SAR EVALUATION REPORT

For

PC SMART S.A.

Carrera 116 no.15-25

FCC ID: 2ABFV-P45K15

Report Type:	**Product Type:**
Revised Report	Smart Phone

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Report Number:	RSZ150925010-20A Rev
Report Date:	2016-11-09
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Attestation of Test Results			
EUT Information	**Company Name**	PC SMART S.A.	
	EUT Description	Touch Smart Phone Krone 4.5	
	FCC ID	2ABFV-P45K15	
	Model Number	XF4502	
	Test Date	2016-10-17, 2016-10-18 and 2016-10-19	
Frequency	**Max. SAR Level(s) Reported**		**Limit(W/Kg)**
GSM 850	0.551 W/kg 1g Head SAR 0.962 W/kg 1g Body SAR		**1. 6**
PCS 1900	0.251 W/kg 1g Head SAR 0.387 W/kg 1g Body SAR		
WCDMA 850	0.399 W/kg 1g Head SAR 0.542 W/kg 1g Body SAR		
WCDMA 1900	0.250 W/kg 1g Head SAR 0.501 W/kg 1g Body SAR		
LTE Band 4	0.187 W/kg 1g Head SAR 0.785 W/kg 1g Body SAR		
LTE Band 7	0.058 W/kg 1g Head SAR 0.136 W/kg 1g Body SAR		
Wi-Fi	0.123 W/kg 1g Head SAR 0.118 W/kg 1g Body SAR		
Simultaneous	0.674 W/kg 1g Head SAR 1.080 W/kg 1g Body SAR		
Hotspot	1.080 W/kg 1g Body SAR		
Applicable Standards	**FCC 47 CFR part 2.1093** Radiofrequency radiation exposure evaluation: portable devices		
	IEEE1528:2013 IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques		
	IEC 62209-2:2010 Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices-Human models, instrumentation, and procedures-Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)		
	KDB procedures KDB 447498 D01 General RF Exposure Guidance v06. KDB 648474 D04 Handset SAR v01r03. KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04 KDB 865664 D02 RF Exposure Reporting v01r02 KDB 941225 D01 3G SAR Procedures v03r01 KDB 941225 D05 SAR for LTE Devices v02r03 KDB 941225 D06 Hotspot Mode v02r01		
Note: This wireless device has been shown to be capable of compliance for localized specific absorption rate (SAR) for General Population/Uncontrolled Exposure limits specified in ANSI/IEEE Standards and has been tested in accordance with the measurement procedures specified in IEEE 1528-2013 and RF exposure KDB procedures. **The results and statements contained in this report pertain only to the device(s) evaluated.**			

Note: for LTE Band 7, please refer to RSZ150925010-20B Rev

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	RSZ150925010-20	Original Report	2015-09-26
1	RSZ150925010-20A Rev	Revised Report	2016-11-09

Note: for LTE Band 7, please refer to RSZ150925010-20B Rev

EUT DESCRIPTION

This report has been prepared on behalf of PC SMART S.A. and their product, FCC ID: 2ABFV-P45K15, Model: XF4502 or the EUT (Equipment under Test) as referred to in the rest of this report.

Note: For the data of LTE Band 7, please refer to the RSZ150925010-20B Rev.

Technical Specification

Product Type	Portable
Exposure Category:	Population / Uncontrolled
Antenna Type(s):	Internal Antenna
Body-Worn Accessories:	Headset
Face-Head Accessories:	None
Multi-slot Class:	Class 12
Operation Mode :	GSM Voice, EGPRS/GPRS Data, WCDMA(Rel99, HSUPA, HSDPA, HSPA+),LTE, Wi-Fi and Bluetooth
Frequency Band:	GSM 850 : 824-849 MHz(TX) ; 869-894 MHz(RX) PCS 1900: 1850-1910 MHz(TX) ; 1930-1990 MHz(RX) WCDMA 850: 824-849 MHz(TX) ; 869-894 MHz(RX) WCDMA 1900: 1850-1910 MHz(TX) ; 1930-1990 MHz(RX) LTE Band 4: 1710-1755 MHz(TX) ; 2110-2155 MHz(RX) LTE Band 7: 2500-2570 MHz(TX) ; 2620-2690 MHz(RX) Wi-Fi(802.11b/g/n20): 2412 MHz-2462 MHz Wi-Fi(802.11n40): 2422 MHz-2452 MHz Bluetooth3.0 : 2402 MHz-2480 MHz BLE:2402 MHz-2480 MHz
Conducted RF Power:	GSM 850 : 32.73 dBm PCS 1900: 29.03 dBm WCDMA 850: 22.53 dBm WCDMA 1900: 22.87 dBm LTE Band 4: 22.88 dBm LTE Band 7: 23.06 dBm Wi-Fi: 16.65 dBm Bluetooth3.0: 6.05 dBm BLE: -3.71 dBm
Dimensions (L*W*H):	132.1 mm (L) × 66.2 mm (W) × 9.6 mm (H)
Power Source:	3.8 V_{DC} Rechargeable Battery
Normal Operation:	Head and Body-worn

REFERENCE, STANDARDS, AND GUILDELINES

FCC:

The Report and Order requires routine SAR evaluation prior to equipment authorization of portable transmitter devices, including portable telephones. For portable devices, the RF radiation exposure evaluation requirement was provided in part 2.1093. According to KDB447498 D01 “General RF Exposure Guidance”, the device should be evaluated at maximum output power (radiated from the antenna) under “worst-case” conditions for normal or intended use, incorporating normal antenna operating positions, device peak performance frequencies and positions for maximum RF energy coupling.

This report describes the methodology and results of experiments performed on wireless data terminal. The objective was to determine if there is RF radiation and if radiation is found, what is the extent of radiation with respect to safety limits. SAR (Specific Absorption Rate) is the measure of RF exposure determined by the amount of RF energy absorbed by human body (or its parts) – to determine how the RF energy couples to the body or head which is a primary health concern for body worn devices.

CE:

The order requires routine SAR evaluation prior to equipment authorization of portable transmitter devices, including portable telephones. For portable devices, the limitation of exposure of the general public to electromagnetic fields was recommended on Council Recommendation 1999/519/EC. According to the Standard IEC62209-1/2, the device should be evaluated at maximum output power (radiated from the antenna) under “worst-case” conditions for normal or intended use, incorporating normal antenna operating positions, device peak performance frequencies and positions for maximum RF energy coupling.

This report describes the methodology and results of experiments performed on wireless data terminal. The objective was to determine if there is RF radiation and if radiation is found, what is the extent of radiation with respect to safety limits. SAR (Specific Absorption Rate) is the measure of RF exposure determined by the amount of RF energy absorbed by human body (or its parts) – to determine how the RF energy couples to the body or head which is a primary health concern for body portable devices.

The test configurations were laid out on a specially designed test fixture to ensure the reproducibility of measurements. Each configuration was scanned for SAR. Analysis of each scan was carried out to characterize the above effects in the device.

SAR Limits

FCC Limit (1g Tissue)

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 1 g of tissue)	1.60	8.0
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	4.0	20.0

CE Limit (10g Tissue)

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 10 g of tissue)	2.0	10
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	4.0	20.0

Population/Uncontrolled Environments are defined as locations where there is the exposure of individual who have no knowledge or control of their exposure.

Occupational/Controlled Environments are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure (i.e. as a result of employment or occupation).

FACILITIES

The test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect data is located at 6/F, the 3rd Phase of WanLi Industrial Building, Shi Hua Road, Fu Tian Free Trade Zone, Shenzhen, Guangdong, P.R. of China

DESCRIPTION OF TEST SYSTEM

These measurements were performed with ALSAS 10 Universal Integrated SAR Measurement system from APREL Laboratories.

ALSAS-10U System Description

ALSAS-10-U is fully compliant with the technical and scientific requirements of IEEE 1528, IEC 62209, CENELEC, ARIB, ACA, and the Federal Communications Commission. The system comprises of a six axes articulated robot which utilizes a dedicated controller.
ALSAS-10U uses the latest methodologies. And FDTD modeling to provide a platform which is repeatable with minimum uncertainty.

Applications

Predefined measurement procedures compliant with the guidelines of CENELEC, IEEE, IEC, FCC, etc are utilized during the assessment for the device. Automatic detection for all SAR maxima are embedded within the core architecture for the system, ensuring that peak locations used for centering the zoom scan are within a 1mm resolution and a 0.05mm repeatable position. System operation range currently available up-to 6 GHz in simulated tissue.

Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 10mm2 step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments.

Where the system identifies multiple SAR peaks (which are within 25% of peak value) the system will provide the user with the option of assessing each peak location individually for zoom scan averaging.

Zoom Scan (Cube Scan Averaging)

The averaging zoom scan volume utilized in the ALSAS-10U software is in the shape of a cube and the side dimension of a 1 g or 10 g mass is dependent on the density of the liquid representing the simulated tissue. A density of 1000 kg/m3 is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm,with the side length of the 10 g cube 21,5mm.

When the cube intersects with the surface of the phantom, it is oriented so that 3 vertices touch the surface of the shell or the center of a face is tangent to the surface. The face of the cube closest to the surface is modified in order to conform to the tangent surface.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications (including FCC) utilize a physical step of 5x5x8 (8mmx8mmx5mm) providing a volume of 32mm in the X & Y axis, and 35mm in the Z axis.

ALSAS-10U Interpolation and Extrapolation Uncertainty

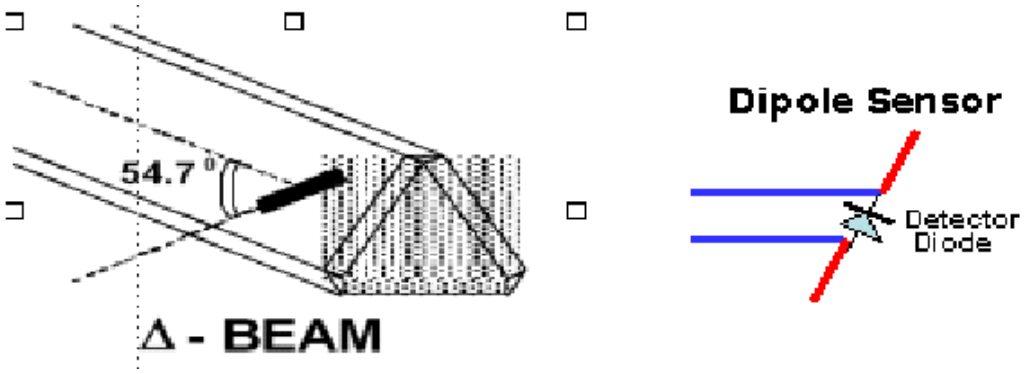
The overall uncertainty for the methodology and algorithms the used during the SAR calculation was evaluated using the data from IEEE 1528 based on the example f3 algorithm:

$$f_3(x,y,z) = A \frac{a^2}{\frac{a^2}{4} + x'^2 + y'^2} \cdot \left(e^{-\frac{2z}{a}} + \frac{a^2}{2(a+2z)^2} \right)$$

Isotropic E-Field Probe

The isotropic E-Field probe has been fully calibrated and assessed for isotropicity, and boundary effect within a controlled environment. Depending on the frequency for which the probe is calibrated the method utilized for calibration will change.

The E-Field probe utilizes a triangular sensor arrangement as detailed in the diagram below:



SAR is assessed with a calibrated probe which moves at a default height of 5mm from the center of the diode, which is mounted to the sensor, to the phantom surface (in the Z Axis). The 5mm offset height has been selected so as to minimize any resultant boundary effect due to the probe being in close proximity to the phantom surface.

The following algorithm is an example of the function used by the system for linearization of the output from the probe when measuring complex modulation schemes.

$$V_i = U_i + U_i^2 \cdot \frac{cf}{dcp_i}$$

Isotropic E-Field Probe Specification

Calibration Method	Frequency Dependent Below 1 GHz Calibration in air performed in a TEM Cell Above 1 GHz Calibration in air performed in waveguide
Sensitivity	0.70 μV/(V/m)^2 to 0.85 μV/(V/m)^2
Dynamic Range	0.0005 W/kg to 100 W/kg
Isotropic Response	Better than 0.1 dB
Diode Compression Point (DCP)	Calibration for Specific Frequency
Probe Tip Diameter	< 2.9 mm
Sensor Offset	1.56 (+/- 0.02 mm)
Probe Length	289 mm
Video Bandwidth	@ 500 Hz: 1 dB @ 1.02 kHz: 3 dB
Boundary Effect	Less than 2.1% for distance greater than 0.58 mm
Spatial Resolution	The spatial resolution uncertainty is less than 1.5% for 4.9mm diameter probe. The spatial resolution uncertainty is less than 1.0% for 2.5mm diameter probe

Boundary Detection Unit and Probe Mounting Device

ALSAS-10U incorporates a boundary detection unit with a sensitivity of 0.05mm for detecting all types of surfaces. The robust design allows for detection during probe tilt (probe normalize) exercises, and utilizes a second stage emergency stop. The signal electronics are fed directly into the robot controller for high accuracy surface detection in lateral and axial detection modes (X, Y, & Z).

The probe is mounted directly onto the Boundary Detection unit for accurate tooling and displacement calculations controlled by the robot kinematics. The probe is connect to an isolated probe interconnect where the output stage of the probe is fed directly into the amplifier stage of the Daq-Paq.

Daq-Paq (Analog to Digital Electronics)

ALSAS-10U incorporates a fully calibrated Daq-Paq (analog to digital conversion system) which has a 4 channel input stage, sent via a 2 stage auto-set amplifier module. The input signal is amplified accordingly so as to offer a dynamic range from 5μV to 800mV. Integration of the fields measured is carried out at board level utilizing a Co-Processor which then sends the measured fields down into the main computational module in digitized form via an RS232 communications port. Probe linearity and duty cycle compensation is carried out within the main Daq-Paq module.

ADC	12 Bit
Amplifier Range	20 mV to 200 mV and 150 mV to 800 mV
Field Integration	Local Co-Processor utilizing proprietary integration algorithms
Number of Input Channels	4 in total 3 dedicated and 1 spare
Communication	Packet data via RS232

Axis Articulated Robot

ALSAS-10U utilizes a six axis articulated robot, which is controlled using a Pentium based real-time movement controller. The movement kinematics engine utilizes proprietary (Thermo CRS) interpolation and extrapolation algorithms, which allow full freedom of movement for each of the six joints within the working envelope. Utilization of joint 6 allows for full probe rotation with a tolerance better than 0.05mm around the central axis.

Robot/Controller Manufacturer	Thermo CRS
Number of Axis	Six independently controlled axis
Positioning Repeatability	0.05 mm
Controller Type	Single phase Pentium based C500C
Robot Reach	710 mm
Communication	RS232 and LAN compatible

ALSAS Universal Workstation

ALSAS Universal workstation allows for repeatability and fast adaptability. It allows users to do calibration, testing and measurements using different types of phantoms with one set up, which significantly speeds up the measurement process.

Universal Device Positioner

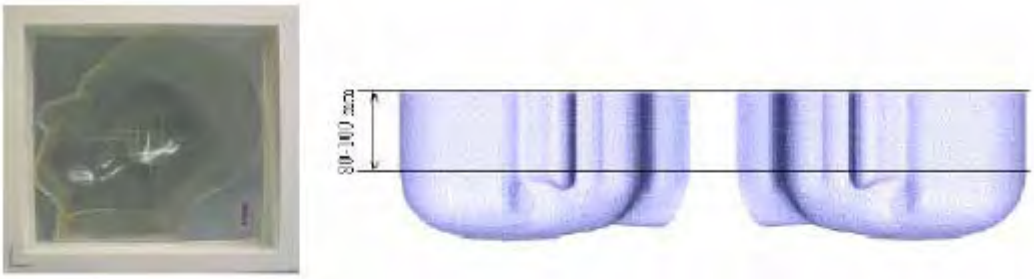
The universal device positioner allows complete freedom of movement of the EUT. Developed to hold a EUT in a free-space scenario any additional loading attributable to the material used in the construction of the positioner has been eliminated. Repeatability has been enhanced through the linear scales which form the design used to indicate positioning for any given test scenario in all major axes. A 15° tilt indicator is included for the of aid cheek to tilt movements for head SAR analysis. Overall uncertainty for measurements have been reduced due to the design of the Universal device positioner, which allows positioning of a device in as near to a free-space scenario as possible, and by providing the means for complete repeatability.

Phantom Types

The ALSAS-10U allows the integration of multiple phantom types. SAM Phantoms fully compliant with IEEE 1528, Universal Phantom, and Universal Flat.

APREL SAM Phantoms

The SAM phantoms developed using the IEEE SAM CAD file. They are fully compliant with the requirements for both IEEE 1528 and FCC Supplement C. Both the left and right SAM phantoms are interchangeable, transparent and include the IEEE 1528 grid with visible NF and MB lines.



APREL Laboratories Universal Phantom

The Universal Phantom is used on the ALSAS-10U as a system validation phantom. The Universal Phantom has been fully validated both experimentally from 800MHz to 6GHz and numerically using XFDTD numerical software.

The shell thickness is 2mm overall, with a 4mm spacer located at the NF/MB intersection providing an overall thickness of 6mm in line with the requirements of IEEE-1528.

The design allows for fast and accurate measurements, of handsets, by allowing the conservative SAR to be evaluated at on frequency for both left and right head experiments in one measurement.

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.

Ingredients (% by weight)	Frequency (MHz)									
	450		835		915		1900		2450	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	38.56	51.16	41.45	52.4	41.05	56.0	54.9	40.4	62.7	73.2
Salt (Nacl)	3.95	1.49	1.45	1.4	1.35	0.76	0.18	0.5	0.5	0.04
Sugar	56.32	46.78	56.0	45.0	56.5	41.76	0.0	58.0	0.0	0.0
HEC	0.98	0.52	1.0	1.0	1.0	1.21	0.0	1.0	0.0	0.0
Bactericide	0.19	0.05	0.1	0.1	0.1	0.27	0.0	0.1	0.0	0.0
Triton x-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.8	0.0
DGBE	0.0	0.0	0.0	0.0	0.0	0.0	44.92	0.0	0.0	26.7
Dielectric Constant	43.42	58.0	42.54	56.1	42.0	56.8	39.9	54.0	39.8	52.5
Conductivity (s/m)	0.85	0.83	0.91	0.95	1.0	1.07	1.42	1.45	1.88	1.78

Recommended Tissue Dielectric Parameters for Head and Body

Frequency (MHz)	Head Tissue		Body Tissue	
	εr	σ (S/m)	εr	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800-2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

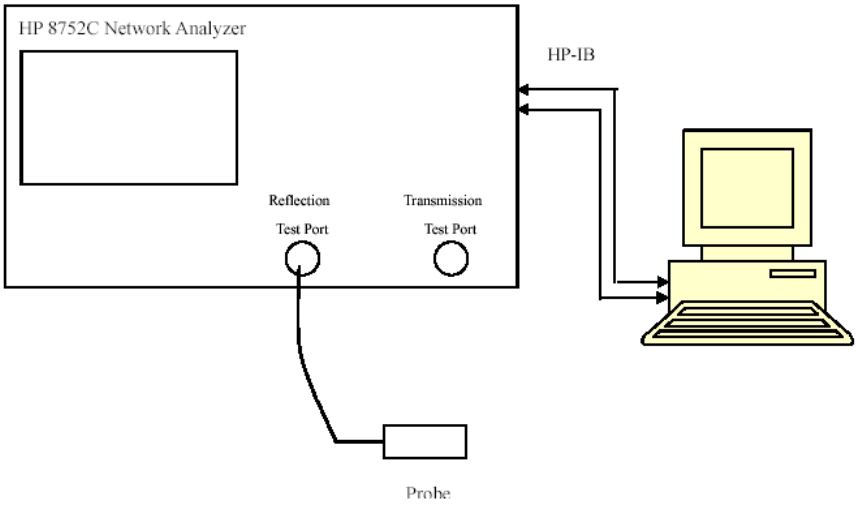
EQUIPMENT LIST AND CALIBRATION

Equipments List & Calibration Information

Equipment	Model	Calibration Date	Calibration Due Date	S/N
CRS F3 robot	ALS-F3	N/A	N/A	RAF0805352
CRS F3 Software	ALS-F3-SW	N/A	N/A	N/A
CRS C500C controller	ALS-C500	N/A	N/A	RCF0805379
Probe mounting device & Boundary Detection Sensor System	ALS-PMDPS-3	N/A	N/A	120-00270
Universal Work Station	ALS-UWS	N/A	N/A	100-00157
Data Acquisition Package	ALS-DAQ-PAQ-3	2015-12-14	2016-12-14	110-00212
Miniature E-Field Probe	ALS-E-020	2015-12-14	2016-12-14	500-00283
Dipole, 835MHz	ALS-D-835-S-2	2014-10-08	2017-10-08	180-00558
Dipole, 1750MHz	ALS-D-1750-S-2	2013-10-08	2016-10-08	198-00304
Dipole,1900MHz	ALS-D-1900-S-2	2014-10-09	2017-10-09	210-00710
Dipole, 2450MHz	ALS-D-2450-S-2	2014-10-09	2017-10-09	220-00758
Dipole Spacer	ALS-DS-U	N/A	N/A	250-00907
Device holder/Positioner	ALS-H-E-SET-2	N/A	N/A	170-00510
Left ear SAM phantom	ALS-P-SAM-L	N/A	N/A	130-00311
Right ear SAM phantom	ALS-P-SAM-R	N/A	N/A	140-00359
UniPhantom	ALS-P-UP-1	N/A	N/A	150-00413
Simulated Tissue 835 MHz Head	ALS-TS-835-H	Each Time	/	270-01002
Simulated Tissue 835 MHz Body	ALS-TS-835-B	Each Time	/	270-02101
Simulated Tissue 1750 MHz Head	ALS-TS-1750-H	Each Time	/	295-01103
Simulated Tissue 1750 MHz Body	ALS-TS-1750-B	Each Time	/	295-02102
Simulated Tissue 1900 MHz Head	ALS-TS-1900-H	Each Time	/	295-01103
Simulated Tissue 1900 MHz Body	ALS-TS-1900-B	Each Time	/	295-02102
Simulated Tissue 2450 MHz Head	ALS-TS-2450-H	Each Time	/	290-01108
Simulated Tissue 2450 MHz Body	ALS-TS-2450-B	Each Time	/	290-01109
Power Amplifier	5S1G4	N/A	N/A	71377
Directional couple	DC6180A	N/A	N/A	0325849
Attenuator	3dB	N/A	N/A	5402
Network analyzer	8752C	2016-06-03	2017-06-03	3410A02356
Dielectric probe kit	HP85070B	2016-06-13	2017-06-13	US33020324
Synthesized Sweeper	HP 8341B	2016-06-03	2017-06-03	2624A00116
UNIVERSAL RADIO COMMUNICATION TESTER	CMU200	2015-11-23	2016-11-23	106891
WIDEBAND RADIO COMMUNICATION TESTER	CMW500	2016-04-19	2017-04-19	114772
EMI Test Receiver	ESCI	2016-06-13	2017-06-13	101746

SAR MEASUREMENT SYSTEM VERIFICATION

Liquid Verification



Liquid Verification Setup Block Diagram

Liquid Verification Results

Frequency	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
824.2	Head	41.85	0.90	41.56	0.90	0.698	0.000	±5
	Body	55.3	0.99	55.24	0.97	0.109	2.062	±5
826.4	Head	42.09	0.92	41.54	0.90	1.324	2.222	±5
	Body	55.57	0.99	55.23	0.97	0.616	2.062	±5
836.6	Head	41.9	0.93	41.50	0.90	0.964	3.333	±5
	Body	55.6	0.99	55.20	0.97	0.725	2.062	±5
846.6	Head	41.83	0.94	41.50	0.91	0.795	3.297	±5
	Body	55.72	1.01	55.20	0.98	0.942	3.061	±5
848.8	Head	41.91	0.94	41.50	0.91	0.988	3.297	±5
	Body	55.67	1.01	55.20	0.98	0.851	3.061	±5

**Liquid Verification was performed on 2016-10-17 and 2016-10-18*

Frequency	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
1850.2	Head	40.11	1.41	40.00	1.40	0.275	0.714	±5
	Body	53.36	1.55	53.30	1.52	0.113	1.974	±5
1852.4	Head	40.28	1.41	40.00	1.40	0.700	0.714	±5
	Body	53.68	1.52	53.30	1.52	0.713	0.000	±5
1880.0	Head	40.15	1.40	40.00	1.40	0.375	0.000	±5
	Body	53.72	1.53	53.30	1.52	0.788	0.658	±5
1907.6	Head	40.10	1.41	40.00	1.40	0.250	0.714	±5
	Body	53.53	1.52	53.30	1.52	0.432	0.000	±5
1909.8	Head	40.54	1.42	40.00	1.40	1.350	1.429	±5
	Body	53.65	1.56	53.30	1.52	0.657	2.632	±5

**Liquid Verification was performed on 2016-10-17 and 2016-10-18*

Frequency	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
1720.0	Head	40.25	1.37	40.08	1.37	0.424	0.000	±5
	Body	53.93	1.53	53.44	1.49	0.917	2.685	±5
1732.5	Head	40.65	1.37	40.07	1.37	1.447	0.000	±5
	Body	53.86	1.50	53.42	1.49	0.824	0.671	±5
1745.0	Head	40.30	1.40	40.06	1.38	0.599	1.449	±5
	Body	53.99	1.52	53.39	1.50	1.124	1.333	±5

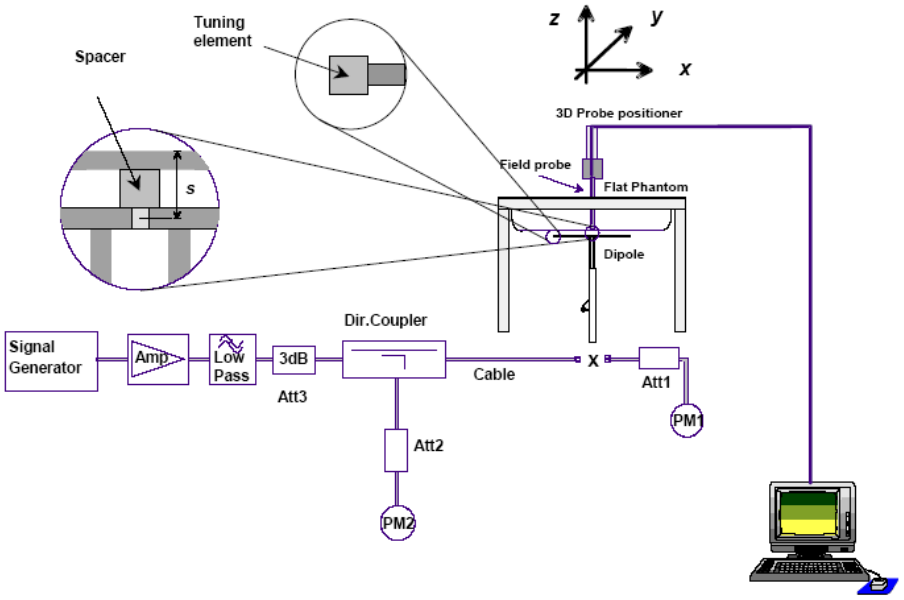
Frequency	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
2412	Head	39.52	1.79	39.20	1.80	0.816	-0.556	±5
	Body	52.66	1.92	52.70	1.95	-0.076	-1.538	±5
2437	Head	39.41	1.80	39.20	1.80	0.536	0.000	±5
	Body	52.62	1.95	52.70	1.95	-0.152	0.000	±5
2462	Head	39.69	1.82	39.20	1.80	1.250	1.111	±5
	Body	52.64	1.96	52.70	1.95	-0.114	0.513	±5

**Liquid Verification was performed on 2016-10-19*

System Accuracy Verification

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of ±10%. The validation results are tabulated below. And also the corresponding SAR plot is attached as well in the SAR plots files.

System Verification Setup Block Diagram



System Accuracy Check Results

Date	Frequency Band	Liquid Type	Measured SAR (W/Kg)		Target Value (W/Kg)	Delta (%)	Tolerance (%)
2016-10-17	835	Head	1g	9.783	9.773	0.102	±10
	1900	Head	1g	39.523	39.481	0.106	±10
2016-10-18	835	Body	1g	9.952	9.736	2.219	±10
	1900	Body	1g	39.879	39.715	0.413	±10
2016-10-19	1750	Head	1g	36.438	37.02	-1.572	±10
		Body	1g	36.834	36.65	0.502	±10
	2450	Head	1g	54.228	54.916	-1.253	±10
		Body	1g	56.202	52.418	7.219	±10

*All SAR values are normalized to 1 Watt forward power.

