

APPENDIX C: RELEVANT PAGES FROM PROBE CALIBRATION REPORT(S)

The State Radio_monitoring_center Testing Center

Calibration Certificate



Instrument Dosimetric E-field Probe

Type/Model ES3DV3

Manufacturer Schmid & Partner Engineering AG

Serial No SN:3128

Name of Client The State Radio_monitoring_center Testing Center

Address of Client No.80 Bei Lishi Road XiCheng District

Calibration Date 2012.2.3

All calibrations have been conducted in the closed laboratory facility: environment temperature (22±3) °C and humidity<70%

Approved by  

Tel: +86-10-68009202 68009203 Fax: +86-10-68009205 68009195
Add: No.80 Bei Lishi Road, Xi Cheng District Beijing 100037, P.R.China

Page 1 of 6 Certificate No.SRTC2012-CAL002-001

The State Radio_monitoring_center Testing Center

Reference documents of the measurement(Code, Name)

SRTC3003-V1.0.0 Working procedure for calibration——SAR testing system

Place and environmental condition of the measurement

Temperature 23.8℃ Humidity 38.2%
Location SRTC226 room

Primary Calibration Equipment used	Model/Type	ID#	Cal Date	Scheduled Calibration
Power meter	E4417A	SN: MY45101004	2011.8	2012.8
Power sensor	E9300B	SN: MY41496001	2011.8	2012.8
Power sensor	E9300B	SN: MY41496003	2011.8	2012.8
Reference DAE	DAE4	SN: 725	2011.10	2012.10
Signal generator	SML03	SN:103514	2010.8	2012.8
Network analyzer	8714ET	SN:US40372083	2011.8	2012.8
Secondary Calibration Equipment used	Model/Type	ID#		
Waveguide	WGLS R9	SN:1006		
Waveguide	WGLS R14	SN:1003		
Waveguide	WGLS R22	SN:1006		

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Certificate No.SRTC2012-CAL002-001

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Note:

1. This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).

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4.The calibration results would be valid only for the items calibration.

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Certificate No.SRTC2012-CAL002-001

The State Radio_monitoring_center Testing Center

Glossary

TSL	Tissue Simulating Liquid
NORM _{x, y, z}	The sensitivity in free space
ConvF	The sensitivity of the TSL/The sensitivity in free space
DCP	Diode Compression Point
Angle ϕ	ϕ rotation around probe axis
Angle θ	θ rotation around an axis that is in the plane normal to probe axis i.e. $\theta=0$, means that is normal to probe axis

Calibration is preformed according to the Following Standards

IEEE Std 1528-2003

IEC 62209-1-2005

Federal Communication Commission Office of Engineering & Technology (FCC OET)

Methods Applied and Interpretation of Parameters

- NORM_{x, y, z}: Assessed for E-field polarization $\theta=0$ for XY sensors and $\theta=90$ for Z sensor
- NORM(f)_{x, y, z} = NORM_{x, y, z} * frequency_response. And this linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the states uncertainty of ConvF.
- DCP_{x,y,z}: DCP are numerical linearization parameters assessed based on the data of power sweep(no uncertainty required). DCP does not depend on frequency and medium.
- ConvF and boundary effect: Assessed in flat phantom using E-field and inside waveguide using analytical field distributions based on power measurements for $f > 800\text{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation(alpha,depth) of which typical uncertainty values are given. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50\text{MHz}$ to $\pm 100\text{MHz}$.
- Spherical isotropy: in a locally homogeneous field realized using an open waveguide setup.

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Measurement Conditions

DASY versions	DSAY 5	V52.8.0.692
Model	Flat phantom	—

Probe Sensitivity Parameters

	Value	Unit
Axis X	1.00	$\mu V / (V / m)^2$
Axis Y	1.00	$\mu V / (V / m)^2$
Axis Z	1.00	$\mu V / (V / m)^2$

1. Diode Compression Point

	Value	Unit	Uncertainty (k=2)
Axis X	100.0	mV	10.82%
Axis Y	100.6	mV	10.82%
Axis Z	100.7	mV	10.82%

