Exhibit 11: SAR Test Report: IHDT56AS1

Date of test:	April 2-4, 2001
Laboratory:	Motorola Personal Communications Sector Product Safety Laboratory 2001 N. Division Room: AS228 Harvard, Illinois 60033
Test Responsible:	Steven Hauswirth Staff Engineer
Accreditation:	ISO 17025 Accredited Lab, A2LA certificate #1651-01
Statement of Compliance:	Motorola declares under its sole responsibility that portable cellular telephone FCC ID IHDT56AS1 to which this declaration relates, is in conformity with the appropriate RF exposure standards, recommendations and guidelines. It also declares that the product was tested in accordance with the appropriate measurement standards, guidelines and recommended practices. Any deviations from these standards, guidelines and recommended practices are noted below:

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Reference Notes

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 IHDT56AS1. The Specific Absorption Rate (SAR) of this product was measured. The portable cellular phone was tested in accordance with the latest available test guidelines. The SAR values found for the portable cellular phone (FCC ID IHDT56AS1) are below the maximum recommended levels of 1.6 W/kg. Detailed procedures of the test are described in the *Motorola Exhibit 11 Reference SAR Test Report*.

2. Description of the Device Under Test

Antenna description

Type	Fixed Stub	
Location	Right Side	
Dimensions	Length	31mm
	Width at Base	9mm
Configuration	Helix	

Device description

FCC ID Number	IHDT56AS1		
Serial number	890607STBEA		
Mode(s) of Operation	AMPS	TDMA800	TDMA1900
Maximum Output Power Setting	27.0dBm	27.5dBm	27.0dBm
Duty Cycle	1:3	1:3	1:3
Transmitting Frequency Rang(s)	824.04-848.97MHz	824.04-848.97MHz	1850.2-1909.8MHz

3. Test Results

The SAR results shown in tables 1 and 2 are maximum SAR values averaged over 1 gram of phantom tissue. Also shown are the measured conducted output powers and the temperature of the test facility during the test.

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 then placed in the SAR measurement system with a fully charged battery.

A full data set output of two test conditions with the highest SAR values from the Dasy™ measurement system is included as appendix 2 and 3. The test conditions included are indicated as bold numbers in the following table. All other test conditions measured lower SAR values than those included.

This model does implement a cut-back of conducted power in analog mode when it’s flip is closed.

f (MHz)	Description	Conducted Output Power (dBm)	SAR, 1g (W/kg) Left Head	SAR, 1g (W/kg) Right Head
Analog 800MHz	Channel 991	27.07	0.58	0.62
	Channel 400	27.02	0.67	0.74
	Channel 799	27.06	0.78	**0.86**
Digital 800MHz	Channel 991	27.64		
	Channel 384	27.73		
	Channel 779	27.59	0.29	0.31
Digital 1900MHz	Channel 2	26.82	1.13	**1.27**
	Channel 1000	26.85	1.08	1.17
	Channel 1999	26.85	1.20	1.05

Table 1: SAR measurement results for the portable cellular telephone FCC ID IHDT56AS1 at highest possible output power. Measured against the head.

f (MHz)	Description	Conducted Output Power (dBm)	SAR, 1g (W/kg) Plastic Belt-Clip
Analog 800MHz	Channel 991	26.57	1.15
	Channel 384	26.52	**1.24**
	Channel 799	26.56	1.14
Digital 800MHz	Channel 991	27.64	
	Channel 384	27.73	0.40
	Channel 779	27.59	
Digital 1900MHz	Channel 2	26.82	0.30
	Channel 1000	26.85	**0.33**
	Channel 1998	26.85	0.26

Table 2: SAR measurement results for the portable cellular telephone FCC ID IHDT56AS1 at highest possible output power. Measured against the body.

