Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.8 Ω + 4.4 jΩ
Return Loss	- 27.2 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	52.3 Ω + 1.5 jΩ
Return Loss	- 31.4 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.162 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	November 10, 2009

DASY5 Validation Report for Head TSL

Date: 24.07.2015

Test Laboratory: SPEAG, Zurich, Switzerland

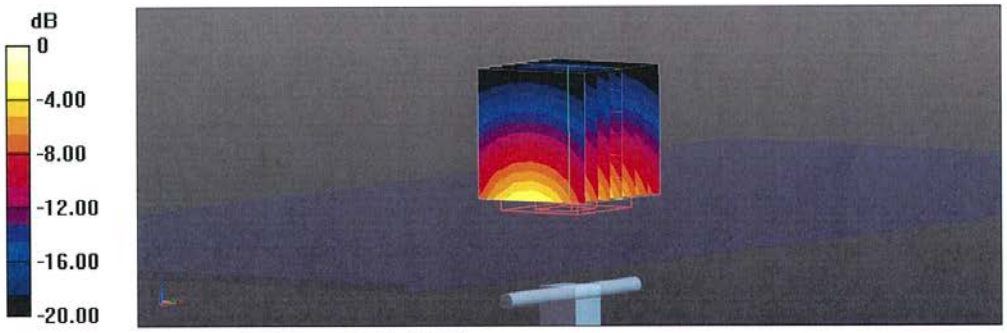
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:853

Communication System: UID 0 - CW; Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 1.88 S/m; ε_r = 37.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

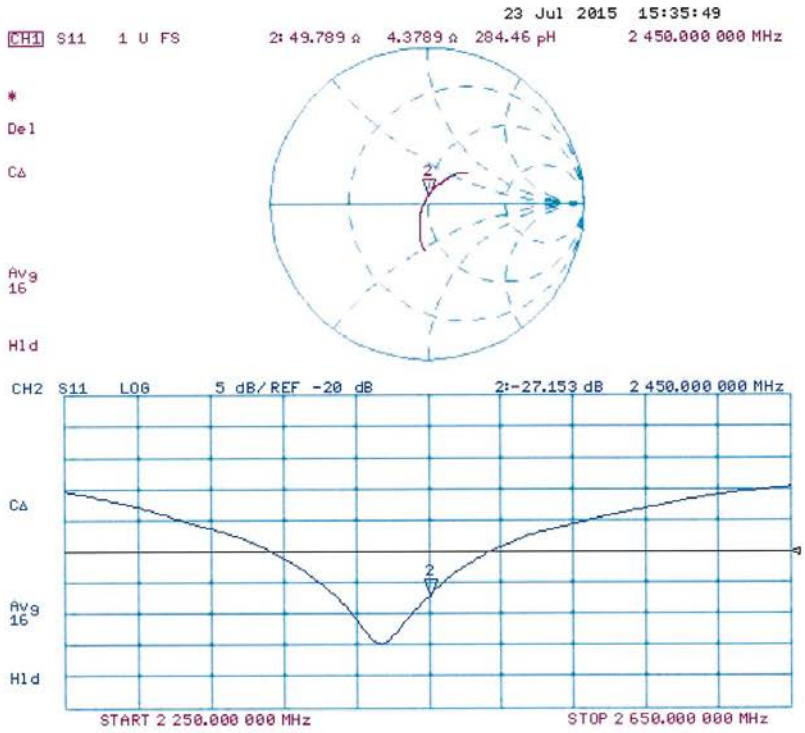
- Probe: ES3DV3 - SN3205; ConvF(4.54, 4.54, 4.54); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 18.08.2014
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 100.4 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 27.9 W/kg
SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.24 W/kg
Maximum value of SAR (measured) = 17.7 W/kg



0 dB = 17.7 W/kg = 12.48 dBW/kg

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 24.07.2015

Test Laboratory: SPEAG, Zurich, Switzerland

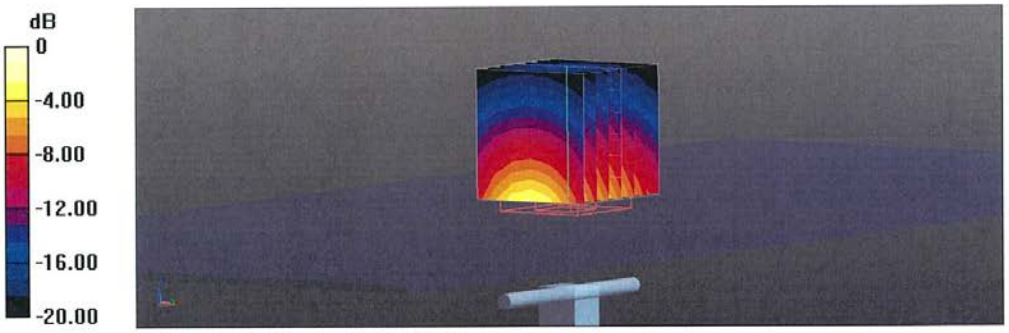
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:853

Communication System: UID 0 - CW; Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 2.03 S/m; ε_r = 52.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

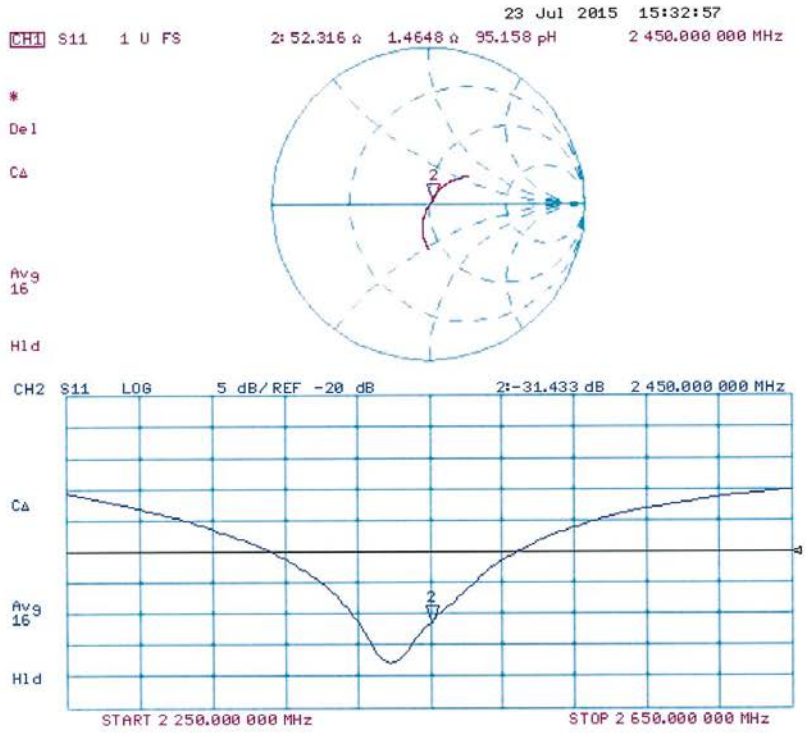
- Probe: ES3DV3 - SN3205; ConvF(4.32, 4.32, 4.32); Calibrated: 30.12.2014;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 18.08.2014
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.79 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 27.5 W/kg
SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.16 W/kg
Maximum value of SAR (measured) = 17.6 W/kg



0 dB = 17.6 W/kg = 12.46 dBW/kg

Impedance Measurement Plot for Body TSL



ANNEX I SPOT CHECK TEST

As the test lab for 5010E from TCL Communication Ltd, we, CTTL (Shouxiang), declare on our sole responsibility that, according to "Declaration of changes" provided by applicant, only the Spot check test should be performed. The test results are as below.