2. Probe Conversion Factors: Head Tissue Liquid

Frequency (MHz)	Validity (MHz)	Permittivity	Conductivity (mho/m)	Alpha	Depth (mm)	ConvFx/ ConvFy / ConvFz $\mu V / (V / m)^2$			Uncertainty (k = 2)
900	±100	42.72	0.968	0.411	1.582	7.375	7.783	7.540	13.02%
1800	±100	39.61	1.354	0.386	1.760	5.767	6.013	5.888	13.02%
1900	±100	39.11	1.463	0.313	2.161	5.438	5.759	5.595	13.02%
2450	±100	38.30	1.890	0.406	1.755	3.770	3.979	3.882	13.02%

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Certificate No.SRTC2012-CAL002-001

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3. Probe Conversion Factors: Body Tissue Liquid

Frequency (MHz)	Validity (MHz)	Permittivity	Conductivity (mho/m)	Alpha	Depth (mm)	ConvFx/ ConvFy/ConvFz $\mu V/(V/m)^2$			Uncertainty (k=2)
900	±100	54.48	1.055	0.405	1.643	7.149	7.540	7.336	13.02%
1800	±100	53.74	1.567	0.370	2.095	6.056	6.383	6.220	13.02%
1900	±100	53.40	1.679	0.301	2.577	5.271	5.584	5.501	13.02%
2450	±100	52.70	1.950	0.494	1.585	3.783	4.000	3.888	13.02%

4. Probe Isotropy

	Value	Unit	Uncertainty(k=2)
Axial Isotropy	-0.18	dB	10.18%
Spherical Isotropy	-0.20	dB	10.18%

Calibrated by

张赫佐

Checked by

刘佳

APPENDIX D: RELEVANT PAGES FROM DAE REPORT(S)

The State Radio_monitoring_center Testing Center

Calibration Certificate



Instrument DAE

Type/Model DAE4

Manufacturer Schmid & Partner Engineering AG

Serial No SN:720

Name of Client The State Radio_monitoring_center Testing Center

Address of Client No.98 Bei Lishi Road XiCheng District

Calibration Date 2012.2.7

All calibrations have been conducted in the closed laboratory facility: environment temperature (22±3) °C and humidity<70%

Approved by  

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The State Radio_monitoring_center Testing Center

Reference documents of the measurement(Code, Name)
SRTC3003-V1.0.0 Working procedure for calibration——SAR testing system
Place and environmental condition of the measurement
Temperature 21.9℃ Humidity 27.8%
Location SRTC226 room

Primary Calibration Equipment used	Model/Type	ID#	Cal Date	Scheduled Calibration
Process Calibrator Protractor	Fluke 525B	1090118	2011.8	2012.8
		1001	2011.8	2012.8
Secondary Calibration Equipment used	Model/Type	ID#	Cal Date	Scheduled Calibration
Calibrator Box	V1.1	1003	---	---

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Note:

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The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.
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3. SRTC is responsible for the whole of certificate only with stamp of SRTC.
4. The calibration results would be valid only for the items calibration.
5. The certification is written by Chinese and English. Exact meaning should be explained only on Chinese version.

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The State Radio_monitoring_center Testing Center

Glossary

DAE	data acquisition electronics
Connector angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is preformed according to the Following Standards

- IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in Human Head from Wireless Communication Devices: Measurement Techniques", December 2003
- IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300MHz to 3GHz)", February 2005
- Federal Communication Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Methods Applied and Interpretation of Parameters

- **DC Voltage Measurement:** Calibration Factor assessed for use in DASY system by comparison with a calibrates instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- **Connector angle:** The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters contain technical information as a result from the performance test and require no uncertainty.

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DC Voltage Measurement Linearity: Verification of the Linearity at +10% and -10% of the nominal calibration voltage.

Common mode sensitivity: Influence of a positive or negative common mode voltage on the differential measurement.

Channel separation: Influence of a voltage on the neighbor channels not subject to an input voltage.

AD Converter Values with inputs shorted: Values on the internal AD converter corresponding to zero input voltage.

Input Offset Measurement: Output voltage and statistical results over a large number of zero voltage measurement.

