# SAR TEST REPORT

## No. 2009SAR00032

**For**

**ZTE CORPORATION**

**CDMA 1X Digital Mobile Phone**

**ZTE C70**

**With**

**Hardware Version: C98A**

**Software Version: ZTEC70V1.0.0B01**

**FCCID: Q78-ZTEC70**

**Issued Date: 2009-05-25**

Deutscher Akkreditierungs Rat

***No.*** **DAT-P-114/01-01**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of TMC Beijing.

**Test Laboratory:**

TMC Beijing, Telecommunication Metrology Center of Ministry of Information Industry

No. 52, Huayuan Bei Road, Haidian District, Beijing, P. R. China 100083.

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# TABLE OF CONTENT

# 1 Test Laboratory

## 1.1 Testing Location

| | |
|---|---|
| Company Name: | TMC Beijing, Telecommunication Metrology Center of MII |
| Address: | No 52, Huayuan beilu, Haidian District, Beijing,P.R.China |
| Postal Code: | 100083 |
| Telephone: | +86-10-62303288 |
| Fax: | +86-10-62304793 |

## 1.2 Testing Environment

| | |
|---|---|
| Temperature: | 18°C~25 °C, |
| Relative humidity: | 30%~ 70% |
| Ground system resistance: | < 0.5 Ω |

Ambient noise is checked and found very low and in compliance with requirement of standards.
Reflection of surrounding objects is minimized and in compliance with requirement of standards.

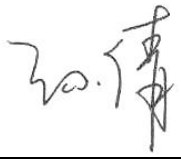
## 1.3 Project Data

| | |
|---|---|
| Project Leader: | Sun Qian |
| Test Engineer: | Lin Xiaojun |
| Testing Start Date: | May 20, 2009 |
| Testing End Date: | May 22, 2009 |

## 1.4 Signature

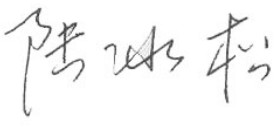
**Lin Xiaojun**

**(Prepared this test report)**



**Sun Qian**

**(Reviewed this test report)**



**Lu Bingsong**

**Deputy Director of the laboratory**

**(Approved this test report)**

# 2 Client Information

## 2.1 Applicant Information

| | |
|---|---|
| Company Name: | ZTE CORPORATION |
| Address /Post: | ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China |
| City: | Shenzhen |
| Postal Code: | 518057 |
| Country: | P. R. China |
| Telephone: | 0086 21 6889 7541 |
| Fax: | 0086 21 5080 1070 |

## 2.2 Manufacturer Information

| | |
|---|---|
| Company Name: | ZTE CORPORATION |
| Address /Post: | ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China |
| City: | Shenzhen |
| Postal Code: | 518057 |
| Country: | P. R. China |
| Telephone: | 0086 21 6889 7541 |
| Fax: | 0086 21 5080 1070 |

# 3 Equipment Under Test (EUT) and Ancillary Equipment (AE)

## 3.1 About EUT

| | |
|---|---|
| EUT Description: | CDMA 1X Digital Mobile Phone |
| Model Name: | ZTE C70 |
| Frequency Band: | CDMA 800 / CDMA 1900 / AWS 1700 |

**Picture 1: Constituents of the sample**

## 3.2 Internal Identification of EUT used during the test

| EUT ID* | SN or IMEI | HW Version | SW Version |
|---|---|---|---|
| EUT1 | A000000B000012 | C98A | ZTEC70V1.0.0B01 |

*EUT ID: is used to identify the test sample in the lab internally.

## 3.3 Internal Identification of AE used during the test

| AE ID* | Description | Model | SN | Manufacturer |
|---|---|---|---|---|
| AE1 | Adapter | STC-A22O50U5-C | 800811270467701 | ZTE CORPORATION |
| AE2 | Battery | Li3709T42P3h553447 | 60110811040347499 | ZTE CORPORATION |
| AE3 | Battery | Li3709T42P3h553447 | 60110811040340245 | ZTE CORPORATION |

*AE ID: is used to identify the test sample in the lab internally.

# 4 CHARACTERISTICS OF THE TEST

## 4.1 Applicable Limit Regulations

**EN 50360–2001:** Product standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones.

It specifies the maximum exposure limit of **2.0 W/kg** as averaged over any 10 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

**ANSI C95.1–1999:** IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

## 4.2 Applicable Measurement Standards

**EN 50361–2001:** Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones.

**IEEE 1528–2003:** Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques.

**OET Bulletin 65 (Edition 97-01) and Supplement C(Edition 01-01):** Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits.

**IEC 62209-1:** Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1:Procedure to determine the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)

**IEC 62209-2 (Draft)**: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the Specific Absorption Rate (SAR)in the head and body for 30MHz to 6GHz Handheld and Body-Mounted Devices used in close proximity to the Body.

They specify the measurement method for demonstration of compliance with the SAR limits for such equipments.

# 5 OPERATIONAL CONDITIONS DURING TEST

## 5.1 Schematic Test Configuration

A communication link is set up with a System Simulator (SS) by air link, and a call is established. The Absolute Radio Frequency Channel Number (ARFCN) is allocated to 1013, 384 and 777 respectively in the case of CDMA 835 MHz, to 25, 600 and 1175 respectively in the case of CDMA 1900MHz, or to 25, 450 and 875 respectively in the case of AWS 1700MHz. The EUT is commanded to operate at maximum transmitting power.

The EUT shall use its internal transmitter. The antenna(s), battery and accessories shall be those specified by the manufacturer. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. If a wireless link is used, the antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the handset. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the handset by at least 30 dB.

In order to determine the highest value of the peak spatial-average SAR of the EUT, it was tested at middle frequency (cheek and tilt, for both left and right sides of the SAM phantom). After found the worst case, perform the tests at the high and low frequencies. In addition, for all other conditions where the peak spatial-average SAR value determined is within 3 dB of the applicable SAR limit, all other test frequencies shall be tested as well.

Test communication setup meet as followings:

| | |
|---|---|
| Communication standard between mobile station and base station simulator | 3GPP2 C.S0011-B |
| Radio configuration | RC3（Supporting CDMA 1X） |
| Spreading Rate | SR1 |
| Data Rate | 9600bps |
| Service Options | SO55 （loop back mode） |
| Service Options | SO3 （voice mode） |
| Multiplex Options | The mobile station does not support this service. |

Base station Simulator: CMU200

Test Parameter setup for maximum RF output power according to section 4.4.5 of 3GPP2 C.S0011-B:

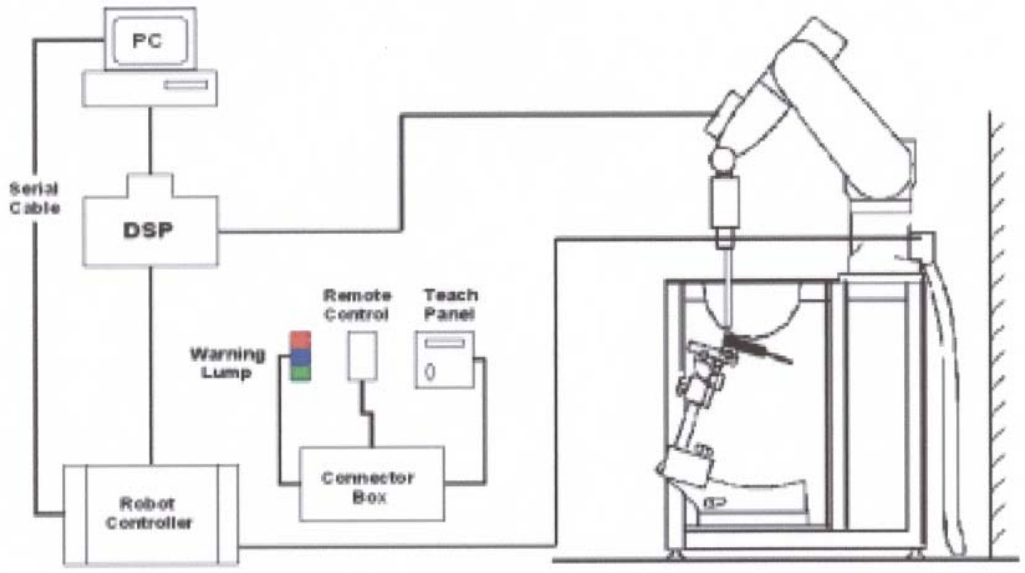
| Parameter | Units | Value |
|---|---|---|
| $I_{or}$ | dBm/1.23MHz | -104 |
| $\frac{PilotE_c}{I_{or}}$ | dB | -7 |
| $\frac{TrafficE_c}{I_{or}}$ | dB | -7.4 |

For SAR test, the maximum power output is very important and essential; it is identical under the measurement uncertainty. It is proper to use typical Test Mode 3 (FW RC3, RVS RC3, SO55) as the worst case for SAR test.
Under the loop back mode between mobile station and CMU200, the transmitter continuously emits with maximum power more strong than voice mode, so the SAR test was done with loop back mode.
To make the mobile emits maximum power; the output power of CMU200 would be adjusted to minimum power with the sensitivity of the mobile station to build steady connection with mobile station. The power level control parameter in the CMU200 is “0”, it means “all up” and requires mobile station to emit with maximum power.

## 5.2 SAR Measurement Set-up

These measurements were performed with the automated near-field scanning system DASY4 Professional from Schmid & Partner Engineering AG (SPEAG). The system is based on a high precision robot (working range greater than 0.9m), which positions the probes with a positional repeatability of better than ± 0.02mm. Special E- and H-field probes have been developed for measurements close to material discontinuity, the sensors of which are directly loaded with a Schottky diode and connected via highly resistive lines (length =300mm) to the data acquisition unit.

A cell controller system contains the power supply, robot controller, teaches pendant (Joystick), and remote control, is used to drive the robot motors. The PC consists of the Micron Pentium III 800 MHz computer with Windows 2000 system and SAR Measurement Software DASY4 Professional, A/D interface card, monitor, mouse, and keyboard. The Stäubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card.




**Picture 2: SAR Lab Test Measurement Set-up**

The DAE consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer.

## 5.3 Dasy4 E-field Probe System

The SAR measurements were conducted with the dosimetric probe ES3DV3 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe has been calibrated according to the standard procedure with an accuracy of better than ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB.

### ES3DV3 Probe Specification

| | |
|---|---|
| Construction | Symmetrical design with triangular core<br>Interleaved sensors<br>Built-in shielding against static charges<br>PEEK enclosure material (resistant to organic solvents, e.g., DGBE) |
| Calibration | Basic Broad Band Calibration in air<br>Conversion Factors (CF) for HSL 900 and HSL 1810<br>Additional CF for other liquids and frequencies upon request |
| Frequency | 10 MHz to 4 GHz; Linearity: ± 0.2 dB (30 MHz to 4 GHz) |
| Directivity | ± 0.2 dB in HSL (rotation around probe axis)<br>± 0.3 dB in tissue material (rotation normal to probe axis) |
| Dynamic Range | 5 μW/g to > 100 mW/g; Linearity: ± 0.2 dB |
| Dimensions | Overall length: 330 mm (Tip: 20 mm)<br>Tip diameter: 3.9 mm (Body: 12 mm)<br>Distance from probe tip to dipole centers: 2.0 mm |
| Application | General dosimetry up to 4 GHz<br>Dosimetry in strong gradient fields<br>Compliance tests of mobile phones |

**Picture 3: ES3DV3 E-field Probe**

**Picture4:ES3DV3 E-field probe**

## 5.4 E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies bellow 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C\frac{\Delta T}{\Delta t}$$

Where: $\Delta t$ = Exposure time (30 seconds),
C = Heat capacity of tissue (brain or muscle),
$\Delta T$ = Temperature increase due to RF exposure.

Or

$$SAR = \frac{|E|^2 \sigma}{\rho}$$

Where:
σ = Simulated tissue conductivity,
ρ = Tissue density (kg/m$^3$).

**Picture 5: Device Holder**

## 5.5 Other Test Equipment

### 5.5.1 Device Holder for Transmitters

In combination with the Generic Twin Phantom V3.0, the Mounting Device (POM) enables the rotation of the mounted transmitter in spherical coordinates whereby the rotation points is the ear opening. The devices can be easily, accurately, and repeatably positioned according to the FCC and CENELEC specifications. The device holder can be locked at different phantom locations (left head, right head, flat phantom).

### 5.5.2 Phantom

The Generic Twin Phantom is constructed of a fiberglass shell integrated in a wooden table. The shape of the shell is based on data from an anatomical study designed to determine the maximum exposure in at least 90% of all users. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents the evaporation of the liquid. Reference markings on the Phantom allow the complete setup of all

predefined phantom positions and measurement grids by manually teaching three points in the robot.

Shell Thickness 2±0. l mm
Filling Volume Approx. 20 liters
Dimensions 810 x l000 x 500 mm (H x L x W)
Available Special

**Picture 6: Generic Twin Phantom**

## 5.6 Equivalent Tissues

The liquid used for the frequency range of 800-2000 MHz consisted of water, sugar, salt and Cellulose. The liquid has been previously proven to be suited for worst-case. The Table 1 and 2 shows the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the IEEE 1528.

**Table 1. Composition of the Head Tissue Equivalent Matter**

| MIXTURE % | FREQUENCY 850MHz |
|---|---|
| Water | 41.45 |
| Sugar | 56.0 |
| Salt | 1.45 |
| Preventol | 0.1 |
| Cellulose | 1.0 |
| Dielectric Parameters Target Value | f=850MHz ε=41.5 σ=0.90 |
| MIXTURE % | FREQUENCY 1900MHz |
| Water | 55.242 |
| Glycol monobutyl | 44.452 |
| Salt | 0.306 |
| Dielectric Parameters Target Value | f=1900MHz ε=40.0 σ=1.40 |
| MIXTURE% | FREQUENCY 1800 MHz |
| Water | 55.242 |
| Glycol monobutyl | 44.452 |
| Salt | 0.306 |
| Dielectric Parameters Target Value | f=1800 MHz ε=40.0 σ=1.40 |

**Table 2. Composition of the Body Tissue Equivalent Matter**

| MIXTURE % | FREQUENCY 850MHz |
|---|---|
| Water | 52.5 |
| Sugar | 45.0 |
| Salt | 1.4 |
| Preventol | 0.1 |
| Cellulose | 1.0 |
| Dielectric Parameters Target Value | f=850MHz ε=55.2 σ=0.97 |
| MIXTURE % | FREQUENCY 1900MHz |

| | |
|---|---|
| **Water** | **69.91** |
| **Glycol monobutyl** | **29.96** |
| **Salt** | **0.13** |
| **Dielectric Parameters Target Value** | **f=1900MHz ε=53.3 σ=1.52** |
| **MIXTURE %** | **FREQUENCY 1800 MHz** |
| **Water** | **69.91** |
| **Glycol monobutyl** | **29.96** |
| **Salt** | **0.13** |
| **Dielectric Parameters Target Value** | **f=1800 MHz ε=53.3 σ=1.52** |

### 5.7 System Specifications

### 5.7.1 Robotic System Specifications

**Specifications**

**Positioner:** Stäubli Unimation Corp. Robot Model: RX90L
**Repeatability:** ±0.02 mm
**No. of Axis:** 6

**Data Acquisition Electronic (DAE) System**

**Cell Controller**

**Processor:** Pentium III
**Clock Speed:** 800 MHz
**Operating System:** Windows 2000

**Data Converter**

**Features:**Signal Amplifier, multiplexer, A/D converter, and control logic
**Software:** DASY4 software
**Connecting Lines:** Optical downlink for data and status info.
Optical uplink for commands and clock

## 6 CONDUCTED OUTPUT POWER MEASUREMENT

### 6.1 Summary

During the process of testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication tester (CMU-200) to ensure the maximum power transmission and proper modulation. This result contains conducted output power and ERP for the EUT. In all cases, the measured peak output power should be greater and within 5% than EMI measurement.

### 6.2 Conducted Power

#### 6.2.1 Measurement Methods

The EUT was set up for the maximum output power. The channel power was measured with Agilent Spectrum Analyzer E4440A. These measurements were done at low, middle and high channels.

### 6.2.2 Measurement result

**Table 3: Conducted Power Measurement Results**

| | | | |
|---|---|---|---|
| **CDMA 835MHz** | **Conducted Power (dBm)** | | |
| | **Channel 777(848.31MHz)** | **Channel 384(836.52MHz)** | **Channel 1013(825MHz)** |
| | 22.17 | 21.14 | 20.84 |
| **CDMA 1900MHZ** | **Conducted Power (dBm)** | | |
| | **Channel 1175(1908.75MHz)** | **Channel 600(1880MHz)** | **Channel 25(1851.25MHz)** |
| | 21.63 | 21.71 | 21.34 |
| **AWS 1700MHZ** | **Conducted Power (dBm)** | | |
| | **Channel 875(1753.75MHz)** | **Channel 450(1732.5MHz)** | **Channel 25(1711.25MHz)** |
| | 21.80 | 22.08 | 22.12 |

### 6.2.3 Power Drift

To control the output power stability during the SAR test, DASY4 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in Table 7 to Table 18 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

# 7 TEST RESULTS

## 7.1 Dielectric Performance

**Table 4: Dielectric Performance of Head Tissue Simulating Liquid**

| Measurement is made at temperature 23.3 °C and relative humidity 49%.<br>Liquid temperature during the test: 22.5°C<br>Measurement Date : 835 MHz **May 20,2009** 1900 MHz **May 21,2009** 1700 MHz **May 22,2009** | | | |
|---|---|---|---|
| / | **Frequency** | **Permittivity ε** | **Conductivity σ (S/m)** |
| **Target value** | 835 MHz | 41.5 | 0.90 |
| | 1900 MHz | 40.0 | 1.40 |
| **Measurement value (Average of 10 tests)** | 835 MHz | 40.4 | 0.90 |
| | 1900 MHz | 39.2 | 1.42 |
| | 1700 MHz | 41.3 | 1.33 |

**Table 5: Dielectric Performance of Body Tissue Simulating Liquid**

| Measurement is made at temperature 23.3 °C and relative humidity 49%.<br>Liquid temperature during the test: 22.5°C<br>Measurement Date : 835 MHz **May 20,2009** 1900 MHz **May 21,2009** 1700 MHz **May 22,2009** | | | |
|---|---|---|---|
| / | **Frequency** | **Permittivity ε** | **Conductivity σ (S/m)** |
| **Target value** | 835 MHz | 55.2 | 0.97 |
| | 1900 MHz | 53.3 | 1.52 |
| **Measurement value (Average of 10 tests)** | 835 MHz | 53.8 | 1.00 |
| | 1900 MHz | 52.3 | 1.56 |
| | 1700 MHz | 52.8 | 1.45 |

## 7.2 System Validation

**Table 6: System Validation**

| Measurement is made at temperature 23.3 °C and relative humidity 49%.<br>Liquid temperature during the test: 22.5°C<br>Measurement Date : 835 MHz **May 20,2009** 1900 MHz **May 21,2009** 1700 MHz **May 22,2009** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Liquid parameters** | Dipole calibration Target value | **Frequency** | | **Permittivity ε** | | **Conductivity σ (S/m)** | |
| | | 835 MHz | | 39.9 | | 0.88 | |
| | | 1900 MHz | | 38.9 | | 1.38 | |
| | | 1800 MHz | | 39.0 | | 1.40 | |
| | Actural Measurement value | 835 MHz | | 40.4 | | 0.90 | |
| | | 1900 MHz | | 39.2 | | 1.42 | |
| | | 1800 MHz | | 40.9 | | 1.42 | |
| **Verification results** | **Frequency** | **Target value (W/kg)** | | **Measured value (W/kg)** | | **Deviation** | |
| | | **10 g Average** | **1 g Average** | **10 g Average** | **1 g Average** | **10 g Average** | **1 g Average** |
| | 835 MHz | 1.60 | 2.48 | 1.62 | 2.50 | 1.25% | 0.81% |
| | 1900 MHz | 5.09 | 9.73 | 5.27 | 9.91 | 3.54% | 1.85% |
| | 1800 MHz | 5.06 | 9.60 | 5.0 | 9.22 | -1.18% | -3.96% |

Note：Target values are the data of the dipole validation results, please check Annex F for the Dipole Calibration Certificate.

## 7.3 Summary of Measurement Results (CDMA 835MHz)

**Table 7: SAR Values (CDMA 835MHz-Head) – Slide down**

| **Limit of SAR (W/kg)** | **10 g Average** | **1 g Average** | **Power Drift (dB)** |
|---|---|---|---|
| | 2.0 | 1.6 | |
| **Test Case** | **Measurement Result (W/kg)** | | |
| | **10 g Average** | **1 g Average** | |
| Left hand, Touch cheek, Top frequency(See Fig.1) | 0.565 | 0.818 | -0.173 |
| Left hand, Touch cheek, Mid frequency(See Fig.3) | 0.496 | 0.720 | -0.126 |
| Left hand, Touch cheek, Bottom frequency(See Fig.4) | 0.466 | 0.665 | -0.048 |
| Left hand, Tilt 15 Degree, Top frequency(See Fig.5) | 0.275 | 0.375 | -0.173 |
| Left hand, Tilt 15 Degree, Mid frequency(See Fig.6) | 0.238 | 0.323 | -0.007 |
| Left hand, Tilt 15 Degree, Bottom frequency(See Fig.7) | 0.224 | 0.302 | 0.130 |
| Right hand, Touch cheek, Top frequency(See Fig.8) | 0.535 | 0.782 | -0.171 |
| Right hand, Touch cheek, Mid frequency(See Fig.9) | 0.481 | 0.694 | -0.112 |
| Right hand, Touch cheek, Bottom frequency(See Fig.10) | 0.359 | 0.499 | -0.130 |
| Right hand, Tilt 15 Degree, Top frequency(See Fig.11) | 0.271 | 0.373 | -0.051 |

| | | | |
|---|---|---|---|
| Right hand, Tilt 15 Degree, Mid frequency(See Fig.12) | 0.227 | 0.308 | 0.060 |
| Right hand, Tilt 15 Degree, Bottom frequency(See Fig.13) | 0.208 | 0.286 | -0.088 |

**Table 8: SAR Values (CDMA 835MHz-Head) – Slide up**

| **Limit of SAR (W/kg)** | **10 g Average** | **1 g Average** | **Power Drift (dB)** |
|---|---|---|---|
| | 2.0 | 1.6 | |
| **Test Case** | **Measurement Result (W/kg)** | | |
| | **10 g Average** | **1 g Average** | |
| Left hand, Touch cheek, Mid frequency(See Fig.14) | 0.470 | 0.647 | -0.136 |
| Left hand, Tilt 15 Degree, Mid frequency(See Fig.15) | 0.234 | 0.324 | -0.035 |
| Right hand, Touch cheek, Mid frequency(See Fig.16) | 0.463 | 0.647 | 0.173 |
| Right hand, Tilt 15 Degree, Mid frequency(See Fig.17) | 0.261 | 0.361 | 0.073 |
| Left hand, Touch cheek, Top frequency(See Fig.18) | 0.554 | 0.768 | 0.084 |
| Left hand, Touch cheek, Bottom frequency(See Fig.19) | 0.355 | 0.488 | -0.070 |

**Table 9: SAR Values (CDMA 835MHz -Body) – Slide down**

| **Limit of SAR (W/kg)** | **10 g Average** | **1g Average** | **Power Drift (dB)** |
|---|---|---|---|
| | 2.0 | 1.6 | |
| **Test Case** | **Measurement Result (W/kg)** | | |
| | **10 g Average** | **1 g Average** | |
| Body, Towards Phantom, Top frequency (See Fig.20) | 0.300 | 0.412 | 0.075 |
| Body, Towards Phantom, Mid frequency (See Fig.21) | 0.333 | 0.457 | 0.039 |
| Body, Towards Phantom, Bottom frequency (See Fig.22) | 0.239 | 0.328 | -0.004 |
| Body, Towards Ground, Top frequency (See Fig.23) | 0.609 | 0.894 | -0.159 |
| Body, Towards Ground, Mid frequency (See Fig.24) | 0.678 | 0.992 | -0.003 |
| Body, Towards Ground, Bottom frequency (See Fig.26) | 0.502 | 0.730 | -0.112 |

**Table 10: SAR Values (CDMA 835MHz -Body) – Slide up**

| **Limit of SAR (W/kg)** | **10 g Average** | **1g Average** | **Power Drift (dB)** |
|---|---|---|---|
| | 2.0 | 1.6 | |
| **Test Case** | **Measurement Result (W/kg)** | | |
| | **10 g Average** | **1 g Average** | |
| Body, Towards Phantom, Top frequency (See Fig.27) | 0.531 | 0.732 | -0.178 |

| | | | |
|---|---|---|---|
| Body, Towards Phantom, Mid frequency (See Fig.28) | 0.512 | 0.702 | 0.093 |
| Body, Towards Phantom, Bottom frequency (See Fig.29) | 0.511 | 0.695 | -0.139 |
| Body, Towards Ground, Top frequency (See Fig.30) | 0.637 | 0.890 | -0.076 |
| Body, Towards Ground, Mid frequency (See Fig.31) | 0.631 | 0.881 | -0.012 |
| Body, Towards Ground, Bottom frequency (See Fig.32) | 0.591 | 0.829 | -0.023 |

## 7.4 Summary of Measurement Results (CDMA 1900MHz)

**Table 11: SAR Values (CDMA 1900MHz-Head) – Slide down**

| **Limit of SAR (W/kg)** | **10 g Average** | **1 g Average** | **Power Drift (dB)** |
|---|---|---|---|
| | 2.0 | 1.6 | |
| **Test Case** | **Measurement Result (W/kg)** | | |
| | **10 g Average** | **1 g Average** | |
| Left hand, Touch cheek, Top frequency(See Fig.33) | 0.464 | 0.754 | -0.016 |
| Left hand, Touch cheek, Mid frequency(See Fig.34) | 0.435 | 0.707 | 0.056 |
| Left hand, Touch cheek, Bottom frequency(See Fig.35) | 0.450 | 0.730 | 0.091 |
| Left hand, Tilt 15 Degree, Top frequency(See Fig.36) | 0.140 | 0.237 | -0.189 |
| Left hand, Tilt 15 Degree, Mid frequency(See Fig.37) | 0.130 | 0.218 | 0.087 |
| Left hand, Tilt 15 Degree, Bottom frequency(See Fig.38) | 0.147 | 0.241 | -0.031 |
| Right hand, Touch cheek, Top frequency(See Fig.39) | 0.636 | 1.14 | -0.118 |
| Right hand, Touch cheek, Mid frequency(See Fig.41) | 0.560 | 1.01 | -0.130 |
| Right hand, Touch cheek, Bottom frequency(See Fig.42) | 0.596 | 1.07 | -0.199 |
| Right hand, Tilt 15 Degree, Top frequency(See Fig.43) | 0.142 | 0.237 | -0.116 |
| Right hand, Tilt 15 Degree, Mid frequency(See Fig.44) | 0.137 | 0.226 | 0.087 |
| Right hand, Tilt 15 Degree, Bottom frequency(See Fig.45) | 0.151 | 0.243 | 0.186 |

**Table 12: SAR Values (CDMA 1900MHz-Head) – Slide up**

| **Limit of SAR (W/kg)** | **10 g Average** | **1 g Average** | **Power Drift (dB)** |
|---|---|---|---|
| | 2.0 | 1.6 | |
| **Test Case** | **Measurement Result (W/kg)** | | |
| | **10 g Average** | **1 g Average** | |
| Left hand, Touch cheek, Mid frequency(See Fig.46) | 0.179 | 0.292 | 0.125 |
| Left hand, Tilt 15 Degree, Mid frequency(See Fig.47) | 0.057 | 0.086 | 0.130 |
| Right hand, Touch cheek, Mid frequency(See Fig.48) | 0.148 | 0.239 | 0.164 |
| Right hand, Tilt 15 Degree, Mid frequency(See Fig.49) | 0.058 | 0.097 | 0.132 |
| Left hand, Touch cheek, Top frequency(See Fig.50) | 0.168 | 0.277 | -0.043 |
| Left hand, Touch cheek, Bottom frequency(See Fig.51) | 0.195 | 0.317 | -0.108 |

**Table 13: SAR Values (CDMA 1900MHz -Body) – Slide down**

| Limit of SAR (W/kg) | 10 g Average | 1g Average | Power Drift (dB) |
|---|---|---|---|
| | 2.0 | 1.6 | |
| Test Case | Measurement Result (W/kg) | | |
| | 10 g Average | 1 g Average | |
| Body, Towards Phantom, Top frequency (See Fig.52) | 0.179 | 0.290 | -0.120 |
| Body, Towards Phantom, Mid frequency (See Fig.53) | 0.156 | 0.253 | -0.003 |
| Body, Towards Phantom, Bottom frequency (See Fig.54) | 0.154 | 0.250 | -0.032 |
| Body, Towards Ground, Top frequency (See Fig.55) | 0.320 | 0.550 | -0.176 |
| Body, Towards Ground, Mid frequency (See Fig.57) | 0.307 | 0.529 | 0.030 |
| Body, Towards Ground, Bottom frequency (See Fig.58) | 0.298 | 0.508 | -0.051 |

**Table 14: SAR Values (CDMA 1900MHz -Body) – Slide up**

| Limit of SAR (W/kg) | 10 g Average | 1g Average | Power Drift (dB) |
|---|---|---|---|
| | 2.0 | 1.6 | |
| Test Case | Measurement Result (W/kg) | | |
| | 10 g Average | 1 g Average | |
| Body, Towards Phantom, Top frequency (See Fig.59) | 0.164 | 0.262 | -0.198 |
| Body, Towards Phantom, Mid frequency (See Fig.60) | 0.159 | 0.250 | 0.055 |
| Body, Towards Phantom, Bottom frequency (See Fig.61) | 0.173 | 0.273 | -0.018 |
| Body, Towards Ground, Top frequency (See Fig.62) | 0.317 | 0.519 | -0.183 |
| Body, Towards Ground, Mid frequency (See Fig.63) | 0.298 | 0.486 | 0.040 |
| Body, Towards Ground, Bottom frequency (See Fig.64) | 0.322 | 0.524 | -0.001 |

## 7.5 Summary of Measurement Results (AWS 1700MHz)

**Table 15: SAR Values (AWS 1700MHz-Head) – Slide down**

| Limit of SAR (W/kg) | 10 g Average | 1 g Average | Power Drift (dB) |
|---|---|---|---|
| | 2.0 | 1.6 | |
| Test Case | Measurement Result (W/kg) | | |
| | 10 g Average | 1 g Average | |
| Left hand, Touch cheek, Top frequency(See Fig.65) | 0.580 | 0.906 | -0.120 |
| Left hand, Touch cheek, Mid frequency(See Fig.66) | 0.575 | 0.889 | 0.043 |
| Left hand, Touch cheek, Bottom frequency(See Fig.67) | 0.639 | 0.993 | -0.199 |

| | | | |
|---|---|---|---|
| Left hand, Tilt 15 Degree, Top frequency(See Fig.68) | 0.263 | 0.436 | 0.087 |
| Left hand, Tilt 15 Degree, Mid frequency(See Fig.69) | 0.268 | 0.439 | -0.098 |
| Left hand, Tilt 15 Degree, Bottom frequency(See Fig.70) | 0.284 | 0.451 | 0.057 |
| Right hand, Touch cheek, Top frequency(See Fig.71) | 0.804 | 1.43 | -0.009 |
| Right hand, Touch cheek, Mid frequency(See Fig.72) | 0.799 | 1.42 | 0.087 |
| Right hand, Touch cheek, Bottom frequency(See Fig.73) | 0.815 | 1.44 | -0.102 |
| Right hand, Tilt 15 Degree, Top frequency(See Fig.75) | 0.253 | 0.400 | -0.001 |
| Right hand, Tilt 15 Degree, Mid frequency(See Fig.76) | 0.273 | 0.431 | 0.122 |
| Right hand, Tilt 15 Degree, Bottom frequency(See Fig.77) | 0.304 | 0.471 | -0.156 |

**Table 16: SAR Values (AWS 1700MHz-Head) – Slide up**

| **Limit of SAR (W/kg)** | **10 g Average** | **1 g Average** | **Power Drift (dB)** |
|---|---|---|---|
| | 2.0 | 1.6 | |
| **Test Case** | **Measurement Result (W/kg)** | | |
| | **10 g Average** | **1 g Average** | |
| Left hand, Touch cheek, Top frequency(See Fig.78) | 0.379 | 0.641 | 0.110 |
| Left hand, Touch cheek, Mid frequency(See Fig.79) | 0.413 | 0.698 | 0.130 |
| Left hand, Touch cheek, Bottom frequency(See Fig.80) | 0.480 | 0.814 | -0.140 |
| Left hand, Tilt 15 Degree, Top frequency(See Fig.81) | 0.090 | 0.142 | -0.183 |
| Left hand, Tilt 15 Degree, Mid frequency(See Fig.82) | 0.122 | 0.193 | -0.007 |
| Left hand, Tilt 15 Degree, Bottom frequency(See Fig.83) | 0.133 | 0.204 | 0.083 |
| Right hand, Touch cheek, Top frequency(See Fig.84) | 0.278 | 0.464 | -0.104 |
| Right hand, Touch cheek, Mid frequency(See Fig.85) | 0.288 | 0.471 | 0.108 |
| Right hand, Touch cheek, Bottom frequency(See Fig.86) | 0.324 | 0.532 | 0.142 |
| Right hand, Tilt 15 Degree, Top frequency(See Fig.87) | 0.121 | 0.192 | 0.099 |
| Right hand, Tilt 15 Degree, Mid frequency(See Fig.88) | 0.125 | 0.197 | 0.035 |
| Right hand, Tilt 15 Degree, Bottom frequency(See Fig.89) | 0.139 | 0.217 | -0.111 |

**Table 17: SAR Values (AWS 1700MHz -Body) – Slide down**

| **Limit of SAR (W/kg)** | **10 g Average** | **1g Average** | **Power Drift (dB)** |
|---|---|---|---|
| | 2.0 | 1.6 | |
| **Test Case** | **Measurement Result (W/kg)** | | |
| | **10 g Average** | **1 g Average** | |
| Body, Towards Phantom, Top frequency (See Fig.90) | 0.168 | 0.265 | -0.008 |
| Body, Towards Phantom, Mid frequency (See Fig.91) | 0.161 | 0.254 | -0.008 |
| Body, Towards Phantom, Bottom frequency (See Fig.92) | 0.178 | 0.282 | -0.185 |
| Body, Towards Ground, Top frequency (See Fig.93) | 0.440 | 0.748 | -0.006 |
| Body, Towards Ground, Mid frequency (See Fig.95) | 0.395 | 0.670 | -0.014 |

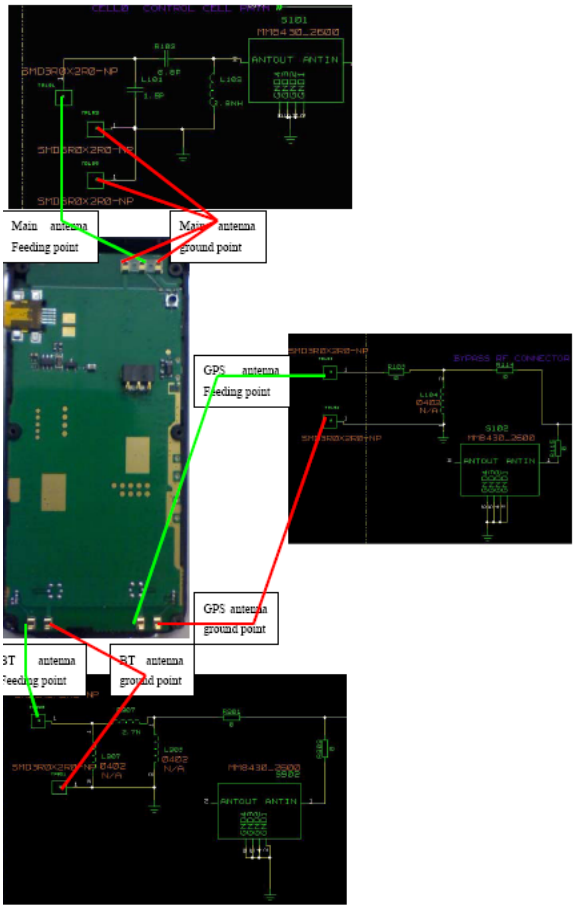
| | | | |
|---|---|---|---|
| Body, Towards Ground, Bottom frequency (See Fig.96) | 0.432 | 0.730 | -0.112 |

**Table 18: SAR Values (AWS 1700MHz -Body) – Slide up**

| Limit of SAR (W/kg) | 10 g Average | 1g Average | Power Drift (dB) |
|---|---|---|---|
| | 2.0 | 1.6 | |
| **Test Case** | **Measurement Result (W/kg)** | | |
| | **10 g Average** | **1 g Average** | |
| Body, Towards Phantom, Top frequency (See Fig.97) | 0.251 | 0.400 | 0.028 |
| Body, Towards Phantom, Mid frequency (See Fig.98) | 0.264 | 0.417 | -0.037 |
| Body, Towards Phantom, Bottom frequency (See Fig.99) | 0.311 | 0.488 | -0.076 |
| Body, Towards Ground, Top frequency (See Fig.100) | 0.363 | 0.572 | -0.104 |
| Body, Towards Ground, Mid frequency (See Fig.101) | 0.401 | 0.624 | 0.088 |
| Body, Towards Ground, Bottom frequency (See Fig.102) | 0.471 | 0.727 | -0.087 |

## 7.6 Summary of Measurement Results (Bluetooth function)

The distance between BT antenna and GSM antenna is >5cm. The location of the antennas inside mobile phone is shown below:



The output power of BT antenna is as following:

| **Channel** | **Ch 0**<br>**2402 MHz** | **Ch 39**<br>**2441 Mhz** | **Ch 78**<br>**2480 MHz** |
|---|---|---|---|
| Peak Conducted Output Power(dBm) | -0.99 | -0.94 | -3.07 |

According to the output power measurement result and the distance between the two antennas, we can draw the conclusion that: stand-alone SAR and simultaneous transmission SAR are not required for BT transmitter, because the output power of BT transmitter is $\leqslant 2P_{Ref}$ and its antenna is $\geqslant$5cm from other antenna

### 7.7 Conclusion

Localized Specific Absorption Rate (SAR) of this portable wireless device has been measured in all cases requested by the relevant standards cited in Clause 4.2 of this report. Maximum localized SAR is below exposure limits specified in the relevant standards cited in Clause 4.1 of this test report.

