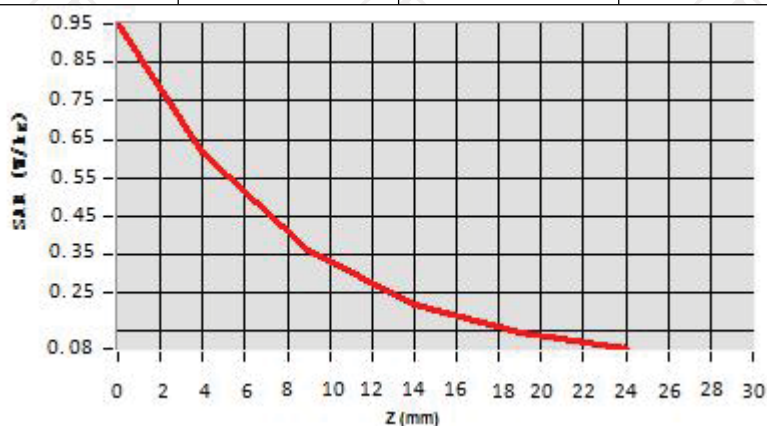


Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9625	0.6022	0.3594	0.2202	0.0725



Hot spot position



Date of measurement: 08/23/2022 Test mode: 1800MHz (Body)

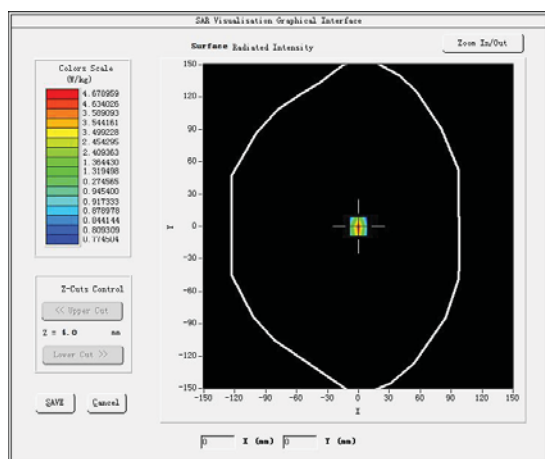
Product Description: Validation

Dipole Model: SID1800

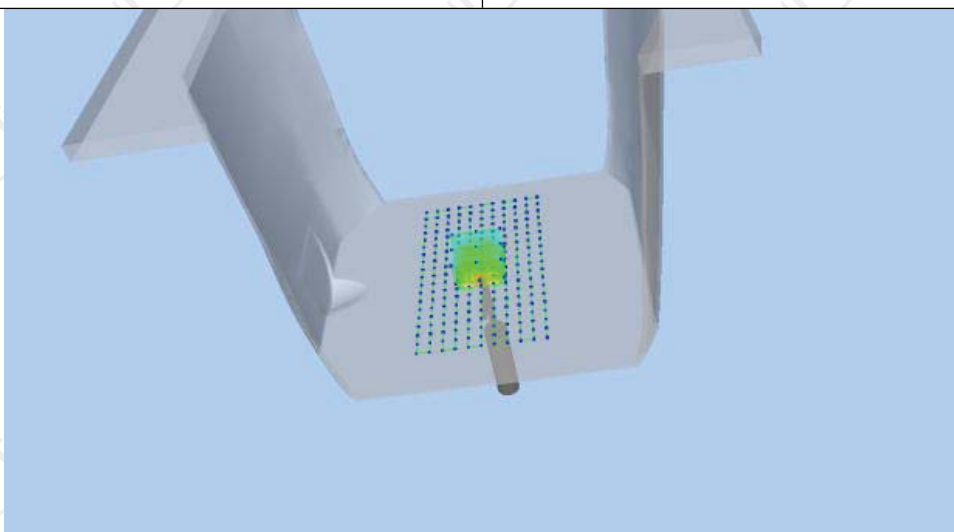
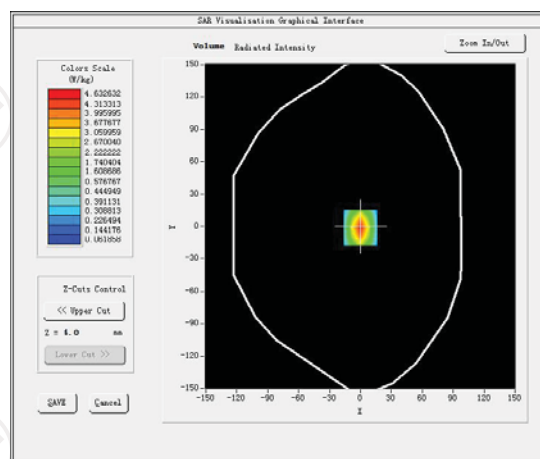
E-Field Probe: SSE2 (SN 36/20 EPG0346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.16
Frequency (MHz)	1800.000000
Relative permittivity (real part)	53.292699
Relative permittivity (imaginary part)	15.200000
Conductivity (S/m)	1.530000
Variation (%)	3.050000
SAR 10g (W/Kg)	2.053687
SAR 1g (W/Kg)	3.782547

