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Annex B: Measurement Results

Tested Model : N5001L

**Report Number:
WSCT-R&E17040291A-SAR**

MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 10/6/2017

Measurement duration: 8 minutes 21 seconds

A. Experimental conditions.

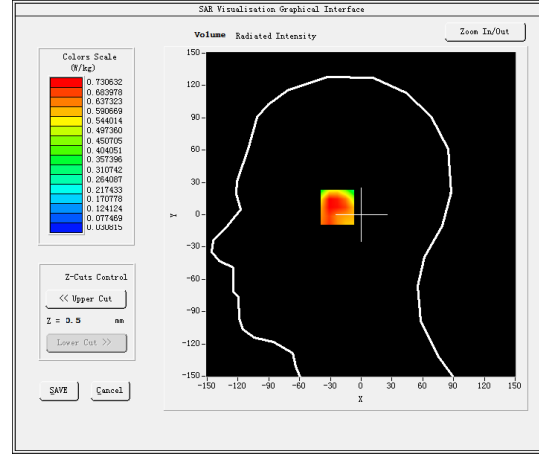
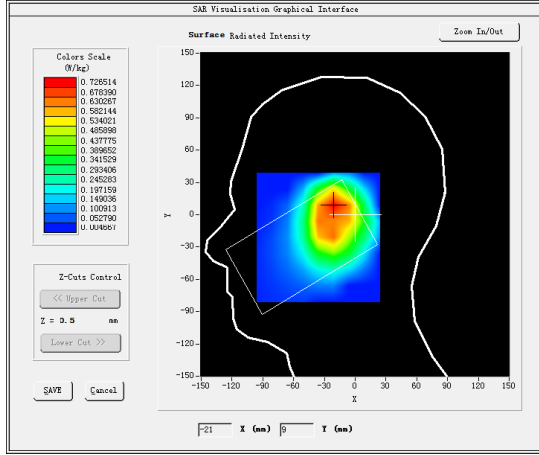
| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7, dx=8mm dy=8mm dz=5mm, Complete</u> |
| <u>Phantom</u> | <u>Right head</u> |
| <u>Device Position</u> | <u>Cheek</u> |
| <u>Band</u> | <u>CUSTOM (GPRS850 4Tx)</u> |
| <u>Channels</u> | <u>Low</u> |
| <u>Signal</u> | <u>Duty Cycle: 2.00 (Crest factor: 2.0)</u> |
| <u>Conversion factor</u> | <u>4.93</u> |

B. SAR Measurement Results

| | |
|---|------------|
| Frequency (MHz) | 824.200012 |
| Relative permittivity (real part) | 41.550823 |
| Relative permittivity (imaginary part) | 19.649035 |
| Conductivity (S/m) | 0.899707 |
| Variation (%) | 4.610000 |

SURFACE SAR

VOLUME SAR

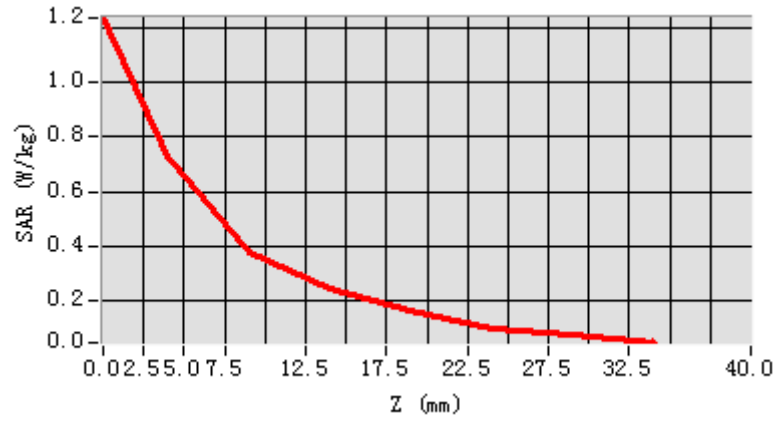


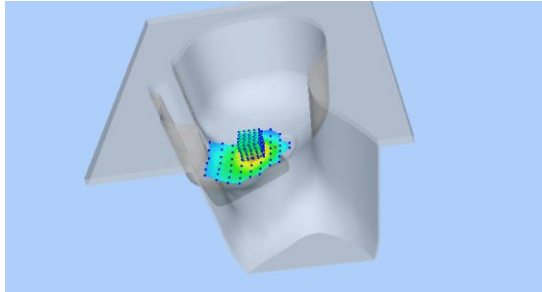
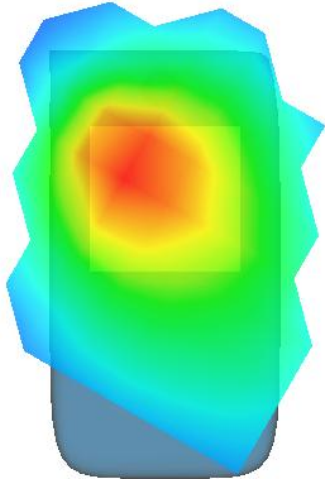
Maximum location: X=-20.00, Y=8.00

SAR Peak: 1.23 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.428571 |
| SAR 1g (W/Kg) | 0.734285 |

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| SAR (W/Kg) | 1.2345 | 0.7306 | 0.3794 | 0.2418 | 0.1660 | 0.0981 | 0.0765 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 2

Rear-side-low

Type: Phone measurement (Complete)

Date of measurement: 10/6/2017

Measurement duration: 10 minutes 38 seconds

A. Experimental conditions.

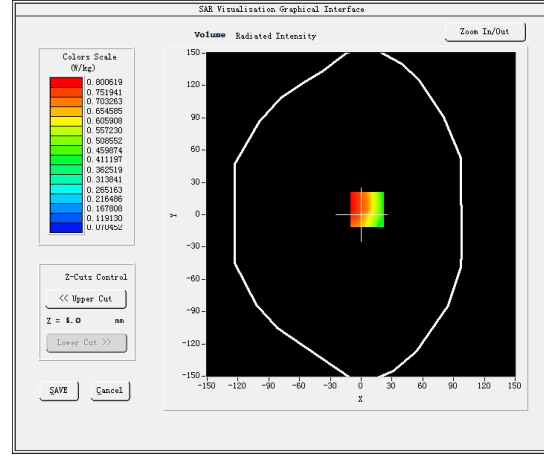
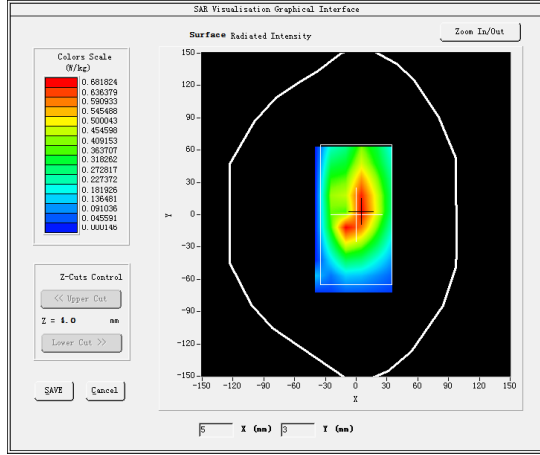
| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Validation plane</u> |
| <u>Device Position</u> | <u>Body</u> |
| <u>Band</u> | <u>CUSTOM (GPRS850 4Tx)</u> |
| <u>Channels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

B. SAR Measurement Results

| | |
|---|------------|
| Frequency (MHz) | 824.200012 |
| Relative permittivity (real part) | 55.242077 |
| Relative permittivity (imaginary part) | 21.378187 |
| Conductivity (S/m) | 0.978883 |
| Variation (%) | 2.350000 |

SURFACE SAR

VOLUME SAR

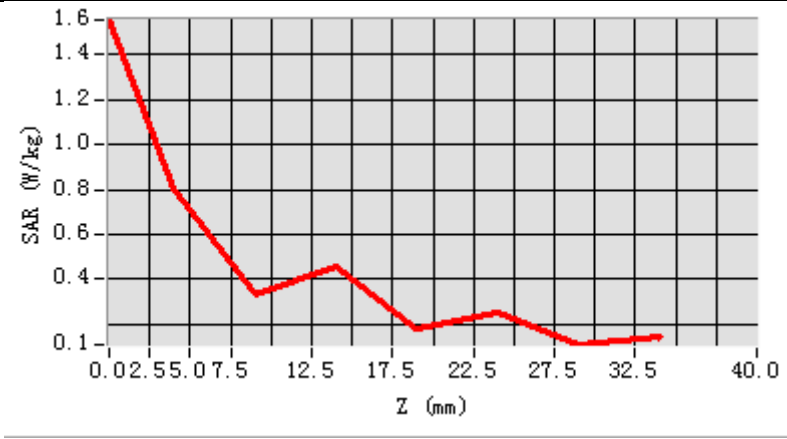


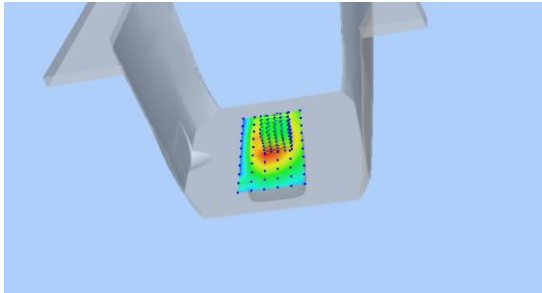
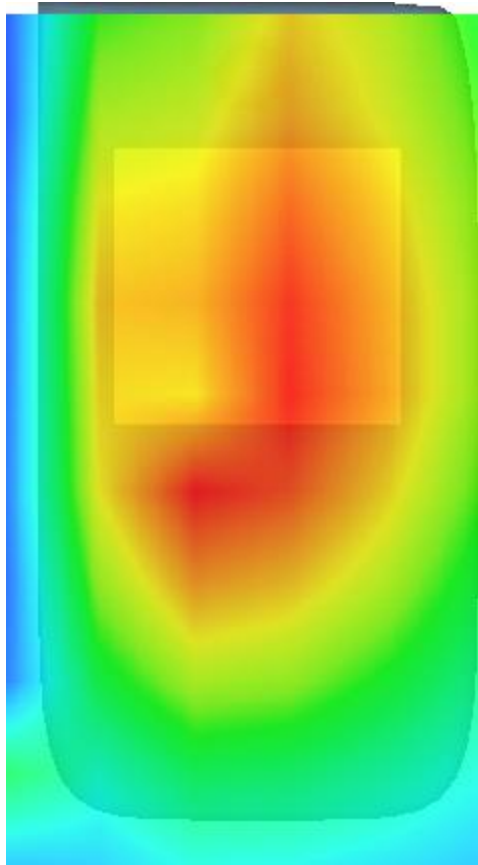
Maximum location: X=6.00, Y=5.00

SAR Peak: 1.06 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.433015 |
| SAR 1g (W/Kg) | 0.762906 |

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| SAR (W/Kg) | 1.5532 | 0.8006 | 0.3347 | 0.4544 | 0.1798 | 0.2474 | 0.1093 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 8 minutes 11 seconds

A. Experimental conditions.

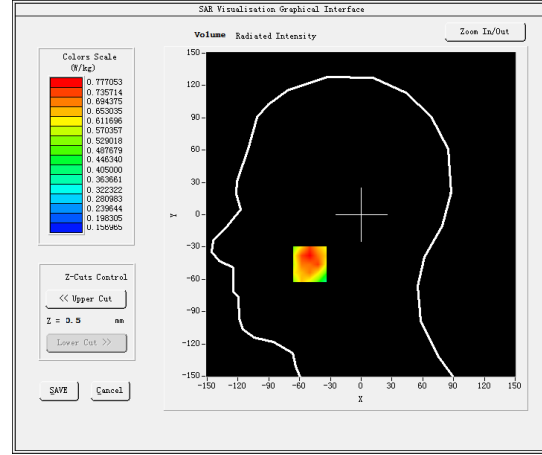
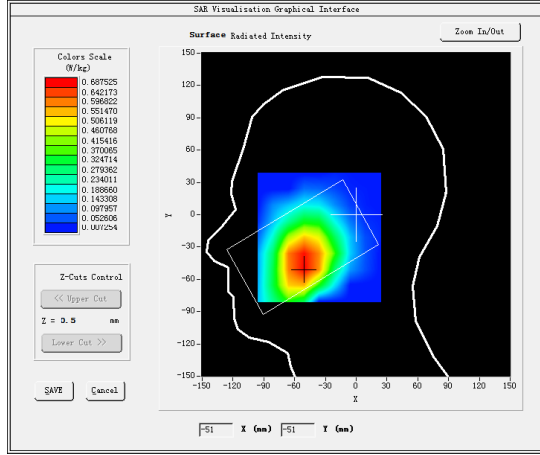
| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Right head</u> |
| <u>Device Position</u> | <u>Cheek</u> |
| <u>Band</u> | <u>CUSTOM (GPRS1900 4Tx)</u> |
| <u>Channels</u> | <u>Middle</u> |
| <u>Signal</u> | <u>Duty Cycle: 2.00 (Crest factor: 2.0)</u> |
| <u>Conversion factor</u> | <u>4.63</u> |

B. SAR Measurement Results

| | |
|---|-------------|
| Frequency (MHz) | 1880.000000 |
| Relative permittivity (real part) | 39.914200 |
| Relative permittivity (imaginary part) | 13.434300 |
| Conductivity (S/m) | 1.403138 |
| Variation (%) | 0.290000 |

