

## Appendix 1 – System Performance Check Plots



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

## System Performance Check

#### DUT: Dipole 900 MHz; Type: D900V2; Serial: 153

Frequency: 900 MHz; Duty Cycle: 1:1

Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used: f = 900 MHz;  $\sigma = 0.98 \text{ S/m}$ ;  $\varepsilon_r = 42.908$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### DASY5 Configuration:

- Probe: EX3DV4 SN7321; ConvF(9.6, 9.6, 9.6); Calibrated: 9/27/2023;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn508; Calibrated: 9/19/2023
- Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1063
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

### Dipole/Input 250 mW/Area Scan (9x9x1): Measurement grid: dx=10mm, dy=10mm

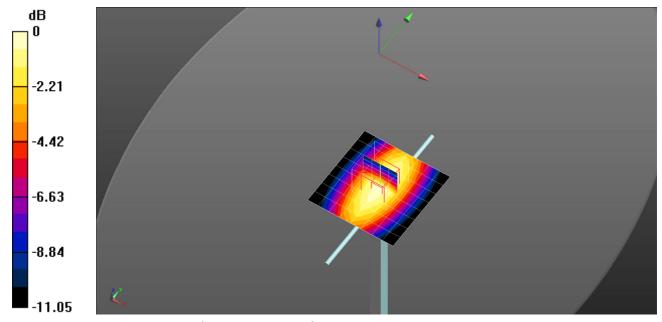
Maximum value of SAR (measured) = 3.35 W/kg

#### Dipole/Input 250 mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 59.64 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 4.00 W/kg

SAR(1 g) = 2.64 W/kg; SAR(10 g) = 1.71 W/kg Maximum value of SAR (measured) = 3.38 W/kg



0 dB = 3.38 W/kg = 5.29 dBW/kg



**Appendix 2 – Highest SAR Test Plots** 



Date: 12/27/2023

## Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

#### 1ch / ASK

## DUT: RecoHand; Type: M920SRW; Serial: 00010

Frequency: 917.1 MHz; Duty Cycle: 1:1

Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used (interpolated): f = 917.1 MHz;  $\sigma = 0.987 \text{ S/m}$ ;  $\epsilon_r = 42.95$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### DASY5 Configuration:

- Probe: EX3DV4 SN7321; ConvF(9.6, 9.6, 9.6); Calibrated: 9/27/2023;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn508; Calibrated: 9/19/2023
- Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1063
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

## Body/Front/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.238 W/kg

#### Body/Front/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

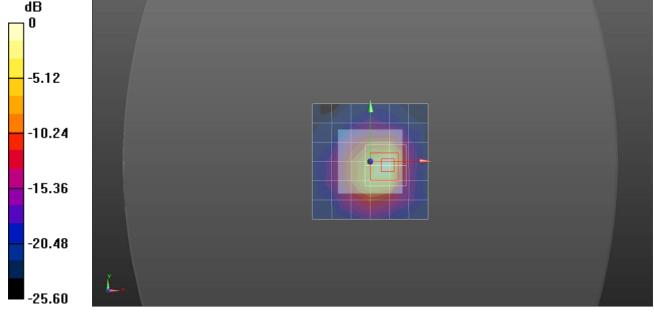
Reference Value = 8.645 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.419 W/kg

SAR(1 g) = 0.134 W/kg; SAR(10 g) = 0.051 W/kg

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.229 W/kg



0 dB = 0.229 W/kg = -6.40 dBW/kg



Date: 12/27/2023

#### 1ch / ASK

#### DUT: RecoHand; Type: M920SRW; Serial: 00010

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Frequency: 917.1 MHz; Duty Cycle: 1:1

Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used (interpolated): f = 917.1 MHz;  $\sigma = 0.987 \text{ S/m}$ ;  $\epsilon_r = 42.95$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### DASY5 Configuration:

- Probe: EX3DV4 SN7321; ConvF(9.6, 9.6, 9.6); Calibrated: 9/27/2023;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn508; Calibrated: 9/19/2023
- Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1063
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

### Body/Case1(w/Attachment)/Area Scan (9x11x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.0107 W/kg

## Body/Case1(w/Attachment)/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm,

dz=5mm

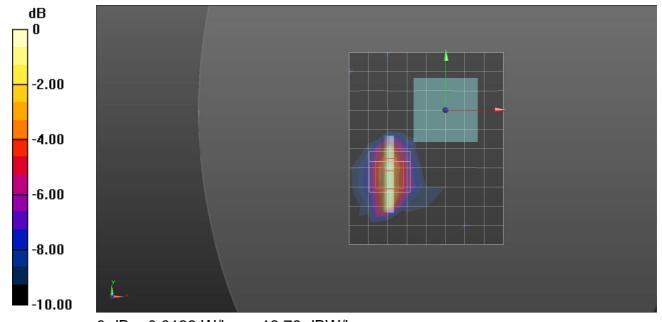
Reference Value = 3.171 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.0200 W/kg

