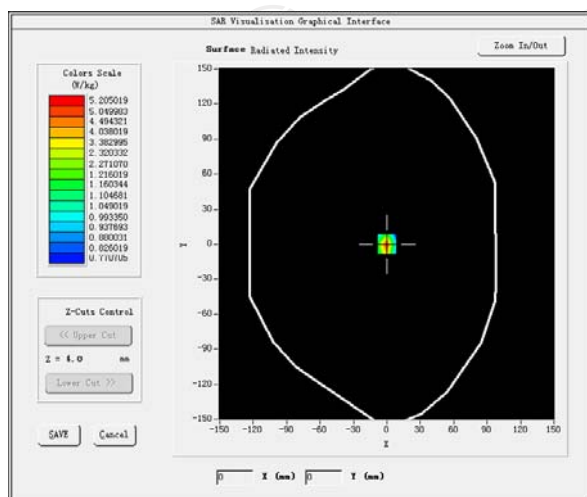


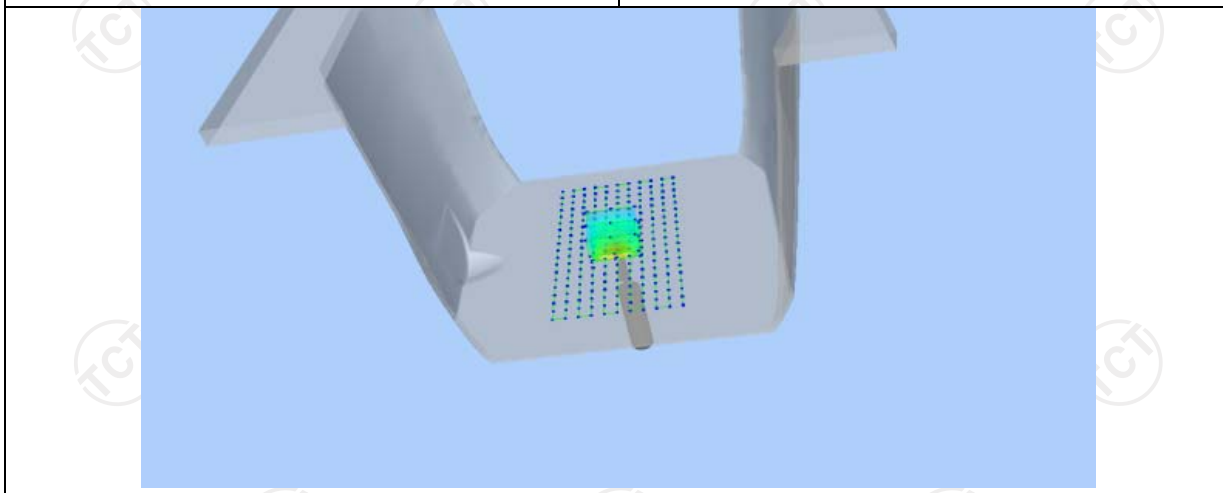
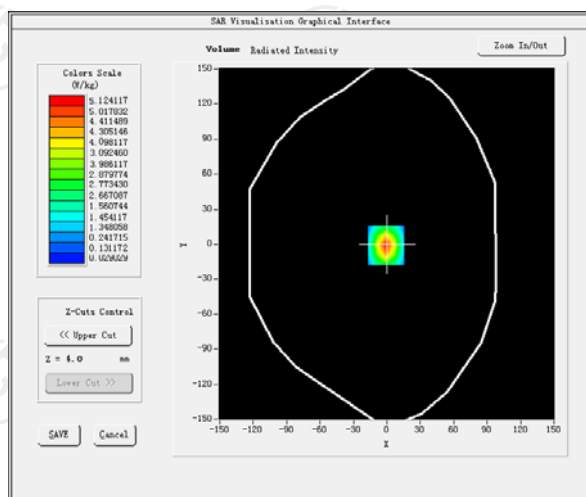
Date of measurement: 01/09/2018 Test mode: 2450MHz (Head)
 Product Description: Validation
 Dipole Model: SID2450
 E-Field Probe: SSE5 (SN 07/15 EP248)

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

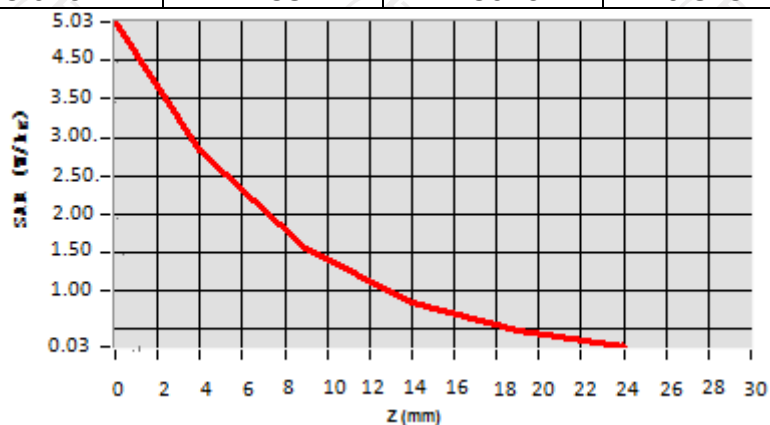
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.0262	2.7584	1.5026	0.8252	0.4125

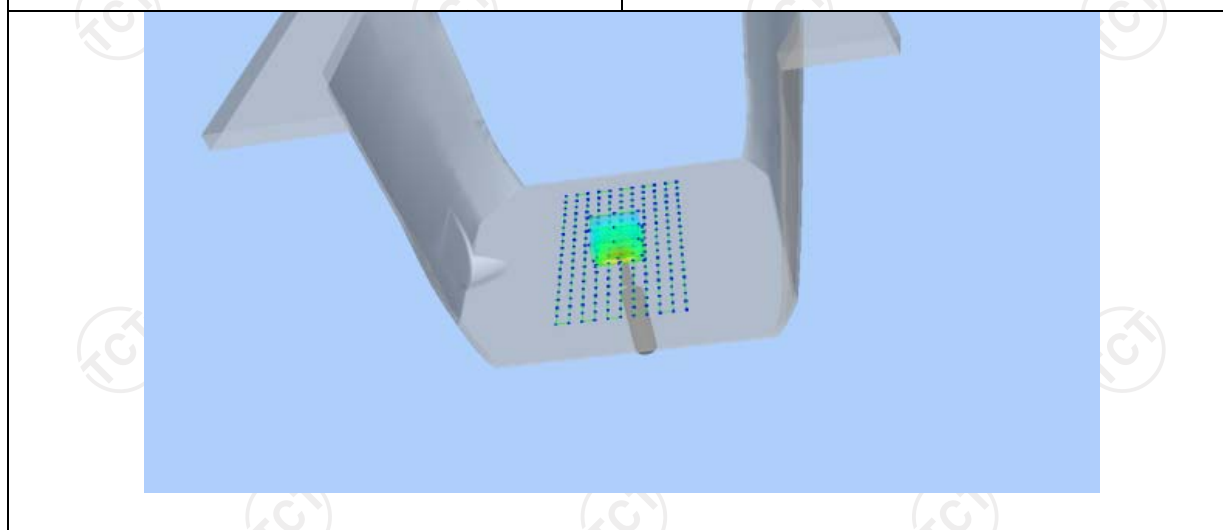
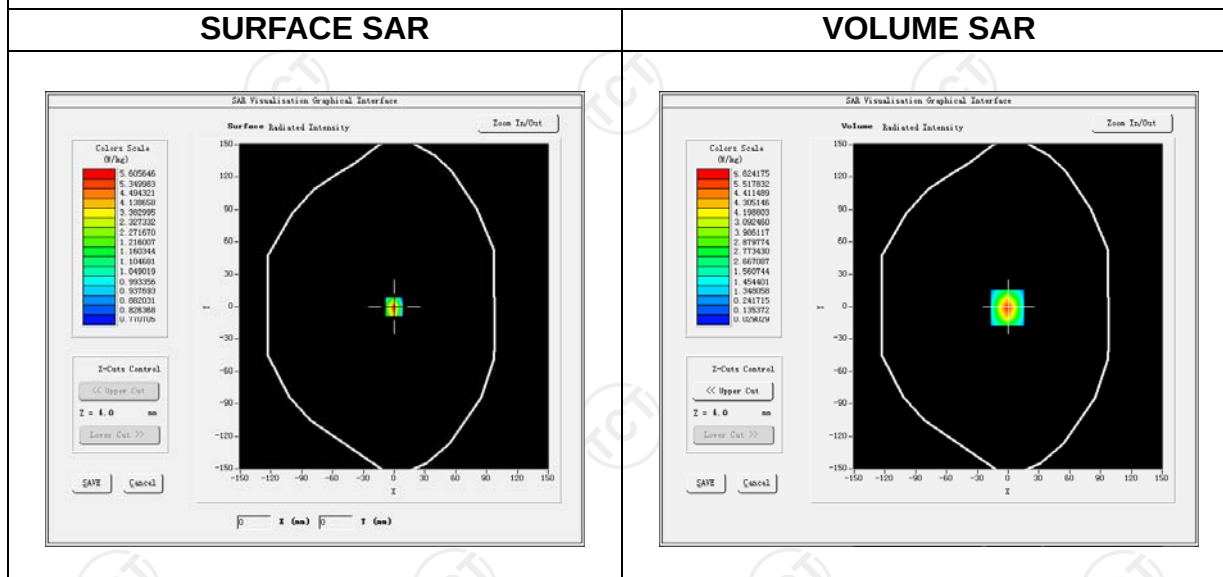


Hot spot position

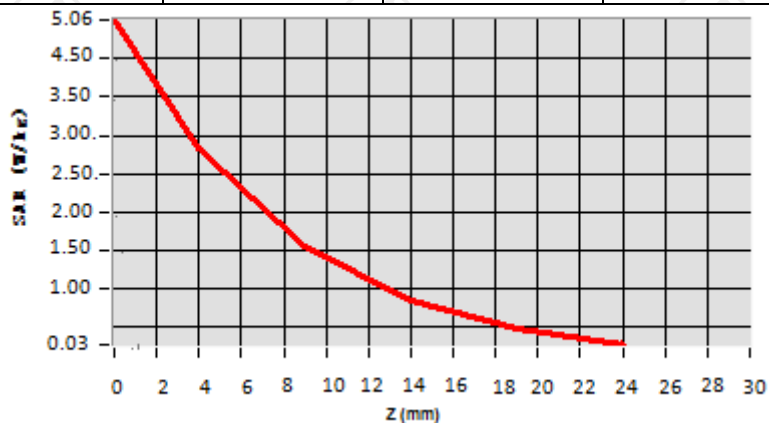


Date of measurement: 01/09/2018 Test mode: 2450MHz (Body)
 Product Description: Validation
 Dipole Model: SID2450
 E-Field Probe: SSE5 (SN 07/15 EP248)

