



MOTOROLA

Exhibit 11 Addendum: SAR Test Report
FCC ID: AZ489FT5808

Date of test: 19 September 2001

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Statement of Compliance: Motorola declares under its sole responsibility that portable transceiver FCC ID AZ489FT5808 to which this declaration relates, is in conformity with the appropriate RF exposure standards, recommendations and guidelines. It also declares that the product was tested in accordance with the appropriate measurement standards, guidelines and recommended practices. Any deviations from these standards, guidelines and recommended practices are noted below:

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The results and statements contained herein relate only to the items tested. The names of individuals involved may be mentioned only in connection with the statements or results from this report.

Motorola encourages all feedback, both positive and negative, on this test report.

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1. Introduction

Motorola, Inc. has performed measurements of the maximum potential exposure to the user of Portable Radio FCC ID AZ489FT5808. The Specific Absorption Rate (SAR) of this product was measured. The portable radio was tested in accordance with the latest available test guidelines. The SAR values found for the portable radio FCC ID AZ489FT5808 are below the maximum recommended levels of 1.6 W/kg.

2. Description of the Device Under Test

Antenna description

Type	Retractable	
Location	Right Side	
Dimensions	Length	83mm
	Width at Base	4mm
Configuration	Helix	

Device description

FCC ID Number	AZ489FT5808		
Serial number of Device's Data Contained within Report	919ABQ08ZX		
Mode(s) of Operation	Two-way (Dispatch)	PSTN (Phone Mode)	Data-Mode
Modulation Mode(s)	TDMA 16QAM	TDMA 16QAM	TDMA 64QAM
Maximum Output Power Setting	28.5dBm	28.5dBm	28.5dBm
Duty Cycle	1/6	1/3	81/120
Transmitting Frequency Range(s)	806.0125-824.9875MHz	806.0125-824.9875MHz	806.0125-824.9875MHz

This radio has two types of PAs that can be used in production. The primary PA is a dual stage (Doherty) PA and the alternate PA is a single ended PA. Both types were evaluated for SAR. The dual stage (Doherty) was found to have higher SAR values. The single ended PA has lower SAR and is then considered a class 1 permissive change.

Serial Numbers of Units Evaluated:

Dual Stage PA unit 1: 919ABQ08ZX

Dual Stage PA unit 2: 919ABQ090L

Single Ended PA unit 1: 919ABS091B

Single Ended PA unit 2: 919ABS091K

3. Test Results

The Portable Radio FCC ID AZ489FT5808 has three modes of operation (Two-way, Phone and Data). The Two-way and Phone modes can both be used in a cheek/touch configuration. Since both modes have the same peak power and the phone mode has the higher of the two duty cycles (thus the higher time average power), only the phone mode will be tested for the cheek/touch configuration. The Two-way, Phone and Data modes can all be used in a body-worn configuration. Since all the modes have the same peak power and the data mode has the highest of all the duty cycles (thus the highest time average power), only the data mode will be tested for the body-worn configuration.

3.1 Phone Mode Test Results

The SAR results shown in tables 1 through 3 are maximum SAR values averaged over 1 gram of phantom tissue for Head Adjacent SAR measurements. Also shown are the measured conducted output powers. When the radio is placed in the left side of the head in cheek touch position, the antenna is located 32mm away from the user. This is the closer of the two sides of the head.

The test sample was operated in a test mode that allows control of the transmitter without the need to place actual phone calls. For the purposes of this test the unit is commanded to test mode and manually set to the proper channel, transmitter power level and transmit mode of operation. The radio was then placed in the SAR measurement system with a fully charged battery.

Per Supplement C 01-01, the SAR was measured at the middle channel for each test configuration (left, right, extended and retracted) and if it was at least 2.0 dB lower than the SAR limit (after accounting for SAR drift), testing at the high and low channels was not performed. The tissue simulant depth was verified to be 15.0cm $\pm$ 0.5cm at the center of the ear.

The Portable Radio FCC ID AZ489FT5808 has three battery options:

SNN5704A - A 550mAH battery, SNN5705B - A 750mAH battery and a SNN5717B – A 450mAH battery

The battery with the highest capacity is the SNN5705B. This battery was used to do most of the SAR testing. The channels that resulted in the highest SAR values for the antenna retracted and extended were repeated using the other batteries. The SAR results are shown in tables 2 and 3.

A full data set output of two test conditions with the highest SAR values from the Dasy™ measurement system is included as appendix 2. The test conditions included are indicated as bold numbers in the following table. All other test conditions measured lower SAR values than those included.

Description	f (MHz)	Conducted Output Power (dBm)	Left Head				Right Head			
			Antenna Extended		Antenna Retracted		Antenna Extended		Antenna Retracted	
			SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)
Phone Mode	806.0125MHz	28.2dBm	1.00	0.04						
	813.5125MHz	28.4dBm	1.05	0.07	0.88	-0.06	0.80	-0.09	0.70	-0.01
	824.9875MHz	28.2dBm	1.15	0.02						

Table 1: SAR measurement results for the portable radio FCC ID AZ489FT5808 with Battery SNN5705B attached, at highest possible output power. Measured against the head.

Description	f (MHz)	Conducted Output Power (dBm)	Left Head				Right Head			
			Antenna Extended		Antenna Retracted		Antenna Extended		Antenna Retracted	
			SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)
Phone Mode	806.0125MHz	28.4dBm								
	813.5125MHz	28.3dBm			0.97	0.04				
	824.9875MHz	28.4dBm	1.14	0.05						

Table 2: SAR measurement results for the portable radio FCC ID AZ489FT5808 with Battery SNN5704A attached, at highest possible output power. Measured against the head.

Description	f (MHz)	Conducted Output Power (dBm)	Left Head				Right Head			
			Antenna Extended		Antenna Retracted		Antenna Extended		Antenna Retracted	
			SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)
Phone Mode	806.0125MHz	28.3dBm								
	813.5125MHz	28.4dBm			0.87	0.06				
	824.9875MHz	28.3dBm	0.97	-0.01						

Table 3: SAR measurement results for the portable radio FCC ID AZ489FT5808 with Battery SNN5717B attached, at highest possible output power. Measured against the head.

3.2 Push-to-Talk/Dispatch Mode Test Results

The SAR results shown in table #4 are maximum SAR values averaged over 1 gram of phantom tissue for the Push-to-Talk/Dispatch Mode SAR measurements. Also shown are the measured conducted output powers.

The test sample was operated in a test mode that allows control of the transmitter without the need to place actual phone calls. For the purposes of this test the unit is commanded to test mode and manually set to the proper channel, transmitter power level and transmit mode of operation. The radio was then placed in the SAR measurement system with a fully charged battery. The radio was placed with the front of the device positioned at 2.5 cm from a flat phantom, as per Supplement C 01-01.

A full data set output of two test conditions with the highest SAR values from the Dasy™ measurement system is included as appendix 3. The test conditions included are indicated as bold numbers in the following table. All other test conditions measured lower SAR values than those included.

Description	f (MHz)	Conducted Output Power (dBm)	Two-Way (Push-to-Talk)			
			Antenna Extended		Antenna Retracted	
			SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)
Two-Way	806.0125MHz	28.3dBm	0.093	-0.07	0.138	-0.35
	813.5125MHz	28.3dBm	0.146	0.10	0.143	-0.12
	824.9875MHz	28.3dBm	0.083	-0.38	0.089	0.14

Table 4: SAR measurement results for the portable radio FCC ID AZ489FT5808 with Battery SNN5705B attached, at highest possible output power. Radio positioned 2.5cm below the flat phantom.

