MOTOROLA

Exhibit 11: SAR Test Report IHDT56ET1

Date of test: 05/17/2004 to 05/20/2004
Date of Report: 05/28/2004

Laboratory:
Motorola Personal Communications Sector Product Safety & Compliance Laboratory
600 N. US Highway 45
Room: MW113
Libertyville, Illinois 60048

Test Responsible:
Albert Patapack
Senior Staff Engineer

Accreditation: This laboratory is accredited to ISO/IEC 17025-1999 to perfom the following tests:

ACCREDITED

Tests:	Procedures:
Electromagnetic Specific Absorption Rate	ANSI/IEEE C95.1-1992, 1999 (SAR) IEEE C95.3-1991 IEEE P1528 (*DRAFT*) FCC OET Bulletin 65 (*including Supplements A, B, C*) Australian Communications Authority Radio Communications (Electromagnetic Radiation – Human Exposure) Standard 1999 CENELEC EN 50361 (2001)
Simulated Tissue Preparation	APP-0247
RF Power Measurement	DOI-0876, 0900, 0902, 0904, 0915

On the following products or types of products:
Wireless Communications Devices (Examples): Two Way Radios; Portable Phones (including Cellular,
Licensed Non-Broadcast and PCS); Low Frequency Readers; and Pagers

A2LA certificate #1651-01

Statement of Compliance:
Motorola declares under its sole responsibility that portable cellular telephone FCC ID IHDT56ET1 to which this declaration relates, is in conformity with the appropriate General Population/Uncontrolled RF exposure standards, recommendations and guidelines (FCC 47 CFR §2.1093). 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:

(none)

Table of Contents

1 Introduction

The Motorola Personal Communications Sector Product Safety Laboratory has performed measurements of the maximum potential exposure to the user of portable cellular phone (FCC ID IHDT56ET1). The Specific Absorption Rate (SAR) of this product was measured. The portable cellular phone was tested in accordance with FCC OET Bulletin 65 Supplement C 01-01.

2 Description of the Device Under Test

2.1 Antenna description

Type	External	
Location	Upper Right	
Dimensions	Length	114 mm
	Width	8 mm
Configuration	Extendable Whip	

2.2 Device description

FCC ID Number	**IHDT56ET1**		
Serial number	A8EE8925		
Mode(s) of Operation	800 AMPS	800 CDMA	1900 CDMA
Modulation Mode(s)	AMPS	CDMA	CDMA
Maximum Output Power Setting	27.80dBm	25.00dBm	25.00dBm
Duty Cycle	1:1	1:1	1:1
Transmitting Frequency Rang(s)	824-849MHz	824-849MHz	1851-1909MHz
Production Unit or Identical Prototype (47 CFR §2..908)	Identical Prototype		
Device Category	Portable		
RF Exposure Limits	General Population / Uncontrolled		

3 Test Equipment Used

3.1 Dosimetric System

The Motorola Personal Communications Sector Product Safety & Compliance Laboratory utilizes a Dosimetric Assessment System (Dasy3™ v3.1d) manufactured by Schmid & Partner Engineering AG (SPEAG™), of Zurich Switzerland. All the SAR measurements are taken within a shielded enclosure. The overall RSS uncertainty of the measurement system is ±11.7% (K=1) with an expanded uncertainty of ±23.0% (K=2). The measurement uncertainty budget is given in Appendix 6. Per IEEE 1528, this uncertainty budget is applicable to the SAR range of 0.4 W/kg to 10 W/kg. The list of calibrated equipment used for the measurements is shown below.

Description	Serial Number	Cal Due Date
DASY3 DAE V1	440	02/09/05
E-Field Probe ES3DV3	3037	10/10/04
Dipole Validation Kit, D835V2	425TR	04/02/05
S.A.M. Phantom used for 800MHz	TP-1005	
Dipole Validation Kit, D1800V2	259TR	04/02/05

S.A.M. Phantom used for 1900MHz	TP-1154	

3.2 Additional Equipment

Description	Serial Number	Cal Due Date
Signal Generator HP8648C	3847A04633	10/11/2004
	3847A04845	11/5/2004
Power Meter E4419B	GB39511090	4/5/2005
	US39250622	1/8/2005
Power Sensor #1 - E9301A	US39210916	8/5/2004
	US39210918	8/5/2004
Power Sensor #2 - E9301A	US39211008	8/5/2004
	US39210917	8/5/2004
Network Analyzer HP8753ES	US39171846	06/03/04
Dielectric Probe Kit HP85070B	US99360070	N/A

4 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 the HP85070 Dielectric Probe Kit These values, along with the temperature of the tissue simulate are shown in the table below. The recommended limits for maximum permittivity and minimum conductivity are also shown. These come from the Federal Communication Commission, OET Bulletin 65 Supplement C 01-01. It is seen that the measured parameters are satisfactory for compliance testing.

f (MHz)	Tissue type	Limits / Measured	Dielectric Parameters		
			e_r	s (S/m)	Temp (°C)
835	Head	**Measured,** 05/17/04	41.70	0.91	19.0
		Measured, 05/18/04	41.60	0.91	19.5
		Measured, 05/19/04	41.90	0.91	18.8
		Recommended Limits	41.5 ±5%	0.90 ±5%	18-25
	Body	**Measured,** 05/19/04	55.20	0.98	19.0
		Recommended Limits	55.2 ±5%	0.97 ±5%	18-25
1880	Head	**Measured,** 05/19/04	38.10	1.45	18.8
		Recommended Limits	40.0 ±5%	1.40 ±5%	18-25
	Body	**Measured,** 05/19/04	51.40	1.59	19.2
		Measured, 05/20/04	51.30	1.58	19.4
		Recommended Limits	53.3 ±5%	1.52 ±5%	18-25

The list of ingredients and the percent composition used for the tissue simulates are indicated in the table below.

Ingredient	800MHz Head	800MHz Body	1900MHz Head	1900MHz Body
Sugar	57.0	44.9	--	30.80
DGBE	--	--	47.0	--
Water	40.45	53.06	52.8	68.91
Salt	1.45	0.94	0.2	0.29
HEC	1.0	1.0	--	--
Bact.	0.1	0.1	--	--

5 System Accuracy Verification

A system accuracy verification of the DASY3 was performed using the measurement equipment listed in Section 3.1. The daily system accuracy verification occurs within center section of the SAM phantom.

A SAR measurement was performed to see if the measured SAR was within +/- 10% from the target SAR indicated on the dipole certification sheet. These tests were done at 900MHz and/or 1800MHz. These frequencies are within 100MHz of the mid-band frequency of the test device. This is within the allowable window given in Supplement C 01-01 *Appendix D System Verification* section item #5. 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 tissue stimulant depth was verified to be 15.0cm ±0.5cm. Z-axis scans showing the SAR penetration are also included in Appendix 1. SAR values are normalized to 1W forward power delivered to the dipole.

f (MHz)	Description	SAR (W/kg), 1gram	Dielectric Parameters		Ambient Temp (°C)	Tissue Temp (°C)
			e_r	s (S/m)		
835	**Measured,** 05/17/04	9.55	41.70	0.91	20.0	19.1
	Measured, 05/18/04	9.95	41.60	0.91	20.0	19.7
	Measured, 05/19/04	9.70	41.90	0.91	20.0	18.7
	Recommended Limits	10.0	41.5 ±5%	0.90 ±5%	18-25	18-25
1800	**Measured,** 05/19/04	39.20	38.50	1.36	20.0	18.7
	Measured, 05/20/04	40.95	38.30	1.35	20.0	19.2
	Recommended Limits	40.7	40.0 ±5%	1.4 ±5%	18-25	18-25

The following probe conversion factors were used on the E-Field probe(s) used for the system accuracy verification measurements:

Description	Serial Number	f (MHz)	Conversion Factor	Cal Cert pg #
E-Field Probe ES3DV3	SN3037	900	6.1	2 of 10
		1800	4.9	2 of 10

6 Test Results

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 phone was tested in the configurations stipulated in OET Bulletin 65 Supplement C 01-01. Motorola also followed the requirements in Supplement. C / Appendix D: SAR Measurement Procedures, section titled *"Devices Operating Next To A Person's Ear"*. These directions state "The device should be tested on the left and right side of the head phantom in the "Cheek/Touch" and "Ear/Tilt" positions. When applicable, each configuration should be tested with the antenna in its fully extended and fully retracted positions. These test configurations should be tested at the high, middle and low frequency channels of each operating mode; for example, AMPS, CDMA, and TDMA. If the SAR measured at the middle channel for each test configuration (left, right, Cheek/Touch, Tile/Ear, extended and retracted) is at least 2.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s)."

The DASY v3.1d SAR measurement system specified in section 3.1 was utilized within the intended operations as set by the SPEAG™ setup. The phone was positioned into the measurement configurations using the positioner supplied with the DASY 3.1d SAR measurement system. The measured dielectric constant of the material used for the positioner is less than 2.9 and the loss tangent is less than 0.02 (± 30%) at 850MHz. The default settings for the "coarse" and "cube" scans were chosen and use for measurements. The grid spacing of the course scan was set to 15cm as shown in the SAR plots included in appendix 2 and 3. Please refer to the DASY manual for additional information on SAR scanning procedures and algorithms used.

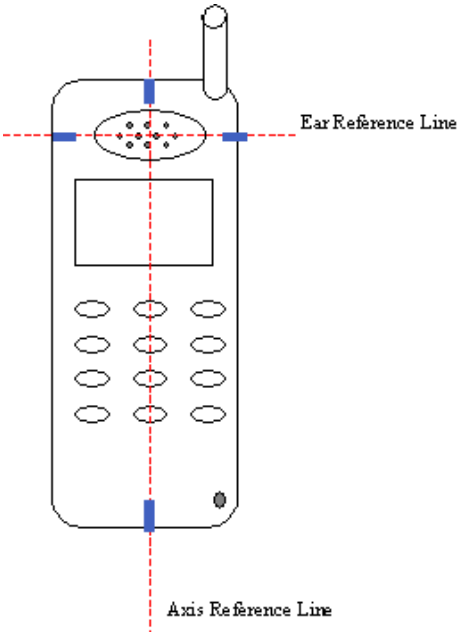
The Cellular Phone (FCC ID IHDT56ET1) has the SNN5723A as the only available battery options. This battery was used to do all of the SAR testing. The phone was placed in the SAR measurement system with a fully charged battery.

6.1 Head Adjacent Test Results

To aid in positioning repeatability, the ear reference line of the device and the axis reference line of the device have been physically added using a non-metallic marker.

- Per Figure 1, the "Ear Reference Line" is centered vertically through the center of the listening area (as defined by the speaker holes in the housing).
- The "Axis Reference Line" bisects the front surface of the device at its top and bottom edges.
- The intersection of these two lines defines the location of the "Ear Reference Point".

The lines drawn on the device extended to the outside edges, as shown in blue in the figure below, & wrap around the sides of the device.



The SAR results shown in tables 1 through 4 are maximum SAR values averaged over 1 gram of phantom tissue. Also shown are the measured conducted output powers, the temperature of the test facility during the test, the temperature of the tissue simulate after the test, the measured drift and the extrapolated SAR. The exact method of extrapolation is New SAR = Old SAR * 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY™ measurement system can be scaled up by the measured drift to determine the SAR at the beginning of the measurement process. This is the most conservative SAR because it corresponds to the average output power at the beginning of the SAR test. This extrapolation has been done because when the DUT is operating properly it may exhibit a slump in radiated power and SAR over time. This is verified by measuring the SAR drift after the test. The test conditions indicated as bold numbers in the following table are included in Appendix 2

The SAR measurements were performed using the SAM phantoms listed in section 3.1. Since same phantoms and tissue simulate are used for the system accuracy verification as the device SAR measurements, the Z-axis scans included in within Appendix 1 are applicable for verification of tissue simulate depth to be 15.0cm ±0.5cm. All other test conditions measured lower SAR values than those included in Appendix 2. Note that 800MHz digital mode SAR measurements were performed in accordance with Supplement C.

The following probe conversion factors were used on the E-Field probe(s) used for the head adjacent measurements:

Description	Serial Number	f (MHz)	Conversion Factor	Cal Cert pg #
E-Field Probe ES3DV3	SN3037	900	6.1	7 of 10
		1800	4.9	7 of 10

f (MHz)	Description	Conducted Output Power (dBm)	Left Head (Cheek / Touch Position)							
			Ant Extended				Ant Retracted			
			Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)	Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)
Analog 800MHz	Channel 991	27.70					1.18	-0.10	1.21	19.0
	Channel 384	27.81	**0.601**	**-0.62**	**0.69**	**19.0**	0.828	-0.37	0.90	19.0
	Channel 799	27.81					**1.17**	**-0.70**	**1.37**	**19.0**
Digital 800MHz	Channel 1013	24.96					**1.19**	**-0.37**	**1.30**	**18.1**
	Channel 384	24.92	**0.723**	**-0.07**	**0.73**	**18.1**	0.91	-0.34	0.98	18.3
	Channel 777	24.90					1.10	-0.17	1.14	18.1
Digital 1900MHz	Channel 25	24.90					1.12	0.26	1.12	18.7
	Channel 600	25.04	**0.307**	**-0.13**	**0.32**	**18.7**	1.08	-0.13	1.11	18.7
	Channel 1175	24.95					**1.11**	**-0.29**	**1.19**	**18.8**

Table 1: SAR measurement results for the portable cellular telephone FCC ID IHDT56ET1 at highest possible output power. Measured against the left head in the Cheek/Touch Position.

f (MHz)	Description	Conducted Output Power (dBm)	Right Head (Cheek / Touch Position)							
			Ant Extended				Ant Retracted			
			Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)	Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)
Analog 800MHz	Channel 991	27.70					**1.06**	**-0.31**	**1.14**	**19.5**
	Channel 384	27.81	**0.753**	**-0.26**	**0.80**	**19.5**	0.847	-0.56	0.96	19.6
	Channel 799	27.81					1.02	-0.43	1.13	19.5
Digital 800MHz	Channel 1013	24.96					**1.20**	**-0.30**	**1.29**	**19.5**
	Channel 384	24.92	**0.709**	**-0.30**	**0.76**	**19.5**	0.974	-0.39	1.07	19.5
	Channel 777	24.90					1.08	-0.68	1.26	18.7
Digital 1900MHz	Channel 25	24.90					1.17	0.24	1.17	18.6
	Channel 600	25.04	**0.443**	**-0.39**	**0.48**	**18.6**	**1.33**	**0.03**	**1.33**	**18.9**
	Channel 1175	24.95					1.12	-0.09	1.14	18.6

Table 2: SAR measurement results for the portable cellular telephone FCC ID IHDT56ET1 at highest possible output power. Measured against the right head in the Cheek/Touch Position.

f (MHz)	Description	Conducted Output Power (dBm)	Left Head (15° Tilt Position)							
			Ant Extended				Ant Retracted			
			Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)	Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)
Analog 800MHz	Channel 991	27.70								
	Channel 384	27.81	**0.176**	**-0.09**	**0.18**	**19.0**	**0.207**	**-0.01**	**0.21**	**19.0**
	Channel 799	27.81								
Digital 800MHz	Channel 1013	24.96								
	Channel 384	24.92	**0.183**	**0.02**	**0.18**	**18.8**	**0.231**	**-0.17**	**0.24**	**18.8**
	Channel 777	24.90								
Digital 1900MHz	Channel 25	24.90								
	Channel 600	25.04	0.177	-0.17	0.18	18.8	0.23	-0.40	0.25	18.6
	Channel 1175	24.95								

Table 3: SAR measurement results for the portable cellular telephone FCC ID IHDT56ET1 at highest possible output power. Measured against the left head in the 15° Tilt Position.

f (MHz)	Description	Conducted Output Power (dBm)	Right Head (15° Tilt Position)							
			Ant Extended				Ant Retracted			
			Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)	Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)
Analog 800MHz	Channel 991	27.70								
	Channel 384	27.81	**0.152**	**0.02**	**0.15**	**19.4**	**0.178**	**-0.16**	**0.18**	**19.6**
	Channel 799	27.81								
Digital 800MHz	Channel 1013	24.96								
	Channel 384	24.92	**0.178**	**0.03**	**0.18**	**18.3**	**0.204**	**-0.07**	**0.21**	**18.4**
	Channel 777	24.90								
Digital 1900MHz	Channel 25	24.90								
	Channel 600	25.04	**0.146**	**0.02**	**0.15**	**18.7**	**0.15**	**-0.11**	**0.15**	**18.6**
	Channel 1175	24.95								

Table 4: SAR measurement results for the portable cellular telephone FCC ID IHDT56ET1 at highest possible output power. Measured against the right head in the 15° Tilt Position.

6.2 Body Worn Test Results

The SAR results shown in table 5 are the maximum SAR values averaged over 1 gram of phantom tissue. Also shown are the measured conducted output powers, the temperature of the test facility during the test, the temperature of the tissue simulate after the test, the measured drift and the extrapolated SAR. The exact method of extrapolation is New SAR = Old SAR * 10^(-drift/10). The SAR reported at the end of the measurement process by the DASY™ measurement system can be scaled up by the measured drift to determine the SAR at the beginning of the measurement process. This is the most conservative SAR because it corresponds to the average output power at the beginning of the SAR test. This extrapolation has been done because when the DUT is operating properly it may exhibit a slump in radiated power and SAR over time. This is verified by measuring the SAR drift after the test. The test conditions indicated as bold numbers in the following table are included in Appendix 3. Note that 800MHz digital mode SAR measurements were performed in accordance with OET Bulletin 65 Supplement C 01-01. All other test conditions measured lower SAR values than those included in Appendix 3.

A "flat" phantom was for the body-worn tests. This "flat" phantom is made out of 1" thick natural High Density Polyethylene with a thickness at the bottom equal to 2.0mm. It measures 52.7cm(long) x 26.7cm(wide) x 21.2cm(tall). The measured dielectric constant of the material used is less than 2.3 and the loss tangent is less than 0.0046 all the way up to 2.184GHz.

The tissue stimulant depth was verified to be 15.0cm ±0.5cm. The same device holder described in section 6 was used for positioning the phone. There is only one body-worn accessory, a plastic holster and belt dip model number 0188335Y01, available for this phone. This accessory was used for all body-worn SAR measurements. The cellular phone was tested with a headset connected to the device for all body-worn SAR measurements.

The following probe conversion factors were used on the E-Field probe(s) used for the body worn measurements:

Description	Serial Number	f (MHz)	Conversion Factor	Cal Cert pg #
E-Field Probe ES3DV3	SN3037	900	5.9	8 of 10
		1800	4.7	8 of 10

f (MHz)	Description	Conducted Output Power (dBm)	Body Worn							
			Ant Extended				Ant Retracted			
			Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)	Measured (W/kg)	Drift (dB)	Extrapolated (W/kg)	Simulate Temp (°C)
Analog 800MHz	Channel 991	27.70								
	Channel 384	27.81	**0.339**	**0.07**	**0.34**	**19.0**	**0.346**	**-0.08**	**0.35**	**19.4**
	Channel 799	27.81								
Digital 800MHz	Channel 1013	24.96								
	Channel 384	24.92	**0.345**	**-0.05**	**0.35**	**19.1**	**0.351**	**0.00**	**0.35**	**19.2**
	Channel 777	24.90								
Digital 1900MHz	Channel 25	24.90								
	Channel 600	25.04	**0.383**	**-0.13**	**0.39**	**19.4**	**0.638**	**-0.11**	**0.65**	**19.2**
	Channel 1175	24.95								

Table 5: SAR measurement results for the portable cellular telephone FCC ID IHDT56ET1 at highest possible output power. Measured against the body.

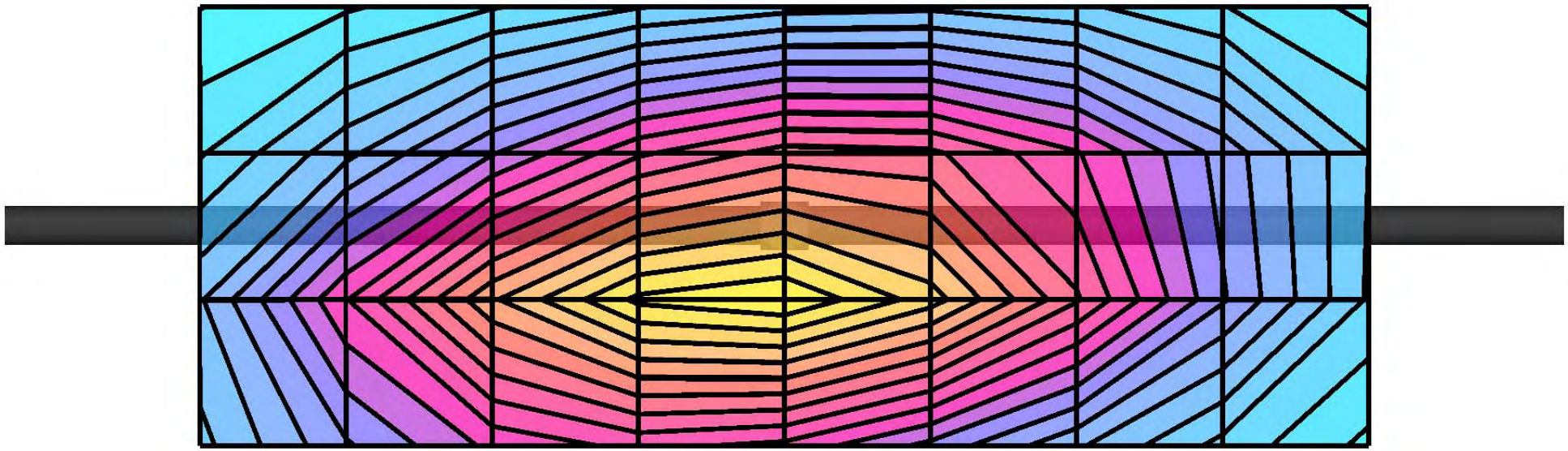
Appendix 1

SAR distribution comparison for the system accuracy verification

05/17/04

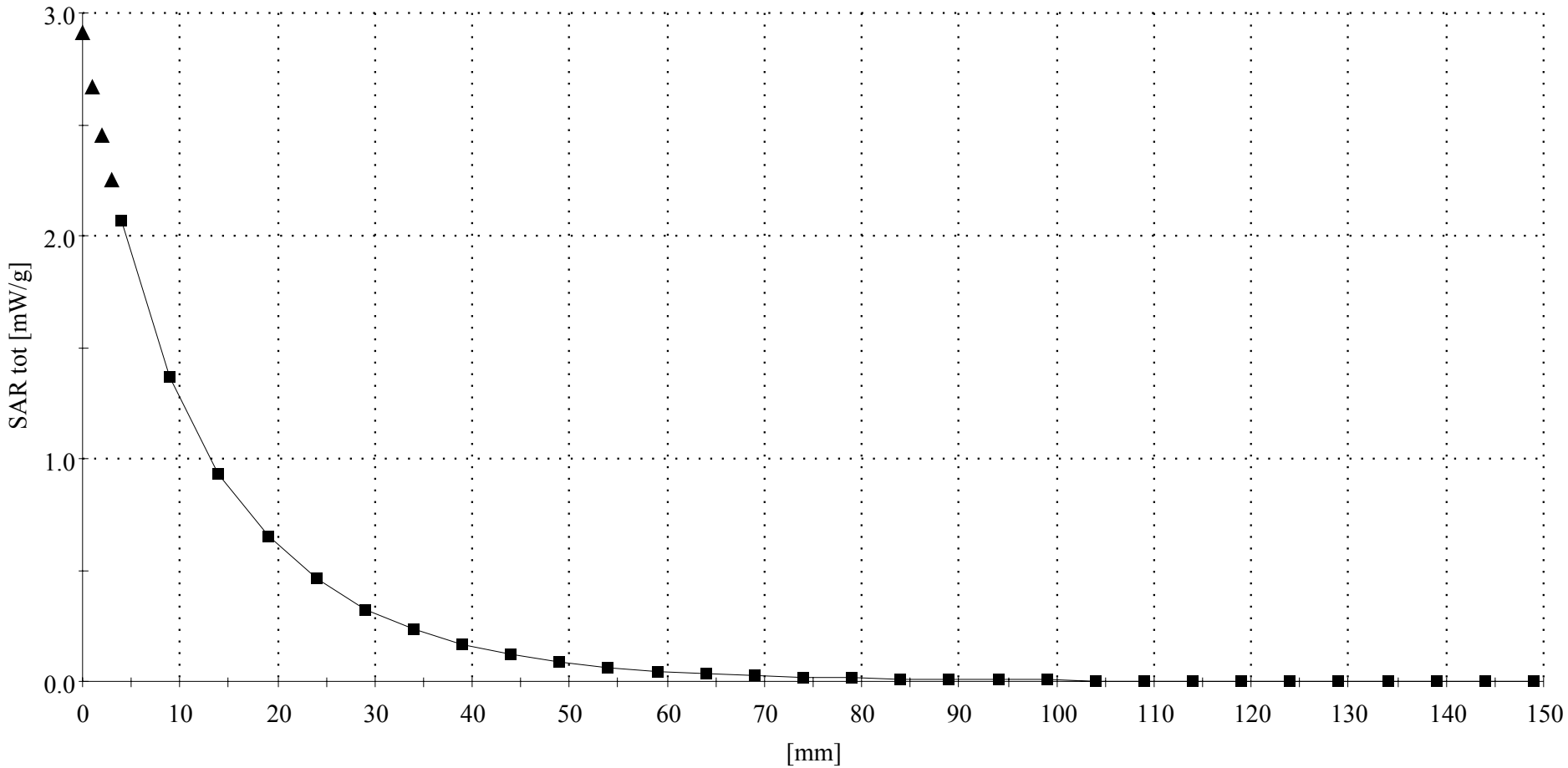
Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn# 425TR
PM1 Power =200mW
Sim.Temp@meas=19.1 Sim.Temp@SPC = 19.1 Room Temp @ SPC = 20
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Flat Section; Position: (90°,90°); Frequency: 835 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.7$ $\rho = 1.00$ g/cm^3
Cubes (2): SAR (1g): 1.91 mW/g ± 0.03 dB, SAR (10g): 1.24 mW/g ± 0.03 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 12.6 (11.8, 13.7) [mm]
Powerdrift: -0.03 dB



