Date/Time: 8/10/2011 4:23:45 PM

Test Laboratory: Electronics Testing Center, Taiwan

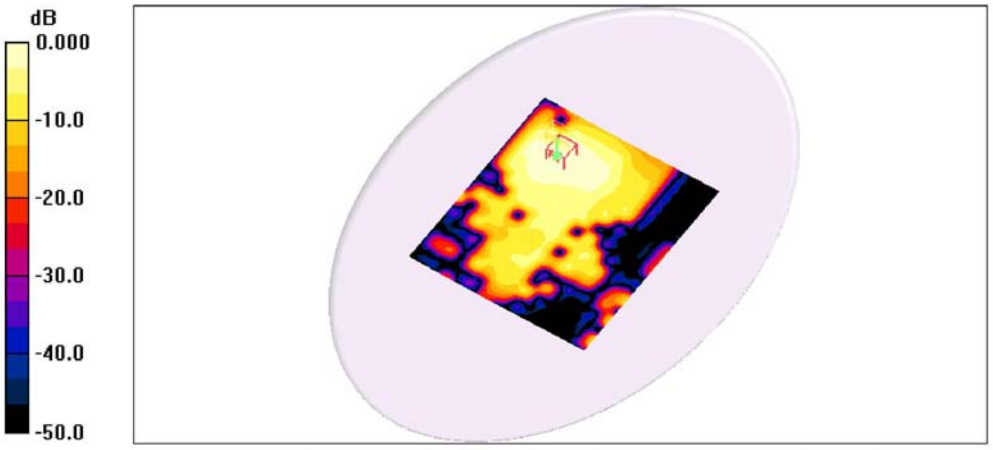
DUT: Tablet; Type: Mobile Collaboration Tablet; Serial: N/A

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.958 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3
Air temperature: 23degC; Liquid temperature: 22.5degC;
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3665; ConvF(9.5, 9.5, 9.5); Calibrated: 4/19/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn629; Calibrated: 9/17/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1055
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

EGSM850_2TX Slot_CH190_A_Side_distance_8mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.09 V/m; Power Drift = 0.181 dB
Peak SAR (extrapolated) = 0.363 W/kg
SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.175 mW/g
Maximum value of SAR (measured) = 0.270 mW/g

EGSM850_2TX Slot_CH190_A_Side_distance_8mm/Area Scan (141x161x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.268 mW/g



0 dB = 0.268mW/g

GPRS 1900 Distance 8mm

Date/Time: 8/16/2011 9:22:23 AM

Test Laboratory: Electronics Testing Center, Taiwan

DUT: Tablet; Type: Mobile Collaboration Tablet; Serial: N/A

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8
Medium parameters used (interpolated): f = 1880 MHz; σ = 1.49 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Air temperature:22.5 degC; Liquid temperature:22 degC;
Phantom section: Flat Section

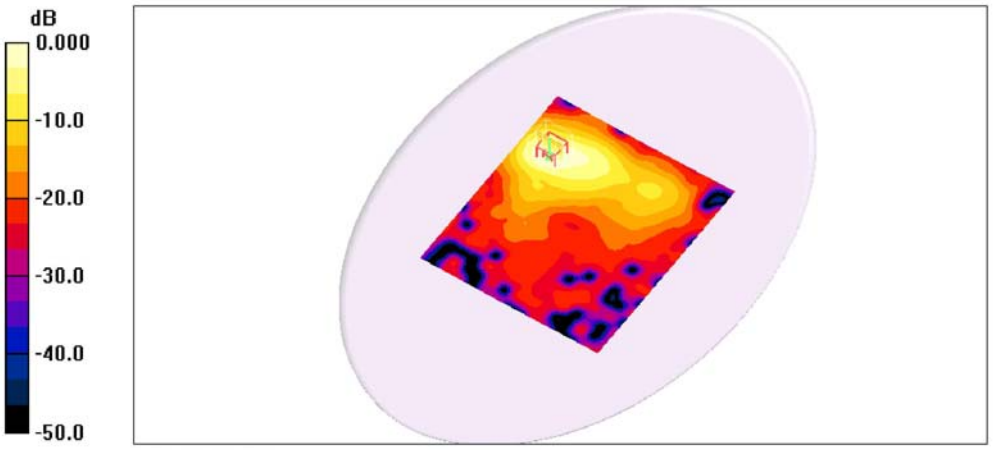
DASY4 Configuration:
- Probe: EX3DV4 - SN3665; ConvF(8.06, 8.06, 8.06); Calibrated: 4/19/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn629; Calibrated: 9/17/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1055
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GPRS1900_1TX Slot_CH661_A_Side_Distance_8 mm/Area Scan (141x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.286 mW/g

