SAR DATA SUMMARY

Mixture Type: 835MHz Brain

14.1 MEASUREMENT RESULTS (AMPS Right Head SAR – Touch)

FREQUENCY		Modulation	Begin / End POWER‡			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
824.04	0991	AMPS	25.5	25.5	Extended	Cheek / Touch	In	**0.95**
824.04	0991	AMPS	25.5	25.5	Extended	Cheek / Touch	Out	**1.15**
836.49	0383	AMPS	25.5	25.5	Extended	Cheek / Touch	In	**0.81**
836.49	0383	AMPS	25.5	25.5	Extended	Cheek / Touch	Out	**0.89**
848.97	0799	AMPS	25.5	25.5	Extended	Cheek / Touch	In	**1.14**
848.97	0799	AMPS	25.5	25.5	Extended	Cheek / Touch	Out	**1.15**
848.97	0799	AMPS	25.5	25.5	Standard	Cheek / Touch	Out	**1.15**
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**Brain 1.6 W/kg (mW/g) averaged over 1 gram**		

NOTES:

1. The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings. *Standard & Extended Batteries are options.*

‡Power Measured	☒	Conducted	☐	ERP	☐	EIRP
4. SAR Measurement System	☐	DASY3	☒	IDX	☐	
Phantom Configuration	☐	Left Head	☐	Flat Phantom	☒	Right Head
5. SAR Configuration	☒	Head	☐	Body	☐	Hand
6. Test Signal Call Mode	☒	Manu. Test Codes	☐	Base Station Simulator		

7. Tissue parameters and temperatures are listed on the SAR plots.
8. Liquid tissue depth is 15.1 cm. ± 0.1

Alfred Cirwithian
Vice President Engineering

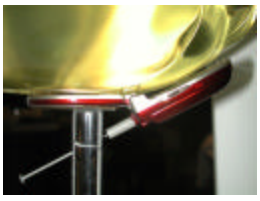

Figure 14.1 Right Head SAR Test Setup
-- Cheek / Touch Position --

SAR DATA SUMMARY (Continued)

Mixture Type: 835MHz Brain

14.5 MEASUREMENT RESULTS (CELLULAR CDMA Left Head SAR – Touch)

FREQUENCY		Modulation	Begin / End POWER‡			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
824.70	1013	CDMA	24.5	24.5	Extended	Cheek / Touch	In	**0.96**
824.70	1013	CDMA	24.5	24.5	Extended	Cheek / Touch	Out	**1.18**
824.70	1013	CDMA	24.5	24.5	Standard	Cheek / Touch	Out	**1.05**
ANSI / IEEE C95.1 1992 - SAFETY LIMIT Spatial Peak Uncontrolled Exposure/General Population						**Brain 1.6 W/kg (mW/g) **averaged over 1 gram		

NOTES:

1. The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings. *Standard & Extended Batteries are options.*

	‡Power Measured	☒	Conducted	☐	ERP	☐	EIRP
4.	SAR Measurement System	☐	DASY3	☒	IDX	☐	
	Phantom Configuration	☒	Left Head	☐	Flat Phantom	☐	Right Head
5.	SAR Configuration	☒	Head	☐	Body	☐	Hand
6.	Test Signal Call Mode	☒	Manu. Test Codes	☐	Base Station Simulator		

7. Tissue parameters and temperatures are listed on the SAR plots.
8. Liquid tissue depth is 15.1 cm. ± 0.1
9. Justification for reduced test configurations: Per FCC P1528 Power Rule (Jan. 31, 2002), SAR measurements were taken on only one channel because the peak SAR value is less than 85% of the maximum SAR value in AMPS mode.

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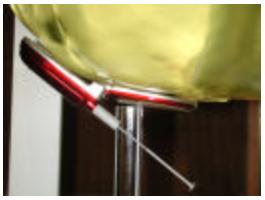

Figure 14.5 Left Head SAR Test Setup -- Cheek / Touch Position --

SAR DATA SUMMARY (Continued)

Mixture Type: 835MHz Brain

14.6 MEASUREMENT RESULTS (CELLULAR CDMA Right Head SAR – Touch)

FREQUENCY		Modulation	Begin / End POWER‡			Device Test Position	Antenna Position	SAR (W/kg)
MHz	Ch.		(dBm)		Battery			
848.31	777	CDMA	24.5	24.5	Extended	Cheek / Touch	In	**0.84**
848.31	777	CDMA	24.5	24.5	Extended	Cheek / Touch	Out	**0.91**
ANSI / IEEE C95.1 1992 - SAFETY LIMIT **Spatial Peak** **Uncontrolled Exposure/General Population**						**Brain** **1.6 W/kg (mW/g)** averaged over 1 gram		

