ANNEX B

of

CCIC-SET

CONFORMANCE TEST REPORT FOR

HUMAN EXPOSURE TO ELECTROMAGNETIC FIELDS

SET2016-11965

LTE USB Modem

Type Name: MF831

Hardware Version： dkxA

Software Version： BD_MF831V1.0.2B18

System Performance Check Data and Highest SAR Plots

This Annex consists of 14 pages

Date of Report：2016-07-08

System Performance Check (Body, 835MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 04/07/2016

Measurement duration: 21 minutes 24seconds

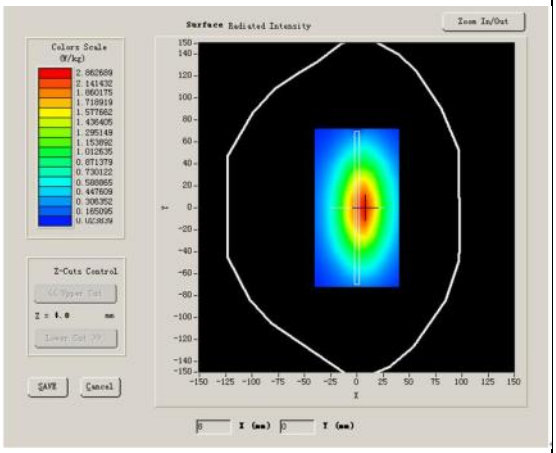
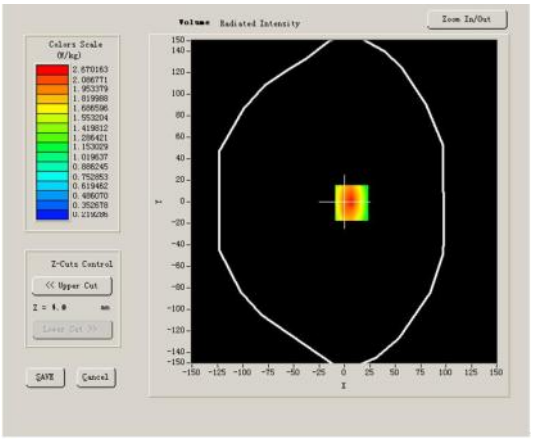
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	835MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	850
Relative permittivity (real part)	55.08
Relative permittivity	20.54
Conductivity (S/m)	0.97
Power drift (%)	1.24
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
ConvF:	5.82
Duty factor:	1:1

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=7.00, Y=-1.00

SAR 10g (W/Kg)	1.635247
SAR 1g (W/Kg)	2.523584

System Performance Check (Body, 1800MHz)

Type: Phone measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 05/07/2016

Measurement duration: 20 minutes 03 seconds

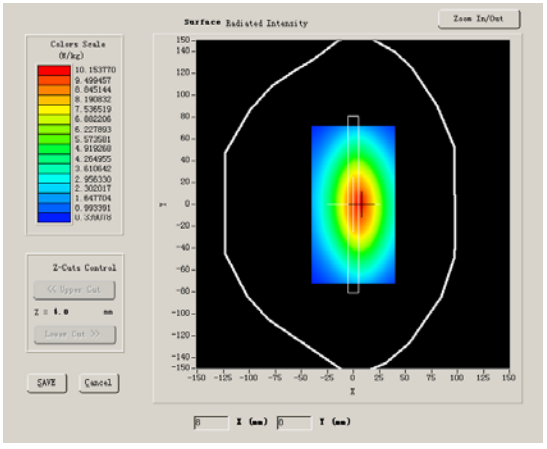
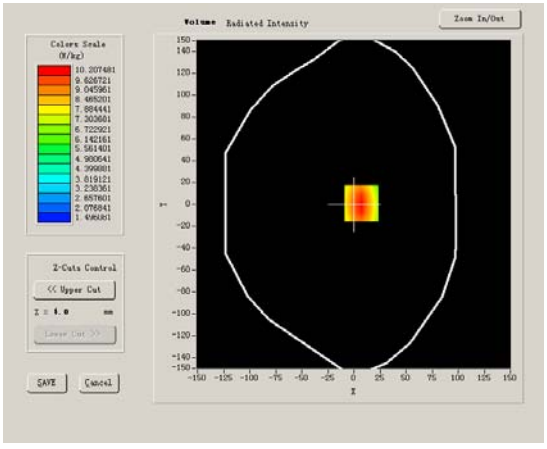
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	1800MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	1800
Relative permittivity (real part)	53.12
Relative permittivity	15.10
Conductivity (S/m)	1.51
Power drift (%)	-0.68
Ambient Temperature:	22.2°C
Liquid Temperature:	22.6°C
ConvF:	4.96
Crest factor:	1:1

