

Calibration Laboratory of

Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





S Schweizerischer Kalibrierdienst
Service suisse d'étalonnage
Servizio svizzero di taratura
Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossary:

TSL tissue simulating liquid

ConvF sensitivity in TSL / NORM x,y,z N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions: Further details are available from the Validation Report at the end
 of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed
 point exactly below the center marking of the flat phantom section, with the arms oriented
 parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole
 positioned under the liquid filled phantom. The impedance stated is transformed from the
 measurement at the SMA connector to the feed point. The Return Loss ensures low
 reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point.
 No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

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Measurement Conditions

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

DAST 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	2450 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.9 ± 6 %	1.88 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C		

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.5 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.5 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.24 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.5 W/kg ± 16.5 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	52.4 ± 6 %	2.03 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C		

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.3 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	52.1 W/kg ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.16 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	24.4 W/kg ± 16.5 % (k=2)



Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

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

Antenna Parameters with Body TSL

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

General Antenna Parameters and Design

Electrical Delay (one direction)	1.162 ns

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

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	November 10, 2009



DASY5 Validation Report for Head TSL

Date: 24.07.2015

Test Laboratory: SPEAG, Zurich, Switzerland

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

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: f = 2450 MHz; $\sigma = 1.88$ S/m; $\varepsilon_r = 37.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY52 Configuration:

Probe: ES3DV3 - SN3205; ConvF(4.54, 4.54, 4.54); Calibrated: 30.12.2014;

Sensor-Surface: 3mm (Mechanical Surface Detection)

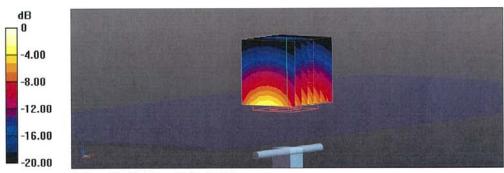
Electronics: DAE4 Sn601; Calibrated: 18.08.2014

Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001

DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

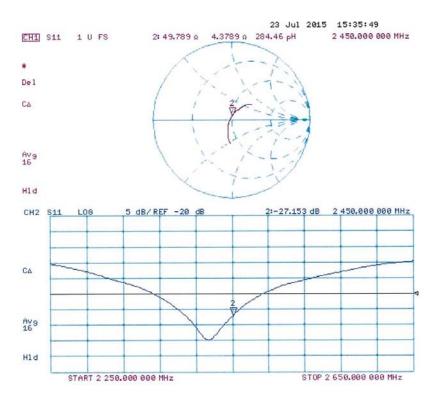
Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 100.4 V/m; Power Drift = 0.04 dB Peak SAR (extrapolated) = 27.9 W/kg SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.24 W/kg Maximum value of SAR (measured) = 17.7 W/kg



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



Impedance Measurement Plot for Head TSL





DASY5 Validation Report for Body TSL

Date: 24.07.2015

Test Laboratory: SPEAG, Zurich, Switzerland

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

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used: f = 2450 MHz; $\sigma = 2.03$ S/m; $\varepsilon_r = 52.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY52 Configuration:

Probe: ES3DV3 - SN3205; ConvF(4.32, 4.32, 4.32); Calibrated: 30.12.2014;

Sensor-Surface: 3mm (Mechanical Surface Detection)

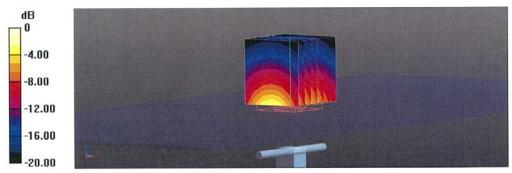
Electronics: DAE4 Sn601; Calibrated: 18.08.2014

Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002

DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

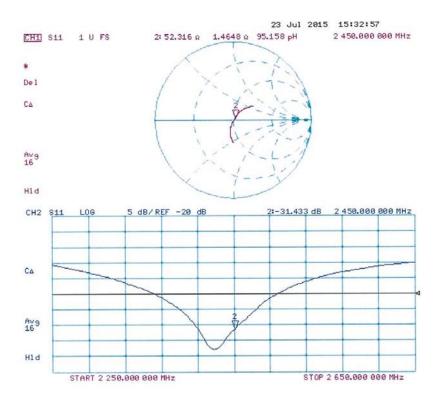
Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 95.79 V/m; Power Drift = 0.03 dB Peak SAR (extrapolated) = 27.5 W/kg SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.16 W/kg Maximum value of SAR (measured) = 17.6 W/kg



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



Impedance Measurement Plot for Body TSL





ANNEX I SPOT CHECK TEST

As the test lab for 4060O 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

CCM		Conducted Power (dBm)	
GSM 850MHz	Channel 251(848.8MHz)	Channel 190(836.6MHz)	Channel 128(824.2MHz)
650IVIFIZ	\	32.05	\
0014		Conducted Power (dBm)	
GSM	Channel 810(1909.8MHz)	Channel 661(1880MHz)	Channel 512(1850.2MHz)
1900MHz	29.48	\	\

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

GSM 850	Mea	sured Power (d	Bm)
GPRS (GMSK)	251	190	128
2 Txslots	30.43	\	\
PCS1900	Mea	sured Power (d	Bm)
GPRS (GMSK)	810	661	512
3 Txslots	25.77	\	\

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

	Tubio II	1-3. The conducted it	711-01-101-11-0-1117-t				
ltem	band		FDDV result				
item	ARFCN	4233 (846.6MHz)	4182 (836.4MHz)	4132 (826.4MHz)			
WCDMA	\	\	23.52	23.36			
ltem	band		FDDII result AP OFF				
item	ARFCN	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)			
WCDMA	1	23.72	\	\			
Item	band	FDDII result AP ON					
item	ARFCN	9538 (1907.6MHz)	9400 (1880MHz)	9262 (1852.4MHz)			
WCDMA	\	22.47	\	\			
lt a ma	band		FDDIV result				
Item	ARFCN	1513 (1752.6MHz)	1412 (1732.4MHz)	1312 (1712.4MHz)			
WCDMA	\	23.62	\	\			



