



Annex B: Measurement Results

Tested Model: EMP2920

Report Number: FCC7050447A



Towards-ground-high

Type: Phone measurement (Complete)

Date of measurement: 17/5/2017

Measurement duration: 10 minutes 37 seconds

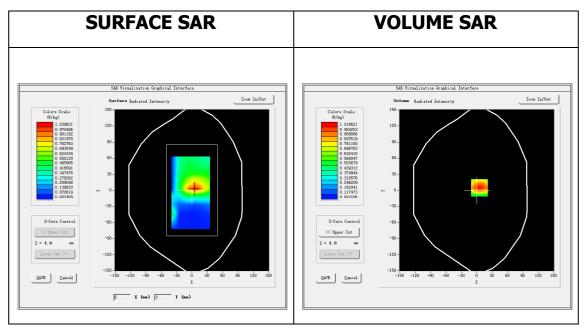
A. Experimental conditions.

Area Scan	dx=15mm dy=15mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<u>Device Position</u>	Body	
<u>Band</u>	CUSTOM (GPRS850 4Tx)	
<u>Channels</u>	<u>High</u>	
<u>Signal</u>	Duty Cycle: 2.00 (Crest factor: 2.0)	
Conversion factor	<u>5.07</u>	

B. SAR Measurement Results

Frequency (MHz)	848.799988
Relative permittivity (real part)	53.693120
Relative permittivity (imaginary part)	21.395110
Conductivity (S/m)	1.009214
Variation (%)	2.240000



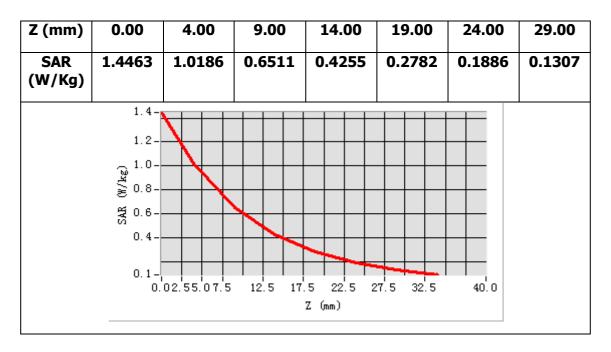


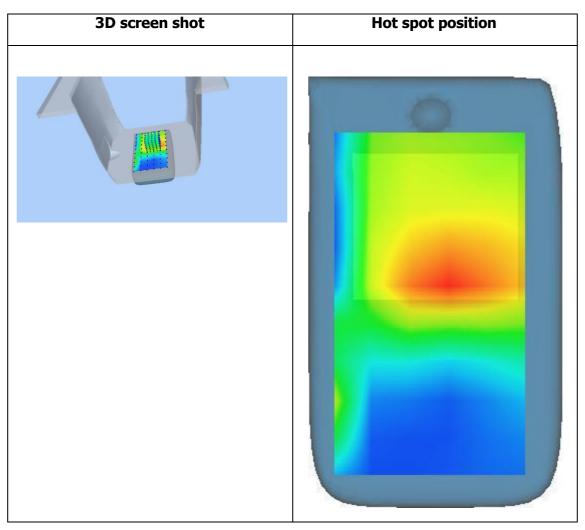
Maximum location: X=5.00, Y=5.00

SAR Peak: 1.44 W/kg

SAR 10g (W/Kg)	0.511279
SAR 1g (W/Kg)	0.738654









Bottom-side-high

Type: Phone measurement (Complete)

Date of measurement: 17/5/2017

Measurement duration: 10 minutes 36 seconds

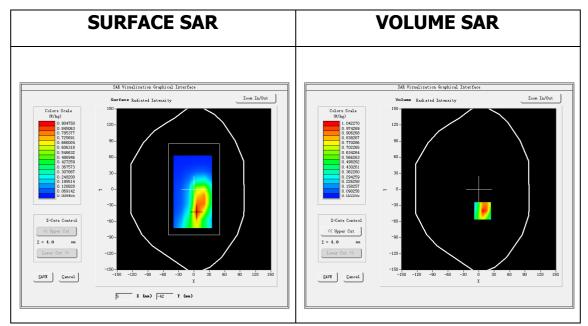
A. Experimental conditions.

Area Scan	dx=15mm dy=15mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<u>Device Position</u>	<u>Body</u>	
<u>Band</u>	CUSTOM (GPRS850 4Tx)	
<u>Channels</u>	<u>High</u>	
<u>Signal</u>	Duty Cycle: 2.00 (Crest factor: 2.0)	
Conversion factor	<u>5.07</u>	

B. SAR Measurement Results

Frequency (MHz)	848.799988
Relative permittivity (real part)	53.693120
Relative permittivity (imaginary part)	21.395110
Conductivity (S/m)	1.009214
Variation (%)	3.850000

SATIMO 225, rue Pierre Rivoalon 29200 Brest - France Tel:+33 (0)2 98 05 13 34; Fax: +33 (0)2 98 05 53 87; www.satimo.com



