

11. System Check Results

Date of measurement: 14/03/2016 Test mode: 835 (Head)

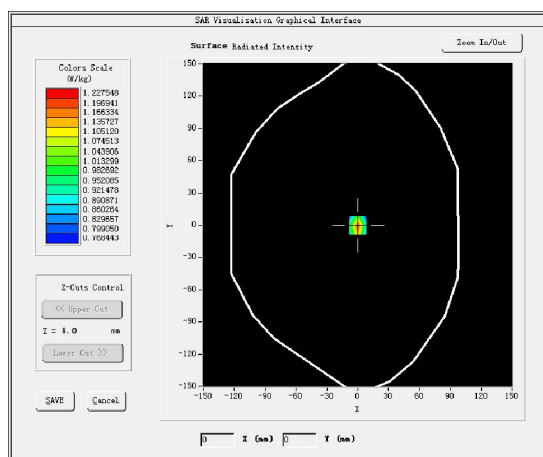
Product Description: Validation

Dipole Model: SID835

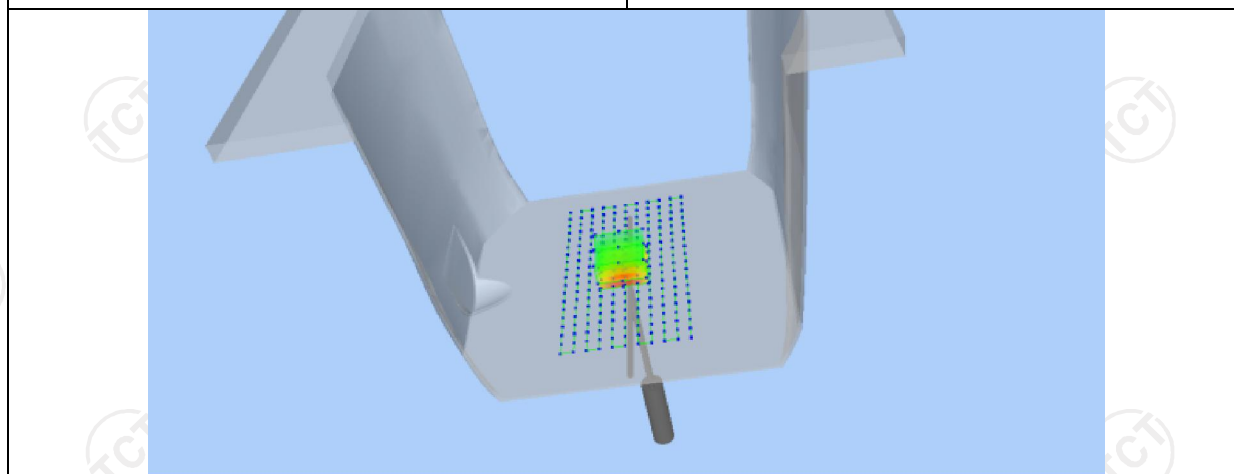
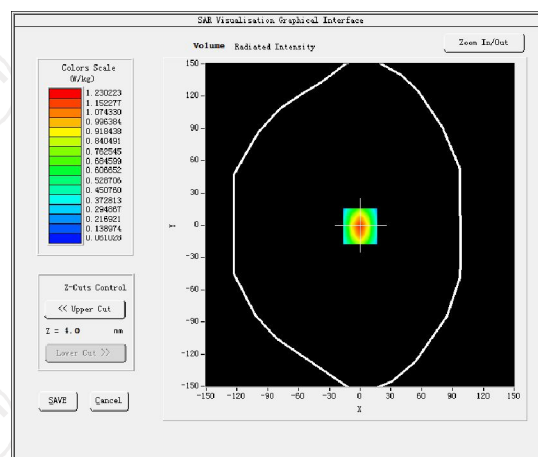
E-Field Probe: SSE5 (SN 07/15 EP248)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	5.05
Frequency (MHz)	835.000000
Relative permittivity (real part)	41.417760
Relative permittivity (imaginary part)	18.129852
Conductivity (S/m)	0.874923
Variation (%)	-0.090000
SAR 10g (W/Kg)	0.570226
SAR 1g (W/Kg)	0.886036

SURFACE SAR



VOLUME SAR



Date of measurement: 14/03/2016 Test mode: 835 (Body)

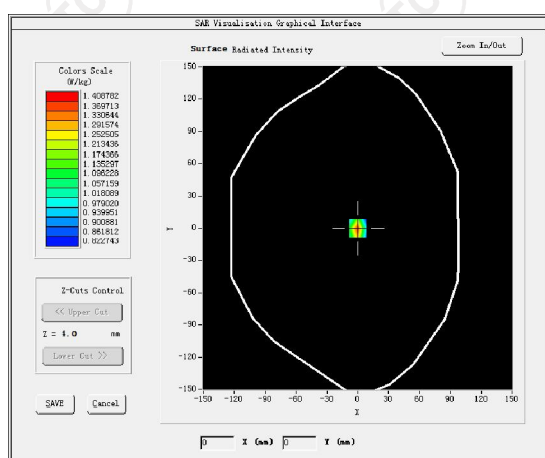
Product Description: Validation

Dipole Model: SID835

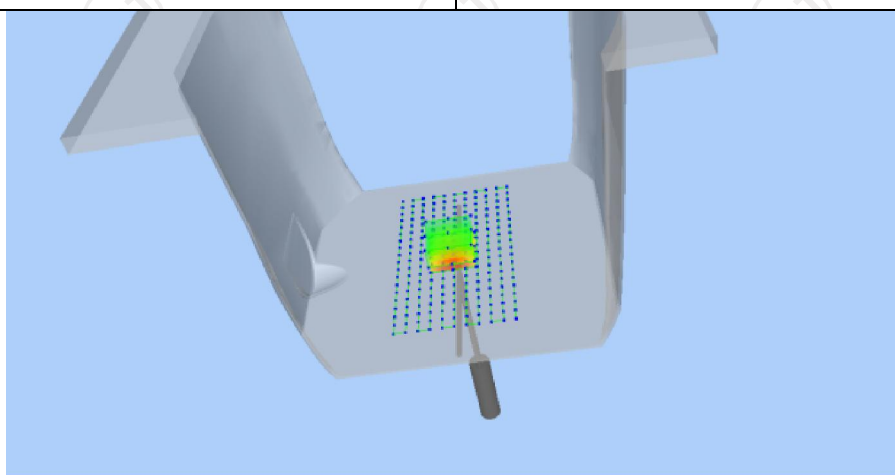
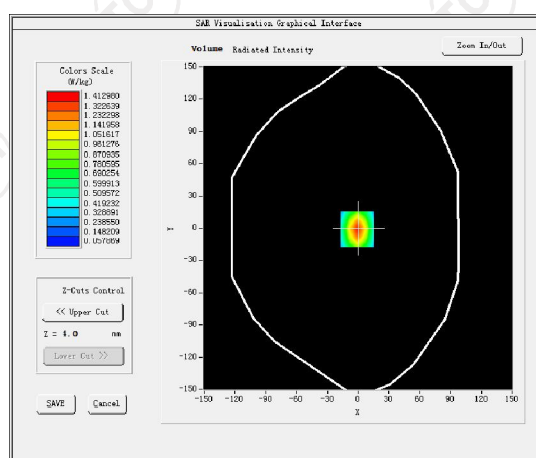
E-Field Probe: SSE5 (SN 07/15 EP248)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	5.22
Frequency (MHz)	835.000000
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.978883
Variation (%)	-0.150000
SAR 10g (W/Kg)	0.633112
SAR 1g (W/Kg)	0.949433

SURFACE SAR



VOLUME SAR



Date of measurement: 15/03/2016 Test mode: 1900MHz (Head)

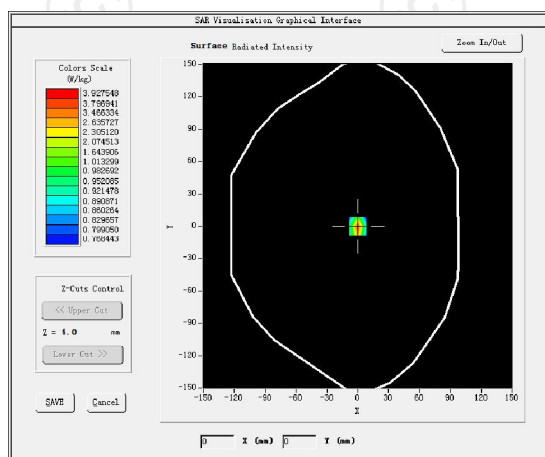
Product Description: Validation

Dipole Model: SID1900

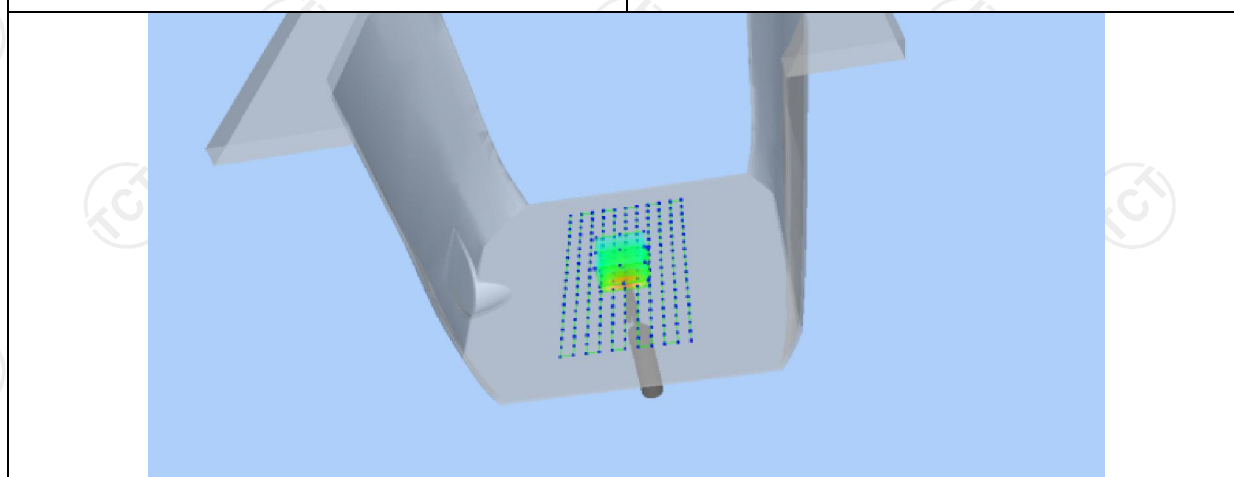
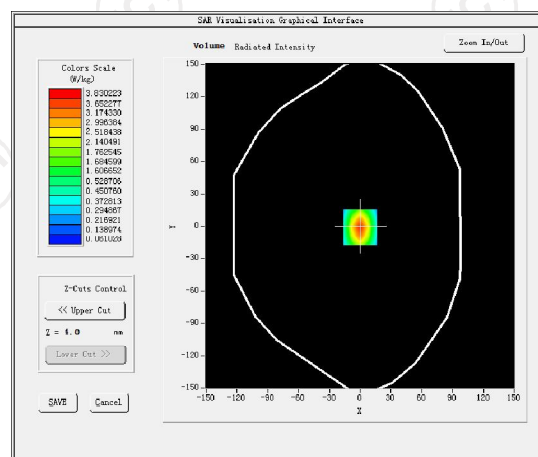
E-Field Probe: SSE5 (SN 07/15 EP248)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	4.86
Frequency (MHz)	1900.000000
Relative permittivity (real part)	39.076721
Relative permittivity (imaginary part)	12.607061
Conductivity (S/m)	1.337609
Variation (%)	-0.910000
SAR 10g (W/Kg)	1.899569
SAR 1g (W/Kg)	3.576329