NOTES:

1. The test data reported are the worst-case SAR value with the antenna-head position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [July 2001].
2. All modes of operation were investigated, and worst-case results are reported.
3. Battery is fully charged for all readings. *Standard & Extended Batteries are options.*

	‡Power Measured	☒	Conducted	☐	ERP	☐	EIRP
4.	SAR Measurement System	☐	DASY3	☒	IDX	☐	
	Phantom Configuration	☐	Left Head	☐	Flat Phantom	☒	Right Head
5.	SAR Configuration	☒	Head	☐	Body	☐	Hand
6.	Test Signal Call Mode	☒	Manu. Test Codes	☐	Base Station Simulator		

7. Tissue parameters and temperatures are listed on the SAR plots.
8. Liquid tissue depth is 15.1 cm. ± 0.1
9. Justification for reduced test configurations: Per FCC P1528 Power Rule (Jan. 31, 2002), SAR measurements were taken on only one channel because the peak SAR value is less than 85% of the maximum SAR value in AMPS mode.

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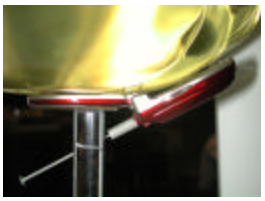
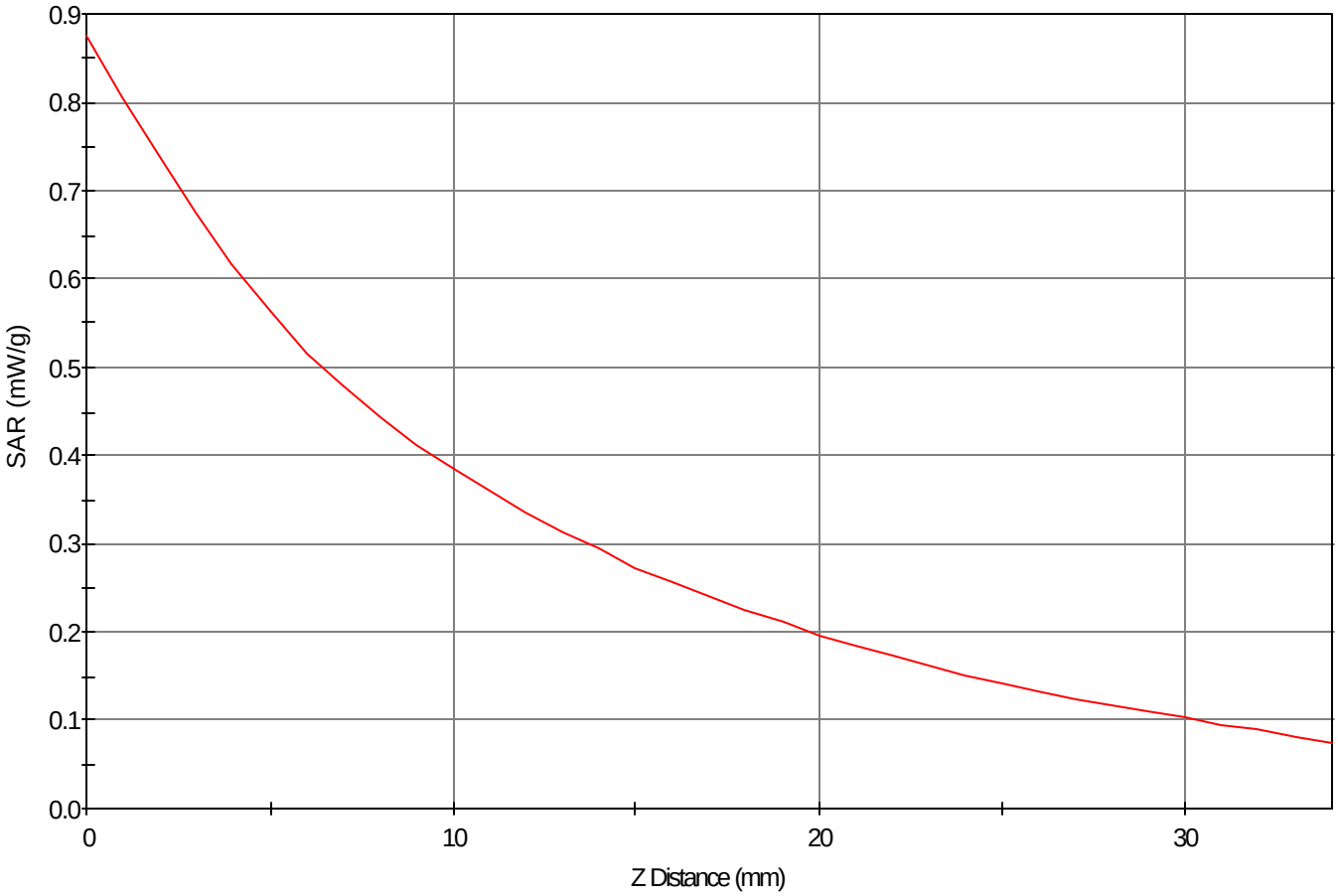


