ANNEX A   Graph Results

GSM850_CH190 Left Cheek

Date: 1/14/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 836.6; σ = 0.886 mho/m; εr = 41.55; ρ = 1000 kg/m³

Ambient Temperature: 22.5°C,   Liquid Temperature: 22.3°C

Communication System: GSM850 836.6 Duty Cycle: 1：8.3

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.147 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.995 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.151 W/kg
SAR(1 g) = 0.116 W/kg; SAR(10 g) = 0.091 W/kg
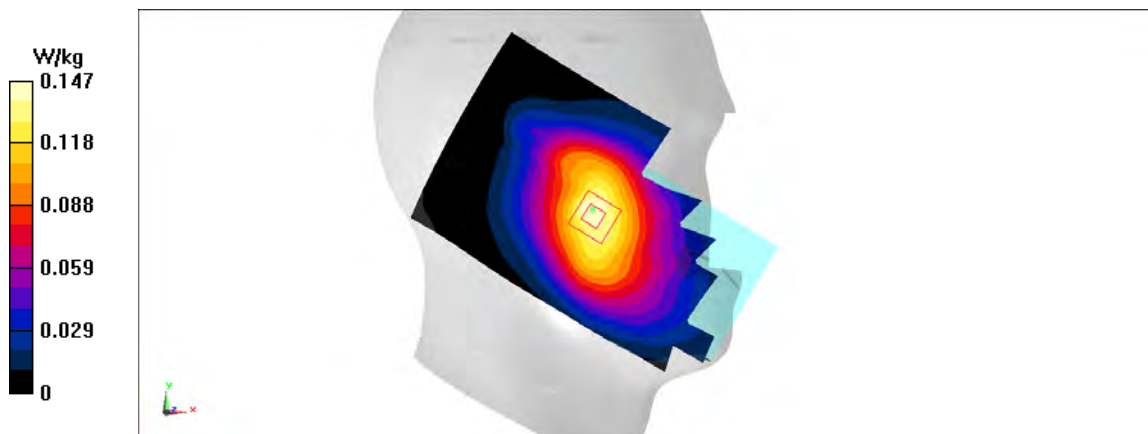Maximum value of SAR (measured) = 0.138 W/kg

Fig A.1

GSM850_CH251 Rear

Date: 1/14/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 848.8; σ = 0.897 mho/m; εr = 41.53; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: GSM850 848.8 Duty Cycle: 1：2.67

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
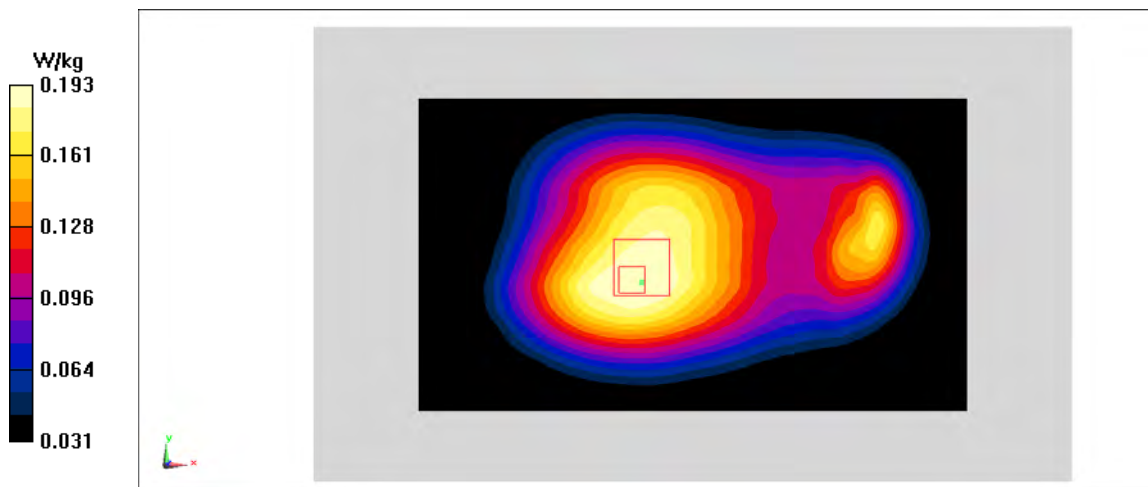Maximum value of SAR (interpolated) = 0.197 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.64 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.212 W/kg
SAR(1 g) = 0.161 W/kg; SAR(10 g) = 0.124 W/kg
Maximum value of SAR (measured) = 0.193 W/kg

Fig A.2

GSM850_CH251 Rear

Date: 1/14/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 848.8; σ = 0.897 mho/m; εr = 41.53; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: GSM850 848.8 Duty Cycle: 1：2.67

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

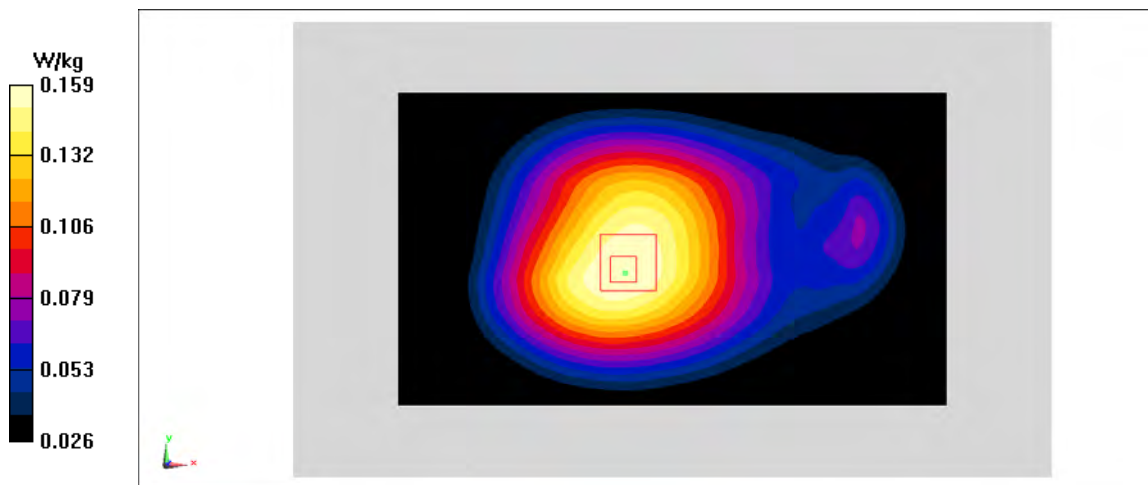Maximum value of SAR (interpolated) = 0.161 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.38 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.174 W/kg

SAR(1 g) = 0.131 W/kg; SAR(10 g) = 0.101 W/kg

Maximum value of SAR (measured) = 0.159 W/kg

Fig A.3

PCS1900_CH661 Left Cheek

Date: 1/17/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: f = 1880; σ = 1.382 mho/m; εr = 40.11; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC, Liquid Temperature: 22.3ºC

Communication System: PCS1900 1880 Duty Cycle: 1：8.3

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0869 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.17 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.096 W/kg

SAR(1 g) = 0.061 W/kg; SAR(10 g) = 0.037 W/kg

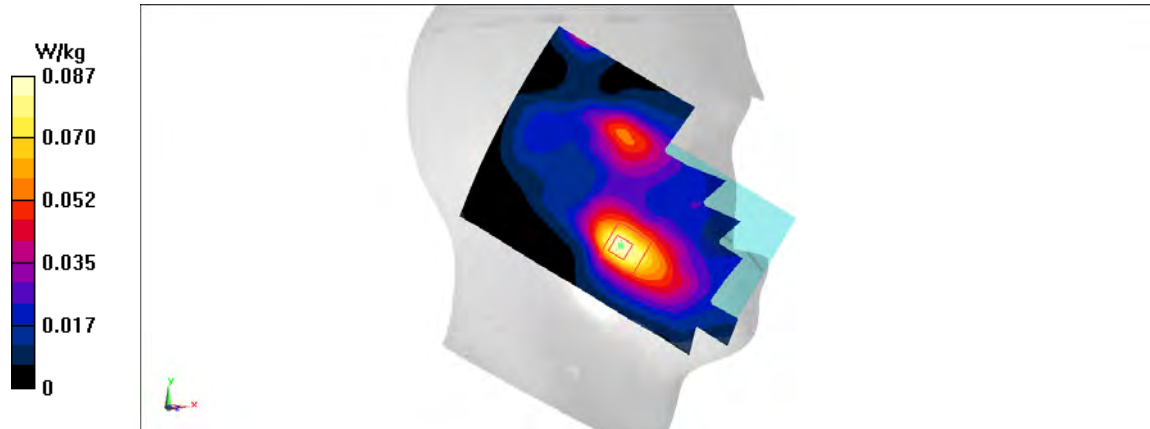Maximum value of SAR (measured) = 0.0836 W/kg

Fig A.4

PCS1900_CH661 Bottom

Date: 1/17/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: f = 1880; σ = 1.382 mho/m; εr = 40.11; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: PCS1900 1880 Duty Cycle: 1：2.67

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

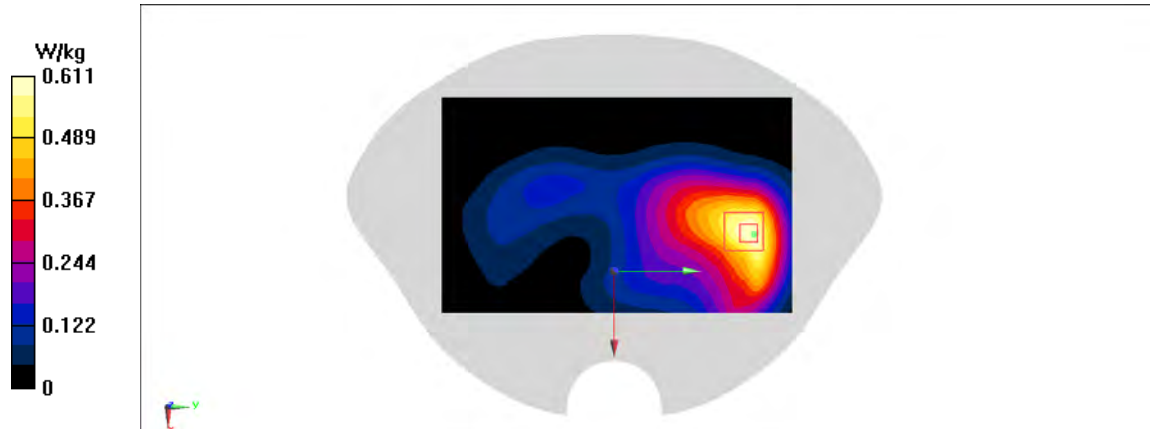Maximum value of SAR (interpolated) = 0.611 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.614 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.732 W/kg

SAR(1 g) = 0.788 W/kg; SAR(10 g) = 0.441 W/kg

Maximum value of SAR (measured) = 0.611 W/kg

Fig A.5

PCS1900_CH661 Rear
Date: 1/17/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1880; σ = 1.382 mho/m; εr = 40.11; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: PCS1900 1880 Duty Cycle: 1：2.67
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
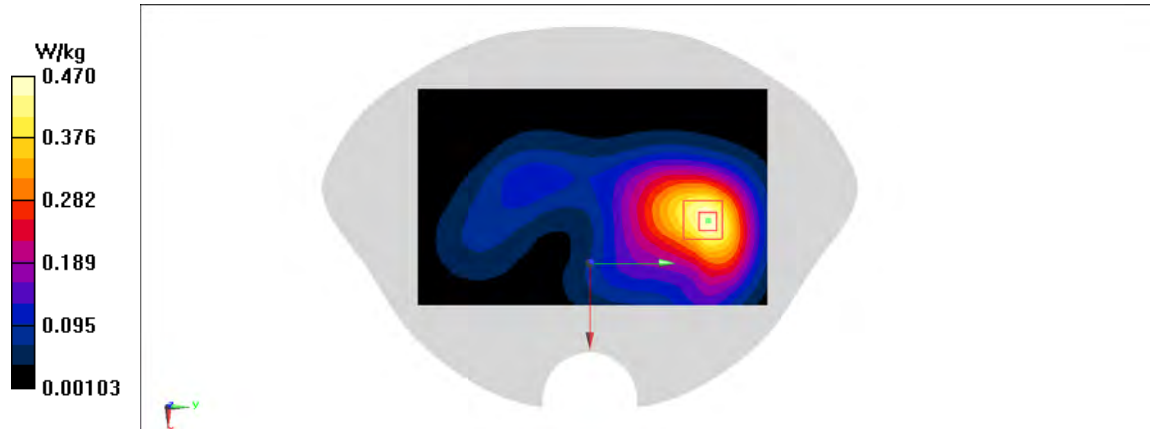Maximum value of SAR (interpolated) = 0.47 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.665 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.529 W/kg
SAR(1 g) = 0.327 W/kg; SAR(10 g) = 0.206 W/kg
Maximum value of SAR (measured) = 0.454 W/kg

Fig A.6

WCDMA1900-BII_CH9662 Left Tilt

Date: 1/17/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1852.4; σ = 1.355 mho/m; εr = 40.15; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: WCDMA1900-BII 1852.4 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
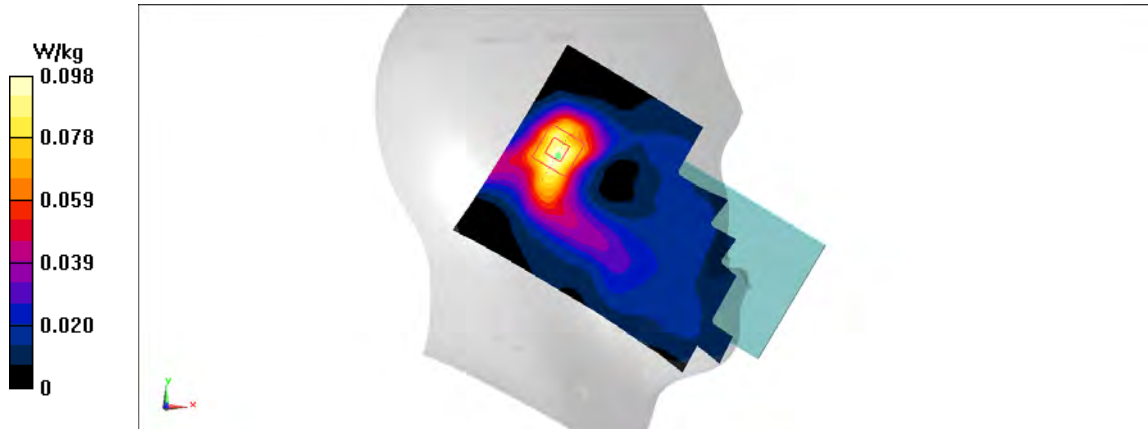Maximum value of SAR (interpolated) = 0.098 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.54 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.126 W/kg
SAR(1 g) = 0.074 W/kg; SAR(10 g) = 0.043 W/kg
Maximum value of SAR (measured) = 0.103 W/kg

Fig A.7

No.I20Z62183-SEM01

WCDMA1900-BII_CH9800 Bottom

Date: 1/17/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: f = 1880; σ = 1.382 mho/m; εr = 40.11; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: WCDMA1900-BII 1880 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

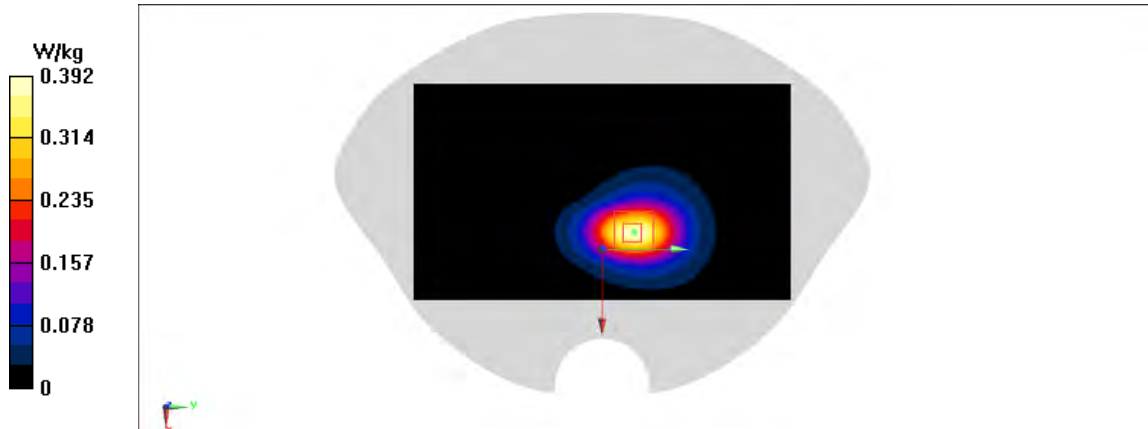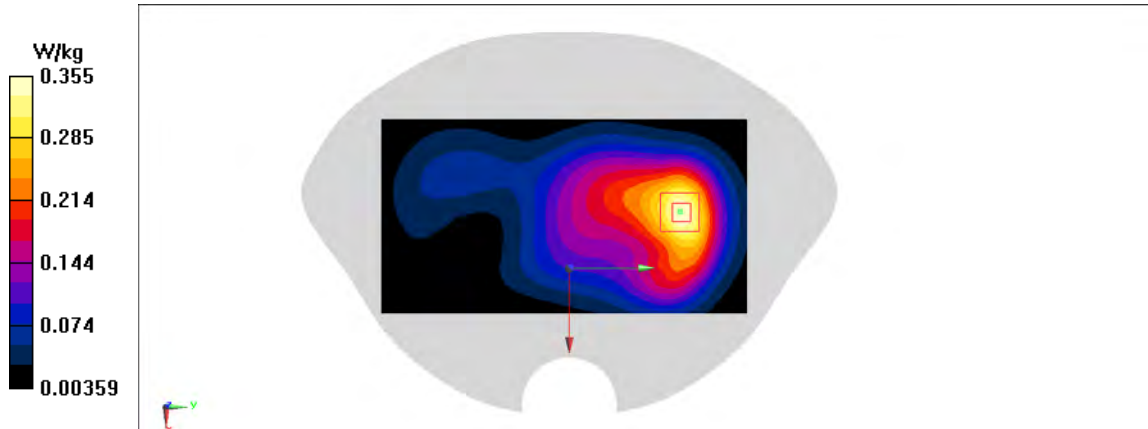Maximum value of SAR (interpolated) = 0.392 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.44 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.462 W/kg

SAR(1 g) = 0.257 W/kg; SAR(10 g) = 0.143 W/kg

Maximum value of SAR (measured) = 0.379 W/kg

Fig A.8

WCDMA1900-BII_CH9800 Rear

Date: 1/17/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1880; σ = 1.382 mho/m; εr = 40.11; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: WCDMA1900-BII 1880 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
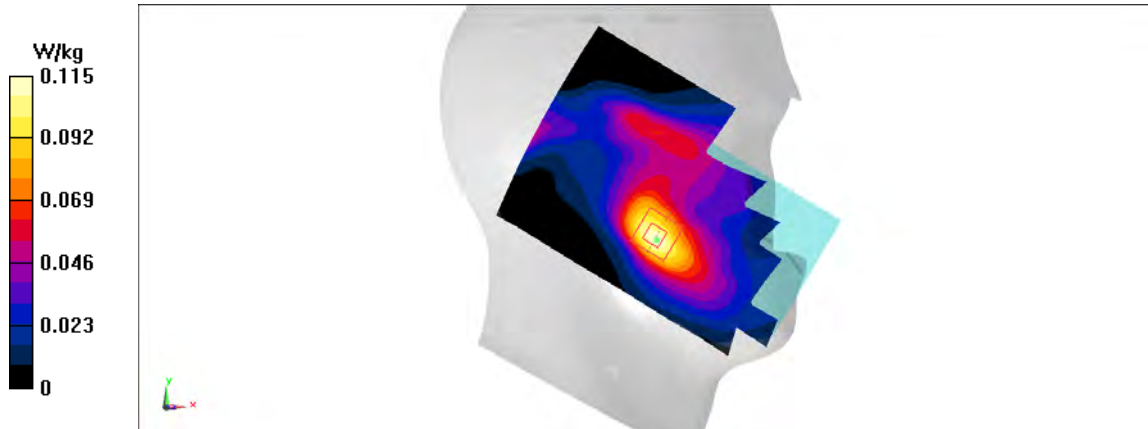Maximum value of SAR (interpolated) = 0.355 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.755 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.412 W/kg
SAR(1 g) = 0.247 W/kg; SAR(10 g) = 0.152 W/kg
Maximum value of SAR (measured) = 0.351 W/kg

Fig A.9

WCDMA1700-BIV_CH1637 Left Cheek

Date: 1/16/2021
Electronics: DAE4 Sn536
Medium: head 1750 MHz
Medium parameters used: f = 1732.4; σ = 1.366 mho/m; εr = 39.87; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: WCDMA1700-BIV 1732.4 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

 Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
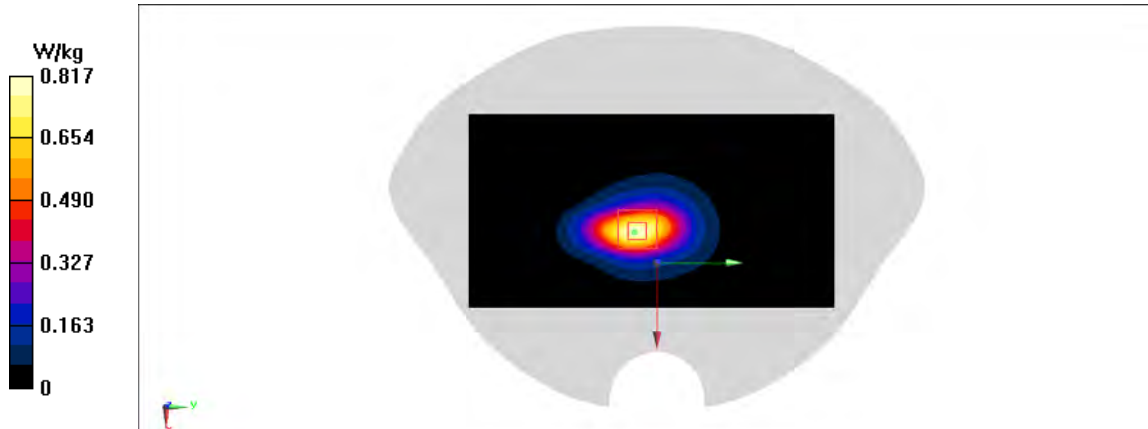 Maximum value of SAR (interpolated) = 0.115 W/kg

 Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 4.608 V/m; Power Drift = 0.02 dB
 Peak SAR (extrapolated) = 0.128 W/kg
 SAR(1 g) = 0.083 W/kg; SAR(10 g) = 0.053 W/kg
 Maximum value of SAR (measured) = 0.112 W/kg

Fig A.10

WCDMA1700-BIV_CH1537 Bottom

Date: 1/16/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: f = 1712.4; σ = 1.347 mho/m; εr = 39.9; ρ = 1000 kg/m^3

Ambient Temperature: 22.5°C,   Liquid Temperature: 22.3°C

Communication System: WCDMA1700-BIV 1712.4 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
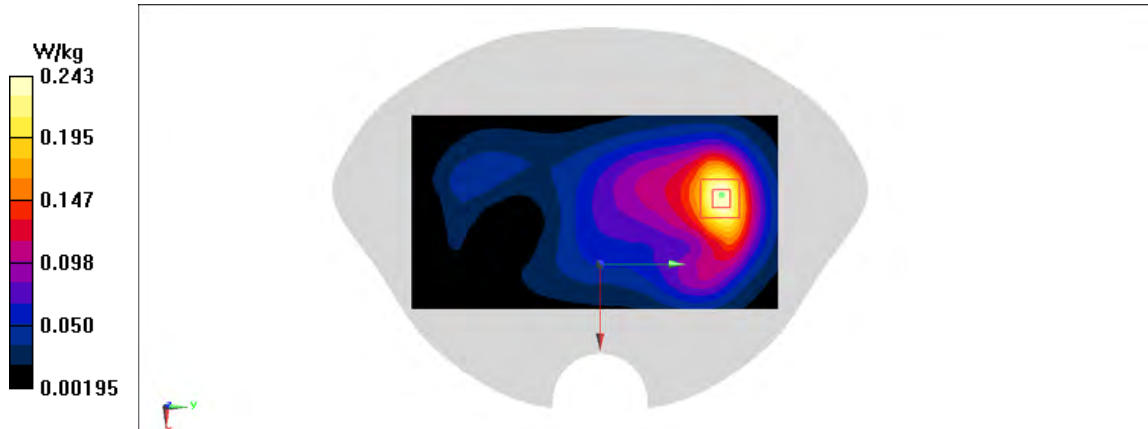
Maximum value of SAR (interpolated) = 0.817 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.17 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.979 W/kg

SAR(1 g) = 0.547 W/kg; SAR(10 g) = 0.303 W/kg

Maximum value of SAR (measured) = 0.824 W/kg

Fig A.11

WCDMA1700-BIV_CH1637 Rear

Date: 1/16/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: f = 1732.4; σ = 1.366 mho/m; εr = 39.87; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: WCDMA1700-BIV 1732.4 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
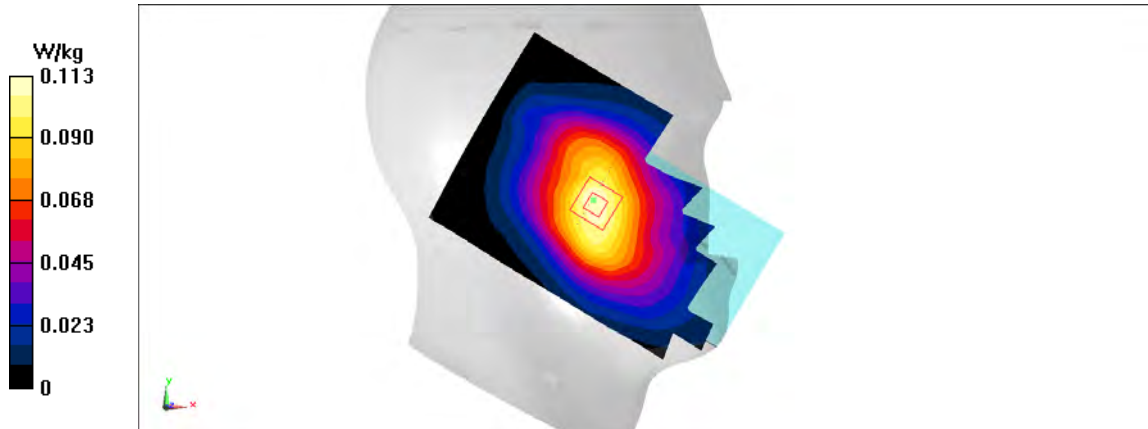
Maximum value of SAR (interpolated) = 0.243 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.265 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.291 W/kg

SAR(1 g) = 0.178 W/kg; SAR(10 g) = 0.109 W/kg

Maximum value of SAR (measured) = 0.247 W/kg

Fig A.12

WCDMA850-BV_CH4233 Left Cheek

Date: 1/14/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 846.6; σ = 0.895 mho/m; εr = 41.54; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: WCDMA850-BV 846.6 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
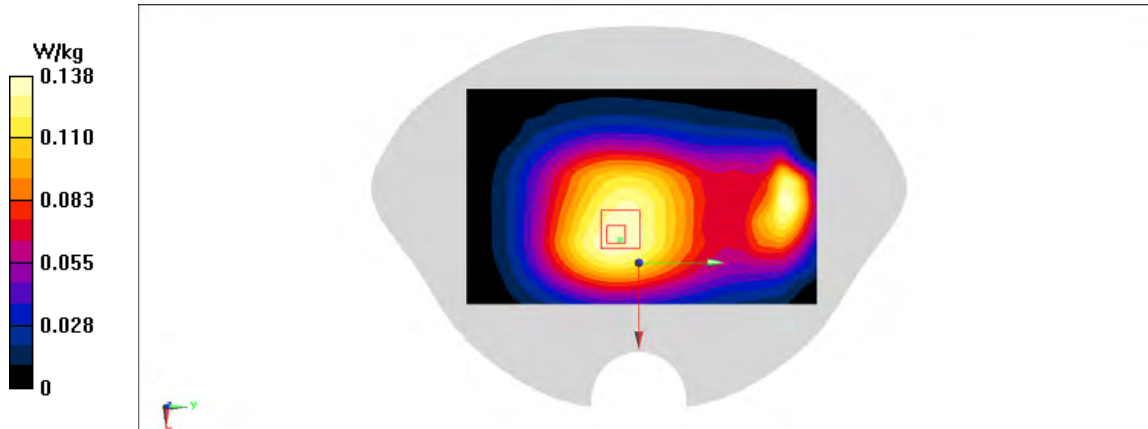
Maximum value of SAR (interpolated) = 0.113 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.258 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.124 W/kg

SAR(1 g) = 0.09 W/kg; SAR(10 g) = 0.07 W/kg

Maximum value of SAR (measured) = 0.112 W/kg

Fig A.13

WCDMA850-BV_CH4233 Rear

Date: 1/14/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 846.6; σ = 0.895 mho/m; εr = 41.54; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,　　Liquid Temperature: 22.3ºC

Communication System: WCDMA850-BV 846.6 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

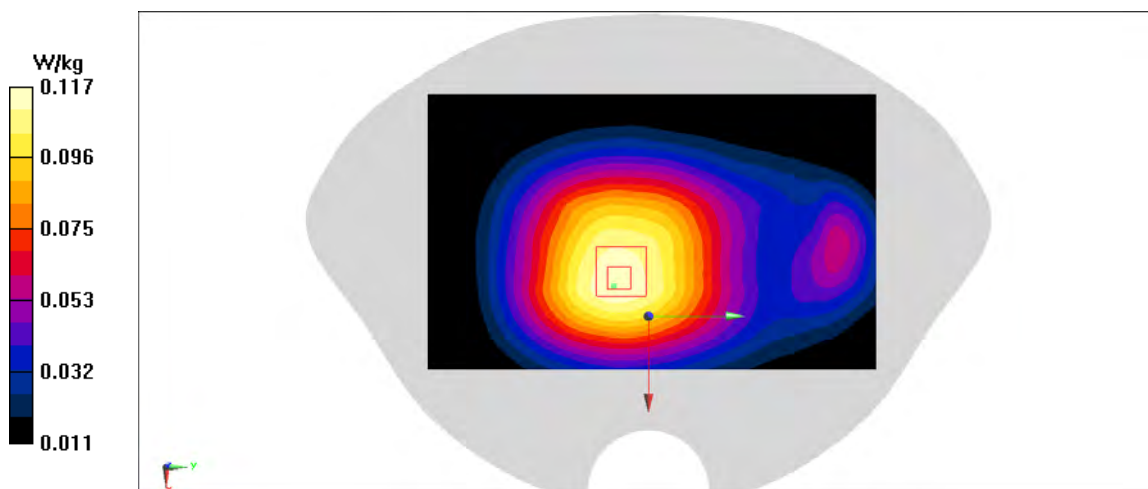Maximum value of SAR (interpolated) = 0.138 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.12 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.109 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.135 W/kg

Fig A.14

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WCDMA850-BV_CH4233 Rear

Date: 1/14/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 846.6; σ = 0.895 mho/m; εr = 41.54; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: WCDMA850-BV 846.6 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.116 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.12 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.131 W/kg