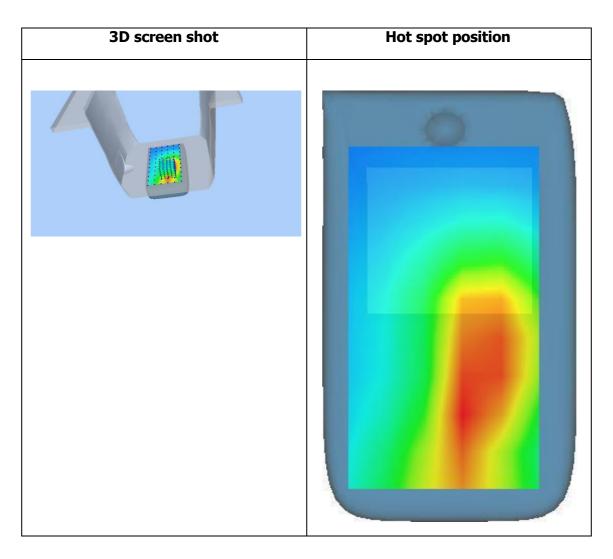
Maximum location: X=7.00, Y=-40.00

SAR Peak: 2.08 W/kg

SAR 10g (W/Kg)	0.485094
SAR 1g (W/Kg)	0.746731



Z (mm)	0.00	4.00	9.00	14.00	19.00	24.00	29.00
SAR (W/Kg)	2.0167	1.0423	0.4065	0.2179	0.1134	0.0620	0.0389
	2.02- 1.75- 1.50- (%) 1.25- 1.00- 8W 0.75- 0.50- 0.25- 0.03-		12.5 17	7.5 22.5 Z (mm)	27.5 32.5	40.0	





Towards-ground-low

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 8 minutes 51 seconds

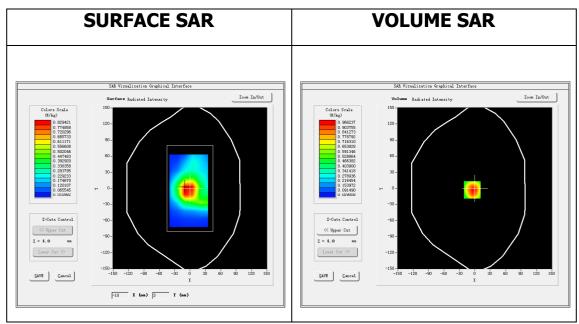
A. Experimental conditions.

<u>Area Scan</u>	dx=15mm dy=15mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<u>Device Position</u>	Body	
<u>Band</u>	CUSTOM (GPRS1900 4Tx)	
<u>Channels</u>	Low	
<u>Signal</u>	Duty Cycle: 2.00 (Crest factor: 2.0)	
Conversion factor	<u>4.78</u>	

B. SAR Measurement Results

Frequency (MHz)	1850.199951
Relative permittivity (real part)	53.232899
Relative permittivity (imaginary part)	14.493960
Conductivity (S/m)	1.489818
Variation (%)	-4.190000



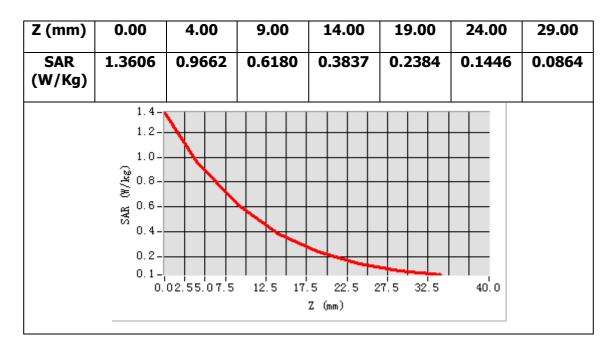


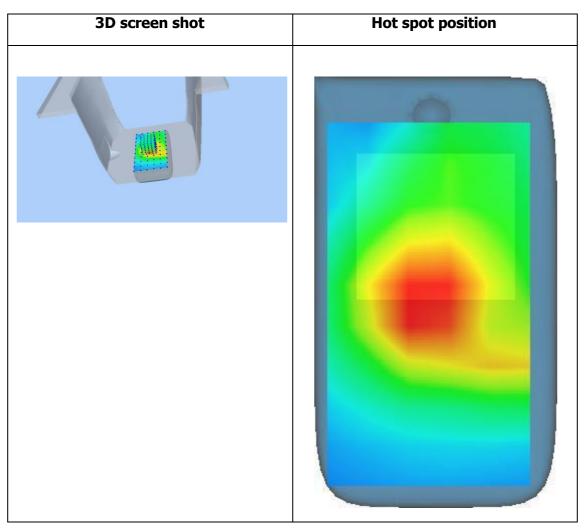
Maximum location: X=-5.00, Y=-3.00

SAR Peak: 1.46 W/kg

SAR 10g (W/Kg)	0.539104
SAR 1g (W/Kg)	0.728711









Rear-side-low

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 11 minutes 15 seconds

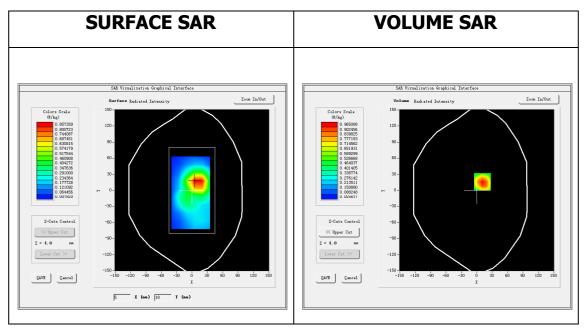
A. Experimental conditions.

