MOTOROLA

Exhibit 11: SAR Test Report IHDT56EF1

Date of test: 04/24/2004 to 05/10/2004
Date of Report: 05/26/2004

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 perform 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 IHDT56EF1 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)

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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 IHDT56EF1). 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	IHDT56EF1					
Serial number	338CA46B					
Mode(s) of Operation	800 CDMA	GSM 900	GPRS 900	GSM 1800	GPRS 1800	1900 CDMA
Modulation Mode(s)	CDMA	GSM	GSM	GSM	GSM	CDMA
Maximum Output Power Setting	25.00dBm	33.00dBm	33.00dBm	31.00dBm	31.00dBm	25.00dBm
Duty Cycle	1:1	1:8	1:8	1:8	1:8	1:1
Transmitting Frequency Rang(s)	824-849MHz	880.2-914.8MHz	880.2-914.8MHz	1710.2-1784.8 MHz	1710.2-1784.8 MHz	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
Power Meter E4419B	GB39511090	4/5/2005
Power Sensor #1 - E9301A	US39210916	8/5/2004
Power Sensor #2 - E9301A	US39211008	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,** 04/24/04	41.50	0.91	18.1
		Measured, 04/25/04	41.50	0.91	18.8
		Measured, 04/26/04	40.50	0.89	18.8
		Recommended Limits	41.5 ±5%	0.90 ±5%	18-25
	Body	**Measured,** 04/26/04	55.40	0.98	19.3
		Measured, 04/27/04	54.50	0.98	18.7
		Measured, 05/10/04	53.80	0.98	19.0
		Recommended Limits	55.2 ±5%	0.97 ±5%	18-25
1880	Head	**Measured,** 04/27/04	38.60	1.47	18.1
		Recommended Limits	40.0 ±5%	1.40 ±5%	18-25
	Body	**Measured,** 04/28/04	50.90	1.58	19.1
		Measured, 05/10/04	51.30	1.59	18.9
		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,** 04/24/04	9.70	41.50	0.91	20.0	18.3
	Measured, 04/25/04	9.75	41.50	0.91	20.0	19.1
	Measured, 04/26/04	9.50	40.50	0.89	20.0	18.1
	Measured, 04/27/04	9.60	40.90	0.90	21.0	18.9
	Measured, 05/10/04	9.85	42.40	0.92	20.0	19.1
	Recommended Limits	10.0	41.5 ±5%	0.90 ±5%	18-25	18-25
1800	**Measured,** 04/27/04	39.90	39.00	1.38	21.0	18.7
	Measured, 04/28/04	41.30	38.9	1.38	20.0	19.1
	Measured, 05/10/04	40.95	38.80	1.37	20.0	19.1
	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 ES3DV63	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 IHDT56EF1) has the following battery options:

SNN5695A - 800mAH Battery
SNN5615A - 1350mAH Battery

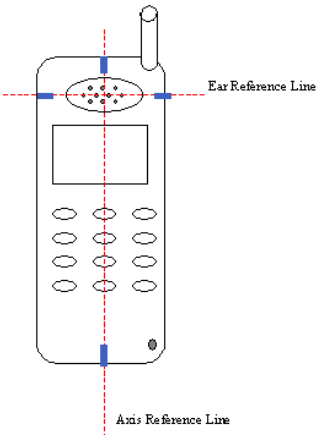
The SNN5695A battery was used to do most of the SAR testing. The phone was placed in the SAR measurement system with a fully charged battery. The configuration that resulted in the highest SAR values were tested using the other batteries listed above.

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 6 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 ES3DV63	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)
Digital 800MHz	Channel 1013	24.99	1.17	-0.31	1.26	18.1	**1.25**	**-0.29**	**1.34**	**19.0**
	Channel 384	24.93	1.05	-0.14	1.08	18.3	1.15	-0.40	1.26	19.0
	Channel 777	24.99	**1.21**	**-0.34**	**1.31**	**18.3**	1.20	-0.39	1.31	19.0
Digital 1900MHz	Channel 25	25.00								
	Channel 600	25.06	**0.388**	**0.22**	**0.39**	**19.0**	**0.792**	**0.03**	**0.79**	**19.0**
	Channel 1175	25.01								

Table 1: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 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)
Digital 800MHz	Channel 1013	24.99	**1.39**	**-0.33**	**1.50**	**18.0**	**1.43**	**-0.30**	**1.53**	**18.3**
	Channel 384	24.93	1.28	-0.31	1.37	18.0	1.23	-0.30	1.32	18.1
	Channel 777	24.99	1.25	-0.30	1.34	17.9	1.35	-0.41	1.48	18.0
Digital 1900MHz	Channel 25	25.00								
	Channel 600	25.06	**0.489**	**0.07**	**0.49**	**19.0**	**0.719**	**-0.14**	**0.74**	**19.0**
	Channel 1175	25.01								

Table 2: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 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)
Digital 800MHz	Channel 1013	24.99								
	Channel 384	24.93	**0.262**	**-0.12**	**0.27**	**18.1**	**0.316**	**-0.01**	**0.32**	**18.3**
	Channel 777	24.99								
Digital 1900MHz	Channel 25	25.00								
	Channel 600	25.06	**0.234**	**0.24**	**0.23**	**19.0**	**0.223**	**0.13**	**0.22**	**19.1**
	Channel 1175	25.01								

Table 3: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 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)
Digital 800MHz	Channel 1013	24.99								
	Channel 384	24.93	**0.273**	**0.03**	**0.27**	**18.7**	**0.313**	**0.13**	**0.31**	**18.7**
	Channel 777	24.99								
Digital 1900MHz	Channel 25	25.00								
	Channel 600	25.06	**0.215**	**0.00**	**0.22**	**17.8**	**0.177**	**-0.09**	**0.18**	**19.1**
	Channel 1175	25.01								

Table 4: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 at highest possible output power. Measured against the right head in the 15° Tilt Position.

f (MHz)	Description	Conducted Output Power (dBm)	**Cheek / Touch Position with SNN5615A Battery**							
			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)
Digital 800MHz **Right Head**	Channel 1013	24.99	1.20	-0.33	1.29	18.7	1.07	-0.30	1.15	18.8
	Channel 384	24.93	1.06	-029	1.13	18.7	**1.17**	**-0.33**	**1.26**	**18.7**
	Channel 777	24.99	**1.21**	**-0.33**	**1.31**	**18.7**	1.03	-0.35	1.12	18.7
Digital 1900MHz **Left Head**	Channel 25	25.00					0.799	0.09	0.80	18.2
	Channel 600	25.06	**0.355**	**0.18**	**0.36**	**18.1**	**0.914**	**0.13**	**0.91**	**18.0**
	Channel 1175	25.01					0.746	0.02	0.75	18.2

Table 5: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 at highest possible output power. Measured against the head in the Cheek/Touch Position.

f (MHz)	Description	Conducted Output Power (dBm)	Cheek / Touch Position with SYN9766 Case							
			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)
Digital 800MHz **Right Head**	Channel 1013	24.99	0.982	-0.18	1.02	18.8	**1.37**	**-0.36**	**1.49**	**19.0**
	Channel 384	24.93	1.08	-0.30	1.16	18.8	1.02	-0.23	1.08	19.0
	Channel 777	24.99	**1.24**	**-0.26**	**1.32**	**18.8**	0.987	-0.33	1.06	19.0
Digital 1900MHz **Left Head**	Channel 25	25.00								
	Channel 600	25.06	**0.392**	**0.03**	**0.39**	**18.1**	**0.689**	**-0.10**	**0.71**	**18.1**
	Channel 1175	25.01								

Table 6: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 at highest possible output power. Measured against the head in the Cheek/Touch Position.

6.2 Body Worn Test Results

The SAR results shown in tables 7 through 11 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. The functional accessories were divided into two categories, the ones with metal components and the ones with non-metal components. For non-metallic component accessories', testing was performed on the accessory that displayed the closest proximity to the flat phantom. Each metallic component accessory, if any, was checked for uniqueness of metal component so that each is tested with the device. If multiple accessories shared an identical metal component, only the accessory that dictates the closest spacing to the body was tested. The cellular phone was tested with a headset connected to the device for all body-worn SAR measurements.

There are three Body-Worn Accessories available for this phone, one of which uses 2 different belt clips:
Plastic Holster model #SYN0912A
Leather Pouch model #CHYN4459A
Leather Case model #SYN9766A using
Wishbone Belt Clip model #SYN8631A
Universal Belt Clip model #SYN8763B

All accessories were used for the 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 ES3DV63	SN3037	900	5.9	8 of 10
		1800	4.7	8 of 10

f (MHz)	Description	Conducted Output Power (dBm)	Body Worn with SYN9766A Case and SYN8631A Clip							
			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)
Digital 800MHz	Channel 1013	24.99								
	Channel 384	24.93	**0.396**	**0.12**	**0.40**	**19.3**	**0.369**	**0.09**	**0.37**	**19.3**
	Channel 777	24.99								
Digital 1900MHz	Channel 25	25.00								
	Channel 600	25.06	**0.689**	**-0.04**	**0.70**	**19.0**	**0.694**	**-0.07**	**0.71**	**19.0**
	Channel 1175	25.01								

Table 7: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 at highest possible output power. Measured against the body.

f (MHz)	Description	Conducted Output Power (dBm)	Body Worn with SYN9766A Case and SYN8763A Clip							
			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)
Digital 800MHz	Channel 1013	24.99								
	Channel 384	24.93	**0.239**	**0.07**	**0.24**	**19.0**	**0.22**	**0.11**	**0.22**	**19.0**
	Channel 777	24.99								
Digital 1900MHz	Channel 25	25.00					1.29	-0.15	1.34	19.8
	Channel 600	25.06	**0.393**	**-0.07**	**0.40**	**19.8**	**1.40**	**-0.21**	**1.47**	**19.8**
	Channel 1175	25.01					0.964	-0.23	1.02	19.9

Table 8: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 at highest possible output power. Measured against the body.

f (MHz)	Description	Conducted Output Power (dBm)	Body Worn with CHYN4459 Pouch							
			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)
Digital 800MHz	Channel 1013	24.99	0.864	0.19	0.86	19.3	0.651	0.06	0.65	19.3
	Channel 384	24.93	0.833	0.05	0.83	19.3	0.811	0.03	0.81	19.3
	Channel 777	24.99	**0.961**	**-0.02**	**0.97**	**19.3**	**0.827**	**-0.14**	**0.85**	**19.3**
Digital 1900MHz	Channel 25	25.00	**1.01**	**-0.04**	**1.02**	**18.6**	**1.05**	**-0.06**	**1.06**	**19.9**
	Channel 600	25.06	0.983	0.00	0.98	19.9	0.98	-0.13	1.01	19.9
	Channel 1175	25.01	0.984	-0.06	1.00	18.3	0.791	-0.15	0.82	19.9

Table 9: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 at highest possible output power. Measured against the body.

f (MHz)	Description	Conducted Output Power (dBm)	Body Worn with CHYN4459 Pouch and SNN5615A Battery							
			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)
Digital 800MHz	Channel 1013	24.99								
	Channel 384	24.93	**0.701**	**-0.01**	**0.70**	**19.0**	**0.614**	**-0.02**	**0.62**	**19.0**
	Channel 777	24.99								
f (MHz)	Description	Conducted Output Power (dBm)	Body Worn with SYN9766A Case, SYN8763A Clip and SNN5615A Battery							
			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)
Digital 1900MHz	Channel 25	25.00					**1.34**	**-0.05**	**1.36**	**18.3**
	Channel 600	25.06	**0.29**	**-0.02**	**0.29**	**18.2**	1.16	-0.07	1.18	18.3
	Channel 1175	25.01					0.839	-0.11	0.86	18.1

Table 10: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 at highest possible output power. Measured against the body.

f (MHz)	Description	Conducted Output Power (dBm)	Body Worn with SYN0912A Holster							
			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)
Digital 800MHz	Channel 1013	24.99								
	Channel 384	24.93	**0.594**	**0.09**	**0.61**	**18.7**	**0.609**	**0.09**	**0.61**	**18.7**
	Channel 777	24.99								
Digital 1900MHz	Channel 25	25.00	1.00	0.02	1.00	18.3	**1.18**	**-0.04**	**1.19**	**18.3**
	Channel 600	25.06	**1.09**	**0.12**	**1.09**	**18.2**	1.16	-0.10	1.19	18.3
	Channel 1175	25.01	1.07	-0.08	1.09	18.3	0.92	-0.26	0.98	18.3

Table 11: SAR measurement results for the portable cellular telephone FCC ID IHDT56EF1 at highest possible output power. Measured against the body.

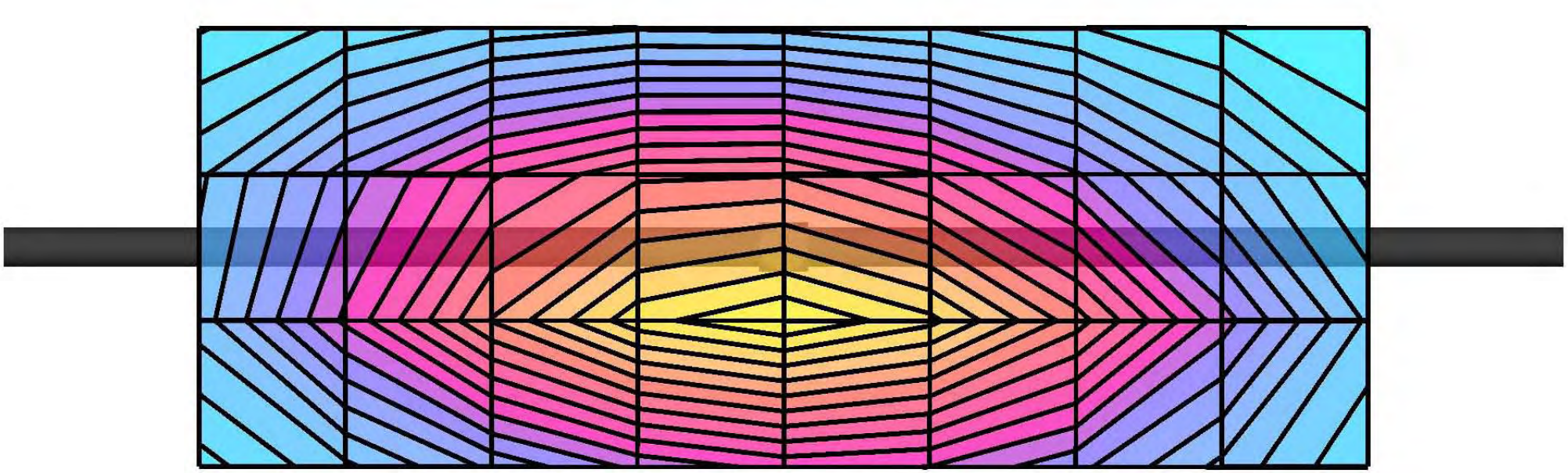
Appendix 1

SAR distribution comparison for the system accuracy verification

04/24/04

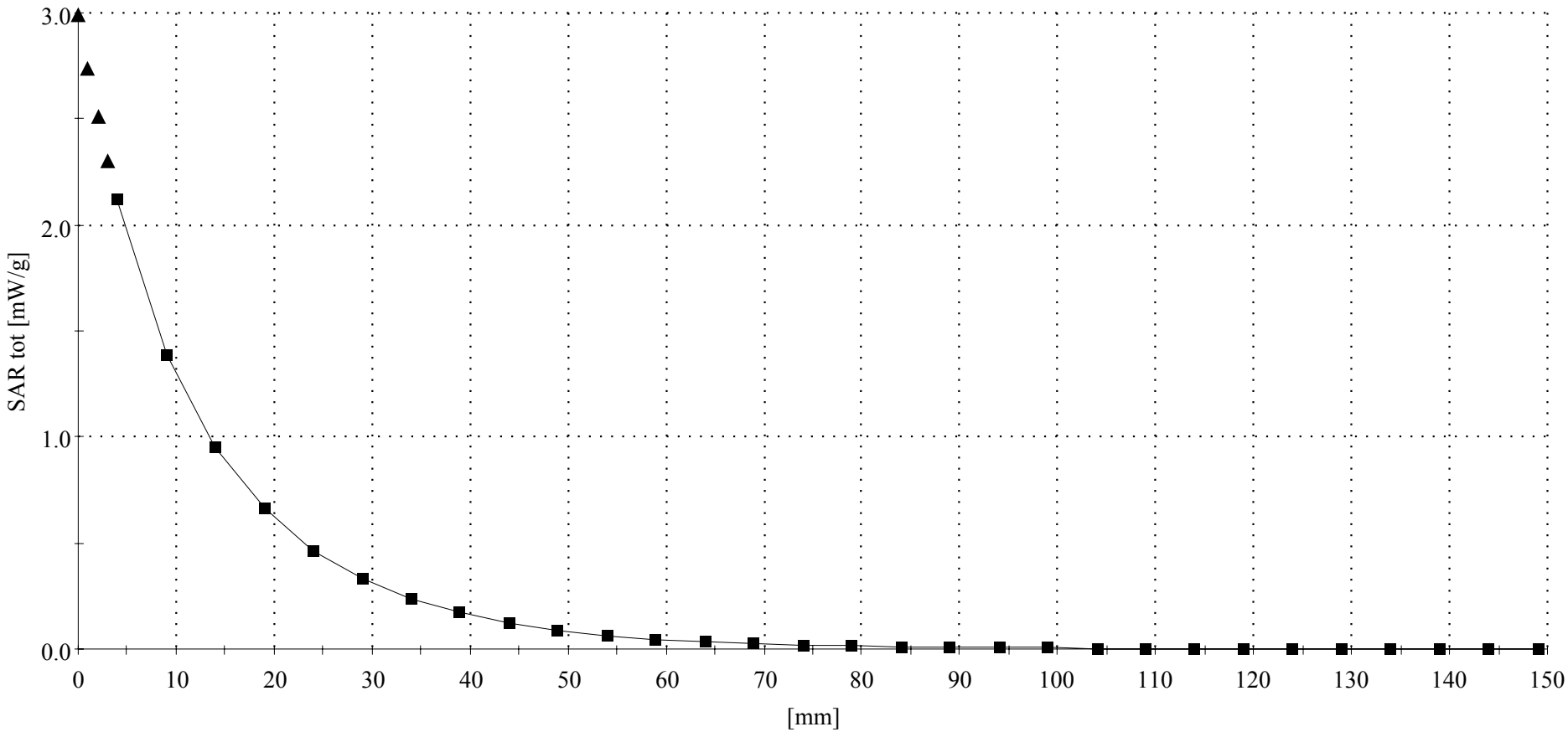
Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn# 425tr
PM1 Power =200mW
Sim.Temp@meas=18.3 Sim.Temp@SPC = 18.3 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cubes (2): SAR (1g): 1.94 mW/g ± 0.02 dB, SAR (10g): 1.26 mW/g ± 0.02 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 12.6 (11.8, 13.6) [mm]
Powerdrift: -0.03 dB



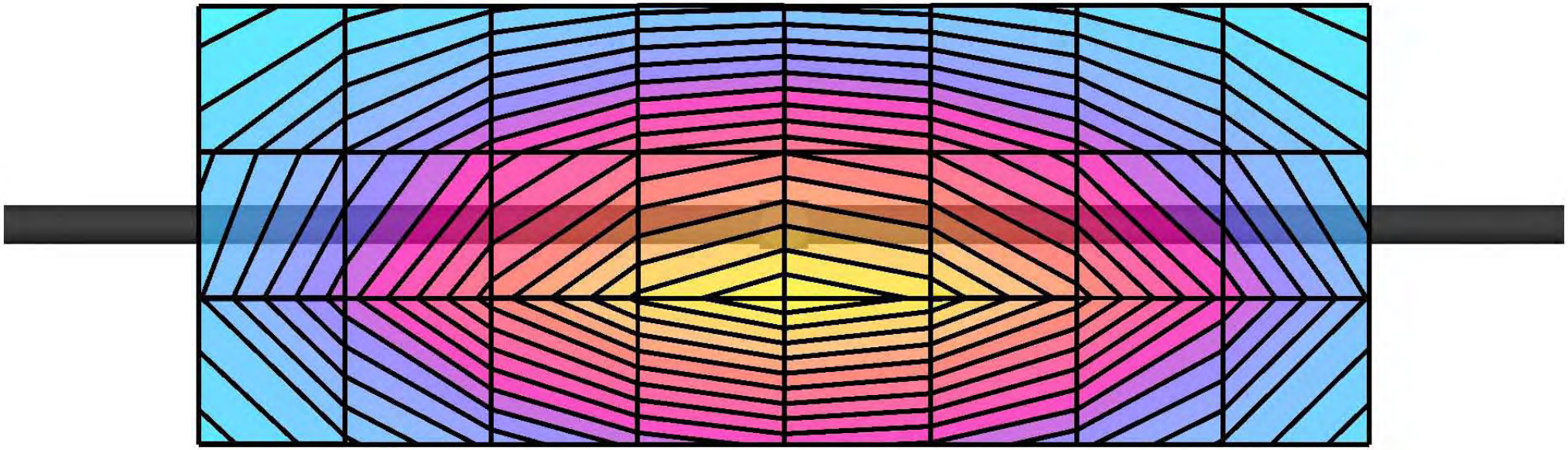
Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn# 425tr
PM1 Power =200mW
Sim.Temp@meas=18.3 Sim.Temp@SPC = 18.3 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 12.5 (11.8, 13.5) [mm]



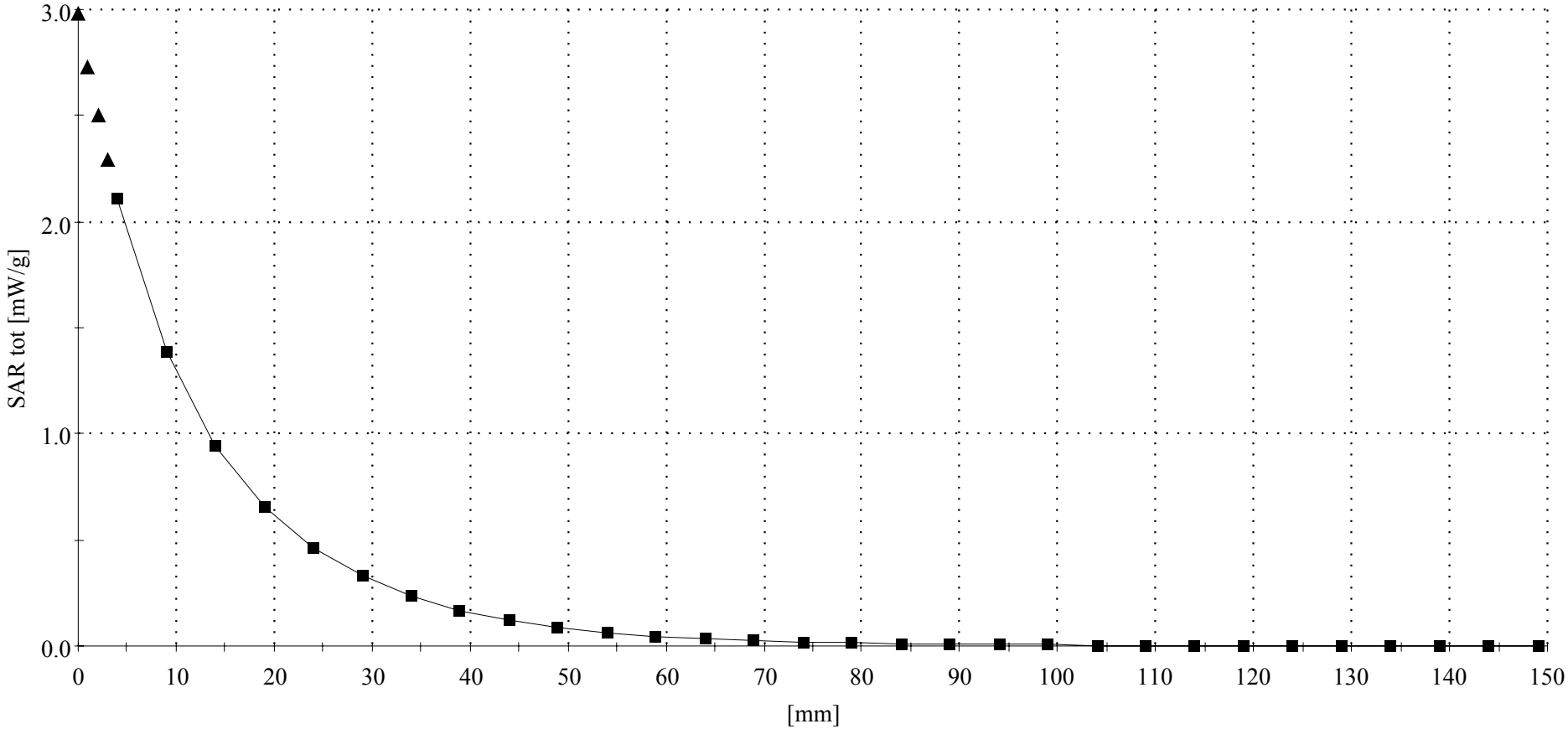
Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn# 425tr
PM1 Power = 199mW
Sim.Temp@meas=19.1C Sim.Temp@SPC = 19.1C Room Temp @ SPC = 20C
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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cubes (2): SAR (1g): 1.94 mW/g ± 0.03 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: 12.5 (11.7, 13.6) [mm]
Powerdrift: -0.01 dB



Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn# 425tr
PM1 Power = 199mW
Sim.Temp@meas=19.1C Sim.Temp@SPC = 19.1C Room Temp @ SPC = 20C
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: σ = 0.91 mho/m ε_r = 41.5 ρ = 1.00 g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 12.5 (11.7, 13.5) [mm]



