

**DASY5 Validation Report for Body TSL**

Date: 26.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole D5GHzV2; Type: D5GHzV2; Serial: D5GHzV2 - SN:1060**

Communication System: UID 0 - CW; Frequency: 5250 MHz, Frequency: 5600 MHz, Frequency: 5750 MHz

Medium parameters used:  $f = 5250$  MHz;  $\sigma = 5.42$  S/m;  $\epsilon_r = 47.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.88$  S/m;  $\epsilon_r = 46.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>Medium parameters used:  $f = 5750$  MHz;  $\sigma = 6.11$  S/m;  $\epsilon_r = 46.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

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

DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(4.85, 4.85, 4.85); Calibrated: 30.06.2016, ConvF(4.35, 4.35, 4.35); Calibrated: 30.06.2016, ConvF(4.3, 4.3, 4.3); Calibrated: 30.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

**Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5250MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0:**

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 67.69 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 28.9 W/kg

**SAR(1 g) = 7.62 W/kg; SAR(10 g) = 2.14 W/kg**

Maximum value of SAR (measured) = 18.0 W/kg

**Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0:**

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 67.99 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 33.0 W/kg

**SAR(1 g) = 7.97 W/kg; SAR(10 g) = 2.23 W/kg**

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

**Dipole Calibration for Body Tissue/Pin=100mW, dist=10mm, f=5750 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0:**

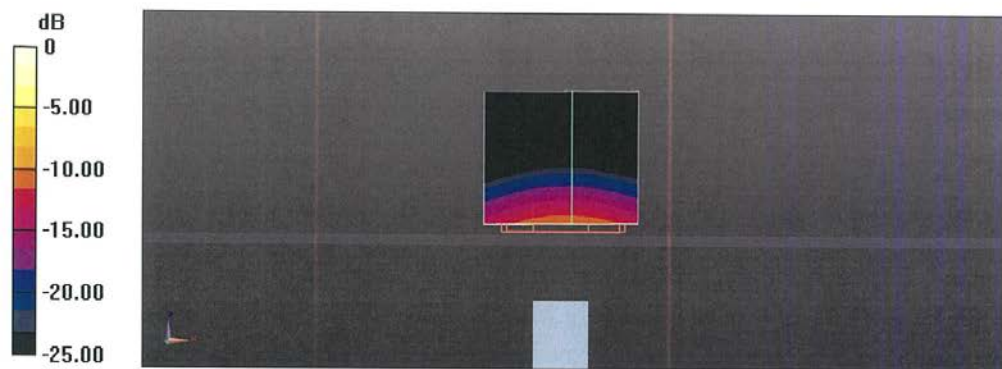
Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 65.44 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 32.4 W/kg

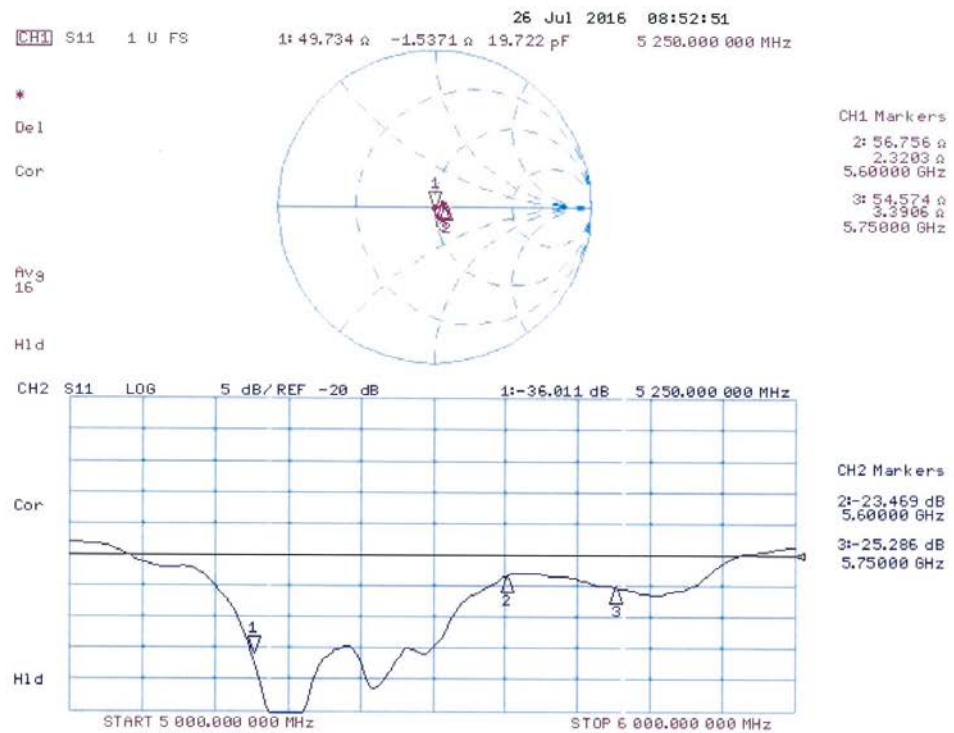
**SAR(1 g) = 7.51 W/kg; SAR(10 g) = 2.1 W/kg**

Maximum value of SAR (measured) = 18.2 W/kg



0 dB = 18.2 W/kg = 12.60 dBW/kg

### Impedance Measurement Plot for Body TSL



## ANNEX I SPOT CHECK

As the test lab for 5085G 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)
	31.52	31.80	31.90
GSM 1900MHz	Conducted Power (dBm)		
	Channel 810(1909.8MHz)	Channel 661(1880MHz)	Channel 512(1850.2MHz)
	28.59	28.50	28.25

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

GSM 850 GPRS (GMSK)	Measured Power (dBm)		
	251	190	128
4 Txslots	26.14	26.36	26.44
PCS1900 GPRS (GMSK)	Measured Power (dBm)		
	810	661	512
4 Txslots	23.78	23.59	23.42

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

Item	band	FDDV result		
	ARFCN	4233 (846.6MHz)	4182 (836.4MHz)	4132 (826.4MHz)
WCDMA	\	23.55	23.65	23.93
Item	band	FDDII result		
	ARFCN	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)
WCDMA	\	22.17	22.21	22.20
Item	band	FDDIV result		
	ARFCN	1513 (1752.6MHz)	1412 (1732.4MHz)	1312 (1712.4MHz)
WCDMA	\	22.41	22.42	22.38

**Table I.1-4: The conducted Power for LTE**

LTE Band2 20MHz	1RB-Low (0)	1900 (19100)	22.73
	1RB-High (99)	1880 (18900)	22.69
	1RB-High (99)	1860 (18700)	22.69
LTE Band4 20MHz	1RB-High (99)	1745 (20300)	23.83
		1732.5 (20175)	23.89
		1720 (20050)	23.93
LTE Band5 10MHz	1RB-High (49)	844 (20600)	23.74
		836.5 (20525)	23.71
		829 (20450)	23.82
LTE Band7 20MHz	1RB-High (99)	2560 (21350)	22.88
	1RB-Low (0)	2535 (21100)	22.90
	1RB-High (99)	2510 (20850)	22.96
LTE Band12 10MHz	1RB-Low (0)	711 (23130)	23.45
	1RB-High (49)	707.5 (23095)	23.50
	1RB-High (49)	704 (23060)	23.46

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

Mode / data rate	Channel	Measured Power (dBm)
802.11b – 1Mbps	1	17.51
802.11a – 6Mbps	165	15.66

## 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./Note	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)
Ch.	MHz										
128	824.2	L	Cheek	Fig.1	31.90	32	0.155	<b>0.16</b>	0.201	<b>0.21</b>	0.02

**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./Note	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)
Ch.	MHz										
128	824.2	GPRS (4)	Rear	Fig.2	26.44	26.5	0.265	<b>0.27</b>	0.335	<b>0.34</b>	0.03

Note: 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./Note	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)
Ch.	MHz										
512	1850.2	L	Cheek	Fig.3	28.25	29	0.057	<b>0.07</b>	0.090	<b>0.11</b>	0.07

**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./Note	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)
Ch.	MHz										
512	1850.2	GPRS (4)	Bottom	Fig.4	23.42	24	0.371	<b>0.42</b>	0.717	<b>0.82</b>	-0.18

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./Note	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)
Ch.	MHz										
4233	846.6	L	Cheek	Fig.5	23.93	24	0.262	<b>0.27</b>	0.341	<b>0.35</b>	-0.14

**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./Note	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)
Ch.	MHz									
4233	846.6	Left	Fig.6	23.93	24	0.354	<b>0.36</b>	0.514	<b>0.52</b>	0.00

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: 22.9°C						Liquid Temperature: 22.5°C					
Frequency		Side	Test Position	Figure No./Note	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)
Ch.	MHz										
1738	1752.6	L	Cheek	Fig.7	22.38	23	0.138	0.16	0.211	0.24	0.14

**Table I.2-8: SAR Values (WCDMA 1700 MHz Band - Body)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C				
Frequency		Test Position	Figure No./Note	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)
Ch.	MHz									
1738	1752.6	Bottom	Fig.8	22.38	23	0.563	<b>0.65</b>	1.06	<b>1.22</b>	-0.09

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./Note	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)
Ch.	MHz										
9662	1852.4	R	Cheek	Fig.9	22.17	23	0.111	0.13	0.177	0.21	0.04

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C				
Frequency		Test Position	Figure No./Note	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)
Ch.	MHz									
9938	1907.6	Bottom	Fig.10	22.20	23	0.590	<b>0.71</b>	1.16	<b>1.39</b>	-0.05

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

**Table I.2-11: SAR Values (LTE Band2 - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
Frequency		Mode	Side	Test Position	Figure No./ Note	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)
Ch.	MHz											
19100	1900	1RB_Low	L	Cheek	Fig.11	22.73	23	0.103	0.11	0.166	0.18	0.05

Note1: The LTE mode is QPSK\_20MHz.

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

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	Test Position	Figure No./ Note	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)
Ch.	MHz										
19100	1900	1RB_Low	Bottom	Fig.12	22.73	23	0.573	<b>0.61</b>	1.12	<b>1.19</b>	-0.09
18900	1880	1RB_High	Bottom	/	22.69	23	0.497	<b>0.53</b>	1.02	<b>1.10</b>	-0.10
18700	1860	1RB_High	Bottom	/	22.69	23	0.494	<b>0.53</b>	1.01	<b>1.08</b>	-0.08

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

Note2: The LTE mode is QPSK\_20MHz.

**Table I.2-13: SAR Values(LTE Band4 - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed 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)	Powe r Drift (dB)
Ch.	MHz											
20300	1745	1RB_High	L	Cheek	Fig.13	23.83	24	0.141	<b>0.15</b>	0.216	<b>0.22</b>	-0.10

Note1: The LTE mode is QPSK\_20MHz.

**Table I.2-14: SAR Values (LTE Band4 - Body)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5 °C					
Frequency		Mode	Test Position	Figure No./Note	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)
Ch.	MHz										
20300	1745	1RB_High	Bottom	Fig.14	23.83	24	0.625	<b>0.65</b>	1.18	<b>1.23</b>	-0.14
20175	1732.5	1RB_High	Bottom	/	23.89	24	0.521	<b>0.53</b>	1.04	<b>1.07</b>	-0.05
20050	1720	1RB_High	Bottom	/	23.93	24	0.497	<b>0.51</b>	0.993	<b>1.01</b>	-0.06

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

Note2: The LTE mode is QPSK\_20MHz.



**Table I.2-15: SAR Values(LTE Band5 - 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)
Ch.	MHz											
20600	844	1RB_High	L	Cheek	Fig.15	23.74	24.5	0.203	<b>0.24</b>	0.263	<b>0.31</b>	-0.06

Note1: The LTE mode is QPSK\_10MHz.

