



May 09, 2005

Supplement to SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56FA1)

Prepared by:

Albert Patapack

Motorola Personal Communications Sector Product Safety Laboratory

Libertyville, Illinois

Summary of FCC request for additional information

There was a request for additional information regarding Motorola’s SAR Test Report for Motorola portable cellular phone (FCC ID IHDT56FA1). The requested information is addressed below in the same numbering sequence received.

2. Please provide the following SAR data plots: PCS Left Head Touch, Cellular CDMA Right Head Touch, PCS and Cellular CDMA Right Head Tilt.

Response: The updated data tables, with the data for the missing plots highlighted, are attached below. The missing plots are attached below in the original report Appendix 2 supplement. Two of the plots were taken on a day for which the tissue simulating liquid measurements had not been previously reported. The updated table is attached here.

Electrical parameters of the tissue simulating liquid for original report

f (MHz)	Tissue type	Limits / Measured	Dielectric Parameters		
			ϵ_r	σ (S/m)	Temp (°C)
835	Head	Measured, 04/07/2005	41.8	0.91	20.0
		Measured, 04/08/2005	41.8	0.91	20.0
		Measured, 04/16/2005	42.0	0.92	19.5
		Recommended Limits	41.5 ±5%	0.90 ±5%	18-25
	Body	Measured, 04/11/2005	53.7	0.98	20.5
		Measured, 04/12/2005	53.4	0.97	20.5
		Measured, 04/13/2005	54.4	0.98	19.6
		Measured, 04/17/2005	54.0	0.98	20.0
		Measured, 04/18/2005	54.5	0.98	20.0
		Measured, 04/20/2005	53.4	0.97	20.0
	Recommended Limits	55.2 ±5%	0.97 ±5%	18-25	
1880	Head	Measured, 04/09/2005	38.3	1.46	20.0
		Measured, 04/10/2005	38.2	1.44	20.0
		Recommended Limits	40.0 ±5%	1.40 ±5%	18-25
	Body	Measured, 04/11/2005	52.1	1.59	18.9
		Measured, 04/13/2005	52.1	1.59	19.1
		Measured, 04/18/2005	51.6	1.59	18.9
		Recommended Limits	53.3 ±5%	1.52 ±5%	18-25

6.1 Supplement to the Head Adjacent Test Results of the Original Report

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	27.83	1.36	0.02	1.36	20.0	1.48	-0.19	1.55	20.0
	Channel 384	27.85	1.45	0.43	1.45	20.0	1.31	0.02	1.31	20.0
	Channel 799	27.75	1.35	-0.03	1.36	20.0	1.28	-0.3	1.37	19.2
Digital 800MHz	Channel 1013	24.93	1.34	-0.01	1.34	20.0	1.46	-0.13	1.50	19.9
	Channel 384	24.95	1.32	0.03	1.32	20.0	0.996	0.09	1.00	20
	Channel 777	24.93	1.16	-0.27	1.23	19.9	1.33	-0.33	1.43	20
Digital 1900MHz	Channel 25	25.02					1.08	0.07	1.08	19
	Channel 600	24.87	0.495	0.12	0.50	19	1.2	0.146	1.20	19
	Channel 1175	24.88					1.39	-0.13	1.43	19

Amended report Table 1: SAR measurement results for the portable cellular telephone FCC ID IHDT56FA1 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	27.83	1.51	0.03	1.51	20	1.44	-0.17	1.50	20
	Channel 384	27.85	1.43	0.18	1.43	20	1.37	-0.01	1.37	20
	Channel 799	27.75	1.32	-0.14	1.36	20	1.38	-0.3	1.48	20
Digital 800MHz	Channel 1013	24.93	1.26	0.03	1.26	20	1.39	-0.06	1.41	20
	Channel 384	24.95	1.28	0.15	1.28	20	0.988	-0.16	1.02	20
	Channel 777	24.93	1.14	-0.23	1.20	20	1.38	-0.06	1.40	20
Digital 1900MHz	Channel 25	25.02					1.2	-0.09	1.23	19
	Channel 600	24.87	0.549	0.103	0.55	19	1.17	-0.03	1.18	19
	Channel 1175	24.88					1.41	-0.07	1.43	19

Amended Report Table 2: SAR measurement results for the portable cellular telephone FCC ID IHDT56FA1 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	27.83								
	Channel 384	27.85	0.396	0.459	0.40	20	0.357	-0.24	0.38	20
	Channel 799	27.75								
Digital 800MHz	Channel 1013	24.93								
	Channel 384	24.95	0.364	-0.08	0.37	20	0.294	0.03	0.29	20
	Channel 777	24.93								
Digital 1900MHz	Channel 25	25.02								
	Channel 600	24.87	0.192	0.07	0.19	19	0.284	-0.07	0.29	19
	Channel 1175	24.88								

Amended Report Table 3: SAR measurement results for the portable cellular telephone FCC ID IHDT56FA1 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	27.83								
	Channel 384	27.85	0.37	0.27	0.37	20	0.376	0.15	0.38	20
	Channel 799	27.75								
Digital 800MHz	Channel 1013	24.93								
	Channel 384	24.95	0.351	0.40	0.35	20	0.286	0.10	0.29	20
	Channel 777	24.93								
Digital 1900MHz	Channel 25	25.02								
	Channel 600	24.87	0.139	-0.07	0.14	19	0.205	0.06	0.21	19
	Channel 1175	24.88								

Amended Report Table 4: SAR measurement results for the portable cellular telephone FCC ID IHDT56FA1 at highest possible output power. Measured against the right head in the 15° Tilt Position.

Supplement to Appendix 2 of the Original Report
SAR distribution plots for Phantom Head Adjacent Use

Date/Time: 4/7/2005 8:42:26AM

Test Laboratory: Motorola AMPS RH Cheek ch991 ant ret

Serial: FC990BFA;

Procedure Notes: Ch# 991 / Pwr Step: 2 Antenna Position: Retracted Accessory Model #: ???

Battery Model #: SNN5762A DEVICE POSITION (cheek or rotated): Cheek

Communication System: AMPS 835; Frequency: 824.04 MHz; Channel Number: 991; Duty Cycle: 1:1;

Medium: Low Freq Head; Medium parameters used: $\sigma = 0.91$ mho/m, $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3037; ConvF(6.11, 6.11, 6.11); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Sugar Water SAM; Type: SAM; Serial: TP-1153;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Right Head Template/Area Scan - Normal (15mm) (7x17x1):

