APPENDIX A: SYSTEM CHECKING SCANS

Date of measurement: 11/5/2020

A. Experimental conditions.

| <u>Area Scan</u> | surf sam plan.txt, h= 5.00 mm |
|------------------------|--|
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm</u> |
| | dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | <u>CW750</u> |
| <u>Channels</u> | Middle |
| Signal | CW (Crest factor: 1.0) |
| | |

C. SAR Measurement Results

Middle Band SAR (Channel -1):

| Frequency (MHz) | 750.000000 |
|--|------------|
| Relative permittivity (real part) | 41.411211 |
| Relative permittivity (imaginary part) | 19.564401 |
| Conductivity (S/m) | 0.889429 |
| Variation (%) | -0.810000 |



Maximum location: X=-2.00, Y=0.00 SAR Peak: 1.30 W/kg

| SAR 10g (W/Kg) | 0.532245 |
|----------------|----------|
| SAR 1g (W/Kg) | 0.910991 |

Date of measurement: 12/5/2020

A. Experimental conditions.

| <u>Area Scan</u> | surf sam plan.txt, h= 5.00 mm |
|------------------|--|
| ZoomScan | 5x5x7,dx=8mm dy=8mm |
| | dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | <u>CW835</u> |
| <u>Channels</u> | Middle |
| <u>Signal</u> | CW (Crest factor: 1.0) |
| | |

C. SAR Measurement Results

Middle Band SAR (Channel -1):

| Frequency (MHz) | 835.000000 |
|--|------------|
| Relative permittivity (real part) | 42.811211 |
| Relative permittivity (imaginary part) | 19.364401 |
| Conductivity (S/m) | 0.922429 |
| Variation (%) | -0.820000 |



Maximum location: X=0.00, Y=0.00 SAR Peak: 1.49 W/kg

| SAR 10g (W/Kg) | 0.612241 |
|----------------|----------|
| SAR 1g (W/Kg) | 1.032047 |

Date of measurement: 13/5/2020

A. Experimental conditions.

| <u>Area Scan</u> | surf sam plan.txt, h= 5.00 mm |
|------------------------|--|
| <u>ZoomScan</u> | <u>5x5x7,dx=8mm dy=8mm</u> |
| | dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | <u>CW1750</u> |
| <u>Channels</u> | Middle |
| Signal | CW (Crest factor: 1.0) |
| | |

C. SAR Measurement Results

Middle Band SAR (Channel -1):

| Frequency (MHz) | 1750.000000 |
|--|-------------|
| Relative permittivity (real part) | 40.109789 |
| Relative permittivity (imaginary part) | 14.439212 |
| Conductivity (S/m) | 1.413610 |
| Variation (%) | 0.230000 |



Maximum location: X=0.00, Y=0.00 SAR Peak: 7.82 W/kg

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|-------------------|----------|
| SAR 10g (W/Kg) | 1.880042 |
| SAR 1g (W/Kg) | 3.604163 |

Date of measurement: 14/5/2020

A. Experimental conditions.

| <u>Area Scan</u> | surf sam plan.txt, h= 5.00 mm |
|------------------|--|
| ZoomScan | 5x5x7,dx=8mm dy=8mm |
| | dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | <u>CW1900</u> |
| <u>Channels</u> | Middle |
| <u>Signal</u> | CW (Crest factor: 1.0) |
| | |

C. SAR Measurement Results

Middle Band SAR (Channel -1):

| Frequency (MHz) | 1900.000000 |
|--|-------------|
| Relative permittivity (real part) | 39.752101 |
| Relative permittivity (imaginary part) | 19.284800 |
| Conductivity (S/m) | 1.454896 |
| Variation (%) | -0.420000 |



Maximum location: X=0.00, Y=1.00 SAR Peak: 7.19 W/kg

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|--------------------|----------|
| SAR 10g (W/Kg) | 1.928042 |
| SAR 1g (W/Kg) | 3.692301 |