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=7.00, Y=1.00

SAR 10g (W/Kg)	5.025324
SAR 1g (W/Kg)	9.868531

System Performance Check (Body, 1900MHz)

Type: Validation measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=8mm, dy=8mm, dz=5mm

Date of measurement: 05/07/2016

Measurement duration: 21 minutes 48 seconds

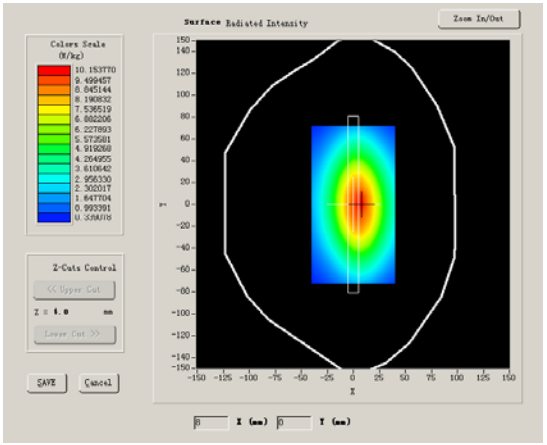
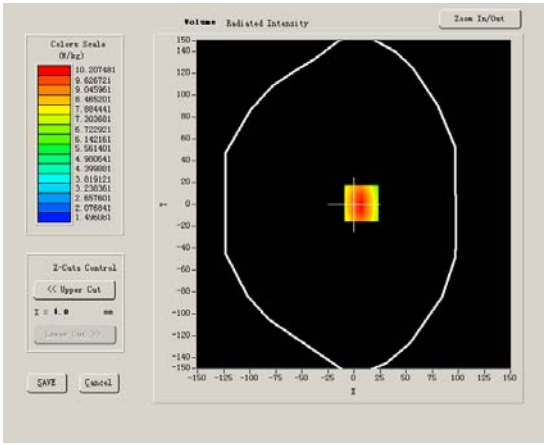
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	5x5x7,dx=8mm dy=8mm dz=5mm
Device Position	Dipole
Band	1900MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	1900
Relative permittivity (real part)	53.11
Relative permittivity	14.40
Conductivity (S/m)	1.52
Power Drift (%)	1.05
Ambient Temperature:	22.1°C
Liquid Temperature:	22.6°C
ConvF:	5.43
Duty factor:	1:1

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=1.00, Y=6.00

SAR 10g (W/Kg)	5.275322
SAR 1g (W/Kg)	10.152543

System Performance Check (Body, 2600MHz)