The maximum SAR values are obtained at the case of **AWS 1700 Head,** Right hand, Touch cheek**, Slide down, Bottom frequency (Table 15)**, and the value are: **0.815 (10g), 1.44(1g).**

## 8 Measurement Uncertainty

| SN | a | Type | c | d | e = f(d,k) | f | h = c x f / e | k |
|---|---|---|---|---|---|---|---|---|
| | Uncertainty Component | | Tol. (± %) | Prob. Dist. | Div. | $c_i$ (1 g) | 1 g $u_i$ (±%) | $v_i$ |
| 1 | System repetivity | A | 0.5 | N | 1 | 1 | 0.5 | 9 |
| | Measurement System | | | | | | | |
| 2 | Probe Calibration | B | 5 | N | 2 | 1 | 2.5 | ∞ |
| 3 | Axial Isotropy | B | 4.7 | R | √3 | $(1\text{-cp})^{1/2}$ | 4.3 | ∞ |
| 4 | Hemispherical Isotropy | B | 9.4 | R | √3 | $\sqrt{c_p}$ | | ∞ |
| 5 | Boundary Effect | B | 0.4 | R | √3 | 1 | 0.23 | ∞ |
| 6 | Linearity | B | 4.7 | R | √3 | 1 | 2.7 | ∞ |
| 7 | System Detection Limits | B | 1.0 | R | √3 | 1 | 0.6 | ∞ |
| 8 | Readout Electronics | B | 1.0 | N | 1 | 1 | 1.0 | ∞ |
| 9 | RF Ambient Conditions | B | 3.0 | R | √3 | 1 | 1.73 | ∞ |
| 10 | Probe Positioner Mechanical Tolerance | B | 0.4 | R | √3 | 1 | 0.2 | ∞ |
| 11 | Probe Positioning with respect to Phantom Shell | B | 2.9 | R | √3 | 1 | 1.7 | ∞ |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 12 | Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation | B | 3.9 | R | √3 | 1 | 2.3 | ∞ |
| | Test sample Related | | | | | | | |
| 13 | Test Sample Positioning | A | 4.9 | N | 1 | 1 | 4.9 | N-1 |
| 14 | Device Holder Uncertainty | A | 6.1 | N | 1 | 1 | 6.1 | N-1 |
| 15 | Output Power Variation - SAR drift measurement | B | 5.0 | R | √3 | 1 | 2.9 | ∞ |
| | Phantom and Tissue Parameters | | | | | | | |
| 16 | Phantom Uncertainty (shape and thickness tolerances) | B | 1.0 | R | √3 | 1 | 0.6 | ∞ |
| 17 | Liquid Conductivity - deviation from target values | B | 5.0 | R | √3 | 0.64 | 1.7 | ∞ |
| 18 | Liquid Conductivity - measurement uncertainty | B | 5.0 | N | 1 | 0.64 | 1.7 | M |
| 19 | Liquid Permittivity - deviation from target values | B | 5.0 | R | √3 | 0.6 | 1.7 | ∞ |
| 20 | Liquid Permittivity - measurement uncertainty | B | 5.0 | N | 1 | 0.6 | 1.7 | M |
| | Combined Standard Uncertainty | | | RSS | | | 11.25 | |
| | Expanded Uncertainty (95% CONFIDENCE INTERVAL) | | | K=2 | | | 22.5 | |

# 9 MAIN TEST INSTRUMENTS

**Table 19: List of Main Instruments**

| No. | Name | Type | Serial Number | Calibration Date | Valid Period |
|---|---|---|---|---|---|
| 01 | Network analyzer | HP 8753E | US38433212 | August 30,2008 | One year |
| 02 | Power meter | NRVD | 101253 | June 20, 2008 | One year |
| 03 | Power sensor | NRV-Z5 | 100333 | | |
| 04 | Power sensor | NRV-Z6 | 100011 | September 2, 2008 | One year |
| 05 | Signal Generator | E4433B | US37230472 | September 4, 2008 | One Year |
| 06 | Amplifier | VTL5400 | 0505 | No Calibration Requested | |
| 07 | BTS | CMU 200 | 105948 | August 15, 2008 | One year |
| 08 | E-field Probe | SPEAG ES3DV3 | 3149 | October 1, 2008 | One year |
| 09 | DAE | SPEAG DAE4 | 771 | November 20, 2008 | One year |
| 10 | Dipole Validation Kit | SPEAG D835V2 | 443 | February 18, 2009 | Two years |
| 11 | Dipole Validation Kit | SPEAG D1900V2 | 541 | February 19, 2009 | Two years |
| 12 | Dipole Validation Kit | SPEAG D1800V2 | 2d145 | December 11, 2007 | Two years |

***END OF REPORT BODY***

# ANNEX A MEASUREMENT PROCESS

The evaluation was performed with the following procedure:

Step 1: Measurement of the SAR value at a fixed location above the reference point was measured and was used as a reference value for assessing the power drop.

Step 2: The SAR distribution at the exposed side of the phantom was measured at a distance of 3.9 mm from the inner surface of the shell. The area covered the entire dimension of the flat phantom and the horizontal grid spacing was 10 mm x 10 mm. Based on this data, the area of the maximum absorption was determined by spline interpolation.

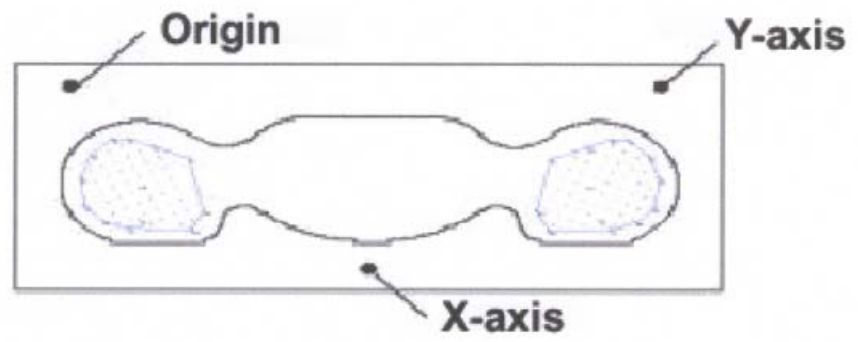
Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7 x 7x 7 points. On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

a. The data at the surface were extrapolated, since the center of the dipoles is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

b. The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1g or 10g) were computed using the 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the "Not a knot"-condition (in x ~ y and z-directions). The volume was integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.

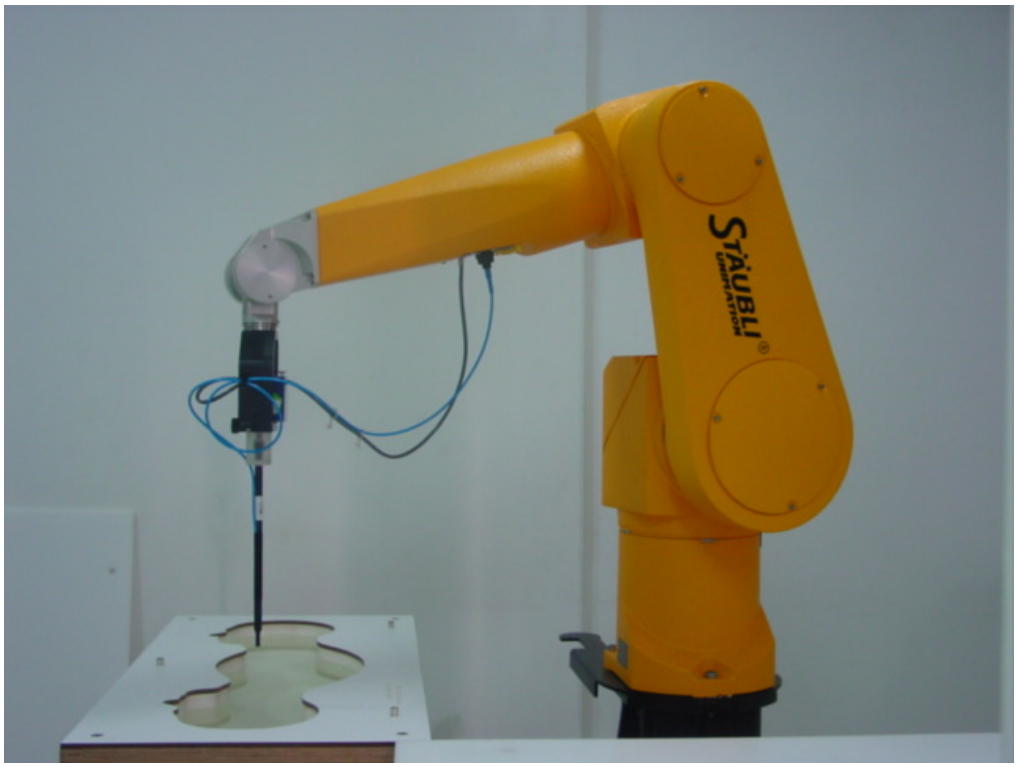
c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation is repeated.

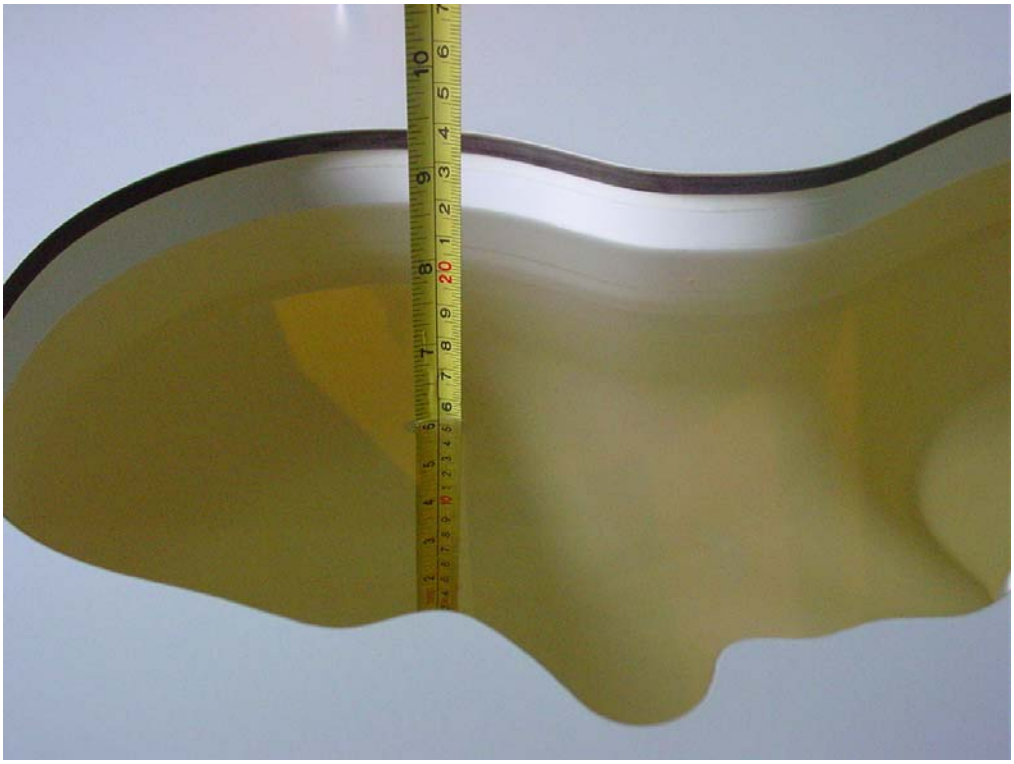



**Picture A: SAR Measurement Points in Area Scan**

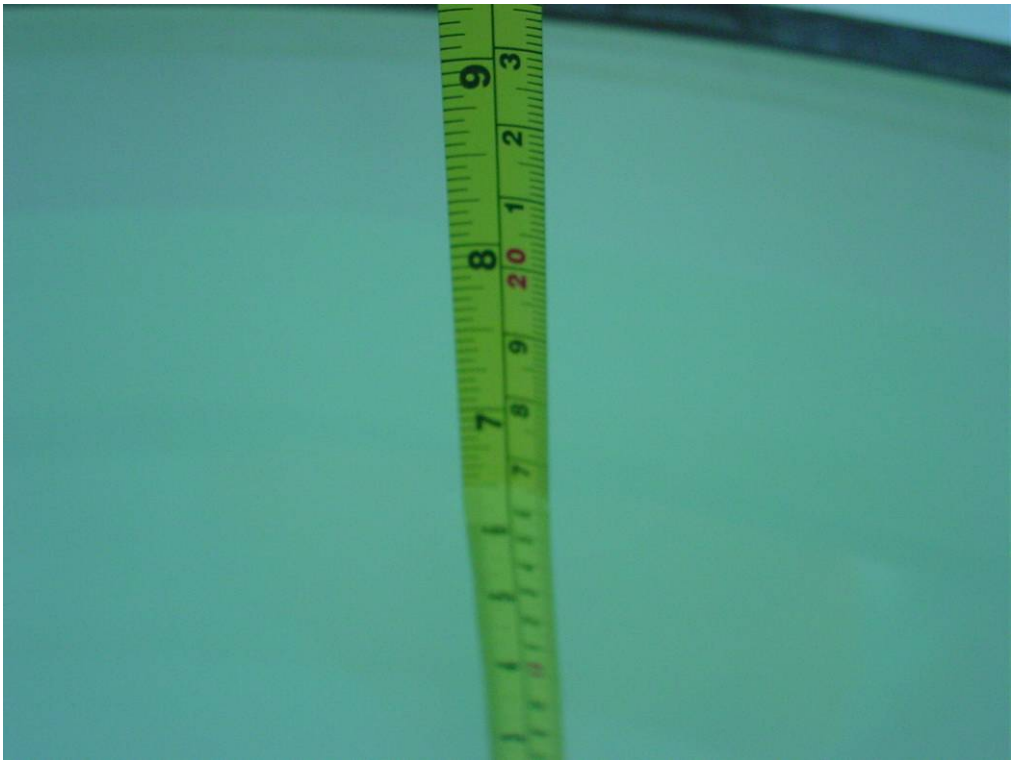
# ANNEX B TEST LAYOUT




**Picture B1: Specific Absorption Rate Test Layout**

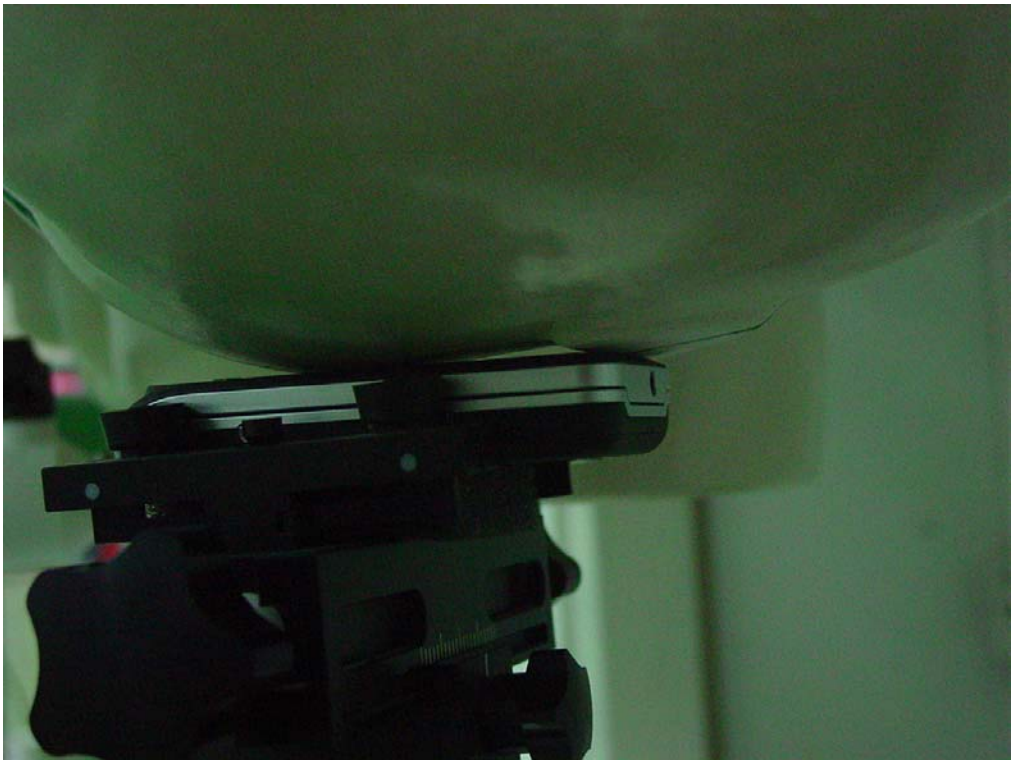


**Picture B2: Liquid depth in the Flat Phantom (850 MHz)**

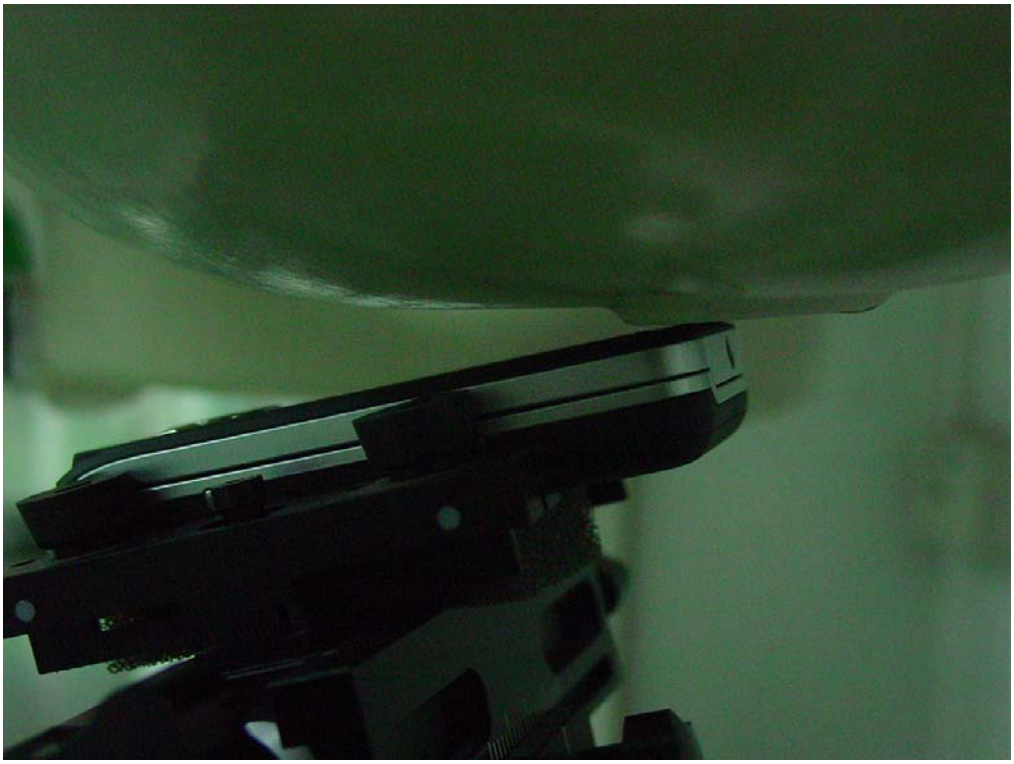


**Picture B3 Liquid depth in the Flat Phantom (1900MHz)**

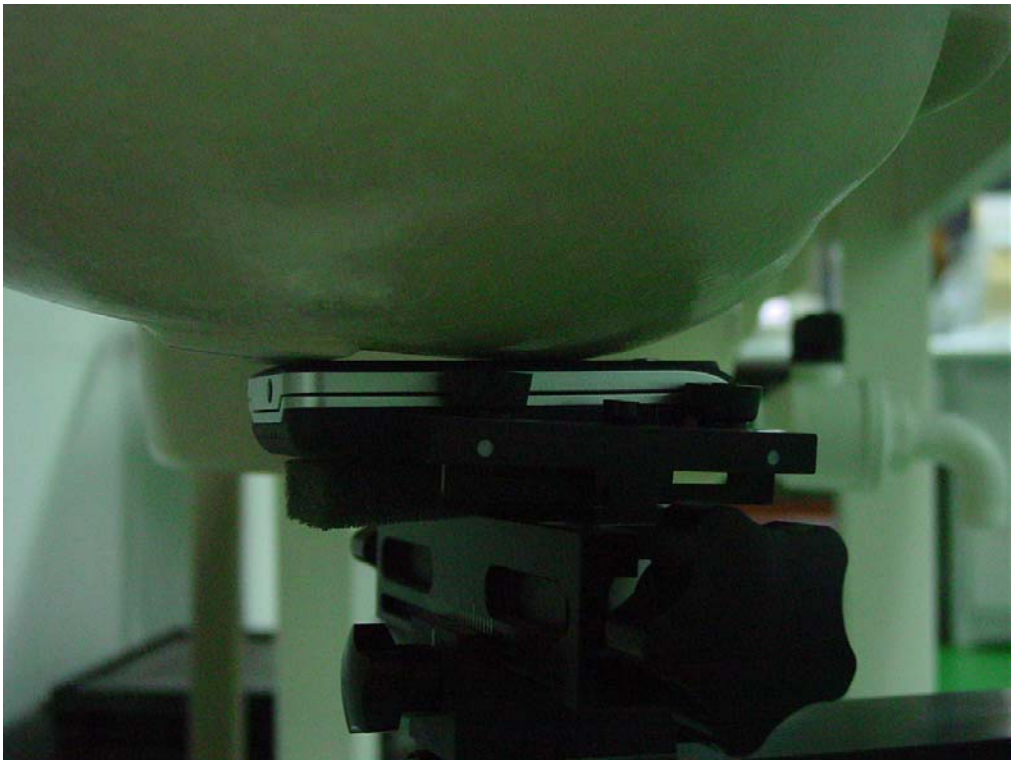
**Picture B4 Liquid depth in the Flat Phantom (1800MHz)**



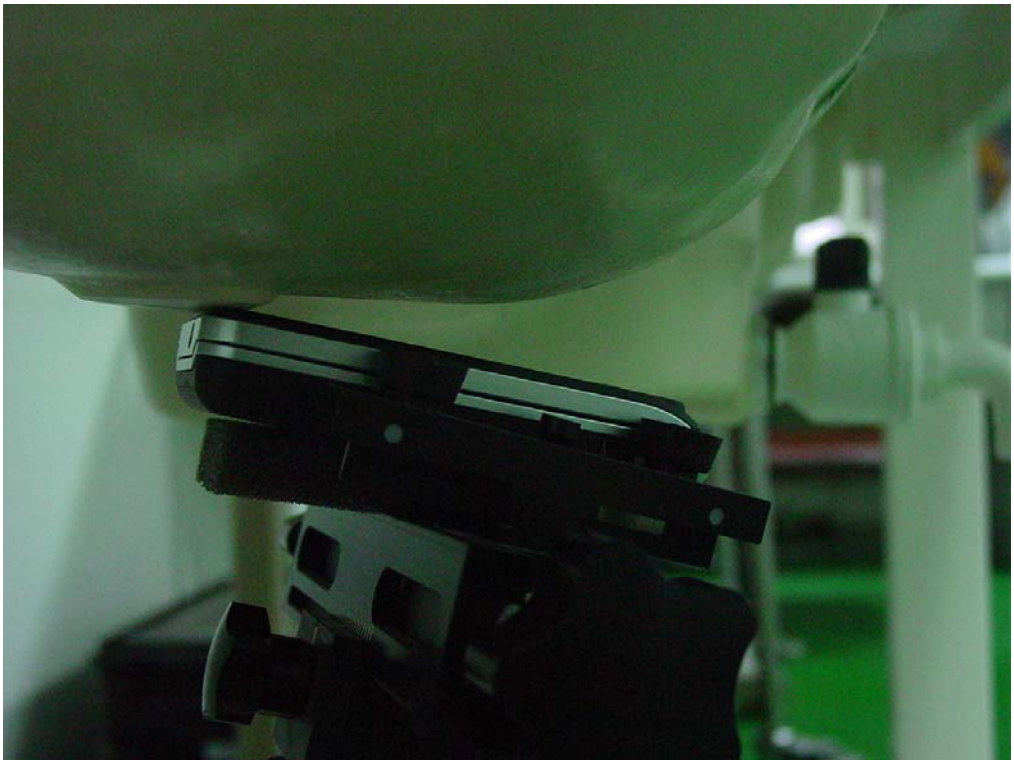
**Picture B5: Left Hand Touch Cheek Position – Slide down**



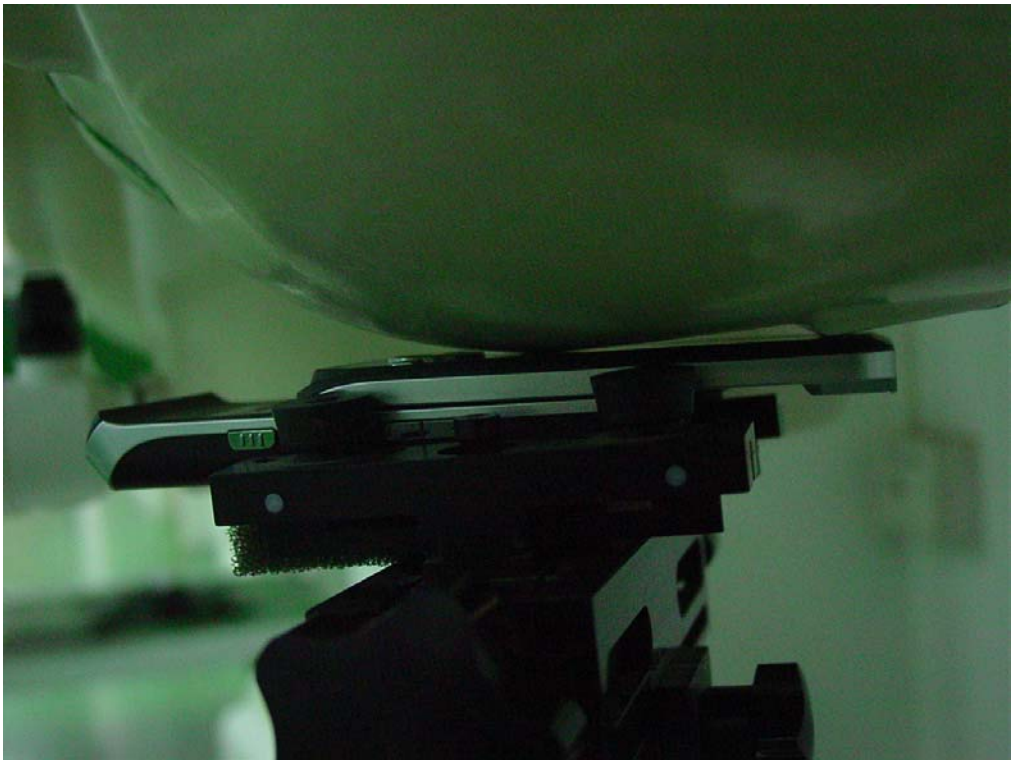
**Picture B6: Left Hand Tilt 15° Position – Slide down**



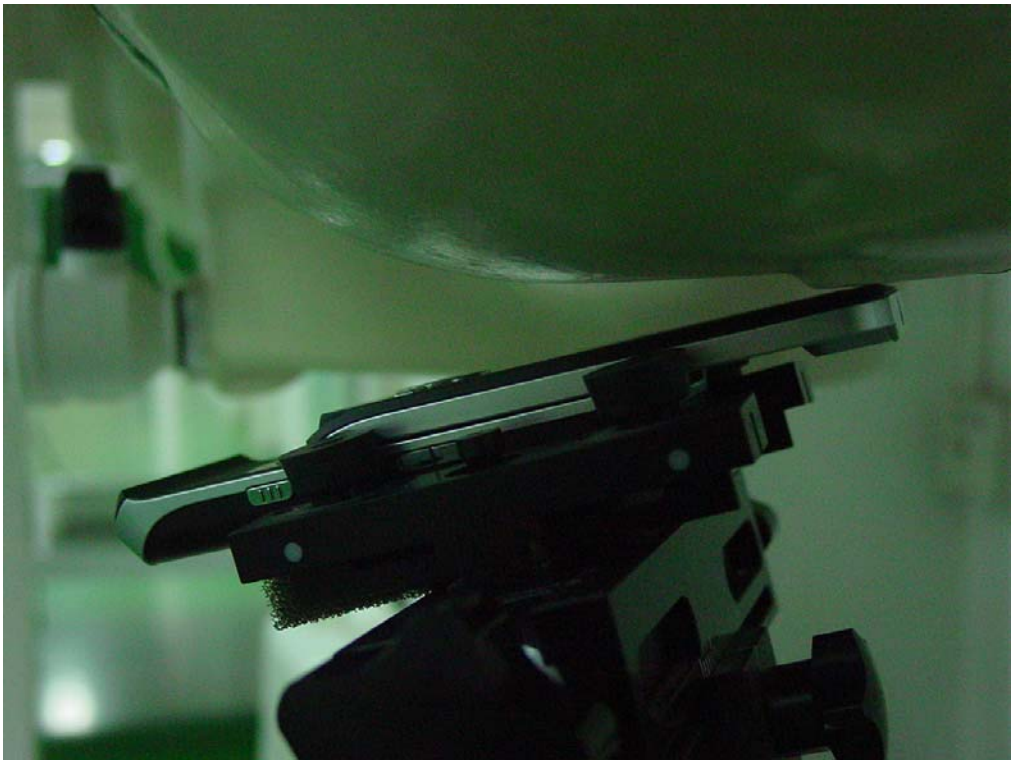
**Picture B7: Right Hand Touch Cheek Position – Slide down**



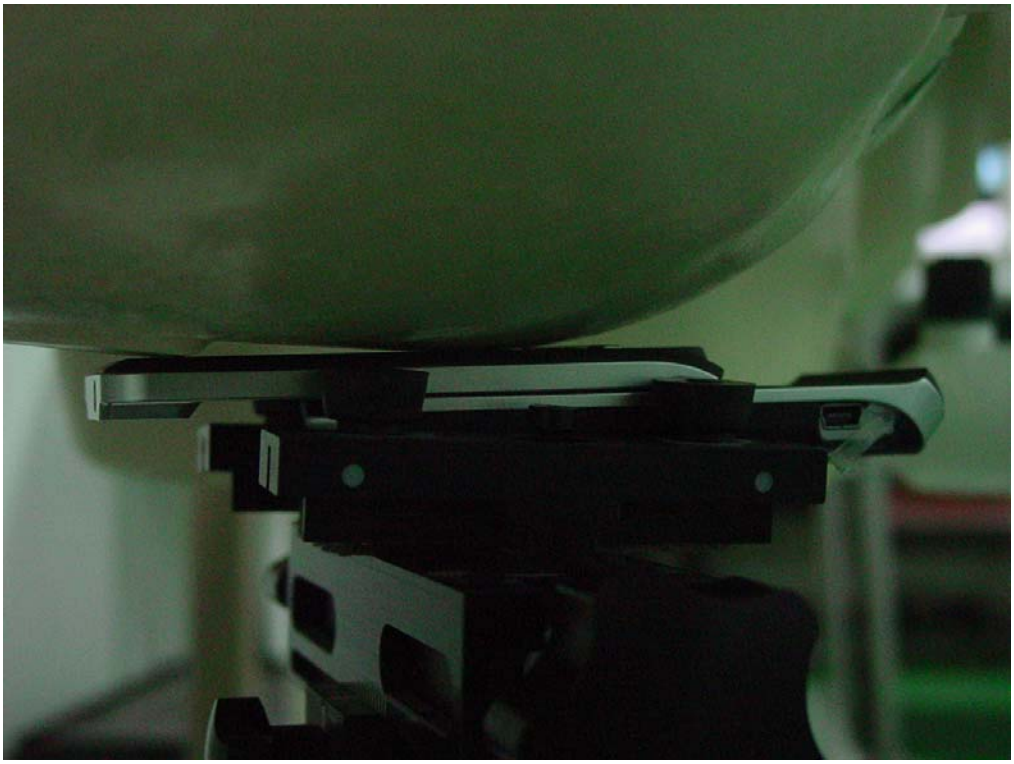
**Picture B8: Right Hand Tilt 15° Position – Slide down**



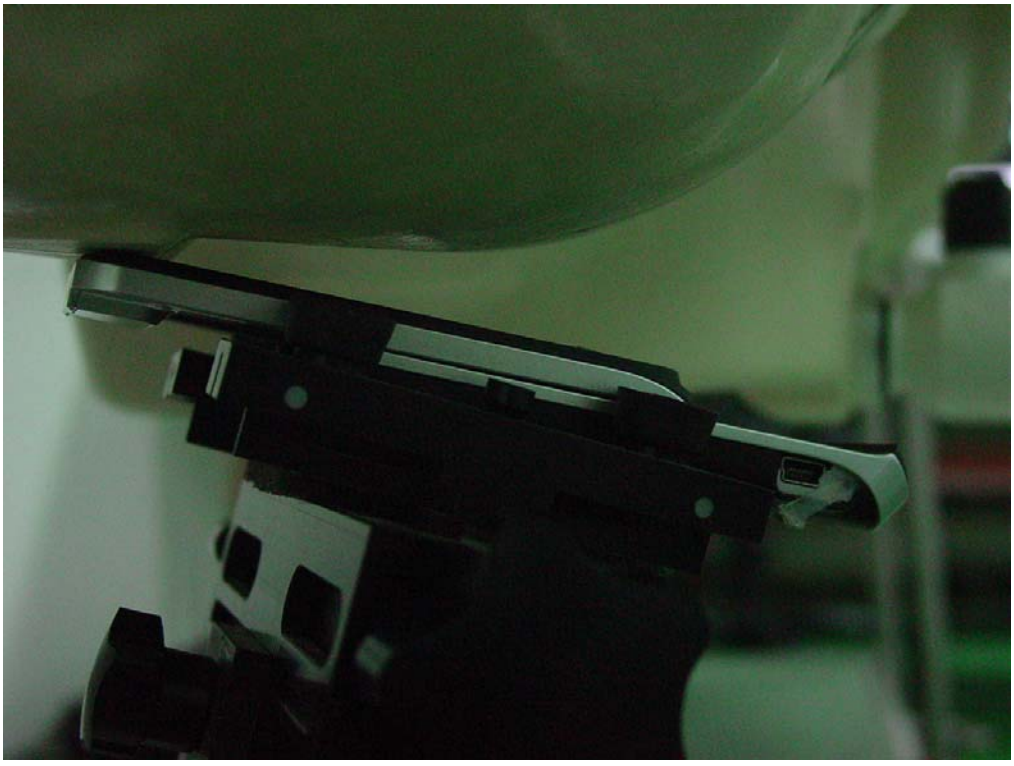
**Picture B9: Left Hand Touch Cheek Position – Slide up**



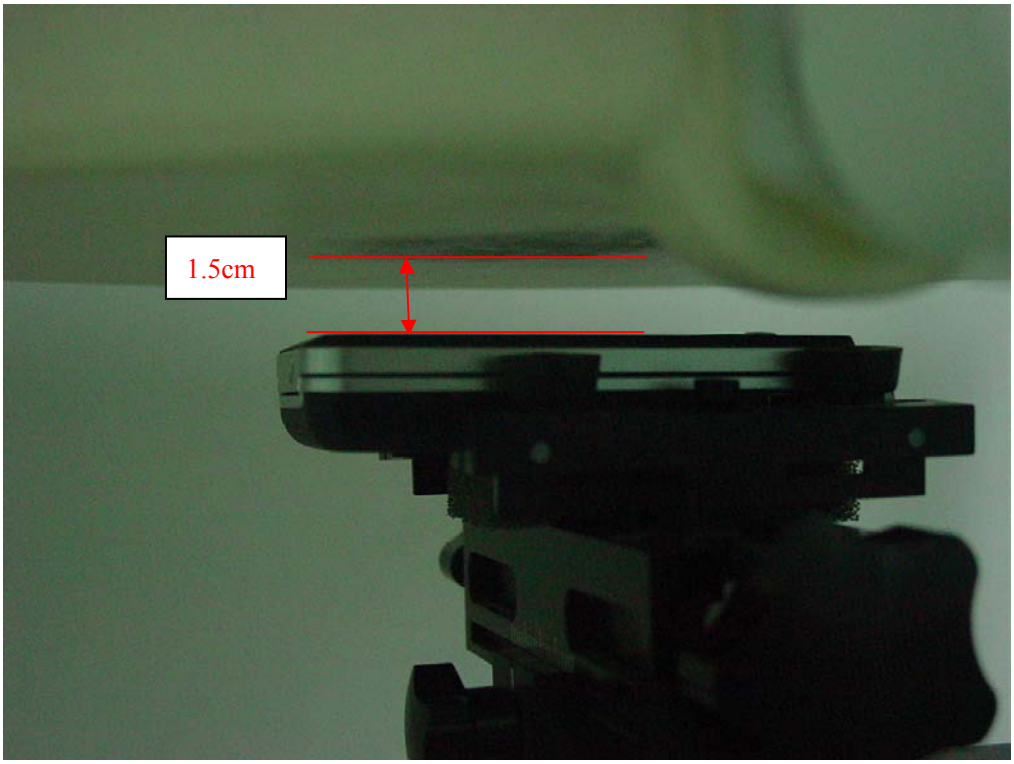
**Picture B10: Left Hand Tilt 15° Position – Slide up**



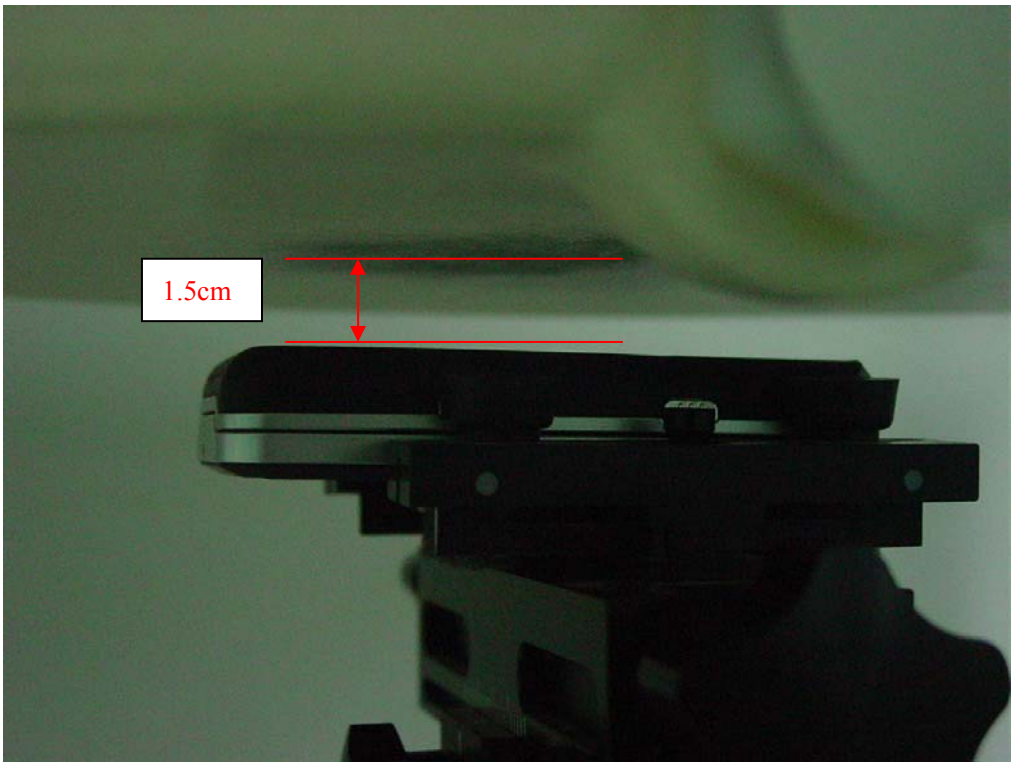
**Picture B11: Right Hand Touch Cheek Position – Slide up**



