Report NO.: TS201409006 Page 1 / 121

### **FCC SAR EVALUATION REPORT**

For

SISCOSUN GROUP, LLC
315 FIFTH AVENUE, SUITE 1005 NEW YORK, NY 10016,
UNITED STATES OF AMERICA

Product Name: Table PC

Model No.: PT-701A, PT-701B, PT-701C, PT-701D,

PT-701F, PT-701G, Q7 3G

Date of Receipt: 12<sup>th</sup> Sep. 2014

Date of Test: 12<sup>th</sup> Sep. 2014

Issued Date: 14th Sep. 2014

Report No.:TS201409006

Report Version: V1.0

#### Issue By

Shenzhen Sunway Communication CO.,LTD Testing Center

1/F,BuildingA, SDG Info Port, KefengRoad, Hi-Tech Park, Nanshan District,
Shenzhen, Guangdong, China 518104,

**Note:** The test results relate only to the samples tested. This report shall not be reproduced in full, without the written approval of SUNWAY Testing Center.



Report NO.: TS201409006 Page 2 / 121

# **SAR Evaluation compliance**

Product Name:	Table PC		
Brand Name:	-		
Model Name:	PT-701A, PT-701B, PT-701C, PT-701D, PT-701F, PT-701G, Q7 3G		
Applicant:	SISCOSUN GROUP, LLC		
Address:	315 FIFTH AVENUE, SUITE 1005 NEW YORK, NY 10016, UNITED STATES OF AMERICA		
Manufacturer:	Potato Technology International Co.,Ltd		
Address:	3F/Block A1,JuYin industry Zone, ShangLiLang GanLl Road,		
	BuJi street, LongGang District, Shenzhen, China		
Applicable	IEEE Std. 1528-2013,FCC 47 CFR§2.1093		
Standard:	KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r03		
	KDB 447498 D01 General RF Exposure Guidance v05r02		
	KDB 941225 D01 SAR test for 3G devices v02		
	KDB 941225 D03 SAR Test Reduction GSM GPRS EDGE vo1		
Test Result:	Max. SAR Report:		
	Body (1g): 0.864 W/kg		
	Head(1g): 0.660 W/kg		
Performed Date:	12 <sup>th</sup> ~13 <sup>th</sup> Sep. 2014		
Test Engineer:	<u>Li.Zhao</u> 14 <sup>th</sup> Sep. 2014		
Reviewed By	14th Sep. 2014		
Performed	Shenzhen Sunway Communication CO.,LTD Testing Center		
Location:	1/F,BuildingA,SDG Info Port, KefengRoad,Hi-Tech Park, Nanshan District,Shenzhen,Guangdong, China 518104 Tel: +86-755- 36615880		
	Fax: +86-755- 86525532		



Report NO.: TS201409006 Page 3 / 121

### **TABLE OF CONTENS**

1. General Information:	4
1.1 EUT Description:	4
1.2 Test Environment:	6
2. SAR Measurement System:	7
2.1 Dasy4 System Description:	7
3. System Components:	8
4. Tissue Simulating Liquid	10
4.1 The composition of the tissue simulating liquid:	10
4.2 Tissue Calibration Result:	10
4.3 Tissue Dielectric Parameters for Head and Body Phantoms:	11
5. SAR System Validation	12
5.1 Validation System:	12
5.2 Validation Dipoles:	12
5.3 Validation Result:	13
6. SAR Evaluation Procedures:	14
7. SAR Exposure Limits	15
8. Measurement Uncertainty:	16
9. Conducted Power Measurement:	18
10. Test photos and results:	23
10.1 DUT photos:	23
10.2 Setup photos	25
10.3 SAR result summary:	30
10.4 Co-located SAR	31
11. Equipment List:	34
Appendix A. System validation plots:	35
Appendix B. SAR Test plots:	39
Appendix C. Probe Calibration Data:	45
Appendix D. DAE Calibration Data:	45
Appendix E. Dipole Calibration Data:	45



Report NO.: TS201409006 Page 4 / 121

### 1. General Information:

### 1.1 EUT Description:

EUT Information			
Product Name	Table PC		
Brand Name	-		
Model Name	PT-701A, PT-701B, PT-701C, PT-701D,		
	PT-701F, PT-701G, Q7 3G		
Device Category	Protable		
Antenna Type	Integral Antenna		
Headset	1		
Battery	Type: Rechargeable lithium-ion battery 3.7V		
Dimensions (L*W*H):	189mm (L)× 109mm (W)×10mm (H)		
Weight:	-		
Power Source:	Rechargeable lithium-ion battery 3.7V		
Normal Operation:	Head & Body		
GSM-2G			
Support Band	GSM850/PCS1900		
GPRS Type	GPRS850/GPRS1900 EGPRS850/EGPRS1900		
GPRS Class	12		
Fraguency Dande:	GSM 850: UL: 824-850 MHz DL: 869-894 MHz		
Frequency Bands:	PCS 1900: UL: 1850-1910 MHz DL: 1930-1990 MHz		
Release Version	R99		
Type of modulation	GMSK for GSM/GPRS/EGPRS,8PSK for EGPRS		
Antonno locationo	GSM antenna is located on the top of the mobile phone (page		
Antenna locations	24)		
Antenna Gain	1.1dBi		



Report NO.: TS201409006 Page 5 / 121

WCDMA-3G			
Support Band	WCDMA Band II/ WCDMA Band V		
Frequency Bands:	WCDMA Band I:		
	UL: 1850~1910 MHz DL: 1930 ~1990MHz		
	WCDMA Band V		
	UL:824~850 MHZ DL:870~900 MHZ		
Release Version	Rel-5		
Type of modulation	QPSK		
Antenna Gain	1.1dBi		
WiFi			
Wi-Fi Frequency	802.11b/g/n(20MHz): 2412~2472MHz		
	802.11n(40MHz) :2422-2452MHz		
Type of modulation	DBPSK/ DQPSK/CCK/BPSK/ QPSK/ 16QAM/ 64QAM		
Data Rate 802.11b: 1/2/5.5/11 Mbps			
	802.11g: 6/9/12/18/24/36/48/54 Mbps		
	802.11n: up to 150 Mbps		
Antenna Gain	3dBi		
Bluetooth			
Frequency	2402-2408 MHz		
Type of modulation	FHSS		
Data Rate	1Mbps(GFSK), 2Mbps(Pi/4 DQPSK), 3Mbps(8DPSK)		
Antenna Gain	3dBi		
Max. Output Power (Co	onducted)		
GSM850:	31.70dBm		
DCS1900:	30.69dBm		
WCDMA Band II:	22.69dBm		
WCDMA Band V:	20.79dBm		
802.11	8.69dBm		
Bluetooth	-3.0dBm		



Report NO.: TS201409006 Page 6 / 121

### 1.2 Test Environment:

Ambient conditions in the SAR laboratory:

Items	Required	Actual
Temperature (°C)	18-25	21~23
Humidity (%RH)	30-70	50~65

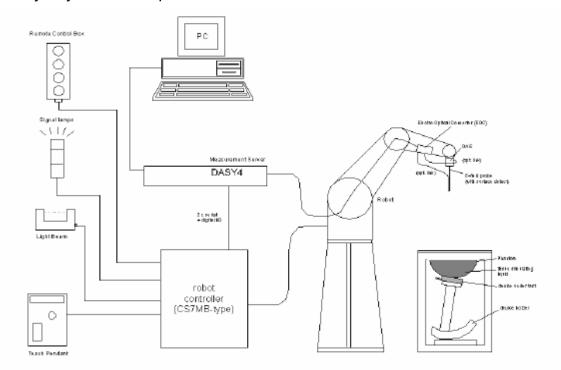
# 9

### SHENZHEN SUNWAY COMMUNICATION CO.,LTD

Report NO.: TS201409006 Page 7 / 121

#### 2. SAR Measurement System:

#### 2.1 Dasy4 System Description:



The DASY4 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- ➤ A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc.
- ➤ The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to the DAE and for the analog signal from the optical surface detection.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
- ➤ A computer operating Windows 2000 or Windows XP.
- DASY4 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- > The SAM twin phantom enabling testing left-hand and right-hand usage.
- > The device holder for handheld mobile phones.
- > Tissue simulating liquid mixed according to the given recipes.
- Validation dipole kits allowing to validate the proper functioning of the system.



Report NO.: TS201409006 Page 8 / 121

#### 3. System Components:

#### DAsY4 Measurement Server:



Calibration: No calibration required.

The DASY4 measurement server is based on a PC/104 CPU board with a 166MHz low-power pentium, 32MB chipdisk and 64MB RAM. The necessary circuits for communication with either the DAE4 (or DAE3) electronic box as well as the 16-bit AD-converter system for optical detection and digital I/O interface are contained on the DASY4 I/O-board, which is directly connected to the PC/104 bus of the CPU board.

#### DATA Acquisition Electronics (DAE):



Calibration: Recommended once a year

The data acquisition electronics consists of a highly sensitive electrometer grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

#### Dosimetric Probes:



Calibration: Recommended once a year

Model: EX3DV4,

Frequency: 10MHz to 6G, Linearity:±0.2dB, Dynamic Range: 10 µW/g to100 mW/g

Directivity:

± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)

These probes are specially designed and calibrated for use in liquids with high permittivities. They should not be used in air, since the spherical isotropy in air is poor (±2 dB). The dosimetric probes have special calibrations in various liquids at different frequencies.



