

### Measurement Conditions

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

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz $\pm$ 1 MHz	

### Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	38.0 $\pm$ 6 %	1.86 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.5 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.8 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.23 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.6 W/kg $\pm$ 16.5 % (k=2)

### Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 $\pm$ 0.2) °C	51.8 $\pm$ 6 %	2.03 mho/m $\pm$ 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

### SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	13.1 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	51.2 W/kg $\pm$ 17.0 % (k=2)

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.10 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	24.1 W/kg $\pm$ 16.5 % (k=2)

**Appendix (Additional assessments outside the scope of SCS 0108)****Antenna Parameters with Head TSL**

Impedance, transformed to feed point	$53.7 \Omega + 5.1 j\Omega$
Return Loss	- 24.3 dB

**Antenna Parameters with Body TSL**

Impedance, transformed to feed point	$50.0 \Omega + 4.5 j\Omega$
Return Loss	- 27.0 dB

**General Antenna Parameters and Design**

Electrical Delay (one direction)	1.162 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. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

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 10, 2009

## DASY5 Validation Report for Head TSL

Date: 25.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:853**

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.86$  S/m;  $\epsilon_r = 38$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.72, 7.72, 7.72); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

### Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

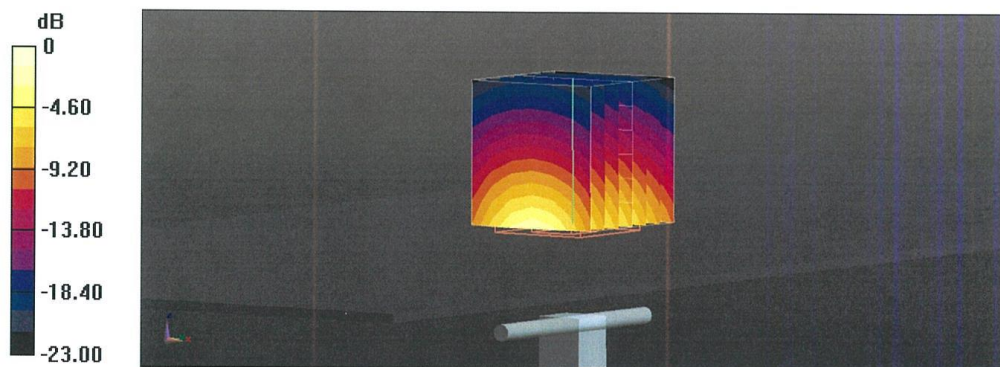
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 115.0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 27.5 W/kg

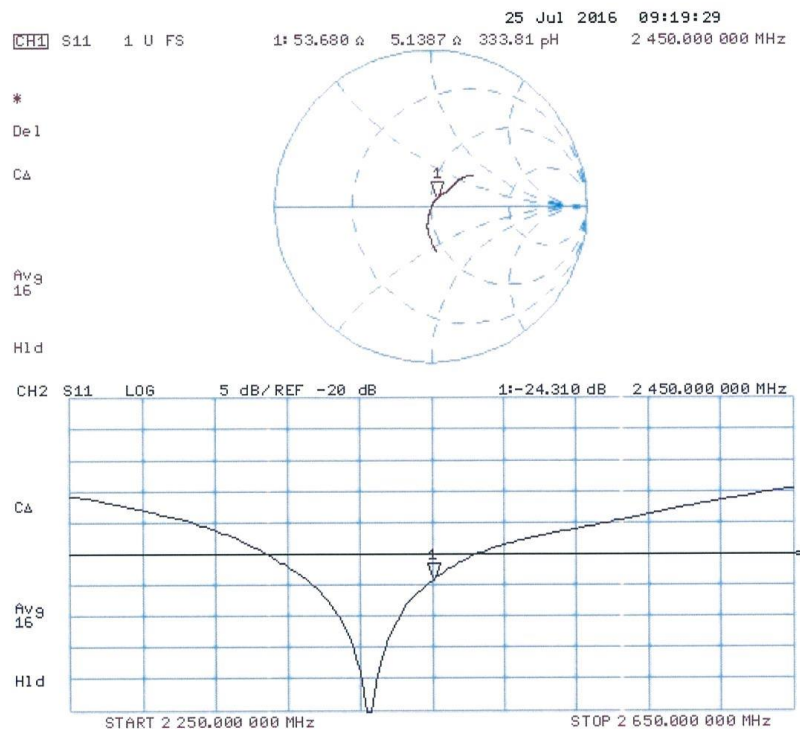
**SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.23 W/kg**