**Table I.2-16: SAR Values (LTE Band5-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)
Ch.	MHz										
20600	844	1RB_High	Left	Fig.16	23.74	24.5	0.265	<b>0.32</b>	0.384	<b>0.46</b>	-0.13

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

Note2: The LTE mode is QPSK\_10MHz.

**Table I.2-17: SAR Values(LTE Band7 - Head)**

Ambient Temperature: 22.9°C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	Conduct ed 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)
Ch.	MHz											
21350	2560	1RB_High	L	Cheek	Fig.17	22.88	23.5	0.014	<b>0.02</b>	0.024	<b>0.03</b>	0.09

Note1: The LTE mode is QPSK\_20MHz.

**Table I.2-18: SAR Values (LTE Band7 - Body)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./Note	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)
Ch.	MHz										
21350	2560	1RB_High	Bottom	Fig.18	22.88	23.5	0.247	<b>0.28</b>	0.540	<b>0.62</b>	-0.01

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

Note2: The LTE mode is QPSK\_20MHz.



**Table I.2-19: SAR Values(LTE Band12 - Head)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C						
Frequency		Mode	Side	Test Position	Figure No./ Note	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)
Ch.	MHz											
23095	707.5	1RB_High	L	Cheek	Fig.19	23.50	24	0.123	<b>0.14</b>	0.155	<b>0.17</b>	-0.04

Note1: The LTE mode is QPSK\_10MHz.

**Table I.1-20: SAR Values (LTE Band12 - Body)**

Ambient Temperature: 22.9 °C						Liquid Temperature: 22.5°C					
Frequency		Mode	Test Position	Figure No./ Note	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)
Ch.	MHz										
23095	707.5	1RB_High	Left	Fig.20	23.50	24	0.189	<b>0.21</b>	0.265	<b>0.30</b>	0.00

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

Note2: The LTE mode is QPSK\_10MHz.

### I.3 WLAN Evaluation

#### Head Evaluation

**Table I.3-1: SAR Values (WLAN - Head) – 802.11b (Full SAR)**

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.										
2412	1	Right	Tilt	Fig.21	17.51	19	0.168	<b>0.24</b>	0.367	<b>0.52</b>	-0.15

**Table I.3-2: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)**

Ambient Temperature: 22.9 °C					Liquid Temperature: 22.5°C		
Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.						
2412	1	Right	Tilt	99.52%	100%	<b>0.52</b>	<b>0.52</b>

**Table I.3-3: SAR Values (WLAN - Head) – 802.11a (Full SAR)**

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.										
5825	165	Right	Tilt	Fig.22	15.66	16.5	0.061	<b>0.07</b>	0.196	<b>0.24</b>	0.09

**Table I.3-4: SAR Values (WLAN - Head) – 802.11b 1Mbps (Scaled Reported SAR)**

Ambient Temperature: 22.9 °C				Liquid Temperature: 22.5 °C			
Frequency		Side	Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.						
5825	165	Right	Tilt	98.47%	100%	<b>0.24</b>	<b>0.24</b>

### Body Evaluation

**Table I.3-5: SAR Values (WLAN - Head) – 802.11b (Full SAR)**

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.									
2412	1	Rear	Fig.23	17.51	19	0.091	<b>0.13</b>	0.187	<b>0.26</b>	0.18

**Table I.3-6: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)**

Ambient Temperature: 23.0 °C				Liquid Temperature: 22.5 °C		
Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.					
2412	1	Rear	99.52%	100%	<b>0.26</b>	<b>0.26</b>

**Table I.3-7: SAR Values (WLAN - Head) – 802.11a (Full SAR)**

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.									
5825	165	Top	Fig.24	15.66	16.5	0.066	<b>0.08</b>	0.164	<b>0.20</b>	0.01

**Table I.3-8: SAR Values (WLAN - Head) – 802.11a (Scaled Reported SAR)**

Ambient Temperature: 23.0 °C				Liquid Temperature: 22.5 °C		
Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g) (W/kg)	Scaled reported SAR (1g) (W/kg)
MHz	Ch.					
5825	165	Top	98.47%	100%	<b>0.20</b>	<b>0.20</b>

#### I.4 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	0.21	0.22
	PCS 1900	0.11	0.11
	WCDMA850	0.35	0.29
	WCDMA1700	0.24	0.21
	WCDMA1900	0.21	0.19
	LTE Band 2	0.18	0.20
	LTE Band 4	0.22	0.24
	LTE Band 5	0.31	0.33
	LTE Band 7	0.03	0.02
	LTE Band 12	0.17	0.34
	WLAN 2.4 GHz	0.52	0.63
	WLAN 5 GHz	0.24	0.34
Hotspot (Separation Distance 10mm)	GSM 850	0.34	0.26
	PCS 1900	0.82	1.08
	WCDMA850	0.52	0.38
	WCDMA1700	1.22	1.22
	WCDMA1900	1.39	1.40
	LTE Band 2	1.19	1.10
	LTE Band 4	1.23	1.19
	LTE Band 5	0.46	0.44
	LTE Band 7	0.62	0.89
	LTE Band 12	0.30	0.51
	WLAN 2.4 GHz	0.26	0.33
	WLAN 5 GHz	0.20	0.22

**Note:** The spot check results of Head for WCDMA850 / WCDMA1700 / WCDMA1900 / LTE Band12 and body for GSM850 / WCDMA850 / LTE B2 / LTE B4 / LTE B5 are larger than the original results, so these values replace the original results and others are quoted.

## I.5 Graph Results of spotcheck

### 850 Left Cheek Low

Date: 2017-4-13

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.889$  mho/m;  $\epsilon_r = 42.14$ ;  $\rho = 1000$  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: 1:8.3

Probe: EX3DV4 – SN3846ConvF(9.33, 9.33, 9.33)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.219 W/kg

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

Reference Value = 4.273 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.252 W/kg

**SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.155 W/kg**

Maximum value of SAR (measured) = 0.219 W/kg

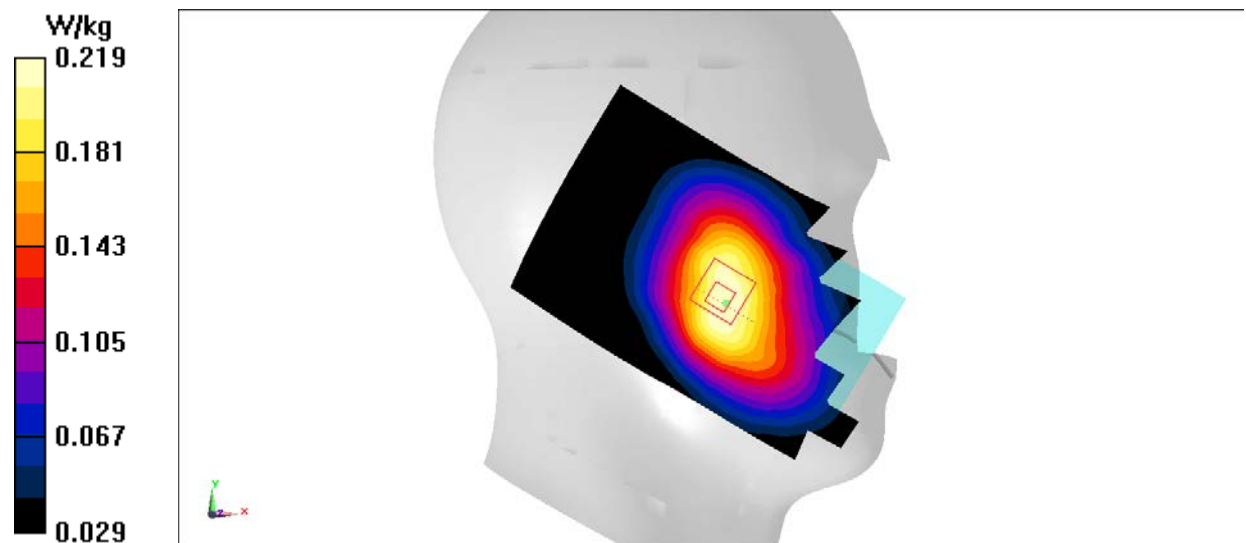


Fig.1 850MHz

### 850 Body Rear Low

Date: 2017-4-13

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.975$  mho/m;  $\epsilon_r = 56.83$ ;  $\rho = 1000$  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 – SN3846ConvF(9.52, 9.52, 9.52)

**Area Scan (111x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.366 W/kg

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

Reference Value = 18.78 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.410 W/kg

**SAR(1 g) = 0.335 W/kg; SAR(10 g) = 0.265 W/kg**

Maximum value of SAR (measured) = 0.361 W/kg

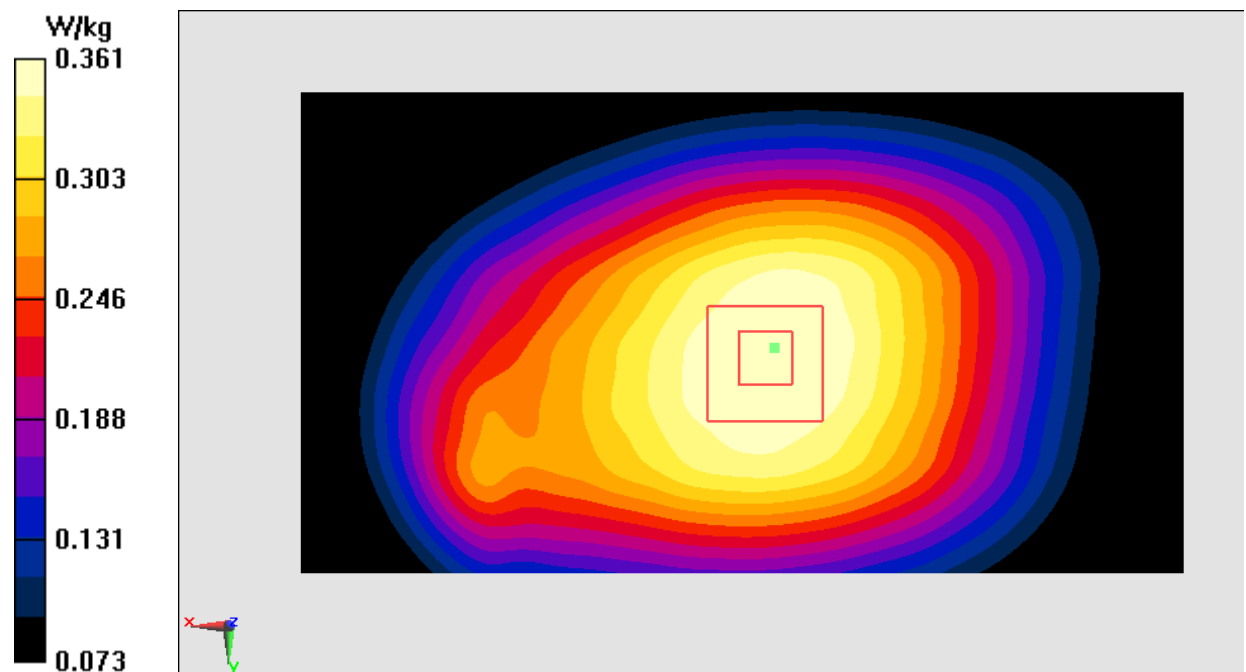


Fig.2 850 MHz

### 1900 Left Cheek Low

Date: 2017-4-15

Electronics: DAE4 Sn1331

Medium: Head 1900 MHz

Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.354$  mho/m;  $\epsilon_r = 40.59$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

Probe: EX3DV4– SN3846 ConvF(7.89, 7.89, 7.89)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.106 W/kg

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

Reference Value = 2.529 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.140 W/kg