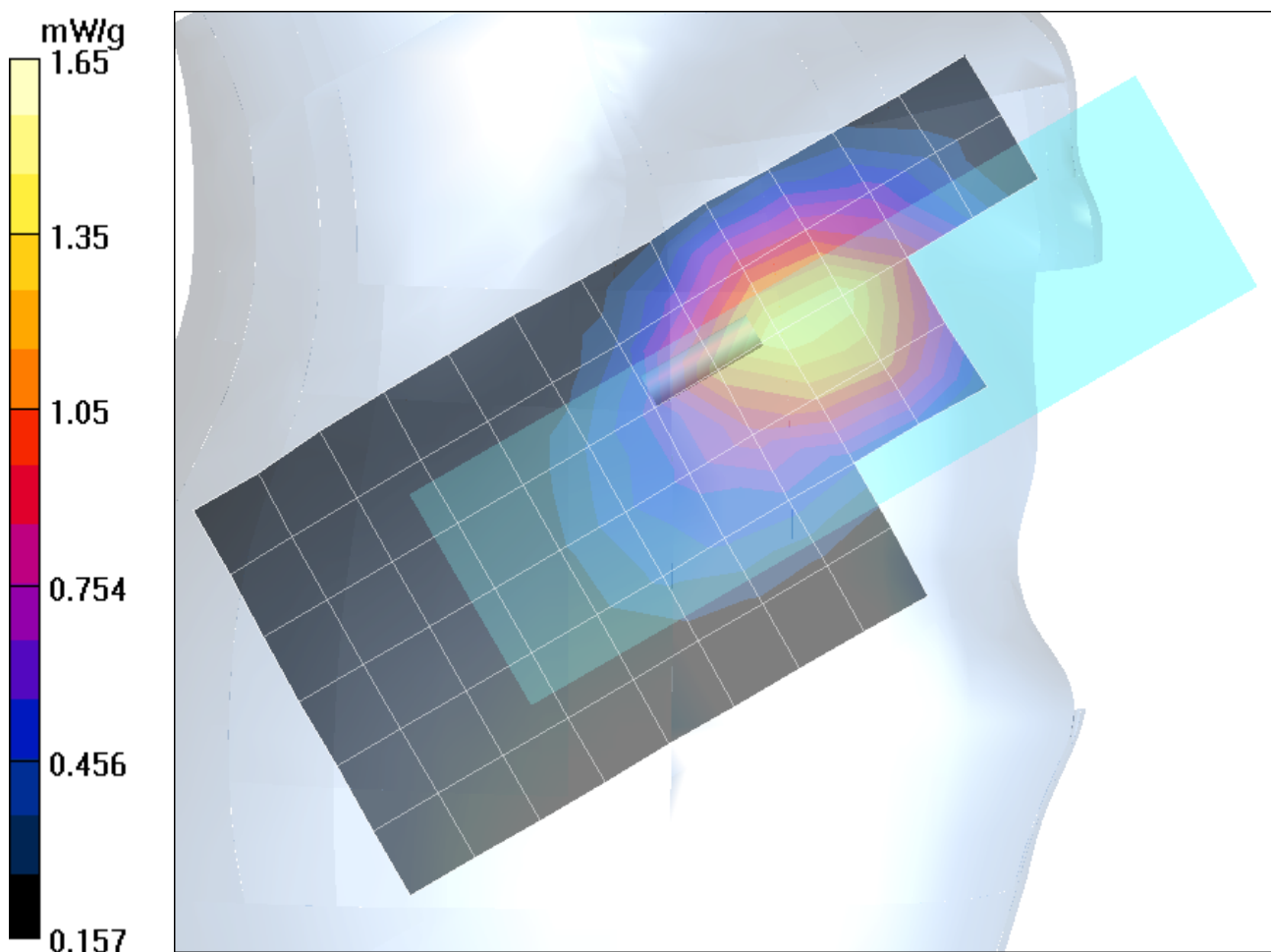
Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.46 mW/g

Right Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 40.7 V/m; **Power Drift = -0.174 dB** Peak SAR (extrapolated) = 1.97 W/kg

SAR(1 g) = 1.44 mW/g; SAR(10 g) = 0.987 mW/g Maximum value of SAR (measured) = 1.54 mW/g



Date/Time: 4/8/2005 7:14:45PM

Test Laboratory: Motorola AMPS LH Tilt ch384 ant ret

Serial: FC990BFA;

Procedure Notes: Ch# 384 / Pwr Step: 2 Antenna Position: RETRACTED Accessory Model #: None

Battery Model #: SNN5762A DEVICE POSITION (cheek or rotated): ROTATED

Communication System: AMPS 835; Frequency: 836.52 MHz; Channel Number: 384; Duty Cycle: 1:1;

Medium: Low Freq Head; Medium parameters used: $\sigma = 0.91$ mho/m, $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3037; ConvF(6.11, 6.11, 6.11); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Sugar Water SAM; Type: SAM; Serial: TP-1153;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Left Head Template/Area Scan - Normal (15mm) (7x17x1):

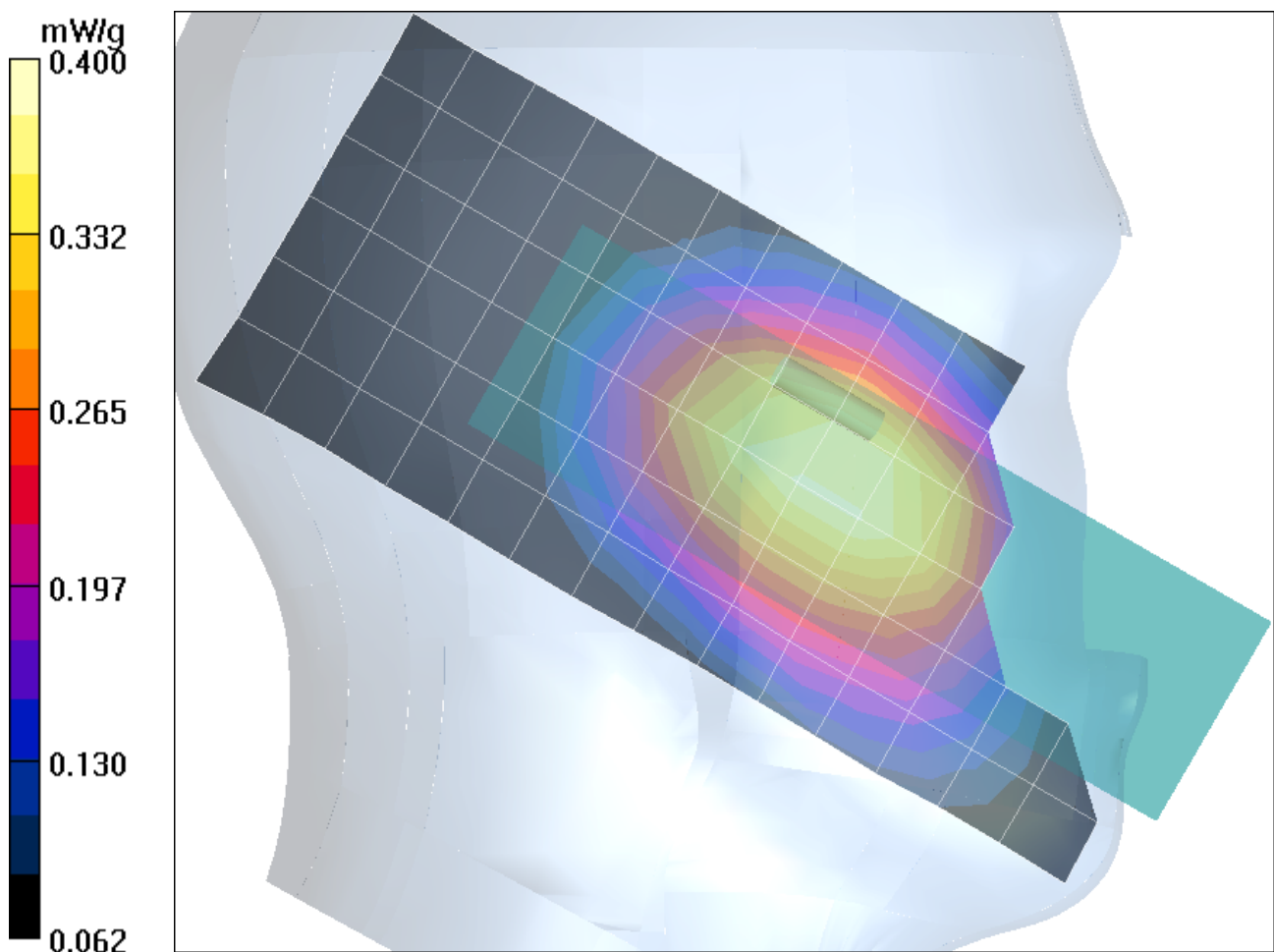
Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.381 mW/g

Left Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.9 V/m; **Power Drift = -0.242 dB** Peak SAR (extrapolated) = 0.454 W/kg

SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.273 mW/g Maximum value of SAR (measured) = 0.370 mW/g



Date/Time: 4/7/2005 6:24:23PM

Test Laboratory: Motorola AMPS LH Cheek ch384 ant ext

Serial: FC990BFA

Procedure Notes: Ch# 384 / Pwr Step: 2 Antenna Position: EXTENDED Accessory Model #: ???