SAR SYSTEM VALIDATION DATA

Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

System Performance Check 835 MHz Head Liquid

Dipole 835 MHz; Type: ALS-D-835-S-2; S/N: 180-00558

Product Data
Device Name : Dipole 835 MHz
Serial No. : 180-00558
Type : Dipole
Model : ALS-D-835-S-2
Frequency Band : 835
Max. Transmit Pwr : 1 W
Drift Time : 3 min(s)
Power Drift-Start : 10.528 W/kg
Power Drift-Finish : 10.401 W/kg
Power Drift (%) : -1.254

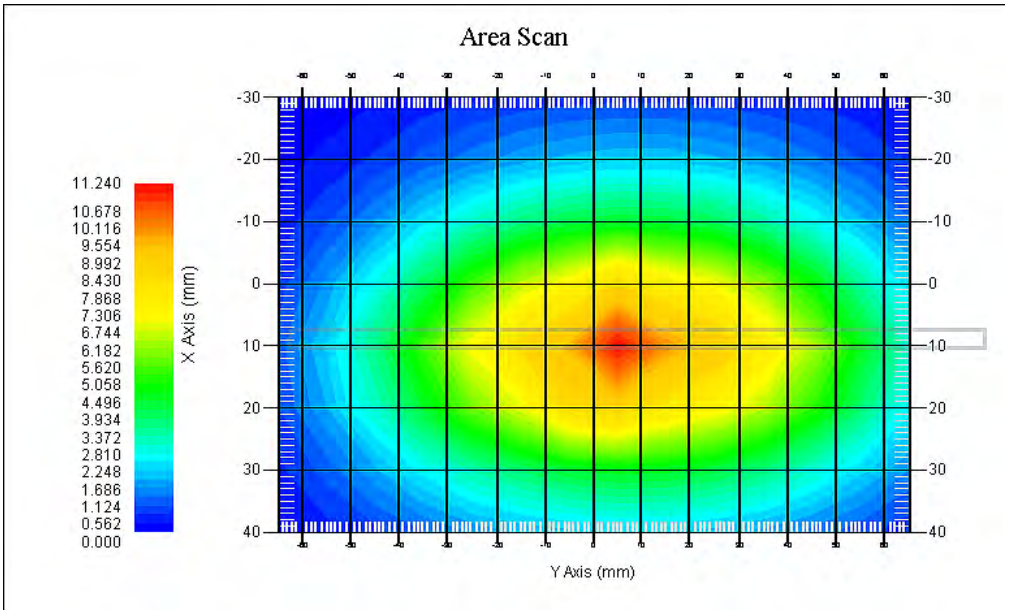
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Serial No. : System Default
Location : Center
Description : Default
Phantom Data

Tissue Data
Type : Head
Serial No. : 270-01002
Frequency : 835.0 MHz
Last Calib. Date : 17-Oct-2016
Temperature : 20.00 °C
Ambient Temp. : 21.00 °C
Humidity : 56.00 RH%
Epsilon : 41.92 F/m
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : E-Field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 14-Dec-2015
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.00 °C
Ambient Temp. : 21.00 °C
Area Scan : 8x14x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

1 gram SAR value : 9.783 W/kg
10 gram SAR value : 6.356 W/kg
Area Scan Peak SAR : 11.240 W/kg
Zoom Scan Peak SAR : 16.728 W/kg



835 MHz System Validation with Head Tissue

Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

System Performance Check 835 MHz Body Liquid

Dipole 835 MHz; Type: ALS-D-835-S-2; S/N: 180-00558

Product Data
Device Name : Dipole 835 MHz
Serial No. : 180-00558
Type : Dipole
Model : ALS-D-835-S-2
Frequency Band : 835
Max. Transmit Pwr : 1 W
Drift Time : 3 min(s)
Power Drift-Start : 9.526 W/kg
Power Drift-Finish : 9.405 W/kg
Power Drift (%) : -1.248

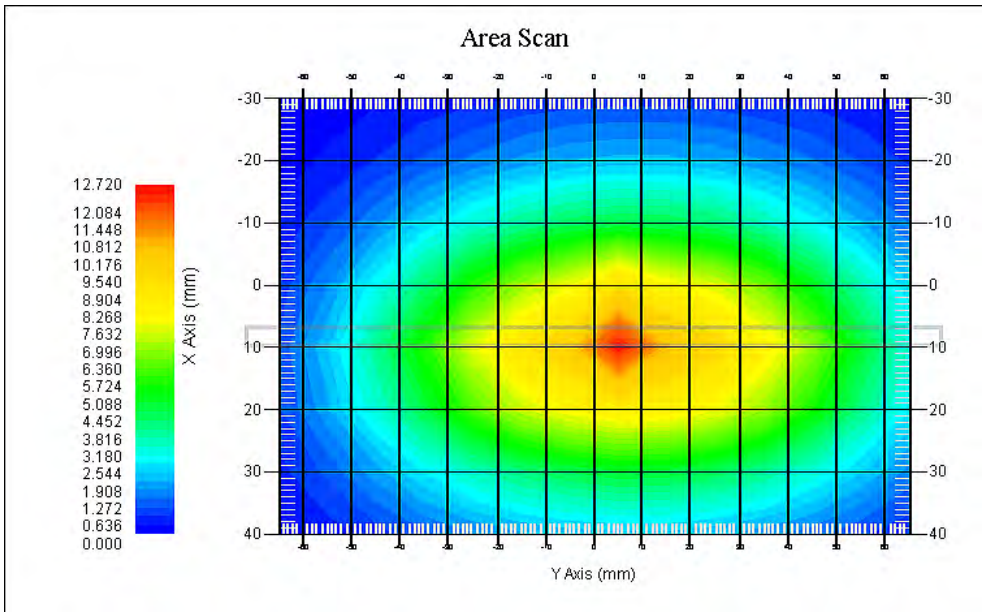
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Serial No. : System Default
Location : Center
Description : Default
Phantom Data

Tissue Data
Type : Body
Serial No. : 270-02101
Frequency : 835.0 MHz
Last Calib. Date : 18-Oct-2016
Temperature : 20.00 °C
Ambient Temp. : 21.00 °C
Humidity : 56.00 RH%
Epsilon : 55.47 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : E-Field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 14-Dec-2015
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 21.00 °C
Ambient Temp. : 21.00 °C
Area Scan : 8x14x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

1 gram SAR value : 9.952 W/kg
10 gram SAR value : 6.157 W/kg
Area Scan Peak SAR : 12.720 W/kg
Zoom Scan Peak SAR : 16.228 W/kg



835 MHz System Validation with Body Tissue

Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

System Performance Check 1750 MHz Head Liquid

Dipole 1750 MHz; Type: ALS-D-1750-S-2; S/N: 198-00304

Product Data
Device Name : Dipole 1750MHz
Serial No. : 198-00304
Type : Dipole
Model : ALS-D-1750-S-2
Frequency Band : 1700
Max. Transmit Pwr : 1 W
Drift Time : 3 min(s)
Power Drift-Start : 34.639 W/kg
Power Drift-Finish : 34.065 W/kg
Power Drift (%) : -1.759

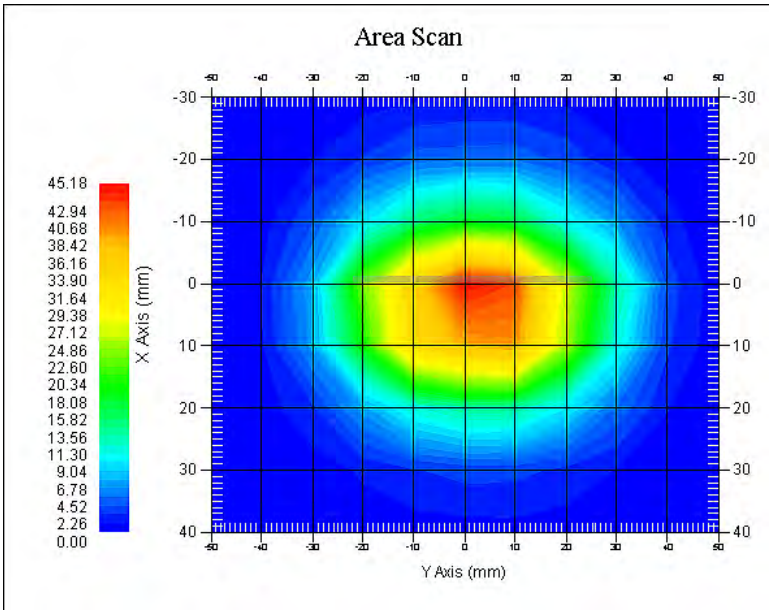
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Serial No. : System Default
Location : Center
Description : Default

Tissue Data
Type : Head
Serial No. : 295-01101
Frequency : 1750.00 MHz
Last Calib. Date : 19-Oct-2016
Temperature : 20.00 °C
Ambient Temp. : 21.00 °C
Humidity : 56.00 RH%
Epsilon : 40.27 F/m
Sigma : 1.41 S/m
Density : 1000.00 kg/cu. M

Probe Data
Name : E-Field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 14-Dec-2015
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.4
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.00 °C
Ambient Temp. : 20.00 °C
Area Scan : 8x11x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

1 gram SAR value : 36.438 W/kg
10 gram SAR value : 19.838 W/kg
Area Scan Peak SAR : 45.180 W/kg
Zoom Scan Peak SAR : 61.085 W/kg



1750 MHz System Validation with Head Tissue

Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

System Performance Check 1750 MHz Body Liquid

Dipole 1750 MHz; Type: ALS-D-1750-S-2; S/N: 198-00304

Product Data
Device Name : Dipole 1750MHz
Serial No. : 198-00304
Type : Dipole
Model : ALS-D-1750-S-2
Frequency Band : 1700
Max. Transmit Pwr : 1 W
Drift Time : 3 min(s)
Power Drift-Start : 35.112 W/kg
Power Drift-Finish : 35.632 W/kg
Power Drift (%) : 1.873

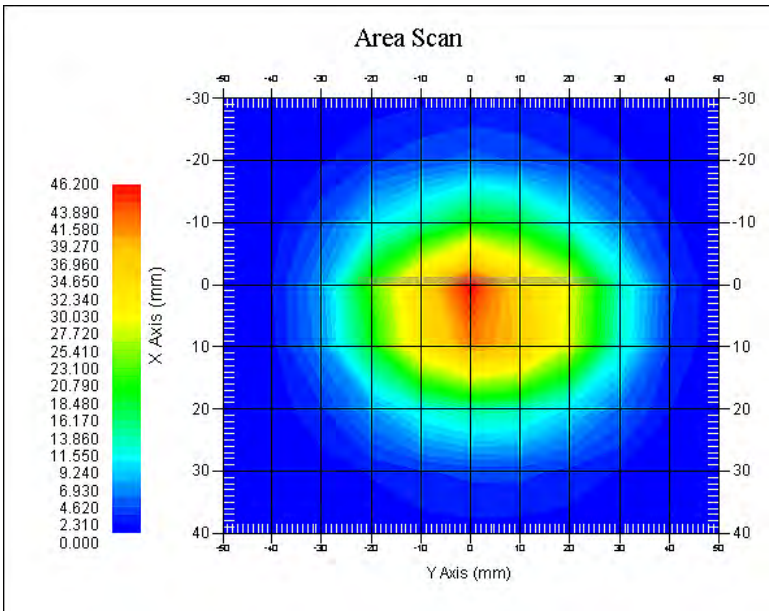
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Serial No. : System Default
Location : Center
Description : Default

Tissue Data
Type : Body
Serial No. : 295-02105
Frequency : 1750.00 MHz
Last Calib. Date : 19-Oct-2016
Temperature : 20.00 °C
Ambient Temp. : 21.00 °C
Humidity : 56.00 RH%
Epsilon : 54.03 F/m
Sigma : 1.52 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : E-Field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 14-Dec-2015
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.3
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.00 °C
Ambient Temp. : 21.00 °C
Area Scan : 8x11x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

1 gram SAR value : 36.834 W/kg
10 gram SAR value : 19.163 W/kg
Area Scan Peak SAR : 46.200 W/kg
Zoom Scan Peak SAR : 62.565 W/kg



1750 MHz System Validation with Body Tissue

Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

System Performance Check 1900 MHz Head Liquid

Dipole 1900 MHz; Type: ALS-D-1900-S-2; S/N: 210-00710

Product Data
Device Name : Dipole 1900MHz
Serial No. : 210-00710
Type : Dipole
Model : ALS-D-1900-S-2
Frequency Band : 1900
Max. Transmit Pwr : 1 W
Drift Time : 3 min(s)
Power Drift-Start : 37.032 W/kg
Power Drift-Finish : 37.082 W/kg
Power Drift (%) : 0.655

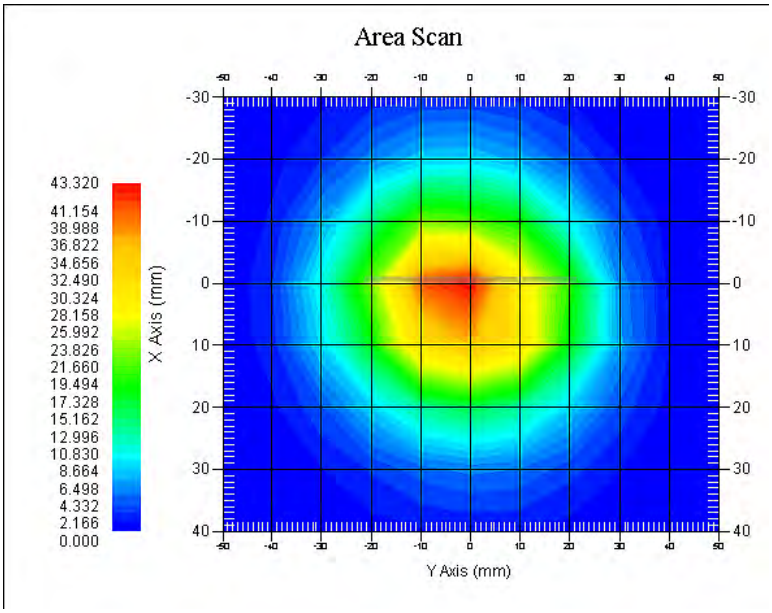
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Serial No. : System Default
Location : Center
Description : Default

Tissue Data
Type : Head
Serial No. : 295-01103
Frequency : 1900.00 MHz
Last Calib. Date : 17-Oct-2016
Temperature : 20.00 °C
Ambient Temp. : 21.00 °C
Humidity : 56.00 RH%
Epsilon : 40.12 F/m
Sigma : 1.40 S/m
Density : 1000.00 kg/cu. M

Probe Data
Name : E-Field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 14-Dec-2015
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.00 °C
Ambient Temp. : 20.00 °C
Area Scan : 8x11x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

1 gram SAR value : 39.523 W/kg
10 gram SAR value : 20.632 W/kg
Area Scan Peak SAR : 43.319 W/kg
Zoom Scan Peak SAR : 68.054 W/kg



1900 MHz System Validation with Head Tissue

Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

System Performance Check 1900 MHz Body Liquid

Dipole 1900 MHz; Type: ALS-D-1900-S-2; S/N: 210-00710

Product Data
Device Name : Dipole 1900MHz
Serial No. : 210-00710
Type : Dipole
Model : ALS-D-1900-S-2
Frequency Band : 1900
Max. Transmit Pwr : 1 W
Drift Time : 3 min(s)
Power Drift-Start : 38.003 W/kg
Power Drift-Finish : 38.137 W/kg
Power Drift (%) : 0.528

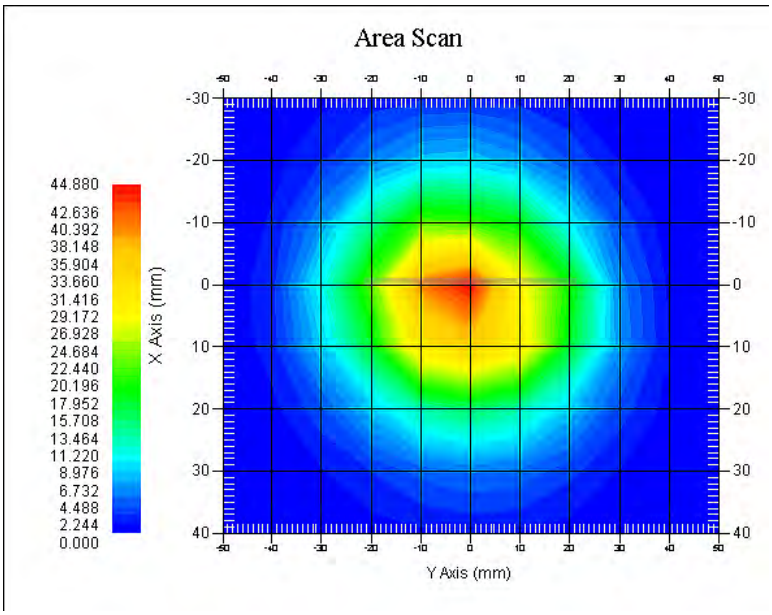
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Serial No. : System Default
Location : Center
Description : Default

Tissue Data
Type : Body
Serial No. : 295-02102
Frequency : 1900.00 MHz
Last Calib. Date : 18-Oct-2016
Temperature : 20.00 °C
Ambient Temp. : 21.00 °C
Humidity : 56.00 RH%
Epsilon : 53.57 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Name : E-Field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 14-Dec-2015
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.00 °C
Ambient Temp. : 21.00 °C
Area Scan : 7x11x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

1 gram SAR value : 39.879 W/kg
10 gram SAR value : 20.589 W/kg
Area Scan Peak SAR : 44.880 W/kg
Zoom Scan Peak SAR : 75.037 W/kg



1900 MHz System Validation with Body Tissue

Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

System Performance Check 2450 MHz Head Liquid

Dipole 2450 MHz; Type: ALS-D-2450-S-2; S/N: 220-00758

Product Data
Device Name : Dipole 2450MHz
Serial No. : 220-00758
Type : Dipole
Model : ALS-D-2450-S-2
Frequency Band : 2450 MHz
Max. Transmit Pwr : 1 W
Drift Time : 3 min(s)
Power Drift-Start : 50.124 W/kg
Power Drift-Finish : 50.698 W/kg
Power Drift (%) : 1.098

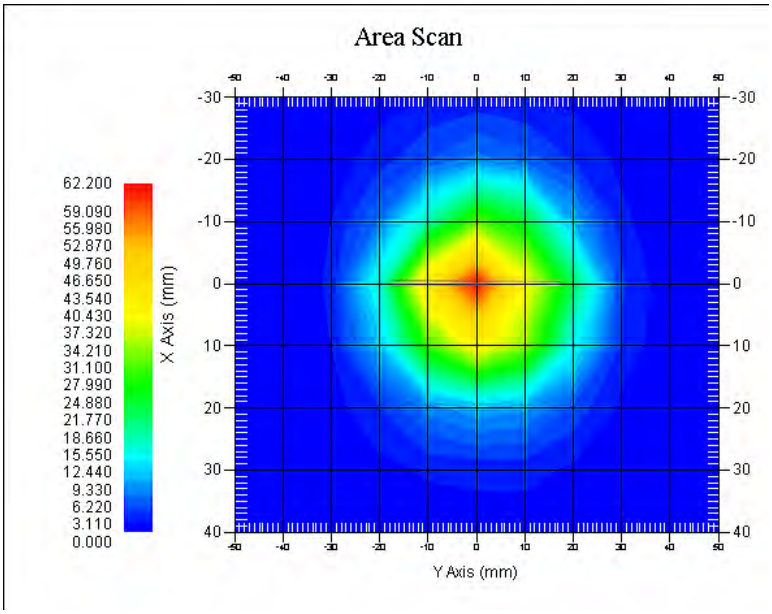
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Serial No. : System Default
Location : Center
Description : Default

Tissue Data
Type : Head
Serial No. : 290-01109
Frequency : 2450.0 MHz
Last Calib. Date : 19-Oct-2016
Temperature : 20.00 °C
Ambient Temp. : 21.00 °C
Humidity : 50.00 RH%
Epsilon : 39.61 F/m
Sigma : 1.81 S/m
Density : 1000.00 kg/cu. M

Probe Data
Name : E-Field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 14-Dec-2015
Frequency Band : 2450 MHz
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.00 °C
Ambient Temp. : 20.00 °C
Area Scan : 7x11x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

1 gram SAR value : 54.228 W/kg
10 gram SAR value : 24.149 W/kg
Area Scan Peak SAR : 62.200 W/kg
Zoom Scan Peak SAR : 98.017 W/kg



2450 MHz System Validation with Head Tissue

Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

System Performance Check 2450 MHz Body Liquid

Dipole 2450 MHz; Type: ALS-D-2450-S-2; S/N: 220-00758

Product Data
Device Name : Dipole 2450MHz
Serial No. : 220-00758
Type : Dipole
Model : ALS-D-2450-S-2
Frequency Band : 2450 MHz
Max. Transmit Pwr : 1 W
Drift Time : 3 min(s)
Power Drift-Start : 51.325 W/kg
Power Drift-Finish : 52.337 W/kg
Power Drift (%) : 2.322

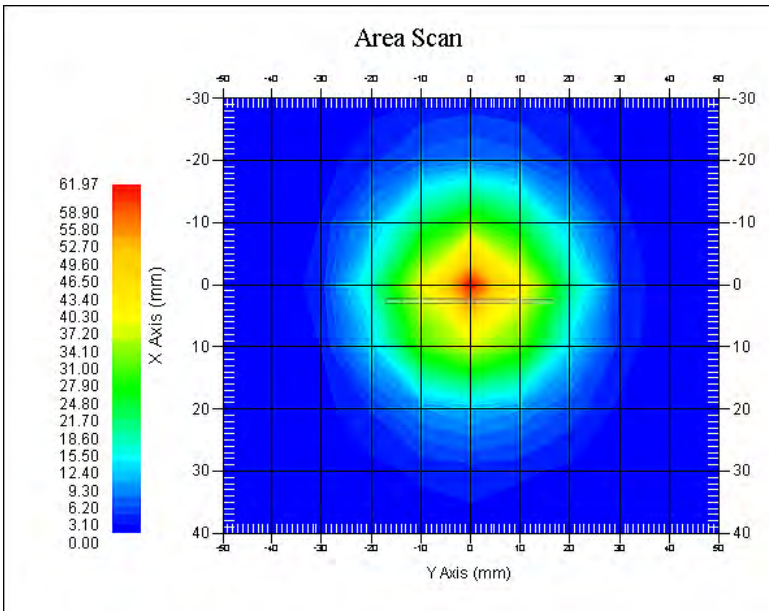
Phantom Data
Name : APREL-Uni
Type : Uni-Phantom
Serial No. : System Default
Location : Center
Description : Default

Tissue Data
Type : BODY
Serial No. : 290-01109
Frequency : 2450.0 MHz
Last Calib. Date : 19-Oct-2016
Temperature : 20.00 °C
Ambient Temp. : 21.00 °C
Humidity : 50.00 RH%
Epsilon : 52.64 F/m
Sigma : 1.95 S/m
Density : 1000.00 kg/cu. M

Probe Data
Name : E-Field
Model : E-020
Type : E-Field Triangle
Serial No. : 500-00283
Last Calib. Date : 14-Dec-2015
Frequency Band : 2450 MHz
Duty Cycle Factor : 1
Conversion Factor : 4.3
Probe Sensitivity : 1.20 1.20 1.20 $\mu V/(V/m)^2$
Compression Point : 95.00 mV
Offset : 1.56 mm

Measurement Data
Crest Factor : 1
Scan Type : Complete
Tissue Temp. : 20.00 °C
Ambient Temp. : 20.00 °C
Area Scan : 8x11x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

1 gram SAR value : 56.202 W/kg
10 gram SAR value : 24.824 W/kg
Area Scan Peak SAR : 61.970 W/kg
Zoom Scan Peak SAR : 91.541 W/kg



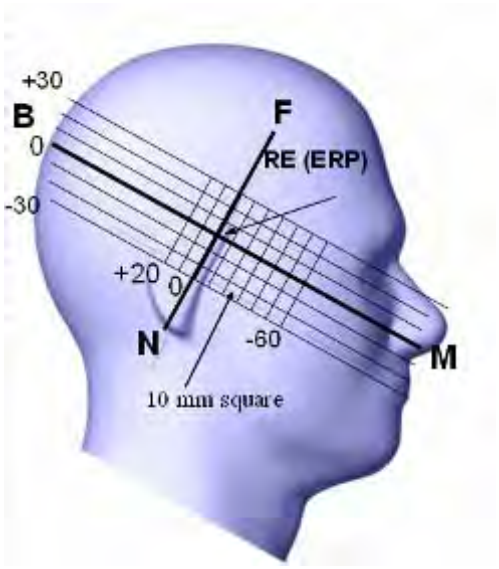
2450 MHz System Validation with Body Tissue

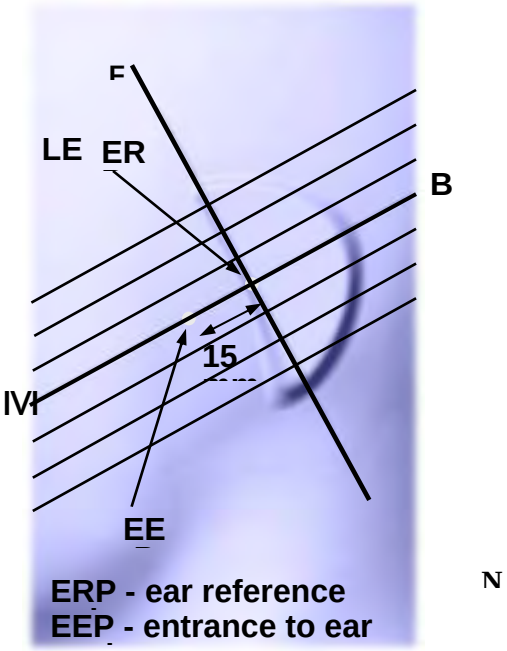
EUT TEST STRATEGY AND METHODOLOGY

Test Positions for Device Operating Next to a Person's Ear

This category includes most wireless handsets with fixed, retractable or internal antennas located toward the top half of the device, with or without a foldout, sliding or similar keypad cover. The handset should have its earpiece located within the upper ¼ of the device, either along the centerline or off-centered, as perceived by its users. This type of handset should be positioned in a normal operating position with the "test device reference point" located along the "vertical centerline" on the front of the device aligned to the "ear reference point". The "test device reference point" should be located at the same level as the center of the earpiece region. The "vertical centerline" should bisect the front surface of the handset at its top and bottom edges. A "ear reference point" is located on the outer surface of the head phantom on each ear spacer. It is located 1.5 cm above the center of the ear canal entrance in the "phantom reference plane" defined by the three lines joining the center of each "ear reference point" (left and right) and the tip of the mouth.

A handset should be initially positioned with the earpiece region pressed against the ear spacer of a head phantom. For the SCC-34/SC-2 head phantom, the device should be positioned parallel to the "N-F" line defined along the base of the ear spacer that contains the "ear reference point". For interim head phantoms, the device should be positioned parallel to the cheek for maximum RF energy coupling. The "test device reference point" is aligned to the "ear reference point" on the head phantom and the "vertical centerline" is aligned to the "phantom reference plane". This is called the "initial ear position". While maintaining these three alignments, the body of the handset is gradually adjusted to each of the following positions for evaluating SAR:





Cheek/Touch Position

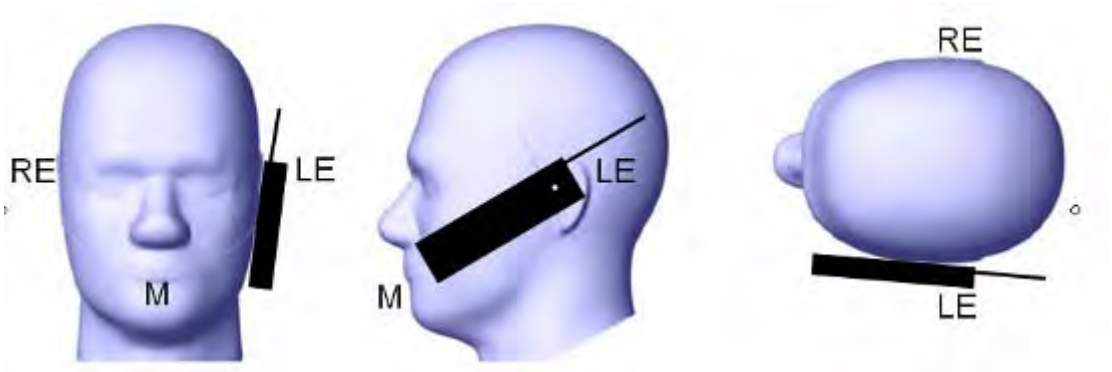
The device is brought toward the mouth of the head phantom by pivoting against the "ear reference point" or along the "N-F" line for the SCC-34/SC-2 head phantom.

This test position is established:

- When any point on the display, keypad or mouthpiece portions of the handset is in contact with the phantom.
- (or) When any portion of a foldout, sliding or similar keypad cover opened to its intended self-adjusting normal use position is in contact with the cheek or mouth of the phantom.

For existing head phantoms – when the handset loses contact with the phantom at the pivoting point, rotation should continue until the device touches the cheek of the phantom or breaks its last contact from the ear spacer.