SURFACE SAR



VOLUME SAR



Date of measurement: 15/03/2016 Test mode: 1900MHz (Body)

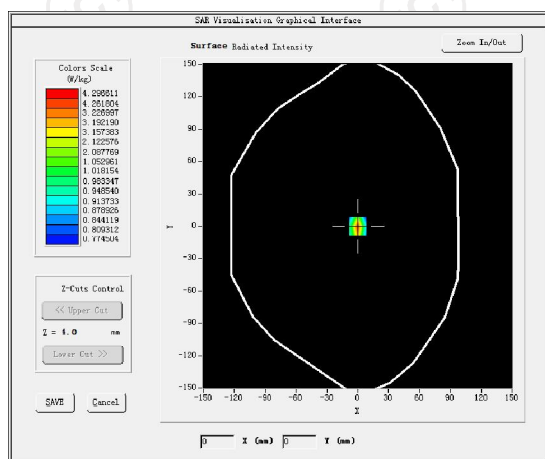
Product Description: Validation

Dipole Model: SID1900

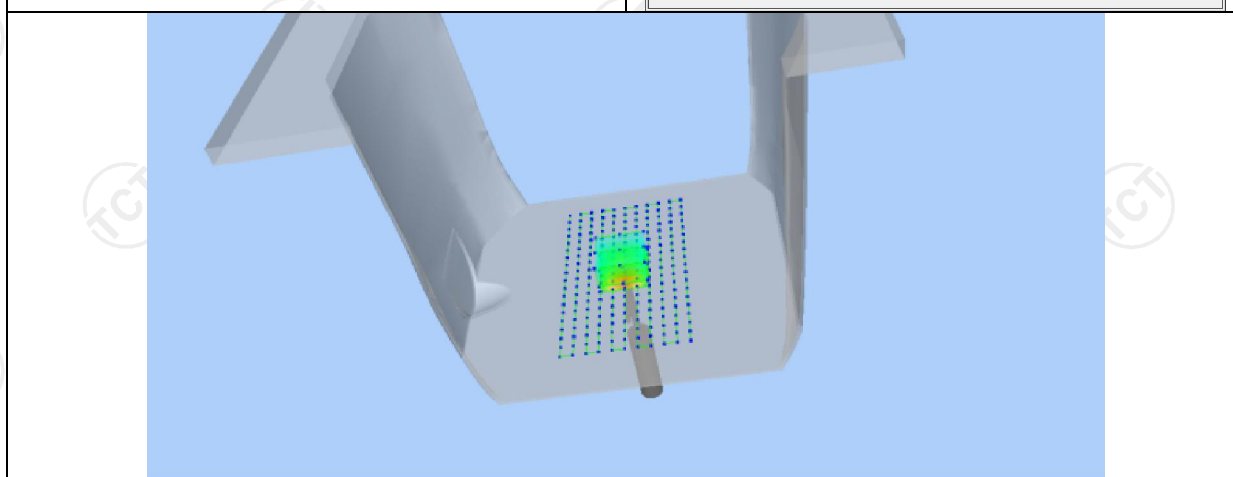
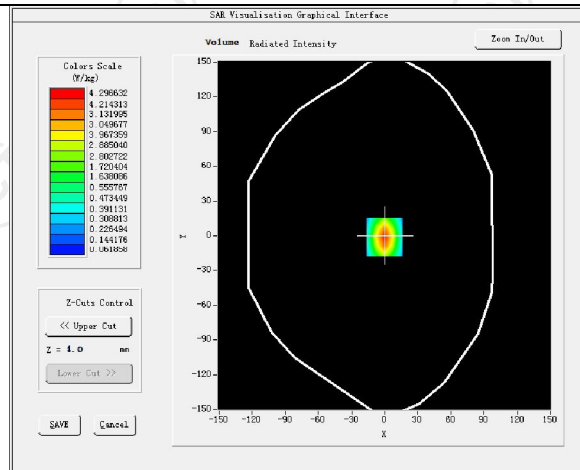
E-Field Probe: SSE5 (SN 07/15 EP248)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	5.05
Frequency (MHz)	1900.000000
Relative permittivity (real part)	50.741001
Relative permittivity (imaginary part)	14.232400
Conductivity (S/m)	1.486495
Variation (%)	1.250000
SAR 10g (W/Kg)	1.994234
SAR 1g (W/Kg)	3.766325

SURFACE SAR



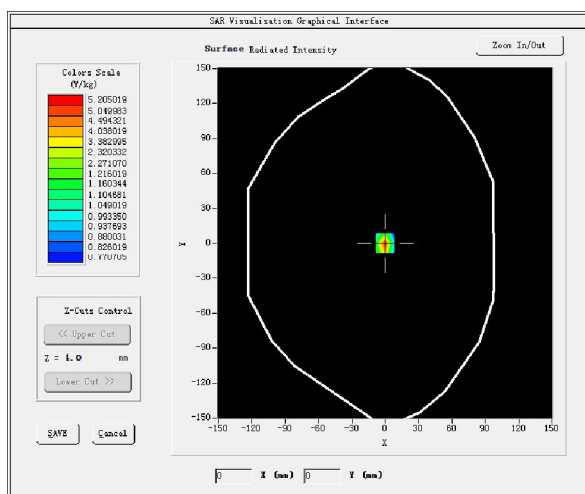
VOLUME SAR



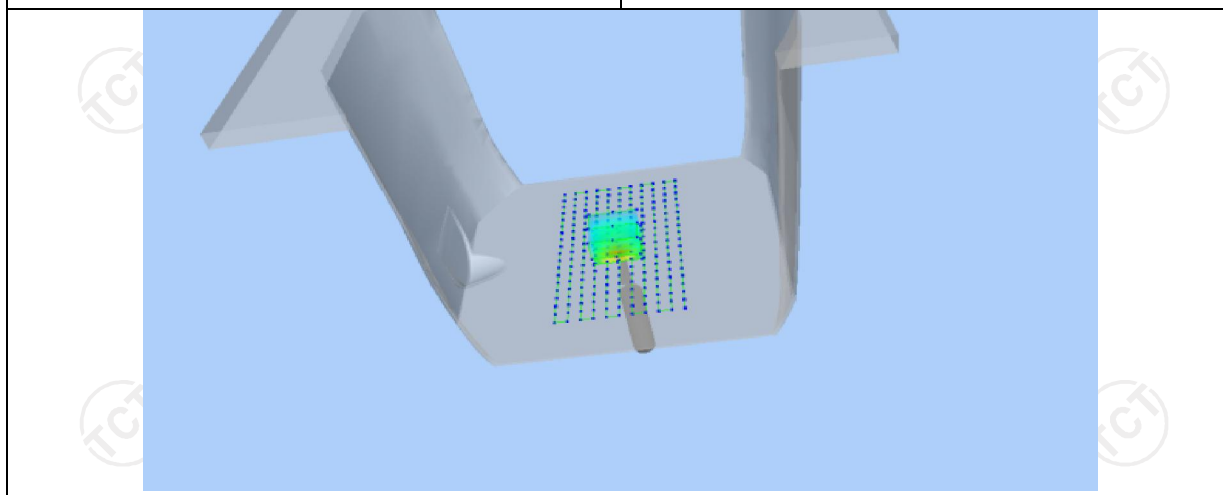
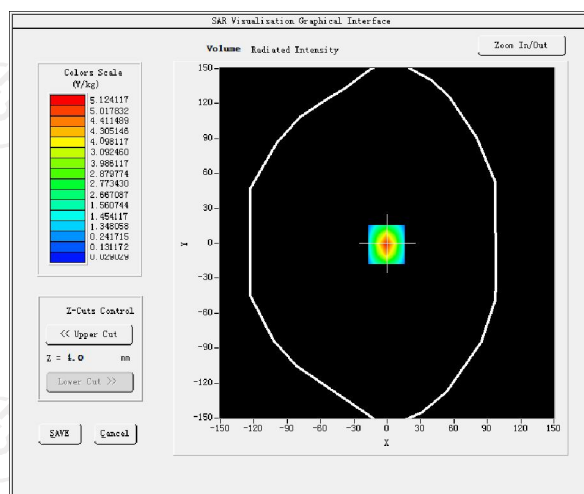
Date of measurement: 16/03/2016 Test mode: 2450MHz (Head)
 Product Description: Validation
 Dipole Model: SID2450
 E-Field Probe: SSE5 (SN 07/15 EP248)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	4.21
Frequency (MHz)	2450.000000
Relative permittivity (real part)	37.821613
Relative permittivity (imaginary part)	13.546980
Conductivity (S/m)	1.834111
Variation (%)	-0.470000
SAR 10g (W/Kg)	2.364445
SAR 1g (W/Kg)	4.994244

SURFACE SAR



VOLUME SAR



Date of measurement: 16/03/2016 Test mode: 2450MHz (Body)