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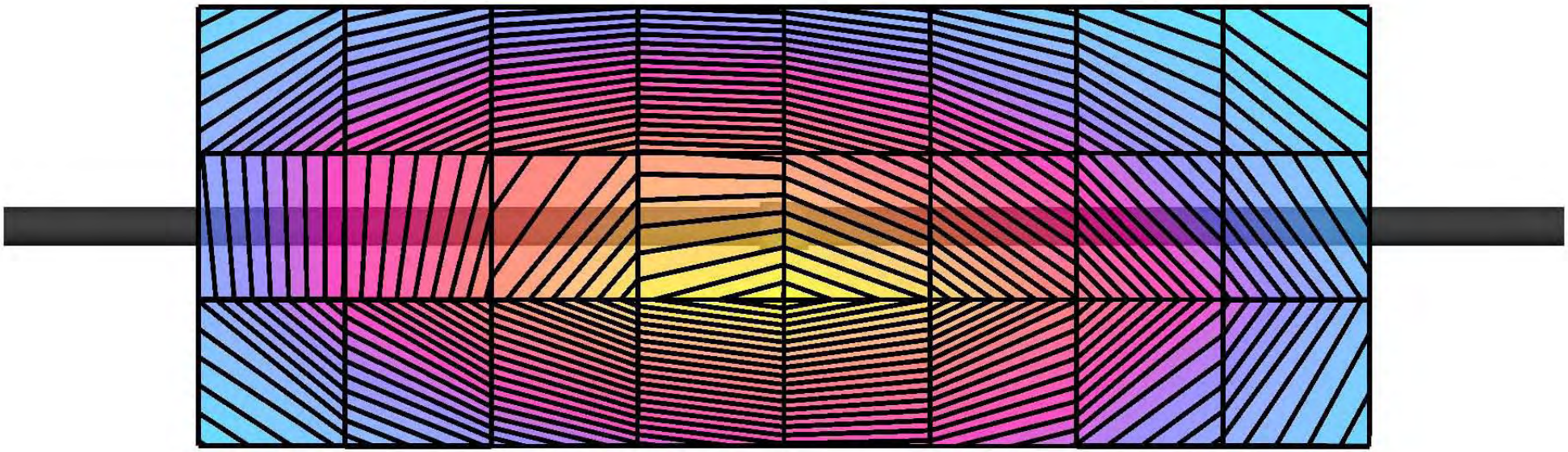
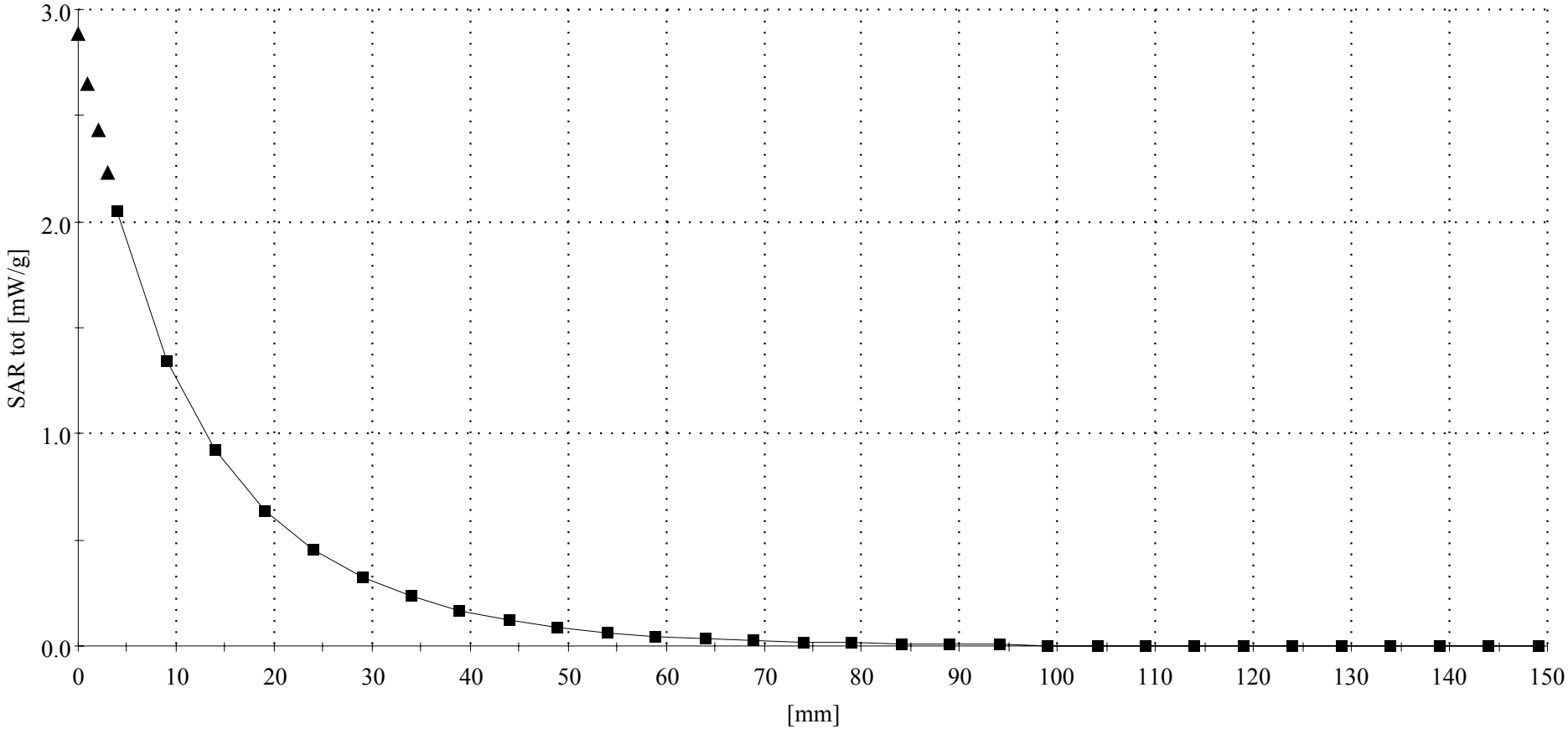
Dipole 835 MHz

835MHz System Performance Check / Dipole Sn# 425tr
PM1 Power = 200mW
Sim.Temp@meas=18.9c Sim.Temp@SPC =18.1c Room Temp @ SPC = 20c
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: $\sigma = 0.89$ mho/m $\varepsilon_r = 40.5$ $\rho = 1.00$ g/cm^3
Cubes (2): SAR (1g): 1.90 mW/g ± 0.03 dB, SAR (10g): 1.23 mW/g ± 0.02 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 12.6 (11.8, 13.6) [mm]
Powerdrift: 0.03 dB



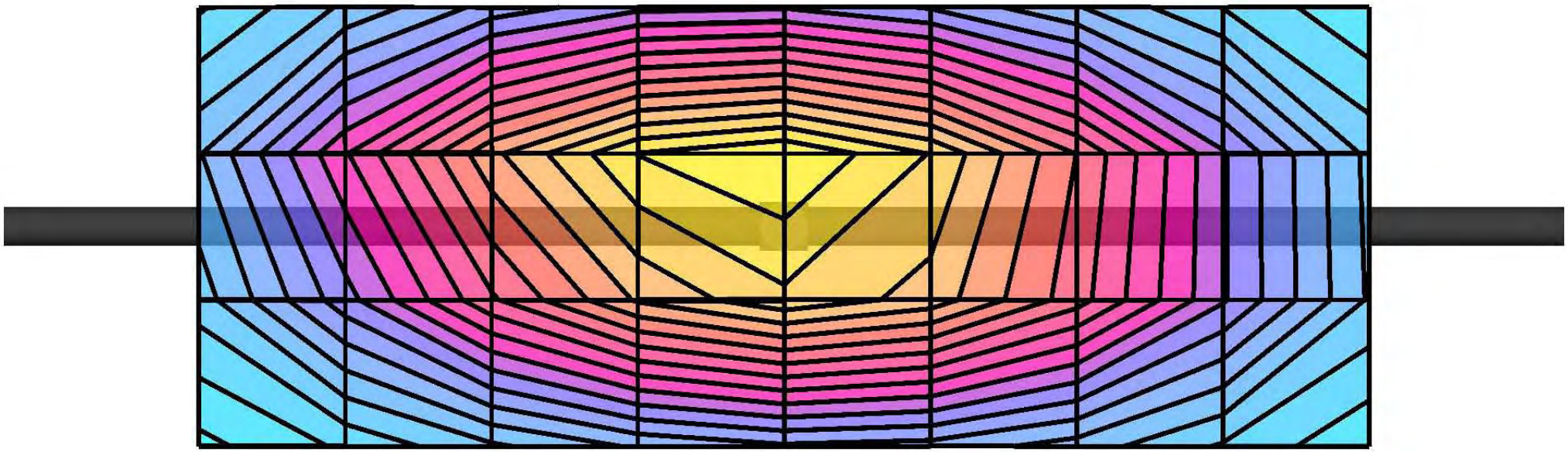
Dipole 835 MHz

835MHz System Performance Check / Dipole Sn# 425tr
PM1 Power = 200mW
Sim.Temp@meas=18.9c Sim.Temp@SPC =18.1c Room Temp @ SPC = 20c
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: $\sigma = 0.89$ mho/m $\varepsilon_r = 40.5$ $\rho = 1.00$ g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 12.5 (11.8, 13.5) [mm]



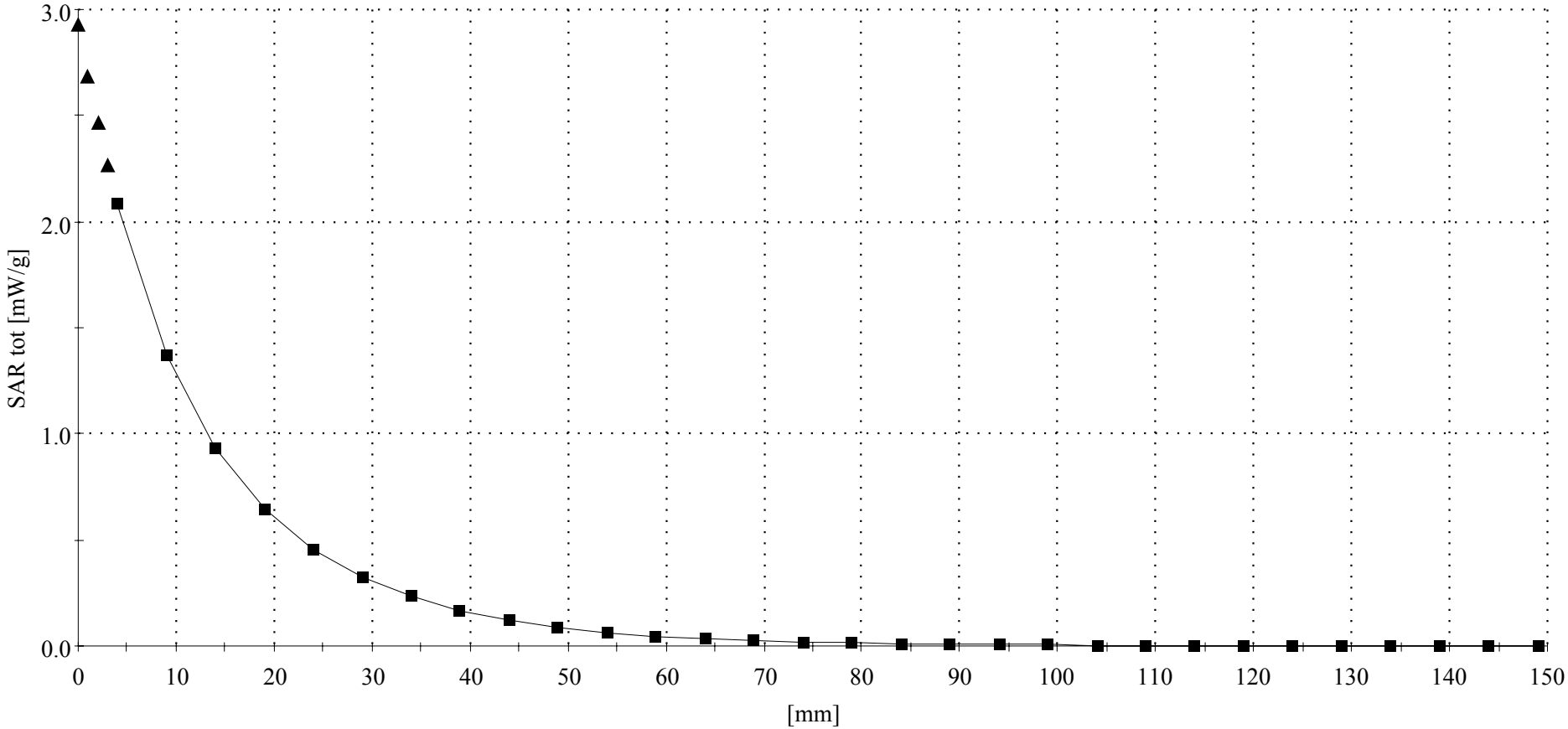
Dipole 835 MHz

1800 MHz System Performance Check / Dipole Sn# 425TR
PM1 Power =200mW
Sim.Temp@meas=18.9 Sim.Temp@SPC =18.9 Room Temp @ SPC = 21
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: $\sigma = 0.90$ mho/m $\varepsilon_r = 40.9$ $\rho = 1.00$ g/cm^3
Cubes (2): SAR (1g): 1.92 mW/g ± 0.00 dB, SAR (10g): 1.25 mW/g ± 0.00 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 12.6 (11.8, 13.6) [mm]
Powerdrift: -0.02 dB



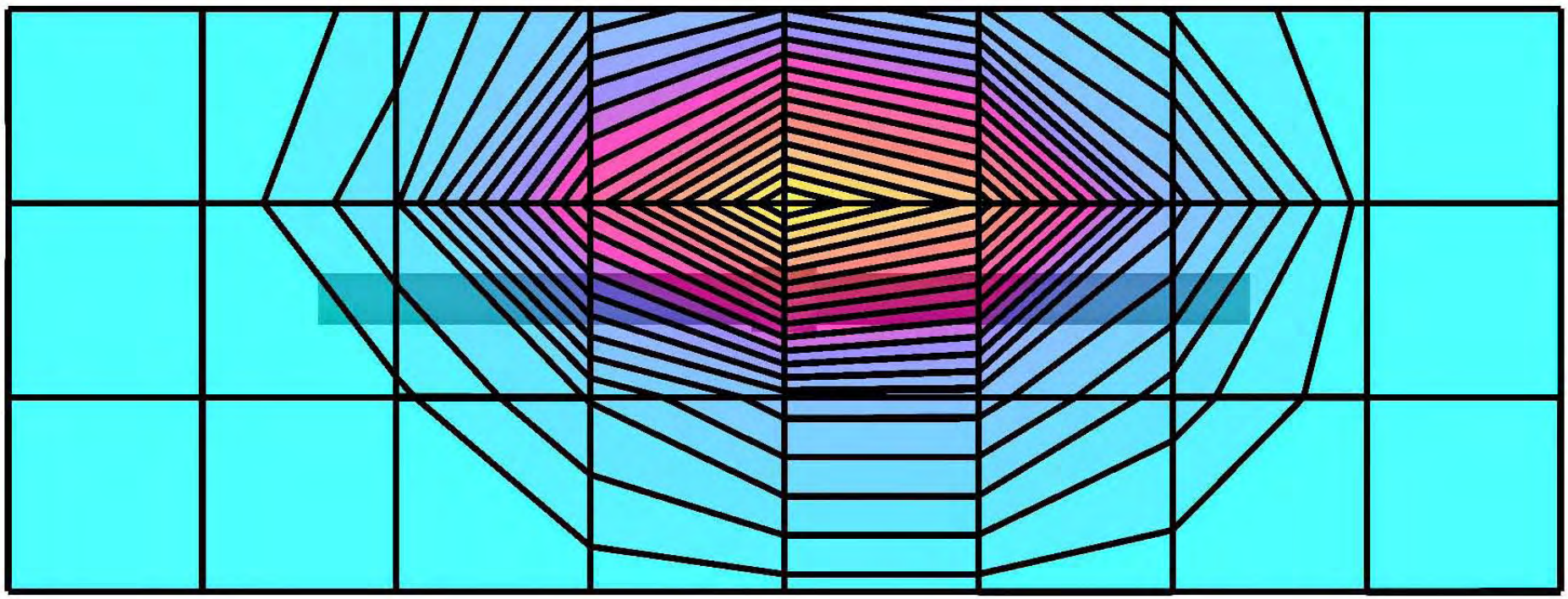
Dipole 835 MHz

1800 MHz System Performance Check / Dipole Sn# 425TR
PM1 Power =200mW
Sim.Temp@meas=18.9 Sim.Temp@SPC =18.9 Room Temp @ SPC = 21
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: $\sigma = 0.90$ mho/m $\varepsilon_r = 40.9$ $\rho = 1.00$ g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 12.5 (11.8, 13.4) [mm]



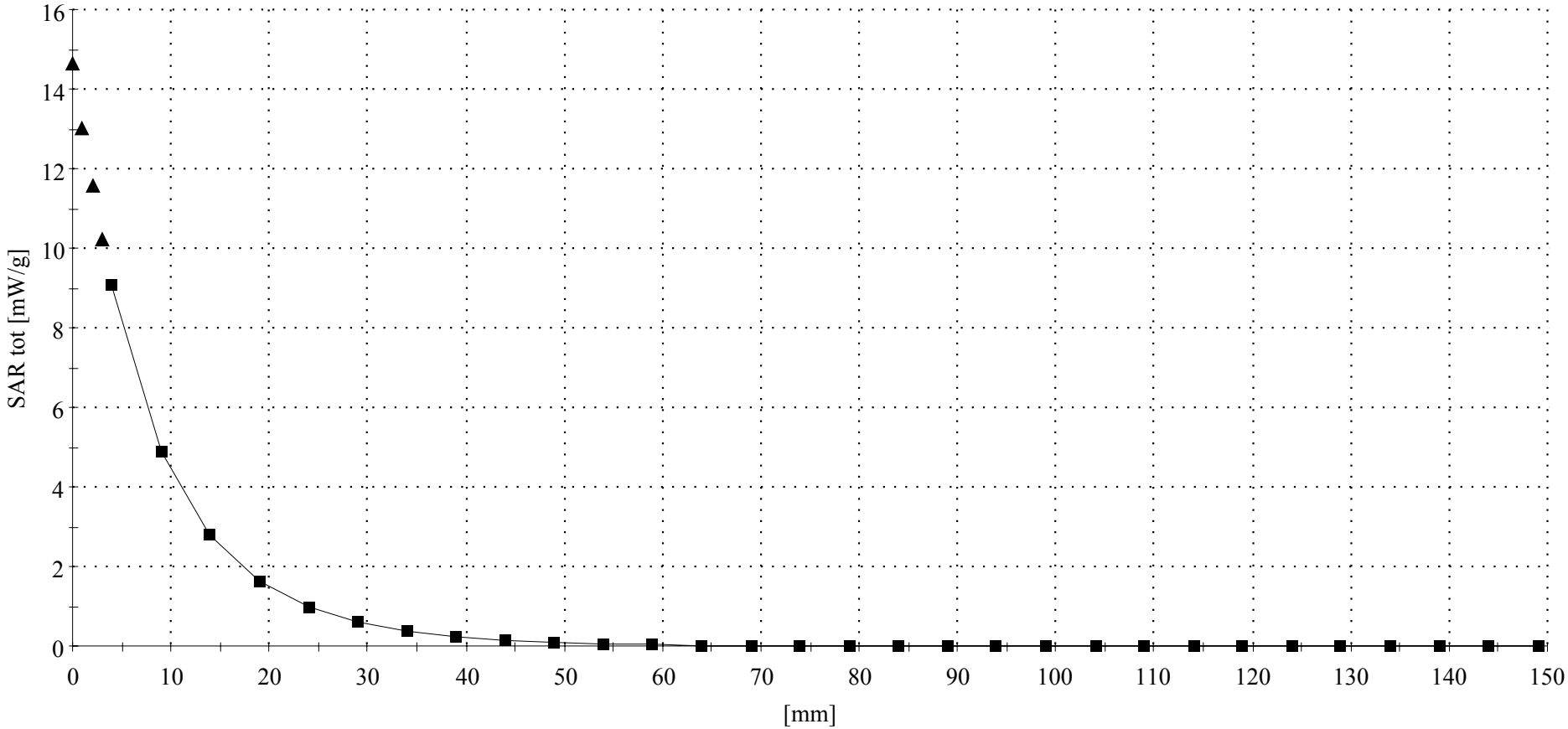
Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 259tr
PM1 Power = 200mW
Sim.Temp@meas=19.2 Sim.Temp@SPC = 18.7 Room Temp @ SPC = 21
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 = 1.38 mho/m ε_r = 39.0 ρ = 1.00 g/cm^3
Cubes (2): SAR (1g): 7.98 mW/g ± 0.01 dB, SAR (10g): 4.19 mW/g ± 0.01 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 8.6 (8.3, 9.2) [mm]
Powerdrift: -0.05 dB



Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 259tr
PM1 Power = 200mW
Sim.Temp@meas=19.2 Sim.Temp@SPC = 18.7 Room Temp @ SPC = 21
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 = 1.38 mho/m ε_r = 39.0 ρ = 1.00 g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 8.5 (8.2, 9.1) [mm]



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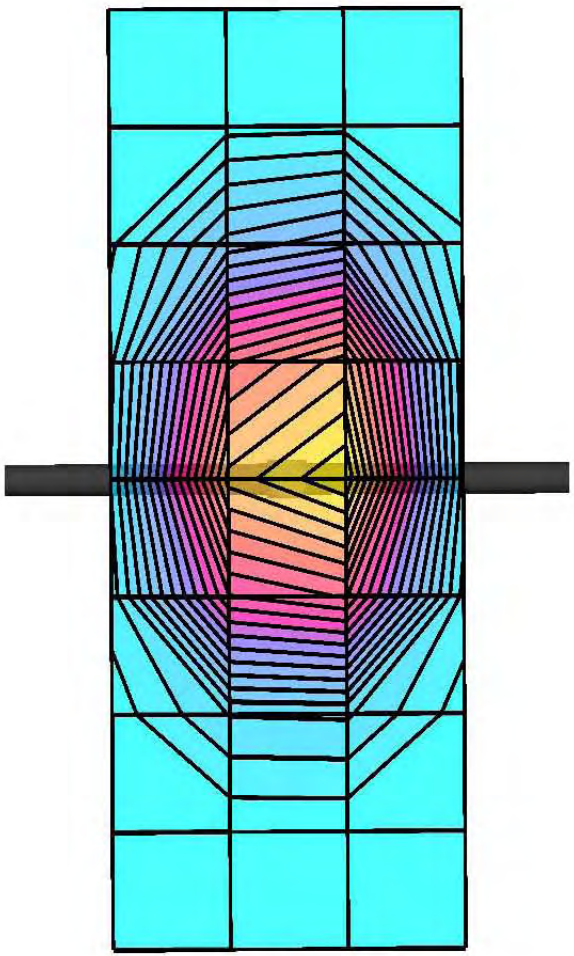
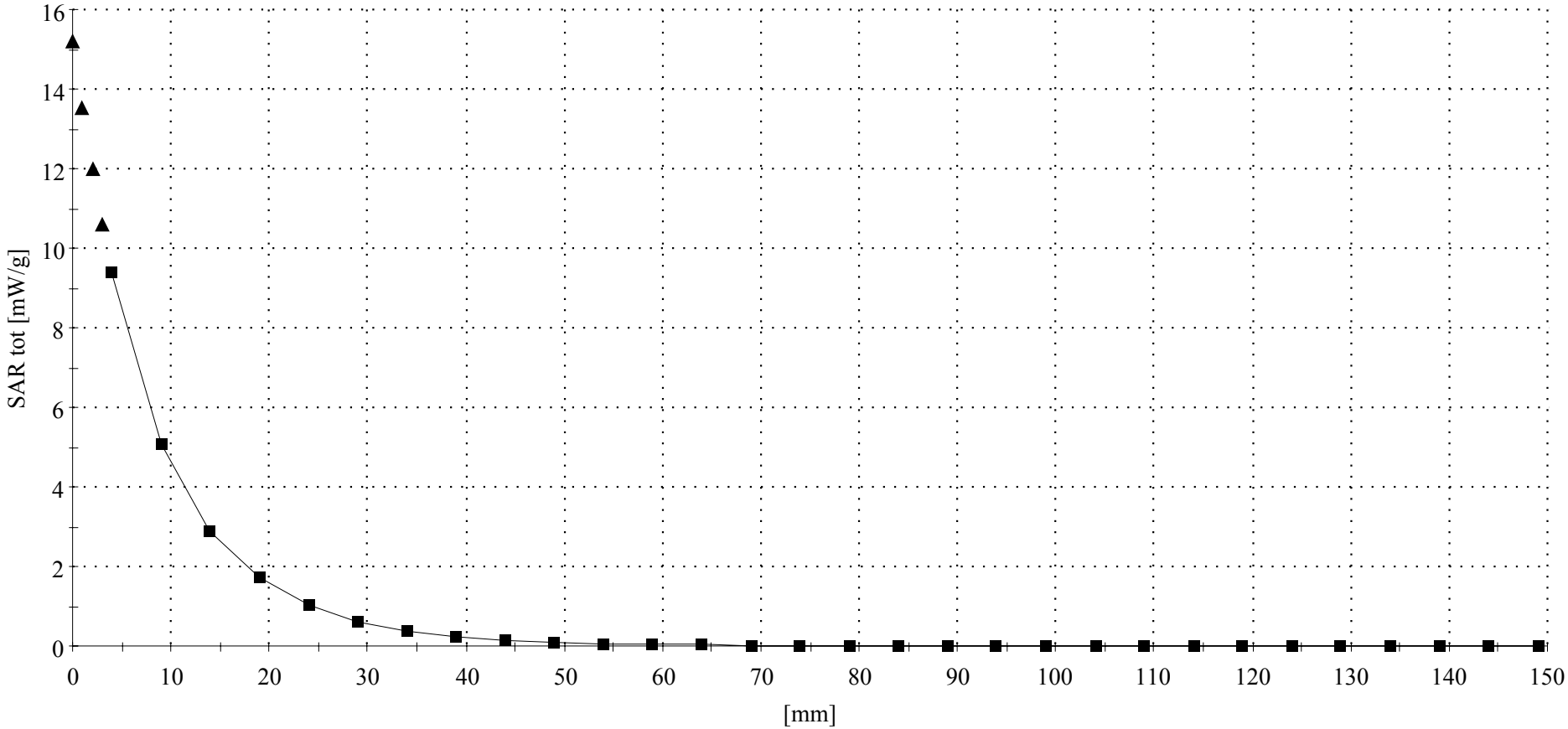
Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 259tr
PM1 Power = 200mW
Sim.Temp@meas=18.8 Sim.Temp@SPC = 19.1 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 = 1.38 mho/m ε_r = 38.9 ρ = 1.00 g/cm^3
Cubes (2): SAR (1g): 8.26 mW/g ± 0.01 dB, SAR (10g): 4.35 mW/g ± 0.01 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 8.6 (8.2, 9.3) [mm]
Powerdrift: -0.14 dB