Battery Model #: SNN5762A DEVICE POSITION (cheek or rotated): Cheek

Communication System: AMPS 835; Frequency: 836.52 MHz; Channel Number: 384; Duty Cycle: 1:1;

Medium: Low Freq Head; Medium parameters used: $\sigma = 0.91$ mho/m, $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3037; ConvF(6.11, 6.11, 6.11); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Sugar Water SAM; Type: SAM; Serial: TP-1153;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Left Head Template/Area Scan - Normal (15mm) (7x17x1):

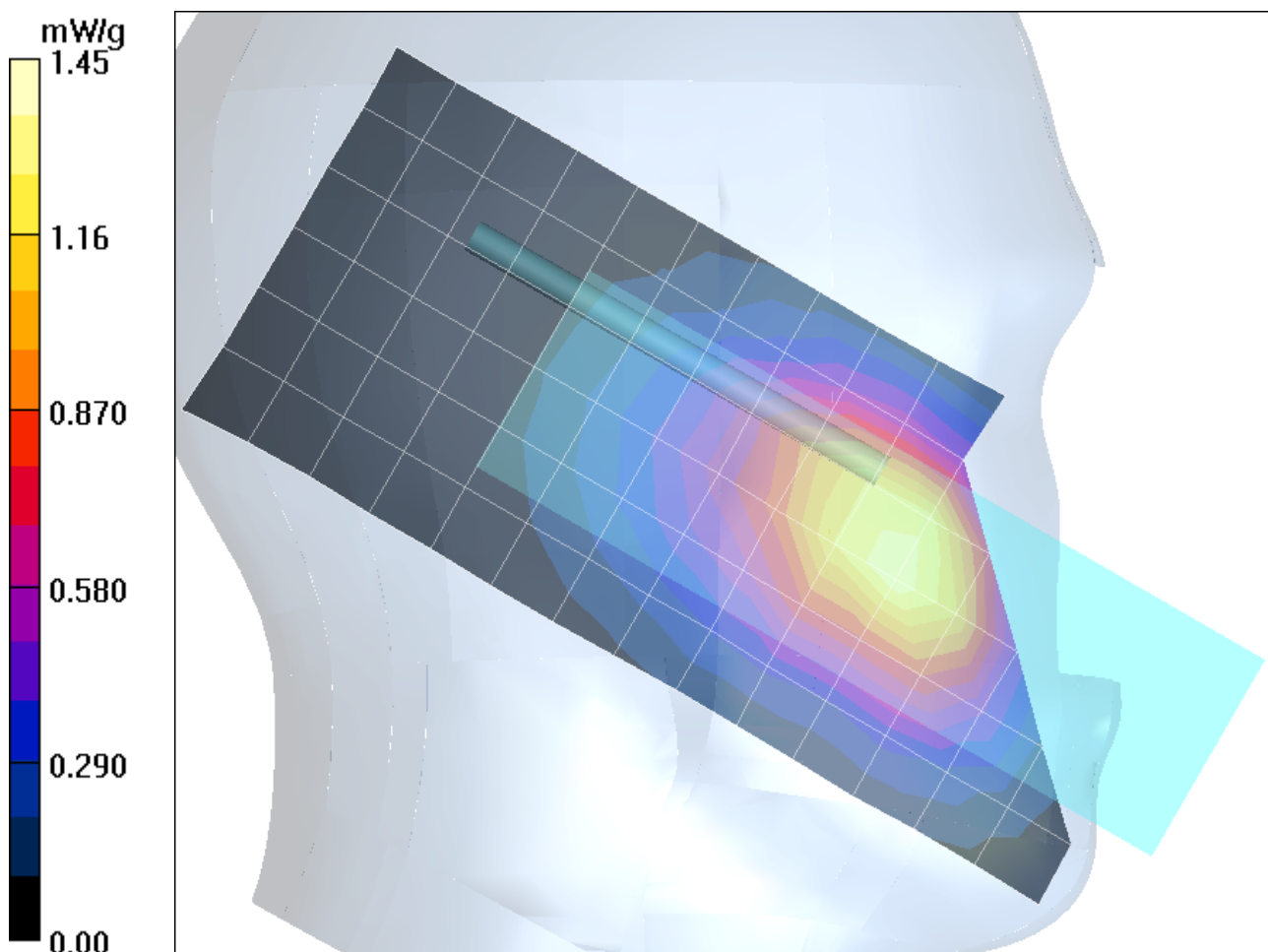
Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.34 mW/g

Left Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 38.8 V/m; **Power Drift = 0.433 dB** Peak SAR (extrapolated) = 1.92 W/kg

SAR(1 g) = 1.45 mW/g; SAR(10 g) = 1.01 mW/g Maximum value of SAR (measured) = 1.50 mW/g



Date/Time: 4/10/2005 10:45:36PM

Test Laboratory: Motorola 1900 RH Tilt ch600 ant ret

Serial: FC990BFA

Procedure Notes: Ch# 600 / Pwr Step: alwaysup Antenna Position: ret Accessory Model #: non

Battery Model #: snn5762a DEVICE POSITION tilt

Communication System: CDMA 1900; Frequency: 1880 MHz; Channel Number: 600; Duty Cycle: 1:1;

Medium: Back-Up Glycol Head; Medium parameters used: $\sigma = 1.44$ mho/m, $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3037; ConvF(5.16, 5.16, 5.16); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Glycol SAM; Type: SAM; Serial: TP-1159;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Right Head Template/Area Scan - Normal (15mm) (7x17x1):