Type: Phone measurement

Area scan resolution: dx=8mm,dy=8mm

Zoom scan resolution: dx=5mm, dy=5mm, dz=4mm

Date of measurement: 07/07/2016

Measurement duration: 22 minutes 28 seconds

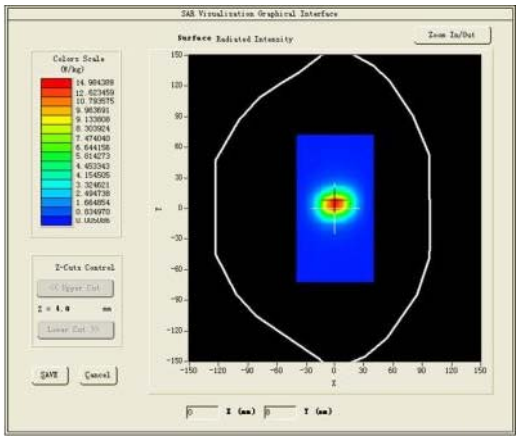
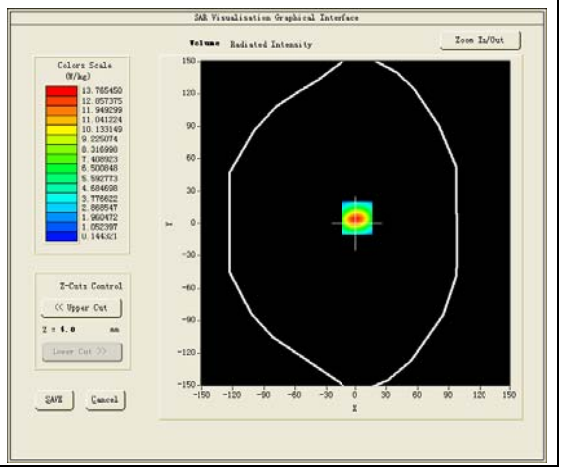
A. Experimental conditions.

Phantom File	dx=8mm dy=8mm
Phantom	7x7x8,dx=5mm dy=5mm dz=4mm
Device Position	Dipole
Band	2600MHz
Channels	
Signal	CW

B. SAR Measurement Results

Band SAR

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	2600
Relative permittivity (real part)	52.37
Relative permittivity	14.88
Conductivity (S/m)	2.15
Power drift (%)	2.35
Ambient Temperature:	22.2°C
Liquid Temperature:	22.5°C
Crest factor:	1:1
ConvF:	5.22

SURFACE SAR	VOLUME SAR
	

Maximum location: X=1.00, Y=4.00

SAR 10g (W/Kg)	5.980351
SAR 1g (W/Kg)	14.063205

Plot 1: GSM850, Horizontal Up, Middle

Type: Phone measurement

Date of measurement: 04/07/2016

Measurement duration: 21 minutes 15 seconds

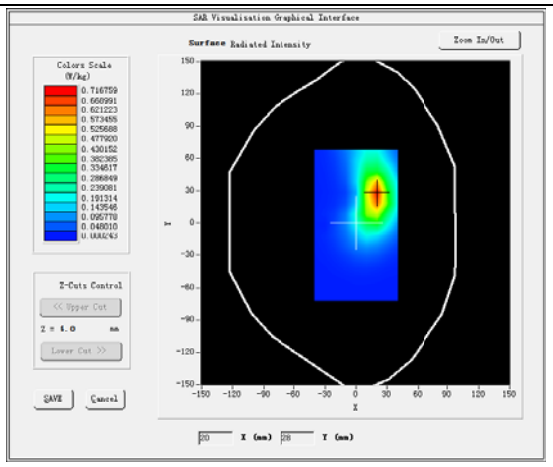
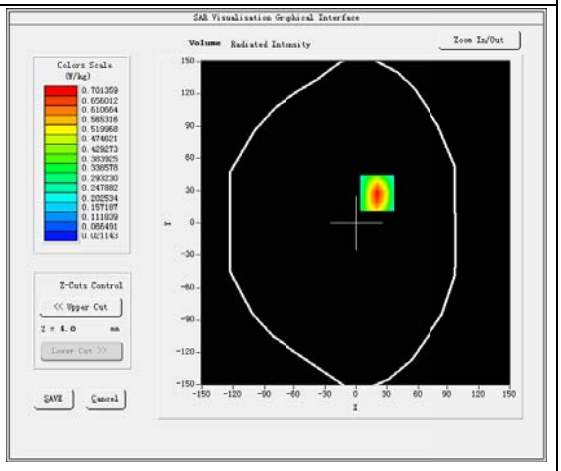
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	GSPRS850_4Tx
Channels	190
Signal	GPRS(Duty cycle: 1:2)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	836.6
Relative permittivity (real part)	55.08
Relative permittivity (imaginary part)	20.54
Conductivity (S/m)	0.97
Variation (%)	-0.70
ConvF:	5.82