Dipole 1800 MHz

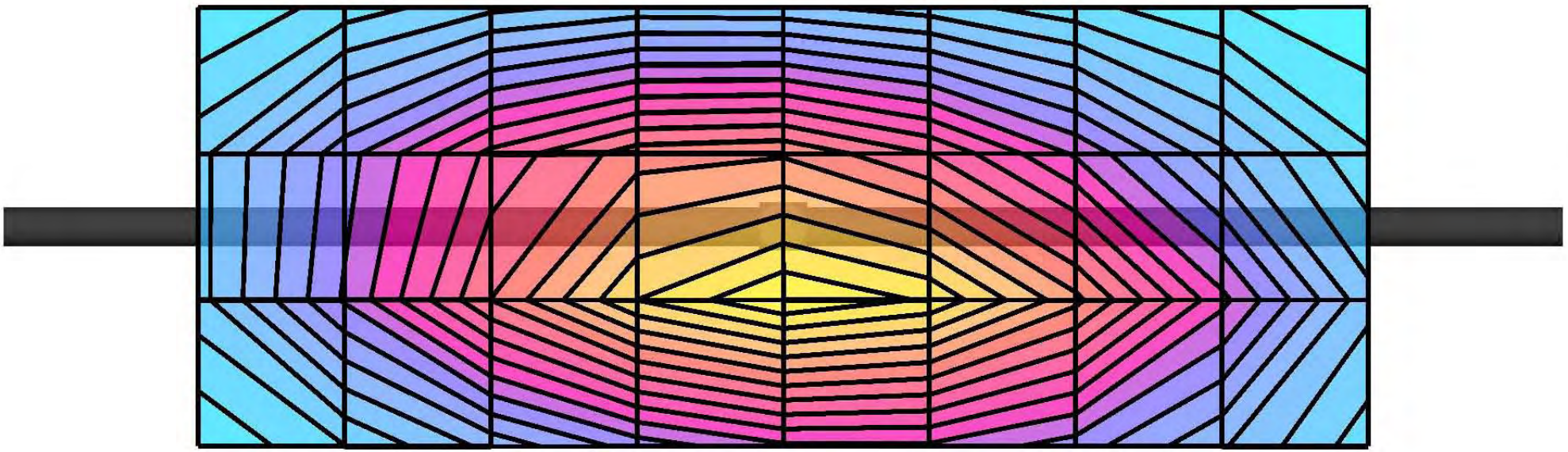
1800 MHz System Performance Check / Dipole Sn# 259tr
PM1 Power = 200mW
Sim.Temp@meas=18.8 Sim.Temp@SPC = 19.1 Room Temp @ SPC = 20
R1 Amy Twin Phantom Rev.4 (22Aug02) Phantom; Section; Position: ; Frequency: 1800 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1800 MHz VALIDATION: σ = 1.38 mho/m ε_r = 38.9 ρ = 1.00 g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 8.5 (8.1, 9.2) [mm]



05/10/04

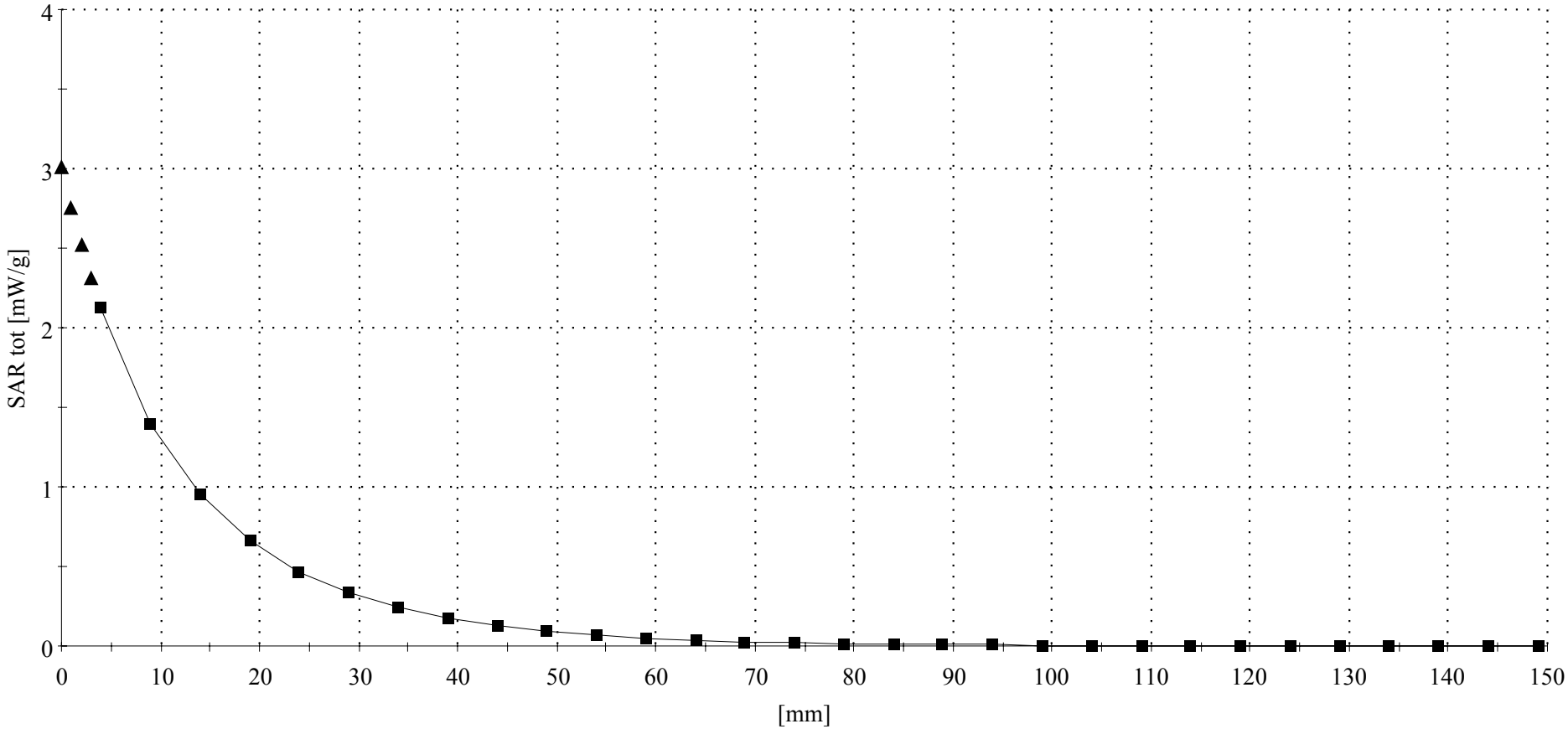
Dipole 835 MHz

835 MHz System Performance Check / Dipole Sn# 425tr
PM1 Power =200mW
Sim.Temp@meas=19.5c Sim.Temp@SPC = 19.1c Room Temp @ SPC = 20c
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: $\sigma = 0.92$ mho/m $\varepsilon_r = 42.4$ $\rho = 1.00$ g/cm^3
Cubes (2): SAR (1g): 1.97 mW/g ± 0.03 dB, SAR (10g): 1.28 mW/g ± 0.01 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 12.7 (11.9, 13.7) [mm]
Powerdrift: -0.03 dB



Dipole 835 MHz

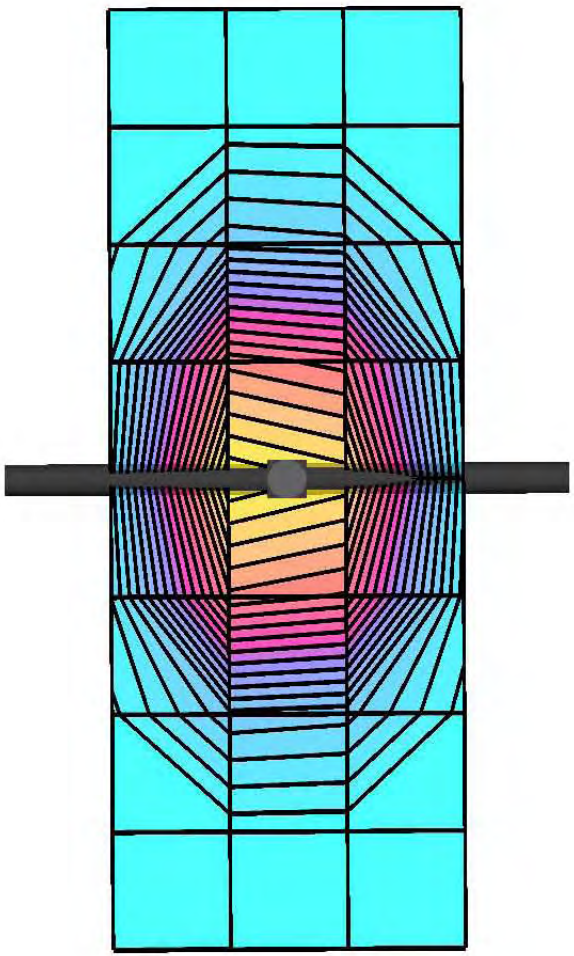
835 MHz System Performance Check / Dipole Sn# 425tr
PM1 Power =200mW
Sim.Temp@meas=19.5c Sim.Temp@SPC = 19.1c Room Temp @ SPC = 20c
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Section; Position: ; Frequency: 835 MHz
Probe: ES3DV3 - SN3037 - Validation4; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz VALIDATION: σ = 0.92 mho/m ε_r = 42.4 ρ = 1.00 g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 12.6 (11.8, 13.6) [mm]



05/10/04

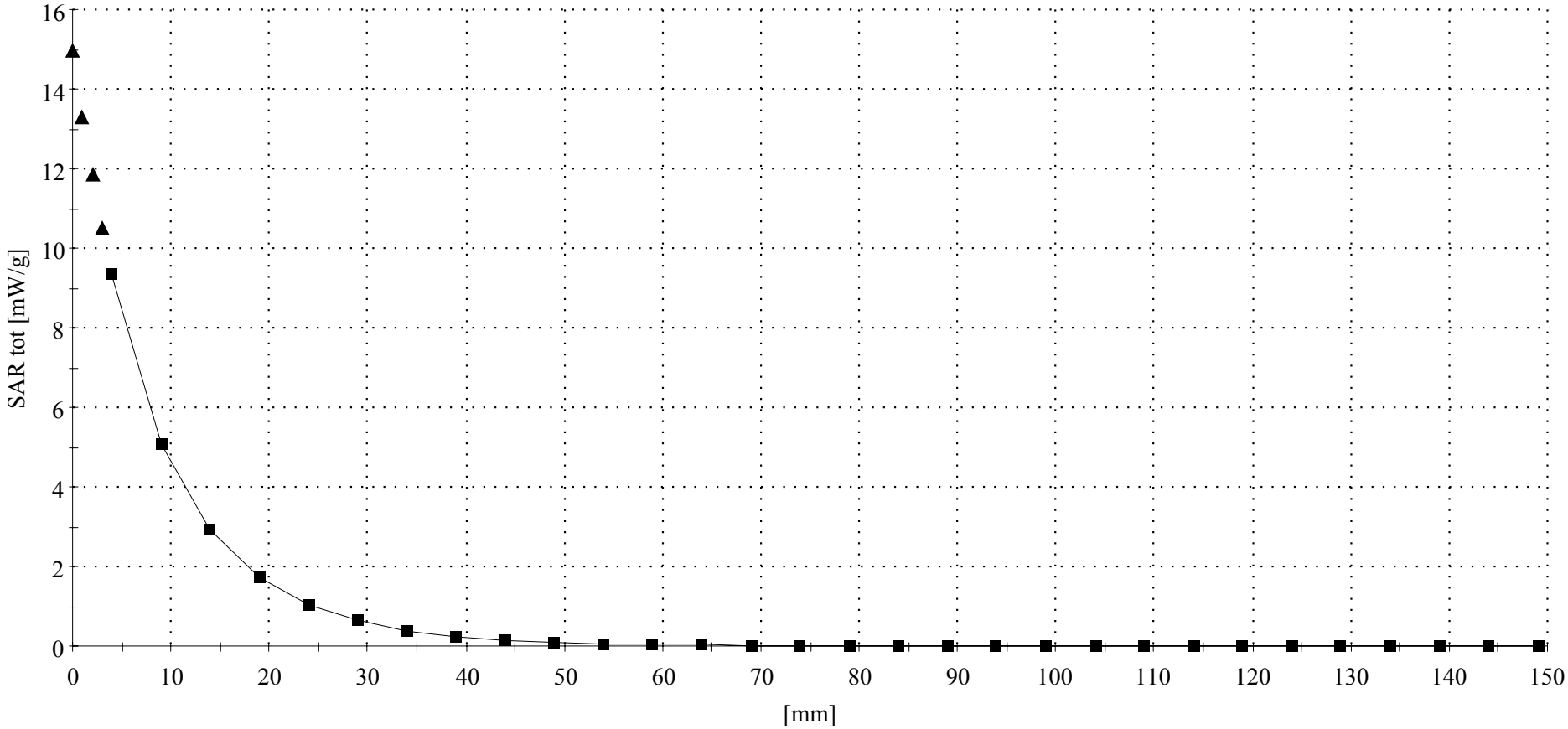
Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 259tr
PM1 Power = 200mW
Sim.Temp@meas=19.3c Sim.Temp@SPC = 19.1c Room Temp @ SPC = 20c
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 = 1.37 mho/m ε_r = 38.8 ρ = 1.00 g/cm^3
Cubes (2): SAR (1g): 8.19 mW/g ± 0.05 dB, SAR (10g): 4.34 mW/g ± 0.01 dB, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 8.6 (8.3, 9.3) [mm]
Powerdrift: -0.02 dB



Dipole 1800 MHz

1800 MHz System Performance Check / Dipole Sn# 259tr
PM1 Power = 200mW
Sim.Temp@meas=19.3c Sim.Temp@SPC = 19.1c Room Temp @ SPC = 20c
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 = 1.37 mho/m ε_r = 38.8 ρ = 1.00 g/cm^3
: , ()
Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 5.0
Penetration depth: 8.6 (8.3, 9.3) [mm]



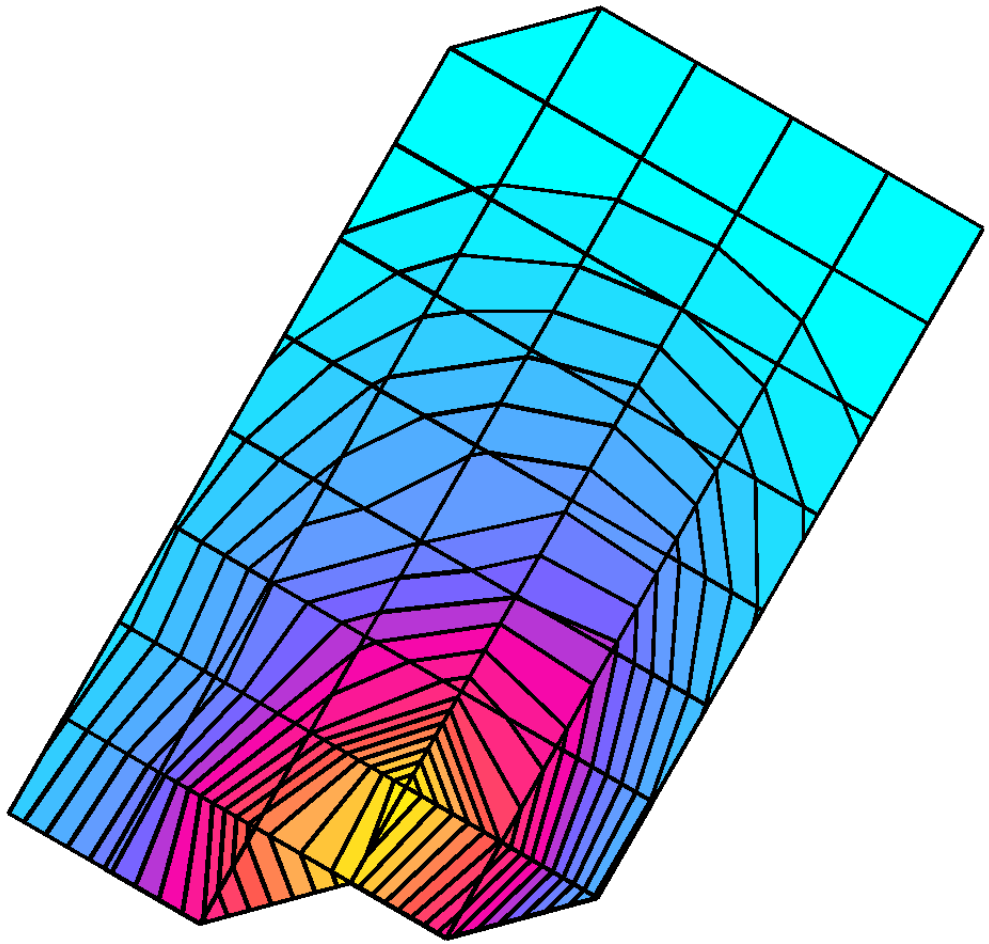
Appendix 2

SAR distribution plots for Phantom Head Adjacent Use

04/24/04 20:19

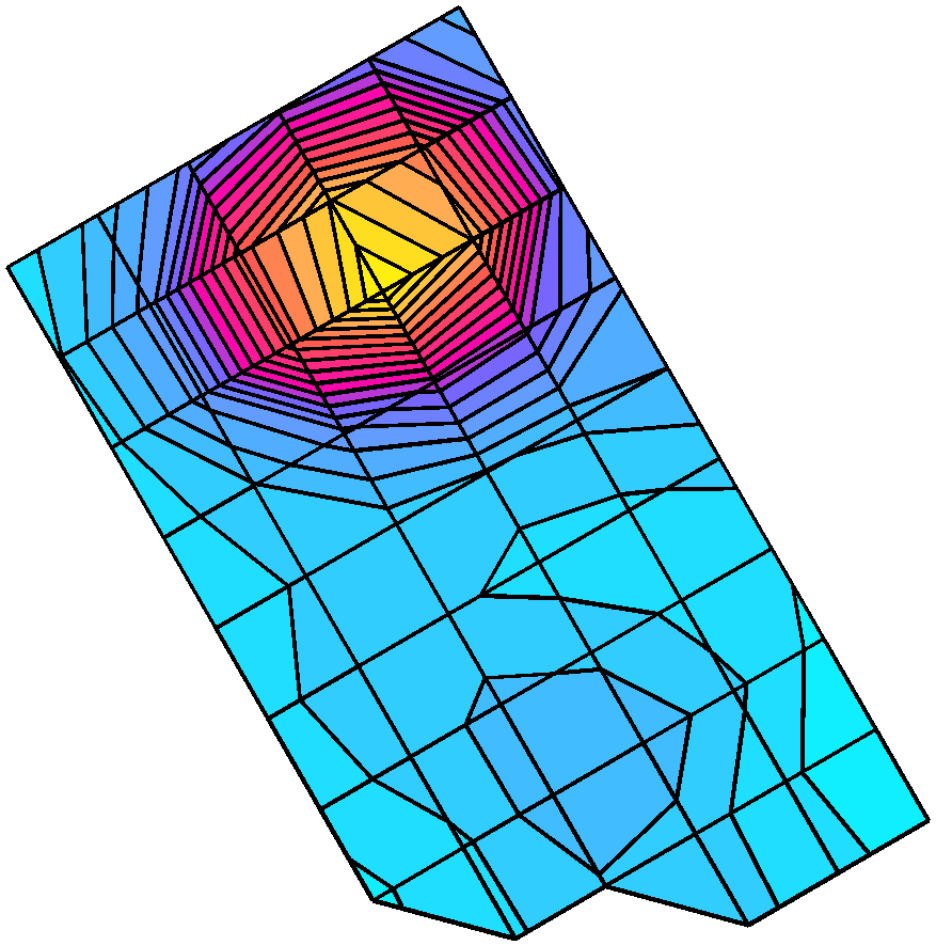
338CA46B

Ch# 1013 / Pwr Step: ALWAYS UP Antenna Position: EXT
Type of Modulation: 800 CDMA Battery Model #: SNN5695A
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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.17 mW/g, SAR (10g): 0.755 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.0 (11.2, 17.6) [mm]
Powerdrift: -0.31 dB



338CA46B

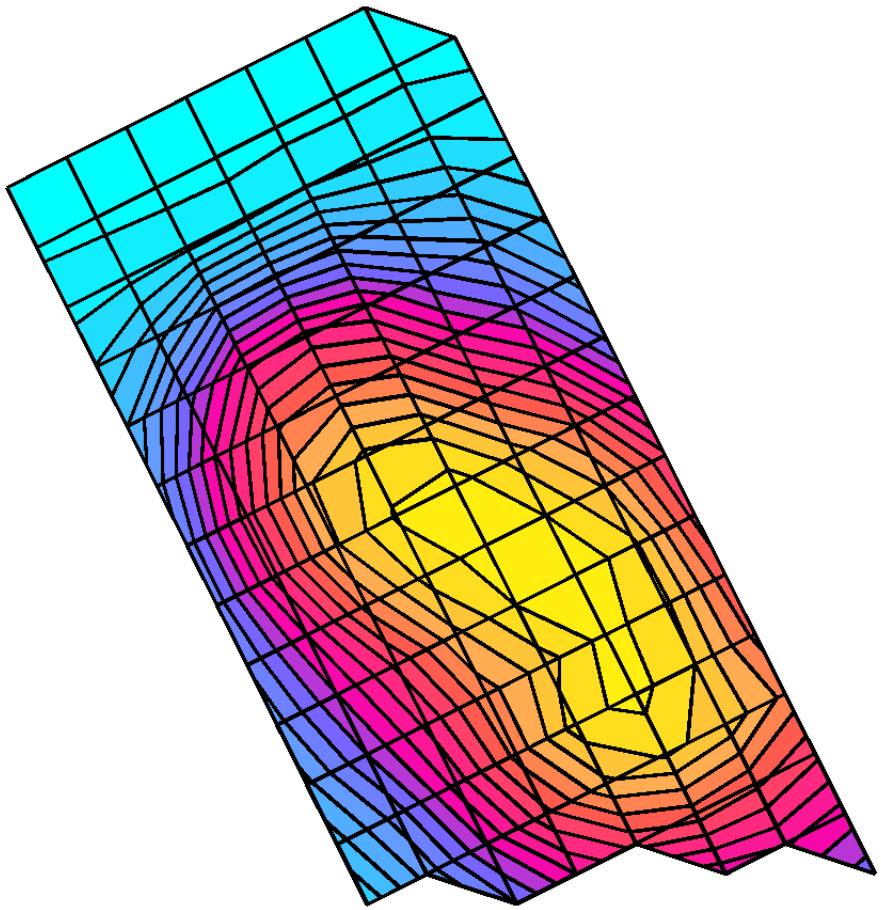
Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 1900 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: NONE
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.215 mW/g, SAR (10g): 0.128 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 11.0 (10.6, 11.4) [mm]
Powerdrift: 0.00 dB



04/25/04 18:30

338CA46B

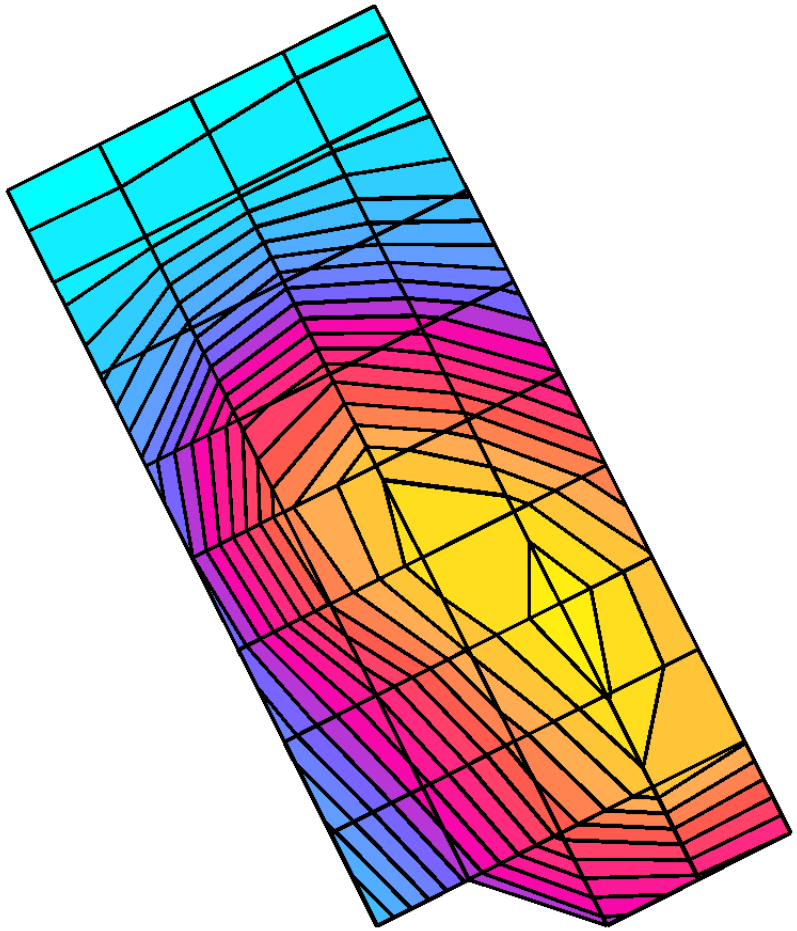
Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position:Retracted
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION: Tilted
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.313 mW/g * , SAR (10g): 0.226 mW/g * Max outside, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 21.0 (20.3, 21.9) [mm]
Powerdrift: 0.13 dB