Area Scan	dx=15mm dy=15mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<u>Device Position</u>	Body	
<u>Band</u>	CUSTOM (GPRS1900 4Tx)	
<u>Channels</u>	Low	
<u>Signal</u>	Duty Cycle: 2.00 (Crest factor: 2.0)	
Conversion factor	<u>4.78</u>	

B. SAR Measurement Results

Frequency (MHz)	1850.199951
Relative permittivity (real part)	53.232899
Relative permittivity (imaginary part)	14.493960
Conductivity (S/m)	1.489818
Variation (%)	-1.550000



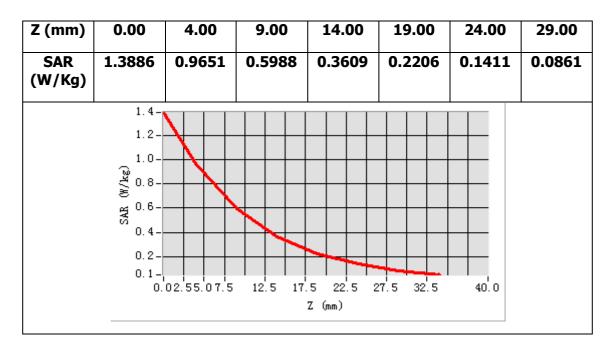


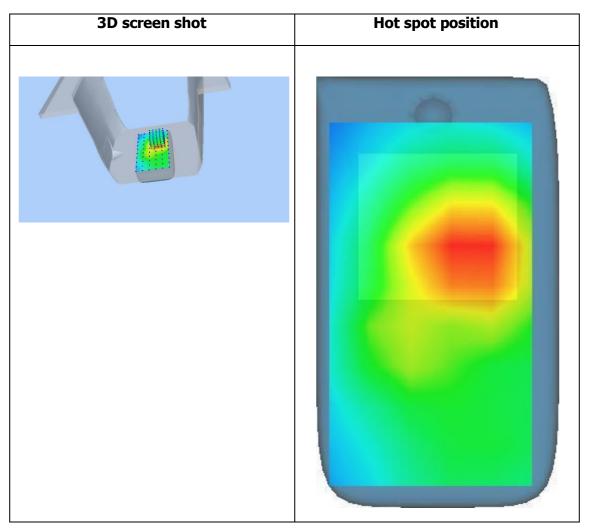
Maximum location: X=11.00, Y=16.00

SAR Peak: 1.42 W/kg

SAR 10g (W/Kg)	0.425590
SAR 1g (W/Kg)	0.758312









Towards-ground-low

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 10 minutes 38 seconds

A. Experimental conditions.

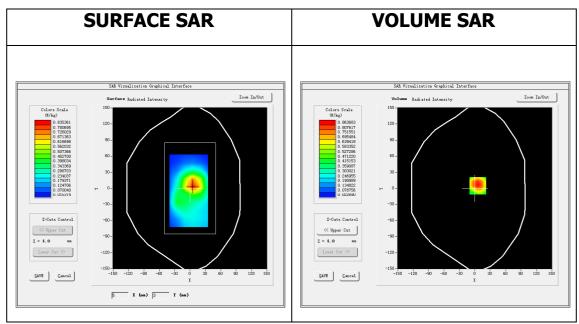
<u>Area Scan</u>	dx=15mm dy=15mm
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	Band2 WCDMA1900
<u>Channels</u>	<u>Low</u>
<u>Signal</u>	WCDMA (Crest factor: 1.0)
Conversion factor	<u>4.78</u>

B. SAR Measurement Results

Middle Band SAR (Channel 9262):

Frequency (MHz)	1852.400000
Relative permittivity (real part)	53.694200
Relative permittivity (imaginary part)	14.636405
Conductivity (S/m)	1.533138
Variation (%)	2.890000



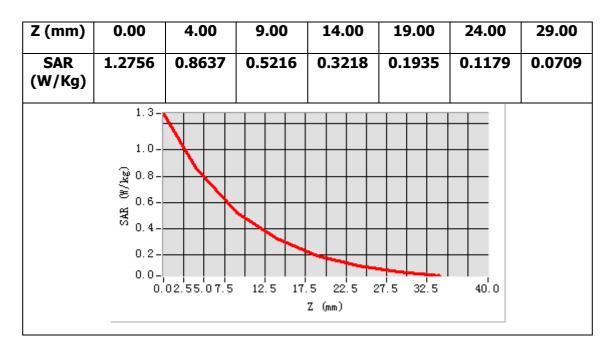


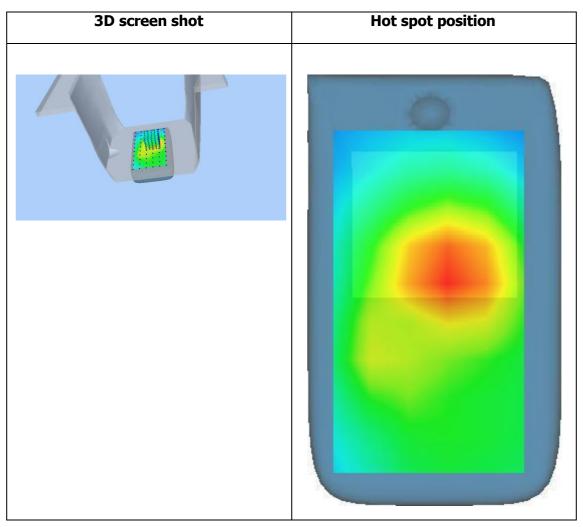
Maximum location: X=6.00, Y=5.00

SAR Peak: 1.29 W/kg

SAR 10g (W/Kg)	0.480206
SAR 1g (W/Kg)	0.735200









Rear-side-low

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 10 minutes 10 seconds

A. Experimental conditions.

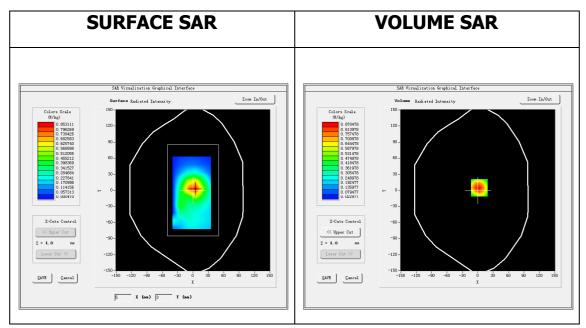
<u>Area Scan</u>	dx=15mm dy=15mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<u>Device Position</u>	<u>Body</u>	
<u>Band</u>	Band2 WCDMA1900	
<u>Channels</u>	<u>Low</u>	
<u>Signal</u>	WCDMA (Crest factor: 1.0)	
Conversion factor	<u>4.78</u>	