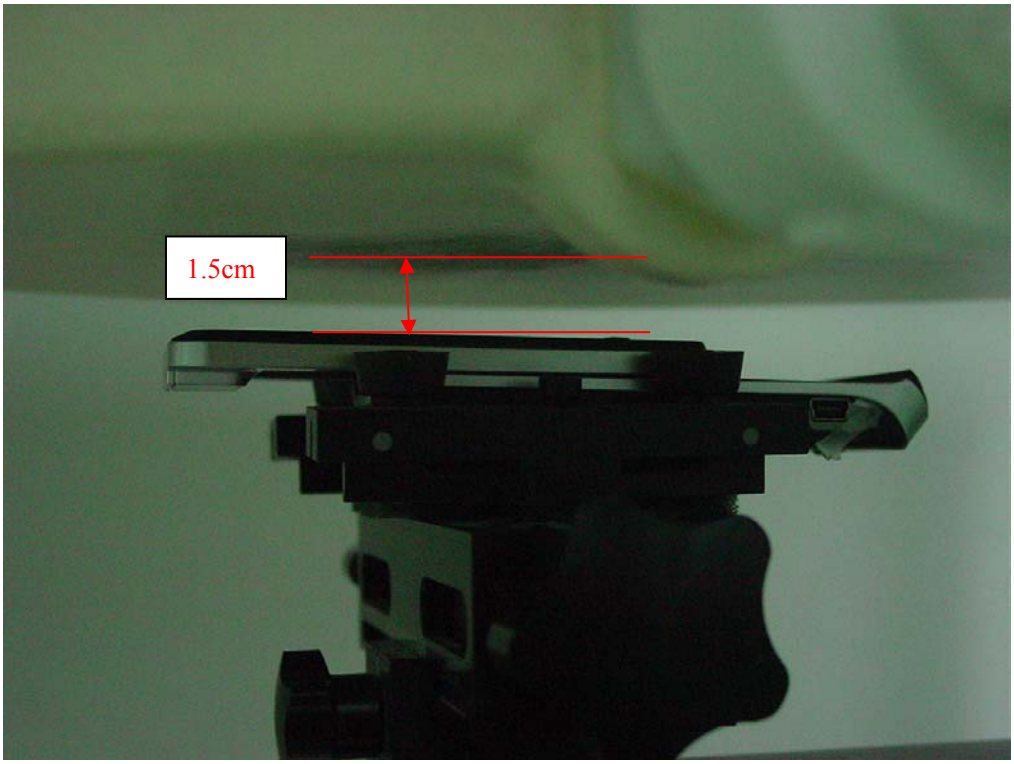
**Picture B12: Right Hand Tilt 15° Position – Slide up**



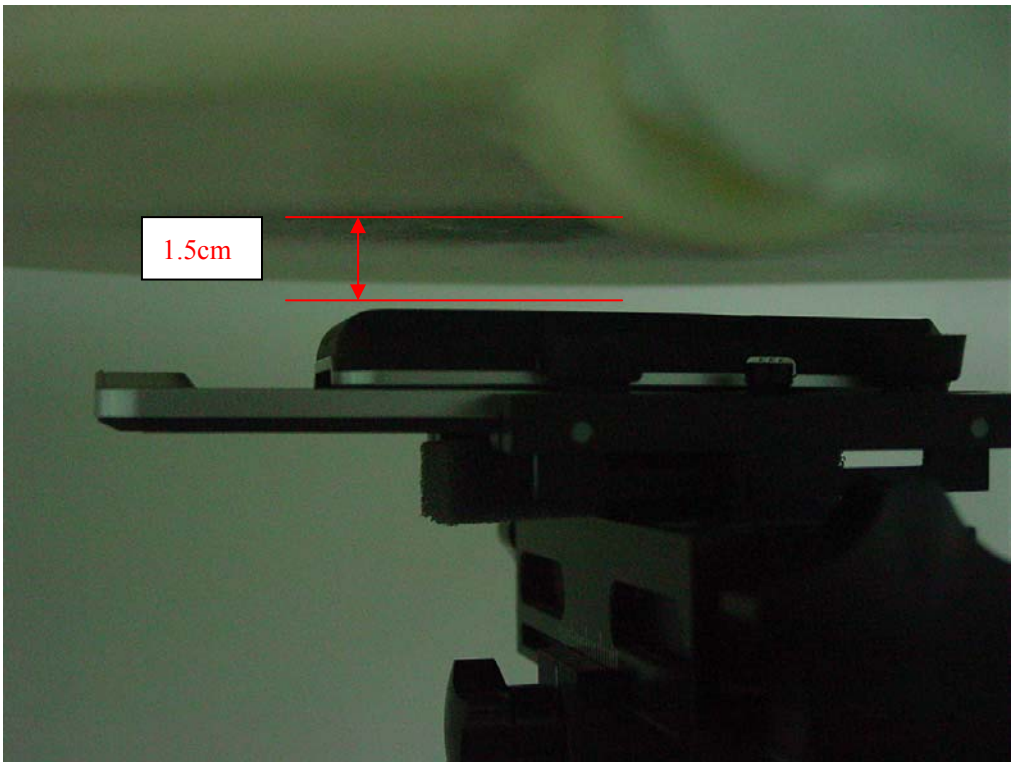

**Picture B13: Body-worn Position (towards phantom, the distance from handset to the bottom of the Phantom is 1.5cm) – Slide down**




**Picture B14: Body-worn Position (towards ground, the distance from handset to the bottom of the Phantom is 1.5cm) – Slide down**




**Picture B15: Body-worn Position (towards phantom, the distance from handset to the bottom of the Phantom is 1.5cm) – Slide up**




**Picture B16: Body-worn Position (towards ground, the distance from handset to the bottom of the Phantom is 1.5cm) – Slide up**

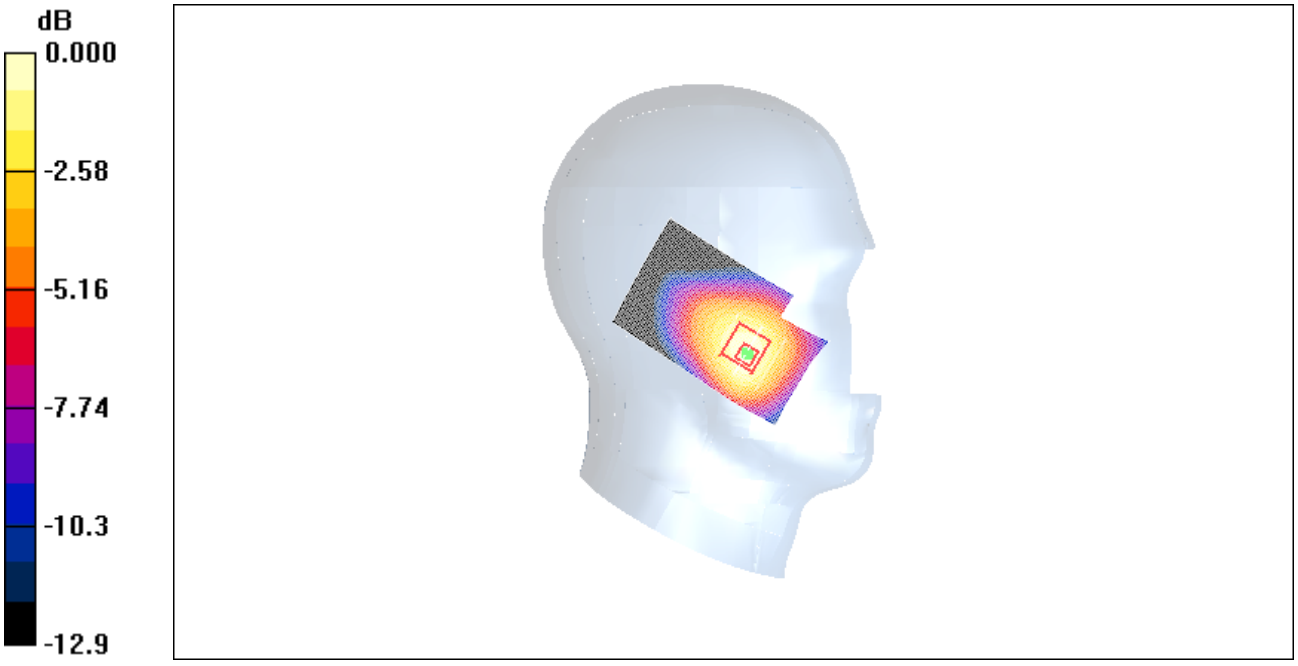
# ANNEX C GRAPH RESULTS

## CDMA 835 Left Cheek High – Slide down

Date/Time: 2009-5-20 7:53:12
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 848.31 MHz; $\sigma$ = 0.919 mho/m; $\varepsilon_r$ = 40.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 848.31 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek High/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.873 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.0 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.818 mW/g; SAR(10 g) = 0.565 mW/g
Maximum value of SAR (measured) = 0.887 mW/g




0 dB = 0.887mW/g

**Fig. 1 CDMA 835MHz CH777 – Slide down**

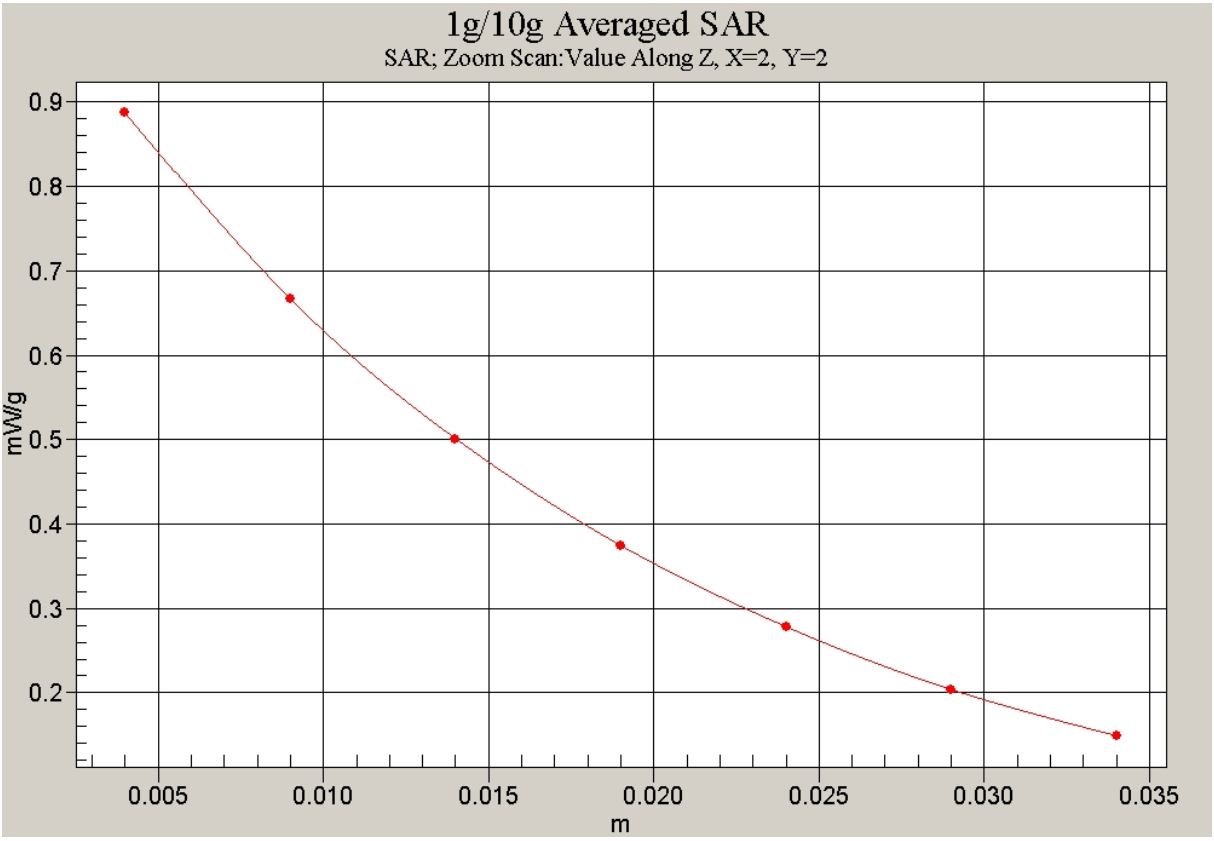


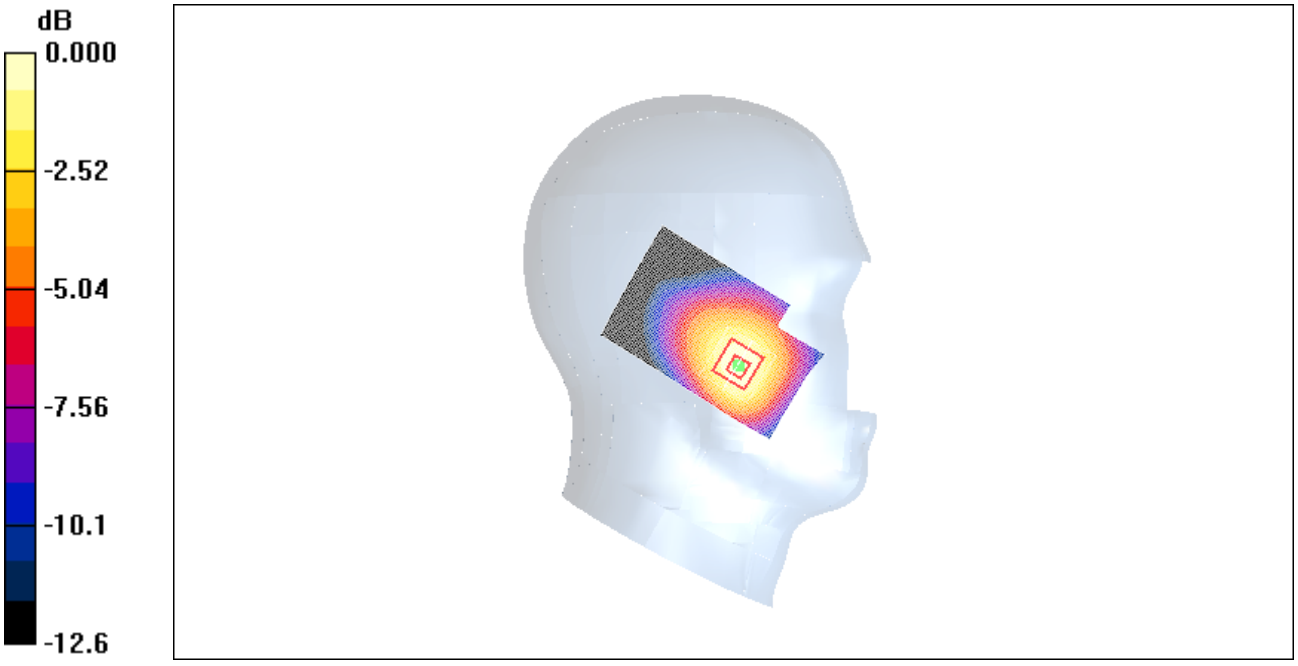

**Fig. 2 Z-Scan at power reference point (CDMA 835MHz CH777)**

**CDMA 835 Left Cheek Middle – Slide down**

Date/Time: 2009-5-20 8:07:21
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 0.908 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Middle/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.790 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.48 V/m; Power Drift = -0.126 dB
Peak SAR (extrapolated) = 0.953 W/kg
SAR(1 g) = 0.720 mW/g; SAR(10 g) = 0.496 mW/g
Maximum value of SAR (measured) = 0.768 mW/g




0 dB = 0.768mW/g

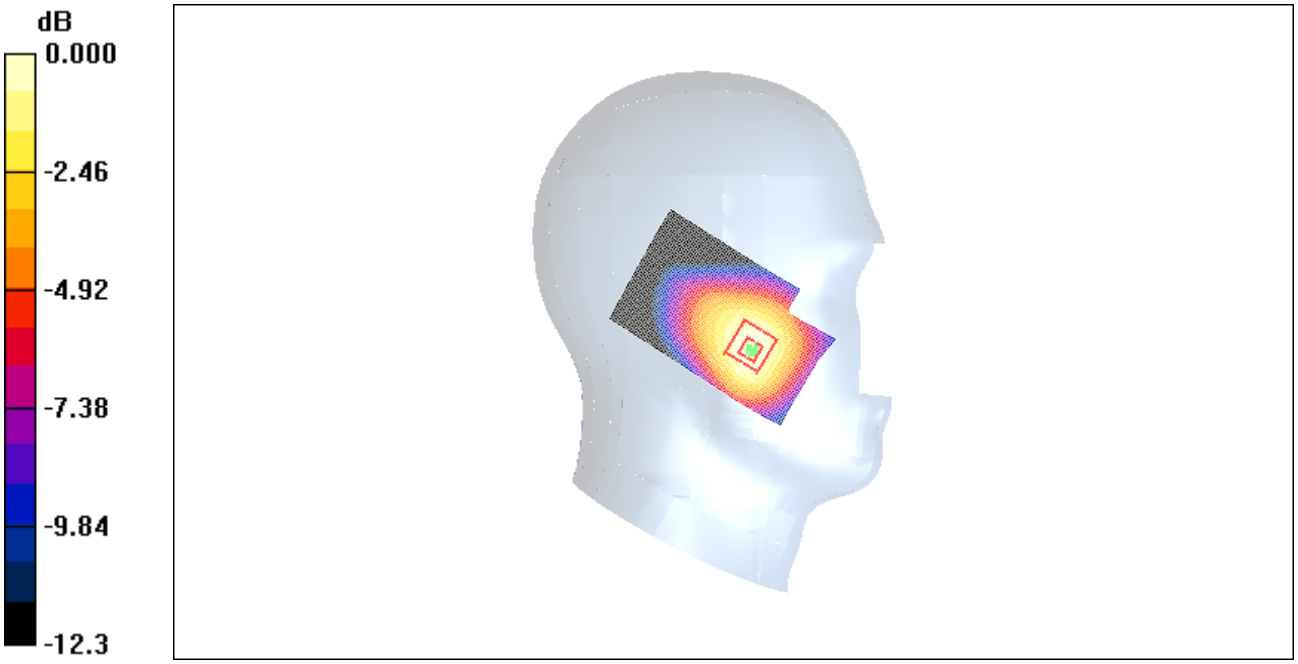
**Fig. 3 CDMA 835MHz CH384 – Slide down**

**CDMA 835 Left Cheek Low – Slide down**

Date/Time: 2009-5-20 8:21:25
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used: f = 825 MHz; $\sigma$ = 0.896 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 824.7 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Low/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.723 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.54 V/m; Power Drift = -0.048 dB
Peak SAR (extrapolated) = 0.863 W/kg
SAR(1 g) = 0.665 mW/g; SAR(10 g) = 0.466 mW/g
Maximum value of SAR (measured) = 0.718 mW/g




0 dB = 0.718mW/g

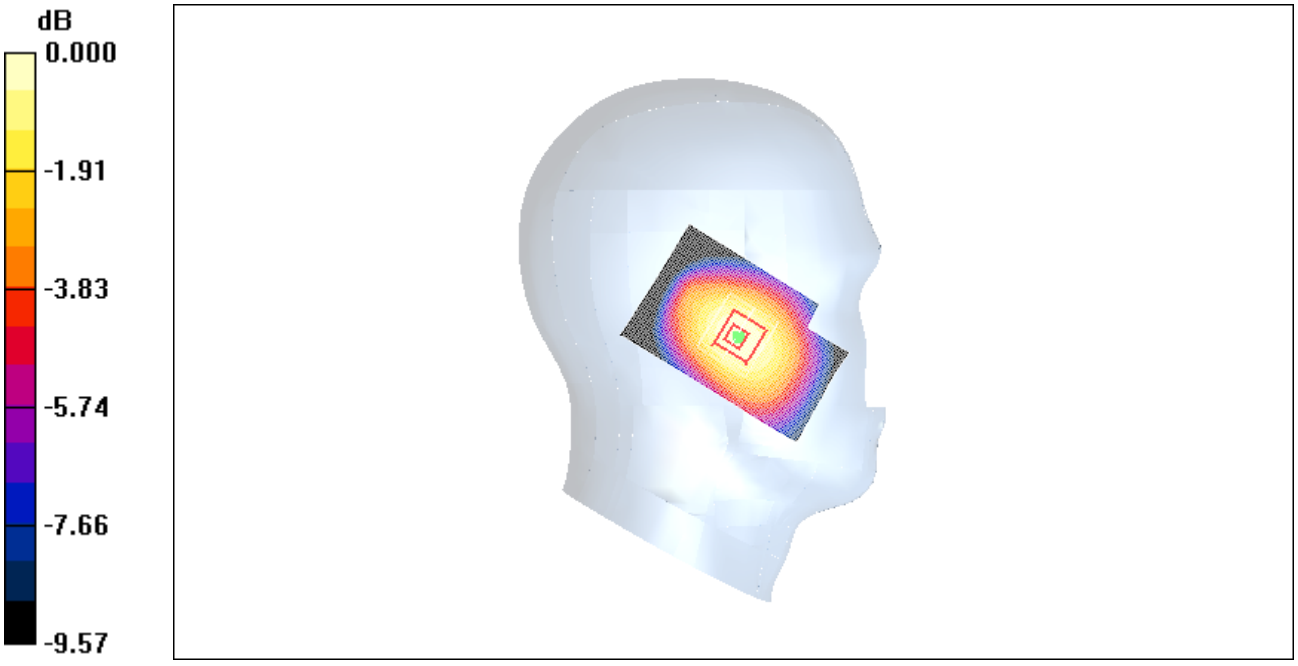
**Fig. 4 CDMA 835MHz CH1013 – Slide down**

**CDMA 835 Left Tilt High – Slide down**

Date/Time: 2009-5-20 8:35:16
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 848.31 MHz; $\sigma$ = 0.919 mho/m; $\varepsilon_r$ = 40.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 848.31 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt High/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.397 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.4 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 0.480 W/kg
SAR(1 g) = 0.375 mW/g; SAR(10 g) = 0.275 mW/g
Maximum value of SAR (measured) = 0.397 mW/g




0 dB = 0.397mW/g

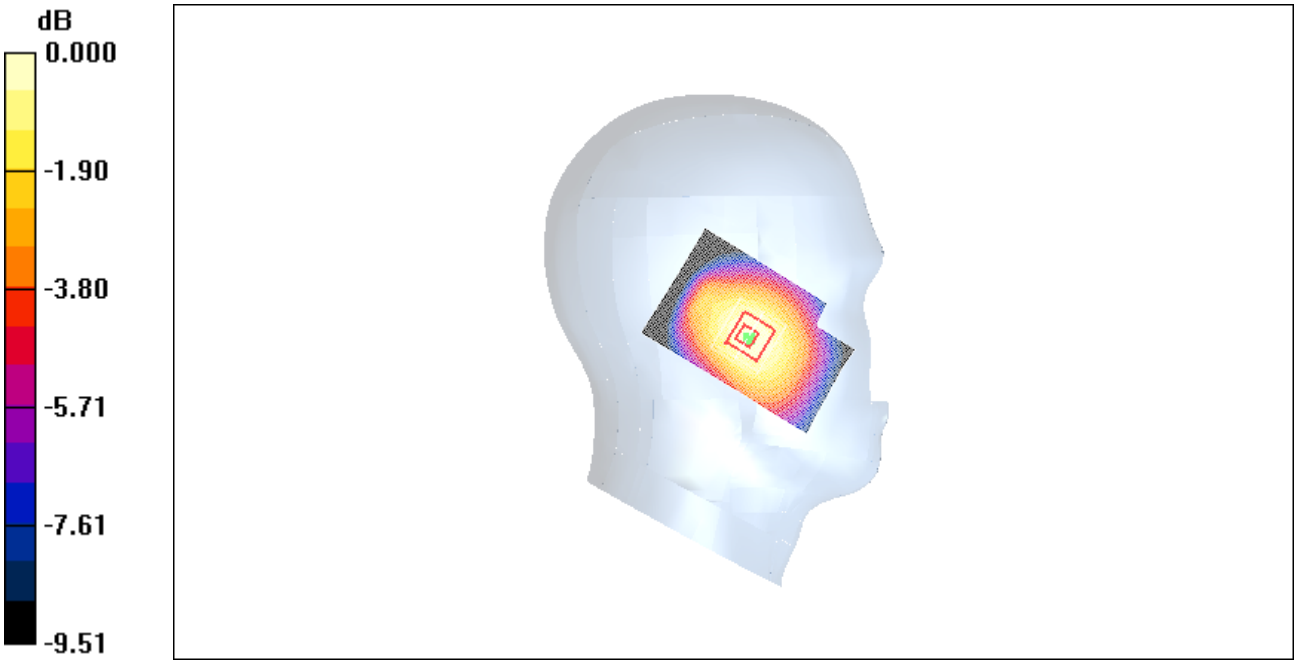
**Fig. 5 CDMA 835MHz CH777 – Slide down**

**CDMA 835 Left Tilt Middle – Slide down**

Date/Time: 2009-5-20 8:49:30
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 0.908 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt Middle/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.336 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.4 V/m; Power Drift = -0.007 dB
Peak SAR (extrapolated) = 0.421 W/kg
SAR(1 g) = 0.323 mW/g; SAR(10 g) = 0.238 mW/g
Maximum value of SAR (measured) = 0.344 mW/g




0 dB = 0.344mW/g

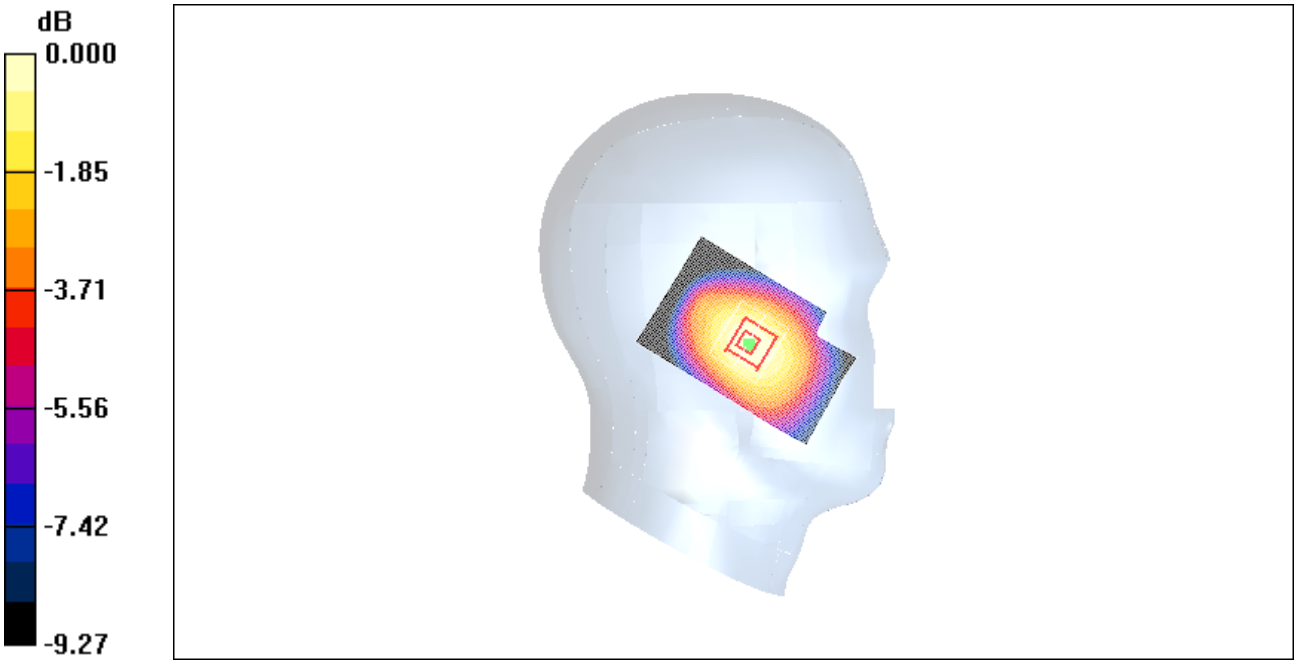
**Fig. 6 CDMA 835MHz CH384 – Slide down**

**CDMA 835 Left Tilt Low – Slide down**

Date/Time: 2009-5-20 9:03:41
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used: f = 825 MHz; $\sigma$ = 0.896 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 824.7 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

**Tilt Low/Area Scan (51x81x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.316 mW/g

**Tilt Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.0 V/m; Power Drift = 0.130 dB
Peak SAR (extrapolated) = 0.381 W/kg
**SAR(1 g) = 0.302 mW/g; SAR(10 g) = 0.224 mW/g**
Maximum value of SAR (measured) = 0.320 mW/g




0 dB = 0.320mW/g

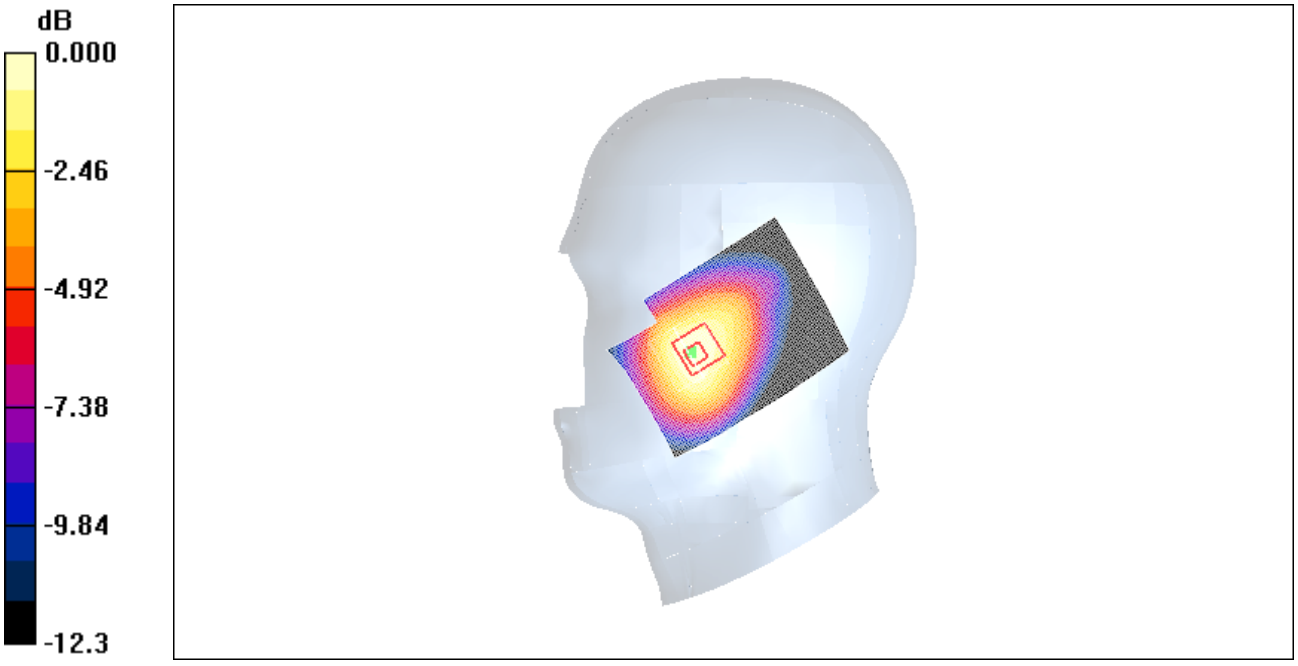
**Fig. 7 CDMA 835MHz CH1013 – Slide down**

**CDMA 835 Right Cheek High – Slide down**

Date/Time: 2009-5-20 9:17:44
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 848.31 MHz; $\sigma$ = 0.919 mho/m; $\varepsilon_r$ = 40.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 848.31 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek High/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.825 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.93 V/m; Power Drift = -0.171 dB
Peak SAR (extrapolated) = 0.955 W/kg
**SAR(1 g) = 0.782 mW/g; SAR(10 g) = 0.535 mW/g**
Maximum value of SAR (measured) = 0.821 mW/g




0 dB = 0.821mW/g

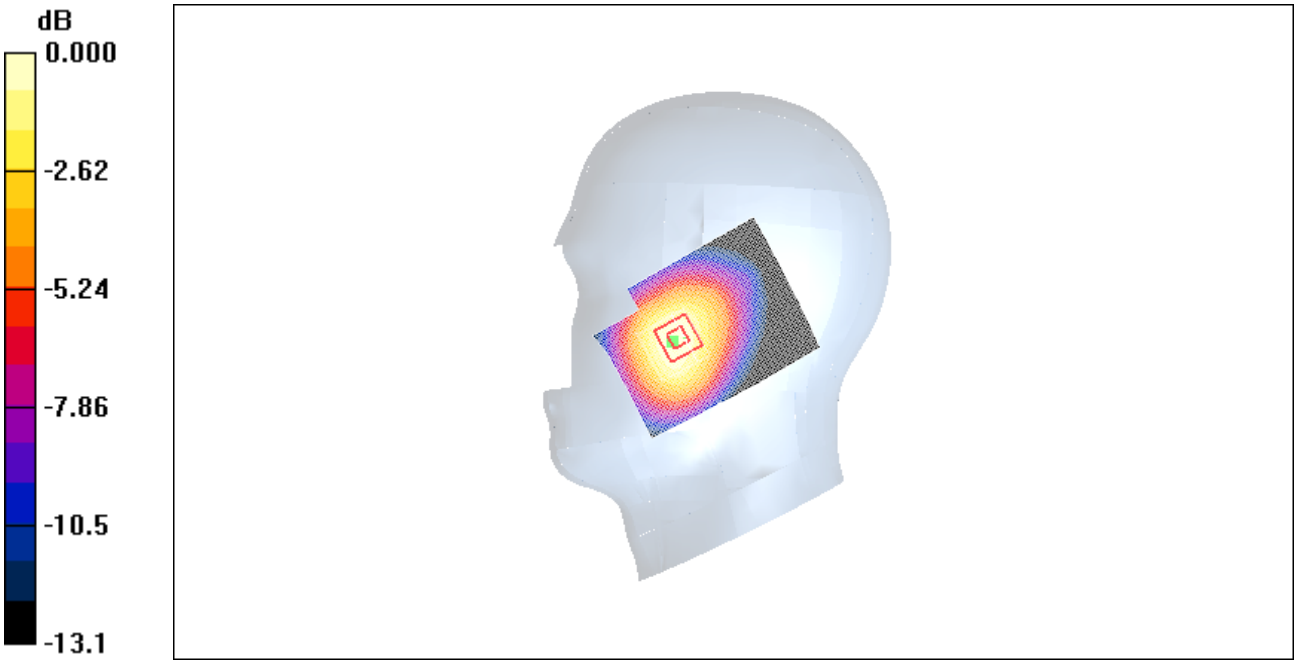
**Fig. 8 CDMA 835MHz CH777 – Slide down**

**CDMA 835 Right Cheek Middle – Slide down**

Date/Time: 2009-5-20 9:31:52
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 0.908 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Middle/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.727 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.78 V/m; Power Drift = -0.112 dB
Peak SAR (extrapolated) = 0.912 W/kg
SAR(1 g) = 0.694 mW/g; SAR(10 g) = 0.481 mW/g
Maximum value of SAR (measured) = 0.721 mW/g




0 dB = 0.721mW/g

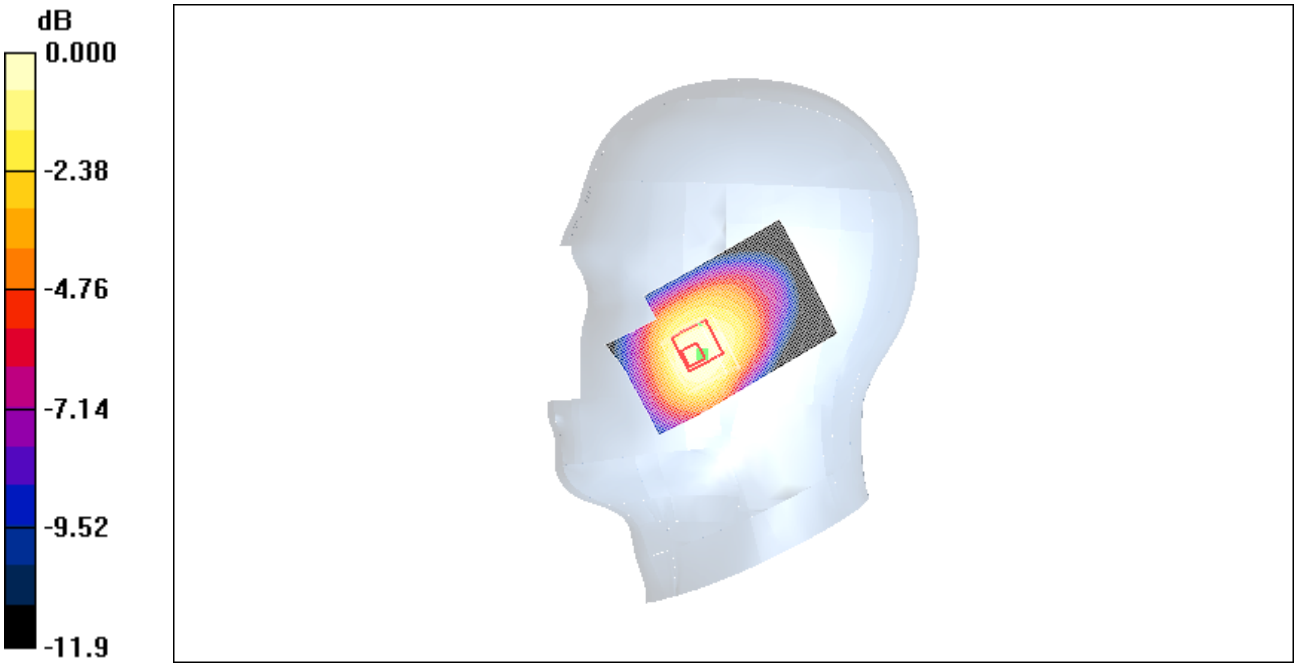
**Fig. 9 CDMA 835MHz CH384 – Slide down**

## CDMA 835 Right Cheek Low – Slide down

Date/Time: 2009-5-20 9:45:34
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used: f = 825 MHz; $\sigma$ = 0.896 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 824.7 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

**Cheek Low/Area Scan (51x81x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.651 mW/g

**Cheek Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.9 V/m; Power Drift = -0.130 dB
Peak SAR (extrapolated) = 0.686 W/kg
**SAR(1 g) = 0.499 mW/g; SAR(10 g) = 0.359 mW/g**
Maximum value of SAR (measured) = 0.555 mW/g