04/25/04 19:45

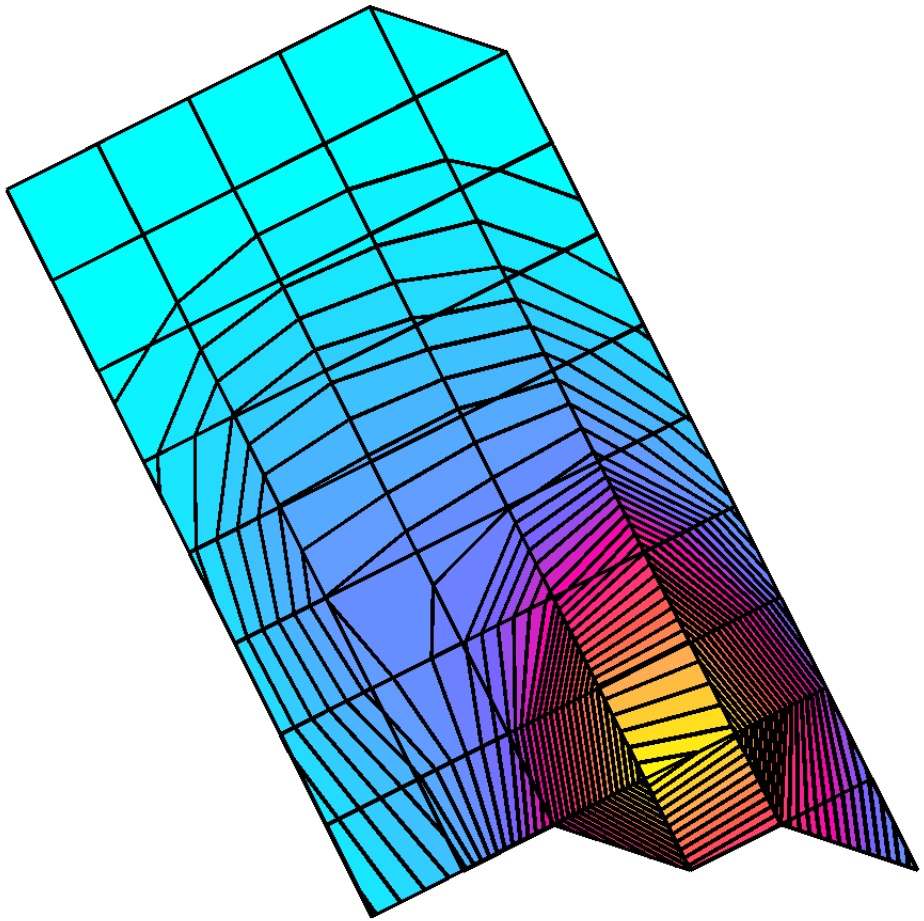
338CA46B

Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position:Extended
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION: 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.273 mW/g, SAR (10g): 0.210 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 21.7 (20.2, 23.0) [mm]
Powerdrift: 0.03 dB



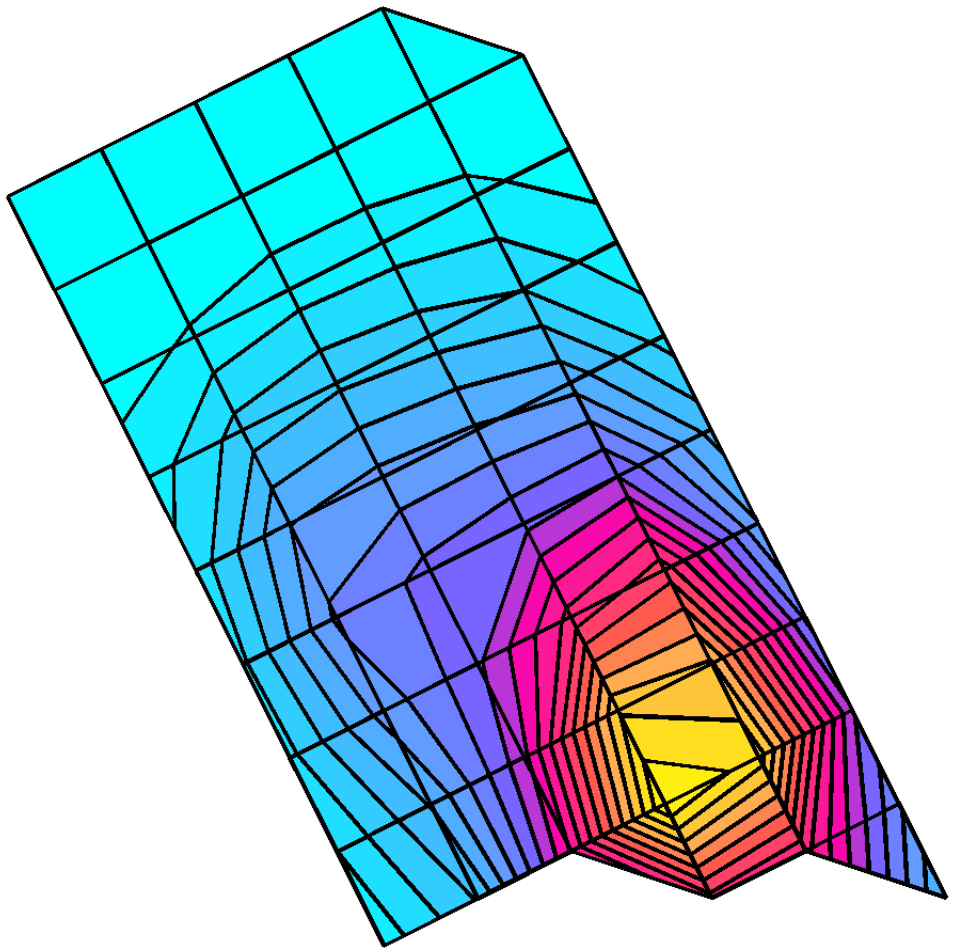
338CA46B

Ch# 777 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.35 mW/g, SAR (10g): 0.834 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.0 (10.6, 16.3) [mm]
Powerdrift: -0.41 dB



338CA46B

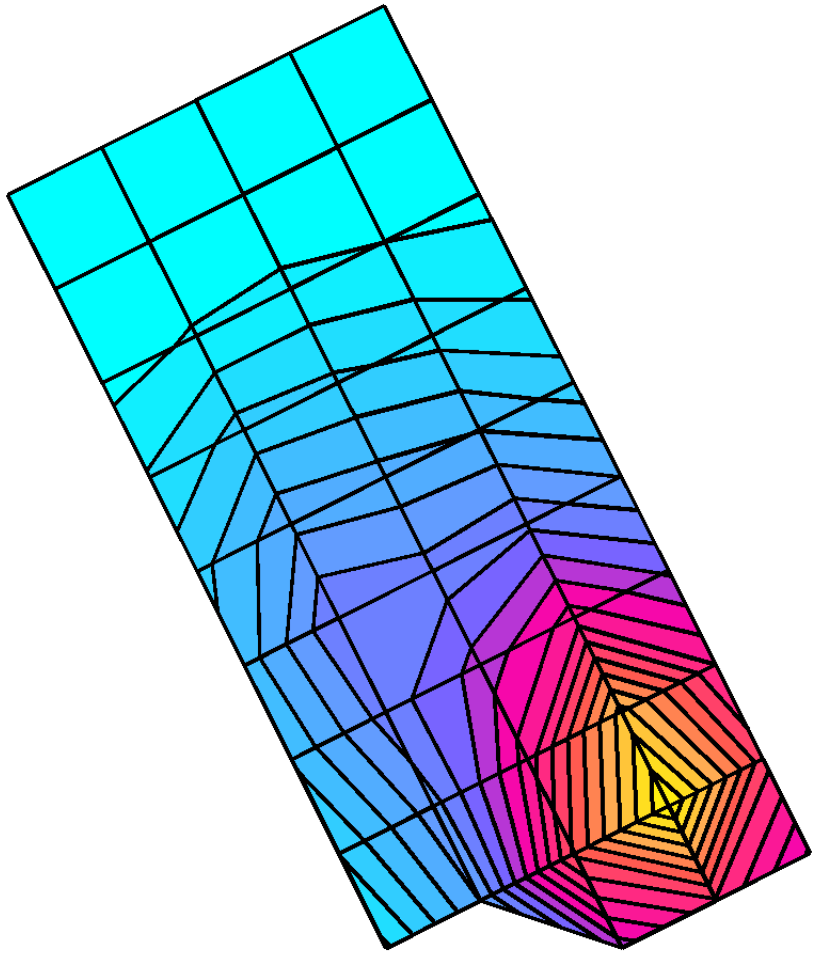
Ch# 777 / Pwr Step: ALWAYS UP
Antenna Position ret
Type of Modulation: 800 CDMA
Battery Model #: 5695a std bat
DEVICE POSITION: Cheek
Accessory Model #: syn9766 leather case
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 848 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.987 mW/g, SAR (10g): 0.630 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.5 (10.6, 17.4) [mm]
Powerdrift: -0.33 dB



04/25/04 22:04

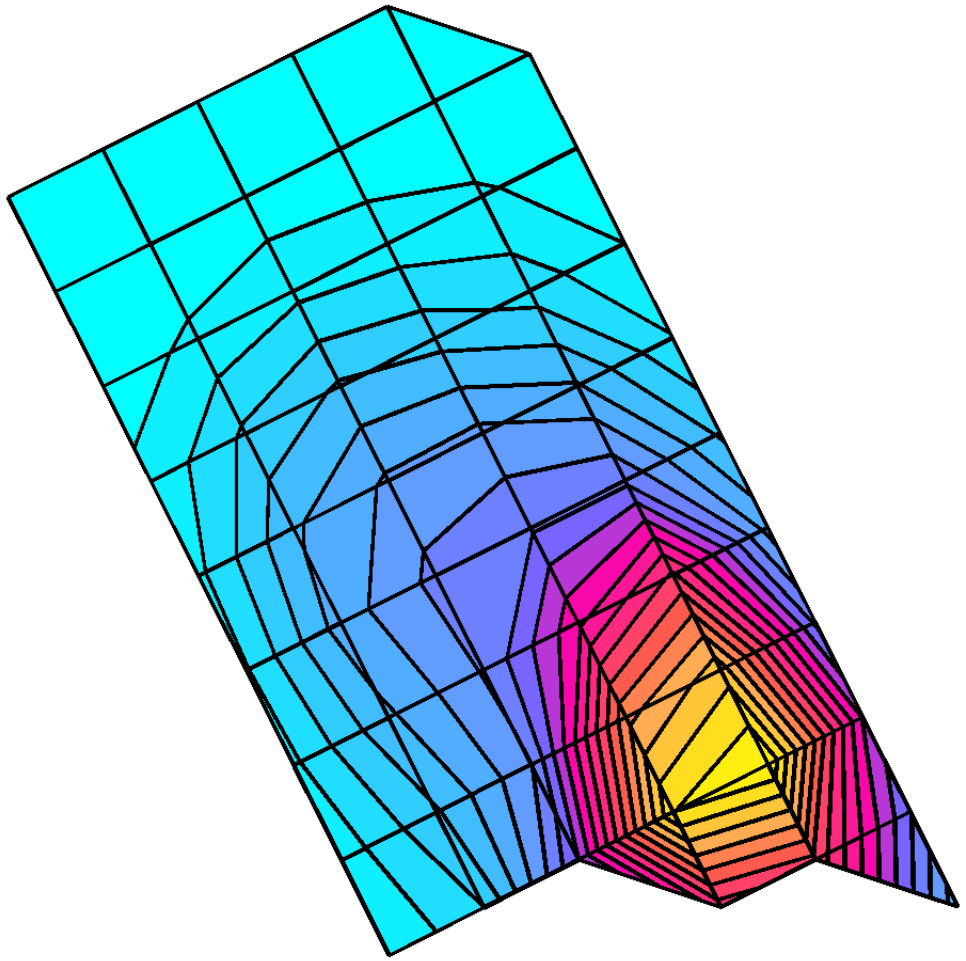
338CA46B

Ch# 777 / Pwr Step: ALWAYS UP
Antenna Position:Retracted
Type of Modulation: 800 CDMA
Battery Model #: Extended Battery
DEVICE POSITION: 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.03 mW/g, SAR (10g): 0.649 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.0 (10.1, 17.0) [mm]
Powerdrift: -0.35 dB



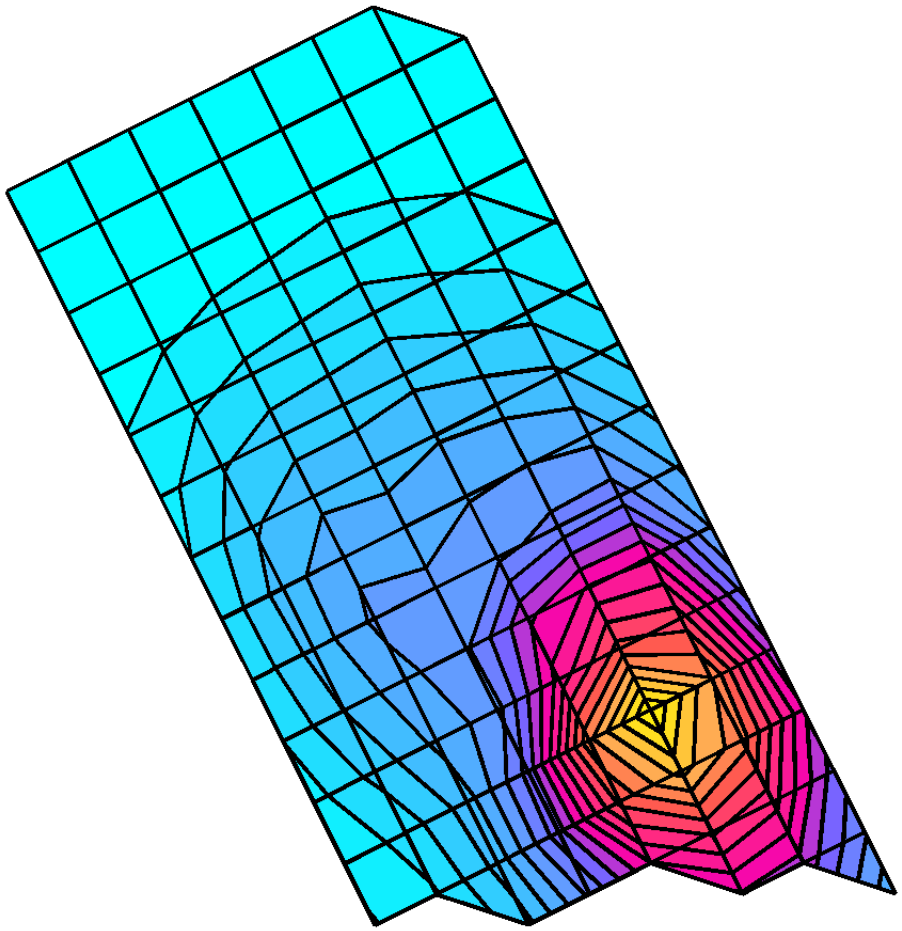
338CA46B

Ch# 777 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.25 mW/g, SAR (10g): 0.785 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.6 (10.7, 17.3) [mm]
Powerdrift: -0.30 dB



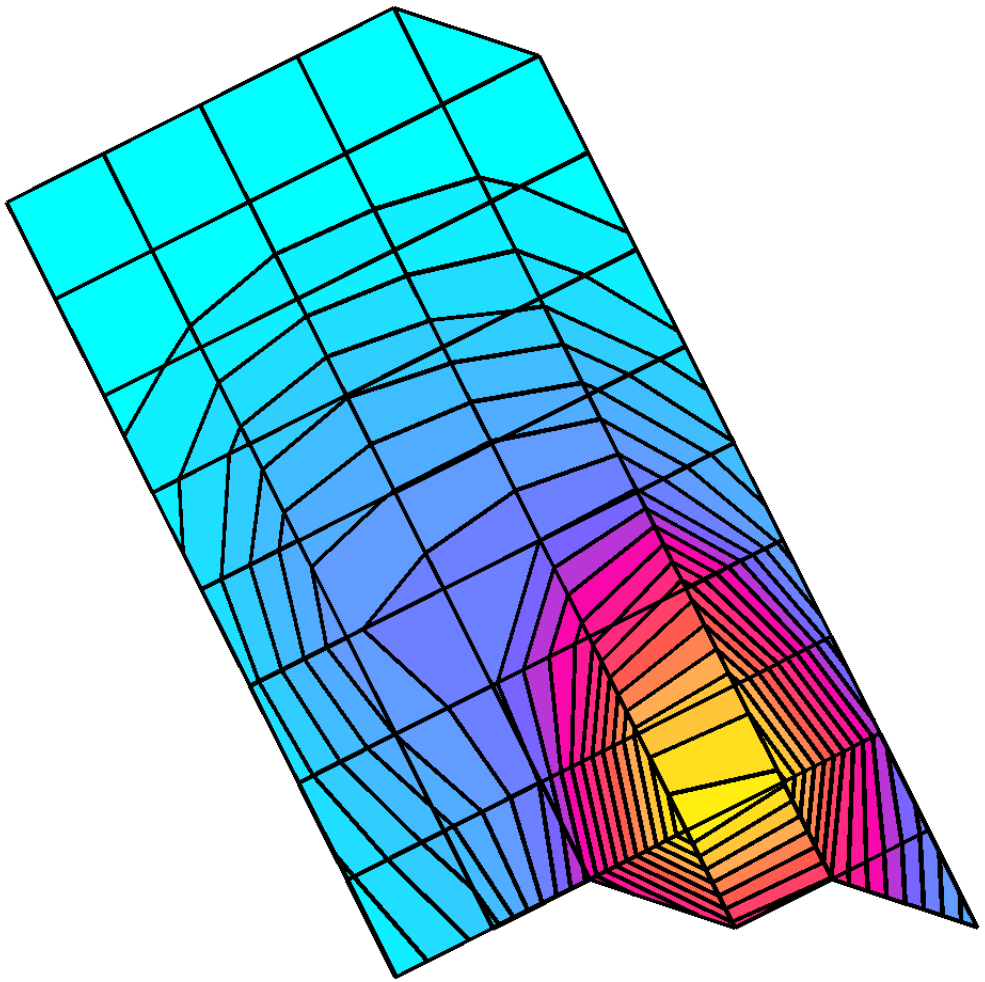
338CA46B

Ch# 777 / Pwr Step: Always Up
Antenna Position: Extended
Type of Modulation:CDMA 800
Battery Model #: SNN5695A
DEVICE POSITION: Cheek
Accessory Model #: SYN9766 Leather Case
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: $\sigma = 0.89$ mho/m $\varepsilon_r = 40.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.24 mW/g, SAR (10g): 0.789 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 13.1 (10.7, 16.2) [mm]
Powerdrift: -0.26 dB



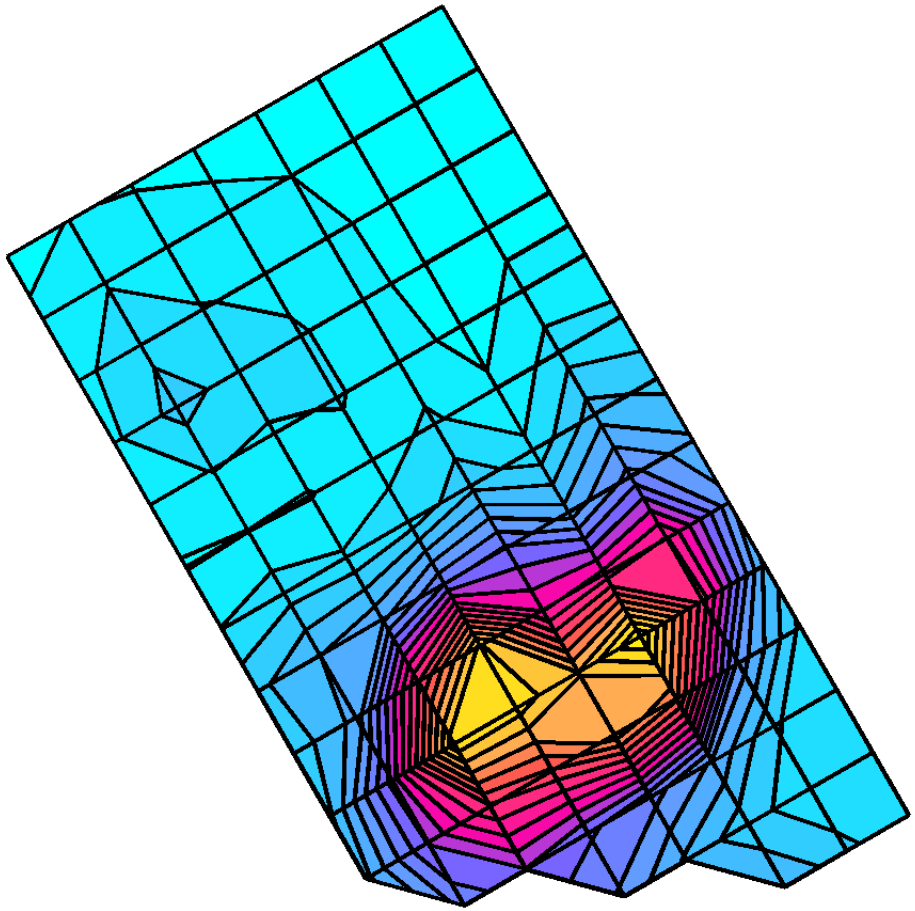
338CA46B

Ch# 777 / Pwr Step: ALWAYS UP
Antenna Position ext
Type of Modulation: 800 CDMA
Battery Model #: Extended Battery
DEVICE POSITION: Cheek
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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.21 mW/g, SAR (10g): 0.741 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 12.9 (10.3, 16.4) [mm]
Powerdrift: -0.33 dB



338CA46B

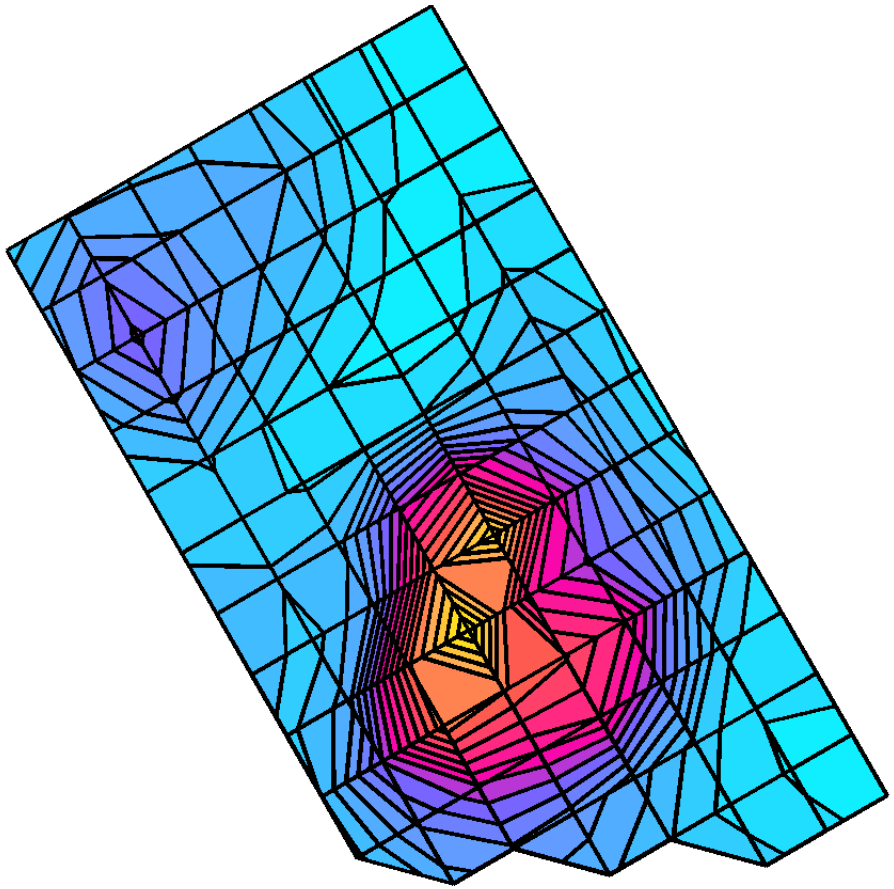
Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 1800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.719 mW/g, SAR (10g): 0.380 mW/g * Max outside, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 7.9 (7.6, 8.4) [mm]
Powerdrift: -0.14 dB