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



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



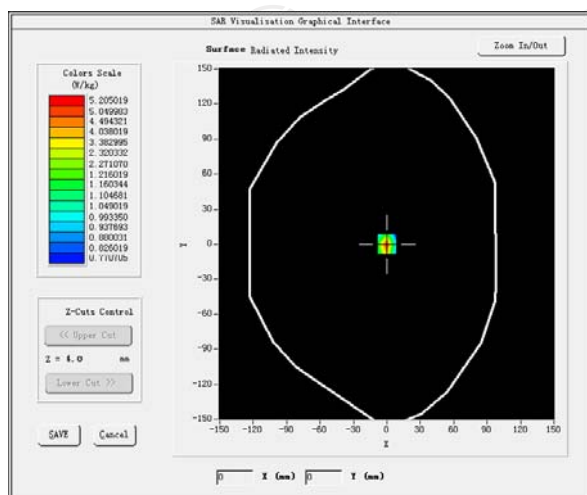
Hot spot position



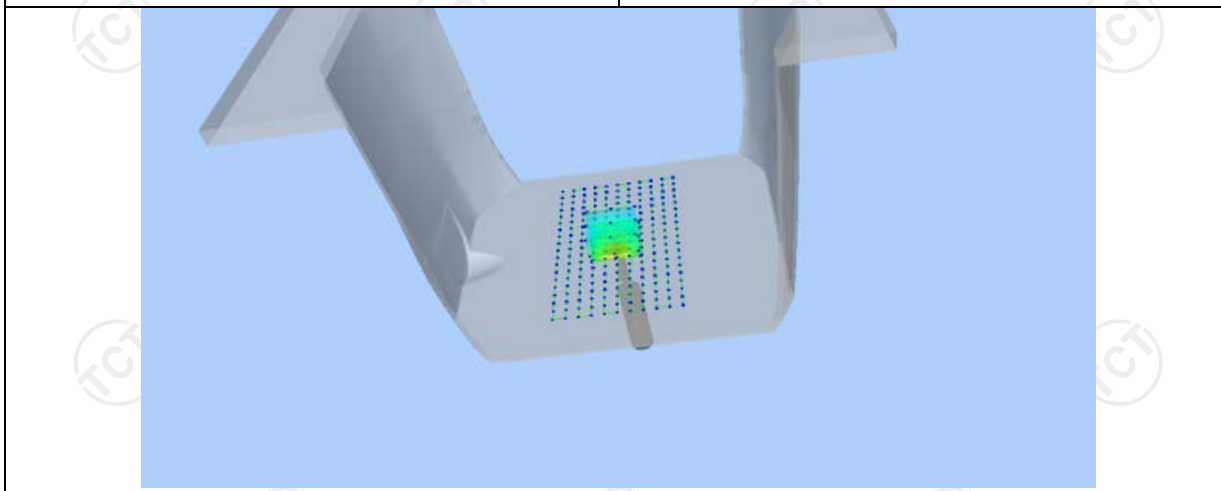
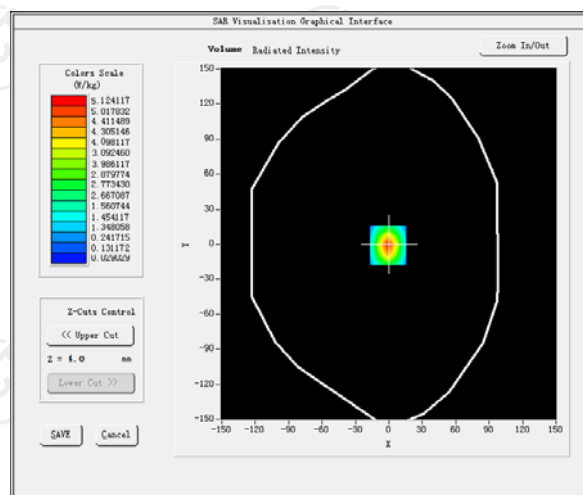
Date of measurement: 01/12/2018 Test mode: 2600MHz (Head)
 Product Description: Validation
 Dipole Model: SID2600
 E-Field Probe: SSE5 (SN 07/15 EP248)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	4.36
Frequency (MHz)	2593.000000
Relative permittivity (real part)	38.853477
Relative permittivity (imaginary part)	13.545489
Conductivity (S/m)	1.922567
Variation (%)	-1.360000
SAR 10g (W/Kg)	2.430127
SAR 1g (W/Kg)	5.413744

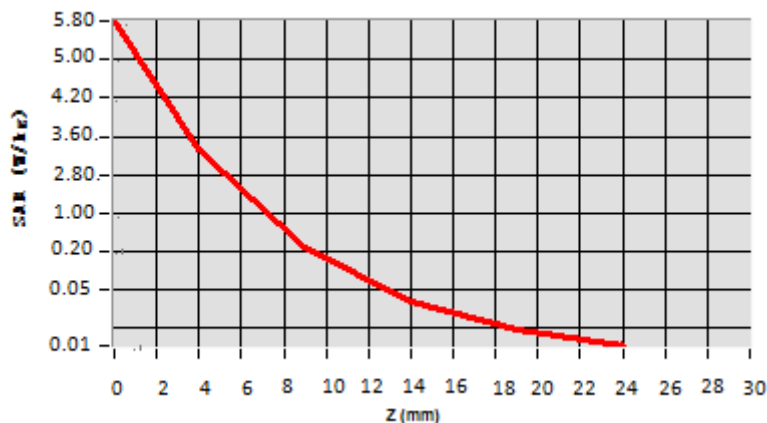
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.7893	3.2375	0.2098	0.0387	0.0249



Hot spot position



Date of measurement: 01/12/2018 Test mode: 2600MHz (Body)

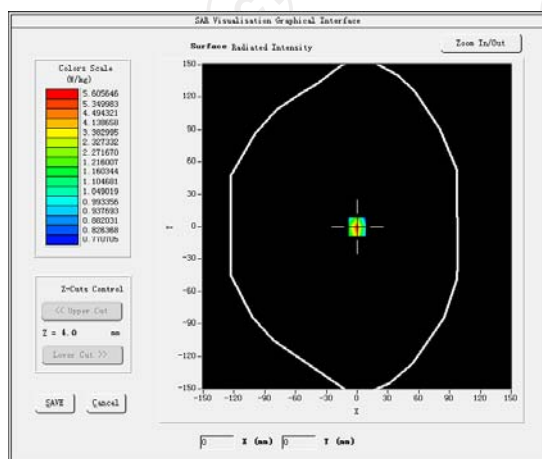
Product Description: Validation

Dipole Model: SID2600

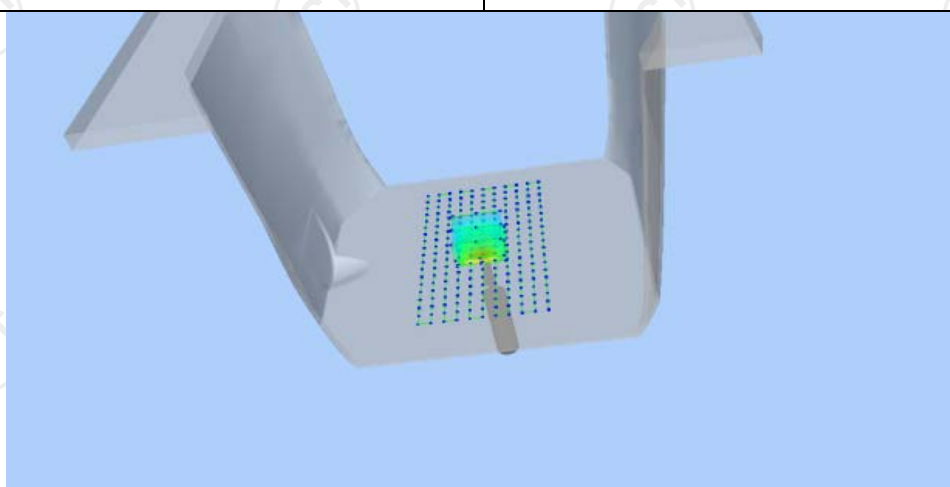
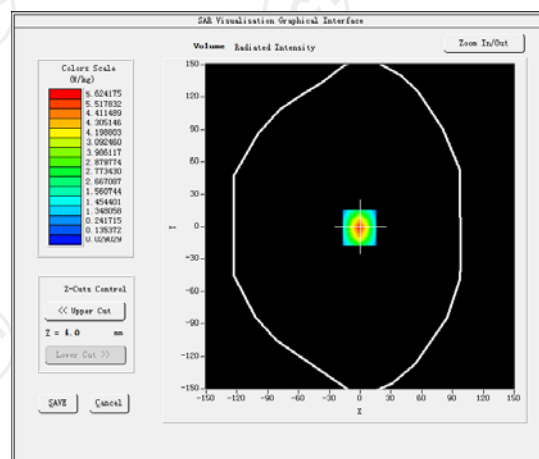
E-Field Probe: SSE5 (SN 07/15 EP248)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	4.50
Frequency (MHz)	2593.000000
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

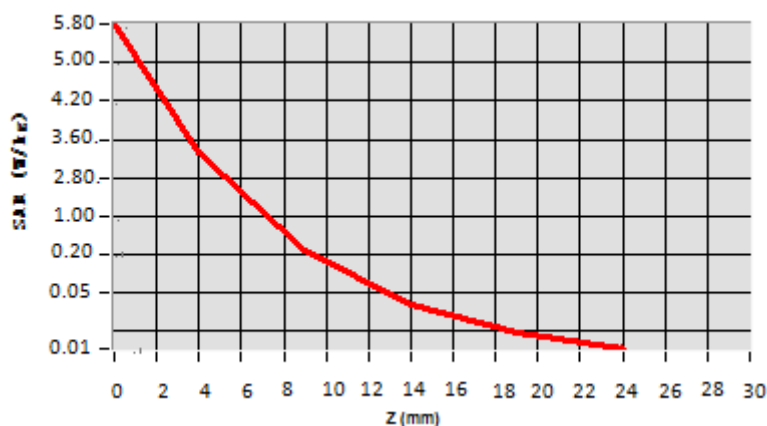
SURFACE SAR



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



12. SAR Test Data

GSM850

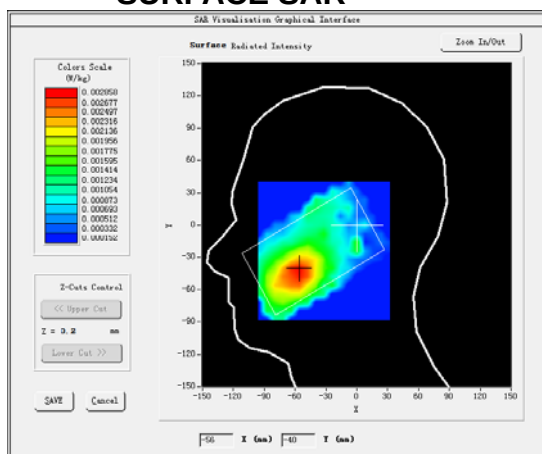
MEASUREMENT 1

Middle Band SAR (Channel 190):

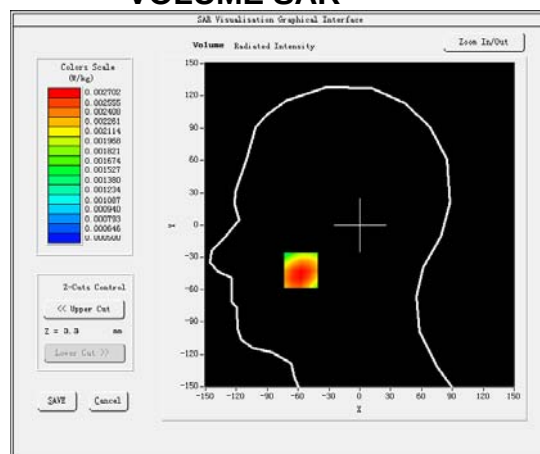
Date: 12/27/2017

Frequency (MHz)	836.599976
Relative permittivity (real part)	41.417760
Relative permittivity (imaginary part)	18.129852
Conductivity (S/m)	0.874923
Variation (%)	2.620000
Crest Factor:	8.3
Probe Conversion factor	5.50
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



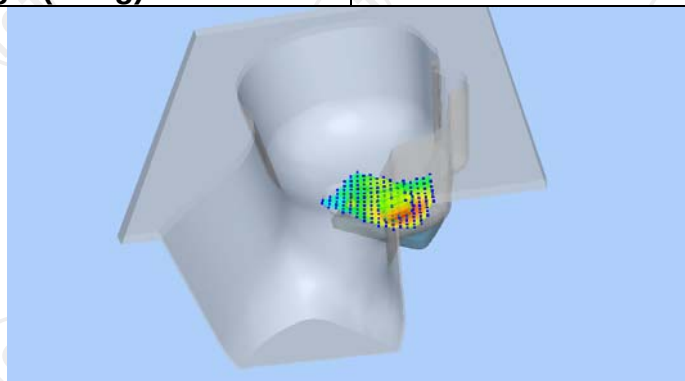
Maximum location: X=-57.00, Y=-42.00 SAR Peak: 0.03 W/kg

SAR 10g (W/Kg)