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=20.00, Y=28.00

SAR Peak: 1.12 W/kg

SAR 10g (W/Kg)	0.343495
SAR 1g (W/Kg)	0.653216

Plot 2: GSM1900, Horizontal Up, Middle

Type: Phone measurement

Date of measurement: 05/07/2016

Measurement duration: 21 minutes 13 seconds

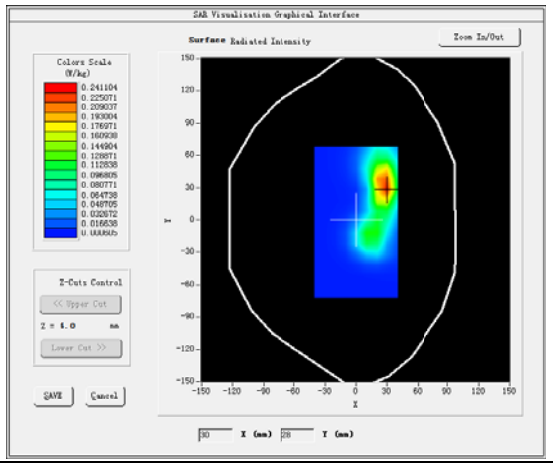
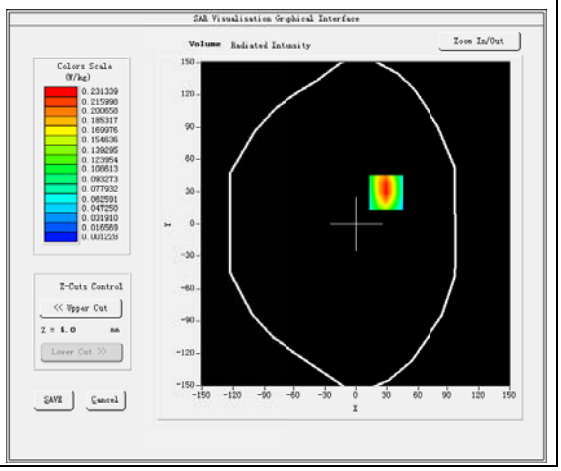
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	GPRS1900_4Tx
Channels	661
Signal	GPRS (Duty cycle: 1:2)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	1880.0
Relative permittivity (real part)	53.11
Relative permittivity (imaginary part)	14.40
Conductivity (S/m)	1.52
Variation (%)	-0.78
ConvF:	5.43