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

1900 (19100)	23.61
1880 (18900)	23.98
1860 (18700)	23.75
1900 (19100)	22.37
1880 (18900)	1
1860 (18700)	1
1745 (20300)	23.78
1732.5 (20175)	23.90
1720 (20050)	23.30
844 (20600)	1
836.5 (20525)	23.54
829 (20450)	\
711(23130)	23.22
707.5(23095)	1
704(23060)	1
	1880 (18900) 1860 (18700) 1900 (19100) 1880 (18900) 1860 (18700) 1745 (20300) 1732.5 (20175) 1720 (20050) 844 (20600) 836.5 (20525) 829 (20450) 711(23130) 707.5(23095)

I.2 Measurement results

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

			Am	bient Te	mperature: 2	23.0 °C	Liquid Temp	erature: 22	.5°C		
Freque	ency		Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
•		Side	Position	No.	Power	Power (dBm)	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
MHz	Ch.		Position	NO.	(dBm)	Fower (dbill)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
836.6	190	Left	Touch	Fig.1	32.5	33.5	0.158	0.20	0.241	0.30	0.03

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

	Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C													
Frequ	iencv	Mode	Test	Eiguro	Conducted	May tung up	Measured	Reported	Measured	Reported	Power			
	Frequency (number			Figure	Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift			
MHz	Ch.	timeslots)	Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)			
848.8	848.8 251 GPRS (2) Rear Fig.2 29.48				29.48	30.5	0.296	0.37	0.611	0.77	-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: 23.0 °C Liquid Temperature: 22.5 °C											
					Max. tune-up	Measured	Reported	Measured	Reported	Power	
MHz	Ch.	Side	Position	No.	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
1909.8	810	Left	Touch	Fig.3	30.43	30.5	0.213	0.22	0.348	0.35	0.00



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

			Ambier	nt Tempe	erature: 23.0)°C Liqu	uid Tempera	ture: 22.5°C	2		
Frequ	encv	Mode	Toot	Figure	Conducted		Measured	Reported	Measured	Reported	Power
requeries		(number of	Test	Figure	Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
MHz	Ch.	timeslots)	Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
1909.8 810 GPRS (3) Bottom Fig.4 25.77						27	0.412	0.55	0.785	1.04	-0.03

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: 23.0 °C Liquid Temperature: 22.5 °C												
Frequency Test Figure Conducted Max. tune					Max. tune-up	Measured	Reported	Measured	Reported	Power			
MHz	Ch.	Side	Position	No.	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)		
826.4	4132	Left	Touch	Fig.5	23.36	24	0.197	0.23	0.258	0.30	0.09		

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

					•	• • • • • • • • • • • • • • • • • • • •				
			Ambien	t Temperatu	re: 23.0 °C	Liquid Te	mperature:	22.5°C		
Frequ	iency	Toot	F:	Conducted	May tung up	Measured	Reported	Measured	Reported	Power
1.1040		Test	Figure	Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
MHz	Ch.	Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
836.4	4182	Rear	Fig.6	23.52	24	0.292	0.33	0.385	0.43	0.05

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

Table I.2-7: SAR Values (WCDMA 1700 MHz Band - Head)

	14010 112 11 07 117 1414 00 (11 00 1111 12 0414 11 044)													
Ambient Temperature: 23.0 °C Liquid Temperature: 22.5 °C														
Frequency Test Figure Conducted Max					Max. tune-up	Measured	Reported	Measured	Reported	Power				
	-	•	Side	Position		Power	-	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift		
	MHz	Ch.		Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)		
1	1752.6	1513	Left	Touch	Fig.7	23.62	24	0.285	0.31	0.452	0.49	0.07		

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

		P	Ambient	Temperature	e: 23.0 °C	Liquid Tem	perature: 2	2.5°C		
Frequ	Ch.	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)
1712.4	1312	Rear	Fig.8	23.67	24	0.635	0.69	0.969	1.05	-0.01

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: 23.0 °C Liquid Temperature: 22.5 °C													
Frequency Test Figure Conducted Max. tur						Max. tune-up	Measured	Reported	Measured	Reported	Power		
-			Side	Position	No.	Power	Power	Power (dBm)	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
	MHz	Ch.		FUSITION	INO.	(dBm)	rowei (abiii)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)	
Ī	1852.4	9262	Left	Touch	Fig.9	23.6	24	0.365	0.40	0.584	0.64	0.12	

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

		А	mbient ⁻	Temperature	e: 23.0 °C	Liquid Ter	mperature:	22.5°C		
Frequ	ency	Test	Figure	Conducted Power	Max. tune-up	Measured SAR(10g)	Reported SAR(10g)	Measured SAR(1g)	Reported SAR(1a)	Power Drift
MHz	Ch.	Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
1907.6	9538	Bottom	Fig.10	22.47	22.5	0.49	0.49	0.913	0.92	-0.05

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

	Table III THE SAME VALUES (COSTILLATIONS INTO SAME SOURCE), THE SAME SOURCE IN SA									
		А	mbient	Temperature	e: 23.0 °C	Liquid Ter	mperature:	22.5°C		
Frequ	encv	Toot	Figure	Conducted	May tupo up	Measured	Reported	Measured	Reported	Power
	I	Test	Figure	Power	Max. tune-up	SAR(10g)	SAR(10g)	SAR(1g)	SAR(1g)	Drift
MHz	Ch.	Position	No.	(dBm)	Power (dBm)	(W/kg)	(W/kg)	(W/kg)	(W/kg)	(dB)
1907.6	9538	Rear	Fig.11	23.72	24	0.329	0.35	0.535	0.57	0.19

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

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

			Amb	ient Temp	erature	: 23.0 °C	Liquid	Temperatui	e: 22.5°C			
Frequ	uency			To et	- :	Conducted	Max.	Measured	Reported	Measured	Reported	Power
MHz	Ch.	Mode	Side	Test Position	Figure No.	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
1900	19100	1RB_Mid	Left	Touch	Fig.12	23.61	24.8	0.37	0.49	0.602	0.79	0.08

Note1: The LTE mode is QPSK_20MHz.