SAR(1 g) = 0.093 W/kg; SAR(10 g) = 0.055 W/kg

Maximum value of SAR (measured) = 0.117 W/kg

Fig A.15

LTE1900-FDD2_CH19100 Left Cheek

Date: 1/18/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.385 mho/m; εr = 39.78; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE1900-FDD2 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
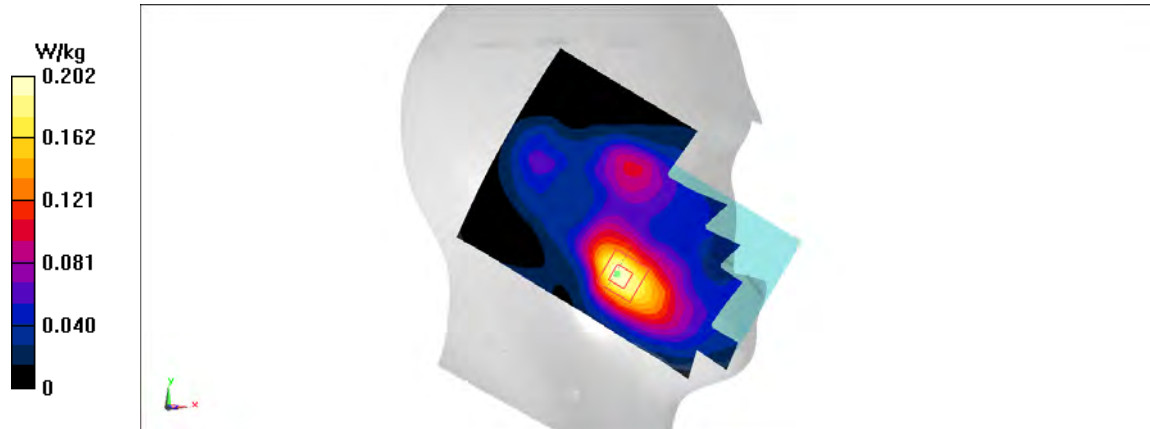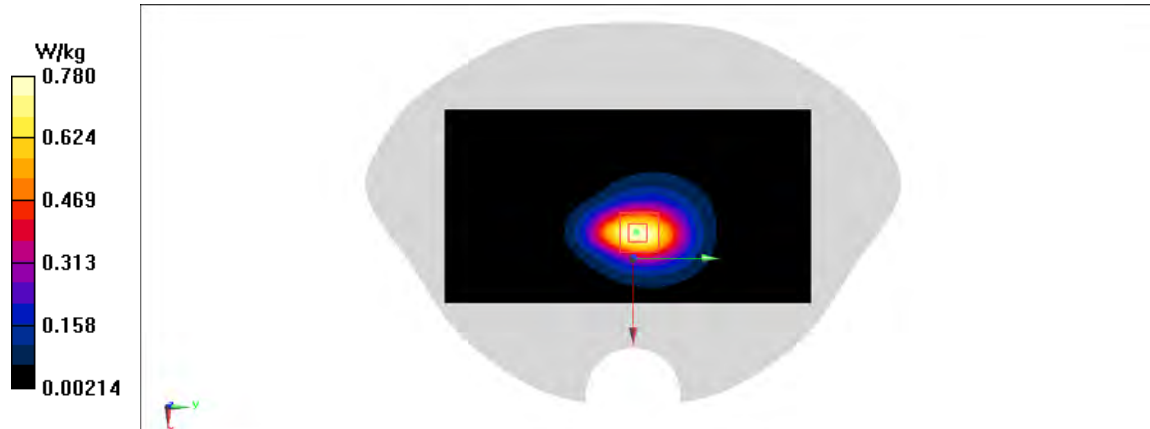Maximum value of SAR (interpolated) = 0.202 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.013 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.234 W/kg
SAR(1 g) = 0.15 W/kg; SAR(10 g) = 0.094 W/kg
Maximum value of SAR (measured) = 0.202 W/kg

Fig A.16

LTE1900-FDD2_CH18900 Bottom

Date: 1/18/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1880 MHz; σ = 1.366 mho/m; εr = 39.8; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE1900-FDD2 1880 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
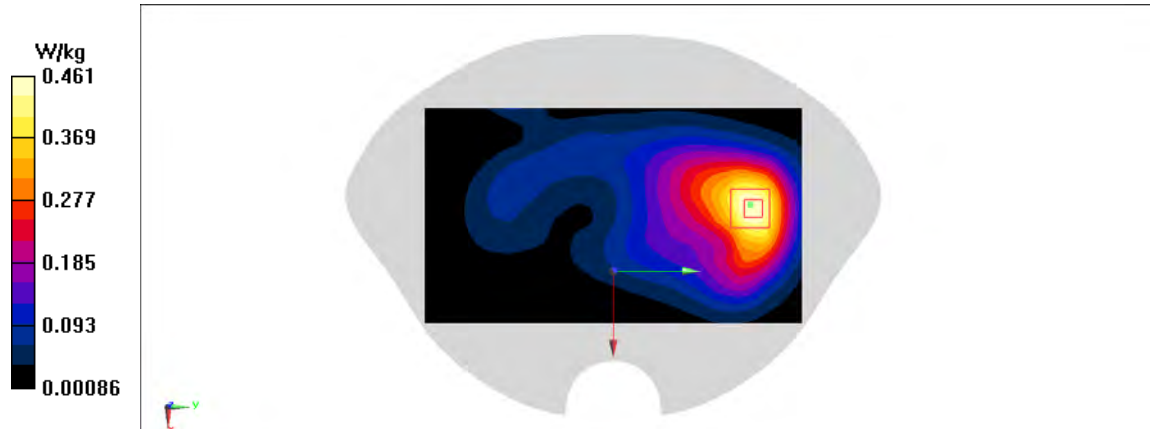Maximum value of SAR (interpolated) = 0.78 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.15 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.922 W/kg
SAR(1 g) = 0.515 W/kg; SAR(10 g) = 0.286 W/kg
Maximum value of SAR (measured) = 0.76 W/kg

Fig A.17

LTE1900-FDD2_CH19100 Rear

Date: 1/18/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: f = 1900 MHz; σ = 1.385 mho/m; εr = 39.78; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE1900-FDD2 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

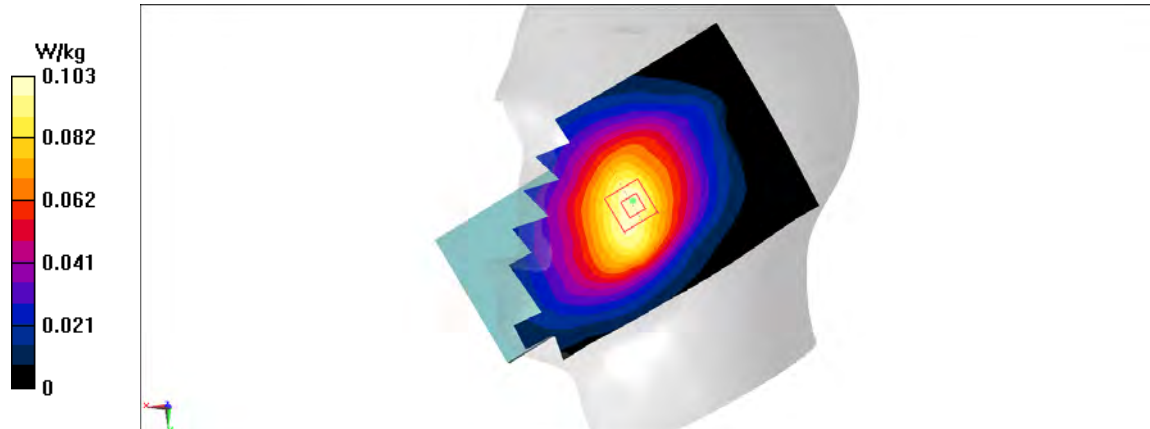Maximum value of SAR (interpolated) = 0.461 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.819 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.526 W/kg

SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.195 W/kg

Maximum value of SAR (measured) = 0.444 W/kg

Fig A.18

LTE850-FDD5_CH20450 Right Cheek
Date: 1/15/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 829 MHz; σ = 0.912 mho/m; εr = 41.5; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,　Liquid Temperature: 22.3ºC
Communication System: LTE850-FDD5 829 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
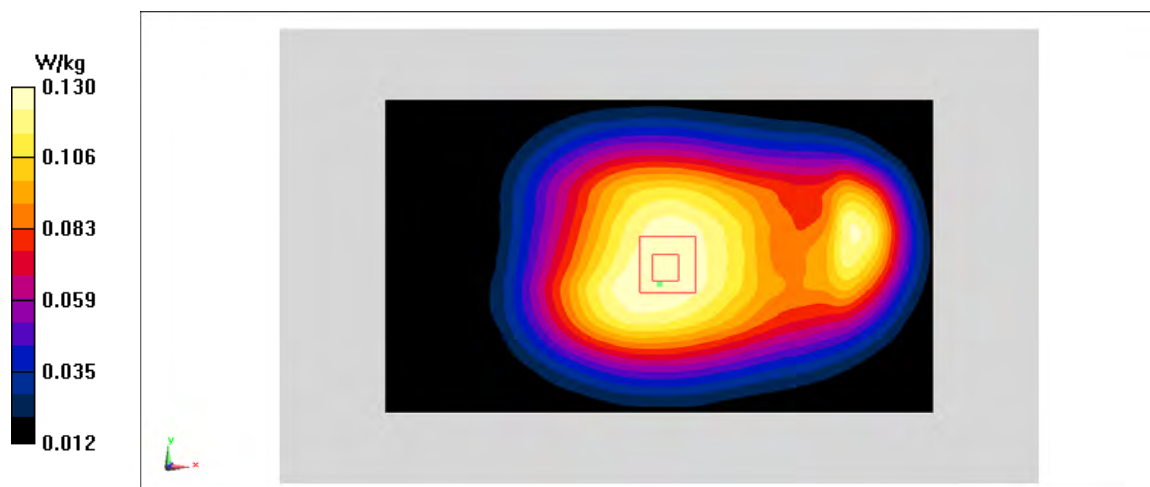Maximum value of SAR (interpolated) = 0.103 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.3 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.116 W/kg
SAR(1 g) = 0.087 W/kg; SAR(10 g) = 0.067 W/kg
Maximum value of SAR (measured) = 0.105 W/kg

Fig A.19

LTE850-FDD5_CH20450 Rear

Date: 1/15/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 829 MHz; σ = 0.912 mho/m; εr = 41.5; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE850-FDD5 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
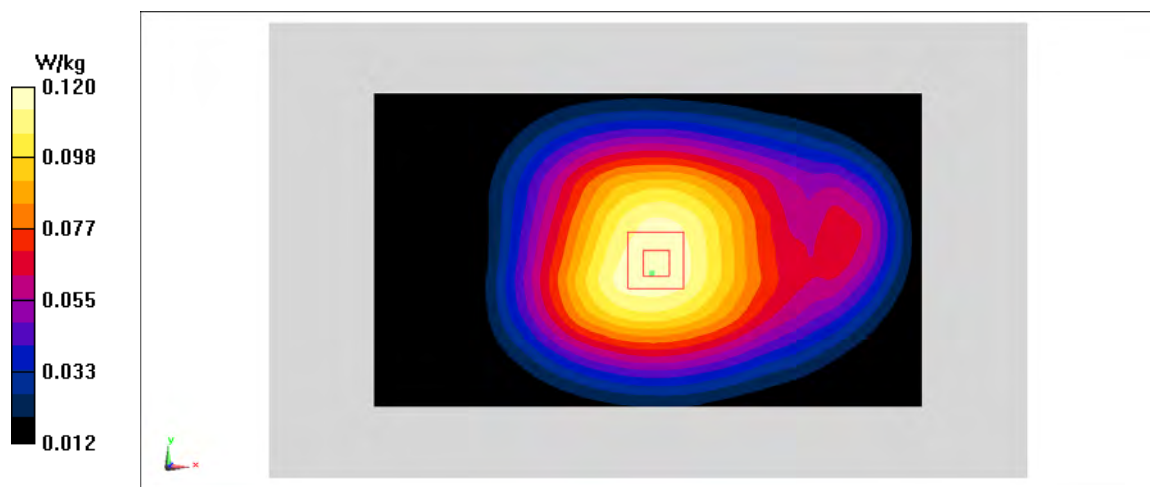
Maximum value of SAR (interpolated) = 0.131 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.66 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.141 W/kg

SAR(1 g) = 0.11 W/kg; SAR(10 g) = 0.087 W/kg

Maximum value of SAR (measured) = 0.13 W/kg

Fig A.20

LTE850-FDD5_CH20450 Rear

Date: 1/15/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 829 MHz; σ = 0.912 mho/m; εr = 41.5; ρ = 1000 kg/m^3

Ambient Temperature: 22.5°C,   Liquid Temperature: 22.3°C

Communication System: LTE850-FDD5 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

    Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.119 W/kg

    Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.16 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 0.13 W/kg

SAR(1 g) = 0.1 W/kg; SAR(10 g) = 0.078 W/kg
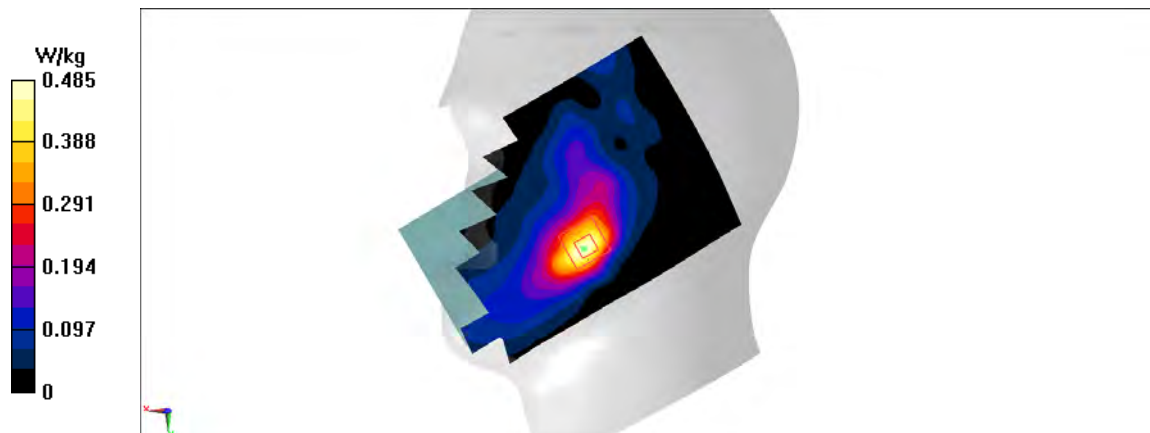
Maximum value of SAR (measured) = 0.12 W/kg

Fig A.21

LTE2500-FDD7_CH21350 Right Cheek

Date: 1/19/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2560 MHz; σ = 1.936 mho/m; εr = 39.65; ρ = 1000 kg/m^3

Ambient Temperature: 22.5°C,   Liquid Temperature: 22.3°C

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

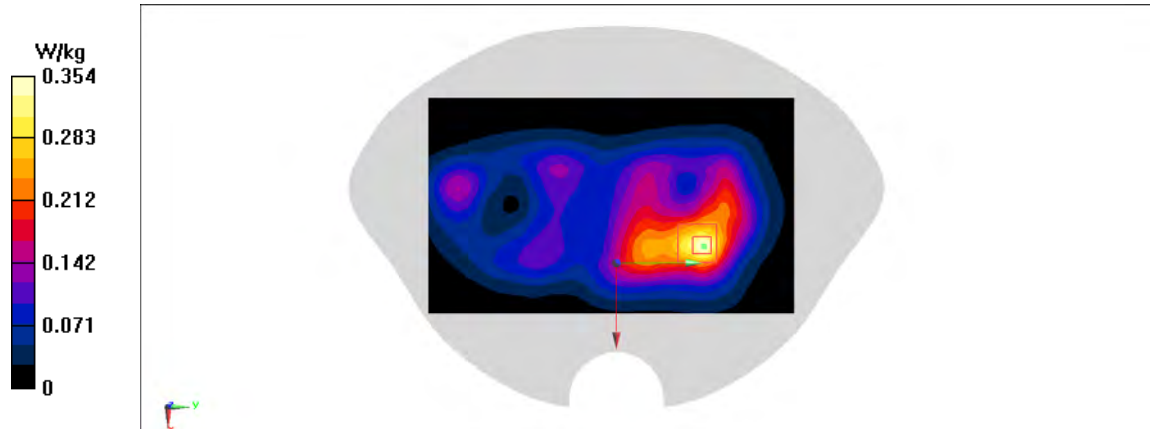Maximum value of SAR (interpolated) = 0.485 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.894 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.553 W/kg

SAR(1 g) = 0.308 W/kg; SAR(10 g) = 0.168 W/kg

Maximum value of SAR (measured) = 0.458 W/kg

Fig A.22

LTE2500-FDD7_CH21350 Rear
Date: 1/19/2021
Electronics: DAE4 Sn536
Medium: head 2600 MHz
Medium parameters used: f = 2560 MHz; σ = 1.936 mho/m; εr = 39.65; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
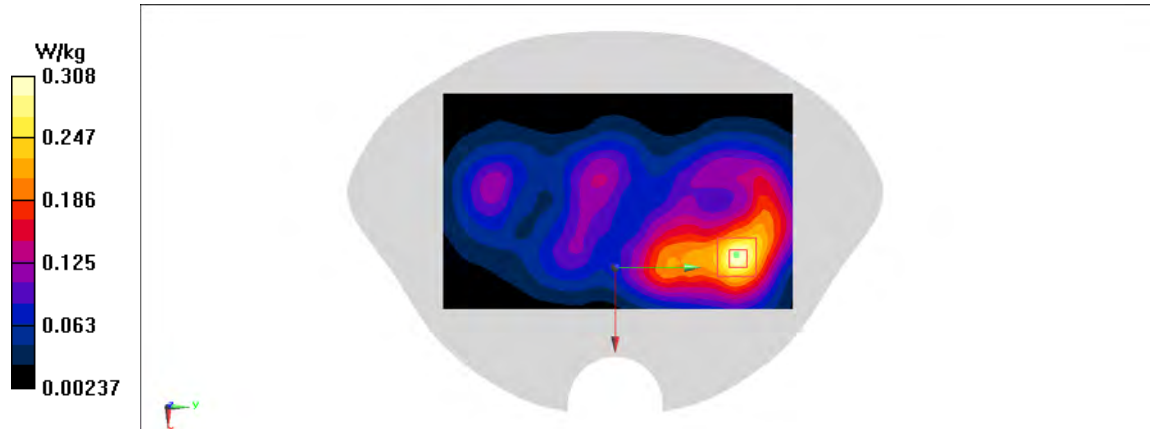Maximum value of SAR (interpolated) = 0.354 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.934 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.405 W/kg
SAR(1 g) = 0.216 W/kg; SAR(10 g) = 0.114 W/kg
Maximum value of SAR (measured) = 0.327 W/kg

Fig A.23

LTE2500-FDD7_CH21350 Rear

Date: 1/19/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2560 MHz; σ = 1.936 mho/m; εr = 39.65; ρ = 1000 kg/m^3

Ambient Temperature: 22.5℃,　Liquid Temperature: 22.3℃

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.308 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.275 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.375 W/kg

SAR(1 g) = 0.2 W/kg; SAR(10 g) = 0.108 W/kg
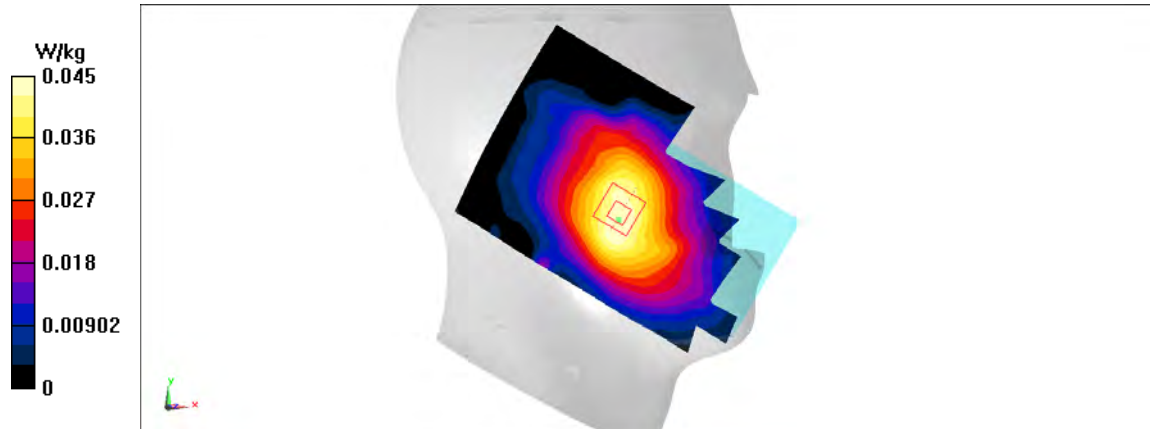
Maximum value of SAR (measured) = 0.3 W/kg

Fig A.24

LTE700-FDD12_CH23060 Left Cheek

Date: 1/13/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: f = 704 MHz; σ = 0.836 mho/m; εr = 41.77; ρ = 1000 kg/m³

Ambient Temperature: 22.5°C,   Liquid Temperature: 22.3°C

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0451 W/kg

**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.737 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.05 W/kg

SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.029 W/kg

Maximum value of SAR (measured) = 0.045 W/kg

Fig A.25

LTE700-FDD12_CH23060 Rear

Date: 1/13/2021
Electronics: DAE4 Sn536
Medium: head 750 MHz
Medium parameters used: f = 704 MHz; σ = 0.836 mho/m; εr = 41.77; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
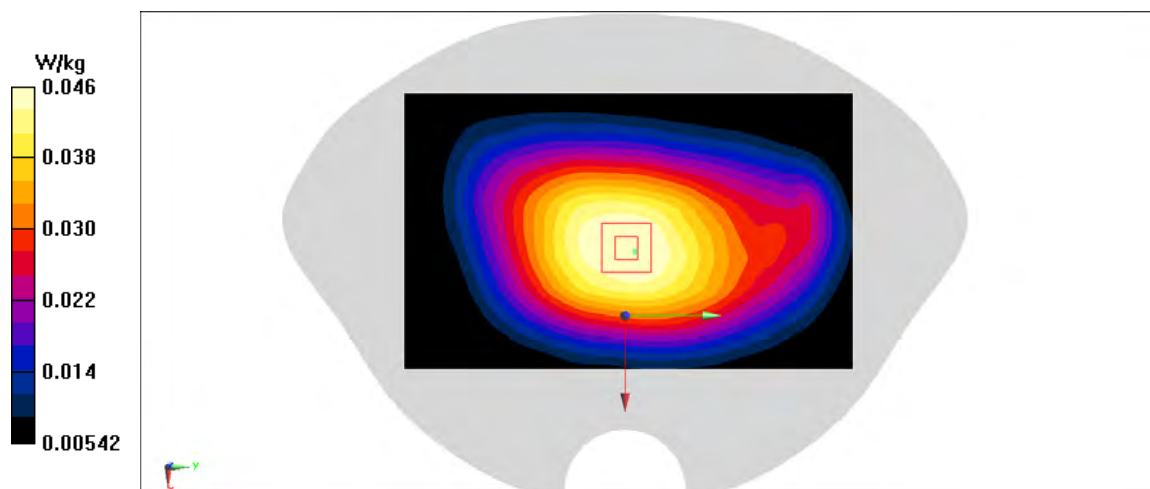Maximum value of SAR (interpolated) = 0.0771 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.488 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.086 W/kg
SAR(1 g) = 0.062 W/kg; SAR(10 g) = 0.047 W/kg
Maximum value of SAR (measured) = 0.0765 W/kg
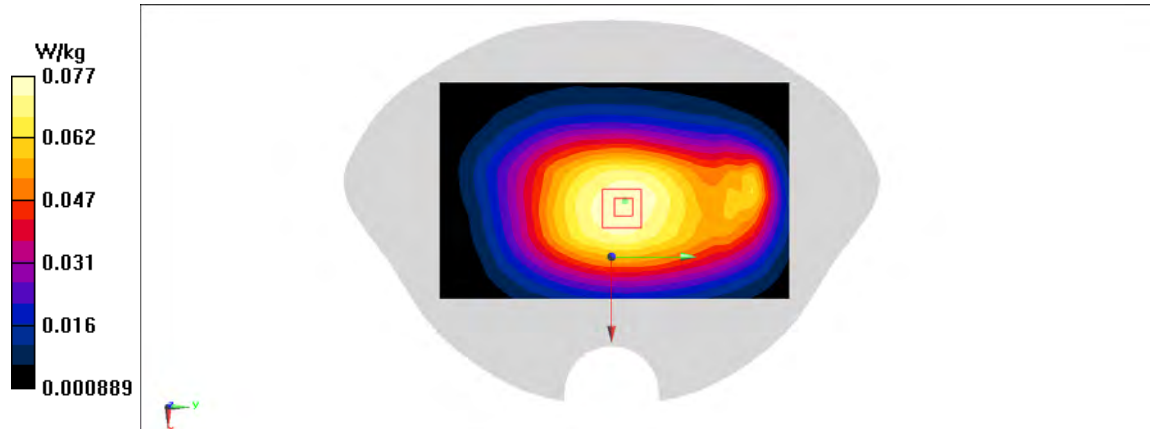
Fig A.26

LTE700-FDD12_CH23060 Rear

Date: 1/13/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: f = 704 MHz; σ = 0.836 mho/m; εr = 41.77; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.047 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.262 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.052 W/kg

SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.028 W/kg
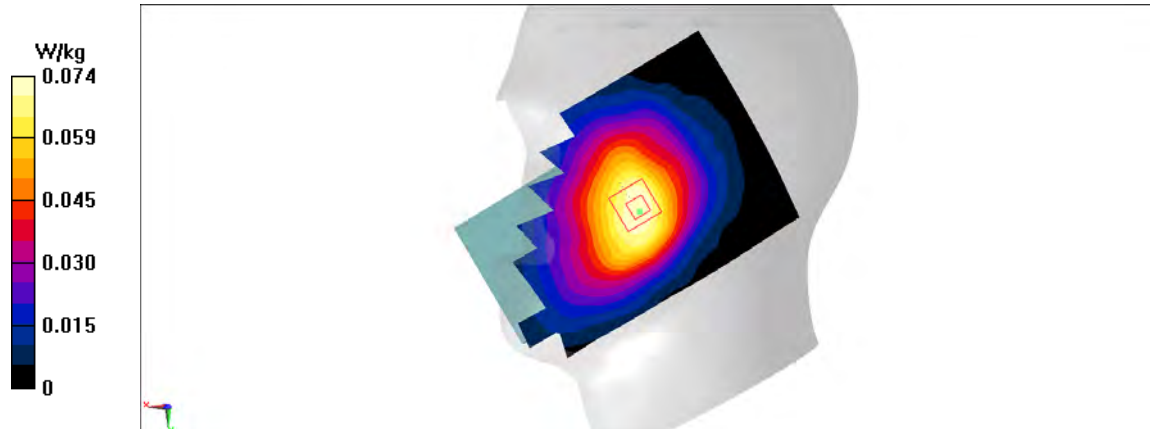
Maximum value of SAR (measured) = 0.0461 W/kg

Fig A.27

LTE850-FDD26_CH26775 Right Cheek

Date: 1/15/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 822.5 MHz; σ = 0.906 mho/m; εr = 41.51; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
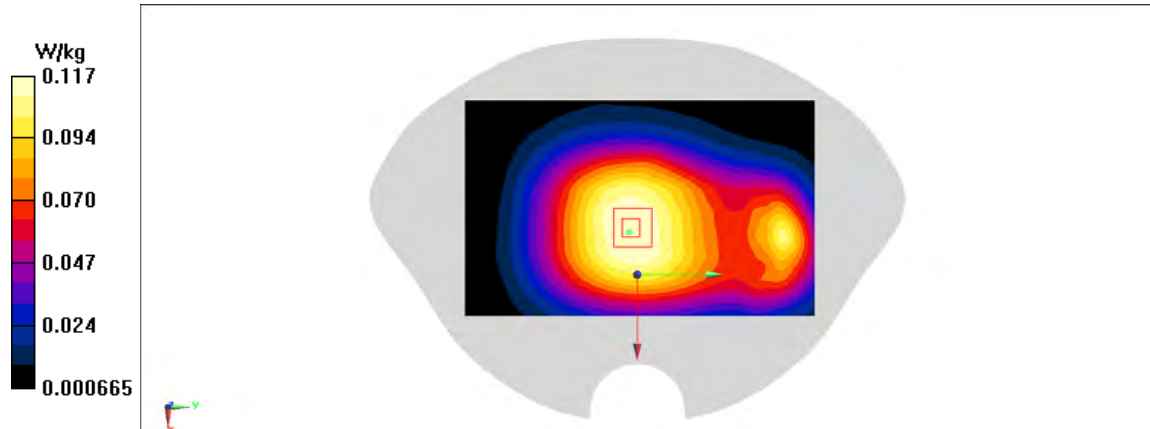Maximum value of SAR (interpolated) = 0.0743 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.062 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.084 W/kg
SAR(1 g) = 0.062 W/kg; SAR(10 g) = 0.047 W/kg
Maximum value of SAR (measured) = 0.0754 W/kg

Fig A.28

LTE850-FDD26_CH26775 Front

Date: 1/15/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 822.5 MHz; σ = 0.906 mho/m; εr = 41.51; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
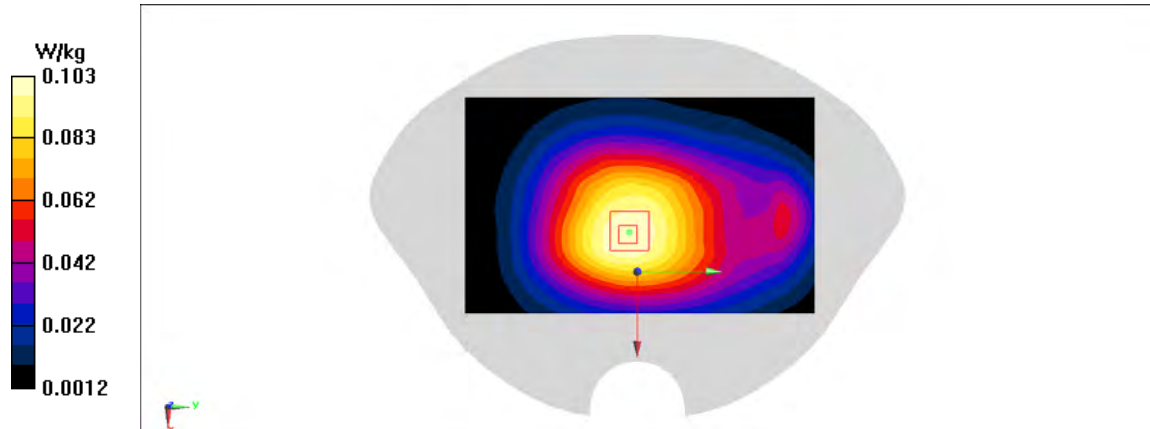Maximum value of SAR (interpolated) = 0.117 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.22 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.128 W/kg
SAR(1 g) = 0.091 W/kg; SAR(10 g) = 0.069 W/kg
Maximum value of SAR (measured) = 0.113 W/kg

Fig A.29

LTE850-FDD26_CH26775 Rear
Date: 1/15/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 822.5 MHz; σ = 0.906 mho/m; εr = 41.51; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
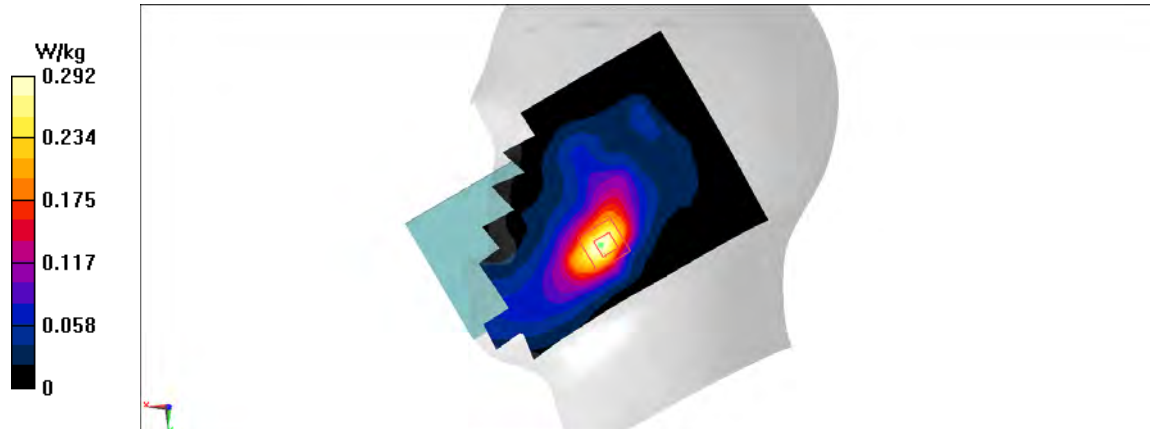Maximum value of SAR (interpolated) = 0.103 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.85 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.115 W/kg
SAR(1 g) = 0.082 W/kg; SAR(10 g) = 0.061 W/kg
Maximum value of SAR (measured) = 0.101 W/kg

