

FCC

SAR

TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
LTE Digital Mobile Phone

ISSUED TO
Nubia Technology Co., Ltd.

6/F, Tower A, Hans Innovation Mansion, North Ring Rd., No. 9018,
Hi-Tech Industrial Park, Nanshan District, Shenzhen, P. R. China



Tested by: *Heng Aiping*
Heng Aiping
(Engineer)

Date: *Sep. 28, 2016*

Approved by: *Liao Jianming*
Liao Jianming
(Technical Director)

Date: *Sep. 28, 2016*



Report No.: BL-SZ1680175-701

EUT Type: LTE Digital Mobile Phone

Model Name: NX531J

Brand Name: nubia

FCC ID: 2AHJO-NX531J

Test Standard: FCC 47 CFR Part 2.1093

ANSI C95.1: 1999, IEEE 1528: 2013

Maximum SAR: Head (1 g): 0.499 W/kg

Body (1 g): 0.652 W/kg

Hotspot (1 g): 1.093 W/kg

Test Conclusion: Pass

Test Date: Sep. 02, 2016 ~ Sep. 27, 2016

Date of Issue: Sep. 28, 2016

NOTE: This test report can be duplicated completely for the legal use with the approval of the applicant; it shall not be reproduced except in full, without the written approval of Shenzhen BALUN Technology Co., Ltd. BALUN Laboratory. Any objections should be raised within thirty days from the date of issue. To validate the report, please visit BALUN website.

Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 22, 2016</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>Sep. 28, 2016</u>	<u>Revised Manufacturer and Application Address in page 7</u> <u>Removed SAR test for LTE Band 28</u> <u>Added Liquid photo for 5GHz in page 22</u> <u>Revised test configuration described in page 62</u> <u>Added LTE Band2/4 narrower Bandwidth (15MHz) SAR test in page 64 and 65</u> <u>Revised System Check Reference and Target values in page 74</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION.....	5
1.1	Identification of the Testing Laboratory.....	5
1.2	Identification of the Responsible Testing Location.....	5
1.3	Test Environment Condition.....	5
1.4	Announce.....	6
2	PRODUCT INFORMATION.....	7
2.1	Applicant Information.....	7
2.2	Manufacturer Information.....	7
2.3	Factory Information.....	7
2.4	General Description for Equipment under Test (EUT).....	7
2.5	Ancillary Equipment.....	8
2.6	Technical Information.....	9
3	SUMMARY OF TEST RESULTS.....	10
3.1	Test Standards.....	10
3.2	Device Category and SAR Limit.....	10
3.3	Test Result Summary.....	12
3.4	Test Uncertainty.....	13
4	SAR MEASUREMENT SYSTEM.....	14
4.1	Definition of Specific Absorption Rate (SAR).....	14
4.2	SATIMO SAR System.....	14

5	SYSTEM VERIFICATION	23
5.1	Antenna Port Test Requirement	23
5.2	Purpose of System Check	23
5.3	System Check Setup	23
6	EUT TEST POSITION CONFIGURATIONS	24
6.1	Head Exposure Conditions	24
6.2	Body-worn Position Conditions	25
6.3	Hotspot Mode Exposure Position Conditions	26
7	SAR MEASUREMENT PROCEDURES	27
7.1	SAR Measurement Process Diagram	27
7.2	SAR Scan General Requirements	28
7.3	SAR Measurement Procedure	29
7.4	Area & Zoom Scan Procedures	29
8	CONDUCTED RF OUTPUT POWER	30
8.1	GSM	30
8.2	WCDMA	31
8.3	LTE	32
8.4	WIFI	39
8.5	Power Reduction List	44
9	EUT ANTENNA LOCATION SKETCH	49
9.1	SAR Test Exclusion Consider Table	50
9.2	10g Extremity Exposure Consider	52
10	TEST RESULTS	53
10.1	GSM 850	53
10.2	GSM 1900	53
10.3	WCDMA Band 2	54
10.4	WCDMA Band 4	54
10.5	WCDMA Band 5	55
10.6	LTE Band 2(20MHz Bandwidth)	56
10.7	LTE Band 4 (20MHz Bandwidth)	57
10.8	LTE Band 5 (10MHz Bandwidth)	58

10.9	LTE Band 7 (20MHz Bandwidth)	59
10.10	LTE Band 12 (10MHz Bandwidth)	59
10.11	LTE Band 17 (10MHz Bandwidth)	60
10.12	WIFI 2.4GHz (ANT 0)	61
10.13	WIFI 2.4GHz (ANT 1)	61
10.14	WIFI 5GHz (ANT 0)	62
10.15	WIFI 5GHz (ANT 1)	62
10.16	LTE Band 2 (15MHz Bandwidth)	64
10.17	LTE Band 4 (15MHz Bandwidth)	65
11	SAR Measurement Variability	66
12	SIMULTANEOUS TRANSMISSION	67
12.1	Simultaneous Transmission Mode Consider	67
12.2	Estimated SAR Calculation	68
12.3	Sum SAR of Simultaneous Transmission	69
13	TEST EQUIPMENTS LIST	72
ANNEX A	SIMULATING LIQUID VERIFICATION RESULT	73
ANNEX B	SYSTEM CHECK RESULT	74
ANNEX C	TEST DATA	117
ANNEX D	EUT EXTERNAL PHOTOS	172
ANNEX E	SAR TEST SETUP PHOTOS	172
ANNEX F	CALIBRATION REPORT	173
F.1	E-Field Probe	173
F.2	750 MHz Dipole	183
F.3	835MHz Dipole	194
F.4	1800MHz Dipole	205
F.5	1900MHz Dipole	216
F.6	2450MHz Dipole	227
F.7	2600 MHz Dipole	238
F.8	Waveguide	249
F.9	SATIMO Dipole	262

1 GENERAL INFORMATION

1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100
Fax Number	+86 755 6182 4271

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	<p>The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1.</p> <p>The laboratory has been listed by US Federal Communications Commission to perform electromagnetic emission measurements. The recognition numbers of test site are 832625.</p> <p>The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.</p>
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Test Environment Condition

Ambient Temperature	20 to 23°C
Ambient Relative Humidity	37 to 48%
Ambient Pressure	100 to 102KPa

1.4 Announce

- (1) The test report reference to the report template version v2.2.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Nubia Technology Co., Ltd.
Address	6/F, Tower A, Hans Innovation Mansion, North Ring Rd., No. 9018, Hi-Tech Industrial Park, Nanshan District, Shenzhen, P. R. China

2.2 Manufacturer Information

Manufacturer	Nubia Technology Co., Ltd.
Address	6/F, Tower A, Hans Innovation Mansion, North Ring Rd., No. 9018, Hi-Tech Industrial Park, Nanshan District, Shenzhen, P. R. China

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Type	LTE Digital Mobile Phone
Model Name Under Test	NX531J
Series Model Name	NX531J, nubia Z11
Description of Model Name Differentiation	The equipment model NX531J and nubia Z11 are LTE Digital Mobile Phone, the electrical parameters and internal structure of circuit are same, only the model name is different.
Hardware Version	NX531J_V2AMB_B
Software Version	NX531J_ENCommon_V1.09
Dimensions (Approx.)	Please refer to the report of BL-SZ1680175-AW.PDF
Weight (Approx.)	N/A
Network and Wireless connectivity	2G Network GSM/ GPRS/ EDGE 850/ 1900; 3G Network WCDMA Band 2/ 4/ 5, HSDPA, HSUPA; 4G Network FDD LTE Band 2/ 4/ 5/ 7/ 12/ 17; Bluetooth 3.0, Bluetooth 4.0 Low Energy (BLE); WIFI 802.11a,802.11b, 802.11g and 802.11n (HT20/40), 802.11ac GPS, GLONASS, NFC

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	Li3829T44P6h806435
	Serial No.	N/A
	Capacitance	2900 mAh
	Rated Voltage	3.85 V
	Limit Charge Voltage	4.4 V
Ancillary Equipment 2	Charger	
	Brand Name	nubia
	Model No.	STC-A5930A-Z
	Rated Voltage	100-240 V~ , 0.5 A, 50/60 Hz
	Limit Charge Voltage	5 V=, 3.0 A or 9 V=, 2.0 A or 12 V=, 5 A
Ancillary Equipment 3	Earphone	
	Length (Approx.)	1.0 m
Ancillary Equipment 4	USB Data Cable	
	Length (Approx.)	1.0 m

2.6 Technical Information

The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	GSM, WCDMA, FDD-LTE, 2.4G WLAN, 5G WLAN, Bluetooth		
Frequency Range	GSM 850	TX: 824 MHz ~ 849 MHz	RX: 869 MHz ~ 894 MHz
	GSM 1900	TX: 1850 MHz ~ 1910 MHz	RX: 1930 MHz ~ 1990 MHz
	WCDMA Band 2	TX: 1850 MHz ~ 1910 MHz	RX: 1930 MHz ~ 1990 MHz
	WCDMA Band 4	TX: 1710 MHz ~ 1755 MHz	RX: 2110 MHz ~ 2155 MHz
	WCDMA Band 5	TX: 824 MHz ~ 849 MHz	RX: 869 MHz ~ 894 MHz
	LTE Band 2	TX: 1850 MHz ~ 1910 MHz	RX: 1930 MHz ~ 1990 MHz
	LTE Band 4	TX: 1710 MHz ~ 1755 MHz	RX: 2110 MHz ~ 2155 MHz
	LTE Band 5	TX: 824 MHz ~ 849 MHz	RX: 869 MHz ~ 894 MHz
	LTE Band 7	TX: 2500 MHz ~ 2570 MHz	RX: 2620 MHz ~ 2690 MHz
	LTE Band 12	TX: 699 MHz ~ 716 MHz	RX: 729 MHz ~ 746 MHz
	LTE Band 17	TX: 704 MHz ~ 716 MHz	RX: 734 MHz ~ 746 MHz
	802.11b/g /n(HT20/HT40)	2400~2483.5 MHz	
	802.11a/ /n(HT20/HT40) /ac(HT20/HT40) /HT80)	5150 MHz~ 5250 MHz	
		5250 MHz~ 5350 MHz	
5470 MHz~ 5725 MHz			
5725 MHz~ 5850 MHz			
Bluetooth	2400~2483.5 MHz		
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	Not Support		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		
EUT Stage	Portable Device		
Product	Type		
	<input checked="" type="checkbox"/> Production unit	<input type="checkbox"/> Identical prototype	
Note: 1: Only 2.4G WLAN supports hotspot mode. 2: 2.4G WLAN and 5G WLAN support double antennas transmitter of antenna 0 and antenna 1, only antenna 0 supports Bluetooth.			

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	ANSI/IEEE Std. C95.1-1999	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	FCC KDB 447498 D01 v06	Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
5	FCC KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	FCC KDB 941225 D05 v02r04	SAR Evaluation Considerations for LTE Devices
7	FCC KDB 941225 D06 v02r01	SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
8	FCC KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	FCC KDB 865664 D02 v01r02	RF Exposure Reporting
10	FCC KDB 648474 D04 v01r03	SAR Evaluation Considerations for Wireless Handsets

3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user. Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Table of Exposure Limits:

Body Position	SAR Value (W/Kg)	
	General Population/ Uncontrolled Exposure	Occupational/ Controlled Exposure
Whole-Body SAR (averaged over the entire body)	0.08	0.4
Partial-Body SAR (averaged over any 1 gram of tissue)	1.60	8.0
SAR for hands, wrists, feet and ankles (averaged over any 10 grams of tissue)	4.0	20.0

NOTE:

General Population/Uncontrolled: Locations where there is the exposure of individuals who have no knowledge or control of their exposure. General population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Occupational/Controlled: Locations where there is exposure that may be incurred by persons who are aware of the potential for exposure. In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

3.3 Test Result Summary

3.3.1 Highest SAR (1 g Value)

Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)			Limit (W/kg)
	Head	Body-worn	Hotspot	Head	Body-worn	Hotspot	
GSM 850	0.196	0.283	0.367	0.499	0.652	1.093	1.6
GSM 1900	0.093	0.297	0.887				
WCDMA Band 2	0.232	0.652	1.054				
WCDMA Band 4	0.296	0.608	1.093				
WCDMA Band 5	0.232	0.308	0.421				
LTE Band 2	0.195	0.627	0.971				
LTE Band 4	0.278	0.600	0.971				
LTE Band 5	0.232	0.326	0.448				
LTE Band 7	0.319	0.611	0.695				
LTE Band 12	0.095	0.140	0.161				
LTE Band 17	0.090	0.144	0.166				
2.4G WLAN (ANT 0)	0.407	0.067	0.105				
2.4G WLAN (ANT 1)	0.155	0.046	0.080				
5G WLAN (ANT 0)	0.247	0.104	N/A				
5G WLAN (ANT 1)	0.499	0.282	N/A				
Verdict	Pass						

3.3.2 Highest Simultaneous SAR

Position	Simultaneous Configuration	Simultaneous SAR (W/kg)	Limit (W/kg)	Verdict
Head	LTE QPSK + 5G WLAN	1.065	1.6	Pass
Body-worn	WCDMA RMC + 5G WLAN	1.038	1.6	Pass
Hotspot Mode	WCDMA RMC + 2.4G WLAN	1.286	1.6	Pass

3.4 Test Uncertainty

According to KDB 865664 D01, when the highest measured 1 g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis is not required in SAR reports submitted for equipment approval.

The maximum 1 g SAR for the EUT in this report is 1.093 W/kg, which is lower than 1.5 W/kg, so the the extensive SAR measurement uncertainty analysis is not required in this report.

4 SAR MEASUREMENT SYSTEM

4.1 Definition of Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational / controlled exposure limits are higher than the limits for general population /uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$\text{SAR} = \frac{d}{dt} \left(\frac{dW}{dm} \right) = \frac{d}{dt} \left(\frac{dW}{\rho dv} \right)$$

SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

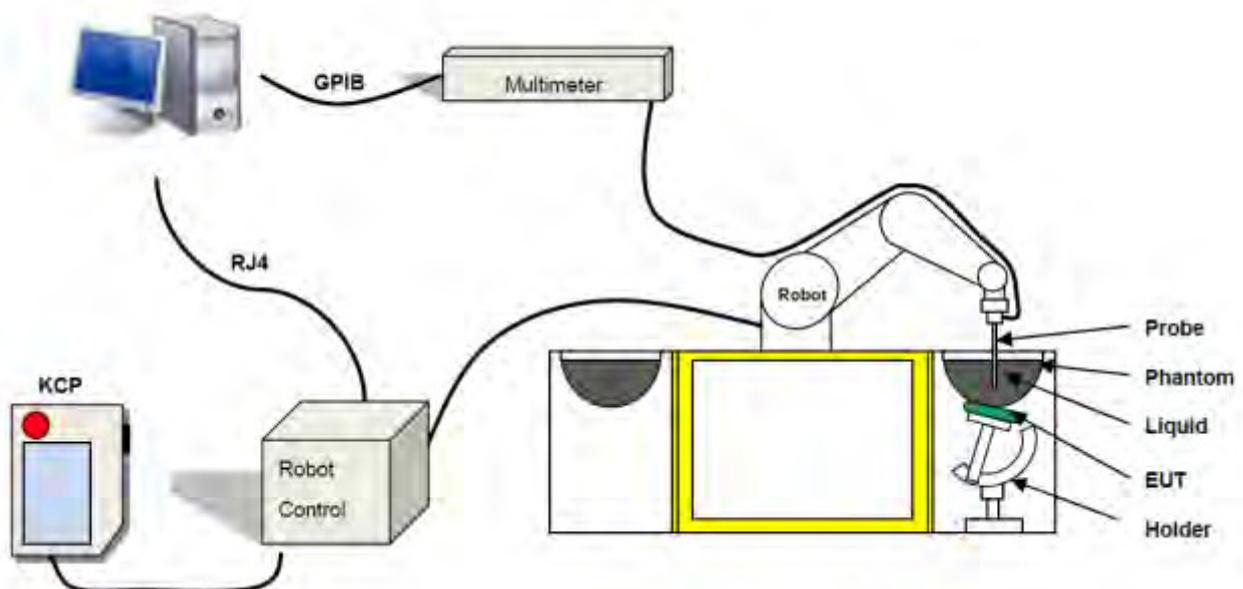
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

ρ is the mass density of the tissue and E is the RMS electrical field strength.

4.2 SATIMO SAR System

4.2.1 SATIMO SAR System Diagram



These measurements were performed with the automated near-field scanning system OPENSAR from SATIMO.

The system is based on a high precision robot (working range: 850 mm), which positions the probes with a positional repeatability of better than ± 0.02 mm. Special E- and H-field probes have been developed for measurements close to material discontinuity, the sensors of which are directly loaded with a Schottky diode and connected via highly resistive lines to the data acquisition unit.

The SAR measurements were conducted with dosimetric probe (manufactured by SATIMO), designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe has been calibrated according to the procedure described in SAR standard with accuracy of better than $\pm 10\%$. The spherical isotropy was evaluated with the procedure described in SAR standard and found to be better than ± 0.25 dB. The phantom used was the SAM Phantom as described in FCC supplement C, IEEE P1528.

4.2.2 Robot

The SATIMO SAR system uses the high precision robots from KUKA. For the 6-axis controller system, the robot controller version (KUKA) from KUKA is used. The KUKA robot series have many features that are important for our application:



- High precision (repeatability ± 0.035 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)

4.2.3 E-Field Probe

For the measurements the Specific Dosimetric E-Field Probe SN 34/15 EPGO 265 with following specifications is used

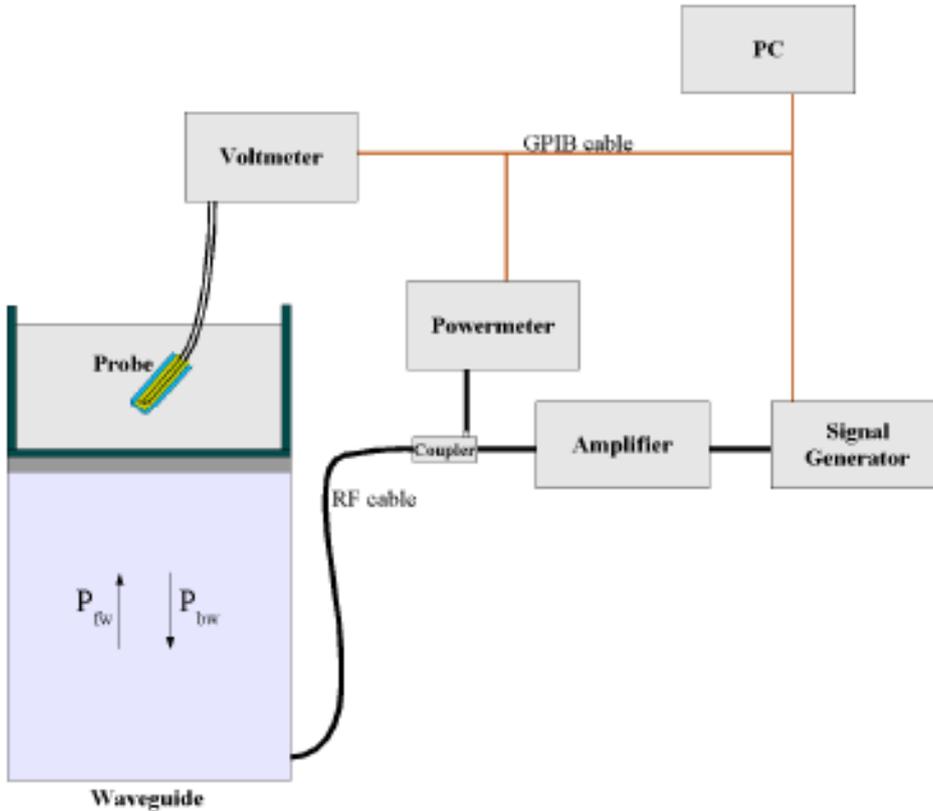
- Dynamic range: 0.01-100 W/kg
- Tip Diameter : 2.5 mm
- Lower detection limit : 7 mW/kg
(repeatability better than ± 1 mm)
- Probe linearity: ± 0.07 dB
- Calibration range: 450 MHz to 5800 MHz for head & body simulating liquid.

Angle between probe axis (evaluation axis) and surface normal line: less than 30°



E-Field Probe Calibration Process

Probe calibration is realized, in compliance with CENELEC EN 62209-1/-2 and IEEE 1528 std, with CALISAR, Antenna proprietary calibration system. The calibration is performed with the IEC62209-1/2 annexe technique using reference guide at the five frequencies.



$$SAR = \frac{4(P_{fw} - P_{bw})}{ab\sigma} \cos^2 \left(\pi \frac{y}{a} \right) c^{(2\pi/\sigma)}$$

Where :

- P_{fw} = Forward Power
- P_{bw} = Backward Power
- a and b = Waveguide Dimensions
- l = Skin Depth

Keithley configuration

Rate = Medium; Filter = ON; RDGS = 10; FILTER TYPE = MOVING AVERAGE; RANGE AUTO After each calibration, a SAR measurement is performed on a validation dipole and compared with a NPL calibrated probe, to verify it.

The calibration factors, CF(N), for the 3 sensors corresponding to dipole 1, dipole 2 and dipole 3 are:

$$CF(N)=SAR(N)/V_{lin}(N) \quad (N=1,2,3)$$

The linearised output voltage $V_{lin}(N)$ is obtained from the displayed output voltage $V(N)$ using

$$V_{lin}(N)=V(N)*(1+V(N)/DCP(N)) \quad (N=1,2,3)$$

Where the DCP is the diode compression point in mV.

4.2.4 Phantoms

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

Photo of Phantom SN 30/13 SAM103



Photo of Phantom SN 30/13 SAM104



Serial Number	Positionner Material	Permittivity	Loss Tangent
SN 30/13 SAM103	Gelcoat with fiberglass	3.4	0.02
SN 30/13 SAM104	Gelcoat with fiberglass	3.4	0.02

4.2.5 Device Holder

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5 mm distance, a positioning uncertainty of ± 0.5 mm would produce a SAR uncertainty of ± 20 %. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.

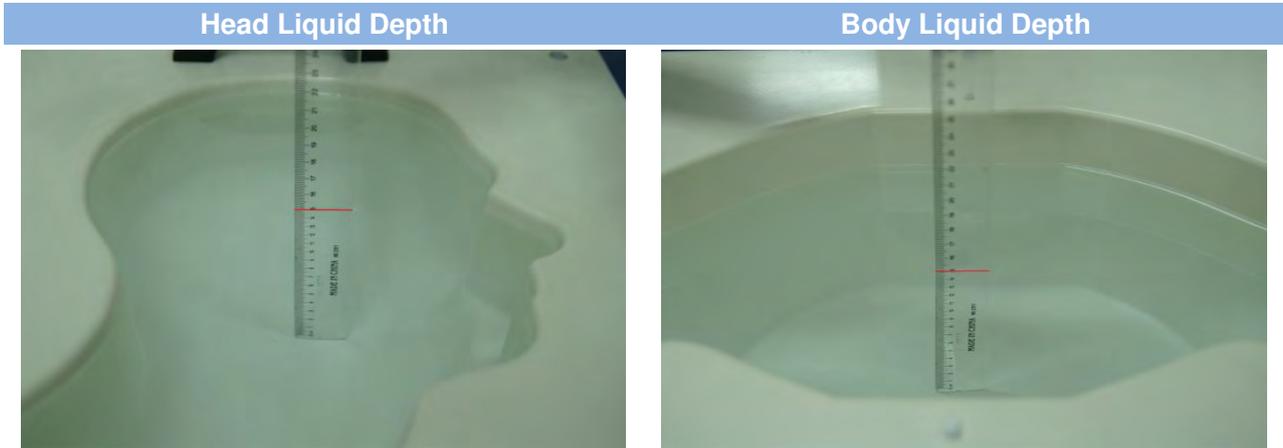


Serial Number	Holder Material	Permittivity	Loss Tangent
SN 25/13 MSH87	Deirin	3.7	0.005
SN 25/13 MSH88	Deirin	3.7	0.005

The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is lower than 1° .

4.2.6 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.



The following table gives the recipes for tissue simulating liquid and the theoretical Conductivity/Permittivity.

Head (Reference IEEE1528)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ϵ
750	41.1	57.0	0.2	1.4	0.2	0	0.89	41.9
835	40.3	57.9	0.2	1.4	0.2	0	0.90	41.5
900	40.3	57.9	0.2	1.4	0.2	0	0.97	41.5
1800, 1900, 2000	55.2	0	0	0.3	0	44.5	1.4	40.0
2450	55.0	0	0	0.1	0	44.9	1.80	39.2
2600	54.9	0	0	0.1	0	45.0	1.96	39.0
Frequency(MHz)	Water (%)	Hexyl Carbitol (%)			Triton X-100 (%)		Conductivity σ (S/m)	Permittivity ϵ
5200	62.52	17.24			17.24		4.66	36.0
5800	62.52	17.24			17.24		5.27	35.3
Body (From instrument manufacturer)								
Frequency (MHz)	Water (%)	Sugar (%)	Cellulose (%)	Salt (%)	Preventol (%)	DGBE (%)	Conductivity σ (S/m)	Permittivity ϵ
750	51.7	47.2	0	0.9	0.1	0	0.96	55.5
835	50.8	48.2	0	0.9	0.1	0	0.97	55.2
900	50.8	48.2	0	0.9	0.1	0	1.05	55.0
1800, 1900, 2000	70.2	0	0	0.4	0	29.4	1.52	53.3
2450	68.6	0	0	0.1	0	31.3	1.95	52.7
2600	68.2	0	0	0.1	0	31.7	2.16	52.5

Frequency(MHz)	Water	DGBE (%)	Salt (%)	Conductivity σ (S/m)	Permittivity ϵ
5200	78.60	21.40	/	5.54	47.86
5800	78.50	21.40	0.1	6.0	48.20

Head Liquid Depth (5GHz)



Body Liquid Depth(5GHz)



5 SYSTEM VERIFICATION

5.1 Antenna Port Test Requirement

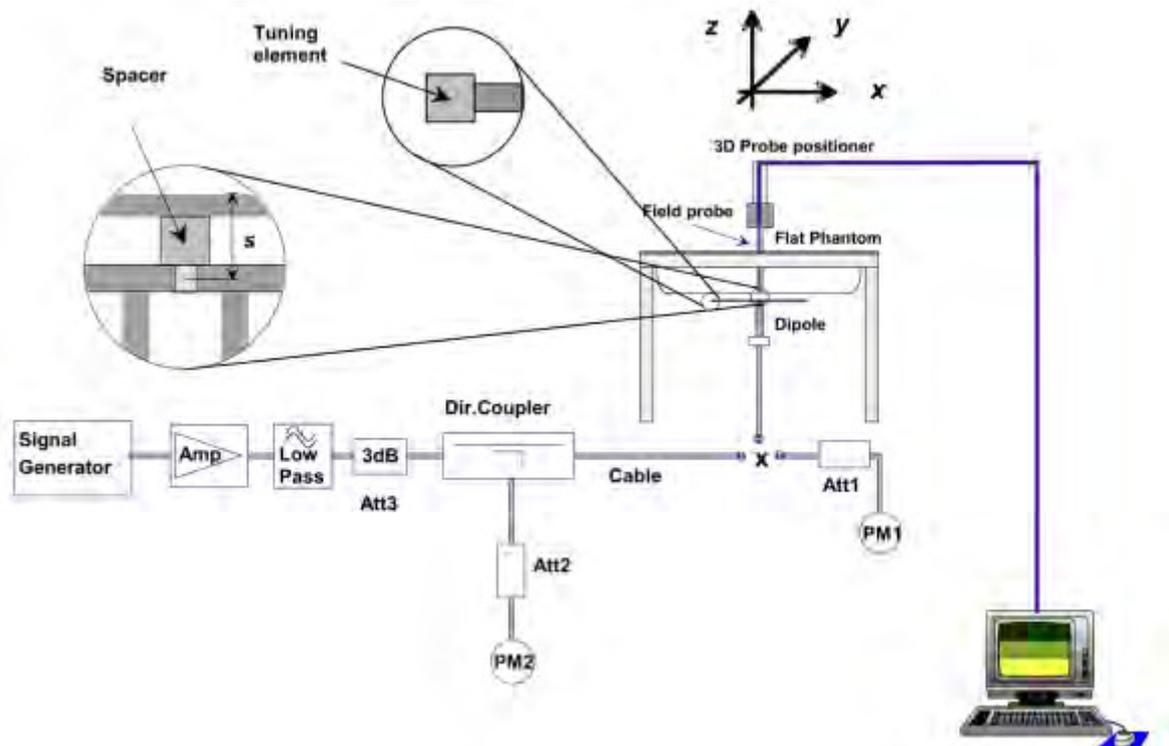
The SATIMO SAR system is equipped with one or more system validation kits. These units together with the predefined measurement procedures within the SATIMO software enable the user to conduct the system performance check and system validation. System validation kit includes a dipole, tripod holder to fix it underneath the flat phantom and a corresponding distance holder.

5.2 Purpose of System Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

5.3 System Check Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



6 EUT TEST POSITION CONFIGURATIONS

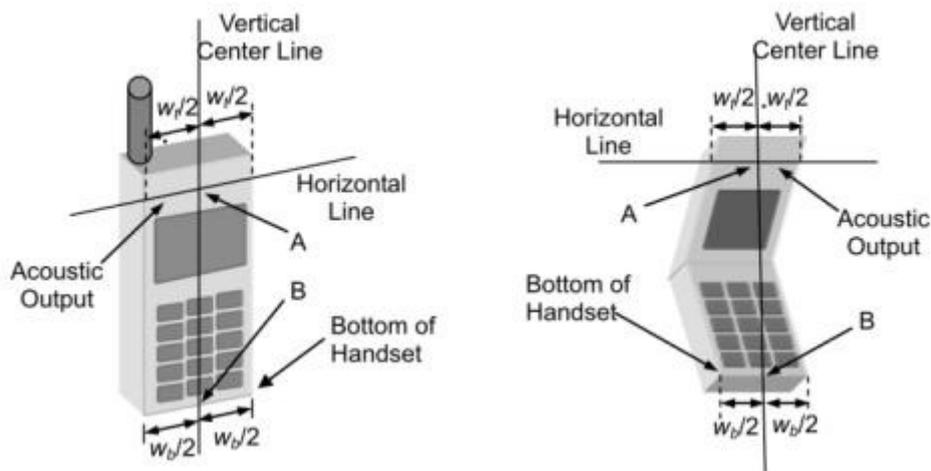
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

6.1.1 Define two imaginary lines on the handset

- The vertical center line passes through two points on the front side of the handset - the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the bottom of the handset.
- The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



6.1.2 Cheek Position

- To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.



6.1.3 Tilted Position

- (a) To position the device in the “cheek” position described above.
- (b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.



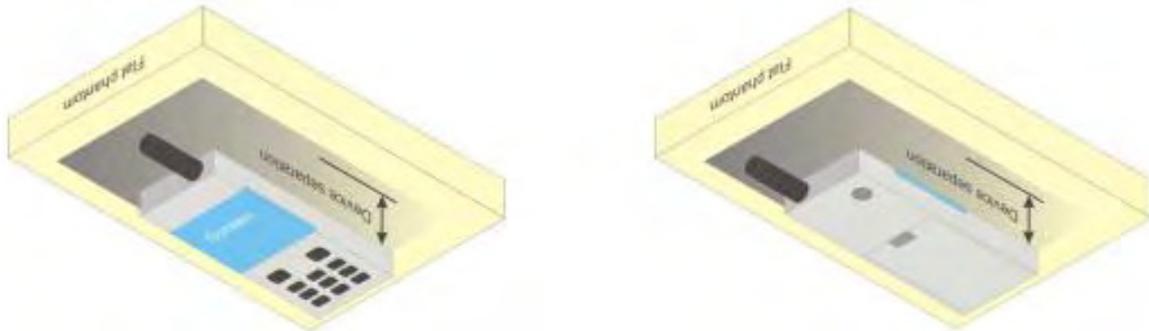
6.2 Body-worn Position Conditions

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB 447498 are used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is $> 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. All body-worn accessories containing metallic components are tested in conjunction with the host device.

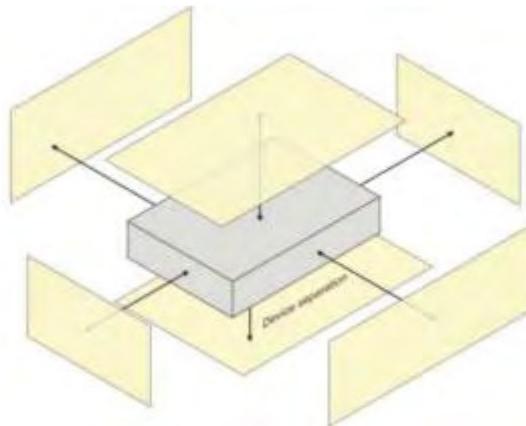
Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice only operations in its normal and expected use conditions, testing of data mode for body-worn compliance is not required. A conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by

users of consumer handsets is used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer, according to the requirements of Supplement C 01-01. Devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, will be tested using a conservative minimum test separation distance ≤ 5 mm to support compliance.



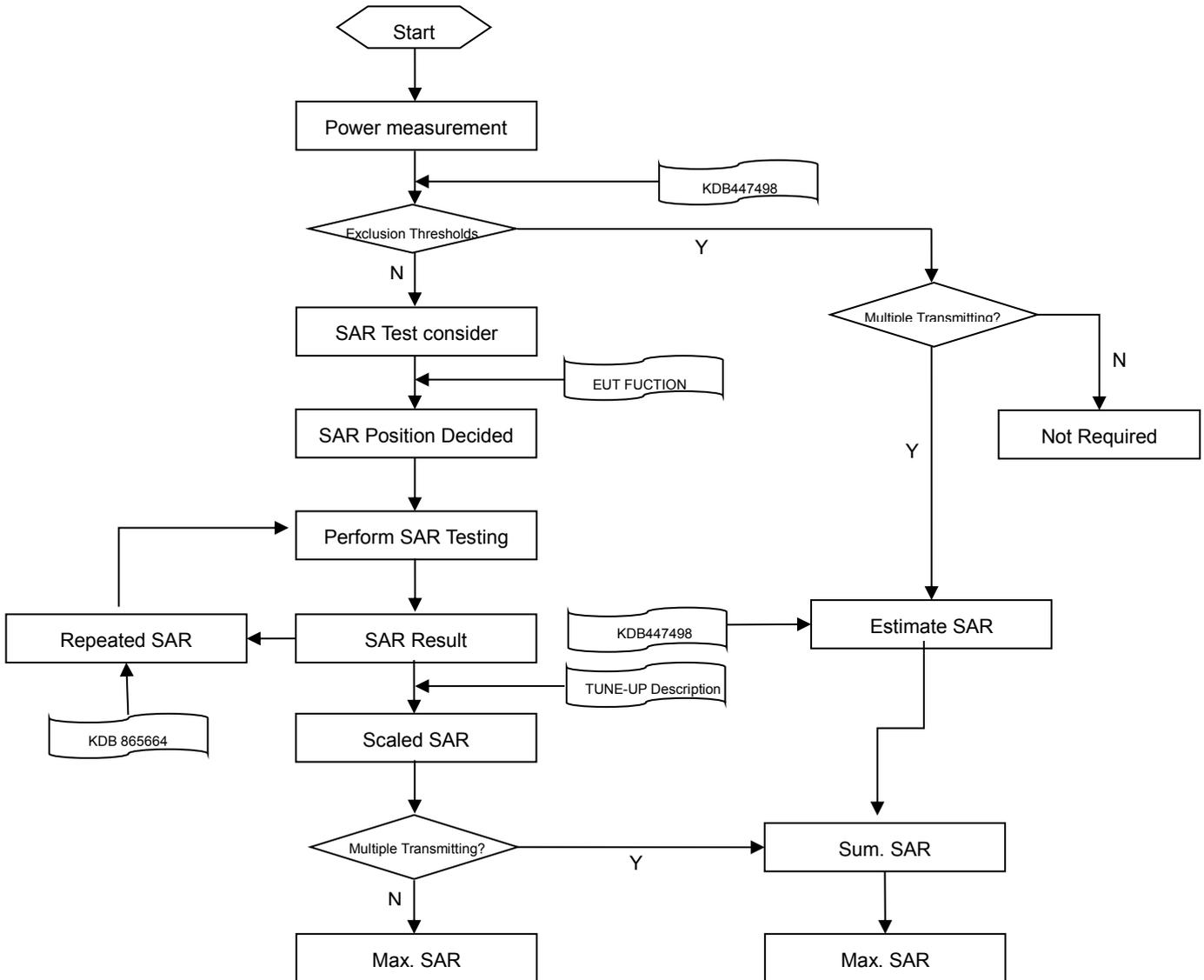
6.3 Hotspot Mode Exposure Position Conditions

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing functions, the relevant hand and body exposure conditions are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm x 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).



7 SAR MEASUREMENT PROCEDURES

7.1 SAR Measurement Process Diagram



7.2 SAR Scan General Requirements

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

		$\leq 3\text{GHz}$	$> 3\text{GHz}$
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface		$5 \pm 1 \text{ mm}$	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$
Maximum probe angle from probe axis to phantom surface normal at the measurement location		$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x \text{ Area}$, $\Delta y \text{ Area}$		$\leq 2 \text{ GHz}: \leq 15 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 12 \text{ mm}$	$3-4 \text{ GHz}: \leq 12 \text{ mm}$ $4 - 6 \text{ GHz}: \leq 10 \text{ mm}$
		When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x \text{ Zoom}$, $\Delta y \text{ Zoom}$		$\leq 2 \text{ GHz}: \leq 8 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 5 \text{ mm}^*$	$3-4 \text{ GHz}: \leq 5 \text{ mm}^*$ $4 - 6 \text{ GHz}: \leq 4 \text{ mm}^*$
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z \text{ Zoom} (n)$	$\leq 5 \text{ mm}$	$3-4 \text{ GHz}: \leq 4 \text{ mm}$
			$4-5 \text{ GHz}: \leq 3 \text{ mm}$
			$5-6 \text{ GHz}: \leq 2 \text{ mm}$
	graded grid	$\Delta z \text{ Zoom} (1)$: between 1st two points closest to phantom surface	$\leq 4 \text{ mm}$
$4-5 \text{ GHz}: \leq 2.5 \text{ mm}$			
	$\Delta z \text{ Zoom} (n>1)$: between subsequent points	$\leq 1.5 \cdot \Delta z \text{ Zoom} (n-1)$	
Minimum zoom scan volume	x, y, z	$\geq 30 \text{ mm}$	$3-4 \text{ GHz}: \geq 28 \text{ mm}$
			$4-5 \text{ GHz}: \geq 25 \text{ mm}$
			$5-6 \text{ GHz}: \geq 22 \text{ mm}$

Note:

- δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
- * When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is $\leq 1.4 \text{ W/kg}$, $\leq 8 \text{ mm}$, $\leq 7 \text{ mm}$ and $\leq 5 \text{ mm}$ zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

7.3 SAR Measurement Procedure

The following steps are used for each test position

- Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

7.4 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01 quoted below.

When the 1-g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

8 CONDUCTED RF OUPUT POWER

8.1 GSM

GSM 850 Band	Burst Average Power(dBm)			Frame-averaged power(dBm)		
Channel	128	190	251	128	190	251
GSM (GMSK, 1-Slot)	33.13	33.24	33.24	24.13	24.24	24.24
GPRS (GMSK, 1-Slot)	33.12	33.22	33.22	24.12	24.22	24.22
GPRS (GMSK, 2-Slots)	30.84	30.85	30.87	24.84	24.85	24.87
GPRS (GMSK, 3-Slots)	27.63	28.73	28.53	23.37	24.47	24.27
GPRS (GMSK, 4-Slots)	25.68	25.43	25.33	22.68	22.43	22.33
EGPRS (8PSK, 1-Slot)	29.81	29.72	29.65	20.81	20.72	20.65
EGPRS (8PSK, 2-Slots)	28.08	27.86	27.78	22.08	21.86	21.78
EGPRS (8PSK, 3-Slots)	24.94	25.88	25.79	20.68	21.62	21.53
EGPRS (8PSK, 4-Slots)	24.87	24.65	24.52	21.87	21.65	21.52
GSM 1900 Band	Burst Average Power(dBm)			Frame-averaged power(dBm)		
Channel	512	661	810	512	661	810
GSM (GMSK, 1-Slot)	30.29	30.31	30.30	21.29	21.31	21.30
GPRS (GMSK, 1-Slot)	30.15	30.22	30.19	21.15	21.22	21.19
GPRS (GMSK, 2-Slots)	26.90	26.98	26.99	20.90	20.98	20.99
GPRS (GMSK, 3-Slots)	24.76	24.92	24.90	20.50	20.66	20.64
GPRS (GMSK, 4-Slots)	22.73	22.77	22.83	19.73	19.77	19.83
EGPRS (8PSK, 1-Slot)	29.18	29.12	29.14	20.18	20.12	20.14
EGPRS (8PSK, 2-Slots)	27.74	27.68	27.63	21.74	21.68	21.63
EGPRS (8PSK, 3-Slots)	25.74	25.69	25.69	21.48	21.43	21.43
EGPRS (8PSK, 4-Slots)	23.54	23.39	23.18	20.54	20.39	20.18

Note:

- SAR testing was performed on the maximum frame-Peaked power mode.
- The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:

Frame-averaged power = Burst averaged power (1 Tx Slot) - 9 dB

Frame-averaged power = Burst averaged power (2 Tx Slots) - 6 dB

Frame-averaged power = Burst averaged power (3 Tx Slots) - 4.26 dB

Frame-averaged power = Burst averaged power (4 Tx Slots) - 3 dB

8.2 WCDMA

WCDMA Band	Band 2			Band 4		
Channel	9262	9400	9538	1312	1412	1513
RMC 12.2Kbps	23.61	23.32	23.47	23.75	23.66	23.59
HSDPA Subtest-1	22.56	22.27	22.30	22.60	22.61	22.58
HSDPA Subtest-2	22.56	22.30	22.35	22.66	22.62	22.56
HSDPA Subtest-3	22.07	21.83	21.86	22.19	22.11	22.09
HSDPA Subtest-4	22.05	21.82	21.83	22.18	22.12	22.07
HSUPA Subtest-1	22.52	22.31	22.33	22.70	22.60	22.52
HSUPA Subtest-2	20.62	20.30	20.35	20.68	20.60	20.64
HSUPA Subtest-3	21.51	21.27	21.33	21.70	21.68	21.54
HSUPA Subtest-4	20.55	20.31	20.38	17.85	20.46	20.49
HSUPA Subtest-5	22.38	22.29	22.26	22.70	22.58	22.54
Band	Band 5			-		
Channel	4132	4182	4233	-	-	-
RMC 12.2Kbps	23.32	23.15	23.14	-	-	-
HSDPA Subtest-1	22.31	22.12	22.11	-	-	-
HSDPA Subtest-2	22.29	22.15	22.12	-	-	-
HSDPA Subtest-3	21.83	21.63	21.67	-	-	-
HSDPA Subtest-4	21.82	21.63	21.64	-	-	-
HSUPA Subtest-1	22.27	22.08	22.09	-	-	-
HSUPA Subtest-2	20.24	20.06	20.09	-	-	-
HSUPA Subtest-3	21.24	21.06	21.12	-	-	-
HSUPA Subtest-4	20.33	20.14	20.18	-	-	-
HSUPA Subtest-5	22.33	22.09	22.16	-	-	-

8.3 LTE

FDD LTE Band 2							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18700	18900	19100	18700	18900	19100
20MHz	1 (RB_Pos:0)	23.17	23.16	23.11	22.75	22.50	22.48
	1 (RB_Pos:50)	22.94	22.92	22.92	22.55	22.29	22.36
	1 (RB_Pos:99)	23.04	23.05	22.95	22.65	22.50	22.34
	50 (RB_Pos:0)	22.18	22.13	22.20	21.16	21.11	21.16
	50 (RB_Pos:25)	22.08	22.07	22.07	21.13	21.11	21.03
	50 (RB_Pos:50)	22.13	22.02	22.04	21.15	21.06	21.01
	100 (RB_Pos:0)	22.17	22.13	22.12	21.15	21.10	21.06
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18675	18900	19125	18675	18900	19125
15MHz	1 (RB_Pos:0)	23.77	23.64	23.83	22.62	22.99	22.96
	1 (RB_Pos:38)	22.98	23.00	23.12	21.93	22.35	22.32
	1 (RB_Pos:74)	23.30	23.22	23.43	22.22	22.57	22.42
	36 (RB_Pos:0)	22.30	22.31	22.39	21.33	21.37	21.38
	36 (RB_Pos:20)	22.11	22.10	22.15	21.16	21.20	21.17
	36 (RB_Pos:39)	22.13	22.10	22.12	21.14	21.14	21.08
	75 (RB_Pos:0)	22.17	22.18	22.28	21.23	21.23	21.25
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18650	18900	19150	18650	18900	19150
10MHz	1 (RB_Pos:0)	23.21	23.21	23.19	22.08	22.50	22.19
	1 (RB_Pos:25)	22.91	22.86	22.77	21.80	22.25	21.80
	1 (RB_Pos:49)	23.03	22.89	22.90	21.85	22.25	21.95
	25 (RB_Pos:0)	22.12	22.14	22.04	21.15	21.16	21.21
	25 (RB_Pos:12)	21.99	22.04	21.89	21.07	21.02	20.99
	25 (RB_Pos:25)	22.01	22.03	21.91	21.02	21.04	20.96
	50 (RB_Pos:0)	22.07	22.05	21.93	21.06	21.11	20.99
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18625	18900	19175	18625	18900	19175
5MHz	1 (RB_Pos:0)	22.93	22.91	22.94	22.11	22.61	22.03
	1 (RB_Pos:13)	22.96	22.92	22.98	22.10	22.52	21.97
	1 (RB_Pos:24)	22.82	22.89	22.82	22.10	22.39	21.92
	12 (RB_Pos:0)	22.00	22.00	21.98	21.09	21.17	21.06
	12 (RB_Pos:6)	22.00	21.98	21.94	21.08	21.14	20.98
	12 (RB_Pos:13)	21.93	21.87	21.88	21.03	21.09	20.96
	25 (RB_Pos:0)	21.94	21.96	21.91	20.99	21.07	20.89
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		