I.1 The evaluation of multi-SIM cards

Table I.1-1: The evaluation of multi-SIM cards for Head Test

Frequency		Mode/Band	Side	Test Position	SIM card	SAR(1g)	Power Drift(dB)
MHz	Ch.					(W/kg)	
848.8	251	GSM850	Right	Touch	SIM1	0.346	-0.02
848.8	251	GSM850	Right	Touch	SIM2	0.317	0.15

Note: According to the values in the above table, we'll perform the spot check of head with SIM1.

Table I.1-2: The evaluation of multi- SIM cards for Body Test

Frequency		Mode/Band	Test Position	Spacing (mm)	SIM card	SAR(1g)	Power Drift(dB)
MHz	Ch.					(W/kg)	
846.6	4233	WCDMA850	Rear	10	SIM1	0.467	0.12
846.6	4233	WCDMA850	Rear	10	SIM2	0.458	-0.10

Note: According to the values in the above table, we'll perform the spot check of head with SIM1.

I.2 Conducted power of selected case

Table I.2-1: The conducted power results for GSM850/1900

GSM 850MHz	Conducted Power (dBm)		
	Channel 251(848.8MHz)	Channel 190(836.6MHz)	Channel 128(824.2MHz)
	31.62	\	\
GSM 1900MHz	Conducted Power (dBm)		
	Channel 810(1909.8MHz)	Channel 661(1880MHz)	Channel 512(1850.2MHz)
	\	28.93	\

Table I.2-2: The conducted power results for GPRS

GSM 850 GPRS (GMSK)	Measured Power (dBm)		
	251	190	128
2Txslots	30.87	\	\
PCS1900 GPRS (GMSK)	Measured Power (dBm)		
	810	661	512
3Txslots	26.38	\	\

Table I.2-3: The conducted Power for WCDMA

Item	band	FDDV result		
	ARFCN	4233 (846.6MHz)	4182 (836.4MHz)	4132 (826.4MHz)
WCDMA	\	22.80	\	\
Item	band	FDDII result		
	ARFCN	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)
WCDMA	\	\	22.84	\

Table I.2-4: The conducted Power for WLAN

802.11b(dBm)				
Channel\data rate	1Mbps	2Mbps	5.5Mbps	11Mbps
11(2462MHz)	\	\	16.70	\

I.3 Measurement results

Table I.3-1: SAR Values (GSM 850 MHz Band - Head)

Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.										
848.8	251	Right	Touch	Fig.I.1	31.62	32.6	0.289	**0.36**	0.369	**0.46**	-0.02

Table I.3-2: SAR Values (GSM 850 MHz Band - Body)

Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C											
Frequency		Mode (number of timeslots)	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
848.8	251	GPRS(2)	Rear	Fig.I.2	30.87	31.5	0.605	**0.70**	0.785	**0.91**	0.07

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table I.3-3: SAR Values (GSM 1900 MHz Band - Head)

Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.										
1880	661	Left	Touch	Fig.I.3	28.93	29.7	0.112	**0.13**	0.182	**0.22**	0.15

Table I.3-4: SAR Values (GSM 1900 MHz Band - Body)

Ambient Temperature: 22.5 °C Liquid Temperature: 22.0 °C											
Frequency		Mode (number of timeslots)	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
1909.8	810	GPRS(3)	Bottom	Fig.I.4	26.38	28	0.200	**0.29**	0.387	**0.56**	-0.17

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table I.3-5: SAR Values (WCDMA 850 MHz Band - Head)

Ambient Temperature: 22.5 °C Liquid Temperature: 22.0 °C											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.										
846.6	4233	Right	Touch	Fig.I.5	22.80	23.5	0.265	**0.31**	0.340	**0.40**	0.03

Table I.3-6: SAR Values (WCDMA 850 MHz Band - Body)

Ambient Temperature: 22.5 °C Liquid Temperature: 22.0 °C										
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.									
846.6	4233	Rear	Fig.I.6	22.80	23.5	0.387	**0.45**	0.504	**0.59**	0.12

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table I.3-7: SAR Values (WCDMA 1900 MHz Band - Head)

Ambient Temperature: 22.5 °C Liquid Temperature: 22.0 °C											
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.										
1880	9400	Left	Touch	Fig.I.7	22.84	23.5	0.175	**0.20**	0.283	**0.33**	0.12

Table I.3-8: SAR Values (WCDMA 1900 MHz Band - Body)

Ambient Temperature: 22.5 °C Liquid Temperature: 22.0 °C										
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.									
1880	9400	Bottom	Fig.I.8	22.84	23.5	0.176	**0.20**	0.330	**0.38**	-0.19

Note1: The distance between the EUT and the phantom bottom is 10mm.

I.4 WLAN Evaluation

Head Evaluation

Table I.4-1: SAR Values (WLAN - Head) – 802.11b 5.5Mbps (Full SAR)

Ambient Temperature: 22.5 °C		Liquid Temperature: 22.0 °C									
Frequency		Side	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift (dB)
MHz	Ch.										
2462	11	Left	Touch	Fig.I.9	16.70	17	0.026	**0.03**	0.061	**0.06**	0.14

Table I.4-2: SAR Values (WLAN - Head) – 802.11b 5.5Mbps (Scaled Reported SAR)

Ambient Temperature: 22.5 °C		Liquid Temperature: 22.0 °C					
Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.						
2462	11	Left	Touch	98.24%	100%	**0.06**	**0.06**