Report NO.: TS201409006 Page 9 / 121

#### Light Beam unit:



Calibration: No calibration required.

The light beam switch allows automatic "tooling" of the probe. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip. The repeatability of this process is better than 0.1 mm.

#### SAM Twin Phantom:



The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region where shell thickness increases to 6mm). It has three measurement areas:

- Left hand
- Right hand
- Flat phantom

The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

#### Device Holder for SAM Twin Phantom:



The DASY device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation centers for both scales is the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.

The DASY device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity "=3 and loss tangent \_=0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered



Report NO.: TS201409006 Page 10 / 121

### 4. Tissue Simulating Liquid

4.1 The composition of the tissue simulating liquid:

INGREDIENT	835MHz	835MHz	1900MHz	1900MHz
(% Weight)	Head	Body	Head	Body
Water	40.45	52.4	54.9	40.4
Salt	1.525	1.52	0.18	0.5
Sugar	57.6	45.0	0.00	58.0
HEC	0.40	1.0	0.00	1.0
Preventol	0.10	0.1	0.00	0.1
DGBE	0.00	0	44.92	0

#### 4.2 Tissue Calibration Result:

Dielectric Probe Kit: Speag DAK 3.5mm probe -S/N:1038

Head Tissue Simulate Measurement:

Frequency		Dielectric Parameters		Tissue	
(MHz)	Description	٤ <sub>r</sub>	σ[s/m]	Temp. (°C)	Date
	Reference	41.50±5%	0.90±5%	N/A	
835MHz	Reference	(39.425~43.574)	(0.9215~1.0185)	IN/A	2014.09.12
	Measurement	42.27	0.91	22.1	
	Reference	40±5%	1.40±5%	N/A	
1900MHz	Reference	(38~42)	(1.33~1.47)	IN/A	2014.09.12
	Measurement	39.27	1.42	21.8	

#### **Body Tissue Simulate Measurement:**

Body Hoode Cirrulate Medodrement.					
Fraguanay		Dielectric Parameters		Tissue	
Frequency (MHz)	Description	٤ <sub>r</sub>	σ[s/m]	Temp. (°C)	Date
	Reference	55.2±5%	0.97±5%	N/A	
835MHz	Reference	(52.45~57.96)	(0.93~1.01)	IN/A	2014.09.13
	Measurement	54.73	0.98	22.5	
	Reference	53.3±5%	1.52±5%	NI/A	
1900MHz	Reference	(50.64~55.96)	(1.45~1.59)	N/A	2014.09.13
	Measurement	52.45	1.54	22.5	



Report NO.: TS201409006 Page 11 / 121

4.3 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

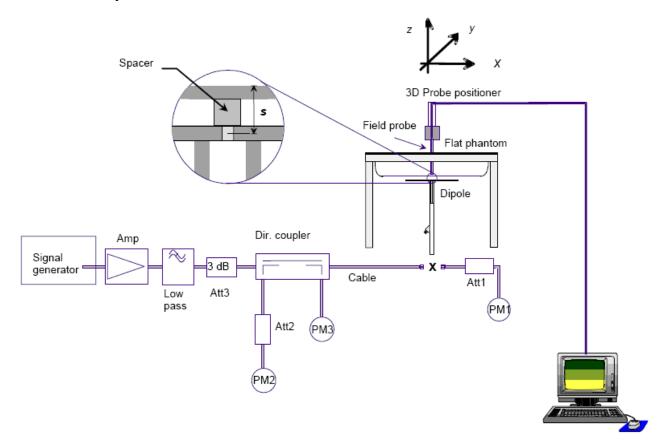
Target Frequency	Hea	d	Во	dy
(MHz)	٤r	σ[s/m]	٤ <sub>r</sub>	σ[s/m]
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800-2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00



Report NO.: TS201409006 Page 12 / 121

### 5. SAR System Validation

#### 5.1 Validation System:



#### 5.2 Validation Dipoles:

The dipoles used is based on the IEEE-1528/EN62209-1 standard, and is complied with mechanical and electrical specifications in line with the requirements of both IEEE-1528/EN62209-1 and FCC Supplement C. the table below provides details for the mechanical and electrical specifications for the dipoles

Frequency	L(mm)	H(mm)	D(mm)
835MHz	161	89.8	3.6
1900MHz	68	39.5	3.6



Report NO.: TS201409006 Page 13 / 121

#### 5.3 Validation Result:

5.5 Validation Result.						
System perfo	System performance check for Head at 835MHz,1900MHz					
Maliata Cara Di						
Frequency	oole: D835V2-SN:	SAR(1g)	SAR(10g)	Tissue		
(MHz)	Description	W/Kg	W/Kg	Temp. (℃)	Date	
835MHz	Reference	9.29±10% (8.36~10.22)	6.0±10% (5.40~6.60)	N/A	2014.09.12	
	Validation	10.04	6.56	22.5		
Validation Dip	oole: D1900V2-SN	:5d018				
1900MHz	Reference	40.1±10% (36.09~44.11)	21.1±10% (18.99~23.21)	N/A	2014.09.12	
	Validation	42.0	21.44	22.5		
System perfo	System performance check for Body at 835MHz,1900MHz					
Validation Dip	pole: D835V2-SN:	4d120				
Frequency	Description	SAR(1g)	SAR(10g)	Tissue Temp.	Date	
(MHz)		W/Kg	W/Kg	(℃)		
835MHz	Reference	9.47±10% (8.52~10.41)	6.23±10% (5.61~6.85)	N/A	2014.09.13	
	Validation		6.24	22.5		
Validation Dipole: D1900V2-SN:5d018						
1900MHz	Reference	39.8±10% (35.82~43.78)	21.0±10% (18.90~23.10)	N/A	2014.09.13	
	Validation	42.40	21.60	22.5		

Note: Note: All system validation SAR values are measured at 24dBm and normalized to 1W forward power.



Report NO.: TS201409006 Page 14 / 121

#### 6. SAR Evaluation Procedures:

The procedure for assessing the average SAR value consists of the following steps:

#### Power Reference Measurement

The Power Reference Measurement and Power Drift Measurement jobs are useful jobs for monitoring the power drift of the device under test in the batch process. Both jobs measure the field at a specified reference position, at a selectable distance from the phantom surface. The reference position can be either the selected section's grid reference point or a user point in this section. The reference job projects the selected point onto the phantom surface, orients the probe perpendicularly to the surface, and approaches the surface using the selected detection method.

#### Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a finer measurement around the hot spot. The sophisticated interpolation routines implemented in DASY4 software can find the maximum locations even in relatively coarse grids. The scanning area is defined by an editable grid. This grid is anchored at the grid reference point of the selected section in the phantom. When the Area Scan's property sheet is brought-up, grid settings can be edited by a user.

#### Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The default Zoom Scan measures 7 x 7 x 7 points (5mmx5mmx5mm) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure.

#### Power Drift Measurement

The Power Drift Measurement job measures the field at the same location as the most recent power reference measurement job within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement.



Report NO.: TS201409006 Page 15 / 121

#### 7. SAR Exposure Limits

SAR assessments have been made in line with the requirements of IEEE-15288,FCC Supplement C ,and comply with ANSI/IEEE C95.1-1992"Uncontrolled Environments" limits.

Limits for General Population/Uncontrolled Exposure (W/kg)

Type Exposure	Uncontrolled Environment Limit
Spatial Peak SAR (1g cube tissue for brain or body)	1.60W/kg
Spatial Peak SAR (whole body)	0.08W/kg
Spatial Peak SAR (10g for hands,feet,ankles and wrist)	4.00W/kg

Note: Occupational/Uncontrolled 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)



Report NO.: TS201409006 Page 16 / 121

### 8. Measurement Uncertainty:

Measurement uncertainty for 300 MHz to 3 GHz averaged over 1 gram / 10 gram.

NO	Source	Uncert.	Prob. Dist.	Div.	ci (1g)	ci (10g)	Stand. Uncert. ui (1g)	Stand. Uncert. ui (10g)	Veff
1	Repeat	0.04	N	1	1	1	0.04	0.04	9
Instru	ument								
2	Probe calibration	7	N	2	1	1	3.5	3.5	∞
3	Axial isotropy	4.7	R	√3	0.7	0.7	1.9	1.9	∞
4	Hemispherical isotropy	9.6	R	√3	0.7	0.7	3.9	3.9	∞
5	Boundary effect	1.0	R	√3	1	1	0.6	0.6	∞
6	Linearity	4.7	R	√3	1	1	2.7	2.7	∞
7	Detection limits	1.0	R	√3	1	1	0.6	0.6	∞
8	Readout electronics	0.3	N	1	1	1	0.3	0.3	∞
9	Response time	0.8	R	√3	1	1	0.5	0.5	∞
10	Integration time	2.6	R	√3	1	1	1.5	1.5	∞
11	Ambient noise	3.0	R	√3	1	1	1.7	1.7	∞
12	Ambient reflections	3.0	R	√3	1	1	1.7	1.7	∞
13	Probe positioner mech. restrictions	0.4	R	√3	1	1	0.2	0.2	∞
	Probe positioning with respect to phantom shell	2.9	R	√3	1	1	1.7	1.7	∞
15	Max.SAR evaluation	1.0	R	√3	1	1	0.6	0.6	∞