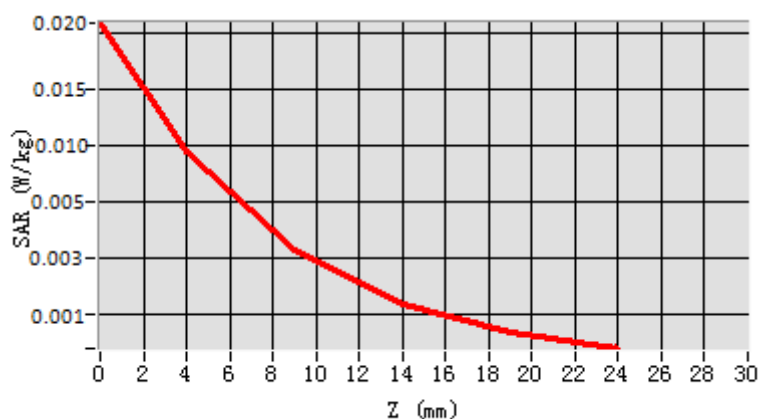
0.011955

SAR 1g (W/Kg)

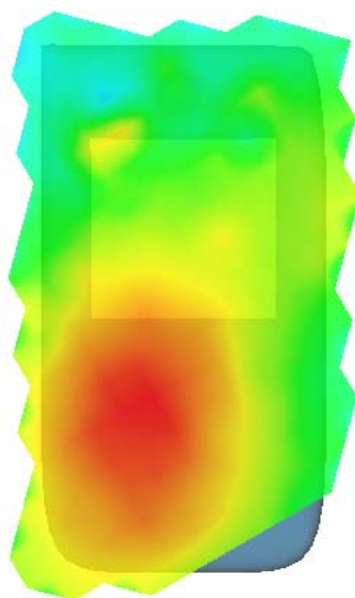
0.022647



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0186	0.0083	0.0035	0.0016	0.0008



Hot spot position



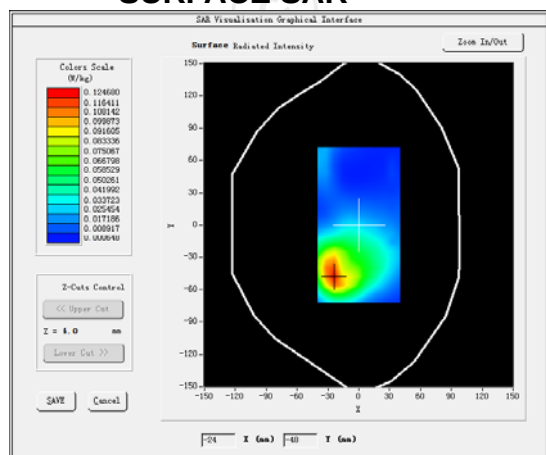
MEASUREMENT 2

Middle Band SAR (Channel 190):

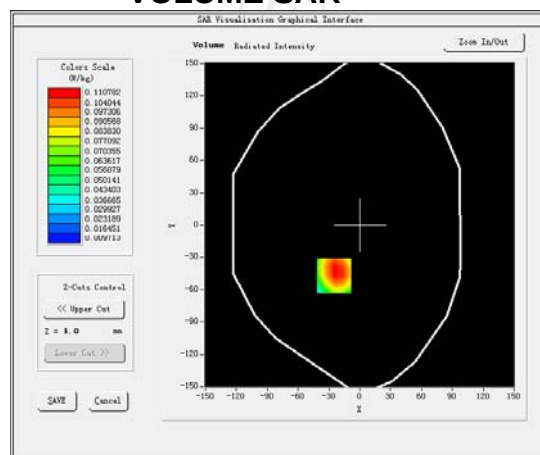
Date: 12/27/2017

Frequency (MHz)	836.599976
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.938883
Variation (%)	-2.320000
Crest Factor:	8.3
Probe Conversion factor	5.65
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(0mm)</u>
Band	<u>GSM850(Voice)</u>

SURFACE SAR



VOLUME SAR



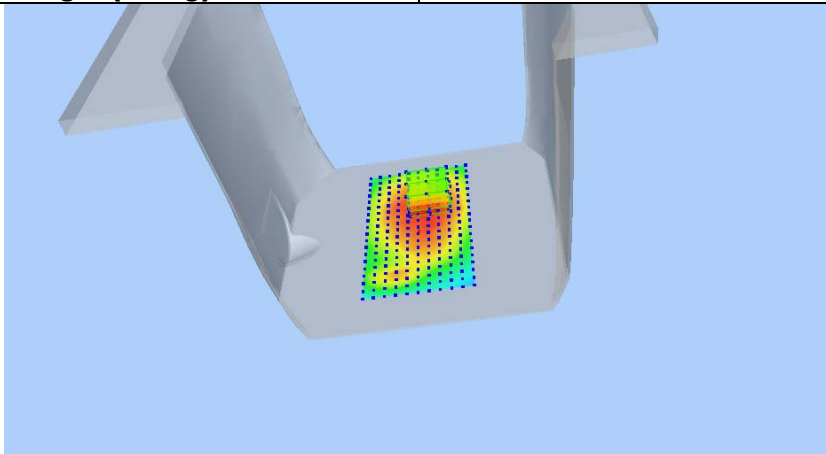
Maximum location: X=-25.00, Y=-47.00 SAR Peak: 0.16 W/kg

SAR 10g (W/Kg)

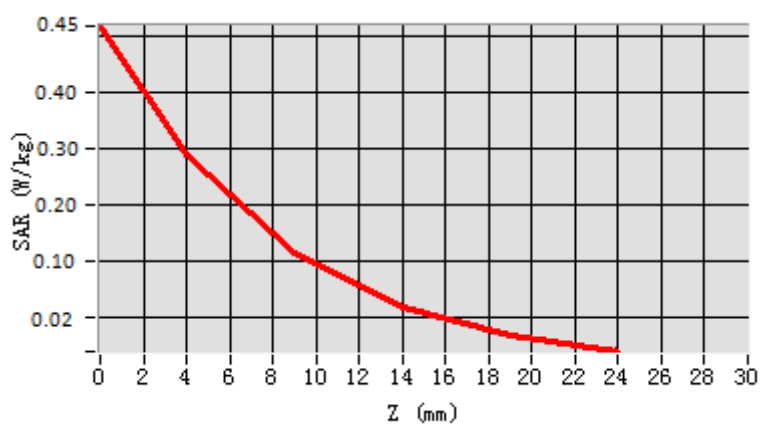
0.067473

SAR 1g (W/Kg)

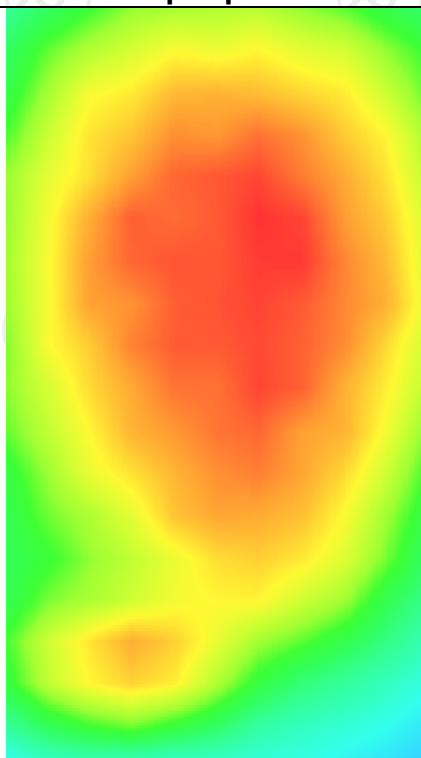
0.109652



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.4486	0.2965	0.1019	0.0294	0.0132



Hot spot position



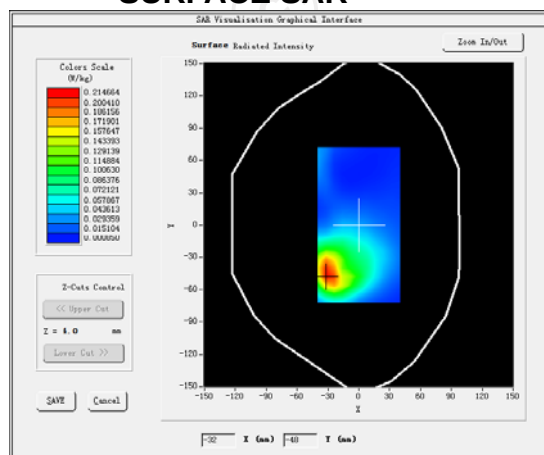
MEASUREMENT 3

Middle Band SAR (Channel 190):

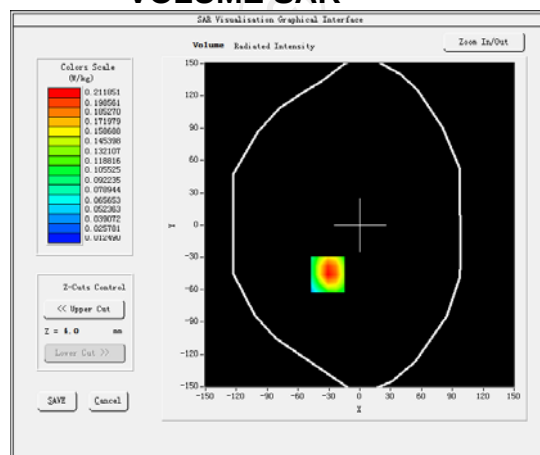
Date: 12/27/2017

Frequency (MHz)	848.799988
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.938883
Variation (%)	-0.350000
Crest Factor:	2.0
Probe Conversion factor	5.65
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(0mm)
Band	GSM850(GPRS 4slot)

SURFACE SAR



VOLUME SAR



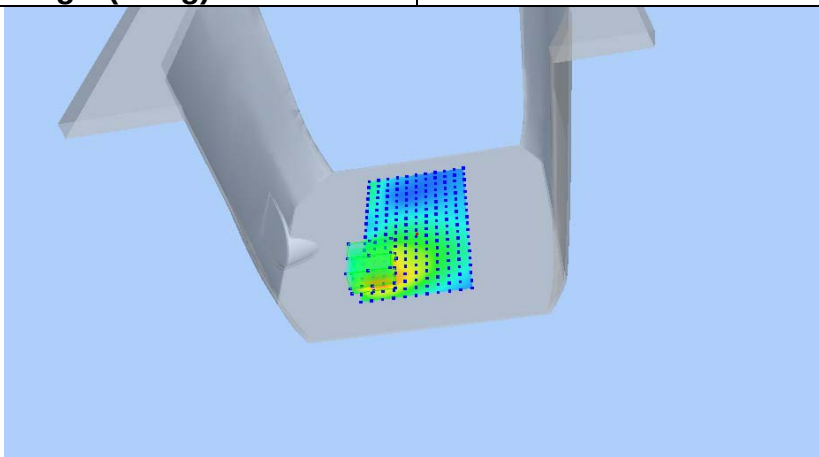
Maximum location: X=-31.00, Y=-46.00 SAR Peak: 0.33 W/kg

SAR 10g (W/Kg)

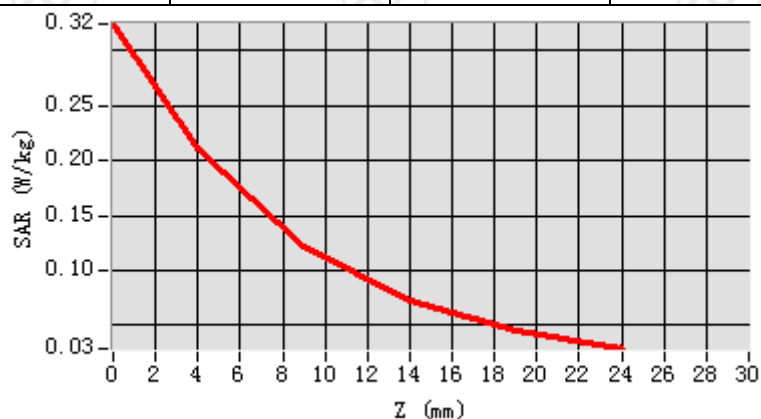
0.116412

SAR 1g (W/Kg)

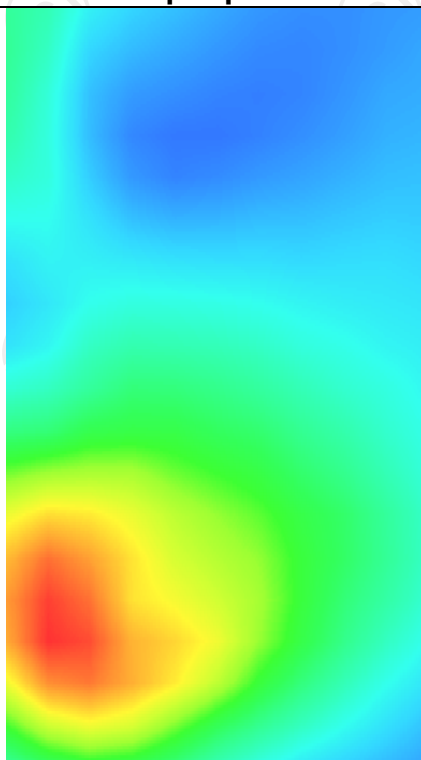
0.205304



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.3246	0.2119	0.1224	0.0723	0.0454