04/27/04 14:00

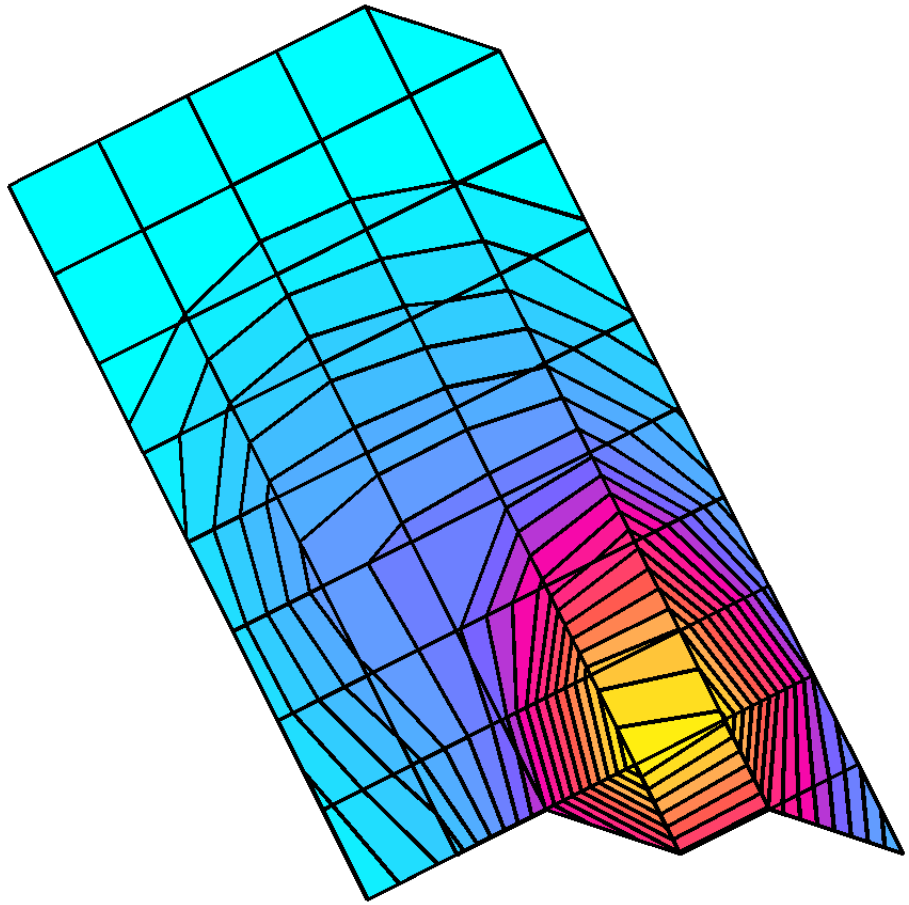
338CA46B

Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 1800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
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 = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.489 mW/g, SAR (10g): 0.276 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 10.7 (10.6, 10.9) [mm]
Powerdrift: 0.07 dB



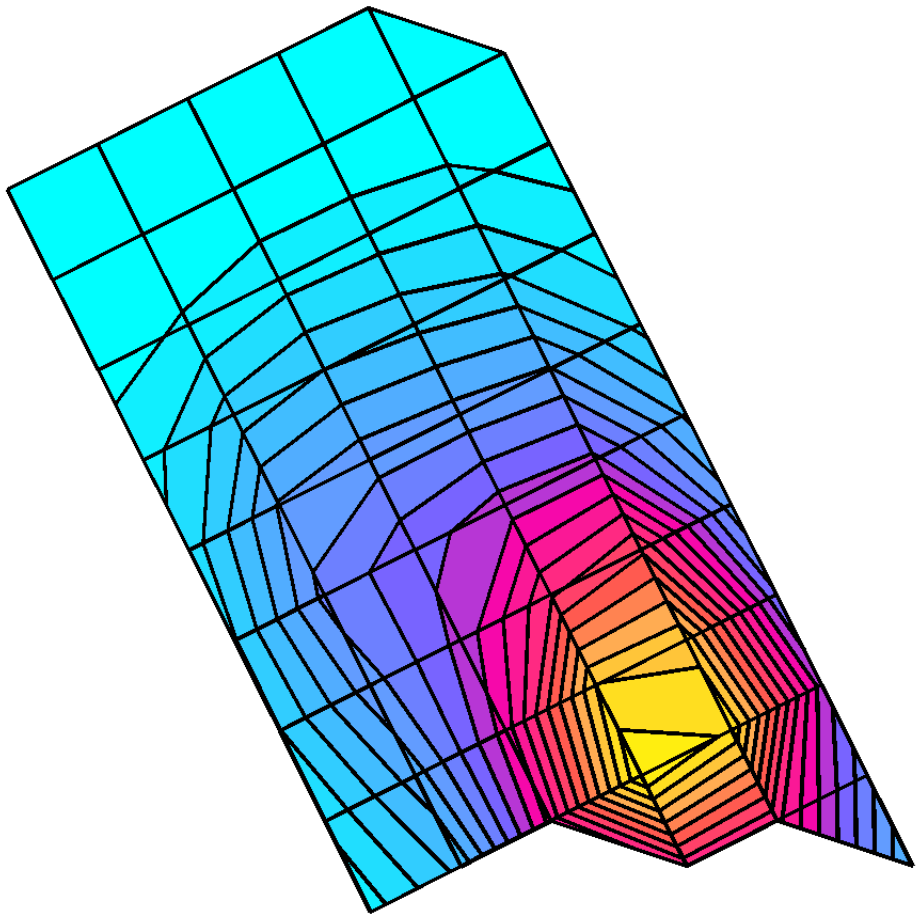
338CA46B

Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
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: 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.23 mW/g, SAR (10g): 0.772 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.3 (11.1, 16.2) [mm]
Powerdrift: -0.30 dB



338CA46B

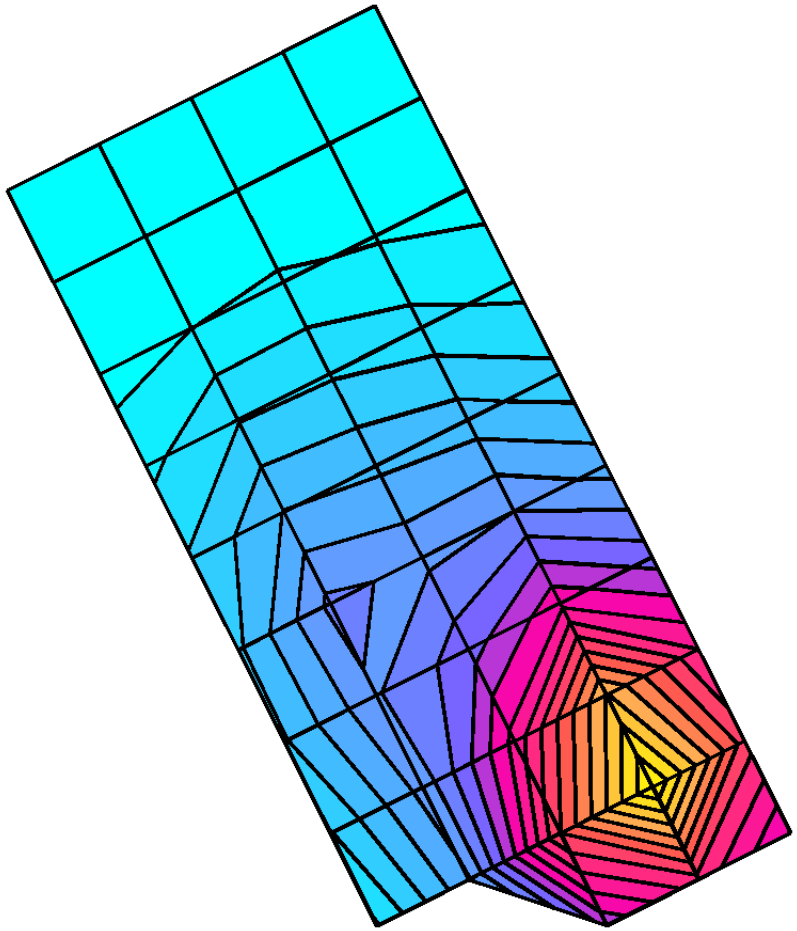
Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position ret
Type of Modulation: 800 CDMA
Battery Model #: 5695a std bat
DEVICE POSITION: Cheek
Accessory Model #: syn9766 leather case
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.02 mW/g, SAR (10g): 0.644 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.1 (10.3, 16.9) [mm]
Powerdrift: -0.23 dB



04/25/04 20:31

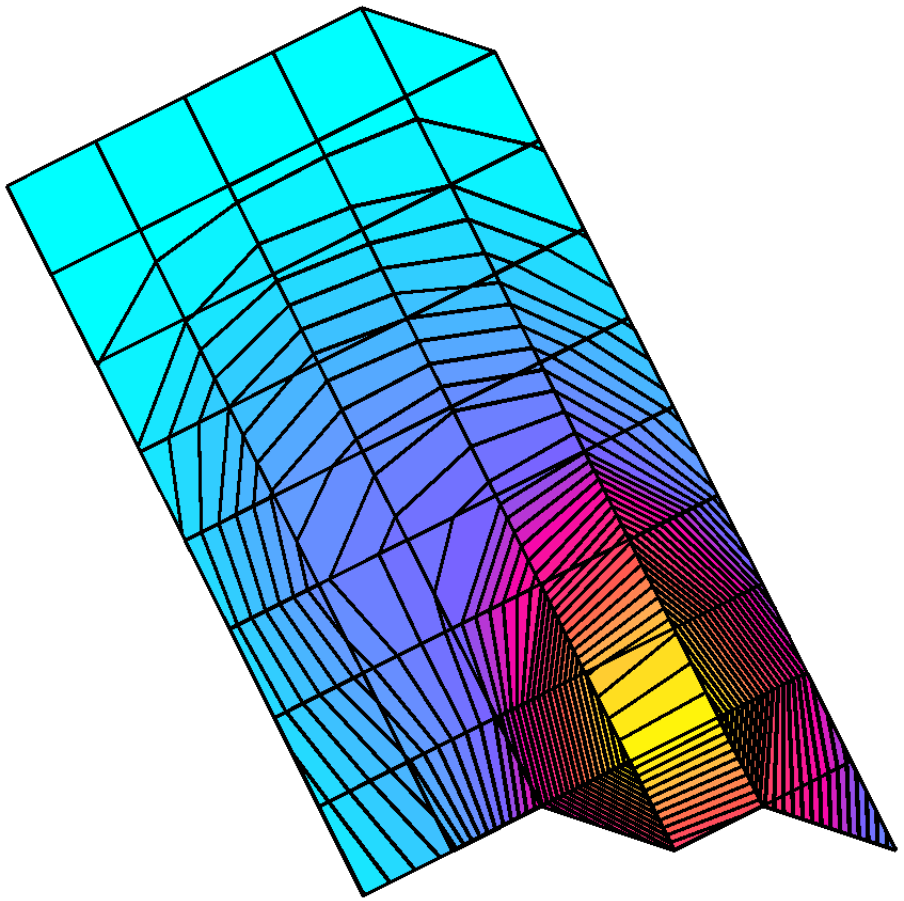
338CA46B

Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position:Retracted
Type of Modulation: 800 CDMA
Battery Model #: Extended Battery
DEVICE POSITION: Cheek
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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.17 mW/g, SAR (10g): 0.721 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.0 (10.0, 17.1) [mm]
Powerdrift: -0.33 dB



338CA46B

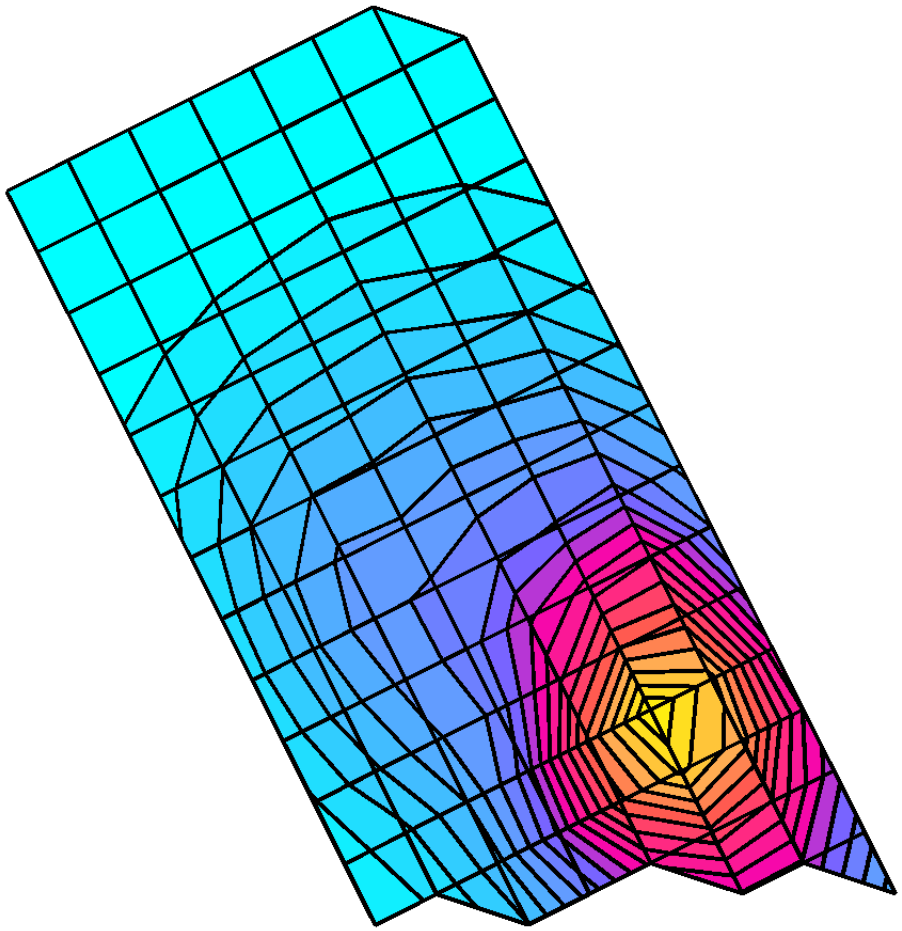
Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.28 mW/g, SAR (10g): 0.790 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.1 (10.6, 16.5) [mm]
Powerdrift: -0.31 dB



04/26/04 23:13

338CA46B

Ch# 384 / Pwr Step: Always Up
Antenna Position: Extended
Type of Modulation:CDMA 800
Battery Model #: SNN5695A
DEVICE POSITION: Cheek
Accessory Model #: SYN9766 Leather Case
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: $\sigma = 0.89$ mho/m $\varepsilon_r = 40.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.08 mW/g, SAR (10g): 0.687 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 13.6 (10.8, 17.3) [mm]
Powerdrift: -0.30 dB



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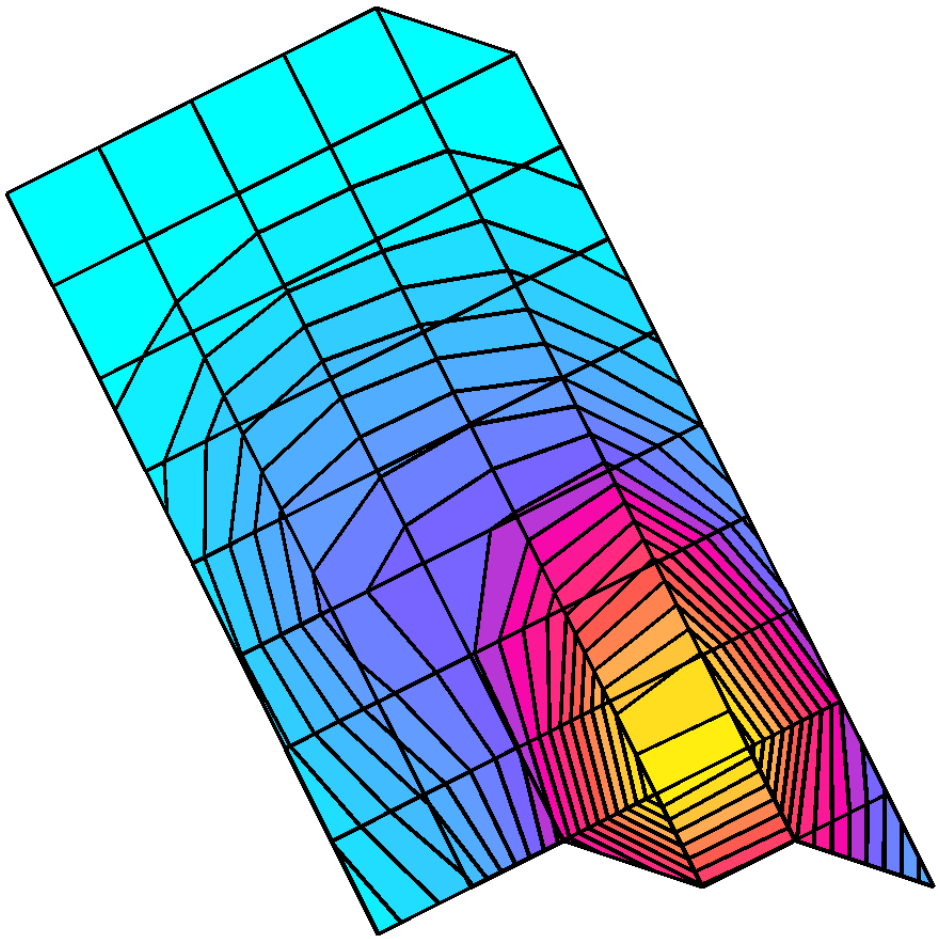
338CA46B

Ch# 384 / Pwr Step: ALWAYS UP
Type of Modulation: 800 CDMA
DEVICE POSITION: Cheek

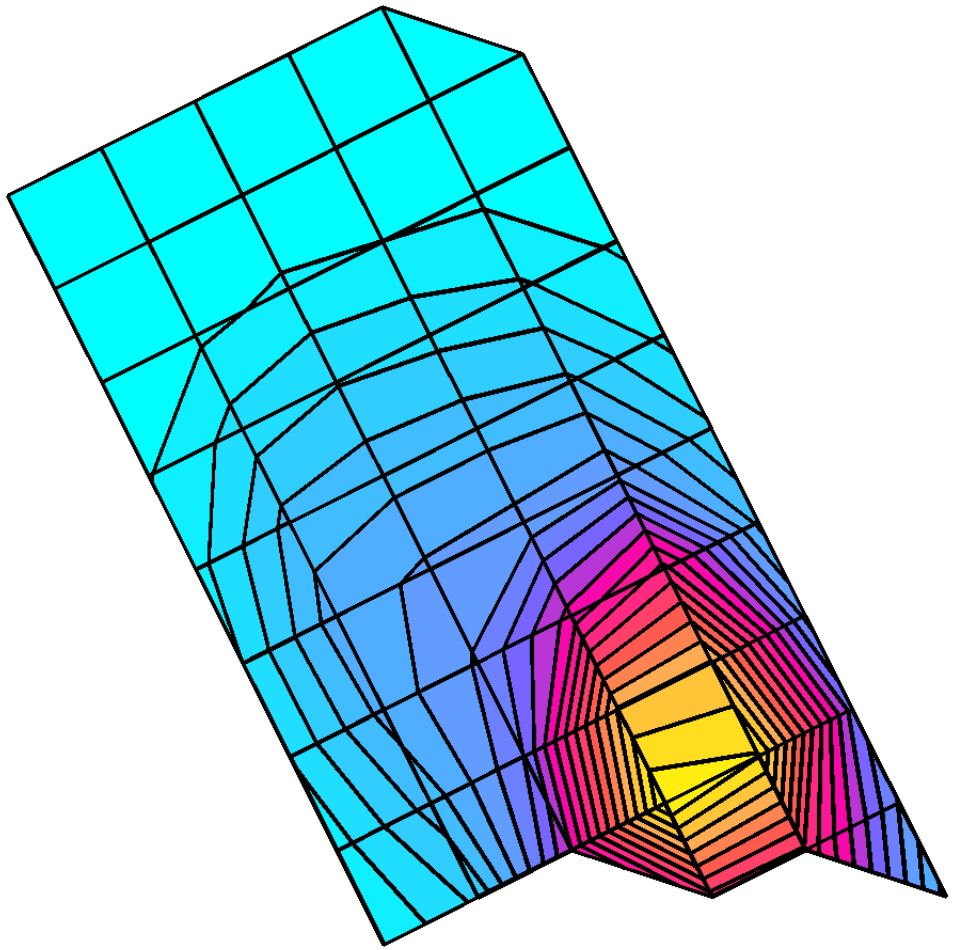
Antenna Position ext
Battery Model #: Extended Battery

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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.06 mW/g, SAR (10g): 0.665 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.4 (10.3, 17.5) [mm]
Powerdrift: -0.29 dB



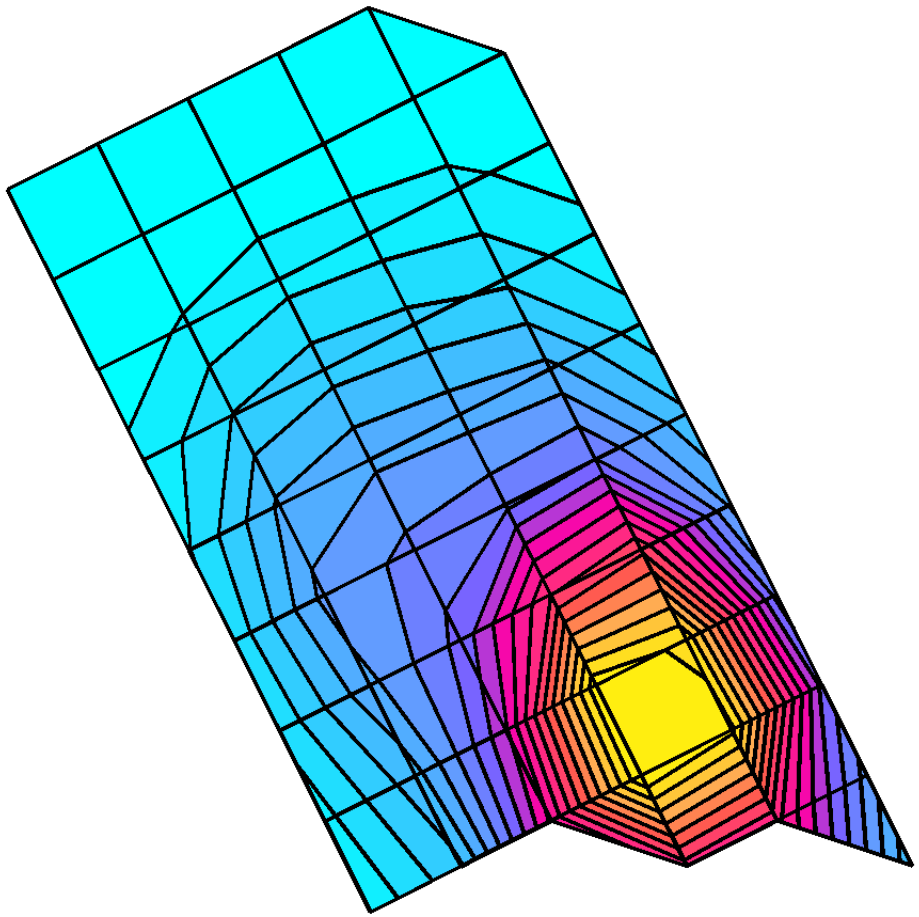
338CA46B

Ch# 1013 / Pwr Step: ALWAYS UP Antenna Position: RET
Type of Modulation: 800 CDMA Battery Model #: SNN5695A
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: 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.43 mW/g, SAR (10g): 0.868 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.0 (10.3, 16.6) [mm]
Powerdrift: -0.30 dB



338CA46B

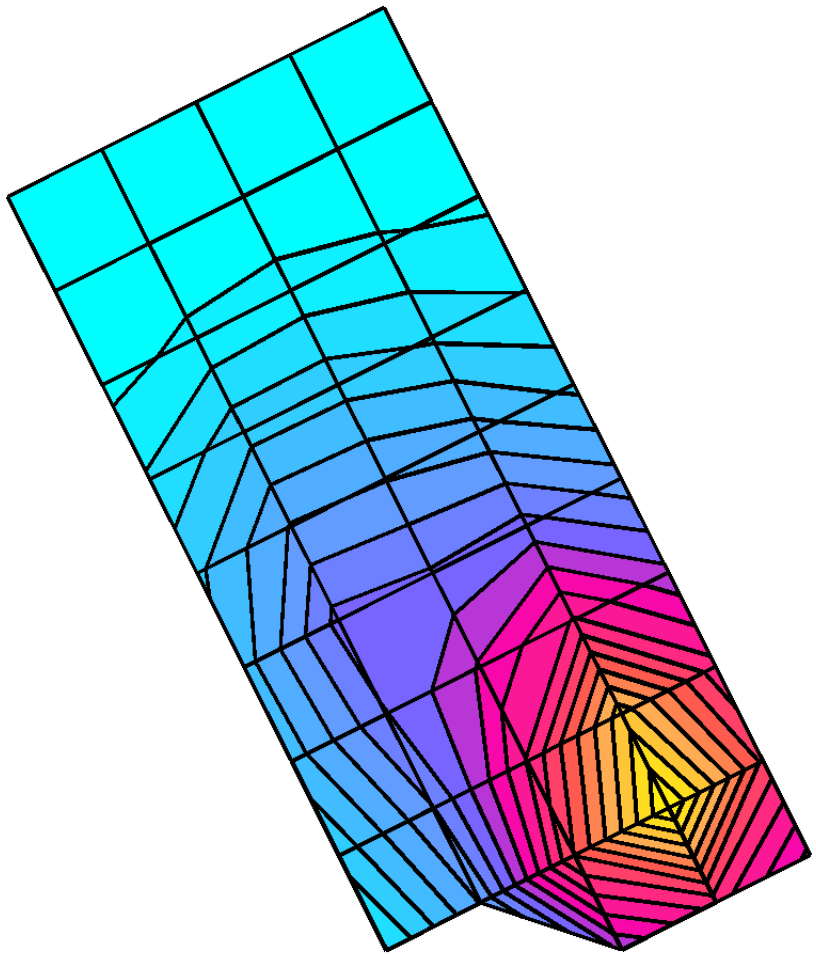
Ch# 1013 / Pwr Step: ALWAYS UP
Antenna Position ret
Type of Modulation: 800 CDMA
Battery Model #: 5695a std bat
DEVICE POSITION: Cheek
Accessory Model #: syn9766 leather case
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 824 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.37 mW/g, SAR (10g): 0.852 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 12.7 (10.5, 15.7) [mm]
Powerdrift: -0.36 dB