0 dB = 0.555mW/g

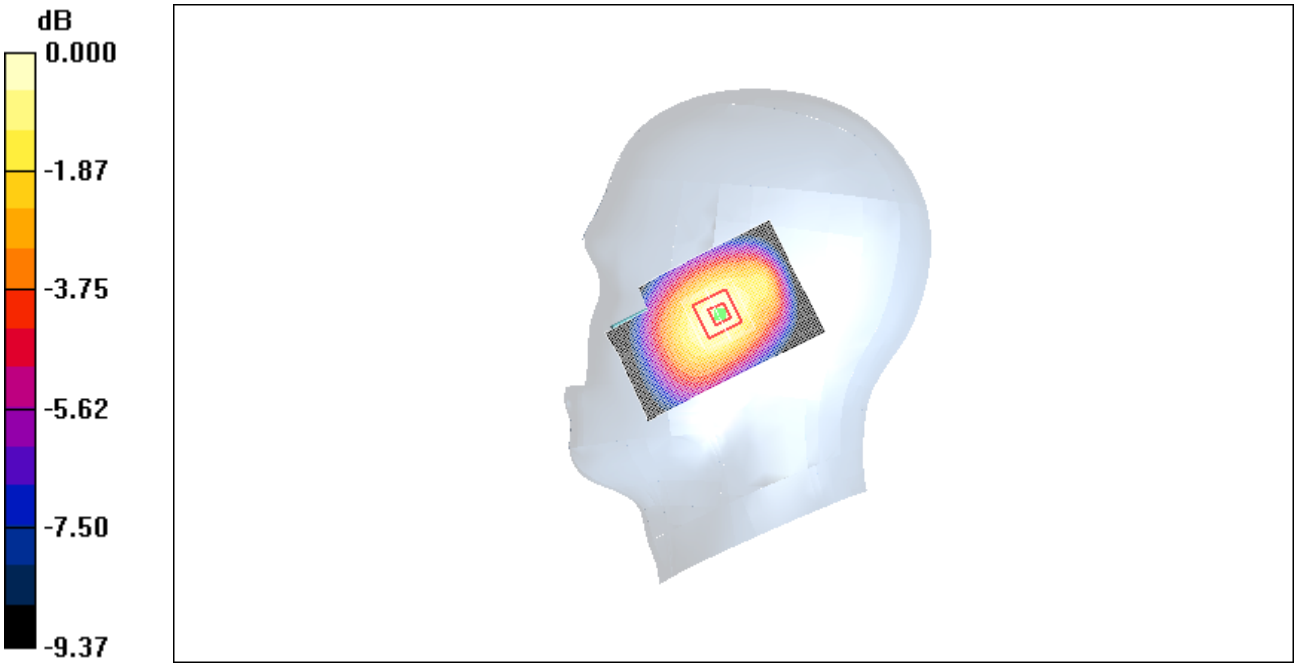
**Fig. 10 CDMA 835MHz CH1013 – Slide down**

## CDMA 835 Right Tilt High – Slide down

Date/Time: 2009-5-20 9:59:17
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 848.31 MHz; $\sigma$ = 0.919 mho/m; $\varepsilon_r$ = 40.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 848.31 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt High/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.389 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.7 V/m; Power Drift = -0.051 dB
Peak SAR (extrapolated) = 0.481 W/kg
**SAR(1 g) = 0.373 mW/g; SAR(10 g) = 0.271 mW/g**
Maximum value of SAR (measured) = 0.396 mW/g




0 dB = 0.396mW/g

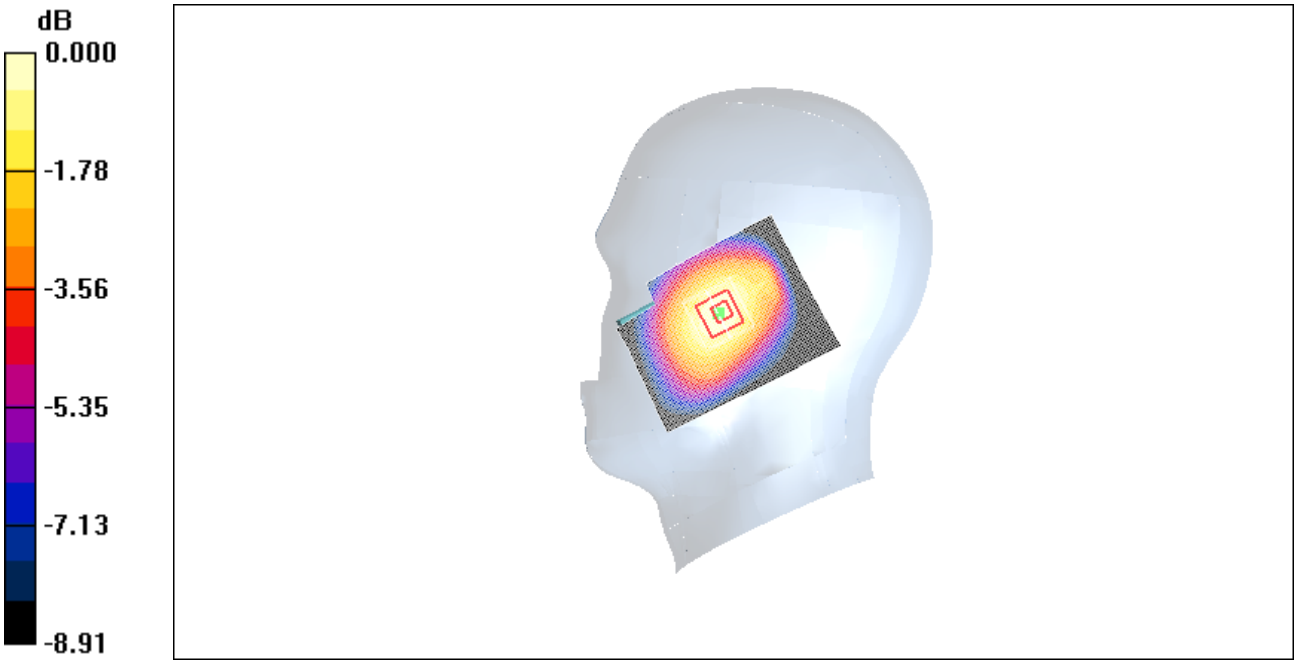
**Fig. 11 CDMA 835MHz CH777 – Slide down**

**CDMA 835 Right Tilt Middle – Slide down**

Date/Time: 2009-5-20 10:13:22
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 0.908 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt Middle/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.321 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.9 V/m; Power Drift = 0.060 dB
Peak SAR (extrapolated) = 0.395 W/kg
SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.227 mW/g
Maximum value of SAR (measured) = 0.326 mW/g




0 dB = 0.326mW/g

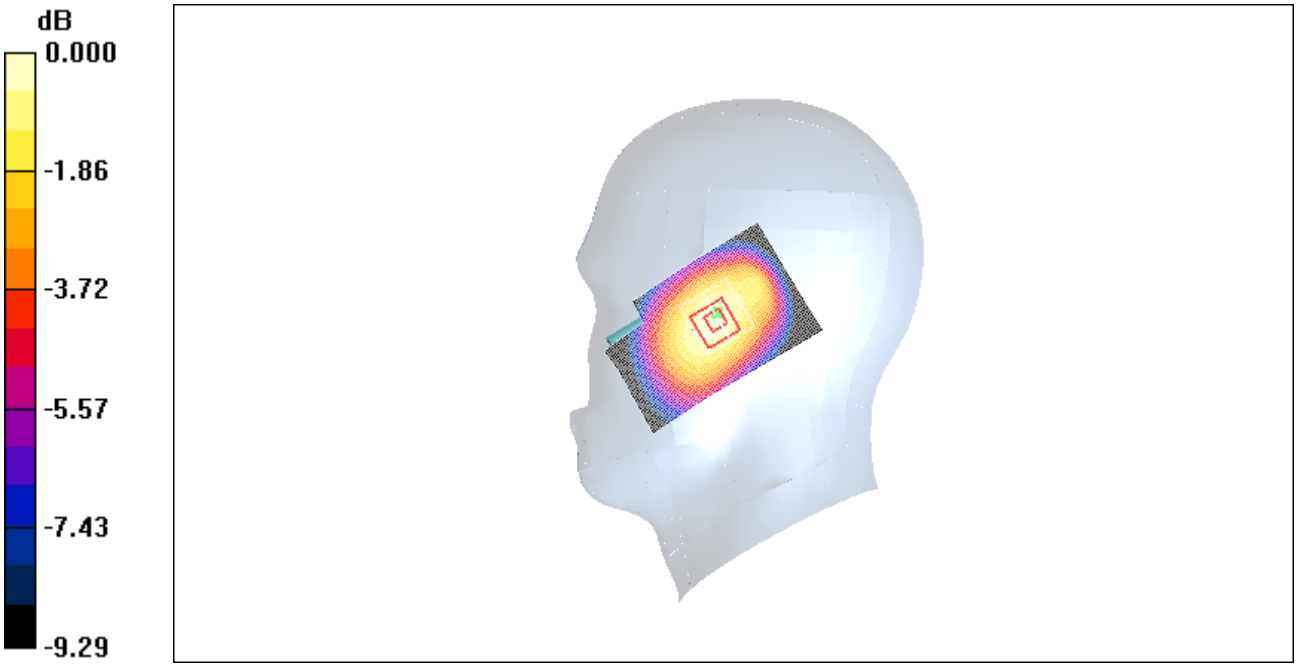
**Fig. 12 CDMA 835MHz CH384 – Slide down**

**CDMA 835 Right Tilt Low – Slide down**

Date/Time: 2009-5-20 10:27:40
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used: f = 825 MHz; $\sigma$ = 0.896 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 824.7 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt Low/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.294 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.0 V/m; Power Drift = -0.088 dB
Peak SAR (extrapolated) = 0.375 W/kg
SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.208 mW/g
Maximum value of SAR (measured) = 0.303 mW/g




0 dB = 0.303mW/g

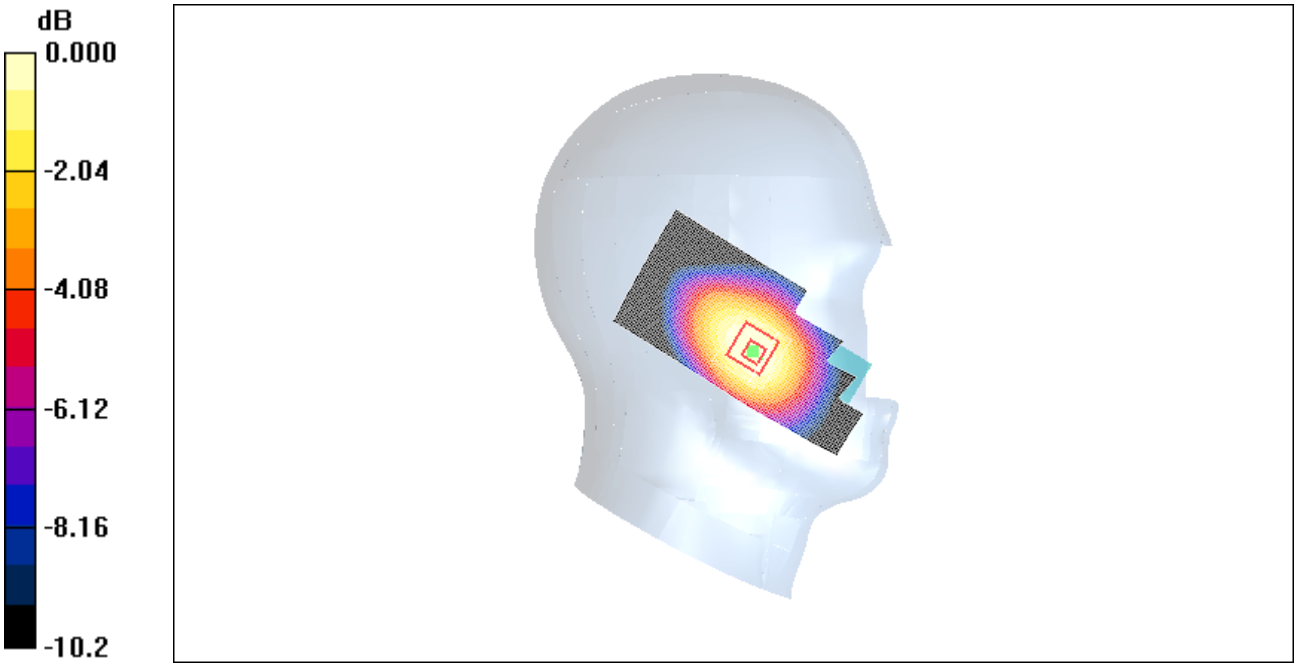
**Fig. 13 CDMA 835MHz CH1013 – Slide down**

**CDMA 835 Left Cheek Middle – Slide up**

Date/Time: 2009-5-20 10:42:08
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 0.908 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Middle/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.719 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = -0.136 dB
Peak SAR (extrapolated) = 0.832 W/kg
SAR(1 g) = 0.647 mW/g; SAR(10 g) = 0.470 mW/g
Maximum value of SAR (measured) = 0.678 mW/g




0 dB = 0.678mW/g

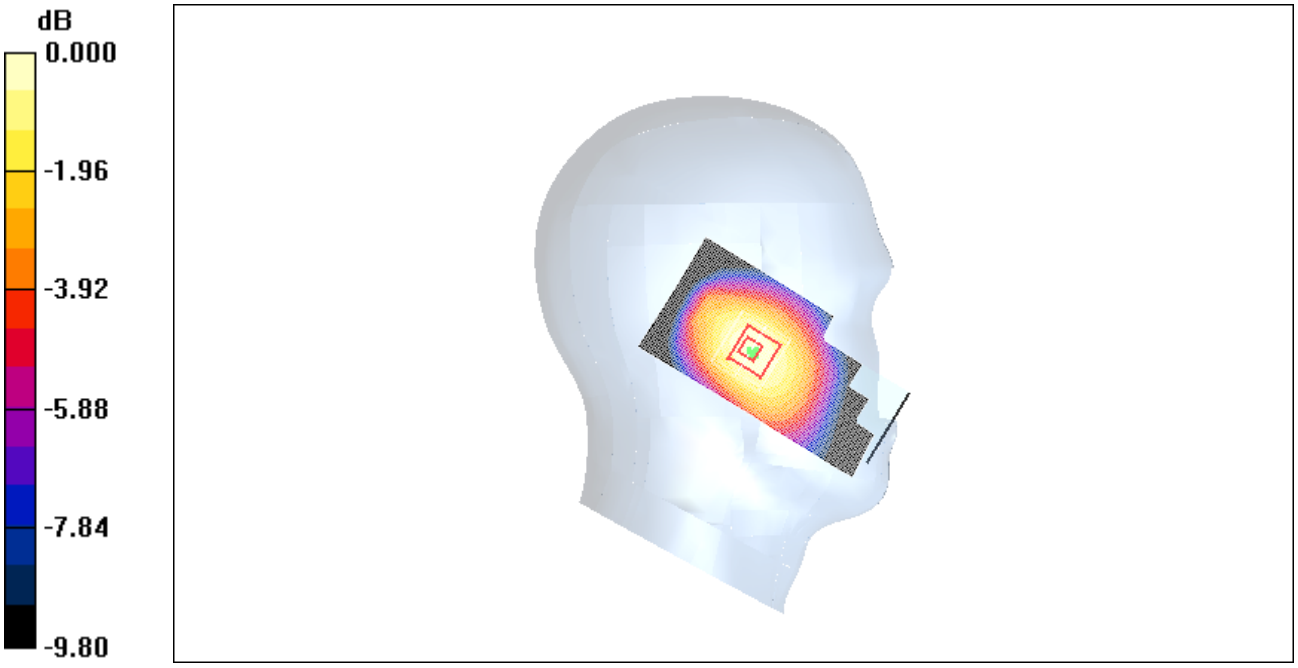
**Fig. 14 CDMA 835MHz CH384 – Slide up**

**CDMA 835 Left Tilt Middle – Slide up**

Date/Time: 2009-5-20 10:56:10
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 0.908 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt Middle/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.343 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.7 V/m; Power Drift = -0.035 dB
Peak SAR (extrapolated) = 0.428 W/kg
SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.234 mW/g
Maximum value of SAR (measured) = 0.343 mW/g




0 dB = 0.343mW/g

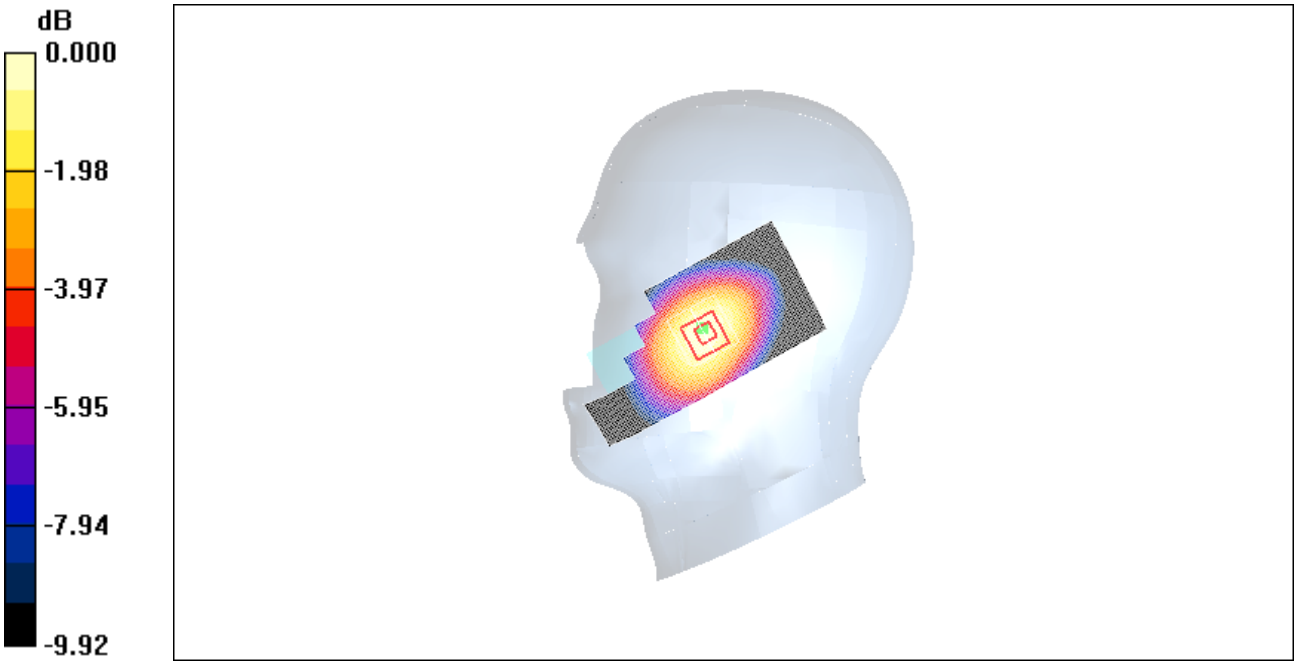
**Fig. 15 CDMA 835MHz CH384 – Slide up**

**CDMA 835 Right Cheek Middle – Slide up**

Date/Time: 2009-5-20 11:10:35
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 0.908 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Middle/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.667 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.79 V/m; Power Drift = 0.173 dB
Peak SAR (extrapolated) = 0.841 W/kg
SAR(1 g) = 0.647 mW/g; SAR(10 g) = 0.463 mW/g
Maximum value of SAR (measured) = 0.684 mW/g




0 dB = 0.684mW/g

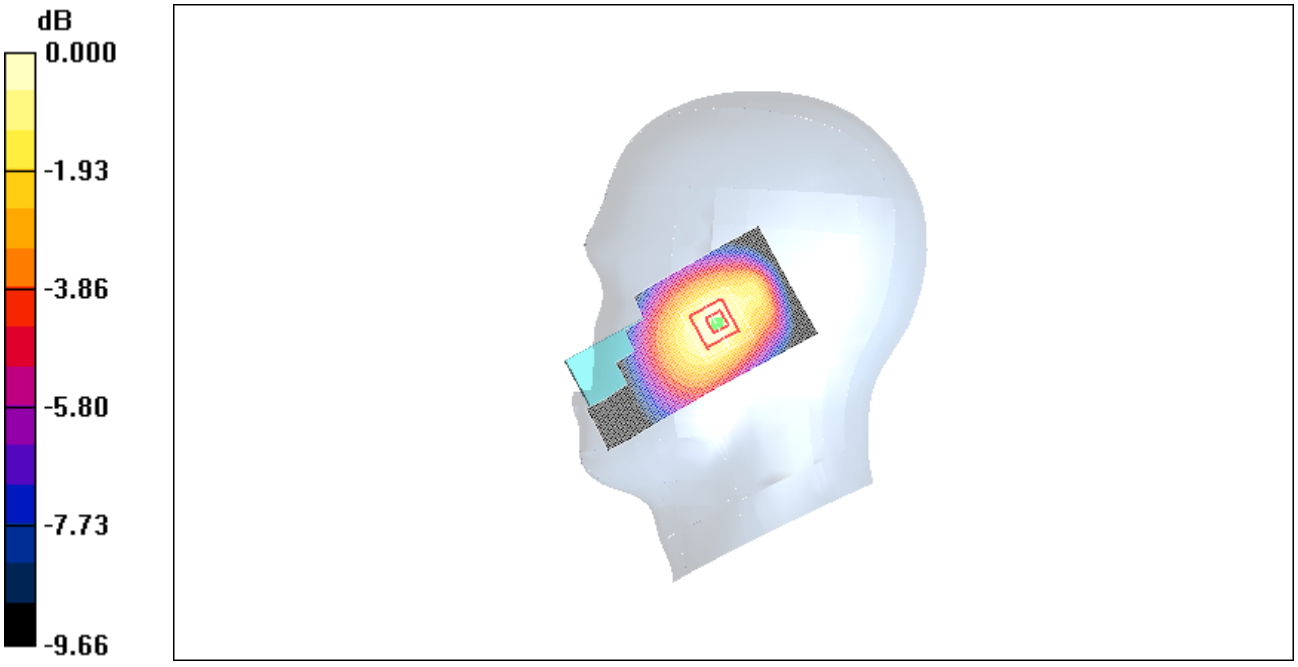
**Fig. 16 CDMA 835MHz CH384 – Slide up**

**CDMA 835 Right Tilt Middle – Slide up**

Date/Time: 2009-5-20 11:24:41
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 0.908 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Tilt Middle/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.369 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.4 V/m; Power Drift = 0.073 dB
Peak SAR (extrapolated) = 0.477 W/kg
SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.261 mW/g
Maximum value of SAR (measured) = 0.383 mW/g




0 dB = 0.383mW/g

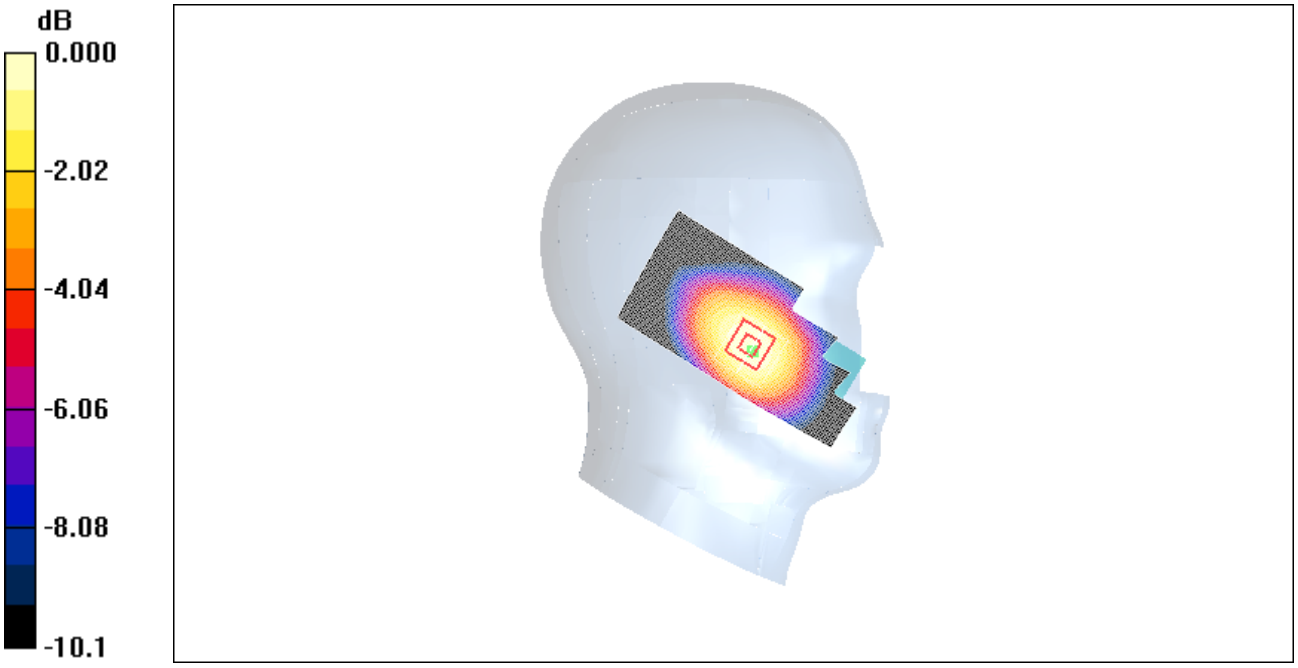
**Fig. 17 CDMA 835MHz CH384 – Slide up**

**CDMA 835 Left Cheek High – Slide up**

Date/Time: 2009-5-20 11:38:09
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used (interpolated): f = 848.31 MHz; $\sigma$ = 0.919 mho/m; $\varepsilon_r$ = 40.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 848.31 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek High/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.813 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = 0.084 dB
Peak SAR (extrapolated) = 0.983 W/kg
SAR(1 g) = 0.768 mW/g; SAR(10 g) = 0.554 mW/g
Maximum value of SAR (measured) = 0.798 mW/g




0 dB = 0.798mW/g

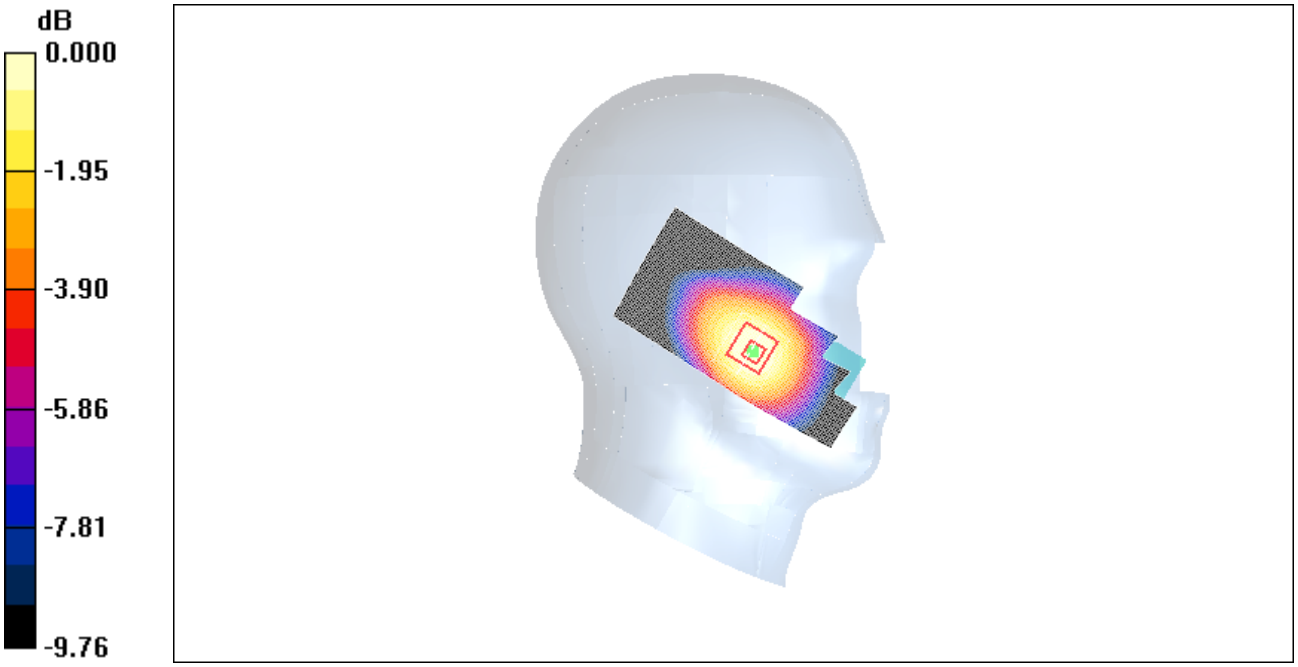
**Fig. 18 CDMA 835MHz CH777 – Slide up**

**CDMA 835 Left Cheek Low – Slide up**

Date/Time: 2009-5-20 11:52:13
Electronics: DAE4 Sn771
Medium: Head 835
Medium parameters used: f = 825 MHz; $\sigma$ = 0.896 mho/m; $\varepsilon_r$ = 40.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 824.7 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.56, 6.56, 6.56)

Cheek Low/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.529 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.59 V/m; Power Drift = -0.070 dB
Peak SAR (extrapolated) = 0.628 W/kg
SAR(1 g) = 0.488 mW/g; SAR(10 g) = 0.355 mW/g
Maximum value of SAR (measured) = 0.512 mW/g




0 dB = 0.512mW/g

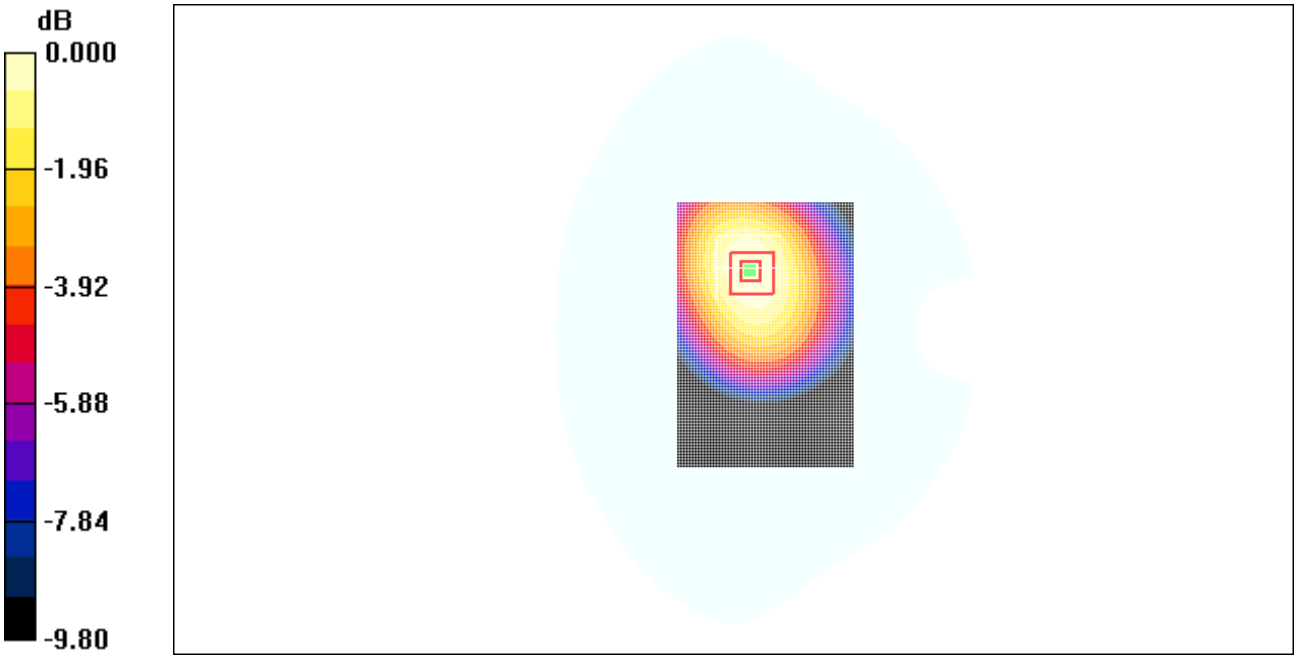
**Fig. 19 CDMA 835MHz CH1013 – Slide up**

**CDMA 835 Body Toward Phantom High – Slide down**

Date/Time: 2009-5-20 12:24:01
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used (interpolated): f = 848.31 MHz; $\sigma$ = 1.02 mho/m; $\varepsilon_r$ = 53.7; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 848.31 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom High/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.438 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.4 V/m; Power Drift = 0.075 dB
Peak SAR (extrapolated) = 0.533 W/kg
SAR(1 g) = 0.412 mW/g; SAR(10 g) = 0.300 mW/g
Maximum value of SAR (measured) = 0.436 mW/g




0 dB = 0.436mW/g

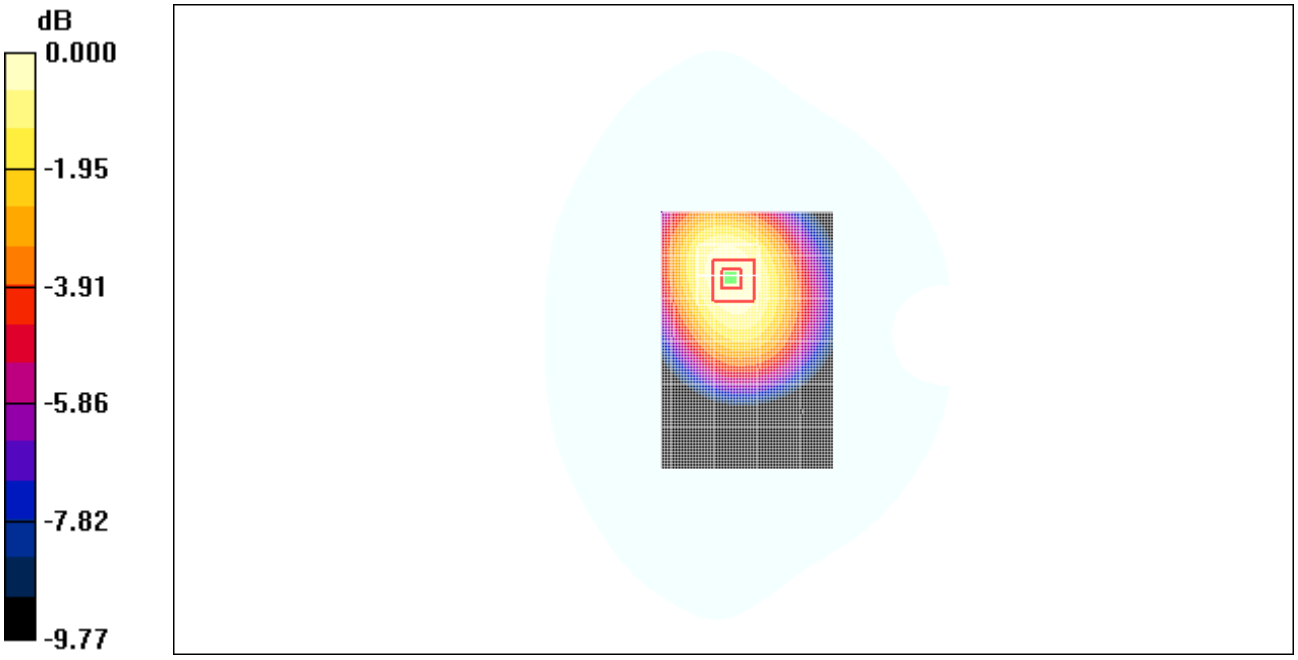
**Fig. 20 CDMA 835MHz CH777 – Slide down**

**CDMA 835 Body Toward Phantom Middle – Slide down**

Date/Time: 2009-5-20 12:38:24
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 1.01 mho/m; $\varepsilon_r$ = 53.8; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

**Toward Phantom Middle/Area Scan (61x91x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.483 mW/g

**Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.3 V/m; Power Drift = 0.039 dB
Peak SAR (extrapolated) = 0.595 W/kg
**SAR(1 g) = 0.457 mW/g; SAR(10 g) = 0.333 mW/g**
Maximum value of SAR (measured) = 0.481 mW/g




0 dB = 0.481mW/g

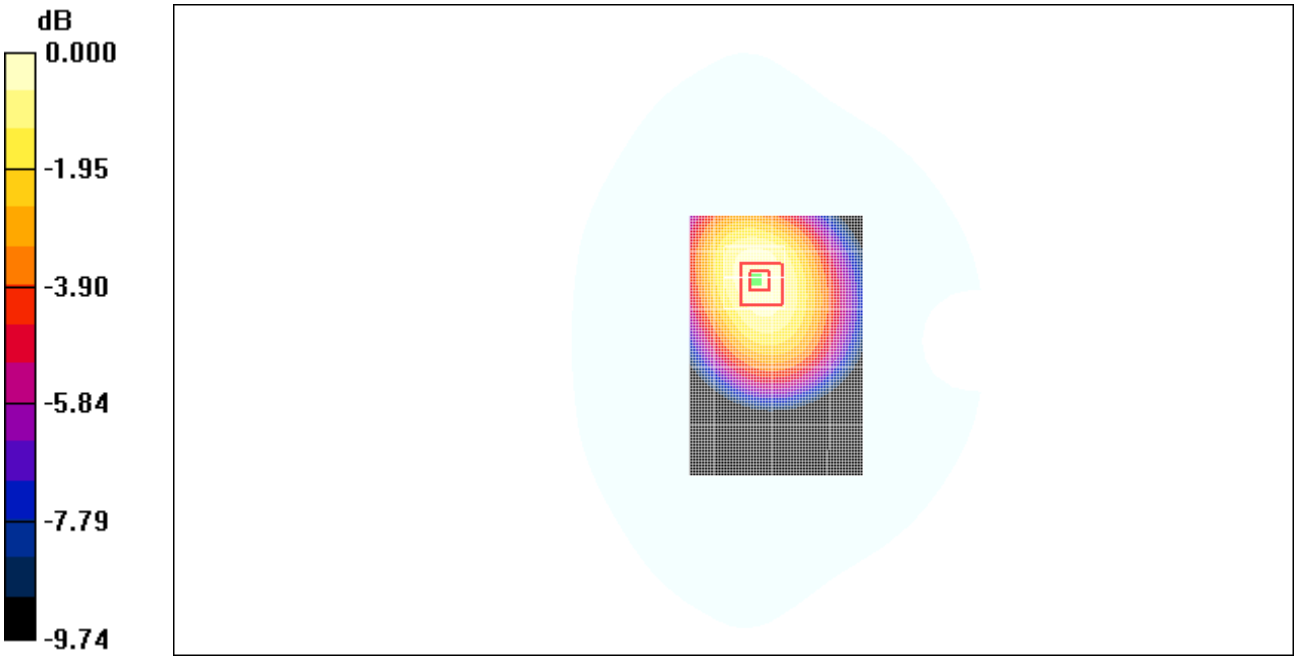
**Fig. 21 CDMA 835MHz CH384 – Slide down**

**CDMA 835 Body Toward Phantom Low – Slide down**

Date/Time: 2009-5-20 12:52:11
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used: f = 825 MHz; $\sigma$ = 0.993 mho/m; $\varepsilon_r$ = 53.9; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 824.7 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.349 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.5 V/m; Power Drift = -0.004 dB
Peak SAR (extrapolated) = 0.424 W/kg
SAR(1 g) = 0.328 mW/g; SAR(10 g) = 0.239 mW/g
Maximum value of SAR (measured) = 0.346 mW/g