SURFACE SAR

VOLUME SAR

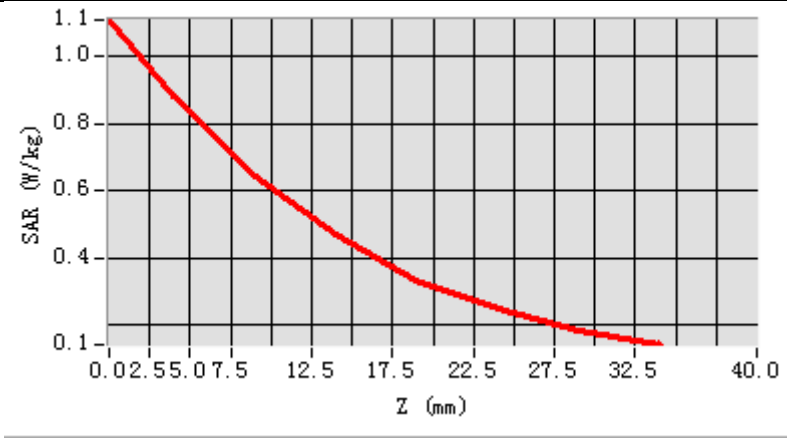


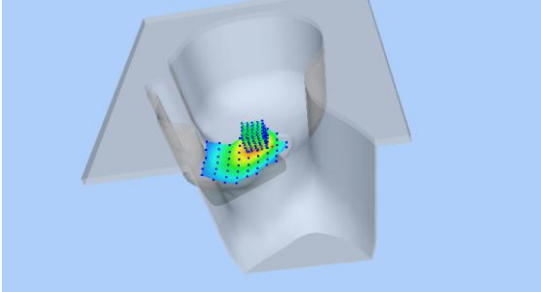
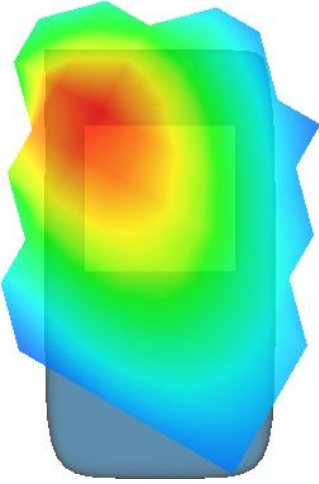
Maximum location: X=-50.00, Y=-46.00

SAR Peak: 1.11 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.585147 |
| SAR 1g (W/Kg) | 0.666552 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 1.1082 | 0.8809 | 0.6442 | 0.4730 | 0.3316 | 0.2502 | 0.1862 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 4

Rear-side-middle

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 8 minutes 39 seconds

A. Experimental conditions.

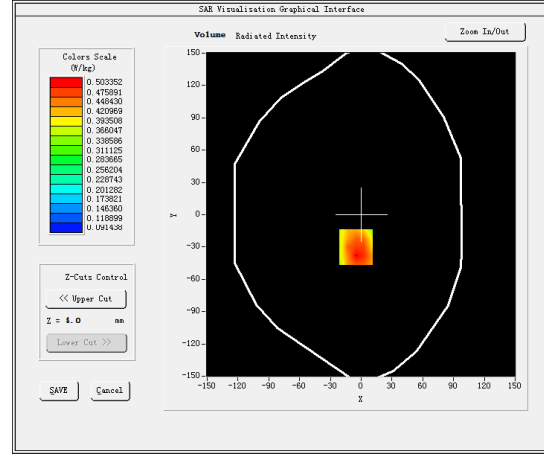
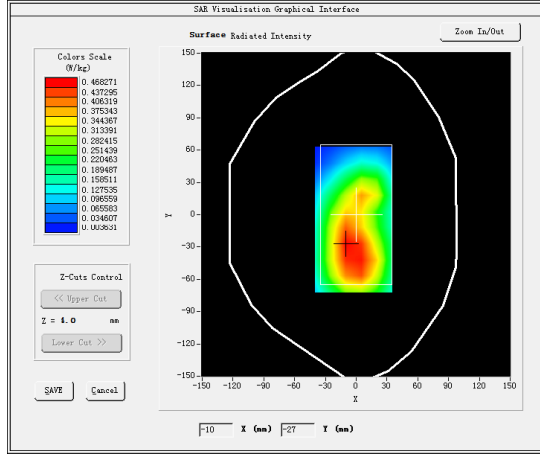
| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Validation plane</u> |
| <u>Device Position</u> | <u>Body</u> |
| <u>Band</u> | <u>CUSTOM (GPRS1900 4Tx)</u> |
| <u>Channels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

B. SAR Measurement Results

| | |
|---|-------------|
| Frequency (MHz) | 1880.000000 |
| Relative permittivity (real part) | 53.356098 |
| Relative permittivity (imaginary part) | 14.668600 |
| Conductivity (S/m) | 1.532054 |
| Variation (%) | 3.280000 |

SURFACE SAR

VOLUME SAR

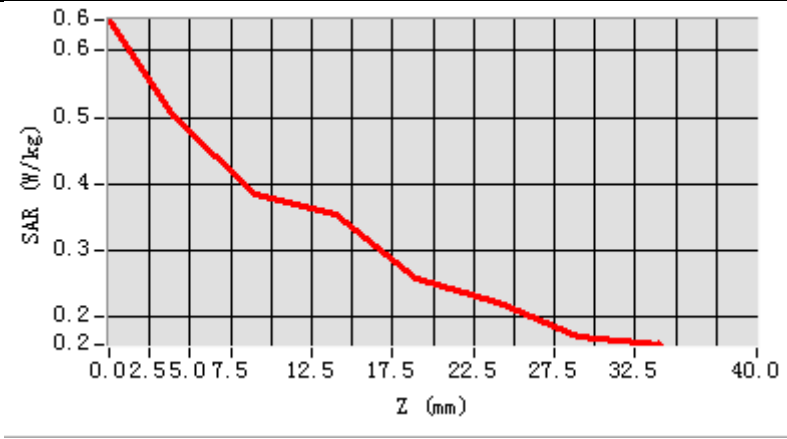


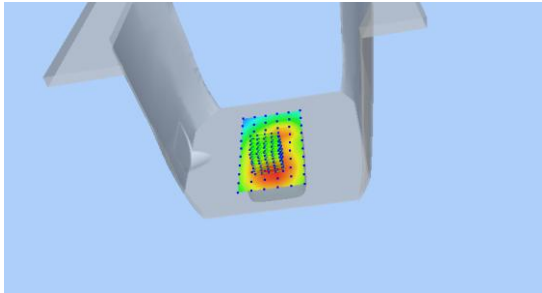
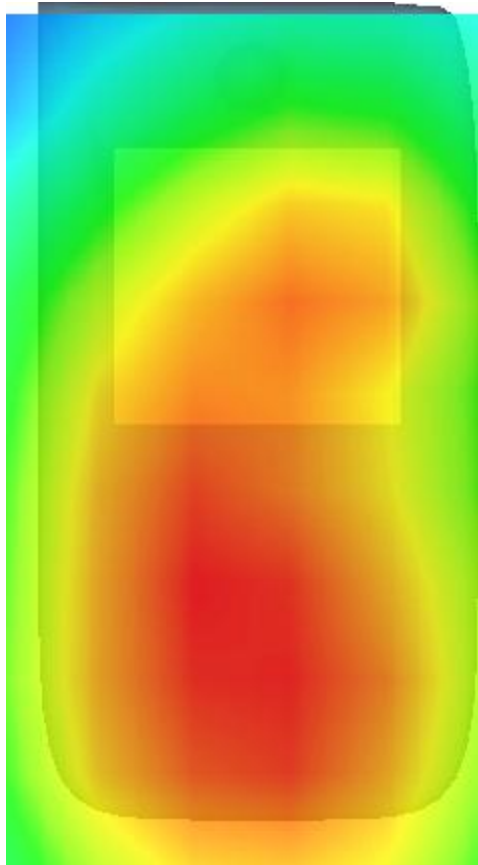
Maximum location: X=-5.00, Y=-30.00

SAR Peak: 0.64 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.379376 |
| SAR 1g (W/Kg) | 0.495274 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 0.6464 | 0.5034 | 0.3838 | 0.3563 | 0.2573 | 0.2228 | 0.1699 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 5

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 8 minutes 7 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Right head</u> |
| <u>Device Position</u> | <u>Tilt</u> |
| <u>Band</u> | <u>Band2 WCDMA1900</u> |
| <u>Channels</u> | <u>Low</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.78</u> |

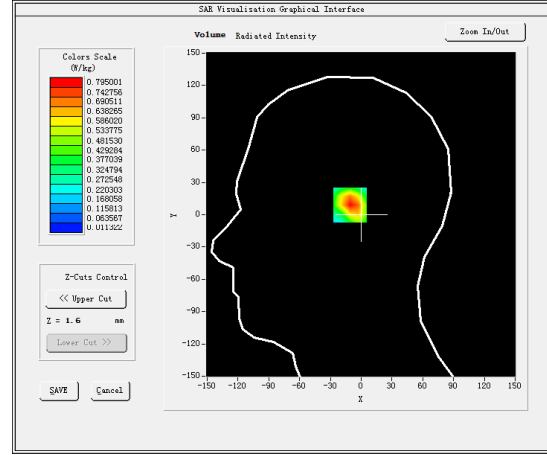
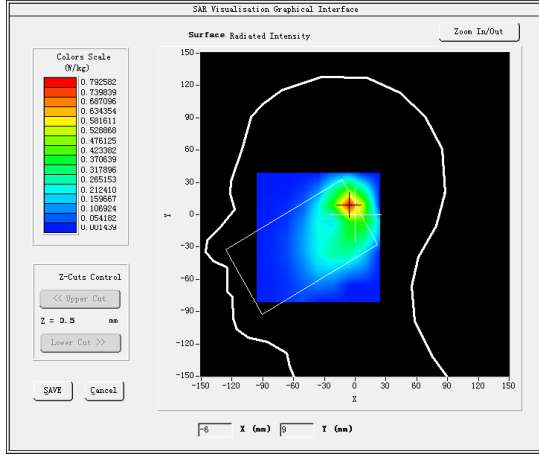
B. SAR Measurement Results

Lower Band SAR (Channel 9262):

| | |
|---|-------------|
| Frequency (MHz) | 1852.400024 |
| Relative permittivity (real part) | 39.843739 |
| Relative permittivity (imaginary part) | 13.323660 |
| Conductivity (S/m) | 1.371153 |
| Variation (%) | 3.910000 |

SURFACE SAR

VOLUME SAR

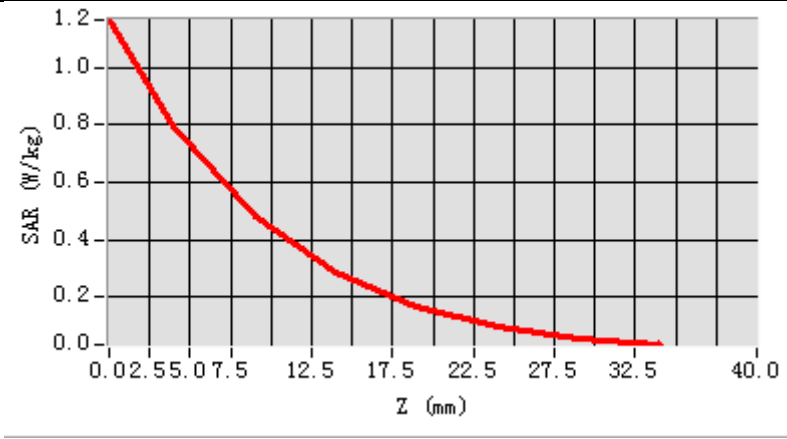


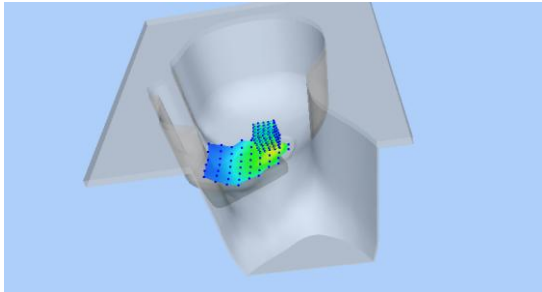
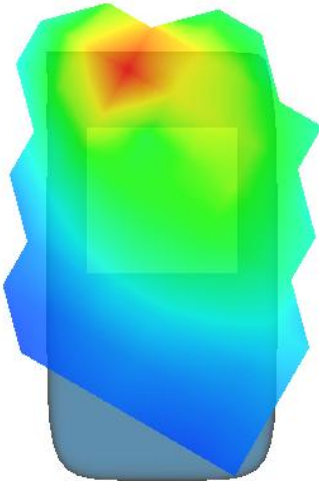
Maximum location: X=-6.00, Y=9.00

SAR Peak: 1.18 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.404375 |
| SAR 1g (W/Kg) | 0.644056 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 1.1654 | 0.7950 | 0.4802 | 0.2857 | 0.1678 | 0.0994 | 0.0591 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 6

Top-side-low

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 10 minutes 12 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Validation plane</u> |
| <u>Device Position</u> | <u>Body</u> |
| <u>Band</u> | <u>Band2 WCDMA1900</u> |
| <u>Channels</u> | <u>Low</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.63</u> |

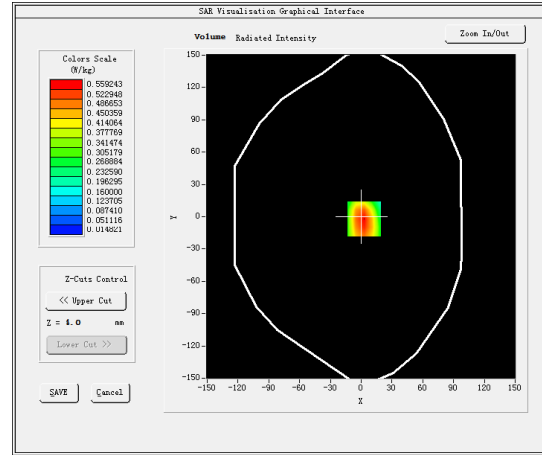
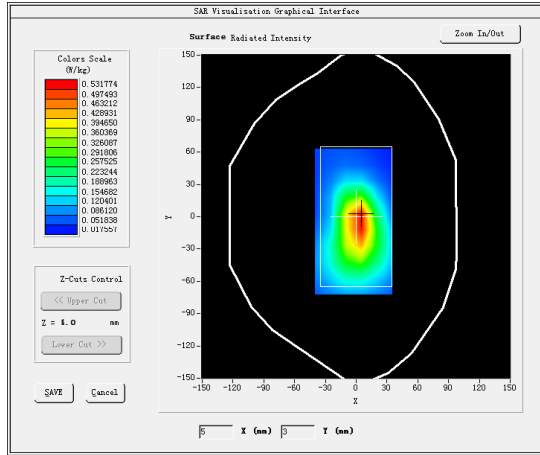
B. SAR Measurement Results