Report NO.: TS201409006 Page 17 / 121

Test sample related									
16	Device positioning	3.8	N	1	1	1	3.8	3.8	99
17	Device holder	5.1	N	1	1	1	5.1	5.1	5
18	Drift of output power	5.0	R	√3	1	1	2.9	2.9	8
Phan	Phantom and set-up								
19	Phantom uncertainty	4.0	R	√3	1	1	2.3	2.3	8
20	Liquid conductivity (target)	5.0	R	√3	0.64	0.43	1.8	1.2	8
21	Liquid conductivity (meas)	2.5	N	1	0.64	0.43	1.6	1.2	8
22	Liquid Permittivity (target)	5.0	R	√3	0.6	0.49	1.7	1.5	8
23	Liquid Permittivity (meas)	2.5	N	1	0.6	0.49	1.5	1.2	8
Combined standard			RSS	$U_C = \sqrt{\sum_{i=1}^{n} C_i^2 U_i^2}$		12.2%	11.9%	236	
	Expanded uncertainty U = (P=95%)				2		24.4%	23.8%	



Report NO.: TS201409006 Page 18 / 121

### 9. Conducted Power Measurement:

Band	Channel	Frequency	Avg.Burst	Duty Cycle	Frame Power				
Бапи	Channel	(MHz)	Power(dBm)	Factor(dB)	(dBm)				
Maximum Power <sim 1=""></sim>									
	CH128	824.20	31.27	-9.03	22.24				
GSM850	CH190	836.60	31.35	-9.03	22.32				
	CH251	848.80	31.70	-9.03	22.67				
	Ch512	1850.20	30.33	-9.03	21.30				
PCS1900	CH661	1880.00	30.69	-9.03	21.66				
	CH810	1909.80	30.64	-9.03	21.61				
Maximum Power <sim 2=""></sim>									
GSM850	CH251	836.60	31.06	-9.03	22.03				
PCS1900	CH661	1880.00	30.18	-9.03	21.15				



Report NO.: TS201409006 Page 19 / 121

Band	Channel Frequency (MHz)		Avg.Burst Power(dBm)	Duty Cycle Factor(dB)	Frame Power (dBm)
Maximum Pov	wer				
CDDC050	CH128	824.20	31.11	-9.03	22.08
GPRS850 Slot1	CH190	836.60	31.31	-9.03	22.28
Sioti	CH251	848.80	31.67	-9.03	22.64
GPRS850	CH128	824.20	30.32	-6.02	24.3
Slot2	CH190	836.60	30.57	-6.02	24.55
SIOLZ	CH251	848.80	30.88	-6.02	24.86
GPRS850	CH128	824.20	28.34	-4.35	23.99
Slot3	CH190	836.60	28.60	-4.35	24.25
31013	CH251	848.80	28.44 -4.35		24.09
GPRS850	CH128	824.20	27.34	-3	24.34
Slot4	CH190	836.60	27.45	-3	24.45
31014	CH251	848.80	27.76	-3	24.76
GPRS1900	CH512	1850.20	30.15	-9.03	21.12
Slot1	CH661	1880.00	30.55	-9.03	21.52
Sioti	CH810	1909.80	30.58	-9.03	21.55
GPRS1900	CH512	1850.20	28.99	-6.02	22.97
Slot2	CH661	1880.00	29.47	-6.02	23.45
SIOLZ	CH810	1909.80	29.34	-6.02	23.32
GPRS1900	CH512	1850.20	26.97	-4.35	22.62
Slot3	CH661	1880.00	27.41	-4.35	23.06
Siuis	CH810	1909.80	27.38	-4.35	23.03
GPRS1900	CH512	1850.20	24.90	-3	21.9
Slot4	CH661	1880.00	25.37	-3	22.37
GIULA	CH810	1909.80	25.33	-3	22.33



Report NO.: TS201409006 Page 20 / 121

Dand	Channal	Frequency	Avg.Burst	Duty Cycle	Frame Power
Band	Channel	(MHz)	Power(dBm)	Factor(dB)	(dBm)
Maximum Pow	rer				
EDD0050	CH128	824.20	31.07	-9.03	22.04
EPRS850	CH190	836.60	31.27	-9.03	22.24
Slot1(GMSK)	CH251	848.80	31.63	-9.03	22.6
EDDCOEO	CH128	824.20	30.30	-6.02	24.28
EPRS850 Slot2(GMSK)	CH190	836.60	30.55	-6.02	24.53
SIULZ(GIVISK)	CH251	848.80	30.86	-6.02	24.84
EDDC050	CH128	824.20	28.29	-4.35	23.94
EPRS850	CH190	836.60	28.55	-4.35	24.2
Slot3(GMSK)	CH251	848.80	28.59	-4.35	24.24
EDD0050	CH128	824.20	26.51	-3	23.51
EPRS850	CH190	836.60	26.56	-3	23.56
Slot4(GMSK)	CH251	848.80	26.68	-3	23.68
EDD\$1000	CH512	1850.20	29.09	-9.03	20.06
EPRS1900 Slot1(GMSK)	CH661	1880.00	29.49	-9.03	20.46
SIOLT(GIVISK)	CH810	1909.80	29.51	-9.03	20.48
EPRS1900	CH512	1850.20	28.38	-6.02	22.36
Slot2(GMSK)	CH661	1880.00	28.36	-6.02	22.34
SIULZ(GIVISK)	CH810	1909.80	28.23	-6.02	22.21
EDDS1000	CH512	1850.20	26.23	-4.35	21.58
EPRS1900	CH661	1880.00	26.36	-4.35	22.01
Slot3(GMSK)	CH810	1909.80	26.25	-4.35	21.9
EDD01000	CH512	1850.20	25.23	-3	22.23
EPRS1900	CH661	1880.00	24.71	-3	21.71
Slot4(GMSK)	CH810	1909.80	24.67	-3	21.67



Report NO.: TS201409006 Page 21 / 121

		Frequency	Avg.Burst	Duty Cycle	Frame Power
Band	Channel	(MHz)	Power(dBm)	Factor(dB)	(dBm)
		(1011 12)	r ower (abiii)	r actor(db)	(ubiii)
Maximum Pov	ver				
EPRS850	CH128	824.20	25.73	-9.03	16.7
Slot1(8PSK)	CH190	836.60	25.71	-9.03	16.68
Siot (or Six)	CH251	848.80	25.4	-9.03	16.37
EPRS850	CH128	824.20	24.66	-6.02	18.64
Slot2(8PSK)	CH190	836.60	24.92	-6.02	18.9
31012(6F3K)	CH251	848.80	24.76	-6.02	18.74
EDD0050	CH128	824.20	22.78	-4.35	18.43
EPRS850	CH190	836.60	23.07	-4.35	18.72
Slot3(8PSK)	CH251	848.80	23.26	-4.35	18.91
EDDOOGO	CH128	824.20	21.82	-3	18.82
EPRS850	CH190	836.60	21.9	-3	18.9
Slot4(8PSK)	CH251	848.80	22.1	-3	19.1
EDDC4000	CH512	1850.20	25.18	-9.03	16.15
EPRS1900	CH661	1880.00	25.46	-9.03	16.43
Slot1(8PSK)	CH810	1909.80	25.55	-9.03	16.52
EDD04000	CH512	1850.20	23.89	-6.02	17.87
EPRS1900	CH661	1880.00	24.35	-6.02	18.33
Slot2(8PSK)	CH810	1909.80	23.37	-6.02	17.35
EDD04000	CH512	1850.20	22.39	-4.35	18.04
EPRS1900	CH661	1880.00	22.73	-4.35	18.38
Slot3(8PSK)	CH810	1909.80	22.51	-4.35	18.16
EDD04000	CH512	1850.20	21.3	-3	18.3
EPRS1900	CH661	1880.00	21.49	-3	18.49
Slot4(8PSK)	CH810	1909.80	21.76	-3	18.76

Note: According KDB 941225, conduct Power of EGPRS (8PSK) is not exceed conduct power of EGPRS (GMSK), SAR evaluation of EGPRS (8PSK) is optional



Report NO.: TS201409006 Page 22 / 121

Average Power									
Band	,	WCDMA Band	II.	V	WCDMA Band V.				
СН	9262	9400	9538	4132	4183	4233			
Frequency	1852.4	1880.0	1907.6	826.4	836.6	846.6			
RMC 12.2Kbps	22.69	22.56	22.58	20.79	20.68	20.66			
HSDPA Subtest-1	22.28	22.23	22.31	20.42	20.34	20.39			
HSDPA Subtest-2	22.29	22.22	22.31	20.36	20.33	20.39			
HSDPA Subtest-3	22.24	22.18	22.23	20.31	20.29	20.31			
HSDPA Subtest-4	22.21	22.09	22.25	20.28	20.20	20.33			
HSUPA Subtest-1	22.19	22.18	22.19	20.26	20.29	20.27			
HSUPA Subtest-2	22.16	22.07	22.21	20.23	20.18	20.29			
HSUPA Subtest-3	22.29	22.17	22.25	20.36	20.28	20.33			
HSUPA Subtest-4	22.11	22.10	22.21	20.18	20.21	20.29			
HSUPA Subtest-5	22.14	22.09	22.13	20.21	20.20	20.21			
RMC 12.2Kbps-SIM2	22.61	22.55	22.53	20.77	20.65	20.63			