Fig A.30

LTE2600-TDD41_CH40620 Right Cheek

Date: 1/15/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2593; σ = 1.925 mho/m; εr = 39.06; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE2600-TDD41 2593 Duty Cycle: 1:1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

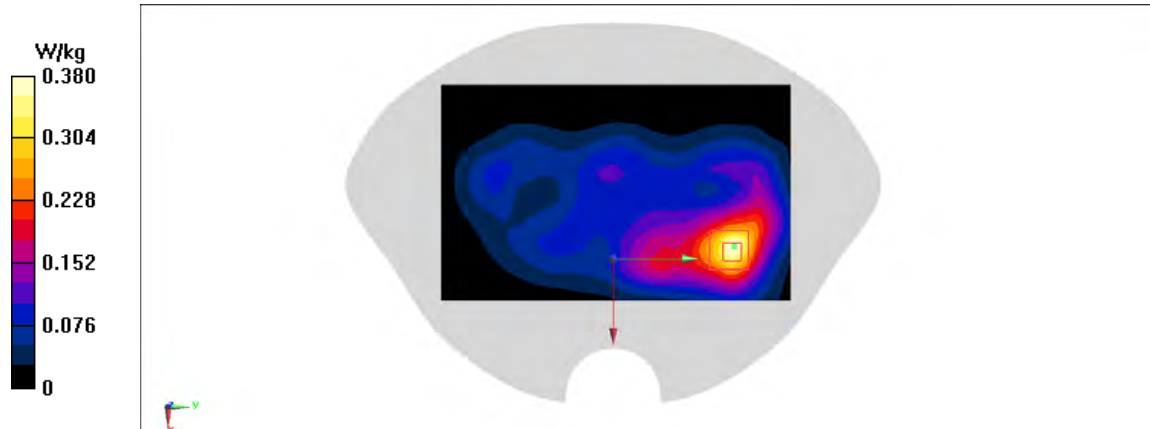Maximum value of SAR (interpolated) = 0.292 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.311 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.337 W/kg

SAR(1 g) = 0.191 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.275 W/kg

Fig A.31

LTE2600-TDD41_CH40620 Rear

Date: 1/15/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2593; σ = 1.925 mho/m; εr = 39.06; ρ = 1000 kg/m³

Ambient Temperature: 22.5°C,   Liquid Temperature: 22.3°C

Communication System: LTE2600-TDD41 2593 Duty Cycle: 1:1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
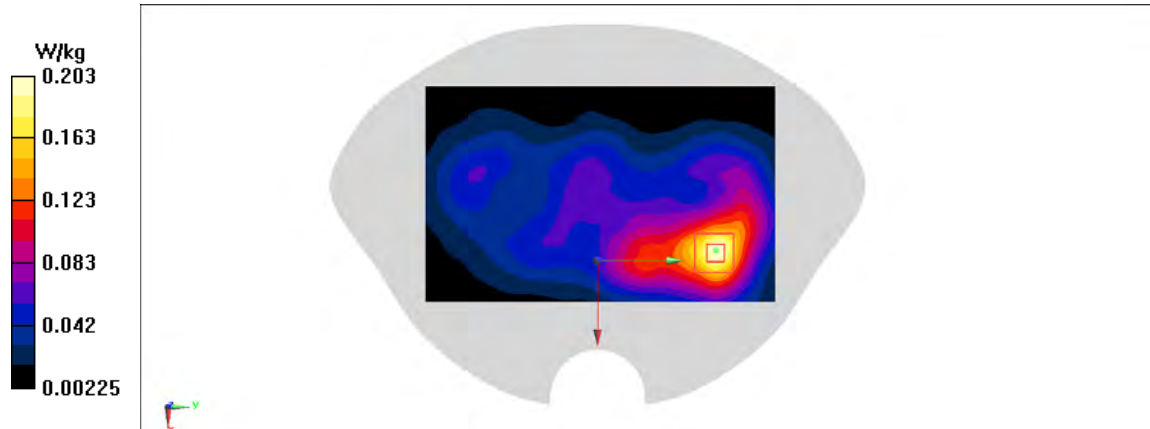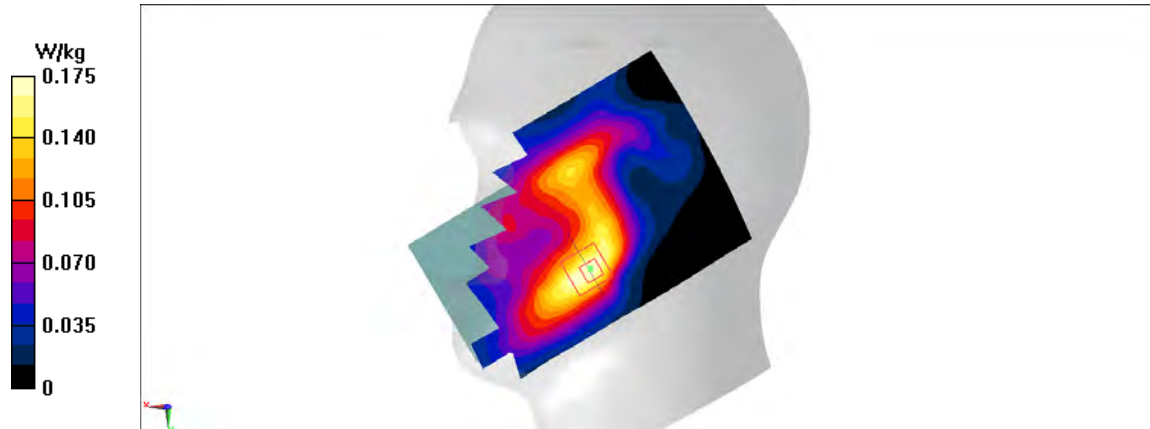
Maximum value of SAR (interpolated) = 0.38 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.895 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.494 W/kg

SAR(1 g) = 0.257 W/kg; SAR(10 g) = 0.132 W/kg

Maximum value of SAR (measured) = 0.379 W/kg

Fig A.32

LTE2600-TDD41_CH40620 Rear

Date: 1/15/2021
Electronics: DAE4 Sn536
Medium: head 2600 MHz
Medium parameters used: f = 2593; σ = 1.925 mho/m; εr = 39.06; ρ = 1000 kg/m^3
Ambient Temperature: 22.5℃,   Liquid Temperature: 22.3℃
Communication System: LTE2600-TDD41 2593 Duty Cycle: 1:1.58
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
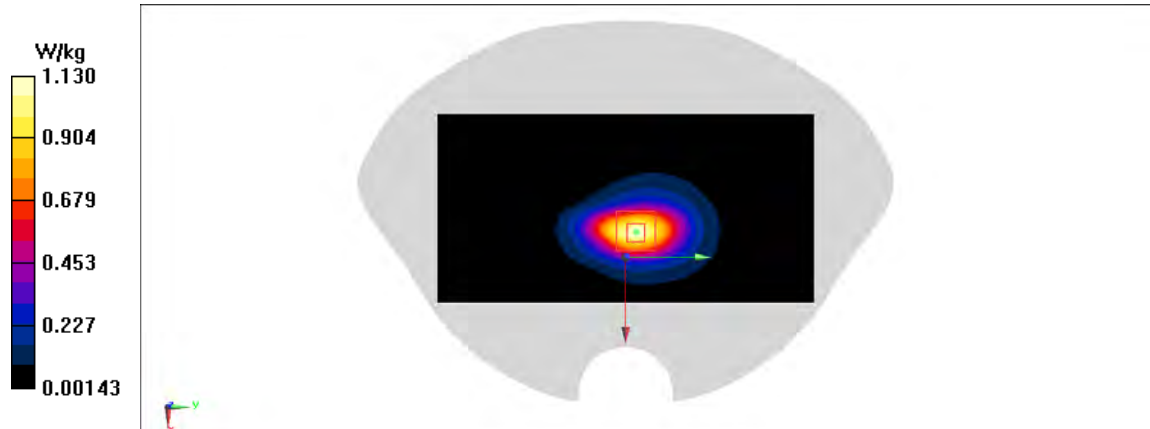Maximum value of SAR (interpolated) = 0.203 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.374 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.252 W/kg
SAR(1 g) = 0.132 W/kg; SAR(10 g) = 0.07 W/kg
Maximum value of SAR (measured) = 0.201 W/kg

Fig A.33

LTE1700-FDD66_CH132572 Right Cheek

Date: 1/16/2021
Electronics: DAE4 Sn536
Medium: head 1750 MHz
Medium parameters used: f = 1770 MHz; σ = 1.377 mho/m; εr = 39.69; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,　　Liquid Temperature: 22.3ºC
Communication System: LTE1700-FDD66 1770 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
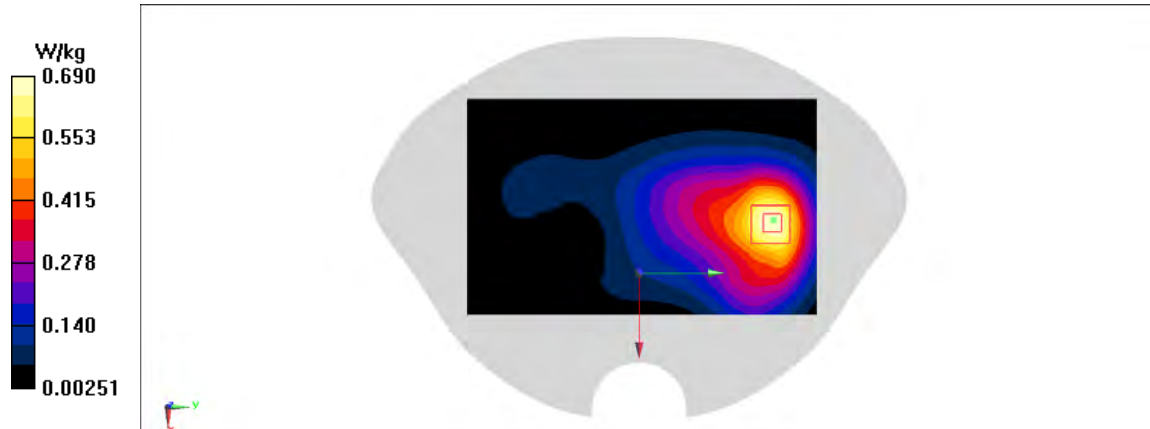Maximum value of SAR (interpolated) = 0.175 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.453 V/m; Power Drift = 0.1 dB
Peak SAR (extrapolated) = 0.196 W/kg
SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.081 W/kg
Maximum value of SAR (measured) = 0.167 W/kg

Fig A.34

LTE1700-FDD66_CH132572 Bottom

Date: 1/16/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: f = 1770 MHz; σ = 1.377 mho/m; εr = 39.69; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE1700-FDD66 1770 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.13 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.98 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.772 W/kg; SAR(10 g) = 0.429 W/kg

Maximum value of SAR (measured) = 1.14 W/kg

Fig A.35

LTE1700-FDD66_CH132572 Rear

Date: 1/16/2021
Electronics: DAE4 Sn536
Medium: head 1750 MHz
Medium parameters used: f = 1770 MHz; σ = 1.377 mho/m; εr = 39.69; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE1700-FDD66 1770 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.69 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.04 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.825 W/kg
SAR(1 g) = 0.505 W/kg; SAR(10 g) = 0.314 W/kg
Maximum value of SAR (measured) = 0.701 W/kg

Fig A.36

GSM850_CH128 Right Cheek

Date: 1/5/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 824.2; σ = 0.888 mho/m; εr = 40.93; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: GSM850 824.2 Duty Cycle: 1：8.3
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
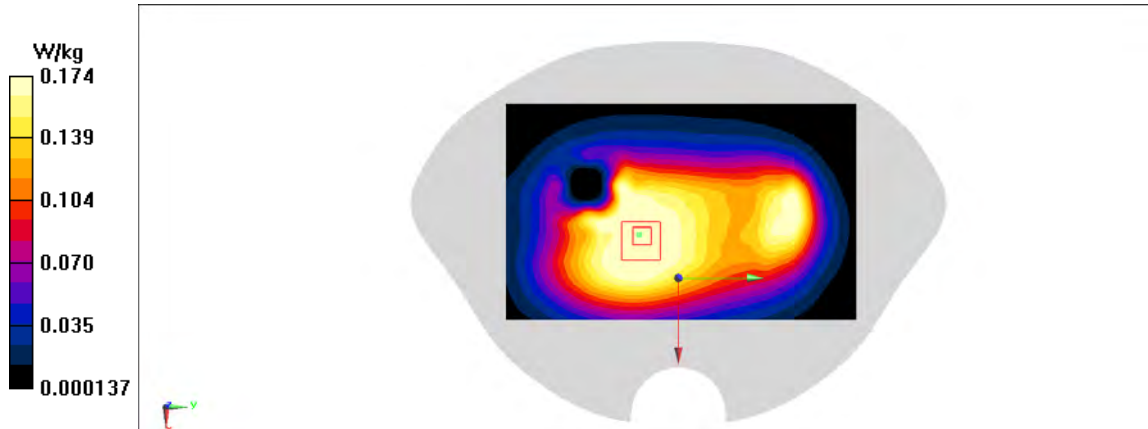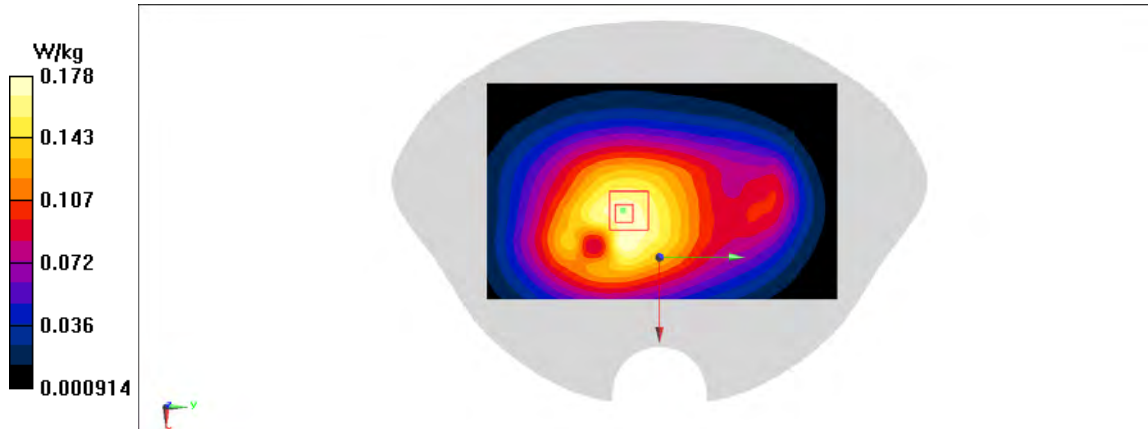Maximum value of SAR (interpolated) = 1.7 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.11 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.77 W/kg
SAR(1 g) = 0.799 W/kg; SAR(10 g) = 0.496 W/kg
Maximum value of SAR (measured) = 1.16 W/kg
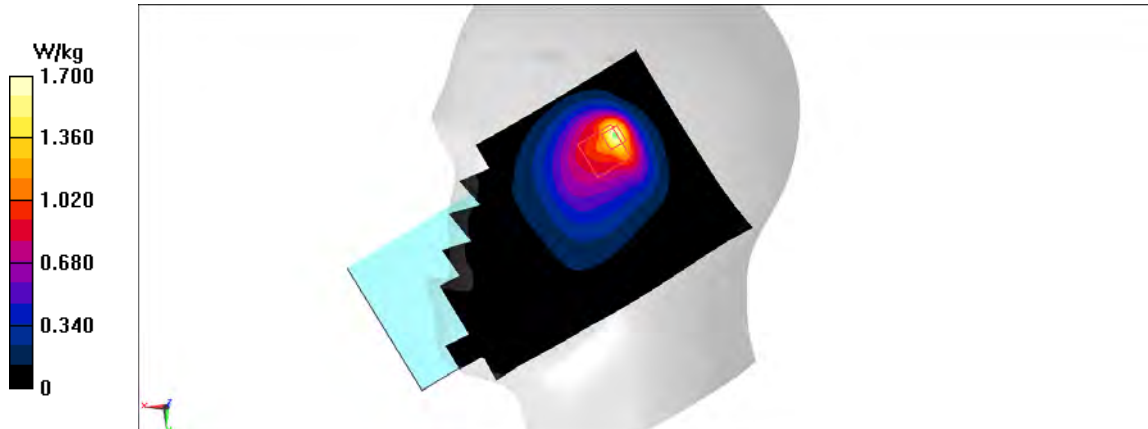
Fig A.37

GSM850_CH190 Rear

Date: 1/5/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 836.6; σ = 0.9 mho/m; εr = 40.92; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: GSM850 836.6 Duty Cycle: 1：2.67
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.187 W/kg
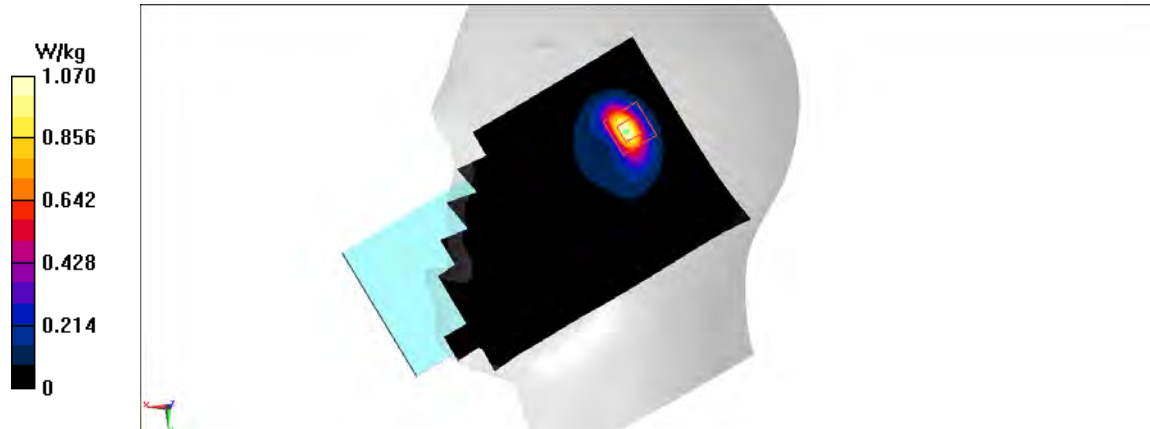
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.77 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.194 W/kg
SAR(1 g) = 0.142 W/kg; SAR(10 g) = 0.109 W/kg
Maximum value of SAR (measured) = 0.174 W/kg

Fig A.38

GSM850_CH190 Rear

Date: 1/5/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 836.6; σ = 0.9 mho/m; εr = 40.92; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: GSM850 836.6 Duty Cycle: 1：2.67

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

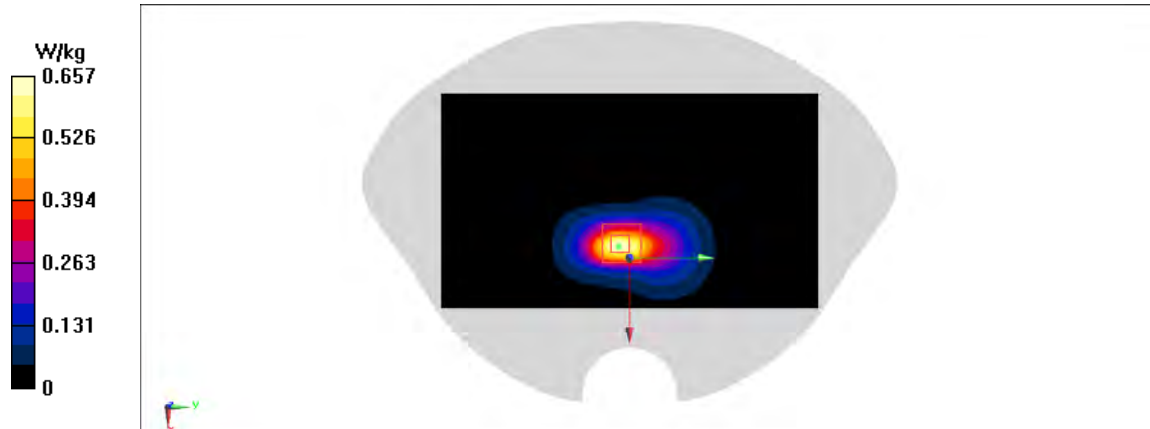Maximum value of SAR (interpolated) = 0.178 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.48 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.209 W/kg

SAR(1 g) = 0.133 W/kg; SAR(10 g) = 0.097 W/kg

Maximum value of SAR (measured) = 0.16 W/kg

Fig A.39

PCS1900_CH512 Right Tilt

Date: 1/8/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1850.2; σ = 1.36 mho/m; εr = 40.8; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: PCS1900 1850.2 Duty Cycle: 1：8.3
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
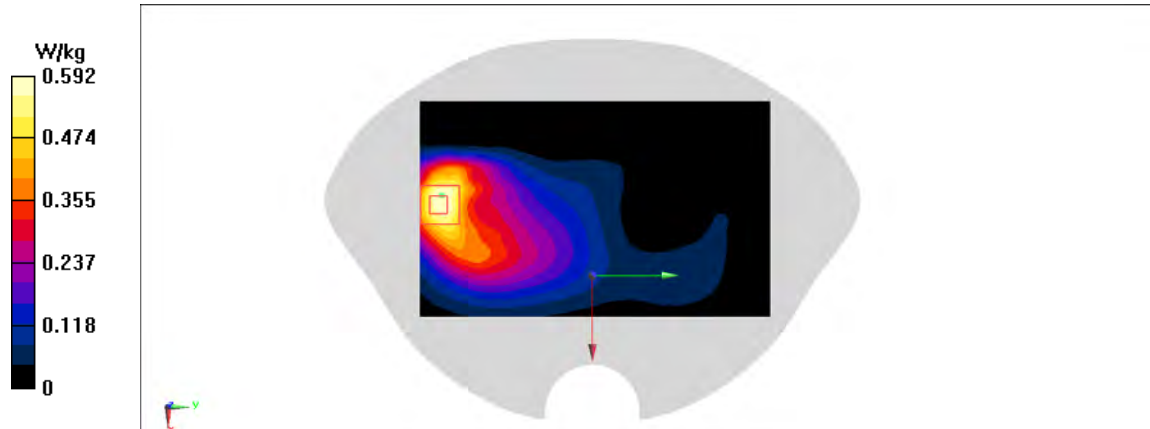Maximum value of SAR (interpolated) = 1.07 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.29 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.606 W/kg; SAR(10 g) = 0.262 W/kg
Maximum value of SAR (measured) = 0.981 W/kg

Fig A.40

PCS1900_CH810 Top

Date: 1/8/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: f = 1909.8; σ = 1.418 mho/m; εr = 40.73; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: PCS1900 1909.8 Duty Cycle: 1：2.67

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.657 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.02 V/m; Power Drift = 0 dB

Peak SAR (extrapolated) = 0.817 W/kg

SAR(1 g) = 0.424 W/kg; SAR(10 g) = 0.21 W/kg
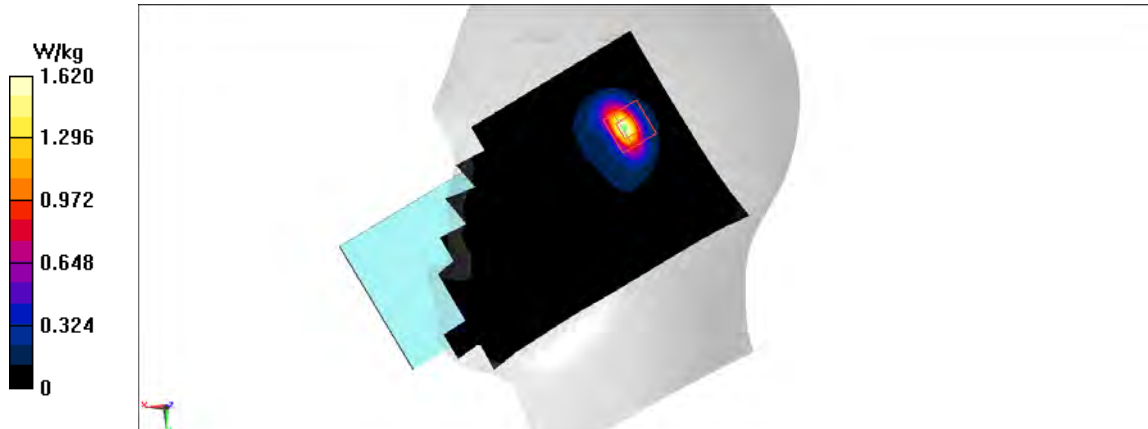
Maximum value of SAR (measured) = 0.68 W/kg

Fig A.41

PCS1900_CH810 Rear

Date: 1/8/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1909.8; σ = 1.418 mho/m; εr = 40.73; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: PCS1900 1909.8 Duty Cycle: 1：2.67
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
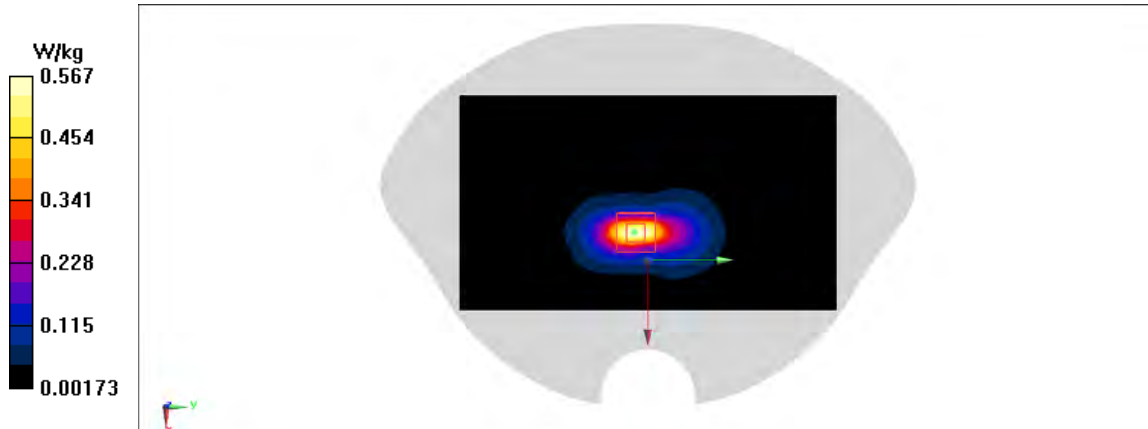Maximum value of SAR (interpolated) = 0.592 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.996 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.76 W/kg
SAR(1 g) = 0.442 W/kg; SAR(10 g) = 0.254 W/kg
Maximum value of SAR (measured) = 0.626 W/kg

Fig A.42

WCDMA1900-BII_CH9662 Right Tilt

Date: 1/8/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1852.4; σ = 1.362 mho/m; εr = 40.8; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: WCDMA1900-BII 1852.4 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

   Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
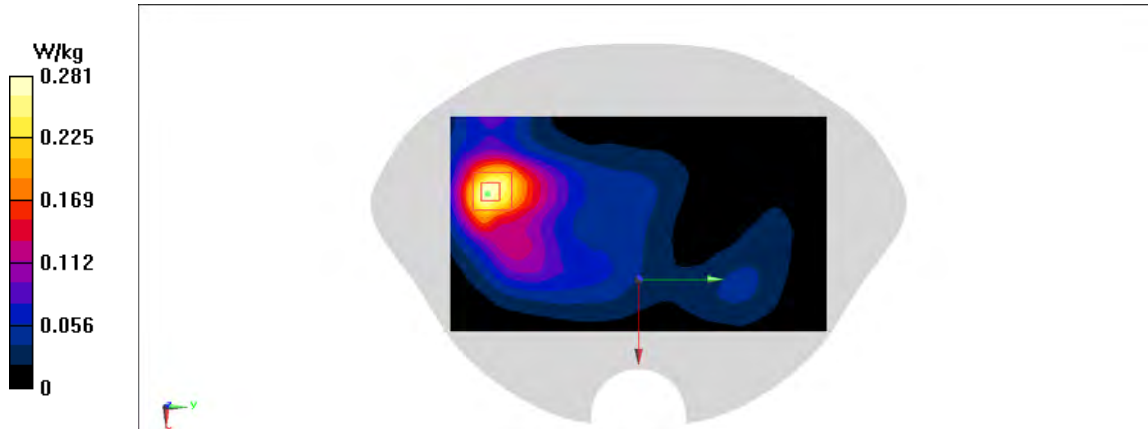   Maximum value of SAR (interpolated) = 1.62 W/kg

   Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
   Reference Value = 19.04 V/m; Power Drift = -0.11 dB
   Peak SAR (extrapolated) = 1.97 W/kg
   SAR(1 g) = 0.875 W/kg; SAR(10 g) = 0.37 W/kg
   Maximum value of SAR (measured) = 1.48 W/kg

Fig A.43

WCDMA1900-BII_CH9938 Top

Date: 1/8/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: f = 1907.6; σ = 1.416 mho/m; εr = 40.73; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: WCDMA1900-BII 1907.6 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.567 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.64 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.739 W/kg

SAR(1 g) = 0.374 W/kg; SAR(10 g) = 0.18 W/kg

Maximum value of SAR (measured) = 0.595 W/kg

Fig A.44

WCDMA1900-BII_CH9800 Rear

Date: 1/8/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: f = 1880; σ = 1.389 mho/m; εr = 40.76; ρ = 1000 kg/m³

Ambient Temperature: 22.5℃,   Liquid Temperature: 22.3℃

Communication System: WCDMA1900-BII 1880 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
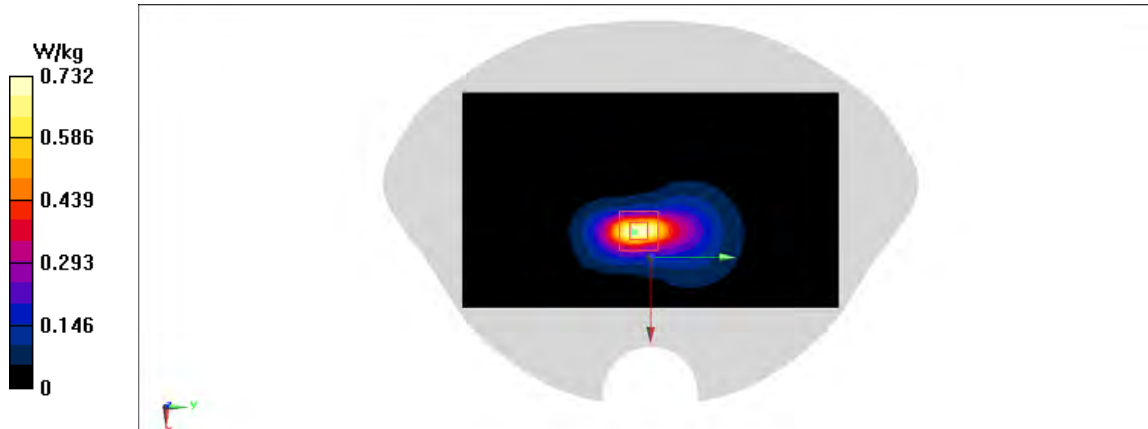
Maximum value of SAR (interpolated) = 0.281 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.302 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.356 W/kg

