

### Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2600 MHz $\pm$ 1 MHz	

### Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	37.3 $\pm$ 6 %	2.05 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.7 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	57.1 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.62 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	26.0 W/kg $\pm$ 16.5 % (k=2)

### Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.5	2.16 mho/m
Measured Body TSL parameters	(22.0 $\pm$ 0.2) °C	51.9 $\pm$ 6 %	2.22 mho/m $\pm$ 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

### SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	14.3 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	56.4 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.40 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	25.4 W/kg $\pm$ 16.5 % (k=2)

**Appendix (Additional assessments outside the scope of SCS 0108)****Antenna Parameters with Head TSL**

Impedance, transformed to feed point	48.2 $\Omega$ - 5.4 j $\Omega$
Return Loss	- 24.8 dB

**Antenna Parameters with Body TSL**

Impedance, transformed to feed point	45.1 $\Omega$ - 4.0 j $\Omega$
Return Loss	- 23.5 dB

**General Antenna Parameters and Design**

Electrical Delay (one direction)	1.153 ns
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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	October 30, 2007

## DASY5 Validation Report for Head TSL

Date: 21.07.2015

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1012**

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.05$  S/m;  $\epsilon_r = 37.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(4.49, 4.49, 4.49); 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:

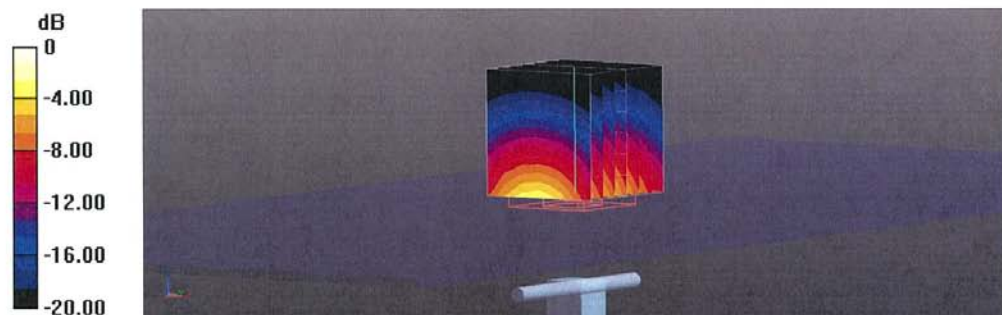
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 102.6 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 30.8 W/kg

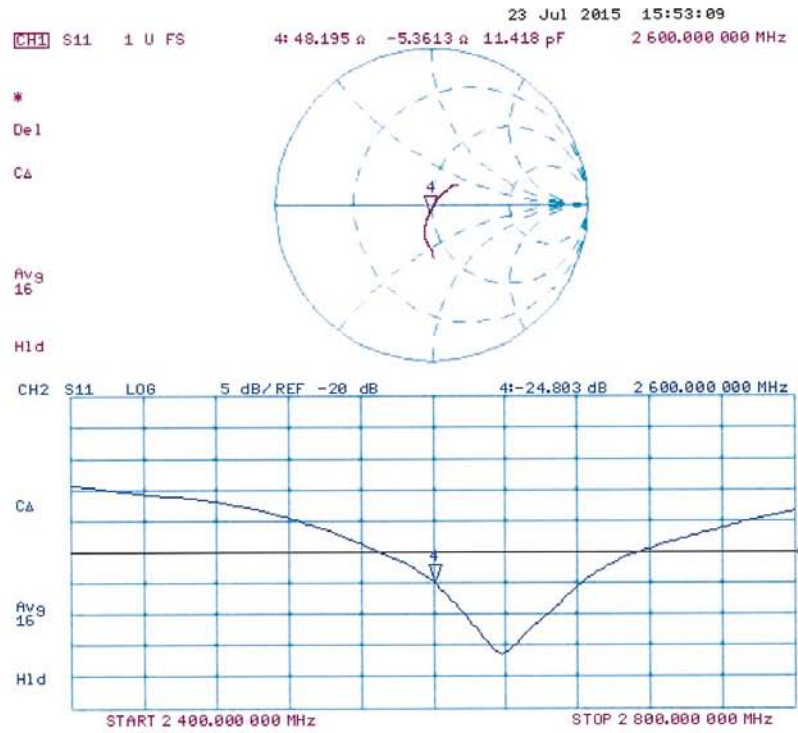
**SAR(1 g) = 14.7 W/kg; SAR(10 g) = 6.62 W/kg**

Maximum value of SAR (measured) = 19.6 W/kg



0 dB = 19.6 W/kg = 12.92 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 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1012**

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.22$  S/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(4.13, 4.13, 4.13); 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:

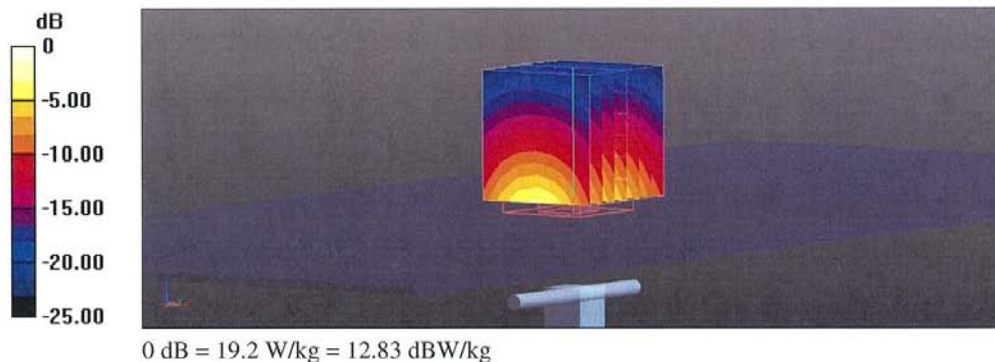
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.86 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 29.5 W/kg

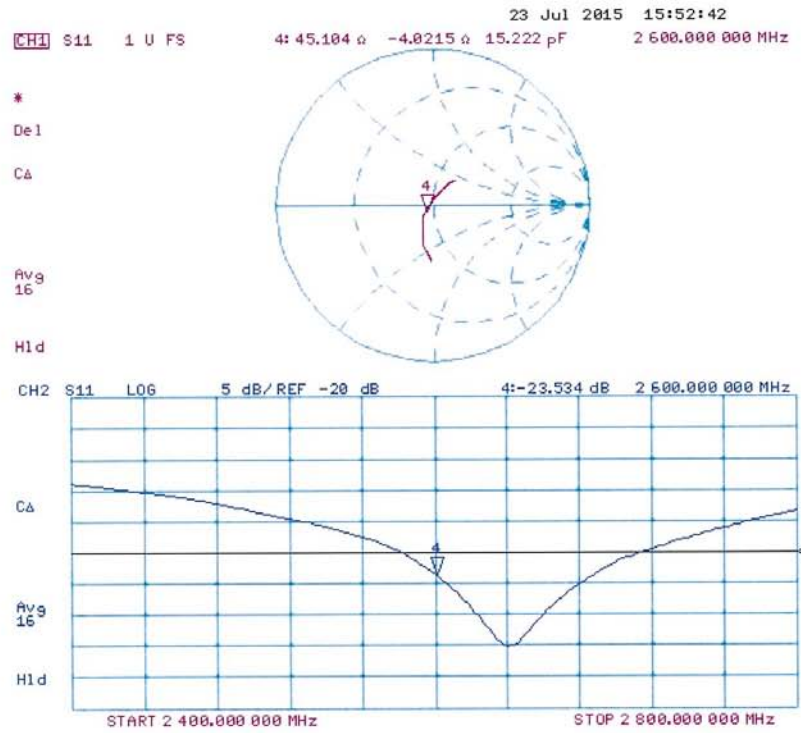
**SAR(1 g) = 14.3 W/kg; SAR(10 g) = 6.4 W/kg**

Maximum value of SAR (measured) = 19.2 W/kg





### Impedance Measurement Plot for Body TSL



## ANNEX I SPOT CHECK TEST

As the test lab for 5057M 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 Conducted power of selected case

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

GSM 850MHz	Conducted Power (dBm)		
	Channel 251(848.8MHz)	Channel 190(836.6MHz)	Channel 128(824.2MHz)
	\	32.28	\
GSM 1900MHz	Conducted Power (dBm)		
	Channel 810(1909.8MHz)	Channel 661(1880MHz)	Channel 512(1850.2MHz)
	\	\	29.76

**Table I.1-2: The conducted power results for GPRS**

GSM 850 GPRS (GMSK)	Measured Power (dBm)		
	251	190	128
4 Txslots	\	\	27.81
PCS1900 GPRS (GMSK)	Measured Power (dBm)		
	810	661	512
2 Txslots	28.23	\	\

**Table I.1-3: The conducted Power for WCDMA**

Item	band	FDDV result		
	ARFCN	4132/4357	4182/4407	4233/4458
WCDMA	\	(826.4MHz)	(836.4MHz)	(846.6MHz)
		23.17	\	23.26
Item	band	FDDII result		
	ARFCN	9262/9662	9400/9800	9538/9938
WCDMA	\	(1852.4MHz)	(1880MHz)	(1907.6MHz)
		22.35	\	\
Item	band	FDDIV result		
	ARFCN	1312/1537	1412/1675	1513/1738
WCDMA	\	(1712.4MHz)	(1732.4MHz)	(1752.6MHz)
		21.64	\	\

**Table I.1-4: The conducted Power for WCDMA (Hotspot)**

Item	band	FDDII result		
	ARFCN	9262/9662	9400/9800	9538/9938
WCDMA	\	(1852.4MHz)	(1880MHz)	(1907.6MHz)
		\	\	20.86

**Table I.1-5: The conducted Power for LTE**

LTE Band2 20MHz	1RB-High (99)	1900 (19100)	\
		1880 (18900)	\
		1860 (18700)	23.33
LTE Band4 20MHz	1RB-Middle (50)	1745 (20300)	23.10
		1732.5 (20175)	23.59
		1720 (20050)	\
LTE Band5 20MHz	1RB-Middle (24)	844 (20600)	\
		836.5 (20525)	\
		829 (20450)	23.02
LTE Band7 20MHz	1RB-Middle (50)	2560 (21350)	23.55
		2535 (21100)	\
		2510 (20850)	\
LTE Band17 20MHz	1RB-Middle (24)	711 (23800)	23.09
		710 (23790)	\
		709 (23780)	\

**Table I.1-6: The conducted Power for LTE (Hotspot)**

LTE Band2 20MHz	1RB-Middle (50)	1900 (19100)	20.92
		1880 (18900)	\
		1860 (18700)	\

## I.2 Measurement results

**Table I.2-1: SAR Values (GSM 850 MHz Band - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °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.										
836.6	190	Right	Touch	Fig.1	32.28	33.5	0.205	<b>0.27</b>	0.264	<b>0.35</b>	0.08

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °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.										
824.2	128	GPRS (4)	Rear	Fig.2	27.81	29	0.462	<b>0.61</b>	0.581	<b>0.76</b>	0.02

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



**Table I.2-3: SAR Values (GSM 1900 MHz Band - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °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.										
1850.2	512	Right	Touch	Fig.3	29.76	30	0.053	<b>0.06</b>	0.084	<b>0.09</b>	0.12

**Table I.2-4: SAR Values (GSM 1900 MHz Band - Body)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °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 (2)	Bottom	Fig.4	28.23	29	0.444	<b>0.53</b>	0.804	<b>0.96</b>	-0.07

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

**Table I.2-5: SAR Values (WCDMA 850 MHz Band - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °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.5	23.26	23.5	0.235	<b>0.25</b>	0.304	<b>0.32</b>	-0.07

**Table I.2-6: SAR Values (WCDMA 850 MHz Band - Body)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °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.									
826.4	4132	Rear	Fig.6	23.17	23.5	0.155	<b>0.17</b>	0.266	<b>0.29</b>	0.02

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

**Table I.2-7: SAR Values (WCDMA 1700 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.										
1712.4	1312	Right	Touch	Fig.7	21.64	22.7	0.146	<b>0.19</b>	0.228	<b>0.29</b>	0.12

**Table I.2-8: SAR Values (WCDMA 1700 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.									
1712.4	1312	Front	Fig.8	21.64	22.7	0.318	<b>0.41</b>	0.53	<b>0.68</b>	-0.15

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

**Table I.2-9: SAR Values (WCDMA 1900 MHz Band - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °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.										
1852.4	9262	Right	Touch	Fig.9	22.35	22.7	0.090	<b>0.10</b>	0.144	<b>0.16</b>	0.08

**Table I.2-10: SAR Values (WCDMA 1900 MHz Band - Body) –AP ON**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °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.									
1907.6	9538	Bottom	Fig.10	20.86	21.5	0.372	<b>0.43</b>	0.668	<b>0.77</b>	-0.06

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

**Table I.2-11: SAR Values (WCDMA 1900 MHz Band - Body) –AP OFF**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °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.									
1852.4	9262	Rear	Fig.11	22.35	22.7	0.250	<b>0.27</b>	0.417	<b>0.45</b>	-0.01

Note1: The distance between the EUT and the phantom bottom is 15mm.