**SAR(1 g) = 0.090 W/kg; SAR(10 g) = 0.057 W/kg**

Maximum value of SAR (measured) = 0.107 W/kg

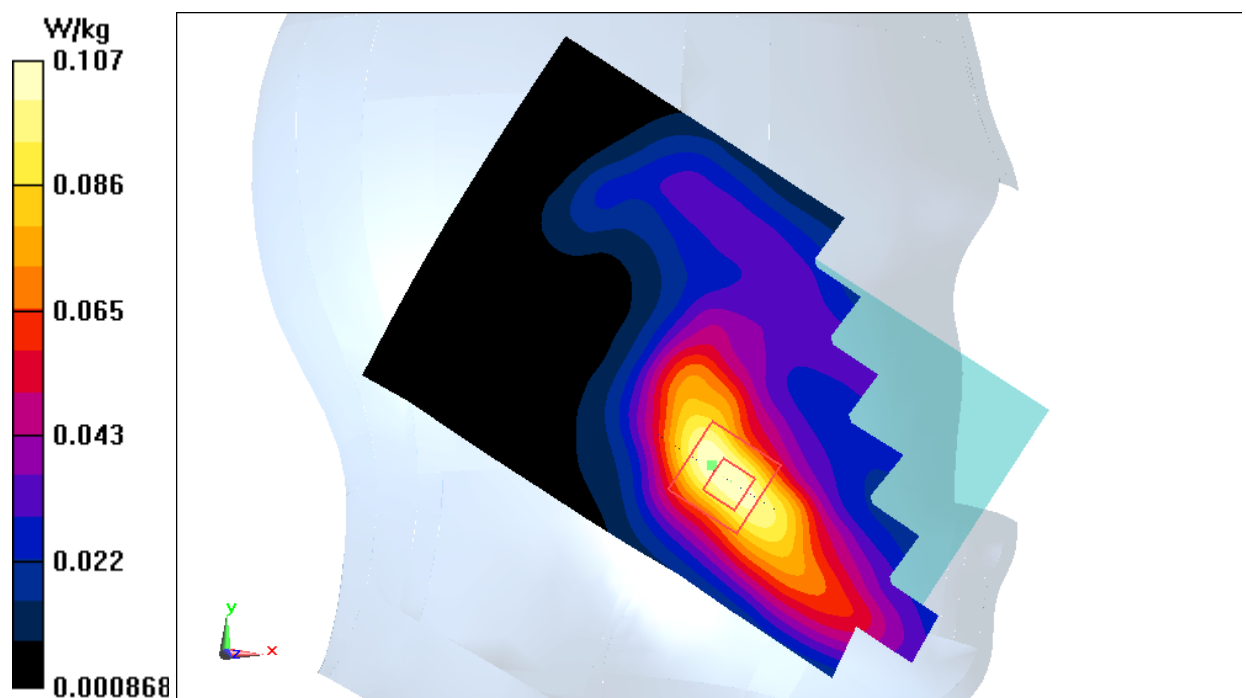


Fig.3 1900 MHz

### 1900 Body Bottom Low

Date: 2017-4-15

Electronics: DAE4 Sn1331

Medium: Body 1900 MHz

Medium parameters used:  $f = 1850.2$  MHz;  $\sigma = 1.496$  mho/m;  $\epsilon_r = 54.58$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: GSM 1900MHz GPRS Frequency: 1850.2 MHz Duty Cycle: 1:2

Probe: EX3DV4– SN7307 ConvF(7.67, 7.67, 7.67)

**Area Scan (111x61x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.906 W/kg

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

Reference Value = 19.35 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.717 W/kg; SAR(10 g) = 0.371 W/kg**

Maximum value of SAR (measured) = 0.886 W/kg

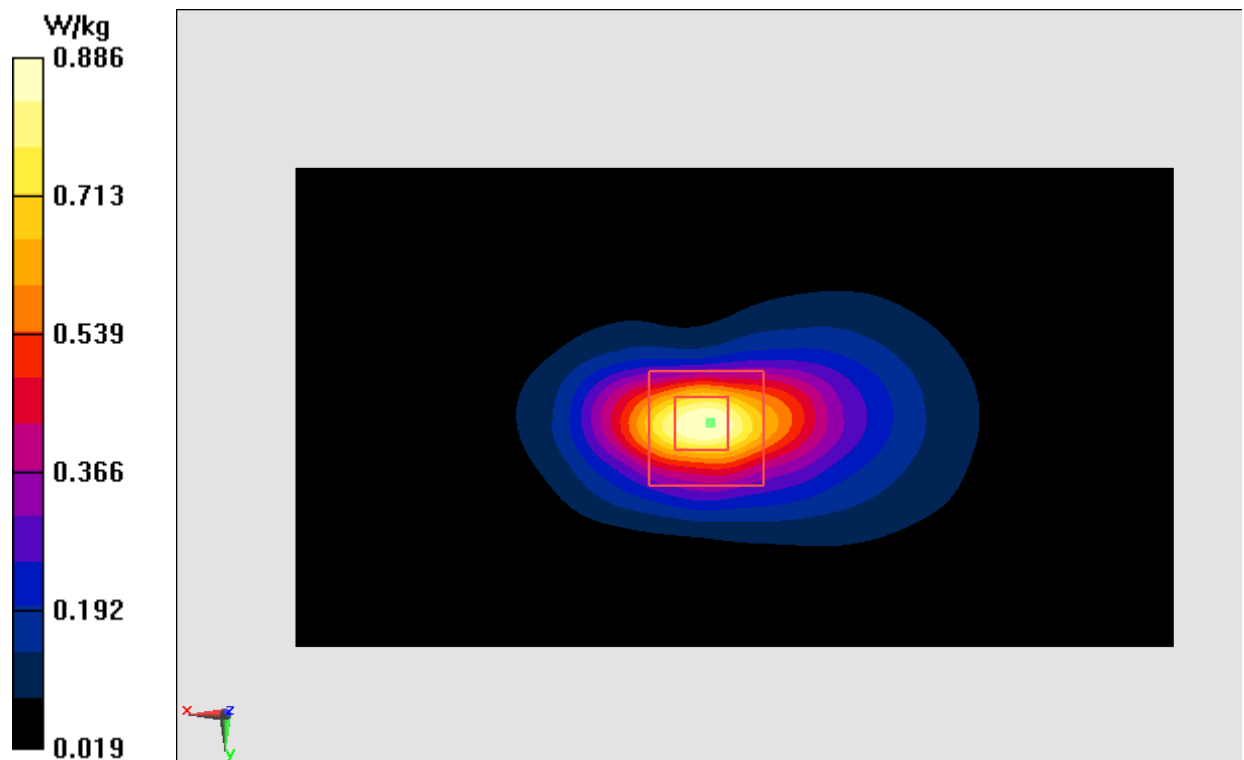


Fig.4 1900 MHz



### WCDMA 850 Left Cheek High

Date: 2017-4-13

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 0.914$  mho/m;  $\epsilon_r = 41.02$ ;  $\rho = 1000$  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 – SN3846 ConvF(9.33, 9.33, 9.33)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.373 W/kg

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

Reference Value = 5.902 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.424 W/kg

**SAR(1 g) = 0.341 W/kg; SAR(10 g) = 0.262 W/kg**

Maximum value of SAR (measured) = 0.372 W/kg

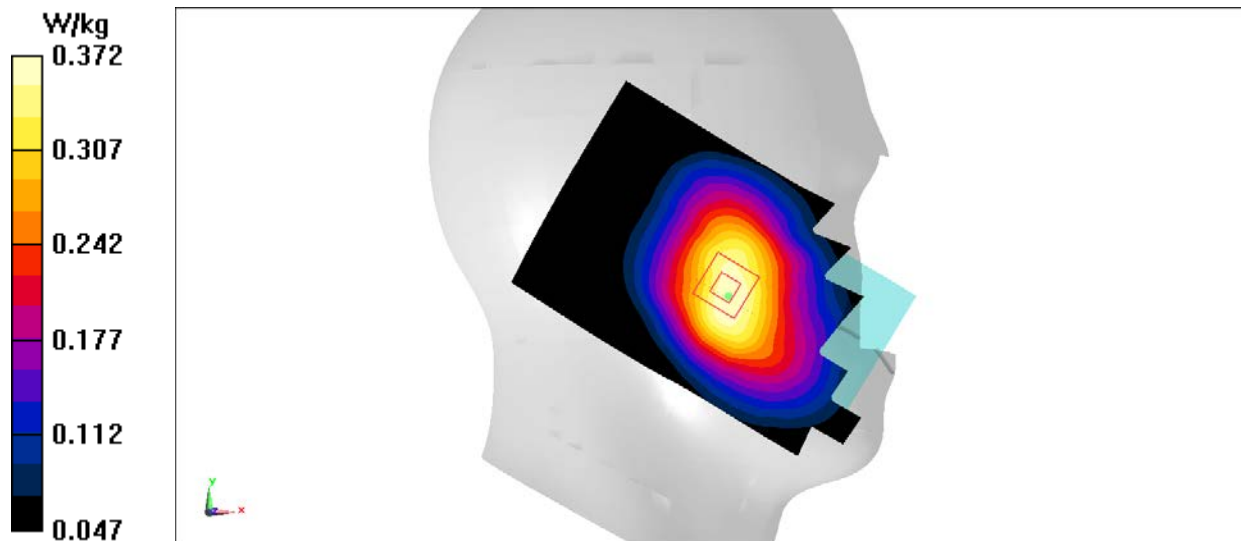


Fig.5 WCDMA 850

## WCDMA 850 Body Left High

Date: 2017-4-13

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated):  $f = 846.6$  MHz;  $\sigma = 1.002$  mho/m;  $\epsilon_r = 55.32$ ;  $\rho = 1000$  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 – SN3846ConvF(9.52, 9.52, 9.52)

**Area Scan (111x61x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.585 W/kg

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

Reference Value = 22.53 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.725 W/kg

**SAR(1 g) = 0.514 W/kg; SAR(10 g) = 0.354 W/kg**

Maximum value of SAR (measured) = 0.589 W/kg

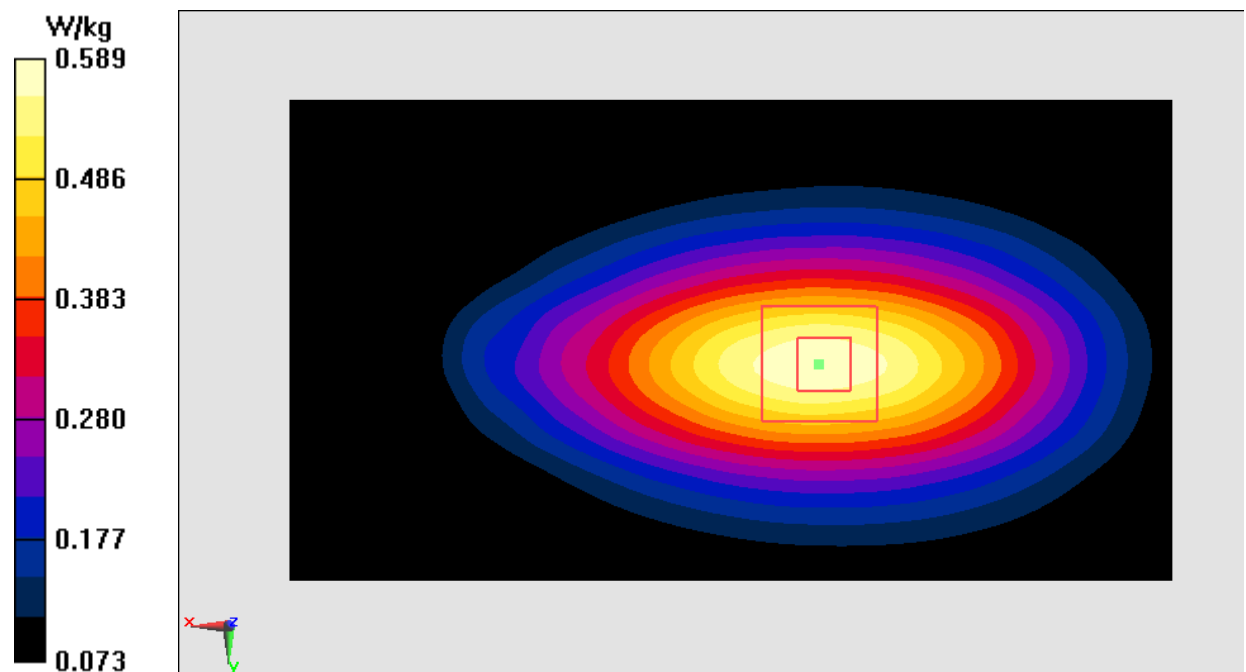


Fig.6 WCDMA 850

## WCDMA 1700 Left Cheek High

Date: 2017-4-14

Electronics: DAE4 Sn1331

Medium: Head 1750 MHz

Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.382$  mho/m;  $\epsilon_r = 40.62$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: WCDMA 1750 Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(8.16, 8.16, 8.16)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.276 W/kg