SAR(1 g) = 0.202 W/kg; SAR(10 g) = 0.114 W/kg

Maximum value of SAR (measured) = 0.298 W/kg

Fig A.45

WCDMA1700-BIV_CH1738 Right Tilt

Date: 1/7/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: f = 1752.6; σ = 1.361 mho/m; εr = 39.69; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: WCDMA1700-BIV 1752.6 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
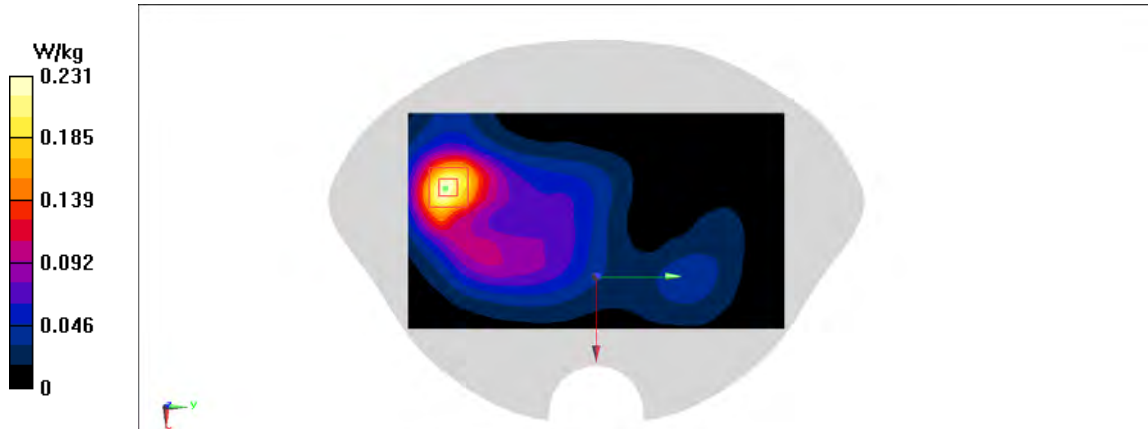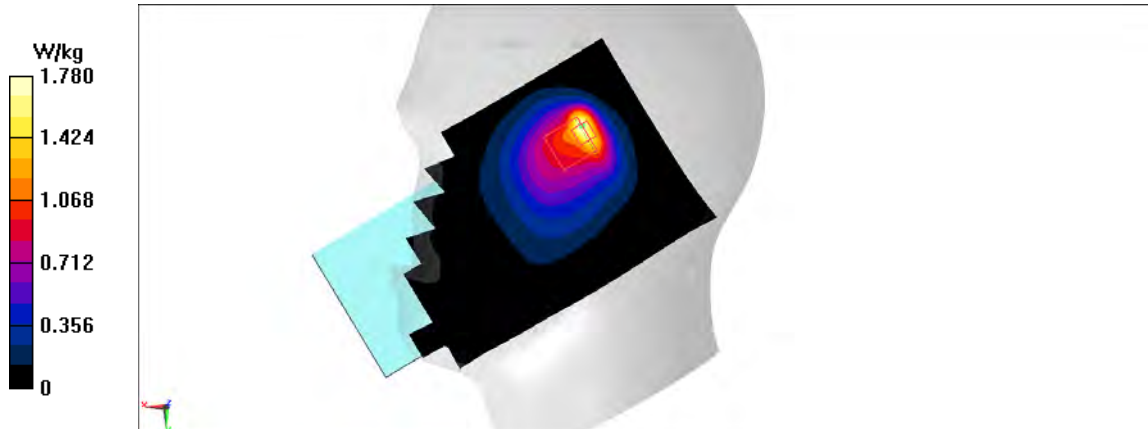Maximum value of SAR (interpolated) = 1.08 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.21 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.83 W/kg
SAR(1 g) = 0.816 W/kg; SAR(10 g) = 0.356 W/kg
Maximum value of SAR (measured) = 1.35 W/kg
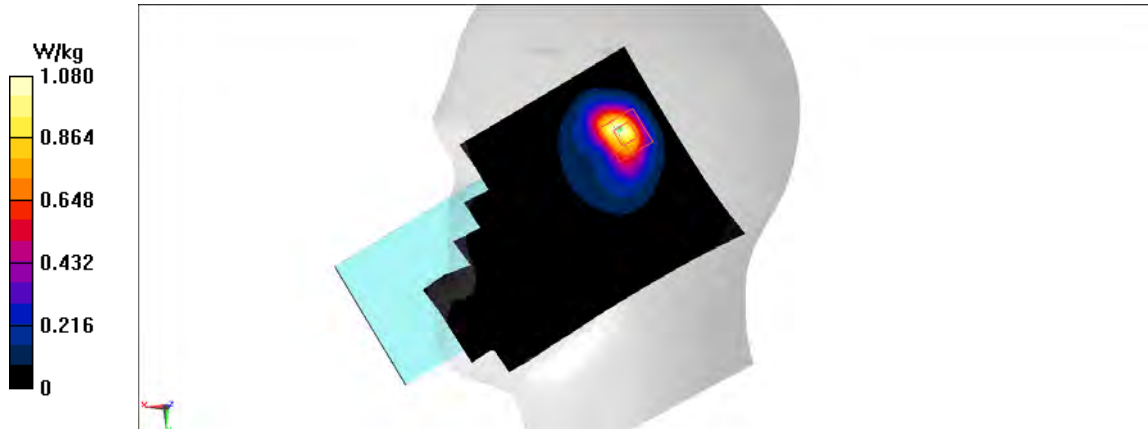
Fig A.46

WCDMA1700-BIV_CH1738 Top

Date: 1/7/2021
Electronics: DAE4 Sn536
Medium: head 1750 MHz
Medium parameters used: f = 1752.6; σ = 1.361 mho/m; εr = 39.69; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: WCDMA1700-BIV 1752.6 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
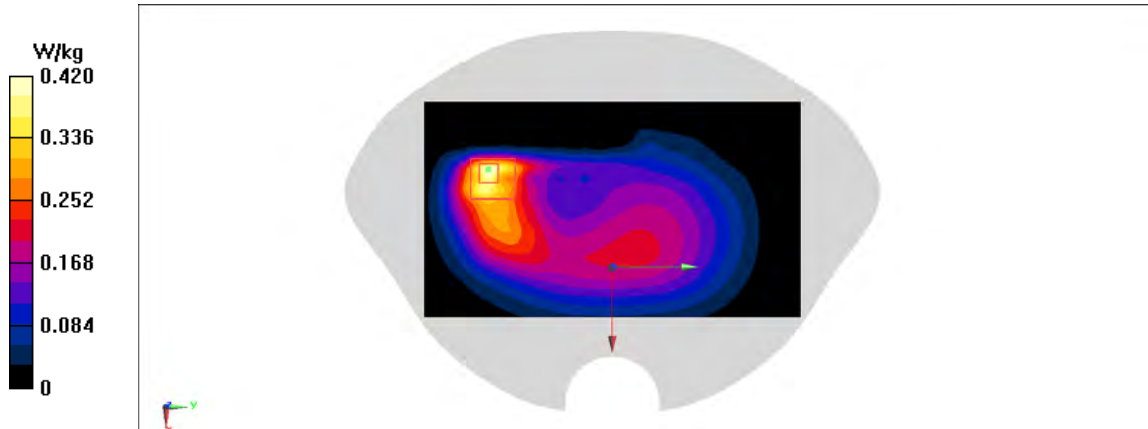Maximum value of SAR (interpolated) = 0.732 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.03 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 0.886 W/kg
SAR(1 g) = 0.455 W/kg; SAR(10 g) = 0.227 W/kg
Maximum value of SAR (measured) = 0.726 W/kg

Fig A.47

WCDMA1700-BIV_CH1738 Rear

Date: 1/7/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: f = 1752.6; σ = 1.361 mho/m; εr = 39.69; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: WCDMA1700-BIV 1752.6 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.231 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.641 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.285 W/kg

SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.093 W/kg

Maximum value of SAR (measured) = 0.239 W/kg

Fig A.48

WCDMA850-BV_CH4132 Right Cheek

Date: 1/5/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 826.4; σ = 0.889 mho/m; εr = 40.93; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: WCDMA850-BV 826.4 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
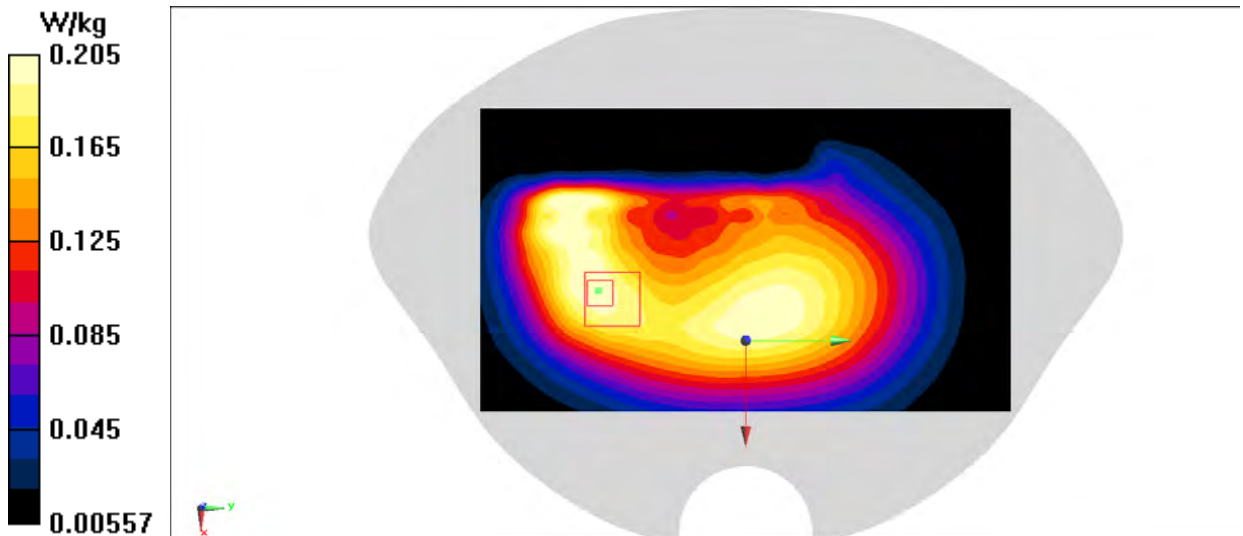Maximum value of SAR (interpolated) = 1.78 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.51 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 1.79 W/kg
SAR(1 g) = 0.836 W/kg; SAR(10 g) = 0.528 W/kg
Maximum value of SAR (measured) = 1.19 W/kg

Fig A.49

WCDMA850-BV_CH4182 Rear

Date: 1/5/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 836.4; σ = 0.899 mho/m; εr = 40.92; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: WCDMA850-BV 836.4 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
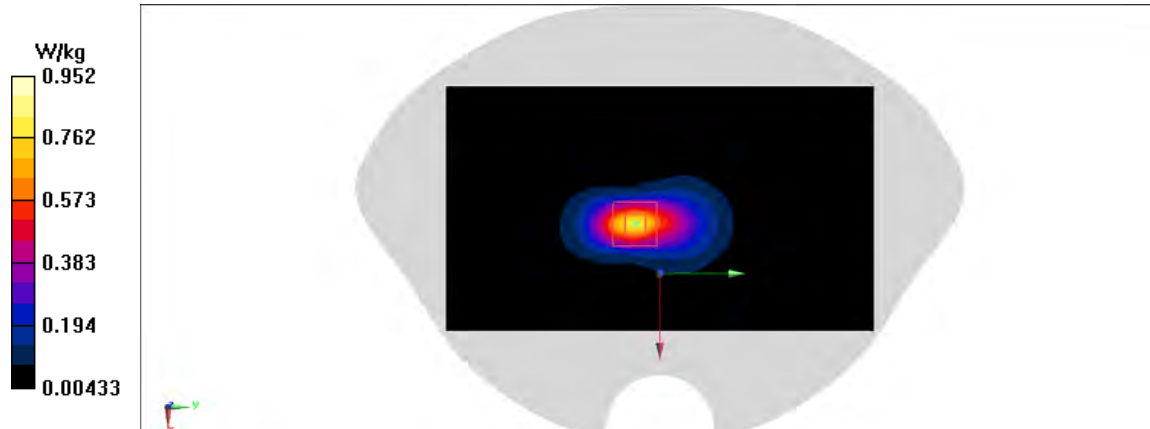Maximum value of SAR (interpolated) = 0.42 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.23 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.43 W/kg
SAR(1 g) = 0.232 W/kg; SAR(10 g) = 0.147 W/kg
Maximum value of SAR (measured) = 0.334 W/kg

Fig A.50

WCDMA850-BV_CH4182 Rear

Date: 1/5/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 836.4; σ = 0.899 mho/m; εr = 40.92; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: WCDMA850-BV 836.4 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (81x141x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
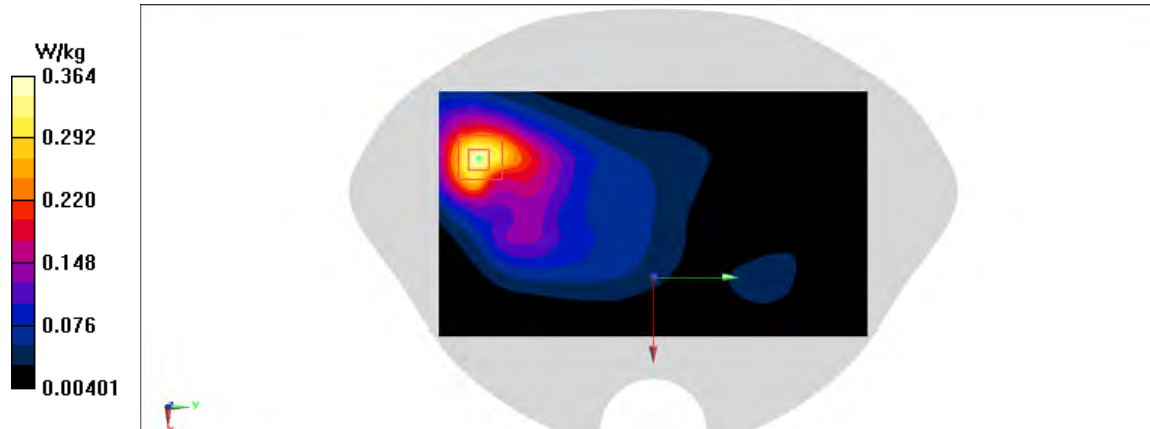
Maximum value of SAR (interpolated) = 0.239 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.69 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.239 W/kg

SAR(1 g) = 0.156 W/kg; SAR(10 g) = 0.111 W/kg

Maximum value of SAR (measured) = 0.205 W/kg

Fig A.51

LTE1900-FDD2_CH19100 Left Tilt

Date: 1/9/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.428 mho/m; εr = 39.99; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE1900-FDD2 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.818 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.41 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.946 W/kg
SAR(1 g) = 0.529 W/kg; SAR(10 g) = 0.265 W/kg
Maximum value of SAR (measured) = 0.795 W/kg
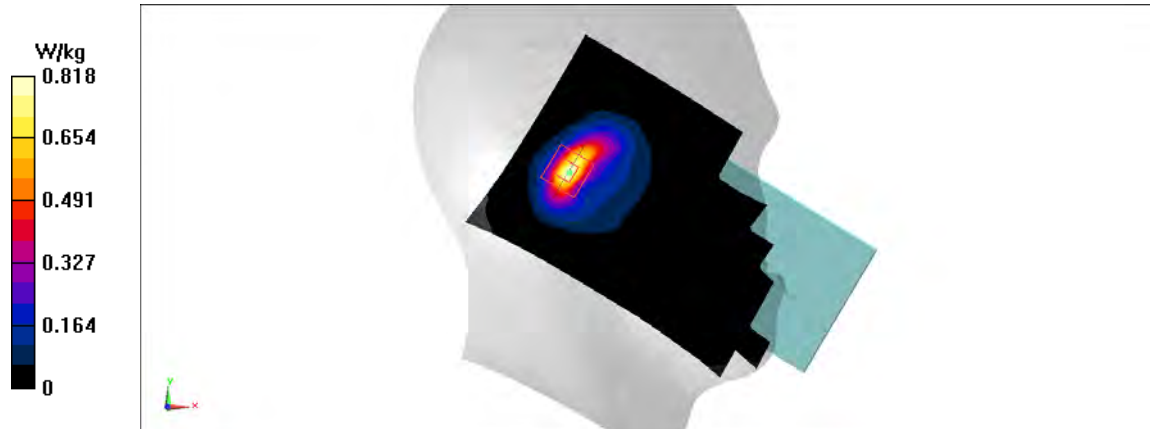
Fig A.52

LTE1900-FDD2_CH19100 Top

Date: 1/9/2021

Electronics: DAE4 Sn536

Medium: head 1900 MHz

Medium parameters used: f = 1900 MHz; σ = 1.428 mho/m; εr = 39.99; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE1900-FDD2 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
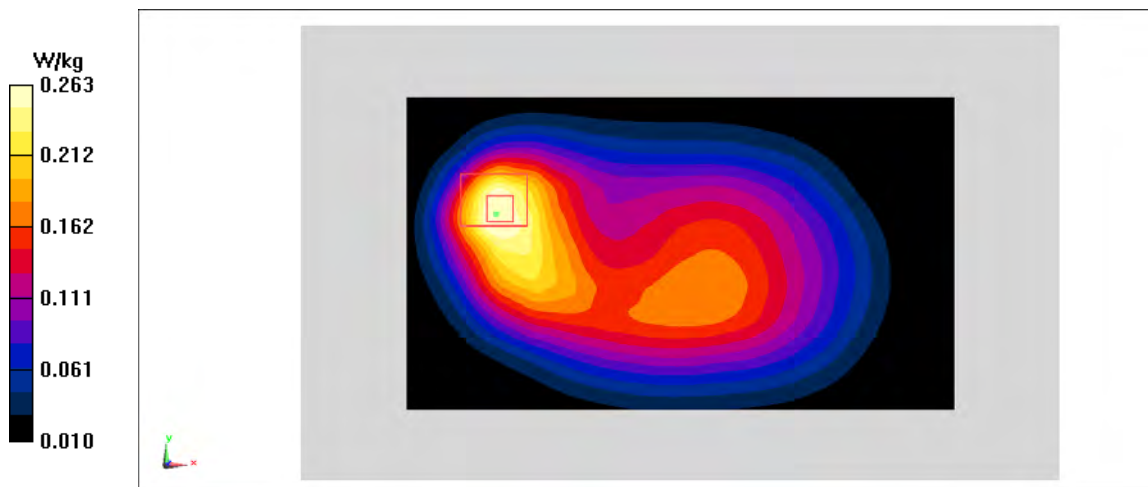
Maximum value of SAR (interpolated) = 0.804 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.81 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.582 W/kg; SAR(10 g) = 0.277 W/kg

Maximum value of SAR (measured) = 0.952 W/kg

Fig A.53

LTE1900-FDD2_CH19100 Rear

Date: 1/9/2021
Electronics: DAE4 Sn536
Medium: head 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.428 mho/m; εr = 39.99; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE1900-FDD2 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.349 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.983 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.435 W/kg
SAR(1 g) = 0.249 W/kg; SAR(10 g) = 0.14 W/kg
Maximum value of SAR (measured) = 0.364 W/kg

Fig A.54

LTE850-FDD5_CH20450 Right Cheek

Date: 1/6/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 829 MHz; σ = 0.899 mho/m; εr = 42.27; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE850-FDD5 829 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
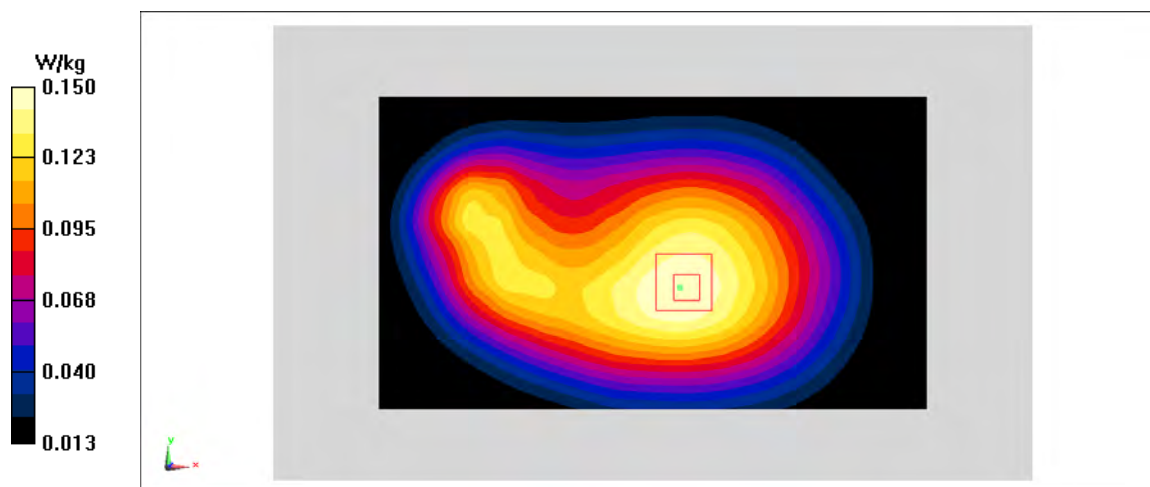Maximum value of SAR (interpolated) = 1.29 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 23.25 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.28 W/kg
SAR(1 g) = 0.589 W/kg; SAR(10 g) = 0.374 W/kg
Maximum value of SAR (measured) = 0.842 W/kg
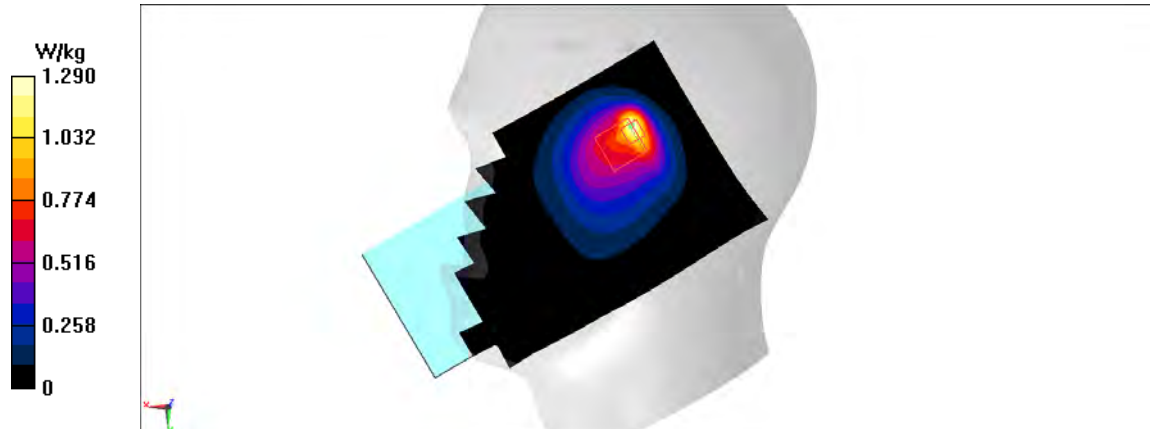
Fig A.55

No.I20Z62183-SEM01

LTE850-FDD5_CH20450 Rear

Date: 1/6/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 829 MHz; σ = 0.899 mho/m; εr = 42.27; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE850-FDD5 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

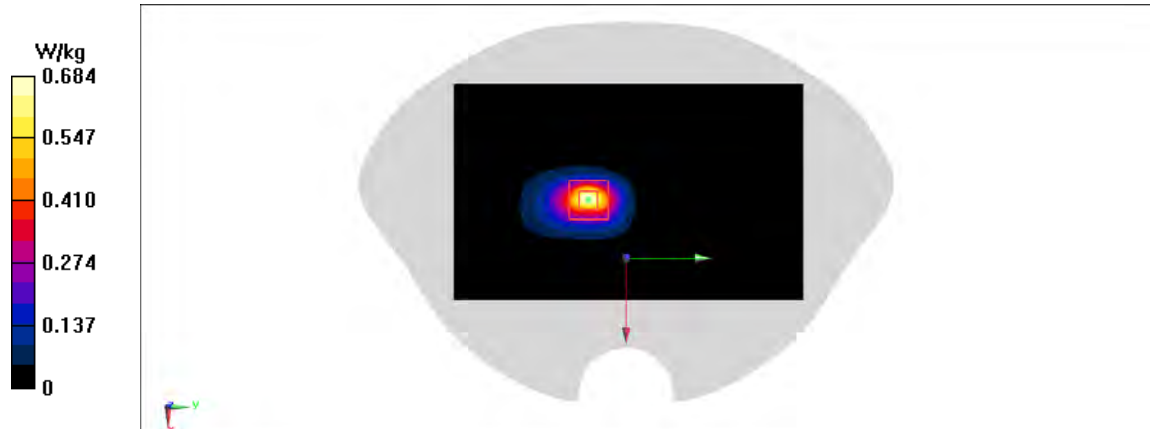Maximum value of SAR (interpolated) = 0.278 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.47 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.191 W/kg; SAR(10 g) = 0.127 W/kg

Maximum value of SAR (measured) = 0.263 W/kg

Fig A.56

LTE850-FDD5_CH20450 Rear

Date: 1/6/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 829 MHz; σ = 0.899 mho/m; εr = 42.27; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE850-FDD5 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
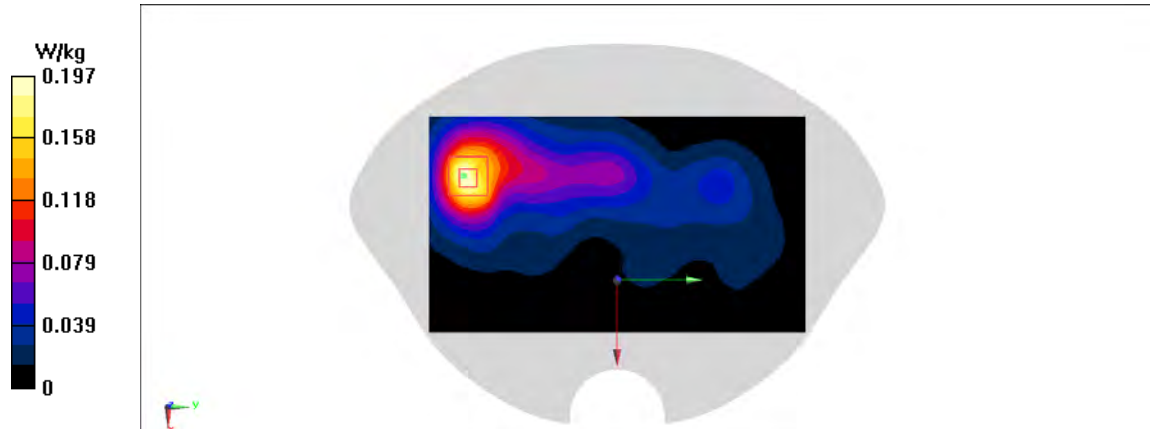
Maximum value of SAR (interpolated) = 0.15 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.9 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.163 W/kg

SAR(1 g) = 0.125 W/kg; SAR(10 g) = 0.097 W/kg

Maximum value of SAR (measured) = 0.15 W/kg

Fig A.57

LTE2500-FDD7_CH21350 Right Tilt

Date: 1/11/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2560 MHz; σ = 1.961 mho/m; εr = 39.05; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

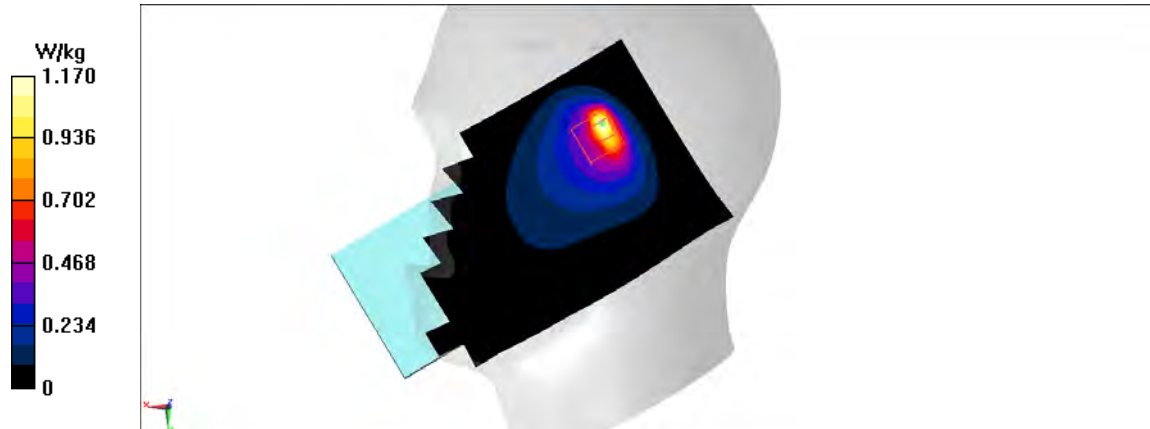Maximum value of SAR (interpolated) = 1.33 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.288 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.665 W/kg; SAR(10 g) = 0.267 W/kg

Maximum value of SAR (measured) = 1.33 W/kg
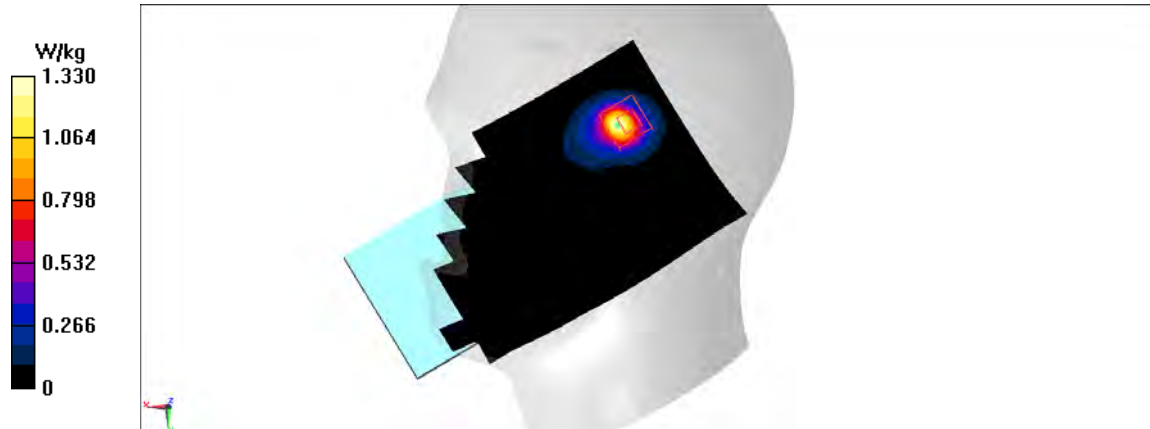
Fig A.58

LTE2500-FDD7_CH21350 Top

Date: 1/11/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2560 MHz; σ = 1.961 mho/m; εr = 39.05; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
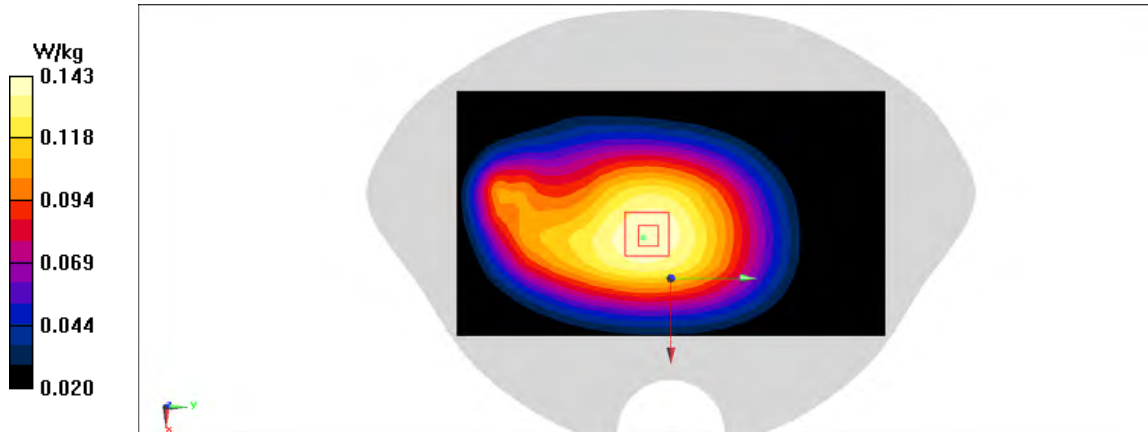
Maximum value of SAR (interpolated) = 0.684 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.235 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.195 W/kg

Maximum value of SAR (measured) = 0.796 W/kg

Fig A.59

LTE2500-FDD7_CH21350 Rear

Date: 1/11/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2560 MHz; σ = 1.961 mho/m; εr = 39.05; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE2500-FDD7 2560 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

    Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.197 W/kg

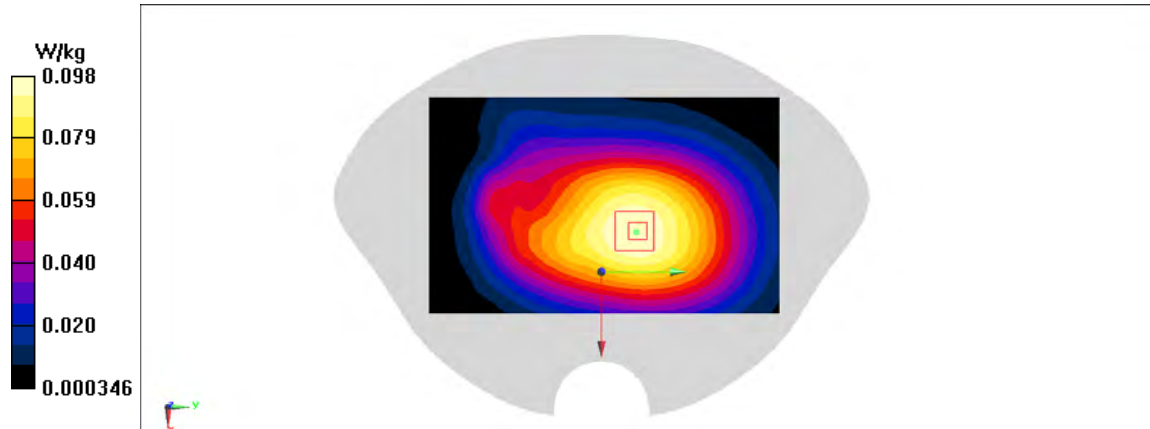   **Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.86 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.276 W/kg

SAR(1 g) = 0.138 W/kg; SAR(10 g) = 0.069 W/kg

Maximum value of SAR (measured) = 0.221 W/kg

Fig A.60

LTE700-FDD12_CH23060 Right Tilt

Date: 1/4/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: f = 704 MHz; σ = 0.846 mho/m; εr = 41.34; ρ = 1000 kg/m^3

Ambient Temperature: 22.5°C,   Liquid Temperature: 22.3°C

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

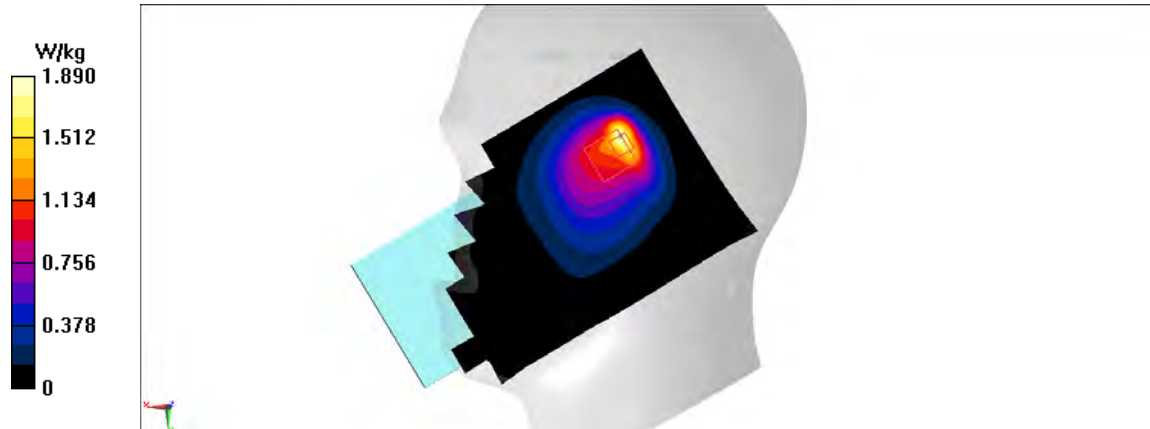Maximum value of SAR (interpolated) = 1.17 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.66 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.73 W/kg

SAR(1 g) = 0.587 W/kg; SAR(10 g) = 0.288 W/kg

Maximum value of SAR (measured) = 1.2 W/kg

Fig A.61

LTE700-FDD12_CH23060 Rear

Date: 1/4/2021
Electronics: DAE4 Sn536
Medium: head 750 MHz
Medium parameters used: f = 704 MHz; σ = 0.846 mho/m; εr = 41.34; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
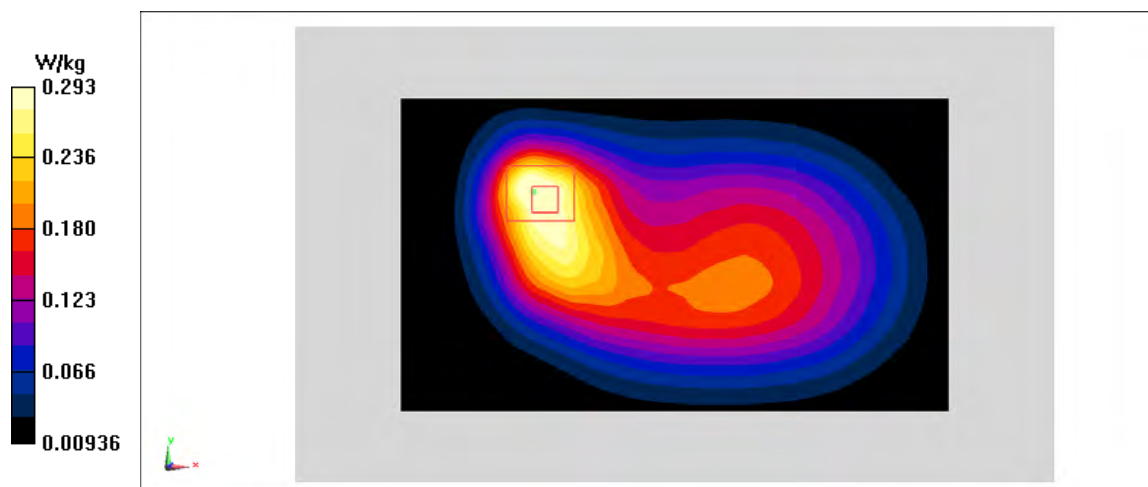Maximum value of SAR (interpolated) = 0.143 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.16 W/kg
SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.09 W/kg
Maximum value of SAR (measured) = 0.143 W/kg

Fig A.62

LTE700-FDD12_CH23060 Rear

Date: 1/4/2021

Electronics: DAE4 Sn536

Medium: head 750 MHz

Medium parameters used: f = 704 MHz; σ = 0.846 mho/m; εr = 41.34; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE700-FDD12 704 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

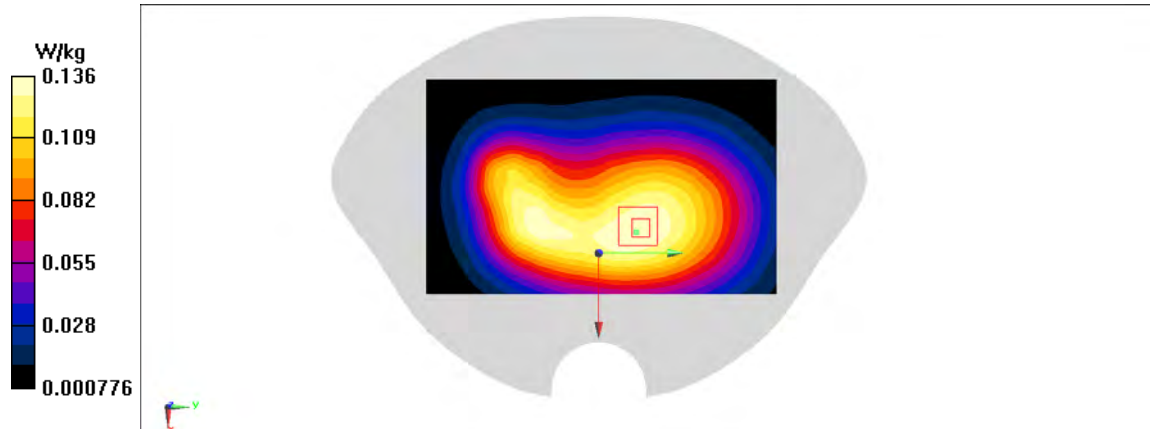Maximum value of SAR (interpolated) = 0.0984 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.44 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.111 W/kg

SAR(1 g) = 0.08 W/kg; SAR(10 g) = 0.061 W/kg

Maximum value of SAR (measured) = 0.0982 W/kg

Fig A.63

LTE850-FDD26_CH26865 Right Cheek
Date: 1/6/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 831.5 MHz; σ = 0.902 mho/m; εr = 42.26; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,　Liquid Temperature: 22.3ºC
Communication System: LTE850-FDD26 831.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

　Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
　Maximum value of SAR (interpolated) = 1.89 W/kg

　Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
　Reference Value = 32.76 V/m; Power Drift = 0.03 dB
　Peak SAR (extrapolated) = 1.76 W/kg
　SAR(1 g) = 0.831 W/kg; SAR(10 g) = 0.529 W/kg
　Maximum value of SAR (measured) = 1.18 W/kg

Fig A.64

LTE850-FDD26_CH26775 Rear

Date: 1/6/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 822.5 MHz; σ = 0.893 mho/m; εr = 42.28; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
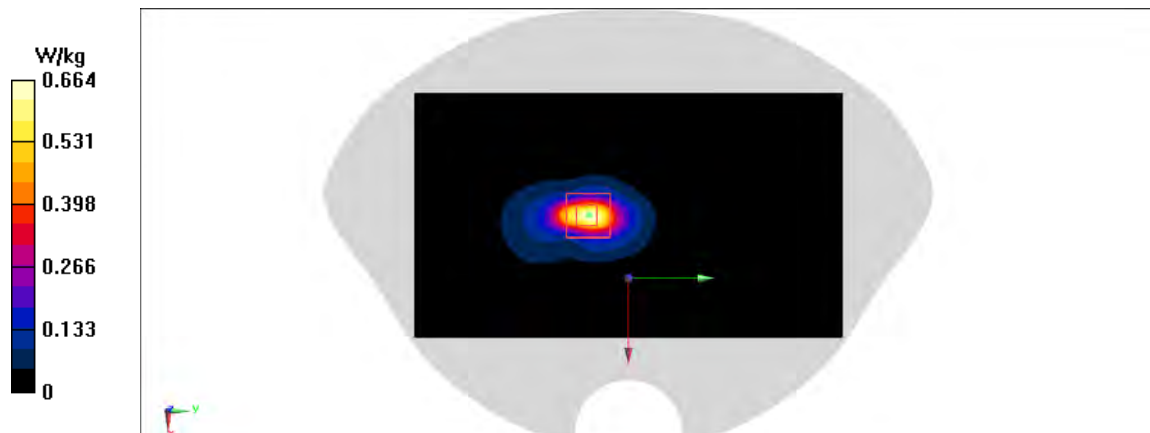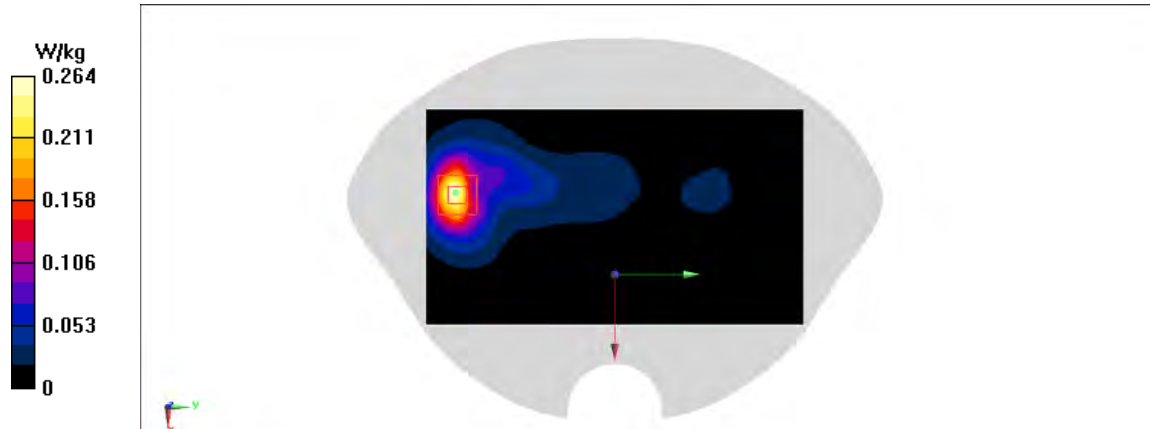Maximum value of SAR (interpolated) = 0.316 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.38 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.348 W/kg
SAR(1 g) = 0.214 W/kg; SAR(10 g) = 0.149 W/kg
Maximum value of SAR (measured) = 0.293 W/kg

Fig A.65

LTE850-FDD26_CH26775 Rear

Date: 1/6/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 822.5 MHz; σ = 0.893 mho/m; εr = 42.28; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE850-FDD26 822.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
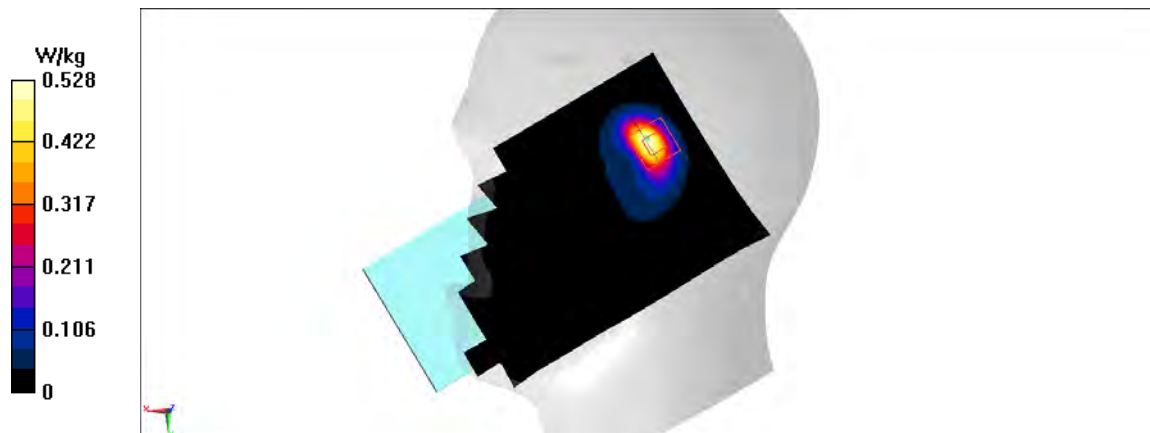Maximum value of SAR (interpolated) = 0.136 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.91 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.152 W/kg
SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.082 W/kg
Maximum value of SAR (measured) = 0.135 W/kg

Fig A.66

LTE2600-TDD41_CH40620 Right Tilt

Date: 1/20/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2593; σ = 1.925 mho/m; εr = 39.06; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE2600-TDD412593 Duty Cycle: 1:1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

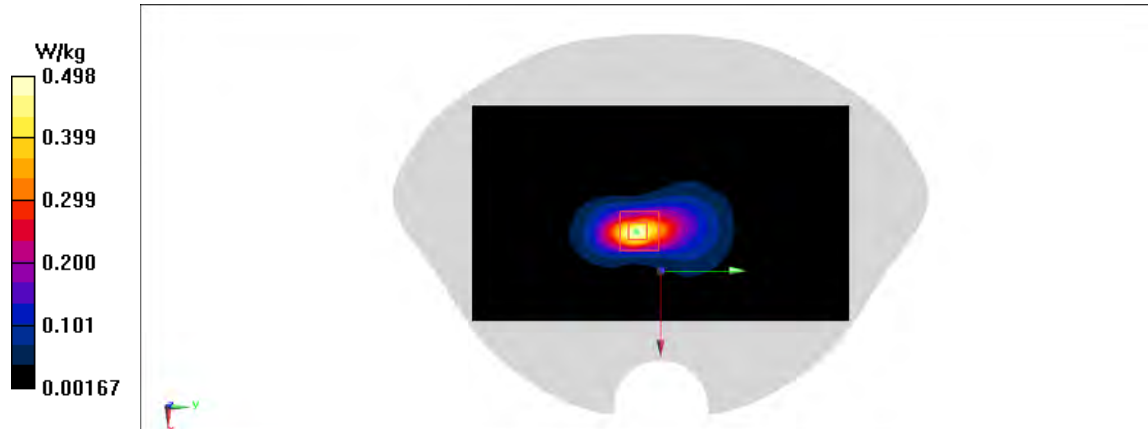Maximum value of SAR (interpolated) = 0.605 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.659 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.861 W/kg

SAR(1 g) = 0.338 W/kg; SAR(10 g) = 0.136 W/kg

Maximum value of SAR (measured) = 0.682 W/kg
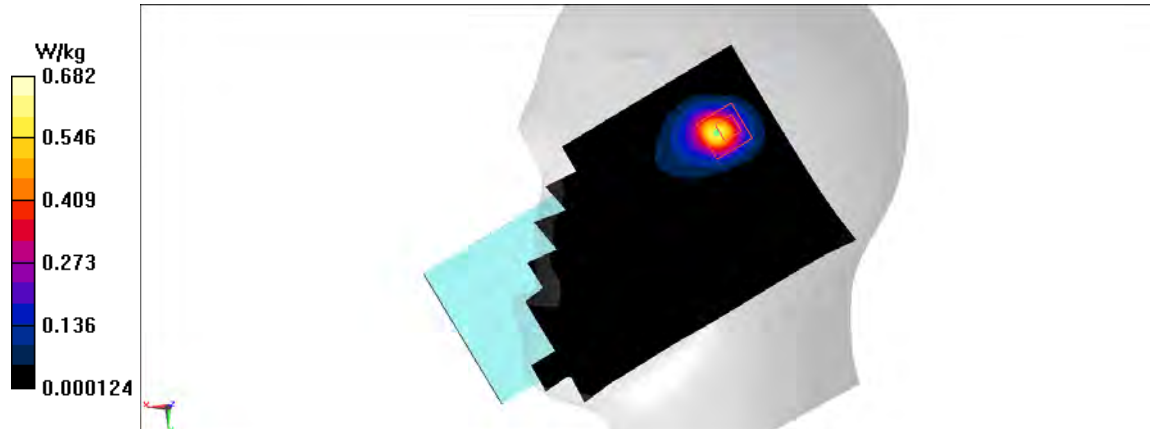
Fig A.67

LTE2600-TDD41_CH40620 Top

Date: 1/20/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2593; σ = 1.925 mho/m; εr = 39.06; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE2600-TDD41 2593 Duty Cycle: 1:1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
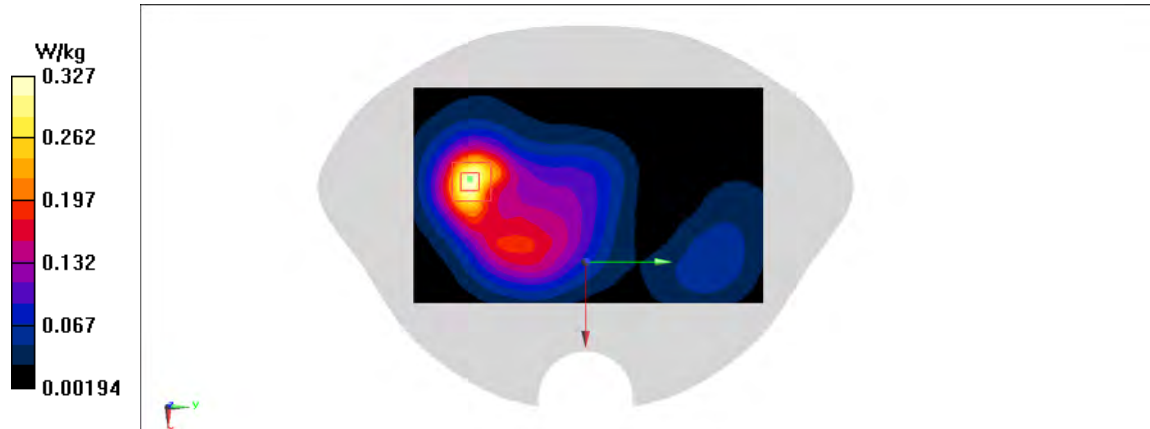
Maximum value of SAR (interpolated) = 0.658 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.217 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.912 W/kg

SAR(1 g) = 0.4 W/kg; SAR(10 g) = 0.168 W/kg

Maximum value of SAR (measured) = 0.664 W/kg

Fig A.68

LTE2600-TDD41_CH39750 Rear

Date: 1/20/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2506; σ = 1.941 mho/m; εr = 38.99; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE2600-TDD41 2506 Duty Cycle: 1:1.58

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
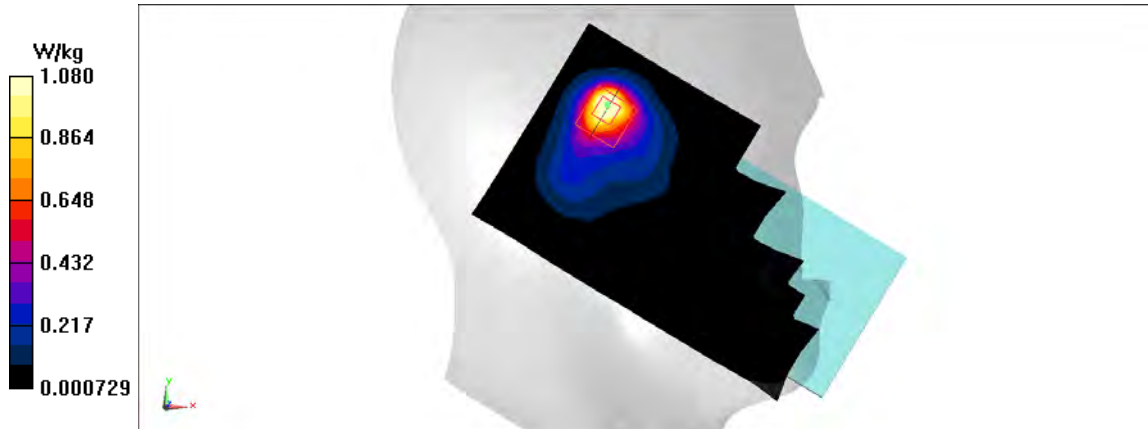
Maximum value of SAR (interpolated) = 0.264 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.491 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.344 W/kg

SAR(1 g) = 0.17 W/kg; SAR(10 g) = 0.081 W/kg

Maximum value of SAR (measured) = 0.276 W/kg

Fig A.69

LTE1700-FDD66_CH132072 Right Tilt

Date: 1/16/2021

Electronics: DAE4 Sn536

Medium: head 1750 MHz

Medium parameters used: f = 1720 MHz; σ = 1.374 mho/m; εr = 39.62; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

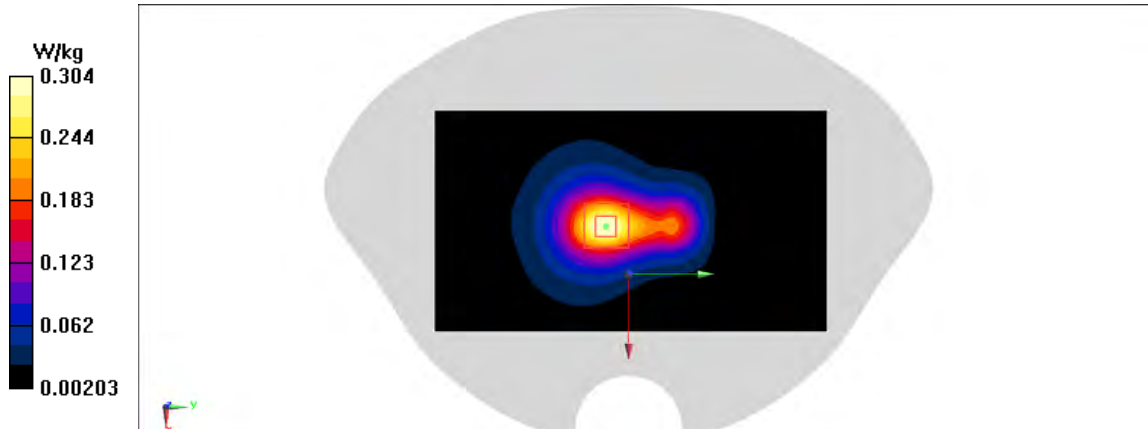Maximum value of SAR (interpolated) = 0.528 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.39 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.757 W/kg

SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.147 W/kg

Maximum value of SAR (measured) = 0.582 W/kg

Fig A.70

LTE1700-FDD66_CH132072 Top

Date: 1/16/2021
Electronics: DAE4 Sn536
Medium: head 1750 MHz
Medium parameters used: f = 1720 MHz; σ = 1.374 mho/m; εr = 39.62; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
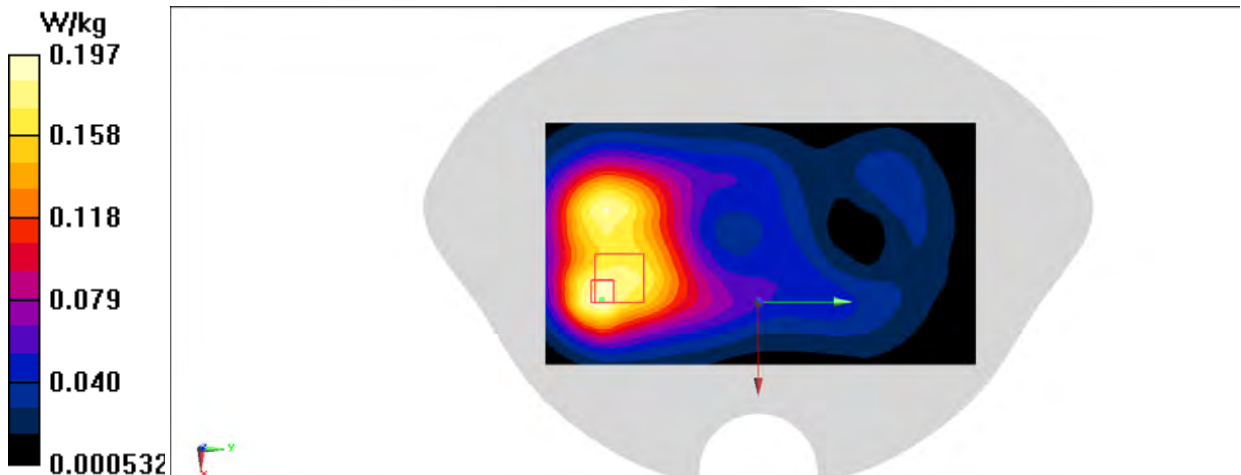Maximum value of SAR (interpolated) = 0.498 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.69 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.685 W/kg
SAR(1 g) = 0.347 W/kg; SAR(10 g) = 0.167 W/kg
Maximum value of SAR (measured) = 0.568 W/kg

Fig A.71

LTE1700-FDD66_CH132072 Rear

Date: 1/16/2021
Electronics: DAE4 Sn536
Medium: head 1750 MHz
Medium parameters used: f = 1720 MHz; σ = 1.374 mho/m; εr = 39.62; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC, Liquid Temperature: 22.3ºC
Communication System: LTE1700-FDD66 1720 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
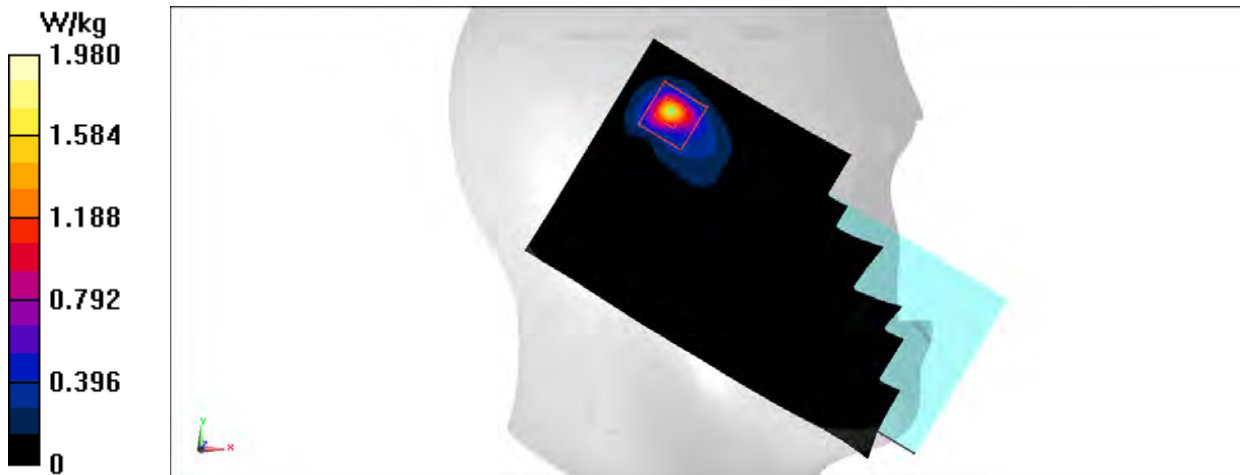Maximum value of SAR (interpolated) = 0.327 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.026 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.396 W/kg
SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.128 W/kg
Maximum value of SAR (measured) = 0.329 W/kg

Fig A.72

WLAN2450_CH11 Left Cheek
Date: 1/10/2021
Electronics: DAE4 Sn536
Medium: head 2450 MHz
Medium parameters used: f = 2462; σ = 1.791 mho/m; εr = 38.98; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: WLAN2450 2462 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(7.77,7.77,7.77)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
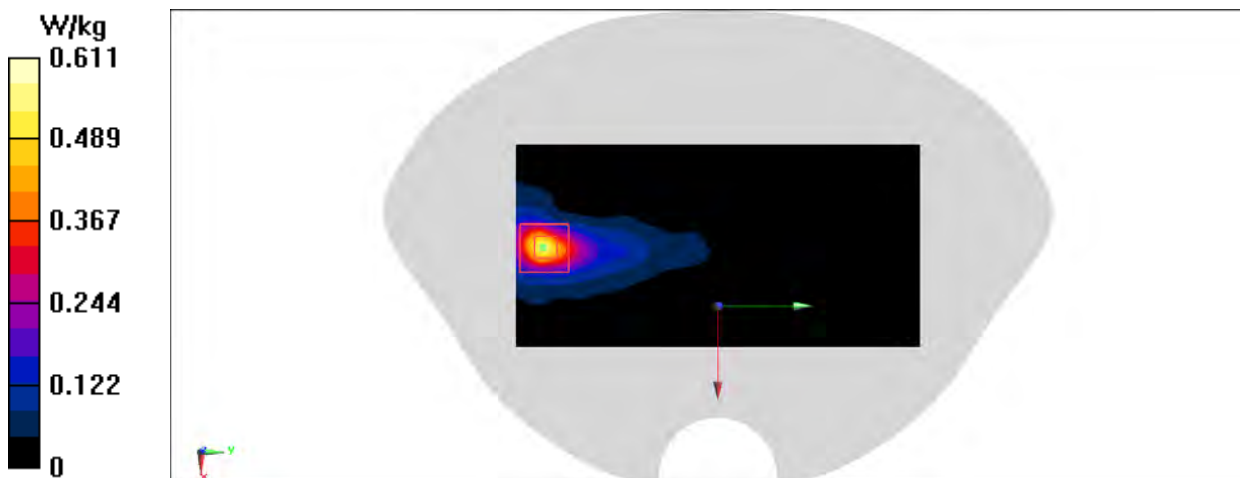Maximum value of SAR (interpolated) = 1.33 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.01 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 1.4 W/kg
SAR(1 g) = 0.649 W/kg; SAR(10 g) = 0.303 W/kg
Maximum value of SAR (measured) = 1.08 W/kg