Lower Band SAR (Channel 9262):

| | |
|---|-------------|
| Frequency (MHz) | 1852.400024 |
| Relative permittivity (real part) | 53.256340 |
| Relative permittivity (imaginary part) | 14.499960 |
| Conductivity (S/m) | 1.492207 |
| Variation (%) | 0.170000 |

SURFACE SAR

VOLUME SAR

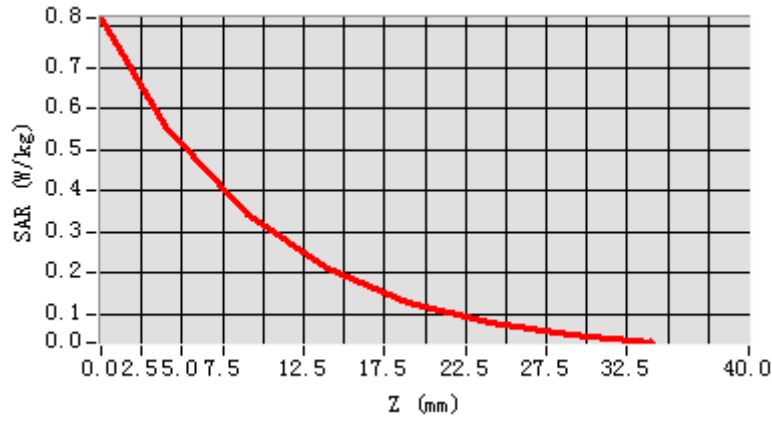


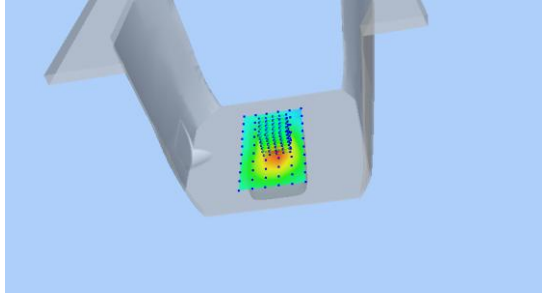
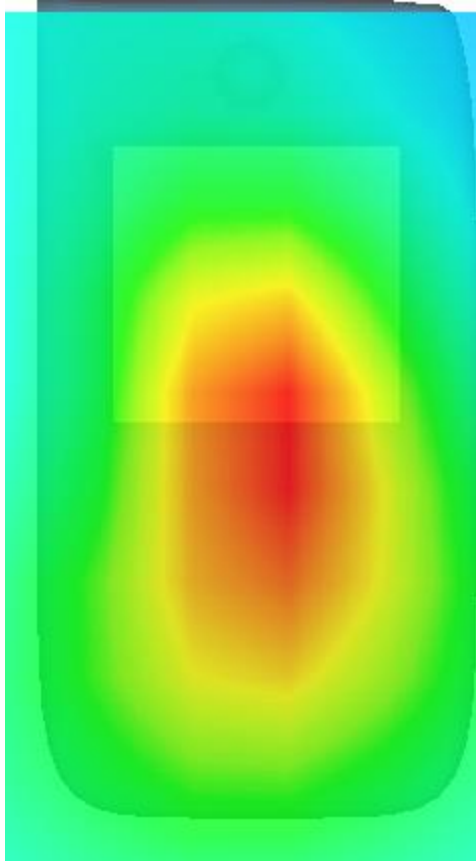
Maximum location: X=3.00, Y=-2.00

SAR Peak: 0.82 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.308015 |
| SAR 1g (W/Kg) | 0.633292 |

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| SAR (W/Kg) | 0.8208 | 0.5592 | 0.3411 | 0.2123 | 0.1297 | 0.0800 | 0.0490 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 7

Type: Phone measurement (Complete)

Date of measurement: 15/6/2017

Measurement duration: 10 minutes 16 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Left head</u> |
| <u>Device Position</u> | <u>Cheek</u> |
| <u>Band</u> | <u>Band4 WCDMA1700</u> |
| <u>Channels</u> | <u>High</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.01</u> |

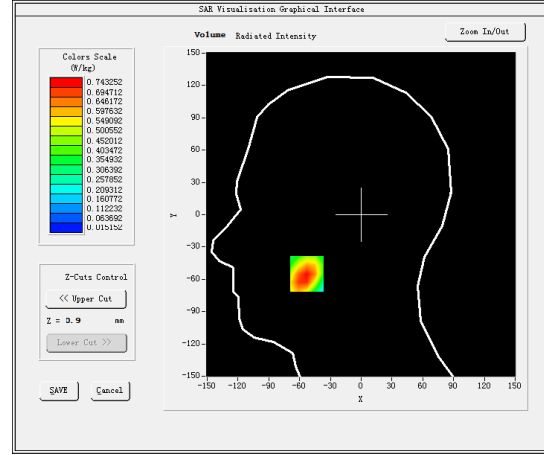
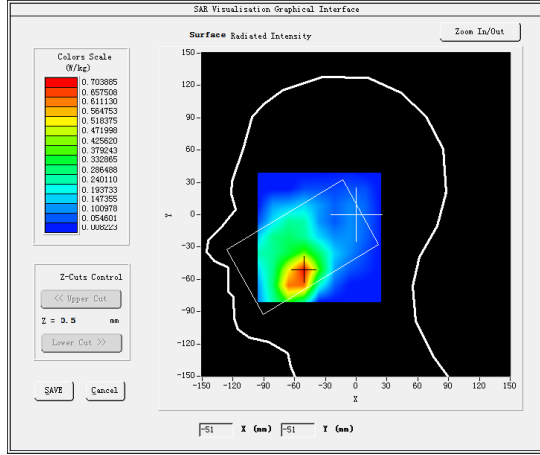
B. SAR Measurement Results

Middle Band SAR (Channel 1513):

| | |
|---|-------------|
| Frequency (MHz) | 1752.600000 |
| Relative permittivity (real part) | 39.768299 |
| Relative permittivity (imaginary part) | 14.198700 |
| Conductivity (S/m) | 1.366230 |
| Variation (%) | 1.300000 |

SURFACE SAR

VOLUME SAR

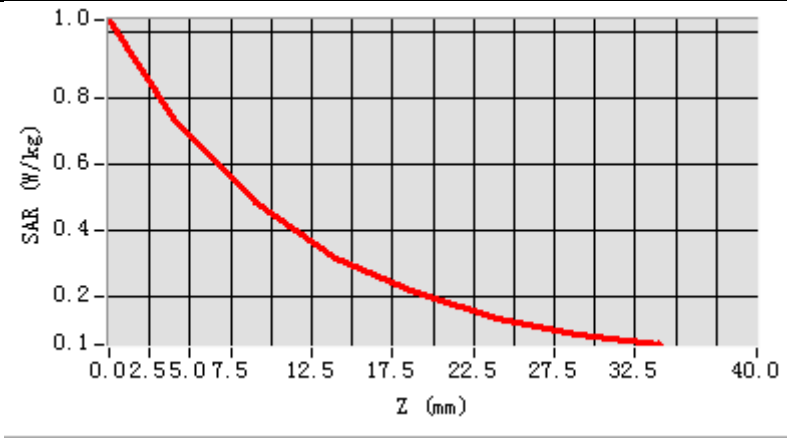


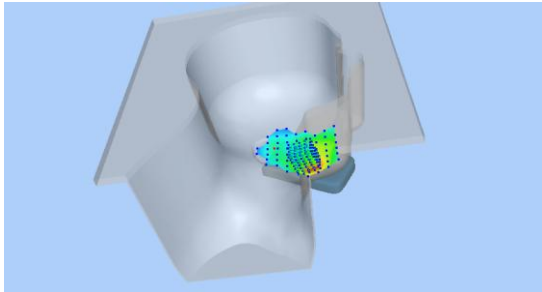
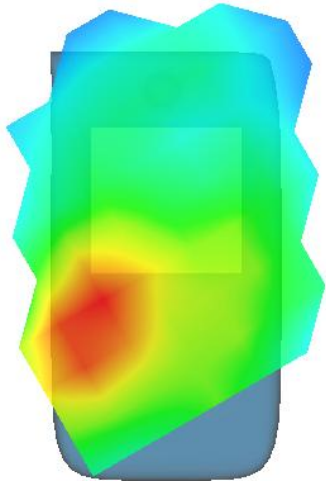
Maximum location: X=-53.00, Y=-55.00

SAR Peak: 1.08 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.297540 |
| SAR 1g (W/Kg) | 0.430169 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 1.0372 | 0.7433 | 0.4883 | 0.3200 | 0.2143 | 0.1381 | 0.0906 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 8

Rear-side-middle

Type: Phone measurement (Complete)

Date of measurement: 15/6/2017

Measurement duration: 10 minutes 50 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Validation plane</u> |
| <u>Device Position</u> | <u>Body</u> |
| <u>Band</u> | <u>Band4 WCDMA1700</u> |
| <u>Channels</u> | <u>High</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.16</u> |

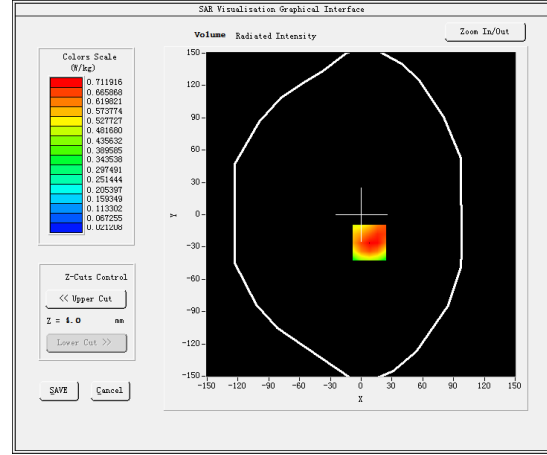
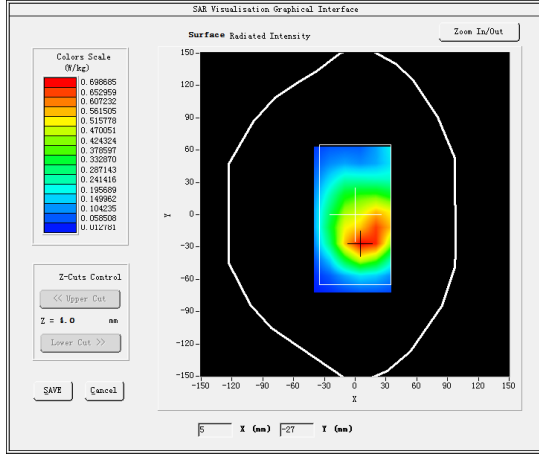
B. SAR Measurement Results

Middle Band SAR (Channel 1513):

| | |
|---|-------------|
| Frequency (MHz) | 1752.600000 |
| Relative permittivity (real part) | 53.306900 |
| Relative permittivity (imaginary part) | 15.297200 |
| Conductivity (S/m) | 1.471931 |
| Variation (%) | -0.630000 |

