FCC SAR
Measurement and Test Report

For

Cyrus Technology GmbH

Hergelsbendenstrasse 49, D-52080 Aachen, Germany

FCC ID: 2AI3KCS45XA

Test Standards:	FCC Part 2.1093 ANSI / IEEE C95.1 :2005+A1:2010 ANSI / IEEE C95.3 : 2002(R2008) IEEE 1528 :2013
Product Description:	Rugged Phone
Tested Model:	CS45XA
Report No.:	WTX19X11079863W
Sample Received Date:	2019-11-18
Tested Date:	2019-11-18 to 2019-12-16
Issued Date:	2019-12-17
Tested By:	Ruler Liu / Engineer
Reviewed By:	Silin Chen / EMC Manager
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Prepared By:	

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Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen SEM Test Technology Co., Ltd.

TABLE OF CONTENTS

1. General Information 3
1.1 Product Description for Equipment Under Test (EUT) 3
1.2 Test Standards 7
1.3 Test Methodology 7
1.4 Test Facility 7
2. Summary of Test Results 8
3. Specific Absorption Rate (SAR) 10
3.1 Introduction 10
3.2 SAR Definition 10
4. SAR Measurement System 11
4.1 The Measurement System 11
4.2 Probe 11
4.3 Probe Calibration Process 13
4.4 Phantom 14
4.5 Device Holder 14
4.6 Test Equipment List 15
5. Tissue Simulating Liquids 16
5.1 Composition of Tissue Simulating Liquid 16
5.2 Tissue Dielectric Parameters for Head and Body Phantoms 18
5.3 Tissue Calibration Result 19
6. SAR Measurement Evaluation 20
6.1 Purpose of System Performance Check 20
6.2 System Setup 20
6.3 Validation Results 21
7. EUT Testing Position 23
7.1 Define Two Imaginary Lines on The Handset 23
7.2 Cheek Position 24
7.3 Tilted Position 24
7.4 Body Worn Position 25
7.5 EUT Antenna Position 25
7.6 EUT Testing Position 27
8. SAR Measurement Procedures 28
8.1 Measurement Procedures 28
8.2 Spatial Peak SAR Evaluation 28
8.3 Area & Zoom Scan Procedures 29
8.4 Volume Scan Procedures 29
8.5 SAR Averaged Methods 29
8.6 Power Drift Monitoring 29
9. SAR Test Result 30
9.1 Conducted RF Output Power 30
9.2 Test Results for Standalone SAR Test 102
9.3 Simultaneous Multi-band Transmission SAR Analysis 127
10. Measurement Uncertainty 160
10.1 Uncertainty for EUT SAR Test 160
10.2 Uncertainty for System Performance Check 161
Annex A. Plots of System Performance Check 163
Annex B. Plots of SAR Measurement 199
Annex C. EUT Photos 310
Annex D. Test Setup Photos 312
Annex E. Calibration Certificate 318

1. General Information

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Cyrus Technology GmbH
Address of applicant:	Hergelsbendenstrasse 49, D-52080 Aachen, Germany
Manufacturer:	Cyrus Technology GmbH
Address of manufacturer:	Hergelsbendenstrasse 49, D-52080 Aachen, Germany

General Description of EUT:	
Product Name:	Rugged Phone
Brand Name:	CYRUS
Model No.:	CS45XA
Adding Model(s):	/
Rated Voltage:	DC 3.85V by Battery
Battery:	4400mAh
Software Version:	CS45XA_ROW_1.0.3
Hardware Version:	V1.1
Device Category:	Portable Device
Note: The test data is gathered from a production sample provided by the manufacturer.	

Technical Characteristics of EUT:	
2G	
Support Networks:	GSM, GPRS, EDGE
Support Band:	GSM850/PCS1900
Uplink Frequency:	GSM/GPRS/EDGE 850: 824~849MHz GSM/GPRS/EDGE 1900: 1850~1910MHz
Downlink Frequency:	GSM/GPRS/EDGE 850: 869~894MHz GSM/GPRS/EDGE 1900: 1930~1990MHz
RF Output Power:	GSM850: 32.52dBm, GSM1900: 30.33dBm EDGE850: 26.86dBm, EDGE1900: 26.04dBm
Type of Modulation:	GMSK, 8PSK
Type of Antenna:	Integral Antenna
Antenna Gain:	GSM850: 1.62dBi; GSM1900: 1.46dBi
GPRS/EDGE Class:	Class 12
3G	
Support Networks:	WCDMA, HSDPA, HSUPA
Support Band:	WCDMA Band 2, WCDMA Band 5, WCDMA Band 4
Uplink Frequency:	WCDMA Band 2: 1850~1910MHz WCDMA Band 5: 824~849MHz WCDMA Band 4: 1710~1755MHz
Downlink Frequency:	WCDMA Band 2: 1930~1990MHz WCDMA Band 5: 869~894MHz WCDMA Band 4: 2110~2155MHz
RF Output Power:	WCDMA Band 2: 22.75dBm, WCDMA Band 4: 21.52dBm WCDMA Band 5: 22.97dBm
Type of Modulation:	BPSK
Antenna Type:	Integral Antenna
Antenna Gain:	WCDMA Band 2: 1.22dBi, WCDMA Band 4: 1.11dBi, WCDMA Band 5: 1.61dBi
4G	
Support Networks:	FDD-LTE
Support Band:	FDD-LTE Band 2, 4, 5, 7, 12, 13, 17, 25,26,30,66 TDD-LTE Band 40
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 7: Tx: 2500-2570MHz, FDD-LTE Band 12: Tx: 699-719MHz, FDD-LTE Band 13: Tx: 777-787MHz, FDD-LTE Band 17: Tx: 704-716MHz

	FDD-LTE Band 25: Tx: 1850-1915MHz, FDD-LTE Band 26: Tx: 814-864MHz&824-849MHz FDD-LTE Band 30: Tx: 2300-2310MHz, TDD-LTE Band 40: Tx: 2305-2315MHz&2350-2360MHz FDD-LTE Band 66: Tx: 1710-1770MHz,
Downlink Frequency:	FDD-LTE Band 2: Rx: 1930-1990MHz, FDD-LTE Band 4: Rx: 2110-2155MHz, FDD-LTE Band 5: Rx: 869-894MHz, FDD-LTE Band 7: Rx: 2620-2690MHz, FDD-LTE Band 12: Rx: 729-749MHz, FDD-LTE Band 13: Rx: 746-756MHz, FDD-LTE Band 17: Rx: 734-746MHz FDD-LTE Band 25: Rx: 1930-1995MHz, FDD-LTE Band 26: Rx: 814-864MHz&824-849MHz FDD-LTE Band 30: Rx: 2300-2310MHz, TDD-LTE Band 40: Rx: 2305-2315MHz&2350-2360MHz FDD-LTE Band 66: Rx: 1710-1770MHz,
RF Output Power:	FDD-LTE Band 2: 22.62 dBm, FDD-LTE Band 4: 23.43 dBm, FDD-LTE Band 5: 23.33 dBm, FDD-LTE Band 7: 23.66 dBm, FDD-LTE Band 12: 23.79 dBm, FDD-LTE Band 13: 23.53 dBm, FDD-LTE Band 17: 23.52 dBm, FDD-LTE Band 25: 23.50 dBm, FDD-LTE Band 26(814-824MHz): 23.33 dBm, FDD-LTE Band 26(824-849MHz): 23.67 dBm, FDD-LTE Band 30: 23.56 dBm, FDD-LTE Band 40(2305-2315MHz): 23.52 dBm, FDD-LTE Band 40(2350-2360MHz): 21.67 dBm, FDD-LTE Band 66: 24.78dBm
Type of Modulation:	QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	FDD-LTE Band 2: 1.53dBi, FDD-LTE Band 4: 1.12dBi, FDD-LTE Band 5: 1.56dBi, FDD-LTE Band 7: 1.6dBi, FDD-LTE Band 12: 1.12dBi, FDD-LTE Band 13: 1.36dBi, FDD-LTE Band 17: 1.16dBi, FDD-LTE Band 25: 1.44dBi, FDD-LTE Band 26: 1.45dBi, FDD-LTE Band 30: 1.47dBi, TDD-LTE Band 40: 1.55dBi,

	FDD-LTE Band 66: 1.58dBi
WIFI(2.4G)	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz for 11b/g/n(HT20) 2422-2452MHz for 11n(HT40)
RF Output Power:	16.44dBm (Conducted)
Type of Modulation:	CCK, OFDM, QPSK, BPSK, 16QAM, 64QAM
Data Rate:	1-11Mbps, 6-54Mbps, up to 150Mbps
Quantity of Channels:	11 for 802.11b/g/n(HT20) 7 for 802.11n(HT40)
Channel Separation:	5MHz
Antenna Type:	Integral Antenna
Antenna Gain:	2.36dBi
Bluetooth	
Bluetooth Version:	V5.0
Frequency Range:	2402-2480MHz
RF Output Power:	7.670dBm (Conducted)
Data Rate:	1Mbps, 2Mbps, 3Mbps
Modulation:	GFSK, Pi/4 QDPSK, 8DPSK
Quantity of Channels:	79/40
Channel Separation:	1MHz/2MHz
Antenna Type:	Integral Antenna
Antenna Gain:	2.36dBi
WIFI(5G)	
Support Standards:	802.11a, 802.11n-HT20/40,802.11ac-HT80
Frequency Range:	Band 1: 5180-5240MHz,Band 2: 5260-5320MHz, Band 3: 5500-5700MHz,Band 4: 5745-5825MHz
RF Output Power:	11.97dBm (Conducted)
Type of Modulation:	QPSK, 16QAM, 64QAM
Type of Antenna:	Internal Antenna
Antenna Gain:	1.44dBi
NFC	
Support Standards:	NFC
Frequency Range:	13.56MHz
Max. Field Strength:	58.03dBuV/m (at 3m)
Antenna Type:	Integral Antenna

1.2 Test Standards

The following report is prepared on behalf of the Cyrus Technology GmbH 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 ,KDB 941225 D06 v02r01, 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: Shenzhen SEM Test Technology Co., Ltd.
Address: 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C. (518101）

FCC – Registration No.: 125990
Shenzhen SEM Test Technology 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 Shenzhen SEM.Test Technology 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	Head SAR	Body-worn (10mm Gap)	Hotspot (10mm Gap)	SAR_{1g} Limit (W/kg)
	Maximum SAR_{1g} (W/kg)	Maximum SAR_{1g} (W/kg)	Maximum SAR_{1g} (W/kg)	
GSM850	**1.173**	0.637	**1.194**	1.6
GSM1900	0.435	0.437	0.742	1.6
WCDMA Band 2	0.258	0.717	0.717	1.6
WCDMA Band 5	0.357	0.550	0.550	1.6
WCDMA Band 4	0.568	0.777	0.777	1.6
FDD-LTE 2	0.420	0.718	0.718	1.6
FDD-LTE 4	0.600	**1.137**	1.137	1.6
FDD-LTE 5	0.366	0.548	0.548	1.6
FDD-LTE 7	0.501	1.009	1.024	1.6
FDD-LTE 12	0.366	0.719	0.719	1.6
FDD-LTE 13	0.450	0.761	0.761	1.6
FDD-LTE 17	0.340	0.859	0.859	1.6
FDD-LTE 25	0.431	0.729	0.729	1.6
FDD-LTE 26	0.459	0.680	0.680	1.6
FDD-LTE 30	0.310	0.538	0.538	1.6
TDD-LTE 40	0.030	0.250	0.250	1.6
FDD-LTE 66	0.665	0.758	0.758	1.6
WLAN 2.4G	0.204	0.195	0.195	1.6
WLAN 5.2G	0.343	0.193	0.193	1.6
WLAN 5.3G	0.429	0.235	0.235	1.6
WLAN 5.6G	0.346	0.340	0.340	1.6
WLAN 5.8G	0.147	0.130	0.130	1.6
Simultaneous Transmission	1.453	1.349	**1.534**	1.6

Front-of the face SAR (25mm Gap)

Frequency Band	Maximum SAR_{1g} (W/kg)	SAR_{1g} Limit (W/kg)
GSM850	0.344	1.6
GSM1900	0.105	1.6

Remark:

The highest reported SAR values for head, body-worn accessory, wireless router(hotspot), front-of the face and simultaneous transmission conditions are ***1.173W/kg, 1.137W/kg , 1.194W/kg, 0.344W/kg and 1.534W/kg*** *respectively.*

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, and had been tested in accordance with the measurement methods and procedure specified in IEEE 1528-2013 and KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02

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 techiques 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:

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

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

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

Where: C is the specific heat capacity, δ T is the temperature rise and δ t is the exposure duration, or related to the
electrical field in the tissue by

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

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.

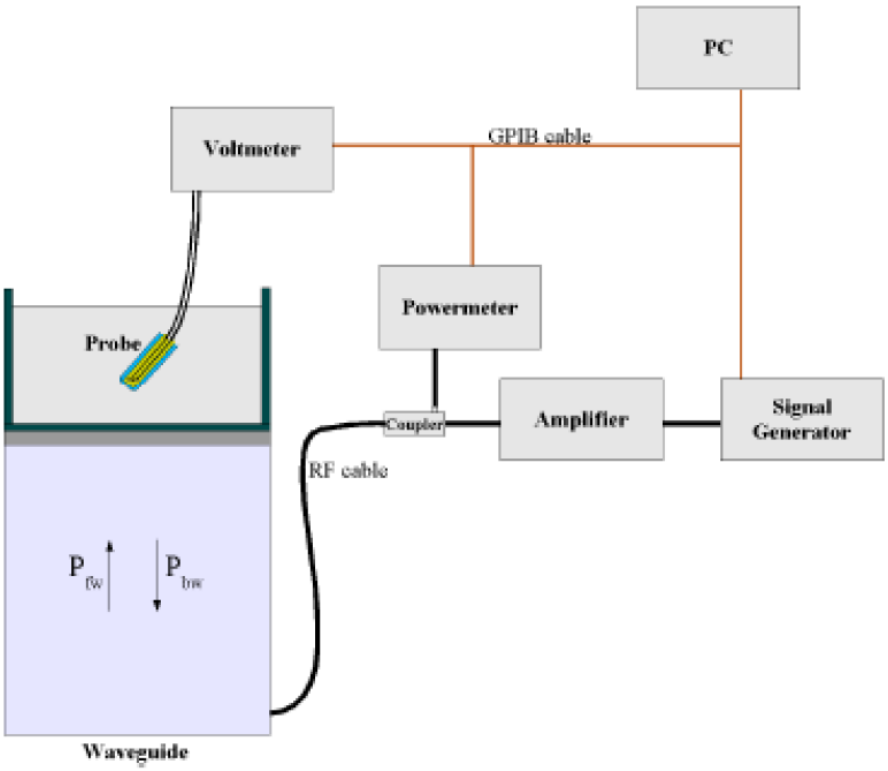
4.2 Probe

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
- 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 suface normal line:1ess 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.



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

Where :

Pfw = Forward Power

Pbw = Backward Power

a and b =Waveguide dimensions

I = 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:

$$CF(N)=SAR(N)/Vlin(N)\ (N=1,2,3)$$

The linearised output voltage Vlin(N) is obtained from the displayed output voltage V(N) using

$$Vlin(N)=V(N)*(1+V(N)/DCP(N))\ (N=1,2,3)$$

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.

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

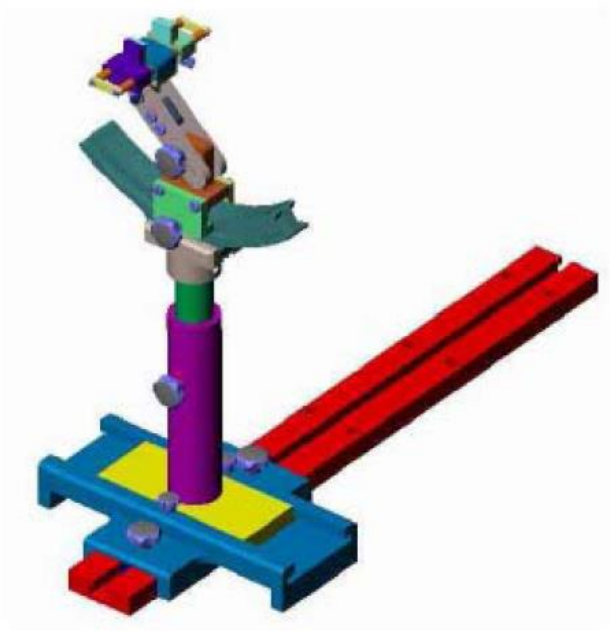
Where:
σ = simulated tissue conductivity,
ρ = Tissue density (1.25 g/cm3 for brain tissue)

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

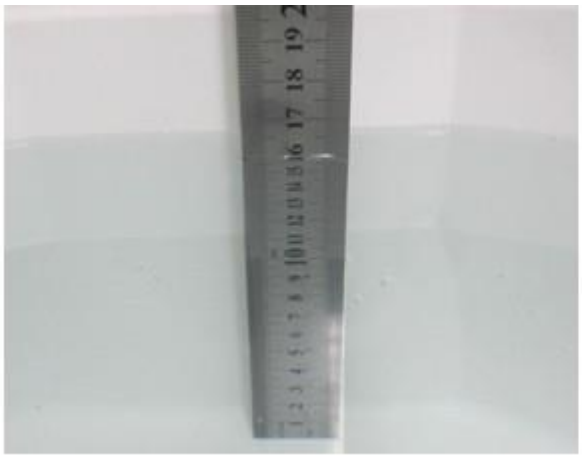
4.6 Test Equipment List

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
E-Field Probe	MVG	SSE5	SN 09/13 EP168	2019-05-22	2020-05-21
E-Field Probe	MVG	SSE2	SN 45/15 EPGO280	2019-07-08	2020-07-07
750MHz Dipole	MVG	SID750	SN 47/12 DIP 0G750-203	2019-03-16	2020-03-15
835MHz Dipole	MVG	SID835	SN 47/12 DIP 0G835-204	2019-03-16	2020-03-15
1800MHz Dipole	MVG	SID1800	SN 47/12 DIP 1G800-206	2019-03-16	2020-03-15
1900MHz Dipole	MVG	SID1900	SN 47/12 DIP 1G900-207	2019-03-16	2020-03-15
2450MHz Dipole	MVG	SID2450	SN 13/15 DIP 2G450-364	2019-03-16	2020-03-15
2600MHz Dipole	MVG	SID2600	SN 13/15 DIP 2G600-365	2019-03-16	2020-03-15
5 GHz Waveguide	MVG	SWG5500	SN 49/16 WGA45	2019-07-15	2020-07-14
Dielectric Probe Kit	MVG	SCLMP	SN 47/12 OCPG49	2019-03-16	2020-03-15
SAM Phantom	MVG	SAM	SN/ 47/12 SAM95	N/A	N/A
MULTIMETER	KEITHLEY	Keithley 2000	4006367	2019-04-30	2020-04-29
Signal Generator	Rohde & Schwarz	SMR20	100047	2019-04-30	2020-04-29
Universal Tester	Rohde & Schwarz	CMU200	112012	2019-04-30	2020-04-29
Communications Tester	Rohde & Schwarz	CMW500	148650	2019-04-30	2020-04-29
Network Analyzer	HP	8753C	2901A00831	2019-04-30	2020-04-29
Directional Couplers	Agilent	778D	20160	2019-04-30	2020-04-29

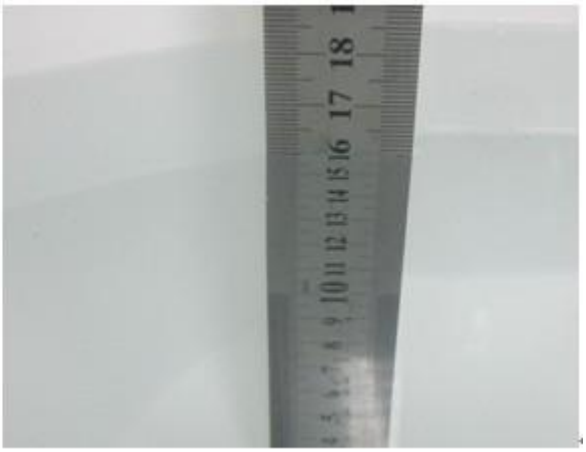
5. Tissue Simulating Liquids

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 Head SAR



Liquid Height for Body SAR

The Composition of Tissue Simulating Liquid

Frequency (MHz)	Water (%)	Salt (%)	Sugar (%)	HEC (%)	Preventol (%)	DGBE (%)
Head						
750	41.1	1.4	57.0	0.2	0.3	0
835	40.3	1.4	57.9	0.2	0.2	0
1700-1900	55.2	0.3	0	0	0	44.5
2450	55.0	0.1	0	0	0	44.9
2600	54.9	0.1	0	0	0	45.0
Body						
750	50.0	0.8	48.8	0.2	0.2	0
835	50.8	0.9	48.1	0.1	0.1	0
1700-1900	70.2	0.4	0	0	0	29.4
2450	68.6	0.1	0	0	0	31.3
2600	68.2	0.1	0	0	0	31.7

Frequency (MHz)	Water (%)	Hexyl Carbitol (%)	Triton X-100 (%)
Head			
5000-6000	65.52	17.24	17.24
Body			
5000-6000	78.6	10.7	10.7

5.2 Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

Target Frequency (MHz)	Head		Body	
	Conductivity (σ)	Permittivity (ε_r)	Conductivity (σ)	Permittivity (ε_r)
150	0.76	52.3	0.80	61.9
300	0.87	45.3	0.92	58.2
450	0.87	43.5	0.94	56.7
750	**0.89**	**41.9**	**0.96**	**55.5**
835	**0.90**	**41.5**	**0.97**	**55.2**
900	0.97	41.5	1.05	55.0
915	0.98	41.5	1.06	55.0
1450	1.20	40.5	1.30	54.0
1610	1.29	40.3	1.40	53.8
1750	**1.37**	**40.1**	**1.49**	**53.4**
1800-2000	**1.40**	**40.0**	**1.52**	**53.3**
2450	**1.80**	**39.2**	**1.95**	**52.7**
3000	2.40	38.5	2.73	52.0
5200	**4.66**	**36.0**	**5.30**	**49.0**
5300	**35.9**	**4.76**	**5.42**	**48.9**
5600	**5.07**	**35.5**	**5.77**	**48.5**
5800	**5.27**	**35.3**	**6.00**	**48.2**

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. (℃)	Conductivity			Permittivity			Limit (%)	Date
		Reading (σ)	Target (σ)	Delta (%)	Reading (ε r)	Target (ε r)	Delta (%)		
750	21.2	0.86	0.89	-3.37	41.32	41.90	-1.38	±5	2019-12-09
835	21.2	0.87	0.90	-3.33	41.11	41.50	-0.94	±5	2019-12-09
1750	21.3	1.37	1.37	0.00	39.02	40.1	-2.69	±5	2019-12-10
1800	21.3	1.37	1.40	-2.14	39.02	40.0	-2.45	±5	2019-12-10
1900	21.3	1.38	1.40	-1.43	38.56	40.00	-3.60	±5	2019-12-10
2450	21.3	1.74	1.80	-3.33	38.15	39.20	-2.68	±5	2019-12-11
2600	21.3	1.93	1.96	-1.53	38.63	39.0	-0.95	±5	2019-12-11
5200	21.3	4.87	4.66	4.51	35.6	36.0	-1.11	±5	2019-12-12
5300	21.3	4.74	4.86	-2.47	35.6	35.8	-0.56	±5	2019-12-12
5600	21.3	5.21	5.07	2.76	35.3	35.5	-0.56	±5	2019-12-12
5800	21.3	5.17	5.27	-1.90	35.6	35.3	0.85	±5	2019-12-12

Body Tissue Simulating Liquid									
Freq. MHz.	Temp. (℃)	Conductivity			Permittivity			Limit (%)	Date
		Reading (σ)	Target (σ)	Delta (%)	Reading (ε r)	Target (ε r)	Delta (%)		
750	21.2	0.93	0.96	-3.12	54.96	55.50	-0.97	±5	2019-12-09
835	21.2	0.95	0.97	-2.06	54.85	55.20	-0.63	±5	2019-12-09
1750	21.3	1.46	1.49	-2.01	51.22	53.40	-4.08	±5	2019-12-10
1800	21.3	1.46	1.52	-3.95	51.22	53.30	-3.90	±5	2019-12-10
1900	21.3	1.50	1.52	-1.32	52.42	53.30	-1.65	±5	2019-12-10
2450	21.3	1.91	1.95	-2.05	52.01	52.70	-1.31	±5	2019-12-11
2600	21.3	2.12	2.16	-1.85	52.24	52.50	-0.50	±5	2019-12-11
5200	21.3	5.16	5.30	-2.64	48.50	49.0	-1.02	±5	2019-12-12
5300	21.3	5.26	5.42	-2.95	48.50	48.9	-0.82	±5	2019-12-12
5600	21.3	5.52	5.77	-4.33	48.30	48.5	-0.41	±5	2019-12-12
5800	21.3	5.76	6.00	-4.00	48.50	48.2	0.62	±5	2019-12-12

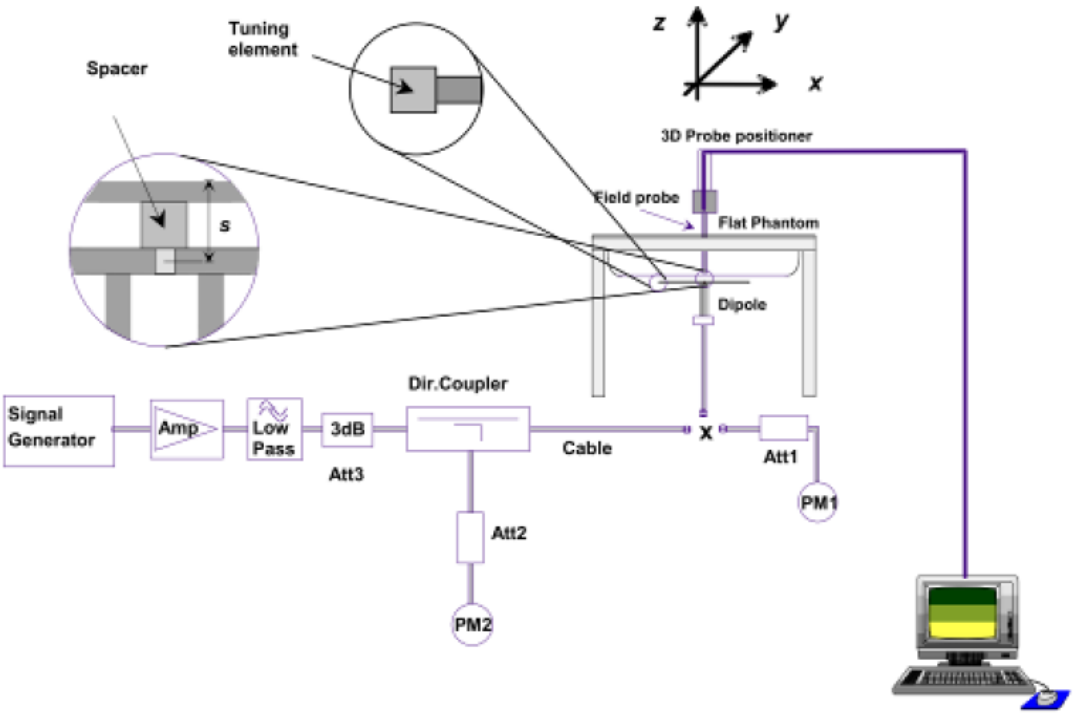
6. SAR Measurement Evaluation

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 835 MHz and 1900 MHz. 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 MHz	Targeted SAR_{1g} (W/kg)	Measured SAR_{1g} (W/kg)	Normalized SAR_{1g} (W/kg)	Tolerance (%)	Date
Head					
750	8.40	2.16	8.64	2.86	2019-12-09
835	9.67	2.41	9.64	-0.31	2019-12-09
1800	38.51	9.61	38.44	-0.18	2019-12-10
1900	39.58	9.91	39.64	0.15	2019-12-10
2450	53.69	13.45	53.8	0.20	2019-12-11
2600	55.13	13.67	54.68	-0.82	2019-12-11
Body					
750	8.40	2.12	8.48	0.95	2019-12-09
835	9.38	2.35	9.4	0.21	2019-12-09
1800	38.31	9.58	38.32	0.03	2019-12-10
1900	39.10	9.78	39.12	0.05	2019-12-10
2450	50.41	12.59	50.36	-0.10	2019-12-11

2600	53.89	13.43	53.72	-0.32	2019-12-11

Frequency	Liquid	Power (mw)	Targeted SAR1g	Measured SAR1g	Normalized SAR1g	Tolerance
5200	Head	100	161.23	16.946	169.46	5.10
5200	Body	100	154.45	16.681	166.81	8.00
5800	Head	100	179.32	16.946	169.46	-5.50
5800	Body	100	170.71	16.681	166.81	-2.28

Remark: Referring to IEEE 1528-2013, Section 8.2, The system check shall be performed at a test frequency that is within ±10% or ±100 MHz of the compliance test mid-band frequency, so the 1750 MHz system verification is made of 1800MHz Dipole.

Targeted and Measurement SAR

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

7. EUT Testing Position

7.1 Define Two Imaginary Lines on The Handset

(a) The vertical centerline 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.

(b) 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.

(c) 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.

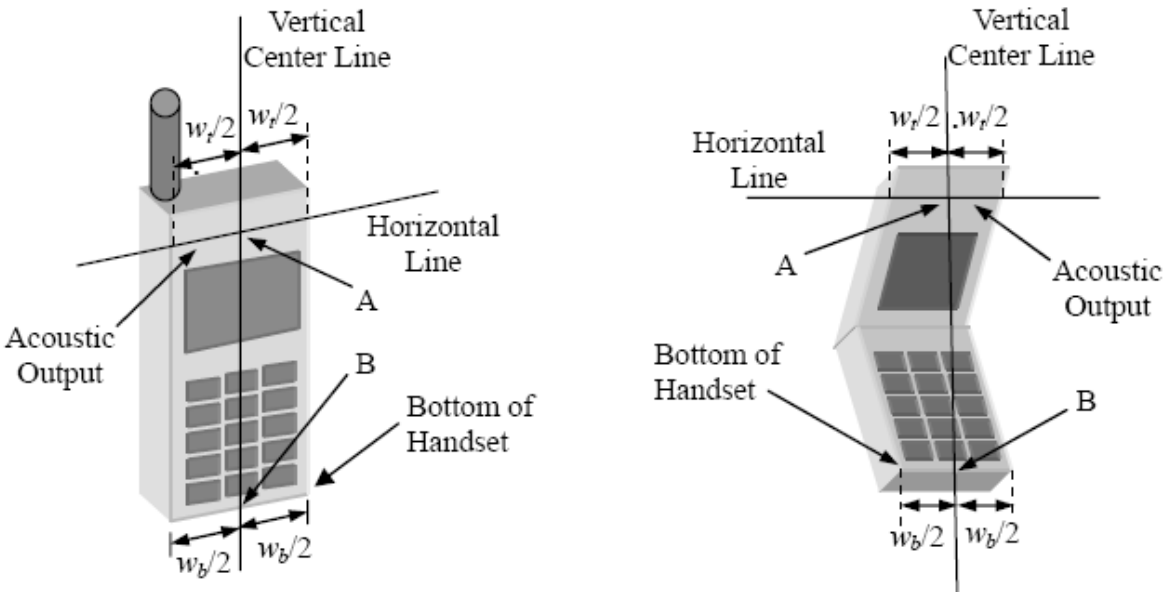


Illustration for Handset Vertical and Horizontal Reference Lines

7.2 Cheek Position

(a) 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.
(b) 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 (see Fig. 7.2).

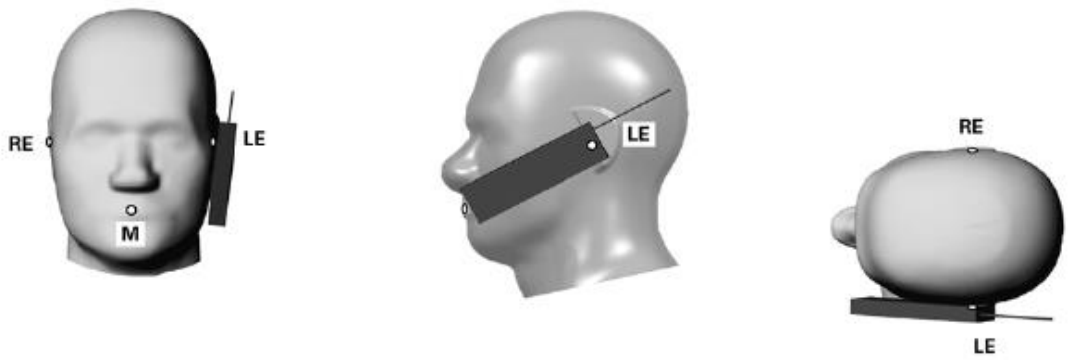


Illustration for Cheek Position

7.3 Tilted Position

(a) To position the device in the “cheek” position described above.
(b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost (see Fig. 7.3).

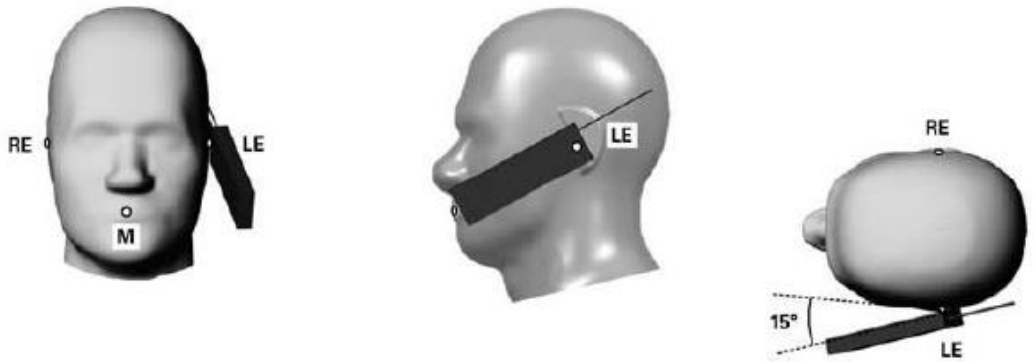


Illustration for Tilted Position

7.4 Body Worn Position

(a) To position the device parallel to the phantom surface with either keypad up or down.
(b) To adjust the device parallel to the flat phantom.
(c) To adjust the distance between the device surface and the flat phantom to 10mm.

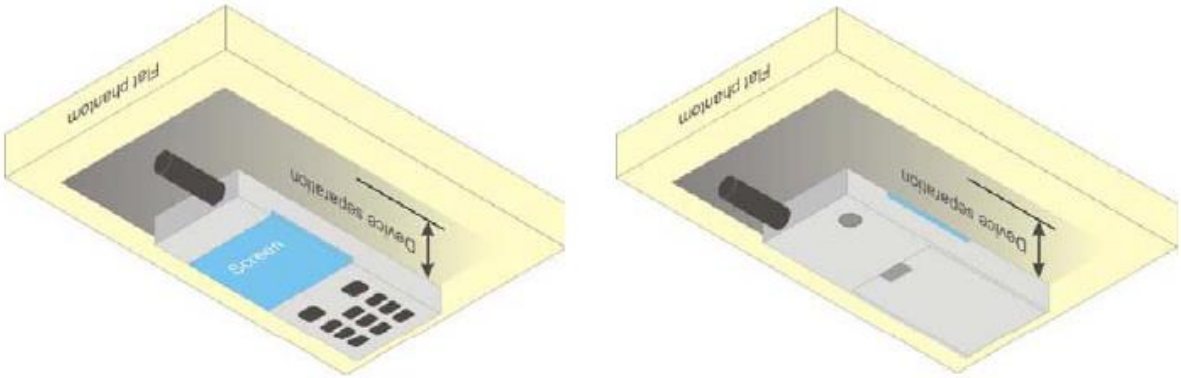
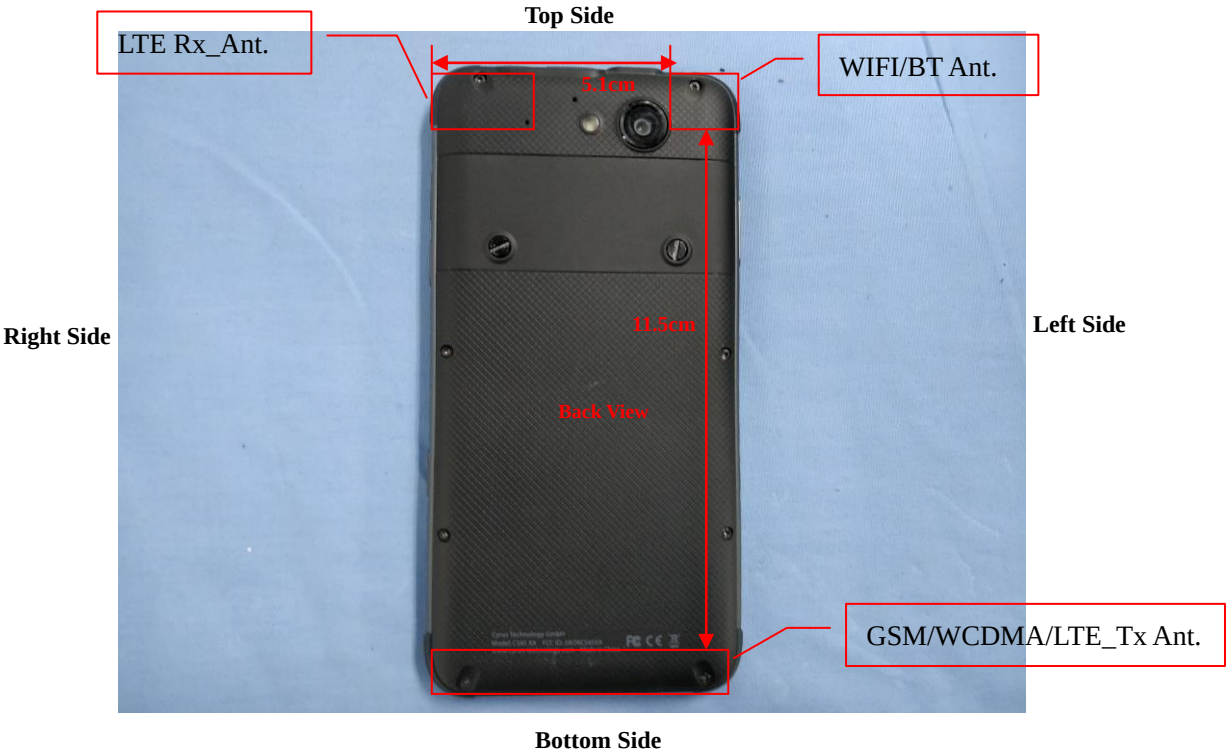
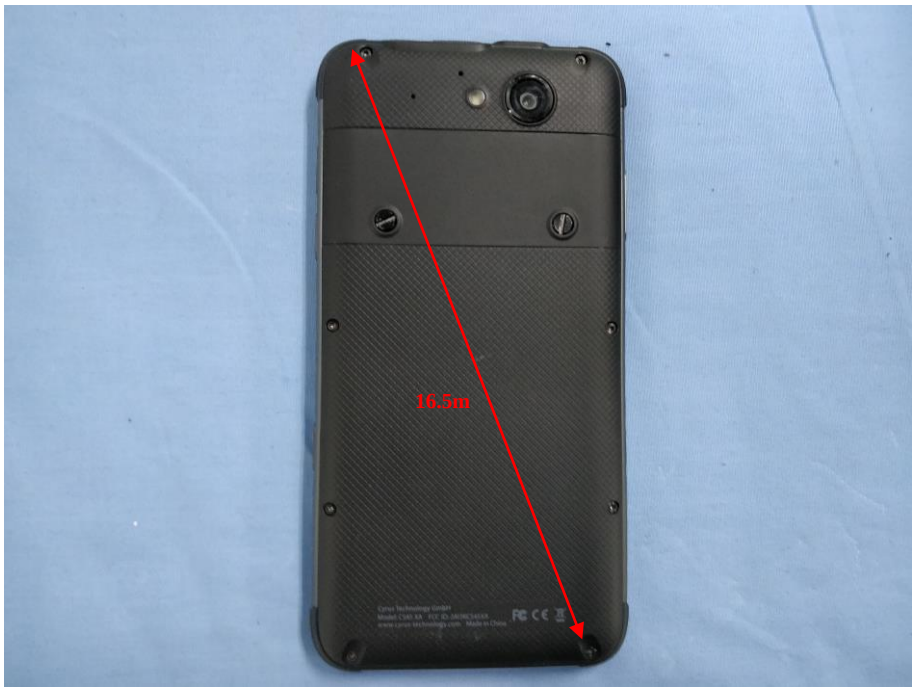


Illustration for Body Worn Position

7.5 EUT Antenna Position





Block Diagram for EUT Antenna Position

7.6 EUT Testing Position

Head/Body-worn/Hotspot mode SAR assessments are required for this device. This EUT was tested in different positions for different SAR test modes, more information as below:

Head SAR tests				
Antennas	**Right Cheek**	**Left Cheek**	**Right Tilted**	**Left Tilted**
WWAN	Yes	Yes	Yes	Yes
WLAN	Yes	Yes	Yes	Yes

Hotspot SAR tests, Test distance: 10mm						
Antennas	**Front**	**Back**	**Right Side**	**Left Side**	**Top Side**	**Bottom Side**
WWAN	Yes	Yes	Yes	Yes	No	Yes
WLAN	Yes	Yes	No	Yes	Yes	No

Body-worn SAR tests, Test distance: 10mm		
Antennas	**Front**	**Back**
WWAN	Yes	Yes
WLAN	Yes	Yes

Front-of the face SAR tests, Test distance: 25mm	
Antennas	**Front**
WWAN	Yes

Remark:

1. Referring to KDB 941225 D06, when the overall device length and width are >= 9cm*5cm, the test separation distances is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.

2. Referring to KDB 648474 D04 Handset SAR v01r03, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg

3. The EUT supports PTT function only through GPRS/EDGE network function. With PTT mode, a test separation distance of 25 mm is used for in-front-of the face SAR.