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

			Ambient 7	Tempera	nture: 23.0°C	C Liqui	id Tempera	ture: 22.5°0	7		
Frequ	uency Ch.	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)
1900	19100	1RB_Low	Bottom	Fig.13	22.37	23	0.571	0.66	1.08	1.25	-0.03

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 ⁻	Tempera	nture: 23.0 °C	Liqui	d Tempera	ture: 22.5°C	7		
Frequ	iency		Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
MHz	Ch.	Mode	Position	No.	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
1900	19100	1RB_Mid	Rear	Fig.14	23.61	24.8	0.379	0.50	0.62	0.82	-0.11
1880	18900	1RB_Mid	Rear	/	23.98	24.8	0.371	0.45	0.616	0.74	-0.10
1860	18700	1RB_Mid	Rear	/	23.75	24.8	0.33	0.42	0.551	0.70	0.10

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)

			Amb	ient Temp	perature	: 23.0 °C	Liquid	Temperatui	e: 22.5°C			
Frequ	uency			Test	Figure	Conducted	Max.	Measured	Reported	Measured	Reported	Power
MHz	Ch.	Mode	Side	Position	Figure No.	Power (dBm)	tune-up Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
1745	20300	1RB_Mid	Left	Touch	Fig.15	23.78	24.5	0.271	0.32	0.435	0.51	-0.02

Note1: The LTE mode is QPSK_20MHz.

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

			Ambient ⁻	Tempera	nture: 23.0 °C	Liqui	id Temperat	ture: 22.5°C			
Frequ	iency		Test	Figure	Conducted	Max. tune-up	Measured	Reported	Measured	Reported	Power
MHz	Ch.	Mode	Position	No.	Power (dBm)	Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
1745	20300	1RB_Mid	Rear	/	23.78	24.5	0.578	0.68	0.915	1.08	-0.08
1732.5	20175	1RB_Mid	Rear	/	23.9	24.5	0.634	0.73	1.01	1.16	-0.16
1720	20050	1RB_Mid	Rear	Fig.16	23.3	24.5	0.657	0.87	0.988	1.30	-0.15

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)

						0	- (-:		,			
			Amb	ient Temp	erature	: 23.0 °C	Liquid	Temperatui	e: 22.5°C			
Frequ	uency			Test	Figuro	Conducted	Max.	Measured	Reported	Measured	Reported	Power
MHz	Ch.	Mode	Side	Position	Figure No.	Power (dBm)	tune-up Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
836.5	20525	1RB_Mid	Left	Touch	Fig.17	23.54	24.5	0.203	0.25	0.268	0.33	0.09

Note1: The LTE mode is QPSK_10MHz.



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

			Ambient ⁻	Tempera	nture: 23.0°C	Liqui	id Tempera	ture: 22.5°0	2		
Freq MHz	uency Ch.	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)
836.5	20525	1RB_Mid	Rear	Fig.18	23.54	24.5	0.311	0.39	0.421	0.53	-0.14

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 Band12 - Head)

			Amb	ient Temp	erature:	23.0 °C	Liquid	Temperatur	e: 22.5 °C			
Frequ	iency			Toot	Figure	Conducted	Max.	Measured	Reported	Measured	Reported	Power
MHz	Ch.	Mode	Side	Test Position	Figure No.	Power (dBm)	tune-up Power (dBm)	SAR(10g) (W/kg)	SAR(10g) (W/kg)	SAR(1g) (W/kg)	SAR(1g) (W/kg)	Drift (dB)
707.5	23095	1RB_Mid	Left	Touch	Fig.19	23.23	24	0.179	0.21	0.229	0.27	0.03

Note1: The LTE mode is QPSK_10MHz.

Table I.2-20: SAR Values (LTE Band12 - Body)

			Ambient 7	Tempera	ture: 23.0 °C	Liqui	d Temperat	ture: 22.5°	C		
Frequ MHz	Ch.	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)
704	23060	1RB_Mid	Rear	Fig.20	23.3	24	0.325	0.38	0.435	0.51	-0.05

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

Note2: The LTE mode is QPSK_10MHz.



I.4 Reported SAR Comparison

Exposure Configuration	Technology Band	Reported SAR 1g (W/Kg): spot check	Reported SAR 1g (W/Kg): original
	GSM 850	0.30	0.39
	PCS 1900	0.35	0.39
	WCDMA 850	0.30	0.44
	WCDMA 1700	0.49	0.59
Head (Separation Distance 0mm)	WCDMA 1900	0.64	0.76
(Separation Distance offin)	LTE Band2	0.79	0.78
	LTE Band4	0.51	0.74
	LTE Band5	0.33	0.44
	LTE Band12	0.27	0.33
	GSM 850	0.77	0.79
	PCS 1900	1.04	1.18
	WCDMA 850	0.43	0.48
	WCDMA 1700	1.05	1.14
	WCDMA 1900	0.92	1.04
	AP ON		
Body	WCDMA 1900 AP OFF	0.57	0.63
	LTE Band2 AP ON	1.25	1.27
	LTE Band2 AP OFF	0.82	0.79
	LTE Band4	1.30	1.26
	LTE Band5	0.53	0.52
	LTE Band12	0.51	0.52

Note: The spot check results of LTE Band2 Head and Body(AP OFF),LTE Band4 Body and LTE Band5 Body are larger than the original results, the spot check results replace the original results and others are quoted.