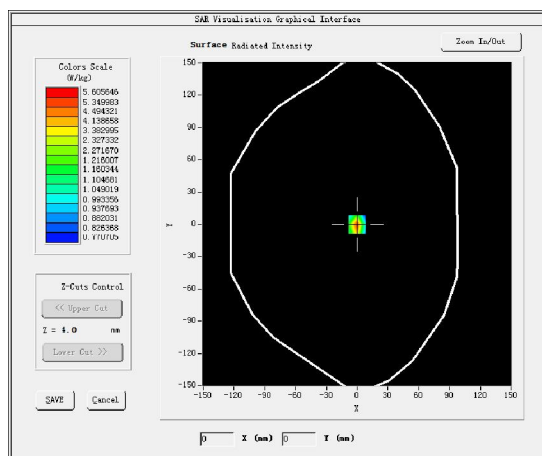
Product Description: Validation

Dipole Model: SID2450

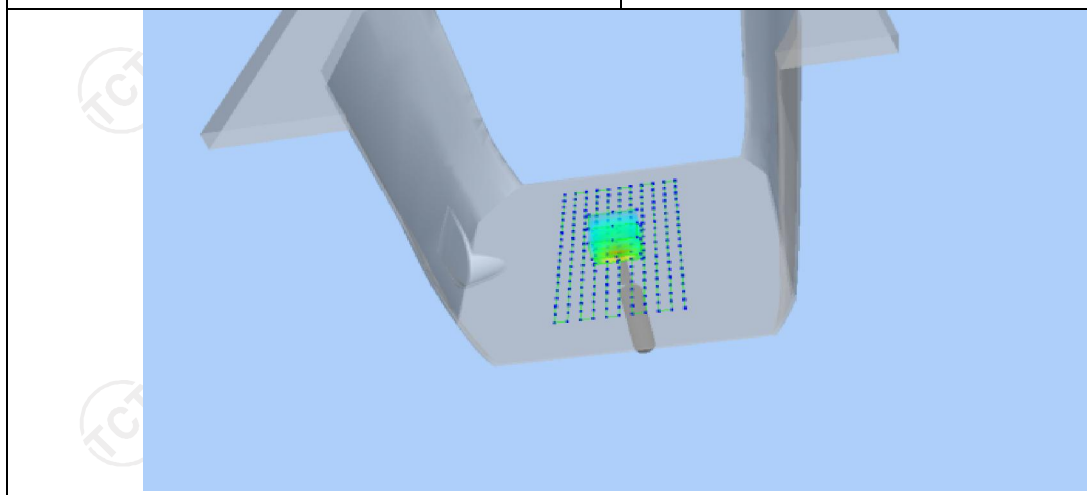
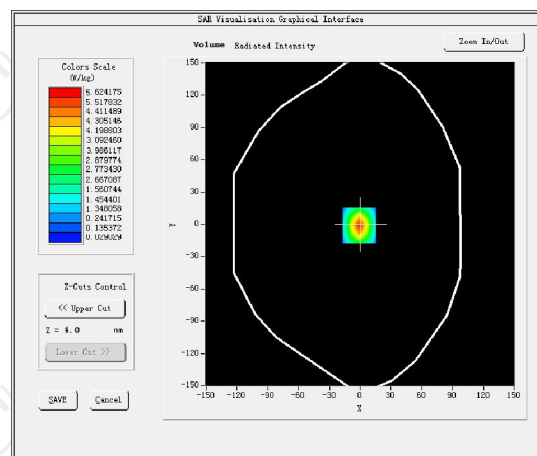
E-Field Probe: SSE5 (SN 07/15 EP248)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	4.36
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



12. SAR Test Data

GSM850

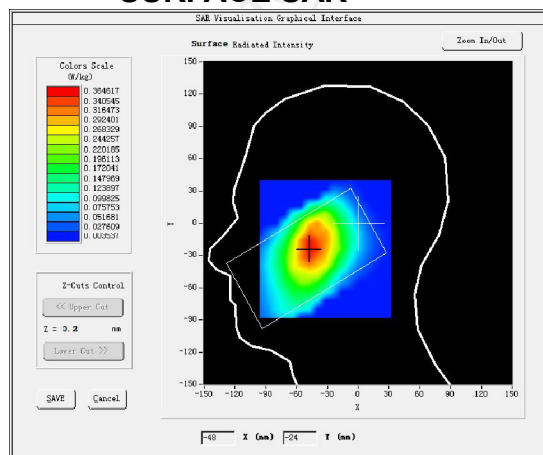
MEASUREMENT 1

High Band SAR (Channel 189):

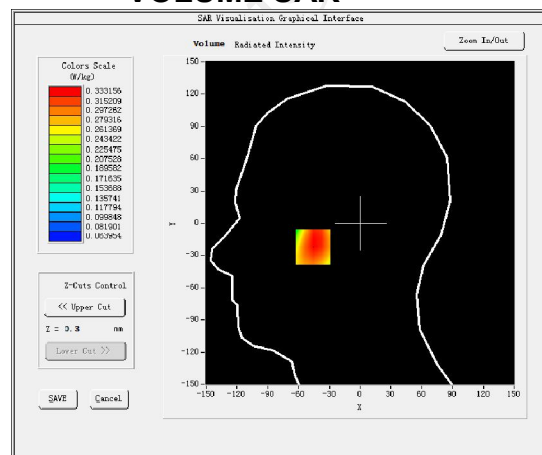
Date: 14/03/2016

Frequency (MHz)	836.400024
Relative permittivity (real part)	41.417760
Relative permittivity (imaginary part)	18.129852
Conductivity (S/m)	0.874923
Variation (%)	-1.250000
Crest Factor:	8.3
Probe Conversion factor	5.05
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>GSM850(voice)</u>

SURFACE SAR



VOLUME SAR



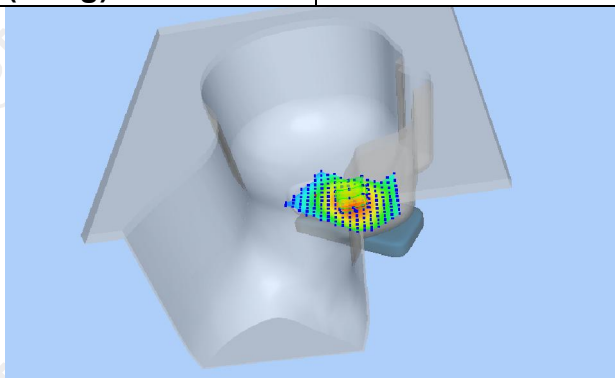
Maximum location: X=-46.00, Y=-22.00 SAR Peak: 0.48W/kg

SAR 10g (W/Kg)

0.273397

SAR 1g (W/Kg)

0.351244



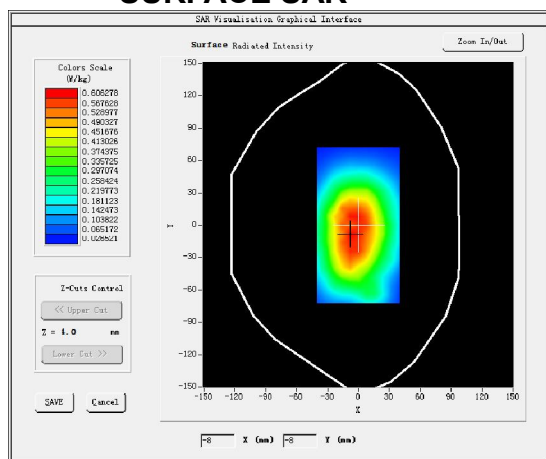
MEASUREMENT 2

High Band SAR (Channel 189):

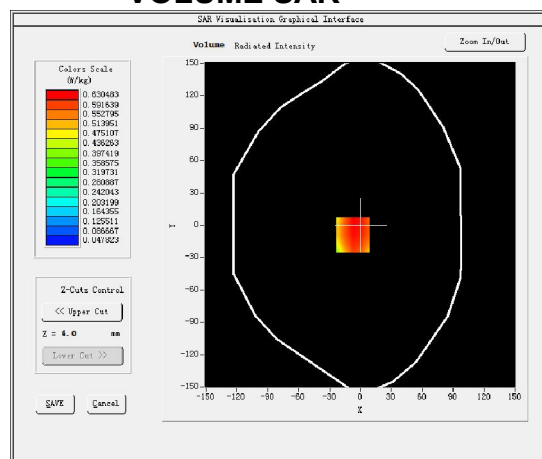
Date: 14/03/2016

Frequency (MHz)	836.400024
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.978883
Variation (%)	-2.610000
Crest Factor:	8.3
Probe Conversion factor	5.22
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7, dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	GSM850(Voice)

SURFACE SAR

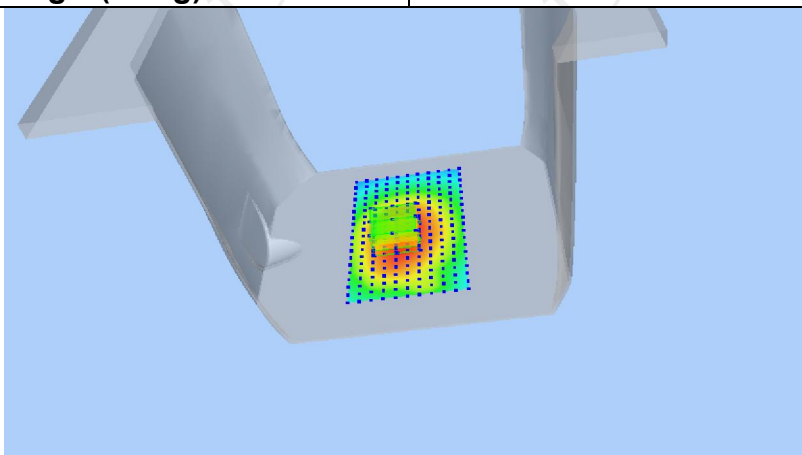


VOLUME SAR



Maximum location: X=-7.00, Y=-9.00 SAR Peak: 0.75 W/kg

SAR 10g (W/Kg)	0.264742
SAR 1g (W/Kg)	0.366984



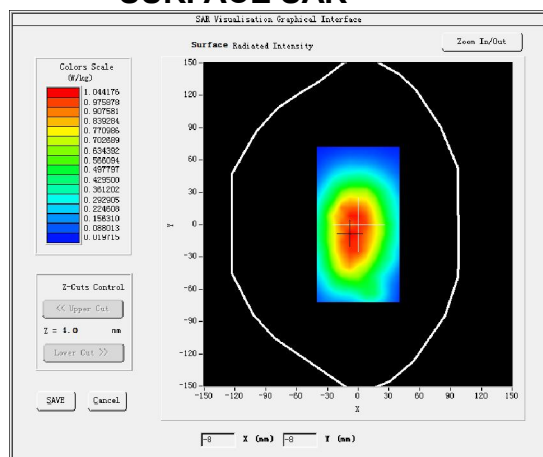
MEASUREMENT 3

High Band SAR (Channel 128):

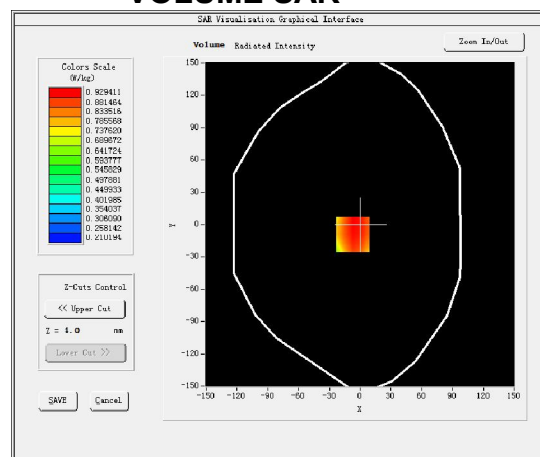
Date: 14/03/2016

Frequency (MHz)	824.200012
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.978883
Variation (%)	-3.300000
Crest Factor:	2.0
Probe Conversion factor	5.22
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body back(hotpot)</u>
Band	<u>GSM850(GPRS 2slot)</u>