Maximum value of SAR (measured) = 22.2 W/kg



0 dB = 22.2 W/kg = 13.46 dBW/kg

### Impedance Measurement Plot for Head TSL



## DASY5 Validation Report for Body TSL

Date: 25.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:853**

Communication System: UID 0 - CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.03$  S/m;  $\epsilon_r = 51.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.79, 7.79, 7.79); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

### Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

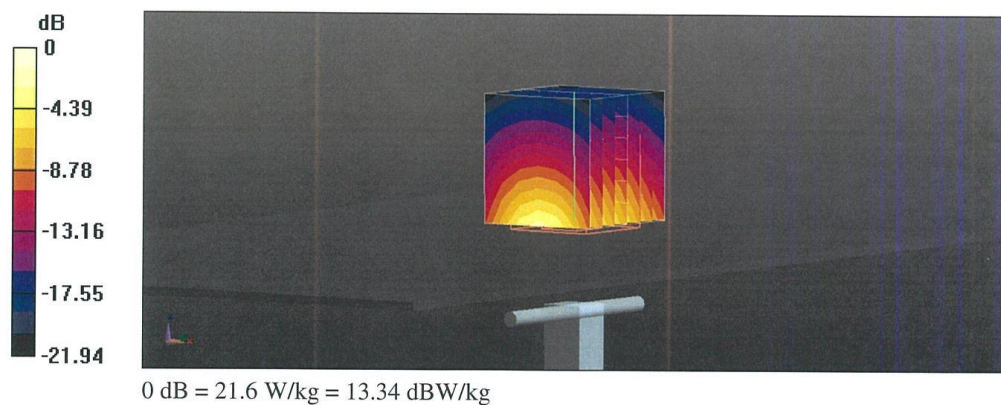
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 107.4 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 26.3 W/kg

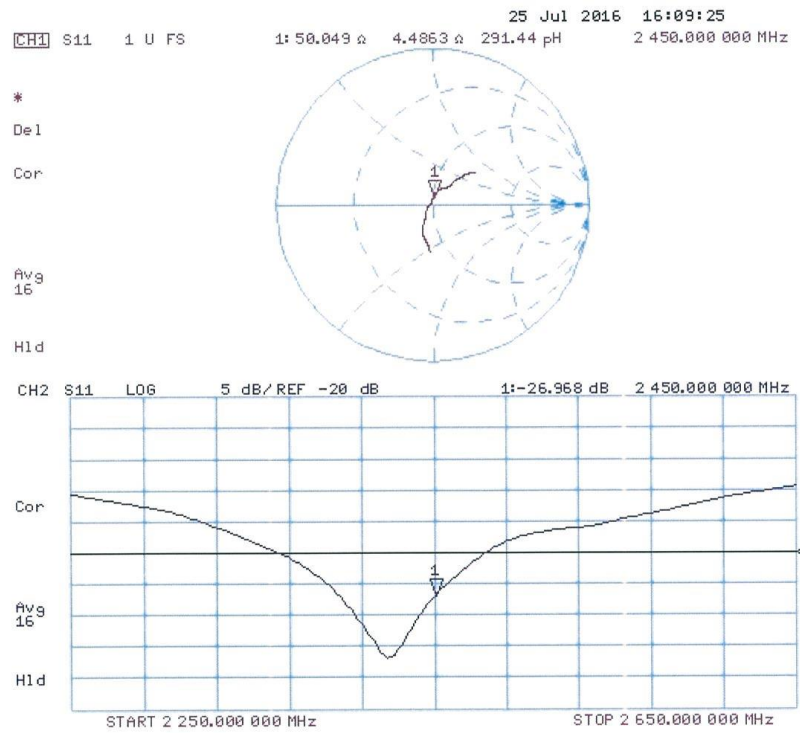
**SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.1 W/kg**

Maximum value of SAR (measured) = 21.6 W/kg





### Impedance Measurement Plot for Body TSL



## 2600 MHz Dipole Calibration Certificate

**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  
**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 0108**

Client **CTTL-BJ (Auden)**

Certificate No: **D2600V2-1012\_Jul16**

### CALIBRATION CERTIFICATE

Object **D2600V2 - SN:1012**

Calibration procedure(s) **QA CAL-05.v9**  
Calibration procedure for dipole validation kits above 700 MHz

Calibration date: **July 25, 2016**



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  $(22 \pm 3)^\circ\text{C}$  and humidity  $< 70\%$ .