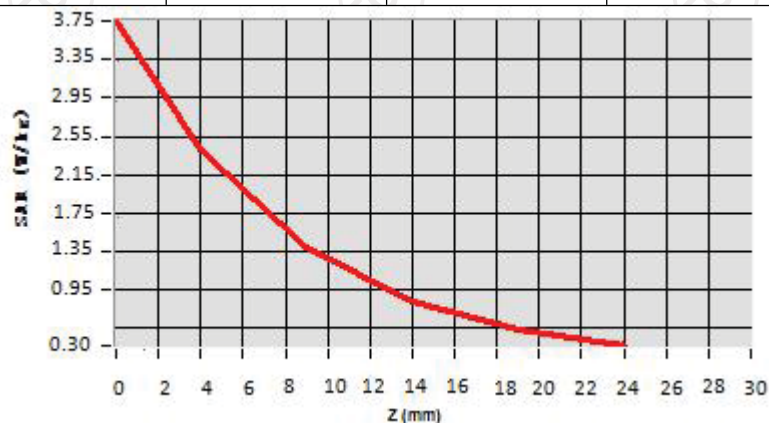
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.7545	2.4524	1.3520	0.8214	0.5525



Hot spot position



Date of measurement: 08/23/2022 Test mode: 1900MHz (Body)

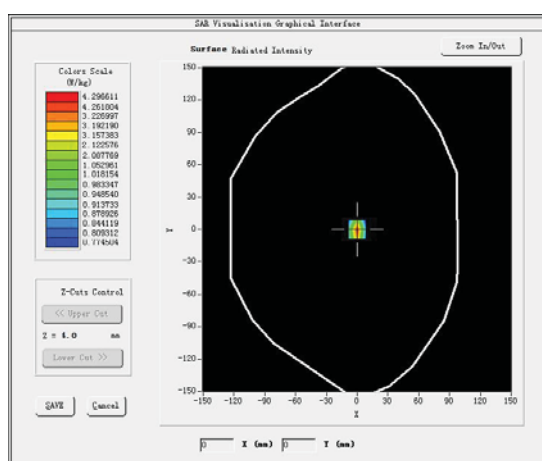
Product Description: Validation

Dipole Model: SID1900

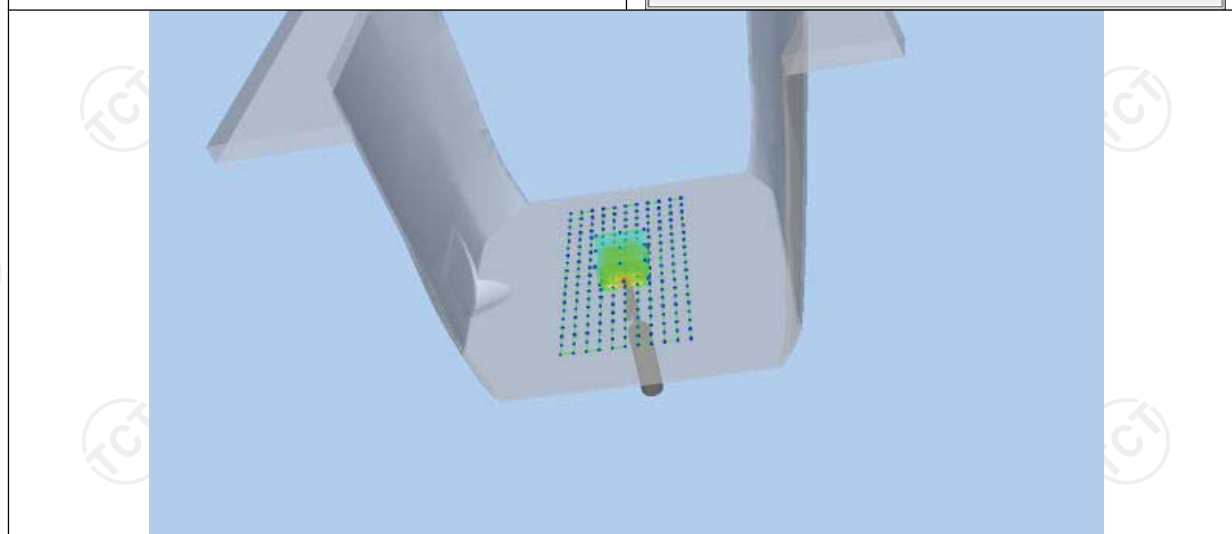
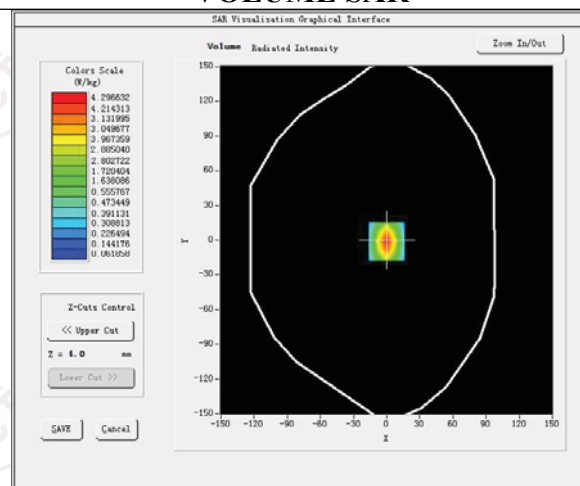
E-Field Probe: SSE2 (SN 36/20 EPG0346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	8.0
Probe Conversion factor	2.32
Frequency (MHz)	1900.000000
Relative permittivity (real part)	53.309999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.510354
Variation (%)	1.250000
SAR 10g (W/Kg)	1.994255
SAR 1g (W/Kg)	3.766112