3.3 Data Mode Test Results

The SAR results shown in tables 5 through 8 are maximum SAR values averaged over 1 gram of phantom tissue for Body-worn SAR measurements. Also shown are the measured conducted output powers. The flat phantom used is 41cm(long) x 23cm(wide) x 21.2cm(tall). The bottom of this flat phantom is 2mm thick. The body of this radio, with the flip open, is 16cm(long) x 5cm(wide). The issue simulant depth was verified to be 15.0cm ±0.5cm

The test sample was operated in a test mode that allows control of the transmitter without the need to place actual phone calls. For the purposes of this test the unit is commanded to test mode and manually set to the proper channel, transmitter power level and transmit mode of operation. The radio was then placed in the SAR measurement system with a fully charged battery.

The Portable Radio FCC ID AZ489FT5808 has three battery options:

SNN5704A - A 550mAh battery

SNN5705B - A 750mAh battery

SNN5717B - A 450mAh battery

The battery with the highest capacity is the SNN5705B. This battery was used to do most of the SAR testing. The channels that resulted in the highest SAR values for the antenna retracted and extended were repeated using the other batteries. The SAR results are shown in tables 5 through 7

The portable radio has a data port located at the bottom of the unit. Various cables can be used to attach the portable radio to USB ports, a dash mount holder, Palm Pilot PDAs or a keyboard for character entries. All these cables utilize the same type of connector to attach to the data port. Table 8 shows the SAR results when a data cable is attached to the bottom of the device. Just the channels that resulted in the highest SAR values for the body-worn configuration with the antenna retracted and extended were measured.

A full data set output of two test conditions with the highest SAR values from the Dasy™ measurement system is included as appendix 4. The test conditions included are indicated as bold numbers in the following table. All other test conditions measured lower SAR values than those included.

Description	f (MHz)	Conducted Output Power (dBm)	Body Worn			
			Antenna Extended		Antenna Retracted	
			SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)
Data Mode	806.0125MHz	28.3dBm	0.64	-0.42	0.58	0.10
	813.5125MHz	28.4dBm	0.68	0.11	0.61	-0.22
	824.9875MHz	28.4dBm	0.61	-0.36	0.63	-0.26

Table 5: SAR measurement results for the portable radio FCC ID AZ489FT5808 with Battery SNN5705B attached, at highest possible output power. Measured inside the belt-clip against the flat phantom.

Description	f (MHz)	Conducted Output Power (dBm)	Body Worn			
			Antenna Extended		Antenna Retracted	
			SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)
Data Mode	806.0125MHz	28.4dBm	0.71	0.08		
	813.5125MHz	28.4dBm				
	824.9875MHz	28.4dBm			0.62	-0.55

Table 6: SAR measurement results for the portable radio FCC ID AZ489FT5808 with Battery SNN5704A attached, at highest possible output power. Measured inside the belt-clip against the flat phantom.

Description	f (MHz)	Conducted Output Power (dBm)	Body Worn			
			Antenna Extended		Antenna Retracted	
			SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)
Data Mode	806.0125MHz	28.3dBm	0.70	0.04		
	813.5125MHz	28.4dBm				
	824.9875MHz	28.4dBm			0.63	-0.34

Table 7: SAR measurement results for the portable radio FCC ID AZ489FT5808 with Battery SNN5717B and a data cable attached, at highest possible output power. Measured inside the belt-clip against the flat phantom.

Description	f (MHz)	Conducted Output Power (dBm)	Body Worn			
			Antenna Extended		Antenna Retracted	
			SAR, 1g (W/kg)	Drift (dB)	SAR, 1g (W/kg)	Drift (dB)
Data Mode	806.0125MHz	28.4dBm	0.54	-0.04		
	813.5125MHz	28.4dBm				
	824.9875MHz	28.4dBm			0.31	-0.71

Table 8: SAR measurement results for the portable radio FCC ID AZ489FT5808 with Battery SNN5704A attached and USB cable attached, at highest possible output power. Measured inside the belt-clip against the flat phantom.

4. Test Equipment Used

4.1 Dosimetric System Equipment Used

The Motorola Personal Communications Sector Product Safety Laboratory utilizes a Dosimetric Assessment System (Dasy3™) SAR measurement system manufactured by Schmid & Partner Engineering AG (SPEAG™), of Zurich Switzerland. The overall RSS uncertainty of the measurement system is $\pm 12.0\%$ (K=1) with an expanded measurement uncertainty of $\pm 24\%$

Description	Serial Number	Cal Due Date
DASY3 DAE V1	SN411	1/15/2002
E-Field Probe ETDV6	SN1522	5/11/2002
Dipole Validation Kit, DV800V2	SN68	8/01/2001

4.2 Additional Equipment Used for System Accuracy Verification

Description	Serial Number	Cal Due Date
Signal Generator HP8648C	3847A04832	1/18/2003
Power Meter E4419B	GB39511088	1/19/2002
Power Sensor 8481A	US39210917	1/24/2002

5. Electrical parameters of the tissue simulating liquid

Prior to conducting SAR measurements, the relative permittivity, ϵ_r , and the conductivity, σ , of the tissue simulating liquids were measured with HP85070 Dielectric Probe Kit. These values are shown in the table below. The mass density, ρ , used by the dosimetric system is also given. Recommended limits for maximum permittivity, minimum conductivity and maximum mass density are also shown. These come from the Federal Communication Commission, OET Bulletin 65 Supplement C 01-01. The recommended dielectric parameters of the tissue simulant for the exact center frequency of the transmitting band of this portable radio were calculated using linear interpolation from the data points given in Supplement C 01-01. It is seen that the measured parameters are satisfactory for compliance testing. The issue simulant depth was verified to be $15.0\text{cm} \pm 0.5\text{cm}$ at the center of the ear. The simulant temperature was measured at the beginning and end of each day. The values measured at the start of each day are shown in the table below. The ambient temperature was also measured throughout the day. The ambient temperature measurements and the tissue simulant temperature measurements always found the temperature $\pm 2.0^\circ\text{C}$ from the temperature measured in the morning.

f (MHz)	Tissue type	Limits / Measured	Dielectric Parameters			Simulant Temperature °C
			ϵ_r	σ (S/m)	ρ (g/cm ³)	
813.51	Head	Measured, 09/05/01	43.2	0.91	1.00	22.3
		Recommended Limits	41.4	0.9	1.00	20-26
813.51	Head	Measured, 09/06/01	43.5	0.91	1.00	22.4
		Recommended Limits	41.4	0.9	1.00	20-26
813.51	Head	Measured, 09/07/01	40.8	0.9	1.00	22.6
		Recommended Limits	41.4	0.9	1.00	20-26
813.51	Body	Measured, 09/08/01	55.1	0.97	1.00	22.1
		Recommended Limits	55.1	0.97	1.00	20-26

6. System Accuracy Verification

A system accuracy verification of the DASY3 was performed using the measurement equipment listed in Section 4. The test was conducted on the same days as the measurement of the DUT. Recommended limits for maximum permittivity, minimum conductivity are shown in the table below. These come from the Federal Communication Commission, OET Bulletin 65 Supplement C 01-01. The obtained results from the system accuracy verification are displayed in the table below. The distributions of SAR compare well with those of the reference measurements (see Appendix 1).. The issue simulant depth was verified to be 15.0cm $\pm$ 0.5cm.

f (MHz)	Description	SAR (W/kg) , 1gram	Dielectric Parameters		Temp (°C)
			ϵ_r	σ (S/m)	
900	Measured, 09/05/01	12.34	40.2	0.96	22.2
	Recommended Limits	11.88	41.5	0.97	N/A
900	Measured, 09/06/01	12.36	40.1	0.96	22.7
	Recommended Limits	11.88	41.5	0.97	N/A
900	Measured, 09/07/01	12.48	39.9	0.96	22.5
	Recommended Limits	11.88	41.5	0.97	N/A
900	Measured, 09/08/01	12.24	39.5	0.95	22.7
	Recommended Limits	11.88	41.5	0.97	N/A

Appendix 1

SAR distribution comparison for the system accuracy verification

Dipole 900

900MHz Dipole Validation / Dipole Sn# 68 / Forward Power = 250mW/ Simulant Temp at time of measurement 22.5