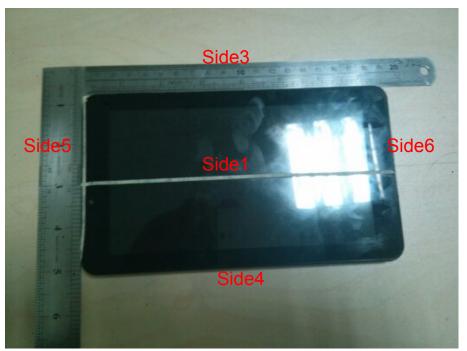
WIFI								
	CH01	2412	8.37					
802.11b	CH06	2437	8.69					
	CH11	2462	8.53					
	CH01	2412	6.45					
802.11g	CH06	2437	6.34					
	CH11	2462	6.21					
	CH01	2412	6.22					
802.11n-20	CH06	2437	6.13					
	CH11	2462	6.41					
	CH01	2422	4.32					
802.11n-40	CH02	2437	4.32					
	CH03	2452	4.23					
Bluetooth	Bluetooth							
1Mbps	00	2402	-3dBm					



Report NO.: TS201409006 Page 23 / 121

### 10. Test photos and results:

### 10.1 DUT photos:



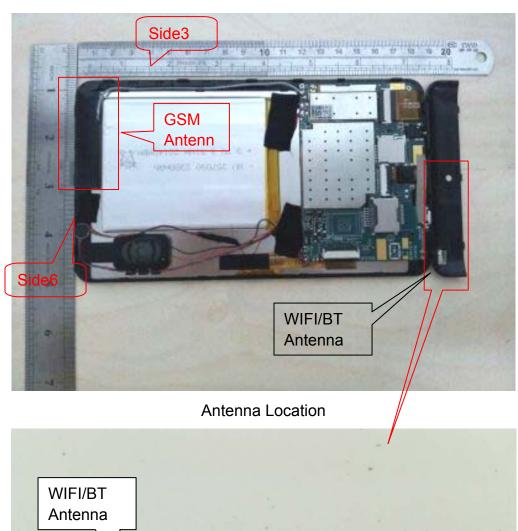
Front side



Back side



Report NO.: TS201409006 Page 24 / 121



WIFI/BT Antenna

WIFI Antenna



Report NO.: TS201409006 Page 25 / 121

# 10.2 Setup photos:



Left Touch Cheek



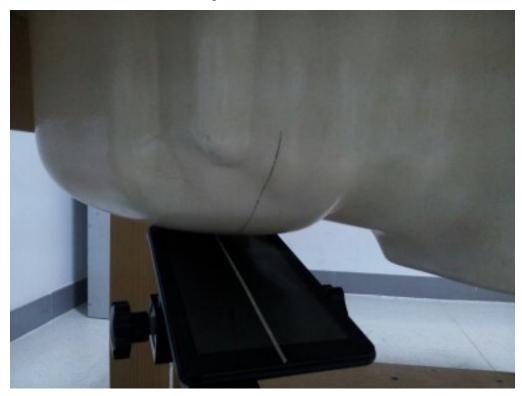
Left Tilt(15°)



Report NO.: TS201409006 Page 26 / 121



Right Touch Cheek

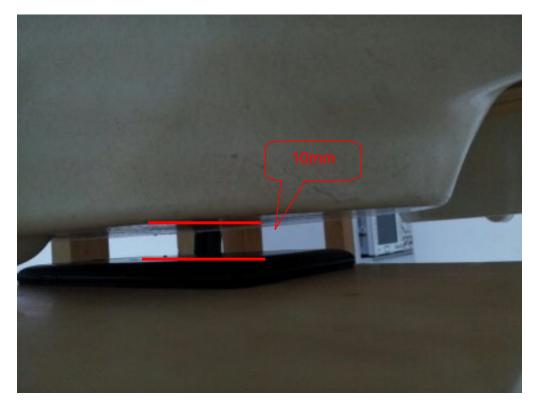


Right Tilt(15°)

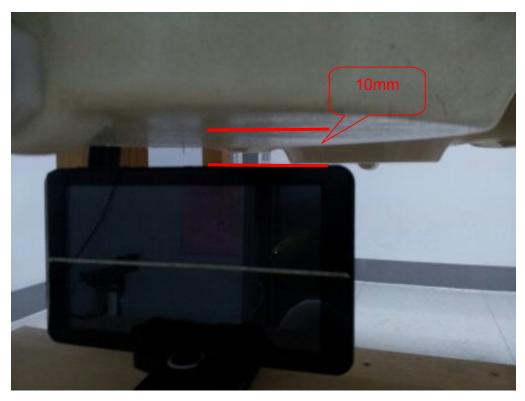


Report NO.: TS201409006 Page 27 / 121

Body:



Side2



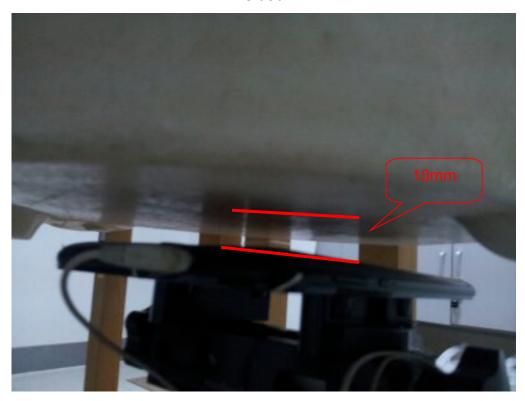
Side3



Report NO.: TS201409006 Page 28 / 121



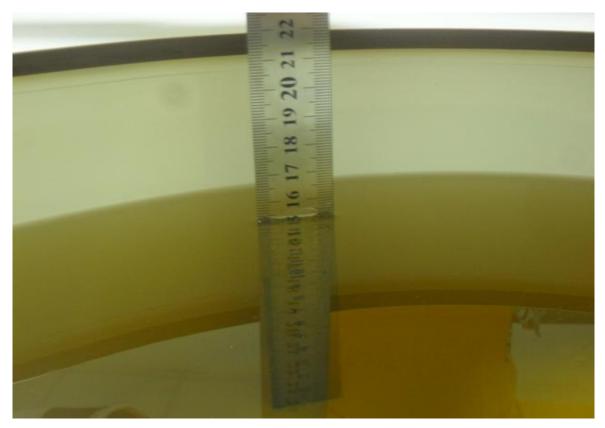
Side6



Side 2 with Headset



Report NO.: TS201409006 Page 29 / 121



Liquid depth (15cm)



Report NO.: TS201409006 Page 30 / 121

10.3 SAR result summary:

Scale Factor=Target Power/Measurement Power Scale SAR=Measurement SAR\*Scale Factor Head

Te Band	Test Case of Head  Test Position  Test CH		Meas. Power (dBm)	Target Power (dBm)	Factor	Meas. SAR (W/kg)	Scale SAR (W/kg)	Power Drift <±0.2	Data Slot
SIM1,Liq	uid: Head					1g Avg.		dB	
	Left Cheek	CH190	31.35	33	1.46	0.428	0.626	0.007	Plot 1
	Left Tilt	CH190	31.35	33	1.46	0.192	0.281	0.074	Plot 2
GSM 850	Right Tilt	CH190	31.35	33	1.46	0.187	0.273	0.018	Plot 3
	Right Cheek	CH190	31.35	33	1.46	0.391	0.572	0.062	Plot 4
	Left Cheek	CH661	30.69	31	1.07	0.18	0.193	0.155	Plot 5
GSM	Left Tilt	CH661	30.69	31	1.07	0.138	0.148	0.002	Plot 6
1900	Right Tilt	CH661	30.69	31	1.07	0.123	0.132	0.00	Plot 7
	Right Cheek	CH661	30.69	31	1.07	0.258	0.277	-0.111	Plot 8
	Left Cheek	CH4183	20.68	21	1.08	0.538	0.579	0.071	Plot 9
WCDMA	Left Tilt	CH4183	20.68	21	1.08	0.323	0.348	0.180	Plot 10
Band V	Right Tilt	CH4183	20.68	21	1.08	0.399	0.430	-0.110	Plot 11
	Right Cheek	CH4183	20.68	21	1.08	0.613	0.660	-0.174	Plot 12
	Left Cheek	CH9750	22.56	23	1.11	0.211	0.233	-0.102	Plot 13
WCDMA	Left Tilt	CH9750	22.56	23	1.11	0.107	0.118	0.032	Plot 14
Band II	Right Tilt	CH9750	22.56	23	1.11	0.145	0.160	-0.048	Plot 15
	Right Cheek	CH9750	22.56	23	1.11	0.277	0.307	-0.053	Plot 16
SIM2,Liq	uid: Head								
GSM 850	Right Cheek	CH190	31.35	33	1.46	0.368	0.537	-0.147	Plot 17
GSM 1900	Right Cheek	CH661	30.69	31	1.07	0.217	0.233	-0.053	Plot 18
WCDMA Band V	Right Cheek	CH4183	20.68	21	1.08	0.586	0.631	0.154	Plot 19
WCDMA Band II	Right Cheek	CH9750	22.56	23	1.11	0.249	0.276	-0.146	Plot 20



