

TEST REPORT

Reference No..... : WTX21X03015667W
FCC ID : S3KGLU194ST
Applicant : Global Telecom Corp
Address..... : 17901 Von Karman Ave, Suite 600, Irvine, California 92614 United States of America
Product Name : LTE USB Dongle
Test Model. : GLU194ST
FCC Part 2.1093
Standards : ANSI / IEEE C95.1 : 2005+A1:2010
ANSI / IEEE C95.3 : 2002(R2008)
IEEE 1528 :2013
Date of Receipt sample : Mar.04, 2021
Date of Test..... : Mar.04, 2021 to Mar.15, 2021
Date of Issue : Mar.17, 2021
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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1. General Information

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: Global Telecom Corp
 Address of applicant: 17901 Von Karman Ave, Suite 600, Irvine, California
 92614 United States of America

Manufacturer: Global Telecom Corp
 Address of manufacturer: 17901 Von Karman Ave, Suite 600, Irvine, California
 92614 United States of America

General Description of EUT:	
Product Name:	LTE USB Dongle
Trade Name:	Global Telecom, TITAN, NetStick
Model No.:	GLU194ST
Adding Model(s):	/
<p><i>Note:</i></p> <ol style="list-style-type: none"> <i>The test data is gathered from a production sample provided by the manufacturer.</i> <i>The USB cable USB cable for testing is not influence the radiating characteristics and output power of the transmitter.</i> <i>The USB cable USB cable for testing is 10-inches.</i> 	

Technical Characteristics of EUT:	
4G	
Support Networks:	FDD-LTE
Support Band:	FDD-LTE Band 2, 4, 5, 12, 17, 25, 26, 66, 71 TDD-LTE Band 41
Uplink Frequency:	FDD-LTE Band 2: Tx: 1850-1910MHz, FDD-LTE Band 4: Tx: 1710-1755MHz, FDD-LTE Band 5: Tx: 824-849MHz, FDD-LTE Band 12: Tx: 699-716MHz, FDD-LTE Band 17: Tx: 704-716MHz FDD-LTE Band 25: Tx: 1850-1915MHz, FDD-LTE Band 26: Tx: 814-849MHz, TDD-LTE Band 41: Tx: 2496-2690MHz FDD-LTE Band 66: Tx: 1710-1780MHz FDD-LTE Band 71: Tx: 663-698MHz
RF Output Power:	FDD-LTE Band 2: 24.97dBm, FDD-LTE Band 4: 24.66dBm, FDD-LTE Band 5: 25.61dBm, FDD-LTE Band 12: 24.08dBm, FDD-LTE Band 17: 24.15dBm FDD-LTE Band 25: 24.00dBm, FDD-LTE Band 26: 23.78dBm, TDD-LTE Band 41: 24.42dBm FDD-LTE Band 66: 24.72dBm FDD-LTE Band 71: 23.47dBm
Type of Modulation:	QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	FDD-LTE Band 2: 2.5dBi, FDD-LTE Band 4: 2.5dBi, FDD-LTE Band 5: 1.0dBi, FDD-LTE Band 12: 1.0dBi, FDD-LTE Band 17: 1.0dBi, FDD-LTE Band 25: 2.5dBi, FDD-LTE Band 26: 1.0dBi, TDD-LTE Band 41: 3.5dBi FDD-LTE Band 66: 2.5dBi, FDD-LTE Band 71: 1.0dBi

1.2 Test Standards

The following report is prepared on behalf of the Global Telecom Corp in accordance with FCC 47 CFR Part 2.1093, ANSI/IEEE C95.1-2005, ANSI / IEEE C95.3 :2002, IEEE 1528-2013, KDB 447498 D01 v06, KDB 648474 D04 v01r03, KDB 248227 D01 v02r02, KDB 941225 D01 v03r01, KDB 941225 D05 v02r05 , and KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02.

The objective is to determine compliance with FCC Part 2.1093 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02. The public notice KDB 447498 D01 v06 for Mobile and Portable Devices RF Exposure Procedure also.

1.4 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010. Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

2. Summary of Test Results

The maximum results of Specific Absorption Rate (SAR) have found during testing are as follows:

Frequency Band	Body-worn (5mm Gap)	SAR _{1g} Limit (W/kg)
	Maximum SAR _{1g} (W/kg)	
LTE Band 2	1.220	1.6
LTE Band 4	1.026	1.6
LTE Band 5	0.391	1.6
LTE Band 12	0.522	1.6
LTE Band 17	0.594	1.6
LTE Band 66	0.762	1.6
LTE Band 71	0.678	1.6

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR Part 2.1093 and ANSI/IEEE C95.1-2005+A1:2010, and had been tested in accordance with the measurement methods and procedure specified in KDB 865664 D01 v01r04, KDB 865664 D02 v01r02 and IEC 62209-2:2010.

3. Specific Absorption Rate (SAR)

3.1 Introduction

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.

3.2 SAR Definition

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 either related to the temperature elevation in tissue by

$$\text{SAR} = C \left(\frac{\delta T}{\delta t} \right)$$

Where: C is the specific heat capacity, δT is the temperature rise and δt is the exposure duration, or 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.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

4. SAR Measurement System

4.1 The Measurement System

Comosar is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The Comosar system consists of the following items:

- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

The following figure shows the system.



The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR software computes the results to give a SAR value in a 1g or 10g mass.

4.2 Probe

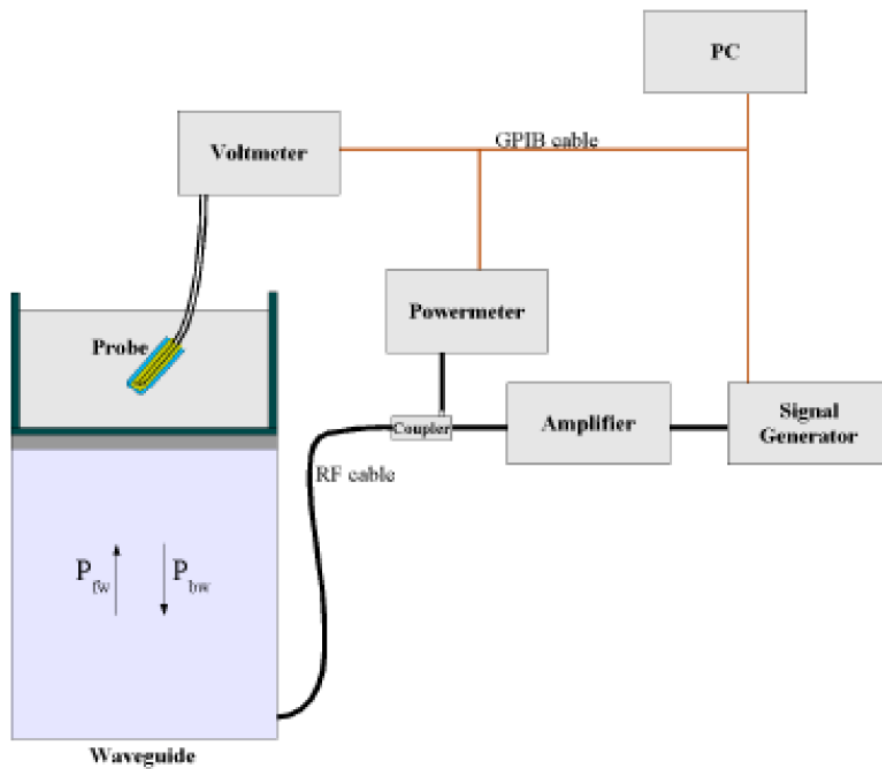
For the measurements the Specific Dosimetric E-Field Probe SSE5 SN 09/13 EP168 with following specifications is used

- Dynamic range: 0.01-100 W/kg
- Probe Length: 330 mm
- Length of Individual Dipoles: 4.5 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter : 5 mm

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<http://www.semtest.com.cn>

- Distance between dipoles / probe extremity: 2.7mm
 - Probe linearity: <0.25 dB
 - Axial Isotropy: <0.25 dB
 - Spherical Isotropy: <0.50 dB
 - Calibration range: 700 to 3000MHz for head & body simulating liquid.
- Angle between probe axis (evaluation axis) and surface normal line: less than 30°

Probe calibration is realized, in compliance with EN 62209-1 and IEEE 1528 STD, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the EN 62209-1 annexe technique using reference guide at the five frequencies.



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

Where :

P_{fw} = Forward Power

P_{bw} = Backward Power

a and b = Waveguide dimensions

δ = 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.

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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 DCP is the diode compression point in mV.

4.3 Probe Calibration Process

Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. SATIMO Probe calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm²) using an with CALISAR, Antenna proprietary calibration system.

Free Space Assessment Procedure

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1mW/cm².

Temperature Assessment Procedure

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated head tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C \frac{\Delta T}{\Delta t}$$

Where:

Δt = exposure time (30 seconds),

C = heat capacity of tissue (brain or muscle),

ΔT = temperature increase due to RF exposure.

SAR is proportional to $\Delta T / \Delta t$, the initial rate of tissue heating, before thermal diffusion takes place. The electric field in the simulated tissue can be used to estimate SAR by equating the thermally derived SAR to that with the E- field component.

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

Where:

σ = simulated tissue conductivity,

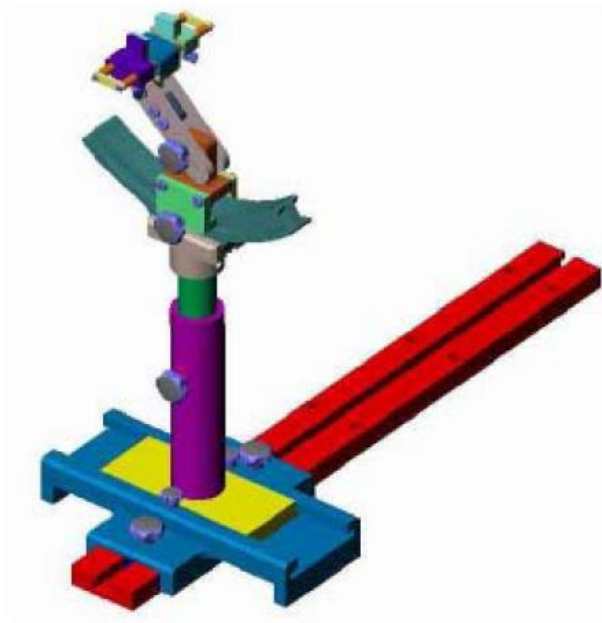
ρ = Tissue density (1.25 g/cm³ for brain tissue)

4.4 Phantom

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.

4.5 Device Holder

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 °.



System Material	Permittivity	Loss Tangent
Delrin	3.7	0.005

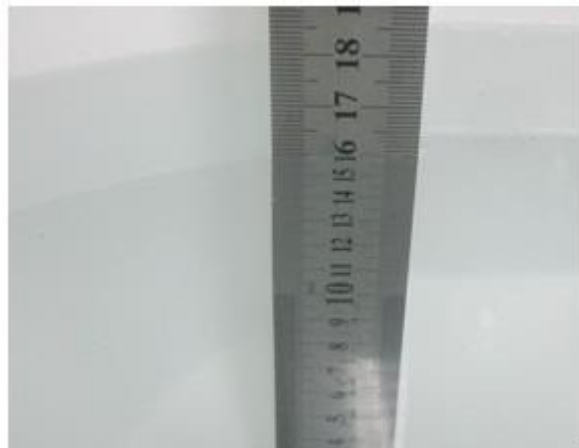
4.6 Test Equipment List

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
E-Field Probe	MVG	SSE5	SN 09/13 EP168	2020-05-22	2022-05-21
750MHz Dipole	MVG	SID750	SN 47/12 DIP 0G750-203	2020-03-11	2022-03-10
835MHz Dipole	MVG	SID835	SN 47/12 DIP 0G835-204	2020-03-11	2022-03-10
1800MHz Dipole	MVG	SID1800	SN 47/12 DIP 1G800-206	2020-03-11	2022-03-10
Dielectric Probe	SATIMO	SCLMP	SN 47/12 OCPG49	2020-03-11	2022-03-10
SAM Phantom	SATIMO	SAM	SN/ 47/12 SAM95	N/A	N/A
Multi Meter	Keithley	Keithley 2000	4006367	2020-04-28	2021-04-27
Power meter	Keithley	3500	JC-2017-09-001	2020-04-28	2021-04-27
Power meter	Keithley	3500	JC-2017-09-001	2020-04-28	2021-04-27
Power Sensor	Agilent	11636B	JC-2017-10-002	2020-04-28	2021-04-27
Signal Generator	Rohde & Schwarz	SMR20	100047	2020-04-28	2021-04-27
Universal Tester	Rohde & Schwarz	CMU200	112315	2020-04-28	2021-04-27
Communications Tester	Rohde & Schwarz	CMW500	148650	2020-04-28	2021-04-27
Network Analyzer	HP	8753C	SEMT-1064	2020-04-28	2021-04-27
Directional Couplers	Agilent	778D	20160	2020-04-28	2021-04-27

5. Tissue Simulating Liquids

5.1 Composition of Tissue Simulating Liquid

For the measurement of the field distribution inside the SAM phantom with SMTIMO, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. 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. Please see the following photos for the liquid height.



Liquid Height for Body SAR

The Composition of Tissue Simulating Liquid

Frequency (MHz)	Water (%)	Salt (%)	1,2-Propane diol (%)	HEC (%)	Preventol (%)	DGBE (%)
Head/Body						
835	40.3	1.4	57.9	0.2	0.2	0
900	40.3	1.4	57.9	0.2	0.2	0
1800-2000	55.2	0.3	0	0	0	44.5

5.2 Tissue Dielectric Parameters for Head and Body Phantoms

The IEEE Std. 1528, FCC KDBs and CEI/IEC 62209 standards state that the system validation measurements must be performed using a reference dipole meeting the fore mentioned return loss and mechanical dimension requirements. The validation measurement must be performed against a liquid filled flat phantom, with the phantom constructed as outlined in the fore mentioned standards. Per the standards, the dipole shall be positioned below the bottom of the phantom, with the dipole length centered and parallel to the longest dimension of the flat phantom, with the top surface of the dipole at the described distance from the bottom surface of the phantom.

Target Frequency (MHz)	Head	
	Conductivity (σ)	Permittivity (ϵ_r)
150	0.76	52.3
300	0.87	45.3
450	0.87	43.5
750	0.89	41.9
835	0.90	41.5
900	0.97	41.5
915	0.98	41.5
1450	1.20	40.5
1610	1.29	40.3
1800-2000	1.40	40.0
2450	1.80	39.2
3000	2.40	38.5
5200	4.66	36.0
5300	35.9	4.76
5600	5.07	35.5
5800	5.27	35.3

5.3 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using COMOSAR Dielectric Probe Kit and an Agilent Network Analyzer.

Calibration Result for Dielectric Parameters of Tissue Simulating Liquid

Head Tissue Simulating Liquid									
Freq. MHz.	Temp. (°C)	Conductivity			Permittivity			Limit (%)	Date
		Reading (σ)	Target (σ)	Delta (%)	Reading (ϵ_r)	Target (ϵ_r)	Delta (%)		
750	22.1	0.87	0.89	-2.25	42.75	41.90	2.03	±5	2021-03-15
835	22.1	0.89	0.90	-1.11	42.27	41.50	1.86	±5	2021-03-15
1800	22.4	1.41	1.40	0.71	39.62	40.0	-0.95	±5	2021-03-12

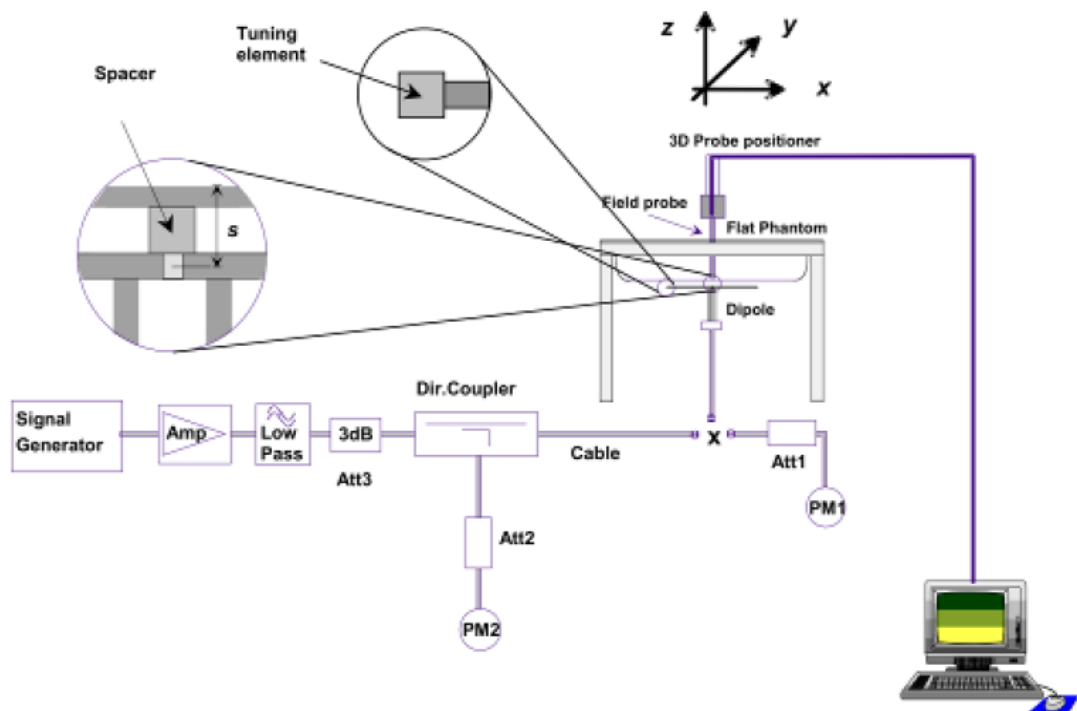
6. SAR Measurement Evaluation

6.1 Purpose of System Performance Check

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

6.2 System 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 which comes from a signal generator at frequency 2450MHz and 5000MHz. 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.