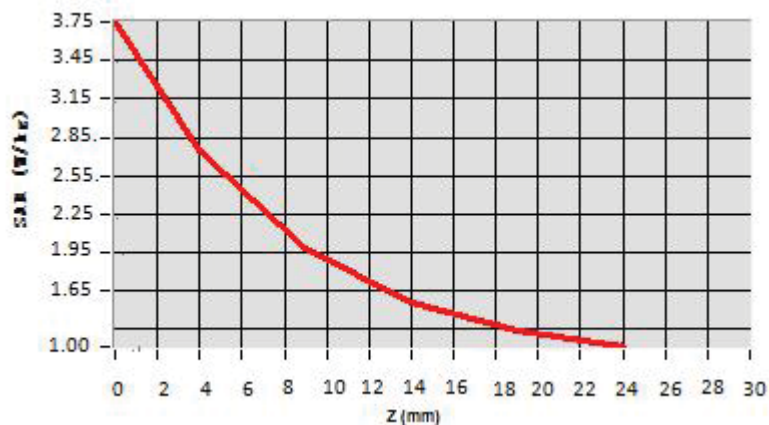
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.7752	2.7154	1.9525	1.5694	0.9014



Hot spot position



Date of measurement: 08/23/2022 Test mode: 2450MHz (Body)