Report NO.: TS201409006 Page 31 / 121

Body

Te	Test Case of Head			Target	Fact	Meas. SAR	Scale	Power	Data
Band	Test Position	СН	Power (dBm)	Power (dBm)	or	(W/kg) 1g Avg.	SAR (W/kg)	Drift <±0.2 dB	Slot
Liquid: E	Body, Separat	or: 10mi	m						
	Side2-1Slot	CH190	31.31	33	1.48	0.326	0.481	-0.002	Plot 21
	Side2-2Slot	CH190	30.57	32	1.39	0.456	0.634	0.016	Plot 22
	Side2-3Slot	CH190	28.6	30	1.38	0.485	0.669	0.002	Plot 23
GPRS 850	Side2-4Slot	CH190	27.45	28.5	1.27	0.503	0.641	0.007	Plot 24
	Side3-4Slot	CH190	27.45	28.5	1.27	0.428	0.545	0.035	Plot 25
	Side6-4Slot	CH190	27.45	28.5	1.27	0.275	0.350	-0.132	Plot 26
	Side1-4Slot	CH190	27.45	28.5	1.27	0.457	0.580	-0.015	Plot 27
EGPRS 850	Side2-4Slot	CH190	26.56	28.5	1.56	0.553	0.864	0.021	Plot 28
GSM850	Side2 with Headset	CH190	31.35	33	1.46	0.226	0.330	-0.056	Plot 29
	Side2-1Slot	CH661	30.55	31	1.11	0.181	0.201	0.116	Plot 30
	Side2-2Slot	CH661	29.47	30	1.13	0.266	0.301	0.176	Plot 31
	Side2-3Slot	CH661	27.41	28	1.15	0.318	0.364	0.165	Plot 32
GPRS 1900	Side2-4Slot	CH661	25.37	26.5	1.30	0.363	0.471	0.082	Plot 33
	Side3-4Slot	CH661	25.37	26.5	1.30	0.281	0.365	0.129	Plot 34
	Side6-4Slot	CH661	25.37	26.5	1.30	0.147	0.191	0.107	Plot 35
	Side1-4Slot	CH661	25.37	26.5	1.30	0.325	0.423	-0.018	Plot 36
EGPRS 1900	Side2-4Slot	CH661	24.71	26.5	1.51	0.413	0.624	0.028	Plot 37
GSM 1900	Side2 with Headset	CH661	30.69	31	1.07	0.232	0.249	0.069	Plot 38
	Side 2	CH4183	20.34	21	1.16	0.712	0.829	0.144	Plot 39
HSDPA	Side 3	CH4183	20.34	21	1.16	0.609	0.709	-0.012	Plot 40
Band V	Side 6	CH4183	20.34	21	1.16	0.399	0.464	-0.011	Plot 41
	Side 1	CH4183	20.34	21	1.16	0.654	0.759	0.032	Plot 42



Report NO.: TS201409006 Page 32 / 121

WCDMA Band V	Side2 with Headset	CH4183	20.68	21	1.08	0.361	0.389	0.124	Plot 43
	Side 2	CH9750	22.23	23	1.19	0.594	0.709	0.125	Plot 44
HSDPA	Side 3	CH9750	22.23	23	1.19	0.406	0.485	0.102	Plot 45
Band II	Side 6	CH9750	22.23	23	1.19	0.319	0.381	-0.082	Plot 46
	Side 1	CH9750	22.23	23	1.19	0.525	0.625	0.132	Plot 47
WCDMA Band II	Side2 with Headset	CH9750	22.56	23	1.11	0.212	0.235	0.010	Plot 48

Note:1. When the 1g SAR is ≤0.8 W/kg, testing for low and high channel is optional.

2. For distance from antenna to edges (side3, side5) exceed 2.5cm, SAR measurement for these sides is optional.



Report NO.: TS201409006 Page 33 / 121

#### 10.4 Co-located SAR

According to KDB 447498,Bluetooth and BT/WLAN output power is ≤10dBm,standalone SAR for Bluetooth and WLAN is not required

Simultaneous transmission SAR for WLAN and BT:

SAR= (max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]· $[\sqrt{f_{(GHz)}/x}]$ 

Max Power for WLAN = 9.5dBm Max Power for BT = -3dBm X=7.5

Min Test separation distance for Body position=10mm

Min Test separation distance for Head position=5mm

WLAN F=2.437 GHz. BT F=2.402GHz

Test position	Head(5mm)	Body/hotspot(10mm)
WLAN Estimated SAR	0.374	0.187
BT Estimated SAR	0.021	0.011

#### The simultaneous transmission between WLAN,BT and GSM/WCDMA

Max 1-g SAR(W/kg	Σ1 α SAD(\M/kα)				
Position	WLAN	ВТ	GSM/WCDMA	∑1-g SAR(W/kg)	
Right-Cheek	0.374		0.660	1.034	
		0.021	0.000	0.681	

#### Body SAR value and the sum of the 1-g SAR for WLAN, BT and GSM/WCDMA

Max 1-g SAR(W/kg	Σ1 α CΛD(\\/\/\\α\)				
Position	WLAN	ВТ	GSM/WCDMA	∑1-g SAR(W/kg)	
Body	0.187		0.864	1.051	
		0.011	0.864	0.875	

Note: 1.This device just supports simultaneous transmission between WLAN,BT and GSM/WCDMA

#### Conclusion:

- 1. Simultaneous Transmission: WLAN,BT and GSM/WCDMA
- 2. Require for simultaneous Transmission SAR with Volume Scans:

**NO** ( $\sum_{1}$ -g SAR<1.6W/Kg)



Report NO.: TS201409006 Page 34 / 121

### 11. Equipment List:

NO.	Instrument	Manufacture	Model	S/N	Cal. Date	Cal. Due Date
1	Communication Tester	Agilent	E5515C	MY50267264	Dec 27 <sup>th</sup> 2013	Dec 27 <sup>th</sup> 2014
2	E-field Probe	Speag	EX3DV4	3898	March 10 <sup>th</sup> 2014	March 10 <sup>th</sup> 2015
3	Dielectric Probe Kit	Speag	DAK 3.5mm Probe	1038	N/A	N/A
4	DAE	Speag	DAE4	914	Dec 18 <sup>th</sup> 2013	Dec 18 <sup>th</sup> 2014
5	SAM TWIN phantom	Speag	SAM	1360/1432	N/A	N/A
6	Robot	Stabuli	TX60L	N/A	N/A	N/A
7	Device Holder	Speag	SD000H01HA	N/A	N/A	N/A
8	Vector Network	Agilent	E5071C	MY46107615	Jan 6 <sup>th</sup> 2014	Jan 7 <sup>th</sup> 2015
9	Signal Generator	Agilent	E4438C	MY49072279	Nov 27 <sup>th</sup> 2013	Nov 27 <sup>th</sup> 2014
10	Amplifier	Mini-circult	ZHL-42W	QA098002	N/A	N/A
11	Power Meter	Agilent	N1419A	MY50001563	Nov 27 <sup>th</sup> 2013	Nov 27 <sup>th</sup> 2014
12	Power Sensor	Agilent	N8481H	MY51020010	Nov 27 <sup>th</sup> 2013	Nov 27 <sup>th</sup> 2014
13	Directional Coupler	Agilent	772D	MY46151275	Nov 27 <sup>th</sup> 2013	Nov 27 <sup>th</sup> 2014
14	Directional Coupler	Agilent	778D	MY48220607	Nov 27 <sup>th</sup> 2013	Nov 27 <sup>th</sup> 2014
15	Dipole 835MHz	Speag	D835V2	4d120	Jun 16 <sup>th</sup> 2014	Jun 15 <sup>th</sup> 2016
16	Dipole 1900MHz	Speag	D1900V2	5d018	Jun 18 <sup>th</sup> 2014	Jun 17 <sup>th</sup> 2016



Report NO.: TS201409006 Page 35 / 121

#### Appendix A. System validation plots:

DUT: Dipole 835MHz; Type: D835V2; Serial: D835V2 - SN:4d120 Program Name: System Performance Check Head at 835 MHz

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: f = 835 MHz;  $\sigma$  = 0.94 mho/m;  $\varepsilon_r$  =41.50;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172 **d=10mm, Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 2.59 mW/g

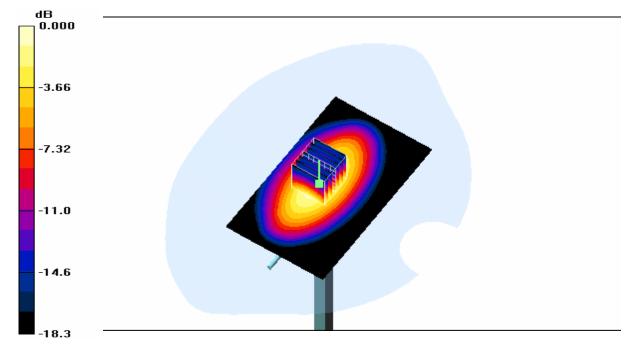
### d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.38 V/m; Power Drift = -0.03dB

Peak SAR (extrapolated) = 3.61W/kg

SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.64 mW/gMaximum value of SAR (measured) = 2.81 mW/g



0 dB = 2.81 mW/g



Report NO.: TS201409006 Page 36 / 121

DUT: Dipole 835MHz; Type: D835V2; Serial: D835V2 - SN:4d120 Program Name: System Performance Check Body at 835 MHz

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: f = 835 MHz;  $\sigma$  = 1.005 mho/m;  $\varepsilon_r$  = 55.20;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 SN3898; ConvF(9.63, 9.63, 9.63); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**d=10mm, Pin=250mW/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 2.49 mW/g