System Verification Setup Block Diagram



Setup Photo of Dipole Antenna

The output power on dipole port must be calibrated to 24 dBm(250 mW) before dipole is connected.

The output power on 5 GHz Waveguide must be calibrated to 20 dBm (100mW) before 5 GHz Waveguide is connected.

6.3 Validation Results

Comparing to the original SAR value provided by SATIMO, the validation data should be within its specification of 10 %. Table 6.1 shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion.

Frequency	Targeted SAR _{1g}	Measured SAR _{1g}	Normalized SAR _{1g}	Tolerance	Date
MHz	(W/kg)	(W/kg)	(W/kg)	(%)	
Head					
750	8.4	2.01	8.04	-4.29	2021-03-15
835	9.65	2.34	9.36	-3.01	2021-03-15
1800	38.49	9.76	39.04	1.43	2021-03-12

Targeted and Measurement SAR

Please refer to Annex A for the plots of system performance check.

7. EUT Testing Position

7.1 Body Position

- (a) To position the device parallel to the phantom surface with each side.
- (b) To adjust the device parallel to the flat phantom.
- (c) To adjust the distance between the device surface and the flat phantom to 5mm.

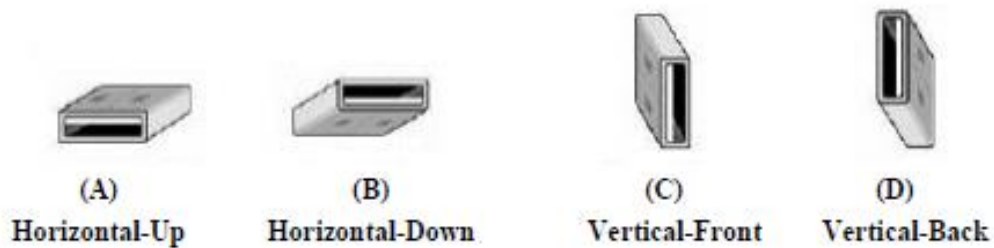


Illustration for Body Position

7.2 EUT Antenna Position

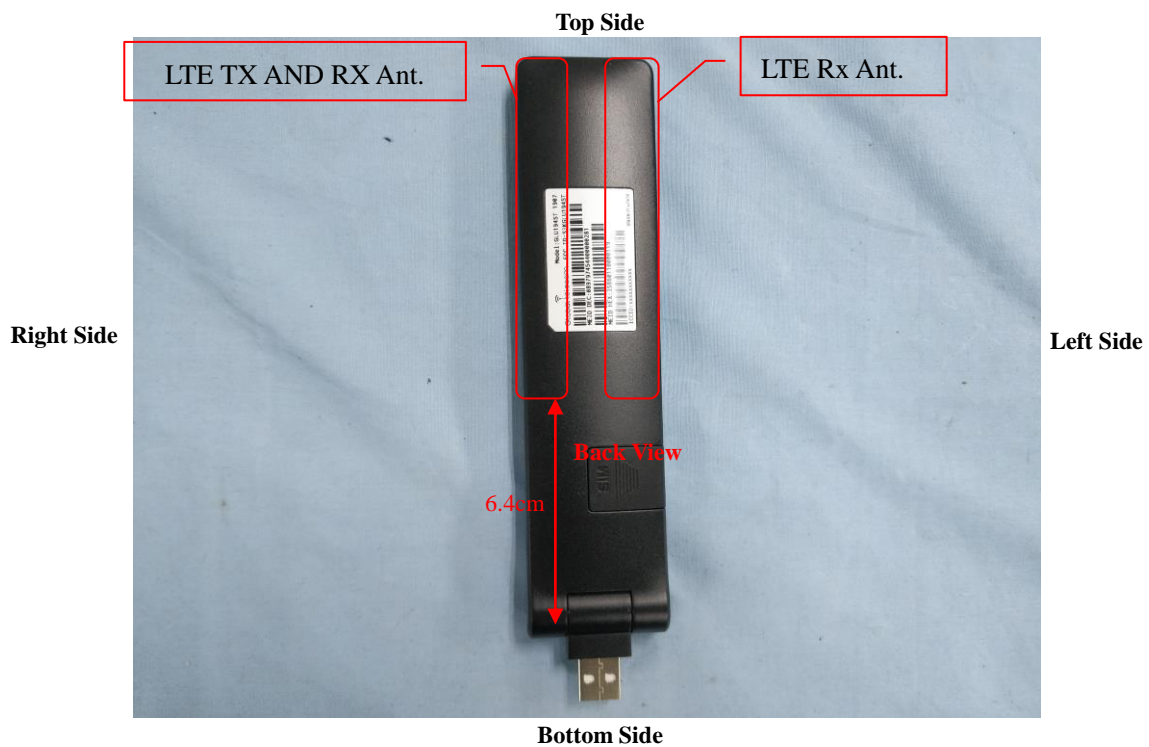


Fig 7.1 Block Diagram for EUT Antenna Position

7.3 EUT Testing Position

Body SAR tests, Test distance: 5mm				
Antennas	Horizontal-Up	Horizontal-Down	Vertical-Front	Vertical-Back
LTE	Yes	Yes	Yes	Yes

Remark:

1. Test all USB orientations [see figure below: (A) Horizontal-Up, (B) Horizontal-Down, (C) Vertical-Front, and (D) Vertical-Back] with a device-to-phantom separation distance of 5 mm or less, according to KDB 447498 D02,v02 requirements.

Please refer to Annex D for the EUT test setup photos.

8. SAR Measurement Procedures

8.1 Measurement Procedures

The measurement procedures are as follows:

- (a) Use base station simulator (if applicable) or engineering software to transmit RF power continuously (continuous Tx) in the highest power channel.
- (b) Keep EUT to radiate maximum output power or 100% factor (if applicable)
- (c) Measure output power through RF cable and power meter.
- (d) Place the EUT in the positions as Annex D demonstrates.
- (e) Set scan area, grid size and other setting on the SATIMO software.
- (f) Measure SAR results for the highest power channel on each testing position.
- (g) Find out the largest SAR result on these testing positions of each band
- (h) Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- (a) Power reference measurement
- (b) Area scan
- (c) Zoom scan
- (d) Power drift measurement

8.2 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The SATIMO software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine. The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- (a) Extraction of the measured data (grid and values) from the Zoom Scan
- (b) Calculation of the SAR value at every measurement point based on all stored data
- (c) Generation of a high-resolution mesh within the measured volume
- (d) Interpolation of all measured values from the measurement grid to the high-resolution grid
- (e) Extrapolation of the entire 3D field distribution to the phantom surface over the distance from sensor to surface
- (f) Calculation of the averaged SAR within masses of 1g and 10g

8.3 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 measures 5x5x7 points with step size 8, 8 and 5 mm for 300 MHz to 3 GHz, and 8x8x8 points with step size 4, 4 and 2.5 mm for 3 GHz to 6 GHz. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

8.4 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing (step-size is 4, 4 and 2.5 mm). When all volume scan were completed, the software can combine and subsequently superpose these measurement data to calculating the multiband SAR.

8.5 SAR Averaged Methods

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimize measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1mm step.

The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10g and 1 g requires a very fine resolution in the three dimensional scanned data array.

8.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In SATIMO measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drift more than 5%, the SAR will be retested.

9. SAR Test Result

9.1 Conducted RF Output Power

FDD-LTE Band 2:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.06	0
		1	3	24.00	0
		1	5	24.03	0
		3	0	24.26	0
		3	2	24.12	0
		3	3	24.17	0
		6	0	22.84	1
	MCH	1	0	23.73	0
		1	3	23.36	0
		1	5	23.75	0
		3	0	23.72	0
		3	2	23.65	0
		3	3	23.70	0
		6	0	22.45	1
	HCH	1	0	24.42	0
		1	3	24.34	0
		1	5	24.17	0
		3	0	24.30	0
		3	2	24.13	0
		3	3	24.15	0
		6	0	23.41	1
16QAM	LCH	1	0	23.36	1
		1	3	23.42	1
		1	5	23.34	1
		3	0	23.06	1
		3	2	22.92	1
		3	3	23.01	1
		6	0	21.81	2
	MCH	1	0	22.87	1
		1	3	22.79	1
		1	5	22.77	1
		3	0	22.33	1
		3	2	22.31	1

		3	3	22.43	1
		6	0	21.46	2
	HCH	1	0	23.96	1
		1	3	23.77	1
		1	5	23.63	1
		3	0	23.66	1
		3	2	23.38	1
		3	3	23.40	1
		6	0	22.59	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.79	0
		1	7	23.89	0
		1	14	23.93	0
		8	0	22.31	1
		8	4	22.85	1
		8	7	22.97	1
		15	0	22.85	1
	MCH	1	0	23.48	0
		1	7	23.69	0
		1	14	23.56	0
		8	0	22.03	1
		8	4	22.37	1
		8	7	22.27	1
		15	0	22.16	1
	HCH	1	0	24.60	0
		1	7	24.48	0
		1	14	24.14	0
		8	0	23.32	1
		8	4	23.51	1
		8	7	23.37	1
		15	0	23.48	1
16QAM	LCH	1	0	23.38	1
		1	7	23.36	1
		1	14	23.38	1
		8	0	21.45	2
		8	4	21.75	2
		8	7	21.74	2
		15	0	21.57	2
	MCH	1	0	23.06	1

		1	7	22.84	1
		1	14	22.74	1
		8	0	20.96	2
		8	4	21.36	2
		8	7	21.22	2
		15	0	21.23	2
	HCH	1	0	24.01	1
		1	7	23.96	1
		1	14	23.59	1
		8	0	22.35	2
		8	4	22.61	2
		8	7	22.46	2
		15	0	22.59	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.76	0
		1	12	24.02	0
		1	24	23.93	0
		12	0	22.71	1
		12	6	22.96	1
		12	13	22.84	1
		25	0	22.93	1
	MCH	1	0	23.26	0
		1	12	23.66	0
		1	24	23.71	0
		12	0	22.00	1
		12	6	22.22	1
		12	13	22.09	1
		25	0	22.32	1
	HCH	1	0	24.58	0
		1	12	24.75	0
		1	24	24.07	0
		12	0	23.46	1
		12	6	23.69	1
		12	13	23.34	1
		25	0	23.70	1
16QAM	LCH	1	0	23.28	1
		1	12	23.06	1
		1	24	23.40	1
		12	0	21.49	2

		12	6	21.72	2
		12	13	21.64	2
		25	0	21.77	2
	MCH	1	0	22.60	1
		1	12	22.61	1
		1	24	22.67	1
		12	0	21.13	2
		12	6	21.41	2
		12	13	21.30	2
		25	0	21.36	2
	HCH	1	0	24.01	1
		1	12	24.10	1
		1	24	23.47	1
		12	0	22.55	2
		12	6	22.67	2
12		13	22.46	2	
25		0	22.84	2	

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.81	0
		1	24	23.98	0
		1	49	23.38	0
		25	0	23.04	1
		25	12	23.00	1
		25	25	22.89	1
		50	0	22.98	1
	MCH	1	0	23.05	0
		1	24	23.57	0
		1	49	23.87	0
		25	0	22.43	1
		25	12	22.19	1
		25	25	22.41	1
		50	0	22.23	1
	HCH	1	0	24.19	0
		1	24	24.96	0
		1	49	24.06	0
		25	0	23.75	1
		25	12	23.83	1
		25	25	23.63	1
		50	0	23.72	1

16QAM	LCH	1	0	23.35	1
		1	24	23.04	1
		1	49	22.75	1
		25	0	21.72	2
		25	12	21.71	2
		25	25	21.64	2
		50	0	21.83	2
	MCH	1	0	22.53	1
		1	24	22.69	1
		1	49	22.98	1
		25	0	21.21	2
		25	12	21.30	2
		25	25	21.43	2
		50	0	21.34	2
	HCH	1	0	23.73	1
		1	24	24.25	1
		1	49	23.59	1
		25	0	23.00	2
		25	12	22.81	2
		25	25	22.76	2
		50	0	22.82	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.69	0
		1	37	23.88	0
		1	74	22.92	0
		37	0	22.50	1
		37	18	22.69	1
		37	38	22.39	1
		75	0	22.64	1
	MCH	1	0	22.73	0
		1	37	23.48	0
		1	74	23.62	0
		37	0	22.17	1
		37	18	22.57	1
		37	38	22.39	1
		75	0	22.40	1
	HCH	1	0	23.46	0
		1	37	24.74	0
		1	74	24.21	0

16QAM		37	0	22.97	1
		37	18	23.53	1
		37	38	23.63	1
		75	0	23.40	1
	LCH	1	0	23.07	1
		1	37	22.84	1
		1	74	22.27	1
		37	0	21.67	2
		37	18	21.71	2
		37	38	21.08	2
		75	0	21.43	2
	MCH	1	0	22.15	1
		1	37	22.66	1
		1	74	22.79	1
		37	0	20.99	2
		37	18	21.31	2
		37	38	21.43	2
		75	0	21.13	2
	HCH	1	0	22.74	1
		1	37	24.04	1
		1	74	23.67	1
		37	0	22.09	2
		37	18	22.76	2
		37	38	22.62	2
		75	0	22.49	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.97	0
		1	49	24.16	0
		1	99	24.35	0
		50	0	23.57	1
		50	25	23.09	1
		50	50	22.61	1
		100	0	22.08	1
	MCH	1	0	22.57	0
		1	49	23.54	0
		1	99	23.62	0
		50	0	22.06	1
		50	25	22.28	1
		50	50	22.18	1

		100	0	22.30	1
	HCH	1	0	23.09	0
		1	49	23.89	0
		1	99	23.98	0
		50	0	22.51	1
		50	25	22.94	1
		50	50	23.31	1
		100	0	22.76	1
16QAM		LCH	1	0	23.02
	1		49	22.48	1
	1		99	21.69	1
	50		0	21.44	2
	50		25	21.16	2
	50		50	20.80	2
	100		0	21.19	2
	MCH		1	0	22.00
		1	49	22.57	1
		1	99	23.03	1
		50	0	21.17	2
		50	25	21.04	2
		50	50	21.30	2
		100	0	21.09	2
		HCH	1	0	22.46
	1		49	23.38	1
	1		99	23.51	1
	50		0	21.55	2
	50		25	22.12	2
	50		50	22.59	2
	100		0	21.87	2

FDD-LTE Band 4:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.17	0
		1	3	24.14	0
		1	5	24.11	0
		3	0	24.21	0
		3	2	24.13	0
		3	3	24.62	0
		6	0	23.27	1
	MCH	1	0	24.23	0
		1	3	24.04	0
		1	5	24.05	0
		3	0	24.11	0
		3	2	23.86	0
		3	3	23.90	0
		6	0	22.85	1
	HCH	1	0	24.48	0
		1	3	24.48	0
		1	5	24.50	0
		3	0	24.43	0
		3	2	24.36	0
		3	3	24.45	0
		6	0	23.64	1
16QAM	LCH	1	0	23.69	1
		1	3	23.51	1
		1	5	23.53	1
		3	0	23.39	1
		3	2	23.32	1
		3	3	23.38	1
		6	0	22.55	2
	MCH	1	0	23.76	1
		1	3	23.61	1
		1	5	23.54	1
		3	0	23.27	1
		3	2	22.92	1
		3	3	22.94	1
		6	0	22.10	2
HCH	1	0	23.84	1	
	1	3	23.87	1	