SAR(1 g) = 0.00713 W/kg; SAR(10 g) = 0.00368 W/kg

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.0133 W/kg



0 dB = 0.0133 W/kg = -18.76 dBW/kg



Date: 12/27/2023

## Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

#### 1ch / ASK

## DUT: RecoHand; Type: M920SRW; Serial: 00010

Frequency: 917.1 MHz; Duty Cycle: 1:1

Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used (interpolated): f = 917.1 MHz;  $\sigma = 0.987 \text{ S/m}$ ;  $\epsilon_r = 42.95$ ;  $\rho = 1000 \text{ kg/m}^3$ 

#### DASY5 Configuration:

- Probe: EX3DV4 SN7321; ConvF(9.6, 9.6, 9.6); Calibrated: 9/27/2023;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn508; Calibrated: 9/19/2023
- Phantom: ELI v4.0 (20deg probe tilt); Type: QDOVA001BB; Serial: TP:1063
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

## Extremity/Case2(w/Attachment)/Area Scan (11x11x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

## Maximum value of SAR (measured) = 0.00554 W/kg

## Extremity/Case2(w/Attachment)/Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

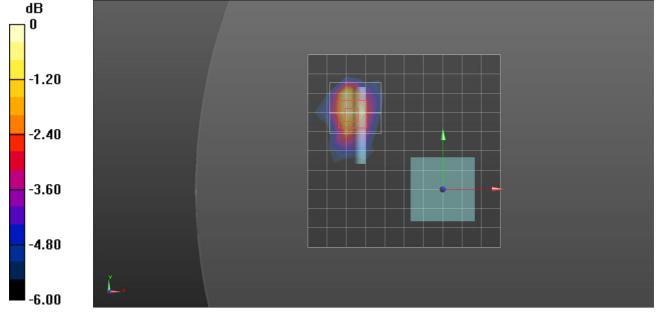
Reference Value = 2.052 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.0100 W/kg

SAR(1 g) = 0.00397 W/kg; SAR(10 g) = 0.00219 W/kg

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.00582 W/kg



0 dB = 0.00582 W/kg = -22.35 dBW/kg



## **Appendix 3 – Dosimetric E-Field Probe Calibration Data**



CALIBRATION

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Client

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Certificate No: 23J02Z80047

## CALIBRATION CERTIFICATE

Object

EX3DV4 - SN: 7321

Calibration Procedure(s)

FF-Z11-004-02

Calibration Procedures for Dosimetric E-field Probes

Calibration date:

September 27, 2023

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)℃ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID# C	al Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	101919	12-Jun-23(CTTL, No.J23X05435)	Jun-24
Power sensor NRP-Z91	101547	12-Jun-23(CTTL, No.J23X05435)	Jun-24
Power sensor NRP-Z91	101548	12-Jun-23(CTTL, No.J23X05435)	Jun-24
Reference 10dBAttenuator	18N50W-10dB	19-Jan-23(CTTL, No.J23X00212)	Jan-25
Reference 20dBAttenuator	18N50W-20dB	19-Jan-23(CTTL, No.J23X00211)	Jan-25
Reference Probe EX3DV4	SN 3846	31-May-23(SPEAG, No.EX-3846_	May23) May-24
DAE4	SN 1555	24-Aug-23(SPEAG, No.DAE4-155	5_Aug23) Aug-24
Secondary Standards	ID#	Cal Date(Calibrated by, Certificate	No.) Scheduled Calibration
SignalGenerator MG3700A	6201052605	12-Jun-23(CTTL, No.J23X05434)	Jun-24
Network Analyzer E5071C	MY46110673	10-Jan-23(CTTL, No.J23X00104)	Jan-24
Reference 10dBAttenuator	BT0520	11-May-23(CTTL, No.J23X04061)	May-25
Reference 20dBAttenuator	BT0267	11-May-23(CTTL, No.J23X04062)	May-25
OCP DAK-3.5	SN 1040	18-Jan-23(SPEAG, No.OCP-DAK	3,5-1040_Jan23) Jan-24
Na	ame	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	200
Reviewed by:	Lin Hao	SAR Test Engineer	林光
Approved by:	Qi Dianyuan	SAR Project Leader	2 LOS