B. SAR Measurement Results

Middle Band SAR (Channel 9262):

Frequency (MHz)	1852.400000
Relative permittivity (real part)	53.694200
Relative permittivity (imaginary part)	14.636405
Conductivity (S/m)	1.533138
Variation (%)	2.190000



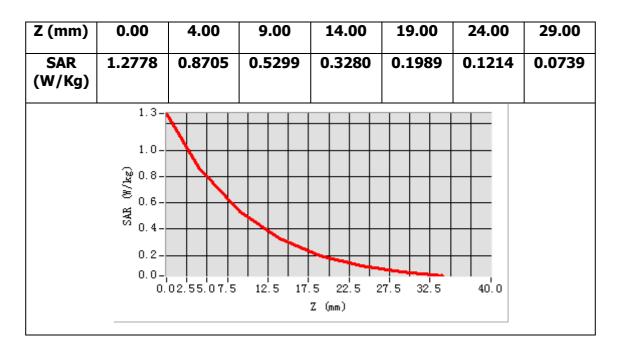


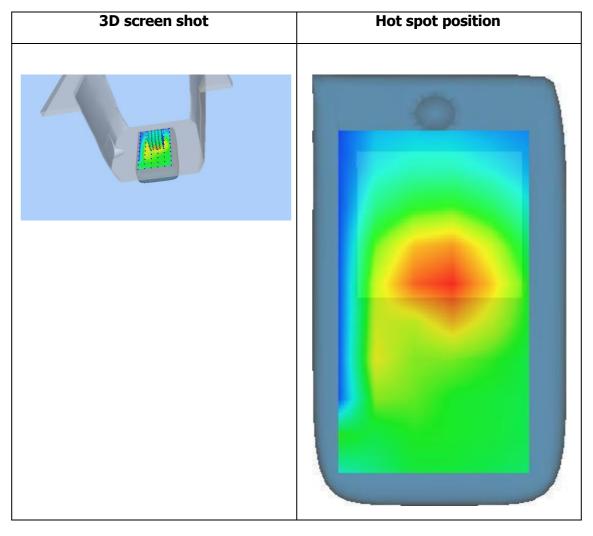
Maximum location: X=3.00, Y=5.00

SAR Peak: 1.29 W/kg

SAR 10g (W/Kg)	0.465436
SAR 1g (W/Kg)	0.787887









Towards-ground-high

Type: Phone measurement (Complete)

Date of measurement: 17/5/2017

Measurement duration: 10 minutes 15 seconds

A. Experimental conditions.

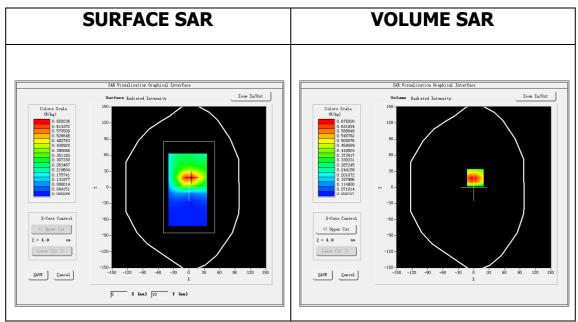
<u>Area Scan</u>	dx=15mm dy=15mm
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	Band5 WCDMA850
<u>Channels</u>	<u>High</u>
<u>Signal</u>	WCDMA (Crest factor: 1.0)
Conversion factor	<u>5.07</u>

B. SAR Measurement Results

Higher Band SAR (Channel 4233):

Frequency (MHz)	846.599976
Relative permittivity (real part)	53.880612
Relative permittivity (imaginary part)	21.233297
Conductivity (S/m)	1.000360
Variation (%)	-0.680000



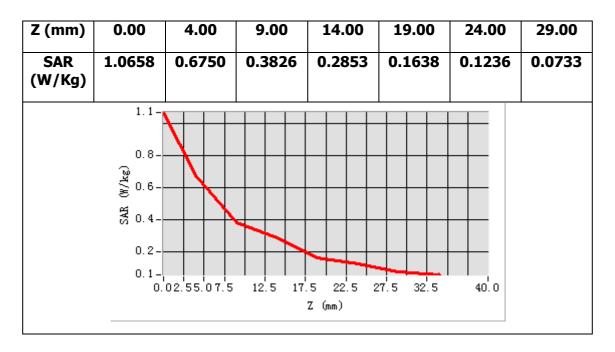


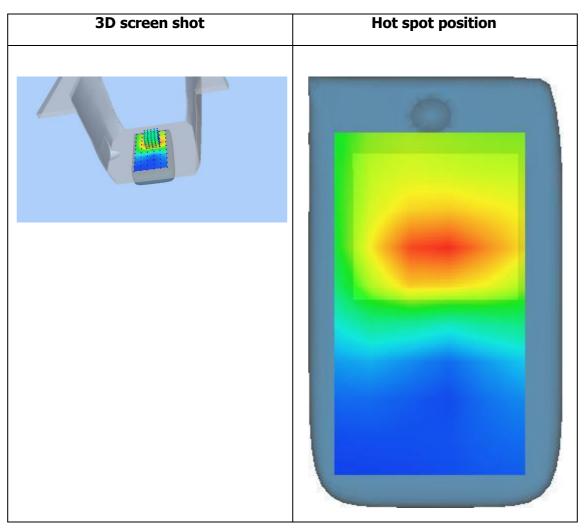
Maximum location: X=3.00, Y=18.00

SAR Peak: 1.01 W/kg

SAR 10g (W/Kg)	0.399175
SAR 1g (W/Kg)	0.673071









Rear-side-high

Type: Phone measurement (Complete)