		1	5	23.91	1
		3	0	23.65	1
		3	2	23.58	1
		3	3	23.66	1
		6	0	22.94	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.46	0
		1	7	24.50	0
		1	14	24.25	0
		8	0	23.35	1
		8	4	23.65	1
		8	7	23.59	1
		15	0	23.56	1
	MCH	1	0	23.97	0
		1	7	23.87	0
		1	14	23.85	0
		8	0	22.76	1
		8	4	22.83	1
		8	7	22.70	1
		15	0	22.75	1
	HCH	1	0	24.54	0
		1	7	24.49	0
		1	14	24.42	0
		8	0	23.27	1
		8	4	23.42	1
		8	7	23.42	1
		15	0	23.51	1
16QAM	LCH	1	0	24.04	1
		1	7	24.06	1
		1	14	23.75	1
		8	0	22.08	2
		8	4	22.46	2
		8	7	22.38	2
		15	0	22.35	2
	MCH	1	0	23.45	1
		1	7	23.39	1
		1	14	23.33	1
		8	0	21.86	2
		8	4	21.93	2

		8	7	21.83	2
		15	0	21.92	2
	HCH	1	0	23.80	1
		1	7	23.90	1
		1	14	23.80	1
		8	0	22.42	2
		8	4	22.62	2
		8	7	22.60	2
		15	0	22.66	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.48	0
		1	12	24.43	0
		1	24	24.70	0
		12	0	23.25	1
		12	6	23.46	1
		12	13	23.38	1
		25	0	23.60	1
	MCH	1	0	23.91	0
		1	12	23.89	0
		1	24	23.85	0
		12	0	22.56	1
		12	6	22.83	1
		12	13	22.63	1
		25	0	22.81	1
	HCH	1	0	24.40	0
		1	12	24.52	0
		1	24	24.46	0
		12	0	23.28	1
		12	6	23.43	1
		12	13	23.30	1
		25	0	23.49	1
16QAM	LCH	1	0	24.01	1
		1	12	23.93	1
		1	24	24.10	1
		12	0	22.03	2
		12	6	22.25	2
		12	13	22.08	2
		25	0	22.90	2
	MCH	1	0	23.37	1

		1	12	23.39	1
		1	24	23.29	1
		12	0	21.92	2
		12	6	22.11	2
		12	13	21.92	2
		25	0	22.03	2
	HCH	1	0	23.65	1
		1	12	23.82	1
		1	24	23.75	1
		12	0	22.52	2
		12	6	22.67	2
		12	13	22.52	2
		25	0	22.83	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.45	0
		1	24	24.54	0
		1	49	24.51	0
		25	0	23.58	1
		25	12	23.68	1
		25	25	23.81	1
		50	0	23.74	1
	MCH	1	0	24.02	0
		1	24	23.81	0
		1	49	23.73	0
		25	0	22.92	1
		25	12	22.84	1
		25	25	22.86	1
		50	0	22.73	1
	HCH	1	0	24.24	0
		1	24	24.44	0
		1	49	24.48	0
		25	0	23.29	1
		25	12	23.39	1
		25	25	23.41	1
		50	0	23.44	1
16QAM	LCH	1	0	23.96	1
		1	24	24.09	1
		1	49	23.98	1
		25	0	22.93	2

		25	12	22.75	2
		25	25	23.03	2
		50	0	22.92	2
	MCH	1	0	23.55	1
		1	24	23.51	1
		1	49	23.24	1
		25	0	22.09	2
		25	12	22.02	2
		25	25	22.08	2
		50	0	21.98	2
	HCH	1	0	23.61	1
		1	24	23.84	1
		1	49	23.83	1
		25	0	22.65	2
		25	12	22.62	2
25		25	22.76	2	
50		0	22.66	2	

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.20	0
		1	37	24.59	0
		1	74	24.36	0
		37	0	23.63	1
		37	18	23.83	1
		37	38	23.70	1
		75	0	23.67	1
	MCH	1	0	24.32	0
		1	37	23.75	0
		1	74	23.89	0
		37	0	23.06	1
		37	18	23.00	1
		37	38	22.77	1
		75	0	22.81	1
	HCH	1	0	23.86	0
		1	37	24.29	0
		1	74	24.56	0
		37	0	22.99	1
		37	18	23.47	1
		37	38	23.40	1
		75	0	23.27	1

16QAM	LCH	1	0	23.48	1
		1	37	24.14	1
		1	74	23.94	1
		37	0	22.14	2
		37	18	22.30	2
		37	38	22.40	2
		75	0	22.28	2
	MCH	1	0	23.73	1
		1	37	23.15	1
		1	74	23.24	1
		37	0	22.15	2
		37	18	22.23	2
		37	38	21.94	2
		75	0	22.11	2
	HCH	1	0	23.44	1
		1	37	23.64	1
		1	74	23.89	1
		37	0	22.31	2
		37	18	22.67	2
		37	38	22.71	2
		75	0	22.61	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.91	0
		1	49	24.66	0
		1	99	23.97	0
		50	0	23.59	1
		50	25	23.57	1
		50	50	23.20	1
		100	0	23.52	1
	MCH	1	0	24.37	0
		1	49	23.64	0
		1	99	23.75	0
		50	0	22.82	1
		50	25	22.52	1
		50	50	22.57	1
		100	0	22.66	1
	HCH	1	0	23.43	0
		1	49	23.85	0
		1	99	24.28	0

		50	0	22.77	1
		50	25	23.01	1
		50	50	23.29	1
		100	0	23.00	1
16QAM	LCH	1	0	23.80	1
		1	49	24.00	1
		1	99	23.42	1
		50	0	22.71	2
		50	25	22.71	2
		50	50	22.43	2
		100	0	22.72	2
	MCH	1	0	23.85	1
		1	49	23.08	1
		1	99	23.28	1
		50	0	22.11	2
		50	25	21.82	2
		50	50	21.91	2
		100	0	21.90	2
	HCH	1	0	22.95	1
		1	49	23.25	1
		1	99	23.68	1
		50	0	21.94	2
		50	25	22.26	2
		50	50	22.56	2
		100	0	22.35	2

FDD-LTE Band 5:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.19	0
		1	3	24.17	0
		1	5	24.37	0
		3	0	23.76	0
		3	2	24.01	0
		3	3	24.65	0
		6	0	22.86	1
	MCH	1	0	22.50	0
		1	3	22.61	0
		1	5	22.58	0
		3	0	22.45	0
		3	2	22.33	0
		3	3	22.38	0
		6	0	21.58	1
	HCH	1	0	24.44	0
		1	3	24.66	0
		1	5	24.62	0
		3	0	24.36	0
		3	2	24.54	0
		3	3	24.40	0
		6	0	23.37	1
16QAM	LCH	1	0	23.31	1
		1	3	23.75	1
		1	5	23.80	1
		3	0	22.84	1
		3	2	23.01	1
		3	3	23.11	1
		6	0	21.97	2
	MCH	1	0	22.06	1
		1	3	22.01	1
		1	5	22.17	1
		3	0	21.69	1
		3	2	21.59	1
		3	3	21.68	1
		6	0	20.74	2
HCH	1	0	24.00	1	
	1	3	24.23	1	

		1	5	23.91	1
		3	0	23.65	1
		3	2	23.70	1
		3	3	23.71	1
		6	0	22.08	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.87	0
		1	7	24.92	0
		1	14	25.51	0
		8	0	22.40	1
		8	4	23.97	1
		8	7	24.12	1
		15	0	23.78	1
	MCH	1	0	22.51	0
		1	7	22.42	0
		1	14	22.56	0
		8	0	21.33	1
		8	4	21.53	1
		8	7	21.53	1
		15	0	21.38	1
	HCH	1	0	24.55	0
		1	7	24.34	0
		1	14	24.56	0
		8	0	22.26	1
		8	4	23.33	1
		8	7	23.25	1
		15	0	23.30	1
16QAM	LCH	1	0	23.12	1
		1	7	24.50	1
		1	14	24.88	1
		8	0	21.58	2
		8	4	22.33	2
		8	7	22.52	2
		15	0	22.22	2
	MCH	1	0	21.96	1
		1	7	22.07	1
		1	14	22.22	1
		8	0	20.42	2
		8	4	20.62	2

		8	7	20.64	2
		15	0	20.60	2
	HCH	1	0	23.33	1
		1	7	23.22	1
		1	14	23.99	1
		8	0	21.41	2
		8	4	21.71	2
		8	7	21.67	2
		15	0	21.75	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.01	0
		1	12	25.43	0
		1	24	25.43	0
		12	0	23.48	1
		12	6	24.07	1
		12	13	24.31	1
		25	0	24.02	1
	MCH	1	0	23.59	0
		1	12	22.29	0
		1	24	22.90	0
		12	0	21.46	1
		12	6	21.41	1
		12	13	21.49	1
		25	0	21.54	1
	HCH	1	0	25.31	0
		1	12	24.61	0
		1	24	24.59	0
		12	0	23.67	1
		12	6	22.78	1
		12	13	22.47	1
		25	0	23.58	1
16QAM	LCH	1	0	22.81	1
		1	12	24.89	1
		1	24	24.91	1
		12	0	22.04	2
		12	6	22.69	2
		12	13	22.95	2
		25	0	22.67	2
	MCH	1	0	22.30	1

		1	12	21.83	1
		1	24	22.42	1
		12	0	20.62	2
		12	6	20.75	2
		12	13	20.84	2
		25	0	20.78	2
	HCH	1	0	24.59	1
		1	12	23.11	1
		1	24	24.03	1
		12	0	22.13	2
		12	6	21.92	2
		12	13	21.52	2
		25	0	22.05	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.12	0
		1	24	25.61	0
		1	49	23.91	0
		25	0	24.09	1
		25	12	24.32	1
		25	25	23.96	1
		50	0	24.14	1
	MCH	1	0	24.64	0
		1	24	22.27	0
		1	49	24.72	0
		25	0	22.05	1
		25	12	21.65	1
		25	25	21.92	1
		50	0	22.03	1
	HCH	1	0	24.12	0
		1	24	25.60	0
		1	49	24.58	0
		25	0	23.54	1
		25	12	24.26	1
		25	25	22.97	1
		50	0	23.16	1
16QAM	LCH	1	0	23.87	1
		1	24	25.21	1
		1	49	23.55	1
		25	0	22.77	2

		25	12	22.98	2
		25	25	22.82	2
		50	0	22.81	2
	MCH	1	0	24.35	1
		1	24	21.90	1
		1	49	23.72	1
		25	0	21.35	2
		25	12	20.78	2
		25	25	21.21	2
		50	0	21.30	2
	HCH	1	0	22.88	1
		1	24	24.21	1
		1	49	24.07	1
		25	0	22.58	2
		25	12	22.59	2
		25	25	22.09	2
		50	0	22.42	2

FDD-LTE Band 12:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.73	0
		1	3	22.77	0
		1	5	22.94	0
		3	0	22.70	0
		3	2	22.41	0
		3	3	22.70	0
		6	0	21.74	1
	MCH	1	0	23.45	0
		1	3	23.45	0
		1	5	23.18	0
		3	0	23.38	0
		3	2	23.23	0
		3	3	23.03	0
		6	0	22.41	1
	HCH	1	0	23.88	0
		1	3	23.92	0
		1	5	23.78	0
		3	0	23.76	0
		3	2	23.83	0
		3	3	23.78	0
		6	0	22.89	1
16QAM	LCH	1	0	22.51	1
		1	3	22.18	1
		1	5	22.50	1
		3	0	21.83	1
		3	2	21.59	1
		3	3	21.79	1
		6	0	20.69	2
	MCH	1	0	23.03	1
		1	3	22.67	1
		1	5	22.66	1
		3	0	22.57	1
		3	2	22.24	1
		3	3	22.30	1
		6	0	21.41	2
HCH	1	0	23.50	1	
	1	3	23.49	1	

		1	5	23.25	1
		3	0	22.99	1
		3	2	23.08	1
		3	3	22.92	1
		6	0	21.97	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.65	0
		1	7	22.70	0
		1	14	23.29	0
		8	0	21.10	1
		8	4	21.74	1
		8	7	21.98	1
		15	0	21.66	1
	MCH	1	0	23.84	0
		1	7	23.36	0
		1	14	23.05	0
		8	0	22.29	1
		8	4	22.28	1
		8	7	22.05	1
		15	0	22.22	1
	HCH	1	0	23.98	0
		1	7	24.05	0
		1	14	23.66	0
		8	0	22.95	1
		8	4	23.24	1
		8	7	22.88	1
		15	0	22.88	1
16QAM	LCH	1	0	21.64	1
		1	7	22.34	1
		1	14	22.92	1
		8	0	20.50	2
		8	4	20.74	2
		8	7	21.00	2
		15	0	20.63	2
	MCH	1	0	23.21	1
		1	7	22.79	1
		1	14	22.55	1
		8	0	21.33	2
		8	4	21.23	2

		8	7	21.04	2
		15	0	21.24	2
	HCH	1	0	23.61	1
		1	7	23.57	1
		1	14	23.17	1
		8	0	22.00	2
		8	4	22.18	2
		8	7	21.86	2
		15	0	21.91	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.17	0
		1	12	23.37	0
		1	24	23.92	0
		12	0	21.52	1
		12	6	22.21	1
		12	13	22.26	1
		25	0	22.18	1
	MCH	1	0	23.89	0
		1	12	23.54	0
		1	24	23.06	0
		12	0	22.43	1
		12	6	22.30	1
		12	13	21.92	1
		25	0	22.40	1
	HCH	1	0	23.56	0
		1	12	24.03	0
		1	24	23.87	0
		12	0	22.49	1
		12	6	22.94	1
		12	13	22.94	1
		25	0	22.82	1
16QAM	LCH	1	0	21.73	1
		1	12	22.56	1
		1	24	23.15	1
		12	0	20.61	2
		12	6	21.32	2
		12	13	21.62	2
		25	0	21.17	2
	MCH	1	0	23.24	1

		1	12	22.76	1
		1	24	22.54	1
		12	0	21.62	2
		12	6	21.63	2
		12	13	21.06	2
		25	0	21.44	2
	HCH	1	0	22.91	1
		1	12	23.54	1
		1	24	23.10	1
		12	0	21.74	2
		12	6	22.22	2
		12	13	21.94	2
		25	0	22.05	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.54	0
		1	24	23.71	0
		1	49	22.75	0
		25	0	22.06	1
		25	12	22.63	1
		25	25	22.69	1
		50	0	22.54	1
	MCH	1	0	23.48	0
		1	24	23.44	0
		1	49	23.56	0
		25	0	22.77	1
		25	12	22.37	1
		25	25	22.08	1
		50	0	22.51	1
	HCH	1	0	23.66	0
		1	24	23.41	0
		1	49	24.08	0
		25	0	22.29	1
		25	12	22.24	1
		25	25	22.77	1
		50	0	22.57	1
16QAM	LCH	1	0	21.79	1
		1	24	23.33	1
		1	49	22.38	1
		25	0	21.29	2

		25	12	21.77	2
		25	25	21.72	2
		50	0	21.58	2
	MCH	1	0	22.68	1
		1	24	22.64	1
		1	49	23.04	1
		25	0	21.77	2
		25	12	21.33	2
		25	25	21.22	2
		50	0	21.52	2
	HCH	1	0	23.25	1
		1	24	23.02	1
		1	49	23.48	1
		25	0	21.35	2
		25	12	21.48	2
		25	25	21.87	2
		50	0	21.63	2

FDD-LTE Band 17:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.92	0
		1	12	23.90	0
		1	24	22.87	0
		12	0	22.38	1
		12	6	22.51	1
		12	13	22.15	1
		25	0	22.53	1
	MCH	1	0	23.33	0
		1	12	23.21	0
		1	24	23.55	0
		12	0	21.86	1
		12	6	22.06	1
		12	13	22.27	1
		25	0	22.36	1
	HCH	1	0	23.45	0
		1	12	24.11	0
		1	24	23.84	0
		12	0	22.51	1
		12	6	22.97	1
		12	13	22.83	1
		25	0	22.76	1
16QAM	LCH	1	0	23.14	1
		1	12	23.11	1
		1	24	22.34	1
		12	0	21.70	2
		12	6	21.82	2
		12	13	21.32	2
		25	0	21.75	2
	MCH	1	0	22.55	1
		1	12	22.52	1
		1	24	22.92	1
		12	0	20.86	2
		12	6	21.07	2
		12	13	21.48	2
		25	0	21.38	2
HCH	1	0	23.01	1	
	1	12	23.65	1	