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: 5058 (20k)	05-Apr-16 (No. 217-02292)	Apr-17
Type-N mismatch combination	SN: 5047.2 / 06327	05-Apr-16 (No. 217-02295)	Apr-17
Reference Probe EX3DV4	SN: 7349	15-Jun-16 (No. EX3-7349_Jun16)	Jun-17
DAE4	SN: 601	30-Dec-15 (No. DAE4-601_Dec15)	Dec-16

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter EPM-442A	SN: GB37480704	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (No. 217-02222)	In house check: Oct-16
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (No. 217-02223)	In house check: Oct-16
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Jun-15)	In house check: Oct-16
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-15)	In house check: Oct-16

	Name	Function	Signature
Calibrated by:	Michael Weber	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: July 26, 2016

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

**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  
**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 0108**

**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:**

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- 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
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

**Additional Documentation:**

- 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.

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%.



### Measurement Conditions

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

DASY Version	DASY5	V52.8.8
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2600 MHz $\pm$ 1 MHz	

### Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	37.5 $\pm$ 6 %	2.02 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.5 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	<b>56.7 W/kg <math>\pm</math> 17.0 % (k=2)</b>

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.39 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	<b>25.2 W/kg <math>\pm</math> 16.5 % (k=2)</b>

### Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.5	2.16 mho/m
Measured Body TSL parameters	(22.0 $\pm$ 0.2) °C	51.4 $\pm$ 6 %	2.20 mho/m $\pm$ 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

### SAR result with Body TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	14.0 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	<b>55.3 W/kg <math>\pm</math> 17.0 % (k=2)</b>

SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL	condition	
SAR measured	250 mW input power	6.25 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	<b>24.8 W/kg <math>\pm</math> 16.5 % (k=2)</b>

**Appendix (Additional assessments outside the scope of SCS 0108)****Antenna Parameters with Head TSL**

Impedance, transformed to feed point	46.8 $\Omega$ - 6.6 j $\Omega$
Return Loss	- 22.4 dB

**Antenna Parameters with Body TSL**

Impedance, transformed to feed point	44.1 $\Omega$ - 4.9 j $\Omega$
Return Loss	- 21.8 dB

**General Antenna Parameters and Design**

Electrical Delay (one direction)	1.152 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. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

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 30, 2007

## DASY5 Validation Report for Head TSL

Date: 22.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1012**

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.02$  S/m;  $\epsilon_r = 37.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.56, 7.56, 7.56); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

### Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

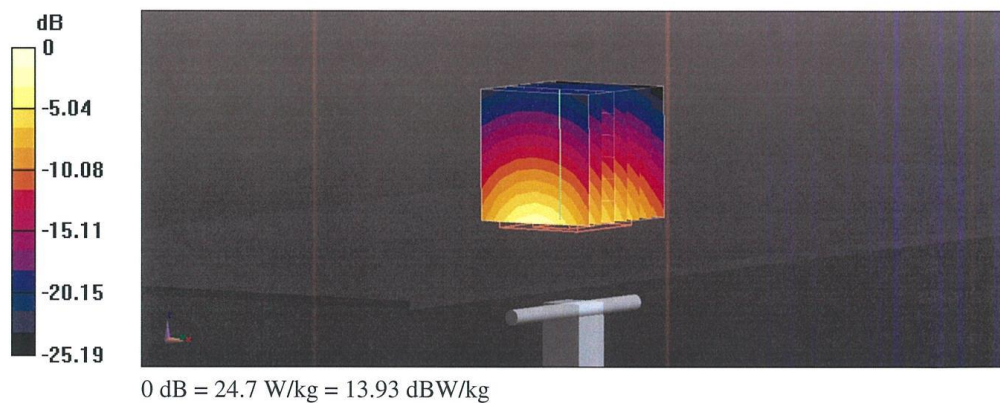
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 115.3 V/m; Power Drift = -0.02 dB