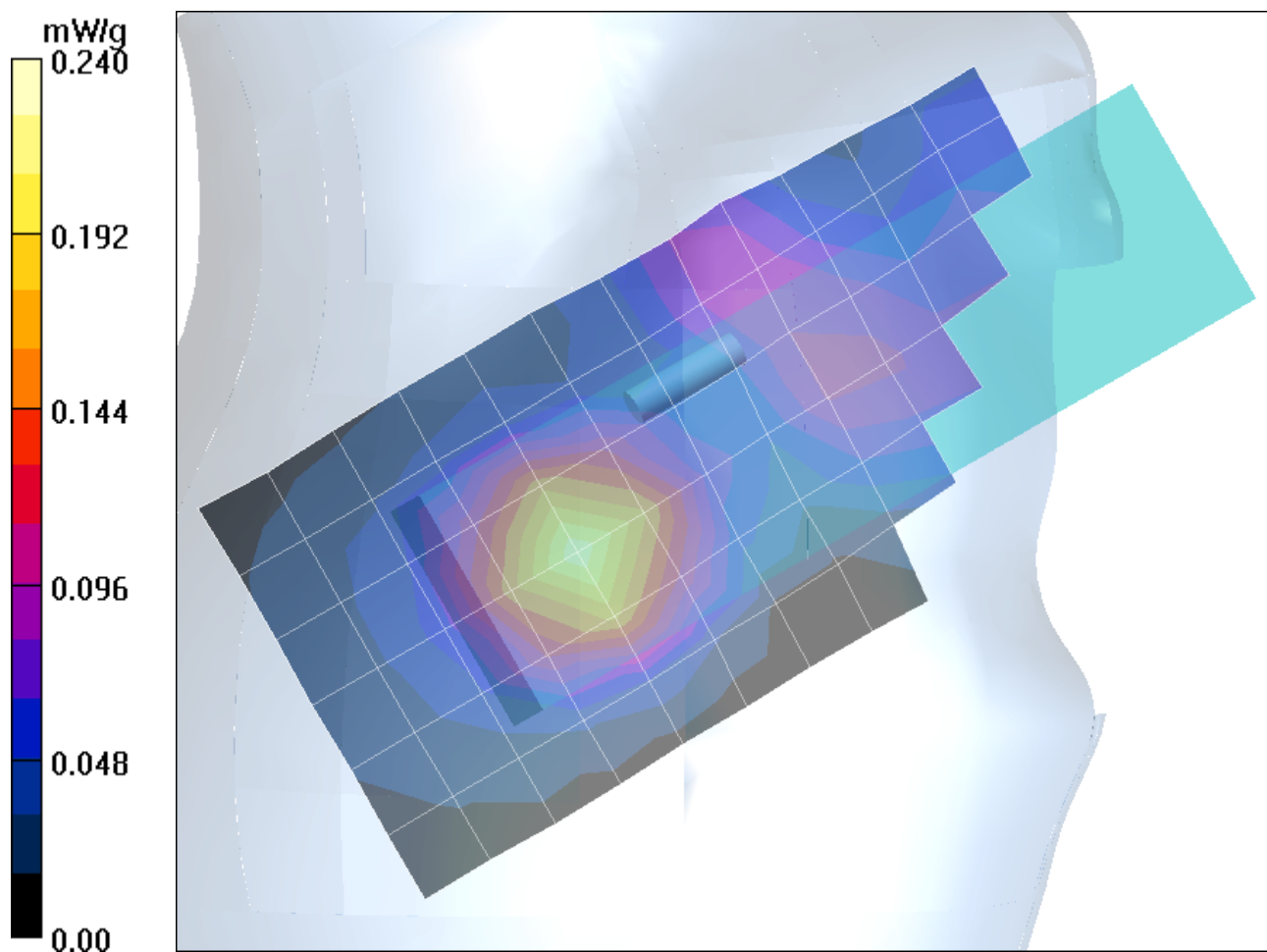
Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.222 mW/g

Right Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.9 V/m; Power Drift = 0.065 dB Peak SAR (extrapolated) = 0.298 W/kg

SAR(1 g) = 0.205 mW/g; SAR(10 g) = 0.130 mW/g Maximum value of SAR (measured) = 0.221 mW/g



Date/Time: 4/10/2005 11:07:29PM

Test Laboratory: Motorola 1900 RH Tilt ch600 ant ext

Serial: FC990BFA

Procedure Notes: Ch# 600 / Pwr Step: alwaysup Antenna Position: ext Accessory Model #: non

Battery Model #: snn5762a DEVICE POSITION tilt

Communication System: CDMA 1900; Frequency: 1880 MHz; Channel Number: 600; Duty Cycle: 1:1;

Medium: Back-Up Glycol Head; Medium parameters used: $\sigma = 1.44$ mho/m, $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3037; ConvF(5.16, 5.16, 5.16); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Glycol SAM; Type: SAM; Serial: TP-1159;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Right Head Template/Area Scan - Normal (15mm) (7x17x1):

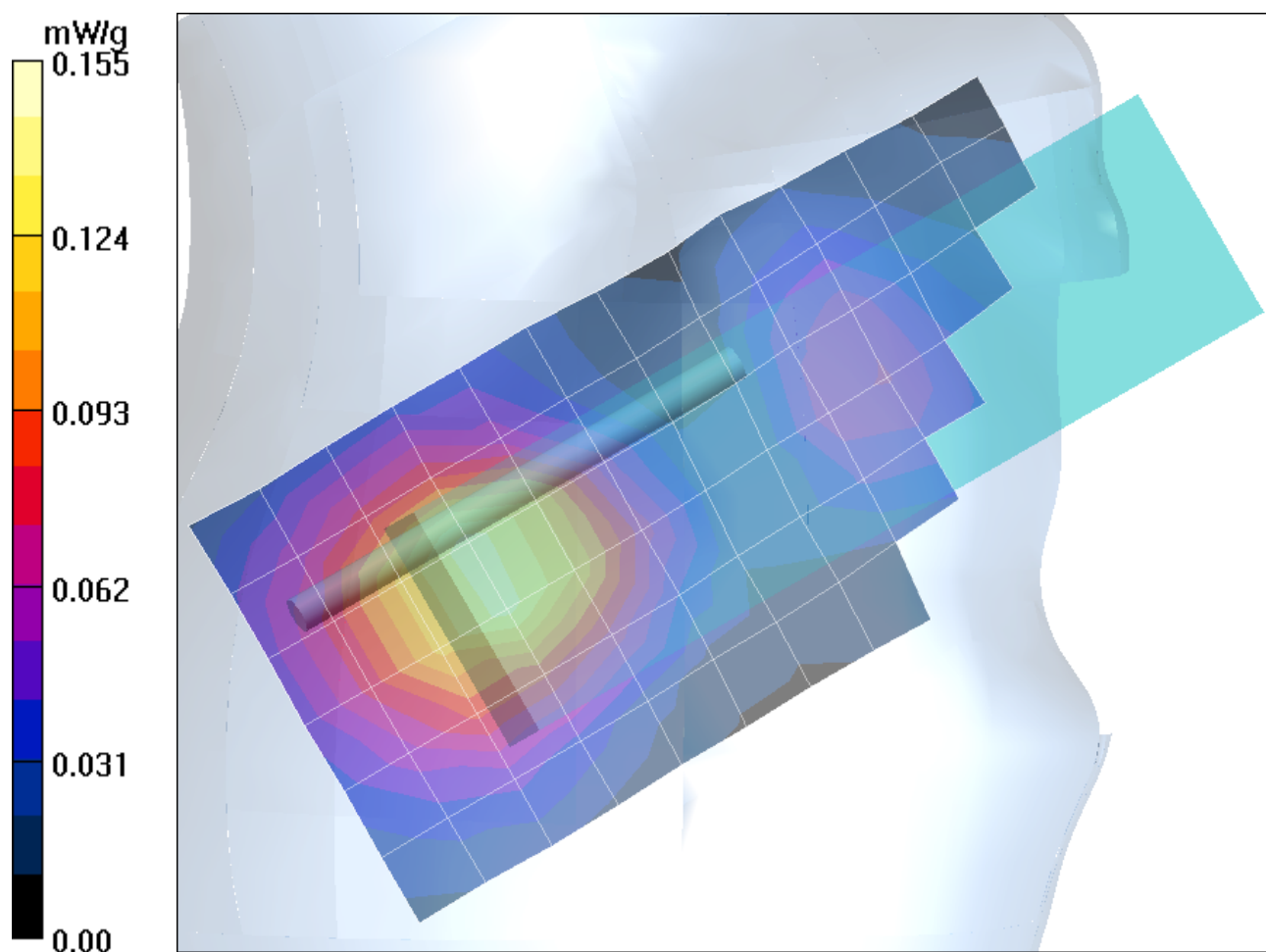
Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.141 mW/g

Right Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.1 V/m; **Power Drift = -0.068 dB** Peak SAR (extrapolated) = 0.214 W/kg

SAR(1 g) = 0.139 mW/g; SAR(10 g) = 0.089 mW/g Maximum value of SAR (measured) = 0.151 mW/g