Dipole 835 MHz

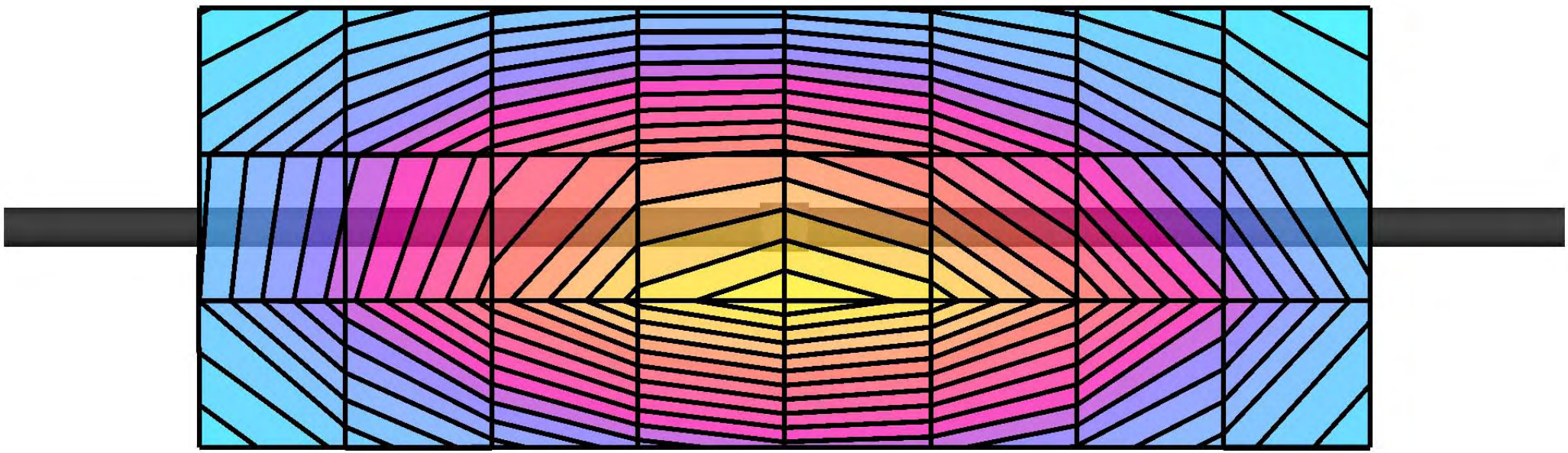
835 MHz System Performance Check / Dipole Sn# 425TR
PM1 Power =200mW
Sim.Temp@meas=19.1 Sim.Temp@SPC = 19.1 Room Temp @ SPC = 20
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 835 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.7$ $\rho = 1.00$ g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 12.6 (11.8, 13.5) [mm]



05/18/04

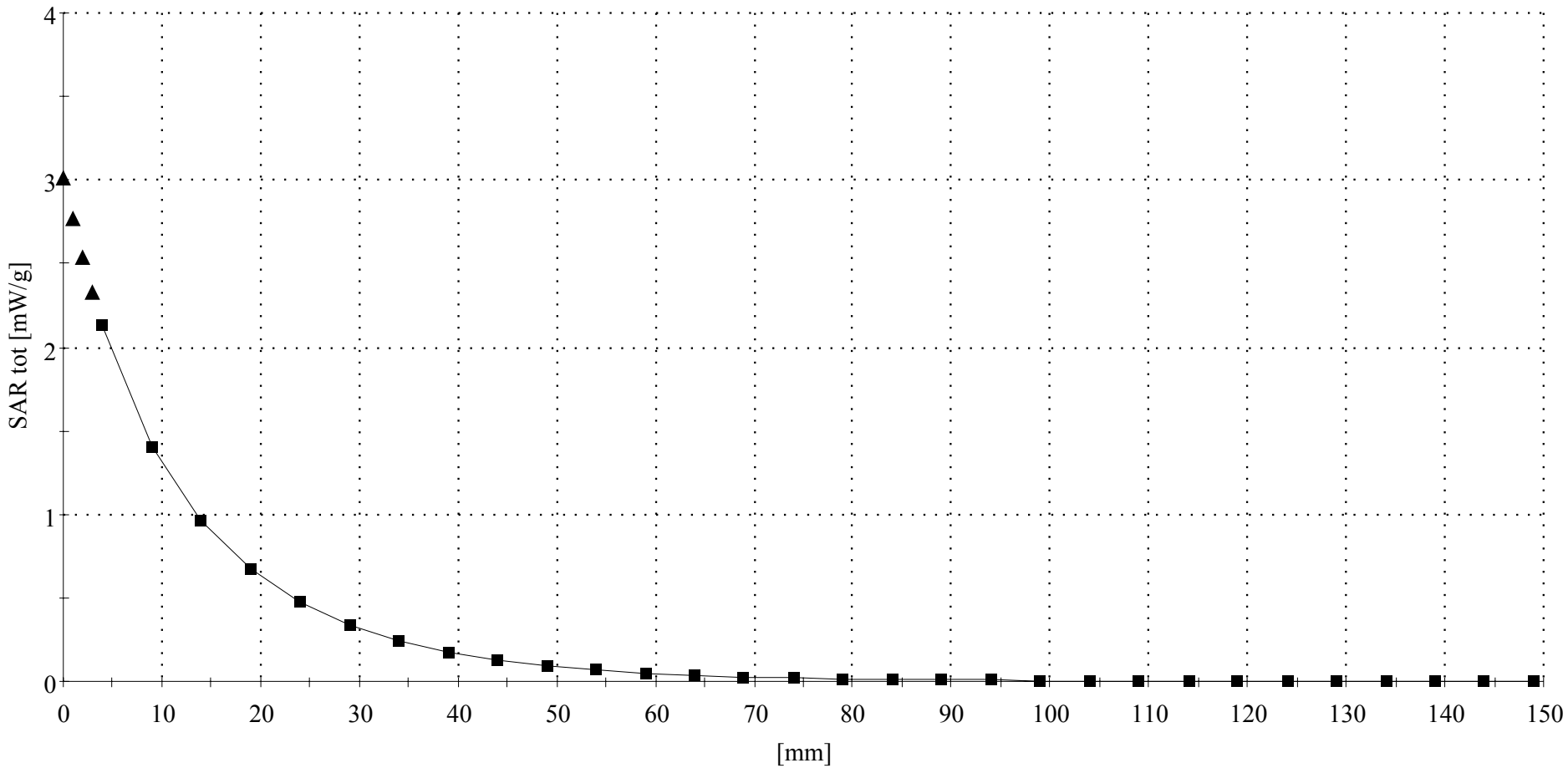
Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn#425TR
PM1 Power =200mW
Sim.Temp@meas=19.7 Sim.Temp@SPC = 19.7 Room Temp @ SPC = 20
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Flat Section; Position: (90°,90°); Frequency: 835 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cubes (2): SAR (1g): 1.99 mW/g ± 0.05 dB, SAR (10g): 1.29 mW/g ± 0.04 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 12.6 (11.8, 13.6) [mm]
Powerdrift: 0.01 dB



Dipole 835 MHz

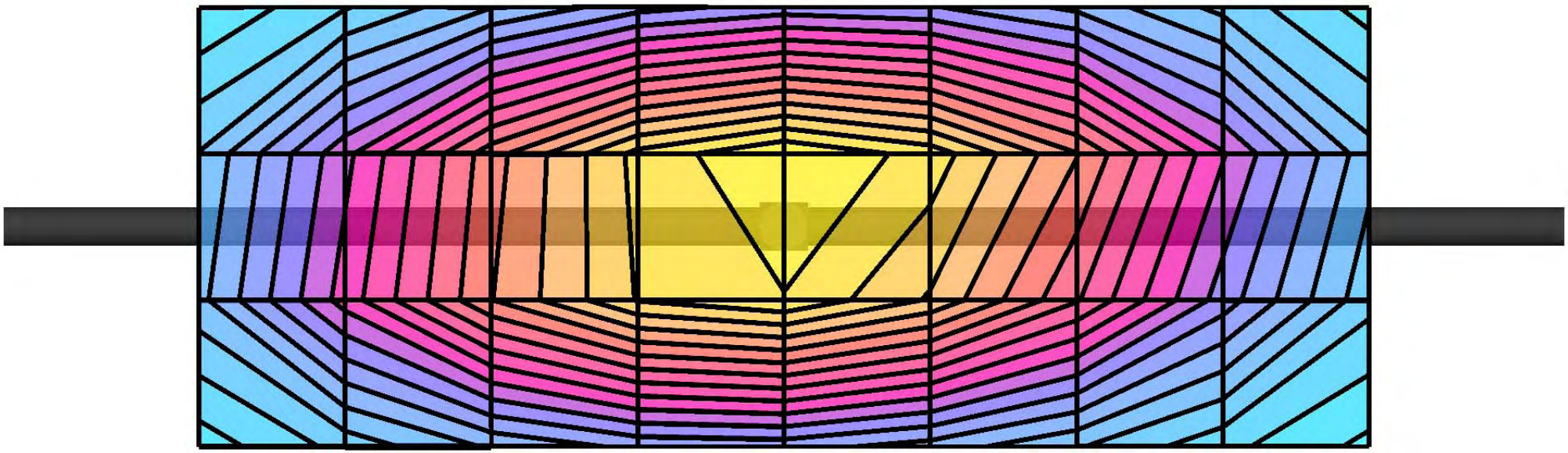
835 MHz System Performance Check / Dipole Sn#425TR
PM1 Power =200mW
Sim.Temp@meas=19.7 Sim.Temp@SPC = 19.7 Room Temp @ SPC = 20
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 835 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 12.6 (11.8, 13.5) [mm]



05/19/04

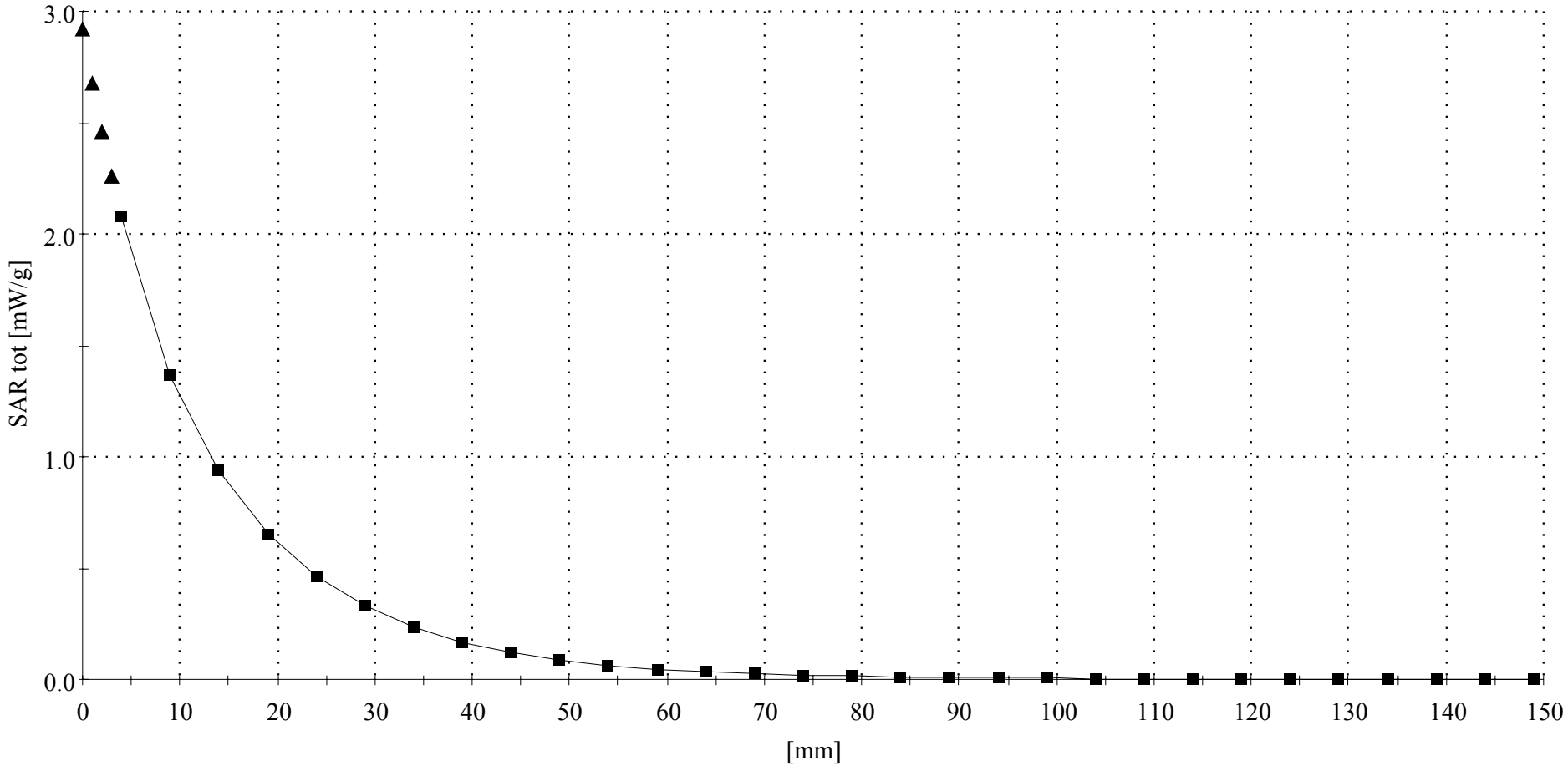
Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn# 425TR
PM1 Power =200mW
Sim.Temp@meas=18.7 Sim.Temp@SPC = 18.7 Room Temp @ SPC =20
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Flat Section; Position: (90°,90°); Frequency: 835 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.9$ $\rho = 1.00$ g/cm^3
Cubes (2): SAR (1g): 1.94 mW/g ± 0.02 dB, SAR (10g): 1.26 mW/g ± 0.03 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 12.6 (11.8, 13.6) [mm]
Powerdrift: 0.01 dB



Dipole 835 MHz

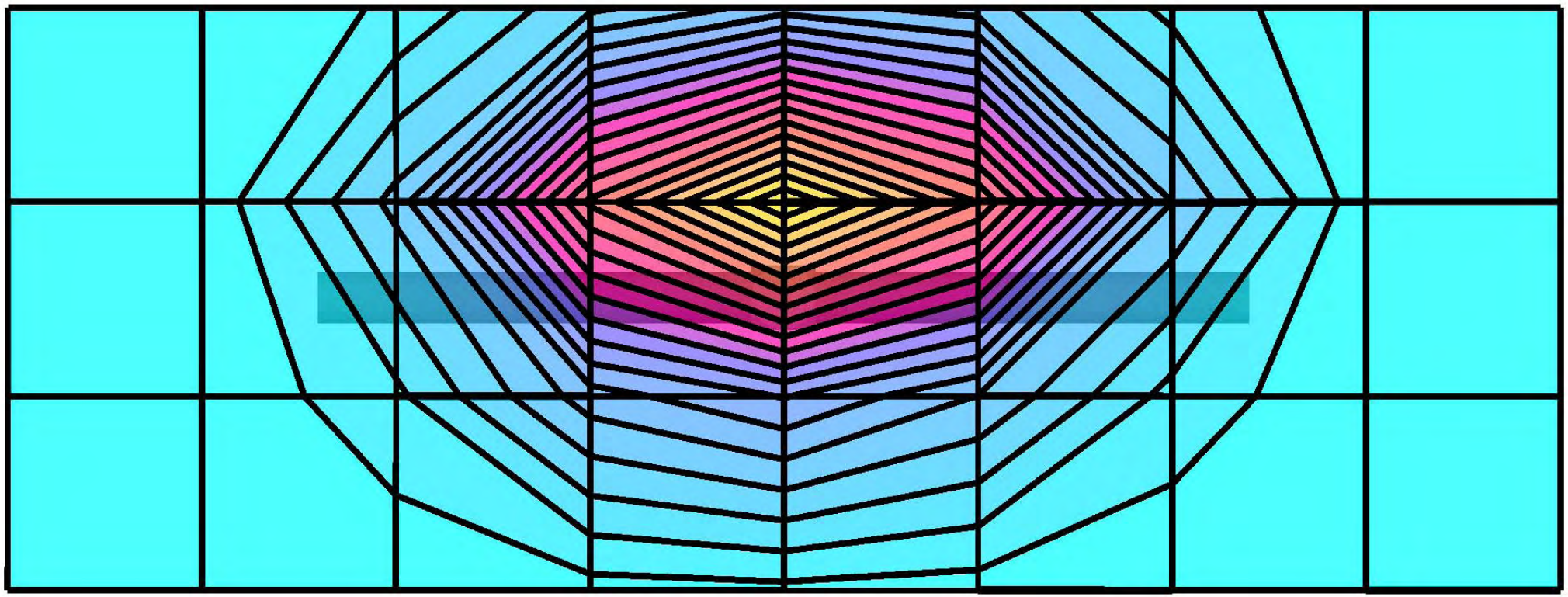
835 MHz System Performance Check / Dipole Sn# 425TR
PM1 Power =200mW
Sim.Temp@meas=18.7 Sim.Temp@SPC = 18.7 Room Temp @ SPC =20
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 835 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.9$ $\rho = 1.00$ g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 12.6 (11.9, 13.6) [mm]



05/19/04

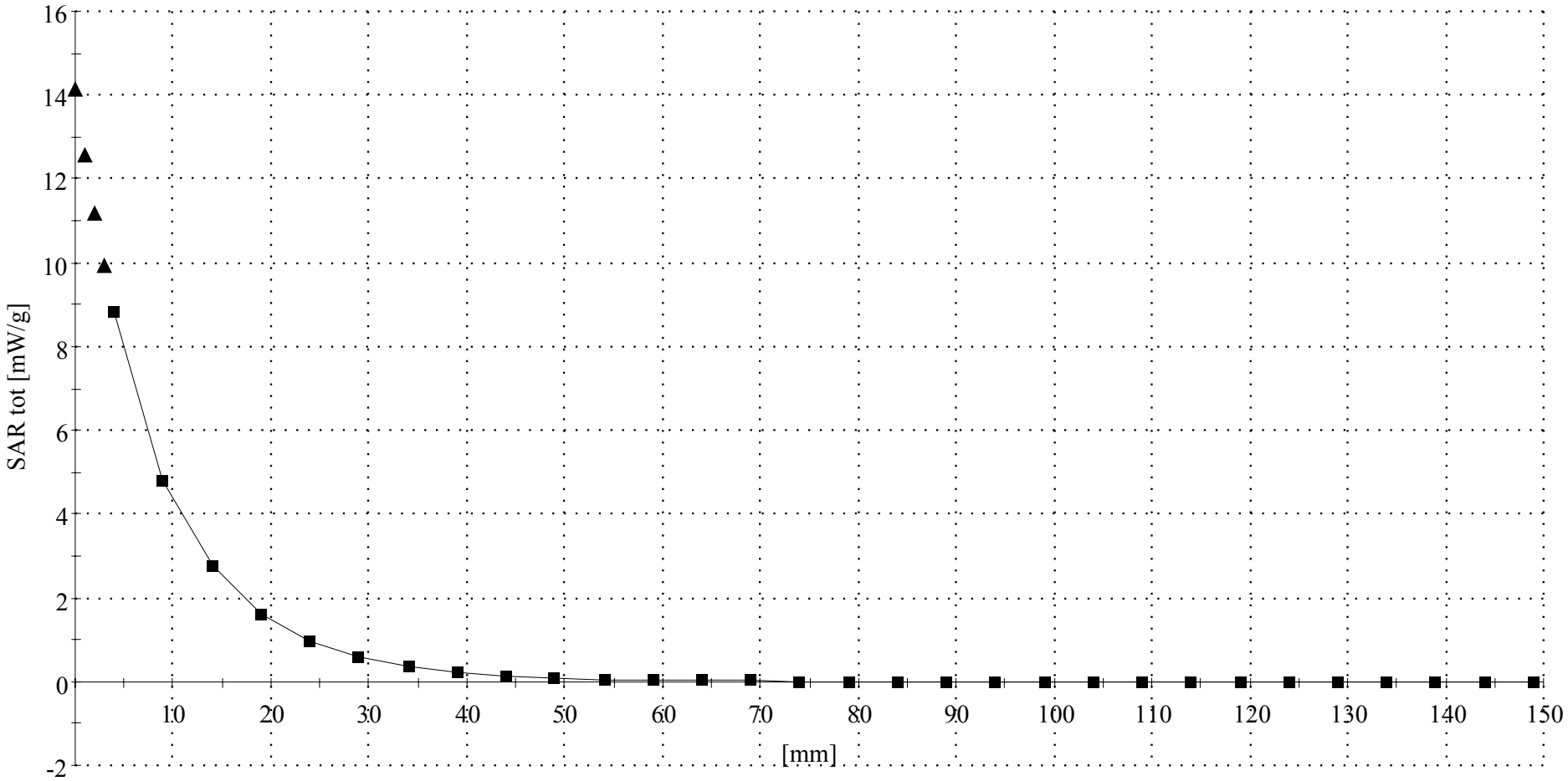
Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 259TR
PM1 Power =200mW
Sim.Temp@meas=19 Sim.Temp@SPC = 18.7 Room Temp @ SPC = 20
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Flat Section; Position: (90°,90°); Frequency: 1800 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1800 MHz VALIDATION: σ = 1.36 mho/m ε_r = 38.5 ρ = 1.00 g/cm^3
Cubes (2): SAR (1g): 7.84 mW/g ± 0.01 dB, SAR (10g): 4.15 mW/g ± 0.06 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 8.9 (8.6, 9.4) [mm]
Powerdrift: -0.02 dB