SURFACE SAR

VOLUME SAR

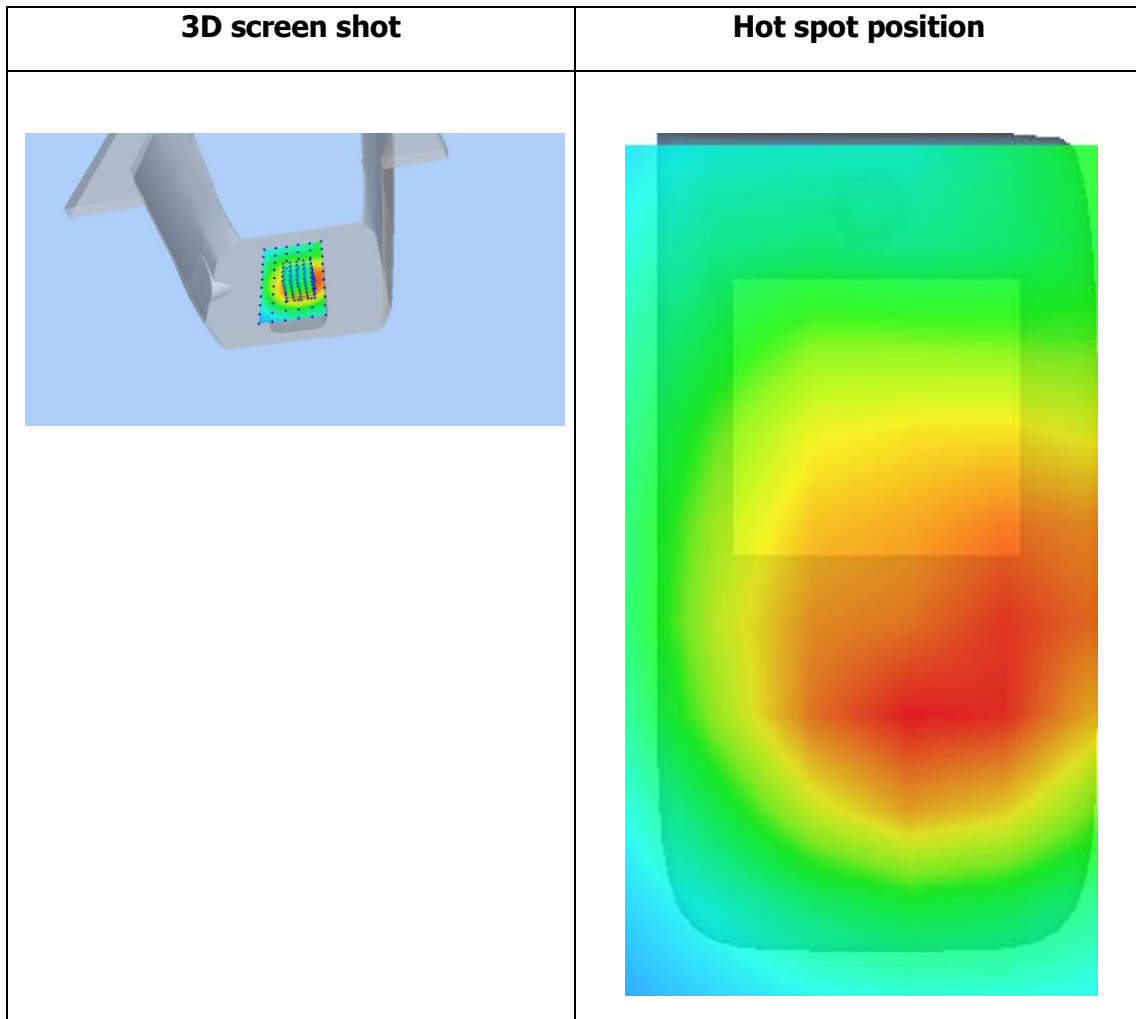
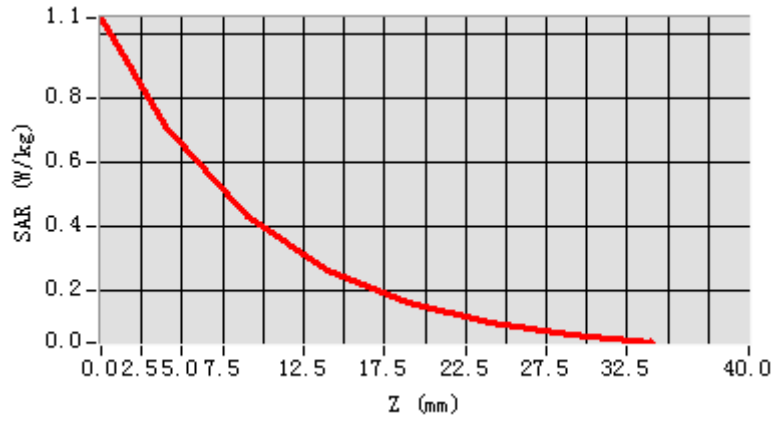


Maximum location: X=8.00, Y=-26.00

SAR Peak: 1.06 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.337276 |
| SAR 1g (W/Kg) | 0.485295 |

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| SAR (W/Kg) | 1.0523 | 0.7119 | 0.4307 | 0.2643 | 0.1614 | 0.0986 | 0.0599 |



MEASUREMENT 9

Type: Phone measurement (Complete)

Date of measurement: 10/6/2017

Measurement duration: 8 minutes 12 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Left head</u> |
| <u>Device Position</u> | <u>Cheek</u> |
| <u>Band</u> | <u>Band5 WCDMA850</u> |
| <u>Channels</u> | <u>Middle</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.93</u> |

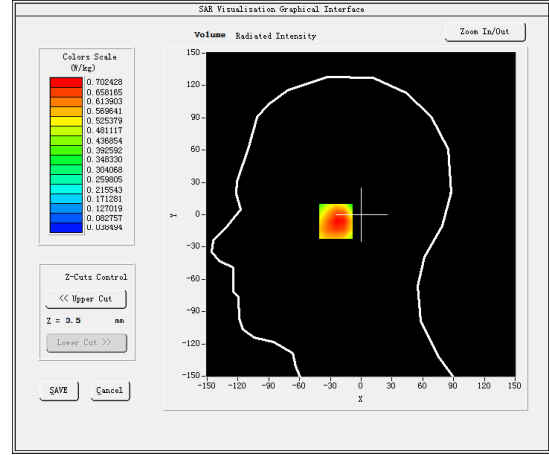
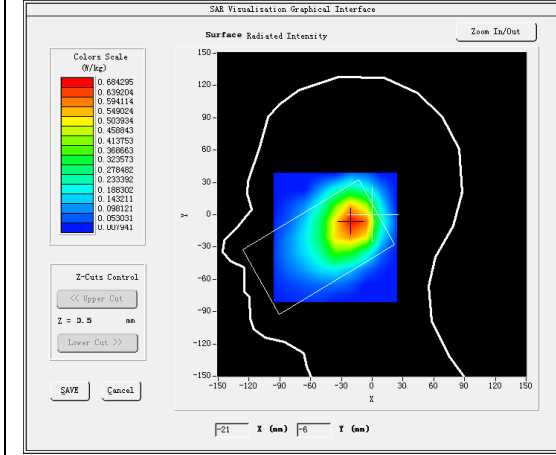
B. SAR Measurement Results

Middle Band SAR (Channel 4182):

| | |
|---|------------|
| Frequency (MHz) | 836.400024 |
| Relative permittivity (real part) | 40.234680 |
| Relative permittivity (imaginary part) | 19.852501 |
| Conductivity (S/m) | 0.922480 |
| Variation (%) | 0.860000 |

SURFACE SAR

VOLUME SAR

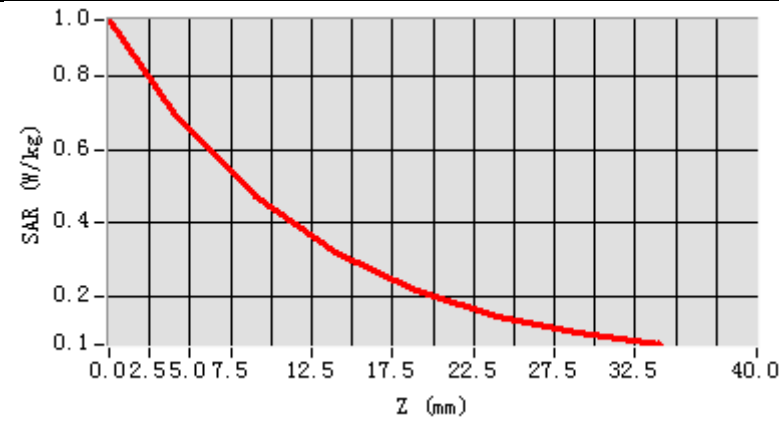


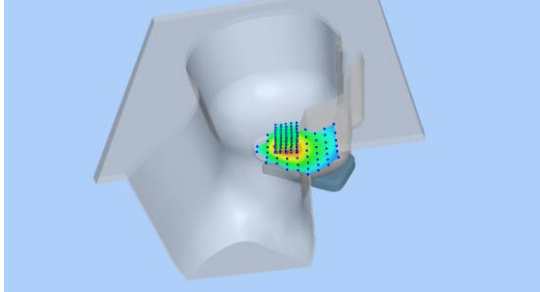
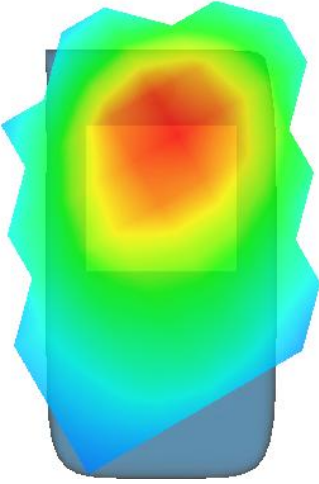
Maximum location: X=-19.00, Y=-6.00

SAR Peak: 1.00 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.446988 |
| SAR 1g (W/Kg) | 0.697497 |

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| SAR (W/Kg) | 0.9525 | 0.7024 | 0.4761 | 0.3213 | 0.2178 | 0.1488 | 0.1017 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 10

Rear-side-middle

Type: Phone measurement (Complete)

Date of measurement: 10/6/2017

Measurement duration: 10 minutes 1 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Validation plane</u> |
| <u>Device Position</u> | <u>Body</u> |
| <u>Band</u> | <u>Band5 WCDMA850</u> |
| <u>Channels</u> | <u>Middle</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>5.07</u> |

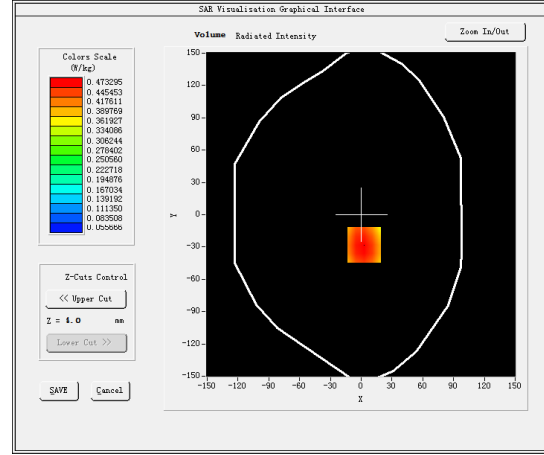
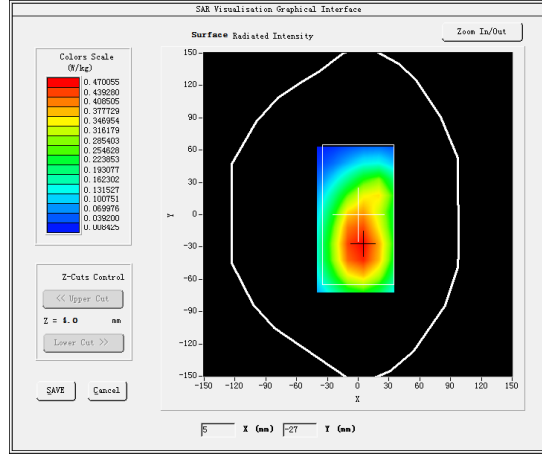
B. SAR Measurement Results

Middle Band SAR (Channel 4182):

| | |
|---|------------|
| Frequency (MHz) | 836.400024 |
| Relative permittivity (real part) | 53.916260 |
| Relative permittivity (imaginary part) | 21.316219 |
| Conductivity (S/m) | 0.990494 |
| Variation (%) | 2.400000 |

SURFACE SAR

VOLUME SAR

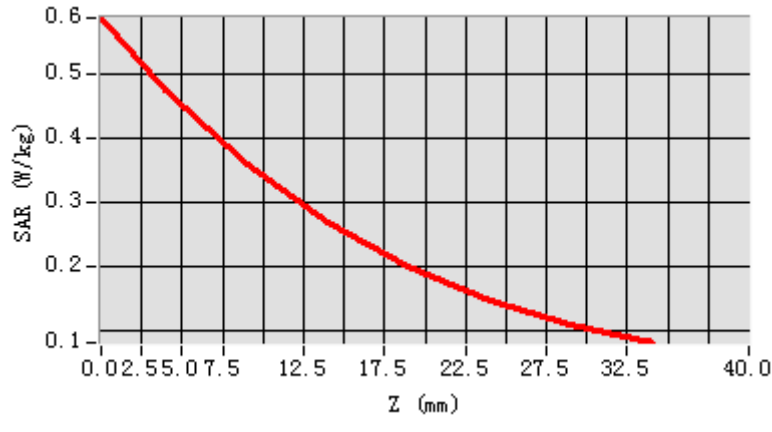


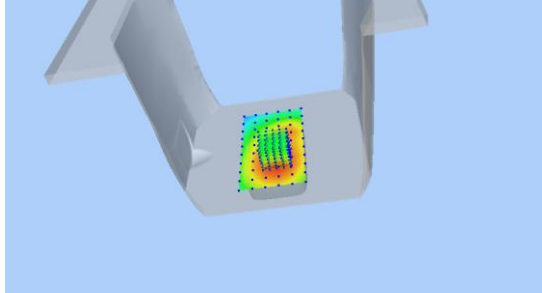
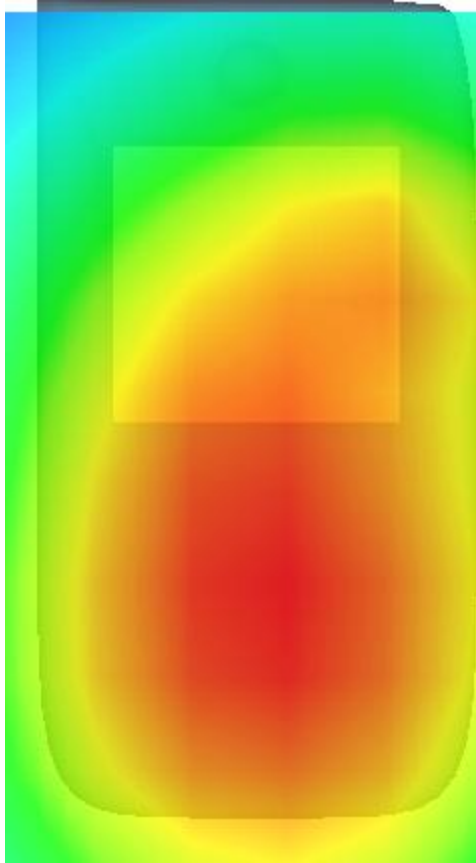
Maximum location: X=3.00, Y=-28.00

SAR Peak: 0.59 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.336590 |
| SAR 1g (W/Kg) | 0.467948 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 0.5867 | 0.4733 | 0.3574 | 0.2695 | 0.1987 | 0.1475 | 0.1091 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 11

20M-1RB#99

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 8 minutes 6 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Right head</u> |
| <u>Device Position</u> | <u>Cheek</u> |
| <u>Band</u> | <u>LTE band 2</u> |
| <u>Channels</u> | <u>High</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.63</u> |