Fig A.73

WLAN2450_CH6 Top

Date: 1/10/2021
Electronics: DAE4 Sn536
Medium: body 2450 MHz
Medium parameters used: f = 2437; σ = 1.768 mho/m; εr = 39.01; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC, Liquid Temperature: 22.3ºC
Communication System: WLAN2450 2437 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(7.77,7.77,7.77)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
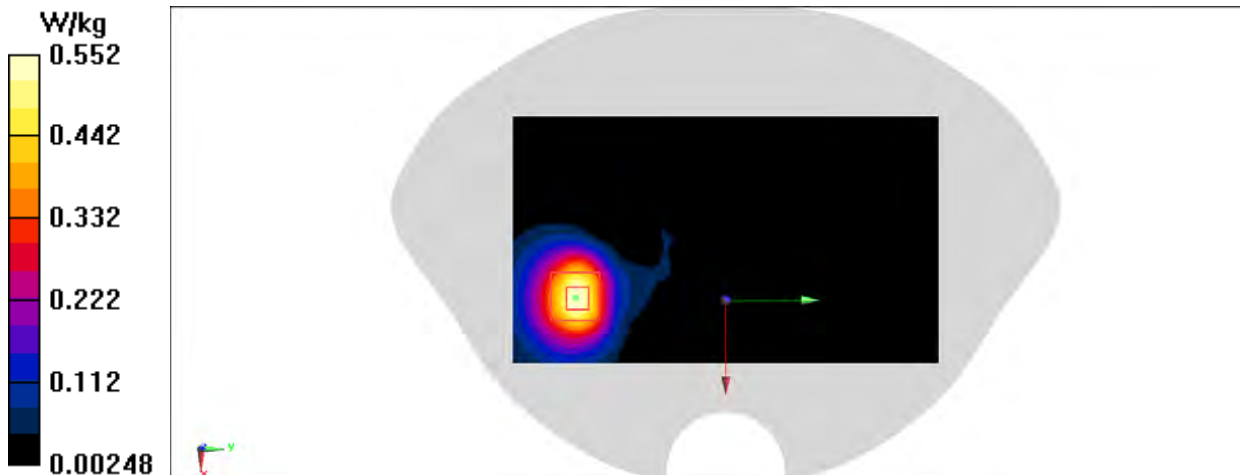Maximum value of SAR (interpolated) = 0.311 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.13 V/m; Power Drift = 0.1 dB
Peak SAR (extrapolated) = 0.383 W/kg
SAR(1 g) = 0.197 W/kg; SAR(10 g) = 0.104 W/kg
Maximum value of SAR (measured) = 0.304 W/kg

Fig A.74

WLAN2450_CH6 Rear

Date: 1/10/2021

Electronics: DAE4 Sn536

Medium: body 2450 MHz

Medium parameters used: f = 2437; σ = 1.768 mho/m; εr = 39.01; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,　Liquid Temperature: 22.3ºC

Communication System: WLAN2450 2437 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.77,7.77,7.77)

Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

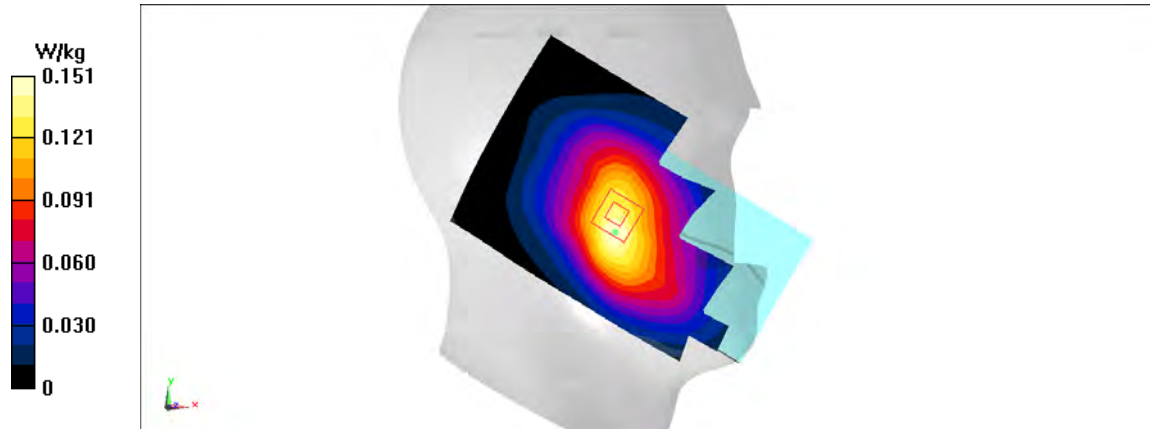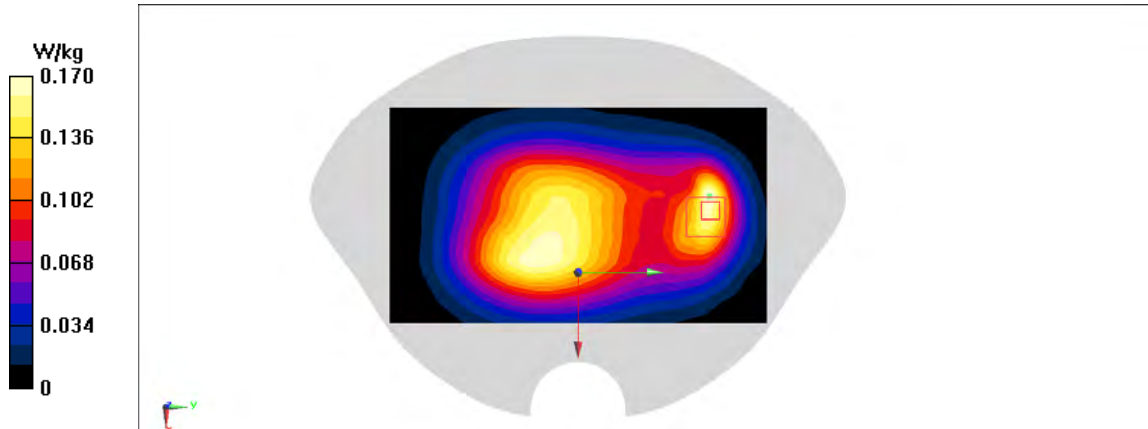Maximum value of SAR (interpolated) = 0.195 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.301 V/m; Power Drift = −0.02 dB

Peak SAR (extrapolated) = 0.245 W/kg

SAR(1 g) = 0.126 W/kg; SAR(10 g) = 0.074 W/kg

Maximum value of SAR (measured) = 0.197 W/kg

Fig A.75

WLAN5G_CH42 Left Cheek

Date: 1/21/2021

Electronics: DAE4 Sn536

Medium: head 5250 MHz

Medium parameters used: f = 5210; σ = 4.764 mho/m; εr = 36.79; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,　　Liquid Temperature: 22.3ºC

Communication System: WLAN5G 5250 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(5.61,5.61,5.61)

`Area Scan (111x171x1):` Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.66 W/kg

`Zoom Scan (7x7x7)/Cube 0:` Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.763 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 3.34 W/kg

SAR(1 g) = 0.719 W/kg; SAR(10 g) = 0.194 W/kg

Maximum value of SAR (measured) = 1.98 W/kg

Fig A.76

WLAN5G_CH42 Right
Date: 1/21/2021
Electronics: DAE4 Sn536
Medium: head 5250 MHz
Medium parameters used: f = 5210; σ = 4.764 mho/m; εr = 36.79; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: WLAN5G 5250 Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(5.61,5.61,5.61)

Area Scan (91x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
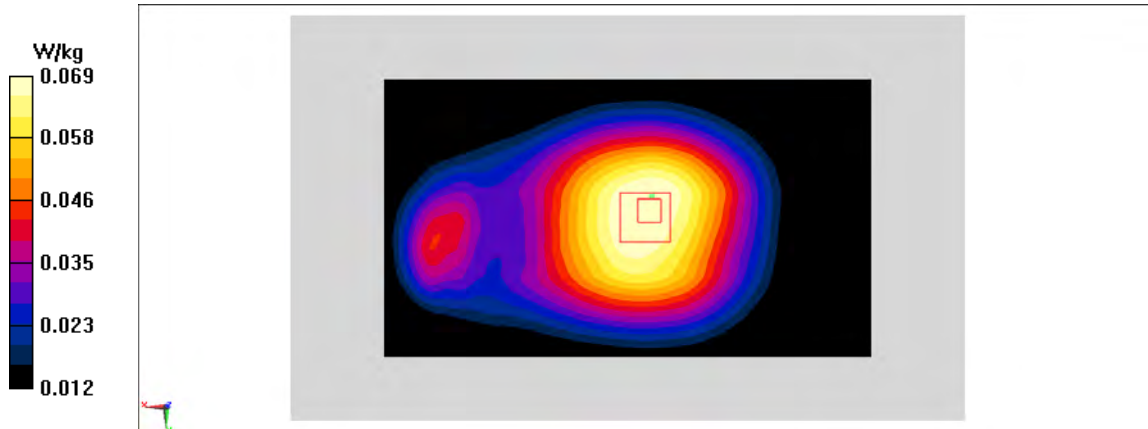
Maximum value of SAR (interpolated) = 0.542 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.293 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.246 W/kg; SAR(10 g) = 0.076 W/kg
Maximum value of SAR (measured) = 0.611 W/kg

Fig A.77

WLAN5G_CH40 Right

Date: 1/21/2021

Electronics: DAE4 Sn536

Medium: head 5250 MHz

Medium parameters used: f = 5210; σ = 4.774 mho/m; εr = 36.69; ρ = 1000 kg/m³

Ambient Temperature: 22.5°C,   Liquid Temperature: 22.3°C

Communication System: WLAN5G 5250 Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(5.61,5.61,5.61)

Area Scan (111x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

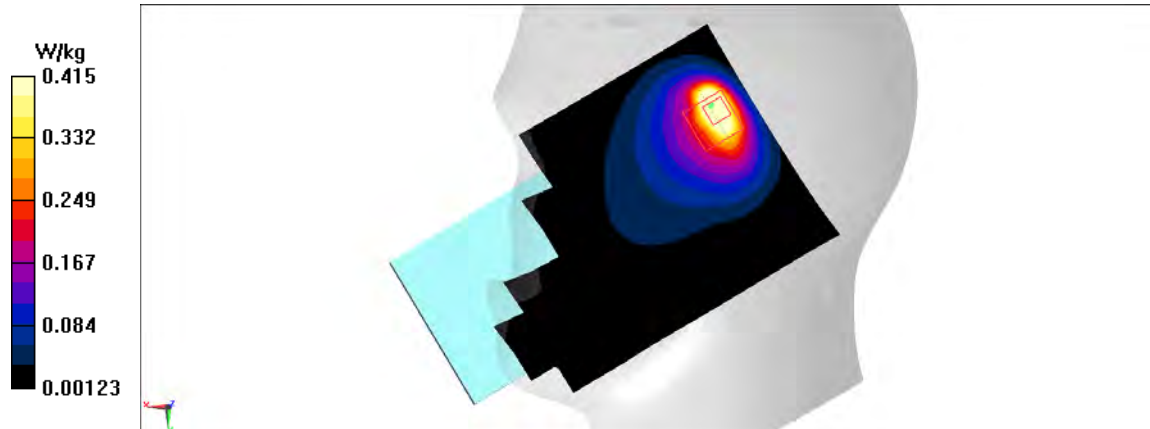Maximum value of SAR (interpolated) = 0.568 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.760 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.893 W/kg

SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.107 W/kg

Maximum value of SAR (measured) = 0.552 W/kg

Fig A.78

n5_CH167300 Left Cheek

Date: 1/24/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 836.5 MHz; σ = 0.906 mho/m; εr = 42.26; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System:n5 836.5 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

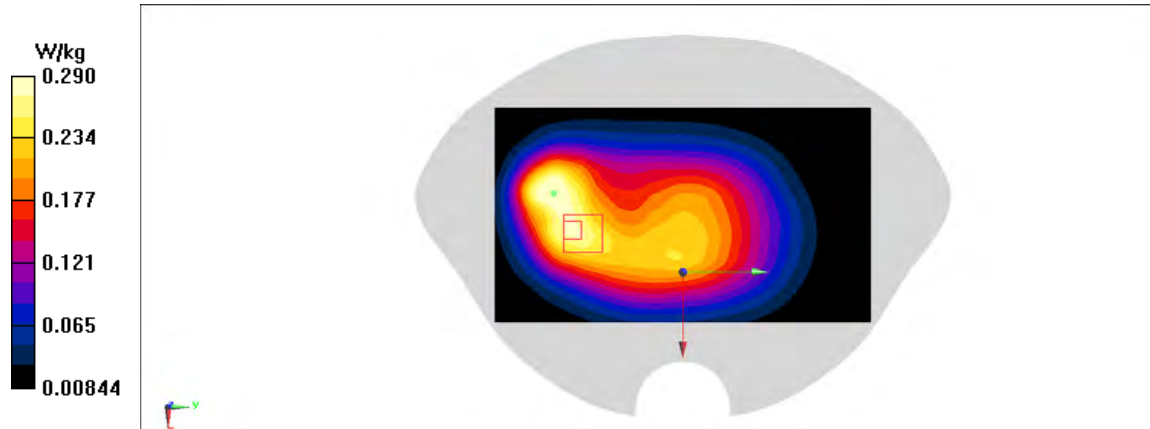Maximum value of SAR (interpolated) = 0.151 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.066 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.15 W/kg

SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.132 W/kg

Fig A.79

n5_CH167300 Rear

Date: 1/24/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 836.5 MHz; σ = 0.906 mho/m; εr = 42.26; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: n5 836.5 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
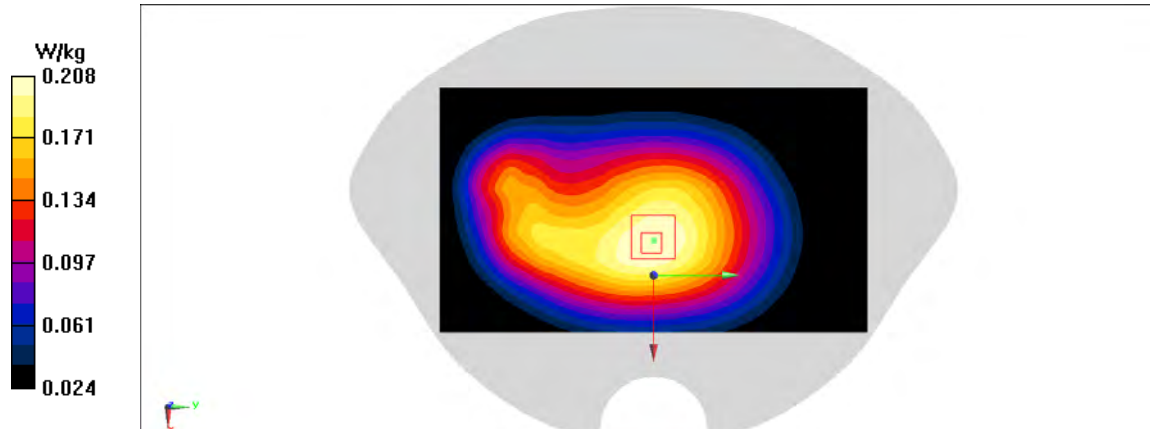Maximum value of SAR (interpolated) = 0.17 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.11 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.214 W/kg
SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.066 W/kg
Maximum value of SAR (measured) = 0.166 W/kg

Fig A.80

n5_CH167300 Rear

Date: 1/24/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 836.5 MHz; σ = 0.906 mho/m; εr = 42.26; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n5 836.5 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0703 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.264 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.076 W/kg

SAR(1 g) = 0.058 W/kg; SAR(10 g) = 0.045 W/kg

Maximum value of SAR (measured) = 0.069 W/kg

Fig A.81

n5_CH167300 Right Tilt

Date: 1/24/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 836.5 MHz; σ = 0.906 mho/m; εr = 42.26; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,　Liquid Temperature: 22.3ºC

Communication System:n5 836.5 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

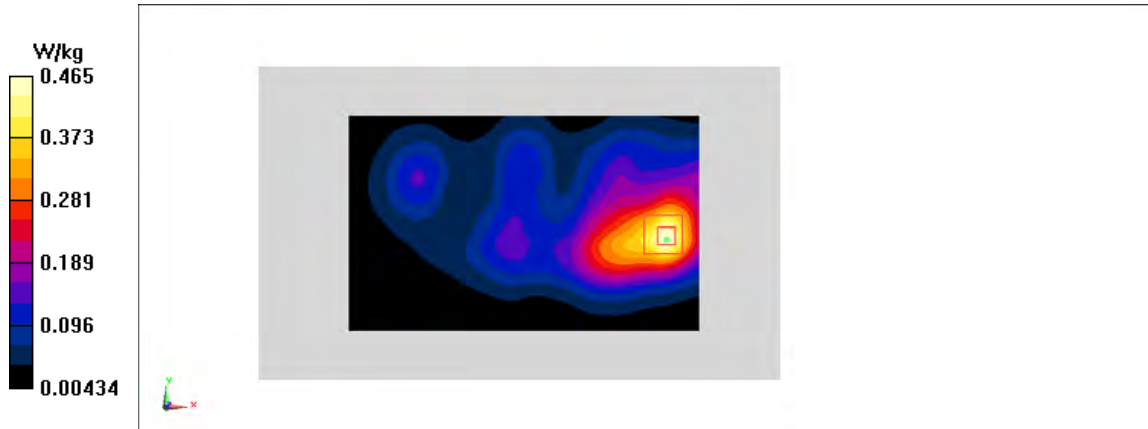Maximum value of SAR (interpolated) = 0.602 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.53 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.672 W/kg

SAR(1 g) = 0.259 W/kg; SAR(10 g) = 0.136 W/kg

Maximum value of SAR (measured) = 0.415 W/kg

Fig A.82

n5_CH167300 Rear

Date: 1/24/2021

Electronics: DAE4 Sn536

Medium: head 835 MHz

Medium parameters used: f = 836.5 MHz; σ = 0.906 mho/m; εr = 42.26; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n5 836.5 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.317 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.44 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.37 W/kg

SAR(1 g) = 0.213 W/kg; SAR(10 g) = 0.147 W/kg

Maximum value of SAR (measured) = 0.29 W/kg

Fig A.83

n5_CH167300 Rear

Date: 1/24/2021
Electronics: DAE4 Sn536
Medium: head 835 MHz
Medium parameters used: f = 836.5 MHz; σ = 0.906 mho/m; εr = 42.26; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: n5 836.5 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
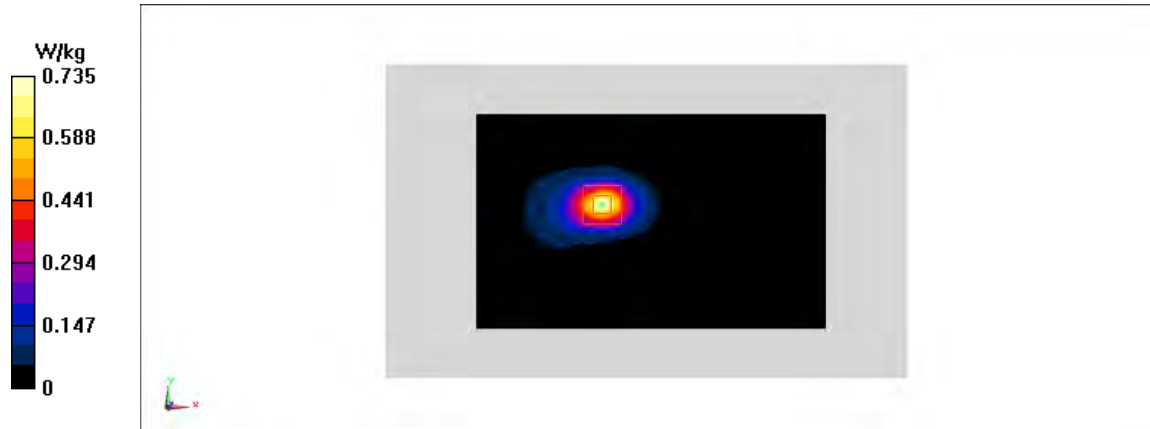Maximum value of SAR (interpolated) = 0.207 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.54 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.235 W/kg
SAR(1 g) = 0.165 W/kg; SAR(10 g) = 0.123 W/kg
Maximum value of SAR (measured) = 0.208 W/kg

Fig A.84

n7_CH507000 Right Cheek

Date: 1/25/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2535 MHz; σ = 1.937 mho/m; εr = 39.08; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n7 2535 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

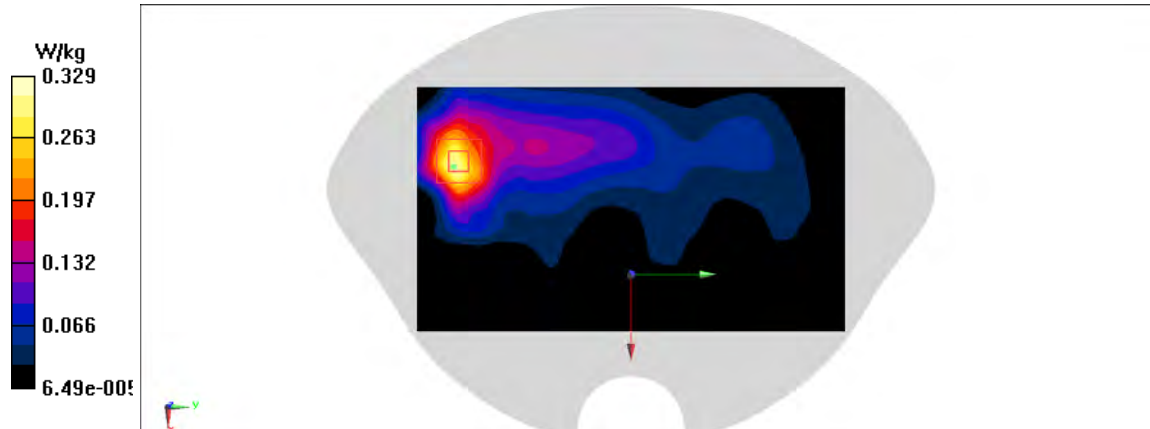Maximum value of SAR (interpolated) = 0.451 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.118 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.504 W/kg

SAR(1 g) = 0.281 W/kg; SAR(10 g) = 0.151 W/kg

Maximum value of SAR (measured) = 0.405 W/kg
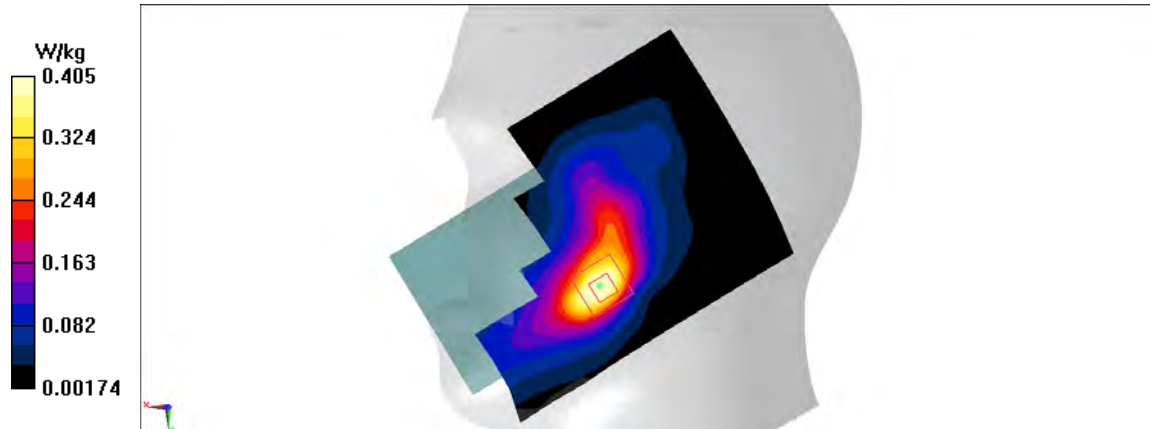
Fig A.85

n7_CH507000 Rear

Date: 1/25/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2535 MHz; σ = 1.937 mho/m; εr = 39.08; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n7 2535 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

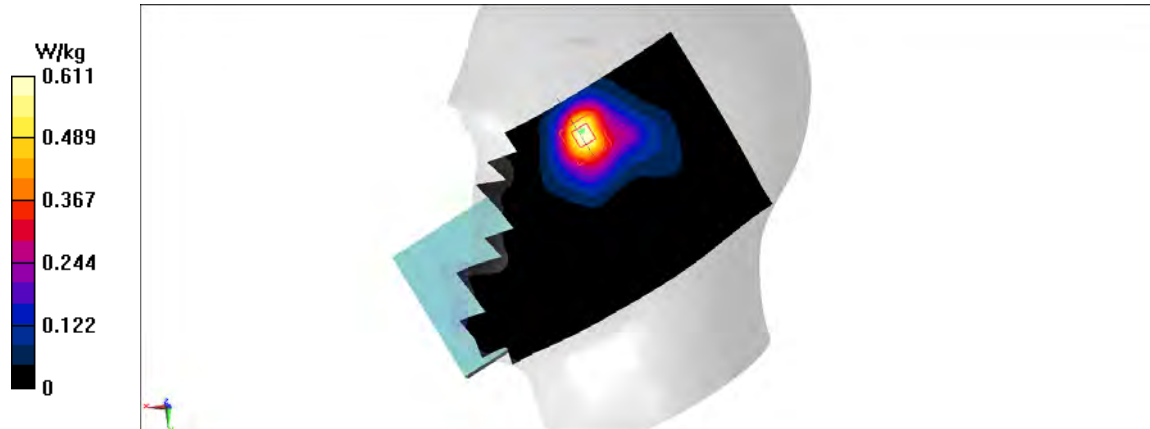Maximum value of SAR (interpolated) = 0.631 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.764 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.785 W/kg

SAR(1 g) = 0.414 W/kg; SAR(10 g) = 0.214 W/kg

Maximum value of SAR (measured) = 0.462 W/kg
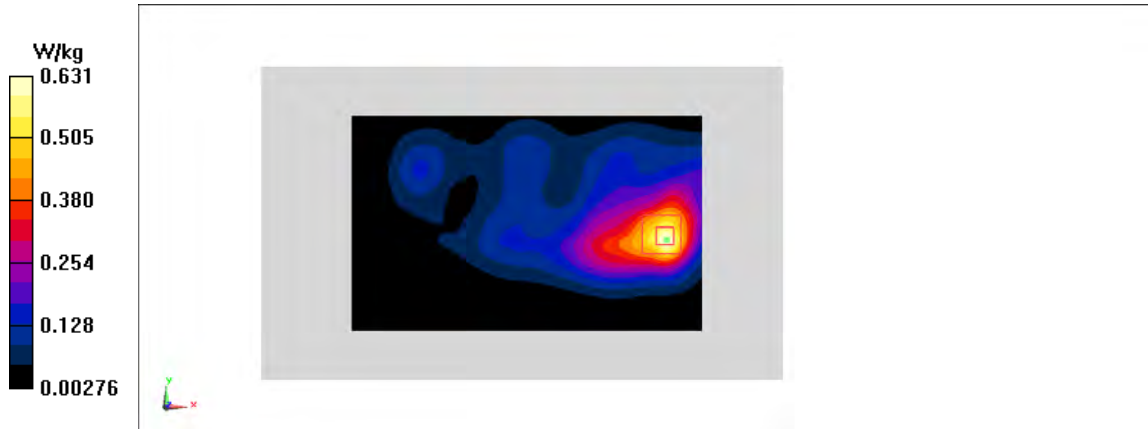
Fig A.86

n7_CH507000 Rear

Date: 1/25/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2535 MHz; σ = 1.937 mho/m; εr = 39.08; ρ = 1000 kg/m^3

Ambient Temperature: 22.5℃,   Liquid Temperature: 22.3℃

Communication System: n7 2535 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

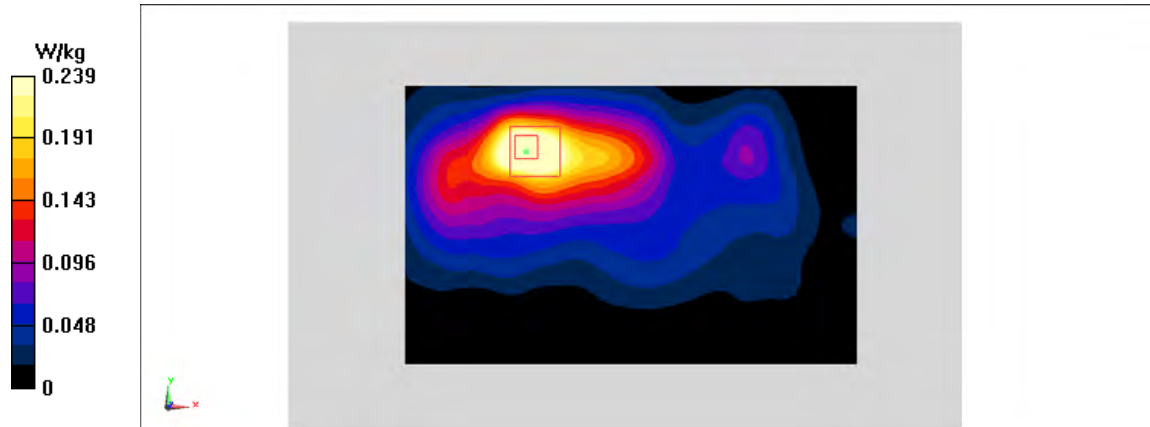Maximum value of SAR (interpolated) = 0.465 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.797 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.563 W/kg

SAR(1 g) = 0.301 W/kg; SAR(10 g) = 0.164 W/kg

Maximum value of SAR (measured) = 0.327 W/kg

Fig A.87

n7_CH507000 Right Tilt

Date: 1/25/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2535 MHz; σ = 1.937 mho/m; εr = 39.08; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n7 2535 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

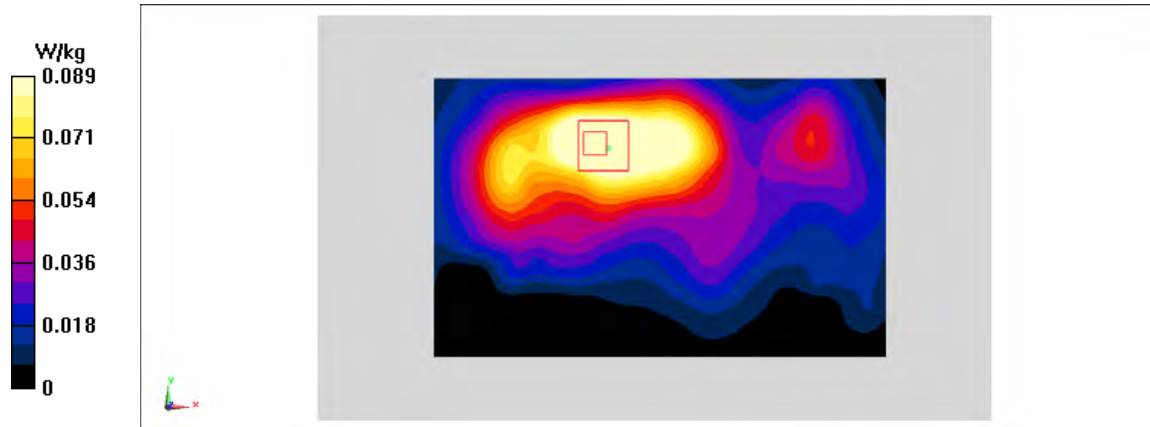Maximum value of SAR (interpolated) = 0.806 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.253 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.464 W/kg; SAR(10 g) = 0.178 W/kg