4. Test Equipment Used

4.1 Dosimetric System

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

Description	Serial Number	Cal Due Date
DASY3 DAE V1	SN398	8/28/2001
E-Field Probe ETDV6	SN1514	11/25/01
Dipole Validation Kit, DV1800V2	SN259	1/6/2002
Dipole Validation Kit, DV900V2	SN80	10/26/02

4.2 Additional Equipment

Description	Serial Number	Cal Due Date
Signal Generator HP8648C	3847A04810	11/15/2002
Power Meter E4419B	GB39511087	11/14/2001
Power Sensor 8481A	US39210931	1/24/2002

5. Electrical parameters of the tissue simulating liquid

Prior to conducting SAR measurements, the relative permittivity, ε_r, and the conductivity, σ, of the tissue simulating liquids were measured with HP85070 Dielectric Probe Kit These values are shown in the table below. The mass density, ρ, used by the dosimetric system is also given. Recommended limits for maximum permittivity, minimum conductivity and maximum mass density are also shown. These come from the Federal Communication Commission, "Tissue Dielectric Properties" web site at http://www.fcc.gov/fcc-bin/dielec.sh. 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)	r (g/cm^3)
836	**Head**	**Measured,** 4/4/2000	43.89	0.87	1.00
		Recommended Limits	46.10	0.74	1.03
	Body	**Measured,** 4/4/2001	52.64	1.09	1.00
		Recommended Limits	56.10	0.94	1.03
1880	**Head**	**Measured,** 4/2//2001	38.45	1.42	1.00
		Recommended Limits	43.40	1.19	1.03
	Body	**Measured,** 4/3/2001	47.94	1.64	1.00
		Recommended Limits	54.00	1.43	1.03

6. System Accuracy Verification

A system accuracy verification of the DASY3 was performed using the measurement equipment listed in Section 4. The test was conducted on the same day as the measurement of the DUT. The obtained results are displayed in the table below. The distributions of SAR compare well with those of the reference measurements (see Appendix 1). The SAR is normalized to 1W input power to the dipole.

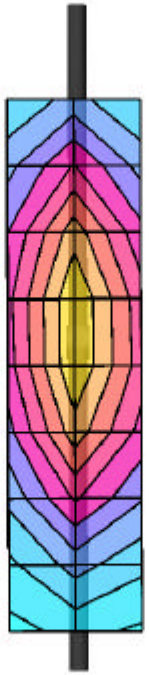
f (MHz)	Description	SAR (W/kg), 1gram	Dielectric Parameters		Temp (°C)
			e_r	s (S/m)	
900	**Measured**	10.28	42.56	0.86	22.0
	Recommended Limits	10.20	40.00	0.85	N/A
1800	**Measured**	42.74	39.57	1.73	20.0
	Recommended Limits	39.27	41.10	1.69	N/A

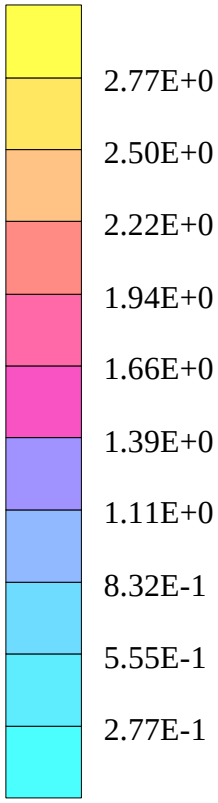
Appendix 1:

SAR distribution comparison for the system accuracy verification

Dipole 900 MHz

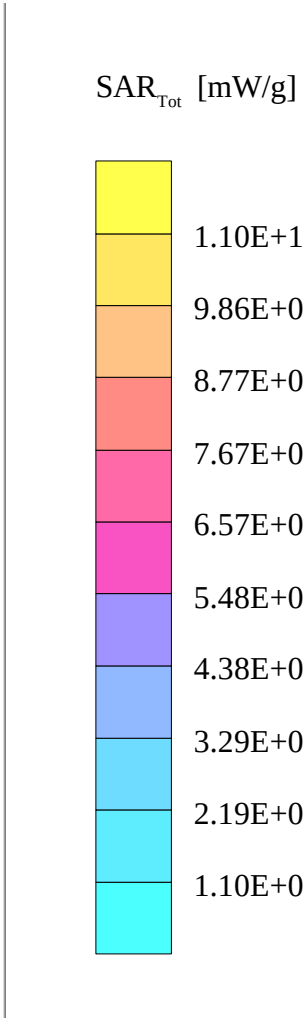
900 MHz Dipole Validation / Dipole Sn# 80 / Forward Power = 251mW / Temp at time of measurement: 22C
Amy Twin Optic OFF; Section 1
Probe: ET3DV6 - SN1514 Validation; ConvF(6.48,6.48,6.48); Crest factor: 1.0; Validation 900 MHz: σ = 0.86 mho/m ε_r = 42.6 ρ = 1.00 g/cm^3
Cubes (2): Peak: 3.98 mW/g ± 0.18 dB, SAR (1g): 2.58 mW/g ± 0.18 dB, SAR (10g): 1.68 mW/g ± 0.18 dB, (Worst-case extrapolation)





Dipole 1800 MHz

1800 MHz Dipole Validation / Dipole Sn#259 / Forward Power =248mW / Temp at time of measurement: 20
Amy Twin Optic OFF; Section 1
Probe: ET3DV6 - SN1514 Validation; ConvF(5.66,5.66,5.66); Crest factor: 1.0; Validation 1800 MHz: σ = 1.73 mho/m ε_r = 39.6 ρ = 1.00 g/cm^3
Cubes (2): Peak: 20.7 mW/g ± 0.15 dB, SAR (1g): 10.6 mW/g ± 0.14 dB, SAR (10g): 5.37 mW/g ± 0.11 dB, (Worst-case extrapolation)