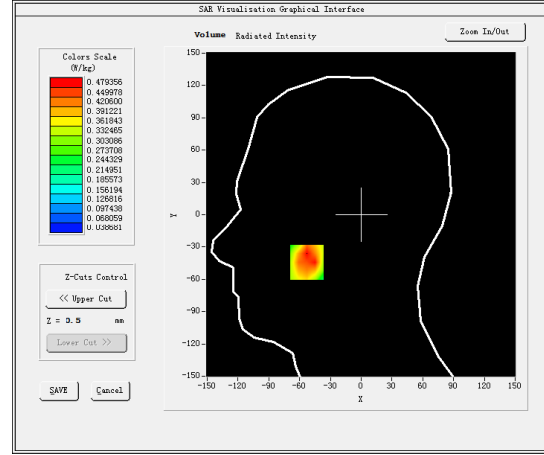
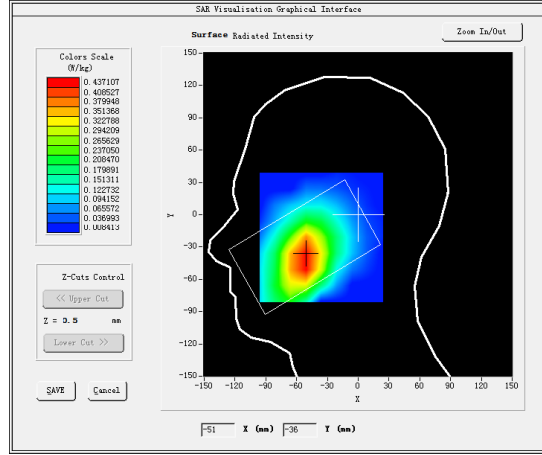
B. SAR Measurement Results

Higher Band SAR (Channel 19100):

| | |
|---|-------------|
| Frequency (MHz) | 1900.000000 |
| Relative permittivity (real part) | 39.982151 |
| Relative permittivity (imaginary part) | 13.318046 |
| Conductivity (S/m) | 1.411277 |
| Variation (%) | -0.430000 |

SURFACE SAR

VOLUME SAR

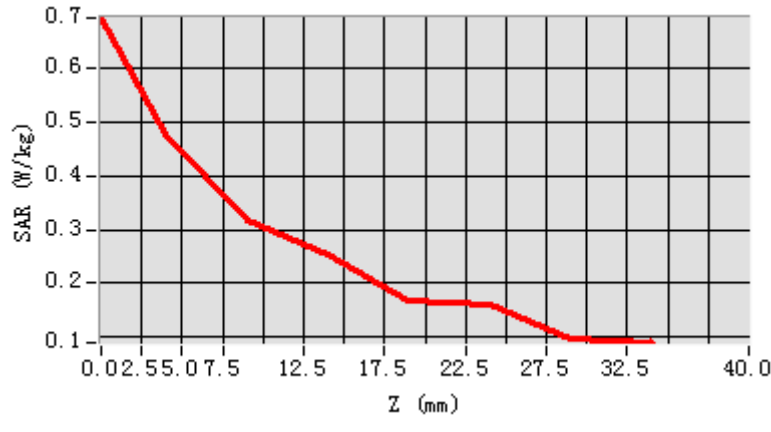


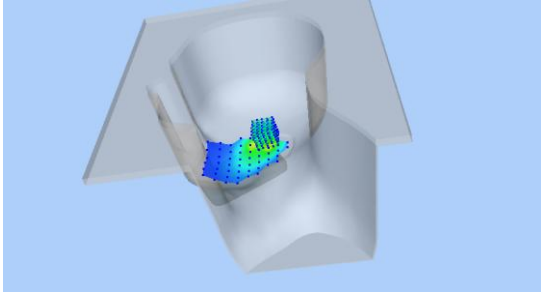
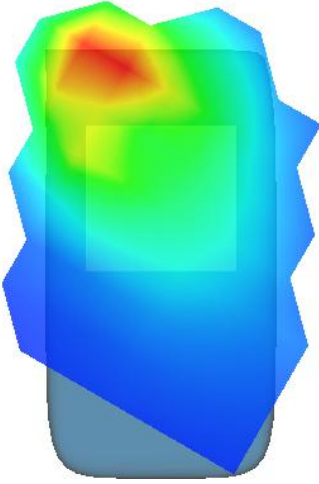
Maximum location: X=-53.00, Y=-44.00

SAR Peak: 0.69 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.222687 |
| SAR 1g (W/Kg) | 0.425654 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 0.6947 | 0.4794 | 0.3185 | 0.2521 | 0.1657 | 0.1599 | 0.0965 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 12

Rear-side-20M-25RB#25-high

Type: Phone measurement (Complete)

Date of measurement: 24/5/2017

Measurement duration: 8 minutes 25 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Validation plane</u> |
| <u>Device Position</u> | <u>Body</u> |
| <u>Band</u> | <u>LTE band 2</u> |
| <u>Channels</u> | <u>High</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.78</u> |

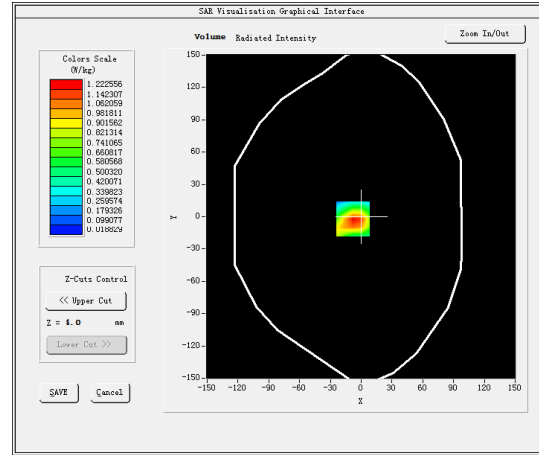
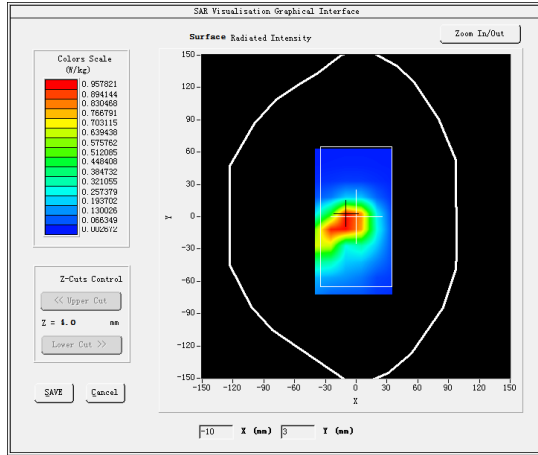
B. SAR Measurement Results

Higher Band SAR (Channel 19100):

| | |
|---|-------------|
| Frequency (MHz) | 1900.000000 |
| Relative permittivity (real part) | 53.385151 |
| Relative permittivity (imaginary part) | 14.756100 |
| Conductivity (S/m) | 1.561277 |
| Variation (%) | 0.240000 |

SURFACE SAR

VOLUME SAR

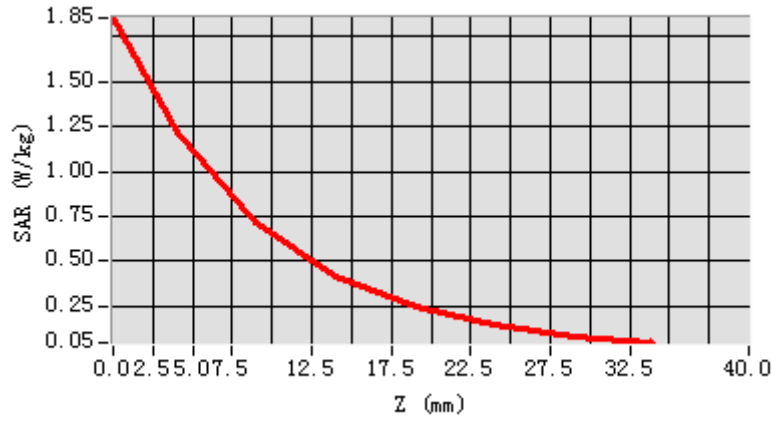


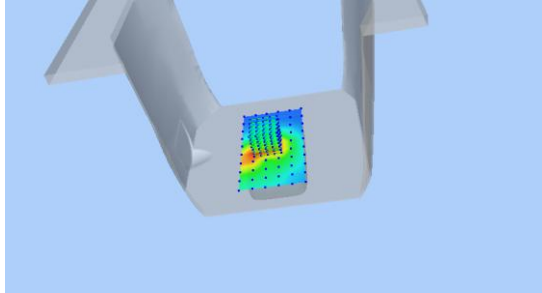
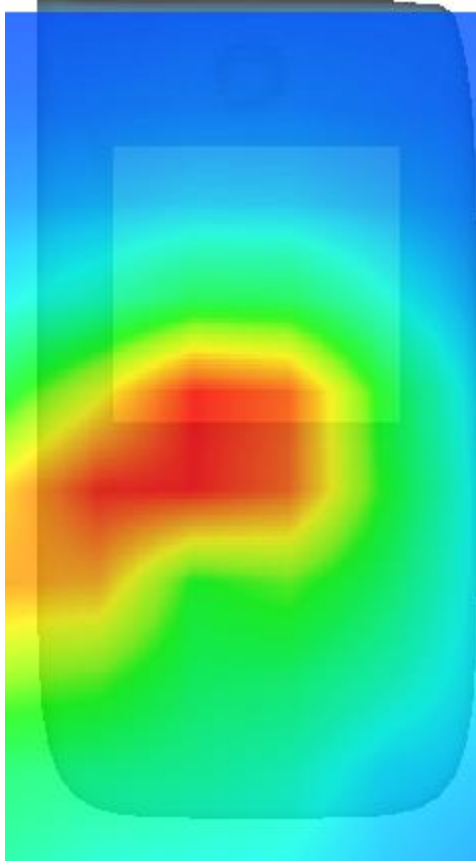
Maximum location: X=-8.00, Y=-2.00

SAR Peak: 1.96 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.637972 |
| SAR 1g (W/Kg) | 0.720328 |

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| SAR (W/Kg) | 1.8533 | 1.2226 | 0.7110 | 0.4196 | 0.2455 | 0.1430 | 0.0837 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 13

20M-1RB#99

Type: Phone measurement (Complete)

Date of measurement: 15/6/2017

Measurement duration: 8 minutes 9 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Right head</u> |
| <u>Device Position</u> | <u>Cheek</u> |
| <u>Band</u> | <u>LTE band 4</u> |
| <u>Channels</u> | <u>High</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.01</u> |

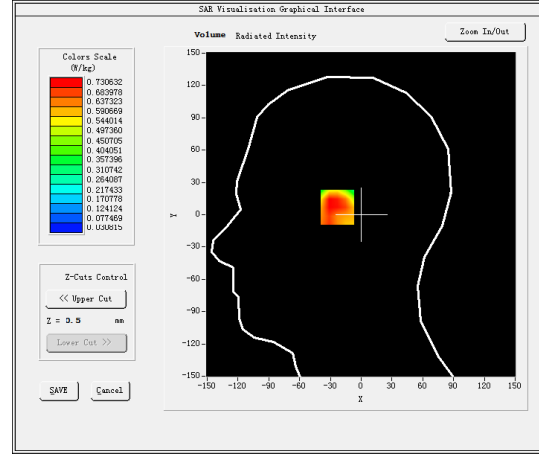
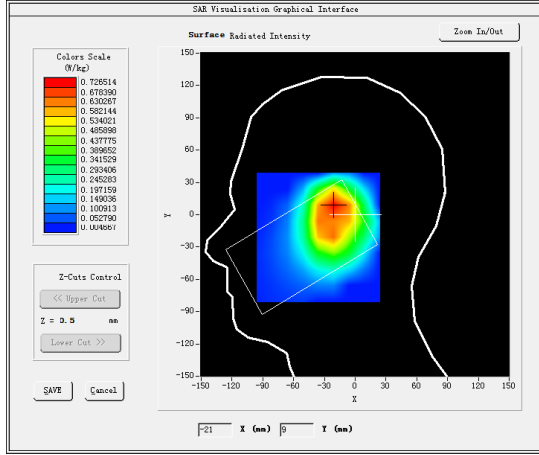
B. SAR Measurement Results

Higher Band SAR (Channel 20300):

| | |
|---|-------------|
| Frequency (MHz) | 1745.000000 |
| Relative permittivity (real part) | 40.175499 |
| Relative permittivity (imaginary part) | 14.048900 |
| Conductivity (S/m) | 1.365475 |
| Variation (%) | 0.360000 |

SURFACE SAR

VOLUME SAR

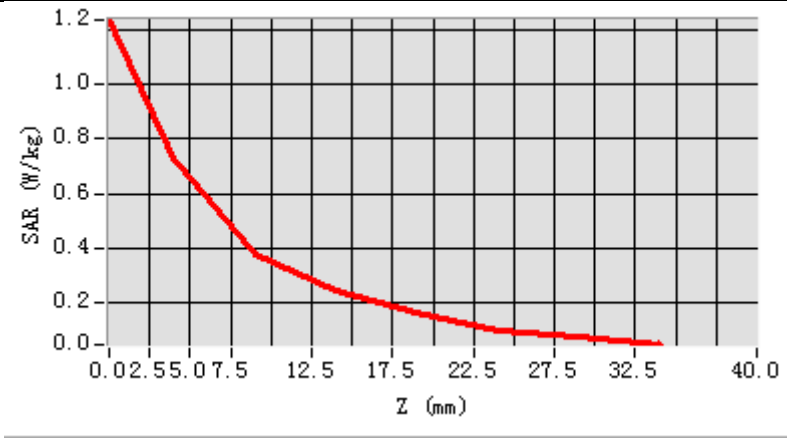


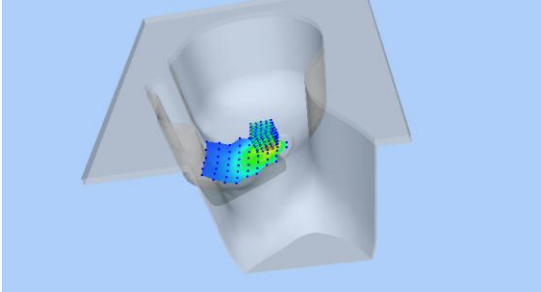
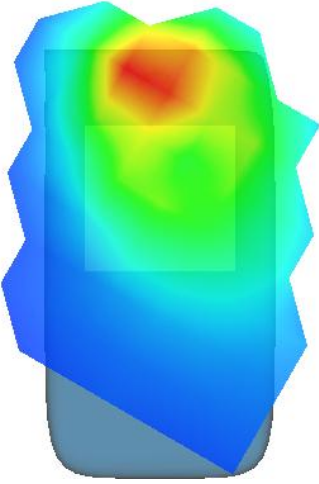
Maximum location: X=-20.00, Y=8.00