	Channel	18615	18900	19185	18615	18900	19185
3.0MHz	1 (RB_Pos:0)	22.89	22.94	22.90	21.65	22.23	21.90
	1 (RB_Pos:8)	22.89	22.85	22.90	21.67	22.24	21.98
	1 (RB_Pos:14)	22.79	22.82	22.85	21.62	22.14	21.94
	8 (RB_Pos:0)	21.95	21.98	21.91	21.08	21.06	20.99
	8 (RB_Pos:3)	21.95	22.00	21.94	21.13	21.09	20.97
	8 (RB_Pos:7)	21.92	21.91	21.92	21.07	21.00	20.90
	15 (RB_Pos:0)	21.93	21.96	21.94	21.00	21.02	20.87
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18607	18900	19193	18607	18900	19193
1.4MHz	1 (RB_Pos:0)	22.77	22.82	22.79	21.93	22.17	21.85
	1 (RB_Pos:3)	22.81	22.87	22.87	21.86	22.19	21.85
	1 (RB_Pos:5)	22.80	22.77	22.76	21.86	22.11	21.78
	3 (RB_Pos:0)	22.85	22.93	22.75	21.92	22.08	21.93
	3 (RB_Pos:1)	22.92	22.97	22.92	22.03	22.07	21.98
	3 (RB_Pos:3)	22.86	22.90	22.88	21.95	22.02	21.89
	6 (RB_Pos:0)	21.84	21.87	21.83	21.02	20.86	21.03
FDD LTE Band 4							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20050	20175	20300	20050	20175	20300
20MHz	1 (RB_Pos:0)	23.04	23.17	23.29	22.53	22.47	22.57
	1 (RB_Pos:50)	22.90	22.92	22.96	22.51	22.14	22.31
	1 (RB_Pos:99)	23.02	23.03	23.02	22.48	22.45	22.32
	50 (RB_Pos:0)	22.08	22.09	22.16	21.06	21.11	21.18
	50 (RB_Pos:25)	22.03	22.01	22.07	21.03	21.05	21.08
	50 (RB_Pos:50)	22.00	22.05	22.06	21.05	21.04	21.05
	100 (RB_Pos:0)	22.02	22.05	22.14	21.02	21.03	21.15
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20025	20175	20325	20025	20175	20325
15MHz	1 (RB_Pos:0)	23.57	23.56	23.69	22.47	22.83	22.83
	1 (RB_Pos:38)	22.90	22.96	23.01	21.82	22.27	22.16
	1 (RB_Pos:74)	23.16	23.21	23.13	22.13	22.54	22.19
	36 (RB_Pos:0)	22.18	22.27	22.24	21.15	21.30	21.19
	36 (RB_Pos:20)	21.96	22.05	22.03	20.99	21.07	21.05
	36 (RB_Pos:39)	22.05	22.09	22.04	21.05	21.12	21.01
	75 (RB_Pos:0)	22.13	22.11	22.12	21.12	21.14	21.12
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20000	20175	20350	20000	20175	20350
10MHz	1 (RB_Pos:0)	23.12	23.15	23.14	21.94	22.41	22.21

	1 (RB_Pos:25)	22.73	22.81	22.73	21.55	22.11	21.81
	1 (RB_Pos:49)	22.94	22.92	22.80	21.68	22.19	21.88
	25 (RB_Pos:0)	22.00	22.01	22.06	20.94	21.03	21.13
	25 (RB_Pos:12)	21.95	21.95	21.86	20.91	20.95	20.98
	25 (RB_Pos:25)	21.84	21.88	21.88	20.88	20.89	20.95
	50 (RB_Pos:0)	21.96	21.98	21.90	20.89	21.00	20.99
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19975	20175	20375	19975	20175	20375
5MHz	1 (RB_Pos:0)	22.95	22.85	22.90	22.02	22.29	21.97
	1 (RB_Pos:13)	22.92	22.89	22.81	21.90	22.31	21.87
	1 (RB_Pos:24)	22.85	22.85	22.76	21.94	22.31	21.84
	12 (RB_Pos:0)	21.93	21.89	21.82	20.93	21.01	20.93
	12 (RB_Pos:6)	21.83	21.89	21.90	20.87	21.04	20.98
	12 (RB_Pos:13)	21.83	21.83	21.84	20.87	20.98	20.92
	25 (RB_Pos:0)	21.78	21.88	21.85	20.80	20.95	20.90
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19965	20175	20385	19965	20175	20385
3.0MHz	1 (RB_Pos:0)	22.76	22.87	22.81	21.61	21.99	21.87
	1 (RB_Pos:8)	22.81	22.82	22.76	21.67	22.07	21.88
	1 (RB_Pos:14)	22.71	22.85	22.68	21.37	22.04	21.79
	8 (RB_Pos:0)	21.82	21.87	21.81	20.94	20.95	20.84
	8 (RB_Pos:3)	21.87	21.91	21.85	20.99	21.01	20.90
	8 (RB_Pos:7)	21.84	21.88	21.83	20.96	20.99	20.88
	15 (RB_Pos:0)	21.84	21.87	21.81	20.86	20.94	20.78
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19957	20175	20393	19957	20175	20393
1.4MHz	1 (RB_Pos:0)	22.75	22.77	22.64	21.76	22.01	21.78
	1 (RB_Pos:3)	22.80	22.80	22.71	21.84	22.13	21.76
	1 (RB_Pos:5)	22.75	22.77	22.66	21.77	22.08	21.72
	3 (RB_Pos:0)	22.72	22.91	22.70	21.88	22.00	21.88
	3 (RB_Pos:1)	22.82	22.89	22.73	21.90	22.03	21.87
	3 (RB_Pos:3)	22.78	22.89	22.69	21.90	21.95	21.83
	6 (RB_Pos:0)	21.77	21.77	21.67	20.85	20.76	20.89

FDD LTE Band 5							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20450	20525	20600	20450	20525	20600
10MHz	1 (RB_Pos:0)	23.18	23.23	23.17	22.14	22.64	22.18
	1 (RB_Pos:25)	22.91	23.02	23.00	21.89	22.44	21.92
	1 (RB_Pos:49)	23.21	23.32	23.10	22.11	22.68	22.06

	25 (RB_Pos:0)	22.17	22.15	22.24	21.16	21.12	21.28
	25 (RB_Pos:12)	22.08	22.10	22.15	21.07	21.11	21.21
	25 (RB_Pos:25)	22.17	22.22	22.25	21.15	21.26	21.30
	50 (RB_Pos:0)	22.16	22.16	22.18	21.10	21.12	21.19
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20425	20525	20625	20425	20525	20625
5MHz	1 (RB_Pos:0)	23.08	22.99	23.10	22.17	22.49	22.15
	1 (RB_Pos:13)	23.17	23.06	23.14	22.30	22.60	22.17
	1 (RB_Pos:24)	22.99	23.05	22.93	22.16	22.61	22.00
	12 (RB_Pos:0)	22.03	22.07	22.05	21.14	21.22	21.11
	12 (RB_Pos:6)	22.06	22.08	22.12	21.14	21.18	21.18
	12 (RB_Pos:13)	21.95	22.09	22.02	21.02	21.25	21.06
	25 (RB_Pos:0)	22.01	22.06	22.10	21.06	21.10	21.07
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20415	20525	20635	20415	20525	20635
3.0 MHz	1 (RB_Pos:0)	22.94	23.01	22.98	21.92	22.46	21.95
	1 (RB_Pos:8)	22.95	23.05	22.91	21.89	22.42	21.93
	1 (RB_Pos:14)	22.96	23.01	22.80	21.89	22.49	21.80
	8 (RB_Pos:0)	22.06	22.03	22.06	21.14	21.09	21.16
	8 (RB_Pos:3)	22.09	22.09	22.02	21.17	21.07	21.12
	8 (RB_Pos:7)	22.07	22.00	22.02	21.18	21.03	21.10
	15 (RB_Pos:0)	22.07	22.03	22.06	21.08	21.03	20.95
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20407	20525	20643	20407	20525	20643
1.4MHz	1 (RB_Pos:0)	22.94	22.92	22.83	22.03	22.29	21.86
	1 (RB_Pos:3)	22.95	23.00	22.82	22.10	22.37	21.86
	1 (RB_Pos:5)	22.93	22.93	22.75	22.07	22.34	21.88
	3 (RB_Pos:0)	22.85	22.98	22.82	21.98	22.12	22.06
	3 (RB_Pos:1)	22.92	22.93	22.83	21.98	22.12	22.14
	3 (RB_Pos:3)	22.87	22.89	22.85	21.98	22.05	22.05
	6 (RB_Pos:0)	21.98	22.04	21.88	21.14	20.86	21.10
FDD LTE Band 7							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20850	21100	21350	20850	21100	21350
20MHz	1 (RB_Pos:0)	23.35	23.16	23.15	22.73	22.62	22.55
	1 (RB_Pos:50)	22.97	22.83	22.84	22.53	22.28	22.27
	1 (RB_Pos:99)	23.13	22.79	22.90	22.54	22.20	22.29
	50 (RB_Pos:0)	22.06	22.02	22.05	21.09	21.01	21.05
	50 (RB_Pos:25)	22.00	21.89	21.97	21.02	20.93	20.94

	50 (RB_Pos:50)	21.95	21.86	21.91	20.95	20.84	20.89
	100 (RB_Pos:0)	21.98	21.95	21.95	21.02	20.92	20.98
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20825	21100	21375	20825	21100	21375
15MHz	1 (RB_Pos:0)	23.45	23.47	23.56	22.45	22.83	22.46
	1 (RB_Pos:38)	22.94	22.86	22.88	21.90	22.22	22.06
	1 (RB_Pos:74)	23.23	23.01	23.06	22.12	22.37	22.31
	36 (RB_Pos:0)	22.15	22.09	22.03	21.10	21.10	21.01
	36 (RB_Pos:20)	22.03	21.88	21.83	21.04	20.99	20.81
	36 (RB_Pos:39)	22.09	21.94	21.84	21.08	20.94	20.79
	75 (RB_Pos:0)	22.10	21.97	21.87	21.06	21.04	20.94
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20800	21100	21400	20800	21100	21400
10MHz	1 (RB_Pos:0)	23.17	23.11	22.99	22.01	22.41	22.12
	1 (RB_Pos:25)	22.89	22.84	22.67	21.70	22.17	21.69
	1 (RB_Pos:49)	23.00	22.83	22.73	21.79	22.16	21.71
	25 (RB_Pos:0)	22.02	21.96	21.81	20.96	21.00	20.87
	25 (RB_Pos:12)	21.90	21.87	21.71	20.93	20.86	20.81
	25 (RB_Pos:25)	21.90	21.86	21.68	20.90	20.86	20.76
	50 (RB_Pos:0)	21.98	21.88	21.73	20.91	20.93	20.78
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20775	21100	21425	20775	21100	21425
5MHz	1 (RB_Pos:0)	22.97	22.85	22.74	22.11	22.39	21.81
	1 (RB_Pos:13)	22.99	22.85	22.73	22.10	22.38	21.78
	1 (RB_Pos:24)	22.83	22.79	22.66	22.05	22.30	21.74
	12 (RB_Pos:0)	21.87	21.81	21.63	20.93	20.94	20.75
	12 (RB_Pos:6)	21.90	21.86	21.70	20.99	20.96	20.73
	12 (RB_Pos:13)	21.92	21.76	21.64	20.99	20.94	20.70
	25 (RB_Pos:0)	21.87	21.84	21.62	20.91	20.92	20.67
FDD LTE Band 12							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23060	23095	23130	23060	23095	23130
10MHz	1 (RB_Pos:0)	22.83	22.89	22.95	21.79	22.26	21.97
	1 (RB_Pos:25)	22.88	22.94	23.01	21.78	22.25	22.12
	1 (RB_Pos:49)	22.78	22.85	22.94	21.69	22.21	22.02
	25 (RB_Pos:0)	22.06	22.03	22.02	20.98	21.02	21.12
	25 (RB_Pos:12)	21.96	22.06	22.14	20.94	21.01	21.22
	25 (RB_Pos:25)	22.03	22.05	22.11	20.98	21.00	21.19
	50 (RB_Pos:0)	22.05	21.99	22.06	20.98	21.06	21.01

Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23035	23095	23155	23035	23095	23155
5MHz	1 (RB_Pos:0)	23.04	22.90	22.93	22.05	22.41	21.97
	1 (RB_Pos:13)	23.16	22.97	22.96	22.12	22.50	22.02
	1 (RB_Pos:24)	23.04	22.96	23.01	22.08	22.50	22.10
	12 (RB_Pos:0)	21.95	22.04	21.99	20.99	21.14	21.03
	12 (RB_Pos:6)	22.04	21.98	22.03	21.10	21.11	21.01
	12 (RB_Pos:13)	21.94	22.02	22.11	20.99	21.11	21.12
	25 (RB_Pos:0)	22.01	22.00	22.07	21.01	21.00	21.12
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23025	23095	23165	23025	23095	23165
3.0MHz	1 (RB_Pos:0)	22.88	22.93	22.98	21.70	22.25	22.11
	1 (RB_Pos:8)	22.90	22.94	23.06	21.72	22.27	22.19
	1 (RB_Pos:14)	22.89	22.91	23.02	21.69	22.29	22.07
	8 (RB_Pos:0)	21.98	22.04	22.04	21.08	21.08	21.02
	8 (RB_Pos:3)	21.92	22.03	22.05	21.02	21.05	21.15
	8 (RB_Pos:7)	21.95	21.95	21.97	21.02	21.01	21.03
	15 (RB_Pos:0)	21.91	21.94	22.02	20.95	20.98	20.94
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			QPSK		
	Channel	23017	23095	23173	23017	23095	23173
1.4MHz	1 (RB_Pos:0)	22.74	22.86	22.95	21.91	22.11	21.89
	1 (RB_Pos:3)	22.91	22.87	22.96	21.98	22.23	21.95
	1 (RB_Pos:5)	22.78	22.83	22.99	21.80	22.21	22.04
	3 (RB_Pos:0)	22.94	22.93	22.95	21.97	22.02	22.04
	3 (RB_Pos:1)	22.96	22.99	22.98	22.12	22.03	22.09
	3 (RB_Pos:3)	22.96	22.88	22.96	22.07	22.02	22.15
	6 (RB_Pos:0)	21.94	21.89	21.91	21.04	20.80	21.07

FDD LTE Band 17							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23780	23790	23800	23780	23790	23800
10MHz	1 (RB_Pos:0)	22.84	22.82	22.86	21.71	22.18	21.96
	1 (RB_Pos:25)	22.88	22.83	22.96	21.78	22.18	22.04
	1 (RB_Pos:49)	22.96	22.82	22.86	21.70	22.17	21.96
	25 (RB_Pos:0)	22.01	22.09	22.00	20.95	21.13	21.14
	25 (RB_Pos:12)	22.00	22.00	22.07	20.96	21.03	21.20
	25 (RB_Pos:25)	21.95	21.95	22.18	20.96	21.01	21.22
	50 (RB_Pos:0)	22.06	21.99	22.14	21.01	20.98	21.16
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23755	23790	23825	23755	23790	23825
5MHz	1 (RB_Pos:0)	23.06	22.89	22.93	22.15	22.42	21.98
	1 (RB_Pos:13)	23.08	23.00	23.05	22.13	22.74	22.01
	1 (RB_Pos:24)	23.00	22.87	22.94	22.14	22.51	22.02
	12 (RB_Pos:0)	22.01	22.01	22.08	21.15	21.18	21.07
	12 (RB_Pos:6)	21.97	21.93	22.07	21.10	21.14	21.06
	12 (RB_Pos:13)	21.98	21.96	22.00	21.06	21.14	21.06
	25 (RB_Pos:0)	21.90	22.04	22.02	21.04	20.99	21.01

8.4 WIFI

8.4.1 2.4GWIFI (Antenna 0)

Band (GHz)	Mode	Channel	Freq. (MHz)	Peak Power (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	15.36	No
		6	2437	15.53	No
		11	2462	15.57	Yes
	802.11g	1	2412	10.76	No
		6	2437	11.51	No
		11	2462	11.82	No
	802.11n(HT20)	1	2412	11.07	No
		6	2437	11.65	No
		11	2462	11.66	No
	802.11n(HT40)	3	2422	11.52	No
		6	2437	11.05	No
		9	2452	11.08	No

8.4.2 2.4GWIFI (Antenna 1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Peak Power (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	15.30	Yes
		6	2437	14.91	No
		11	2462	14.84	No
	802.11g	1	2412	10.69	No
		6	2437	10.37	No
		11	2462	10.05	No
	802.11n(HT20)	1	2412	10.50	No
		6	2437	10.35	No
		11	2462	10.15	No
	802.11n(HT40)	3	2422	10.57	No
		6	2437	10.49	No
		9	2452	10.73	No

8.4.3 5GWIFI (Antenna 0)

Band (GHz)	Mode	Channel	Freq. (MHz)	Peak Power (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	12.83	No
		44	5220	13.16	No
		48	5240	13.09	No
	802.11n(HT20)	36	5180	12.50	No
		44	5220	12.79	No
		48	5240	11.35	No
	802.11n(HT40)	38	5190	13.28	No
		46	5230	12.24	No
	802.11ac(HT20)	36	5180	12.71	No
		44	5220	12.36	No
		48	5240	12.18	No
	802.11ac(HT40)	38	5190	12.00	No
46		5230	11.82	No	
802.11ac(HT80)	42	5210	12.03	No	
5.3 (5.25~5.35)	802.11a	52	5260	13.19	No
		60	5300	12.99	No
		64	5320	12.91	No
	802.11n(HT20)	52	5260	12.32	No
		60	5300	12.68	No
		64	5320	12.40	No
	802.11n(HT40)	54	5270	13.38	Yes
		62	5310	12.29	No
	802.11ac(HT20)	52	5260	12.64	No
		60	5300	12.63	No
		64	5320	12.75	No
	802.11ac(HT40)	54	5270	12.14	No
62		5310	13.20	No	
802.11ac(HT80)	58	5290	11.80	No	
5.6 (5.47~5.725)	802.11a	100	5500	13.16	No
		116	5580	13.54	No
		140	5700	13.21	No
	802.11n(HT20)	100	5500	12.84	No
		116	5580	13.06	No
		140	5700	11.83	No
	802.11n(HT40)	102	5510	13.60	Yes
		110	5550	12.74	No
	802.11ac(HT20)	100	5500	13.01	No
		116	5580	13.07	No
		140	5700	11.64	No
	802.11ac(HT40)	102	5510	12.34	No
110		5550	12.62	No	

	802.11ac(HT80)	106	5530	12.33	No
5.8 (5.725~5.850)	802.11a	149	5745	13.06	No
		157	5785	13.08	No
		161	5805	13.06	No
		149	5745	12.63	No
	802.11n(HT20)	157	5785	12.69	No
		161	5805	12.96	No
		151	5755	12.06	No
	802.11n(HT40)	159	5790	13.40	No
		149	5745	12.94	No
	802.11ac(HT20)	157	5785	12.80	No
		163	5825	12.89	No
		151	5755	12.46	No
802.11ac(HT40)	159	5790	13.49	Yes	
	802.11ac(HT80)	155	5775	11.47	No

8.4.4 5GWIFI (Antenna 1)

Band (GHz)	Mode	Channel	Freq. (MHz)	Peak Power (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	12.45	No
		44	5220	11.78	No
		48	5240	12.69	No
	802.11n(HT20)	36	5180	12.55	No
		44	5220	11.59	No
		48	5240	12.90	No
	802.11n(HT40)	38	5190	9.15	No
		46	5230	10.73	No
	802.11ac(HT20)	36	5180	11.91	No
		44	5220	11.81	No
		48	5240	11.34	No
	802.11ac(HT40)	38	5190	12.64	No
		46	5230	13.31	Yes
	802.11ac(HT80)	42	5210	8.44	No
5.3 (5.25~5.35)	802.11a	52	5260	12.90	No
		60	5300	12.96	No
		64	5320	12.70	No
	802.11n(HT20)	52	5260	12.93	No
		60	5300	12.65	No
		64	5320	11.55	No
	802.11n(HT40)	54	5270	10.41	No
		62	5310	8.97	No
	802.11ac(HT20)	52	5260	11.53	No
		60	5300	12.85	No

		64	5320	12.72	No
	802.11ac(HT40)	54	5270	12.21	No
		62	5310	13.11	No
	802.11ac(HT80)	58	5290	8.70	No
5.6 (5.47~5.725)	802.11a	100	5500	13.16	No
		116	5580	13.14	No
		140	5700	12.89	No
	802.11n(HT20)	100	5500	12.68	No
		116	5580	12.95	No
		140	5700	12.66	No
	802.11n(HT40)	102	5510	9.88	No
		110	5550	12.24	No
	802.11ac(HT20)	100	5500	12.33	No
		116	5580	12.94	No
		140	5700	12.85	No
	802.11ac(HT40)	102	5510	12.11	No
		110	5550	13.56	Yes
	802.11ac(HT80)	106	5530	9.74	No
5.8 (5.725~5.850)	802.11a	149	5745	10.19	No
		157	5785	10.61	Yes
		161	5805	8.94	No
	802.11n(HT20)	149	5745	9.94	No
		157	5785	9.50	No
		161	5805	9.81	No
	802.11n(HT40)	151	5755	10.40	No
		159	5790	9.35	No
	802.11ac(HT20)	149	5745	9.57	No
		157	5785	9.33	No
		163	5825	10.34	No
	802.11ac(HT40)	151	5755	10.19	No
		159	5790	10.40	No
	802.11ac(HT80)	155	5775	8.80	No

8.4.5 Bluetooth

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Peak Power (dBm)	9.61	9.50	9.54	8.88	8.86	8.90
Mode	8-DPSK			BLE		
Channel	0	39	78	0	19	39
Frequency (MHz)	2402	2441	2480	2402	2440	2480
Peak Power (dBm)	9.09	9.08	9.11	0.50	0.72	0.87

8.5 Power Reduction List

When device operating under hotspot mode, the WCDMA B2/B4, LTE B2/B4/B7 power reduction will applied for SAR compliance.

WCDMA Band	Band 2			Band 4		
Channel	9263	9400	9538	1312	1413	1513
RMC 12.2Kbps	20.03	19.80	19.87	20.17	20.01	19.94
HSDPA Subtest-1	18.99	18.80	18.77	18.99	18.80	18.79
HSDPA Subtest-2	18.99	18.79	18.80	19.01	18.78	18.77
HSDPA Subtest-3	18.50	18.11	18.27	18.54	18.30	18.31
HSDPA Subtest-4	18.51	18.30	18.27	18.51	18.30	18.28
HSUPA Subtest-1	18.99	18.81	18.82	18.86	18.92	18.81
HSUPA Subtest-2	17.02	16.87	16.76	16.99	16.91	16.87
HSUPA Subtest-3	18.02	17.77	17.80	18.02	17.88	17.86
HSUPA Subtest-4	17.07	16.75	16.84	17.06	16.91	16.88
HSUPA Subtest-5	18.86	18.71	18.66	18.86	18.76	18.68

FDD LTE Band 2							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18700	18900	19100	18700	18900	19100
20MHz	1 (RB_Pos:0)	19.39	19.41	19.29	19.94	19.77	19.63
	1 (RB_Pos:50)	19.34	19.36	19.35	19.90	19.63	19.65
	1 (RB_Pos:99)	19.25	19.28	19.18	19.83	19.65	19.47
	50 (RB_Pos:0)	19.52	19.45	19.43	19.54	19.41	19.36
	50 (RB_Pos:25)	19.48	19.41	19.35	19.53	19.42	19.45
	50 (RB_Pos:50)	19.44	19.41	19.33	19.48	19.39	19.32
	100 (RB_Pos:0)	19.51	19.41	19.38	19.51	19.38	19.37
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18675	18900	19125	18675	18900	19125
15MHz	1 (RB_Pos:0)	19.98	19.97	19.88	19.90	20.27	20.25
	1 (RB_Pos:38)	19.42	19.35	19.34	19.35	19.66	19.77
	1 (RB_Pos:74)	19.48	19.45	19.40	19.41	19.78	19.68
	36 (RB_Pos:0)	19.76	19.64	19.74	19.69	19.68	19.65
	36 (RB_Pos:20)	19.53	19.43	19.46	19.54	19.48	19.38
	36 (RB_Pos:39)	19.48	19.35	19.38	19.49	19.39	19.30
	75 (RB_Pos:0)	19.57	19.51	19.54	19.55	19.54	19.53
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18650	18900	19150	18650	18900	19150
10MHz	1 (RB_Pos:0)	19.84	19.65	19.67	19.69	19.99	19.67
	1 (RB_Pos:25)	19.60	19.41	19.36	19.45	19.70	19.40
	1 (RB_Pos:49)	19.52	19.32	19.27	19.40	19.69	19.34

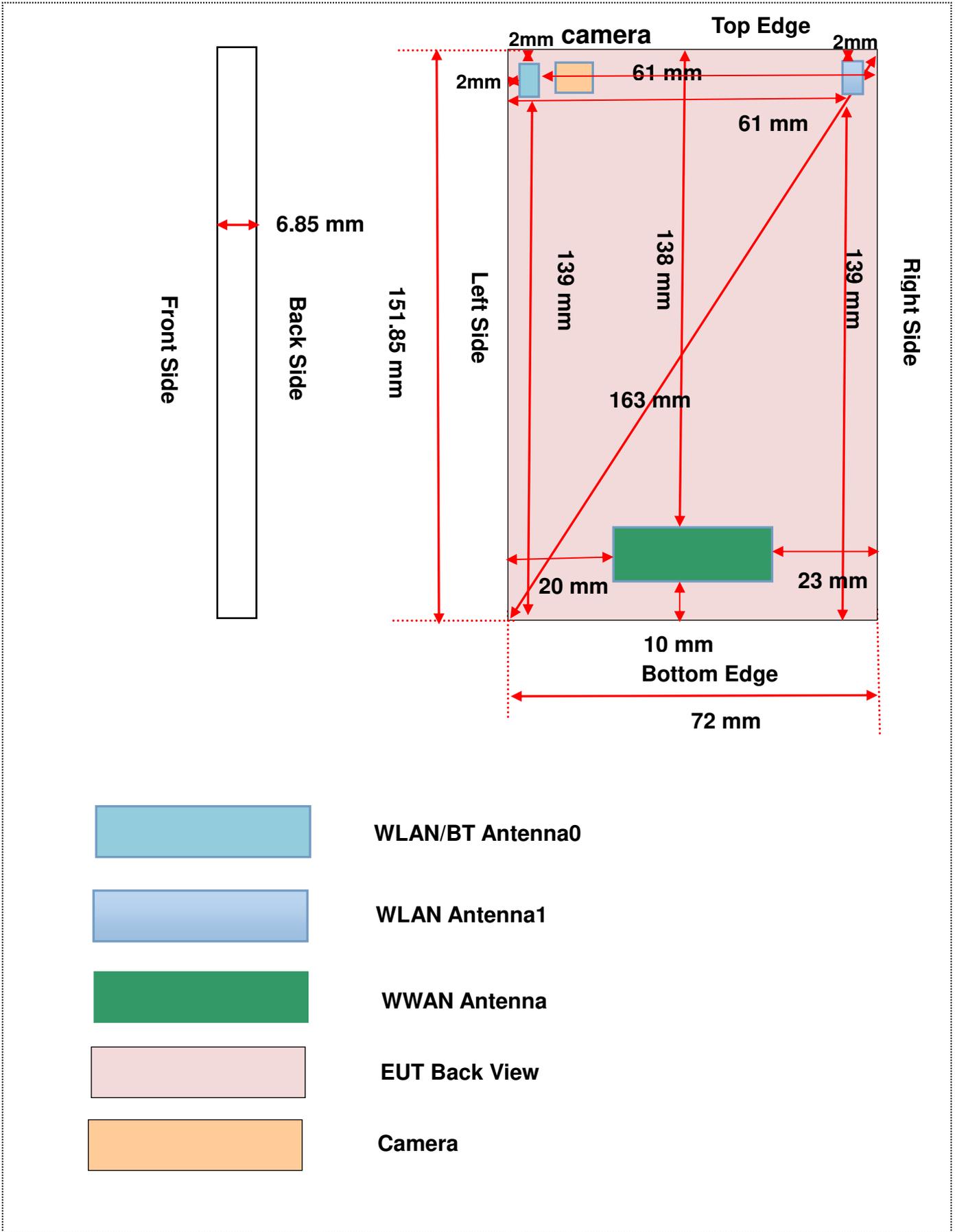
	25 (RB_Pos:0)	19.75	19.61	19.64	19.71	19.61	19.68
	25 (RB_Pos:12)	19.65	19.48	19.54	19.67	19.49	19.59
	25 (RB_Pos:25)	19.61	19.42	19.44	19.57	19.47	19.53
	50 (RB_Pos:0)	19.68	19.50	19.55	19.66	19.52	19.55
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18625	18900	19175	18625	18900	19175
5MHz	1 (RB_Pos:0)	19.57	19.45	19.53	19.78	19.95	19.65
	1 (RB_Pos:13)	19.58	19.47	19.55	19.74	19.96	19.58
	1 (RB_Pos:24)	19.39	19.36	19.42	19.61	19.83	19.49
	12 (RB_Pos:0)	19.63	19.48	19.47	19.70	19.62	19.52
	12 (RB_Pos:6)	19.60	19.42	19.51	19.70	19.57	19.56
	12 (RB_Pos:13)	19.58	19.48	19.43	19.65	19.59	19.50
	25 (RB_Pos:0)	19.55	19.45	19.45	19.62	19.49	19.45
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18615	18900	19185	18615	18900	19185
3.0MHz	1 (RB_Pos:0)	19.47	19.37	19.38	19.38	19.76	19.45
	1 (RB_Pos:8)	19.45	19.36	19.36	19.40	19.70	19.42
	1 (RB_Pos:14)	19.49	19.39	19.28	19.35	19.70	19.33
	8 (RB_Pos:0)	19.61	19.44	19.47	19.71	19.53	19.52
	8 (RB_Pos:3)	19.59	19.48	19.49	19.74	19.53	19.54
	8 (RB_Pos:7)	19.56	19.40	19.44	19.68	19.45	19.50
	15 (RB_Pos:0)	19.57	19.41	19.48	19.65	19.49	19.42
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18607	18900	19193	18607	18900	19193
1.4MHz	1 (RB_Pos:0)	19.40	19.34	19.27	19.42	19.65	19.38
	1 (RB_Pos:3)	19.43	19.34	19.38	19.48	19.70	19.48
	1 (RB_Pos:5)	19.38	19.25	19.32	19.46	19.65	19.35
	3 (RB_Pos:0)	19.42	19.40	19.36	19.51	19.58	19.58
	3 (RB_Pos:1)	19.48	19.42	19.39	19.54	19.57	19.60
	3 (RB_Pos:3)	19.42	19.34	19.35	19.55	19.53	19.58
	6 (RB_Pos:0)	19.41	19.38	19.40	19.58	19.31	19.56

LTE Band 4							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
20 MHz	Channel	20050	20175	20300	20050	20175	20300
	1 (RB_Pos:0)	19.27	19.64	19.63	19.64	19.98	19.80
	1 (RB_Pos:50)	19.57	19.45	19.55	19.91	19.81	19.83
	1 (RB_Pos:99)	19.27	19.40	19.24	19.74	19.74	19.53
	50 (RB_Pos:0)	19.50	19.61	19.64	19.50	19.58	19.52
	50 (RB_Pos:25)	19.62	19.54	19.68	19.46	19.56	19.63
	50 (RB_Pos:50)	19.42	19.46	19.53	19.46	19.47	19.46
	100 (RB_Pos:0)	19.48	19.65	19.57	19.46	19.52	19.63
15 MHz	Channel	20025	20175	20325	20025	20175	20325
	1 (RB_Pos:0)	19.82	20.15	20.06	19.81	20.42	20.33
	1 (RB_Pos:38)	19.41	19.46	19.48	19.40	19.82	19.74
	1 (RB_Pos:74)	19.49	19.65	19.63	19.50	19.99	19.88
	36 (RB_Pos:0)	19.61	19.79	19.80	19.66	19.86	19.75
	36 (RB_Pos:20)	19.53	19.53	19.56	19.51	19.64	19.62
	36 (RB_Pos:39)	19.45	19.53	19.52	19.52	19.58	19.45
	75 (RB_Pos:0)	19.60	19.59	19.67	19.58	19.68	19.58
10 MHz	Channel	20000	20175	20350	20000	20175	20350
	1 (RB_Pos:0)	19.49	19.63	19.54	19.41	19.91	19.53
	1 (RB_Pos:25)	19.39	19.35	19.23	19.30	19.65	19.26
	1 (RB_Pos:49)	19.48	19.31	19.23	19.29	19.64	19.29
	25 (RB_Pos:0)	19.56	19.63	19.49	19.53	19.65	19.54
	25 (RB_Pos:12)	19.53	19.50	19.38	19.56	19.46	19.44
	25 (RB_Pos:25)	19.54	19.45	19.44	19.57	19.42	19.39
	50 (RB_Pos:0)	19.53	19.50	19.39	19.52	19.54	19.41
5 MHz	Channel	19975	20175	20375	19975	20175	20375
	1 (RB_Pos:0)	19.44	19.45	19.48	19.54	19.98	19.53
	1 (RB_Pos:13)	19.51	19.38	19.44	19.56	19.94	19.51
	1 (RB_Pos:24)	19.45	19.35	19.31	19.47	19.89	19.42
	12 (RB_Pos:0)	19.41	19.52	19.36	19.50	19.61	19.45
	12 (RB_Pos:6)	19.42	19.41	19.43	19.51	19.51	19.42
	12 (RB_Pos:13)	19.41	19.43	19.19	19.52	19.57	19.29
	25 (RB_Pos:0)	19.41	19.42	19.37	19.38	19.48	19.38
3 MHz	Channel	19965	20175	20385	19965	20175	20385
	1 (RB_Pos:0)	19.33	19.40	19.28	19.22	19.75	19.37
	1 (RB_Pos:8)	19.33	19.34	19.23	19.25	19.68	19.36
	1 (RB_Pos:14)	19.31	19.33	19.13	19.16	19.66	19.21
	8 (RB_Pos:0)	19.36	19.42	19.34	19.59	19.52	19.40
	8 (RB_Pos:3)	19.45	19.42	19.36	19.57	19.51	19.37
	8 (RB_Pos:7)	19.39	19.32	19.21	19.50	19.45	19.41
	15 (RB_Pos:0)	19.42	19.37	19.38	19.46	19.47	19.30

Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
1.4 MHz	Channel	19957	20175	20393	19957	20175	20393
	1 (RB_Pos:0)	19.35	19.37	19.10	19.30	19.69	19.30
	1 (RB_Pos:3)	19.38	19.33	19.30	19.35	19.66	19.34
	1 (RB_Pos:5)	19.26	19.25	19.22	19.28	19.62	19.23
	3 (RB_Pos:0)	19.31	19.35	19.24	19.36	19.52	19.41
	3 (RB_Pos:1)	19.20	19.39	19.29	19.44	19.58	19.48
	3 (RB_Pos:3)	19.36	19.37	19.27	19.43	19.51	19.43
	6 (RB_Pos:0)	19.35	19.31	19.22	19.65	19.29	19.48
LTE Band 7							
20 MHz	Channel	20850	21100	21350	20850	21100	21350
	1 (RB_Pos:0)	19.21	19.31	19.12	19.85	19.73	19.59
	1 (RB_Pos:50)	19.20	19.22	19.06	19.71	19.55	19.47
	1 (RB_Pos:99)	19.06	18.95	18.89	19.53	19.41	19.24
	50 (RB_Pos:0)	19.30	19.38	19.10	19.24	19.34	19.05
	50 (RB_Pos:25)	19.22	19.30	19.00	19.27	19.32	19.04
	50 (RB_Pos:50)	19.08	19.19	19.01	19.14	19.18	18.98
	100 (RB_Pos:0)	19.23	19.22	19.12	19.24	19.29	19.08
15 MHz	Channel	20825	21100	21375	20825	21100	21375
	1 (RB_Pos:0)	19.71	19.78	19.26	19.48	20.05	19.86
	1 (RB_Pos:38)	19.17	19.20	18.89	19.20	19.56	19.32
	1 (RB_Pos:74)	19.21	19.25	19.10	19.14	19.57	19.30
	36 (RB_Pos:0)	19.32	19.48	19.16	19.27	19.49	19.08
	36 (RB_Pos:20)	19.29	19.28	19.01	19.31	19.27	18.95
	36 (RB_Pos:39)	19.22	19.21	18.89	19.16	19.25	18.89
	75 (RB_Pos:0)	19.31	19.34	19.03	19.31	19.36	19.05
10 MHz	Channel	20800	21100	21400	20800	21100	21400
	1 (RB_Pos:0)	19.29	19.32	19.12	19.25	19.68	19.09
	1 (RB_Pos:25)	19.13	19.10	18.96	19.14	19.43	19.00
	1 (RB_Pos:49)	19.14	19.10	18.97	19.13	19.42	19.05
	25 (RB_Pos:0)	19.23	19.29	19.07	19.17	19.32	19.16
	25 (RB_Pos:12)	19.24	19.16	18.98	19.23	19.23	19.08
	25 (RB_Pos:25)	19.19	19.14	18.98	19.19	19.19	19.03
	50 (RB_Pos:0)	19.23	19.25	19.02	19.14	19.24	19.01
5 MHz	Channel	20775	21100	21425	20775	21100	21425
	1 (RB_Pos:0)	19.31	19.18	19.05	19.49	19.78	19.15
	1 (RB_Pos:13)	19.39	19.10	18.94	19.47	19.71	19.08
	1 (RB_Pos:24)	19.25	19.09	18.95	19.32	19.63	18.93
	12 (RB_Pos:0)	19.14	19.26	18.95	19.25	19.45	19.01
	12 (RB_Pos:6)	19.30	19.16	18.97	19.28	19.35	19.03
	12 (RB_Pos:13)	19.15	19.12	18.94	19.17	19.31	19.01

	25 (RB_Pos:0)	19.31	19.18	19.05	19.49	19.78	19.15
--	---------------	-------	-------	-------	-------	-------	-------

9 EUT ANTENNA LOCATION SKETCH



9.1 SAR Test Exclusion Consider Table

According with FCC KDB 447498 D01, Appendix A, <SAR Test Exclusion Thresholds for 100 MHz - 6 GHz and ≤ 50 mm> Table, this Device SAR test configurations consider as following :

Band	Mode	Max. Peak Power		Test Position Configurations					
		dBm	mW	Head	Front/ Back	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM 850	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	Voice	33.35	2162.72	Yes	Yes	Yes	Yes	No	Yes
	Data	31.00	1258.93	No	Yes	Yes	Yes	No	Yes
GSM 1900	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	Voice	30.40	1096.48	Yes	Yes	Yes	Yes	No	Yes
	Data	30.35	1083.93	No	Yes	Yes	Yes	No	Yes
WCDMA Band 2	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	RMC	23.70	234.42	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 4	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	RMC	23.85	242.66	Yes	Yes	Yes	Yes	No	Yes
WCDMA Band 5	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	RMC	23.40	218.78	Yes	Yes	Yes	Yes	No	Yes
LTE Band 2	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	QPSK	23.25	211.35	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	QPSK	23.40	218.78	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	QPSK	23.35	216.27	Yes	Yes	Yes	Yes	No	Yes
LTE Band 7	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	QPSK	23.45	221.31	Yes	Yes	Yes	Yes	No	Yes
LTE Band 12	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	QPSK	23.10	204.17	Yes	Yes	Yes	Yes	No	Yes
LTE Band 17	Distance to User			<5mm	<5 mm	20 mm	23 mm	138 mm	10 mm
	QPSK	23.05	201.84	Yes	Yes	Yes	Yes	No	Yes
WLAN 2.4 G (ANT0)	Distance to User			<5mm	<5mm	<5mm	61mm	<5mm	139 mm
	802.11b	15.65	36.73	Yes	Yes	Yes	No	Yes	No
	802.11g	11.90	15.49	Yes	Yes	Yes	No	Yes	No
	802.11n(HT20)	11.75	14.97	Yes	Yes	Yes	No	Yes	No
WLAN 2.4 G (ANT1)	Distance to User			<5mm	<5mm	61mm	<5mm	<5mm	139 mm
	802.11b	15.40	34.67	Yes	Yes	No	Yes	Yes	No
	802.11g	10.80	12.02	Yes	Yes	No	Yes	Yes	No
	802.11n(HT20)	10.45	11.09	Yes	Yes	No	Yes	Yes	No
WLAN 5 G	Distance to User			<5mm	<5mm	<5mm	61mm	<5mm	139 mm
	802.11a	13.65	23.17	Yes	Yes	Yes	No	Yes	No

(ANT0)	802.11n(HT20)	13.15	20.65	Yes	Yes	Yes	No	Yes	No
	802.11n(HT40)	13.70	23.44	Yes	Yes	Yes	No	Yes	No
	802.11ac(HT20)	13.15	20.65	Yes	Yes	Yes	No	Yes	No
	802.11ac(HT40)	13.60	22.91	Yes	Yes	Yes	No	Yes	No
	802.11ac(HT80)	12.45	17.58	Yes	Yes	Yes	No	Yes	No
WLAN 5 G (ANT1)	Distance to User			<5mm	<5mm	61mm	<5mm	<5mm	139 mm
	802.11a	13.25	21.14	Yes	Yes	No	Yes	Yes	No
	802.11n(HT20)	13.05	20.18	Yes	Yes	No	Yes	Yes	No
	802.11n(HT40)	12.35	17.18	Yes	Yes	No	Yes	Yes	No
	802.11ac(HT20)	13.05	20.18	Yes	Yes	No	Yes	Yes	No
	802.11ac(HT40)	13.65	23.17	Yes	Yes	No	Yes	Yes	No
	802.11ac(HT80)	9.85	9.66	Yes	Yes	No	Yes	Yes	No
Bluetooth	Distance to User			<5mm	<5mm	<5mm	61mm	<5mm	139 mm
	Bluetooth BR/EDR	9.70	9.33	No	No	No	No	No	No
	Bluetooth BLE	1.00	1.26	No	No	No	No	No	No

Note:

- Maximum power is the source-based time-average power and represents the maximum RF output power among production units.
- Per KDB 447498 D01, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
- Per KDB 447498 D01, standalone SAR test exclusion threshold is applied; If the distance of the antenna to the user is < 5mm, 5mm is used to determine SAR exclusion threshold
- Per KDB 447498 D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$$
 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
 - f(GHz) is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before calculation
 - The result is rounded to one decimal place for comparison
 - For < 50 mm distance, we just calculate mW of the exclusion threshold value (3.0) to do compare.
 This formula is $[3.0] / [\sqrt{f(\text{GHz})}] \cdot [(\text{min. test separation distance, mm})] = \text{exclusion threshold of mW}$.
- Per KDB 447498 D01, at 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
 - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f(MHz)/150)] mW, at 100 MHz to 1500 MHz
 - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz
- Per KDB 941225 D01, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA /HSUPA /DC-HSDPA output power is < 0.25dB higher than RMC12.2Kbps, or reported SAR with RMC 12.2kbps setting is $\leq 1.2\text{W/kg}$, HSDPA/HSUPA/DC-HSDPA SAR evaluation can be excluded.
- Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion. For each frequency band, testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than 1/4dB higher than those measured at the lowest data rate
- Apply the test exclusion rule in KDB 248227 D01 v02 11g, 11n-HT20 and HT40 output power is less than 1/4dB higher than 11b mode, thus the SAR can be excluded.

9.2 10g Extremity Exposure Consider

According with FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance;

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

Conclusion:

The EUT hotspot mode 1-g reported SAR is 1.093 W/Kg, which is less than 1.2W/Kg, 10-g extremity SAR is not required.

10 TEST RESULTS

10.1 GSM 850

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power(dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head											
Voice	Left Cheek	0	251	848.80	-2.01	0.120	33.24	33.35	1.03	0.123	/
	Left Tilt	0	251	848.80	0.27	0.087	33.24	33.35	1.03	0.089	/
	Right Cheek	0	251	848.80	-3.37	0.191	33.24	33.35	1.03	0.196	1#
	Right Tilt	0	251	848.80	0.33	0.101	33.24	33.35	1.03	0.104	/
Body-worn Accessory											
Voice	Front Side	15	251	848.80	0.37	0.237	33.24	33.35	1.03	0.243	/
	Back Side	15	251	848.80	-1.43	0.276	33.24	33.35	1.03	0.283	2#
Hotspot											
GPRS 2 slots	Front Side	10	251	848.80	0.17	0.288	30.87	31.00	1.03	0.297	/
	Back Side	10	251	848.80	-3.16	0.356	30.87	31.00	1.03	0.367	3#
	Left Edge	10	251	848.80	1.23	0.170	30.87	31.00	1.03	0.175	/
	Right Edge	10	251	848.80	2.33	0.073	30.87	31.00	1.03	0.075	/
	Bottom Edge	10	251	848.80	2.59	0.203	30.87	31.00	1.03	0.209	/
Note: For this band, the EUT does not support Power Reduction under Hotspot mode.											

10.2 GSM 1900

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power(dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head											
Voice	Left Cheek	0	661	1880.00	-1.78	0.091	30.31	30.40	1.02	0.093	4#
	Left Tilt	0	661	1880.00	1.96	0.058	30.31	30.40	1.02	0.059	/
	Right Cheek	0	661	1880.00	-2.20	0.051	30.31	30.40	1.02	0.052	/
	Right Tilt	0	661	1880.00	3.56	0.030	30.31	30.40	1.02	0.031	/
Body-worn Accessory											
Voice	Front Side	15	661	1880.00	-0.59	0.291	30.31	30.40	1.02	0.297	5#
	Back Side	15	661	1880.00	0.28	0.264	30.31	30.40	1.02	0.270	/
Hotspot											
GPRS 1 slots	Front Side	10	661	1880.00	-1.14	0.590	30.22	30.35	1.03	0.608	/
	Back Side	10	661	1880.00	1.59	0.467	30.22	30.35	1.03	0.481	/
	Left Edge	10	661	1880.00	2.68	0.123	30.22	30.35	1.03	0.127	/
	Right Edge	10	661	1880.00	3.47	0.062	30.22	30.35	1.03	0.064	/
	Bottom Edge	10	661	1880.00	-3.32	0.861	30.22	30.35	1.03	0.887	6#
	512		1850.20	2.41	0.759	30.15	30.35	1.05	0.795	/	

			810	1909.80	3.10	0.512	30.19	30.35	1.04	0.531	/
Note: For this band, the EUT does not support Power Reduction under Hotspot mode.											

10.3WCDMA Band 2

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power(dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head											
RMC	Left Cheek	0	9262	1852.40	-4.14	0.227	23.61	23.70	1.02	0.232	7#
	Left Tilt	0	9262	1852.40	0.33	0.114	23.61	23.70	1.02	0.116	/
	Right Cheek	0	9262	1852.40	2.81	0.140	23.61	23.70	1.02	0.143	/
	Right Tilt	0	9262	1852.40	0.10	0.056	23.61	23.70	1.02	0.057	/
Body-worn Accessory											
RMC	Front Side	15	9262	1852.40	-4.13	0.639	23.61	23.70	1.02	0.652	8#
	Back Side	15	9262	1852.40	-0.33	0.545	23.61	23.70	1.02	0.556	/
Hotspot											
RMC	Front Side	10	9262	1852.40	2.55	0.625	20.03	20.15	1.03	0.643	/
	Back Side	10	9262	1852.40	1.69	0.548	20.03	20.15	1.03	0.563	/
	Left Edge	10	9262	1852.40	0.98	0.124	20.03	20.15	1.03	0.127	/
	Right Edge	10	9262	1852.40	1.34	0.013	20.03	20.15	1.03	0.013	/
	Bottom Edge	10	9262	1852.40	-1.28	1.025	20.03	20.15	1.03	1.054	9#
			9400	1880.00	-1.61	0.953	19.80	20.15	1.08	1.033	/
9538			1907.60	-1.55	0.879	19.87	20.15	1.07	0.938	/	
Note: For this band, the EUT support Power Reduction under Hotspot mode.											

10.4WCDMA Band 4

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power(dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head											
RMC	Left Cheek	0	1312	1712.40	-3.66	0.289	23.75	23.85	1.02	0.296	10#
	Left Tilt	0	1312	1712.40	-1.23	0.145	23.75	23.85	1.02	0.148	/
	Right Cheek	0	1312	1712.40	-1.99	0.202	23.75	23.85	1.02	0.207	/
	Right Tilt	0	1312	1712.40	0.69	0.089	23.75	23.85	1.02	0.091	/
Body-worn Accessory											
RMC	Front Side	15	1312	1712.40	-2.18	0.594	23.75	23.85	1.02	0.608	11#
	Back Side	15	1312	1712.40	1.66	0.489	23.75	23.85	1.02	0.500	/
Hotspot											
RMC	Front Side	10	1312	1712.40	0.33	0.637	20.17	20.25	1.02	0.649	/
	Back Side	10	1312	1712.40	0.67	0.494	20.17	20.25	1.02	0.503	/
	Left Edge	10	1312	1712.40	2.33	0.081	20.17	20.25	1.02	0.083	/
	Right Edge	10	1312	1712.40	-0.47	0.082	20.17	20.25	1.02	0.084	/

	Bottom Edge	10	1312	1712.40	-1.24	1.019	20.17	20.25	1.02	1.038	/
			1412	1732.40	-1.37	1.008	20.01	20.25	1.06	1.065	/
			1513	1752.60	-1.08	1.018	19.94	20.25	1.07	1.093	12#
Note: For this band, the EUT support Power Reduction under Hotspot mode.											