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=29.00, Y=29.00

SAR Peak: 0.43 W/kg

SAR 10g (W/Kg)	0.101111
SAR 1g (W/Kg)	0.219742

Plot 3: WCDMA850, Horizontal Up, Middle

Type: Phone measurement

Date of measurement:04/07/2016

Measurement duration: 21 minutes 11 seconds

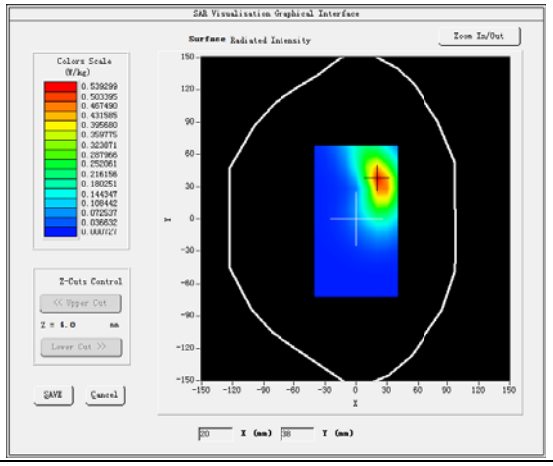
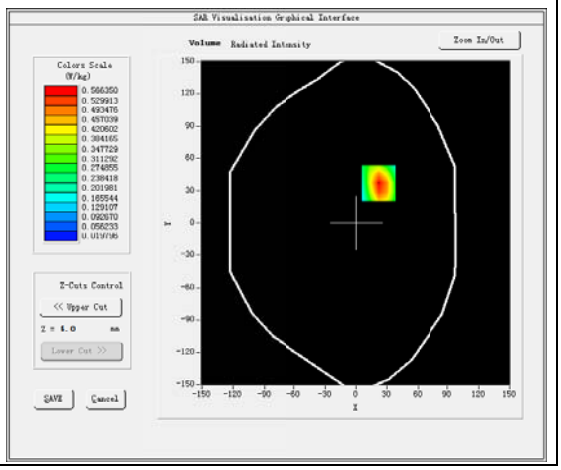
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	Band5_WCDMA850
Channels	4283
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	836.6
Relative permittivity (real part)	55.08
Relative permittivity (imaginary part)	20.54
Conductivity (S/m)	0.97
Variation (%)	0.22
ConvF:	5.82

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=22.00, Y=37.00

SAR Peak: 0.86 W/kg

SAR 10g (W/Kg)	0.297342
SAR 1g (W/Kg)	0.530936

Plot 4: WCDMA1700, Horizontal Up, Middle

Type: Phone measurement

Date of measurement: 05/07/2016

Measurement duration: 21 minutes 21 seconds

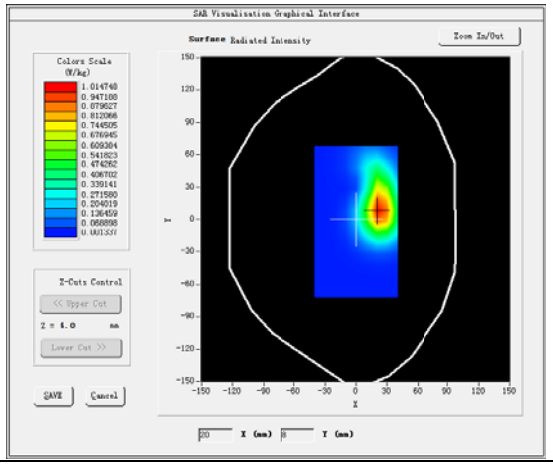
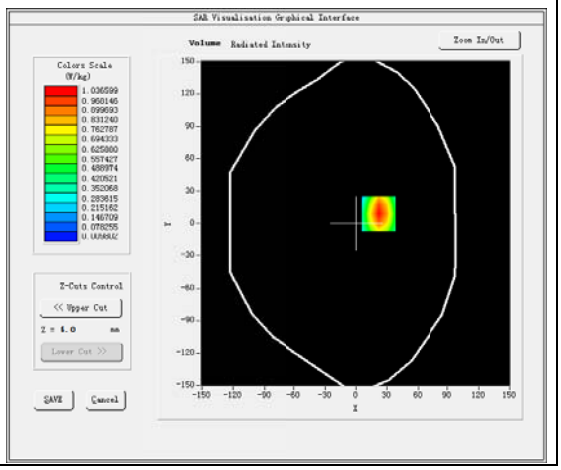
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	Band2_WCDMA1700
Channels	1413
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	1732.6
Relative permittivity (real part)	53.12
Relative permittivity (imaginary	15.10
Conductivity (S/m)	1.51
Variation (%)	-4.66
ConvF:	4.96