SAR Peak: 1.22 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.470358 |
| SAR 1g (W/Kg) | 0.705315 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 1.2245 | 0.7306 | 0.3794 | 0.2418 | 0.1660 | 0.0981 | 0.0765 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 14

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

Type: Phone measurement (Complete)

Date of measurement: 15/6/2017

Measurement duration: 8 minutes 16 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Validation plane</u> |
| <u>Device Position</u> | <u>Body</u> |
| <u>Band</u> | <u>LTE band 4</u> |
| <u>Channels</u> | <u>High</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.16</u> |

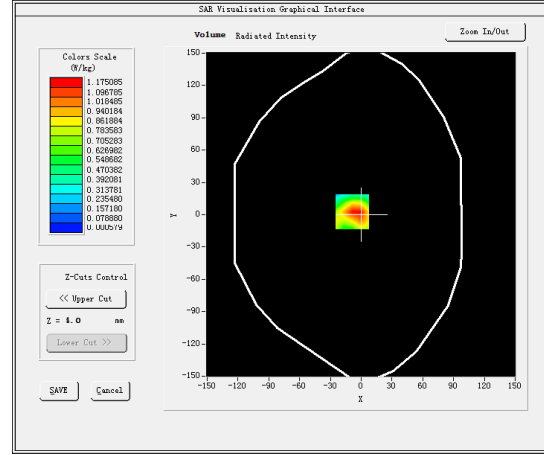
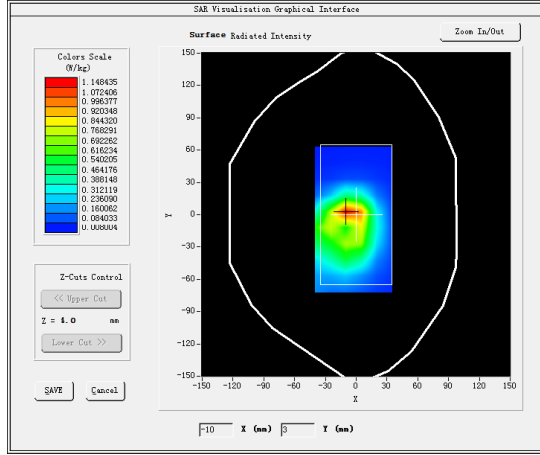
B. SAR Measurement Results

Higher Band SAR (Channel 20300):

| | |
|---|-------------|
| Frequency (MHz) | 1745.000000 |
| Relative permittivity (real part) | 53.211948 |
| Relative permittivity (imaginary part) | 15.353750 |
| Conductivity (S/m) | 1.492299 |
| Variation (%) | -1.770000 |

SURFACE SAR

VOLUME SAR

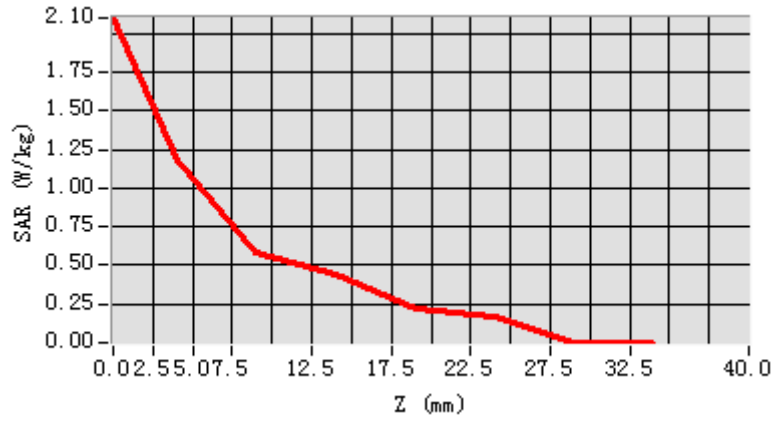


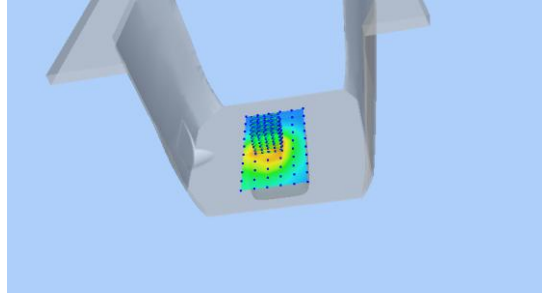
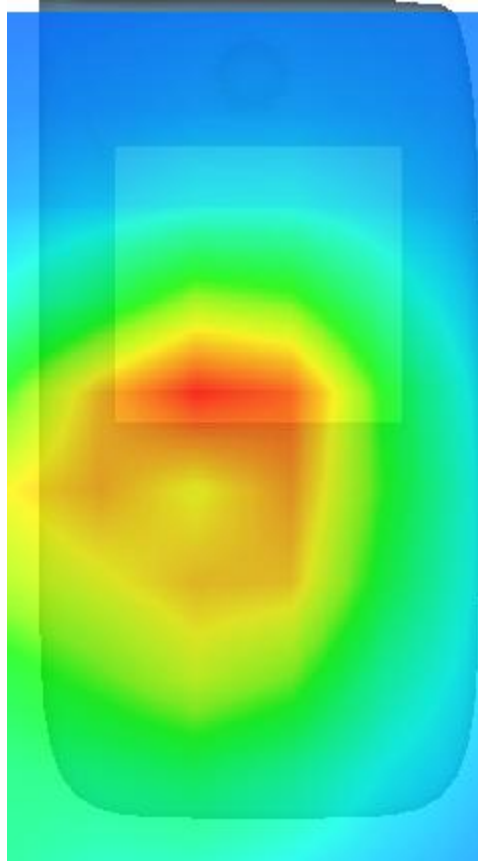
Maximum location: X=-9.00, Y=3.00

SAR Peak: 1.90 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.522758 |
| SAR 1g (W/Kg) | 0.700776 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 2.1009 | 1.1751 | 0.5837 | 0.4434 | 0.2207 | 0.1635 | 0.0006 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 15

10M-25RB#25

Type: Phone measurement (Complete)

Date of measurement: 10/6/2017

Measurement duration: 8 minutes 9 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Left head</u> |
| <u>Device Position</u> | <u>Cheek</u> |
| <u>Band</u> | <u>LTE band 5</u> |
| <u>Channels</u> | <u>High</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.65</u> |

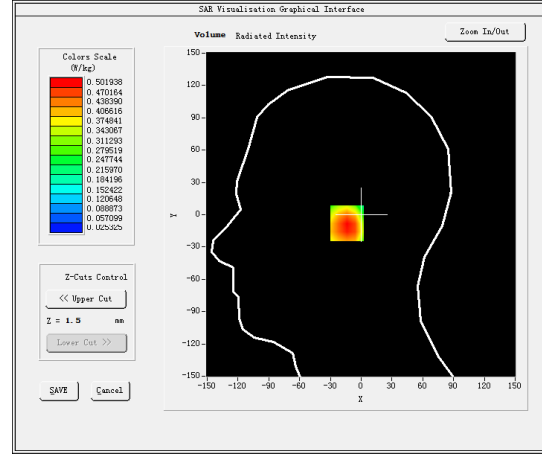
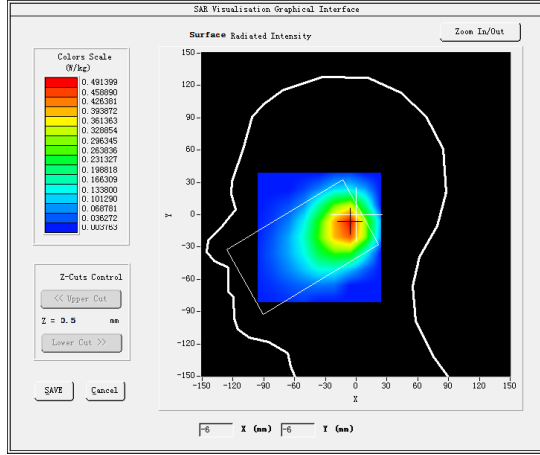
B. SAR Measurement Results

Higher Band SAR (Channel 20600):

| | |
|---|------------|
| Frequency (MHz) | 843.500000 |
| Relative permittivity (real part) | 40.140049 |
| Relative permittivity (imaginary part) | 19.885000 |
| Conductivity (S/m) | 0.931833 |
| Variation (%) | -0.910000 |

SURFACE SAR

VOLUME SAR

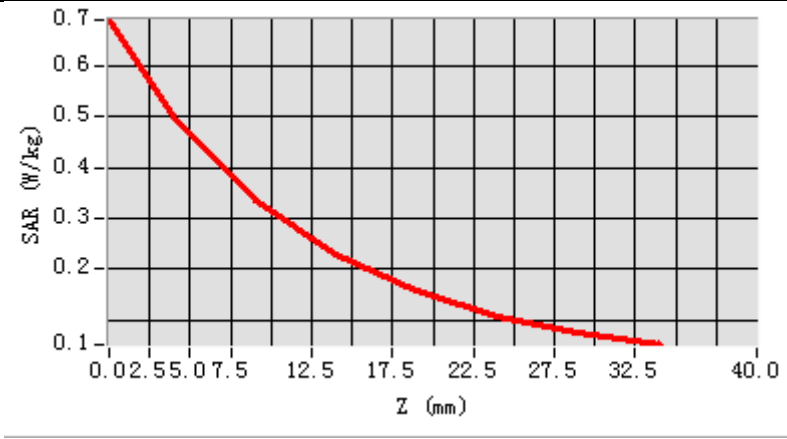


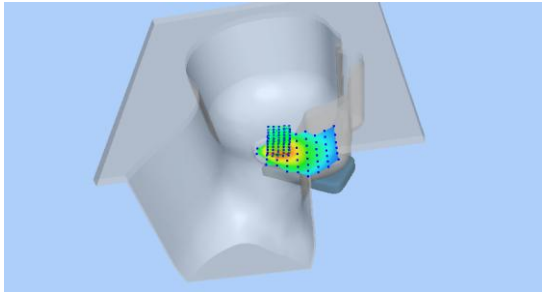
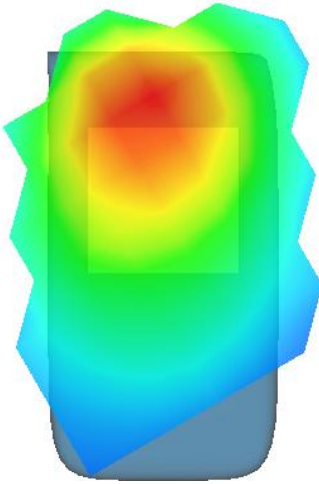
Maximum location: X=-7.00, Y=-8.00

SAR Peak: 0.72 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.316846 |
| SAR 1g (W/Kg) | 0.498574 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 0.6916 | 0.5019 | 0.3368 | 0.2299 | 0.1572 | 0.1079 | 0.0734 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 16

Rear-side-10M-25RB#25-high

Type: Phone measurement (Complete)

Date of measurement: 10/6/2017

Measurement duration: 9 minutes 32 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Validation plane</u> |
| <u>Device Position</u> | <u>Body</u> |
| <u>Band</u> | <u>LTE band 5</u> |
| <u>Channels</u> | <u>High</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.83</u> |

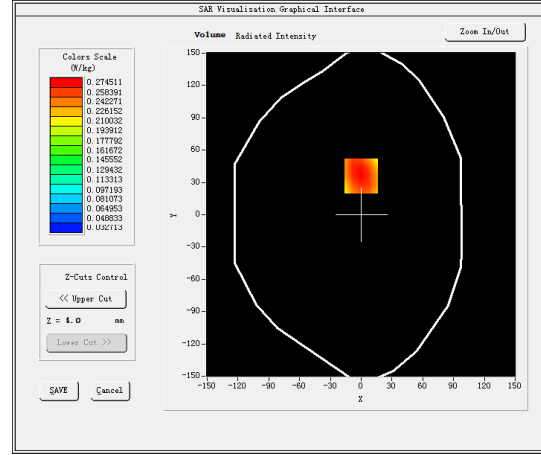
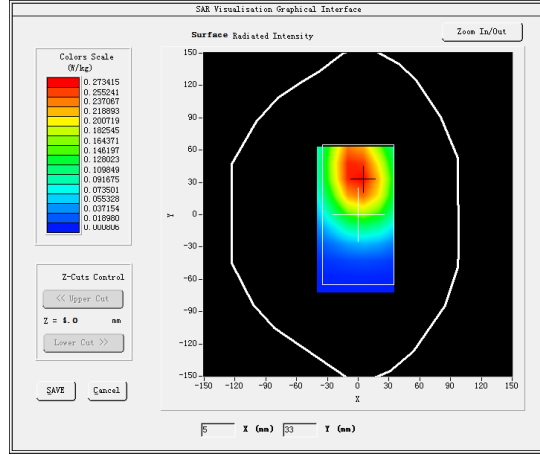
B. SAR Measurement Results

Higher Band SAR (Channel 20600):

| | |
|---|------------|
| Frequency (MHz) | 843.500000 |
| Relative permittivity (real part) | 53.800152 |
| Relative permittivity (imaginary part) | 21.331751 |
| Conductivity (S/m) | 0.999630 |
| Variation (%) | -1.490000 |