GPRS1900_1TX Slot_CH661_A_Side_Distance_8 mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.902 V/m; Power Drift = 0.153 dB
Peak SAR (extrapolated) = 0.335 W/kg
SAR(1 g) = 0.201 mW/g; SAR(10 g) = 0.117 mW/g

Maximum value of SAR (measured) = 0.221 mW/g



0 dB = 0.286mW/g

Date/Time: 8/16/2011 10:26:06 AM

Test Laboratory: Electronics Testing Center, Taiwan

DUT: Tablet; Type: Mobile Collaboration Tablet; Serial: N/A

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 1880 MHz; σ = 1.49 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Air temperature:22.5 degC; Liquid temperature:22 degC;
Phantom section: Flat Section

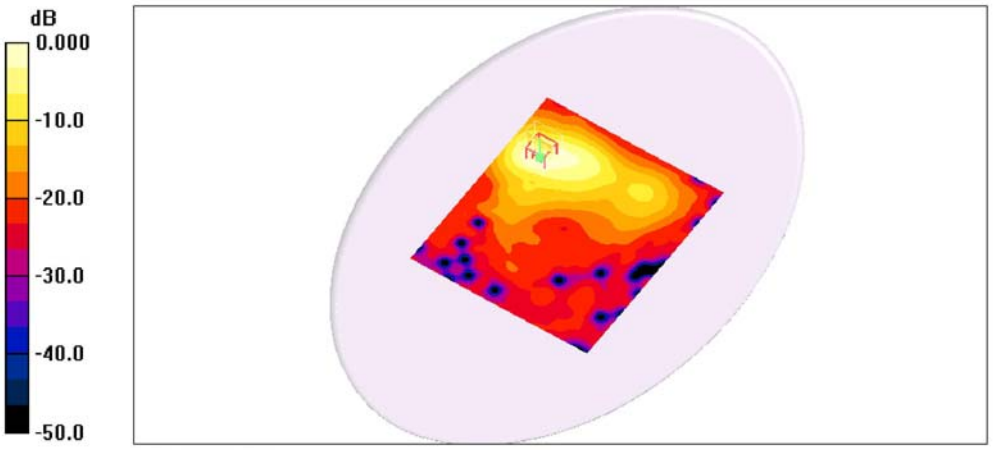
DASY4 Configuration:
- Probe: EX3DV4 - SN3665; ConvF(8.06, 8.06, 8.06); Calibrated: 4/19/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn629; Calibrated: 9/17/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1055
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

GPRS1900_2TX Slot_CH661_A_Side_Distance_8 mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.25 V/m; Power Drift = 0.186 dB
Peak SAR (extrapolated) = 0.524 W/kg
SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.185 mW/g

Maximum value of SAR (measured) = 0.346 mW/g

GPRS1900_2TX Slot_CH661_A_Side_Distance_8 mm/Area Scan (141x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.347 mW/g



0 dB = 0.347mW/g

Date/Time: 8/16/2011 11:12:52 AM

Test Laboratory: Electronics Testing Center, Taiwan

DUT: Tablet; Type: Mobile Collaboration Tablet; Serial: N/A

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8
Medium parameters used (interpolated): f = 1880 MHz; σ = 1.49 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Air temperature:22.5 degC; Liquid temperature:22 degC;
Phantom section: Flat Section