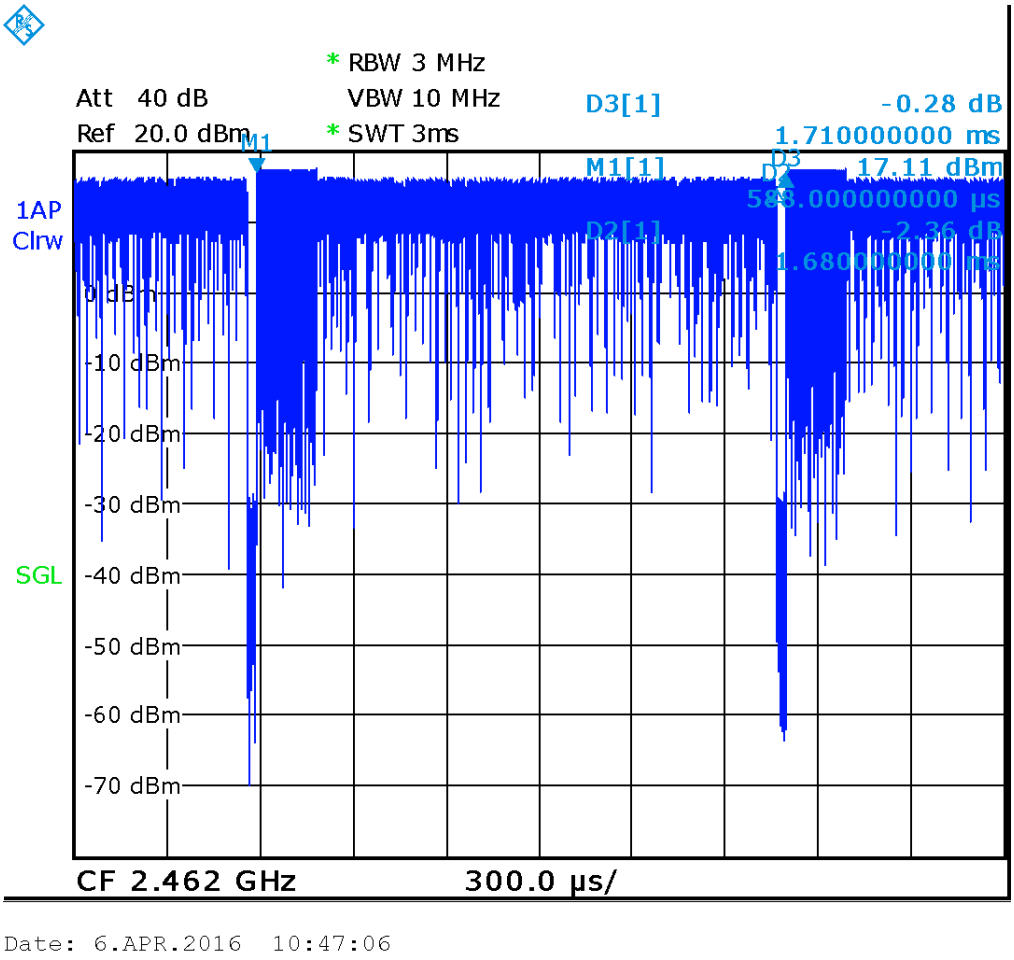
Body Evaluation

Table I.4-3: SAR Values (WLAN - Body) – 802.11b 5.5Mbps (Fast SAR)

Ambient Temperature: 22.0 °C		Liquid Temperature: 21.6 °C								
Frequency		Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(10g) (W/kg)	Reported SAR(10g) (W/kg)	Measured SAR(1g) (W/kg)	Reported SAR(1g)(W/kg)	Power Drift (dB)
MHz	Ch.									
2462	11	Rear	Fig.I.10	16.70	17	0.009	**0.01**	0.026	**0.03**	0.00

Table I.4-4: SAR Values (WLAN - Body) – 802.11b 5.5Mbps (Scaled Reported SAR)

Ambient Temperature: 22.5 °C		Liquid Temperature: 22.0 °C				
Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.					
2462	11	Rear	98.24%	100%	**0.03**	**0.03**



Picture I.1 The plot of duty factor for WLAN-2.4G

I.5 Reported SAR Comparison

Exposure Configuration	Technology Band	Reported SAR for **original** 1g (W/Kg)	Reported SAR for **spot check** 1g (W/Kg)
Head (Separation Distance 0mm)	GSM 850	0.48	0.46
	PCS 1900	**0.19**	**0.22**
	UMTS FDD 5	**0.36**	**0.40**
	UMTS FDD 2	0.37	0.33
	WLAN 2.4 GHz	0.07	0.06
Body-worn (Data) (Separation Distance 10mm)	GSM 850	0.96	0.91
	PCS 1900	0.85	0.56
	UMTS FDD 5	0.68	0.59
	UMTS FDD 2	0.51	0.38
	WLAN 2.4 GHz	0.05	0.03

Note: The spot check results of GSM 1900 (Head) & UMTS FDD5 (Head) is larger than the original results, the spot check results replace the original results and others are quoted.

I.6 GRAPH RESULTS OF SPOTCHECK

850 Right Cheek High

Date: 2016-3-21
Electronics: DAE4 Sn777
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.942 mho/m; εr = 41.123; ρ = 1000 kg/m^3
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C
Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3617 ConvF(9.56, 9.56, 9.56)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.395 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.998 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.447 W/kg
SAR(1 g) = 0.369 W/kg; SAR(10 g) = 0.289 W/kg
Maximum value of SAR (measured) = 0.397 W/kg

