

FCC
SAR
TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
CDMA/LTE 4G Mobile Phone

ISSUED TO
Hoperun mMax Digital Inc.

4790 Irvine Blvd., Ste. 105-431 Irvine, CA 92620



Tested by: Zong Liyao
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Date: Sep. 19, 2017

Approved by: Wei Yanquan
Wei Yanquan
(Chief Engineer)

Date: Sep. 19, 2017

Report No.: BL-EC1780083-703

EUT Name: CDMA/LTE 4G Mobile Phone

Model Name: S502

Brand Name: Jabr box

FCC ID: 2AKQN-S502

Test Standard: FCC 47 CFR Part 2.1093
ANSI C95.1: 1999, IEEE 1528: 2013

Maximum SAR: Head (1 g): 0.595 W/kg
Body-worn (1 g): 1.166 W/kg
Hotspot (1 g): 1.069 W/kg

Test Conclusion: Pass

Test Date: Aug. 15, 2017 ~ Aug. 31, 2017

Date of Issue: Sep. 19, 2017

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Sep. 19, 2017</u>	<u>Initial Issue</u>

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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

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	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196. The laboratory is a testing organization accredited by American Association for Laboratory Accreditation (A2LA) according to ISO/IEC 17025. The accreditation certificate is 4344.01. 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.
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	45 to 60%
Ambient Pressure	100 to 102KPa

1.4 Announce

- (1) The test report reference to the report template version v2.3.
- (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	Hoperun mMax Digital Inc.
Address	4790 Irvine Blvd., Ste. 105-431 Irvine, CA 92620

2.2 Manufacturer Information

Manufacturer	Hoperun mMax Digital Inc.
Address	4790 Irvine Blvd., Ste. 105-431 Irvine, CA 92620

2.3 Factory Information

Factory	Hoperun mMax Digital Inc.
Address	4790 Irvine Blvd., Ste. 105-431 Irvine, CA 92620

2.4 General Description for Equipment under Test (EUT)

EUT Name	CDMA/LTE 4G Mobile Phone
Model Name Under Test	S502
Series Model Name	N/A
Description of Model Name Differentiation	N/A
Hardware Version	S502_MAIN_V1.2
Software Version	LLDJ902.1.0_M200
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A
Network and Wireless connectivity	3G Network CDMA/EVDO: CDMA2000,CDMA 1xEVDO, BC 0, BC1, BC10, Rev.0/A 4G Network FDD LTE Band 2/4/5/12/13/25/26 TDD LTE Band 41 Bluetooth 3.0, Bluetooth 4.0 Low Energy (BLE), WIFI 802.11b, 802.11g and 802.11n (HT20/40) GPS

2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	Jabr box
	Model No.	LCL2000A
	Serial No.	N/A
	Capacitance	2300 mAh
	Rated Voltage	3.8 V
	Limit Charge Voltage	4.2±0.03 V
Ancillary Equipment 2	Charger	
	Brand Name	Jabr box
	Model Name	RC051057
	Rated Input	100-240 V ~, 50/60 Hz, 0.2 mA
	Rated Output	5 V —, 1000 mA
Ancillary Equipment 3	USB Cable	
	Length(Approx.)	102 cm

2.6 Technical Information

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

Operating Mode	CDMA; LTE; WLAN; Bluetooth		
Frequency Range	CDMA BC0	TX: 824.025 ~ 848.985 MHz	RX: 869.025 ~ 893.985 MHz
	CDMA BC1	TX: 1850 ~ 1910 MHz	RX: 91930 ~ 1990 MHz
	CDMA BC10	TX: 806.0 ~ 900.975 MHz	RX: 851.0~ 939.975 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 12	TX: 699~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 13	TX: 777 ~ 787 MHz	RX: 746 ~ 756 MHz
	LTE Band 25	TX: 1850 ~ 1915 MHz	RX: 1930 ~ 1995 MHz
	LTE Band 26	TX: 814 ~ 849 MHz	RX: 859 ~ 894 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	802.11b/g /n(HT20/HT40)	2400~2483.5 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 (When device operating under hotspot mode, that the CDMA/EVDO BC1, LTE B2/B4/B25/41 power reduction will applied for SAR compliance. The reduction power details please refer section 8.6)		
Exposure Category	General Population/Uncontrolled exposure		
EUT Stage	Portable Device		
Product	Type		
	☒ Production unit	☐ Identical prototype	

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 v02r05	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
11	KDB 248227 D01 v02r02	SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters

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 (15mm)	Hotspot (10mm)	Head	Body-worn (15mm)	Hotspot (10mm)	
CDMA BC0	0.502	0.561	0.558	0.595	1.166	1.069	1.6
CDMA BC1	0.392	0.753	0.908				
CDMA BC10	0.595	0.622	0.661				
LTE Band 2	0.483	0.994	1.069				
LTE Band 4	0.530	0.932	1.003				
LTE Band 5	0.419	0.410	0.466				
LTE Band 12	0.275	0.516	0.586				
LTE Band 13	0.505	0.607	0.714				
LTE Band 25	0.474	0.872	0.995				
LTE Band 26	0.437	0.482	0.538				
LTE Band 41	0.234	1.166	0.661				
2.4G WLAN	0.424	0.135	0.256				
Bluetooth	N/A	0.054	N/A				
Verdict	Pass						

3.3.2 Highest Simultaneous SAR

Position	Simultaneous Configuration	Simultaneous SAR (W/kg)	Limit (W/kg)	Verdict
Head	CDMA RMC + 2.4G WLAN	1.019	1.6	Pass
Body-worn	LTE QPSK + 2.4G WLAN	1.301	1.6	Pass
Hotspot Mode	LTE QPSK + 2.4G WLAN	1.325	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 1.166 W/kg, which is lower than 1.5 W/kg, so 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

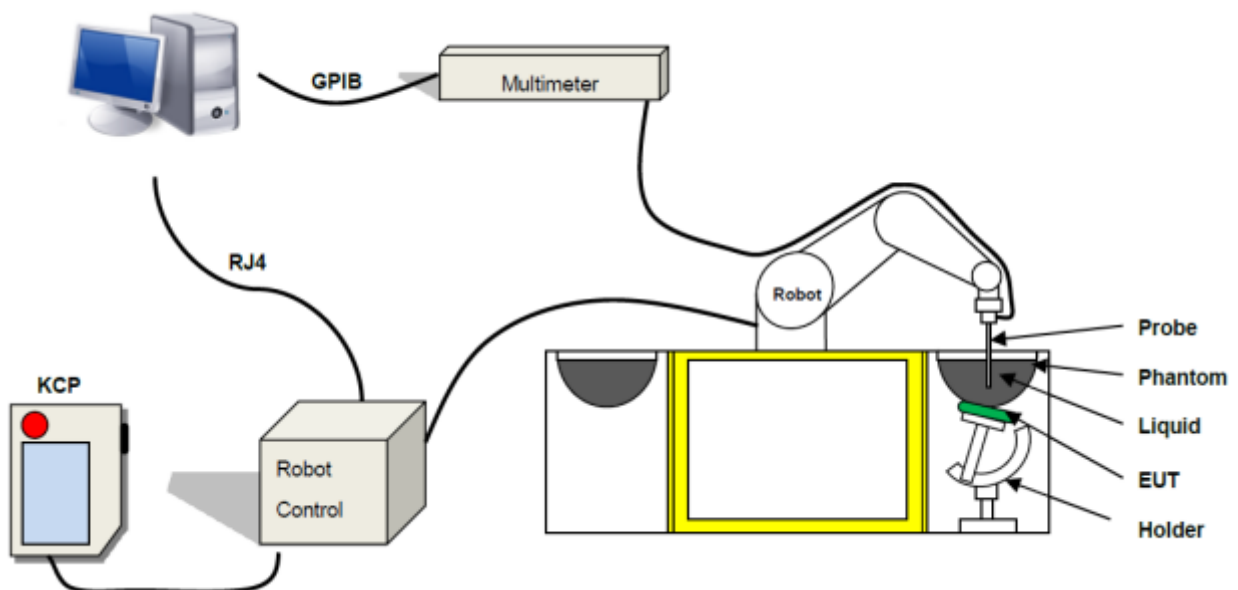
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

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 08 /16 EPGO 295 with following specifications is used

- Dynamic range: 0.01-100 W/kg
- Tip Diameter : 2.5 mm
- Lower detection limit : 10 mW/kg
(repeatability better than ± 1 mm)
- Probe linearity: ± 0.07 dB

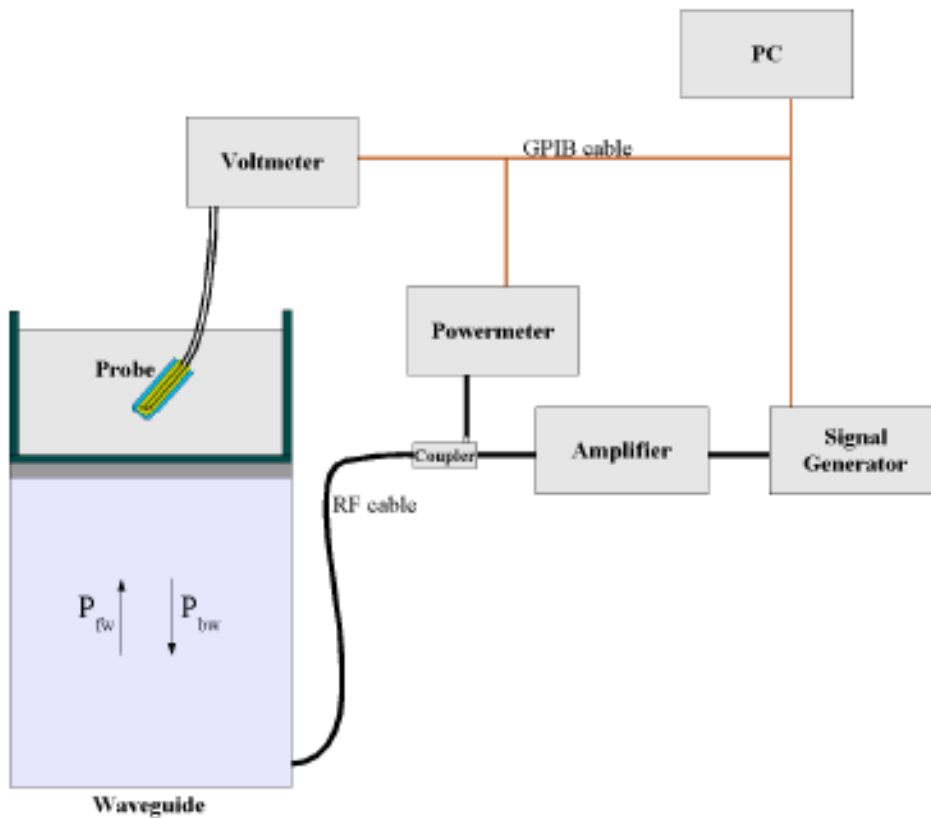
- Calibration range: 300 MHz to 6000 MHz for head & body simulating liquid.

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, Antennessa proprietary calibration system. The calibration is performed with the IEC62209-1/2 annexe technique using reference guide at the five frequencies.



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

Where :

P_{fw} = Forward Power

P_{bw} = Backward Power

a and b = Waveguide Dimensions

σ = 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.

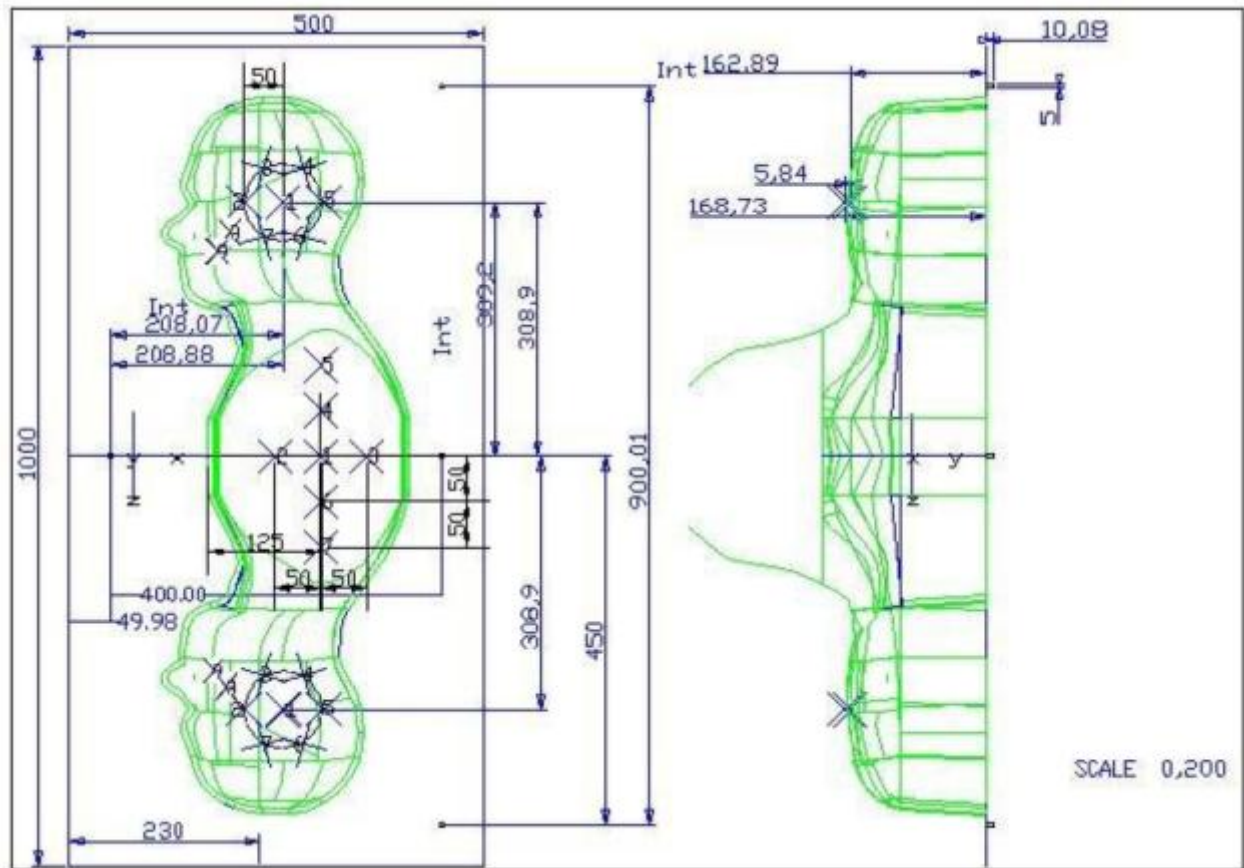
Photo of Phantom SN 30/13 SAM103



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



Serial Number	Left Head		Right Head		Flat Part	
SN 30/13 SAM103	2	2.00	2	2.03	1	2.09
	3	2.02	3	2.05	2	2.10
	4	2.04	4	2.04	3	2.09
	5	2.04	5	2.07	4	2.11
	6	2.02	6	2.07	5	2.11
	7	2.01	7	2.09	6	2.09
	8	2.04	8	2.10	7	2.11
	9	2.02	9	2.09	-	-
SN 30/13 SAM104	2	2.05	2	2.06	1	2.03
	3	2.08	3	2.03	2	2.03
	4	2.05	4	2.03	3	2.01
	5	2.06	5	2.02	4	2.03
	6	2.08	6	2.02	5	2.03
	7	2.06	7	2.04	6	2.00
	8	2.07	8	2.04	7	1.98
	9	2.07	9	2.05	-	-

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.

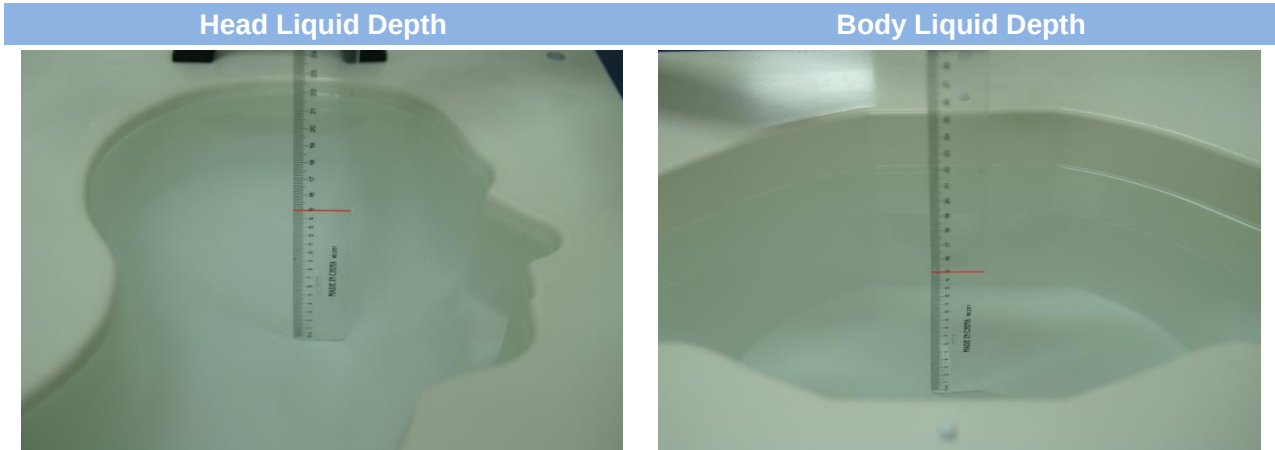


Serial Number	Holder Material	Permittivity	Loss Tangent
SN 25/13 MSH87	Deirin	3.7	0.005
SN 25/13 MSH88	Deirin	3.7	0.005

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

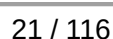
Frequency(MHz)	Water	DGBE (%)	Salt (%)	Conductivity σ (S/m)	Permittivity ϵ
5200	78.60	21.40	/	5.54	47.86
5800	78.50	21.40	0.1	6.0	48.20

5.1 Antenna Port Test Requirement

5.2 Purpose of System Check

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

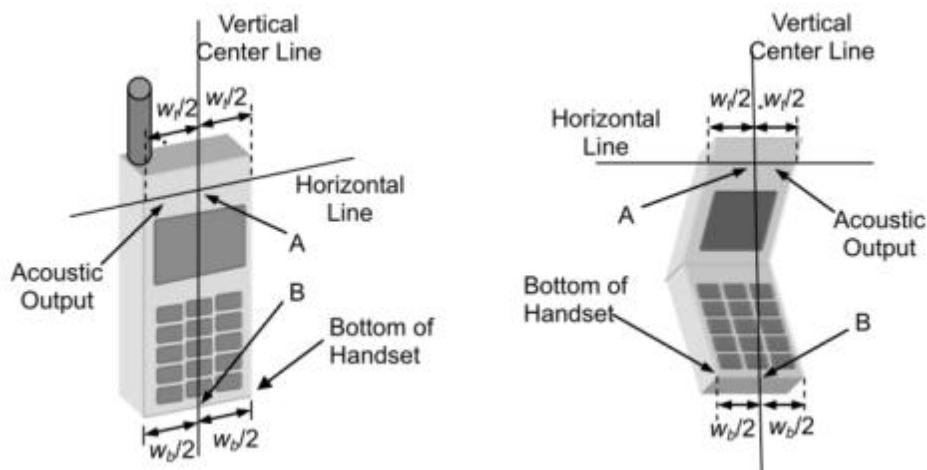
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

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.

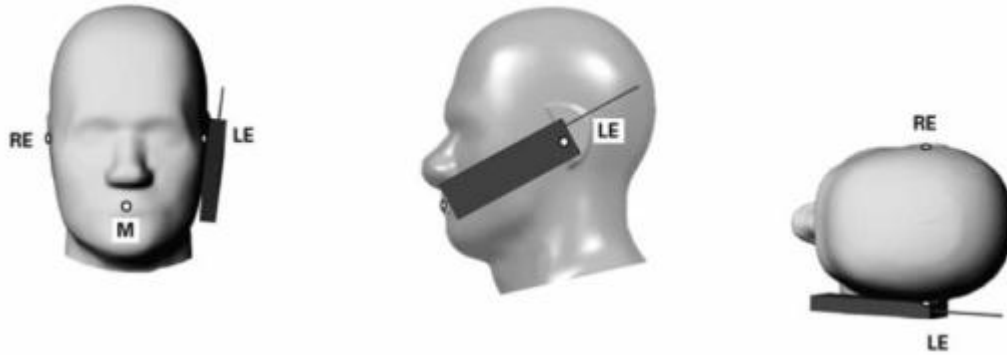
6.1.1 Define two imaginary lines on the handset

- 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

- To position the device in the “cheek” position described above.
- 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.



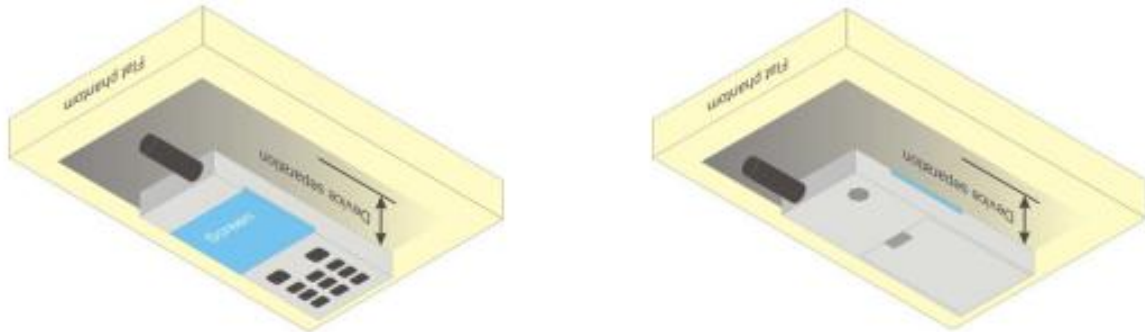
6.2 Body-worn Position Conditions

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.

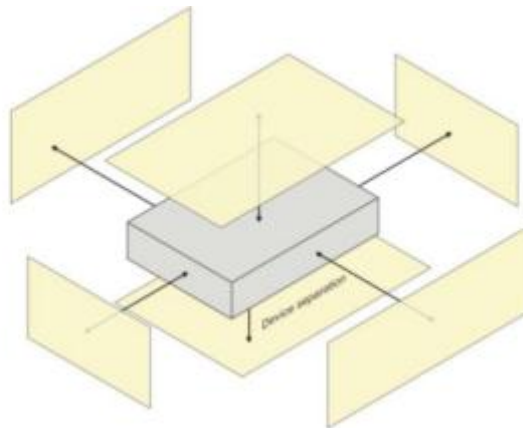
Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice 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.



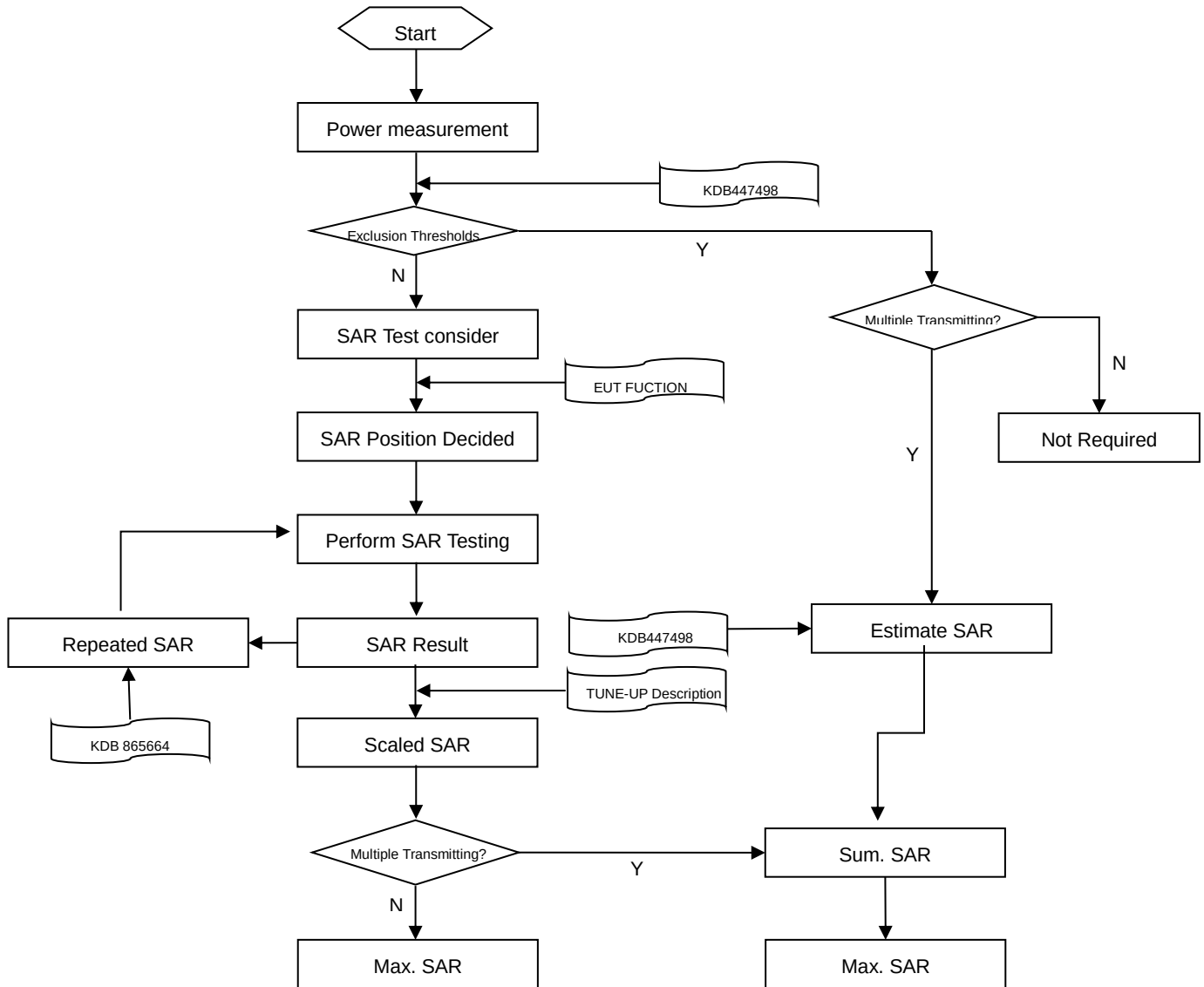
6.3 Hotspot Mode Exposure Position Conditions

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.

			≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30°±1°	20°±1°
Maximum area scan spatial resolution: Δx Area , Δy Area			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3–4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 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 ≤ 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: Δx Zoom , Δy Zoom			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3–4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: Δz Zoom (n)		≤ 5 mm	3–4 GHz: ≤ 4 mm
				4–5 GHz: ≤ 3 mm
				5–6 GHz: ≤ 2 mm
	graded grid	Δ z Zoom (1): between 1st two points closest to phantom surface	≤ 4 mm	3–4 GHz: ≤ 3 mm
				4–5 GHz: ≤ 2.5 mm
				5–6 GHz: ≤ 2 mm
	Δ z Zoom (n>1): between subsequent points		≤ 1.5·Δz Zoom (n-1)	
Minimum zoom scan volume	x, y, z		≥30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm

Note:

1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 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 OUTPUT POWER

8.1 CDMA

Band		CDMA BC0			CDMA BC1		
Channel		1013	384	777	25	600	1175
Frequency (MHz)		824.70	836.52	848.31	1851.25	1880.00	1908.75
1xRTT	RC1 SO55	23.70	23.85	23.24	23.54	23.38	23.31
	RC3 SO55	23.74	23.94	23.28	23.49	23.33	23.32
	RC3 SO32	23.78	23.93	23.29	23.37	23.34	23.43
1xEVDO Rel.0	FTAP Rate: 307.2kbps RTAP Rate: 153.6kbps	23.92	23.82	23.21	23.23	22.89	23.10
1xEVDO Rel.A	FTAP: 307.2k,QPSK/ACK RTAP: 4096	23.56	23.93	23.47	23.31	22.89	22.99
Band		CDMA BC10			-		
Channel		450	560	670	-	-	-
Frequency (MHz)		838.50	841.80	845.10	-	-	-
1xRTT	RC1 SO55	23.99	23.95	23.79	-	-	-
	RC3 SO55	23.92	23.94	23.88	-	-	-
	RC3 SO32	24.25	24.30	24.16	-	-	-
1xEVDO Rel.0	FTAP Rate: 307.2kbps RTAP Rate: 153.6kbps	23.86	23.85	23.73	-	-	-
1xEVDO Rel.A	FTAP: 307.2k,QPSK/ACK RTAP: 4096	23.90	23.77	23.81	-	-	-

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)	23.67	23.37	22.72	23.08	22.53	22.18
	1 (RB_Pos:50)	23.11	23.13	22.55	22.48	22.09	21.84
	1 (RB_Pos:99)	23.30	23.28	22.73	22.50	22.36	22.07
	50 (RB_Pos:0)	22.29	22.05	21.60	21.15	21.02	20.51
	50 (RB_Pos:25)	22.09	21.97	21.55	21.03	20.84	20.37
	50 (RB_Pos:50)	22.16	21.95	21.59	21.08	20.83	20.39
	100 (RB_Pos:0)	22.19	21.92	21.57	21.05	20.99	20.53
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18675	18900	19125	18675	18900	19125
15MHz	1 (RB_Pos:0)	23.60	23.01	22.89	22.86	22.31	22.62
	1 (RB_Pos:38)	22.87	22.57	22.51	21.90	22.06	22.45
	1 (RB_Pos:74)	23.18	22.88	22.83	22.37	22.21	22.53
	36 (RB_Pos:0)	22.16	21.95	21.78	21.15	21.05	20.63
	36 (RB_Pos:20)	22.10	21.85	21.70	21.02	20.95	20.52
	36 (RB_Pos:39)	22.17	21.94	21.74	20.95	20.96	20.78
	75 (RB_Pos:0)	22.18	21.90	21.74	21.12	20.89	20.71
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18650	18900	19150	18650	18900	19150
10MHz	1 (RB_Pos:0)	23.38	22.96	22.84	22.45	22.34	22.22
	1 (RB_Pos:25)	23.30	22.66	22.75	22.23	22.06	22.10
	1 (RB_Pos:49)	23.20	22.83	22.84	22.13	22.13	22.05
	25 (RB_Pos:0)	22.21	21.83	21.86	21.23	20.91	20.98
	25 (RB_Pos:12)	22.10	21.88	21.93	21.26	20.84	20.85
	25 (RB_Pos:25)	22.10	21.94	21.97	21.17	20.94	21.10
	50 (RB_Pos:0)	22.13	21.93	21.92	21.05	20.91	20.88
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18625	18900	19175	18625	18900	19175
5MHz	1 (RB_Pos:0)	23.11	23.14	23.04	22.15	22.36	22.27
	1 (RB_Pos:13)	23.26	22.70	22.93	21.72	21.99	22.15
	1 (RB_Pos:24)	23.04	22.96	23.05	21.89	22.26	21.95
	12 (RB_Pos:0)	22.18	21.94	21.99	21.13	21.14	20.84
	12 (RB_Pos:6)	22.20	21.91	22.01	20.88	21.02	20.91
	12 (RB_Pos:13)	22.23	21.96	22.12	21.23	21.10	21.05
	25 (RB_Pos:0)	22.26	21.99	22.13	21.33	20.95	21.07
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		

	Channel	18615	18900	19185	18615	18900	19185
3.0MHz	1 (RB_Pos:0)	23.28	22.90	23.16	22.20	22.63	22.36
	1 (RB_Pos:8)	23.21	22.60	22.82	22.09	22.03	22.35
	1 (RB_Pos:14)	23.51	22.87	23.07	22.76	22.58	22.34
	8 (RB_Pos:0)	22.38	21.82	22.07	20.87	21.02	21.16
	8 (RB_Pos:3)	22.22	21.82	22.03	20.91	20.94	21.12
	8 (RB_Pos:7)	22.25	21.88	21.96	21.02	20.89	21.07
	15 (RB_Pos:0)	22.24	21.86	22.13	21.21	20.86	20.95
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18607	18900	19193	18607	18900	19193
1.4MHz	1 (RB_Pos:0)	23.07	22.71	23.01	22.94	21.95	22.36
	1 (RB_Pos:3)	23.10	22.73	23.44	22.95	22.27	22.46
	1 (RB_Pos:5)	23.07	22.87	23.06	23.06	22.66	22.43
	3 (RB_Pos:0)	23.10	22.82	23.05	21.77	22.12	21.97
	3 (RB_Pos:1)	23.17	22.83	23.05	21.83	22.10	22.07
	3 (RB_Pos:3)	23.24	22.78	22.99	21.76	22.04	22.00
	6 (RB_Pos:0)	22.07	21.84	22.12	21.05	20.90	21.11

FDD LTE Band 4							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20050	20175	20300	20050	20175	20300
20MHz	1 (RB_Pos:0)	23.27	23.10	23.00	22.20	22.45	22.41
	1 (RB_Pos:50)	22.77	23.33	22.70	21.91	22.29	22.05
	1 (RB_Pos:99)	23.28	23.11	22.61	22.04	22.51	22.06
	50 (RB_Pos:0)	22.08	22.13	22.00	21.10	21.11	21.03
	50 (RB_Pos:25)	21.98	22.11	21.82	21.04	21.05	20.87
	50 (RB_Pos:50)	22.06	22.14	21.69	21.05	21.03	20.65
	100 (RB_Pos:0)	22.05	22.04	21.96	21.07	21.03	20.84
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20025	20175	20325	20025	20175	20325
15MHz	1 (RB_Pos:0)	23.20	23.09	23.04	22.13	22.47	22.89
	1 (RB_Pos:38)	22.66	22.85	22.60	21.86	22.13	22.61
	1 (RB_Pos:74)	22.75	22.85	22.73	22.67	22.36	22.61
	36 (RB_Pos:0)	22.00	22.12	22.07	20.98	21.12	21.00
	36 (RB_Pos:20)	21.80	22.04	21.78	20.86	21.15	20.72
	36 (RB_Pos:39)	21.84	22.07	21.79	20.90	21.19	20.65
	75 (RB_Pos:0)	21.91	21.99	22.00	20.99	21.10	20.86
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20000	20175	20350	20000	20175	20350
10MHz	1 (RB_Pos:0)	22.91	23.13	23.00	22.21	22.40	22.22