SURFACE SAR

VOLUME SAR

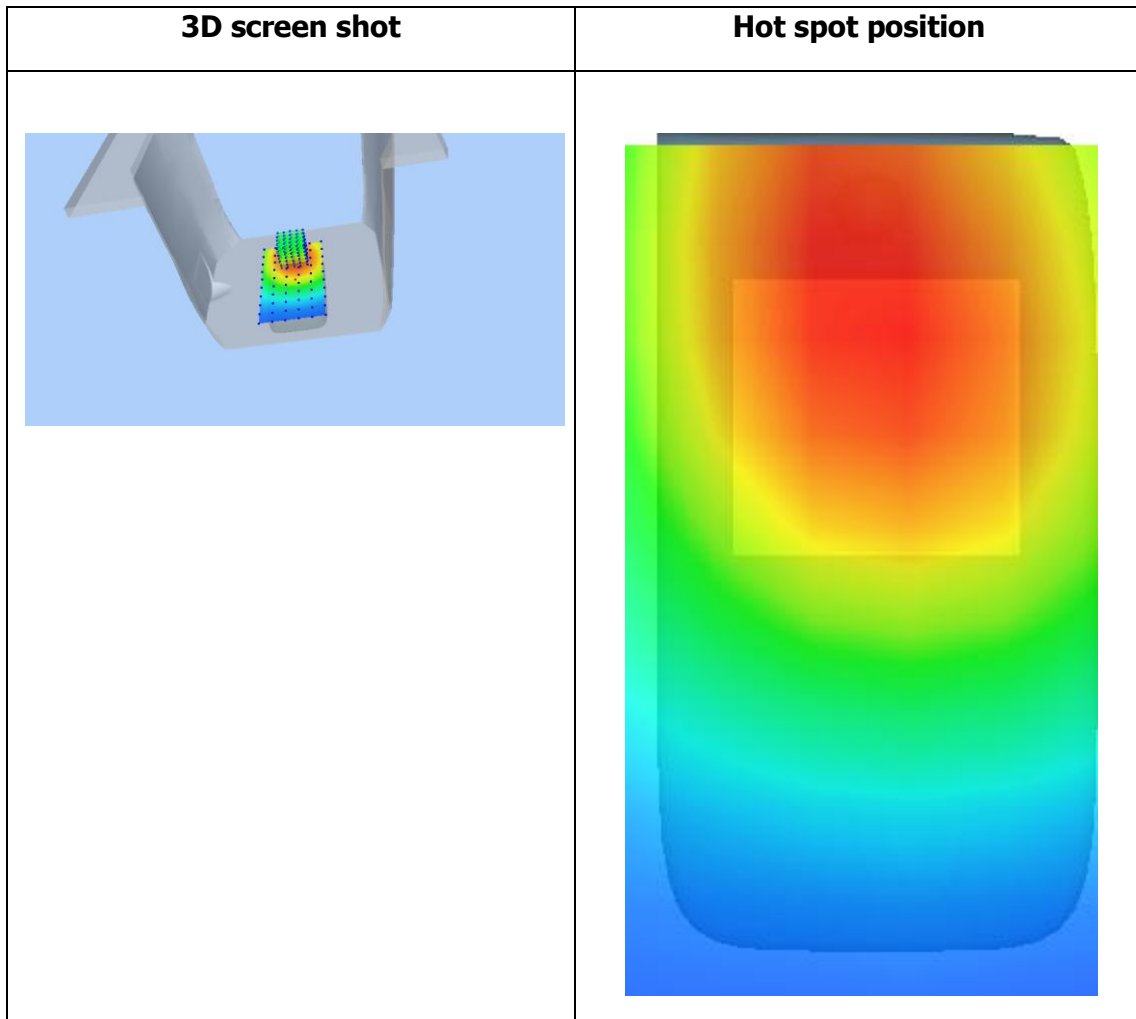
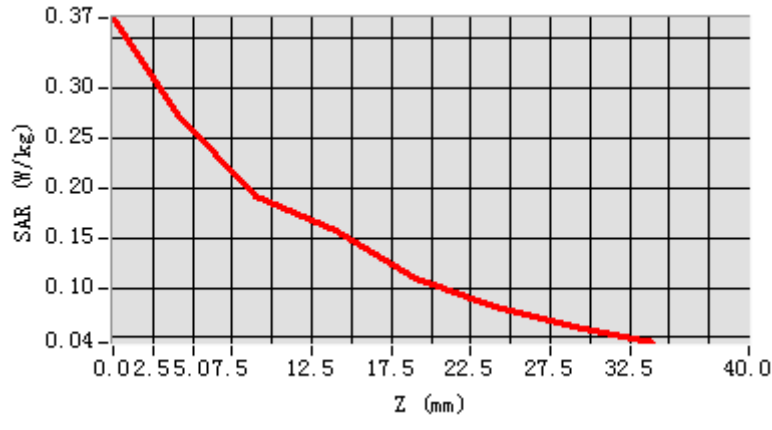


Maximum location: X=0.00, Y=36.00

SAR Peak: 0.37 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.191748 |
| SAR 1g (W/Kg) | 0.275318 |

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| SAR (W/Kg) | 0.3707 | 0.2745 | 0.1913 | 0.1569 | 0.1087 | 0.0814 | 0.0604 |



MEASUREMENT 17

20M-1RB#99

Type: Phone measurement (Complete)

Date of measurement: 8/6/2017

Measurement duration: 8 minutes 13 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Left head</u> |
| <u>Device Position</u> | <u>Cheek</u> |
| <u>Band</u> | <u>LTE band 7</u> |
| <u>Channels</u> | <u>Low</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.0</u> |

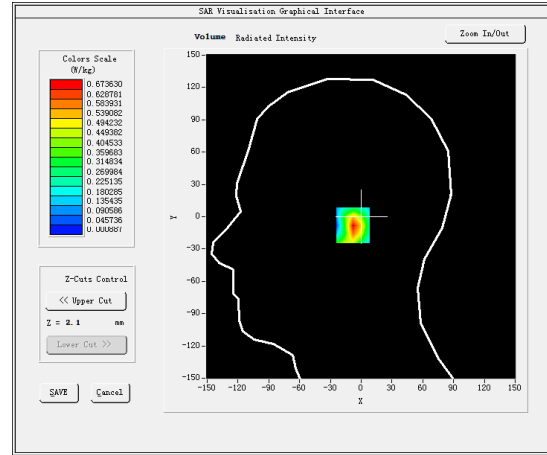
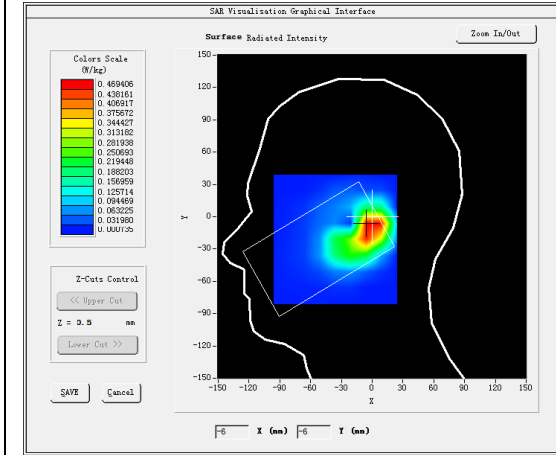
B. SAR Measurement Results

Higher Band SAR (Channel 20850):

| | |
|---|-------------|
| Frequency (MHz) | 2510.000000 |
| Relative permittivity (real part) | 38.582001 |
| Relative permittivity (imaginary part) | 13.554400 |
| Conductivity (S/m) | 1.927737 |
| Variation (%) | -0.510000 |

SURFACE SAR

VOLUME SAR

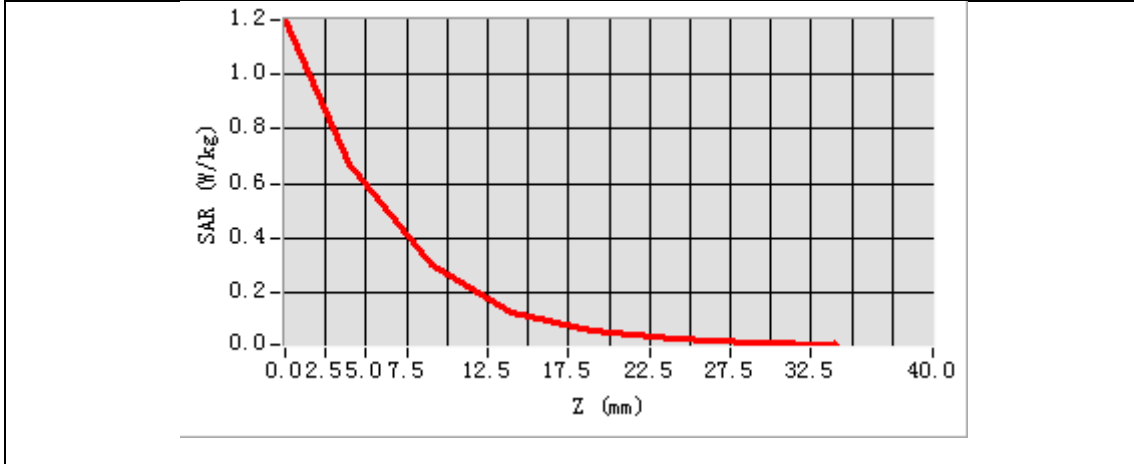


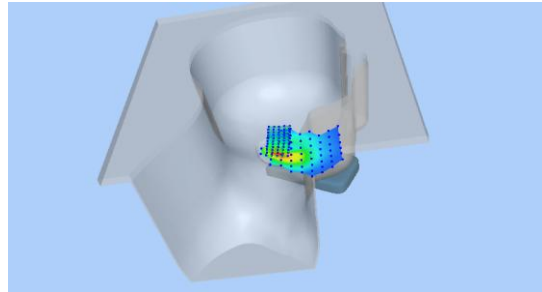
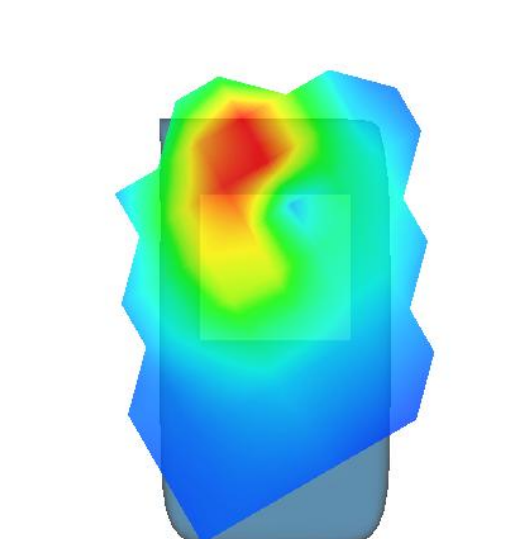
Maximum location: X=0.00, Y=-8.00

SAR Peak: 1.20 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.405011 |
| SAR 1g (W/Kg) | 0.647663 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 1.2023 | 0.6736 | 0.3012 | 0.1228 | 0.0605 | 0.0262 | 0.0122 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 18

Top-side-20M-1RB#99-low

Type: Phone measurement (Complete)

Date of measurement: 8/6/2017

Measurement duration: 10 minutes 34 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Validation plane</u> |
| <u>Device Position</u> | <u>Body</u> |
| <u>Band</u> | <u>LTE band 7</u> |
| <u>Channels</u> | <u>Low</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.11</u> |

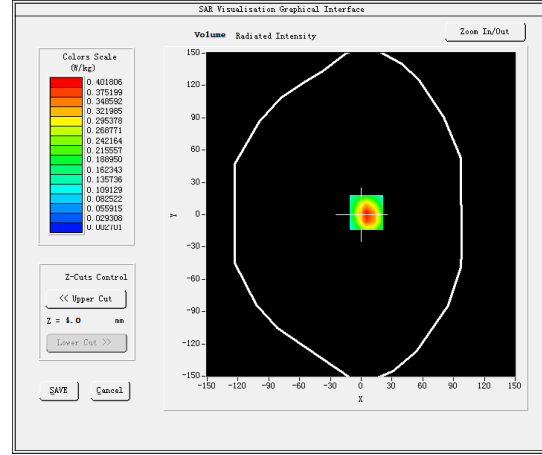
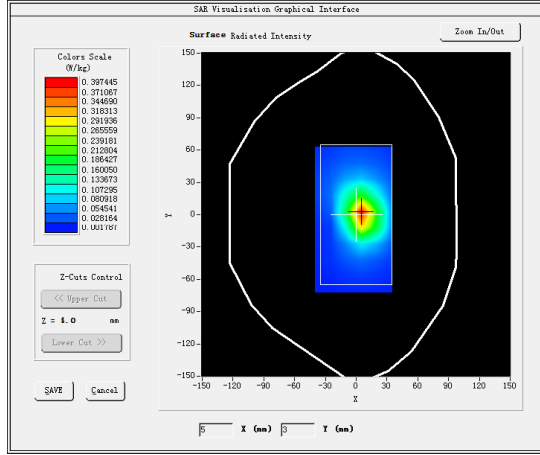
B. SAR Measurement Results

Lower Band SAR (Channel 20850):

| | |
|---|-------------|
| Frequency (MHz) | 2510.000000 |
| Relative permittivity (real part) | 52.502410 |
| Relative permittivity (imaginary part) | 14.481331 |
| Conductivity (S/m) | 2.021114 |
| Variation (%) | -1.530000 |