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 form 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

GSM - Burst Average Power (dBm)								
Band	**GSM850**			**Tune-up power (dBm)**	**PCS1900**			**Tune-up power (dBm)**
Channel	**128**	**190**	**251**		**512**	**661**	**810**	
Frequency (MHz)	**824.2**	**836.6**	**848.8**		**1850.2**	**1880**	**1909.8**	
GSM	32.40	32.42	32.34	32.5	30.26	30.31	30.33	30.5
GPRS (1 slot)	32.52	32.43	32.36	33.0	30.26	30.25	30.27	30.5
GPRS (2 slots)	31.86	31.79	31.75	32.0	29.29	29.39	29.34	29.5
GPRS (3 slots)	30.29	30.24	30.15	30.5	27.07	27.19	27.18	27.5
GPRS (4 slots)	29.27	29.17	29.06	29.5	25.96	26.11	26.05	26.5
EDGE (1 slot)	26.86	26.75	26.73	27.0	26.04	25.9	25.76	26.5
EDGE (2 slots)	25.68	25.62	25.54	26.0	25.09	24.89	24.79	25.5
EDGE (3 slots)	23.66	23.61	23.50	24.0	22.95	22.79	22.68	23.0
EDGE (4 slots)	22.50	22.38	22.40	23.0	21.78	21.65	21.52	22.0

GSM - Source-Based Time-Average Power (dBm)								
Band	**GSM850**			**Tune-up power (dBm)**	**PCS1900**			**Tune-up power (dBm)**
Channel	**128**	**190**	**251**		**512**	**661**	**810**	
Frequency (MHz)	**824.2**	**836.6**	**848.8**		**1850.2**	**1880**	**1909.8**	
GSM	23.40	23.42	23.34	23.5	21.26	21.31	21.33	21.5
GPRS (1 slot)	23.52	23.43	23.36	24.0	21.26	21.25	21.27	21.5
GPRS (2 slots)	25.86	25.79	25.75	26.0	23.29	23.39	23.34	23.5
GPRS (3 slots)	26.04	25.99	25.90	26.5	22.82	22.94	22.93	23.0
GPRS (4 slots)	26.27	26.17	26.06	26.5	22.96	23.11	23.05	23.5
EDGE (1 slot)	17.86	17.75	17.73	18.0	17.04	16.90	16.76	17.5
EDGE (2 slots)	19.68	19.62	19.54	20.0	19.09	18.89	18.79	19.5
EDGE (3 slots)	19.41	19.36	19.25	19.5	18.70	18.54	18.43	19.0
EDGE (4 slots)	19.50	19.38	19.40	20.0	18.78	18.65	18.52	19.0
Note: The source-based time-averaged power is linearly scaled the maximum burst averaged power based on time slots. The calculated method are shown as below: Source based time-average power = Burst averaged power - Duty cycle factor in dB Duty cycle factor = 9 dB for 1 Tx slot, 6 dB for 2 Tx slots, 4.25 dB for 3 Tx slots, 3 dB for 4 Tx slots								

Remark:

1. For Head SAR testing, GSM GPRS (4TX slots) and GPRS (2TX slots) should be evaluated, therefore the EUT was set in GSM and GPRS (4TX slots) for GSM850 and GPRS (2TX slots) for GSM1900 due to its highest source-based time-average power.
2. For Body SAR testing, GPRS should be evaluated, therefore the EUT was set in GPRS (4TX slots) for GSM850 and

GPRS (2TX slots) for GSM1900 due to its highest source-based time-average power.

3. Per KDB 447498 D01 v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.

4. The DUT do not support DTM function.

5. This device supports VOIP capability through 3rd party apps software.

WCDMA - Average Power (dBm)								
Band	**WCDMA Band II**				**WCDMA Band V**			
Channel	**9262**	**9400**	**9538**	**Tune-up power (dBm)**	**4132**	**4182**	**4233**	**Tune-up power (dBm)**
Frequency (MHz)	**1852.4**	**1880.0**	**1907.6**		**826.4**	**836.6**	**846.6**	
RMC 12.2k	22.72	22.75	22.74	23.0	22.97	22.93	22.90	23.0
HSDPA Subtest-1	21.75	21.78	21.76	22.0	21.99	21.97	22.00	22.5
HSDPA Subtest-2	21.73	21.76	21.73	22.0	21.96	21.95	21.96	22.0
HSDPA Subtest-3	21.74	21.75	21.74	22.0	21.97	21.94	21.97	22.0
HSDPA Subtest-4	21.72	21.74	21.75	22.0	21.98	21.96	21.98	22.0
HSUPA Subtest-1	21.87	21.82	21.80	22.0	21.98	22.01	21.89	22.5
HSUPA Subtest-2	21.85	21.8	21.76	22.0	21.96	21.96	21.86	22.0
HSUPA Subtest-3	21.84	21.81	21.78	22.0	21.95	21.98	21.87	22.0
HSUPA Subtest-4	21.86	21.79	21.79	22.0	21.97	21.98	21.86	22.0
HSUPA Subtest-5	21.85	21.78	21.76	22.0	21.96	21.99	21.87	22.0

WCDMA - Average Power (dBm)								
Band	**WCDMA Band IV**							
Channel	**1312**	**1412**	**1513**	**Tune-up power (dBm)**				
Frequency (MHz)	**1712.4**	**1732.4**	**1752.6**					
RMC 12.2k	21.26	21.34	21.52	22.0				
HSDPA Subtest-1	20.35	20.37	20.59	21.0				
HSDPA Subtest-2	20.32	20.35	20.56	21.0				
HSDPA Subtest-3	20.31	20.34	20.56	21.0				
HSDPA Subtest-4	20.32	20.35	20.57	21.0				
HSUPA Subtest-1	20.67	20.32	20.61	21.0				
HSUPA Subtest-2	20.65	20.31	20.59	21.0				
HSUPA Subtest-3	20.63	20.31	20.60	21.0				
HSUPA Subtest-4	20.64	20.31	20.58	21.0				
HSUPA Subtest-5	20.65	20.31	20.58	21.0				

Remark:

1. For Head SAR, per KDB 941225 D01 v03, RMC 12.2kbps setting is used to evaluate SAR. If AMR 12.2kbps power is < 1/4 dB higher than RMC, SAR tests with AMR 12.2kbps can be excluded.

2. For Body SAR, per KDB 941225 D01 v03, RMC 12.2kbps setting is used to evaluate SAR. If HSDPA subset-1 output power is < 1/4 dB higher than RMC, and SAR with RMC 12.2kbps setting is ≦1.2W/kg, HSDPA SAR evaluation can be excluded

FDD-LTE Band 2:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.24	0
		1	3	22.35	0
		1	5	22.22	0
		3	0	21.35	0
		3	2	21.37	0
		3	3	21.35	0
		6	0	21.27	1
	MCH	1	0	22.16	0
		1	3	22.37	0
		1	5	22.14	0
		3	0	21.26	0
		3	2	21.27	0
		3	3	21.27	0
		6	0	21.21	1
	HCH	1	0	22.20	0
		1	3	22.34	0
		1	5	22.24	0
		3	0	21.32	0
		3	2	21.36	0
		3	3	21.37	0
		6	0	21.27	1
16QAM	LCH	1	0	21.50	1
		1	3	21.64	1
		1	5	21.52	1
		3	0	21.46	1
		3	2	21.48	1
		3	3	21.44	1
		6	0	20.98	2
	MCH	1	0	21.50	1
		1	3	21.64	1
		1	5	21.48	1
		3	0	21.22	1
		3	2	21.24	1
		3	3	21.22	1
		6	0	20.88	2
	HCH	1	0	21.47	1
		1	3	21.70	1

		1	5	21.49	1
		3	0	21.36	1
		3	2	21.41	1
		3	3	21.41	1
		6	0	20.92	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.24	0
		1	7	22.49	0
		1	14	22.29	0
		8	0	21.29	1
		8	4	21.32	1
		8	7	21.25	1
		15	0	21.22	1
	MCH	1	0	22.22	0
		1	7	22.44	0
		1	14	22.16	0
		8	0	21.23	1
		8	4	21.26	1
		8	7	21.19	1
		15	0	21.15	1
	HCH	1	0	22.24	0
		1	7	22.39	0
		1	14	22.21	0
		8	0	21.20	1
		8	4	21.26	1
		8	7	21.20	1
		15	0	21.24	1
16QAM	LCH	1	0	21.57	1
		1	7	21.80	1
		1	14	21.58	1
		8	0	20.55	2
		8	4	20.40	2
		8	7	20.93	2
		15	0	20.26	2
	MCH	1	0	21.55	1
		1	7	21.77	1
		1	14	21.54	1
		8	0	20.65	2
		8	4	20.75	2
		8	7	20.97	2

		15	0	20.56	2
	HCH	1	0	21.46	1
		1	7	21.70	1
		1	14	21.52	1
		8	0	20.75	2
		8	4	20.69	2
		8	7	20.45	2
		15	0	20.73	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.24	0
		1	12	22.56	0
		1	24	22.27	0
		12	0	21.27	1
		12	6	21.31	1
		12	13	21.25	1
		25	0	21.28	1
	MCH	1	0	22.19	0
		1	12	22.38	0
		1	24	22.09	0
		12	0	21.21	1
		12	6	21.23	1
		12	13	21.06	1
		25	0	21.20	1
	HCH	1	0	22.14	0
		1	12	22.49	0
		1	24	22.22	0
		12	0	21.26	1
		12	6	21.26	1
		12	13	21.11	1
		25	0	21.20	1
16QAM	LCH	1	0	21.45	1
		1	12	21.85	1
		1	24	21.49	1
		12	0	20.74	2
		12	6	20.89	2
		12	13	20.75	2
		25	0	20.90	2
	MCH	1	0	21.40	1
		1	12	21.68	1
		1	24	21.30	1

		12	0	20.71	2
		12	6	20.85	2
		12	13	20.80	2
		25	0	20.93	2
	HCH	1	0	21.29	1
		1	12	21.70	1
		1	24	21.41	1
		12	0	20.69	2
		12	6	20.54	2
		12	13	20.77	2
		25	0	20.92	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.27	0
		1	24	22.48	0
		1	49	22.28	0
		25	0	21.46	1
		25	12	21.36	1
		25	25	21.37	1
		50	0	21.42	1
	MCH	1	0	22.24	0
		1	24	22.36	0
		1	49	22.09	0
		25	0	21.27	1
		25	12	21.21	1
		25	25	21.09	1
		50	0	21.18	1
	HCH	1	0	22.18	0
		1	24	22.33	0
		1	49	22.24	0
		25	0	21.13	1
		25	12	21.19	1
		25	25	21.06	1
		50	0	21.04	1
16QAM	LCH	1	0	21.52	1
		1	24	21.78	1
		1	49	21.61	1
		25	0	20.41	2
		25	12	20.39	2
		25	25	20.40	2
		50	0	20.44	2

	MCH	1	0	21.63	1
		1	24	21.70	1
		1	49	21.45	1
		25	0	20.78	2
		25	12	20.98	2
		25	25	20.78	2
		50	0	20.69	2
	HCH	1	0	21.45	1
		1	24	21.58	1
		1	49	21.50	1
		25	0	20.56	2
		25	12	20.48	2
		25	25	20.69	2
		50	0	20.97	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.20	0
		1	37	22.59	0
		1	74	22.18	0
		37	0	21.44	1
		37	18	21.42	1
		37	38	21.36	1
		75	0	21.42	1
	MCH	1	0	22.19	0
		1	37	22.43	0
		1	74	21.93	0
		37	0	21.34	1
		37	18	21.34	1
		37	38	21.13	1
		75	0	21.24	1
	HCH	1	0	22.09	0
		1	37	22.35	0
		1	74	22.16	0
		37	0	21.10	1
		37	18	21.20	1
		37	38	21.17	1
		75	0	21.15	1
16QAM	LCH	1	0	21.50	1
		1	37	21.86	1
		1	74	21.54	1
		37	0	20.42	2

		37	18	20.41	2
		37	38	20.80	2
		75	0	20.43	2
	MCH	1	0	21.55	1
		1	37	21.79	1
		1	74	21.30	1
		37	0	20.90	2
		37	18	20.68	2
		37	38	20.74	2
		75	0	20.84	2
	HCH	1	0	21.45	1
		1	37	21.71	1
		1	74	21.37	1
		37	0	20.99	2
		37	18	20.74	2
		37	38	20.83	2
		75	0	20.62	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.26	0
		1	49	22.62	0
		1	99	22.32	0
		50	0	21.50	1
		50	25	21.58	1
		50	50	21.42	1
		100	0	21.50	1
	MCH	1	0	22.27	0
		1	49	22.43	0
		1	99	22.01	0
		50	0	21.26	1
		50	25	21.22	1
		50	50	20.90	1
		100	0	21.06	1
	HCH	1	0	21.95	0
		1	49	22.42	0
		1	99	21.98	0
		50	0	21.10	0.5
		50	25	21.19	0.5
		50	50	21.13	0.5
		100	0	21.06	0.5
16QAM	LCH	1	0	21.46	1

		1	49	21.85	1
		1	99	21.50	1
		50	0	20.50	2
		50	25	20.40	2
		50	50	20.43	2
		100	0	20.51	2
	MCH	1	0	21.68	1
		1	49	21.72	1
		1	99	21.33	1
		50	0	20.91	2
		50	25	20.72	2
		50	50	20.96	2
		100	0	20.68	2
	HCH	1	0	21.33	1
		1	49	21.58	1
		1	99	21.33	1
		50	0	20.93	2
		50	25	20.72	2
		50	50	20.86	2
		100	0	20.92	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	23.09	0
		1	3	23.23	0
		1	5	23.05	0
		3	0	22.17	0
		3	2	22.19	0
		3	3	22.14	0
		6	0	22.13	1
	MCH	1	0	23.12	0
		1	3	23.16	0
		1	5	23.04	0
		3	0	22.19	0
		3	2	22.14	0
		3	3	22.17	0
		6	0	22.07	1
	HCH	1	0	22.78	0
		1	3	22.97	0

		1	5	22.83	0
		3	0	21.96	0
		3	2	21.99	0
		3	3	21.96	0
		6	0	21.87	1
16QAM	LCH	1	0	22.31	1
		1	3	22.42	1
		1	5	22.29	1
		3	0	22.27	1
		3	2	22.28	1
		3	3	22.26	1
		6	0	21.12	2
	MCH	1	0	22.47	1
		1	3	22.46	1
		1	5	22.42	1
		3	0	22.15	1
		3	2	22.17	1
		3	3	22.19	1
		6	0	21.08	2
	HCH	1	0	22.10	1
		1	3	22.28	1
		1	5	22.14	1
		3	0	22.00	1
		3	2	22.00	1
		3	3	22.04	1
		6	0	21.05	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.07	0
		1	7	23.24	0
		1	14	23.03	0
		8	0	22.04	1
		8	4	22.05	1
		8	7	22.04	1
		15	0	22.06	1
	MCH	1	0	23.07	0
		1	7	23.30	0
		1	14	23.03	0
		8	0	22.05	1
		8	4	22.06	1
		8	7	22.03	1

		15	0	22.02	1
	HCH	1	0	22.87	0
		1	7	23.07	0
		1	14	22.90	0
		8	0	21.85	1
		8	4	21.86	1
		8	7	21.78	1
		15	0	21.80	1
16QAM	LCH	1	0	22.35	1
		1	7	22.49	1
		1	14	22.25	1
		8	0	21.15	2
		8	4	21.22	2
		8	7	21.14	2
		15	0	21.07	2
	MCH	1	0	22.41	1
		1	7	22.47	1
		1	14	22.50	1
		8	0	21.10	2
		8	4	21.12	2
		8	7	21.09	2
		15	0	21.09	2
	HCH	1	0	22.23	1
		1	7	22.32	1
		1	14	22.17	1
		8	0	20.85	2
		8	4	20.89	2
		8	7	20.83	2
		15	0	20.86	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.06	0
		1	12	23.38	0
		1	24	23.00	0
		12	0	22.04	1
		12	6	22.10	1
		12	13	21.99	1
		25	0	22.05	1
	MCH	1	0	23.06	0
		1	12	23.33	0
		1	24	22.96	0

		12	0	22.03	1
		12	6	22.13	1
		12	13	22.06	1
		25	0	22.09	1
	HCH	1	0	22.90	0
		1	12	23.10	0
		1	24	22.84	0
		12	0	21.88	1
		12	6	21.91	1
		12	13	21.77	1
		25	0	21.87	1
16QAM	LCH	1	0	22.33	1
		1	12	22.45	1
		1	24	22.25	1
		12	0	21.12	2
		12	6	21.18	2
		12	13	21.11	2
		25	0	21.14	2
	MCH	1	0	22.33	1
		1	12	22.44	1
		1	24	22.30	1
		12	0	21.19	2
		12	6	21.26	2
		12	13	21.24	2
		25	0	21.19	2
	HCH	1	0	22.10	1
		1	12	22.31	1
		1	24	22.00	1
		12	0	20.91	2
		12	6	20.95	2
		12	13	20.82	2
		25	0	20.99	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.04	0
		1	24	23.19	0
		1	49	23.03	0
		25	0	22.11	1
		25	12	22.04	1
		25	25	22.07	1
		50	0	22.10	1
	MCH	1	0	23.07	0
		1	24	23.22	0
		1	49	22.95	0
		25	0	22.11	1
		25	12	22.10	1
		25	25	22.09	1
		50	0	22.12	1
	HCH	1	0	22.95	0
		1	24	23.04	0
		1	49	22.83	0
		25	0	22.01	1
		25	12	21.91	1
		25	25	21.87	1
		50	0	21.92	1
16QAM	LCH	1	0	22.35	1
		1	24	22.46	1
		1	49	22.32	1
		25	0	21.16	2
		25	12	21.13	2
		25	25	21.16	2
		50	0	21.16	2
	MCH	1	0	22.45	1
		1	24	22.47	1
		1	49	22.42	1
		25	0	21.20	2
		25	12	21.21	2
		25	25	21.24	2
		50	0	21.21	2
	HCH	1	0	22.20	1
		1	24	22.31	1
		1	49	22.05	1
		25	0	21.02	2

		25	12	20.98	2
		25	25	20.91	2
		50	0	20.98	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.00	0
		1	37	23.28	0
		1	74	23.00	0
		37	0	22.13	1
		37	18	22.09	1
		37	38	22.10	1
		75	0	22.11	1
	MCH	1	0	23.01	0
		1	37	23.30	0
		1	74	22.83	0
		37	0	22.09	1
		37	18	22.09	1
		37	38	22.08	1
		75	0	22.09	1
	HCH	1	0	22.98	0
		1	37	23.14	0
		1	74	22.79	0
		37	0	22.03	1
		37	18	21.98	1
		37	38	21.90	1
		75	0	21.96	1
16QAM	LCH	1	0	22.26	1
		1	37	22.44	1
		1	74	22.29	1
		37	0	21.12	2
		37	18	21.13	2
		37	38	21.07	2
		75	0	21.17	2
	MCH	1	0	22.32	1
		1	37	22.37	1
		1	74	22.15	1
		37	0	21.10	2
		37	18	21.15	2
		37	38	21.16	2
		75	0	21.15	2
	HCH	1	0	22.20	1

		1	37	22.35	1
		1	74	22.09	1
		37	0	20.98	2
		37	18	21.00	2
		37	38	20.86	2
		75	0	20.97	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.43	0
		1	49	23.29	0
		1	99	23.04	0
		50	0	22.28	1
		50	25	22.07	1
		50	50	22.04	1
		100	0	22.08	1
	MCH	1	0	23.03	0
		1	49	23.28	0
		1	99	22.89	0
		50	0	22.07	1
		50	25	22.12	1
		50	50	22.12	1
		100	0	22.05	1
	HCH	1	0	22.83	0
		1	49	23.18	0
		1	99	22.67	0
		50	0	22.00	1
		50	25	21.99	1
		50	50	21.82	1
		100	0	21.83	1
16QAM	LCH	1	0	22.21	1
		1	49	22.48	1
		1	99	22.21	1
		50	0	21.10	2
		50	25	21.11	2
		50	50	21.11	2
		100	0	21.10	2
	MCH	1	0	22.41	1
		1	49	22.45	1
		1	99	22.30	1
		50	0	21.12	2
		50	25	21.21	2

		50	50	21.20	2
		100	0	21.13	2
	HCH	1	0	22.23	1
		1	49	22.37	1
		1	99	21.94	1
		50	0	21.01	2
		50	25	21.05	2
		50	50	20.88	2
		100	0	20.95	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	22.34	0
		1	3	22.41	0
		1	5	22.28	0
		3	0	22.35	0
		3	2	22.32	0
		3	3	22.36	0
		6	0	21.30	1
	MCH	1	0	22.46	0
		1	3	22.51	0
		1	5	22.44	0
		3	0	22.34	0
		3	2	22.33	0
		3	3	22.34	0
		6	0	21.42	1
	HCH	1	0	22.75	0
		1	3	22.89	0
		1	5	22.76	0
		3	0	22.35	0
		3	2	22.39	0
		3	3	22.36	0
		6	0	21.78	1
16QAM	LCH	1	0	21.59	1
		1	3	21.75	1
		1	5	21.64	1
		3	0	21.56	1
		3	2	21.51	1
		3	3	21.49	1
		6	0	20.35	2
	MCH	1	0	21.82	1
		1	3	22.08	1
		1	5	21.85	1
		3	0	21.55	1
		3	2	21.59	1
		3	3	21.57	1
		6	0	20.44	2
	HCH	1	0	22.07	1
		1	3	22.30	1
		1	5	22.05	1

		3	0	21.89	1
		3	2	21.93	1
		3	3	21.89	1
		6	0	20.94	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.22	0
		1	7	22.59	0
		1	14	22.34	0
		8	0	21.28	1
		8	4	21.35	1
		8	7	21.26	1
		15	0	21.23	1
	MCH	1	0	22.36	0
		1	7	22.61	0
		1	14	22.44	0
		8	0	21.38	1
		8	4	21.48	1
		8	7	21.38	1
		15	0	21.40	1
	HCH	1	0	22.78	0
		1	7	23.02	0
		1	14	22.78	0
		8	0	21.72	1
		8	4	21.76	1
		8	7	21.70	1
		15	0	21.72	1
16QAM	LCH	1	0	21.59	1
		1	7	21.85	1
		1	14	21.65	1
		8	0	20.44	2
		8	4	20.49	2
		8	7	20.57	2
		15	0	20.76	2
	MCH	1	0	21.89	1
		1	7	22.11	1
		1	14	21.97	1
		8	0	20.48	2
		8	4	20.53	2
		8	7	20.50	2
		15	0	20.50	2

	HCH	1	0	22.12	1
		1	7	22.30	1
		1	14	22.11	1
		8	0	20.73	2
		8	4	20.79	2
		8	7	20.74	2
		15	0	20.80	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.26	0
		1	12	22.71	0
		1	24	22.38	0
		12	0	21.33	1
		12	6	21.41	1
		12	13	21.31	1
		25	0	21.40	1
	MCH	1	0	22.40	0
		1	12	22.74	0
		1	24	22.46	0
		12	0	21.39	1
		12	6	21.53	1
		12	13	21.46	1
		25	0	21.50	1
	HCH	1	0	22.72	0
		1	12	23.12	0
		1	24	22.80	0
		12	0	21.65	1
		12	6	21.78	1
		12	13	21.71	1
		25	0	21.74	1
16QAM	LCH	1	0	21.57	1
		1	12	21.94	1
		1	24	21.66	1
		12	0	20.47	2
		12	6	20.51	2
		12	13	20.43	2
		25	0	20.45	2
	MCH	1	0	21.74	1
		1	12	22.06	1
		1	24	21.78	1
		12	0	20.62	2

		12	6	20.72	2
		12	13	20.61	2
		25	0	20.58	2
	HCH	1	0	21.95	1
		1	12	22.28	1
		1	24	21.97	1
		12	0	20.70	2
		12	6	20.86	2
		12	13	20.72	2
		25	0	20.88	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.33	0
		1	24	22.55	0
		1	49	22.37	0
		25	0	22.48	1
		25	12	22.41	1
		25	25	22.39	1
		50	0	21.46	1
	MCH	1	0	23.12	0
		1	24	22.64	0
		1	49	22.56	0
		25	0	21.43	1
		25	12	21.49	1
		25	25	21.45	1
		50	0	21.44	1
	HCH	1	0	23.14	0
		1	24	22.88	0
		1	49	22.75	0
		25	0	21.82	1
		25	12	21.74	1
		25	25	21.88	1
		50	0	21.83	1
16QAM	LCH	1	0	21.65	1
		1	24	21.88	1
		1	49	21.77	1
		25	0	20.61	2
		25	12	20.78	2
		25	25	20.59	2
		50	0	20.64	2
	MCH	1	0	21.84	1

		1	24	22.11	1
		1	49	22.01	1
		25	0	20.51	2
		25	12	20.60	2
		25	25	20.57	2
		50	0	20.55	2
	HCH	1	0	21.93	1
		1	24	22.21	1
		1	49	22.06	1
		25	0	20.93	2
		25	12	20.83	2
		25	25	20.96	2
		50	0	20.91	2

FDD-LTE Band 7:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.90	0
		1	12	23.36	0
		1	24	22.98	0
		12	0	22.00	1
		12	6	22.11	1
		12	13	22.02	1
		25	0	21.97	1
	MCH	1	0	22.93	0
		1	12	23.49	0
		1	24	23.00	0
		12	0	22.10	1
		12	6	22.17	1
		12	13	22.13	1
		25	0	22.11	1
	HCH	1	0	23.23	0
		1	12	23.59	0
		1	24	23.28	0
		12	0	22.37	1
		12	6	22.37	1
		12	13	22.27	1
		25	0	22.21	1
16QAM	LCH	1	0	22.34	1
		1	12	22.64	1
		1	24	22.30	1
		12	0	21.05	2
		12	6	21.11	2
		12	13	21.03	2
		25	0	21.03	2
	MCH	1	0	22.35	1
		1	12	22.68	1
		1	24	22.32	1
		12	0	21.15	2
		12	6	21.27	2
		12	13	21.20	2
		25	0	21.16	2
	HCH	1	0	22.44	1
		1	12	22.78	1
		1	24	22.47	1

		12	0	21.22	2
		12	6	21.31	2
		12	13	21.14	2
		25	0	21.29	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.08	0
		1	24	23.19	0
		1	49	23.01	0
		25	0	22.10	1
		25	12	22.05	1
		25	25	22.09	1
		50	0	21.97	1
	MCH	1	0	23.01	0
		1	24	23.15	0
		1	49	23.00	0
		25	0	22.08	1
		25	12	22.02	1
		25	25	22.06	1
		50	0	22.31	1
	HCH	1	0	23.37	0
		1	24	23.58	0
		1	49	23.42	0
		25	0	22.47	1
		25	12	22.46	1
		25	25	22.40	1
		50	0	22.42	1
16QAM	LCH	1	0	22.39	1
		1	24	22.51	1
		1	49	22.36	1
		25	0	21.06	2
		25	12	21.10	2
		25	25	21.11	2
		50	0	20.99	2
	MCH	1	0	22.48	1
		1	24	22.58	1
		1	49	22.45	1
		25	0	21.32	2
		25	12	21.30	2
		25	25	21.35	2
		50	0	21.36	2

	HCH	1	0	22.68	1
		1	24	22.87	1
		1	49	22.71	1
		25	0	21.48	2
		25	12	21.48	2
		25	25	21.40	2
		50	0	21.48	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.15	0
		1	37	23.19	0
		1	74	23.06	0
		37	0	22.24	1
		37	18	22.26	1
		37	38	22.25	1
		75	0	22.23	1
	MCH	1	0	23.12	0
		1	37	23.51	0
		1	74	23.16	0
		37	0	22.27	1
		37	18	22.31	1
		37	38	22.28	1
		75	0	22.29	1
	HCH	1	0	23.28	0
		1	37	23.55	0
		1	74	23.35	0
		37	0	22.47	1
		37	18	22.50	1
		37	38	22.44	1
		75	0	22.47	1
16QAM	LCH	1	0	22.51	1
		1	37	22.67	1
		1	74	22.34	1
		37	0	21.17	2
		37	18	21.22	2
		37	38	21.20	2
		75	0	21.22	2
	MCH	1	0	22.42	1
		1	37	22.75	1
		1	74	22.48	1
		37	0	21.29	2

		37	18	21.32	2
		37	38	21.26	2
		75	0	21.28	2
	HCH	1	0	22.60	1
		1	37	22.89	1
		1	74	22.61	1
		37	0	21.43	2
		37	18	21.44	2
		37	38	21.32	2
		75	0	21.40	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.66	0
		1	49	23.39	0
		1	99	23.06	0
		50	0	22.59	1
		50	25	22.56	1
		50	50	22.56	1
		100	0	22.13	1
	MCH	1	0	23.10	0
		1	49	23.45	0
		1	99	23.18	0
		50	0	22.24	1
		50	25	22.30	1
		50	50	22.19	1
		100	0	22.21	1
	HCH	1	0	23.16	0
		1	49	23.45	0
		1	99	23.23	0
		50	0	22.40	1
		50	25	22.47	1
		50	50	22.36	1
		100	0	22.36	1
16QAM	LCH	1	0	22.45	1
		1	49	22.65	1
		1	99	22.31	1
		50	0	21.15	2
		50	25	21.22	2
		50	50	21.17	2
		100	0	21.17	2
	MCH	1	0	22.50	1

		1	49	22.81	1
		1	99	22.54	1
		50	0	21.30	2
		50	25	21.39	2
		50	50	21.27	2
		100	0	21.25	2
	HCH	1	0	22.36	1
		1	49	22.72	1
		1	99	22.52	1
		50	0	21.40	2
		50	25	21.44	2
		50	50	21.37	2
		100	0	21.39	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	23.28	0
		1	3	23.35	0
		1	5	23.38	0
		3	0	22.36	0
		3	2	22.42	0
		3	3	22.40	0
		6	0	22.34	1
	MCH	1	0	23.27	0
		1	3	23.36	0
		1	5	23.29	0
		3	0	22.39	0
		3	2	22.33	0
		3	3	22.36	0
		6	0	22.34	1
	HCH	1	0	23.21	0
		1	3	23.31	0
		1	5	23.21	0
		3	0	22.30	0
		3	2	22.33	0
		3	3	22.31	0
		6	0	22.26	1
16QAM	LCH	1	0	22.67	1
		1	3	22.79	1
		1	5	22.66	1
		3	0	22.60	1
		3	2	22.58	1
		3	3	22.55	1
		6	0	21.37	2
	MCH	1	0	22.73	1
		1	3	22.81	1
		1	5	22.74	1
		3	0	22.41	1
		3	2	22.48	1
		3	3	22.42	1
		6	0	21.28	2
	HCH	1	0	22.59	1
		1	3	22.71	1
		1	5	22.52	1

		3	0	22.40	1
		3	2	22.41	1
		3	3	22.40	1
		6	0	21.37	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.29	0
		1	7	23.52	0
		1	14	23.32	0
		8	0	22.35	1
		8	4	22.40	1
		8	7	22.35	1
		15	0	22.36	1
	MCH	1	0	23.25	0
		1	7	23.72	0
		1	14	23.27	0
		8	0	22.27	1
		8	4	22.34	1
		8	7	22.32	1
		15	0	22.34	1
	HCH	1	0	23.28	0
		1	7	23.55	0
		1	14	23.27	0
		8	0	22.28	1
		8	4	22.28	1
		8	7	22.22	1
		15	0	22.24	1
16QAM	LCH	1	0	22.65	1
		1	7	22.95	1
		1	14	22.64	1
		8	0	21.49	2
		8	4	21.50	2
		8	7	21.41	2
		15	0	21.35	2
	MCH	1	0	22.71	1
		1	7	22.99	1
		1	14	22.77	1
		8	0	21.31	2
		8	4	21.37	2
		8	7	21.33	2
		15	0	21.34	2

	HCH	1	0	22.60	1
		1	7	22.99	1
		1	14	22.58	1
		8	0	21.18	2
		8	4	21.32	2
		8	7	21.24	2
		15	0	21.24	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.29	0
		1	12	23.55	0
		1	24	23.31	0
		12	0	22.43	1
		12	6	22.41	1
		12	13	22.28	1
		25	0	22.42	1
	MCH	1	0	23.31	0
		1	12	23.60	0
		1	24	23.24	0
		12	0	22.31	1
		12	6	22.36	1
		12	13	22.37	1
		25	0	22.38	1
	HCH	1	0	23.28	0
		1	12	23.56	0
		1	24	23.21	0
		12	0	22.29	1
		12	6	22.32	1
		12	13	22.24	1
		25	0	22.25	1
16QAM	LCH	1	0	22.66	1
		1	12	22.95	1
		1	24	22.61	1
		12	0	21.52	2
		12	6	21.48	2
		12	13	21.40	2
		25	0	21.40	2
	MCH	1	0	22.59	1
		1	12	22.92	1
		1	24	22.57	1
		12	0	21.37	2

		12	6	21.46	2
		12	13	21.47	2
		25	0	21.41	2
	HCH	1	0	22.47	1
		1	12	22.72	1
		1	24	22.48	1
		12	0	21.33	2
		12	6	21.34	2
		12	13	21.24	2
		25	0	21.32	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.79	0
		1	24	23.51	0
		1	49	23.22	0
		25	0	22.53	1
		25	12	22.36	1
		25	25	22.46	1
		50	0	22.46	1
	MCH	1	0	23.28	0
		1	24	23.48	0
		1	49	23.07	0
		25	0	22.35	1
		25	12	22.35	1
		25	25	22.45	1
		50	0	22.38	1
	HCH	1	0	23.29	0
		1	24	23.43	0
		1	49	23.21	0
		25	0	22.25	1
		25	12	22.29	1
		25	25	22.23	1
		50	0	22.23	1
16QAM	LCH	1	0	22.68	1
		1	24	22.83	1
		1	49	22.57	1
		25	0	21.55	2
		25	12	21.41	2
		25	25	21.51	2
		50	0	21.50	2
	MCH	1	0	22.76	1

		1	24	22.96	1
		1	49	22.64	1
		25	0	21.40	2
		25	12	21.42	2
		25	25	21.48	2
		50	0	21.47	2
	HCH	1	0	22.60	1
		1	24	22.78	1
		1	49	22.52	1
		25	0	21.26	2
		25	12	21.33	2
		25	25	21.25	2
		50	0	21.25	2

FDD-LTE Band 13:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.04	0
		1	12	22.91	0
		1	24	22.59	0
		12	0	21.60	1
		12	6	21.71	1
		12	13	21.74	1
		25	0	21.70	1
	MCH	1	0	22.65	0
		1	12	22.92	0
		1	24	22.54	0
		12	0	21.71	1
		12	6	21.71	1
		12	13	21.79	1
		25	0	22.04	1
	HCH	1	0	23.07	0
		1	12	23.47	0
		1	24	22.82	0
		12	0	22.10	1
		12	6	22.20	1
		12	13	21.96	1
		25	0	22.11	1
16QAM	LCH	1	0	21.75	1
		1	12	22.17	1
		1	24	21.88	1
		12	0	20.65	2
		12	6	20.78	2
		12	13	20.85	2
		25	0	20.71	2
	MCH	1	0	21.89	1
		1	12	22.23	1
		1	24	21.89	1
		12	0	21.08	2
		12	6	21.23	2
		12	13	21.21	2
		25	0	21.18	2
	HCH	1	0	22.04	1
		1	12	22.34	1
		1	24	21.95	1

		12	0	21.07	2
		12	6	21.15	2
		12	13	21.05	2
		25	0	21.14	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
	MCH	1	0	23.53	0
		1	24	22.77	0
		1	49	22.55	0
		25	0	22.60	1
		25	12	22.69	1
		25	25	22.65	1
		50	0	22.59	1
	HCH	/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
16QAM	LCH	/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
	MCH	1	0	21.79	1
		1	24	22.10	1
		1	49	21.87	1
		25	0	20.67	2
		25	12	20.71	2
		25	25	20.88	2
		50	0	20.60	2

	HCH	/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/
		/	/	/	/

FDD-LTE Band 17:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.06	0
		1	12	23.47	0
		1	24	22.95	0
		12	0	22.05	1
		12	6	22.16	1
		12	13	22.09	1
		25	0	22.07	1
	MCH	1	0	22.99	0
		1	12	23.33	0
		1	24	22.91	0
		12	0	22.10	1
		12	6	22.12	1
		12	13	22.00	1
		25	0	22.08	1
	HCH	1	0	23.01	0
		1	12	23.21	0
		1	24	22.93	0
		12	0	21.99	1
		12	6	22.07	1
		12	13	22.03	1
		25	0	22.05	1
16QAM	LCH	1	0	22.38	1
		1	12	22.61	1
		1	24	22.26	1
		12	0	21.11	2
		12	6	21.22	2
		12	13	21.13	2
		25	0	21.11	2
	MCH	1	0	22.30	1
		1	12	22.62	1
		1	24	22.22	1
		12	0	21.23	2
		12	6	21.23	2
		12	13	21.14	2
		25	0	21.09	2
	HCH	1	0	22.18	1
		1	12	22.47	1

		1	24	22.20	1
		12	0	21.04	2
		12	6	21.09	2
		12	13	20.93	2
		25	0	21.12	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.52	0
		1	24	23.19	0
		1	49	22.89	0
		25	0	22.51	1
		25	12	22.49	1
		25	25	22.48	1
		50	0	22.44	1
	MCH	1	0	23.01	0
		1	24	23.20	0
		1	49	22.92	0
		25	0	22.10	1
		25	12	22.07	1
		25	25	22.07	1
		50	0	22.03	1
	HCH	1	0	23.02	0
		1	24	23.22	0
		1	49	22.95	0
		25	0	22.12	1
		25	12	22.05	1
		25	25	22.05	1
		50	0	22.00	1
16QAM	LCH	1	0	22.36	1
		1	24	22.53	1
		1	49	22.25	1
		25	0	21.14	2
		25	12	21.12	2
		25	25	21.07	2
		50	0	21.12	2
	MCH	1	0	22.50	1
		1	24	22.66	1
		1	49	22.42	1
		25	0	21.14	2
		25	12	21.14	2
		25	25	21.08	2

		50	0	21.08	2
	HCH	1	0	22.40	1
		1	24	22.49	1
		1	49	22.26	1
		25	0	21.11	2
		25	12	21.05	2
		25	25	21.04	2
		50	0	21.08	2

FDD-LTE Band 25:

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.08	0
		1	3	23.18	0
		1	5	23.10	0
		3	0	22.19	0
		3	2	22.22	0
		3	3	22.22	0
		6	0	22.15	1
	MCH	1	0	22.79	0
		1	3	22.90	0
		1	5	22.77	0
		3	0	22.59	0
		3	2	22.58	0
		3	3	22.55	0
		6	0	21.85	1
	HCH	1	0	22.53	0
		1	3	22.66	0
		1	5	22.54	0
		3	0	22.44	0
		3	2	22.43	0
		3	3	22.48	0
		6	0	21.38	1
16QAM	LCH	1	0	22.36	1
		1	3	22.49	1
		1	5	22.33	1
		3	0	22.32	1
		3	2	22.31	1
		3	3	22.27	1
		6	0	21.10	2
	MCH	1	0	22.11	1
		1	3	22.26	1
		1	5	22.11	1
		3	0	21.85	1
		3	2	21.86	1
		3	3	21.88	1
		6	0	20.76	2
	HCH	1	0	21.74	1
		1	3	21.91	1

		1	5	21.71	1
		3	0	21.39	1
		3	2	21.60	1
		3	3	21.54	1
		6	0	20.64	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.16	0
		1	7	23.37	0
		1	14	23.19	0
		8	0	22.19	1
		8	4	22.24	1
		8	7	22.16	1
		15	0	22.17	1
	MCH	1	0	22.84	0
		1	7	23.07	0
		1	14	22.85	0
		8	0	21.89	1
		8	4	21.89	1
		8	7	21.82	1
		15	0	21.80	1
	HCH	1	0	22.66	0
		1	7	22.88	0
		1	14	22.63	0
		8	0	21.66	1
		8	4	21.68	1
		8	7	21.62	1
		15	0	21.63	1
16QAM	LCH	1	0	22.43	1
		1	7	22.67	1
		1	14	22.50	1
		8	0	21.22	2
		8	4	21.29	2
		8	7	21.20	2
		15	0	21.13	2
	MCH	1	0	22.25	1
		1	7	22.34	1
		1	14	22.21	1
		8	0	20.89	2
		8	4	20.84	2
		8	7	20.82	2

		15	0	20.82	2
	HCH	1	0	21.84	1
		1	7	21.96	1
		1	14	21.75	1
		8	0	20.59	2
		8	4	20.62	2
		8	7	20.56	2
		15	0	20.57	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.14	0
		1	12	23.48	0
		1	24	23.14	0
		12	0	22.24	1
		12	6	22.22	1
		12	13	22.18	1
		25	0	22.16	1
	MCH	1	0	22.85	0
		1	12	23.30	0
		1	24	22.76	0
		12	0	21.92	1
		12	6	21.90	1
		12	13	21.76	1
		25	0	21.86	1
	HCH	1	0	22.59	0
		1	12	22.91	0
		1	24	22.59	0
		12	0	21.75	1
		12	6	21.70	1
		12	13	21.62	1
		25	0	21.68	1
16QAM	LCH	1	0	22.41	1
		1	12	22.69	1
		1	24	22.41	1
		12	0	21.27	2
		12	6	21.27	2
		12	13	21.19	2
		25	0	21.20	2
	MCH	1	0	22.01	1
		1	12	22.27	1
		1	24	21.98	1

		12	0	21.00	2
		12	6	21.03	2
		12	13	20.86	2
		25	0	20.87	2
	HCH	1	0	21.75	1
		1	12	22.04	1
		1	24	21.71	1
		12	0	20.73	2
		12	6	20.66	2
		12	13	20.59	2
		25	0	20.69	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.17	0
		1	24	23.29	0
		1	49	23.08	0
		25	0	22.28	1
		25	12	22.20	1
		25	25	22.18	1
		50	0	22.23	1
	MCH	1	0	22.86	0
		1	24	23.00	0
		1	49	22.71	0
		25	0	21.93	1
		25	12	21.88	1
		25	25	21.75	1
		50	0	21.81	1
	HCH	1	0	22.60	0
		1	24	22.77	0
		1	49	22.55	0
		25	0	21.78	1
		25	12	21.64	1
		25	25	21.48	1
		50	0	21.69	1
16QAM	LCH	1	0	22.43	1
		1	24	22.61	1
		1	49	22.39	1
		25	0	21.31	2
		25	12	21.27	2
		25	25	21.22	2
		50	0	21.27	2
	MCH	1	0	22.28	1
		1	24	22.34	1
		1	49	22.17	1
		25	0	20.98	2
		25	12	20.90	2
		25	25	20.83	2
		50	0	20.94	2
	HCH	1	0	21.82	1
		1	24	22.05	1
		1	49	21.76	1
		25	0	20.83	2

		25	12	20.65	2
		25	25	20.47	2
		50	0	20.69	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.08	0
		1	37	23.23	0
		1	74	22.90	0
		37	0	22.24	1
		37	18	22.21	1
		37	38	22.16	1
		75	0	22.19	1
	MCH	1	0	22.83	0
		1	37	23.09	0
		1	74	22.63	0
		37	0	21.99	1
		37	18	21.93	1
		37	38	21.79	1
		75	0	21.91	1
	HCH	1	0	22.69	0
		1	37	22.82	0
		1	74	22.51	0
		37	0	21.68	1
		37	18	21.71	1
		37	38	21.52	1
		75	0	21.57	1
16QAM	LCH	1	0	22.35	1
		1	37	22.66	1
		1	74	22.19	1
		37	0	21.23	2
		37	18	21.17	2
		37	38	21.10	2
		75	0	21.16	2
	MCH	1	0	22.14	1
		1	37	22.23	1
		1	74	21.93	1
		37	0	20.94	2
		37	18	20.91	2
		37	38	20.81	2
		75	0	20.91	2
	HCH	1	0	21.91	1

		1	37	22.05	1
		1	74	21.68	1
		37	0	20.57	2
		37	18	20.65	2
		37	38	20.44	2
		75	0	20.60	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.50	0
		1	49	23.36	0
		1	99	22.95	0
		50	0	22.65	1
		50	25	22.63	1
		50	50	22.61	1
		100	0	22.17	1
	MCH	1	0	22.93	0
		1	49	23.26	0
		1	99	22.65	0
		50	0	21.91	1
		50	25	21.88	1
		50	50	21.67	1
		100	0	21.81	1
	HCH	1	0	23.25	0
		1	49	22.65	0
		1	99	22.36	0
		50	0	21.57	1
		50	25	21.58	1
		50	50	21.27	1
		100	0	21.41	1
16QAM	LCH	1	0	22.33	1
		1	49	22.56	1
		1	99	22.11	1
		50	0	21.19	2
		50	25	21.16	2
		50	50	21.18	2
		100	0	21.18	2
	MCH	1	0	22.27	1
		1	49	22.37	1
		1	99	22.01	1
		50	0	21.04	2
		50	25	20.92	2