DC Voltage Measurement

A/D-Converter Resolution nominal

High Range: 1LSB=6.1 μ V

Low Range: 1LSB=61nV

full range = -100...+300mV

full range = -1...+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Facto	X	Y	Z
High Range	403.358 \pm 0.12%(k=2)	404.816 \pm 0.12%(k=2)	403.239 \pm 0.12%(k=2)
Low Range	3.948 \pm 1.3%(k=2)	3.965 \pm 1.3%(k=2)	3.950 \pm 1.3%(k=2)

Connector Angle

Connector Angle to be used in DASY system	174' \pm 1'
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1. DC Voltage Linearity

DC Voltage Linearity

High Range	Input (μ V)	Reading(μ V)	Error(%)
Channel X +Input	+200000	200001.6	0.001
Channel X +Input	+20000	20008.9	0.045
Channel X -Input	-20000	-19997.9	0.011
Channel Y +Input	+200000	200001.1	0.000
Channel Y +Input	+20000	20009.2	0.046
Channel Y -Input	-20000	-19996.7	0.017
Channel Z +Input	+200000	200002.5	0.001
Channel Z +Input	+20000	20006.1	0.031
Channel Z -Input	-20000	-20004.4	0.022

Low Range	Input (μ V)	Reading(μ V)	Error(%)
Channel X +Input	+2000	2000.5	0.03
Channel X +Input	+200	201.6	0.80
Channel X -Input	-200	-201.9	0.95
Channel Y +Input	+2000	2000.3	0.02
Channel Y +Input	+200	201.6	0.80
Channel Y -Input	-200	-201.9	0.95
Channel Z +Input	+2000	1999.0	0.05
Channel Z +Input	+200	200.2	0.10
Channel Z -Input	-200	-201.5	0.75

2. Common mode sensitivity

Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3sec

	Common mode Input Voltage(mV)	High Range Average Reading(μ V)	Low Range Average Reading(μ V)
Channel X	200	-5.6	-7.0
	-200	9.1	8.1
Channel Y	200	15.7	15.1
	-200	-15.8	-15.6
Channel Z	200	-17.2	-17.4
	-200	15.6	15.7

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3.Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3sec

	Input Voltage(mV)	Channel X(μ V)	Channel Y(μ V)	Channel Z(μ V)
Channel X	200	—	9.6	4.0
Channel Y	200	7.4	—	9.7
Channel Z	200	6.8	6.7	—

4 .AD-Converter Values with inputs shorted

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3sec

	High Range(LSB)	Low Range (LSB)
Channel X	16150.2	16332.3
Channel Y	16218.4	17543.7
Channel Z	16450.4	15098.6

5.Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3sec

Input 10MΩ

	Average(μ V)	Min. Offset(μ V)	Max. Offset(μ V)	Std.Deviation(μ V)
Channel X	0.2	1.5	-1.3	0.5
Channel Y	-0.6	1.7	-1.7	0.4
Channel Z	-0.8	1.5	-2.4	0.7

Calibrated by 张赫作

Checked by 刘佳

APPENDIX E: RELEVANT PAGES FROM DIPOLE VALIDATION KIT REPORT(S)

The State Radio_monitoring_center Testing Center

Calibration Certificate



IAC-MRA
CNAS
CALIBRATION
CNAS L0447

Instrument Dipole

Type/Model D900V2

Manufacturer Schmid & Partner Engineering AG

Serial No SN: 171

Name of Client The State Radio_monitoring_center Testing Center

Address of Client No.80 Beilishi Road Xicheng District Beijing, China

Calibration Date 2011.6.11

All calibrations have been conducted in the closed laboratory facility: environment temperature (22±3) °C and humidity<70%

Approved by  

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Page 1 of 7 Certificate No.SRTC2011-CAL003-001

The State Radio_monitoring_center Testing Center

Reference documents of the measurement(Code, Name)	
SRMC3003-V1.0.0 Working procedure for calibration of SAR Testing system	
Place and environmental condition of the measurement	
Temperature 20.3℃	Humidity 38.6%
Location SRTC Room226	

Primary Calibration Equipment used	Model/Type	ID#	Cal Date	Scheduled Calibration
Power meter	E4417A	SN: MY45101004	2010.8.20	2011.8.20
Power sensor	E9300B	SN: MY41496001	2010.8.20	2011.8.20
Power sensor	E9300B	SN: MY41496003	2010.8.20	2011.8.20
DAE Reference DAE	DAE4	SN: 720	2011.1.19	2012.1.19
Reference probe	ES3DV3	SN:3128	2011.4.21	2012.4.21
Secondary Calibration Equipment used	Model/Type	ID#	Cal Date	Scheduled Calibration
Signal generator	SML03	SN:103514	2010.8	2011.8
Network analyzer	8714ET	SN:US40372083	2010.8	2011.8