Date/Time: 4/9/2005 8:42:04PM

Test Laboratory: Motorola 1900 LH Cheek ch1175 ant ret**Serial: FC990BFA**Procedure Notes: Ch#1175 / Pwr Step: alwaysup Antenna Position: ret Battery Model #: smn5762a
DEVICE POSITION cheekCommunication System: CDMA 1900; Frequency: 1908.75 MHz; Channel Number: 1175; Duty Cycle: 1:1;
Medium: Back-Up Glycol Head; Medium parameters used: $\sigma = 1.46$ mho/m, $\epsilon_r = 38.3$; $\rho = 1000$ kg/m³

DASY4 Configuration:

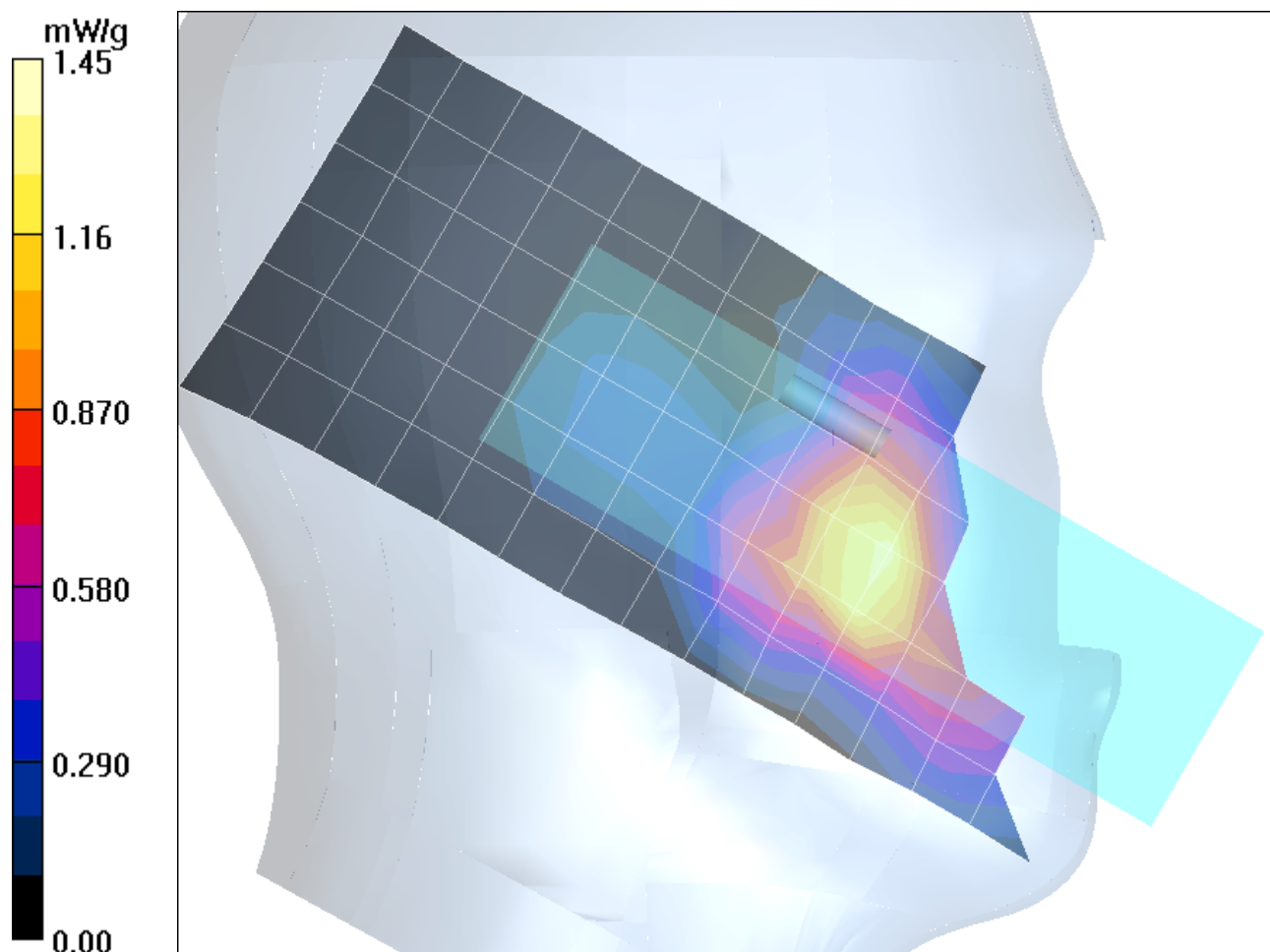
- Probe: ES3DV3 - SN3037; ConvF(5.16, 5.16, 5.16); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Glycol SAM; Type: SAM; Serial: TP-1159;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Left Head Template/Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.31 mW/g

Left Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 33.2 V/m; **Power Drift = -0.130 dB** Peak SAR (extrapolated) = 2.12 W/kg**SAR(1 g) = 1.39 mW/g; SAR(10 g) = 0.803 mW/g** Maximum value of SAR (measured) = 1.52 mW/g

Date/Time: 4/9/2005 9:41:08PM

Test Laboratory: Motorola 1900 LH Cheek ch600 ant ext

Serial: FC990BFA

Procedure Notes: Ch# 600 / Pwr Step: alwaysup Antenna Position: ext Battery Model #: smn5762a

DEVICE POSITION cheek

Communication System: CDMA 1900; Frequency: 1880 MHz; Channel Number: 600; Duty Cycle: 1:1;

Medium: Back-Up Glycol Head; Medium parameters used: $\sigma = 1.46$ mho/m, $\epsilon_r = 38.3$; $\rho = 1000$ kg/m³

DASY4 Configuration:

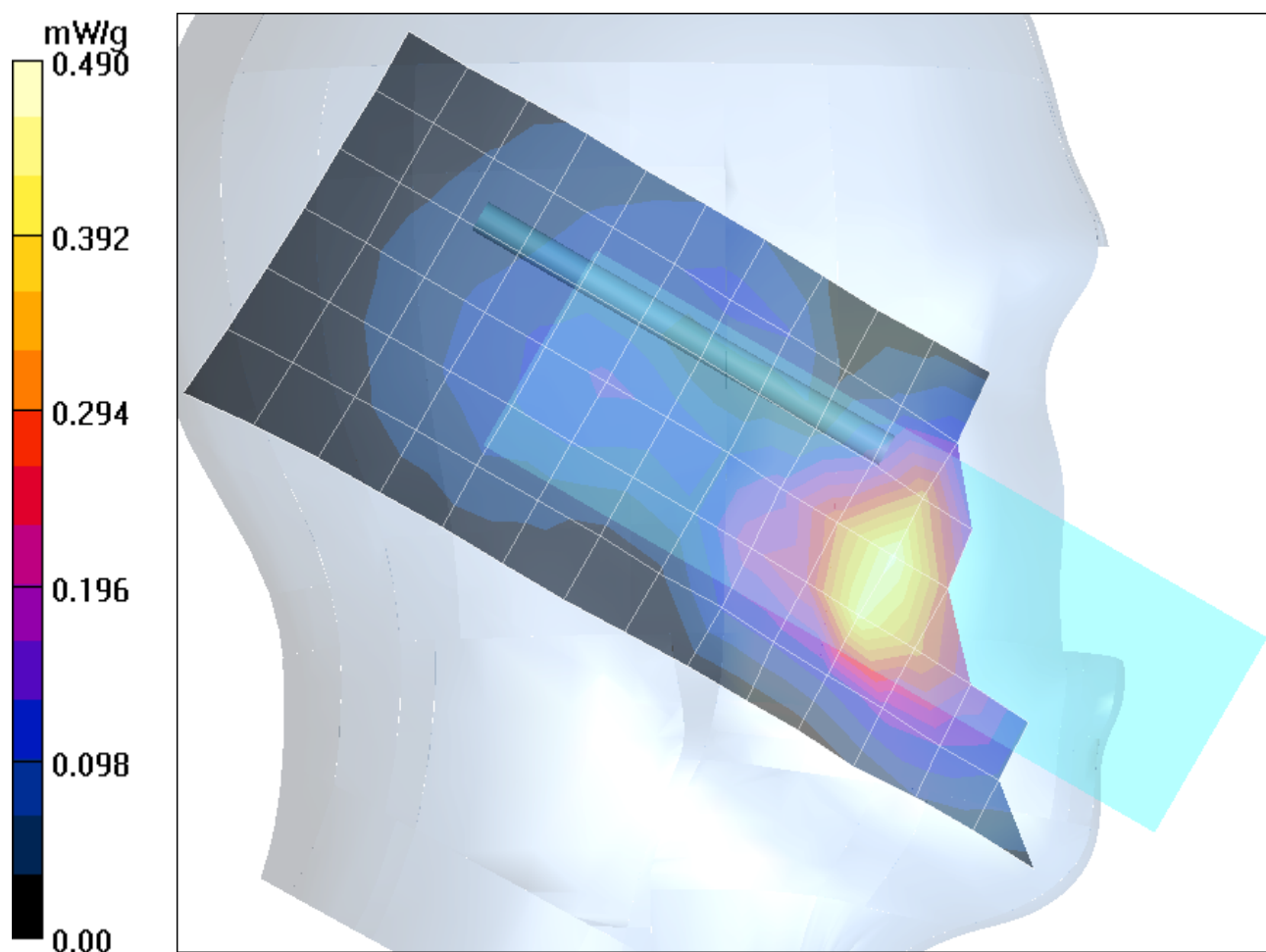
- Probe: ES3DV3 - SN3037; ConvF(5.16, 5.16, 5.16); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Glycol SAM; Type: SAM; Serial: TP-1159;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Left Head Template/Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.468 mW/g