		1	24	23.04	1
		12	0	21.74	2
		12	6	22.21	2
		12	13	21.91	2
		25	0	21.93	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	21.56	0
		1	24	23.08	0
		1	49	23.96	0
		25	0	22.58	1
		25	12	22.29	1
		25	25	22.44	1
		50	0	22.52	1
	MCH	1	0	23.77	0
		1	24	23.11	0
		1	49	24.15	0
		25	0	22.43	1
		25	12	22.21	1
		25	25	22.72	1
		50	0	22.61	1
	HCH	1	0	23.65	0
		1	24	23.49	0
		1	49	23.80	0
		25	0	22.31	1
		25	12	22.39	1
		25	25	22.91	1
		50	0	22.55	1
16QAM	LCH	1	0	23.34	1
		1	24	22.59	1
		1	49	23.69	1
		25	0	21.73	2
		25	12	21.29	2
		25	25	21.68	2
		50	0	21.67	2
	MCH	1	0	23.13	1
		1	24	22.71	1
		1	49	23.57	1
		25	0	21.49	2
		25	12	21.12	2

		25	25	22.00	2
		50	0	21.65	2
	HCH	1	0	23.19	1
		1	24	22.93	1
		1	49	23.39	1
		25	0	21.31	2
		25	12	21.41	2
		25	25	21.96	2
		50	0	21.58	2

FDD-LTE Band 66:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.34	0
		1	3	23.91	0
		1	5	24.28	0
		3	0	24.37	0
		3	2	24.41	0
		3	3	24.27	0
		6	0	23.05	1
	MCH	1	0	23.66	0
		1	3	23.84	0
		1	5	23.87	0
		3	0	23.89	0
		3	2	23.87	0
		3	3	24.07	0
		6	0	23.12	1
	HCH	1	0	23.46	0
		1	3	23.73	0
		1	5	23.54	0
		3	0	23.81	0
		3	2	23.81	0
		3	3	23.64	0
		6	0	22.96	1
16QAM	LCH	1	0	22.96	1
		1	3	22.96	1
		1	5	22.88	1
		3	0	22.82	1
		3	2	22.97	1
		3	3	22.71	1
		6	0	22.24	2
	MCH	1	0	22.82	1
		1	3	23.02	1
		1	5	23.05	1
		3	0	22.93	1
		3	2	23.05	1
		3	3	23.00	1
		6	0	22.33	2
HCH	1	0	22.57	1	
	1	3	22.78	1	

		1	5	22.70	1
		3	0	22.79	1
		3	2	22.80	1
		3	3	22.76	1
		6	0	21.92	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.40	0
		1	7	24.39	0
		1	14	24.23	0
		8	0	22.83	1
		8	4	22.82	1
		8	7	23.50	1
		15	0	23.49	1
	MCH	1	0	23.79	0
		1	7	23.87	0
		1	14	24.12	0
		8	0	22.79	1
		8	4	22.73	1
		8	7	23.07	1
		15	0	22.91	1
	HCH	1	0	23.82	0
		1	7	23.96	0
		1	14	23.88	0
		8	0	22.64	1
		8	4	22.74	1
		8	7	22.75	1
		15	0	22.76	1
16QAM	LCH	1	0	23.12	1
		1	7	23.02	1
		1	14	22.84	1
		8	0	22.08	2
		8	4	22.05	2
		8	7	22.12	2
		15	0	22.12	2
	MCH	1	0	22.89	1
		1	7	22.94	1
		1	14	23.09	1
		8	0	22.01	2
		8	4	21.95	2

		8	7	22.27	2
		15	0	22.18	2
	HCH	1	0	22.63	1
		1	7	22.75	1
		1	14	22.84	1
		8	0	21.93	2
		8	4	21.90	2
		8	7	21.98	2
		15	0	21.89	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.37	0
		1	12	24.19	0
		1	24	24.41	0
		12	0	23.03	1
		12	6	23.10	1
		12	13	23.24	1
		25	0	23.38	1
	MCH	1	0	23.65	0
		1	12	23.98	0
		1	24	24.10	0
		12	0	22.79	1
		12	6	22.74	1
		12	13	22.88	1
		25	0	22.99	1
	HCH	1	0	24.06	0
		1	12	23.89	0
		1	24	23.85	0
		12	0	22.63	1
		12	6	22.58	1
		12	13	22.79	1
		25	0	22.90	1
16QAM	LCH	1	0	23.49	1
		1	12	23.27	1
		1	24	23.64	1
		12	0	21.85	2
		12	6	21.89	2
		12	13	21.92	2
		25	0	22.74	2
	MCH	1	0	22.69	1

		1	12	23.00	1
		1	24	23.12	1
		12	0	22.07	2
		12	6	22.03	2
		12	13	22.17	2
		25	0	22.43	2
	HCH	1	0	22.93	1
		1	12	22.81	1
		1	24	22.91	1
		12	0	21.72	2
		12	6	21.67	2
		12	13	21.90	2
		25	0	22.15	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.52	0
		1	24	24.68	0
		1	49	24.37	0
		25	0	23.51	1
		25	12	23.42	1
		25	25	23.72	1
		50	0	23.61	1
	MCH	1	0	23.63	0
		1	24	24.08	0
		1	49	24.30	0
		25	0	23.02	1
		25	12	22.94	1
		25	25	23.29	1
		50	0	23.03	1
	HCH	1	0	23.81	0
		1	24	23.96	0
		1	49	23.84	0
		25	0	22.74	1
		25	12	22.77	1
		25	25	22.85	1
		50	0	23.01	1
16QAM	LCH	1	0	23.44	1
		1	24	23.62	1
		1	49	23.44	1
		25	0	22.81	2

		25	12	22.82	2
		25	25	22.86	2
		50	0	22.76	2
	MCH	1	0	22.61	1
		1	24	23.00	1
		1	49	23.11	1
		25	0	22.29	2
		25	12	22.37	2
		25	25	22.61	2
		50	0	22.44	2
	HCH	1	0	22.84	1
		1	24	23.09	1
		1	49	22.99	1
		25	0	21.91	2
		25	12	21.90	2
		25	25	21.87	2
		50	0	22.10	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.30	0
		1	37	24.39	0
		1	74	24.12	0
		37	0	23.60	1
		37	18	23.80	1
		37	38	23.43	1
		75	0	23.52	1
	MCH	1	0	23.73	0
		1	37	24.07	0
		1	74	24.30	0
		37	0	22.56	1
		37	18	22.95	1
		37	38	23.09	1
		75	0	23.03	1
	HCH	1	0	24.18	0
		1	37	23.68	0
		1	74	23.84	0
		37	0	23.13	1
		37	18	22.79	1
		37	38	23.02	1
		75	0	23.04	1

16QAM	LCH	1	0	23.55	1
		1	37	23.80	1
		1	74	23.36	1
		37	0	23.64	2
		37	18	23.79	2
		37	38	23.39	2
		75	0	22.58	2
	MCH	1	0	22.57	1
		1	37	22.89	1
		1	74	23.17	1
		37	0	22.59	2
		37	18	22.96	2
		37	38	23.14	2
		75	0	22.43	2
	HCH	1	0	23.13	1
		1	37	22.76	1
		1	74	23.12	1
		37	0	23.20	2
		37	18	22.76	2
		37	38	23.11	2
		75	0	22.20	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.15	0
		1	49	24.72	0
		1	99	23.83	0
		50	0	23.46	1
		50	25	23.42	1
		50	50	23.00	1
		100	0	23.32	1
	MCH	1	0	23.34	0
		1	49	23.84	0
		1	99	24.22	0
		50	0	22.56	1
		50	25	22.60	1
		50	50	23.18	1
		100	0	22.83	1
	HCH	1	0	24.08	0
		1	49	23.72	0
		1	99	23.79	0

		50	0	23.05	1
		50	25	23.03	1
		50	50	22.93	1
		100	0	22.91	1
16QAM	LCH	1	0	23.47	1
		1	49	23.65	1
		1	99	23.05	1
		50	0	22.55	2
		50	25	22.59	2
		50	50	22.26	2
		100	0	22.60	2
	MCH	1	0	22.37	1
		1	49	22.82	1
		1	99	23.15	1
		50	0	21.97	2
		50	25	21.94	2
		50	50	22.57	2
		100	0	22.24	2
	HCH	1	0	23.11	1
		1	49	22.87	1
		1	99	22.79	1
		50	0	22.16	2
		50	25	22.21	2
		50	50	22.01	2
		100	0	22.09	2

FDD-LTE Band 71:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.76	0
		1	12	22.23	0
		1	24	23.08	0
		12	0	21.40	1
		12	6	21.32	1
		12	13	21.54	1
		25	0	21.59	1
	MCH	1	0	22.63	0
		1	12	23.13	0
		1	24	23.30	0
		12	0	21.65	1
		12	6	21.62	1
		12	13	21.96	1
		25	0	21.94	1
	HCH	1	0	22.80	0
		1	12	22.83	0
		1	24	22.95	0
		12	0	21.59	1
		12	6	21.71	1
		12	13	21.93	1
		25	0	21.85	1
16QAM	LCH	1	0	21.24	1
		1	12	21.19	1
		1	24	22.05	1
		12	0	20.46	2
		12	6	20.39	2
		12	13	20.61	2
		25	0	20.69	2
	MCH	1	0	21.64	1
		1	12	22.05	1
		1	24	22.18	1
		12	0	20.84	2
		12	6	20.81	2
		12	13	21.16	2
		25	0	21.15	2
HCH	1	0	21.93	1	
	1	12	21.96	1	

		1	24	22.10	1
		12	0	20.82	2
		12	6	20.79	2
		12	13	21.02	2
		25	0	21.01	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.69	0
		1	24	22.99	0
		1	49	22.44	0
		25	0	21.57	1
		25	12	21.63	1
		25	25	21.71	1
		50	0	21.71	1
	MCH	1	0	22.81	0
		1	24	23.20	0
		1	49	22.79	0
		25	0	22.04	1
		25	12	22.09	1
		25	25	22.13	1
		50	0	22.04	1
	HCH	1	0	22.75	0
		1	24	22.91	0
		1	49	22.87	0
		25	0	21.65	1
		25	12	21.67	1
		25	25	21.95	1
		50	0	21.74	1
16QAM	LCH	1	0	21.27	1
		1	24	21.78	1
		1	49	21.34	1
		25	0	20.90	2
		25	12	20.83	2
		25	25	20.72	2
		50	0	20.88	2
	MCH	1	0	21.75	1
		1	24	22.18	1
		1	49	21.46	1
		25	0	20.98	2
		25	12	21.08	2

		25	25	21.39	2
		50	0	21.27	2
	HCH	1	0	21.72	1
		1	24	22.00	1
		1	49	21.86	1
		25	0	20.74	2
		25	12	20.73	2
		25	25	21.09	2
		50	0	20.80	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.40	0
		1	37	22.29	0
		1	74	22.70	0
		37	0	21.82	1
		37	18	21.74	1
		37	38	21.92	1
		75	0	21.60	1
	MCH	1	0	22.48	0
		1	37	22.93	0
		1	74	23.13	0
		37	0	21.38	1
		37	18	21.90	1
		37	38	21.89	1
		75	0	21.98	1
	HCH	1	0	23.35	0
		1	37	22.78	0
		1	74	23.02	0
		37	0	22.27	1
		37	18	21.88	1
		37	38	22.09	1
		75	0	21.84	1
16QAM	LCH	1	0	21.34	1
		1	37	21.71	1
		1	74	22.03	1
		37	0	21.79	2
		37	18	21.79	2
		37	38	22.00	2
		75	0	20.74	2
	MCH	1	0	21.38	1

		1	37	21.85	1
		1	74	21.90	1
		37	0	21.36	2
		37	18	21.87	2
		37	38	21.92	2
		75	0	20.81	2
	HCH	1	0	22.28	1
		1	37	21.90	1
		1	74	22.04	1
		37	0	22.34	2
		37	18	21.96	2
		37	38	22.14	2
		75	0	20.86	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.62	0
		1	49	22.47	0
		1	99	22.85	0
		50	0	21.55	1
		50	25	21.44	1
		50	50	21.64	1
		100	0	21.71	1
	MCH	1	0	22.42	0
		1	49	22.89	0
		1	99	22.63	0
		50	0	21.63	1
		50	25	21.75	1
		50	50	21.93	1
		100	0	21.83	1
	HCH	1	0	22.89	0
		1	49	22.67	0
		1	99	23.47	0
		50	0	22.07	1
		50	25	21.87	1
		50	50	21.69	1
		100	0	21.71	1
16QAM	LCH	1	0	21.51	1
		1	49	21.71	1
		1	99	22.02	1
		50	0	20.68	2

		50	25	20.57	2
		50	50	20.91	2
		100	0	20.83	2
	MCH	1	0	21.30	1
		1	49	21.80	1
		1	99	21.43	1
		50	0	20.91	2
		50	25	20.91	2
		50	50	21.21	2
		100	0	20.83	2
	HCH	1	0	21.89	1
		1	49	21.64	1
		1	99	22.16	1
		50	0	21.07	2
		50	25	21.10	2
50		50	20.73	2	
100		0	20.76	2	

Remark:

1. Per KDB941225 D05 v02r05, Start with the largest channel bandwidth then measure SAR for QPSK with 1 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. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. 6 When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.
2. Per KDB941225 D05 v02r05, The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.
3. Per KDB941225 D05 v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations, and the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
4. Per KDB941225 D05 v02r05, For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in 5.2.1, 5.2.2, and 5.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

9.2 Test Results for Standalone SAR Test

Body SAR

LTE Band 2–Body SAR Test								
Plot No.	Mode	Test Position Body	Freque ncy	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 20MHz 1RB	Horizontal-Up	1860	24.97	25.0	1.007	0.488	0.491
	QPSK 20MHz 1RB	Horizontal-Down	1860	24.97	25.0	1.007	0.864	0.870
1	QPSK 20MHz 1RB	Horizontal-Down	1880	23.62	24.0	1.091	1.118	1.220
	QPSK 20MHz 1RB	Horizontal-Down	1880	23.62	24.0	1.091	1.103	1.204
	QPSK 20MHz 1RB	Horizontal-Down	1900	23.98	24.0	1.005	0.856	0.860
	QPSK 20MHz 1RB	Vertical-Back	1860	24.97	25.0	1.007	0.539	0.543
	QPSK 20MHz 1RB	Vertical-Front	1860	24.97	25.0	1.007	0.069	0.069
	QPSK 20MHz 50%RB	Horizontal-Up	1860	23.57	24.0	1.104	0.416	0.459
	QPSK 20MHz 50%RB	Horizontal-Down	1860	23.57	24.0	1.104	0.706	0.779
	QPSK 20MHz 50%RB	Vertical-Back	1860	23.57	24.0	1.104	0.450	0.497
	QPSK 20MHz 50%RB	Vertical-Front	1860	23.57	24.0	1.104	0.055	0.061

LTE Band 4–Body SAR Test								
Plot No.	Mode	Test Position Body	Freque ncy	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 20MHz 1RB	Horizontal-Up	1720	24.66	25.0	1.081	0.562	0.608
2	QPSK 20MHz 1RB	Horizontal-Down	1720	24.66	25.0	1.081	0.949	1.026
	QPSK 20MHz 1RB	Horizontal-Down	1720	24.66	25.0	1.081	0.842	0.911
	QPSK 20MHz 1RB	Horizontal-Down	1732.5	24.37	24.5	1.030	0.779	0.803

	QPSK 20MHz 1RB	Horizontal-Down	1745	24.28	24.5	1.052	0.762	0.802
	QPSK 20MHz 1RB	Vertical-Back	1720	24.66	25.0	1.081	0.706	0.763
	QPSK 20MHz 1RB	Vertical-Front	1720	24.66	25.0	1.081	0.207	0.224
	QPSK 20MHz 50%RB	Horizontal-Up	1720	23.59	24.0	1.099	0.427	0.469
	QPSK 20MHz 50%RB	Horizontal-Down	1720	23.59	24.0	1.099	0.544	0.598
	QPSK 20MHz 50%RB	Vertical-Back	1720	23.59	24.0	1.099	0.538	0.591
	QPSK 20MHz 50%RB	Vertical-Front	1720	23.59	24.0	1.099	0.178	0.196