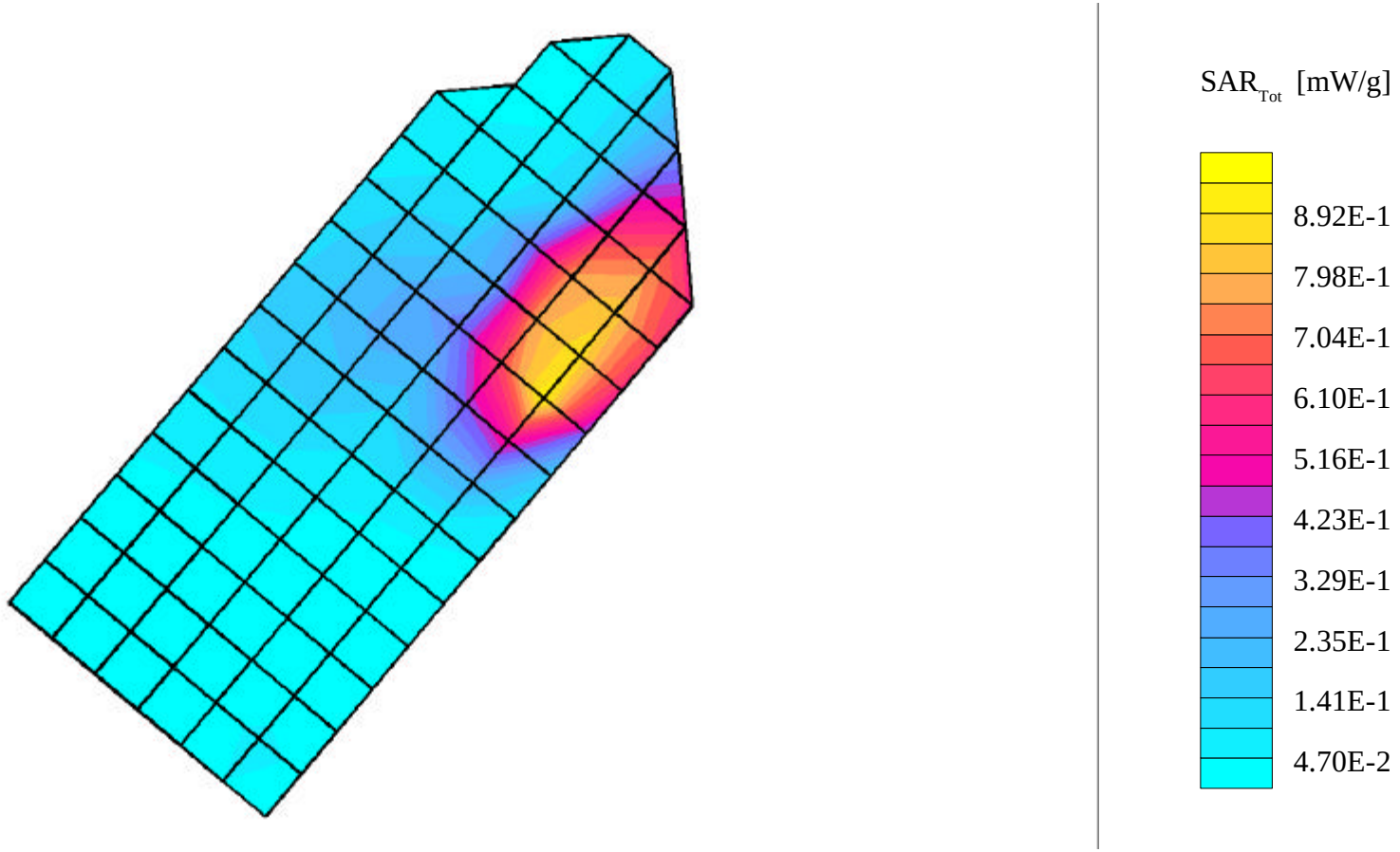


Appendix 2:

SAR distribution plots for Phantom Head Adjacent Use

s/n B170121

Ch# 799 / Pwr Step:2 / Type of Modulation: Analog
Mindy (Right Head) Phantom; Right Head Section; Position: (80°,180°); Frequency: 849 MHz
Probe: ET3DV6 - SN1514 Head (Sugar Water); ConvF(6.62,6.62,6.62); Crest factor: 1.0; Head 835 MHz: σ = 0.87 mho/m ε_r = 43.9 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 0.863 mW/g, SAR (10g): 0.538 mW/g * Max outside, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 11.2 (9.5, 13.6) [mm]
Powerdrift: -0.22 dB



s/n B170121

Ch#2 / Pwr Step:2 / Type of Modulation:1900TDMA
BONNIE (RIGHT HEAD) Phantom; Right Head Section; Position: (80°,180°); Frequency: 1850 MHz
Probe: ET3DV6 - SN1514 Head (Glycol); ConvF(5.39,5.39,5.39); Crest factor: 3.0; Head Glycol 1900 MHz: σ = 1.42 mho/m ε_r = 38.5 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 1.27 mW/g, SAR (10g): 0.602 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Penetration depth: 9.4 (8.6, 10.7) [mm]
Powerdrift: -0.46 dB