Cheek /Touch Position



Ear/Tilt Position

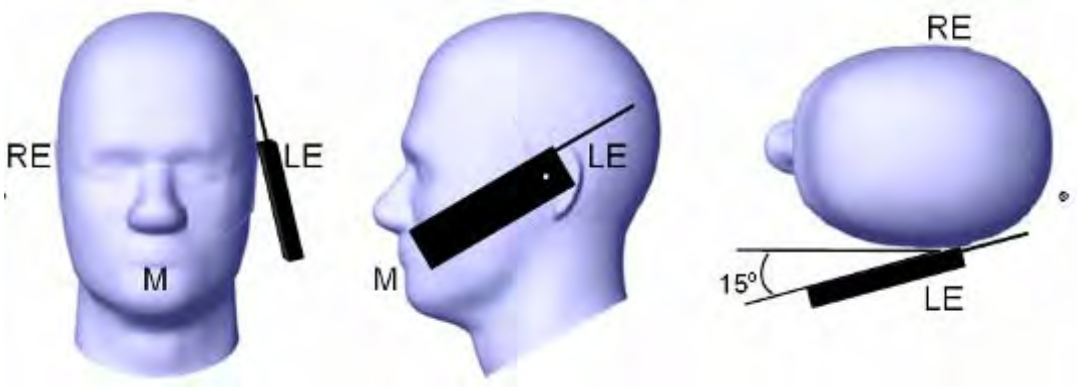
With the handset aligned in the "Cheek/Touch Position":

1) If the earpiece of the handset is not in full contact with the phantom's ear spacer (in the "Cheek/Touch position") and the peak SAR location for the "Cheek/Touch" position is located at the ear spacer region or corresponds to the earpiece region of the handset, the device should be returned to the "initial ear position" by rotating it away from the mouth until the earpiece is in full contact with the ear spacer.

2) (otherwise) The handset should be moved (translated) away from the cheek perpendicular to the line passes through both "ear reference points" (note: one of these ear reference points may not physically exist on a split head model) for approximate 2-3 cm. While it is in this position, the device handset is tilted away from the mouth with respect to the "test device reference point" until the inside angle between the vertical centerline on the front surface of the phone and the horizontal line passing through the ear reference point isby 15 80°. After the tilt, it is then moved (translated) back toward the head perpendicular to the line passes through both "ear reference points" until the device touches the phantom or the ear spacer. If the antenna touches the head first, the positioning process should be repeated with a tilt angle less than 15° so that the device and its antenna would touch the phantom simultaneously. This test position may require a device holder or positioner to achieve the translation and tilting with acceptable positioning repeatability.

If a device is also designed to transmit with its keypad cover closed for operating in the head position, such positions should also be considered in the SAR evaluation. The device should be tested on the left and right side of the head phantom in the "Cheek/Touch" and "Ear/Tilt" positions. When applicable, each configuration should be tested with the antenna in its fully extended and fully retracted positions. These test configurations should be tested at the high, middle and low frequency channels of each operating mode; for example, AMPS, CDMA, and TDMA. If the SAR measured at the middle channel for each test configuration (left, right, Cheek/Touch, Tile/Ear, extended and retracted) is at least 2.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s). If the transmission band of the test device is less than 10 MHz, testing at the high and low frequency channels is optional.

Ear /Tilt 15° Position



Test positions for body-worn and other configurations

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. Devices with a headset output should be tested with a headset connected to the device. When multiple accessories that do not contain metallic components are supplied with the device, the device may be tested with only the accessory that dictates the closest spacing to the body. When multiple accessories that contain metallic components are supplied with the device, the device must be tested with each accessory that contains a unique metallic component. If multiple accessories share an identical metallic component (e.g., the same metallic belt-clip used with different holsters with no other metallic components), only the accessory that dictates the closest spacing to the body must be tested.

Body-worn accessories may not always be supplied or available as options for some devices that are intended to be authorized for body-worn use. A separation distance of 1.5 cm between the back of the device and a flat phantom is recommended for testing body-worn SAR compliance under such circumstances. Other separation distances may be used, but they should not exceed 2.5 cm. In these cases, the device may use body-worn accessories that provide a separation distance greater than that tested for the device provided however that the accessory contains no metallic components.

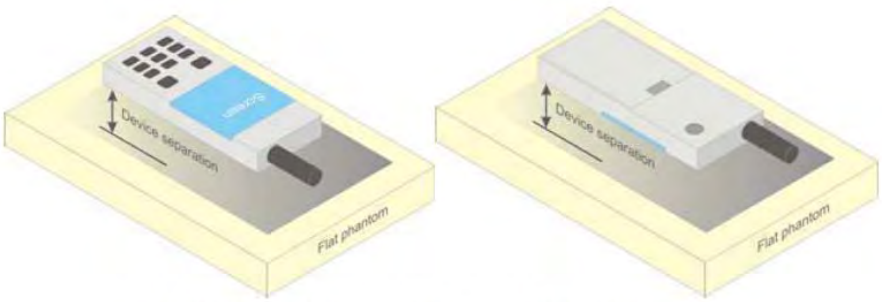


Figure 5 – Test positions for body-worn devices

SAR Evaluation Procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the SAR value at a fixed location above the ear point or central position was used as a reference value for assessing the power drop. The SAR at this point is measured at the start of the test and then again at the end of the testing.

Step 2: The SAR distribution at the exposed side of the head was measured at a distance of 4 mm from the inner surface of the shell. The area covered the entire dimension of the head or EUT and the horizontal grid spacing was 10 mm x 10 mm. Based on these data, the area of the maximum absorption was determined by spline interpolation. The first Area Scan covers the entire dimension of the EUT to ensure that the hotspot was correctly identified.

Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7x 7 x 7 points. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

1) The data at the surface were extrapolated, since the center of the dipoles is 1.2 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

2) The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one dimensional splines with the “Not a knot"-condition (in x, y and z-directions). The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the averages.

All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement of the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation was repeated.

Test methodology

KDB 447498 D01 General RF Exposure Guidance v06.
KDB 648474 D04 Handset SAR v01r03.
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
KDB 865664 D02 RF Exposure Reporting v01r02
KDB 941225 D01 3G SAR Procedures v03r01
KDB 941225 D05 SAR for LTE Devices v02r03
KDB 941225 D06 Hotspot Mode v02r01

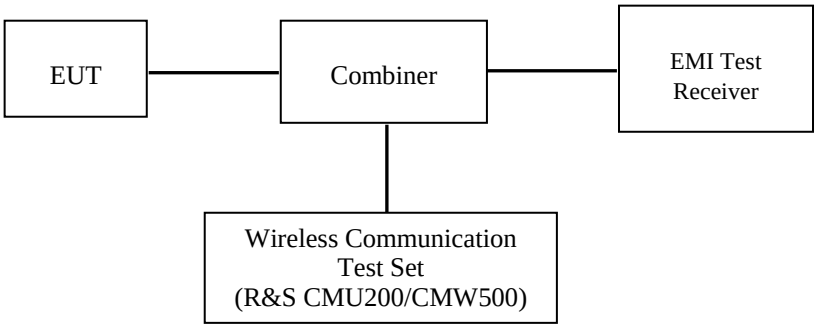
CONDUCTED OUTPUT POWER MEASUREMENT

Provision Applicable

The measured peak output power should be greater and within 5% than EMI measurement.

Test Procedure

The RF output of the transmitter was connected to the input of the EMI Test Receiver through sufficient attenuation.



GSM/WCDMA/LTE

Radio Configuration

The power measurement was configured by the Wireless Communication Test Set CMU200 & CMW500 for all Radio configurations.

GSM

Function: Menu select > GSM Mobile Station > GSM 850/1900
Press Connection control to choose the different menus
Press RESET > choose all the reset all settings
Connection: Press Signal Off to turn off the signal and change settings
Network Support > GSM + only
MS Signal
> 33 dBm for GSM 850
> 30 dBm for PCS 1900
BS Signal:Enter the same channel number for TCH channel (test channel) and BCCH channel
Frequency Offset >+ 0 Hz
Mode > BCCH and TCH
BCCH Level > -85 dBm (May need to adjust if link is not stabe)
BCCH Channel >choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]
Channel Type > Off
P0 > 4 dB
TCH > choose desired test channel
Hopping >Off
AF/RF: Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
Connection: Press Signal on to turn on the signal and change settings

GPRS

Function: Menu select > GSM Mobile Station > GSM 850/1900
Press Connection control to choose the different menus
Press RESET > choose all the reset all settings
Connection:Press Signal Off to turn off the signal and change settings
Network Support > GSM + GPRS
Main Service > Packet Data
Service selection > Test Mode A – Auto Slot Config. off
MS Signal:Press Slot Config Bottom on the right twice to select and change the number of time slots and power setting
> Slot configuration > Uplink/Gamma
> 33 dBm for GPRS 850
> 30 dBm for GPRS 1900
BS Signal: Enter the same channel number for TCH channel (test channel) and BCCH channel
Frequency Offset >+ 0 Hz
Mode >BCCH and TCH
BCCH Level >-85 dBm (May need to adjust if link is not stabe)
BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]

Channel Type > Off
P0 > 4 dB
Slot Config > Unchanged (if already set under MS signal)
TCH > choose desired test channel
Hopping >Off
Main Timeslot >3
Network:Coding Scheme >CS4 (GPRS)
Bit Stream >2E9-1 PSR Bit Stream
AF/RF: Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
Connection: Press Signal on to turn on the signal and change settings

EGPRS

Function: Menu select > GSM Mobile Station > GSM 850/1900
Press Connection control to choose the different menus
Press RESET > choose all the reset all settings
Connection:Press Signal Off to turn off the signal and change settings
Network Support > GSM + EGPRS
Main Service > Packet Data
Service selection > Test Mode A – Auto Slot Config. off
MS Signal:Press Slot Config Bottom on the right twice to select and change the number of time slots and power setting
> Slot configuration > Uplink/Gamma
> 27 dBm for EGPRS 850
> 25 dBm for EGPRS 1900
BS Signal: Enter the same channel number for TCH channel (test channel) and BCCH channel
Frequency Offset >+ 0 Hz
Mode >BCCH and TCH
BCCH Level >-85 dBm (May need to adjust if link is not stabe)
BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]

Channel Type > Off
P0 > 4 dB
Slot Config > Unchanged (if already set under MS signal)
TCH > choose desired test channel
Hopping >Off
Main Timeslot >3
Network:Coding Scheme >MCS5 (EGPRS)
Bit Stream >2E9-1 PSR Bit Stream
AF/RF: Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
Connection: Press Signal on to turn on the signal and change settings

WCDMA Release 99

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification. The EUT has a nominal maximum output power of 24dBm (+1.7/-3.7).

WCDMA General Settings	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	βc / βd	8/15

HSDPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	**HSDPA**	**HSDPA**	**HSDPA**	**HSDPA**
	Subset	**1**	**2**	**3**	**4**
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm2			
	βc	2/15	12/15	15/15	15/15
	βd	15/15	15/15	8/15	4/15
	βd (SF)	64			
	βc/ βd	2/15	12/15	15/8	15/4
	βhs	4/15	24/15	30/15	30/15
	MPR(dB)	0	0	0.5	0.5
HSDPA Specific Settings	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	Ahs=βhs/ βc	30/15			

HSPA+

The following tests were conducted according to the test requirements in Table C.11.1.4 of 3GPP TS 34.121-1

Sub-test	β_c *(Note3)*	β_d	β_{HS} *(Note1)*	β_{ec}	β_{ed} ***(2xSF2)*** *(Note 4)*	β_{ed} ***(2xSF4)*** *(Note 4)*	**CM** ***(dB)*** *(Note 2)*	**MPR** ***(dB)*** *(Note 2)*	***AG Index*** *(Note 4)*	***E-TFCI*** *(Note 5)*	***E-TFCI*** *(boost)*
1	1	0	30/15	30/15	β_{ed}1: 30/15 β_{ed}2: 30/15	β_{ed}3: 24/15 β_{ed}4: 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c.
Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
Note 3: DPDCH is not configured, therefore the β_c is set to 1 and β_d = 0 by default.
Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

HSUPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSUPA	HSUPA	HSUPA	HSUPA	HSUPA
	Subset	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	βc	11/15	6/15	15/15	2/15	15/15
	βd	15/15	15/15	9/15	15/15	0
	βec	209/225	12/15	30/15	2/15	5/15
	βc/ βd	11/15	6/15	15/9	2/15	-
	βhs	22/15	12/15	30/15	4/15	5/15
	CM(dB)	1.0	3.0	2.0	3.0	1.0
	MPR(dB)	0	2	1	2	0
HSDPA Specific Settings	DACK	8				
	DNAK	8				
	DCQI	8				
	Ack-Nack repetition factor	3				
	CQI Feedback	4ms				
	CQI Repetition Factor	2				
	Ahs=βhs/ βc	30/15				
HSUPA Specific Settings	DE-DPCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	21
	ETFCI	75	67	92	71	81
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E_FCIs	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27		E-TFCI 11 E-TFCI PO4 E-TFCI 92 E-TFCI PO 18	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27	

LTE

For UE Power Class 1 and 3, the allowed Maximum Power Reduction (MPR) for the maximum output power in Table 6.2.2-1due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

For UE Power Class 1 and 3 the specific requirements and identified subclauses are specified in Table 6.2.4-1 along with the allowed A-MPR values that may be used to meet these requirements. The allowed A-MPR values specified below in Table 6.2.4.-1 to 6.2.4-15 are in addition to the allowed MPR requirements specified in subclause 6.2.3.

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (subclause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	N/A
NS_03	6.6.2.2.1	2, 4,10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10,15,20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	N/A
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	
NS_11	6.6.2.2.1	23	1.4, 3, 5, 10, 15, 20	Table 6.2.4-5	
NS_12	6.6.3.3.5	26	1.4, 3, 5	Table 6.2.4-6	
NS_13	6.6.3.3.6	26	5	Table 6.2.4-7	
NS_14	6.6.3.3.7	26	10, 15	Table 6.2.4-8	
NS_15	6.6.3.3.8	26	1.4, 3, 5, 10, 15	Table 6.2.4-9 Table 6.2.4-10	
NS_16	6.6.3.3.9	27	3, 5, 10	Table 6.2.4-11, Table 6.2.4-12, Table 6.2.4-13	
NS_17	6.6.3.3.10	28	5, 10	Table 5.6-1	N/A
NS_18	6.6.3.3.11	28	5	≥ 2	≤ 1
			10, 15, 20	≥ 1	≤ 4
NS_19	6.6.3.3.12	44	10, 15, 20	Table 6.2.4-14	
NS_20	6.2.2 6.6.2.2.1 6.6.3.2	23	5, 10, 15, 20	Table 6.2.4-15	
...					
NS_32	-	-	-	-	-

Wi-Fi

For 802.11b, 802.11g and 802.11n-HT20 mode, 11 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	/	/
6	2437	/	/
7	2442	/	/

For 802.11b, 802.11g, 802.11n-HT20 mode, EUT was tested with Channel 1, 6 and 11.

For 802.11n-HT40 mode, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2422	6	2447
2	2427	7	2452
3	2432	/	/
4	2437	/	/
5	2442	/	/

EUT was tested with Channel 1, 4 and 7.

Maximum Output Power among production units

Max Target Power for Production Unit (dBm)				
Mode/Band		Channel		
		Low	Middle	High
GSM 850		32.8	32.8	32.8
GPRS850 1 slot		32.6	32.6	32.6
GPRS850 2 slots		32.0	32.0	32.0
GPRS850 3 slots		30.3	30.3	30.3
GPRS850 4 slots		29.2	29.2	29.2
EGPRS850 1 slot		26.8	26.8	26.8
EGPRS850 2 slots		25.1	25.1	25.1
EGPRS850 3 slots		22.9	22.9	22.9
EGPRS850 4 slots		21.9	21.9	21.9
PCS 1900		29.1	29.1	29.1
GPRS1900 1 slot		28.3	28.2	28.2
GPRS1900 2 slots		27.7	27.7	27.7
GPRS1900 3 slots		25.8	25.8	25.8
GPRS1900 4 slots		24.7	24.7	24.7
EGPRS1900 1 slot		25.4	25.4	25.4
EGPRS1900 2 slots		24.0	24.0	24.0
EGPRS1900 3 slots		22.2	22.2	22.2
EGPRS1900 4 slots		21.0	21.0	21.0
WCDMA850	RMC	22.6	22.6	22.5
	HSDPA	21.9	21.9	21.9
	HSUPA	21.8	21.8	21.8
	DC-HSDPA	21.2	21.2	21.2
	HSPA+	21.3	21.3	21.3
WCDMA1900	RMC	22.7	22.7	22.9
	HSDPA	22.2	22.2	22.2
	HSUPA	22.2	22.2	22.2
	DC-HSDPA	21.6	21.6	21.6
	HSPA+	21.7	21.7	21.7
LTE Band 4		22.9	22.9	22.9
LTE Band 7		23.1	23.1	23.1
Wi-Fi		16.7	16.7	16.7
Bluetooth3.0		6.1	6.1	6.1
BLE		-3.7	-3.7	-3.7

Test Results:

GSM:

Band	Frequency (MHz)	Conducted Output Power(dBm)
GSM 850	824.2	32.41
	836.6	**32.73**
	848.8	32.62
PCS 1900	1850.2	28.72
	1880.0	**29.03**
	1909.8	28.86

GPRS:

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slot	3 slots	4 slots
GSM 850	128	824.2	32.53	31.95	30.23	29.02
	190	836.6	32.44	31.84	30.19	29.15
	251	848.8	32.32	31.73	30.12	29.07
PCS 1900	512	1850.2	28.22	27.26	25.63	24.33
	661	1880.0	28.11	27.37	25.64	24.56
	810	1909.8	28.17	27.62	25.72	24.67

EGPRS:

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slot	3 slots	4 slots
GSM 850	128	824.2	26.72	24.63	22.71	21.87
	190	836.6	26.75	24.96	22.82	21.63
	251	848.8	26.63	25.07	22.67	21.75
PCS 1900	512	1850.2	25.34	23.62	21.67	20.72
	661	1880.0	25.32	23.93	22.12	20.57
	810	1909.8	25.17	23.77	21.95	20.98

For SAR, the time based average power is relevant, the difference in between depends on the duty cycle of the TDMA signal.

Number of Time slot	1	2	3	4
Duty Cycle	1:8	1:4	1:2.66	1:2
Time based Ave. power compared to slotted Ave. power	-9 dB	-6 dB	-4.25 dB	-3 dB
Crest Factor	8	4	2.66	2

The time based average power for GPRS

Band	Channel No.	Frequency (MHz)	Time based average Power (dBm)			
			1 slot	2 slot	3 slots	4 slots
GSM 850	128	824.2	23.53	25.95	25.98	26.02
	190	836.6	23.44	25.84	25.94	**26.15**
	251	848.8	23.32	25.73	25.87	26.07
PCS 1900	512	1850.2	19.22	21.26	21.38	21.33
	661	1880.0	19.11	21.37	21.39	21.56
	810	1909.8	19.17	21.62	21.47	**21.67**

The time based average power for EGPRS

Band	Channel No.	Frequency (MHz)	Time based average Power (dBm)			
			1 slot	2 slot	3 slots	4 slots
GSM 850	128	824.2	17.72	18.63	18.46	18.87
	190	836.6	17.75	18.96	18.57	18.63
	251	848.8	17.63	**19.07**	18.42	18.75
PCS 1900	512	1850.2	16.34	17.62	17.42	17.72
	661	1880.0	16.32	17.93	17.87	17.57
	810	1909.8	16.17	17.77	17.70	**17.98**

Note:
1. Rohde & Schwarz Radio Communication Tester (CMU200) was used for the measurement of GSM peak and average output power for active timeslots.
2. For GSM voice, 1 timeslot has been activated with power level 5 (850 MHz band) and 0 (1900 MHz band).
3. For GPRS, 1, 2, 3 and 4 timeslots has been activated separately with power level 3(850 MHz band) and 3(1900 MHz band).
4. For EGPRS, 1, 2, 3 and 4 timeslots has been activated separately with power level 6(850 MHz band) and 5(1900 MHz band).

Results (12.2kbps RMC)

WCDMA 850

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
	RMC12.2k		**22.53**	22.22	22.42
	HSDPA	1	21.73	21.35	21.58
		2	21.82	21.54	21.67
		3	21.57	21.27	21.74
		4	**21.88**	21.01	21.63
	HSUPA	1	21.5	21.33	21.44
		2	21.72	21.12	21.65
		3	21.53	21.15	**21.79**
		4	21.66	21.17	21.48
		5	21.67	21.48	21.67
	DC-HSDPA	1	21.12	20.85	21.04
		2	21.08	20.84	21.03
		3	21.09	20.92	**21.15**
		4	21.03	20.93	21.03
	HSPA+	1	21.02	20.94	**21.27**

WCDMA 1900

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
	RMC12.2k		22.33	22.65	**22.87**
	HSDPA	1	21.52	21.82	21.95
		2	21.44	22.03	21.91
		3	21.65	21.98	22.09
		4	21.56	22.09	**22.17**
	HSUPA	1	21.54	21.92	22.08
		2	21.63	21.81	**22.12**
		3	21.52	21.75	21.93
		4	21.55	21.96	22.04
		5	21.57	21.93	22.16
	DC-HSDPA	1	21.19	21.47	21.55
		2	21.07	21.38	**21.52**
		3	21.03	21.54	21.53
		4	21.06	21.35	21.47
	HSPA+	1	20.97	21.32	**21.63**

Note:

1. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model 1.
2. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPA when the maximum average output of each RF channel is less than ¼ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is < 75% of SAR limit.

LTE Band 4:

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1710.7MHz	1732.5MHz	1754.3MHz
1.4M	QPSK	RB Size=1, RB Offset=0	0	0	22.95	22.78	22.71
		RB Size=1, RB Offset=2	0	0	22.87	22.79	22.70
		RB Size=1, RB Offset=5	0	0	22.65	22.82	22.56
		RB Size=3, RB Offset=0	1	1	22.11	21.90	22.14
		RB Size=3, RB Offset=1	1	1	22.20	22.15	21.65
		RB Size=3, RB Offset=2	1	1	22.07	22.11	21.94
		RB Size=6, RB Offset=0	1	1	21.51	21.60	21.39
	16QAM	RB Size=1, RB Offset=0	1	1	22.15	22.24	22.15
		RB Size=1, RB Offset=2	1	1	22.20	22.11	21.79
		RB Size=1, RB Offset=5	1	1	22.02	22.37	21.88
		RB Size=3, RB Offset=0	2	2	21.46	21.17	21.20
		RB Size=3, RB Offset=1	2	2	20.98	21.01	20.93
		RB Size=3, RB Offset=2	2	2	21.12	21.29	20.91
		RB Size=6, RB Offset=0	2	2	21.57	20.47	20.45

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1711.5MHz	1732.5MHz	1753.5MHz
3M	QPSK	RB Size=1, RB Offset=0	0	0	22.65	22.76	22.37
		RB Size=1, RB Offset=7	0	0	22.52	22.54	22.34
		RB Size=1, RB Offset=14	0	0	22.46	22.70	22.55
		RB Size=8, RB Offset=0	1	1	22.52	22.15	21.59
		RB Size=8, RB Offset=4	1	1	22.37	22.12	21.91
		RB Size=8, RB Offset=7	1	1	22.24	22.13	21.76
		RB Size=15, RB Offset=0	1	1	21.52	21.73	21.15
	16QAM	RB Size=1, RB Offset=0	1	1	22.13	21.96	21.97
		RB Size=1, RB Offset=7	1	1	21.83	22.21	22.19
		RB Size=1, RB Offset=14	1	1	22.01	22.16	21.91
		RB Size=8, RB Offset=0	2	2	21.15	21.35	20.84
		RB Size=8, RB Offset=4	2	2	21.25	21.04	20.78
		RB Size=8, RB Offset=7	2	2	21.26	21.12	20.78
		RB Size=15, RB Offset=0	2	2	20.38	20.59	20.22

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1712.5MHz	1732.5MHz	1752.5MHz
5M	QPSK	RB Size=1, RB Offset=0	0	0	22.77	22.64	22.49
		RB Size=1, RB Offset=12	0	0	22.79	22.46	22.31
		RB Size=1, RB Offset=24	0	0	22.66	22.47	22.54
		RB Size=12, RB Offset=0	1	1	22.08	22.18	21.77
		RB Size=12, RB Offset=6	1	1	22.26	21.92	21.91
		RB Size=12, RB Offset=11	1	1	22.04	22.02	21.72
		RB Size=25, RB Offset=0	1	1	21.48	21.41	21.13
	16QAM	RB Size=1, RB Offset=0	1	1	22.08	22.00	21.81
		RB Size=1, RB Offset=12	1	1	22.30	22.00	21.90
		RB Size=1, RB Offset=24	1	1	22.26	22.47	21.78
		RB Size=12, RB Offset=0	2	2	21.29	21.21	20.78
		RB Size=12, RB Offset=6	2	2	20.90	21.32	20.89
		RB Size=12, RB Offset=11	2	2	21.01	21.40	20.64
		RB Size=25, RB Offset=0	2	2	20.56	20.69	20.47

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1715MHz	1732.5MHz	1750MHz
10M	QPSK	RB Size=1, RB Offset=0	0	0	22.68	22.41	21.90
		RB Size=1, RB Offset=24	0	0	22.69	22.77	22.04
		RB Size=1, RB Offset=49	0	0	22.67	22.51	21.77
		RB Size=25, RB Offset=0	1	1	21.89	22.14	21.43
		RB Size=25, RB Offset=12	1	1	22.16	22.28	21.57
		RB Size=25, RB Offset=24	1	1	21.90	22.25	21.54
		RB Size=50, RB Offset=0	1	1	21.54	21.47	21.03
	16QAM	RB Size=1, RB Offset=0	1	1	22.26	21.89	21.79
		RB Size=1, RB Offset=24	1	1	22.05	21.80	21.58
		RB Size=1, RB Offset=49	1	1	22.05	21.93	21.76
		RB Size=25, RB Offset=0	2	2	21.24	21.55	21.05
		RB Size=25, RB Offset=12	2	2	21.51	21.54	21.18
		RB Size=25, RB Offset=24	2	2	21.44	21.67	21.28
		RB Size=50, RB Offset=0	2	2	20.11	20.54	20.35

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1717.5MHz	1732.5MHz	1747.5MHz
15M	QPSK	RB Size=1, RB Offset=0	0	0	22.93	23.02	22.09
		RB Size=1, RB Offset=37	0	0	22.94	22.99	22.21
		RB Size=1, RB Offset=74	0	0	23.00	22.95	22.45
		RB Size=36, RB Offset=0	1	1	22.10	22.17	21.21
		RB Size=36, RB Offset=18	1	1	22.22	21.95	21.04
		RB Size=36, RB Offset=37	1	1	22.37	22.05	21.30
		RB Size=75, RB Offset=0	1	1	21.59	21.48	20.79
	16QAM	RB Size=1, RB Offset=0	1	1	22.17	21.78	22.00
		RB Size=1, RB Offset=37	1	1	22.29	22.13	21.80
		RB Size=1, RB Offset=74	1	1	22.04	21.68	21.49
		RB Size=36, RB Offset=0	2	2	21.10	21.28	21.19
		RB Size=36, RB Offset=18	2	2	21.14	21.39	21.05
		RB Size=36, RB Offset=37	2	2	20.97	21.37	20.99
		RB Size=75, RB Offset=0	2	2	20.11	20.70	20.40

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					1720MHz	1732.5MHz	1745MHz
20M	QPSK	RB Size=1, RB Offset=0	0	0	22.52	22.76	22.07
		RB Size=1, RB Offset=49	0	0	22.72	**22.88**	22.09
		RB Size=1, RB Offset=99	0	0	22.83	22.86	22.26
		RB Size=50, RB Offset=0	1	1	**22.43**	22.21	21.41
		RB Size=50, RB Offset=24	1	1	22.12	21.78	21.56
		RB Size=50, RB Offset=49	1	1	22.09	21.41	21.59
		RB Size=100, RB Offset=0	1	1	21.45	20.59	20.63
	16QAM	RB Size=1, RB Offset=0	1	1	22.15	21.64	21.55
		RB Size=1, RB Offset=49	1	1	22.15	21.98	21.75
		RB Size=1, RB Offset=99	1	1	21.91	21.83	21.94
		RB Size=50, RB Offset=0	2	2	21.27	21.09	20.75
		RB Size=50, RB Offset=24	2	2	21.08	20.93	20.67
		RB Size=50, RB Offset=49	2	2	21.17	20.99	21.08
		RB Size=100, RB Offset=0	2	2	20.52	20.78	20.04

LTE Band 7:

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2502.5MHz	2535MHz	2567.5MHz
5M	QPSK	RB Size=1, RB Offset=0	0	0	22.79	23.00	22.61
		RB Size=1, RB Offset=12	0	0	22.74	22.98	22.50
		RB Size=1, RB Offset=24	0	0	22.72	22.98	22.46
		RB Size=12, RB Offset=0	1	1	22.02	22.29	21.86
		RB Size=12, RB Offset=6	1	1	22.14	22.40	21.87
		RB Size=12, RB Offset=11	1	1	22.03	22.24	21.75
		RB Size=25, RB Offset=0	1	1	21.70	21.94	21.45
	16QAM	RB Size=1, RB Offset=0	1	1	21.58	21.81	21.31
		RB Size=1, RB Offset=12	1	1	21.55	21.76	21.30
		RB Size=1, RB Offset=24	1	1	21.61	21.87	21.41
		RB Size=12, RB Offset=0	2	2	21.14	21.33	20.81
		RB Size=12, RB Offset=6	2	2	21.09	21.27	20.84
		RB Size=12, RB Offset=11	2	2	21.19	21.42	20.95
		RB Size=25, RB Offset=0	2	2	20.76	21.03	20.52
BW	**Modulation**	**Resource Block Size& Resource Block Offset**	**Target MPR**	**Meas MPR**	**Ave Tx Power (dBm)**		
					Low Channel	**Mid Channel**	**High Channel**
					2505MHz	2535MHz	2565MHz
10M	QPSK	RB Size=1, RB Offset=0	0	0	22.78	23.02	22.56
		RB Size=1, RB Offset=24	0	0	22.88	23.05	22.57
		RB Size=1, RB Offset=49	0	0	22.71	22.96	22.46
		RB Size=25, RB Offset=0	1	1	22.05	22.24	21.69
		RB Size=25, RB Offset=12	1	1	22.05	22.29	21.90
		RB Size=25, RB Offset=24	1	1	22.04	22.22	21.78
		RB Size=50, RB Offset=0	1	1	21.78	21.98	21.58
	16QAM	RB Size=1, RB Offset=0	1	1	22.06	22.33	21.96
		RB Size=1, RB Offset=24	1	1	22.13	22.43	21.88
		RB Size=1, RB Offset=49	1	1	22.12	22.33	21.82
		RB Size=25, RB Offset=0	2	2	21.33	21.53	20.98
		RB Size=25, RB Offset=12	2	2	21.24	21.44	20.95
		RB Size=25, RB Offset=24	2	2	21.28	21.53	21.12
		RB Size=50, RB Offset=0	2	2	20.78	21.01	20.56

BW	Modulation	Resource Block Size& Resource Block Offset	Target MPR	Meas MPR	Ave Tx Power (dBm)		
					Low Channel	Mid Channel	High Channel
					2507.5MHz	2535MHz	2562.5MHz
15M	QPSK	RB Size=1, RB Offset=0	0	0	22.85	23.09	22.68
		RB Size=1, RB Offset=37	0	0	22.82	23.07	22.65
		RB Size=1, RB Offset=74	0	0	22.76	23.02	22.50
		RB Size=36, RB Offset=0	1	1	21.90	22.15	21.69
		RB Size=36, RB Offset=18	1	1	21.89	22.16	21.68
		RB Size=36, RB Offset=37	1	1	21.95	22.19	21.80
		RB Size=75, RB Offset=0	1	1	21.71	21.99	21.43
	16QAM	RB Size=1, RB Offset=0	1	1	22.11	22.34	21.92
		RB Size=1, RB Offset=37	1	1	22.12	22.38	21.93
		RB Size=1, RB Offset=74	1	1	22.07	22.26	21.84
		RB Size=36, RB Offset=0	2	2	21.43	21.64	21.22
		RB Size=36, RB Offset=18	2	2	21.55	21.75	21.30
		RB Size=36, RB Offset=37	2	2	21.38	21.60	21.07
		RB Size=75, RB Offset=0	2	2	20.79	21.02	20.61
BW	**Modulation**	**Resource Block Size& Resource Block Offset**	**Target MPR**	**Meas MPR**	**Ave Tx Power (dBm)**		
					Low Channel	**Mid Channel**	**High Channel**
					2510MHz	2535MHz	2560MHz
20M	QPSK	RB Size=1, RB Offset=0	0	0	22.76	22.98	22.46
		RB Size=1, RB Offset=49	0	0	22.84	**23.06**	22.62
		RB Size=1, RB Offset=99	0	0	22.76	22.97	22.45
		RB Size=50, RB Offset=0	1	1	21.68	21.86	21.35
		RB Size=50, RB Offset=24	1	1	21.80	**22.03**	21.58
		RB Size=50, RB Offset=49	1	1	21.68	21.95	21.48
		RB Size=100, RB Offset=0	1	1	21.95	22.16	21.73
	16QAM	RB Size=1, RB Offset=0	1	1	22.01	22.20	21.76
		RB Size=1, RB Offset=49	1	1	21.96	22.26	21.84
		RB Size=1, RB Offset=99	1	1	21.94	22.16	21.74
		RB Size=50, RB Offset=0	2	2	21.15	21.44	20.97
		RB Size=50, RB Offset=24	2	2	21.33	21.54	21.05
		RB Size=50, RB Offset=49	2	2	21.31	21.59	21.08
		RB Size=100, RB Offset=0	2	2	20.85	21.06	20.57

Note:

1. SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02.
2. The CMW500 Wideband Radio Communication tester is used for LTE output power measurements and SAR testing. Closed loop power control is used to keep the radio transmitters the max output power during the test.
3. KDB941225D05v02- SAR for higher order modulation 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

Bluetooth:

Mode	Channel No.	Channel frequency (MHz)	Conducted Output Power (dBm)
BDR(GFSK)	0	2402	4.32
	39	2441	**6.05**
	78	2480	4.07
EDR(4-DQPSK)	0	2402	5.97
	39	2441	4.53
	78	2480	3.31
EDR(8-DPSK)	0	2402	4.97
	39	2441	3.12
	78	2480	4.96
BLE	0	2402	-4.22
	19	2440	-3.71
	39	2480	-3.87

Wi-Fi:

Band	Channel No.	Channel frequency (MHz)	Conducted Output Power (dBm)
802.11b	1	2412	16.41
	6	2437	16.53
	11	2462	**16.65**
802.11g	1	2412	13.22
	6	2437	13.45
	11	2462	13.56
802.11n HT20	1	2412	12.98
	6	2437	12.63
	11	2462	13.16
802.11n HT40	1	2422	13.19
	4	2437	12.45
	7	2452	13.12

Note:

1. The output power was tested under data rate 1Mbps for 802.11b, 6Mbps for 802.11g, MCS0 for 802.11n HT20, MCS0 for 802.11n HT40.

SAR MEASUREMENT RESULTS

This page summarizes the results of the performed dosimetric evaluation.

SAR Test Data

Environmental Conditions

Temperature:	21-24 ℃
Relative Humidity:	50-53 %
ATM Pressure:	1001-1002 mbar

Testing was performed by Lance Li, Hans Zhao, and River Rao on 2016-10-17, 2016-10-18 and 2016-10-19

For the SAR data of the LTE Band 7 please refer to report RSZ150925010-20B Rev.

GSM 850:

EUT Position	Frequency (MHz)	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Left Head Cheek	824.2	GSM	/	/	/	/	/	/	/
	836.6	GSM	0.317	32.73	32.80	1.016	0.542	**0.551**	**1#**
	848.8	GSM	/	/	/	/	/	/	/
Left Head Tilt	824.2	GSM	/	/	/	/	/	/	/
	836.6	GSM	0.697	32.73	32.80	1.016	0.316	0.321	2#
	848.8	GSM	/	/	/	/	/	/	/
Right Head Cheek	824.2	GSM	/	/	/	/	/	/	/
	836.6	GSM	0.784	32.73	32.80	1.016	0.480	0.488	3#
	848.8	GSM	/	/	/	/	/	/	/
Right Head Tilt	824.2	GSM	/	/	/	/	/	/	/
	836.6	GSM	-0.408	32.73	32.80	1.016	0.342	0.347	4#
	848.8	GSM	/	/	/	/	/	/	/

Note:

1 .When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. According to IEEE 1528-2013, the middle channel is required to be tested first.

PCS Band:

EUT Position	Frequency (MHz)	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Left Head Cheek	1850.2	GSM	/	/	/	/	/	/	/
	1880.0	GSM	4.279	29.03	29.10	1.016	0.247	**0.251**	**5#**
	1909.8	GSM	/	/	/	/	/	/	/
Left Head Tilt	1850.2	GSM	/	/	/	/	/	/	/
	1880.0	GSM	0.704	29.03	29.10	1.016	0.141	0.143	6#
	1909.8	GSM	/	/	/	/	/	/	/
Right Head Cheek	1850.2	GSM	/	/	/	/	/	/	/
	1880.0	GSM	-3.877	29.03	29.10	1.016	0.229	0.233	7#
	1909.8	GSM	/	/	/	/	/	/	/
Right Head Tilt	1850.2	GSM	/	/	/	/	/	/	/
	1880.0	GSM	-0.758	29.03	29.10	1.016	0.131	0.133	8#
	1909.8	GSM	/	/	/	/	/	/	/

Note:

1 .When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. According to IEEE 1528-2013, the middle channel is required to be tested first.

WCDMA 850:

EUT Position	Frequency (MHz)	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Left Head Cheek	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	0.538	22.22	22.6	1.091	0.366	**0.399**	**9#**
	846.6	RMC	/	/	/	/	/	/	/
Left Head Tilt	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	3.086	22.22	22.6	1.091	0.199	0.217	10#
	846.6	RMC	/	/	/	/	/	/	/
Right Head Cheek	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	1.715	22.22	22.6	1.091	0.324	0.353	11#
	846.6	RMC	/	/	/	/	/	/	/
Right Head Tilt	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	1.877	22.22	22.6	1.091	0.182	0.199	12#
	846.6	RMC	/	/	/	/	/	/	/

WCDMA1900:

EUT Position	Frequency (MHz)	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Left Head Cheek	1852.4	RMC	/	/	/	/	/	/	/
	1880.0	RMC	1.128	22.65	22.70	1.012	0.247	**0.250**	**13#**
	1907.6	RMC	/	/	/	/	/	/	/
Left Head Tilt	1852.4	RMC	/	/	/	/	/	/	/
	1880.0	RMC	1.428	22.65	22.70	1.012	0.118	0.119	14#
	1907.6	RMC	/	/	/	/	/	/	/
Right Head Cheek	1852.4	RMC	/	/	/	/	/	/	/
	1880.0	RMC	2.899	22.65	22.70	1.012	0.209	0.212	15#
	1907.6	RMC	/	/	/	/	/	/	/
Right Head Tilt	1852.4	RMC	/	/	/	/	/	/	/
	1880.0	RMC	0.995	22.65	22.70	1.012	0.112	0.113	16#
	1907.6	RMC	/	/	/	/	/	/	/

Note:

1.When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model.

LTE Band 4:

EUT Position	Frequency (MHz)	Bandwith（MHz）	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Left Head Cheek	1720	20	1RB, Offset=49	/	/	/	/	/	/	/
	1732.5	20	1RB, Offset=49	-1.442	22.88	22.90	1.005	0.177	0.178	17#
	1745	20	1RB, Offset=49	/	/	/	/	/	/	/
	1720	20	50%RB, Offset=0	-1.124	22.43	22.90	1.114	0.168	**0.187**	**18#**
Left Head Tilt	1720	20	1RB, Offset=49	/	/	/	/	/	/	/
	1732.5	20	1RB, Offset=49	0.606	22.88	22.90	1.005	0.118	0.119	19#
	1745	20	1RB, Offset=49	/	/	/	/	/	/	/
	1720	20	50%RB, Offset=0	0.699	22.43	22.90	1.114	0.125	0.139	20#
Right Head Cheek	1720	20	1RB, Offset=49	/	/	/	/	/	/	/
	1732.5	20	1RB, Offset=49	1.527	22.88	22.90	1.005	0.178	0.179	21#
	1745	20	1RB, Offset=49	/	/	/	/	/	/	/
	1720	20	50%RB, Offset=0	1.923	22.43	22.90	1.114	0.144	0.160	22#
Right Head Tilt	1720	20	1RB, Offset=49	/	/	/	/	/	/	/
	1732.5	20	1RB, Offset=49	-0.699	22.88	22.90	1.005	0.105	0.106	23#
	1745	20	1RB, Offset=49	/	/	/	/	/	/	/
	1720	20	50%RB, Offset=0	1.622	22.43	22.90	1.114	0.098	0.109	24#

Note:

1. When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02.
3. KDB941225D05- SAR for higher order modulation 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
4. The procedures required for 1 RB allocation are applied to measure the SAR for QPSK with 50% RB allocation
5. KDB941225D05- For QPSK with 100% RB allocation, when the reported SAR measured for the Highest output power channel is <1.45 W/kg, tests for the remaining required test channels are optional.
6. KDB941225D05- 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 are ≤ 0.8 W/kg.
7. KDB941225D05- Start with the largest channel bandwidth (20M) and 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 offset the upper edge, middle and lower edge of each required test channel.

Wi-Fi 802.11b

EUT Position	Frequency (MHz)	Power Drift (%)	Meas. Avg. Power (dBm)	Max. Rated Avg. Power (dBm)	1 g SAR Value (W/Kg)			
					Scaled Factor	Meas. SAR	Scaled SAR	Plot
Left Head Cheek	2412	/	/	/	/	/	/	/
	2437	/	/	/	/	/	/	/
	2462	1.815	16.65	16.70	1.012	0.122	**0.123**	**25#**
Left Head Tilt	2412	/	/	/	/	/	/	/
	2437	/	/	/	/	/	/	/
	2462	-2.238	16.65	16.70	1.012	0.077	0.078	26#
Right Head Cheek	2412	/	/	/	/	/	/	/
	2437	/	/	/	/	/	/	/
	2462	2.703	16.65	16.70	1.012	0.109	0.110	27#
Right Head Tilt	2412	/	/	/	/	/	/	/
	2437	/	/	/	/	/	/	/
	2462	-3.528	16.65	16.70	1.012	0.069	0.070	28#

Note:
1. When the 1-g SAR is ≤ 0.8W/Kg, testing for other channel is optional.
2. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.

Mobile Hot-Spot Test Result

The DUT is capable of functioning as a Wi-Fi to Cellular Mobile hotspot. Additional SAR testing was performed according to KDB 941225 D06. Testing was performed with a separation of 1cm between the DUT and the flat phantom. The DUT was positioned for SAR tests with the front and back surfaces facing the phantom, and also with the edges facing the phantom in which the transmitting antenna is <2.5 cm from the edge. Each transmit band was utilized for SAR testing. The tested mode has been selected within each band that exhibits the highest time average output power.

Hot spot-GPRS 850

EUT Position	Frequency (MHz)	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Body-Worn-Headset (10 mm)	824.2	GSM	/	/	/	/	/	/	/
	836.6	GSM	0.808	32.73	32.80	1.016	0.667	0.678	29#
	848.8	GSM	/	/	/	/	/	/	/
Body-Back (10 mm)	824.2	GPRS	0.780	29.02	29.2	1.042	0.923	**0.962**	**30#**
	836.6	GPRS	0.229	29.15	29.2	1.012	0.867	0.877	31#
	848.8	GPRS	0.682	29.07	29.2	1.030	0.843	0.868	32#
Body-Left (10 mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	0.597	29.15	29.20	1.012	0.421	0.426	33#
	848.8	GPRS	/	/	/	/	/	/	/
Body-Right (10 mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	0.421	29.15	29.20	1.012	0.652	0.660	34#
	848.8	GPRS	/	/	/	/	/	/	/
Body-Bottom (10 mm)	824.2	GPRS	/	/	/	/	/	/	/
	836.6	GPRS	0.513	29.15	29.20	1.012	0.545	0.552	35#
	848.8	GPRS	/	/	/	/	/	/	/

Note:

1 .When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. The EUT is a Capability Class B Mobile Phone which can be attached to both GPRS and GSM services.
4. The Multi-slot Classes of EUT is Class12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 1DL+4UL is the worst case.
5. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.

Hot spot-GPRS1900

EUT Position	Frequency (MHz)	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Body-Worn-Headset (10 mm)	1850.2	GSM	/	/	/	/	/	/	/
	1880.0	GSM	-2.326	29.03	29.10	1.016	0.175	0.178	36#
	1909.8	GSM	/	/	/	/	/	/	/
Body-Back (10 mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880.0	GPRS	4.425	24.56	24.70	1.033	0.375	**0.387**	**37#**
	1909.8	GPRS	/	/	/	/	/	/	/
Body-Left (10 mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880.0	GPRS	-1.695	24.56	24.70	1.033	0.172	0.178	38#
	1909.8	GPRS	/	/	/	/	/	/	/
Body-Right (10 mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880.0	GPRS	0.571	24.56	24.70	1.033	0.239	0.247	39#
	1909.8	GPRS	/	/	/	/	/	/	/
Body-Bottom (10 mm)	1850.2	GPRS	/	/	/	/	/	/	/
	1880.0	GPRS	1.594	24.56	24.70	1.033	0.247	0.255	40#
	1909.8	GPRS	/	/	/	/	/	/	/

Note:

1 .When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. The EUT is a Capability Class B Mobile Phone which can be attached to both GPRS and GSM services.
4. The Multi-slot Classes of EUT is Class12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 1DL+4UL is the worst case.
5. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.

Hot Spot WCDMA 850

EUT Position	Frequency (MHz)	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Body-Back (10 mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	-0.438	22.22	22.60	1.091	0.497	**0.542**	**41#**
	846.6	RMC	/	/	/	/	/	/	/
Body-Left (10 mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	0.441	22.22	22.60	1.091	0.225	0.245	42#
	846.6	RMC	/	/	/	/	/	/	/
Body-Right (10 mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	1.095	22.22	22.60	1.091	0.345	0.376	43#
	846.6	RMC	/	/	/	/	/	/	/
Body-Bottom (10 mm)	826.4	RMC	/	/	/	/	/	/	/
	836.6	RMC	-1.136	22.22	22.6	1.091	0.248	0.271	44#
	846.6	RMC	/	/	/	/	/	/	/

Hot Spot WCDMA 1900

EUT Position	Frequency (MHz)	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
						Scaled Factor	Meas. SAR	Scaled SAR	Plot
Body-Back (10 mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880.0	RMC	-0.364	22.65	22.70	1.012	0.495	**0.501**	**45#**
	1907.6	RMC	/	/	/	/	/	/	/
Body-Left (10 mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880.0	RMC	1.415	22.65	22.70	1.012	0.237	0.240	46#
	1907.6	RMC	/	/	/	/	/	/	/
Body-Right (10 mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880.0	RMC	0.348	22.65	22.70	1.012	0.347	0.351	47#
	1907.6	RMC	/	/	/	/	/	/	/
Body-Bottom (10 mm)	1852.4	RMC	/	/	/	/	/	/	/
	1880.0	RMC	0.791	22.65	22.70	1.012	0.282	0.285	48#
	1907.6	RMC	/	/	/	/	/	/	/

Note:
1. When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. According to IEEE 1528-2013, the middle channel is required to be tested first.
4. KDB 447498D01- When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel must be used.
5. The default test configuration is to measure SA R with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model.
6. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.

Hot Spot LTE Band 4

EUT Position	Frequency (MHz)	Bandwith（MHz）	Test Mode	Power Drift (%)	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/Kg)			
							Scaled Factor	Meas. SAR	Scaled SAR	Plot
Body-Back (10 mm)	1720	20	1RB, Offset=49	0.980	22.72	22.9	1.042	0.753	**0.785**	**49#**
	1732.5	20	1RB, Offset=49	1.866	22.88	22.9	1.005	0.776	0.780	50#
	1745	20	1RB, Offset=49	0.533	22.09	22.9	1.205	0.649	0.782	51#
	1720	20	50%RB, Offset=0	0.383	22.43	22.9	1.114	0.593	0.661	52#
Body-Left (10 mm)	1720	20	1RB, Offset=49	/	/	/	/	/	/	/
	1732.5	20	1RB, Offset=49	-0.513	22.88	22.9	1.005	0.193	0.194	53#
	1745	20	1RB, Offset=49	/	/	/	/	/	/	/
	1720	20	50%RB, Offset=0	-1.685	22.43	22.9	1.114	0.183	0.204	54#
Body-Right (10 mm)	1720	20	1RB, Offset=49	/	/	/	/	/	/	/
	1732.5	20	1RB, Offset=49	-1.130	22.88	22.9	1.005	0.233	0.234	55#
	1745	20	1RB, Offset=49	/	/	/	/	/	/	/
	1720	20	50%RB, Offset=0	0.535	22.43	22.9	1.114	0.224	0.250	56#
Body-Bottom (10 mm)	1720	20	1RB, Offset=49	/	/	/	/	/	/	/
	1732.5	20	1RB, Offset=49	-1.011	22.88	22.9	1.005	0.307	0.309	57#
	1745	20	1RB, Offset=49	/	/	/	/	/	/	/
	1720	20	50%RB, Offset=0	-0.308	22.43	22.9	1.114	0.281	0.313	58#

Note:

1. When the 1-g SAR is ≤ 0.8W/Kg, testing for other channels are optional.
2. SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02.
3. KDB941225D05- SAR for higher order modulation 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
4. The procedures required for 1 RB allocation are applied to measure the SAR for QPSK with 50% RB allocation
5. KDB941225D05- For QPSK with 100% RB allocation, when the reported SAR measured for the Highest output power channel is <1.45 W/kg, tests for the remaining required test channels are optional.
6. KDB941225D05- 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 are ≤ 0.8 W/kg.
7. KDB941225D05- Start with the largest channel bandwidth (20M) and 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 offset the upper edge, middle and lower edge of each required test channel.

Wi-Fi 802.11b

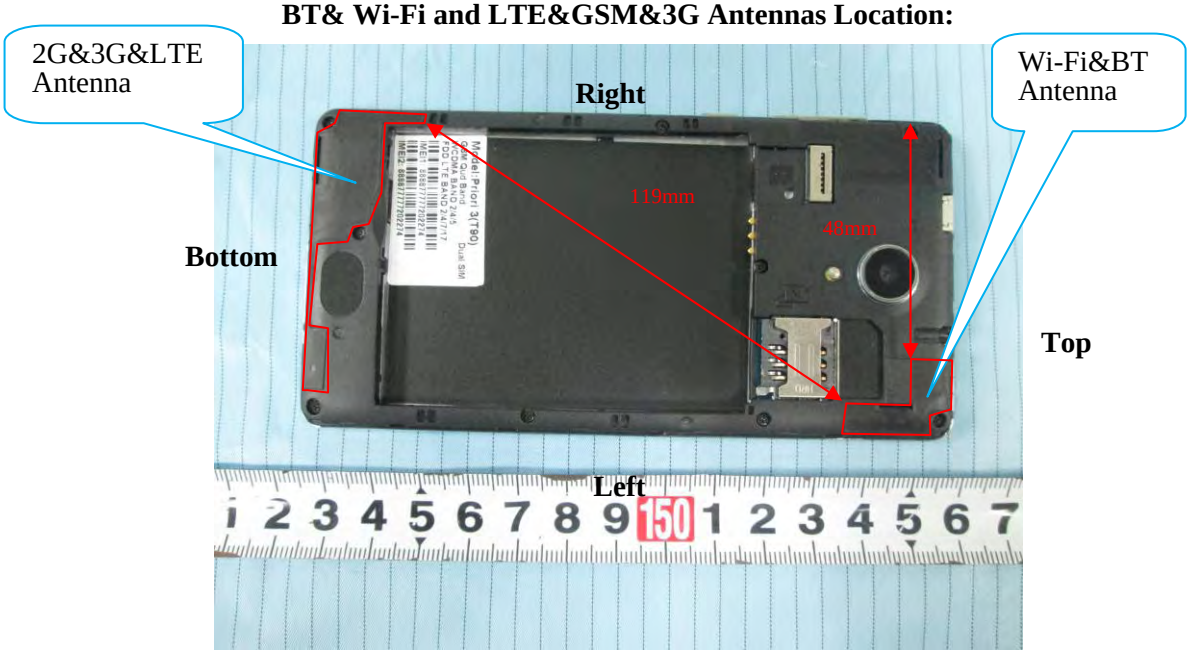
EUT Position	Frequency (MHz)	Power Drift (%)	Meas. Avg. Power (dBm)	Max. Rated Avg. Power (dBm)	1 g SAR Value (W/Kg)			
					Scaled Factor	Meas. SAR	Scaled SAR	Plot
Body-worn-Back (10mm)	2412	/	/	/	/	/	/	/
	2437	/	/	/	/	/	/	/
	2462	-0.573	16.65	16.70	1.012	0.117	**0.118**	**59#**
Body-worn-Left (10mm)	2412	/	/	/	/	/	/	/
	2437	/	/	/	/	/	/	/
	2462	-0.128	16.65	16.70	1.012	0.087	0.088	60#
Body-worn-Top (10mm)	2412	/	/	/	/	/	/	/
	2437	/	/	/	/	/	/	/
	2462	0.123	16.65	16.70	1.012	0.057	0.058	61#

Note:

1. When the 1-g SAR is ≤ 0.8W/Kg, testing for other channel is optional.

SAR SIMULTANEOUS TRANSMISSION DESCRIPTION

BT& Wi-Fi and LTE&GSM&3G Antennas Location:



Simultaneous Transmission:

Description of Simultaneous Transmit Capabilities			Antennas Distance (mm)
Transmitter Combination	Simultaneous?	Hotspot?	
GSM + WCDMA	×	×	0
GSM + LTE	×	×	0
GSM + Bluetooth	√	×	119
GSM + Wi-Fi	√	√	119
WCDMA + LTE	×	×	0
WCDMA + Bluetooth	√	×	119
WCDMA + Wi-Fi	√	√	119
LTE+ Bluetooth	√	×	119
LTE+ Wi-Fi	√	√	119

Standalone SAR test exclusion considerations

Mode	Position	Max tune up power		Distance (mm)	Calculated value	Threshold (1-g)	SAR Test Exclusion
		(dBm)	(Mw)				
Bluetooth	Head	6.10	4.074	0	1.3	3.0	Yes
	Body	6.10	4.074	10.00	0.7	3.0	Yes

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, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

1. f(GHz) is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.

3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

Standalone SAR estimation:

Mode	Frequency (GHz)	Distance (mm)	Max tune up power		Estimated $_{1-g}$ (W/kg)
			(dBm)	(Mw)	
BT Head	2.480	0	6.10	4.074	0.171
BT Body	2.480	10	6.10	4.074	0.086

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.