Hot spot position

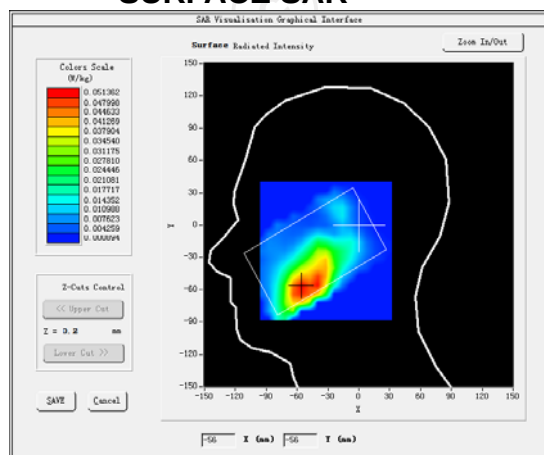


GSM1900

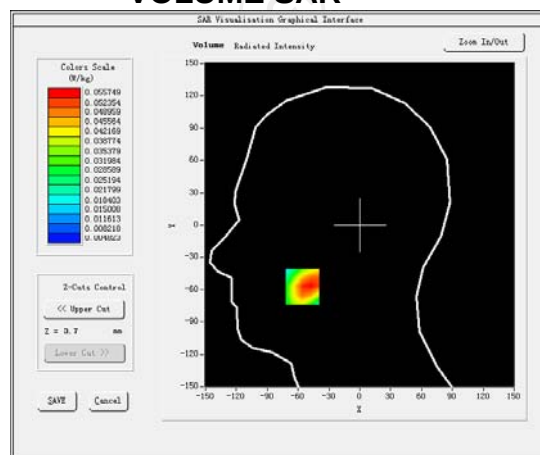
MEASUREMENT 1

Middle Band SAR (Channel 661):		Date: 01/03/2018
Frequency (MHz)	1880.000000	
Relative permittivity (real part)	39.101855	
Relative permittivity (imaginary part)	12.607061	
Conductivity (S/m)	1.347369	
Variation (%)	-4.920000	
Crest Factor	8.3	
Probe Conversion factor	4.85	
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	Right head	
Device Position	Cheek	
Band	GSM1900(voice)	

SURFACE SAR



VOLUME SAR



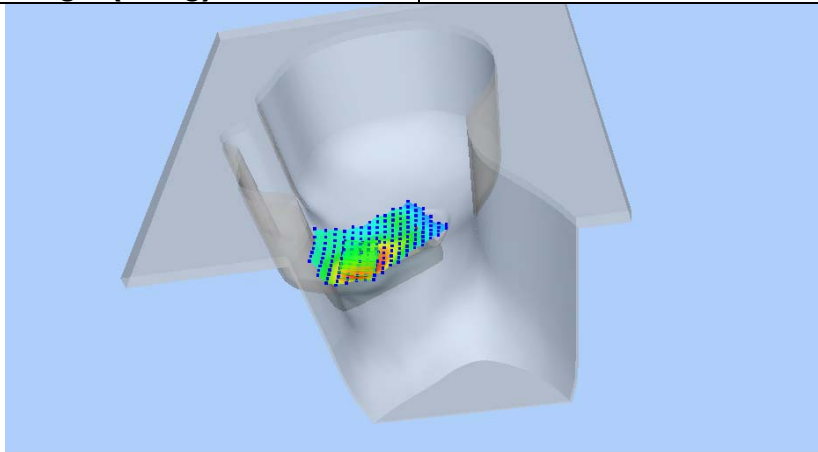
Maximum location: X=-56.00, Y=-57.00 SAR Peak: 0.08 W/kg

SAR 10g (W/Kg)

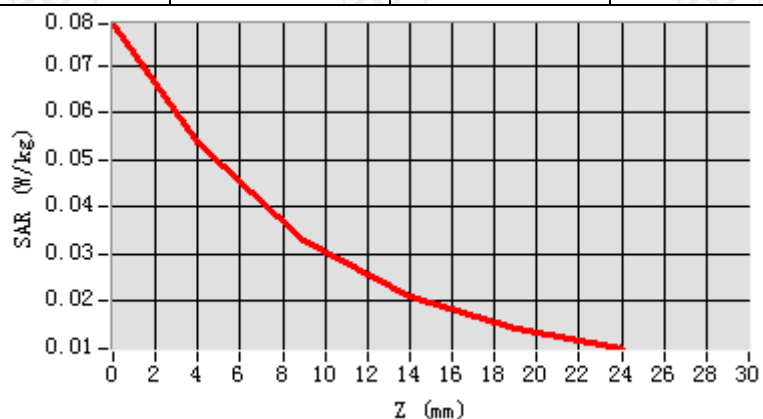
0.032755

SAR 1g (W/Kg)

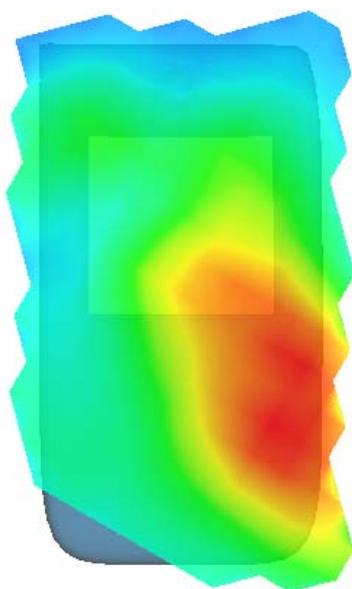
0.053039



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0788	0.0536	0.0330	0.0210	0.0142



Hot spot position



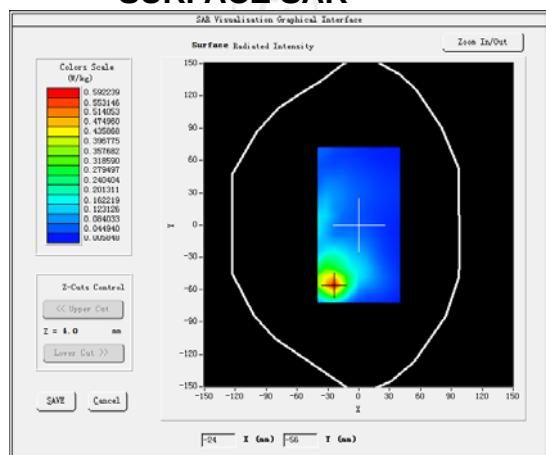
MEASUREMENT 2

Middle Band SAR (Channel 661):

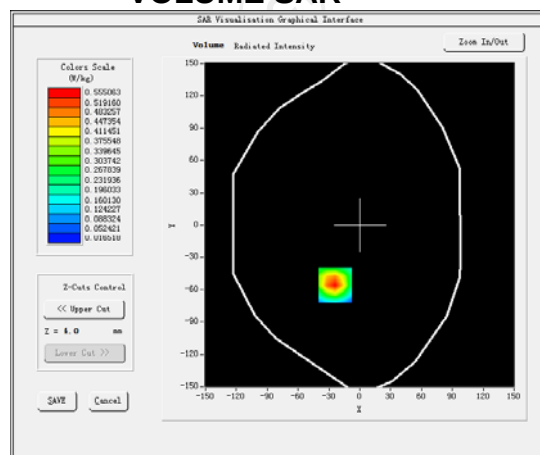
Date: 01/03/2018

Frequency (MHz)	1880.000000
Relative permittivity (real part)	53.321765
Relative permittivity (imaginary part)	14.232400
Conductivity (S/m)	1.502748
Variation (%)	-2.880000
Crest Factor	8.3
Probe Conversion factor	5.01
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(0mm)</u>
Band	<u>GSM1900(voice)</u>

SURFACE SAR



VOLUME SAR



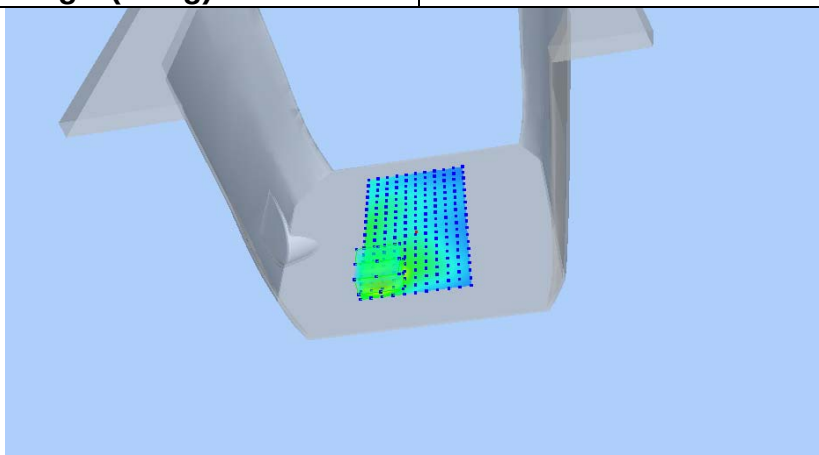
Maximum location: X=-24.00, Y=-56.00 SAR Peak: 0.83 W/kg

SAR 10g (W/Kg)

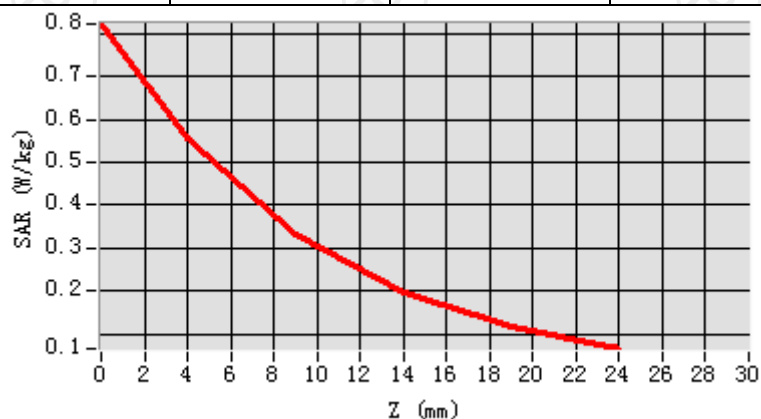
0.274487

SAR 1g (W/Kg)

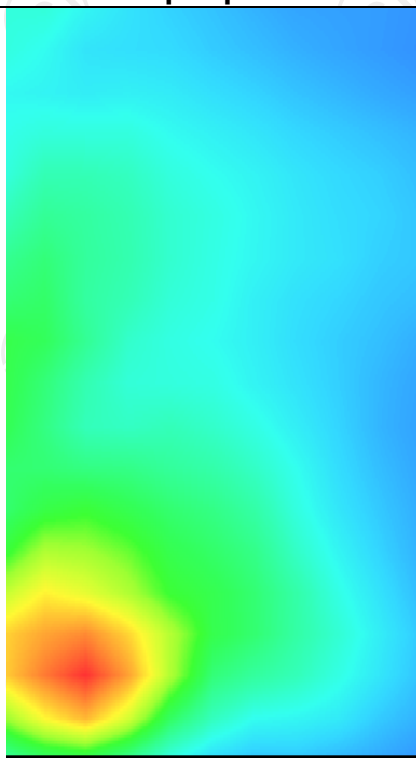
0.516064



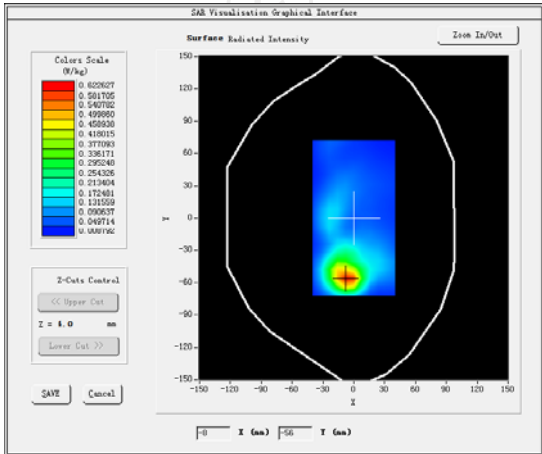
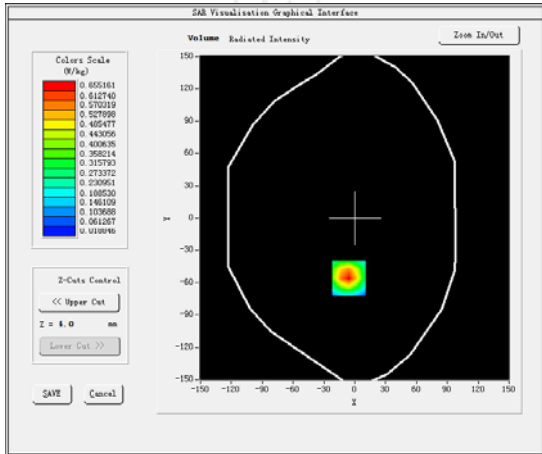
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.8227	0.5551	0.3316	0.1963	0.1167