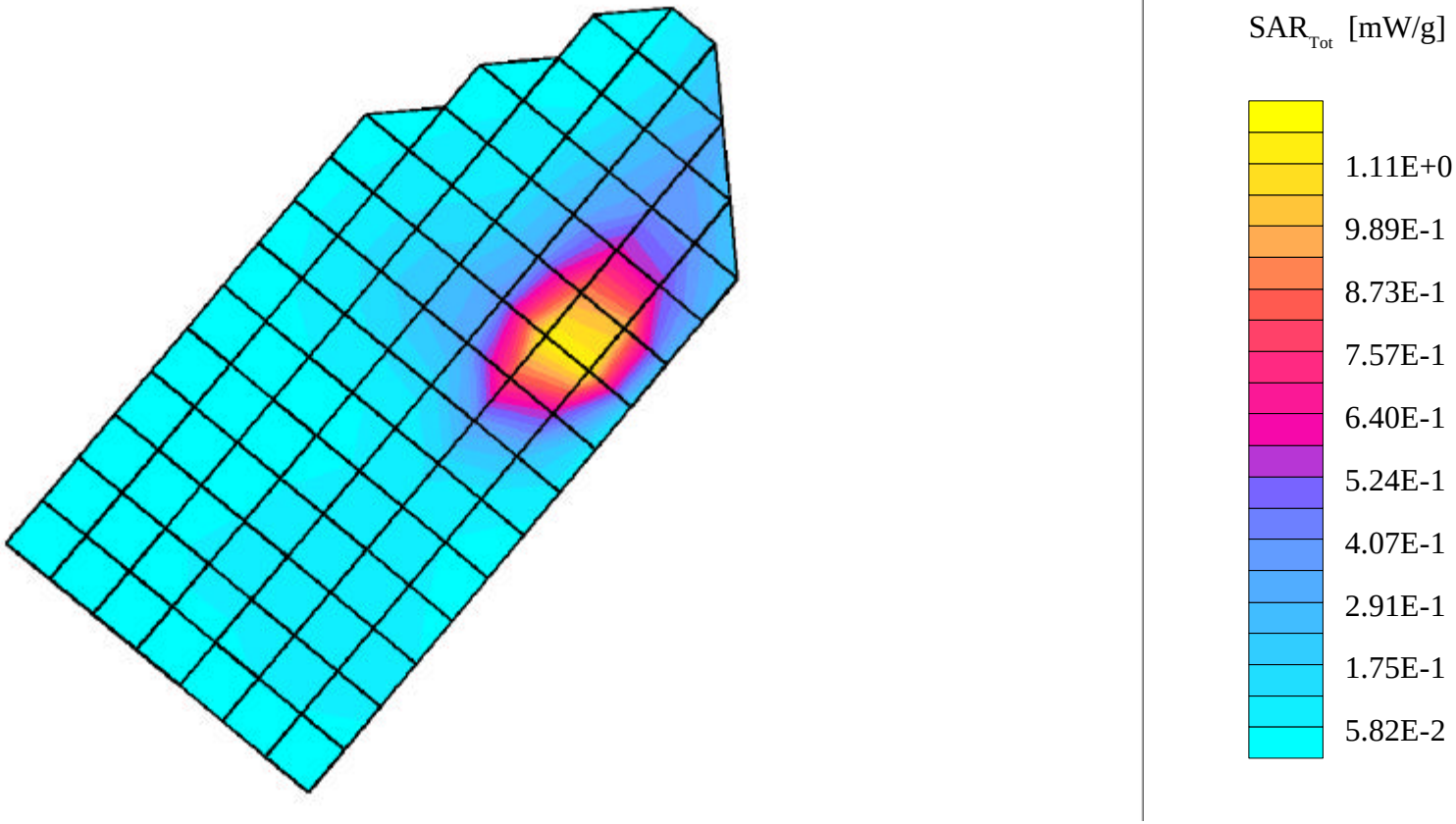


Figure 1. Picture of Phone with typical 800MHz Contour Plot Overlaid

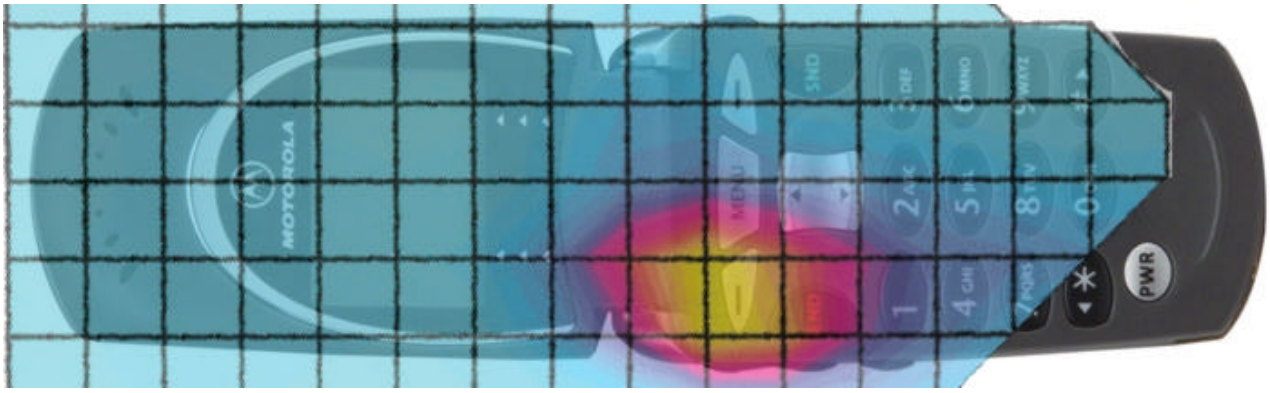


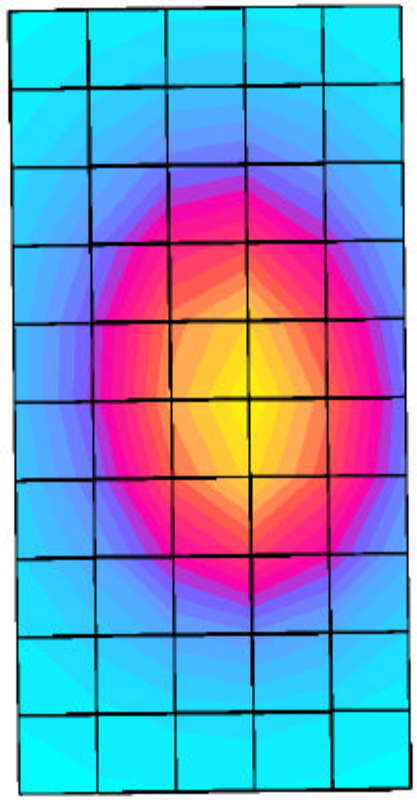
Figure 2. Picture of Phone with typical 1900MHz Contour Plot Overlaid

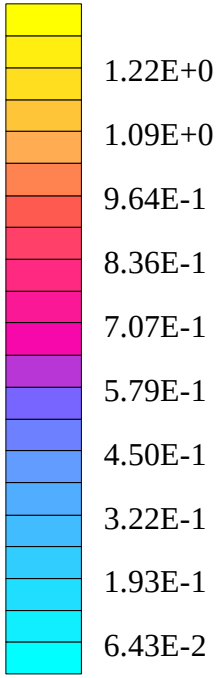
Appendix 3:

SAR distribution plots for Body Worn Configuration

s/n B170121

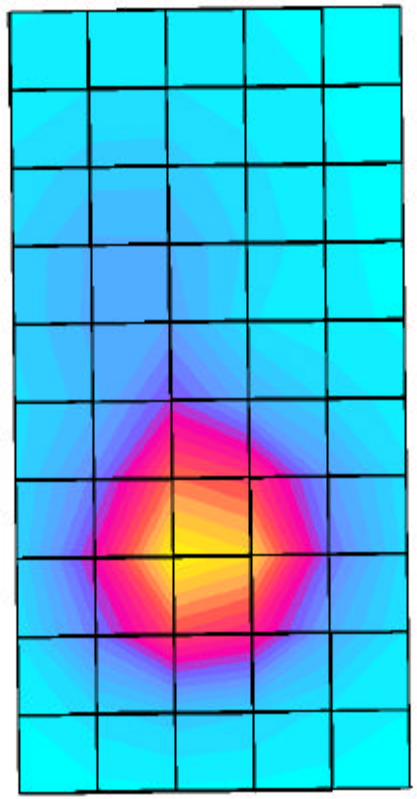
Ch# 384 / Pwr Step:2 / Type of Modulation: Analog
Amy Twin Optic OFF Phantom; Section2 Section; Position: (0°,0°); Frequency: 837 MHz
Probe: ET3DV6 - SN1514 Muscle (Sugar Water); ConvF(6.57,6.57,6.57); Crest factor: 1.0; Muscle 835 MHz: σ = 1.09 mho/m ε_r = 52.6 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 1.24 mW/g, SAR (10g): 0.852 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 14.5 (13.0, 16.2) [mm]
Powerdrift: -0.04 dB