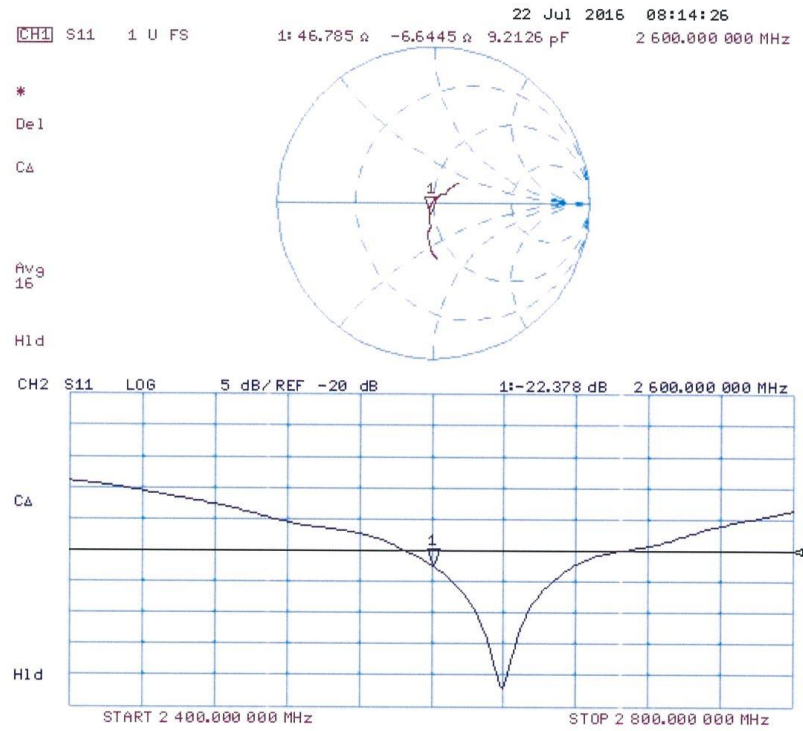
Peak SAR (extrapolated) = 30.9 W/kg

**SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.39 W/kg**

Maximum value of SAR (measured) = 24.7 W/kg



### Impedance Measurement Plot for Head TSL





## DASY5 Validation Report for Body TSL

Date: 22.07.2016

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 2600 MHz D2600V2; Type: D2600V2; Serial: D2600V2 - SN:1012**

Communication System: UID 0 - CW; Frequency: 2600 MHz

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.2$  S/m;  $\epsilon_r = 51.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7349; ConvF(7.48, 7.48, 7.48); Calibrated: 15.06.2016;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.12.2015
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.8(1258); SEMCAD X 14.6.10(7372)

### Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

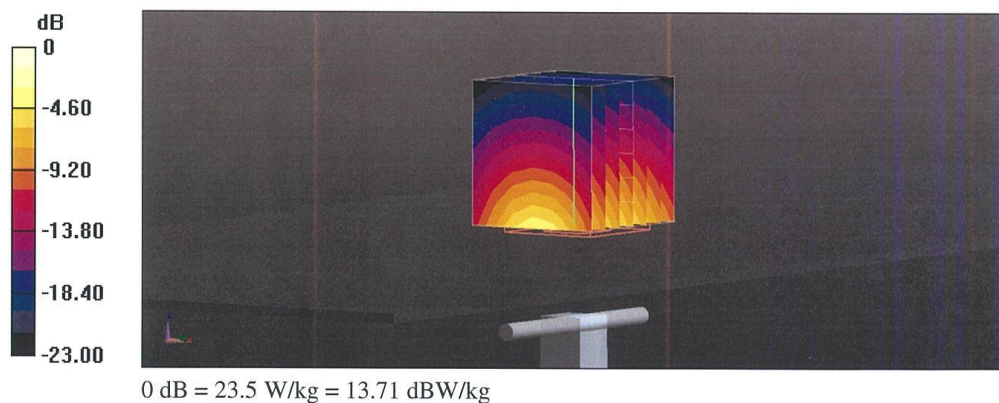
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 108.8 V/m; Power Drift = -0.03 dB