Left Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.4 V/m; **Power Drift = 0.119 dB** Peak SAR (extrapolated) = 0.740 W/kg**SAR(1 g) = 0.495 mW/g; SAR(10 g) = 0.286 mW/g** Maximum value of SAR (measured) = 0.544 mW/g

Date/Time: 4/8/2005 10:56:05PM

Test Laboratory: Motorola 800 RH Tilt ch384 ant ret

Serial: FC990BFA

Procedure Notes: Ch# 384 / Pwr Step: OTA Antenna Position: RETRACTED Accessory Model #: None
Battery Model #: SNN5762A DEVICE POSITION (cheek or rotated): ROTATED

Communication System: CDMA 835; Frequency: 836.52 MHz; Channel Number: 384; Duty Cycle: 1:1;
Medium: Low Freq Head; Medium parameters used: $\sigma = 0.91$ mho/m, $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3037; ConvF(6.11, 6.11, 6.11); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Sugar Water SAM; Type: SAM; Serial: TP-1153;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Right Head Template/Area Scan - Normal (15mm) (7x17x1):

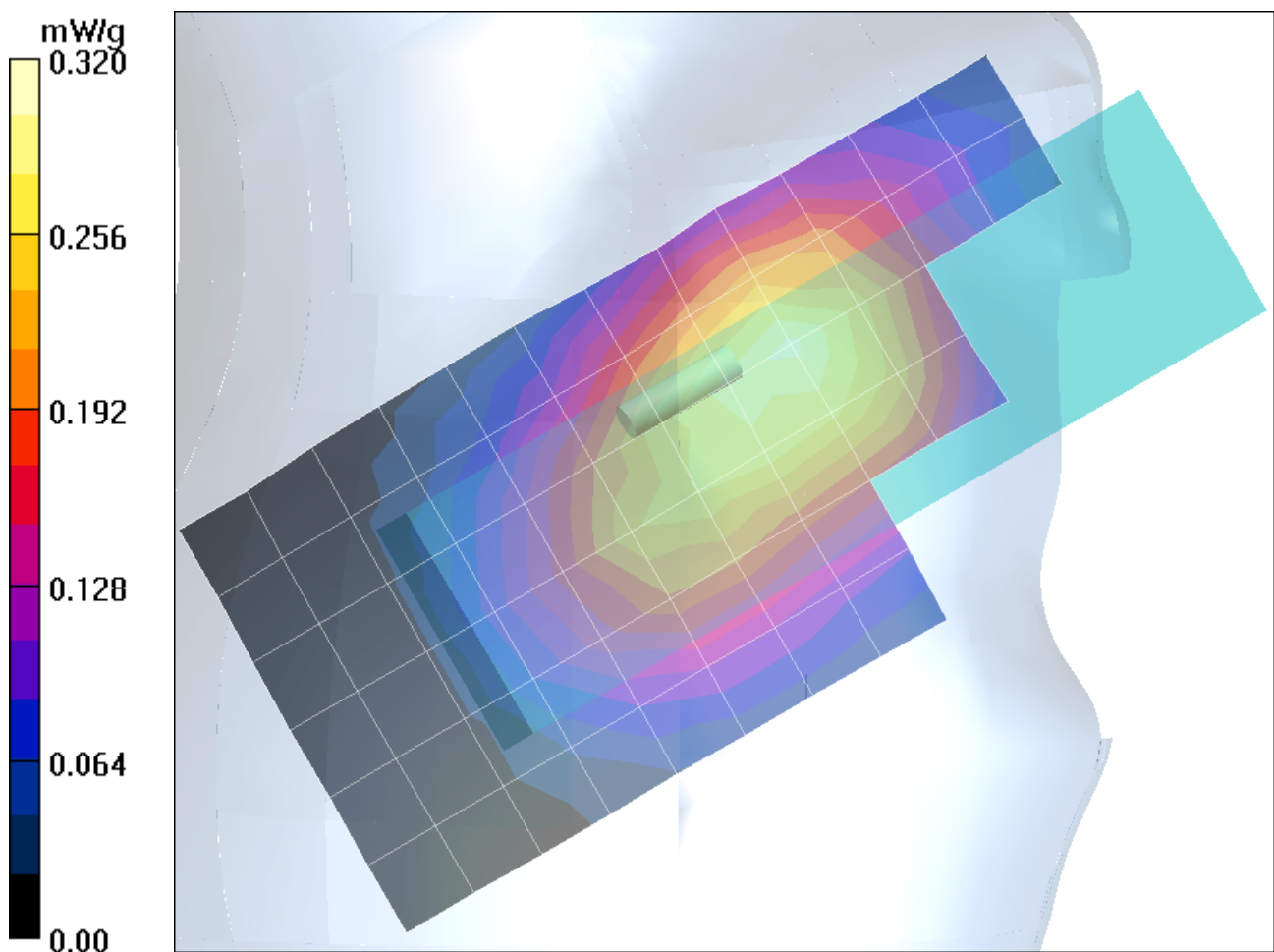
Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.307 mW/g

Right Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.3 V/m; **Power Drift = 0.101 dB** Peak SAR (extrapolated) = 0.356 W/kg

SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.218 mW/g Maximum value of SAR (measured) = 0.301 mW/g



Date/Time: 4/9/2005 1:35:32AM

Test Laboratory: Motorola 800 RH Tilt ch384 ant ext

Serial: FC990BFA

Procedure Notes: Ch# 384 / Pwr Step: OTA Antenna Position: EXTENDED Accessory Model #: None
Battery Model #: SNN5762A DEVICE POSITION (cheek or rotated): ROTATED
Communication System: CDMA 835; Frequency: 836.52 MHz; Channel Number: 384; Duty Cycle: 1:1;
Medium: Low Freq Head; Medium parameters used: $\sigma = 0.91$ mho/m, $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3037; ConvF(6.11, 6.11, 6.11); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Sugar Water SAM; Type: SAM; Serial: TP-1153;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Right Head Template/Area Scan - Normal (15mm) (7x17x1):