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=22.00, Y=9.00

SAR Peak: 1.78 W/kg

SAR 10g (W/Kg)	0.481349
SAR 1g (W/Kg)	0.973126

Plot 5: WCDMA1900, Horizontal Up, Middle

Type: Phone measurement

Date of measurement: 05/07/2016

Measurement duration: 22 minutes 13 seconds

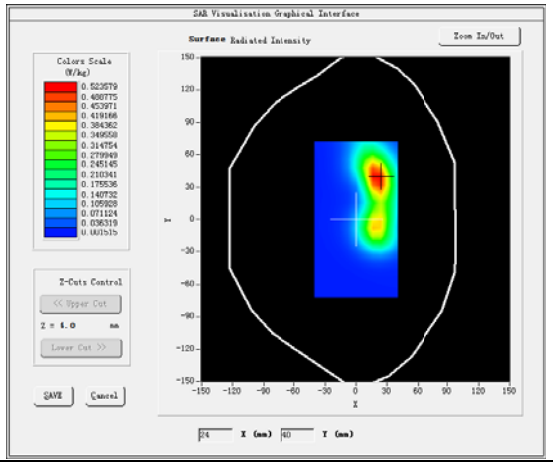
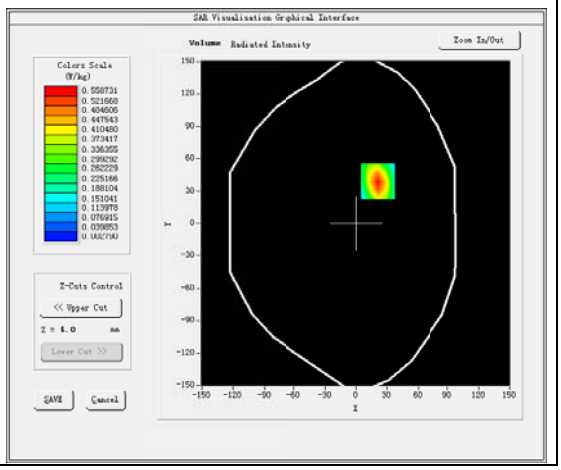
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	Band2_WCDMA1900
Channels	9538
Signal	WCDMA (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	1907.6
Relative permittivity (real part)	53.11
Relative permittivity (imaginary	14.40
Conductivity (S/m)	1.52
Variation (%)	-4.05
ConvF:	5.43

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=21.00, Y=39.00

SAR Peak: 1.05 W/kg

SAR 10g (W/Kg)	0.237269
SAR 1g (W/Kg)	0.523330

Plot 6: LTE Band2, 20MHz, Horizontal Up, Middle

Type: Phone measurement

Date of measurement: 05/07/2016

Measurement duration: 22 minutes 05 seconds

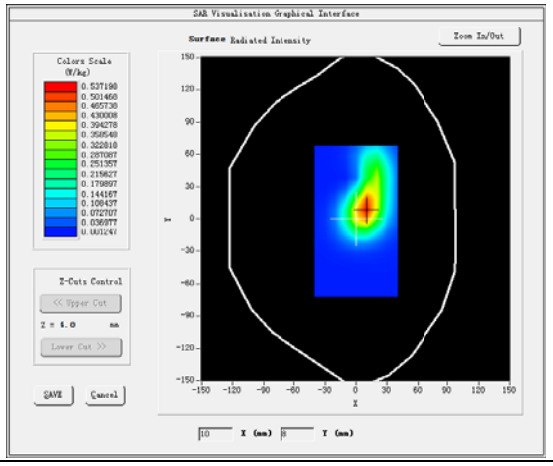
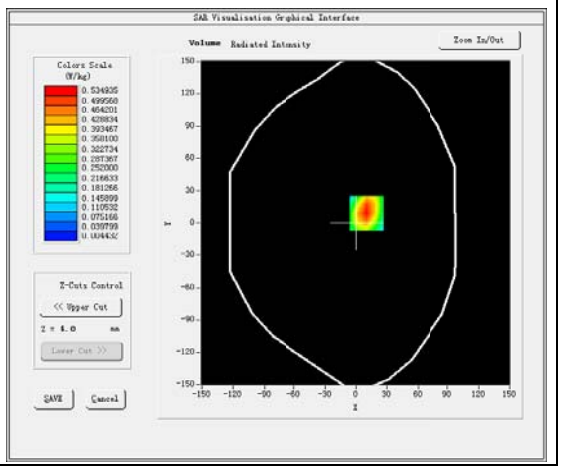
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 2
Channels	18900
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	1880
Relative permittivity (real part)	53.11
Relative permittivity (imaginary	14.40
Conductivity (S/m)	1.52
Variation (%)	-0.51
ConvF:	5.43