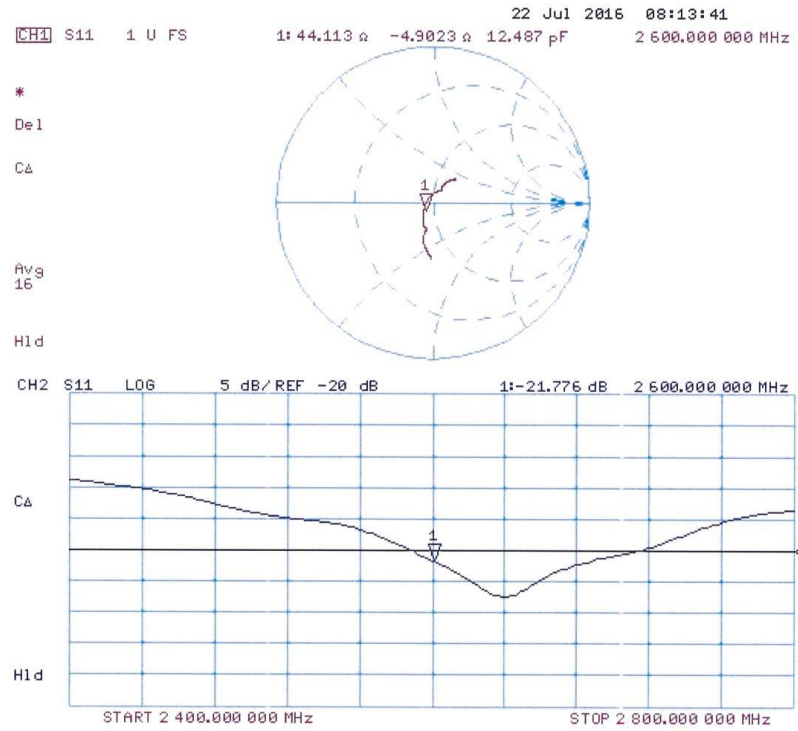
Peak SAR (extrapolated) = 28.9 W/kg

**SAR(1 g) = 14 W/kg; SAR(10 g) = 6.25 W/kg**

Maximum value of SAR (measured) = 23.5 W/kg



### Impedance Measurement Plot for Body TSL



## **ANNEX I Sensor Triggering Data Summary**

Per FCC KDB Publication 616217 D04v01r02, this device was tested by the manufacturer to determine the proximity sensor triggering distances for the rear and top edge of the device. The measured output power within  $\pm 5\text{mm}$  of the triggering points (or until touching the phantom) is included for rear and each applicable edge.

To ensure all production units are compliant it is necessary to test SAR at a distance 1mm less than the smallest distance from the device and SAR phantom (determined from these triggering tests according to the KDB 616217 D04v01r02) with the device at maximum output power without power reduction. These SAR tests are included in addition to the SAR tests for the device touching the SAR phantom, with reduced power.

We tested the power with the mode at highest reported SAR and got the different proximity sensor triggering distances for rear and top edge. But the manufacturer has declared 20mm is the most conservative triggering distance for all bands and all positions. So base on the most conservative triggering distance of 20mm, additional SAR measurements were required at 19mm from the rear and top edge.