		50	50	20.73	2
		100	0	20.79	2
	HCH	1	0	21.86	1
		1	49	21.97	1
		1	99	21.61	1
		50	0	20.62	2
		50	25	20.63	2
		50	50	20.89	2
		100	0	20.47	2

TDD-LTE Band 26(814-824MHz):

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.91	0
		1	3	23.08	0
		1	5	22.98	0
		3	0	22.10	1
		3	2	22.13	1
		3	3	22.10	1
		6	0	21.97	1
	MCH	1	0	22.99	0
		1	3	23.15	0
		1	5	23.07	0
		3	0	22.15	1
		3	2	22.07	1
		3	3	22.12	1
		6	0	22.01	1
	HCH	1	0	23.05	0
		1	3	23.21	0
		1	5	23.05	0
		3	0	22.15	1
		3	2	22.13	1
		3	3	22.13	1
		6	0	21.99	1
16QAM	LCH	1	0	22.21	1
		1	3	22.40	1
		1	5	22.24	1
		3	0	22.17	2
		3	2	22.13	2
		3	3	22.11	2
		6	0	20.97	2
	MCH	1	0	22.42	1
		1	3	22.66	1
		1	5	22.37	1
		3	0	22.12	2
		3	2	22.13	2
		3	3	22.14	2
		6	0	21.03	2
	HCH	1	0	22.36	1
		1	3	22.57	1

		1	5	22.35	1
		3	0	22.17	2
		3	2	22.20	2
		3	3	22.20	2
		6	0	21.24	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.94	0
		1	7	23.28	0
		1	14	22.99	0
		8	0	21.98	1
		8	4	21.99	1
		8	7	21.97	1
		15	0	21.94	1
	MCH	1	0	23.00	0
		1	7	23.26	0
		1	14	22.96	0
		8	0	21.98	1
		8	4	22.02	1
		8	7	21.99	1
		15	0	21.96	1
	HCH	1	0	23.06	0
		1	7	23.28	0
		1	14	23.04	0
		8	0	21.96	1
		8	4	22.02	1
		8	7	22.00	1
		15	0	21.96	1
16QAM	LCH	1	0	22.27	1
		1	7	22.47	1
		1	14	22.30	1
		8	0	21.08	2
		8	4	21.11	2
		8	7	21.08	2
		15	0	20.97	2
	MCH	1	0	22.48	1
		1	7	22.72	1
		1	14	22.49	1
		8	0	21.07	2
		8	4	21.08	2

		8	7	21.07	2
		15	0	21.01	2
	HCH	1	0	22.41	1
		1	7	22.60	1
		1	14	22.38	1
		8	0	21.00	2
		8	4	21.05	2
		8	7	20.98	2
		15	0	21.03	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.88	0
		1	12	23.28	0
		1	24	22.96	0
		12	0	21.93	1
		12	6	22.03	1
		12	13	21.97	1
		25	0	21.97	1
	MCH	1	0	22.94	0
		1	12	23.26	0
		1	24	22.94	0
		12	0	21.96	1
		12	6	22.02	1
		12	13	21.99	1
		25	0	22.02	1
	HCH	1	0	22.98	0
		1	12	23.24	0
		1	24	23.00	0
		12	0	21.96	1
		12	6	22.03	1
		12	13	21.99	1
		25	0	21.97	1
16QAM	LCH	1	0	22.16	1
		1	12	22.36	1
		1	24	22.28	1
		12	0	20.96	2
		12	6	21.11	2
		12	13	21.08	2
		25	0	21.01	2
	MCH	1	0	22.23	1
		1	12	22.26	1

		1	24	22.21	1
		12	0	21.09	2
		12	6	21.17	2
		12	13	21.18	2
		25	0	21.09	2
	HCH	1	0	22.19	1
		1	12	22.22	1
		1	24	22.17	1
		12	0	21.01	2
		12	6	21.09	2
		12	13	21.03	2
		25	0	21.09	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
	MCH	1	0	22.92	0
		1	24	23.30	0
		1	49	22.99	0
		25	0	22.21	1
		25	12	22.26	1
		25	25	22.23	1
		50	0	22.00	1
	HCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
16QAM	LCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2

		50	0	/	2
	MCH	1	0	22.20	1
		1	24	22.44	1
		1	49	22.30	1
		25	0	21.08	2
		25	12	21.07	2
		25	25	21.19	2
		50	0	21.14	2
	HCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2

TDD-LTE Band 26(824-849MHz):

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.84	0
		1	3	22.94	0
		1	5	22.85	0
		3	0	22.22	1
		3	2	22.26	1
		3	3	22.22	1
		6	0	21.83	1
	MCH	1	0	22.99	0
		1	3	23.15	0
		1	5	23.07	0
		3	0	22.15	1
		3	2	22.12	1
		3	3	22.09	1
		6	0	22.02	1
	HCH	1	0	23.29	0
		1	3	23.49	0
		1	5	23.32	0
		3	0	22.38	1
		3	2	22.47	1
		3	3	22.48	1
		6	0	22.33	1
16QAM	LCH	1	0	22.08	1
		1	3	22.27	1
		1	5	22.09	1
		3	0	22.07	2
		3	2	22.08	2
		3	3	22.07	2
		6	0	20.87	2
	MCH	1	0	22.40	1
		1	3	22.67	1
		1	5	22.48	1
		3	0	22.15	2
		3	2	22.20	2
		3	3	22.21	2
		6	0	21.07	2
	HCH	1	0	22.63	1
		1	3	22.86	1
		1	5	22.68	1

		3	0	22.39	2
		3	2	22.45	2
		3	3	22.47	2
		6	0	21.50	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.91	0
		1	7	23.17	0
		1	14	22.95	0
		8	0	21.91	1
		8	4	21.96	1
		8	7	21.94	1
		15	0	21.91	1
	MCH	1	0	23.04	0
		1	7	23.52	0
		1	14	23.07	0
		8	0	22.00	1
		8	4	22.09	1
		8	7	22.10	1
		15	0	22.03	1
	HCH	1	0	23.40	0
		1	7	23.62	0
		1	14	23.33	0
		8	0	22.29	1
		8	4	22.34	1
		8	7	22.28	1
		15	0	22.29	1
16QAM	LCH	1	0	22.27	1
		1	7	22.61	1
		1	14	22.25	1
		8	0	21.03	2
		8	4	21.15	2
		8	7	21.05	2
		15	0	20.97	2
	MCH	1	0	22.48	1
		1	7	22.74	1
		1	14	22.58	1
		8	0	21.12	2
		8	4	21.15	2
		8	7	21.16	2

		15	0	21.15	2
	HCH	1	0	22.70	1
		1	7	22.99	1
		1	14	22.60	1
		8	0	21.32	2
		8	4	21.37	2
		8	7	21.33	2
		15	0	21.37	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.90	0
		1	12	23.27	0
		1	24	22.94	0
		12	0	21.93	1
		12	6	22.01	1
		12	13	21.93	1
		25	0	21.95	1
	MCH	1	0	23.02	0
		1	12	23.64	0
		1	24	23.02	0
		12	0	22.03	1
		12	6	22.14	1
		12	13	22.01	1
		25	0	22.11	1
	HCH	1	0	23.27	0
		1	12	23.66	0
		1	24	23.28	0
		12	0	22.27	1
		12	6	22.32	1
		12	13	22.19	1
		25	0	22.31	1
16QAM	LCH	1	0	22.19	1
		1	12	22.51	1
		1	24	22.27	1
		12	0	21.02	2
		12	6	21.14	2
		12	13	21.06	2
		25	0	21.06	2
	MCH	1	0	22.30	1
		1	12	22.62	1
		1	24	22.36	1

		12	0	21.21	2
		12	6	21.30	2
		12	13	21.24	2
		25	0	21.18	2
	HCH	1	0	22.44	1
		1	12	22.82	1
		1	24	22.46	1
		12	0	21.33	2
		12	6	21.36	2
		12	13	21.29	2
		25	0	21.35	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	22.84	0
		1	24	23.29	0
		1	49	22.99	0
		25	0	21.95	1
		25	12	21.95	1
		25	25	21.98	1
		50	0	21.90	1
	MCH	1	0	22.99	0
		1	24	23.67	0
		1	49	23.03	0
		25	0	22.59	1
		25	12	22.63	1
		25	25	22.51	1
		50	0	22.11	1
	HCH	1	0	23.13	0
		1	24	23.35	0
		1	49	23.27	0
		25	0	22.25	1
		25	12	22.27	1
		25	25	22.27	1
		50	0	22.25	1
16QAM	LCH	1	0	22.20	1
		1	24	22.41	1
		1	49	22.30	1
		25	0	21.06	2
		25	12	21.04	2
		25	25	21.04	2
		50	0	21.00	2

	MCH	1	0	22.43	1
		1	24	22.63	1
		1	49	22.51	1
		25	0	21.17	2
		25	12	21.15	2
		25	25	21.24	2
		50	0	21.21	2
	HCH	1	0	22.48	1
		1	24	22.72	1
		1	49	22.59	1
		25	0	21.32	2
		25	12	21.33	2
		25	25	21.34	2
		50	0	21.33	2

TDD-LTE Band 30:

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	23.12	0
		1	12	23.43	0
		1	24	23.06	0
		12	0	22.17	1
		12	6	22.23	1
		12	13	22.24	1
		25	0	22.20	1
	MCH	1	0	/	0
		1	12	/	0
		1	24	/	0
		12	0	/	1
		12	6	/	1
		12	13	/	1
		25	0	/	1
	HCH	1	0	23.13	0
		1	12	23.48	0
		1	24	23.14	0
		12	0	22.16	1
		12	6	22.21	1
		12	13	22.19	1
		25	0	22.14	1
16QAM	LCH	1	0	22.38	1
		1	12	22.66	1
		1	24	22.33	1
		12	0	21.20	2
		12	6	21.28	2
		12	13	21.28	2
		25	0	21.21	2
	MCH	1	0	/	1
		1	12	/	1
		1	24	/	1
		12	0	/	2
		12	6	/	2
		12	13	/	2
		25	0	/	2
	HCH	1	0	22.46	1
		1	12	22.73	1
		1	24	22.39	1

		12	0	21.21	2
		12	6	21.23	2
		12	13	21.24	2
		25	0	21.15	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
	MCH	1	0	23.21	0
		1	24	23.56	0
		1	49	23.14	0
		25	0	22.27	1
		25	12	22.36	1
		25	25	22.28	1
		50	0	22.22	1
	HCH	1	0	/	0
		1	24	/	0
		1	49	/	0
		25	0	/	1
		25	12	/	1
		25	25	/	1
		50	0	/	1
16QAM	LCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2
	MCH	1	0	22.47	1
		1	24	22.50	1
		1	49	22.33	1
		25	0	21.21	2
		25	12	21.29	2
		25	25	21.29	2
		50	0	21.26	2

	HCH	1	0	/	1
		1	24	/	1
		1	49	/	1
		25	0	/	2
		25	12	/	2
		25	25	/	2
		50	0	/	2

FDD-LTE Band 40: 2305-2315MHz

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dBm)
		Size	Offset		
QPSK	LCH	1	0	23.13	0
		1	12	23.40	0
		1	24	23.10	0
		12	0	22.20	1
		12	6	22.27	1
		12	13	22.32	1
		25	0	22.19	1
	HCH	1	0	23.17	0
		1	12	23.50	0
		1	24	23.13	0
		12	0	22.18	1
		12	6	22.25	1
		12	13	22.24	1
		25	0	22.19	1
16QAM	LCH	1	0	22.40	1
		1	12	22.64	1
		1	24	22.35	1
		12	0	21.22	2
		12	6	21.28	2
		12	13	21.31	2
		25	0	21.26	2
	HCH	1	0	22.53	1
		1	12	22.77	1
		1	24	22.44	1
		12	0	21.28	2
		12	6	21.29	2
		12	13	21.30	2
		25	0	21.22	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dBm)
		Size	Offset		
QPSK	MCH	1	0	23.52	0
		1	24	23.30	0
		1	49	23.18	0
		25	0	22.34	1
		25	12	22.32	1
		25	25	22.33	1
		50	0	22.25	1
16QAM	MCH	1	0	22.53	1
		1	24	22.57	1
		1	49	22.39	1
		25	0	21.26	2
		25	12	21.30	2
		25	25	21.33	2
		50	0	21.26	2

FDD-LTE Band 40: 2350-2360MHz

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dBm)
		Size	Offset		
QPSK	LCH	1	0	21.30	0
		1	12	21.57	0
		1	24	21.28	0
		12	0	20.39	1
		12	6	20.53	1
		12	13	20.55	1
		25	0	20.69	1
	HCH	1	0	21.28	0
		1	12	21.60	0
		1	24	21.29	0
		12	0	20.41	1
		12	6	20.40	1
		12	13	20.47	1
		25	0	20.49	1
16QAM	LCH	1	0	20.49	1
		1	12	20.80	1
		1	24	20.51	1
		12	0	19.42	2
		12	6	19.39	2

		12	13	19.33	2
		25	0	19.14	2
	HCH	1	0	20.71	1
		1	12	20.81	1
		1	24	20.76	1
		12	0	19.52	2
		12	6	19.53	2
		12	13	19.50	2
		25	0	19.43	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dBm)
		Size	Offset		
QPSK	MCH	1	0	21.67	0
		1	24	21.50	0
		1	49	21.32	0
		25	0	20.69	1
		25	12	20.44	1
		25	25	20.67	1
		50	0	20.45	1
16QAM	MCH	1	0	20.61	1
		1	24	20.72	1
		1	49	20.66	1
		25	0	19.52	2
		25	12	19.46	2
		25	25	19.42	2
		50	0	19.48	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	24.41	0
		1	3	24.59	0
		1	5	24.41	0
		3	0	23.54	0
		3	2	23.57	0
		3	3	23.54	0
		6	0	23.50	1
	MCH	1	0	24.44	0
		1	3	24.61	0
		1	5	24.41	0
		3	0	23.57	0
		3	2	23.55	0
		3	3	23.59	0
		6	0	23.46	1
	HCH	1	0	24.28	0
		1	3	24.46	0
		1	5	24.30	0
		3	0	23.40	0
		3	2	23.45	0
		3	3	23.44	0
		6	0	23.34	1
16QAM	LCH	1	0	23.63	1
		1	3	23.87	1
		1	5	23.65	1
		3	0	23.63	1
		3	2	23.66	1
		3	3	23.65	1
		6	0	22.51	2
	MCH	1	0	23.80	1
		1	3	23.93	1
		1	5	23.86	1
		3	0	23.53	1
		3	2	23.57	1
		3	3	23.59	1
		6	0	22.43	2
	HCH	1	0	23.60	1
		1	3	23.80	1
		1	5	23.57	1

		3	0	23.48	1
		3	2	23.45	1
		3	3	23.49	1
		6	0	22.49	2

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.43	0
		1	7	24.48	0
		1	14	24.48	0
		8	0	23.48	1
		8	4	23.57	1
		8	7	23.50	1
		15	0	23.43	1
	MCH	1	0	24.46	0
		1	7	24.48	0
		1	14	24.42	0
		8	0	23.47	1
		8	4	23.49	1
		8	7	23.45	1
		15	0	23.42	1
	HCH	1	0	24.30	0
		1	7	24.30	0
		1	14	24.27	0
		8	0	23.32	1
		8	4	23.39	1
		8	7	23.34	1
		15	0	23.27	1
16QAM	LCH	1	0	23.84	1
		1	7	23.85	1
		1	14	23.92	1
		8	0	22.52	2
		8	4	22.56	2
		8	7	22.54	2
		15	0	22.53	2
	MCH	1	0	23.71	1
		1	7	23.75	1
		1	14	23.69	1
		8	0	22.56	2
		8	4	22.59	2
		8	7	22.52	2
		15	0	22.42	2

	HCH	1	0	23.78	1
		1	7	23.80	1
		1	14	23.73	1
		8	0	22.33	2
		8	4	22.35	2
		8	7	22.32	2
		15	0	22.32	2

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.43	0
		1	12	24.77	0
		1	24	24.48	0
		12	0	23.40	1
		12	6	23.53	1
		12	13	23.50	1
		25	0	23.47	1
	MCH	1	0	24.43	0
		1	12	24.52	0
		1	24	24.42	0
		12	0	23.48	1
		12	6	23.56	1
		12	13	23.43	1
		25	0	23.49	1
	HCH	1	0	24.30	0
		1	12	24.60	0
		1	24	24.28	0
		12	0	23.31	1
		12	6	23.38	1
		12	13	23.34	1
		25	0	23.34	1
16QAM	LCH	1	0	23.67	1
		1	12	23.72	1
		1	24	23.69	1
		12	0	22.59	2
		12	6	22.69	2
		12	13	22.64	2
		25	0	22.57	2
	MCH	1	0	23.70	1
		1	12	23.99	1
		1	24	23.66	1
		12	0	22.51	2

		12	6	22.57	2
		12	13	22.51	2
		25	0	22.52	2
	HCH	1	0	23.62	1
		1	12	23.88	1
		1	24	23.54	1
		12	0	22.45	2
		12	6	22.51	2
		12	13	22.40	2
		25	0	22.40	2

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.46	0
		1	24	24.62	0
		1	49	24.50	0
		25	0	23.51	1
		25	12	23.53	1
		25	25	23.55	1
		50	0	23.53	1
	MCH	1	0	24.43	0
		1	24	24.60	0
		1	49	24.41	0
		25	0	23.55	1
		25	12	23.52	1
		25	25	23.51	1
		50	0	23.49	1
	HCH	1	0	24.37	0
		1	24	24.49	0
		1	49	24.27	0
		25	0	23.41	1
		25	12	23.42	1
		25	25	23.36	1
		50	0	23.39	1
16QAM	LCH	1	0	23.88	1
		1	24	23.83	1
		1	49	23.93	1
		25	0	22.64	2
		25	12	22.61	2
		25	25	22.62	2
		50	0	22.64	2
	MCH	1	0	23.73	1

		1	24	23.90	1
		1	49	23.68	1
		25	0	22.61	2
		25	12	22.53	2
		25	25	22.52	2
		50	0	22.54	2
	HCH	1	0	23.82	1
		1	24	23.90	1
		1	49	23.73	1
		25	0	22.49	2
		25	12	22.44	2
		25	25	22.44	2
		50	0	22.42	2

Channel Bandwidth: 15 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.43	0
		1	37	24.52	0
		1	74	24.46	0
		37	0	23.57	1
		37	18	23.54	1
		37	38	23.60	1
		75	0	23.62	1
	MCH	1	0	24.43	0
		1	37	24.46	0
		1	74	24.28	0
		37	0	23.55	1
		37	18	23.55	1
		37	38	23.48	1
		75	0	23.60	1
	HCH	1	0	24.31	0
		1	37	24.36	0
		1	74	24.22	0
		37	0	23.42	1
		37	18	23.43	1
		37	38	23.39	1
		75	0	23.44	1
16QAM	LCH	1	0	23.72	1
		1	37	23.88	1
		1	74	23.83	1
		37	0	22.61	2
		37	18	22.65	2

		37	38	22.62	2
		75	0	22.59	2
	MCH	1	0	23.76	1
		1	37	23.78	1
		1	74	23.60	1
		37	0	22.57	2
		37	18	22.52	2
		37	38	22.44	2
		75	0	22.56	2
	HCH	1	0	23.66	1
		1	37	23.69	1
		1	74	23.52	1
		37	0	22.51	2
		37	18	22.45	2
		37	38	22.40	2
		75	0	22.43	2

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	MPR (dB)
		Size	Offset		
QPSK	LCH	1	0	24.46	0
		1	49	24.78	0
		1	99	24.51	0
		50	0	23.63	1
		50	25	23.64	1
		50	50	23.57	1
		100	0	23.54	1
	MCH	1	0	24.54	0
		1	49	24.71	0
		1	99	24.34	0
		50	0	23.53	1
		50	25	23.52	1
		50	50	23.41	1
		100	0	23.42	1
	HCH	1	0	24.29	0
		1	49	24.60	0
		1	99	24.20	0
		50	0	23.51	0.5
		50	25	23.38	0.5
		50	50	23.34	0.5
		100	0	23.41	0.5
16QAM	LCH	1	0	23.75	1
		1	49	23.85	1

		1	99	23.92	1
		50	0	22.72	2
		50	25	22.67	2
		50	50	22.67	2
		100	0	22.65	2
	MCH	1	0	23.70	1
		1	49	23.93	1
		1	99	23.58	1
		50	0	22.52	2
		50	25	22.53	2
		50	50	22.46	2
		100	0	22.46	2
	HCH	1	0	23.72	1
		1	49	23.97	1
		1	99	23.60	1
		50	0	22.55	2
		50	25	22.45	2
		50	50	22.43	2
		100	0	22.44	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 > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

WLAN(2.4G) - Maximum Average Power					
Test Mode	**Data Rate**	**Channel**	**Frequency (MHz)**	**Average Power (dBm)**	**Tune-up power (dBm)**
802.11b	1Mbps	CH 01	2412	16.44	16.5
		CH 06	2437	15.73	16.5
		CH 11	2462	15.44	16.5
802.11g	54Mbps	CH 01	2412	14.18	15.0
		CH 06	2437	14.15	15.0
		CH 11	2462	14.95	15.0
802.11n (20MHz)	MCS7	CH 01	2412	13.38	14.0
		CH 06	2437	11.91	14.0
		CH 11	2462	13.80	14.0
802.11n (40MHz)	MCS7	CH 03	2422	12.85	13.0
		CH 06	2437	10.36	13.0
		CH 09	2452	11.50	13.0

WLAN(5.2G)- Maximum Average Power				
Test Mode	**Channel**	**Frequency (MHz)**	**Average Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 36	5180	11.75	12.0
	CH 40	5200	10.62	12.0
	CH 48	5240	11.40	12.0
802.11n-20	CH 36	5180	10.59	11.0
	CH 40	5200	10.33	11.0
	CH 48	5240	10.52	11.0
802.11n -40	CH 38	5190	9.99	10.0
	CH46	5230	9.27	10.0
802.11ac -80	CH 42	5210	8.28	10.0

WLAN(5.3G)- Maximum Average Power				
Test Mode	**Channel**	**Frequency (MHz)**	**Average Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 52	5260	11.08	11.5
	CH 56	5280	10.49	11.5
	CH 64	5320	11.07	11.5

802.11n-20	CH 52	5260	10.79	12.0
	CH 56	5280	11.15	12.0
	CH 64	5320	11.59	12.0
802.11n -40	CH 54	5270	9.06	9.5
	CH 62	5310	9.25	9.5
802.11ac -80	CH 58	5290	8.36	9.5

WLAN(5.6G)- Maximum Average Power				
Test Mode	**Channel**	**Frequency (MHz)**	**Average Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH 100	5500	11.86	12.0
	CH 120	5600	11.97	12.0
	CH 140	5700	10.80	12.0
802.11n-20	CH 100	5500	11.45	11.5
	CH 120	5600	11.84	11.5
	CH 140	5700	10.29	11.5
802.11n -40	CH 102	5510	11.10	11.5
	CH118	5590	10.37	11.5
	CH134	5670	9.94	11.5
802.11ac -80	CH106	5530	10.07	10.5
	CH122	5610	9.13	10.5

WLAN(5.8G) - Maximum Average Power				
Test Mode	**Channel**	**Frequency (MHz)**	**Average Power (dBm)**	**Tune-up power (dBm)**
802.11a	CH149	5745	11.13	11.5
	CH157	5785	10.00	11.5
	CH165	5825	9.76	11.5
802.11n-20	CH149	5745	11.33	11.5
	CH157	5785	10.78	11.5
	CH165	5825	9.16	11.5
802.11n -40	CH151	5755	10.93	11.0
	CH159	5795	9.86	11.0
802.11ac -80	CH155	5775	10.99	11.0

Remark:

1. Per KDB 248227 D01 v02r02, For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions.

2. Per KDB 248227 D01 v02r02, For 802.11b DSSS SAR measurements ,when the reported SAR of the highest measured maximum output power channel (see 3.1) for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration. 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; i.e., all channels require testing.

3 .For OFDM modes (802.11g/n), SAR is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and it is <= 1.2W/kg.

4. Per KDB 248227 D01 v02r02, When multiple channel bandwidth configurations in a frequency band have the same specified maximum output power, the initial test configuration is determined by applying the following steps sequentially.

1) The largest channel bandwidth configuration is selected among the multiple configurations in a frequency band with the same specified maximum output power.

2) If multiple configurations have the same specified maximum output power and largest channel bandwidth, the lowest order modulation among the largest channel bandwidth configurations is selected.

3) If multiple configurations have the same specified maximum output power, largest channel bandwidth and lowest order modulation, the lowest data rate configuration among these configurations is selected.

4) When multiple transmission modes (802.11a/g/n/ac) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n.

Bluetooth - Maximum Average Power			
Test Mode	**Data Rate**	**Average Power(dBm)**	**Tune-up power (dBm)**
GFSK	1Mbps	7.670	8.0
Pi/4 QDPSK	2Mbps	6.489	8.0
8DPSK	3Mbps	6.481	8.0

Bluetooth - Maximum Average Power					
Test Mode	**Data Rate**	**Channel**	**Frequency (MHz)**	**Average Power (dBm)**	**Tune-up power (dBm)**
BLE	1Mbps	CH 00	2402	-5.411	-5
		CH 19	2440	-6.351	-5
		CH 39	2480	-6.003	-5

NFC - Maximum Average Power			
Test Mode	**Frequency (MHz)**	**Average Power(dBm)**	**Tune-up power (dBm)**
NFC	13.56	-.37.2	-37.0

Remark:

Bluetooth and NFC maximum output power is 7.857dBm and--48.96dBm *respectively*, and Maximum Tune-Up output power is 4.0dBm and-25dBm *respectively*,. Per KDB 447498 D01 V06, 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:

[(max. power of channel, including tune-up tolerance, 4.87mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,16 where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation17
- The result is rounded to one decimal place for comparison

Bluetooth:

Tune-Up Power (dBm)	Max. Power (mW)	Distance (mm)	Frequency (GHz)	Result	Limit
8.0	6.31	5	2.402	1.96	3

The exclusion thresholds is 1.96< 3, therefore, the RF exposure evaluation is not required.

NFC:

Tune-Up Power (dBm)	Max. Power (mW)	Distance (mm)	Frequency (GHz)	Result	Limit
-37.1	0.000194984	5	0.01356	0.00000454	3

The exclusion thresholds is 0.00000454< 3, therefore, the RF exposure evaluation is not required.

9.2 Test Results for Standalone SAR Test

Head SAR

GSM850 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
1.	GSM	Right Cheek	190	836.6	32.42	32.5	1.019	0.405	0.413
2.	GSM	Right Tilted	190	836.6	32.42	32.5	1.019	0.224	0.228
3.	GSM	Left Cheek	190	836.6	32.42	32.5	1.019	0.585	0.596
4.	GSM	Left Tilted	190	836.6	32.42	32.5	1.019	0.292	0.297

GSM1900 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	M Hz					
5.	GSM	Right Cheek	810	1909.8	30.33	30.5	1.040	0.113	0.118
6.	GSM	Right Tilted	810	1909.8	30.33	30.5	1.040	0.051	0.053
7.	GSM	Left Cheek	810	1909.8	30.33	30.5	1.040	0.105	0.109
8.	GSM	Left Tilted	810	1909.8	30.33	30.5	1.040	0.045	0.047

GPRS850 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
9.	GPRS_4TX	Right Cheek	128	824.2	29.27	29.5	1.054	0.841	0.887
10.	GPRS_4TX	Right Cheek	190	836.6	29.17	29.5	1.079	0.825	0.890
11.	GPRS_4TX	Right Cheek	251	848.8	29.06	29.5	1.107	0.816	0.903
12.	GPRS_4TX	Right Tilted	128	824.2	29.27	29.5	1.054	0.426	0.449
13.	GPRS_4TX	Left Cheek	128	824.2	29.27	29.5	1.054	0.959	1.011
14.	GPRS_4TX	Left Cheek	190	836.6	29.17	29.5	1.079	1.087	1.173
15.	GPRS_4TX	Left Cheek	251	848.8	29.06	29.5	1.107	0.991	1.097
16.	GPRS_4TX	Left Tilted	128	824.2	29.27	29.5	1.054	0.448	0.472

GPRS1900 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	M Hz					
17.	GPRS_2TX	Right Cheek	661	1880.0	29.39	29.5	1.026	0.424	0.435
18.	GPRS_2TX	Right Tilted	661	1880.0	29.39	29.5	1.026	0.218	0.224
19.	GPRS_2TX	Left Cheek	661	1880.0	29.39	29.5	1.026	0.206	0.211
20.	GPRS_2TX	Left Tilted	661	1880.0	29.39	29.5	1.026	0.116	0.119

WCDMA Band 2 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
21.	RMC	Right Cheek	9400	1880.0	22.75	23.0	1.059	0.244	0.258
22.	RMC	Right Tilted	9400	1880.0	22.75	23.0	1.059	0.126	0.133
23.	RMC	Left Cheek	9400	1880.0	22.75	23.0	1.059	0.183	0.194
24.	RMC	Left Tilted	9400	1880.0	22.75	23.0	1.059	0.107	0.113

WCDMA Band 5 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
25.	RMC	Right Cheek	4132	826.4	22.97	23.0	1.007	0.244	0.246
26.	RMC	Right Tilted	4132	826.4	22.97	23.0	1.007	0.126	0.127
27.	RMC	Left Cheek	4132	826.4	22.97	23.0	1.007	0.355	0.357
28.	RMC	Left Tilted	4132	826.4	22.97	23.0	1.007	0.177	0.178

WCDMA Band 4 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
29.	RMC	Right Cheek	1513	1752.6	21.52	22.0	1.117	0.509	0.568
30.	RMC	Right Tilted	1513	1752.6	21.52	22.0	1.117	0.255	0.285
31.	RMC	Left Cheek	1513	1752.6	21.52	22.0	1.117	0.452	0.505
32.	RMC	Left Tilted	1513	1752.6	21.52	22.0	1.117	0.223	0.249

LTE Band 2– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB		MHz					
33.	RMC QPSK 20MHz 1RB	Right Cheek	1860.0	22.62	23.0	1.091	0.385	0.420
34.	RMC QPSK 20MHz 1RB	Right Tilted	1860.0	22.62	23.0	1.091	0.192	0.210
35.	RMC QPSK 20MHz 1RB	Left Cheek	1860.0	22.62	23.0	1.091	0.194	0.212
36.	RMC QPSK 20MHz 1RB	Left Tilted	1860.0	22.62	23.0	1.091	0.106	0.116
37.	RMC QPSK 20MHz 50%RB	Right Cheek	1860.0	22.62	23.0	1.091	0.187	0.204
38.	RMC QPSK 20MHz 50%RB	Right Tilted	1860.0	22.62	23.0	1.091	0.105	0.115
39.	RMC QPSK 20MHz 50%RB	Left Cheek	1860.0	22.62	23.0	1.091	0.112	0.122
40.	RMC QPSK 20MHz 50%RB	Left Tilted	1860.0	22.62	23.0	1.091	0.096	0.105

LTE Band 4– Head SAR Test								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Head	MHz	(dBm)	(dBm)			
41.	RMC QPSK 20MHz 1RB	Right Cheek	1720.0	23.43	23.5	1.016	0.590	0.600
42.	RMC QPSK 20MHz 1RB	Right Tilted	1720.0	23.43	23.5	1.016	0.326	0.331
43.	RMC QPSK 20MHz 1RB	Left Cheek	1720.0	23.43	23.5	1.016	0.429	0.436
44.	RMC QPSK 20MHz 1RB	Left Tilted	1720.0	23.43	23.5	1.016	0.259	0.263
45.	RMC QPSK 20MHz 50%RB	Right Cheek	1720.0	23.43	23.5	1.016	0.311	0.316
46.	RMC QPSK 20MHz 50%RB	Right Tilted	1720.0	23.43	23.5	1.016	0.167	0.170
47.	RMC QPSK 20MHz 50%RB	Left Cheek	1720.0	23.43	23.5	1.016	0.206	0.209
48.	RMC QPSK 20MHz 50%RB	Left Tilted	1720.0	23.43	23.5	1.016	0.137	0.139

LTE Band 5– Head SAR Test								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth	Head	MHz	(dBm)	(dBm)			
49.	RMC QPSK 10MHz 1RB	Right Cheek	829.0	23.33	23.5	1.040	0.274	0.285
50.	RMC QPSK 10MHz 1RB	Right Tilted	829.0	23.33	23.5	1.040	0.143	0.149
51.	RMC QPSK 10MHz 1RB	Left Cheek	829.0	23.33	23.5	1.040	0.352	0.366
52.	RMC QPSK 10MHz 1RB	Left Tilted	829.0	23.33	23.5	1.040	0.186	0.193
53.	RMC QPSK 10MHz 50%RB	Right Cheek	829.0	23.33	23.5	1.040	0.126	0.131
54.	RMC QPSK 10MHz 50%RB	Right Tilted	829.0	23.33	23.5	1.040	0.078	0.081
55.	RMC QPSK 10MHz 50%RB	Left Cheek	829.0	23.33	23.5	1.040	0.179	0.186
56.	RMC QPSK 10MHz 50%RB	Left Tilted	829.0	23.33	23.5	1.040	0.092	0.096

LTE Band 7– Head SAR Test								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth	Head	MHz	(dBm)	(dBm)			
57.	RMC QPSK 20MHz 1RB	Right Cheek	2510.0	23.66	24.0	1.081	0.463	0.501
58.	RMC QPSK 20MHz 1RB	Right Tilted	2510.0	23.66	24.0	1.081	0.266	0.288
59.	RMC QPSK 20MHz 1RB	Left Cheek	2510.0	23.66	24.0	1.081	0.104	0.112
60.	RMC QPSK 20MHz 1RB	Left Tilted	2510.0	23.66	24.0	1.081	0.056	0.061
61.	RMC QPSK 20MHz 50%RB	Right Cheek	2510.0	23.66	24.0	1.081	0.258	0.279
62.	RMC QPSK 20MHz 50%RB	Right Tilted	2510.0	23.66	24.0	1.081	0.143	0.155
63.	RMC QPSK 20MHz 50%RB	Left Cheek	2510.0	23.66	24.0	1.081	0.051	0.055
64.	RMC QPSK 20MHz 50%RB	Left Tilted	2510.0	23.66	24.0	1.081	0.029	0.031

LTE Band 12– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
65.	RMC QPSK 10MHz 1RB	Right Cheek	704.0	23.79	24.0	1.050	0.313	0.329
66.	RMC QPSK 10MHz 1RB	Right Tilted	704.0	23.79	24.0	1.050	0.162	0.170
67.	RMC QPSK 10MHz 1RB	Left Cheek	704.0	23.79	24.0	1.050	0.349	0.366
68.	RMC QPSK 10MHz 1RB	Left Tilted	704.0	23.79	24.0	1.050	0.179	0.188
69.	RMC QPSK 10MHz 50%RB	Right Cheek	704.0	23.79	24.0	1.050	0.151	0.158
70.	RMC QPSK 10MHz 50%RB	Right Tilted	704.0	23.79	24.0	1.050	0.088	0.092
71.	RMC QPSK 10MHz 50%RB	Left Cheek	704.0	23.79	24.0	1.050	0.172	0.181
72.	RMC QPSK 10MHz 50%RB	Left Tilted	704.0	23.79	24.0	1.050	0.089	0.093

LTE Band 13– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
73.	RMC QPSK 10MHz 1RB	Right Cheek	782.0	23.53	24.0	1.114	0.309	0.344
74.	RMC QPSK 10MHz 1RB	Right Tilted	782.0	23.53	24.0	1.114	0.162	0.181
75.	RMC QPSK 10MHz 1RB	Left Cheek	782.0	23.53	24.0	1.114	0.404	0.450
76.	RMC QPSK 10MHz 1RB	Left Tilted	782.0	23.53	24.0	1.114	0.226	0.252
77.	RMC QPSK 10MHz 50%RB	Right Cheek	782.0	23.53	24.0	1.114	0.153	0.170
78.	RMC QPSK 10MHz 50%RB	Right Tilted	782.0	23.53	24.0	1.114	0.081	0.090
79.	RMC QPSK 10MHz 50%RB	Left Cheek	782.0	23.53	24.0	1.114	0.212	0.236
80.	RMC QPSK 10MHz 50%RB	Left Tilted	782.0	23.53	24.0	1.114	0.118	0.131

LTE Band 17– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
81.	RMC QPSK 10MHz 1RB	Right Cheek	709.0	23.52	24.0	1.117	0.275	0.307
82.	RMC QPSK 10MHz 1RB	Right Tilted	709.0	23.52	24.0	1.117	0.139	0.155
83.	RMC QPSK 10MHz 1RB	Left Cheek	709.0	23.52	24.0	1.117	0.304	0.340
84.	RMC QPSK 10MHz 1RB	Left Tilted	709.0	23.52	24.0	1.117	0.156	0.174
85.	RMC QPSK 10MHz 50%RB	Right Cheek	709.0	23.52	24.0	1.117	0.129	0.144
86.	RMC QPSK 10MHz 50%RB	Right Tilted	709.0	23.52	24.0	1.117	0.077	0.086
87.	RMC QPSK 10MHz 50%RB	Left Cheek	709.0	23.52	24.0	1.117	0.149	0.166
88.	RMC QPSK 10MHz 50%RB	Left Tilted	709.0	23.52	24.0	1.117	0.087	0.097

LTE Band 25– Head SAR Test								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Head	MHz	(dBm)	(dBm)			
89.	RMC QPSK 20MHz 1RB	Right Cheek	1860.0	23.50	24.0	1.122	0.384	0.431
90.	RMC QPSK 20MHz 1RB	Right Tilted	1860.0	23.50	24.0	1.122	0.189	0.212
91.	RMC QPSK 20MHz 1RB	Left Cheek	1860.0	23.50	24.0	1.122	0.196	0.220
92.	RMC QPSK 20MHz 1RB	Left Tilted	1860.0	23.50	24.0	1.122	0.092	0.103
93.	RMC QPSK 20MHz 50%RB	Right Cheek	1860.0	23.50	24.0	1.122	0.192	0.215
94.	RMC QPSK 20MHz 50%RB	Right Tilted	1860.0	23.50	24.0	1.122	0.099	0.111
95.	RMC QPSK 20MHz 50%RB	Left Cheek	1860.0	23.50	24.0	1.122	0.103	0.116
96.	RMC QPSK 20MHz 50%RB	Left Tilted	1860.0	23.50	24.0	1.122	0.051	0.057

LTE Band 26(814-824MHz)– Head SAR Test (814-824MHz)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth	Head	MHz	(dBm)	(dBm)			
97.	RMC QPSK 10MHz 1RB	Right Cheek	819.0	23.30	23.5	1.047	0.270	0.283
98.	RMC QPSK 10MHz 1RB	Right Tilted	819.0	23.30	23.5	1.047	0.139	0.146
99.	RMC QPSK 10MHz 1RB	Left Cheek	819.0	23.30	23.5	1.047	0.332	0.348
100.	RMC QPSK 10MHz 1RB	Left Tilted	819.0	23.30	23.5	1.047	0.158	0.165
101.	RMC QPSK 10MHz 50%RB	Right Cheek	819.0	23.30	23.5	1.047	0.144	0.151
102.	RMC QPSK 10MHz 50%RB	Right Tilted	819.0	23.30	23.5	1.047	0.072	0.075
103.	RMC QPSK 10MHz 50%RB	Left Cheek	819.0	23.30	23.5	1.047	0.155	0.162
104.	RMC QPSK 10MHz 50%RB	Left Tilted	819.0	23.30	23.5	1.047	0.077	0.081

LTE Band 26(824-849MHz)– Head SAR Test (824-849MHz)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth	Head	MHz	(dBm)	(dBm)			
105.	RMC QPSK 10MHz 1RB	Right Cheek	831.0	23.67	24.0	1.079	0.262	0.283
106.	RMC QPSK 10MHz 1RB	Right Tilted	831.0	23.67	24.0	1.079	0.137	0.148
107.	RMC QPSK 10MHz 1RB	Left Cheek	831.0	23.67	24.0	1.079	0.425	0.459
108.	RMC QPSK 10MHz 1RB	Left Tilted	831.0	23.67	24.0	1.079	0.225	0.243
109.	RMC QPSK 10MHz 50%RB	Right Cheek	831.0	23.67	24.0	1.079	0.132	0.142
110.	RMC QPSK 10MHz 50%RB	Right Tilted	831.0	23.67	24.0	1.079	0.068	0.073
111.	RMC QPSK 10MHz 50%RB	Left Cheek	831.0	23.67	24.0	1.079	0.217	0.234
112.	RMC QPSK 10MHz 50%RB	Left Tilted	831.0	23.67	24.0	1.079	0.115	0.124

LTE Band 30– Head SAR Test								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth	Head	MHz	(dBm)	(dBm)			
113.	RMC QPSK 10MHz 1RB	Right Cheek	2310.0	23.56	24.0	1.107	0.280	0.310
114.	RMC QPSK 10MHz 1RB	Right Tilted	2310.0	23.56	24.0	1.107	0.144	0.159
115.	RMC QPSK 10MHz 1RB	Left Cheek	2310.0	23.56	24.0	1.107	0.180	0.199
116.	RMC QPSK 10MHz 1RB	Left Tilted	2310.0	23.56	24.0	1.107	0.101	0.112
117.	RMC QPSK 10MHz 50%RB	Right Cheek	2310.0	23.56	24.0	1.107	0.142	0.157
118.	RMC QPSK 10MHz 50%RB	Right Tilted	2310.0	23.56	24.0	1.107	0.069	0.076
119.	RMC QPSK 10MHz 50%RB	Left Cheek	2310.0	23.56	24.0	1.107	0.099	0.110
120.	RMC QPSK 10MHz 50%RB	Left Tilted	2310.0	23.56	24.0	1.107	0.051	0.056

LTE Band 40:2305-2315MHz– Head SAR Test								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth	Head	MHz	(dBm)	(dBm)			
121.	RMC QPSK 10MHz 1RB	Right Cheek	2310.0	23.52	24.0	1.117	0.023	0.026
122.	RMC QPSK 10MHz 1RB	Right Tilted	2310.0	23.52	24.0	1.117	0.013	0.015
123.	RMC QPSK 10MHz 1RB	Left Cheek	2310.0	23.52	24.0	1.117	0.014	0.016
124.	RMC QPSK 10MHz 1RB	Left Tilted	2310.0	23.52	24.0	1.117	0.008	0.009
125.	RMC QPSK 10MHz 50%RB	Right Cheek	2310.0	23.52	24.0	1.117	0.014	0.016
126.	RMC QPSK 10MHz 50%RB	Right Tilted	2310.0	23.52	24.0	1.117	0.007	0.008
127.	RMC QPSK 10MHz 50%RB	Left Cheek	2310.0	23.52	24.0	1.117	0.006	0.007
128.	RMC QPSK 10MHz 50%RB	Left Tilted	2310.0	23.52	24.0	1.117	0.004	0.004

LTE Band 40: 2350-2360MHz– Head SAR Test								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth	Head	MHz	(dBm)	(dBm)			
129.	RMC QPSK 10MHz 1RB	Right Cheek	2355.0	21.67	22.0	1.079	0.028	0.030
130.	RMC QPSK 10MHz 1RB	Right Tilted	2355.0	21.67	22.0	1.079	0.016	0.017
131.	RMC QPSK 10MHz 1RB	Left Cheek	2355.0	21.67	22.0	1.079	0.015	0.016
132.	RMC QPSK 10MHz 1RB	Left Tilted	2355.0	21.67	22.0	1.079	0.008	0.009
133.	RMC QPSK 10MHz 50%RB	Right Cheek	2355.0	21.67	22.0	1.079	0.015	0.016
134.	RMC QPSK 10MHz 50%RB	Right Tilted	2355.0	21.67	22.0	1.079	0.009	0.010
135.	RMC QPSK 10MHz 50%RB	Left Cheek	2355.0	21.67	22.0	1.079	0.007	0.008
136.	RMC QPSK 10MHz 50%RB	Left Tilted	2355.0	21.67	22.0	1.079	0.005	0.005

LTE Band 66– Head SAR Test								
Plot No.	Mode	Test Position Head	Frequency	Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth		MHz					
137.	RMC QPSK 20MHz 1RB	Right Cheek	1712.5	24.78	25.0	1.052	0.632	0.665
138.	RMC QPSK 20MHz 1RB	Right Tilted	1712.5	24.78	25.0	1.052	0.338	0.356
139.	RMC QPSK 20MHz 1RB	Left Cheek	1712.5	24.78	25.0	1.052	0.404	0.425
140.	RMC QPSK 20MHz 1RB	Left Tilted	1712.5	24.78	25.0	1.052	0.217	0.228
141.	RMC QPSK 20MHz 50%RB	Right Cheek	1712.5	24.78	25.0	1.052	0.312	0.328
142.	RMC QPSK 20MHz 50%RB	Right Tilted	1712.5	24.78	25.0	1.052	0.166	0.175
143.	RMC QPSK 20MHz 50%RB	Left Cheek	1712.5	24.78	25.0	1.052	0.208	0.219
144.	RMC QPSK 20MHz 50%RB	Left Tilted	1712.5	24.78	25.0	1.052	0.119	0.125

WLAN 2.4GHz – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
145.	802.11b	Right Cheek	01	2412	16.44	16.5	1.014	0.182	0.185
146.	802.11b	Right Tilted	01	2412	16.44	16.5	1.014	0.099	0.100
147.	802.11b	Left Cheek	01	2412	16.44	16.5	1.014	0.201	0.204
148.	802.11b	Left Tilted	01	2412	16.44	16.5	1.014	0.118	0.120

WLAN 5.2GHz – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
149.	802.11a	Right Cheek	36	5180	11.75	12.0	1.059	0.324	0.343
150.	802.11a	Right Tilted	36	5180	11.75	12.0	1.059	0.156	0.165
151.	802.11a	Left Cheek	36	5180	11.75	12.0	1.059	0.222	0.235
152.	802.11a	Left Tilted	36	5180	11.75	12.0	1.059	0.118	0.125

WLAN 5.3GHz – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
153.	802.11n-20	Right Cheek	64	5320	11.59	12.0	1.099	0.390	0.429
154.	802.11n-20	Right Tilted	64	5320	11.59	12.0	1.099	0.155	0.170
155.	802.11n-20	Left Cheek	64	5320	11.59	12.0	1.099	0.255	0.280
156.	802.11n-20	Left Tilted	64	5320	11.59	12.0	1.099	0.128	0.141

WLAN 5.6GHz – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
157.	802.11a	Right Cheek	120	5600	11.97	12.0	1.007	0.344	0.346
158.	802.11a	Right Tilted	120	5600	11.97	12.0	1.007	0.157	0.158
159.	802.11a	Left Cheek	120	5600	11.97	12.0	1.007	0.107	0.108
160.	802.11a	Left Tilted	120	5600	11.97	12.0	1.007	0.061	0.061

WLAN 5.8GHz – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
161.	802.11n-20	Right Cheek	149	5745	11.33	11.5	1.040	0.038	0.040
162.	802.11n-20	Right Tilted	149	5745	11.33	11.5	1.040	0.021	0.022
163.	802.11n-20	Left Cheek	149	5745	11.33	11.5	1.040	0.141	0.147
164.	802.11n-20	Left Tilted	149	5745	11.33	11.5	1.040	0.068	0.071

Remark: Per KDB 447498 D01 v06, if the highest output channel SAR for each exposure position ≤ 0.8 W/kg other channels SAR tests are not necessary.