LTE Band 5–Body SAR Test								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 10MHz 1RB	Horizontal-Up	829	25.61	26.0	1.094	0.164	0.179
3	QPSK 10MHz 1RB	Horizontal-Down	829	25.61	26.0	1.094	0.357	0.391
	QPSK 10MHz 1RB	Vertical-Back	829	25.61	26.0	1.094	0.160	0.175
	QPSK 10MHz 1RB	Vertical-Front	829	25.61	26.0	1.094	0.080	0.088
	QPSK 10MHz 50%RB	Horizontal-Up	829	24.32	24.5	1.042	0.155	0.162
	QPSK 10MHz 50%RB	Horizontal-Down	829	24.32	24.5	1.042	0.333	0.347
	QPSK 10MHz 50%RB	Vertical-Back	829	24.32	24.5	1.042	0.143	0.149
	QPSK 10MHz 50%RB	Vertical-Front	829	24.32	24.5	1.042	0.072	0.075

LTE Band 12–Body SAR Test								
Plot No.	Mode	Test Position Body	Freque ncy	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 10MHz 1RB	Horizontal-Up	711	24.08	24.5	1.102	0.289	0.318
4	QPSK 10MHz 1RB	Horizontal-Down	711	24.08	24.5	1.102	0.474	0.522
	QPSK 10MHz 1RB	Vertical-Back	711	24.08	24.5	1.102	0.192	0.211
	QPSK 10MHz 1RB	Vertical-Front	711	24.08	24.5	1.102	0.102	0.112
	QPSK 10MHz 50%RB	Horizontal-Up	711	22.77	23.0	1.054	0.208	0.219
	QPSK 10MHz 50%RB	Horizontal-Down	711	22.77	23.0	1.054	0.411	0.433
	QPSK 10MHz 50%RB	Vertical-Back	711	22.77	23.0	1.054	0.157	0.166
	QPSK 10MHz 50%RB	Vertical-Front	711	22.77	23.0	1.054	0.091	0.096

LTE Band 17–Body SAR Test								
Plot No.	Mode	Test Position Body	Freque ncy	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 10MHz 1RB	Horizontal-Up	710	24.15	24.5	1.084	0.301	0.326
5	QPSK 10MHz 1RB	Horizontal-Down	710	24.15	24.5	1.084	0.548	0.594
	QPSK 10MHz 1RB	Vertical-Back	710	24.15	24.5	1.084	0.173	0.188
	QPSK 10MHz 1RB	Vertical-Front	710	24.15	24.5	1.084	0.116	0.126
	QPSK 10MHz 50%RB	Horizontal-Up	710	22.72	23.0	1.067	0.235	0.251
	QPSK 10MHz 50%RB	Horizontal-Down	710	22.72	23.0	1.067	0.493	0.526
	QPSK 10MHz 50%RB	Vertical-Back	710	22.72	23.0	1.067	0.171	0.182
	QPSK 10MHz 50%RB	Vertical-Front	710	22.72	23.0	1.067	0.100	0.107

LTE Band 66–Body SAR Test								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 20MHz 1RB	Horizontal-Up	1720	24.72	25.0	1.067	0.505	0.539
6	QPSK 20MHz 1RB	Horizontal-Down	1720	24.72	25.0	1.067	0.714	0.762
	QPSK 20MHz 1RB	Vertical-Back	1720	24.72	25.0	1.067	0.482	0.514
	QPSK 20MHz 1RB	Vertical-Front	1720	24.72	25.0	1.067	0.152	0.162
	QPSK 20MHz 50%RB	Horizontal-Up	1720	23.46	23.5	1.009	0.404	0.408
	QPSK 20MHz 50%RB	Horizontal-Down	1720	23.46	23.5	1.009	0.577	0.582
	QPSK 20MHz 50%RB	Vertical-Back	1720	23.46	23.5	1.009	0.360	0.363
	QPSK 20MHz 50%RB	Vertical-Front	1720	23.46	23.5	1.009	0.141	0.142

LTE Band 71–Body SAR Test								
Plot No.	Mode	Test Position Body	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
	QPSK 20MHz 1RB	Horizontal-Up	688	23.47	23.5	1.007	0.368	0.371
7	QPSK 20MHz 1RB	Horizontal-Down	688	23.47	23.5	1.007	0.673	0.678
	QPSK 20MHz 1RB	Vertical-Back	688	23.47	23.5	1.007	0.353	0.355
	QPSK 20MHz 1RB	Vertical-Front	688	23.47	23.5	1.007	0.175	0.176
	QPSK 20MHz 50%RB	Horizontal-Up	688	22.07	22.5	1.104	0.279	0.308
	QPSK 20MHz 50%RB	Horizontal-Down	688	22.07	22.5	1.104	0.442	0.488
	QPSK 20MHz 50%RB	Vertical-Back	688	22.07	22.5	1.104	0.270	0.298
	QPSK 20MHz 50%RB	Vertical-Front	688	22.07	22.5	1.104	0.123	0.136

Repeated SAR

Mode	Test Position Body	Frequency	SAR1g (W/kg)	Repeated SAR		Ratio	
		MHz		1	2	1	2
QPSK 20MHz 1RB	Horizontal-Down	1880	1.118	1.103	/	1.01	/
QPSK 20MHz 1RB	Horizontal-Down	1720	0.949	0.842	/	1.13	/

Remark:

1. Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
2. When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3. Perform a second repeated measurement only 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 (~ 10% from the 1-g SAR limit).
4. Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

10. Measurement Uncertainty

10.1 Uncertainty for EUT SAR Test

a	b	c	d	e= f(d,k)	f	g	h= c*f/e	i= c*g/e	k
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	7.0	N	1	1	1	7.00	7.00	∞
Axial Isotropy	E.2.2	2.5	R	$\sqrt{3}$	$(1_{Cp})^{1/2}$	$(1_{Cp})^{1/2}$	1.02	1.02	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	$(Cp)^{1/2}$	$(Cp)^{1/2}$	1.63	1.63	∞
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	E.2.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
System detection limits	E.2.5	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.02	∞
Reponse Time	E.2.7	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Integration Time	E.2.8	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
RF ambient Conditions – Noise	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient Conditions - Reflections	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	E.5	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Test Sample Related									
Test sample positioning	E.4.2	0.03	N	1	1	1	0.03	0.03	N-1
Device Holder Uncertainty	E.4.1	5.00	N	1	1	1	5.00	5.00	
Output power Variation - SAR drift measurement	E.2.9	12.02	R	$\sqrt{3}$	1	1	6.94	6.94	∞
SAR scaling	E6.5	0.0	R	$\sqrt{3}$	1	1	0.0	0.0	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E3.2	1.9	R	$\sqrt{3}$	1	0.84	1.10	0.90	∞

Liquid conductivity - deviation from target value	E.3.2	5.00	R	$\sqrt{3}$	0.64	0.43	1.85	1.24	∞
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N	1	0.64	0.43	3.20	2.15	∞
Liquid permittivity - deviation from target value	E.3.2	0.37	R	$\sqrt{3}$	0.6	0.49	0.13	0.10	∞
Liquid permittivity - measurement uncertainty	E.3.3	10.00	N	1	0.6	0.49	6.00	4.90	∞
Combined Standard Uncertainty			RSS				12.98	12.53	
Expanded Uncertainty (95% Confidence interval)			K=2				25.32	24.43	

10.2 Uncertainty for System Performance Check

a	b	c	d	e= f(d,k)	f	g	h= c*f/e	i= c*g/e	k
Uncertainty Component	Sec.	Tol (+- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	7.0	N	1	1	1	7.00	7.00	∞
Axial Isotropy	E.2.2	2.5	R	$\sqrt{3}$	$(1_{Cp})^{1/2}$	$(1_{Cp})^{1/2}$	1.02	1.02	∞
Hemispherical Isotropy	E.2.2	4.0	R	$\sqrt{3}$	$(Cp)^{1/2}$	$(Cp)^{1/2}$	1.63	1.63	∞
Boundary effect	E.2.3	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	E.2.4	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞
System detection limits	E.2.5	1.0	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation response	E.2.5	0	R	$\sqrt{3}$	0	0	0.0	0.0	∞
Readout Electronics	E.2.6	0.02	N	1	1	1	0.02	0.02	∞
Reponse Time	E.2.7	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Integration Time	E.2.8	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
RF ambient Conditions – Noise	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF ambient Conditions - Reflections	E.6.1	3.0	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Extrapolation, interpolation and	E.5.2	5.0	R	$\sqrt{3}$	1	1	2.89	2.89	∞

integration Algorithms for Max. SAR Evaluation									
Dipole									
Dipole axis to liquid Distance	8,E.4.2	1.00	N	$\sqrt{3}$	1	1	0.58	0.58	N-1
Input power and SAR drift measurement	8,6.6.2	12.02	R	$\sqrt{3}$	1	1	6.94	6.94	∞
Deviation of experimental dipole from numerical dipole	E.6.4	5.5	R	$\sqrt{3}$	1	1	3.20	3.20	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	$\sqrt{3}$	1	1	0.03	0.03	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E3.2	2.0	R	$\sqrt{3}$	1	0.84	1.10	1.10	∞
Liquid conductivity - deviation from target value	E.3.2	5.00	R	$\sqrt{3}$	0.64	0.43	1.85	1.24	
Liquid conductivity - measurement uncertainty	E.3.3	5.00	N	1	0.64	0.43	3.20	2.15	
Liquid permittivity - deviation from target value	E.3.2	0.37	R	$\sqrt{3}$	0.6	0.49	0.13	0.10	
Liquid permittivity - measurement uncertainty	E.3.3	10.00	N	1	0.6	0.49	6.00	4.90	M
Combined Standard Uncertainty			RSS				12.00	11.50	
Expanded Uncertainty (95% Confidence interval)			K=2				23.39	22.43	

Annex A. Plots of System Performance Check

MEASUREMENT 1

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 15 minutes 21 seconds

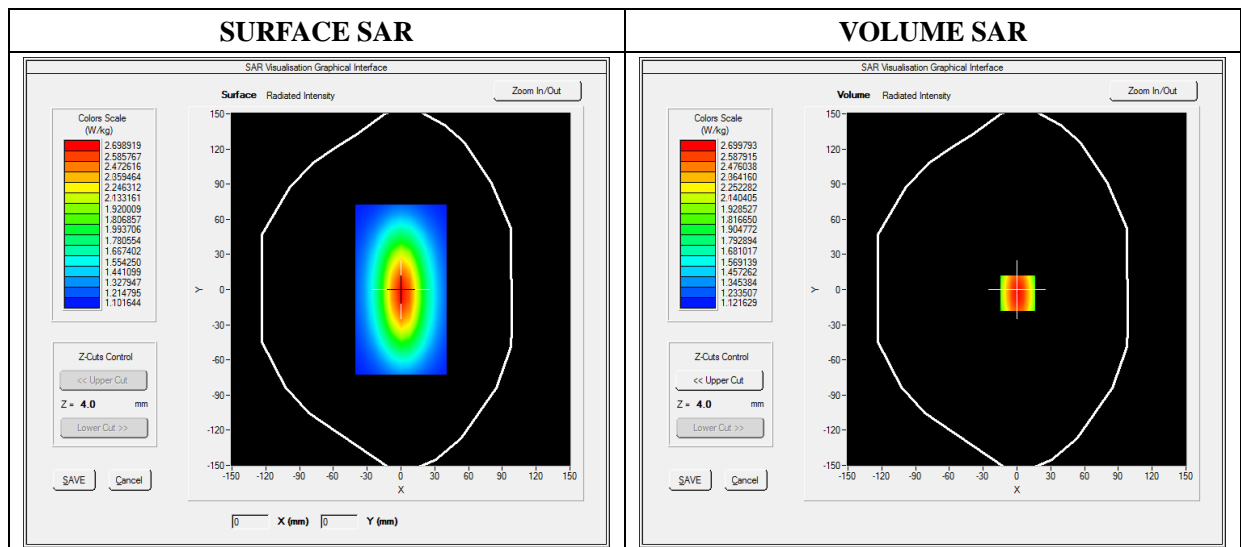
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.99; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW750
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	750.000000
Relative Permittivity (real part)	42.750635
Conductivity (S/m)	0.871258
Power Variation (%)	1.380000
Ambient Temperature	22.1
Liquid Temperature	22.1

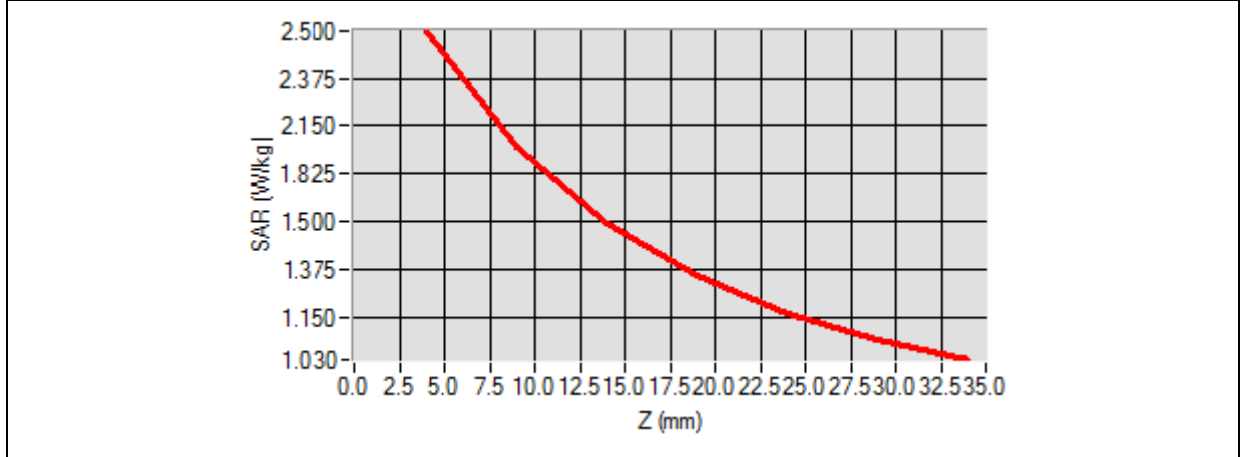


Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.304217
SAR 1g (W/Kg)	2.014568

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.3634	1.8023	1.4523	1.2514	1.1005	1.0245



3D screen shot	Hot spot position
<p>A 3D perspective view of a grey, L-shaped device. A rectangular area on the horizontal part of the device is highlighted with a color-coded grid, showing a hot spot (red) in the center, transitioning through yellow and green to blue at the edges.</p>	<p>A 2D heatmap showing a central red oval-shaped hot spot. The intensity decreases radially, passing through yellow and green to a blue background, representing the spatial distribution of SAR.</p>

MEASUREMENT 2

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 7 minutes 21 seconds

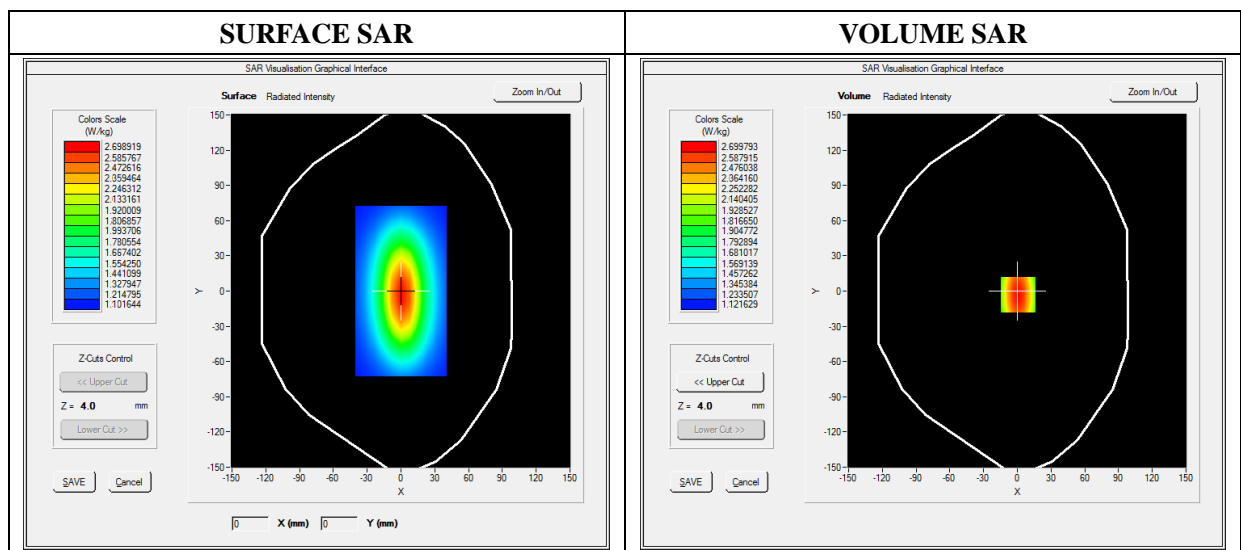
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.93; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW835
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	835.000000
Relative Permittivity (real part)	42.271682
Conductivity (S/m)	0.892814
Power Variation (%)	1.100000
Ambient Temperature	22.1
Liquid Temperature	22.1