	1 (RB_Pos:25)	22.77	23.14	22.81	22.37	22.30	22.15
	1 (RB_Pos:49)	22.83	22.95	22.87	22.36	22.25	22.08
	25 (RB_Pos:0)	21.88	22.01	22.06	20.84	20.91	21.00
	25 (RB_Pos:12)	21.78	22.01	21.83	20.75	20.92	20.90
	25 (RB_Pos:25)	21.76	22.05	21.80	20.75	20.94	20.78
	50 (RB_Pos:0)	21.86	22.03	21.96	20.75	20.93	20.91
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19975	20175	20375	19975	20175	20375
5MHz	1 (RB_Pos:0)	22.56	23.31	22.78	21.53	22.01	21.98
	1 (RB_Pos:13)	22.39	22.87	22.51	21.20	21.91	21.91
	1 (RB_Pos:24)	22.35	23.18	22.76	21.36	21.97	22.49
	12 (RB_Pos:0)	21.67	22.04	21.76	20.51	21.24	20.88
	12 (RB_Pos:6)	21.65	22.02	21.79	20.52	21.11	20.91
	12 (RB_Pos:13)	21.73	22.05	21.79	20.60	21.07	20.82
	25 (RB_Pos:0)	21.64	22.10	21.77	20.73	21.02	20.78
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19965	20175	20385	19965	20175	20385
3.0MHz	1 (RB_Pos:0)	22.62	23.12	22.65	22.09	22.91	21.99
	1 (RB_Pos:8)	22.52	22.96	22.51	22.09	22.83	21.84
	1 (RB_Pos:14)	22.47	23.08	22.61	22.27	22.30	21.95
	8 (RB_Pos:0)	21.70	22.06	21.77	21.35	21.10	20.76
	8 (RB_Pos:3)	21.78	22.23	21.74	21.34	21.24	20.73
	8 (RB_Pos:7)	21.89	22.25	21.79	20.55	21.18	20.80
	15 (RB_Pos:0)	21.78	22.10	21.74	20.60	20.91	20.76
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19957	20175	20393	19957	20175	20393
1.4MHz	1 (RB_Pos:0)	22.59	23.07	22.77	22.39	22.17	22.05
	1 (RB_Pos:3)	22.68	23.03	23.07	22.56	22.14	22.06
	1 (RB_Pos:5)	22.66	22.90	22.82	22.25	22.04	22.05
	3 (RB_Pos:0)	22.59	22.91	22.80	21.43	22.11	21.90
	3 (RB_Pos:1)	22.51	22.92	22.83	21.48	22.03	21.95
	3 (RB_Pos:3)	22.47	23.02	22.79	21.39	21.99	21.79
	6 (RB_Pos:0)	21.66	22.10	21.75	20.51	20.75	21.00

FDD LTE Band 5							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20450	20525	20600	20450	20525	20600
10MHz	1 (RB_Pos:0)	23.02	23.00	22.98	22.18	22.40	22.00
	1 (RB_Pos:25)	23.01	22.97	23.31	21.94	22.07	22.17
	1 (RB_Pos:49)	22.91	22.97	23.00	21.86	22.21	22.10
	25 (RB_Pos:0)	21.91	22.17	22.11	20.88	21.03	21.23
	25 (RB_Pos:12)	21.94	22.01	22.03	20.77	20.99	21.08
	25 (RB_Pos:25)	21.88	22.16	22.01	20.85	21.16	21.06
	50 (RB_Pos:0)	22.04	22.22	22.08	20.93	21.21	21.00
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20425	20525	20625	20425	20525	20625
5MHz	1 (RB_Pos:0)	22.82	22.76	22.85	21.83	22.54	21.98
	1 (RB_Pos:13)	22.51	23.03	22.61	21.41	21.96	21.89
	1 (RB_Pos:24)	22.58	23.17	22.78	21.72	22.37	21.94
	12 (RB_Pos:0)	21.94	22.09	22.00	20.86	21.29	20.90
	12 (RB_Pos:6)	22.05	22.10	21.96	20.67	21.30	20.87
	12 (RB_Pos:13)	22.00	22.03	21.94	20.98	20.80	20.79
	25 (RB_Pos:0)	21.87	22.07	22.00	21.05	20.85	20.86
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20415	20525	20635	20415	20525	20635
3.0 MHz	1 (RB_Pos:0)	22.95	22.97	22.81	21.96	22.82	22.04
	1 (RB_Pos:8)	22.64	22.90	22.61	21.76	22.67	21.96
	1 (RB_Pos:14)	22.93	23.05	22.74	22.49	22.96	22.39
	8 (RB_Pos:0)	21.97	22.08	21.90	20.75	21.19	20.89
	8 (RB_Pos:3)	21.92	21.97	21.99	20.58	21.08	20.80
	8 (RB_Pos:7)	21.79	21.96	21.80	20.56	21.07	20.85
	15 (RB_Pos:0)	21.95	22.08	21.95	20.85	21.05	20.98
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20407	20525	20643	20407	20525	20643
1.4MHz	1 (RB_Pos:0)	22.88	22.85	22.88	22.71	22.87	22.27
	1 (RB_Pos:3)	23.20	23.13	23.06	22.66	22.99	22.44
	1 (RB_Pos:5)	22.80	22.90	22.81	22.55	22.83	21.89
	3 (RB_Pos:0)	22.89	22.86	23.01	21.87	22.03	22.38
	3 (RB_Pos:1)	22.84	22.96	22.94	21.67	22.05	22.32
	3 (RB_Pos:3)	22.75	22.95	22.85	21.61	21.99	22.29
	6 (RB_Pos:0)	21.78	22.07	21.95	20.65	20.65	21.05

FDD LTE Band 12							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23060	23095	23130	23060	23095	23130
10MHz	1 (RB_Pos:0)	22.61	22.54	22.86	21.75	22.02	21.89
	1 (RB_Pos:25)	22.63	22.57	22.68	22.15	22.05	21.87
	1 (RB_Pos:49)	22.40	22.53	22.91	22.10	21.74	21.99
	25 (RB_Pos:0)	21.49	21.61	21.78	20.54	20.60	20.92
	25 (RB_Pos:12)	21.56	21.49	21.72	20.34	20.57	20.86
	25 (RB_Pos:25)	21.67	21.63	21.77	20.59	20.51	20.82
	50 (RB_Pos:0)	21.68	21.54	21.75	20.50	20.52	20.75
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23035	23095	23155	23035	23095	23155
5MHz	1 (RB_Pos:0)	22.26	22.53	22.62	21.30	21.65	21.72
	1 (RB_Pos:13)	22.20	22.64	22.49	20.97	21.51	21.35
	1 (RB_Pos:24)	22.48	22.54	22.60	21.28	21.45	21.47
	12 (RB_Pos:0)	21.49	21.64	21.63	20.53	20.65	20.55
	12 (RB_Pos:6)	21.65	21.63	21.56	20.41	20.65	20.40
	12 (RB_Pos:13)	21.59	21.68	21.62	20.51	20.69	20.36
	25 (RB_Pos:0)	21.59	21.67	21.67	20.59	20.59	20.53
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23025	23095	23165	23025	23095	23165
3.0MHz	1 (RB_Pos:0)	22.51	22.54	22.47	21.91	22.69	21.83
	1 (RB_Pos:8)	22.40	22.48	22.34	21.73	22.43	21.79
	1 (RB_Pos:14)	22.43	22.44	22.58	21.94	22.55	21.88
	8 (RB_Pos:0)	21.46	21.65	21.52	20.69	20.83	20.63
	8 (RB_Pos:3)	21.41	21.73	21.50	20.64	20.73	20.61
	8 (RB_Pos:7)	21.47	21.66	21.49	20.66	20.69	20.59
	15 (RB_Pos:0)	21.55	21.72	21.58	20.63	20.60	20.60
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23017	23095	23173	23017	23095	23173
1.4MHz	1 (RB_Pos:0)	22.55	22.49	22.41	22.25	21.94	21.80
	1 (RB_Pos:3)	22.52	22.55	22.66	22.03	22.14	21.96
	1 (RB_Pos:5)	22.39	22.54	22.60	22.03	22.03	21.98
	3 (RB_Pos:0)	22.52	22.64	22.38	21.28	21.90	21.94
	3 (RB_Pos:1)	22.57	22.71	22.53	21.64	21.95	22.10
	3 (RB_Pos:3)	22.47	22.56	22.53	21.67	21.79	22.09
	6 (RB_Pos:0)	21.41	21.62	21.60	20.61	20.78	20.77

FDD LTE Band 13							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23230			23230		
10MHz	1 (RB_Pos:0)	22.51			21.56		
	1 (RB_Pos:25)	22.57			22.43		
	1 (RB_Pos:49)	22.42			21.99		
	25 (RB_Pos:0)	21.84			20.80		
	25 (RB_Pos:12)	21.71			20.58		
	25 (RB_Pos:25)	21.68			20.53		
	50 (RB_Pos:0)	21.77			20.72		
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23205	23230	23255	23205	23230	23255
5MHz	1 (RB_Pos:0)	22.66	21.63	22.64	21.60	22.56	21.59
	1 (RB_Pos:13)	22.51	20.95	22.67	21.49	22.43	21.44
	1 (RB_Pos:24)	22.46	21.13	22.51	21.76	22.47	21.77
	12 (RB_Pos:0)	21.72	20.83	21.71	20.89	21.68	20.94
	12 (RB_Pos:6)	21.74	20.58	21.62	20.66	21.63	20.64
	12 (RB_Pos:13)	21.67	20.45	21.72	20.57	21.70	20.66
	25 (RB_Pos:0)	21.78	20.76	21.79	20.57	21.75	20.77

FDD LTE Band 25							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26140	26365	26590	26140	26365	26590
20MHz	1 (RB_Pos:0)	23.47	23.47	23.22	22.17	22.71	22.49
	1 (RB_Pos:50)	23.08	23.47	23.03	22.26	22.59	22.40
	1 (RB_Pos:99)	23.06	23.33	23.21	22.28	22.41	22.41
	50 (RB_Pos:0)	22.38	22.22	22.02	21.45	21.16	20.94
	50 (RB_Pos:25)	22.38	22.18	22.10	21.45	21.08	20.94
	50 (RB_Pos:50)	22.32	22.08	22.08	21.39	21.09	21.05
	100 (RB_Pos:0)	22.54	22.09	22.11	21.34	21.05	21.10
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26115	26365	26615	26115	26365	26615
15MHz	1 (RB_Pos:0)	23.59	23.23	23.06	22.97	22.57	22.96
	1 (RB_Pos:38)	23.19	22.95	23.11	22.24	22.45	22.89
	1 (RB_Pos:74)	23.29	22.92	23.15	22.23	22.35	22.97
	36 (RB_Pos:0)	22.20	22.10	22.14	21.03	21.12	21.05
	36 (RB_Pos:20)	22.28	22.02	22.19	21.10	21.03	21.18
	36 (RB_Pos:39)	22.37	22.06	22.34	21.29	21.17	21.22
	75 (RB_Pos:0)	22.31	22.03	22.27	21.29	21.13	21.09
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26090	26365	26640	26090	26365	26640
10MHz	1 (RB_Pos:0)	23.52	23.17	23.34	22.33	22.48	22.79
	1 (RB_Pos:25)	23.06	22.99	23.33	23.07	22.33	22.80
	1 (RB_Pos:49)	23.27	23.07	23.41	22.85	22.41	22.64
	25 (RB_Pos:0)	22.22	22.19	22.45	21.17	21.05	21.41
	25 (RB_Pos:12)	22.23	22.06	22.53	20.96	21.08	21.38
	25 (RB_Pos:25)	22.45	22.24	22.51	21.17	21.25	21.52
	50 (RB_Pos:0)	22.36	22.12	22.49	21.19	21.21	21.49
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26065	26365	26665	26065	26365	26665
5MHz	1 (RB_Pos:0)	23.14	23.00	23.21	22.14	22.52	22.47
	1 (RB_Pos:13)	22.92	23.10	23.25	21.69	22.09	22.47
	1 (RB_Pos:24)	22.99	23.28	22.92	21.71	21.97	22.94
	12 (RB_Pos:0)	22.30	22.17	22.30	21.13	21.08	21.40
	12 (RB_Pos:6)	22.22	22.07	22.26	20.95	21.11	21.36
	12 (RB_Pos:13)	22.04	22.17	22.32	21.08	21.21	21.07
	25 (RB_Pos:0)	22.21	22.07	22.47	21.31	21.08	21.33
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26055	26365	26675	26055	26365	26675

3.0MHz	1 (RB_Pos:0)	23.13	22.95	23.24	22.23	22.90	22.49
	1 (RB_Pos:8)	23.07	22.99	23.05	22.63	22.16	22.15
	1 (RB_Pos:14)	23.18	23.16	23.12	22.83	22.17	22.36
	8 (RB_Pos:0)	22.43	22.12	22.22	21.45	21.07	21.14
	8 (RB_Pos:3)	22.26	22.05	22.28	21.19	21.11	21.11
	8 (RB_Pos:7)	22.16	22.11	22.17	21.09	21.14	21.23
	15 (RB_Pos:0)	22.20	22.08	22.21	21.06	21.10	21.16
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26047	26365	26683	26047	26365	26683
1.4MHz	1 (RB_Pos:0)	23.32	22.86	23.01	23.05	23.01	22.19
	1 (RB_Pos:3)	23.21	22.99	23.61	23.09	23.03	22.45
	1 (RB_Pos:5)	23.16	22.85	23.21	22.97	22.99	22.45
	3 (RB_Pos:0)	23.30	22.97	23.25	21.90	22.16	22.02
	3 (RB_Pos:1)	23.14	22.98	23.34	21.99	22.15	22.07
	3 (RB_Pos:3)	23.15	22.99	23.21	21.92	22.09	21.95
	6 (RB_Pos:0)	22.33	22.08	22.27	21.13	20.83	21.37

FDD LTE Band 26							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26775	26865	26965	26775	26865	26965
15MHz	1 (RB_Pos:0)	22.99	22.99	23.21	22.54	22.24	22.66
	1 (RB_Pos:38)	22.59	22.72	23.03	21.94	21.95	22.49
	1 (RB_Pos:74)	22.85	22.91	22.82	22.26	22.70	22.43
	36 (RB_Pos:0)	21.79	21.80	22.04	20.86	20.99	21.05
	36 (RB_Pos:20)	21.63	21.80	21.97	20.72	20.94	20.69
	36 (RB_Pos:39)	21.81	21.86	21.91	20.91	20.98	20.84
	75 (RB_Pos:0)	21.74	21.94	21.96	20.68	20.79	20.94
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26750	26865	26990	26750	26865	26990
10MHz	1 (RB_Pos:0)	23.03	22.72	22.96	22.07	22.49	22.25
	1 (RB_Pos:25)	22.73	22.83	22.82	21.71	22.14	22.13
	1 (RB_Pos:49)	22.87	22.76	22.76	21.87	22.09	21.89
	25 (RB_Pos:0)	21.85	21.99	21.89	20.76	20.92	20.95
	25 (RB_Pos:12)	21.74	21.71	21.77	20.74	20.73	20.85
	25 (RB_Pos:25)	21.79	21.87	21.72	20.71	20.68	20.78
	50 (RB_Pos:0)	21.78	21.97	21.67	20.88	20.91	20.79
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26715	26865	27015	26715	26865	27015
5MHz	1 (RB_Pos:0)	22.83	22.66	22.71	21.84	22.24	21.78
	1 (RB_Pos:13)	22.58	22.62	22.56	21.34	22.14	21.83

	1 (RB_Pos:24)	22.76	23.11	22.29	21.66	22.25	21.75
	12 (RB_Pos:0)	21.93	21.89	21.76	20.71	20.99	20.62
	12 (RB_Pos:6)	21.91	21.80	21.67	20.65	20.66	20.71
	12 (RB_Pos:13)	21.74	21.88	21.79	20.62	20.61	20.77
	25 (RB_Pos:0)	21.78	21.93	21.78	20.90	20.82	20.84
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26705	26865	27025	26705	26865	27025
3.0MHz	1 (RB_Pos:0)	22.83	22.71	22.78	22.25	22.42	21.94
	1 (RB_Pos:8)	22.85	22.66	22.39	21.55	21.97	21.76
	1 (RB_Pos:14)	22.94	22.71	22.46	21.76	22.04	21.72
	8 (RB_Pos:0)	21.87	21.86	21.71	20.62	20.81	20.92
	8 (RB_Pos:3)	21.84	21.77	21.57	20.66	20.74	20.80
	8 (RB_Pos:7)	21.79	21.73	21.57	20.63	20.78	20.62
	15 (RB_Pos:0)	21.84	21.79	21.72	20.87	20.91	20.58
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26697	26865	27033	26697	26865	27033
1.4MHz	1 (RB_Pos:0)	22.85	22.86	22.56	22.78	22.15	21.67
	1 (RB_Pos:3)	22.88	22.88	22.50	22.60	22.19	21.71
	1 (RB_Pos:5)	23.00	22.78	22.50	22.60	22.19	21.59
	3 (RB_Pos:0)	22.91	22.86	22.63	22.13	21.96	21.60
	3 (RB_Pos:1)	22.84	22.92	22.55	22.11	21.99	21.62
	3 (RB_Pos:3)	22.82	22.81	22.54	22.10	21.87	21.51
	6 (RB_Pos:0)	21.87	21.78	21.54	21.28	20.67	20.56

FDD LTE Band 41											
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK					16QAM				
	Channel	39750	40185	40620	41055	41490	39750	40185	40620	41055	41490
20MHz	1 (RB_Pos:0)	22.89	23.00	23.63	23.37	23.02	22.21	22.37	22.57	22.52	22.28
	1 (RB_Pos:50)	22.95	23.06	23.34	23.17	22.90	21.81	21.74	22.17	22.15	22.25
	1 (RB_Pos:99)	22.74	22.82	23.43	23.16	22.91	21.82	21.77	22.29	22.18	22.24
	50 (RB_Pos:0)	21.77	21.90	22.51	22.14	21.59	20.68	20.90	21.57	21.10	20.67
	50 (RB_Pos:25)	21.79	21.71	22.30	22.10	21.37	20.89	20.72	21.36	21.05	20.45
	50 (RB_Pos:50)	21.71	21.71	22.24	22.11	21.32	20.81	20.67	21.38	21.04	20.31
	100 (RB_Pos:0)	21.79	21.79	22.42	22.08	21.45	20.81	20.75	21.32	21.03	20.39
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK					16QAM				
	Channel	39725	40160	40620	41080	41515	39725	40160	40620	41080	41515
15MHz	1 (RB_Pos:0)	22.64	22.90	23.86	23.51	22.84	22.42	22.74	22.90	22.98	21.87
	1 (RB_Pos:38)	22.41	22.59	23.49	23.13	22.22	22.25	22.39	22.64	22.52	21.93
	1 (RB_Pos:74)	22.56	22.69	23.66	23.32	22.30	22.24	22.50	22.70	22.54	22.00
	36 (RB_Pos:0)	21.56	21.89	22.53	22.15	21.52	20.48	20.75	21.56	21.17	20.68
	36 (RB_Pos:20)	21.57	21.71	22.32	22.13	21.30	20.38	20.54	21.36	21.17	20.37
	36 (RB_Pos:39)	21.60	21.69	22.39	22.17	21.32	20.53	20.53	21.45	21.15	20.28
	75 (RB_Pos:0)	21.49	21.74	22.35	22.15	21.49	20.53	20.80	21.43	21.21	20.54
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK					16QAM				
	Channel	39700	40135	40620	41105	41540	39700	40135	40620	41105	41540
10MHz	1 (RB_Pos:0)	22.47	22.92	23.80	23.54	22.53	22.14	22.62	22.91	22.53	22.79
	1 (RB_Pos:25)	22.53	22.77	23.34	23.29	22.41	22.00	22.38	22.71	22.67	22.87
	1 (RB_Pos:49)	22.33	22.75	23.41	23.16	22.48	22.15	22.30	22.67	22.57	22.59
	25 (RB_Pos:0)	21.23	21.90	22.35	22.25	21.47	20.36	20.93	21.24	21.07	20.43
	25 (RB_Pos:12)	21.26	21.80	22.30	22.21	21.35	20.27	20.75	21.28	21.13	20.32
	25 (RB_Pos:25)	21.24	21.80	22.26	22.14	21.29	20.27	20.66	21.08	21.08	20.28
	50 (RB_Pos:0)	21.28	21.85	22.31	22.24	21.39	20.23	20.72	21.37	21.20	20.48
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK					16QAM				
	Channel	39675	40110	40620	41130	41565	39675	40110	40620	41130	41565
5MHz	1 (RB_Pos:0)	22.02	23.00	23.01	22.85	22.52	21.58	22.16	22.33	22.14	21.20
	1 (RB_Pos:13)	22.12	22.90	23.20	22.84	22.38	21.23	21.89	22.07	22.08	20.99
	1 (RB_Pos:24)	22.23	22.81	23.15	22.87	22.39	21.43	22.01	22.33	22.01	20.99
	12 (RB_Pos:0)	21.16	21.93	22.25	22.05	21.33	20.24	20.88	21.20	21.35	20.29
	12 (RB_Pos:6)	21.17	22.01	22.31	21.93	21.36	20.30	20.77	21.25	21.26	20.12
	12 (RB_Pos:13)	21.25	21.96	22.29	21.94	21.36	20.27	20.84	21.25	21.32	20.12
	25 (RB_Pos:0)	21.23	21.95	22.32	21.95	21.38	20.18	20.82	21.30	20.81	20.33

8.4 WIFI

8.4.1 2.4GWIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Avg. Power (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	16.56	No
		6	2437	16.62	No
		11	2462	16.77	Yes
	802.11g	1	2412	13.53	No
		6	2437	13.81	No
		11	2462	13.34	No
	802.11n(HT20)	1	2412	12.98	No
		6	2437	13.95	No
		11	2462	13.17	No
	802.11n(HT40)	3	2422	11.78	No
		6	2437	11.95	No
		9	2452	11.94	No

8.5 Bluetooth

Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Average Power (dBm)	6.68	10.48	7.19	7.43	11.24	8.03
Mode	8-DPSK			BLE		
Channel	0	39	78	0	19	39
Frequency (MHz)	2402	2441	2480	2402	2440	2480
Average Power (dBm)	7.77	11.58	8.36	-1.80	-0.12	-1.25

8.6 Power Reduction List

When device operating under hotspot mode, the CDMA BC1, LTE B2/B4/B25/B41 power reduction will be applied for SAR compliance.

Band		CDMA BC1		
Channel		25	600	1175
Frequency (MHz)		1851.25	1880.00	1908.75
1xRTT	RC1 SO55	20.43	20.22	20.34
	RC3 SO55	20.37	20.29	20.24
	RC3 SO32	20.27	20.25	20.32
1xEVDO Rel.0	FTAP Rate: 307.2kbps RTAP Rate: 153.6kbps	20.35	20.25	20.29
1xEVDO Rel.A	FTAP: 307.2k,QPSK/ACK RTAP: 4096	20.25	20.23	20.18

FDD LTE Band 2							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18700	18900	19100	18700	18900	19100
20MHz	1 (RB_Pos:0)	20.14	20.34	20.02	20.41	20.65	20.41
	1 (RB_Pos:50)	20.10	20.39	19.79	20.53	20.44	19.90
	1 (RB_Pos:99)	20.05	20.43	20.00	20.10	20.55	20.03
	50 (RB_Pos:0)	20.19	20.21	19.83	20.17	20.07	19.82
	50 (RB_Pos:25)	20.18	20.17	19.71	20.17	20.02	19.52
	50 (RB_Pos:50)	20.15	20.14	19.69	20.19	20.19	19.71
	100 (RB_Pos:0)	20.21	20.08	19.79	20.06	20.02	19.70
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18675	18900	19125	18675	18900	19125
15MHz	1 (RB_Pos:0)	20.22	20.35	20.03	20.30	20.59	20.41
	1 (RB_Pos:38)	20.17	19.87	19.79	20.13	20.18	20.17
	1 (RB_Pos:74)	20.32	20.19	19.98	20.25	20.37	20.34
	36 (RB_Pos:0)	20.08	20.09	19.96	20.23	20.07	19.85
	36 (RB_Pos:20)	20.13	20.03	19.90	20.24	19.92	19.78
	36 (RB_Pos:39)	20.15	20.17	20.02	20.27	20.26	19.78
	75 (RB_Pos:0)	20.12	20.11	19.96	20.27	20.18	19.89
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18650	18900	19150	18650	18900	19150
10MHz	1 (RB_Pos:0)	20.30	20.10	20.13	20.57	20.51	20.42
	1 (RB_Pos:25)	20.14	20.03	19.92	20.37	20.36	20.31
	1 (RB_Pos:49)	20.18	20.20	20.15	20.52	20.41	20.35
	25 (RB_Pos:0)	20.17	20.08	20.24	20.02	20.06	20.41
	25 (RB_Pos:12)	20.07	20.15	20.19	19.93	20.04	20.39

	25 (RB_Pos:25)	20.17	20.09	20.22	20.03	20.16	20.34
	50 (RB_Pos:0)	20.12	20.13	20.21	20.05	20.09	20.17
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18625	18900	19175	18625	18900	19175
5MHz	1 (RB_Pos:0)	19.85	20.36	19.98	19.98	20.61	20.32
	1 (RB_Pos:13)	20.09	19.85	20.10	19.99	20.11	20.10
	1 (RB_Pos:24)	20.13	20.26	20.26	19.90	19.88	20.14
	12 (RB_Pos:0)	20.10	20.01	20.31	19.92	20.23	20.25
	12 (RB_Pos:6)	20.16	20.08	20.36	19.92	20.09	20.34
	12 (RB_Pos:13)	20.15	20.14	20.33	20.02	20.24	20.44
	25 (RB_Pos:0)	20.19	20.07	20.29	20.29	20.20	20.30
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18615	18900	19185	18615	18900	19185
3.0MHz	1 (RB_Pos:0)	19.96	20.03	20.28	20.37	20.49	20.24
	1 (RB_Pos:8)	19.93	19.90	20.34	20.40	20.20	19.99
	1 (RB_Pos:14)	20.25	20.11	20.26	20.63	20.19	20.63
	8 (RB_Pos:0)	20.26	20.12	20.42	20.27	20.35	20.36
	8 (RB_Pos:3)	20.33	20.07	20.43	20.15	20.21	20.37
	8 (RB_Pos:7)	20.19	20.06	20.40	20.12	20.17	20.35
	15 (RB_Pos:0)	20.24	20.10	20.41	20.39	20.08	20.39
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18607	18900	19193	18607	18900	19193
1.4MHz	1 (RB_Pos:0)	20.22	19.96	20.37	20.68	20.30	20.71
	1 (RB_Pos:3)	20.44	20.12	20.52	20.81	20.37	20.82
	1 (RB_Pos:5)	20.21	20.09	20.46	20.56	20.24	20.85
	3 (RB_Pos:0)	20.10	20.10	20.44	20.18	20.09	20.12
	3 (RB_Pos:1)	20.17	20.13	20.49	20.38	20.08	20.17
	3 (RB_Pos:3)	20.09	20.08	20.45	20.44	20.03	20.11
	6 (RB_Pos:0)	20.09	20.12	20.41	20.29	19.90	20.73

FDD LTE Band 4							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20050	20175	20300	20050	20175	20300
20MHz	1 (RB_Pos:0)	21.44	21.25	21.24	21.28	21.57	21.57
	1 (RB_Pos:50)	21.00	21.15	20.96	21.07	21.63	21.16
	1 (RB_Pos:99)	21.05	21.23	21.11	21.11	21.58	21.15
	50 (RB_Pos:0)	21.18	21.19	21.10	21.23	21.12	20.99
	50 (RB_Pos:25)	21.13	21.25	20.93	21.18	21.09	20.76
	50 (RB_Pos:50)	21.14	21.12	20.77	21.17	21.07	20.67
	100 (RB_Pos:0)	21.15	21.19	20.99	21.19	21.02	20.92
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20025	20175	20325	20025	20175	20325
15MHz	1 (RB_Pos:0)	21.24	21.28	21.40	21.28	21.58	21.66
	1 (RB_Pos:38)	20.81	21.12	20.82	20.96	21.52	21.28
	1 (RB_Pos:74)	21.14	21.14	20.99	21.22	21.59	21.21
	36 (RB_Pos:0)	21.02	21.25	21.18	21.05	21.22	21.13
	36 (RB_Pos:20)	20.93	21.24	20.94	21.03	21.20	20.85
	36 (RB_Pos:39)	21.01	21.28	20.91	21.04	21.23	20.90
	75 (RB_Pos:0)	20.99	21.15	21.04	21.04	21.20	20.84
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20000	20175	20350	20000	20175	20350
10MHz	1 (RB_Pos:0)	20.89	21.13	21.02	21.27	21.49	21.32
	1 (RB_Pos:25)	20.77	21.07	20.99	20.99	21.44	21.24
	1 (RB_Pos:49)	20.78	20.97	21.04	21.18	21.34	21.15
	25 (RB_Pos:0)	20.97	21.14	21.15	20.98	21.10	21.24
	25 (RB_Pos:12)	20.85	21.14	21.08	20.86	21.07	21.07
	25 (RB_Pos:25)	20.88	21.11	21.02	20.79	21.05	21.00
	50 (RB_Pos:0)	20.92	21.12	21.05	20.82	21.07	21.16
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19975	20175	20375	19975	20175	20375
5MHz	1 (RB_Pos:0)	20.63	21.05	20.93	20.77	21.08	21.13
	1 (RB_Pos:13)	20.44	21.15	20.62	20.25	21.03	21.05
	1 (RB_Pos:24)	20.51	21.39	20.79	20.43	20.97	21.13
	12 (RB_Pos:0)	20.76	21.21	20.97	20.65	21.27	20.78
	12 (RB_Pos:6)	20.74	21.20	20.99	20.58	21.26	20.84
	12 (RB_Pos:13)	20.73	21.22	20.94	20.62	21.26	20.76
	25 (RB_Pos:0)	20.79	21.24	20.88	20.86	21.21	20.81
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19965	20175	20385	19965	20175	20385

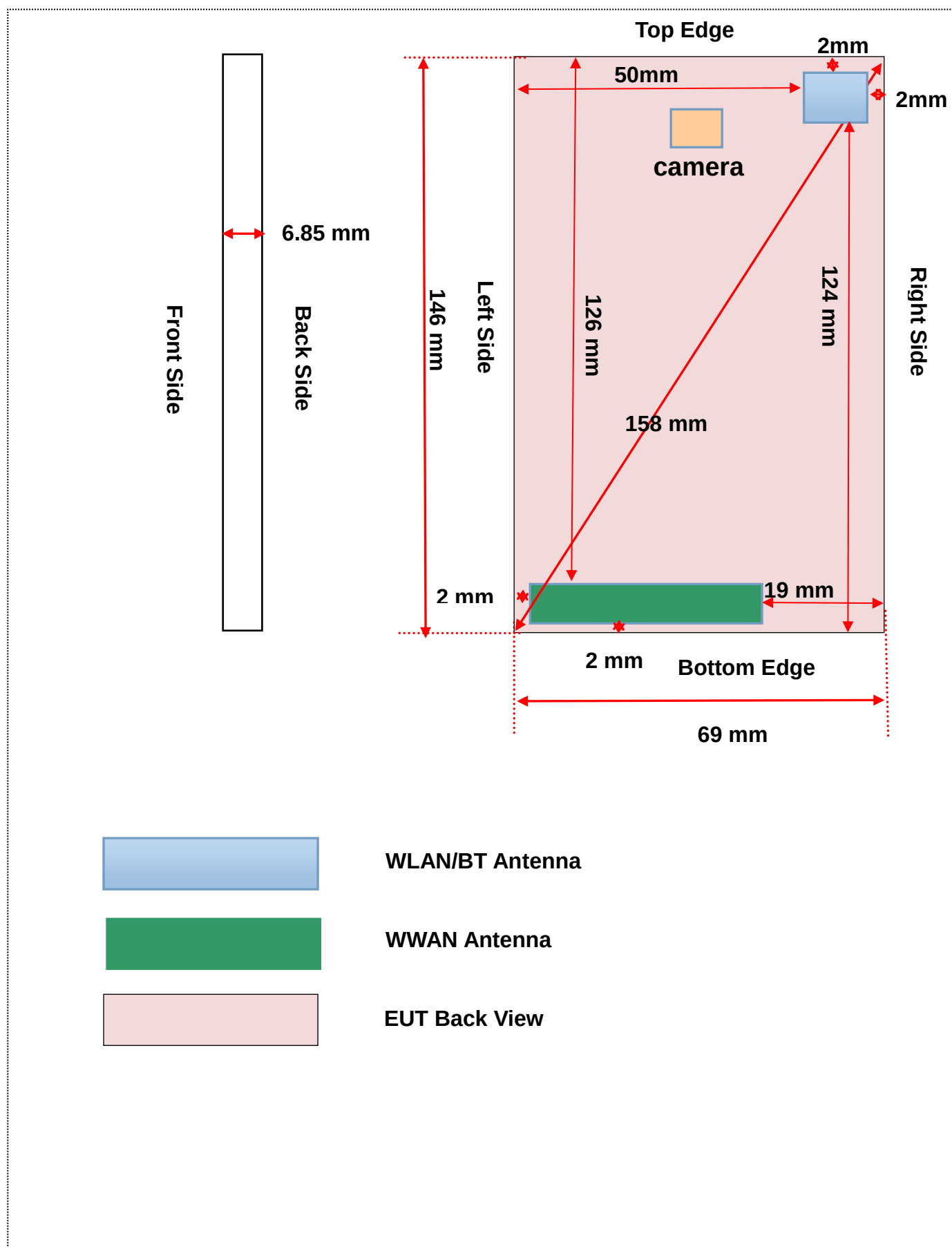
3.0MHz	1 (RB_Pos:0)	20.62	21.10	20.86	20.62	21.44	21.18
	1 (RB_Pos:8)	20.56	21.07	20.73	20.51	21.44	21.09
	1 (RB_Pos:14)	20.48	21.33	20.87	20.54	21.41	21.13
	8 (RB_Pos:0)	20.72	21.13	20.91	20.50	21.29	20.96
	8 (RB_Pos:3)	20.65	21.15	20.89	20.53	21.32	20.93
	8 (RB_Pos:7)	20.66	21.18	20.87	20.53	21.25	20.93
	15 (RB_Pos:0)	20.73	21.14	20.89	20.79	21.27	20.86
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19957	20175	20393	19957	20175	20393
1.4MHz	1 (RB_Pos:0)	20.68	21.05	20.76	21.01	21.39	21.14
	1 (RB_Pos:3)	20.79	21.16	20.78	21.12	21.55	21.17
	1 (RB_Pos:5)	20.67	21.15	20.83	21.03	21.47	21.22
	3 (RB_Pos:0)	20.70	21.18	20.83	20.32	21.18	20.71
	3 (RB_Pos:1)	20.75	21.13	20.87	20.37	21.40	20.75
	3 (RB_Pos:3)	20.62	21.10	20.84	20.27	21.26	20.70
	6 (RB_Pos:0)	20.57	21.18	20.79	20.34	20.99	20.90

FDD LTE Band 25							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26140	26365	26590	26140	26365	26590
20MHz	1 (RB_Pos:0)	20.31	20.40	20.24	20.71	20.73	20.52
	1 (RB_Pos:50)	20.48	20.60	20.13	20.56	20.70	20.34
	1 (RB_Pos:99)	20.45	20.50	20.45	20.37	20.64	20.36
	50 (RB_Pos:0)	20.24	20.21	20.13	20.23	20.18	20.13
	50 (RB_Pos:25)	20.34	20.24	20.11	20.38	20.20	20.10
	50 (RB_Pos:50)	20.29	20.17	20.19	20.24	20.24	20.20
	100 (RB_Pos:0)	20.29	20.19	20.20	20.25	20.15	20.14
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26115	26365	26615	26115	26365	26615
15MHz	1 (RB_Pos:0)	20.14	20.29	20.40	20.61	20.47	20.80
	1 (RB_Pos:38)	20.11	20.12	20.25	20.07	20.36	20.63
	1 (RB_Pos:74)	20.30	20.18	20.39	20.75	20.56	20.66
	36 (RB_Pos:0)	20.04	20.21	20.26	20.09	20.20	20.20
	36 (RB_Pos:20)	20.17	20.21	20.37	20.11	20.21	20.27
	36 (RB_Pos:39)	20.29	20.22	20.58	20.40	20.31	20.66
	75 (RB_Pos:0)	20.18	20.16	20.42	20.13	20.13	20.45
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26090	26365	26640	26090	26365	26640
10MHz	1 (RB_Pos:0)	20.08	20.18	20.57	20.51	20.58	20.92
	1 (RB_Pos:25)	20.04	20.18	20.71	20.35	20.51	20.94