**Table I.2-12: SAR Values (LTE Band2 - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
Frequency		Mode	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.											
1860	18700	1RB_High	Right	Touch	Fig.12	23.33	24	0.096	<b>0.11</b>	0.153	<b>0.18</b>	0.16

Note1: The LTE mode is QPSK\_20MHz.

**Table I.2-13: SAR Values (LTE Band2 - Body) –AP ON**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	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.										
1900	19100	1RB_Mid	Bottom	Fig.13	20.92	22.6	0.347	<b>0.51</b>	0.629	<b>0.93</b>	0.14

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

Note2: The LTE mode is QPSK\_20MHz.

**Table I.2-14: SAR Values (LTE Band2 - Body) –AP OFF**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	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.										
1860	18700	1RB_High	Rear	Fig.14	23.33	24	0.285	<b>0.33</b>	0.474	<b>0.55</b>	0.09

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK\_20MHz.

**Table I.2-15: SAR Values (LTE Band4 - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
Frequency		Mode	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.											
1732.5	20175	1RB_Mid	Right	Touch	Fig.15	23.59	24	0.191	<b>0.21</b>	0.302	<b>0.33</b>	0.06

Note1: The LTE mode is QPSK\_20MHz.

**Table I.2-16: SAR Values (LTE Band4 - Body)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	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.										
1745	20300	1RB_Mid	Rear	Fig.16	23.10	24	0.532	<b>0.66</b>	0.926	<b>1.14</b>	0.03

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

Note2: The LTE mode is QPSK\_20MHz.

**Table I.2-17: SAR Values (LTE Band5 - Head)**

Ambient Temperature: 22.5 °C													Liquid Temperature: 22.0 °C			
Frequency		Mode	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.															
829	20450	1RB_Mid	Right	Touch	Fig.17	23.02	24	0.244	<b>0.31</b>	0.307	<b>0.38</b>	0.02				

Note1: The LTE mode is QPSK\_10MHz.

**Table I.2-18: SAR Values (LTE Band5 - Body)**

Ambient Temperature: 22.5 °C						Liquid Temperature: 22.0 °C					
Frequency		Mode	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.										
829	20450	1RB_Mid	Rear	Fig.18	23.02	24	0.232	<b>0.29</b>	0.379	<b>0.47</b>	0.18

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

Note2: The LTE mode is QPSK\_10MHz.

**Table I.2-19: SAR Values (LTE Band7 - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
Frequency		Mode	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.											
2560	21350	1RB_Mid	Left	Touch	Fig.19	23.55	24	0.274	<b>0.30</b>	0.478	<b>0.53</b>	-0.08

Note1: The LTE mode is QPSK\_20MHz.

**Table I.2-20: SAR Values (LTE Band7 - Body)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	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.										
2560	21350	1RB_Mid	Rear	Fig.20	23.55	24	0.305	<b>0.34</b>	0.576	<b>0.64</b>	0.12

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

Note2: The LTE mode is QPSK\_20MHz.

**Table I.2-21: SAR Values (LTE Band17 - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
Frequency		Mode	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.											
711	23800	1RB_Mid	Right	Touch	Fig.21	23.09	24.3	0.137	<b>0.18</b>	0.155	<b>0.20</b>	0.17

Note1: The LTE mode is QPSK\_10MHz.

**Table I.2-22: SAR Values (LTE Band17 - Body)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	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.										
711	23800	1RB_Mid	Rear	Fig.22	23.09	24.3	0.239	<b>0.32</b>	0.276	<b>0.36</b>	0.04

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

Note2: The LTE mode is QPSK\_10MHz.

### I.3 Reported SAR Comparison

Exposure Configuration	Technology Band	Reported SAR 1g (W/Kg): spot check	Reported SAR 1g (W/Kg): original
Head (Separation Distance 0mm)	GSM 850	0.35	0.40
	PCS 1900	0.09	0.10
	WCDMA 850	0.32	0.34
	WCDMA 1700	0.29	0.29
	WCDMA 1900	0.16	0.16
	LTE Band2	0.18	0.18
	LTE Band4	0.33	0.27
	LTE Band5	0.38	0.38
	LTE Band7	0.53	0.53
	LTE Band17	0.20	0.21
Body-worn (Data) (Separation Distance 10mm)	GSM 850	0.76	0.82
	PCS 1900	0.96	1.01
	WCDMA 850	0.29	0.41
	WCDMA 1700	0.68	1.02
	WCDMA 1900	0.77	0.74
	LTE Band2	0.93	0.83
	LTE Band4	1.14	1.18
	LTE Band5	0.47	0.47
	LTE Band7	0.64	0.81
	LTE Band17	0.36	0.37
Body-worn (Data) (Separation Distance 15mm)	WCDMA 1900	0.45	0.48
	LTE Band2	0.55	0.58

**Note: The spot check result of LTE Band4 for Head & WCDMA 1900 AP ON for Body & LTE Band2 AP ON for Body is larger than the original result, so it replace the original result and others are quoted.**

### 850 Right Cheek Middle

Date: 2016-06-01

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.921$  mho/m;  $\epsilon_r = 41.184$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: GSM 850 Frequency: 836.6 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3617 ConvF(9.56, 9.56, 9.56)

**Area Scan (81x131x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.290 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.426 V/m; Power Drift = 0.08dB

Peak SAR (extrapolated) = 0.331 W/kg

**SAR(1 g) = 0.264 W/kg; SAR(10 g) = 0.205 W/kg**

Maximum value of SAR (measured) = 0.288 W/kg

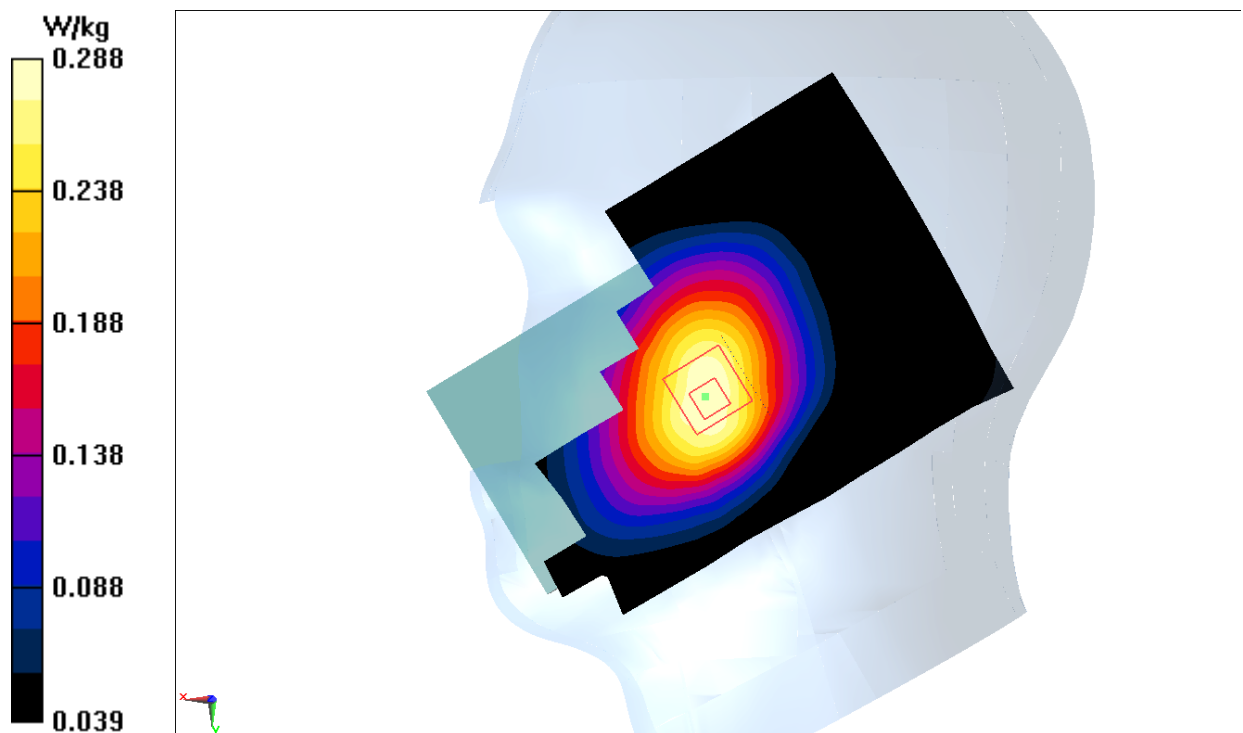


Fig.1 850MHz



### 850 Body Rear Low

Date: 2016-06-01

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.935$  mho/m;  $\epsilon_r = 56.487$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:2

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) = 0.630 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.99 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.713 W/kg

**SAR(1 g) = 0.581 W/kg; SAR(10 g) = 0.462 W/kg**

Maximum value of SAR (measured) = 0.603 W/kg

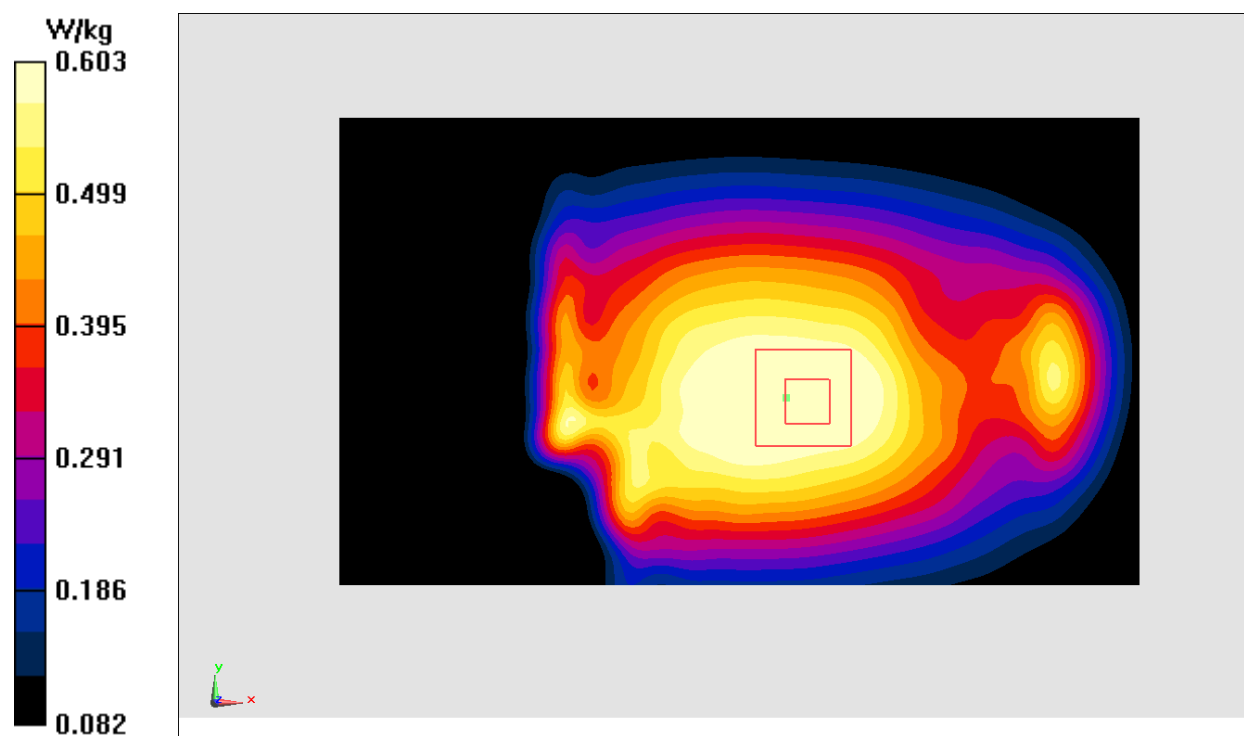


Fig.2 850 MHz

### 1900 Right Cheek Low

Date: 2016-06-03

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.289$  mho/m;  $\epsilon_r = 38.891$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3617 ConvF(8.07, 8.07, 8.07)

**Area Scan (81x131x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.103 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 2.530 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.125 W/kg

