @ 1.00 cm (Vt) = 0.0208

Ave. Voltage (Vs+Vt)/2 = 0.0351

Ave. SAR over 1 g (mW/g) = 1.0555

SAR Scan  
File : 01110617\_ZOOM  
Start : 6-Nov-101 03:28:54 pm End : 6-Nov-101 03:37:53 pm  
SAMSUNG/STH-A225/2;848.97MHz;W;Helical/Out;  
Head/Right Ear;ZOOM/SAR;PCTEST/E Field/0 DegreesBrain/41.500/0.900

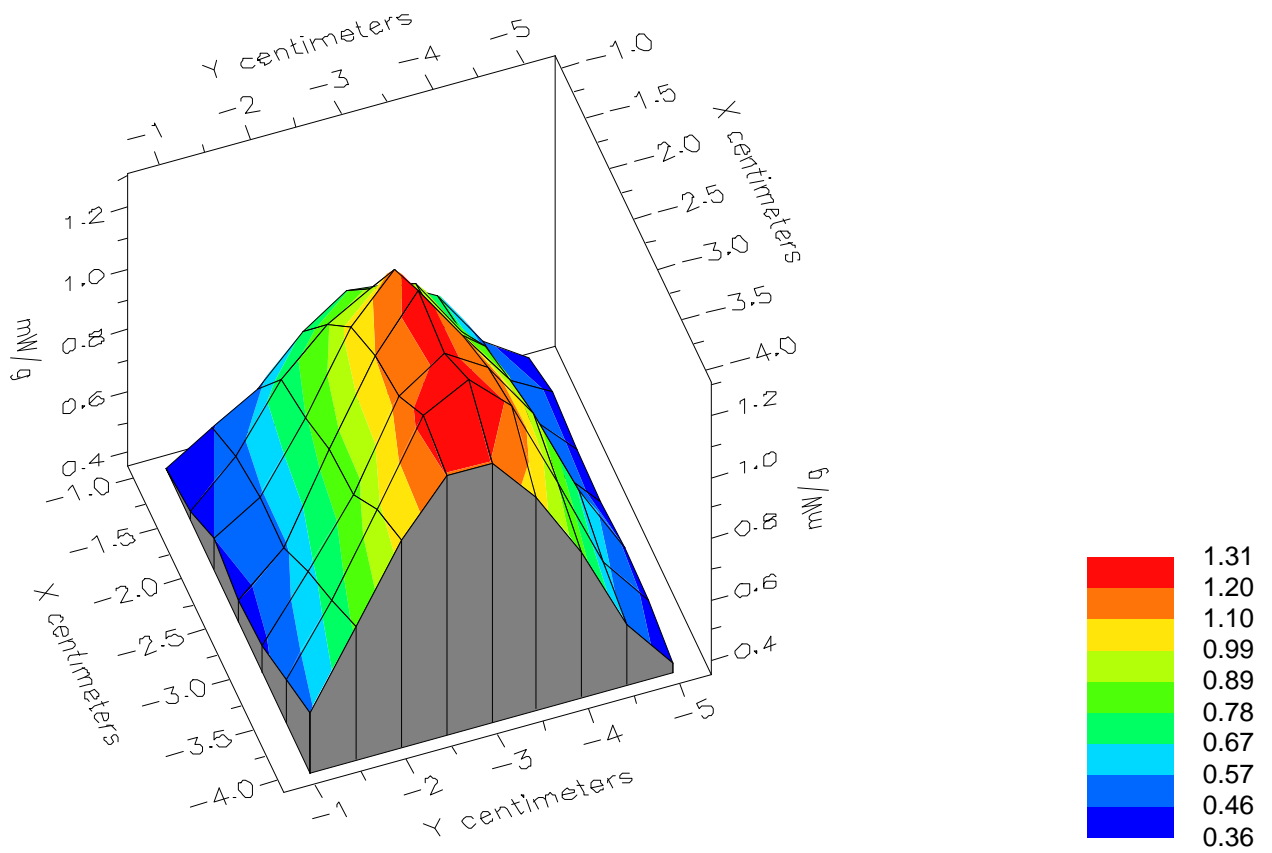


File : 01110617\_ZOOM

Start : 6-Nov-101 03:28:54 pm End : 6-Nov-101 03:37:53 pm

SAMSUNG/STH-A225/2;848.97MHz;W;Helical/Out;