SURFACE SAR

VOLUME SAR

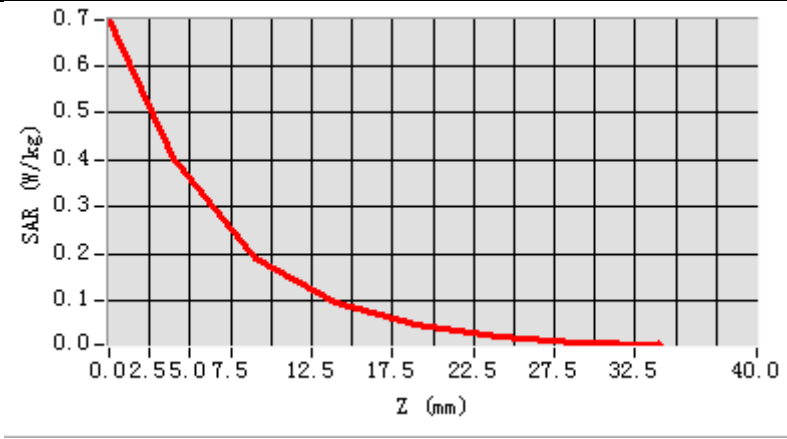


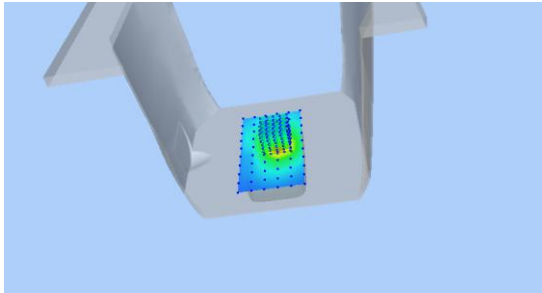
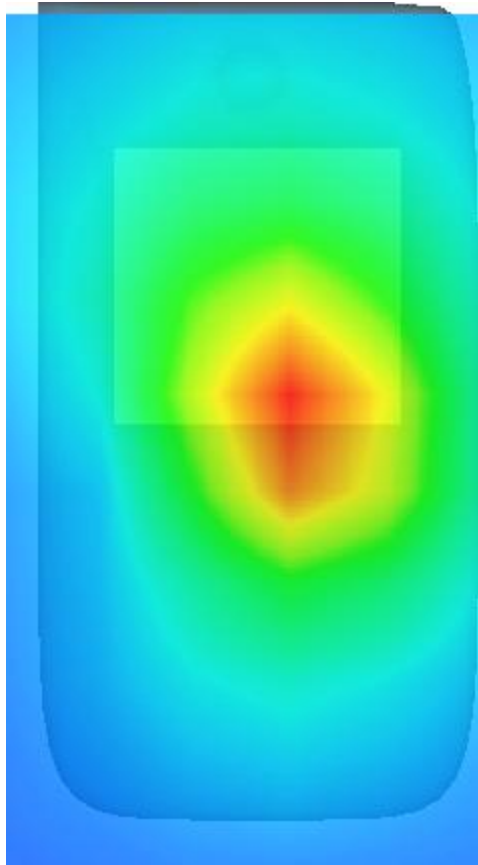
Maximum location: X=5.00, Y=2.00

SAR Peak: 0.70 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.185984 |
| SAR 1g (W/Kg) | 0.413202 |

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| SAR (W/Kg) | 0.6981 | 0.4018 | 0.1893 | 0.0962 | 0.0483 | 0.0243 | 0.0124 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 19

Type: Phone measurement (Complete)

Date of measurement: 17/6/2017

Measurement duration: 12 minutes 32 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <u>Phantom</u> | <u>Left head</u> |
| <u>Device Position</u> | <u>Cheek</u> |
| <u>Band</u> | <u>IEEE 802.11b ISM</u> |
| <u>Channels</u> | <u>Middle</u> |
| <u>Signal</u> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.11</u> |

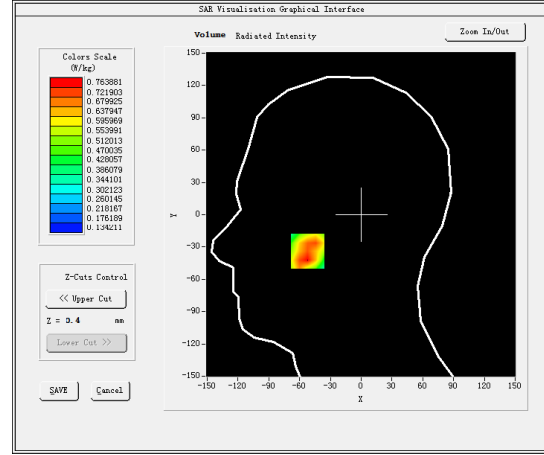
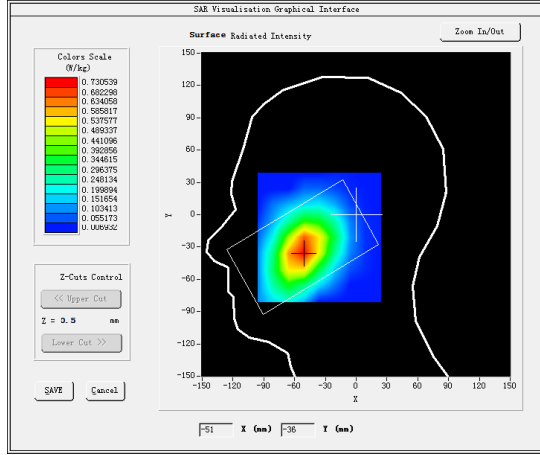
B. SAR Measurement Results

Middle Band SAR (Channel 6):

| | |
|---|-------------|
| Frequency (MHz) | 2437.000000 |
| Relative permittivity (real part) | 38.568100 |
| Relative permittivity (imaginary part) | 13.379800 |
| Conductivity (S/m) | 1.815193 |
| Variation (%) | 0.250000 |

SURFACE SAR

VOLUME SAR

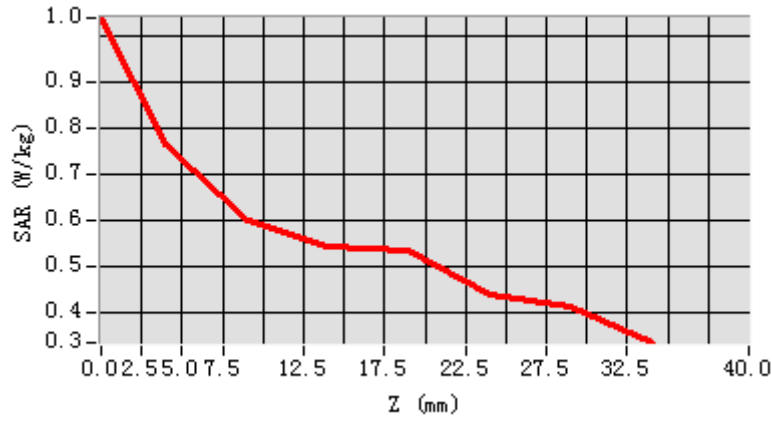


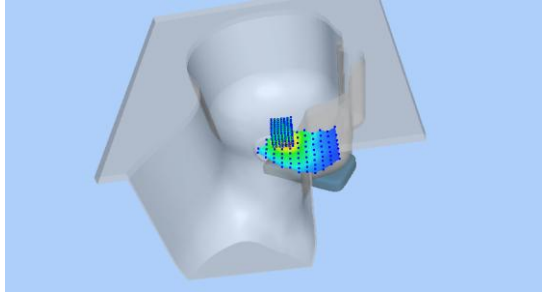
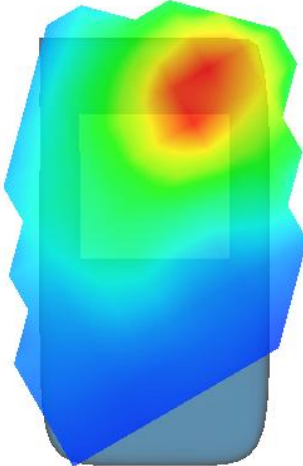
Maximum location: X=-52.00, Y=-34.00

SAR Peak: 0.96 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.542057 |
| SAR 1g (W/Kg) | 0.740863 |

| | | | | | | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
| SAR (W/Kg) | 1.0396 | 0.7639 | 0.5978 | 0.5399 | 0.5316 | 0.4352 | 0.4111 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |

MEASUREMENT 20

Rear-side-middle

Type: Phone measurement (Complete)

Date of measurement: 17/6/2017

Measurement duration: 12 minutes 40 seconds

A. Experimental conditions.

| | |
|---------------------------------|--|
| <u>Area Scan</u> | <u>dx=15mm dy=15mm</u> |
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u> |
| <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> | <u>Duty cycle:1:1</u> |
| <u>Conversion factor</u> | <u>4.0</u> |

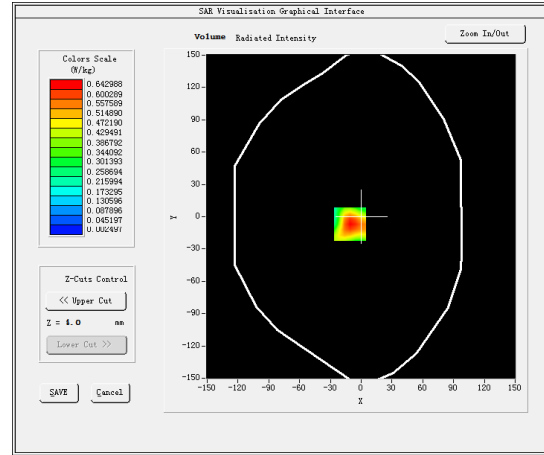
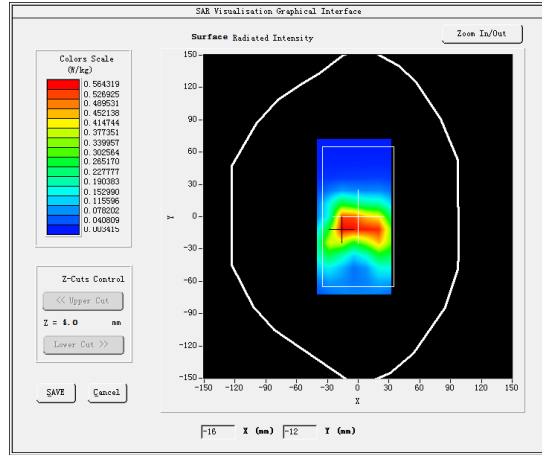
B. SAR Measurement Results

Middle Band SAR (Channel 7):

| | |
|---|-------------|
| Frequency (MHz) | 2442.000000 |
| Relative permittivity (real part) | 52.756401 |
| Relative permittivity (imaginary part) | 14.076200 |
| Conductivity (S/m) | 1.909671 |
| Variation (%) | 1.830000 |

SURFACE SAR

VOLUME SAR

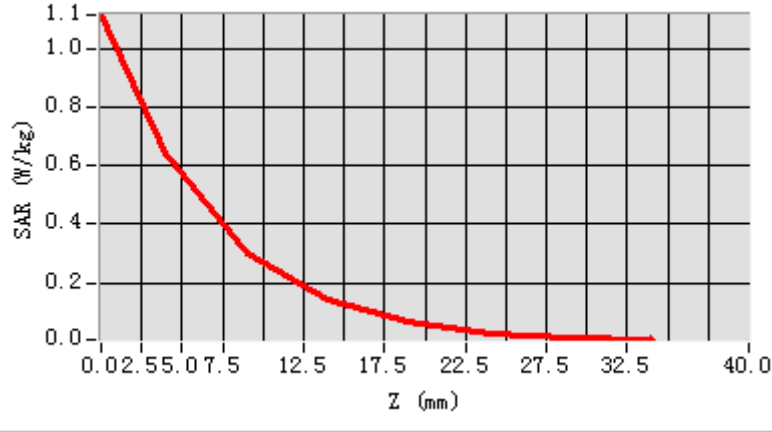


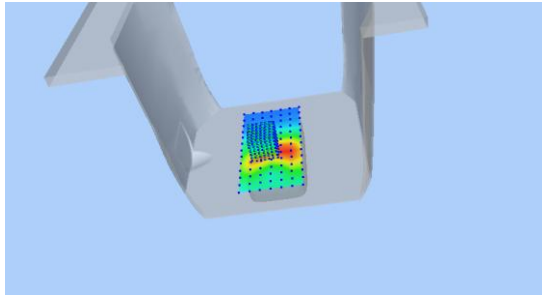
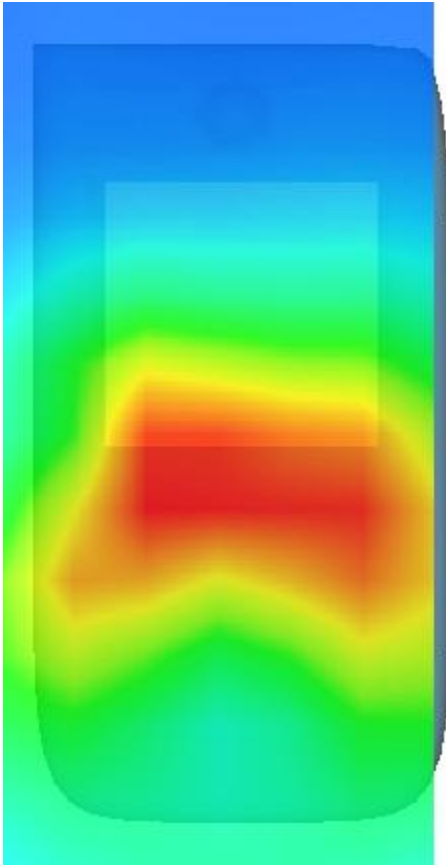
Maximum location: X=-11.00, Y=-7.00

SAR Peak: 1.10 W/kg

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.305689 |
| SAR 1g (W/Kg) | 0.507865 |

| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 | 24.00 | 29.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| SAR (W/Kg) | 1.1135 | 0.6430 | 0.3000 | 0.1401 | 0.0645 | 0.0298 | 0.0138 |



| 3D screen shot | Hot spot position |
|---|--|
|  |  |