Body-worn SAR

GSM850 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
165.	GSM	Back	190	836.6	32.42	32.5	1.019	0.625	0.637
166.	GSM	Front	190	836.6	32.42	32.5	1.019	0.558	0.568

GSM1900 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
167.	GSM	Back	810	1909.8	30.33	30.5	1.040	0.420	0.437
168.	GSM	Front	810	1909.8	30.33	30.5	1.040	0.243	0.253

WCDMA Band 2 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
169.	RMC 12.2k	Back Side	9400	1880.0	22.75	23.0	1.059	0.677	0.717
170.	RMC 12.2k	Front Side	9400	1880.0	22.75	23.0	1.059	0.432	0.458

WCDMA Band 5 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
171.	RMC 12.2k	Back Side	4132	826.4	22.97	23.0	1.007	0.546	0.550
172.	RMC 12.2k	Front Side	4132	826.4	22.97	23.0	1.007	0.346	0.348

WCDMA Band 4– Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
173.	RMC 12.2k	Back Side	1513	1752.6	21.52	22.0	1.117	0.696	0.777
174.	RMC 12.2k	Front Side	1513	1752.6	21.52	22.0	1.117	0.692	0.773

LTE Band 2–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
175.	RMC QPSK 20MHz 1RB	Back Side	1860.0	22.62	23.0	1.091	0.658	0.718
176.	RMC QPSK 20MHz 1RB	Front Side	1860.0	22.62	23.0	1.091	0.566	0.618
177.	RMC QPSK 20MHz 50%RB	Back Side	1860.0	22.62	23.0	1.091	0.325	0.355
178.	RMC QPSK 20MHz 50%RB	Front Side	1860.0	22.62	23.0	1.091	0.253	0.276

LTE Band 4–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
179.	RMC QPSK 20MHz 1RB	Back Side	1720.0	23.43	23.5	1.016	0.687	0.698
180.	RMC QPSK 20MHz 1RB	Front Side	1720.0	23.43	23.5	1.016	1.038	1.055
181.	RMC QPSK 20MHz 1RB	Front Side	1732.5	23.28	23.5	1.052	1.058	1.113
182.	RMC QPSK 20MHz 1RB	Front Side	1745.0	23.18	23.5	1.076	1.056	1.137
183.	RMC QPSK 20MHz 50%RB	Back Side	1720.0	23.43	23.5	1.016	0.344	0.350
184.	RMC QPSK 20MHz 50%RB	Front Side	1720.0	23.43	23.5	1.016	0.516	0.524

LTE Band 5–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
185.	RMC QPSK 10MHz 1RB	Back Side	829.0	23.33	23.5	1.040	0.527	0.548
186.	RMC QPSK 10MHz 1RB	Front Side	829.0	23.33	23.5	1.040	0.306	0.318
187.	RMC QPSK 10MHz 50%RB	Back Side	829.0	23.33	23.5	1.040	0.259	0.269
188.	RMC QPSK 10MHz 50%RB	Front Side	829.0	23.33	23.5	1.040	0.154	0.160

LTE Band 7–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
189.	RMC QPSK 20MHz 1RB	Back Side	2510.0	23.66	24.0	1.081	0.933	1.009
190.	RMC QPSK 20MHz 1RB	Back Side	2535.0	23.45	24.0	1.135	0.851	0.966
191.	RMC QPSK 20MHz 1RB	Back Side	2560.0	23.45	24.0	1.135	0.790	0.897
192.	RMC QPSK 20MHz 1RB	Front Side	2510.0	23.66	24.0	1.081	0.446	0.482
193.	RMC QPSK 20MHz 50%RB	Back Side	2510.0	23.66	24.0	1.081	0.459	0.496
194.	RMC QPSK 20MHz 50%RB	Front Side	2510.0	23.66	24.0	1.081	0.226	0.244

LTE Band 12–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
195.	RMC QPSK 10MHz 1RB	Back Side	704.0	23.79	24.0	1.050	0.685	0.719
196.	RMC QPSK 10MHz 1RB	Front Side	704.0	23.79	24.0	1.050	0.380	0.399
197.	RMC QPSK 10MHz 50%RB	Back Side	704.0	23.79	24.0	1.050	0.342	0.359
198.	RMC QPSK 10MHz 50%RB	Front Side	704.0	23.79	24.0	1.050	0.199	0.209

LTE Band 13–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
199.	RMC QPSK 10MHz 1RB	Back Side	782.0	23.53	24.0	1.114	0.683	0.761
200.	RMC QPSK 10MHz 1RB	Front Side	782.0	23.53	24.0	1.114	0.414	0.461
201.	RMC QPSK 10MHz 50%RB	Back Side	782.0	23.53	24.0	1.114	0.339	0.378
202.	RMC QPSK 10MHz 50%RB	Front Side	782.0	23.53	24.0	1.114	0.213	0.237

LTE Band 17–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
203.	RMC QPSK 10MHz 1RB	Back Side	709.0	23.52	24.0	1.117	0.769	0.859
204.	RMC QPSK 10MHz 1RB	Front Side	709.0	23.52	24.0	1.117	0.398	0.445
205.	RMC QPSK 10MHz 50%RB	Back Side	709.0	23.52	24.0	1.117	0.387	0.432
206.	RMC QPSK 10MHz 50%RB	Front Side	709.0	23.52	24.0	1.117	0.212	0.237

LTE Band 25–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
207.	RMC QPSK 20MHz 1RB	Back Side	1860.0	23.50	24.0	1.122	0.650	0.729
208.	RMC QPSK 20MHz 1RB	Front Side	1860.0	23.50	24.0	1.122	0.476	0.534
209.	RMC QPSK 20MHz 50%RB	Back Side	1860.0	23.50	24.0	1.122	0.336	0.377
210.	RMC QPSK 20MHz 50%RB	Front Side	1860.0	23.50	24.0	1.122	0.243	0.273

LTE Band 26–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
211.	RMC QPSK 10MHz 1RB	Back Side	819.0	23.30	23.5	1.047	0.627	0.657
212.	RMC QPSK 10MHz 1RB	Front Side	819.0	23.30	23.5	1.047	0.229	0.240
213.	RMC QPSK 10MHz 50%RB	Back Side	819.0	23.30	23.5	1.047	0.335	0.351
214.	RMC QPSK 10MHz 50%RB	Front Side	819.0	23.30	23.5	1.047	0.129	0.135

LTE Band 26–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
215.	RMC QPSK 10MHz 1RB	Back Side	831.0	23.67	24.0	1.079	0.630	0.680
216.	RMC QPSK 10MHz 1RB	Front Side	831.0	23.67	24.0	1.079	0.409	0.441
217.	RMC QPSK 10MHz 50%RB	Back Side	831.0	23.67	24.0	1.079	0.338	0.365
218.	RMC QPSK 10MHz 50%RB	Front Side	831.0	23.67	24.0	1.079	0.226	0.244

LTE Band 30–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
219.	RMC QPSK 20MHz 1RB	Back Side	2310.0	23.56	24.0	1.107	0.486	0.538
220.	RMC QPSK 20MHz 1RB	Front Side	2310.0	23.56	24.0	1.107	0.199	0.220
221.	RMC QPSK 20MHz 50%RB	Back Side	2310.0	23.56	24.0	1.107	0.225	0.249
222.	RMC QPSK 20MHz 50%RB	Front Side	2310.0	23.56	24.0	1.107	0.113	0.125

LTE Band 40:2305-2315MHz–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
223.	RMC QPSK 10MHz 1RB	Back Side	2310.0	23.52	24.0	1.117	0.186	0.208
224.	RMC QPSK 10MHz 1RB	Front Side	2310.0	23.52	24.0	1.117	0.076	0.085
225.	RMC QPSK 10MHz 50%RB	Back Side	2310.0	23.52	24.0	1.117	0.088	0.098
226.	RMC QPSK 10MHz 50%RB	Front Side	2310.0	23.52	24.0	1.117	0.035	0.039

LTE Band 40: 2350-2360MHz–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
227.	RMC QPSK 10MHz 1RB	Back Side	2355.0	21.67	22.0	1.079	0.232	0.250
228.	RMC QPSK 10MHz 1RB	Front Side	2355.0	21.67	22.0	1.079	0.100	0.108
229.	RMC QPSK 10MHz 50%RB	Back Side	2355.0	21.67	22.0	1.079	0.121	0.131
230.	RMC QPSK 10MHz 50%RB	Front Side	2355.0	21.67	22.0	1.079	0.057	0.061

LTE Band 66–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
231.	RMC QPSK 20MHz 1RB	Back Side	1712.5	24.78	25.0	1.052	0.571	0.601
232.	RMC QPSK 20MHz 1RB	Front Side	1712.5	24.78	25.0	1.052	0.721	0.758
233.	RMC QPSK 20MHz 50%RB	Back Side	1712.5	24.78	25.0	1.052	0.291	0.306
234.	RMC QPSK 20MHz 50%RB	Front Side	1712.5	24.78	25.0	1.052	0.337	0.355

WLAN 2.4GHz –Body SAR Test									
Plot No.	Mode	Test Position	Frequency		Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
		Body	CH.	MHz	(dBm)	(dBm)			
235.	802.11b	Back Side	01	2412	16.44	16.5	1.014	0.192	0.195
236.	802.11b	Front Side	01	2412	16.44	16.5	1.014	0.155	0.157

WLAN 5.2GHz –Body SAR Test									
Plot No.	Mode	Test Position	Frequency		Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
		Body	CH.	MHz	(dBm)	(dBm)			
237.	802.11a	Back Side	36	5180	11.75	12.0	1.059	0.182	0.193
238.	802.11a	Front Side	36	5180	11.75	12.0	1.059	0.071	0.075

WLAN 5.3GHz –Body SAR Test									
Plot No.	Mode	Test Position	Frequency		Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
		Body	CH.	MHz	(dBm)	(dBm)			
239.	802.11n-20	Back Side	64	5320	11.59	12.0	1.099	0.214	0.235
240.	802.11n-20	Front Side	64	5320	11.59	12.0	1.099	0.102	0.112

WLAN 5.6GHz –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)
			CH.	MHz					
241.	802.11a	Back Side	120	5600	11.97	12.0	1.007	0.338	0.340
242.	802.11a	Front Side	120	5600	11.97	12.0	1.007	0.075	0.076

WLAN 5.8GHz –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)
			CH.	MHz					
243.	802.11n-20	Back Side	149	5745	11.33	11.5	1.040	0.125	0.130
244.	802.11n-20	Front Side	149	5745	11.33	11.5	1.040	0.039	0.041

Remark: Per KDB 447498 D01 v06, if the highest output channel SAR for each exposure position ≤ 0.8 W/kg other channels SAR tests are not necessary.

Hotspot SAR

GSM850 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
245.	GPRS_4TX	Back Side	128	824.2	29.27	29.5	1.054	1.028	1.084
246.	GPRS_4TX	Back Side	190	836.6	29.17	29.5	1.079	1.026	1.107
247.	GPRS_4TX	Back Side	251	848.8	29.06	29.5	1.107	1.079	1.194
248.	GPRS_4TX	Front Side	128	824.2	29.27	29.5	1.054	0.746	0.787
249.	GPRS_4TX	Right side	128	824.2	29.27	29.5	1.054	0.386	0.407
250.	GPRS_4TX	Left side	128	824.2	29.27	29.5	1.054	0.377	0.398
251.	GPRS_4TX	Bottom side	128	824.2	29.27	29.5	1.054	0.415	0.438

GSM1900 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
252.	GPRS_2TX	Back Side	661	1880.0	29.39	29.5	1.026	0.723	0.742
253.	GPRS_2TX	Front Side	661	1880.0	29.39	29.5	1.026	0.472	0.484
254.	GPRS_2TX	Right side	661	1880.0	29.39	29.5	1.026	0.392	0.402
255.	GPRS_2TX	Left side	661	1880.0	29.39	29.5	1.026	0.387	0.397
256.	GPRS_2TX	Bottom side	661	1880.0	29.39	29.5	1.026	0.421	0.432

WCDMA Band 2 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
257.	RMC 12.2k	Back Side	9400	1880.0	22.75	23.0	1.059	0.677	0.717
258.	RMC 12.2k	Front Side	9400	1880.0	22.75	23.0	1.059	0.432	0.458
259.	RMC 12.2k	Right side	9400	1880.0	22.75	23.0	1.059	0.259	0.274
260.	RMC 12.2k	Left side	9400	1880.0	22.75	23.0	1.059	0.243	0.257
261.	RMC 12.2k	Bottom side	9400	1880.0	22.75	23.0	1.059	0.329	0.348

WCDMA Band 5 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
262.	RMC 12.2k	Back Side	4132	826.4	22.97	23.0	1.007	0.546	0.550
263.	RMC 12.2k	Front Side	4132	826.4	22.97	23.0	1.007	0.346	0.348
264.	RMC 12.2k	Right side	4132	826.4	22.97	23.0	1.007	0.133	0.134
265.	RMC 12.2k	Left side	4132	826.4	22.97	23.0	1.007	0.127	0.128
266.	RMC 12.2k	Bottom side	4132	826.4	22.97	23.0	1.007	0.162	0.163

WCDMA Band 4 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
267.	RMC 12.2k	Back Side	1513	1752.6	21.52	22.0	1.117	0.696	0.777
268.	RMC 12.2k	Front Side	1513	1752.6	21.52	22.0	1.117	0.692	0.773
269.	RMC 12.2k	Right side	1513	1752.6	21.52	22.0	1.117	0.312	0.348
270.	RMC 12.2k	Left side	1513	1752.6	21.52	22.0	1.117	0.291	0.325
271.	RMC 12.2k	Bottom side	1513	1752.6	21.52	22.0	1.117	0.385	0.430

LTE Band 2–Body SAR Test (Gap: 10mm)								
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					
272.	RMC QPSK 20MHz 1RB	Back Side	1860.0	22.62	23.0	1.091	0.658	0.718
273.	RMC QPSK 20MHz 1RB	Front Side	1860.0	22.62	23.0	1.091	0.566	0.618
274.	RMC QPSK 20MHz 1RB	Right side	1860.0	22.62	23.0	1.091	0.266	0.290
275.	RMC QPSK 20MHz 1RB	Left side	1860.0	22.62	23.0	1.091	0.257	0.281
276.	RMC QPSK 20MHz 1RB	Bottom side	1860.0	22.62	23.0	1.091	0.341	0.372
277.	RMC QPSK 20MHz 50%RB	Back Side	1860.0	22.62	23.0	1.091	0.325	0.355
278.	RMC QPSK 20MHz 50%RB	Front Side	1860.0	22.62	23.0	1.091	0.253	0.276
279.	RMC QPSK 20MHz 50%RB	Right side	1860.0	22.62	23.0	1.091	0.142	0.155
280.	RMC QPSK 20MHz 50%RB	Left side	1860.0	22.62	23.0	1.091	0.138	0.151
281.	RMC QPSK 20MHz 50%RB	Bottom side	1860.0	22.62	23.0	1.091	0.181	0.198

LTE Band 4–Body SAR Test (Gap: 10mm)								
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					
282.	RMC QPSK 20MHz 1RB	Back Side	1720.0	23.43	23.5	1.016	0.687	0.698
283.	RMC QPSK 20MHz 1RB	Front Side	1720.0	23.43	23.5	1.016	1.038	1.055
284.	RMC QPSK 20MHz 1RB	Front Side	1732.5	23.28	23.5	1.052	1.058	1.113
285.	RMC QPSK 20MHz 1RB	Front Side	1745.0	23.18	23.5	1.076	1.056	1.137
286.	RMC QPSK 20MHz 1RB	Right side	1720.0	23.43	23.5	1.016	0.388	0.394
287.	RMC QPSK 20MHz 1RB	Left side	1720.0	23.43	23.5	1.016	0.371	0.377
288.	RMC QPSK 20MHz 1RB	Bottom side	1720.0	23.43	23.5	1.016	0.412	0.419
289.	RMC QPSK 20MHz 50%RB	Back Side	1720.0	23.43	23.5	1.016	0.344	0.350
290.	RMC QPSK 20MHz 50%RB	Front Side	1720.0	23.43	23.5	1.016	0.516	0.524
291.	RMC QPSK 20MHz 50%RB	Right side	1720.0	23.43	23.5	1.016	0.199	0.202
292.	RMC QPSK 20MHz 50%RB	Left side	1720.0	23.43	23.5	1.016	0.193	0.196
293.	RMC QPSK 20MHz 50%RB	Bottom side	1720.0	23.43	23.5	1.016	0.211	0.214
294.	RMC QPSK 20MHz 50%RB	Front Side	1720.0	23.43	23.5	1.016	0.668	0.679

LTE Band 5–Body SAR Test (Gap: 10mm)								
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					
295.	RMC QPSK 10MHz 1RB	Back Side	829.0	23.33	23.5	1.040	0.527	0.548
296.	RMC QPSK 10MHz 1RB	Front Side	829.0	23.33	23.5	1.040	0.306	0.318
297.	RMC QPSK 10MHz 1RB	Right side	829.0	23.33	23.5	1.040	0.163	0.170
298.	RMC QPSK 10MHz 1RB	Left side	829.0	23.33	23.5	1.040	0.158	0.164
299.	RMC QPSK 10MHz 1RB	Bottom side	829.0	23.33	23.5	1.040	0.182	0.189
300.	RMC QPSK 10MHz 50%RB	Back Side	829.0	23.33	23.5	1.040	0.259	0.269
301.	RMC QPSK 10MHz 50%RB	Front Side	829.0	23.33	23.5	1.040	0.154	0.160
302.	RMC QPSK 10MHz 50%RB	Right side	829.0	23.33	23.5	1.040	0.088	0.092
303.	RMC QPSK 10MHz 50%RB	Left side	829.0	23.33	23.5	1.040	0.081	0.084
304.	RMC QPSK 10MHz 50%RB	Bottom side	829.0	23.33	23.5	1.040	0.093	0.097

LTE Band 7–Body SAR Test (Gap: 10mm)								
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					
305.	RMC QPSK 20MHz 1RB	Back Side	2510.0	23.66	24.0	1.081	0.933	1.009
306.	RMC QPSK 20MHz 1RB	Back Side	2535.0	23.45	24.0	1.135	0.851	0.966
307.	RMC QPSK 20MHz 1RB	Back Side	2560.0	23.45	24.0	1.135	0.790	0.897
308.	RMC QPSK 20MHz 1RB	Front Side	2510.0	23.66	24.0	1.081	0.446	0.482
309.	RMC QPSK 20MHz 1RB	Right side	2510.0	23.66	24.0	1.081	0.325	0.351
310.	RMC QPSK 20MHz 1RB	Left side	2510.0	23.66	24.0	1.081	0.311	0.336
311.	RMC QPSK 20MHz 1RB	Bottom side	2510.0	23.66	24.0	1.081	0.947	1.024
312.	RMC QPSK 20MHz 1RB	Bottom side	2535.0	23.45	24.0	1.135	0.834	0.947
313.	RMC QPSK 20MHz 1RB	Bottom side	2560.0	23.45	24.0	1.135	0.740	0.840
314.	RMC QPSK 20MHz 50%RB	Back Side	2510.0	23.66	24.0	1.081	0.459	0.496
315.	RMC QPSK 20MHz 50%RB	Front Side	2510.0	23.66	24.0	1.081	0.226	0.244
316.	RMC QPSK 20MHz 50%RB	Right side	2510.0	23.66	24.0	1.081	0.162	0.175
317.	RMC QPSK 20MHz 50%RB	Left side	2510.0	23.66	24.0	1.081	0.153	0.165
318.	RMC QPSK 20MHz 50%RB	Bottom side	2510.0	23.66	24.0	1.081	0.466	0.504
319.	RMC QPSK 20MHz 100%RB	Back Side	2510.0	23.66	24.0	1.081	0.546	0.590
320.	RMC QPSK 20MHz 100%RB	Bottom side	2510.0	23.66	24.0	1.081	0.553	0.598

LTE Band 12–Body SAR Test (Gap: 10mm)								
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					
321.	RMC QPSK 10MHz 1RB	Back Side	704.0	23.79	24.0	1.050	0.685	0.719
322.	RMC QPSK 10MHz 1RB	Front Side	704.0	23.79	24.0	1.050	0.380	0.399
323.	RMC QPSK 10MHz 1RB	Right side	704.0	23.79	24.0	1.050	0.315	0.331
324.	RMC QPSK 10MHz 1RB	Left side	704.0	23.79	24.0	1.050	0.302	0.317
325.	RMC QPSK 10MHz 1RB	Bottom side	704.0	23.79	24.0	1.050	0.470	0.493
326.	RMC QPSK 10MHz 50%RB	Back Side	704.0	23.79	24.0	1.050	0.342	0.359
327.	RMC QPSK 10MHz 50%RB	Front Side	704.0	23.79	24.0	1.050	0.199	0.209
328.	RMC QPSK 10MHz 50%RB	Right side	704.0	23.79	24.0	1.050	0.155	0.163
329.	RMC QPSK 10MHz 50%RB	Left side	704.0	23.79	24.0	1.050	0.153	0.161
330.	RMC QPSK 10MHz 50%RB	Bottom side	704.0	23.79	24.0	1.050	0.226	0.237

LTE Band 13–Body SAR Test (Gap: 10mm)								
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					
331.	RMC QPSK 10MHz 1RB	Back Side	782.0	23.53	24.0	1.114	0.683	0.761
332.	RMC QPSK 10MHz 1RB	Front Side	782.0	23.53	24.0	1.114	0.414	0.461
333.	RMC QPSK 10MHz 1RB	Right side	782.0	23.53	24.0	1.114	0.142	0.158
334.	RMC QPSK 10MHz 1RB	Left side	782.0	23.53	24.0	1.114	0.138	0.154
335.	RMC QPSK 10MHz 1RB	Bottom side	782.0	23.53	24.0	1.114	0.153	0.170
336.	RMC QPSK 10MHz 50%RB	Back Side	782.0	23.53	24.0	1.114	0.339	0.378
337.	RMC QPSK 10MHz 50%RB	Front Side	782.0	23.53	24.0	1.114	0.213	0.237
338.	RMC QPSK 10MHz 50%RB	Right side	782.0	23.53	24.0	1.114	0.078	0.087
339.	RMC QPSK 10MHz 50%RB	Left side	782.0	23.53	24.0	1.114	0.073	0.081
340.	RMC QPSK 10MHz 50%RB	Bottom side	782.0	23.53	24.0	1.114	0.085	0.095

LTE Band 17–Body SAR Test (Gap: 10mm)								
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					
341.	RMC QPSK 10MHz 1RB	Back Side	709.0	23.52	24.0	1.117	0.769	0.859
342.	RMC QPSK 10MHz 1RB	Front Side	709.0	23.52	24.0	1.117	0.398	0.445
343.	RMC QPSK 10MHz 1RB	Right side	709.0	23.52	24.0	1.117	0.126	0.141
344.	RMC QPSK 10MHz 1RB	Left side	709.0	23.52	24.0	1.117	0.118	0.132
345.	RMC QPSK 10MHz 1RB	Bottom side	709.0	23.52	24.0	1.117	0.143	0.160
346.	RMC QPSK 10MHz 50%RB	Back Side	709.0	23.52	24.0	1.117	0.387	0.432
347.	RMC QPSK 10MHz 50%RB	Front Side	709.0	23.52	24.0	1.117	0.212	0.237
348.	RMC QPSK 10MHz 50%RB	Right side	709.0	23.52	24.0	1.117	0.065	0.073
349.	RMC QPSK 10MHz 50%RB	Left side	709.0	23.52	24.0	1.117	0.066	0.074
350.	RMC QPSK 10MHz 50%RB	Bottom side	709.0	23.52	24.0	1.117	0.072	0.080

LTE Band 25–Body SAR Test (Gap: 10mm)								
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					
351.	RMC QPSK 20MHz 1RB	Back Side	1860.0	23.50	24.0	1.122	0.650	0.729
352.	RMC QPSK 20MHz 1RB	Front Side	1860.0	23.50	24.0	1.122	0.476	0.534
353.	RMC QPSK 20MHz 1RB	Right side	1860.0	23.50	24.0	1.122	0.228	0.256
354.	RMC QPSK 20MHz 1RB	Left side	1860.0	23.50	24.0	1.122	0.215	0.241
355.	RMC QPSK 20MHz 1RB	Bottom side	1860.0	23.50	24.0	1.122	0.332	0.373
356.	RMC QPSK 20MHz 50%RB	Back Side	1860.0	23.50	24.0	1.122	0.336	0.377
357.	RMC QPSK 20MHz 50%RB	Front Side	1860.0	23.50	24.0	1.122	0.243	0.273
358.	RMC QPSK 20MHz 50%RB	Right side	1860.0	23.50	24.0	1.122	0.119	0.134
359.	RMC QPSK 20MHz 50%RB	Left side	1860.0	23.50	24.0	1.122	0.112	0.126
360.	RMC QPSK 20MHz 50%RB	Bottom side	1860.0	23.50	24.0	1.122	0.176	0.197

LTE Band 26–Body SAR Test (Gap: 10mm) (814-824MHz)								
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					
361.	RMC QPSK 10MHz 1RB	Back Side	819.0	23.30	23.5	1.047	0.627	0.657
362.	RMC QPSK 10MHz 1RB	Front Side	819.0	23.30	23.5	1.047	0.229	0.240
363.	RMC QPSK 10MHz 1RB	Right side	819.0	23.30	23.5	1.047	0.179	0.187
364.	RMC QPSK 10MHz 1RB	Left side	819.0	23.30	23.5	1.047	0.162	0.170
365.	RMC QPSK 10MHz 1RB	Bottom side	819.0	23.30	23.5	1.047	0.199	0.208
366.	RMC QPSK 10MHz 50%RB	Back Side	819.0	23.30	23.5	1.047	0.335	0.351
367.	RMC QPSK 10MHz 50%RB	Front Side	819.0	23.30	23.5	1.047	0.129	0.135
368.	RMC QPSK 10MHz 50%RB	Right side	819.0	23.30	23.5	1.047	0.091	0.095
369.	RMC QPSK 10MHz 50%RB	Left side	819.0	23.30	23.5	1.047	0.086	0.090
370.	RMC QPSK 10MHz 50%RB	Bottom side	819.0	23.30	23.5	1.047	0.099	0.104

LTE Band 26–Body SAR Test (Gap: 10mm) (824-849MHz)								
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					
371.	RMC QPSK 10MHz 1RB	Back Side	831.0	23.67	24.0	1.079	0.630	0.680
372.	RMC QPSK 10MHz 1RB	Front Side	831.0	23.67	24.0	1.079	0.409	0.441
373.	RMC QPSK 10MHz 1RB	Right side	831.0	23.67	24.0	1.079	0.199	0.215
374.	RMC QPSK 10MHz 1RB	Left side	831.0	23.67	24.0	1.079	0.187	0.202
375.	RMC QPSK 10MHz 1RB	Bottom side	831.0	23.67	24.0	1.079	0.196	0.211
376.	RMC QPSK 10MHz 50%RB	Back Side	831.0	23.67	24.0	1.079	0.338	0.365
377.	RMC QPSK 10MHz 50%RB	Front Side	831.0	23.67	24.0	1.079	0.226	0.244
378.	RMC QPSK 10MHz 50%RB	Right side	831.0	23.67	24.0	1.079	0.115	0.124
379.	RMC QPSK 10MHz 50%RB	Left side	831.0	23.67	24.0	1.079	0.109	0.118
380.	RMC QPSK 10MHz 50%RB	Bottom side	831.0	23.67	24.0	1.079	0.102	0.110

LTE Band 30–Body SAR Test (Gap: 10mm)								
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					
381.	RMC QPSK 10MHz 1RB	Back Side	2310.0	23.56	24.0	1.107	0.486	0.538
382.	RMC QPSK 10MHz 1RB	Front Side	2310.0	23.56	24.0	1.107	0.199	0.220
383.	RMC QPSK 10MHz 1RB	Right side	2310.0	23.56	24.0	1.107	0.187	0.207
384.	RMC QPSK 10MHz 1RB	Left side	2310.0	23.56	24.0	1.107	0.173	0.191
385.	RMC QPSK 10MHz 1RB	Bottom side	2310.0	23.56	24.0	1.107	0.349	0.386
386.	RMC QPSK 10MHz 50%RB	Back Side	2310.0	23.56	24.0	1.107	0.225	0.249
387.	RMC QPSK 10MHz 50%RB	Front Side	2310.0	23.56	24.0	1.107	0.113	0.125
388.	RMC QPSK 10MHz 50%RB	Right side	2310.0	23.56	24.0	1.107	0.108	0.120
389.	RMC QPSK 10MHz 50%RB	Left side	2310.0	23.56	24.0	1.107	0.092	0.102
390.	RMC QPSK 10MHz 50%RB	Bottom side	2310.0	23.56	24.0	1.107	0.157	0.174

LTE Band 40:2305-2315MHz–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
391.	RMC QPSK 10MHz 1RB	Back Side	2310.0	23.52	24.0	1.117	0.186	0.208
392.	RMC QPSK 10MHz 1RB	Front Side	2310.0	23.52	24.0	1.117	0.076	0.085
393.	RMC QPSK 10MHz 1RB	Right side	2310.0	23.52	24.0	1.117	0.099	0.111
394.	RMC QPSK 10MHz 1RB	Left side	2310.0	23.52	24.0	1.117	0.079	0.088
395.	RMC QPSK 10MHz 1RB	Bottom side	2310.0	23.52	24.0	1.117	0.129	0.144
396.	RMC QPSK 10MHz 50%RB	Back Side	2310.0	23.52	24.0	1.117	0.088	0.098
397.	RMC QPSK 10MHz 50%RB	Front Side	2310.0	23.52	24.0	1.117	0.035	0.039
398.	RMC QPSK 10MHz 50%RB	Right side	2310.0	23.52	24.0	1.117	0.047	0.052
399.	RMC QPSK 10MHz 50%RB	Left side	2310.0	23.52	24.0	1.117	0.038	0.042
400.	RMC QPSK 10MHz 50%RB	Bottom side	2310.0	23.52	24.0	1.117	0.063	0.070

LTE Band 40: 2350-2360MHz–Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
401.	RMC QPSK 10MHz 1RB	Back Side	2355.0	21.67	22.0	1.079	0.232	0.250
402.	RMC QPSK 10MHz 1RB	Front Side	2355.0	21.67	22.0	1.079	0.100	0.108
403.	RMC QPSK 10MHz 1RB	Right side	2355.0	21.67	22.0	1.079	0.122	0.132
404.	RMC QPSK 10MHz 1RB	Left side	2355.0	21.67	22.0	1.079	0.103	0.111
405.	RMC QPSK 10MHz 1RB	Bottom side	2355.0	21.67	22.0	1.079	0.169	0.182
406.	RMC QPSK 10MHz 50%RB	Back Side	2355.0	21.67	22.0	1.079	0.121	0.131
407.	RMC QPSK 10MHz 50%RB	Front Side	2355.0	21.67	22.0	1.079	0.057	0.061
408.	RMC QPSK 10MHz 50%RB	Right side	2355.0	21.67	22.0	1.079	0.063	0.068
409.	RMC QPSK 10MHz 50%RB	Left side	2355.0	21.67	22.0	1.079	0.055	0.059
410.	RMC QPSK 10MHz 50%RB	Bottom side	2355.0	21.67	22.0	1.079	0.081	0.087

LTE Band 66:Body SAR Test (Gap: 10mm)								
Plot No.	Mode	Test Position	Frequency	Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
	Modulation, Bandwidth, RB	Body	MHz	(dBm)	(dBm)			
411.	RMC QPSK 20MHz 1RB	Back Side	1720.0	24.78	25.0	1.052	0.571	0.601
412.	RMC QPSK 20MHz 1RB	Front Side	1720.0	24.78	25.0	1.052	0.721	0.758
413.	RMC QPSK 20MHz 1RB	Right side	1720.0	24.78	25.0	1.052	0.253	0.266
414.	RMC QPSK 20MHz 1RB	Left side	1720.0	24.78	25.0	1.052	0.247	0.260
415.	RMC QPSK 20MHz 1RB	Bottom side	1720.0	24.78	25.0	1.052	0.305	0.321
416.	RMC QPSK 20MHz 50%RB	Back Side	1720.0	24.78	25.0	1.052	0.291	0.306
417.	RMC QPSK 20MHz 50%RB	Front Side	1720.0	24.78	25.0	1.052	0.337	0.355
418.	RMC QPSK 20MHz 50%RB	Right side	1720.0	24.78	25.0	1.052	0.132	0.139
419.	RMC QPSK 20MHz 50%RB	Left side	1720.0	24.78	25.0	1.052	0.125	0.131
420.	RMC QPSK 20MHz 50%RB	Bottom side	1720.0	24.78	25.0	1.052	0.154	0.162

WLAN 2.4GHz –Body SAR Test									
Plot No.	Mode	Test Position	Frequency		Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
		Body	CH.	MHz	(dBm)	(dBm)			
421.	802.11b	Back Side	01	2412	16.44	16.5	1.014	0.192	0.195
422.	802.11b	Front Side	01	2412	16.44	16.5	1.014	0.155	0.157
423.	802.11b	Left side	01	2412	16.44	16.5	1.014	0.075	0.076
424.	802.11b	Top side	01	2412	16.44	16.5	1.014	0.137	0.139

WLAN 5.2GHz –Body SAR Test									
Plot No.	Mode	Test Position	Frequency		Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
		Body	CH.	MHz	(dBm)	(dBm)			
425.	802.11a	Back Side	36	5180	11.75	12.0	1.059	0.182	0.193
426.	802.11a	Front Side	36	5180	11.75	12.0	1.059	0.071	0.075
427.	802.11a	Left side	36	5180	11.75	12.0	1.059	0.056	0.059
428.	802.11a	Top side	36	5180	11.75	12.0	1.059	0.072	0.076

WLAN 5.3GHz –Body SAR Test									
Plot No.	Mode	Test Position	Frequency		Output Power	Rated Limit	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
		Body	CH.	MHz	(dBm)	(dBm)			
429.	802.11n-20	Back Side	64	5320	11.59	12.0	1.099	0.214	0.235
430.	802.11n-20	Front Side	64	5320	11.59	12.0	1.099	0.102	0.112
431.	802.11n-20	Left side	64	5320	11.59	12.0	1.099	0.048	0.053
432.	802.11n-20	Top side	64	5320	11.59	12.0	1.099	0.058	0.064

WLAN 5.6GHz –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)
			CH.	MHz					
433.	802.11a	Back Side	120	5600	11.97	12.0	1.007	0.338	0.340
434.	802.11a	Front Side	120	5600	11.97	12.0	1.007	0.075	0.076
435.	802.11a	Left side	120	5600	11.97	12.0	1.007	0.055	0.055
436.	802.11a	Top side	120	5600	11.97	12.0	1.007	0.060	0.060

WLAN 5.8GHz –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)
			CH.	MHz					
437.	802.11n-20	Back Side	149	5745	11.33	11.5	1.040	0.125	0.130
438.	802.11n-20	Front Side	149	5745	11.33	11.5	1.040	0.039	0.041
439.	802.11n-20	Left side	149	5745	11.33	11.5	1.040	0.029	0.030
440.	802.11n-20	Top side	149	5745	11.33	11.5	1.040	0.031	0.032

Front-of the face SAR

GSM850 – Head SAR Test (Gap: 25mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
441.	GPRS_4TX	Front	128	824.2	29.27	29.5	1.054	0.344	0.363

GSM1900 –Head SAR Test (Gap: 25mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
442.	GPRS_2TX	Front	661	1880.0	29.39	29.5	1.026	0.102	0.105

Repeated SAR

GPRS850 – Head SAR Test									
Plot No.	Mode	Test Position Head	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
443.	GPRS_4TX	Left Cheek	128	824.2	29.27	29.5	1.054	0.922	0.972

GSM850 – Body SAR Test (Gap: 10mm)									
Plot No.	Mode	Test Position Body	Frequency		Output Power (dBm)	Rated Limit (dBm)	Scaling Factor	SAR1g (W/kg)	Scaled SAR1g (W/kg)
			CH.	MHz					
444.	GPRS_4TX	Back Side	251	848.8	29.06	29.5	1.107	1.048	1.160

LTE Band 4–Body SAR Test (Gap: 10mm)								
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					
445.	RMC QPSK 20MHz 1RB	Front Side	1720.0	23.28	23.5	1.052	1.058	1.113

LTE Band 7–Body SAR Test (Gap: 10mm)								
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					
446.	RMC QPSK 20MHz 1RB	Back Side	2510.0	23.66	24.0	1.081	0.911	0.985
447.	RMC QPSK 20MHz 1RB	Bottom side	2510.0	23.66	24.0	1.081	0.926	1.001

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.

9.3 Simultaneous Multi-band Transmission SAR Analysis

List of Mode for Simultaneous Multi-band Transmission

No.	Configurations	Head SAR	Body-worn SAR	Hotspot SAR
1	GSM(Voice/Data) + WLAN(2.4G)(Data)	Yes	Yes	Yes
2	WCDMA (Voice/Data)+ (2.4G)(Data)	Yes	Yes	Yes
3	LTE(Data) + (2.4G)(Data)	Yes	Yes	Yes
4	GSM(Voice/Data) + WLAN(5G)(Data)	Yes	Yes	Yes
5	WCDMA (Voice/Data)+ (5G)(Data)	Yes	Yes	Yes
6	LTE(Data) + (5G)(Data)	Yes	Yes	Yes
7	GSM(Voice/Data) + Bluetooth(Data)	Yes	Yes	-
8	WCDMA (Voice/Data) + Bluetooth(Data)	Yes	Yes	-
9	LTE(Data) + Bluetooth(Data)	Yes	Yes	-

Remark:

1. GSM ,WCDMA and LTE share the same antenna, and cannot transmit simultaneously.
2. WLAN and Bluetooth share the same antenna, and cannot transmit simultaneously.
3. According to the KDB 447498 D01 v06, when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)/x] W/kg for test separation distances ≤ 50 mm;

where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.