0 dB = 0.346mW/g

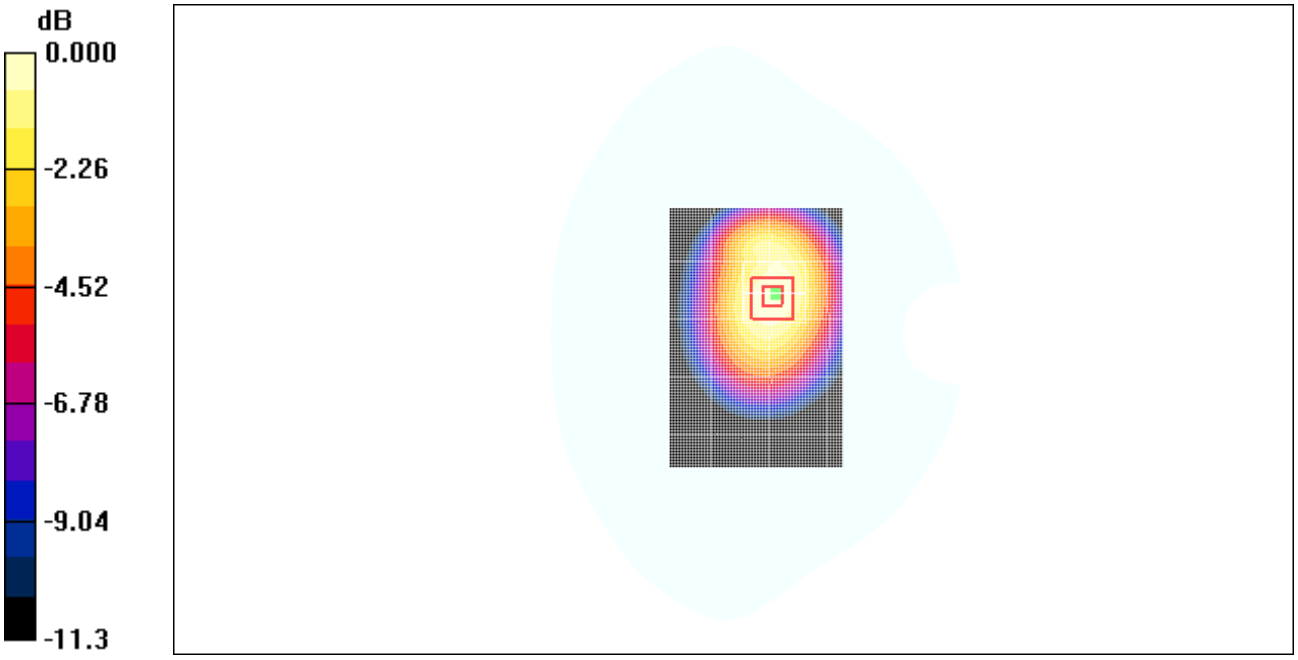
**Fig. 22 CDMA 835MHz CH1013 – Slide down**

**CDMA 835 Body Toward Ground High – Slide down**

Date/Time: 2009-5-20 13:06:47
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used (interpolated): f = 848.31 MHz; $\sigma$ = 1.02 mho/m; $\varepsilon_r$ = 53.7; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 848.31 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

**Toward Ground High/Area Scan (61x91x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.958 mW/g

**Toward Ground High/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.9 V/m; Power Drift = -0.159 dB
Peak SAR (extrapolated) = 1.25 W/kg
**SAR(1 g) = 0.894 mW/g; SAR(10 g) = 0.609 mW/g**
Maximum value of SAR (measured) = 0.959 mW/g




0 dB = 0.959mW/g

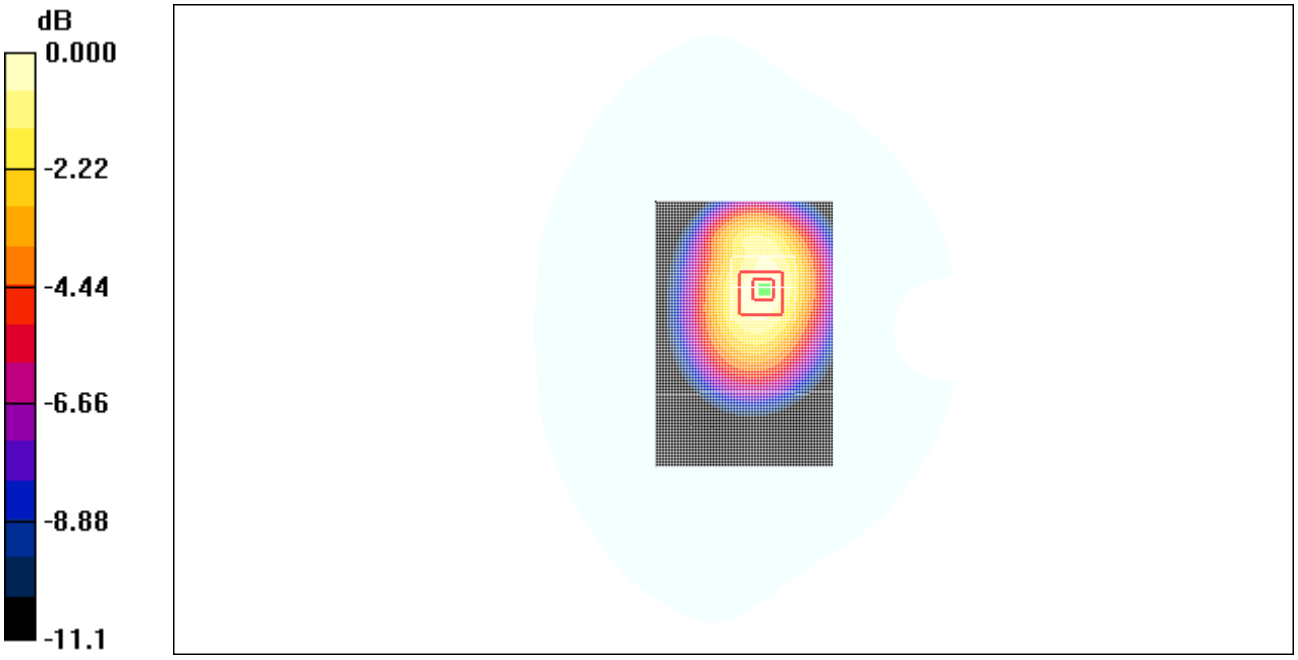
**Fig. 23 CDMA 835MHz CH777 – Slide down**

**CDMA 835 Body Toward Ground Middle – Slide down**

Date/Time: 2009-5-20 13:20:36
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 1.01 mho/m; $\varepsilon_r$ = 53.8; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.06 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.1 V/m; Power Drift = -0.003 dB
Peak SAR (extrapolated) = 1.38 W/kg
SAR(1 g) = 0.992 mW/g; SAR(10 g) = 0.678 mW/g
Maximum value of SAR (measured) = 1.07 mW/g




0 dB = 1.07mW/g

**Fig. 24 CDMA 835MHz CH384 – Slide down**

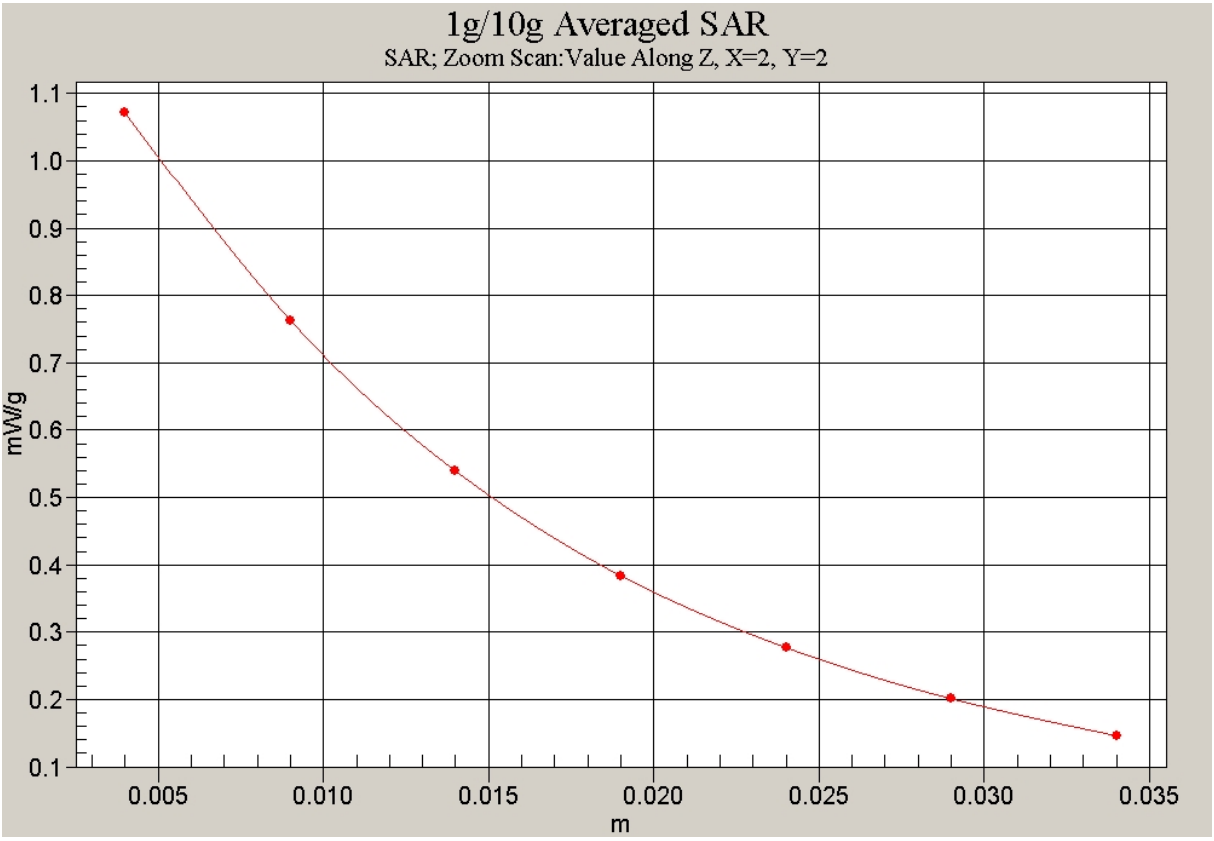


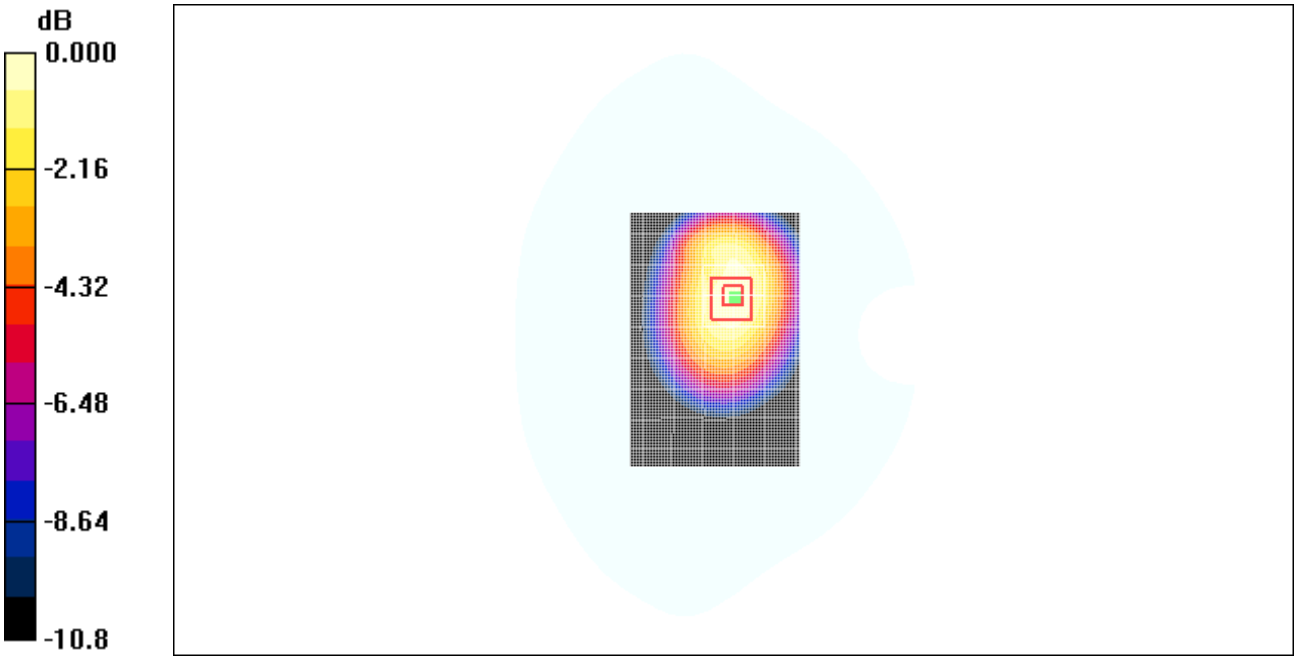

**Fig. 25 Z-Scan at power reference point (CDMA 835MHz, Body, Towards Ground, CH384)**

**CDMA 835 Body Toward Ground Low – Slide down**

Date/Time: 2009-5-20 13:34:19
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used: f = 825 MHz; $\sigma$ = 0.993 mho/m; $\varepsilon_r$ = 53.9; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 824.7 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.804 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.5 V/m; Power Drift = -0.112 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.730 mW/g; SAR(10 g) = 0.502 mW/g
Maximum value of SAR (measured) = 0.785 mW/g




0 dB = 0.785mW/g

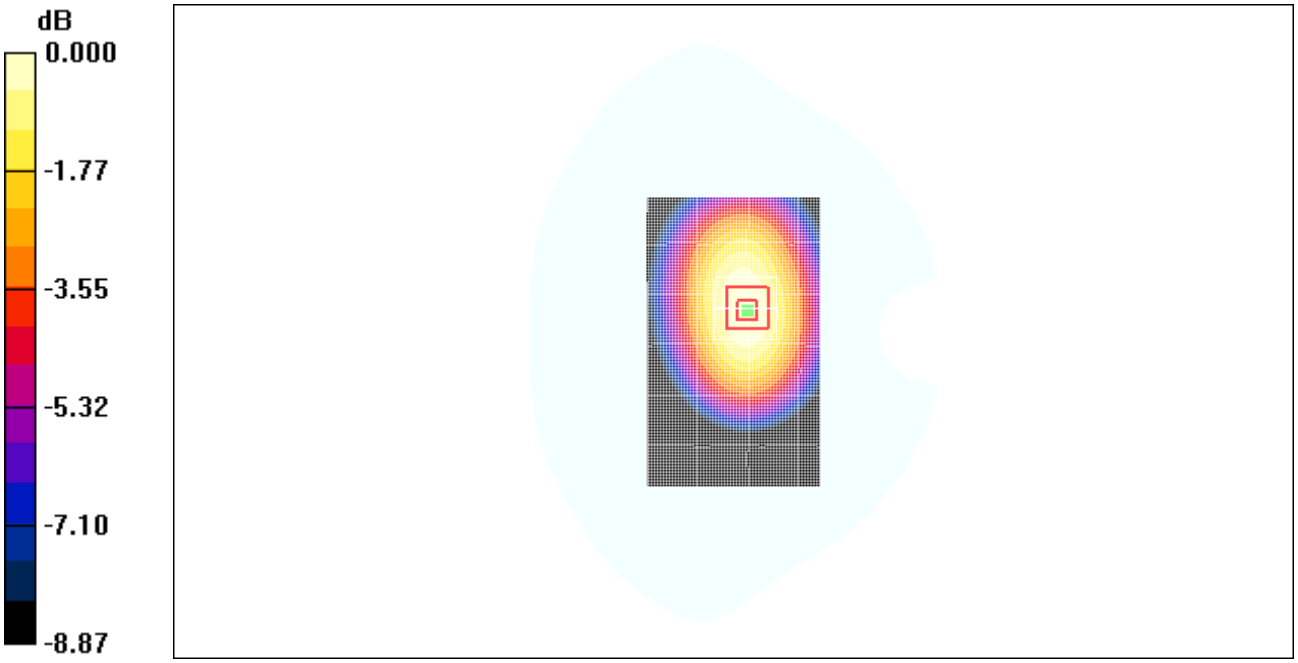
**Fig. 26 CDMA 835MHz CH1013 – Slide down**

**CDMA 835 Body Toward Phantom High – Slide up**

Date/Time: 2009-5-20 13:48:23
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used (interpolated): f = 848.31 MHz; $\sigma$ = 1.02 mho/m; $\varepsilon_r$ = 53.7; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 848.31 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.782 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.1 V/m; Power Drift = -0.178 dB
Peak SAR (extrapolated) = 0.951 W/kg
**SAR(1 g) = 0.732 mW/g; SAR(10 g) = 0.531 mW/g**
Maximum value of SAR (measured) = 0.776 mW/g




0 dB = 0.776mW/g

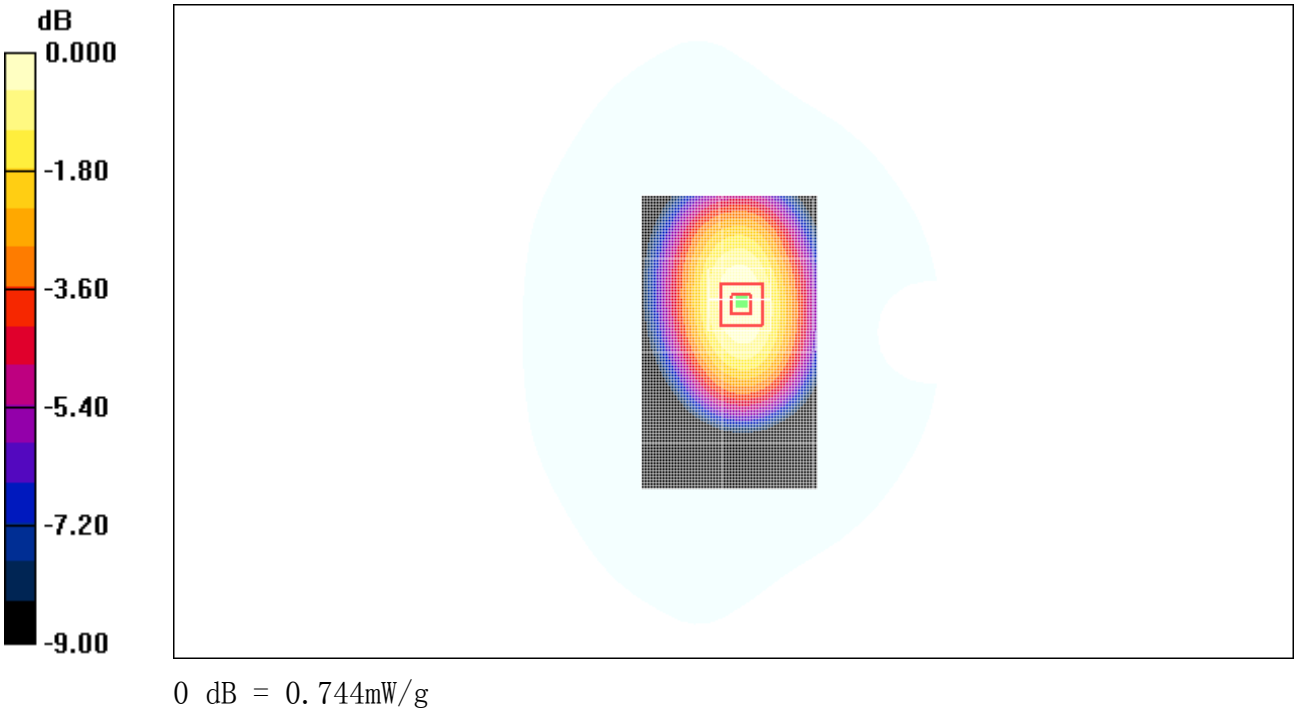
**Fig. 27 CDMA 835MHz CH777 – Slide up**

**CDMA 835 Body Toward Phantom Middle – Slide up**

Date/Time: 2009-5-20 14:02:34
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 1.01 mho/m; $\varepsilon_r$ = 53.8; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

**Toward Phantom Middle/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.737 mW/g

**Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.0 V/m; Power Drift = 0.093 dB
Peak SAR (extrapolated) = 0.902 W/kg
**SAR(1 g) = 0.702 mW/g; SAR(10 g) = 0.512 mW/g**
Maximum value of SAR (measured) = 0.744 mW/g




0 dB = 0.744mW/g

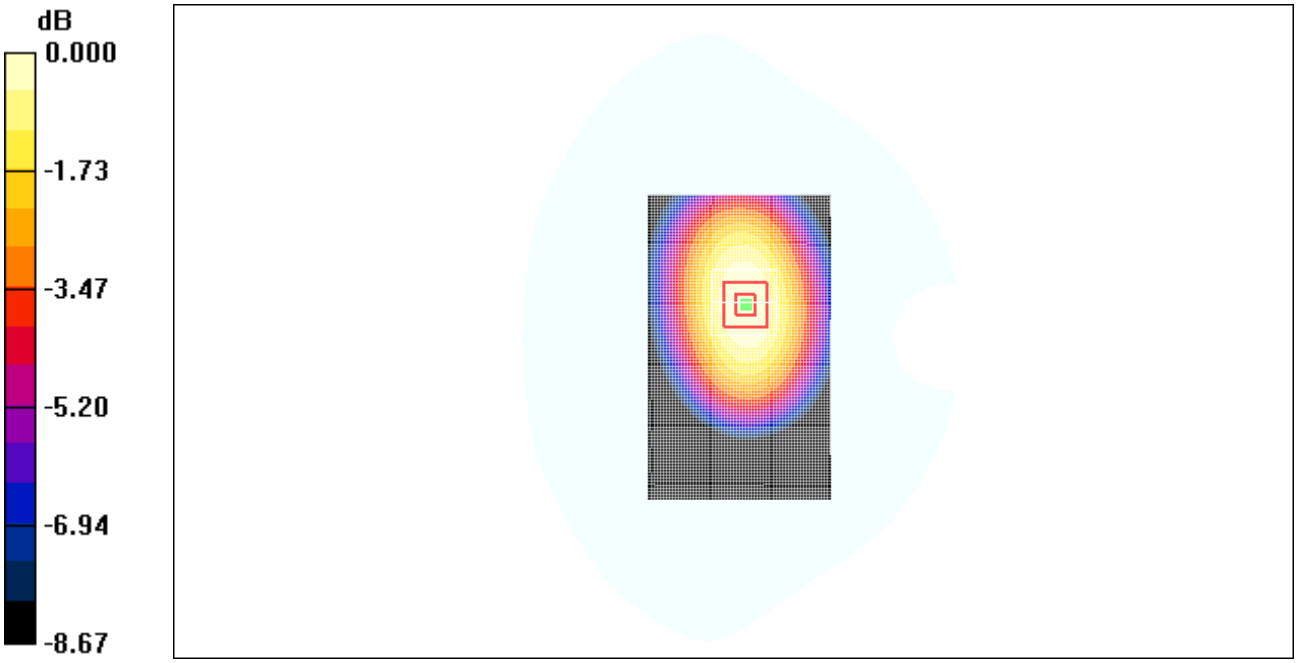
**Fig. 28 CDMA 835MHz CH384 – Slide up**

**CDMA 835 Body Toward Phantom Low – Slide up**

Date/Time: 2009-5-20 14:16:28
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used: f = 825 MHz; $\sigma$ = 0.993 mho/m; $\varepsilon_r$ = 53.9; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 824.7 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Phantom Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.756 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.7 V/m; Power Drift = -0.139 dB
Peak SAR (extrapolated) = 0.885 W/kg
SAR(1 g) = 0.695 mW/g; SAR(10 g) = 0.511 mW/g
Maximum value of SAR (measured) = 0.733 mW/g




0 dB = 0.733mW/g

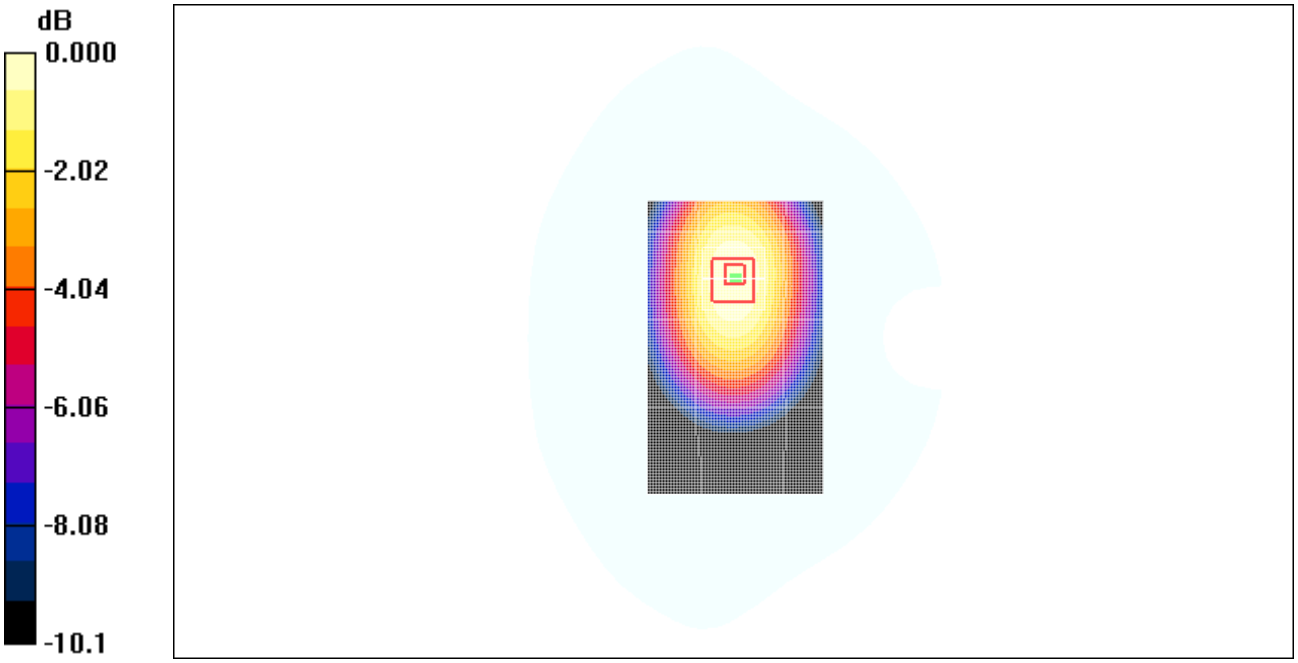
**Fig. 29 CDMA 835MHz CH1013 – Slide up**

**CDMA 835 Body Toward Ground High – Slide up**

Date/Time: 2009-5-20 14:30:11
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used (interpolated): f = 848.31 MHz; $\sigma$ = 1.02 mho/m; $\varepsilon_r$ = 53.7; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 848.31 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.965 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.6 V/m; Power Drift = -0.076 dB
Peak SAR (extrapolated) = 1.17 W/kg
SAR(1 g) = 0.890 mW/g; SAR(10 g) = 0.637 mW/g
Maximum value of SAR (measured) = 0.945 mW/g




0 dB = 0.945mW/g

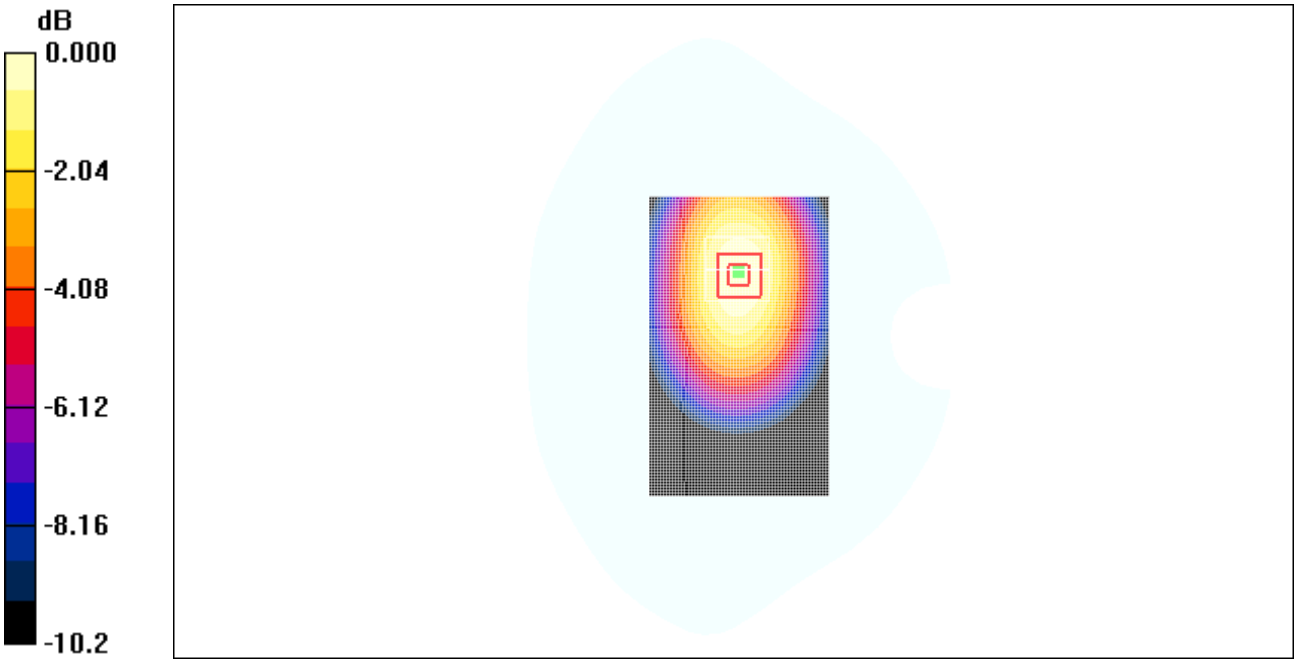
**Fig. 30 CDMA 835MHz CH777 – Slide up**

**CDMA 835 Body Toward Ground Middle – Slide up**

Date/Time: 2009-5-20 14:44:25
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used (interpolated): f = 836.52 MHz; $\sigma$ = 1.01 mho/m; $\varepsilon_r$ = 53.8; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 836.52 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.940 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.0 V/m; Power Drift = -0.012 dB
Peak SAR (extrapolated) = 1.16 W/kg
SAR(1 g) = 0.881 mW/g; SAR(10 g) = 0.631 mW/g
Maximum value of SAR (measured) = 0.929 mW/g




0 dB = 0.929mW/g

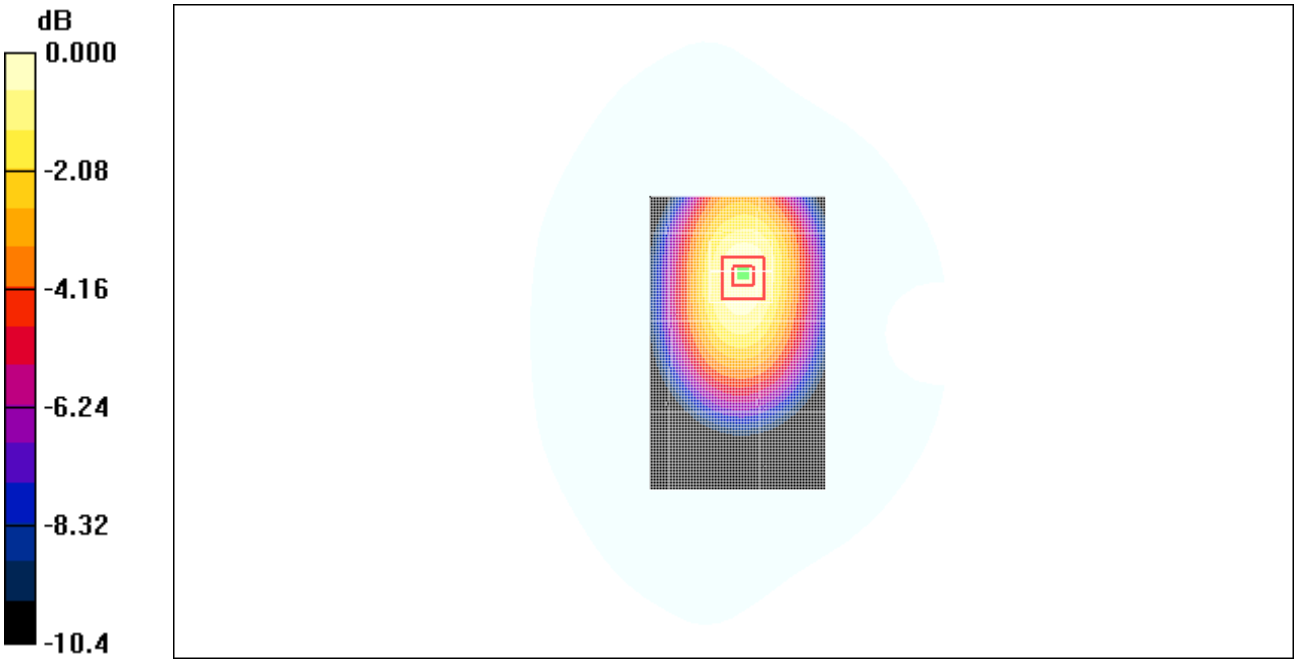
**Fig. 31 CDMA 835MHz CH384 – Slide up**

**CDMA 835 Body Toward Ground Low – Slide up**

Date/Time: 2009-5-20 14:58:16
Electronics: DAE4 Sn771
Medium: Body 835
Medium parameters used: f = 825 MHz; $\sigma$ = 0.993 mho/m; $\varepsilon_r$ = 53.9; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1X-new Frequency: 824.7 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(6.22, 6.22, 6.22)

Toward Ground Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.873 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.0 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.829 mW/g; SAR(10 g) = 0.591 mW/g
Maximum value of SAR (measured) = 0.879 mW/g




0 dB = 0.879mW/g

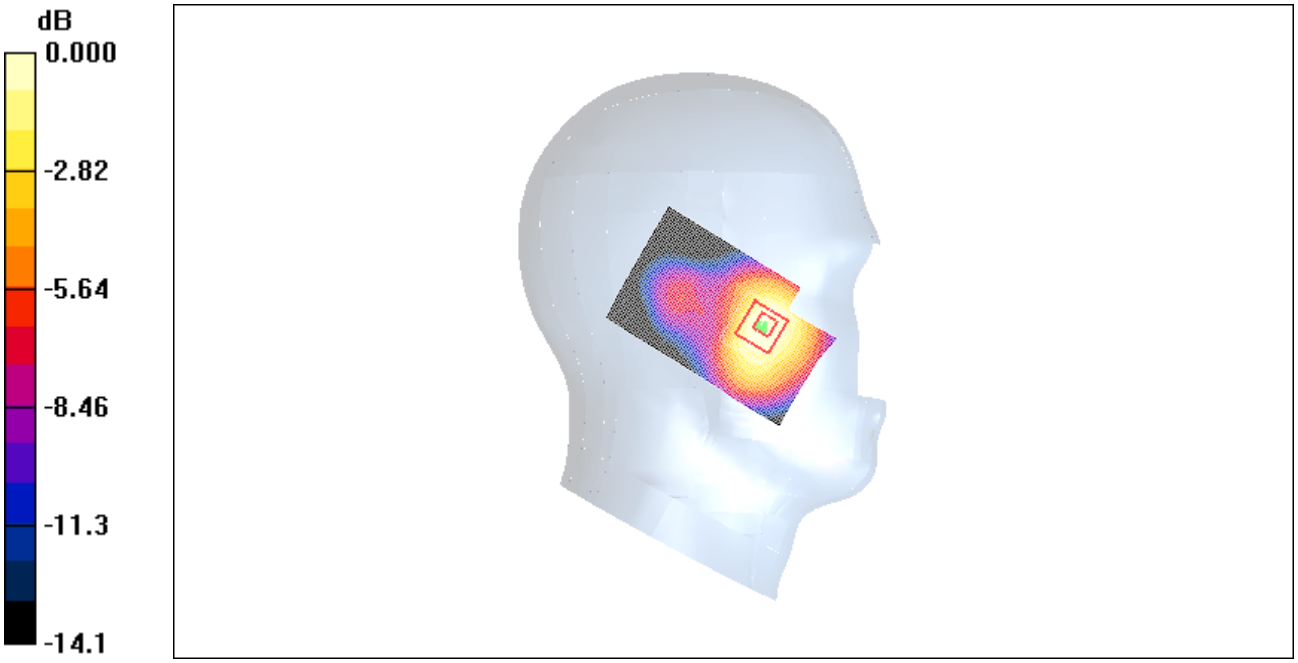
**Fig. 32 CDMA 835MHz CH1013 – Slide up**

**CDMA 1900 Left Cheek High – Slide down**

Date/Time: 2009-5-21 7:49:30
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1908.75 MHz; $\sigma$ = 1.43 mho/m; $\varepsilon_r$ = 39.1; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.825 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.30 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 1.15 W/kg
**SAR(1 g) = 0.754 mW/g; SAR(10 g) = 0.464 mW/g**
Maximum value of SAR (measured) = 0.791 mW/g




0 dB = 0.791mW/g

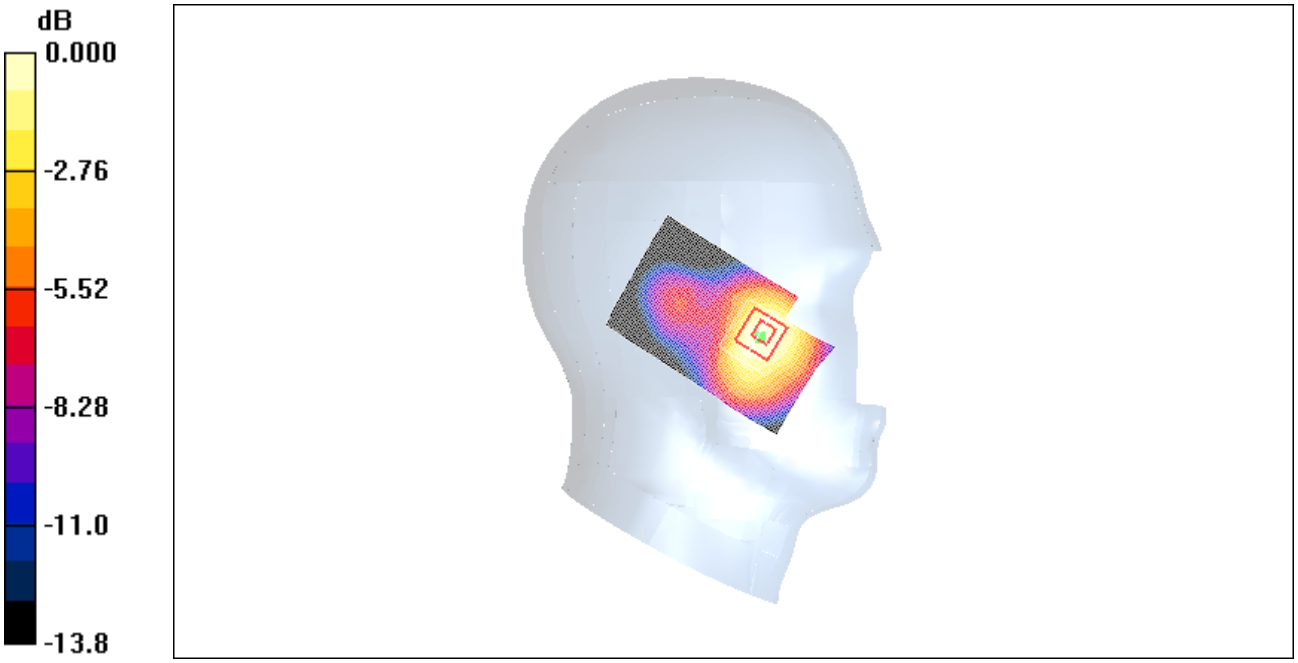
**Fig. 33 CDMA 1900 MHz CH1175 – Slide down**