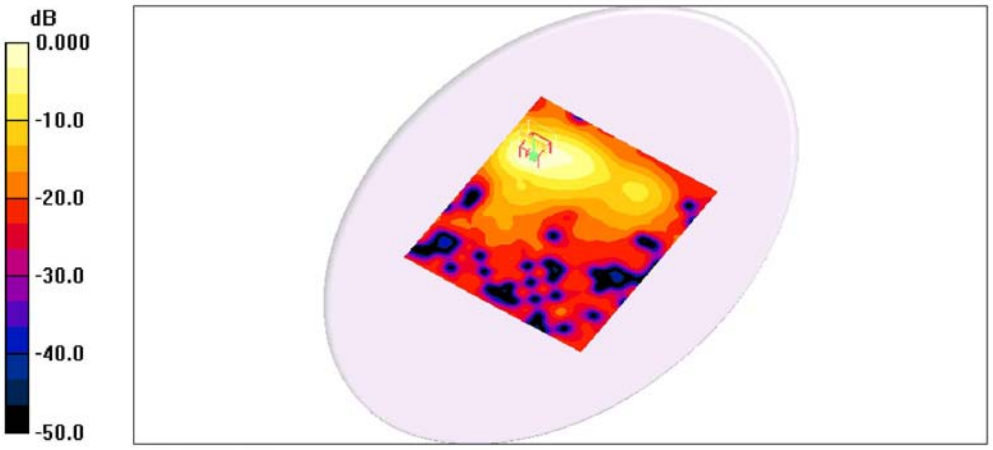
DASY4 Configuration:
- Probe: EX3DV4 - SN3665; ConvF(8.06, 8.06, 8.06); Calibrated: 4/19/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn629; Calibrated: 9/17/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1055
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

EGPRS1900_1TX Slot_CH661_A_Side_Distance_8 mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.975 V/m; Power Drift = 0.141 dB
Peak SAR (extrapolated) = 0.337 W/kg
SAR(1 g) = 0.203 mW/g; SAR(10 g) = 0.118 mW/g

Maximum value of SAR (measured) = 0.224 mW/g

EGPRS1900_1TX Slot_CH661_A_Side_Distance_8 mm/Area Scan (141x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.225 mW/g



0 dB = 0.225mW/g

Date/Time: 8/16/2011 11:20:42 AM

Test Laboratory: Electronics Testing Center, Taiwan

DUT: Tablet; Type: Mobile Collaboration Tablet; Serial: N/A

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium parameters used (interpolated): f = 1880 MHz; σ = 1.49 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Air temperature:22.5 degC; Liquid temperature:22 degC;
Phantom section: Flat Section

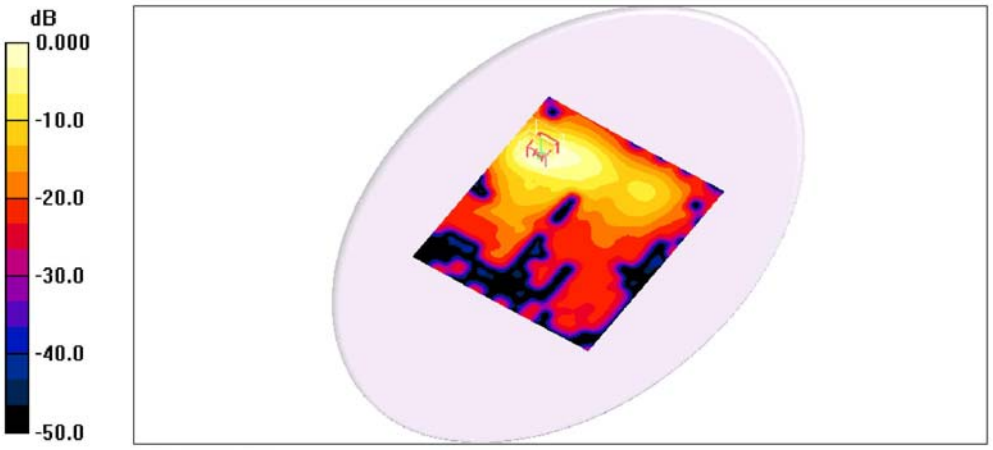
DASY4 Configuration:
- Probe: EX3DV4 - SN3665; ConvF(8.06, 8.06, 8.06); Calibrated: 4/19/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn629; Calibrated: 9/17/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1055
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