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion

Simultaneous SAR test exclusion considerations:

GSM with BT:

Mode	Position	Reported SAR (W/kg)		ΣSAR
		GSM	BT	< 1.6W/kg
GSM 850	Left Head Cheek	0.551	0.171	**0.722**
	Left Head Tilt	0.321	0.171	0.492
	Right Head Cheek	0.488	0.171	0.659
	Right Head Tilt	0.347	0.171	0.518
	Body-Worn-Headset	0.678	0.086	0.764
PCS 1900	Left Head Cheek	0.251	0.171	0.422
	Left Head Tilt	0.143	0.171	0.314
	Right Head Cheek	0.233	0.171	0.404
	Right Head Tilt	0.133	0.171	0.304
	Body-Worn-Headset	0.178	0.086	0.264

WCDMA with BT:

Mode	Position	Reported SAR (W/kg)		ΣSAR
		WCDMA	BT	< 1.6W/kg
WCDMA 850	Left Head Cheek	0.399	0.171	0.570
	Left Head Tilt	0.217	0.171	0.388
	Right Head Cheek	0.353	0.171	0.524
	Right Head Tilt	0.199	0.171	0.370
WCDMA 1900	Left Head Cheek	0.250	0.171	0.421
	Left Head Tilt	0.119	0.171	0.29
	Right Head Cheek	0.212	0.171	0.383
	Right Head Tilt	0.113	0.171	0.284

LTE with BT:

Mode	Position	Reported SAR (W/kg)		ΣSAR	Remark
		LTE	BT	< 1.6W/kg	
LTE Band 4	Left Head Cheek	0.187	0.171	0.358	/
	Left Head Tilt	0.139	0.171	0.310	/
	Right Head Cheek	0.179	0.171	0.350	/
	Right Head Tilt	0.109	0.171	0.280	/
LTE Band 7	Left Head Cheek	0.044	0.171	0.215	Originated from Report RSZ150925010 -20B Rev
	Left Head Tilt	0.026	0.171	0.197	
	Right Head Cheek	0.058	0.171	0.229	
	Right Head Tilt	0.035	0.171	0.206	

GSM with Wi-Fi:

Mode	Position	Reported SAR (W/kg)		ΣSAR
		GSM	Wi-Fi	< 1.6W/kg
GSM 850	Left Head Cheek	0.551	0.123	**0.674**
	Left Head Tilt	0.321	0.078	0.399
	Right Head Cheek	0.488	0.110	0.598
	Right Head Tilt	0.347	0.070	0.417
	Body-Worn-Headset	0.678	0.118	0.796
PCS 1900	Left Head Cheek	0.251	0.123	0.374
	Left Head Tilt	0.143	0.078	0.221
	Right Head Cheek	0.233	0.110	0.343
	Right Head Tilt	0.133	0.070	0.203
	Body-Worn-Headset	0.178	0.118	0.296

WCDMA with Wi-Fi:

Mode	Position	Reported SAR (W/kg)		ΣSAR
		WCDMA	Wi-Fi	< 1.6W/kg
WCDMA 850	Left Head Cheek	0.399	0.123	0.522
	Left Head Tilt	0.217	0.078	0.295
	Right Head Cheek	0.353	0.110	0.463
	Right Head Tilt	0.199	0.070	0.269
WCDMA 1900	Left Head Cheek	0.250	0.123	0.373
	Left Head Tilt	0.119	0.078	0.197
	Right Head Cheek	0.212	0.110	0.322
	Right Head Tilt	0.113	0.070	0.183

LTE with Wi-Fi:

Mode	Position	Reported SAR (W/kg)		ΣSAR	Remark
		LTE	Wi-Fi	< 1.6W/kg	
LTE Band 4	Left Head Cheek	0.187	0.123	0.31	/
	Left Head Tilt	0.139	0.078	0.217	/
	Right Head Cheek	0.179	0.110	0.289	/
	Right Head Tilt	0.109	0.070	0.179	/
LTE Band 7	Left Head Cheek	0.044	0.123	0.167	Originated from Report RSZ150925010 -20B Rev
	Left Head Tilt	0.026	0.078	0.104	
	Right Head Cheek	0.058	0.110	0.168	
	Right Head Tilt	0.035	0.070	0.105	

Evaluations for Simultaneous SAR, BT+WWAN					
Test Position	Body-Back (1.0cm)	Body-Left (1.0cm)	Body-Right (1.0cm)	Body-Bottom (1.0cm)	Body-Top (1.0cm)
Mode	Stand Alone 1-g SAR (W/Kg)				
GPRS 850	0.962	0.426	0.660	0.552	/
GPRS 1900	0.387	0.178	0.247	0.255	/
WCDMA 850	0.542	0.245	0.376	0.271	/
WCDMA 1900	0.501	0.240	0.351	0.285	/
LTE Band 4	0.785	0.204	0.250	0.313	/
LTE Band 7	0.136	0.060	0.074	0.080	/
BT	0.086	0.086	0.086	0.086	0.086
	∑ 1-g SAR(W/Kg)				
GPRS 850 + Wi-Fi	1.048	0.512	0.746	0.638	/
GPRS 1900 + Wi-Fi	0.473	0.264	0.333	0.341	/
WCDMA 850 + Wi-Fi	0.628	0.331	0.462	0.357	/
WCDMA 1900+ Wi-Fi	0.587	0.326	0.437	0.371	/
LTE Band 4+ Wi-Fi	0.871	0.290	0.336	0.399	/
LTE Band 7+ Wi-Fi	0.222	0.146	0.160	0.166	/
Evaluations for Simultaneous SAR, Mobile Hot Spot Positions					
Test Position	Body-Back (1.0cm)	Body-Left (1.0cm)	Body-Right (1.0cm)	Body-Bottom (1.0cm)	Body-Top (1.0cm)
Mode	Stand Alone 1-g SAR (W/Kg)				
GPRS 850	0.962	0.426	0.660	0.552	/
GPRS 1900	0.387	0.178	0.247	0.255	/
WCDMA 850	0.542	0.245	0.376	0.271	/
WCDMA 1900	0.501	0.240	0.351	0.285	/
LTE Band 4	0.785	0.204	0.250	0.313	/
LTE Band 7	0.136	0.060	0.074	0.080	/
Wi-Fi	0.118	0.088	/	/	0.058
	∑ 1-g SAR(W/Kg)				
GPRS 850 + Wi-Fi	**1.080**	0.514	/	/	/
GPRS 1900 + Wi-Fi	0.505	0.266	/	/	/
WCDMA 850 + Wi-Fi	0.660	0.333	/	/	/
WCDMA 1900+ Wi-Fi	0.619	0.328	/	/	/
LTE Band 4+ Wi-Fi	0.903	0.292	/	/	/
LTE Band 7+ Wi-Fi	0.254	0.148	/	/	/

Note:

1. If the sum of the 1g SAR measured for the simultaneously transmitting antennas is less than the SAR limit, SAR measurement for simultaneous transmission is not required.
2. SAR value for LTE band 7 originated from Report RSZ150925010-20B Rev.

SAR Plots

Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Left Head Cheek (836.6 MHz Middle Channel)

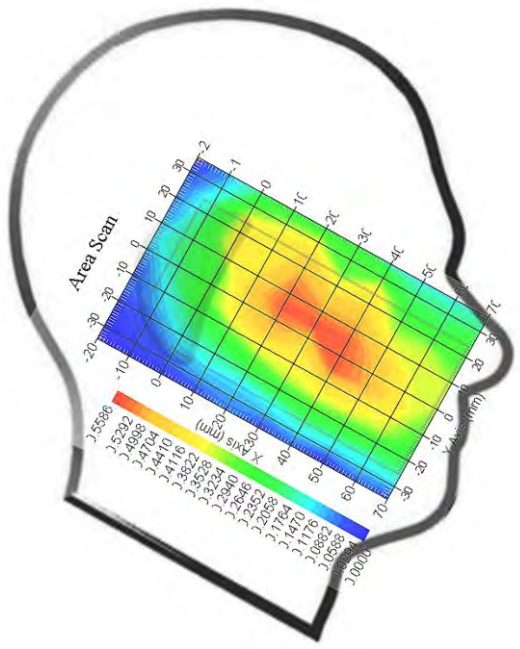
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type : Complete
Area Scan : 10x8x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.315 W/kg
Power Drift-Finish : 0.316 W/kg
Power Drift (%) : 0.317

Tissue Data
Type : Head
Frequency : 836.6 MHz
Epsilon : 41.90 F/m
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 8
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.542 W/kg
10 gram SAR value : 0.327 W/kg
Area Scan Peak SAR : 0.558 W/kg
Zoom Scan Peak SAR : 0.736 W/kg

Plot 1#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Left Head 15° Tilt (836.6 MHz Middle Channel)

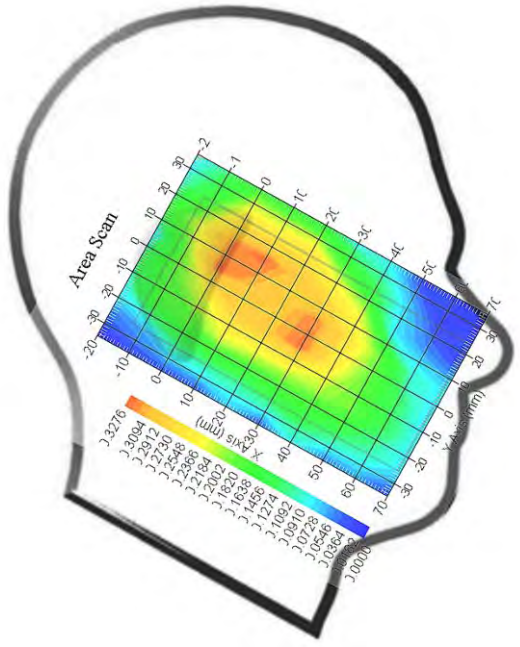
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type : Complete
Area Scan : 10x8x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.287 W/kg
Power Drift-Finish : 0.289 W/kg
Power Drift (%) : 0.697

Tissue Data
Type : Head
Frequency : 836.6 MHz
Epsilon : 41.90 F/m
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 8
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.316 W/kg
10 gram SAR value : 0.231 W/kg
Area Scan Peak SAR : 0.327 W/kg
Zoom Scan Peak SAR : 0.518 W/kg

Plot 2#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Right Head Cheek (836.6 MHz Middle Channel)

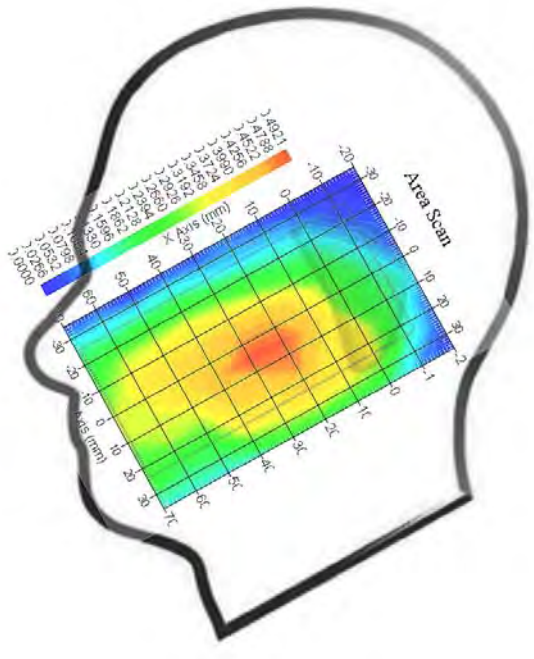
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type : Complete
Area Scan : 10x8x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.255 W/kg
Power Drift-Finish : 0.257 W/kg
Power Drift (%) : 0.784

Tissue Data
Type : Head
Frequency : 836.6 MHz
Epsilon : 41.90 F/m
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 8
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.480 W/kg
10 gram SAR value : 0.323 W/kg
Area Scan Peak SAR : 0.492 W/kg
Zoom Scan Peak SAR : 0.691 W/kg

Plot 3#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Right Head 15° Tilt (836.6 MHz Middle Channel)

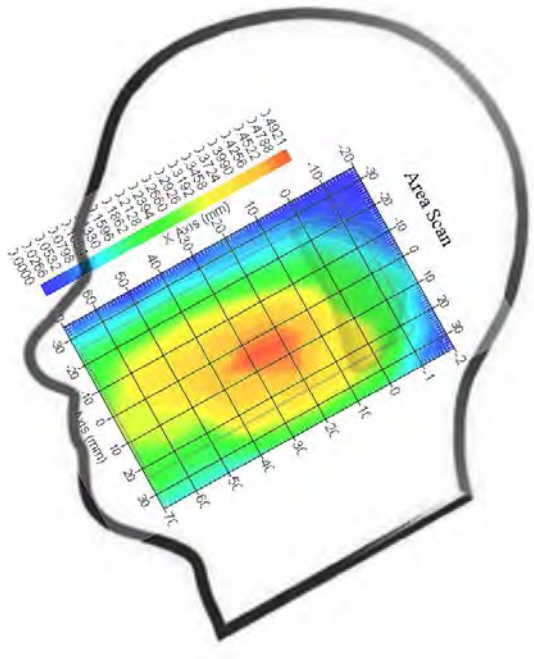
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type : Complete
Area Scan : 10x8x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.245 W/kg
Power Drift-Finish : 0.244 W/kg
Power Drift (%) : -0.408

Tissue Data
Type : Head
Frequency : 836.6 MHz
Epsilon : 41.90 F/m
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 8
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.342 W/kg
10 gram SAR value : 0.223 W/kg
Area Scan Peak SAR : 0.492 W/kg
Zoom Scan Peak SAR : 0.574 W/kg

Plot 4#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Left Head Cheek(1880.0 MHz Middle Channel)

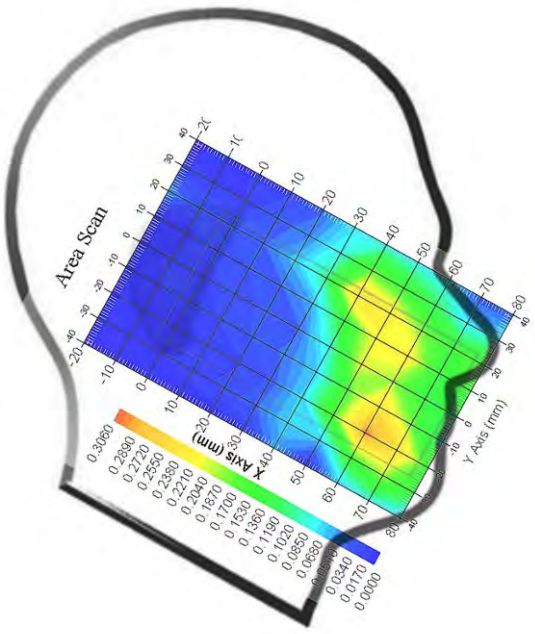
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.012 W/kg
Power Drift-Finish : 0.012 W/kg
Power Drift (%) : 4.279

Tissue Data
Type : Head
Frequency : 1880.0 MHz
Epsilon : 40.15 F/m
Sigma : 1.40 S/m
Density : 1000.00 kg/cu. M

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 8
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.247 W/kg
10 gram SAR value : 0.182 W/kg
Area Scan Peak SAR : 0.306 W/kg
Zoom Scan Peak SAR : 0.487 W/kg

Plot 5#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Left Head 15° Tilt (1880.0 MHz Middle Channel)

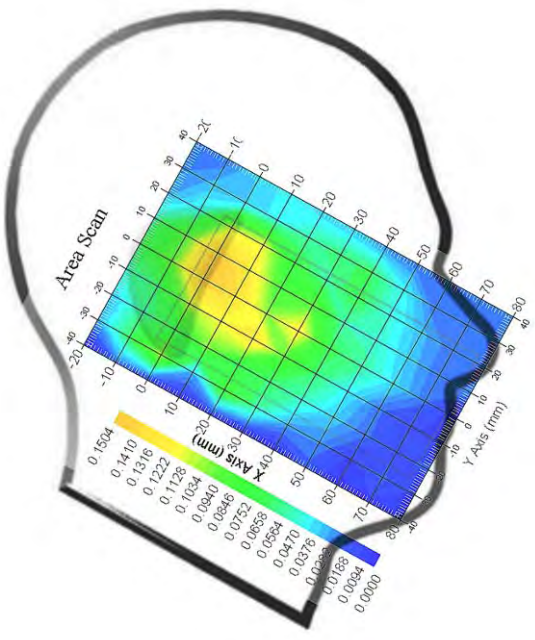
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.142 W/kg
Power Drift-Finish : 0.143 W/kg
Power Drift (%) : 0.704

Tissue Data
Type : Head
Frequency : 1880.0 MHz
Epsilon : 40.15 F/m
Sigma : 1.40 S/m
Density : 1000.00 kg/cu. M

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 8
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.141 W/kg
10 gram SAR value : 0.085 W/kg
Area Scan Peak SAR : 0.150 W/kg
Zoom Scan Peak SAR : 0.326 W/kg

Plot 6#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Right Head Cheek(1880.0 MHz Middle Channel)

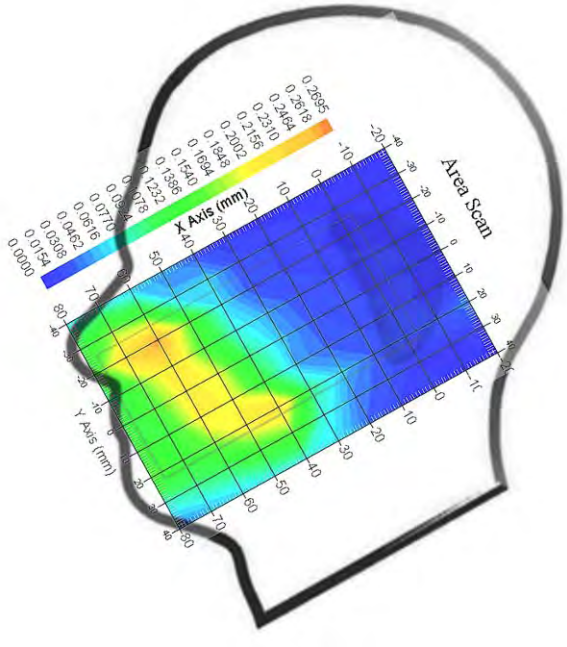
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.002 W/kg
Power Drift-Finish : 0.002 W/kg
Power Drift (%) : -3.877

Tissue Data
Type : Head
Frequency : 1880.0 MHz
Epsilon : 40.15 F/m
Sigma : 1.40 S/m
Density : 1000.00 kg/cu. M

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 8
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.229 W/kg
10 gram SAR value : 0.157 W/kg
Area Scan Peak SAR : 0.269 W/kg
Zoom Scan Peak SAR : 0.426 W/kg

Plot 7#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Right Head 15° Tilt (1880.0 MHz Middle Channel)

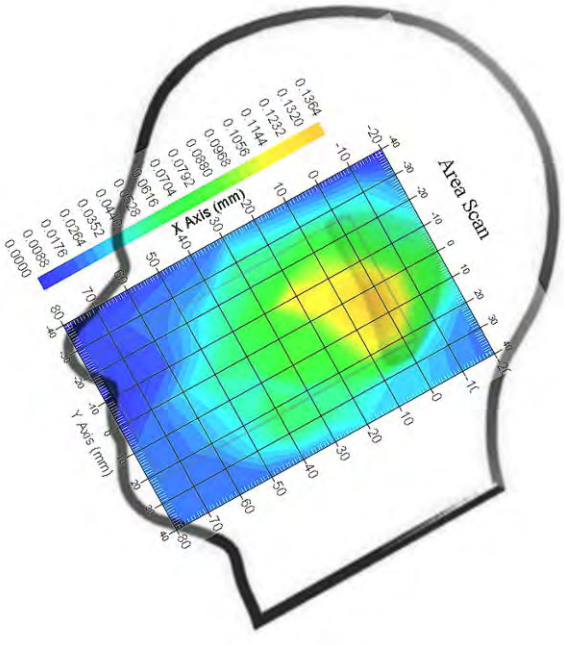
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.132 W/kg
Power Drift-Finish : 0.131 W/kg
Power Drift (%) : -0.758

Tissue Data
Type : Head
Frequency : 1880.0 MHz
Epsilon : 40.15 F/m
Sigma : 1.40 S/m
Density : 1000.00 kg/cu. M

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 8
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.131 W/kg
10 gram SAR value : 0.087 W/kg
Area Scan Peak SAR : 0.136 W/kg
Zoom Scan Peak SAR : 0.296 W/kg

Plot 8#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA850; Left Head Cheek (836.6 MHz Middle Channel)

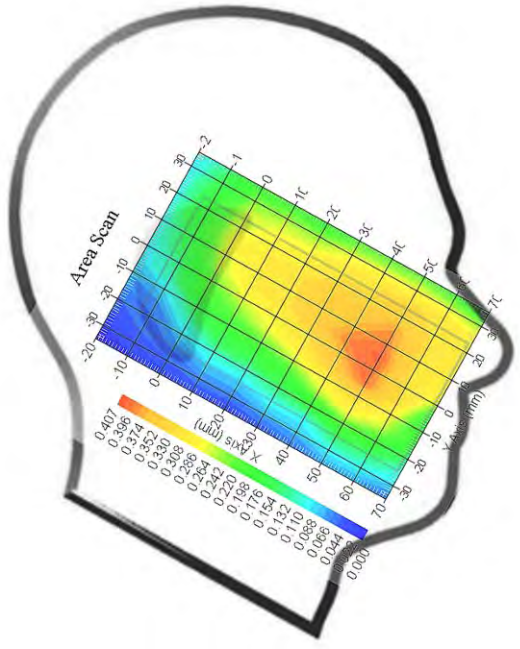
Measurement Data
Test mode : WCDMA850
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x8x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.186 W/kg
Power Drift-Finish : 0.187 W/kg
Power Drift (%) : 0.538

Tissue Data
Type : Head
Frequency : 836.6 MHz
Epsilon : 41.90 F/m
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.366 W/kg
10 gram SAR value : 0.255 W/kg
Area Scan Peak SAR : 0.407 W/kg
Zoom Scan Peak SAR : 0.612 W/kg

Plot 9#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA850; Left Head 15° Tilt (836.6 MHz Middle Channel)

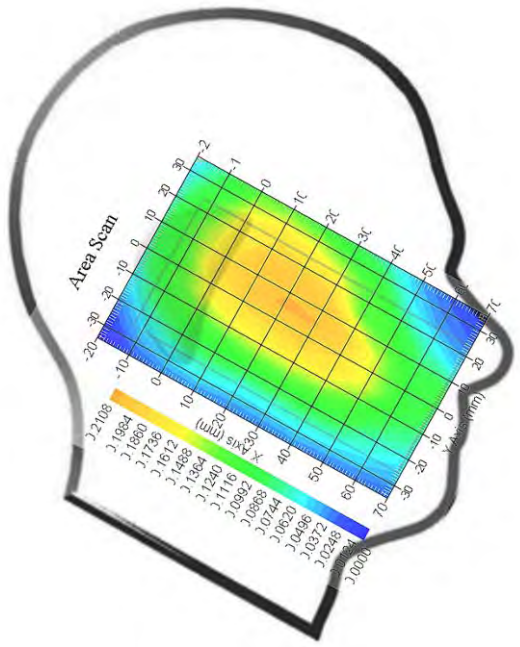
Measurement Data
Test mode : WCDMA850
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x8x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.162 W/kg
Power Drift-Finish : 0.167 W/kg
Power Drift (%) : 3.086

Tissue Data
Type : Head
Frequency : 836.6 MHz
Epsilon : 41.90 F/m
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.199 W/kg
10 gram SAR value : 0.102 W/kg
Area Scan Peak SAR : 0.210 W/kg
Zoom Scan Peak SAR : 0.321 W/kg

Plot 10#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA850; Right Head Cheek (836.6 MHz Middle Channel)

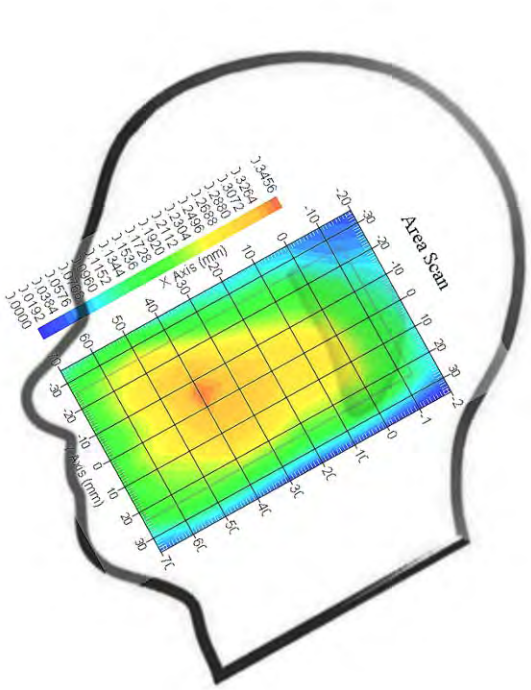
Measurement Data
Test mode : WCDMA850
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x8x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.175 W/kg
Power Drift-Finish : 0.178 W/kg
Power Drift (%) : 1.715

Tissue Data
Type : Head
Frequency : 836.6 MHz
Epsilon : 41.90 F/m
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.324 W/kg
10 gram SAR value : 0.217 W/kg
Area Scan Peak SAR : 0.345 W/kg
Zoom Scan Peak SAR : 0.494 W/kg

Plot 11#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA850; Right Head 15° Tilt (836.6 MHz Middle Channel)

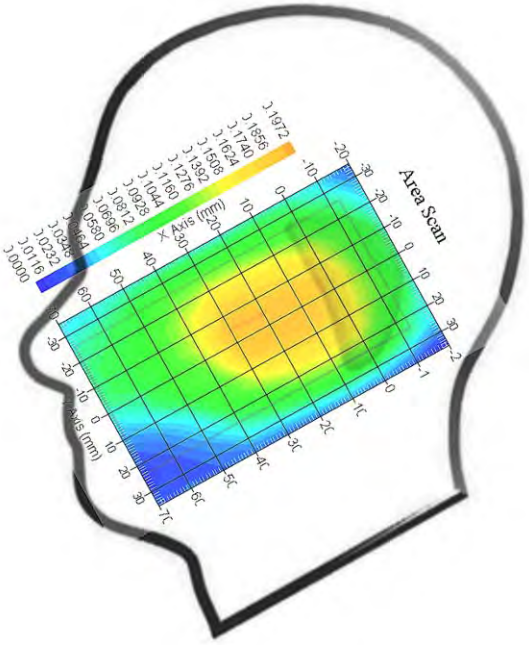
Measurement Data
Test mode : WCDMA850
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x8x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.159 W/kg
Power Drift-Finish : 0.162 W/kg
Power Drift (%) : 1.877

Tissue Data
Type : Head
Frequency : 836.6 MHz
Epsilon : 41.90 F/m
Sigma : 0.93 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.182 W/kg
10 gram SAR value : 0.097 W/kg
Area Scan Peak SAR : 0.197 W/kg
Zoom Scan Peak SAR : 0.267 W/kg

Plot 12#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA1900; Left Head Cheek (1880.0 MHz Middle Channel)

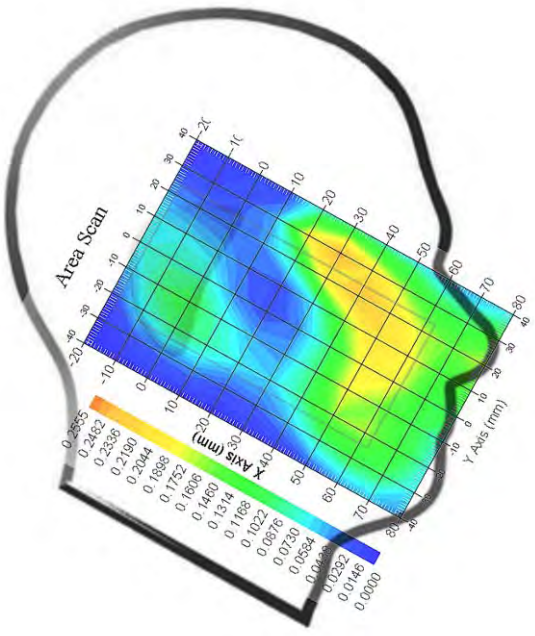
Measurement Data
Test mode : WCDMA1900
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.085 W/kg
Power Drift-Finish : 0.086 W/kg
Power Drift (%) : 1.128

Tissue Data
Type : Head
Frequency : 1880.0 MHz
Epsilon : 40.15 F/m
Sigma : 1.40 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.247 W/kg
10 gram SAR value : 0.133 W/kg
Area Scan Peak SAR : 0.255 W/kg
Zoom Scan Peak SAR : 0.402 W/kg

Plot 13#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA1900; Left Head 15° Tilt (1880.0 MHz Middle Channel)

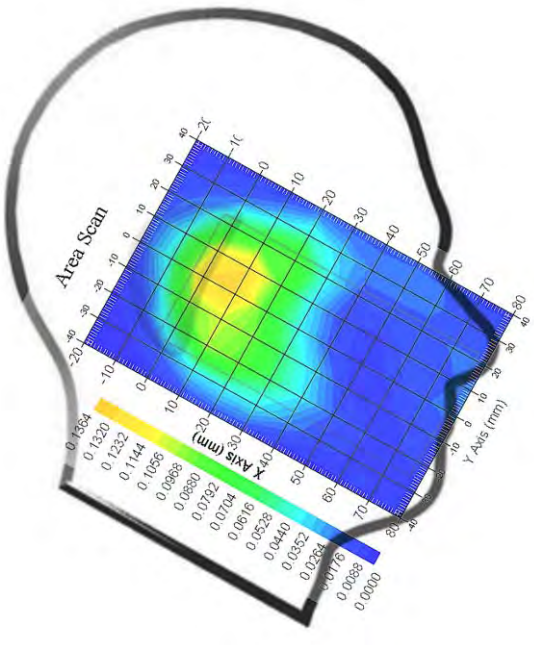
Measurement Data
Test mode : WCDMA1900
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.136 W/kg
Power Drift-Finish : 0.138 W/kg
Power Drift (%) : 1.428

Tissue Data
Type : Head
Frequency : 1880.0 MHz
Epsilon : 40.15 F/m
Sigma : 1.40 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.118 W/kg
10 gram SAR value : 0.069 W/kg
Area Scan Peak SAR : 0.136 W/kg
Zoom Scan Peak SAR : 0.192 W/kg

Plot 14#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA1900; Right Head Cheek (1880.0 MHz Middle Channel)

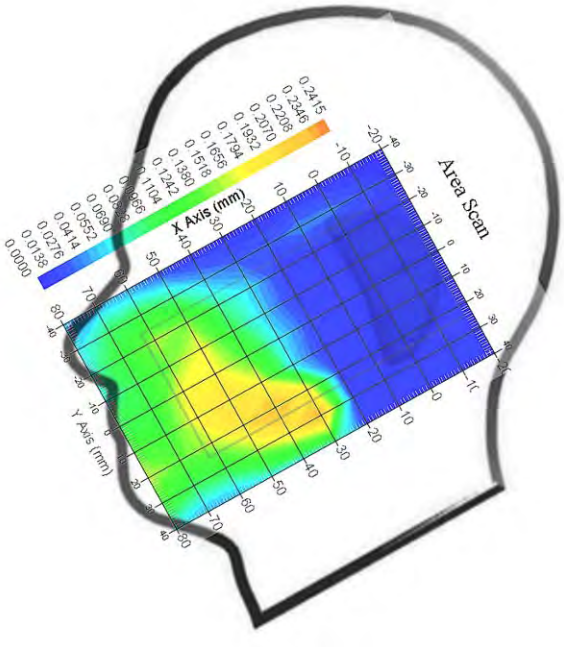
Measurement Data
Test mode : WCDMA1900
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.069 W/kg
Power Drift-Finish : 0.071 W/kg
Power Drift (%) : 2.899

Tissue Data
Type : Head
Frequency : 1880.0 MHz
Epsilon : 40.15 F/m
Sigma : 1.40 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.209 W/kg
10 gram SAR value : 0.138 W/kg
Area Scan Peak SAR : 0.241 W/kg
Zoom Scan Peak SAR : 0.394 W/kg

Plot 15#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA1900; Right Head 15° Tilt (1880.0 MHz Middle Channel)