850 Left Cheek Middle

Date: 2016-05-11

Electronics: DAE4 Sn777 Medium: Head 850 MHz

Medium parameters used (interpolated): f = 836.6 MHz; $\sigma = 0.936$ mho/m; $\epsilon r = 41.115$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 23.0°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 (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.261 W/kg

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

Reference Value = 4.584 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.306 W/kg

SAR(1 g) = 0.241 W/kg; SAR(10 g) = 0.185 W/kg

Maximum value of SAR (measured) = 0.263 W/kg

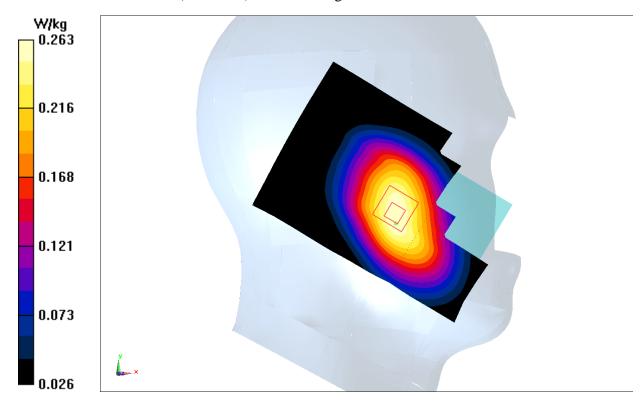


Fig.1 850MHz



850 Body Rear High

Date: 2016-05-11

Electronics: DAE4 Sn777 Medium: Body 850 MHz

Medium parameters used (interpolated): f = 848.8 MHz; $\sigma = 0.994$ mho/m; $\epsilon r = 56.053$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:4

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

Area Scan (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.578 W/kg

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

Reference Value = 23.82 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.611 W/kg; SAR(10 g) = 0.296 W/kg

Maximum value of SAR (measured) = 0.488 W/kg

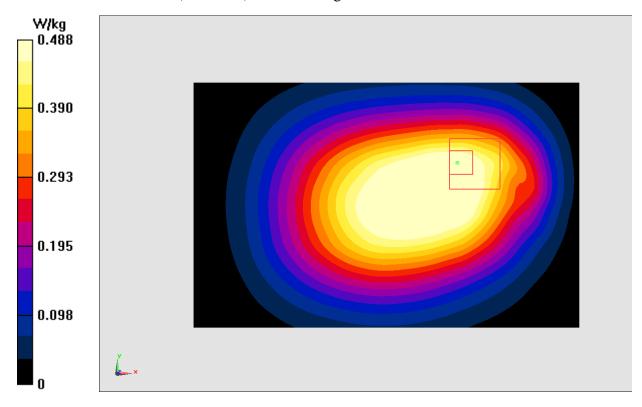


Fig.2 850 MHz



1900 Left Cheek High

Date: 2016-05-13

Electronics: DAE4 Sn777 Medium: Head 1900 MHz

Medium parameters used: f = 1910 MHz; $\sigma = 1.321 \text{ mho/m}$; $\epsilon r = 39.865$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

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

Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.426 W/kg

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

Reference Value = 4.790 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.534 W/kg

SAR(1 g) = 0.348 W/kg; SAR(10 g) = 0.213 W/kg

Maximum value of SAR (measured) = 0.407 W/kg

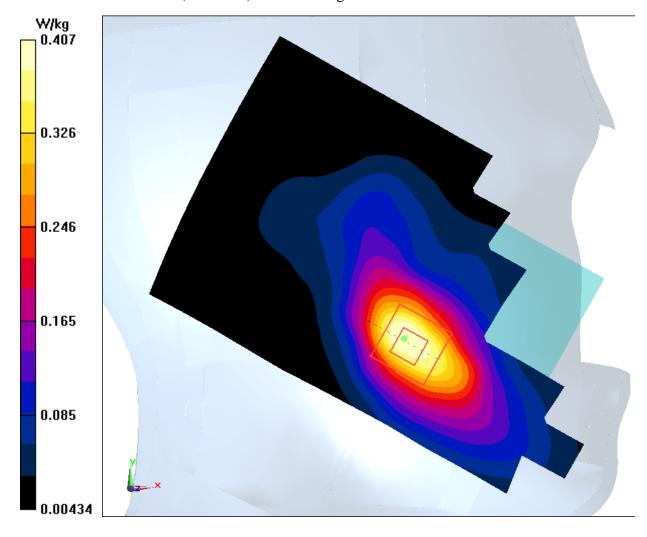


Fig.3 1900 MHz



1900 Body Bottom High

Date: 2016-05-13

Electronics: DAE4 Sn777 Medium: Body 1900 MHz

Medium parameters used: f = 1910 MHz; $\sigma = 1.532 \text{ mho/m}$; $\epsilon r = 54.086$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1910 MHz Duty Cycle: 1:2.67

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

Area Scan (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.956 W/kg

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

Reference Value = 23.05 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.785 W/kg; SAR(10 g) = 0.412 W/kg