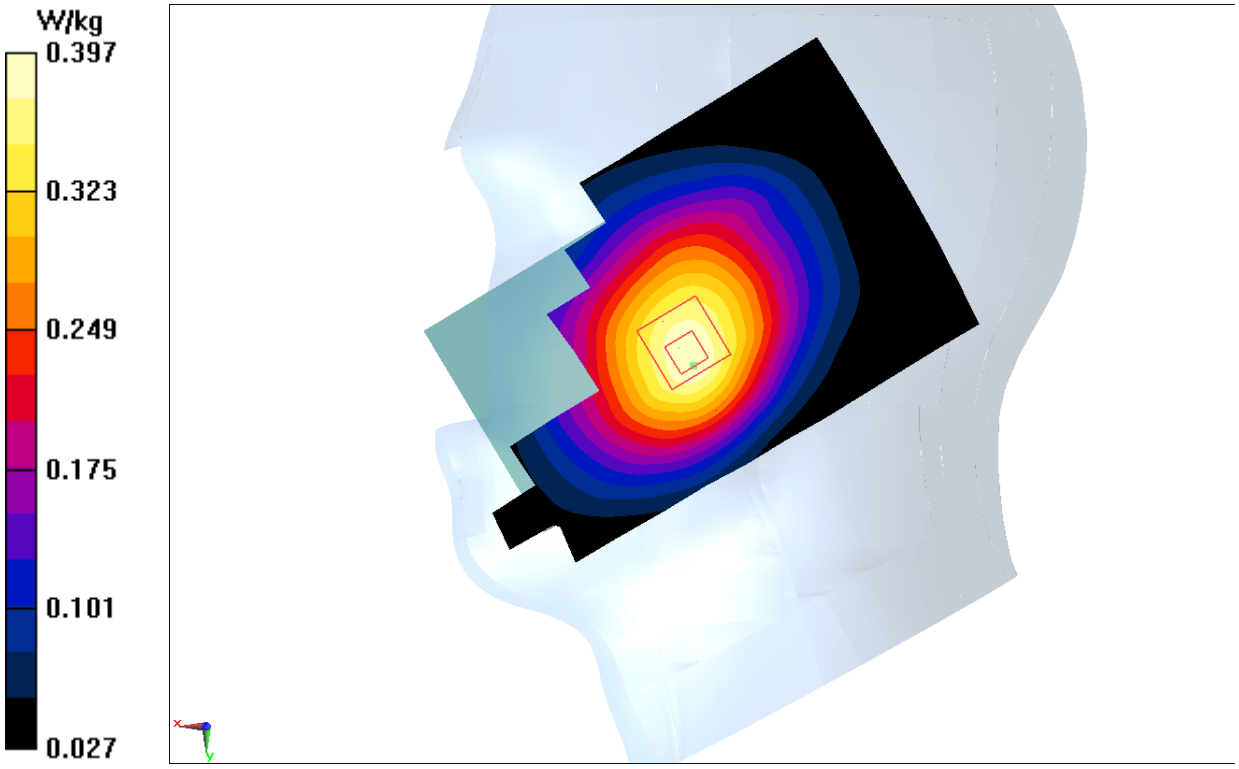


Fig.I.1 850MHz

850 Body Rear High

Date: 2016-3-21
Electronics: DAE4 Sn777
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.995 mho/m; εr = 56.154; ρ = 1000 kg/m^3
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C
Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:4
Probe: EX3DV4 - SN3617 ConvF(9.71, 9.71, 9.71)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.857 W/kg

Zoom Scan 2 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 27.07 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.995 W/kg
SAR(1 g) = 0.785 W/kg; SAR(10 g) = 0.605 W/kg
Maximum value of SAR (measured) = 0.859 W/kg

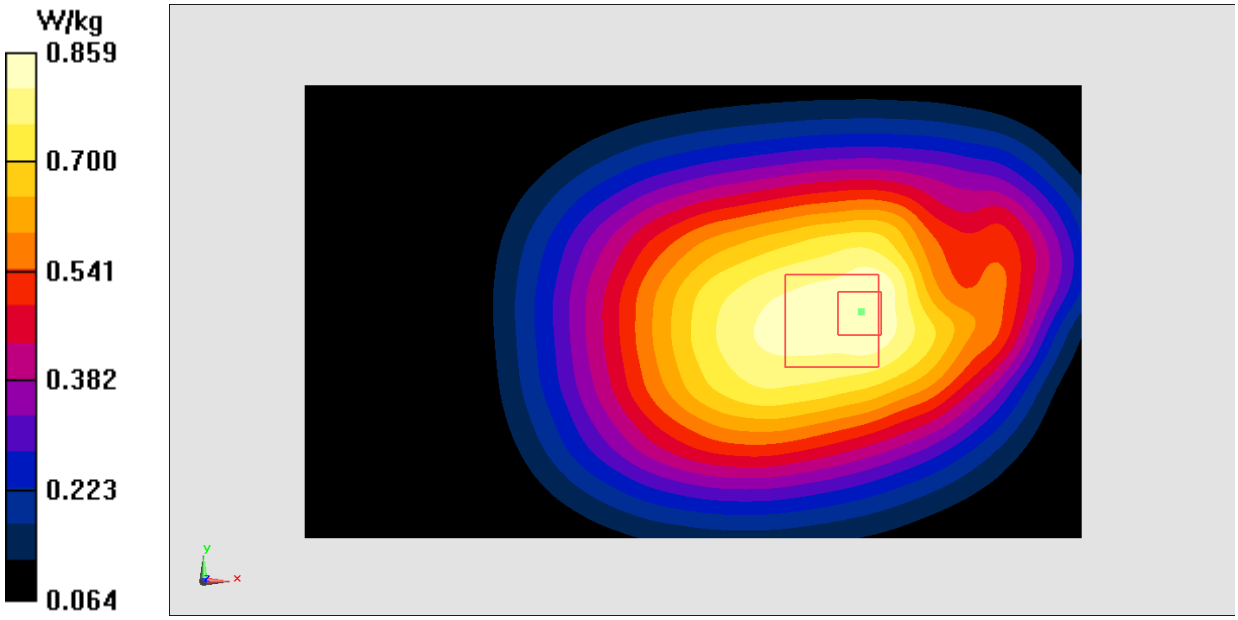


Fig.I.2 850 MHz

1900 Left Cheek Middle
Date: 2016-3-22
Electronics: DAE4 Sn777
Medium: Head 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.389 mho/m; εr = 40.332; ρ = 1000 kg/m^3
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C
Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:8.3
Probe: EX3DV4 - SN3617 ConvF(8.07, 8.07, 8.07)

Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.191 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.375 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 0.280 W/kg
SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.112 W/kg
Maximum value of SAR (measured) = 0.198 W/kg