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

Reference Value = 5.071 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.304 W/kg

**SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.138 W/kg**

Maximum value of SAR (measured) = 0.244 W/kg

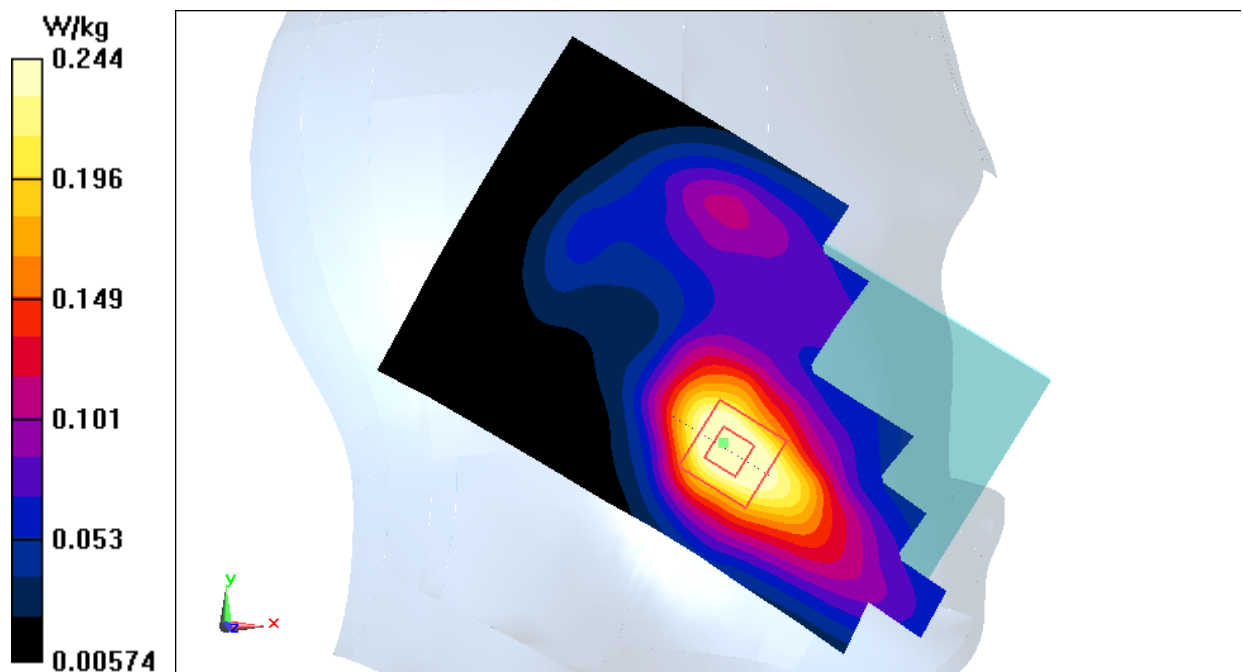


Fig.7 WCDMA1700

## WCDMA 1700 Body Bottom High

Date: 2017-4-14

Electronics: DAE4 Sn1331

Medium: Body 1750 MHz

Medium parameters used:  $f = 1752.6$  MHz;  $\sigma = 1.516$  mho/m;  $\epsilon_r = 53.14$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: WCDMA 1900 Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.90, 7.90, 7.90)

**Area Scan (111x61x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 1.34 W/kg

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

Reference Value = 24.66 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.78 W/kg

**SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.563 W/kg**

Maximum value of SAR (measured) = 1.33 W/kg

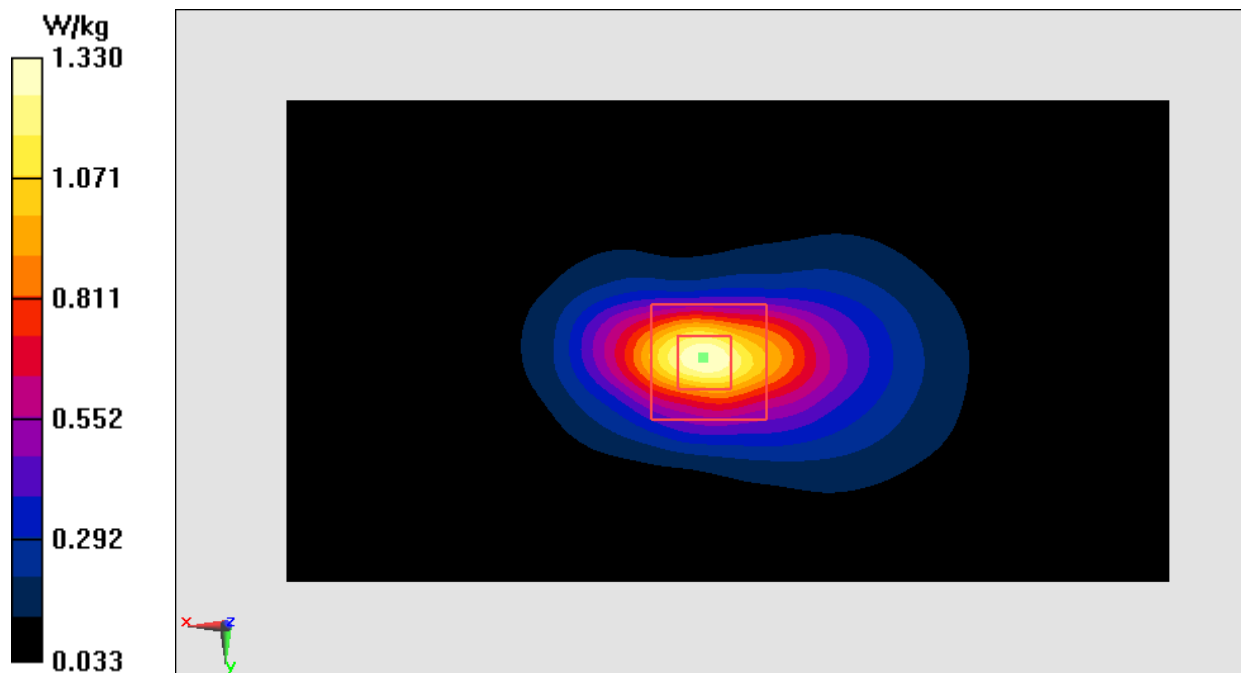


Fig.8 WCDMA1700

## WCDMA 1900 Right Cheek Low

Date: 2017-4-15

Electronics: DAE4 Sn1331

Medium: Head 1900 MHz

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.355$  mho/m;  $\epsilon_r = 40.54$ ;  $\rho = 1000$  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– SN3846 ConvF(7.89, 7.89, 7.89)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.224 W/kg

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

Reference Value = 4.083 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.266 W/kg

**SAR(1 g) = 0.177 W/kg; SAR(10 g) = 0.111 W/kg**

Maximum value of SAR (measured) = 0.207 W/kg

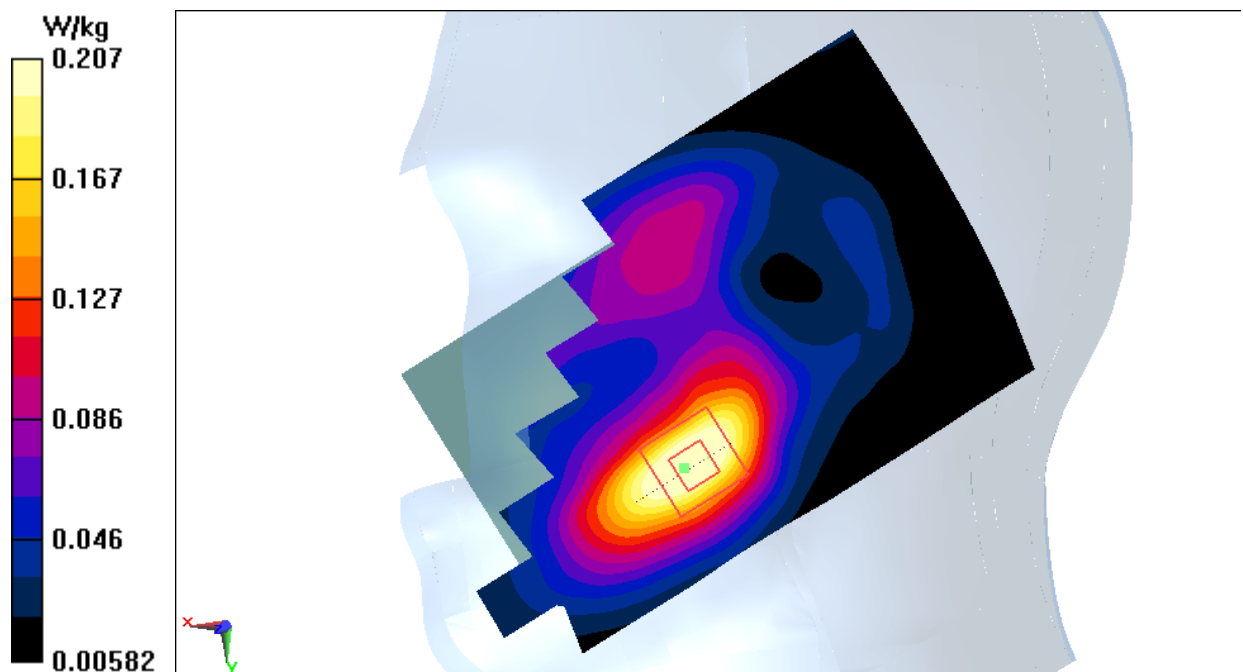


Fig.9 WCDMA1900

## WCDMA 1900 Body Bottom High

Date: 2017-4-15

Electronics: DAE4 Sn1331

Medium: Body 1900 MHz

Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.542$  mho/m;  $\epsilon_r = 52.98$ ;  $\rho = 1000$  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- SN3846 ConvF(7.57, 7.57, 7.57)

**Area Scan (111x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.46 W/kg

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

Reference Value = 23.53 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.04 W/kg

**SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.590 W/kg**

Maximum value of SAR (measured) = 1.45 W/kg

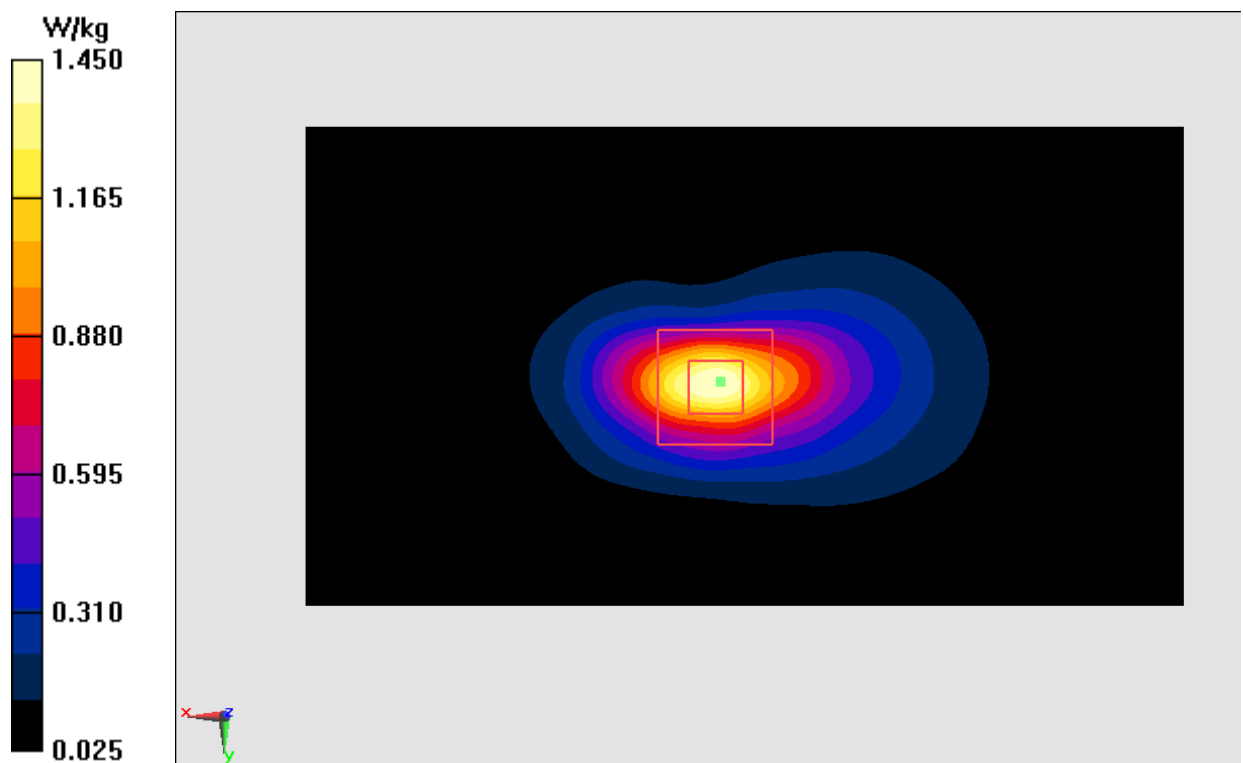


Fig.10 WCDMA1900

### LTE Band2 Left Cheek High with QPSK\_20M\_1RB\_Low

Date: 2017-4-15

Electronics: DAE4 Sn1331

Medium: Head 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.390$  mho/m;  $\epsilon_r = 39.55$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band2 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.89, 7.89, 7.89)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.199 W/kg

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

Reference Value = 3.299 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.259 W/kg

**SAR(1 g) = 0.166 W/kg; SAR(10 g) = 0.103 W/kg**

Maximum value of SAR (measured) = 0.197 W/kg

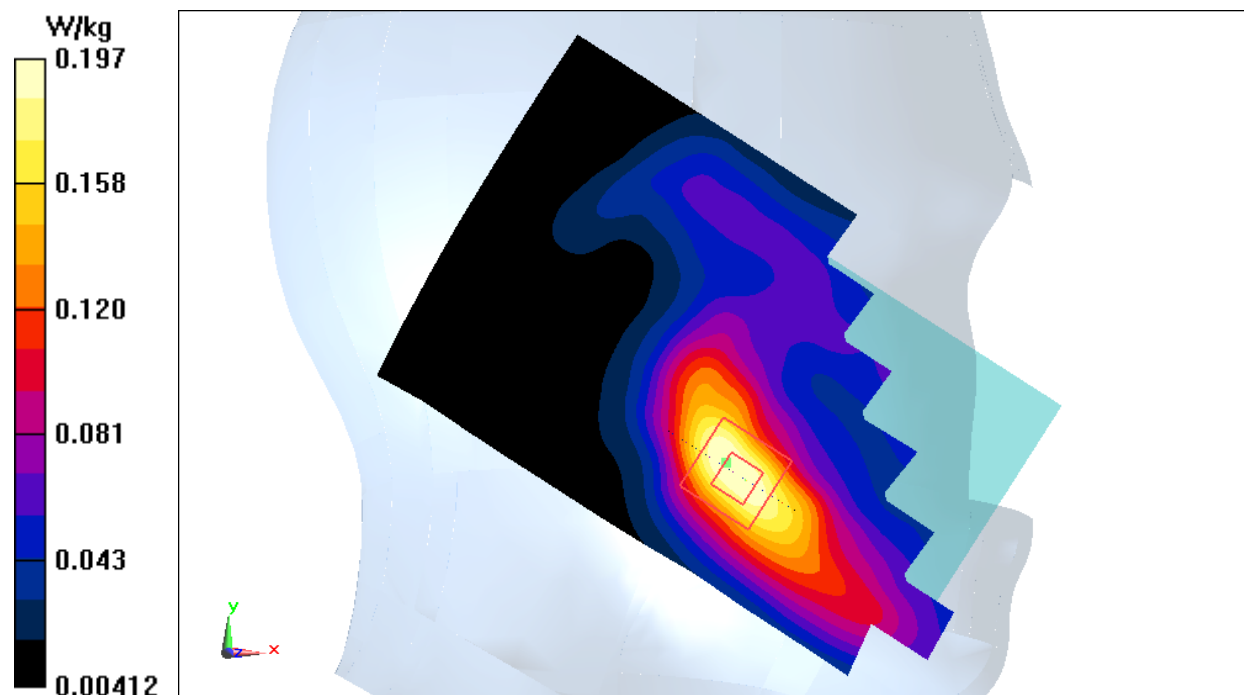


Fig.11 LTE Band2



### LTE Band2 Body Bottom High with QPSK\_20M\_1RB\_Low

Date: 2017-4-15

Electronics: DAE4 Sn1331

Medium: Body 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.536$  mho/m;  $\epsilon_r = 53.19$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band2 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.57, 7.57, 7.57)

**Area Scan (111x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.42 W/kg

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

Reference Value = 23.37 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.95 W/kg

**SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.573 W/kg**

Maximum value of SAR (measured) = 1.39 W/kg

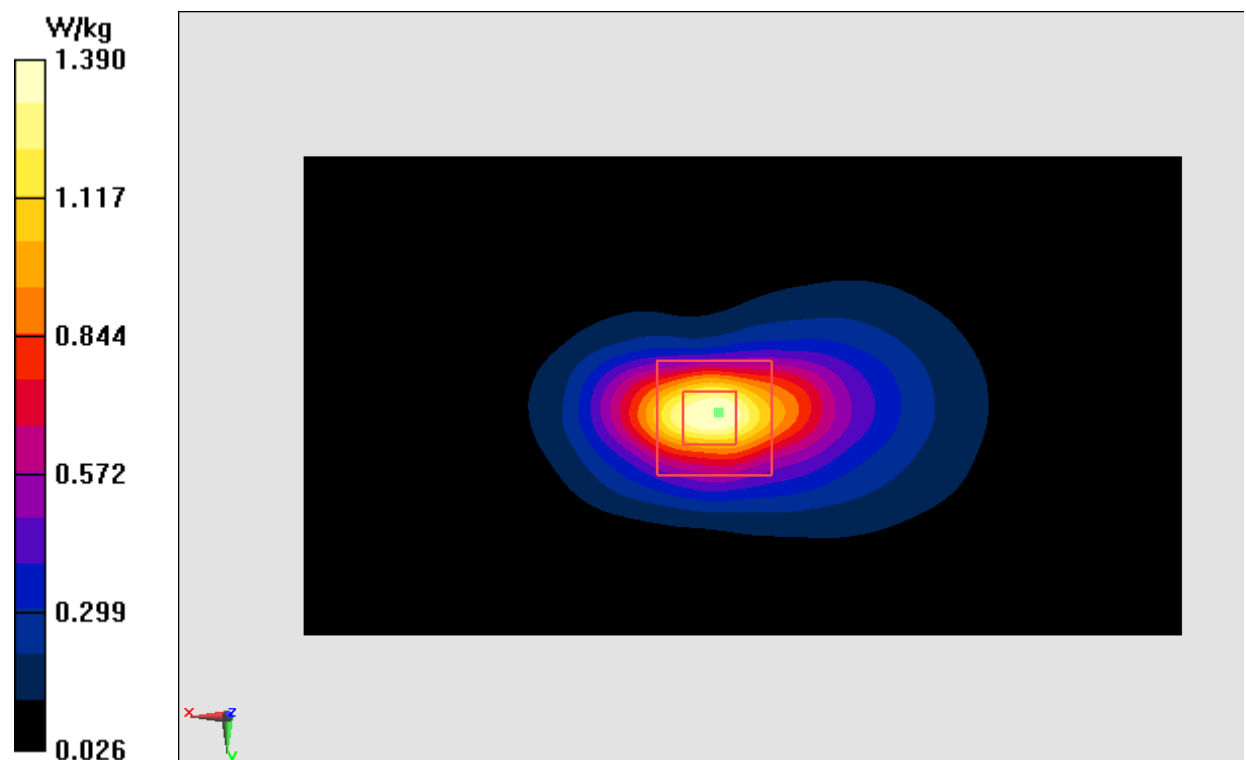


Fig.12 LTE Band2

### LTE Band4 Left Cheek High with QPSK\_20M\_1RB\_High

Date: 2017-4-14

Electronics: DAE4 Sn1331

Medium: Head 1750 MHz

Medium parameters used  $f = 1745$  MHz;  $\sigma = 1.376$  mho/m;  $\epsilon_r = 40.80$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band4 Frequency: 1745MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846ConvF(8.16, 8.16, 8.16)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 4.284 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.318 W/kg

**SAR(1 g) = 0.216 W/kg; SAR(10 g) = 0.141 W/kg**

Maximum value of SAR (measured) = 0.250 W/kg

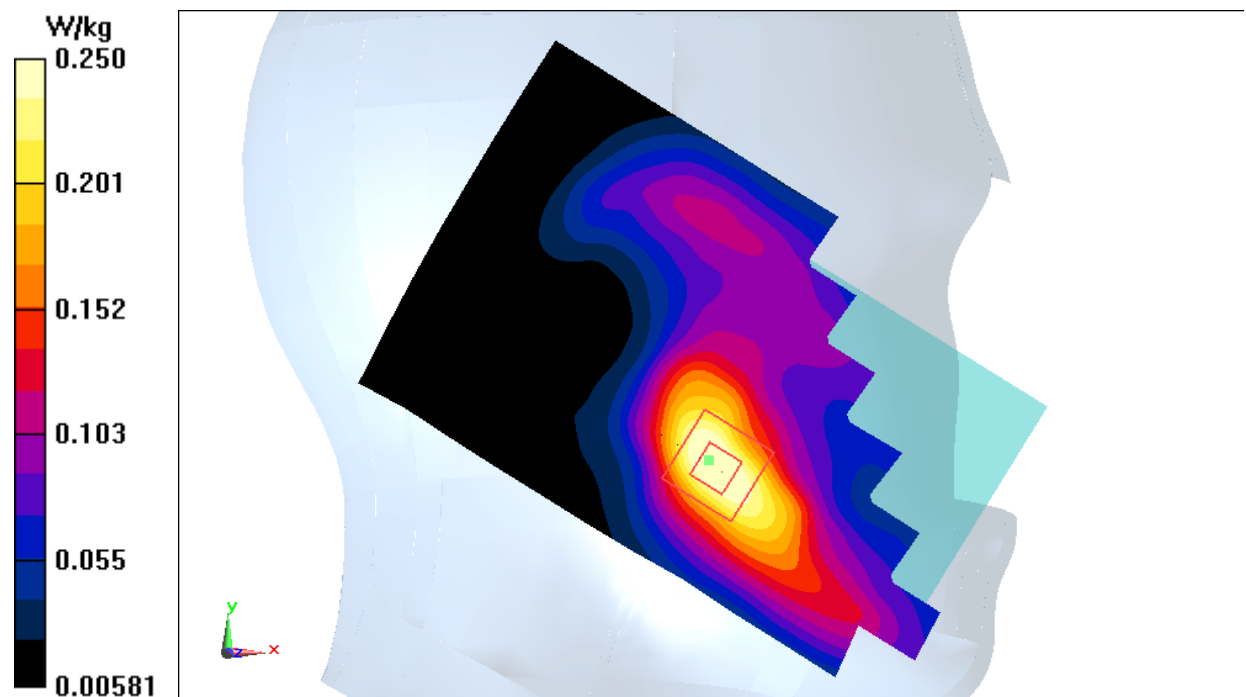


Fig.13 LTE Band4

### LTE Band4 Body Bottom High with QPSK\_20M\_1RB\_High

Date: 2017-4-14

Electronics: DAE4 Sn1331

Medium: Body 1750 MHz

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.510$  mho/m;  $\epsilon_r = 53.37$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band4 Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846ConvF(7.90, 7.90, 7.90)