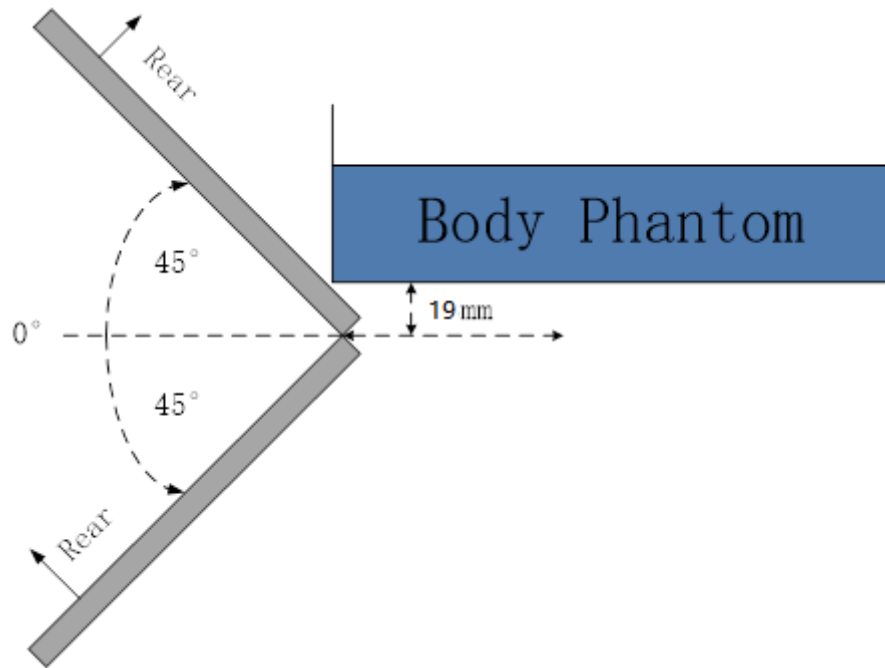
## WCDMA 1900

Rear			Left			Bottom	
Moving towards			Moving towards			Moving towards	
Distance	Power		Distance	Power		Distance	Power
40mm	22.69dbm		40mm	22.71dbm		40mm	22.7dbm
39mm	22.7dbm		39mm	22.7dbm		39mm	22.7dbm
38mm	22.69dbm		38mm	22.7dbm		38mm	22.68dbm
37mm	22.68dbm		37mm	22.69dbm		37mm	22.67dbm
36mm	22.68dbm		36mm	22.68dbm		36mm	22.68dbm
35mm	22.69dbm		35mm	22.69dbm		35mm	22.67dbm
34mm	22.7dbm		34mm	22.71dbm		34mm	22.68dbm
33mm	22.7dbm		33mm	22.7dbm		33mm	22.69dbm
32mm	22.69dbm		32mm	22.69dbm		32mm	22.69dbm
31mm	22.68dbm		31mm	22.69dbm		31mm	22.68dbm
30mm	22.68dbm		30mm	22.68dbm		30mm	22.67dbm
29mm	22.7dbm		29mm	22.69dbm		29mm	22.69dbm
28mm	22.71dbm		28mm	22.7dbm		28mm	22.71dbm
27mm	22.69dbm		27mm	22.69dbm		27mm	22.7dbm
26mm	22.67dbm		26mm	22.68dbm		26mm	22.67dbm
25mm	22.68dbm		25mm	22.69dbm		25mm	22.68dbm
24mm	22.67dbm		24mm	22.67dbm		24mm	22.67dbm
23mm	22.69dbm		23mm	22.69dbm		23mm	22.68dbm
22mm	22.68dbm		22mm	22.67dbm		22mm	22.68dbm
21mm	22.67dbm		21mm	22.67dbm		21mm	22.69dbm
20mm	17.12dbm		20mm	17.13dbm		20mm	17.13dbm
19mm	17.13dbm		19mm	17.12dbm		19mm	17.12dbm
18mm	17.14dbm		18mm	17.11dbm		18mm	17.12dbm
17mm	17.13dbm		17mm	17.14dbm		17mm	17.11dbm
16mm	17.12dbm		16mm	17.13dbm		16mm	17.11dbm
15mm	17.11dbm		15mm	17.1dbm		15mm	17.13dbm
14mm	17.12dbm		14mm	17.12dbm		14mm	17.1dbm
13mm	17.13dbm		13mm	17.14dbm		13mm	17.12dbm
12mm	17.12dbm		12mm	17.13dbm		12mm	17.11dbm
11mm	17.14dbm		11mm	17.14dbm		11mm	17.12dbm
10mm	17.13dbm		10mm	17.12dbm		10mm	17.14dbm
9mm	17.1dbm		9mm	17.11dbm		9mm	17.11dbm
8mm	17.11dbm		8mm	17.12dbm		8mm	17.13dbm
7mm	17.13dbm		7mm	17.13dbm		7mm	17.12dbm
6mm	17.13dbm		6mm	17.14dbm		6mm	17.12dbm
5mm	17.12dbm		5mm	17.12dbm		5mm	17.13dbm
4mm	17.13dbm		4mm	17.12dbm		4mm	17.12dbm
3mm	17.14dbm		3mm	17.14dbm		3mm	17.11dbm
2mm	17.13dbm		2mm	17.11dbm		2mm	17.12dbm
1mm	17.12dbm		1mm	17.11dbm		1mm	17.13dbm
0mm	17.13dbm		0mm	17.12dbm		0mm	17.14dbm