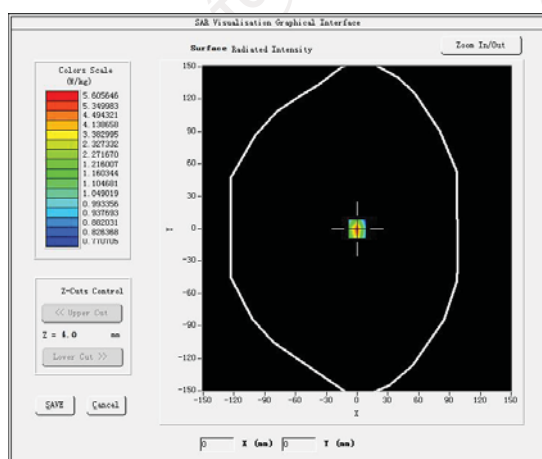
Product Description: Validation

Dipole Model: SID2450

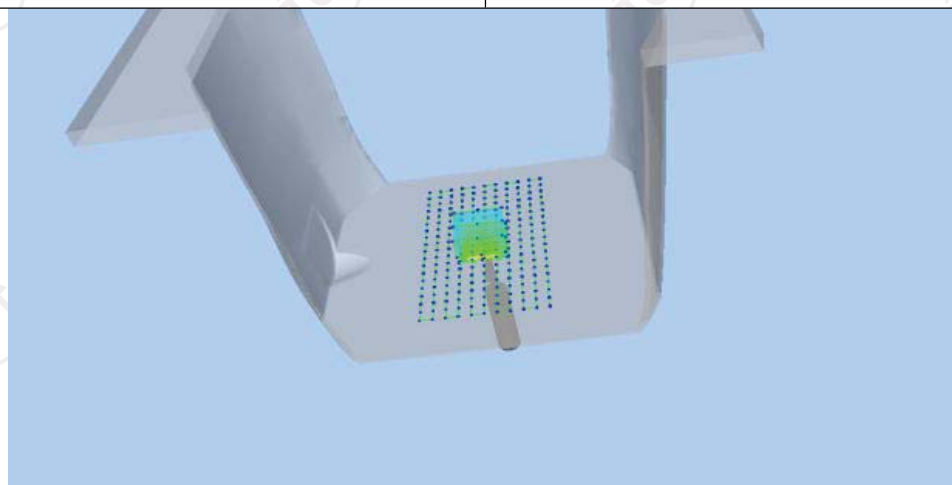
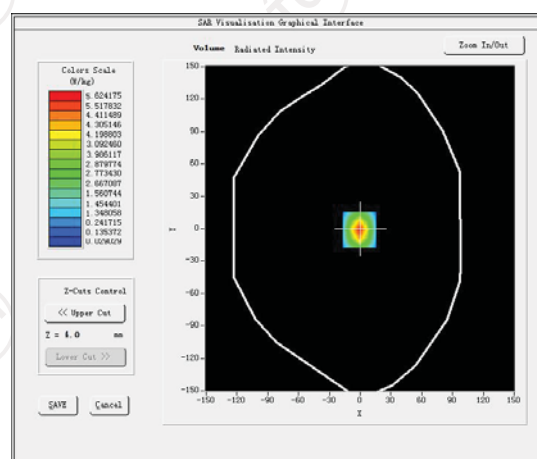
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.37
Frequency (MHz)	2450.000000
Relative permittivity (real part)	54.616199
Relative permittivity (imaginary part)	14.930150
Conductivity (S/m)	2.012159
Variation (%)	-0.230000
SAR 10g (W/Kg)	2.416669
SAR 1g (W/Kg)	5.066368

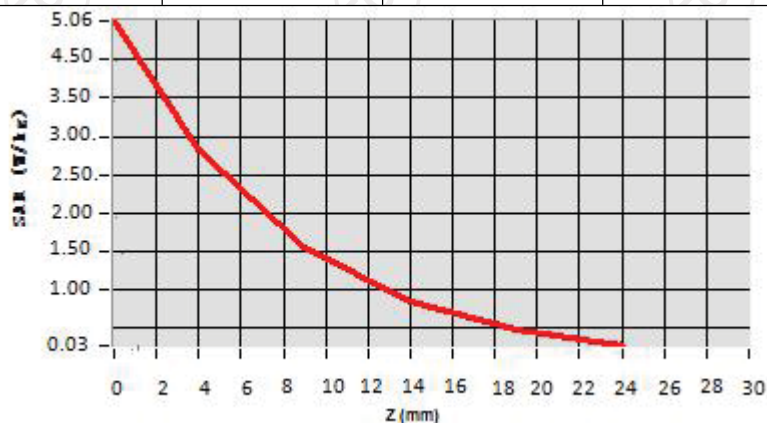
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.0622	2.7984	1.5251	0.8352	0.4200



Hot spot position



Date of measurement: 08/23/2022 Test mode: 2600MHz (Body)