Issued: October 05, 2023

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Glossary:

TSL tissue simulating liquid NORMx,y,z sensitivity in free space

ConvF sensitivity in TSL / NORMx,y,z DCP diode compression point

CF crest factor (1/duty\_cycle) of the RF signal A,B,C,D modulation dependent linearization parameters

Polarization Φ Φ rotation around probe axis

Polarization  $\theta$   $\theta$  rotation around an axis that is in the plane normal to probe axis (at measurement center), i

 $\theta$ =0 is normal to probe axis

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) 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

b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)",

July 2016

- c) 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
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization  $\theta$ =0 (f≤900MHz in TEM-cell; f>1800MHz: waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the  $E^2$ -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.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- Ax,y,z; Bx,y,z; Cx,y,z;VRx,y,z:A,B,C are numerical linearization parameters assessed based on the
  data of power sweep for specific modulation signal. The parameters do not depend on frequency nor
  media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f≤800MHz) and inside waveguide using analytical field distributions based on power measurements for f >800MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued 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±50MHz to±100MHz.
- 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.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).



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## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7321

## **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc ( <i>k</i> =2)
Norm(µV/(V/m)²)A	0.50	0.54	0.28	±10.0%
DCP(mV) <sup>B</sup>	103.1	100.7	96.0	

## **Modulation Calibration Parameters**

UID	Communication		Α	В	С	D	VR	Unc <sup>E</sup>
	System Name		dB	dΒ√μV		dB	mV	(k=2)
0 CW	X	0.0	0.0	1.0	0.00	179.9	±2.6%	
	Y	0.0	0.0	1.0		186.5		
		Z	0.0	0.0	1.0		121.6	

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 Norm X, Y, Z do not affect the E2-field uncertainty inside TSL (see Page 4).

<sup>&</sup>lt;sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>&</sup>lt;sup>E</sup> Uncertainly is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.





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# DASY/EASY - Parameters of Probe: EX3DV4 - SN:7321

## Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz] <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unct. ( <i>k</i> =2)
900	41.5	0.97	9.60	9.60	9.60	0.16	1.37	±12.7%
2450	39.2	1.80	7.62	7.62	7.62	0.50	0.80	±12.7%
5250	35.9	4.71	5.38	5.38	5.38	0.45	1.35	±13.9%
5600	35.5	5.07	4.75	4.75	4.75	0.40	1.50	±13.9%
5750	35.4	5.22	4.85	4.85	4.85	0.40	1.55	±13.9%

 $<sup>^{\</sup>rm C}$  Frequency validity above 300 MHz of  $\pm 100$ MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to  $\pm 50$ MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is  $\pm$  10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to  $\pm$  110 MHz.

F At frequency up to 6 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm 10\%$  if liquid compensation formula is applied to measured SAR values. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

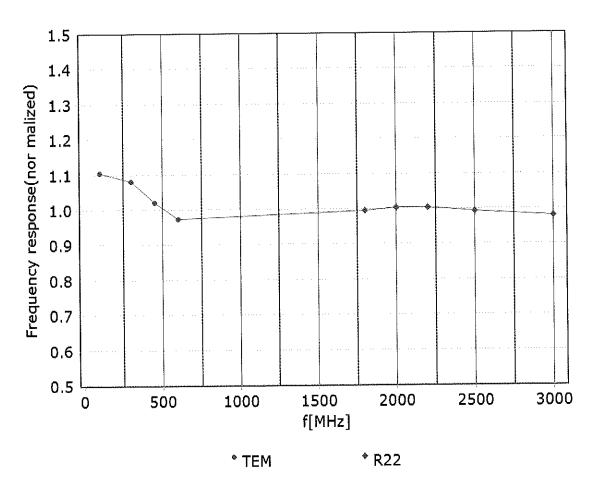
<sup>&</sup>lt;sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.



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# Frequency Response of E-Field (TEM-Cell: ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: ±7.4% (k=2)





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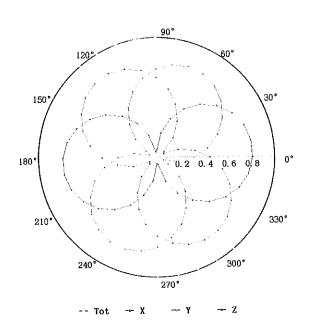
E-mail: emf@caict.ac.cn