Dipole 1800 MHz

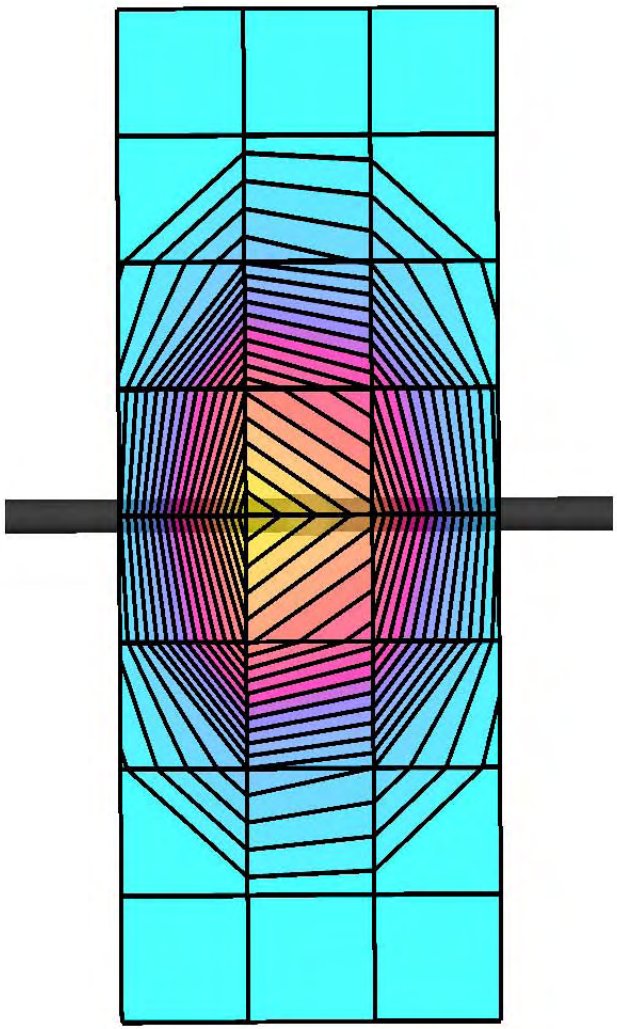
1800 MHz System Performance Check / Dipole Sn# 259TR
PM1 Power =200mW
Sim.Temp@meas=19 Sim.Temp@SPC = 18.7 Room Temp @ SPC = 20
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 1800 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1800 MHz VALIDATION: σ = 1.36 mho/m ε_r = 38.5 ρ = 1.00 g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 8.5 (8.3, 9.2) [mm]



05/20/04

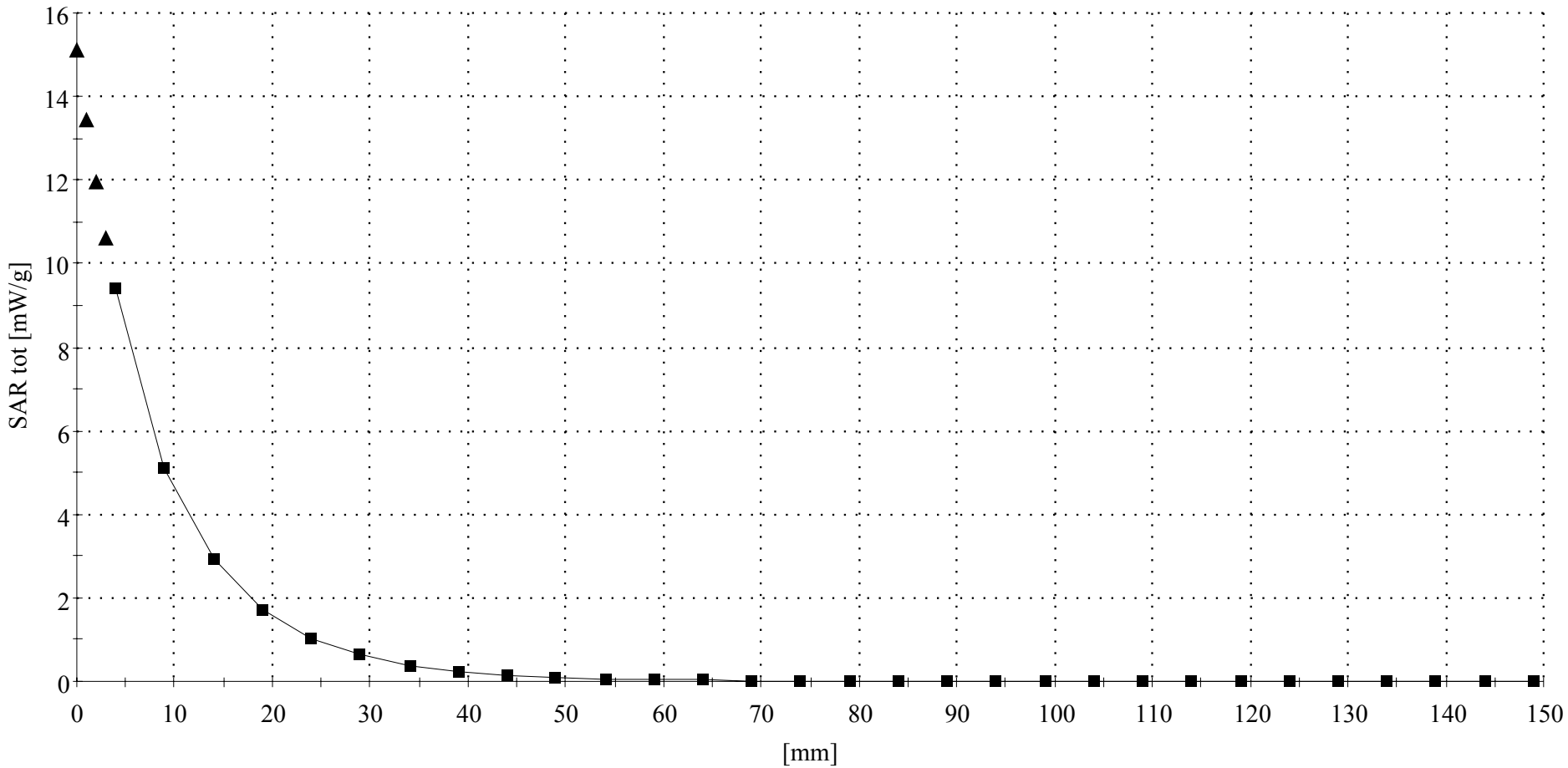
Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn#259TR
PM1 Power =200mW
Sim.Temp@meas=19.1 Sim.Temp@SPC = 19.2 Room Temp @ SPC = 20
R1 Amy Twin Phantom Rev.4 (22Aug02) Phantom; section 2 Section; Position: (90°,90°); Frequency: 1800 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1800 MHz VALIDATION: σ = 1.35 mho/m ε_r = 38.3 ρ = 1.00 g/cm^3
Cubes (2): SAR (1g): 8.19 mW/g ± 0.06 dB, SAR (10g): 4.32 mW/g ± 0.04 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 8.7 (8.4, 9.3) [mm]
Powerdrift: -0.04 dB



Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn#259TR
PM1 Power =200mW
Sim.Temp@meas=19.1 Sim.Temp@SPC = 19.2 Room Temp @ SPC = 20
R1 Amy Twin Phantom Rev.4 (22Aug02) Phantom; Section; Position: ; Frequency: 1800 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1800 MHz VALIDATION: σ = 1.35 mho/m ε_r = 38.3 ρ = 1.00 g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 8.5 (8.2, 9.3) [mm]



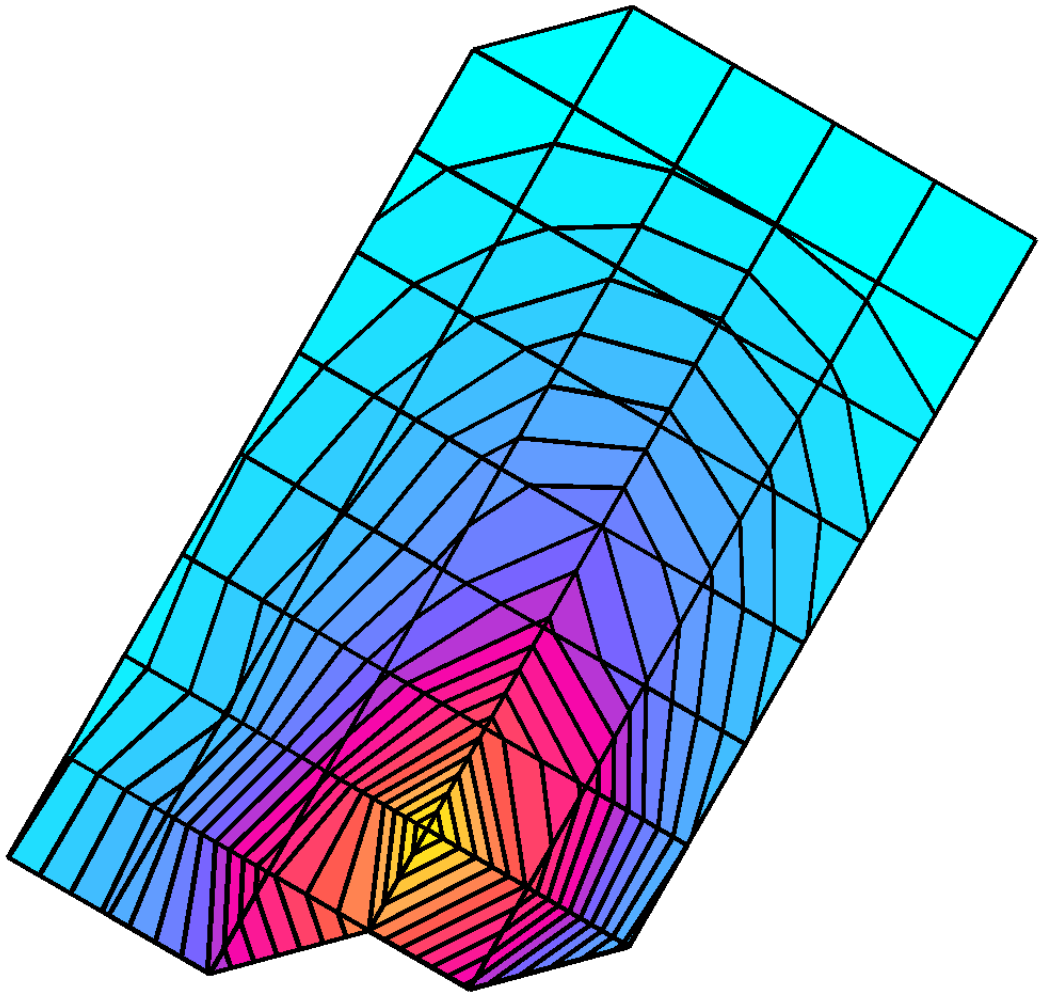
Appendix 2

SAR distribution plots for Phantom Head Adjacent Use

05/17/04 14:37

A8EE8925

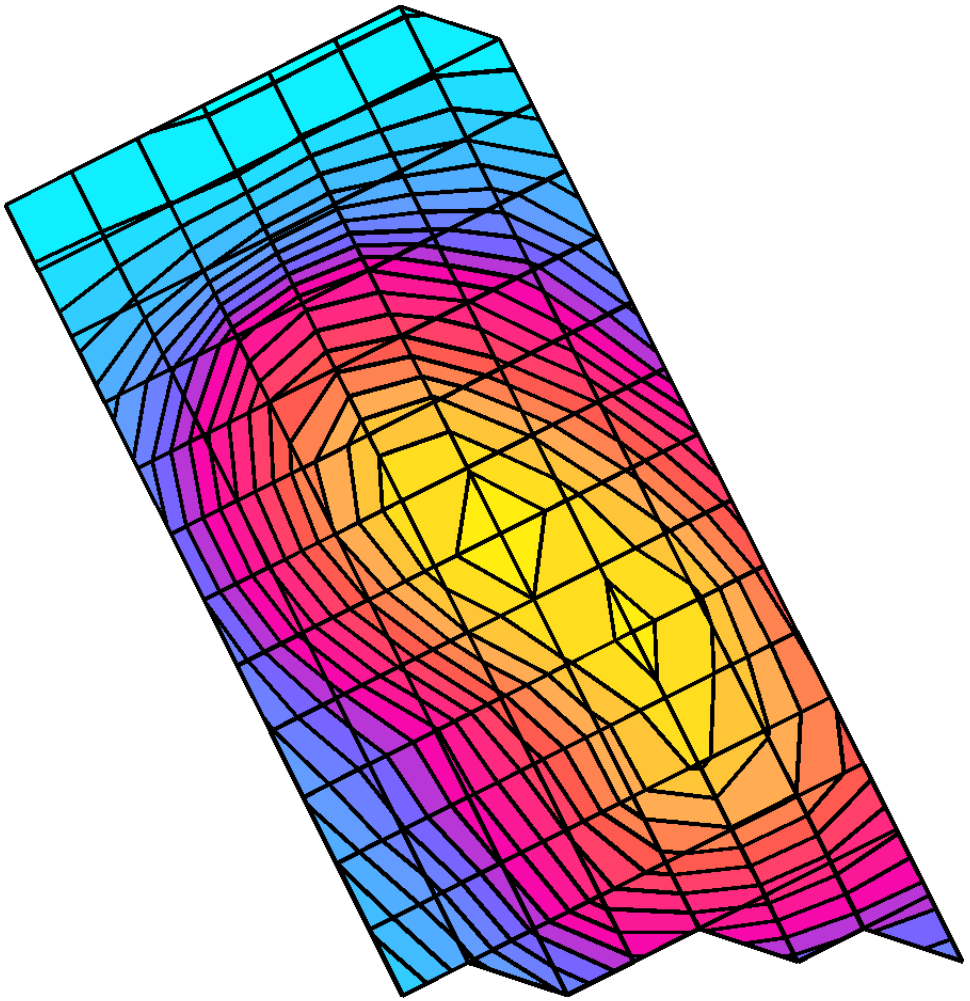
Ch#384 / Pwr Step: 2 Antenna Position: Extended
Type of Modulation: Analog Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): Cheek
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.7$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.601 mW/g, SAR (10g): 0.396 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.0 (11.7, 17.0) [mm]
Powerdrift: -0.62 dB



05/18/04 12:58

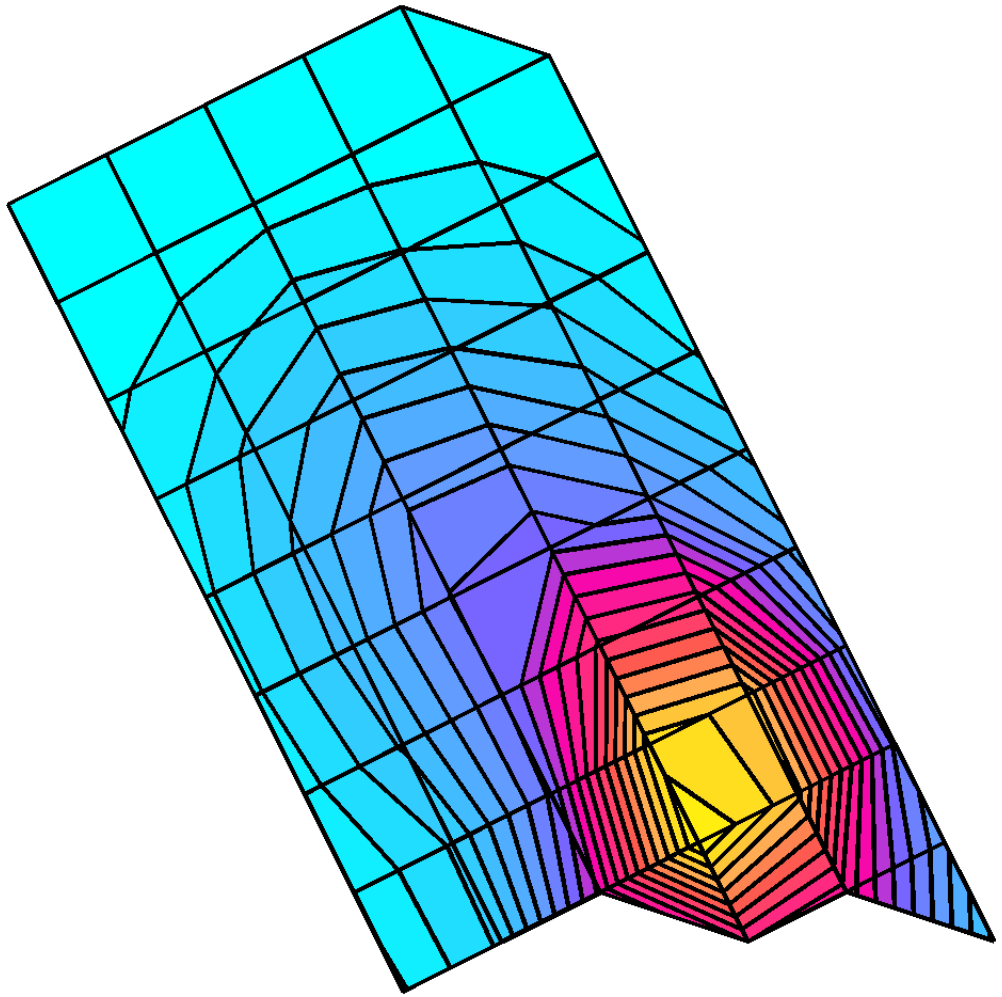
A8EE8925

Ch#384 / Pwr Step: 02 Antenna Position: EXT
Type of Modulation: ANALOG Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 836 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.152 mW/g, SAR (10g): 0.113 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 19.5 (18.4, 20.5) [mm]
Powerdrift: 0.02 dB



A8EE8925

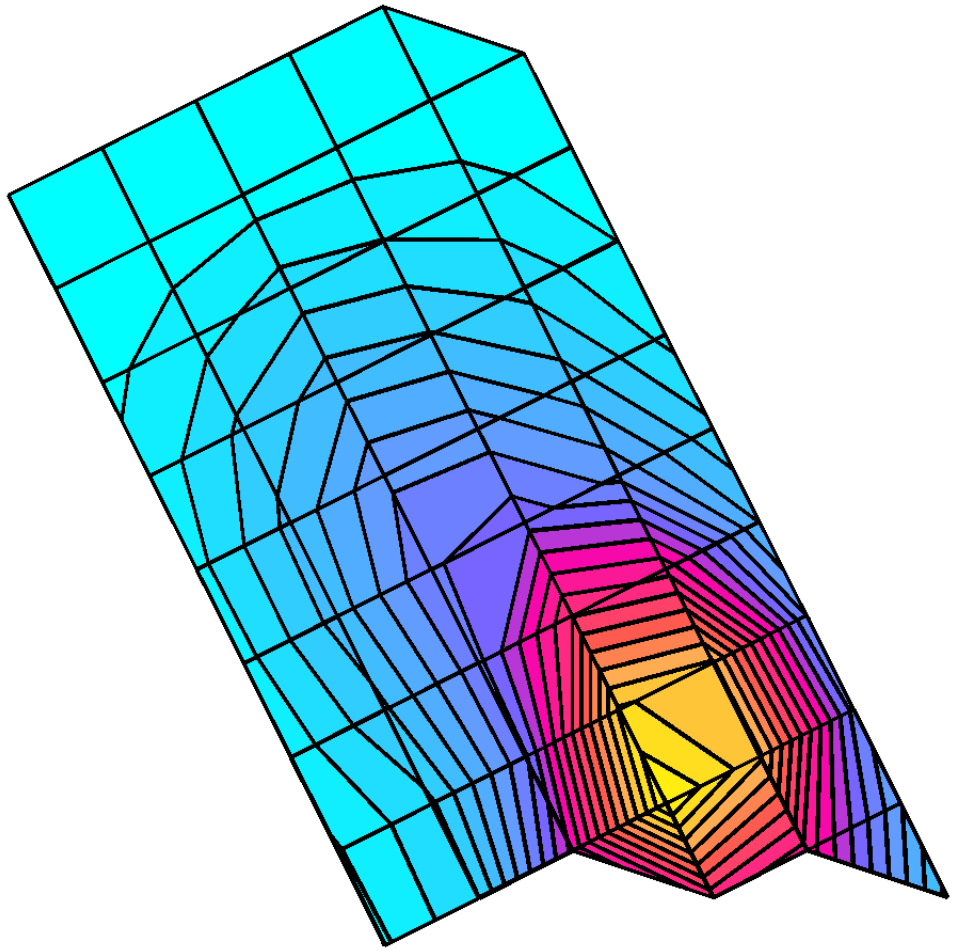
Ch#991 / Pwr Step: 02 Antenna Position: RET
Type of Modulation: ANALOG Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 824 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.06 mW/g, SAR (10g): 0.698 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.2 (11.8, 17.1) [mm]
Powerdrift: -0.31 dB



05/18/04 10:23

A8EE8925

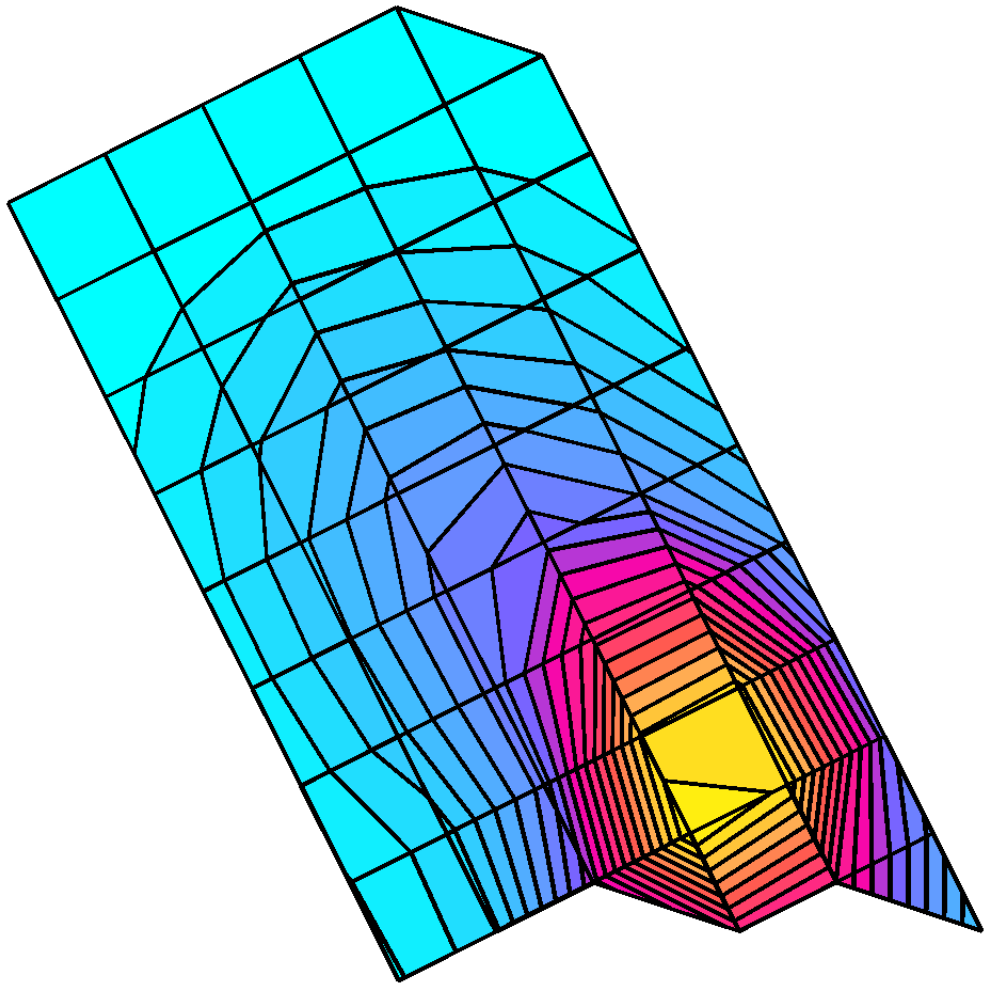
Ch#799 / Pwr Step: 02 Antenna Position: RET
Type of Modulation: ANALOG Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 849 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.02 mW/g, SAR (10g): 0.654 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.2 (11.6, 17.4) [mm]
Powerdrift: -0.43 dB