Date of measurement: 14/5/2020

| <u>Area Scan</u> | surf_sam_plan.txt, h= 5.00 mm |
|------------------------|--|
| <u>ZoomScan</u> | 5x5x7,dx=8mm dy=8mm |
| | dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | <u>CW2300</u> |
| <u>Channels</u> | Middle |
| <u>Signal</u> | CW (Crest factor: 1.0) |
| | |

C. SAR Measurement Results

Middle Band SAR (Channel -1):

| Frequency (MHz) | 2300.000000 |
|--|-------------|
| Relative permittivity (real part) | 38.452698 |
| Relative permittivity (imaginary part) | 13.518400 |
| Conductivity (S/m) | 1.480004 |
| Variation (%) | -0.440000 |



Maximum location: X=0.00, Y=-1.00 SAR Peak: 9.94 W/kg

| SAR 10g (W/Kg) | 2.048061 |
|----------------|----------|
| SAR 1g (W/Kg) | 4.291449 |

Date of measurement: 15/5/2020

A. Experimental conditions.

| <u>Area Scan</u> | surf sam plan.txt, h= 5.00 mm |
|------------------------|--|
| ZoomScan | <u>5x5x7,dx=8mm dy=8mm</u> |
| | dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | <u>CW2450</u> |
| <u>Channels</u> | Middle |
| Signal | CW (Crest factor: 1.0) |
| | |

C. SAR Measurement Results

Middle Band SAR (Channel -1):

| Frequency (MHz) | 2450.000000 |
|--|-------------|
| Relative permittivity (real part) | 37.966698 |
| Relative permittivity (imaginary part) | 13.518400 |
| Conductivity (S/m) | 1.750004 |
| Variation (%) | -1.140000 |



Maximum location: X=0.00, Y=-1.00 SAR Peak: 10.14 W/kg

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|--------------------|----------|
| SAR 10g (W/Kg) | 2.448055 |
| SAR 1g (W/Kg) | 4.920273 |

Date of measurement: 17/5/2020

A. Experimental conditions.

| <u>Area Scan</u> | surf sam plan.txt, h= 5.00 mm |
|------------------|--|
| ZoomScan | 5x5x7,dx=8mm dy=8mm |
| | dz=5mm,Complete/nsurf_sam_plan.txt, h= 5.00 mm |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | <u>CW2600</u> |
| <u>Channels</u> | Middle |
| <u>Signal</u> | CW (Crest factor: 1.0) |
| | |

C. SAR Measurement Results

Middle Band SAR (Channel -1):

| Frequency (MHz) | 2600.000000 |
|--|-------------|
| Relative permittivity (real part) | 37.701950 |
| Relative permittivity (imaginary part) | 13.570000 |
| Conductivity (S/m) | 1.882123 |
| Variation (%) | -1.020000 |



Maximum location: X=0.00, Y=0.00 SAR Peak: 9.95 W/kg

| SAR 10g (W/Kg) | 2.500462 |
|----------------|----------|
| SAR 1g (W/Kg) | 5.482339 |

Date of measurement: 17/5/2020

A. Experimental conditions.

| <u>Area Scan</u> | surf sam plan.txt, h= 2.31 mm |
|------------------------|---|
| <u>ZoomScan</u> | 7x7x7,dx=5mm dy=5mm |
| | <pre>dz=5mm,Complete/nsurf_sam_plan.txt, h= 2.31 mm</pre> |
| Phantom | Validation plane |
| Device Position | Dipole |
| Band | <u>CW5250</u> |
| <u>Channels</u> | Middle |
| Signal | CW (Crest factor: 1.0) |

C. SAR Measurement Results

| Midule Danu SAR (Channel - I). | |
|--|-------------|
| Frequency (MHz) | 5250.000000 |
| Relative permittivity (real part) | 36.690601 |
| Relative permittivity (imaginary part) | 15.966398 |
| Conductivity (S/m) | 4.6402515 |
| Variation (%) | -0.130000 |



Maximum location: X=-1.00, Y=0.00 SAR Peak: 47.39 W/kg

| SAR 10g (W/Kg) | 2.2204296 |
|----------------|-----------|
| SAR 1g (W/Kg) | 8.0474299 |