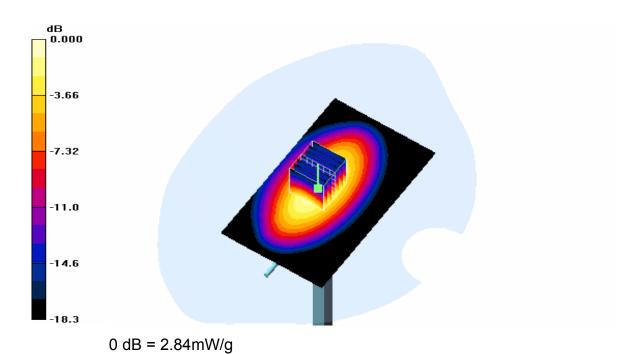
### d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.04 V/m; Power Drift = -0.00dB

Peak SAR (extrapolated) = 3.61 W/kg

SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.56 mW/gMaximum value of SAR (measured) = 2.84 mW/g





Report NO.: TS201409006 Page 37 / 121

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d018 Program Name: System Performance Check Head at 1900 MHz

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz;  $\sigma = 1.39 \text{ mho/m}$ ;  $\varepsilon_r = 39.50$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

# **d=15mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.1 mW/g

# d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

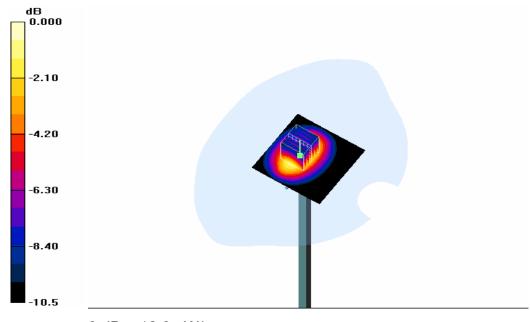
dx=5mm, dy=5mm, dz=5mm

Reference Value = 98.07 V/m; Power Drift = -0.099dB

Peak SAR (extrapolated) = 18.3 W/kg

SAR(1 g) = 10.5 mW/g; SAR(10 g) = 5.36 mW/g

Maximum value of SAR (measured) = 12.6 mW/g



0 dB = 12.6 mW/g



Report NO.: TS201409006 Page 38 / 121

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d018 Program Name: System Performance Check Body at 1900 MHz

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz;  $\sigma$  = 1.51 mho/m;  $\varepsilon_r$  = 52.50;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: EX3DV4 SN3898; ConvF(7.83, 7.83, 7.83); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

# **d=15mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 12 mW/g

### d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

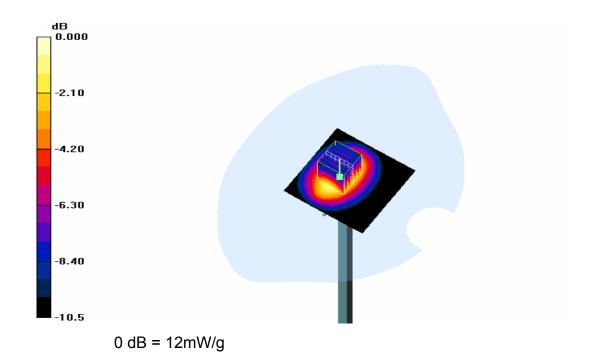
dx=5mm, dy=5mm, dz=5mm

Reference Value =94.36 V/m; Power Drift = 0.05dB

Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 10.6 mW/g; SAR(10 g) = 5.40 mW/g

Maximum value of SAR (measured) = 12.5 mW/g





Report NO.: TS201409006 Page 39 / 121

#### **Appendix B. SAR Test plots:**

Plot 1: 9/12/2014 11:15:01 AM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\varepsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn914; Calibrated: 12/18/2013

- Phantom: SAM with TP1432; Type: SAM;

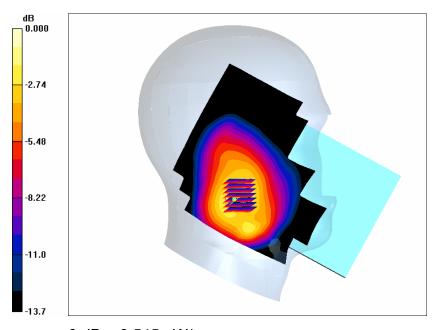
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**leftTouch/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.404 mW/g

**leftTouch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 10.8 V/m; Power Drift = 0.007 dB

Peak SAR (extrapolated) = 0.851 W/kg

SAR(1 g) = 0.428 mW/g; SAR(10 g) = 0.150 mW/g Maximum value of SAR (measured) = 0.545 mW/g



0 dB = 0.545 mW/g



Report NO.: TS201409006 Page 40 / 121

Plot 2: Date/Time: 9/12/2014 11:55:04 AM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

**DUT: PT-701; Type: SI PIN; Serial: IMEI Number** 

**Program Name: PT-701** 

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\epsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn914; Calibrated: 12/18/2013

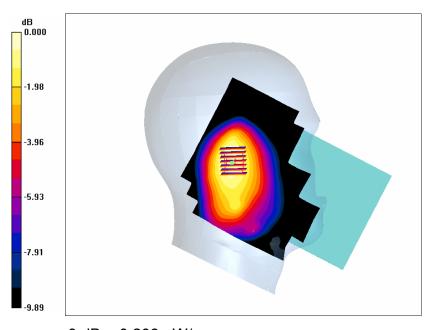
- Phantom: SAM with TP1432; Type: SAM;

- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**left Tilt/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.199 mW/g

**left Tilt/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 13.4 V/m; Power Drift = 0.074 dB Peak SAR (extrapolated) = 0.273 W/kg

SAR(1 g) = 0.192 mW/g; SAR(10 g) = 0.135 mW/g Maximum value of SAR (measured) = 0.203 mW/g



0 dB = 0.203 mW/



Report NO.: TS201409006 Page 41 / 121

Plot 3: Date/Time: 9/12/2014 12:22:00 AM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\varepsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Right Section

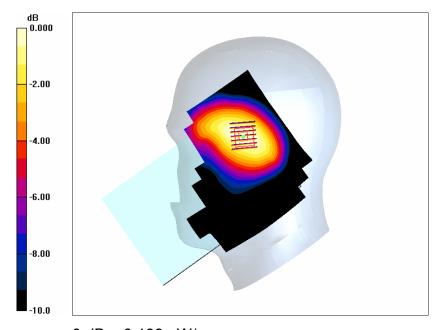
# DASY4 Configuration:

- Probe: EX3DV4 SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Right Tilt/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.195 mW/g

**Right Tilt/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 13.1 V/m; Power Drift = 0.018 dB Peak SAR (extrapolated) = 0.253 W/kg

SAR(1 g) = 0.187 mW/g; SAR(10 g) = 0.134 mW/g Maximum value of SAR (measured) = 0.198 mW/g



0 dB = 0.198 mW/g



Report NO.: TS201409006 Page 42 / 121

Plot 4: Date/Time: 9/12/2014 1:01:21 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\varepsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Right Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

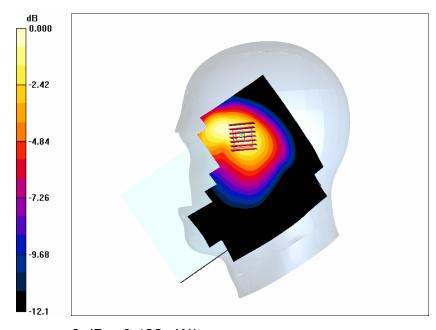
**RightTouch/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.420 mW/g

**RightTouch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.76 V/m; Power Drift = 0.062 dB

Peak SAR (extrapolated) = 0.631 W/kg

SAR(1 g) = 0.391 mW/g; SAR(10 g) = 0.147 mW/g Maximum value of SAR (measured) = 0.422 mW/g



0 dB = 0.422 mW/g



Report NO.: TS201409006 Page 43 / 121

Plot 5: Date/Time: 9/12/2014 5:33:35 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used: f = 1880 MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 40.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: ES3DV3 SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1360; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**left Touch/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.238 mW/g

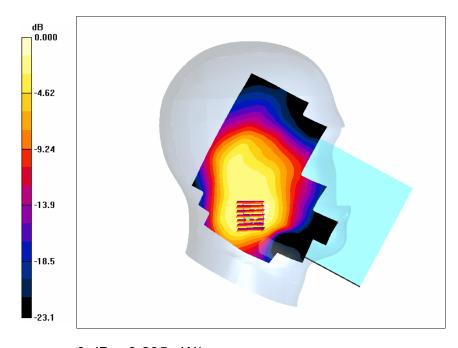
**left Touch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.35 V/m; Power Drift = 0.155 dB

Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.180 mW/g; SAR(10 g) = 0.103 mW/g

Maximum value of SAR (measured) = 0.235 mW/g



0 dB = 0.235 mW/g



Report NO.: TS201409006 Page 44 / 121

Plot 6: Date/Time: 9/12/2014 6:10:14 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used: f = 1880 MHz;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 40.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

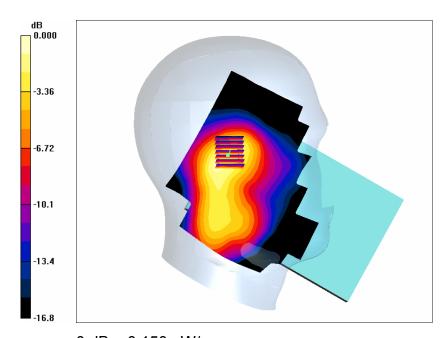
#### DASY4 Configuration:

- Probe: ES3DV3 SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1360; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**left Tilt/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.146 mW/g

**left Tilt/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 10.6 V/m; Power Drift = 0.002 dB Peak SAR (extrapolated) = 0.231 W/kg

SAR(1 g) = 0.138 mW/g; SAR(10 g) = 0.080 mW/g Maximum value of SAR (measured) = 0.150 mW/g



0 dB = 0.150 mW/g



Report NO.: TS201409006 Page 45 / 121

Plot 7: Date/Time: 9/12/2014 6:58:24 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used: f = 1880 MHz;  $\sigma = 1.4$  mho/m;  $\varepsilon_r = 40.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

#### DASY4 Configuration:

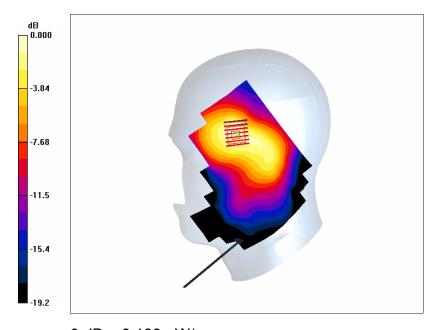
- Probe: ES3DV3 - SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1360; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**right Tilt/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.135 mW/g

**right Tilt/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 8.65 V/m; Power Drift = 0.000 dB Peak SAR (extrapolated) = 0.195 W/kg

SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.073 mW/g Maximum value of SAR (measured) = 0.133 mW/g



0 dB = 0.133 mW/g



Report NO.: TS201409006 Page 46 / 121

Plot 8: Date/Time: 9/12/2014 7:34:07 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used: f = 1880 MHz;  $\sigma = 1.4$  mho/m;  $\varepsilon_r = 40.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

#### DASY4 Configuration:

- Probe: ES3DV3 SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1360; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

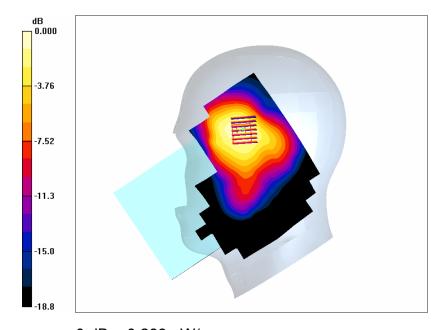
**RightTouch/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.282 mW/g

**RightTouch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.41 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 0.444 W/kg

SAR(1 g) = 0.258 mW/g; SAR(10 g) = 0.152 mW/g Maximum value of SAR (measured) = 0.283 mW/g



0 dB = 0.283 mW/g



Report NO.: TS201409006 Page 47 / 121

Plot 9: 9/12/2014 2:12:01 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: W 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\varepsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014

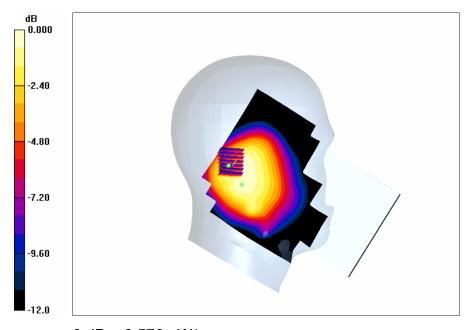
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**leftTouch/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.557 mW/g

**leftTouch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 22.7 V/m; Power Drift = 0.071 dB Peak SAR (extrapolated) = 0.889 W/kg

SAR(1 g) = 0.538 mW/g; SAR(10 g) = 0.340 mW/g

Maximum value of SAR (measured) = 0.576 mW/g



0 dB = 0.576 mW/g



Report NO.: TS201409006 Page 48 / 121

Plot 10: Date/Time: 9/12/2014 2:54:04 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

**DUT: PT-701; Type: SI PIN; Serial: IMEI Number** 

**Program Name: PT-701** 

Communication System: W 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\epsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn914; Calibrated: 12/18/2013

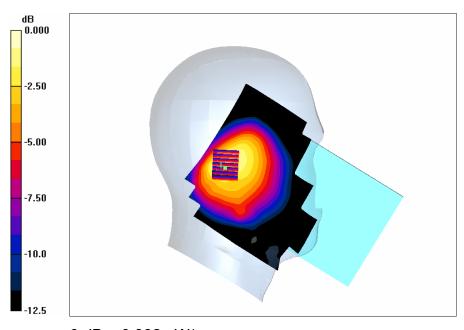
- Phantom: SAM with TP1432; Type: SAM;

- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**left Tilt/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.416 mW/g

**left Tilt/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 14.0 V/m; Power Drift = 0.022 dB Peak SAR (extrapolated) = 0.615 W/kg

SAR(1 g) = 0.323 mW/g; SAR(10 g) = 0.180 mW/g Maximum value of SAR (measured) = 0.382 mW/g



0 dB = 0.382 mW/g



Report NO.: TS201409006 Page 49 / 121

Plot 11: Date/Time: 9/12/2014 3:22:00 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: W 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\varepsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Right Section

#### DASY4 Configuration:

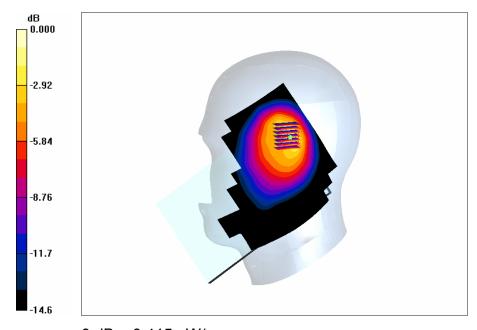
- Probe: EX3DV4 - SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Right Tilt/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.464 mW/g

**Right Tilt/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 21.5 V/m; Power Drift = -0.110 dB Peak SAR (extrapolated) = 0.97 W/kg

SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.170 mW/g. Maximum value of SAR (measured) = 0.415 mW/g



0 dB = 0.415 mW/g



Report NO.: TS201409006 Page 50 / 121

Plot 12: Date/Time: 9/12/2014 4:07:53 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: W 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\varepsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Right Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

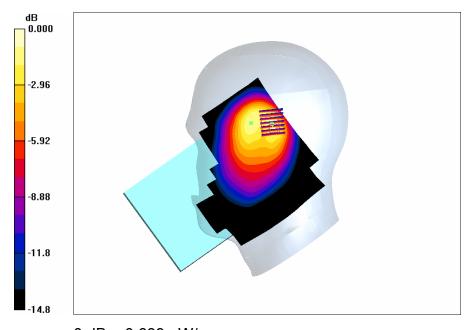
**RightTouch/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.624 mW/g

**RightTouch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.3 V/m; Power Drift = -0.174 dB

Peak SAR (extrapolated) = 1.71 W/kg

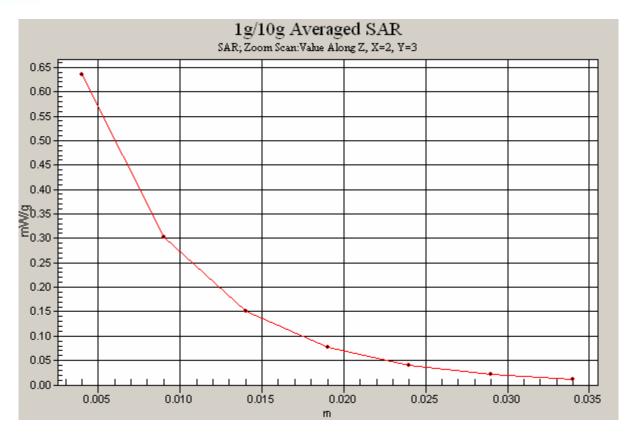
SAR(1 g) = 0.613 mW/g; SAR(10 g) = 0.272 mW/g Maximum value of SAR (measured) = 0.639 mW/g



0 dB = 0.639 mW/g



Report NO.: TS201409006 Page 51 / 121





Report NO.: TS201409006 Page 52 / 121

Plot 13: Date/Time: 9/12/2014 9:27:54 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: W1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 40.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: ES3DV3 - SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014

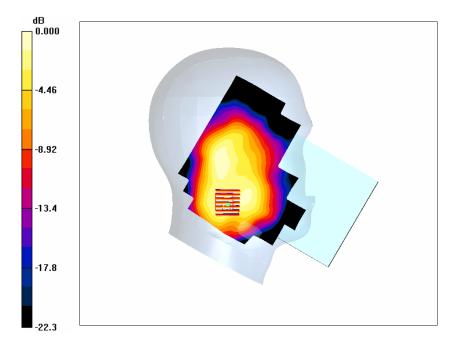
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1360; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**LeftTouch/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.233 mW/g

**LeftTouch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.21 V/m; Power Drift = -0.102 dB Peak SAR (extrapolated) = 0.403 W/kg

SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.125 mW/g Maximum value of SAR (measured) = 0.238 mW/g



0 dB = 0.138 mW/g



Report NO.: TS201409006 Page 53 / 121

Plot 14: Date/Time: 9/12/2014 10:10:14 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: W1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 40.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: ES3DV3 - SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn914; Calibrated: 12/18/2013