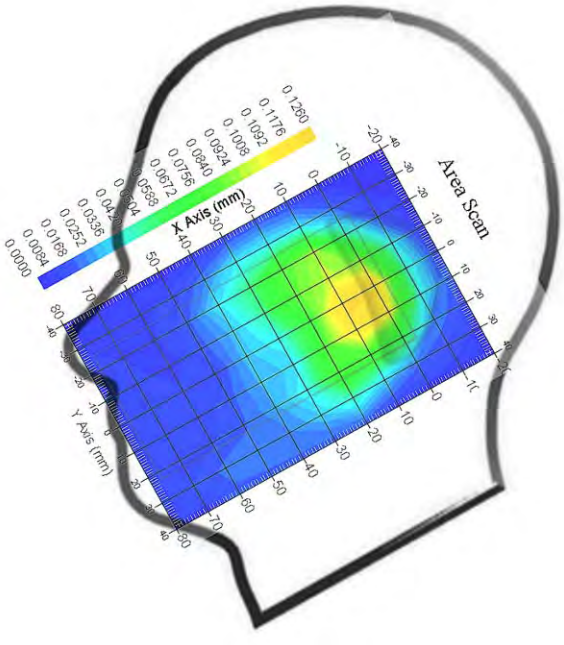
Measurement Data
Test mode : WCDMA1900
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.101 W/kg
Power Drift-Finish : 0.102 W/kg
Power Drift (%) : 0.995

Tissue Data
Type : Head
Frequency : 1880.0 MHz
Epsilon : 40.15 F/m
Sigma : 1.40 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.112 W/kg
10 gram SAR value : 0.080 W/kg
Area Scan Peak SAR : 0.126 W/kg
Zoom Scan Peak SAR : 0.188 W/kg

Plot 16#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

LTE Band 4; Left Head Cheek (1732.5 MHz Middle Channel)

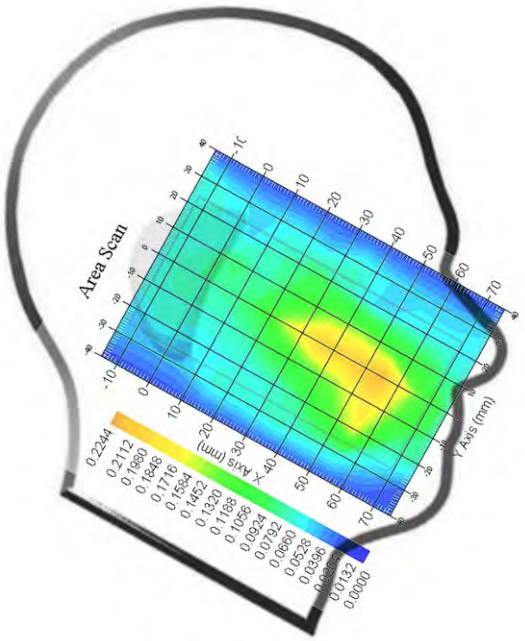
Measurement Data
Test mode : 1RB
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.069 W/kg
Power Drift-Finish : 0.068 W/kg
Power Drift (%) : -1.442

Tissue Data
Type : Head
Frequency : 1732.5 MHz
Epsilon : 40.65 F/m
Sigma : 1.37 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.4
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.177 W/kg
10 gram SAR value : 0.099 W/kg
Area Scan Peak SAR : 0.224 W/kg
Zoom Scan Peak SAR : 0.355 W/kg

Plot 17#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

LTE Band 4; Left Head Cheek (1720.0 MHz Mid Channel)

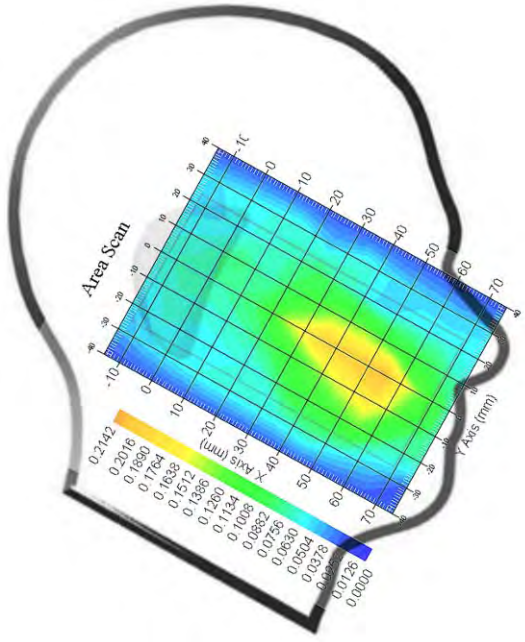
Measurement Data
Test mode : 50RB
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.089 W/kg
Power Drift-Finish : 0.088 W/kg
Power Drift (%) : -1.124

Tissue Data
Type : Head
Frequency : 1720.0 MHz
Epsilon : 40.25 F/m
Sigma : 1.37 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.4
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.168 W/kg
10 gram SAR value : 0.096 W/kg
Area Scan Peak SAR : 0.214 W/kg
Zoom Scan Peak SAR : 0.399 W/kg

Plot 18#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

LTE Band 4; Left Head Tilt (1732.5 MHz Mid Channel)

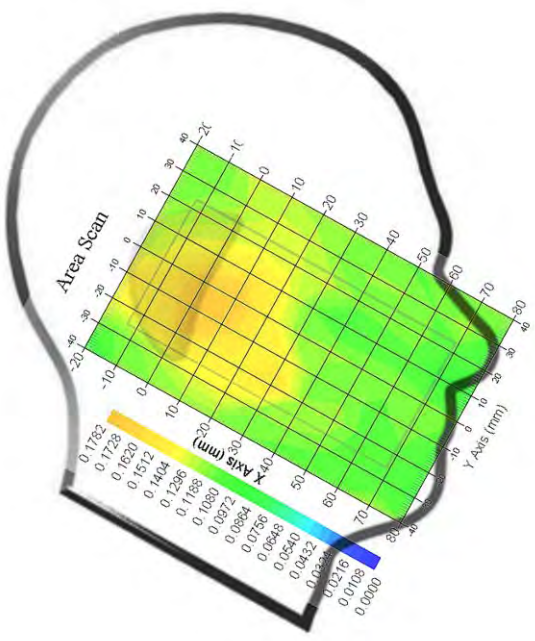
Measurement Data
Test mode : 1RB
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.165 W/kg
Power Drift-Finish : 0.166 W/kg
Power Drift (%) : 0.606

Tissue Data
Type : Head
Frequency : 1732.5 MHz
Epsilon : 40.65 F/m
Sigma : 1.37 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.4
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.118 W/kg
10 gram SAR value : 0.069 W/kg
Area Scan Peak SAR : 0.178 W/kg
Zoom Scan Peak SAR : 0.272 W/kg

Plot 19#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

LTE Band 4; Left Head Tilt (1720.0 MHz Mid Channel)

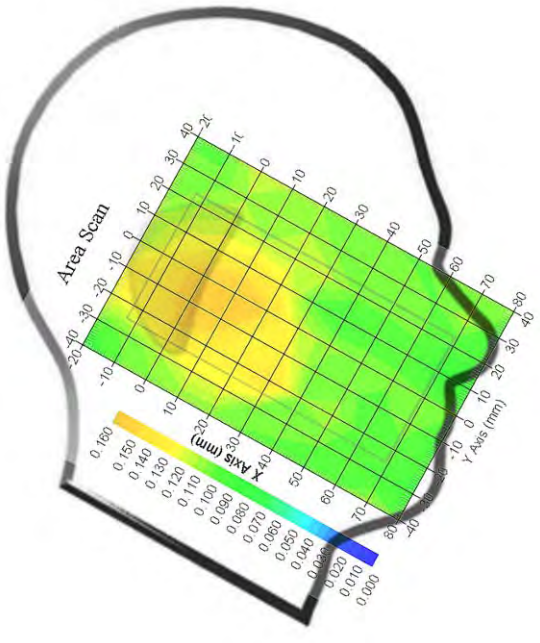
Measurement Data
Test mode : 50RB
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.143 W/kg
Power Drift-Finish : 0.144 W/kg
Power Drift (%) : 0.699

Tissue Data
Type : Head
Frequency : 1720.0 MHz
Epsilon : 40.25 F/m
Sigma : 1.37 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.4
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.125 W/kg
10 gram SAR value : 0.086 W/kg
Area Scan Peak SAR : 0.160 W/kg
Zoom Scan Peak SAR : 0.239 W/kg

Plot 20#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

LTE Band 4; Right Head Cheek (1732.5 MHz Mid Channel)

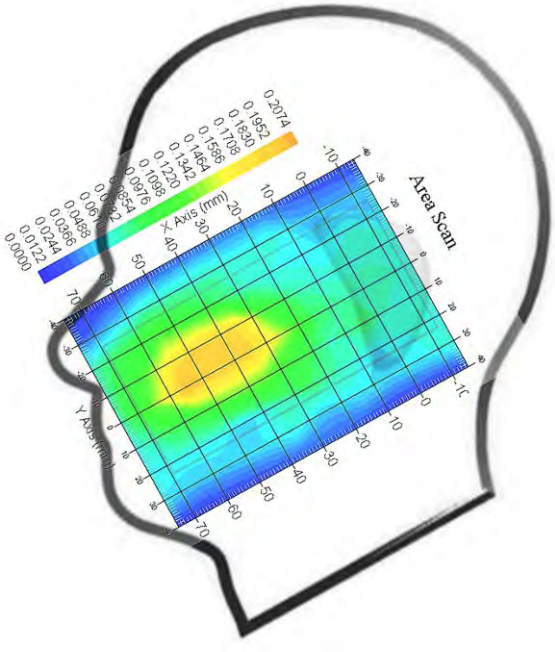
Measurement Data
Test mode : 1RB
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.066 W/kg
Power Drift-Finish : 0.067 W/kg
Power Drift (%) : 1.527

Tissue Data
Type : Head
Frequency : 1732.5 MHz
Epsilon : 40.65 F/m
Sigma : 1.37 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.4
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.178 W/kg
10 gram SAR value : 0.096 W/kg
Area Scan Peak SAR : 0.200 W/kg
Zoom Scan Peak SAR : 0.332 W/kg

Plot 21#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

LTE Band 4; Right Head Cheek (1720.0 MHz Mid Channel)

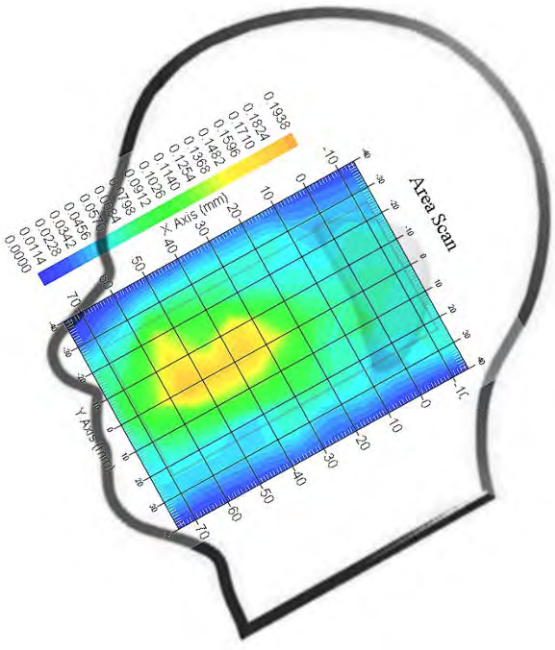
Measurement Data
Test mode : 50RB
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.052 W/kg
Power Drift-Finish : 0.053 W/kg
Power Drift (%) : 1.923

Tissue Data
Type : Head
Frequency : 1720.0 MHz
Epsilon : 40.25 F/m
Sigma : 1.37 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.4
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.144 W/kg
10 gram SAR value : 0.076 W/kg
Area Scan Peak SAR : 0.193 W/kg
Zoom Scan Peak SAR : 0.237 W/kg

Plot 22#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

LTE Band 4; Right Head Tilt (1732.5 MHz Mid Channel)

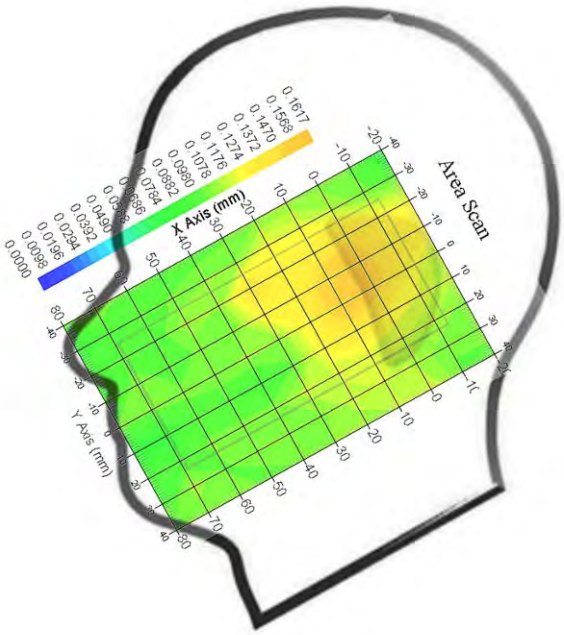
Measurement Data
Test mode : 1RB
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.143 W/kg
Power Drift-Finish : 0.142 W/kg
Power Drift (%) : -0.699

Tissue Data
Type : Head
Frequency : 1732.5 MHz
Epsilon : 40.65 F/m
Sigma : 1.37 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.4
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.105 W/kg
10 gram SAR value : 0.066 W/kg
Area Scan Peak SAR : 0.161 W/kg
Zoom Scan Peak SAR : 0.292 W/kg

Plot 23#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

LTE Band 4; Right Head Tilt (1720.0 MHz Mid Channel)

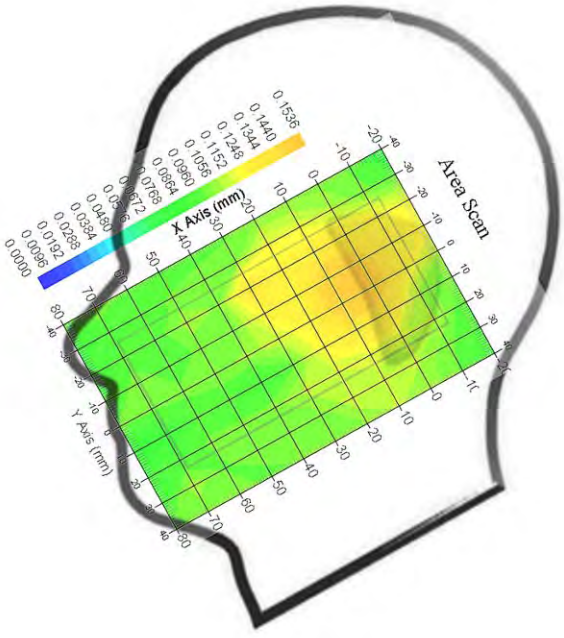
Measurement Data
Test mode : 50RB
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.125 W/kg
Power Drift-Finish : 0.127 W/kg
Power Drift (%) : 1.622

Tissue Data
Type : Head
Frequency : 1720.0 MHz
Epsilon : 40.25 F/m
Sigma : 1.37 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.4
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.098 W/kg
10 gram SAR value : 0.066 W/kg
Area Scan Peak SAR : 0.153 W/kg
Zoom Scan Peak SAR : 0.222 W/kg

Plot 24#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

802.11B; Left Head Cheek (2462 MHz High Channel)

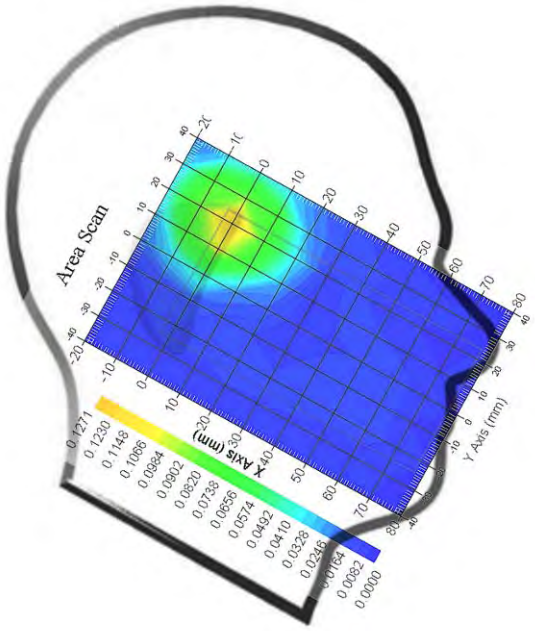
Measurement Data
Test mode : 802.11B
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.055 W/kg
Power Drift-Finish : 0.056 W/kg
Power Drift (%) : 1.815

Tissue Data
Type : Head
Frequency : 2462 MHz
Epsilon : 39.69 F/m
Sigma : 1.82 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 2450
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.122 W/kg
10 gram SAR value : 0.052 W/kg
Area Scan Peak SAR : 0.127 W/kg
Zoom Scan Peak SAR : 0.190 W/kg

Plot 25#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

802.11B; Left Head 15° Tilt (2462 MHz High Channel)

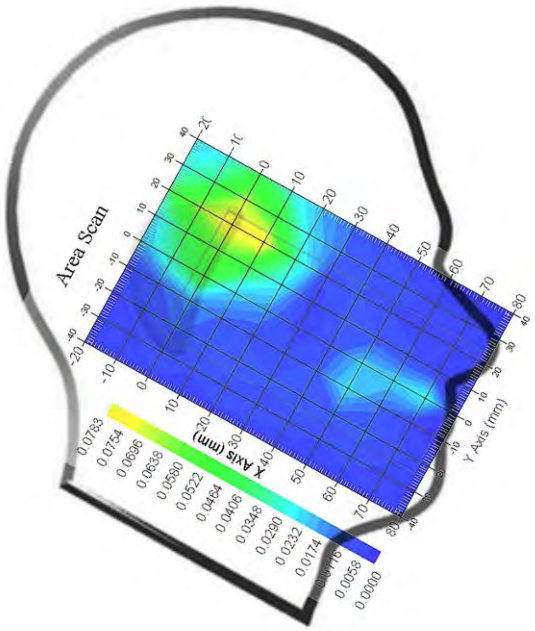
Measurement Data
Test mode : 802.11B
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.044 W/kg
Power Drift-Finish : 0.043 W/kg
Power Drift (%) : -2.238

Tissue Data
Type : Head
Frequency : 2462 MHz
Epsilon : 39.69 F/m
Sigma : 1.82 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 2450
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.077 W/kg
10 gram SAR value : 0.032 W/kg
Area Scan Peak SAR : 0.078 W/kg
Zoom Scan Peak SAR : 0.152 W/kg

Plot 26#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

802.11B; Right Head Cheek (2462 MHz High Channel)

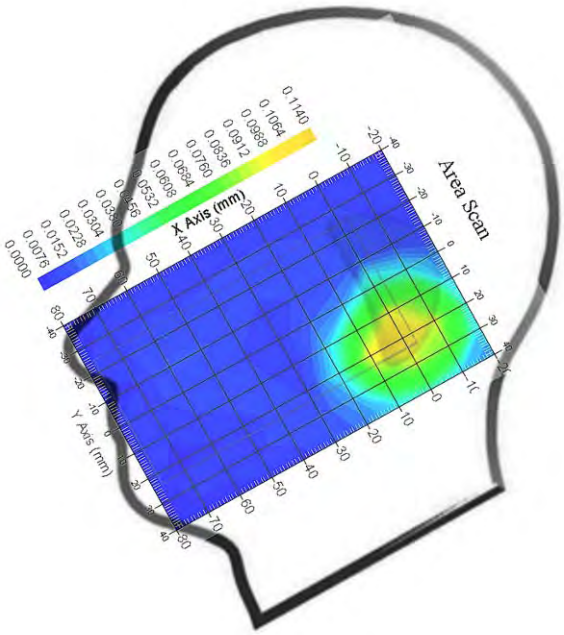
Measurement Data
Test mode : 802.11B
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.037 W/kg
Power Drift-Finish : 0.038 W/kg
Power Drift (%) : 2.703

Tissue Data
Type : Head
Frequency : 2462 MHz
Epsilon : 39.69 F/m
Sigma : 1.82 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 2450
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.109 W/kg
10 gram SAR value : 0.049 W/kg
Area Scan Peak SAR : 0.114 W/kg
Zoom Scan Peak SAR : 0.254 W/kg

Plot 27#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

802.11B; Right Head 15° Tilt (2462 MHz High Channel)

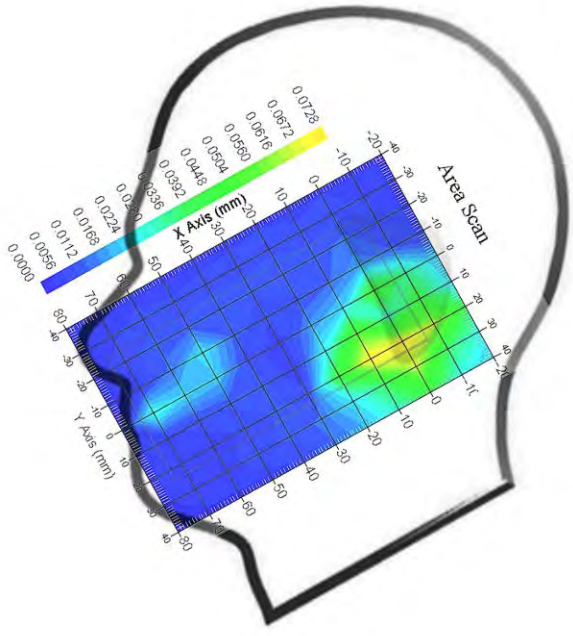
Measurement Data
Test mode : 802.11B
Crest Factor : 1
Scan Type : Complete
Area Scan : 11x9x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.028 W/kg
Power Drift-Finish : 0.027 W/kg
Power Drift (%) : -3.528

Tissue Data
Type : Head
Frequency : 2462 MHz
Epsilon : 39.69 F/m
Sigma : 1.82 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 2450
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.069 W/kg
10 gram SAR value : 0.029 W/kg
Area Scan Peak SAR : 0.072 W/kg
Zoom Scan Peak SAR : 0.098 W/kg

Plot 28#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-Back-Headset (836.6 MHz Middle Channel)

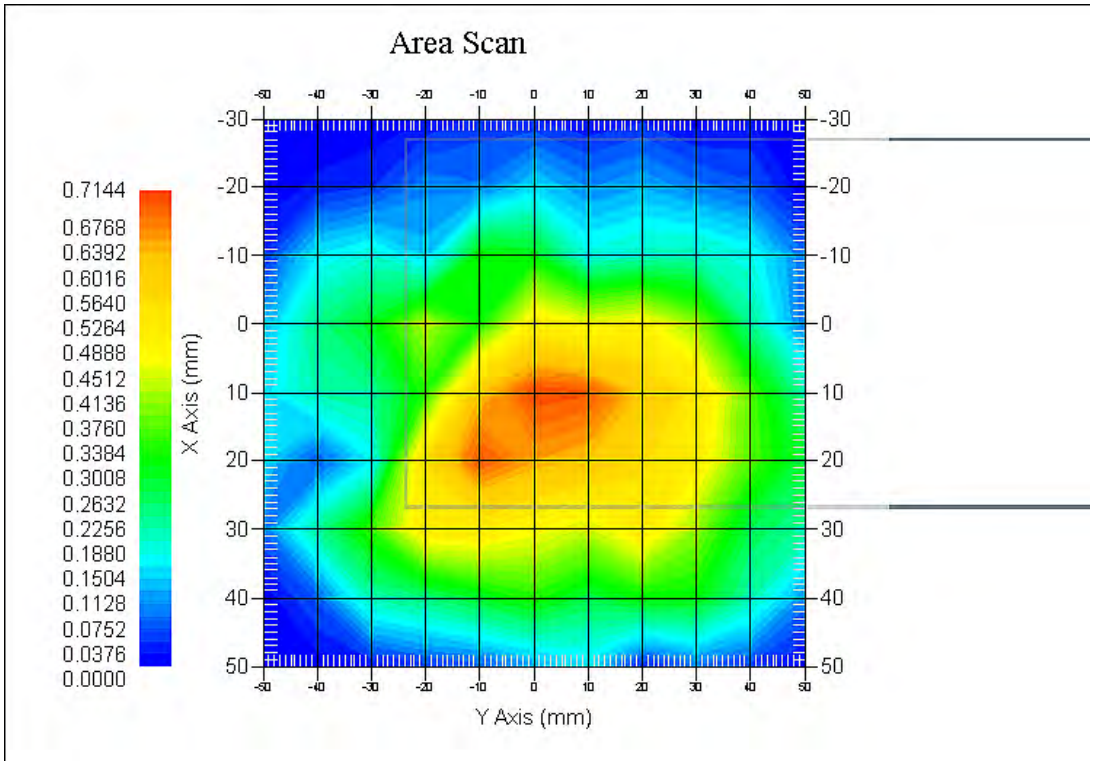
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type： : Complete
Area Scan : 9x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.495 W/kg
Power Drift-Finish : 0.499 W/kg
Power Drift (%) : 0.808

Tissue Data
Type : Body
Frequency : 836.6 MHz
Epsilon : 55.60 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 8
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.667 W/kg
10 gram SAR value : 0.423 W/kg
Area Scan Peak SAR : 0.714 W/kg
Zoom Scan Peak SAR : 0.841 W/kg

Plot 29#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Back (824.2 MHz Low Channel)

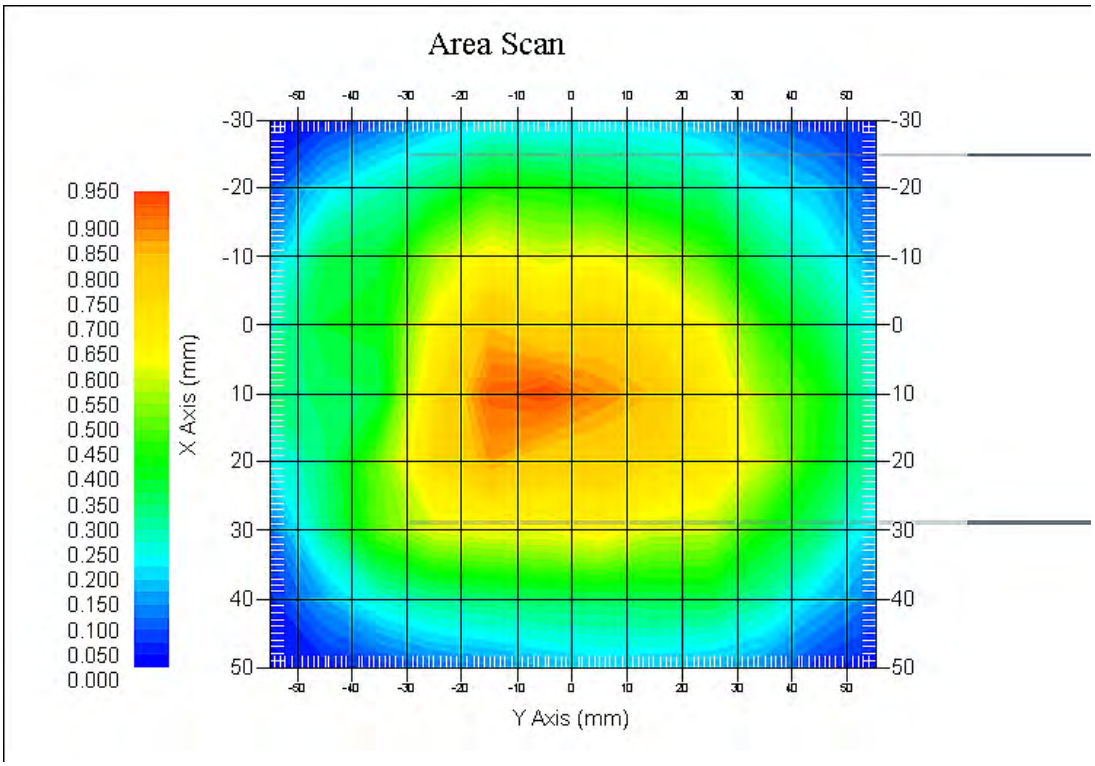
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type： : Complete
Area Scan : 9x12x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.769 W/kg
Power Drift-Finish : 0.775 W/kg
Power Drift (%) : 0.780

Tissue Data
Type : Body
Frequency : 824.2 MHz
Epsilon : 55.30 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 2
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.923 W/kg
10 gram SAR value : 0.652 W/kg
Area Scan Peak SAR : 0.950 W/kg
Zoom Scan Peak SAR : 1.251 W/kg

Plot 30#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Back (836.6 MHz Middle Channel)