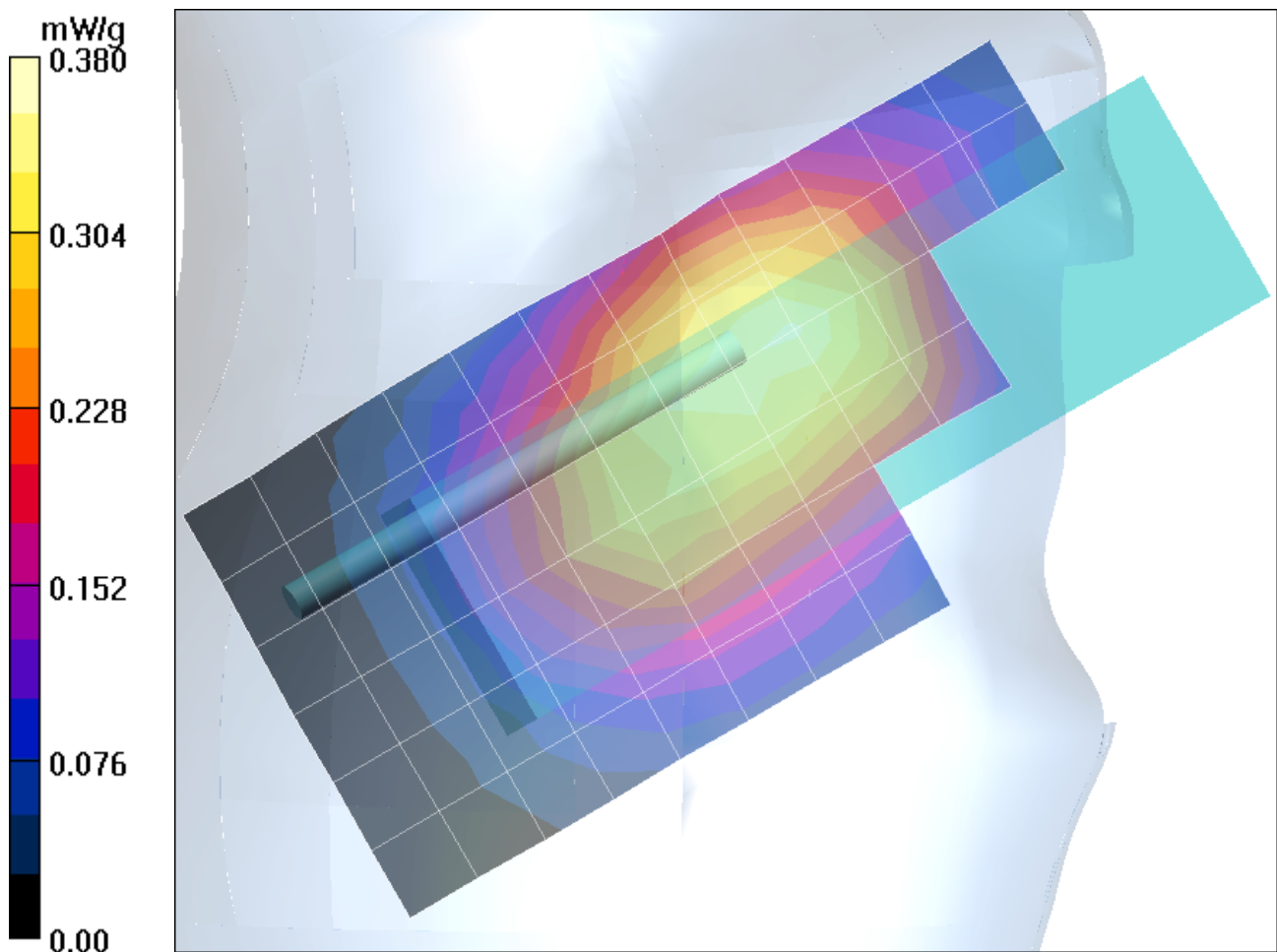
Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.362 mW/g

Right Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.5 V/m; **Power Drift = 0.401 dB** Peak SAR (extrapolated) = 0.451 W/kg

SAR(1 g) = 0.351 mW/g; SAR(10 g) = 0.271 mW/g Maximum value of SAR (measured) = 0.369 mW/g



Date/Time: 4/16/2005 11:31:49PM

Test Laboratory: Motorola 800 RH Cheek ch1013 ant ret

Serial: FC990BFA

Procedure Notes: Ch# 1013 / Pwr Step: always up Antenna Position: ret Battery Model #: snn5762

DEVICE POSITION (cheek)

Communication System: CDMA 835; Frequency: 824.7 MHz; Channel Number: 1013; Duty Cycle: 1:1;

Medium: Low Freq Head; Medium parameters used: $\sigma = 0.92$ mho/m, $\epsilon_r = 42$; $\rho = 1000$ kg/m³

DASY4 Configuration:

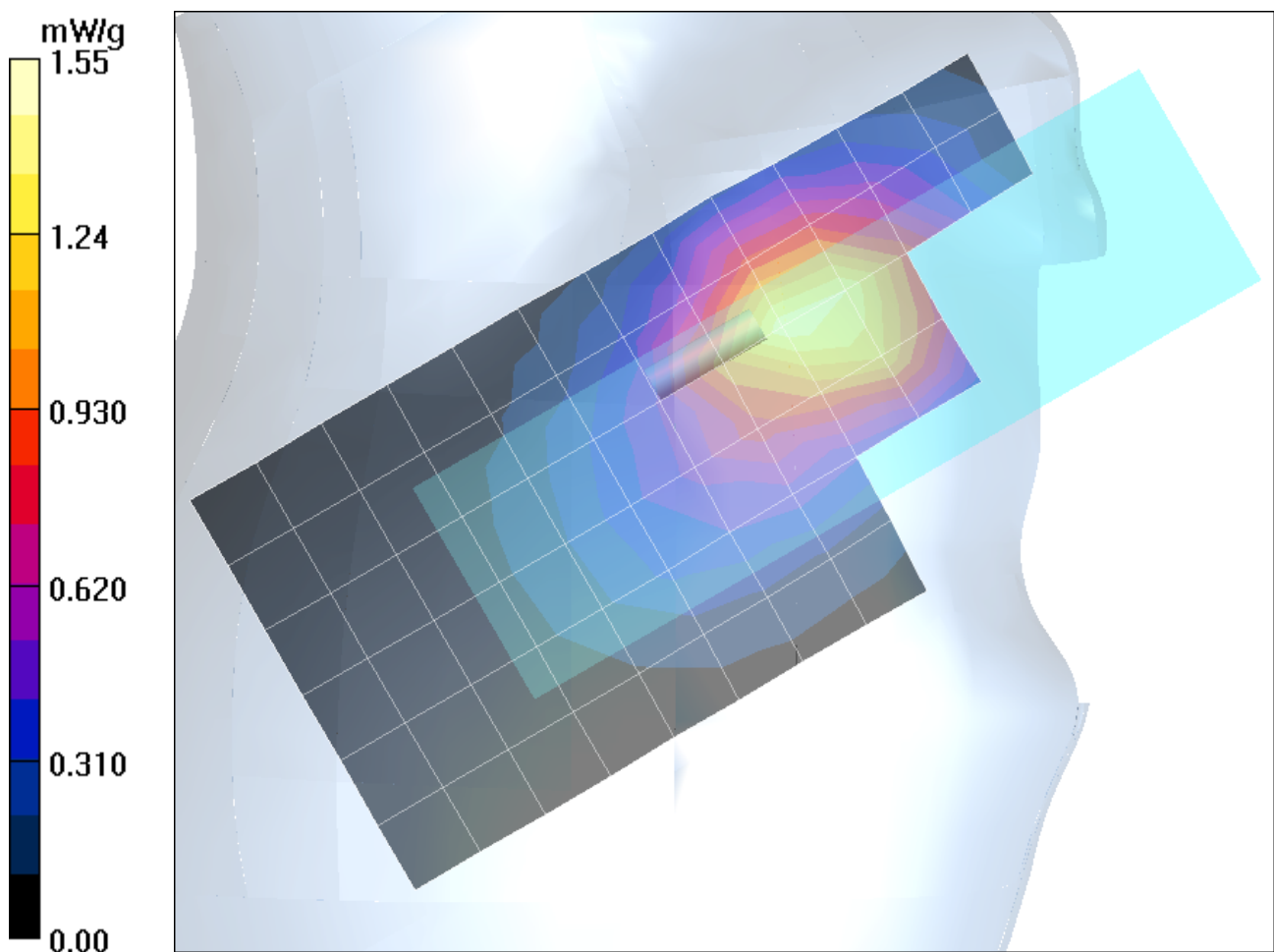
- Probe: ES3DV3 - SN3037; ConvF(6.11, 6.11, 6.11); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Sugar Water SAM; Type: SAM; Serial: TP-1153;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Right Head Template/Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.42 mW/g