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Certificate No.SRTC2011-CAL003-001

The State Radio_monitoring_center Testing Center

Glossary

TSL	tissue simulating liquid
ConvF	sensitivity in TSL/NORM x, y, z
N/A	not applicable or not measured

Calibration is preformed according to the Following Standards

- a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in Human Head from Wireless Communication Devices: Measurement Techniques", December 2003
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300MHz to 3GHz)", February 2005
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- d) EN 62209-1 Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices — Human models, instrumentation, and procedures — Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)

Additional Documentation:

- e) DASY System Handbook

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Certificate No.SRTC2011-CAL003-001

The State Radio_monitoring_center Testing Center

Methods Applied and Interpretation of Parameters

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- SAR measured: SAR measured at the stated antenna input power
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

Measurement Conditions

DASY Version	DSAY 5	V52.2.0.163
Extrapolation	Advanced Extrapolation	——
Phantom	ELI4	——
Distance Dipole Center-TSL	15mm	With spacer
Area Scan Resolution	dx,dy=15mm	——
Zoom Scan Resolution	dx,dy,dz=5mm	——
Frequency	900MHz	——

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Head TSL Parameters

The following parameters and calculation were applied

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0°C	42.0	0.99mho/m
Measured Head TSL parameters	(22±0.5)°C	42.621±5%	0.966mho/m±5%
Head TSL temperature during test	(22.6±0.6)°C	——	——

1. SAR-Head TSL

SAR averaged over 1cm ³ (1g) of Head TSL	Condition	——
SAR measured	250mW input power	2.58mW/g
SAR normalized	normalized to 1W	10.32mW/g
SAR for nominal Head TSL parameters	normalized to 1W	10.54mW/g±17.4%(k=2)

SAR averaged over 10cm ³ (10g) of Head TSL	Condition	——
SAR measured	250mW input power	1.64mW/g
SAR normalized	normalized to 1W	6.56mW/g
SAR for nominal Head TSL parameters	normalized to 1W	6.64mW/g±16.8%(k=2)

2. Other Parameters

Return Loss	-20.25 dB
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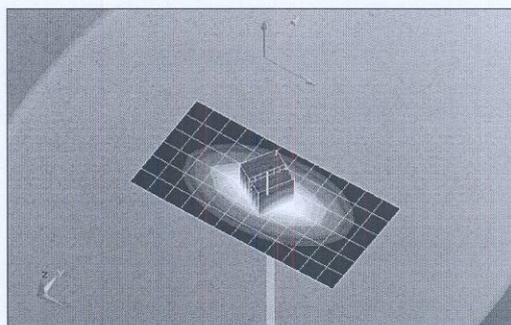
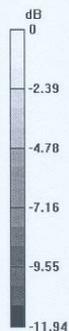
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Annex

Annex 1

Date/Time: 6/11/2011 5:38:58 PM

Test Laboratory: The name of your organization
 DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:171
 Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 900$ MHz; $\sigma = 0.966$ mho/m; $\epsilon_r = 42.621$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 Measurement Standard: DASy5 (IEEE/IEC/ANSI C63.19-2007)
 DASy4 Configuration:
 Probe: ES3DV3 - SN3128; ConvF(9.03, 9.53, 9.2); Calibrated: 4/21/2011
 Sensor-Surface: 4mm (Mechanical Surface Detection)
 Electronics: DAE - SN720; Calibrated: 1/19/2011
 Phantom: ELI v4.0; Type: QDOVA001BB;
 SEMCAD X Version 14.6.4 (4989)
 Configuration/Towards ground - Middle /Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 2.777 mW/g
 Configuration/Towards ground - Middle /Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 54.277 V/m; Power Drift = -0.02 dB
 Peak SAR (extrapolated) = 4.0250
 SAR(1 g) = 2.58 mW/g; SAR(10 g) = 1.64 mW/g
 Maximum value of SAR (measured) = 2.795 mW/g