Maximum value of SAR (measured) = 0.867 W/kg
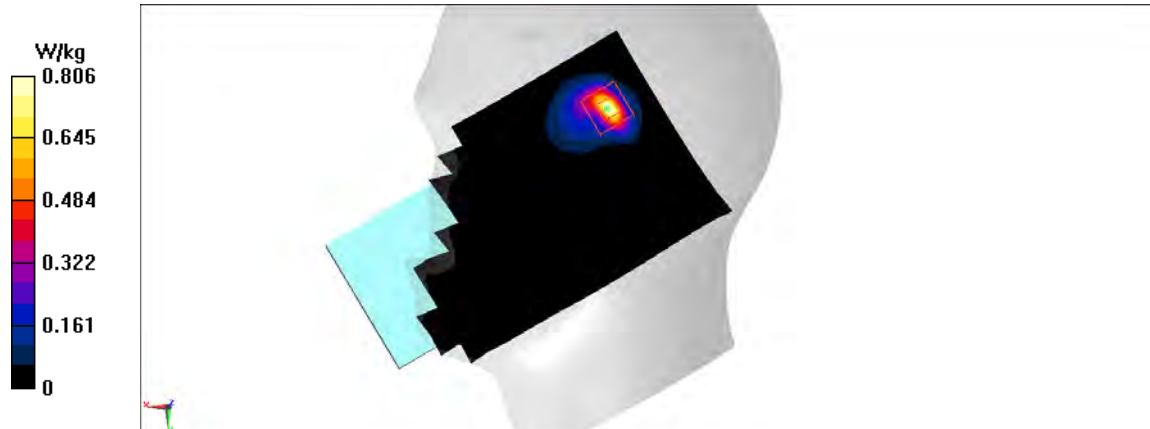
Fig A.88

n7_CH507000 Top
Date: 1/25/2021
Electronics: DAE4 Sn536
Medium: head 2600 MHz
Medium parameters used: f = 2535 MHz; σ = 1.937 mho/m; εr = 39.08; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: n7 2535 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
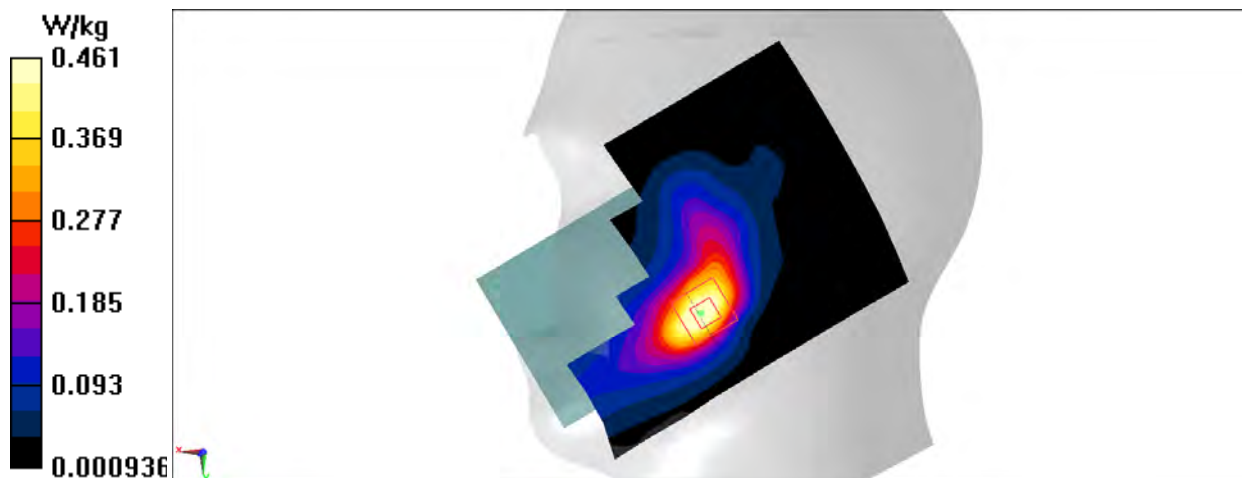Maximum value of SAR (interpolated) = 0.735 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.198 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.498 W/kg; SAR(10 g) = 0.212 W/kg
Maximum value of SAR (measured) = 0.569 W/kg

Fig A.89

n7_CH507000 Rear

Date: 1/25/2021
Electronics: DAE4 Sn536
Medium: head 2600 MHz
Medium parameters used: f = 2535 MHz; σ = 1.937 mho/m; εr = 39.08; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: n7 2535 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
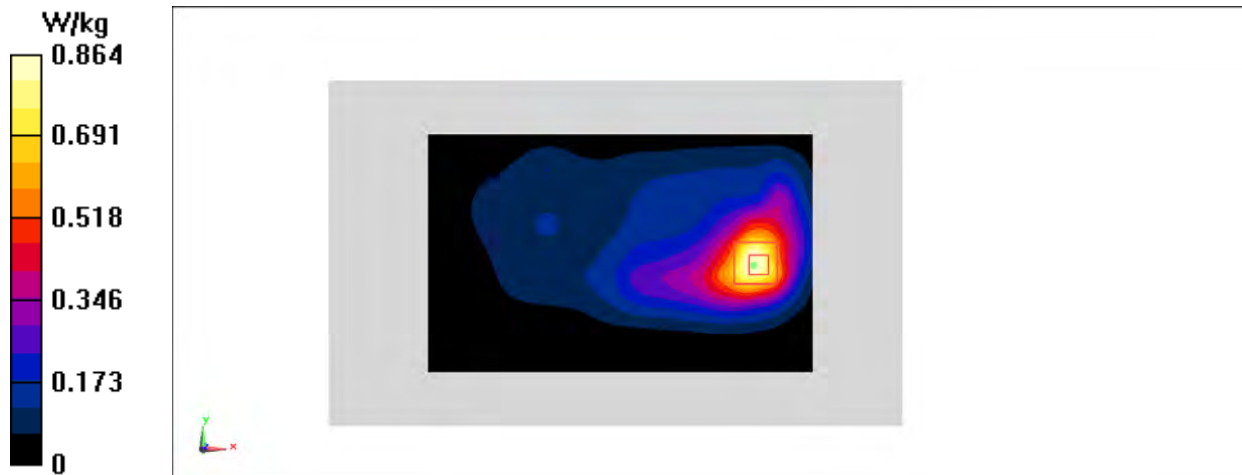Maximum value of SAR (interpolated) = 0.312 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.924 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.416 W/kg
SAR(1 g) = 0.207 W/kg; SAR(10 g) = 0.103 W/kg
Maximum value of SAR (measured) = 0.329 W/kg

Fig A.90

n7_CH507000 Right Cheek

Date: 1/25/2021
Electronics: DAE4 Sn536
Medium: head 2600 MHz
Medium parameters used: f = 2535 MHz; σ = 1.937 mho/m; εr = 39.08; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System: n7 2535 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
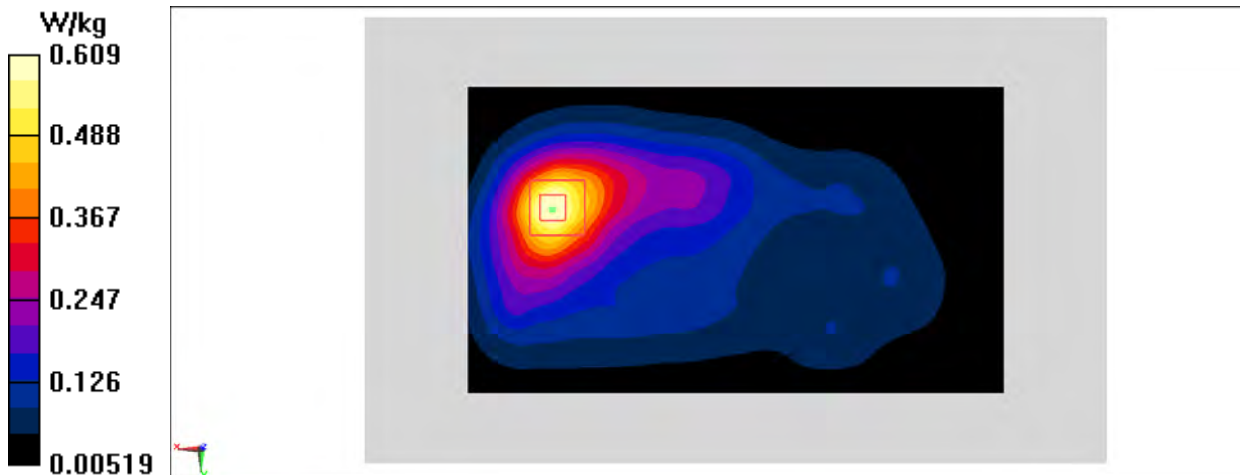Maximum value of SAR (interpolated) = 0.611 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.033 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.838 W/kg
SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.183 W/kg
Maximum value of SAR (measured) = 0.651 W/kg

Fig A.91

n7_CH507000 Rear

Date: 1/25/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2535 MHz; σ = 1.937 mho/m; εr = 39.08; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n7 2535 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
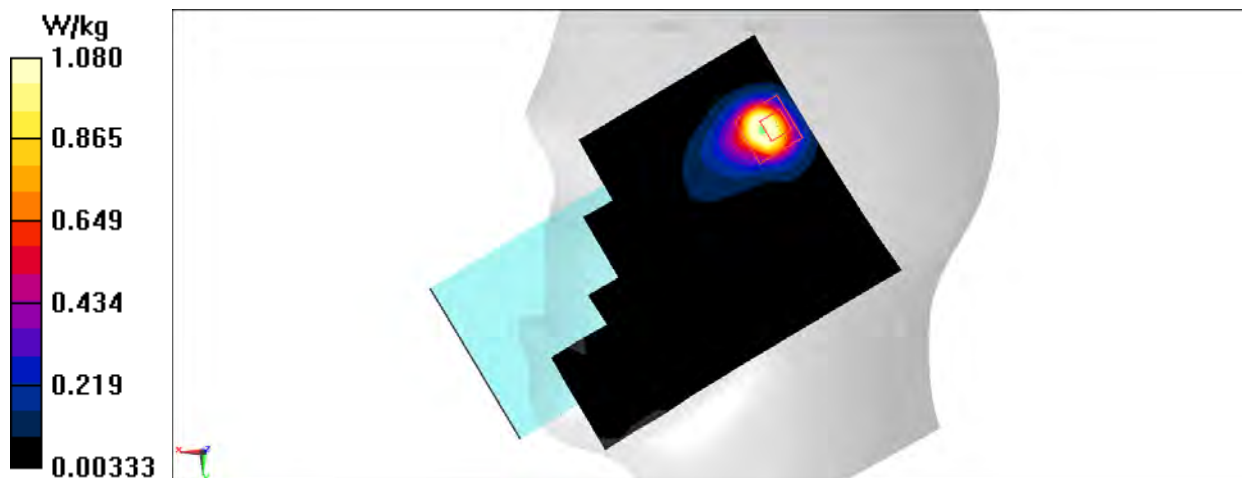
Maximum value of SAR (interpolated) = 0.299 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.765 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.442 W/kg

SAR(1 g) = 0.21 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.239 W/kg

Fig A.92

n7_CH507000 Rear

Date: 1/25/2021
Electronics: DAE4 Sn536
Medium: head 2600 MHz
Medium parameters used: f = 2535 MHz; σ = 1.937 mho/m; εr = 39.08; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC
Communication System:n7 2535 MHz Duty Cycle: 1：1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.122 W/kg

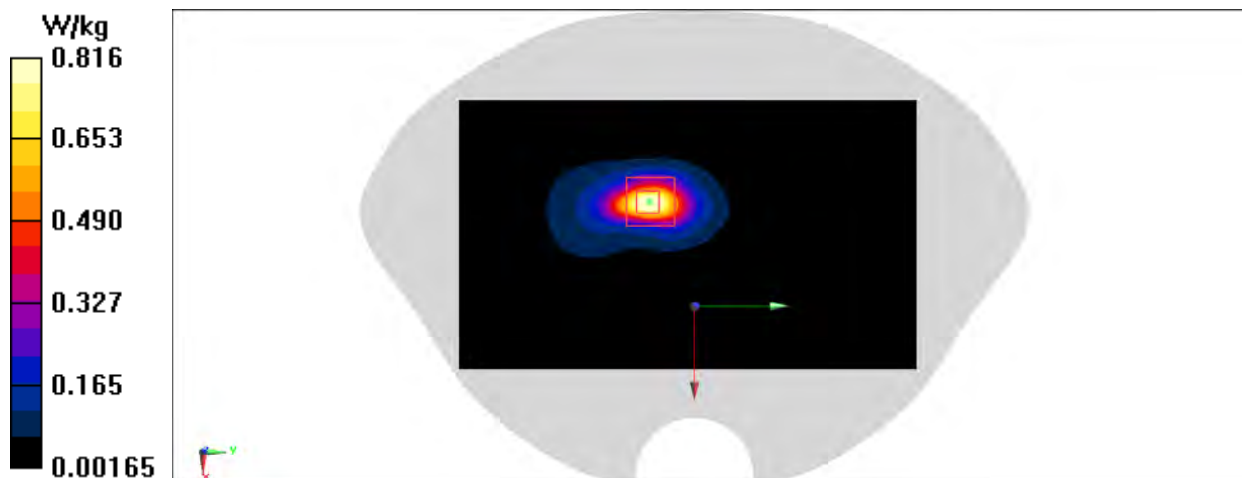
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.596 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.18 W/kg
SAR(1 g) = 0.085 W/kg; SAR(10 g) = 0.046 W/kg
Maximum value of SAR (measured) = 0.0893 W/kg

Fig A.93

N41_CH518598 Right Cheek

Date: 1/26/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2592.99 MHz; σ = 1.943 mho/m; εr = 38.86; ρ = 1000 kg/m^3

Ambient Temperature: 22.5°C,   Liquid Temperature: 22.3°C

Communication System: n41 2592.99 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (81x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
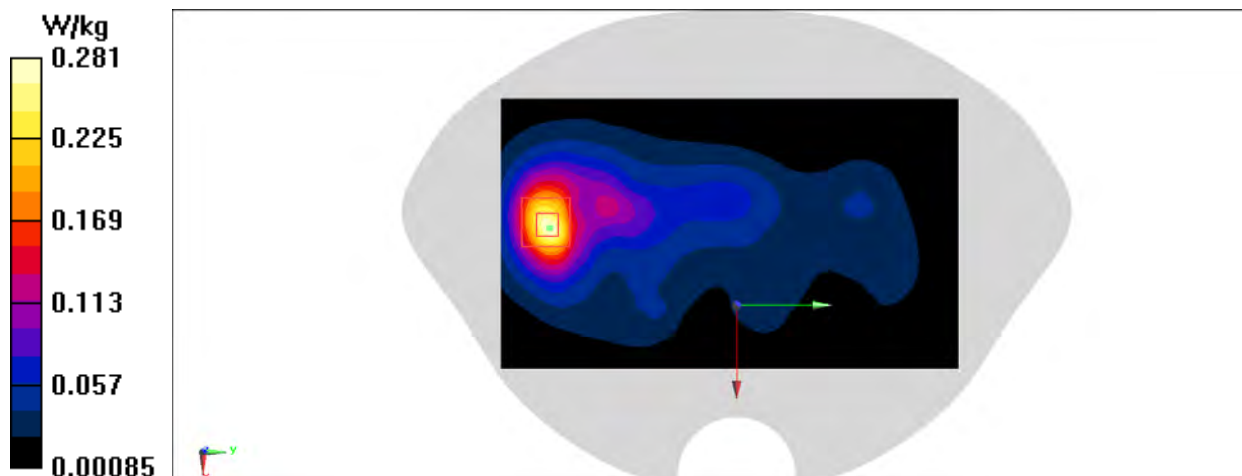
Maximum value of SAR (interpolated) = 0.516 W/kg

Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.253 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.567 W/kg

SAR(1 g) = 0.316 W/kg; SAR(10 g) = 0.169 W/kg

Maximum value of SAR (measured) = 0.461 W/kg

Fig A.94

N41_CH518598 Rear

Date: 1/26/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2592.99 MHz; σ = 1.943 mho/m; εr = 38.86; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n41 2592.99 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
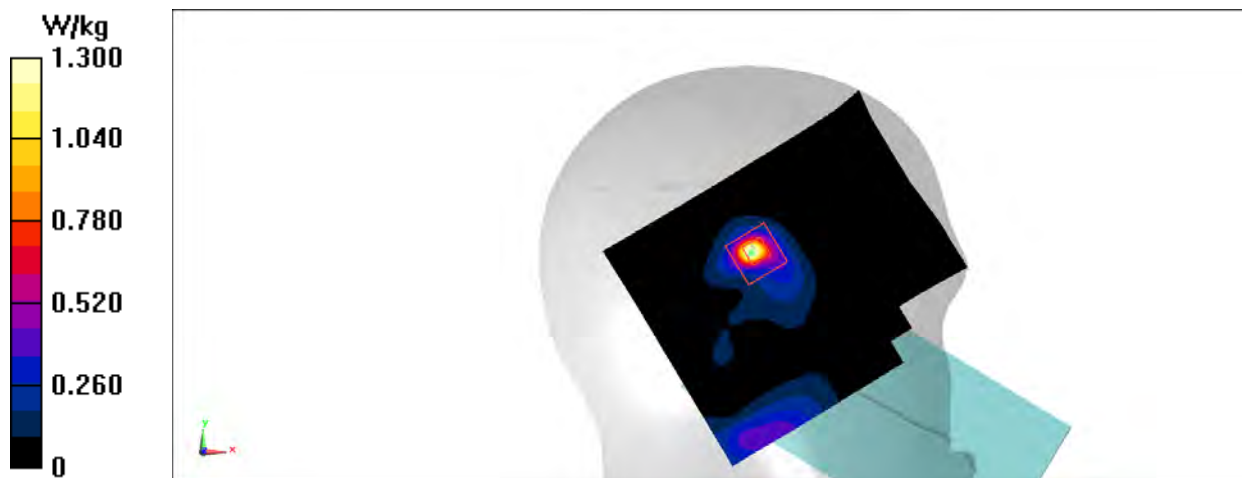
Maximum value of SAR (interpolated) = 0.864 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.235 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.606 W/kg; SAR(10 g) = 0.311 W/kg

Maximum value of SAR (measured) = 0.639 W/kg

Fig A.95

N41_CH518598 Rear

Date: 1/26/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2592.99 MHz; σ = 1.943 mho/m; εr = 38.86; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n41 2592.99 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (141x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
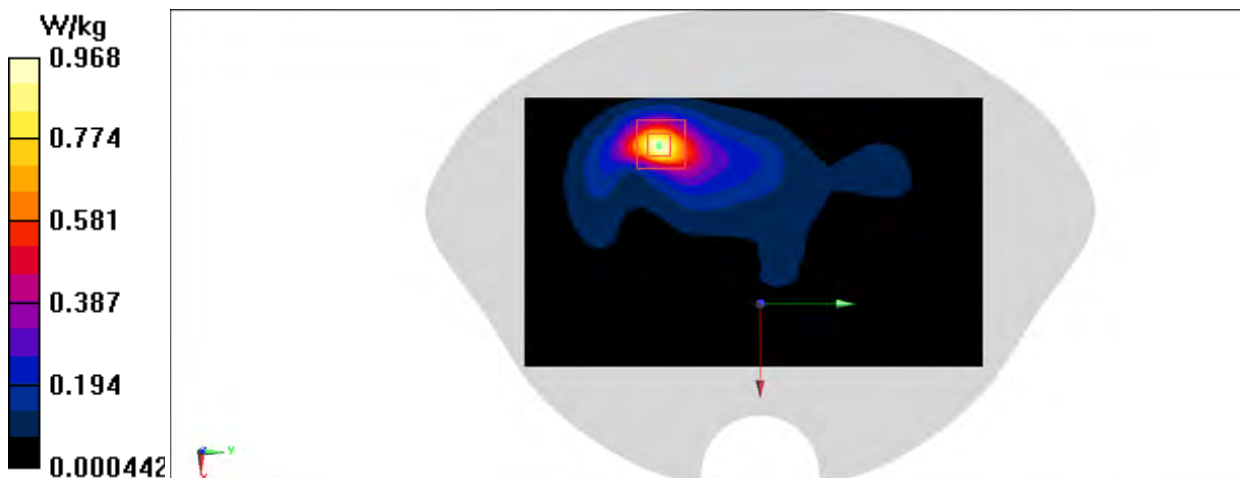
Maximum value of SAR (interpolated) = 0.635 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.816 V/m; Power Drift = −0.04 dB

Peak SAR (extrapolated) = 0.744 W/kg

SAR(1 g) = 0.399 W/kg; SAR(10 g) = 0.215 W/kg

Maximum value of SAR (measured) = 0.609 W/kg

Fig A.96

N41_CH518598 Right Tilt

Date: 1/26/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2592.99 MHz; σ = 1.943 mho/m; εr = 38.86; ρ = 1000 kg/m³

Ambient Temperature: 22.5℃,   Liquid Temperature: 22.3℃

Communication System: n41 2592.99 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (81x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.36 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.008 V/m; Power Drift = −0.01 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.562 W/kg; SAR(10 g) = 0.238 W/kg

Maximum value of SAR (measured) = 1.08 W/kg

Fig A.97

N41_CH518598 Rear

Date: 1/26/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2592.99 MHz; σ = 1.943 mho/m; εr = 38.86; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n41 2592.99 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.878 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.359 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.500 W/kg; SAR(10 g) = 0.216 W/kg

Maximum value of SAR (measured) = 0.816 W/kg

Fig A.98

N41_CH518598 Rear

Date: 1/26/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2592.99 MHz; σ = 1.943 mho/m; εr = 38.86; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n41 2592.99 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.275 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.952 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.356 W/kg

SAR(1 g) = 0.177 W/kg; SAR(10 g) = 0.086 W/kg

Maximum value of SAR (measured) = 0.281 W/kg

Fig A.99

N41_CH518598 Left Cheek

Date: 1/26/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2592.99 MHz; σ = 1.943 mho/m; εr = 38.86; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n41 2592.99 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (101x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.39 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.480 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.37 W/kg

SAR(1 g) = 0.497 W/kg; SAR(10 g) = 0.138 W/kg

Maximum value of SAR (measured) = 1.30 W/kg

Fig A.100

N41_CH518598 Rear

Date: 1/26/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2592.99 MHz; σ = 1.943 mho/m; εr = 38.86; ρ = 1000 kg/m³

Ambient Temperature: 22.5ºC,　Liquid Temperature: 22.3ºC

Communication System: n41 2592.99 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.951 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.377 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.595 W/kg; SAR(10 g) = 0.253 W/kg

Maximum value of SAR (measured) = 0.968 W/kg

Fig A.101

N41_CH518598 Rear

Date: 1/26/2021

Electronics: DAE4 Sn536

Medium: head 2600 MHz

Medium parameters used: f = 2592.99 MHz; σ = 1.943 mho/m; εr = 38.86; ρ = 1000 kg/m^3

Ambient Temperature: 22.5ºC,   Liquid Temperature: 22.3ºC

Communication System: n41 2592.99 MHz Duty Cycle: 1：1

Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

Area Scan (101x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.857 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.463 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.253 W/kg

Maximum value of SAR (measured) = 0.839 W/kg
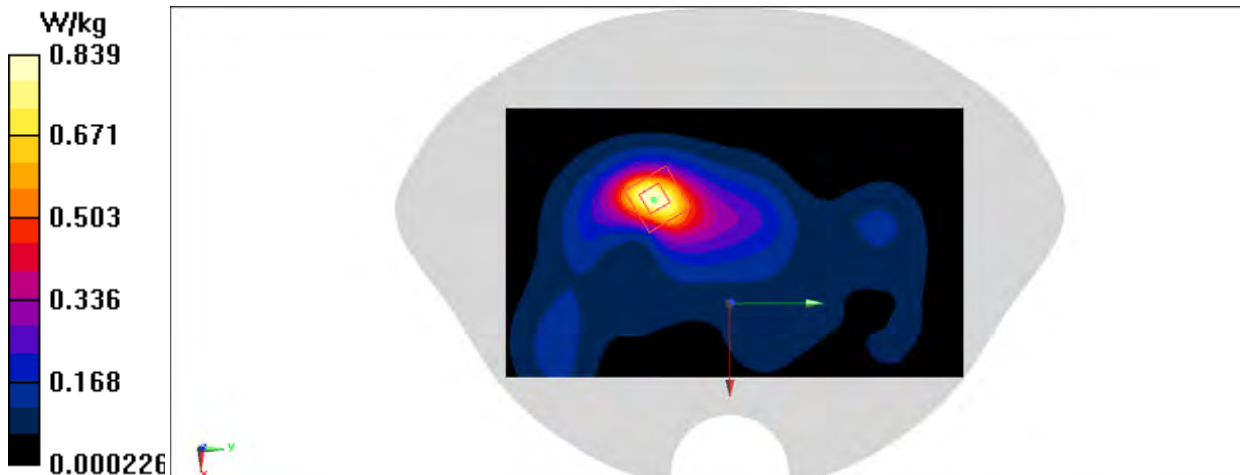
Fig A.102
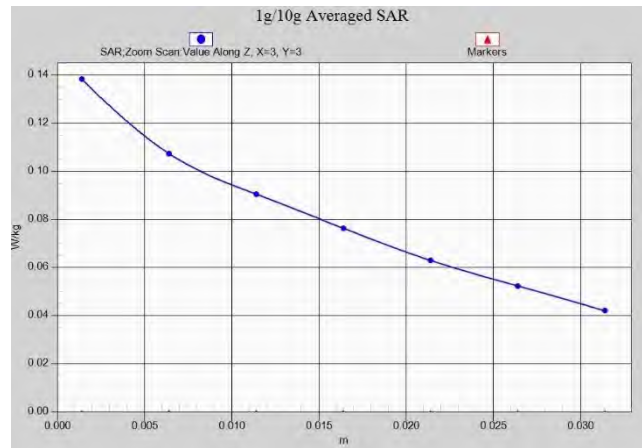
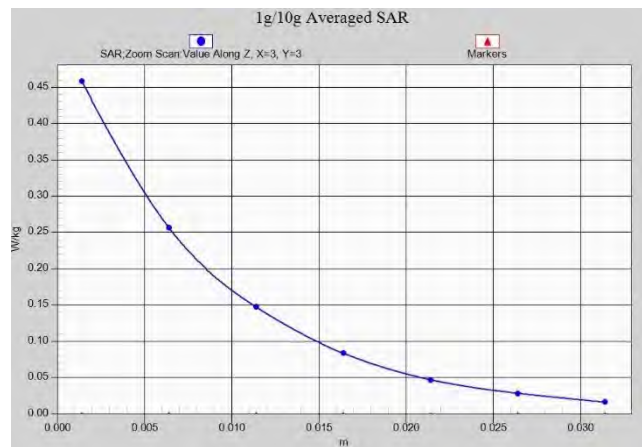**Fig. 1-1   Z-Scan at power reference point (850 MHz)**
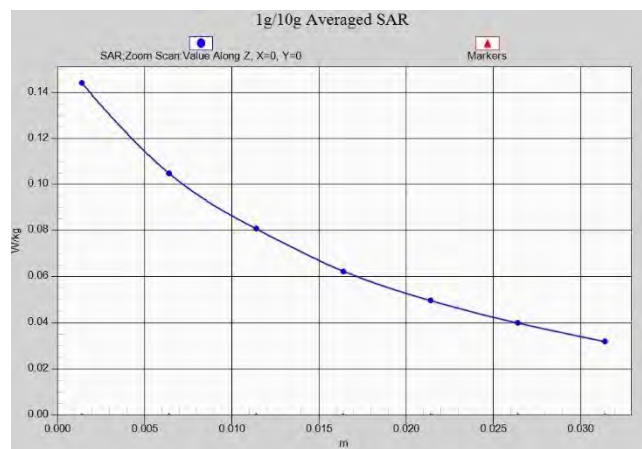
Fig. 1-2   Z-Scan at power reference point (850 MHz)
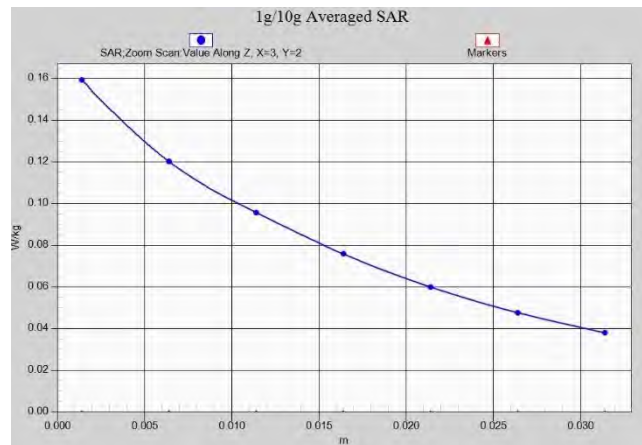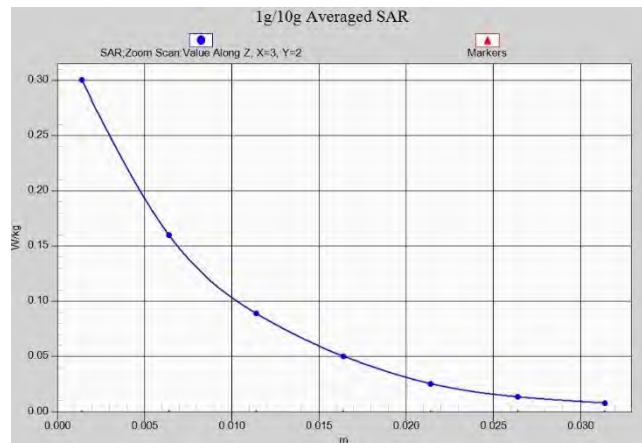
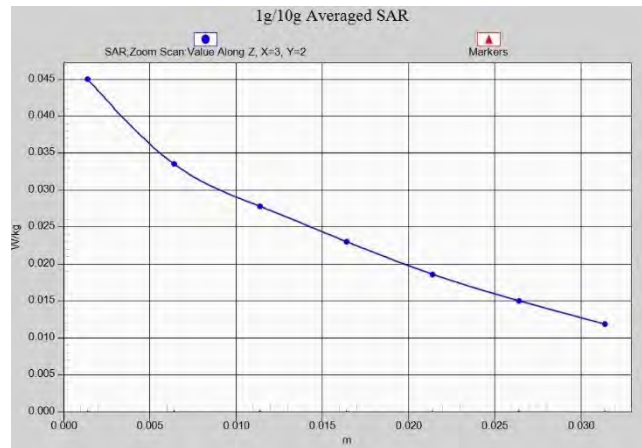