05/18/04 08:24

A8EE8925

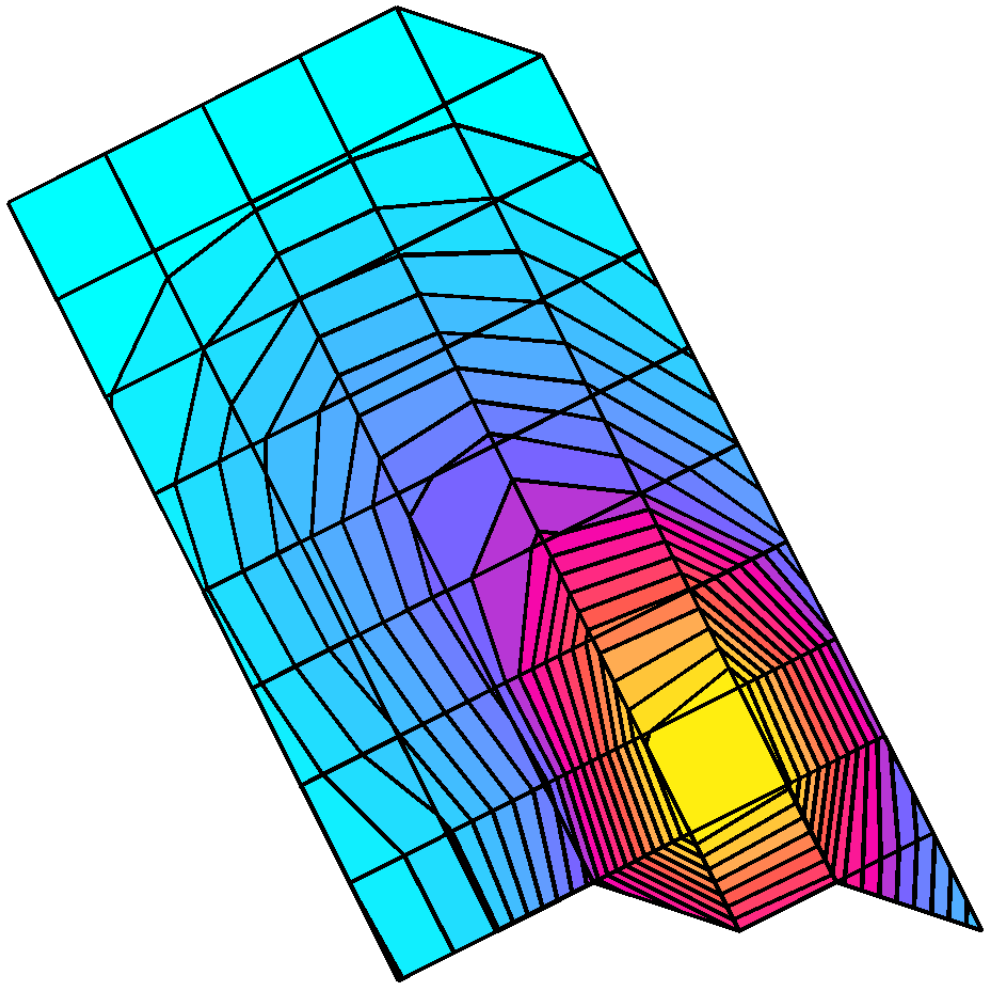
Ch#384 / Pwr Step: 02 Antenna Position: RET
Type of Modulation: ANALOG Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.847 mW/g, SAR (10g): 0.553 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.1 (12.4, 16.1) [mm]
Powerdrift: -0.56 dB



05/18/04 09:06

A8EE8925

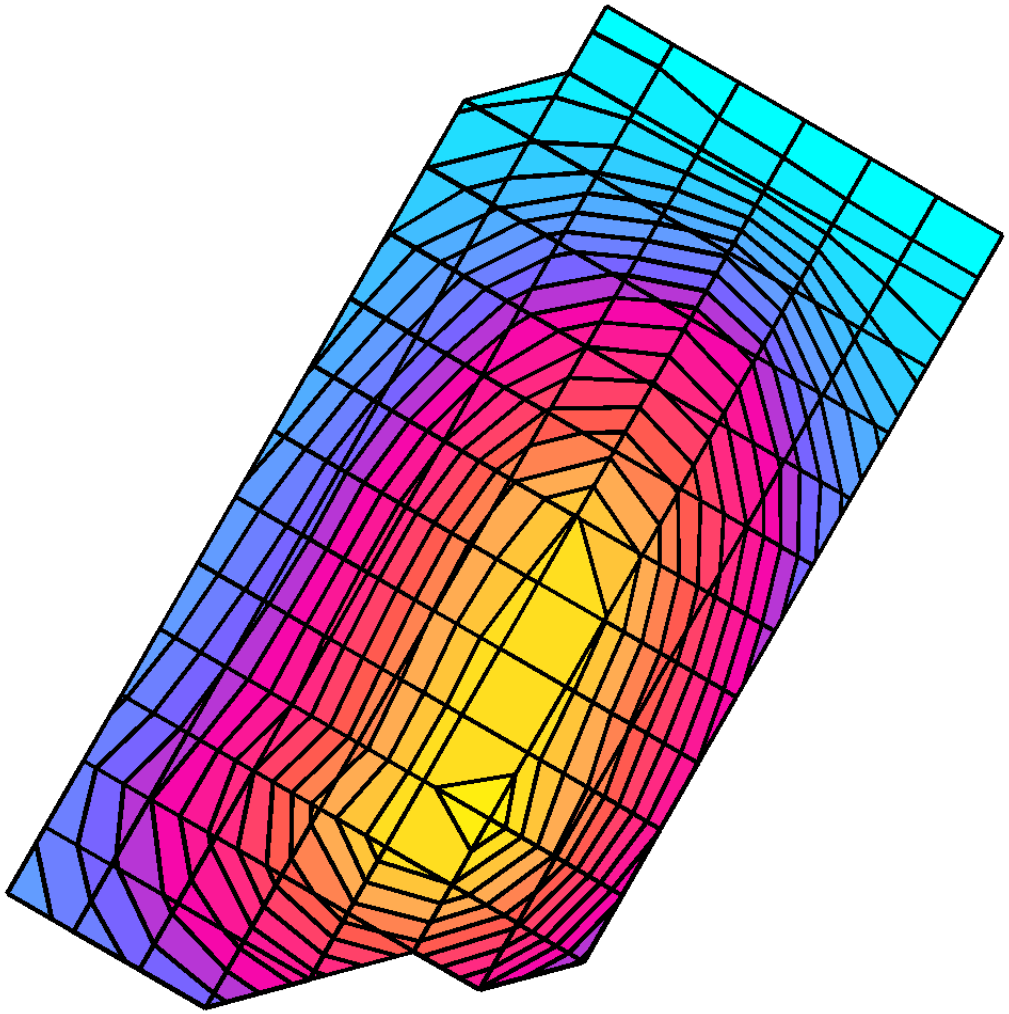
Ch#384 / Pwr Step: 02 Antenna Position: EXT
Type of Modulation: ANALOG Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.753 mW/g, SAR (10g): 0.495 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.4 (12.3, 16.9) [mm]
Powerdrift: -0.26 dB



05/17/04 23:38

V265 SUG3886AA SUB 14188 PHONE 1 A8EE8925

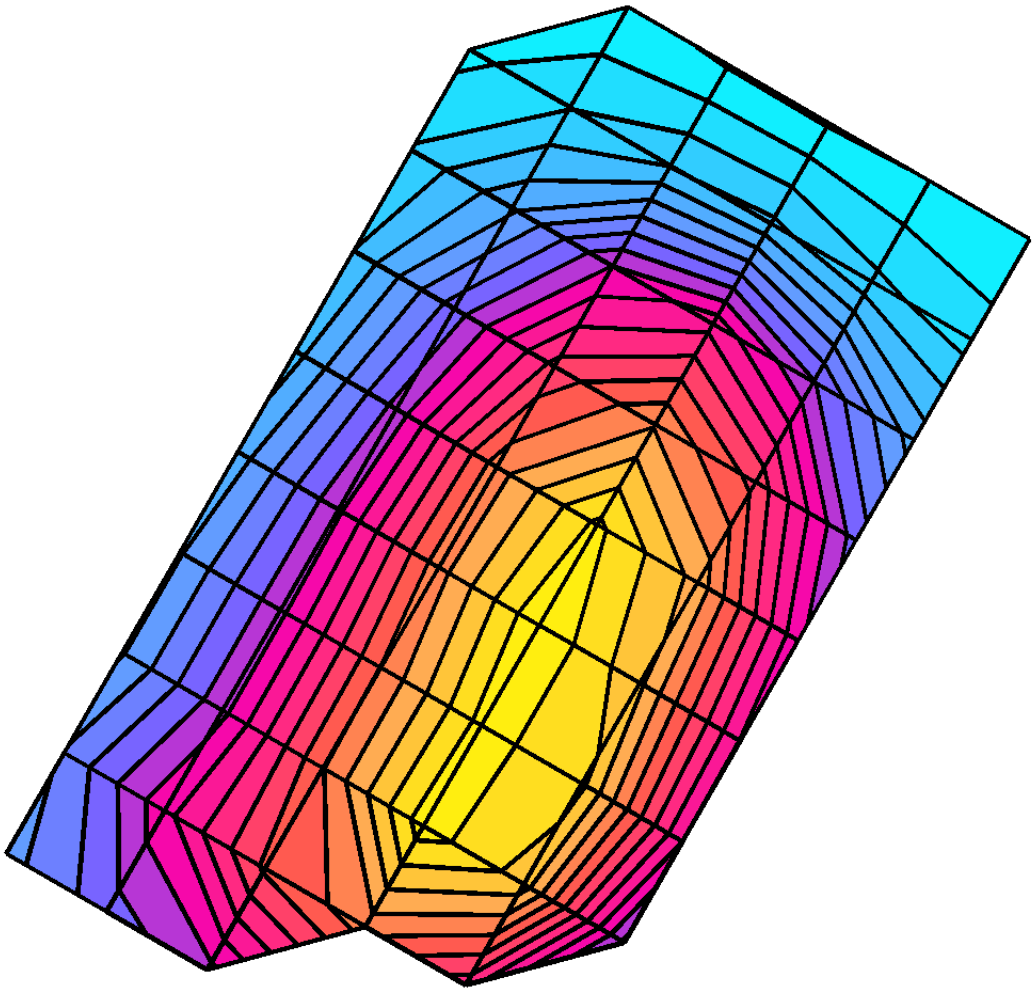
Ch# 384 / Pwr Step: 02 (OTA) Antenna Position: Ret
Type of Modulation: Analog Battery Model #: SNN5723A
DEVICE POSITION : Tilted TESTER INITIALS: DLJ
Accessory Model #: n/a
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.7$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.207 mW/g, SAR (10g): 0.153 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 17.6 (14.6, 21.0) [mm]
Powerdrift: -0.01 dB



05/18/04 01:33

A8EE8925

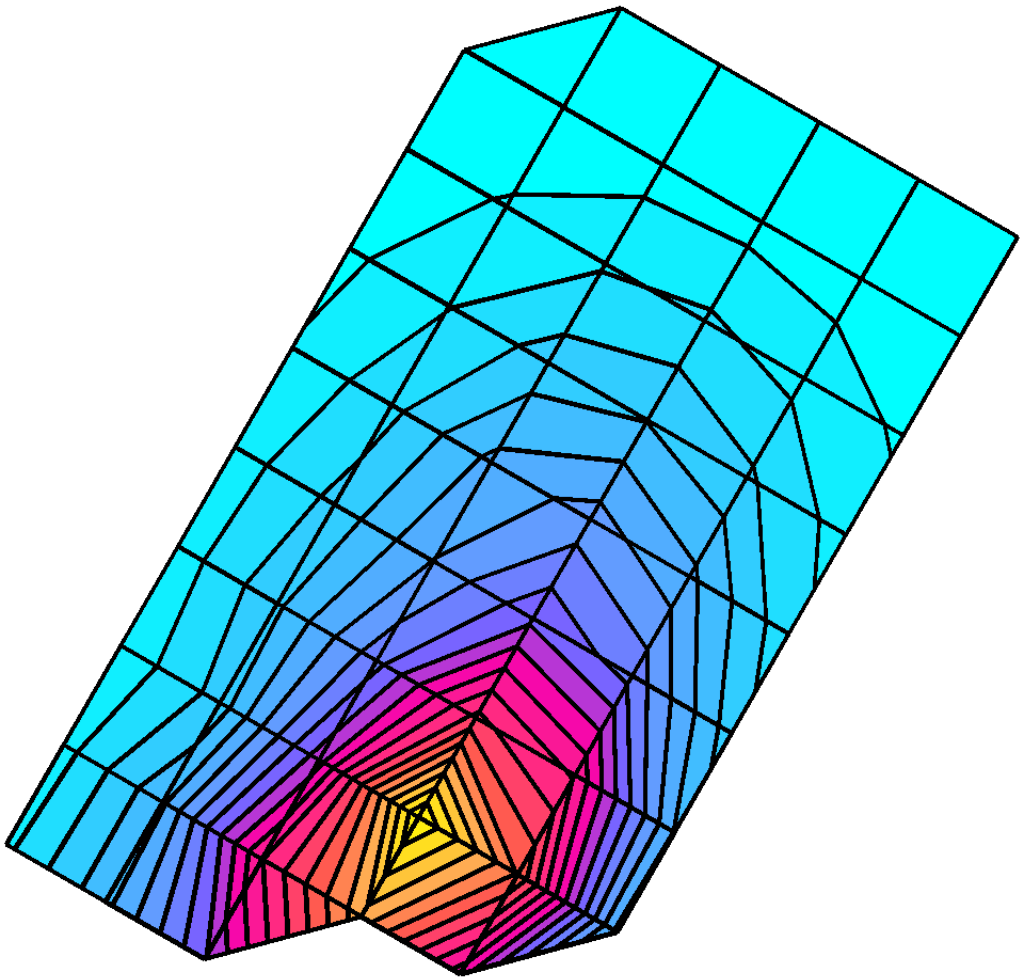
Ch# 384 / Pwr Step: 02 (OTA) Antenna Position: Ext
Type of Modulation: Analog Battery Model #: SNN5723A
DEVICE POSITION : Tilted
Accessory Model #: n/a
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.7$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.176 mW/g, SAR (10g): 0.133 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 20.3 (19.8, 20.6) [mm]
Powerdrift: -0.09 dB



05/17/04 15:57

A8EE8925

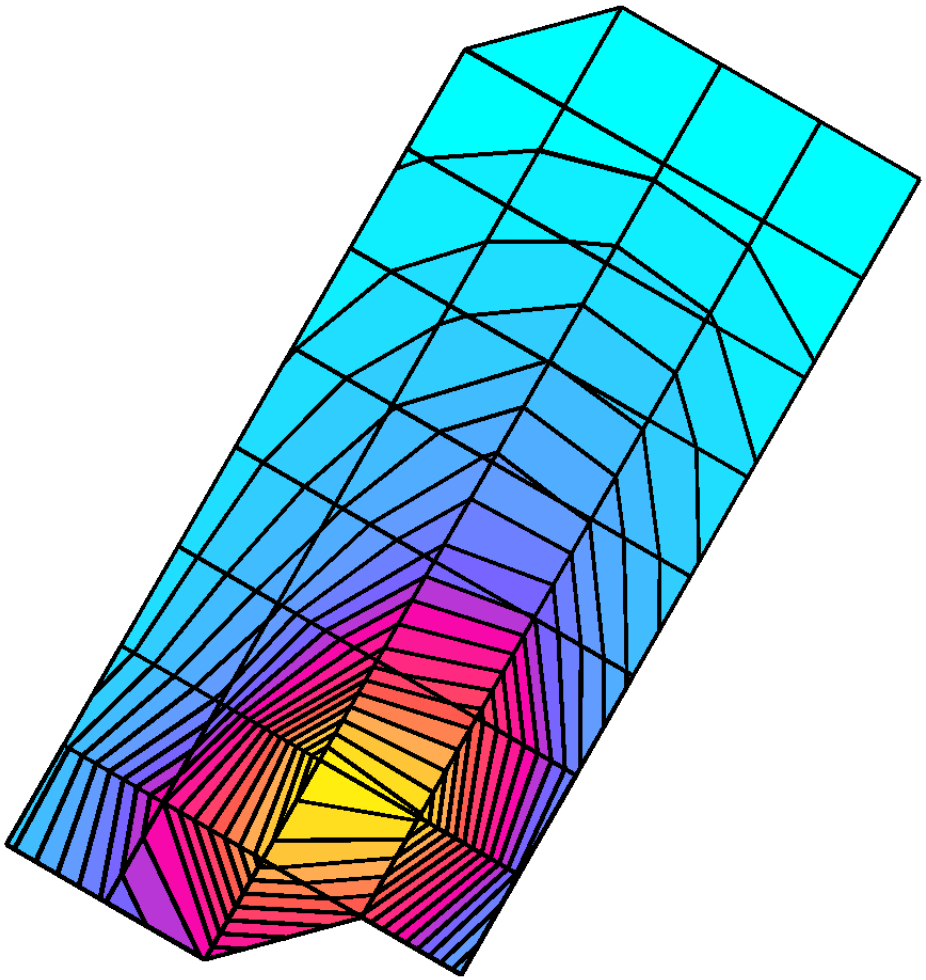
Ch#991 / Pwr Step: 2 Antenna Position: Retracted
Type of Modulation: Analog Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): Cheek
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 824 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.7$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.18 mW/g, SAR (10g): 0.764 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.1 (11.6, 17.4) [mm]
Powerdrift: -0.10 dB



05/17/04 22:02

A8EE8925

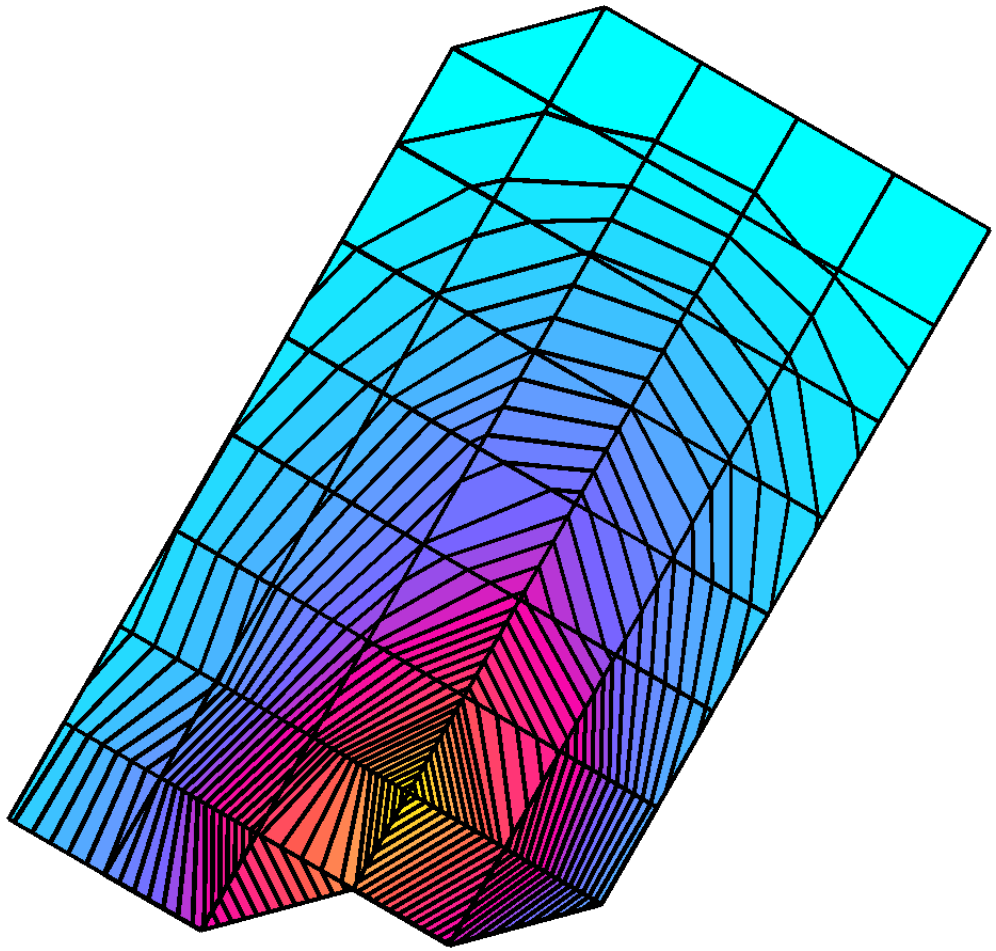
Ch# 799 / Pwr Step: 02 (OTA) Antenna Position: Ret
Type of Modulation: Analog Battery Model #: SNN5723A
DEVICE POSITION : Cheek
Accessory Model #: n/a
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 849 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.7$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.17 mW/g, SAR (10g): 0.763 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.0 (11.6, 17.0) [mm]
Powerdrift: -0.70 dB



05/17/04 13:16

A8EE8925

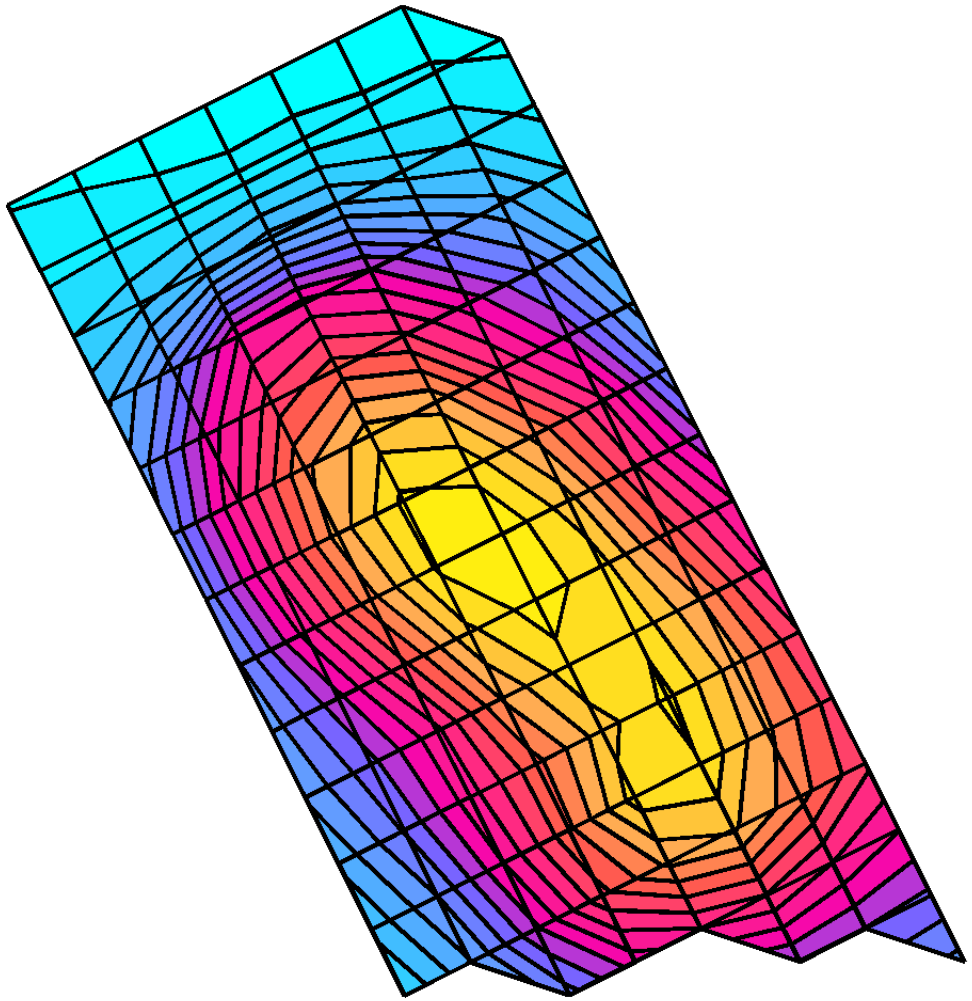
Ch#384 / Pwr Step: 02 Antenna Position:RET
Type of Modulation: analog Battery Model #: snn5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.7$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.828 mW/g, SAR (10g): 0.541 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.9 (10.9, 17.7) [mm]
Powerdrift: -0.37 dB