0 dB = 2.790mW/g = 8.91 dB mW/g

中心检测中心

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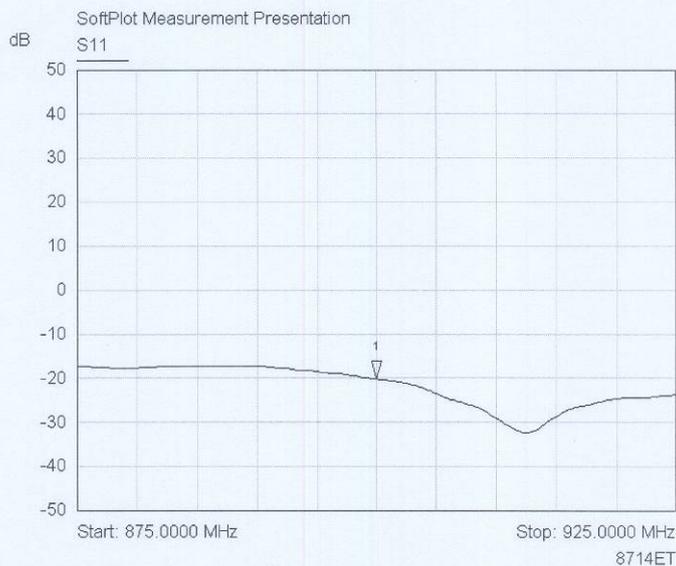
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Certificate No.SRTC2011-CAL003-001

The State Radio_monitoring_center Testing Center

Annex 2



Mkr	Trace	X-Axis	Value	Notes
1	√ S11	900.0000 MHz	-20.25 dB	

Head TSL Return Loss

Calibrated by 张赫作

Checked by 刘佳

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Certificate No.SRTC2011-CAL003-001

The State Radio_monitoring_center Testing Center

Calibration Certificate



Instrument Dipole

Type/Model D1800V2

Manufacturer Schmid & Partner Engineering AG

Serial No SN: 2d084

Name of Client The State Radio_monitoring_center Testing Center

Address of Client No.80 Beilishi Road Xicheng District Beijing, China

Calibration Date 2011.6.11

All calibrations have been conducted in the closed laboratory facility: environment temperature (22±3) °C and humidity<70%

Approved by



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Certificate No.SRTC2011-CAL003-002

The State Radio_monitoring_center Testing Center

Reference documents of the measurement(Code, Name)
SRMC3003-V1.0.0 Working procedure for calibration of SAR Testing system
Place and environmental condition of the measurement
Temperature 20.3℃ Humidity 39.7%
Location SRTC Room226

Primary Calibration Equipment used	Model/Type	ID#	Cal Date	Scheduled Calibration
Power meter	E4417A	SN: MY45101004	2010.8.20	2011.8.20
Power sensor	E9300B	SN: MY41496001	2010.8.20	2011.8.20
Power sensor	E9300B	SN: MY41496003	2010.8.20	2011.8.20
DAE Reference DAE	DAE4	SN: 720	2011.1.19	2012.1.19
Reference probe	ES3DV3	SN:3128	2011.4.21	2012.4.21
Secondary Calibration Equipment used	Model/Type	ID#	Cal Date	Scheduled Calibration
Signal generator	SML03	SN:103514	2010.8	2011.8
Network analyzer	8714ET	SN:US40372083	2010.8	2011.8

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Certificate No.SRTC2011-CAL003-002

The State Radio_monitoring_center Testing Center

Glossary

TSL	tissue simulating liquid
ConvF	sensitivity in TSL/NORM x, y, z
N/A	not applicable or not measured

Calibration is preformed according to the Following Standards

- a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in Human Head from Wireless Communication Devices: Measurement Techniques", December 2003
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300MHz to 3GHz)", February 2005
- c) Federal Communication Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields: Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65
- d) EN 62209-1 Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices — Human models, instrumentation, and procedures — Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)

Additional Documentation:

- e) DASY System Handbook

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Methods Applied and Interpretation of Parameters

- Measurement Conditions: Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- SAR measured: SAR measured at the stated antenna input power
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

Measurement Conditions

DASY Version	DSAY 5	V52.2.0.163
Extrapolation	Advanced Extrapolation	——
Phantom	ELI4	——
Distance Dipole Center-TSL	15mm	With spacer
Area Scan Resolution	dx,dy=15mm	——
Zoom Scan Resolution	dx,dy,dz=5mm	——
Frequency	1800MHz	——