	1 (RB_Pos:49)	20.28	20.18	20.61	20.69	20.61	20.84
	25 (RB_Pos:0)	20.00	20.15	20.55	20.08	20.13	20.66
	25 (RB_Pos:12)	20.01	20.18	20.63	19.97	20.07	20.74
	25 (RB_Pos:25)	20.31	20.27	20.79	20.28	20.27	20.83
	50 (RB_Pos:0)	20.16	20.20	20.52	20.12	20.17	20.56
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26065	26365	26665	26065	26365	26665
5MHz	1 (RB_Pos:0)	19.76	20.19	20.26	19.80	20.19	20.68
	1 (RB_Pos:13)	19.80	20.23	20.15	19.46	20.21	20.57
	1 (RB_Pos:24)	19.64	20.49	20.35	19.90	20.29	20.52
	12 (RB_Pos:0)	20.04	20.12	20.42	19.79	20.24	20.38
	12 (RB_Pos:6)	20.00	20.21	20.48	19.79	20.23	20.52
	12 (RB_Pos:13)	20.02	20.26	20.35	19.91	20.29	20.33
	25 (RB_Pos:0)	20.02	20.20	20.46	20.27	20.12	20.83
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26055	26365	26675	26055	26365	26675
3.0MHz	1 (RB_Pos:0)	19.83	20.13	20.40	20.31	20.58	20.83
	1 (RB_Pos:8)	19.78	20.10	20.17	20.17	20.59	20.59
	1 (RB_Pos:14)	19.89	20.23	20.21	20.31	20.62	20.59
	8 (RB_Pos:0)	20.12	20.14	20.36	19.78	20.34	20.41
	8 (RB_Pos:3)	20.09	20.12	20.35	19.75	20.33	20.40
	8 (RB_Pos:7)	19.97	20.21	20.37	19.75	20.43	20.43
	15 (RB_Pos:0)	20.02	20.13	20.37	19.97	20.22	20.33
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26047	26365	26683	26047	26365	26683
1.4MHz	1 (RB_Pos:0)	19.81	20.06	20.05	20.26	20.45	20.38
	1 (RB_Pos:3)	19.96	20.18	20.21	20.33	20.34	20.48
	1 (RB_Pos:5)	19.89	20.09	20.06	20.38	20.52	20.46
	3 (RB_Pos:0)	19.99	20.06	20.25	20.13	20.46	20.44
	3 (RB_Pos:1)	20.07	20.12	20.29	20.20	20.36	20.40
	3 (RB_Pos:3)	20.11	20.09	20.21	20.37	20.43	20.31
	6 (RB_Pos:0)	20.00	20.11	20.36	20.14	20.19	20.49

FDD LTE Band 41											
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK					16QAM				
	Channel	39750	40185	40620	41055	41490	39750	40185	40620	41055	41490
20MHz	1 (RB_Pos:0)	18.76	18.54	19.20	18.98	18.60	19.06	18.84	18.95	19.40	19.14
	1 (RB_Pos:50)	18.60	18.52	18.84	18.91	18.15	18.99	18.52	18.44	18.53	18.86
	1 (RB_Pos:99)	18.65	18.37	18.91	18.92	18.12	19.02	18.49	18.67	18.73	18.66
	50 (RB_Pos:0)	18.82	18.45	18.94	18.69	18.29	18.62	18.43	19.03	18.70	18.50
	50 (RB_Pos:25)	18.56	18.32	18.73	18.68	18.06	18.49	18.37	18.74	18.66	18.30
	50 (RB_Pos:50)	18.49	18.35	18.69	18.71	17.90	18.48	18.33	18.79	18.74	18.14
	100 (RB_Pos:0)	18.66	18.39	18.80	18.64	18.20	18.61	18.41	18.7	18.57	18.32
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK					16QAM				
	Channel	39725	40160	40620	41080	41515	39725	40160	40620	41080	41515
15MHz	1 (RB_Pos:0)	18.49	19.19	18.64	19.14	19.09	19.33	19.13	19.33	18.35	19.14
	1 (RB_Pos:38)	18.26	19.03	18.34	18.84	18.80	19.16	18.78	18.80	17.80	18.85
	1 (RB_Pos:74)	18.54	19.08	18.42	19.02	19.05	19.05	19.12	19.15	17.92	18.92
	36 (RB_Pos:0)	18.44	18.36	18.47	18.37	18.90	18.87	18.71	18.82	18.19	18.13
	36 (RB_Pos:20)	18.25	18.20	18.39	18.33	18.71	18.70	18.67	18.72	17.95	17.90
	36 (RB_Pos:39)	18.29	18.30	18.36	18.20	18.79	18.97	18.85	18.85	18.04	17.85
	75 (RB_Pos:0)	18.38	18.41	18.39	18.38	18.77	19.07	18.76	18.78	18.02	18.10
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK					16QAM				
	Channel	39700	40135	40620	41105	41540	39700	40135	40620	41105	41540
10MHz	1 (RB_Pos:0)	18.09	18.86	18.63	19.24	19.40	19.32	18.88	19.32	18.21	19.33
	1 (RB_Pos:25)	18.01	18.86	18.53	19.15	18.97	19.23	18.84	18.85	17.93	19.26
	1 (RB_Pos:49)	18.01	18.75	18.45	19.03	18.90	19.15	18.98	18.89	18.01	19.27
	25 (RB_Pos:0)	18.20	18.16	18.50	18.59	18.84	18.69	18.71	18.71	18.10	18.02
	25 (RB_Pos:12)	18.20	18.12	18.56	18.45	18.78	18.57	18.75	18.61	17.98	17.82
	25 (RB_Pos:25)	18.22	18.14	18.76	18.58	18.77	18.56	18.77	18.69	17.98	17.82
	50 (RB_Pos:0)	18.18	18.03	18.75	18.48	18.74	18.74	18.73	18.76	18.06	18.10
Bandwidth (MHz)	RB Set	Power (dBm)									
		QPSK					16QAM				
	Channel	39675	40110	40620	41130	41565	39675	40110	40620	41130	41565
5MHz	1 (RB_Pos:0)	18.00	18.40	18.55	18.15	18.66	18.76	18.73	19.10	18.10	17.69
	1 (RB_Pos:13)	18.01	18.36	18.52	18.09	18.51	18.70	18.66	18.75	17.85	17.47
	1 (RB_Pos:24)	18.10	18.35	18.45	18.15	18.51	18.55	18.74	18.81	17.88	17.59
	12 (RB_Pos:0)	18.20	18.04	18.50	18.34	18.72	19.03	18.82	18.82	18.04	17.73
	12 (RB_Pos:6)	18.15	18.06	18.49	18.23	18.64	18.98	18.75	18.60	18.00	17.76
	12 (RB_Pos:13)	18.20	18.14	18.49	18.35	18.65	18.95	18.82	18.84	17.91	17.75
	25 (RB_Pos:0)	18.09	18.04	18.44	18.54	18.68	18.70	18.82	18.85	18.07	17.98

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
CDMA BC0	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	RC3 SO55	24.30	269.15	Yes	No	No	No	No	No
	RC3 SO32	24.50	281.84	No	Yes	Yes	Yes	Yes	Yes
CDMA BC1	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	RC3 SO55	23.80	239.88	Yes	No	No	No	No	No
	RC3 SO32	23.50	223.87	No	Yes	Yes	Yes	Yes	Yes
CDMA BC10	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	RC3 SO55	24.50	281.84	Yes	No	No	No	No	No
	RC3 SO32	24.80	302.00	No	Yes	Yes	Yes	Yes	Yes
LTE Band 2	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	QPSK	24.00	251.19	Yes	Yes	Yes	Yes	No	Yes
LTE Band 4	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	QPSK	23.60	229.09	Yes	Yes	Yes	Yes	No	Yes
LTE Band 5	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	QPSK	23.50	223.87	Yes	Yes	Yes	Yes	No	Yes
LTE Band 12	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	QPSK	23.30	213.80	Yes	Yes	Yes	Yes	No	Yes
LTE Band 13	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	QPSK	23.00	199.53	Yes	Yes	Yes	Yes	No	Yes
LTE Band 25	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	QPSK	23.80	239.88	Yes	Yes	Yes	Yes	No	Yes
LTE Band 26	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	QPSK	23.50	223.87	Yes	Yes	Yes	Yes	No	Yes
LTE Band 41	Distance to User			<5mm	<5 mm	<5 mm	19 mm	126 mm	<5mm
	QPSK	23.90	245.47	Yes	Yes	Yes	Yes	No	Yes
WLAN 2.4 G	Distance to User			<5mm	<5mm	50mm	<5mm	<5mm	124 mm
	802.11b	17.00	50.12	Yes	Yes	No	Yes	Yes	No
	802.11g	14.00	25.12	No	No	No	No	No	No
	802.11n(HT20)	14.00	25.12	No	No	No	No	No	No
	802.11n(HT40)	12.00	15.85	No	No	No	No	No	No
Bluetooth	Distance to User			<5mm	<5mm	50mm	<5mm	<5mm	124 mm
	Bluetooth BR/EDR	12.00	15.85	Yes	Yes	No	Yes	Yes	No
	Bluetooth BLE	0.3	1.07	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.

2. 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.
3. 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
4. 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:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$
 - a. $f(\text{GHz})$ is the RF channel transmit frequency in GHz
 - b. Power and distance are rounded to the nearest mW and mm before calculation
 - c. The result is rounded to one decimal place for comparison
 - d. For < 50 mm distance, we just calculate mW of the exclusion threshold value (3.0) to do compare.

This formula is $[3.0] / [\sqrt{f(\text{GHz})}] \cdot [(\text{min. test separation distance, mm})] = \text{exclusion threshold of mW.}$
5. 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:
 - a. $[\text{Threshold at 50 mm in step 1}] + (\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)] \text{ mW, at 100 MHz to 1500 MHz}$
 - b. $[\text{Threshold at 50 mm in step 1}] + (\text{test separation distance} - 50 \text{ mm}) \cdot 10] \text{ mW at } > 1500 \text{ MHz and } \leq 6 \text{ GHz}$
6. Per KDB 941225 D01, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode
7. Per KDB 941225 D05, SAR test reduction is applied using the following criteria:
 - a. Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel.
 - b. When the reported SAR is > 0.8 W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.
 - c. Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are > 0.8 W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation < 1.45 W/kg.
 - d. Testing for 16-QAM modulation is not required because the reported SAR for QPSK is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of QPSK.
 - e. Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is < 1.45 W/Kg and its output power is not more than 0.5 dB higher than that of the highest channel bandwidth.
8. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
 - a. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
 - b. When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel.
9. Per KDB 248227 D01 SAR is not required for the following 2.4 GHz OFDM conditions.
 - a. When KDB Publication 447498 D01 SAR test exclusion applies to the OFDM configuration.
 - b. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

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 1.166 W/Kg, which is less than 1.2W/Kg, 10-g extremity SAR is not required.

10 TEST RESULTS

10.1 CDMA BC0

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											
RC3 SO55	Left Cheek	0	384	836.52	0.07	0.454	23.94	24.30	1.09	0.493	/
	Left Tilt	0	384	836.52	1.24	0.226	23.94	24.30	1.09	0.246	/
	Right Cheek	0	384	836.52	-0.32	0.462	23.94	24.30	1.09	0.502	1#
	Right Tilt	0	384	836.52	0.56	0.230	23.94	24.30	1.09	0.250	/
Body-worn Accessory											
RC3 SO32	Front Side	15	384	836.52	0.56	0.460	23.93	24.50	1.14	0.525	/
	Back Side	15	384	836.52	-0.61	0.492	23.93	24.50	1.14	0.561	2#
Hotspot											
RC3 SO32	Front Side	10	384	836.52	0.44	0.436	23.93	24.50	1.14	0.497	/
	Back Side	10	384	836.52	0.73	0.489	23.93	24.50	1.14	0.558	/
	Left Edge	10	384	836.52	1.19	0.479	23.93	24.50	1.14	0.546	/
	Right Edge	10	384	836.52	-0.63	0.390	23.93	24.50	1.14	0.445	/
	Bottom Edge	10	384	836.52	2.47	0.242	23.93	24.50	1.14	0.276	/
Note: For this band, the EUT does not support Power Reduction under Hotspot mode											

10.2 CDMA BC1

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											
RC3 SO55	Left Cheek	0	25	1851.25	1.44	0.319	23.49	23.80	1.07	0.343	/
	Left Tilt	0	25	1851.25	-0.32	0.113	23.49	23.80	1.07	0.121	/
	Right Cheek	0	25	1851.25	4.29	0.365	23.49	23.80	1.07	0.392	3#
	Right Tilt	0	25	1851.25	3.12	0.129	23.49	23.80	1.07	0.139	/
Body-worn Accessory											
RC3 SO32	Front Side	15	1175	1908.75	-1.49	0.701	23.43	23.50	1.02	0.712	/
	Back Side	15	1175	1908.75	-0.92	0.741	23.43	23.50	1.02	0.753	/
Hotspot											
RC3 SO32	Front Side	10	1175	1908.75	-0.20	0.750	20.32	20.60	1.07	0.800	/
	Back Side	10	1175	1908.75	-1.48	0.827	20.32	20.60	1.07	0.882	/
		10	25	1851.25	-1.12	0.825	20.25	20.60	1.08	0.894	/
		10	600	1880.00	-1.68	0.842	20.27	20.60	1.08	0.908	4#
	Left Edge	10	1175	1908.75	0.85	0.321	20.32	20.60	1.07	0.342	/
	Right Edge	10	1175	1908.75	0.44	0.216	20.32	20.60	1.07	0.230	/
	Bottom Edge	10	1175	1908.75	-4.20	0.684	20.32	20.60	1.07	0.730	/
Note: For this band, the EUT support Power Reduction under Hotspot mode.											

10.3 CDMA BC10

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											
RC3 SO55	Left Cheek	0	560	820.00	2.97	0.473	23.94	24.50	1.14	0.538	/
	Left Tilt	0	560	820.00	4.11	0.235	23.94	24.50	1.14	0.267	/
	Right Cheek	0	560	820.00	-0.06	0.524	23.94	24.50	1.14	0.595	5#
	Right Tilt	0	560	820.00	-3.02	0.261	23.94	24.50	1.14	0.297	/
Body-worn Accessory											
RC3 SO32	Front Side	15	560	820.00	0.00	0.533	24.30	24.80	1.12	0.598	/
	Back Side	15	560	820.00	-0.27	0.554	24.30	24.80	1.12	0.622	/
Hotspot											
RC3 SO32	Front Side	10	560	820.00	-0.95	0.496	24.30	24.80	1.12	0.557	/
	Back Side	10	560	820.00	0.55	0.589	24.30	24.80	1.12	0.661	6#
	Left Edge	10	560	820.00	1.35	0.524	24.30	24.80	1.12	0.588	/
	Right Edge	10	560	820.00	-0.59	0.451	24.30	24.80	1.12	0.506	/
	Bottom Edge	10	560	820.00	-0.99	0.291	24.30	24.80	1.12	0.327	/
Note: For this band, the EUT does not support Power Reduction under Hotspot mode											

10.4LTE 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	-1.44	0.333	23.67	24.00	1.08	0.359	/
					50	Low	0.49	0.282	22.29	22.50	1.05	0.296	/
	Left Tilt	0	18700	1860	1	Low	-4.50	0.135	23.67	24.00	1.08	0.146	/
					50	Low	2.01	0.114	22.29	22.50	1.05	0.120	/
	Right Cheek	0	18700	1860	1	Low	1.87	0.448	23.67	24.00	1.08	0.483	7#
					50	Low	-2.41	0.379	22.29	22.50	1.05	0.398	/
	Right Tilt	0	18700	1860	1	Low	-2.12	0.158	23.67	24.00	1.08	0.170	/
					50	Low	3.88	0.134	22.29	22.50	1.05	0.141	/
Body-worn Accessory													
QPSK	Front Side	15	18700	1860	1	Low	0.56	0.438	23.67	24.00	1.08	0.473	/
					50	Low	-2.28	0.349	22.29	22.50	1.05	0.366	/
	Back Side	15	18700	1860	1	Low	-0.60	0.825	23.67	24.00	1.08	0.890	/
			18900	1880	1	Low	1.88	0.816	23.37	24.00	1.16	0.943	/
			19100	1900	1	High	-1.29	0.742	22.73	24.00	1.34	0.994	/
			18700	1860	50	Low	-2.08	0.601	23.67	24.00	1.08	0.648	/
			18700	1860	100	Low	-3.21	0.558	22.29	22.50	1.05	0.586	/
Hotspot													
QPSK	Front Side	10	18900	1880	1	High	-4.50	0.529	20.43	20.7	1.06	0.563	/
					50	Low	-1.06	0.520	20.21	20.5	1.07	0.556	/
	Back Side	10	18900	1880	1	High	-0.54	0.894	20.43	20.7	1.06	0.951	/
			18700	1860	1	Low	-1.29	0.842	20.14	20.7	1.14	0.958	/
			19100	1900	1	Low	1.62	0.914	20.02	20.7	1.17	1.069	8#
			18900	1880	50	Low	-0.26	0.882	20.21	20.5	1.07	0.943	/
			18700	1860	50	Low	-0.75	0.809	20.19	20.5	1.07	0.869	/
			19100	1900	50	Low	-2.10	0.862	19.83	20.5	1.17	1.006	/
			18700	1880	100	Low	-0.42	0.841	20.21	20.5	1.07	0.899	/
	Left Edge	10	18900	1880	1	High	-1.90	0.293	20.43	20.7	1.06	0.312	/
					50	Low	-3.11	0.286	20.21	20.5	1.07	0.306	/
	Right Edge	10	18900	1880	1	Low	0.52	0.197	20.43	20.7	1.06	0.210	/
					50	Low	-1.93	0.190	20.21	20.5	1.07	0.203	/
	Bottom Edge	10	18900	1880	1	High	1.61	0.687	20.43	20.7	1.06	0.731	/
					50	Low	2.13	0.675	20.21	20.5	1.07	0.722	/
Note: For this band, the EUT support Power Reduction under Hotspot mode.													

10.5LTE Band 4 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num b.	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	20175	1732.5	1	Mid	-2.47	0.348	23.33	23.60	1.06	0.370	/
					50	High	3.00	0.311	22.14	22.50	1.09	0.338	/
	Left Tilt	0	20175	1732.5	1	Mid	-1.06	0.186	23.33	23.60	1.06	0.198	/
					50	High	1.02	0.156	22.14	22.50	1.09	0.169	/
	Right Cheek	0	20175	1732.5	1	Mid	-4.02	0.498	23.33	23.60	1.06	0.530	9#
					50	High	2.77	0.445	22.14	22.50	1.09	0.483	/
	Right Tilt	0	20175	1732.5	1	Mid	-3.11	0.248	23.33	23.60	1.06	0.264	/
					50	High	1.78	0.221	22.14	22.50	1.09	0.240	/
Body-worn Accessory													
QPSK	Front Side	15	20175	1732.5	1	Mid	-2.81	0.563	23.33	23.60	1.06	0.599	/
					50	High	0.52	0.301	22.14	22.50	1.09	0.327	/
	Back Side	15	20175	1732.5	1	Mid	-1.22	0.845	23.33	23.60	1.06	0.899	/
			20050	1720	1	High	-1.93	0.833	23.28	23.6	1.08	0.897	/
			20300	1745	1	Low	-0.79	0.812	23.00	23.6	1.15	0.932	/
			20175	1732.5	50	High	-0.85	0.661	22.14	23.6	1.40	0.925	/
			20050	1720	100	Low	0.48	0.536	22.05	22.5	1.11	0.595	/
Hotspot													
QPSK	Front Side	10	20050	1720	1	Low	-0.84	0.541	21.44	21.70	1.06	0.574	/
			20175	1732.5	50	Mid	2.44	0.473	21.25	21.50	1.06	0.501	/
	Back Side	10	20050	1720	1	Low	-1.88	0.923	21.44	21.80	1.09	1.003	10#
			20175	1732.5	1	Low	-0.76	0.867	21.25	21.70	1.11	0.962	/
			20300	1745	1	Low	-1.04	0.860	21.24	21.70	1.11	0.956	/
			20175	1732.5	50	Mid	-1.34	0.807	21.25	21.50	1.06	0.855	/
			20050	1720	50	Low	-1.43	0.835	21.18	21.50	1.08	0.899	/
			20300	1745	50	Low	-0.99	0.804	21.10	21.50	1.10	0.882	/
			21750	1732.5	100	Low	0.04	0.784	21.19	21.50	1.07	0.842	/
			Left Edge	10	20050	1720	1	Low	-2.02	0.312	21.44	21.70	1.06
	20175	1732.5			50	Mid	3.42	0.273	21.25	21.50	1.06	0.289	/
	Right Edge	10	20050	1720	1	Low	2.63	0.209	21.44	21.70	1.06	0.222	/
			20175	1732.5	50	Mid	-1.18	0.183	21.25	21.50	1.06	0.194	/
	Bottom Edge	10	20050	1720	1	Low	2.54	0.507	21.44	21.70	1.06	0.538	/
			20175	1732.5	50	Mid	-2.00	0.439	21.25	21.50	1.06	0.465	/
Note: For this band, the EUT support Power Reduction under Hotspot mode.													

10.6LTE Band 5 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num b.	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	20600	844	1	Mid	-1.88	0.360	23.31	23.50	1.04	0.376	/
			20525	836.5	25	Low	-1.34	0.301	22.17	22.50	1.08	0.327	/
	Left Tilt	0	20600	844	1	Mid	-2.02	0.162	23.31	23.50	1.04	0.169	/
			20525	836.5	25	Low	-1.18	0.141	22.17	22.50	1.08	0.153	/
	Right Cheek	0	20600	844	1	Mid	-2.06	0.401	23.31	23.50	1.04	0.419	11#
			20525	836.5	25	Low	1.58	0.352	22.17	22.50	1.08	0.379	/
	Right Tilt	0	20600	844	1	Mid	-0.07	0.200	23.31	23.50	1.04	0.209	/
			20525	836.5	25	Low	0.03	0.176	22.17	22.50	1.08	0.191	/
Body-worn Accessory													
QPSK	Front Side	15	20600	844	1	Mid	-1.54	0.363	23.31	23.50	1.04	0.379	/
			20525	836.5	25	Low	-1.27	0.299	22.17	22.50	1.07	0.322	/
	Back Side	15	20600	844	1	Mid	-1.43	0.392	23.31	23.50	1.04	0.410	/
			20525	836.5	25	Low	-0.78	0.326	22.17	22.50	1.07	0.351	/
Hotspot													
QPSK	Front Side	10	20600	844	1	Mid	-1.50	0.411	23.31	23.50	1.04	0.429	/
			20525	836.5	25	Low	2.21	0.361	22.17	22.50	1.08	0.389	/
	Back Side	10	20600	844	1	Mid	-0.09	0.446	23.31	23.50	1.04	0.466	12#
			20525	836.5	25	Low	1.44	0.392	22.17	22.50	1.08	0.422	/
	Left Edge	10	20600	844	1	Mid	3.21	0.305	23.31	23.50	1.04	0.319	/
			20525	836.5	25	Low	2.63	0.255	22.17	22.50	1.08	0.275	/
	Right Edge	10	20600	844	1	Mid	-1.34	0.262	23.31	23.50	1.04	0.274	/
			20525	836.5	25	Low	3.42	0.209	22.17	22.50	1.08	0.225	/
	Bottom Edge	10	20600	844	1	Mid	2.54	0.141	23.31	23.50	1.04	0.147	/
			20525	836.5	25	Low	1.58	0.117	22.17	22.50	1.08	0.127	/
Note: For this band, the EUT does not support Power Reduction under Hotspot mode.													

10.7LTE Band 12 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num b.	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	High	0.73	0.240	22.91	23.30	1.09	0.263	/
			23130	711	25	Low	-0.63	0.196	21.78	22.10	1.08	0.211	/
	Left Tilt	0	23130	711	1	High	-1.98	0.128	22.91	23.30	1.09	0.140	/
			23130	711	25	Low	4.29	0.104	21.78	22.10	1.08	0.112	/
	Right Cheek	0	23130	711	1	High	2.24	0.251	22.91	23.30	1.09	0.275	13#
			23130	711	25	Low	1.54	0.205	21.78	22.10	1.08	0.221	/
	Right Tilt	0	23130	711	1	High	-2.02	0.135	22.91	23.30	1.09	0.148	/
			23130	711	25	Low	-1.34	0.110	21.78	22.10	1.08	0.118	/
Body-worn Accessory													
QPSK	Front Side	15	23130	711	1	High	0.17	0.303	22.91	23.30	1.09	0.331	/
			23130	711	25	Low	-0.46	0.234	21.78	22.10	1.08	0.252	/
	Back Side	15	23130	711	1	High	-2.21	0.472	22.91	23.30	1.09	0.516	/
			23130	711	25	Low	0.58	0.365	21.78	22.10	1.08	0.393	/
Hotspot													
QPSK	Front Side	10	23130	711	1	High	0.71	0.344	22.91	23.30	1.09	0.376	/
			23130	711	25	Low	1.70	0.256	21.78	22.10	1.08	0.276	/
	Back Side	10	23130	711	1	High	-1.02	0.536	22.91	23.30	1.09	0.586	14#
			23130	711	25	Low	0.28	0.414	21.78	22.10	1.08	0.446	/
	Left Edge	10	23130	711	1	High	1.72	0.382	22.91	23.30	1.09	0.418	/
			23130	711	25	Low	-1.32	0.307	21.78	22.10	1.08	0.330	/
	Right Edge	10	23130	711	1	High	0.44	0.236	22.91	23.30	1.09	0.258	/
			23130	711	25	Low	-0.04	0.189	21.78	22.10	1.08	0.203	/
	Bottom Edge	10	23130	711	1	High	-0.87	0.102	22.91	23.30	1.09	0.112	/
			23130	711	25	Low	0.63	0.083	21.78	22.10	1.08	0.089	/
Note: For this band, the EUT does not support Power Reduction under Hotspot mode.													

10.8LTE Band 13 (10MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num b.	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	23230	782	1	Mid	0.10	0.451	22.57	23.00	1.10	0.498	/
			23230	782	25	Low	-0.79	0.368	21.84	22.10	1.06	0.391	/
	Left Tilt	0	23230	782	1	Mid	1.44	0.240	22.57	23.00	1.10	0.265	/
			23230	782	25	Low	1.54	0.196	21.84	22.10	1.06	0.208	/
	Right Cheek	0	23230	782	1	Mid	-0.05	0.457	22.57	23.00	1.10	0.505	15#
			23230	782	25	Low	-2.14	0.373	21.84	22.10	1.06	0.396	/
	Right Tilt	0	23230	782	1	Mid	0.03	0.245	22.57	23.00	1.10	0.270	/
			23230	782	25	Low	2.01	0.200	21.84	22.10	1.06	0.212	/
Body-worn Accessory													
QPSK	Front Side	15	23230	782	1	Mid	1.35	0.452	22.57	23.00	1.10	0.499	/
			23230	782	25	Low	-0.87	0.362	21.84	22.10	1.06	0.384	/
	Back Side	15	23230	782	1	Mid	-0.34	0.550	22.57	23.00	1.10	0.607	/
			23230	782	25	Low	-0.60	0.452	21.84	22.10	1.06	0.480	/
Hotspot													
QPSK	Front Side	10	23230	782	1	Mid	1.00	0.524	22.57	23.00	1.10	0.579	/
			23230	782	25	Low	-0.59	0.390	21.84	22.10	1.06	0.414	/
	Back Side	10	23230	782	1	Mid	1.43	0.647	22.57	23.00	1.10	0.714	16#
			23230	782	25	Low	0.60	0.540	21.84	22.10	1.06	0.573	/
	Left Edge	10	23230	782	1	Mid	0.17	0.499	22.57	23.00	1.10	0.551	/
			23230	782	25	Low	-0.99	0.401	21.84	22.10	1.06	0.426	/
	Right Edge	10	23230	782	1	Mid	-0.69	0.389	22.57	23.00	1.10	0.429	/
			23230	782	25	Low	-0.61	0.312	21.84	22.10	1.06	0.331	/
	Bottom Edge	10	23230	782	1	Mid	3.25	0.231	22.57	23.00	1.10	0.255	/
			23230	782	25	Low	-1.35	0.189	21.84	22.10	1.06	0.201	/
Note: For this band, the EUT does not support Power Reduction under Hotspot mode.													

10.9LTE Band 25 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num b.	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	26365	1882.5	1	Low	-3.52	0.311	23.47	23.80	1.08	0.336	/
			26140	1860	50	Low	1.23	0.264	22.38	22.70	1.08	0.284	/
	Left Tilt	0	26365	1882.5	1	Low	-3.92	0.137	23.47	23.80	1.08	0.148	/
			26140	1860	50	Low	1.02	0.116	22.38	22.70	1.08	0.125	/
	Right Cheek	0	26365	1882.5	1	Low	2.08	0.439	23.47	23.80	1.08	0.474	17#
			26140	1860	50	Low	-5.06	0.373	22.38	22.70	1.08	0.402	/
	Right Tilt	0	26365	1882.5	1	Low	-1.91	0.172	23.47	23.80	1.08	0.186	/
			26140	1860	50	Low	-2.67	0.126	22.38	22.70	1.08	0.136	/
Body-worn Accessory													
QPSK	Front Side	15	26365	1882.5	1	Low	-0.06	0.456	23.47	23.80	1.08	0.492	/
			26140	1860	50	Low	-1.17	0.351	22.38	22.70	1.08	0.378	/
	Back Side	15	26365	1882.5	1	Low	-1.32	0.808	23.47	23.80	1.08	0.872	/
			26140	1860	1	Low	-1.99	0.774	23.47	23.80	1.08	0.835	/
			26590	1905	1	Low	0.85	0.761	23.22	23.80	1.14	0.870	/
			26140	1860	50	Low	-1.32	0.605	22.38	22.70	1.08	0.651	/
			26140	1860	100	Low	-0.22	0.639	22.54	22.80	1.06	0.678	/
Hotspot													
QPSK	Front Side	10	26365	1882.5	1	Mid	0.03	0.580	20.60	20.90	1.07	0.621	/
			26140	1860	50	Mid	0.36	0.549	20.34	20.70	1.09	0.596	/
	Back Side	10	26365	1882.5	1	Mid	-0.65	0.882	20.60	20.90	1.07	0.945	/
			26140	1860	1	Mid	-0.41	0.903	20.48	20.90	1.10	0.995	18#
			26590	1905	1	High	-3.21	0.885	20.45	20.90	1.11	0.982	/
			26140	1860	50	Mid	-1.29	0.854	20.34	20.70	1.09	0.928	/
			26365	1882.5	50	Mid	4.29	0.834	20.24	20.70	1.11	0.927	/
			26590	1905	50	High	-1.49	0.851	20.19	20.70	1.12	0.957	/
			26140	1860	100	Low	-0.22	0.816	20.29	20.60	1.07	0.876	/
	Left Edge	10	26365	1882.5	1	Mid	0.04	0.312	20.60	20.90	1.07	0.334	/
			26140	1860	50	Mid	2.31	0.295	20.34	20.70	1.09	0.320	/
	Right Edge	10	26365	1882.5	1	Mid	-1.76	0.171	20.60	20.90	1.07	0.183	/
			26140	1860	50	Mid	-0.40	0.162	20.34	20.70	1.09	0.176	/
	Bottom Edge	10	26365	1882.5	1	Mid	0.52	0.678	20.60	20.90	1.07	0.726	/
			26140	1860	50	Mid	3.20	0.641	20.34	20.70	1.09	0.696	/
Note: For this band, the EUT support Power Reduction under Hotspot mode.													

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

10.10 LTE Band 26 (15MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num b.	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	26965	841.5	1	Low	0.93	0.374	23.21	23.50	1.07	0.400	/
			26965	841.5	36	Low	1.03	0.289	22.04	22.50	1.11	0.321	/
	Left Tilt	0	26965	841.5	1	Low	0.01	0.218	23.21	23.50	1.07	0.233	/
			26965	841.5	36	Low	-0.85	0.169	22.04	22.50	1.11	0.188	/
	Right Cheek	0	26965	841.5	1	Low	-1.02	0.409	23.21	23.50	1.07	0.437	19#
			26965	841.5	36	Low	0.72	0.316	22.04	22.50	1.11	0.351	/
	Right Tilt	0	26965	841.5	1	Low	0.25	0.197	23.21	23.50	1.07	0.211	/
			26965	841.5	36	Low	1.56	0.152	22.04	22.50	1.11	0.169	/
Body-worn Accessory													
QPSK	Front Side	15	26965	841.5	1	Low	0.09	0.415	23.21	23.50	1.07	0.444	/
			26965	841.5	36	Low	-0.11	0.321	22.04	22.50	1.11	0.357	/
	Back Side	15	26965	841.5	1	Low	-1.00	0.451	23.21	23.50	1.07	0.482	/
			26965	841.5	36	Low	-1.87	0.341	22.04	22.50	1.11	0.379	/
Hotspot													
QPSK	Front Side	10	26965	841.5	1	Low	-0.58	0.436	23.21	23.50	1.07	0.466	/
			26965	841.5	36	Low	-2.99	0.334	22.04	22.50	1.11	0.371	/
	Back Side	10	26965	841.5	1	Low	-2.43	0.503	23.21	23.50	1.07	0.538	20#
			26965	841.5	36	Low	-0.90	0.386	22.04	22.50	1.11	0.429	/
	Left Edge	10	26965	841.5	1	Low	-3.10	0.479	23.21	23.50	1.07	0.512	/
			26965	841.5	36	Low	0.45	0.369	22.04	22.50	1.11	0.410	/
	Right Edge	10	26965	841.5	1	Low	-0.50	0.326	23.21	23.50	1.07	0.349	/
			26965	841.5	36	Low	2.08	0.251	22.04	22.50	1.11	0.279	/
	Bottom Edge	10	26965	841.5	1	Low	-2.68	0.198	23.21	23.50	1.07	0.212	/
			26965	841.5	36	Low	-0.92	0.153	22.04	22.50	1.11	0.170	/
Note: For this band, the EUT does not support Power Reduction under Hotspot mode.													