05/18/04 12:10

A8EE8925

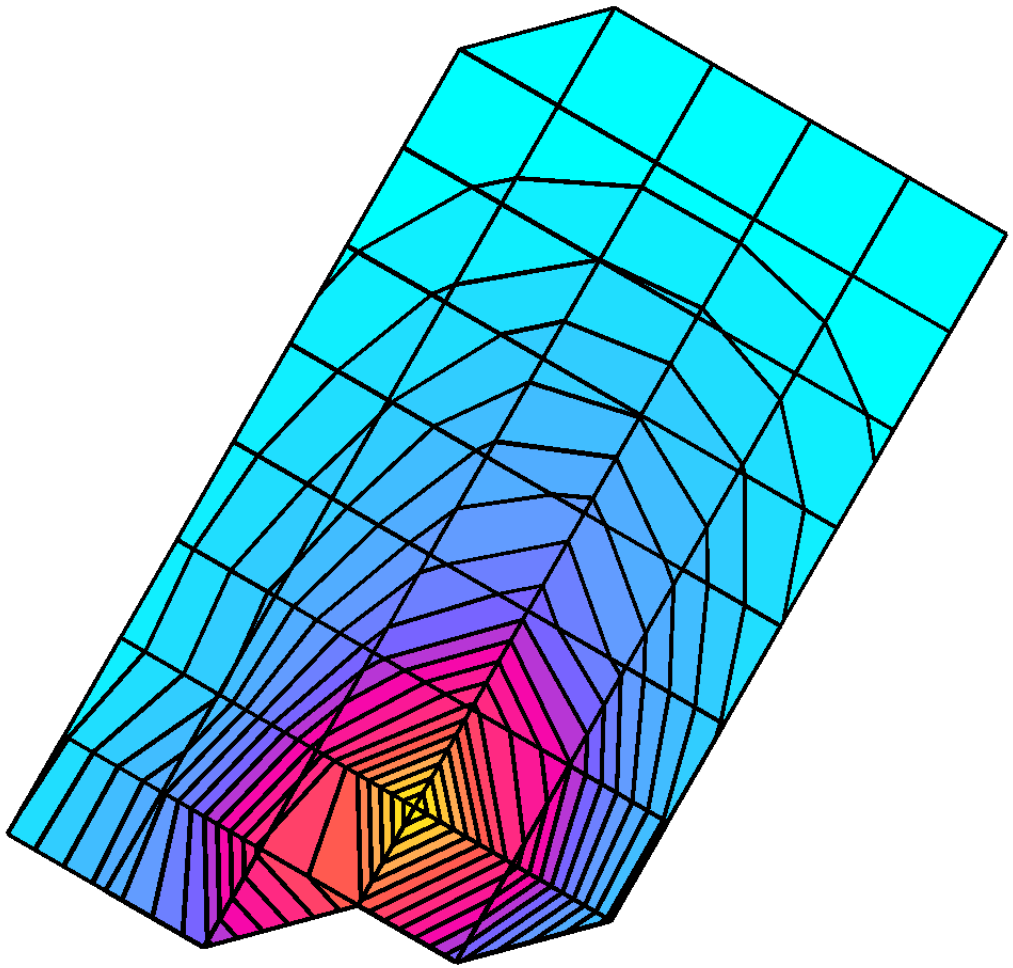
Ch#384 / Pwr Step: 02 Antenna Position: RET
Type of Modulation: ANALOG Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 836 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.178 mW/g, SAR (10g): 0.134 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 18.6 (18.4, 19.1) [mm]
Powerdrift: -0.16 dB



05/19/04 00:22

A8EE8925

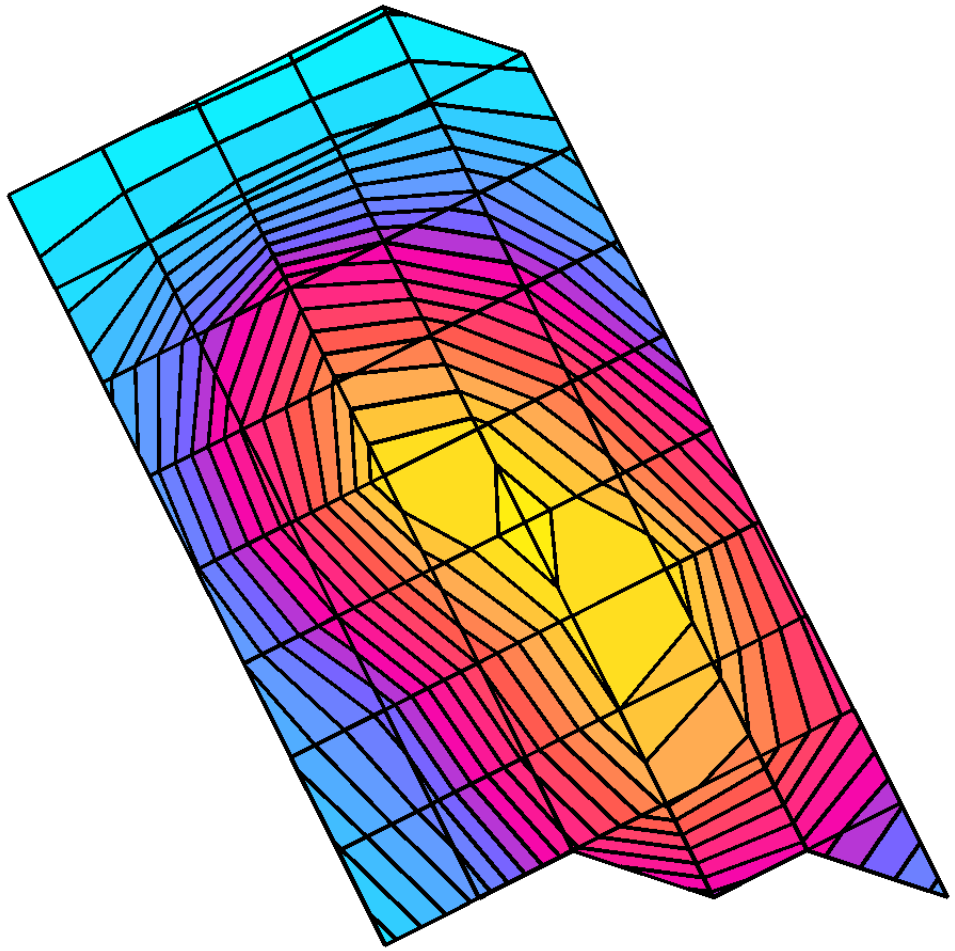
Ch# 1013 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: CDMA 800
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 825 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.19 mW/g, SAR (10g): 0.785 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.4 (11.4, 18.1) [mm]
Powerdrift: -0.37 dB



05/18/04 23:03

A8EE8925

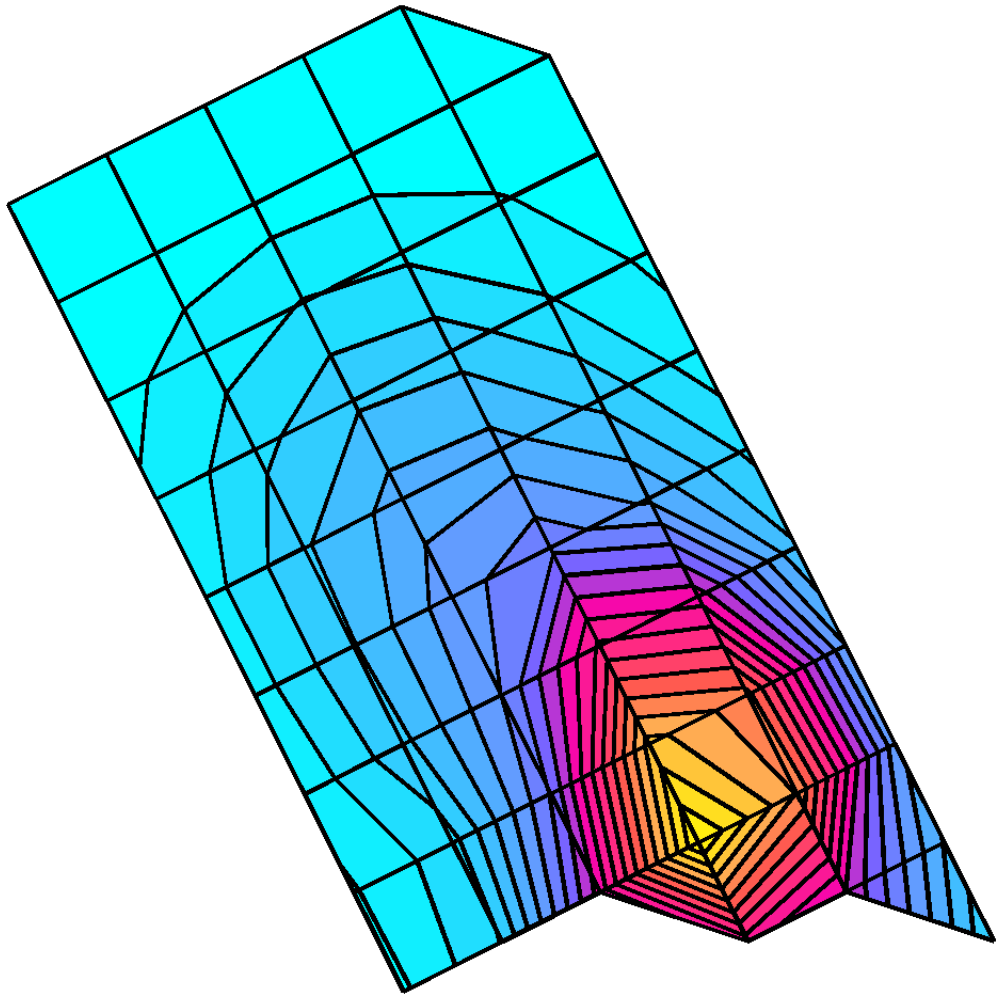
Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: CDMA 800
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.178 mW/g, SAR (10g): 0.132 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 20.7 (19.1, 22.0) [mm]
Powerdrift: 0.03 dB



05/18/04 21:07

A8EE8925

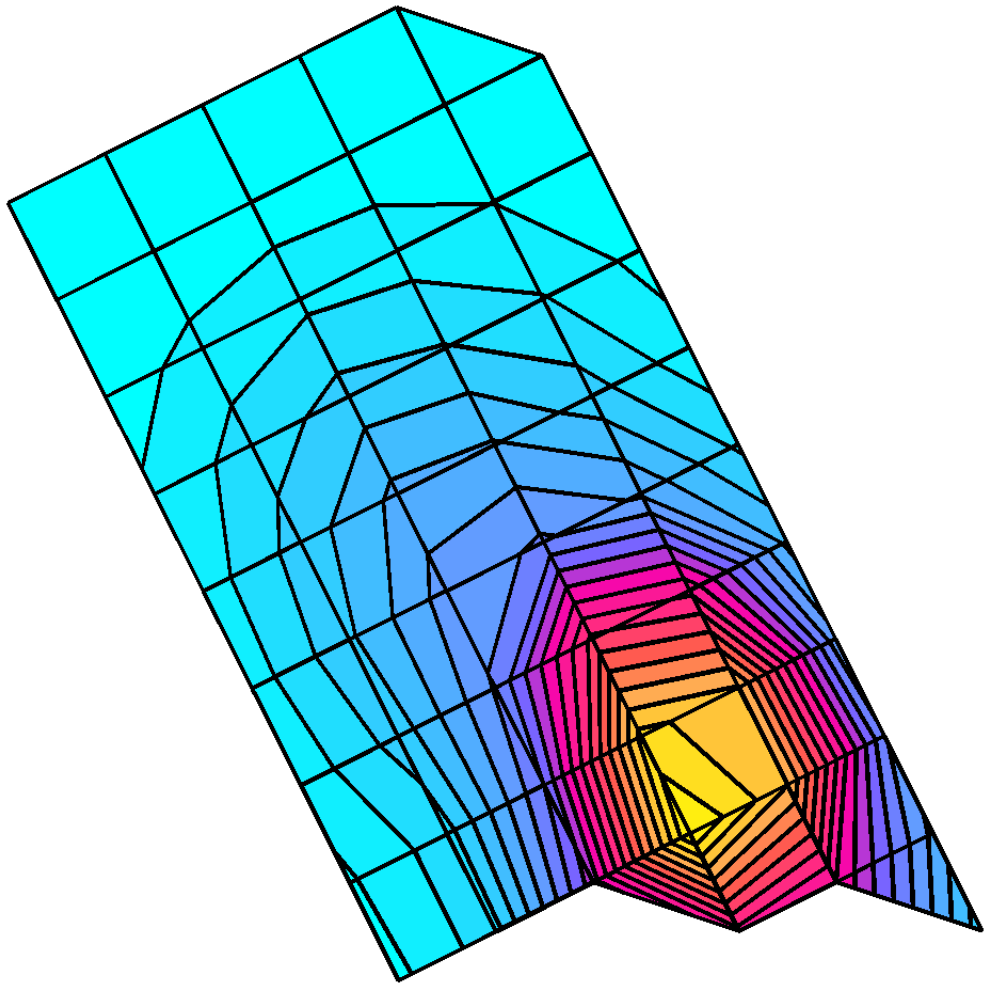
Ch# 777 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: CDMA 800
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 848 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.08 mW/g, SAR (10g): 0.708 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 15.2 (12.9, 17.6) [mm]
Powerdrift: -0.68 dB



05/18/04 14:38

A8EE8925

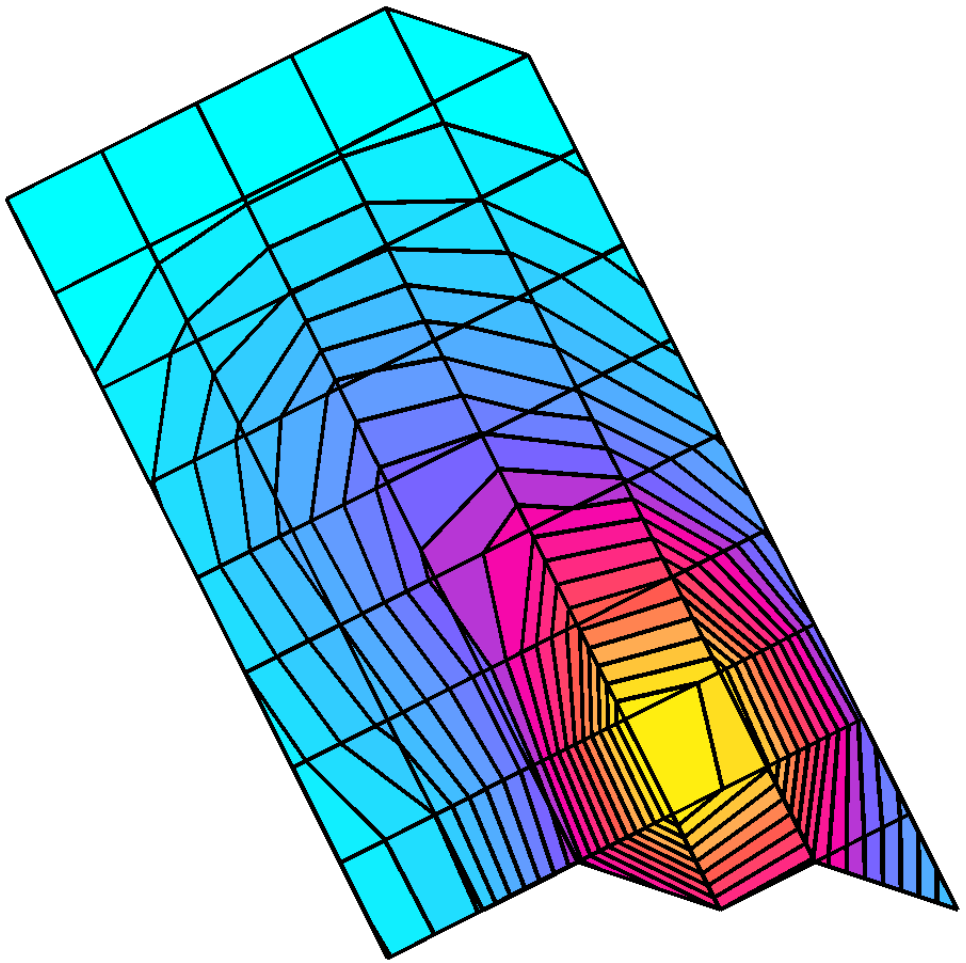
Ch#384 / Pwr Step:ALWAYS UP
Antenna Position:RET
Type of Modulation: CDMA 800
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 836 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.974 mW/g, SAR (10g): 0.633 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.2 (12.2, 16.5) [mm]
Powerdrift: -0.39 dB



05/18/04 13:59

A8EE8925

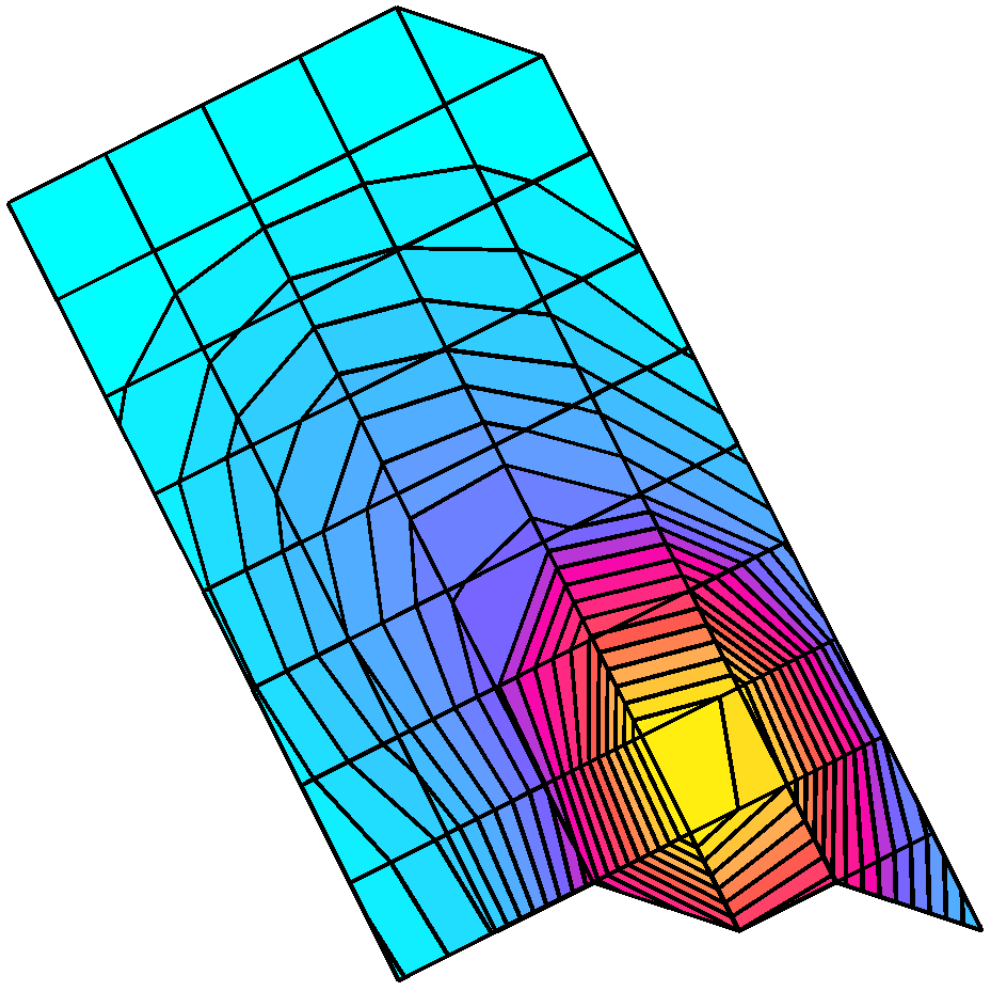
Ch#384 / Pwr Step:ALWAYS UP
Antenna Position: RET
Type of Modulation: CDMA 800
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 836 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.709 mW/g, SAR (10g): 0.466 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.1 (11.8, 17.1) [mm]
Powerdrift: -0.30 dB



05/18/04 15:32

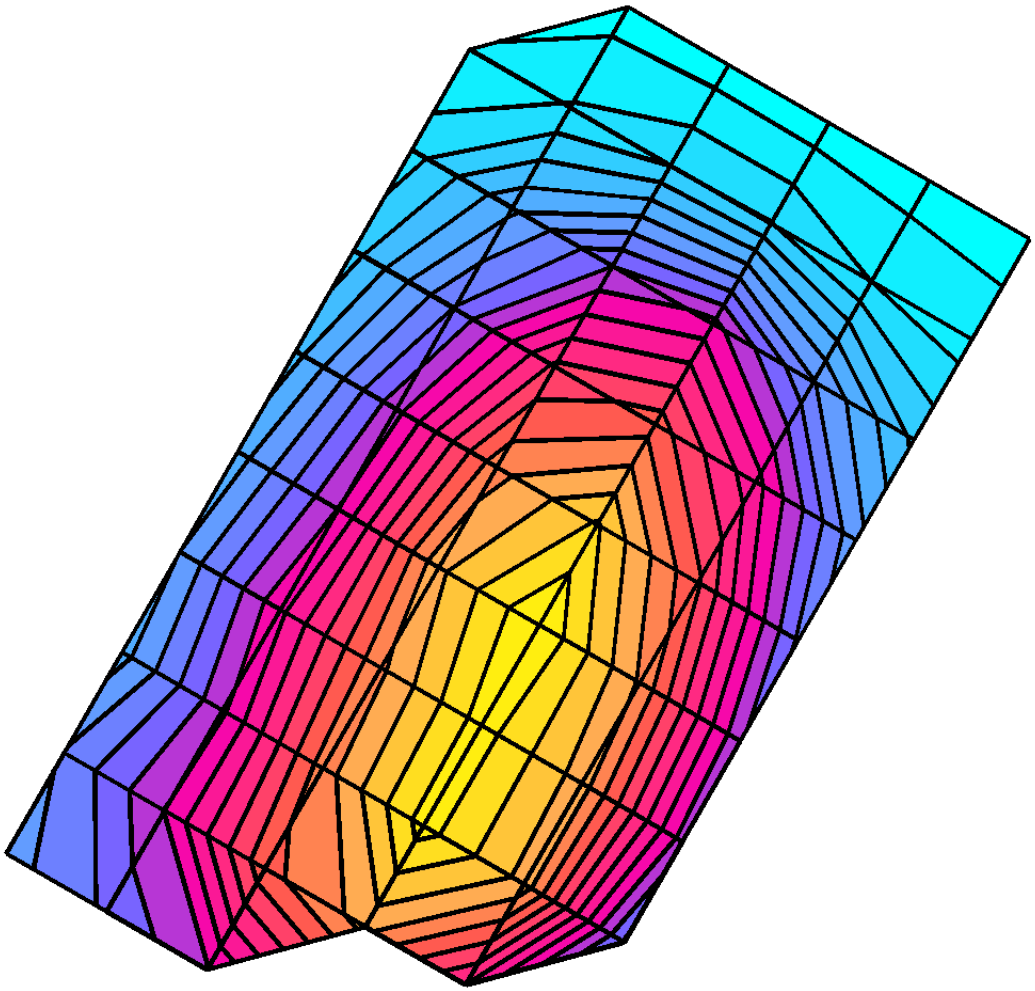
A8EE8925

Ch#1013 / Pwr Step:ALWAYS UP Antenna Position:RET
Type of Modulation: CDMA 800 Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 824 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.20 mW/g, SAR (10g): 0.781 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.0 (10.9, 17.8) [mm]
Powerdrift: -0.30 dB