For simultaneous transmission analysis, Bluetooth SAR is estimated per KDB 447498 D01 v06 as below:

Bluetooth:

Tune-Up Power (dBm)	Max. Power (mW)	Distance (mm)	Frequency (GHz)	X	SAR(1g) 5mm	SAR(1g) 10mm
8.0	6.31	5/10	2.402	7.5	0.261	0.131

Head SAR

WWAN and WLAN

	WWAN		WLAN(2.4G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Right Cheek	GSM850	0.413	0.185	0.598
Right Tilted	GSM850	0.228	0.100	0.328
Left Cheek	GSM850	0.596	0.204	0.800
Left Tilted	GSM850	0.297	0.120	0.417
Right Cheek	GSM1900	0.118	0.185	0.303
Right Tilted	GSM1900	0.053	0.100	0.153
Left Cheek	GSM1900	0.109	0.204	0.313
Left Tilted	GSM1900	0.047	0.120	0.167
Right Cheek	GPRS850	0.887	0.185	1.072
Right Tilted	GPRS850	0.890	0.100	0.990
Left Cheek	GPRS850	1.173	0.204	**1.377**
Left Tilted	GPRS850	0.449	0.120	0.569
Right Cheek	GPRS1900	0.435	0.185	0.620
Right Tilted	GPRS1900	0.224	0.100	0.324
Left Cheek	GPRS1900	0.211	0.204	0.415
Left Tilted	GPRS1900	0.119	0.120	0.239
Right Cheek	WCDMA Band 2	0.258	0.185	0.443
Right Tilted	WCDMA Band 2	0.133	0.100	0.233
Left Cheek	WCDMA Band 2	0.194	0.204	0.398
Left Tilted	WCDMA Band 2	0.113	0.120	0.233
Right Cheek	WCDMA Band 5	0.246	0.185	0.431
Right Tilted	WCDMA Band 5	0.127	0.100	0.227
Left Cheek	WCDMA Band 5	0.357	0.204	0.561
Left Tilted	WCDMA Band 5	0.178	0.120	0.298
Right Cheek	WCDMA Band 4	0.568	0.185	0.753
Right Tilted	WCDMA Band 4	0.285	0.100	0.385
Left Cheek	WCDMA Band 4	0.505	0.204	0.709
Left Tilted	WCDMA Band 4	0.249	0.120	0.369
Right Cheek	LTE Band 2	0.420	0.185	0.605
Right Tilted	LTE Band 2	0.210	0.100	0.310
Left Cheek	LTE Band 2	0.212	0.204	0.416
Left Tilted	LTE Band 2	0.116	0.120	0.236
Right Cheek	LTE Band 4	0.600	0.185	0.785
Right Tilted	LTE Band 4	0.331	0.100	0.431
Left Cheek	LTE Band 4	0.436	0.204	0.640
Left Tilted	LTE Band 4	0.263	0.120	0.383
Right Cheek	LTE Band 5	0.285	0.185	0.470

Right Tilted	LTE Band 5	0.149	0.100	0.249
Left Cheek	LTE Band 5	0.366	0.204	0.570
Left Tilted	LTE Band 5	0.193	0.120	0.313
Right Cheek	LTE Band 7	0.501	0.185	0.686
Right Tilted	LTE Band 7	0.288	0.100	0.388
Left Cheek	LTE Band 7	0.112	0.204	0.316
Left Tilted	LTE Band 7	0.061	0.120	0.181
Right Cheek	LTE Band 12	0.329	0.185	0.514
Right Tilted	LTE Band 12	0.170	0.100	0.270
Left Cheek	LTE Band 12	0.366	0.204	0.570
Left Tilted	LTE Band 12	0.188	0.120	0.308
Right Cheek	LTE Band 13	0.344	0.185	0.529
Right Tilted	LTE Band 13	0.181	0.100	0.281
Left Cheek	LTE Band 13	0.450	0.204	0.654
Left Tilted	LTE Band 13	0.252	0.120	0.372
Right Cheek	LTE Band 17	0.307	0.185	0.492
Right Tilted	LTE Band 17	0.155	0.100	0.255
Left Cheek	LTE Band 17	0.340	0.204	0.544
Left Tilted	LTE Band 17	0.174	0.120	0.294
Right Cheek	LTE Band 25	0.431	0.185	0.616
Right Tilted	LTE Band 25	0.212	0.100	0.312
Left Cheek	LTE Band 25	0.220	0.204	0.424
Left Tilted	LTE Band 25	0.103	0.120	0.223
Right Cheek	LTE Band 26	0.283	0.185	0.468
Right Tilted	LTE Band 26	0.148	0.100	0.248
Left Cheek	LTE Band 26	0.459	0.204	0.663
Left Tilted	LTE Band 26	0.243	0.120	0.363
Right Cheek	LTE Band 30	0.310	0.185	0.495
Right Tilted	LTE Band 30	0.159	0.100	0.259
Left Cheek	LTE Band 30	0.199	0.204	0.403
Left Tilted	LTE Band 30	0.112	0.120	0.232
Right Cheek	LTE Band 40	0.030	0.185	0.215
Right Tilted	LTE Band 40	0.017	0.100	0.117
Left Cheek	LTE Band 40	0.016	0.204	0.220
Left Tilted	LTE Band 40	0.009	0.120	0.129
Right Cheek	LTE Band 66	0.665	0.185	0.850
Right Tilted	LTE Band 66	0.356	0.100	0.456
Left Cheek	LTE Band 66	0.425	0.204	0.629
Left Tilted	LTE Band 66	0.228	0.120	0.348

	WWAN		WLAN(5.2G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Right Cheek	GSM850	0.413	0.343	0.756
Right Tilted	GSM850	0.228	0.165	0.393
Left Cheek	GSM850	0.596	0.235	0.831
Left Tilted	GSM850	0.297	0.125	0.422
Right Cheek	GSM1900	0.118	0.343	0.461
Right Tilted	GSM1900	0.053	0.165	0.218
Left Cheek	GSM1900	0.109	0.235	0.344
Left Tilted	GSM1900	0.047	0.125	0.172
Right Cheek	GPRS850	0.887	0.343	1.230
Right Tilted	GPRS850	0.890	0.165	1.055
Left Cheek	GPRS850	1.173	0.235	**1.408**
Left Tilted	GPRS850	0.449	0.125	0.574
Right Cheek	GPRS1900	0.435	0.343	0.778
Right Tilted	GPRS1900	0.224	0.165	0.389
Left Cheek	GPRS1900	0.211	0.235	0.446
Left Tilted	GPRS1900	0.119	0.125	0.244
Right Cheek	WCDMA Band 2	0.258	0.343	0.601
Right Tilted	WCDMA Band 2	0.133	0.165	0.298
Left Cheek	WCDMA Band 2	0.194	0.235	0.429
Left Tilted	WCDMA Band 2	0.113	0.125	0.238
Right Cheek	WCDMA Band 5	0.246	0.343	0.589
Right Tilted	WCDMA Band 5	0.127	0.165	0.292
Left Cheek	WCDMA Band 5	0.357	0.235	0.592
Left Tilted	WCDMA Band 5	0.178	0.125	0.303
Right Cheek	WCDMA Band 4	0.568	0.343	0.911
Right Tilted	WCDMA Band 4	0.285	0.165	0.450
Left Cheek	WCDMA Band 4	0.505	0.235	0.740
Left Tilted	WCDMA Band 4	0.249	0.125	0.374
Right Cheek	LTE Band 2	0.420	0.343	0.763
Right Tilted	LTE Band 2	0.210	0.165	0.375
Left Cheek	LTE Band 2	0.212	0.235	0.447
Left Tilted	LTE Band 2	0.116	0.125	0.241
Right Cheek	LTE Band 4	0.600	0.343	0.943
Right Tilted	LTE Band 4	0.331	0.165	0.496
Left Cheek	LTE Band 4	0.436	0.235	0.671
Left Tilted	LTE Band 4	0.263	0.125	0.388
Right Cheek	LTE Band 5	0.285	0.343	0.628
Right Tilted	LTE Band 5	0.149	0.165	0.314
Left Cheek	LTE Band 5	0.366	0.235	0.601

Left Tilted	LTE Band 5	0.193	0.125	0.318
Right Cheek	LTE Band 7	0.501	0.343	0.844
Right Tilted	LTE Band 7	0.288	0.165	0.453
Left Cheek	LTE Band 7	0.112	0.235	0.347
Left Tilted	LTE Band 7	0.061	0.125	0.186
Right Cheek	LTE Band 12	0.329	0.343	0.672
Right Tilted	LTE Band 12	0.170	0.165	0.335
Left Cheek	LTE Band 12	0.366	0.235	0.601
Left Tilted	LTE Band 12	0.188	0.125	0.313
Right Cheek	LTE Band 13	0.344	0.343	0.687
Right Tilted	LTE Band 13	0.181	0.165	0.346
Left Cheek	LTE Band 13	0.450	0.235	0.685
Left Tilted	LTE Band 13	0.252	0.125	0.377
Right Cheek	LTE Band 17	0.307	0.343	0.650
Right Tilted	LTE Band 17	0.155	0.165	0.320
Left Cheek	LTE Band 17	0.340	0.235	0.575
Left Tilted	LTE Band 17	0.174	0.125	0.299
Right Cheek	LTE Band 25	0.431	0.343	0.774
Right Tilted	LTE Band 25	0.212	0.165	0.377
Left Cheek	LTE Band 25	0.220	0.235	0.455
Left Tilted	LTE Band 25	0.103	0.125	0.228
Right Cheek	LTE Band 26	0.283	0.343	0.626
Right Tilted	LTE Band 26	0.148	0.165	0.313
Left Cheek	LTE Band 26	0.459	0.235	0.694
Left Tilted	LTE Band 26	0.243	0.125	0.368
Right Cheek	LTE Band 30	0.310	0.343	0.653
Right Tilted	LTE Band 30	0.159	0.165	0.324
Left Cheek	LTE Band 30	0.199	0.235	0.434
Left Tilted	LTE Band 30	0.112	0.125	0.237
Right Cheek	LTE Band 40	0.030	0.343	0.373
Right Tilted	LTE Band 40	0.017	0.165	0.182
Left Cheek	LTE Band 40	0.016	0.235	0.251
Left Tilted	LTE Band 40	0.009	0.125	0.134
Right Cheek	LTE Band 66	0.665	0.343	1.008
Right Tilted	LTE Band 66	0.356	0.165	0.521
Left Cheek	LTE Band 66	0.425	0.235	0.660
Left Tilted	LTE Band 66	0.228	0.125	0.353

	WWAN		WLAN(5.3G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Right Cheek	GSM850	0.413	0.429	0.842
Right Tilted	GSM850	0.228	0.170	0.398
Left Cheek	GSM850	0.596	0.280	0.876
Left Tilted	GSM850	0.297	0.141	0.438
Right Cheek	GSM1900	0.118	0.429	0.547
Right Tilted	GSM1900	0.053	0.170	0.223
Left Cheek	GSM1900	0.109	0.280	0.389
Left Tilted	GSM1900	0.047	0.141	0.188
Right Cheek	GPRS850	0.887	0.429	1.316
Right Tilted	GPRS850	0.890	0.170	1.060
Left Cheek	GPRS850	1.173	0.280	**1.453**
Left Tilted	GPRS850	0.449	0.141	0.590
Right Cheek	GPRS1900	0.435	0.429	0.864
Right Tilted	GPRS1900	0.224	0.170	0.394
Left Cheek	GPRS1900	0.211	0.280	0.491
Left Tilted	GPRS1900	0.119	0.141	0.260
Right Cheek	WCDMA Band 2	0.258	0.429	0.687
Right Tilted	WCDMA Band 2	0.133	0.170	0.303
Left Cheek	WCDMA Band 2	0.194	0.280	0.474
Left Tilted	WCDMA Band 2	0.113	0.141	0.254
Right Cheek	WCDMA Band 5	0.246	0.429	0.675
Right Tilted	WCDMA Band 5	0.127	0.170	0.297
Left Cheek	WCDMA Band 5	0.357	0.280	0.637
Left Tilted	WCDMA Band 5	0.178	0.141	0.319
Right Cheek	WCDMA Band 4	0.568	0.429	0.997
Right Tilted	WCDMA Band 4	0.285	0.170	0.455
Left Cheek	WCDMA Band 4	0.505	0.280	0.785
Left Tilted	WCDMA Band 4	0.249	0.141	0.390
Right Cheek	LTE Band 2	0.420	0.429	0.849
Right Tilted	LTE Band 2	0.210	0.170	0.380
Left Cheek	LTE Band 2	0.212	0.280	0.492
Left Tilted	LTE Band 2	0.116	0.141	0.257
Right Cheek	LTE Band 4	0.600	0.429	1.029
Right Tilted	LTE Band 4	0.331	0.170	0.501
Left Cheek	LTE Band 4	0.436	0.280	0.716
Left Tilted	LTE Band 4	0.263	0.141	0.404
Right Cheek	LTE Band 5	0.285	0.429	0.714
Right Tilted	LTE Band 5	0.149	0.170	0.319
Left Cheek	LTE Band 5	0.366	0.280	0.646

Left Tilted	LTE Band 5	0.193	0.141	0.334
Right Cheek	LTE Band 7	0.501	0.429	0.930
Right Tilted	LTE Band 7	0.288	0.170	0.458
Left Cheek	LTE Band 7	0.112	0.280	0.392
Left Tilted	LTE Band 7	0.061	0.141	0.202
Right Cheek	LTE Band 12	0.329	0.429	0.758
Right Tilted	LTE Band 12	0.170	0.170	0.340
Left Cheek	LTE Band 12	0.366	0.280	0.646
Left Tilted	LTE Band 12	0.188	0.141	0.329
Right Cheek	LTE Band 13	0.344	0.429	0.773
Right Tilted	LTE Band 13	0.181	0.170	0.351
Left Cheek	LTE Band 13	0.450	0.280	0.730
Left Tilted	LTE Band 13	0.252	0.141	0.393
Right Cheek	LTE Band 17	0.307	0.429	0.736
Right Tilted	LTE Band 17	0.155	0.170	0.325
Left Cheek	LTE Band 17	0.340	0.280	0.620
Left Tilted	LTE Band 17	0.174	0.141	0.315
Right Cheek	LTE Band 25	0.431	0.429	0.860
Right Tilted	LTE Band 25	0.212	0.170	0.382
Left Cheek	LTE Band 25	0.220	0.280	0.500
Left Tilted	LTE Band 25	0.103	0.141	0.244
Right Cheek	LTE Band 26	0.283	0.429	0.712
Right Tilted	LTE Band 26	0.148	0.170	0.318
Left Cheek	LTE Band 26	0.459	0.280	0.739
Left Tilted	LTE Band 26	0.243	0.141	0.384
Right Cheek	LTE Band 30	0.310	0.429	0.739
Right Tilted	LTE Band 30	0.159	0.170	0.329
Left Cheek	LTE Band 30	0.199	0.280	0.479
Left Tilted	LTE Band 30	0.112	0.141	0.253
Right Cheek	LTE Band 40	0.030	0.429	0.459
Right Tilted	LTE Band 40	0.017	0.170	0.187
Left Cheek	LTE Band 40	0.016	0.280	0.296
Left Tilted	LTE Band 40	0.009	0.141	0.150
Right Cheek	LTE Band 66	0.665	0.429	1.094
Right Tilted	LTE Band 66	0.356	0.170	0.526
Left Cheek	LTE Band 66	0.425	0.280	0.705
Left Tilted	LTE Band 66	0.228	0.141	0.369

	WWAN		WLAN(5.6G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Right Cheek	GSM850	0.413	0.346	0.759
Right Tilted	GSM850	0.228	0.158	0.386
Left Cheek	GSM850	0.596	0.108	0.704
Left Tilted	GSM850	0.297	0.061	0.358
Right Cheek	GSM1900	0.118	0.346	0.464
Right Tilted	GSM1900	0.053	0.158	0.211
Left Cheek	GSM1900	0.109	0.108	0.217
Left Tilted	GSM1900	0.047	0.061	0.108
Right Cheek	GPRS850	0.887	0.346	1.233
Right Tilted	GPRS850	0.890	0.158	1.048
Left Cheek	GPRS850	1.173	0.108	**1.281**
Left Tilted	GPRS850	0.449	0.061	0.510
Right Cheek	GPRS1900	0.435	0.346	0.781
Right Tilted	GPRS1900	0.224	0.158	0.382
Left Cheek	GPRS1900	0.211	0.108	0.319
Left Tilted	GPRS1900	0.119	0.061	0.180
Right Cheek	WCDMA Band 2	0.258	0.346	0.604
Right Tilted	WCDMA Band 2	0.133	0.158	0.291
Left Cheek	WCDMA Band 2	0.194	0.108	0.302
Left Tilted	WCDMA Band 2	0.113	0.061	0.174
Right Cheek	WCDMA Band 5	0.246	0.346	0.592
Right Tilted	WCDMA Band 5	0.127	0.158	0.285
Left Cheek	WCDMA Band 5	0.357	0.108	0.465
Left Tilted	WCDMA Band 5	0.178	0.061	0.239
Right Cheek	WCDMA Band 4	0.568	0.346	0.914
Right Tilted	WCDMA Band 4	0.285	0.158	0.443
Left Cheek	WCDMA Band 4	0.505	0.108	0.613
Left Tilted	WCDMA Band 4	0.249	0.061	0.310
Right Cheek	LTE Band 2	0.420	0.346	0.766
Right Tilted	LTE Band 2	0.210	0.158	0.368
Left Cheek	LTE Band 2	0.212	0.108	0.320
Left Tilted	LTE Band 2	0.116	0.061	0.177
Right Cheek	LTE Band 4	0.600	0.346	0.946
Right Tilted	LTE Band 4	0.331	0.158	0.489
Left Cheek	LTE Band 4	0.436	0.108	0.544
Left Tilted	LTE Band 4	0.263	0.061	0.324
Right Cheek	LTE Band 5	0.285	0.346	0.631
Right Tilted	LTE Band 5	0.149	0.158	0.307
Left Cheek	LTE Band 5	0.366	0.108	0.474

Left Tilted	LTE Band 5	0.193	0.061	0.254
Right Cheek	LTE Band 7	0.501	0.346	0.847
Right Tilted	LTE Band 7	0.288	0.158	0.446
Left Cheek	LTE Band 7	0.112	0.108	0.220
Left Tilted	LTE Band 7	0.061	0.061	0.122
Right Cheek	LTE Band 12	0.329	0.346	0.675
Right Tilted	LTE Band 12	0.170	0.158	0.328
Left Cheek	LTE Band 12	0.366	0.108	0.474
Left Tilted	LTE Band 12	0.188	0.061	0.249
Right Cheek	LTE Band 13	0.344	0.346	0.690
Right Tilted	LTE Band 13	0.181	0.158	0.339
Left Cheek	LTE Band 13	0.450	0.108	0.558
Left Tilted	LTE Band 13	0.252	0.061	0.313
Right Cheek	LTE Band 17	0.307	0.346	0.653
Right Tilted	LTE Band 17	0.155	0.158	0.313
Left Cheek	LTE Band 17	0.340	0.108	0.448
Left Tilted	LTE Band 17	0.174	0.061	0.235
Right Cheek	LTE Band 25	0.431	0.346	0.777
Right Tilted	LTE Band 25	0.212	0.158	0.370
Left Cheek	LTE Band 25	0.220	0.108	0.328
Left Tilted	LTE Band 25	0.103	0.061	0.164
Right Cheek	LTE Band 26	0.283	0.346	0.629
Right Tilted	LTE Band 26	0.148	0.158	0.306
Left Cheek	LTE Band 26	0.459	0.108	0.567
Left Tilted	LTE Band 26	0.243	0.061	0.304
Right Cheek	LTE Band 30	0.310	0.346	0.656
Right Tilted	LTE Band 30	0.159	0.158	0.317
Left Cheek	LTE Band 30	0.199	0.108	0.307
Left Tilted	LTE Band 30	0.112	0.061	0.173
Right Cheek	LTE Band 40	0.030	0.346	0.376
Right Tilted	LTE Band 40	0.017	0.158	0.175
Left Cheek	LTE Band 40	0.016	0.108	0.124
Left Tilted	LTE Band 40	0.009	0.061	0.070
Right Cheek	LTE Band 66	0.665	0.346	1.011
Right Tilted	LTE Band 66	0.356	0.158	0.514
Left Cheek	LTE Band 66	0.425	0.108	0.533
Left Tilted	LTE Band 66	0.228	0.061	0.289

	WWAN		WLAN(5.8G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Right Cheek	GSM850	0.413	0.040	0.453
Right Tilted	GSM850	0.228	0.022	0.250
Left Cheek	GSM850	0.596	0.147	0.743
Left Tilted	GSM850	0.297	0.071	0.368
Right Cheek	GSM1900	0.118	0.040	0.158
Right Tilted	GSM1900	0.053	0.022	0.075
Left Cheek	GSM1900	0.109	0.147	0.256
Left Tilted	GSM1900	0.047	0.071	0.118
Right Cheek	GPRS850	0.887	0.040	0.927
Right Tilted	GPRS850	0.890	0.022	0.912
Left Cheek	GPRS850	1.173	0.147	**1.320**
Left Tilted	GPRS850	0.449	0.071	0.520
Right Cheek	GPRS1900	0.435	0.040	0.475
Right Tilted	GPRS1900	0.224	0.022	0.246
Left Cheek	GPRS1900	0.211	0.147	0.358
Left Tilted	GPRS1900	0.119	0.071	0.190
Right Cheek	WCDMA Band 2	0.258	0.040	0.298
Right Tilted	WCDMA Band 2	0.133	0.022	0.155
Left Cheek	WCDMA Band 2	0.194	0.147	0.341
Left Tilted	WCDMA Band 2	0.113	0.071	0.184
Right Cheek	WCDMA Band 5	0.246	0.040	0.286
Right Tilted	WCDMA Band 5	0.127	0.022	0.149
Left Cheek	WCDMA Band 5	0.357	0.147	0.504
Left Tilted	WCDMA Band 5	0.178	0.071	0.249
Right Cheek	WCDMA Band 4	0.568	0.040	0.608
Right Tilted	WCDMA Band 4	0.285	0.022	0.307
Left Cheek	WCDMA Band 4	0.505	0.147	0.652
Left Tilted	WCDMA Band 4	0.249	0.071	0.320
Right Cheek	LTE Band 2	0.420	0.040	0.460
Right Tilted	LTE Band 2	0.210	0.022	0.232
Left Cheek	LTE Band 2	0.212	0.147	0.359
Left Tilted	LTE Band 2	0.116	0.071	0.187
Right Cheek	LTE Band 4	0.600	0.040	0.640
Right Tilted	LTE Band 4	0.331	0.022	0.353
Left Cheek	LTE Band 4	0.436	0.147	0.583
Left Tilted	LTE Band 4	0.263	0.071	0.334
Right Cheek	LTE Band 5	0.285	0.040	0.325
Right Tilted	LTE Band 5	0.149	0.022	0.171
Left Cheek	LTE Band 5	0.366	0.147	0.513

Left Tilted	LTE Band 5	0.193	0.071	0.264
Right Cheek	LTE Band 7	0.501	0.040	0.541
Right Tilted	LTE Band 7	0.288	0.022	0.310
Left Cheek	LTE Band 7	0.112	0.147	0.259
Left Tilted	LTE Band 7	0.061	0.071	0.132
Right Cheek	LTE Band 12	0.329	0.040	0.369
Right Tilted	LTE Band 12	0.170	0.022	0.192
Left Cheek	LTE Band 12	0.366	0.147	0.513
Left Tilted	LTE Band 12	0.188	0.071	0.259
Right Cheek	LTE Band 13	0.344	0.040	0.384
Right Tilted	LTE Band 13	0.181	0.022	0.203
Left Cheek	LTE Band 13	0.450	0.147	0.597
Left Tilted	LTE Band 13	0.252	0.071	0.323
Right Cheek	LTE Band 17	0.307	0.040	0.347
Right Tilted	LTE Band 17	0.155	0.022	0.177
Left Cheek	LTE Band 17	0.340	0.147	0.487
Left Tilted	LTE Band 17	0.174	0.071	0.245
Right Cheek	LTE Band 25	0.431	0.040	0.471
Right Tilted	LTE Band 25	0.212	0.022	0.234
Left Cheek	LTE Band 25	0.220	0.147	0.367
Left Tilted	LTE Band 25	0.103	0.071	0.174
Right Cheek	LTE Band 26	0.283	0.040	0.323
Right Tilted	LTE Band 26	0.148	0.022	0.170
Left Cheek	LTE Band 26	0.459	0.147	0.606
Left Tilted	LTE Band 26	0.243	0.071	0.314
Right Cheek	LTE Band 30	0.310	0.040	0.350
Right Tilted	LTE Band 30	0.159	0.022	0.181
Left Cheek	LTE Band 30	0.199	0.147	0.346
Left Tilted	LTE Band 30	0.112	0.071	0.183
Right Cheek	LTE Band 40	0.030	0.040	0.070
Right Tilted	LTE Band 40	0.017	0.022	0.039
Left Cheek	LTE Band 40	0.016	0.147	0.163
Left Tilted	LTE Band 40	0.009	0.071	0.080
Right Cheek	LTE Band 66	0.665	0.040	0.705
Right Tilted	LTE Band 66	0.356	0.022	0.378
Left Cheek	LTE Band 66	0.425	0.147	0.572
Left Tilted	LTE Band 66	0.228	0.071	0.299

WWAN and Bluetooth

	WWAN		Bluetooth	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Right Cheek	GSM850	0.413	0.261	0.674
Right Tilted	GSM850	0.228	0.261	0.489
Left Cheek	GSM850	0.596	0.261	0.857
Left Tilted	GSM850	0.297	0.261	0.558
Right Cheek	GSM1900	0.118	0.261	0.379
Right Tilted	GSM1900	0.053	0.261	0.314
Left Cheek	GSM1900	0.109	0.261	0.370
Left Tilted	GSM1900	0.047	0.261	0.308
Right Cheek	GPRS850	0.887	0.261	1.148
Right Tilted	GPRS850	0.890	0.261	1.151
Left Cheek	GPRS850	1.173	0.261	**1.434**
Left Tilted	GPRS850	0.449	0.261	0.710
Right Cheek	GPRS1900	0.435	0.261	0.696
Right Tilted	GPRS1900	0.224	0.261	0.485
Left Cheek	GPRS1900	0.211	0.261	0.472
Left Tilted	GPRS1900	0.119	0.261	0.380
Right Cheek	WCDMA Band 2	0.258	0.261	0.519
Right Tilted	WCDMA Band 2	0.133	0.261	0.394
Left Cheek	WCDMA Band 2	0.194	0.261	0.455
Left Tilted	WCDMA Band 2	0.113	0.261	0.374
Right Cheek	WCDMA Band 5	0.246	0.261	0.507
Right Tilted	WCDMA Band 5	0.127	0.261	0.388
Left Cheek	WCDMA Band 5	0.357	0.261	0.618
Left Tilted	WCDMA Band 5	0.178	0.261	0.439
Right Cheek	WCDMA Band 4	0.568	0.261	0.829
Right Tilted	WCDMA Band 4	0.285	0.261	0.546
Left Cheek	WCDMA Band 4	0.505	0.261	0.766
Left Tilted	WCDMA Band 4	0.249	0.261	0.510
Right Cheek	LTE Band 2	0.420	0.261	0.681
Right Tilted	LTE Band 2	0.210	0.261	0.471
Left Cheek	LTE Band 2	0.212	0.261	0.473
Left Tilted	LTE Band 2	0.116	0.261	0.377
Right Cheek	LTE Band 4	0.600	0.261	0.861
Right Tilted	LTE Band 4	0.331	0.261	0.592
Left Cheek	LTE Band 4	0.436	0.261	0.697
Left Tilted	LTE Band 4	0.263	0.261	0.524
Right Cheek	LTE Band 5	0.285	0.261	0.546
Right Tilted	LTE Band 5	0.149	0.261	0.410

Left Cheek	LTE Band 5	0.366	0.261	0.627
Left Tilted	LTE Band 5	0.193	0.261	0.454
Right Cheek	LTE Band 7	0.501	0.261	0.762
Right Tilted	LTE Band 7	0.288	0.261	0.549
Left Cheek	LTE Band 7	0.112	0.261	0.373
Left Tilted	LTE Band 7	0.061	0.261	0.322
Right Cheek	LTE Band 12	0.329	0.261	0.590
Right Tilted	LTE Band 12	0.170	0.261	0.431
Left Cheek	LTE Band 12	0.366	0.261	0.627
Left Tilted	LTE Band 12	0.188	0.261	0.449
Right Cheek	LTE Band 13	0.344	0.261	0.605
Right Tilted	LTE Band 13	0.181	0.261	0.442
Left Cheek	LTE Band 13	0.450	0.261	0.711
Left Tilted	LTE Band 13	0.252	0.261	0.513
Right Cheek	LTE Band 17	0.307	0.261	0.568
Right Tilted	LTE Band 17	0.155	0.261	0.416
Left Cheek	LTE Band 17	0.340	0.261	0.601
Left Tilted	LTE Band 17	0.174	0.261	0.435
Right Cheek	LTE Band 25	0.431	0.261	0.692
Right Tilted	LTE Band 25	0.212	0.261	0.473
Left Cheek	LTE Band 25	0.220	0.261	0.481
Left Tilted	LTE Band 25	0.103	0.261	0.364
Right Cheek	LTE Band 26	0.283	0.261	0.544
Right Tilted	LTE Band 26	0.148	0.261	0.409
Left Cheek	LTE Band 26	0.459	0.261	0.720
Left Tilted	LTE Band 26	0.243	0.261	0.504
Right Cheek	LTE Band 30	0.310	0.261	0.571
Right Tilted	LTE Band 30	0.159	0.261	0.420
Left Cheek	LTE Band 30	0.199	0.261	0.460
Left Tilted	LTE Band 30	0.112	0.261	0.373
Right Cheek	LTE Band 40	0.030	0.261	0.291
Right Tilted	LTE Band 40	0.017	0.261	0.278
Left Cheek	LTE Band 40	0.016	0.261	0.277
Left Tilted	LTE Band 40	0.009	0.261	0.270
Right Cheek	LTE Band 66	0.665	0.261	0.926
Right Tilted	LTE Band 66	0.356	0.261	0.617
Left Cheek	LTE Band 66	0.425	0.261	0.686
Left Tilted	LTE Band 66	0.228	0.261	0.489

Body-worn SAR

WWAN and WLAN

	WWAN		WLAN(2.4G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	0.637	0.195	0.832
Front	GSM850	0.568	0.157	0.725
Back	GSM1900	0.437	0.195	0.632
Front	GSM1900	0.253	0.157	0.410
Back	WCDMA Band 2	0.717	0.195	0.912
Front	WCDMA Band 2	0.458	0.157	0.615
Back	WCDMA Band 5	0.550	0.195	0.745
Front	WCDMA Band 5	0.348	0.157	0.505
Back	WCDMA Band 4	0.777	0.195	0.972
Front	WCDMA Band 4	0.773	0.157	0.930
Back	LTE Band 2	0.718	0.195	0.913
Front	LTE Band 2	0.618	0.157	0.775
Back	LTE Band 4	0.698	0.195	0.893
Front	LTE Band 4	1.137	0.157	**1.294**
Back	LTE Band 5	0.548	0.195	0.743
Front	LTE Band 5	0.318	0.157	0.475
Back	LTE Band 7	1.009	0.195	1.204
Front	LTE Band 7	0.966	0.157	1.123
Back	LTE Band 12	0.719	0.195	0.914
Front	LTE Band 12	0.399	0.157	0.556
Back	LTE Band 13	0.761	0.195	0.956
Front	LTE Band 13	0.461	0.157	0.618
Back	LTE Band 17	0.859	0.195	1.054
Front	LTE Band 17	0.445	0.157	0.602
Back	LTE Band 25	0.729	0.195	0.924
Front	LTE Band 25	0.534	0.157	0.691
Back	LTE Band 26	0.680	0.195	0.875
Front	LTE Band 26	0.441	0.157	0.598
Back	LTE Band 30	0.538	0.195	0.733
Front	LTE Band 30	0.220	0.157	0.377
Back	LTE Band 40	0.250	0.195	0.445
Front	LTE Band 40	0.108	0.157	0.265
Back	LTE Band 66	0.601	0.195	0.796
Front	LTE Band 66	0.758	0.157	0.915

	WWAN		WLAN(5.2G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	0.637	0.193	0.830
Front	GSM850	0.568	0.075	0.643
Back	GSM1900	0.437	0.193	0.630
Front	GSM1900	0.253	0.075	0.328
Back	WCDMA Band 2	0.717	0.193	0.910
Front	WCDMA Band 2	0.458	0.075	0.533
Back	WCDMA Band 5	0.550	0.193	0.743
Front	WCDMA Band 5	0.348	0.075	0.423
Back	WCDMA Band 4	0.777	0.193	0.970
Front	WCDMA Band 4	0.773	0.075	0.848
Back	LTE Band 2	0.718	0.193	0.911
Front	LTE Band 2	0.618	0.075	0.693
Back	LTE Band 4	0.698	0.193	0.891
Front	LTE Band 4	1.137	0.075	**1.212**
Back	LTE Band 5	0.548	0.193	0.741
Front	LTE Band 5	0.318	0.075	0.393
Back	LTE Band 7	1.009	0.193	1.202
Front	LTE Band 7	0.966	0.075	1.041
Back	LTE Band 12	0.719	0.193	0.912
Front	LTE Band 12	0.399	0.075	0.474
Back	LTE Band 13	0.761	0.193	0.954
Front	LTE Band 13	0.461	0.075	0.536
Back	LTE Band 17	0.859	0.193	1.052
Front	LTE Band 17	0.445	0.075	0.520
Back	LTE Band 25	0.729	0.193	0.922
Front	LTE Band 25	0.534	0.075	0.609
Back	LTE Band 26	0.680	0.193	0.873
Front	LTE Band 26	0.441	0.075	0.516
Back	LTE Band 30	0.538	0.193	0.731
Front	LTE Band 30	0.220	0.075	0.295
Back	LTE Band 40	0.250	0.193	0.443
Front	LTE Band 40	0.108	0.075	0.183
Back	LTE Band 66	0.601	0.193	0.794
Front	LTE Band 66	0.758	0.075	0.833

	WWAN		WLAN(5.3G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	0.637	0.235	0.872
Front	GSM850	0.568	0.112	0.680
Back	GSM1900	0.437	0.235	0.672
Front	GSM1900	0.253	0.112	0.365
Back	WCDMA Band 2	0.717	0.235	0.952
Front	WCDMA Band 2	0.458	0.112	0.570
Back	WCDMA Band 5	0.550	0.235	0.785
Front	WCDMA Band 5	0.348	0.112	0.460
Back	WCDMA Band 4	0.777	0.235	1.012
Front	WCDMA Band 4	0.773	0.112	0.885
Back	LTE Band 2	0.718	0.235	0.953
Front	LTE Band 2	0.618	0.112	0.730
Back	LTE Band 4	0.698	0.235	0.933
Front	LTE Band 4	1.137	0.112	**1.249**
Back	LTE Band 5	0.548	0.235	0.783
Front	LTE Band 5	0.318	0.112	0.430
Back	LTE Band 7	1.009	0.235	1.244
Front	LTE Band 7	0.966	0.112	1.078
Back	LTE Band 12	0.719	0.235	0.954
Front	LTE Band 12	0.399	0.112	0.511
Back	LTE Band 13	0.761	0.235	0.996
Front	LTE Band 13	0.461	0.112	0.573
Back	LTE Band 17	0.859	0.235	1.094
Front	LTE Band 17	0.445	0.112	0.557
Back	LTE Band 25	0.729	0.235	0.964
Front	LTE Band 25	0.534	0.112	0.646
Back	LTE Band 26	0.680	0.235	0.915
Front	LTE Band 26	0.441	0.112	0.553
Back	LTE Band 30	0.538	0.235	0.773
Front	LTE Band 30	0.220	0.112	0.332
Back	LTE Band 40	0.250	0.235	0.485
Front	LTE Band 40	0.108	0.112	0.220
Back	LTE Band 66	0.601	0.235	0.836
Front	LTE Band 66	0.758	0.112	0.870

	WWAN		WLAN(5.6G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	0.637	0.340	0.977
Front	GSM850	0.568	0.076	0.644
Back	GSM1900	0.437	0.340	0.777
Front	GSM1900	0.253	0.076	0.329
Back	WCDMA Band 2	0.717	0.340	1.057
Front	WCDMA Band 2	0.458	0.076	0.534
Back	WCDMA Band 5	0.550	0.340	0.890
Front	WCDMA Band 5	0.348	0.076	0.424
Back	WCDMA Band 4	0.777	0.340	1.117
Front	WCDMA Band 4	0.773	0.076	0.849
Back	LTE Band 2	0.718	0.340	1.058
Front	LTE Band 2	0.618	0.076	0.694
Back	LTE Band 4	0.698	0.340	1.038
Front	LTE Band 4	1.137	0.076	1.213
Back	LTE Band 5	0.548	0.340	0.888
Front	LTE Band 5	0.318	0.076	0.394
Back	LTE Band 7	1.009	0.340	**1.349**
Front	LTE Band 7	0.966	0.076	1.042
Back	LTE Band 12	0.719	0.340	1.059
Front	LTE Band 12	0.399	0.076	0.475
Back	LTE Band 13	0.761	0.340	1.101
Front	LTE Band 13	0.461	0.076	0.537
Back	LTE Band 17	0.859	0.340	1.199
Front	LTE Band 17	0.445	0.076	0.521
Back	LTE Band 25	0.729	0.340	1.069
Front	LTE Band 25	0.534	0.076	0.610
Back	LTE Band 26	0.680	0.340	1.020
Front	LTE Band 26	0.441	0.076	0.517
Back	LTE Band 30	0.538	0.340	0.878
Front	LTE Band 30	0.220	0.076	0.296
Back	LTE Band 40	0.250	0.340	0.590
Front	LTE Band 40	0.108	0.076	0.184
Back	LTE Band 66	0.601	0.340	0.941
Front	LTE Band 66	0.758	0.076	0.834

	WWAN		WLAN(5.8G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	0.637	0.130	0.767
Front	GSM850	0.568	0.041	0.609
Back	GSM1900	0.437	0.130	0.567
Front	GSM1900	0.253	0.041	0.294
Back	WCDMA Band 2	0.717	0.130	0.847
Front	WCDMA Band 2	0.458	0.041	0.499
Back	WCDMA Band 5	0.550	0.130	0.680
Front	WCDMA Band 5	0.348	0.041	0.389
Back	WCDMA Band 4	0.777	0.130	0.907
Front	WCDMA Band 4	0.773	0.041	0.814
Back	LTE Band 2	0.718	0.130	0.848
Front	LTE Band 2	0.618	0.041	0.659
Back	LTE Band 4	0.698	0.130	0.828
Front	LTE Band 4	1.137	0.041	**1.178**
Back	LTE Band 5	0.548	0.130	0.678
Front	LTE Band 5	0.318	0.041	0.359
Back	LTE Band 7	1.009	0.130	1.139
Front	LTE Band 7	0.966	0.041	1.007
Back	LTE Band 12	0.719	0.130	0.849
Front	LTE Band 12	0.399	0.041	0.440
Back	LTE Band 13	0.761	0.130	0.891
Front	LTE Band 13	0.461	0.041	0.502
Back	LTE Band 17	0.859	0.130	0.989
Front	LTE Band 17	0.445	0.041	0.486
Back	LTE Band 25	0.729	0.130	0.859
Front	LTE Band 25	0.534	0.041	0.575
Back	LTE Band 26	0.680	0.130	0.810
Front	LTE Band 26	0.441	0.041	0.482
Back	LTE Band 30	0.538	0.130	0.668
Front	LTE Band 30	0.220	0.041	0.261
Back	LTE Band 40	0.250	0.130	0.380
Front	LTE Band 40	0.108	0.041	0.149
Back	LTE Band 66	0.601	0.130	0.731
Front	LTE Band 66	0.758	0.041	0.799

WWAN and Bluetooth

	WWAN		Bluetooth	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	0.637	0.131	0.768
Front	GSM850	0.568	0.131	0.699
Back	GSM1900	0.437	0.131	0.568
Front	GSM1900	0.253	0.131	0.384
Back	WCDMA Band 2	0.717	0.131	0.848
Front	WCDMA Band 2	0.458	0.131	0.589
Back	WCDMA Band 5	0.550	0.131	0.681
Front	WCDMA Band 5	0.348	0.131	0.479
Back	WCDMA Band 4	0.777	0.131	0.908
Front	WCDMA Band 4	0.773	0.131	0.904
Back	LTE Band 2	0.718	0.131	0.849
Front	LTE Band 2	0.618	0.131	0.749
Back	LTE Band 4	0.698	0.131	0.829
Front	LTE Band 4	1.137	0.131	**1.268**
Back	LTE Band 5	0.548	0.131	0.679
Front	LTE Band 5	0.318	0.131	0.449
Back	LTE Band 7	1.009	0.131	1.140
Front	LTE Band 7	0.966	0.131	1.097
Back	LTE Band 12	0.719	0.131	0.850
Front	LTE Band 12	0.399	0.131	0.530
Back	LTE Band 13	0.761	0.131	0.892
Front	LTE Band 13	0.461	0.131	0.592
Back	LTE Band 17	0.859	0.131	0.990
Front	LTE Band 17	0.445	0.131	0.576
Back	LTE Band 25	0.729	0.131	0.860
Front	LTE Band 25	0.534	0.131	0.665
Back	LTE Band 26	0.680	0.131	0.811
Front	LTE Band 26	0.441	0.131	0.572
Back	LTE Band 30	0.538	0.131	0.669
Front	LTE Band 30	0.220	0.131	0.351
Back	LTE Band 40	0.250	0.131	0.381
Front	LTE Band 40	0.108	0.131	0.239
Back	LTE Band 66	0.601	0.131	0.732
Front	LTE Band 66	0.758	0.131	0.889

Hotspot SAR

WWAN and WLAN

	WWAN		WLAN(2.4G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	1.194	0.195	**1.389**
Front	GSM850	0.787	0.157	0.944
Top side	GSM850	--	0.139	0.139
Right side	GSM850	0.407	--	0.407
Left side	GSM850	0.398	0.076	0.474
Bottom side	GSM850	0.438	--	0.438
Back	GSM1900	0.742	0.195	0.937
Front	GSM1900	0.484	0.157	0.641
Top side	GSM1900	--	0.139	0.139
Right side	GSM1900	0.402	--	0.402
Left side	GSM1900	0.397	0.076	0.473
Bottom side	GSM1900	0.432	--	0.432
Back	WCDMA Band 2	0.717	0.195	0.912
Front	WCDMA Band 2	0.458	0.157	0.615
Top side	WCDMA Band 2	--	0.139	0.139
Right side	WCDMA Band 2	0.274	--	0.274
Left side	WCDMA Band 2	0.257	0.076	0.333
Bottom side	WCDMA Band 2	0.348	--	0.348
Back	WCDMA Band 5	0.550	0.195	0.745
Front	WCDMA Band 5	0.348	0.157	0.505
Top side	WCDMA Band 5	--	0.139	0.139
Right side	WCDMA Band 5	0.134	--	0.134
Left side	WCDMA Band 5	0.128	0.076	0.204
Bottom side	WCDMA Band 5	0.163	--	0.163
Back	WCDMA Band 4	0.777	0.195	0.972
Front	WCDMA Band 4	0.773	0.157	0.930
Top side	WCDMA Band 4	--	0.139	0.139
Right side	WCDMA Band 4	0.348	--	0.348
Left side	WCDMA Band 4	0.325	0.076	0.401
Bottom side	WCDMA Band 4	0.430	--	0.430
Back	LTE Band 2	0.718	0.195	0.913
Front	LTE Band 2	0.618	0.157	0.775
Top side	LTE Band 2	--	0.139	0.139
Right side	LTE Band 2	0.290	--	0.290
Left side	LTE Band 2	0.281	0.076	0.357
Bottom side	LTE Band 2	0.372	--	0.372
Back	LTE Band 4	0.698	0.195	0.893
Front	LTE Band 4	1.137	0.157	1.294