**Area Scan (111x61x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 1.50 W/kg

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

Reference Value = 26.17 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.98 W/kg

**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.625 W/kg**

Maximum value of SAR (measured) = 1.47 W/kg

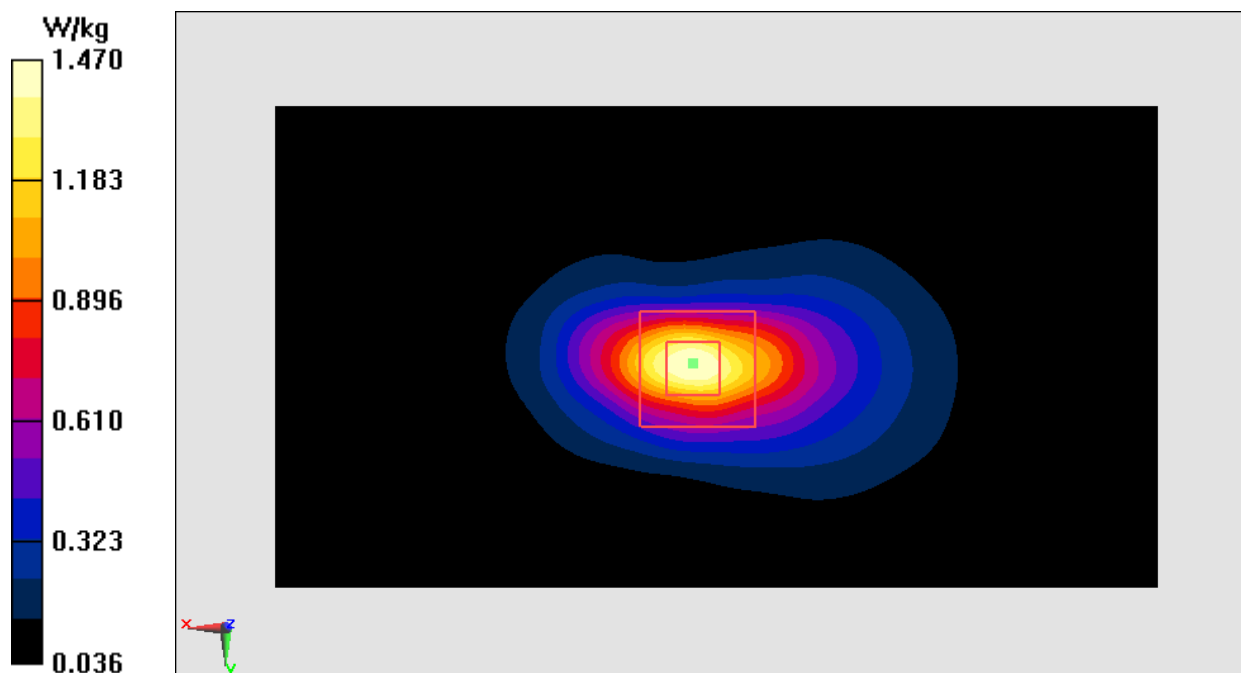


Fig.14 LTE Band4

### **LTE Band5 Left Cheek High with QPSK\_10M\_1RB\_High**

Date: 2017-4-13

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.911$  mho/m;  $\epsilon_r = 41.15$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band5 Frequency: 844 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(9.33, 9.33, 9.33)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.296 W/kg

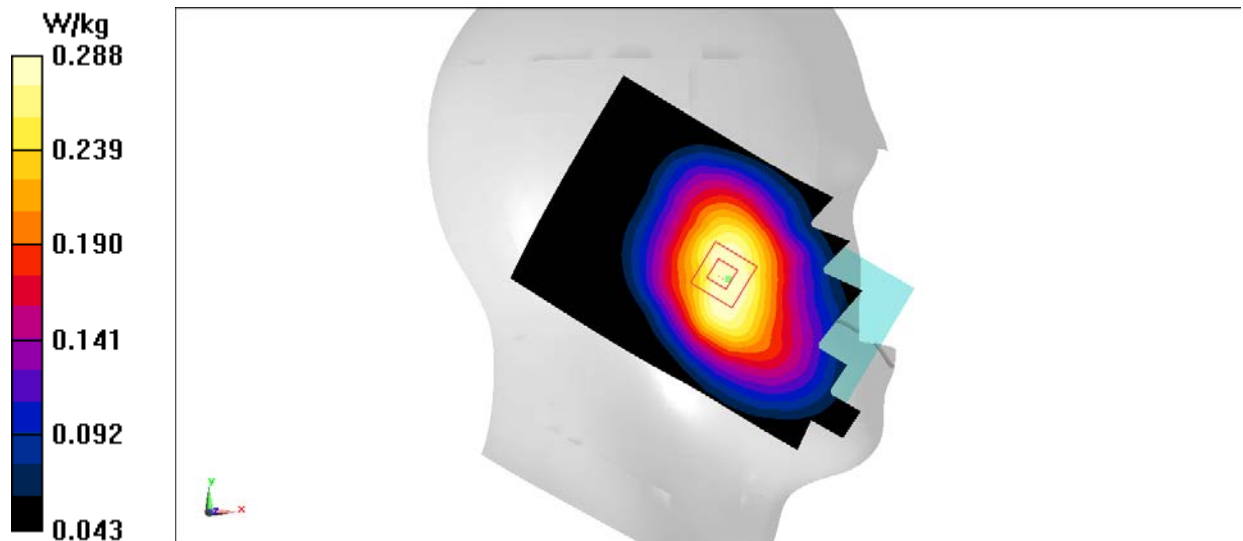
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.549 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.328 W/kg

**SAR(1 g) = 0.263 W/kg; SAR(10 g) = 0.203 W/kg**

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



**Fig.15 LTE Band5**

### LTE Band5 Body Left High with QPSK\_10M\_1RB\_High

Date: 2017-4-13

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated):  $f = 844$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 55.50$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band5 Frequency: 844 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(9.52, 9.52, 9.52)

**Area Scan (111x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.446 W/kg

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

Reference Value = 19.50 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.539 W/kg

**SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.265 W/kg**

Maximum value of SAR (measured) = 0.440 W/kg

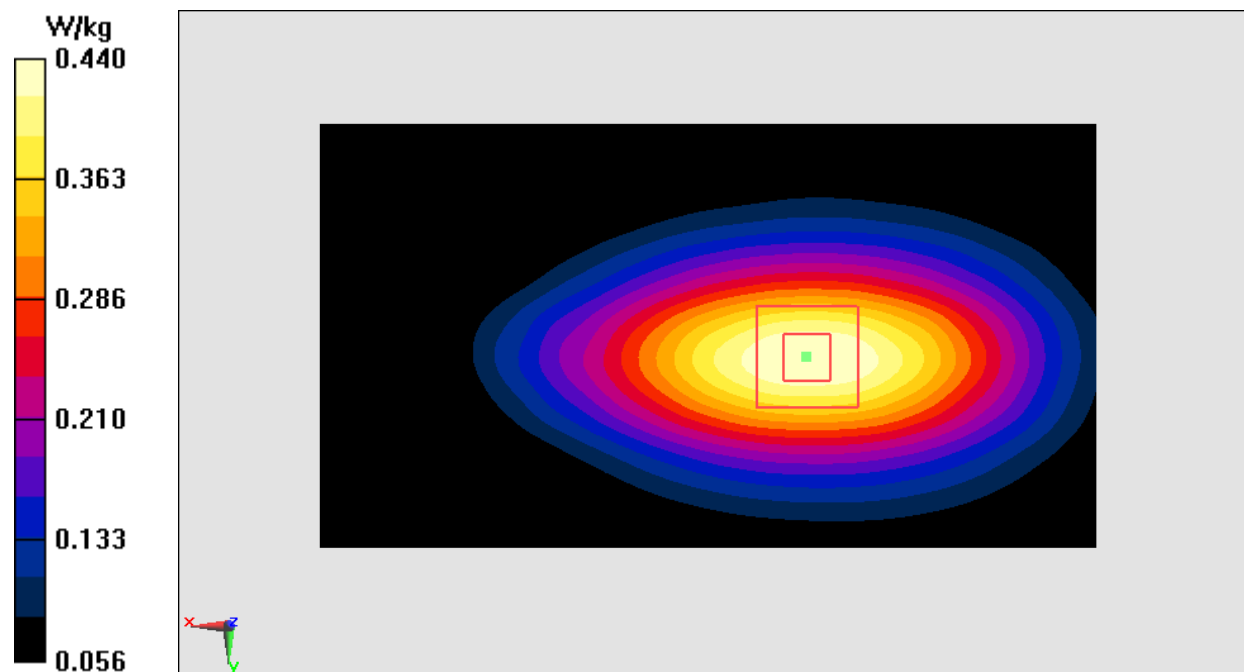


Fig.16 LTE Band5

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

Date: 2017-4-17

Electronics: DAE4 Sn1331

Medium: Head2600 MHz

Medium parameters used:  $f = 2560$  MHz;  $\sigma = 1.936$  mho/m;  $\epsilon_r = 40.18$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band7 Frequency: 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.12, 7.12, 7.12)

**Area Scan (71x121x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.0309 W/kg

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

Reference Value = 0 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.0470 W/kg

**SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.014 W/kg**

Maximum value of SAR (measured) = 0.0283 W/kg

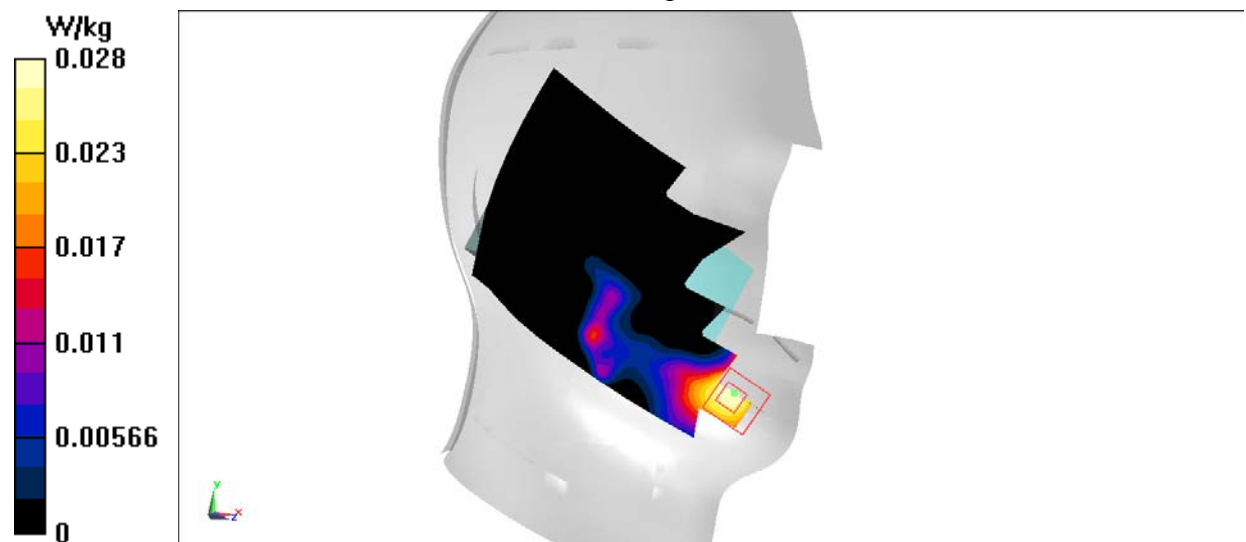


Fig.17 LTE Band7

### LTE Band7 Body Bottom High with QPSK\_20M\_1RB\_High

Date: 2017-4-17

Electronics: DAE4 Sn1331

Medium: Body2600 MHz

Medium parameters used:  $f = 2560$  MHz;  $\sigma = 2.105$  mho/m;  $\epsilon_r = 52.40$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band7 Frequency: 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.25, 7.25, 7.25)