10.11 LTE Band 41 (20MHz Bandwidth)

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	RB Num b.	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	40620	2593	1	Low	-2.38	0.100	23.63	23.90	1.06	0.106	/
			40620	2593	50	Low	-0.07	0.073	22.51	22.80	1.07	0.078	/
	Left Tilt	0	40620	2593	1	Low	-0.84	0.049	23.63	23.90	1.06	0.052	/
			40620	2593	50	Low	2.51	0.036	22.51	22.80	1.07	0.038	/
	Right Cheek	0	40620	2593	1	Low	-2.99	0.220	23.63	23.90	1.06	0.234	21#
			40620	2593	50	Low	-1.20	0.161	22.51	22.80	1.07	0.172	/
	Right Tilt	0	40620	2593	1	Low	-2.39	0.040	23.63	23.90	1.06	0.043	/
			40620	2593	50	Low	1.78	0.029	22.51	22.80	1.07	0.031	/
Body-worn Accessory													
QPSK	Front Side	15	40620	2593	1	Low	-1.10	0.317	23.63	23.90	1.06	0.337	/
			40620	2593	50	Low	2.01	0.245	22.51	22.80	1.07	0.262	/
	Back Side	15	40620	2593	1	Low	-0.50	0.789	23.63	23.90	1.06	0.840	/
			39750	2506	1	Mid	-0.35	0.631	22.95	23.90	1.24	0.785	/
			40185	2549.5	1	Low	-1.80	0.665	23.06	23.90	1.21	0.807	/
			41055	2636.5	1	Low	-2.21	0.948	23.37	23.90	1.13	1.071	/
			41490	2680	1	Low	-0.94	0.952	23.02	23.90	1.22	1.166	22#
			40620	2593	50	Low	0.17	0.591	22.51	22.80	1.07	0.632	/
			40620	2593	100	Low	0.69	0.578	22.42	22.80	1.09	0.631	/
Hotspot													
QPSK	Front Side	10	40620	2593	1	Low	-1.24	0.261	19.20	19.50	1.07	0.280	/
			40620	2593	50	Low	-0.92	0.251	18.94	19.20	1.06	0.266	/
	Back Side	10	40620	2593	1	Low	-3.13	0.617	19.20	19.50	1.07	0.661	/
			40620	2593	50	Low	-4.42	0.594	18.94	19.20	1.06	0.631	/
	Left Edge	10	40620	2593	1	Low	1.60	0.108	19.20	19.50	1.07	0.116	/
			40620	2593	50	Low	-1.35	0.102	18.94	19.20	1.06	0.108	/
	Right Edge	10	40620	2593	1	Low	4.29	0.043	19.20	19.50	1.07	0.046	/
			40620	2593	50	Low	-0.20	0.040	18.94	19.20	1.06	0.042	/
	Bottom Edge	10	40620	2593	1	Low	0.42	0.506	19.20	19.50	1.07	0.542	/
			40620	2593	50	Low	-1.16	0.487	18.94	19.20	1.06	0.517	/
Note: For this band, the EUT support Power Reduction under Hotspot mode.													

10.12 WIFI 2.4GHz

Mode	Position	Dist. (mm)	Ch.	Freq. (MHz)	Duty Cycle (%)	Duty Cycle Factor	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	97.43	1.03	-0.92	0.260	16.77	17.00	1.05	0.281	/
	Left Tilt	0	11	2462	97.43	1.03	-2.51	0.234	16.77	17.00	1.05	0.253	/
	Right Cheek	0	11	2462	97.43	1.03	0.33	0.392	16.77	17.00	1.05	0.424	23#
	Right Tilt	0	11	2462	97.43	1.03	-1.18	0.235	16.77	17.00	1.05	0.254	/
Body-worn Accessory													
802.11 b	Front Side	15	11	2462	97.43	1.03	-0.08	0.088	16.77	17.00	1.05	0.095	/
	Back Side	15	11	2462	97.43	1.03	1.25	0.125	16.77	17.00	1.05	0.135	/
Hotspot													
802.11 b	Front Side	10	11	2462	97.43	1.03	0.25	0.179	16.77	17.00	1.05	0.194	/
	Back Side	10	11	2462	97.43	1.03	-2.07	0.237	16.77	17.00	1.05	0.256	24#
	Right Edge	10	11	2462	97.43	1.03	-3.76	0.170	16.77	17.00	1.05	0.184	/
	Top Edge	10	11	2462	97.43	1.03	-0.02	0.170	16.77	17.00	1.05	0.184	/

10.13 Bluetooth

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.
Body-worn Accessory											
BR/EDR	Front Side	15	39	2441	2.64	0.038	11.58	12.00	1.10	0.042	/
3Mbps	Back Side	15	39	2441	-1.03	0.049	11.58	12.00	1.10	0.054	25#

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	LTE Band 4	Hotspot	Back Side	0.923	Yes	0.905	1.02
1900	CDMA BC1	Hotspot	Back Side	0.842	Yes	0.813	1.04
	LTE Band 2	Hotspot	Back Side	0.914	Yes	0.879	1.04
	LTE Band 25	Hotspot	Back Side	0.903	Yes	0.869	1.04
2600	LTE Band 41	Body-worn	Back Side	0.952	Yes	0.941	1.01

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	CDMA	+ 2.4G WLAN	+ 2.4G WLAN	+ 2.4G WLAN
		--	+ Bluetooth	--
2	LTE	+ 2.4G WLAN	+ 2.4G WLAN	+ 2.4G WLAN
		--	+ Bluetooth	--
Note:				
1. 3G&4G share the same antenna and can't transmit simultaneously.				
2. The Bluetooth and 2.4G WLAN share the same antenna, can't transmitting together.				
3. The 2.4G WLAN can transmit simultaneously with each WWAN.				
4. 2.4G WLAN supports hotspot mode.				

12.2 Sum SAR of Simultaneous Transmission

12.2.1 Sum Head SAR of Simultaneous Transmission

Simultaneous Mode	Mode	Max. 1g SAR (W/kg)	1g Sum SAR (W/kg)	SPLSR (Yes/No)
CDMA + 2.4G WLAN	CDMA	0.595	1.019	No
	2.4G WLAN	0.424		
LTE QPSK + 2.4G WLAN	LTE QPSK	0.530	0.954	No
	2.4G WLAN	0.424		

12.2.2 Sum Body-worn SAR of Simultaneous Transmission

Simultaneous Mode	Mode	Max. 1g SAR (W/kg)	1g Sum SAR (W/kg)	SPLSR (Yes/No)
CDMA +Bluetooth	CDMA	0.753	0.807	No
	Bluetooth	0.054		
CDMA + 2.4G WLAN	CDMA	0.753	0.888	No
	2.4G WLAN	0.135		
LTE QPSK + Bluetooth	LTE QPSK	1.116	1.170	No
	Bluetooth	0.054		
LTE QPSK + 2.4G WLAN	LTE QPSK	1.166	1.301	No
	2.4G WLAN	0.135		

12.2.3 Sum Hotspot mode SAR of Simultaneous Transmission

Simultaneous Mode	Mode	Max. 1g SAR (W/kg)	1g Sum SAR (W/kg)	SPLSR (Yes/No)
CDMA + 2.4G WLAN	CDMA	0.908	1.164	No
	2.4G WLAN	0.256		
LTE QPSK + 2.4G WLAN	LTE QPSK	1.069	1.325	No
	2.4G WLAN	0.256		

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
E-Field Probe	MVG	SSE2	S/N 08/16 EPGO 295	2017/03/22	2018/03/21
MultiMeter	Keithley	MultiMeter 2000	4024022	2017/06/12	2018/06/11
Signal Generator	R&S	SMBV100A	260592	2017/06/12	2018/06/11
Power Meter	Agilent	E4419B	GB40201833	2016/11/25	2017/11/24
Power Sensor	Agilent	E9300A	MY41498012	2016/11/25	2017/11/24
Power Sensor	Agilent	E9300A	MY41499891	2016/11/25	2017/11/24
Power Amplifier	SATIMO	6552B	22374	2017/06/12	2018/06/11
Wireless Communication Test Set	R&S	CMU 200	123666	2016/11/08	2017/11/07
Wireless Communication Test Set	R&S	CMW 500	151885	2017/06/12	2018/06/11
Network Analyzer	Agilent	5071B	MY42404001	2017/06/12	2018/06/11
Thermometer	Elitech	RC-4HC	N/A	2017/02/18	2018/02/17
Dielectric Probe Kit	SATIMO	SCLMP	SN 25/13 OCPG56	N/A	N/A
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
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 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 (%)
2017.08.31	Head	750	21.0	0.90	42.42	0.89	41.90	1.12	1.24
2017.08.29	Body	750	21.1	0.95	57.15	0.96	55.73	-1.04	2.55
2017.08.30	Head	835	21.3	0.91	41.54	0.90	41.50	1.11	0.10
2017.08.28	Body	835	21.5	0.98	54.18	0.97	55.20	1.03	-1.85
2017.08.25	Head	1800	21.4	1.38	40.18	1.40	40.00	-1.43	0.45
2017.08.21	Body	1800	21.5	1.48	52.83	1.52	53.30	-2.63	-0.88
2017.08.24	Head	1900	21.3	1.40	39.63	1.40	40.00	0.00	-0.92
2017.08.17	Body	1900	21.2	1.57	52.42	1.52	53.30	3.29	-1.65
2017.08.18	Body	1900	21.3	1.56	52.55	1.52	53.30	2.63	-1.41
2017.08.23	Head	2450	21.6	1.81	38.65	1.80	39.20	0.56	-1.40
2017.08.15	Body	2450	21.1	1.98	51.14	1.95	52.70	1.54	-2.96
2017.08.22	Head	2600	21.4	2.00	37.68	1.96	39.00	2.04	-3.38
2017.08.16	Body	2600	21.3	2.22	50.62	2.16	52.50	2.78	-3.58
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).

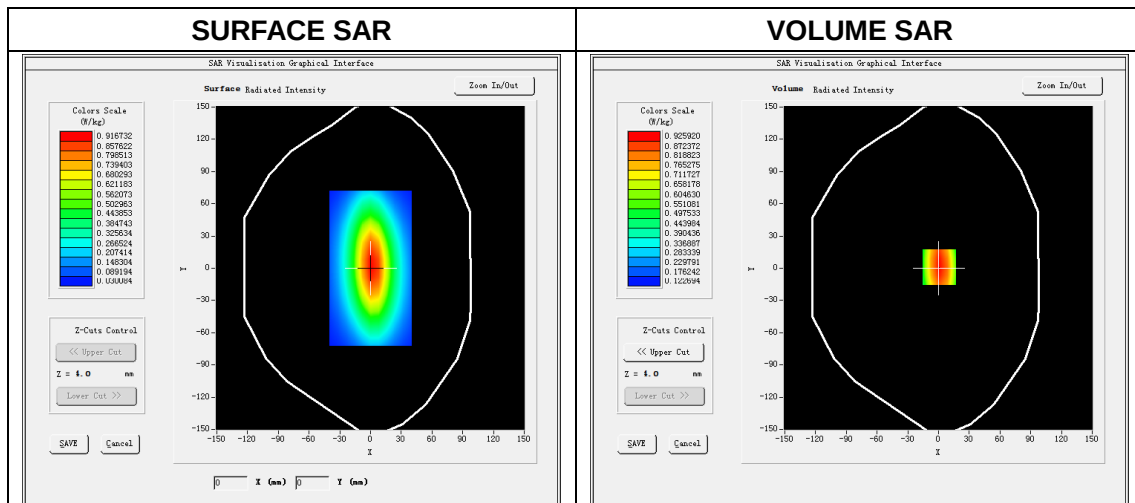
Date	Liquid Type	Freq. (MHz)	Power (mW)	Measured SAR (W/kg)	Normalized SAR (W/kg)	Dipole SAR (W/kg)	Tolerance (%)	Targeted SAR(W/kg)	Tolerance (%)
2017.08.31	Head	750	100	0.890	8.90	8.60	3.49	8.49	4.83
2017.08.29	Body	750	100	0.892	8.92	8.91	0.11	8.49	5.06
2017.08.30	Head	835	100	0.966	9.66	9.81	-1.53	9.56	1.05
2017.08.28	Body	835	100	1.010	10.10	10.53	-4.08	9.56	5.65
2017.08.25	Head	1800	100	4.113	41.13	38.70	6.28	38.40	7.11
2017.08.21	Body	1800	100	3.893	38.93	40.40	-3.64	38.40	1.38
2017.08.24	Head	1900	100	3.758	37.58	40.75	-7.78	39.70	-5.34
2017.08.17	Body	1900	100	4.171	41.71	42.06	-0.83	39.70	5.06
2017.08.18	Body	1900	100	4.027	40.27	42.06	-4.26	39.70	1.44
2017.08.23	Head	2450	100	5.480	54.80	54.29	0.94	52.40	4.58
2017.08.15	Body	2450	100	5.297	52.97	54.70	-3.16	52.40	1.09
2017.08.22	Head	2600	100	6.016	60.16	57.4	4.81	55.30	8.79
2017.08.16	Body	2600	100	5.606	56.06	57.4	-2.33	55.30	1.37
Note: The tolerance limit of System validation $\pm 10\%$.									

System Performance Check Data(750 MHz Head)

Type: Phone measurement (Complete)
E-Field Probe: SN 08/16 SSE2 EPGO295
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2017.08.31
Measurement duration: 13 minutes 30 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	750MHz
Signal	CW
Frequency (MHz)	750MHz
Relative permittivity (real part)	42.417907
Conductivity (S/m)	0.898643
Power drift (%)	-0.090000
Ambient Temperature:	22.3°C
Liquid Temperature:	21.0°C
ConvF:	1.52
Crest factor:	1:1

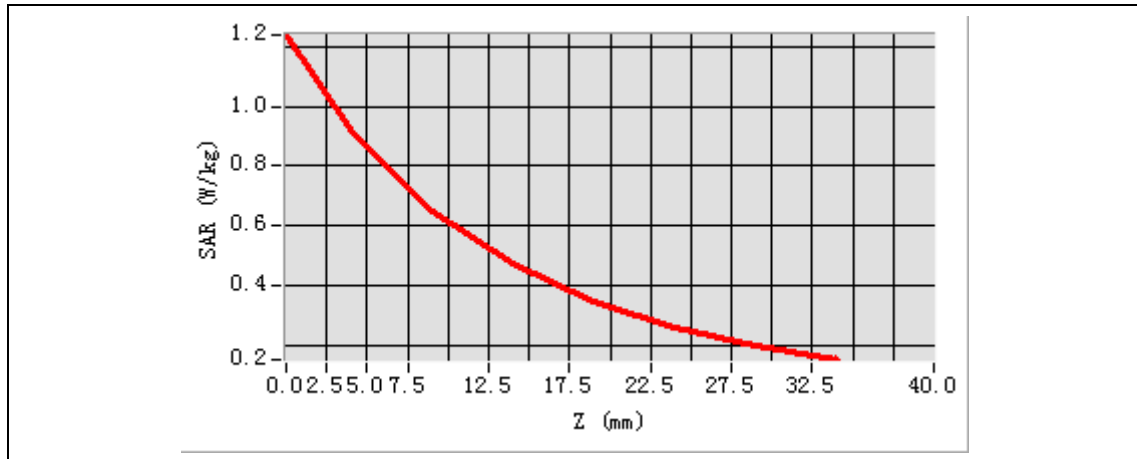


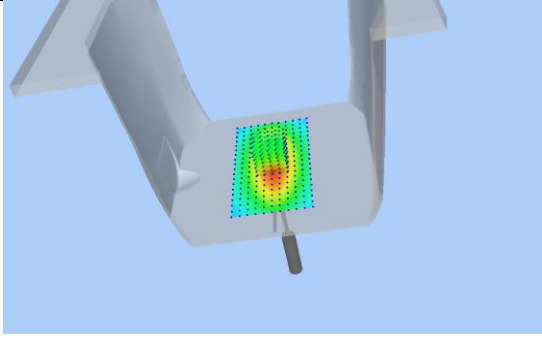
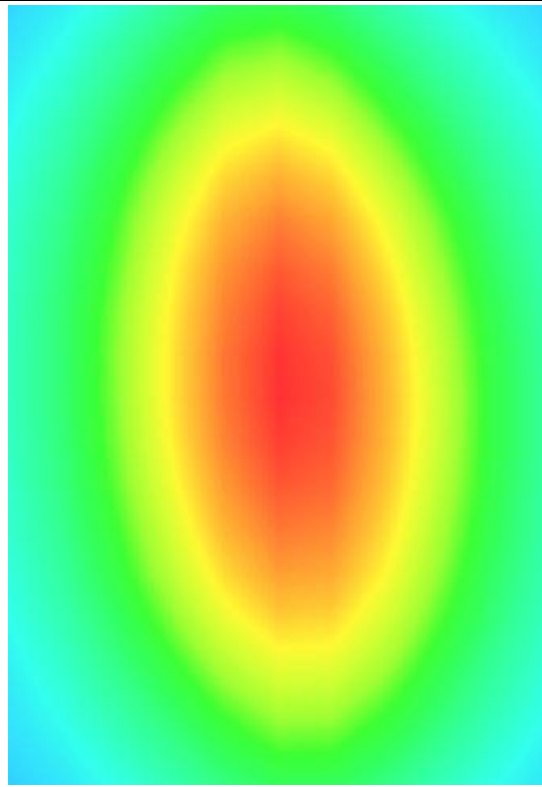
Maximum location: X=1.00, Y=1.00

SAR Peak: 1.17 W/kg

SAR 10g (W/Kg)	0.599987
SAR 1g (W/Kg)	0.889823

Z Axis Scan



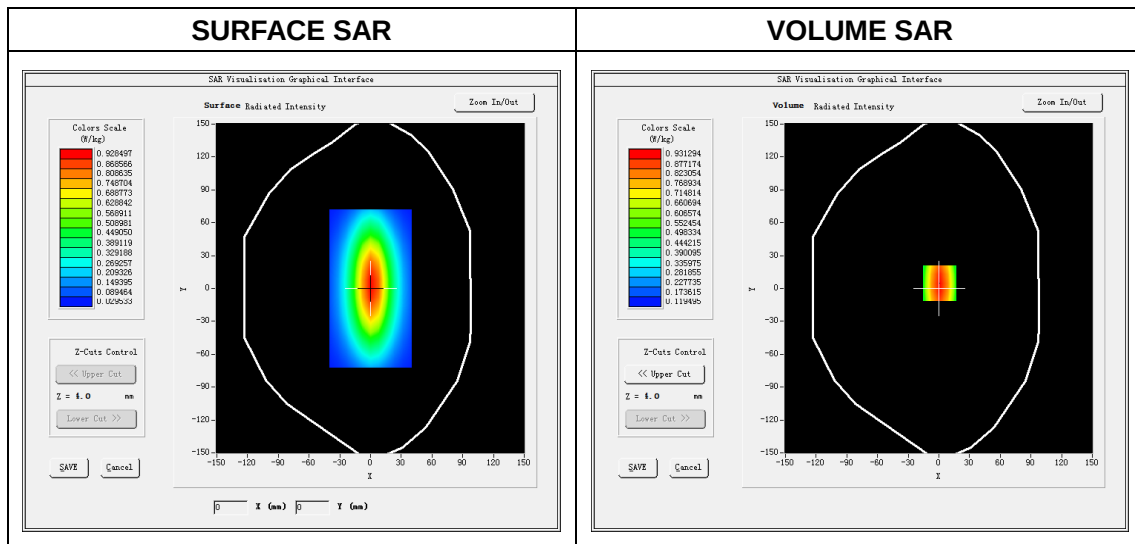
3D screen shot	Hot spot position
	

System Performance Check Data(750 MHz Body)

Type: Phone measurement (Complete)
E-Field Probe: SN 08/16 SSE2 EPGO295
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2017.08.29
Measurement duration: 13 minutes 26 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	750MHz
Signal	CW
Frequency (MHz)	750.000000
Relative permittivity (real part)	57.154359
Conductivity (S/m)	0.948655
Power drift (%)	-0.340000
Ambient Temperature:	22.3°C
Liquid Temperature:	21.1°C
ConvF:	1.56
Crest factor:	1:1

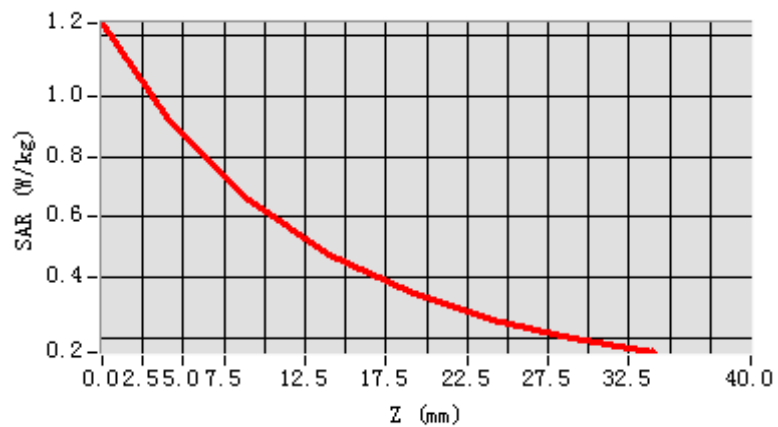


Maximum location: X=1.00, Y=5.00

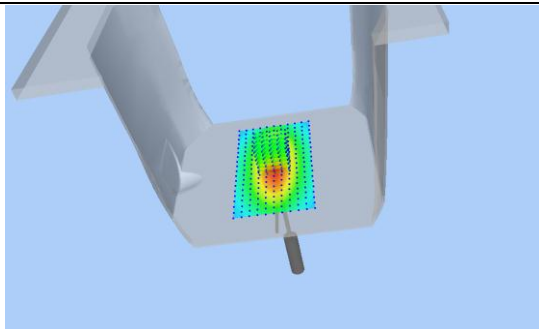
SAR Peak: 1.22 W/kg

SAR 10 g (W/Kg)	0.601543
SAR 1g (W/Kg)	0.892345

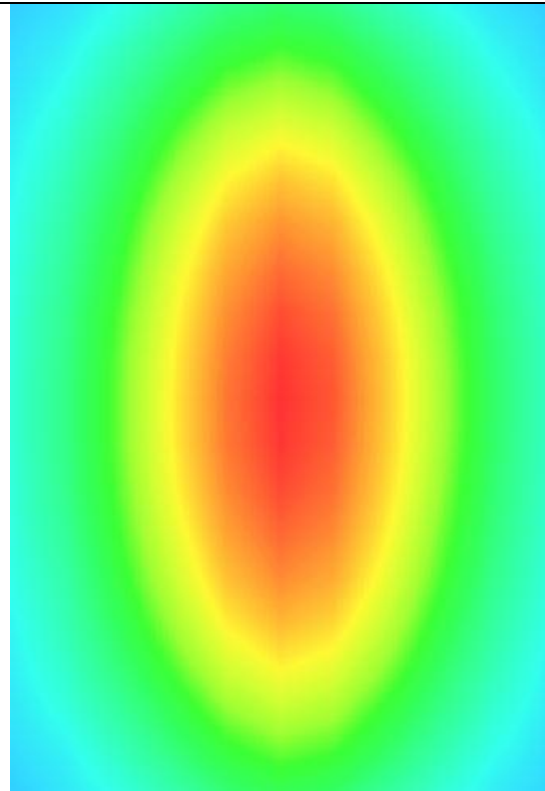
Z Axis Scan



3D screen shot



Hot spot position

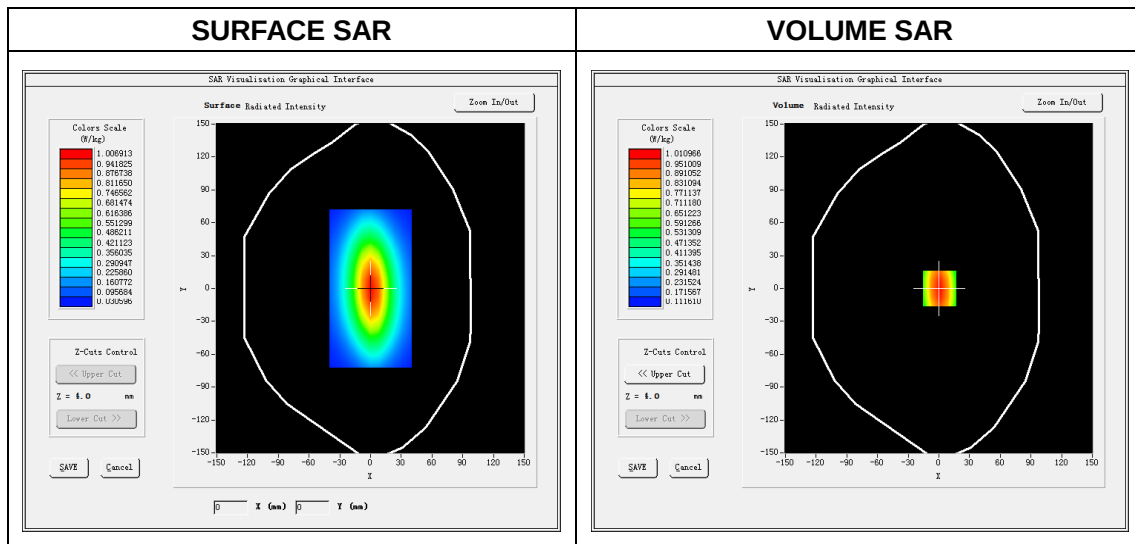


System Performance Check Data(835MHz Head)

Type: Phone measurement (Complete)
E-Field Probe: SN 08/16 SSE2 EPGO295
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2017.08.30
Measurement duration: 13 minutes 41 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	835MHz
Signal	CW
Frequency (MHz)	835.000000
Relative permittivity (real part)	41.542575
Conductivity (S/m)	0.907224
Power drift (%)	0.260000
Ambient Temperature:	22.5°C
Liquid Temperature:	21.3°C
ConvF:	1.78
Crest factor:	1:1

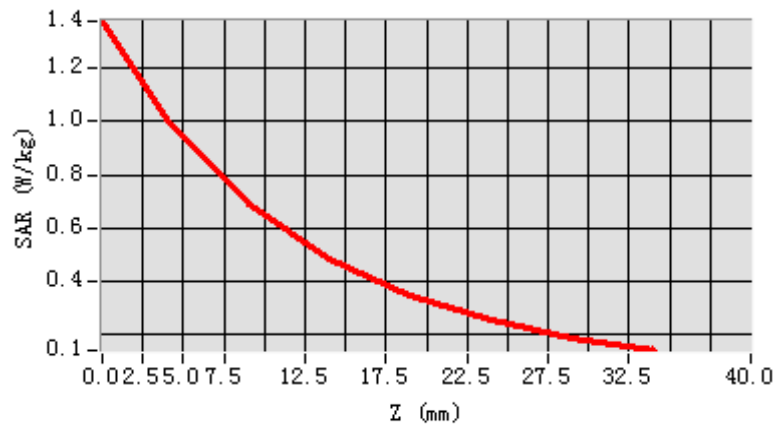


Maximum location: X=1.00, Y=0.00

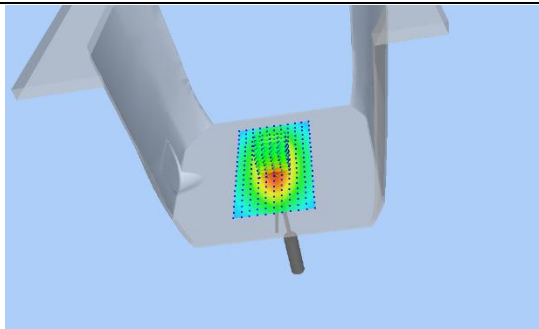
SAR Peak: 1.39 W/kg

SAR 10 g (W/Kg)	0.630954
SAR 1g (W/Kg)	0.965665

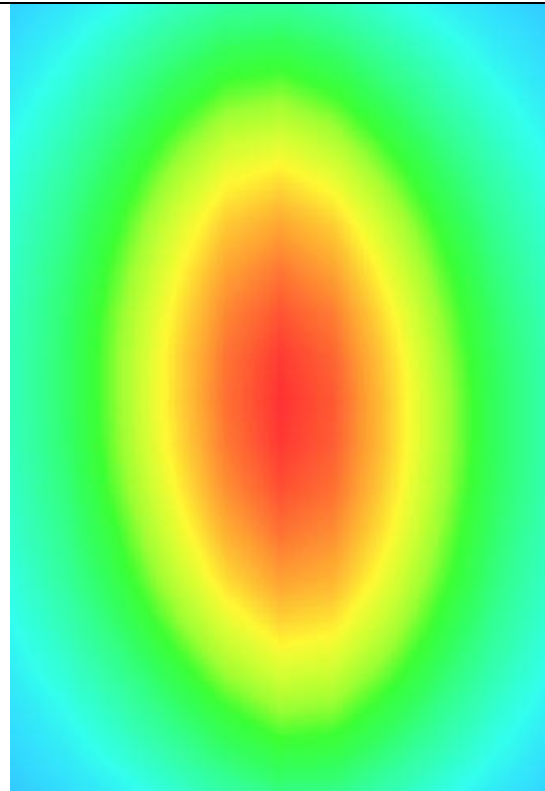
Z Axis Scan



3D screen shot



Hot spot position

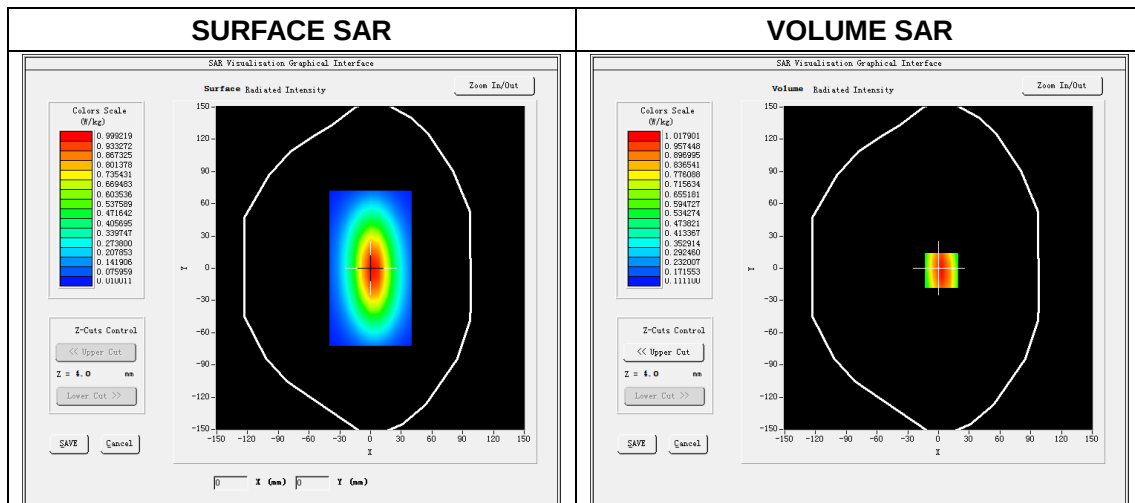


System Performance Check Data(835MHz Body)

Type: Phone measurement (Complete)
E-Field Probe: SN 08/16 SSE2 EPGO295
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2017.08.28
Measurement duration: 14 minutes 01 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	835MHz
Signal	CW
Frequency (MHz)	835.000000
Relative permittivity (real part)	54.183544
Conductivity (S/m)	0.978180
Power drift (%)	0.020000
Ambient Temperature:	22.2°C
Liquid Temperature:	21.5°C
ConvF:	1.85
Crest factor:	1:1

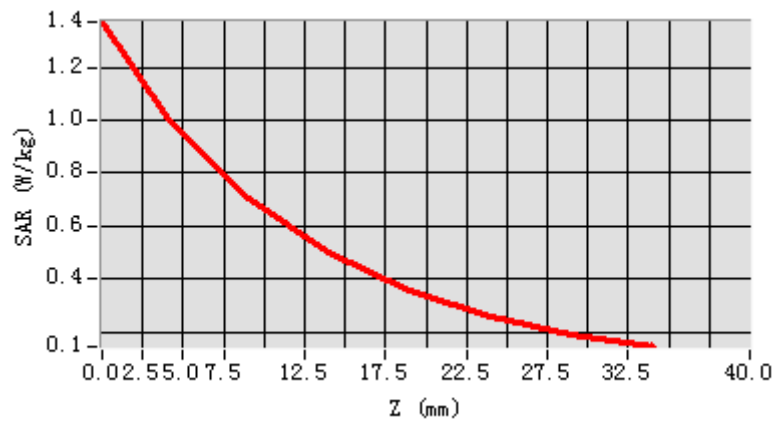


Maximum location: X=3.00, Y=-1.00

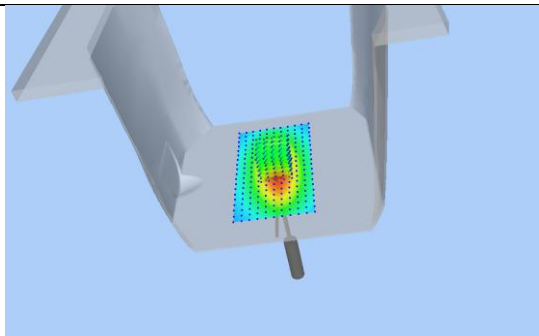
SAR Peak: 1.38 W/kg

SAR 10 g (W/Kg)	0.656433
SAR 1g (W/Kg)	1.009653

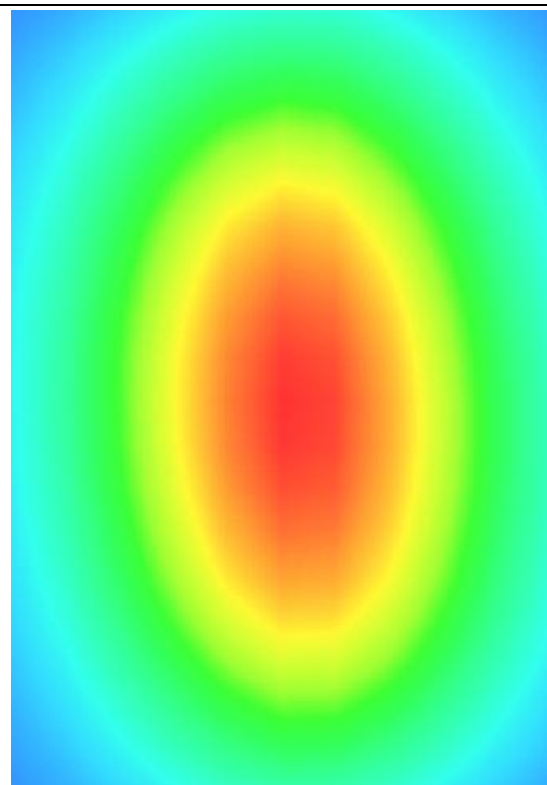
Z Axis Scan



3D screen shot



Hot spot position

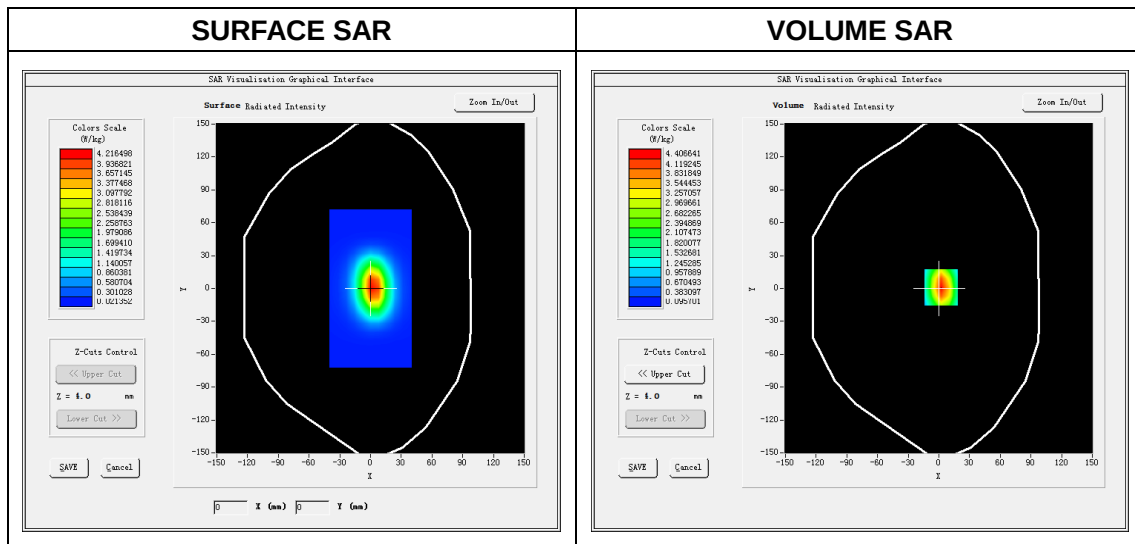


System Performance Check Data(1800MHz Head)