SURFACE SAR

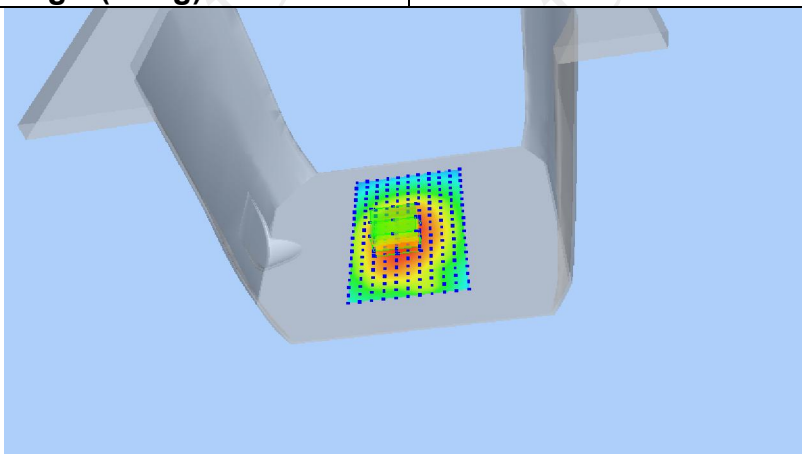


VOLUME SAR



Maximum location: X=-7.00, Y=-9.00 SAR Peak: 0.95 W/kg

SAR 10g (W/Kg)	0.575397
SAR 1g (W/Kg)	0.693410



GSM1900

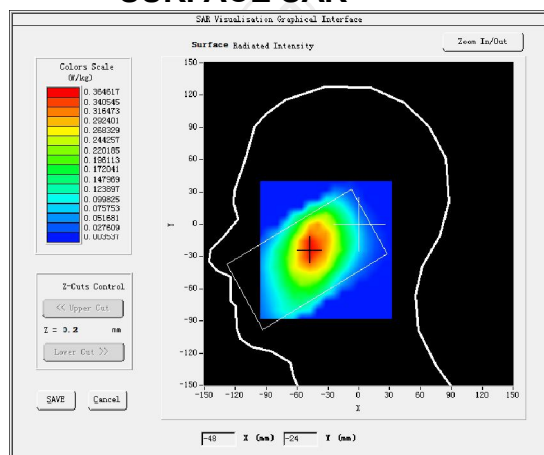
MEASUREMENT 1

Middle Band SAR (Channel 512):

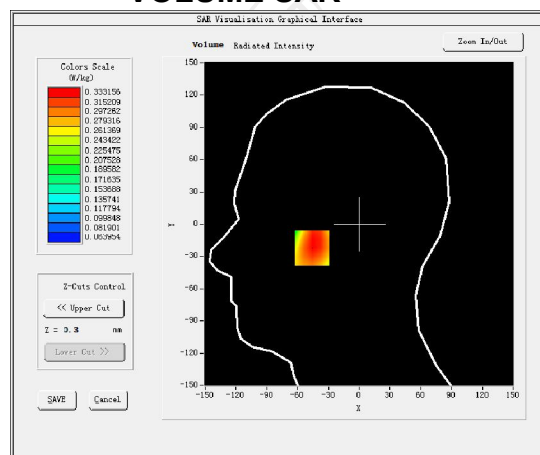
Date: 15/03/2016

Frequency (MHz)	1850.199951
Relative permittivity (real part)	39.076721
Relative permittivity (imaginary part)	12.607061
Conductivity (S/m)	1.337609
Variation (%)	-4.440000
Crest Factor	8.3
Probe Conversion factor	4.86
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>GSM1900(voice)</u>

SURFACE SAR

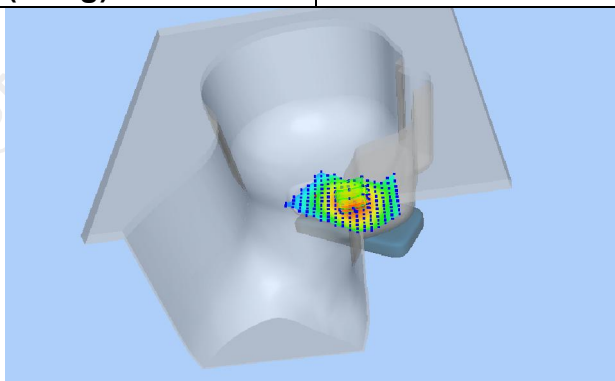


VOLUME SAR



Maximum location: X=-46.00, Y=-22.00 SAR Peak: 0.40 W/kg

SAR 10g (W/Kg)	0.263397
SAR 1g (W/Kg)	0.338244



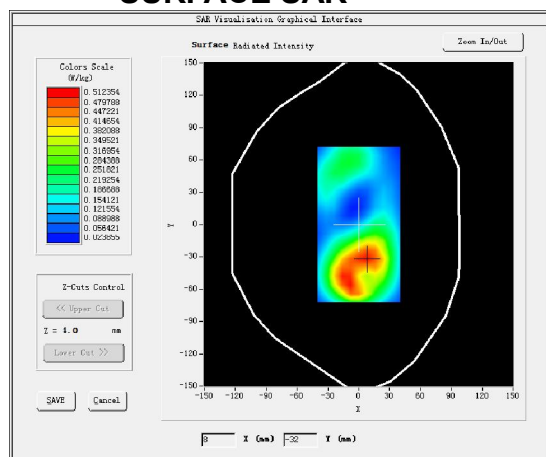
MEASUREMENT 2

Middle Band SAR (Channel 512):

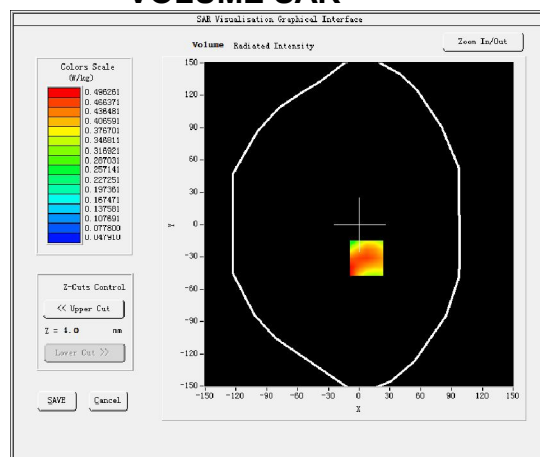
Date: 15/03/2016

Frequency (MHz)	1850.199951
Relative permittivity (real part)	50.741001
Relative permittivity (imaginary part)	14.232400
Conductivity (S/m)	1.486495
Variation (%)	0.900000
Crest Factor	8.3
Probe Conversion factor	5.05
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7, dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	GSM1900(voice)

SURFACE SAR

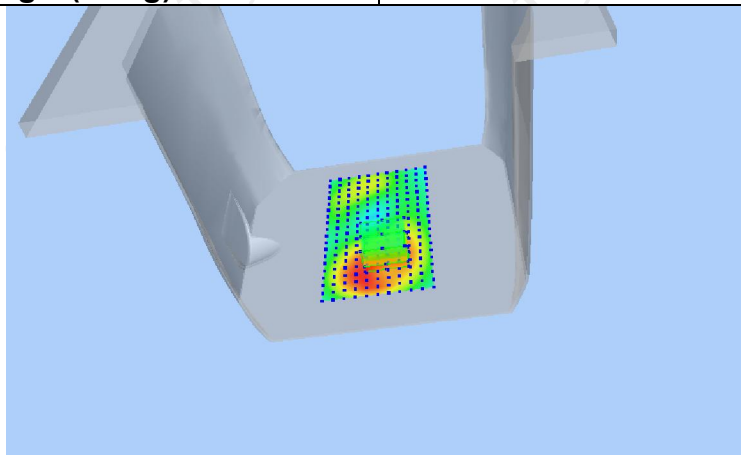


VOLUME SAR



Maximum location: X=7.00, Y=-31.00 SAR Peak: 0.78 W/kg

SAR 10g (W/Kg)	0.283008
SAR 1g (W/Kg)	0.473705



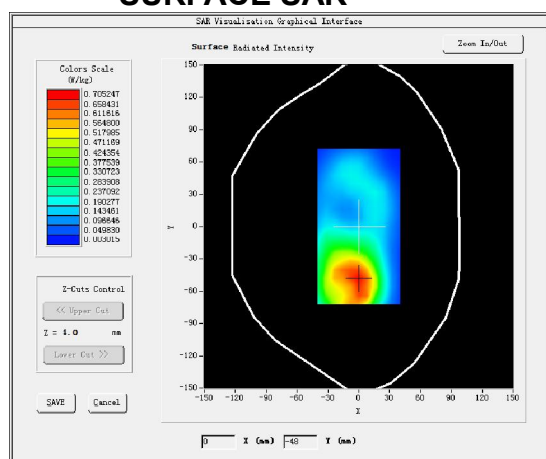
MEASUREMENT 3

Middle Band SAR (Channel 810):

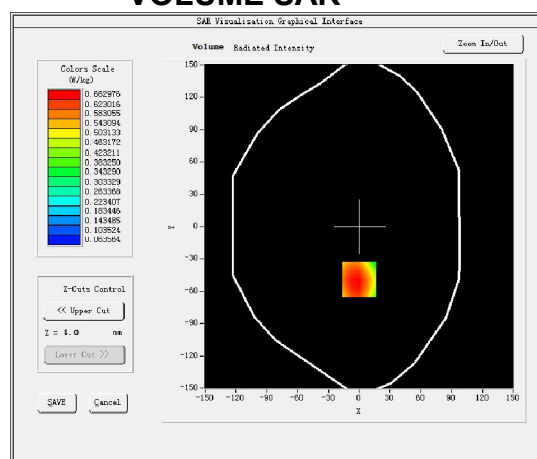
Date: 15/03/2016

Frequency (MHz)	1909.800049
Relative permittivity (real part)	50.741001
Relative permittivity (imaginary part)	14.232400
Conductivity (S/m)	1.486495
Variation (%)	-2.010000
Crest Factor	2.0
Probe Conversion factor	5.05
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body back(hotspot)</u>
Band	<u>GSM1900(GPRS 4slot)</u>

SURFACE SAR

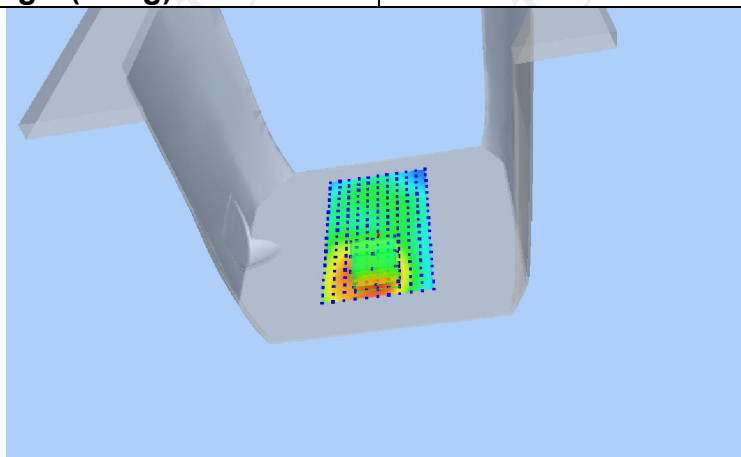


VOLUME SAR



Maximum location: X=0.00, Y=-49.00 SAR Peak: 0.99 W/kg

SAR 10g (W/Kg)	0.395854
SAR 1g (W/Kg)	0.640468



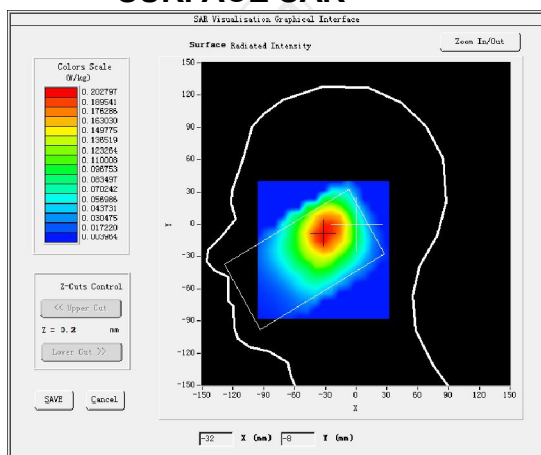
WCDMA Band II
MEASUREMENT 1

Middle Band SAR (Channel 9262):