**Area Scan (111x61x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.709 W/kg

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

Reference Value = 5.205 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.540 W/kg; SAR(10 g) = 0.247 W/kg**

Maximum value of SAR (measured) = 0.692 W/kg

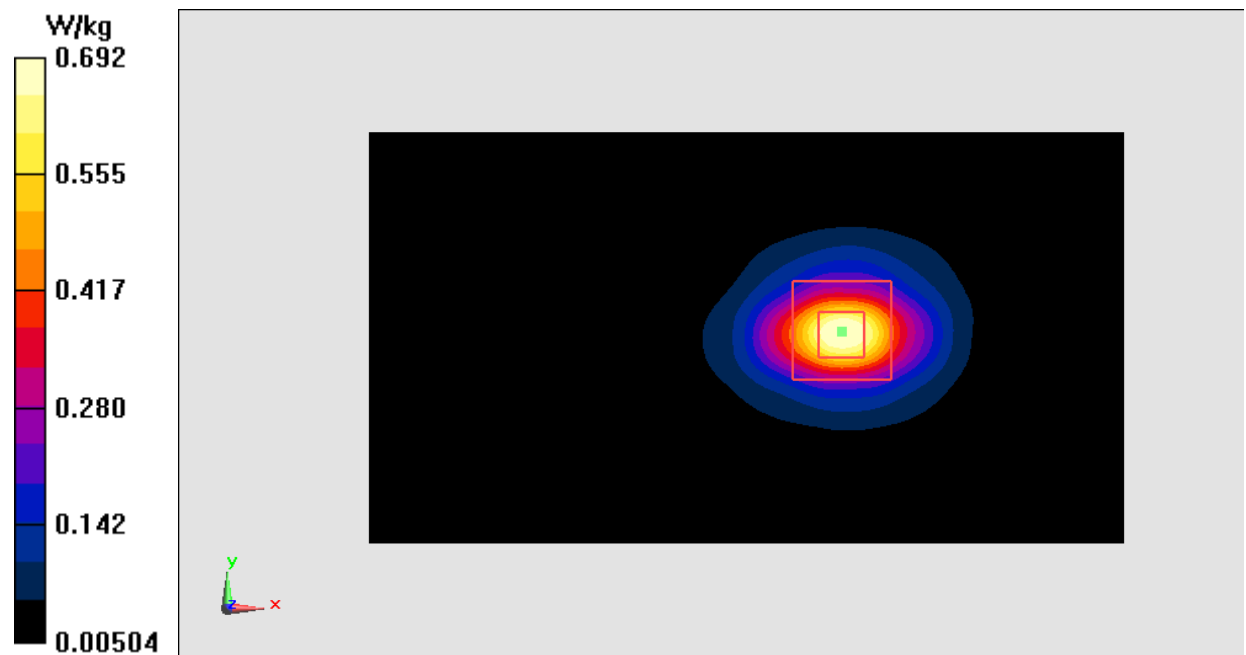


Fig.18 LTE Band7



### LTE Band12 Left Cheek Middle with QPSK\_10M\_1RB\_High

Date: 2017-4-12

Electronics: DAE4 Sn1331

Medium: Head750 MHz

Medium parameters used (interpolated):  $f = 707.5$  MHz;  $\sigma = 0.847$  mho/m;  $\epsilon_r = 44.06$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band12 Frequency: 707.5 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(9.65, 9.65, 9.65)

**Area Scan (71x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.171 W/kg

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

Reference Value = 5.344 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.194 W/kg

**SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.123 W/kg**

Maximum value of SAR (measured) = 0.168 W/kg

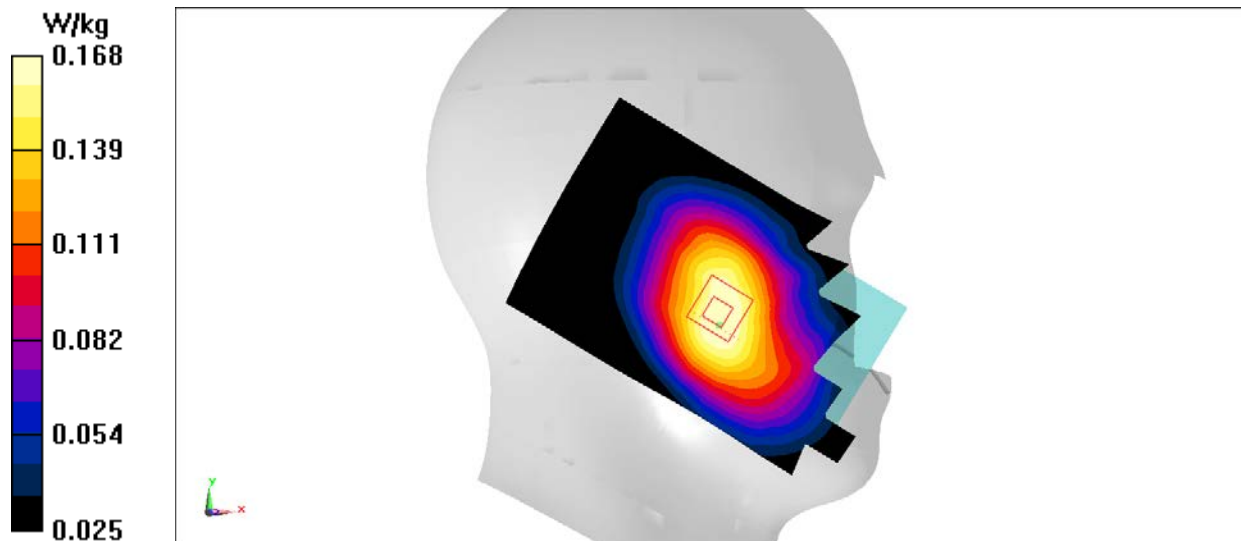


Fig.19 LTE Band12

### LTE Band12 Body Left Middle with QPSK\_10M\_1RB\_High

Date: 2017-4-12

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used (interpolated):  $f = 707.5$  MHz;  $\sigma = 0.897$  mho/m;  $\epsilon_r = 58.49$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band12 Frequency: 707.5 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN3846 ConvF(9.96, 9.96, 9.96)

**Area Scan (111x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 17.45 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.364 W/kg

**SAR(1 g) = 0.265 W/kg; SAR(10 g) = 0.189 W/kg**

Maximum value of SAR (measured) = 0.299 W/kg

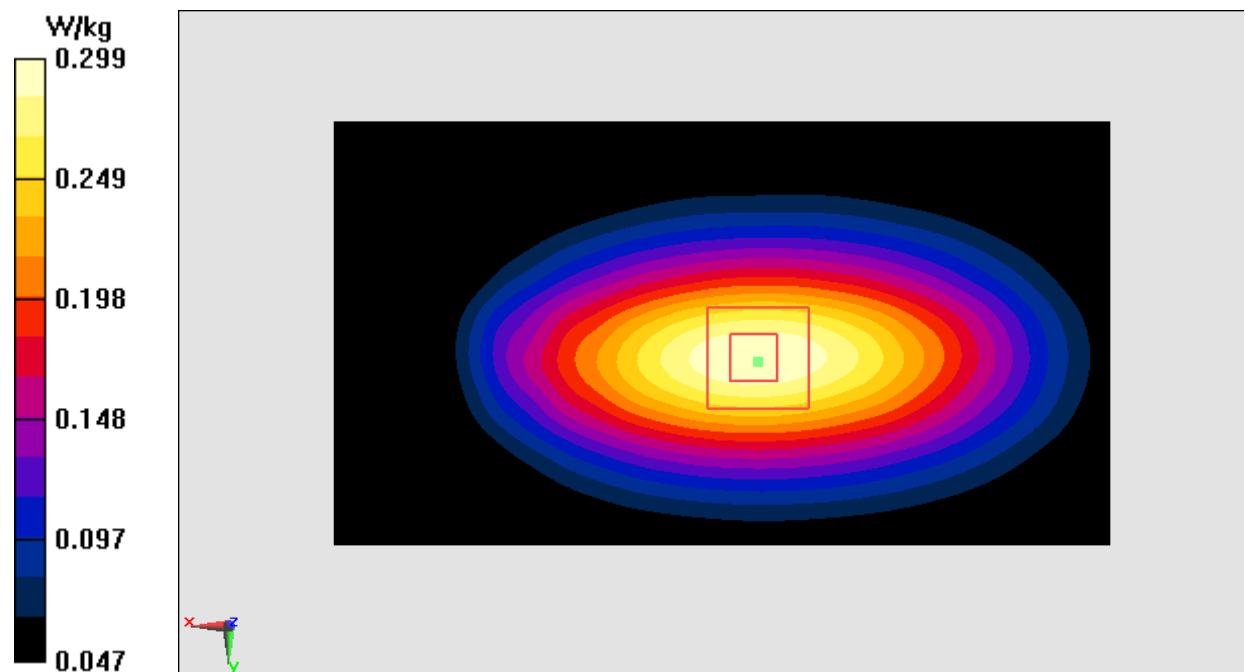


Fig.20 LTE Band12

### Wifi 802.11b Right Tilt Channel 1

Date: 2017-4-16

Electronics: DAE4 Sn1331

Medium: Head 2450 MHz

Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.784$  mho/m;  $\epsilon_r = 39.05$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN3846 ConvF(7.22, 7.22, 7.22)

**Area Scan (91x151x1):** Interpolated grid:  $dx=1.200$  mm,  $dy=1.200$  mm

Maximum value of SAR (interpolated) = 0.588 W/kg

**Zoom Scan (8x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 13.71 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.876 W/kg