Date of measurement: 17/5/2017

Measurement duration: 10 minutes 37 seconds

A. Experimental conditions.

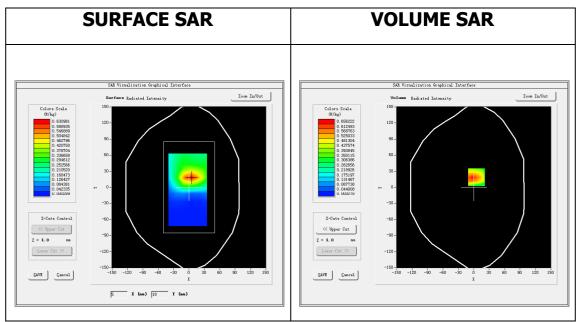
Area Scan	dx=15mm dy=15mm
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	Band5 WCDMA850
<u>Channels</u>	<u>High</u>
<u>Signal</u>	WCDMA (Crest factor: 1.0)
Conversion factor	<u>5.07</u>

B. SAR Measurement Results

Higher Band SAR (Channel 4233):

Frequency (MHz)	846.599976
Relative permittivity (real part)	53.880612
Relative permittivity (imaginary part)	21.233297
Conductivity (S/m)	1.000360
Variation (%)	-1.600000



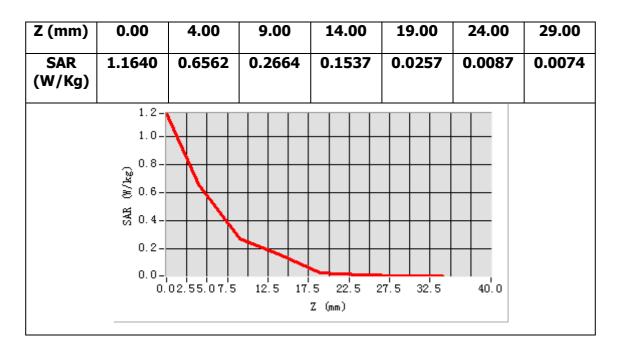


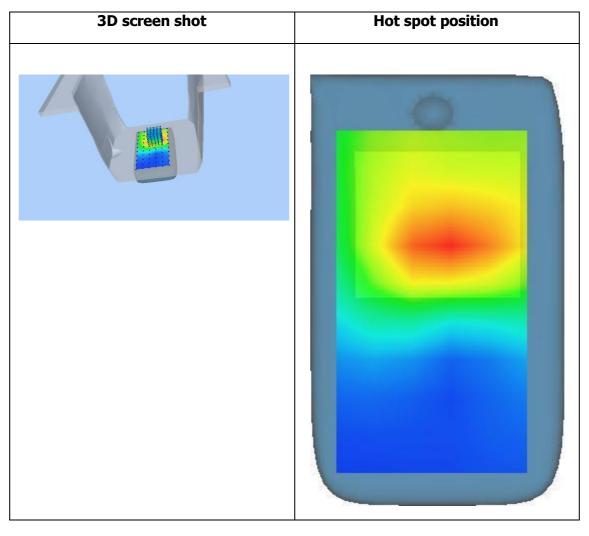
Maximum location: X=5.00, Y=19.00

SAR Peak: 1.04 W/kg

SAR 10g (W/Kg)	0.415360
SAR 1g (W/Kg)	0.772794









Towards-ground-20M-1RB#99-middle

Type: Phone measurement (Complete)

Date of measurement: 22/5/2017

Measurement duration: 12 minutes 4 seconds

A. Experimental conditions.

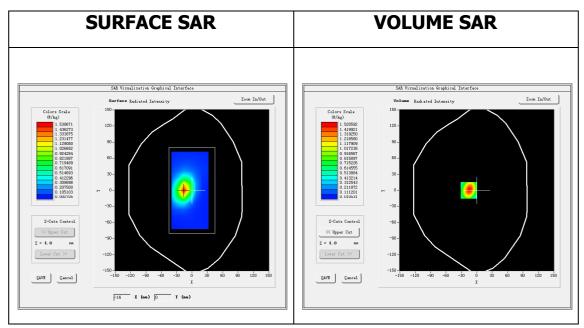
Area Scan	dx=15mm dy=15mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<u>Device Position</u>	<u>Body</u>	
<u>Band</u>	LTE band 7	
<u>Channels</u>	<u>Middle</u>	
<u>Signal</u>	LTE (Crest factor: 1.0)	
Conversion factor	4.07	

B. SAR Measurement Results

Middle Band SAR (Channel 21100):

Frequency (MHz)	2535.000000
Relative permittivity (real part)	51.920998
Relative permittivity (imaginary part)	14.614706
Conductivity (S/m)	2.057741
Variation (%)	-1.160000



