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Shahriar Ninad	Jan 02-04, 2008	RTS-0943-0801-01	L6ARBU20	CW

APPENDIX D: PROBE & DIPOLE CALIBRATION DATA

RTS A		Appendix for the SAR Partial Rep	e BlackBerry® Smartphone N ort	Model RBU21CW	Page 2(22
or Data ahriar N	-	Dates of Test Jan 02-04, 2008	1		
	intu	bull 02 01, 2000			
	Calibration Labor Schmid & Partner Engineering AG Zeughausstrasse 43, 8004			ichweizerischer Kalibrierdienst iervice suisse d'étalonnage iervizio svizzero di taratura wiss Calibration Service	
		Service is one of the signatori		.: SCS 108	
	Client RIM	r the recognition of calibration		T3-1644_Nov07	
	CALIBRATIC	N CERTIFICAT	Education		
	Object	ET3DV6 - SN:1	644		
	Calibration procedure(s)	QA CAL-01.v6 Calibration proc	edure for dosimetric E-field probes		
	Calibration date:	November 12, 2	November 12, 2007		
	Condition of the calibrated item In Tolerance				
	The measurements and th	e uncertainties with confidence	tional standards, which realize the physical units or probability are given on the following pages and ar	e part of the certificate.	
		conducted in the closed laborat	ory facility: environment temperature (22 ± 3)°C an	d humidity < 70%.	
	Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration	
	Power meter E4419B	GB41293874	29-Mar-07 (METAS, No. 217-00670)	Mar-08	
	Power sensor E4412A Power sensor E4412A	MY41495277 MY41498087	29-Mar-07 (METAS, No. 217-00670) 29-Mar-07 (METAS, No. 217-00670)	Mar-08 Mar-08	
	Reference 3 dB Attenuator	and the second sec	8-Aug-07 (METAS, No. 217-00719)	Aug-08	
	Reference 20 dB Attenuate		29-Mar-07 (METAS, No. 217-00671)	Mar-08	
	Reference 30 dB Attenuate Reference Probe ES3DV2	the second s	8-Aug-07 (METAS, No. 217-00720) 4-Jan-07 (SPEAG, No. ES3-3013 Jan07)	Aug-08 Jan-08	
	DAE4	SN: 3013 SN: 654	4-Jan-07 (SPEAG, No. ES3-3013_Jan07) 20-Apr-07 (SPEAG, No. DAE4-654_Apr07)	Jan-08 Apr-08	
	Secondary Standards	ID #	Check Date (in house)	Scheduled Check	_
	RF generator HP 8648C Network Analyzer HP 8753	US3642U01700 3E US37390585	4-Aug-99 (SPEAG, in house check Oct-07) 18-Oct-01 (SPEAG, in house check Oct-07)	In house check: Oct-09 In house check: Oct-08	
	Calibrated by:	Name Katja Pokovic	Function Technical Manager	Signature	
	Approved by:	Niels Kuster	Quality Manager	1.1265	
				Issued: November 12, 2007	
	This calibration certificate	shall not be reproduced except i	n full without written approval of the laboratory.		
	This calibration certificate s Certificate No: ET3-1644		n tull without written approval of the laboratory. Page 1 of 9		_

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Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



- S Schweizerischer Kalibrierdienst C Service sulsse d'étalonnage
 - Servizio svizzero di taratura
 - Swiss Callbration Service

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossary:

Ologouly.	
TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
Polarization ϕ	φ rotation around probe axis
Polarization 9	9 rotation around an axis that is in the plane normal to probe axis (at
	measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications 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 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E²-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)x,y,z = NORMx,y,z * frequency_response (see Frequency Response Chart). This
 linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of
 the frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z* * *ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a
 flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

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November 12, 2007

Probe ET3DV6

SN:1644

Manufactured:	November 7, 2001
Last calibrated:	November 16, 2006
Recalibrated:	November 12, 2007

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)

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November 12, 2007

DASY - Parameters of Probe: ET3DV6 SN:1644

Sensitivity in Free Space ^A			Diode C	ompression ^B
NormX	1.82 ± 10.1%	μV/(V/m) ²	DCP X	93 mV
NormY	1.92 ± 10.1%	μV/(V/m) ²	DCP Y	92 mV
NormZ	1.88 ± 10.1%	μV/(V/m) ²	DCP Z	95 mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL

9	00 MHz	Typical SAR gradient: 5 %	per mm	
Sensor Cente	er to Phanto	m Surface Distance	3.7 mm	4.7 mm
SAR _{be} [%]	Without	Correction Algorithm	7.1	3.7
SAR _{be} [%]	With Co	prrection Algorithm	0.1	0.4

TSL 1810 MHz Typical SAR gradient: 10 % per mm

Sensor Center	Sensor Center to Phantom Surface Distance		4.7 mm
SAR _{be} [%]	Without Correction Algorithm	13.3	9.0
SAR _{be} [%]	With Correction Algorithm	0.5	1.6

Sensor Offset

Probe Tip to Sensor Center

2.7 mm

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of NormX,Y,Z do not affect the E²-field uncertainty inside TSL (see Page 8).