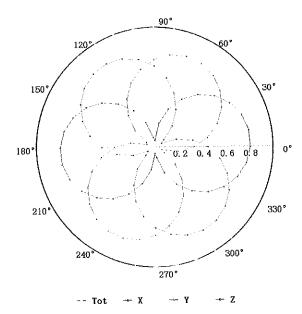
http://www.caict.ac.cn

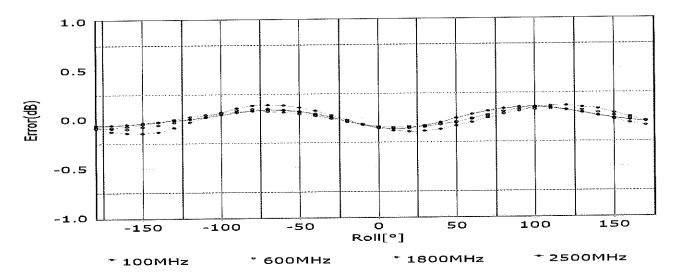
# Receiving Pattern (Φ), θ=0°

## f=600 MHz, TEM

## f=1800 MHz, R22







Uncertainty of Axial Isotropy Assessment: ±1.2% (k=2)

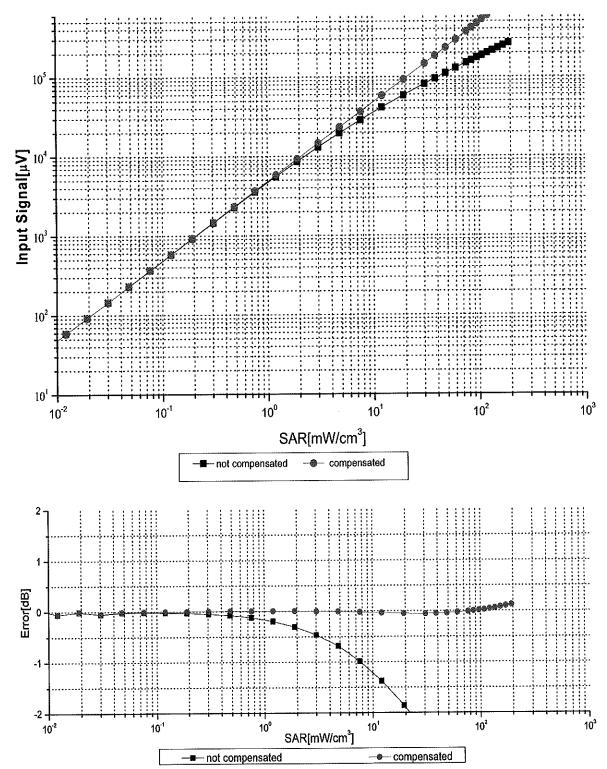




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# Dynamic Range f(SAR<sub>head</sub>) (TEM cell, f = 900 MHz)



Uncertainty of Linearity Assessment: ±0.9% (k=2)





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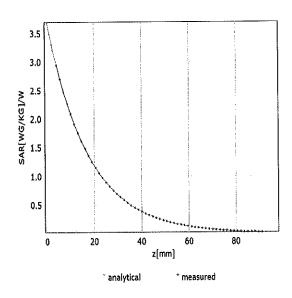
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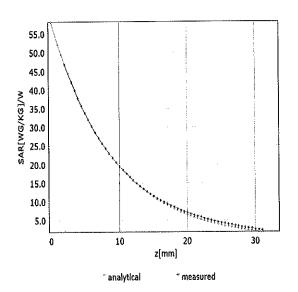
http://www.caict.ac.cn

## **Conversion Factor Assessment**

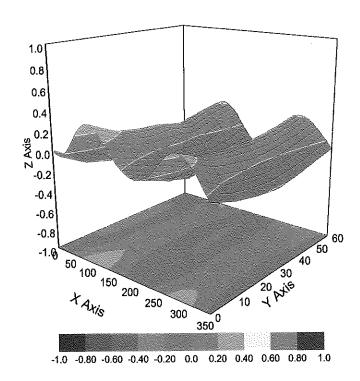
## f=900 MHz,WGLS R9(H\_convF)

f=2450 MHz,WGLS R26(H\_convF)

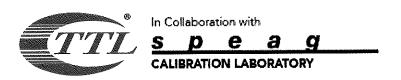




# **Deviation from Isotropy in Liquid**



Uncertainty of Spherical Isotropy Assessment: ±3.2% (k=2)





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# DASY/EASY - Parameters of Probe: EX3DV4 - SN:7321

## **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	161.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm



Appendix 4 – System Validation Dipole Calibration Data





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**Certificate No:** 

23J02Z80044

## **CALIBRATION CERTIFICATE**

Object

D900V2 - SN: 153

Calibration Procedure(s)