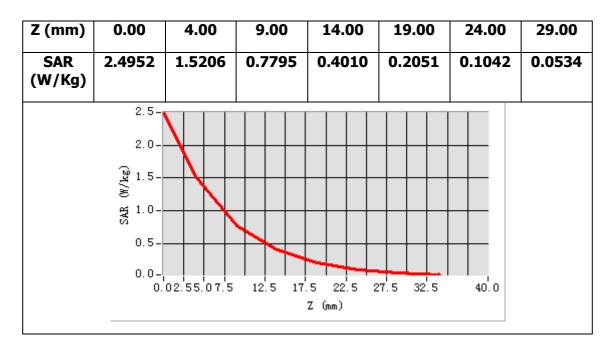


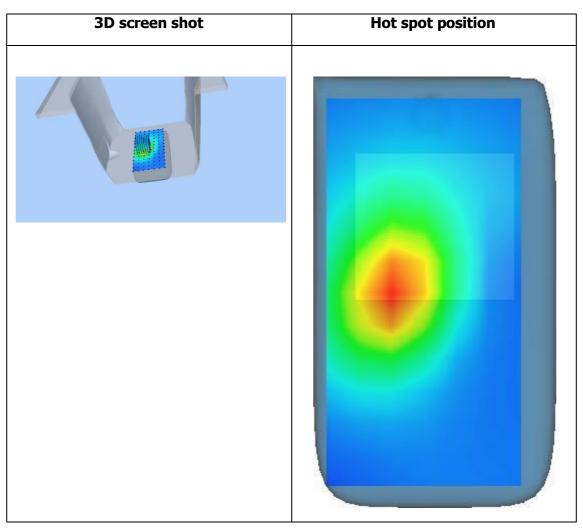
Maximum location: X=-16.00, Y=0.00

SAR Peak: 2.50 W/kg

SAR 10g (W/Kg)	0.510011
SAR 1g (W/Kg)	0.722409









Rear-side-20M-1RB#99-middle

Type: Phone measurement (Complete)

Date of measurement: 22/5/2017

Measurement duration: 11 minutes 30 seconds

A. Experimental conditions.

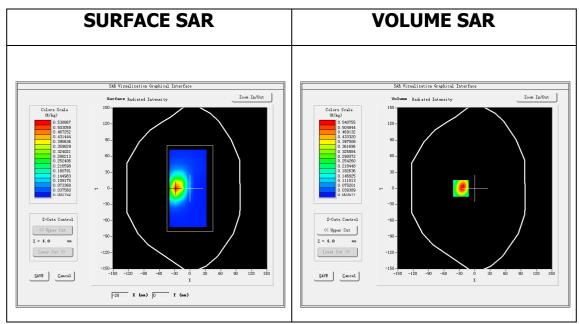
Area Scan	dx=15mm dy=15mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<u>Device Position</u>	<u>Body</u>	
<u>Band</u>	LTE band 7	
<u>Channels</u>	<u>Middle</u>	
<u>Signal</u>	LTE (Crest factor: 1.0)	
Conversion factor	<u>4.07</u>	

B. SAR Measurement Results

Middle Band SAR (Channel 21100):

2535.000000
51.920998
14.614706
2.057741
-0.210000



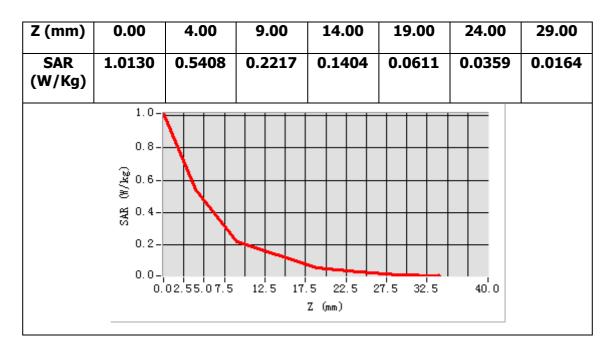


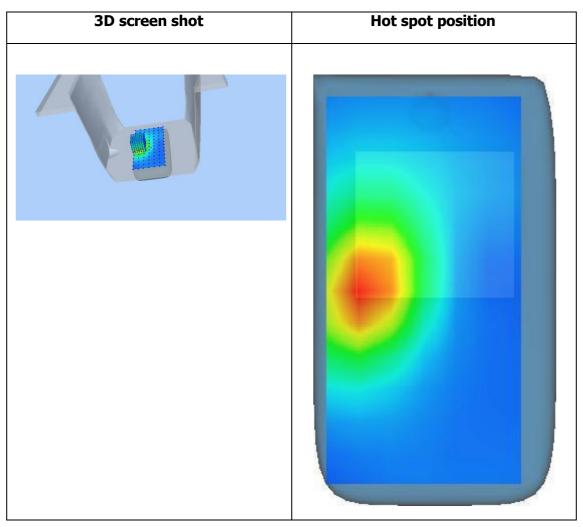
Maximum location: X=-27.00, Y=0.00

SAR Peak: 0.90 W/kg

SAR 10g (W/Kg)	0.355317
SAR 1g (W/Kg)	0.692996









Towards-phantom-20M-1RB#99-middle

Type: Phone measurement (Complete)

Date of measurement: 22/5/2017

Measurement duration: 16 minutes 48 seconds

A. Experimental conditions.

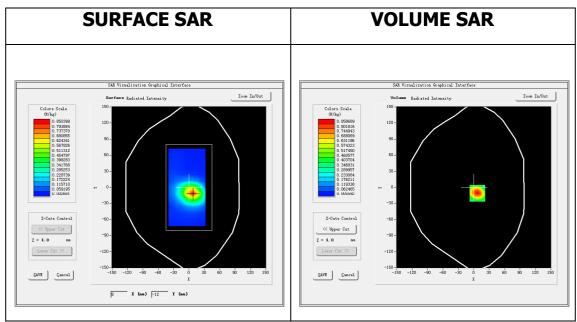
Area Scan	dx=15mm dy=15mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<u>Device Position</u>	<u>Body</u>	
<u>Band</u>	LTE band 41	
<u>Channels</u>	<u>Middle</u>	
<u>Signal</u>	LTE (Crest factor: 1.6)	
Conversion factor	<u>4.07</u>	