EGPRS1900_2TX Slot_CH661_A_Side_Distance_8 mm/Area Scan (141x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.352 mW/g

EGPRS1900_2TX Slot_CH661_A_Side_Distance_8 mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.07 V/m; Power Drift = 0.164 dB
Peak SAR (extrapolated) = 0.531 W/kg
SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.187 mW/g

Maximum value of SAR (measured) = 0.353 mW/g



0 dB = 0.352mW/g

WCDMA Band V Distance 8mm

Date/Time: 8/11/2011 11:58:54 AM

Test Laboratory: Electronics Testing Center, Taiwan

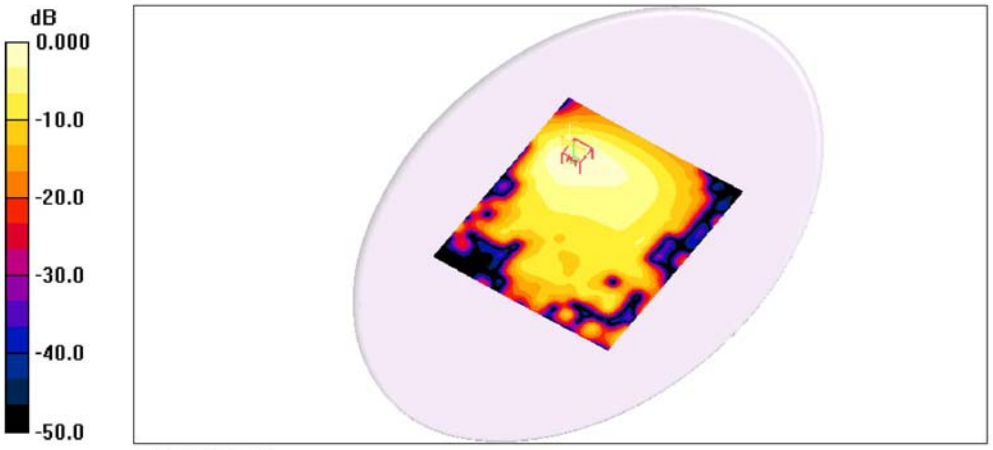
DUT: Tablet; Type: Mobile Collaboration Tablet; Serial: N/A

Communication System: WCDMA V; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.5 MHz; σ = 0.959 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3
Air temperature: 24degC; Liquid temperature: 23degC;
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3665; ConvF(9.5, 9.5, 9.5); Calibrated: 4/19/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn629; Calibrated: 9/17/2010
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1055
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WCDMA_BAND V_CH_4183_A_Side_Distance_8mm/Area Scan (141x161x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.495 mW/g

WCDMA_BAND V_CH_4183_A_Side_Distance_8mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.97 V/m; Power Drift = 0.137 dB
Peak SAR (extrapolated) = 0.672 W/kg
SAR(1 g) = 0.459 mW/g; SAR(10 g) = 0.311 mW/g
Maximum value of SAR (measured) = 0.493 mW/g