04/25/04 21:25

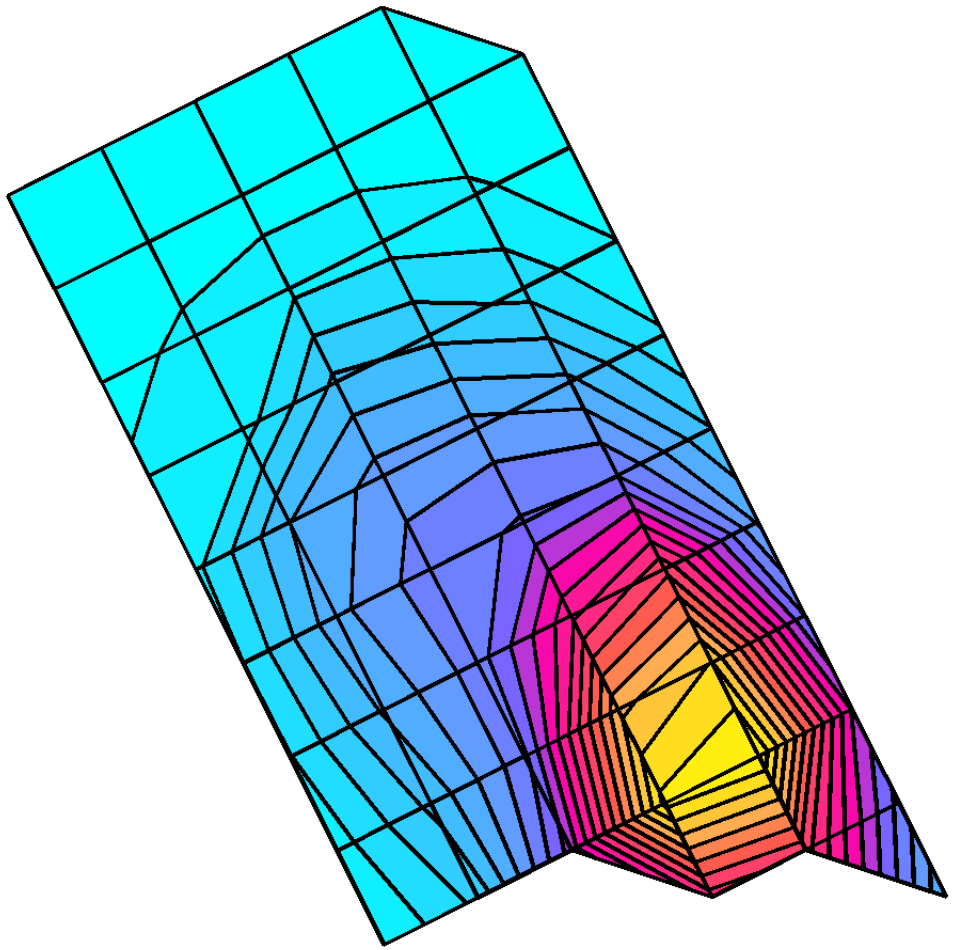
338CA46B

Ch#1013 / Pwr Step: ALWAYS UP
Antenna Position:Retracted
Type of Modulation: 800 CDMA
Battery Model #: Extended Battery
DEVICE POSITION: Cheek
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.07 mW/g, SAR (10g): 0.675 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.4 (10.4, 17.4) [mm]
Powerdrift: -0.30 dB



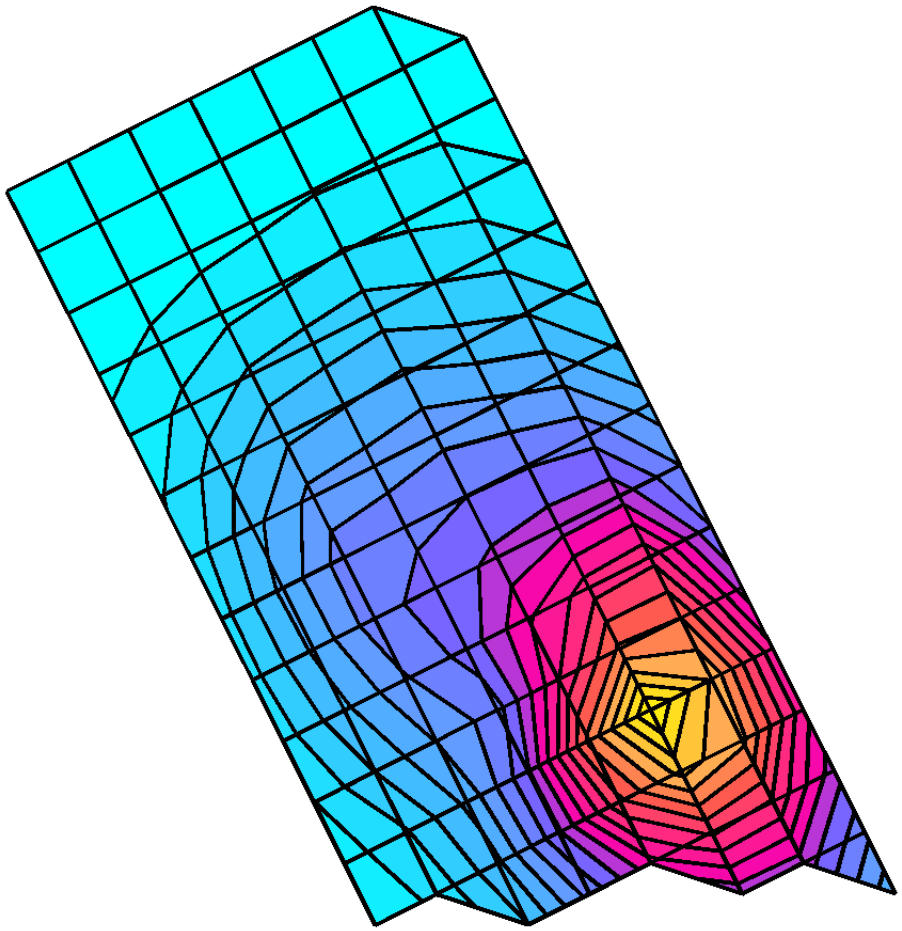
338CA46B

Ch# 1013 / Pwr Step: ALWAYS UP Antenna Position: EXT
Type of Modulation: 800 CDMA Battery Model #: SNN5695A
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: 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.39 mW/g, SAR (10g): 0.857 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.1 (10.1, 17.2) [mm]
Powerdrift: -0.33 dB



338CA46B

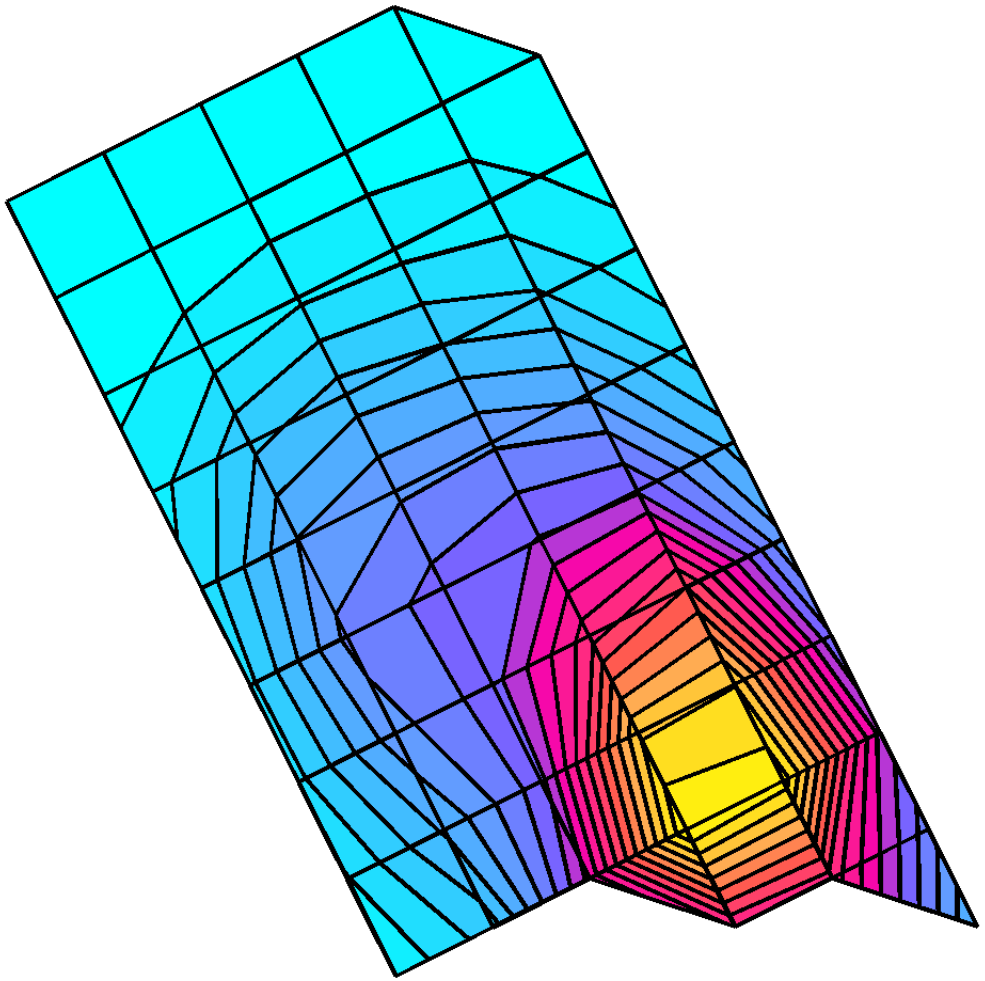
Ch# 1013 / Pwr Step: Always Up
Antenna Position: Extended
Type of Modulation:CDMA 800
Battery Model #: SNN5695A
DEVICE POSITION: Cheek
Accessory Model #: SYN9766 Leather Case
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right Hand Section; Position: (90°,180°); Frequency: 825 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.89$ mho/m $\varepsilon_r = 40.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.982 mW/g, SAR (10g): 0.645 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 14.1 (11.3, 17.7) [mm]
Powerdrift: -0.18 dB



04/26/04 00:34

338CA46B

Ch# 1013 / Pwr Step: ALWAYS UP
Antenna Position ext
Type of Modulation: 800 CDMA
Battery Model #: Extended Battery
DEVICE POSITION: Cheek
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Right 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.20 mW/g, SAR (10g): 0.747 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.1 (10.2, 16.9) [mm]
Powerdrift: -0.33 dB



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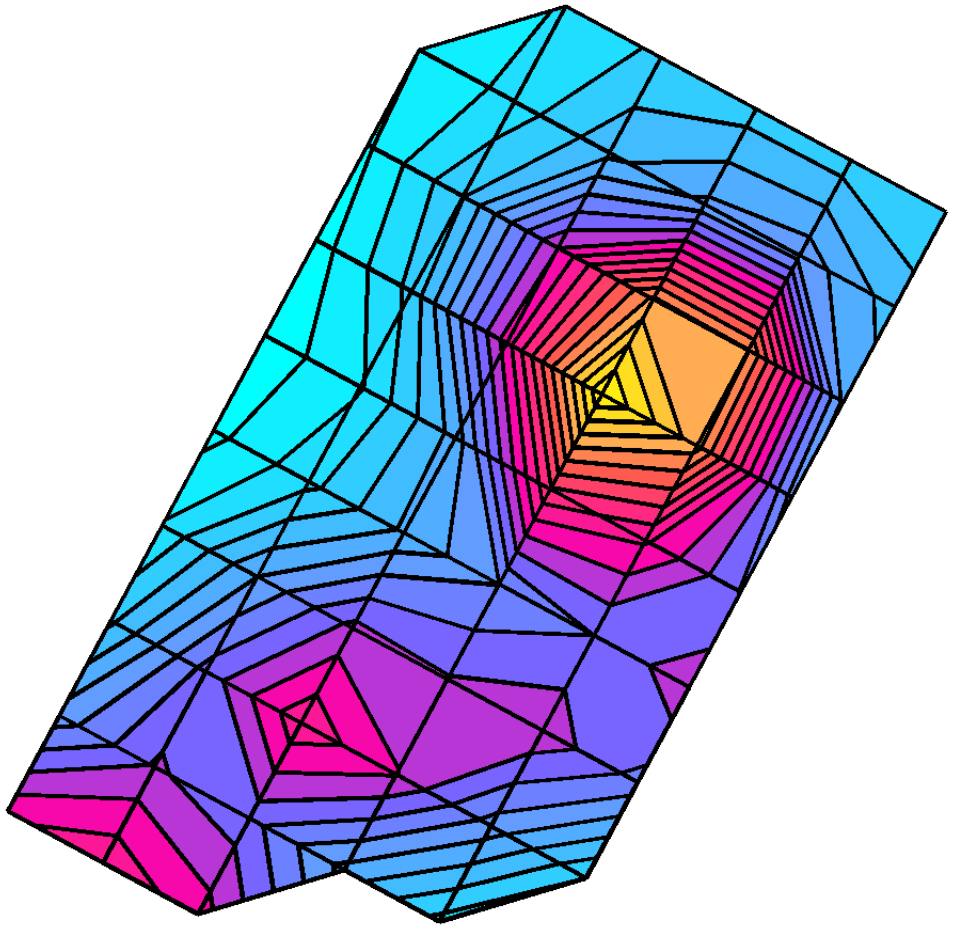
04/27/04 10:10

338CA46B

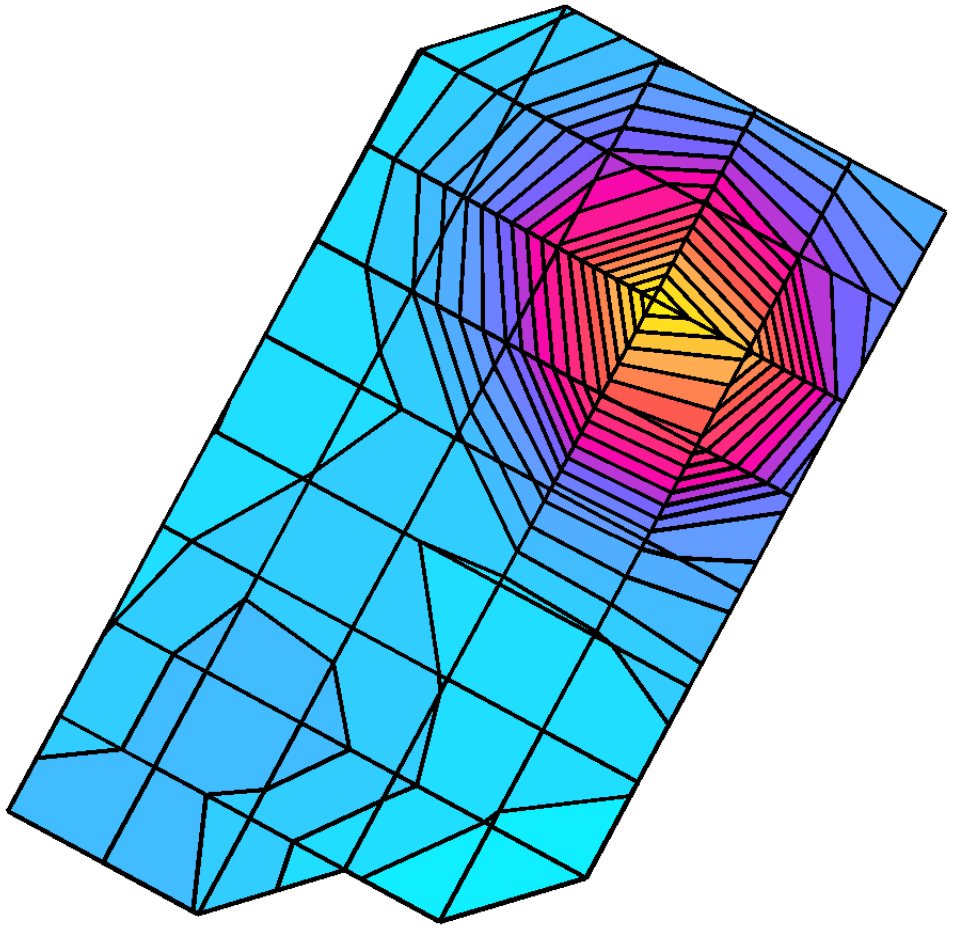
Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 1800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.223 mW/g, SAR (10g): 0.129 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 11.8 (11.7, 11.9) [mm]
Powerdrift: 0.13 dB



04/27/04 09:23

338CA46B

Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 1800 CDMA
Battery Model #: SNN5695A
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 = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.234 mW/g, SAR (10g): 0.138 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 10.7 (10.7, 10.8) [mm]
Powerdrift: 0.24 dB



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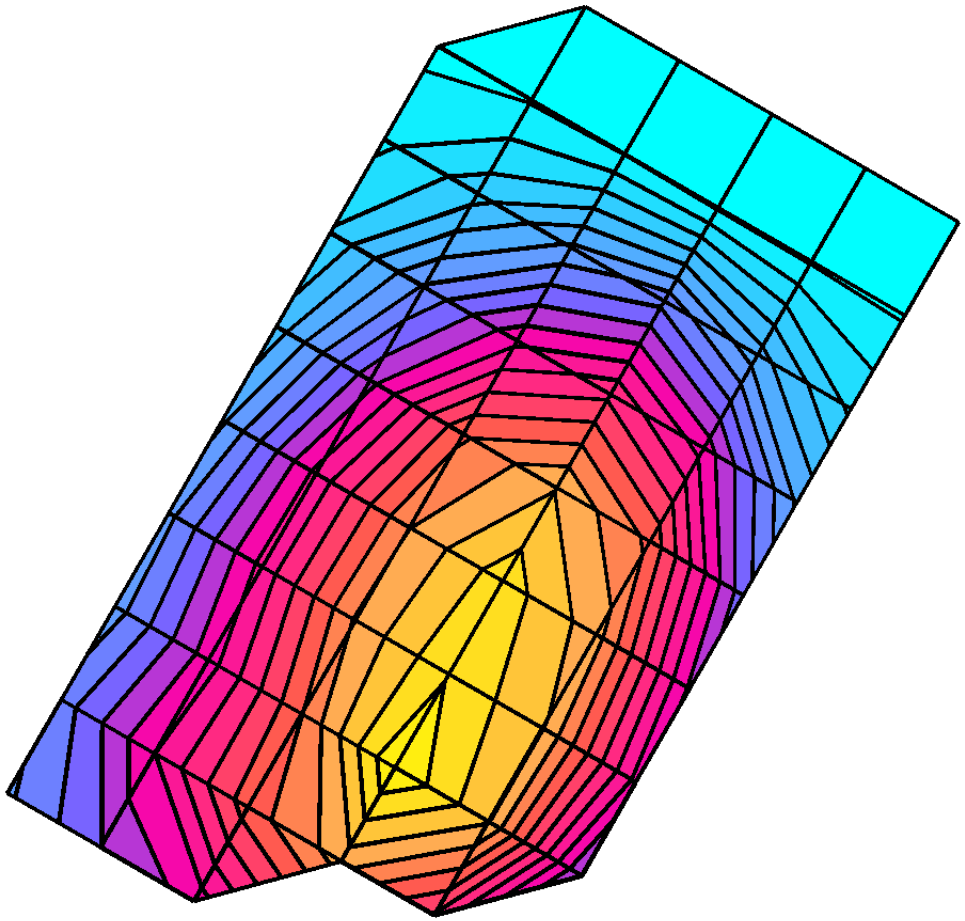
338CA46B

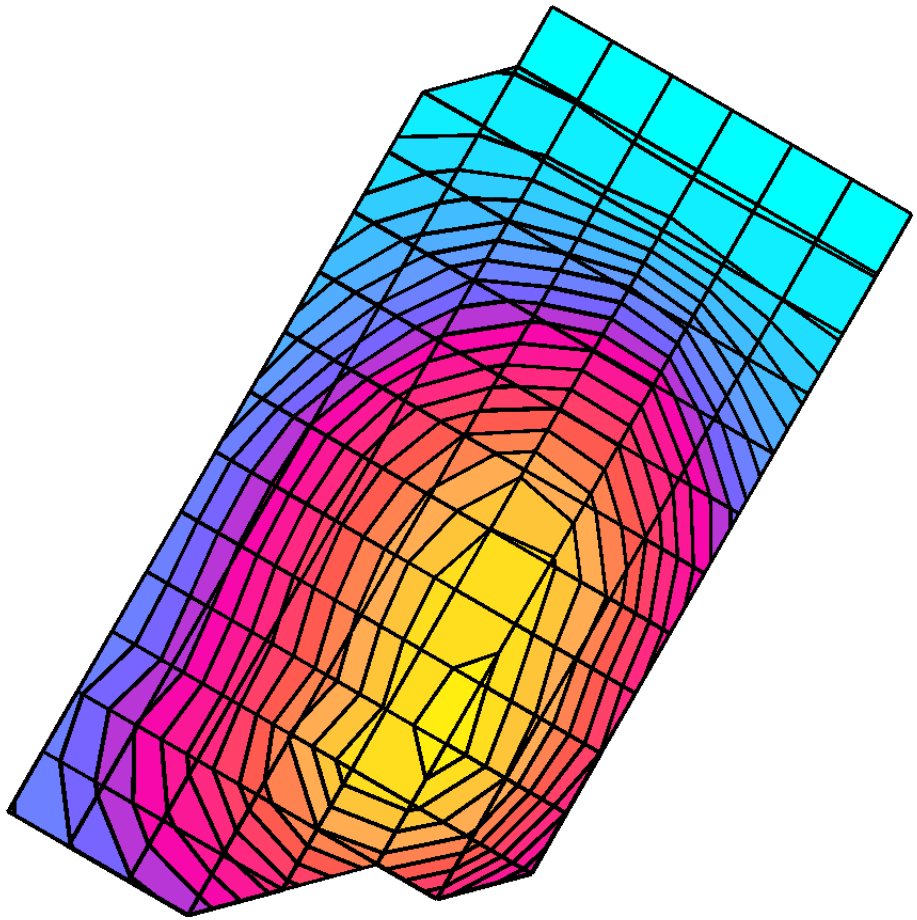
Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: NONE
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 837 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.316 mW/g, SAR (10g): 0.231 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 17.1 (13.4, 21.5) [mm]
Powerdrift: -0.01 dB



04/24/04 23:38

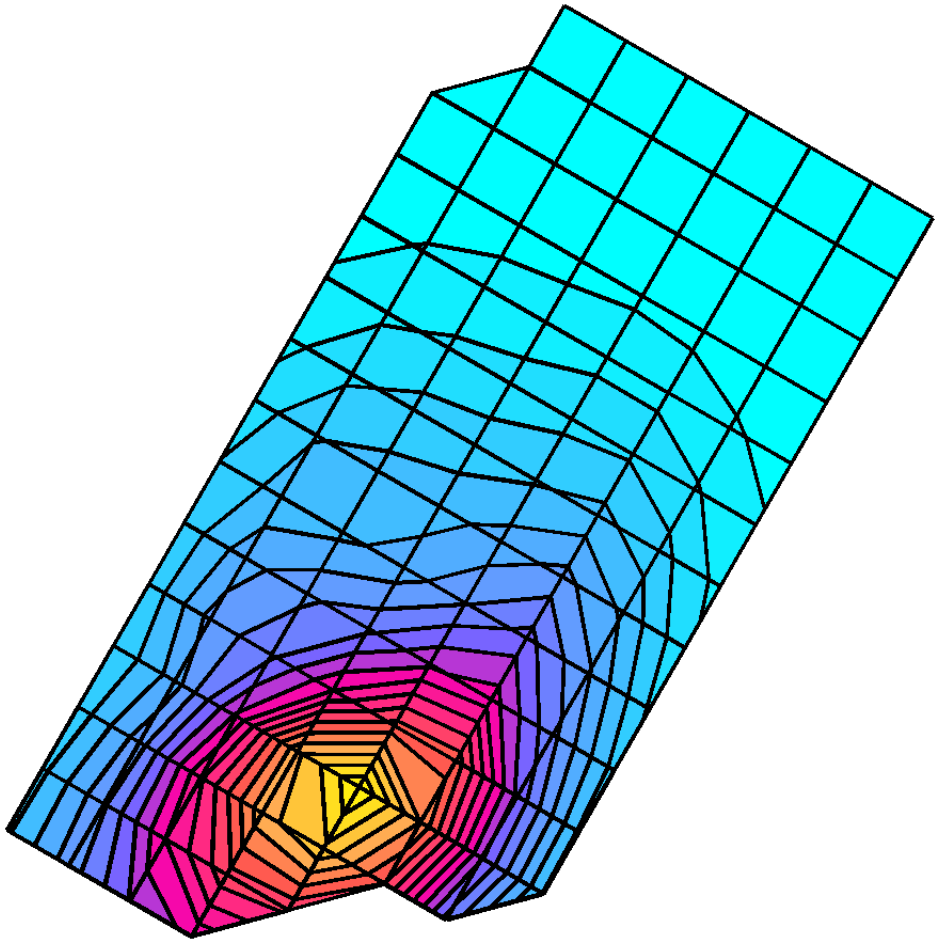
338CA46B

Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): TILTED
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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 0.262 mW/g, SAR (10g): 0.194 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 17.3 (13.6, 21.6) [mm]
Powerdrift: -0.12 dB