**CDMA 1900 Left Cheek Middle – Slide down**

Date/Time: 2009-5-21 8:03:12
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 39.2; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.770 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.81 V/m; Power Drift = 0.056 dB
Peak SAR (extrapolated) = 1.07 W/kg
SAR(1 g) = 0.707 mW/g; SAR(10 g) = 0.435 mW/g
Maximum value of SAR (measured) = 0.739 mW/g




0 dB = 0.739mW/g

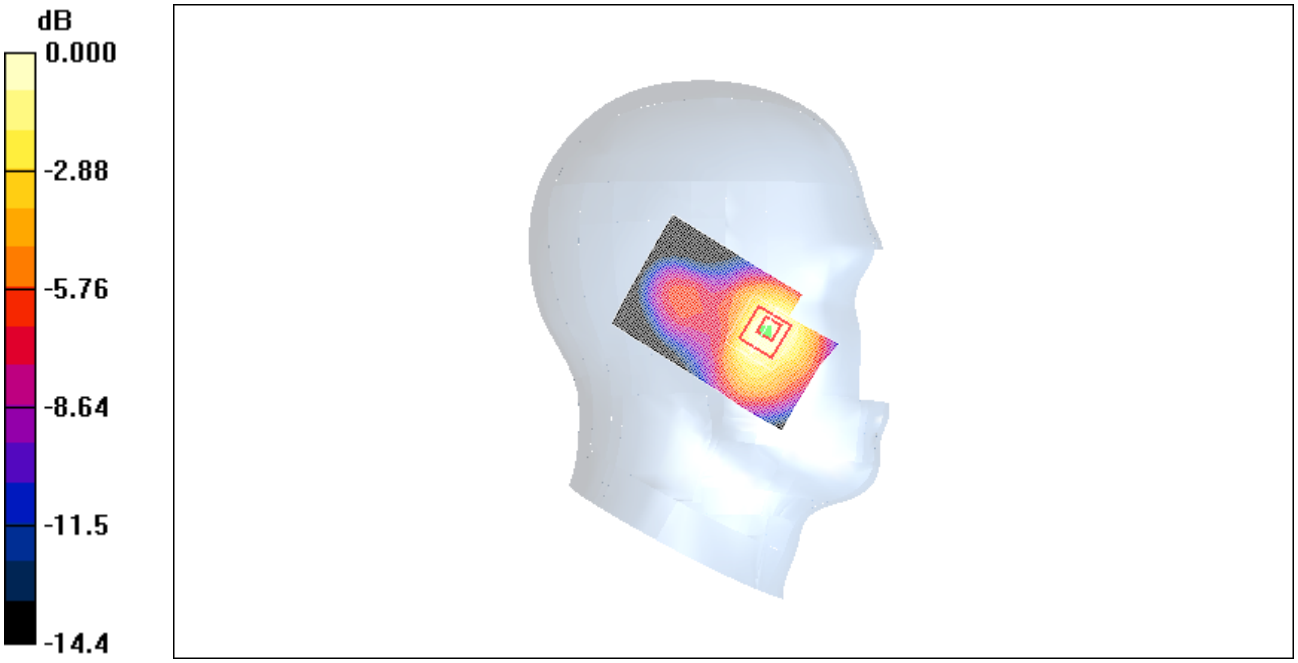
**Fig. 34 CDMA 1900 MHz CH600 – Slide down**

**CDMA 1900 Left Cheek Low – Slide down**

Date/Time: 2009-5-21 8:17:23
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1851.25 MHz; $\sigma$ = 1.38 mho/m; $\varepsilon_r$ = 39.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.780 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.1 V/m; Power Drift = 0.091 dB
Peak SAR (extrapolated) = 1.12 W/kg
**SAR(1 g) = 0.730 mW/g; SAR(10 g) = 0.450 mW/g**
Maximum value of SAR (measured) = 0.775 mW/g




0 dB = 0.775mW/g

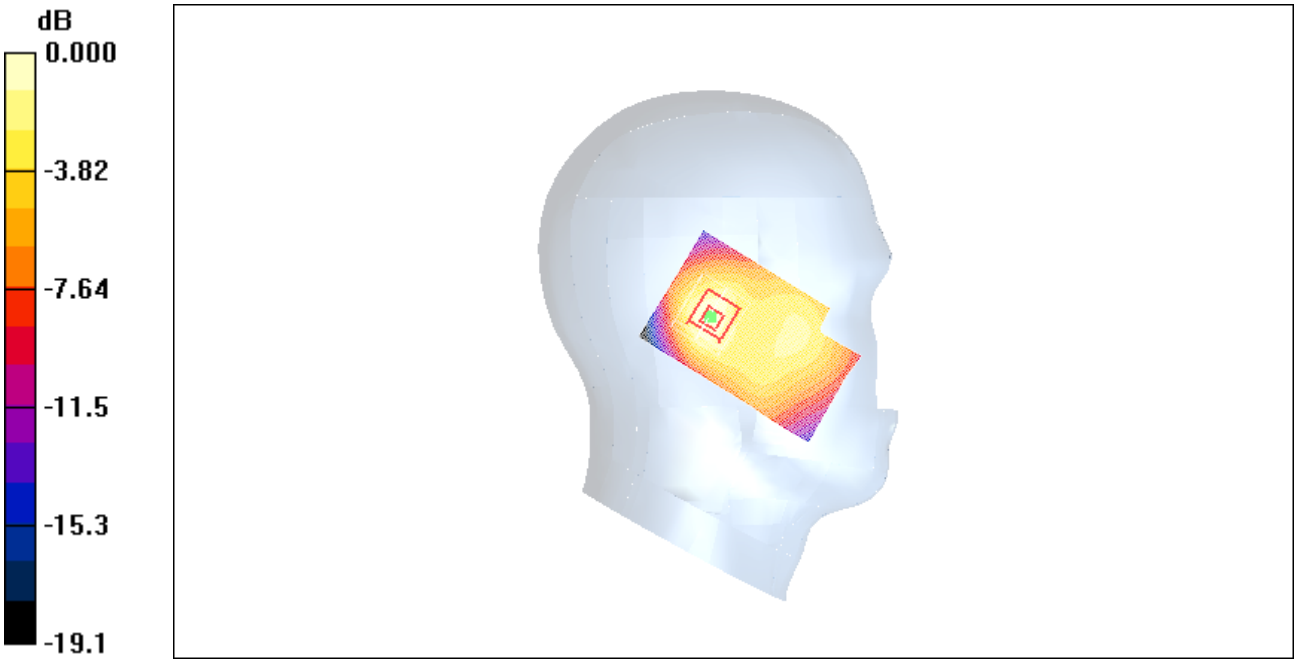
**Fig. 35 CDMA 1900 MHz CH25 – Slide down**

**CDMA 1900 Left Tilt High – Slide down**

Date/Time: 2009-5-21 8:31:42
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1908.75 MHz; $\sigma$ = 1.43 mho/m; $\varepsilon_r$ = 39.1; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt High/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.273 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.1 V/m; Power Drift = -0.189 dB
Peak SAR (extrapolated) = 0.369 W/kg
**SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.140 mW/g**
Maximum value of SAR (measured) = 0.265 mW/g




0 dB = 0.265mW/g

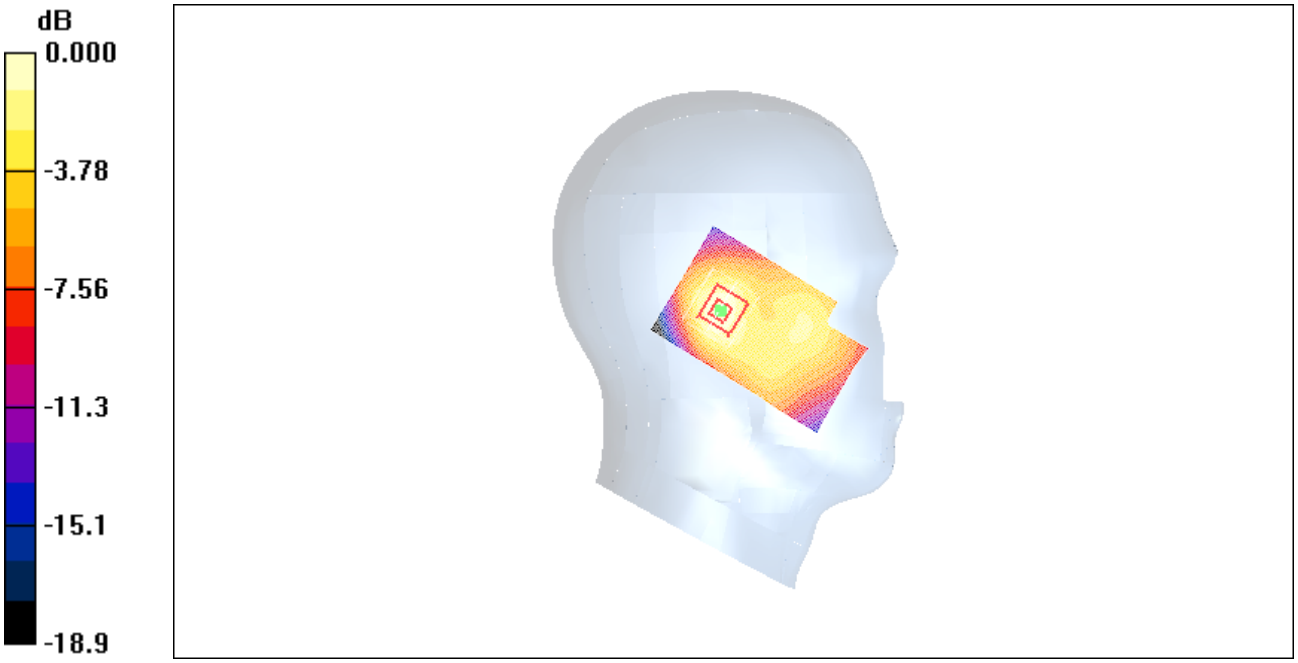
**Fig. 36 CDMA 1900 MHz CH1175 – Slide down**

**CDMA 1900 Left Tilt Middle – Slide down**

Date/Time: 2009-5-21 8:45:08
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 39.2; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.242 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = 0.087 dB
Peak SAR (extrapolated) = 0.334 W/kg
SAR(1 g) = 0.218 mW/g; SAR(10 g) = 0.130 mW/g
Maximum value of SAR (measured) = 0.242 mW/g




0 dB = 0.242mW/g

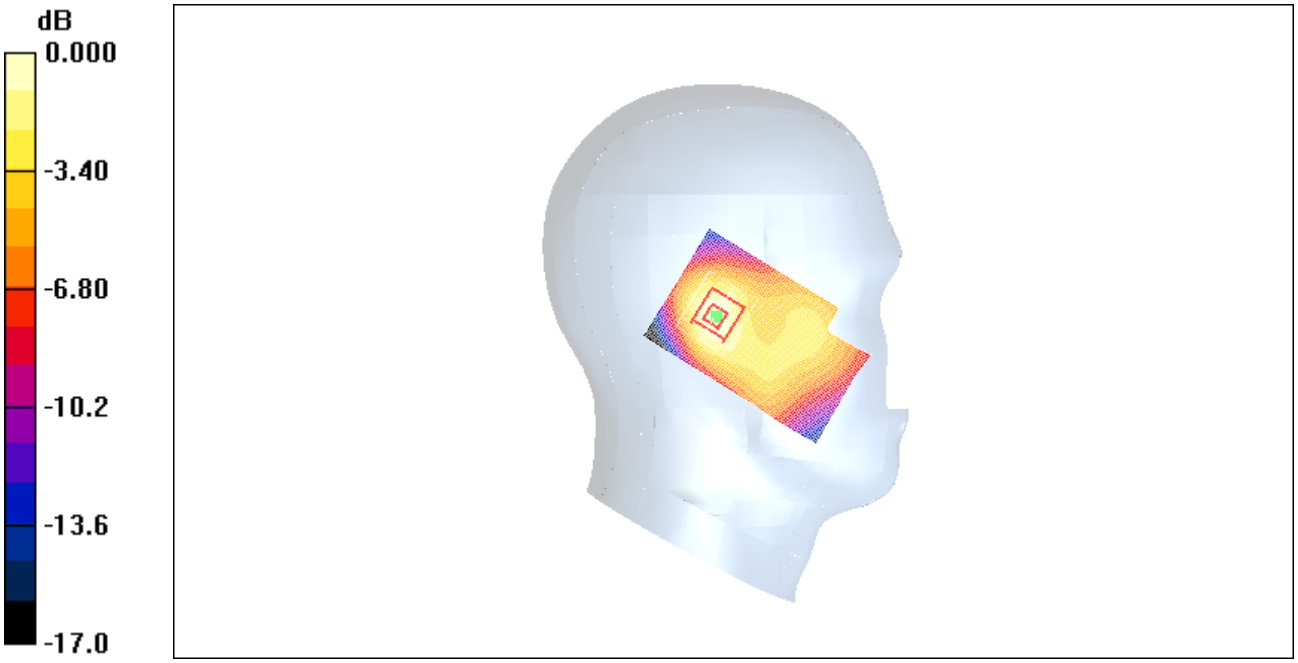
**Fig. 37 CDMA 1900 MHz CH600 – Slide down**

**CDMA 1900 Left Tilt Low – Slide down**

Date/Time: 2009-5-21 8:59:25
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1851.25 MHz; $\sigma$ = 1.38 mho/m; $\varepsilon_r$ = 39.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Low/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.268 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.8 V/m; Power Drift = -0.031 dB
Peak SAR (extrapolated) = 0.364 W/kg
SAR(1 g) = 0.241 mW/g; SAR(10 g) = 0.147 mW/g
Maximum value of SAR (measured) = 0.268 mW/g




0 dB = 0.268mW/g

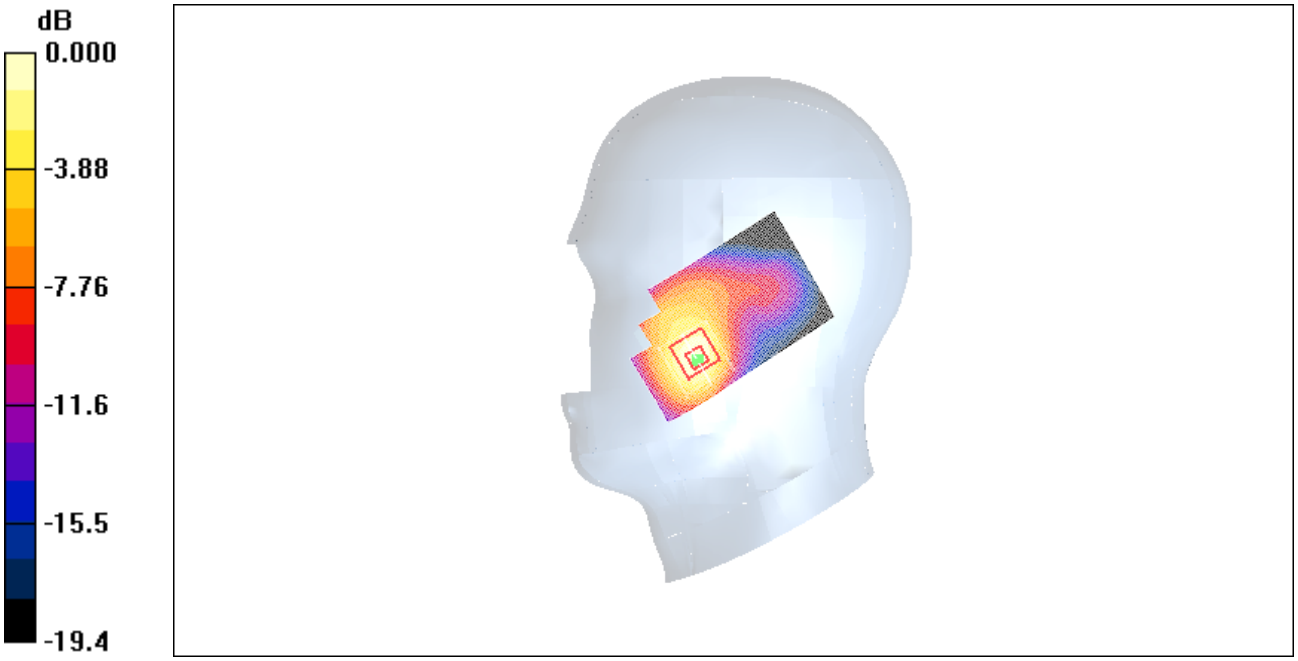
**Fig. 38 CDMA 1900 MHz CH25 – Slide down**

**CDMA 1900 Right Cheek High – Slide down**

Date/Time: 2009-5-21 9:13:44
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1908.75 MHz; $\sigma$ = 1.43 mho/m; $\varepsilon_r$ = 39.1; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.22 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.15 V/m; Power Drift = -0.118 dB
Peak SAR (extrapolated) = 1.84 W/kg
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.636 mW/g
Maximum value of SAR (measured) = 1.27 mW/g




0 dB = 1.27mW/g

**Fig. 39 CDMA 1900 MHz CH1175 – Slide down**

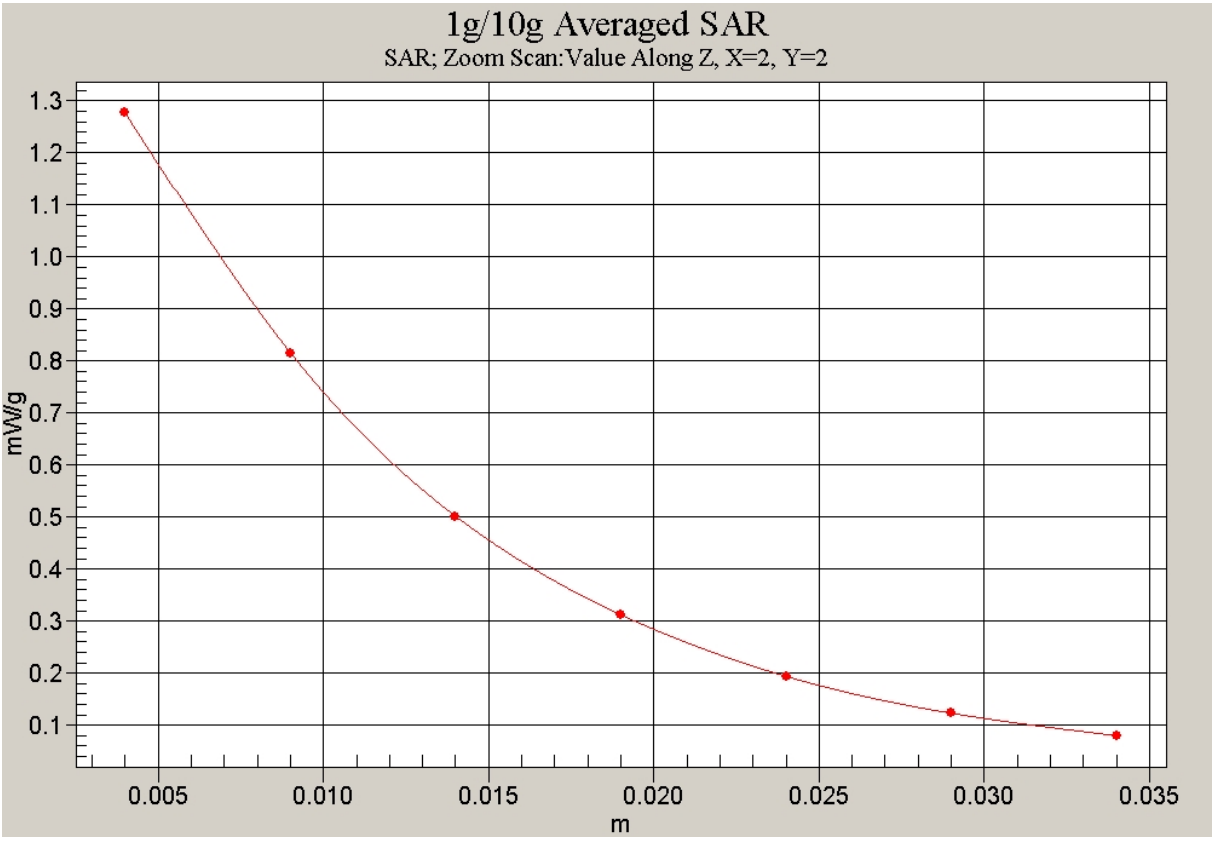


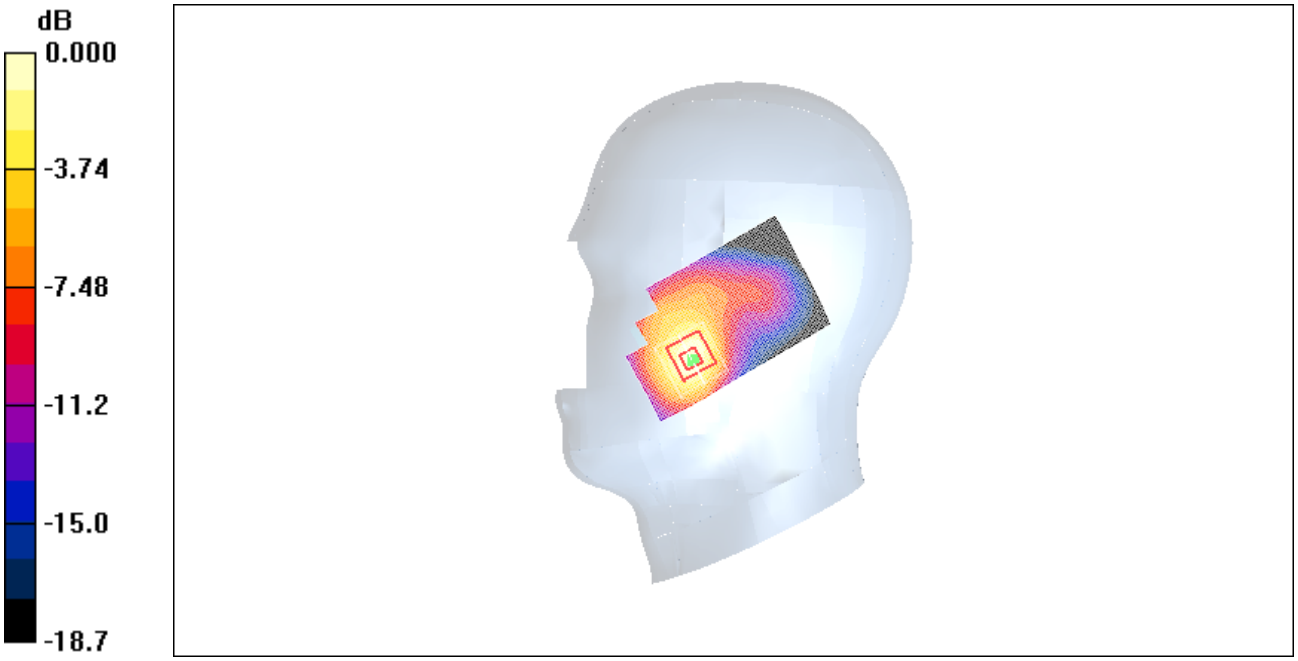

**Fig. 40 Z-Scan at power reference point (CDMA 1900MHz, CH1175)**

**CDMA 1900 Right Cheek Middle – Slide down**

Date/Time: 2009-5-21 9:27:17
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 39.2; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.07 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.00 V/m; Power Drift = -0.130 dB
Peak SAR (extrapolated) = 1.64 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.560 mW/g
Maximum value of SAR (measured) = 1.13 mW/g




0 dB = 1.13mW/g

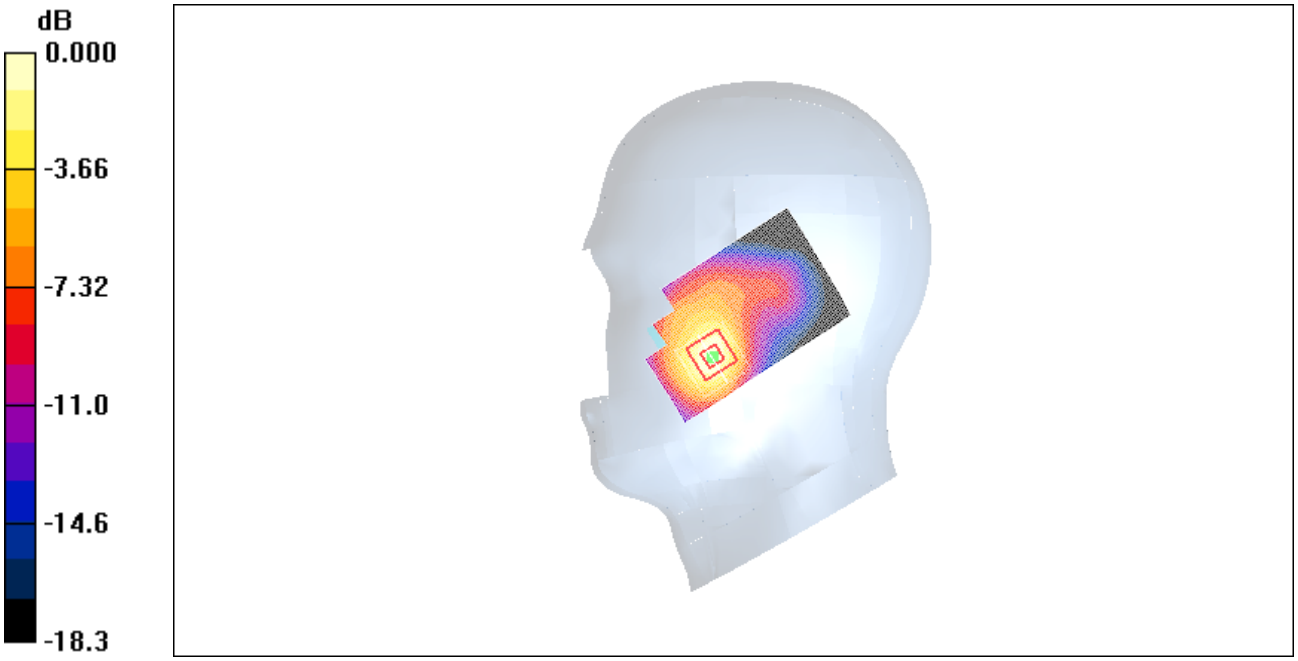
**Fig. 41 CDMA 1900 MHz CH600 – Slide down**

**CDMA 1900 Right Cheek Low – Slide down**

Date/Time: 2009-5-21 9:41:05
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1851.25 MHz; $\sigma$ = 1.38 mho/m; $\varepsilon_r$ = 39.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.13 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.41 V/m; Power Drift = -0.199 dB
Peak SAR (extrapolated) = 1.71 W/kg
SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.596 mW/g
Maximum value of SAR (measured) = 1.20 mW/g




0 dB = 1.20mW/g

**Fig. 42 CDMA 1900 MHz CH25 – Slide down**

**CDMA 1900 Right Tilt High – Slide down**

Date/Time: 2009-5-21 9:55:35
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1908.75 MHz; $\sigma$ = 1.43 mho/m; $\varepsilon_r$ = 39.1; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt High/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.272 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.3 V/m; Power Drift = -0.116 dB
Peak SAR (extrapolated) = 0.355 W/kg
**SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.142 mW/g**
Maximum value of SAR (measured) = 0.252 mW/g


0 dB = 0.252mW/g

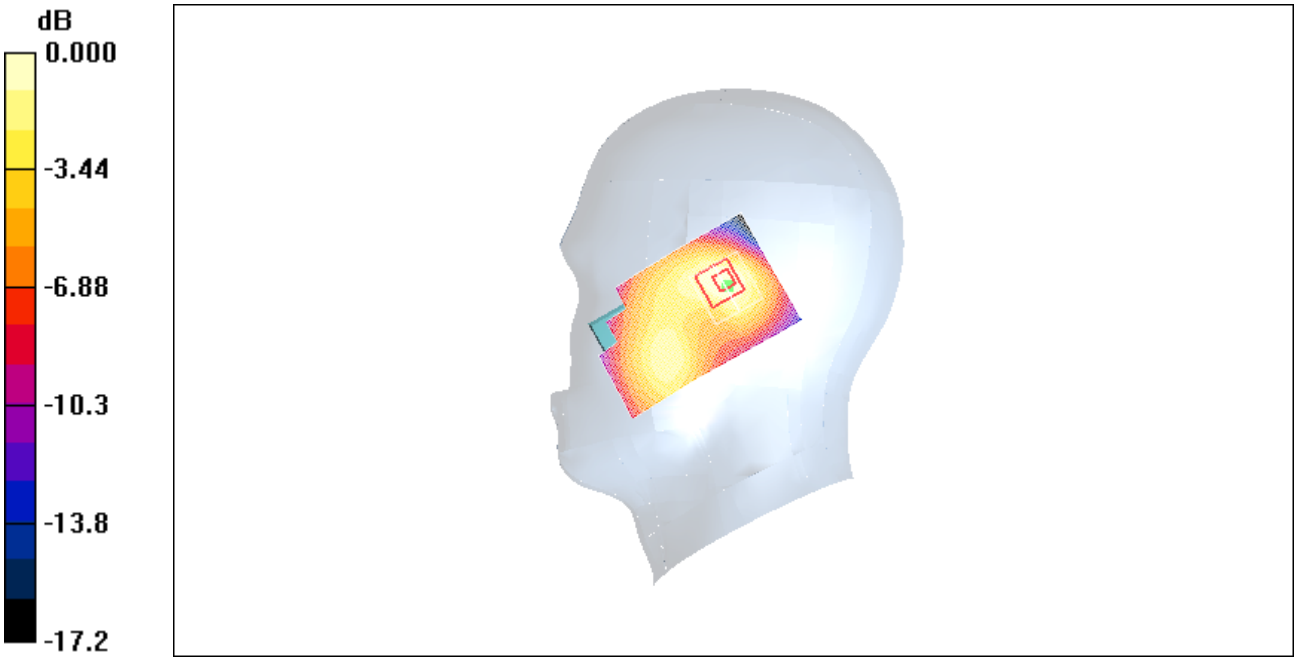
**Fig. 43 CDMA 1900 MHz CH1175 – Slide down**

**CDMA 1900 Right Tilt Middle – Slide down**

Date/Time: 2009-5-21 10:09:27
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 39.2; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.250 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = 0.087 dB
Peak SAR (extrapolated) = 0.340 W/kg
SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.137 mW/g
Maximum value of SAR (measured) = 0.240 mW/g




0 dB = 0.240mW/g

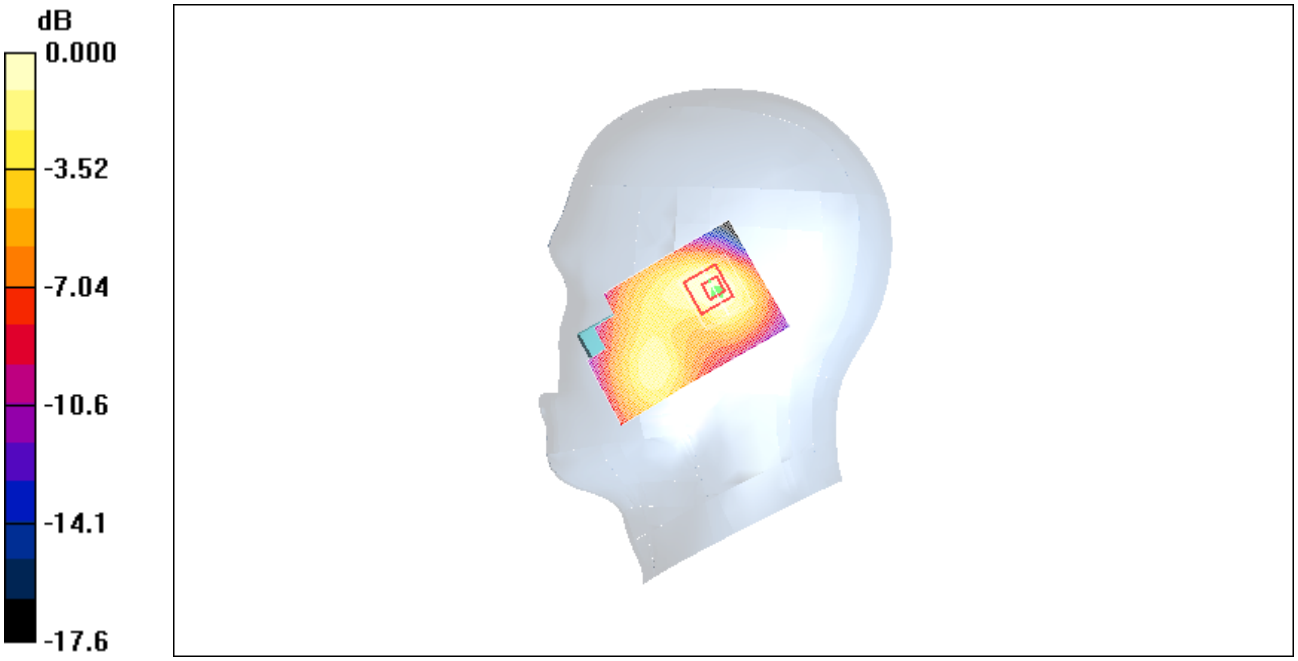
**Fig. 44 CDMA 1900 MHz CH600 – Slide down**

**CDMA 1900 Right Tilt Low – Slide down**

Date/Time: 2009-5-21 10:23:41
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1851.25 MHz; $\sigma$ = 1.38 mho/m; $\varepsilon_r$ = 39.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Low/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.267 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = 0.186 dB
Peak SAR (extrapolated) = 0.362 W/kg
SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.151 mW/g
Maximum value of SAR (measured) = 0.255 mW/g




0 dB = 0.255mW/g

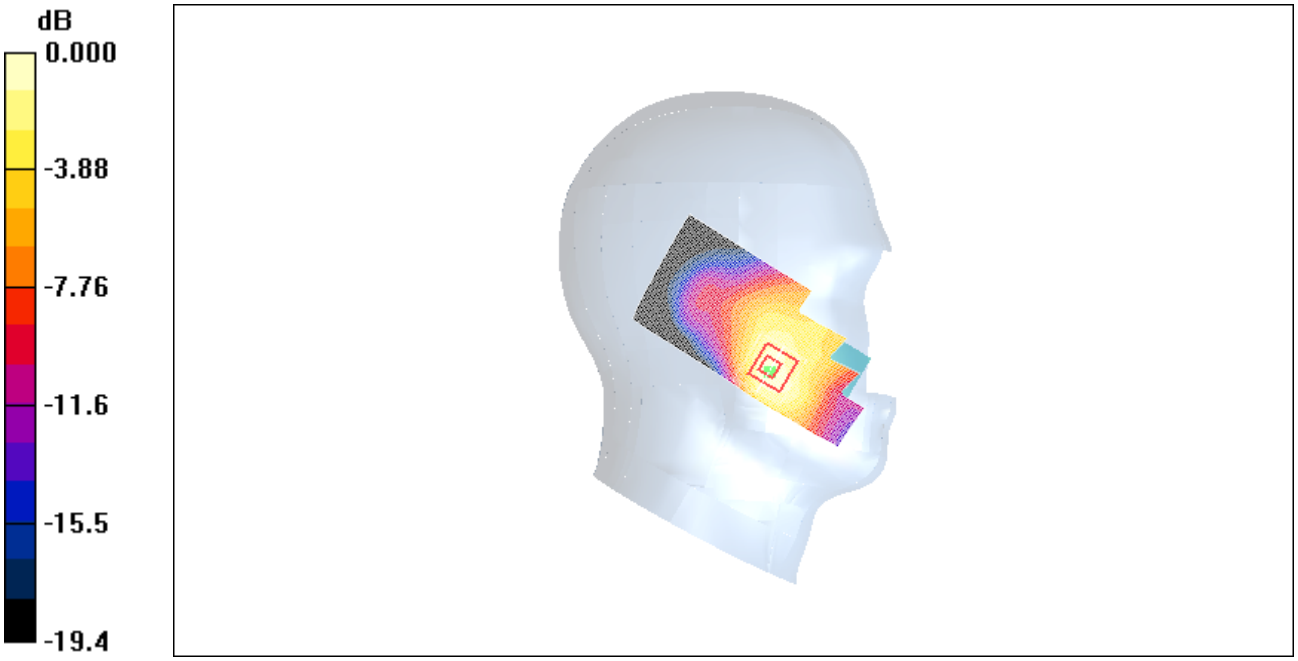
**Fig. 45 CDMA 1900 MHz CH25 – Slide down**

**CDMA 1900 Left Cheek Middle – Slide up**

Date/Time: 2009-5-21 10:37:21
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 39.2; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.328 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.84 V/m; Power Drift = 0.125 dB
Peak SAR (extrapolated) = 0.428 W/kg
SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.179 mW/g
Maximum value of SAR (measured) = 0.317 mW/g




0 dB = 0.317mW/g

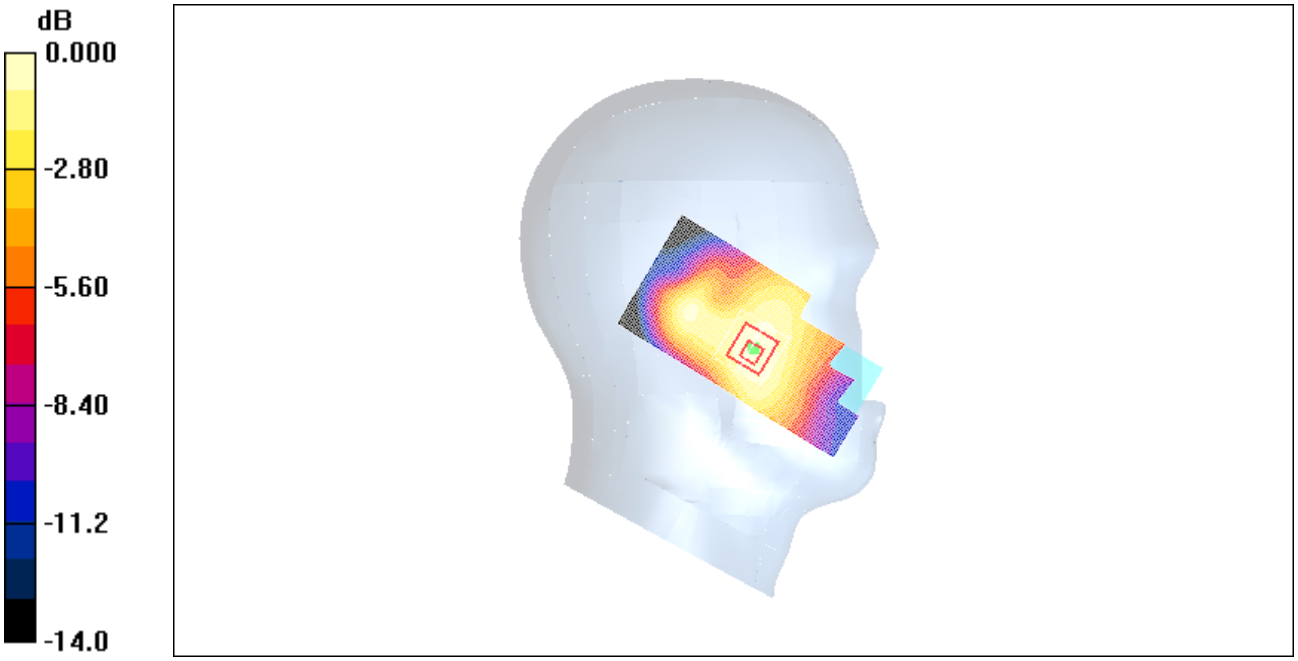
**Fig. 46 CDMA 1900 MHz CH600 – Slide up**