Top side	LTE Band 4	--	0.139	0.139
Right side	LTE Band 4	0.394	--	0.394
Left side	LTE Band 4	0.377	0.076	0.453
Bottom side	LTE Band 4	0.419	--	0.419
Back	LTE Band 5	0.548	0.195	0.743
Front	LTE Band 5	0.318	0.157	0.475
Top side	LTE Band 5	--	0.139	0.139
Right side	LTE Band 5	0.170	--	0.170
Left side	LTE Band 5	0.164	0.076	0.240
Bottom side	LTE Band 5	0.189	--	0.189
Back	LTE Band 7	1.009	0.195	1.204
Front	LTE Band 7	0.482	0.157	0.639
Top side	LTE Band 7	--	0.139	0.139
Right side	LTE Band 7	0.351	--	0.351
Left side	LTE Band 7	0.336	0.076	0.412
Bottom side	LTE Band 7	1.024	--	1.024
Back	LTE Band 12	0.719	0.195	0.914
Front	LTE Band 12	0.399	0.157	0.556
Top side	LTE Band 12	--	0.139	0.139
Right side	LTE Band 12	0.331	--	0.331
Left side	LTE Band 12	0.317	0.076	0.393
Bottom side	LTE Band 12	0.493	--	0.493
Back	LTE Band 13	0.761	0.195	0.956
Front	LTE Band 13	0.461	0.157	0.618
Top side	LTE Band 13	--	0.139	0.139
Right side	LTE Band 13	0.158	--	0.158
Left side	LTE Band 13	0.154	0.076	0.230
Bottom side	LTE Band 13	0.170	--	0.170
Back	LTE Band 17	0.859	0.195	1.054
Front	LTE Band 17	0.445	0.157	0.602
Top side	LTE Band 17	--	0.139	0.139
Right side	LTE Band 17	0.141	--	0.141
Left side	LTE Band 17	0.132	0.076	0.208
Bottom side	LTE Band 17	0.160	--	0.160
Back	LTE Band 25	0.729	0.195	0.924
Front	LTE Band 25	0.534	0.157	0.691
Top side	LTE Band 25	--	0.139	0.139
Right side	LTE Band 25	0.256	--	0.256
Left side	LTE Band 25	0.241	0.076	0.317
Bottom side	LTE Band 25	0.373	--	0.373
Back	LTE Band 26	0.680	0.195	0.875
Front	LTE Band 26	0.441	0.157	0.598
Top side	LTE Band 26	--	0.139	0.139

Right side	LTE Band 26	0.215	--	0.215
Left side	LTE Band 26	0.202	0.076	0.278
Bottom side	LTE Band 26	0.211	--	0.211
Back	LTE Band 30	0.538	0.195	0.733
Front	LTE Band 30	0.220	0.157	0.377
Top side	LTE Band 30	--	0.139	0.139
Right side	LTE Band 30	0.207	--	0.207
Left side	LTE Band 30	0.191	0.076	0.267
Bottom side	LTE Band 30	0.386	--	0.386
Back	LTE Band 40	0.250	0.195	0.445
Front	LTE Band 40	0.108	0.157	0.265
Top side	LTE Band 40	--	0.139	0.139
Right side	LTE Band 40	0.132	--	0.132
Left side	LTE Band 40	0.111	0.076	0.187
Bottom side	LTE Band 40	0.182	--	0.182
Back	LTE Band 66	0.601	0.195	0.796
Front	LTE Band 66	0.758	0.157	0.915
Top side	LTE Band 66	--	0.139	0.139
Right side	LTE Band 66	0.266	--	0.266
Left side	LTE Band 66	0.260	0.076	0.336
Bottom side	LTE Band 66	0.321	--	0.321

	WWAN		WLAN(5.2G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	1.194	0.193	**1.387**
Front	GSM850	0.787	0.075	0.862
Top side	GSM850	--	0.076	0.076
Right side	GSM850	0.407	--	0.407
Left side	GSM850	0.398	0.059	0.457
Bottom side	GSM850	0.438	--	0.438
Back	GSM1900	0.742	0.193	0.935
Front	GSM1900	0.484	0.075	0.559
Top side	GSM1900	--	0.076	0.076
Right side	GSM1900	0.402	--	0.402
Left side	GSM1900	0.397	0.059	0.456
Bottom side	GSM1900	0.432	--	0.432
Back	WCDMA Band 2	0.717	0.193	0.910
Front	WCDMA Band 2	0.458	0.075	0.533
Top side	WCDMA Band 2	--	0.076	0.076
Right side	WCDMA Band 2	0.274	--	0.274
Left side	WCDMA Band 2	0.257	0.059	0.316
Bottom side	WCDMA Band 2	0.348	--	0.348
Back	WCDMA Band 5	0.550	0.193	0.743
Front	WCDMA Band 5	0.348	0.075	0.423
Top side	WCDMA Band 5	--	0.076	0.076
Right side	WCDMA Band 5	0.134	--	0.134
Left side	WCDMA Band 5	0.128	0.059	0.187
Bottom side	WCDMA Band 5	0.163	--	0.163
Back	WCDMA Band 4	0.777	0.193	0.970
Front	WCDMA Band 4	0.773	0.075	0.848
Top side	WCDMA Band 4	--	0.076	0.076
Right side	WCDMA Band 4	0.348	--	0.348
Left side	WCDMA Band 4	0.325	0.059	0.384
Bottom side	WCDMA Band 4	0.430	--	0.430
Back	LTE Band 2	0.718	0.193	0.911
Front	LTE Band 2	0.618	0.075	0.693
Top side	LTE Band 2	--	0.076	0.076
Right side	LTE Band 2	0.290	--	0.290
Left side	LTE Band 2	0.281	0.059	0.340
Bottom side	LTE Band 2	0.372	--	0.372
Back	LTE Band 4	0.698	0.193	0.891
Front	LTE Band 4	1.137	0.075	1.212
Top side	LTE Band 4	--	0.076	0.076

Right side	LTE Band 4	0.394	--	0.394
Left side	LTE Band 4	0.377	0.059	0.436
Bottom side	LTE Band 4	0.419	--	0.419
Back	LTE Band 5	0.548	0.193	0.741
Front	LTE Band 5	0.318	0.075	0.393
Top side	LTE Band 5	--	0.076	0.076
Right side	LTE Band 5	0.170	--	0.170
Left side	LTE Band 5	0.164	0.059	0.223
Bottom side	LTE Band 5	0.189	--	0.189
Back	LTE Band 7	1.009	0.193	1.202
Front	LTE Band 7	0.482	0.075	0.557
Top side	LTE Band 7	--	0.076	0.076
Right side	LTE Band 7	0.351	--	0.351
Left side	LTE Band 7	0.336	0.059	0.395
Bottom side	LTE Band 7	1.024	--	1.024
Back	LTE Band 12	0.719	0.193	0.912
Front	LTE Band 12	0.399	0.075	0.474
Top side	LTE Band 12	--	0.076	0.076
Right side	LTE Band 12	0.331	--	0.331
Left side	LTE Band 12	0.317	0.059	0.376
Bottom side	LTE Band 12	0.493	--	0.493
Back	LTE Band 13	0.761	0.193	0.954
Front	LTE Band 13	0.461	0.075	0.536
Top side	LTE Band 13	--	0.076	0.076
Right side	LTE Band 13	0.158	--	0.158
Left side	LTE Band 13	0.154	0.059	0.213
Bottom side	LTE Band 13	0.170	--	0.170
Back	LTE Band 17	0.859	0.193	1.052
Front	LTE Band 17	0.445	0.075	0.520
Top side	LTE Band 17	--	0.076	0.076
Right side	LTE Band 17	0.141	--	0.141
Left side	LTE Band 17	0.132	0.059	0.191
Bottom side	LTE Band 17	0.160	--	0.160
Back	LTE Band 25	0.729	0.193	0.922
Front	LTE Band 25	0.534	0.075	0.609
Top side	LTE Band 25	--	0.076	0.076
Right side	LTE Band 25	0.256	--	0.256
Left side	LTE Band 25	0.241	0.059	0.300
Bottom side	LTE Band 25	0.373	--	0.373
Back	LTE Band 26	0.680	0.193	0.873
Front	LTE Band 26	0.441	0.075	0.516
Top side	LTE Band 26	--	0.076	0.076
Right side	LTE Band 26	0.215	--	0.215

Left side	LTE Band 26	0.202	0.059	0.261
Bottom side	LTE Band 26	0.211	--	0.211
Back	LTE Band 30	0.538	0.193	0.731
Front	LTE Band 30	0.220	0.075	0.295
Top side	LTE Band 30	--	0.076	0.076
Right side	LTE Band 30	0.207	--	0.207
Left side	LTE Band 30	0.191	0.059	0.250
Bottom side	LTE Band 30	0.386	--	0.386
Back	LTE Band 40	0.250	0.193	0.443
Front	LTE Band 40	0.108	0.075	0.183
Top side	LTE Band 40	--	0.076	0.076
Right side	LTE Band 40	0.132	--	0.132
Left side	LTE Band 40	0.111	0.059	0.170
Bottom side	LTE Band 40	0.182	--	0.182
Back	LTE Band 66	0.601	0.193	0.794
Front	LTE Band 66	0.758	0.075	0.833
Top side	LTE Band 66	--	0.076	0.076
Right side	LTE Band 66	0.266	--	0.266
Left side	LTE Band 66	0.260	0.059	0.319
Bottom side	LTE Band 66	0.321	--	0.321

	WWAN		WLAN(5.3G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	1.194	0.235	**1.429**
Front	GSM850	0.787	0.112	0.899
Top side	GSM850	--	0.064	0.064
Right side	GSM850	0.407	--	0.407
Left side	GSM850	0.398	0.053	0.451
Bottom side	GSM850	0.438	--	0.438
Back	GSM1900	0.742	0.235	0.977
Front	GSM1900	0.484	0.112	0.596
Top side	GSM1900	--	0.064	0.064
Right side	GSM1900	0.402	--	0.402
Left side	GSM1900	0.397	0.053	0.450
Bottom side	GSM1900	0.432	--	0.432
Back	WCDMA Band 2	0.717	0.235	0.952
Front	WCDMA Band 2	0.458	0.112	0.570
Top side	WCDMA Band 2	--	0.064	0.064
Right side	WCDMA Band 2	0.274	--	0.274
Left side	WCDMA Band 2	0.257	0.053	0.310
Bottom side	WCDMA Band 2	0.348	--	0.348
Back	WCDMA Band 5	0.550	0.235	0.785
Front	WCDMA Band 5	0.348	0.112	0.460
Top side	WCDMA Band 5	--	0.064	0.064
Right side	WCDMA Band 5	0.134	--	0.134
Left side	WCDMA Band 5	0.128	0.053	0.181
Bottom side	WCDMA Band 5	0.163	--	0.163
Back	WCDMA Band 4	0.777	0.235	1.012
Front	WCDMA Band 4	0.773	0.112	0.885
Top side	WCDMA Band 4	--	0.064	0.064
Right side	WCDMA Band 4	0.348	--	0.348
Left side	WCDMA Band 4	0.325	0.053	0.378
Bottom side	WCDMA Band 4	0.430	--	0.430
Back	LTE Band 2	0.718	0.235	0.953
Front	LTE Band 2	0.618	0.112	0.730
Top side	LTE Band 2	--	0.064	0.064
Right side	LTE Band 2	0.290	--	0.290
Left side	LTE Band 2	0.281	0.053	0.334
Bottom side	LTE Band 2	0.372	--	0.372
Back	LTE Band 4	0.698	0.235	0.933
Front	LTE Band 4	1.137	0.112	1.249
Top side	LTE Band 4	--	0.064	0.064

Right side	LTE Band 4	0.394	--	0.394
Left side	LTE Band 4	0.377	0.053	0.430
Bottom side	LTE Band 4	0.419	--	0.419
Back	LTE Band 5	0.548	0.235	0.783
Front	LTE Band 5	0.318	0.112	0.430
Top side	LTE Band 5	--	0.064	0.064
Right side	LTE Band 5	0.170	--	0.170
Left side	LTE Band 5	0.164	0.053	0.217
Bottom side	LTE Band 5	0.189	--	0.189
Back	LTE Band 7	1.009	0.235	1.244
Front	LTE Band 7	0.482	0.112	0.594
Top side	LTE Band 7	--	0.064	0.064
Right side	LTE Band 7	0.351	--	0.351
Left side	LTE Band 7	0.336	0.053	0.389
Bottom side	LTE Band 7	1.024	--	1.024
Back	LTE Band 12	0.719	0.235	0.954
Front	LTE Band 12	0.399	0.112	0.511
Top side	LTE Band 12	--	0.064	0.064
Right side	LTE Band 12	0.331	--	0.331
Left side	LTE Band 12	0.317	0.053	0.370
Bottom side	LTE Band 12	0.493	--	0.493
Back	LTE Band 13	0.761	0.235	0.996
Front	LTE Band 13	0.461	0.112	0.573
Top side	LTE Band 13	--	0.064	0.064
Right side	LTE Band 13	0.158	--	0.158
Left side	LTE Band 13	0.154	0.053	0.207
Bottom side	LTE Band 13	0.170	--	0.170
Back	LTE Band 17	0.859	0.235	1.094
Front	LTE Band 17	0.445	0.112	0.557
Top side	LTE Band 17	--	0.064	0.064
Right side	LTE Band 17	0.141	--	0.141
Left side	LTE Band 17	0.132	0.053	0.185
Bottom side	LTE Band 17	0.160	--	0.160
Back	LTE Band 25	0.729	0.235	0.964
Front	LTE Band 25	0.534	0.112	0.646
Top side	LTE Band 25	--	0.064	0.064
Right side	LTE Band 25	0.256	--	0.256
Left side	LTE Band 25	0.241	0.053	0.294
Bottom side	LTE Band 25	0.373	--	0.373
Back	LTE Band 26	0.680	0.235	0.915
Front	LTE Band 26	0.441	0.112	0.553
Top side	LTE Band 26	--	0.064	0.064
Right side	LTE Band 26	0.215	--	0.215

Left side	LTE Band 26	0.202	0.053	0.255
Bottom side	LTE Band 26	0.211	--	0.211
Back	LTE Band 30	0.538	0.235	0.773
Front	LTE Band 30	0.220	0.112	0.332
Top side	LTE Band 30	--	0.064	0.064
Right side	LTE Band 30	0.207	--	0.207
Left side	LTE Band 30	0.191	0.053	0.244
Bottom side	LTE Band 30	0.386	--	0.386
Back	LTE Band 40	0.250	0.235	0.485
Front	LTE Band 40	0.108	0.112	0.220
Top side	LTE Band 40	--	0.064	0.064
Right side	LTE Band 40	0.132	--	0.132
Left side	LTE Band 40	0.111	0.053	0.164
Bottom side	LTE Band 40	0.182	--	0.182
Back	LTE Band 66	0.601	0.235	0.836
Front	LTE Band 66	0.758	0.112	0.870
Top side	LTE Band 66	--	0.064	0.064
Right side	LTE Band 66	0.266	--	0.266
Left side	LTE Band 66	0.260	0.053	0.313
Bottom side	LTE Band 66	0.321	--	0.321

	WWAN		WLAN(5.6G)	Summed SAR (W/kg)
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	1.194	0.340	**1.534**
Front	GSM850	0.787	0.076	0.863
Top side	GSM850	--	0.060	0.060
Right side	GSM850	0.407	--	0.407
Left side	GSM850	0.398	0.055	0.453
Bottom side	GSM850	0.438	--	0.438
Back	GSM1900	0.742	0.340	1.082
Front	GSM1900	0.484	0.076	0.560
Top side	GSM1900	--	0.060	0.060
Right side	GSM1900	0.402	--	0.402
Left side	GSM1900	0.397	0.055	0.452
Bottom side	GSM1900	0.432	--	0.432
Back	WCDMA Band 2	0.717	0.340	1.057
Front	WCDMA Band 2	0.458	0.076	0.534
Top side	WCDMA Band 2	--	0.060	0.060
Right side	WCDMA Band 2	0.274	--	0.274
Left side	WCDMA Band 2	0.257	0.055	0.312
Bottom side	WCDMA Band 2	0.348	--	0.348
Back	WCDMA Band 5	0.550	0.340	0.890
Front	WCDMA Band 5	0.348	0.076	0.424
Top side	WCDMA Band 5	--	0.060	0.060
Right side	WCDMA Band 5	0.134	--	0.134
Left side	WCDMA Band 5	0.128	0.055	0.183
Bottom side	WCDMA Band 5	0.163	--	0.163
Back	WCDMA Band 4	0.777	0.340	1.117
Front	WCDMA Band 4	0.773	0.076	0.849
Top side	WCDMA Band 4	--	0.060	0.060
Right side	WCDMA Band 4	0.348	--	0.348
Left side	WCDMA Band 4	0.325	0.055	0.380
Bottom side	WCDMA Band 4	0.430	--	0.430
Back	LTE Band 2	0.718	0.340	1.058
Front	LTE Band 2	0.618	0.076	0.694
Top side	LTE Band 2	--	0.060	0.060
Right side	LTE Band 2	0.290	--	0.290
Left side	LTE Band 2	0.281	0.055	0.336
Bottom side	LTE Band 2	0.372	--	0.372
Back	LTE Band 4	0.698	0.340	1.038
Front	LTE Band 4	1.137	0.076	1.213
Top side	LTE Band 4	--	0.060	0.060

Right side	LTE Band 4	0.394	--	0.394
Left side	LTE Band 4	0.377	0.055	0.432
Bottom side	LTE Band 4	0.419	--	0.419
Back	LTE Band 5	0.548	0.340	0.888
Front	LTE Band 5	0.318	0.076	0.394
Top side	LTE Band 5	--	0.060	0.060
Right side	LTE Band 5	0.170	--	0.170
Left side	LTE Band 5	0.164	0.055	0.219
Bottom side	LTE Band 5	0.189	--	0.189
Back	LTE Band 7	1.009	0.340	1.349
Front	LTE Band 7	0.482	0.076	0.558
Top side	LTE Band 7	--	0.060	0.060
Right side	LTE Band 7	0.351	--	0.351
Left side	LTE Band 7	0.336	0.055	0.391
Bottom side	LTE Band 7	1.024	--	1.024
Back	LTE Band 12	0.719	0.340	1.059
Front	LTE Band 12	0.399	0.076	0.475
Top side	LTE Band 12	--	0.060	0.060
Right side	LTE Band 12	0.331	--	0.331
Left side	LTE Band 12	0.317	0.055	0.372
Bottom side	LTE Band 12	0.493	--	0.493
Back	LTE Band 13	0.761	0.340	1.101
Front	LTE Band 13	0.461	0.076	0.537
Top side	LTE Band 13	--	0.060	0.060
Right side	LTE Band 13	0.158	--	0.158
Left side	LTE Band 13	0.154	0.055	0.209
Bottom side	LTE Band 13	0.170	--	0.170
Back	LTE Band 17	0.859	0.340	1.199
Front	LTE Band 17	0.445	0.076	0.521
Top side	LTE Band 17	--	0.060	0.060
Right side	LTE Band 17	0.141	--	0.141
Left side	LTE Band 17	0.132	0.055	0.187
Bottom side	LTE Band 17	0.160	--	0.160
Back	LTE Band 25	0.729	0.340	1.069
Front	LTE Band 25	0.534	0.076	0.610
Top side	LTE Band 25	--	0.060	0.060
Right side	LTE Band 25	0.256	--	0.256
Left side	LTE Band 25	0.241	0.055	0.296
Bottom side	LTE Band 25	0.373	--	0.373
Back	LTE Band 26	0.680	0.340	1.020
Front	LTE Band 26	0.441	0.076	0.517
Top side	LTE Band 26	--	0.060	0.060
Right side	LTE Band 26	0.215	--	0.215

Left side	LTE Band 26	0.202	0.055	0.257
Bottom side	LTE Band 26	0.211	--	0.211
Back	LTE Band 30	0.538	0.340	0.878
Front	LTE Band 30	0.220	0.076	0.296
Top side	LTE Band 30	--	0.060	0.060
Right side	LTE Band 30	0.207	--	0.207
Left side	LTE Band 30	0.191	0.055	0.246
Bottom side	LTE Band 30	0.386	--	0.386
Back	LTE Band 40	0.250	0.340	0.590
Front	LTE Band 40	0.108	0.076	0.184
Top side	LTE Band 40	--	0.060	0.060
Right side	LTE Band 40	0.132	--	0.132
Left side	LTE Band 40	0.111	0.055	0.166
Bottom side	LTE Band 40	0.182	--	0.182
Back	LTE Band 66	0.601	0.340	0.941
Front	LTE Band 66	0.758	0.076	0.834
Top side	LTE Band 66	--	0.060	0.060
Right side	LTE Band 66	0.266	--	0.266
Left side	LTE Band 66	0.260	0.055	0.315
Bottom side	LTE Band 66	0.321	--	0.321

	WWAN		**WLAN(5.8G)**	**Summed SAR (W/kg)**
Position	**Band**	**Scaled SAR (W/kg)**	**Scaled SAR (W/kg)**	
Back	GSM850	1.194	0.130	**1.324**
Front	GSM850	0.787	0.041	0.828
Top side	GSM850	--	0.032	0.032
Right side	GSM850	0.407	--	0.407
Left side	GSM850	0.398	0.030	0.428
Bottom side	GSM850	0.438	--	0.438
Back	GSM1900	0.742	0.130	0.872
Front	GSM1900	0.484	0.041	0.525
Top side	GSM1900	--	0.032	0.032
Right side	GSM1900	0.402	--	0.402
Left side	GSM1900	0.397	0.030	0.427
Bottom side	GSM1900	0.432	--	0.432
Back	WCDMA Band 2	0.717	0.130	0.847
Front	WCDMA Band 2	0.458	0.041	0.499
Top side	WCDMA Band 2	--	0.032	0.032
Right side	WCDMA Band 2	0.274	--	0.274
Left side	WCDMA Band 2	0.257	0.030	0.287
Bottom side	WCDMA Band 2	0.348	--	0.348
Back	WCDMA Band 5	0.550	0.130	0.680

Front	WCDMA Band 5	0.348	0.041	0.389
Top side	WCDMA Band 5	--	0.032	0.032
Right side	WCDMA Band 5	0.134	--	0.134
Left side	WCDMA Band 5	0.128	0.030	0.158
Bottom side	WCDMA Band 5	0.163	--	0.163
Back	WCDMA Band 4	0.777	0.130	0.907
Front	WCDMA Band 4	0.773	0.041	0.814
Top side	WCDMA Band 4	--	0.032	0.032
Right side	WCDMA Band 4	0.348	--	0.348
Left side	WCDMA Band 4	0.325	0.030	0.355
Bottom side	WCDMA Band 4	0.430	--	0.430
Back	LTE Band 2	0.718	0.130	0.848
Front	LTE Band 2	0.618	0.041	0.659
Top side	LTE Band 2	--	0.032	0.032
Right side	LTE Band 2	0.290	--	0.290
Left side	LTE Band 2	0.281	0.030	0.311
Bottom side	LTE Band 2	0.372	--	0.372
Back	LTE Band 4	0.698	0.130	0.828
Front	LTE Band 4	1.137	0.041	1.178
Top side	LTE Band 4	--	0.032	0.032
Right side	LTE Band 4	0.394	--	0.394
Left side	LTE Band 4	0.377	0.030	0.407
Bottom side	LTE Band 4	0.419	--	0.419
Back	LTE Band 5	0.548	0.130	0.678
Front	LTE Band 5	0.318	0.041	0.359
Top side	LTE Band 5	--	0.032	0.032
Right side	LTE Band 5	0.170	--	0.170
Left side	LTE Band 5	0.164	0.030	0.194
Bottom side	LTE Band 5	0.189	--	0.189
Back	LTE Band 7	1.009	0.130	1.139
Front	LTE Band 7	0.482	0.041	0.523
Top side	LTE Band 7	--	0.032	0.032
Right side	LTE Band 7	0.351	--	0.351
Left side	LTE Band 7	0.336	0.030	0.366
Bottom side	LTE Band 7	1.024	--	1.024
Back	LTE Band 12	0.719	0.130	0.849
Front	LTE Band 12	0.399	0.041	0.440
Top side	LTE Band 12	--	0.032	0.032
Right side	LTE Band 12	0.331	--	0.331
Left side	LTE Band 12	0.317	0.030	0.347
Bottom side	LTE Band 12	0.493	--	0.493
Back	LTE Band 13	0.761	0.130	0.891
Front	LTE Band 13	0.461	0.041	0.502

Top side	LTE Band 13	--	0.032	0.032
Right side	LTE Band 13	0.158	--	0.158
Left side	LTE Band 13	0.154	0.030	0.184
Bottom side	LTE Band 13	0.170	--	0.170
Back	LTE Band 17	0.859	0.130	0.989
Front	LTE Band 17	0.445	0.041	0.486
Top side	LTE Band 17	--	0.032	0.032
Right side	LTE Band 17	0.141	--	0.141
Left side	LTE Band 17	0.132	0.030	0.162
Bottom side	LTE Band 17	0.160	--	0.160
Back	LTE Band 25	0.729	0.130	0.859
Front	LTE Band 25	0.534	0.041	0.575
Top side	LTE Band 25	--	0.032	0.032
Right side	LTE Band 25	0.256	--	0.256
Left side	LTE Band 25	0.241	0.030	0.271
Bottom side	LTE Band 25	0.373	--	0.373
Back	LTE Band 26	0.680	0.130	0.810
Front	LTE Band 26	0.441	0.041	0.482
Top side	LTE Band 26	--	0.032	0.032
Right side	LTE Band 26	0.215	--	0.215
Left side	LTE Band 26	0.202	0.030	0.232
Bottom side	LTE Band 26	0.211	--	0.211
Back	LTE Band 30	0.538	0.130	0.668
Front	LTE Band 30	0.220	0.041	0.261
Top side	LTE Band 30	--	0.032	0.032
Right side	LTE Band 30	0.207	--	0.207
Left side	LTE Band 30	0.191	0.030	0.221
Bottom side	LTE Band 30	0.386	--	0.386
Back	LTE Band 40	0.250	0.130	0.380
Front	LTE Band 40	0.108	0.041	0.149
Top side	LTE Band 40	--	0.032	0.032
Right side	LTE Band 40	0.132	--	0.132
Left side	LTE Band 40	0.111	0.030	0.141
Bottom side	LTE Band 40	0.182	--	0.182
Back	LTE Band 66	0.601	0.130	0.731
Front	LTE Band 66	0.758	0.041	0.799
Top side	LTE Band 66	--	0.032	0.032
Right side	LTE Band 66	0.266	--	0.266
Left side	LTE Band 66	0.260	0.030	0.290
Bottom side	LTE Band 66	0.321	--	0.321

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	√3	(1_Cp)^1/2	(1_Cp)^1/2	1.02	1.02	∝
Hemispherical Isotropy	E.2.2	4.0	R	√3	(Cp)^1/2	(Cp)^1/2	1.63	1.63	∝
Boundary effect	E.2.3	1.0	R	√3	1	1	0.58	0.58	∝
Linearity	E.2.4	5.0	R	√3	1	1	2.89	2.89	∝
System detection limits	E.2.5	1.0	R	√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	√3	1	1	1.73	1.73	∝
Integration Time	E.2.8	2.0	R	√3	1	1	1.15	1.15	∝
RF ambient Conditions – Noise	E.6.1	3.0	R	√3	1	1	1.73	1.73	∝
RF ambient Conditions - Reflections	E.6.1	3.0	R	√3	1	1	1.73	1.73	∝
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	√3	1	1	1.15	1.15	∝
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	√3	1	1	0.03	0.03	∝
Extrapolation, interpolation and integration Algoritms for Max. SAR Evaluation	E.5	5.0	R	√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	√3	1	1	6.94	6.94	∝
SAR scaling	E6.5	0.0	R	√3	1	1	0.0	0.0	∝
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	√3	1	1	0.03	0.03	∝
Uncertainty in SAR correction for deviations in permittivity and conductivity	E3.2	1.9	R	√3	1	0.84	1.10	0.90	∝
Liquid conductivity - deviation	E.3.2	5.00	R	√3	0.64	0.43	1.85	1.24	∝

from target value									
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	√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	√3	(1_Cp)^1/2	(1_Cp)^1/2	1.02	1.02	∝
Hemispherical Isotropy	E.2.2	4.0	R	√3	(Cp)^1/2	(Cp)^1/2	1.63	1.63	∝
Boundary effect	E.2.3	1.0	R	√3	1	1	0.58	0.58	∝
Linearity	E.2.4	5.0	R	√3	1	1	2.89	2.89	∝
System detection limits	E.2.5	1.0	R	√3	1	1	0.58	0.58	∝
Modulation response	E.2.5	0	R	√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	√3	1	1	1.73	1.73	∝
Integration Time	E.2.8	2.0	R	√3	1	1	1.15	1.15	∝
RF ambient Conditions – Noise	E.6.1	3.0	R	√3	1	1	1.73	1.73	∝
RF ambient Conditions - Reflections	E.6.1	3.0	R	√3	1	1	1.73	1.73	∝
Probe positioner Mechanical Tolerance	E.6.2	2.0	R	√3	1	1	1.15	1.15	∝
Probe positioning with respect to Phantom Shell	E.6.3	0.05	R	√3	1	1	0.03	0.03	∝
Extrapolation, interpolation and integration Algoritms for Max.	E.5.2	5.0	R	√3	1	1	2.89	2.89	∝

SAR Evaluation									
Dipole									
Dipole axis to liquid Distance	8,E.4.2	1.00	N	√3	1	1	0.58	0.58	N−1
Input power and SAR drift measurement	8,6.6.2	12.02	R	√3	1	1	6.94	6.94	∝
Deviation of experimental dipole from numerical dipole	E.6.4	5.5	R	√3	1	1	3.20	3.20	∝
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	0.05	R	√3	1	1	0.03	0.03	∝
Uncertainty in SAR correction for deviations in permittivity and conductivity	E3.2	2.0	R	√3	1	0.84	1.10	1.10	∝
Liquid conductivity - deviation from target value	E.3.2	5.00	R	√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	√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

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/09/2019

Measurement duration: 7 minutes 21 seconds

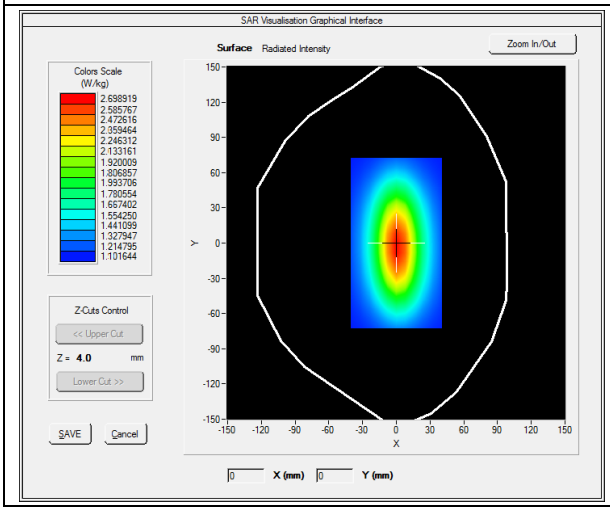
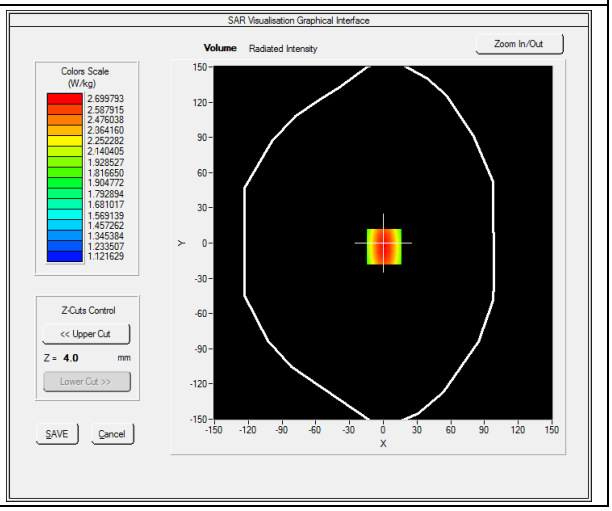
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.99; Calibrated: 05/22/2019

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)	41.320574
Conductivity (S/m)	0.862373
Power Variation (%)	0.038363
Ambient Temperature	21.1
Liquid Temperature	21.3

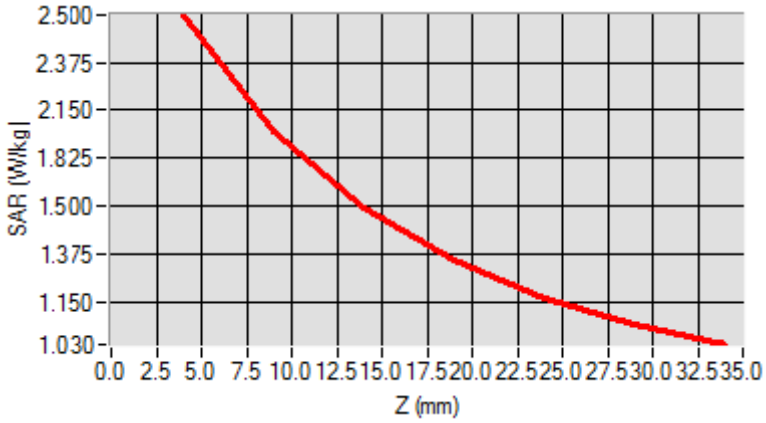
SURFACE SAR	VOLUME SAR
	

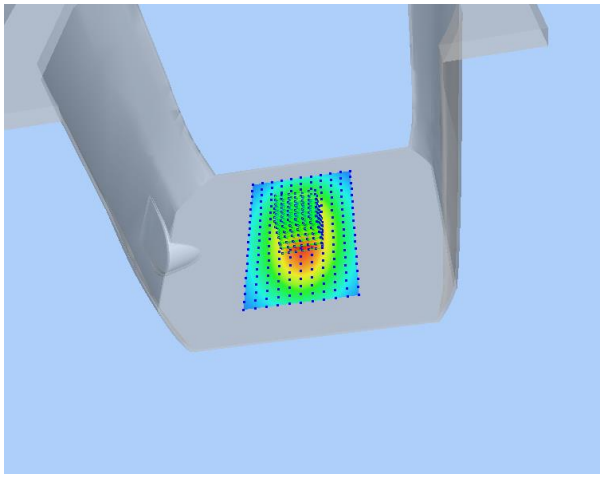
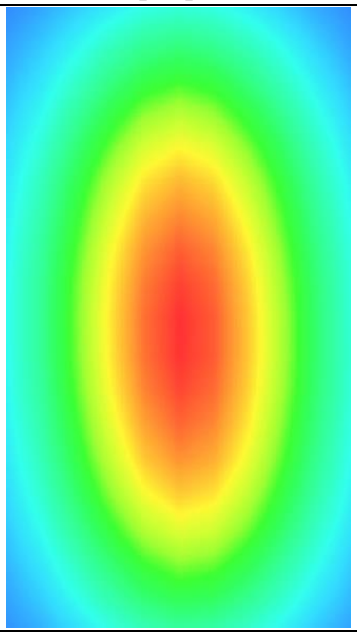
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**1.042744**
SAR 1g (W/Kg)	**2.164534**

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**
	

MEASUREMENT 2

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/09/2019

Measurement duration: 7 minutes 21 seconds

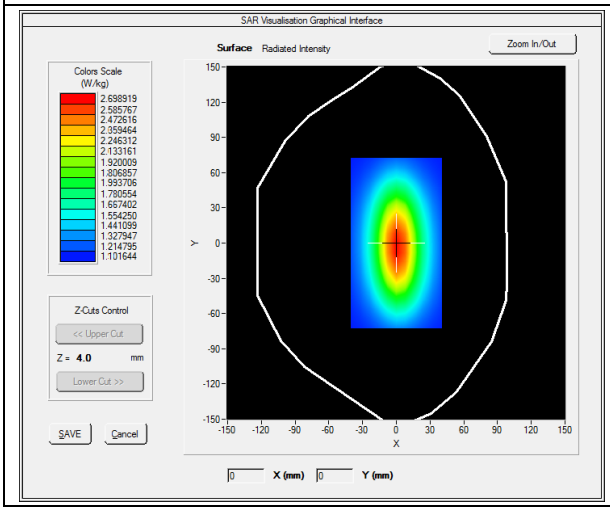
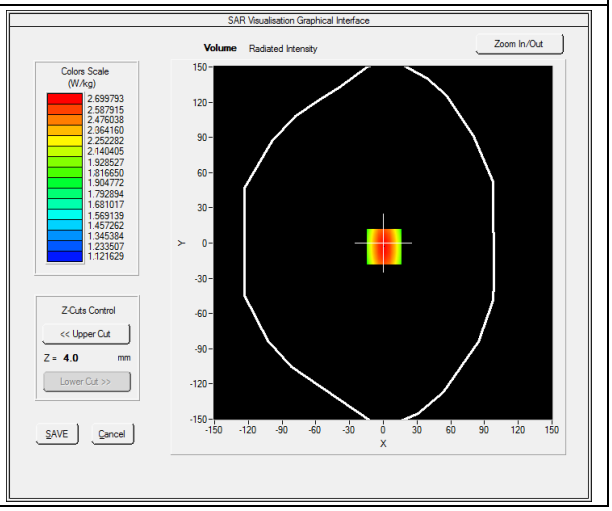
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.93; Calibrated: 05/22/2019

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)	41.110245
Conductivity (S/m)	0.871245
Power Variation (%)	0.038437
Ambient Temperature	21.1
Liquid Temperature	21.3

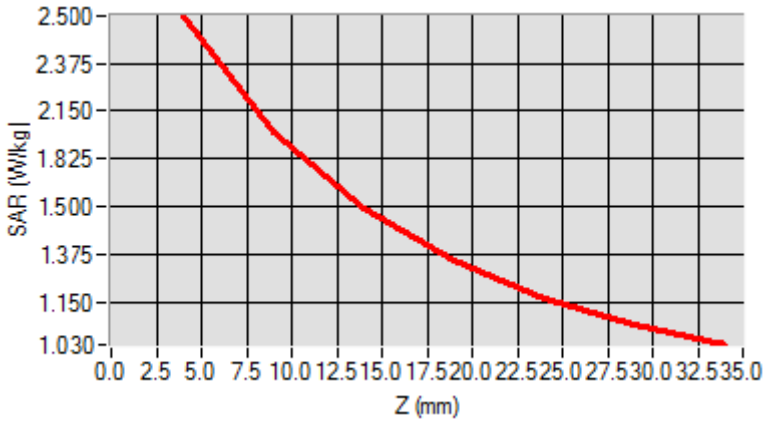
SURFACE SAR	VOLUME SAR
	

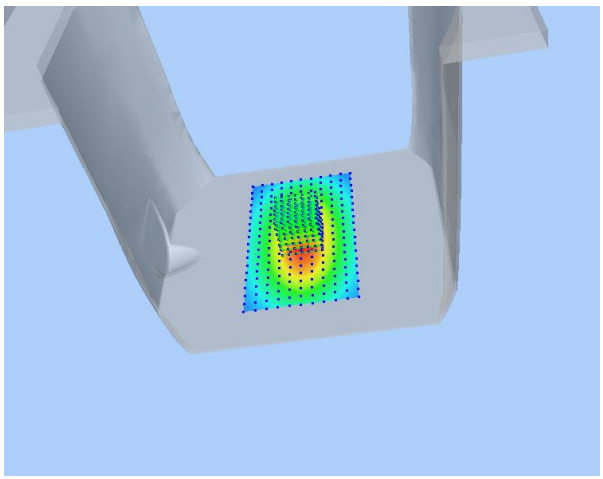
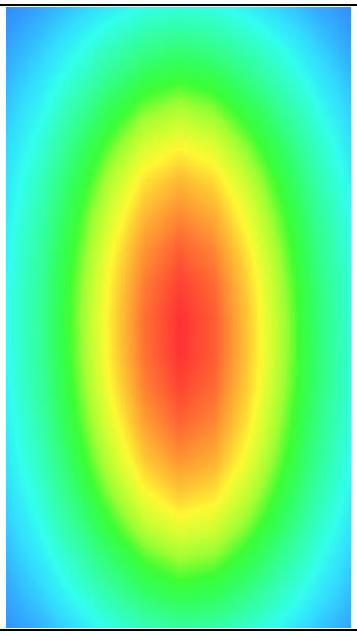
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**1.519489**
SAR 1g (W/Kg)	**2.411253**

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

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/10/2019

Measurement duration: 12 minutes 21 seconds

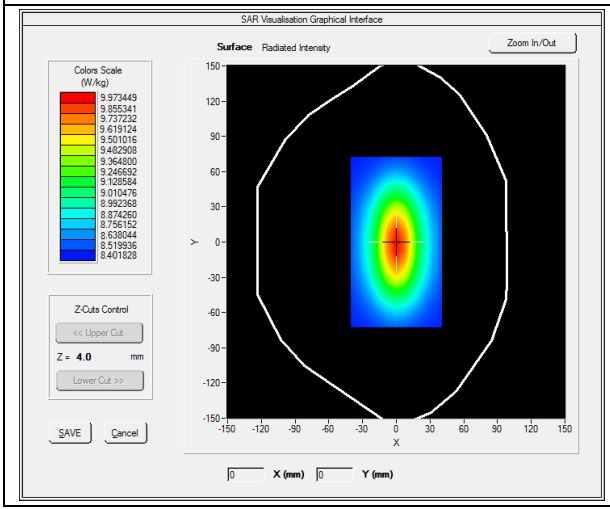
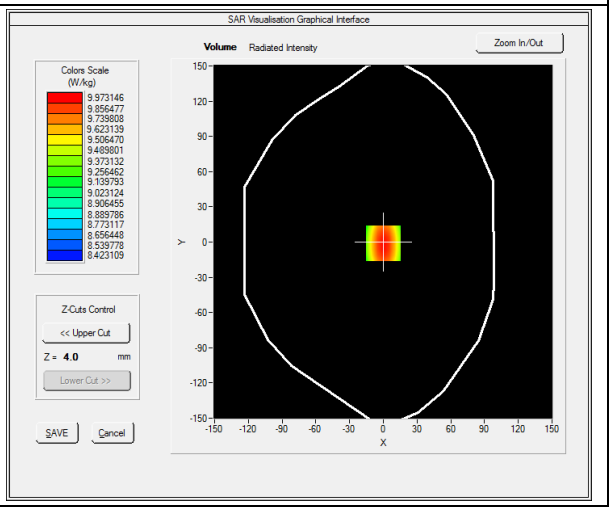
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 5.84; Calibrated: 05/22/2019

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)	39.024890
Conductivity (S/m)	1.371250
Power Variation (%)	1.401232
Ambient Temperature	21.1
Liquid Temperature	21.2

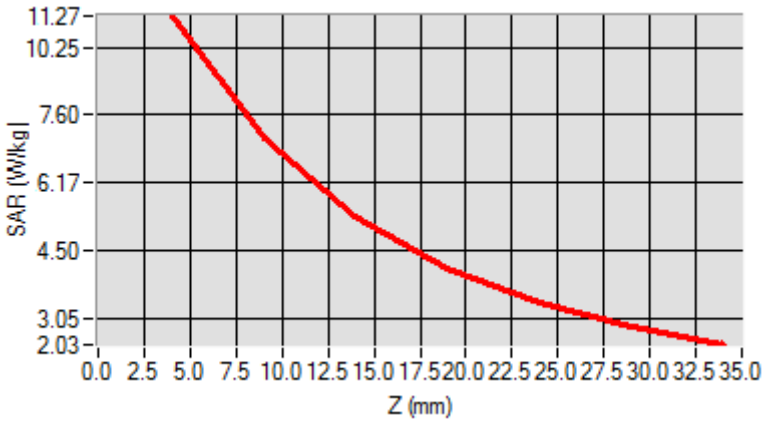
SURFACE SAR	VOLUME SAR
	

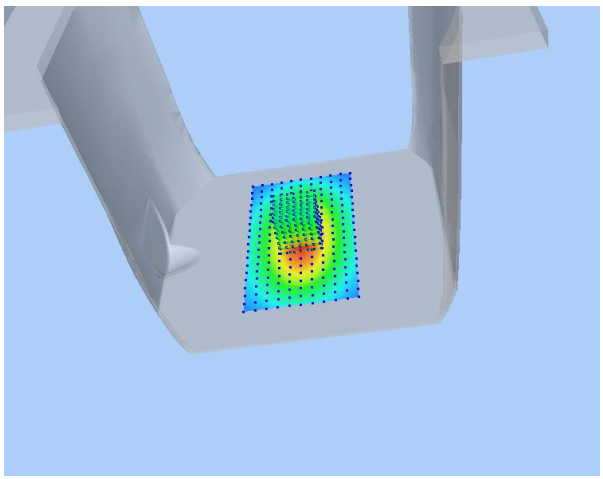
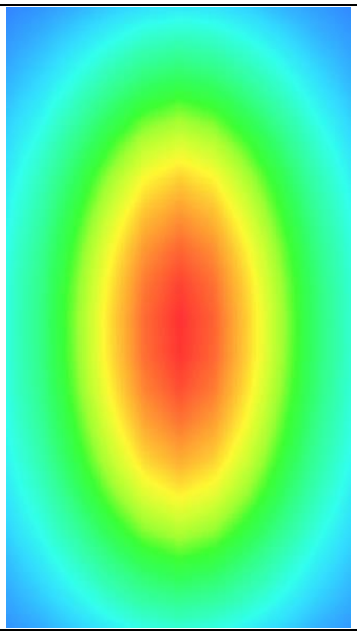
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**5.171252**
SAR 1g (W/Kg)	**9.611250**