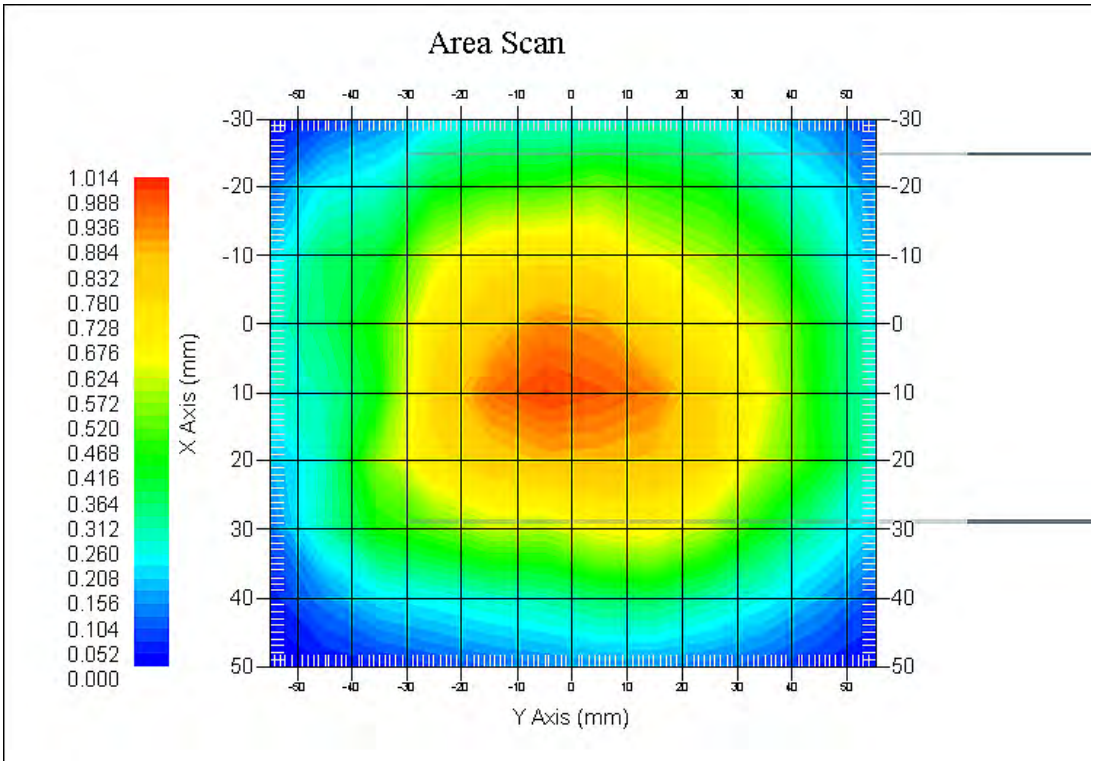
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type： : Complete
Area Scan : 9x12x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.875 W/kg
Power Drift-Finish : 0.877 W/kg
Power Drift (%) : 0.229

Tissue Data
Type : Body
Frequency : 836.6 MHz
Epsilon : 55.60 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 2
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.867 W/kg
10 gram SAR value : 0.613 W/kg
Area Scan Peak SAR : 1.014 W/kg
Zoom Scan Peak SAR : 1.751 W/kg

Plot 31#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Back (848.8 MHz High Channel)

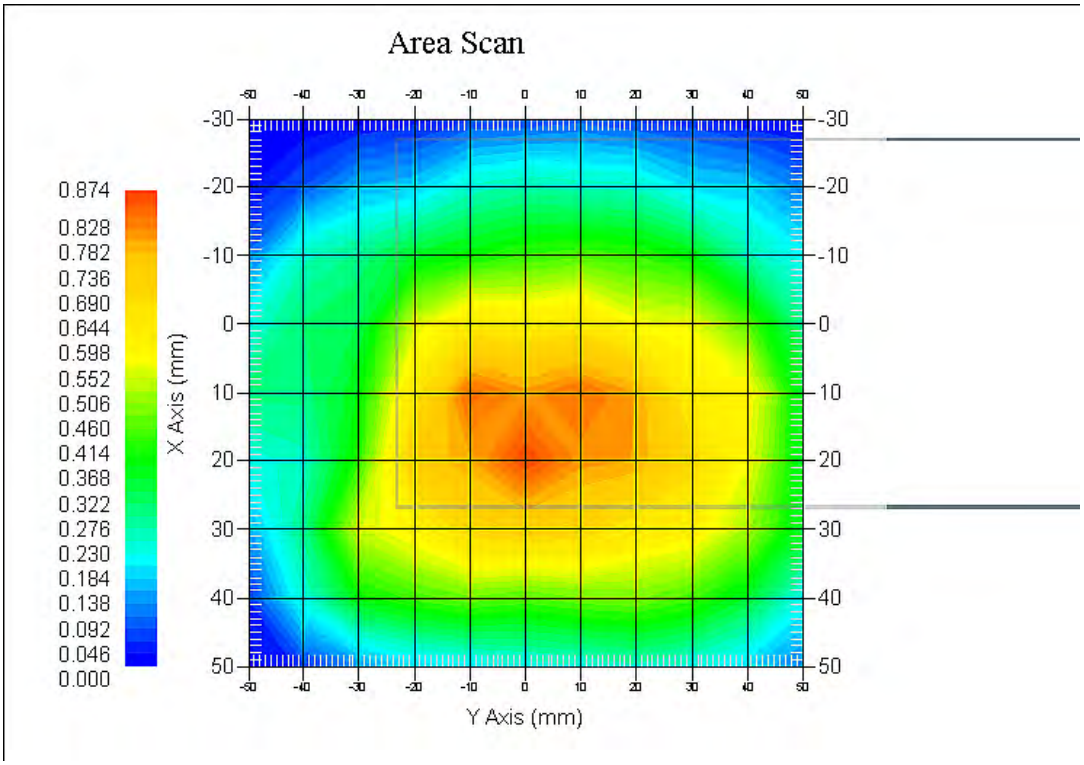
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type： : Complete
Area Scan : 8x12x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.733 W/kg
Power Drift-Finish : 0.738 W/kg
Power Drift (%) : 0.682

Tissue Data
Type : Body
Frequency : 848.8 MHz
Epsilon : 55.67 F/m
Sigma : 1.01 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 2
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.843 W/kg
10 gram SAR value : 0.627 W/kg
Area Scan Peak SAR : 0.858 W/kg
Zoom Scan Peak SAR : 0.992 W/kg

Plot 32#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Left (836.6 MHz Middle Channel)

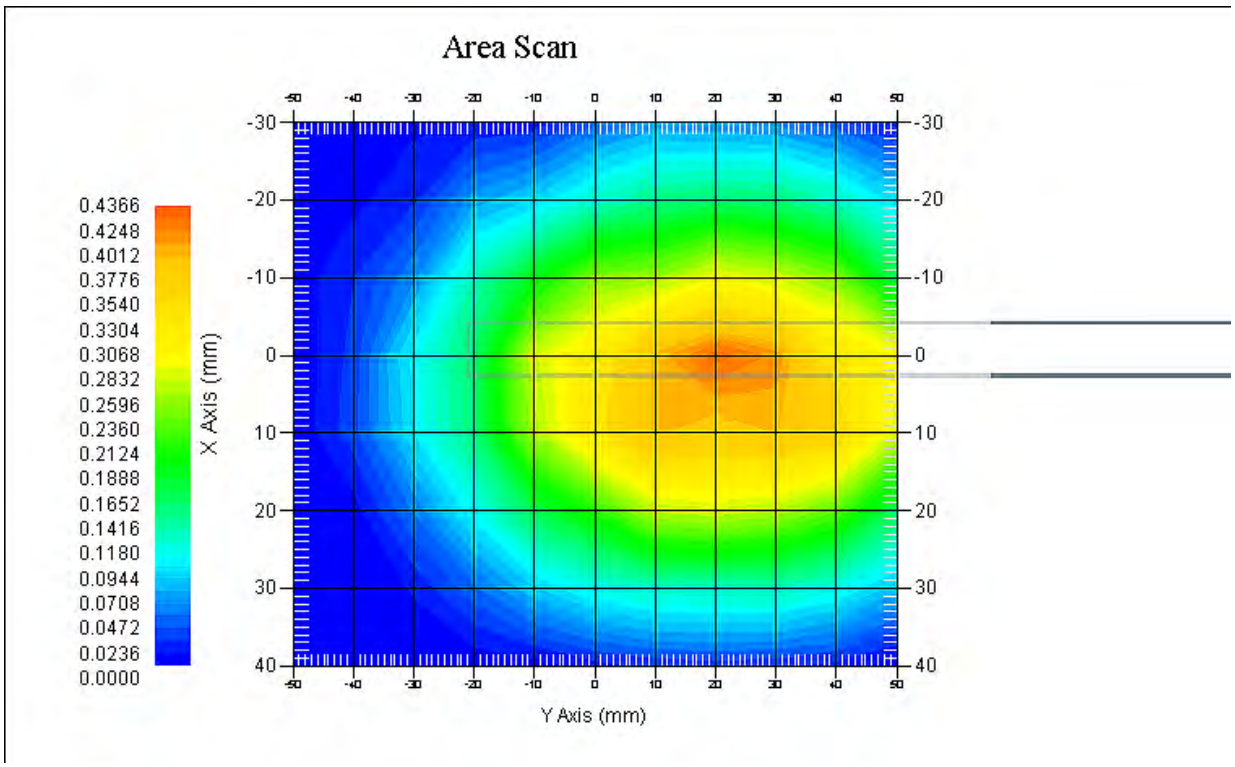
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type： : Complete
Area Scan : 8x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.335 W/kg
Power Drift-Finish : 0.337 W/kg
Power Drift (%) : 0.597

Tissue Data
Type : Body
Frequency : 836.6 MHz
Epsilon : 55.60 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 2
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.421 W/kg
10 gram SAR value : 0.263 W/kg
Area Scan Peak SAR : 0.436 W/kg
Zoom Scan Peak SAR : 0.787 W/kg

Plot 33#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Right (836.6 MHz Middle Channel)

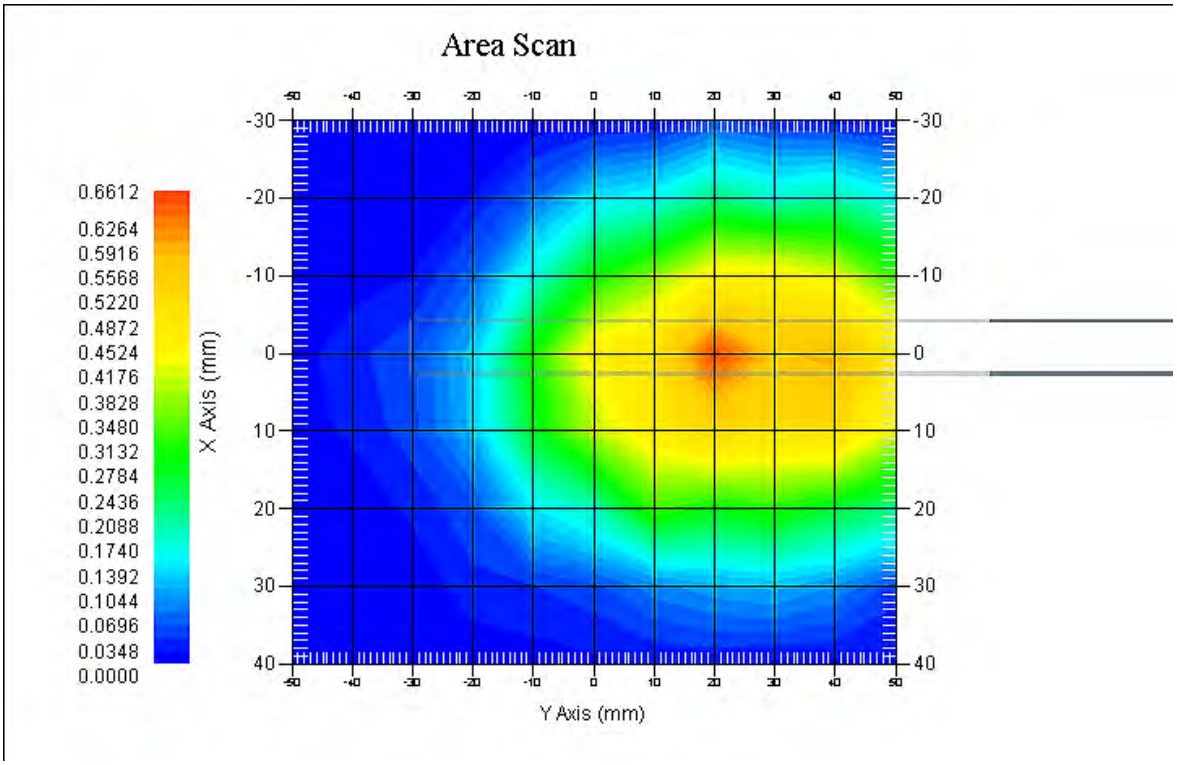
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type： : Complete
Area Scan : 8x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.475 W/kg
Power Drift-Finish : 0.477W/kg
Power Drift (%) : 0.421

Tissue Data
Type : Body
Frequency : 836.6 MHz
Epsilon : 55.60 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 2
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.652 W/kg
10 gram SAR value : 0.436 W/kg
Area Scan Peak SAR : 0.661 W/kg
Zoom Scan Peak SAR : 0.959 W/kg

Plot 34#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Bottom (836.6 MHz Middle Channel)

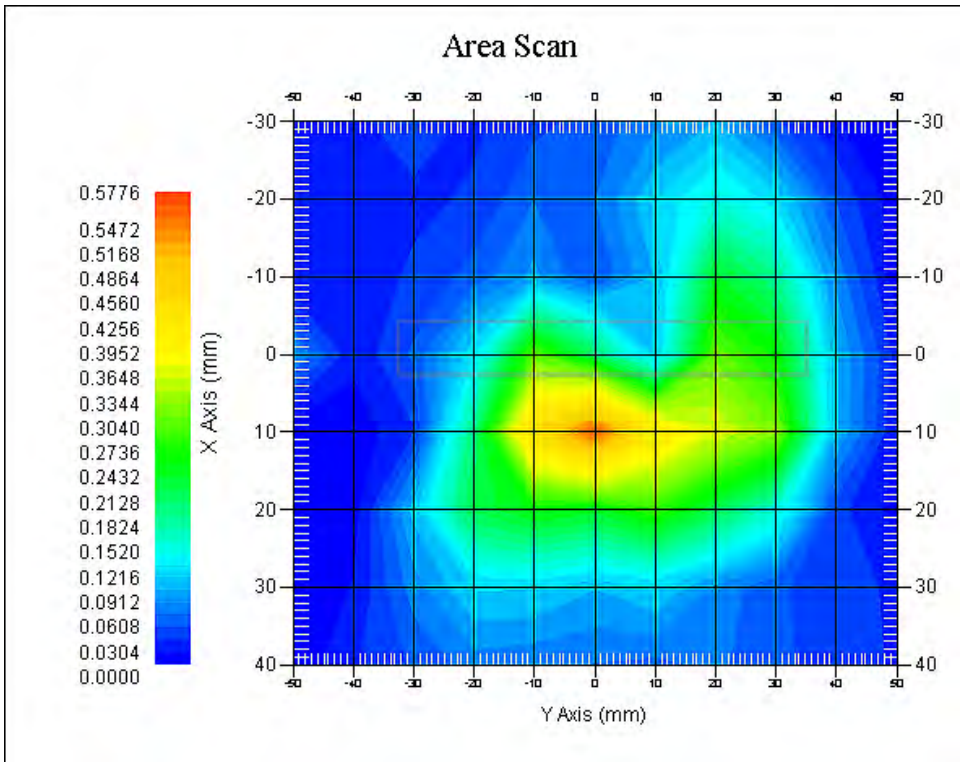
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type： : Complete
Area Scan : 8x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.195 W/kg
Power Drift-Finish : 0.196 W/kg
Power Drift (%) : 0.513

Tissue Data
Type : Body
Frequency : 836.6 MHz
Epsilon : 55.60 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 2
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.545 W/kg
10 gram SAR value : 0.371 W/kg
Area Scan Peak SAR : 0.559 W/kg
Zoom Scan Peak SAR : 0.875 W/kg

Plot 35#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-Back-Headset (1880.0 MHz Middle Channel)

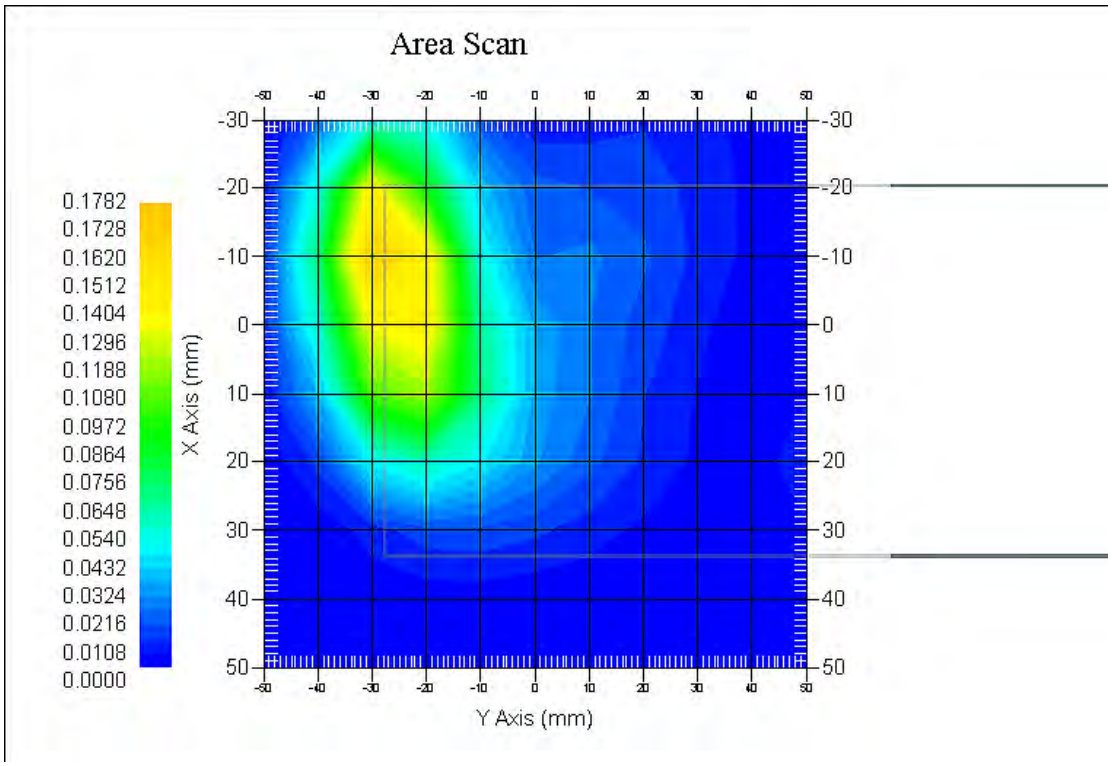
Measurement Data
Test mode : GSM
Crest Factor : 8
Scan Type : Complete
Area Scan : 9x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.043 W/kg
Power Drift-Finish : 0.042 W/kg
Power Drift (%) : -2.326

Tissue Data
Type : Body
Frequency : 1880.0 MHz
Epsilon : 53.72 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 8
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.175 W/kg
10 gram SAR value : 0.094 W/kg
Area Scan Peak SAR : 0.178 W/kg
Zoom Scan Peak SAR : 0.291 W/kg

Plot 36#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Back (1880.0 MHz Middle Channel)

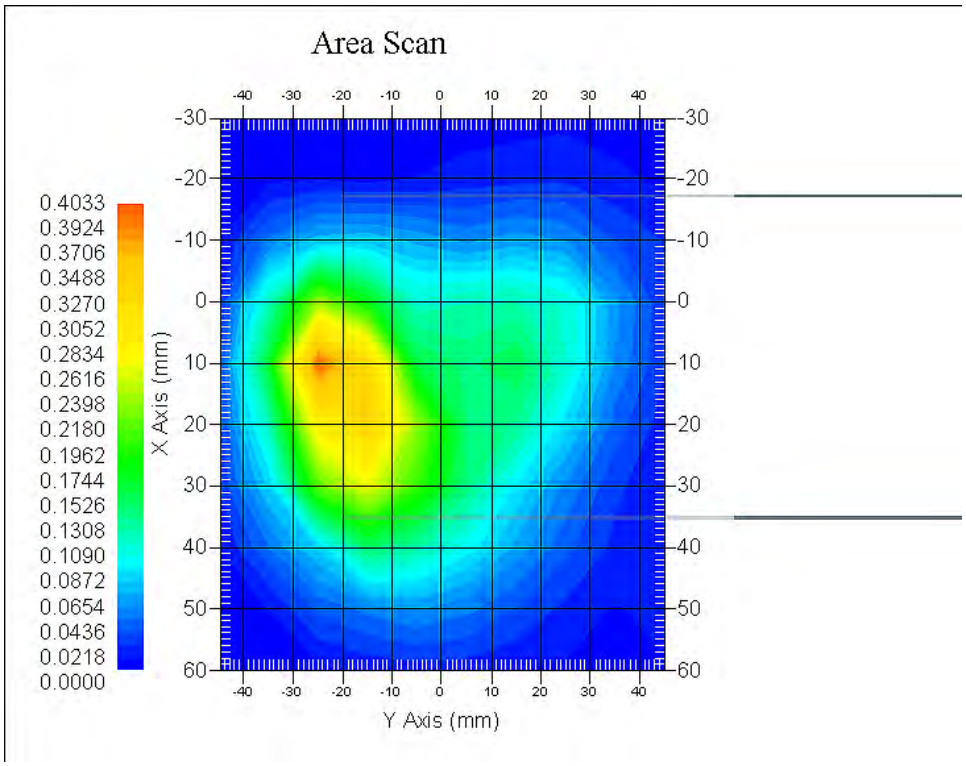
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type : Complete
Area Scan : 10x10x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.113 W/kg
Power Drift-Finish : 0.118 W/kg
Power Drift (%) : 4.425

Tissue Data
Type : Body
Frequency : 1880.0 MHz
Epsilon : 52.72 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 2
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.375 W/kg
10 gram SAR value : 0.289 W/kg
Area Scan Peak SAR : 0.403 W/kg
Zoom Scan Peak SAR : 0.721 W/kg

Plot 37#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Left (1880.0 MHz Middle Channel)

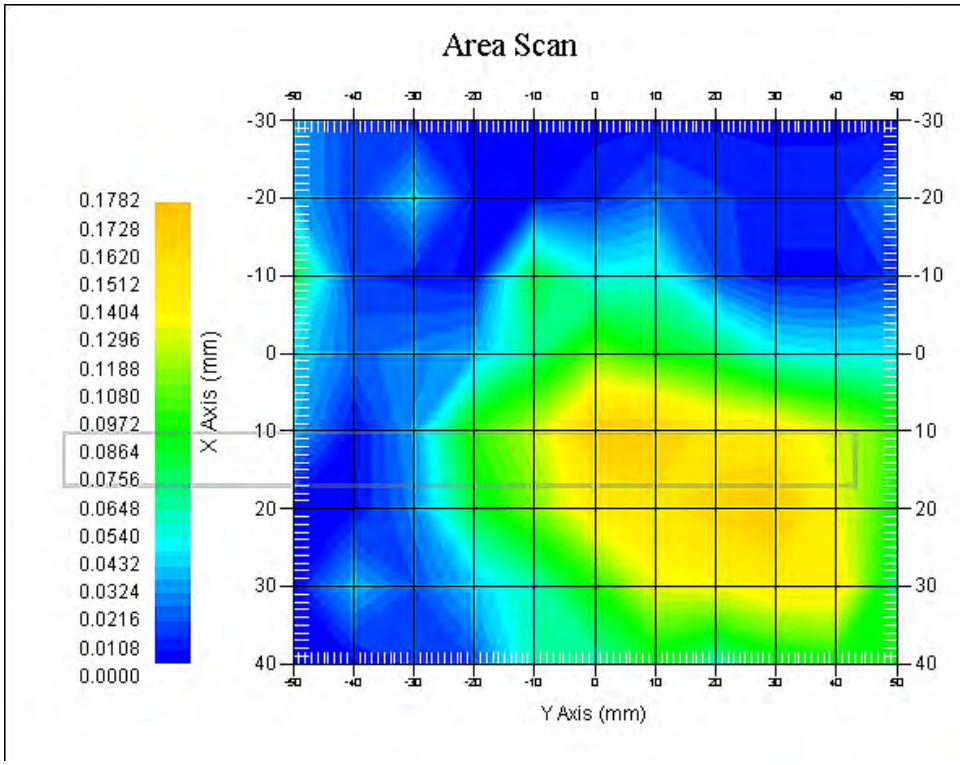
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type : Complete
Area Scan : 8x11x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.118 W/kg
Power Drift-Finish : 0.116W/kg
Power Drift (%) : -1.695

Tissue Data
Type : Body
Frequency : 1880.0 MHz
Epsilon : 52.72 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 2
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.172 W/kg
10 gram SAR value : 0.115 W/kg
Area Scan Peak SAR : 0.178 W/kg
Zoom Scan Peak SAR : 0.325 W/kg

Plot 38#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Right (1880.0 MHz Middle Channel)

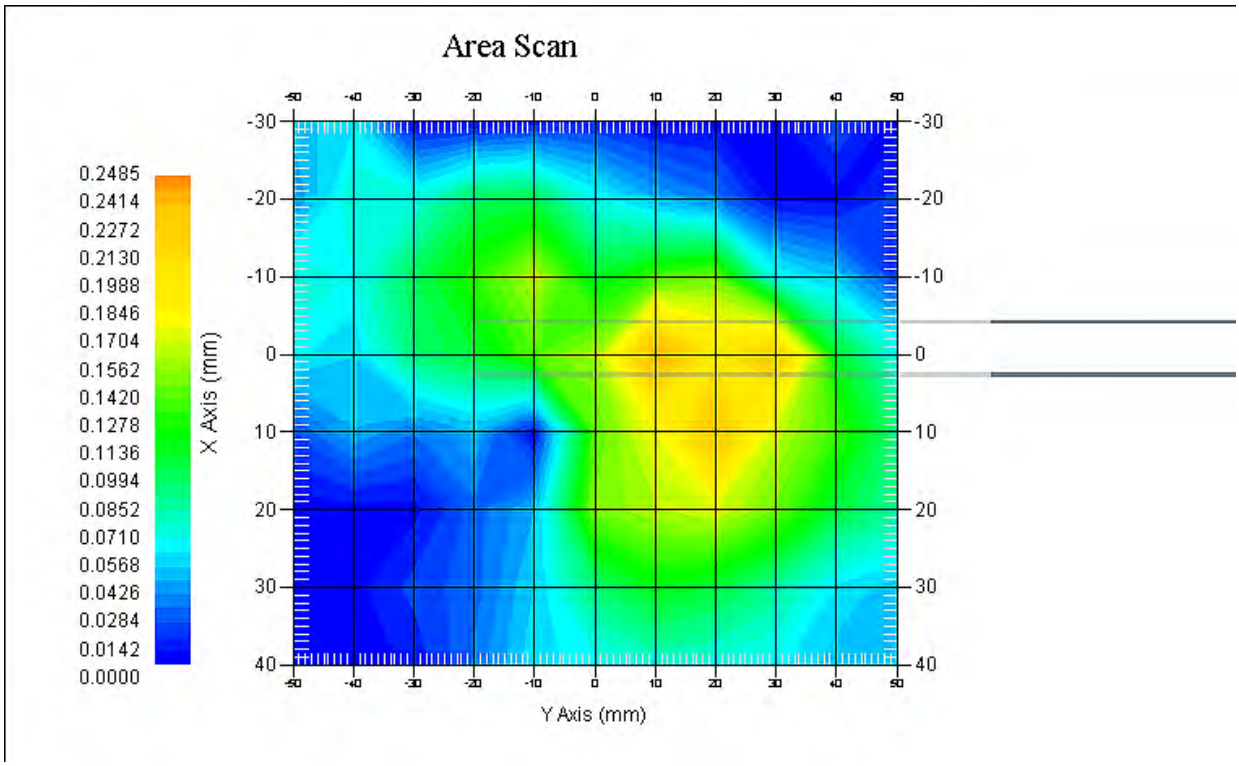
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type : Complete
Area Scan : 8x11x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.175 W/kg
Power Drift-Finish : 0.176 W/kg
Power Drift (%) : 0.571

Tissue Data
Type : Body
Frequency : 1880.0 MHz
Epsilon : 52.72 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 2
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.239 W/kg
10 gram SAR value : 0.133 W/kg
Area Scan Peak SAR : 0.248 W/kg
Zoom Scan Peak SAR : 0.369 W/kg

Plot 39#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

Body-worn-Bottom (1880.0 MHz Middle Channel)