Type: Phone measurement (Complete)
E-Field Probe: SN 08/16 SSE2 EPGO295
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm
Date of measurement: 2017.08.25
Measurement duration: 14 minutes 07 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1800MHz
Signal	CW
Frequency (MHz)	1800.000000
Relative permittivity (real part)	40.183500
Conductivity (S/m)	1.382640
Power drift (%)	0.190000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.4°C
ConvF:	1.88
Crest factor:	1:1

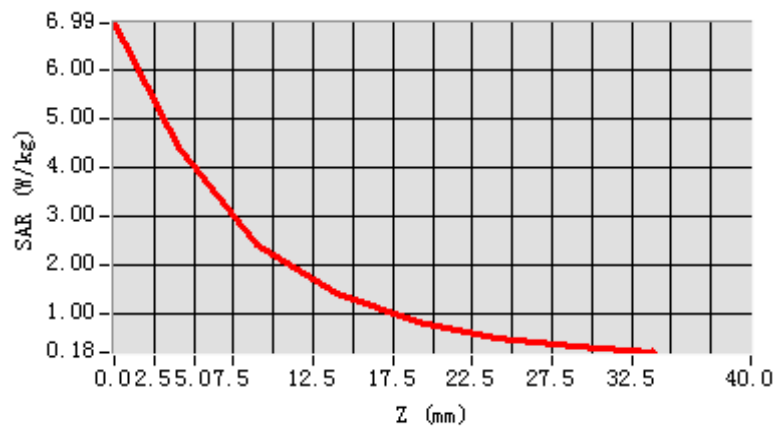


Maximum location: X=2.00, Y=1.00

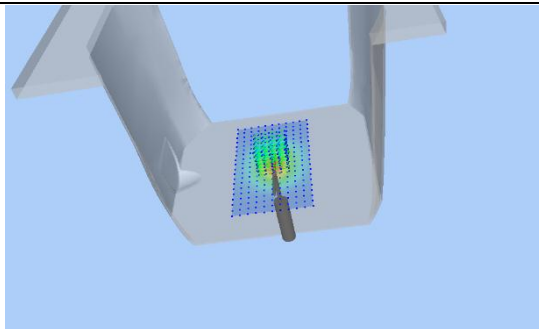
SAR Peak: 6.95 W/kg

SAR 10 g (W/Kg)	2.164667
SAR 1g (W/Kg)	4.113421

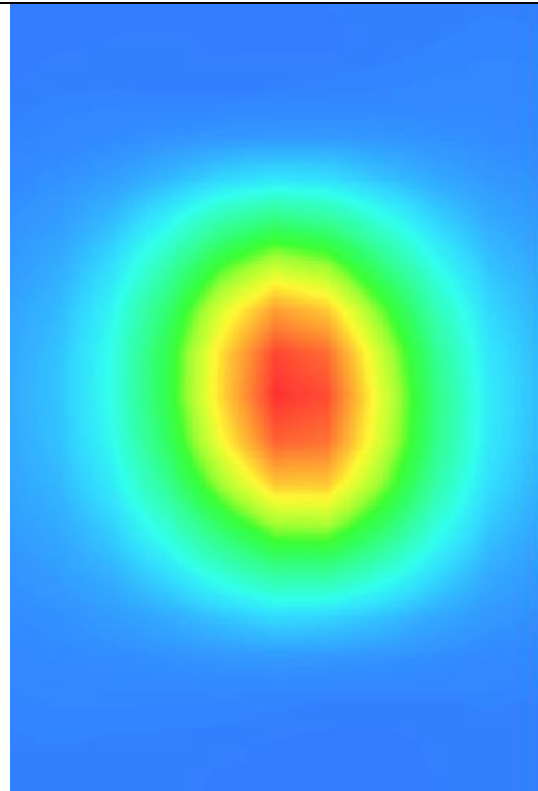
Z Axis Scan



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

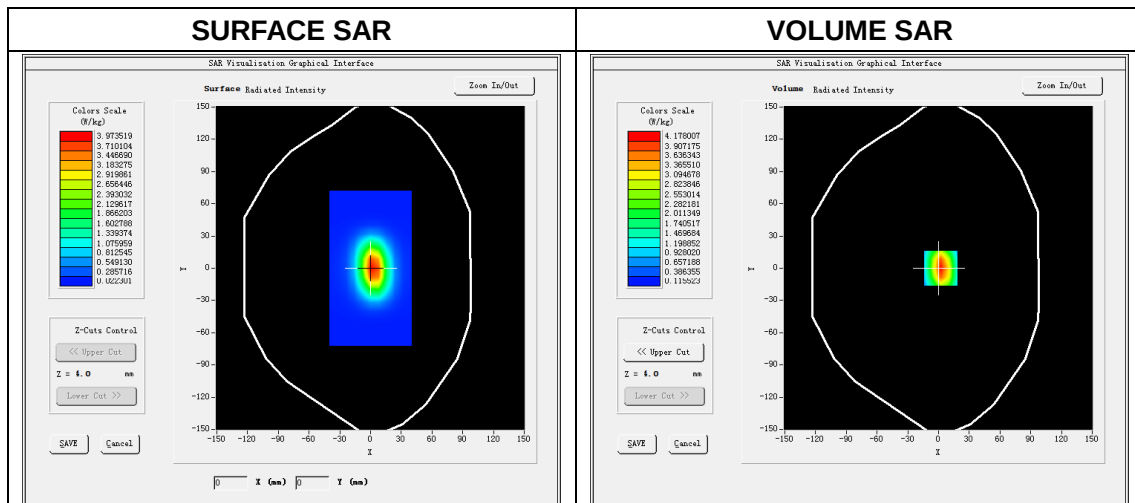
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2017.08.21

Measurement duration: 14 minutes 3 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1800MHz
Signal	CW
Frequency (MHz)	1800.000000
Relative permittivity (real part)	52.833715
Conductivity (S/m)	1.479481
Power drift (%)	-0.140000
Ambient Temperature:	22.6°C
Liquid Temperature:	21.5°C
ConvF:	1.94
Crest factor:	1:1

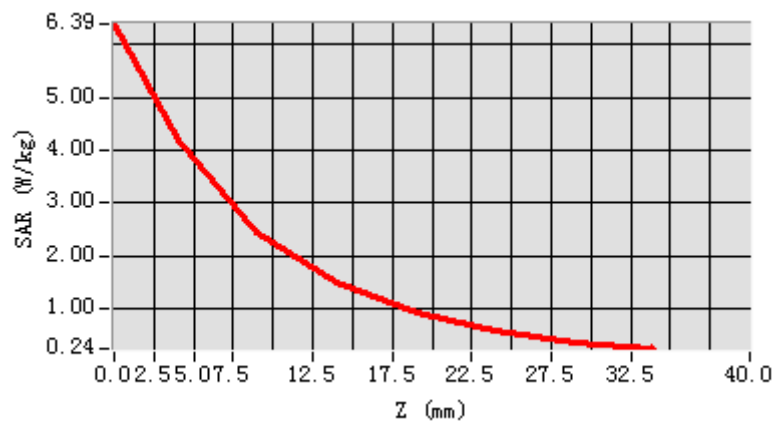


Maximum location: X=2.00, Y=0.00

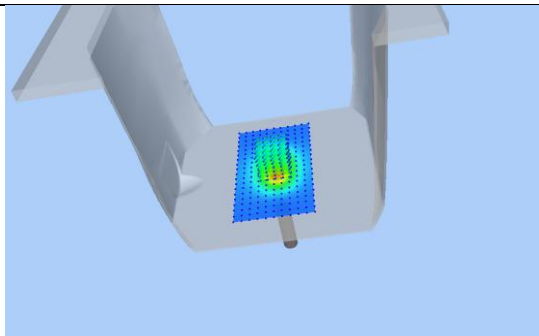
SAR Peak: 6.38 W/kg

SAR 10 g (W/Kg)	2.062334
SAR 1g (W/Kg)	3.892972

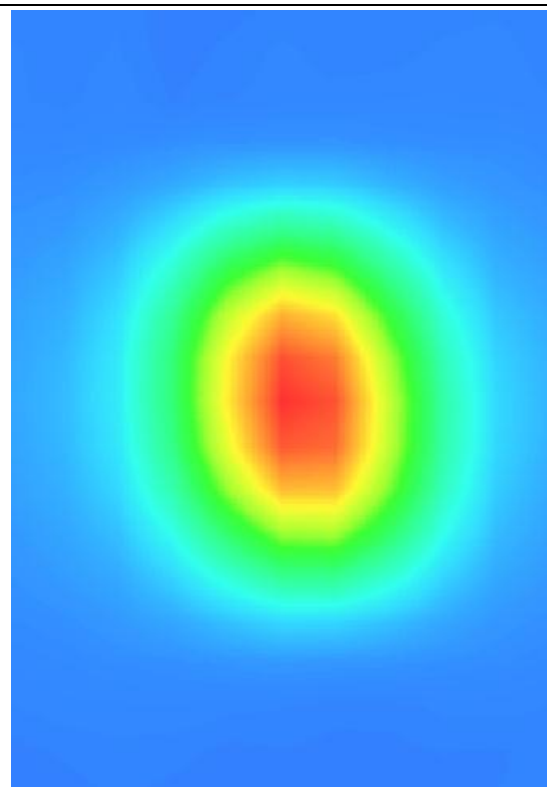
Z Axis Scan



3D screen shot



Hot spot position



System Performance Check Data(1900MHz Head)

Type: Phone measurement (Complete)

E-Field Probe: SN 08/16 SSE2 EPGO295

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

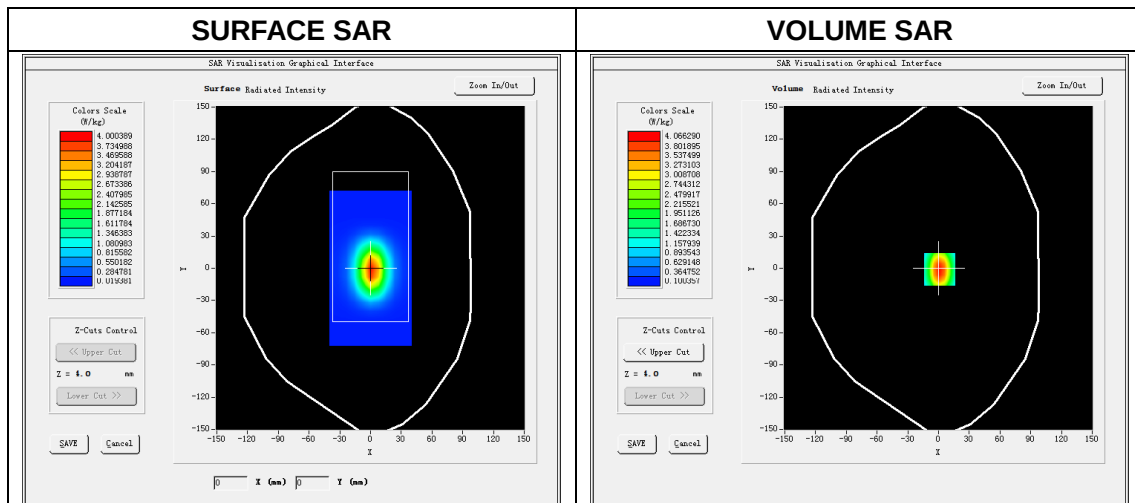
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2017.08.24

Measurement duration: 14 minutes 36 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1900MHz
Signal	CW
Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.628600
Conductivity (S/m)	1.404825
Power drift (%)	-0.740000
Ambient Temperature:	22.4°C
Liquid Temperature:	21.3°C
ConvF:	2.19
Crest factor:	1:1

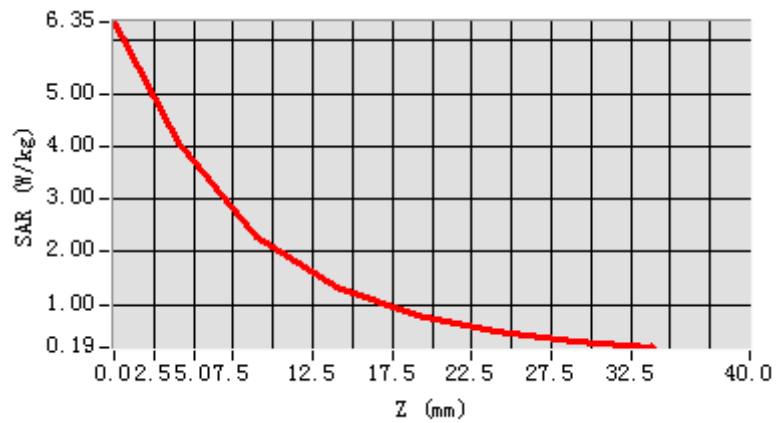


Maximum location: X=-1.00, Y=-1.00

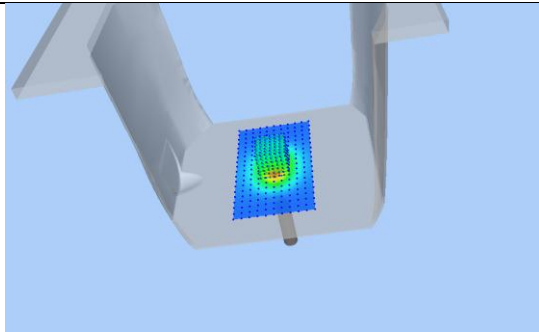
SAR Peak: 6.31W/kg

SAR 10g (W/Kg)	1.978533
SAR 1g (W/Kg)	3.758425

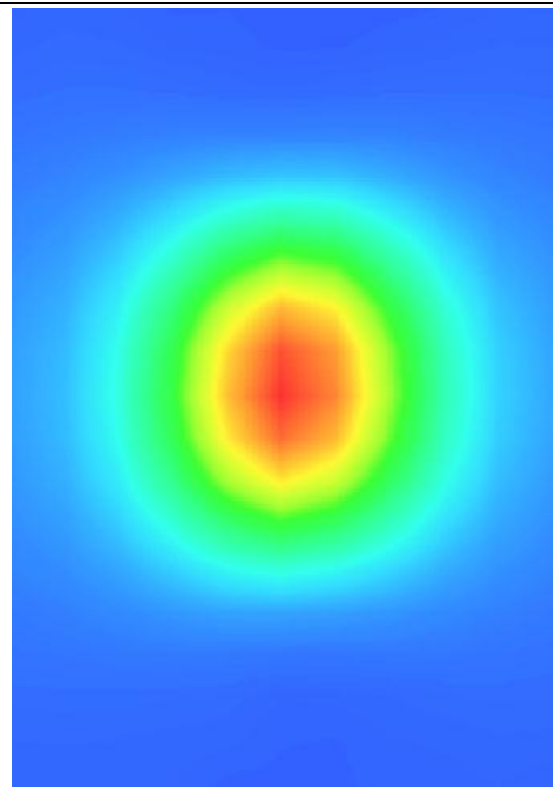
Z Axis Scan



3D screen shot



Hot spot position



System Performance Check Data(1900MHz Body)

Type: Phone measurement (Complete)

E-Field Probe: SN 08/16 SSE2 EPGO295

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

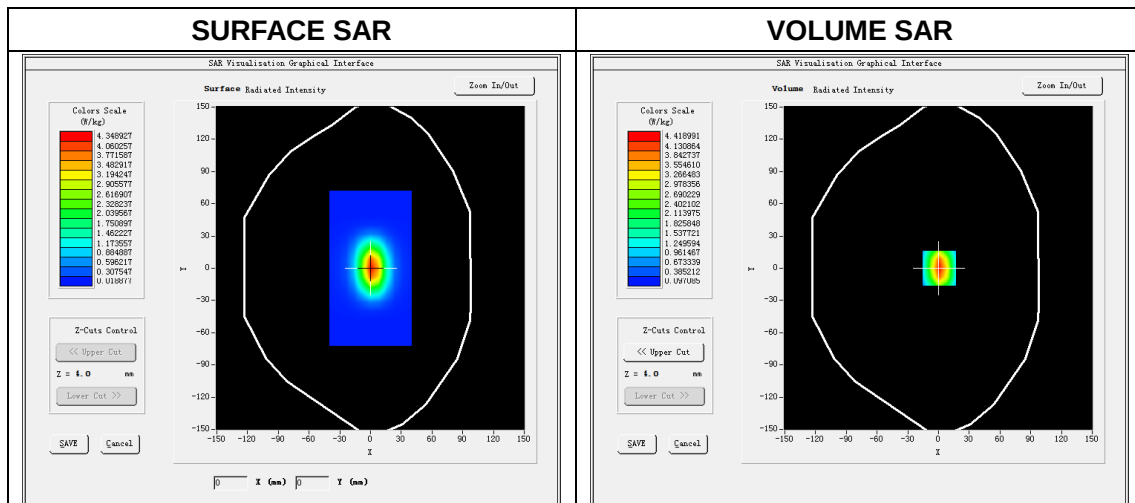
Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 2017.08.17

Measurement duration: 13 minutes 51 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	1900MHz
Signal	CW
Frequency (MHz)	1900.000000
Relative permittivity (real part)	52.422325
Conductivity (S/m)	1.572564
Power drift (%)	-0.040000
Ambient Temperature:	22.1°C
Liquid Temperature:	21.2°C
ConvF:	2.24
Crest factor:	1:1

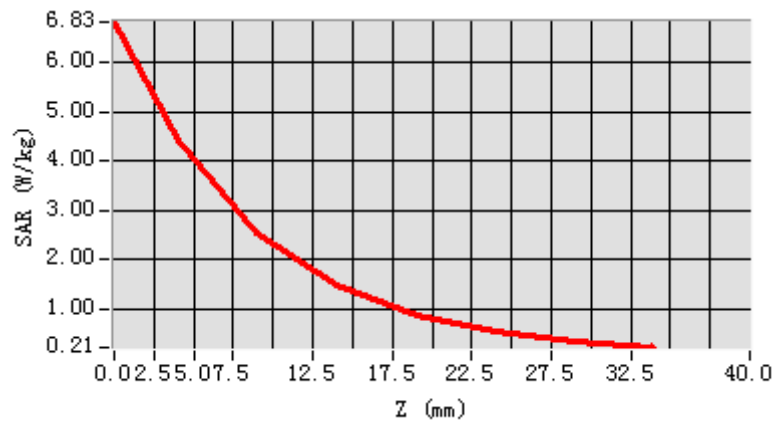


Maximum location: X=1.00, Y=0.00

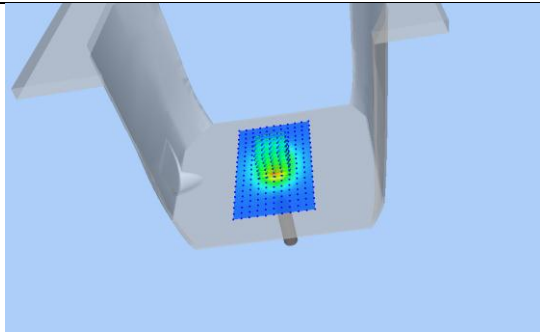
SAR Peak: 6.78W/kg

SAR 10g (W/Kg)	2.138647
SAR 1g (W/Kg)	4.170632

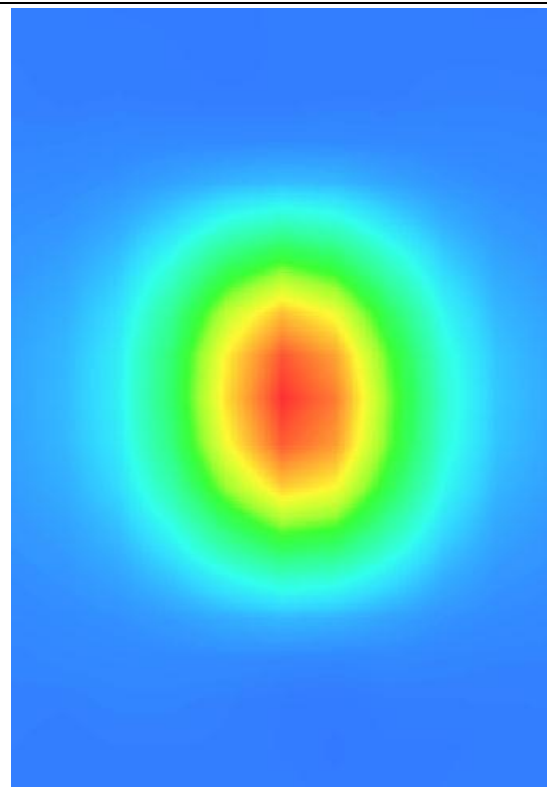
Z Axis Scan



3D screen shot



Hot spot position



System Performance Check Data(2450MHz Head)

Type: Phone measurement (Complete)

E-Field Probe: SN 08/16 SSE2 EPGO295

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

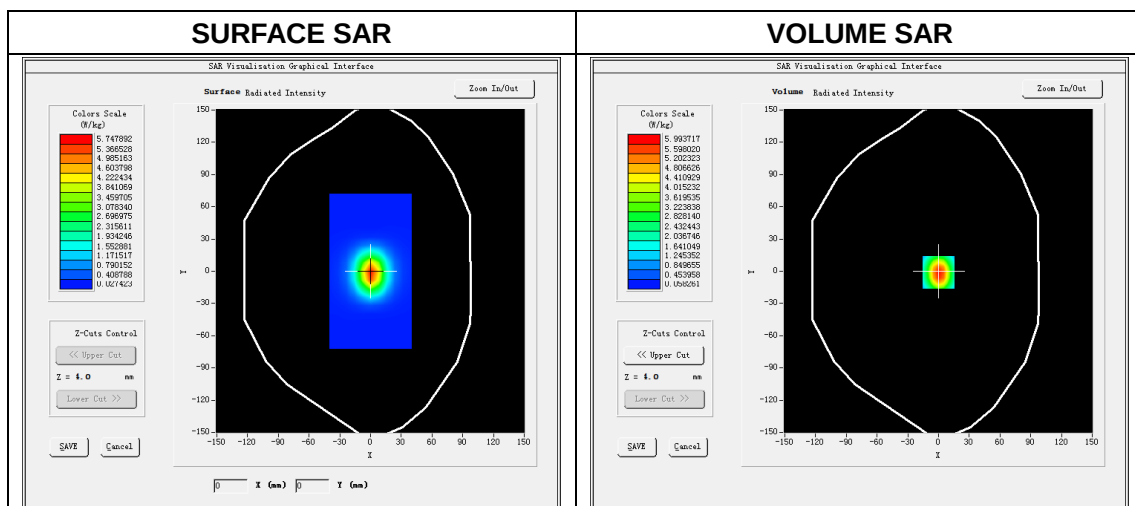
Zoom scan resolution: dx=5mm, dy=5mm, dz=5mm

Date of measurement: 2017.08.23

Measurement duration: 18 minutes 21 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	2450MHz
Signal	CW
Frequency (MHz)	2450.000000
Relative permittivity (real part)	38.648700
Conductivity (S/m)	1.811790
Power drift (%)	-0.450000
Ambient Temperature:	22.7°C
Liquid Temperature:	21.6°C
ConvF:	2.21
Crest factor:	1:1

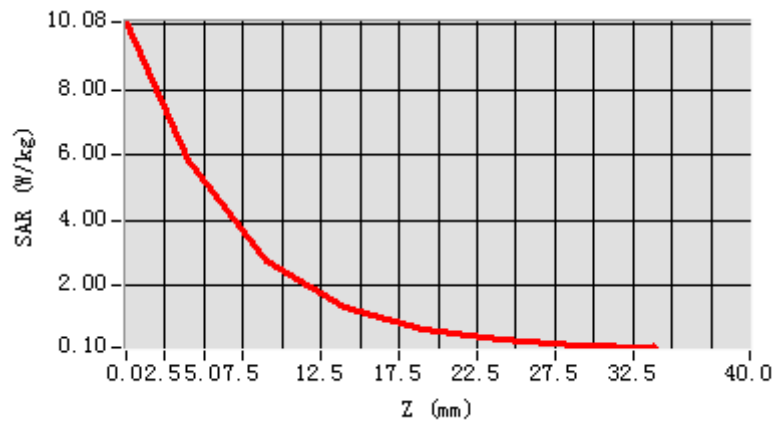


Maximum location: X=0.00, Y=-1.00

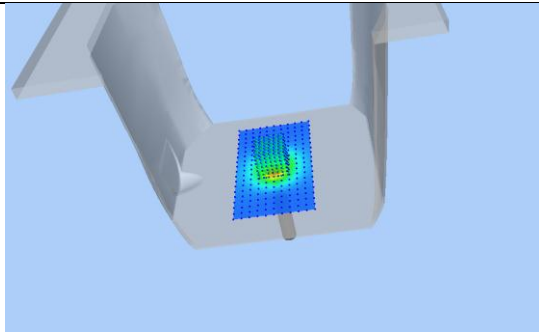
SAR Peak: 10.00 W/kg

SAR 10g (W/Kg)	2.493577
SAR 1g (W/Kg)	5.4796432

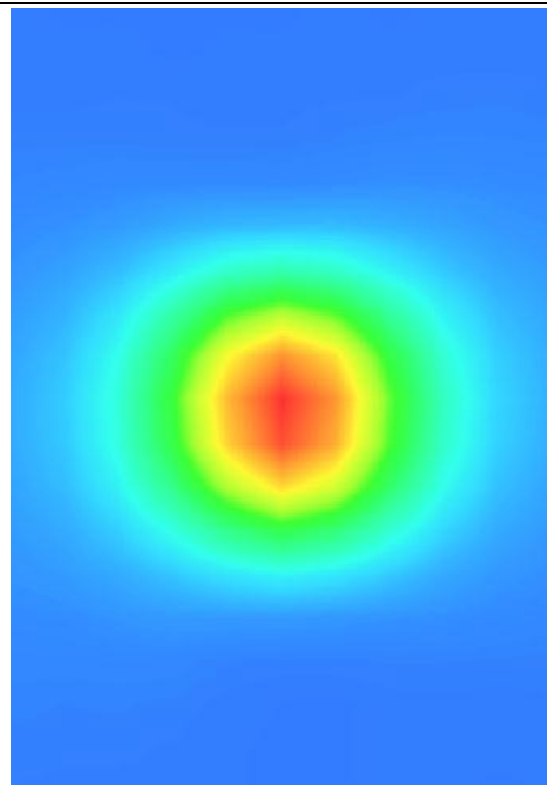
Z Axis Scan



3D screen shot



Hot spot position

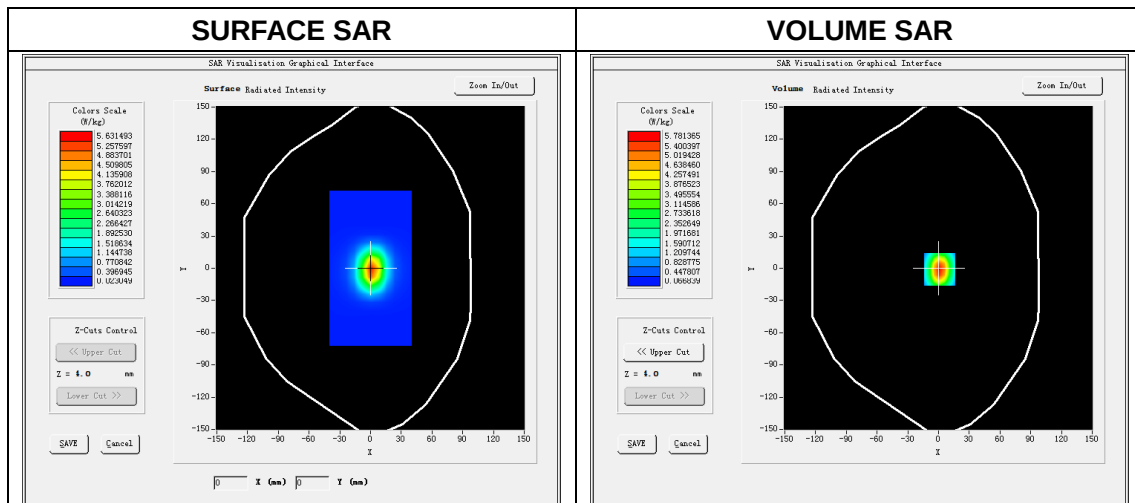


System Performance Check Data(2450MHz Body)

Type: Phone measurement (Complete)
E-Field Probe: SN 08/16 SSE2 EPGO295
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=5mm, dy=5mm, dz=5mm
Date of measurement: 2017.08.15
Measurement duration: 18 minutes 48 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	2450MHz
Signal	CW
Frequency (MHz)	2450.000000
Relative permittivity (real part)	51.138900
Conductivity (S/m)	1.982105
Power drift (%)	0.480000
Ambient Temperature:	22.0°C
Liquid Temperature:	21.1°C
ConvF:	2.30
Crest factor:	1:1

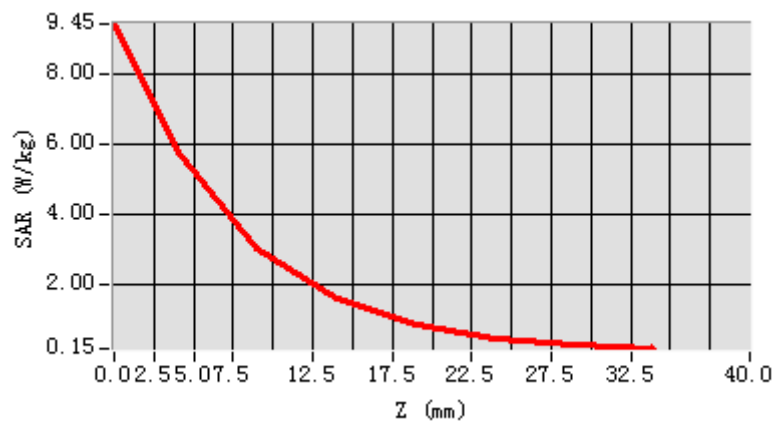


Maximum location: X=1.00, Y=-1.00

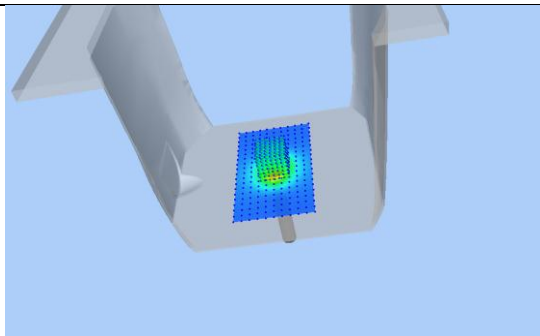
SAR Peak: 9.42W/kg

SAR 10g (W/Kg)	2.475784
SAR 1g (W/Kg)	5.296841

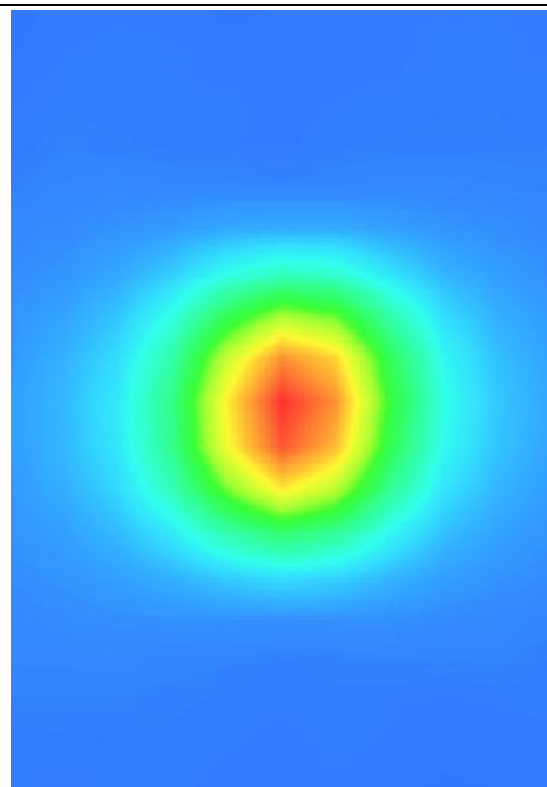
Z Axis Scan



3D screen shot



Hot spot position

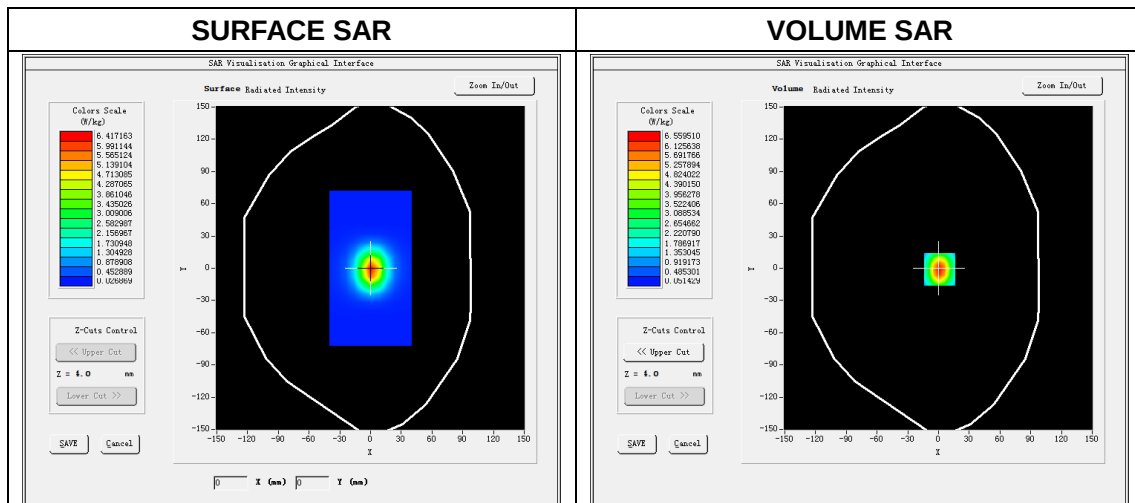


System Performance Check Data(2600MHz Head)

Type: Phone measurement (Complete)
E-Field Probe: SN 08/16 SSE2 EPGO295
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=5mm, dy=5mm, dz=5mm
Date of measurement: 2017.08.22
Measurement duration: 18 minutes 43 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	2600MHz
Signal	CW
Frequency (MHz)	2600.000000
Relative permittivity (real part)	37.683742
Conductivity (S/m)	1.996181
Power drift (%)	-0.240000
Ambient Temperature:	22.6°C
Liquid Temperature:	21.4°C
ConvF:	2.20
Crest factor:	1:1