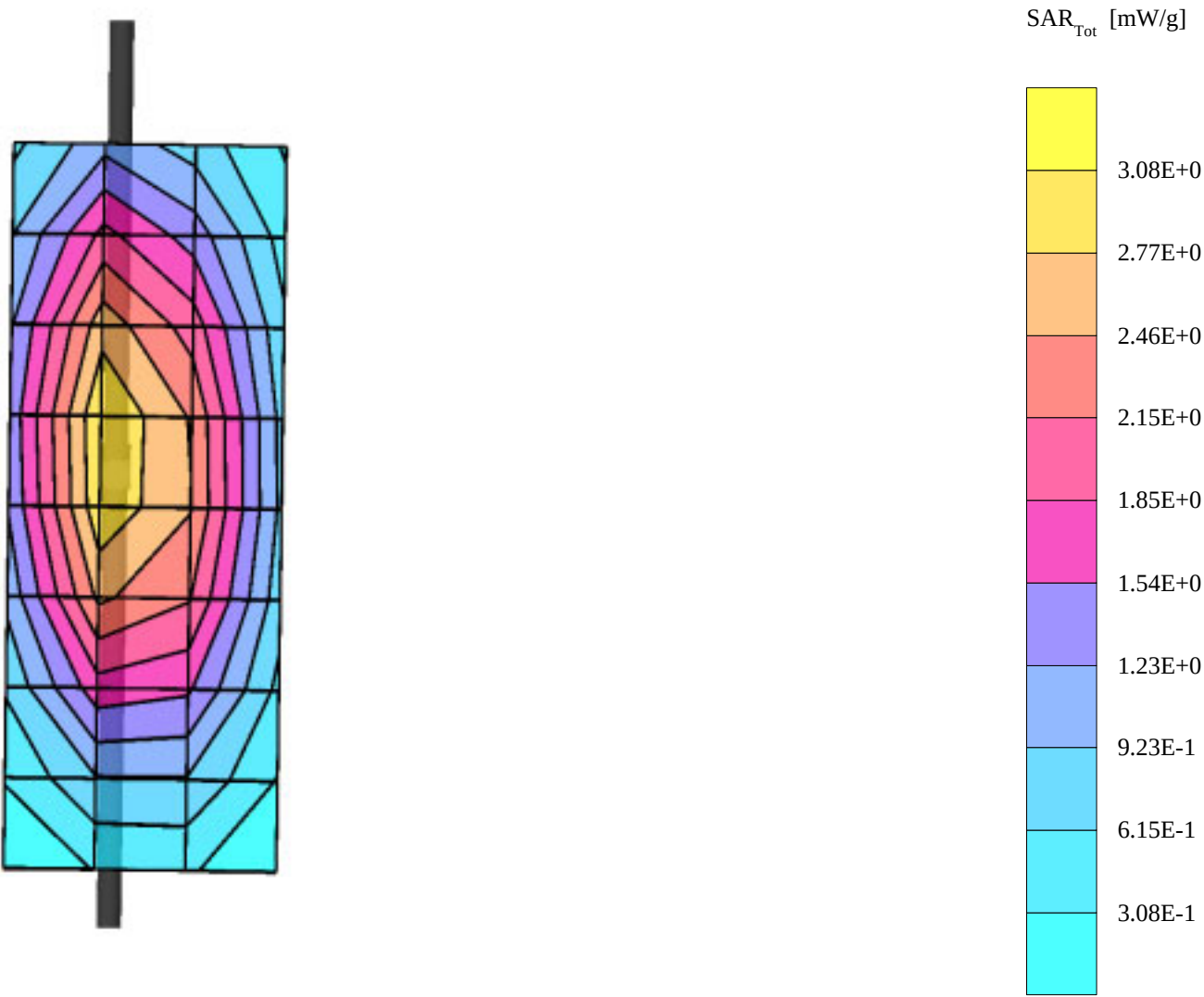
Robot 1 Amy Twin Phantom 2.3; Section 1

Probe: ET3DV6 - SN1522 HEAD - iDEN (Sugar water); ConvF(6.31,6.31,6.31); Crest factor: 1.0; Head 900 MHz: $\sigma = 0.96$ mho/m $\epsilon_r = 39.9$ $\rho = 1.00$ g/cm³

Cubes (2): Peak: 5.09 mW/g ± 0.14 dB, SAR (1g): 3.12 mW/g ± 0.10 dB, SAR (10g): 1.95 mW/g ± 0.09 dB, (Worst-case extrapolation)

Penetration depth: 11.4 (10.3, 12.9) [mm]

Powerdrift: 0.07 dB



Dipole 900

900MHz Dipole Validation / Dipole Sn# 68 / Forward Power = 250mW / Simulant Temp at time of measurement 22.7

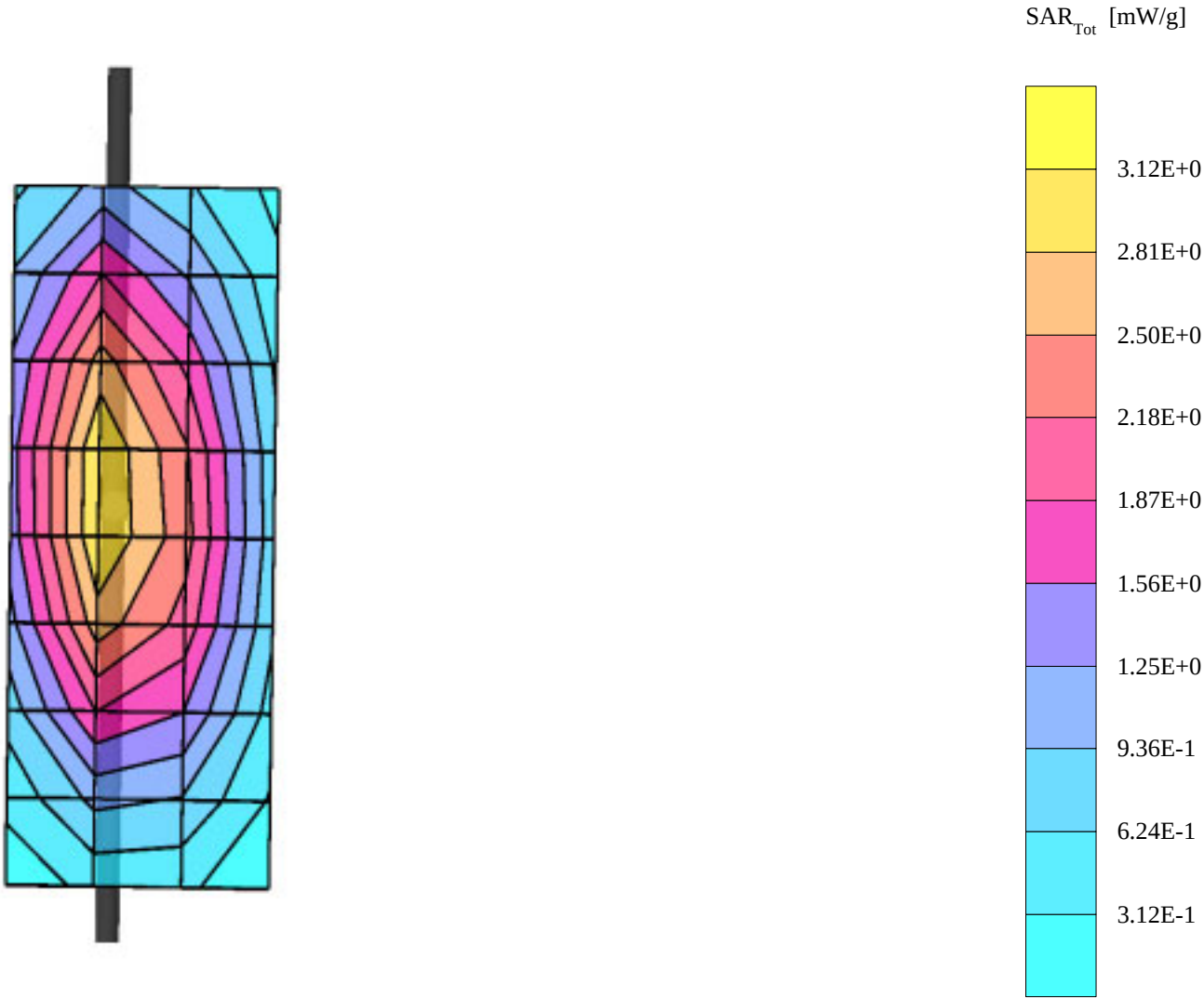
Robot 1 Amy Twin Phantom 2.3; Section 1

Probe: ET3DV6 - SN1522 HEAD - iDEN (Sugar water); ConvF(6.31,6.31,6.31); Crest factor: 1.0; Head 900 MHz: $\sigma = 0.96$ mho/m $\epsilon_r = 40.1$ $\rho = 1.00$ g/cm³