10.5WCDMA Band 5

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power(dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head											
RMC	Left Cheek	0	4132	826.40	3.71	0.145	23.32	23.45	1.03	0.149	/
	Left Tilt	0	4132	826.40	0.21	0.095	23.32	23.45	1.03	0.098	/
	Right Cheek	0	4132	826.40	-1.40	0.225	23.32	23.45	1.03	0.232	13#
	Right Tilt	0	4132	826.40	0.34	0.190	23.32	23.45	1.03	0.196	/
Body-worn Accessory											
RMC	Front Side	15	4132	826.40	-2.24	0.201	23.32	23.45	1.03	0.207	/
	Back Side	15	4132	826.40	-1.48	0.299	23.32	23.45	1.03	0.308	14#
Hotspot											
RMC	Front Side	10	4132	826.40	0.34	0.349	23.32	23.45	1.03	0.360	/
	Back Side	10	4132	826.40	-1.64	0.409	23.32	23.45	1.03	0.421	15#
	Left Edge	10	4132	826.40	2.37	0.108	23.32	23.45	1.03	0.111	/
	Right Edge	10	4132	826.40	1.96	0.085	23.32	23.45	1.03	0.088	/
	Bottom Edge	10	4132	826.40	0.37	0.220	23.32	23.45	1.03	0.227	/
Note: For this band, the EUT does not support Power Reduction under Hotspot mode.											

10.6LTE Band 2(20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Numb.	RB Start	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head													
QPSK	Left Cheek	0	18700	1860	1	Low	-1.77	0.191	23.17	23.25	1.02	0.195	16#
			19100	1900	50	Low	0.23	0.112	22.20	22.30	1.02	0.115	/
	Left Tilt	0	18700	1860	1	Low	0.19	0.120	23.17	23.25	1.02	0.122	/
			19100	1900	50	Low	1.34	0.062	22.20	22.30	1.02	0.063	/
	Right Cheek	0	18700	1860	1	Low	-0.01	0.138	23.17	23.25	1.02	0.141	/
			19100	1900	50	Low	3.45	0.084	22.20	22.30	1.02	0.086	/
	Right Tilt	0	18700	1860	1	Low	-2.46	0.037	23.17	23.25	1.02	0.038	/
			19100	1900	50	Low	-1.11	0.026	22.20	22.30	1.02	0.027	/
Body-worn Accessory													
QPSK	Front Side	15	18700	1860	1	Low	-0.71	0.616	23.17	23.25	1.02	0.627	17#
			19100	1900	50	Low	2.34	0.415	22.20	22.30	1.02	0.425	/
	Back Side	15	18700	1860	1	Low	3.17	0.514	23.17	23.25	1.02	0.524	/
			19100	1900	50	Low	0.34	0.354	22.20	22.30	1.02	0.362	/
Hotspot													
QPSK	Front Side	10	18900	1880	1	Low	-2.22	0.575	19.41	19.50	1.02	0.587	/
			18700	1860	50	Low	1.23	0.585	19.52	19.60	1.02	0.596	/
	Back Side	10	18900	1880	1	Low	-2.49	0.463	19.41	19.50	1.02	0.473	/
			18700	1860	50	Low	-2.34	0.487	19.52	19.60	1.02	0.496	/
	Left Edge	10	18900	1880	1	Low	3.49	0.117	19.41	19.50	1.02	0.119	/
			18700	1860	50	Low	0.97	0.126	19.52	19.60	1.02	0.128	/
	Right Edge	10	18900	1880	1	Low	0.88	0.009	19.41	19.50	1.02	0.009	/
			18700	1860	50	Low	-2.98	0.008	19.52	19.60	1.02	0.008	/
	Bottom Edge	10	18900	1880	1	Low	-1.47	0.916	19.41	19.50	1.02	0.935	/
			18700	1860	1	Low	-0.84	0.947	19.39	19.50	1.03	0.971	18#
			19100	1890	1	Low	-1.13	0.873	19.29	19.50	1.05	0.916	/
			18700	1860	50	Low	-1.19	0.902	19.52	19.60	1.02	0.919	/
			18900	1880	50	Low	-1.47	0.817	19.45	19.60	1.04	0.846	/
			19100	1890	50	Low	-1.56	0.790	19.43	19.60	1.04	0.822	/
			18700	1860	100	Low	-1.33	0.874	19.51	19.60	1.02	0.892	/
			18900	1880	100	Low	-1.10	0.819	19.41	19.60	1.04	0.856	/
			19100	1890	100	Low	-1.85	0.772	19.38	19.60	1.05	0.812	/
Note: For this band, the EUT supports Power Reduction under Hotspot mode.													

10.7LTE Band 4 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Numb.	RB Start	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head													
QPSK	Left Cheek	0	20300	1745	1	Low	-2.32	0.271	23.29	23.40	1.03	0.278	19#
			20300	1745	50	Low	0.27	0.214	22.16	22.25	1.02	0.218	/
	Left Tilt	0	20300	1745	1	Low	0.34	0.111	23.29	23.40	1.03	0.114	/
			20300	1745	50	Low	0.33	0.091	22.16	22.25	1.02	0.093	/
	Right Cheek	0	20300	1745	1	Low	-3.56	0.183	23.29	23.40	1.03	0.188	/
			20300	1745	50	Low	0.34	0.158	22.16	22.25	1.02	0.161	/
	Right Tilt	0	20300	1745	1	Low	0.44	0.091	23.29	23.40	1.03	0.093	/
			20300	1745	50	Low	0.27	0.066	22.16	22.25	1.02	0.067	/
Body-worn Accessory													
QPSK	Front Side	15	20300	1745	1	Low	-2.40	0.585	23.29	23.40	1.03	0.600	20#
			20300	1745	50	Low	-2.37	0.457	22.16	22.25	1.02	0.467	/
	Back Side	15	20300	1745	1	Low	-1.93	0.488	23.29	23.40	1.03	0.501	/
			20300	1745	50	Low	0.11	0.385	22.16	22.25	1.02	0.393	/
Hotspot													
QPSK	Front Side	10	20175	1732.5	1	Low	0.37	0.510	19.64	19.75	1.03	0.523	/
			20300	1745	50	Mid	0.69	0.503	19.68	19.80	1.03	0.517	/
	Back Side	10	20175	1732.5	1	Low	0.82	0.421	19.64	19.75	1.03	0.432	/
			20300	1745	50	Mid	0.73	0.415	19.68	19.80	1.03	0.427	/
	Left Edge	10	20175	1732.5	1	Low	-1.33	0.071	19.64	19.75	1.03	0.073	/
			20300	1745	50	Mid	-0.27	0.069	19.68	19.80	1.03	0.071	/
	Right Edge	10	20175	1732.5	1	Low	1.29	0.061	19.64	19.75	1.03	0.063	/
			20300	1745	50	Mid	3.43	0.054	19.68	19.80	1.03	0.056	/
	Bottom Edge	10	20175	1732.5	1	Low	-0.71	0.893	19.64	19.75	1.03	0.916	/
			20050	1720	1	Low	-1.52	0.869	19.27	19.75	1.12	0.971	21#
			20300	1745	1	Low	-1.37	0.902	19.63	19.75	1.03	0.927	/
			20300	1745	50	Mid	-1.07	0.891	19.68	19.80	1.03	0.916	/
			20050	1720	50	Mid	-1.19	0.869	19.62	19.80	1.04	0.906	/
			20175	1732.5	50	Mid	-1.03	0.893	19.54	19.80	1.06	0.948	/
			20175	1732.5	100	Low	-0.36	0.893	19.65	19.75	1.02	0.914	/
			20050	1720	100	Low	-0.77	0.884	19.48	19.75	1.06	0.941	/
20300	1745	100	Low	-1.09	0.896	19.57	19.75	1.04	0.934	/			

Note: For this band, the EUT supports Power Reduction under Hotspot mode.

10.8LTE Band 5 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Numb.	RB Start	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head													
QPSK	Left Cheek	0	20525	836.5	1	High	-2.71	0.134	23.32	23.40	1.02	0.136	/
			20600	844	25	High	0.33	0.098	22.24	22.35	1.03	0.101	/
	Left Tilt	0	20525	836.5	1	High	-0.28	0.089	23.32	23.40	1.02	0.091	/
			20600	844	25	High	-0.19	0.065	22.24	22.35	1.03	0.067	/
	Right Cheek	0	20525	836.5	1	High	-0.16	0.228	23.32	23.40	1.02	0.232	22#
			20600	844	25	High	2.33	0.179	22.24	22.35	1.03	0.184	/
	Right Tilt	0	20525	836.5	1	High	1.97	0.135	23.32	23.40	1.02	0.138	/
			20600	844	25	High	0.59	0.109	22.25	22.35	1.03	0.112	/
Body-worn Accessory													
QPSK	Front Side	15	20525	836.5	1	High	0.37	0.265	23.32	23.40	1.02	0.270	/
			20600	844	25	High	0.49	0.208	22.24	22.35	1.03	0.213	/
	Back Side	15	20525	836.5	1	High	-0.91	0.320	23.32	23.40	1.02	0.326	23#
			20600	844	25	High	0.68	0.249	22.24	22.35	1.03	0.255	/
Hotspot													
QPSK	Front Side	10	20525	836.5	1	High	3.44	0.385	23.32	23.40	1.02	0.392	/
			20600	844	25	High	-1.59	0.307	22.24	22.35	1.03	0.315	/
	Back Side	10	20525	836.5	1	High	-1.86	0.440	23.32	23.40	1.02	0.448	24#
			20600	844	25	High	0.59	0.346	22.24	22.35	1.03	0.355	/
	Left Edge	10	20525	836.5	1	High	-2.22	0.224	23.32	23.40	1.02	0.228	/
			20600	844	25	High	0.59	0.184	22.24	22.35	1.03	0.189	/
	Right Edge	10	20525	836.5	1	High	0.33	0.087	23.32	23.40	1.02	0.089	/
			20600	844	25	High	-1.22	0.071	22.24	22.35	1.03	0.073	/
	Bottom Edge	10	20525	836.5	1	High	1.38	0.238	23.32	23.40	1.02	0.242	/
			20600	844	25	High	0.49	0.181	22.24	22.35	1.03	0.186	/

Note: For this band, the EUT does not supports Power Reduction under Hotspot mode.

10.9 LTE Band 7 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Numb.	RB Start	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head													
QPSK	Left Cheek	0	20850	2510	1	Low	0.77	0.133	23.35	23.45	1.02	0.136	/
			20850	2510	50	Low	0.34	0.108	22.06	22.15	1.02	0.110	/
	Left Tilt	0	20850	2510	1	Low	0.57	0.076	23.35	23.45	1.02	0.078	/
			20850	2510	50	Low	-0.49	0.066	22.06	22.15	1.02	0.067	/
	Right Cheek	0	20850	2510	1	Low	1.24	0.312	23.35	23.45	1.02	0.319	25#
			20850	2510	50	Low	1.57	0.245	22.06	22.15	1.02	0.250	/
	Right Tilt	0	20850	2510	1	Low	0.36	0.116	23.35	23.45	1.02	0.119	/
			20850	2510	50	Low	1.28	0.085	22.06	22.15	1.02	0.087	/
Body-worn Accessory													
QPSK	Front Side	15	20850	2510	1	Low	-1.22	0.462	23.35	23.45	1.02	0.473	/
			20850	2510	50	Low	-2.98	0.349	22.06	22.15	1.02	0.356	/
	Back Side	15	20850	2510	1	Low	-2.18	0.597	23.35	23.45	1.02	0.611	26#
			20850	2510	50	Low	3.47	0.446	22.06	22.15	1.02	0.455	/
Hotspot													
QPSK	Front Side	10	21100	2535	1	Low	4.01	0.358	19.31	19.40	1.02	0.365	/
			21100	2535	50	Low	0.28	0.361	19.38	19.50	1.03	0.371	/
	Back Side	10	21100	2535	1	Low	0.36	0.465	19.31	19.40	1.02	0.475	/
			21100	2535	50	Low	0.44	0.459	19.38	19.50	1.03	0.472	/
	Left Edge	10	21100	2535	1	Low	0.47	0.101	19.31	19.40	1.02	0.103	/
			21100	2535	50	Low	0.69	0.098	19.38	19.50	1.03	0.101	/
	Right Edge	10	21100	2535	1	Low	0.03	0.121	19.31	19.40	1.02	0.124	/
			21100	2535	50	Low	0.47	0.109	19.38	19.50	1.03	0.112	/
	Bottom Edge	10	21100	2535	1	Low	-0.44	0.681	19.31	19.40	1.02	0.695	27#
			21100	2535	50	Low	-1.00	0.629	19.38	19.50	1.03	0.647	/

Note: For this band, the EUT supports Power Reduction under Hotspot mode.

10.10 LTE Band 12 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Numb.	RB Start	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head													
QPSK	Left Cheek	0	23130	711	1	Mid	-2.83	0.087	23.01	23.10	1.02	0.089	/
			23130	711	25	Mid	-1.25	0.067	22.14	22.25	1.03	0.069	/
	Left Tilt	0	23130	711	1	Mid	1.35	0.061	23.01	23.10	1.02	0.062	/
			23130	711	25	Mid	1.44	0.046	22.14	22.25	1.03	0.047	/
	Right Cheek	0	23130	711	1	Mid	-2.08	0.093	23.01	23.10	1.02	0.095	28#

			23130	711	25	Mid	1.73	0.076	22.14	22.25	1.03	0.078	/
	Right Tilt	0	23130	711	1	Mid	3.46	0.078	23.01	23.10	1.02	0.080	/
			23130	711	25	Mid	2.58	0.065	22.14	22.25	1.03	0.067	/
Body-worn Accessory													
QPSK	Front Side	15	23130	711	1	Mid	3.14	0.118	23.01	23.10	1.02	0.120	/
			23130	711	25	Mid	2.67	0.088	22.14	22.25	1.03	0.090	/
	Back Side	15	23130	711	1	Mid	-3.10	0.137	23.01	23.10	1.02	0.140	29#
			23130	711	25	Mid	4.31	0.110	22.14	22.25	1.03	0.113	/
Hotspot													
QPSK	Front Side	10	23130	711	1	Mid	0.03	0.128	23.01	23.10	1.02	0.131	/
			23130	711	25	Mid	-2.34	0.106	22.14	22.25	1.03	0.109	/
	Back Side	10	23130	711	1	Mid	-1.71	0.158	23.01	23.10	1.02	0.161	30#
			23130	711	25	Mid	-3.79	0.130	22.14	22.25	1.03	0.133	/
	Left Edge	10	23130	711	1	Mid	0.24	0.138	23.01	23.10	1.02	0.141	/
			23130	711	25	Mid	-0.67	0.107	22.14	22.25	1.03	0.110	/
	Right Edge	10	23130	711	1	Mid	0.64	0.124	23.01	23.10	1.02	0.127	/
			23130	711	25	Mid	0.15	0.102	22.14	22.25	1.03	0.105	/
	Bottom Edge	10	23130	711	1	Mid	1.68	0.069	23.01	23.10	1.02	0.070	/
			23130	711	25	Mid	-1.88	0.056	22.14	22.25	1.03	0.057	/

Note: For this band, the EUT does not supports **Power Reduction** under Hotspot mode.

10.11 LTE Band 17 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Numb.	RB Start	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head													
QPSK	Left Cheek	0	23800	711	1	Mid	1.20	0.086	22.96	23.05	1.02	0.088	/
			23800	711	25	High	0.45	0.074	22.18	22.30	1.03	0.076	/
	Left Tilt	0	23800	711	1	Mid	0.13	0.061	22.96	23.05	1.02	0.062	/
			23800	711	25	High	-0.57	0.053	22.18	22.30	1.03	0.054	/
	Right Cheek	0	23800	711	1	Mid	-1.61	0.088	22.96	23.05	1.02	0.090	31#
			23800	711	25	High	2.38	0.084	22.18	22.30	1.03	0.086	/
	Right Tilt	0	23800	711	1	Mid	3.21	0.078	22.96	23.05	1.02	0.080	/
			23800	711	25	High	1.28	0.072	22.18	22.30	1.03	0.074	/
Body-worn Accessory													
QPSK	Front Side	15	23800	711	1	Mid	-1.57	0.117	22.96	23.05	1.02	0.119	/
			23800	711	25	High	-3.46	0.094	22.18	22.30	1.03	0.097	/
	Back Side	15	23800	711	1	Mid	-3.06	0.141	22.96	23.05	1.02	0.144	32#
			23800	711	25	High	0.57	0.120	22.18	22.30	1.03	0.123	/
Hotspot													
QPSK	Front Side	10	23800	711	1	Mid	-3.36	0.127	22.96	23.05	1.02	0.130	/
			23800	711	25	High	0.17	0.104	22.18	22.30	1.03	0.107	/

	Back Side	10	23800	711	1	Mid	-2.21	0.163	22.96	23.05	1.02	0.166	33#
			23800	711	25	High	-2.59	0.128	22.18	22.30	1.03	0.132	/
	Left Edge	10	23800	711	1	Mid	0.03	0.156	22.96	23.05	1.02	0.159	/
			23800	711	25	High	1.59	0.120	22.18	22.30	1.03	0.123	/
	Right Edge	10	23800	711	1	Mid	2.34	0.134	22.96	23.05	1.02	0.137	/
			23800	711	25	High	0.58	0.108	22.18	22.30	1.03	0.111	/
	Bottom Edge	10	23800	711	1	Mid	-1.26	0.064	22.96	23.05	1.02	0.065	/
			23800	711	25	High	0.79	0.059	22.18	22.30	1.03	0.061	/

Note: For this band, the EUT does not supports Power Reduction under Hotspot mode.

10.12 WIFI 2.4GHz (ANT 0)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power(dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head											
802.11 b	Left Cheek	0	11	2462	1.63	0.400	15.57	15.65	1.02	0.407	34#
	Left Tilt	0	11	2462	1.06	0.291	15.57	15.65	1.02	0.296	/
	Right Cheek	0	11	2462	-0.69	0.188	15.57	15.65	1.02	0.191	/
	Right Tilt	0	11	2462	-3.59	0.114	15.57	15.65	1.02	0.116	/
Body-worn Accessory											
802.11 b	Front Side	15	11	2462	-3.79	0.043	15.57	15.65	1.02	0.044	/
	Back Side	15	11	2462	-3.77	0.066	15.57	15.65	1.02	0.067	35#
Hotspot											
802.11 b	Front Side	10	11	2462	-1.20	0.087	15.57	15.65	1.02	0.089	/
	Back Side	10	11	2462	-2.98	0.099	15.57	15.65	1.02	0.101	/
	Left Edge	10	11	2462	-0.17	0.088	15.57	15.65	1.02	0.090	/
	Top Edge	10	11	2462	0.13	0.103	15.57	15.65	1.02	0.105	36#

10.13 WIFI 2.4GHz (ANT 1)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power(dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head											
802.11 b	Left Cheek	0	1	2412	0.32	0.098	15.30	15.40	1.02	0.100	/
	Left Tilt	0	1	2412	2.34	0.061	15.30	15.40	1.02	0.062	/
	Right Cheek	0	1	2412	-2.68	0.151	15.30	15.40	1.02	0.155	37#
	Right Tilt	0	1	2412	-1.69	0.087	15.30	15.40	1.02	0.089	/
Body-worn Accessory											
802.11 b	Front Side	15	1	2412	1.29	0.031	15.30	15.40	1.02	0.032	/
	Back Side	15	1	2412	0.97	0.045	15.30	15.40	1.02	0.046	38#
Hotspot											
802.11 b	Front Side	10	1	2412	-2.26	0.066	15.30	15.40	1.02	0.068	/

	Back Side	10	1	2412	-1.46	0.078	15.30	15.40	1.02	0.080	39#
	Right Edge	10	1	2412	0.09	0.045	15.30	15.40	1.02	0.046	/
	Top Edge	10	1	2412	-2.15	0.070	15.30	15.40	1.02	0.072	/

10.14 WIFI 5GHz (ANT 0)

Fre. Band	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head												
5.3G	802.11 n (HT40)	Left Cheek	0	54	5270	0.99	0.240	13.38	13.50	1.03	0.247	40#
		Left Tilt	0	54	5270	-4.58	0.220	13.38	13.50	1.03	0.226	/
		Right Cheek	0	54	5270	1.35	0.134	13.38	13.50	1.03	0.138	/
		Right Tilt	0	54	5270	2.68	0.110	13.38	13.50	1.03	0.113	/
5.6G	802.11 n (HT40)	Left Cheek	0	102	5510	-2.94	0.222	13.60	13.70	1.02	0.227	41#
		Left Tilt	0	102	5510	-1.30	0.187	13.60	13.70	1.02	0.191	/
		Right Cheek	0	102	5510	2.35	0.108	13.60	13.70	1.02	0.111	/
		Right Tilt	0	102	5510	3.54	0.096	13.60	13.70	1.02	0.098	/
5.8G	802.11 ac (HT40)	Left Cheek	0	159	5790	-3.10	0.202	13.49	13.60	1.03	0.207	42#
		Left Tilt	0	159	5790	-1.83	0.171	13.49	13.60	1.03	0.175	/
		Right Cheek	0	159	5790	4.26	0.101	13.49	13.60	1.03	0.104	/
		Right Tilt	0	159	5790	3.68	0.087	13.49	13.60	1.03	0.089	/
Body-worn Accessory												
5.3G	802.11 n (HT40)	Front Side	15	54	5270	1.69	0.077	13.38	13.50	1.03	0.079	/
		Back Side	15	54	5270	-2.17	0.101	13.38	13.50	1.03	0.104	43#
5.6G	802.11 n (HT40)	Front Side	15	102	5510	0.69	0.072	13.60	13.70	1.02	0.074	/
		Back Side	15	102	5510	-1.47	0.095	13.60	13.70	1.02	0.097	44#
5.8G	802.11 ac (HT40)	Front Side	15	159	5790	1.35	0.074	13.49	13.60	1.03	0.076	/
		Back Side	15	159	5790	4.24	0.096	13.49	13.60	1.03	0.098	44#

10.15 WIFI 5GHz (ANT 1)

Fre. Band	Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head												
5.2G	802.11 ac (HT40)	Left Cheek	0	46	5230	-2.33	0.213	13.31	13.40	1.02	0.217	/
		Left Tilt	0	46	5230	-3.14	0.228	13.31	13.40	1.02	0.233	/
		Right Cheek	0	46	5230	-0.15	0.419	13.31	13.40	1.02	0.428	/
		Right Tilt	0	46	5230	-4.18	0.489	13.31	13.40	1.02	0.499	46#
5.6G	802.11 n (HT40)	Left Cheek	0	110	5550	0.19	0.207	13.56	13.65	1.02	0.211	/
		Left Tilt	0	110	5550	0.87	0.214	13.56	13.65	1.02	0.218	/
		Right Cheek	0	110	5550	-3.27	0.400	13.56	13.65	1.02	0.408	/
		Right Tilt	0	110	5550	2.74	0.433	13.56	13.65	1.02	0.442	47#

5.8G	802.11 ac (HT40)	Left Cheek	0	157	5785	0.13	0.209	10.61	10.70	1.02	0.213	/
		Left Tilt	0	157	5785	0.49	0.220	10.61	10.70	1.02	0.225	/
		Right Cheek	0	157	5785	-3.41	0.445	10.61	10.70	1.02	0.454	/
		Right Tilt	0	157	5785	-3.36	0.451	10.61	10.70	1.02	0.460	48#
Body-worn Accessory												
5.2G	802.11 ac (HT40)	Front Side	15	46	5230	-2.17	0.099	13.31	13.40	1.02	0.101	
		Back Side	15	46	5230	-2.02	0.135	13.31	13.40	1.02	0.138	49#
5.6G	802.11 n (HT40)	Front Side	15	110	5550	-3.44	0.142	13.56	13.65	1.02	0.145	
		Back Side	15	110	5550	-2.33	0.221	13.56	13.65	1.02	0.226	50#
5.8G	802.11 ac (HT40)	Front Side	15	157	5785	-2.64	0.153	10.61	10.70	1.02	0.156	
		Back Side	15	157	5785	-1.00	0.276	10.61	10.70	1.02	0.282	51#

10.16 LTE Band 2 (15MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Numb.	RB Start	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Head													
QPSK	Left Cheek	0	19125	1902.5	1	Low	3.42	0.168	23.83	23.90	1.02	0.171	52#
	Left Tilt	0	19125	1902.5	1	Low	1.24	0.102	23.83	23.90	1.02	0.104	/
	Right Cheek	0	19125	1902.5	1	Low	2.96	0.118	23.83	23.90	1.02	0.120	/
	Right Tilt	0	19125	1902.5	1	Low	3.36	0.032	23.83	23.90	1.02	0.033	/
Body-worn Accessory													
QPSK	Front Side	15	19125	1902.5	1	Low	-2.97	0.565	23.83	23.90	1.02	0.574	53#
	Back Side	15	19125	1902.5	1	Low	-3.47	0.386	23.83	23.90	1.02	0.392	/
Hotspot													
QPSK	Front Side	10	18675	1857.5	1	Low	2.45	0.526	19.98	20.10	1.03	0.541	/
	Back Side	10	18675	1857.5	1	Low	4.75	0.415	19.98	20.10	1.03	0.427	/
	Left Edge	10	18675	1857.5	1	Low	3.15	0.105	19.98	20.10	1.03	0.108	/
	Right Edge	10	18675	1857.5	1	Low	-2.78	0.007	19.98	20.10	1.03	0.007	/
	Bottom Edge	10	18675	1857.5	1	Low	-1.69	0.845	19.98	20.10	1.03	0.869	54#
	18900		1880	1	Low	-3.45	0.809	19.97	20.10	1.03	0.834	/	
	19125		1902.5	1	Low	-2.35	0.822	19.88	20.10	1.05	0.865	/	
Note: For this band, the EUT supports Power Reduction under Hotspot mode.													

10.17 LTE Band 4 (15MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Numb.	RB Start	Power Drift (%)	1 g Meas. SAR (W/Kg)	Meas. Power (dBm)	Max. tune-up Power (dBm)	Scaling Factor	1 g Scaled SAR (W/Kg)	Meas. No.
Hotspot													
QPSK	Front Side	10	20175	1732.5	1	Low	2.45	0.489	20.15	20.25	1.02	0.500	/
	Back Side	10	20175	1732.5	1	Low	1.35	0.386	20.15	20.25	1.02	0.395	/
	Left Edge	10	20175	1732.5	1	Low	-2.58	0.065	20.15	20.25	1.02	0.066	/
	Right Edge	10	20175	1732.5	1	Low	-1.35	0.055	20.15	20.25	1.02	0.056	/
	Bottom Edge	10	20175	1732.5	1	Low	-1.78	0.856	20.15	20.25	1.02	0.876	/
			20025	1717.5	1	Low	-0.38	0.803	19.82	20.25	1.10	0.887	55#
			20325	1747.2	1	Low	3.31	0.812	20.06	20.25	1.05	0.849	/
Note: For this band, the EUT supports Power Reduction under Hotspot mode.													

11 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are ≤ 1.45 W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is ≤ 1.10 , the highest SAR configuration for either head or body tissue-equivalent medium may be used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is < 0.80 W/kg, repeated measurement is not required.
2. When the highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3. If the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 , or when the original or repeated measurement is ≥ 1.45 W/kg, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 , and the original, first or second repeated measurement is ≥ 1.5 W/kg, perform a third repeated measurement.

Frequency Band (MHz)	Wireless Band	RF Exposure Conditions	Test Position	Highest Measured SAR (W/kg)	Repeated SAR (Yes/No)	Highest Measured SAR (W/kg)	Largest to Smallest SAR Ratio
1750	WCDMA Band 4	Hotspot	Bottom Edge	1.019	Yes	1.013	1.01
	LTE Band 4	Hotspot	Bottom Edge	0.902	Yes	0.899	1.00
1900	GSM 1900	Hotspot	Bottom Edge	0.861	Yes	0.858	1.00
	WCDMA Band 2	Hotspot	Bottom Edge	1.025	Yes	1.001	1.02
	LTE Band 2	Hotspot	Bottom Edge	0.947	Yes	0.944	1.00

Note: The ratio of largest to smallest SAR for the original and first repeated measurements is < 1.20 , the second repeated measurement is not required.

12 SIMULTANEOUS TRANSMISSION

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR 1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR 1g 1.6 W/kg), SAR test exclusion is determined by the SAR to Peak Location Ratio (SPLSR).

12.1 Simultaneous Transmission Mode Consider

NO.	Mode	2.4G WLAN & 5G WLAN & 2.4G Bluetooth		
		Head	Body-worn	Hotspot
1	GSM (Voice)	+ 2.4G WLAN Antenna0	+ 2.4G WLAN Antenna0	--
		+ 2.4G WLAN Antenna1	+ 2.4G WLAN Antenna1	--
		+ 2.4G WLAN Antenna(0+1)	+ 2.4G WLAN Antenna(0+1)	--
		+ 5G WLAN Antenna0	+ 5G WLAN Antenna0	--
		+ 5G WLAN Antenna1	+ 5G WLAN Antenna1	--
		+ 5G WLAN Antenna(0+1)	+ 5G WLAN Antenna(0+1)	--
		+ Bluetooth	+ Bluetooth	--
2	GSM (Data)	--	--	+ 2.4G WLAN Antenna0
		--	--	+ 2.4G WLAN Antenna1
		--	--	+ 2.4G WLAN Antenna(0+1)
3	WCDMA RMC	+ 2.4G WLAN Antenna0	+ 2.4G WLAN Antenna0	+ 2.4G WLAN Antenna0
		+ 2.4G WLAN Antenna1	+ 2.4G WLAN Antenna1	+ 2.4G WLAN Antenna1
		+ 2.4G WLAN Antenna0+1	+ 2.4G WLAN Antenna(0+1)	+ 2.4G WLAN Antenna(0+1)
		+ 5G WLAN Antenna0	+ 5G WLAN Antenna0	--
		+ 5G WLAN Antenna1	+ 5G WLAN Antenna1	--
		+ 5G WLAN Antenna(0+1)	+ 5G WLAN Antenna(0+1)	--
		+ Bluetooth	Bluetooth	--
4	LTE	+ 2.4G WLAN Antenna0	+ 2.4G WLAN Antenna0	+ 2.4G WLAN Antenna0
		+ 2.4G WLAN Antenna1	+ 2.4G WLAN Antenna1	+ 2.4G WLAN Antenna1
		+ 2.4G WLAN Antenna(0+1)	+ 2.4G WLAN Antenna(0+1)	+ 2.4G WLAN Antenna(0+1)
		+ 5G WLAN Antenna0	+ 5G WLAN Antenna0	--
		+ 5G WLAN Antenna1	+ 5G WLAN Antenna1	--
		+ 5G WLAN Antenna(0+1)	+ 5G WLAN Antenna(0+1)	--
		+ Bluetooth	+ Bluetooth	--

Note:

- 2G&3G&4G share the same antenna and can't transmit simultaneously.
- The Bluetooth and 2.4G WLAN share the same antenna, can't transmitting together.
- Both the 2.4G WLAN and 5G WLAN can transmit simultaneously with each WWAN.
- Both the 2.4G WLAN and 5G WLAN can't transmit simultaneously at same time.
- Only 2.4G WLAN supports hotspot mode.

12.2 Estimated SAR Calculation

According to KDB 447498 D01 when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR was estimated according to following formula to result in substantially conservative SAR values of ≤ 0.4 W/kg to determine simultaneous transmission SAR test exclusion.

$$\text{Estimated SAR} = \frac{\text{Max. Tune Up Power (mw)}}{\text{Min Test Separation Distance}} * \frac{\sqrt{f_{\text{GHz}}}}{x} \quad (\text{where } x = 7.5 \text{ for 1-g SAR})$$

If the minimum test separation distance is < 5 mm, a distance of 5 mm is used for estimated SAR calculation. When the test separation distance is > 50 mm, the 0.4 W/kg is used for SAR-1g.

Band	Mode	Position	Antenna To user (mm)	SAR Testing	Max. Tune-up Power (dBm)	Max. Tune-up Power (mW)	Frequency (GHz)	Calculation Distance/Gap (mm)	Estimated SAR (W/kg)
Bluetooth	GFSK	Right Cheek	5	NO	9.70	9.33	2.402	5	0.386
		Left Cheek	5	NO	9.70	9.33	2.402	5	0.386
		Front side	10	NO	9.70	9.33	2.402	10	0.193
		Back Side	10	NO	9.70	9.33	2.402	10	0.193
		Right Edge	10	NO	9.70	9.33	2.402	10	0.193
		Top Edge	10	NO	9.70	9.33	2.402	10	0.193

12.3 Sum SAR of Simultaneous Transmission

12.3.1 Sum Head SAR of Simultaneous Transmission

Simultaneous Mode	Mode	Max. 1g SAR (W/kg)	1g Sum SAR (W/kg)	SPLSR (Yes/No)
GSM Voice + 2.4G WLAN	GSM Voice	0.196	0.603	No
	2.4G WLAN Antenna0	0.407		
	GSM Voice	0.196	0.351	No
	2.4G WLAN Antenna1	0.155		
	GSM Voice	0.196	0.758	No
	2.4G WLA Antenna(0+1)	0.562		
GSM Voice +Bluetooth	GSM Voice	0.196	0.582	No
	Bluetooth	0.386		
GSM Voice + 5G WLAN	GSM Voice	0.196	0.443	No
	5G WLAN Antenna0	0.247		
	GSM Voice	0.196	0.695	No
	5G WLAN Antenna1	0.499		
	GSM Voice	0.196	0.942	No
	5G WLA Antenna(0+1)	0.746		
WCDMA RMC +2.4G WLAN	WCDMA RMC	0.296	0.703	No
	2.4G WLAN Antenna0	0.407		
	WCDMA RMC	0.296	0.451	No
	2.4G WLAN Antenna1	0.155		
	WCDMA RMC	0.296	0.858	No
	2.4G WLA Antenna(0+1)	0.562		
WCDMA RMC + Bluetooth	WCDMA RMC	0.296	0.6820.1	No
	Bluetooth	0.386		
WCDMA RMC +5G WLAN	WCDMA RMC	0.296	0.543	No
	5G WLAN Antenna0	0.247		
	WCDMA RMC	0.296	0.795	No
	5G WLAN Antenna1	0.499		
	WCDMA RMC	0.296	1.042	No
	5G WLA Antenna(0+1)	0.746		
LTE QPSK + 2.4G WLAN	LTE QPSK	0.319	0.726	No
	2.4G WLAN Antenna0	0.407		
	LTE QPSK	0.319	0.474	No
	2.4G WLAN Antenna1	0.155		
	LTE QPSK	0.319	0.881	No
	2.4G WLA Antenna(0+1)	0.562		
LTE QPSK + Bluetooth	LTE QPSK	0.319	0.705	No
	Bluetooth	0.386		
LTE QPSK + 5G WLAN	LTE QPSK	0.319	0.566	No
	5G WLAN Antenna0	0.247		
	LTE QPSK	0.319	0.818	No

Simultaneous Mode	Mode	Max. 1g SAR (W/kg)	1g Sum SAR (W/kg)	SPLSR (Yes/No)
	5G WLAN Antenna1	0.499	1.065	No
	LTE QPSK	0.319		
	5G WLA Antenna(0+1)	0.746		

12.3.2 Sum Body-worn SAR of Simultaneous Transmission

Simultaneous Mode	Mode	Max. 1g SAR (W/kg)	1g Sum SAR (W/kg)	SPLSR (Yes/No)
GSM Voice +Bluetooth	GSM Voice	0.297	0.490	No
	Bluetooth	0.193		
GSM Voice + 2.4G WLAN	GSM Voice	0.297	0.364	No
	2.4G WLAN Antenna0	0.067		
	GSM Voice	0.297	0.343	No
	2.4G WLAN Antenna1	0.046		
	GSM Voice	0.297	0.410	No
	2.4G WLA Antenna(0+1)	0.113		
GSM Voice + 5G WLAN	GSM Voice	0.297	0.401	No
	5G WLAN Antenna0	0.104		
	GSM Voice	0.297	0.579	No
	5G WLAN Antenna1	0.282		
	GSM Voice	0.297	0.683	No
	5G WLA Antenna(0+1)	0.386		
WCDMA RMC +Bluetooth	WCDMA RMC	0.652	0.845	No
	Bluetooth	0.193		
WCDMA RMC +2.4G WLAN	WCDMA RMC	0.652	0.719	No
	2.4G WLAN Antenna0	0.067		
	WCDMA RMC	0.652	0.698	No
	2.4G WLAN Antenna1	0.046		
	WCDMA RMC	0.652	0.765	No
	2.4G WLA Antenna(0+1)	0.113		
WCDMA RMC + 5G WLAN	WCDMA RMC	0.652	0.656	No
	5G WLAN Antenna0	0.104		
	WCDMA RMC	0.652	0.934	No
	5G WLAN Antenna1	0.282		
	WCDMA RMC	0.652	1.038	No
	5G WLA Antenna(0+1)	0.386		
LTE QPSK + Bluetooth	LTE QPSK	0.627	0.820	No
	Bluetooth	0.193		
LTE QPSK + 2.4G WLAN	LTE QPSK	0.627	0.694	No
	2.4G WLAN Antenna0	0.067		
	LTE QPSK	0.627	0.673	No
	2.4G WLAN Antenna1	0.046		

Simultaneous Mode	Mode	Max. 1g SAR (W/kg)	1g Sum SAR (W/kg)	SPLSR (Yes/No)
	LTE QPSK	0.627	0.740	No
	2.4G WLA Antenna(0+1)	0.113		
LTE QPSK + 5G WLAN	LTE QPSK	0.627	0.909	No
	5G WLAN Antenna0	0.104		
	LTE QPSK	0.627	0.909	No
	5G WLAN Antenna1	0.282		
	LTE QPSK	0.627	1.013	No
		0.386		

12.3.3 Sum Hotspot mode SAR of Simultaneous Transmission

Simultaneous Mode	Mode	Max. 1g SAR (W/kg)	1g Sum SAR (W/kg)	SPLSR (Yes/No)
GSM DATA + Bluetooth	GSM DATA	0.887	1.080	No
	Bluetooth	0.193		
GSM DATA + 2.4G WLAN	GSM DATA	0.887	0.992	No
	2.4G WLAN Antenna0	0.105		
	GSM DATA	0.887	0.967	No
	2.4G WLAN Antenna1	0.080		
	GSM DATA	0.887	1.072	No
	2.4G WLA Antenna(0+1)	0.185		
WCDMA RMC + Bluetooth	WCDMA RMC	1.093	1.286	No
	Bluetooth	0.193		
WCDMA RMC +2.4G WLAN	WCDMA RMC	1.093	1.198	No
	2.4G WLAN Antenna0	0.105		
	WCDMA RMC	1.093	1.176	No
	2.4G WLAN Antenna1	0.080		
	WCDMA RMC	1.093	1.278	No
	2.4G WLA Antenna(0+1)	0.185		
LTE QPSK + Bluetooth	LTE QPSK	0.971	1.194	No
	Bluetooth	0.193		
LTE QPSK + 2.4G WLAN	LTE QPSK	0.971	1.076	No
	2.4G WLAN Antenna0	0.105		
	LTE QPSK	0.971	1.051	No
	2.4G WLAN Antenna1	0.080		
	LTE QPSK	0.971	1.156	No
	2.4G WLA Antenna(0+1)	0.185		

13 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
750MHz Dipole	SATIMO	SID 750	S/N 25/13 DIP 0G750-253	2015/03/16	2018/03/15
835MHz Dipole	SATIMO	SID 835	S/N 25/13 DIP 0G835-246	2015/03/16	2018/03/15
1800MHz Dipole	SATIMO	SID 1900	S/N 25/13 DIP 1G800-248	2015/03/16	2018/03/15
1900MHz Dipole	SATIMO	SID 1900	S/N 25/13 DIP 1G900-249	2015/03/16	2018/03/15
2450MHz Dipole	SATIMO	SID 2450	S/N 25/13 DIP 2G450-251	2015/03/16	2018/03/15
2600MHz Dipole	SATIMO	SID 2600	SN 25/13 DIP 2G600-254	2015/03/16	2018/03/15
Waveguide	SATIMO	SWG5500	S/N 30/13 DIP WGA24	2015/03/16	2018/03/15
E-Field Probe	MVG	SSE2	S/N 34/15 EPGO 265	2015/10/12	2016/10/11
Antenna	SATIMO	ANTA3	SN 17/13 ZNTA45	N/A	N/A
Phantom1	SATIMO	SAM	SN 30/13 SAM103	N/A	N/A
Phantom2	SATIMO	SAM	SN 30/13 SAM104	N/A	N/A
Dielectric Probe Kit	SATIMO	SCLMP	SN 25/13 OCPG56	2016/08/17	2017/08/16
MultiMeter	Keithley	MultiMeter 2000	4024022	2016/07/13	2017/07/12
Signal Generator	R&S	SMF100A	1167.0000k02/104260	2016/07/13	2017/07/12
Power Meter	Agilent	E4419B	GB40201833	2016/07/13	2017/07/12
Power Sensor	R&S	NRP-Z21	103971	2016/07/13	2017/07/12
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Wireless Communication Test Set	R&S	CMW 500	138884	2016/07/13	2017/07/12
Network Analyzer	R&S	ZVL-6	101380	2016/07/13	2017/07/12
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A
Directional coupler	AA-MCS	AAMCS-UDC	000272	N/A	N/A

Note: Per KDB 865664 D01 Dipole SAR Validation Verification, BALUN LAB has adopted 3 years calibration intervals. On annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss in within 20% of calibrated measurement.

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an SCLMP Dielectric Probe Kit.

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity (σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2016.09.06	Head	750	21.3	0.88	41.92	0.89	41.90	-1.12	0.05
2016.09.05	Body	750	21.5	0.96	57.19	0.96	55.73	0.00	2.62
2016.09.06	Head	835	21.3	0.90	41.23	0.90	41.50	0.00	-0.65
2016.09.02	Body	835	21.3	0.99	53.01	0.97	55.20	2.06	-3.97
2016.09.14	Head	1800	21.2	1.42	40.56	1.40	40.00	1.43	1.40
2016.09.13	Body	1800	22.5	1.47	53.06	1.52	53.30	-3.29	-0.45
2016.09.14	Head	1900	21.0	1.40	39.40	1.40	40.00	0.00	-1.50
2016.09.12	Body	1900	21.3	1.52	53.86	1.52	53.30	0.00	1.05
2016.09.08	Head	2450	21.5	1.84	39.98	1.80	39.20	2.22	1.99
2016.09.07	Body	2450	21.6	1.96	52.11	1.95	52.70	0.51	-1.12
2016.09.08	Head	2600	21.5	1.98	38.10	1.96	39.00	1.02	-2.31
2016.09.07	Body	2600	21.6	2.17	50.48	2.16	52.50	0.46	-3.85
2016.09.10	Head	5200	21.1	4.67	36.87	4.66	36.00	0.21	2.42
2016.09.09	Body	5200	21.1	5.35	49.42	5.30	49.01	0.94	0.84
2016.09.10	Head	5600	21.1	5.23	34.88	5.07	36.53	3.16	-4.52
2016.09.09	Body	5600	21.1	5.84	47.94	5.77	48.47	1.21	-1.09
2016.09.10	Head	5800	21.1	5.46	34.22	5.29	35.20	3.21	-2.78
2016.09.09	Body	5800	21.1	6.12	46.87	6.00	48.20	2.00	-2.76
2016.09.27	Body	1800	21.3	1.46	53.12	1.52	53.30	-3.95	-0.34
2016.09.27	Head	1900	21.3	1.39	39.63	1.40	40.00	-0.71	-0.93
2016.09.27	Body	1900	21.3	1.50	54.17	1.52	53.30	-1.32	1.63

Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$.

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by SATIMO, the validation data should be within its specification of 10%(for 1 g).

Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)	Targeted SAR(W/kg)	Tolerance (%)
2016.09.06	Head	750	100	0.862	8.62	8.60	0.23	8.49	1.53
2016.09.05	Body	750	100	0.887	8.87	8.91	-0.45	8.49	4.48
2016.09.06	Head	835	100	0.992	9.92	9.81	1.12	9.56	3.77
2016.09.02	Body	835	100	1.011	10.11	10.53	-3.99	9.56	5.75
2016.09.14	Head	1800	100	3.892	38.92	38.70	0.57	38.40	1.35
2016.09.13	Body	1800	100	4.011	40.11	40.40	-0.72	38.40	4.45
2016.09.14	Head	1900	100	3.911	39.11	40.75	-4.02	39.70	-1.49
2016.09.12	Body	1900	100	4.115	41.15	42.06	-2.16	39.70	3.65
2016.09.08	Head	2450	100	5.329	53.29	54.29	-1.84	52.40	1.70
2016.09.07	Body	2450	100	5.472	54.72	54.70	0.04	52.40	4.43
2016.09.08	Head	2600	100	5.459	54.59	57.40	-4.90	55.30	-1.28
2016.09.07	Body	2600	100	5.767	57.67	57.60	0.12	55.30	4.29
2016.09.10	Head	5200	100	15.727	157.27	157.80	-0.34	159.00	-1.09
2016.09.09	Body	5200	100	15.386	153.86	155.12	-0.81	159.00	-3.23
2016.09.10	Head	5600	100	16.502	165.02	171.22	-3.62	173.80	-5.05
2016.09.09	Body	5600	100	16.601	166.01	167.13	-0.67	173.80	-4.48
2016.09.10	Head	5800	100	18.159	181.59	179.53	1.15	181.20	0.22
2016.09.09	Body	5800	100	16.904	169.04	173.19	-2.40	181.20	-6.71
2016.09.27	Body	1800	100	3.983	39.83	40.40	-1.41	38.40	3.72
2016.09.27	Head	1900	100	3.897	38.97	40.75	-4.37	39.70	-1.84
2016.09.27	Body	1900	100	4.136	41.36	42.06	-1.67	39.70	4.18

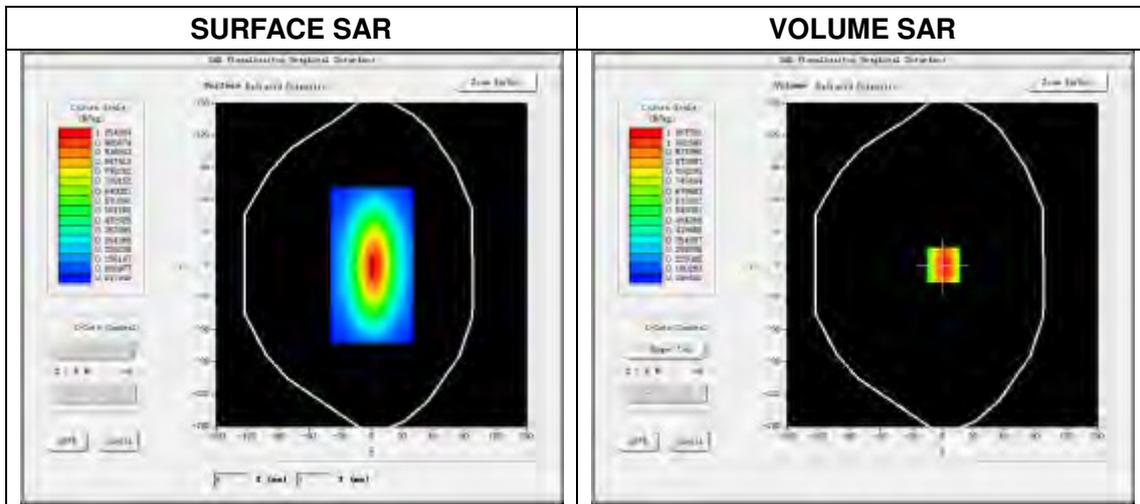
Note: The tolerance limit of System validation $\pm 10\%$.