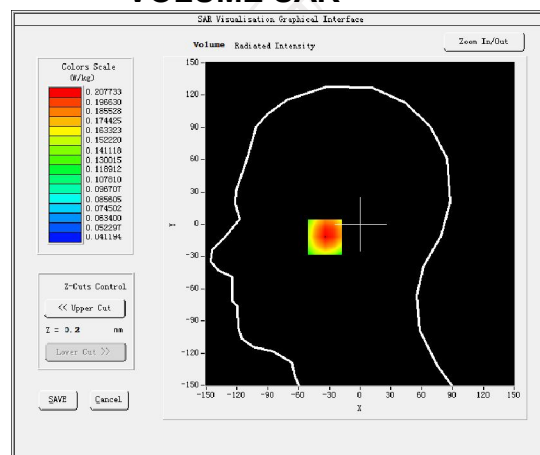
Date: 15/03/2016

Frequency (MHz)	1852.400024
Relative permittivity (real part)	39.076721
Relative permittivity (imaginary part)	12.607061
Conductivity (S/m)	1.337609
Variation (%)	1.000000
Crest Factor	1.0
Probe Conversion factor	4.86
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>Band2 WCDMA1900</u>

SURFACE SAR

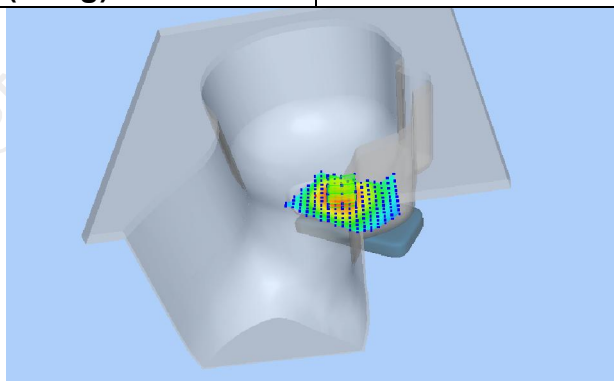


VOLUME SAR



Maximum location: X=-32.00, Y=-12.00 SAR Peak: 0.27 W/kg

SAR 10g (W/Kg)	0.143803
SAR 1g (W/Kg)	0.200939



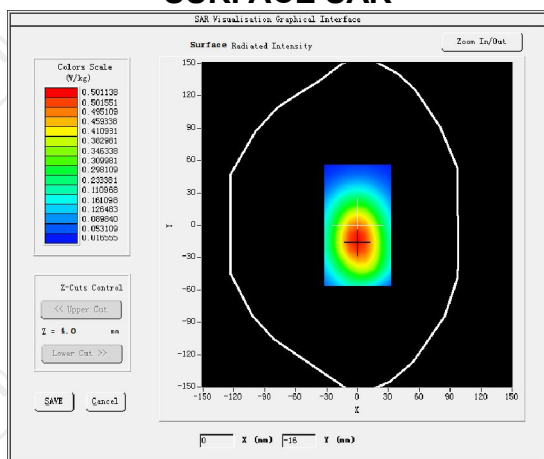
MEASUREMENT 2

Middle Band SAR (Channel 9262):

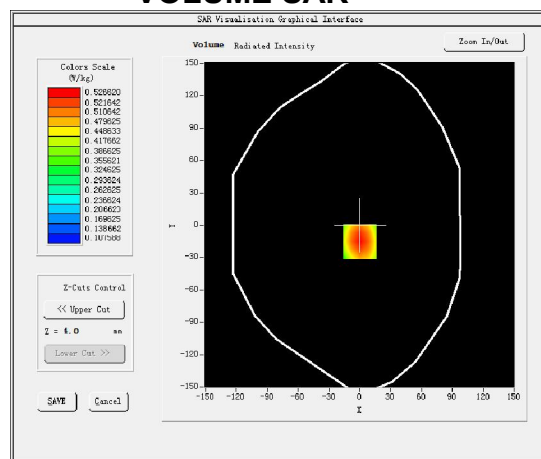
Date: 15/03/2016

Frequency (MHz)	1852.400024
Relative permittivity (real part)	50.741001
Relative permittivity (imaginary part)	14.232400
Conductivity (S/m)	1.486495
Variation (%)	-0.364010
Crest Factor	1.0
Probe Conversion factor	5.05
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body back</u>
Band	<u>Band2 WCDMA1900</u>

SURFACE SAR



VOLUME SAR



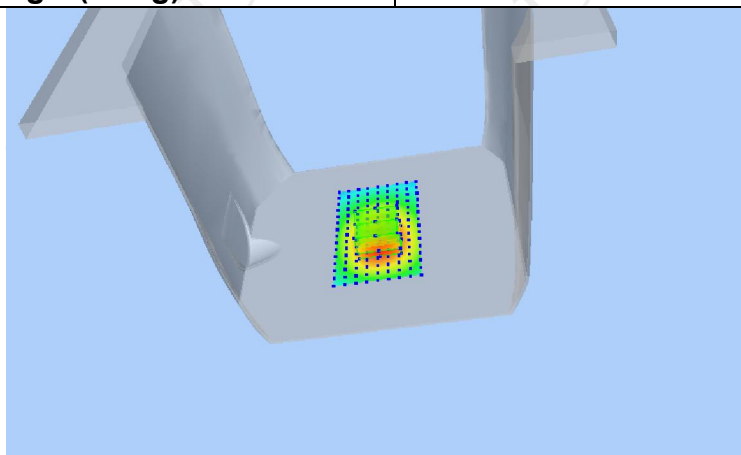
Maximum location: X=1.00, Y=-15.00 SAR Peak: 1.06 W/kg

SAR 10g (W/Kg)

0.137754

SAR 1g (W/Kg)

0.252654



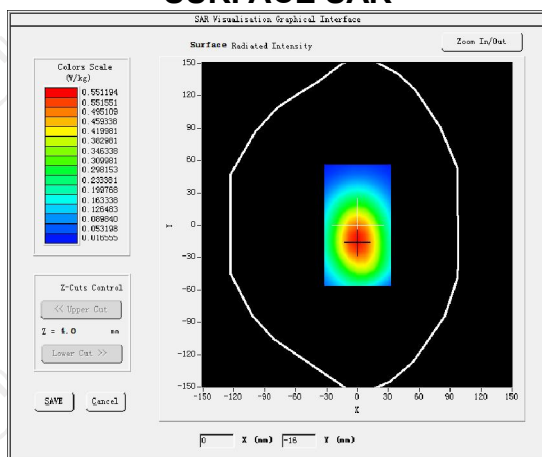
MEASUREMENT 3

Middle Band SAR (Channel 9262):

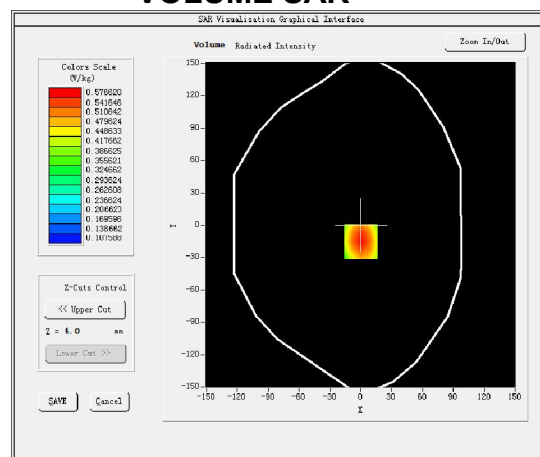
Date: 15/03/2016

Frequency (MHz)	1852.400024
Relative permittivity (real part)	50.741001
Relative permittivity (imaginary part)	14.232400
Conductivity (S/m)	1.486495
Variation (%)	-3.014010
Crest Factor	1.0
Probe Conversion factor	5.05
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body back(hotpot)</u>
Band	<u>Band2 WCDMA1900</u>

SURFACE SAR

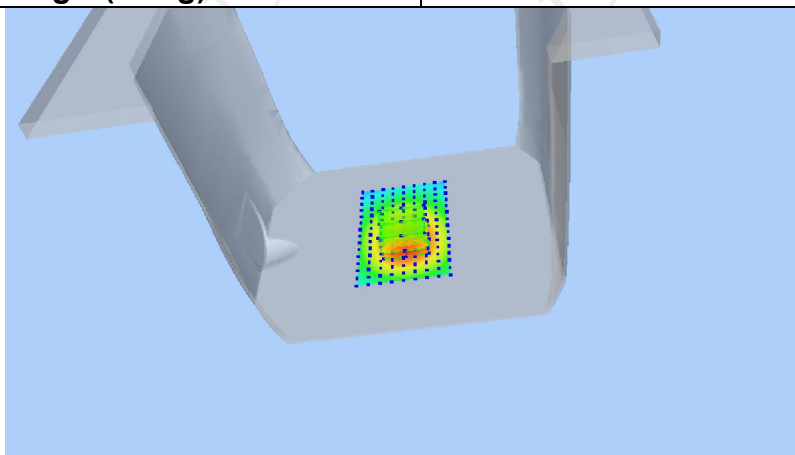


VOLUME SAR



Maximum location: X=1.00, Y=-15.00 SAR Peak: 1.23 W/kg

SAR 10g (W/Kg)	0.337851
SAR 1g (W/Kg)	0.451242



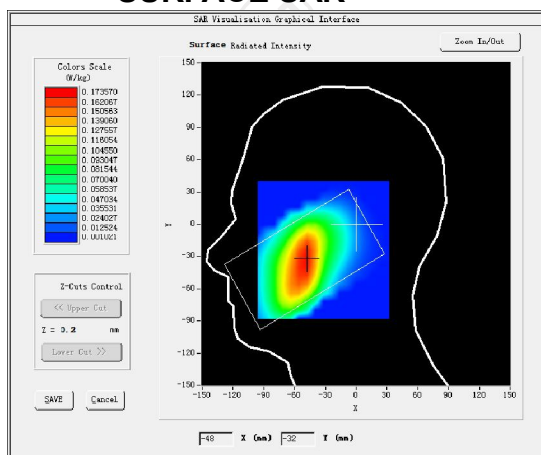
WCDMA Band V
MEASUREMENT 1

Low Band SAR (Channel 4233):

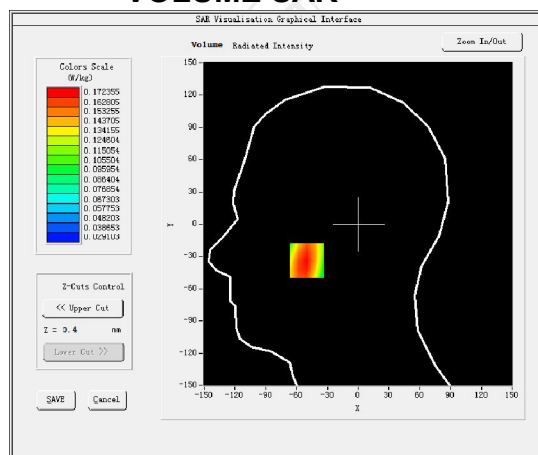
Date: 14/03/2016

Frequency (MHz)	846.599976
Relative permittivity (real part)	41.417760
Relative permittivity (imaginary part)	18.129852
Conductivity (S/m)	0.874923
Variation (%)	1.010000
Crest Factor:	8.3
Probe Conversion factor	5.05
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	<u>Left head</u>
Device Position	<u>Cheek</u>
Band	<u>BAND5 WCDMA850</u>