A8EE8925

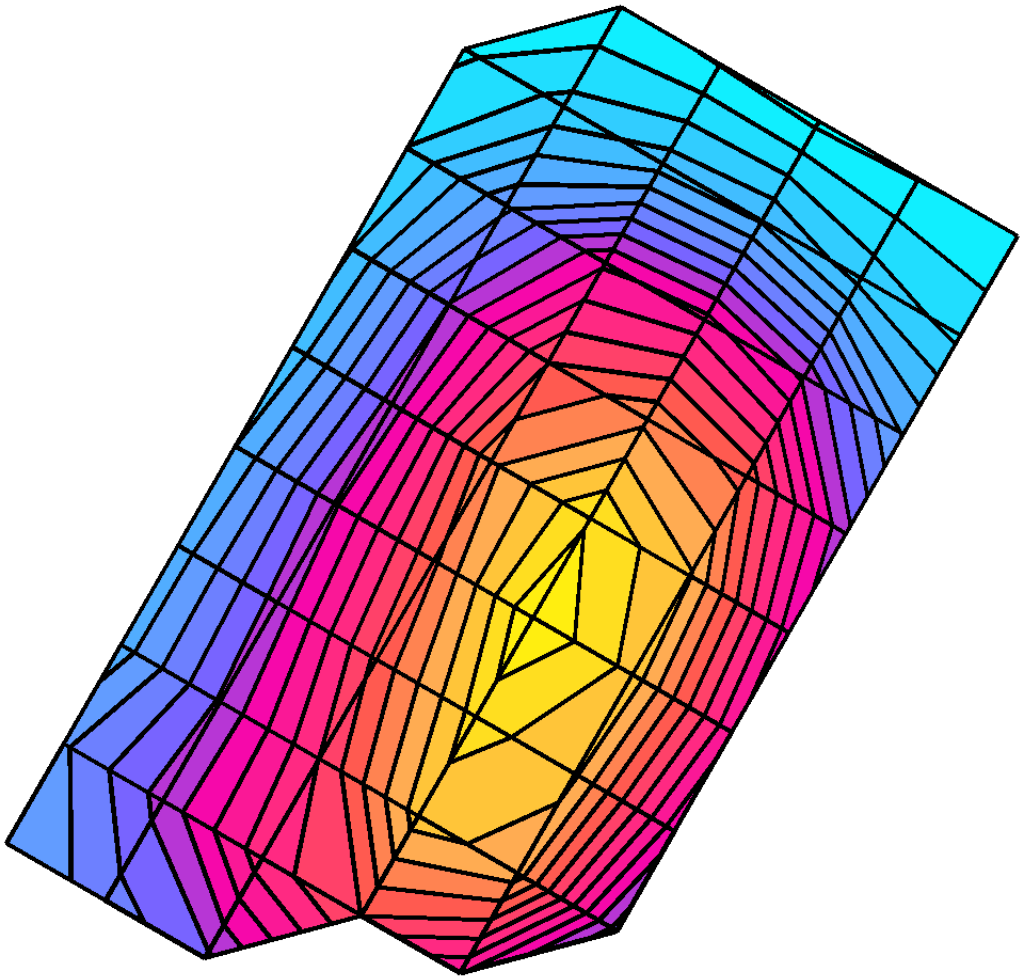
Ch# 384 / Pwr Step:ALWAYS UP Antenna Position: RET
Type of Modulation:800 CDMA Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.9$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.231 mW/g, SAR (10g): 0.171 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 19.3 (17.8, 20.9) [mm]
Powerdrift: -0.17 dB



05/19/04 08:32

A8EE8925

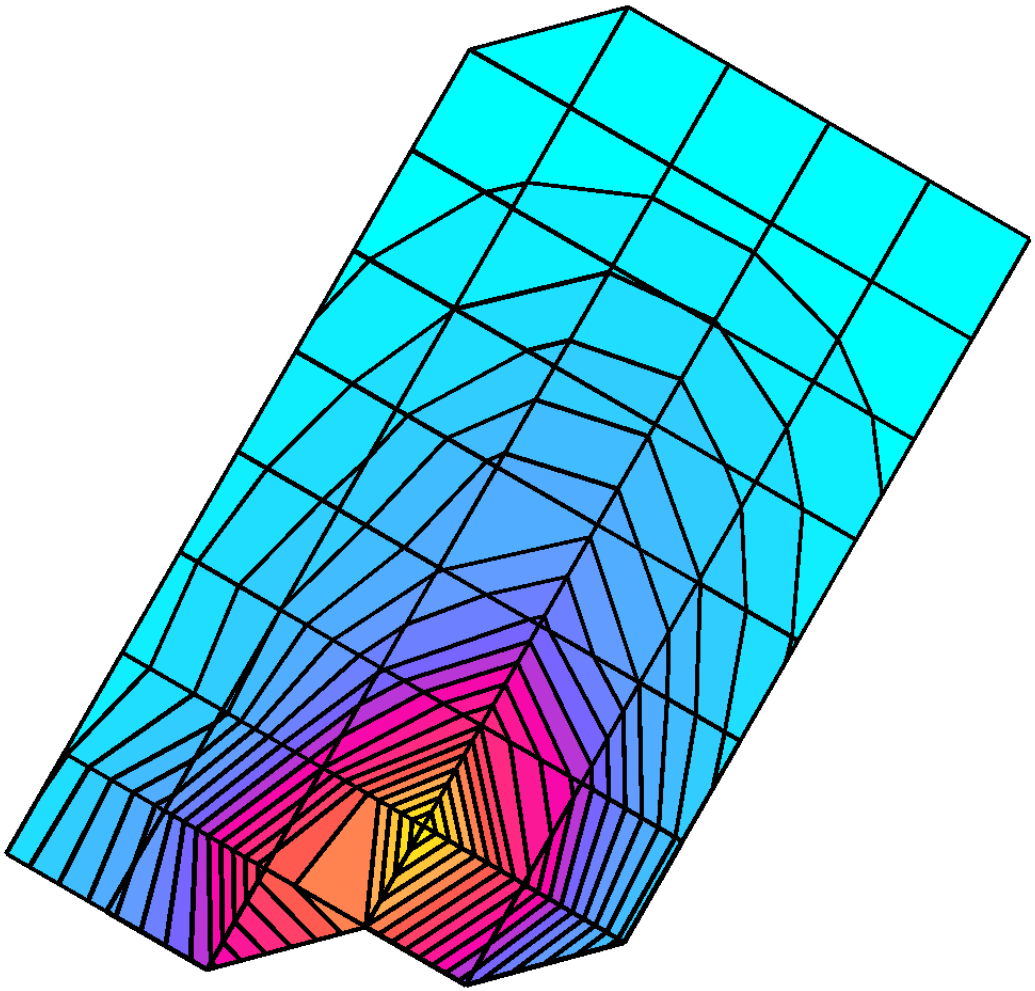
Ch# 384 / Pwr Step:ALWAYS UP Antenna PositionEXT
Type of Modulation:800 CDMA Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.9$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.183 mW/g, SAR (10g): 0.138 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 19.5 (17.8, 21.3) [mm]
Powerdrift: 0.02 dB



05/19/04 01:01

A8EE8925

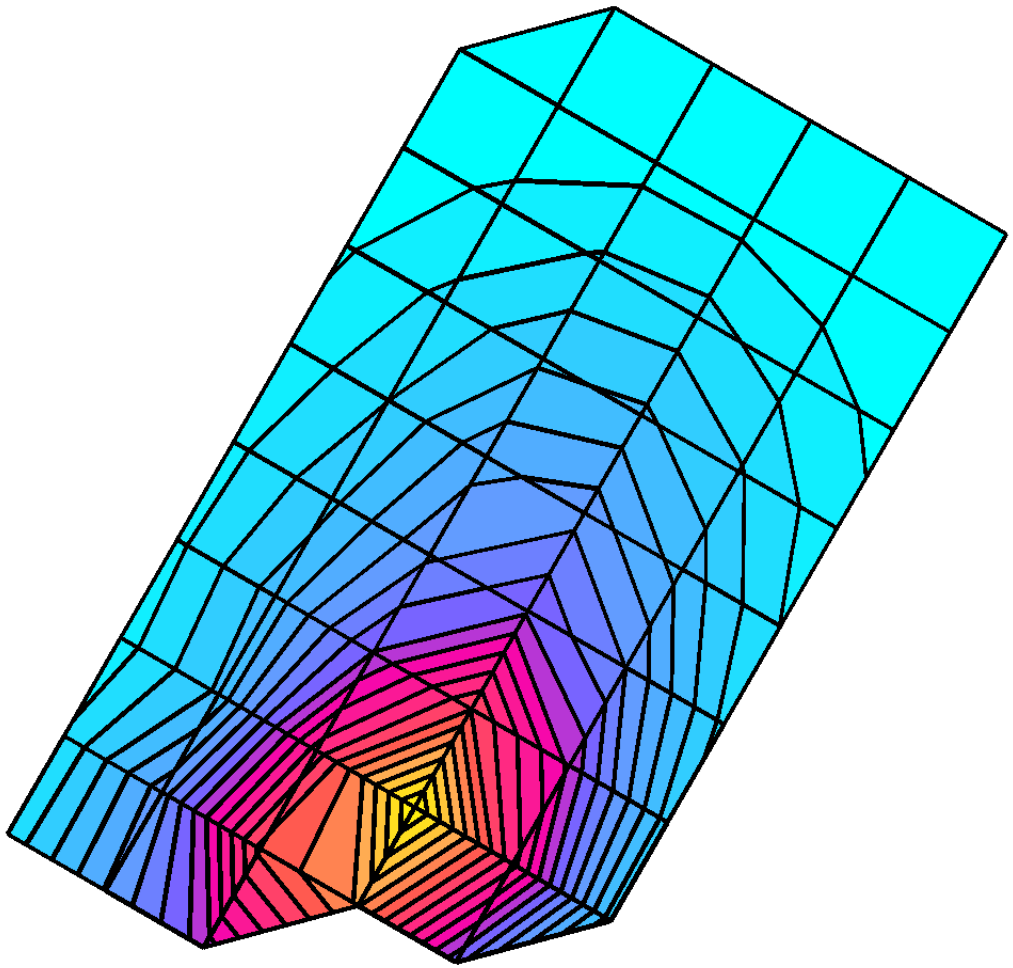
Ch# 777 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: CDMA 800
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 848 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.10 mW/g, SAR (10g): 0.713 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.1 (10.7, 18.4) [mm]
Powerdrift: -0.17 dB



05/18/04 23:44

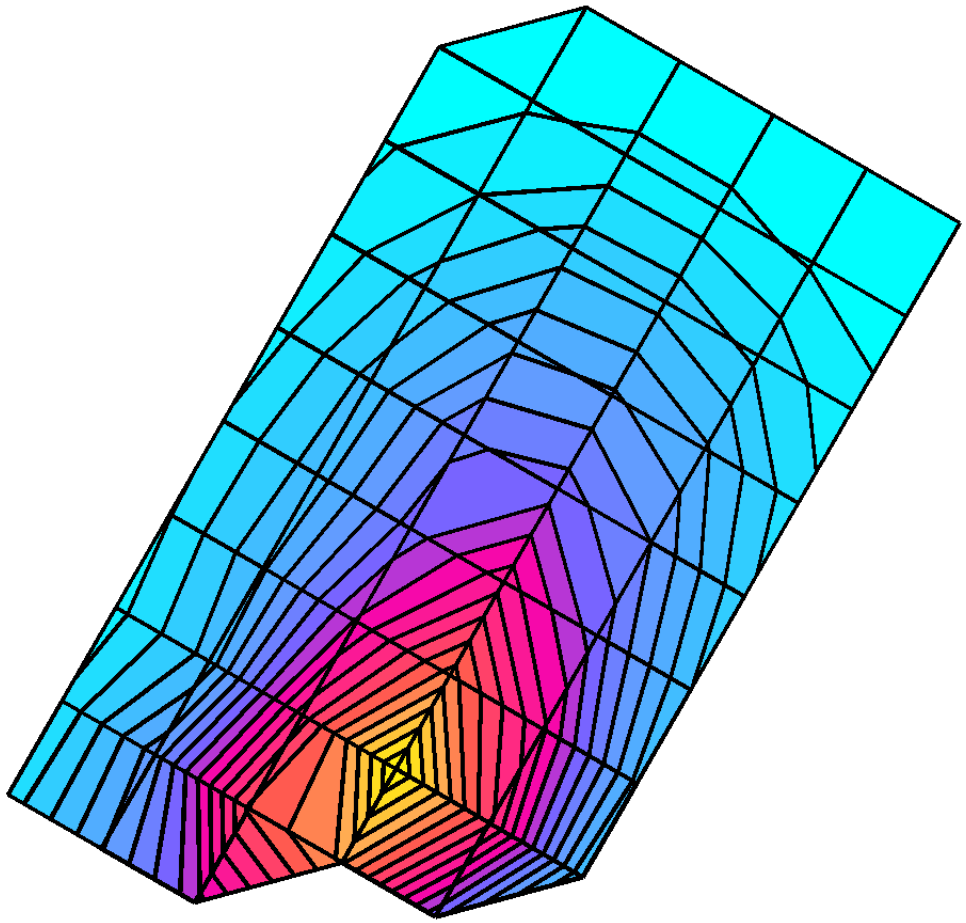
A8EE8925

Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: CDMA 800
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.910 mW/g, SAR (10g): 0.595 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.0 (11.7, 16.9) [mm]
Powerdrift: -0.34 dB



A8EE8925

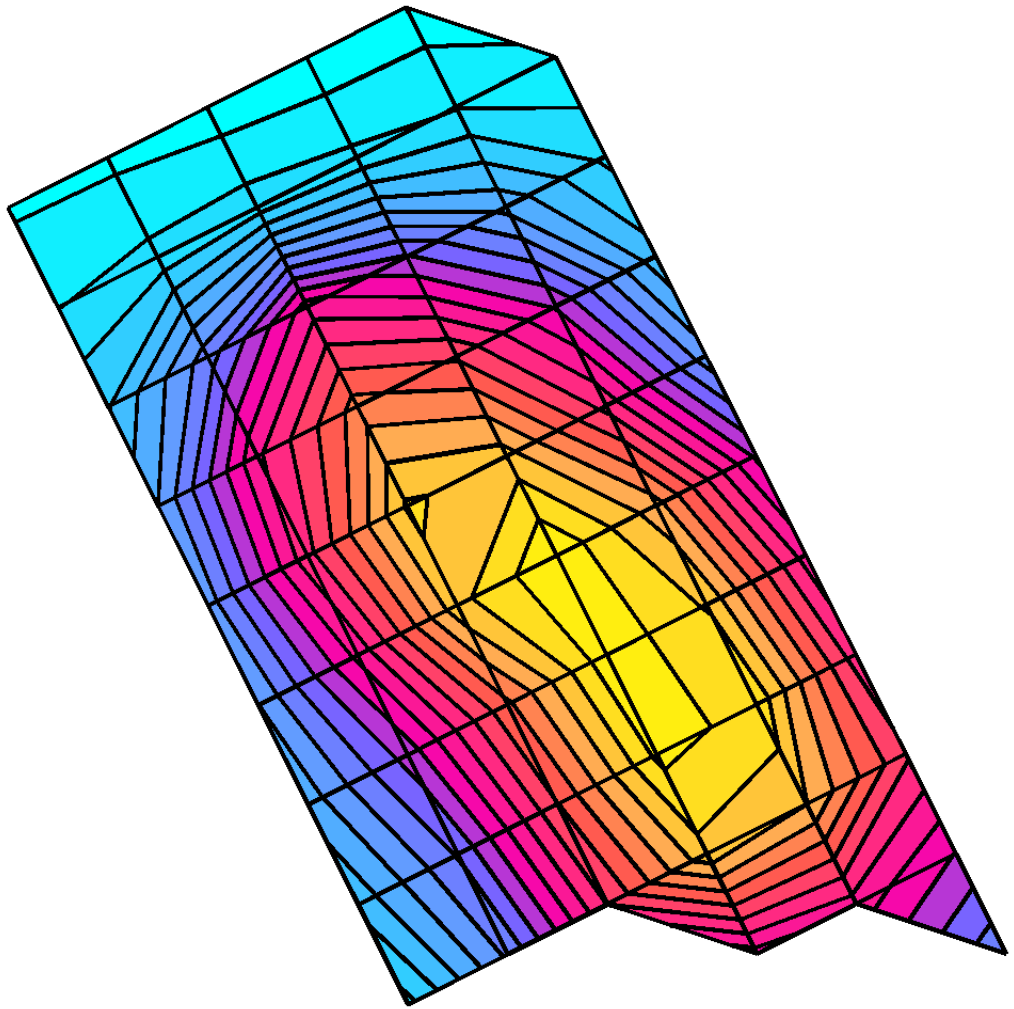
Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: CDMA 800
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.723 mW/g, SAR (10g): 0.482 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.6 (12.4, 17.2) [mm]
Powerdrift: -0.07 dB



05/18/04 21:54

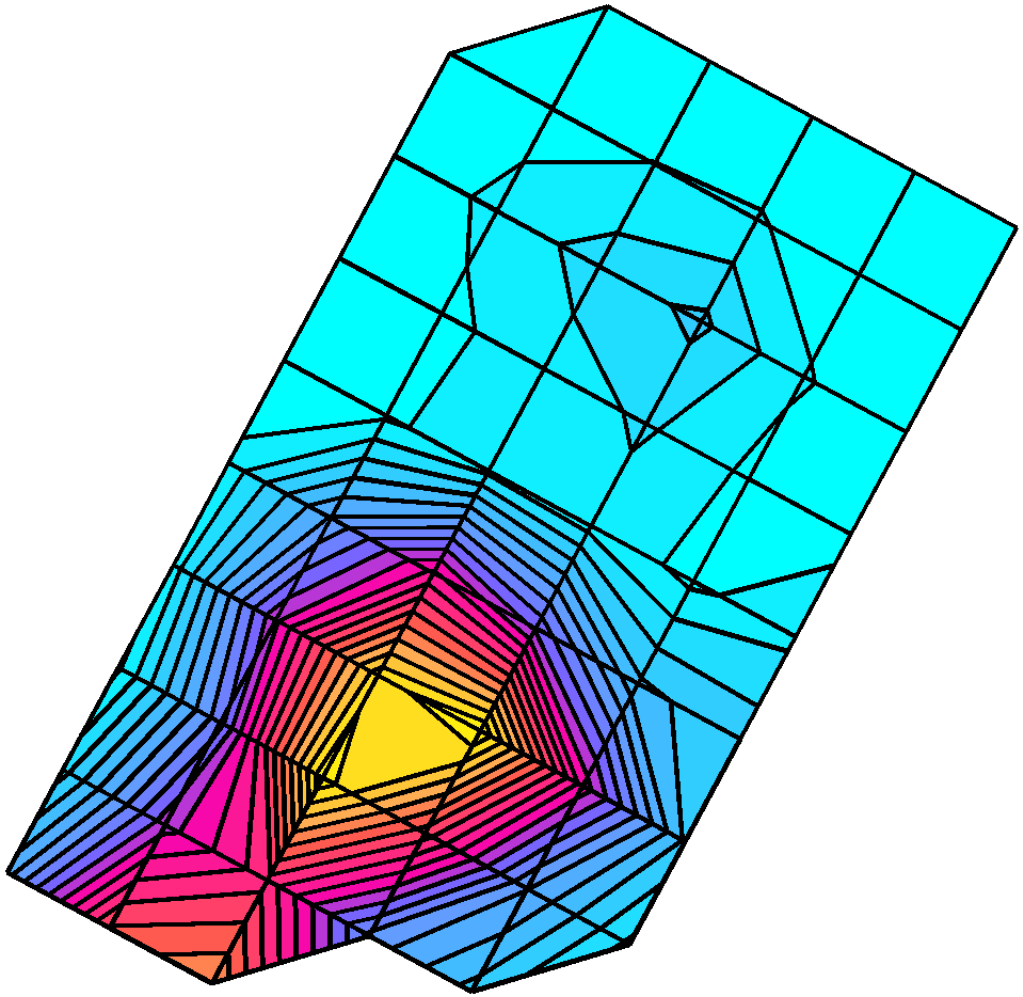
A8EE8925

Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: CDMA 800
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.204 mW/g, SAR (10g): 0.154 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 20.7 (19.0, 22.3) [mm]
Powerdrift: -0.07 dB



A8EE8925

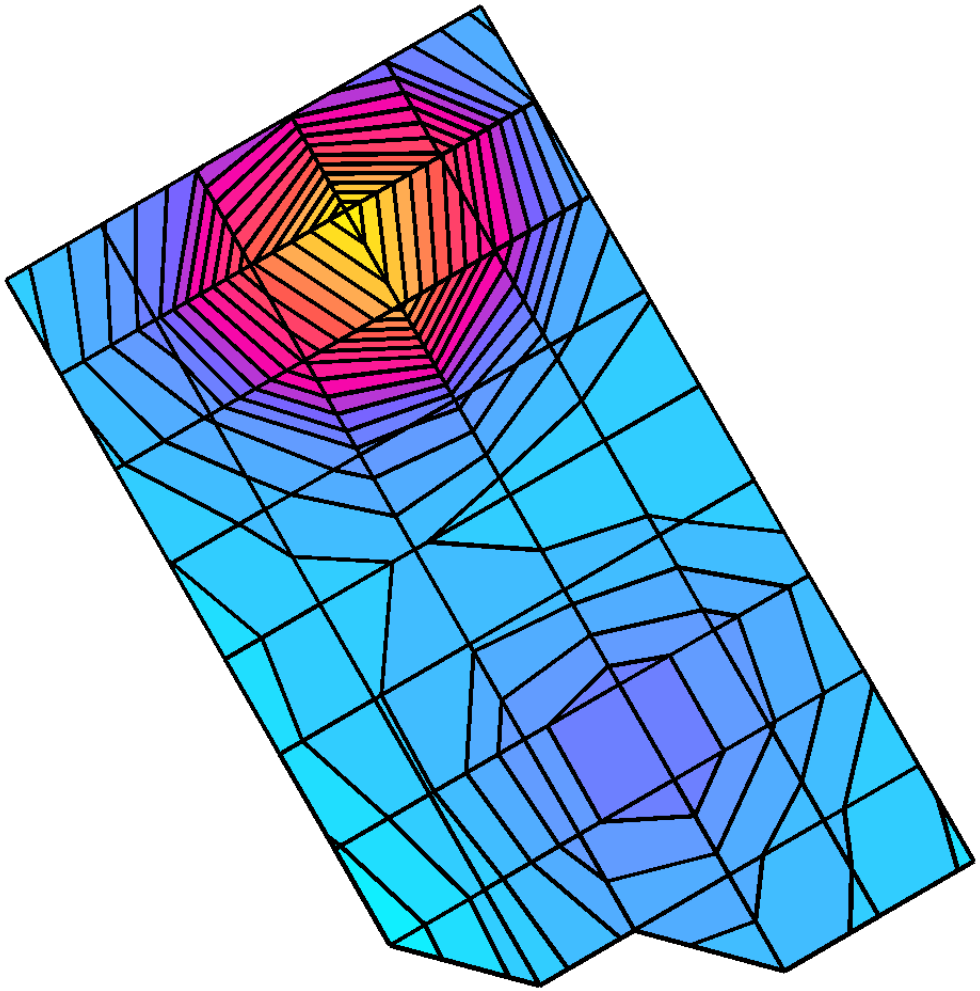
Ch#1175/ Pwr Step:ALWAYS UP
Antenna Position:RET
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1910 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.11 mW/g, SAR (10g): 0.609 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.7 (9.0, 10.4) [mm]
Powerdrift: -0.29 dB



05/19/04 20:34

A8EE8925

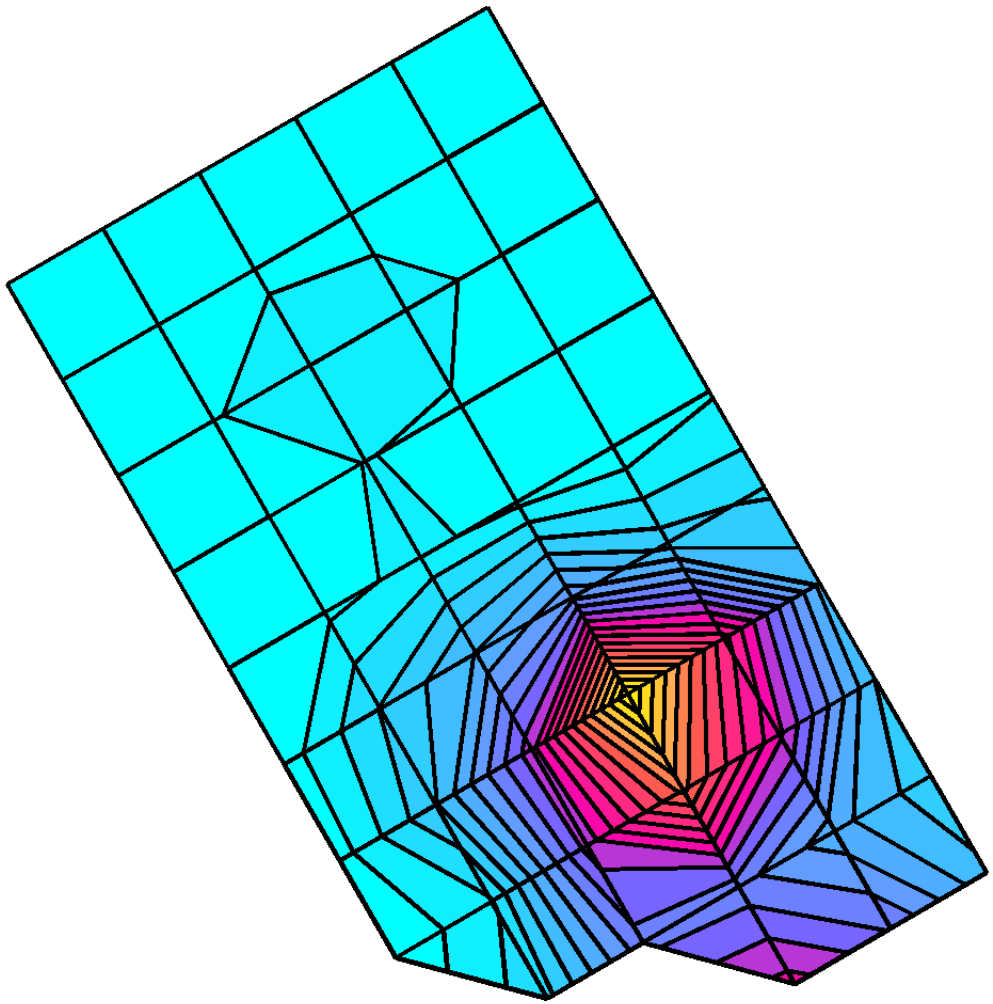
Ch# 600 / Pwr Step:ALWAYS UP
Antenna Position: EXT
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: NONE
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.146 mW/g, SAR (10g): 0.0873 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 11.1 (11.0, 11.3) [mm]
Powerdrift: 0.02 dB