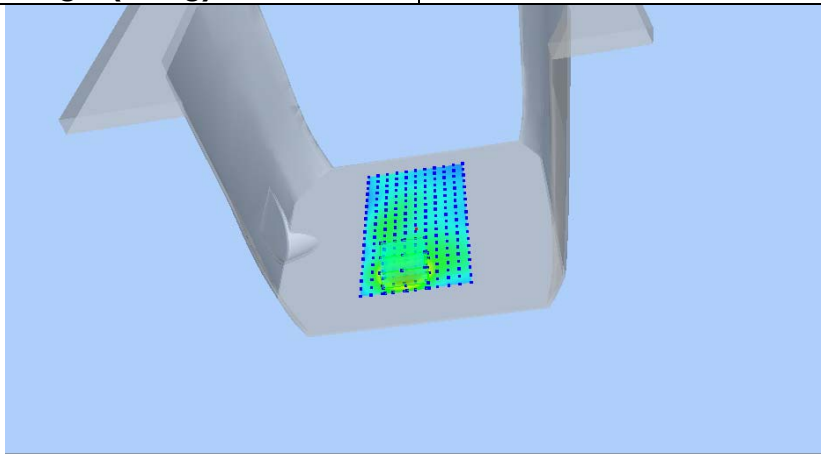


Hot spot position

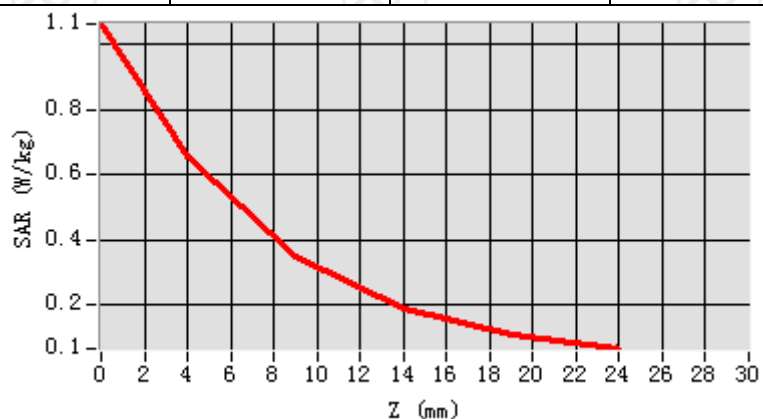


MEASUREMENT 3

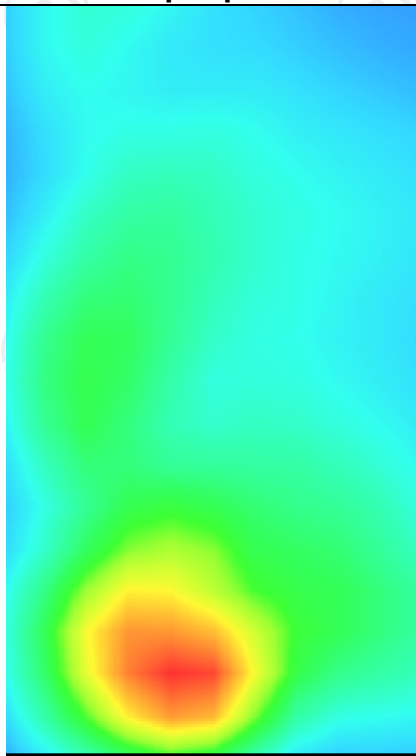
Middle Band SAR (Channel 661):		Date: 01/03/2018
Frequency (MHz)	1850.199951	
Relative permittivity (real part)	53.321765	
Relative permittivity (imaginary part)	14.232400	
Conductivity (S/m)	1.502748	
Variation (%)	-4.530000	
Crest Factor	2.0	
Probe Conversion factor	5.01	
E-Field Probe:	SSE5 (SN 07/15 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(0mm)	
Band	GSM1900(GPRS 0slot)	
SURFACE SAR	VOLUME SAR	
		
Maximum location: X=-6.00, Y=-56.00 SAR Peak: 1.08 W/kg		
SAR 10g (W/Kg)	0.306698	
SAR 1g (W/Kg)	0.609760	



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.0625	0.6552	0.3477	0.1877	0.1096



Hot spot position

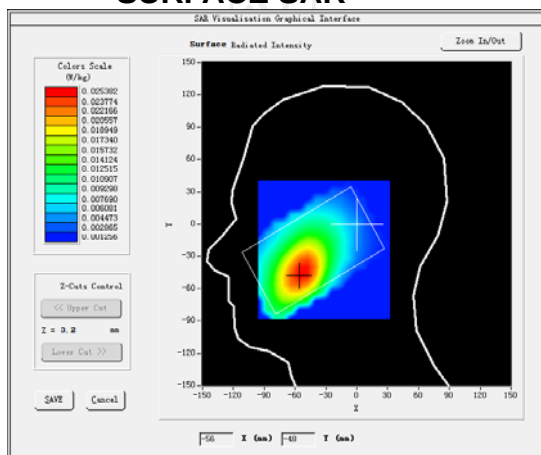


LTE Band 5

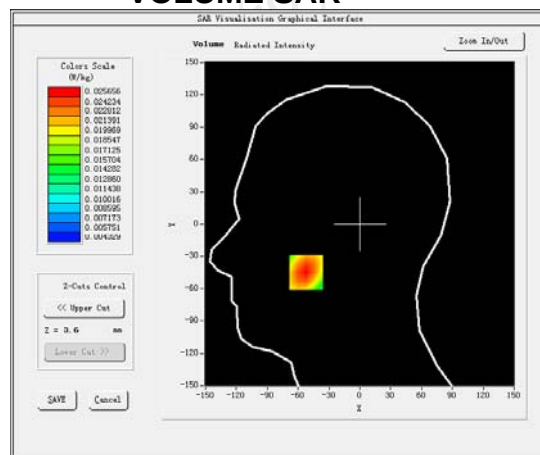
MEASUREMENT 1

Higher Band SAR (Channel 20600):	Date: 12/27/2017
Frequency (MHz)	844.000000
Relative permittivity (real part)	40.392517
Relative permittivity (imaginary part)	12.468850
Conductivity (S/m)	0.881392
Variation (%)	-1.250000
Crest Factor	1.0
Probe Conversion factor	4.38
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>LTE band 5(1 RB#0)</u>

SURFACE SAR



VOLUME SAR



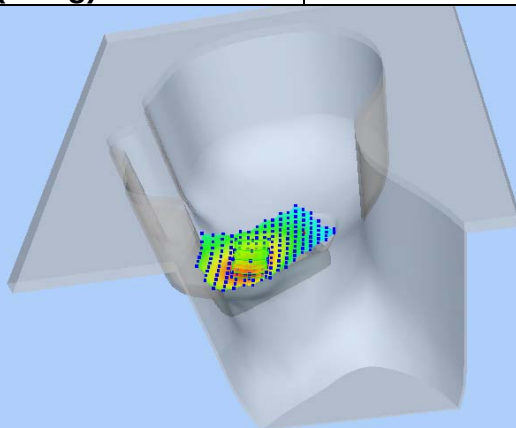
Maximum location: X=-52.00, Y=-45.00 SAR Peak: 0.03 W/kg

SAR 10g (W/Kg)

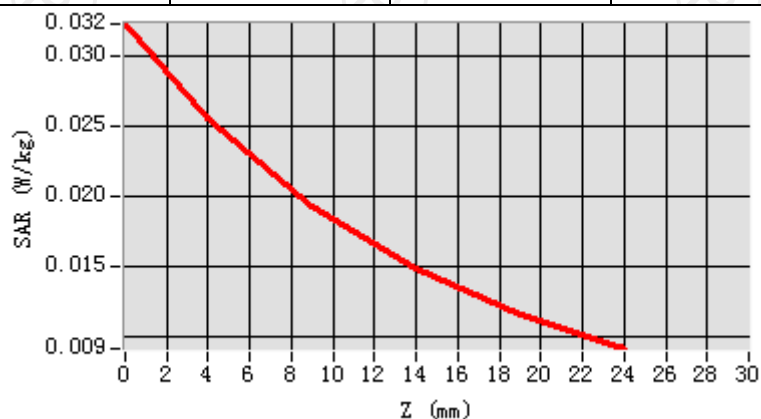
0.017661

SAR 1g (W/Kg)

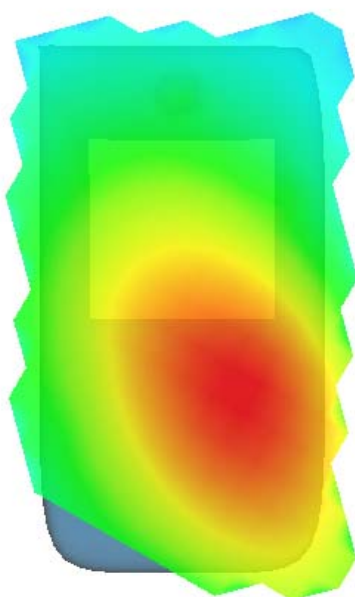
0.025622



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0323	0.0257	0.0193	0.0148	0.0116



Hot spot position



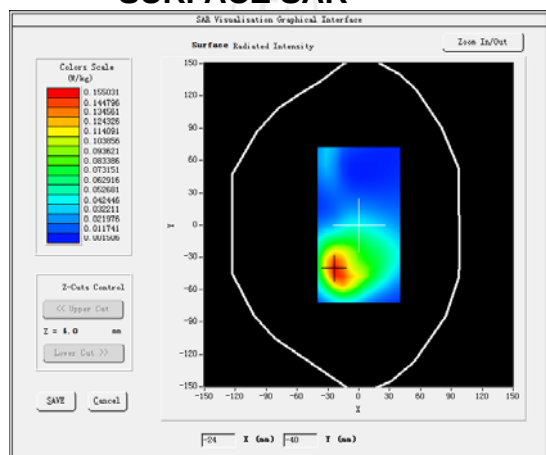
MEASUREMENT 2

Higher Band SAR (Channel 20600):

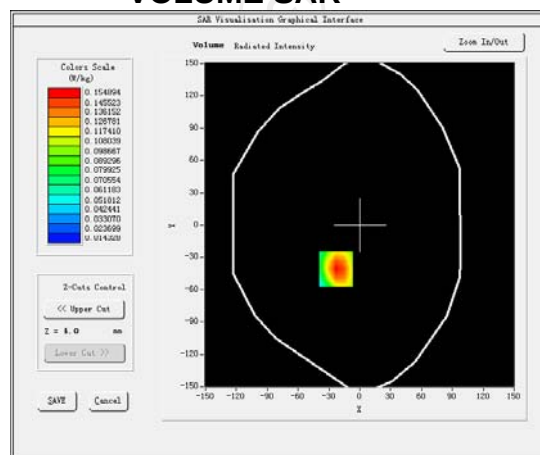
Date: 12/27/2017

Frequency (MHz)	844.000000
Relative permittivity (real part)	53.214937
Relative permittivity (imaginary part)	12.468850
Conductivity (S/m)	0.973512
Variation (%)	-1.160000
Crest Factor	1.0
Probe Conversion factor	4.52
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 front(0mm)</u>
Band	<u>LTE band 5(1 RB#0)</u>