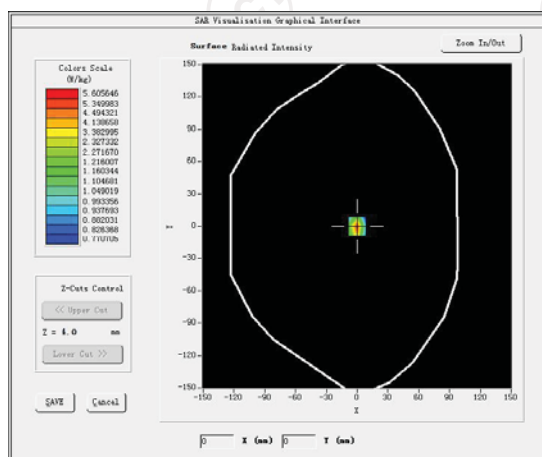
Product Description: Validation

Dipole Model: SID2600

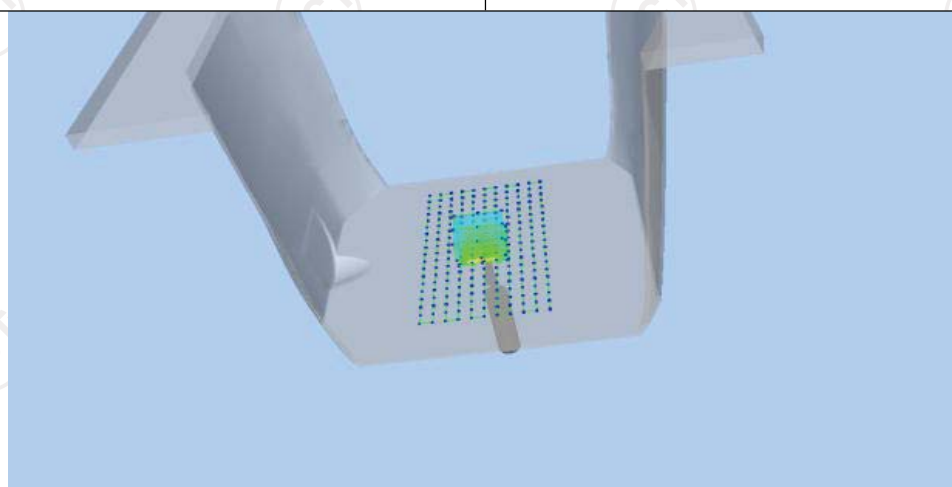
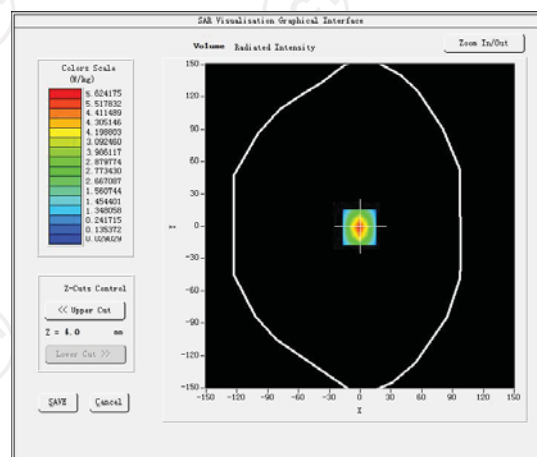
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.23
Frequency (MHz)	2535.000000
Relative permittivity (real part)	52.013887
Relative permittivity (imaginary part)	14.935214
Conductivity (S/m)	2.114821
Variation (%)	-1.800000
SAR 10g (W/Kg)	2.382177
SAR 1g (W/Kg)	5.365098

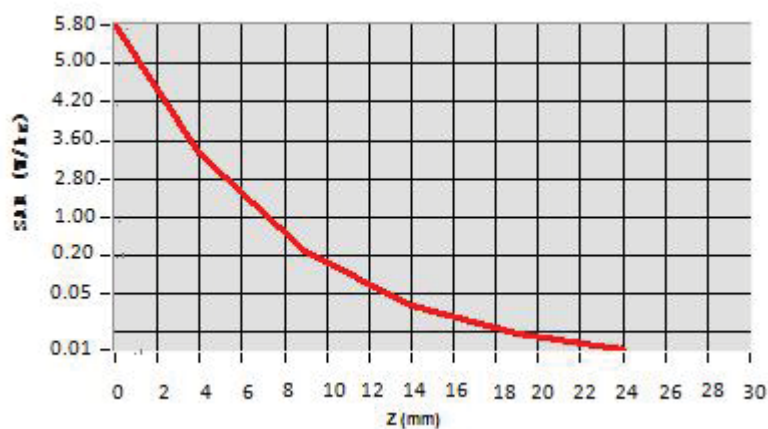
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.7721	3.2210	0.1937	0.0321	0.0203



Hot spot position



11. SAR Test Data

SAR Measurement at LTE band 4 (Body, Validation Plane)