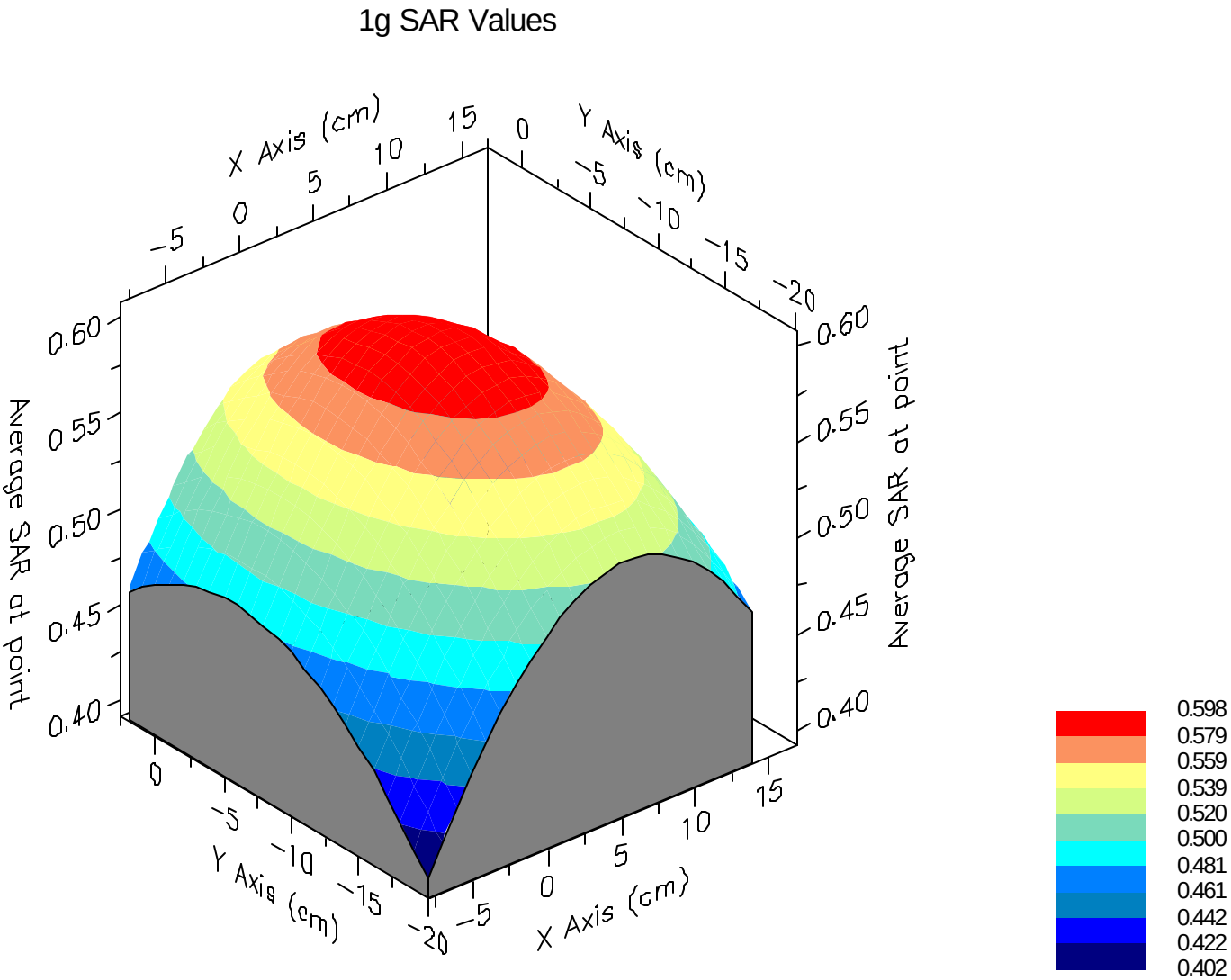
Figure 14.6 Right Head SAR Test Setup
-- Cheek / Touch Position --