**SAR(1 g) = 0.084 W/kg; SAR(10 g) = 0.053 W/kg**

Maximum value of SAR (measured) = 0.0989 W/kg

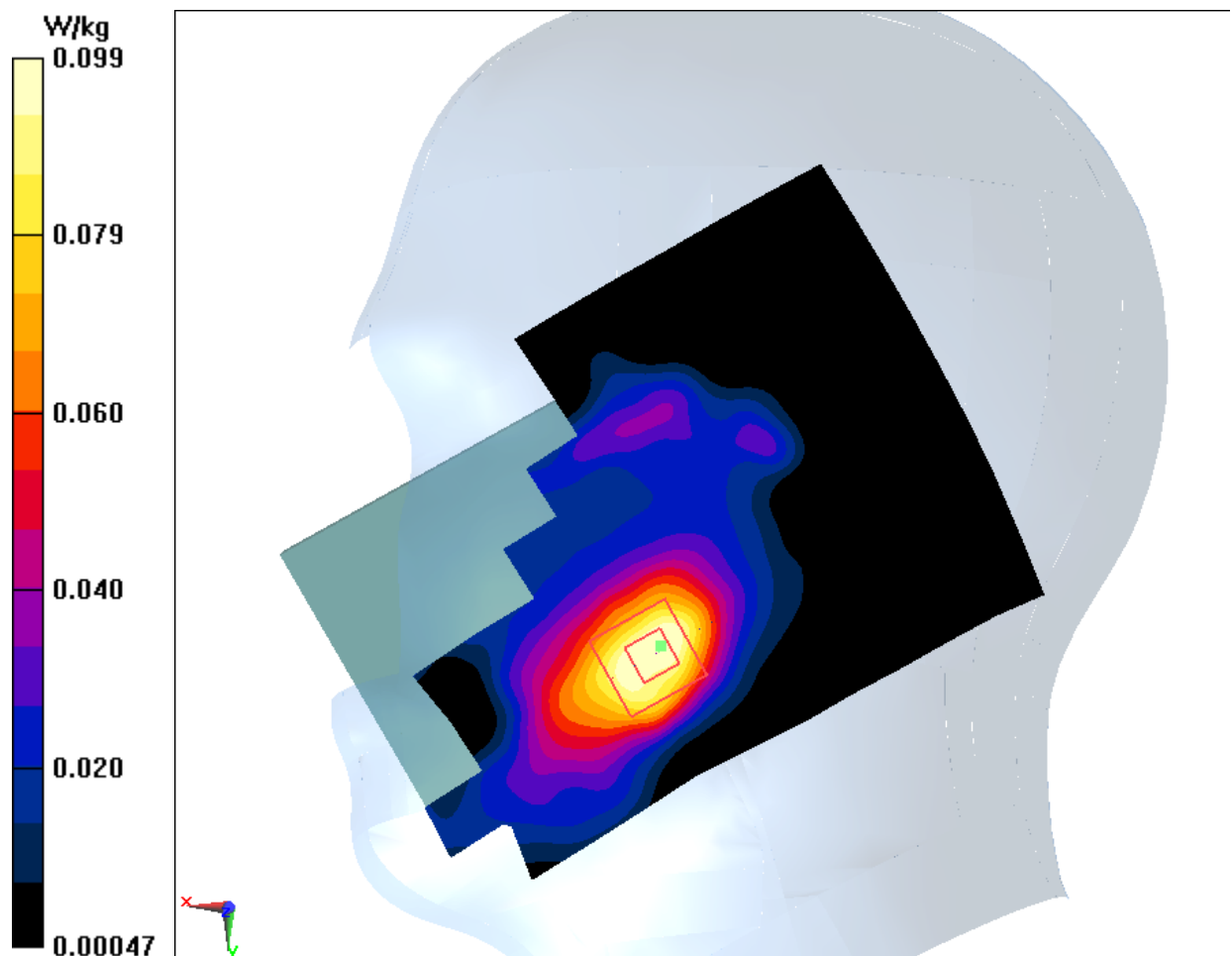


Fig.3 1900 MHz

### 1900 Body Bottom High

Date: 2016-06-03

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1910\text{MHz}$ ;  $\sigma = 1.625\text{ mho/m}$ ;  $\epsilon_r = 54.925$ ;  $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$  Liquid Temperature:  $22.5^\circ\text{C}$

Communication System: GSM 1900MHz GPRS Frequency: 1910MHz Duty Cycle: 1:4

Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

**Area Scan (121x71x1):** Interpolated grid:  $dx=1.000\text{ mm}$ ,  $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) =  $0.977\text{ W/kg}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $20.86\text{ V/m}$ ; Power Drift =  $-0.07\text{dB}$

Peak SAR (extrapolated) =  $1.33\text{ W/kg}$

**SAR(1 g) =  $0.804\text{ W/kg}$ ; SAR(10 g) =  $0.444\text{ W/kg}$**

Maximum value of SAR (measured) =  $0.892\text{ W/kg}$

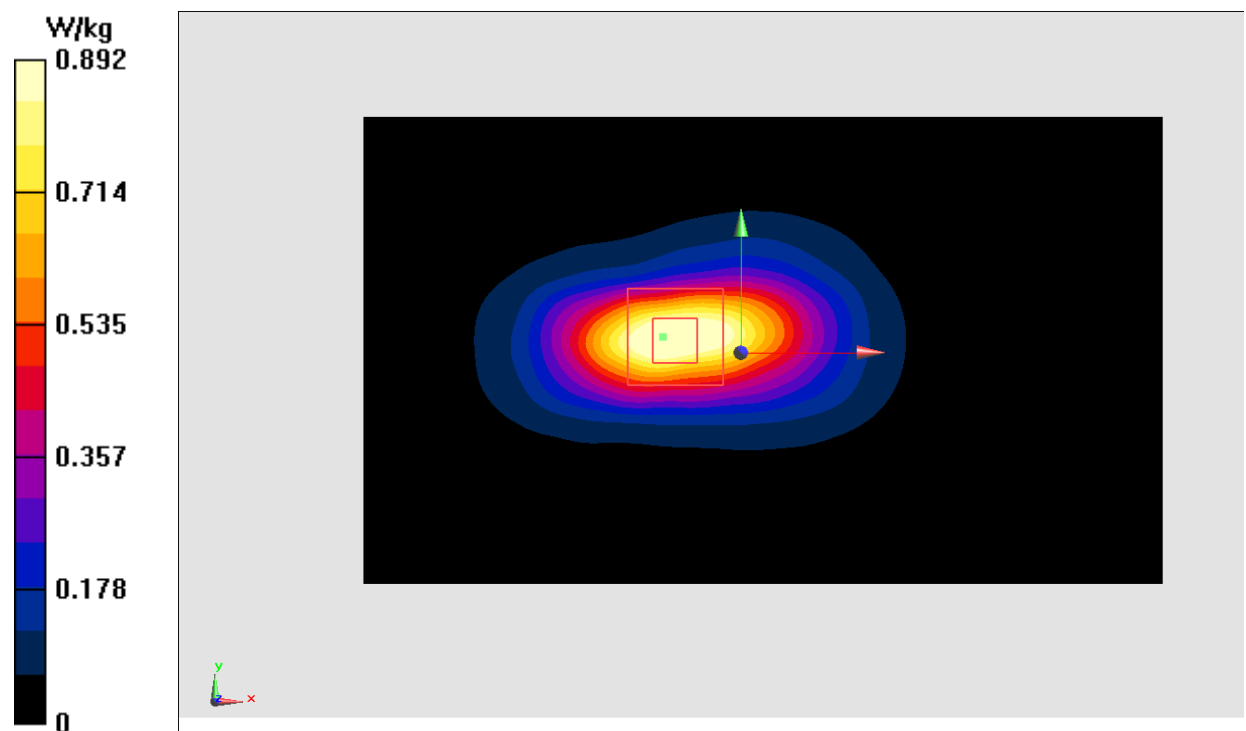


Fig.4 1900 MHz

### WCDMA 850 Right Cheek High

Date: 2016-06-01

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.993$  mho/m;  $\epsilon_r = 41.315$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 (81x131x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.328 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 5.347 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.380 W/kg

**SAR(1 g) = 0.304 W/kg; SAR(10 g) = 0.235 W/kg**

Maximum value of SAR (measured) = 0.331 W/kg

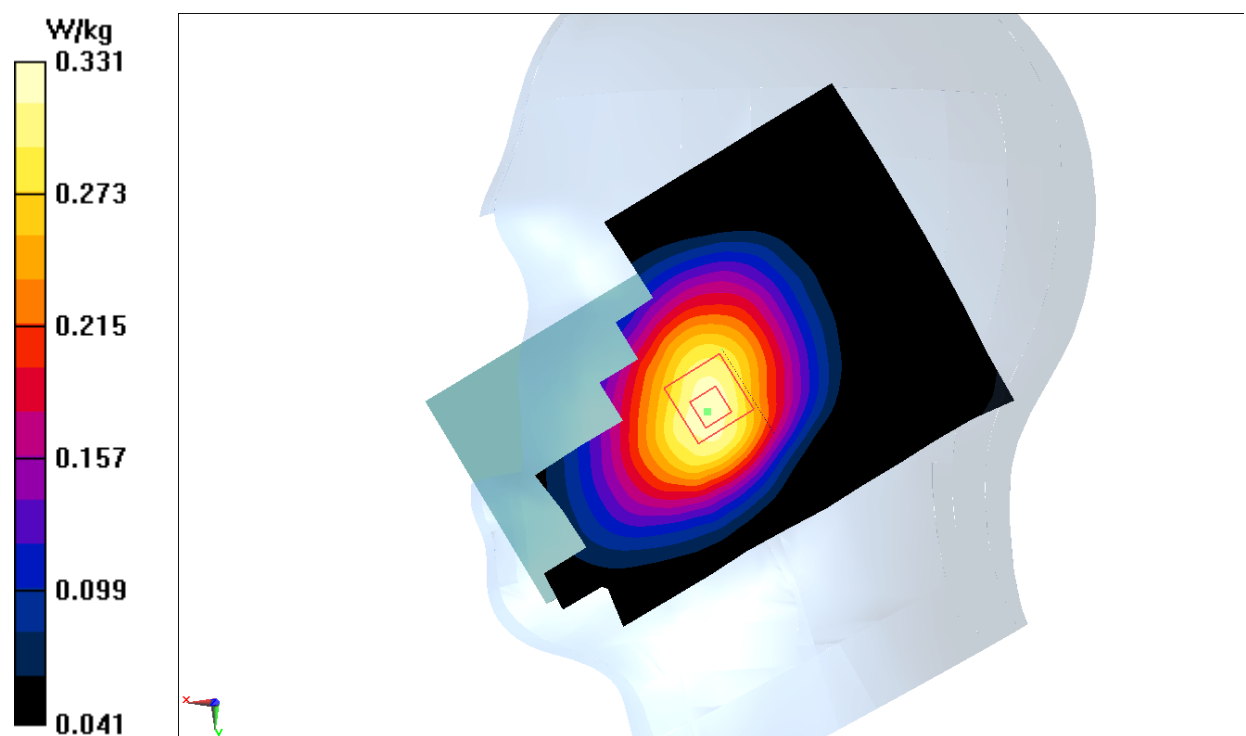


Fig.5 WCDMA 850

### WCDMA 850 Body Rear Low

Date: 2016-06-01

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.929$  mho/m;  $\epsilon_r = 57.16$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 826.4 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) = 0.340 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.55 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.443 W/kg

**SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.155 W/kg**

Maximum value of SAR (measured) = 0.298 W/kg

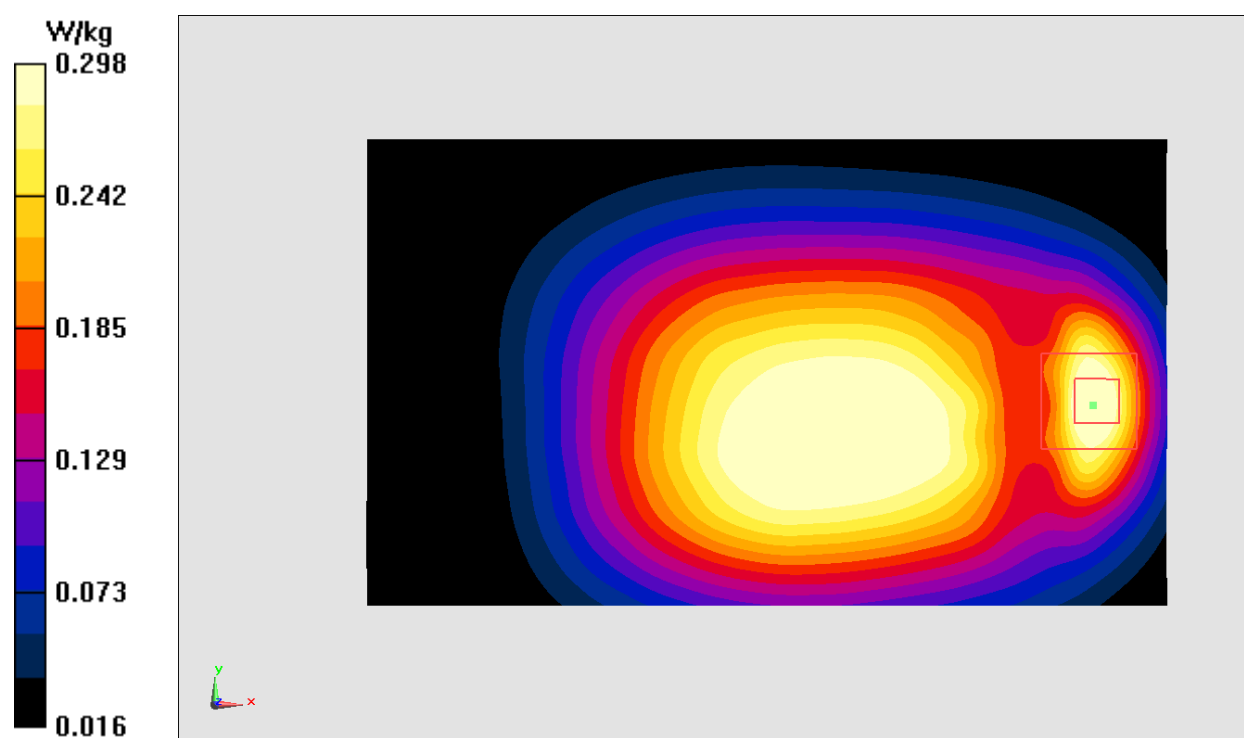


Fig.6 WCDMA 850

### WCDMA 1700 Right Cheek Low

Date: 2016-06-02

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.258$  mho/m;  $\epsilon_r = 41.128$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: WCDMA 1700 Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(8.34, 8.34, 8.34)

**Area Scan (71x131x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.268 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.595 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.327 W/kg

**SAR(1 g) = 0.228 W/kg; SAR(10 g) = 0.146 W/kg**

Maximum value of SAR (measured) = 0.264 W/kg

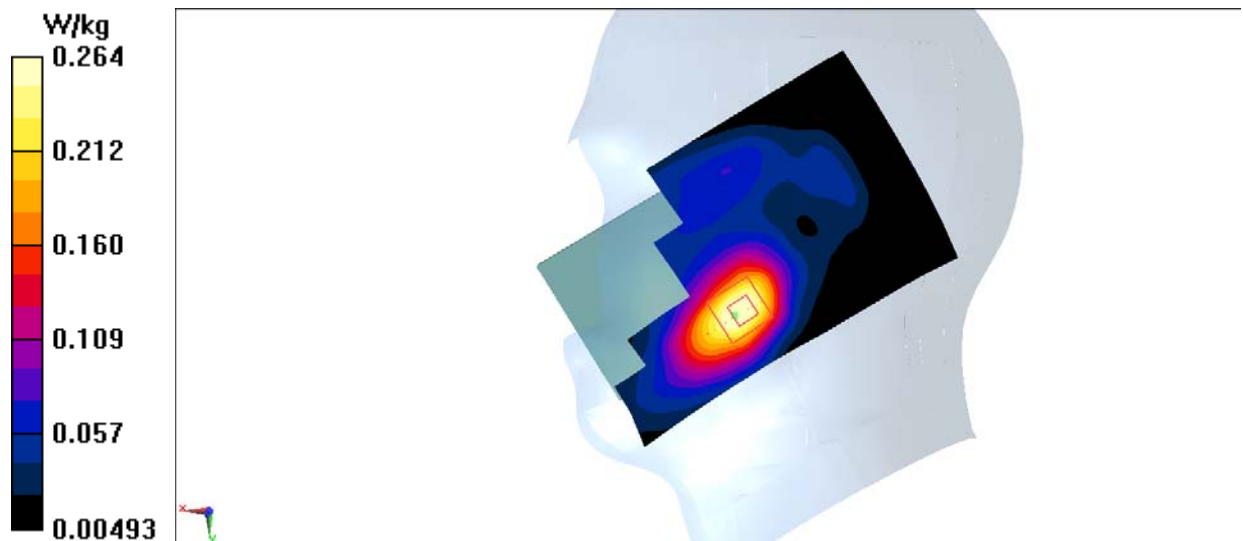


Fig.7 1700MHz



### WCDMA 1700 Body Front Low

Date: 2016-06-02

Electronics: DAE4 Sn777

Medium: Body 1750 MHz

Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.359$  mho/m;  $\epsilon_r = 54.662$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: WCDMA 1700 Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.96, 7.96, 7.96)

**Area Scan (121x71x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.651 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.094 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.824 W/kg

**SAR(1 g) = 0.530 W/kg; SAR(10 g) = 0.318 W/kg**

Maximum value of SAR (measured) = 0.594 W/kg

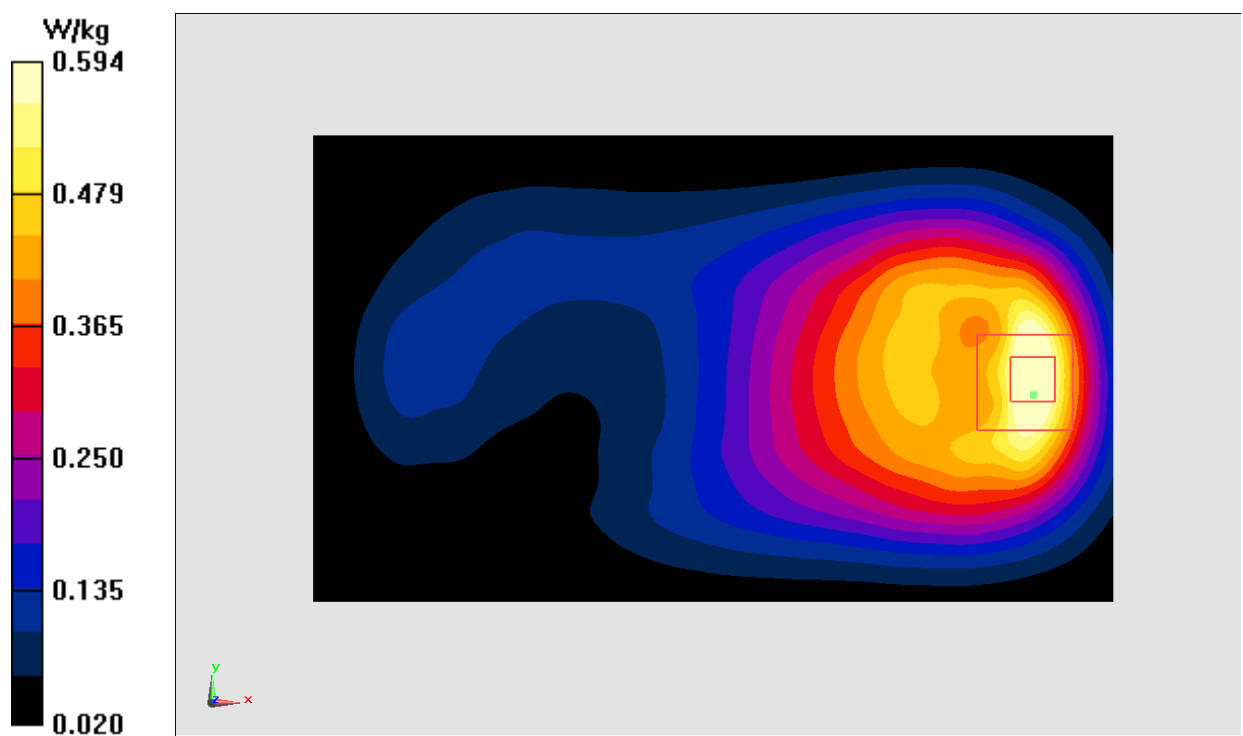


Fig.8 1700 MHz

### WCDMA 1900 Right Cheek Low

Date: 2016-06-03

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.258$  mho/m;  $\epsilon_r = 38.936$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(8.07, 8.07, 8.07)

**Area Scan (81x131x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.181 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.415 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.212 W/kg

**SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.090 W/kg**

Maximum value of SAR (measured) = 0.169 W/kg

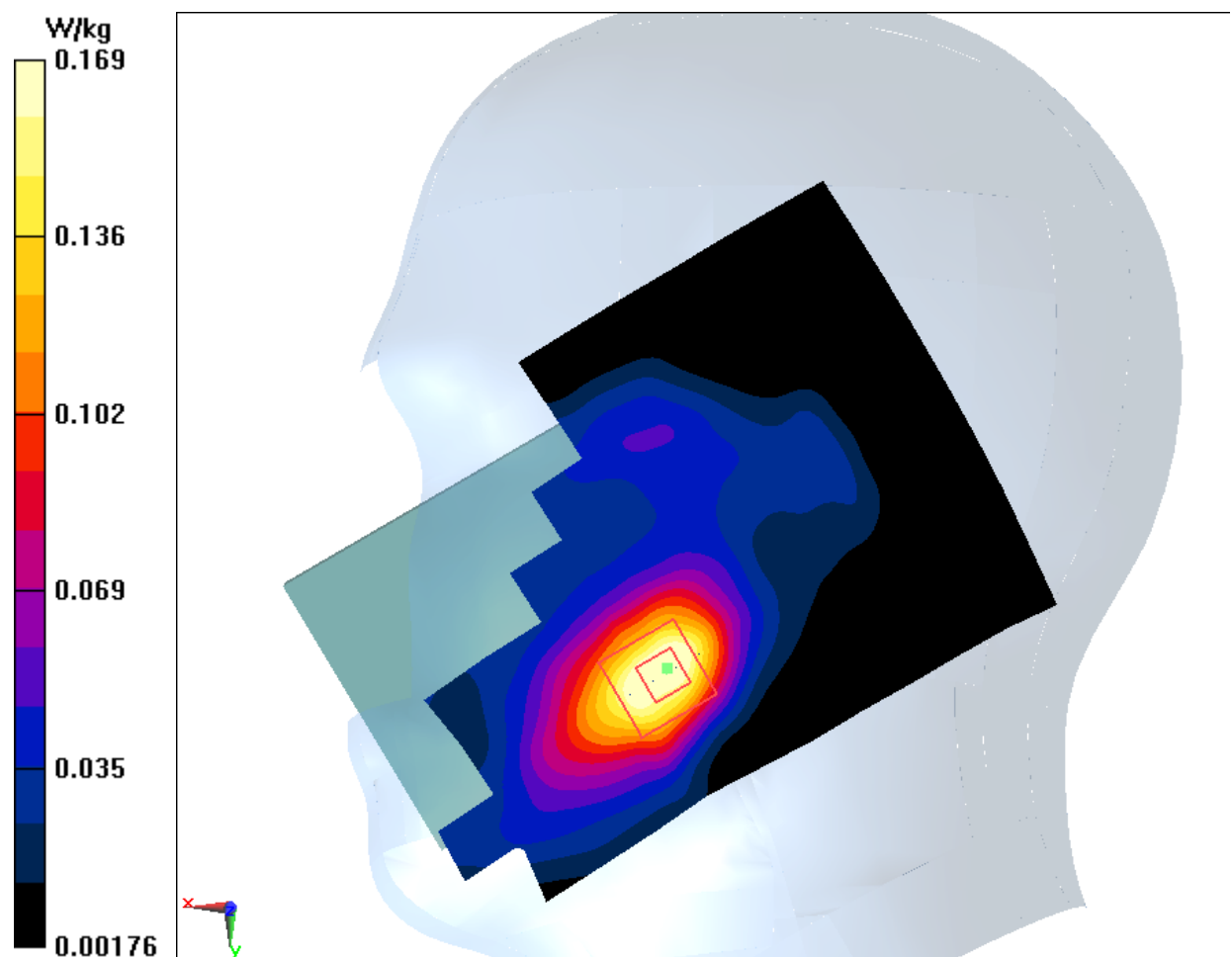


Fig.9 WCDMA1900

## WCDMA 1900 Body Bottom High – AP ON

Date: 2016-06-03

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1907.6$  MHz;  $\sigma = 1.615$  mho/m;  $\epsilon_r = 55.458$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1907.6 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) = 0.929 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 22.71 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.668 W/kg; SAR(10 g) = 0.372 W/kg**