Date of measurement: 24/8/2022

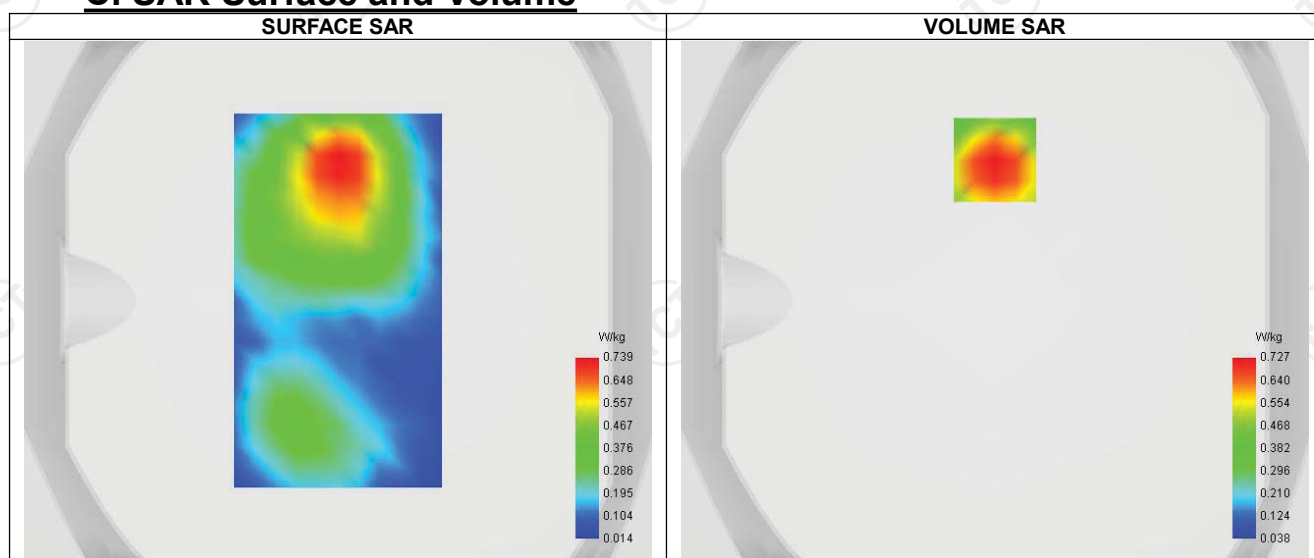
A. Experimental conditions.

Probe	SSE2 (SN 36/20 EPG0346)
ConvF	2.01
Area Scan	surf sam plan.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
Phantom	Validation plane
Device Position	Body
Band	LTE band 4
Channels	Lower (20050)
Signal	LTE FDD
Cell Bandwidth	20 Mhz
Modulation	SC-OFDM - QPSK
RB offset	99
RB size	1

B. Permittivity

Frequency (MHz)	1711.090
Relative permittivity (real part)	53.534
Relative permittivity (imaginary part)	15.411
Conductivity (S/m)	1.465

C. SAR Surface and Volume

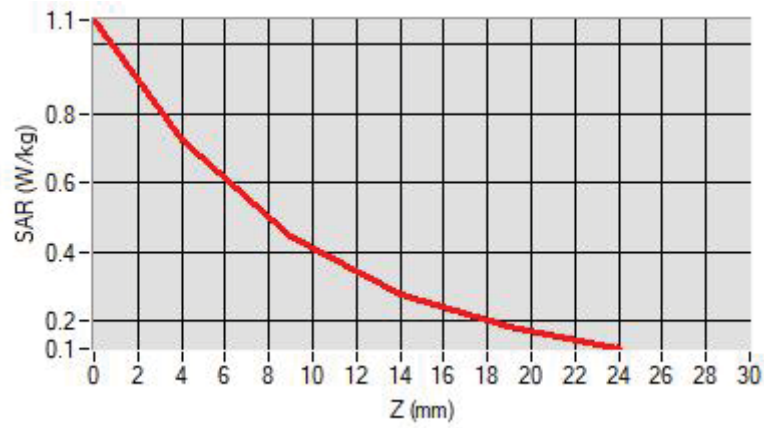


D. SAR 1g & 10g

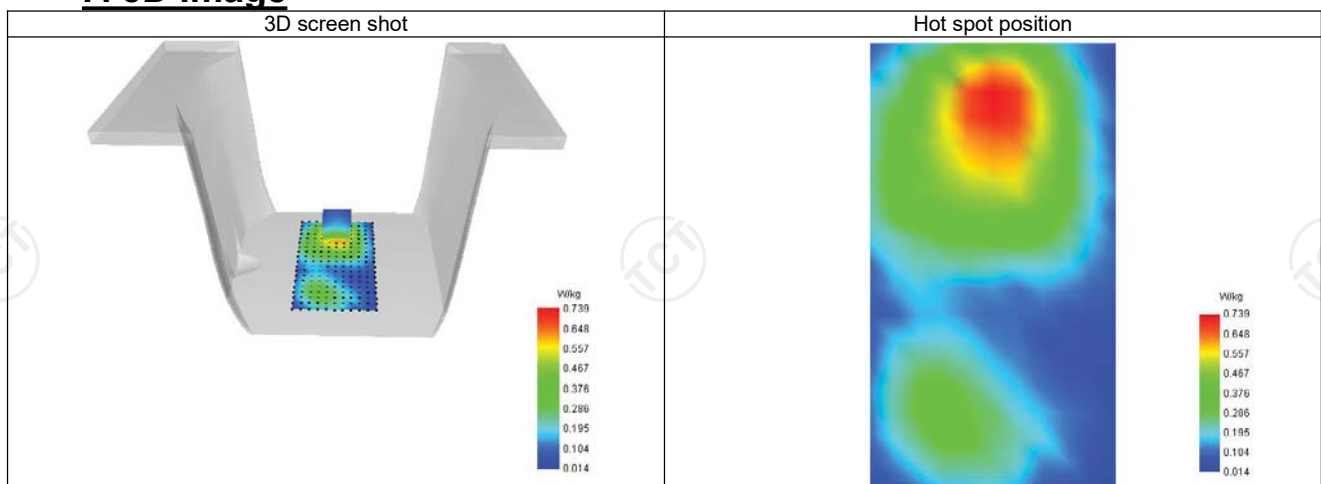
SAR 10g (W/Kg)	0.429
SAR 1g (W/Kg)	0.695
Variation (%)	-4.250
Horizontal validation criteria: minimum distance (mm)	0.000000
Vertical validation criteria: SAR ratio M2/M1 (%)	0.000000