0 dB = 0.495mW/g

WCDMA Band II Distance 8mm

Date/Time: 12/25/2011 4:31:12 PM

Test Laboratory: Electronics Testing Center, Taiwan

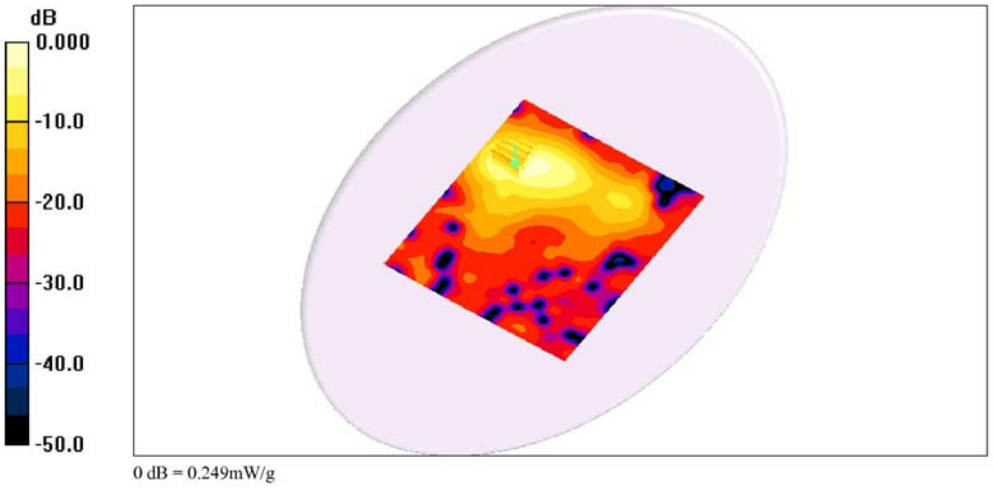
DUT: Tablet; Type: Mobile Collaboration Tablet; Serial: N/A

Communication System: WCDMA; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1880 MHz; σ = 1.51 mho/m; ε_r = 54.98; ρ = 1000 kg/m^3
Air temperature: 23degC; Liquid temperature: 22.5degC;
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3555; ConvF(6.72, 6.72, 6.72); Calibrated: 9/29/2011
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn629; Calibrated: 9/22/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1055
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

WCDMA_BANDII_CH9400_A_Side_Distance_8 mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.03 V/m; Power Drift = 1.40 dB
Peak SAR (extrapolated) = 0.361 W/kg
SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.126 mW/g
Maximum value of SAR (measured) = 0.235 mW/g

WCDMA_BANDII_CH9400_A_Side_Distance_8 mm/Area Scan (141x161x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.249 mW/g



0 dB = 0.249mW/g

ANNEX B: DIPOLE CERTIFICATE

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

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S Servizio svizzero di taratura
S Swiss Calibration 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

Accreditation No.: **SCS 108**

Client **Auden** Certificate No: **D835V2-4d092_Jun11**

CALIBRATION CERTIFICATE

Object	D835V2 - SN: 4d092
Calibration procedure(s)	QA CAL-05.v8 Calibration procedure for dipole validation kits above 700 MHz
Calibration date:	June 22, 2011

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	06-Oct-10 (No. 217-01266)	Oct-11
Power sensor HP 8481A	US37292783	06-Oct-10 (No. 217-01266)	Oct-11
Reference 20 dB Attenuator	SN: S5086 (20b)	29-Mar-11 (No. 217-01367)	Apr-12
Type-N mismatch combination	SN: 5047.2 / 06327	29-Mar-11 (No. 217-01371)	Apr-12
Reference Probe ES3DV3	SN: 3205	29-Apr-11 (No. ES3-3205_Apr11)	Apr-12
DAE4	SN: 601	8-Jun-11 (No. DAE4-601_Jun11)	Jun-12

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-09)	In house check: Oct-11
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-09)	In house check: Oct-11
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-10)	In house check: Oct-11

	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: June 22, 2011

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

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S Swiss Calibration 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

Accreditation No.: SCS 108

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) 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
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) DASY4/5 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.

Measurement Conditions

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

DASY Version	DASY5	V52.6.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

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	40.8 ± 6 %	0.89 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.37 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	**9.52 mW /g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.55 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	**6.22 mW /g ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	55.2	0.97 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	53.1 ± 6 %	0.99 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.47 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	**9.65 mW / g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.62 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	**6.38 mW / g ± 16.5 % (k=2)**

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	52.2 Ω - 2.2 jΩ
Return Loss	- 30.4 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	48.2 Ω - 4.8 jΩ
Return Loss	- 25.7 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.391 ns