338CA46B

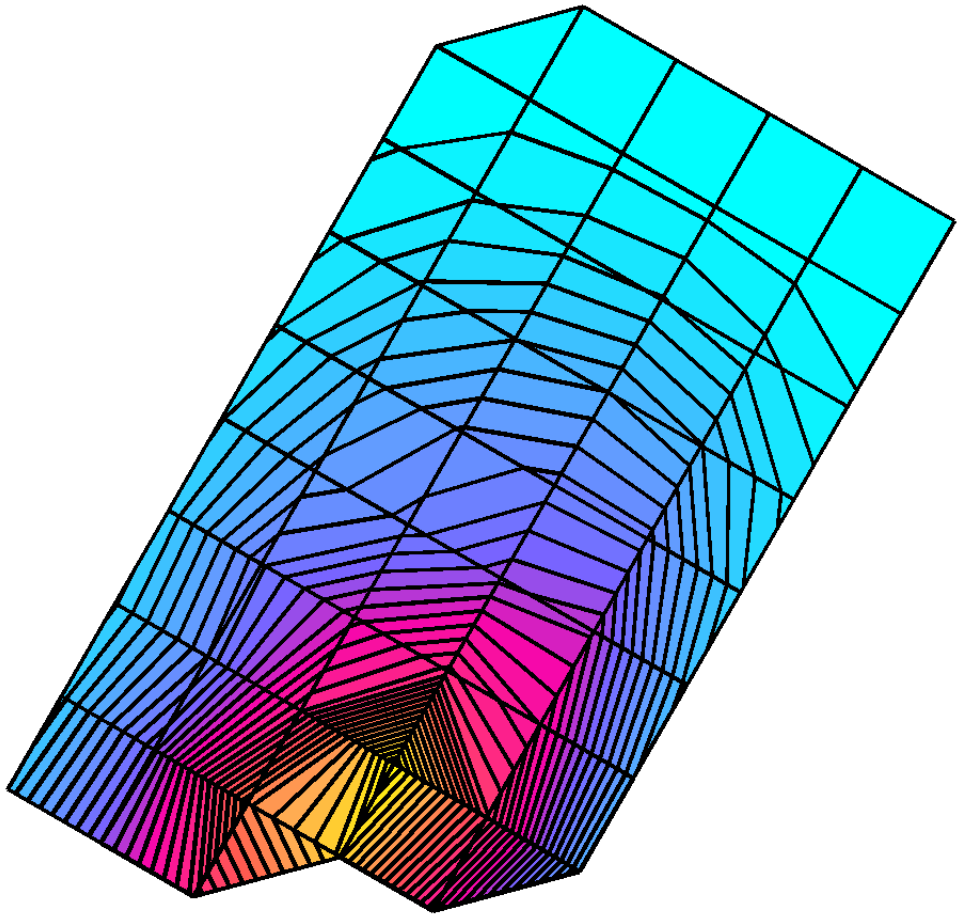
Ch# 777 / Pwr Step:ALWAYS UP Antenna Position:RET
Type of Modulation: 800 CDMA Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 848 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.20 mW/g, SAR (10g): 0.759 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 13.3 (10.8, 16.7) [mm]
Powerdrift: -0.39 dB



04/24/04 21:06

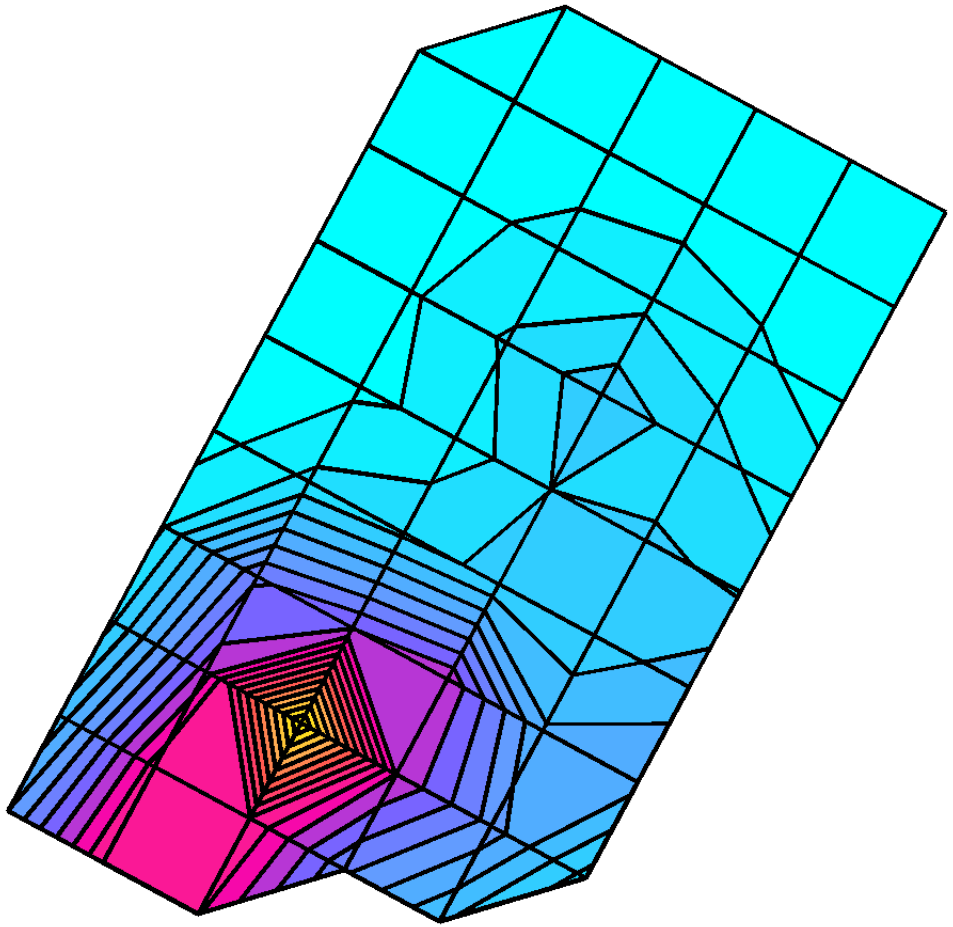
338CA46B

Ch# 777 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.21 mW/g, SAR (10g): 0.777 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.8 (11.1, 17.3) [mm]
Powerdrift: -0.34 dB



338CA46B

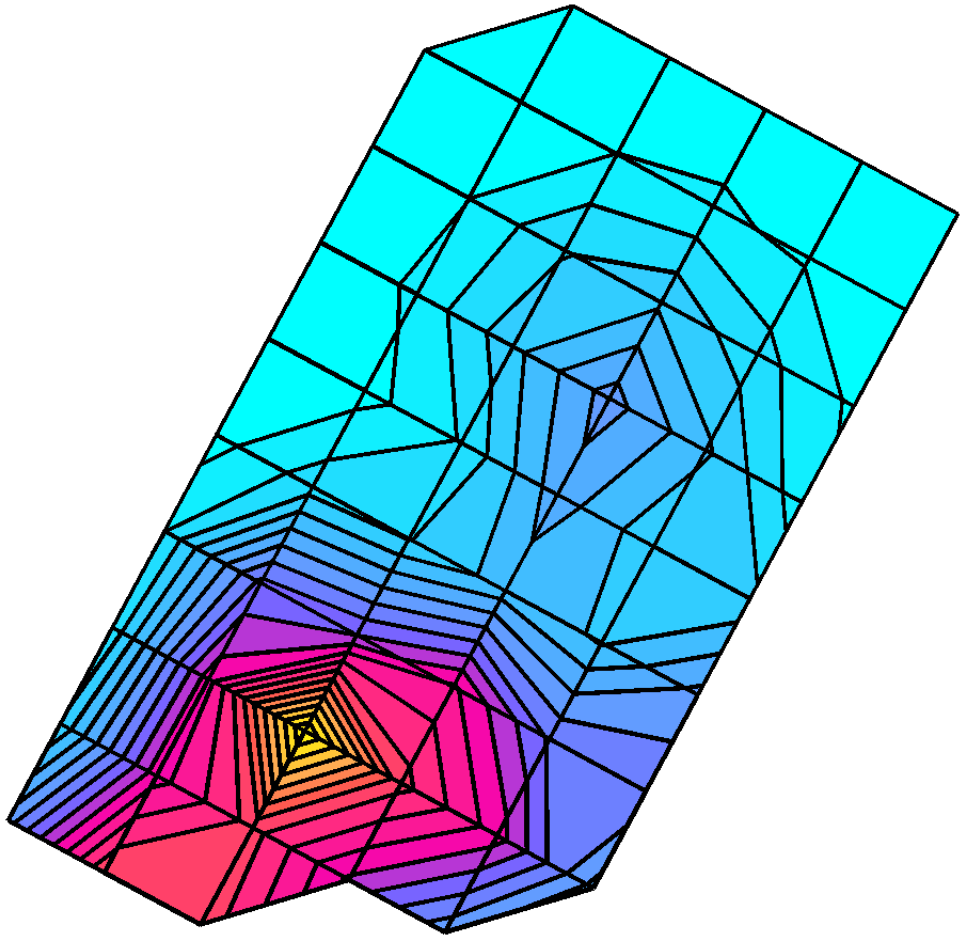
Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 1800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.792 mW/g, SAR (10g): 0.427 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.2 (8.8, 10.0) [mm]
Powerdrift: 0.03 dB



04/27/04 23:50

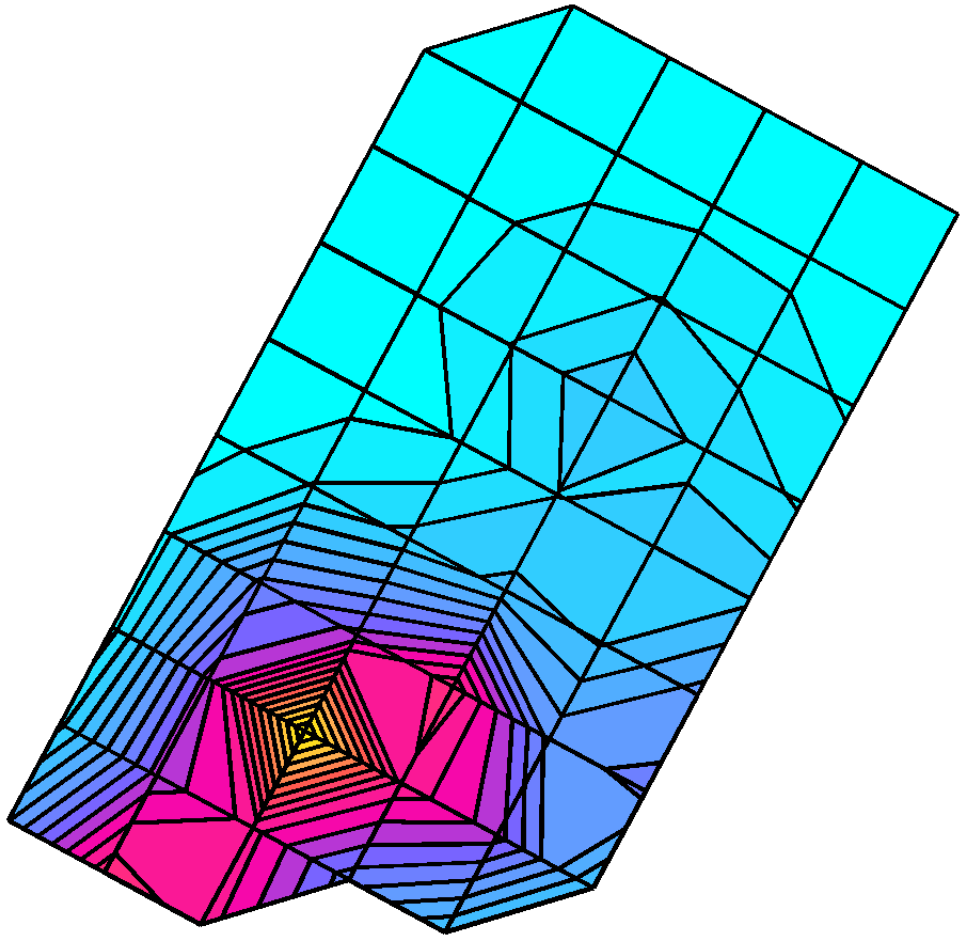
338CA46B

Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 1900 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: SYN9766 Leather Case
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 = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.689 mW/g, SAR (10g): 0.384 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.3 (8.6, 10.4) [mm]
Powerdrift: -0.10 dB



338CA46B

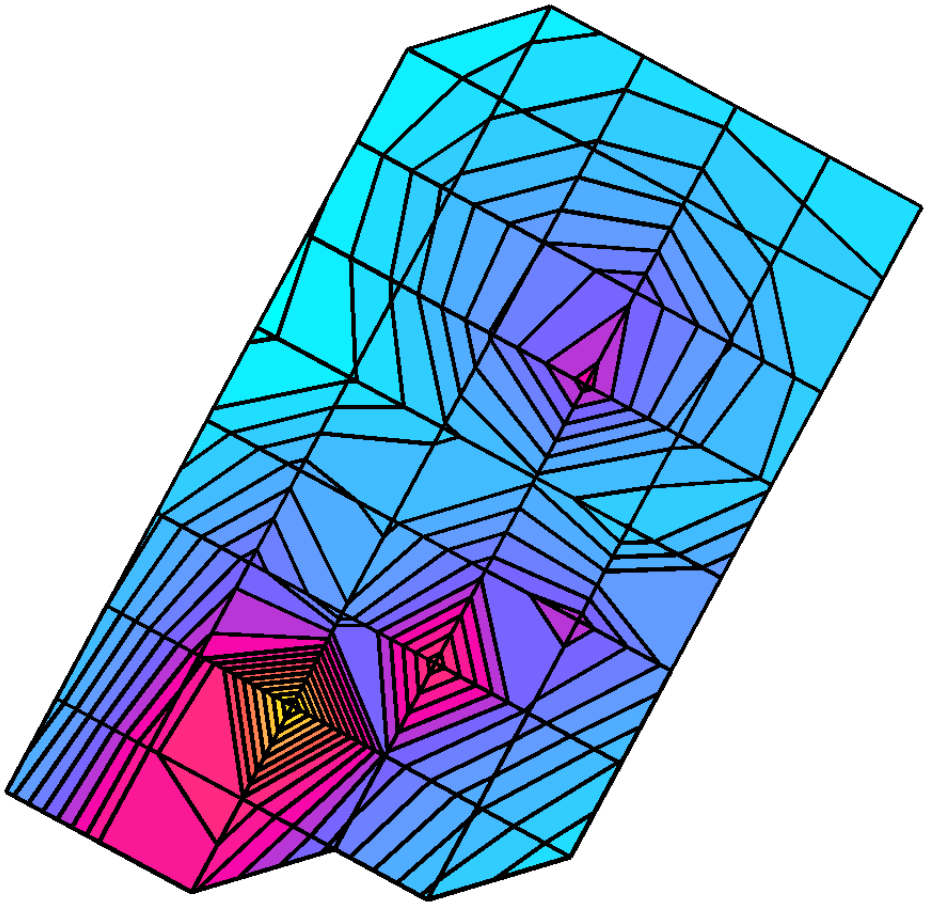
Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 1900 CDMA
Battery Model #: EXT BATTERY
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.914 mW/g, SAR (10g): 0.485 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.7 (9.5, 10.0) [mm]
Powerdrift: 0.13 dB



04/27/04 08:42

338CA46B

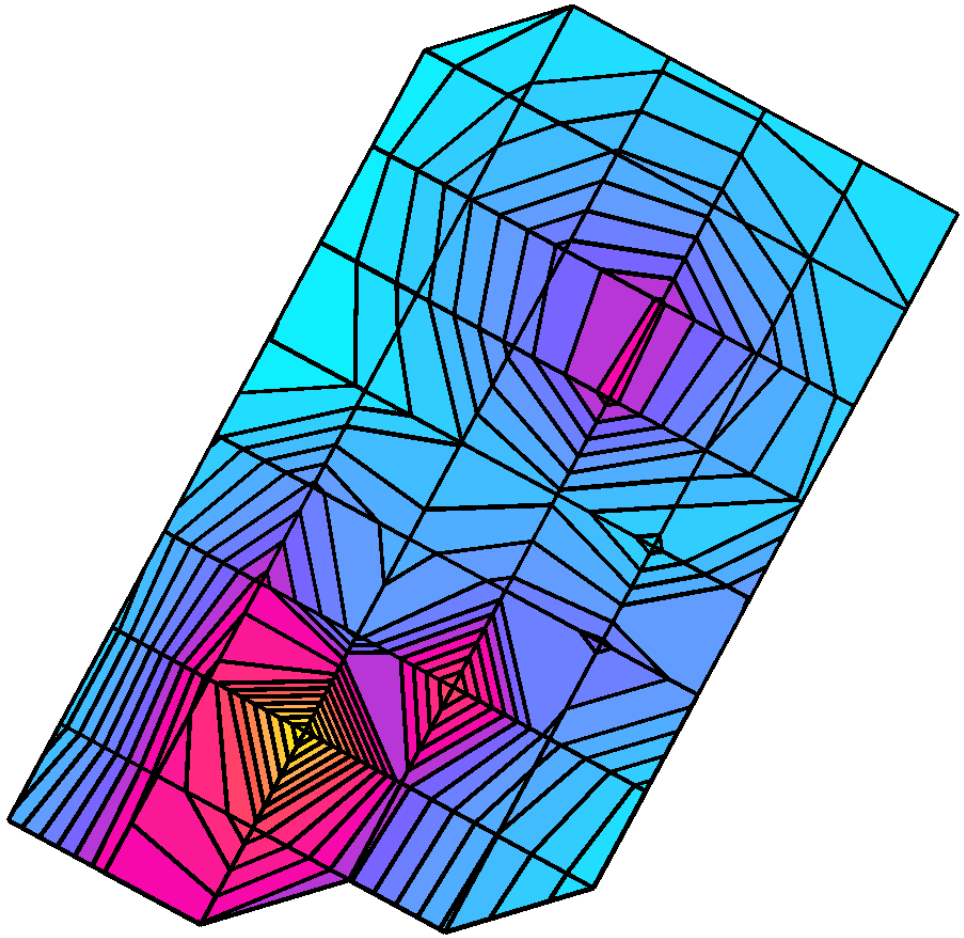
Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 1800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1154 GLYCOL SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 1880 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(4.90,4.90,4.90); Crest factor: 1.0; 1880 MHz Head & Body: σ = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.388 mW/g, SAR (10g): 0.214 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.7 (9.0, 10.8) [mm]
Powerdrift: 0.22 dB



04/28/04 00:30

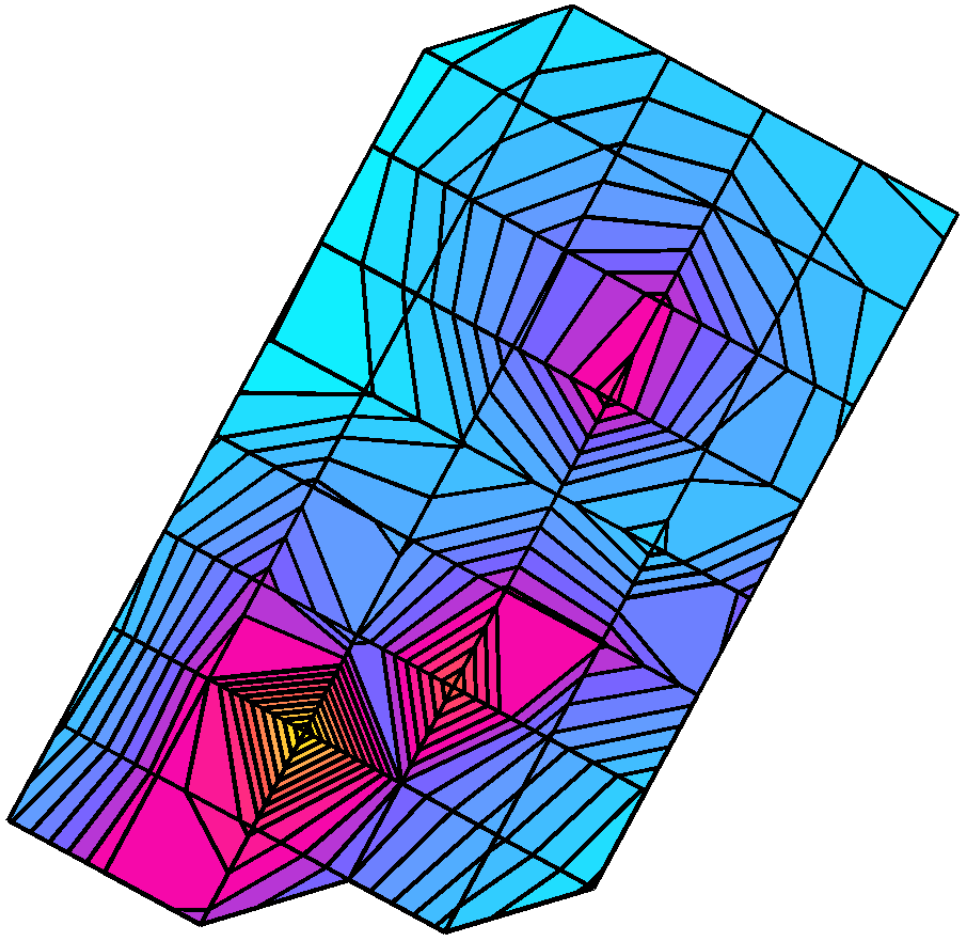
338CA46B

Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 1900 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: SYN9766 Leather Case
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 = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.392 mW/g, SAR (10g): 0.218 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.9 (9.0, 11.2) [mm]
Powerdrift: 0.03 dB



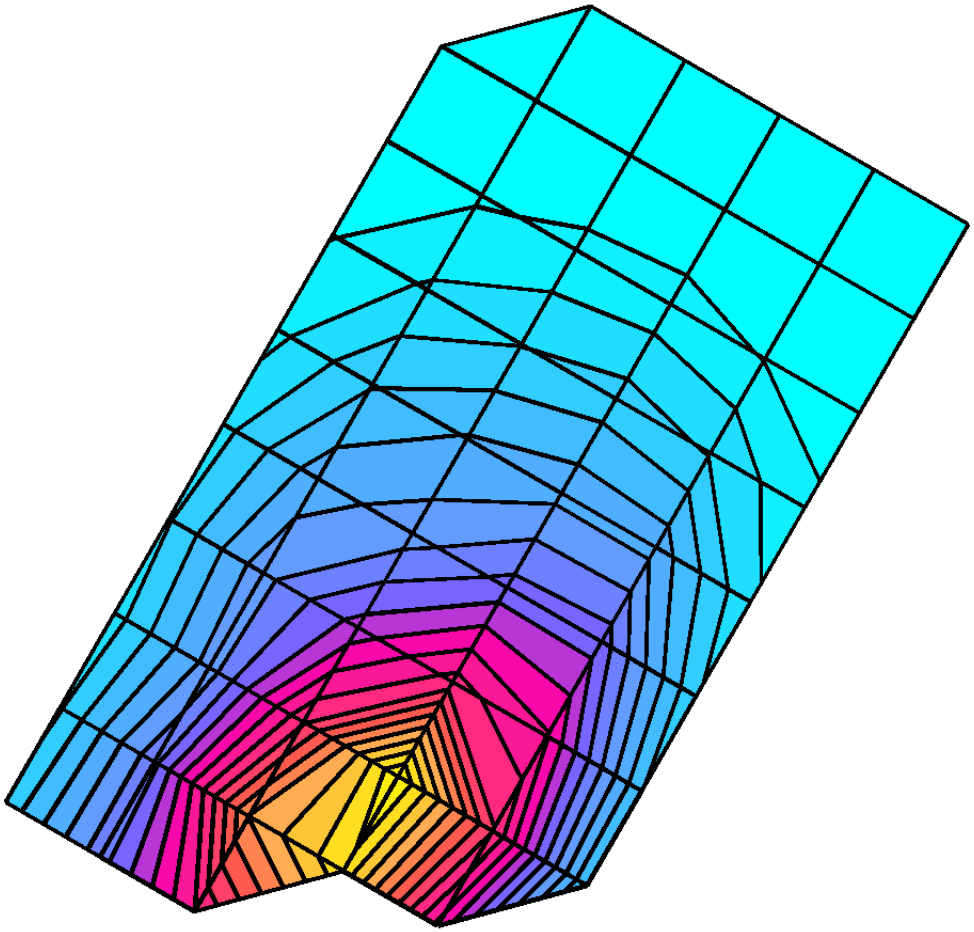
338CA46B

Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 1900 CDMA
Battery Model #: EXT BATTERY
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
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 = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.355 mW/g, SAR (10g): 0.191 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.4 (8.8, 10.4) [mm]
Powerdrift: 0.18 dB