**CDMA 1900 Left Tilt Middle – Slide up**

Date/Time: 2009-5-21 10:51:34
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 39.2; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.093 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.90 V/m; Power Drift = 0.130 dB
Peak SAR (extrapolated) = 0.125 W/kg
SAR(1 g) = 0.086 mW/g; SAR(10 g) = 0.057 mW/g
Maximum value of SAR (measured) = 0.093 mW/g




0 dB = 0.093mW/g

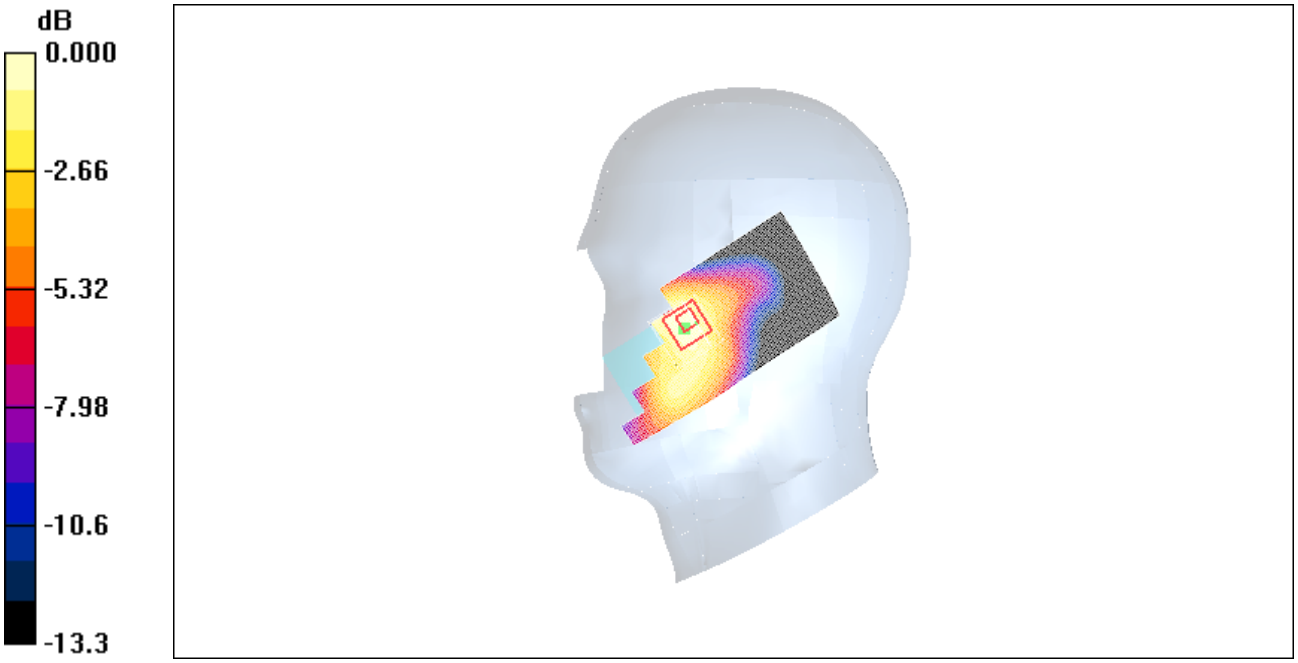
**Fig. 47 CDMA 1900 MHz CH600 – Slide up**

**CDMA 1900 Right Cheek Middle – Slide up**

Date/Time: 2009-5-21 11:05:52
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 39.2; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Middle/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.240 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.46 V/m; Power Drift = 0.164 dB
Peak SAR (extrapolated) = 0.358 W/kg
SAR(1 g) = 0.239 mW/g; SAR(10 g) = 0.148 mW/g
Maximum value of SAR (measured) = 0.246 mW/g




0 dB = 0.246mW/g

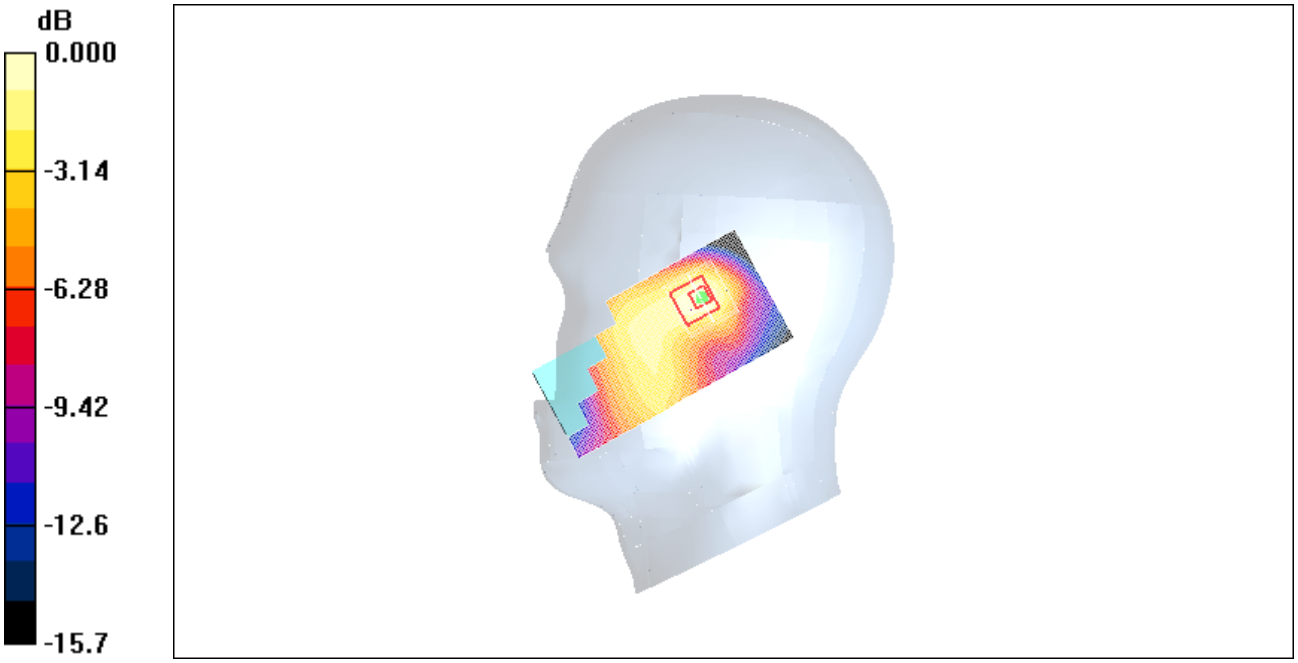
**Fig. 48 CDMA 1900 MHz CH600 – Slide up**

**CDMA 1900 Right Tilt Middle – Slide up**

Date/Time: 2009-5-21 11:19:43
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 39.2; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Tilt Middle/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.109 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.73 V/m; Power Drift = 0.132 dB
Peak SAR (extrapolated) = 0.150 W/kg
SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.058 mW/g
Maximum value of SAR (measured) = 0.107 mW/g




0 dB = 0.107mW/g

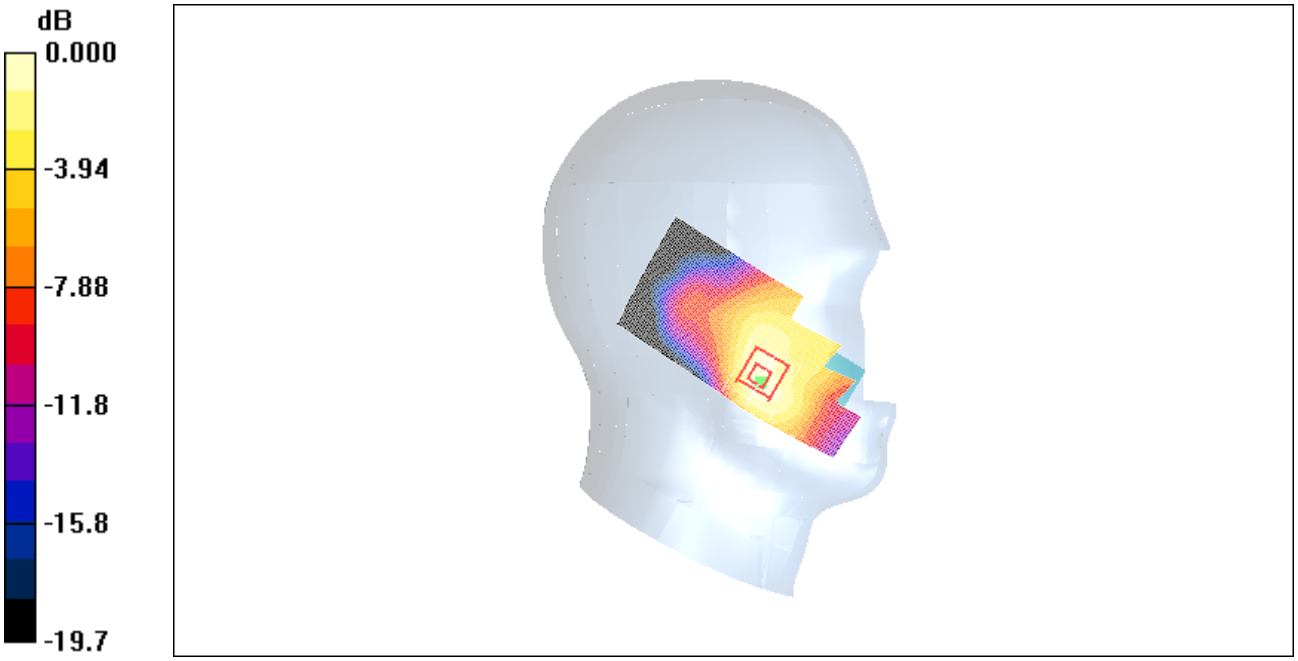
**Fig. 49 CDMA 1900 MHz CH600 – Slide up**

**CDMA 1900 Left Cheek High – Slide up**

Date/Time: 2009-5-21 11:33:17
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1908.75 MHz; $\sigma$ = 1.43 mho/m; $\varepsilon_r$ = 39.1; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek High/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.308 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.38 V/m; Power Drift = -0.043 dB
Peak SAR (extrapolated) = 0.409 W/kg
SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.168 mW/g
Maximum value of SAR (measured) = 0.301 mW/g




0 dB = 0.301mW/g

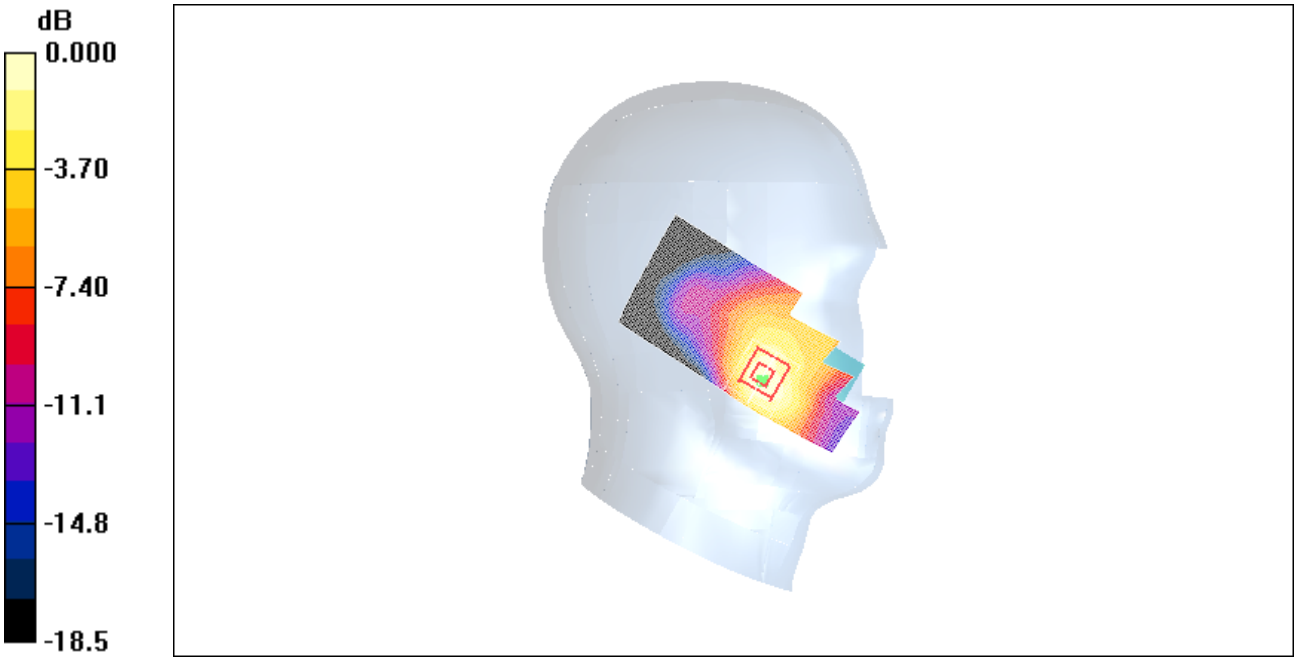
**Fig. 50 CDMA 1900 MHz CH1175 – Slide up**

**CDMA 1900 Left Cheek Low – Slide up**

Date/Time: 2009-5-21 11:47:22
Electronics: DAE4 Sn771
Medium: Head 1900
Medium parameters used (interpolated): f = 1851.25 MHz; $\sigma$ = 1.38 mho/m; $\varepsilon_r$ = 39.3; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.03, 5.03, 5.03)

Cheek Low/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.361 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.93 V/m; Power Drift = -0.108 dB
Peak SAR (extrapolated) = 0.462 W/kg
SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.195 mW/g
Maximum value of SAR (measured) = 0.338 mW/g




0 dB = 0.338mW/g

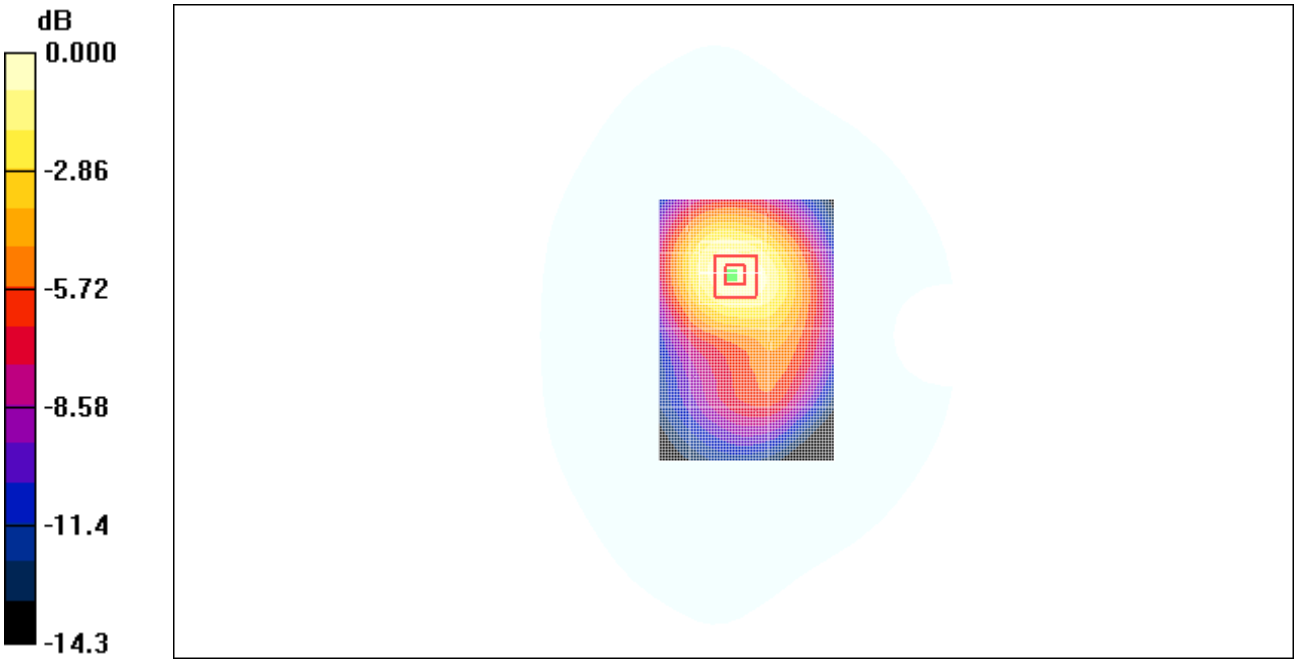
**Fig. 51 CDMA 1900 MHz CH25 – Slide up**

**CDMA 1900 MHz Body Toward Phantom High – Slide down**

Date/Time: 2009-5-21 12:21:20
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used (interpolated): f = 1908.75 MHz; $\sigma$ = 1.56 mho/m; $\varepsilon_r$ = 52.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom High/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.314 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.56 V/m; Power Drift = -0.120 dB
Peak SAR (extrapolated) = 0.468 W/kg
SAR(1 g) = 0.290 mW/g; SAR(10 g) = 0.179 mW/g
Maximum value of SAR (measured) = 0.311 mW/g




0 dB = 0.311mW/g

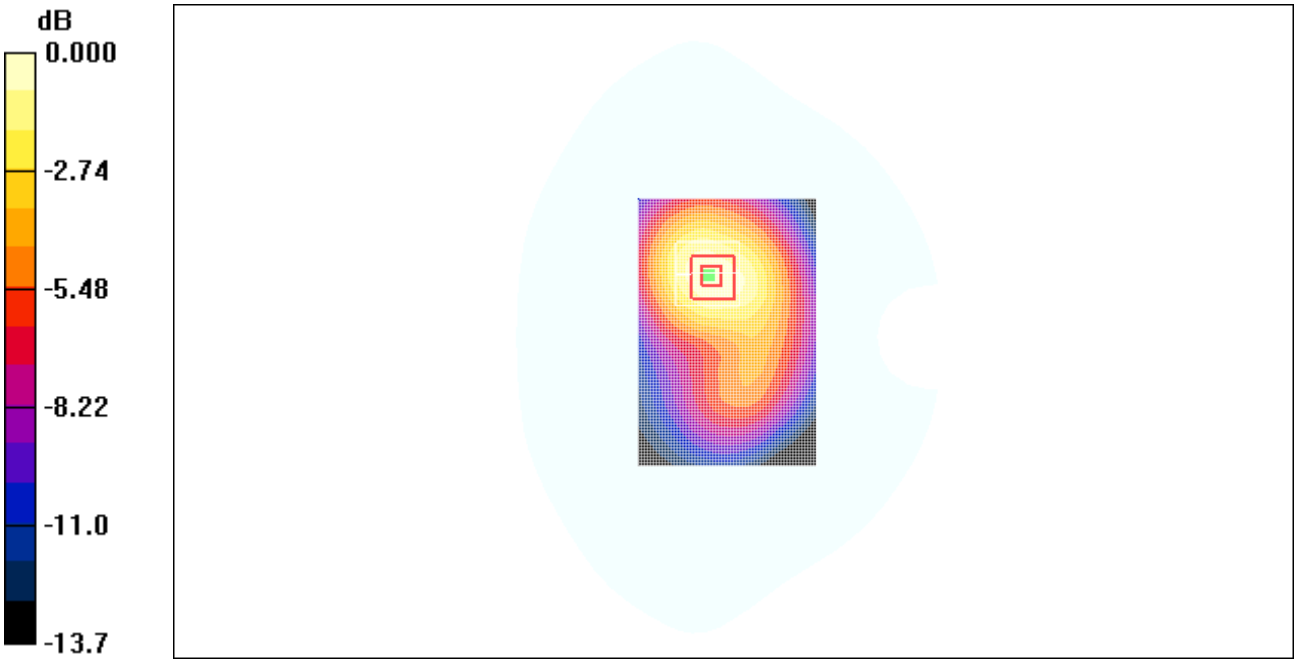
**Fig. 52 CDMA 1900 MHz CH1175 – Slide down**

**CDMA 1900 MHz Body Toward Phantom Middle – Slide down**

Date/Time: 2009-5-21 12:35:32
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.54 mho/m; $\varepsilon_r$ = 52.4; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Middle/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.273 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.19 V/m; Power Drift = -0.003 dB
Peak SAR (extrapolated) = 0.405 W/kg
SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.156 mW/g
Maximum value of SAR (measured) = 0.272 mW/g




0 dB = 0.272mW/g

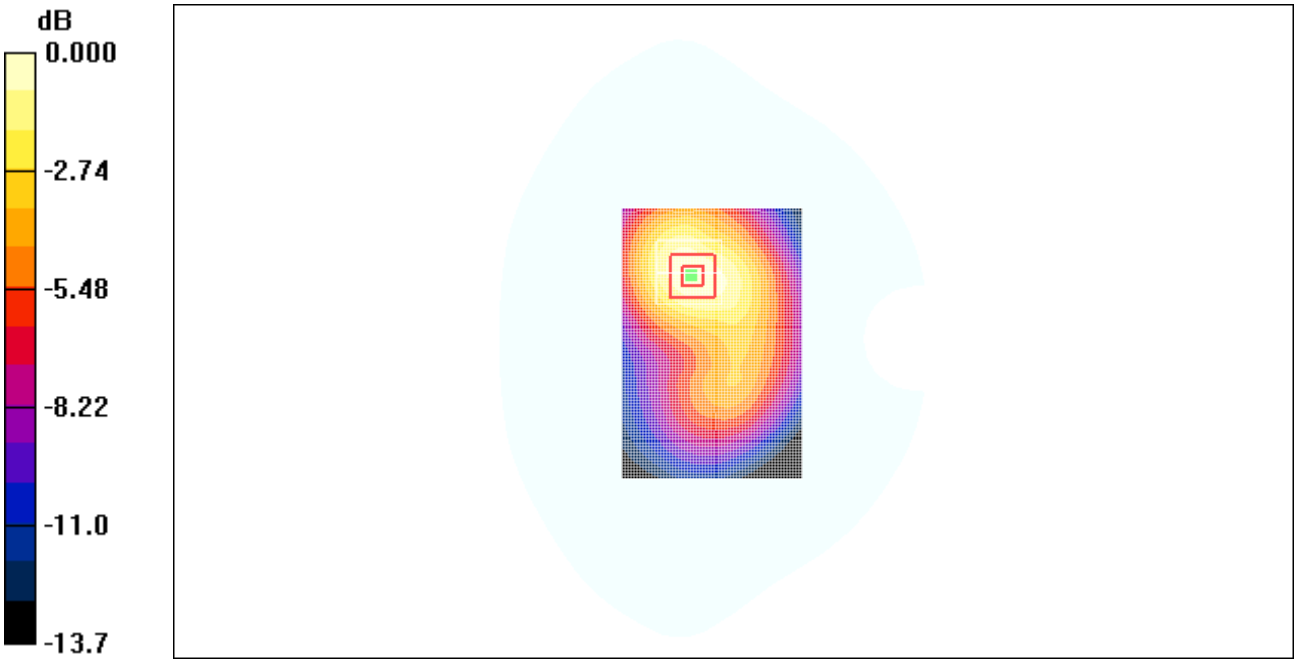
**Fig. 53 CDMA 1900 MHz CH600 – Slide down**

**CDMA 1900 MHz Body Toward Phantom Low – Slide down**

Date/Time: 2009-5-21 12:49:05
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used (interpolated): f = 1851.25 MHz; $\sigma$ = 1.53 mho/m; $\varepsilon_r$ = 52.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.273 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.47 V/m; Power Drift = 0.032 dB
Peak SAR (extrapolated) = 0.394 W/kg
SAR(1 g) = 0.250 mW/g; SAR(10 g) = 0.154 mW/g
Maximum value of SAR (measured) = 0.270 mW/g




0 dB = 0.270mW/g

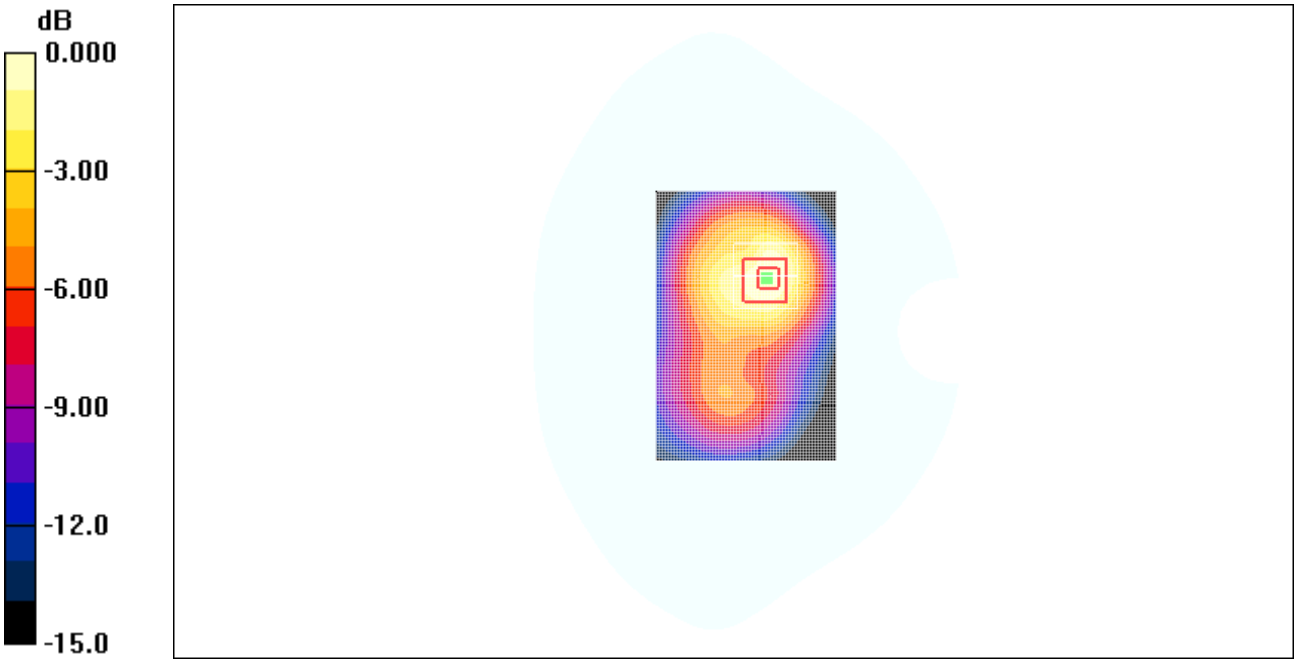
**Fig. 54 CDMA 1900 MHz CH25 – Slide down**

**CDMA 1900 MHz Body Toward Ground High – Slide down**

Date/Time: 2009-5-21 13:03:39
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used (interpolated): f = 1908.75 MHz; $\sigma$ = 1.56 mho/m; $\varepsilon_r$ = 52.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground High/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.644 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.9 V/m; Power Drift = -0.176 dB
Peak SAR (extrapolated) = 0.915 W/kg
SAR(1 g) = 0.550 mW/g; SAR(10 g) = 0.320 mW/g
Maximum value of SAR (measured) = 0.594 mW/g




0 dB = 0.594mW/g

**Fig. 55 CDMA 1900 MHz CH1175 – Slide down**

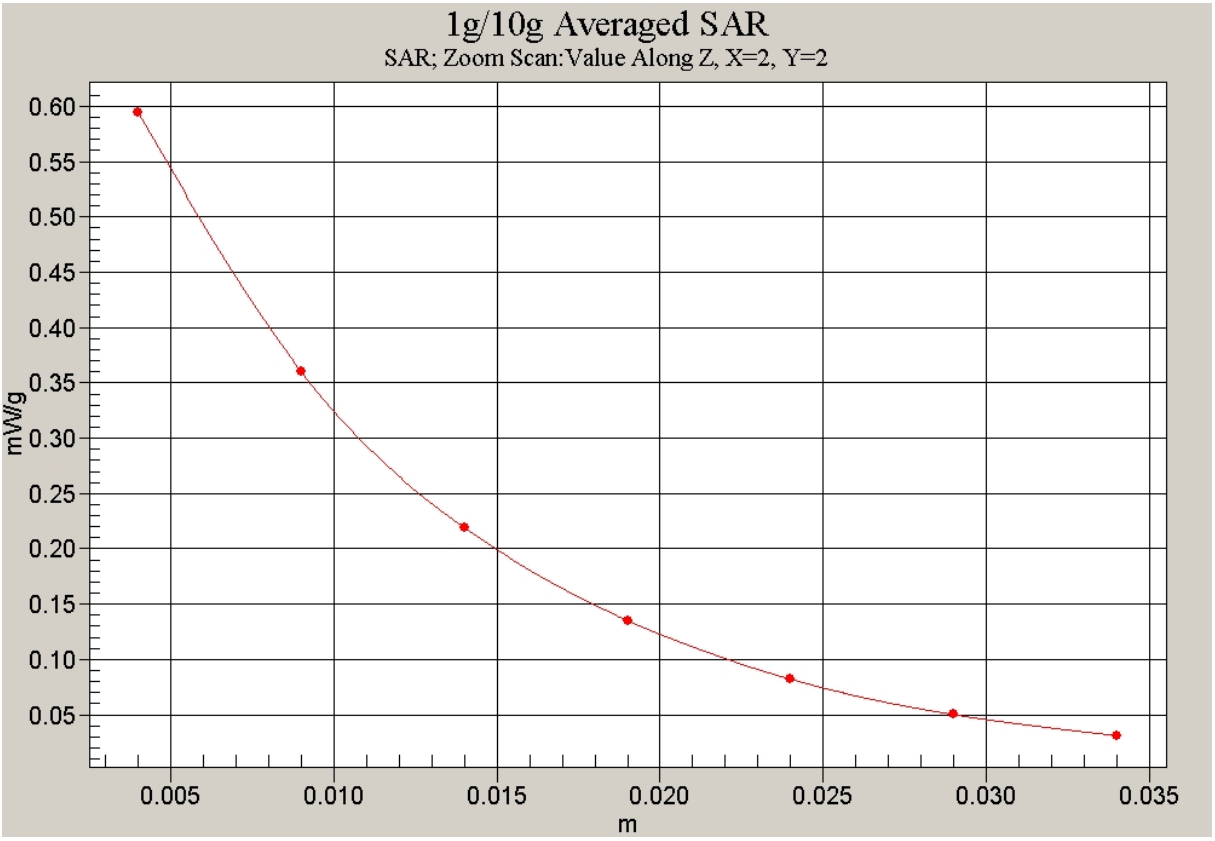


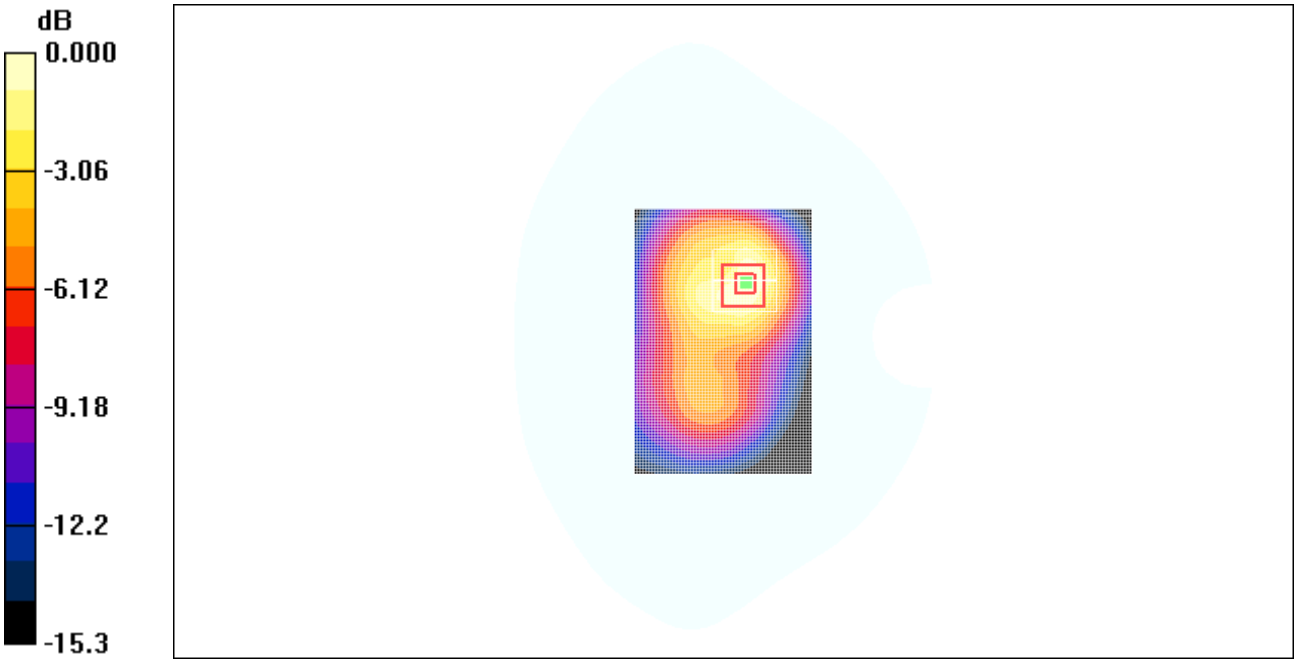

**Fig. 56 Z-Scan at power reference point (CDMA 1900MHz, Body, Towards Ground, CH1175)**

**CDMA 1900 MHz Body Toward Ground Middle – Slide down**

Date/Time: 2009-5-21 13:17:26
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.54 mho/m; $\varepsilon_r$ = 52.4; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.591 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.0 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.893 W/kg
SAR(1 g) = 0.529 mW/g; SAR(10 g) = 0.307 mW/g
Maximum value of SAR (measured) = 0.578 mW/g




0 dB = 0.578mW/g

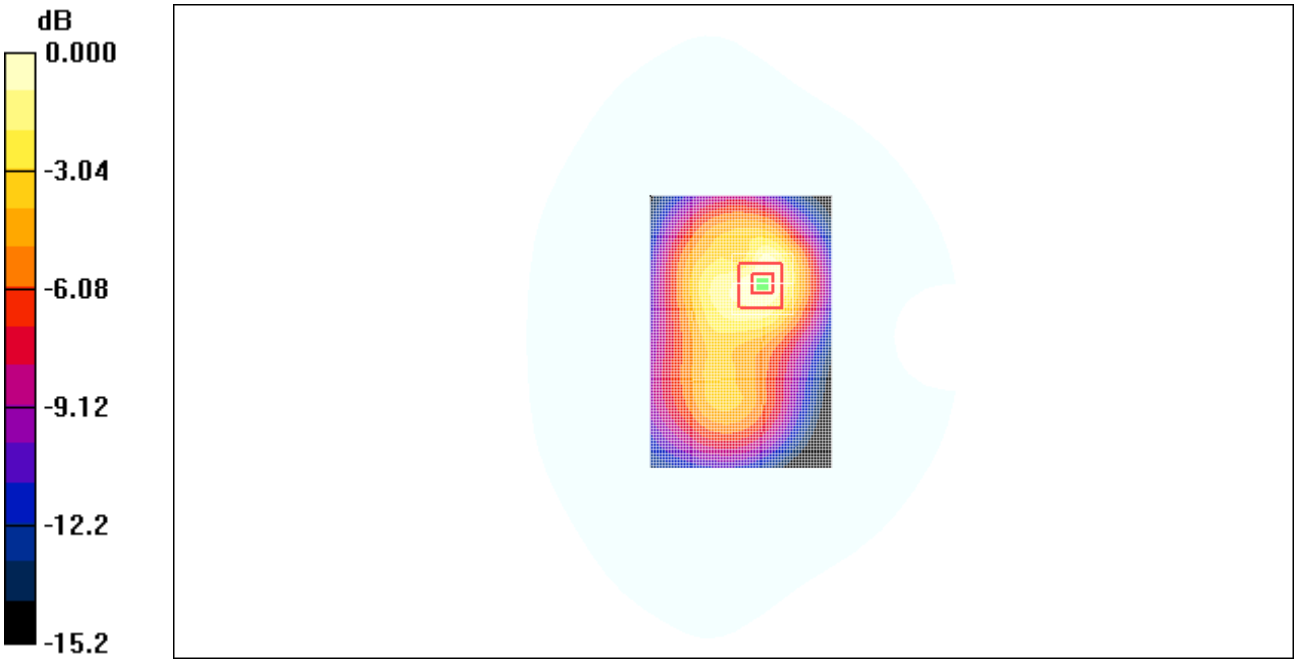
**Fig. 57 CDMA 1900 MHz CH600 – Slide down**

**CDMA 1900 MHz Body Toward Ground Low – Slide down**

Date/Time: 2009-5-21 13:31:50
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used (interpolated): f = 1851.25 MHz; $\sigma$ = 1.53 mho/m; $\varepsilon_r$ = 52.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.591 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.8 V/m; Power Drift = -0.051 dB
Peak SAR (extrapolated) = 0.835 W/kg
SAR(1 g) = 0.508 mW/g; SAR(10 g) = 0.298 mW/g
Maximum value of SAR (measured) = 0.555 mW/g




0 dB = 0.555mW/g

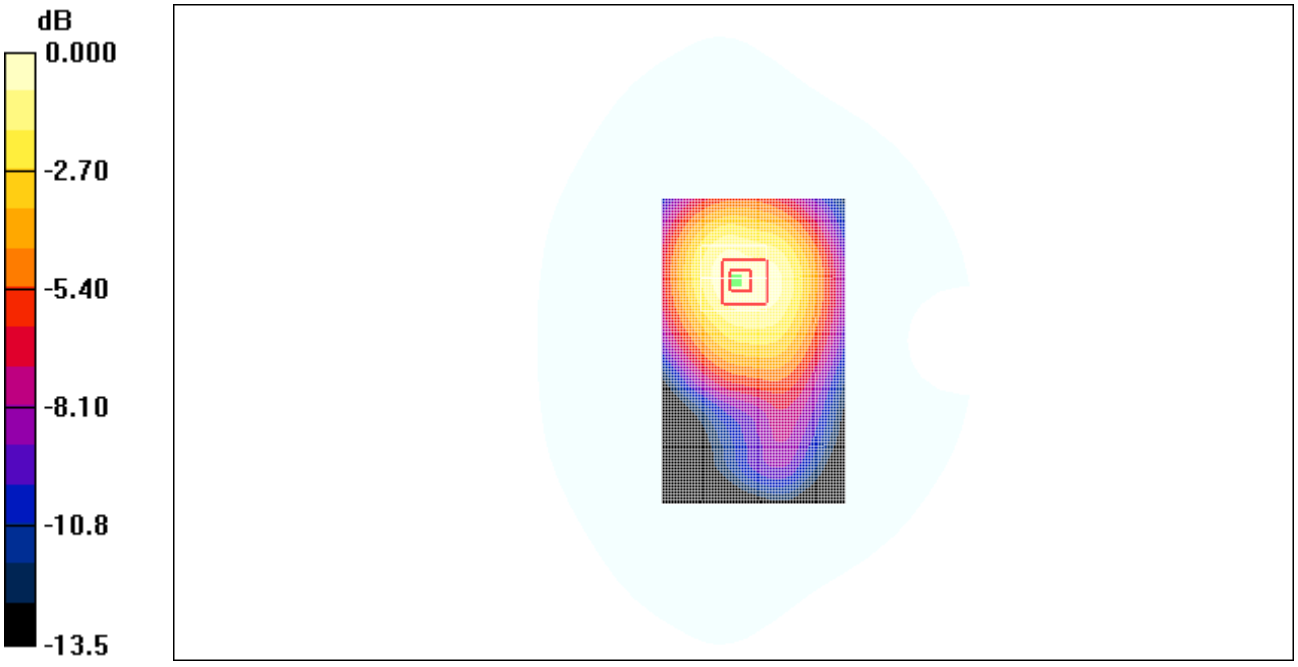
**Fig. 58 CDMA 1900 MHz CH25 – Slide down**