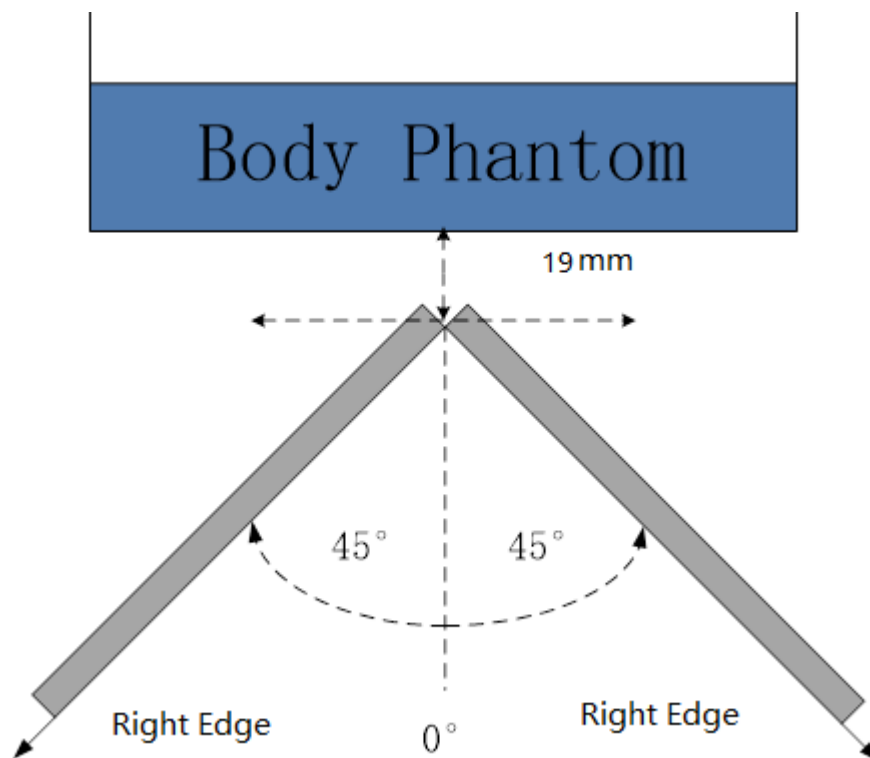


Moving away			Moving away			Moving away	
0mm	17.12dbm		0mm	17.13dbm		0mm	17.12dbm
1mm	17.13dbm		1mm	17.11dbm		1mm	17.11dbm
2mm	17.11dbm		2mm	17.1dbm		2mm	17.12dbm
3mm	17.13dbm		3mm	17.13dbm		3mm	17.13dbm
4mm	17.11dbm		4mm	17.12dbm		4mm	17.11dbm
5mm	17.14dbm		5mm	17.14dbm		5mm	17.11dbm
6mm	17.1dbm		6mm	17.12dbm		6mm	17.13dbm
7mm	17.12dbm		7mm	17.14dbm		7mm	17.13dbm
8mm	17.14dbm		8mm	17.12dbm		8mm	17.14dbm
9mm	17.11dbm		9mm	17.11dbm		9mm	17.12dbm
10mm	17.13dbm		10mm	17.13dbm		10mm	17.14dbm
11mm	17.14dbm		11mm	17.13dbm		11mm	17.14dbm
12mm	17.12dbm		12mm	17.11dbm		12mm	17.13dbm
13mm	17.13dbm		13mm	17.12dbm		13mm	17.13dbm
14mm	17.1dbm		14mm	17.12dbm		14mm	17.12dbm
15mm	17.12dbm		15mm	17.12dbm		15mm	17.11dbm
16mm	17.13dbm		16mm	17.11dbm		16mm	17.13dbm
17mm	17.12dbm		17mm	17.11dbm		17mm	17.11dbm
18mm	17.13dbm		18mm	17.13dbm		18mm	17.12dbm
19mm	17.13dbm		19mm	17.12dbm		19mm	17.14dbm
20mm	17.14dbm		20mm	17.13dbm		20mm	17.12dbm
21mm	22.71dbm		21mm	22.7dbm		21mm	22.7dbm
22mm	22.7dbm		22mm	22.71dbm		22mm	22.69dbm
23mm	22.68dbm		23mm	22.69dbm		23mm	22.67dbm
24mm	22.68dbm		24mm	22.68dbm		24mm	22.67dbm
25mm	22.71dbm		25mm	22.69dbm		25mm	22.71dbm
26mm	22.7dbm		26mm	22.7dbm		26mm	22.71dbm
27mm	22.68dbm		27mm	22.68dbm		27mm	22.68dbm
28mm	22.69dbm		28mm	22.68dbm		28mm	22.68dbm
29mm	22.69dbm		29mm	22.68dbm		29mm	22.69dbm
30mm	22.7dbm		30mm	22.69dbm		30mm	22.71dbm
31mm	22.7dbm		31mm	22.69dbm		31mm	22.71dbm
32mm	22.69dbm		32mm	22.68dbm		32mm	22.69dbm
33mm	22.69dbm		33mm	22.69dbm		33mm	22.68dbm
34mm	22.68dbm		34mm	22.69dbm		34mm	22.68dbm
35mm	22.68dbm		35mm	22.68dbm		35mm	22.69dbm
36mm	22.71dbm		36mm	22.7dbm		36mm	22.71dbm
37mm	22.7dbm		37mm	22.71dbm		37mm	22.7dbm
38mm	22.68dbm		38mm	22.7dbm		38mm	22.69dbm
39mm	22.69dbm		39mm	22.68dbm		39mm	22.69dbm
40mm	22.69dbm		40mm	22.68dbm		40mm	22.7dbm