Cubes (2): Peak: 5.04 mW/g ± 0.13 dB, SAR (1g): 3.09 mW/g ± 0.11 dB, SAR (10g): 1.93 mW/g ± 0.09 dB, (Worst-case extrapolation)

Penetration depth: 11.5 (10.3, 13.0) [mm]

Powerdrift: 0.01 dB



Dipole 900

900MHz Dipole Validation / Dipole Sn# 68 / Forward Power = 252mW / Simulant Temp at time of measurement 22.2

Robot 1 Amy Twin Phantom 2.3; Section 1

Probe: ET3DV6 - SN1522 HEAD - iDEN (Sugar water); ConvF(6.31,6.31,6.31); Crest factor: 1.0; Head 900 MHz: $\sigma = 0.96 \text{ mho/m}$ $\epsilon_r = 40.2$ $\rho = 1.00 \text{ g/cm}^3$

Cubes (2): Peak: $5.07 \text{ mW/g} \pm 0.18 \text{ dB}$, SAR (1g): $3.11 \text{ mW/g} \pm 0.17 \text{ dB}$, SAR (10g): $1.94 \text{ mW/g} \pm 0.16 \text{ dB}$, (Worst-case extrapolation)

Penetration depth: 11.4 (10.3, 12.9) [mm]

Powerdrift: -0.00 dB



Dipole 900

900 MHz Dipole Validation / Dipole Sn# 68 / Forward Power = 251mW / Simulant Temp at time of measurement 22.7C

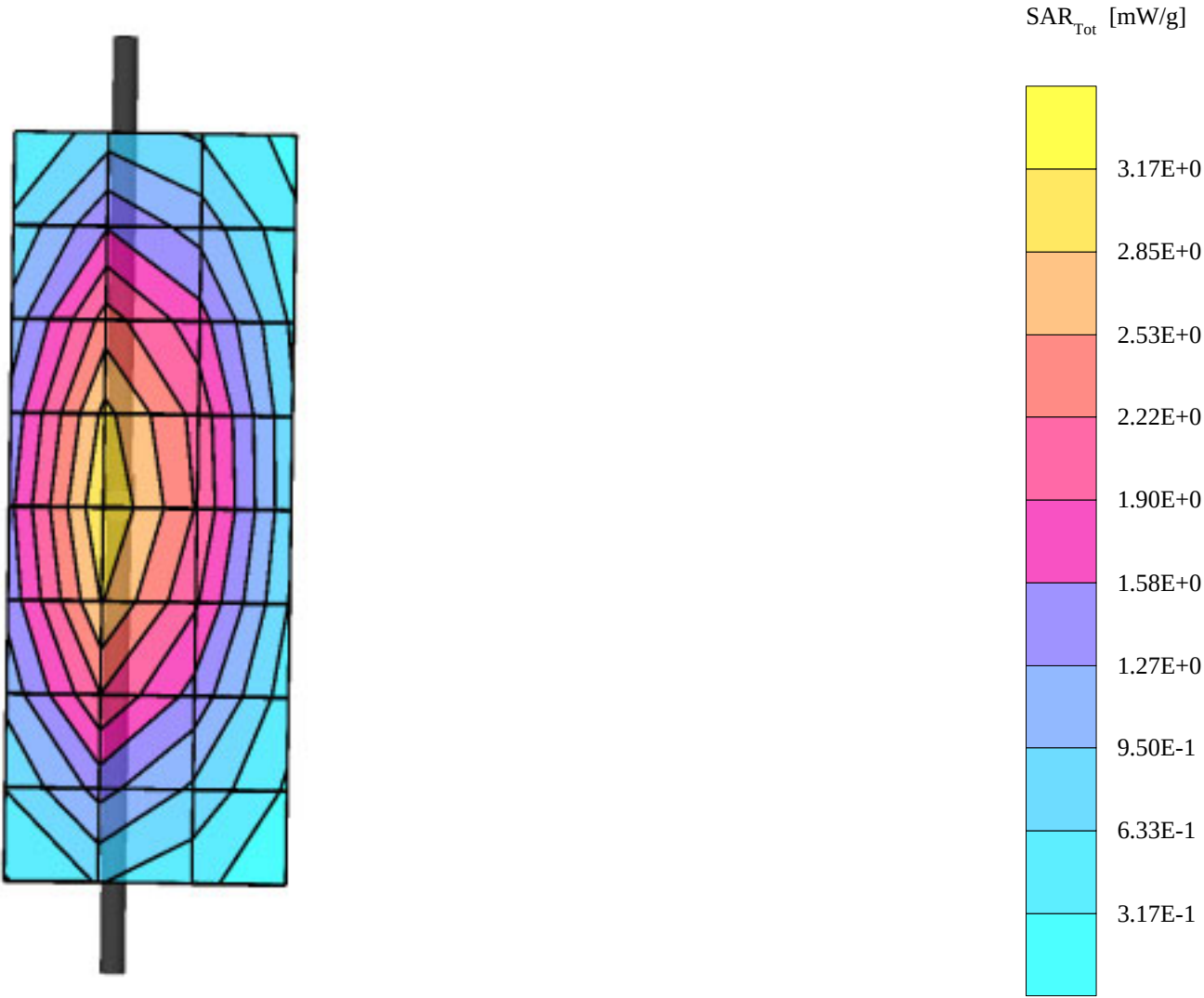
Robot 1 Amy Twin Phantom 2.3; Section 1

Probe: ET3DV6 - SN1522 HEAD - iDEN (Sugar water); ConvF(6.31,6.31,6.31); Crest factor: 1.0; Head 900 MHz: $\sigma = 0.95$ mho/m $\epsilon_r = 39.5$ $\rho = 1.00$ g/cm³

Cubes (2): Peak: 4.97 mW/g ± 0.15 dB, SAR (1g): 3.06 mW/g ± 0.14 dB, SAR (10g): 1.92 mW/g ± 0.13 dB, (Worst-case extrapolation)

Penetration depth: 11.5 (10.3, 13.0) [mm]

Powerdrift: 0.03 dB



Appendix 2

SAR distribution plots for Phantom Head Adjacent Use

s/n: 919ABQ08ZX

Ch# F6 / Antenna Position: Extended / Type of Modulation: 800MHz Phone Mode / Battery Model #: SNN5705B

Robot 1 Left Head (Barney) Phantom; Left Head Section; Position: (80°,180°); Frequency: 825 MHz