FF-Z11-003-01

Calibration Procedures for dipole validation kits

Calibration date:

September 19, 2023

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)℃ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
106277	22-Sep-22 (CTTL, No.J22X09561)	Sep-23
104291	22-Sep-22 (CTTL, No.J22X09561)	Sep-23
SN 3617	31-Mar-23(CTTL-SPEAG,No.Z23-60161)	Mar-24
SN 1556	11-Jan-23(CTTL-SPEAG,No.Z23-60034)	Jan-24
ID#	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
MY49071430	05-Jan-23 (CTTL, No. J23X00107)	Jan-24
MY46110673	10-Jan-23 (CTTL, No. J23X00104)	Jan-24
	106277 104291 SN 3617 SN 1556 ID # MY49071430	106277       22-Sep-22 (CTTL, No.J22X09561)         104291       22-Sep-22 (CTTL, No.J22X09561)         SN 3617       31-Mar-23(CTTL-SPEAG,No.Z23-60161)         SN 1556       11-Jan-23(CTTL-SPEAG,No.Z23-60034)         ID #       Cal Date (Calibrated by, Certificate No.)         MY49071430       05-Jan-23 (CTTL, No. J23X00107)

Name

**Function** 

Signature

Calibrated by:

Zhao Jing

**SAR Test Engineer** 

Reviewed by:

Lin Hao

**SAR Test Engineer** 

Approved by:

Qi Dianyuan

**SAR Project Leader** 

Issued: September 26, 2023

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Certificate No: 23J02Z80044

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Glossary:

TSL tissue simulating liquid

ConvF sensitivity in TSL / NORMx,y,z N/A not applicable or not measured

## Calibration is Performed According to the Following Standards:

a) IEC/IEEE 62209-1528, "Measurement Procedure for The Assessment of Specific Absorption Rate of Human Exposure to Radio Frequency Fields from Hand-held and Body-mounted Wireless Communication Devices- Part 1528: Human Models, Instrumentation and Procedures (Frequency range of 4 MHz to 10 GHz)", October 2020

b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

## **Additional Documentation:**

Certificate No: 23J02Z80044

c) 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%.

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## **Measurement Conditions**

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

DASY Version	DASY52	52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	900 MHz ± 1 MHz	

**Head TSL parameters** 

The following parameters and calculations were applied.

the following paramotors and calculations were	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.97 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.3 ± 6 %	0.98 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C		33 CO TO TO

SAR result with Head TSL

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SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.77 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	11.0 W/kg ± 18.8 % ( <i>k</i> =2)
SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.76 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	6.99 W/kg ± 18.7 % ( <i>k</i> =2)



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## Appendix (Additional assessments outside the scope of CNAS L0570)

## **Antenna Parameters with Head TSL**

Impedance, transformed to feed point	48.9Ω- 5.04jΩ
Return Loss	- 25.7dB

## **General Antenna Parameters and Design**

Electrical Delay (one direction)	1.299 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feed-point 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 feed-point may be damaged.

#### **Additional EUT Data**

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1	

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### **DASY5 Validation Report for Head TSL**

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN: 153

Communication System: UID 0, CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium parameters used: f = 900 MHz;  $\sigma = 0.981$  S/m;  $\varepsilon_r = 41.27$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

**DASY5** Configuration:

- Probe: EX3DV4 SN3617; ConvF(9.68, 9.68, 9.68) @ 900 MHz; Calibrated:
   2023-03-31
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1556; Calibrated: 2023-01-11
- Phantom: MFP V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm,

dy=5mm, dz=5mm

Reference Value = 58.08 V/m; Power Drift = -0.02 dB

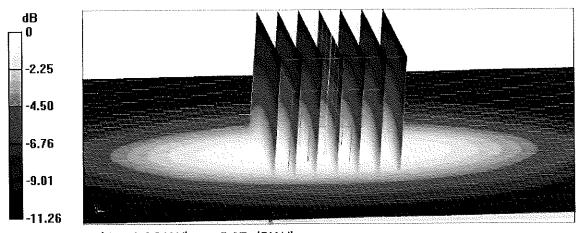
Peak SAR (extrapolated) = 4.50 W/kg

SAR(1 g) = 2.77 W/kg; SAR(10 g) = 1.76 W/kg

Smallest distance from peaks to all points 3 dB below = 16.6 mm

Ratio of SAR at M2 to SAR at M1 = 61.8%

Maximum value of SAR (measured) = 3.86 W/kg



0 dB = 3.86 W/kg = 5.87 dBW/kg



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## Impedance Measurement Plot for Head TSL