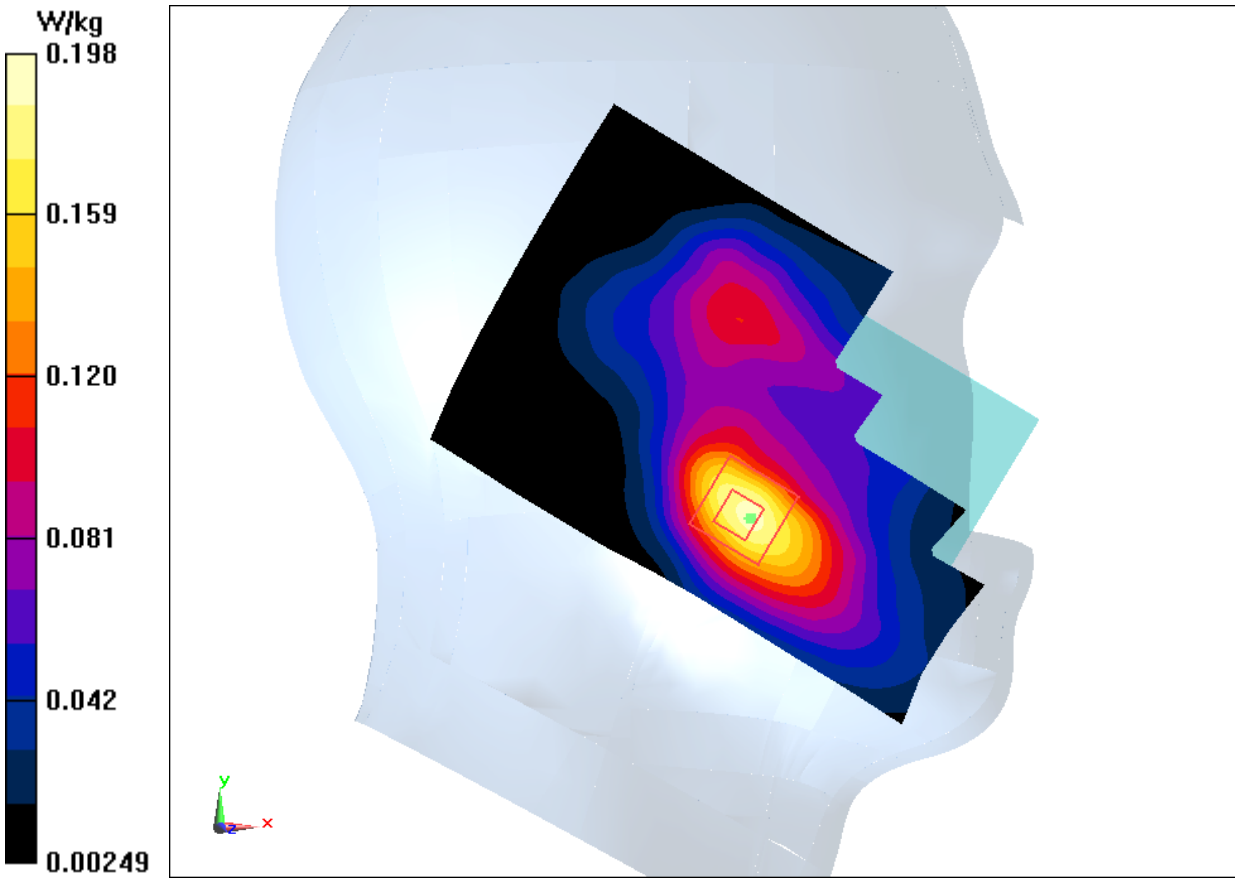


Fig.I.3 1900 MHz

1900 Body Bottom High

Date: 2016-3-22
Electronics: DAE4 Sn777
Medium: Body 1900 MHz
Medium parameters used: f = 1909.8 MHz; σ = 1.633 mho/m; εr = 39.573; ρ = 1000 kg/m^3
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C
Communication System: GSM 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:2.67
Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.477 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.76 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.669 W/kg
SAR(1 g) = 0.387 W/kg; SAR(10 g) = 0.200 W/kg
Maximum value of SAR (measured) = 0.492 W/kg

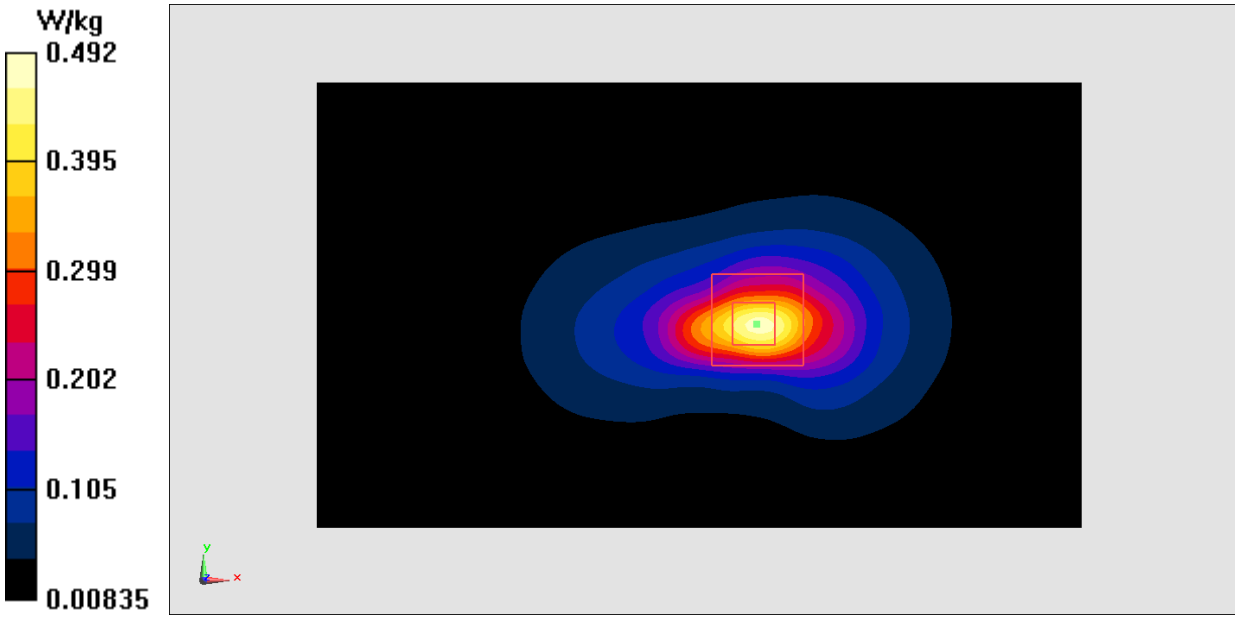


Fig.I.4 1900 MHz

WCDMA 850 Right Cheek High

Date: 2016-3-21
Electronics: DAE4 Sn777
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.911 mho/m; εr = 41.178; ρ = 1000 kg/m^3
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C
Communication System: WCDMA; Frequency: 846.6 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(9.56, 9.56, 9.56)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.380 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.934 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.417 W/kg
SAR(1 g) = 0.340 W/kg; SAR(10 g) = 0.265 W/kg
Maximum value of SAR (measured) = 0.367 W/kg