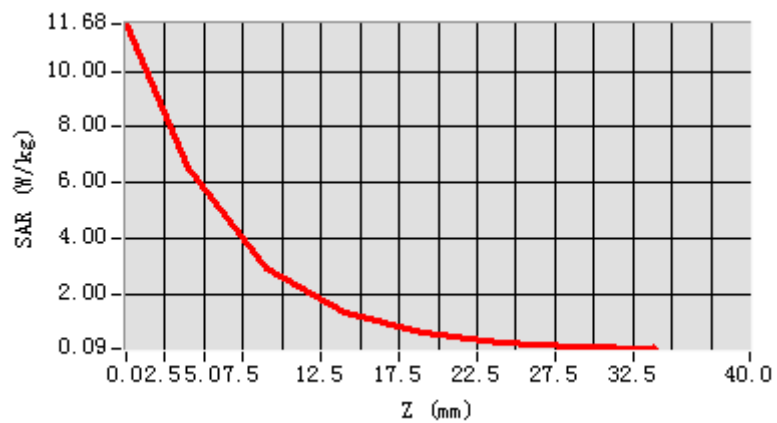


Maximum location: X=1.00, Y=-1.00

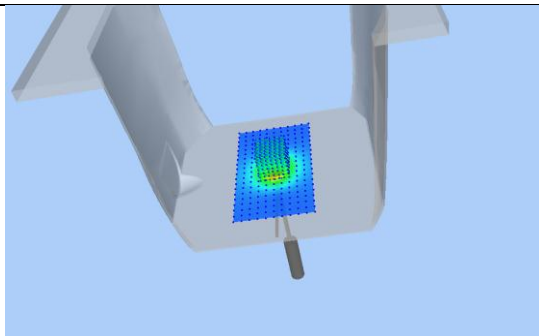
SAR Peak: 11.64 W/kg

SAR 10g (W/Kg)	2.658421
SAR 1g (W/Kg)	6.016295

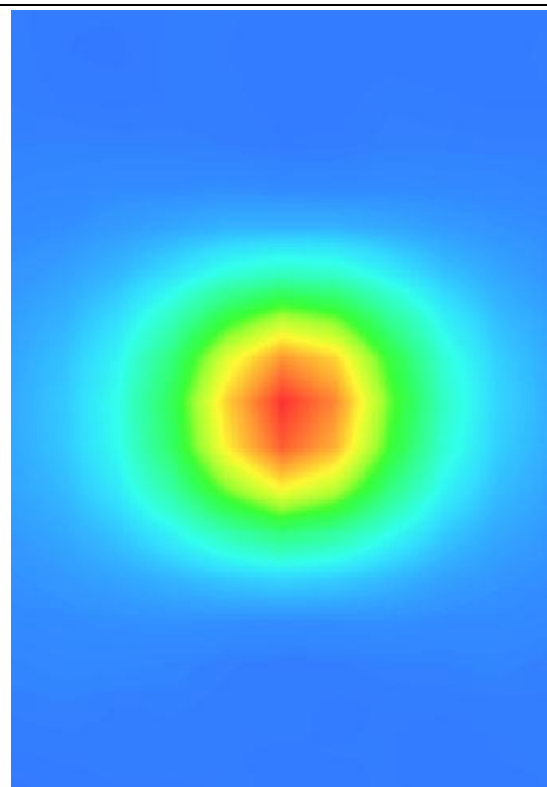
Z Axis Scan



3D screen shot



Hot spot position

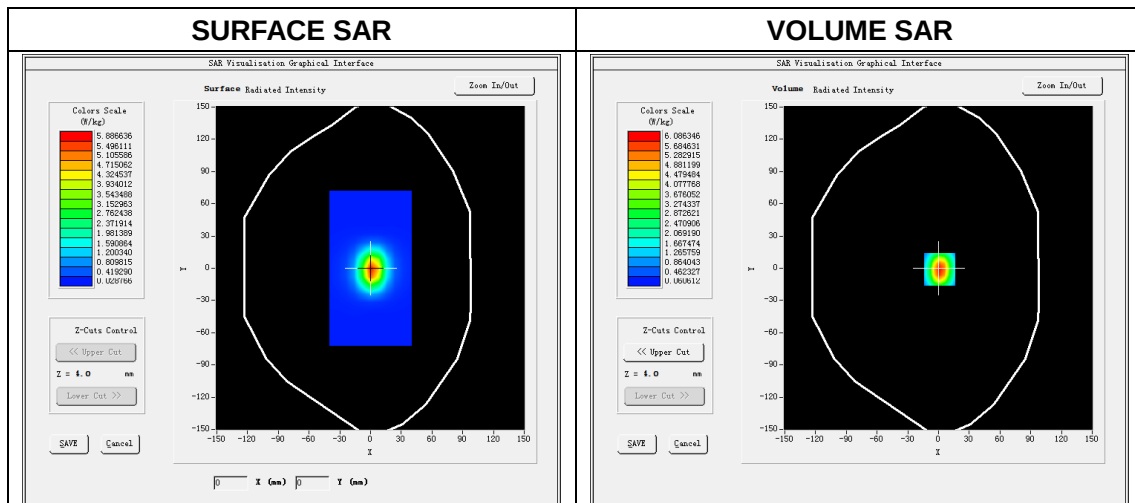


System Performance Check Data(2600MHz Body)

Type: Phone measurement (Complete)
E-Field Probe: SN 08/16 SSE2 EPGO295
Area scan resolution: dx=8mm,dy=8mm
Zoom scan resolution: dx=5mm, dy=5mm, dz=5mm
Date of measurement: 2017.08.16
Measurement duration: 18 minutes 45 seconds

Experimental conditions.

Phantom File	surf_sam_plan.txt
Phantom	Validation plane
Band	2600MHz
Signal	CW
Frequency (MHz)	2600.000000
Relative permittivity (real part)	50.624785
Conductivity (S/m)	2.216743
Power drift (%)	0.980000
Ambient Temperature:	22.3°C
Liquid Temperature:	21.3°C
ConvF:	2.27
Crest factor:	1:1

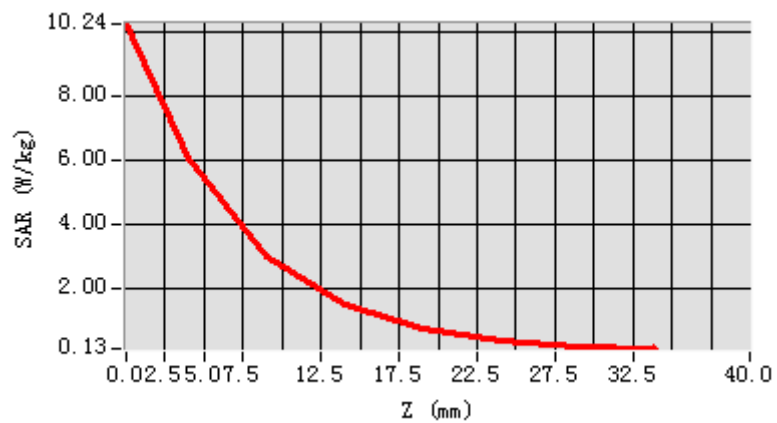


Maximum location: X=1.00, Y=-1.00

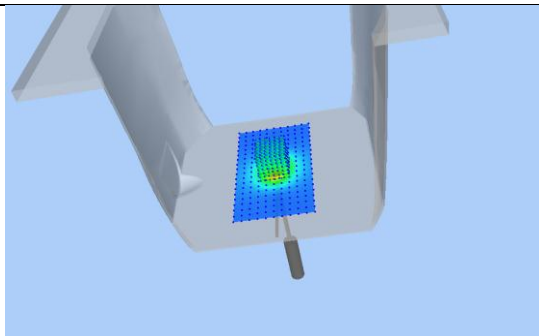
SAR Peak: 10.20W/kg

SAR 10g (W/Kg)	2.510576
SAR 1g (W/Kg)	5.606328

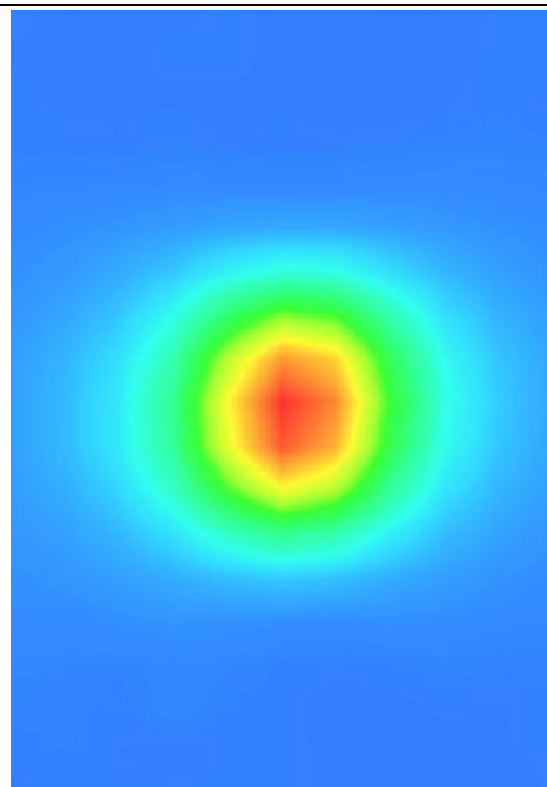
Z Axis Scan



3D screen shot



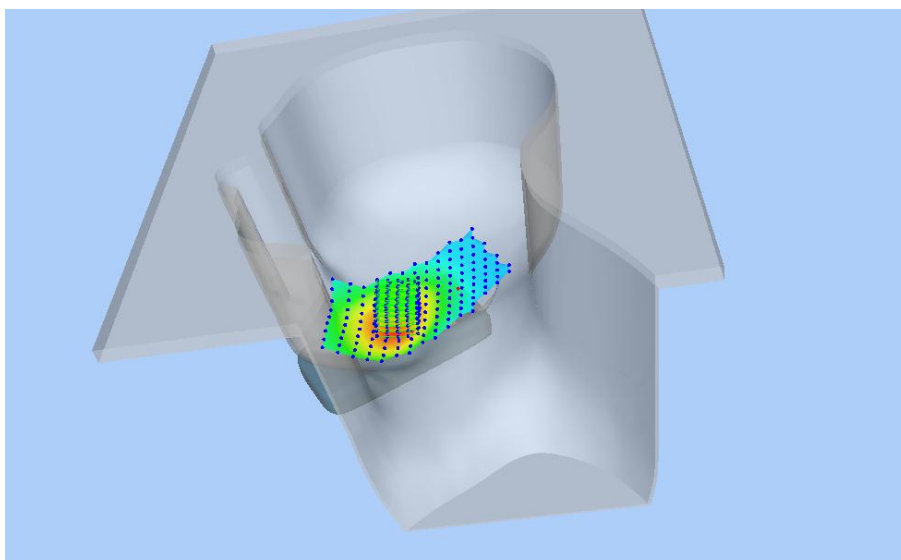
Hot spot position



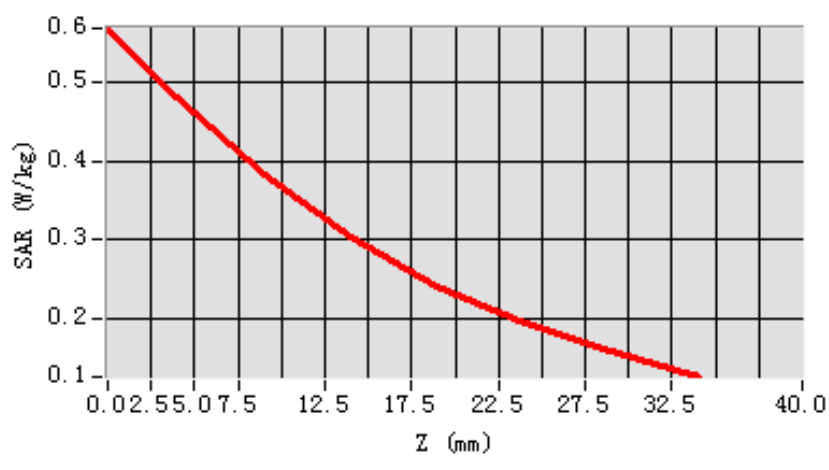
ANNEX C TEST DATA

MEAS. 1 Right Head with Cheek on Middle Channel in CDMA BC0 mode

Test Date: 30/8/2017
Measurement duration: 11 minutes 2 seconds
Signal: CDMA2000, f=836.52 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 41.53; Conductivity: 0.91 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 1.78
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-46.000000, Y=-36.000000
SAR 10g (W/Kg): 0.346081
SAR 1g (W/Kg): 0.461651
Power drift (%): -0.32
3D screen shot

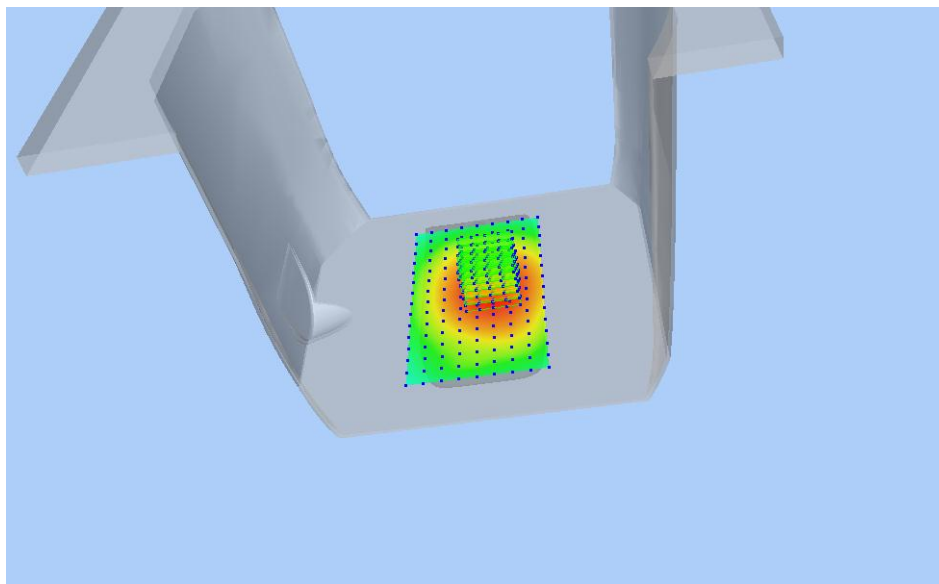


Z Axis Scan

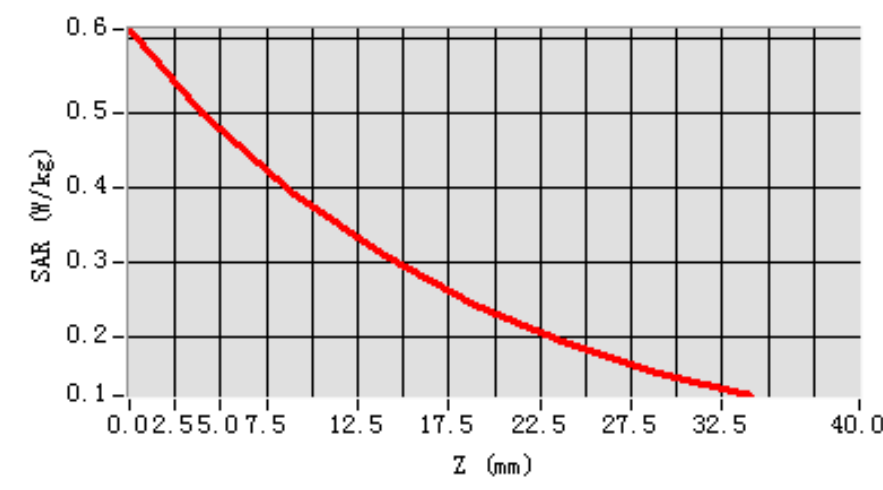


MEAS. 2 Body Plane with Back Side 15mm on Middle Channel in CDMA BC0 mode

Test Date: 28/8/2017
Measurement duration: 11 minutes 57 seconds
Signal: CDMA2000, f=836.52 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 54.18; Conductivity: 0.98 S/m
Test condition: Ambient Temperature: 22.2°C, Liquid Temperature: 21.5°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 1.85
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=0.000000, Y=48.000000
SAR 10g (W/Kg): 0.368814
SAR 1g (W/Kg): 0.491688
Power drift (%): -0.61
3D screen shot

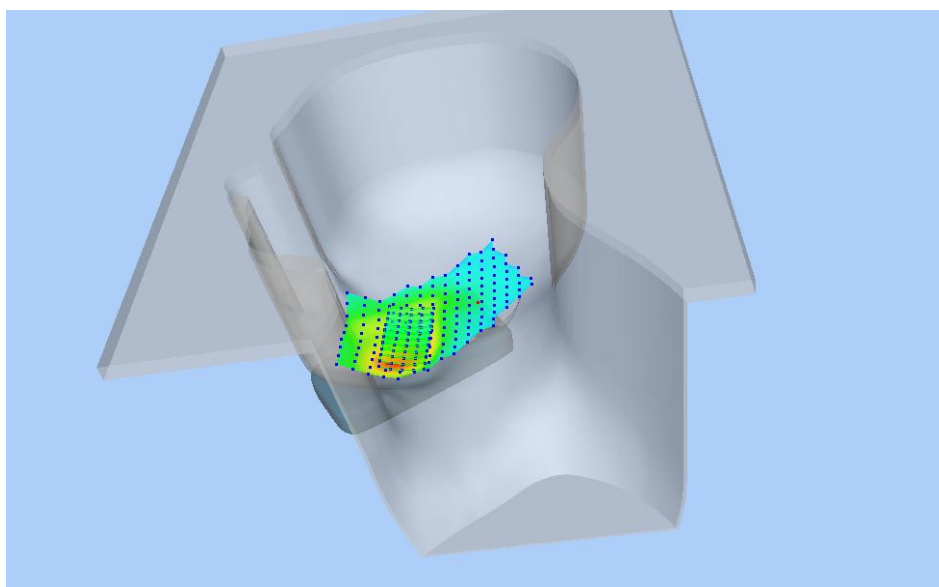


Z Axis Scan

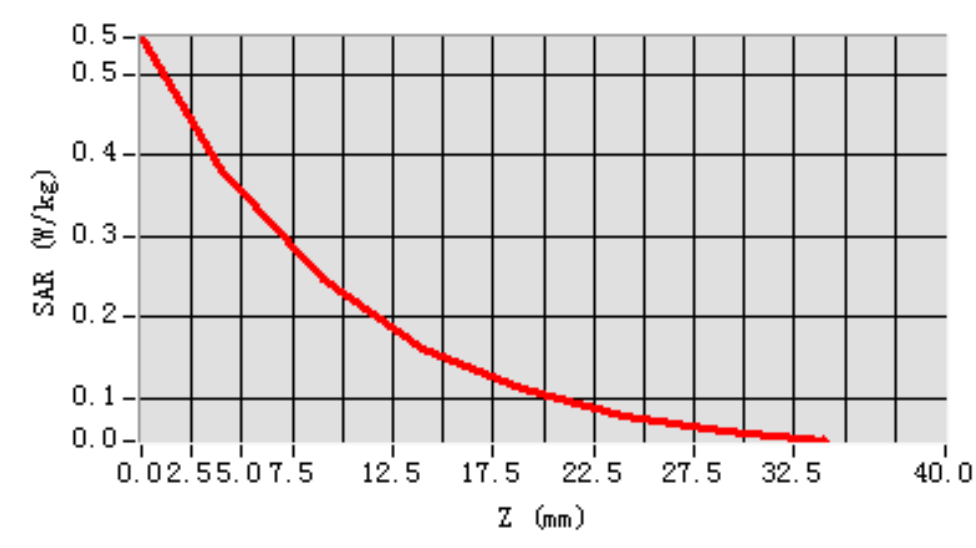


MEAS. 3 Right Head with Cheek on Low Channel in CDMA BC1 mode

Test Date: 24/8/2017
Measurement duration: 12 minutes 12 seconds
Signal: CDMA2000, f=1851.25 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity:39.88; Conductivity: 1.39 S/m
Test condition: Ambient Temperature: 22.4°C, Liquid Temperature: 21.3°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 2.19
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-56.000000, Y=-56.000000
SAR 10g (W/Kg): 0.219375
SAR 1g (W/Kg): 0.364986
Power drift (%): 4.29
3D screen shot



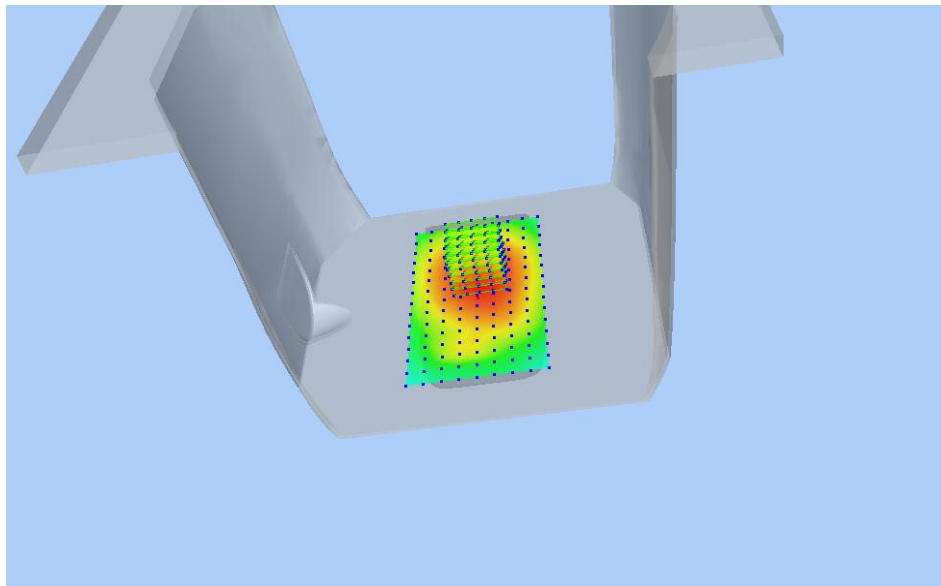
Z Axis Scan



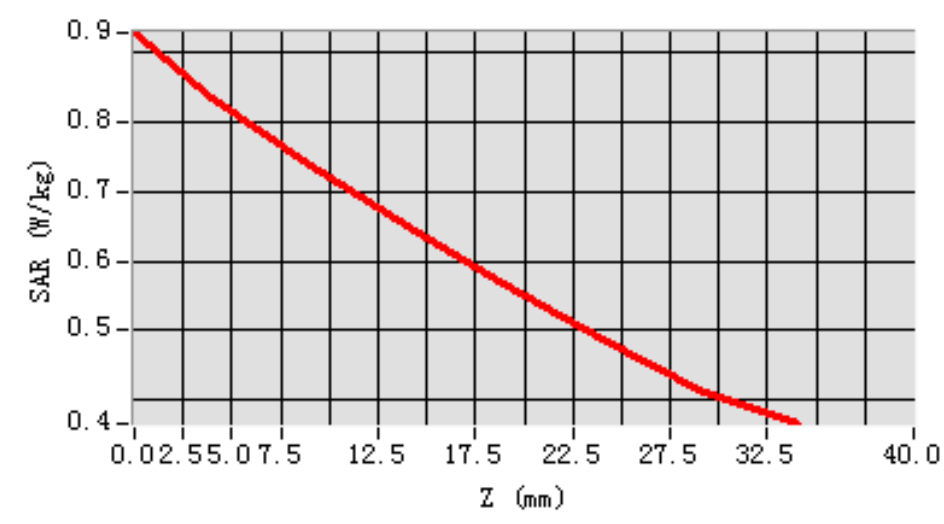
MEAS. 4 Body Plane with Back Side 10mm on Middle Channel in CDMA BC1

mode

Test Date: 18/8/2017
Measurement duration: 12 minutes 4 seconds
Signal: CDMA2000, f=1880.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 52.63; Conductivity: 1.55 S/m
Test condition: Ambient Temperature: 22.0°C, Liquid Temperature: 21.3°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 2.24
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=0.000000, Y=18.000000
SAR 10g (W/Kg): 0.696098
SAR 1g (W/Kg): 0.841944
Power drift (%): -1.68
3D screen shot

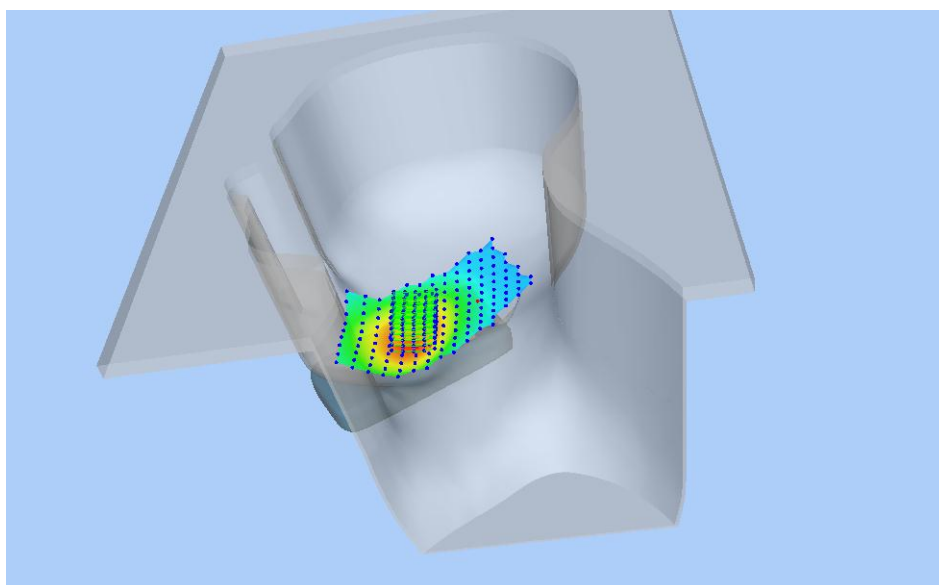


Z Axis Scan

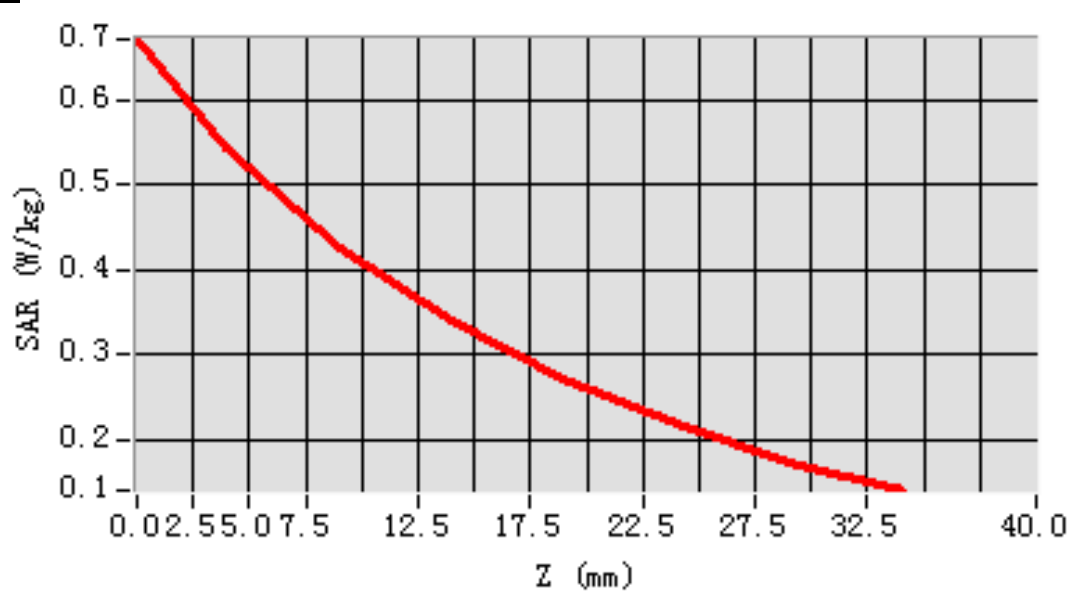


MEAS. 5 Right Head with Cheek on Middle Channel in CDMA BC10 mode

Test Date: 30/8/2017
Measurement duration: 11 minutes 6 seconds
Signal: CDMA2000, f=820.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 41.71; Conductivity: 0.91 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 1.78
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-46.000000, Y=-36.000000
SAR 10g (W/Kg): 0.387445
SAR 1g (W/Kg): 0.524026
Power drift (%): -0.06
3D screen shot



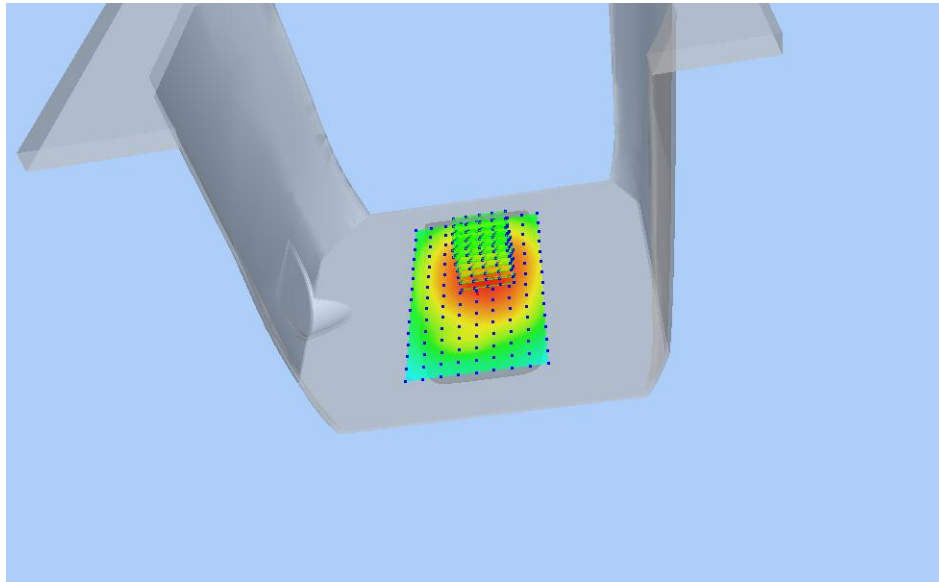
Z Axis Scan



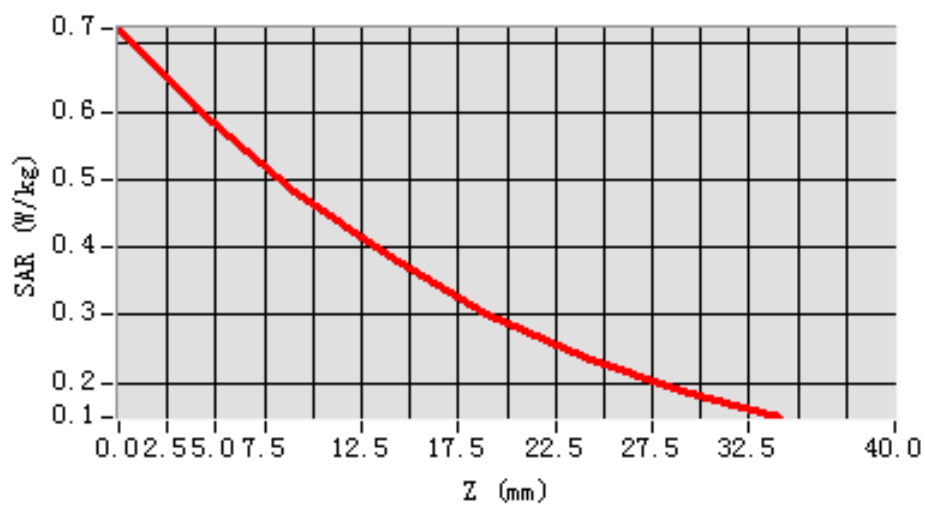
MEAS. 6 Body Plane with Back Side 10mm on Middle Channel in CDMA BC10

mode

Test Date: 28/8/2017
Measurement duration: 12 minutes 44 seconds
Signal: CDMA2000, f=820.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 54.23; Conductivity: 0.98 S/m
Test condition: Ambient Temperature: 22.2°C, Liquid Temperature: 21.5°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 1.85
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=10.000000, Y=18.000000
SAR 10g (W/Kg): 0.449287
SAR 1g (W/Kg): 0.589354
Power drift (%): 0.55
3D screen shot

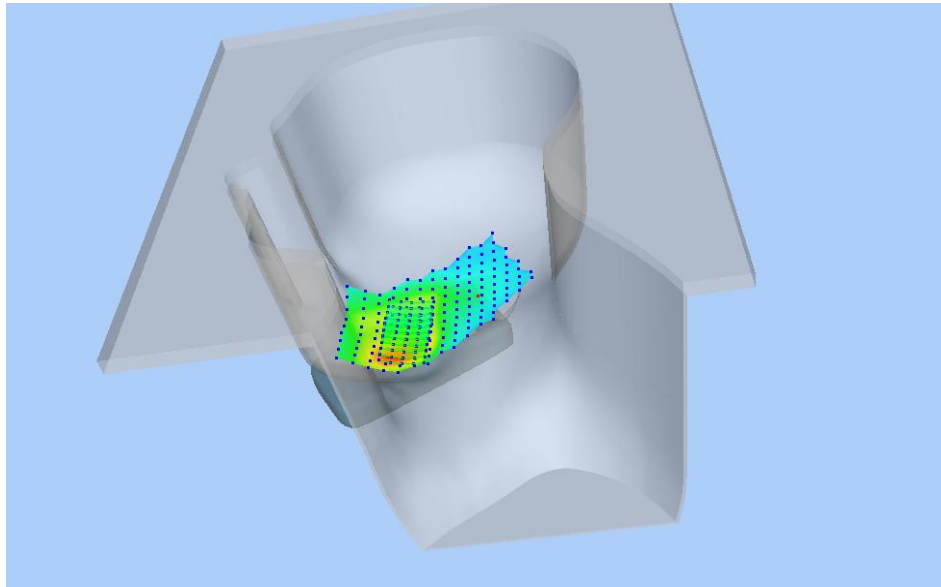


Z Axis Scan

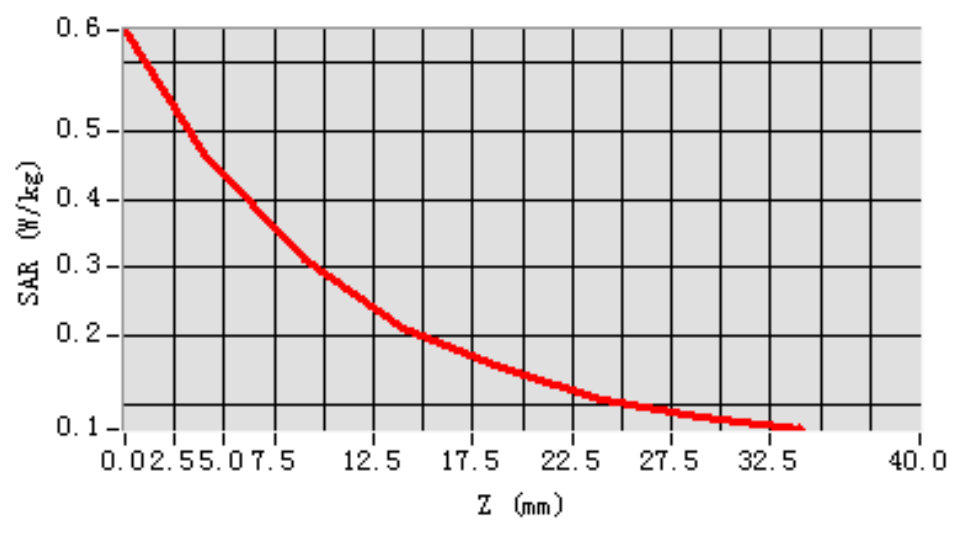


MEAS. 7 Right Head with Cheek on Low Channel in LTE Band 2 mode with 1RB

Test Date:	24/8/2017
Measurement duration:	12 minutes 14 seconds
Signal:	LTE, f=1860.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 39.72; Conductivity: 1.39 S/m
Test condition:	Ambient Temperature: 22.4°C, Liquid Temperature: 21.3°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 2.19
Area Scan:	sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=-56.000000, Y=-56.000000
SAR 10g (W/Kg):	0.276963
SAR 1g (W/Kg):	0.448159
Power drift (%):	1.87
3D screen shot	