System Performance Check Data(750 MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.06
 Measurement duration: 13 minutes 27 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	750MHz
Signal	CW
Frequency (MHz)	750MHz
Relative permittivity (real part)	41.922416
Conductivity (S/m)	0.882879
Power drift (%)	-1.300000
Ambient Temperature:	22.6C
Liquid Temperature:	21.3C
ConvF:	1.81
Crest factor:	1:1

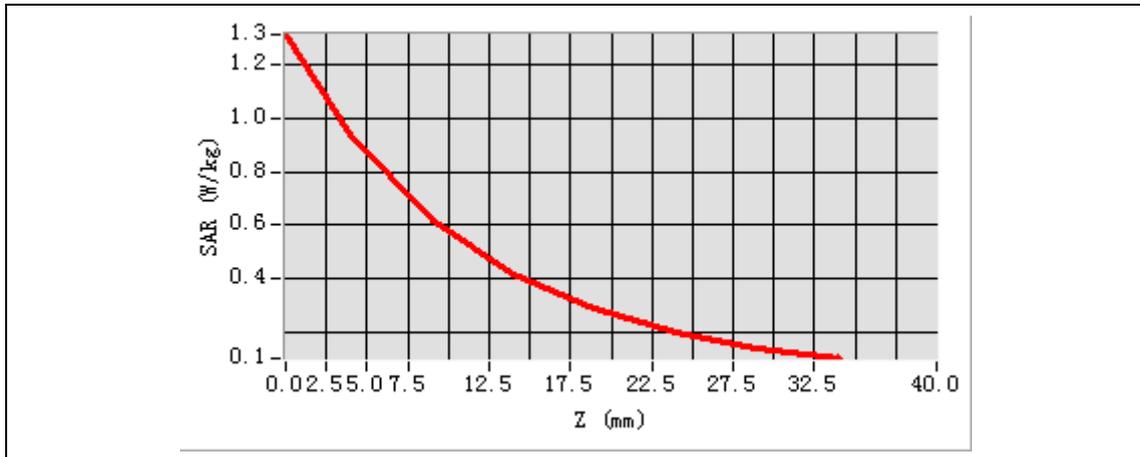


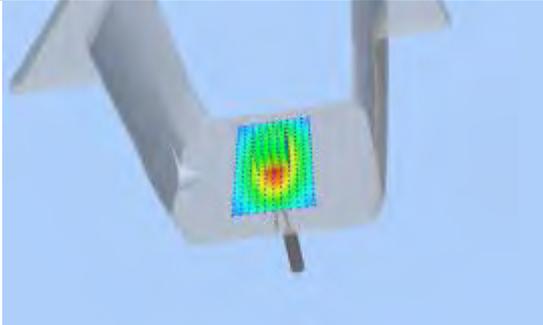
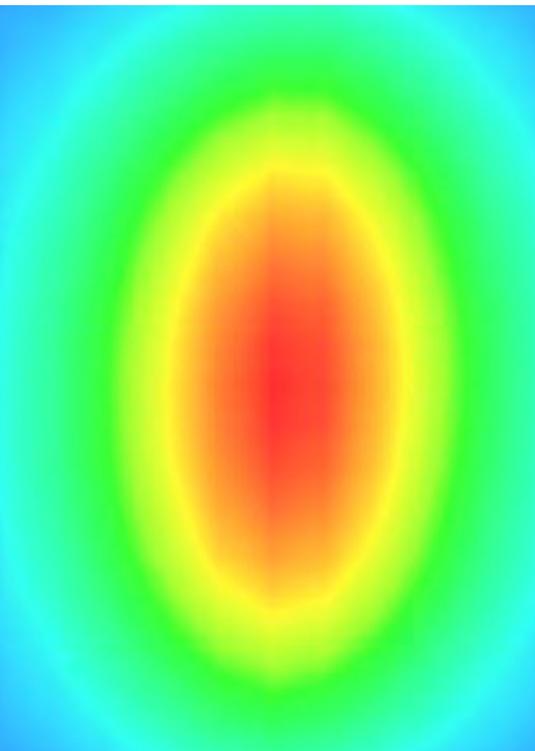
Maximum location: X=1.00, Y=0.00

SAR Peak: 1.28 W/kg

SAR 10g (W/Kg)	0.575312
SAR 1g (W/Kg)	0.862417

Z Axis Scan



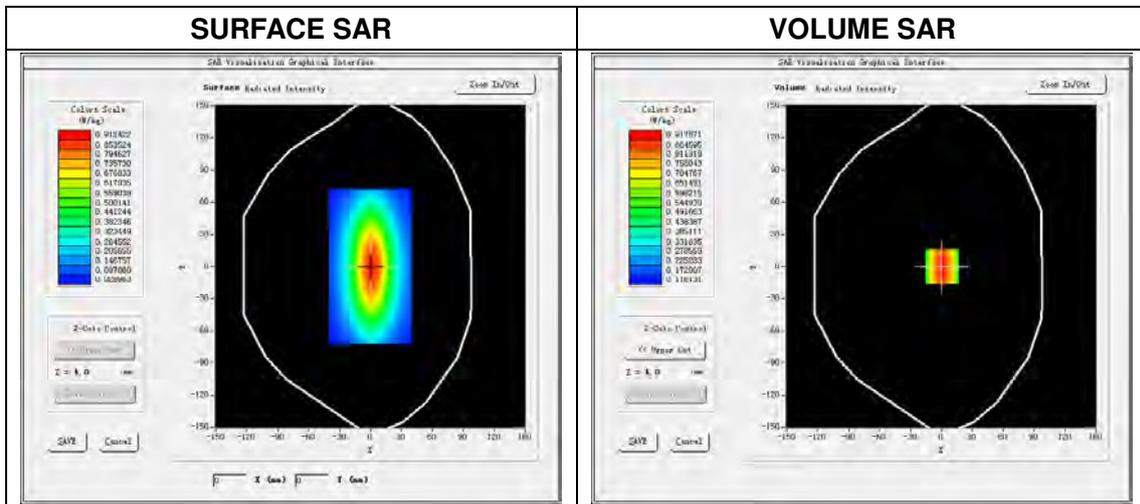
3D screen shot	Hot spot position
	

System Performance Check Data(750 MHz Body)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.05
 Measurement duration: 13 minutes 13 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	750MHz
Signal	CW
Frequency (MHz)	750.000000
Relative permittivity (real part)	57.188739
Conductivity (S/m)	0.962473
Power drift (%)	-0.600000
Ambient Temperature:	22.8C
Liquid Temperature:	21.5C
ConvF:	1.88
Crest factor:	1:1



Maximum location: X=0.00, Y=0.00
 SAR Peak: 1.27 W/kg

SAR 10 g (W/Kg)	0.596549
SAR 1g (W/Kg)	0.887120



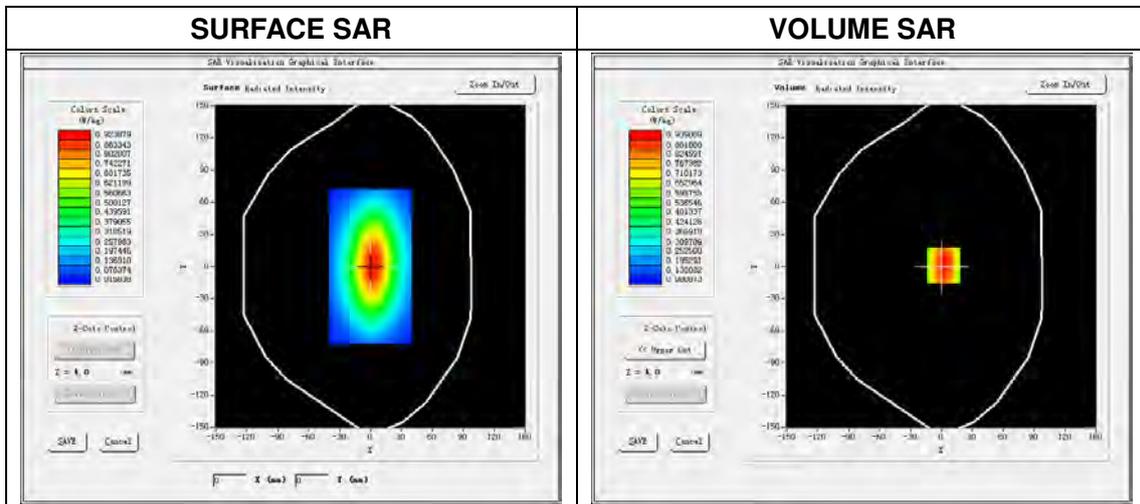
3D screen shot	Hot spot position

System Performance Check Data(835MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8 mm,dy=8 mm
 Zoom scan resolution: dx=8 mm, dy=8 mm, dz=5 mm
 Date of measurement: 2016.09.06
 Measurement duration: 14 minutes 2 seconds

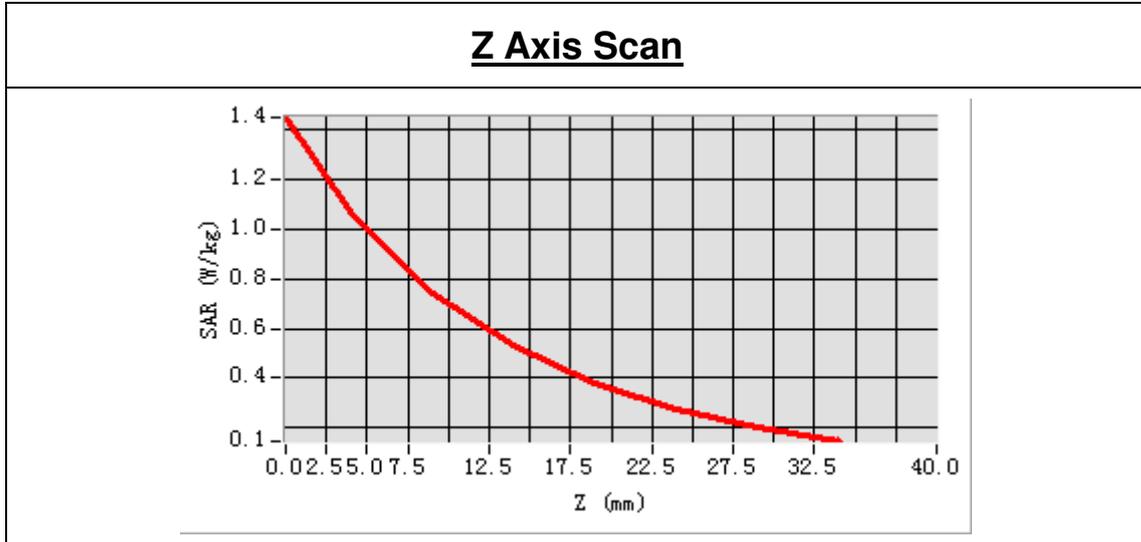
Experimental conditions.

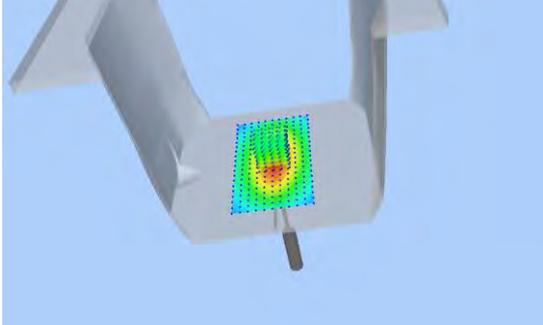
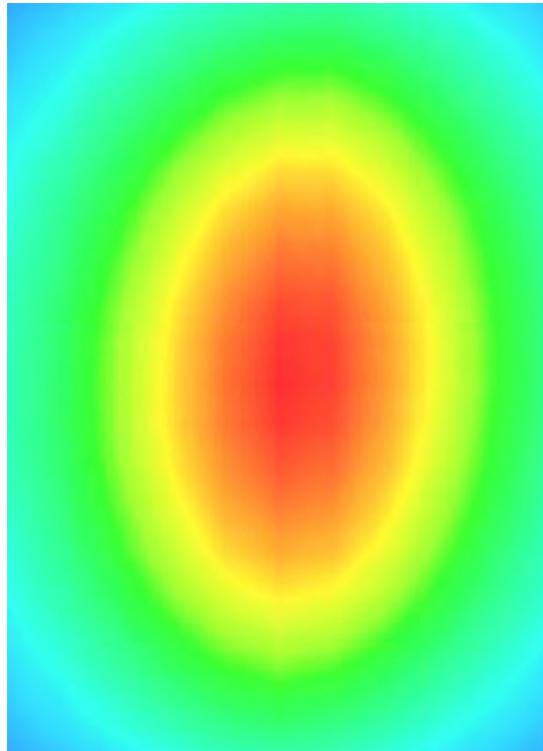
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	835 MHz
Signal	CW
Frequency (MHz)	835.000000
Relative permittivity (real part)	41.231242
Conductivity (S/m)	0.896412
Power drift (%)	-0.150000
Ambient Temperature:	22.6C
Liquid Temperature:	21.3C
ConvF:	2.04
Crest factor:	1:1



Maximum location: X=0.00, Y=0.00
 SAR Peak: 1.41 W/kg

SAR 10 g (W/Kg)	0.612274
SAR 1 g (W/Kg)	0.992357



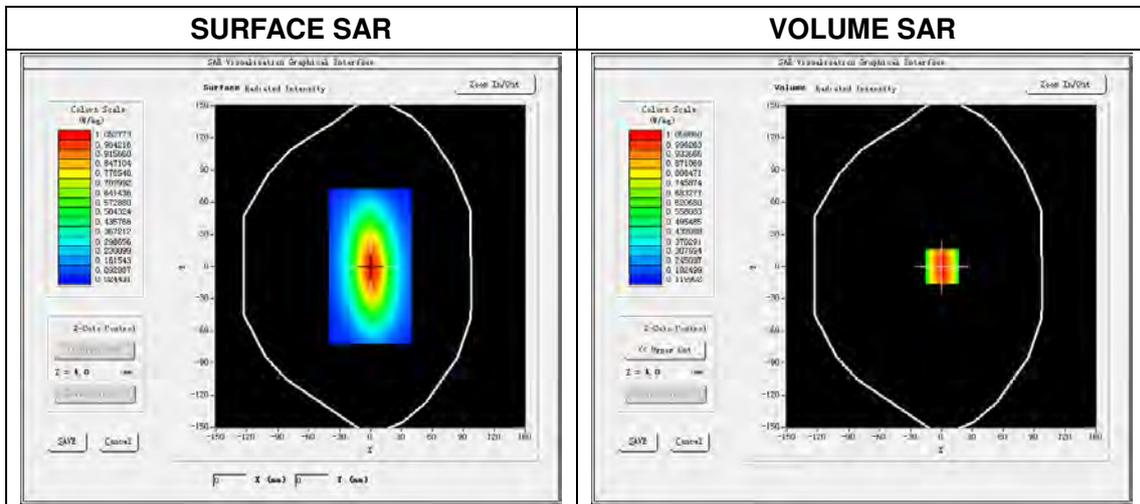
3D screen shot	Hot spot position
	

System Performance Check Data(835MHz Body)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.02
 Measurement duration: 13 minutes 31 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	835MHz
Signal	CW
Frequency (MHz)	835.000000
Relative permittivity (real part)	53.014632
Conductivity (S/m)	0.994233
Power drift (%)	0.390000
Ambient Temperature:	22.5C
Liquid Temperature:	21.3C
ConvF:	2.12
Crest factor:	1:1



Maximum location: X=1.00, Y=0.00
 SAR Peak: 1.41 W/kg

SAR 10 g (W/Kg)	0.638175
SAR 1g (W/Kg)	1.010583



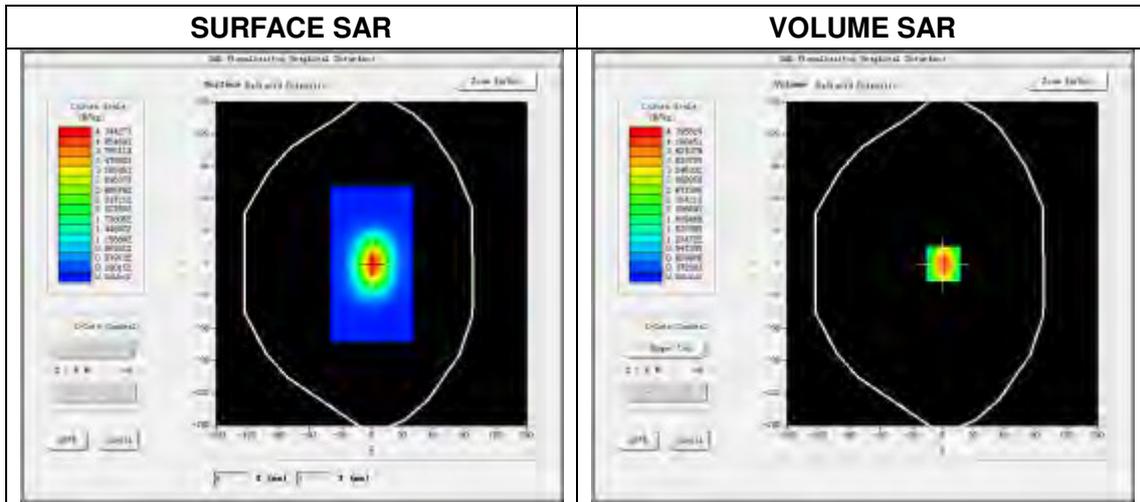
3D screen shot	Hot spot position

System Performance Check Data(1800MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.14
 Measurement duration: 13 minutes 27 seconds

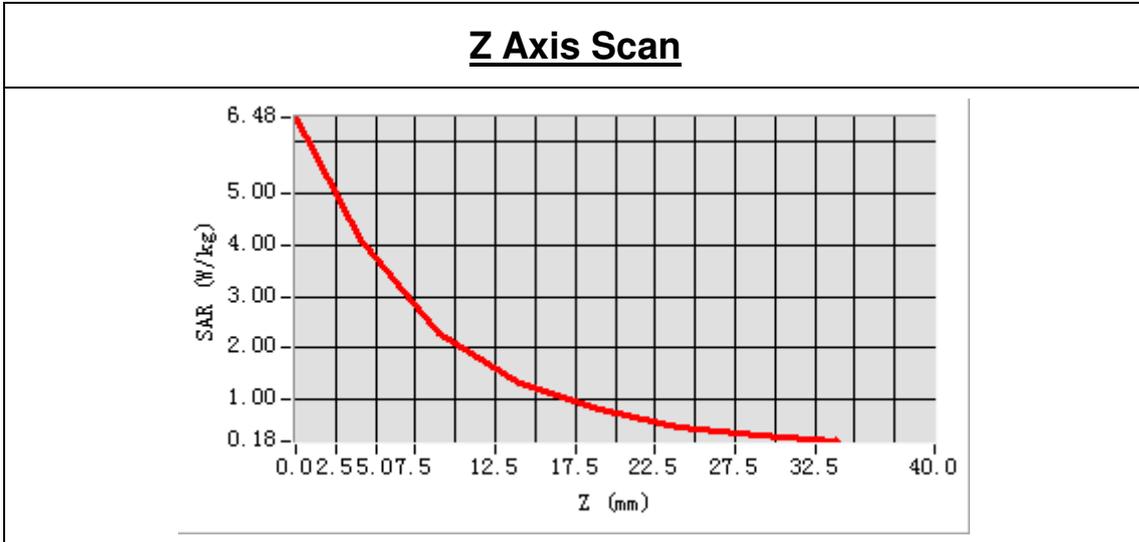
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1800MHz
Signal	CW
Frequency (MHz)	1800.000000
Relative permittivity (real part)	40.562781
Conductivity (S/m)	1.424179
Power drift (%)	0.160000
Ambient Temperature:	22.3C
Liquid Temperature:	21.2C
ConvF:	2.04
Crest factor:	1:1



Maximum location: X=0.00, Y=0.00
 SAR Peak: 6.4 W/kg

SAR 10 g (W/Kg)	1.974289
SAR 1g (W/Kg)	3.891657



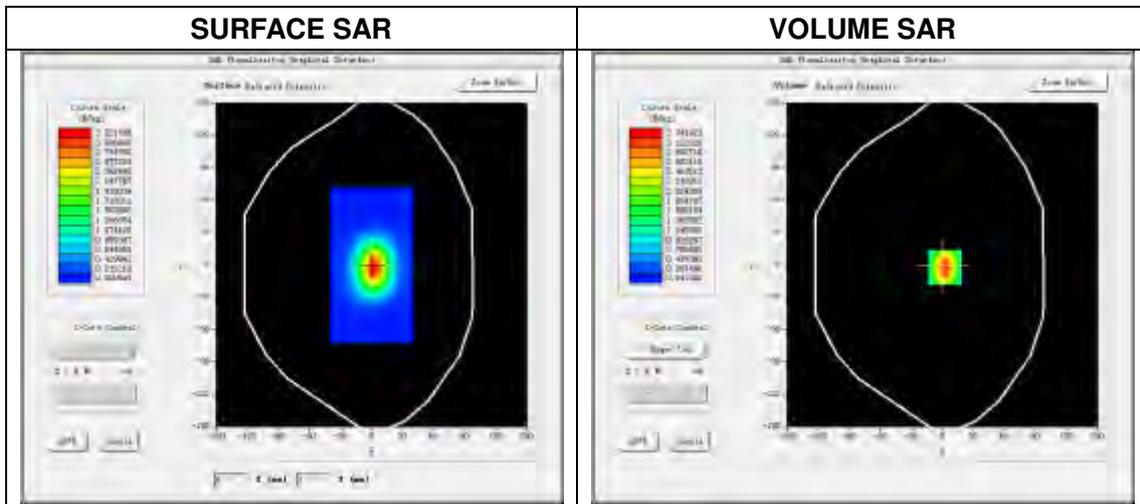
3D screen shot	Hot spot position

System Performance Check Data(1800MHz Body)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.13
 Measurement duration: 14 minutes 46 seconds

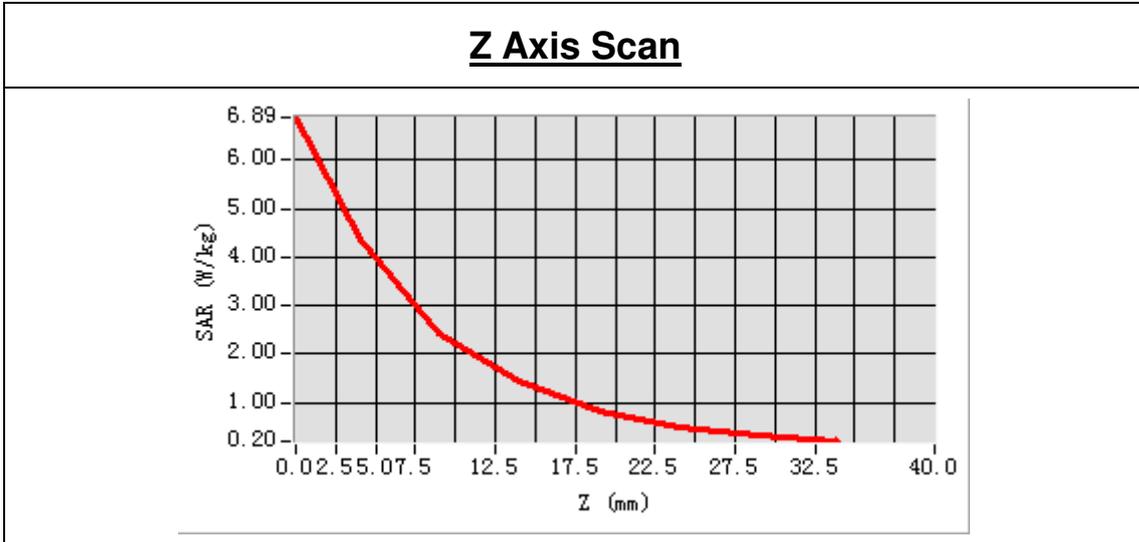
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1800MHz
Signal	CW
Frequency (MHz)	1800.000000
Relative permittivity (real part)	53.062143
Conductivity (S/m)	1.472871
Power drift (%)	0.110000
Ambient Temperature:	22.4C
Liquid Temperature:	22.5C
ConvF:	2.08
Crest factor:	1:1



Maximum location: X=2.00, Y=2.00
SAR Peak: 6.87 W/kg

SAR 10 g (W/Kg)	2.091349
SAR 1g (W/Kg)	4.011359



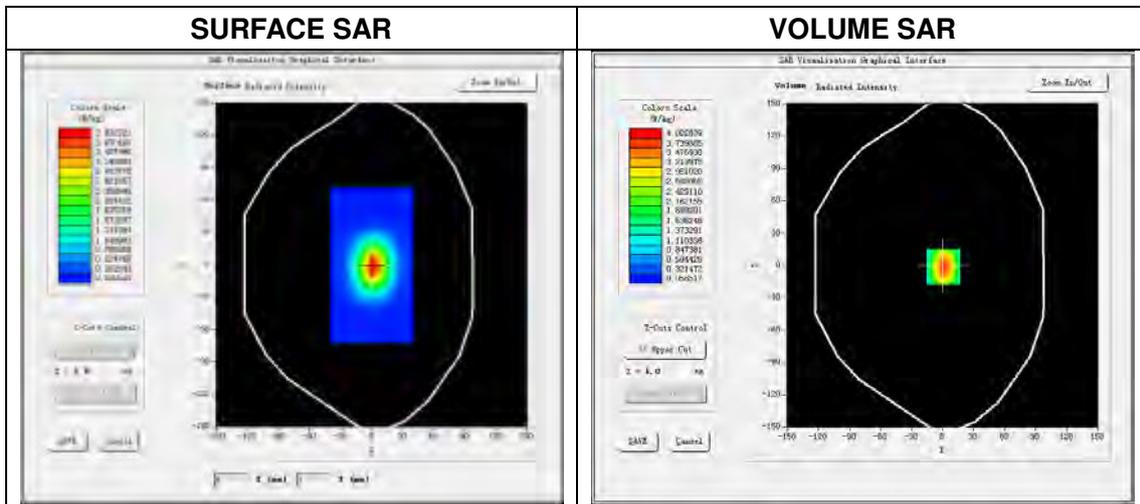
3D screen shot	Hot spot position

System Performance Check Data(1900MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.14
 Measurement duration: 13 minutes 20 seconds

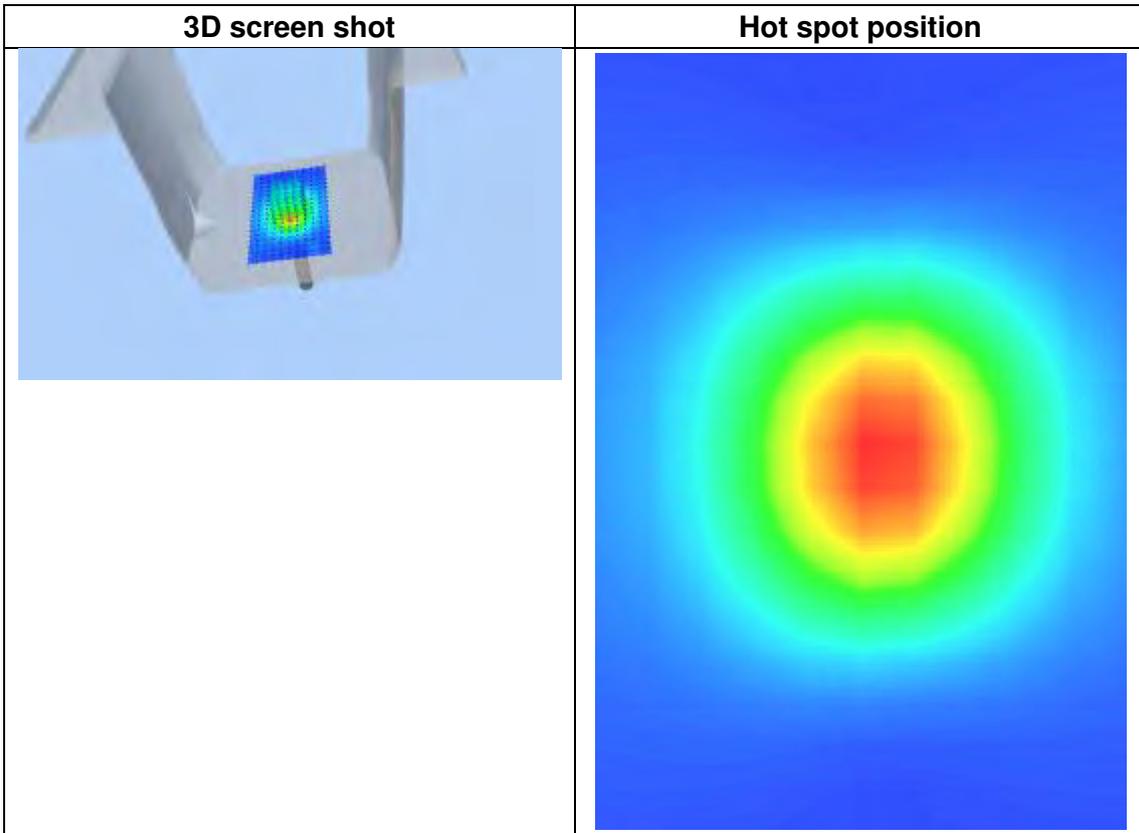
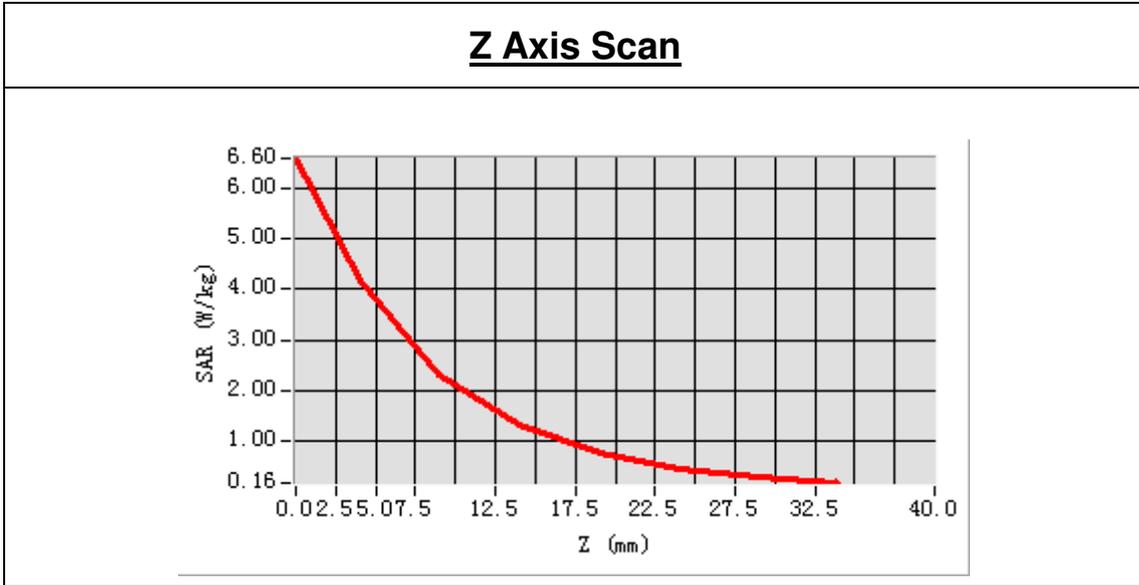
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1900MHz
Signal	CW
Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.402471
Conductivity (S/m)	1.402891
Power drift (%)	2.150000
Ambient Temperature:	22.4C
Liquid Temperature:	21.0C
ConvF:	2.35
Crest factor:	1:1



Maximum location: X=3.00, Y=1.00
 SAR Peak: 6.58W/kg

SAR 10g (W/Kg)	1.974124
SAR 1g (W/Kg)	3.911289

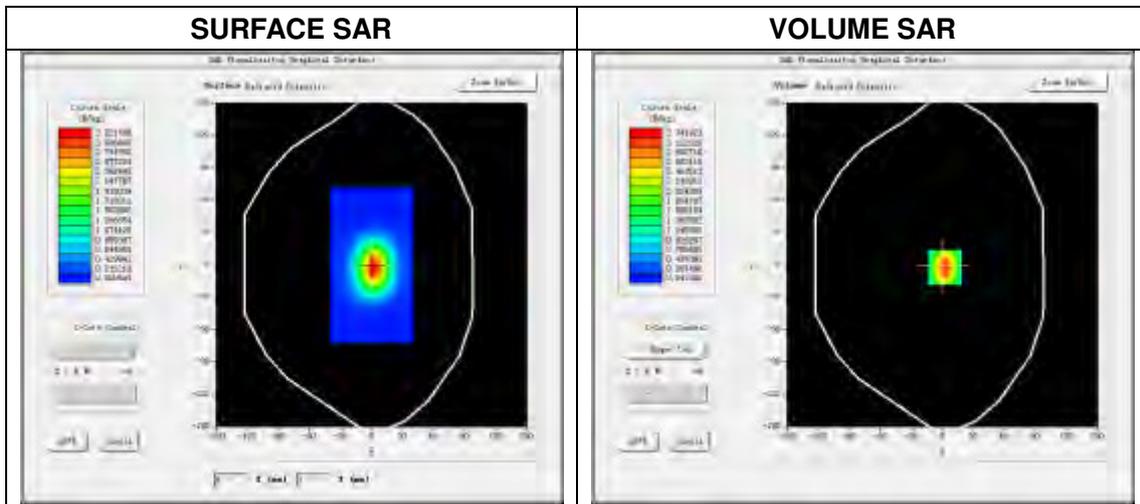


System Performance Check Data(1900MHz Body)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.12
 Measurement duration: 13 minutes 27 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1900MHz
Signal	CW
Frequency (MHz)	1900.000000
Relative permittivity (real part)	53.859103
Conductivity (S/m)	1.523171
Power drift (%)	0.460000
Ambient Temperature:	22.6C
Liquid Temperature:	21.3C
ConvF:	2.42
Crest factor:	1:1



Maximum location: X=2.00, Y=-1.00
 SAR Peak: 6.95W/kg

SAR 10g (W/Kg)	1.997312
SAR 1g (W/Kg)	4.115127



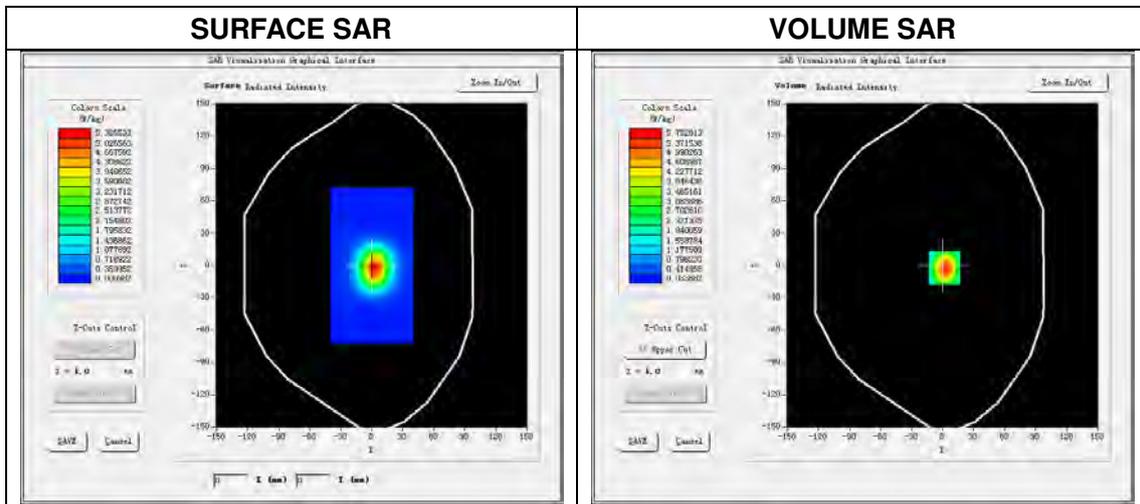
3D screen shot	Hot spot position

System Performance Check Data(2450MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=5mm, dy=5mm, dz=5mm
 Date of measurement: 2016.09.08
 Measurement duration: 18 minutes 47 seconds

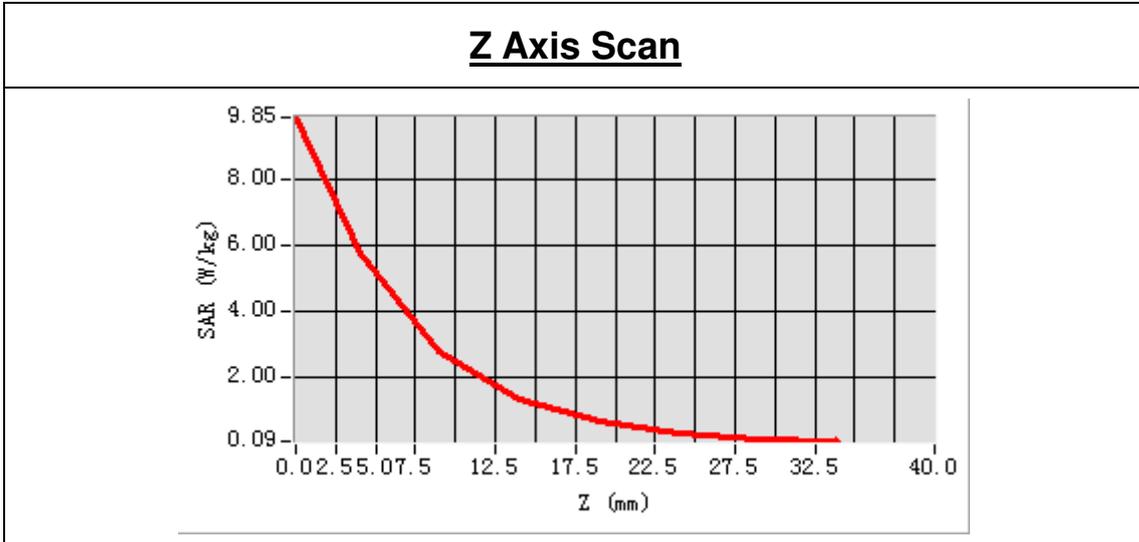
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	2450MHz
Signal	CW
Frequency (MHz)	2450.000000
Relative permittivity (real part)	39.976950
Conductivity (S/m)	1.836079
Power drift (%)	2.570000
Ambient Temperature:	22.6C
Liquid Temperature:	21.5C
ConvF:	2.47
Crest factor:	1:1



Maximum location: X=0.00, Y=0.00
 SAR Peak: 9.52 W/kg

SAR 10g (W/Kg)	2.434687
SAR 1g (W/Kg)	5.328769



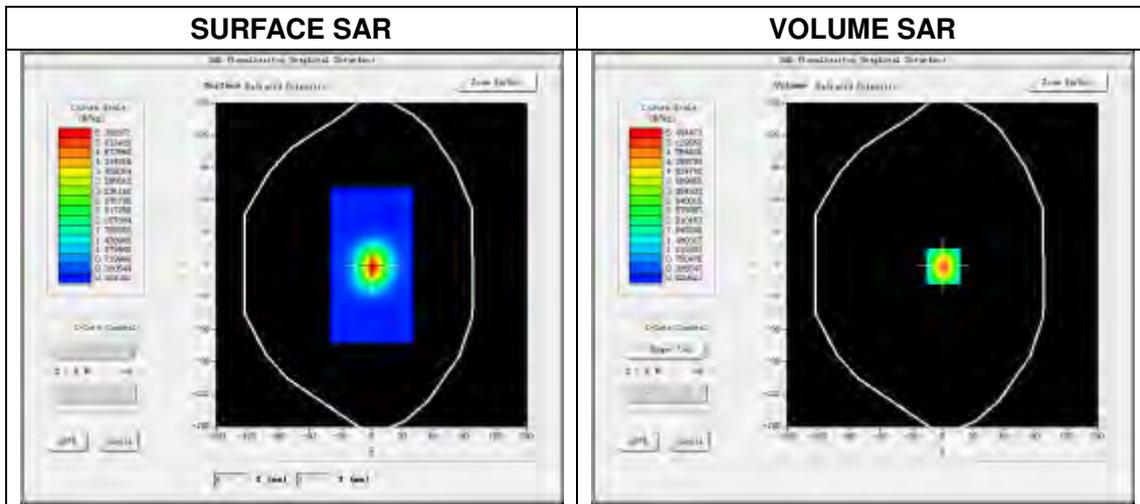
3D screen shot	Hot spot position

System Performance Check Data(2450MHz Body)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=5mm, dy=5mm, dz=5mm
 Date of measurement: 2016.09.07
 Measurement duration: 17 minutes 51 seconds

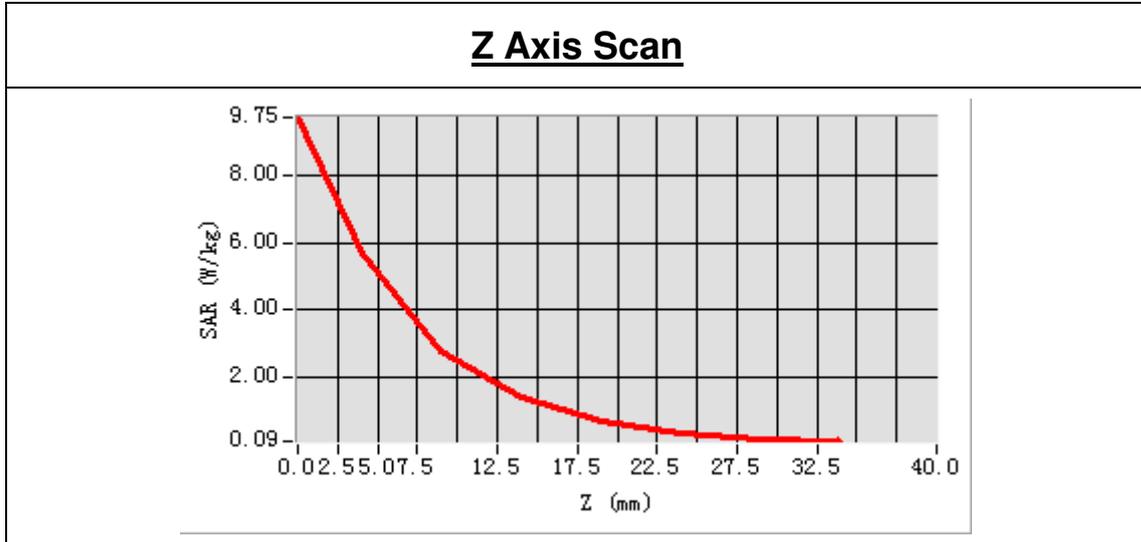
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	2450MHz
Signal	CW
Frequency (MHz)	2450.000000
Relative permittivity (real part)	52.106513
Conductivity (S/m)	1.964598
Power drift (%)	0.270000
Ambient Temperature:	22.9C
Liquid Temperature:	21.6C
ConvF:	2.55
Crest factor:	1:1



Maximum location: X=1.00, Y=-1.00
 SAR Peak: 9.70W/kg

SAR 10g (W/Kg)	2.335417
SAR 1g (W/Kg)	5.471698



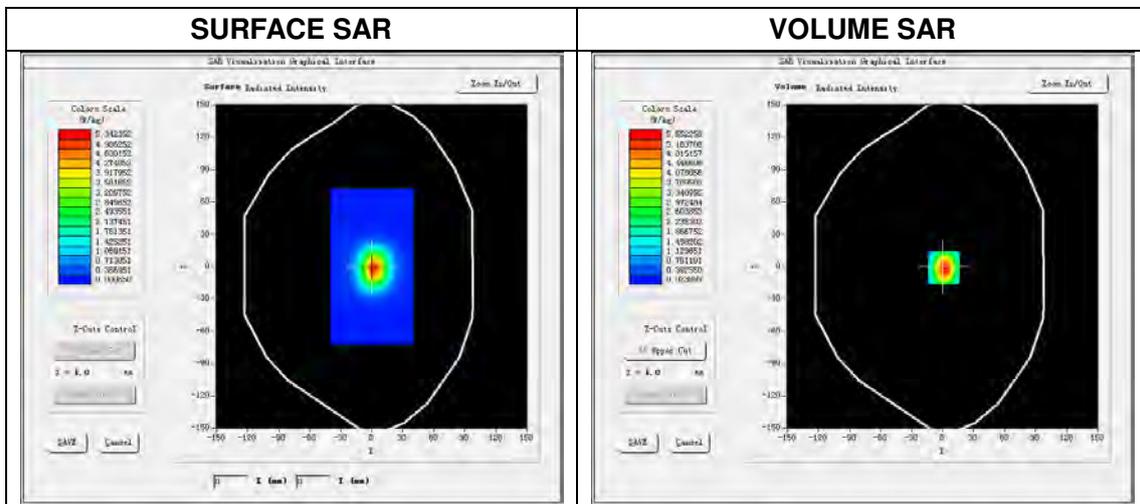
3D screen shot	Hot spot position

System Performance Check Data(2600MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8 mm,dy=8 mm
 Zoom scan resolution: dx=5 mm, dy=5 mm, dz=5 mm
 Date of measurement: 2016.09.08
 Measurement duration: 17 minutes 53 seconds

Experimental conditions.