05/19/04 16:35

A8EE8925

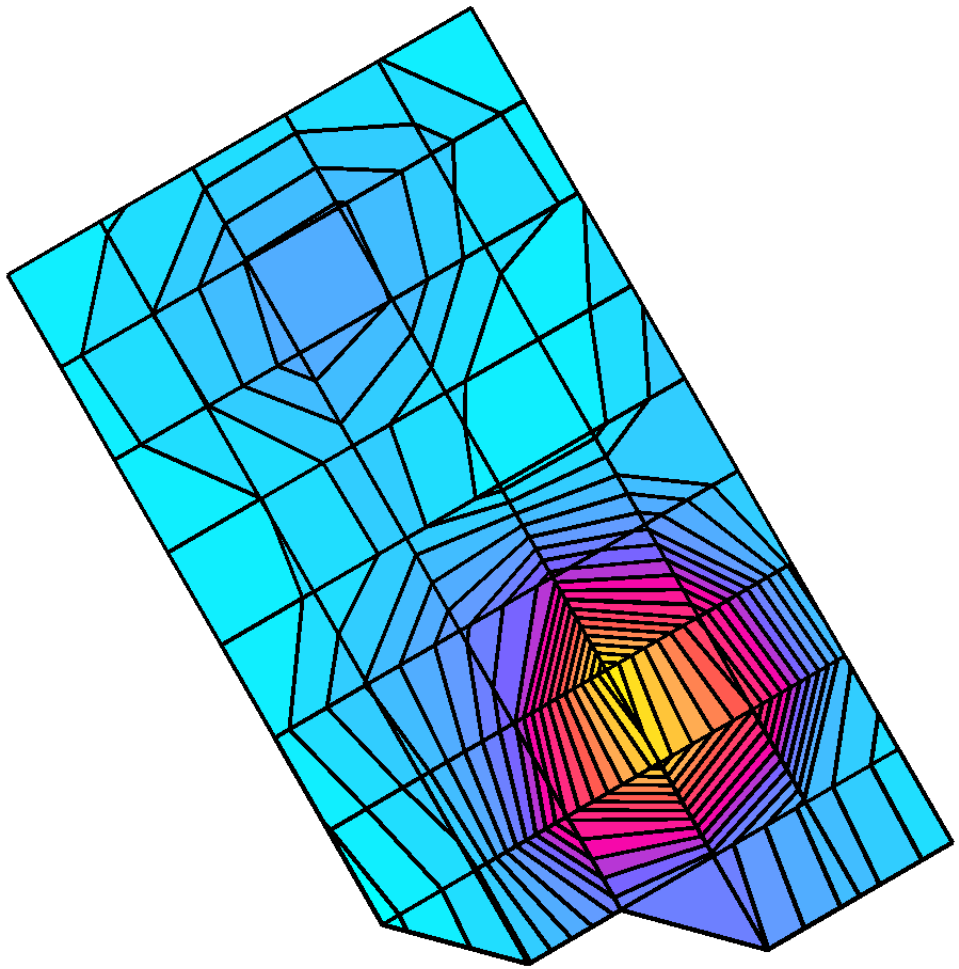
Ch# 600 / Pwr Step:ALWAYS UP
Antenna Position: RET
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.33 mW/g, SAR (10g): 0.726 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 10.8 (10.0, 11.7) [mm]
Powerdrift: 0.03 dB



05/19/04 18:40

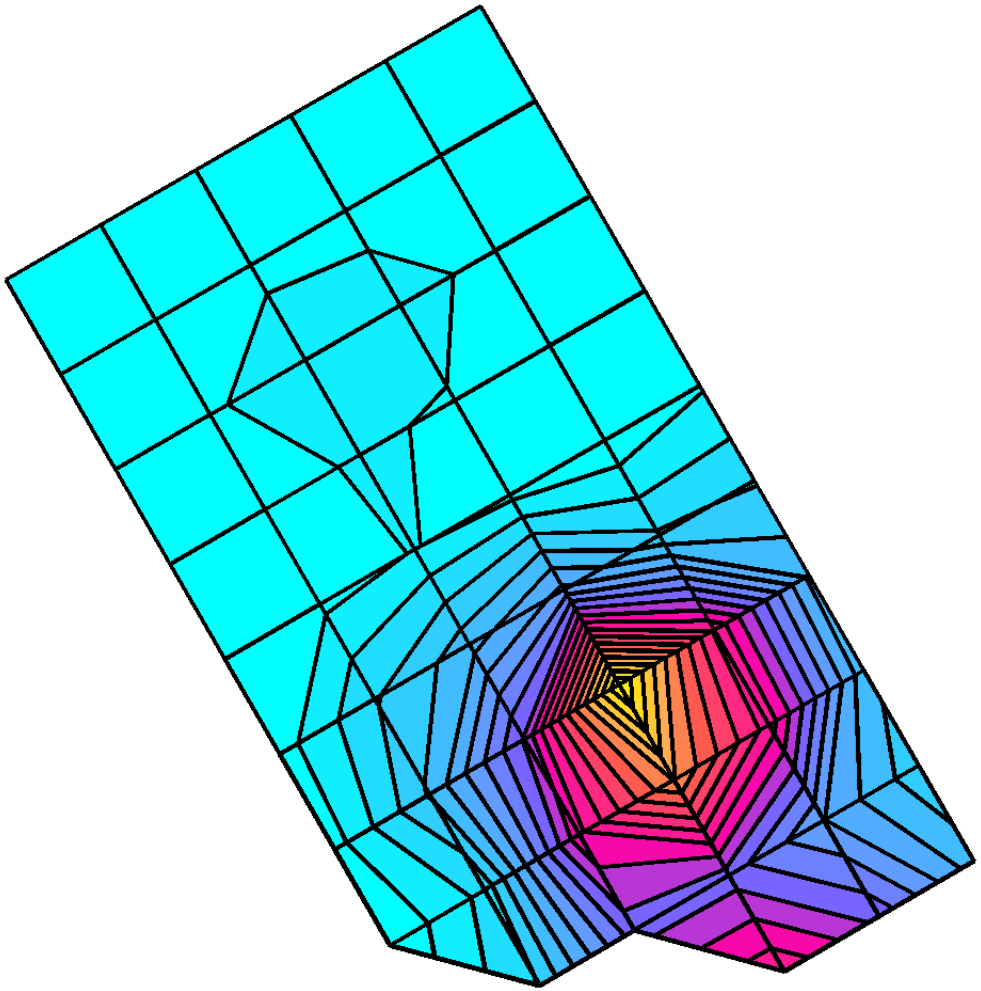
A8EE8925

Ch# 600 / Pwr Step:ALWAYS UP
Antenna Position: EXT
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.443 mW/g, SAR (10g): 0.252 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.8 (9.6, 10.3) [mm]
Powerdrift: -0.39 dB



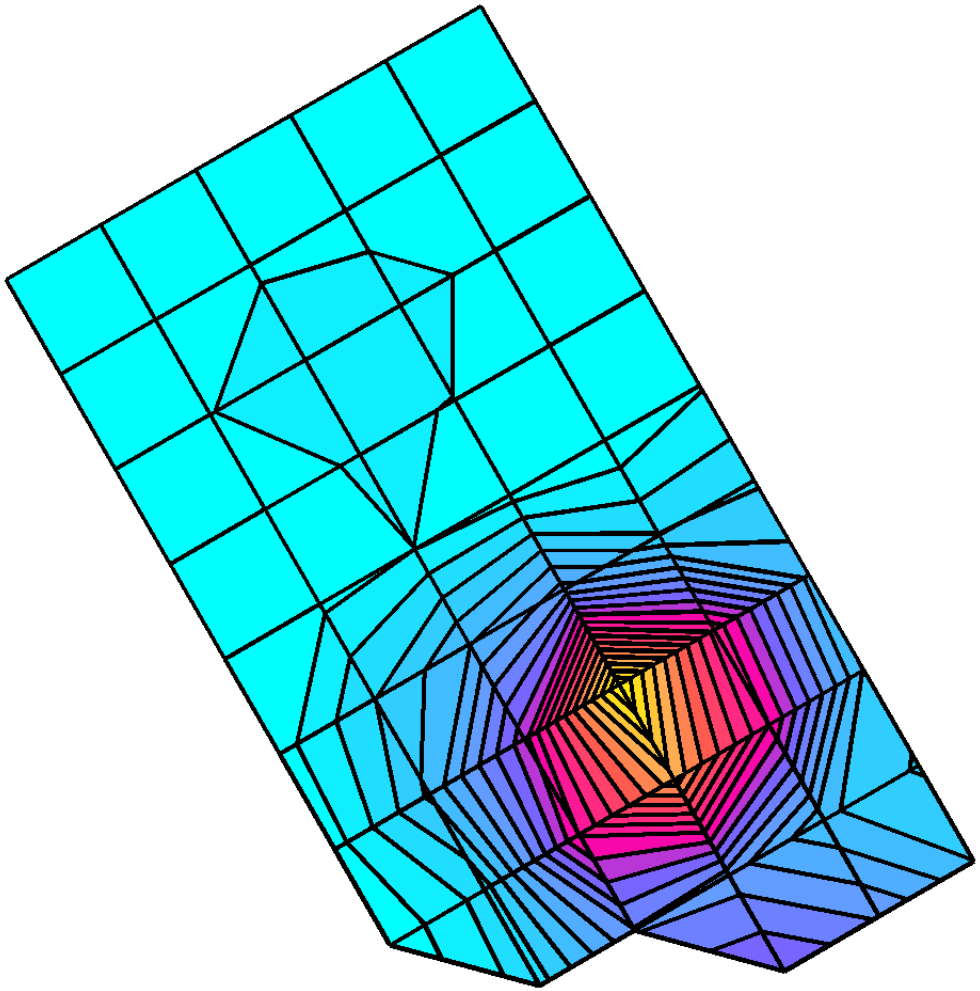
A8EE8925

Ch# 25 / Pwr Step:ALWAYS UP
Antenna Position: RET
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 1851 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.17 mW/g, SAR (10g): 0.648 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 10.8 (10.6, 11.1) [mm]
Powerdrift: 0.24 dB



A8EE8925

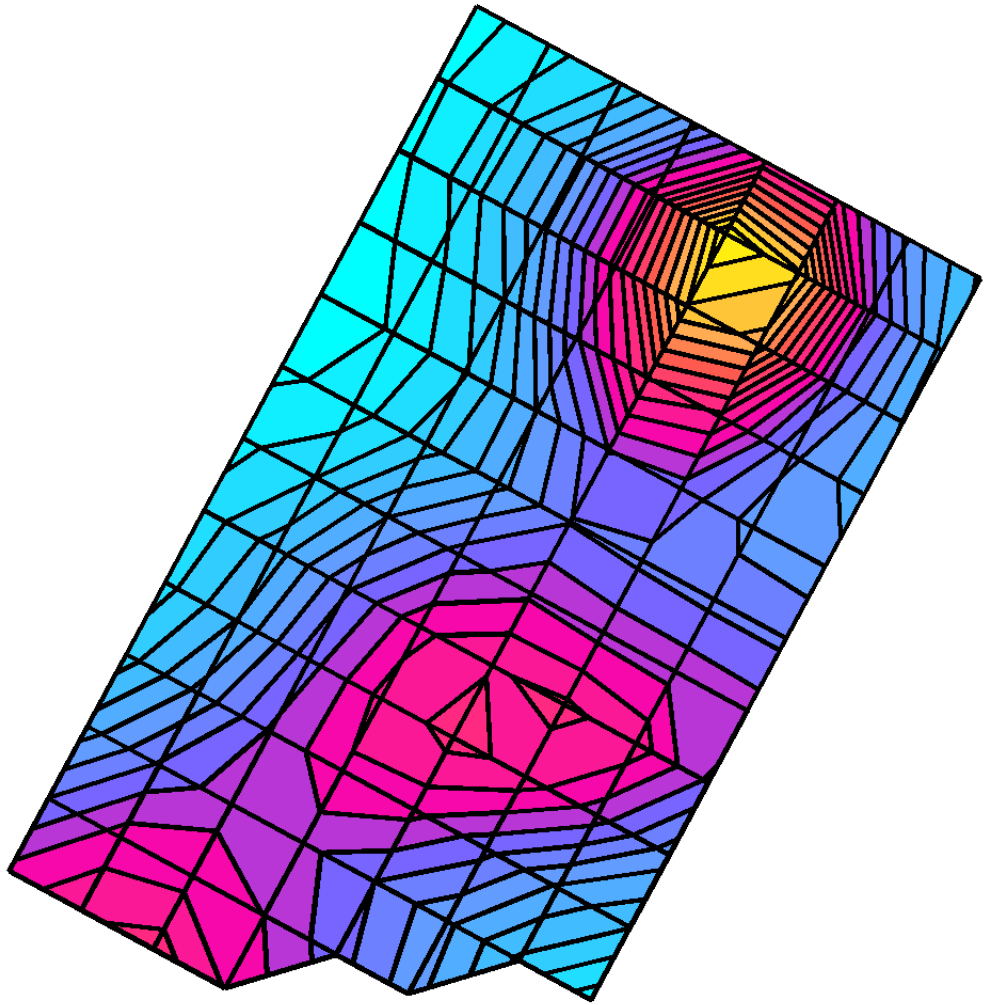
Ch# 1175 / Pwr Step:ALWAYS UP
Antenna Position: RET
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 1910 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.12 mW/g, SAR (10g): 0.609 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 10.0 (9.9, 10.1) [mm]
Powerdrift: -0.09 dB



05/19/04 15:35

A8EE8925

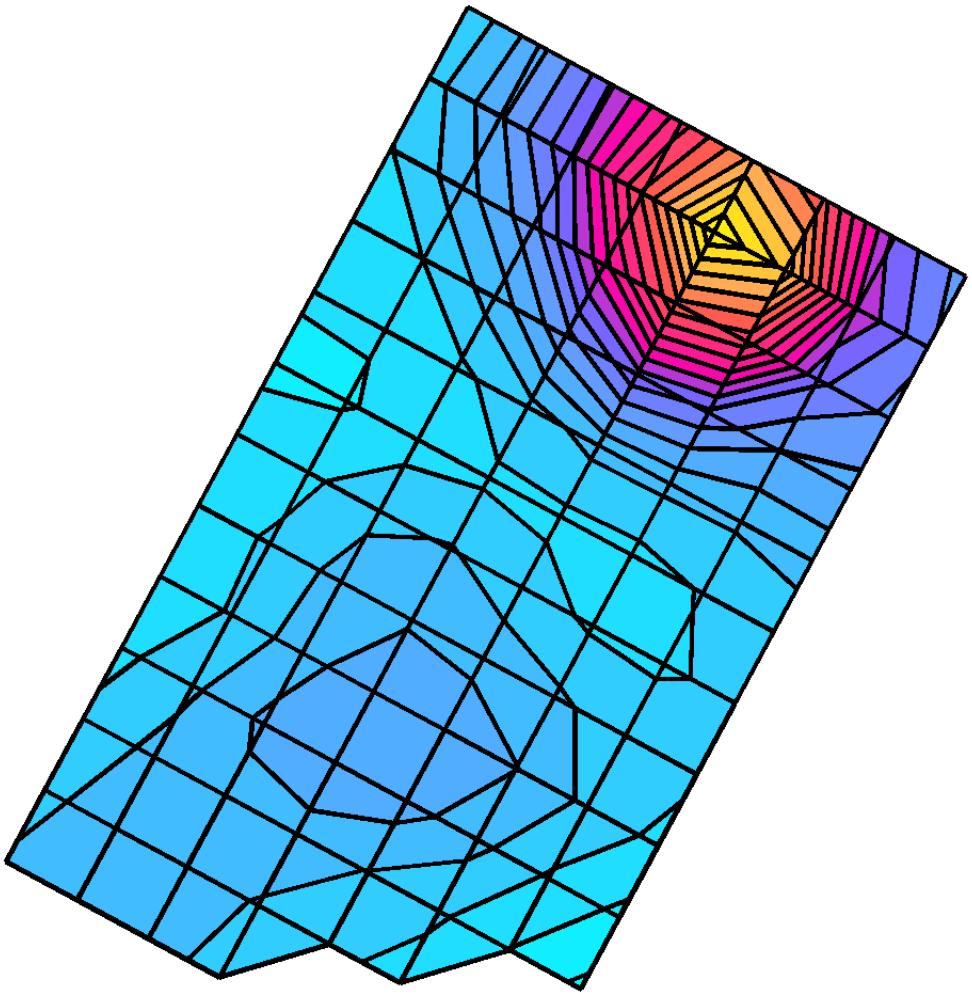
Ch#600/ Pwr Step:ALWAYS UP
Antenna PositionRET
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.230 mW/g, SAR (10g): 0.132 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 10.8 (10.3, 11.5) [mm]
Powerdrift: -0.40 dB



05/19/04 14:52

A8EE8925

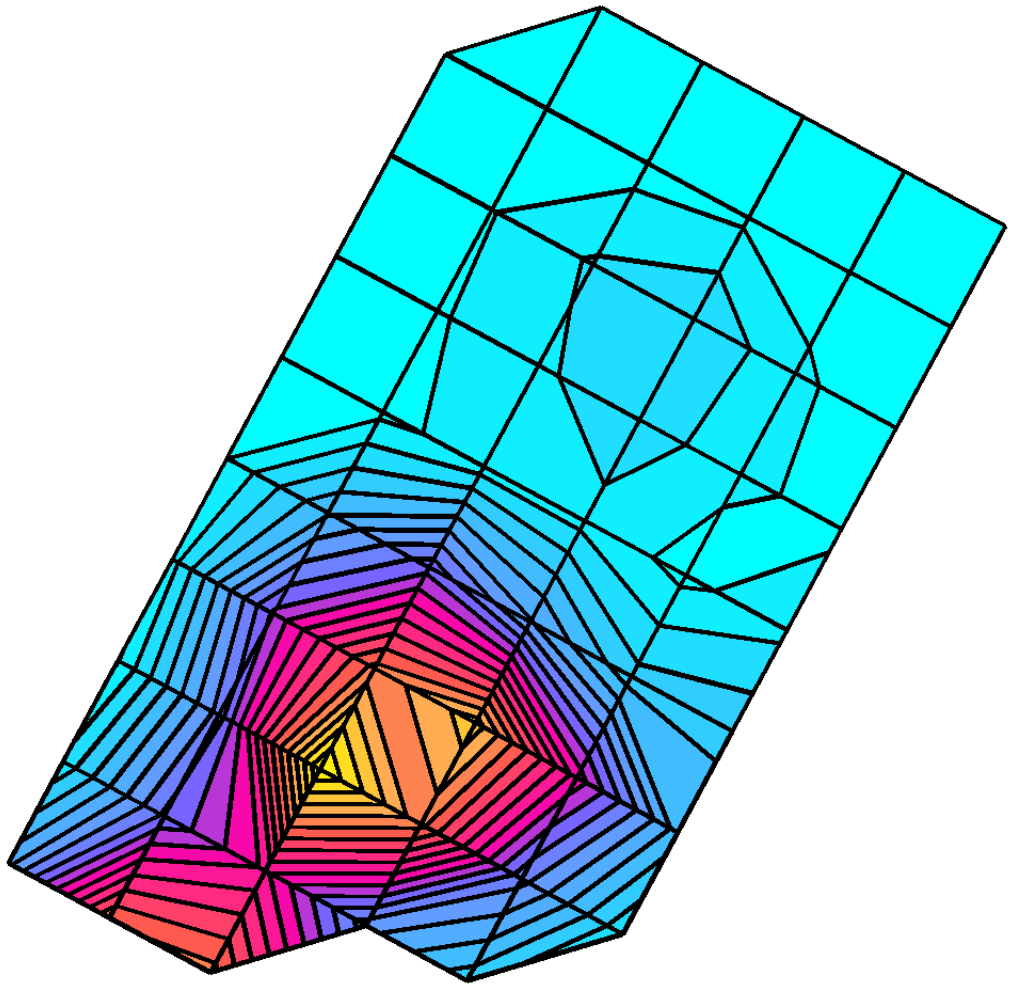
Ch#600/ Pwr Step:ALWAYS UP
Antenna Position:EXT
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated):TILTED
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.177 mW/g, SAR (10g): 0.103 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 11.0 (10.9, 11.1) [mm]
Powerdrift: -0.17 dB



05/19/04 09:25

A8EE8925

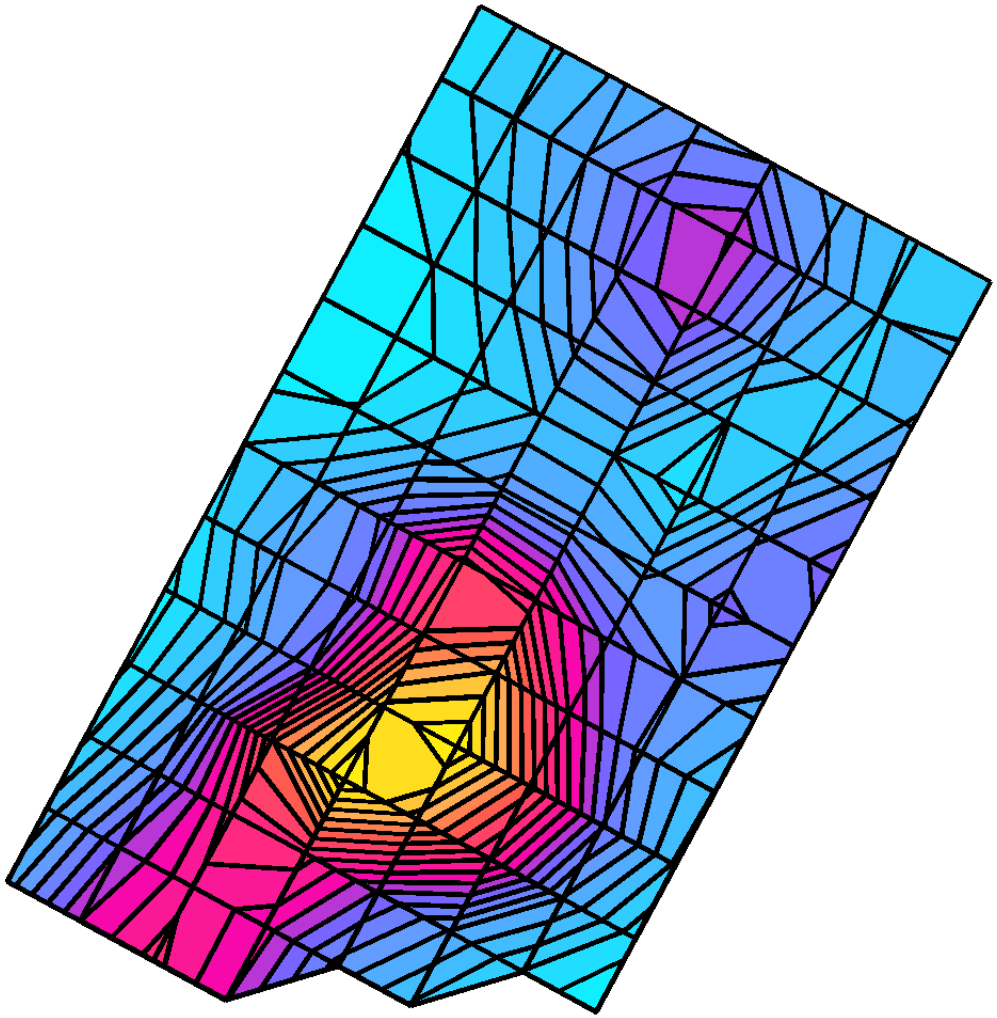
Ch#600 / Pwr Step:ALWAYS UP
Antenna Position: RET
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.08 mW/g, SAR (10g): 0.591 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.4 (8.7, 10.5) [mm]
Powerdrift: -0.13 dB