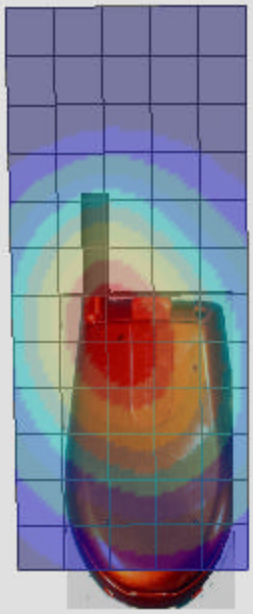
SAR Data Report 02050926

```
  Start        :  9-May-02 01:45:14 pm
  End          :  9-May-02 01:51:16 pm
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A225
  Serial Number    : 1
  Frequency        : 848.97 MHz
  Transmit Pwr     : 0.355 W
  Antenna Type     : Helical
  Antenna Posn.    : In

Measurement Data:
  Phantom Name        : SAM-FLAT
  Phantom Type        : Uniphantom
  Tissue Type         : Muscle
  Tissue Dielectric   : 57.260
  Tissue Conductivity : 0.970
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 835 MHz
  Tissue Type             : Muscle
  Calibrated Dielectric   : 55.700
  Calibrated Conductivity :  0.990
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  4.900
  Probe Sensitivity :  3.597   3.474   3.049   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  AMPS MODE CH-799
  Body
  CF=1; Amb. Temp= 21.3 'C; Liq. Temp=21.2 'C



Area Scan - Max Peak SAR Value at x=3.0 y=-9.0 = 0.57 W/kg

Zoom Scan - Max Peak SAR Value at x=4.0 y=-8.0 z=0.0 = 0.87 W/kg

Max 1g SAR at x=4.0 y=-8.0 z=0.0 = 0.60 W/kg

Max 10g SAR at x=4.0 y=-9.0 z=0.0 = 0.39 W/kg
```