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=10.00, Y=9.00

SAR Peak: 0.94 W/kg

SAR 10g (W/Kg)	0.243930
SAR 1g (W/Kg)	0.501888

Plot 7: LTE Band4, 20MHz, Vertical Back, Middle

Type: Phone measurement

Date of measurement: 05/07/2016

Measurement duration: 22 minutes 12 seconds

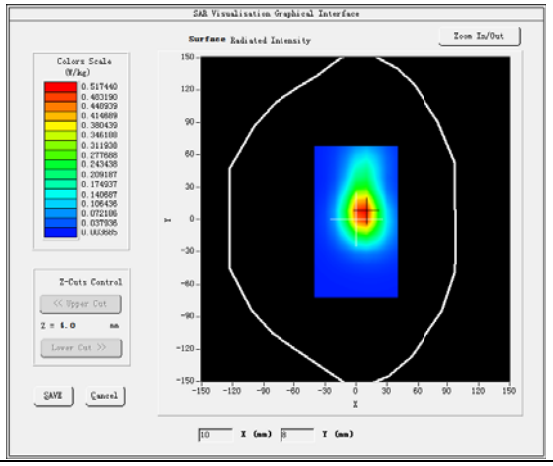
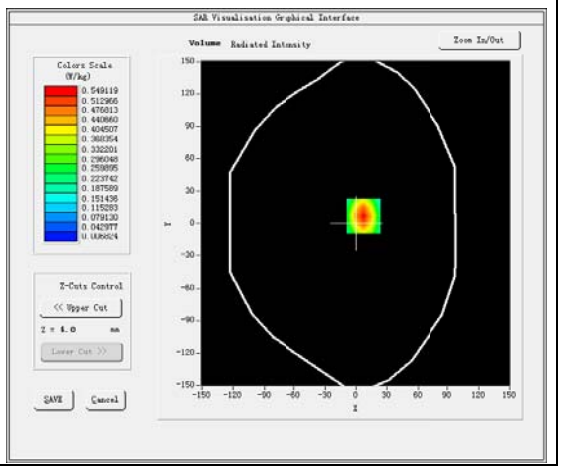
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 4
Channels	20175
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	1732.5
Relative permittivity (real part)	53.24
Relative permittivity (imaginary	15.10
Conductivity (S/m)	1.51
Variation (%)	0.92
ConvF:	4.96