Maximum value of SAR (measured) = 0.979 W/kg

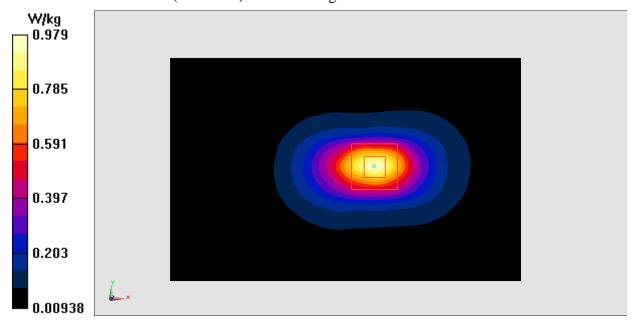


Fig.4 1900 MHz



WCDMA 850 Left Cheek Low

Date: 2016-05-11

Electronics: DAE4 Sn777 Medium: Head 850 MHz

Medium parameters used (interpolated): f = 826.4 MHz; $\sigma = 0.932$ mho/m; $\epsilon r = 41.156$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 826.4 MHz; Duty Cycle: 1:1

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

Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.282 W/kg

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

Reference Value = 5.898 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.336 W/kg

SAR(1 g) = 0.258 W/kg; SAR(10 g) = 0.197 W/kg

Maximum value of SAR (measured) = 0.285 W/kg

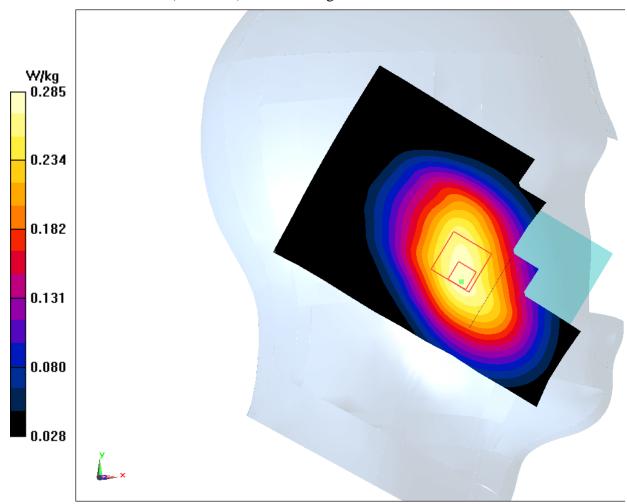


Fig.5 WCDMA 850



WCDMA 850 Body Rear Middle

Date: 2016-05-11

Electronics: DAE4 Sn777 Medium: Body 850 MHz

Medium parameters used (interpolated): f = 836.4 MHz; $\sigma = 0.984$ mho/m; $\epsilon r = 56.214$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

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

Area Scan (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.434 W/kg

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

Reference Value = 20.02 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.491 W/kg

SAR(1 g) = 0.385 W/kg; SAR(10 g) = 0.292 W/kg

Maximum value of SAR (measured) = 0.404 W/kg

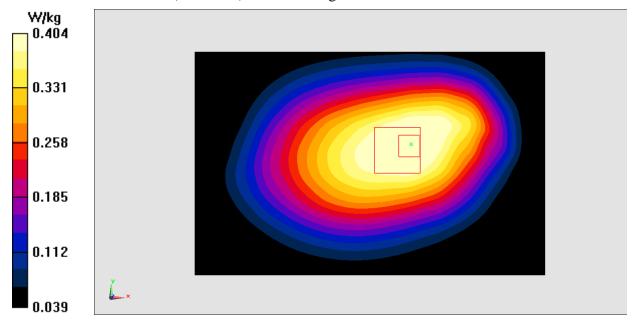


Fig.6 WCDMA 850



WCDMA 1700 Left Cheek High

Date: 2016-05-12

Electronics: DAE4 Sn777 Medium: Head 1750 MHz

Medium parameters used (interpolated): f = 1752.6 MHz; $\sigma = 1.643$ mho/m; $\epsilon r = 39.774$; $\rho = 1.643$ mho/m; $\epsilon r = 39.774$; $\epsilon r = 39.774$

 1000 kg/m^3

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1700 Frequency: 1752.6 MHz Duty Cycle: 1:1

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

Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.485 W/kg

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

Reference Value = 4.717 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.683 W/kg

SAR(1 g) = 0.452 W/kg; SAR(10 g) = 0.285 W/kg

Maximum value of SAR (measured) = 0.497 W/kg

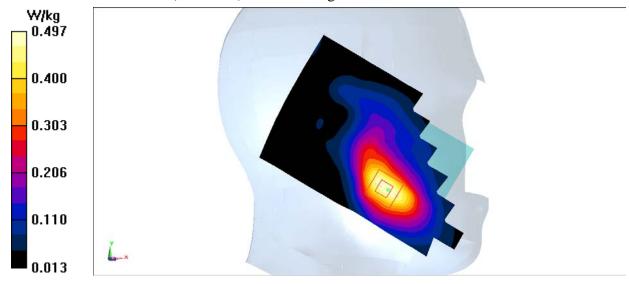


Fig.7 1700MHz



WCDMA 1700 Body Rear Low

Date: 2016-05-12

Electronics: DAE4 Sn777 Medium: Body 1750 MHz

Medium parameters used (interpolated): f = 1712.4 MHz; $\sigma = 1.386$ mho/m; $\epsilon r = 54.526$; $\rho = 1.386$

 1000 kg/m^3

Ambient Temperature: 23.0°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 (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.10 W/kg

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

Reference Value = 13.91 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.969 W/kg; SAR(10 g) = 0.635 W/kg