SURFACE SAR



VOLUME SAR



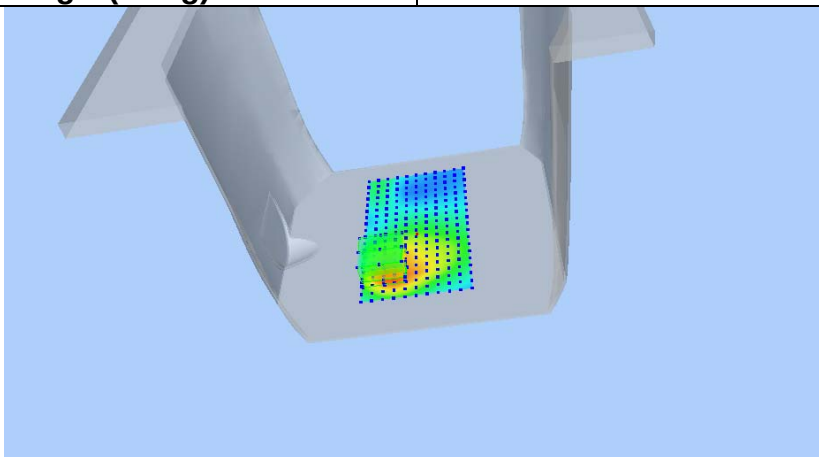
Maximum location: X=-23.00, Y=-41.00 SAR Peak: 0.23 W/kg

SAR 10g (W/Kg)

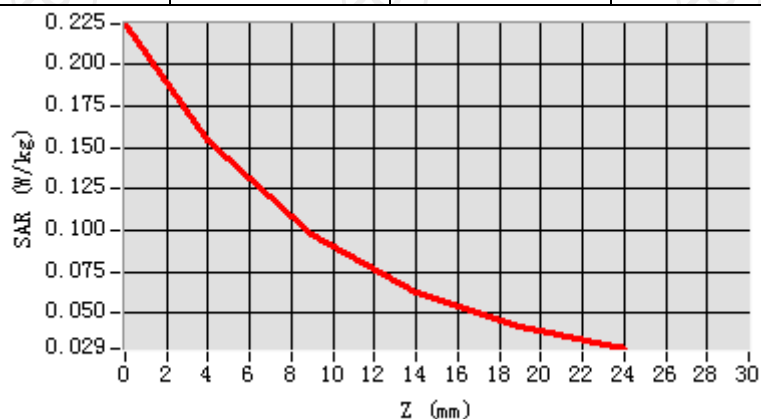
0.089898

SAR 1g (W/Kg)

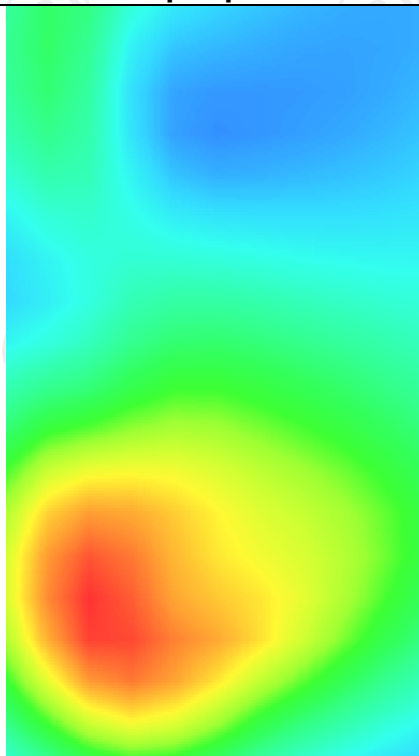
0.147819



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.2246	0.1549	0.0969	0.0622	0.0419

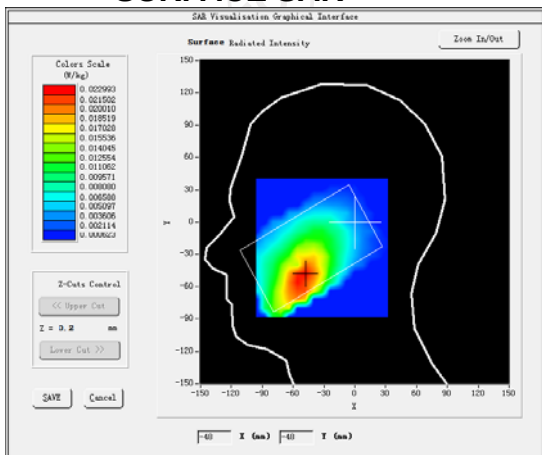
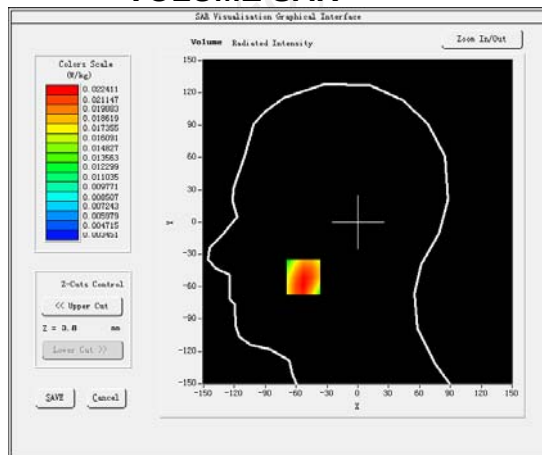


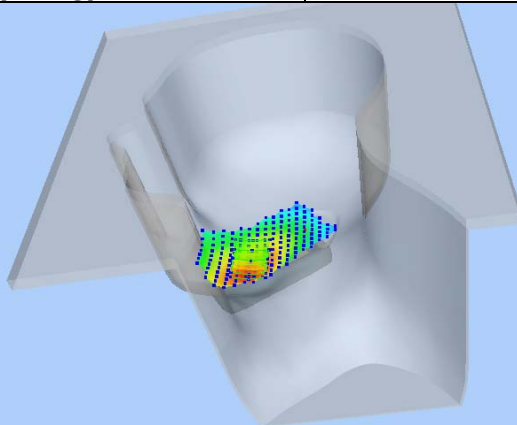
Hot spot position



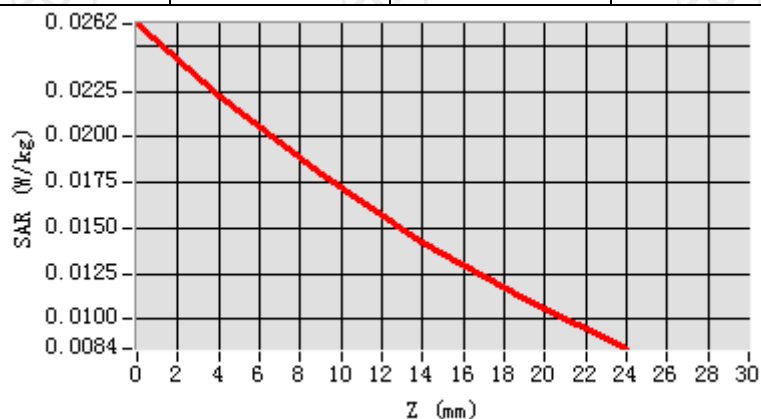
LTE Band 41

MEASUREMENT 1

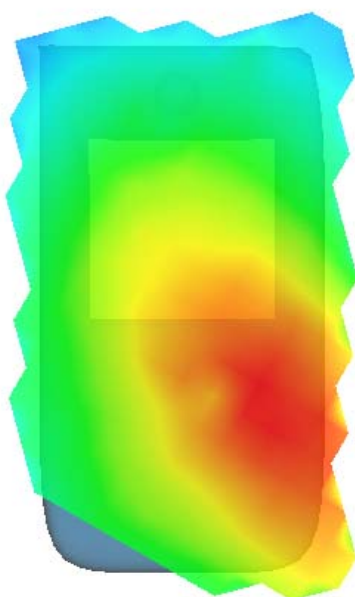
Lower Band SAR (Channel 39750):		Date: 01/12/2018
Frequency (MHz)	2506.000000	
Relative permittivity (real part)	38.863547	
Relative permittivity (imaginary part)	12.468850	
Conductivity (S/m)	1.931042	
Variation (%)	2.570000	
Crest Factor	1.0	
Probe Conversion factor	4.38	
E-Field Probe:	SSE5 (SN 07/15 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	Left head	
Device Position	Cheek	
Band	LTE band 41(1 RB#0)	
SURFACE SAR		VOLUME SAR
		
Maximum location: X=-53.00, Y=-51.00 SAR Peak: 0.03 W/kg		
SAR 10g (W/Kg)		0.015992
SAR 1g (W/Kg)		0.027665



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0262	0.0223	0.0180	0.0143	0.0111



Hot spot position



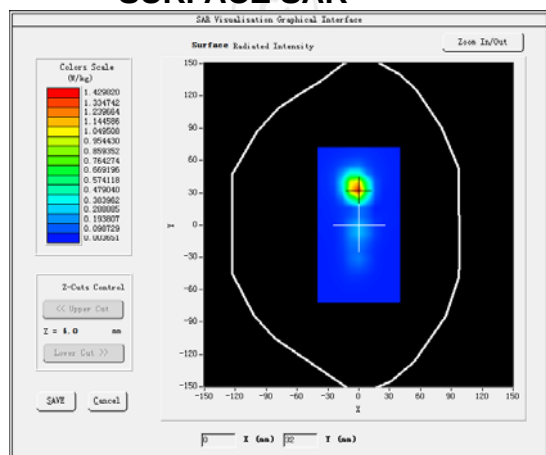
MEASUREMENT 2

Lower Band SAR (Channel 39750):

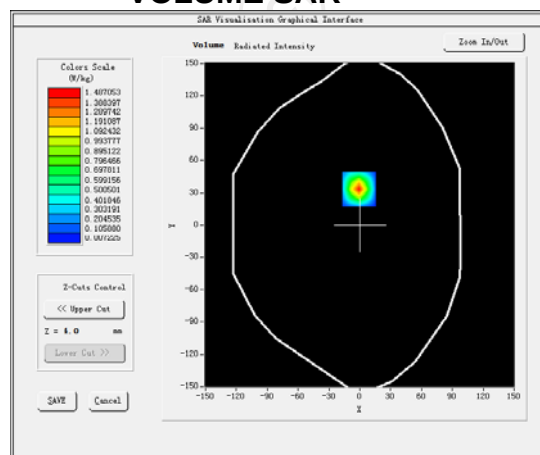
Date: 01/12/2018

Frequency (MHz)	2506.000000
Relative permittivity (real part)	51.961407
Relative permittivity (imaginary part)	12.468850
Conductivity (S/m)	2.103588
Variation (%)	-0.330000
Crest Factor	1.0
Probe Conversion factor	4.52
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 Bottom(0mm)
Band	LTE band 41(1 RB#50)

SURFACE SAR



VOLUME SAR



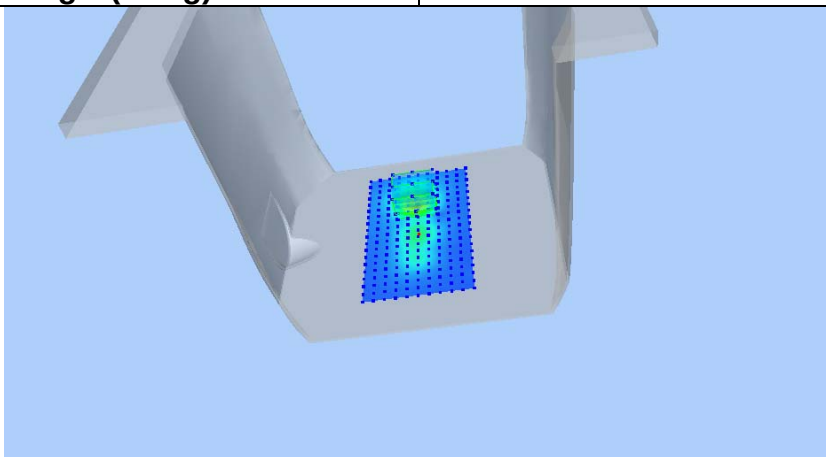
Maximum location: X=-1.00, Y=33.00 SAR Peak: 2.62 W/kg