Maximum value of SAR (measured) = 0.740 W/kg

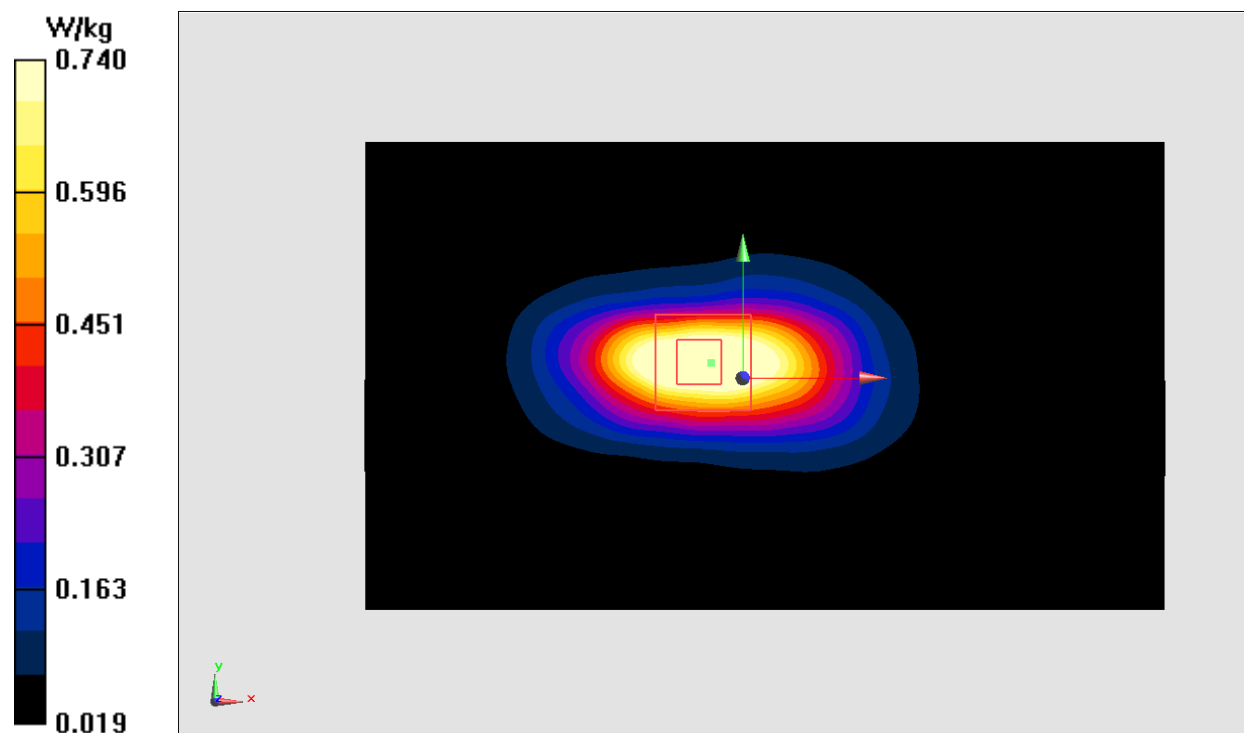


Fig.10 WCDMA 1900

### WCDMA 1900 Body Rear Low – AP OFF

Date: 2016-06-03

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1852.4\text{MHz}$ ;  $\sigma = 1.325\text{ mho/m}$ ;  $\epsilon_r = 55.654$ ;  $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$       Liquid Temperature:  $22.5^\circ\text{C}$

Communication System: WCDMA 1900 Frequency:  $1852.4\text{MHz}$  Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

**Area Scan (121x71x1):** Interpolated grid:  $dx=1.000\text{ mm}$ ,  $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) =  $0.485\text{ W/kg}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $7.275\text{ V/m}$ ; Power Drift =  $-0.01\text{ dB}$

Peak SAR (extrapolated) =  $0.646\text{ W/kg}$

**SAR(1 g) =  $0.417\text{ W/kg}$ ; SAR(10 g) =  $0.250\text{ W/kg}$**

Maximum value of SAR (measured) =  $0.453\text{ W/kg}$

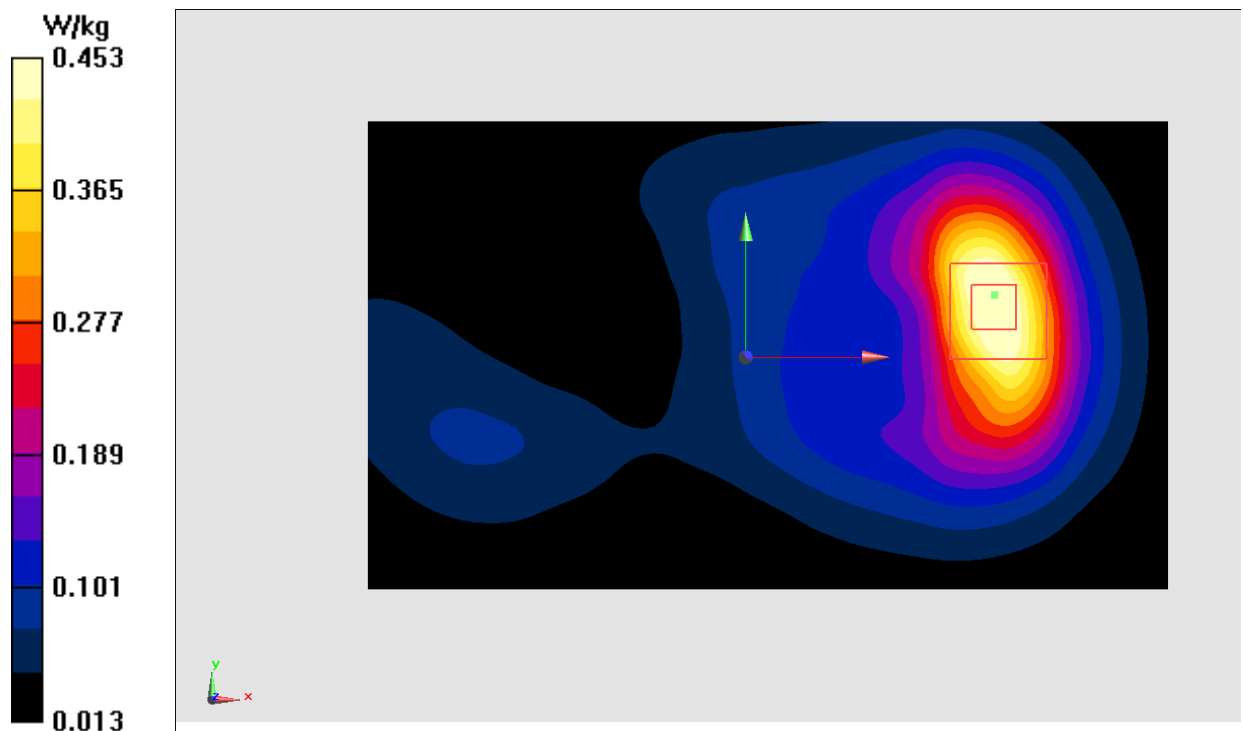


Fig.11 WCDMA 1900

### LTE Band2 Right Cheek Low with QPSK\_20M\_1RB\_High

Date: 2016-06-03

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used:  $f = 1860\text{MHz}$ ;  $\sigma = 1.359\text{ mho/m}$ ;  $\epsilon_r = 38.916$ ;  $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$  Liquid Temperature:  $22.5^\circ\text{C}$

Communication System: LTE Band2 Frequency:  $1860\text{MHz}$  Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(8.07, 8.07, 8.07)

**Area Scan (81x131x1):** Interpolated grid:  $dx=1.000\text{ mm}$ ,  $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) =  $0.190\text{ W/kg}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.143\text{ V/m}$ ; Power Drift =  $0.16\text{ dB}$

Peak SAR (extrapolated) =  $0.227\text{ W/kg}$

**SAR(1 g) =  $0.153\text{ W/kg}$ ; SAR(10 g) =  $0.096\text{ W/kg}$**

Maximum value of SAR (measured) =  $0.180\text{ W/kg}$

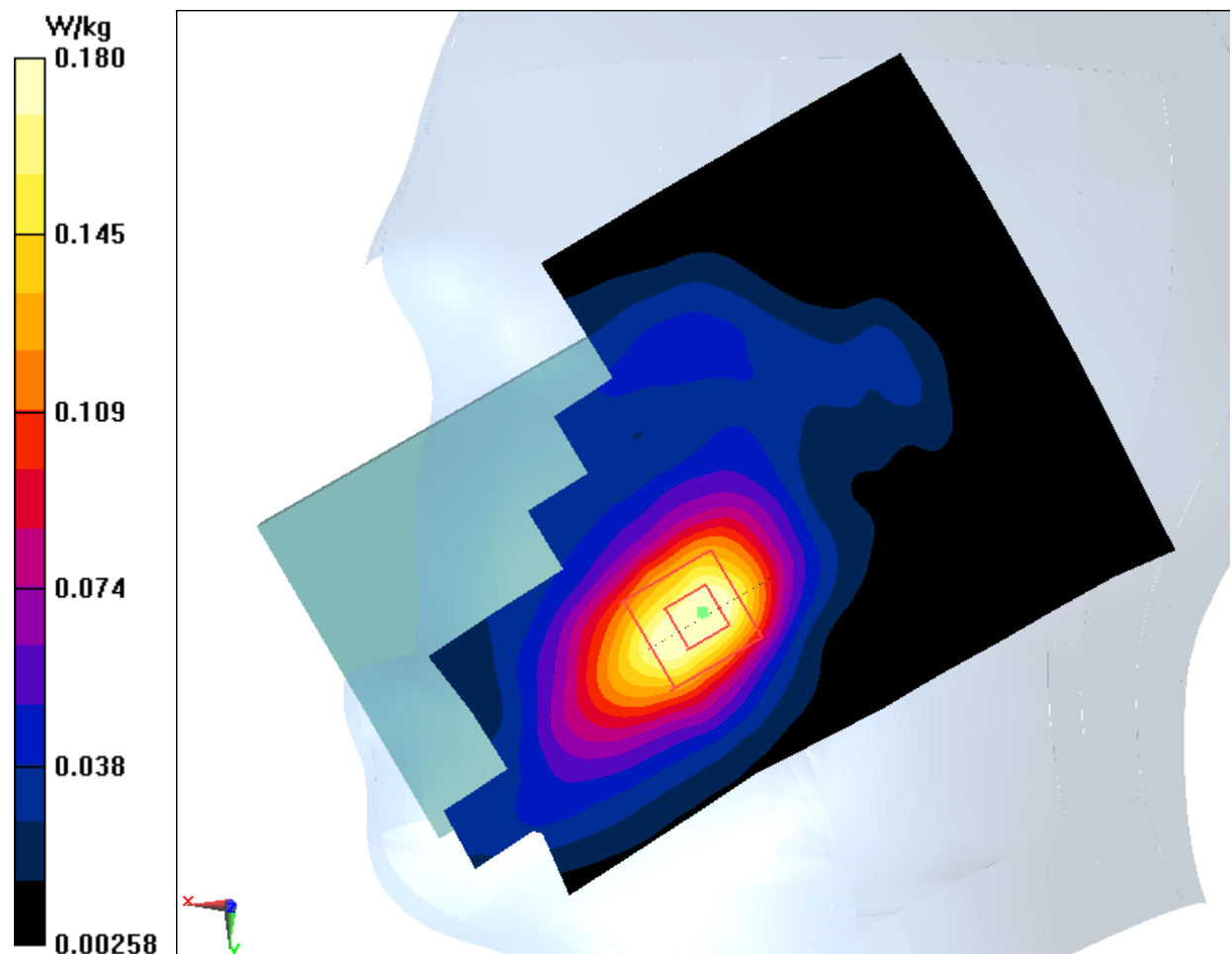


Fig.12 LTE Band 2

# **LTE Band2 Body Bottom High with QPSK\_20M\_1RB\_Middle – AP ON**

Date: 2016-06-03

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.568$  mho/m;  $\epsilon_r = 54.08$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band4 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