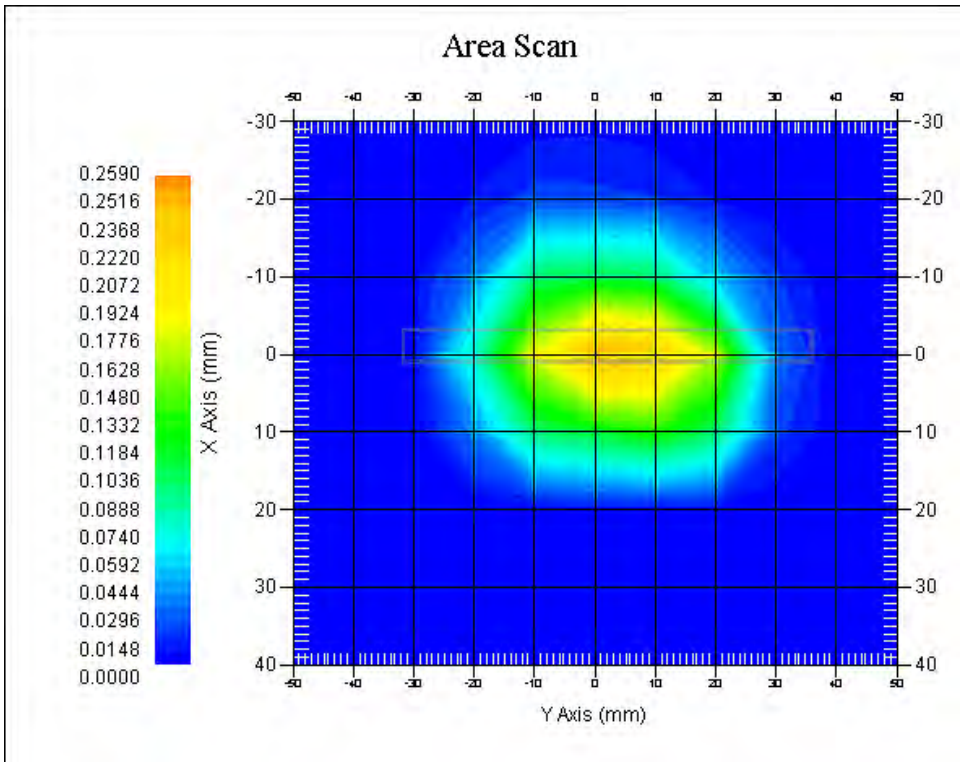
Measurement Data
Test mode : GPRS
Crest Factor : 2
Scan Type : Complete
Area Scan : 8x11x1 : Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.251 W/kg
Power Drift-Finish : 0.255 W/kg
Power Drift (%) : 1.594

Tissue Data
Type : Body
Frequency : 1880.0 MHz
Epsilon : 52.72 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 2
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.247 W/kg
10 gram SAR value : 0.116 W/kg
Area Scan Peak SAR : 0.259 W/kg
Zoom Scan Peak SAR : 0.397 W/kg

Plot 40#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA850; Body-Worn-Back (836.6MHz Middle Channel)

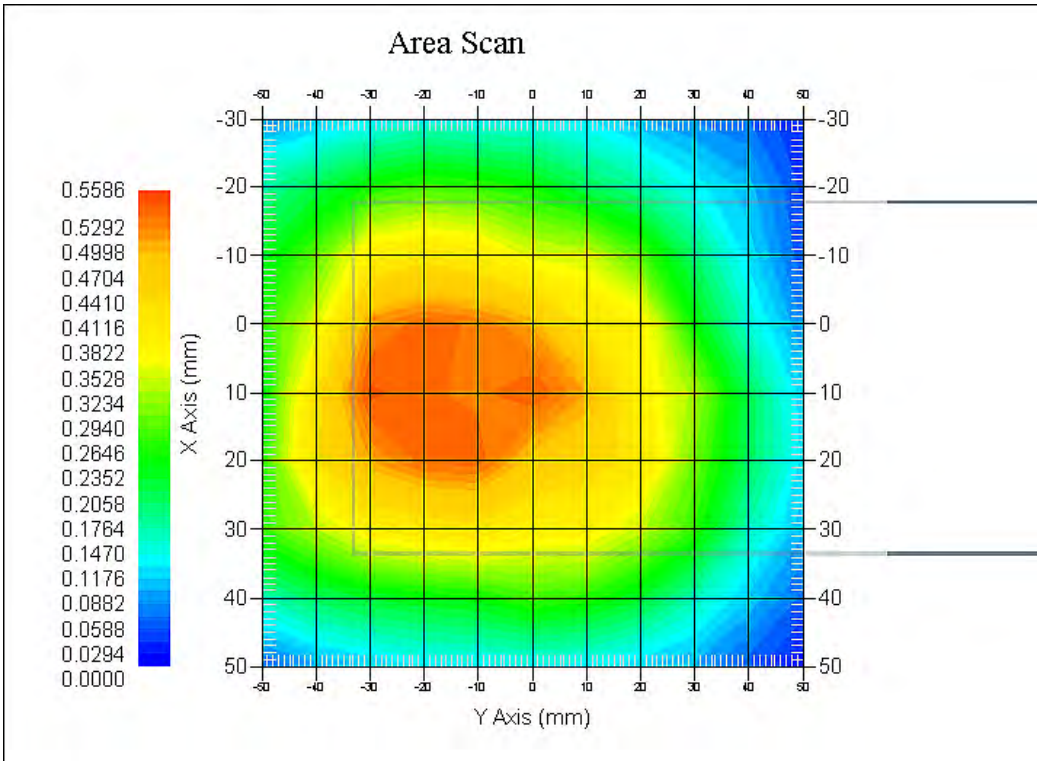
Measurement Data
Test mode : WCDMA850
Crest Factor : 1
Scan Type : Complete
Area Scan : 9x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7: Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.457 W/kg
Power Drift-Finish : 0.455 W/kg
Power Drift (%) : -0.438

Tissue Data
Type : Body
Frequency : 836.6 MHz
Epsilon : 55.60 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.497 W/kg
10 gram SAR value : 0.335 W/kg
Area Scan Peak SAR : 0.558 W/kg
Zoom Scan Peak SAR : 0.853 W/kg

Plot 41#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA850; Body-Worn-Left (836.6MHz Middle Channel)

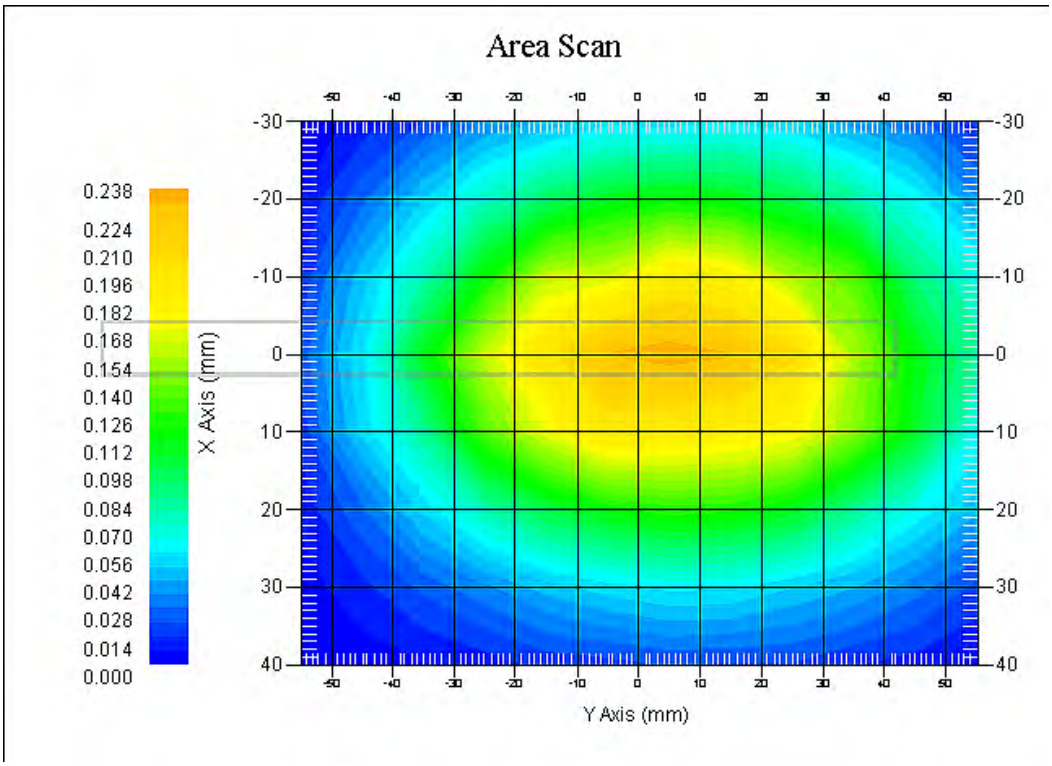
Measurement Data
Test mode : WCDMA850
Crest Factor : 1
Scan Type : Complete
Area Scan : 8x12x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7: Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.227 W/kg
Power Drift-Finish : 0.228 W/kg
Power Drift (%) : 0.441

Tissue Data
Type : Body
Frequency : 836.6 MHz
Epsilon : 55.60 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.225 W/kg
10 gram SAR value : 0.163 W/kg
Area Scan Peak SAR : 0.238 W/kg
Zoom Scan Peak SAR : 0.357 W/kg

Plot 42#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA850; Body-Worn-Right (836.6MHz Middle Channel)

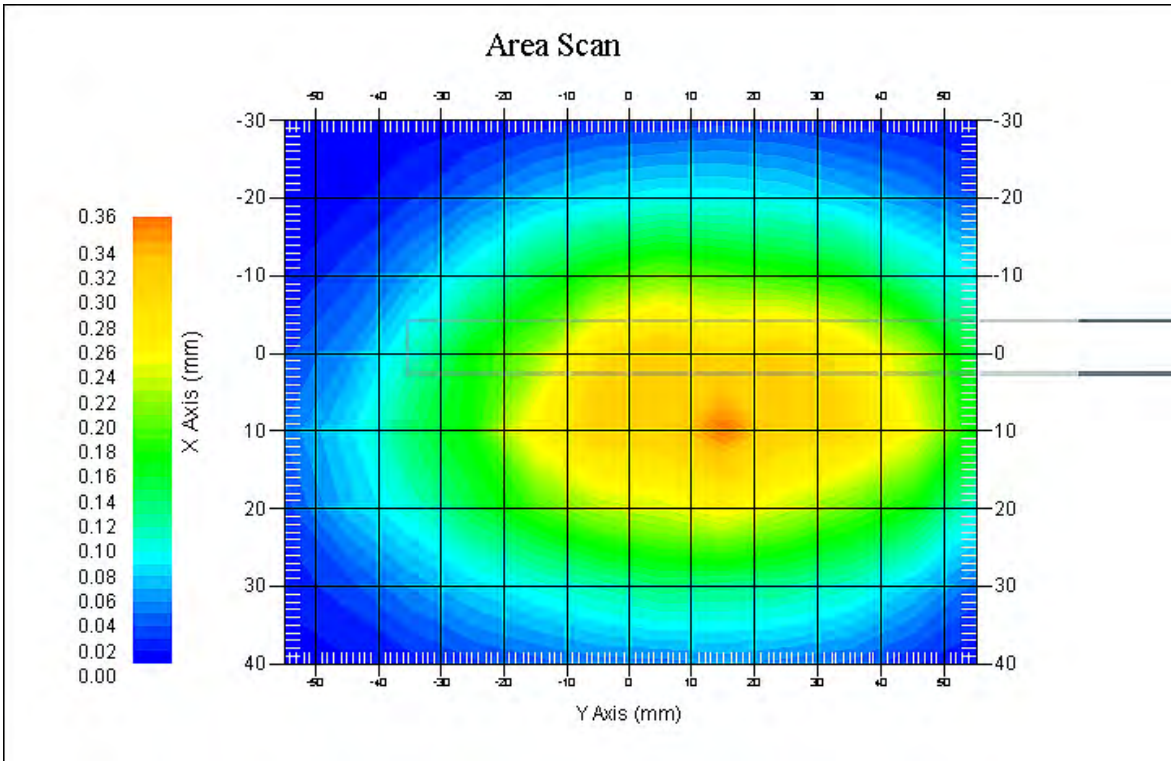
Measurement Data
Test mode : WCDMA850
Crest Factor : 1
Scan Type : Complete
Area Scan : 8x12x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7: Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.275 W/kg
Power Drift-Finish : 0.278 W/kg
Power Drift (%) : 1.095

Tissue Data
Type : Body
Frequency : 836.6 MHz
Epsilon : 55.60 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.345 W/kg
10 gram SAR value : 0.209 W/kg
Area Scan Peak SAR : 0.360 W/kg
Zoom Scan Peak SAR : 0.565 W/kg

Plot 43#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA850; Body-Worn-Bottom (836.6MHz Middle Channel)

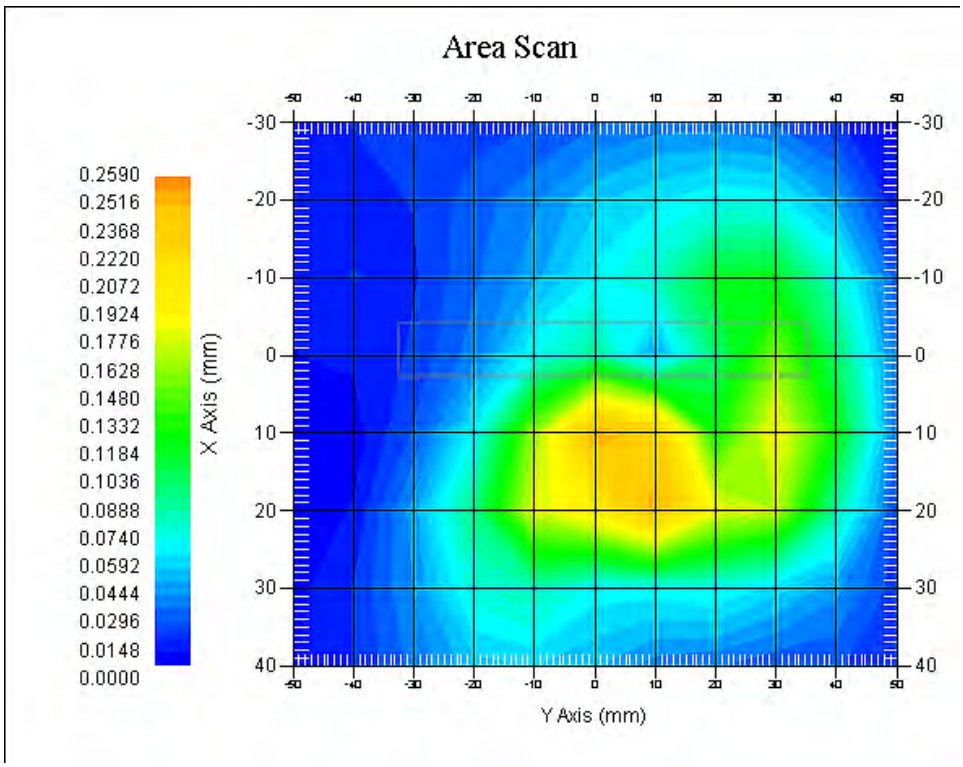
Measurement Data
Test mode : WCDMA850
Crest Factor : 1
Scan Type : Complete
Area Scan : 8x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7: Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.088 W/kg
Power Drift-Finish : 0.087 W/kg
Power Drift (%) : -1.136

Tissue Data
Type : Body
Frequency : 836.6 MHz
Epsilon : 55.60 F/m
Sigma : 0.99 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 835
Duty Cycle Factor : 1
Conversion Factor : 5.9
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.248 W/kg
10 gram SAR value : 0.126 W/kg
Area Scan Peak SAR : 0.259 W/kg
Zoom Scan Peak SAR : 0.650 W/kg

Plot 44#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA1900; Body-Worn-Back (1880.0 MHz Middle Channel)

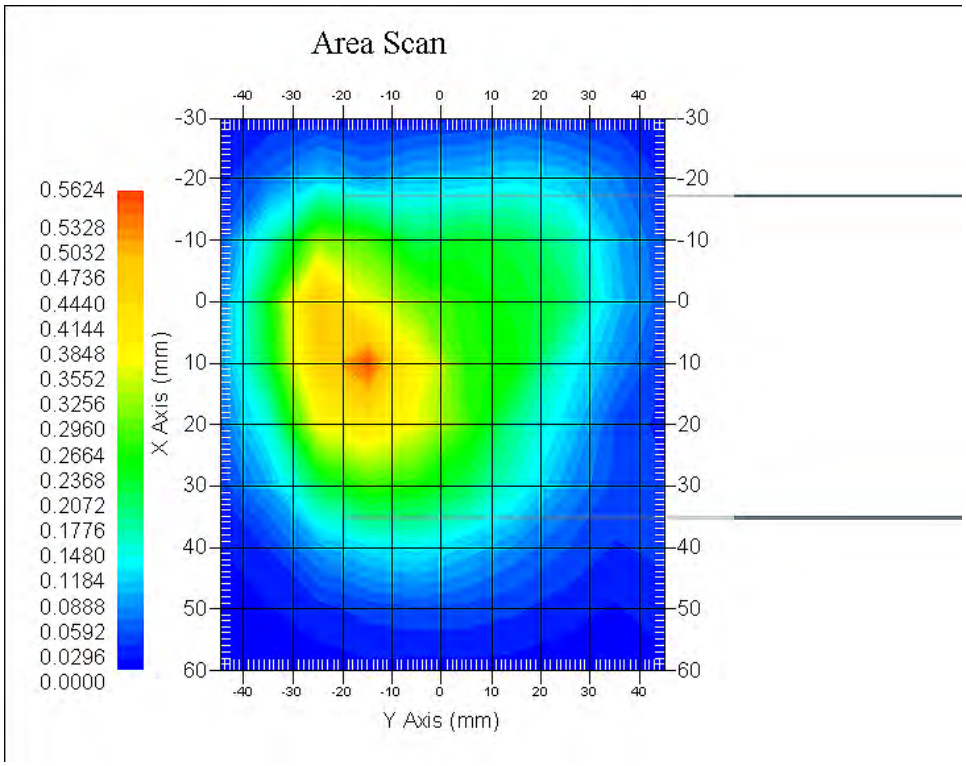
Measurement Data
Test mode : WCDMA1900
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x10x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7: Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.275 W/kg
Power Drift-Finish : 0.274 W/kg
Power Drift (%) : -0.364

Tissue Data
Type : Body
Frequency : 1880.0 MHz
Epsilon : 53.72 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.495 W/kg
10 gram SAR value : 0.259 W/kg
Area Scan Peak SAR : 0.562 W/kg
Zoom Scan Peak SAR : 0.685 W/kg

Plot 45#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA1900; Body-Worn-Left (1880.0 MHz Middle Channel)

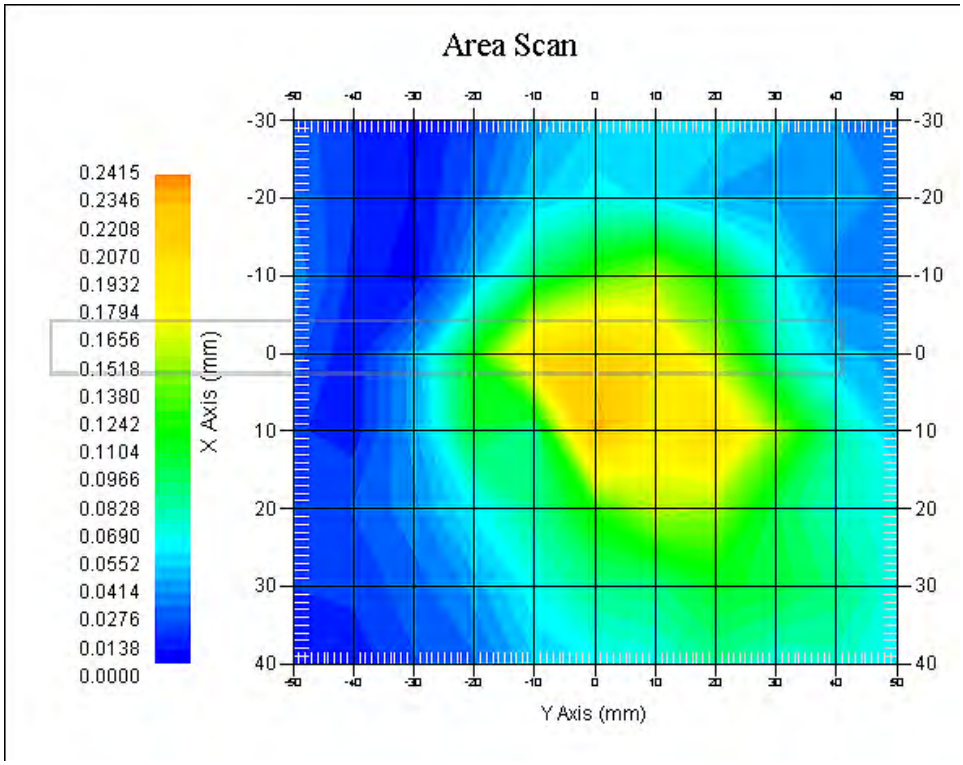
Measurement Data
Test mode : WCDMA1900
Crest Factor : 1
Scan Type : Complete
Area Scan : 8x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7: Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.212 W/kg
Power Drift-Finish : 0.215 W/kg
Power Drift (%) : 1.415

Tissue Data
Type : Body
Frequency : 1880.0 MHz
Epsilon : 53.72 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.237 W/kg
10 gram SAR value : 0.153 W/kg
Area Scan Peak SAR : 0.241 W/kg
Zoom Scan Peak SAR : 0.537 W/kg

Plot 46#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA1900; Body-Worn-Right (1880.0 MHz Middle Channel)

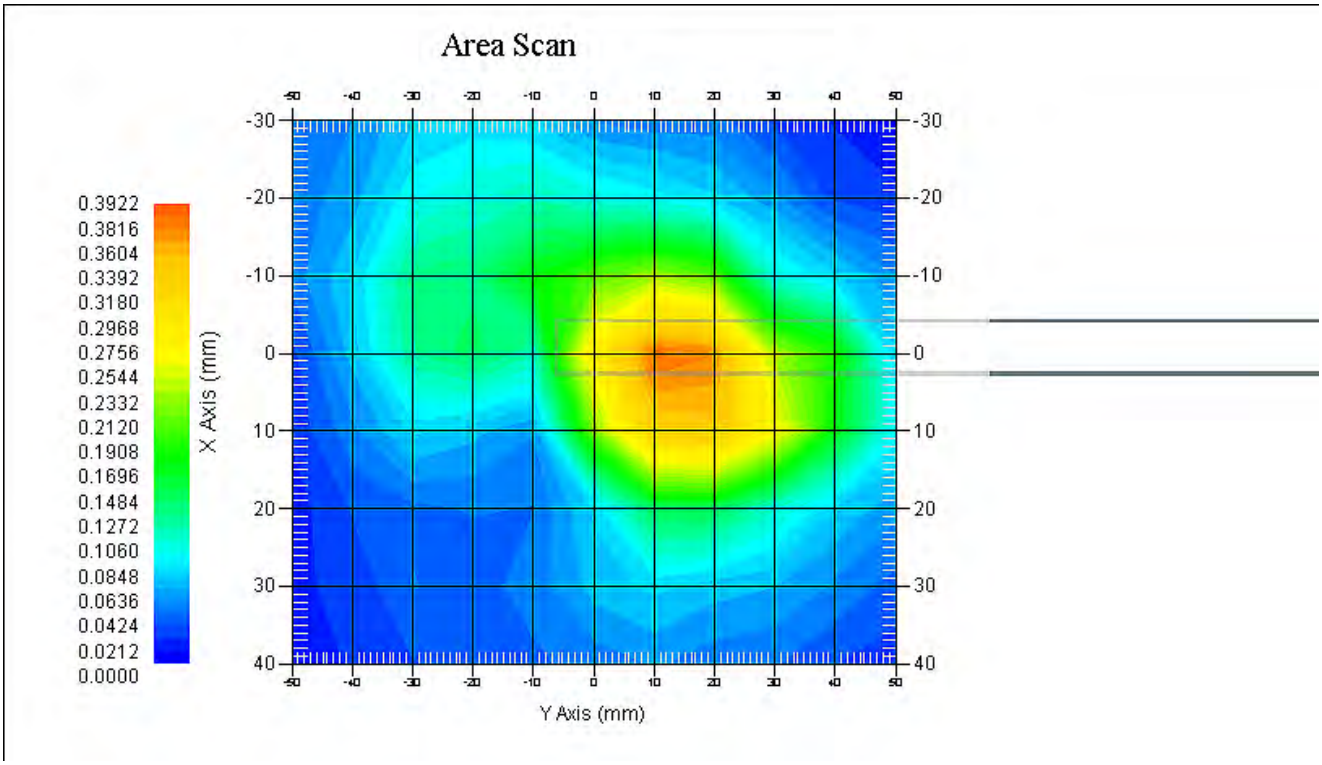
Measurement Data
Test mode : WCDMA1900
Crest Factor : 1
Scan Type : Complete
Area Scan : 8x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7: Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.287 W/kg
Power Drift-Finish : 0.288 W/kg
Power Drift (%) : 0.348

Tissue Data
Type : Body
Frequency : 1880.0 MHz
Epsilon : 53.72 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.347 W/kg
10 gram SAR value : 0.189 W/kg
Area Scan Peak SAR : 0.392 W/kg
Zoom Scan Peak SAR : 0.570 W/kg

Plot 47#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

WCDMA1900; Body-Worn-Bottom (1880.0 MHz Middle Channel)

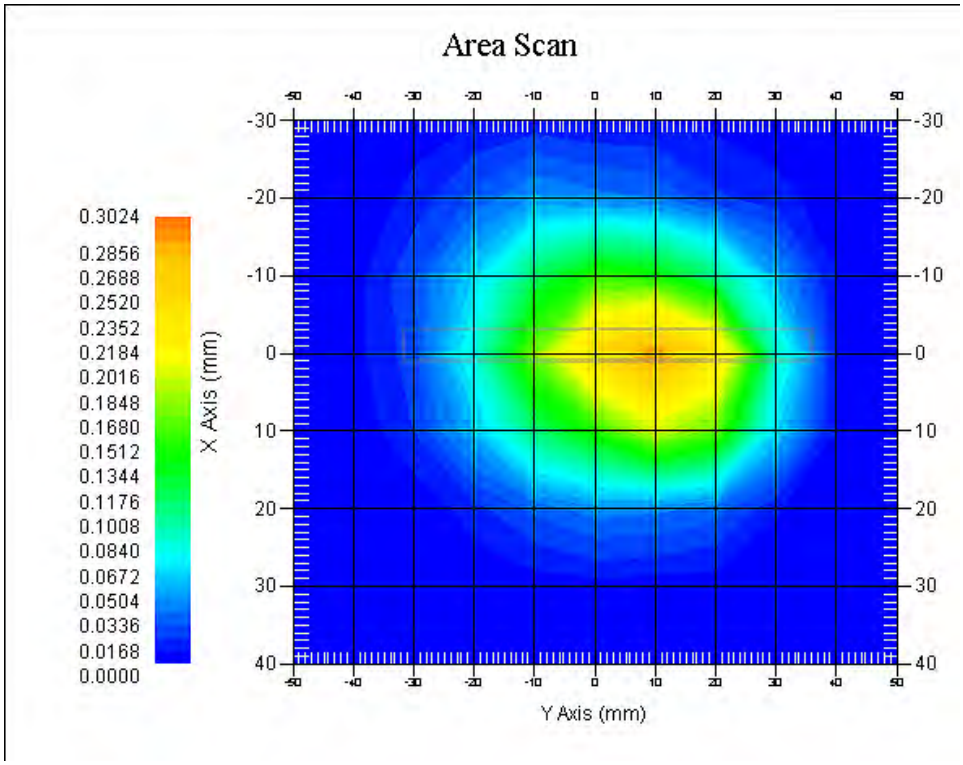
Measurement Data
Test mode : WCDMA1900
Crest Factor : 1
Scan Type : Complete
Area Scan : 8x11x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 7x7x7: Measurement x=5mm, y=5mm, z=5mm
Power Drift-Start : 0.253 W/kg
Power Drift-Finish : 0.255 W/kg
Power Drift (%) : 0.791

Tissue Data
Type : Body
Frequency : 1880.0 MHz
Epsilon : 53.72 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1900
Duty Cycle Factor : 1
Conversion Factor : 4.8
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.282 W/kg
10 gram SAR value : 0.140 W/kg
Area Scan Peak SAR : 0.302 W/kg
Zoom Scan Peak SAR : 0.427 W/kg

Plot 48#



Test Laboratory: Bay Area Compliance Lab Corp. (Shenzhen)

LTE Band 4; Body-Back (1720.0 MHz Low Channel)

Measurement Data
Test mode : 1RB
Crest Factor : 1
Scan Type : Complete
Area Scan : 10x10x1: Measurement x=10mm, y=10mm, z=4mm
Zoom Scan : 5x5x7: Measurement x=8mm, y=8mm, z=5mm
Power Drift-Start : 0.612 W/kg
Power Drift-Finish : 0.618 W/kg
Power Drift (%) : 0.980

Tissue Data
Type : Body
Frequency : 1720.0 MHz
Epsilon : 53.93 F/m
Sigma : 1.53 S/m
Density : 1000.00 kg/cu. m

Probe Data
Serial No. : 500-00283
Frequency Band : 1750
Duty Cycle Factor : 1
Conversion Factor : 5.3
Probe Sensitivity : 1.20 1.20 1.20 µV/(V/m)2
Compression Point : 95.00 mV
Offset : 1.56 mm

1 gram SAR value : 0.753 W/kg
10 gram SAR value : 0.507 W/kg
Area Scan Peak SAR : 0.760 W/kg
Zoom Scan Peak SAR : 0.994 W/kg

Plot 49#