05/19/04 14:08

A8EE8925

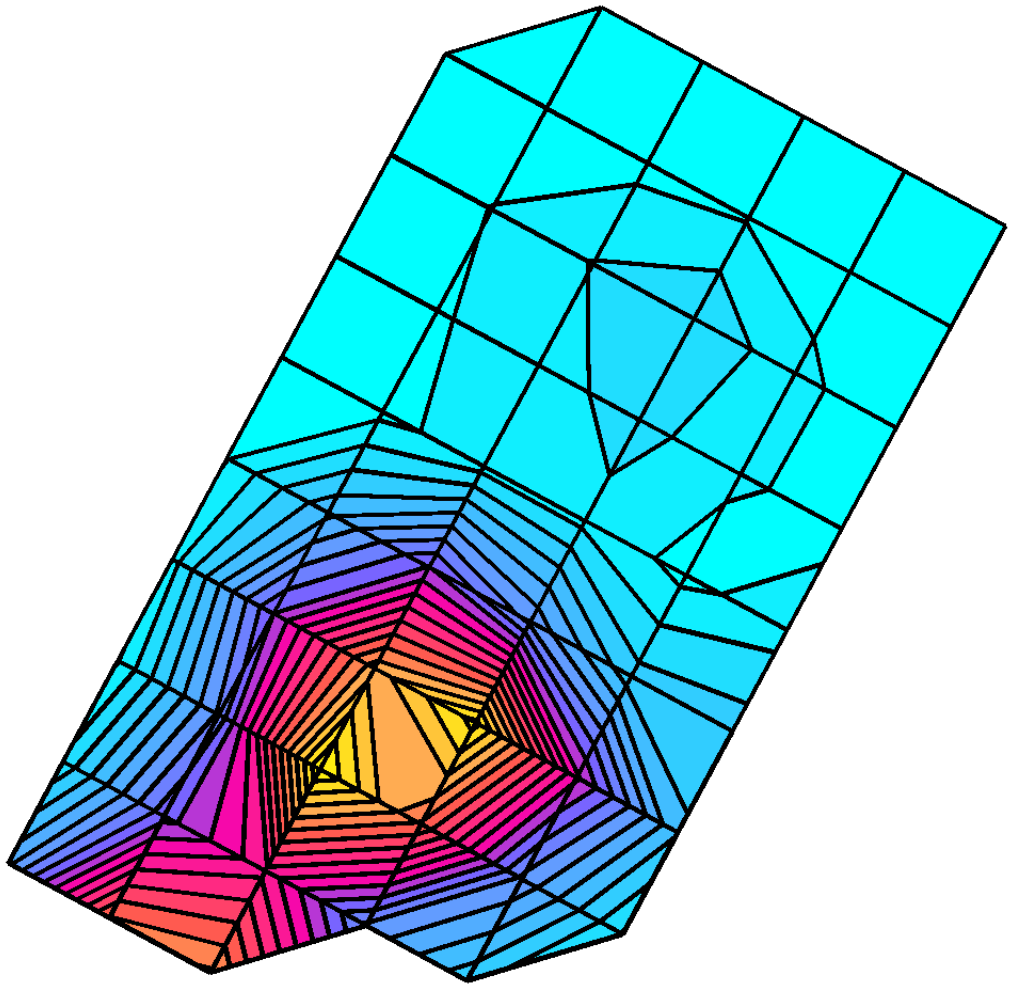
Ch#600/ Pwr Step:ALWAYS UP
Antenna Position:EXT
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.307 mW/g, SAR (10g): 0.168 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 9.3 (8.9, 10.1) [mm]
Powerdrift: -0.13 dB



05/19/04 10:25

A8EE8925

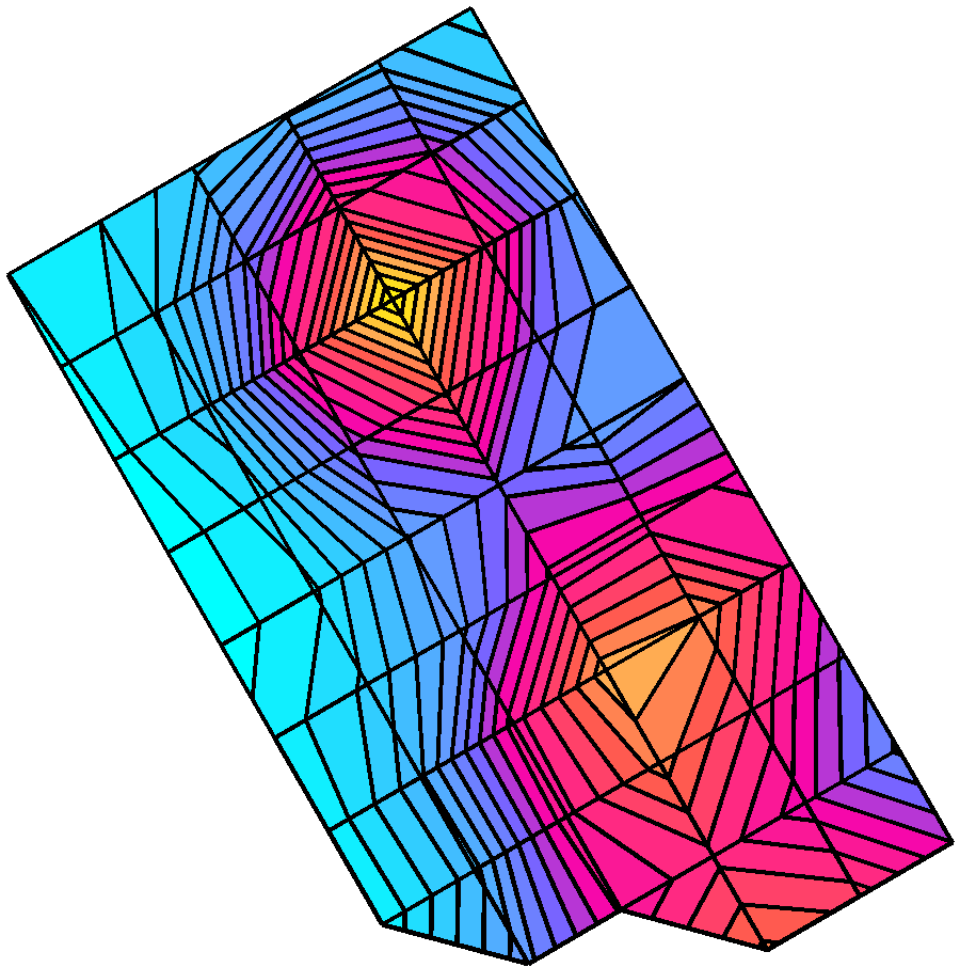
Ch#25/ Pwr Step:ALWAYS UP Antenna Position:RET
Type of Modulation:1900 CDMA Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1851 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 1.12 mW/g, SAR (10g): 0.617 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.9 (9.8, 10.0) [mm]
Powerdrift: 0.26 dB



05/19/04 19:20

A8EE8925

Ch# 600 / Pwr Step:ALWAYS UP
Antenna Position: RET
Type of Modulation:1900 CDMA
Battery Model #: SNN5723A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: NONE
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.45 mho/m ε_r = 38.1 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.150 mW/g, SAR (10g): 0.0881 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 11.5 (11.4, 11.7) [mm]
Powerdrift: -0.11 dB



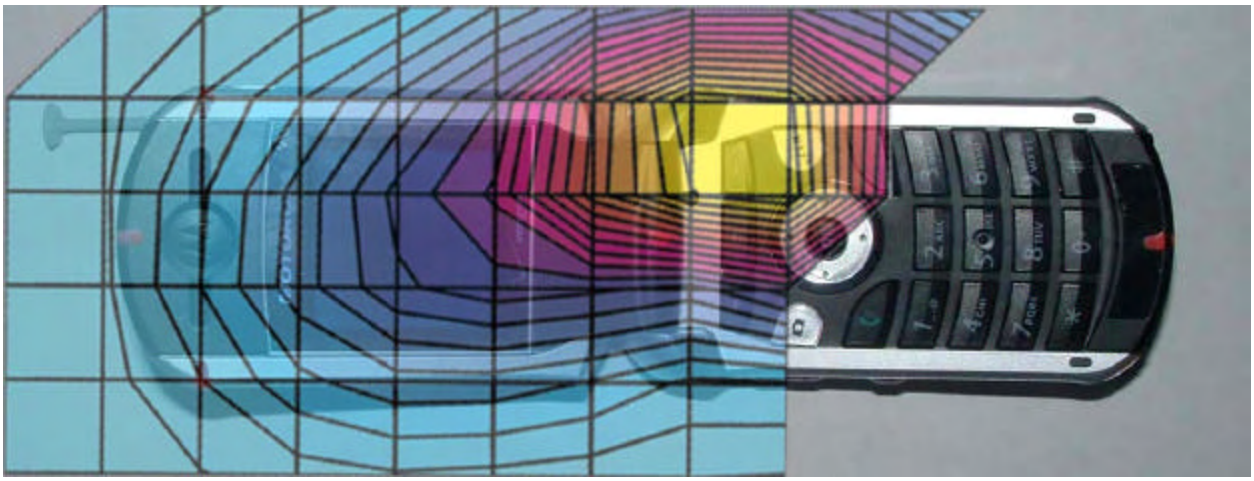


Figure 1.Typical 800MHz Head Adjacent Contour Overlaid on Phone with Antenna Extended (Cheek Touch)

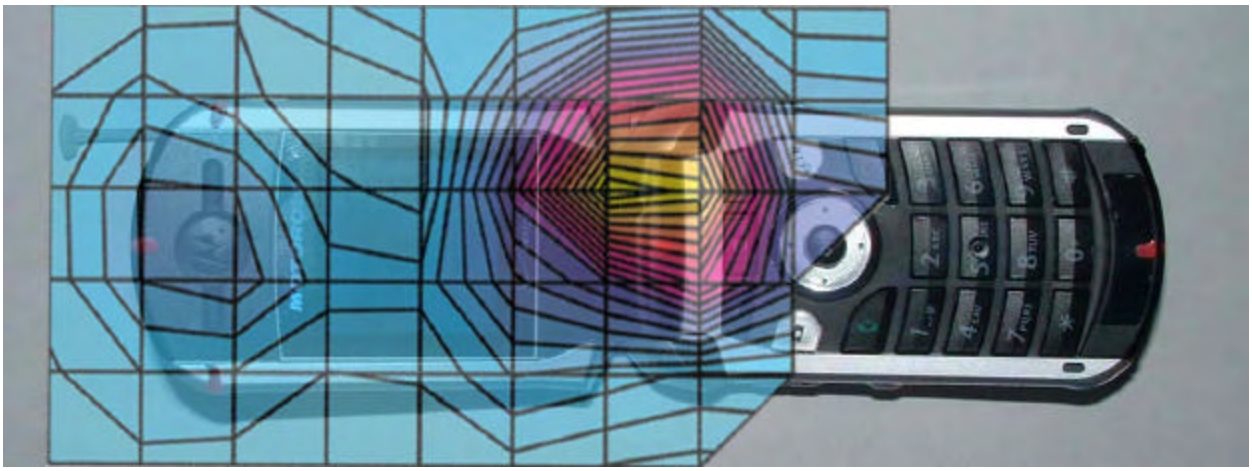


Figure 2.Typical 1900MHz Head Adjacent Contour Overlaid on Phone with Antenna Extended (Cheek Touch)

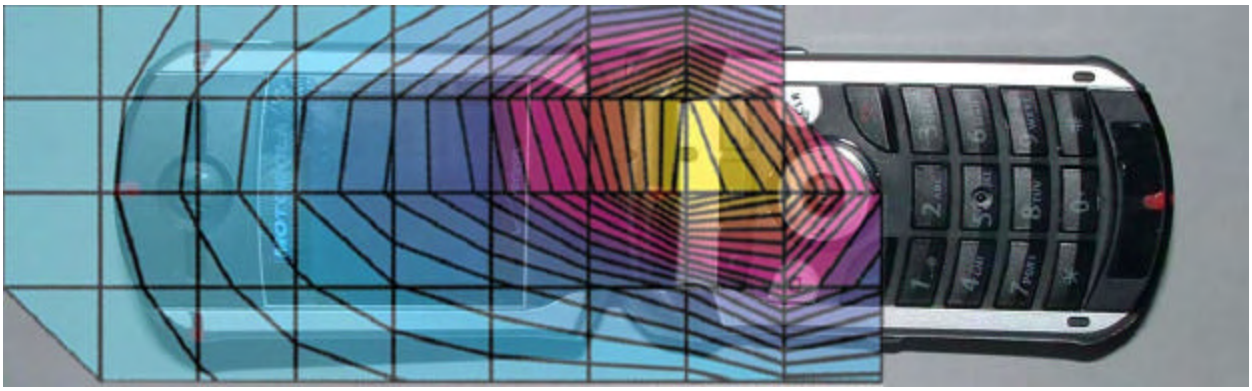


Figure 3.Typical 800MHz Head Adjacent Contour Overlaid on Phone with Antenna Retracted (Cheek Touch)

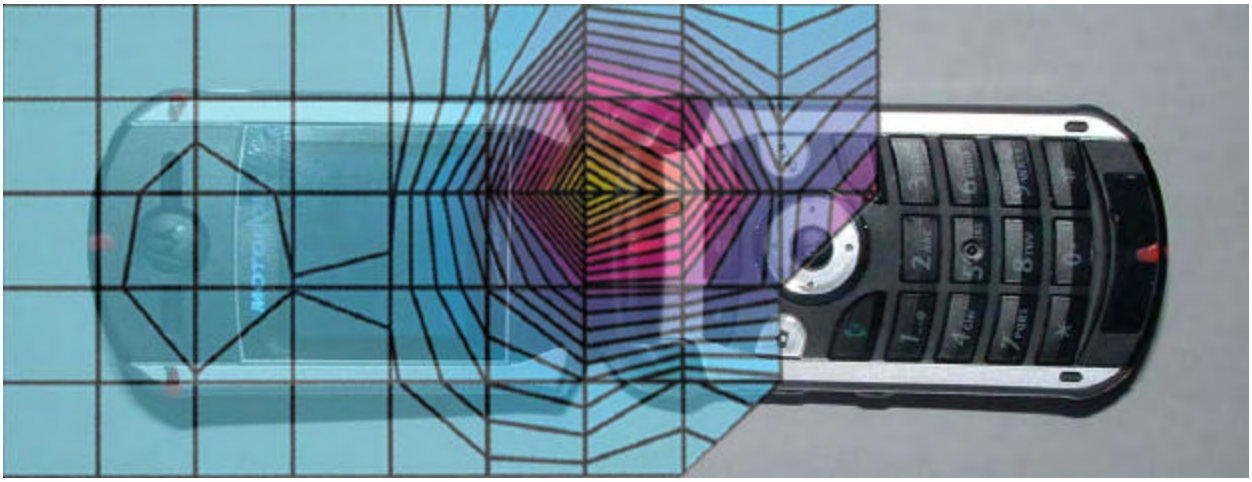


Figure 4.Typical 1900MHz Head Adjacent Contour Overlaid on Phone with Antenna Retracted (Cheek Touch)

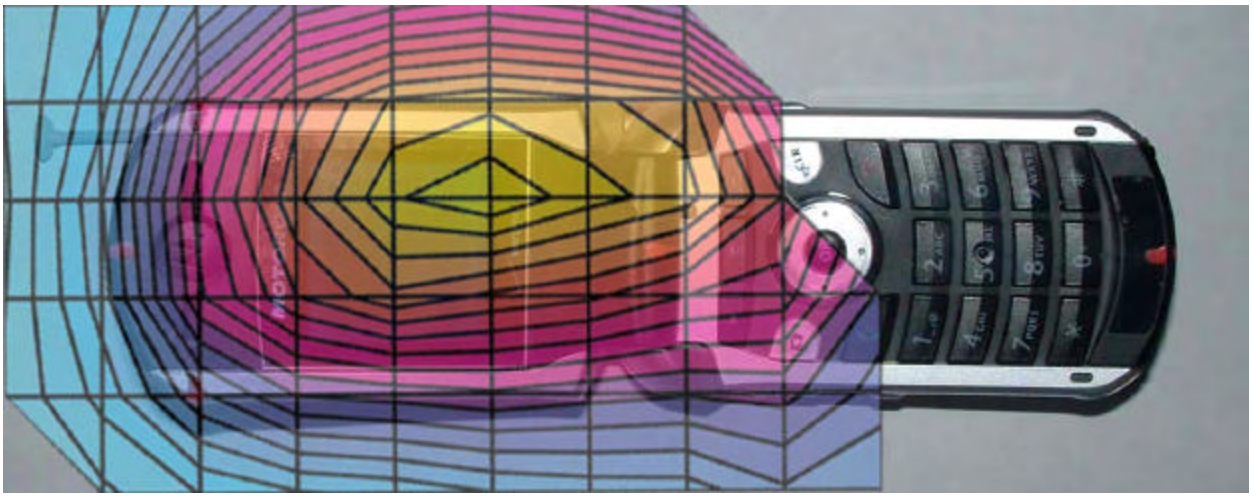


Figure 5.Typical 800MHz Head Adjacent Contour Overlaid on Phone with Antenna Extended (15 ° Tilt)

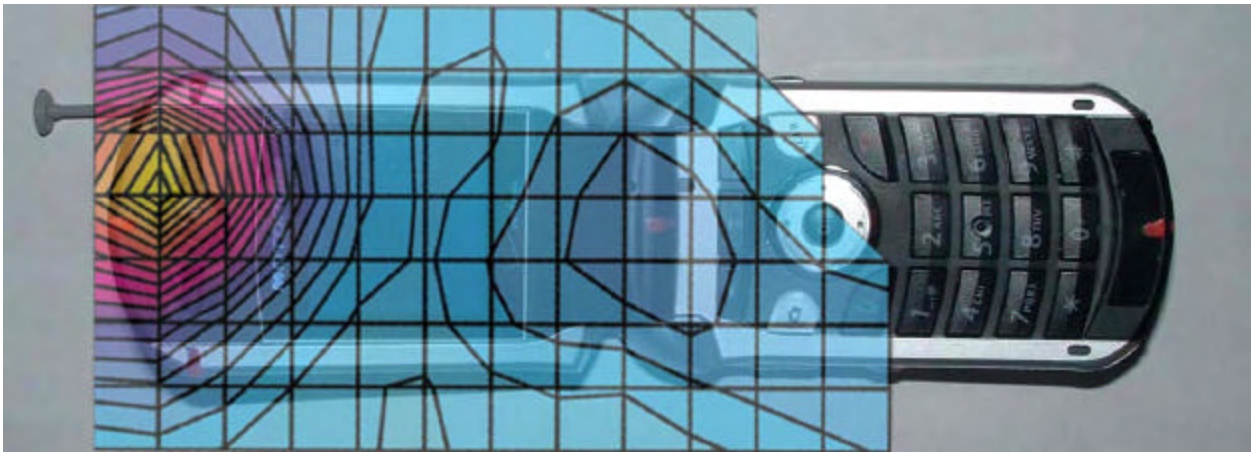


Figure 6.Typical 1900MHz Head Adjacent Contour Overlaid on Phone with Antenna Extended (15 ° Tilt)

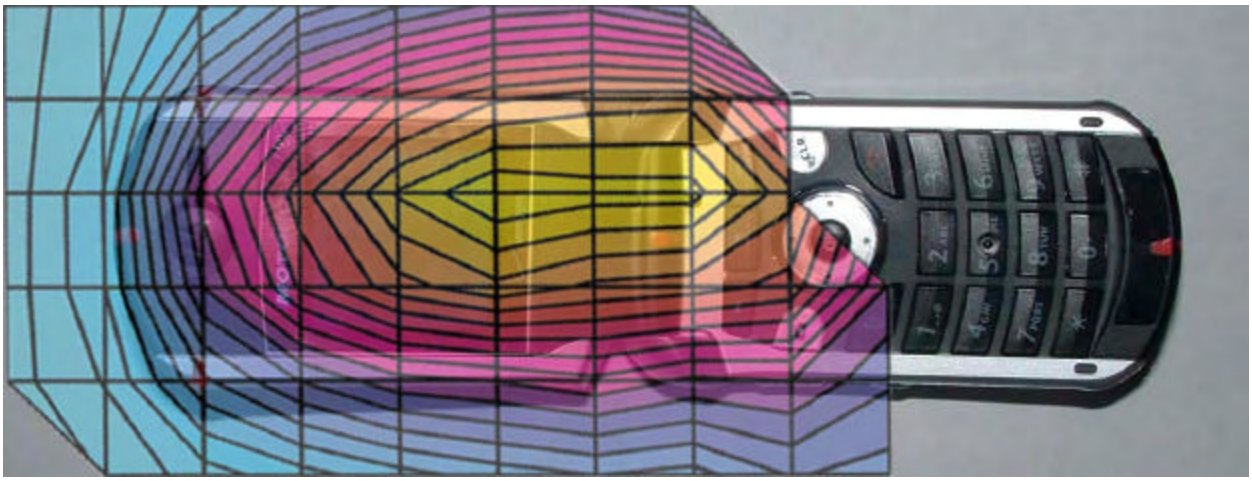


Figure 7.Typical 800MHz Head Adjacent Contour Overlaid on Phone with Antenna Retracted (15 ° Tilt)

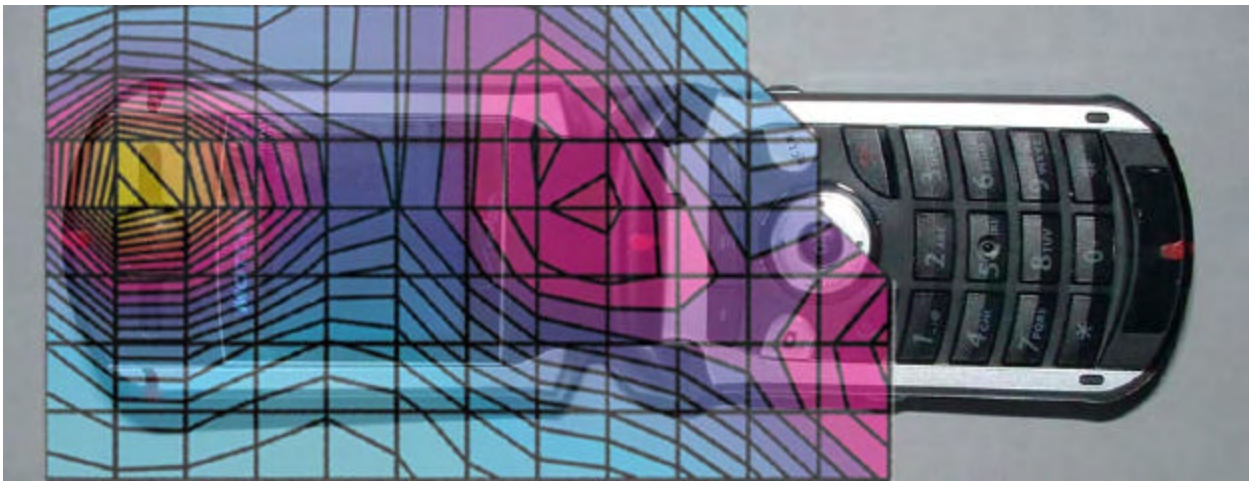


Figure 8.Typical 1900MHz Head Adjacent Contour Overlaid on Phone with Antenna Retracted (15 ° Tilt)