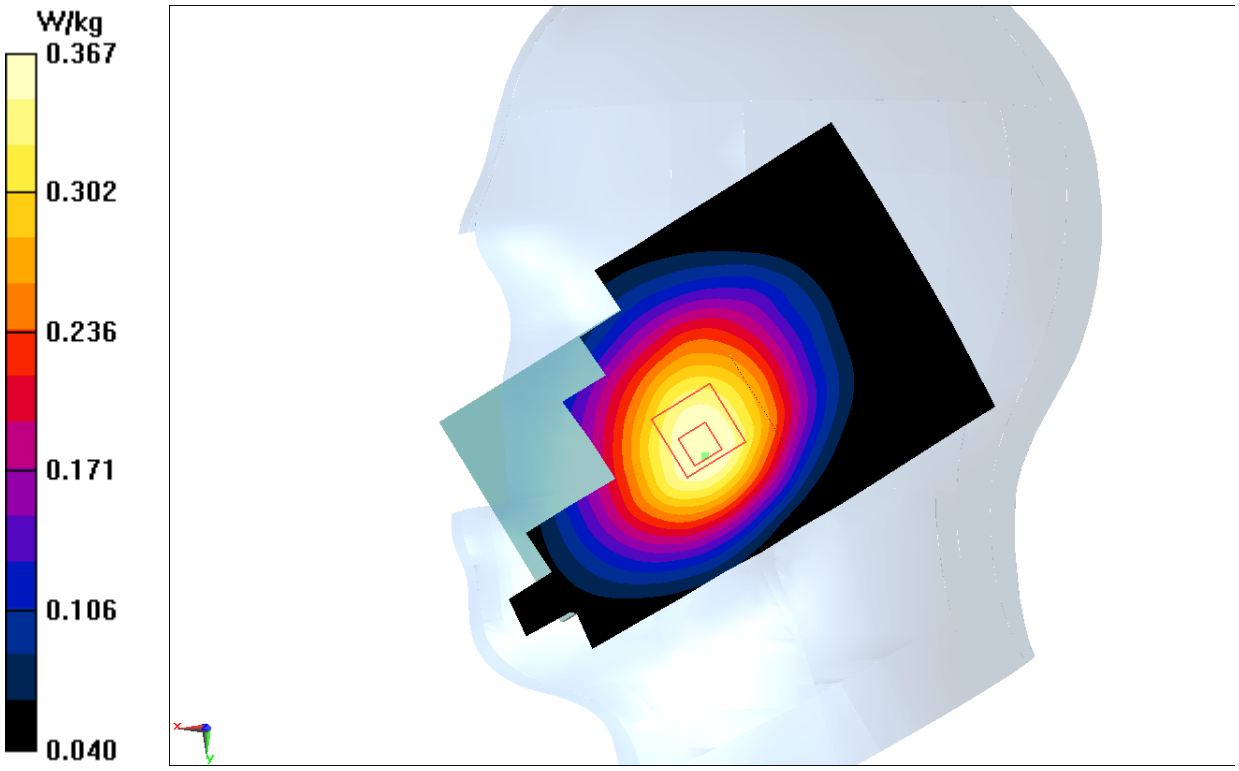


Fig.I.5 WCDMA 850

WCDMA 850 Body Rear High

Date: 2016-3-21
Electronics: DAE4 Sn777
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 846.6 MHz; σ = 0.984 mho/m; εr = 56.252; ρ = 1000 kg/m^3
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C
Communication System: WCDMA; Frequency: 846.6 MHz; Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(9.71, 9.71, 9.71)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.532 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.71 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.631 W/kg
SAR(1 g) = 0.504 W/kg; SAR(10 g) = 0.387 W/kg
Maximum value of SAR (measured) = 0.527 W/kg

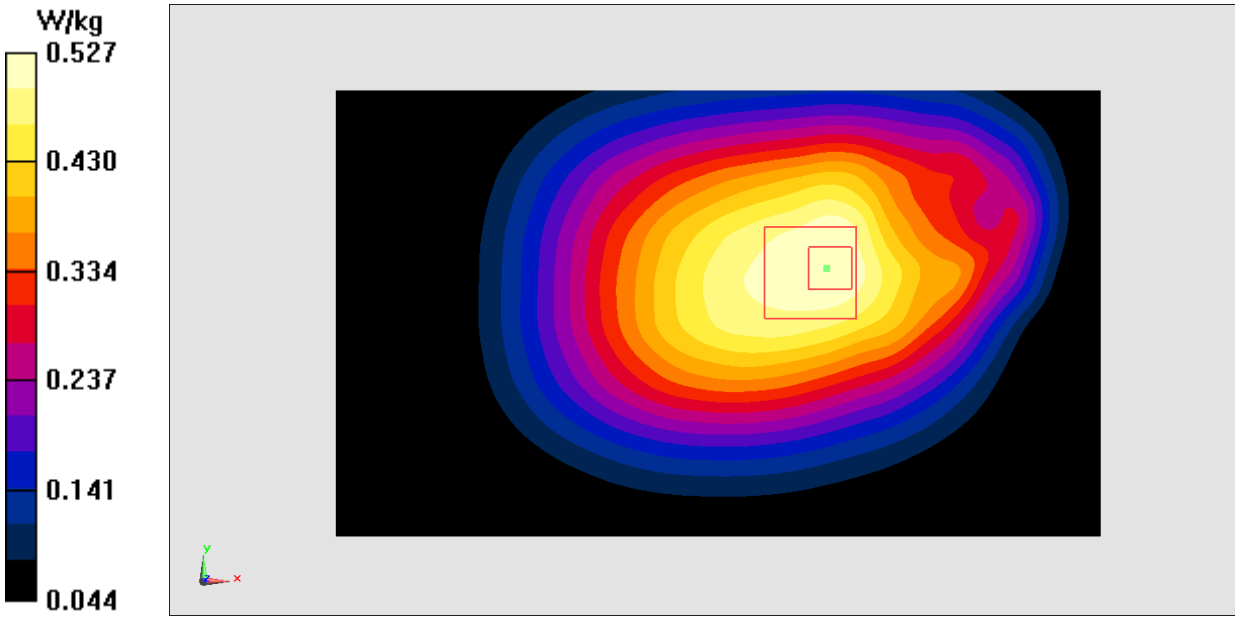


Fig.I.6 WCDMA 850

WCDMA 1900 Left Cheek Middle

Date: 2016-3-22
Electronics: DAE4 Sn777
Medium: Head 1900 MHz
Medium parameters used (interpolated): f = 1880 MHz; σ = 1.389 mho/m; εr = 40.332; ρ = 1000 kg/m^3
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C
Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(8.07, 8.07, 8.07)

Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.300 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.949 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.433 W/kg
SAR(1 g) = 0.283 W/kg; SAR(10 g) = 0.175 W/kg
Maximum value of SAR (measured) = 0.308 W/kg