**CDMA 1900 MHz Body Toward Phantom High – Slide up**

Date/Time: 2009-5-21 13:45:41
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used (interpolated): f = 1908.75 MHz; $\sigma$ = 1.56 mho/m; $\varepsilon_r$ = 52.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.281 mW/g

Toward Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = -0.198 dB
Peak SAR (extrapolated) = 0.427 W/kg
SAR(1 g) = 0.262 mW/g; SAR(10 g) = 0.164 mW/g
Maximum value of SAR (measured) = 0.282 mW/g




0 dB = 0.282mW/g

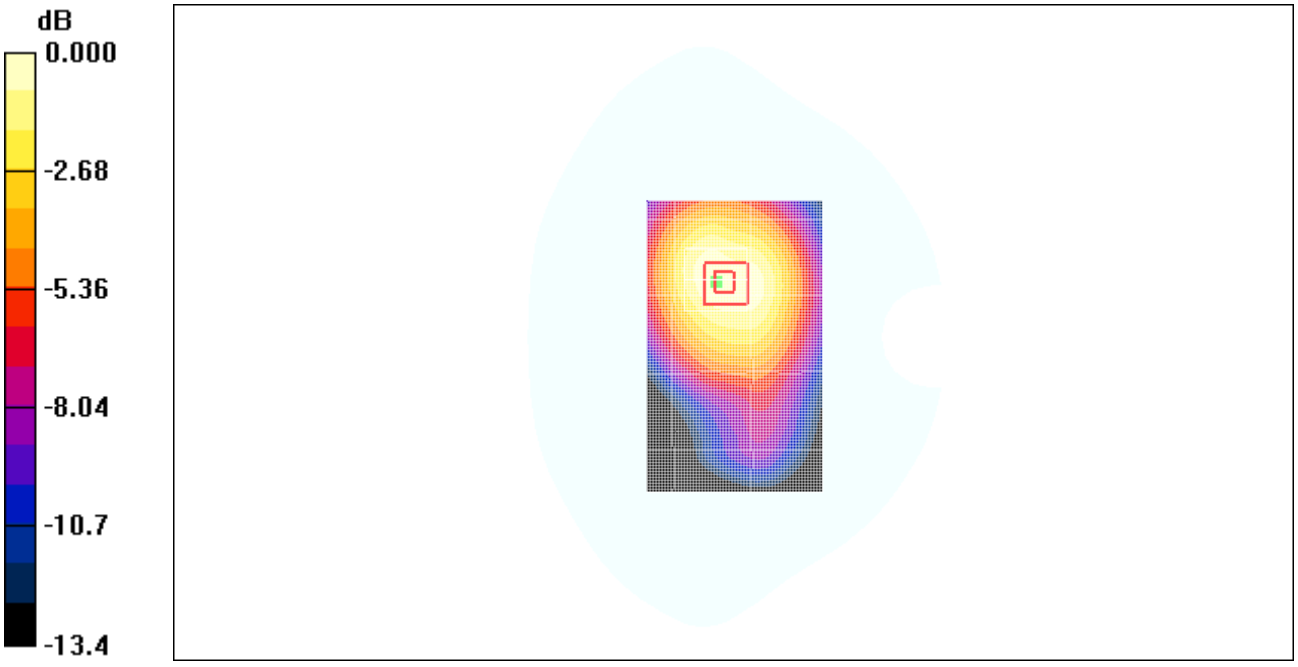
**Fig. 59 CDMA 1900 MHz CH1175 – Slide up**

**CDMA 1900 MHz Body Toward Phantom Middle – Slide up**

Date/Time: 2009-5-21 13:59:28
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.54 mho/m; $\varepsilon_r$ = 52.4; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.267 mW/g

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.3 V/m; Power Drift = 0.055 dB
Peak SAR (extrapolated) = 0.401 W/kg
SAR(1 g) = 0.250 mW/g; SAR(10 g) = 0.159 mW/g
Maximum value of SAR (measured) = 0.267 mW/g




0 dB = 0.267mW/g

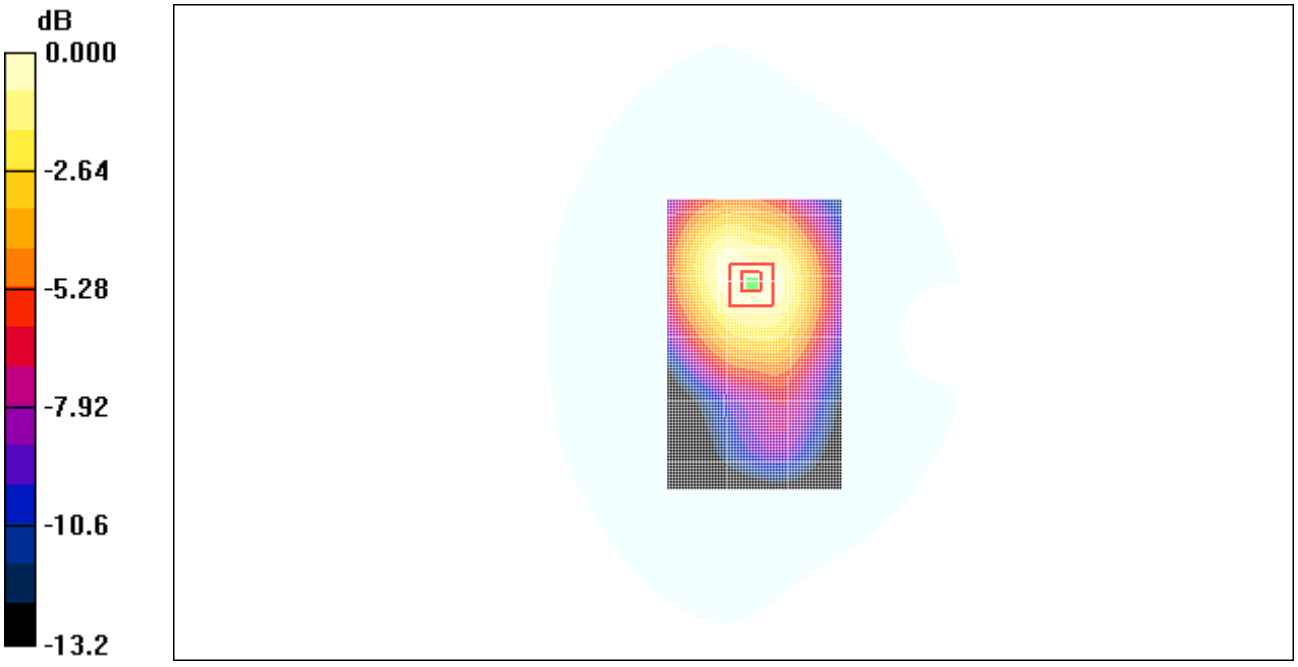
**Fig. 60 CDMA 1900 MHz CH600 – Slide up**

**CDMA 1900 MHz Body Toward Phantom Low – Slide up**

Date/Time: 2009-5-21 14:13:04
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used (interpolated): f = 1851.25 MHz; $\sigma$ = 1.53 mho/m; $\varepsilon_r$ = 52.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Phantom Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.290 mW/g

Toward Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.9 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 0.437 W/kg
SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.173 mW/g
Maximum value of SAR (measured) = 0.293 mW/g




0 dB = 0.293mW/g

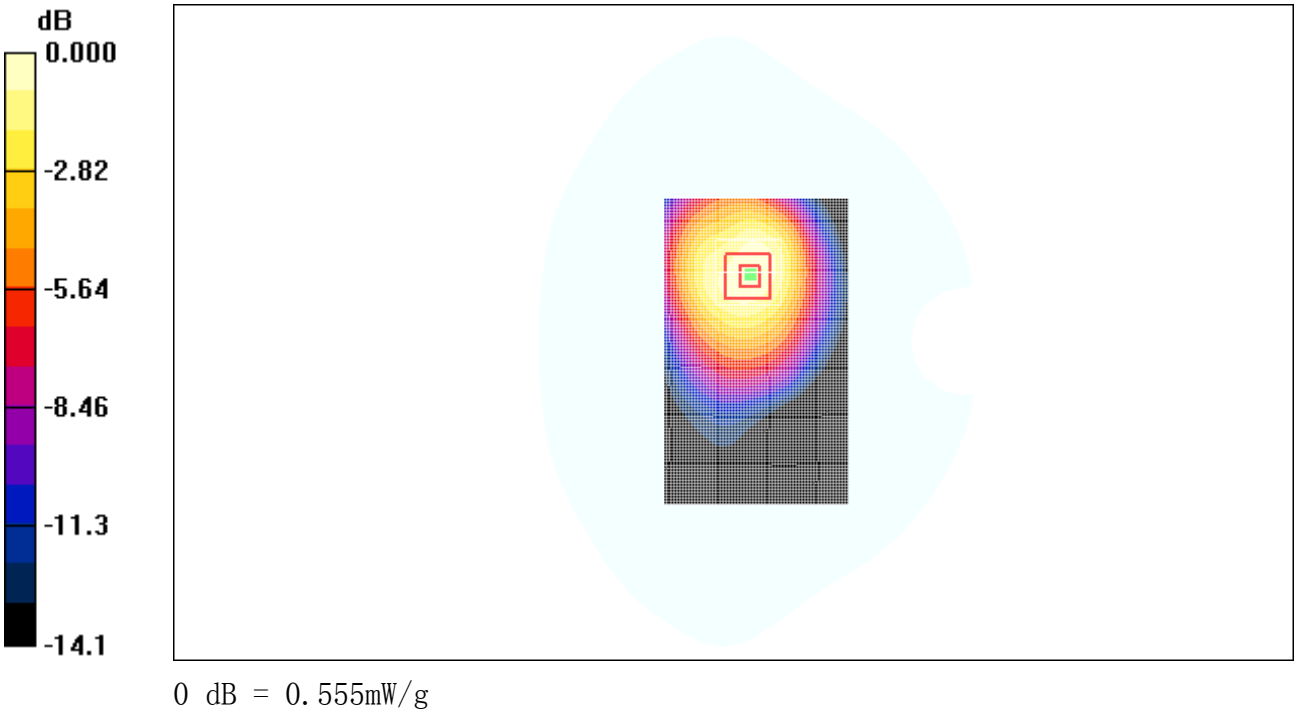
**Fig. 61 CDMA 1900 MHz CH25 – Slide up**

**CDMA 1900 MHz Body Toward Ground High – Slide up**

Date/Time: 2009-5-21 14:27:36
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used (interpolated): f = 1908.75 MHz; $\sigma$ = 1.56 mho/m; $\varepsilon_r$ = 52.3; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1908.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground High/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.555 mW/g

Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.9 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 0.843 W/kg
SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.317 mW/g
Maximum value of SAR (measured) = 0.555 mW/g




0 dB = 0.555mW/g

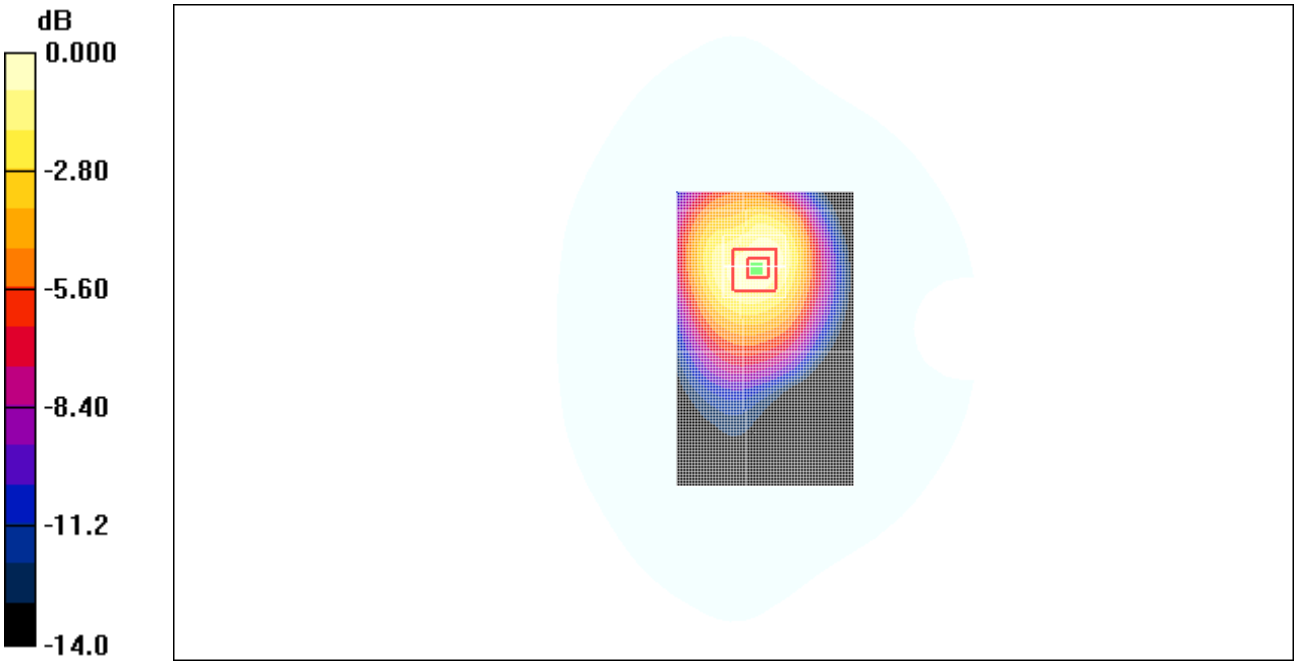
**Fig. 62 CDMA 1900 MHz CH1175 – Slide up**

**CDMA 1900 MHz Body Toward Ground Middle – Slide up**

Date/Time: 2009-5-21 14:41:19
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.54 mho/m; $\varepsilon_r$ = 52.4; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.515 mW/g

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.3 V/m; Power Drift = 0.040 dB
Peak SAR (extrapolated) = 0.791 W/kg
SAR(1 g) = 0.486 mW/g; SAR(10 g) = 0.298 mW/g
Maximum value of SAR (measured) = 0.525 mW/g




0 dB = 0.525mW/g

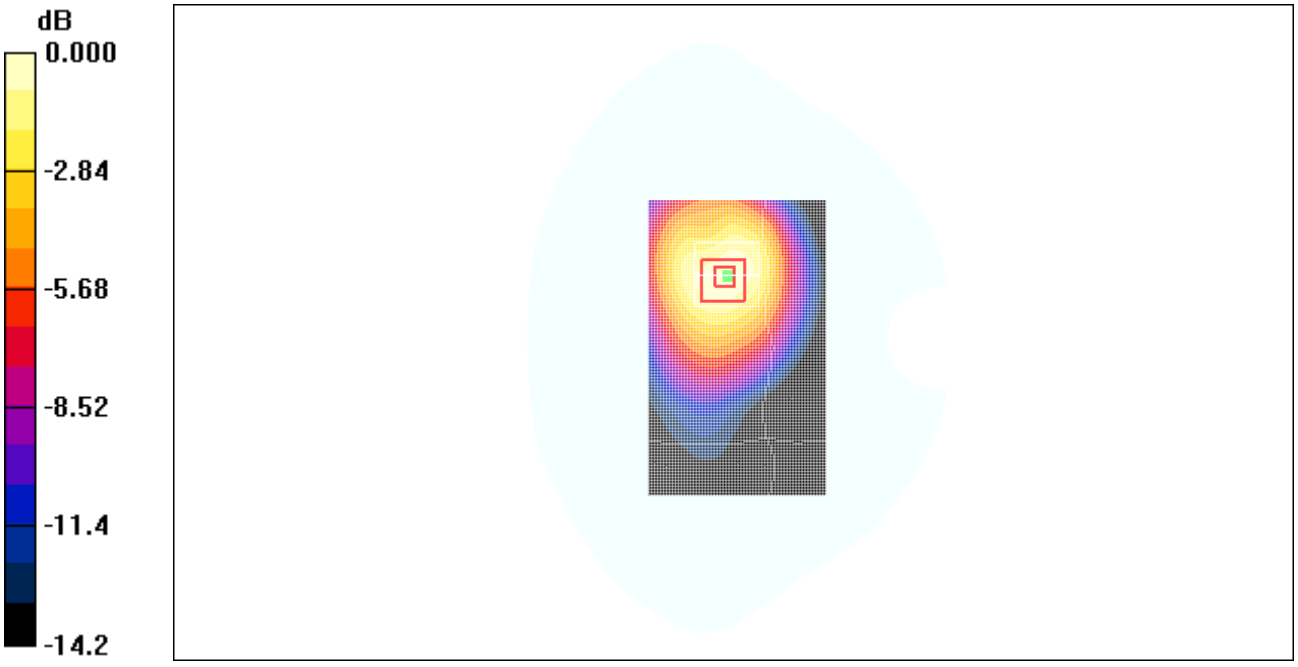
**Fig. 63 CDMA 1900 MHz CH600 – Slide up**

**CDMA 1900 MHz Body Toward Ground Low – Slide up**

Date/Time: 2009-5-21 14:55:34
Electronics: DAE4 Sn771
Medium: Body 1900
Medium parameters used (interpolated): f = 1851.25 MHz; $\sigma$ = 1.53 mho/m; $\varepsilon_r$ = 52.4; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1900 Frequency: 1851.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(4.68, 4.68, 4.68)

Toward Ground Low/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.550 mW/g

Toward Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = -0.001 dB
Peak SAR (extrapolated) = 0.853 W/kg
SAR(1 g) = 0.524 mW/g; SAR(10 g) = 0.322 mW/g
Maximum value of SAR (measured) = 0.569 mW/g




0 dB = 0.569mW/g

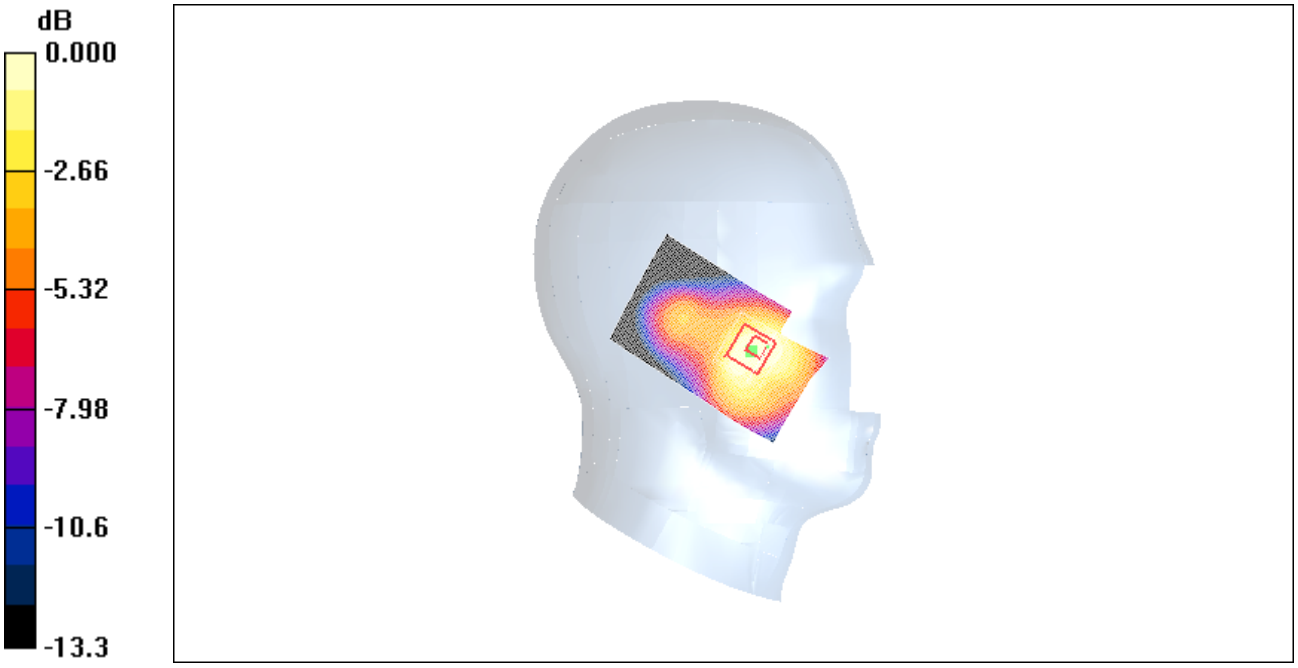
**Fig. 64 CDMA 1900 MHz CH25 – Slide up**

**AWS 1700 Left Cheek High – Slide down**

Date/Time: 2009-5-22 7:56:40
Electronics: DAE4 Sn771
Medium: Head 1800
Medium parameters used (interpolated): f = 1753.75 MHz; $\sigma$ = 1.37 mho/m; $\varepsilon_r$ = 41.1; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1700 Frequency: 1753.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.18, 5.18, 5.18)

Cheek High/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.03 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.1 V/m; Power Drift = -0.120 dB
Peak SAR (extrapolated) = 1.38 W/kg
SAR(1 g) = 0.906 mW/g; SAR(10 g) = 0.580 mW/g
Maximum value of SAR (measured) = 0.956 mW/g




0 dB = 0.956mW/g

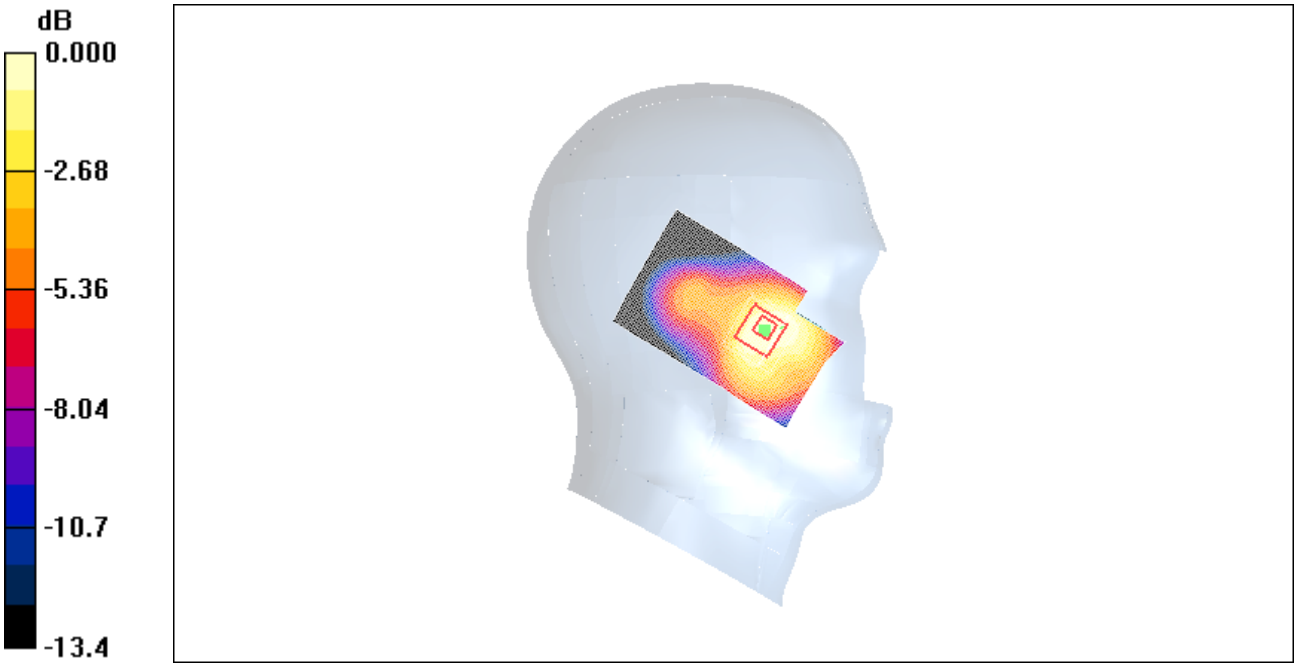
**Fig. 65 AWS 1700 MHz CH875 – Slide down**

**AWS 1700 Left Cheek Middle – Slide down**

Date/Time: 2009-5-22 8:10:24
Electronics: DAE4 Sn771
Medium: Head 1800
Medium parameters used (interpolated): f = 1732.5 MHz; $\sigma$ = 1.36 mho/m; $\varepsilon_r$ = 41.2; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1700 Frequency: 1732.5 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.18, 5.18, 5.18)

Cheek Middle/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.00 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = 0.043 dB
Peak SAR (extrapolated) = 1.32 W/kg
SAR(1 g) = 0.889 mW/g; SAR(10 g) = 0.575 mW/g
Maximum value of SAR (measured) = 0.937 mW/g




0 dB = 0.937mW/g

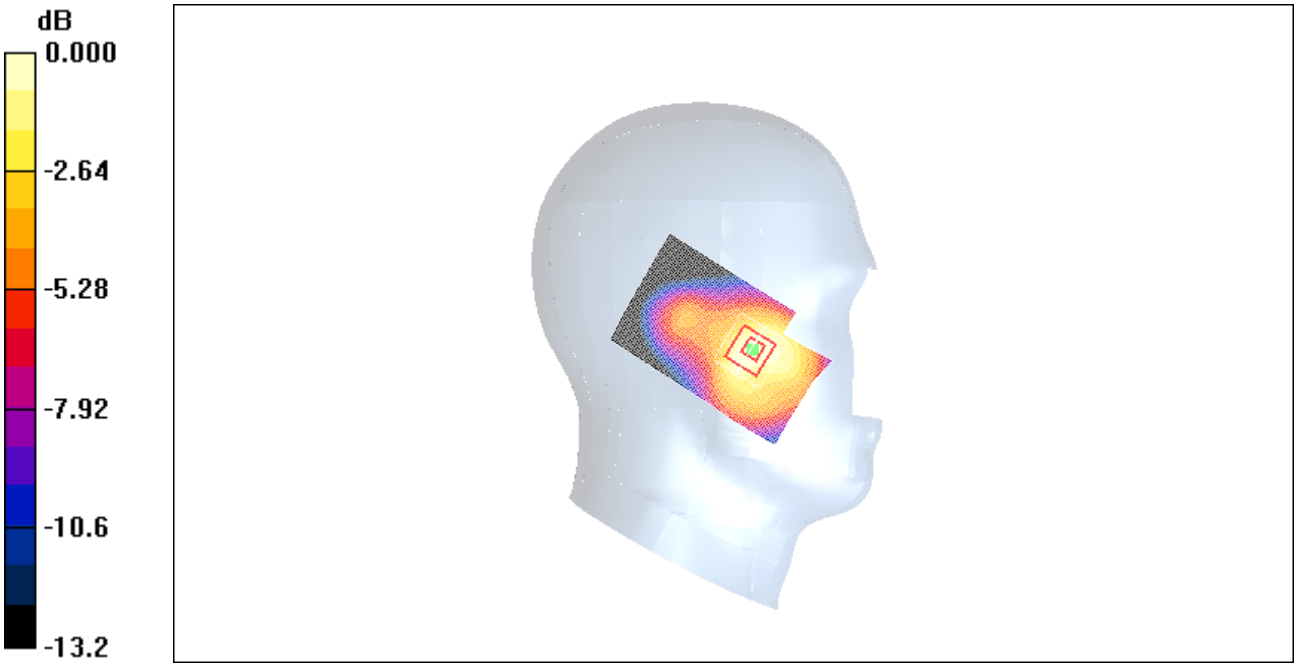
**Fig. 66 AWS 1700 MHz CH450 – Slide down**

**AWS 1700 Left Cheek Low – Slide down**

Date/Time: 2009-5-22 8:24:33
Electronics: DAE4 Sn771
Medium: Head 1800
Medium parameters used (interpolated): f = 1711.25 MHz; $\sigma$ = 1.34 mho/m; $\varepsilon_r$ = 41.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1700 Frequency: 1711.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.18, 5.18, 5.18)

Cheek Low/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.09 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.8 V/m; Power Drift = -0.199 dB
Peak SAR (extrapolated) = 1.46 W/kg
SAR(1 g) = 0.993 mW/g; SAR(10 g) = 0.639 mW/g
Maximum value of SAR (measured) = 1.07 mW/g




0 dB = 1.07mW/g

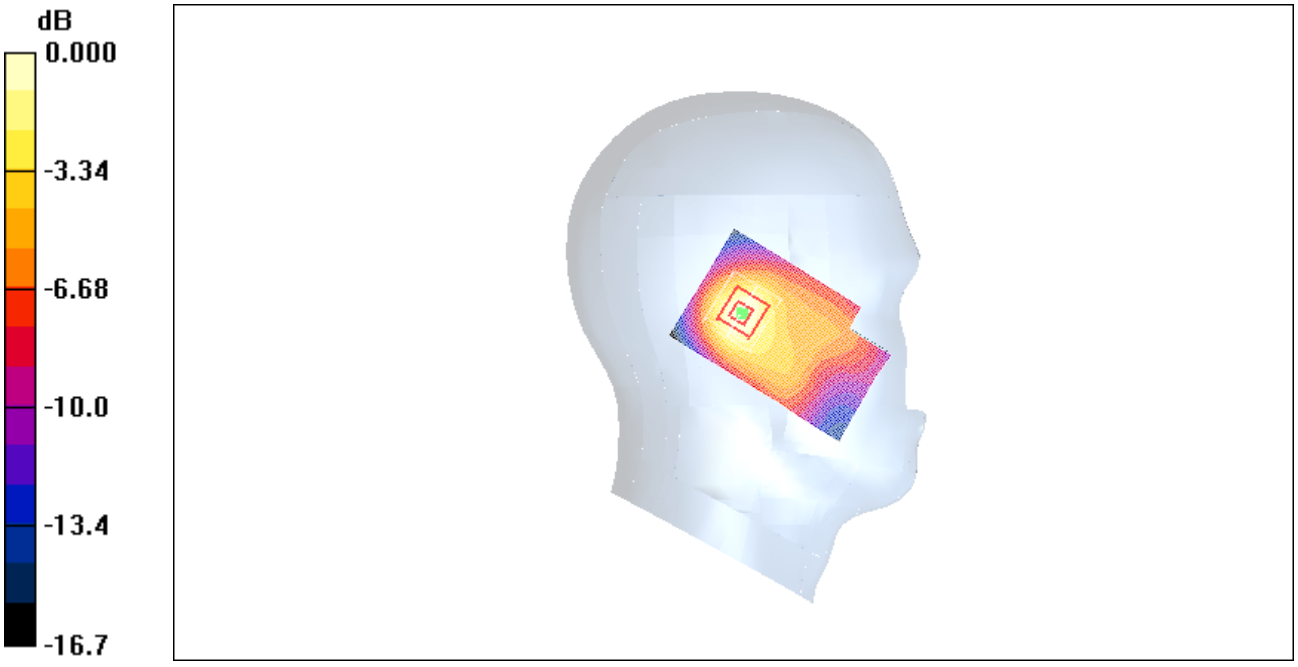
**Fig. 67 AWS 1700 MHz CH25 – Slide down**

**AWS 1700 Left Tilt High – Slide down**

Date/Time: 2009-5-22 8:38:16
Electronics: DAE4 Sn771
Medium: Head 1800
Medium parameters used (interpolated): f = 1753.75 MHz; $\sigma$ = 1.37 mho/m; $\varepsilon_r$ = 41.1; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1700 Frequency: 1753.75 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.18, 5.18, 5.18)

Tilt High/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.485 mW/g

Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.9 V/m; Power Drift = 0.087 dB
Peak SAR (extrapolated) = 0.670 W/kg
SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.263 mW/g
Maximum value of SAR (measured) = 0.483 mW/g




0 dB = 0.483mW/g

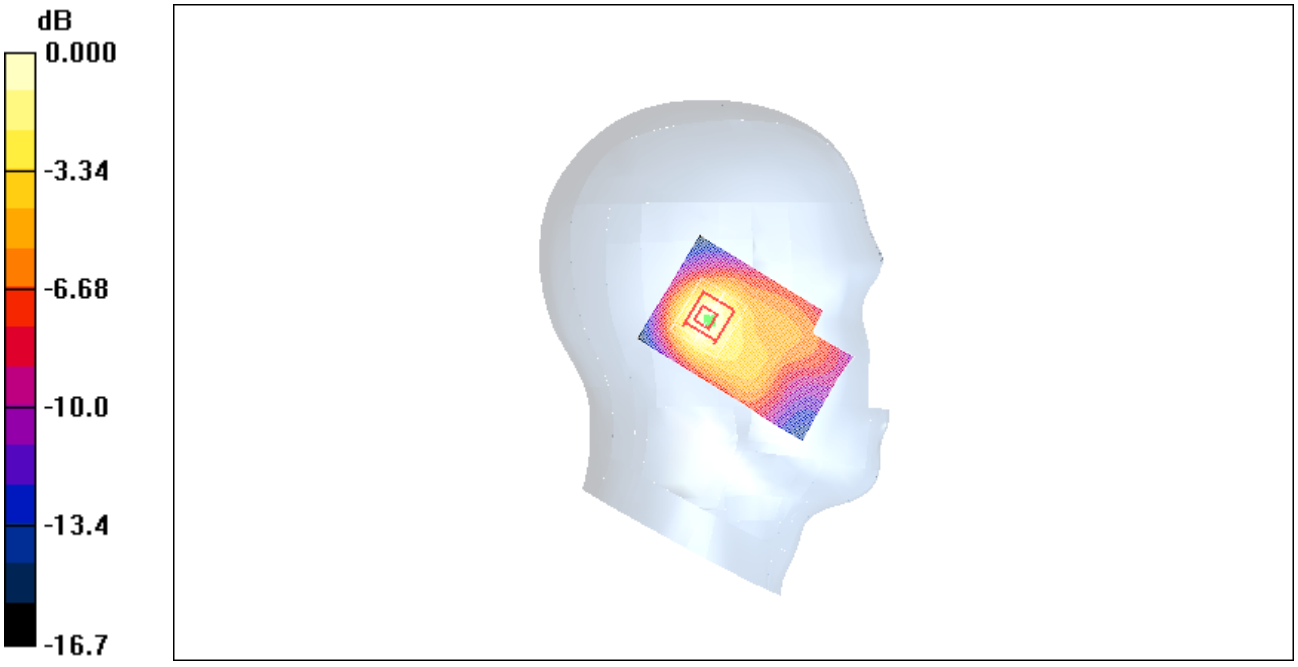
**Fig. 68 AWS 1700 MHz CH875 – Slide down**

**AWS 1700 Left Tilt Middle – Slide down**

Date/Time: 2009-5-22 8:52:29
Electronics: DAE4 Sn771
Medium: Head 1800
Medium parameters used (interpolated): f = 1732.5 MHz; $\sigma$ = 1.36 mho/m; $\varepsilon_r$ = 41.2; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1700 Frequency: 1732.5 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.18, 5.18, 5.18)

Tilt Middle/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.480 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.2 V/m; Power Drift = -0.098 dB
Peak SAR (extrapolated) = 0.663 W/kg
SAR(1 g) = 0.439 mW/g; SAR(10 g) = 0.268 mW/g
Maximum value of SAR (measured) = 0.477 mW/g




0 dB = 0.477mW/g

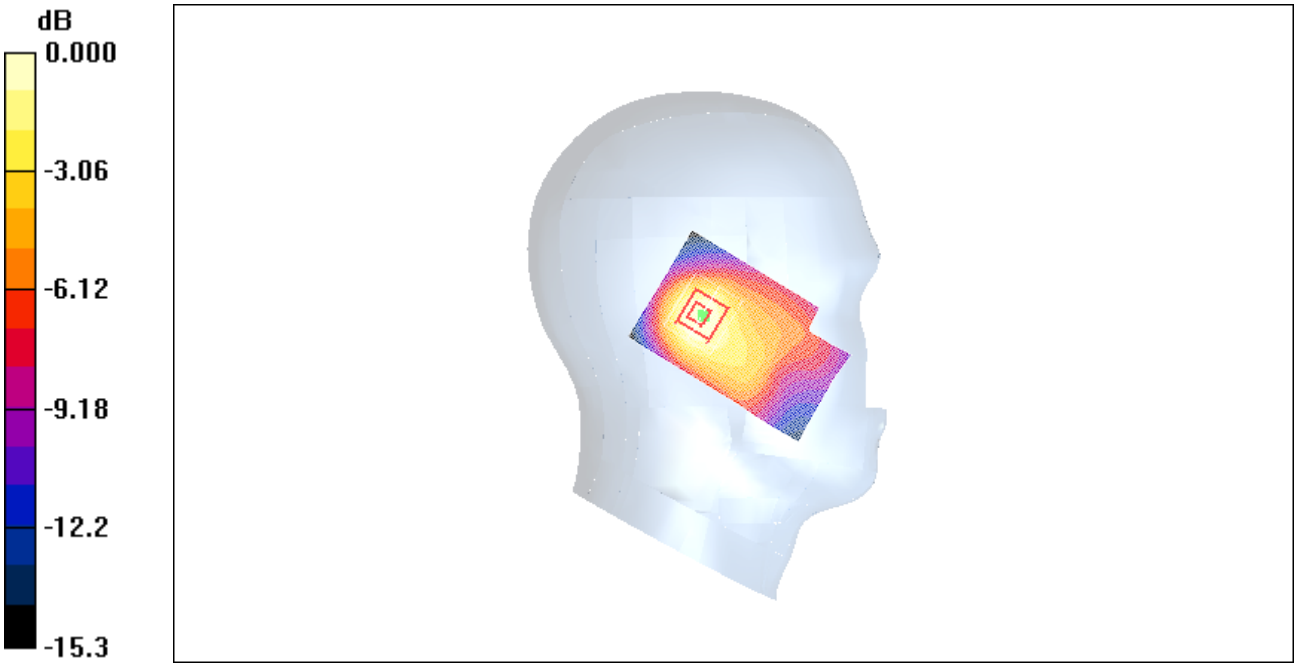
**Fig. 69 AWS 1700 MHz CH450 – Slide down**

**AWS 1700 Left Tilt Low – Slide down**

Date/Time: 2009-5-22 9:06:41
Electronics: DAE4 Sn771
Medium: Head 1800
Medium parameters used (interpolated): f = 1711.25 MHz; $\sigma$ = 1.34 mho/m; $\varepsilon_r$ = 41.3; $\rho$ = 1000 kg/$m^3$
Ambient Temperature:23.3°C Liqiud Temperature: 22.5°C
Communication System: CDMA 1700 Frequency: 1711.25 MHz Duty Cycle: 1:1
Probe: ES3DV3 - SN3149 ConvF(5.18, 5.18, 5.18)

Tilt Low/Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.496 mW/g

Tilt Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.7 V/m; Power Drift = 0.057 dB
Peak SAR (extrapolated) = 0.665 W/kg
SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.284 mW/g
Maximum value of SAR (measured) = 0.482 mW/g




0 dB = 0.482mW/g

**Fig. 70 AWS 1700 MHz CH25 – Slide down**