E. Z Axis Scan

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.072	0.727	0.443	0.277	0.182



F. 3D Image



Appendix A: EUT Photos

Please refer to RF report.

Liquid depth



The Body Liquid of 835MHz (15.4cm)



The Body Liquid of 1800MHz (15.2 cm)



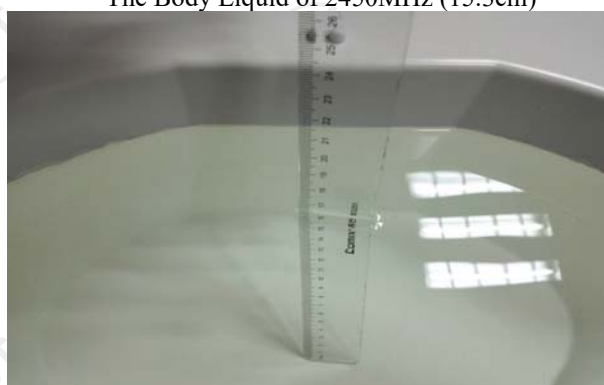
The Body Liquid of 1900MHz (16.4 cm)



The Body Liquid of 2450MHz (15.3cm)

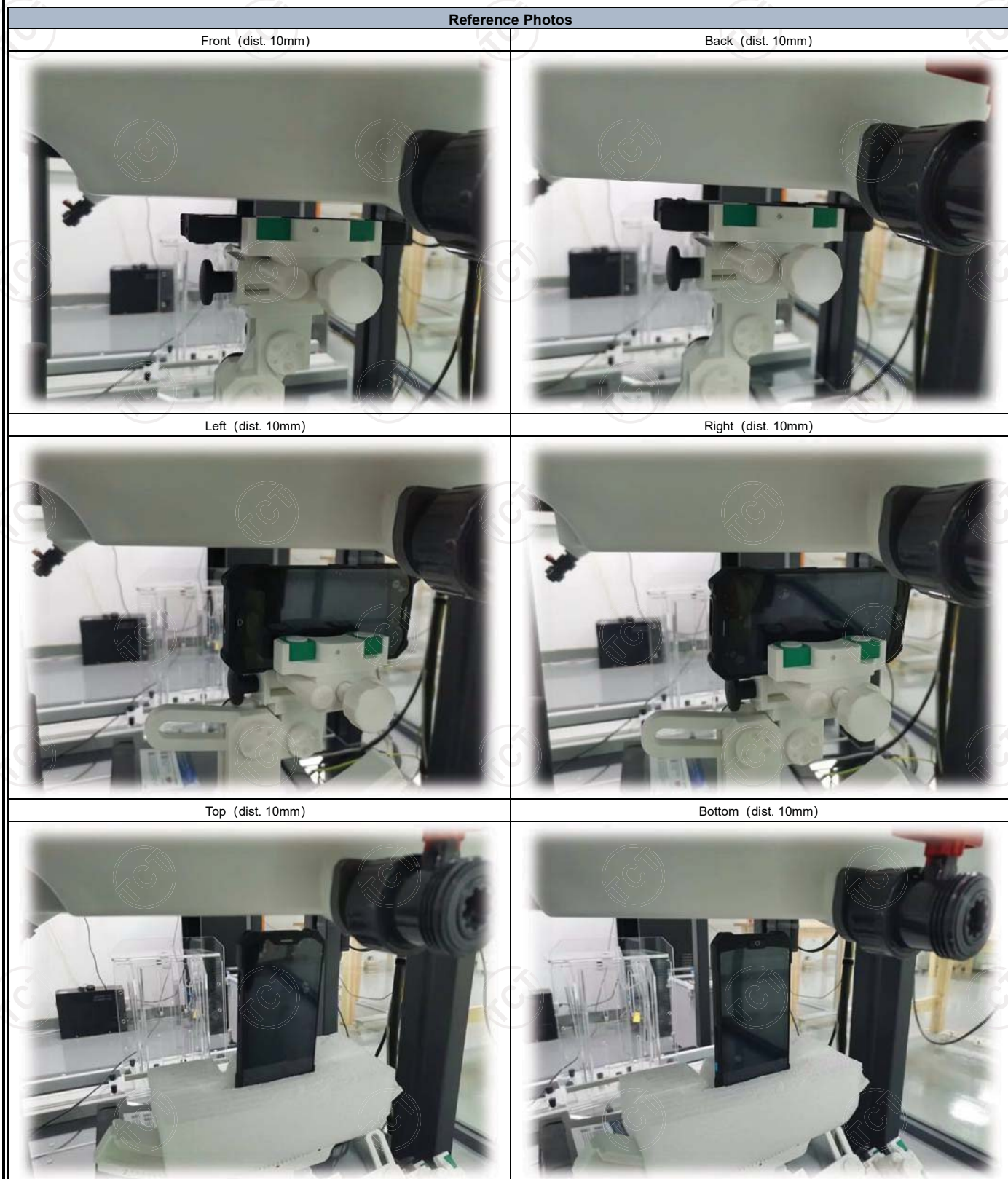


The Body Liquid of 750MHz (16.5cm)



The Body Liquid of 5000-6000MHz (16.5cm)

Appendix B: Test Setup Photos



Appendix C: Probe Calibration Certificate

COMOSAR E-FIELD Probe



COMOSAR E-Field Probe Calibration Report

Ref : ACR.297.1.20.MVGB.A

SHENZHEN TCT TESTING TECHNOLOGY CO., LTD

2101 2201, ZHENCHANG FACTORY, RENSHAN
INDUSTRIAL ZONE, FUHAI SUBDISTRICT,
BAOAN DISTRICT, SHENZHEN, GUANGDONG,
518103. PEOPLES REPUBLIC OF CHINA
MVG COMOSAR DOSIMETRIC E-FIELD PROBE
SERIAL NO.: SN 36/20 EPG0346

Calibrated at MVG

Z.I. de la pointe du diable

Technopôle Brest Iroise – 295 avenue Alexis de Rochon
29280 PLOUZANE - FRANCE

Calibration date: 10/08/2021



Accreditations #2-6789 and #2-6814
Scope available on www.cofrac.fr

Summary:

This document presents the method and results from an accredited COMOSAR E-Field Probe calibration performed at MVG, using the CALIPROBE test bench, for use with a MVG COMOSAR system only. The test results covered by accreditation are traceable to the International System of Units (SI).

Page: 1/10



COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR-297.1.20.MVGB.A