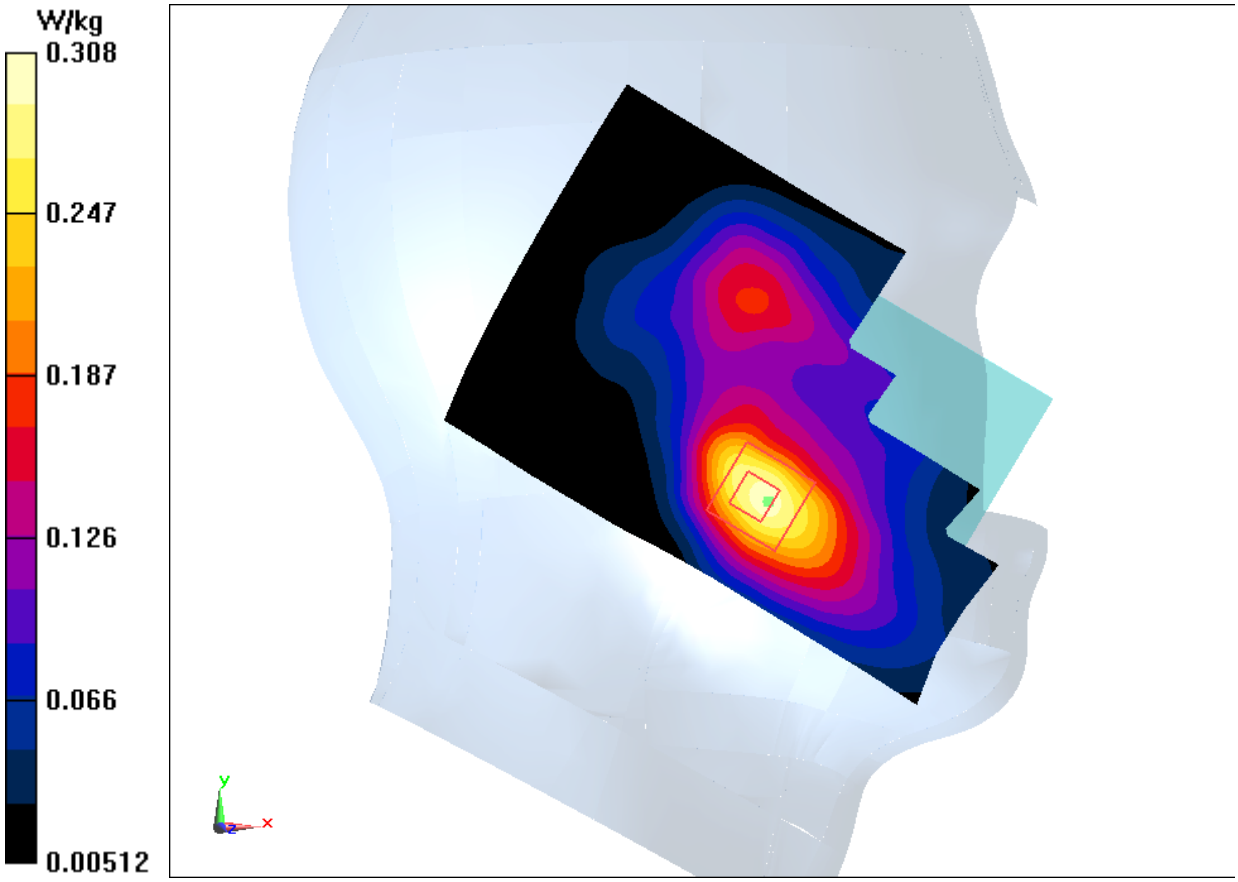


Fig.I.7 WCDMA1900

WCDMA 1900 Body Bottom Middle

Date: 2016-3-22
Electronics: DAE4 Sn777
Medium: Body 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.567 mho/m; εr = 54.235; ρ = 1000 kg/m^3
Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C
Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.412 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.11 V/m; Power Drift = -0.19 dB
Peak SAR (extrapolated) = 0.565 W/kg
SAR(1 g) = 0.330 W/kg; SAR(10 g) = 0.176 W/kg
Maximum value of SAR (measured) = 0.418 W/kg

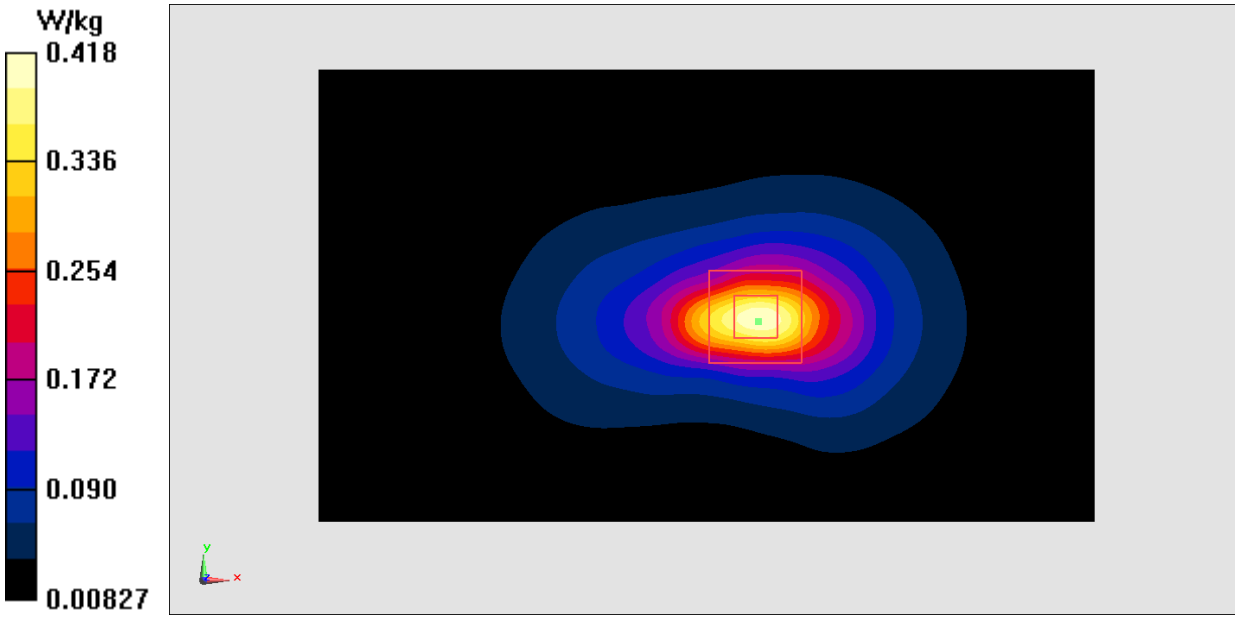


Fig.I.8 WCDMA1900

Wifi 802.11b Left Cheek Channel 11

Date: 2016-3-23
Electronics: DAE4 Sn777
Medium: Head 2450 MHz
Medium parameters used (interpolated): f = 2462 MHz; σ = 1.843 mho/m; ε_r = 38.357; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C
Communication System: WLan 2450 Frequency: 2462 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(7.24, 7.24, 7.24)

Area Scan (91x141x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.0652 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.308 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.163 W/kg
SAR(1 g) = 0.061 W/kg; SAR(10 g) = 0.026 W/kg
Maximum value of SAR (measured) = 0.0691 W/kg