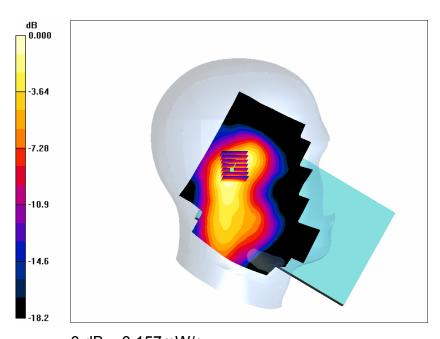
- Phantom: SAM with TP1360; Type: SAM;

- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**left Tilt/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.155 mW/g

**left Tilt/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 7.02 V/m; Power Drift = 0.032 dB Peak SAR (extrapolated) = 0.388 W/kg

SAR(1 g) = 0.147 mW/g; SAR(10 g) = 0.081 mW/g Maximum value of SAR (measured) = 0.157 mW/g



0 dB = 0.157 mW/g



Report NO.: TS201409006 Page 54 / 121

Plot 15: Date/Time: 9/12/2014 10:59:13 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

**DUT: PT-701; Type: SI PIN; Serial: IMEI Number** 

**Program Name: PT-701** 

Communication System: W1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 40.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### DASY4 Configuration:

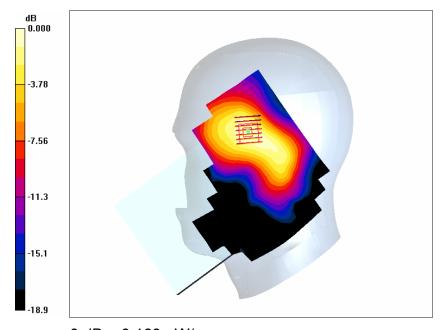
- Probe: ES3DV3 - SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1360; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Right Tilt/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.154 mW/g

**Right Tilt/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 7.60 V/m; Power Drift = -0.048 dB Peak SAR (extrapolated) = 0.347 W/kg

SAR(1 g) = 0.145 mW/g; SAR(10 g) = 0.79 mW/g Maximum value of SAR (measured) = 0.163 mW/g



0 dB = 0.163 mW/g



Report NO.: TS201409006 Page 55 / 121

Plot 16: Date/Time: 9/12/2014 11:44:07 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

**DUT: PT-701; Type: SI PIN; Serial: IMEI Number** 

**Program Name: PT-701** 

Communication System: W1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz;  $\sigma = 1.4 \text{ mho/m}$ ;  $\varepsilon_r = 40.5$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### DASY4 Configuration:

- Probe: ES3DV3 - SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn914; Calibrated: 12/18/2013

- Phantom: SAM with TP1360; Type: SAM;

- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

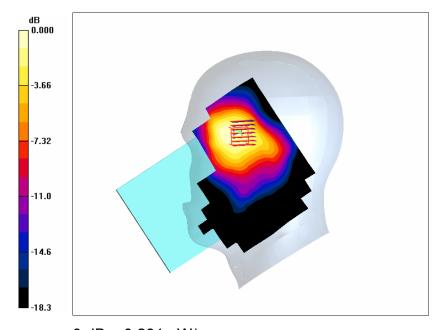
**RightTouch/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.291 mW/g

**RightTouch/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.60 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.587 W/kg

SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.140 mW/g Maximum value of SAR (measured) = 0.291 mW/g



0 dB = 0.291 mW/g



Report NO.: TS201409006 Page 56 / 121

Plot 17: Date/Time: 9/12/2014 13:45:32 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\varepsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn914: Calibrated: 12/18/2013

- Phantom: SAM with TP1432; Type: SAM;

- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**LeftTouch-SIM2/Area Scan (111x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.391 mW/g

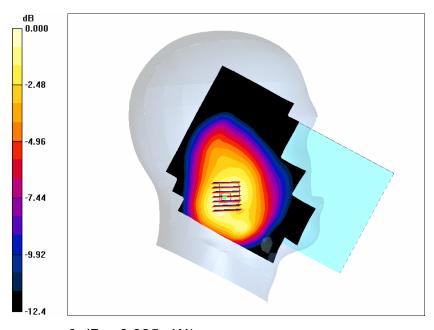
**LeftTouch-SIM2/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.9 V/m; Power Drift = -0.147 dB

Peak SAR (extrapolated) = 0.614 W/kg

SAR(1 g) = 0.368 mW/g; SAR(10 g) = 0.131 mW/g

Maximum value of SAR (measured) = 0.395 mW/g



0 dB = 0.395 mW/g



Report NO.: TS201409006 Page 57 / 121

Plot 18: Date/Time: 9/12/2014 8:43:35 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3 Medium parameters used: f = 1880 MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 40.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: ES3DV3 SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1360; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**RightTouch-SIM2/Area Scan (121x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.251 mW/g

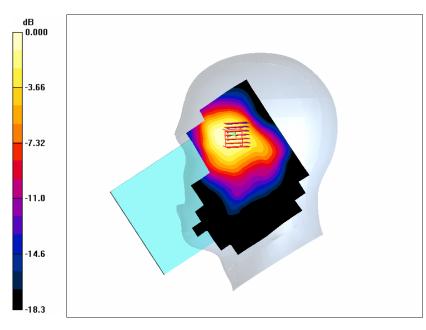
**RightTouch-SIM2/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.60 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 0.287 W/kg

SAR(1 g) = 0.217 mW/g; SAR(10 g) = 0.110 mW/g

Maximum value of SAR (measured) = 0.231 mW/g



0 dB = 0.231 mW/g



Report NO.: TS201409006 Page 58 / 121

Plot 19: Date/Time: 9/12/2014 4:45:55 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: W 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.892 mho/m;  $\epsilon_r$  = 41.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Right Section

#### DASY4 Configuration:

- Probe: EX3DV4 - SN3898; ConvF(9.85, 9.85, 9.85); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn914; Calibrated: 12/18/2013

- Phantom: SAM with TP1432; Type: SAM;

- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

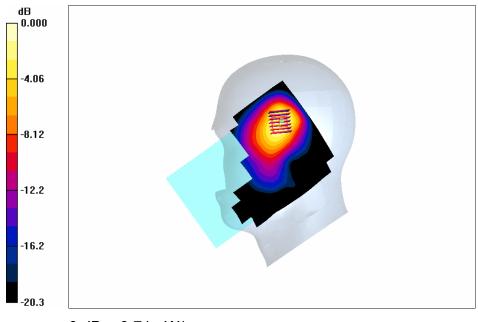
**RightTouch-SIM2/Area Scan (101x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.599 mW/g

**RightTouch-SIM2/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.7 V/m; Power Drift = 0.154 dB

Peak SAR (extrapolated) = 1.73 W/kg

SAR(1 g) = 0.586 mW/g; SAR(10 g) = 0.325 mW/g Maximum value of SAR (measured) = 0.71 mW/g



0 dB = 0.71 mW/g



Report NO.: TS201409006 Page 59 / 121

Plot 20: Date/Time: 9/12/2014 12:35:32 PM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: W1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz;  $\sigma$  = 1.4 mho/m;  $\varepsilon_r$  = 40.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Right Section

#### DASY4 Configuration:

- Probe: ES3DV3 SN3898; ConvF(8.20, 8.20, 8.20); Calibrated: 3/10/2014
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1360; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**RightTouch-SIM2/Area Scan (121x161x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.297 mW/g

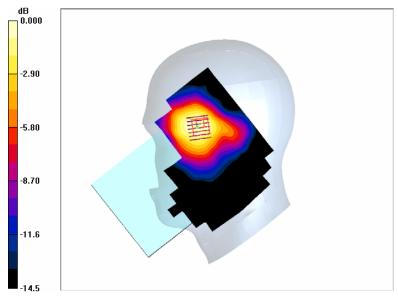
**RightTouch-SIM2/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.59 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 0.596 W/kg

SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.118 mW/g

Maximum value of SAR (measured) = 0.263 mW/g



0 dB = 0.263 mW/q



Report NO.: TS201409006 Page 60 / 121

Plot 21: Date/Time: 9/13/2014 3:18:22 AM

Test Laboratory: SUNWAY COMMUNICATION CO.,LTD.

DUT: PT-701; Type: SI PIN; Serial: IMEI Number

**Program Name: PT-701** 

Communication System: GPRS850; Frequency: 836.6 MHz; Duty Cycle: 1:8

Medium parameters used: f = 837 MHz;  $\sigma$  = 0.992 mho/m;  $\epsilon_r$  = 55.5;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: ES3DV3 - SN3898; ConvF(9.63, 9.63, 9.63); Calibrated: 3/10/2014

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn914; Calibrated: 12/18/2013
- Phantom: SAM with TP1432; Type: SAM;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

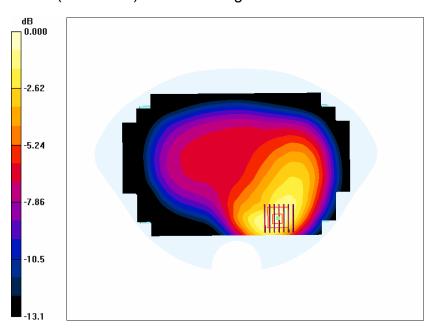
**Side2 1slot/Area Scan (101x181x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.331 mW/g

**Side2 1slot/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =9.34 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 0.533 W/kg

SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.101 mW/g Maximum value of SAR (measured) = 0.359 mW/g



0 dB = 0.359 mW/g