338CA46B

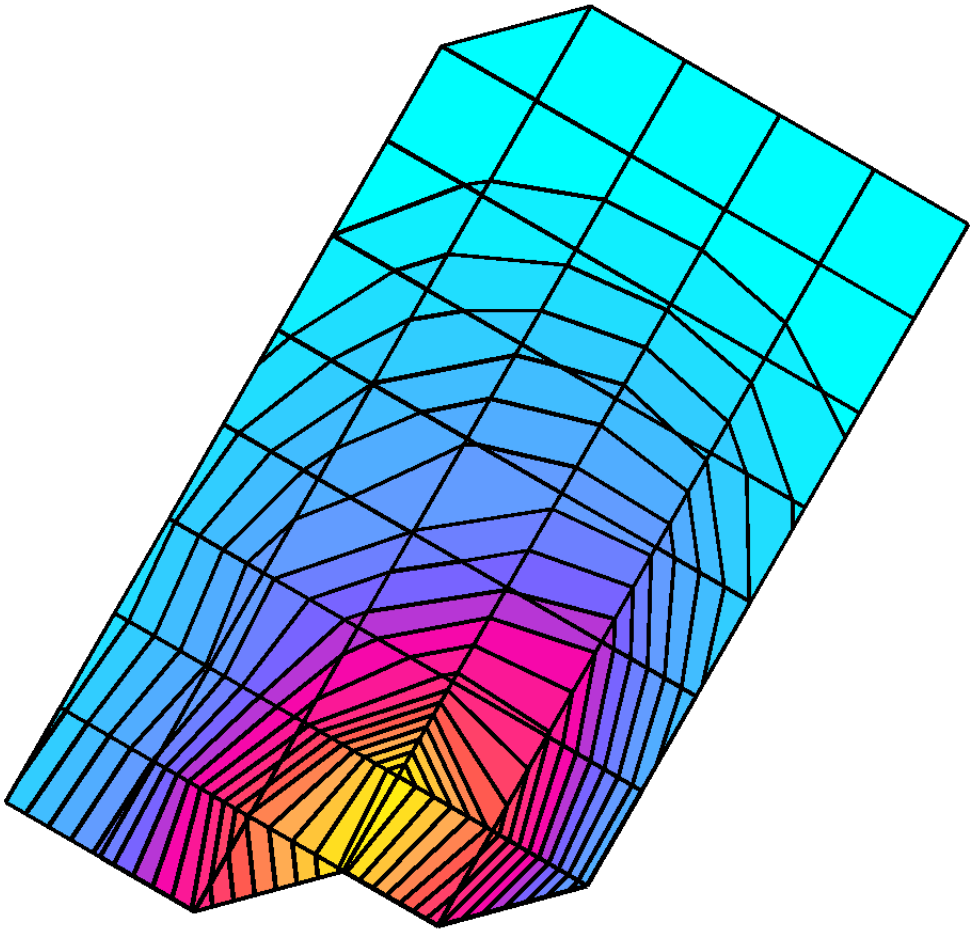
Ch# 384 / Pwr Step:ALWAYS UP Antenna Position:RET
Type of Modulation: 800 CDMA Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: ???
R1 TP-1005 SUGAR SAM Expanded (Rev. 2)-9Jan03 Phantom; Left Hand Section; Position: (90°,180°); Frequency: 836 MHz
Probe: ES3DV3 - SN3037 - IEEE Head; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 MHz Head & Body: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.15 mW/g, SAR (10g): 0.750 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.9 (10.8, 17.9) [mm]
Powerdrift: -0.40 dB



04/24/04 19:35

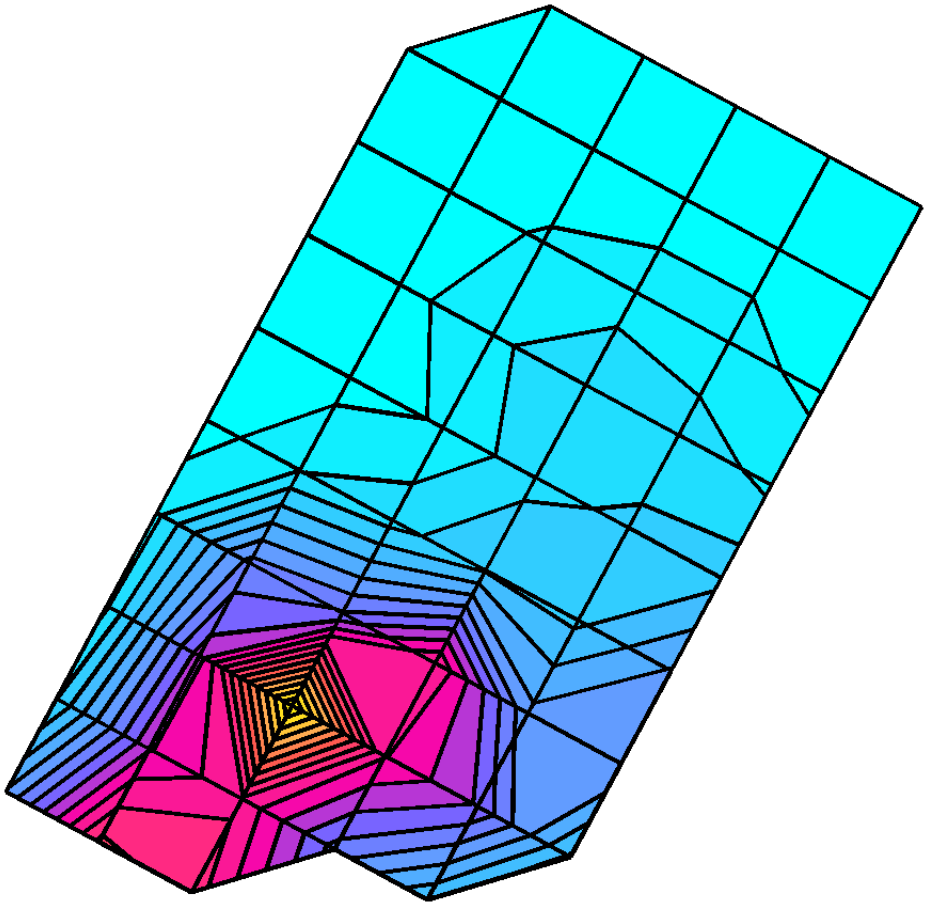
338CA46B

Ch# 384 / Pwr Step: ALWAYS UP
Antenna Position: EXT
Type of Modulation: 800 CDMA
Battery Model #: SNN5695A
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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.05 mW/g, SAR (10g): 0.682 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 14.1 (11.7, 17.1) [mm]
Powerdrift: -0.14 dB



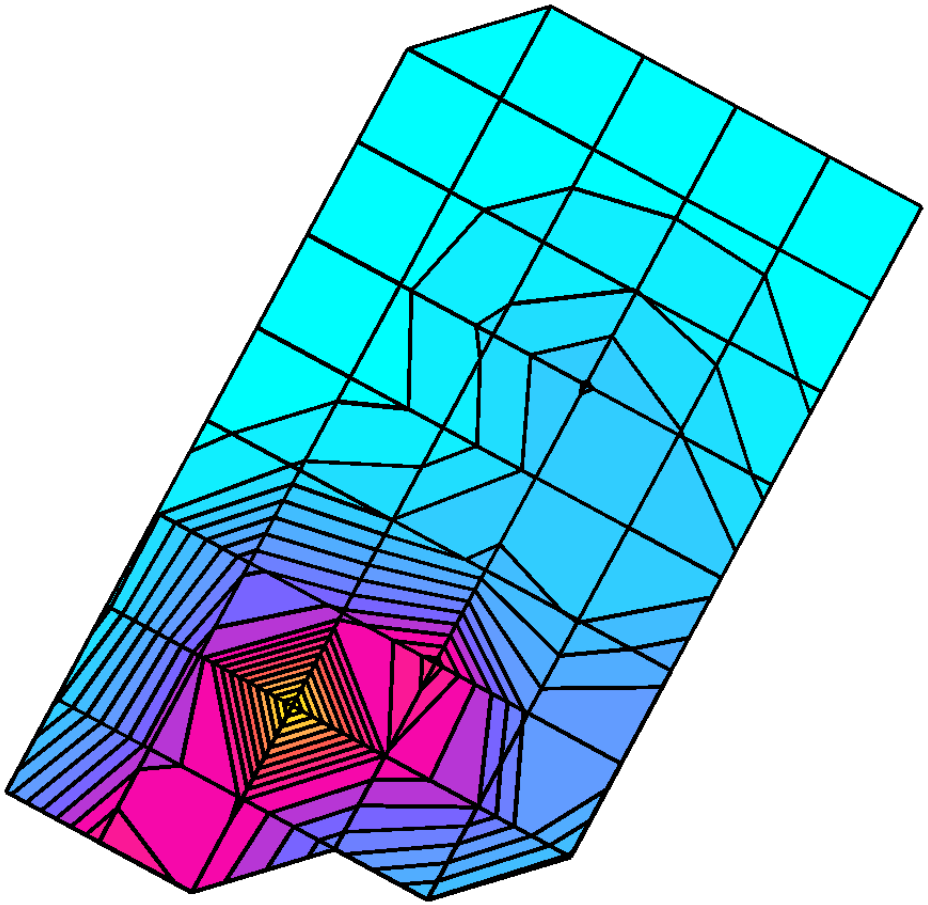
338CA46B

Ch# 25 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 1900 CDMA
Battery Model #: EXT BATTERY
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
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 = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.799 mW/g, SAR (10g): 0.422 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.5 (9.3, 10.0) [mm]
Powerdrift: 0.09 dB



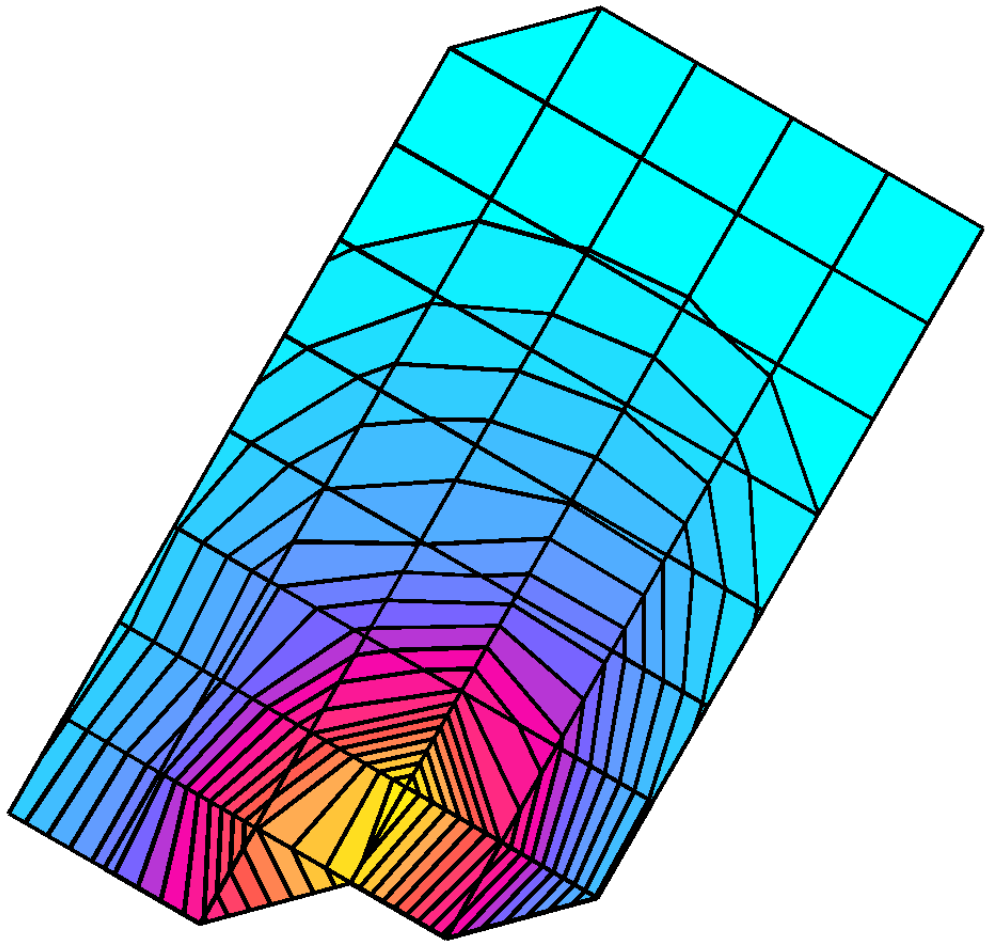
338CA46B

Ch# 1175 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 1900 CDMA
Battery Model #: EXT BATTERY
DEVICE POSITION (cheek or rotated): CHEEK
Accessory Model #: NONE
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 = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.746 mW/g, SAR (10g): 0.391 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 9.2 (9.0, 9.7) [mm]
Powerdrift: 0.02 dB



338CA46B

Ch#1013 / Pwr Step:ALWAYS UP Antenna Position:RET
Type of Modulation: 800 CDMA Battery Model #: SNN5695A
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: 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 $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3
Cube 7x7x7: SAR (1g): 1.25 mW/g, SAR (10g): 0.803 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 15.0
Penetration depth: 13.6 (10.8, 17.2) [mm]
Powerdrift: -0.29 dB



338CA46B

Ch# 600 / Pwr Step: ALWAYS UP
Antenna Position: RET
Type of Modulation: 1800 CDMA
Battery Model #: SNN5695A
DEVICE POSITION (cheek or rotated): TILTED
Accessory Model #: ???
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 = 1.47 mho/m ε_r = 38.6 ρ = 1.00 g/cm^3
Cube 7x7x7: SAR (1g): 0.177 mW/g, SAR (10g): 0.109 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 12.5 (12.0, 13.0) [mm]
Powerdrift: -0.09 dB

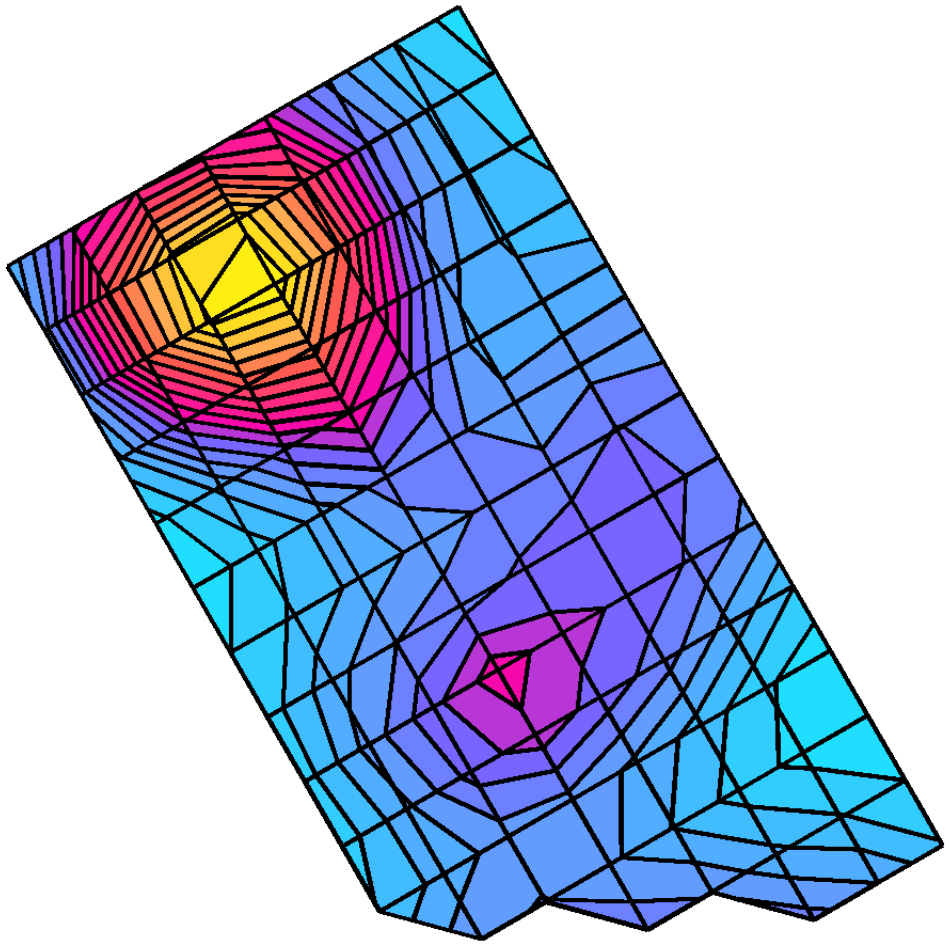


Figure 1.Typical 800MHz Head Adjacent Contour Overlaid on Phone with Antenna Extended (Cheek Touch)

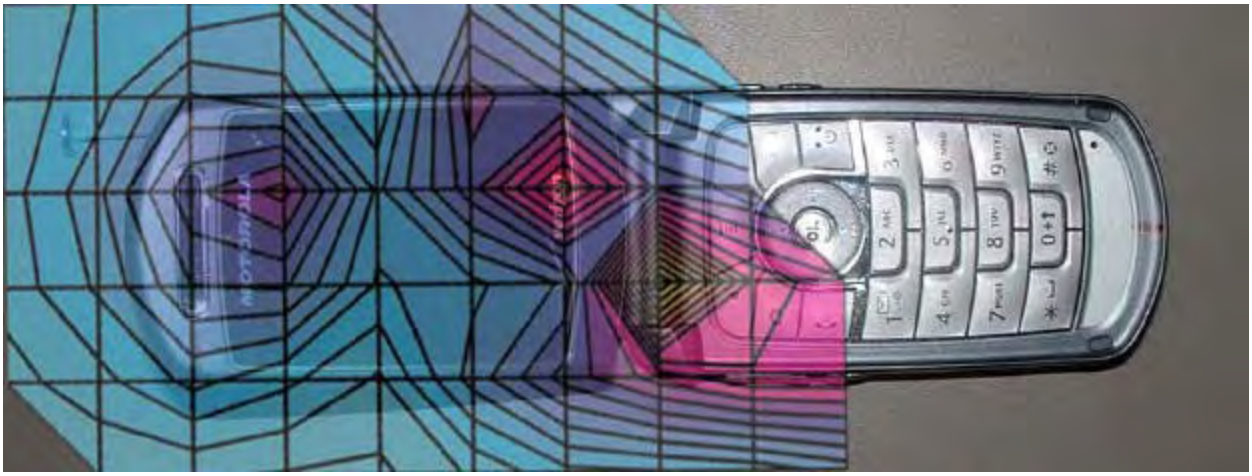


Figure 2.Typical 1900MHz Head Adjacent Contour Overlaid on Phone with Antenna Extended (Cheek Touch)

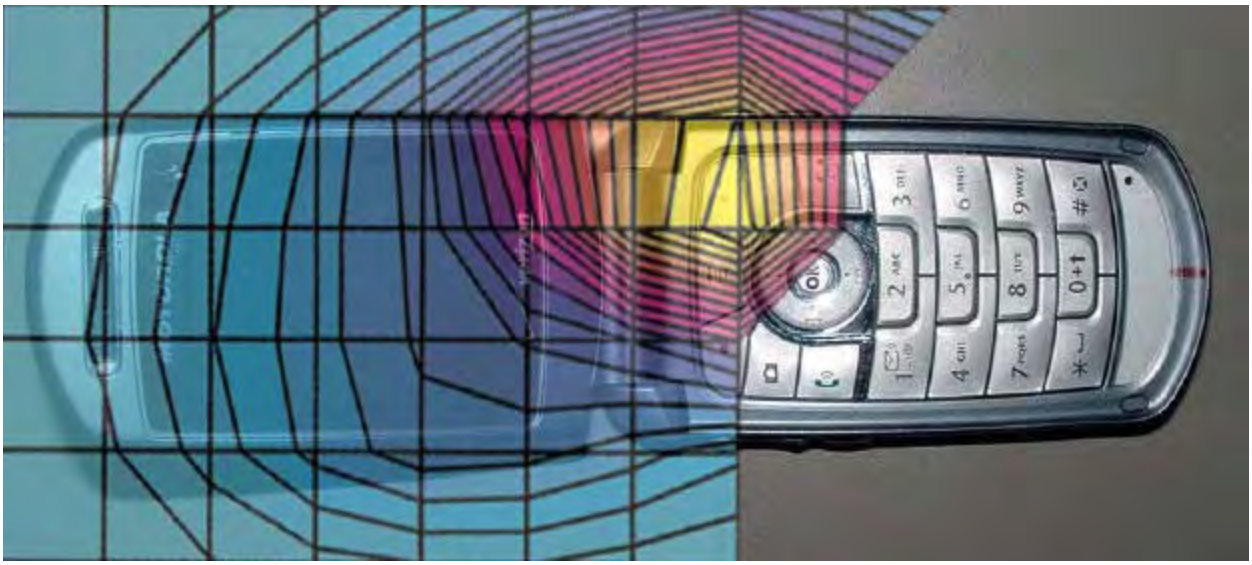


Figure 3.Typical 800MHz Head Adjacent Contour Overlaid on Phone with Antenna Retracted (Cheek Touch)

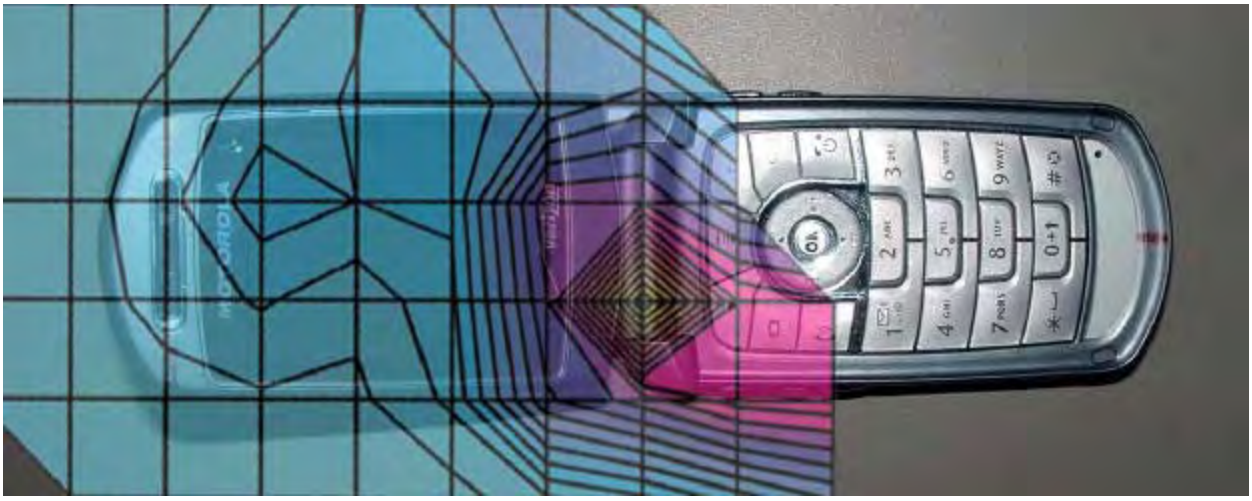


Figure 4.Typical 1900MHz Head Adjacent Contour Overlaid on Phone with Antenna Retracted (Cheek Touch)

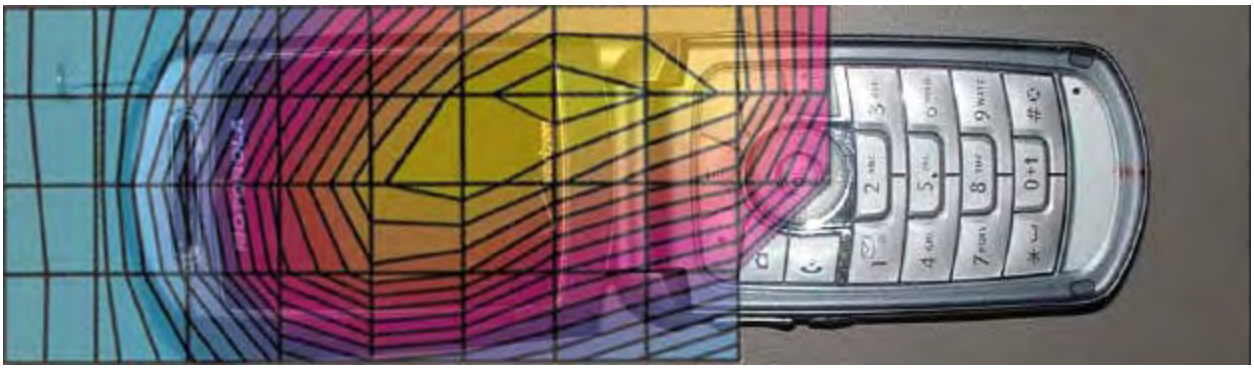


Figure 5.Typical 800MHz Head Adjacent Contour Overlaid on Phone with Antenna Extended (15 ° Tilt)

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

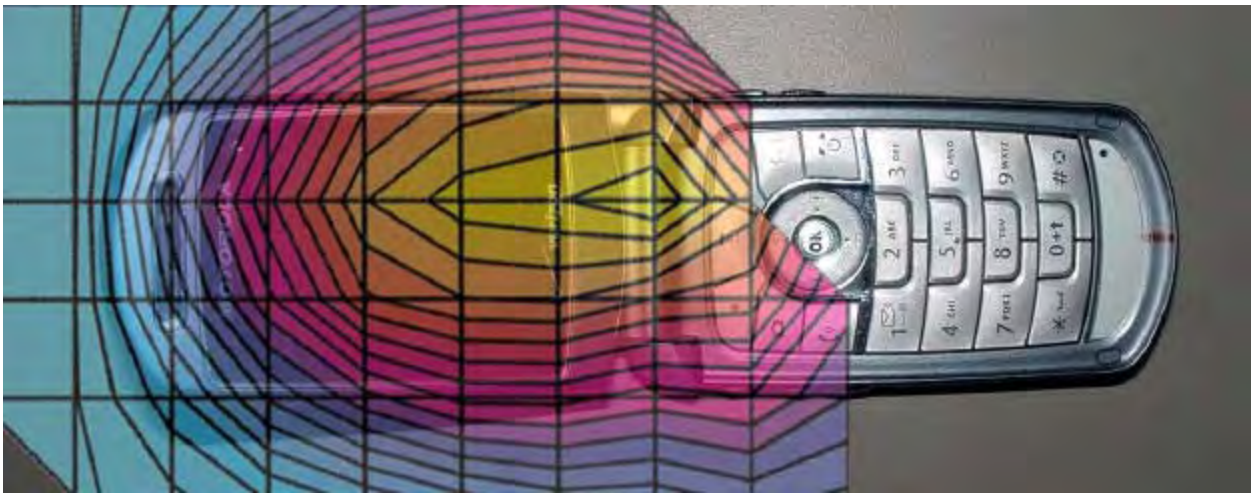


Figure 7.Typical 800MHz Head Adjacent Contour Overlaid on Phone with Antenna Retracted (15 ° Tilt)

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