^B Numerical linearization parameter: uncertainty not required.

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Frequency Response of E-Field

1.5 1.4 1.3 Frequency response (normalized) 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0 500 1000 1500 2000 2500 3000 f [MHz] --- TEM

(TEM-Cell:ifi110 EXX, Waveguide: R22)

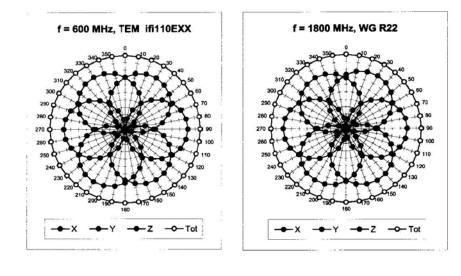
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

Certificate No: ET3-1644_Nov07

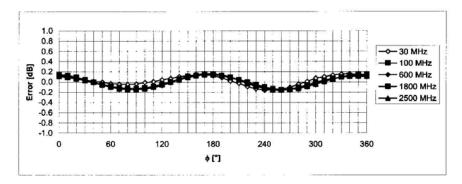
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Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$



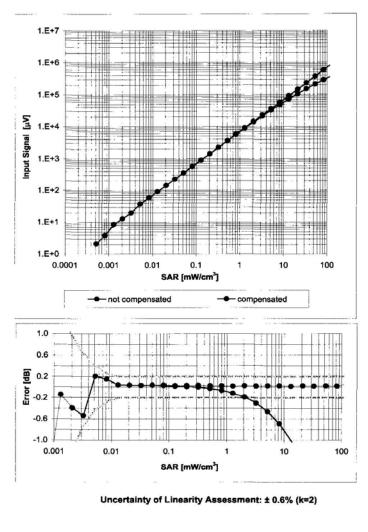
Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

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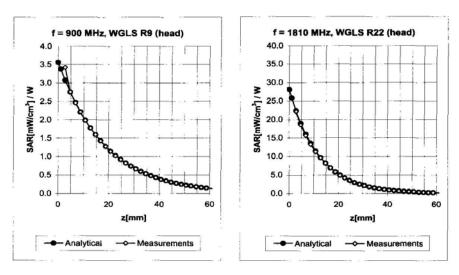
Dynamic Range f(SAR_{head}) (Waveguide R22, f = 1800 MHz)

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Conversion Factor Assessment

f [MHz]	Validity [MHz] ^C	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.21	4.04	6.41 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.71	2.01	5.24 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.32	2.97	5.97 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.73	2.27	4.75 ± 11.0% (k=2)

^c The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

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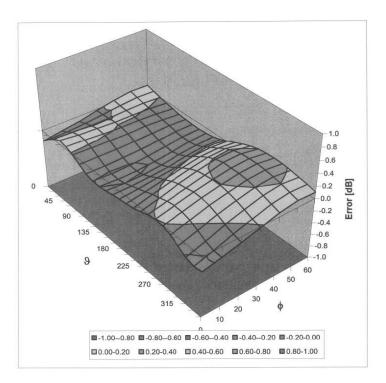
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Deviation from Isotropy in HSL

Error (ϕ , ϑ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

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arr Ninad Date of Text Text RTS-0943-0801-01 PC ID LGARBU20C Calibration Laboratory of Schmid & Partner Engineering AG Zeighnestrase 42, 8004 Zurich, Switzerland Image: Calibration Calibratin Calibratin Calibratin Calibration Calibratin Calibration Calibr	sting Services	SAR Partial Rej	e BlackBerry® Smartp port	mone wroder	RBU21CW
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CALIBRATION CERTIFICATE Object D835V2 - SN: 446 Calibration procedure(s) QA CAL-05, v6 Calibration procedure for dipole validation kits Calibration date January 8, 2007 Condition of the calibrated item In Tolerance This calibration certificate documents the traceability to national standards, which realize the physical write of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate. Al calibration shave been conducted in the disord istoratory facility: environment temperature (22 ± 3)*C and trainitity < 70%. Calibration Equipment used (M&TE critical for calibration) Privary Standards ID Ø Privary Standards ID Ø Output for addition the disord istoratory facility: environment temperature (22 ± 3)*C and trainitity < 70%. Calibration Equipment used (M&TE critical for calibration) Privary Standards ID Ø Output for addition of the disord istoratory facility: environment temperature (22 ± 3)*C and trainitity < 70%. Calibration Prode BER PM-4422 OB37440704 Power menor HP 34811 Standards for calibration Reference 20 dB Alternator Standards (200) Reference 20 dB Alternator Standard (20	Accredited by the Swiss Federal (The Swiss Accreditation Servic	Office of Metrology and Ac e is one of the signatorie	s to the EA	- amas carlor	
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RTS RIM Testing Services	Document Appendix for the BlackBerry® Smartphone Model RBU21CW SAR Partial Report				
Author Data	Dates of Test	Test Report No	FCC ID:		
Shahriar Ninad	Jan 02-04, 2008 RTS-0943-0801-01 L6ARBU20C			CW	

Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



- Schweizerischer Kalibrierdianst Service suisse d'étalonnage С
 - Servizio svizzero di taratura
- S Swiss Calibration Service

Accreditation No.: SCS 108

S

Accredited by the Swiss Federal Office of Metrology and Accreditation The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossan

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

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- b) CENELEC EN 50361, "Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz - 3 GHz), July 2001
- c) Federal Communications 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

Additional Documentation:

d) DASY4 System Handbook

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.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- 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.

Certificate No: D835V2-445 Jan07

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RTS RIM Testing Services	Document Appendix for the Black SAR Partial Report	Appendix for the BlackBerry® Smartphone Model RBU21CW				
Author Data	Dates of Test	Test Report No	FCC ID:			
Shahriar Ninad	Jan 02-04, 2008 RTS-0943-0801-01 L6ARBU20			CW		

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY4	V4.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V4.9	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

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Head TSL parameters The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) *C	40.2±6%	0.88 mho/m ± 6 %
Head TSL temperature during test	(22.2 ± 0.2) °C		-

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.33 mW / g
SAR normalized	normalized to 1W	9.32 mW / g
SAR for nominal Head TSL parameters 1	normalized to 1W	9.28 mW / g ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	253 mW input power	1.52 mW / g
SAR normalized	normalized to 1W	6.08 mW / g
SAR for nominal Head TSL parameters 1	normalized to 1W	6.04 mW/g±16.5 % (k=2)

1 Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

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RTS RIM Testing Services	Document Appendix for the BlackBerr SAR Partial Report	ry® Smartphone Model	RBU21CW	Page 14(22)
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Shahriar Ninad	Jan 02-04, 2008	RTS-0943-0801-01	L6ARBU20	CW

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	50.8 Ω - 5.8 jΩ	
Return Loss	- 24.7 dB	

General Antenna Parameters and Design

Electrical Delay (one direction)	1.386 ns	
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the

feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	October 24, 2001

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DASY4 Validation Report for Head TSL

Date/Time: 08.01.2007 11:34:46

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 446

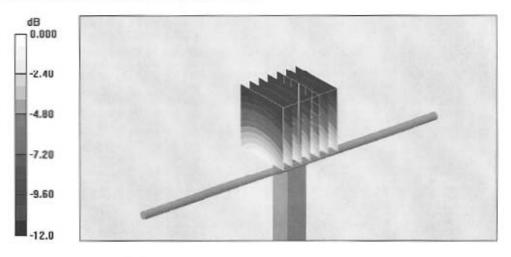
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1 Medium: HSL 900 MHz; Medium parameters used: f = 835 MHz; σ = 0.88 mho/m; ϵ_r = 40.3; ρ = 1000 kg/m³ Phantom section: Flat Section Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 SN1507 (HF); ConvF(6.09, 6.09, 6.09); Calibrated: 19.10.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn907; Calibrated: 20.07.2006
- · Phantom: Flat Phantom 4.9L; Type: QD000P49AA; ;
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin = 250 mW; d = 15 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.7 V/m; Power Drift = 0.017 dB Peak SAR (extrapolated) = 3.43 W/kg SAR(1 g) = 2.33 mW/g; SAR(10 g) = 1.52 mW/g Maximum value of SAR (measured) = 2.51 mW/g



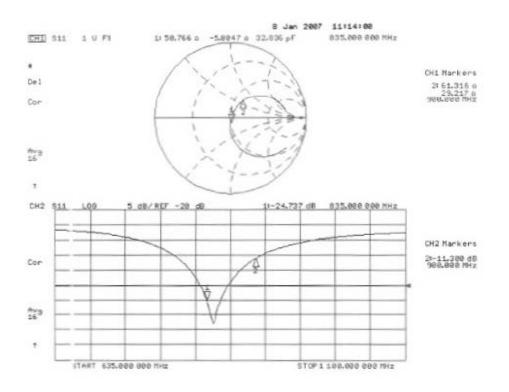
0 dB = 2.51mW/g

Certificate No: D835V2-445_Jan07

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Impedance Measurement Plot for Head TSL