SAR 10g (W/Kg)

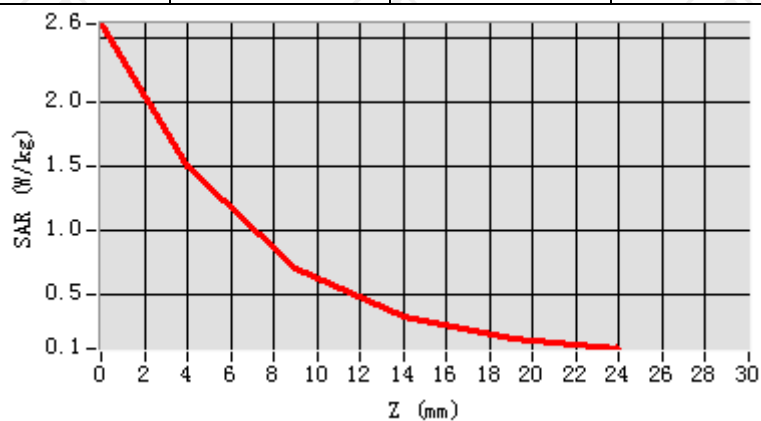
0.471987

SAR 1g (W/Kg)

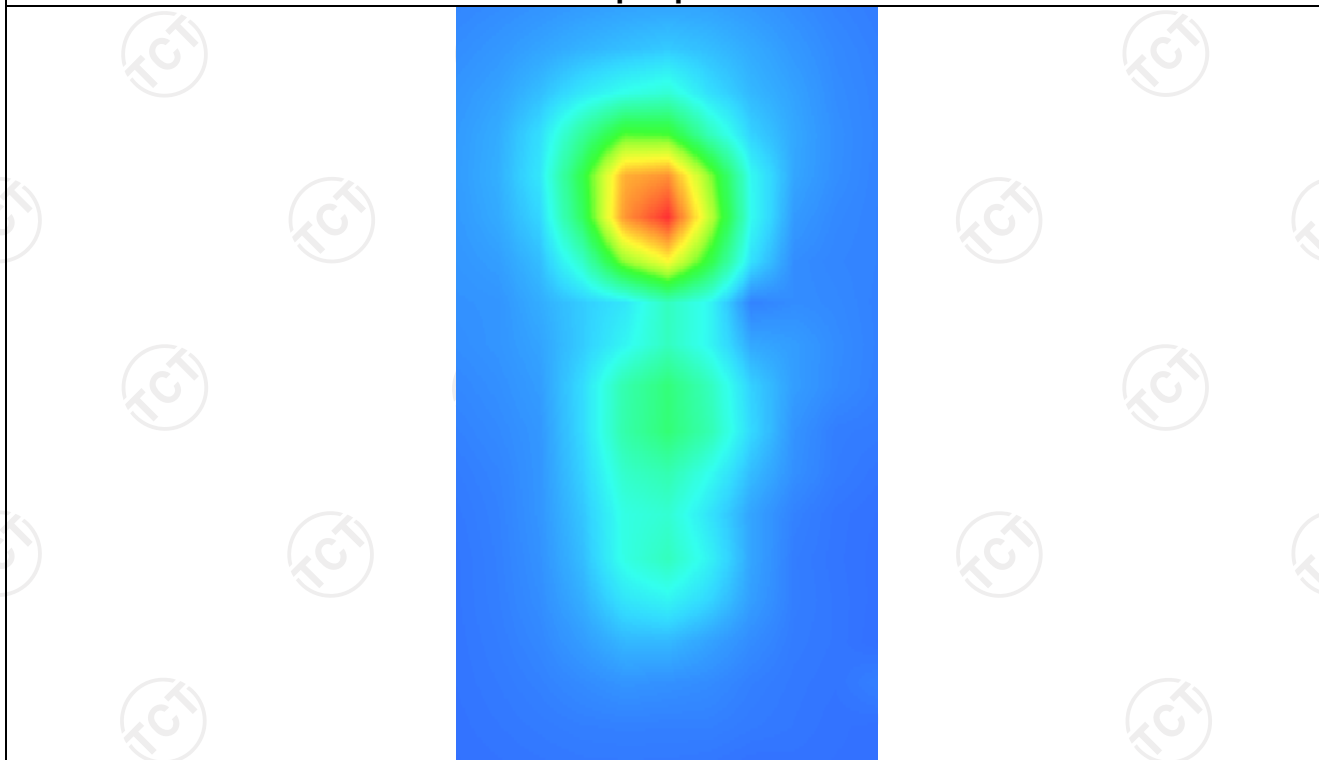
1.043562



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	2.6052	1.4871	0.6918	0.3140	0.1511



Hot spot position



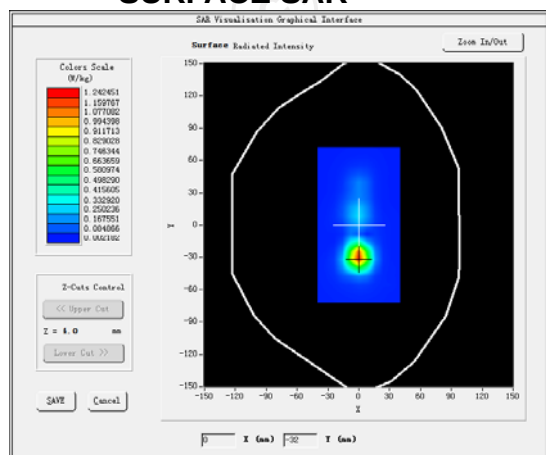
MEASUREMENT 3

Middle Band SAR (Channel 40620):

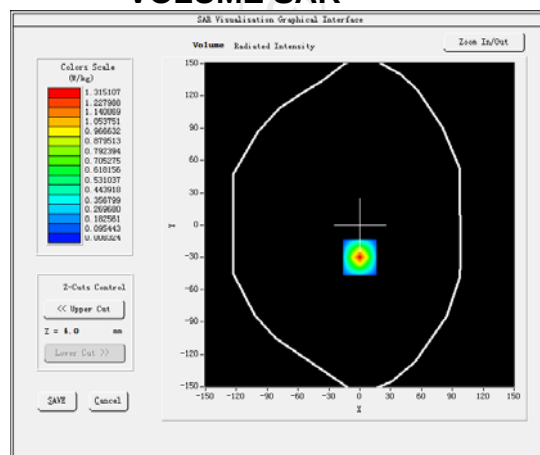
Date: 01/12/2018

Frequency (MHz)	2593.000000
Relative permittivity (real part)	52.013887
Relative permittivity (imaginary part)	14.935214
Conductivity (S/m)	2.114821
Variation (%)	-0.870000
Crest Factor	1.0
Probe Conversion factor	4.52
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 Bottom(0mm)
Band	LTE band 41(1 RB#50)

SURFACE SAR



VOLUME SAR



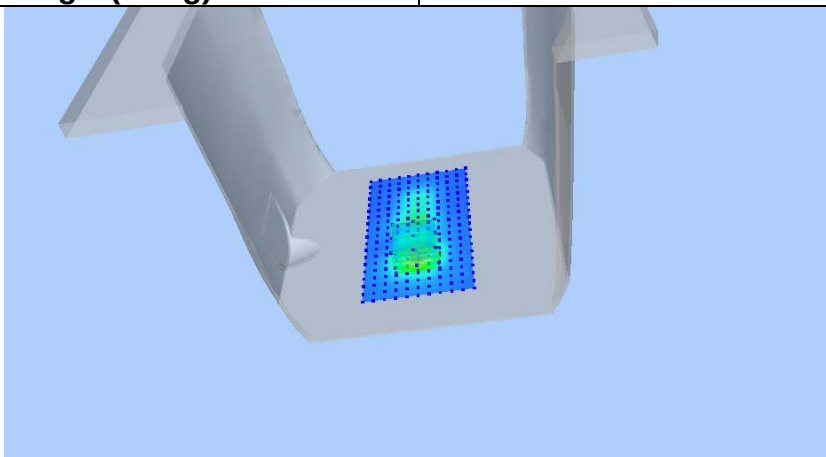
Maximum location: X=0.00, Y=-30.00 SAR Peak: 2.36 W/kg

SAR 10g (W/Kg)

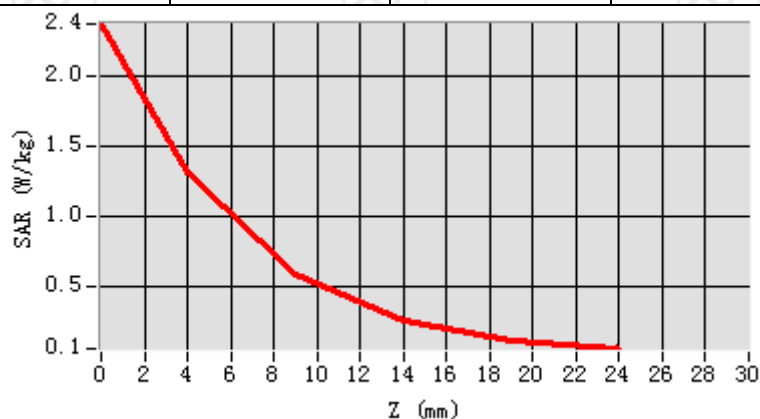
0.439168

SAR 1g (W/Kg)

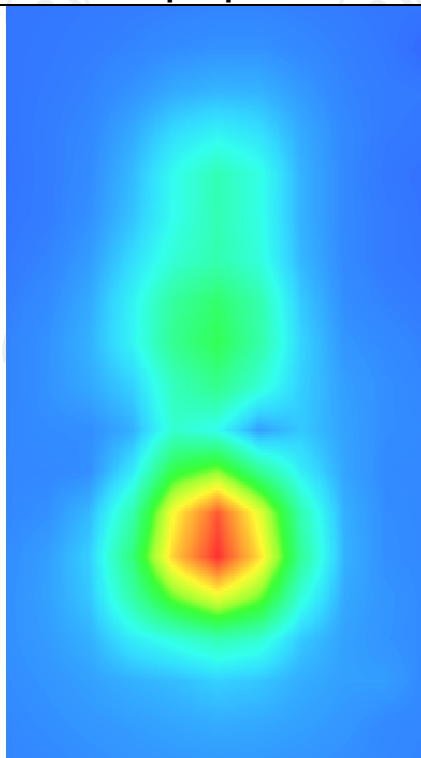
0.911765



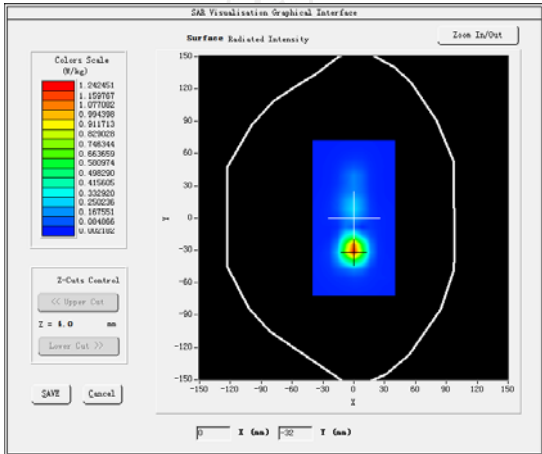
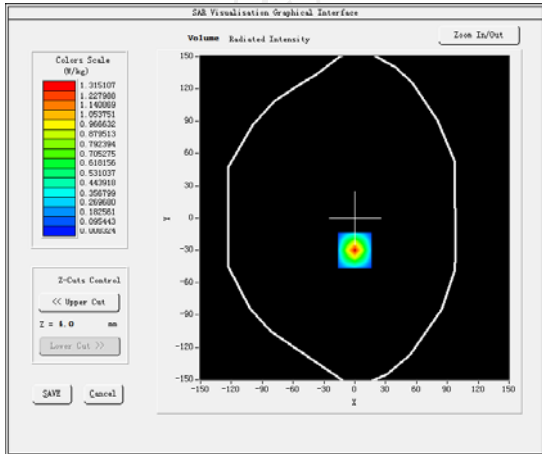
Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	2.3690	1.3151	0.5854	0.2539	0.1197