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Head TSL Parameters

The following parameters and calculation were applied

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0°C	40.0	1.40mho/m
Measured Head TSL parameters	(22±0.5)°C	38.471±5%	1.366mho/m±5%
Head TSL temperature during test	(22.6±0.6)°C	——	——

1. SAR-Head TSL

SAR averaged over 1cm ³ (1g) of Head TSL	Condition	——
SAR measured	250mW input power	9.79mW/g
SAR normalized	normalized to 1W	39.16mW/g
SAR for nominal Head TSL parameters	normalized to 1W	38.81mW/g±17.4%(k=2)

SAR averaged over 10cm ³ (10g) of Head TSL	Condition	——
SAR measured	250mW input power	5.13mW/g
SAR normalized	normalized to 1W	20.42 mW/g
SAR for nominal Head TSL parameters	normalized to 1W	20.18mW/g±16.8%(k=2)

2.Other Parameters

Return Loss	-30.87 dB
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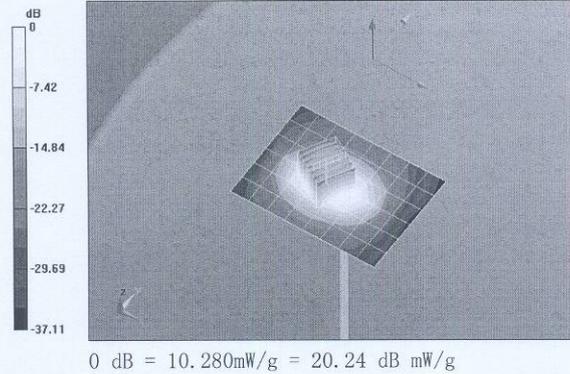
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Annex

Annex 1

Date/Time: 6/11/2011 3:01:56 PM

Test Laboratory: SRTC, Beijing, China
DUT: Dipole 1800 MHz D1800V2; Type: D1800V2; Serial: D1800V2 - SN:4d084
Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1800$ MHz; $\sigma = 1.366$ mho/m; $\epsilon_r = 38.471$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)
DASY4 Configuration:
Probe: ES3DV3 - SN3128; ConvF(6.15, 6.5, 6.27); Calibrated: 4/21/2011
Sensor-Surface: 4mm (Mechanical Surface Detection)
Electronics: DAE - SN720; Calibrated: 1/19/2011
Phantom: ELI v4.0; Type: QDOVA001BB;
SEMCAD X Version 14.6.4 (4989)
Configuration/Towards ground - Middle/Zoom Scan (7x7x7) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 31.313 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 17.7400
SAR(1 g) = 9.79 mW/g; SAR(10 g) = 5.13 mW/g
Maximum value of SAR (measured) = 10.972 mW/g
Configuration/Towards ground - Middle/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 10.276 mW/g



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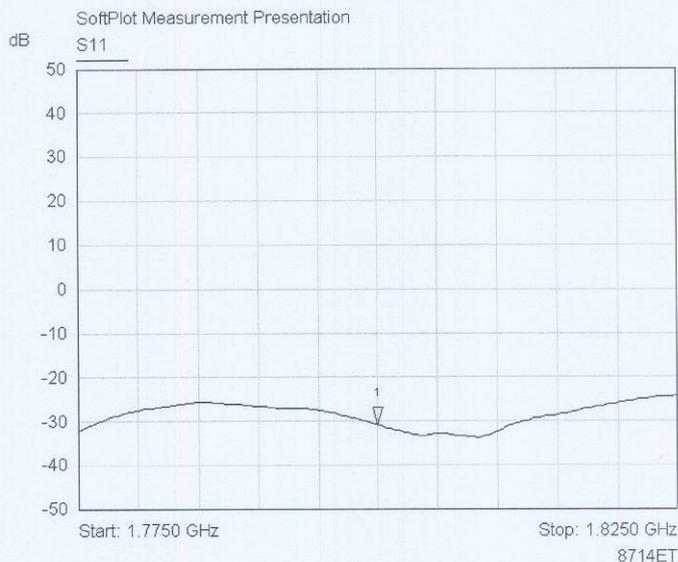
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Annex 2



Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	1.8000 GHz	-30.87 dB	

Head TSL Return Loss

Calibrated by

张赫佐

Checked by

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