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	September 15, 2009

DASY5 Validation Report for Head TSL

Date: 22.06.2011

Test Laboratory: SPEAG, Zurich, Switzerland

D835_4d092_H_110622_CL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d092

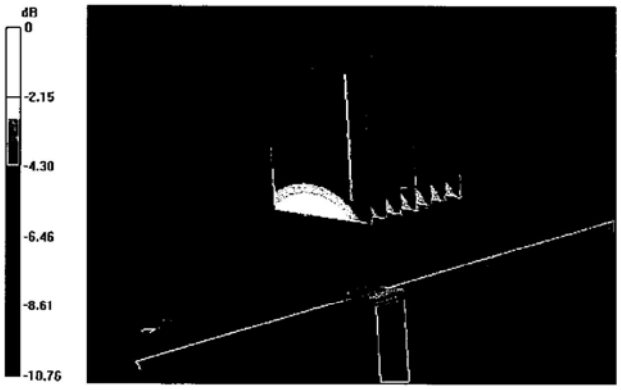
Communication System: CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.89 mho/m; ε_r = 40.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.07, 6.07, 6.07); Calibrated: 29.04.2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 08.06.2011
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.6.2(482); SEMCAD X 14.4.5(3634)

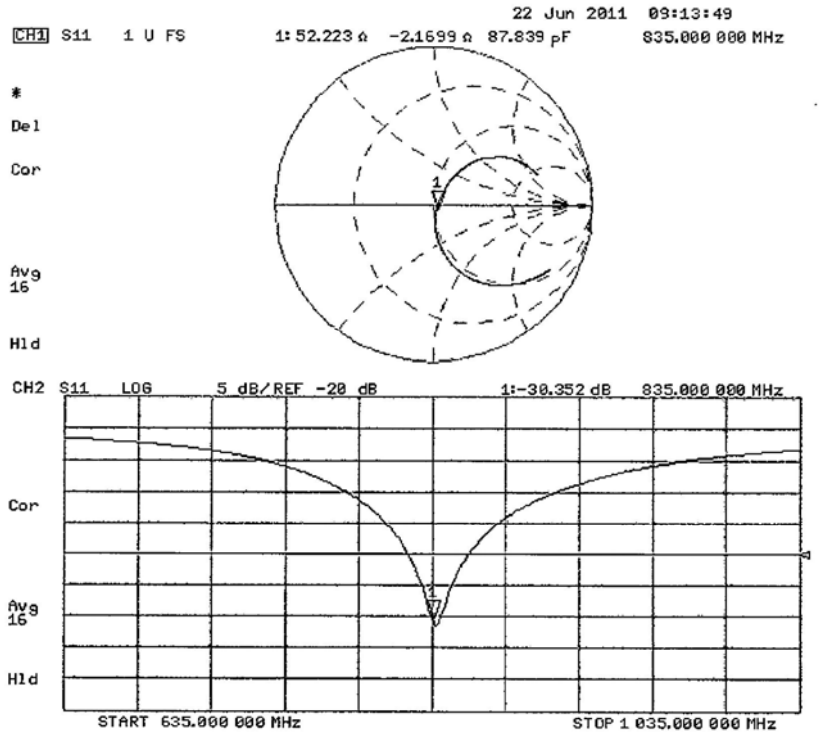
Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.812 V/m; Power Drift = 0.0016 dB
Peak SAR (extrapolated) = 3.508 W/kg
SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.55 mW/g
Maximum value of SAR (measured) = 2.748 mW/g



0 dB = 2.750mW/g

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 22.06.2011

Test Laboratory: SPEAG, Zurich, Switzerland

D835_4d092_M_110622_CL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d092

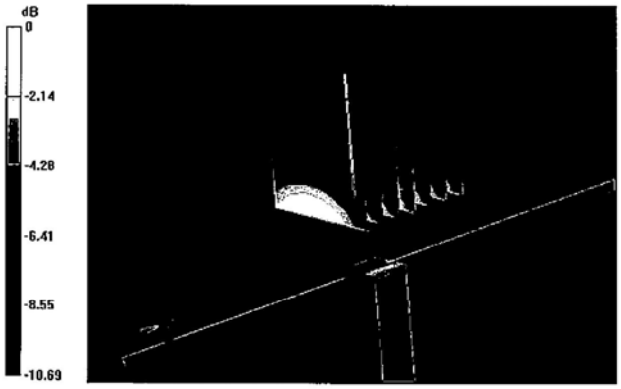
Communication System: CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.99 mho/m; ε_r = 53.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.02, 6.02, 6.02); Calibrated: 29.04.2011
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 08.06.2011
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.6.2(482); SEMCAD X 14.4.5(3634)