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=7.00, Y=7.00

SAR Peak: 0.96 W/kg

SAR 10g (W/Kg)	0.250672
SAR 1g (W/Kg)	0.515178

Plot 8: LTE Band5, 10MHz, Horizontal Up, Middle

Type: Phone measurement

Date of measurement: 04/07/2016

Measurement duration: 22 minutes 24 seconds

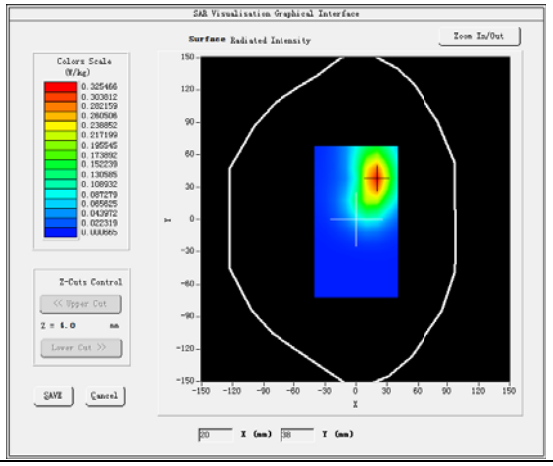
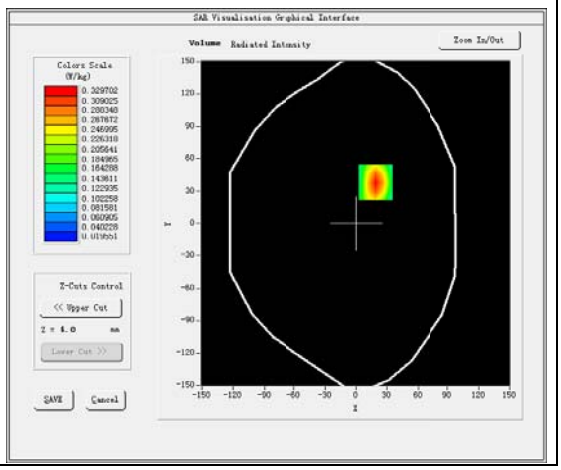
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 5
Channels	20525
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	836.5
Relative permittivity (real part)	55.08
Relative permittivity (imaginary	20.54
Conductivity (S/m)	0.97
Variation (%)	-0.92
ConvF:	5.82

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=19.00, Y=38.00

SAR Peak: 0.48 W/kg

SAR 10g (W/Kg)	0.177489
SAR 1g (W/Kg)	0.308049

Plot 9: LTE Band7, 20MHz, Horizontal Up, Middle

Type: Phone measurement

Date of measurement: 07/07/2016

Measurement duration: 22 minutes 11 seconds

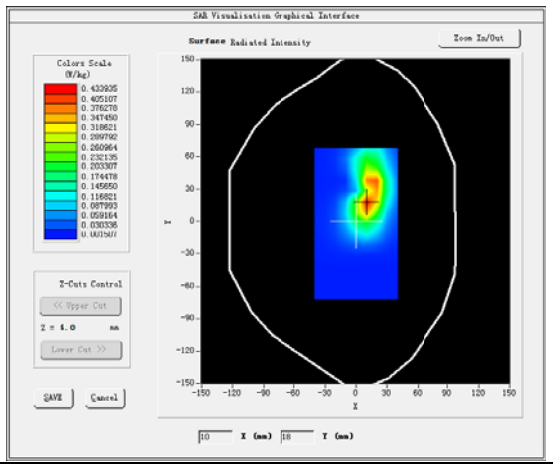
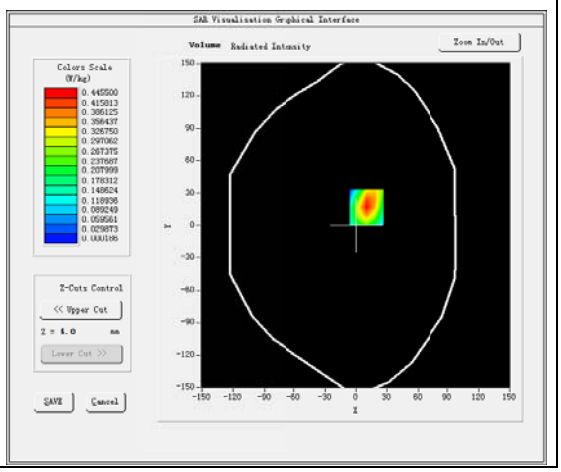
Mobile Phone IMEI number: --

A. Experimental conditions.

Area Scan	dx=8mm dy=8mm
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm
Phantom	Validation plane
Device Position	Back
Band	LTE Band 7
Channels	21100
Signal	LTE (Duty cycle: 1:1)

B. SAR Measurement Results

E-Field Probe	SATIMO SN_04/13_EP166
Frequency (MHz)	2535
Relative permittivity (real part)	52.37
Relative permittivity (imaginary	14.88
Conductivity (S/m)	2.15
Variation (%)	0.04
ConvF:	5.22

SURFACE SAR	**VOLUME SAR**
	

Maximum location: X=10.00, Y=17.00

SAR Peak: 0.97 W/kg

SAR 10g (W/Kg)	0.180960
SAR 1g (W/Kg)	0.428654