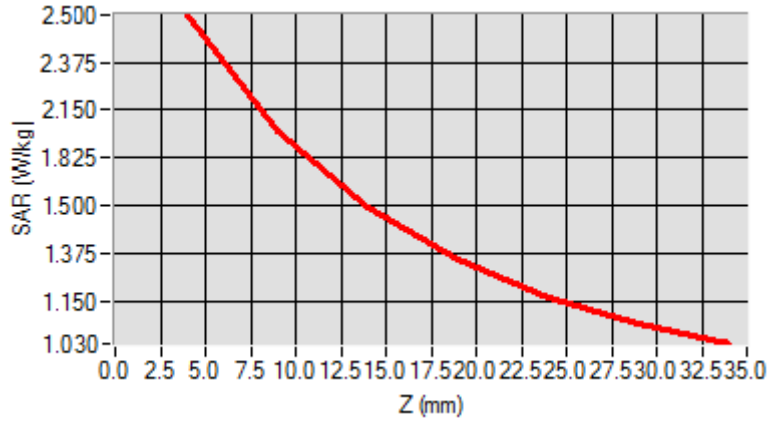


Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	1.550824
SAR 1g (W/Kg)	2.341205

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	2.4900	1.8942	1.4811	1.3541	1.1123	1.0539



3D screen shot	Hot spot position

MEASUREMENT 3

Type: Validation measurement (Fast, 75.00 %)

Measurement duration: 12 minutes 21 seconds

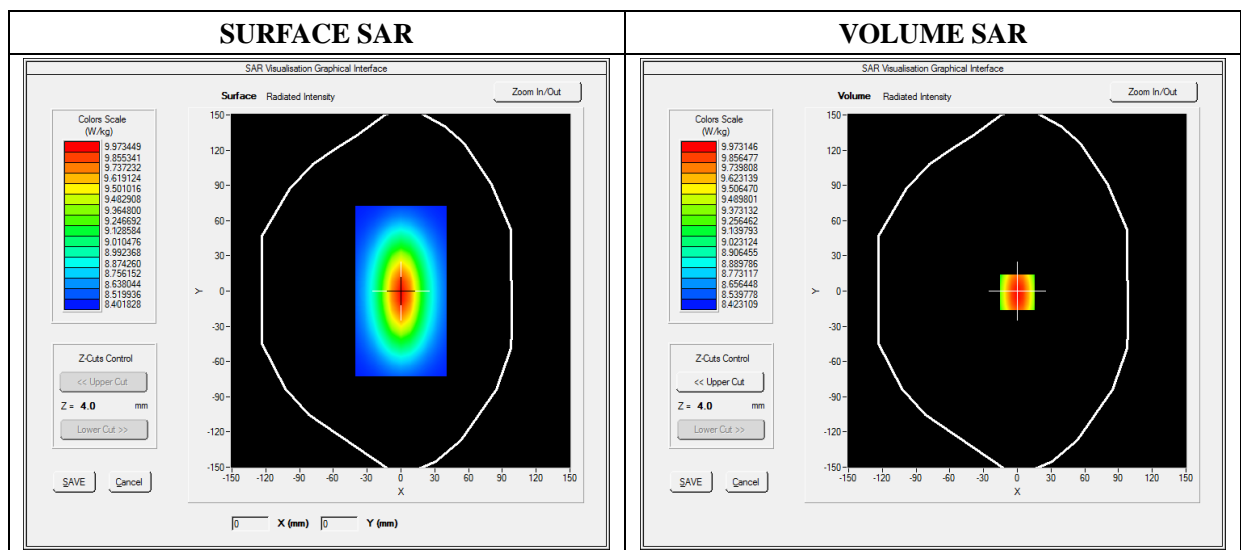
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 5.84; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1800
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

Frequency (MHz)	1800.000000
Relative Permittivity (real part)	39.620849
Conductivity (S/m)	1.411528
Power Variation (%)	-1.400000
Ambient Temperature	22.4
Liquid Temperature	22.4

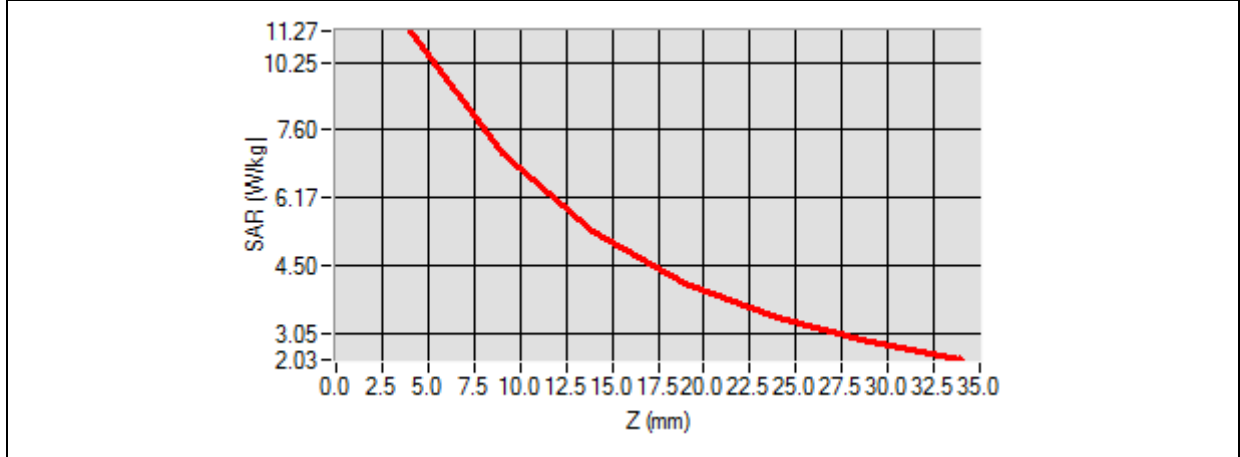


Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	5.151804
SAR 1g (W/Kg)	9.760523

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	10.3455	7.1125	5.1026	3.425	3.0242	2.1125



3D screen shot	Hot spot position

Annex B. Plots of SAR Measurement

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 2021-03-12

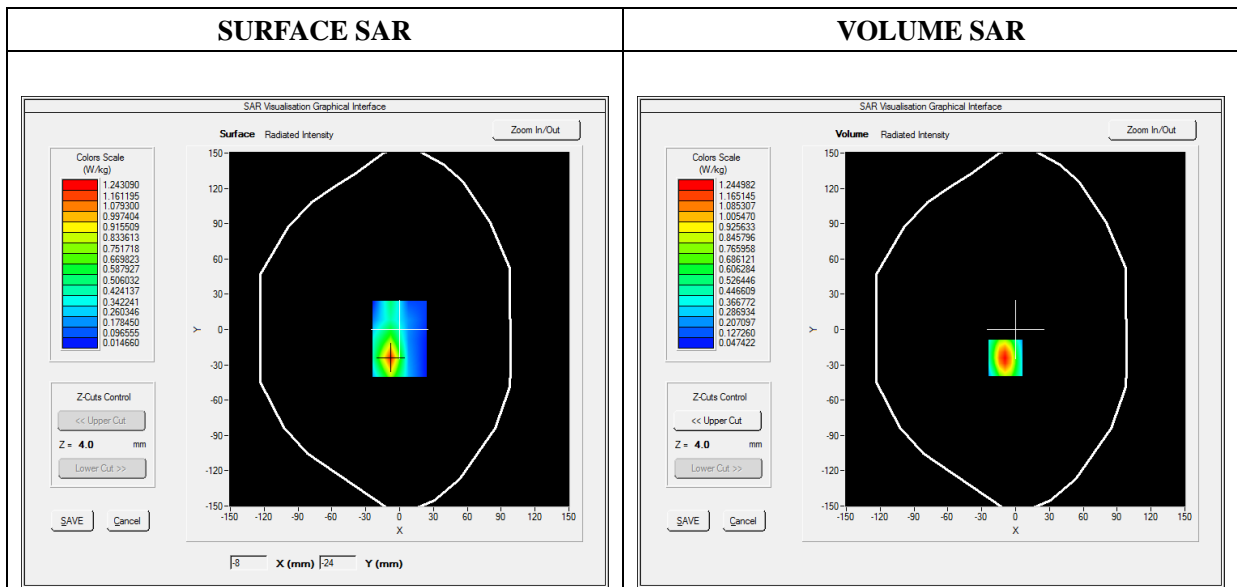
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.35; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
Phantom	Flat Plane
Device Position	Horizontal-Down
Band	LTE Band 2
Channels	Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	1880.000000
Relative Permittivity (real part)	39.401107
Conductivity (S/m)	1.4221314
Power Variation (%)	-0.400000
Ambient Temperature	22.4
Liquid Temperature	22.4

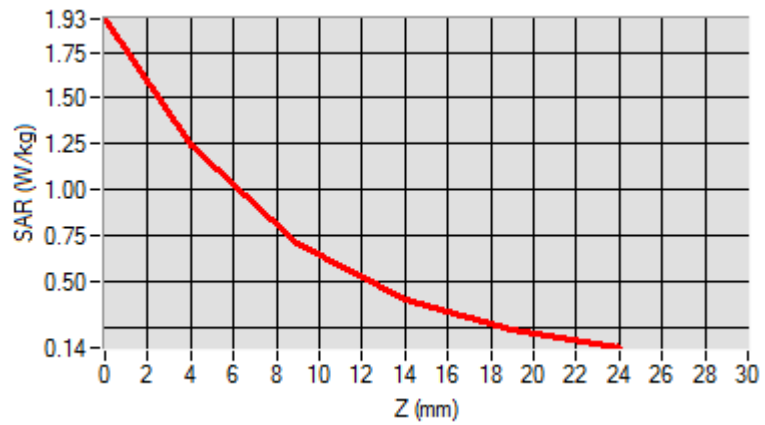


Maximum location: X=-9.00, Y=-24.00

SAR Peak: 1.93 W/kg

SAR 10g (W/Kg)	0.582963
SAR 1g (W/Kg)	1.118313

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.9305	1.2450	0.7027	0.3995	0.2371



3D screen shot	Hot spot position
<p>A 3D perspective view of a grey device with a blue grid overlay. A small, multi-colored (red, yellow, green) hot spot is visible on the device's surface, corresponding to the maximum SAR location.</p>	<p>A 2D heatmap of the device's top surface. The color scale ranges from red (high SAR) to blue (low SAR). The red hot spot is located in the center-left area of the device's top surface.</p>

MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 2021-03-12

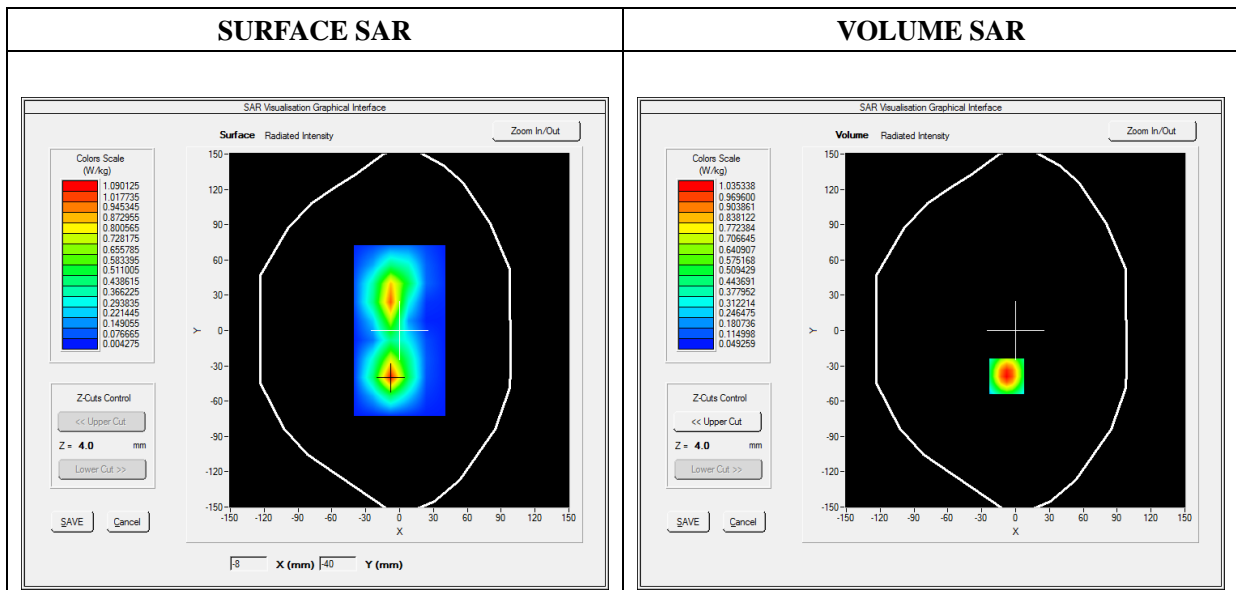
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 5.84; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
Phantom	Flat Plane
Device Position	Horizontal-Down
Band	LTE Band 4
Channels	Low
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	1720.000000
Relative Permittivity (real part)	40.280503
Conductivity (S/m)	1.351018
Power Variation (%)	-1.180000
Ambient Temperature	22.4
Liquid Temperature	22.4

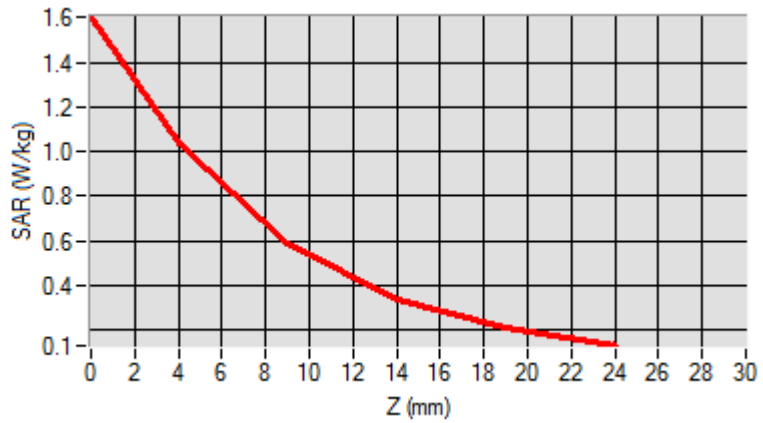


Maximum location: X=-8.00, Y=-39.00

SAR Peak: 1.61 W/kg

SAR 10g (W/Kg)	0.510549
SAR 1g (W/Kg)	0.949463

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.6037	1.0353	0.5879	0.3398	0.2084



3D screen shot	Hot spot position
<p>A 3D perspective view of a grey device. A rectangular area on the front face is highlighted with a color-coded SAR distribution, showing a central red/orange hot spot and surrounding green and blue areas.</p>	<p>A 2D heatmap showing the SAR distribution. It features two distinct red/orange hot spots, one above and one below a central green area, indicating high SAR values in those regions.</p>

MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 2021-03-15

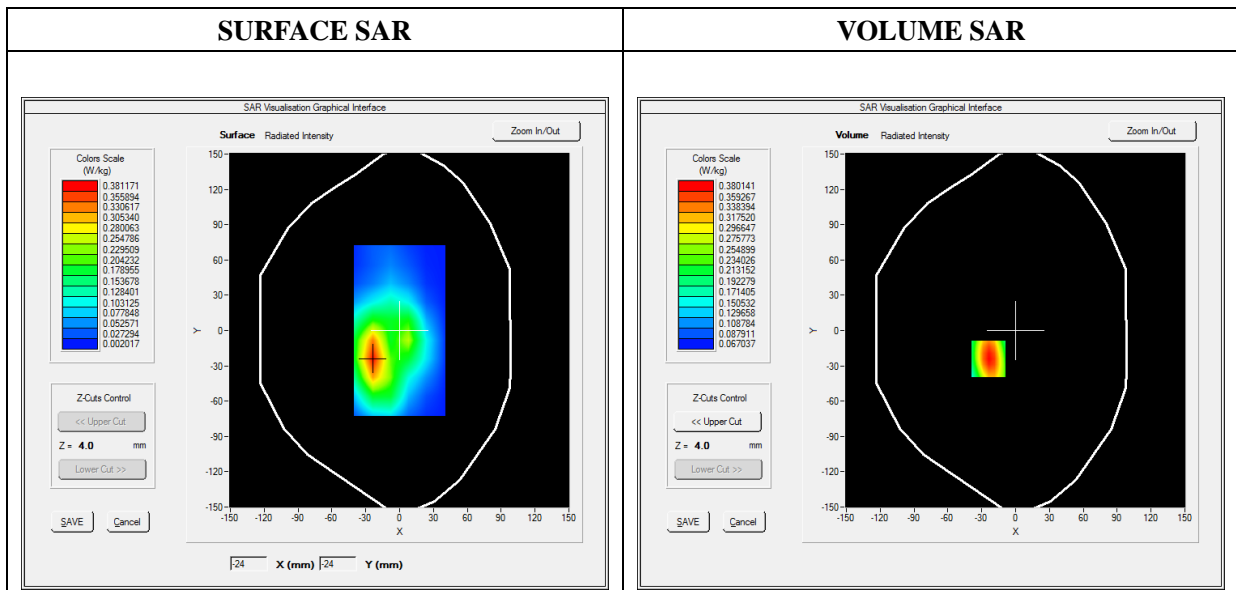
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.93; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
Phantom	Flat Plane
Device Position	Horizontal-Down
Band	LTE Band 5
Channels	Low
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	829.000000
Relative Permittivity (real part)	42.271682
Conductivity (S/m)	0.892814
Power Variation (%)	-0.560000
Ambient Temperature	22.1
Liquid Temperature	22.1

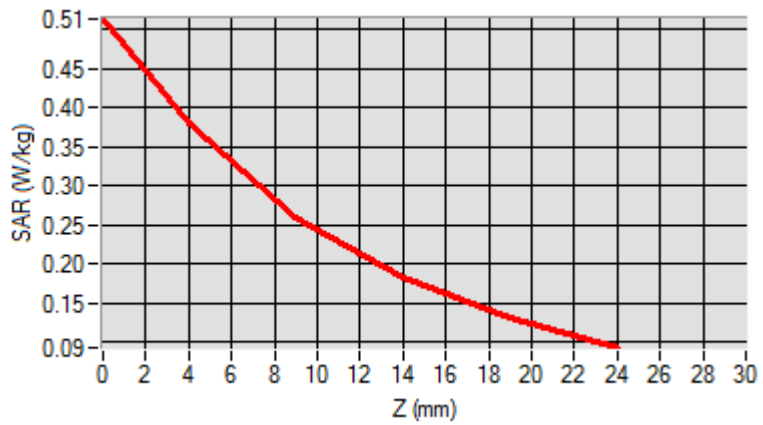


Maximum location: X=-24.00, Y=-24.00

SAR Peak: 0.52 W/kg

SAR 10g (W/Kg)	0.232000
SAR 1g (W/Kg)	0.356819

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.5141	0.3801	0.2605	0.1816	0.1299



3D screen shot	Hot spot position
<p>A 3D perspective view of a grey device with a blue rectangular area on its top surface. This area contains a color-coded SAR hot spot visualization, with red and yellow indicating high SAR values and green and blue indicating lower values.</p>	<p>A 2D heatmap showing the SAR distribution. The highest SAR values are represented by red and yellow colors in the center, transitioning through green to blue at the edges, indicating a localized hot spot.</p>

MEASUREMENT 4

Type: Phone measurement (Complete)

Date of measurement: 2021-03-15

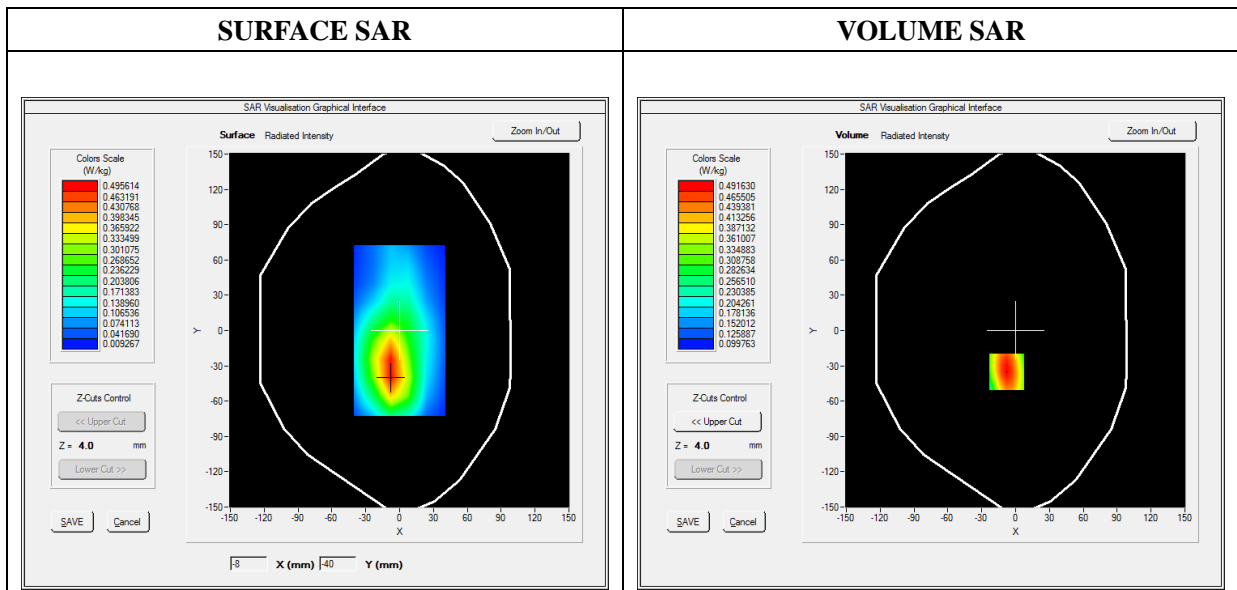
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.99; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
Phantom	Flat Plane
Device Position	Horizontal-Down
Band	LTE Band 12
Channels	High
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	711.000000
Relative Permittivity (real part)	42.902668
Conductivity (S/m)	0.846014
Power Variation (%)	-1.530000
Ambient Temperature	22.1
Liquid Temperature	22.1

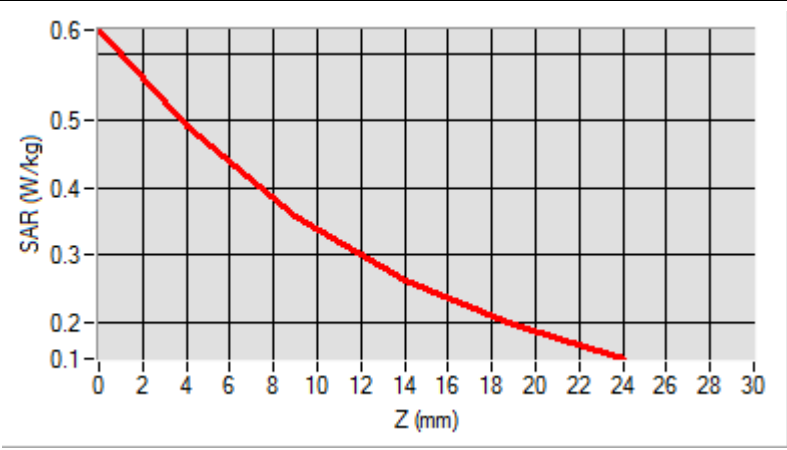


Maximum location: X=-8.00, Y=-35.00

SAR Peak: 0.63 W/kg

SAR 10g (W/Kg)	0.327309
SAR 1g (W/Kg)	0.474211

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.6342	0.4916	0.3579	0.2636	0.1973



3D screen shot	Hot spot position
<p>A 3D perspective view of a grey device. A small rectangular area on the front face is highlighted with a color gradient from blue (low SAR) to red (high SAR), indicating the location of the maximum SAR value.</p>	<p>A 2D heatmap showing a circular region of high intensity (red) in the center, surrounded by concentric rings of decreasing intensity (yellow, green, cyan, blue). This represents the spatial distribution of the SAR field.</p>

MEASUREMENT 5

Type: Phone measurement (Complete)

Date of measurement: 2021-03-15

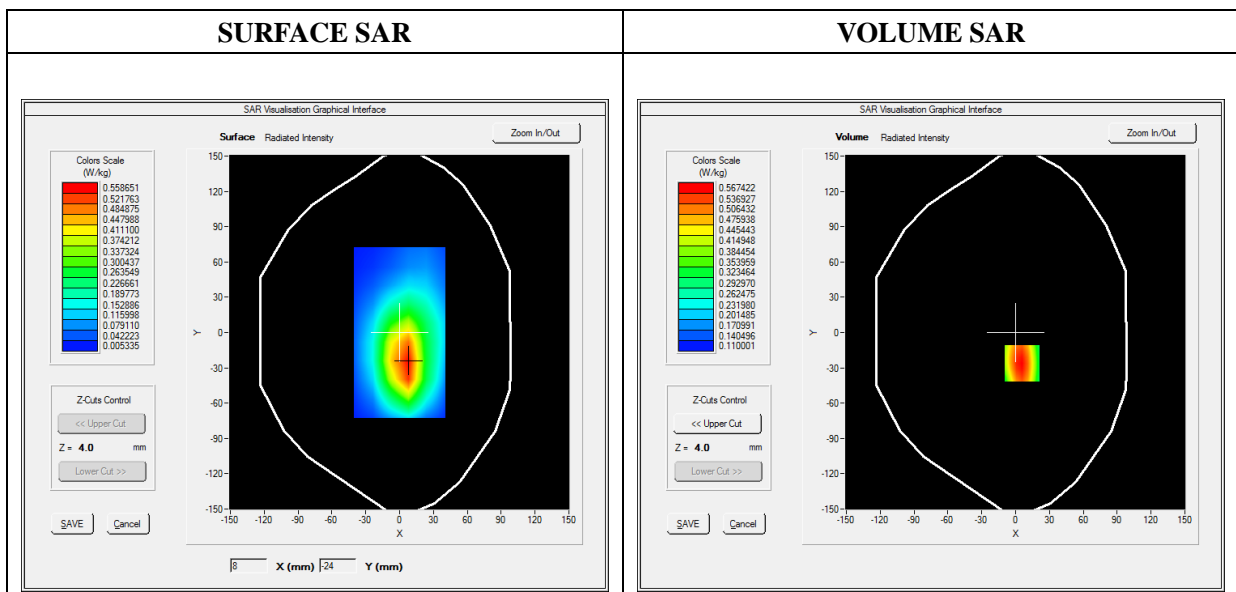
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.99; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
Phantom	Flat Plane
Device Position	Horizontal-Down
Band	LTE Band 17
Channels	Middle
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	710.000000
Relative Permittivity (real part)	42.902668
Conductivity (S/m)	0.846014
Power Variation (%)	-1.650000
Ambient Temperature	22.1
Liquid Temperature	22.1

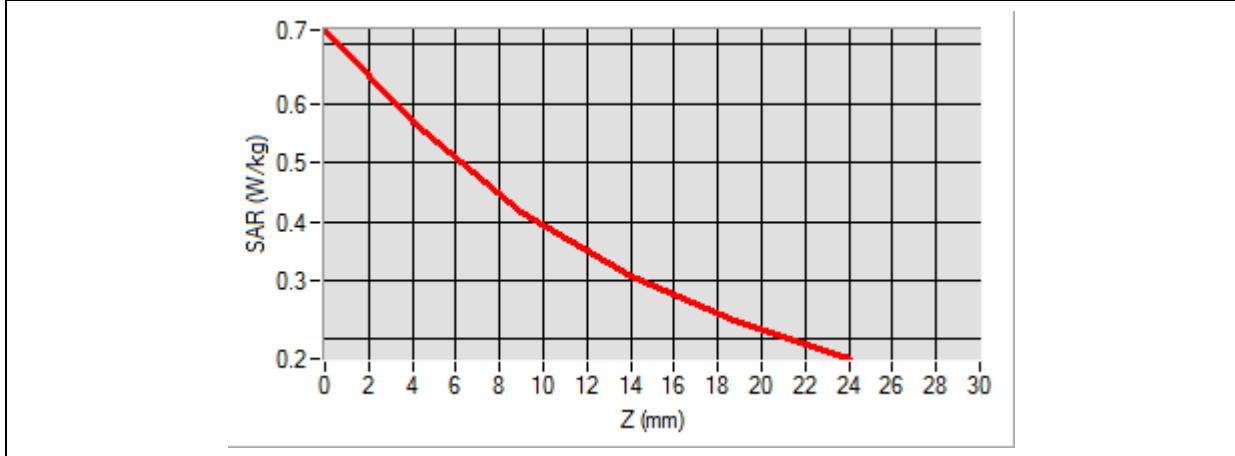


Maximum location: X=6.00, Y=-26.00

SAR Peak: 0.73 W/kg

SAR 10g (W/Kg)	0.378010
SAR 1g (W/Kg)	0.547877

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.7247	0.5674	0.4169	0.3079	0.2290



3D screen shot	Hot spot position
<p>A 3D perspective view of a grey, angular device. A rectangular area on the front face is highlighted with a color-coded SAR distribution, showing a central red/orange hot spot that fades to blue at the edges.</p>	<p>A 2D heatmap representing the SAR distribution. It features a central circular region of red and orange, surrounded by concentric rings of yellow, green, and cyan, indicating the spatial extent of the electromagnetic field.</p>

MEASUREMENT 6

Type: Phone measurement (Complete)

Date of measurement: 2021-03-12

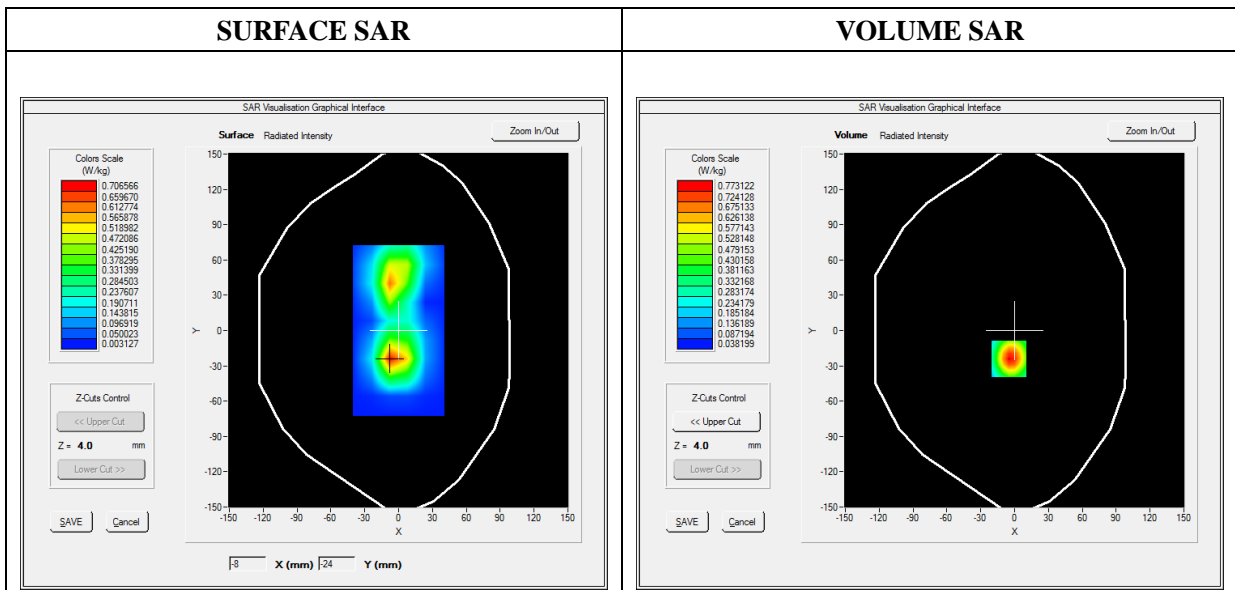
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 5.84; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
Phantom	Flat Plane
Device Position	Horizontal-Down
Band	LTE Band 66
Channels	Low
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	1720.000000
Relative Permittivity (real part)	40.280503
Conductivity (S/m)	1.351018
Power Variation (%)	0.620000
Ambient Temperature	22.4
Liquid Temperature	22.4