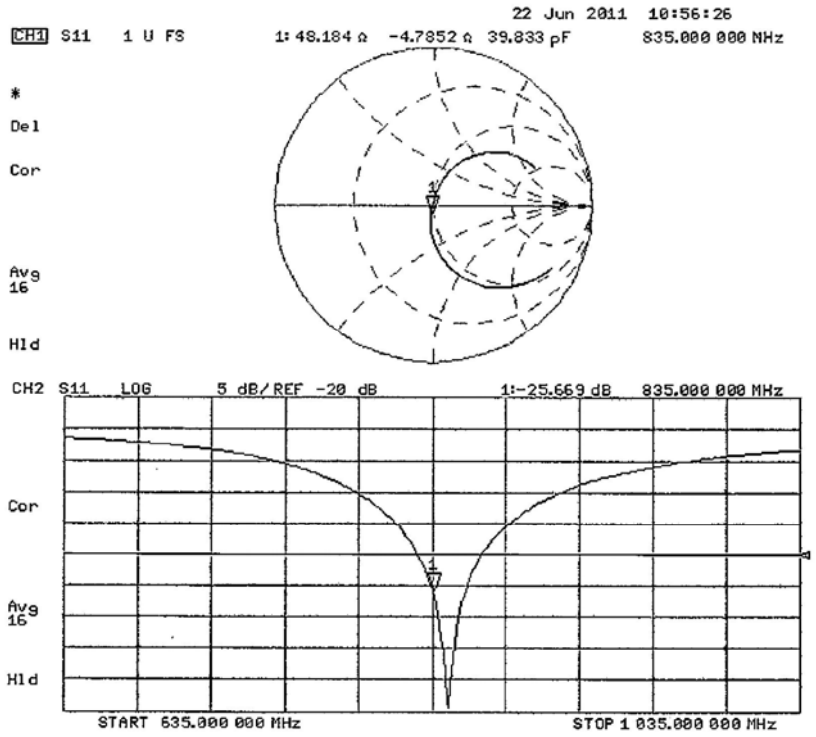
Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.717 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 3.594 W/kg
SAR(1 g) = 2.47 mW/g; SAR(10 g) = 1.62 mW/g
Maximum value of SAR (measured) = 2.864 mW/g



0 dB = 2.860mW/g

Impedance Measurement Plot for Body TSL



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Accreditation No.: SCS 108

Client ETC (Auden)

Certificate No: D1900V2-5d054_Sep10

CALIBRATION CERTIFICATE

Object	D1900V2 - SN: 5d054
Calibration procedure(s)	QA CAL-05.v7 Calibration procedure for dipole validation kits
Calibration date:	September 21, 2010

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	06-Oct-09 (No. 217-01086)	Oct-10
Power sensor HP 8481A	US37292783	06-Oct-09 (No. 217-01086)	Oct-10
Reference 20 dB Attenuator	SN: 5086 (20g)	30-Mar-10 (No. 217-01158)	Mar-11
Type-N mismatch combination	SN: 5047.2 / 06327	30-Mar-10 (No. 217-01162)	Mar-11
Reference Probe ES3DV3	SN: 3205	30-Apr-10 (No. ES3-3205_Apr10)	Apr-11
DAE4	SN: 601	10-Jun-10 (No. DAE4-601_Jun10)	Jun-11

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-09)	In house check: Oct-11
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-09)	In house check: Oct-11
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-09)	In house check: Oct-10

	Name	Function	Signature
Calibrated by:	Dimce Iliev	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: September 22, 2010

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

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
Swiss Calibration Service

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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) 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
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) DASY4/5 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.