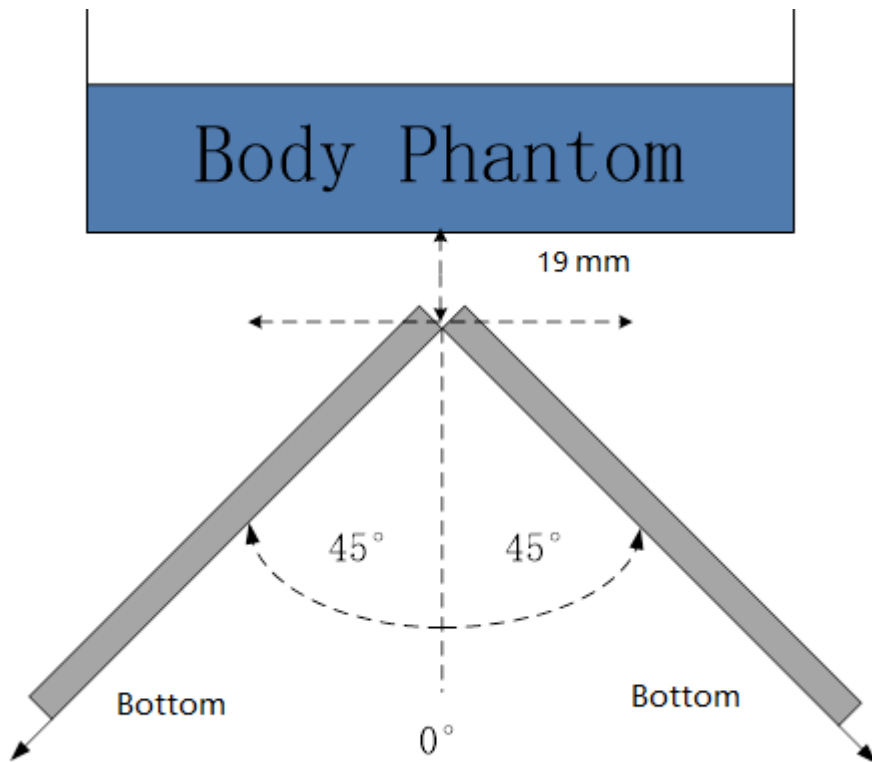
Per FCC KDB Publication 616217 D04v01r02, the influence of table tilt angles to proximity sensor triggering is determined by positioning each tablet edge that contains a transmitting antenna, perpendicular to the flat phantom, at the smallest sensor triggering test distance by rotating the tablet around the edge next to the phantom in  $\leq 10^\circ$  increments until the tablet is  $\pm 45^\circ$  or more from the vertical position at  $0^\circ$ .



**The Rear evaluation for main antenna**



**The Left evaluation for main antenna**



#### **The Bottom edge evaluation for main antenna**

Based on the above evaluation, we come to the conclusion that the sensor triggering is not released and normal maximum output power is not restored within the  $\pm 45^\circ$  range at the smallest sensor triggering test distance declared by manufacturer.

**ANNEX J Accreditation Certificate**

United States Department of Commerce  
National Institute of Standards and Technology



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**Certificate of Accreditation to ISO/IEC 17025:2005**

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NVLAP LAB CODE: 600118-0

**Telecommunication Technology Labs, CAICT**

Beijing  
China

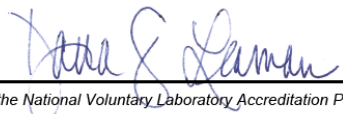
*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,  
listed on the Scope of Accreditation, for:*

**Electromagnetic Compatibility & Telecommunications**

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.  
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality  
management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).*

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2016-09-29 through 2017-09-30  
Effective Dates



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For the National Voluntary Laboratory Accreditation Program