SURFACE SAR

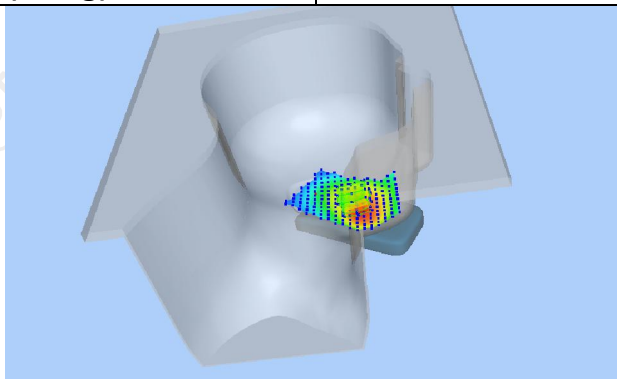


VOLUME SAR



Maximum location: X=-50.00, Y=-34.00 SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.121144
SAR 1g (W/Kg)	0.166325



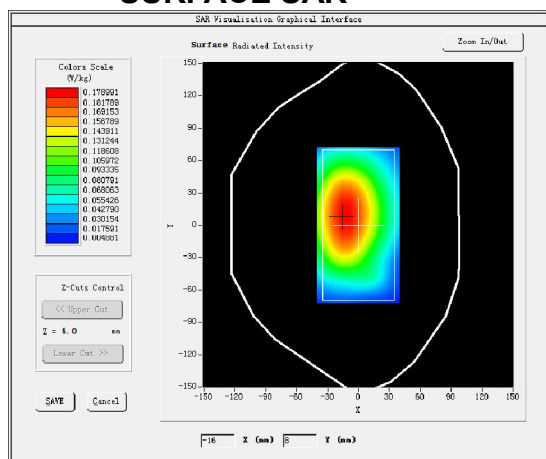
MEASUREMENT 2

Low Band SAR (Channel 4233):

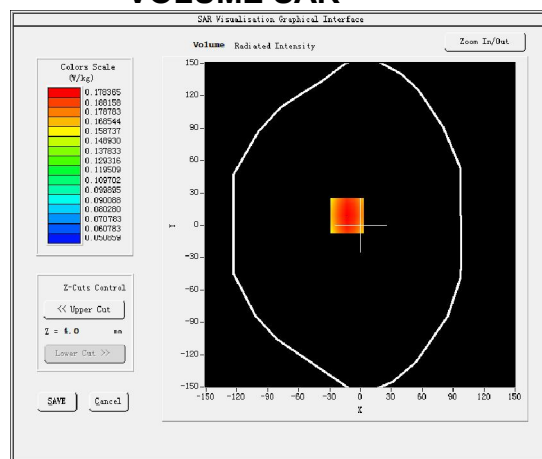
Date: 14/03/2016

Frequency (MHz)	846.599976
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.978883
Variation (%)	0.240000
Crest Factor:	8.3
Probe Conversion factor	5.22
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	dx=8mm dy=8mm, h= 5.00 mm
ZoomScan	5x5x7, dx=8mm dy=8mm dz=5mm, Complete/ndx=8mm dy=8mm, h= 5.00 mm
Phantom	Validation plane
Device Position	Body back
Band	BAND5 WCDMA850

SURFACE SAR

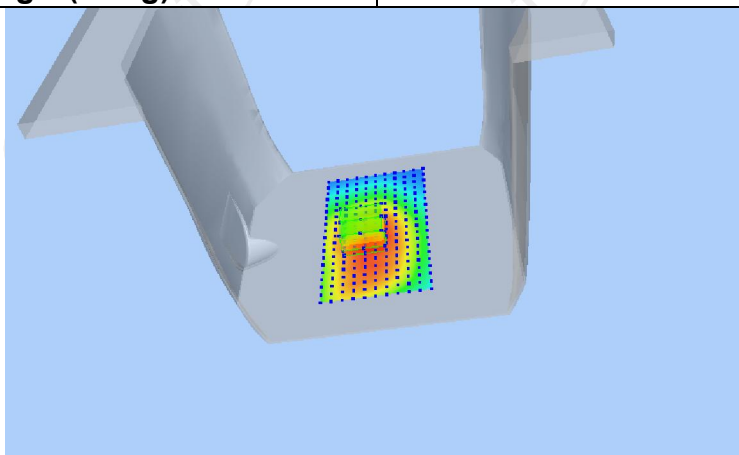


VOLUME SAR



Maximum location: X=-13.00, Y=9.00 SAR Peak: 0.20/kg

SAR 10g (W/Kg)	0.100144
SAR 1g (W/Kg)	0.113660



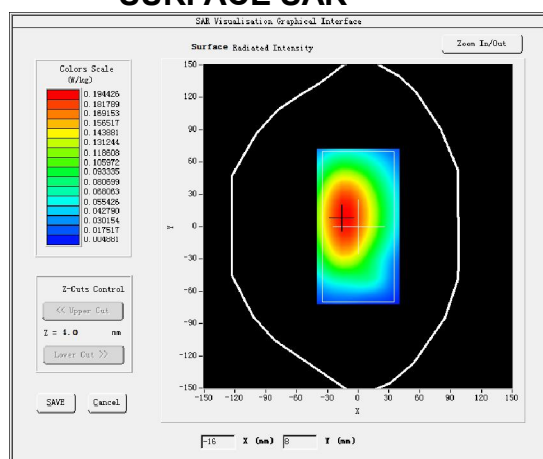
MEASUREMENT 3

Low Band SAR (Channel 4233):

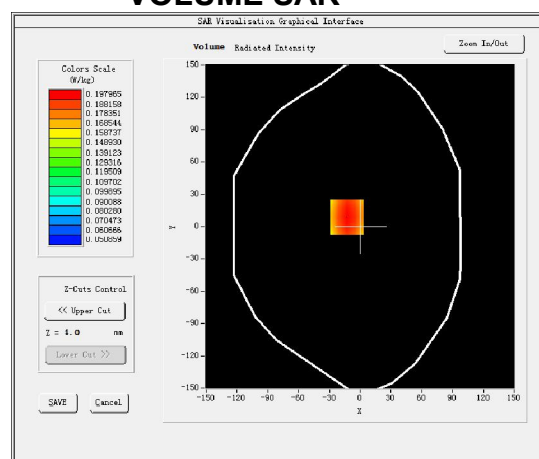
Date: 14/03/2016

Frequency (MHz)	846.599976
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.978883
Variation (%)	0.240000
Crest Factor:	2.0
Probe Conversion factor	5.22
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	<u>Validation plane</u>
Device Position	<u>Body back(hotpot)</u>
Band	<u>BAND5 WCDMA850</u>

SURFACE SAR

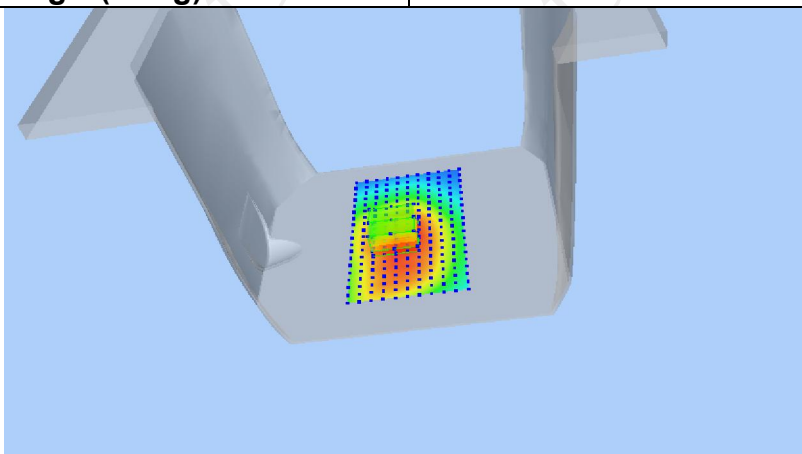


VOLUME SAR



Maximum location: X=-13.00, Y=9.00 SAR Peak: 0.25 W/kg

SAR 10g (W/Kg)	0.141344
SAR 1g (W/Kg)	0.191260



WLAN 2.4

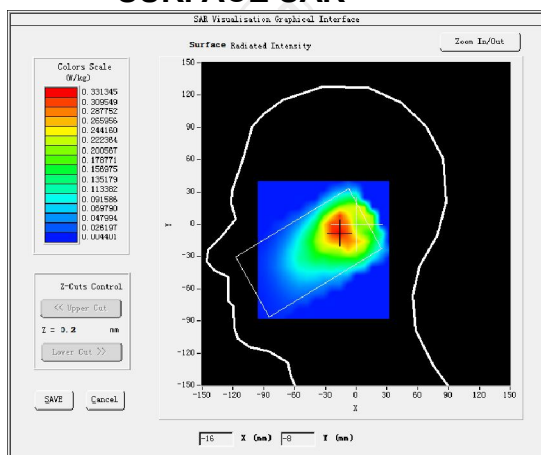
MEASUREMENT 1

Middle Band SAR (Channel 1):

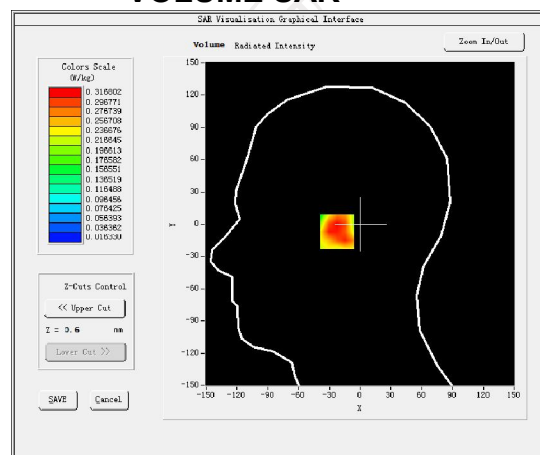
Date: 16/03/2016

Frequency (MHz)	2412.000000
Relative permittivity (real part)	37.821613
Relative permittivity (imaginary part)	13.546980
Conductivity (S/m)	1.834111
Variation (%)	0.090000
Crest Factor	1.0
Probe Conversion factor	4.21
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	Validation plane
Device Position	<u>Left head</u>
Band	<u>IEEE 802.11b ISM</u>