Maximum value of SAR (measured) = 1.04 W/kg

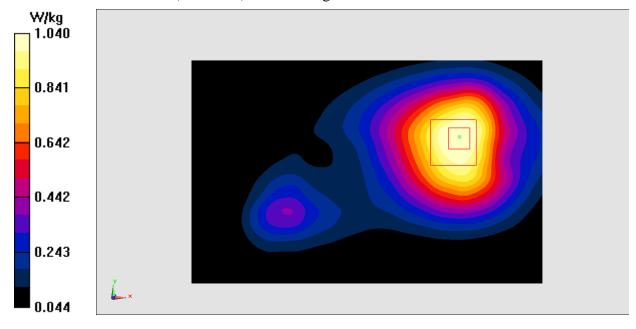


Fig.8 1700 MHz



WCDMA 1900 Left Cheek Low

Date: 2016-05-13

Electronics: DAE4 Sn777 Medium: Head 1900 MHz

Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma = 1.33$ mho/m; $\epsilon r = 39.755$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 23.0°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 (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.727 W/kg

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

Reference Value = 6.621 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.878 W/kg

SAR(1 g) = 0.584 W/kg; SAR(10 g) = 0.365 W/kg

Maximum value of SAR (measured) = 0.682 W/kg

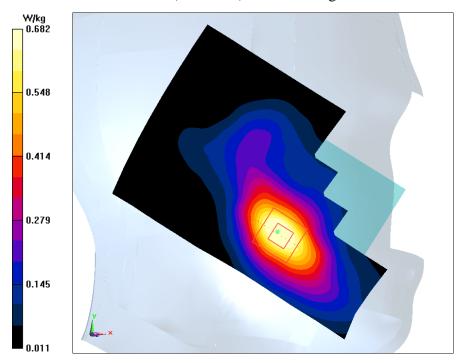


Fig.9 WCDMA1900



WCDMA 1900 Body Bottom High – AP ON

Date: 2016-05-13

Electronics: DAE4 Sn777 Medium: Body 1900 MHz

Medium parameters used: f = 1907.6 MHz; $\sigma = 1.663 \text{ mho/m}$; $\epsilon r = 54.253$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°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 (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.11 W/kg

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

Reference Value = 25.54 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.913 W/kg; SAR(10 g) = 0.490 W/kg

Maximum value of SAR (measured) = 1.12 W/kg

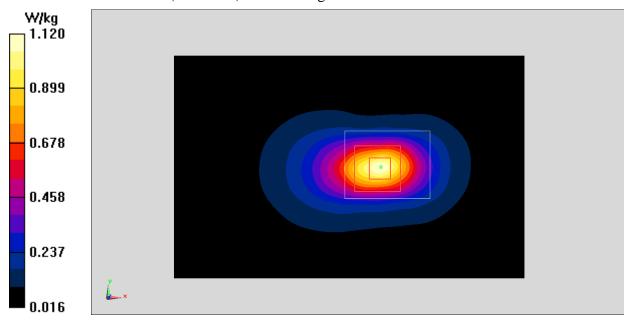


Fig.10 WCDMA1900



WCDMA 1900 Body Rear High – AP OFF

Date: 2016-05-13

Electronics: DAE4 Sn777 Medium: Body 1900 MHz

Medium parameters used: f = 1907.6 MHz; $\sigma = 1.663 \text{ mho/m}$; $\epsilon r = 54.253$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°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 (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.650 W/kg

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

Reference Value = 11.25 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.816 W/kg

SAR(1 g) = 0.535 W/kg; SAR(10 g) = 0.329 W/kgMaximum value of SAR (measured) = 0.626 W/kg

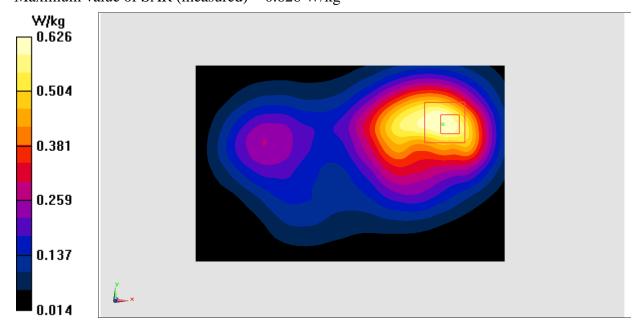


Fig.11 WCDMA1900



LTE Band2 Left Cheek High with QPSK_20M_1RB_Middle

Date: 2016-05-13

Electronics: DAE4 Sn777 Medium: Head 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.436 \text{ mho/m}$; $\epsilon r = 39.88$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

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

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

Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.745 W/kg

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

Reference Value = 6.469 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.916 W/kg

SAR(1 g) = 0.602 W/kg; SAR(10 g) = 0.370 W/kgMaximum value of SAR (measured) = 0.701 W/kg

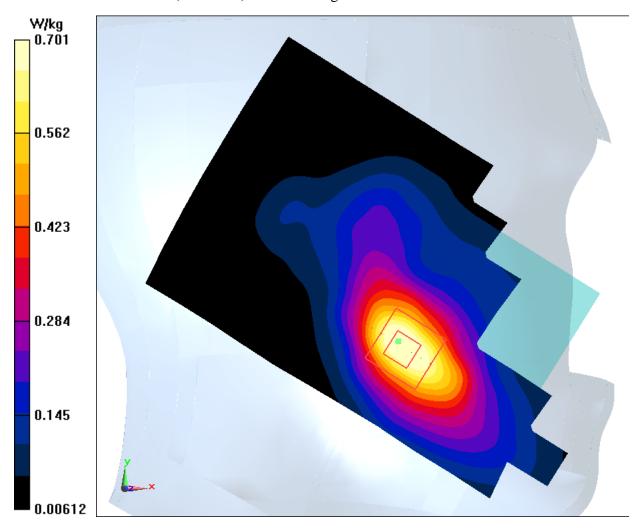


Fig.12 LTE Band2



LTE Band2 Body Bottom High with QPSK_20M_1RB_Low - AP ON

Date: 2016-05-13

Electronics: DAE4 Sn777 Medium: Body 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.573 \text{ mho/m}$; $\epsilon r = 54.15$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