B. SAR Measurement Results

Middle Band SAR (Channel 40620):

Frequency (MHz)	2593.000000
Relative permittivity (real part)	51.980999
Relative permittivity (imaginary part)	14.418500
Conductivity (S/m)	2.084434
Variation (%)	-0.530000



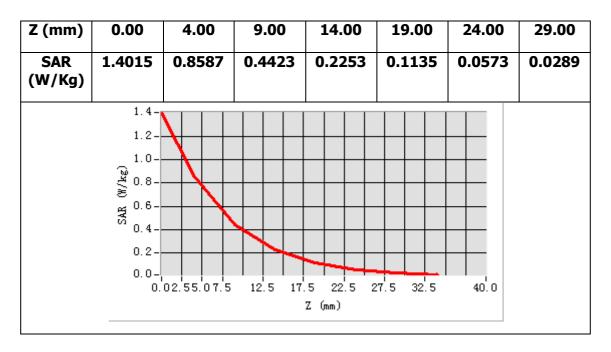


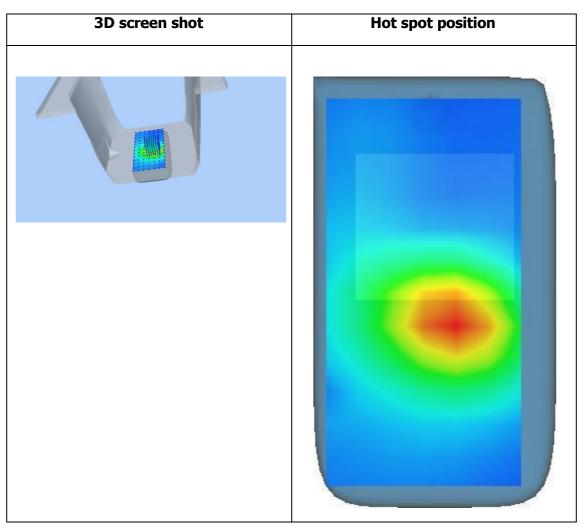
Maximum location: X=7.00, Y=-11.00

SAR Peak: 1.40 W/kg

SAR 10g (W/Kg)	0.401242
SAR 1g (W/Kg)	0.618887









Bottom-side-20M-50RB#50-middle

Type: Phone measurement (Complete)

Date of measurement: 22/5/2017

Measurement duration: 17 minutes 51 seconds

A. Experimental conditions.

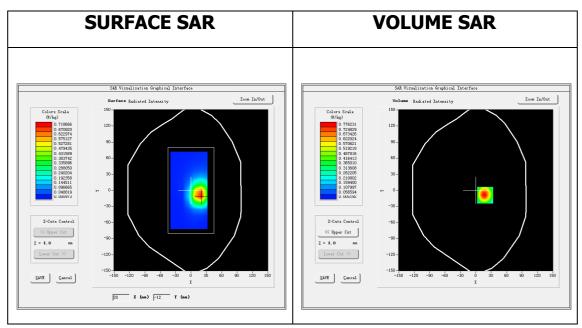
<u>Area Scan</u>	dx=15mm dy=15mm	
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete	
<u>Phantom</u>	<u>Validation plane</u>	
<u>Device Position</u>	<u>Body</u>	
<u>Band</u>	LTE band 41	
<u>Channels</u>	<u>Middle</u>	
<u>Signal</u>	LTE (Crest factor: 1.6)	
Conversion factor	4.07	

B. SAR Measurement Results

Middle Band SAR (Channel 40620):

Frequency (MHz)	2593.000000
Relative permittivity (real part)	51.980999
Relative permittivity (imaginary part)	14.418500
Conductivity (S/m)	2.084434
Variation (%)	-0.480000



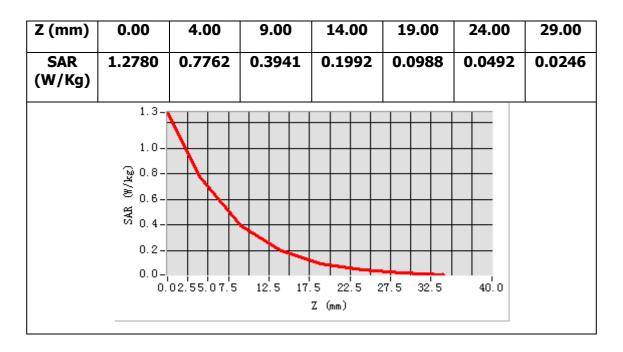


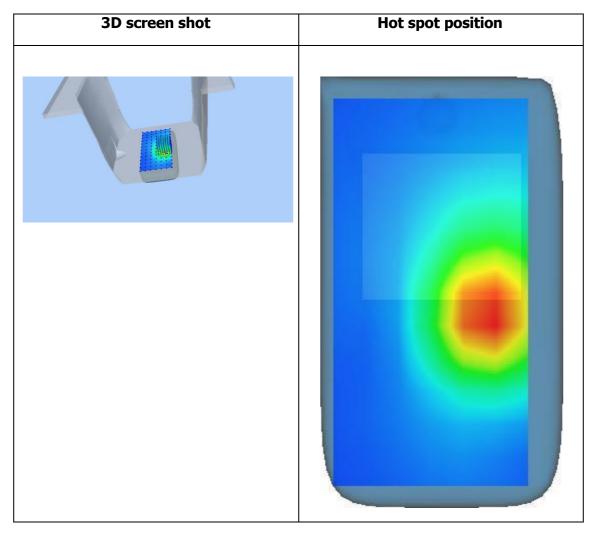
Maximum location: X=18.00, Y=-9.00

SAR Peak: 1.29 W/kg

SAR 10g (W/Kg)	0.377316
SAR 1g (W/Kg)	0.560222









Towards-phantom-middle

Type: Phone measurement (Complete)