Right Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 39.6 V/m; **Power Drift = -0.062 dB** Peak SAR (extrapolated) = 1.95 W/kg**SAR(1 g) = 1.39 mW/g; SAR(10 g) = 0.948 mW/g** Maximum value of SAR (measured) = 1.50 mW/g

Date/Time: 4/16/2005 9:00:09PM

Test Laboratory: Motorola 800 RH Cheek ch384 ant ext

Serial: FC990BFA

Procedure Notes: Ch# 384 / Pwr Step: always up Antenna Position: ext Battery Model #: snn5762

DEVICE POSITION (cheek)

Communication System: CDMA 835; Frequency: 836.52 MHz; Channel Number: 384; Duty Cycle: 1:1;

Medium: Low Freq Head; Medium parameters used: $\sigma = 0.92$ mho/m, $\epsilon_r = 42$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3037; ConvF(6.11, 6.11, 6.11); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Sugar Water SAM; Type: SAM; Serial: TP-1153;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Right Head Template/Area Scan - Normal (15mm) (7x17x1):

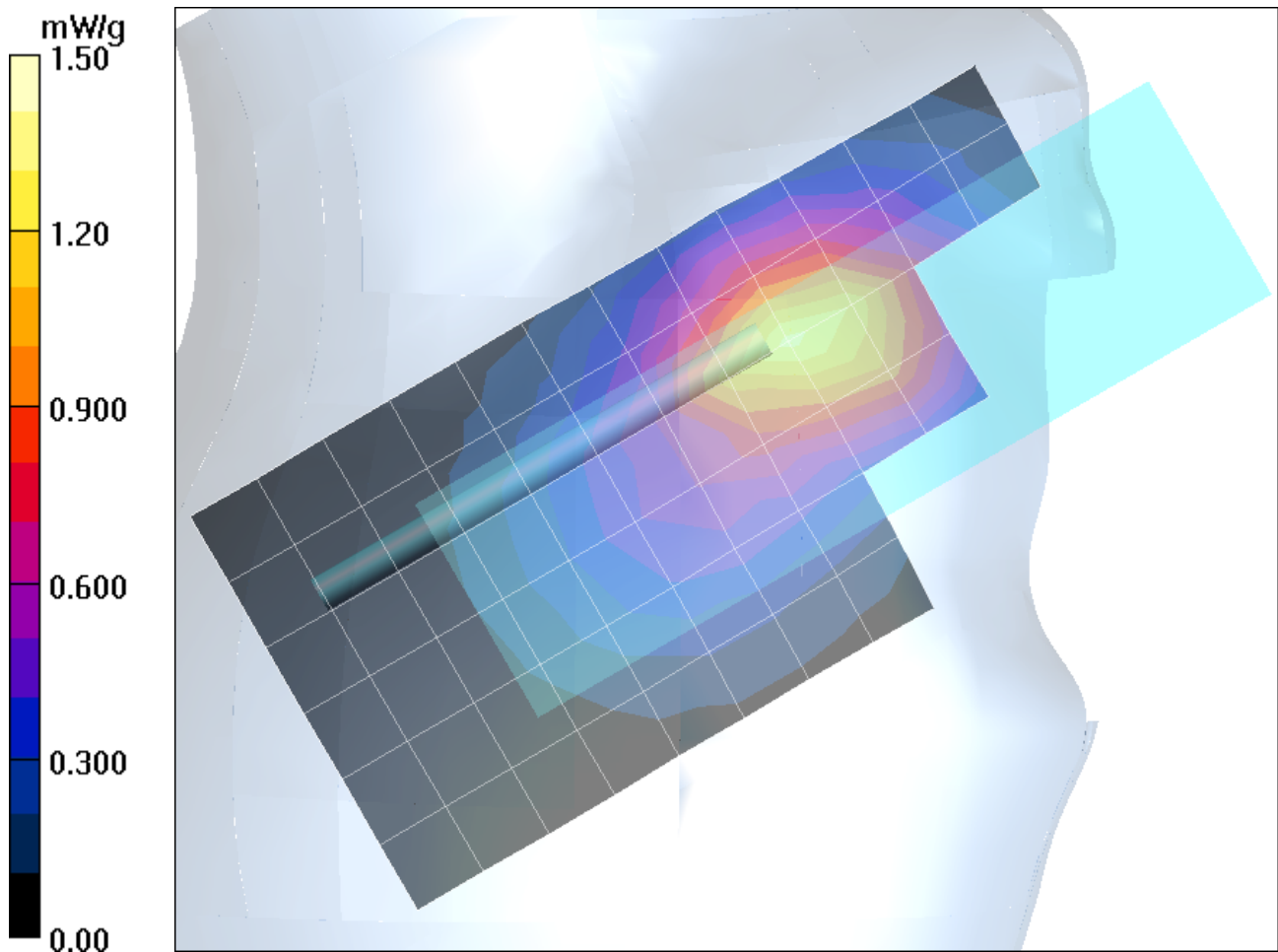
Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 1.34 mW/g

Right Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.6 V/m; Power Drift = 0.150 dB Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.863 mW/g Maximum value of SAR (measured) = 1.39 mW/g



Date/Time: 4/7/2005 1:03:39PM

Test Laboratory: Motorola AMPS RH Tilt ch384 ant ext

Serial: FC990BFA

Procedure Notes: Ch# 384 / Pwr Step: 2 Antenna Position: Extended Accessory Model #: ???

Battery Model #: SNN5762A DEVICE POSITION (cheek or rotated): Rotated

Communication System: AMPS 835; Frequency: 836.52 MHz; Channel Number: 384; Duty Cycle: 1:1;

Medium: Low Freq Head; Medium parameters used: $\sigma = 0.91$ mho/m, $\epsilon_r = 41.8$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3037; ConvF(6.11, 6.11, 6.11); Calibrated: 11/25/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 1/13/2005
- Phantom: R3: Sugar Water SAM; Type: SAM; Serial: TP-1153;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 147

Right Head Template/Area Scan - Normal (15mm) (7x17x1):

Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (measured) = 0.372 mW/g

Right Head Template/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.1 V/m; **Power Drift = 0.265 dB** Peak SAR (extrapolated) = 0.467 W/kg

SAR(1 g) = 0.370 mW/g; SAR(10 g) = 0.286 mW/g Maximum value of SAR (measured) = 0.389 mW/g