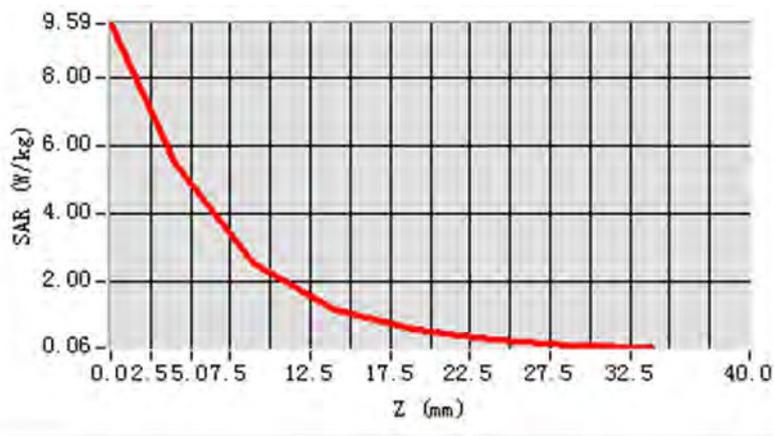
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	2600 MHz
Signal	CW
Frequency (MHz)	2600.000000
Relative permittivity (real part)	38.097251
Conductivity (S/m)	1.978736
Power drift (%)	-0.120000
Ambient Temperature:	22.6C
Liquid Temperature:	21.5C
ConvF:	2.36
Crest factor:	1:1



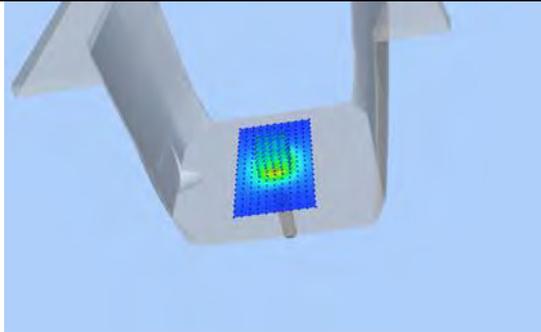
Maximum location: X=1.00, Y=1.00
SAR Peak: 9.57 W/kg

SAR 10 g (W/Kg)	2.403945
SAR 1 g (W/Kg)	5.459132

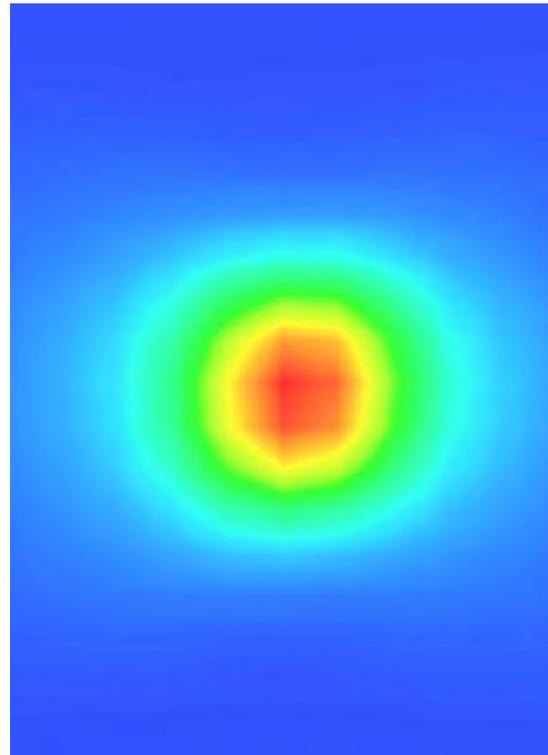
Z Axis Scan



3D screen shot



Hot spot position

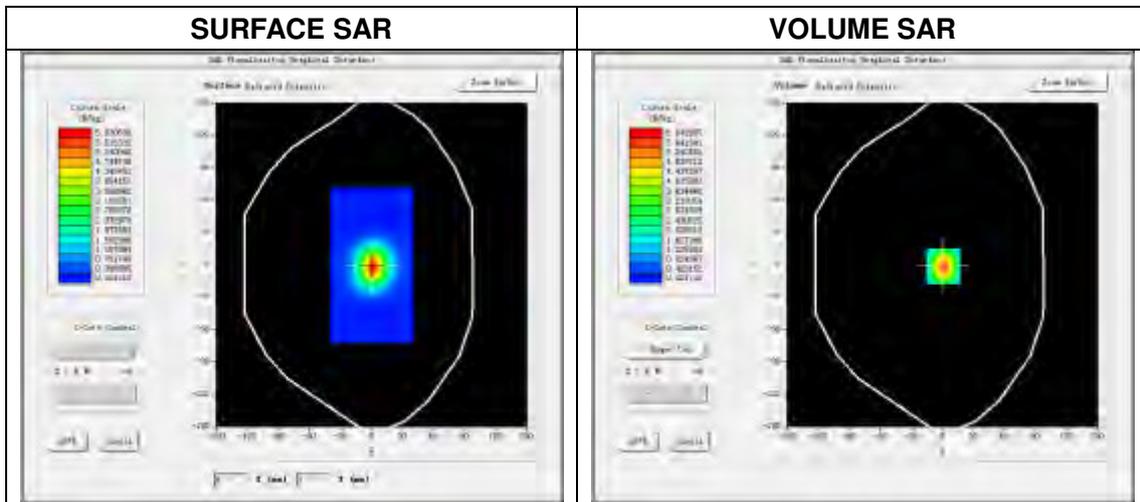


System Performance Check Data(2600MHz Body)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=5mm, dy=5mm, dz=5mm
 Date of measurement: 2016.09.07
 Measurement duration: 18 minutes 29 seconds

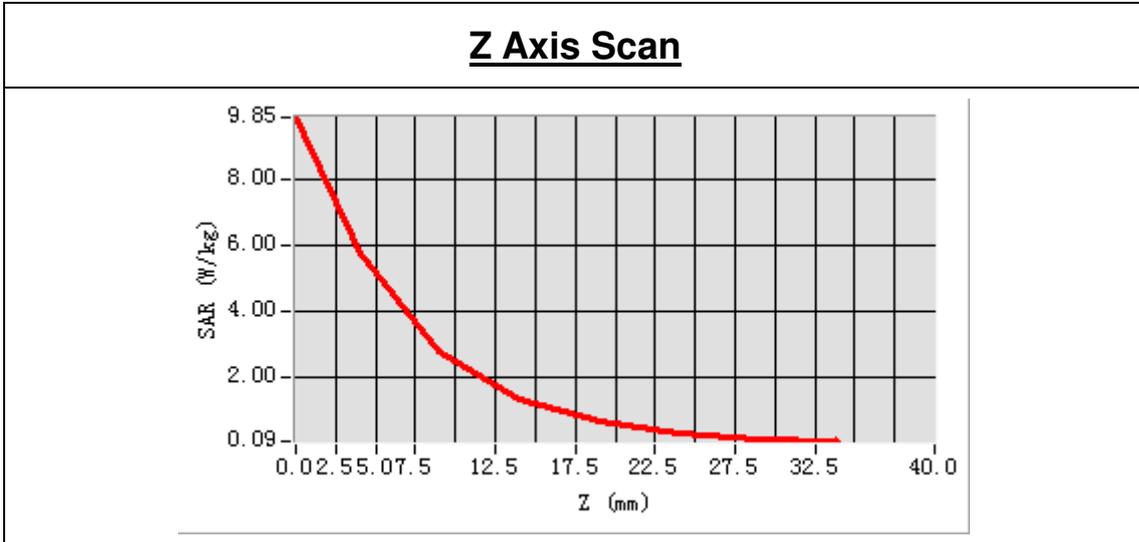
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	2600MHz
Signal	CW
Frequency (MHz)	2600.000000
Relative permittivity (real part)	50.480214
Conductivity (S/m)	2.173460
Power drift (%)	-1.330000
Ambient Temperature:	22.9C
Liquid Temperature:	21.6C
ConvF:	2.43
Crest factor:	1:1



Maximum location: X=1.00, Y=-1.00
 SAR Peak: 9.82W/kg

SAR 10g (W/Kg)	2.395412
SAR 1g (W/Kg)	5.767403



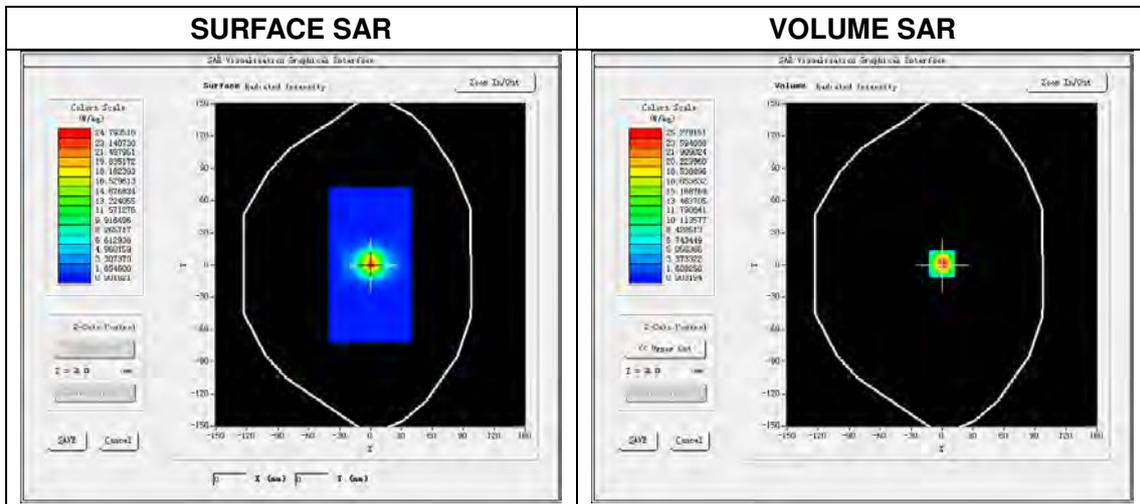
3D screen shot	Hot spot position

System Performance Check Data(5200MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm
 Date of measurement: 2016.09.10
 Measurement duration: 29 minutes 32 seconds

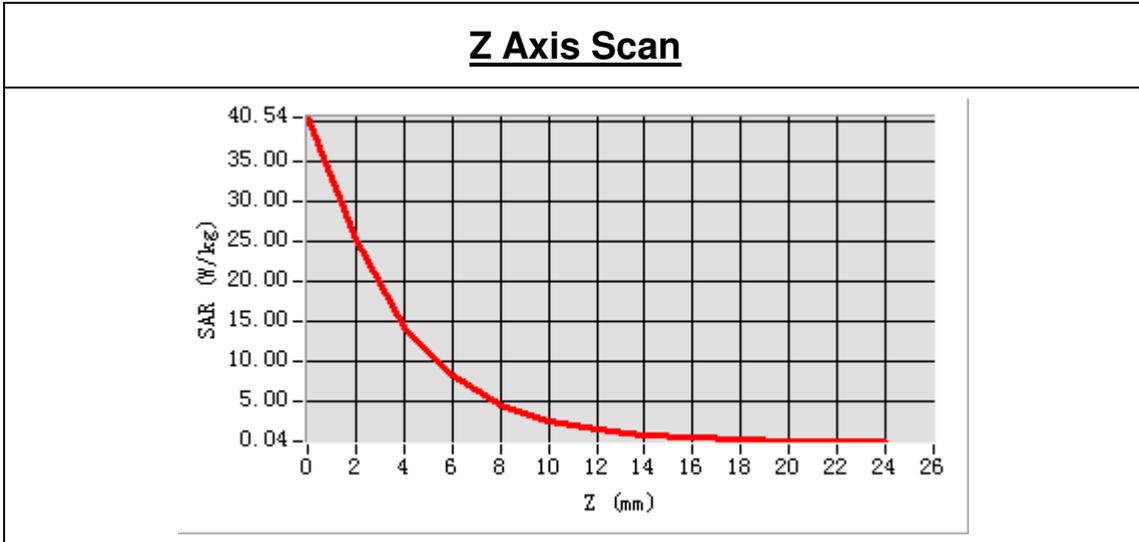
Experimental conditions.

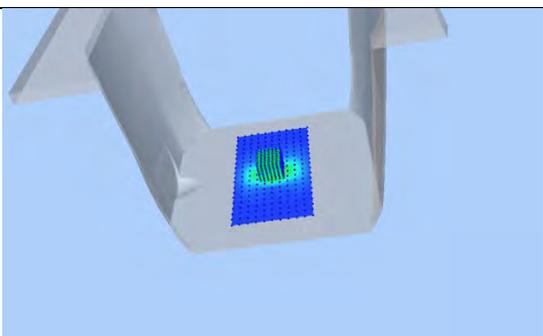
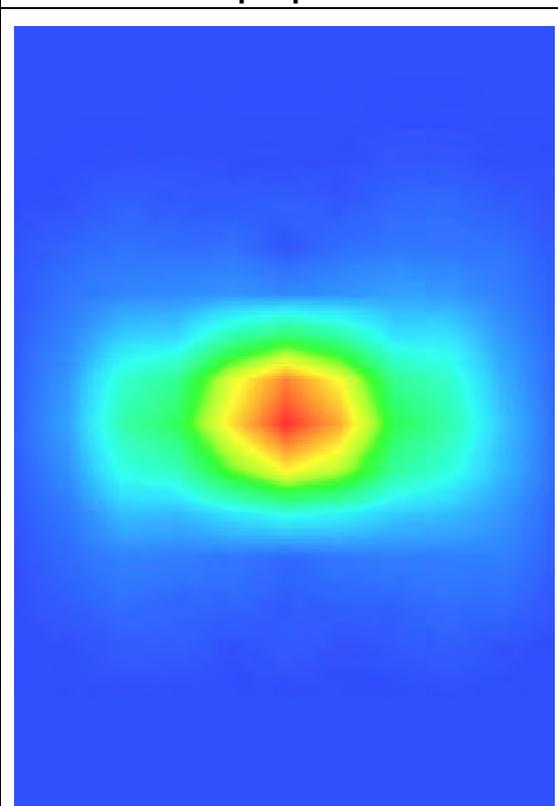
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	5200 MHz
Signal	CW
Frequency (MHz)	5200.000000
Relative permittivity (real part)	36.867518
Conductivity (S/m)	4.674428
Power drift (%)	1.570000
Ambient Temperature:	22.7C
Liquid Temperature:	21.1C
ConvF:	1.81
Crest factor:	1:1



Maximum location: X=2.00, Y=1.00
 SAR Peak: 40.45 W/kg

SAR 10g (W/Kg)	5.492413
SAR 1g (W/Kg)	15.727319



3D screen shot	Hot spot position
	

System Performance Check Data(5200MHz Body)

Type: Phone measurement (Complete)

Area scan resolution: dx=8 mm,dy=8 mm

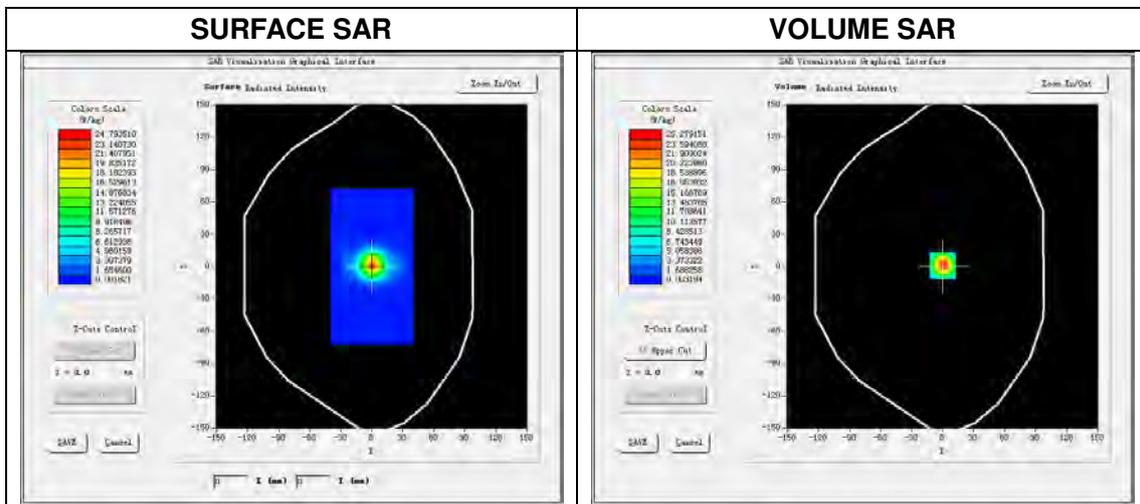
Zoom scan resolution: dx=4 mm, dy=4 mm, dz=2 mm

Date of measurement: 2016.09.09

Measurement duration: 29 minutes 39 seconds

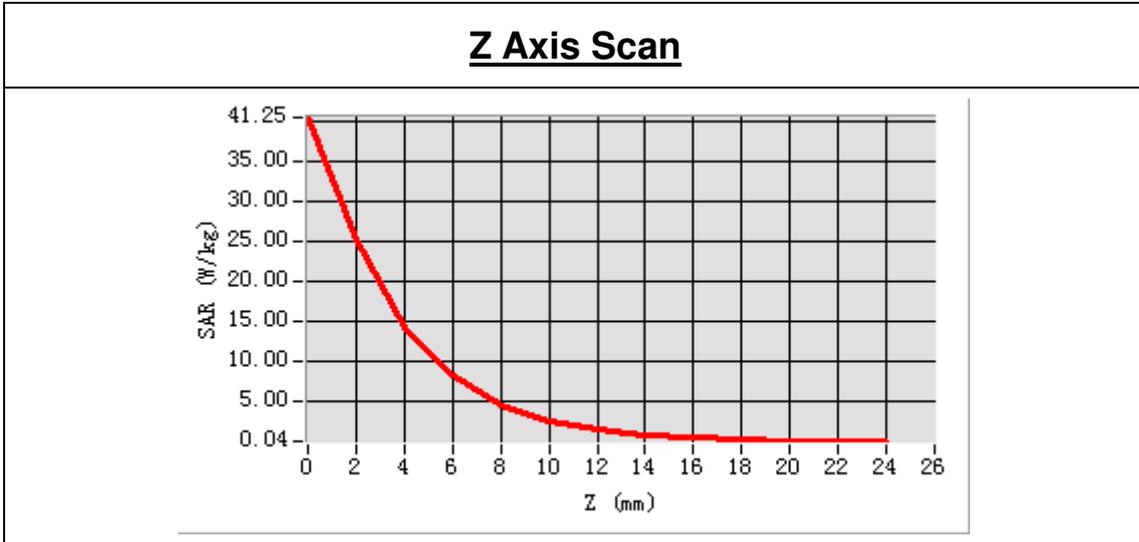
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	5200 MHz
Signal	CW
Frequency (MHz)	5200.000000
Relative permittivity (real part)	49.418539
Conductivity (S/m)	5.345241
Power drift (%)	0.260000
Ambient Temperature:	22.5C
Liquid Temperature:	21.1C
ConvF:	1.85
Crest factor:	1:1



Maximum location: X=0.00, Y=0.00
 SAR Peak: 41.10 W/kg

SAR 10 g (W/Kg)	5.293571
SAR 1 g (W/Kg)	15.386483



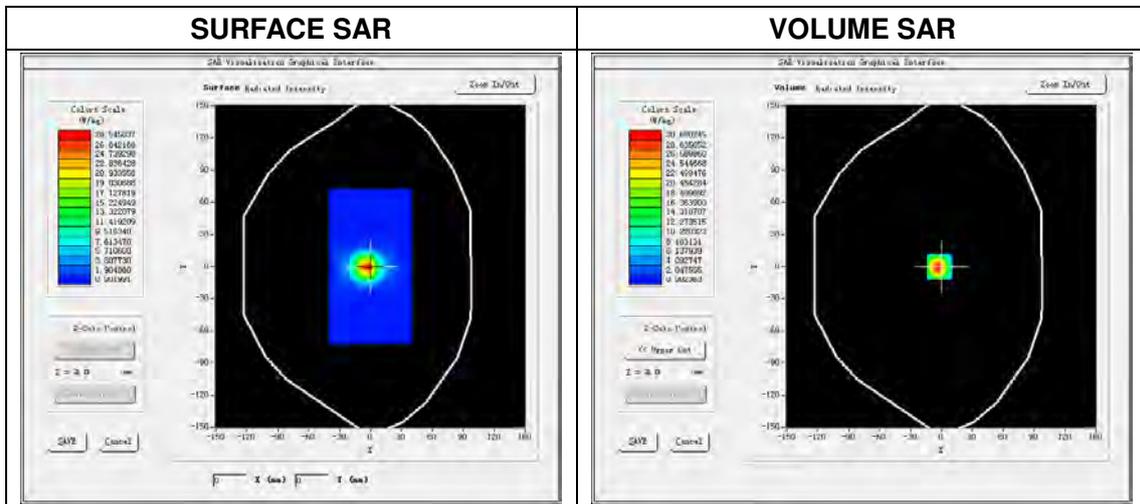
3D screen shot	Hot spot position

System Performance Check Data(5600MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm
 Date of measurement: 2016.09.10
 Measurement duration: 29 minutes 30 seconds

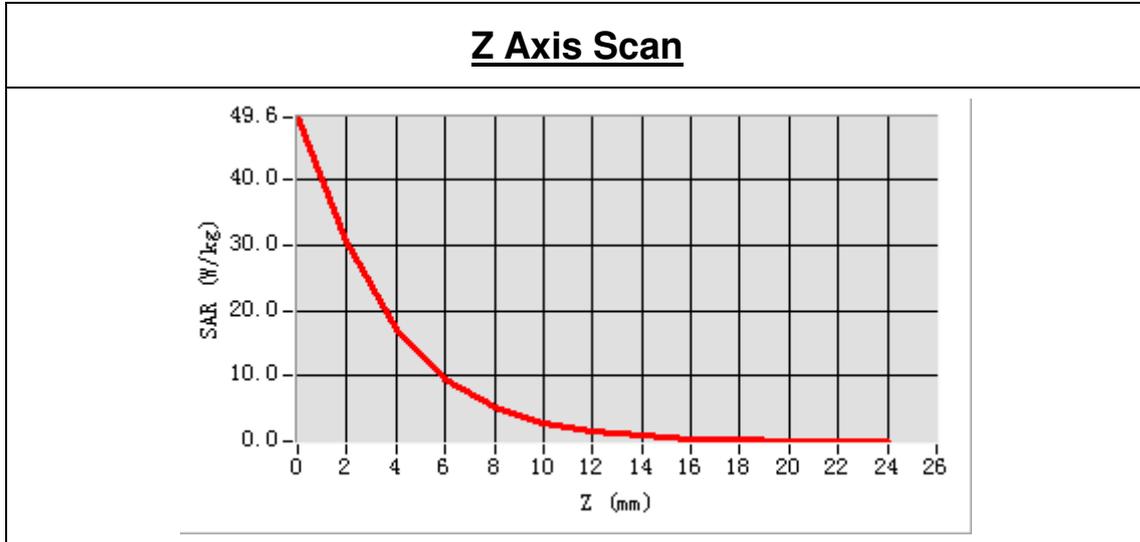
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	5600 MHz
Signal	CW
Frequency (MHz)	5600.000000
Relative permittivity (real part)	34.882714
Conductivity (S/m)	5.228159
Power drift (%)	0.280000
Ambient Temperature:	22.7C
Liquid Temperature:	21.1C
ConvF:	2.08
Crest factor:	1:1



Maximum location: X=1.00, Y=1.00
 SAR Peak: 49.58 W/kg

SAR 10g (W/Kg)	5.579210
SAR 1g (W/Kg)	16.501733



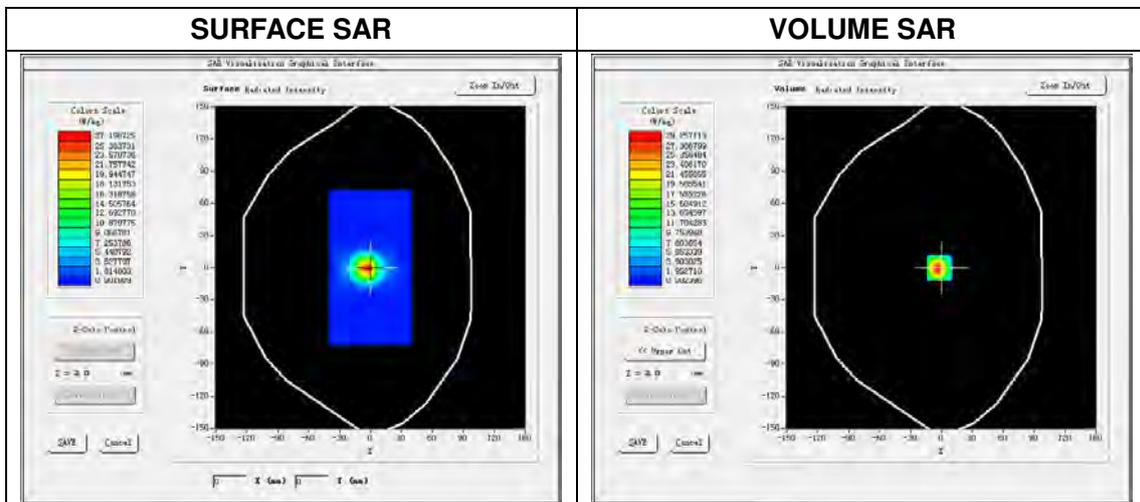
3D screen shot	Hot spot position

System Performance Check Data(5600MHz Body)

Type: Phone measurement (Complete)
 Area scan resolution: dx=8 mm,dy=8 mm
 Zoom scan resolution: dx=4 mm, dy=4 mm, dz=2 mm
 Date of measurement: 2016.09.09
 Measurement duration: 30 minutes 39 seconds

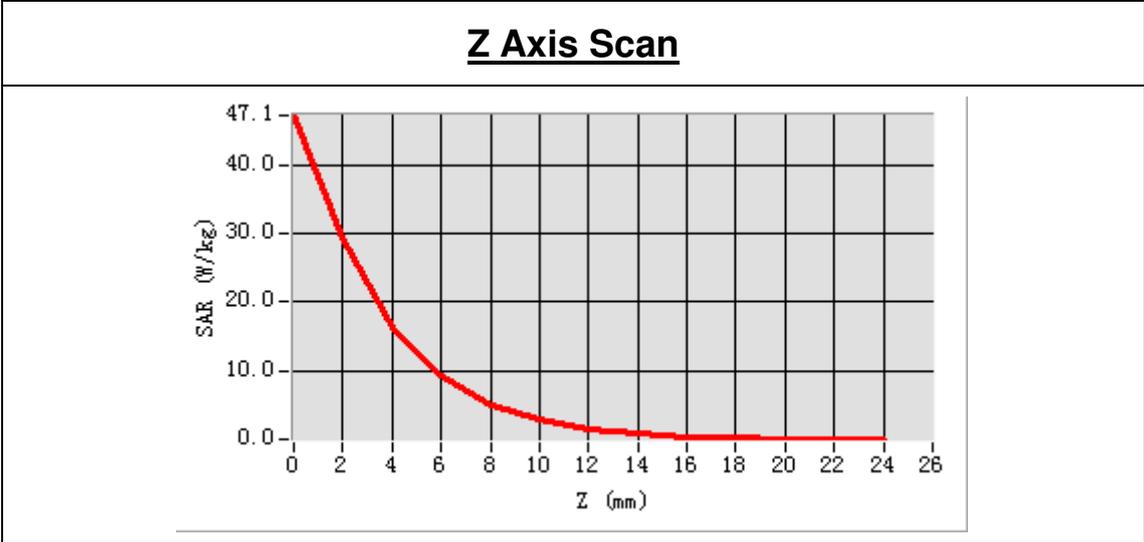
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	5600 MHz
Signal	CW
Frequency (MHz)	5600.000000
Relative permittivity (real part)	47.973649
Conductivity (S/m)	5.841354
Power drift (%)	0.640000
Ambient Temperature:	22.5C
Liquid Temperature:	21.1C
ConvF:	2.15
Crest factor:	1:1



Maximum location: X=-2.00, Y=0.00
 SAR Peak: 45.93 W/kg

SAR 10 g (W/Kg)	5.631587
SAR 1 g (W/Kg)	16.601296



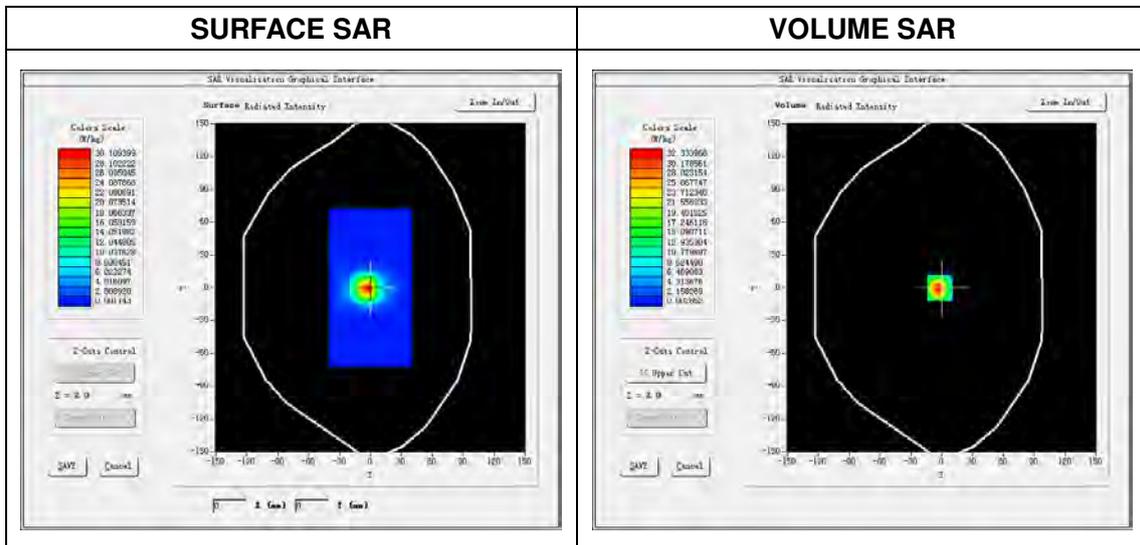
3D screen shot	Hot spot position

System Performance Check Data (5800MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=4mm, dy=4mm, dz=2mm
 Date of measurement: 2016.09.10
 Measurement duration: 29 minutes 31 seconds

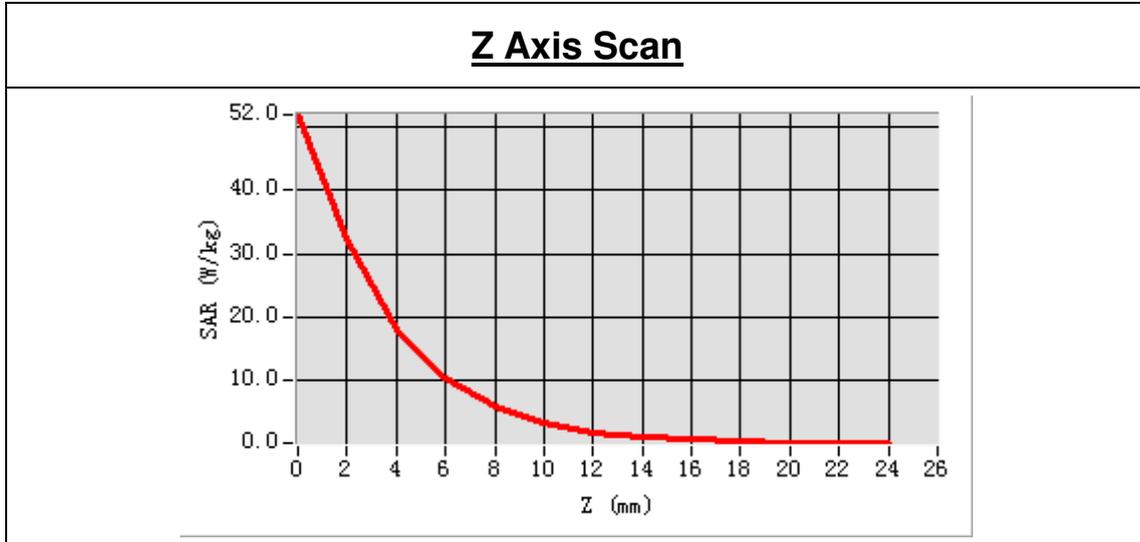
Experimental conditions.

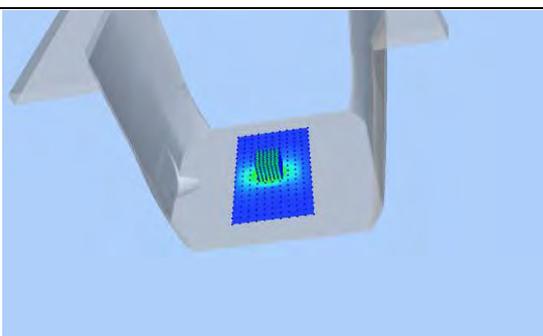
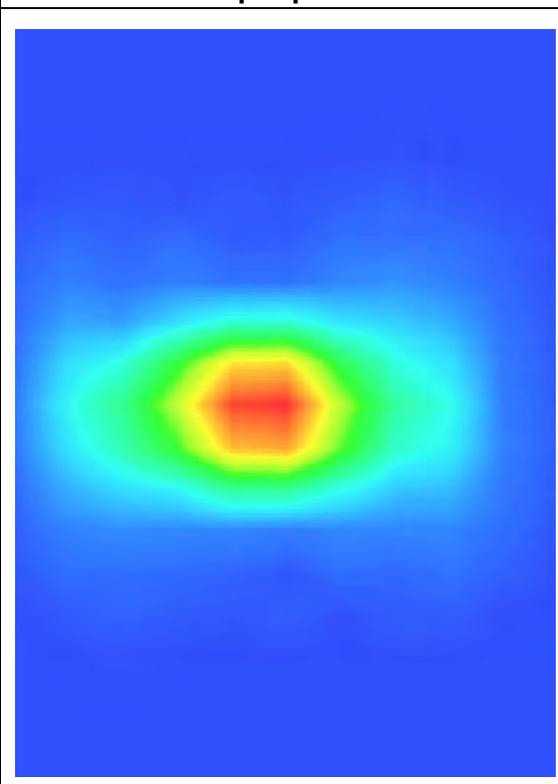
Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	5800 MHz
Signal	CW
Frequency (MHz)	5800.000000
Relative permittivity (real part)	34.221947
Conductivity (S/m)	5.463693
Power drift (%)	1.210000
Ambient Temperature:	22.7C
Liquid Temperature:	21.1C
ConvF:	1.88
Crest factor:	1:1



Maximum location: X=3.00, Y=1.00
SAR Peak: 51.18 W/kg

SAR 10g (W/Kg)	6.123124
SAR 1g (W/Kg)	18.158921



3D screen shot	Hot spot position
	

System Performance Check Data (5800MHz Body)

Type: Phone measurement (Complete)

Area scan resolution: dx=8 mm,dy=8 mm

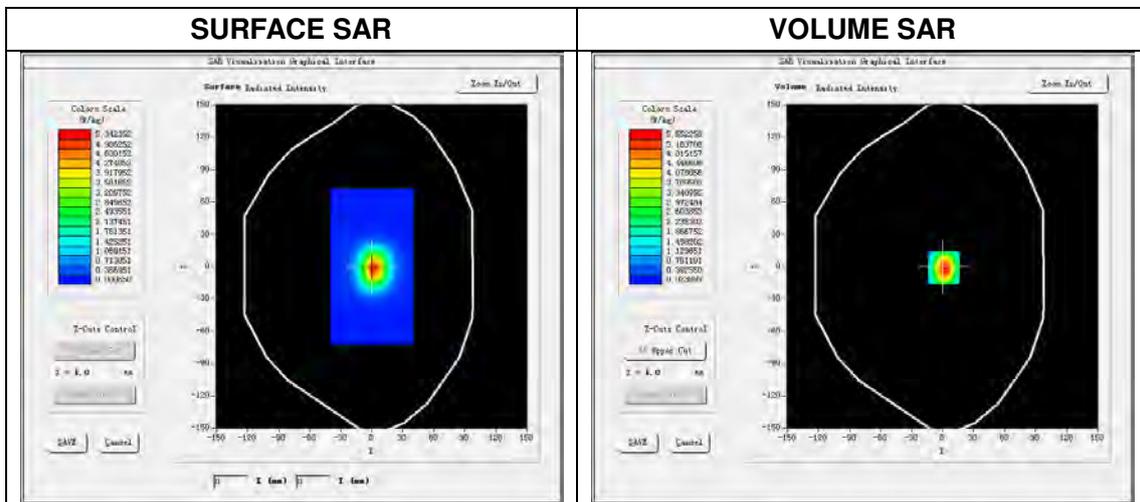
Zoom scan resolution: dx=4 mm, dy=4 mm, dz=2 mm

Date of measurement: 2016.09.09

Measurement duration: 29 minutes 38 seconds

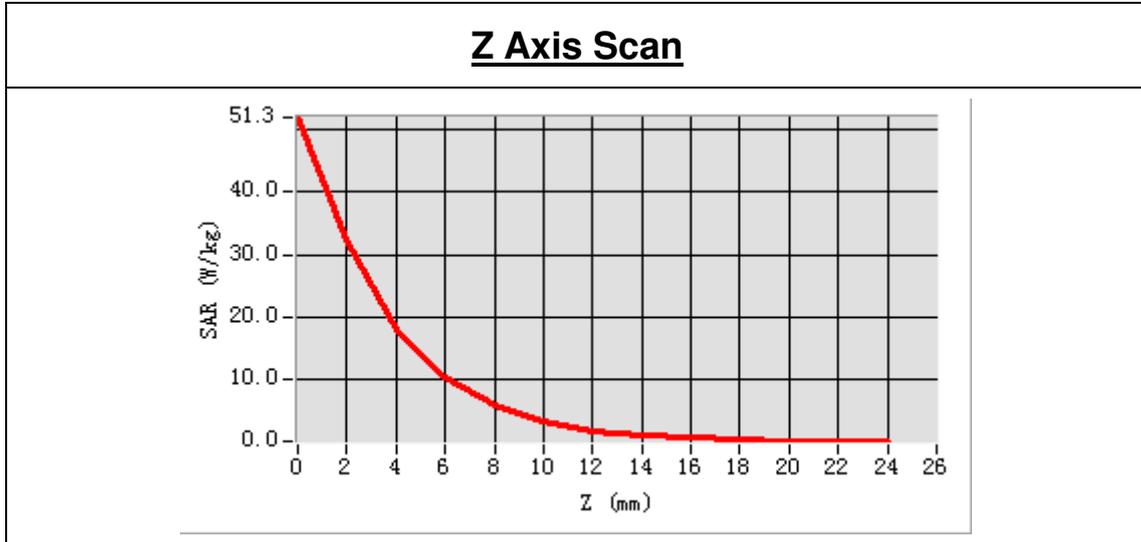
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	5800 MHz
Signal	CW
Frequency (MHz)	5800.000000
Relative permittivity (real part)	46.872468
Conductivity (S/m)	6.124730
Power drift (%)	0.280000
Ambient Temperature:	22.5C
Liquid Temperature:	21.1C
ConvF:	1.93
Crest factor:	1:1



Maximum location: X=0.00, Y=0.00
SAR Peak: 51.26 W/kg

SAR 10 g (W/Kg)	5.869541
SAR 1 g (W/Kg)	16.903842



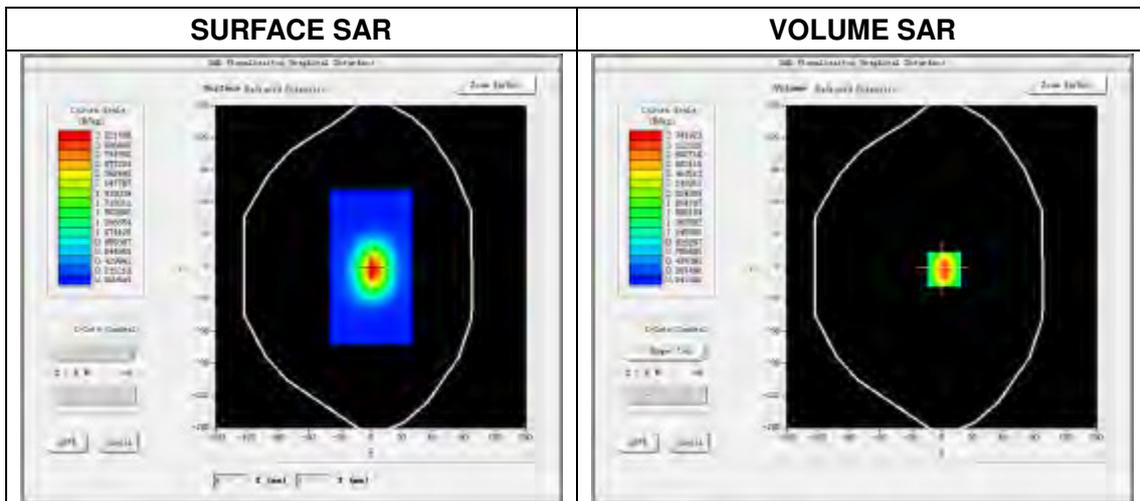
3D screen shot	Hot spot position

System Performance Check Data(1800MHz Body)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.27
 Measurement duration: 14 minutes 16 seconds

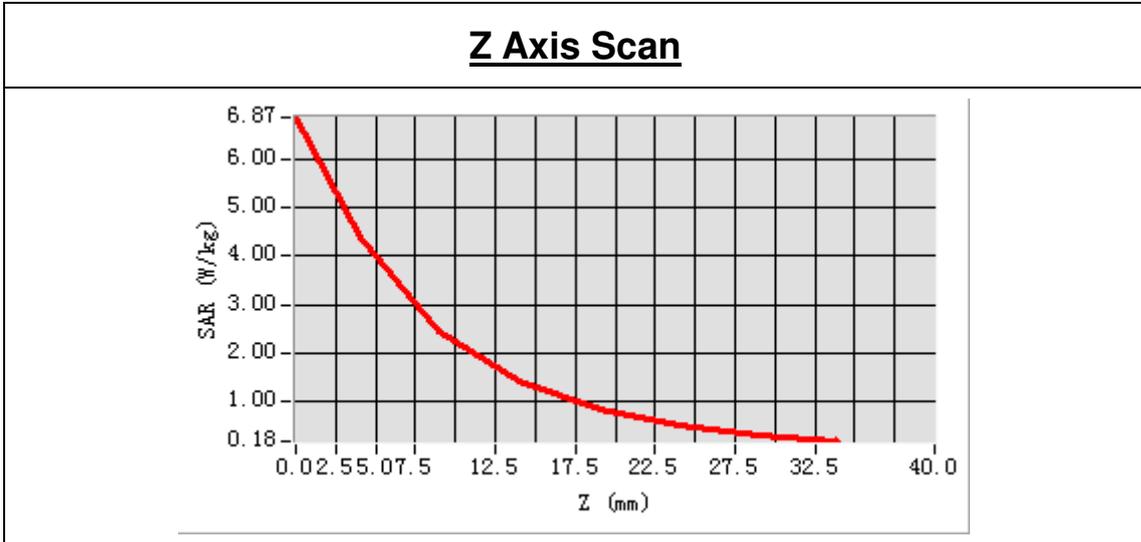
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1800MHz
Signal	CW
Frequency (MHz)	1800.000000
Relative permittivity (real part)	53.123692
Conductivity (S/m)	1.463968
Power drift (%)	0.250000
Ambient Temperature:	22.8°C
Liquid Temperature:	21.3C
ConvF:	2.08
Crest factor:	1:1



Maximum location: X=2.00, Y=2.00
 SAR Peak: 6.85 W/kg

SAR 10 g (W/Kg)	2.075262
SAR 1g (W/Kg)	3.982523



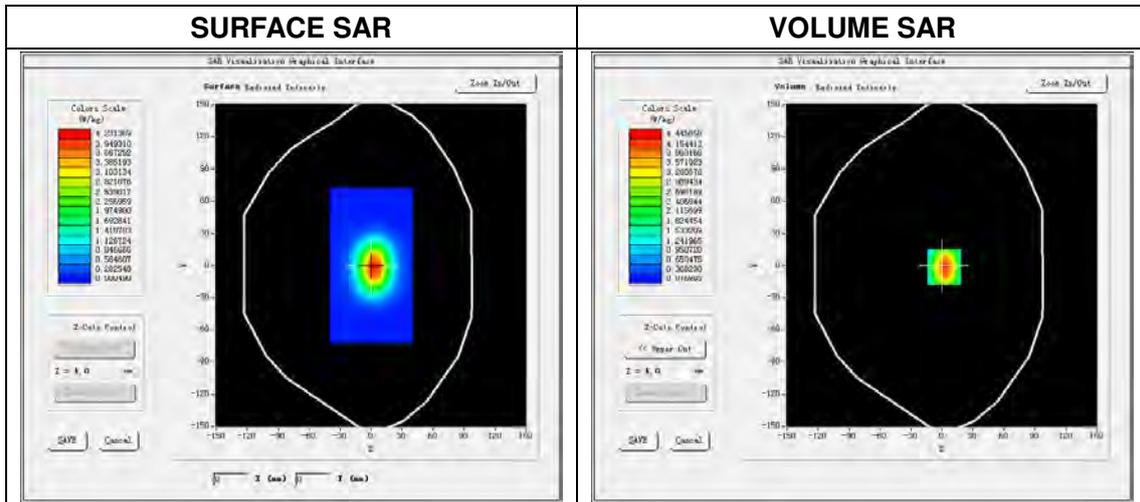
3D screen shot	Hot spot position

System Performance Check Data(1900MHz Head)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.27
 Measurement duration: 13 minutes 26 seconds

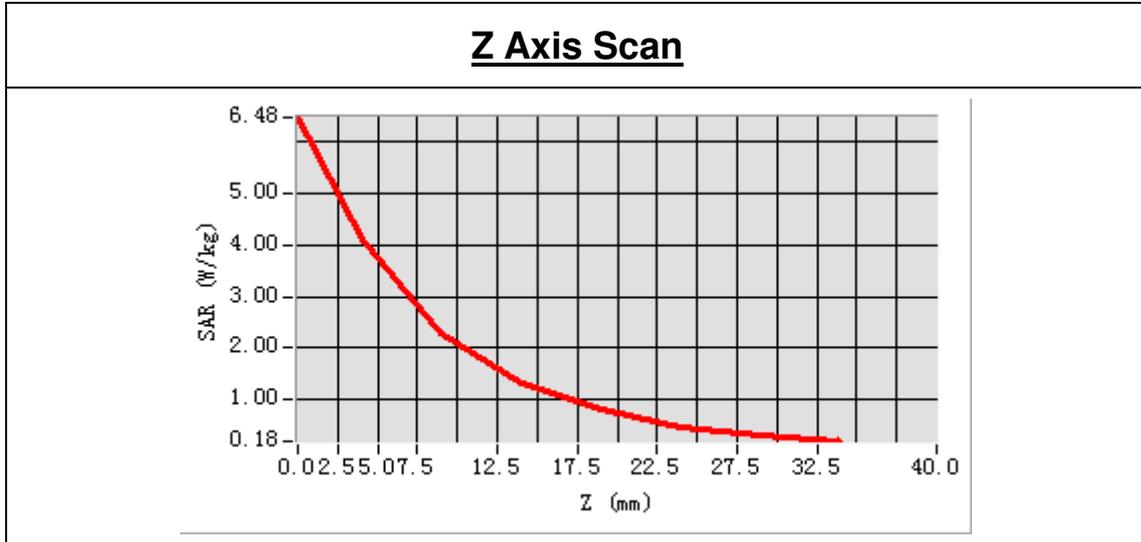
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1900MHz
Signal	CW
Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.626825
Conductivity (S/m)	1.393692
Power drift (%)	0.270000
Ambient Temperature:	22.8C
Liquid Temperature:	21.3C
ConvF:	2.35
Crest factor:	1:1



Maximum location: X=2.00, Y=-1.00
 SAR Peak: 6.48W/kg

SAR 10g (W/Kg)	1.949372
SAR 1g (W/Kg)	3.896535



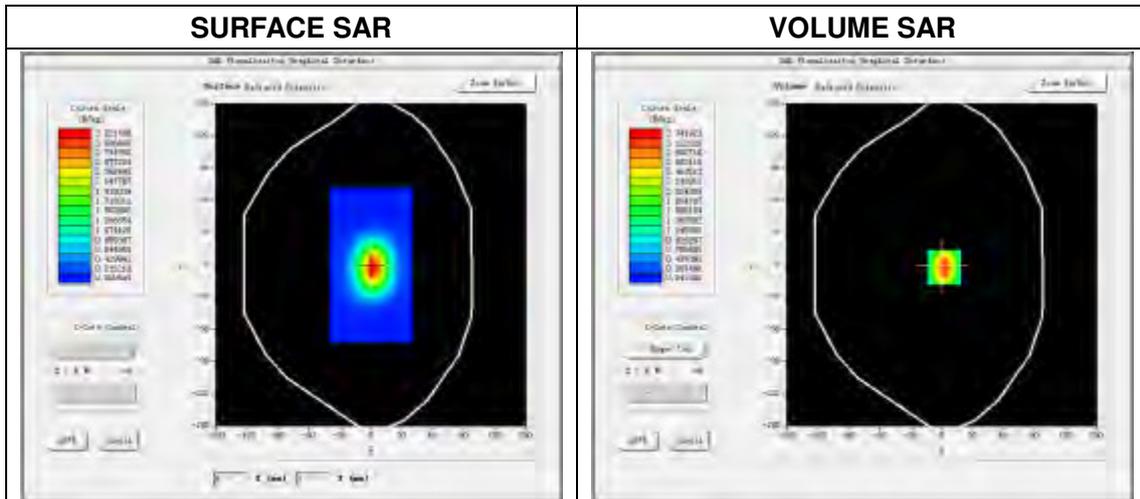
3D screen shot	Hot spot position

System Performance Check Data(1900MHz Body)