**Area Scan (131x81x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.801 W/kg

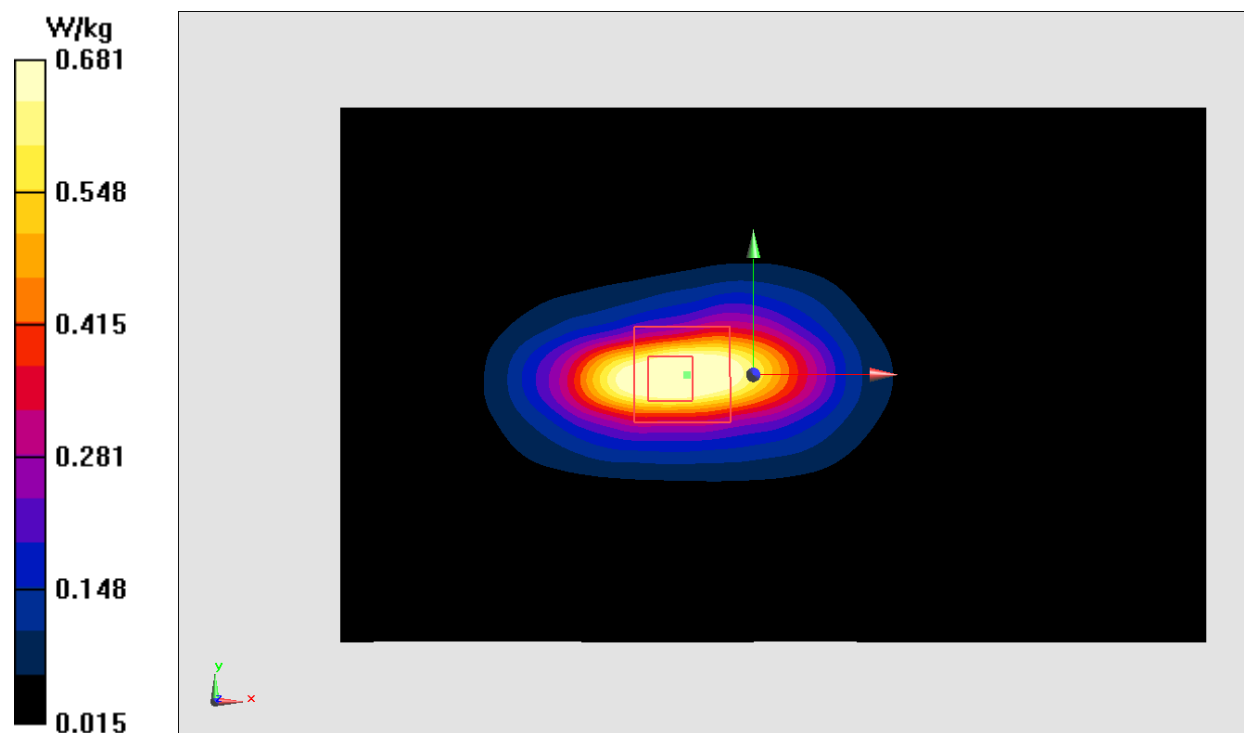
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 18.83 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.629 W/kg; SAR(10 g) = 0.347 W/kg**

Maximum value of SAR (measured) = 0.681 W/kg



**Fig.13 LTE Band 2**



# **LTE Band2 Body Rear High with QPSK\_20M\_1RB\_Middle – AP OFF**

Date: 2016-06-03

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.568$  mho/m;  $\epsilon_r = 54.08$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: LTE Band4 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

**Area Scan (131x81x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.547 W/kg

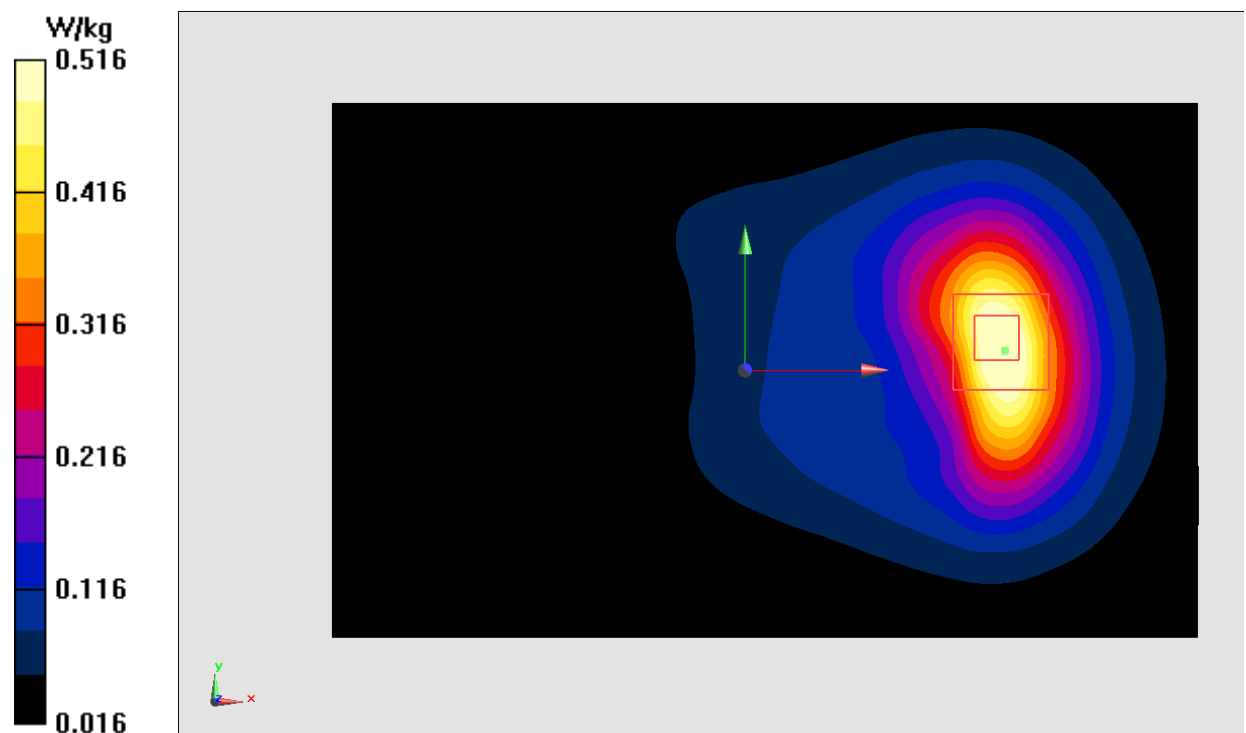
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 6.762 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.743 W/kg

**SAR(1 g) = 0.474 W/kg; SAR(10 g) = 0.285 W/kg**

Maximum value of SAR (measured) = 0.516 W/kg



**Fig.14 LTE Band 2**

### **LTE Band4 Right Cheek Middle with QPSK\_20M\_1RB\_Middle**

Date: 2016-06-02

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used:  $f = 1732.5\text{MHz}$ ;  $\sigma = 1.234\text{ mho/m}$ ;  $\epsilon_r = 41.482$ ;  $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$  Liquid Temperature:  $22.5^\circ\text{C}$

Communication System: LTE Band4 Frequency:  $1732.5\text{MHz}$  Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(8.34, 8.34, 8.34)

**Area Scan (71x131x1):** Interpolated grid:  $dx=1.000\text{ mm}$ ,  $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) =  $0.360\text{ W/kg}$

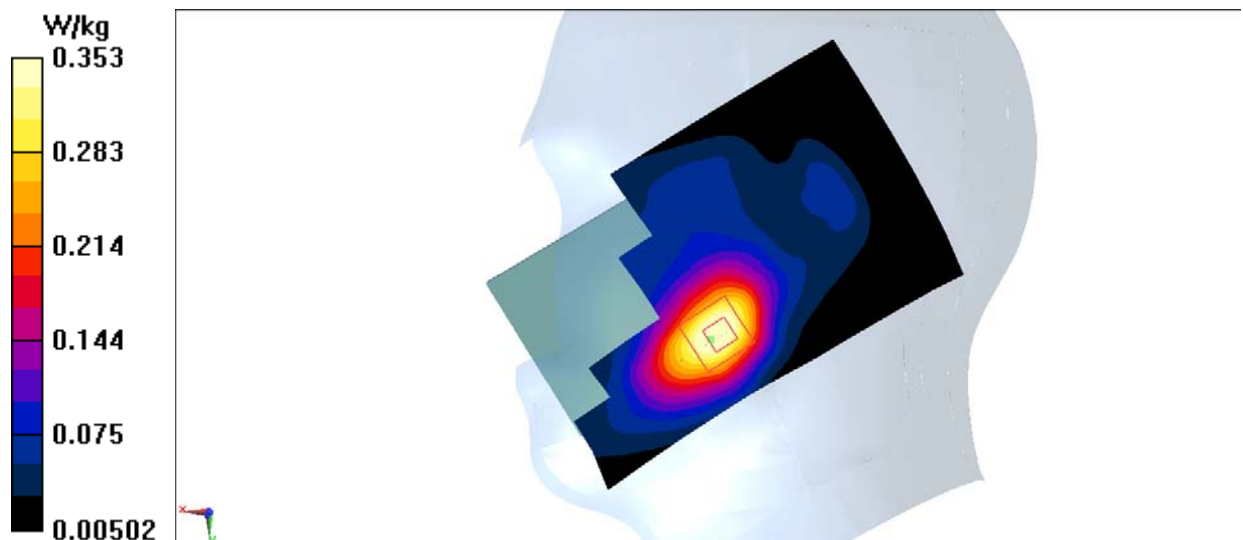
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $6.254\text{ V/m}$ ; Power Drift =  $0.06\text{ dB}$

Peak SAR (extrapolated) =  $0.428\text{ W/kg}$

**SAR(1 g) =  $0.302\text{ W/kg}$ ; SAR(10 g) =  $0.191\text{ W/kg}$**

Maximum value of SAR (measured) =  $0.353\text{ W/kg}$



**Fig.15 LTE Band 4**

### **LTE Band4 Body Rear High with QPSK\_20M\_1RB\_Middle**

Date: 2016-06-02

Electronics: DAE4 Sn777

Medium: Body 1750 MHz

Medium parameters used:  $f = 1745\text{MHz}$ ;  $\sigma = 1.541\text{ mho/m}$ ;  $\epsilon_r = 55.726$ ;  $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$  Liquid Temperature:  $22.5^\circ\text{C}$

Communication System: LTE Band4 Frequency:  $1745\text{MHz}$  Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.96, 7.96, 7.96)

**Area Scan (131x81x1):** Interpolated grid:  $dx=1.000\text{ mm}$ ,  $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) =  $1.12\text{ W/kg}$

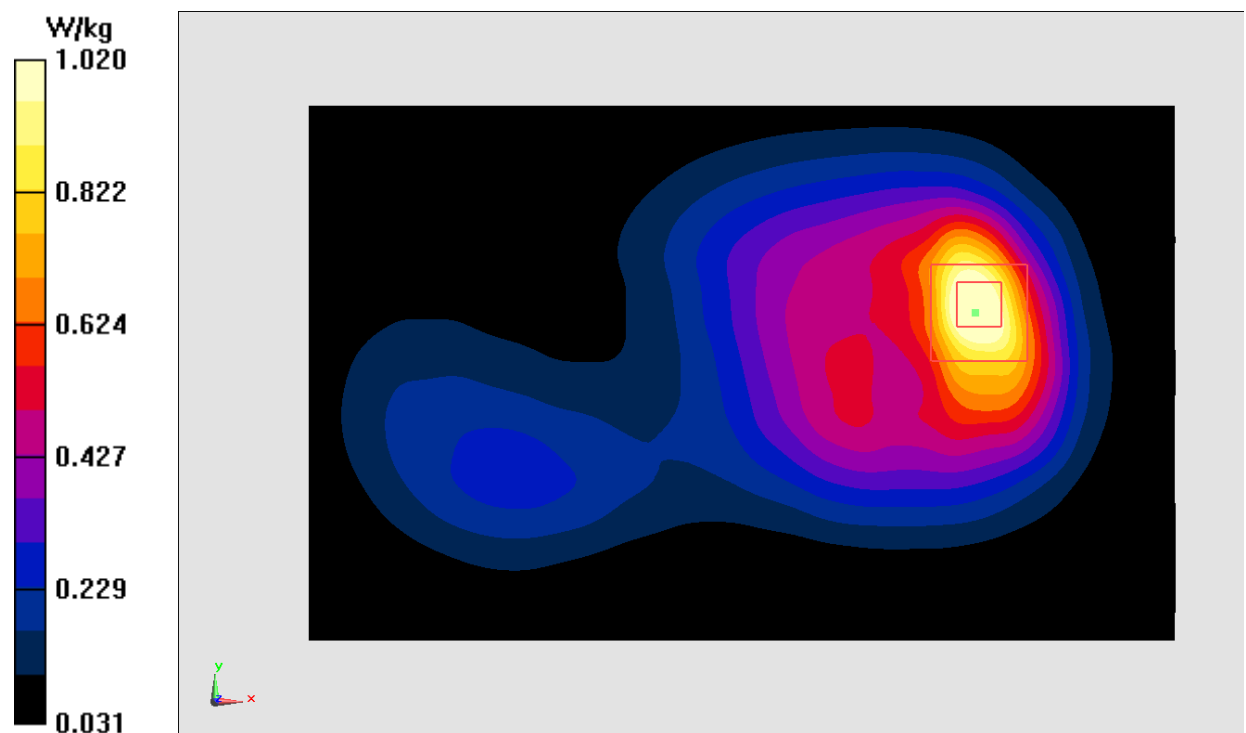
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $12.36\text{ V/m}$ ; Power Drift =  $0.03\text{ dB}$