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**
	

MEASUREMENT 4

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/10/2019

Measurement duration: 12 minutes 21 seconds

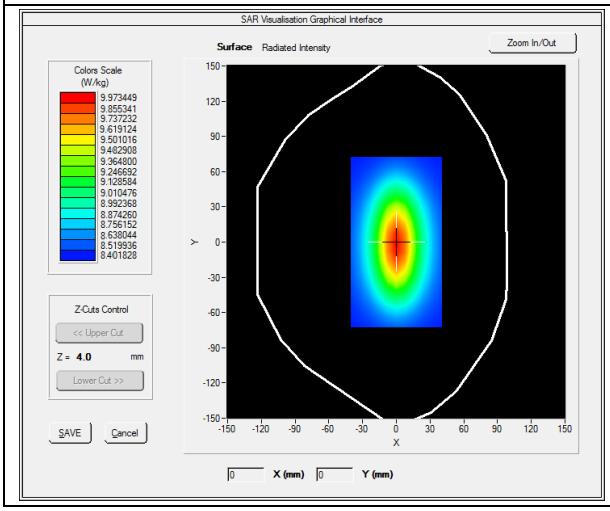
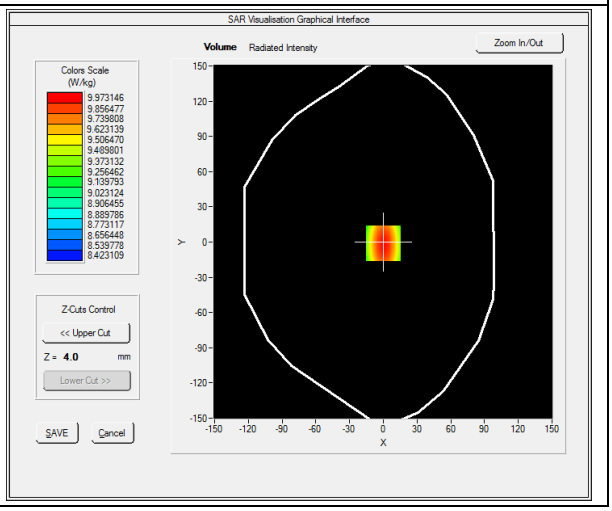
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.35; Calibrated: 05/22/2019

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative Permittivity (real part)	38.560124
Conductivity (S/m)	1.380369
Power Variation (%)	1.022540
Ambient Temperature	21.1
Liquid Temperature	21.3

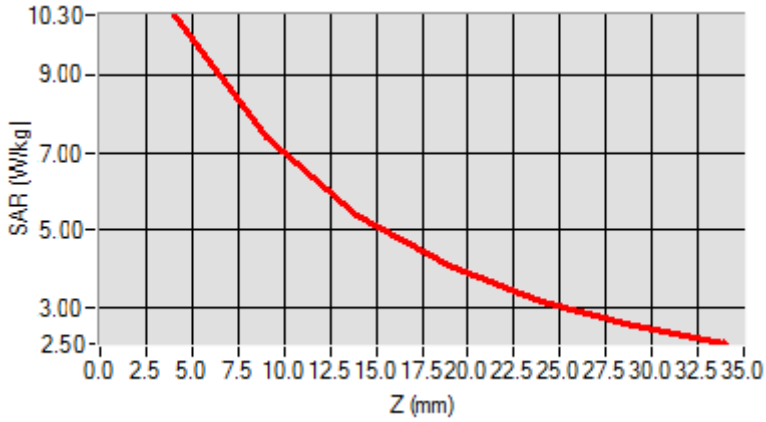
SURFACE SAR	VOLUME SAR
	

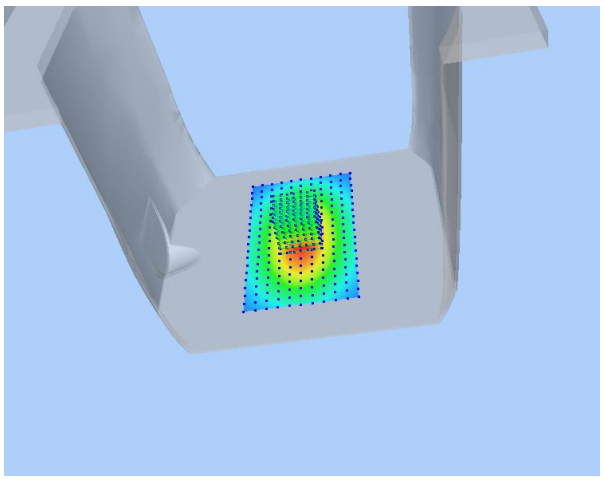
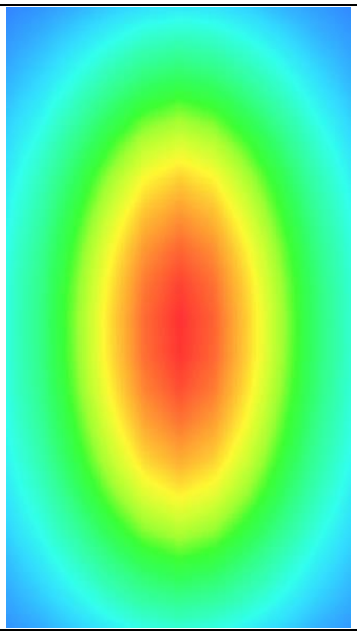
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**5.174526**
SAR 1g (W/Kg)	**9.913214**

Z Axis Scan

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.0000**	**10.2354**	**6.8400**	**5.0121**	**4.1189**	**3.0522**	**2.8424**



3D screen shot	**Hot spot position**
	

MEASUREMENT 5

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/11/2019

Measurement duration: 12 minutes 21 seconds

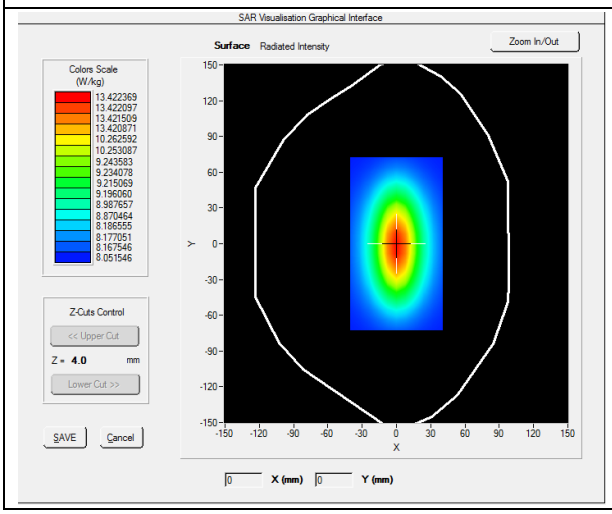
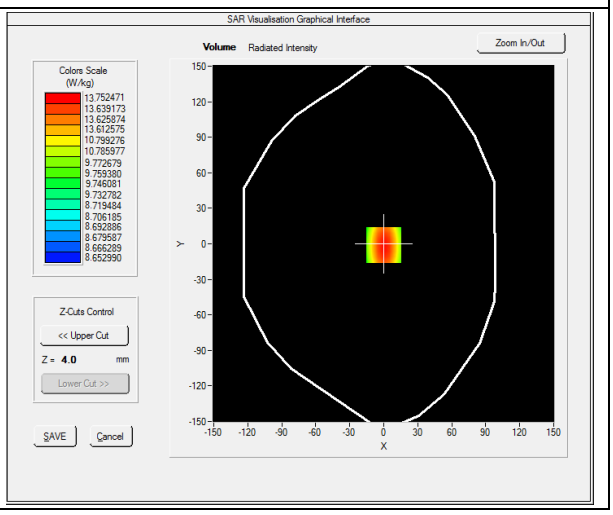
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 5.64; Calibrated: 05/22/2019

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2450
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2450.000000
Relative Permittivity (real part)	38.153660
Conductivity (S/m)	1.740236
Power Variation (%)	1.141452
Ambient Temperature	21.1
Liquid Temperature	21.2

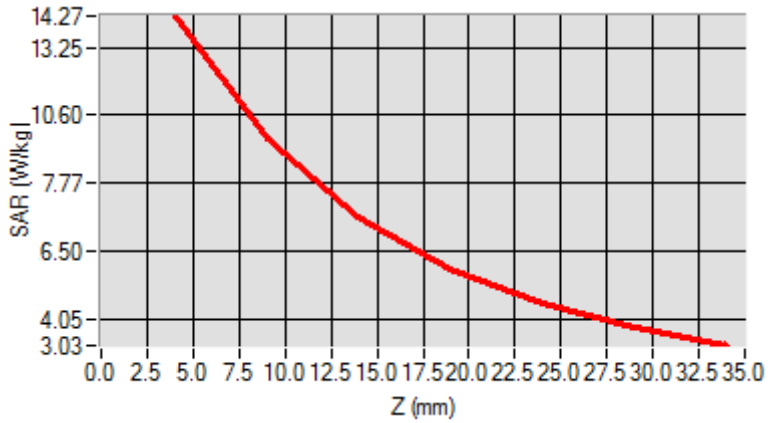
SURFACE SAR	VOLUME SAR
	

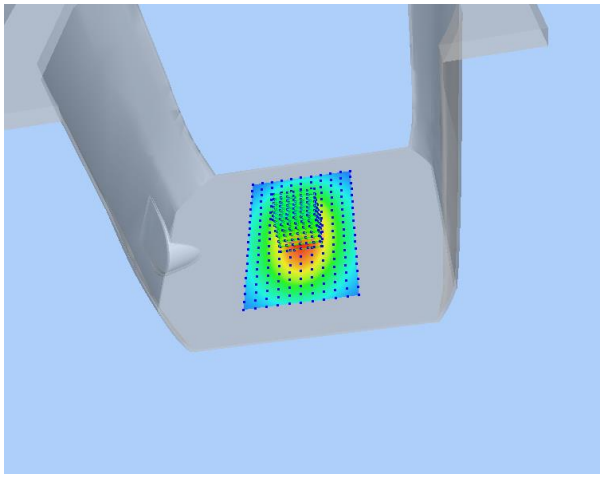
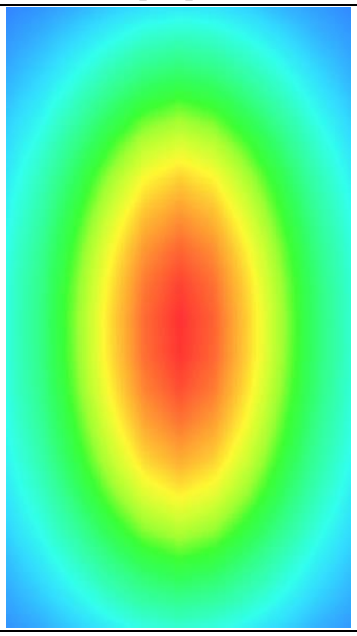
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**8.020427**
SAR 1g (W/Kg)	**13.452457**

Z Axis Scan

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.0000**	**14.1034**	**12.0012**	**10.2624**	**7.4715**	**5.9022**	**4.5114**



3D screen shot	**Hot spot position**
	

MEASUREMENT 6

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/11/2019

Measurement duration: 12 minutes 21 seconds

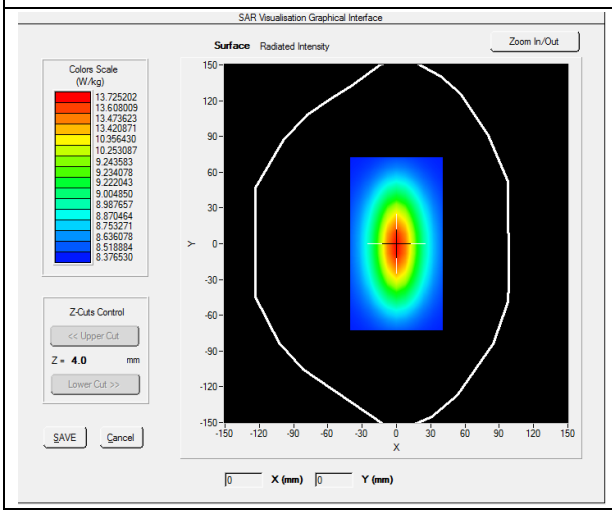
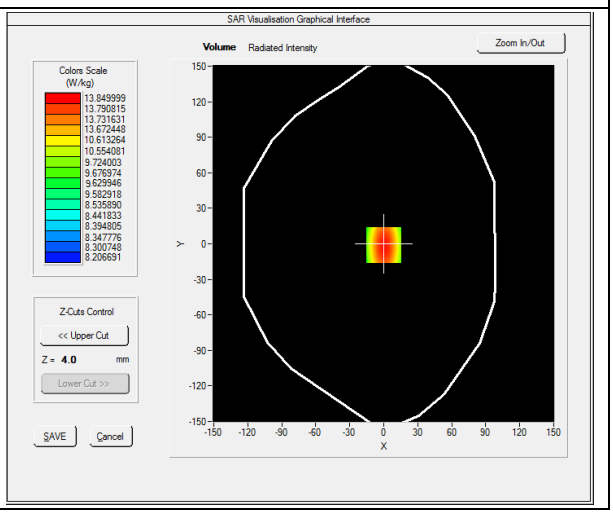
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 5.37; Calibrated: 05/22/2019

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2600.000000
Relative Permittivity (real part)	38.631092
Conductivity (S/m)	1.930182
Power Variation (%)	1.028221
Ambient Temperature	21.1
Liquid Temperature	21.2

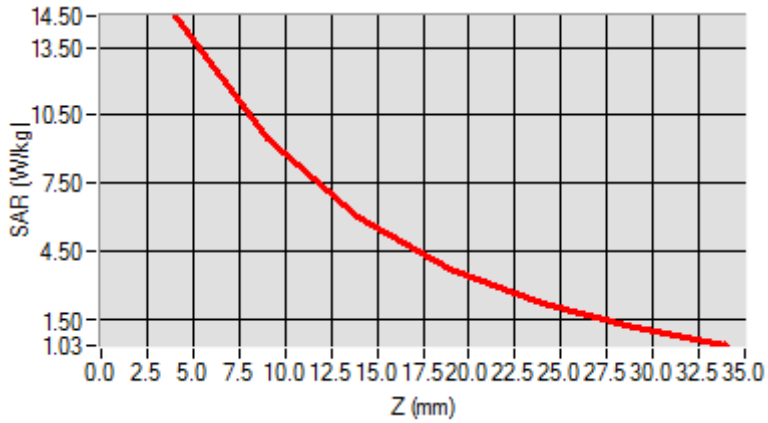
SURFACE SAR	VOLUME SAR
	

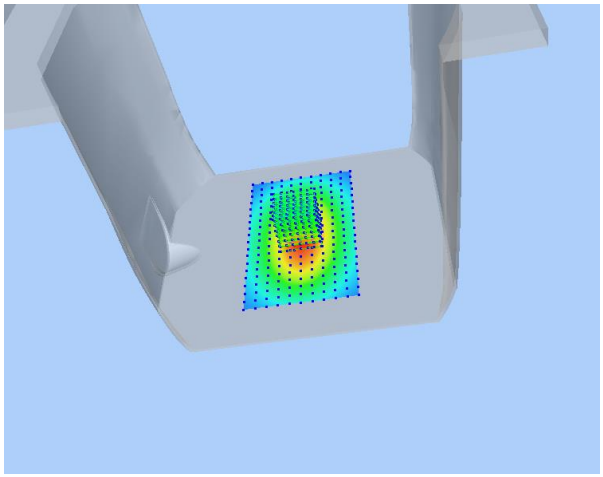
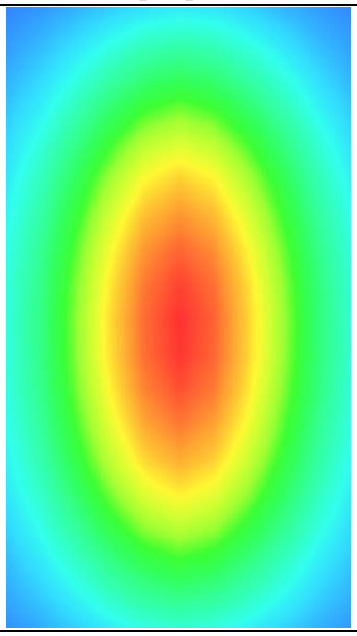
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**8.270822**
SAR 1g (W/Kg)	**13.670282**

Z Axis Scan

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.0000**	**14.0426**	**12.1354**	**10.2965**	**7.4854**	**5.9354**	**4.5186**



3D screen shot	**Hot spot position**
	

MEASUREMENT 7

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/12/2019

Measurement duration: 12 minutes 21 seconds

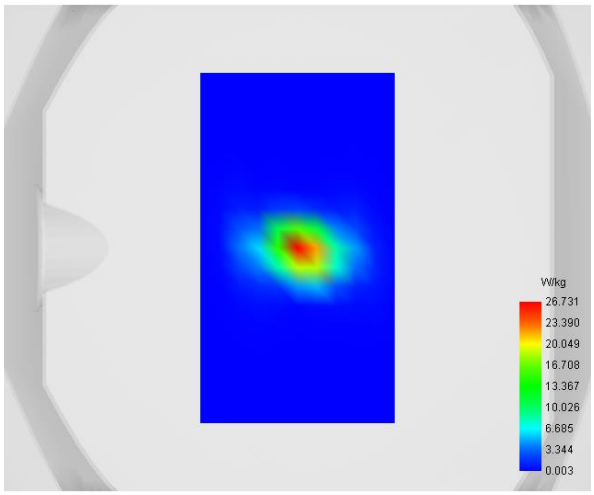
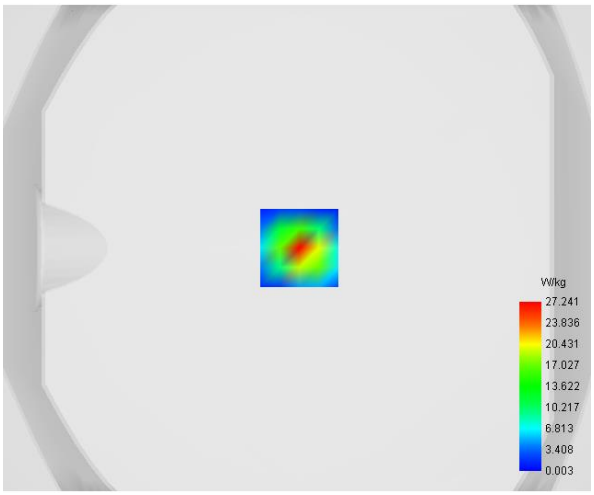
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: 2.28; Calibrated: 2019/07/08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5200
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

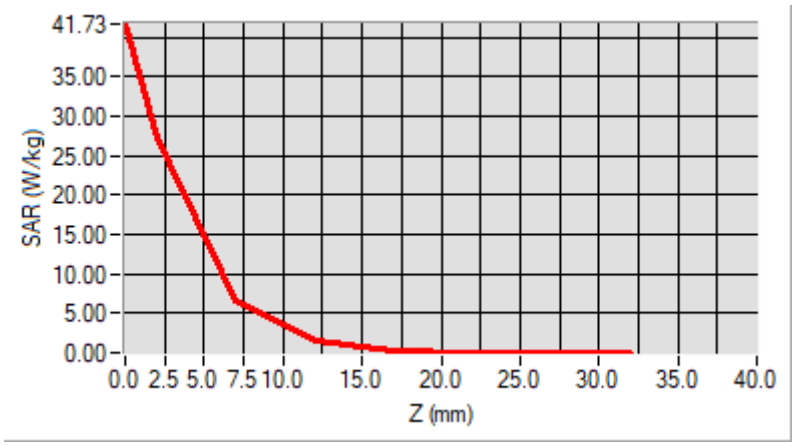
Frequency (MHz)	5200.000000
Relative Permittivity (real part)	35.612911
Conductivity (S/m)	4.871483
Power Variation (%)	0.943213
Ambient Temperature	21.1
Liquid Temperature	21.2

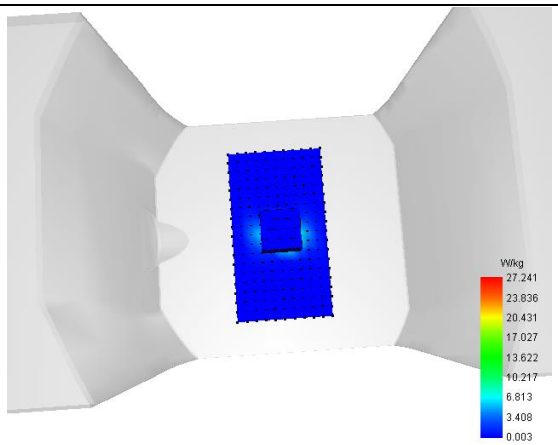
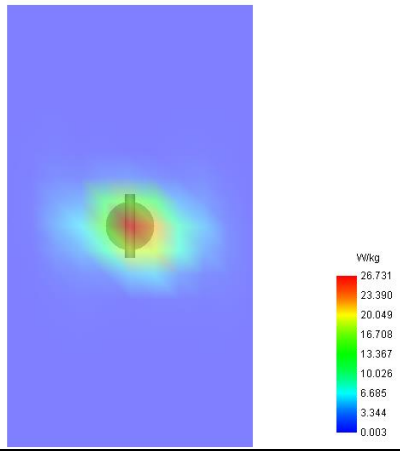
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	**5.310334**
SAR 1g (W/Kg)	**16.946226**

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	41.7264	27.2408	6.5746	1.6234	0.3765	0.0793	0.0129



3D screen shot	Hot spot position
	

MEASUREMENT 8

For Head Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/12/2019

Measurement duration: 12 minutes 21 seconds

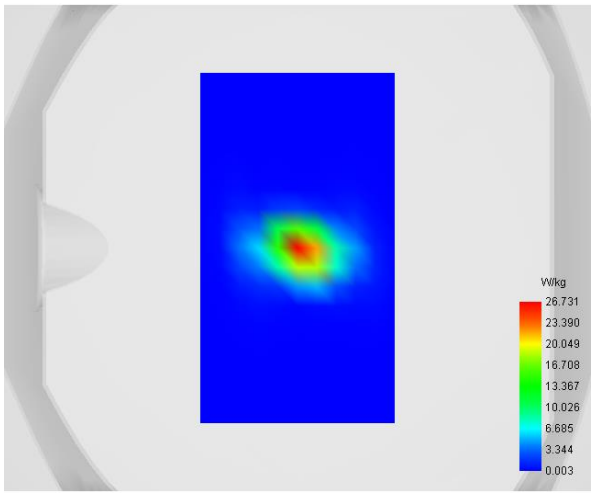
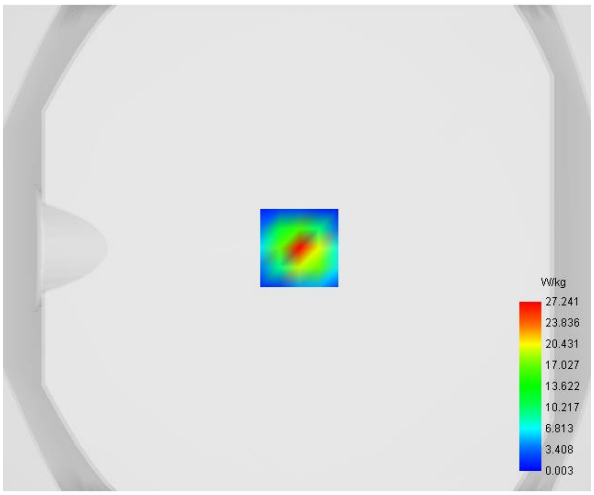
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: 2.44; Calibrated: 2019/07/08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5800
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

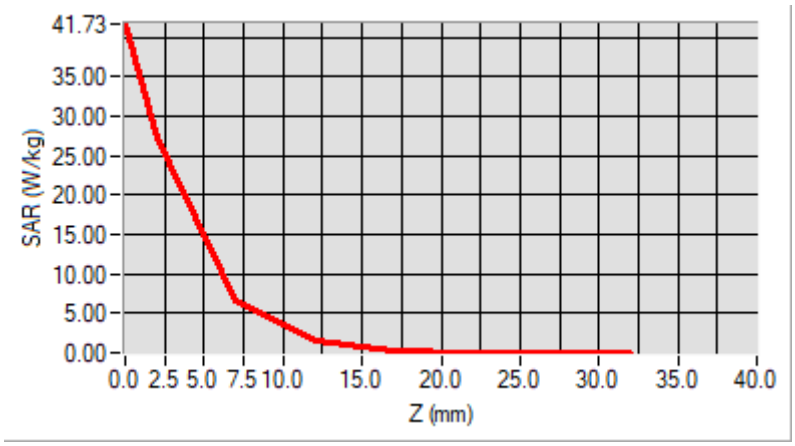
Frequency (MHz)	5800.000000
Relative Permittivity (real part)	35.612911
Conductivity (S/m)	5.171483
Power Variation (%)	0.943782
Ambient Temperature	21.1
Liquid Temperature	21.2

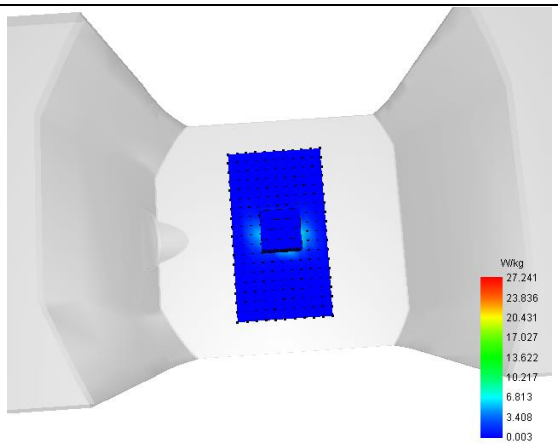
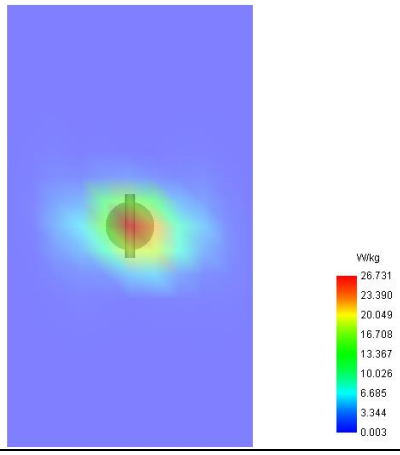
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	**5.310334**
SAR 1g (W/Kg)	**16.946226**

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	41.7264	27.2408	6.5746	1.6234	0.3765	0.0793	0.0129



3D screen shot	Hot spot position
	

MEASUREMENT 9

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/09/2019

Measurement duration: 12 minutes 21 seconds

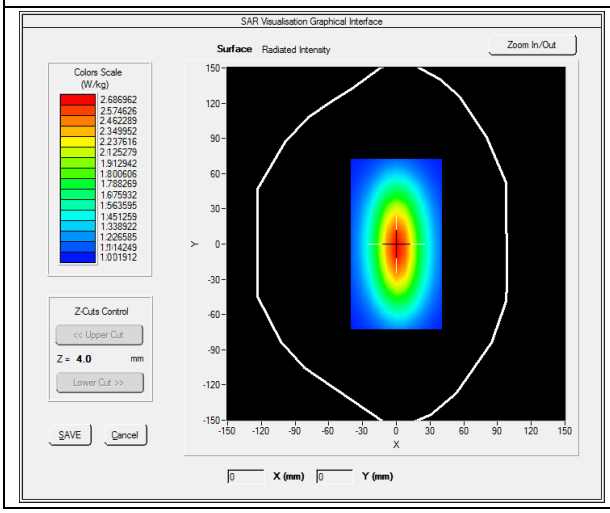
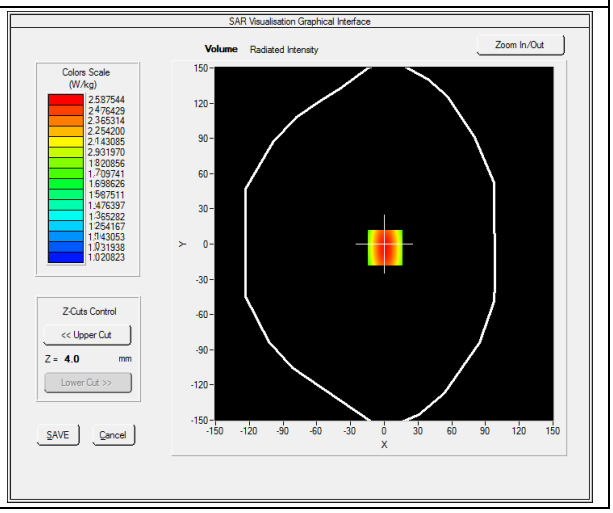
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 7.28; Calibrated: 05/22/2019

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)	54.964739
Conductivity (S/m)	0.931048
Power Variation (%)	0.034745
Ambient Temperature	21.1
Liquid Temperature	21.3

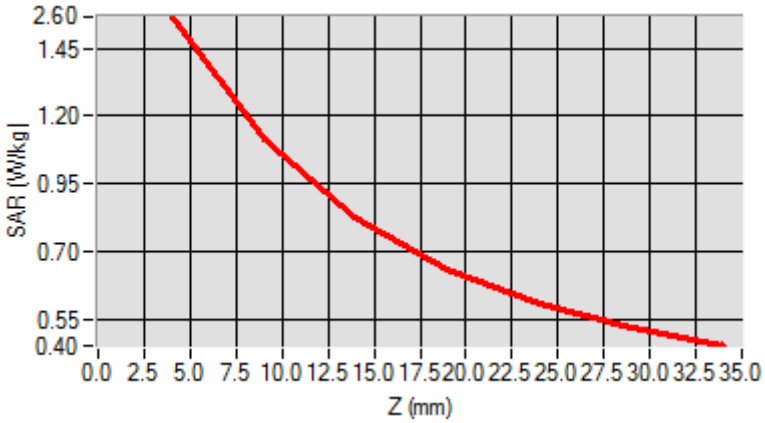
SURFACE SAR	VOLUME SAR
	

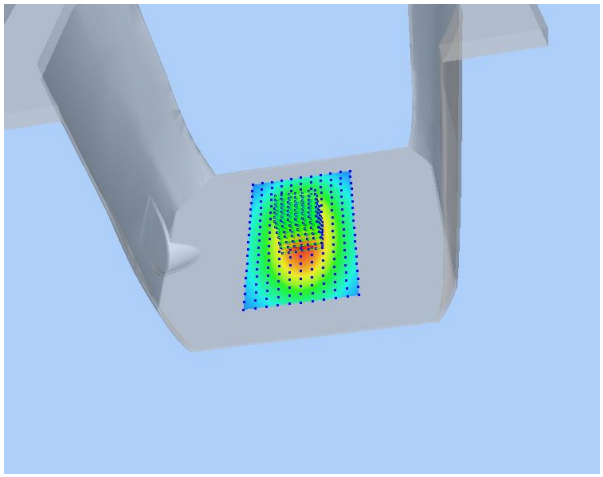
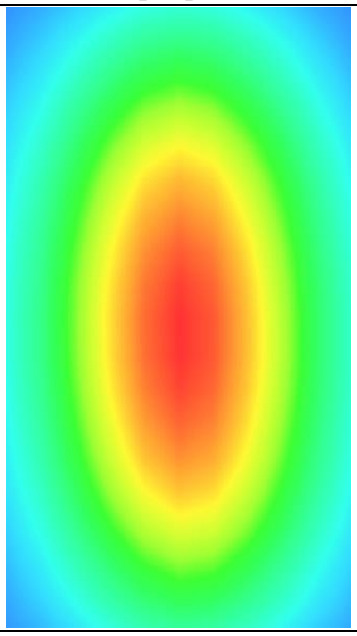
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**1.000865**
SAR 1g (W/Kg)	**2.124211**

Z Axis Scan

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.0000**	**2.5132**	**1.1087**	**0.8214**	**0.5160**	**0.4875**	**0.4864**



3D screen shot	**Hot spot position**
	

MEASUREMENT 10

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/09/2019

Measurement duration: 12 minutes 21 seconds

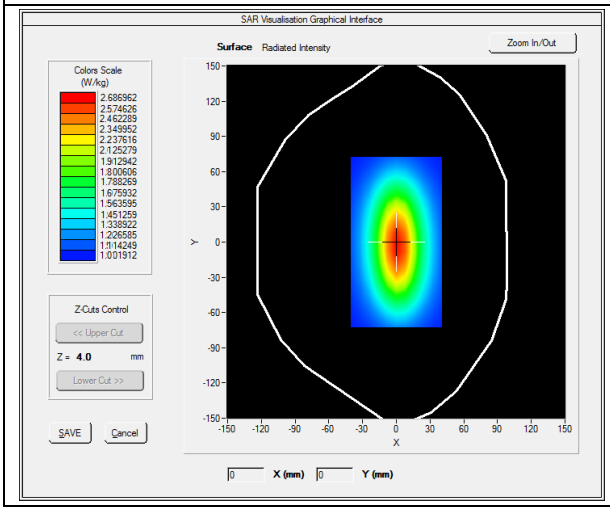
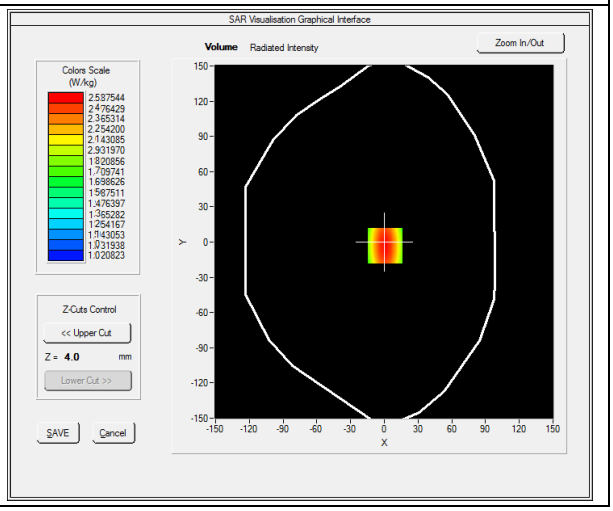
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 7.13; Calibrated: 05/22/2019

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)	54.851214
Conductivity (S/m)	0.951454
Power Variation (%)	0.901472
Ambient Temperature	21.1
Liquid Temperature	21.3

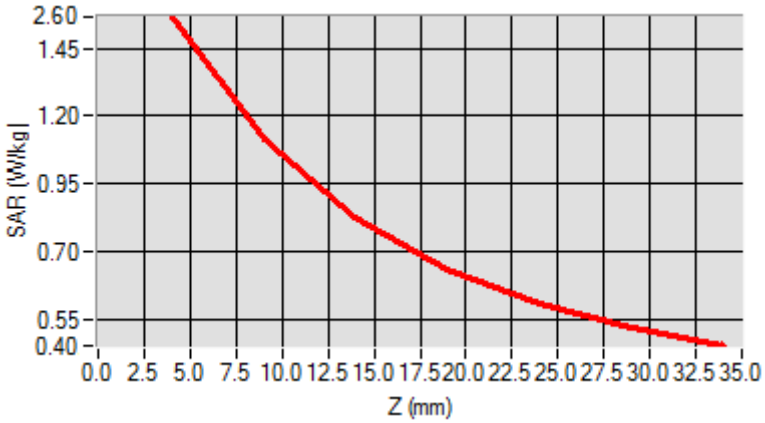
SURFACE SAR	VOLUME SAR
	

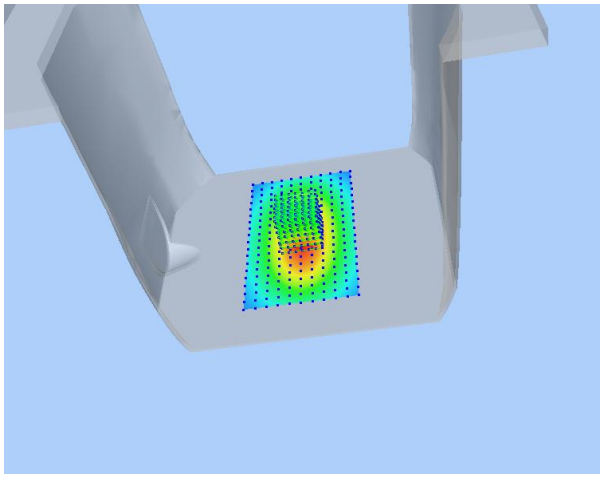
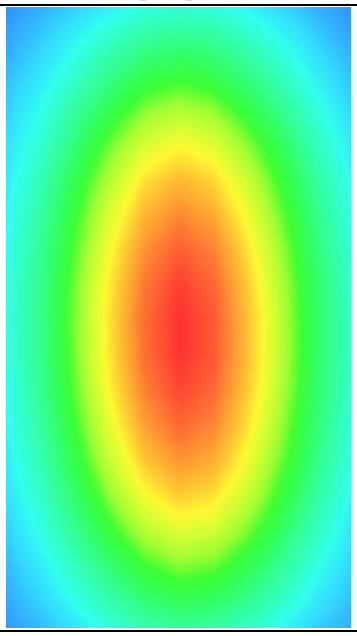
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**1.028956**
SAR 1g (W/Kg)	**2.354211**

Z Axis Scan

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.0000**	**2.5789**	**1.1300**	**0.8795**	**0.5940**	**0.5011**	**0.5100**



3D screen shot	**Hot spot position**
	

MEASUREMENT 11

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/10/2019

Measurement duration: 12 minutes 21 seconds

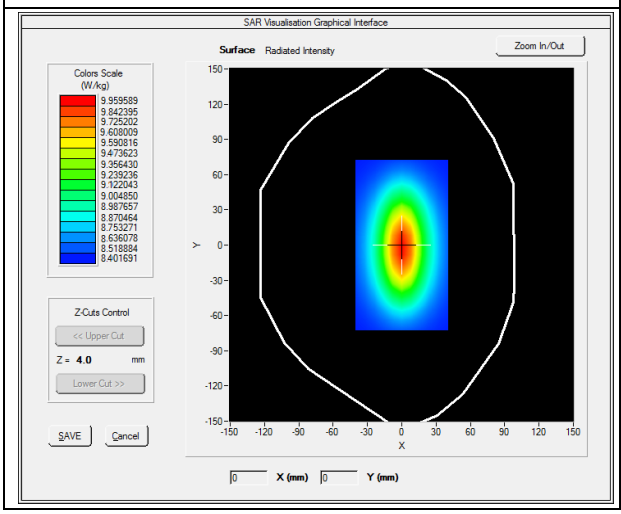
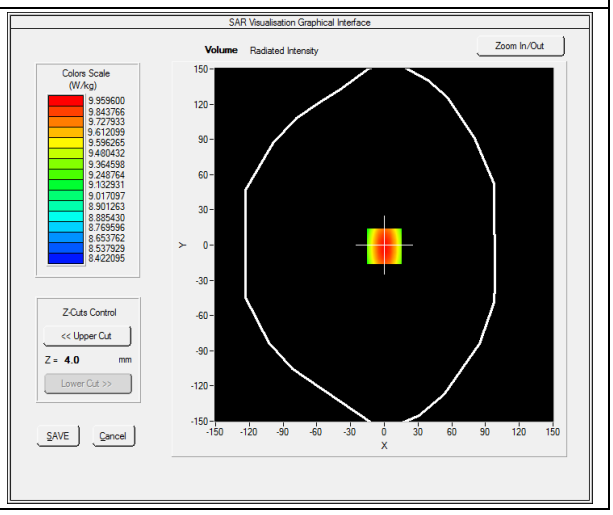
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.06; Calibrated: 05/22/2019

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)	51.224510
Conductivity (S/m)	1.461261
Power Variation (%)	0.845690
Ambient Temperature	21.1
Liquid Temperature	21.2

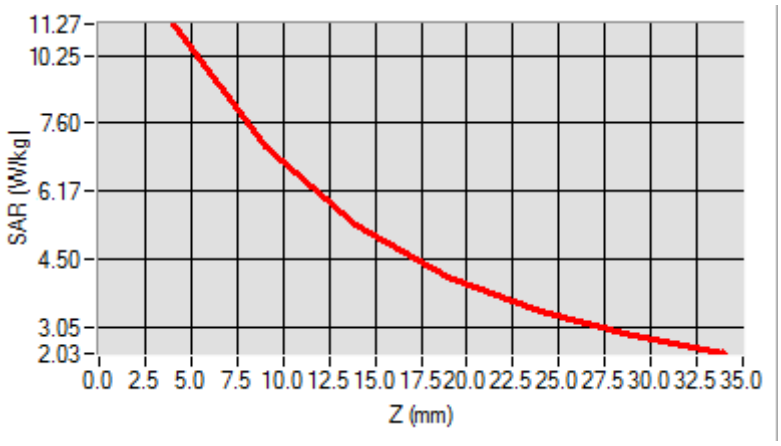
SURFACE SAR	VOLUME SAR
	

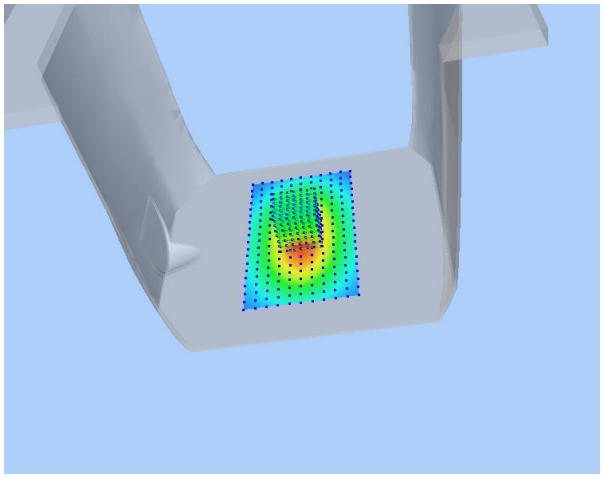
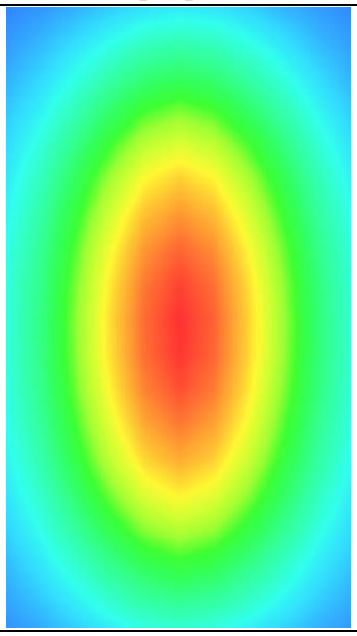
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**5.221202**
SAR 1g (W/Kg)	**9.582560**