Type: Phone measurement (Complete)
 E-Field Probe: SN 34/15 SSE2 EPGO265
 Area scan resolution: dx=8mm,dy=8mm
 Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
 Date of measurement: 2016.09.27
 Measurement duration: 13 minutes 24 seconds

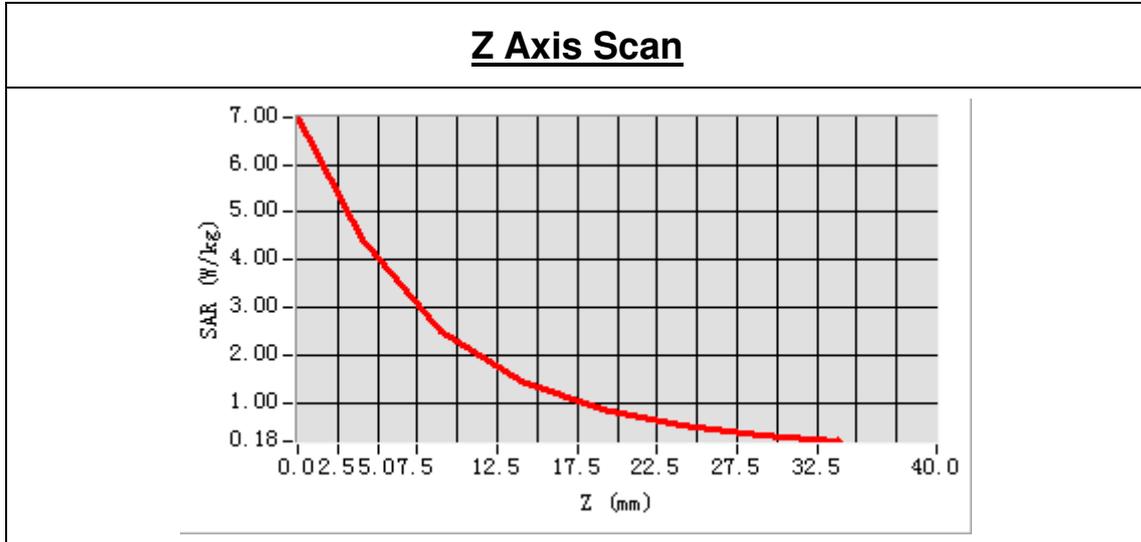
Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1900MHz
Signal	CW
Frequency (MHz)	1900.000000
Relative permittivity (real part)	54.166358
Conductivity (S/m)	1.496265
Power drift (%)	0.160000
Ambient Temperature:	22.8C
Liquid Temperature:	21.3C
ConvF:	2.42
Crest factor:	1:1



Maximum location: X=2.00, Y=-1.00
 SAR Peak: 6.98W/kg

SAR 10g (W/Kg)	2.025692
SAR 1g (W/Kg)	4.135569

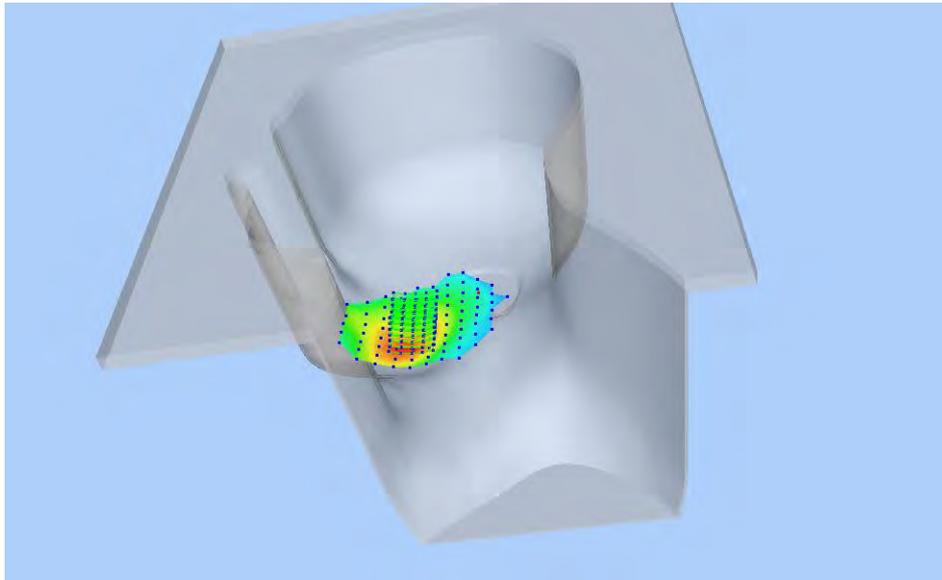


3D screen shot	Hot spot position

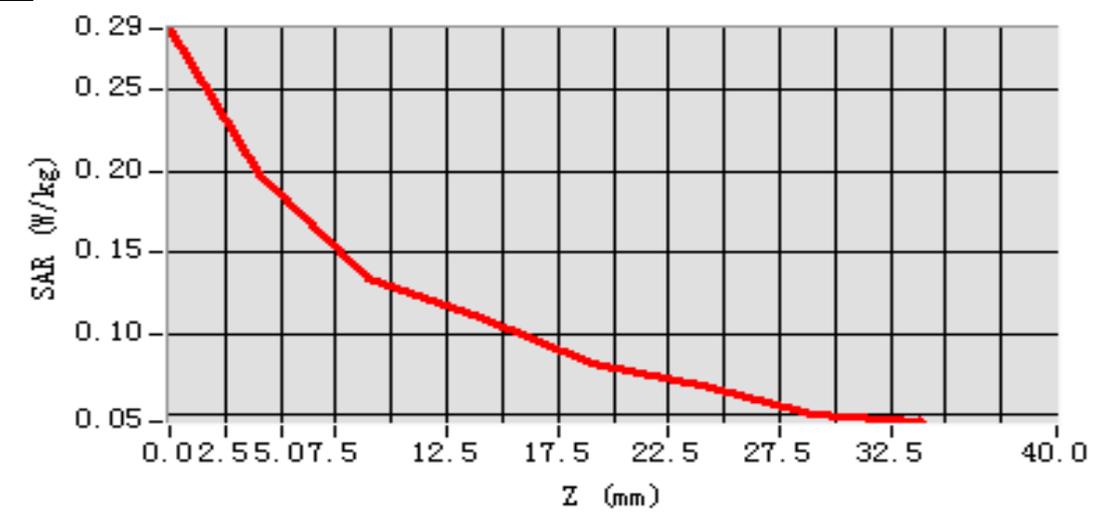
ANNEX C TEST DATA

MEAS. 1 Right Head with Cheek on High Channel in GSM 850 mode

Test Date: 6/9/2016
Measurement duration: 9 minutes 42 seconds
Signal: GSM, f=848.8 MHz, Duty Cycle: 1:8.3
Liquid Parameters: Permittivity: 41.16; Conductivity: 0.90 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.04
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-48.000000
SAR 10g (W/Kg): 0.135156
SAR 1g (W/Kg): 0.191230
Power drift (%): -3.37
3D screen shot

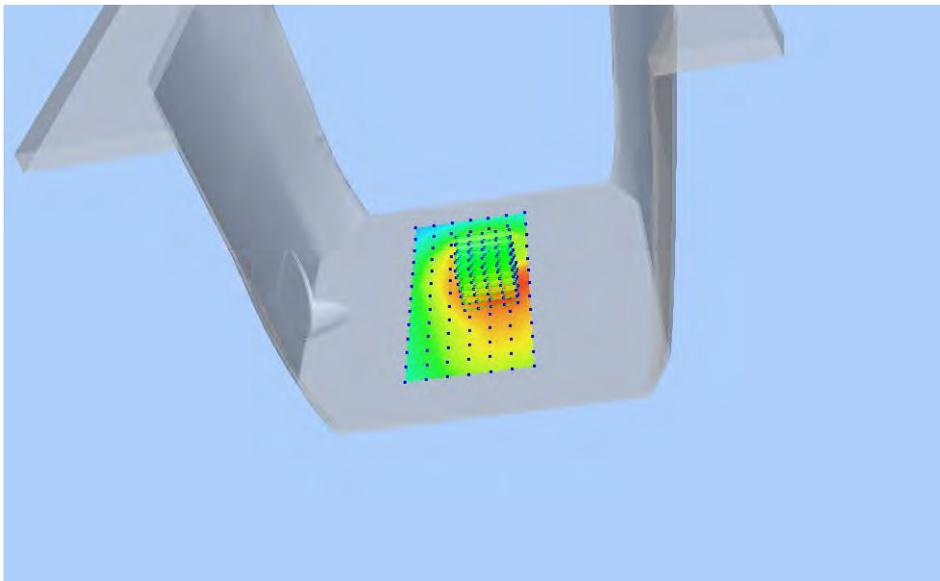


Z Axis Scan

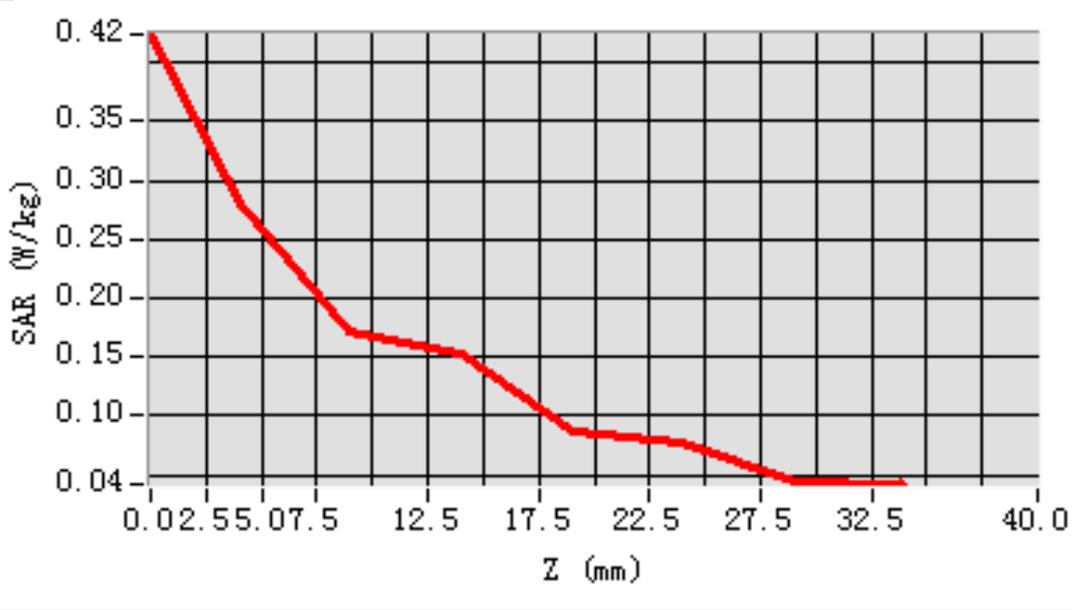


MEAS. 2 Body Plane with Back Side 15mm on High Channel in GSM 850 mode

Test Date: 2/9/2016
Measurement duration: 12 minutes 4 seconds
Signal: GSM, f=848.8 MHz, Duty Cycle: 1:8.3
Liquid Parameters: Permittivity: 52.95; Conductivity: 1.00 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.12
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=8.000000, Y=0.000000
SAR 10g (W/Kg): 0.187838
SAR 1g (W/Kg): 0.275656
Power drift (%): -1.43
3D screen shot



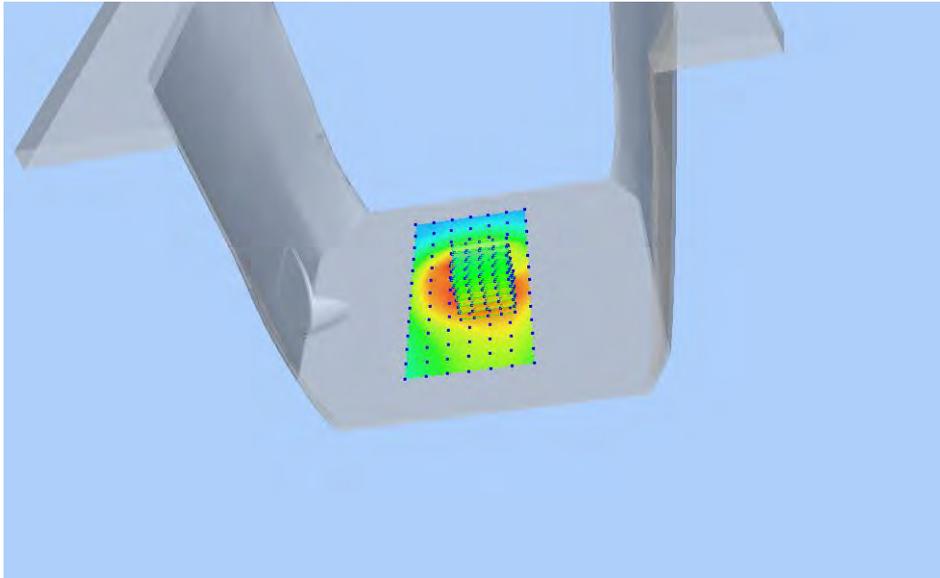
Z Axis Scan



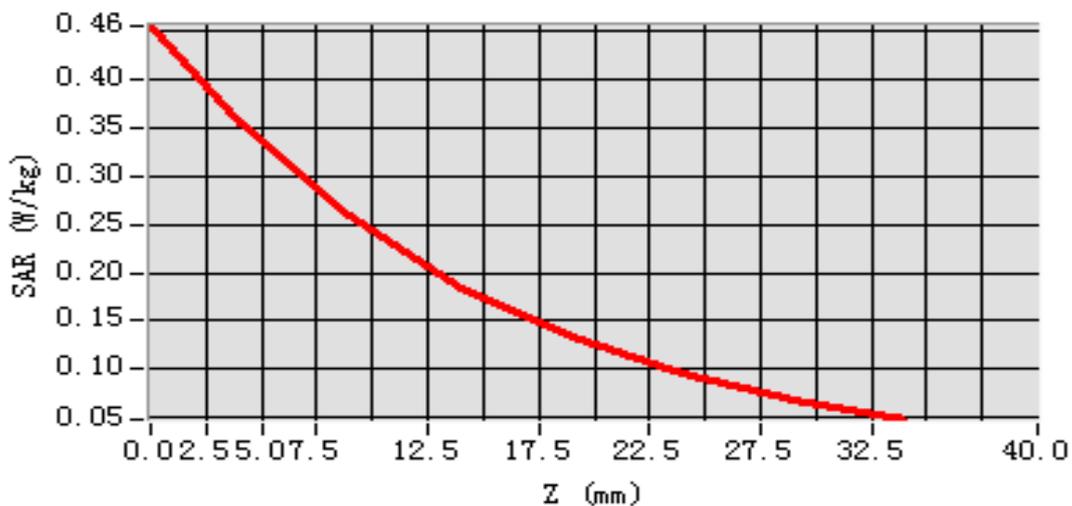
MEAS. 3 Body Plane with Back Side 10mm on High Channel in GPRS 850

mode

Test Date: 2/9/2016
Measurement duration: 11 minutes 45 seconds
Signal: GPRS, f=848.8 MHz, Duty Cycle: 1:4.0
Liquid Parameters: Permittivity: 52.95; Conductivity: 1.00 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.12
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=8.000000, Y=-12.000000
SAR 10g (W/Kg): 0.238741
SAR 1g (W/Kg): 0.355876
Power drift (%): -3.16
3D screen shot

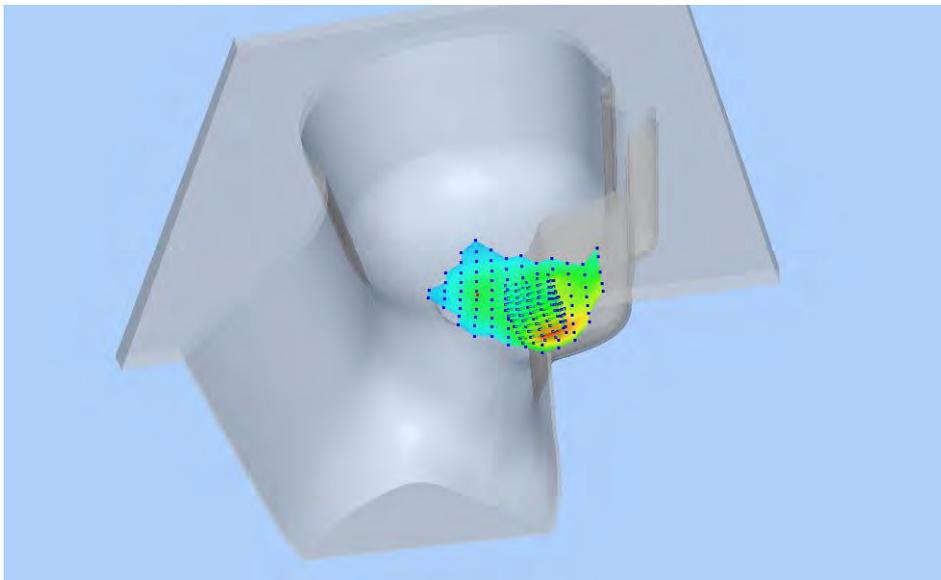


Z Axis Scan

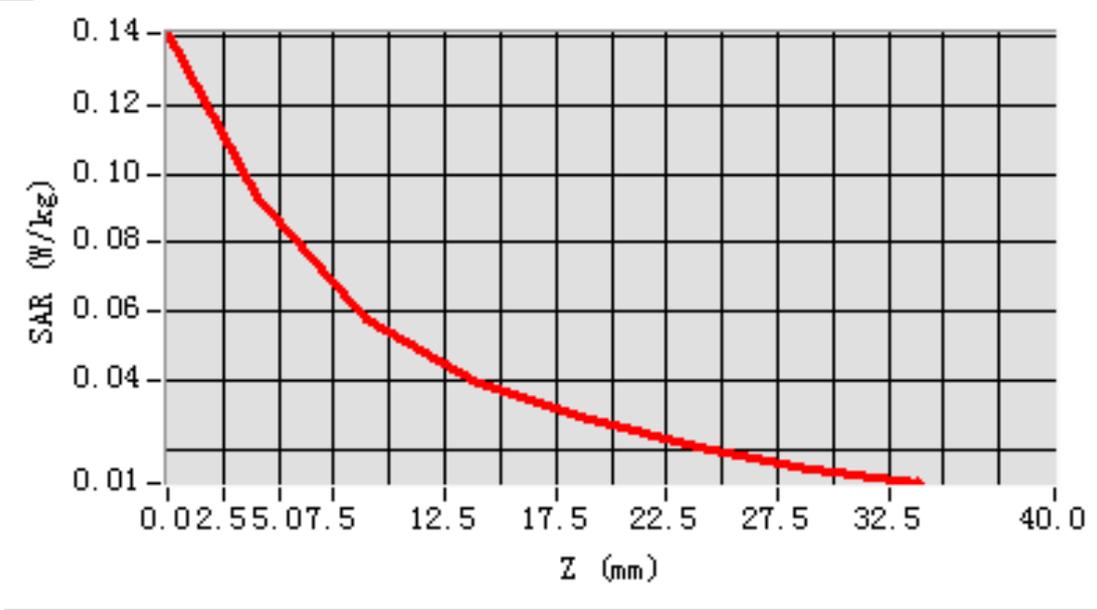


MEAS. 4 Left Head with Cheek on Middle Channel in GSM 1900 mode

Test Date: 14/9/2016
Measurement duration: 10 minutes 24 seconds
Signal: GSM, f=1880.0 MHz, Duty Cycle: 1:8.3
Liquid Parameters: Permittivity: 39.57; Conductivity: 1.38 S/m
Test condition: Ambient Temperature: 22.4°C, Liquid Temperature: 21.0°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.35
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-48.000000
SAR 10g (W/Kg): 0.053064
SAR 1g (W/Kg): 0.090727
Power drift (%): -1.79
3D screen shot



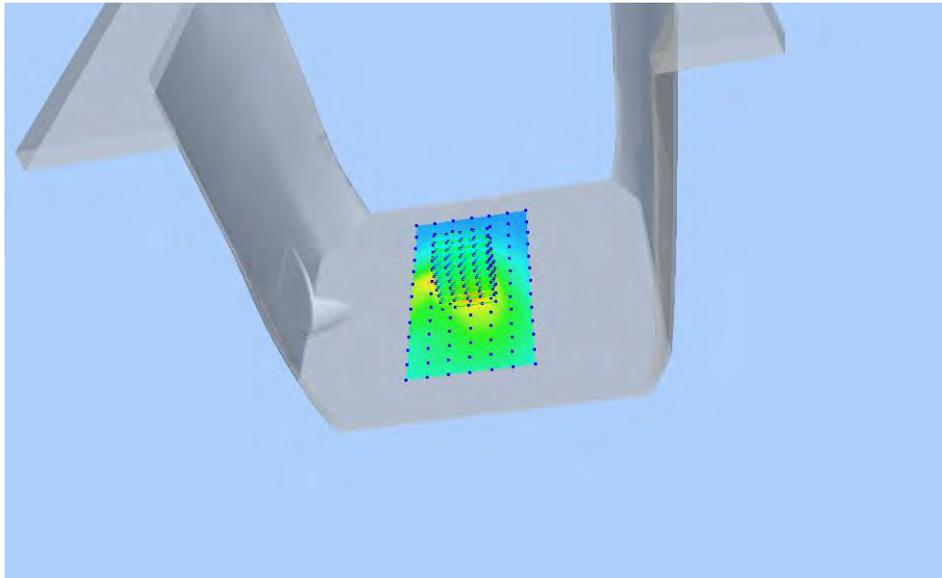
Z Axis Scan



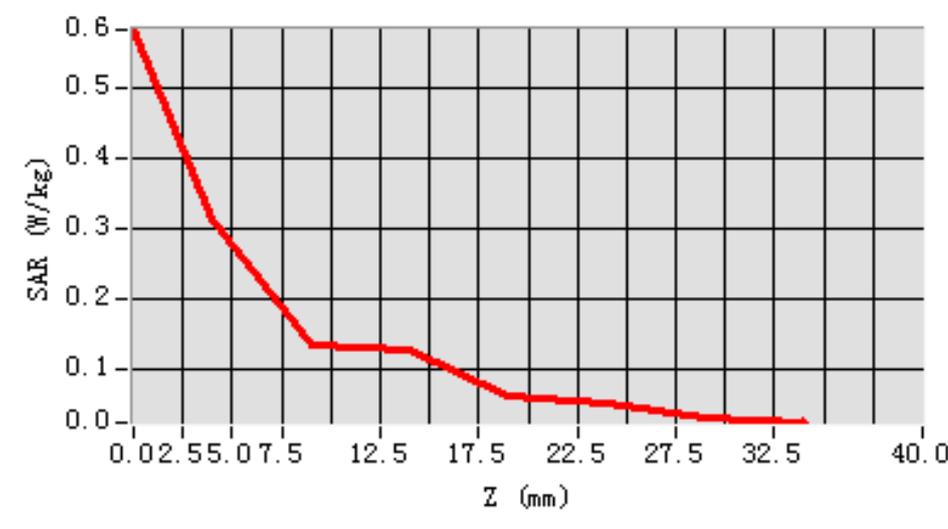
MEAS. 5 Body Plane with Front Side 15mm on Middle Channel in GSM 1900

mode

Test Date: 12/9/2016
Measurement duration: 11 minutes 50 seconds
Signal: GSM, f=1880.0 MHz, Duty Cycle: 1:8.3
Liquid Parameters: Permittivity: 54.46; Conductivity: 1.50 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.42
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-5.000000, Y=1.000000
SAR 10g (W/Kg): 0.162553
SAR 1g (W/Kg): 0.291080
Power drift (%): -0.59
3D screen shot



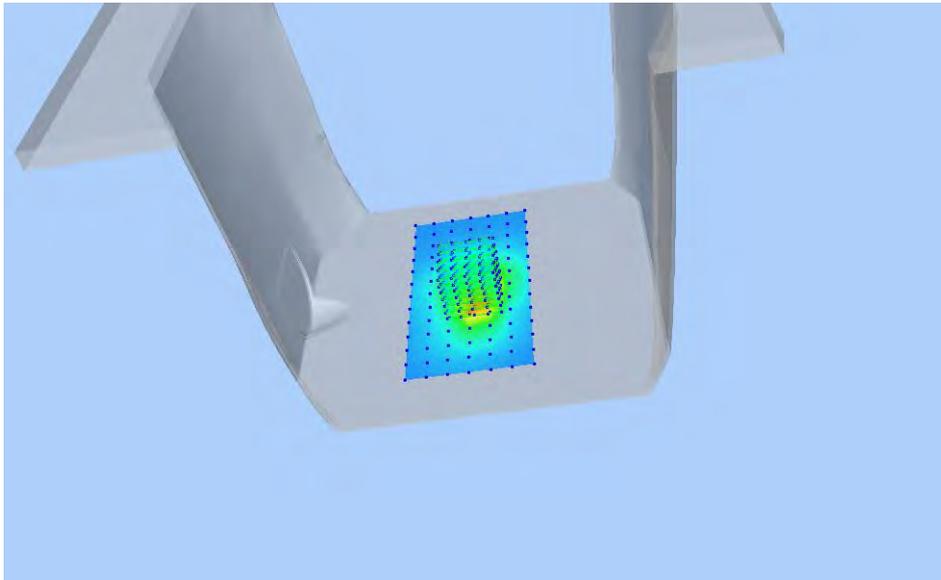
Z Axis Scan



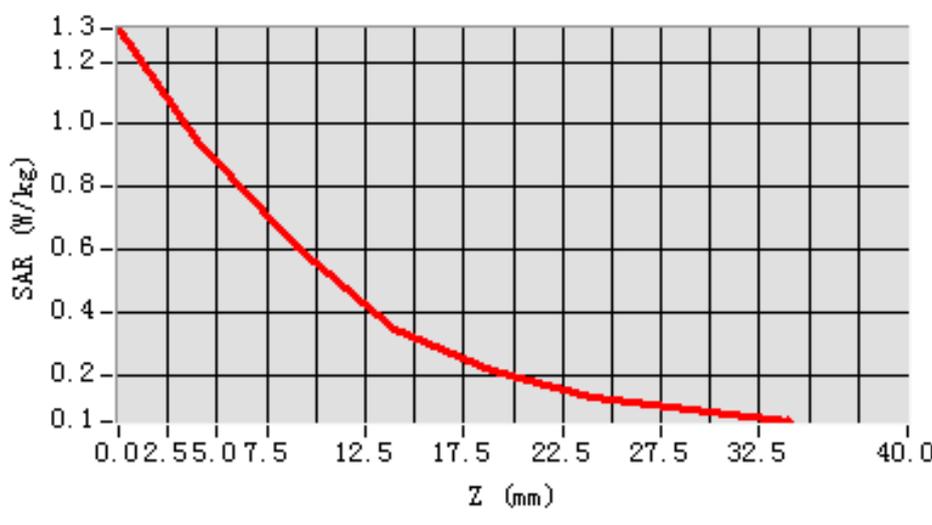
MEAS. 6 Body Plane with Bottom Edge 10mm on Middle Channel in GPRS

1900 mode

Test Date:	12/9/2016
Measurement duration:	12 minutes 11 seconds
Signal:	GPRS, f=1880.0 MHz, Duty Cycle: 1:8.3
Liquid Parameters:	Permittivity: 54.46; Conductivity: 1.50 S/m
Test condition:	Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe:	SN 34/15 SSE2 EPGO265, ConvF: 2.42
Area Scan:	sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=-4.000000, Y=-12.000000
SAR 10g (W/Kg):	0.454787
SAR 1g (W/Kg):	0.861096
Power drift (%):	-3.32
3D screen shot	

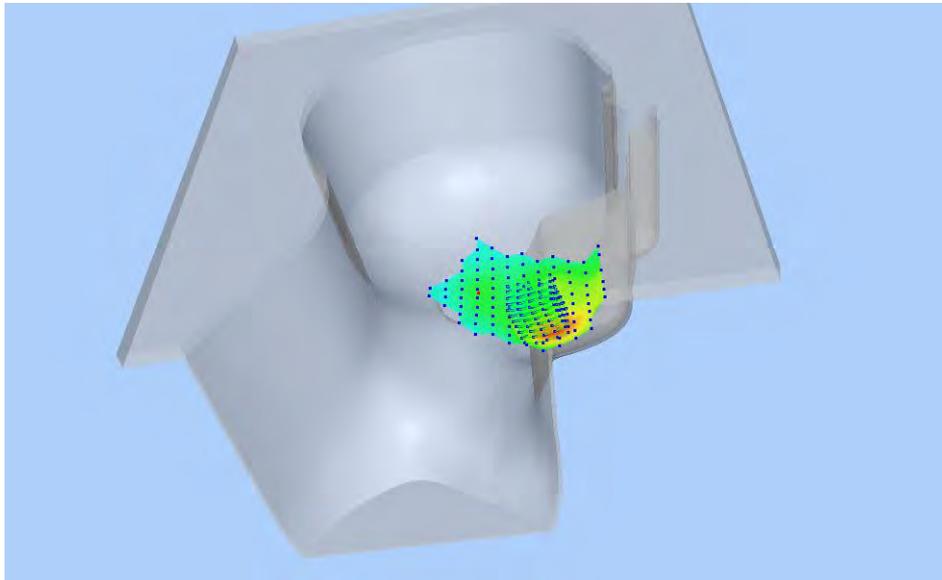


Z Axis Scan

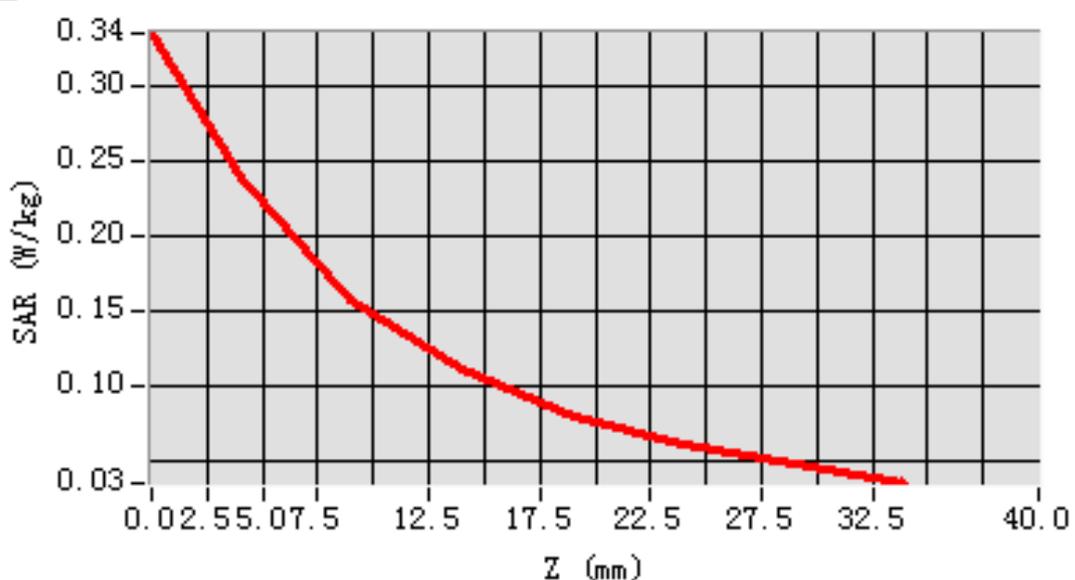


MEAS. 7 Left Head with Cheek on Low Channel in WCDMA Band 2 mode

Test Date: 14/9/2016
Measurement duration: 10 minutes 32 seconds
Signal: WCDMA, f=1852.4 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 40.38; Conductivity: 1.35 S/m
Test condition: Ambient Temperature: 22.4°C, Liquid Temperature: 21.0°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.35
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-48.000000
SAR 10g (W/Kg): 0.140936
SAR 1g (W/Kg): 0.227247
Power drift (%): -4.14
3D screen shot



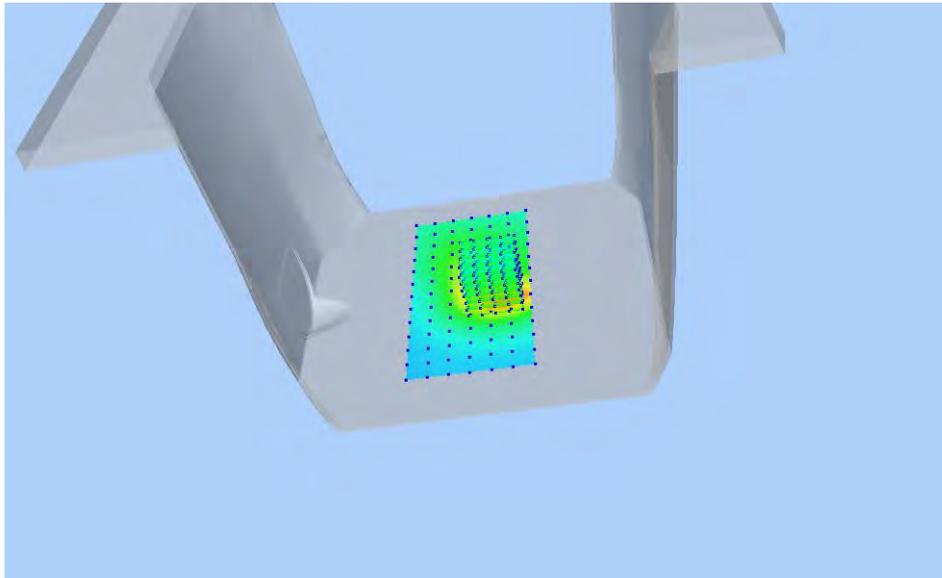
Z Axis Scan



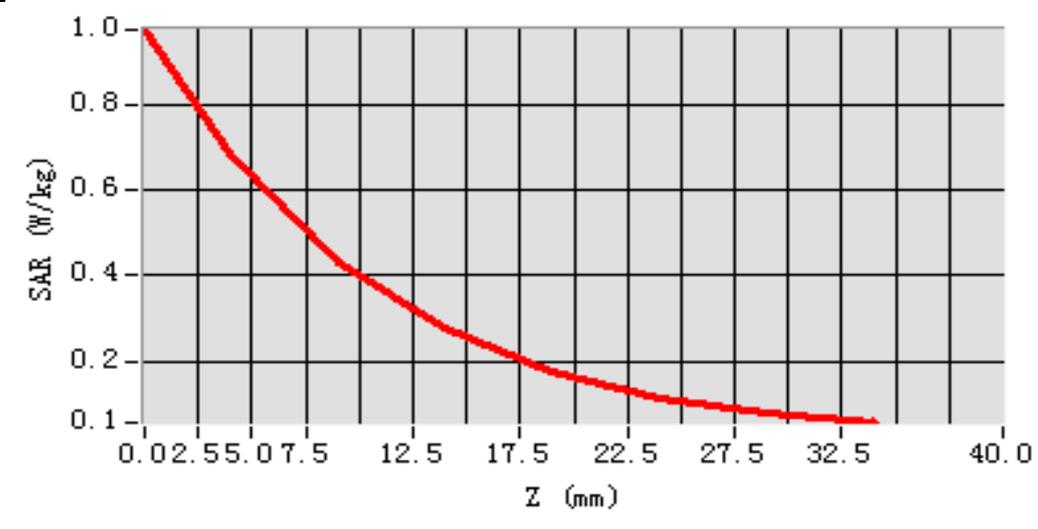
MEAS. 8 Body Plane with Front Side 15mm on Low Channel in WCDMA Band 2

mode

Test Date: 12/9/2016
Measurement duration: 12 minutes 14 seconds
Signal: WCDMA, f=1852.4 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 54.51; Conductivity: 1.47 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.42
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=8.000000, Y=-12.000000
SAR 10g (W/Kg): 0.365080
SAR 1g (W/Kg): 0.639451
Power drift (%): -4.13
3D screen shot



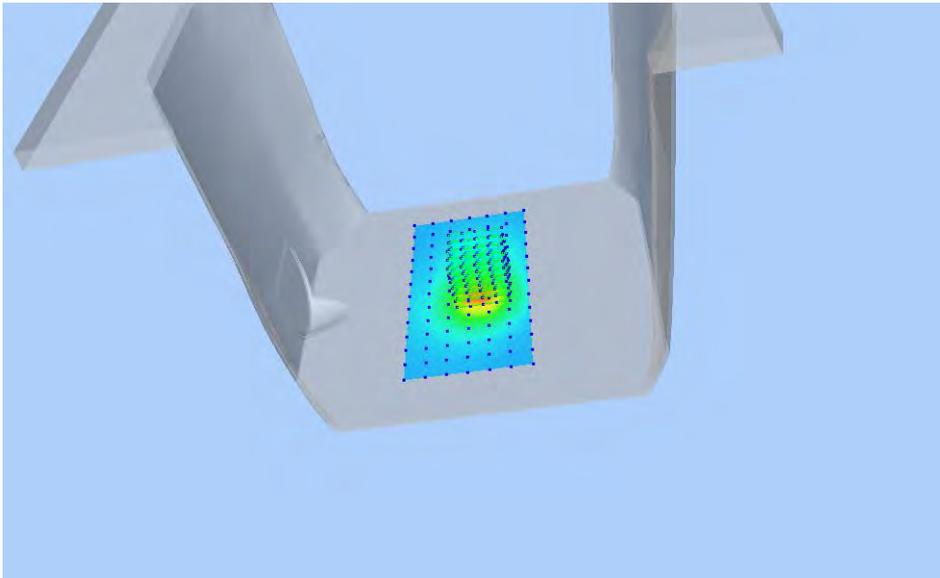
Z Axis Scan



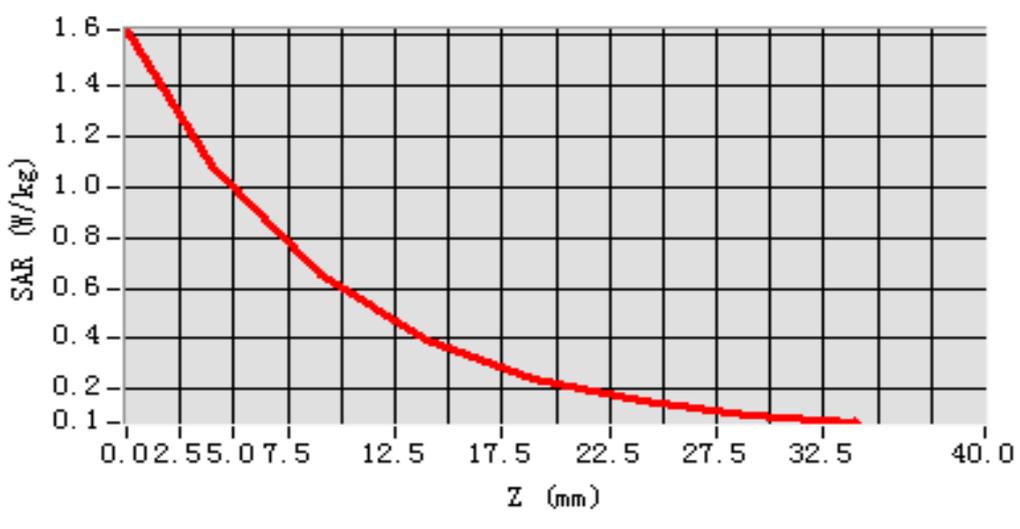
MEAS. 9 Body Plane with Bottom Edge 10mm on Low Channel in WCDMA

Band 2 mode

Test Date: 12/9/2016
Measurement duration: 11 minutes 35 seconds
Signal: WCDMA, f=1852.4 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 54.51; Conductivity: 1.47 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.42
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=8.000000, Y=0.000000
SAR 10g (W/Kg): 0.534101
SAR 1g (W/Kg): 1.024940
Power drift (%): -1.28
3D screen shot

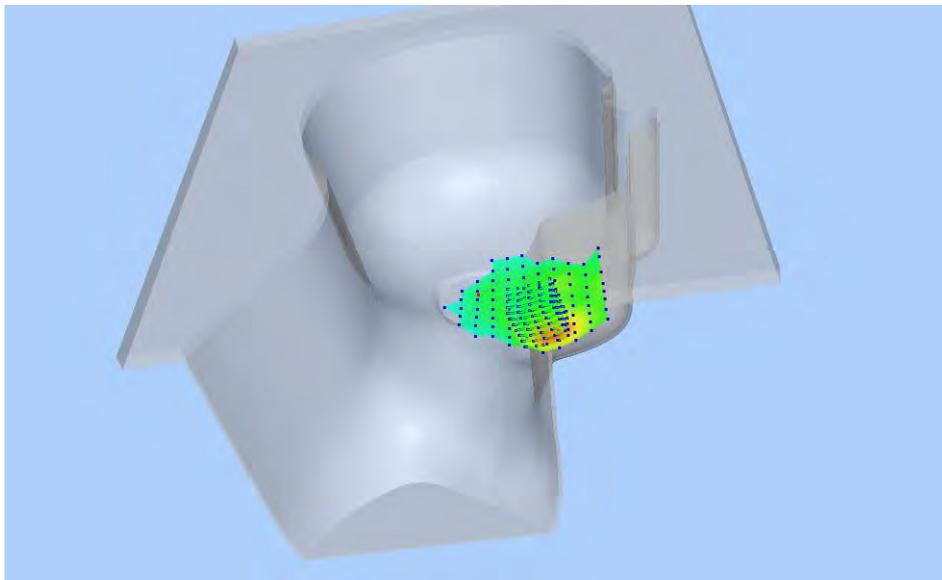


Z Axis Scan

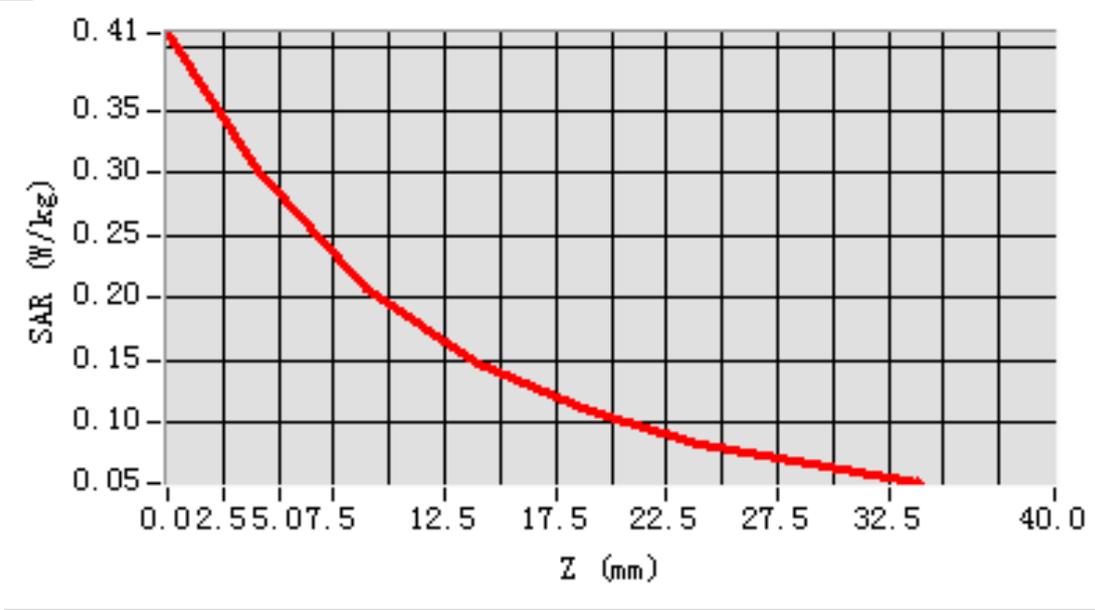


MEAS. 10 Left Head with Cheek on Low Channel in WCDMA Band 4 mode

Test Date: 14/9/2016
Measurement duration: 10 minutes 11 seconds
Signal: WCDMA, f=1712.4 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 41.94; Conductivity: 1.39 S/m
Test condition: Ambient Temperature: 22.3°C, Liquid Temperature: 21.2°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.04
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-48.000000
SAR 10g (W/Kg): 0.184054
SAR 1g (W/Kg): 0.288915
Power drift (%): -3.66
3D screen shot



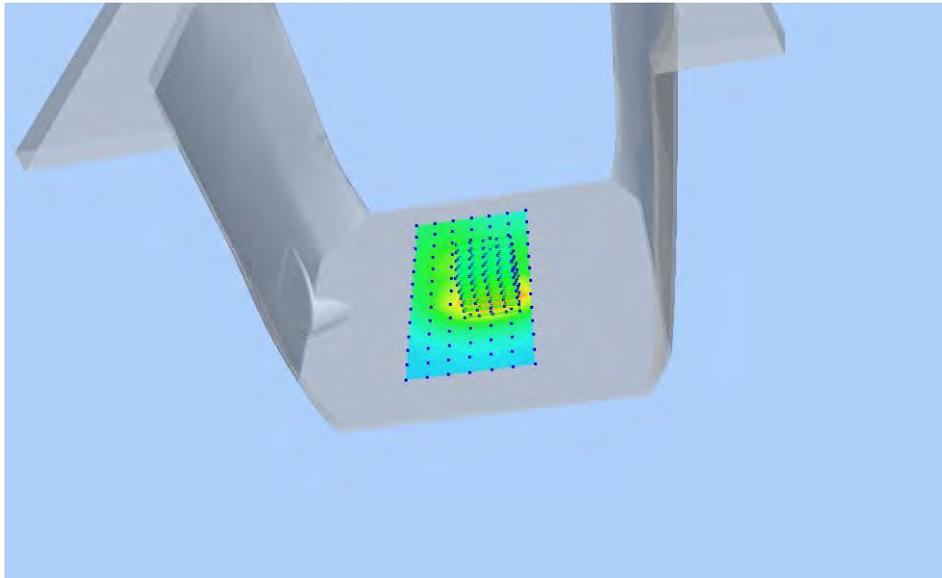
Z Axis Scan



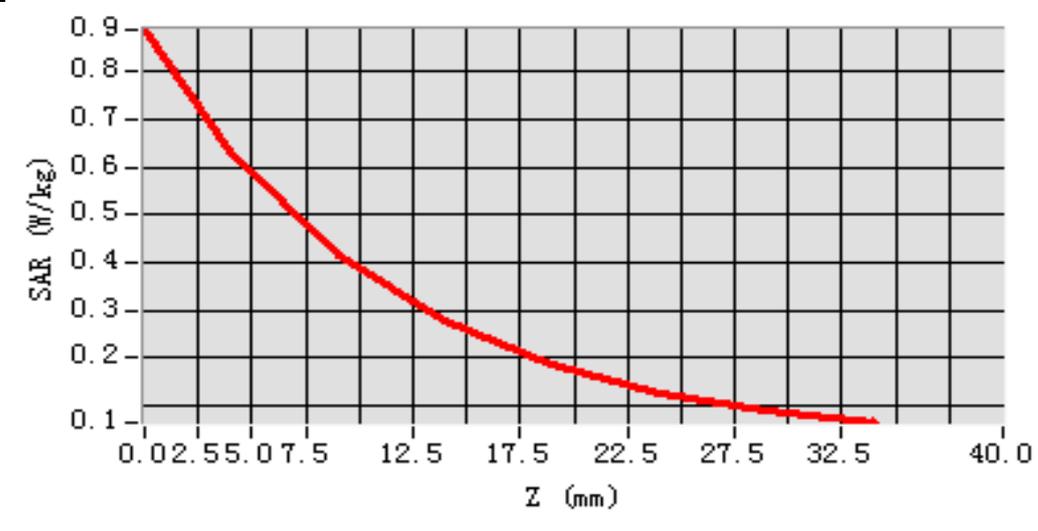
MEAS. 11 Body Plane with Front Side 15mm on Low Channel in WCDMA Band