Head/Right Ear;ZOOM/SAR;PCTEST/E Field/0 DegreesBrain/41.500/0.900

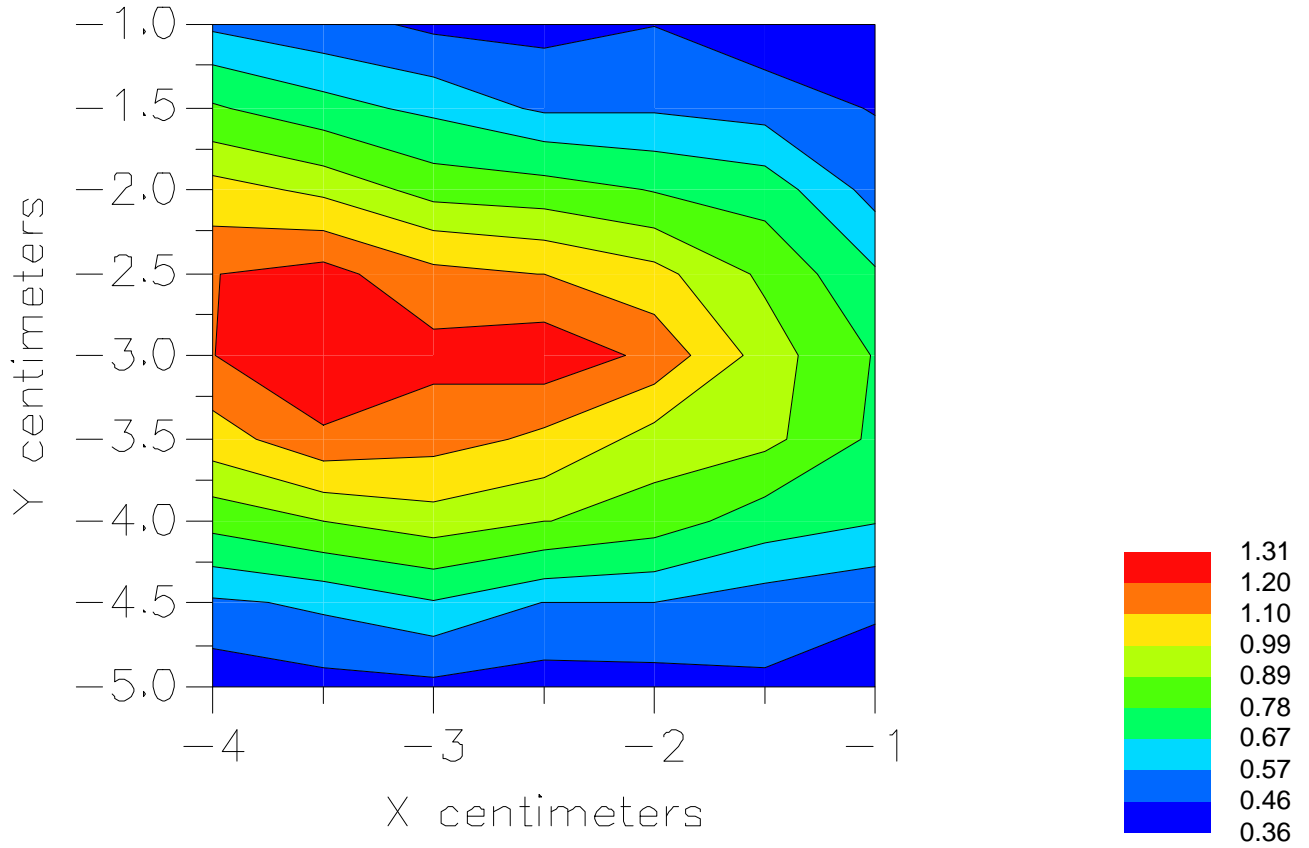


File : 01110617\_ZOOM

Start : 6-Nov-101 03:28:54 pm End : 6-Nov-101 03:37:53 pm

SAMSUNG/STH-A225/2;848.97MHz;W;Helical/Out;

Head/Right Ear;ZOOM/SAR;PCTEST/E Field/0 DegreesBrain/41.500/0.900



File : c:/idx3/SYSTEM/SARMEAS3/data/Normal/01110621\_ZOOM.VLT  
Start : 6-Nov-101 04:18:29 pm End : 6-Nov-101 04:27:17 pm

Radio Type : SAMSUNG  
Model Number : STH-A225  
Serial Number : 2  
Frequency : 848.97 MHz  
Peak Trans. Pwr : 0.420 W  
Start Trans. Pwr : 0.420 W  
Antenna Type : Helical  
Antenna Posn. : In  
Phantom Type : Head  
Phantom Posn. : Right Ear  
Scan Type : ZOOM/SAR  
Probe Name : PCTEST  
Field Type : E Field  
Orientation : 0 Degrees

Mixture Type = Brain  
Mixture Dielectric Constant = 41.500  
Mixture Conductivity = 0.900

Comment :  
SAMSUNG DUAL-MODE PHONE - AMPS MODE  
CH 0799 Conducted 26.2 dBm  
SAMSUNG DUAL-MODE PHONE

Robot : PCTEST

Probe Offset = 0.20 cm  
Sensor Factor = 0.0108  
Conversion Factor = 0.325

PCTEST Amplifier Channel Settings : 0.239 0.278 0.294

Max Location : X = -3.500, Y = -3.000, Z = 0.000 (cm) Value = 25.691

Measured Values (volts) =  
2.398E-002 1.116E-002 6.553E-003 4.200E-003 3.107E-003 2.692E-003  
2.616E-003 2.746E-003 3.025E-003 3.437E-003 4.123E-003 4.647E-003  
4.769E-003 7.853E-004 6.000E-004 2.572E-004

Calc. Voltage @ Surface (Vs) = 0.0273

Voltage @ 1.00 cm (Vt) = 0.0137

Ave. Voltage (Vs+Vt)/2 = 0.0205

Ave. SAR over 1 g (mW/g) = 0.6179