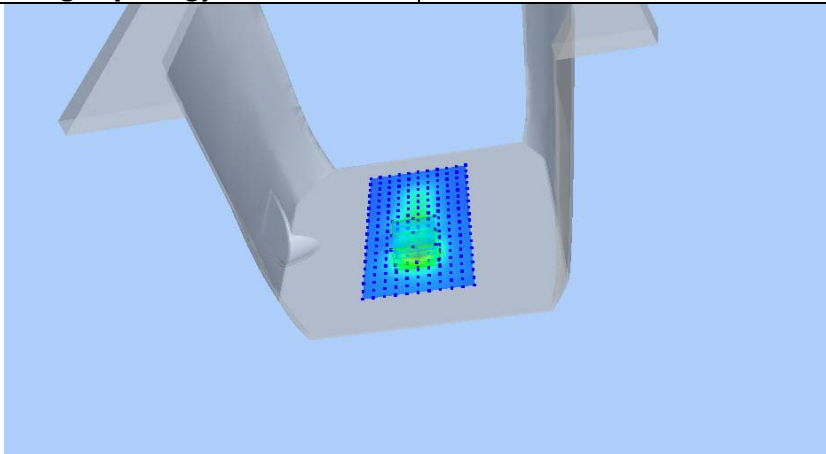


Hot spot position

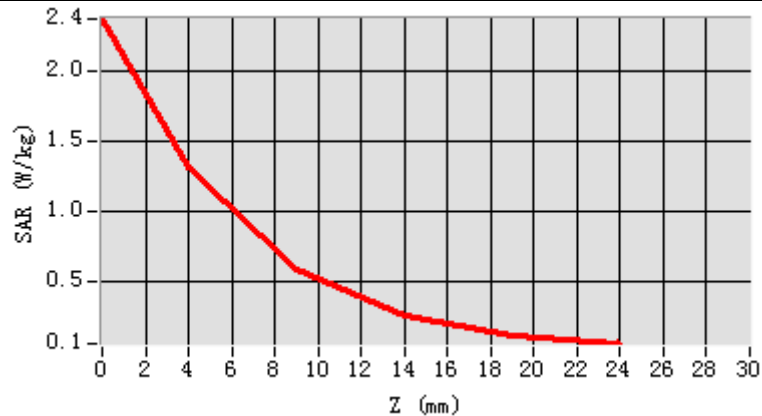


MEASUREMENT 4-repeat

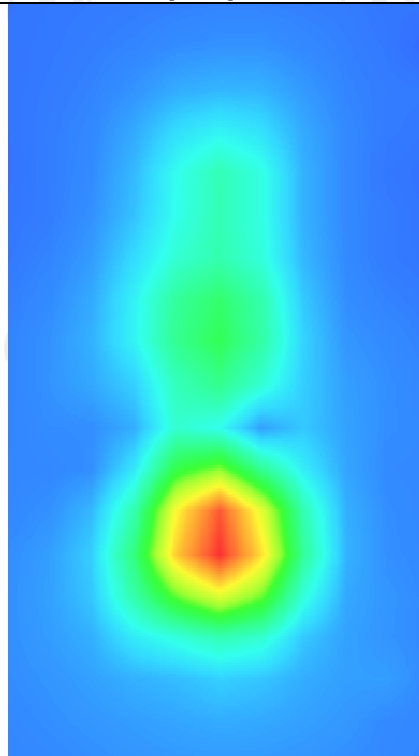
Middle Band SAR (Channel 40620):		Date: 01/12/2018
Frequency (MHz)	2593.000000	
Relative permittivity (real part)	52.013887	
Relative permittivity (imaginary part)	14.935214	
Conductivity (S/m)	2.114821	
Variation (%)	-0.870000	
Crest Factor	1.0	
Probe Conversion factor	4.52	
E-Field Probe:	SSE5 (SN 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 Bottom(0mm)	
Band	LTE band 41(1 RB#50)	
SURFACE SAR	VOLUME SAR	
		
Maximum location: X=1.00, Y=-28.00 SAR Peak: 2.33 W/kg		
SAR 10g (W/Kg)	0.435103	
SAR 1g (W/Kg)	0.904812	



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	2.3327	1.3093	0.5772	0.2427	0.1186



Hot spot position



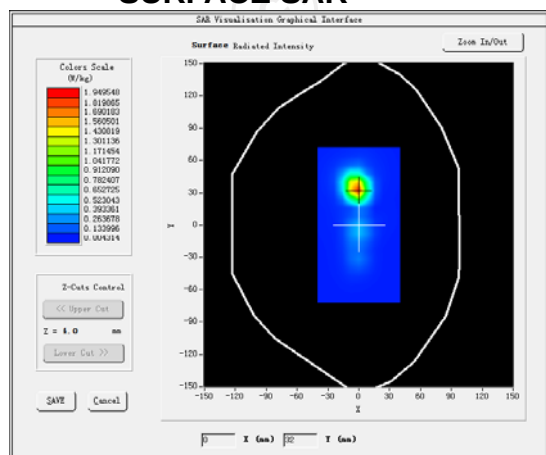
MEASUREMENT 5

Higher Band SAR (Channel 41490):

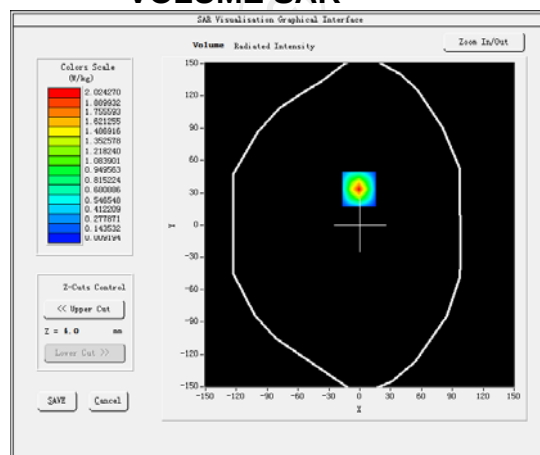
Date: 01/12/2018

Frequency (MHz)	2680.000000
Relative permittivity (real part)	52.131509
Relative permittivity (imaginary part)	12.468850
Conductivity (S/m)	2.128245
Variation (%)	-0.520000
Crest Factor	1.0
Probe Conversion factor	4.52
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 Bottom(0mm)</u>
Band	<u>LTE band 41(1 RB#50)</u>

SURFACE SAR



VOLUME SAR



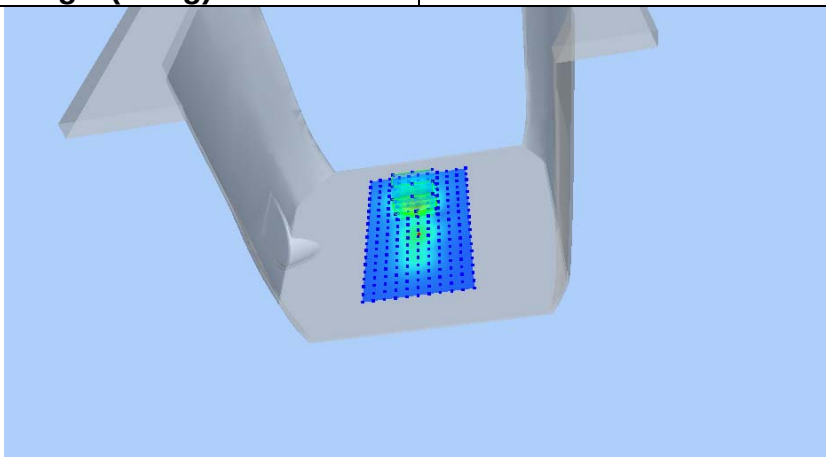
Maximum location: X=-1.00, Y=33.00 SAR Peak: 3.54 W/kg

SAR 10g (W/Kg)

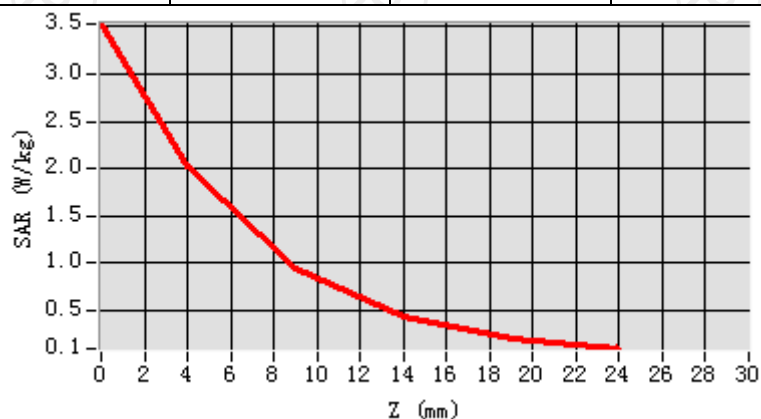
0.537558

SAR 1g (W/Kg)

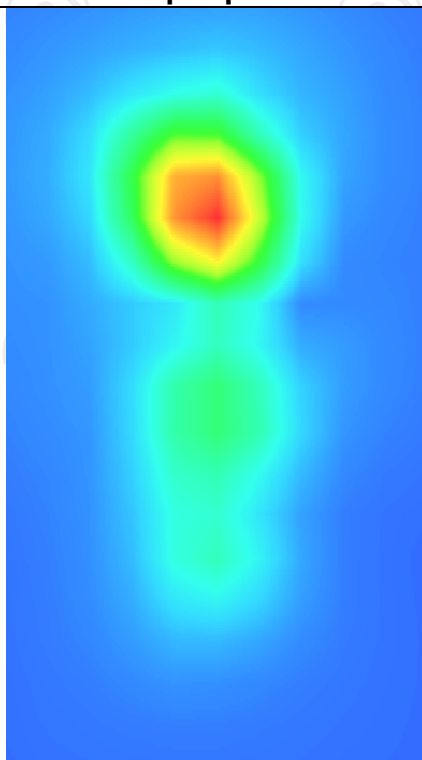
0.704647



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.5272	2.0243	0.9499	0.4352	0.2107



Hot spot position

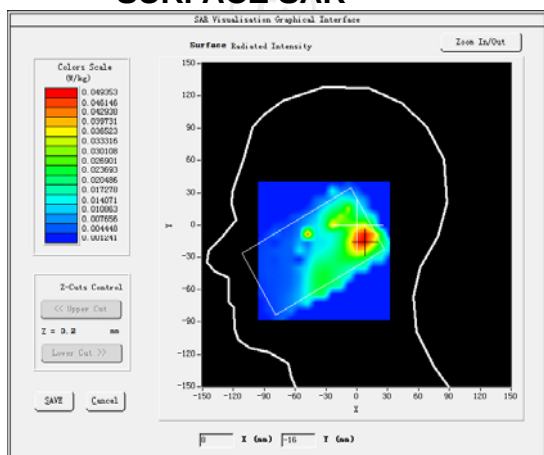


WLAN 2.4

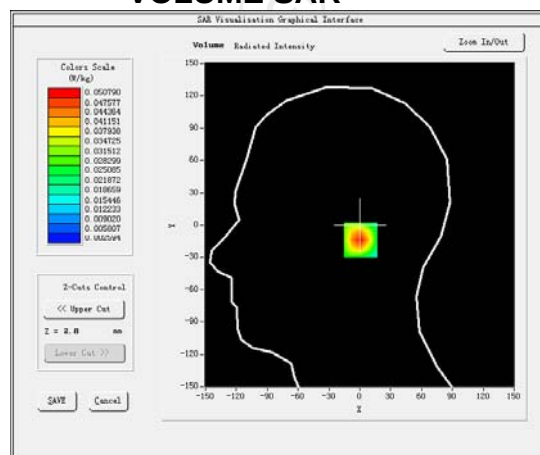
MEASUREMENT 1

Middle Band SAR (Channel 6):		Date: 01/09/2018
Frequency (MHz)	2437.000000	
Relative permittivity (real part)	37.821613	
Relative permittivity (imaginary part)	13.546980	
Conductivity (S/m)	1.834111	
Variation (%)	-3.600000	
Crest Factor	1.0	
Probe Conversion factor	4.58	
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	Right head	
Device Position	Cheek	
Band	IEEE 802.11b ISM	

SURFACE SAR



VOLUME SAR



Maximum location: X=7.00, Y=-14.00 SAR Peak: 0.08 W/kg

SAR 10g (W/Kg)

0.025320

SAR 1g (W/Kg)

0.048326