Peak SAR (extrapolated) =  $1.50\text{ W/kg}$

**SAR(1 g) =  $0.926\text{ W/kg}$ ; SAR(10 g) =  $0.532\text{ W/kg}$**

Maximum value of SAR (measured) =  $1.02\text{ W/kg}$



**Fig.16 LTE Band 4**

### LTE Band5 Right Cheek Middle with QPSK\_10M\_1RB\_Middle

Date: 2016-06-01

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.905$  mho/m;  $\epsilon_r = 40.982$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: LTE Band5 Frequency: 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.56, 9.56, 9.56)

**Area Scan (81x131x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.338 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 5.552 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.411 W/kg

**SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.244 W/kg**

Maximum value of SAR (measured) = 0.350 W/kg

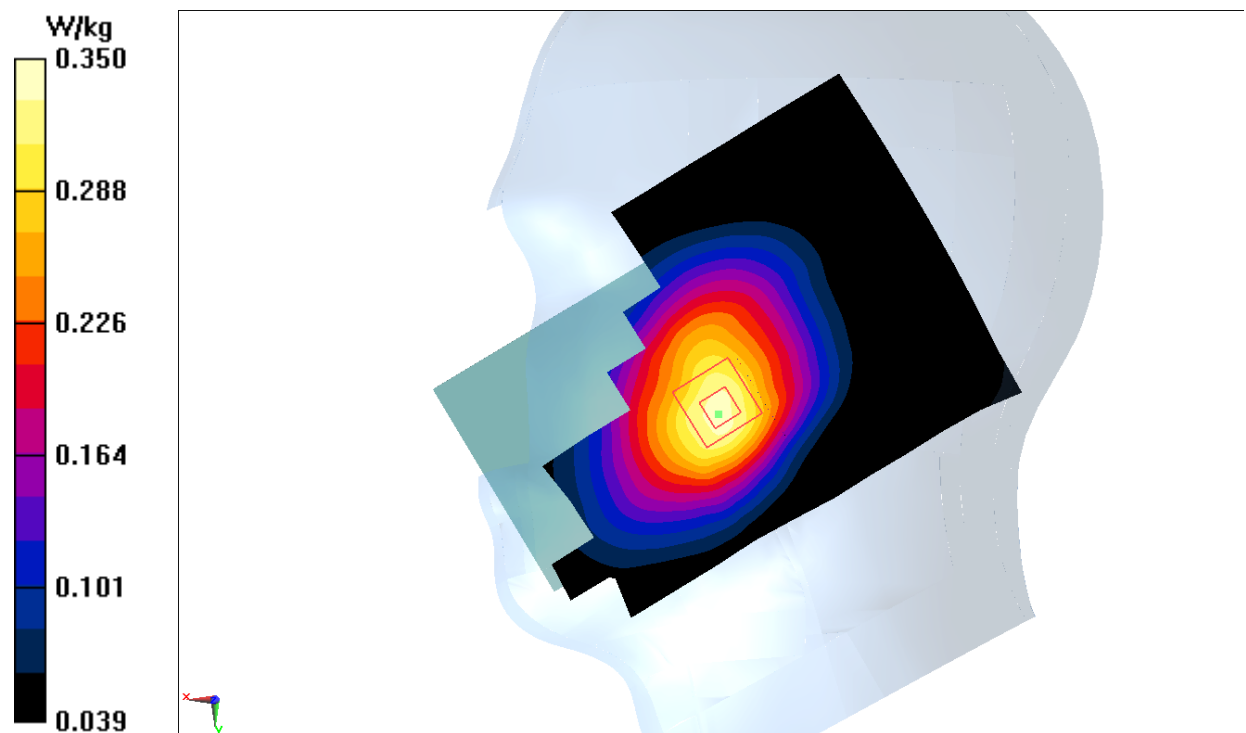


Fig.17 LTE Band 5

### LTE Band5 Body Rear Middle with QPSK\_10M\_1RB\_Middle

Date: 2016-06-01

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.892$  mho/m;  $\epsilon_r = 56.251$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: LTE Band5 Frequency: 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.71, 9.71, 9.71)

**Area Scan (131x81x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.429 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 17.68 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.711 W/kg

**SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.232 W/kg**

Maximum value of SAR (measured) = 0.466 W/kg

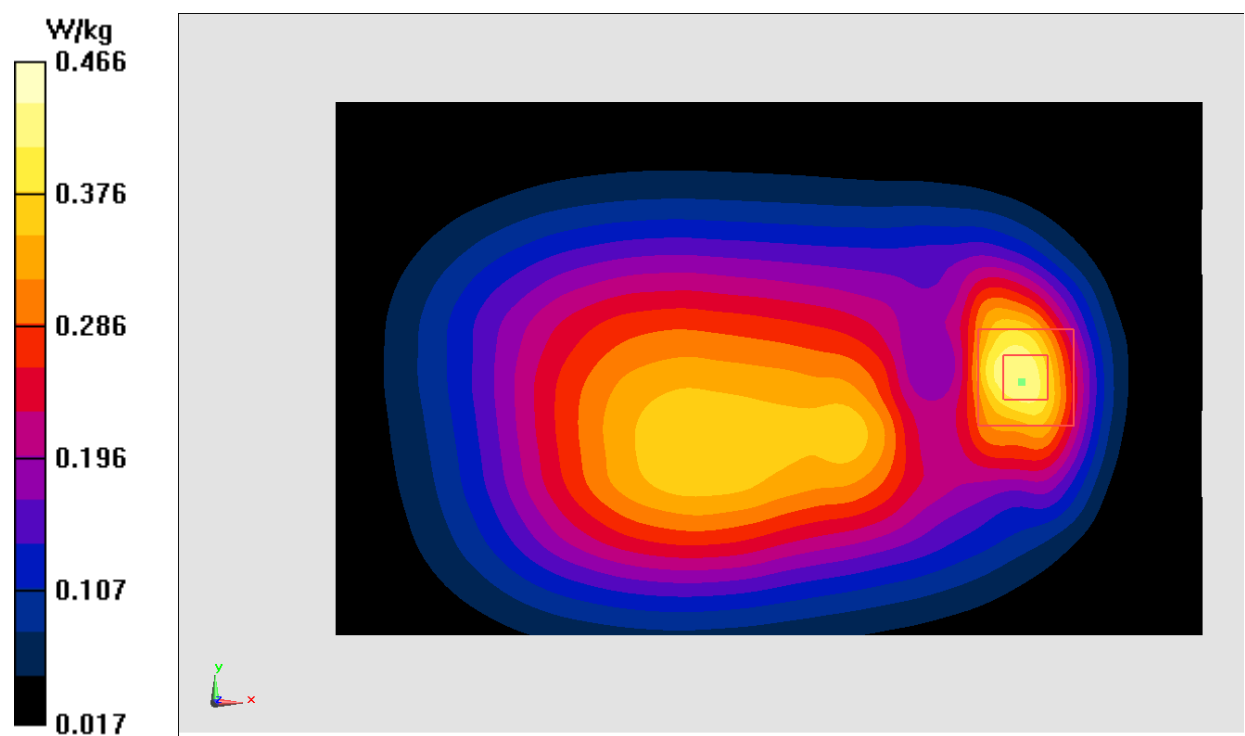


Fig.18 LTE Band 5

### LTE Band7 Left Cheek High with QPSK\_20M\_1RB\_Middle

Date: 2016-06-04

Electronics: DAE4 Sn777

Medium: Head 2600 MHz

Medium parameters used:  $f = 2560\text{MHz}$ ;  $\sigma = 1.924\text{ mho/m}$ ;  $\epsilon_r = 39.563$ ;  $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$  Liquid Temperature:  $22.5^\circ\text{C}$

Communication System: LTE Band7 Frequency:  $2560\text{MHz}$  Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.21, 7.21, 7.21)

**Area Scan (91x151x1):** Interpolated grid:  $dx=1.000\text{ mm}$ ,  $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) =  $0.678\text{ W/kg}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.754\text{ V/m}$ ; Power Drift =  $-0.08\text{ dB}$

Peak SAR (extrapolated) =  $0.986\text{ W/kg}$

**SAR(1 g) =  $0.478\text{ W/kg}$ ; SAR(10 g) =  $0.274\text{ W/kg}$**

Maximum value of SAR (measured) =  $0.635\text{ W/kg}$

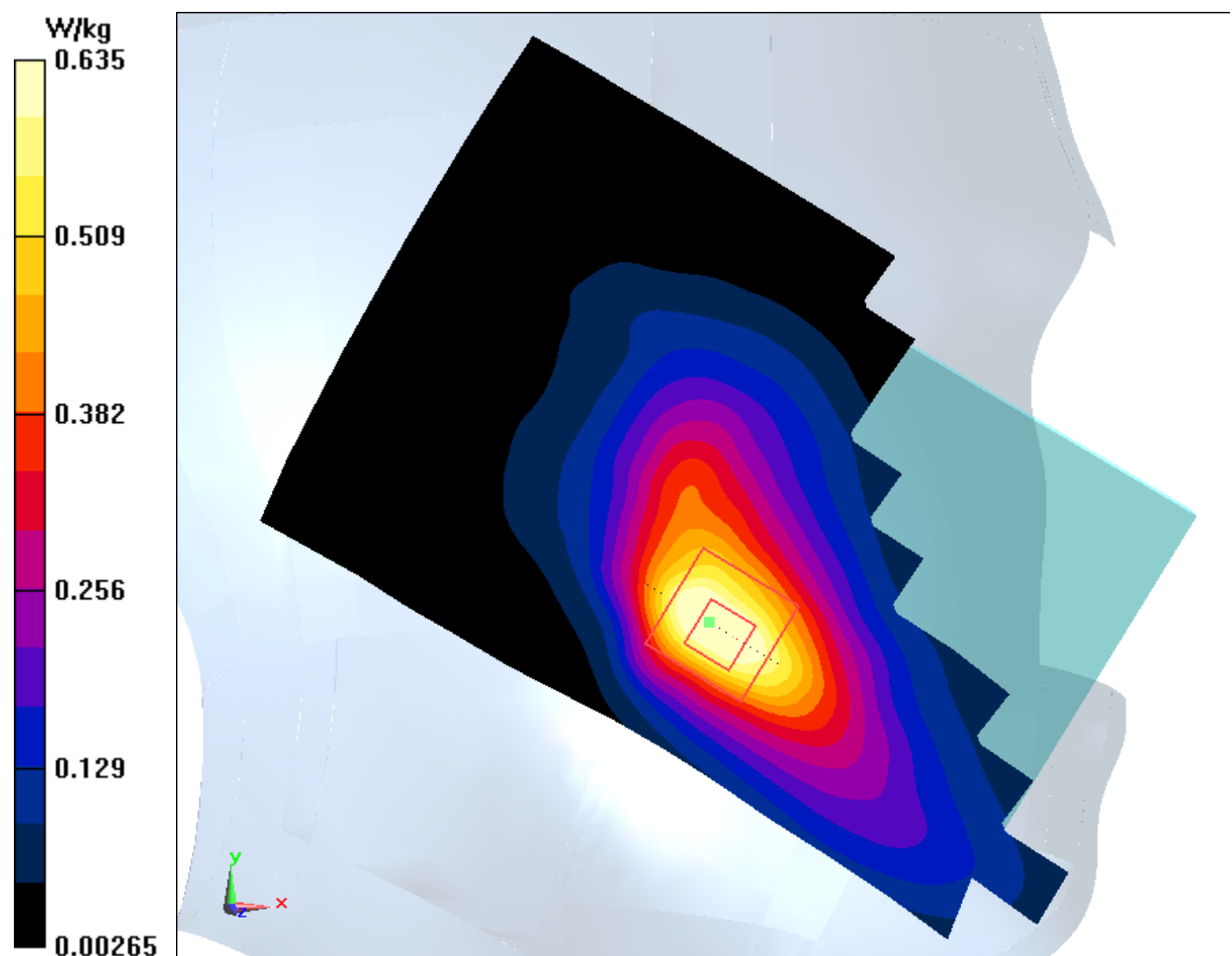


Fig.19 LTE Band 7



### LTE Band7 Body Rear High with QPSK\_20M\_1RB\_Middle

Date: 2016-06-04

Electronics: DAE4 Sn777

Medium: Body 2600 MHz

Medium parameters used:  $f = 2560\text{MHz}$ ;  $\sigma = 2.256\text{ mho/m}$ ;  $\epsilon_r = 51.204$ ;  $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:  $22.9^\circ\text{C}$  Liquid Temperature:  $22.5^\circ\text{C}$