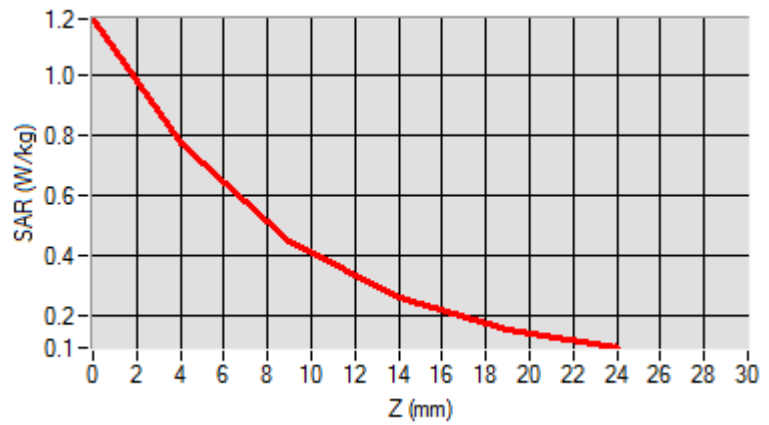


Maximum location: X=-5.00, Y=-24.00

SAR Peak: 1.19 W/kg

SAR 10g (W/Kg)	0.388150
SAR 1g (W/Kg)	0.714139

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.1842	0.7731	0.4453	0.2599	0.1593



3D screen shot	Hot spot position
<p>A 3D perspective view of a grey device with a blue rectangular area on its surface. This area contains a color-coded SAR distribution map, with red and yellow indicating high SAR values (hot spots).</p>	<p>A 2D heatmap showing two distinct hot spots (red/orange) arranged vertically. The intensity of the hot spots is highest in the center and fades to blue as it moves away from the center.</p>

MEASUREMENT 7

Type: Phone measurement (Complete)

Date of measurement: 2021-03-15

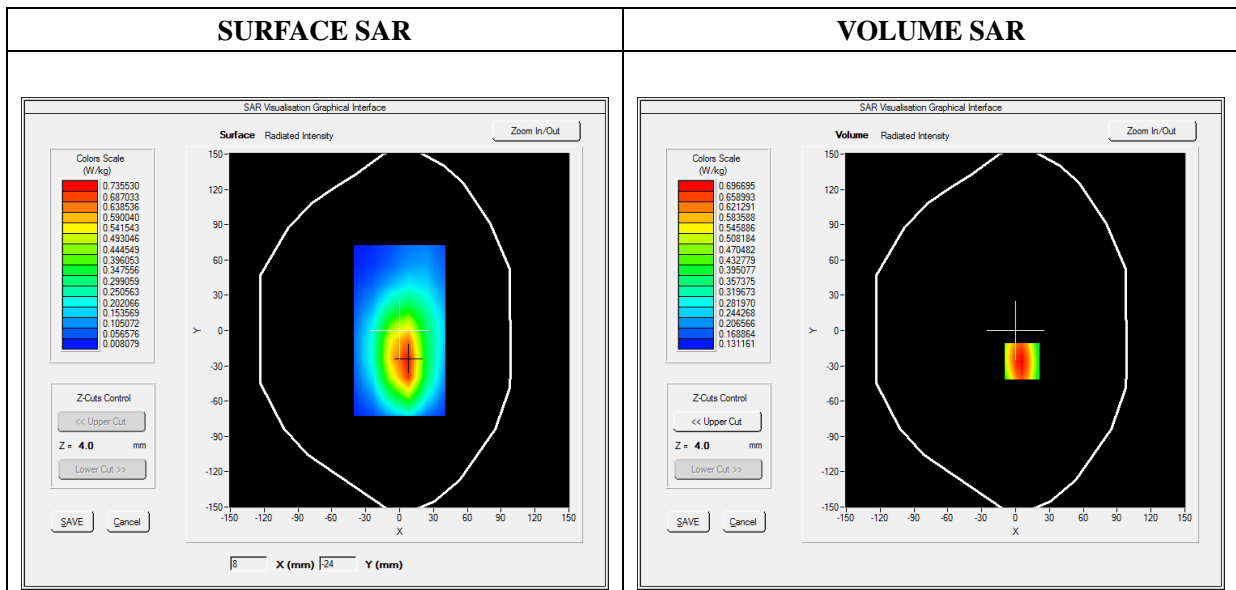
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.99; Calibrated: 2020-05-22

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=8mm dy=8mm dz=5mm
Phantom	Flat Plane
Device Position	Horizontal-Down
Band	LTE Band 71
Channels	High
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	688.000000
Relative Permittivity (real part)	43.091316
Conductivity (S/m)	0.8321968
Power Variation (%)	-1.230000
Ambient Temperature	22.1
Liquid Temperature	22.1

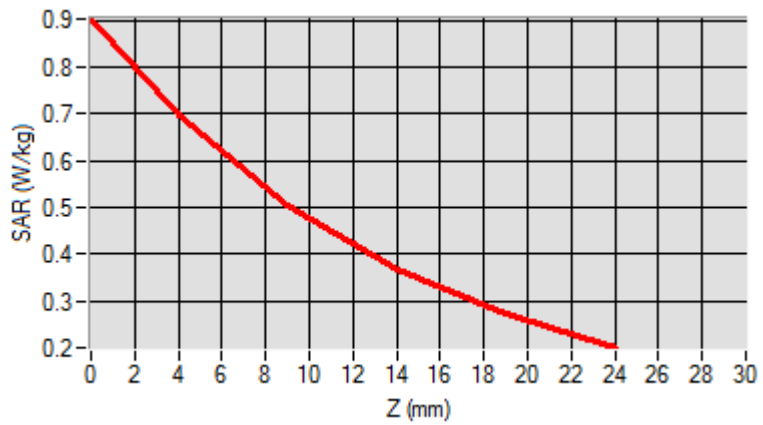


Maximum location: X=6.00, Y=-26.00

SAR Peak: 0.91 W/kg

SAR 10g (W/Kg)	0.460071
SAR 1g (W/Kg)	0.673110

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9030	0.6967	0.5037	0.3682	0.2732



3D screen shot	Hot spot position

Annex C. EUT Photos

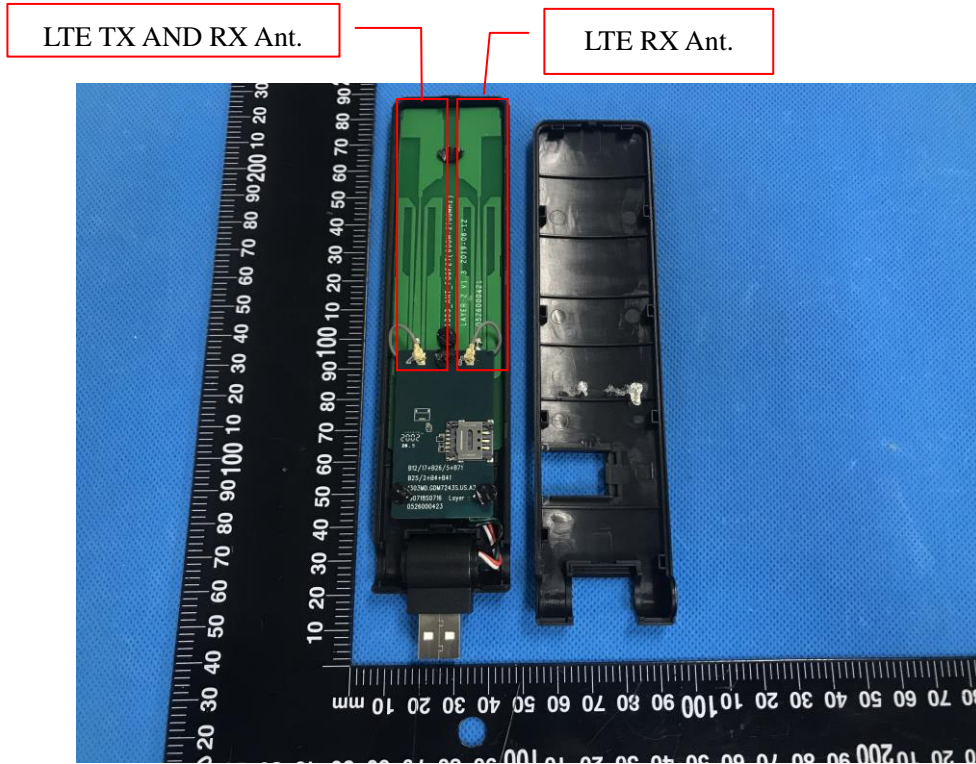
EUT View Front



EUT View Back



Antenna View

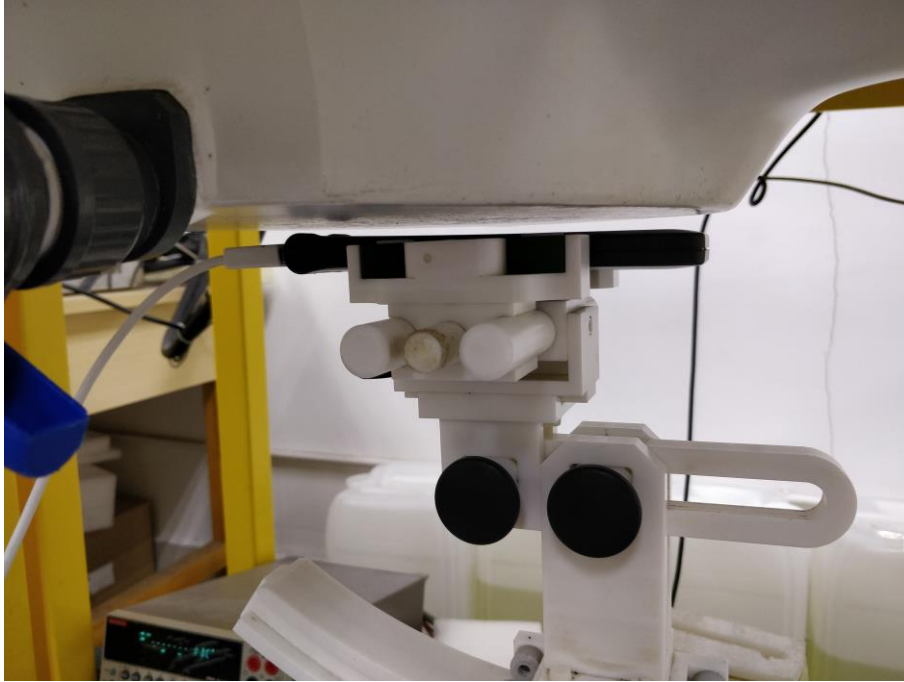


Annex D. Test Setup Photos

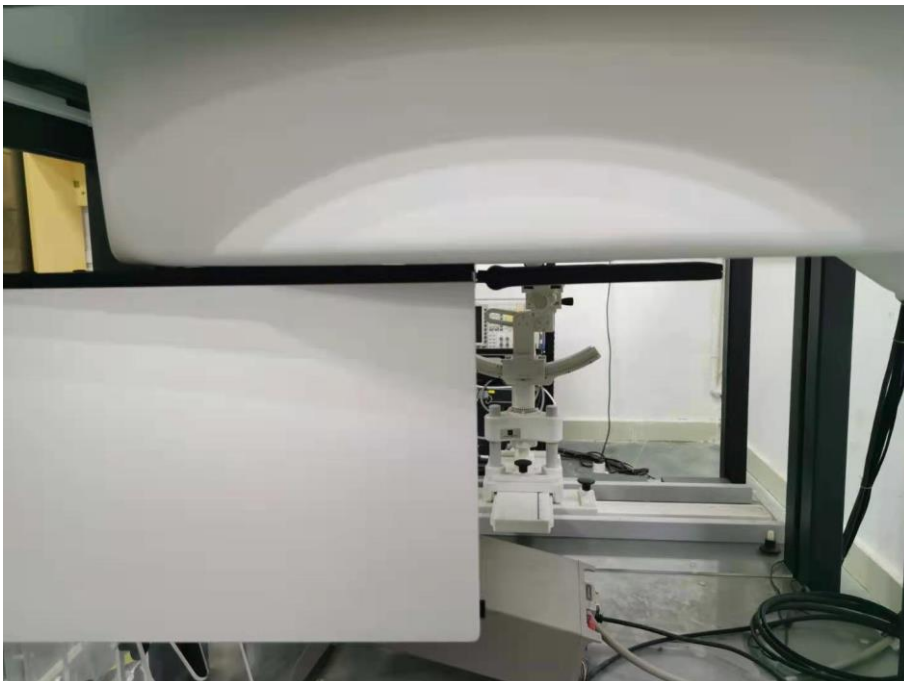
Body mode Exposure Conditions

Test distance: 5mm

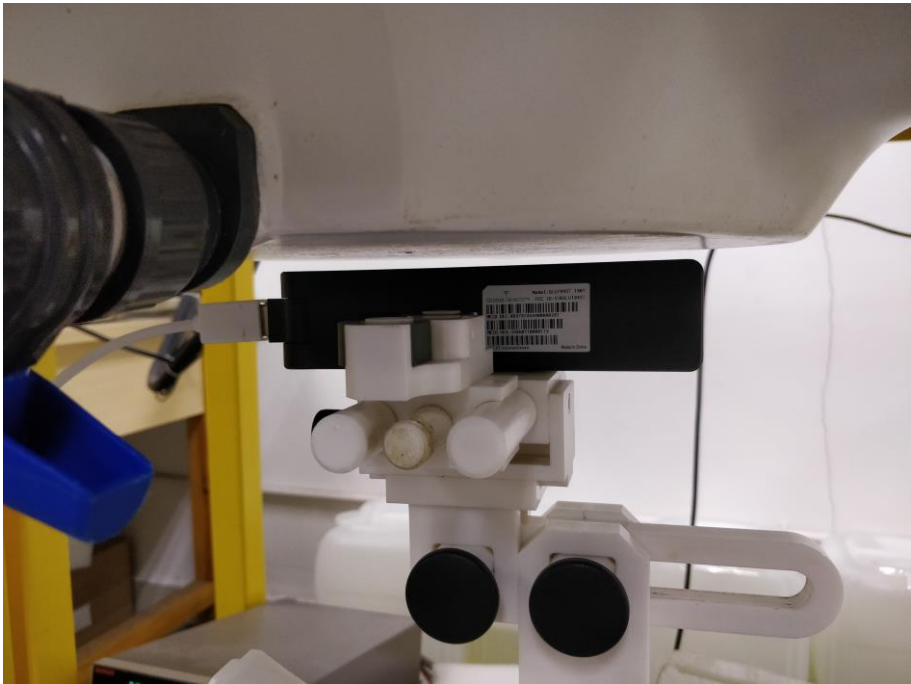
Horizontal-Down



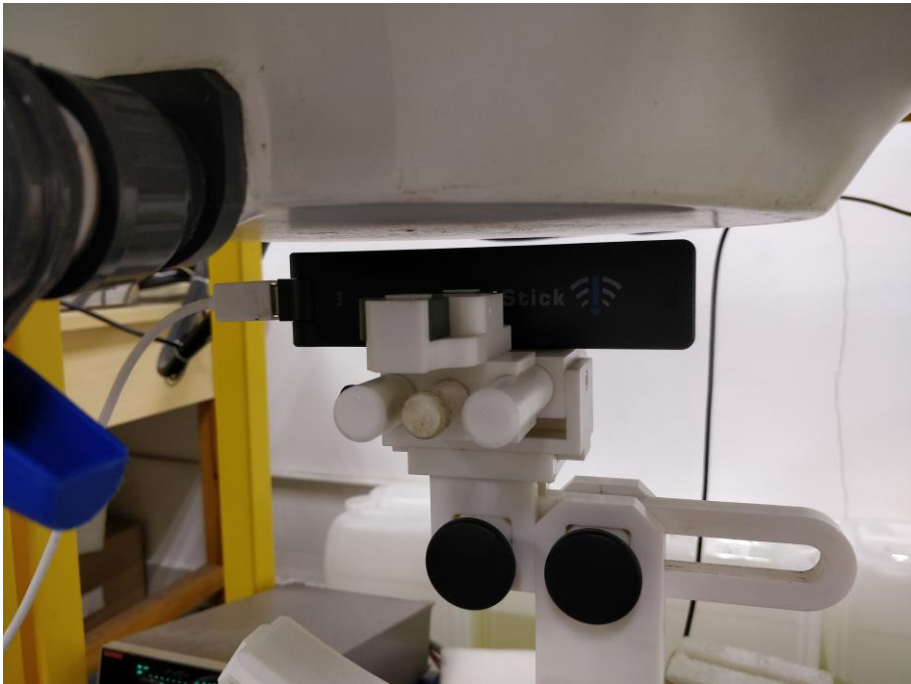
Horizontal-Up



Vertical-Back



Vertical-Front



Annex E. Calibration Certificate

Please refer to the exhibit for the calibration certificate

******* END OF REPORT *******