Date of measurement: 20/5/2017

Measurement duration: 15 minutes 3 seconds

A. Experimental conditions.

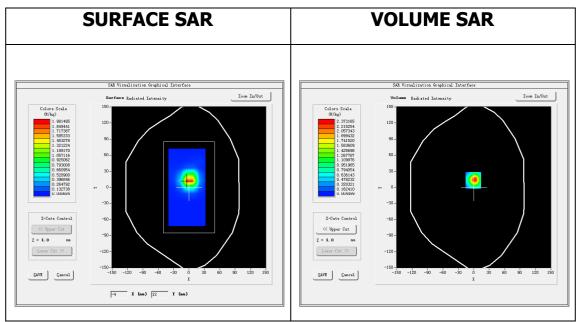
Area Scan	dx=15mm dy=15mm
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	IEEE 802.11b ISM
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	IEEE802.b (Crest factor: 1.0)
Conversion factor	4.11

B. SAR Measurement Results

Middle Band SAR (Channel 6):

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52.752100
Relative permittivity (imaginary part)	14.169239
Conductivity (S/m)	1.915193
Variation (%)	0.0000



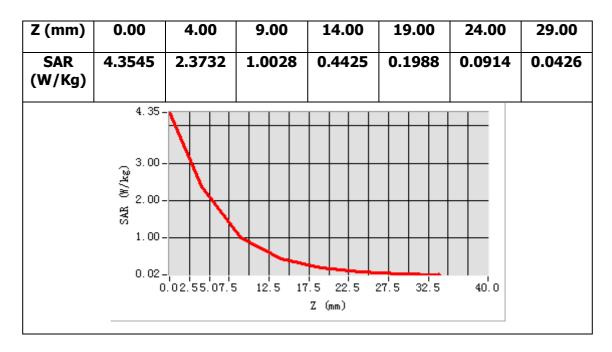


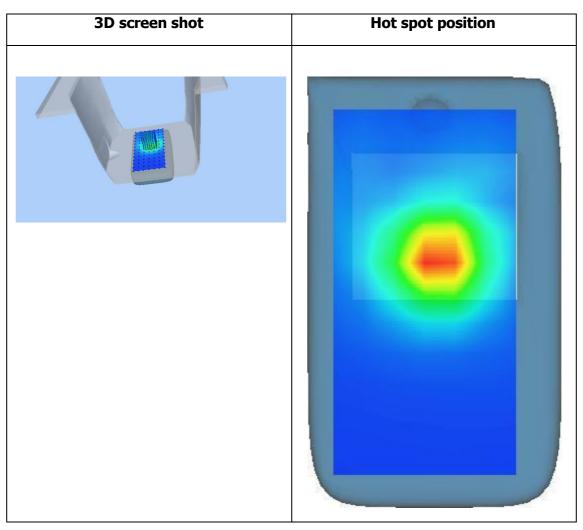
Maximum location: X=-1.00, Y=13.00

SAR Peak: 4.46 W/kg

SAR 10g (W/Kg)	0.163945
SAR 1g (W/Kg)	0.226202









Top-side-middle

Type: Phone measurement (Complete)

Date of measurement: 20/5/2017

Measurement duration: 13 minutes 56 seconds

A. Experimental conditions.

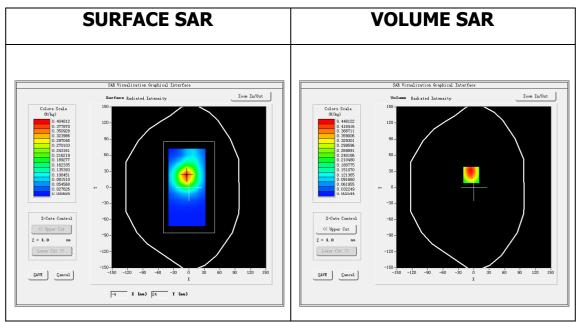
<u>Area Scan</u>	dx=15mm dy=15mm
<u>ZoomScan</u>	5x5x7,dx=8mm dy=8mm dz=5mm,Complete
<u>Phantom</u>	<u>Validation plane</u>
<u>Device Position</u>	<u>Body</u>
<u>Band</u>	<u>IEEE 802.11b ISM</u>
<u>Channels</u>	<u>Middle</u>
<u>Signal</u>	IEEE802.b (Crest factor: 1.0)
Conversion factor	<u>4.11</u>

B. SAR Measurement Results

Middle Band SAR (Channel 6):

Frequency (MHz)	2437.000000
Relative permittivity (real part)	52.752100
Relative permittivity (imaginary part)	14.169239
Conductivity (S/m)	1.915193
Variation (%)	-1.460000





Maximum location: X=-5.00, Y=23.00

SAR Peak: 0.75 W/kg

SAR 10g (W/Kg)	0.321809
SAR 1g (W/Kg)	0.531462