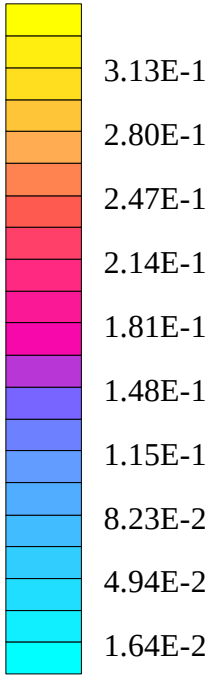




s/n B170121

Ch# 1000 / Pwr Step: 2 / Type of Modulation: 1900TDMA
Amy Twin Optic OFF Phantom; Section2 Section; Position: (0°,0°); Frequency: 1880 MHz
Probe: ET3DV6 - SN1514 Muscle (Glycol); ConvF(5.11,5.11,5.11); Crest factor: 3.0; Muscle Glycol 1900 MHz: σ = 1.64 mho/m ε_r = 47.9 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 0.328 mW/g, SAR (10g): 0.194 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Penetration depth: 10.2 (9.0, 11.8) [mm]
Powerdrift: -0.03 dB





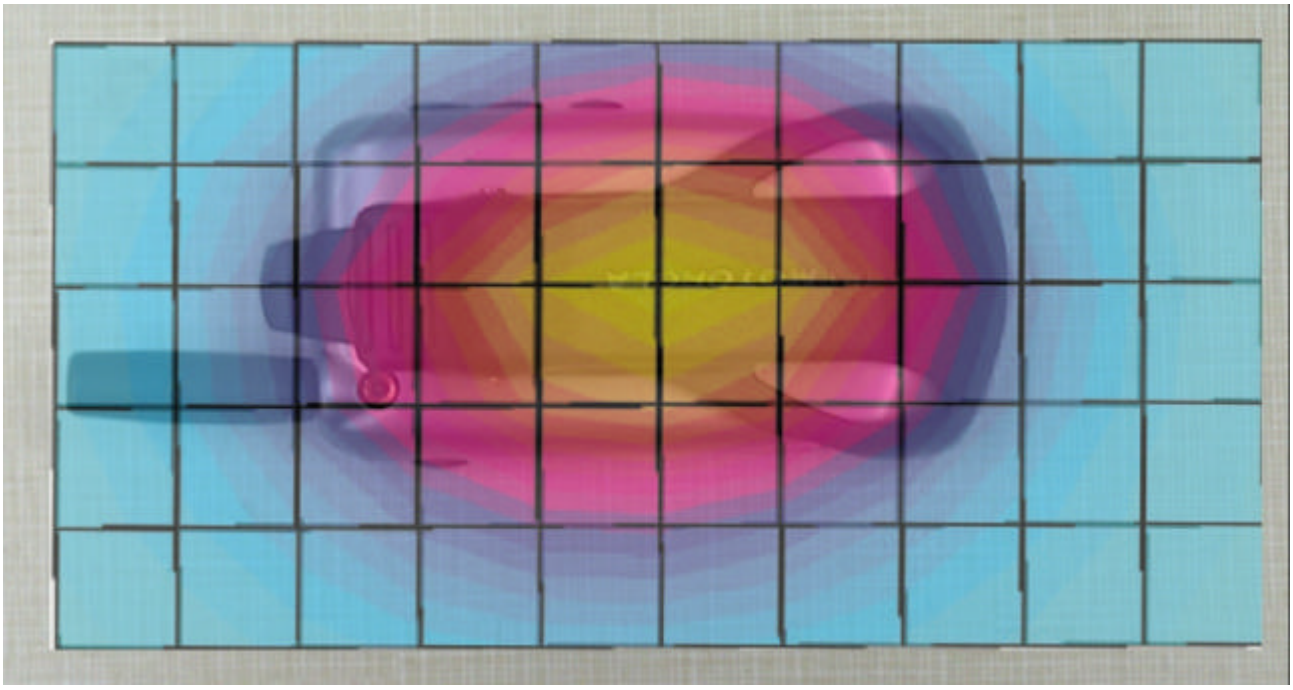


Figure 3. Picture of Phone with typical 800MHz Contour Plot Overlaid

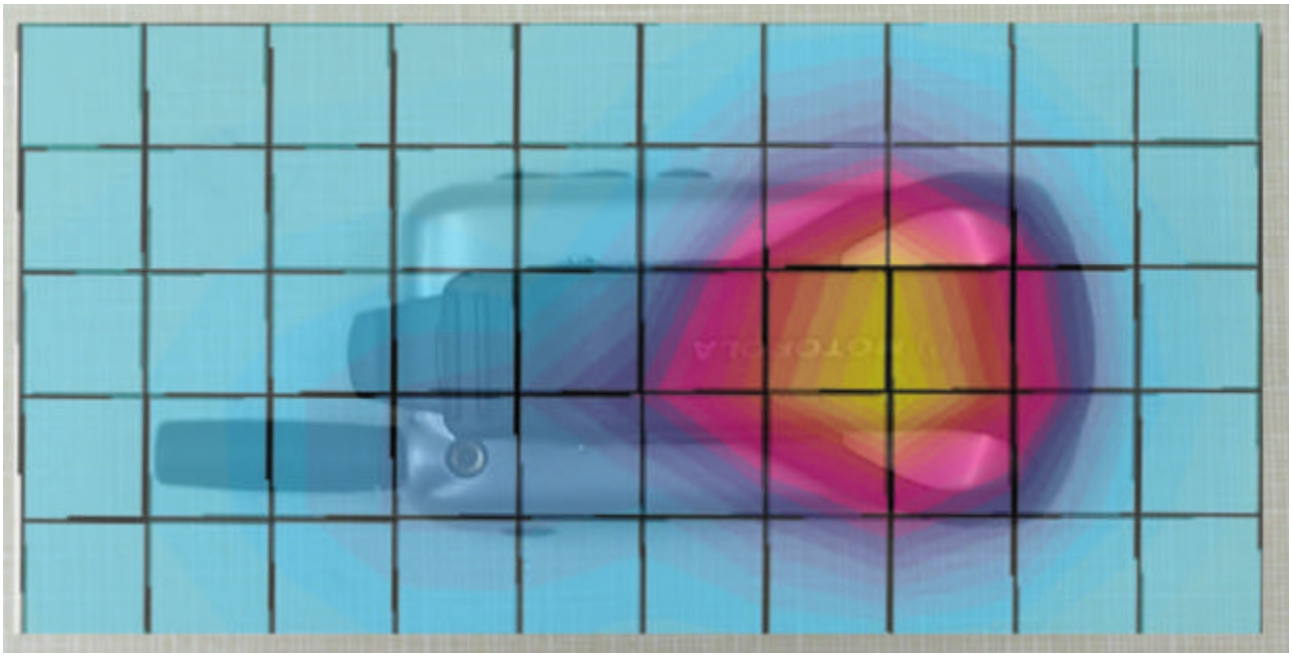


Figure 4. Picture of Phone with typical 1900MHz Contour Plot Overlaid

Appendix 4:

Photographs of the device under test

Figure 5. Face of Phone with Flip Closed

Figure 6. Face of Phone with Flip Open

Figure 7. Phone in Belt-Clip