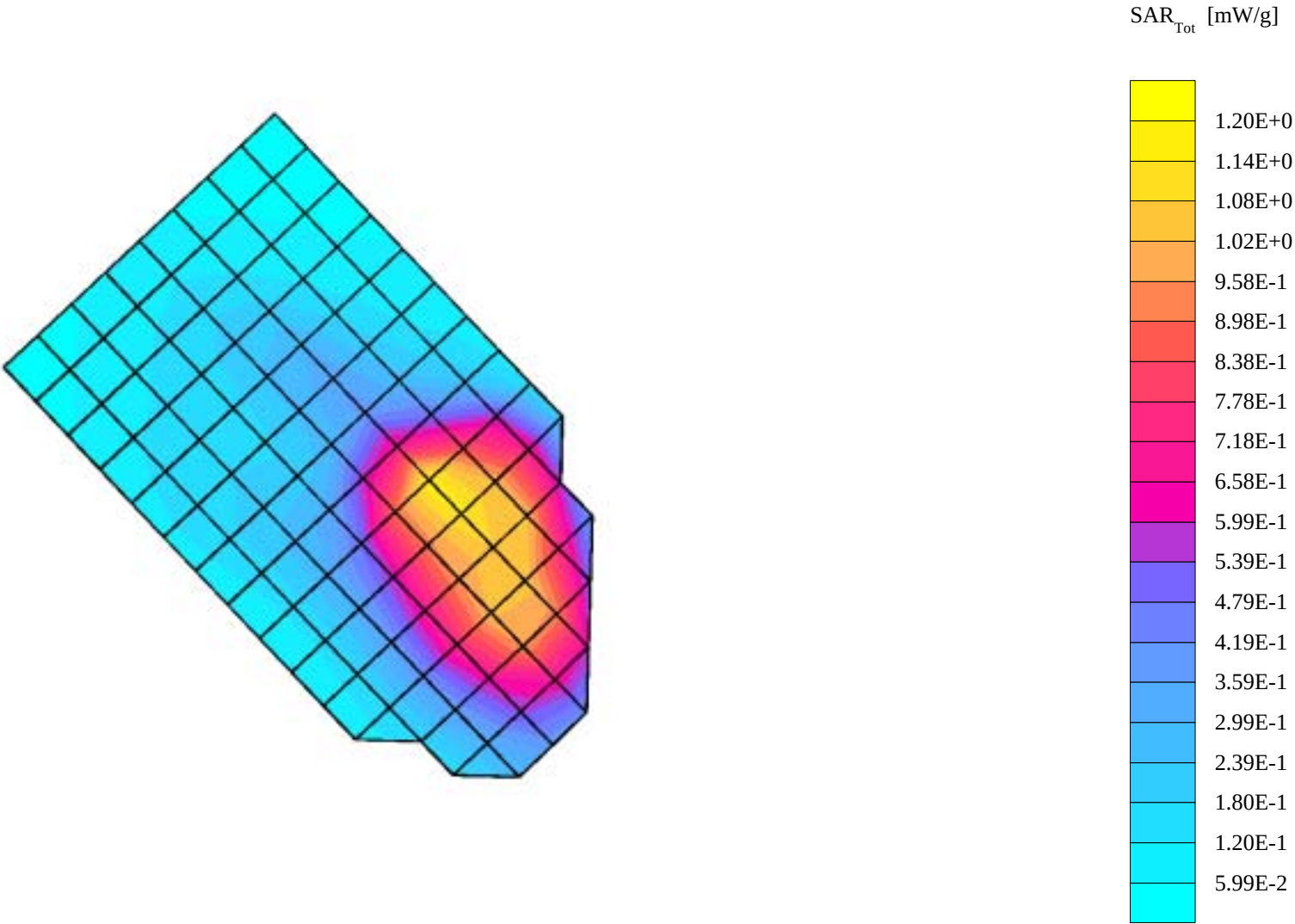
Probe: ET3DV6 - SN1522 HEAD - iDEN (Sugar water); ConvF(6.40,6.40,6.40); Crest factor: 3.0; Head 835 MHz: $\sigma = 0.91$ mho/m $\epsilon_r = 43.2$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 1.15 mW/g, SAR (10g): 0.764 mW/g, (Worst-case extrapolation)

Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0

Penetration depth: 14.1 (10.6, 18.9) [mm]

Powerdrift: 0.02 dB



s/n 919ABQ08ZX

Ch# F3 / Antenna Position: RETRACTED / Type of Modulation: 800MHz Phone Mode / Battery Model #: SNN5704A

Robot 1 Left Head (Barney) Phantom; Left Head Section; Position: (80°,180°); Frequency: 814 MHz

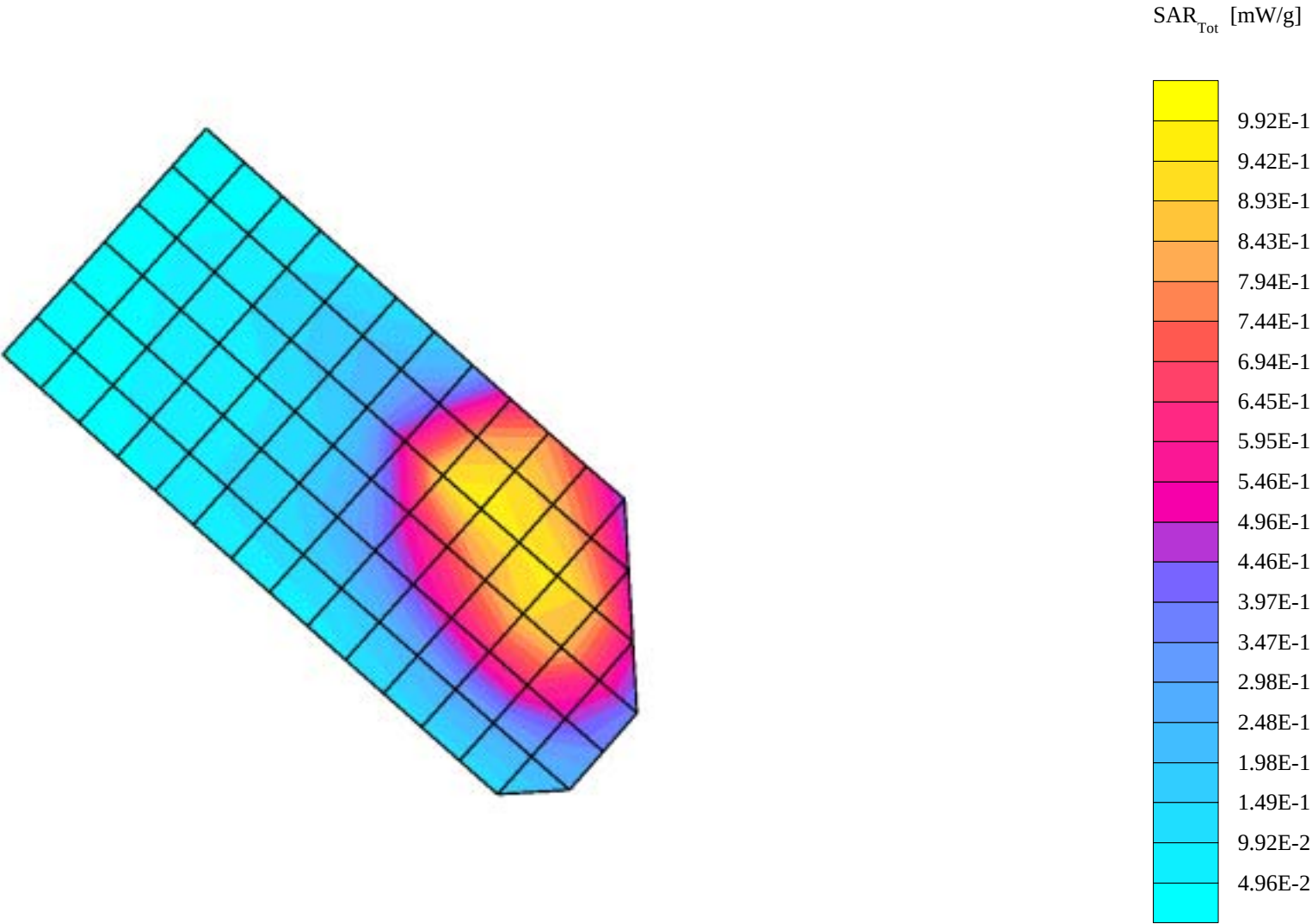
Probe: ET3DV6 - SN1522 HEAD - iDEN (Sugar water); ConvF(6.40,6.40,6.40); Crest factor: 3.0; Head 835 MHz: $\sigma = 0.91$ mho/m $\epsilon_r = 43.5$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.965 mW/g, SAR (10g): 0.670 mW/g, (Worst-case extrapolation)

Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0

Penetration depth: 15.9 (12.1, 20.7) [mm]

Powerdrift: 0.04 dB



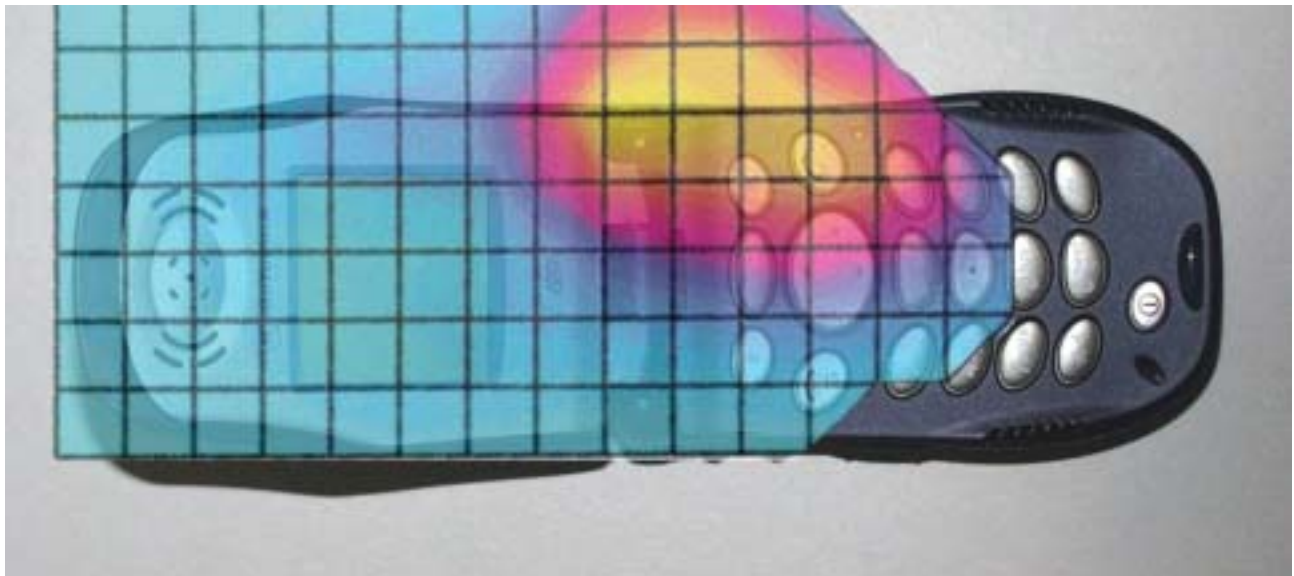


Figure 1. Typical Contour Plot for Phone Mode with Antenna Extended Overlaid on Face of Radio

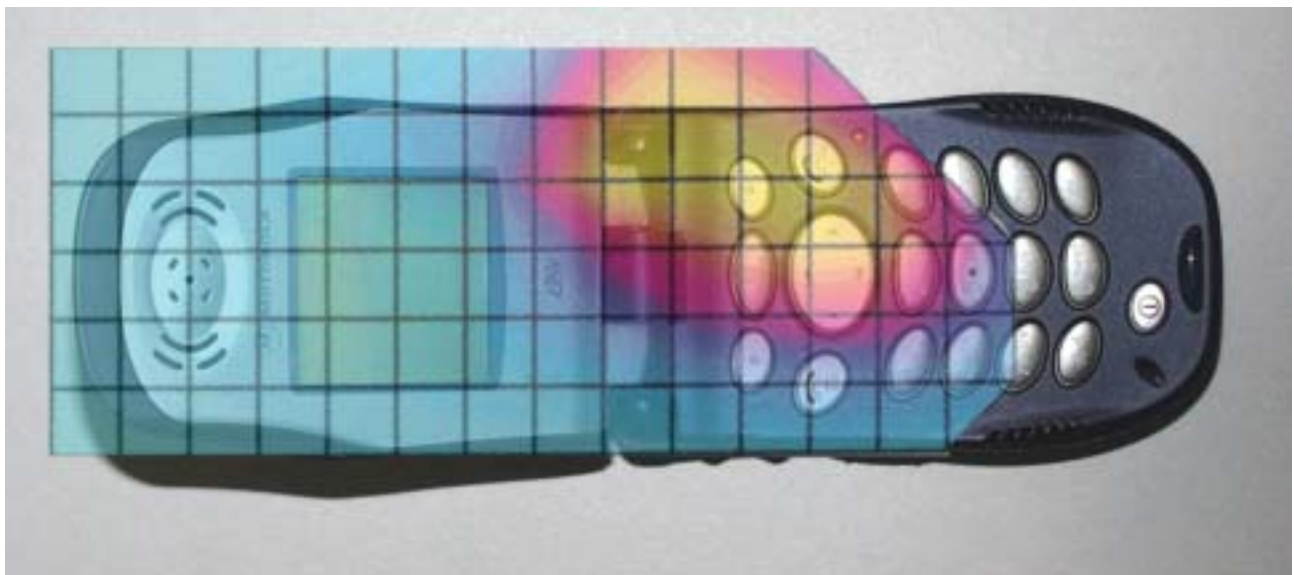


Figure 2. Typical Contour Plot for Phone Mode with Antenna Retracted Overlaid on Face of Radio

Appendix 3

SAR distribution plots for Two-Way (Push-to-Talk) Mode

s/n 919ABQ08ZX

Ch# F3 / Antenna Position: Extended / Type of Modulation: 800MHz P-T-T / Battery Model #: SNN5705B

Robot 1 Amy Twin Phantom 2.3 Phantom; Section 1 Section; Position: (0°,0°); Frequency: 814 MHz

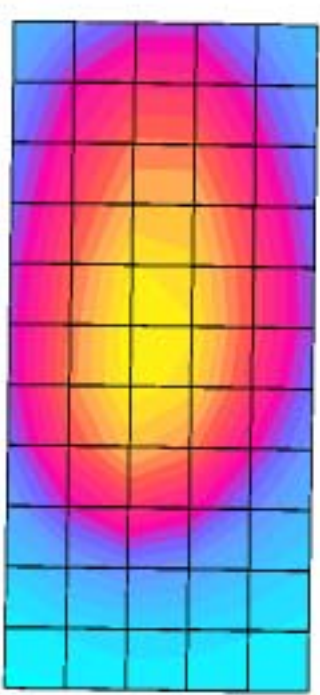
Probe: ET3DV6 - SN1522 HEAD - iDEN (Sugar water); ConvF(6.40,6.40,6.40); Crest factor: 6.0; Head 835 MHz: $\sigma = 0.90$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.146 mW/g, SAR (10g): 0.106 mW/g, (Worst-case extrapolation)

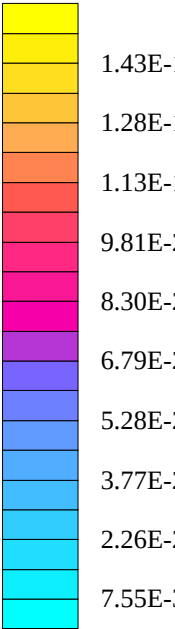
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Penetration depth: 16.2 (14.7, 18.0) [mm]

Powerdrift: 0.10 dB



SAR_{Tot} [mW/g]



s/n 919ABQ08ZX

Ch# F3 / Antenna Position: Retracted / Type of Modulation: 800MHz P-T-T / Battery Model #: SNN5705B

Robot 1 Amy Twin Phantom 2.3 Phantom; Section 1 Section; Position: (0°,0°); Frequency: 814 MHz