	Name	Function	Date	Signature
Prepared by :	Jérôme LUC	Technical Manager	10/08/2021	<i>JS</i>
Checked by :	Jérôme LUC	Technical Manager	10/08/2021	<i>JS</i>
Approved by :	Yann Toutain	Laboratory Director	10/11/2021	<i>Yann Toutain</i>

	Customer Name
Distribution :	SHENHEN TCT TESTING TECHNOLOGY CO., LTD

Issue	Name	Date	Modifications
A	Jérôme LUC	10/11/2021	Initial release

Page: 2/10

Template: ACR.DDD.N.YY.MVGB.ISSUE_COMOSAR Probe vII

This document shall not be reproduced, except in full or in part, without the written approval of MVG. The information contained herein is to be used only for the purpose for which it is submitted and is not to be released in whole or part without written approval of MVG.



COMOSAR E-FIELD PROBE CALIBRATION REPORT

Ref: ACR.297.1.20.MVGB.A

TABLE OF CONTENTS

1	Device Under Test	4
2	Product Description	4
2.1	General Information	4
3	Measurement Method	4
3.1	Linearity	4
3.2	Sensitivity	5
3.3	Lower Detection Limit	5
3.4	Isotropy	5
3.1	Boundary Effect	5
4	Measurement Uncertainty	6
5	Calibration Measurement Results	6
5.1	Sensitivity in air	6
5.2	Linearity	7
5.3	Sensitivity in liquid	8
5.4	Isotropy	9
6	List of Equipment	10

Page: 3/10

Template_ACR.DDD.N.YY.MVGB.ISSUE_COMOSAR Probe vII

This document shall not be reproduced, except in full or in part, without the written approval of MVG. The information contained herein is to be used only for the purpose for which it is submitted and is not to be released in whole or part without written approval of MVG.