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

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

Area Scan (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.29 W/kg

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

Reference Value = 23.20 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.85 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.571 W/kg

Maximum value of SAR (measured) = 1.36 W/kg

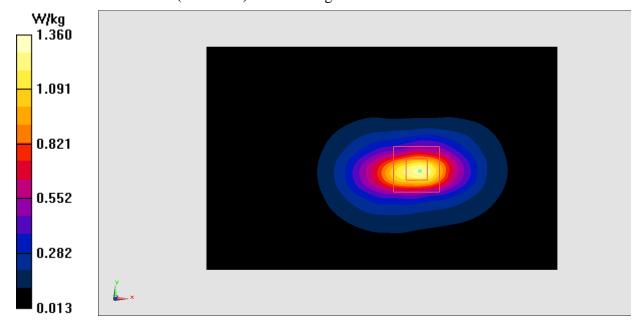


Fig.13 LTE Band2



LTE Band2 Body Rear High with QPSK_20M_1RB_Middle - AP OFF

Date: 2016-05-13

Electronics: DAE4 Sn777 Medium: Body 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.573 \text{ mho/m}$; $\epsilon r = 54.15$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

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

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

Area Scan (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.733 W/kg

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

Reference Value = 10.96 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.964 W/kg

SAR(1 g) = 0.620 W/kg; SAR(10 g) = 0.379 W/kg

Maximum value of SAR (measured) = 0.733 W/kg

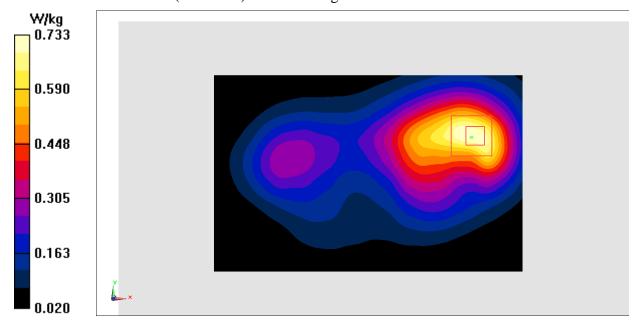


Fig.14 LTE Band2



LTE Band4 Left Cheek High with QPSK_20M_1RB_Middle

Date: 2016-05-12

Electronics: DAE4 Sn777 Medium: Head 1750 MHz

Medium parameters used: f = 1745 MHz; $\sigma = 1.426$ mho/m; $\epsilon r = 39.456$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

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

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

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

Maximum value of SAR (interpolated) = 0.465 W/kg

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

Reference Value = 2.827 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.657 W/kg

SAR(1 g) = 0.435 W/kg; SAR(10 g) = 0.271 W/kg

Maximum value of SAR (measured) = 0.472 W/kg

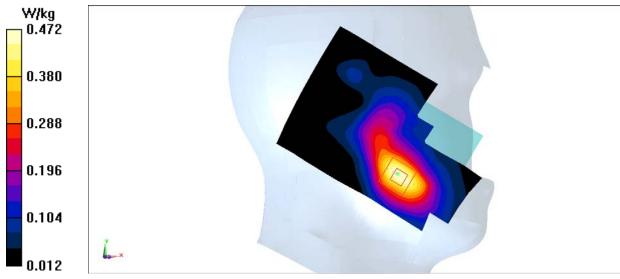


Fig.15 LTE Band4



LTE Band4 Body Rear Low with QPSK_20M_1RB_Middle

Date: 2016-05-12

Electronics: DAE4 Sn777 Medium: Body 1750 MHz

Medium parameters used: f = 1720 MHz; $\sigma = 1.448 \text{ mho/m}$; $\epsilon r = 52.843$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: LTE Band4 Frequency: 1720 MHz Duty Cycle: 1:1

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

Area Scan (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.22 W/kg

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

Reference Value = 18.23 V/m; Power Drift = -0.15dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.657 W/kg

Maximum value of SAR (measured) = 1.16 W/kg

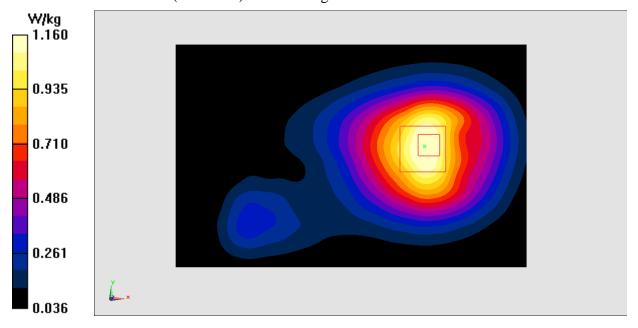


Fig.16 LTE Band4



LTE Band5 Left Cheek Middle with QPSK_10M_1RB_Middle

Date: 2016-05-11

Electronics: DAE4 Sn777 Medium: Head 850 MHz

Medium parameters used (interpolated): f = 836.6 MHz; $\sigma = 0.937$ mho/m; $\epsilon r = 41.106$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: LTE Band5 Frequency: 836.5 MHz Duty Cycle: 1:1

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

Area Scan (71x111x1): 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 = 5.308 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.349 W/kg

SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.281 W/kg

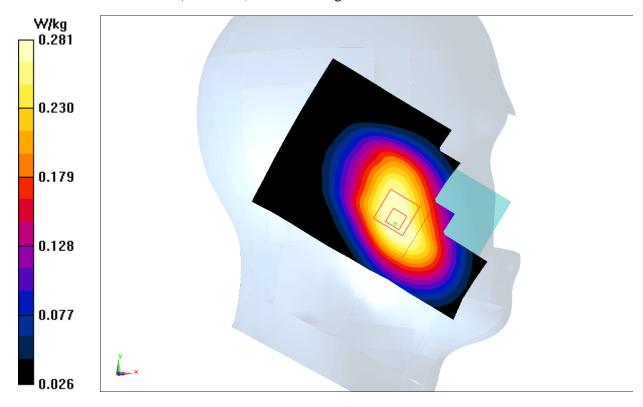


Fig.17 LTE Band5



LTE Band5 Body Rear Middle with QPSK_10M_1RB_Middle

Date: 2016-05-11

Electronics: DAE4 Sn777 Medium: Body 850 MHz

Medium parameters used (interpolated): f = 836.5 MHz; $\sigma = 0.994$ mho/m; $\epsilon r = 56.084$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: LTE Band5 Frequency: 836.5 MHz Duty Cycle: 1:1

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

Area Scan (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.473 W/kg

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

Reference Value = 19.89 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.543 W/kg

SAR(1 g) = 0.421 W/kg; SAR(10 g) = 0.311 W/kg

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

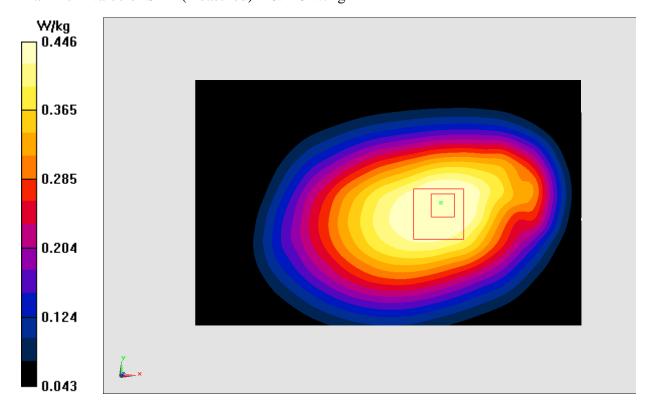


Fig.18 LTE Band5



LTE Band12 Left Cheek Middle with QPSK_10M_1RB_Middle

Date: 2016-05-10

Electronics: DAE4 Sn777 Medium: Head 750 MHz

Medium parameters used (interpolated): f = 707.5 MHz; $\sigma = 0.815$ mho/m; $\epsilon r = 43.312$; $\rho = 0.815$ mho/m; $\epsilon r = 43.312$; $\epsilon r = 0.815$ mho/m; $\epsilon r = 43.312$; $\epsilon r = 0.815$ mho/m; $\epsilon r = 43.312$; $\epsilon r = 0.815$ mho/m; $\epsilon r = 43.312$; $\epsilon r = 0.815$ mho/m; $\epsilon r = 43.312$; $\epsilon r = 0.815$ mho/m; $\epsilon r = 43.312$; $\epsilon r = 0.815$ mho/m; $\epsilon r = 0.815$

 1000 kg/m^3

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

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

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

Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.266 W/kg

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

Reference Value = 7.639 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.290 W/kg

SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.179 W/kg

Maximum value of SAR (measured) = 0.238 W/kg

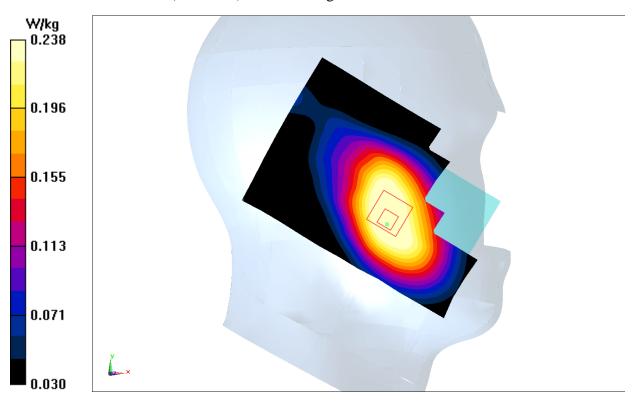


Fig.19 LTE Band12



LTE Band12 Body Rear Low with QPSK_10M_1RB_Middle

Date: 2016-05-10

Electronics: DAE4 Sn777 Medium: Body 750 MHz

Medium parameters used (interpolated): f = 704 MHz; $\sigma = 0.825$ mho/m; $\epsilon r = 56.942$; $\rho = 1000$

 kg/m^3

Ambient Temperature: 23.0°C Liquid Temperature: 22.5°C

Communication System: LTE Band12 Frequency: 704 MHz Duty Cycle: 1:1

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

Area Scan (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.493 W/kg

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

Reference Value = 19.44 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.572 W/kg

SAR(1 g) = 0.435 W/kg; SAR(10 g) = 0.325 W/kgMaximum value of SAR (measured) = 0.454 W/kg

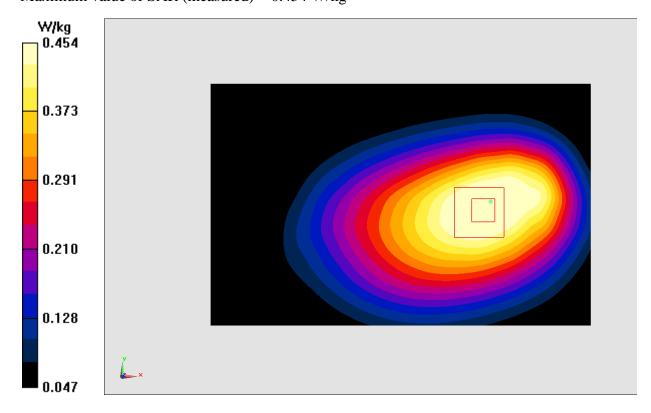


Fig.20 LTE Band12



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