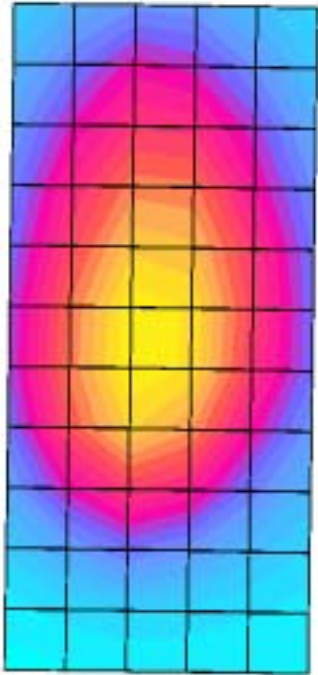
Probe: ET3DV6 - SN1522 HEAD - iDEN (Sugar water); ConvF(6.40,6.40,6.40); Crest factor: 6.0; Head 835 MHz: $\sigma = 0.90$ mho/m $\epsilon_r = 40.8$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.143 mW/g, SAR (10g): 0.104 mW/g, (Worst-case extrapolation)

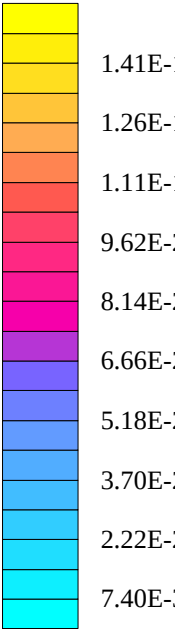
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Penetration depth: 16.3 (14.4, 18.5) [mm]

Powerdrift: -0.12 dB



SAR_{Tot} [mW/g]



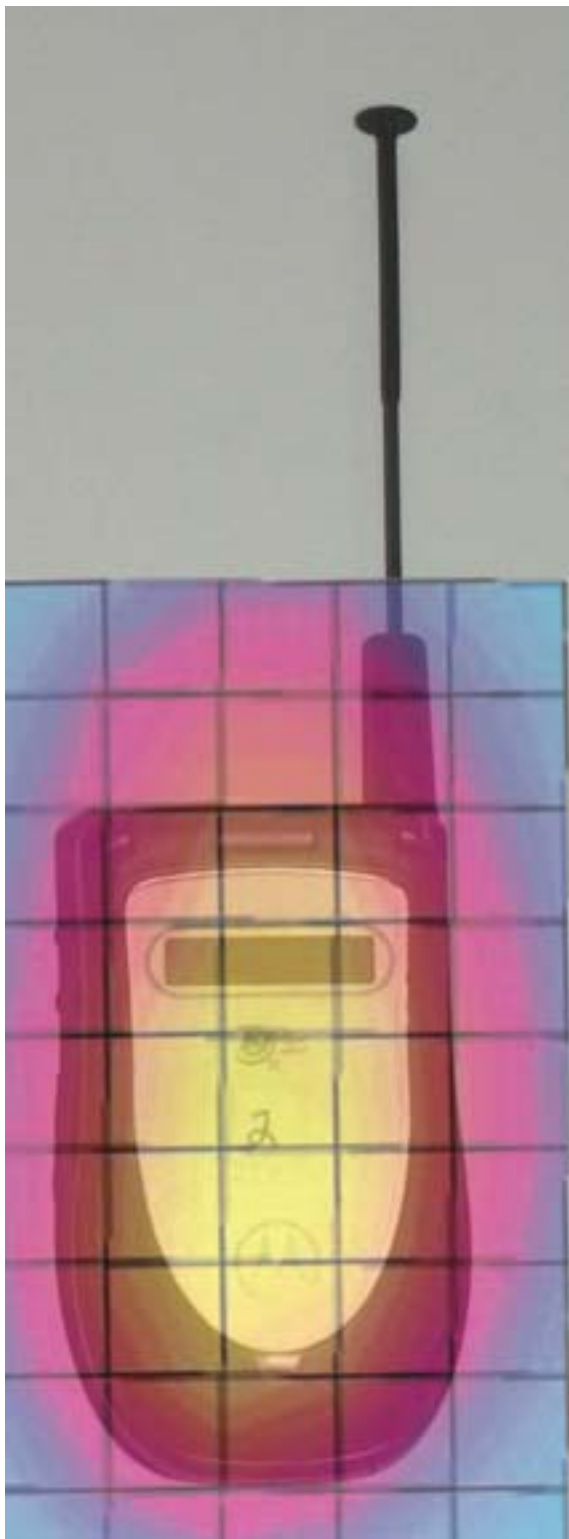


Figure 3. Typical Contour Plot for P-T-T Mode with Antenna Extended Overlaid on Front of Radio



Figure 4. Typical Contour Plot for P-T-T Mode with Antenna Retracted Overlaid on Front of Radio

Appendix 4

SAR distribution plots for Body Worn Configuration

s/n 919ABQ08ZX

Ch# F1 / Antenna Position: Extended / Type of Modulation:800MHz Datamode / Battery Model #: SNN5704A

Robot 1 Amy Twin Phantom 2.3 Phantom; Section2 Section; Position: (0°,0°); Frequency: 806 MHz

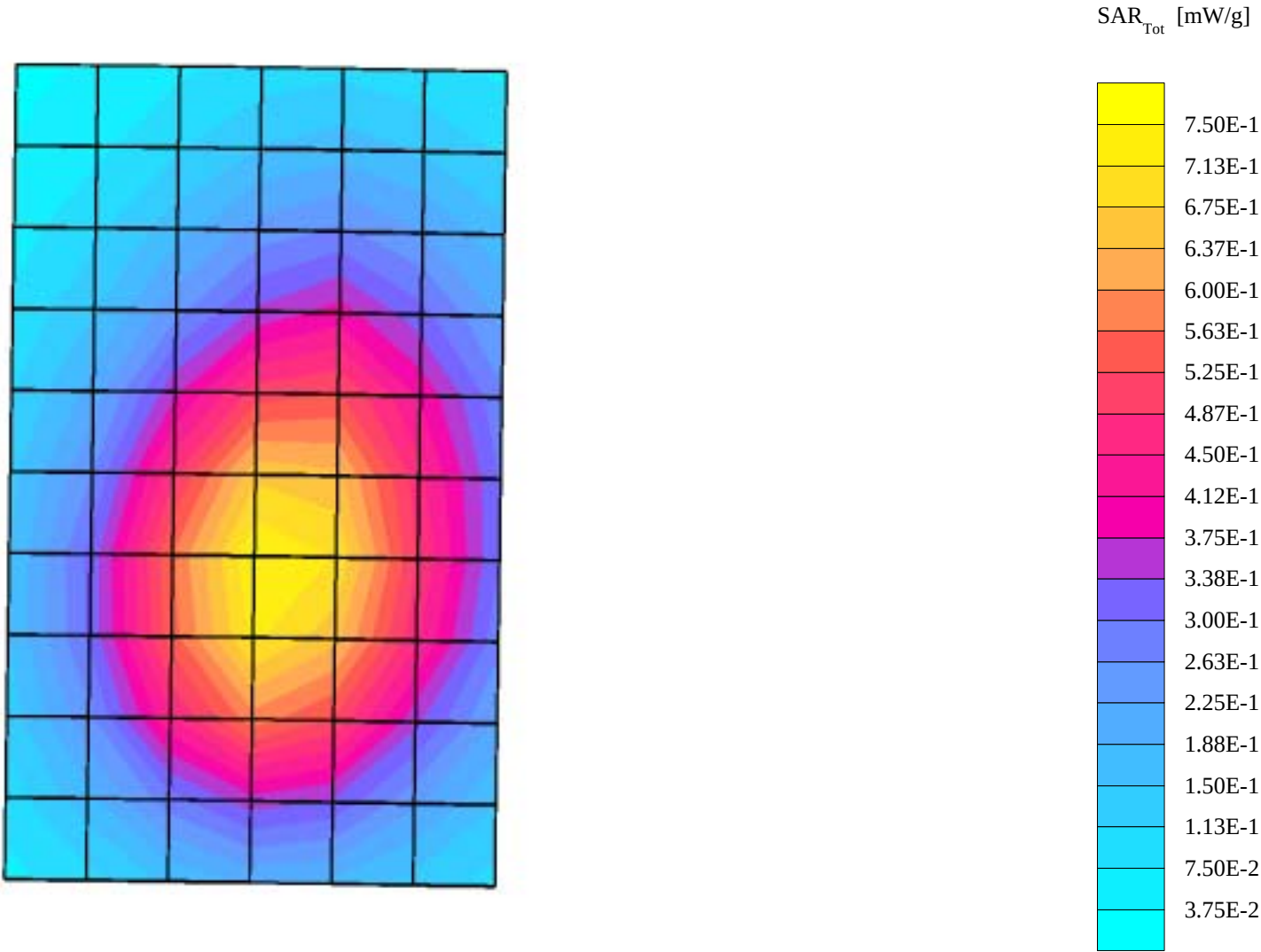
Probe: ET3DV6 - SN1522 BODY - iDEN (Sugarwater); ConvF(6.20,6.20,6.20); Crest factor: 1.5; Body 835 MHz (iDEN): $\sigma = 0.97$ mho/m $\epsilon_r = 55.1$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.709 mW/g, SAR (10g): 0.517 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Penetration depth: 17.4 (15.7, 19.3) [mm]