SURFACE SAR



VOLUME SAR



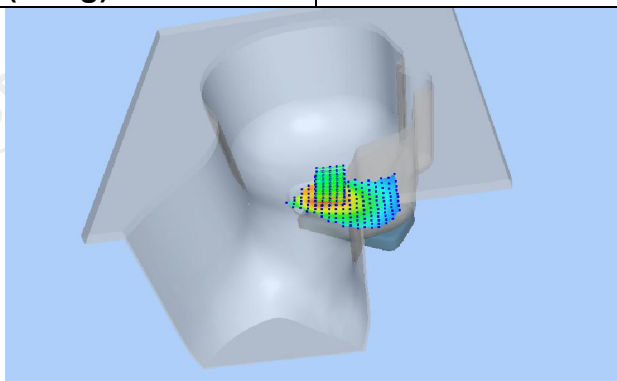
Maximum location: X=-15.00, Y=-8.00 SAR Peak: 0.36 W/kg

SAR 10g (W/Kg)

0.104444

SAR 1g (W/Kg)

0.140409



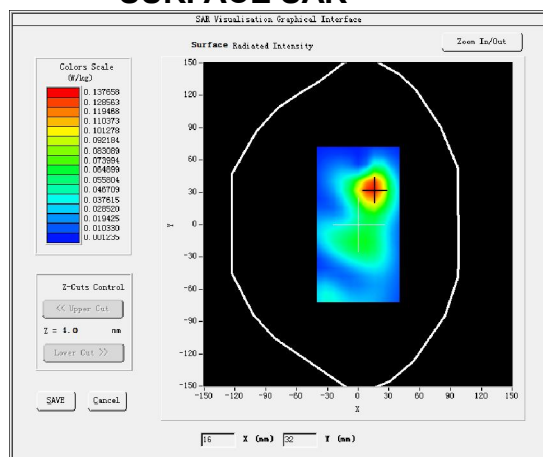
MEASUREMENT 2

Middle Band SAR (Channel 1):

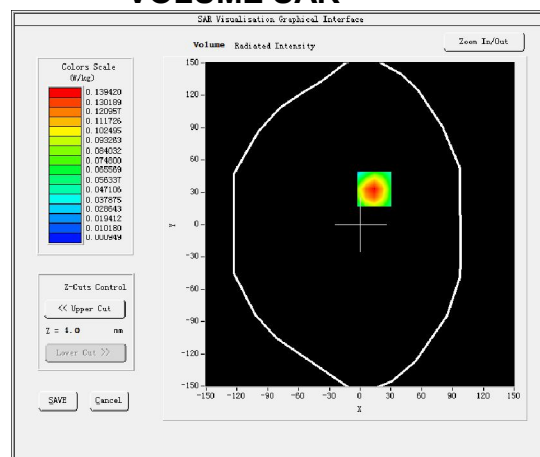
Date: 16/03/2016

Frequency (MHz)	2412.000000
Relative permittivity (real part)	52.710667
Relative permittivity (imaginary part)	14.318444
Conductivity (S/m)	1.942536
Variation (%)	-0.560000
Crest Factor	1.0
Probe Conversion factor	4.36
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	Validation plane
Device Position	Body back
Band	<u>IEEE 802.11b ISM</u>

SURFACE SAR

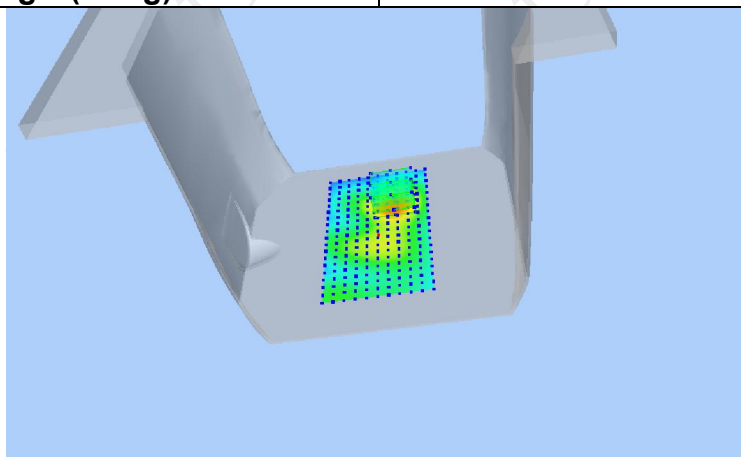


VOLUME SAR



Maximum location: X=14.00, Y=33.00 SAR Peak: 0.22 W/kg

SAR 10g (W/Kg)	0.073224
SAR 1g (W/Kg)	0.102529



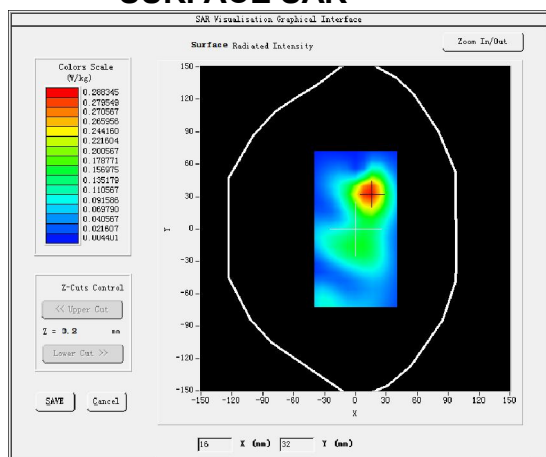
MEASUREMENT 3

Middle Band SAR (Channel 1):

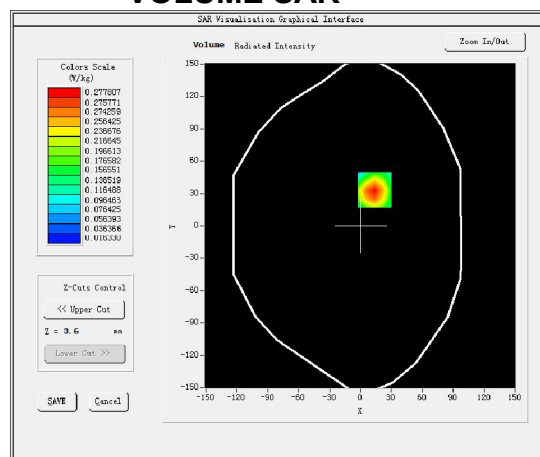
Date: 16/03/2016

Frequency (MHz)	2412.000000
Relative permittivity (real part)	54.616199
Relative permittivity (imaginary part)	14.930150
Conductivity (S/m)	2.012159
Variation (%)	2.330000
Crest Factor	1.0
Probe Conversion factor	4.36
E-Field Probe:	SSE5 (SN 07/15 EP248)
Area Scan	<u>dx=8mm dy=8mm, h= 5.00 mm</u>
ZoomScan	<u>5x5x7, dx=8mm dy=8mm</u> <u>dz=5mm, Complete/ndx=8mm dy=8mm, h=</u> <u>5.00 mm</u>
Phantom	Validation plane
Device Position	Body Back(hotspot)
Band	<u>IEEE 802.11b ISM</u>

SURFACE SAR



VOLUME SAR



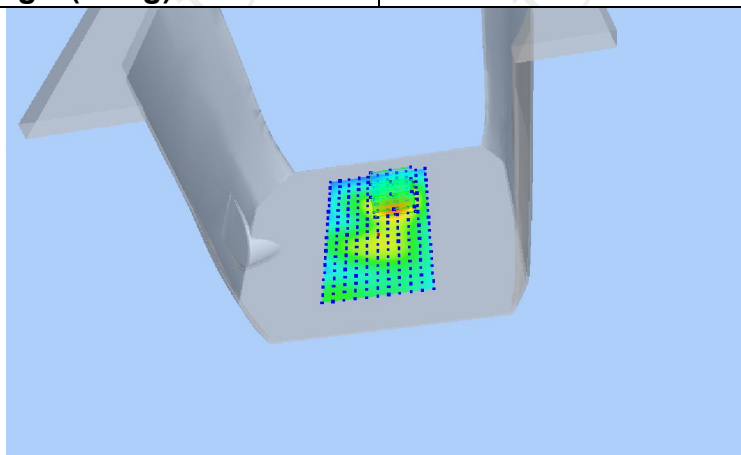
Maximum location: X=16.00, Y=32.00 SAR Peak: 0.29 W/kg

SAR 10g (W/Kg)

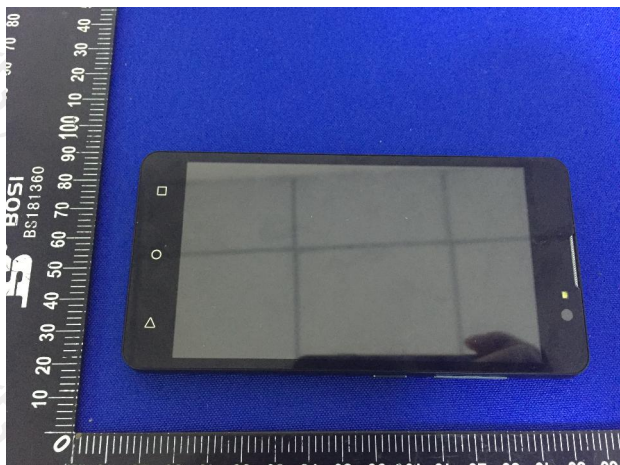
0.114444

SAR 1g (W/Kg)