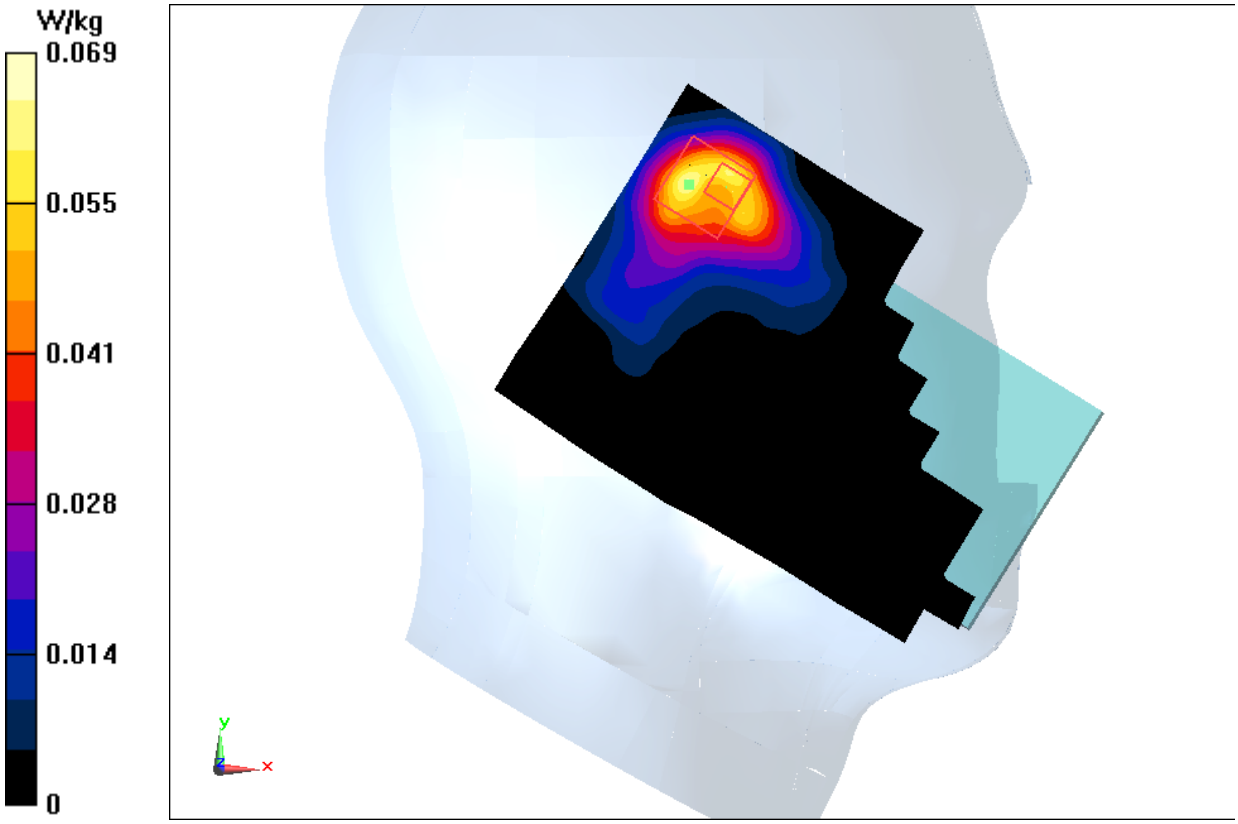


Fig.I.9 2450 MHz

Wifi 802.11b Body Rear Channel 11
Date: 2016-3-23
Electronics: DAE4 Sn777
Medium: Body 2450 MHz
Medium parameters used (interpolated): f = 2462 MHz; σ = 2.053 mho/m; ε_r = 51.245; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C
Communication System: WLan 2450 Frequency: 2462 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3617 ConvF(7.35, 7.35, 7.35)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.0436 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0 dB
Peak SAR (extrapolated) = 0.0940 W/kg
SAR(1 g) = 0.026 W/kg; SAR(10 g) = 0.00909 W/kg
Maximum value of SAR (measured) = 0.0390 W/kg

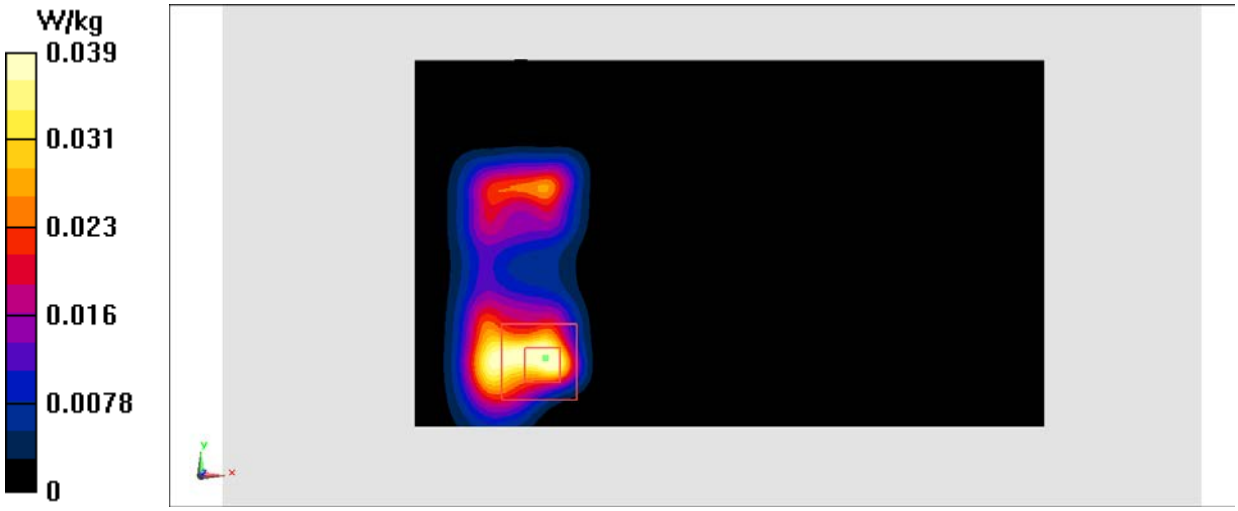


Fig.I.10 2450 MHz

ANNEX J Accreditation Certificate

China National Accreditation Service for Conformity Assessment

LABORATORY ACCREDITATION CERTIFICATE

(No. CNAS L0570)

Telecommunication Technology Labs,

Academy of Telecommunication Research, MIIT

No.52, Huayuan North Road, Haidian District, Beijing, China

No.51, Xueyuan Road, Haidian District, Beijing, China

to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing and calibration.

The scope of accreditation is detailed in the attached schedule bearing the same accreditation number as above. The schedule forms an integral part of this certificate.

Date of Issue: 2014-10-29

Date of Expiry: 2017-06-19

Date of Initial Accreditation: 1998-07-03

Signed on behalf of China National Accreditation Service for Conformity Assessment

China National Accreditation Service for Conformity Assessment (CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCA) to operate the national accreditation schemes for conformity assessment. CNAS is the signatory to International Laboratory Accreditation Cooperation Multilateral Recognition Arrangement (ILAC MRA) and Asia Pacific Laboratory Accreditation Cooperation Multilateral Recognition Arrangement (APLAC MRA).

No. CNAS AL 2

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