Z Axis Scan

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.0000**	**11.2425**	**9.4123**	**8.0345**	**6.9125**	**6.3092**	**3.9460**



3D screen shot	**Hot spot position**
	

MEASUREMENT 12

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/10/2019

Measurement duration: 12 minutes 21 seconds

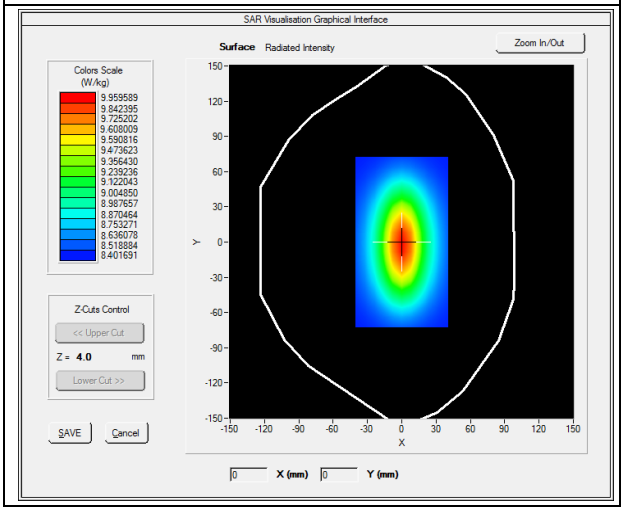
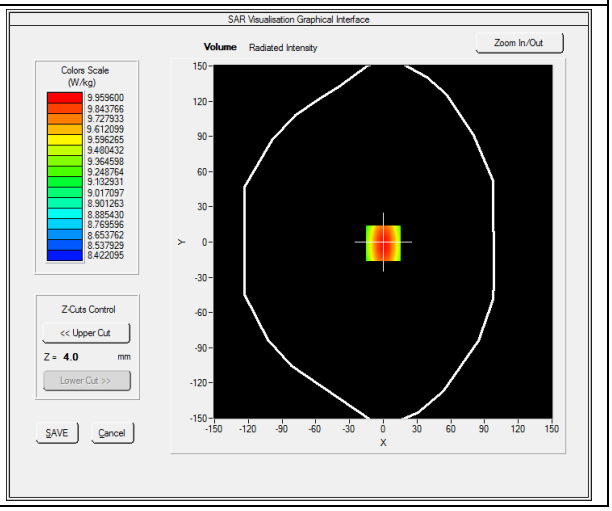
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 6.55; Calibrated: 05/22/2019

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW1900
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	1900.000000
Relative Permittivity (real part)	52.420415
Conductivity (S/m)	1.501966
Power Variation (%)	0.541872
Ambient Temperature	21.1
Liquid Temperature	21.3

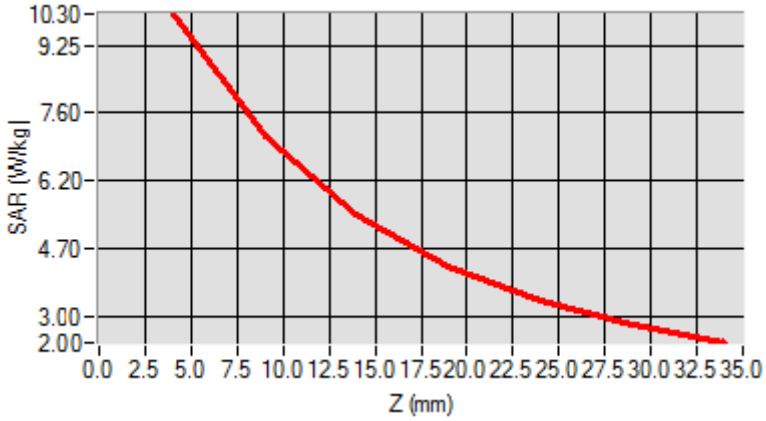
SURFACE SAR	VOLUME SAR
	

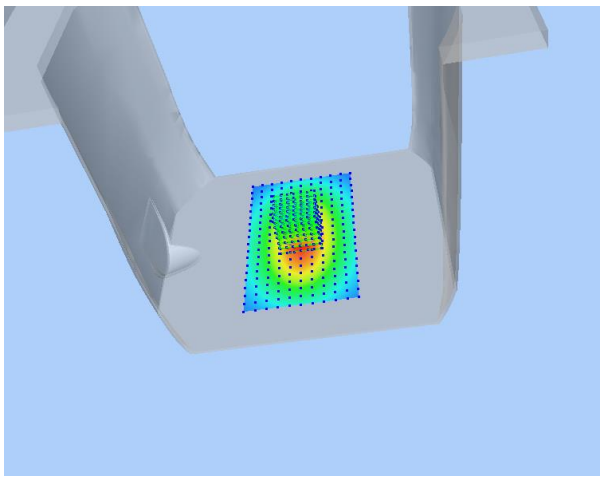
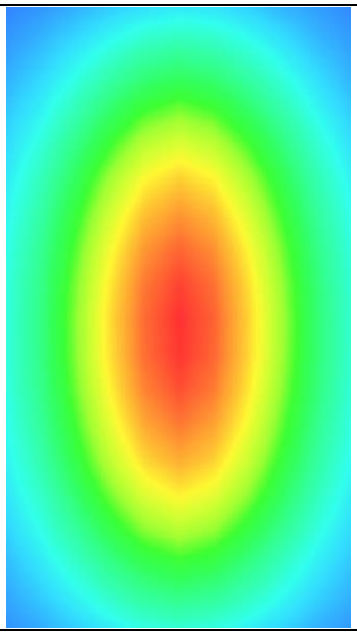
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**5.134651**
SAR 1g (W/Kg)	**9.781550**

Z Axis Scan

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.0000**	**10.2031**	**6.43001**	**4.9011**	**4.5325**	**3.1201**	**2.5024**



3D screen shot	**Hot spot position**
	

MEASUREMENT 13

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/11/2019

Measurement duration: 12 minutes 21 seconds

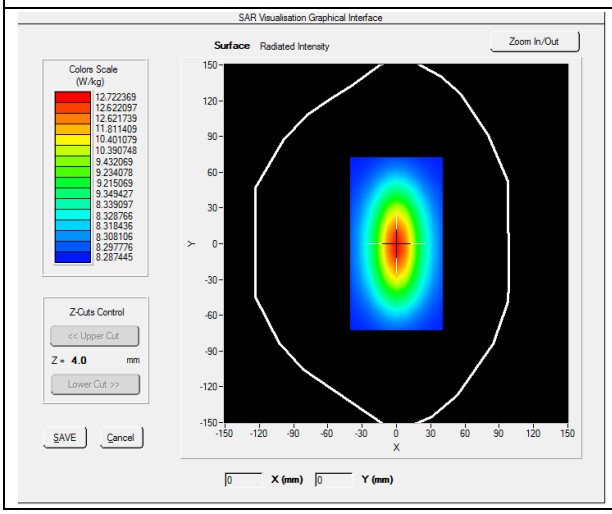
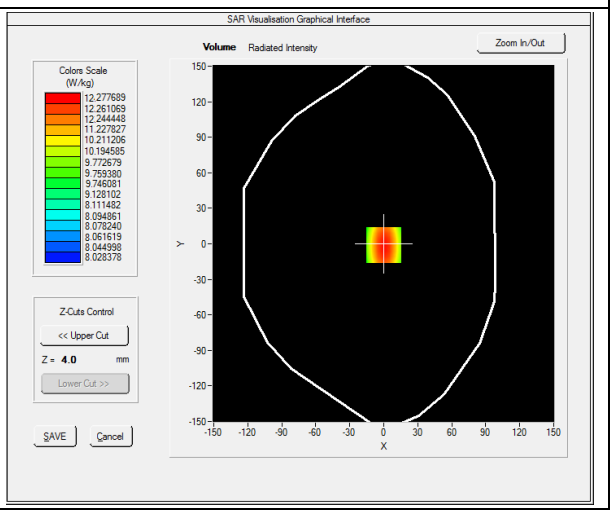
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 5.80; Calibrated: 05/22/2019

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2450
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2450.000000
Relative Permittivity (real part)	52.010212
Conductivity (S/m)	1.910255
Power Variation (%)	1.369745
Ambient Temperature	21.1
Liquid Temperature	21.2

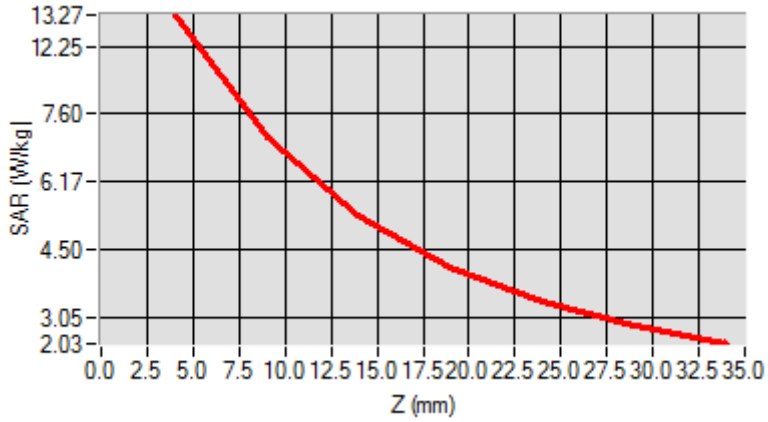
SURFACE SAR	VOLUME SAR
	

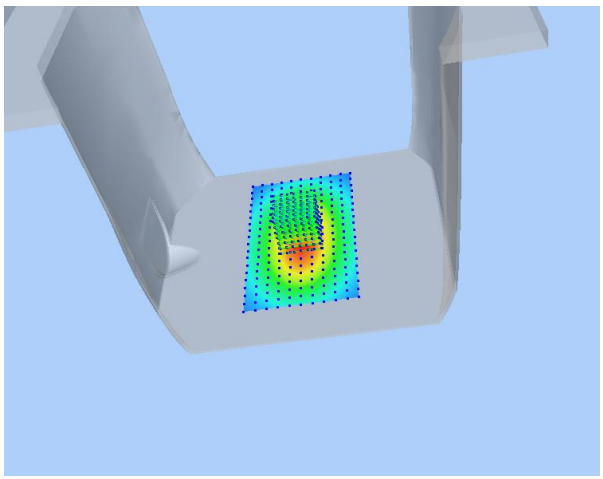
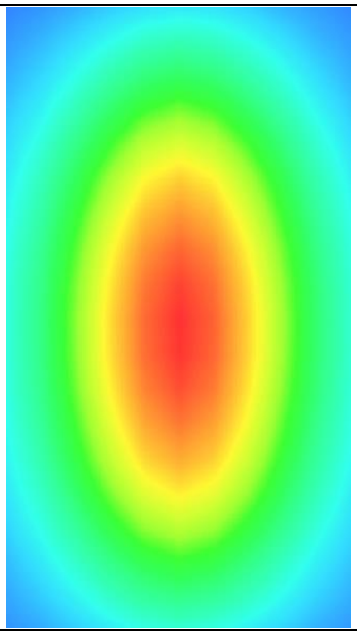
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**7.119522**
SAR 1g (W/Kg)	**12.592360**

Z Axis Scan

Z (mm)	**0.00**	**4.00**	**9.00**	**14.00**	**19.00**	**24.00**	**29.00**
SAR (W/Kg)	**0.0000**	**13.1911**	**11.7951**	**9.2945**	**8.5400**	**6.3712**	**4.6225**



3D screen shot	**Hot spot position**
	

MEASUREMENT 14

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/11/2019

Measurement duration: 12 minutes 21 seconds

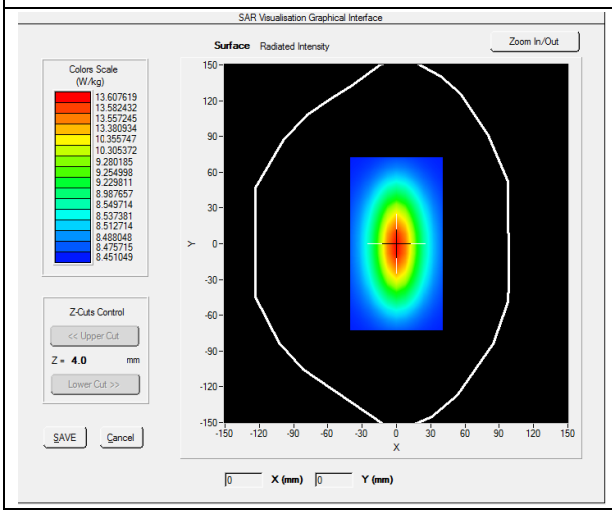
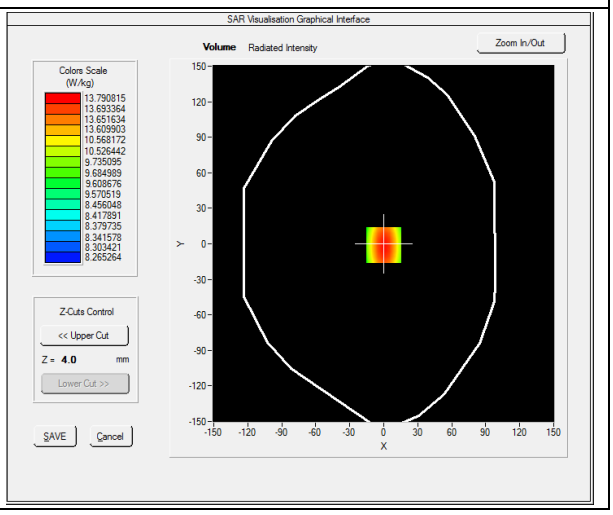
E-field Probe: SSE5 - SN 09/13 EP168; ConvF: 5.58; Calibrated: 05/22/2019

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW2600
Signal	Duty Cycle 1:1

B. SAR Measurement Results

Frequency (MHz)	2600.000000
Relative Permittivity (real part)	52.241202
Conductivity (S/m)	2.120943
Power Variation (%)	1.038832
Ambient Temperature	21.1
Liquid Temperature	21.2

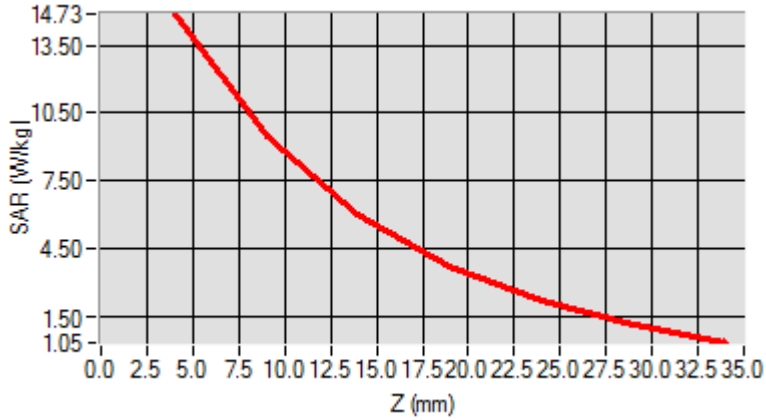
SURFACE SAR	VOLUME SAR
	

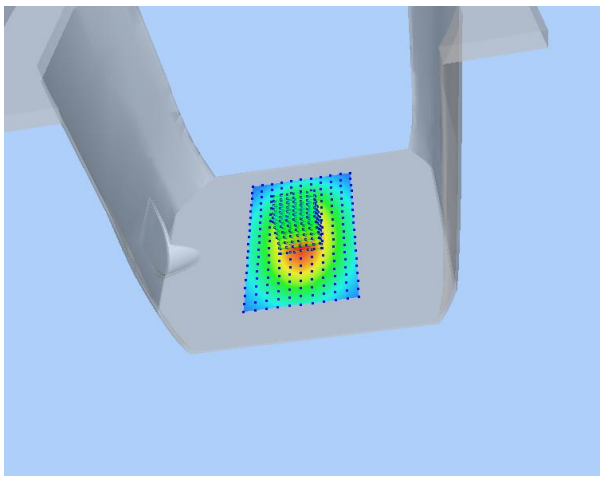
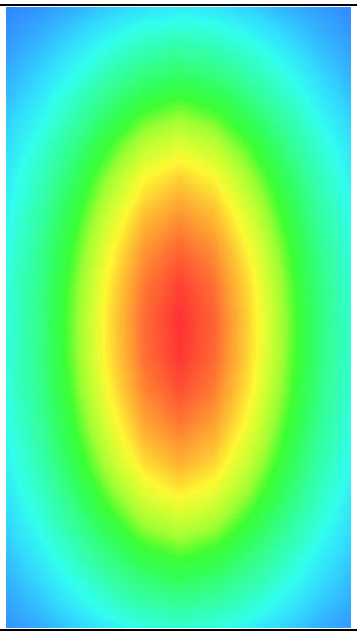
Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	**6.083781**
SAR 1g (W/Kg)	**13.430481**

Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	0.0000	13.6473	11.8441	9.3627	8.5782	6.4357	4.6342



3D screen shot	Hot spot position
	

MEASUREMENT 15

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/12/2019

Measurement duration: 12 minutes 21 seconds

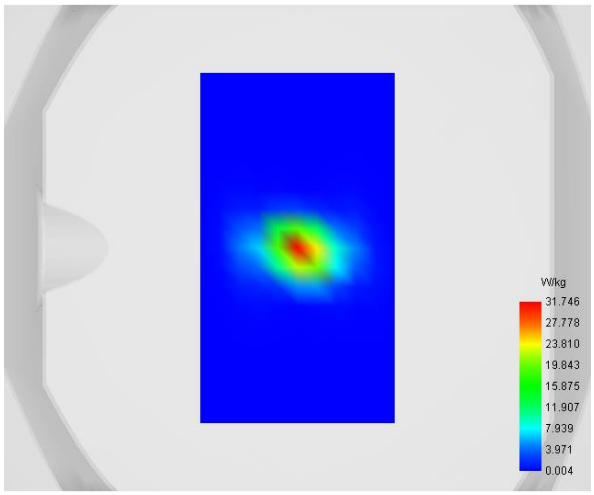
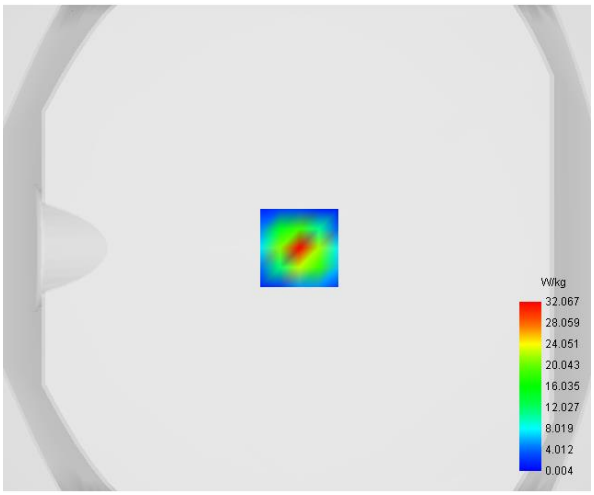
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF:2.39; Calibrated: 2019/07/08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5200
Signal	Duty Cycle 1:1

B. SAR Measurement Results

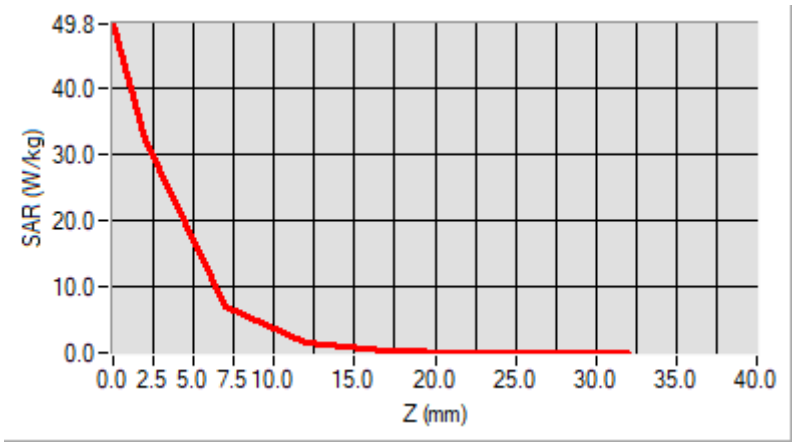
Frequency (MHz)	5200.000000
Relative Permittivity (real part)	48.501241
Conductivity (S/m)	5.160213
Power Variation (%)	0.749201
Ambient Temperature	21.1
Liquid Temperature	21.2

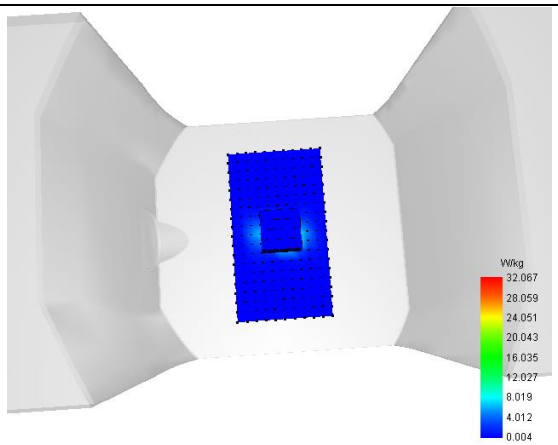
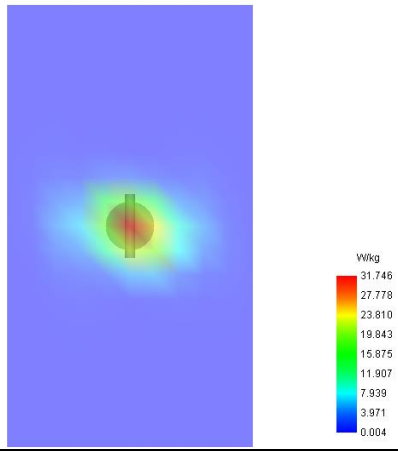
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	**6.047588**
SAR 1g (W/Kg)	**16.681175**

Z (mm)	0.00	2.00	7.00	12.00	17.00	22.00	27.00
SAR (W/Kg)	49.8193	32.0669	7.0244	1.5969	0.3410	0.0635	0.0070



3D screen shot	Hot spot position
	

MEASUREMENT 16

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/12/2019

Measurement duration: 12 minutes 21 seconds

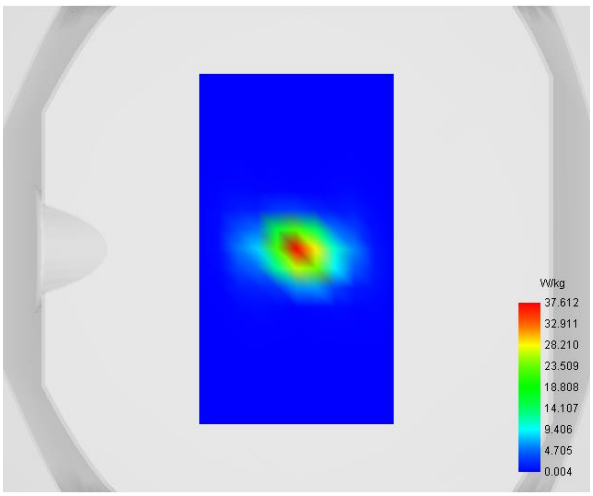
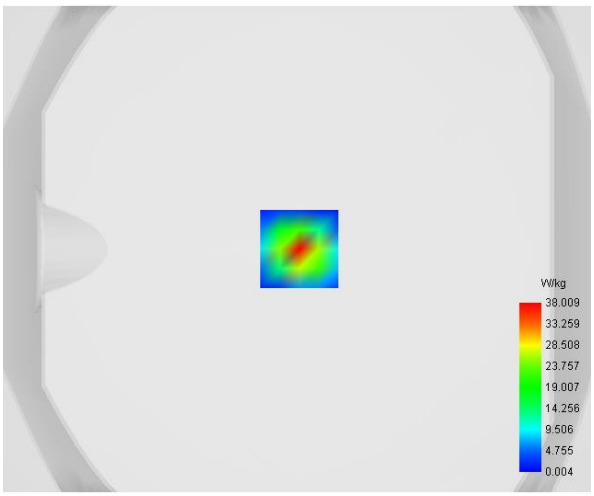
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: 2.28; Calibrated: 2019/07/08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5400
Signal	CW (Crest factor: 1.0)

B. SAR Measurement Results

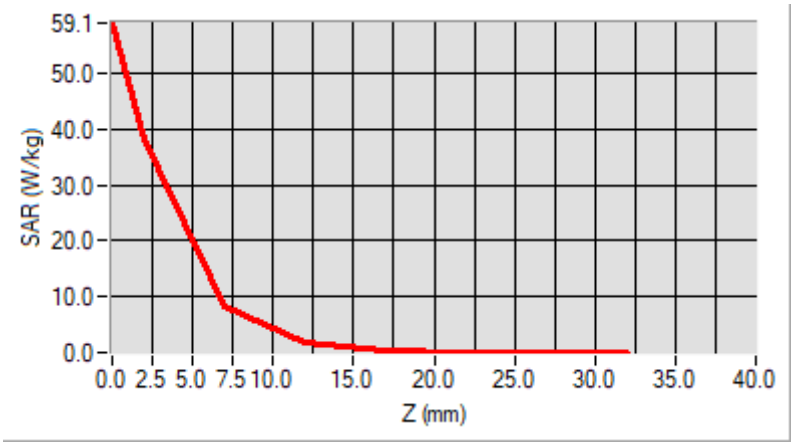
Frequency (MHz)	5400.000000
Relative Permittivity (real part)	48.502911
Conductivity (S/m)	5.261483
Power Variation (%)	0.943782
Ambient Temperature	21.1
Liquid Temperature	21.2

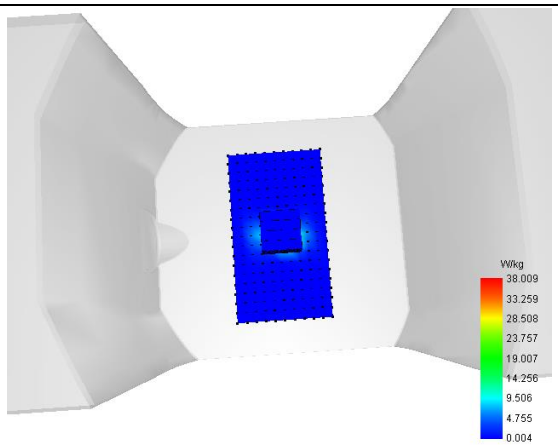
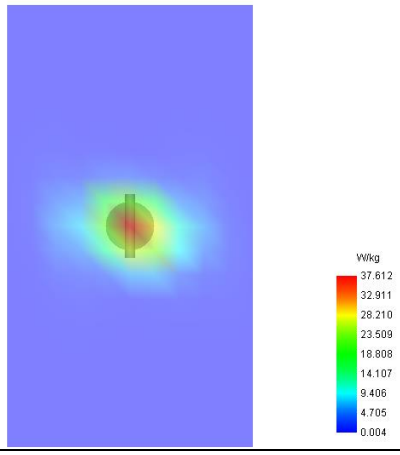
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	**5.872241**
SAR 1g (W/Kg)	**17.329716**

Z (mm)	**0.00**	**2.00**	**7.00**	**12.00**	**17.00**	**22.00**	**27.00**
SAR (W/Kg)	**59.0521**	**38.0093**	**8.3284**	**1.8732**	**0.3993**	**0.0816**	**0.0132**



3D screen shot	**Hot spot position**
	

MEASUREMENT 17

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/12/2019

Measurement duration: 12 minutes 21 seconds

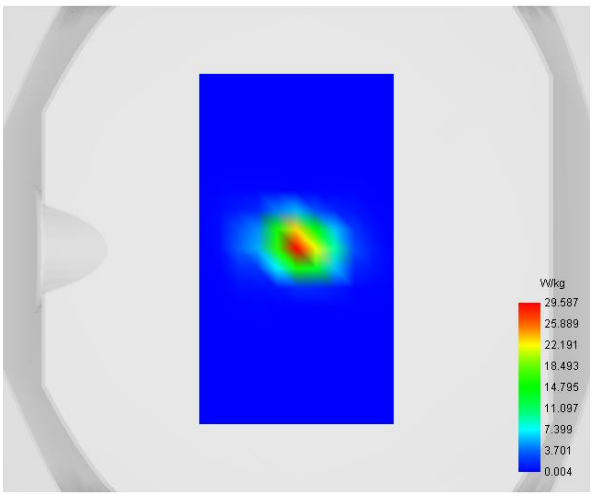
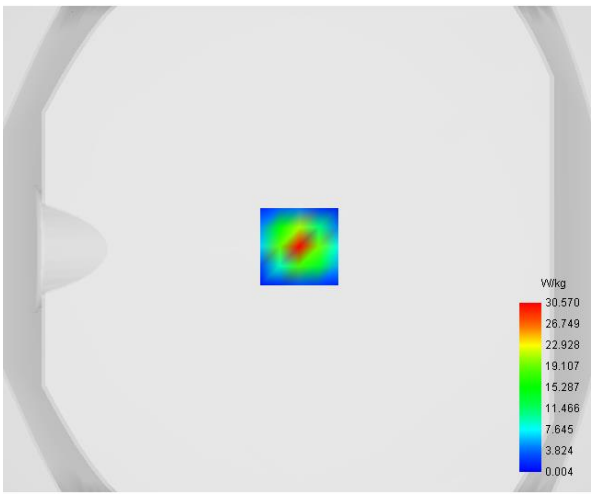
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF: 2.28; Calibrated: 2019/07/08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Zoom Scan	dx=4mm dy=4mm dz=2mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5600
Signal	Duty Cycle 1:1

B. SAR Measurement Results

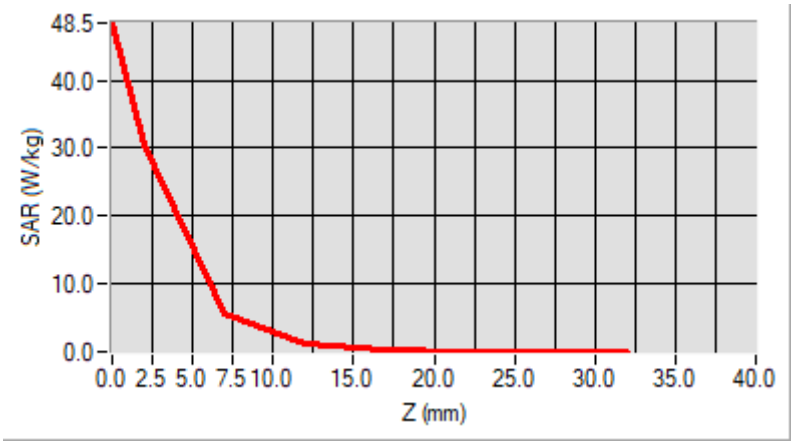
Frequency (MHz)	5600.000000
Relative Permittivity (real part)	48.302143
Conductivity (S/m)	5.521688
Power Variation (%)	0.749201
Ambient Temperature	21.1
Liquid Temperature	21.2

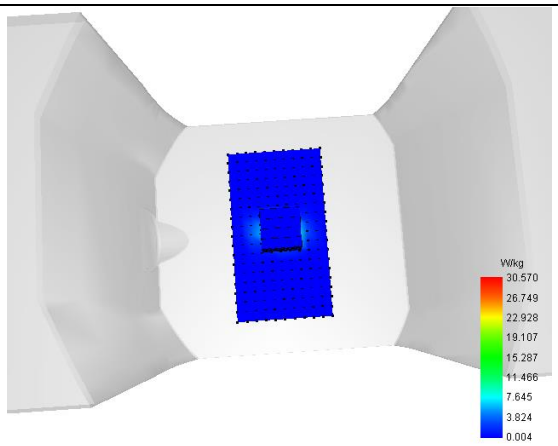
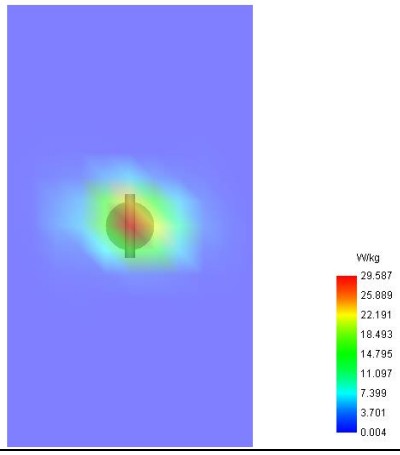
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=1.00

SAR 10g (W/Kg)	**5.912341**
SAR 1g (W/Kg)	**17.110732**

Z (mm)	**0.00**	**2.00**	**7.00**	**12.00**	**17.00**	**22.00**	**27.00**
SAR (W/Kg)	**48.4695**	**30.5699**	**5.7100**	**1.0698**	**0.1906**	**0.0364**	**0.0052**



3D screen shot	**Hot spot position**
	

MEASUREMENT 18

For Body Liquid

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 12/12/2019

Measurement duration: 12 minutes 21 seconds

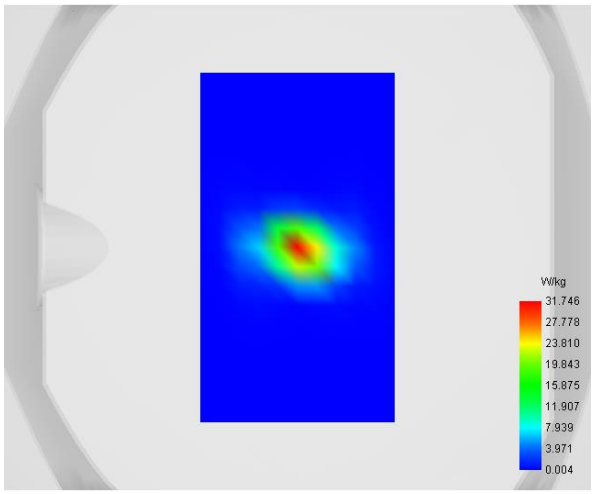
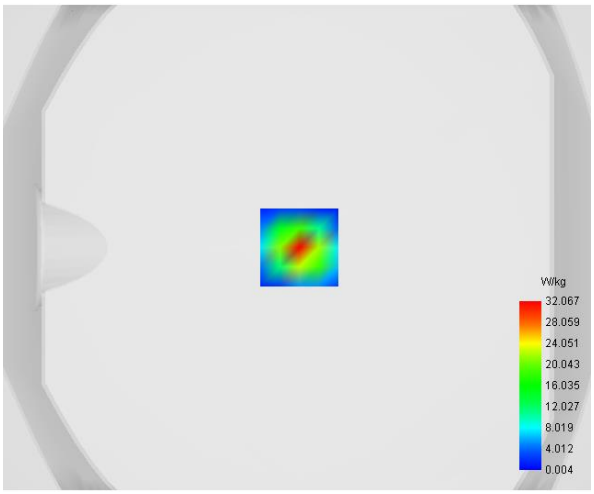
E-field Probe: SSE2 - SN 45/15 EPGO280; ConvF:2.50; Calibrated: 2019/07/08

A. Experimental conditions

Area Scan	dx=8mm dy=8mm
Phantom	Validation plane
Device Position	Dipole
Band	CW5800
Signal	Duty Cycle 1:1

B. SAR Measurement Results

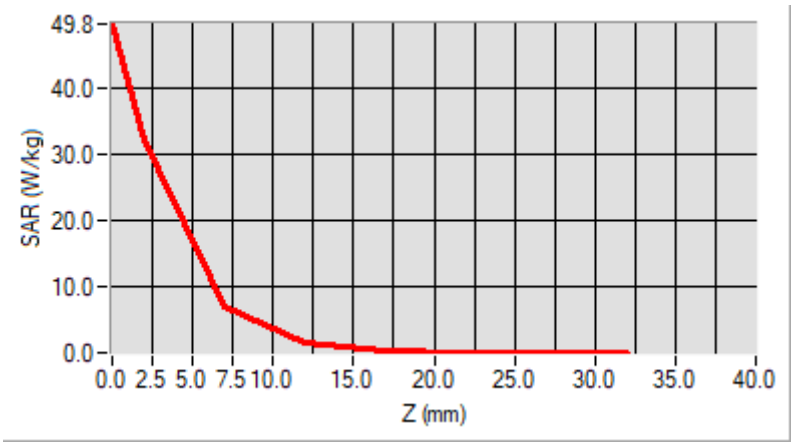
Frequency (MHz)	5800.000000
Relative Permittivity (real part)	48.501939
Conductivity (S/m)	5.761487
Power Variation (%)	0.749201
Ambient Temperature	21.1
Liquid Temperature	21.2

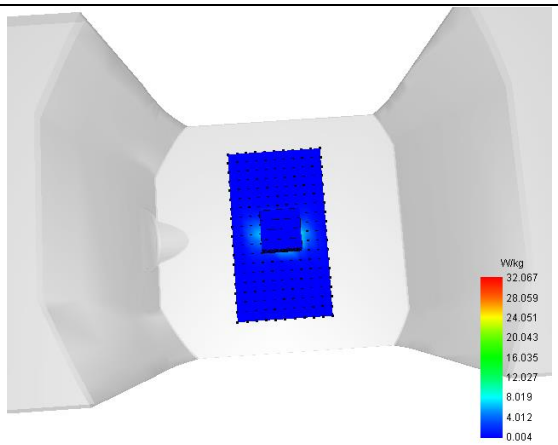
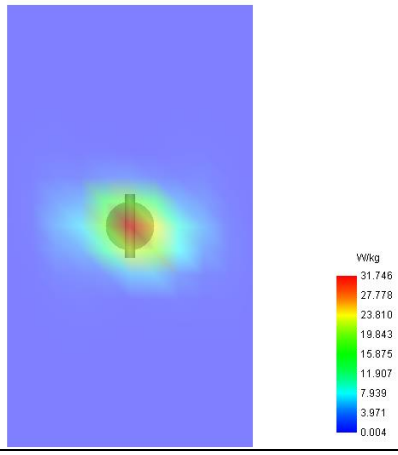
SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	**6.047588**
SAR 1g (W/Kg)	**16.681175**

Z (mm)	**0.00**	**2.00**	**7.00**	**12.00**	**17.00**	**22.00**	**27.00**
SAR (W/Kg)	**49.8193**	**32.0669**	**7.0244**	**1.5969**	**0.3410**	**0.0635**	**0.0070**



3D screen shot	**Hot spot position**
	

Annex B. Plots of SAR Measurement

TYPE	BAND	PARAMETERS
Phone	**GSM850**	Measurement 3: Left Head with Cheek device position on Low Channel in GSM mode
Phone	**GSM1900**	Measurement 5: Right Head with Cheek device position on High Channel in GSM mode
Phone	**GPRS850_4TX**	Measurement 14: Left Head with Cheek device position on Middle Channel in GPRS mode
Phone	**GPRS1900_2TX**	Measurement 17: Right Head with Cheek device position on Middle Channel in GPRS mode
Phone	**WCDMA1900_RMC**	Measurement 21: Right Head with Cheek device position on Middle Channel in WCDMA mode
Phone	**WCDMA850_RMC**	Measurement 27:Left Head with Cheek device position on Low Channel in WCDMA mode
Phone	**WCDMA1700_RMC**	Measurement 29:Right Head with Cheek device position on High Channel in WCDMA mode
Phone	**LTE Band 2_RMC**	Measurement 33: Right Head with Cheek device position on Low Channel in LTE mode
Phone	**LTE Band 4_RMC**	Measurement 41: Right Head with Cheek device position on Low Channel in LTE mode
Phone	**LTE Band 5_RMC**	Measurement 51: Left Head with Cheek device position on Low Channel in LTE mode
Phone	**LTE Band 7_RMC**	Measurement 57: Right Head with Cheek device position on Low Channel in LTE mode
Phone	**LTE Band 12_RMC**	Measurement 67: Left Head with Cheek device position on Low Channel in LTE mode
Phone	**LTE Band 13_RMC**	Measurement 75: Left Head with Cheek device position on Middle Channel in LTE mode
Phone	**LTE Band 17_RMC**	Measurement 83: Left Head with Cheek device position on Low Channel in LTE mode
Phone	**LTE Band 25_RMC**	Measurement 89: Right Head with Cheek device position on Low Channel in LTE mode
Phone	**LTE Band 26_RMC (814-824MHz)**	Measurement 99: Left Head with Cheek device position on Middle Channel in LTE mode
Phone	**LTE Band 26_RMC (824-849MHz)**	Measurement 107: Left Head with Cheek device position on Middle Channel in LTE mode
Phone	**LTE Band 30_RMC**	Measurement 113 Right Head with Cheek device position on Middle Channel in LTE mode
Phone	**LTE Band 40_RMC 2305-2315MHz**	Measurement 121: Right Head with Cheek device position on Middle Channel in LTE mode
Phone	**LTE Band 40_RMC**	Measurement 129: Right Head with Cheek device

	2350-2360MHz	position on Middle Channel in LTE mode
Phone	**LTE Band 66_RMC**	Measurement 137: Right Head with Cheek device position on Low Channel in LTE mode
Phone	**WiFi_802.11b**	Measurement 147: Left Head with Cheek device position on Low Channel in 802.11b mode
Phone	**WLAN 5.2GHz _802.11a**	Measurement 149: Right Head with Cheek device position on Low Channel in 802.11a mode
Phone	**WLAN 5.3GHz _802.11n-20**	Measurement 153: Right Head with Cheek device position on High Channel in 802.11n mode
Phone	**WLAN 5.6GHz _802.11a**	Measurement 157: Right Head with Cheek device position on Middle Channel in 802.11a mode
Phone	**WLAN 5.8GHz _802.11a**	Measurement 163: Left Head with Cheek device position on Low Channel in 802.11a mode
Phone	**GSM850**	Measurement 165: Flat Plane with Back(Body-worn) device position on Middle Channel in GSM mode
Phone	**GSM1900**	Measurement 167: Flat Plane with Back(Body-worn) device position on High Channel in GSM mode
Phone	**GPRS850_4TX**	Measurement 247: Flat Plane with Back device position on Low Channel in GPRS mode
Phone	**GPRS1900_2TX**	Measurement 252: Flat Plane with Back device position on Middle Channel in GPRS mode
Phone	**WCDMA1900_RMC**	Measurement 257: Flat Plane with Back side device position on Middle Channel in WCDMA mode
Phone	**WCDMA850_RMC**	Measurement 262: Flat Plane with Back side device position on Low Channel in WCDMA mode
Phone	**WCDMA1700_RMC**	Measurement 267: Flat Plane with Back side device position on High Channel in WCDMA mode
Phone	**LTE Band 2_RMC**	Measurement 272: Flat Plane with Back device position on Low Channel in LTE mode
Phone	**LTE Band 4_RMC**	Measurement 284: Flat Plane with Front device position on Low Channel in LTE mode
Phone	**LTE Band 5_RMC**	Measurement 295: Flat Plane with Back device position on Low Channel in LTE mode
Phone	**LTE Band 7_RMC**	Measurement 311: Flat Plane with Bottom device position on Low Channel in LTE mode
Phone	**LTE Band 12_RMC**	Measurement 321: Flat Plane with Back device position on Low Channel in LTE mode
Phone	**LTE Band 13_RMC**	Measurement 331: Flat Plane with Back device position on Middle Channel in LTE mode
Phone	**LTE Band 17_RMC**	Measurement 341: Flat Plane with Back device position on Low Channel in LTE mode
Phone	**LTE Band 25_RMC**	Measurement 351: Flat Plane with Back device position on Low Channel in LTE mode