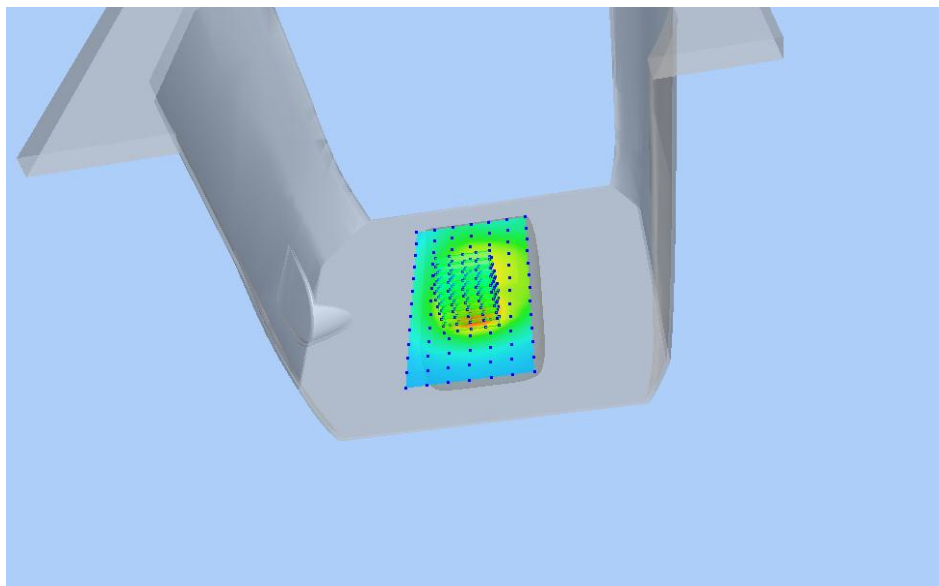


Z Axis Scan

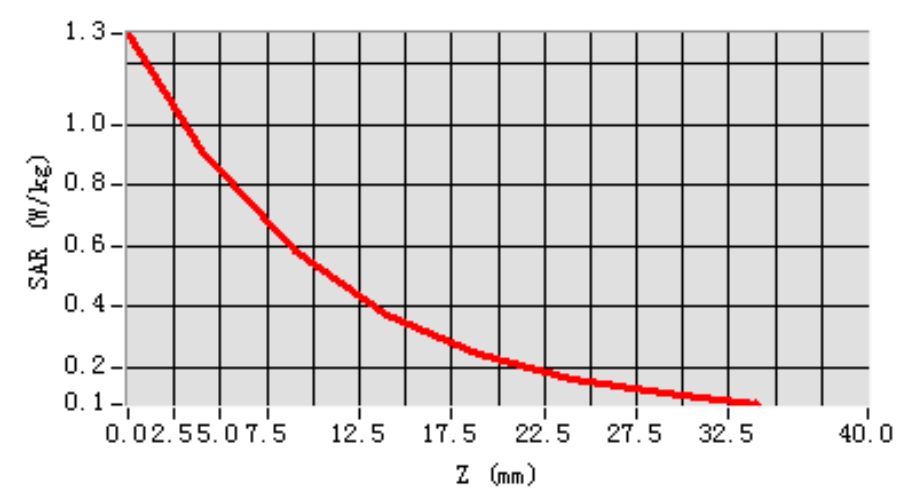


MEAS. 8 Body Plane with Back Side 10mm on High Channel in LTE Band 2 mode with 1RB

Test Date:	17/8/2017
Measurement duration:	10 minutes 5 seconds
Signal:	LTE, f=1900.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity:52.42; Conductivity: 1.57 S/m
Test condition:	Ambient Temperature: 22.1°C, Liquid Temperature: 21.2°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 2.24
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):	0.503338
SAR 1g (W/Kg):	0.914067
Power drift (%):	1.62
3D screen shot	

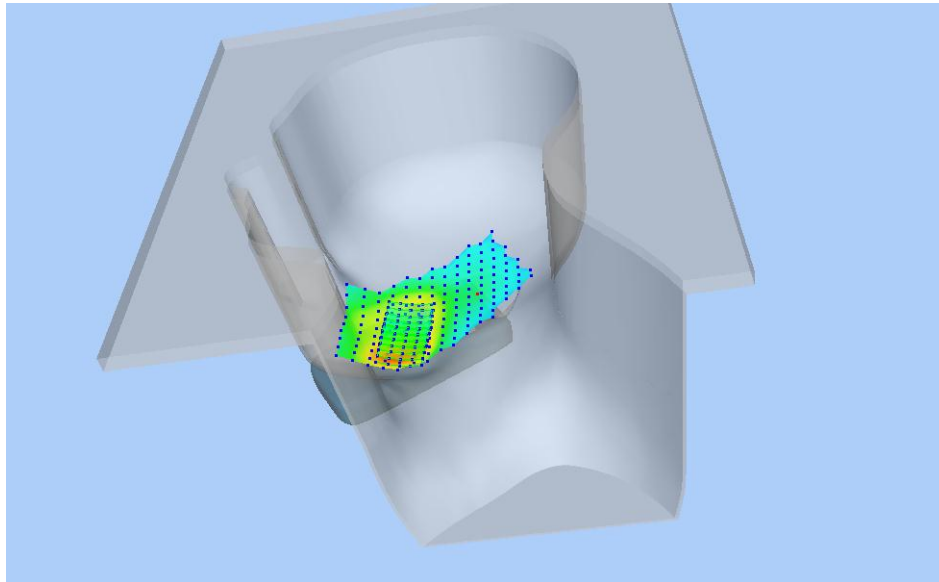


Z Axis Scan

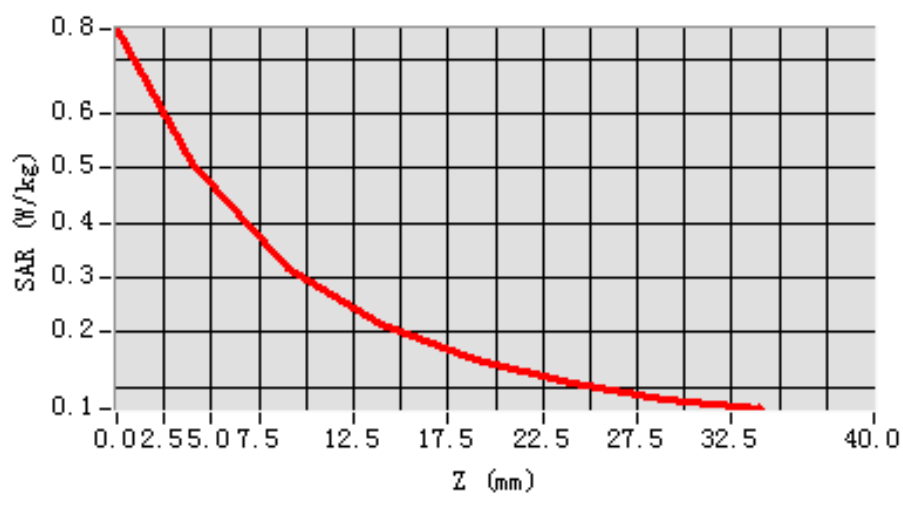


MEAS. 9 Right Head with Cheek on Middle Channel in LTE Band 4 mode with 1RB

Test Date: 25/8/2017
Measurement duration: 12 minutes 11 seconds
Signal: LTE, f=1732.5 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 41.42; Conductivity: 1.35 S/m
Test condition: Ambient Temperature: 22.0°C, Liquid Temperature: 21.4°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 1.88
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-56.000000, Y=-66.000000
SAR 10g (W/Kg): 0.294414
SAR 1g (W/Kg): 0.497786
Power drift (%): -4.02
3D screen shot

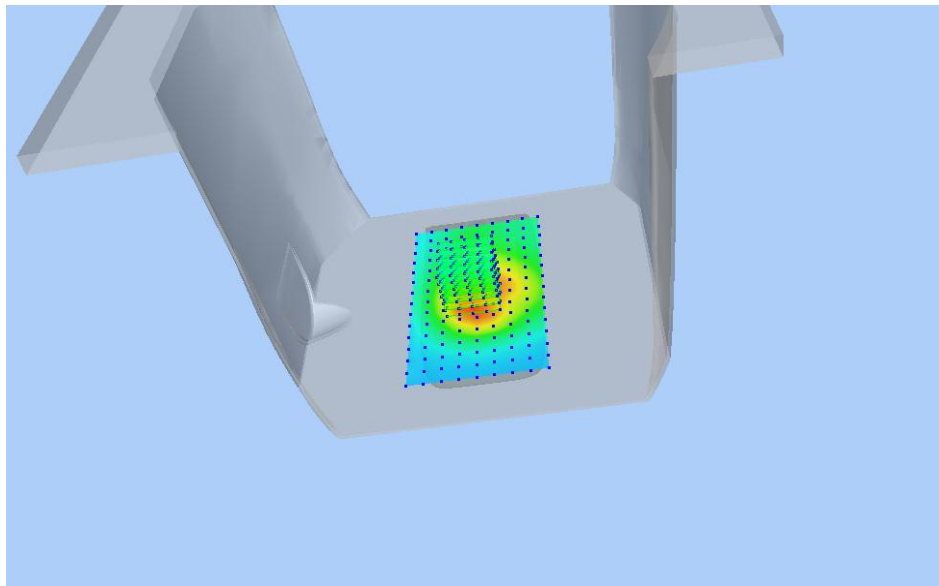


Z Axis Scan

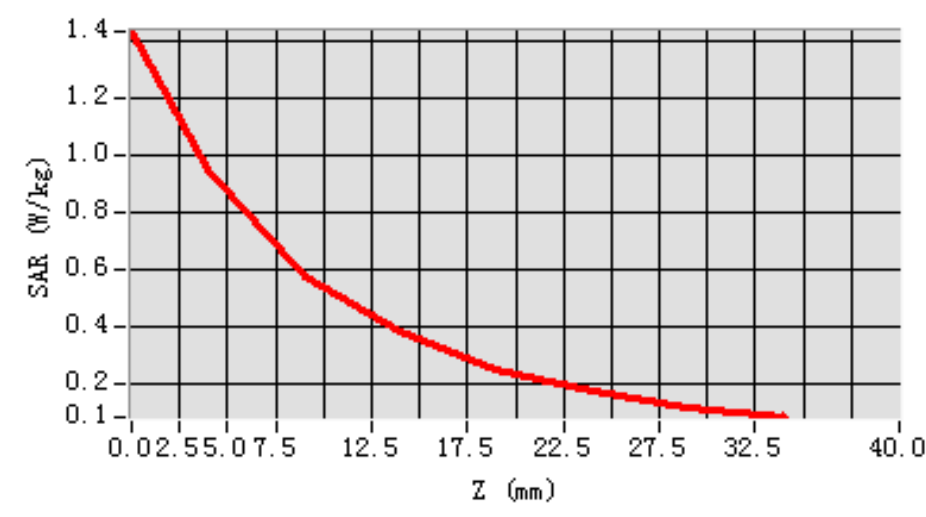


MEAS. 10 Body Plane with Back Side 10mm on Low LTE Band 4 in LTE mode with 1RB

Test Date:	21/8/2017
Measurement duration:	11 minutes 18 seconds
Signal:	LTE, f=1720.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 53.23; Conductivity: 1.45 S/m
Test condition:	Ambient Temperature: 22.6°C, Liquid Temperature: 21.5°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 1.94
Area Scan:	sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=0.000000, Y=-2.000000
SAR 10g (W/Kg):	0.544219
SAR 1g (W/Kg):	0.922787
Power drift (%):	-1.88
3D screen shot	

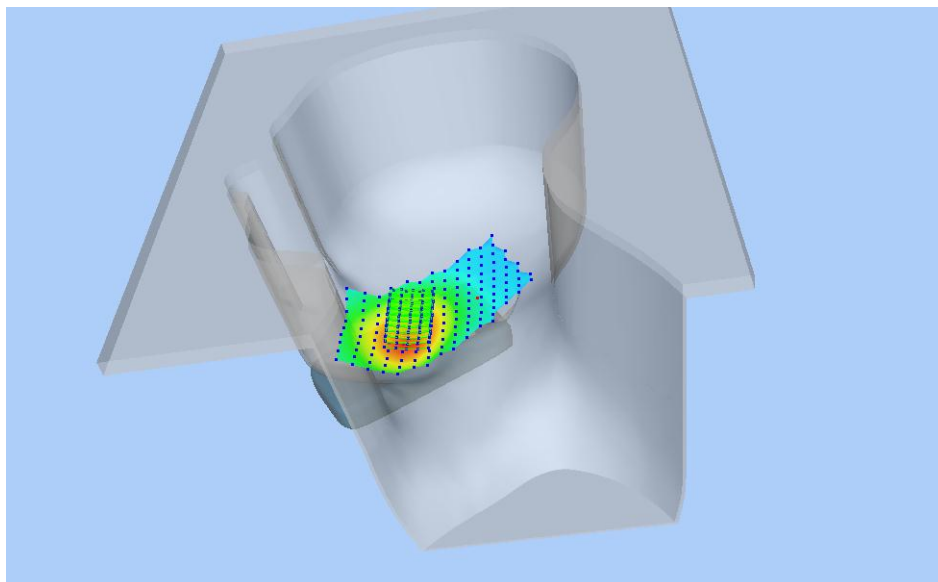


Z Axis Scan

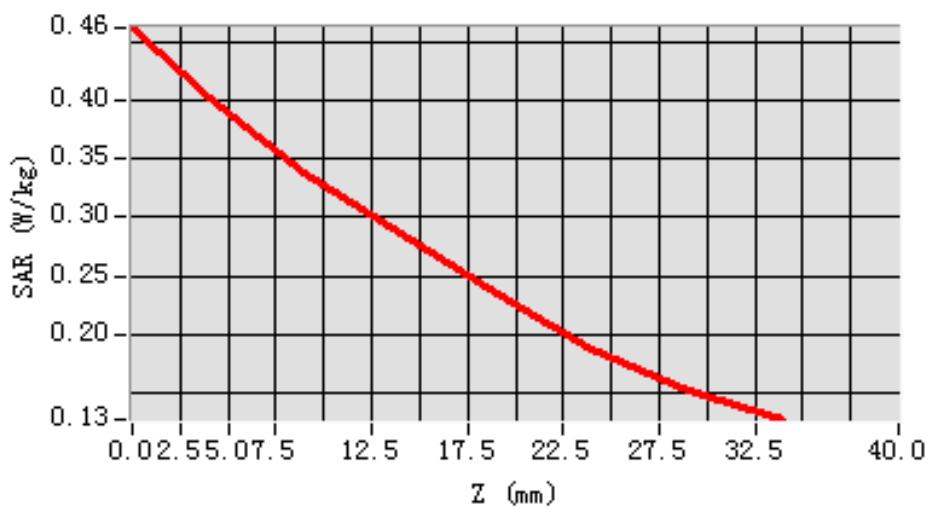


MEAS. 11 Right Head with Cheek on High Channel in LTE Band 5 mode with 1RB

Test Date: 30/8/2017
Measurement duration: 12 minutes 6 seconds
Signal: LTE, f=844.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 41.42; Conductivity: 0.92 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 1.78
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-56.000000, Y=-36.000000
SAR 10g (W/Kg): 0.306657
SAR 1g (W/Kg): 0.400801
Power drift (%): -2.06
3D screen shot

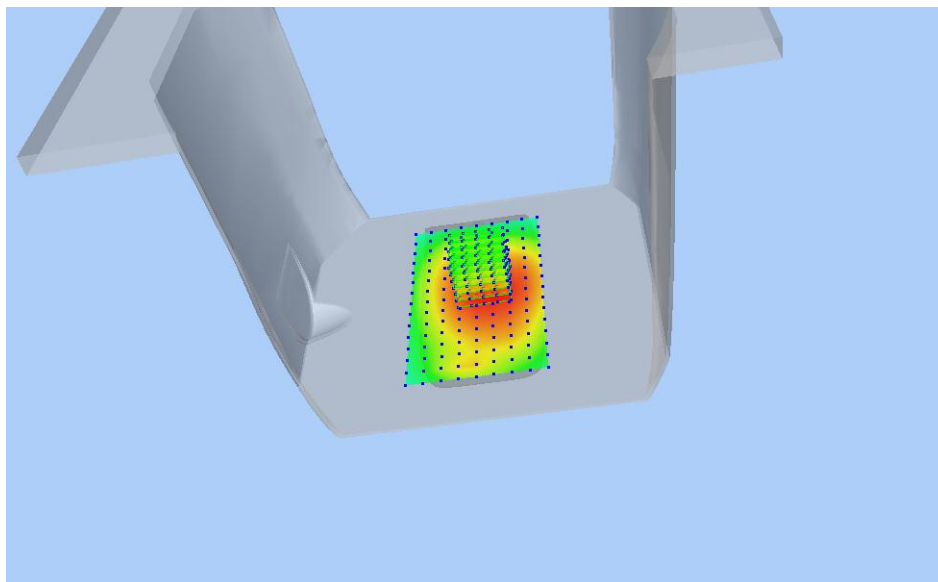


Z Axis Scan

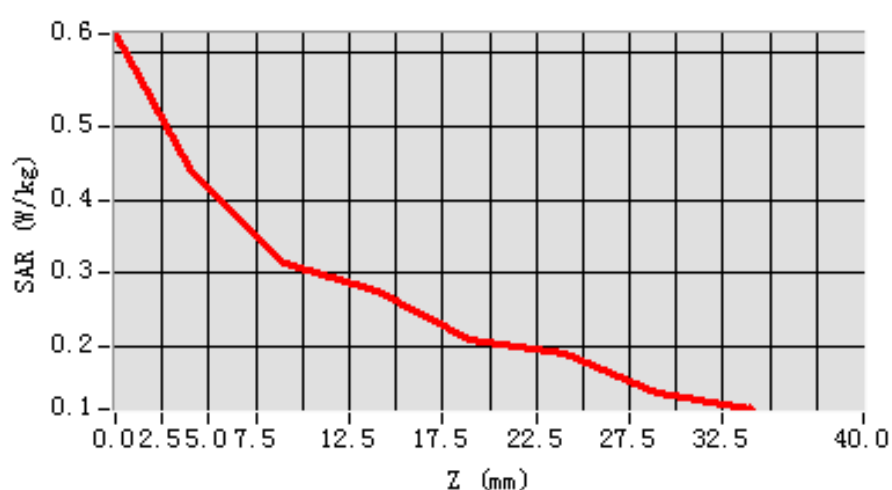


MEAS. 12 Body Plane with Back Side 10mm on High Channel in LTE Band 5 mode with 1RB

Test Date:	28/8/2017
Measurement duration:	12 minutes 33 seconds
Signal:	LTE, f=844.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 53.80; Conductivity: 0.99 S/m
Test condition:	Ambient Temperature: 22.2°C, Liquid Temperature: 21.5°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 1.85
Area Scan:	sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=0.000000, Y=8.000000
SAR 10g (W/Kg):	0.336086
SAR 1g (W/Kg):	0.446184
Power drift (%):	-0.09
3D screen shot	

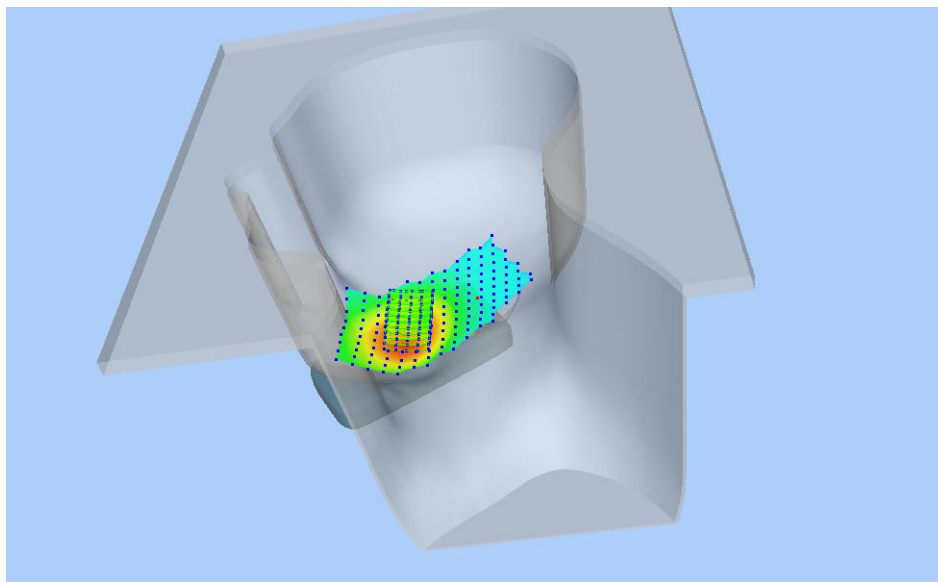


Z Axis Scan

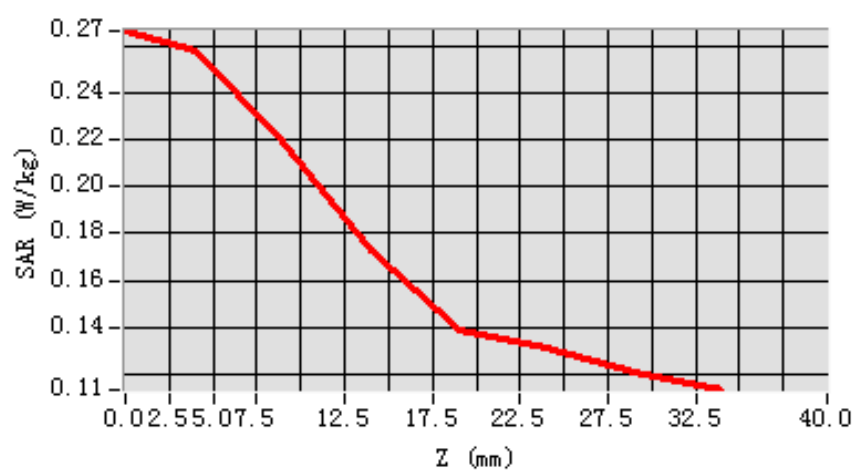


MEAS. 13 Right Head with Cheek on High Channel in LTE Band 12 mode with 1RB

Test Date: 31/8/2017
Measurement duration: 11 minutes 58 seconds
Signal: LTE, f=711.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 42.84; Conductivity: 0.88 S/m
Test condition: Ambient Temperature: 22.3°C, Liquid Temperature: 21.0°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 1.52
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-56.000000, Y=-36.000000
SAR 10g (W/Kg): 0.202320
SAR 1g (W/Kg): 0.250897
Power drift (%): 2.24
3D screen shot



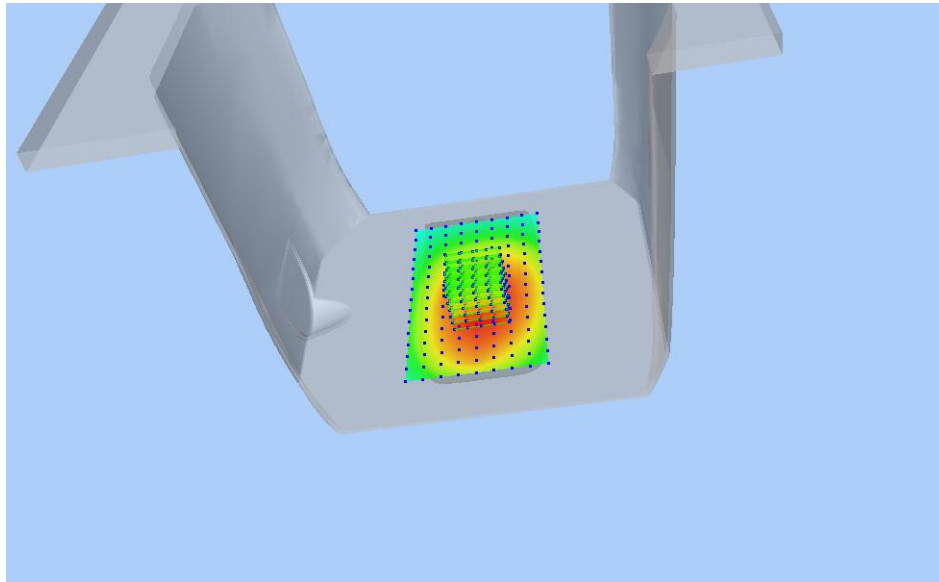
Z Axis Scan



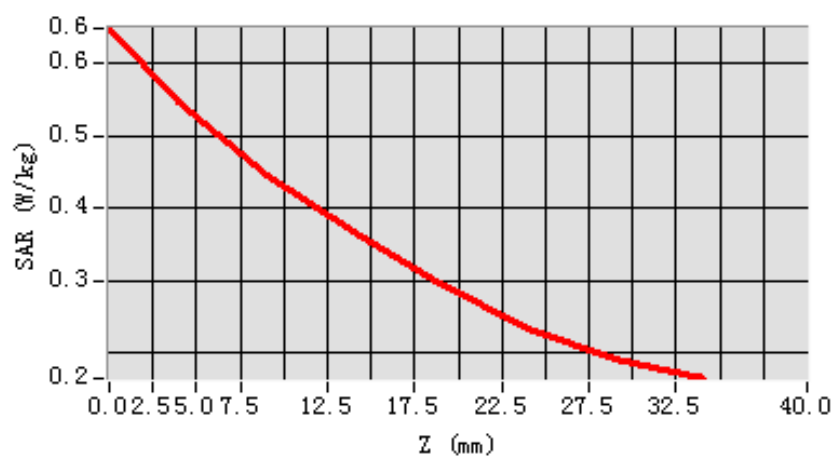
MEAS. 14 Body Plane with Back Side 10mm on High Channel in LTE Band 12

mode with 1RB

Test Date: 29/8/2017
Measurement duration: 12 minutes 9 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: 22.3°C, Liquid Temperature: 21.1°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 1.56
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=0.000000, Y=-22.000000
SAR 10g (W/Kg): 0.416409
SAR 1g (W/Kg): 0.535529
Power drift (%): -1.02
3D screen shot

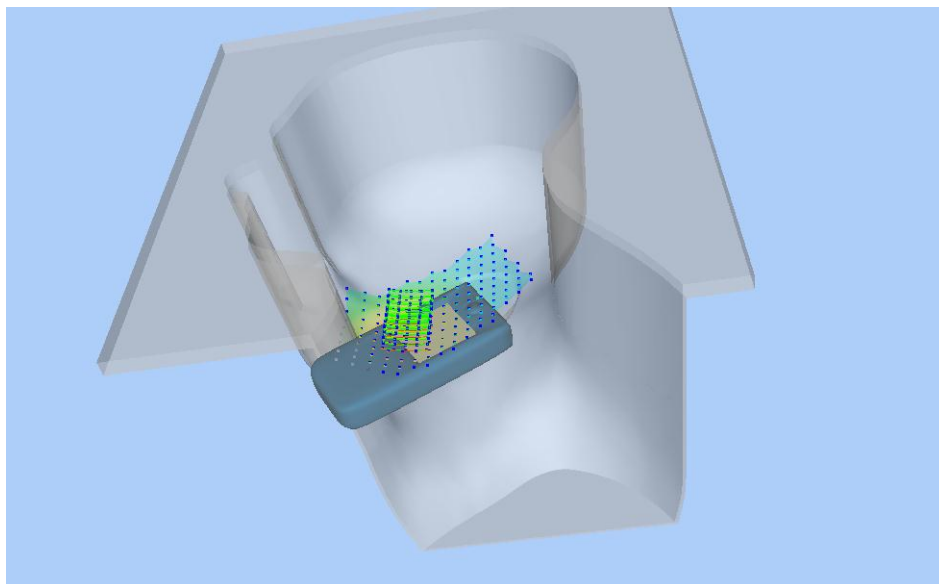


Z Axis Scan

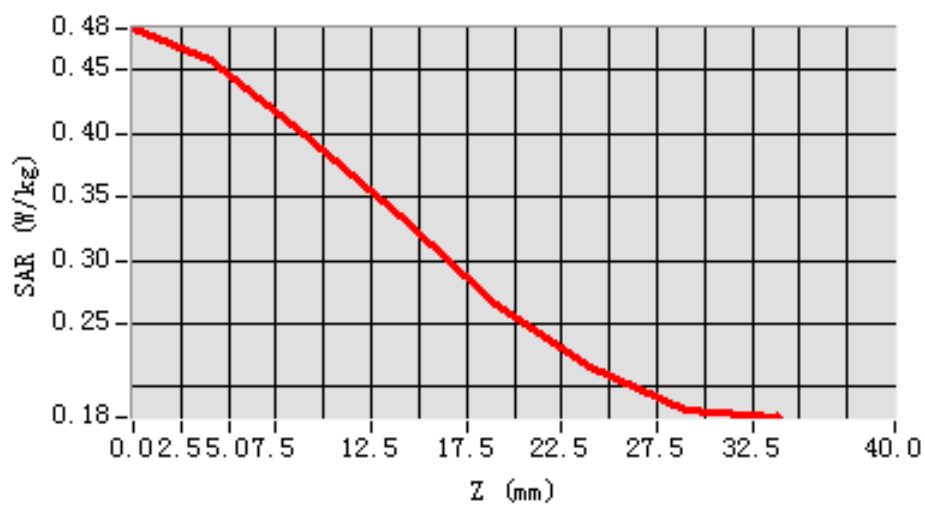


MEAS. 15 Right Head with Cheek on High Channel in LTE Band 13 mode with 1RB

Test Date:	31/8/2017
Measurement duration:	11 minutes 57 seconds
Signal:	LTE, f=782.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 41.97; Conductivity: 0.91 S/m
Test condition:	Ambient Temperature: 22.3°C, Liquid Temperature: 21.0°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 1.52
Area Scan:	sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=-56.000000, Y=-36.000000
SAR 10g (W/Kg):	0.360739
SAR 1g (W/Kg):	0.456503
Power drift (%):	-0.05
3D screen shot	

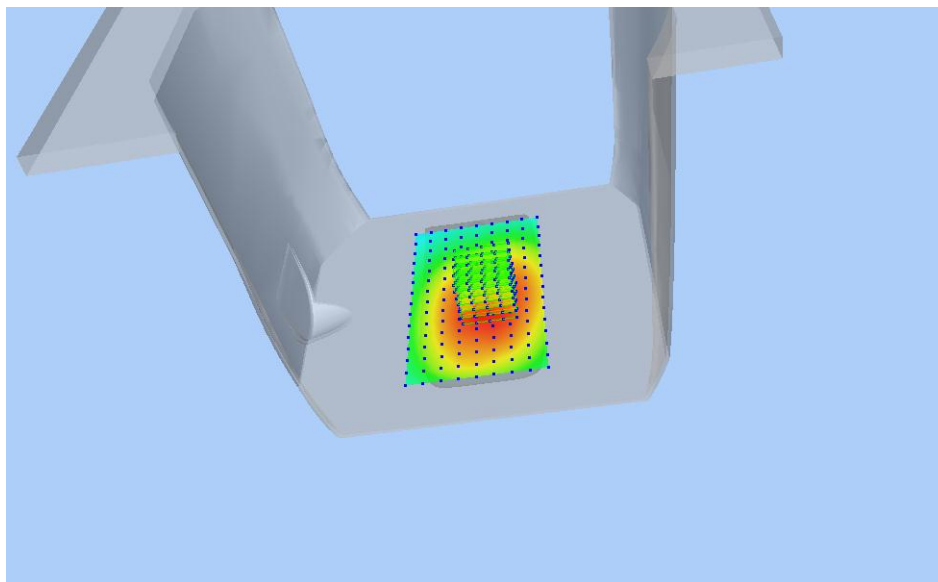


Z Axis Scan

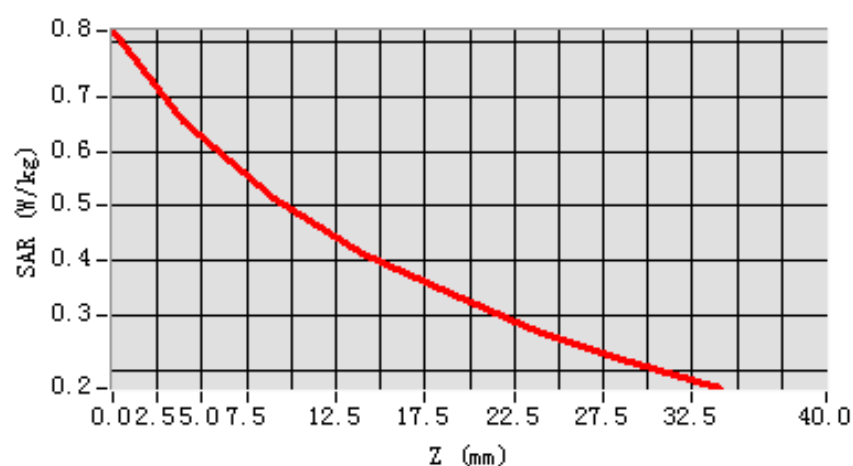


MEAS. 16 Body Plane with Back Side 10mm on High Channel in LTE Band 13 mode with 1RB

Test Date:	29/8/2017
Measurement duration:	12 minutes 55 seconds
Signal:	LTE, f=782.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 56.93; Conductivity: 0.96 S/m
Test condition:	Ambient Temperature: 22.3°C, Liquid Temperature: 21.1°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 1.56
Area Scan:	sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=10.000000, Y=-12.000000
SAR 10g (W/Kg):	0.497837
SAR 1g (W/Kg):	0.647141
Power drift (%):	1.43
3D screen shot	