4 mode

Test Date: 13/9/2016
Measurement duration: 12 minutes 4 seconds
Signal: WCDMA, f=1712.4 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 52.34; Conductivity: 1.41 S/m
Test condition: Ambient Temperature: 22.4°C, Liquid Temperature: 21.5°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.08
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=8.000000, Y=-12.000000
SAR 10g (W/Kg): 0.353885
SAR 1g (W/Kg): 0.594019
Power drift (%): -2.18
3D screen shot



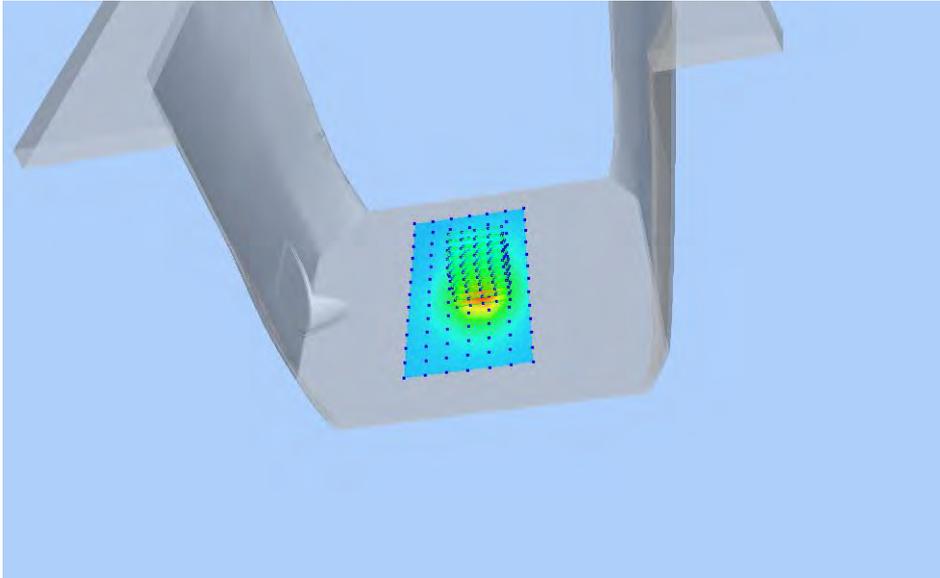
Z Axis Scan



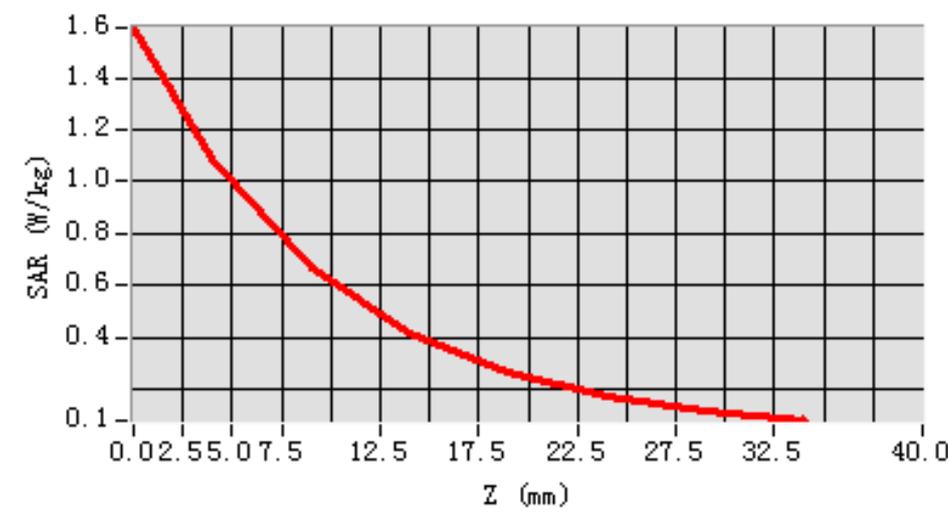
MEAS. 12 Body Plane with Bottom Edge 10mm on High Channel in WCDMA

Band 4 mode

Test Date: 13/9/2016
Measurement duration: 11 minutes 34 seconds
Signal: WCDMA, f=1752.6 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 53.08; Conductivity: 1.46 S/m
Test condition: Ambient Temperature: 22.4°C, Liquid Temperature: 21.5°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.08
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=5.000000, Y=-1.000000
SAR 10g (W/Kg): 0.546822
SAR 1g (W/Kg): 1.017881
Power drift (%): -1.08
3D screen shot

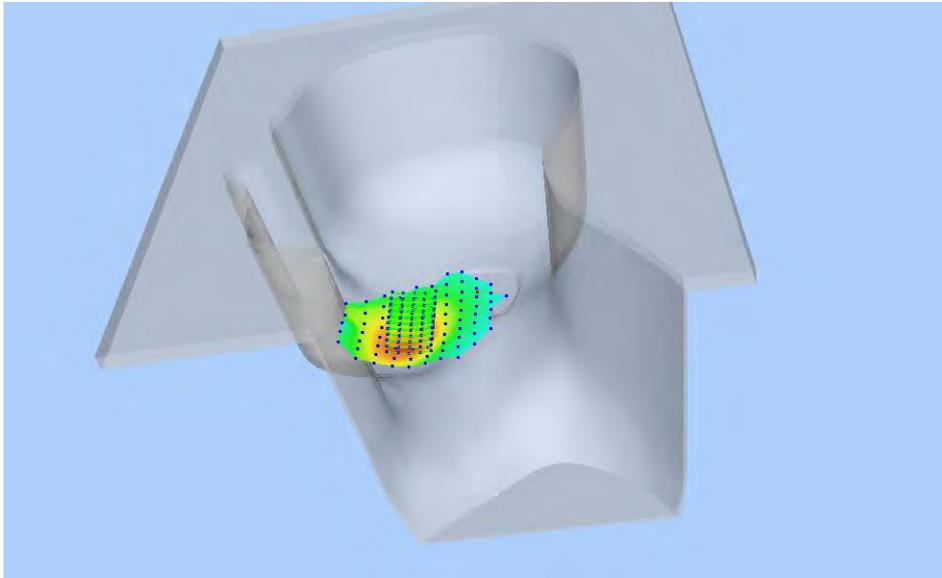


Z Axis Scan

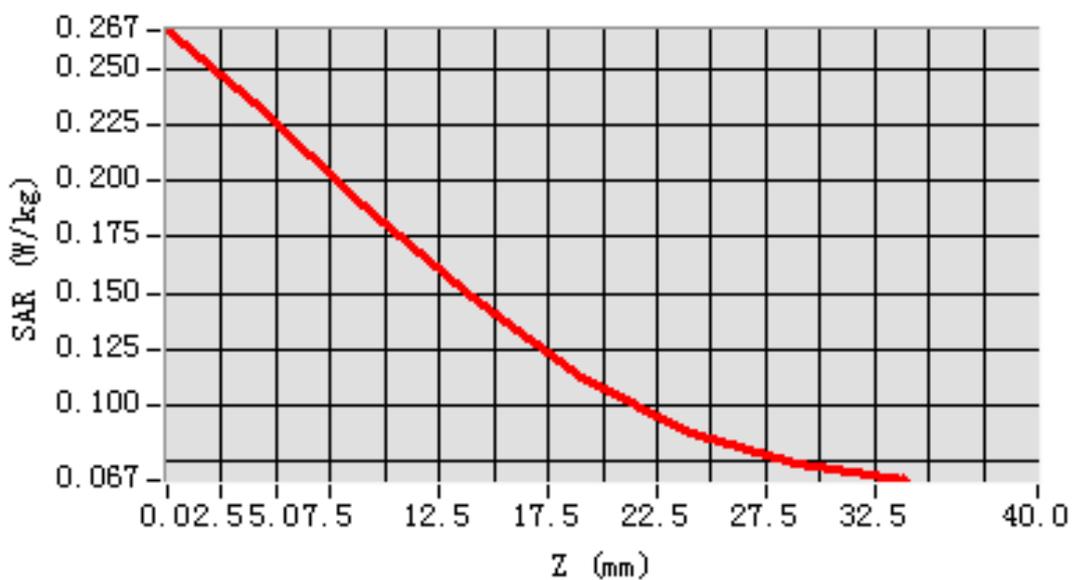


MEAS. 13 Right Head with Cheek on Low Channel in WCDMA Band 5 mode

Test Date: 6/9/2016
Measurement duration: 9 minutes 39 seconds
Signal: WCDMA, f=826.4 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 42.01; Conductivity: 0.89 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.04
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-48.000000
SAR 10g (W/Kg): 0.167242
SAR 1g (W/Kg): 0.224974
Power drift (%): -1.40
3D screen shot



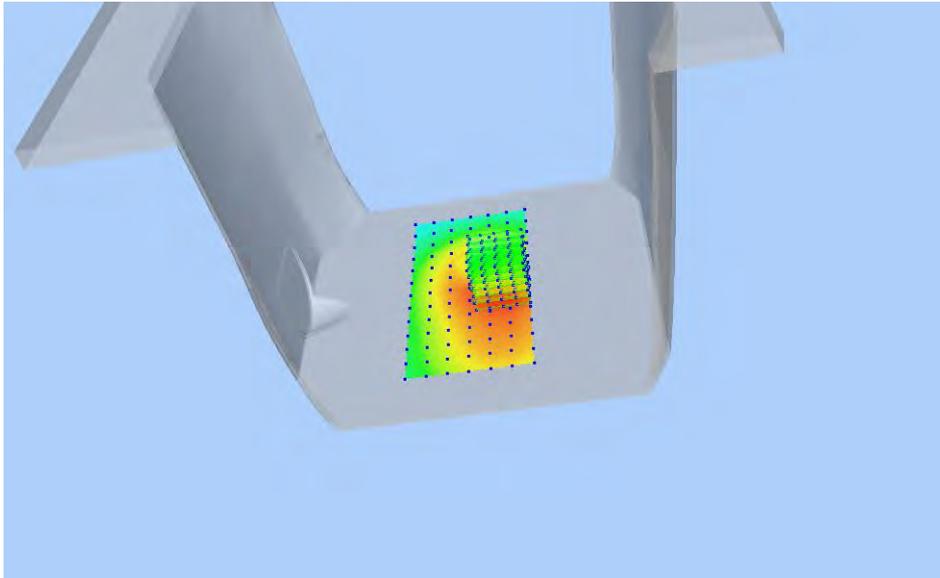
Z Axis Scan



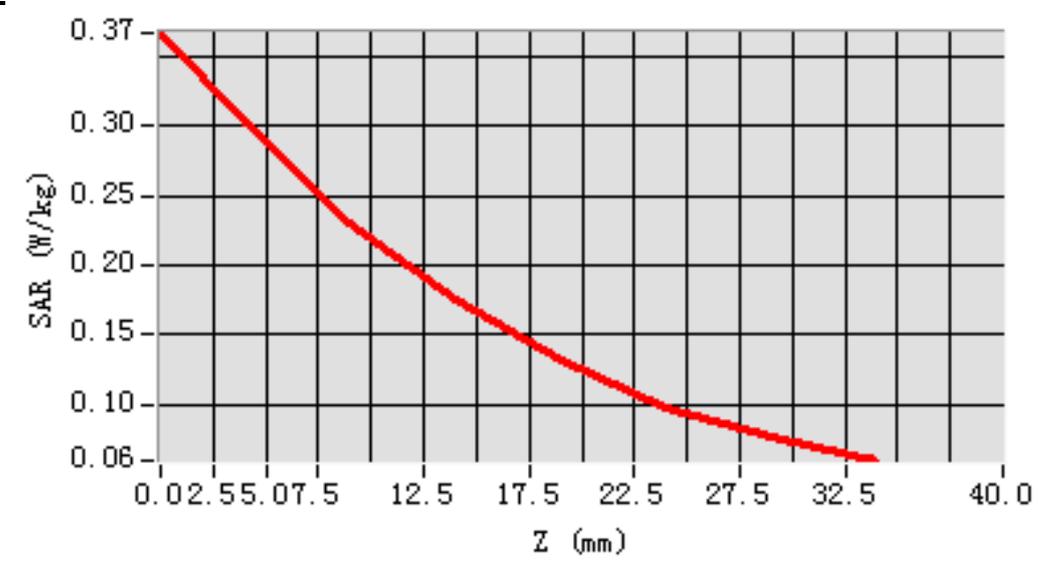
MEAS. 14 Body Plane with Back Side 15mm on Low Channel in WCDMA Band

5 mode

Test Date: 2/9/2016
Measurement duration: 12 minutes 12 seconds
Signal: WCDMA, f=826.4 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 53.90; Conductivity: 0.98 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.12
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=20.000000, Y=0.000000
SAR 10g (W/Kg): 0.218061
SAR 1g (W/Kg): 0.299302
Power drift (%): -1.48
3D screen shot



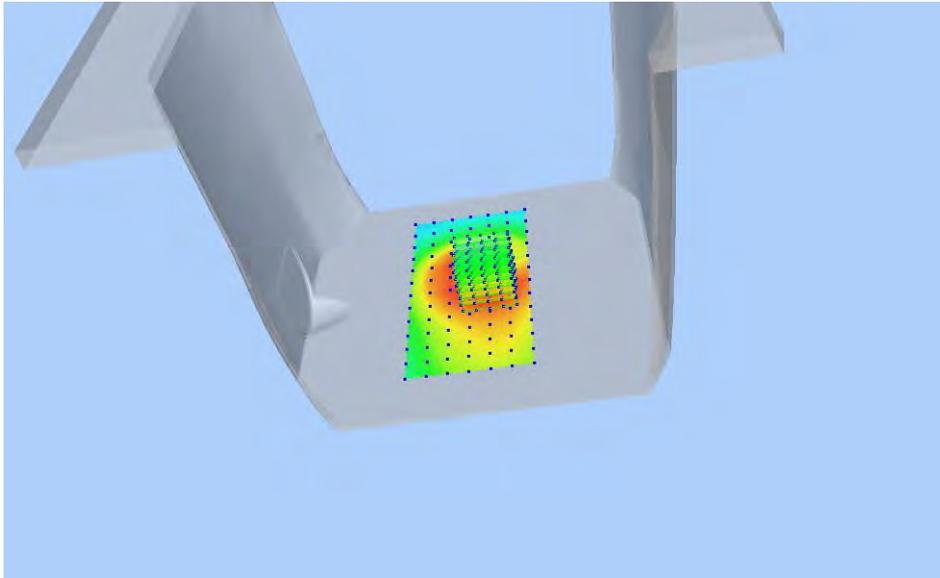
Z Axis Scan



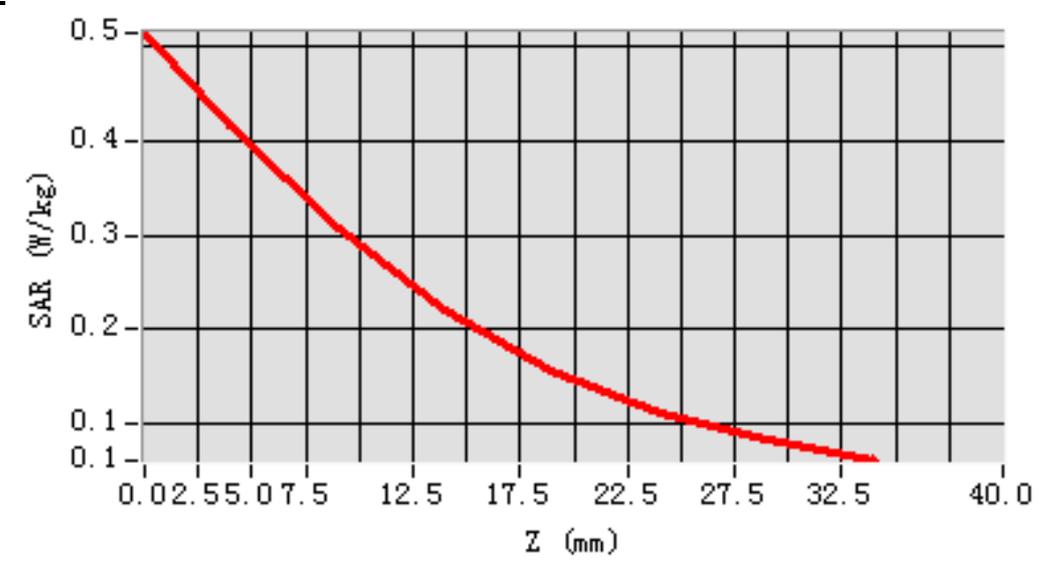
MEAS. 15 Body Plane with Back Side 10mm on Low Channel in WCDMA Band

5 mode

Test Date: 2/9/2016
Measurement duration: 11 minutes 56 seconds
Signal: WCDMA, f=826.4 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 53.90; Conductivity: 0.98 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.12
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=8.000000, Y=0.000000
SAR 10g (W/Kg): 0.286562
SAR 1g (W/Kg): 0.409023
Power drift (%): -1.64
3D screen shot

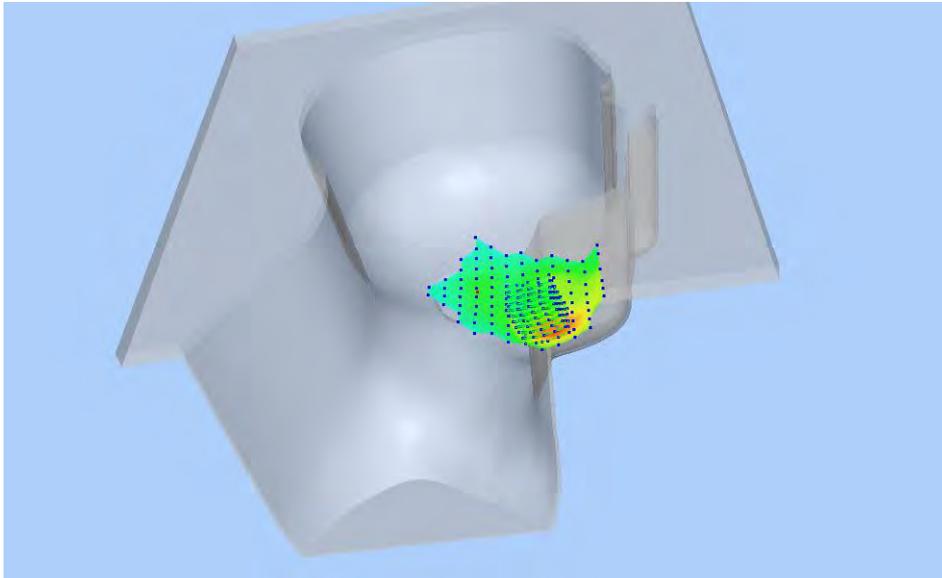


Z Axis Scan

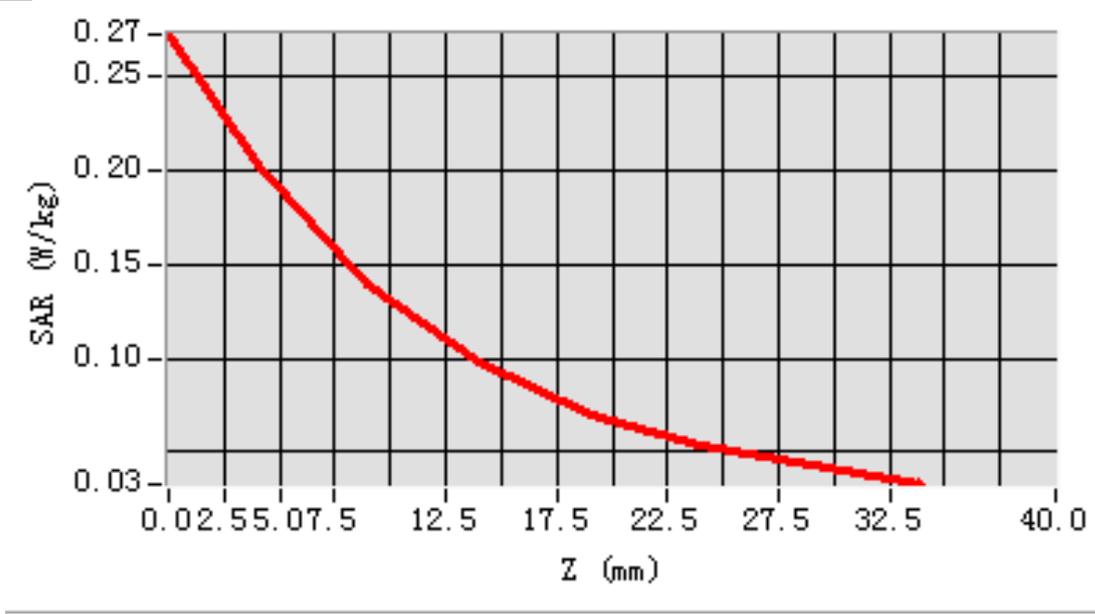


MEAS. 16 Left Head with Cheek on Low Channel in LTE Band 2 mode with 1RB

Test Date: 14/9/2016
Measurement duration: 10 minutes 33 seconds
Signal: LTE, f=1860.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 39.62; Conductivity: 1.36 S/m
Test condition: Ambient Temperature: 22.4°C, Liquid Temperature: 21.0°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.35
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-48.000000
SAR 10g (W/Kg): 0.121728
SAR 1g (W/Kg): 0.190991
Power drift (%): -1.77
3D screen shot



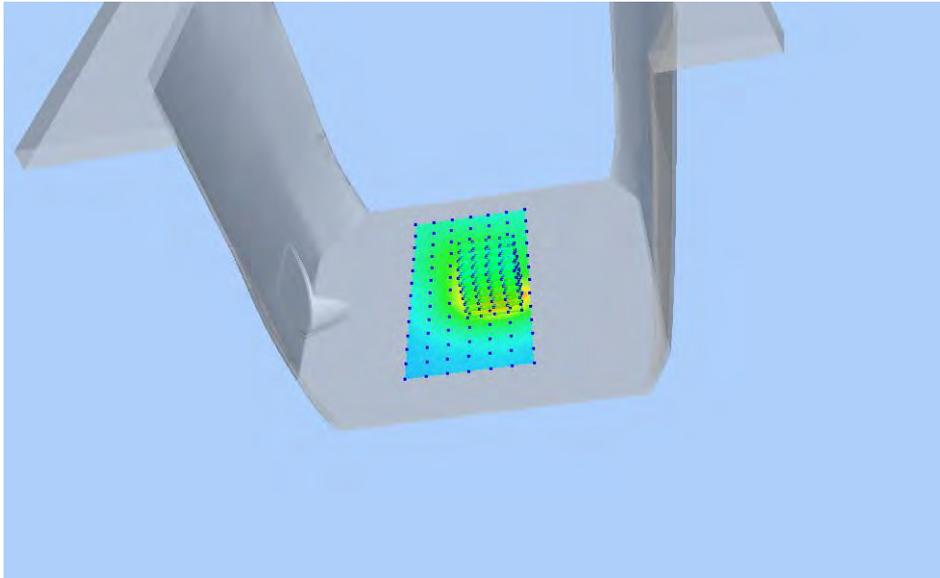
Z Axis Scan



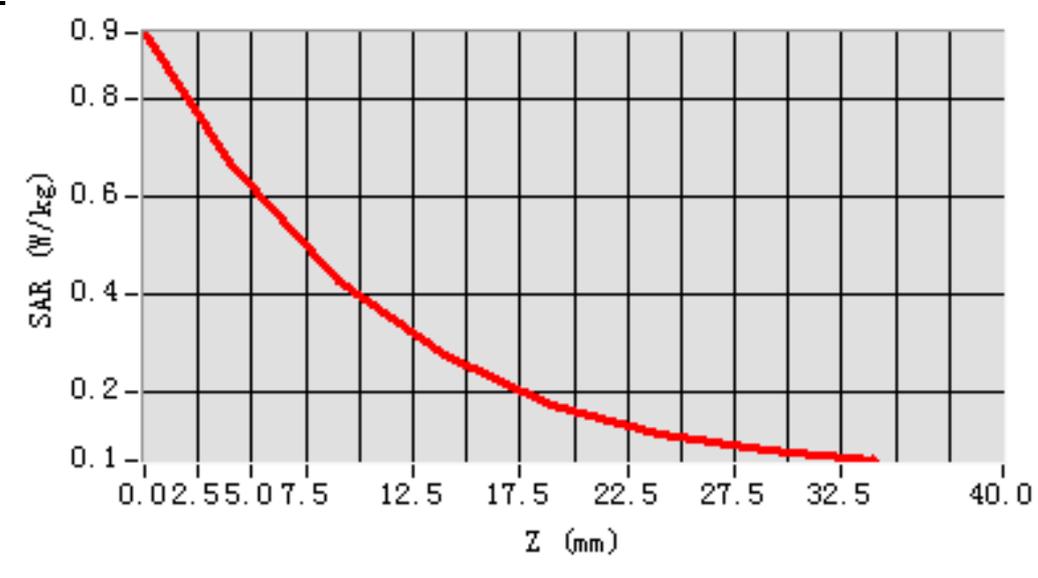
MEAS. 17 Body Plane with Front Side 15mm on Low Channel in LTE Band 2

mode with 1RB

Test Date: 12/9/2016
Measurement duration: 12 minutes 9 seconds
Signal: LTE, f=1860.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 54.43; Conductivity: 1.48 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.42
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=8.000000, Y=-12.000000
SAR 10g (W/Kg): 0.352494
SAR 1g (W/Kg): 0.616013
Power drift (%): -0.71
3D screen shot

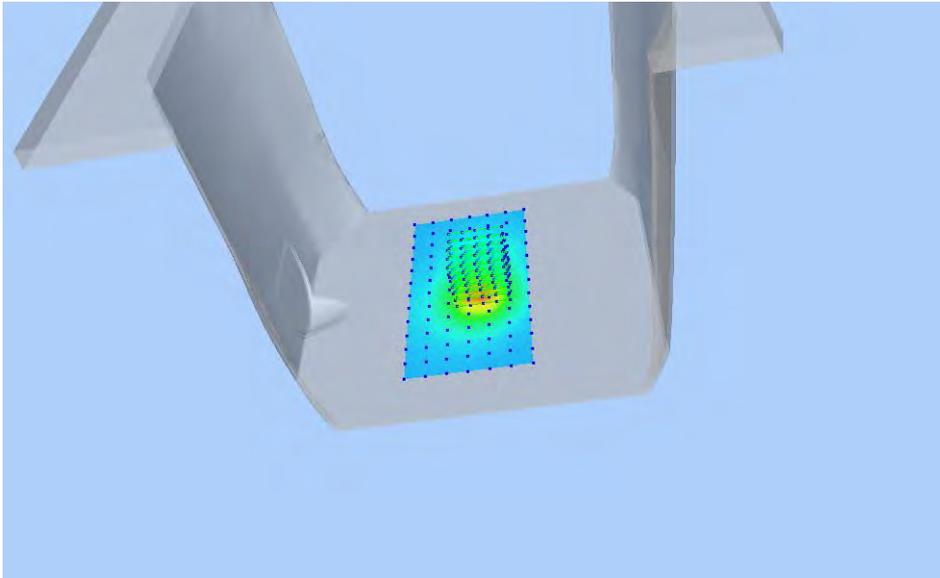


Z Axis Scan

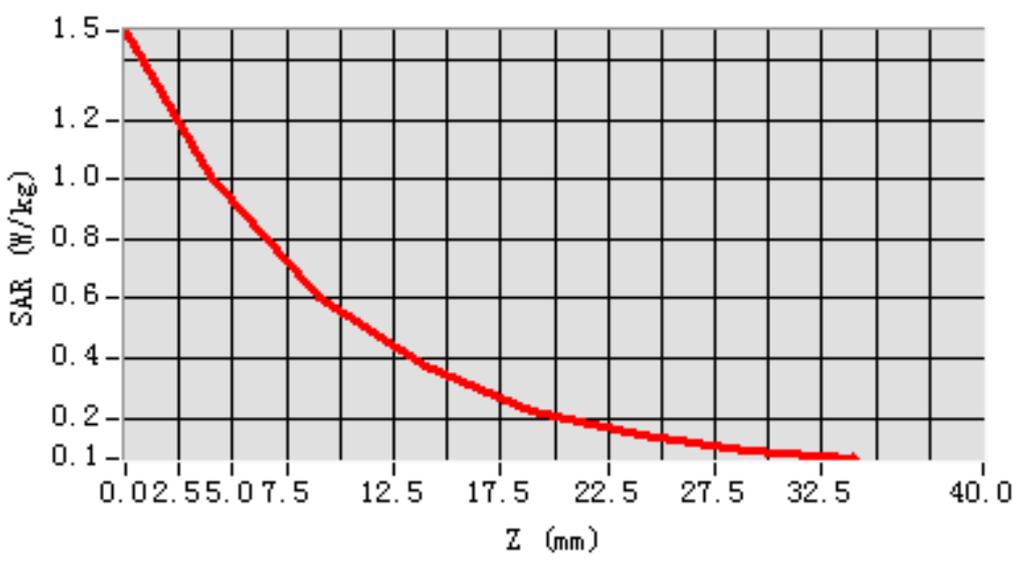


MEAS. 18 Body Plane with Bottom Edge 10mm on Low Channel in LTE Band 2 mode with 1RB

Test Date:	12/9/2016
Measurement duration:	11 minutes 40 seconds
Signal:	LTE, f=1860.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 54.43; Conductivity: 1.48 S/m
Test condition:	Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe:	SN 34/15 SSE2 EPGO265, ConvF: 2.42
Area Scan:	sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=8.000000, Y=0.000000
SAR 10g (W/Kg):	0.493797
SAR 1g (W/Kg):	0.946724
Power drift (%):	-0.84
3D screen shot	



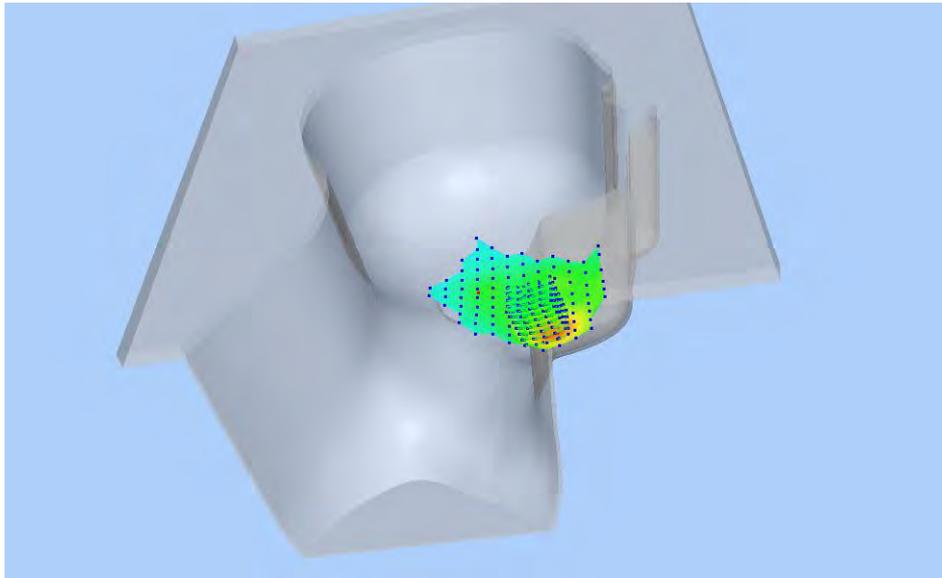
Z Axis Scan



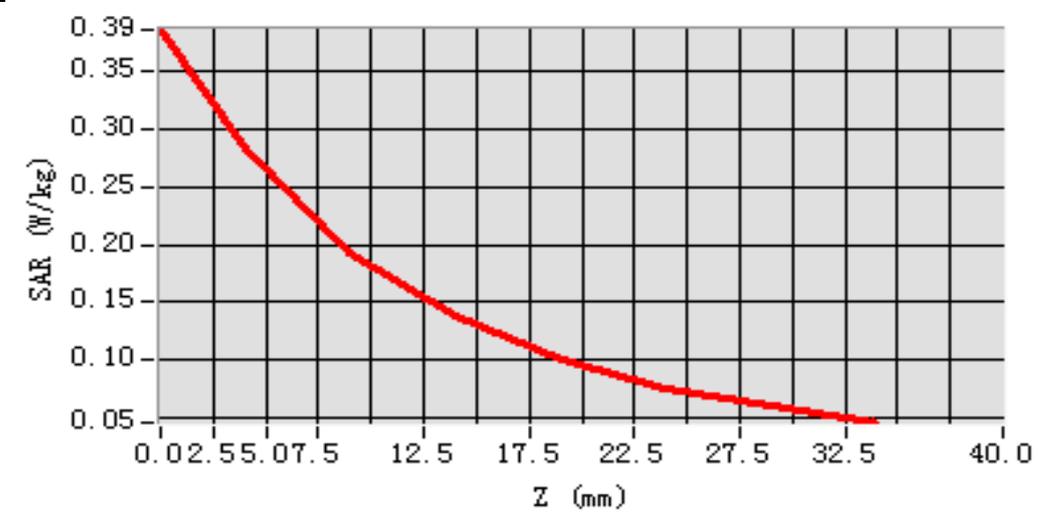
MEAS. 19 Left Head with Cheek on High Channel in LTE Band 4 mode with

1RB

Test Date: 14/9/2016
Measurement duration: 10 minutes 36 seconds
Signal: LTE, f=1745.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 41.89; Conductivity: 1.41 S/m
Test condition: Ambient Temperature: 22.3°C, Liquid Temperature: 21.2°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.04
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-60.000000
SAR 10g (W/Kg): 0.171968
SAR 1g (W/Kg): 0.270926
Power drift (%): -2.32
3D screen shot



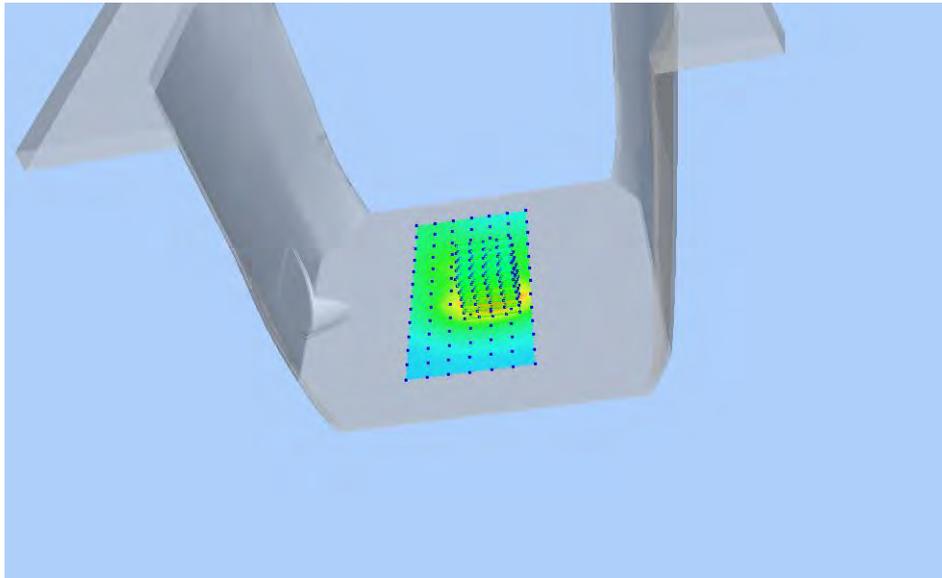
Z Axis Scan



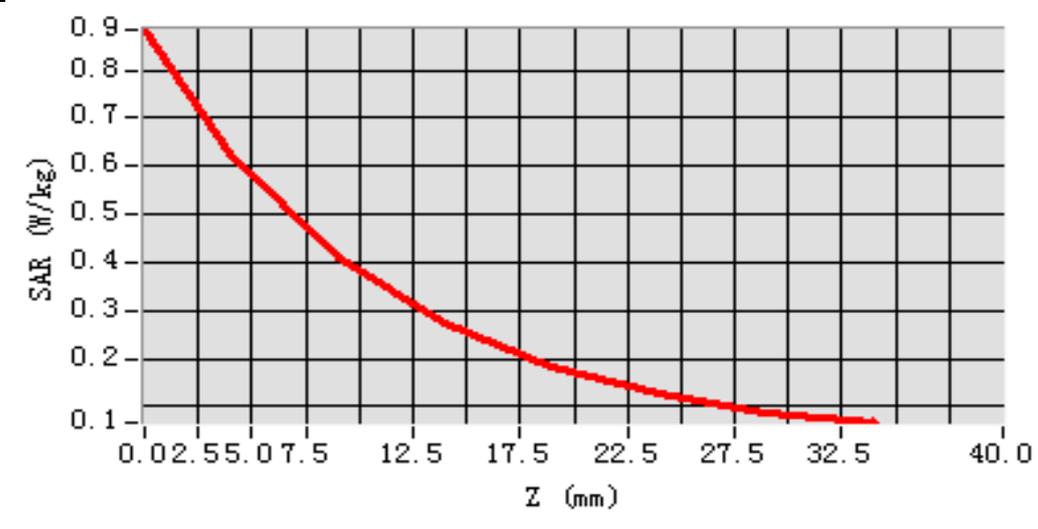
MEAS. 20 Body Plane with Front Side 15mm on High Channel in LTE Band 4

mode with 1RB

Test Date: 13/9/2016
Measurement duration: 11 minutes 59 seconds
Signal: LTE, f=1745.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 53.15; Conductivity: 1.45 S/m
Test condition: Ambient Temperature: 22.4°C, Liquid Temperature: 21.5°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.08
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=8.000000, Y=-12.000000
SAR 10g (W/Kg): 0.346858
SAR 1g (W/Kg): 0.585267
Power drift (%): -2.40
3D screen shot

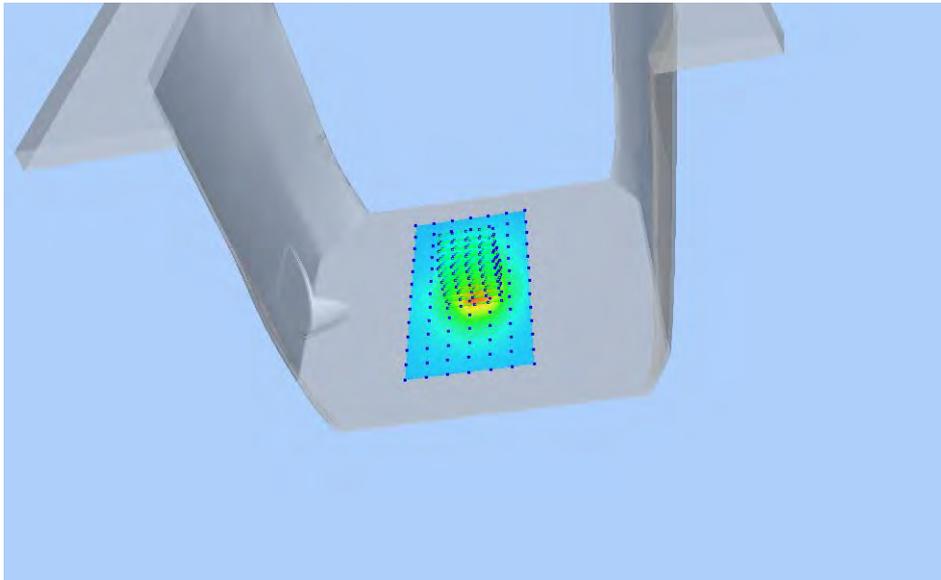


Z Axis Scan

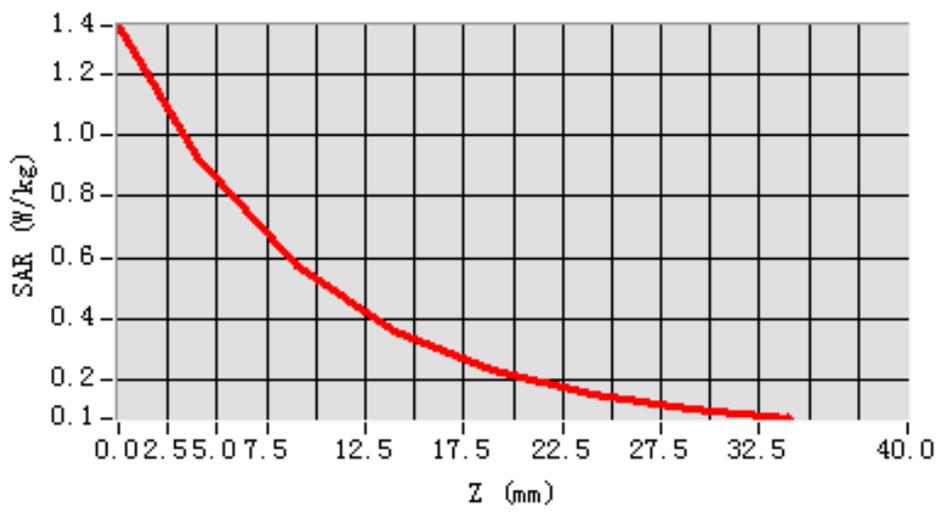


MEAS. 21 Body Plane with Bottom Edge 10mm on Low Channel in LTE Band 4 mode with 1RB

Test Date:	13/9/2016
Measurement duration:	10 minutes 45 seconds
Signal:	LTE, f=1720.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 53.30; Conductivity: 1.43 S/m
Test condition:	Ambient Temperature: 22.4°C, Liquid Temperature: 21.5°C
Probe:	SN 34/15 SSE2 EPGO265, ConvF: 2.08
Area Scan:	sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=1.000000, Y=1.000000
SAR 10g (W/Kg):	0.472556
SAR 1g (W/Kg):	0.868754
Power drift (%):	-1.52
3D screen shot	

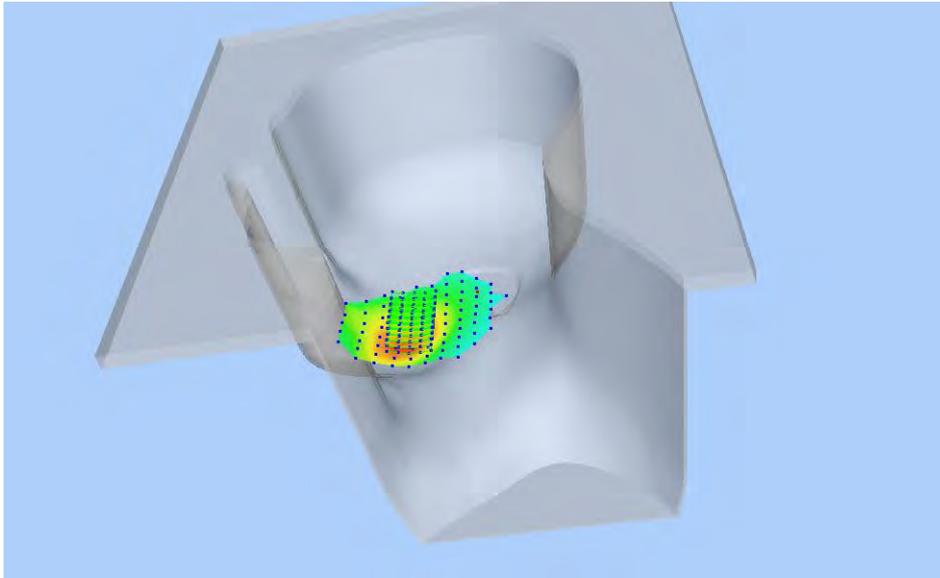


Z Axis Scan

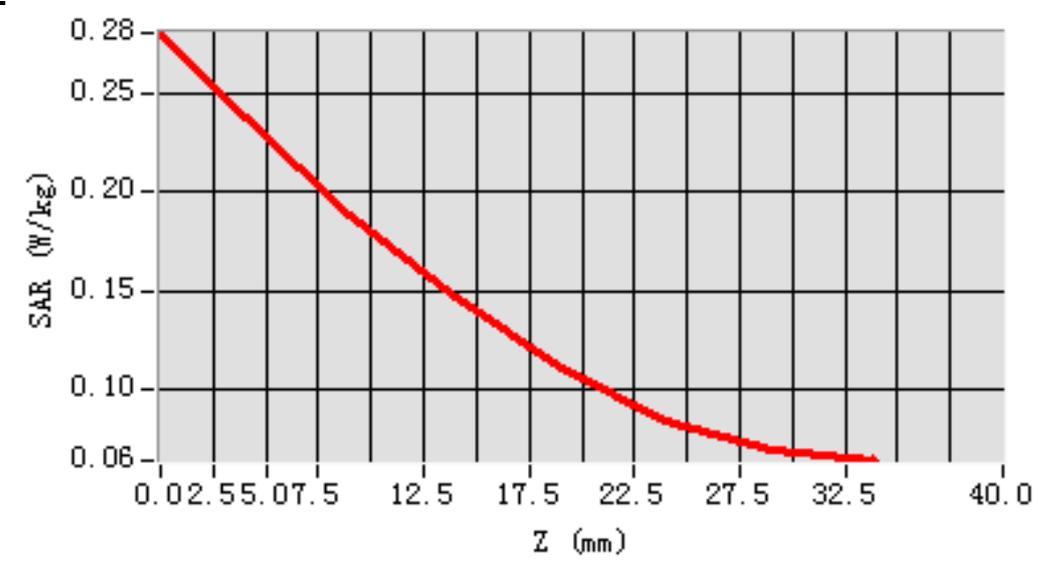


MEAS. 22 Right Head with Cheek on Middle Channel in LTE Band 5 mode with 1RB

Test Date: 6/9/2016
Measurement duration: 9 minutes 40 seconds
Signal: LTE, f=836.5 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 41.22; Conductivity: 0.88 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.04
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-48.000000
SAR 10g (W/Kg): 0.166724
SAR 1g (W/Kg): 0.228413
Power drift (%): -0.16
3D screen shot