**SAR(1 g) = 0.367 W/kg; SAR(10 g) = 0.168 W/kg**

Maximum value of SAR (measured) = 0.496 W/kg

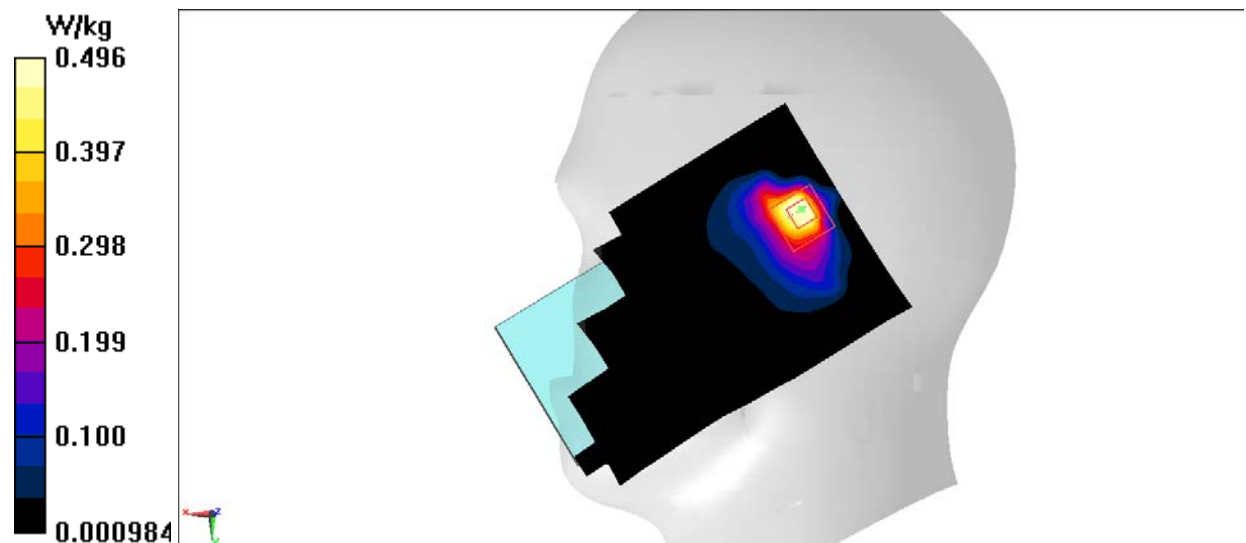


Fig.21 2450 MHz

### Wifi 802.11b Body Rear Channel 1

Date: 2017-4-16

Electronics: DAE4 Sn1331

Medium: Body 2450 MHz

Medium parameters used (interpolated):  $f = 2412$  MHz;  $\sigma = 1.966$  mho/m;  $\epsilon_r = 53.36$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(7.31, 7.31, 7.31)

**Area Scan (111x61x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.258 W/kg

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

Reference Value = 2.619 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.372 W/kg

**SAR(1 g) = 0.187 W/kg; SAR(10 g) = 0.091 W/kg**

Maximum value of SAR (measured) = 0.242 W/kg

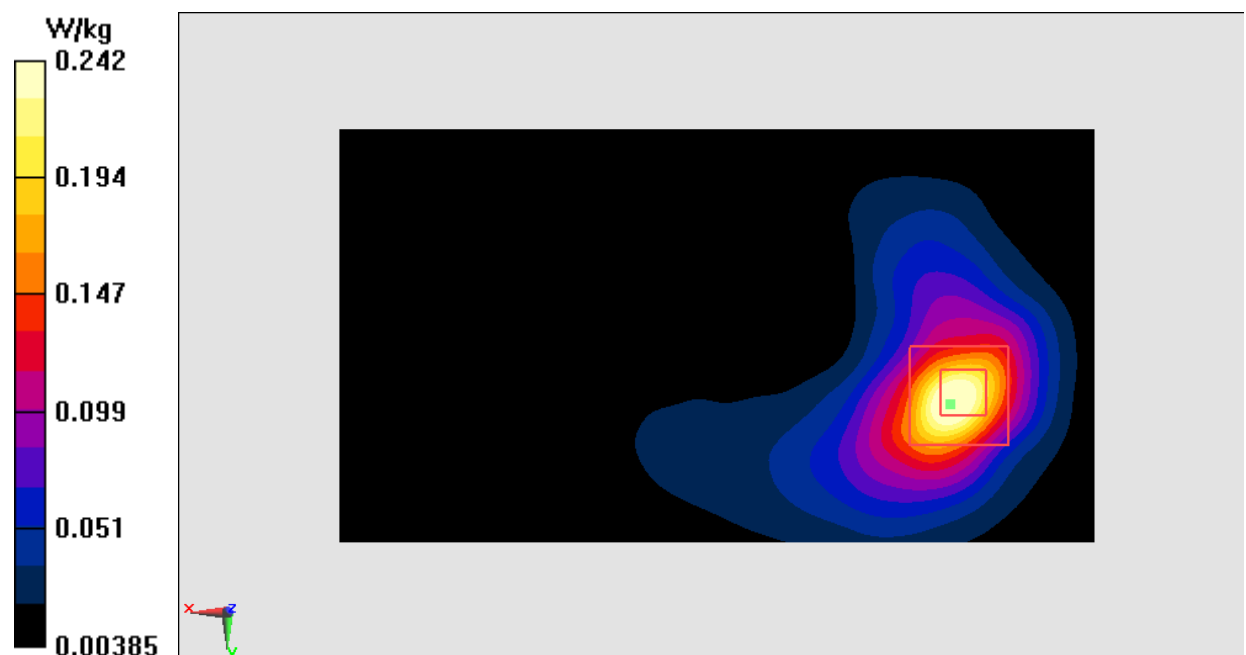


Fig.22 2450 MHz

### Wifi 802.11a Right Tilt Channel 165

Date: 2017-4-18

Electronics: DAE4 Sn1331

Medium: Head 5 GHz

Medium parameters used:  $f = 5825$  MHz;  $\sigma = 5.181$  mho/m;  $\epsilon_r = 35.51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: Wlan 5G Frequency: 5825 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(4.95, 4.95, 4.95)

**Area Scan (101x171x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.327 W/kg

**Zoom Scan (8x8x7)/Cube 0:** Measurement grid:  $dx=4$ mm,  $dy=4$ mm,  $dz=1.4$ mm

Reference Value = 3.117 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.68 W/kg

**SAR(1 g) = 0.196 W/kg; SAR(10 g) = 0.061 W/kg**

Maximum value of SAR (measured) = 0.527 W/kg

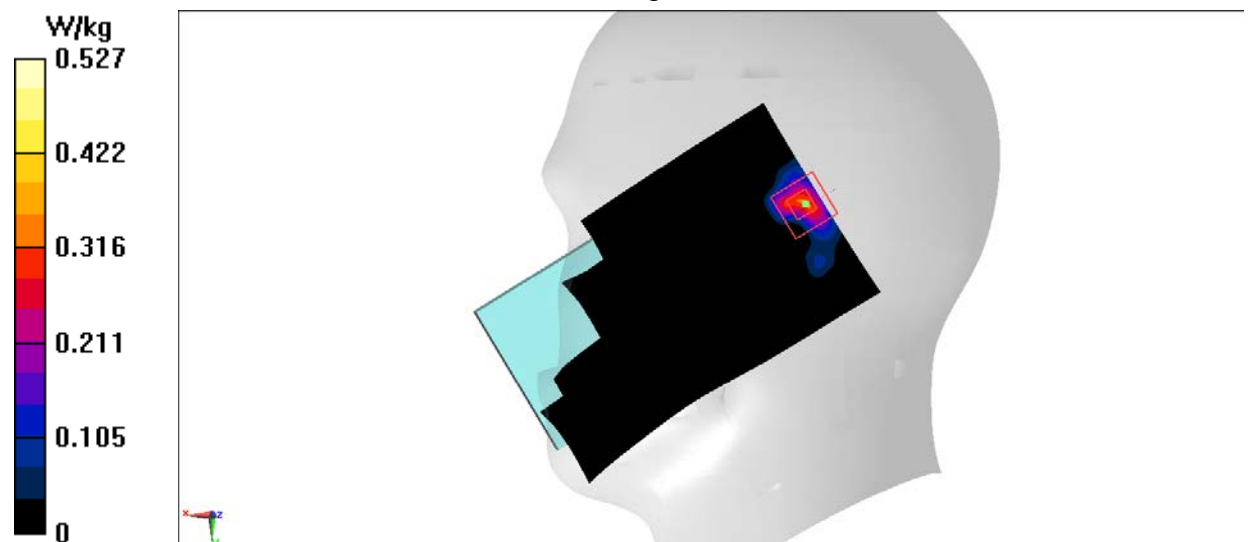


Fig.23 5GHz

## Wifi 802.11a Top Channel 165

Date: 2017-4-18

Electronics: DAE4 Sn1331

Medium: Body5 GHz

Medium parameters used:  $f = 5825$  MHz;  $\sigma = 5.598$  mho/m;  $\epsilon_r = 47.87$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: Wlan 5G Frequency: 5825 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(4.53, 4.53, 4.53)

**Area Scan (141x81x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.321 W/kg

**Zoom Scan (8x9x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 4.686 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.678 W/kg

**SAR(1 g) = 0.164 W/kg; SAR(10 g) = 0.066 W/kg**

Maximum value of SAR (measured) = 0.375 W/kg

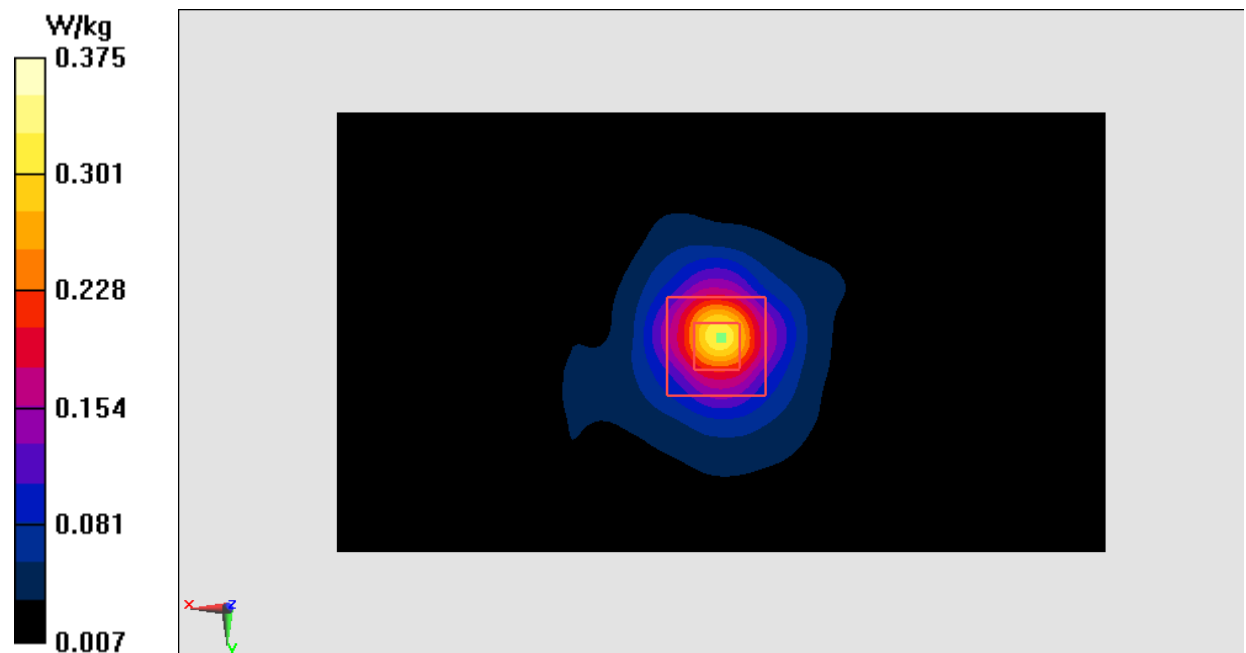
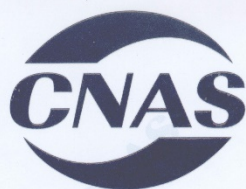


Fig.24 5GHz



## ANNEX J Accreditation Certificate



**China National Accreditation Service for Conformity Assessment**  
**LABORATORY ACCREDITATION CERTIFICATE**  
(Registration 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

TCL International E City, No. 1001 Zhongshanyuan Road, Nanshan  
District, Shenzhen, Guangdong Province

*is accredited in accordance with 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 to undertake testing and calibration service as  
described in the schedule attached to this certificate.*

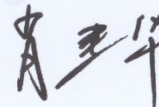
*The scope of accreditation is detailed in the attached schedule bearing the  
same registration number as above. The schedule form an integral part of this  
certificate.*

Date of Issue: 2015-11-13

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 a signatory of the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC MRA) and the Asia Pacific Laboratory Accreditation Cooperation Mutual Recognition Arrangement (APLAC MRA). The validity of the certificate can be checked on CNAS website at <http://www.cnas.org.cn/english/findanaccreditedbody/index.shtml>