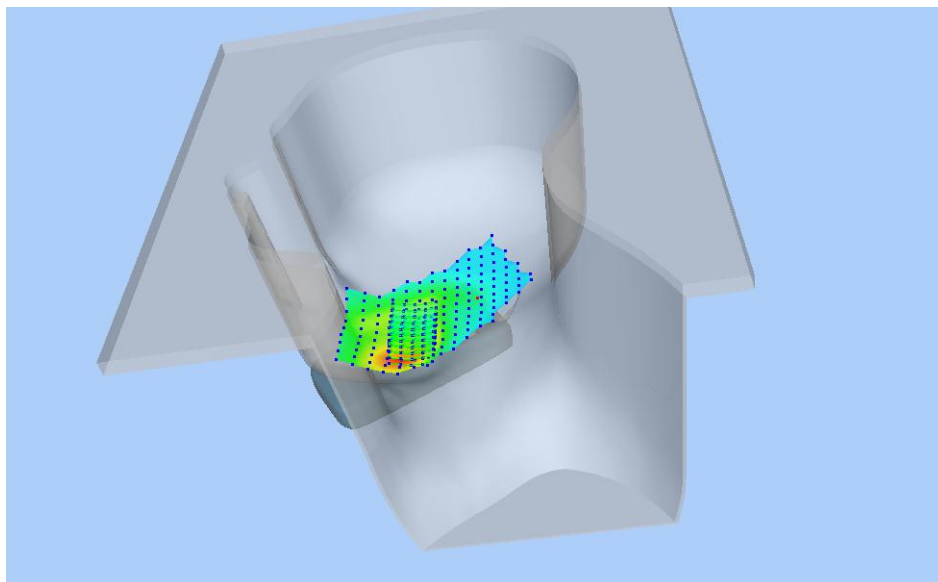


Z Axis Scan

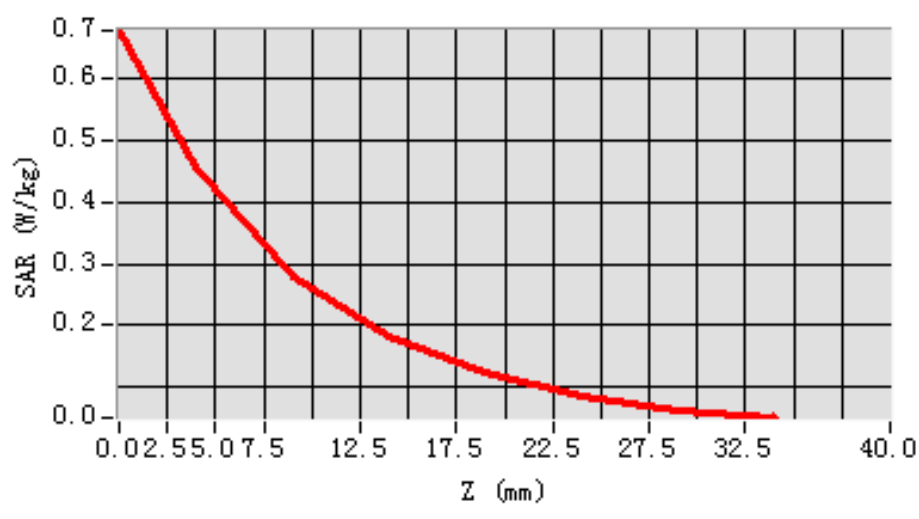


MEAS. 17 Right Head with Cheek on Middle Channel in LTE Band 25 mode with 1RB

Test Date:	24/8/2017
Measurement duration:	11 minutes 38 seconds
Signal:	LTE, f=1882.5 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 39.88; Conductivity: 1.39 S/m
Test condition:	Ambient Temperature: 22.4°C, Liquid Temperature: 21.3°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 2.19
Area Scan:	sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=-46.000000, Y=-56.000000
SAR 10g (W/Kg):	0.257445
SAR 1g (W/Kg):	0.439274
Power drift (%):	2.08
3D screen shot	



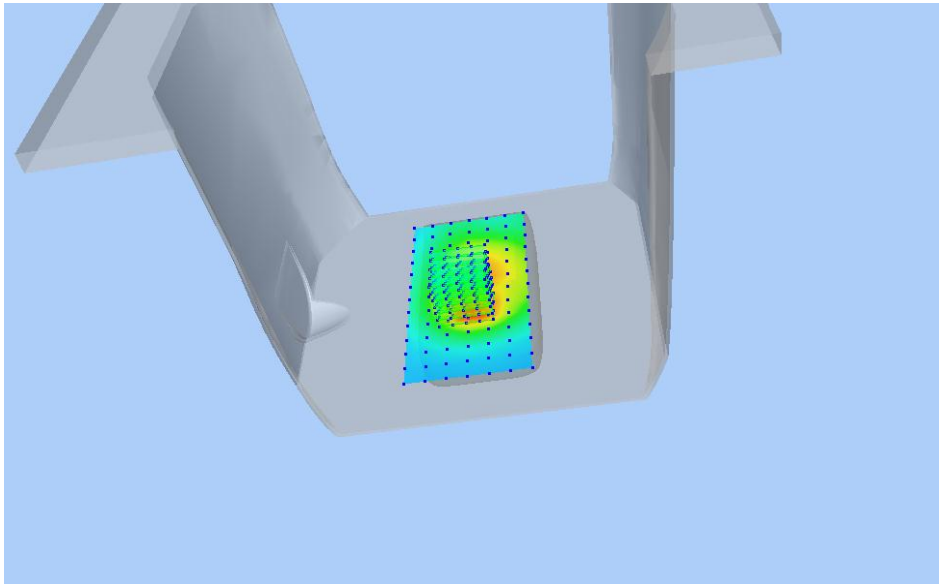
Z Axis Scan



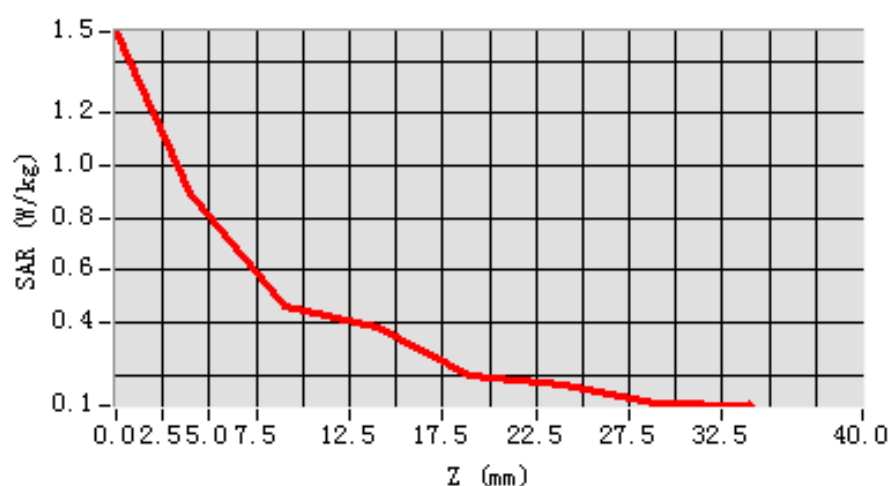
MEAS. 18 Body Plane with Back Side 10mm on Low Channel in LTE Band 25

mode with 1RB

Test Date:	17/8/2017
Measurement duration:	10 minutes 46 seconds
Signal:	LTE, f=1860.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 52.86; Conductivity: 1.54 S/m
Test condition:	Ambient Temperature: 22.1°C, Liquid Temperature: 21.2°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 2.24
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):	0.509089
SAR 1g (W/Kg):	0.903411
Power drift (%):	-0.41
3D screen shot	

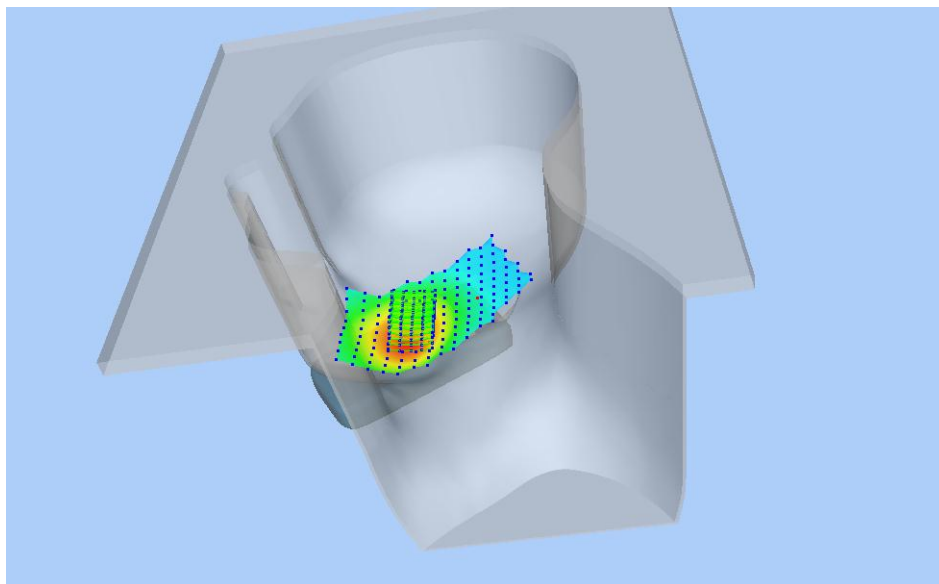


Z Axis Scan

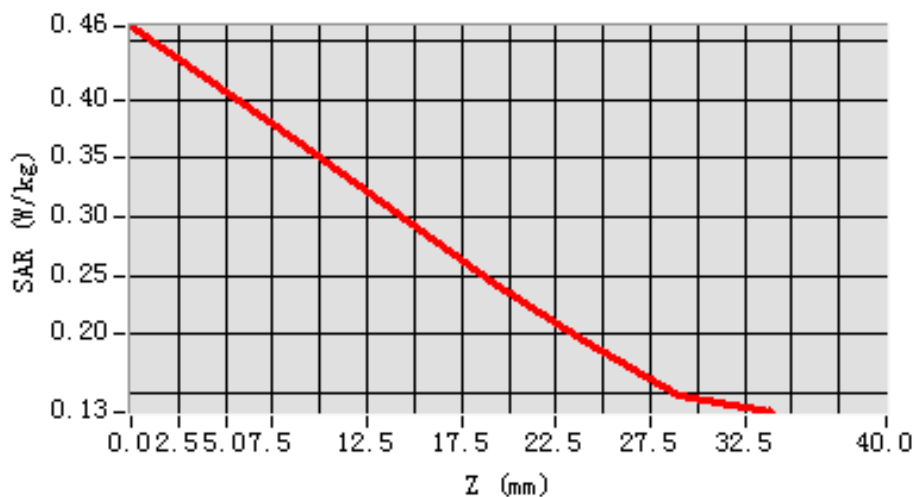


MEAS. 19 Right Head with Cheek on High Channel in LTE Band 26 mode with 1RB

Test Date: 30/8/2017
Measurement duration: 11 minutes 13 seconds
Signal: LTE, f=841.5 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 41.45; Conductivity: 0.92 S/m
Test condition: Ambient Temperature: 22.5°C, Liquid Temperature: 21.3°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 1.78
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location: X=-46.000000, Y=-36.000000
SAR 10g (W/Kg): 0.322765
SAR 1g (W/Kg): 0.408773
Power drift (%): -1.02
3D screen shot

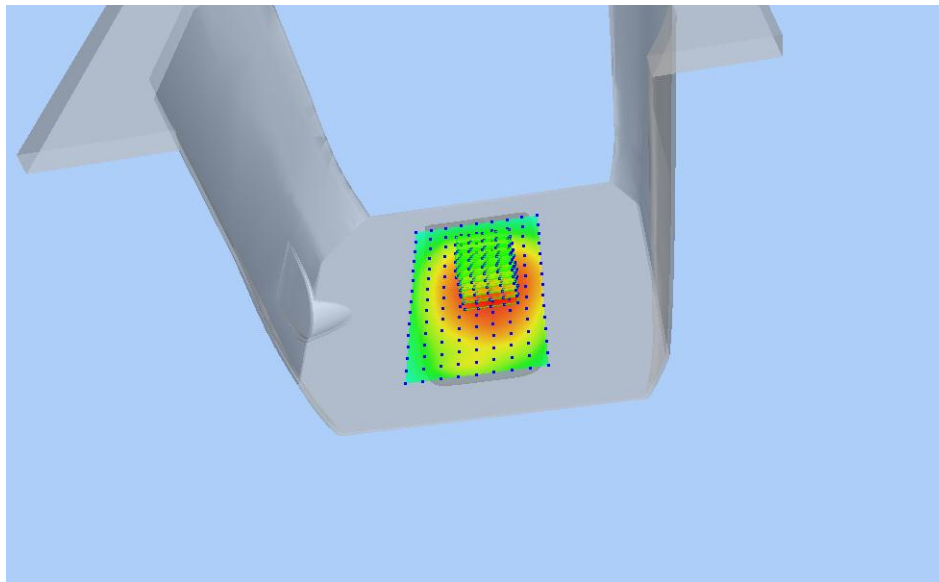


Z Axis Scan

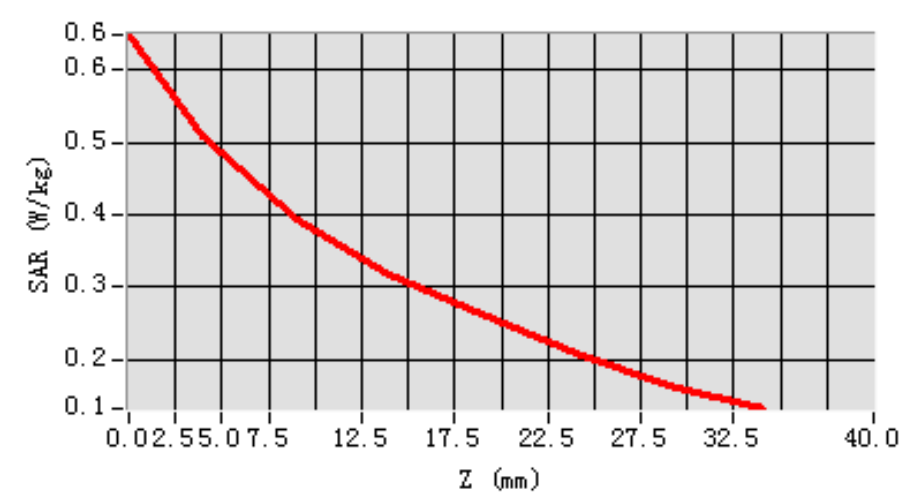


MEAS. 20 Body Plane with Back Side 10mm on High Channel in LTE Band 26 mode with 1RB

Test Date:	28/8/2017
Measurement duration:	13 minutes 3 seconds
Signal:	LTE, f=841.5 MHz, Duty Cycle: 1:1.0
Liquid Parameters:	Permittivity: 53.82; Conductivity: 0.99 S/m
Test condition:	Ambient Temperature: 22.2°C, Liquid Temperature: 21.5°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 1.85
Area Scan:	sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan:	5x5x7,dx=8mm, dy=8mm, dz=5mm,Complete
Maximum location:	X=10.000000, Y=-2.000000
SAR 10g (W/Kg):	0.381664
SAR 1g (W/Kg):	0.503087
Power drift (%):	-2.43
3D screen shot	

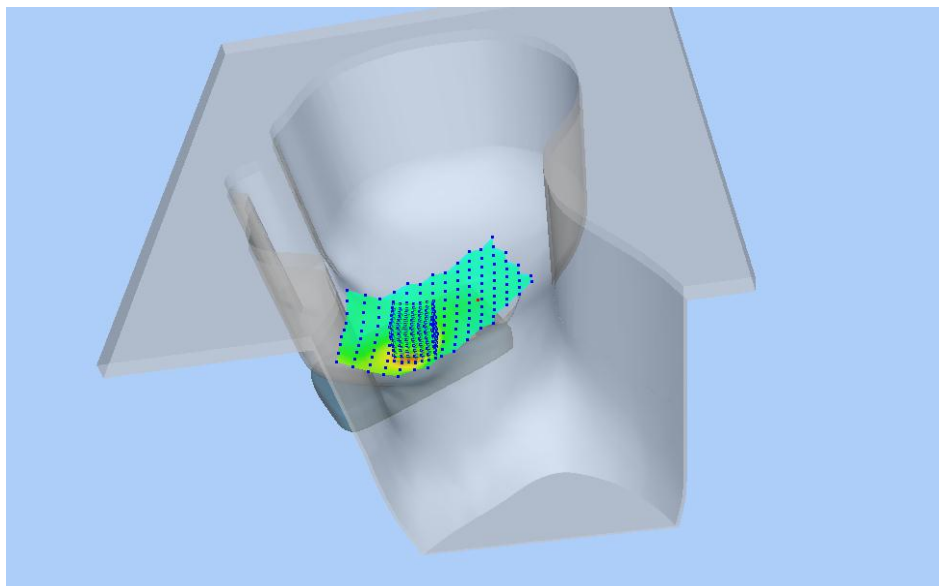


Z Axis Scan

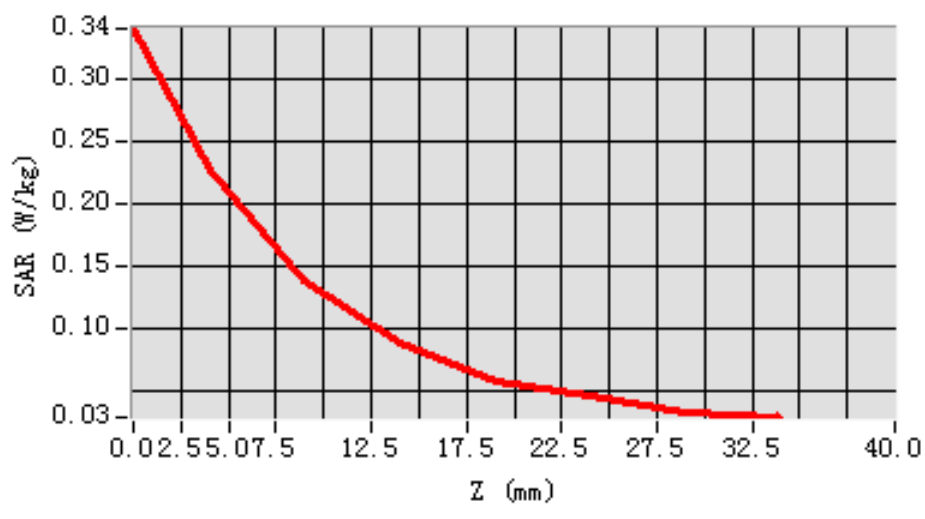


MEAS. 21 Right Head with Cheek on Middle Channel in LTE Band 41 mode with 1RB

Test Date:	22/8/2017
Measurement duration:	16 minutes 1 seconds
Signal:	LTE, f=2593.0 MHz, Duty Cycle: 1:1.6
Liquid Parameters:	Permittivity: 37.69; Conductivity: 2.00 S/m
Test condition:	Ambient Temperature: 22.6°C, Liquid Temperature: 21.4°C
Probe:	SN 08/16 SSE2 EPGO295, ConvF: 2.2
Area Scan:	sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan:	7x7x7,dx=5mm, dy=5mm, dz=5mm,Complete
Maximum location:	X=-46.000000, Y=-46.000000
SAR 10g (W/Kg):	0.120118
SAR 1g (W/Kg):	0.219540
Power drift (%):	-2.99
3D screen shot	

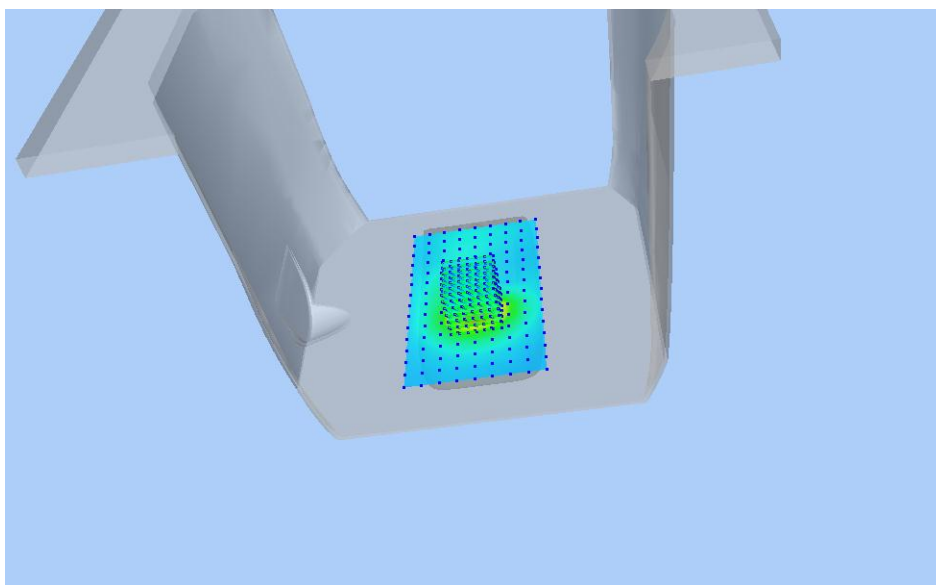


Z Axis Scan

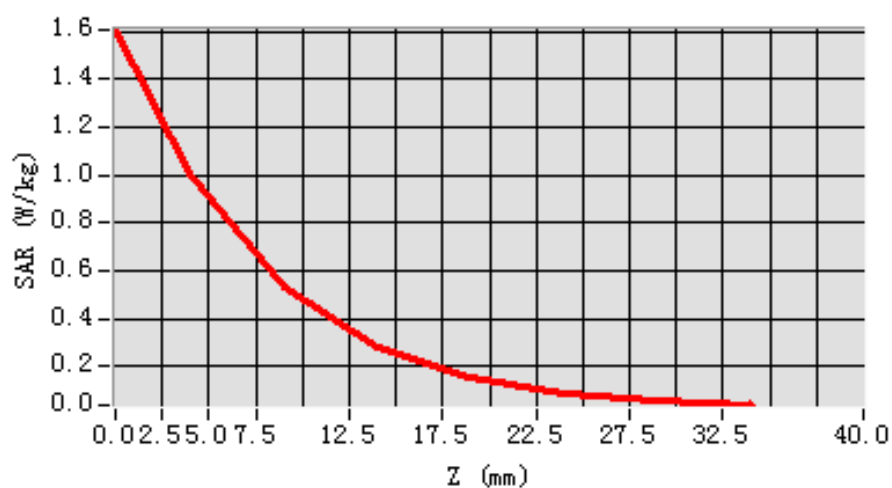


MEAS. 22 Body Plane with Back Side 15mm on High Channel in LTE Band 41 mode with 1RB

Test Date: 16/8/2017
Measurement duration: 16 minutes 59 seconds
Signal: LTE, f=2680.0 MHz, Duty Cycle: 1:1.6
Liquid Parameters: Permittivity: 50.38; Conductivity: 2.26 S/m
Test condition: Ambient Temperature: 22.3°C, Liquid Temperature: 21.3°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 2.27
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 7x7x7,dx=5mm, dy=5mm, dz=5mm,Complete
Maximum location: X=0.000000, Y=-12.000000
SAR 10g (W/Kg): 0.507616
SAR 1g (W/Kg): 0.951506
Power drift (%): -0.94
3D screen shot

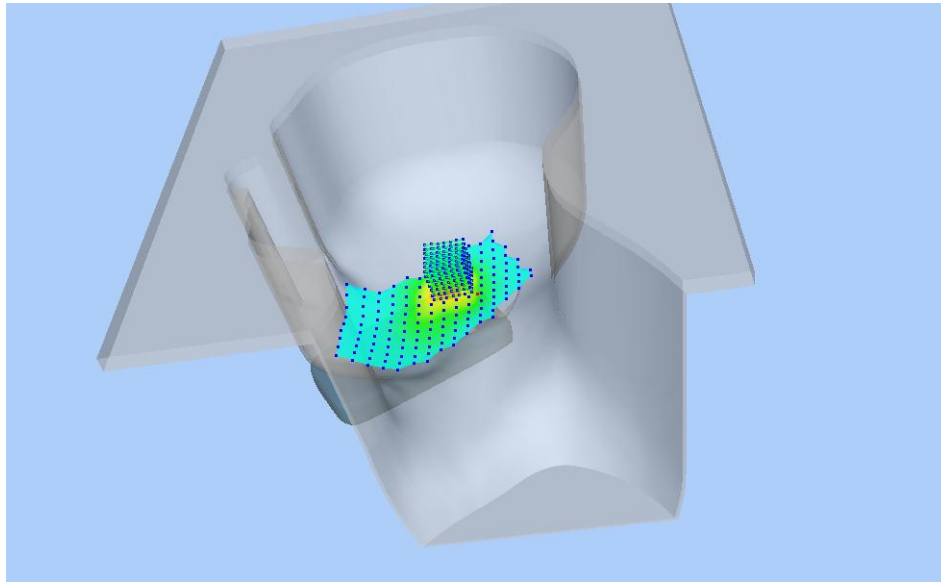


Z Axis Scan

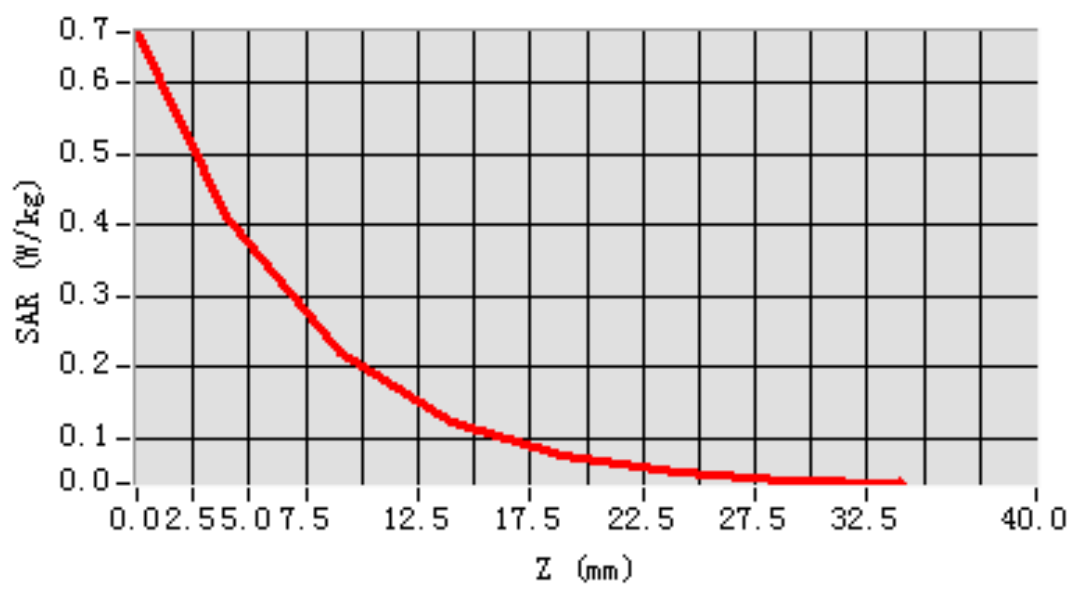


MEAS. 23 Right Head with Cheek on High Channel in IEEE 802.b mode

Test Date: 23/8/2017
Measurement duration: 13 minutes 57 seconds
Signal: WLAN, f=2462.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 38.58; Conductivity: 1.82 S/m
Test condition: Ambient Temperature: 22.7°C, Liquid Temperature: 21.6°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 2.21
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 7x7x7,dx=5mm, dy=5mm, dz=5mm,Complete
Maximum location: X=-16.000000, Y=14.000000
SAR 10g (W/Kg): 0.210423
SAR 1g (W/Kg): 0.391781
Power drift (%): 0.33
3D screen shot



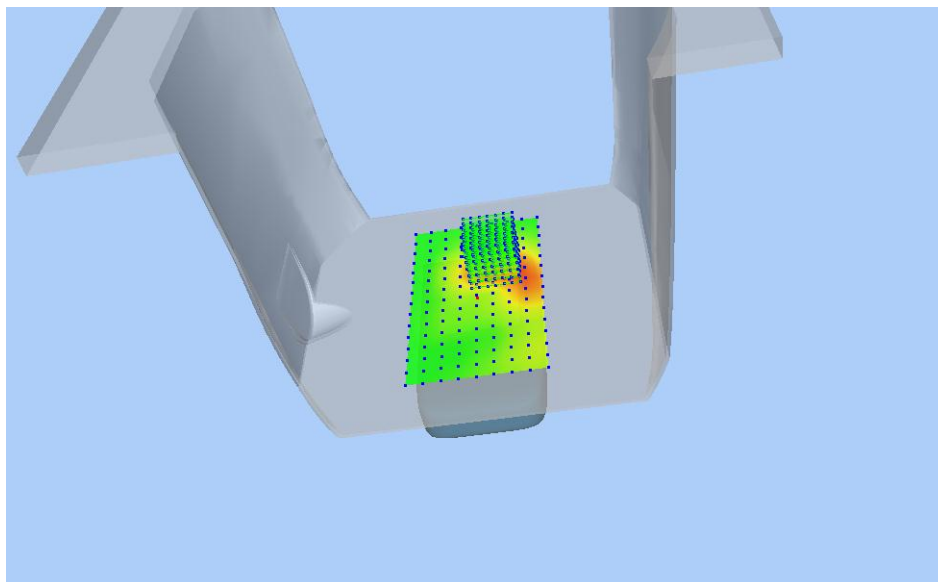
Z Axis Scan



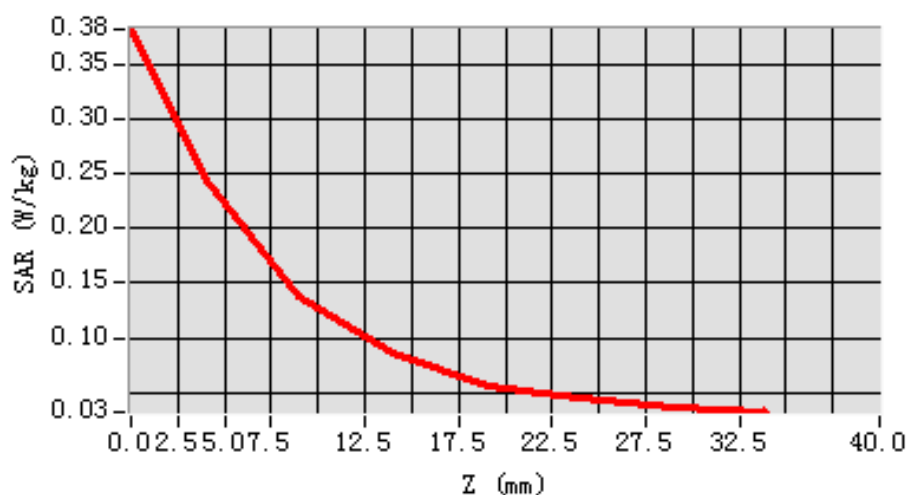
MEAS. 24 Body Plane with Back Side 10mm on High Channel in IEEE 802.b

mode

Test Date: 15/8/2017
Measurement duration: 18 minutes 15 seconds
Signal: WLAN, f=2462.0 MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 50.88; Conductivity: 1.99 S/m
Test condition: Ambient Temperature: 22.0°C, Liquid Temperature: 21.1°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 2.30
Area Scan: sam_direct_droit2_surf10mm.txt, h= 5.00 mm
Zoom Scan: 7x7x7,dx=5mm, dy=5mm, dz=5mm,Complete
Maximum location: X=20.000000, Y=-2.000000
SAR 10g (W/Kg): 0.138023
SAR 1g (W/Kg): 0.236999
Power drift (%): -2.07
3D screen shot

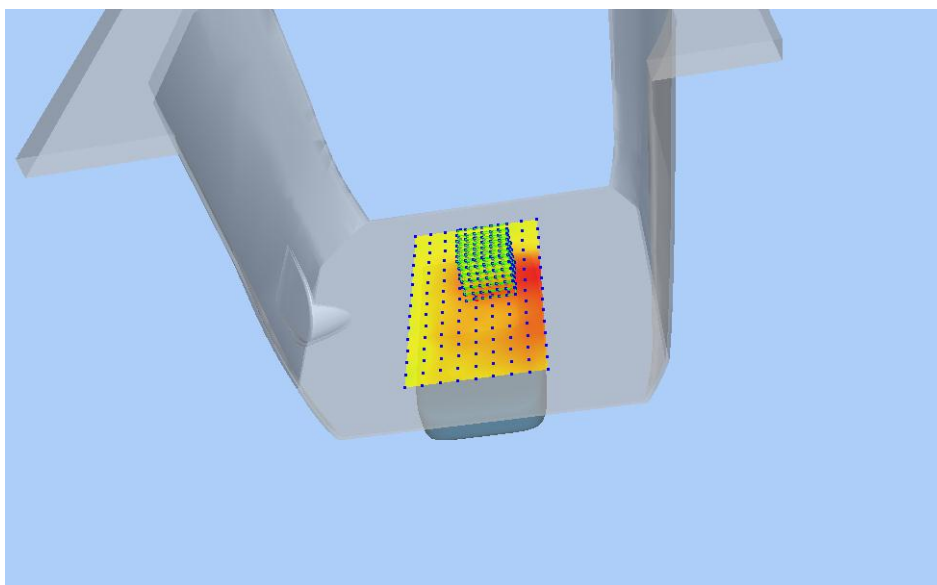


Z Axis Scan

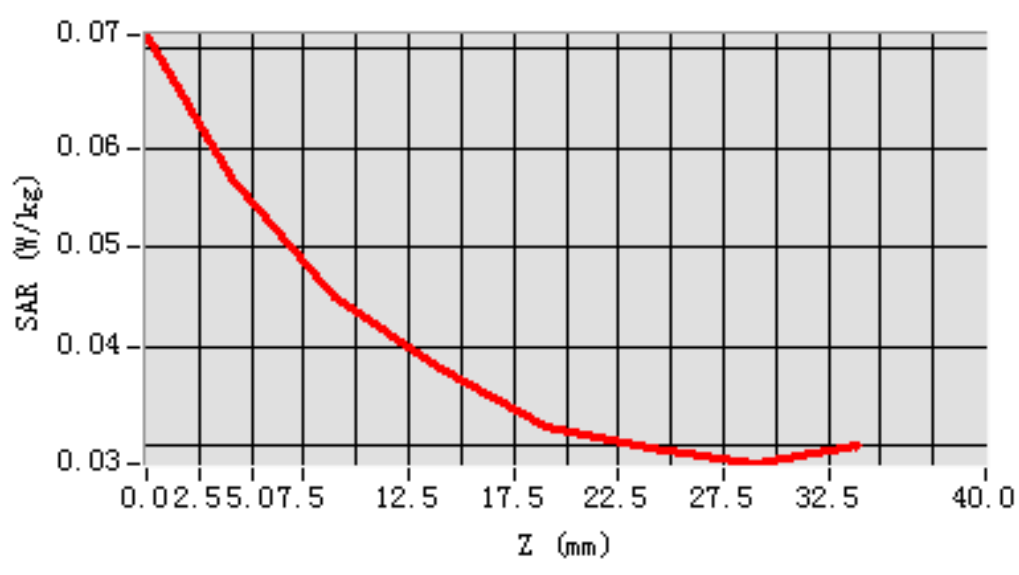


MEAS. 25 Body Plane with Back Side 15mm on Middle Channel in Bluetooth mode

Test Date: 15/8/2017
Measurement duration: 18 minutes 24 seconds
Signal: Bluetooth, $f=2441.0$ MHz, Duty Cycle: 1:1.0
Liquid Parameters: Permittivity: 51.32; Conductivity: 1.98 S/m
Test condition: Ambient Temperature: 22.0°C, Liquid Temperature: 21.1°C
Probe: SN 08/16 SSE2 EPGO295, ConvF: 2.30
Area Scan: sam_direct_droit2_surf10mm.txt, $h=5.00$ mm
Zoom Scan: 7x7x7, $dx=5$ mm, $dy=5$ mm, $dz=5$ mm, Complete
Maximum location: X=10.000000, Y=8.000000
SAR 10g (W/Kg): 0.038168
SAR 1g (W/Kg): 0.049415
Power drift (%): -1.03
3D screen shot



Z Axis Scan



ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-EC1780083-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL- EC1780083-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “CALIBRATION REPORT.pdf”.

--END OF REPORT--