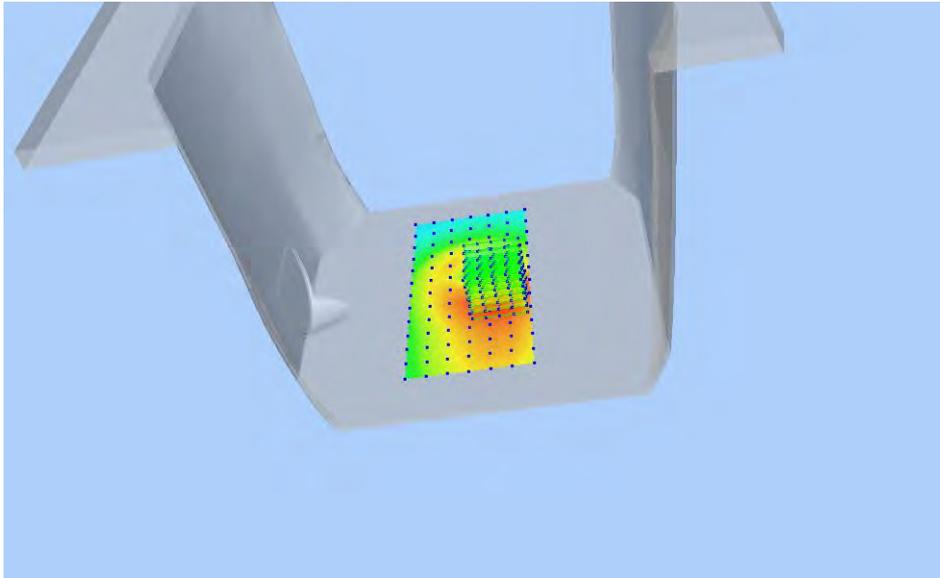
Z Axis Scan



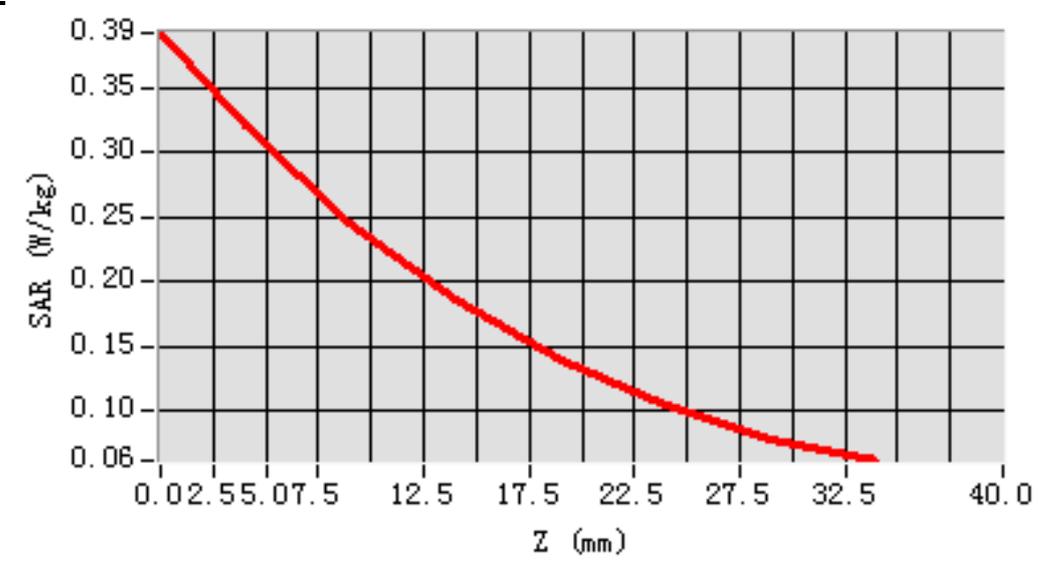
MEAS. 23 Body Plane with Back Side 15mm on Middle Channel in LTE Band 5

mode with 1RB

Test Date: 2/9/2016
Measurement duration: 12 minutes 19 seconds
Signal: LTE, f=836.5 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 53.00; Conductivity: 0.99 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.12
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=20.000000, Y=-12.000000
SAR 10g (W/Kg): 0.227400
SAR 1g (W/Kg): 0.319784
Power drift (%): -0.91
3D screen shot

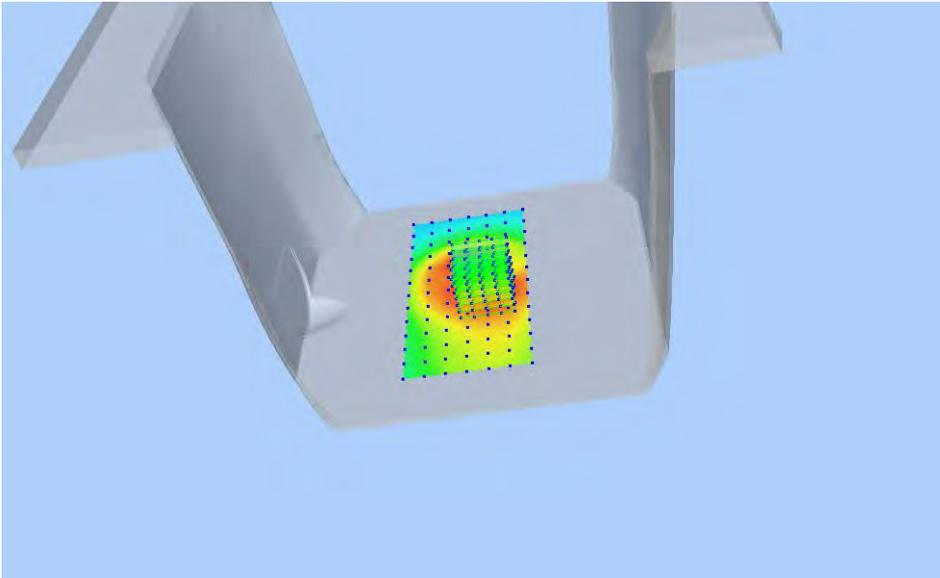


Z Axis Scan

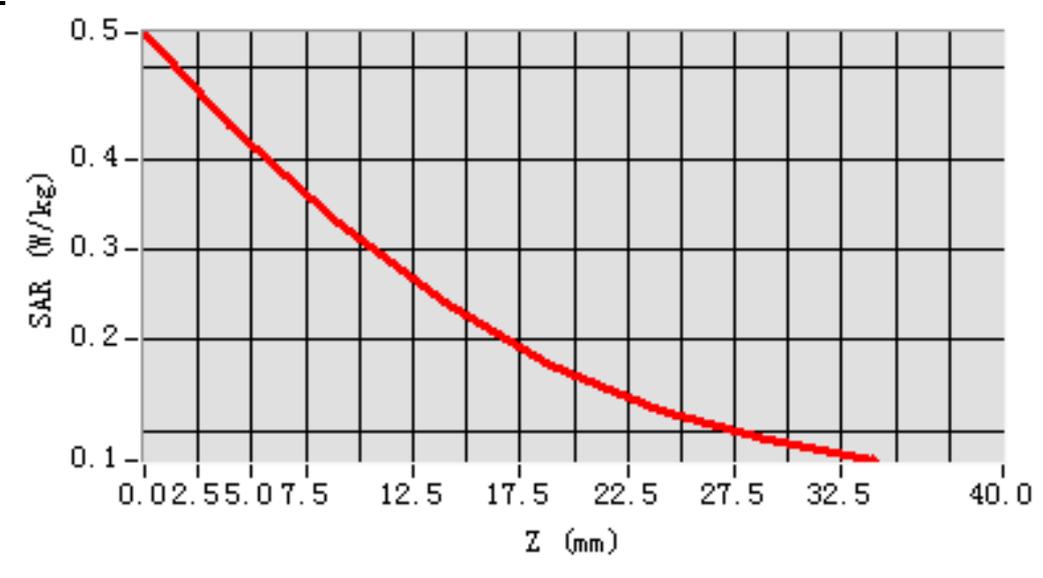


MEAS. 24 Body Plane with Back Side 10mm on Middle Channel in LTE Band 5 mode with 1RB

Test Date: 2/9/2016
Measurement duration: 11 minutes 52 seconds
Signal: LTE, f=836.5 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 53.00; Conductivity: 0.99 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.12
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=8.000000, Y=-12.000000
SAR 10g (W/Kg): 0.303298
SAR 1g (W/Kg): 0.440380
Power drift (%): -1.86
3D screen shot



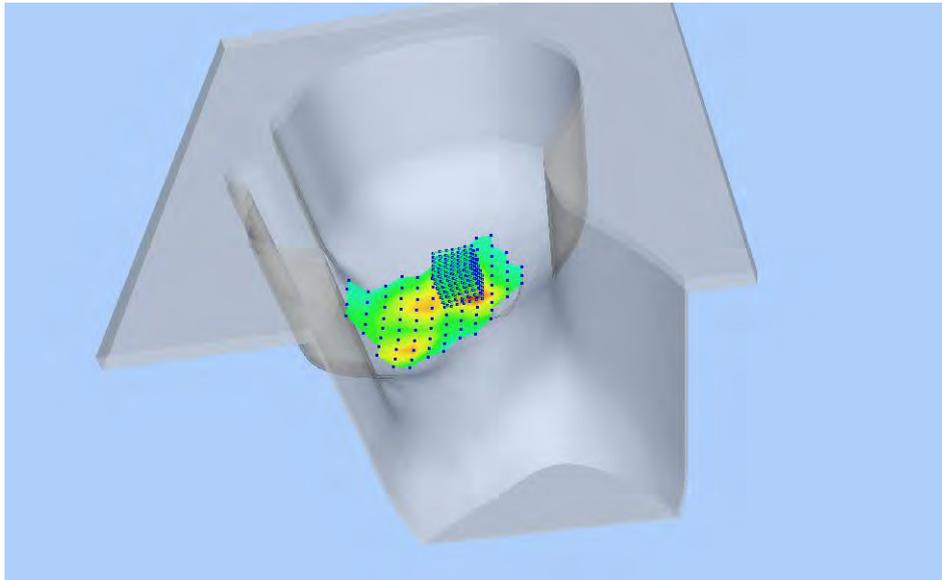
Z Axis Scan



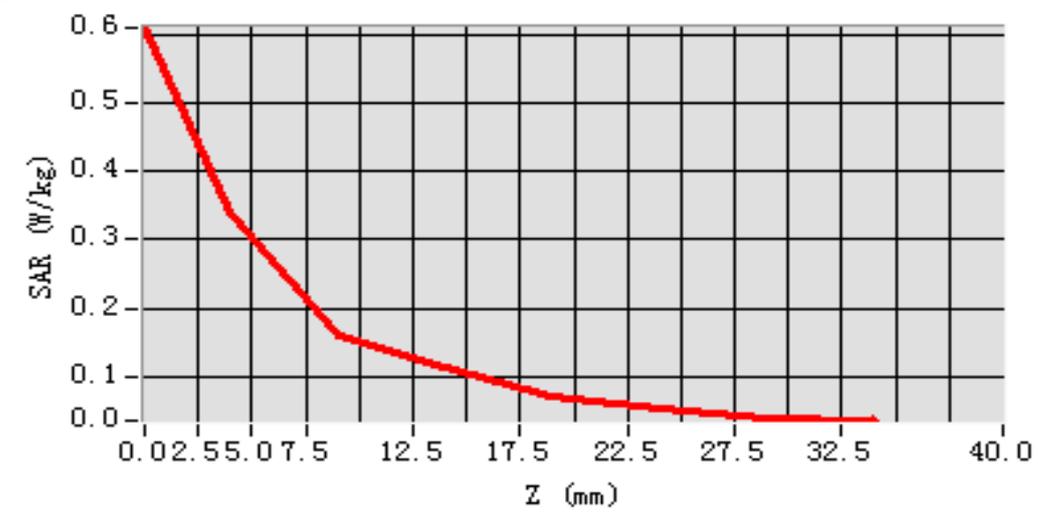
MEAS. 25 Right Head with Cheek on Low Channel in LTE Band 7 mode with

1RB

Test Date: 8/9/2016
Measurement duration: 12 minutes 45 seconds
Signal: LTE, f=2510.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 38.81; Conductivity: 1.90 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.5°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.36
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 7x7x7,dx=5mm, dy=5mm, dz=5mm,Complete
Maximum location: X=-12.000000, Y=0.000000
SAR 10g (W/Kg): 0.168708
SAR 1g (W/Kg): 0.312285
Power drift (%): 1.24
3D screen shot



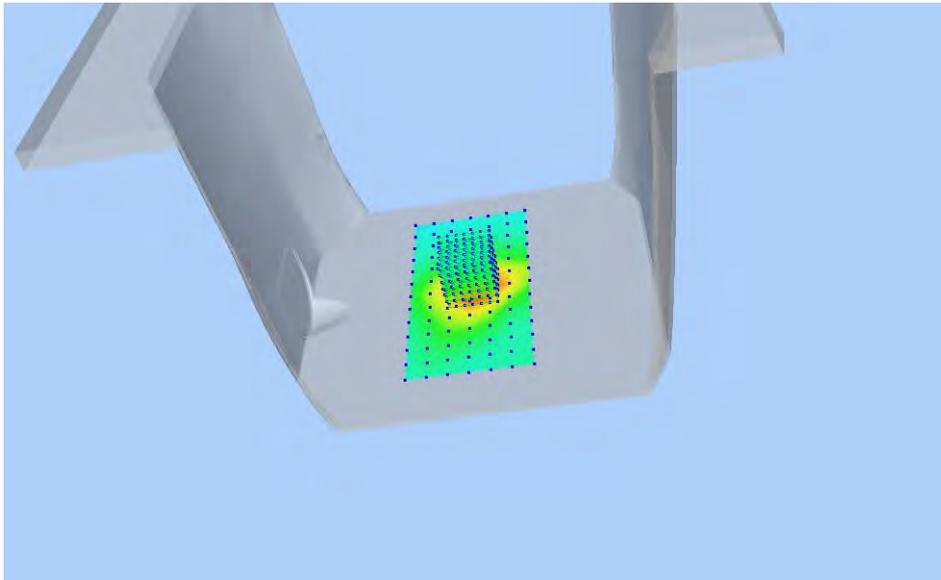
Z Axis Scan



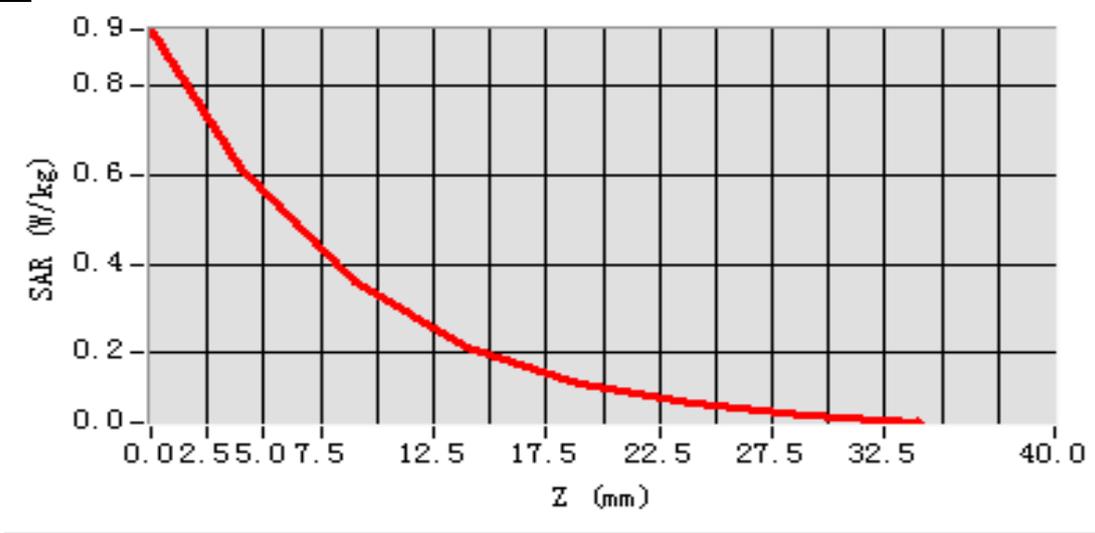
MEAS. 26 Body Plane with Back Side 15mm on Low Channel in LTE Band 7

mode with 1RB

Test Date:	7/9/2016
Measurement duration:	17 minutes 34 seconds
Signal:	LTE, f=2510.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 51.91; Conductivity: 2.09 S/m
Test condition:	Ambient Temperature: 22.9°C, Liquid Temperature: 21.6°C
Probe:	SN 34/15 SSE2 EPGO265, ConvF: 2.43
Area Scan:	sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan:	7x7x7,dx=5mm, dy=5mm, dz=5mm,Complete
Maximum location:	X=20.000000, Y=-12.000000
SAR 10g (W/Kg):	0.345543
SAR 1g (W/Kg):	0.596786
Power drift (%):	-2.18
3D screen shot	



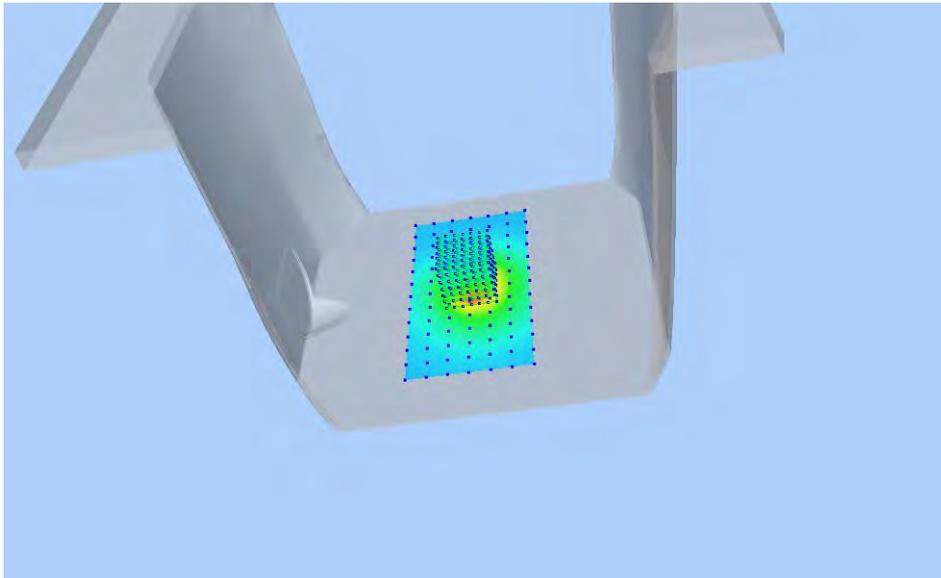
Z Axis Scan



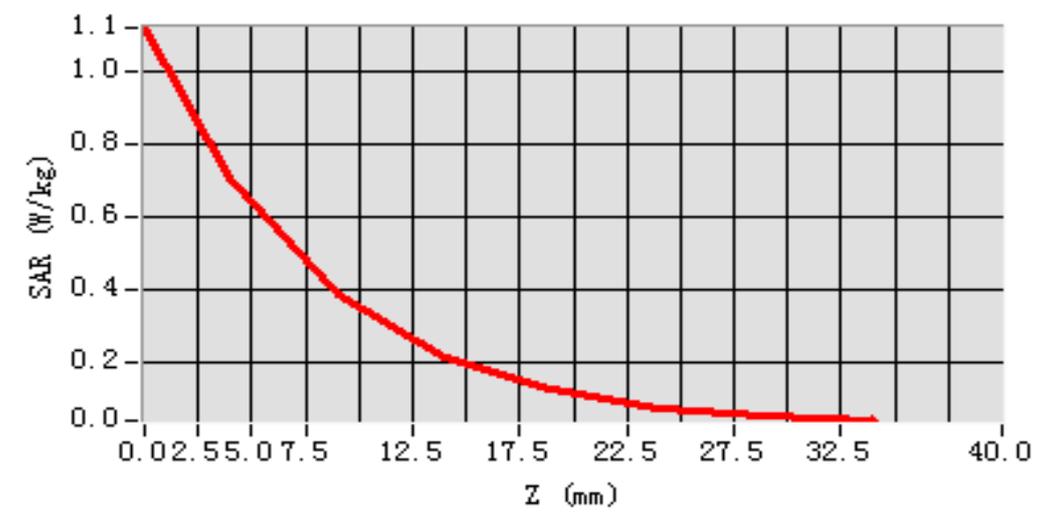
MEAS. 27 Body Plane with Bottom Edge 10mm on Middle Channel in LTE Band

7 mode with 1RB

Test Date: 7/9/2016
Measurement duration: 17 minutes 56 seconds
Signal: LTE, f=2535.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 52.02; Conductivity: 2.14 S/m
Test condition: Ambient Temperature: 22.9°C, Liquid Temperature: 21.6°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.43
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 7x7x7,dx=5mm, dy=5mm, dz=5mm,Complete
Maximum location: X=-4.000000, Y=0.000000
SAR 10g (W/Kg): 0.345355
SAR 1g (W/Kg): 0.680772
Power drift (%): -0.44
3D screen shot



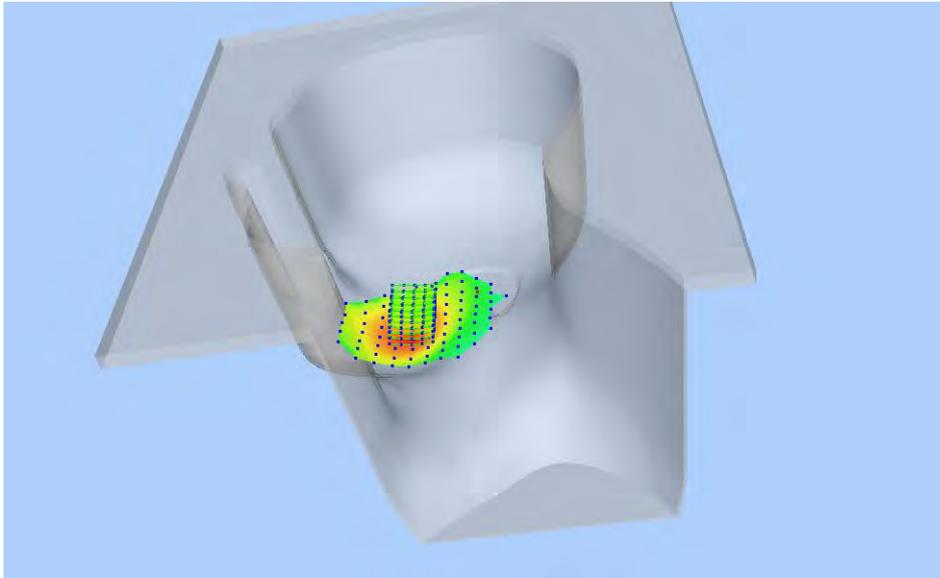
Z Axis Scan



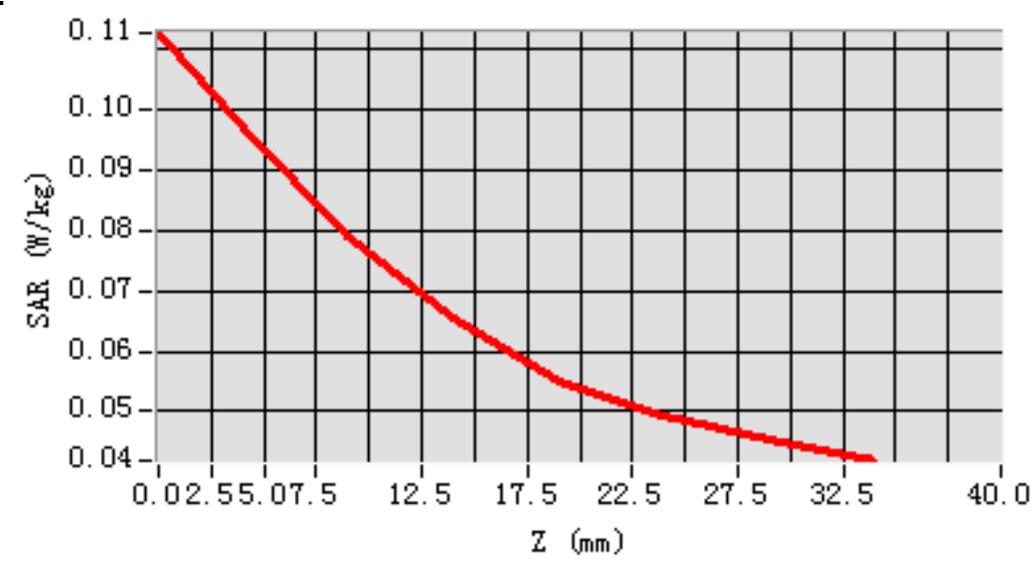
MEAS. 28 Right Head with Cheek on High Channel in LTE Band 12 mode with

1RB

Test Date: 6/9/2016
Measurement duration: 9 minutes 35 seconds
Signal: LTE, f=711.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 43.12; Conductivity: 0.87 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 1.81
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-36.000000
SAR 10g (W/Kg): 0.073030
SAR 1g (W/Kg): 0.093257
Power drift (%): -2.08
3D screen shot



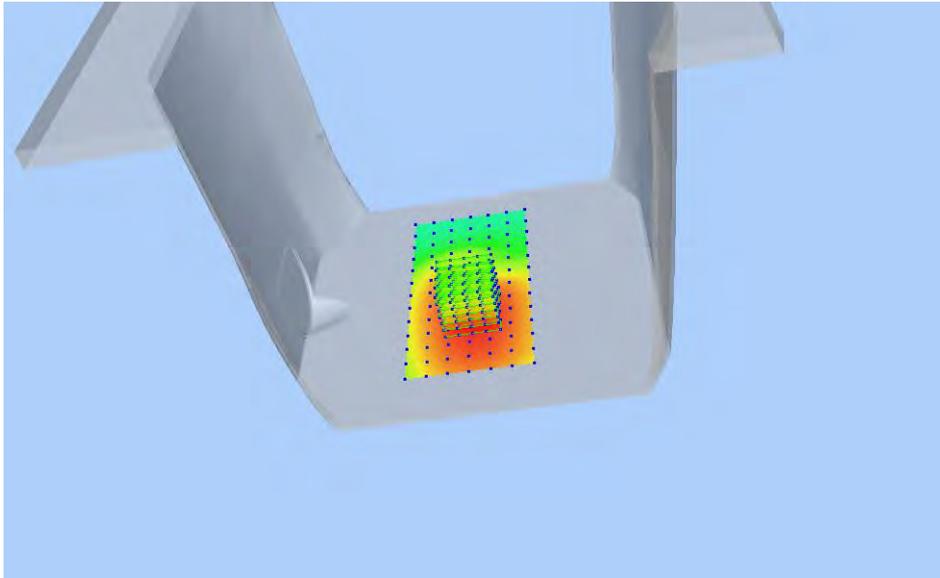
Z Axis Scan



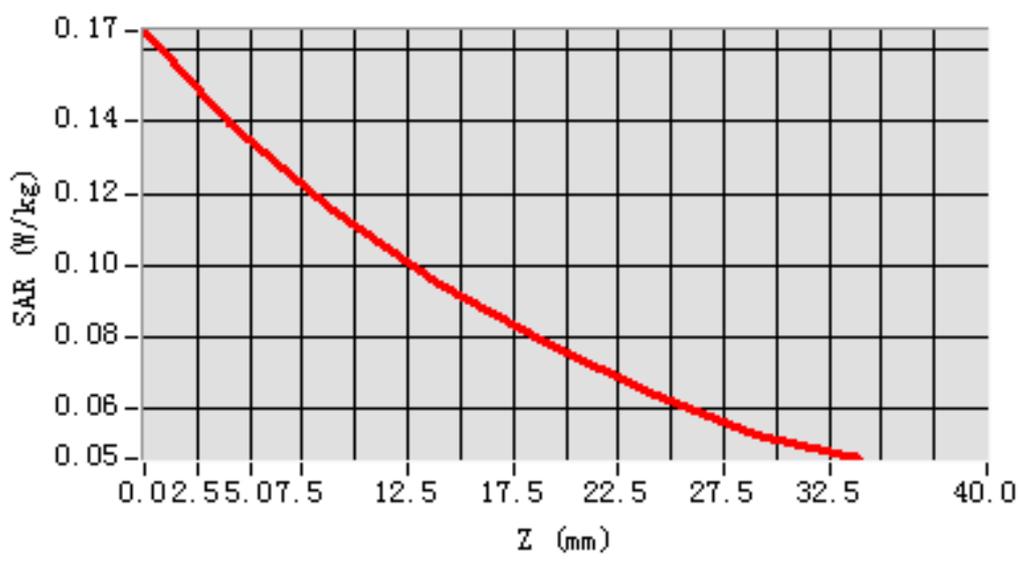
MEAS. 29 Body Plane with Back Side 15mm on High Channel in LTE Band 12

mode with 1RB

Test Date: 5/9/2016
Measurement duration: 10 minutes 16 seconds
Signal: LTE, f=711.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 57.26; Conductivity: 0.94 S/m
Test condition: Ambient Temperature: 22.8°C, Liquid Temperature: 21.5°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 1.88
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-4.000000, Y=-24.000000
SAR 10g (W/Kg): 0.109258
SAR 1g (W/Kg): 0.137357
Power drift (%): -3.10
3D screen shot



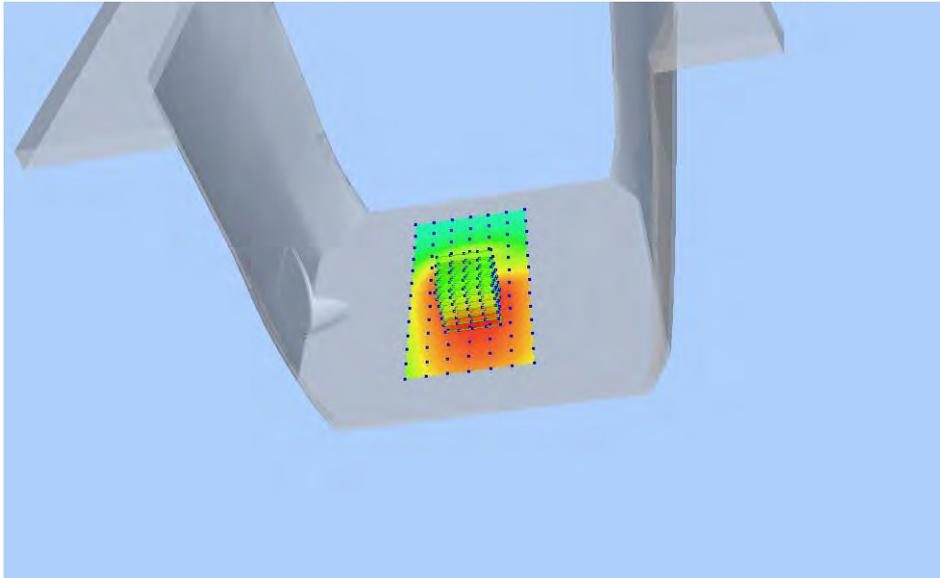
Z Axis Scan



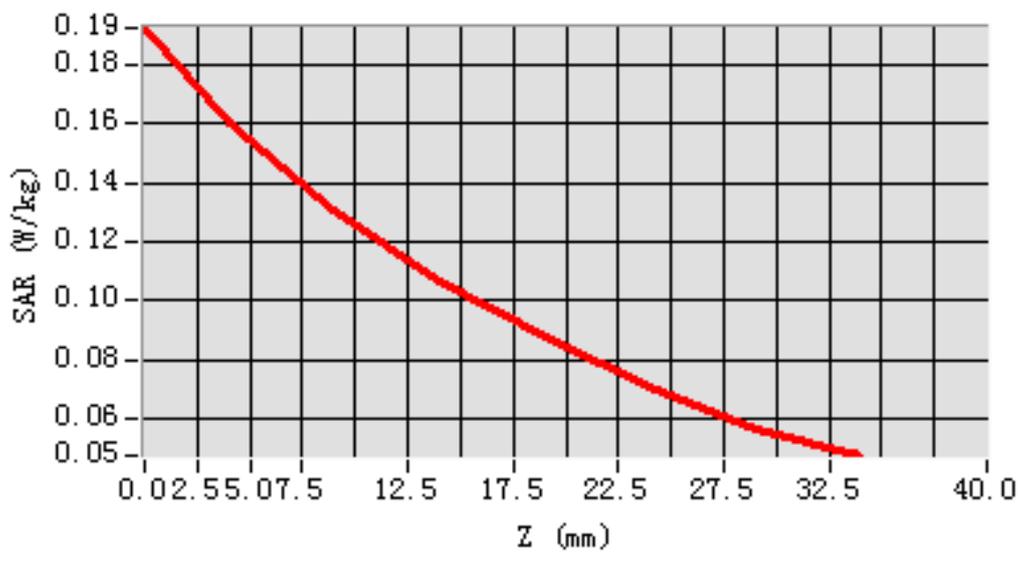
MEAS. 30 Body Plane with Back Side 10mm on High Channel in LTE Band 12

mode with 1RB

Test Date: 5/9/2016
Measurement duration: 10 minutes 20 seconds
Signal: LTE, f=711.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 57.26; Conductivity: 0.94 S/m
Test condition: Ambient Temperature: 22.8°C, Liquid Temperature: 21.5°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 1.88
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-4.000000, Y=-24.000000
SAR 10g (W/Kg): 0.124874
SAR 1g (W/Kg): 0.158198
Power drift (%): -1.71
3D screen shot



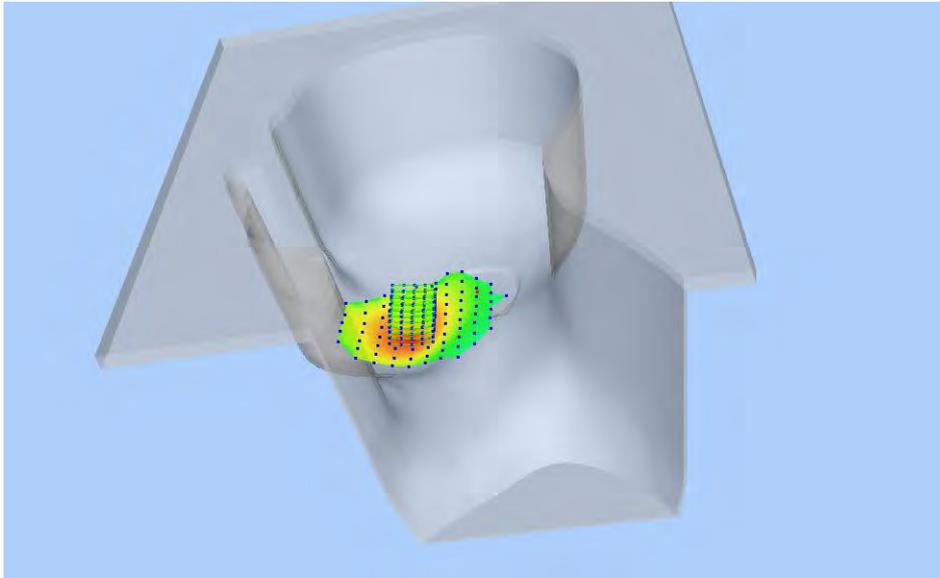
Z Axis Scan



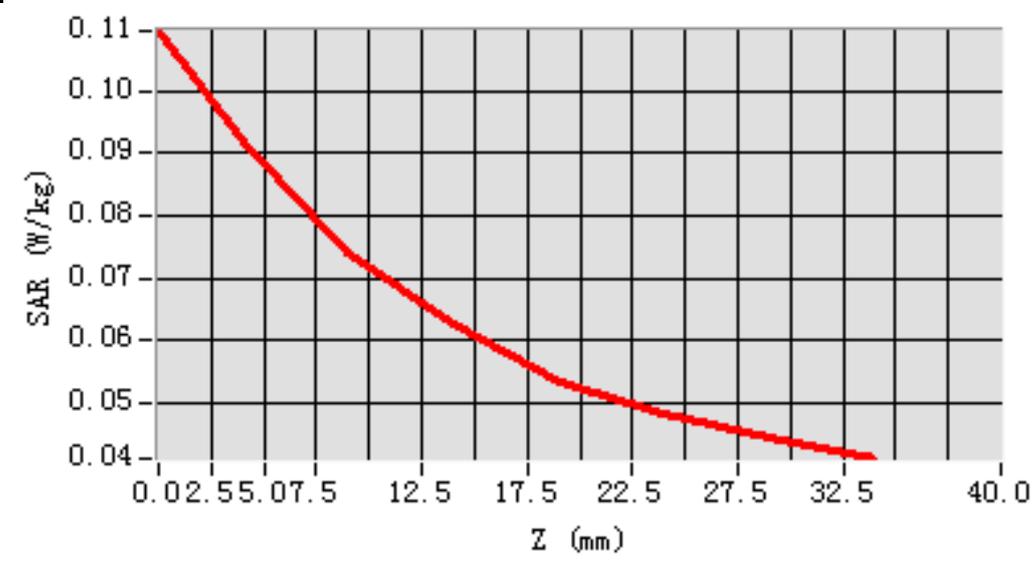
MEAS. 31 Right Head with Cheek on High Channel in LTE Band 17 mode with

1RB

Test Date: 6/9/2016
Measurement duration: 9 minutes 29 seconds
Signal: LTE, f=711.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 43.12; Conductivity: 0.87 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.3°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 1.81
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-48.000000, Y=-36.000000
SAR 10g (W/Kg): 0.069166
SAR 1g (W/Kg): 0.088269
Power drift (%): -1.61
3D screen shot



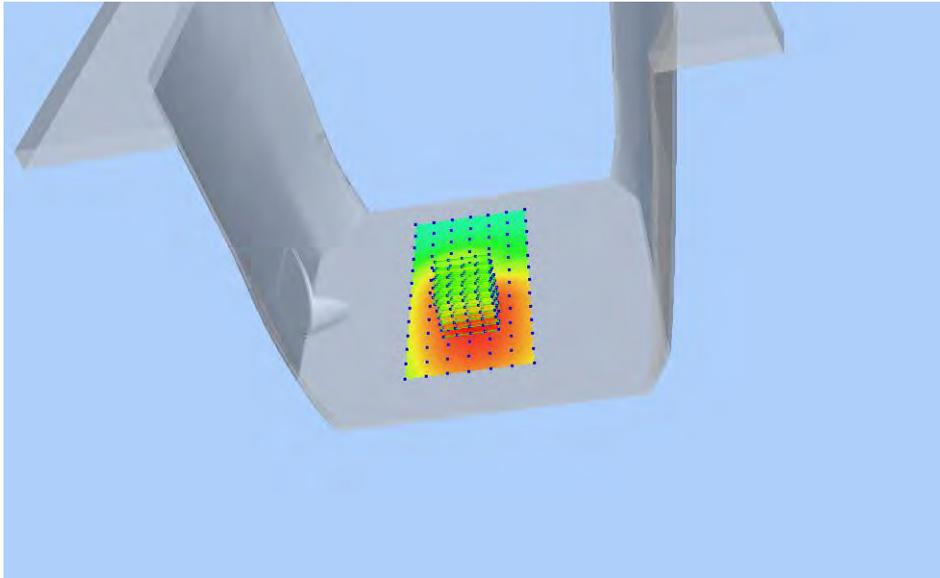
Z Axis Scan



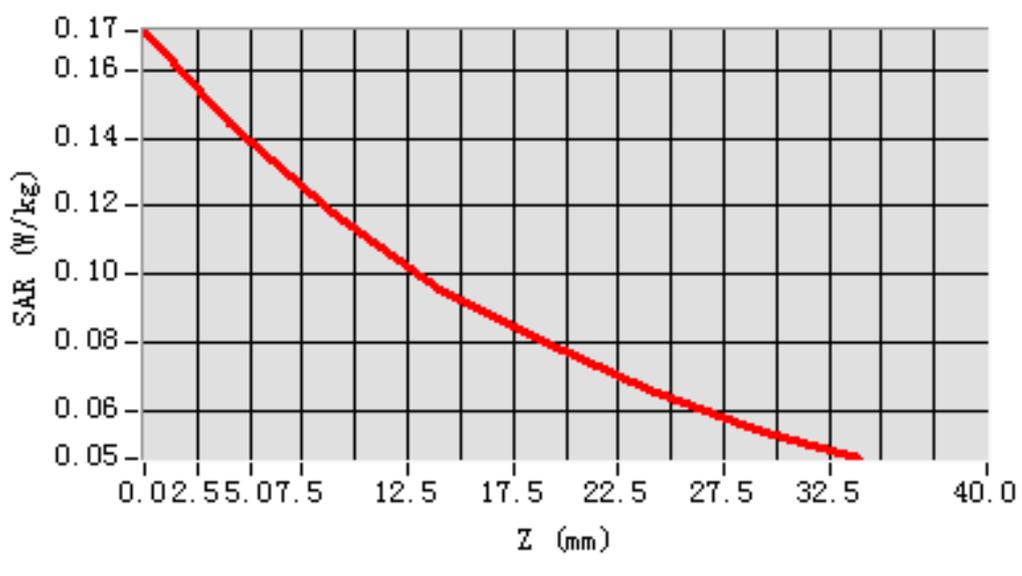
MEAS. 32 Body Plane with Back Side 15mm on High Channel in LTE Band 17

mode with 1RB

Test Date: 5/9/2016
Measurement duration: 10 minutes 7 seconds
Signal: LTE, f=711.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 57.26; Conductivity: 0.94 S/m
Test condition: Ambient Temperature: 22.8°C, Liquid Temperature: 21.5°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 1.88
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-4.000000, Y=-24.000000
SAR 10g (W/Kg): 0.112183
SAR 1g (W/Kg): 0.140914
Power drift (%): -3.06
3D screen shot



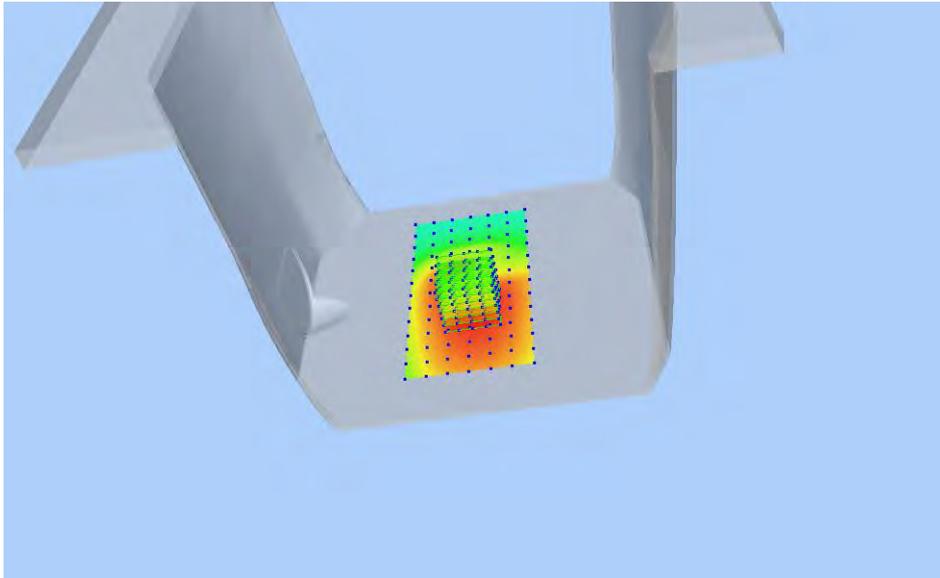
Z Axis Scan



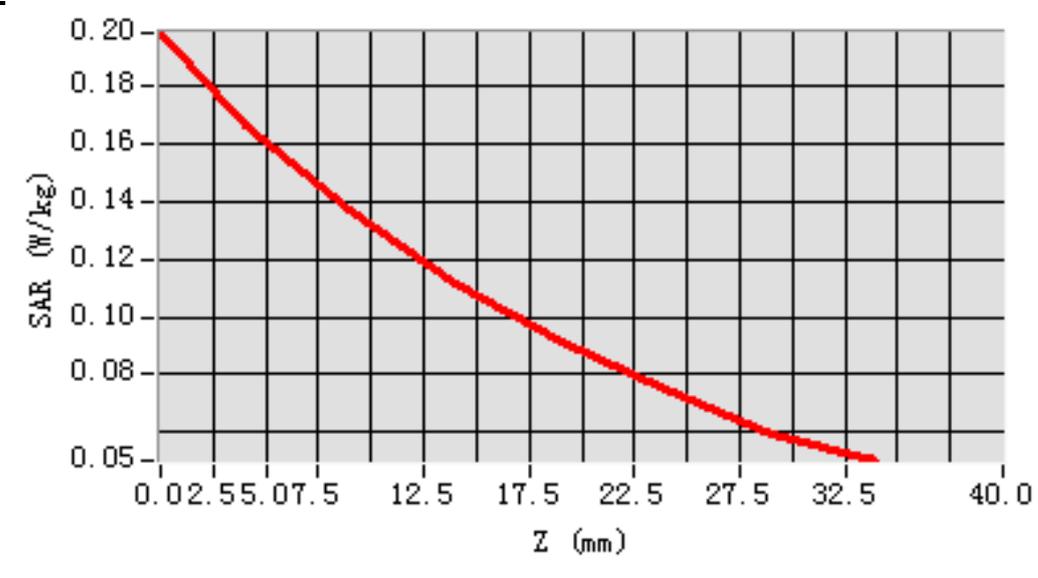
MEAS. 33 Body Plane with Back Side 10mm on High Channel in LTE Band 17

mode with 1RB

Test Date: 5/9/2016
Measurement duration: 10 minutes 20 seconds
Signal: LTE, f=711.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 57.26; Conductivity: 0.94 S/m
Test condition: Ambient Temperature: 22.8°C, Liquid Temperature: 21.5°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 1.88
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-4.000000, Y=-24.000000
SAR 10g (W/Kg): 0.129363
SAR 1g (W/Kg): 0.163400
Power drift (%): -2.21
3D screen shot

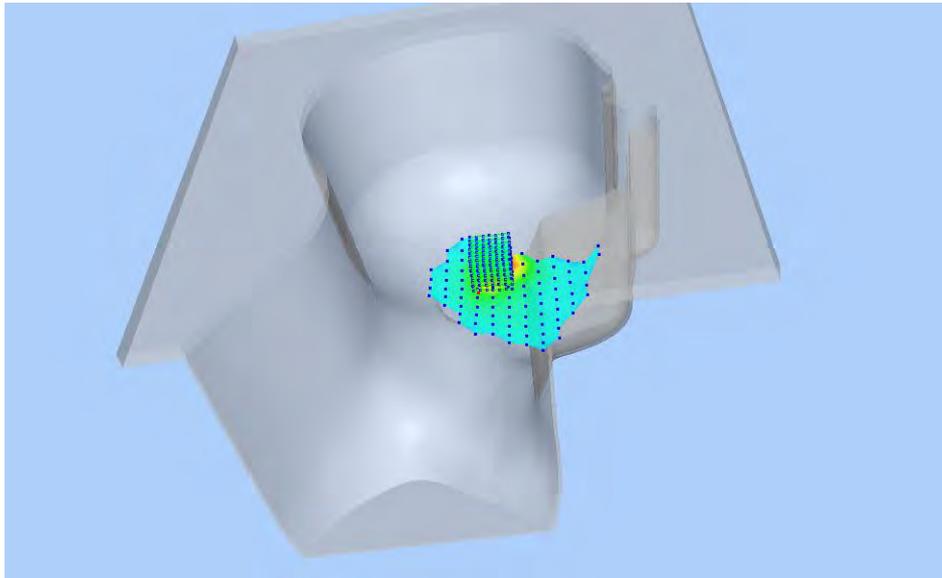


Z Axis Scan



MEAS. 34 Left Head with Cheek on High Channel in IEEE 802.b mode with antenna 0

Test Date: 8/9/2016
Measurement duration: 12 minutes 16 seconds
Signal: WLAN, f=2462.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 39.91; Conductivity: 1.86 S/m
Test condition: Ambient Temperature: 22.6°C, Liquid Temperature: 21.5°C
Probe: SN 34/15 SSE2 EPGO265, ConvF: 2.47
Area Scan: sam_direct_droit2_surf12mm.txt, h= 5.00 mm
Zoom Scan: 7x7x7,dx=5mm, dy=5mm, dz=5mm,Complete
Maximum location: X=-12.000000, Y=12.000000
SAR 10g (W/Kg): 0.209175
SAR 1g (W/Kg): 0.400202
Power drift (%): 1.63
3D screen shot



Z Axis Scan