SAR - Z Axis
at Hotspot x:4.0 y:-8.0



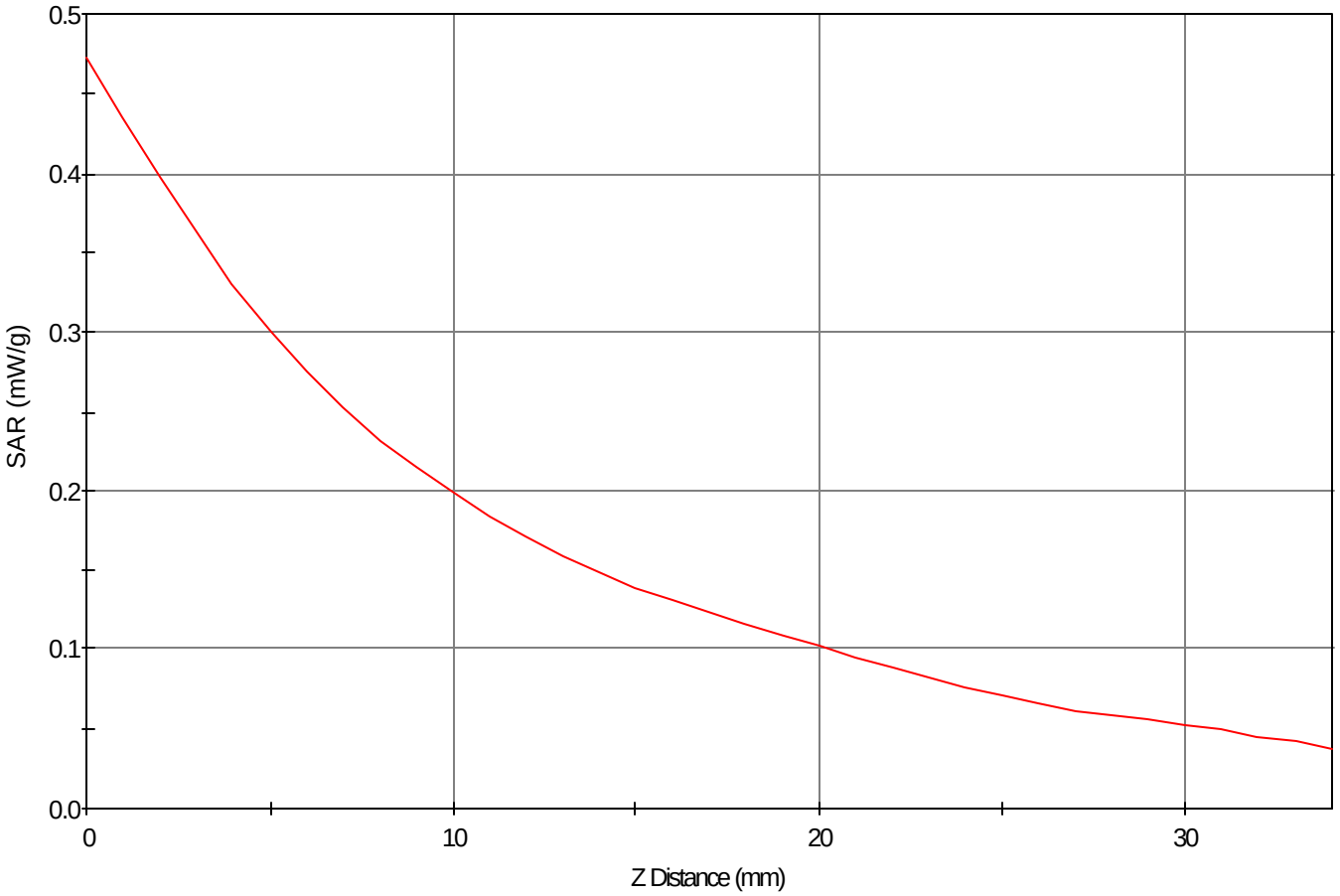

1g SAR Values
X Axis (cm)
Y Axis (cm)
Average SAR at point
0.60
0.55
0.50
0.45
0.40
0.598
0.579
0.559
0.539
0.520
0.500
0.481
0.461
0.442
0.422
0.402



SAR Data Report 02050921

```
  Start        :  9-May-02 01:03:30 pm
  End          :  9-May-02 01:09:43 pm
  Code Version : 4.08
  Robot Version: 4.08

Product Data:
  Type             : SAMSUNG
  Model Number     : SCH-A225
  Serial Number    : 1
  Frequency        : 848.31 MHz
  Transmit Pwr     : 0.280 W
  Antenna Type     : Helical
  Antenna Posn.    : In

Measurement Data:
  Phantom Name        : SAM-FLAT
  Phantom Type        : Uniphantom
  Tissue Type         : Muscle
  Tissue Dielectric   : 57.260
  Tissue Conductivity : 0.970
  Tissue Density      : 1.000
  Robot Name          : CRS

Probe Data:
  Probe Name              : PCT002
  Probe Type              : E Fld Triangle
  Frequency               : 835 MHz
  Tissue Type             : Muscle
  Calibrated Dielectric   : 55.700
  Calibrated Conductivity :  0.990
  Calibrated Density      :  1.000
  Probe Offset            :  2.400 mm
  Conversion Factor       :  4.900
  Probe Sensitivity :  3.597   3.474   3.049   mV/(mW/cm^2)
  Amplifier Gains   :  20.00   20.00   20.00

Sample:
  Rate:         6000 Samples/Sec
  Count:        100 Samples
  NIDAQ Gain:   5

Comments:
  CDMA MODE CH-777
  Body
  CF=1; Amb. Temp= 21.3 'C; Liq. Temp=21.2 'C



Area Scan - Max Peak SAR Value at x=5.0 y=-8.0 = 0.31 W/kg

Zoom Scan - Max Peak SAR Value at x=5.0 y=-8.0 z=0.0 = 0.47 W/kg

Max 1g SAR at x=6.0 y=-8.0 z=0.0 = 0.32 W/kg

Max 10g SAR at x=5.0 y=-9.0 z=0.0 = 0.21 W/kg
```

SAR - Z Axis
at Hotspot x:5.0 y:-8.0



1g SAR Values