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Zeughausstrasse 43, 8004 2	urich, Switzerland	Workte S s	wiss Calibration Service
	ral Office of Metrology and Ac		a: SCS 108
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Client RIM		Certificate No: D	01900V2-545_Jan07
CALIBRATION	CERTIFICATE	International and the second	and the second second
Object	D1900V2 - SN: 5	45	the state of the second
(rejour	D100042 - 014.0		
Calibration procedure(s)	QA CAL-05.v6		
	Calibration proce	dure for dipole validation kits	
	137.32 Mar 201		
Calibration date:	January 9, 2007		and the second states
Condition of the calibrated is	m In Tolerance		
		ional standards, which realize the physical units o robability are given on the following pages and a	
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Calibration Laboratory of Schmid & Partner Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



Schweizerischer Kalibrierdienst s

Service suisse d'étalonnage

С Servizio svizzero di taratura S

Accreditation No.: SCS 108

Swiss Calibration Service

Accredited by the Swiss Federal Office of Metrology and Accreditation The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Glossary:

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

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- b) CENELEC EN 50361, "Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz - 3 GHz), July 2001
- c) Federal Communications 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

Additional Documentation:

d) DASY4 System Handbook

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.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- 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.

Certificate No: D1900V2-545_Jan07

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY4	V4.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Area Scan Resolution	dx, dy = 15 mm	
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1900 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.8 ± 6 %	1.43 mho/m ± 6 %
Head TSL temperature during test	(22.0 ± 0.2) *C		-

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	condition	
SAR measured	250 mW input power	9.49 mW / g
SAR normalized	normalized to 1W	38.0 mW / g
SAR for nominal Head TSL parameters 1	normalized to 1W	37.0 mW/g±17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	4.98 mW / g
SAR normalized	normalized to 1W	19.9 mW / g
SAR for nominal Head TSL parameters 1	normalized to 1W	19.6 mW / g ± 16.5 % (k=2)

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¹ Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

••• C = 20.5

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	52.0 Ω + 0.2 jΩ
Return Loss	- 34.1 dB

General Antenna Parameters and Design

	Electrical Delay (one direction)	1.197 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG	
Manufactured on	November 15, 2001	

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DASY4 Validation Report for Head TSL

Date/Time: 09.01.2007 12:59:52

Test Laboratory: SPEAG, Zurich, Switzerland

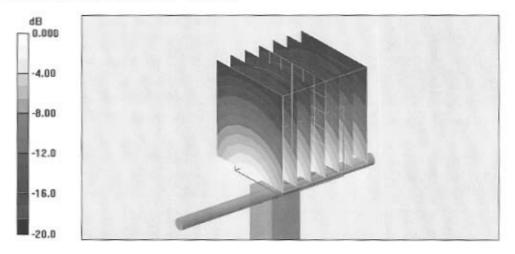
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1 Medium: HSL U10 BB; Medium parameters used: f = 1900 MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³ Phantom section: Flat Section Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 SN1507 (HF); ConvF(4.97, 4.97, 4.97); Calibrated: 19.10.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- · Electronics: DAE4 Sp907; Calibrated: 20.07.2006
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 90.8 V/m; Power Drift = 0.018 dB Peak SAR (extrapolated) = 16.5 W/kg SAR(1 g) = 9.49 mW/g; SAR(10 g) = 4.98 mW/g Maximum value of SAR (measured) = 10.7 mW/g

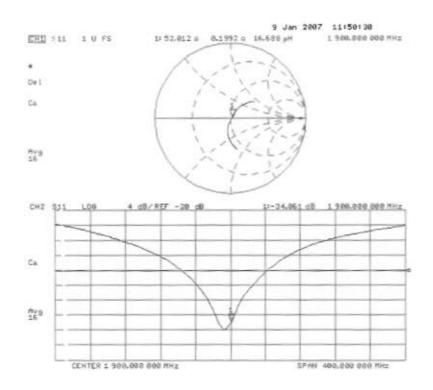


0 dB = 10.7mW/g

Certificate No: D1900V2-545_Jan07

RTS RIM Testing Services	Document Appendix for the BlackBerr SAR Partial Report	y® Smartphone Model 1	RBU21CW	Page 22(22)
Author Data	Dates of Test	Test Report No	FCC ID:	
Shahriar Ninad	Jan 02-04, 2008	RTS-0943-0801-01	L6ARBU20	CW

Impedance Measurement Plot for Head TSL



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