Communication System: LTE Band7 Frequency:  $2560\text{MHz}$  Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(7.20, 7.20, 7.20)

**Area Scan (131x81x1):** Interpolated grid:  $dx=1.000\text{ mm}$ ,  $dy=1.000\text{ mm}$

Maximum value of SAR (interpolated) =  $0.688\text{ W/kg}$

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.694\text{ V/m}$ ; Power Drift =  $0.12\text{ dB}$

Peak SAR (extrapolated) =  $1.04\text{ W/kg}$

**SAR(1 g) =  $0.576\text{ W/kg}$ ; SAR(10 g) =  $0.305\text{ W/kg}$**

Maximum value of SAR (measured) =  $0.628\text{ W/kg}$

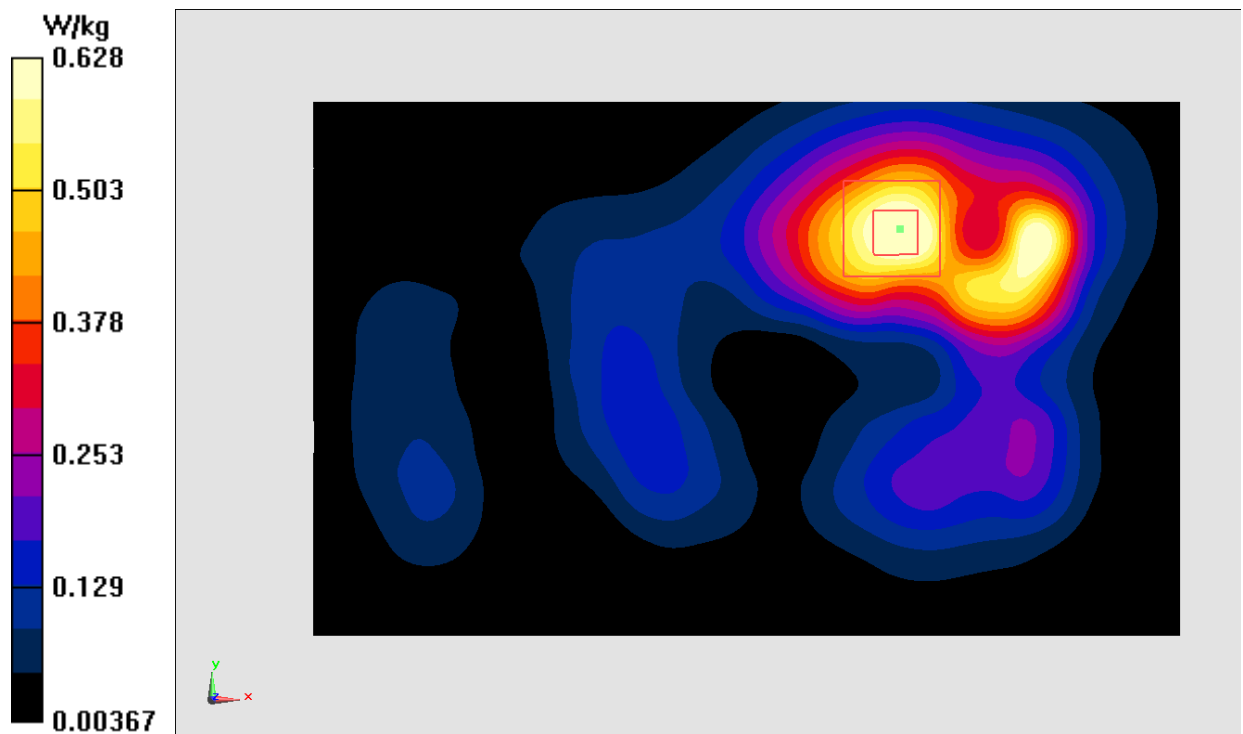


Fig.20 LTE Band 7

### LTE Band17 Right Cheek High with QPSK\_10M\_1RB\_Middle

Date: 2016-05-31

Electronics: DAE4 Sn777

Medium: Head 750 MHz

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.881$  mho/m;  $\epsilon_r = 43.86$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: LTE Band17 Frequency: 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.98, 9.98, 9.98)

**Area Scan (81x131x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.181 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.301 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.202 W/kg

**SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.137 W/kg**

Maximum value of SAR (measured) = 0.182 W/kg

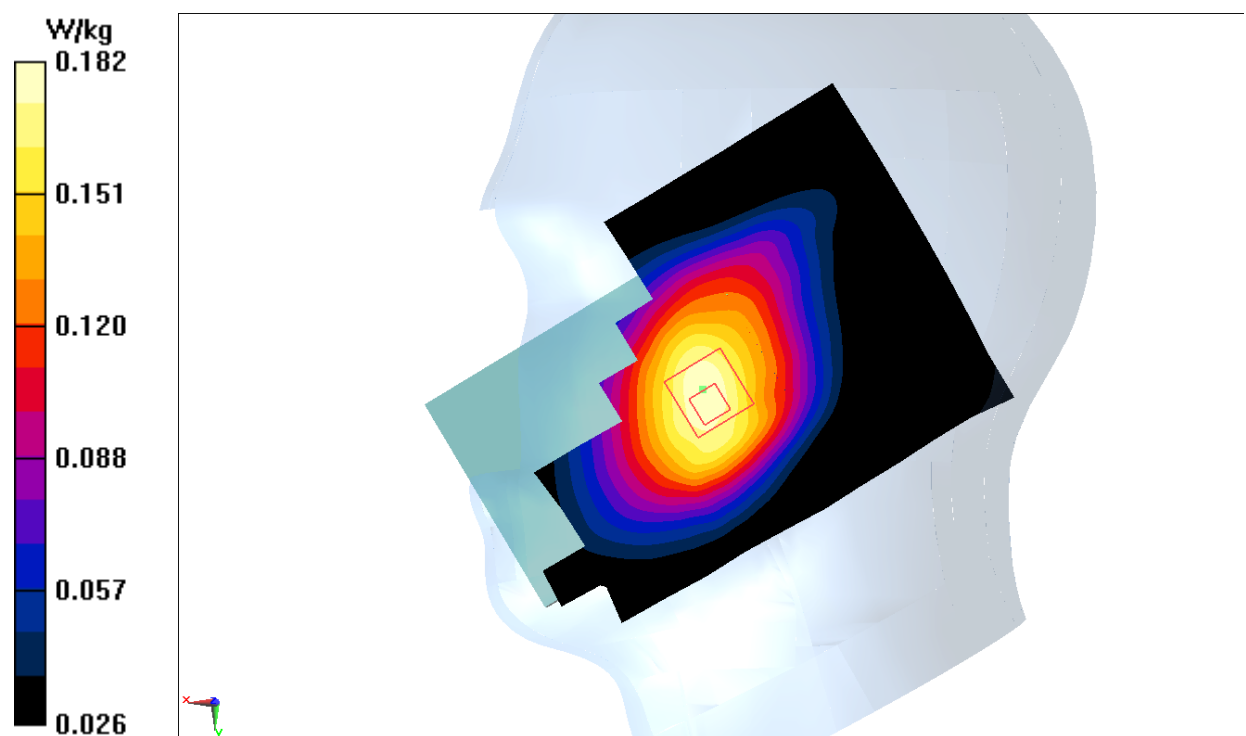


Fig.21 LTE Band 17

### LTE Band17 Body Rear High with QPSK\_10M\_1RB\_Middle

Date: 2016-05-31

Electronics: DAE4 Sn777

Medium: Body 750 MHz

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.925$  mho/m;  $\epsilon_r = 57.91$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.9°C      Liquid Temperature: 22.5°C

Communication System: LTE Band17 Frequency: 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.76, 9.76, 9.76)

**Area Scan (131x81x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.318 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 18.14 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.348 W/kg

**SAR(1 g) = 0.276 W/kg; SAR(10 g) = 0.239 W/kg**

Maximum value of SAR (measured) = 0.305 W/kg

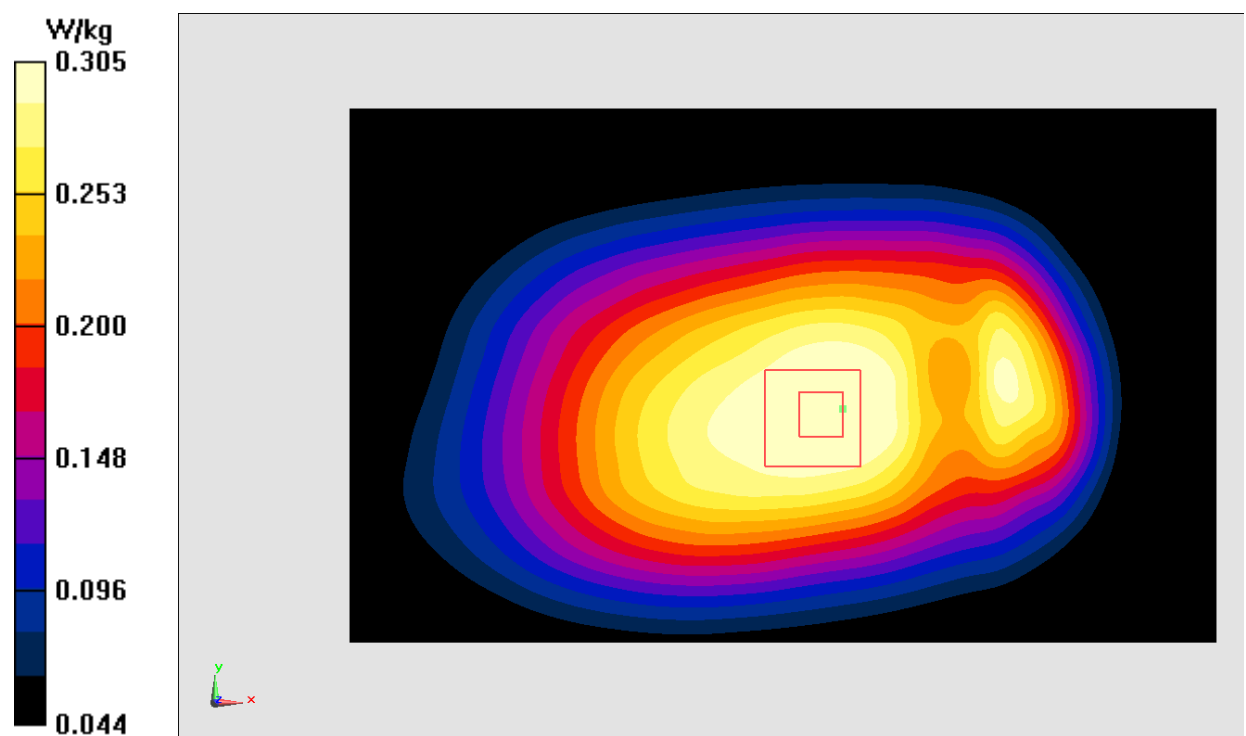


Fig.22 LTE Band 17

## ANNEX J Accreditation Certificate

 		
<p>China National Accreditation Service for Conformity Assessment</p> <p><b>LABORATORY ACCREDITATION CERTIFICATE</b></p> <p>(No. CNAS L0570 )</p> <p><b>Telecommunication Technology Labs,</b> <b>Academy of Telecommunication Research, MIIT</b> <u>No.52, Huayuan North Road, Haidian District, Beijing, China</u> <u>No.51, Xueyuan Road, Haidian District, Beijing, China</u></p> <p><i>In 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.</i></p> <p><i>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.</i></p> <p>Date of Issue: 2014-10-29 Date of Expiry: 2017-06-19 Date of Initial Accreditation: 1998-07-03</p> <p></p> <p>Signed on behalf of China National Accreditation Service for Conformity Assessment</p> <p><small>China National Accreditation Service for Conformity Assessment (CNAS) is authorized by Certification and Accreditation Administration of the People's Republic of China (CNCAS) 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).</small></p> <tr><td><p>No. CNAS AL 2</p></td><td><p>0011149</p></td></tr>	<p>No. CNAS AL 2</p>	<p>0011149</p>
<p>No. CNAS AL 2</p>	<p>0011149</p>	