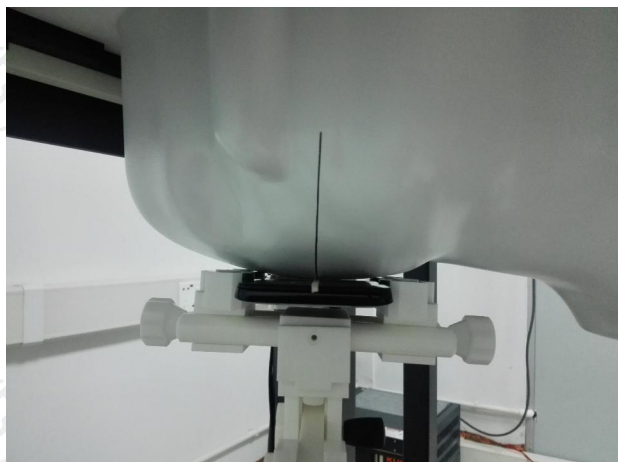
0.170409



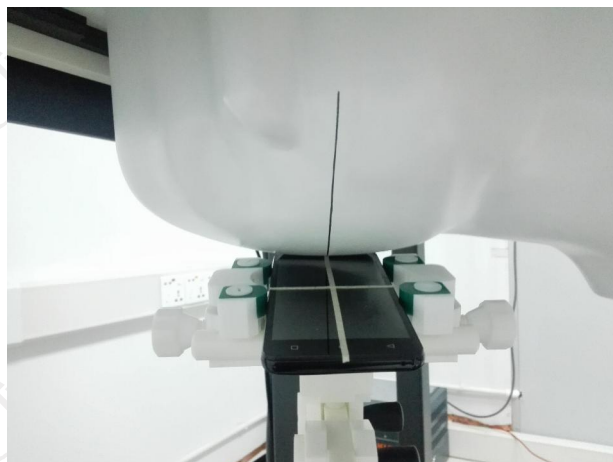
Appendix A: EUT Photos



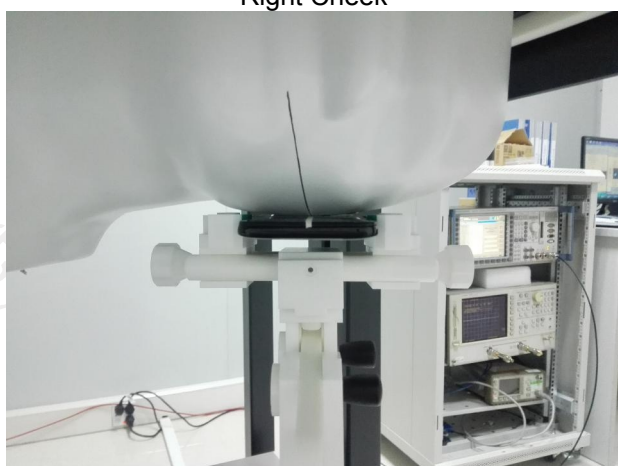
Appendix B: Test Setup Photos



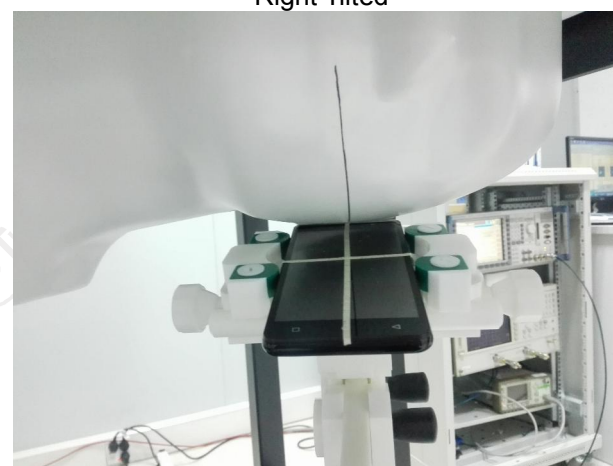
Right Cheek



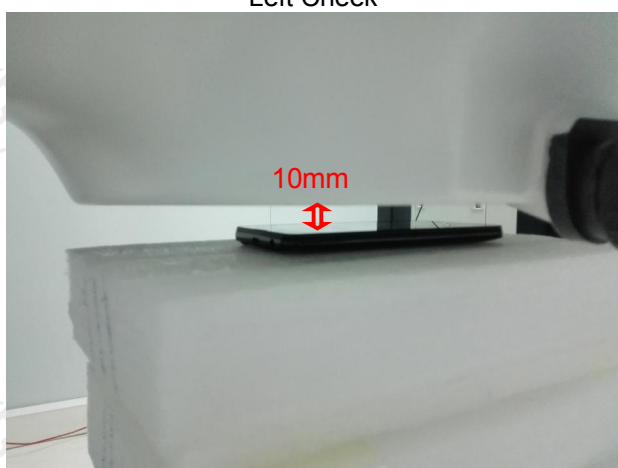
Right Tilted



Left Cheek



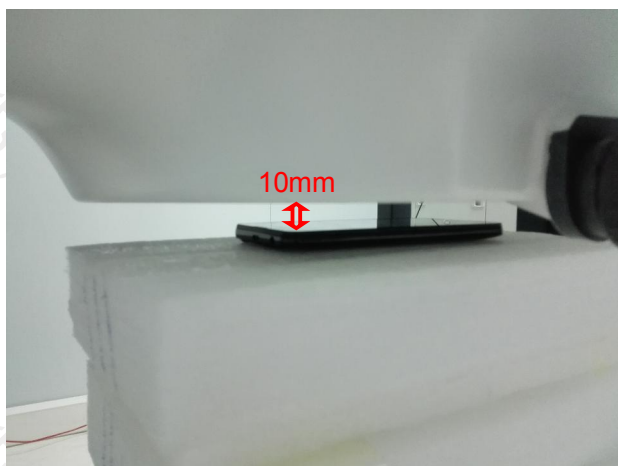
Left Tilted



Body worn – Front(10 mm)



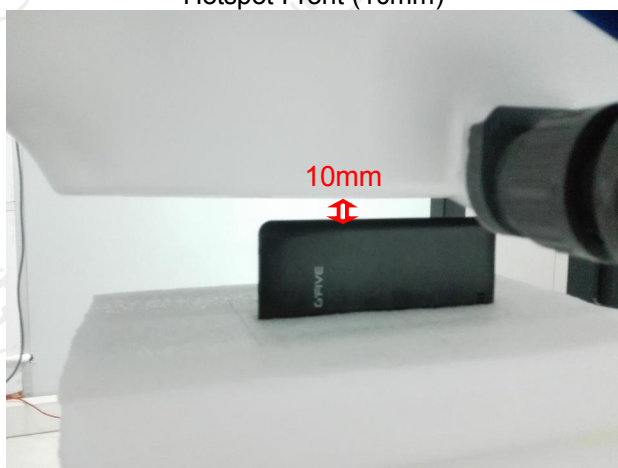
Body worn – Back(10 mm)



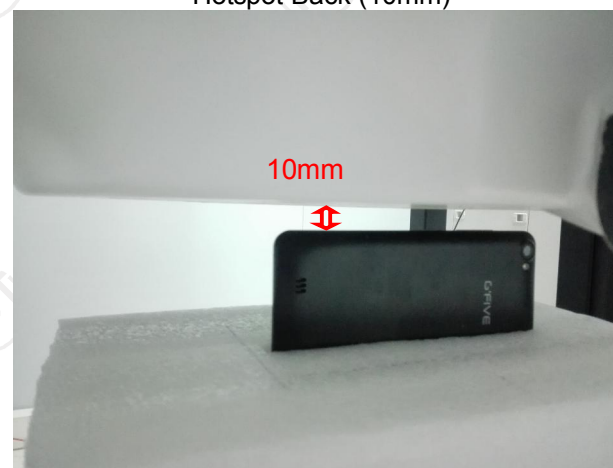
Hotspot Front (10mm)



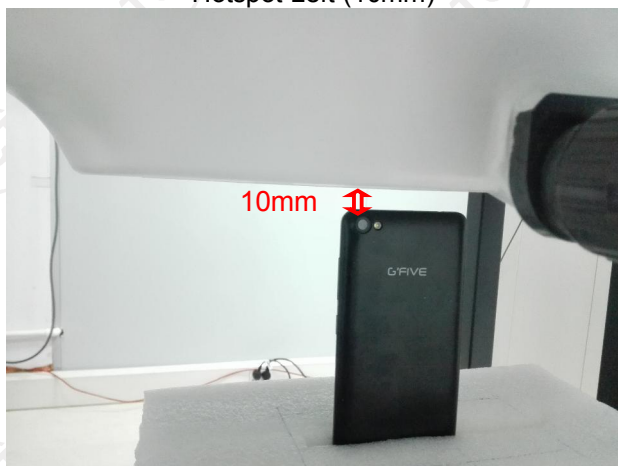
Hotspot Back (10mm)



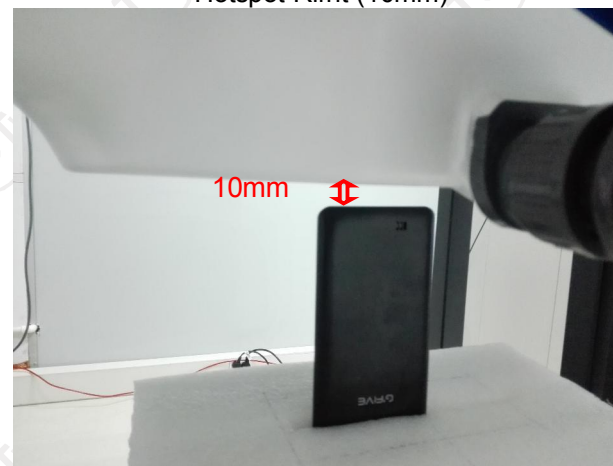
Hotspot Left (10mm)



Hotspot Right (10mm)



Hotspot Top (10mm)

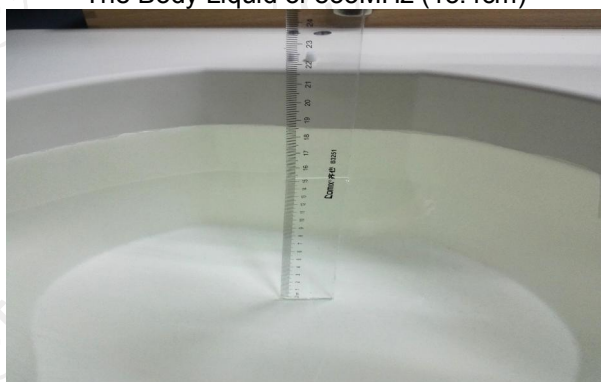


Hotspot Bottom (10mm)

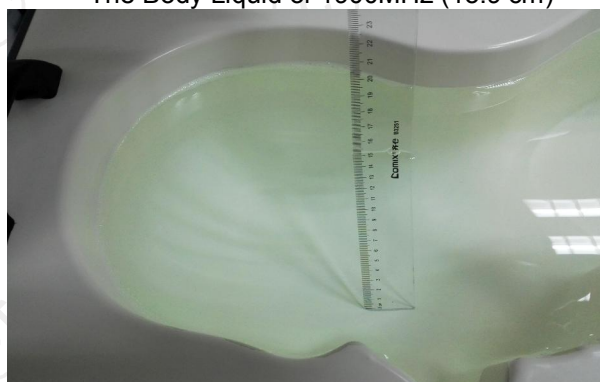
Liquid depth



The Body Liquid of 835MHz (15.4cm)

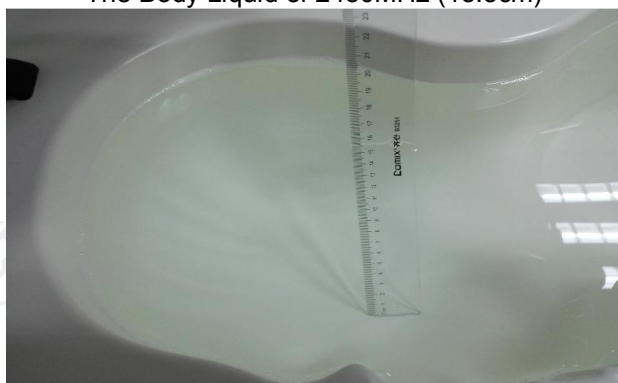


The Body Liquid of 1900MHz (15.9 cm)

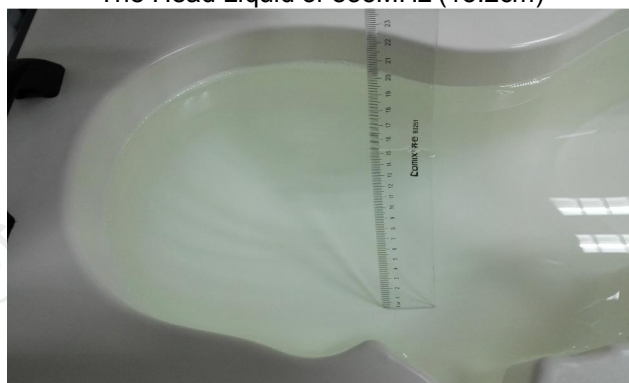


The Body Liquid of 2450MHz (15.3cm)

The Head Liquid of 835MHz (15.2cm)



The Head Liquid of 1900MHz (15.5cm)



The Head Liquid of 2450MHz (15.3cm)