Powerdrift: 0.08 dB



s/n 919ABQ08ZX

Ch# F6 / Antenna Position: Retracted / Type of Modulation:800MHz Datamode / Battery Model #: SNN5704A

Robot 1 Amy Twin Phantom 2.3 Phantom; Section2 Section; Position: (0°,0°); Frequency: 825 MHz

Probe: ET3DV6 - SN1522 BODY - iDEN (Sugarwater); ConvF(6.20,6.20,6.20); Crest factor: 1.5; Body 835 MHz (iDEN): $\sigma = 0.97$ mho/m $\epsilon_r = 55.1$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.623 mW/g, SAR (10g): 0.446 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Penetration depth: 16.9 (14.4, 19.4) [mm]

Powerdrift: -0.55 dB

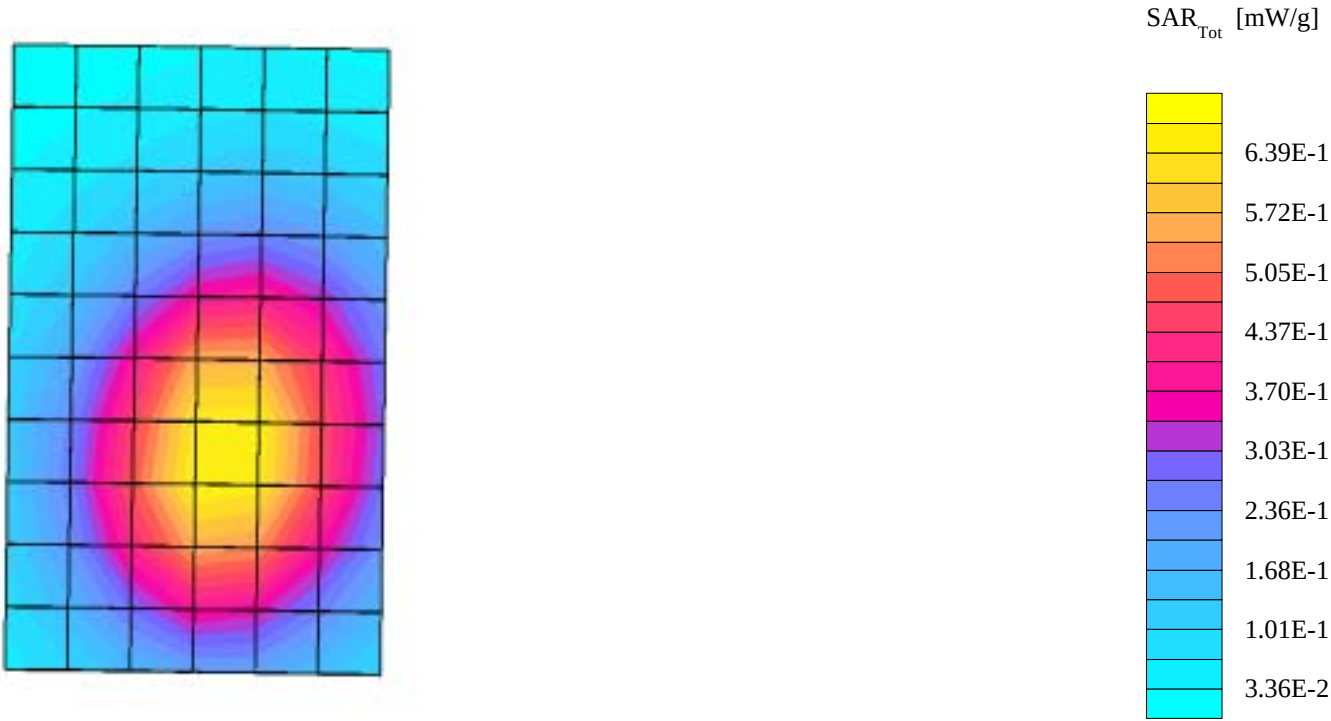




Figure 5. Typical Contour Plot for Data Mode with Antenna Extended Overlaid on Back of Radio

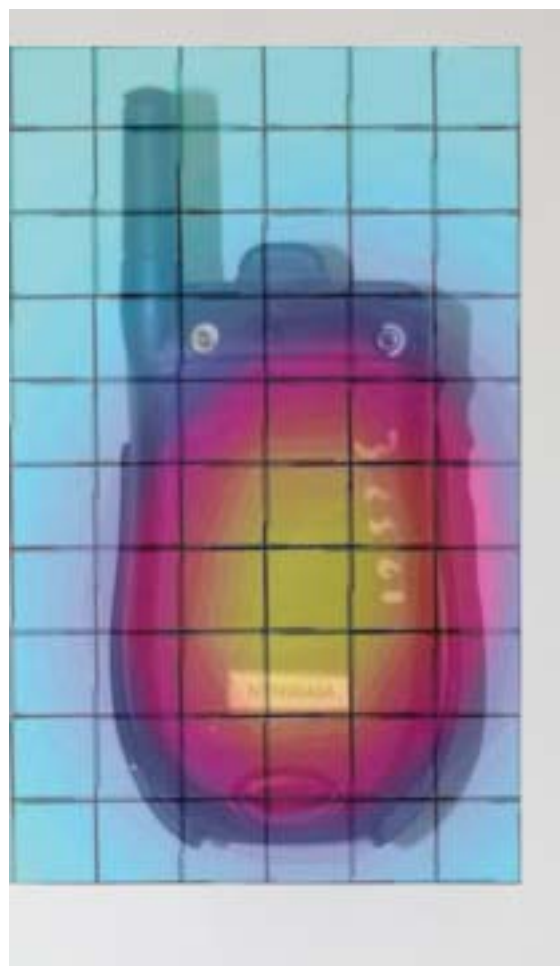


Figure 6. Typical Contour Plot for Data Mode with Antenna Retracted Overlaid on Back of Radio

Appendix 5

Photographs of the device under test



Figure 7. Front of Radio
With Antenna Extended



Figure 8. Side of Radio
With Antenna Extended



Figure 9. Front of Radio with
Antenna Retracted



Figure 10. Side of Radio with
Antenna Retracted



Figure 11. Face of Radio with Flip Open



Figure 12. Radio with Antenna Extended in Cheek Touch Position



Figure 13. Radio with Antenna Retracted in Cheek Touch Position



Figure 14. Separation Distance Provided by Belt Clip with Antenna Extended



Figure 15. Separation Distance Provided by Belt Clip with Antenna Retracted