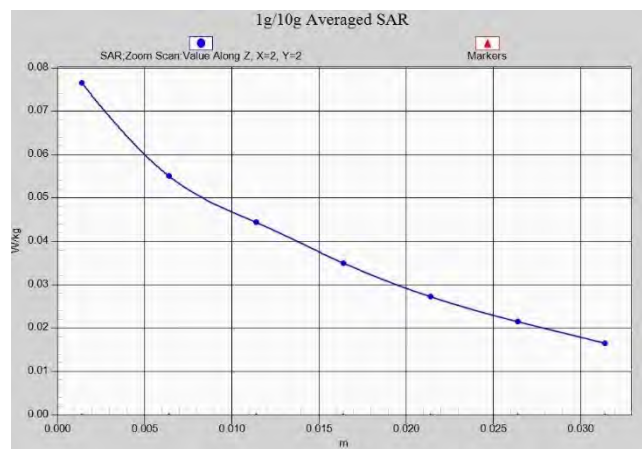**Fig. 1-3   Z-Scan at power reference point (850 MHz)**
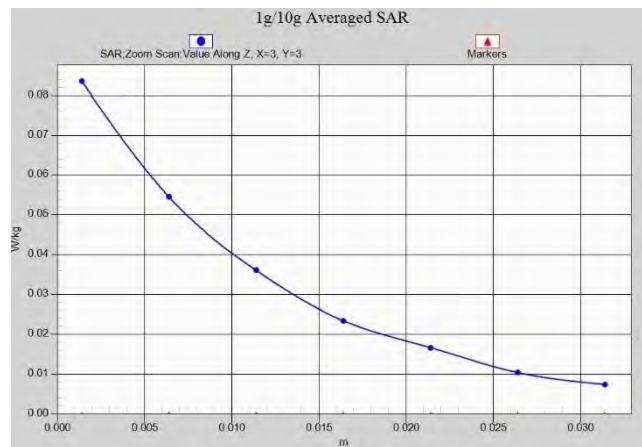
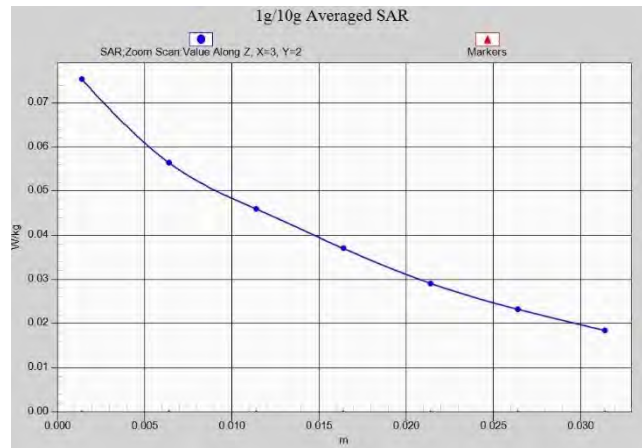**Fig. 1-4   Z-Scan at power reference point (1900 MHz)**
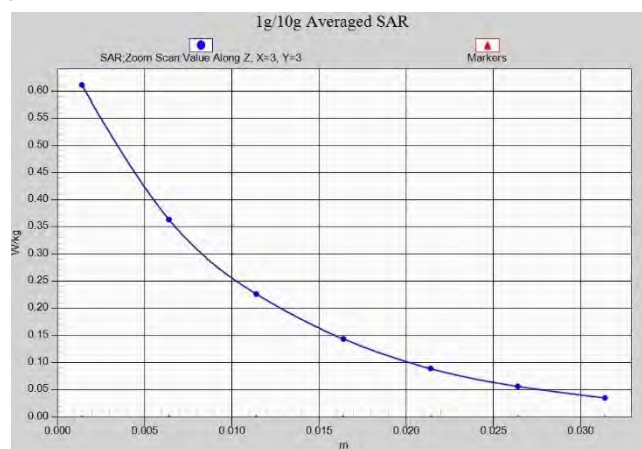
Fig. 1-5   Z-Scan at power reference point (1900 MHz)
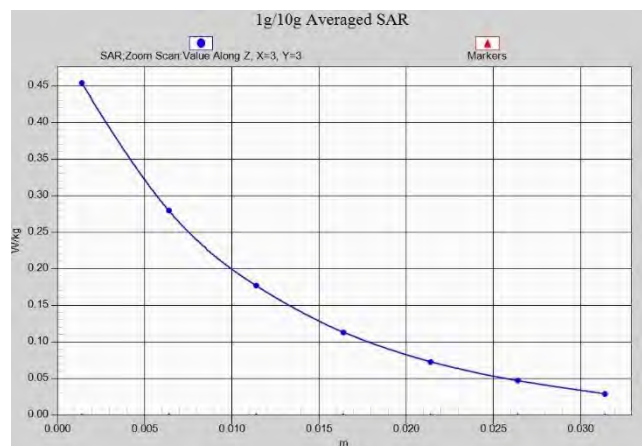
Fig. 1-6   Z-Scan at power reference point (1900 MHz)
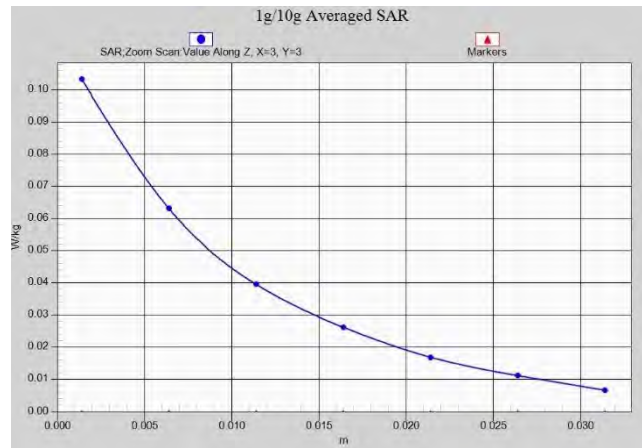
Fig. 1-7　Z-Scan at power reference point (WCDMA1900)
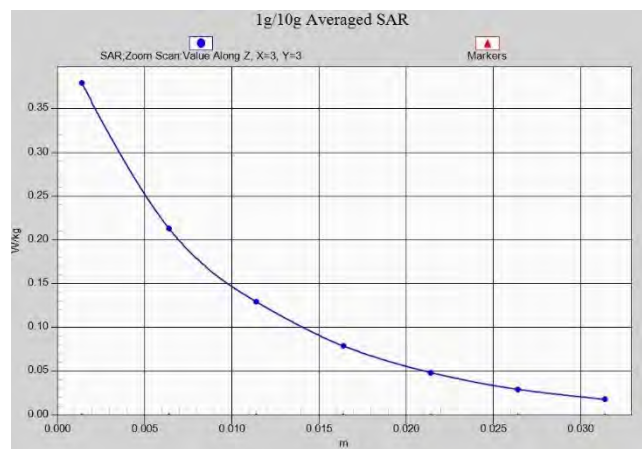
Fig. 1-8　Z-Scan at power reference point (WCDMA1900)
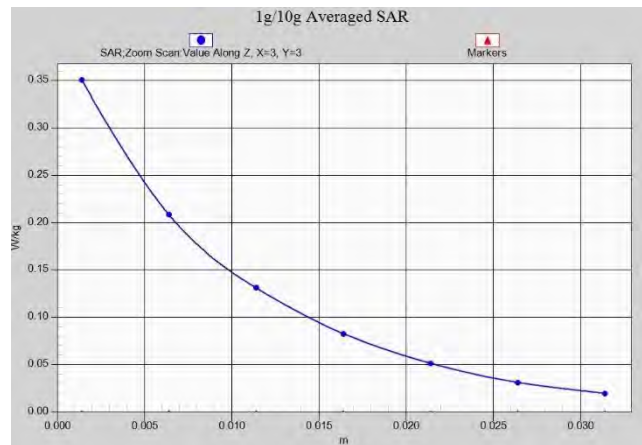
Fig. 1-9　Z-Scan at power reference point (WCDMA1900)

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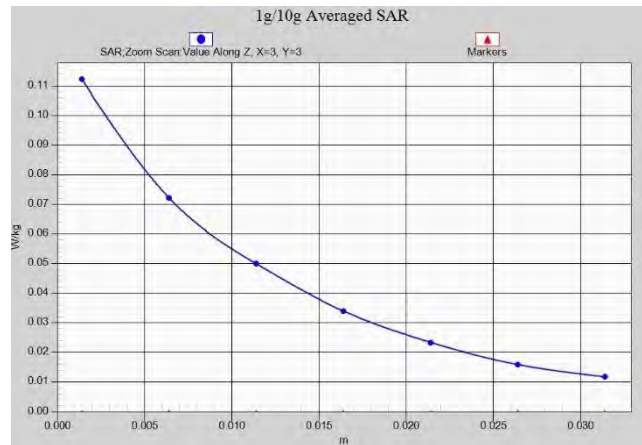
Fig. 1-10   Z-Scan at power reference point (WCDMA1700)
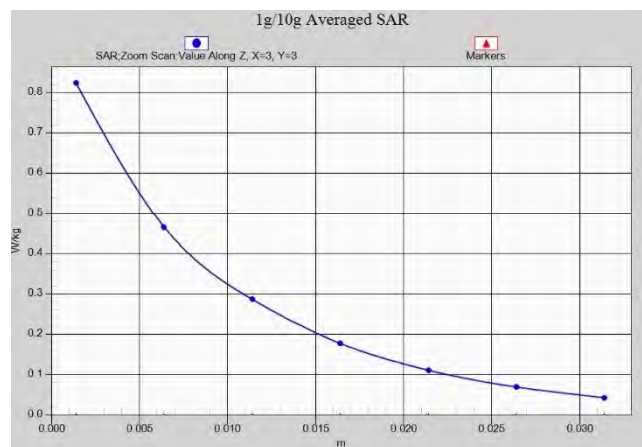
Fig. 1-11   Z-Scan at power reference point (WCDMA1700)
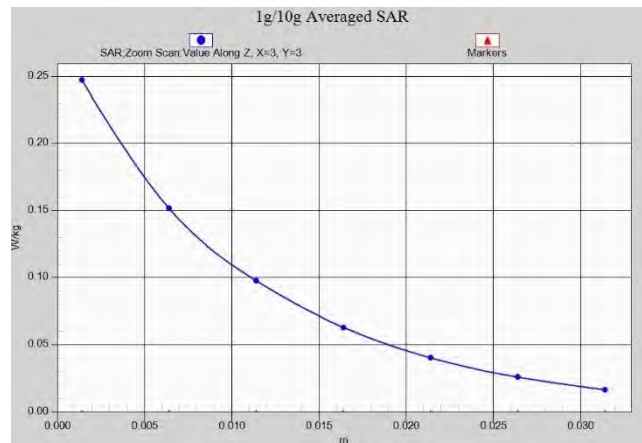
Fig. 1-12   Z-Scan at power reference point (WCDMA1700)
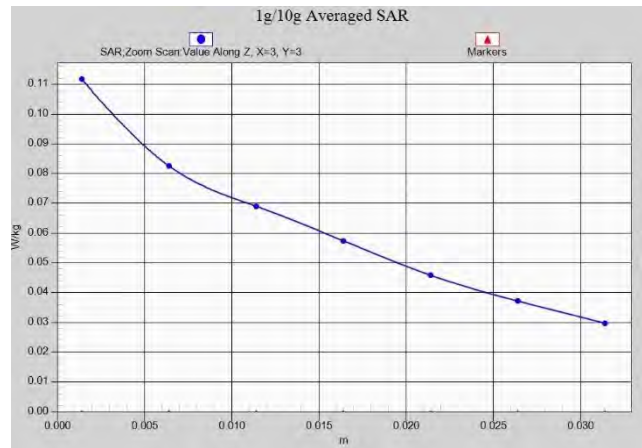
Fig. 1-13   Z-Scan at power reference point (WCDMA850)
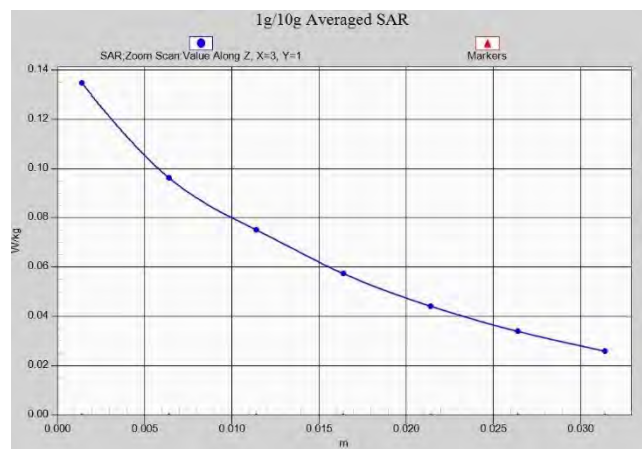
Fig. 1-14   Z-Scan at power reference point (WCDMA850)
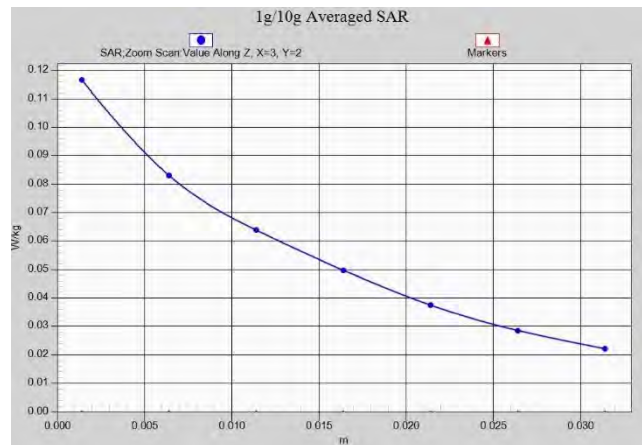
Fig. 1-15   Z-Scan at power reference point (WCDMA850)
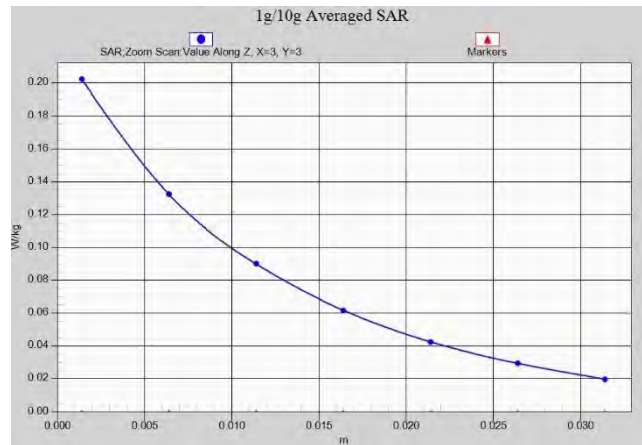
Fig. 1-16   Z-Scan at power reference point (LTE Band2)
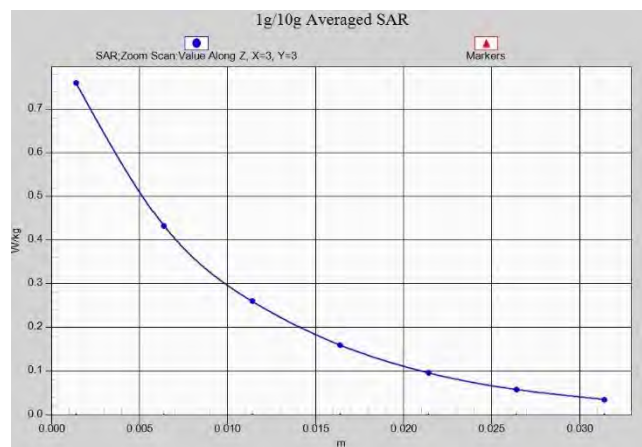
Fig. 1-17   Z-Scan at power reference point (LTE Band2)
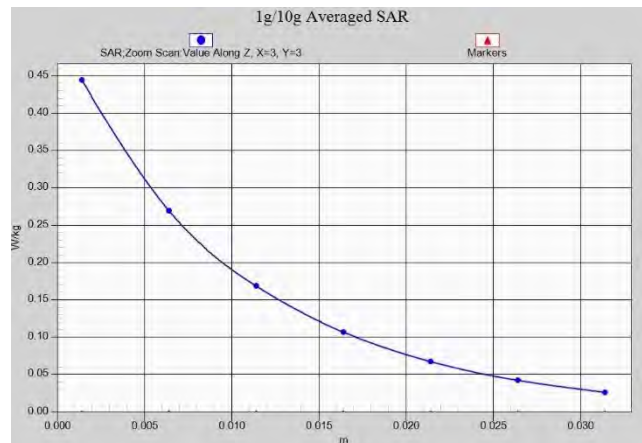
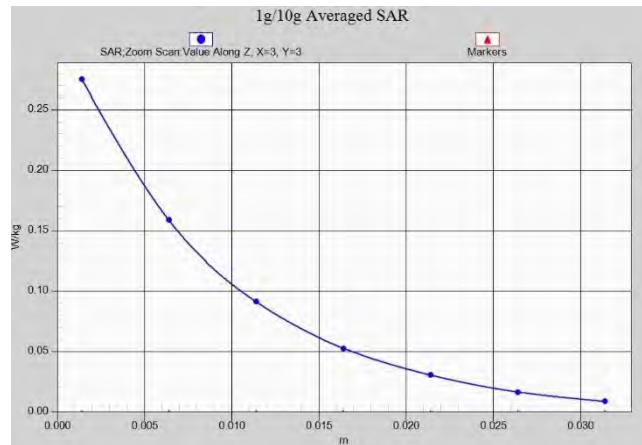**Fig. 1-18   Z-Scan at power reference point (LTE Band2)**
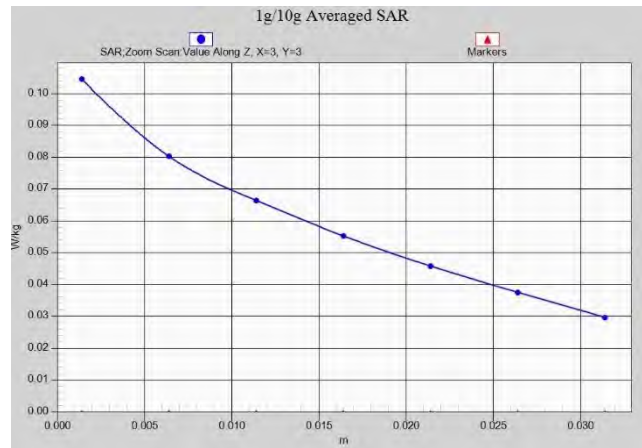
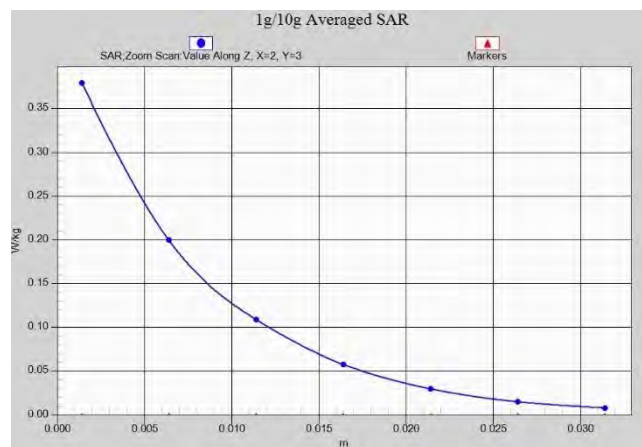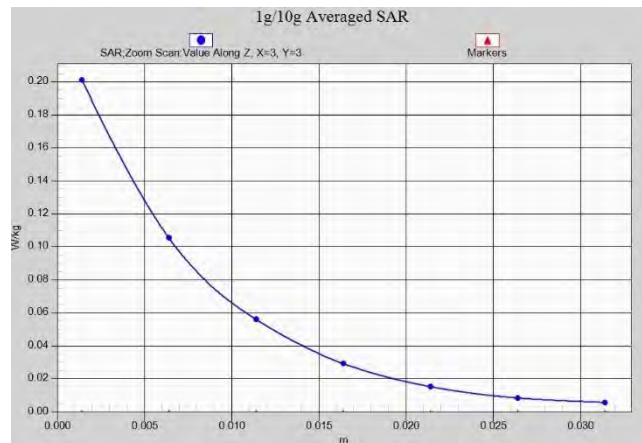**Fig. 1-19   Z-Scan at power reference point (LTE Band5)**
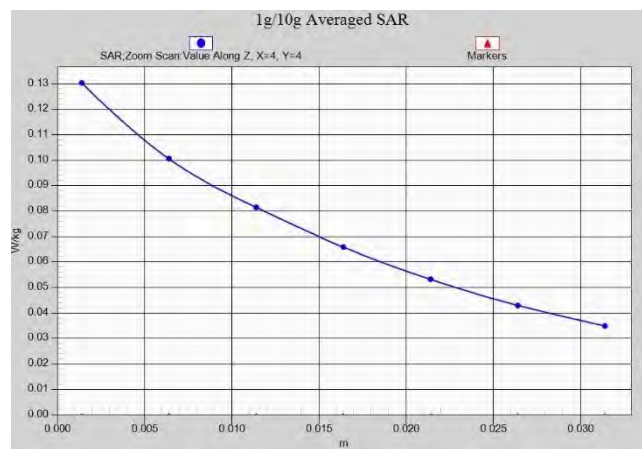
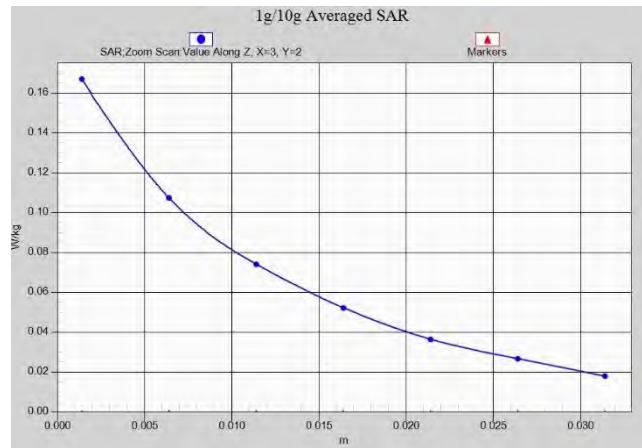**Fig. 1-20   Z-Scan at power reference point (LTE Band5)**
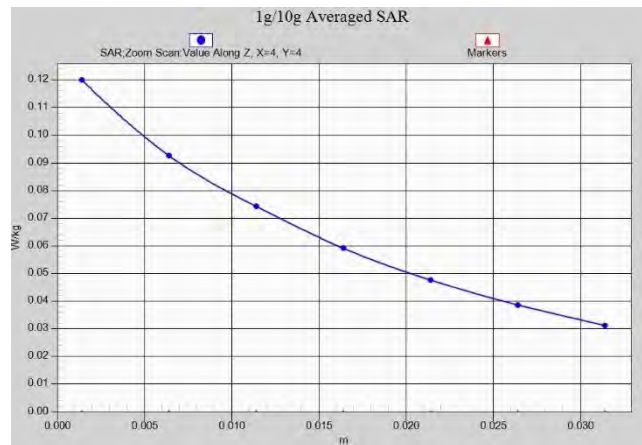
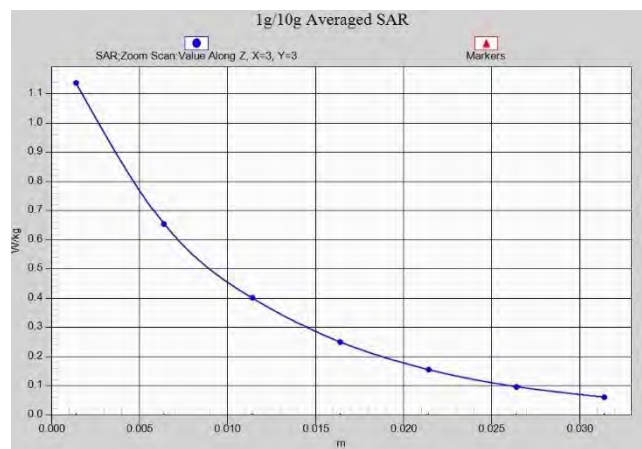**Fig. 1-21   Z-Scan at power reference point (LTE Band5)**

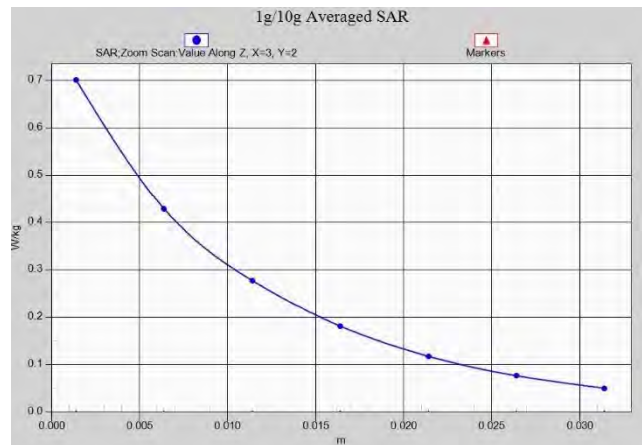**Fig. 1-22　Z-Scan at power reference point (LTE Band7)**
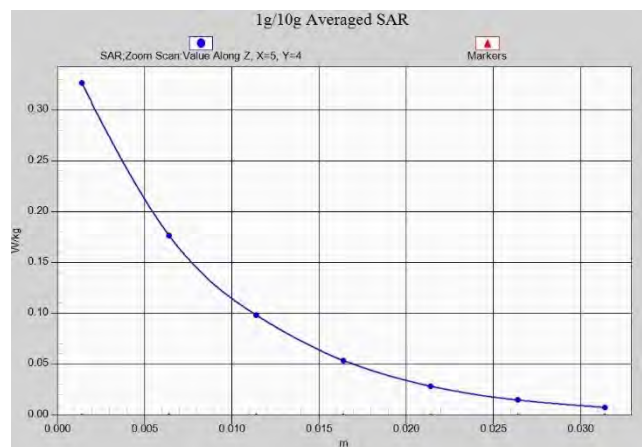
Fig. 1-23　Z-Scan at power reference point (LTE Band7)

Fig. 1-24　Z-Scan at power reference point (LTE Band7)

Fig. 1-25   Z-Scan at power reference point (LTE Band12)

Fig. 1-26   Z-Scan at power reference point (LTE Band12)

Fig. 1-27   Z-Scan at power reference point (LTE Band12)

Fig. 1-28   Z-Scan at power reference point (LTE Band26)
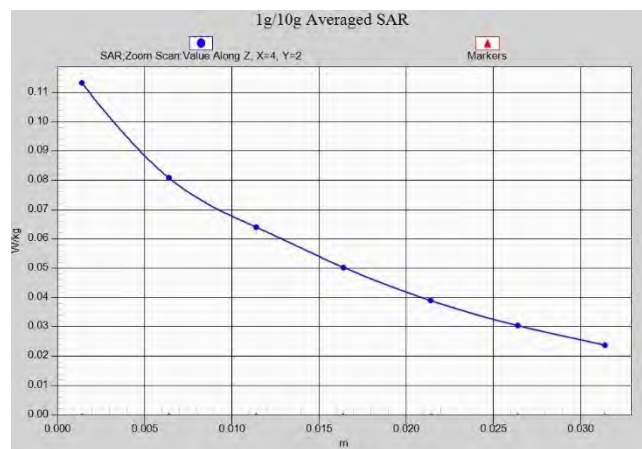
Fig. 1-29   Z-Scan at power reference point (LTE Band26)

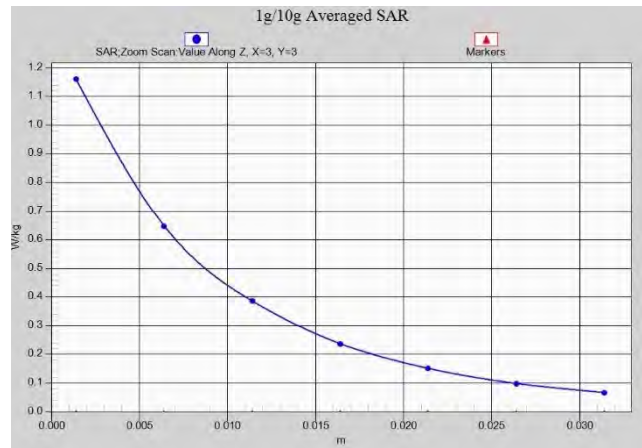**Fig. 1-30   Z-Scan at power reference point (LTE Band26)**

Fig. 1-31   Z-Scan at power reference point (LTE Band41)

Fig. 1-32   Z-Scan at power reference point (LTE Band41)

Fig. 1-33   Z-Scan at power reference point (LTE Band41)

Fig. 1-34   Z-Scan at power reference point (LTE Band66)

Fig. 1-35   Z-Scan at power reference point (LTE Band66)

Fig. 1-36   Z-Scan at power reference point (LTE Band66)
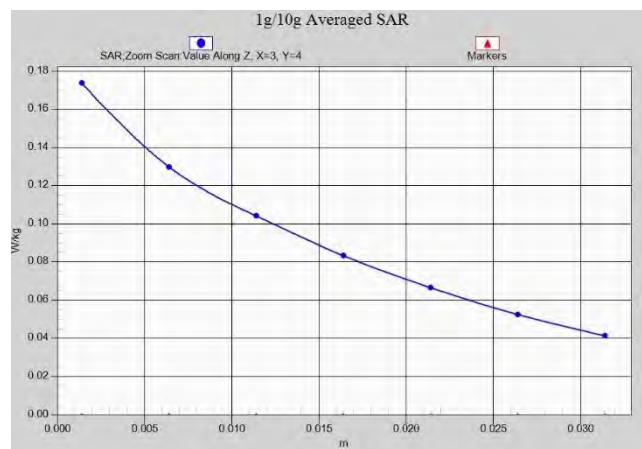
Fig. 1-37　Z-Scan at power reference point (850 MHz)

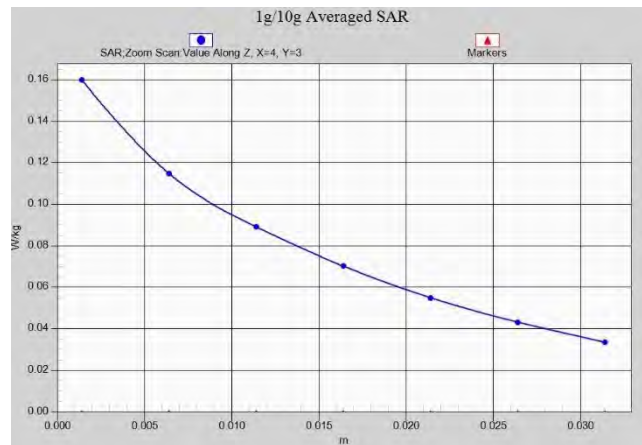**Fig. 1-38　Z-Scan at power reference point (850 MHz)**

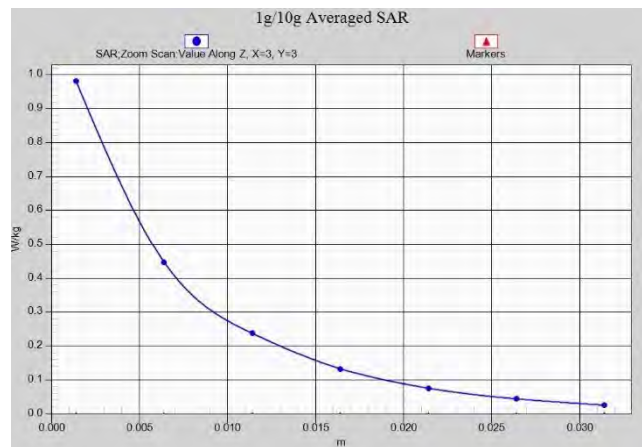**Fig. 1-39　Z-Scan at power reference point (850 MHz)**
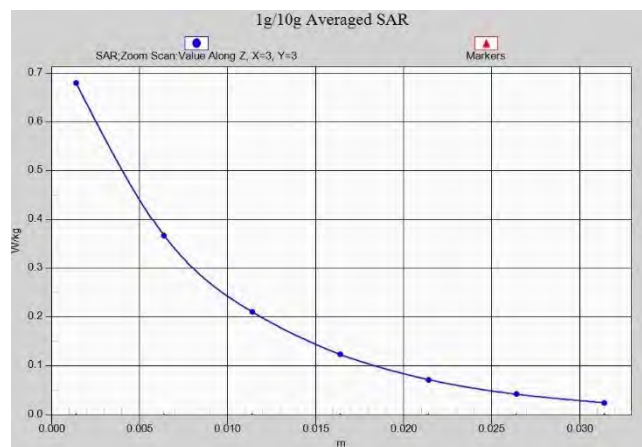
Fig. 1-40   Z-Scan at power reference point (1900 MHz)

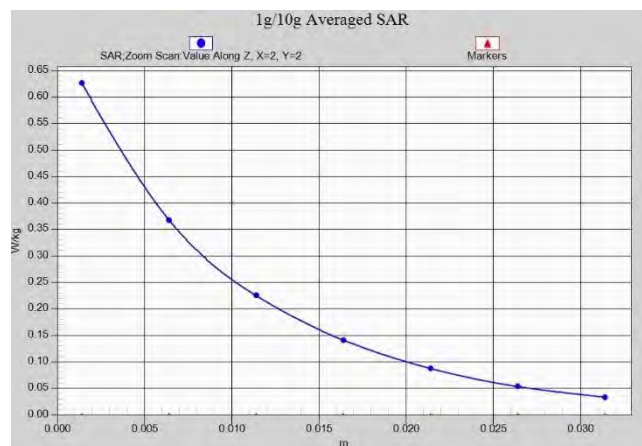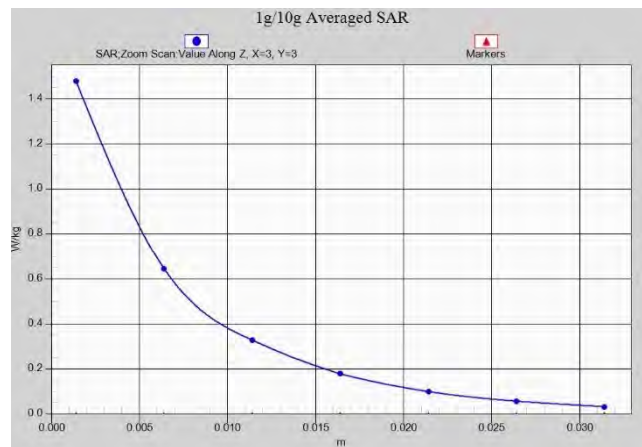**Fig. 1-41   Z-Scan at power reference point (1900 MHz)**
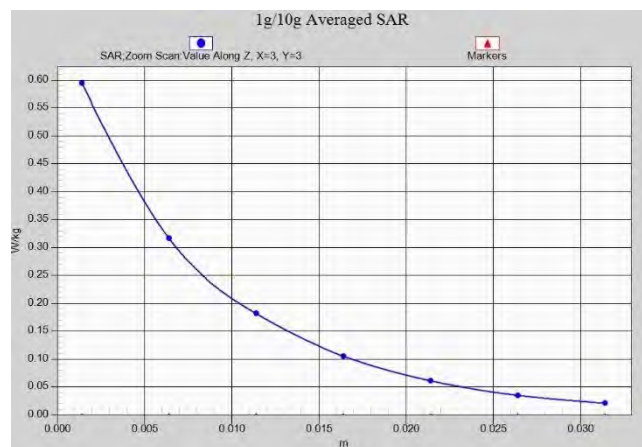

Fig. 1-42   Z-Scan at power reference point (1900 MHz)

Fig. 1-43   Z-Scan at power reference point (WCDMA1900)

Fig. 1-44   Z-Scan at power reference point (WCDMA1900)

Fig. 1-45   Z-Scan at power reference point (WCDMA1900)

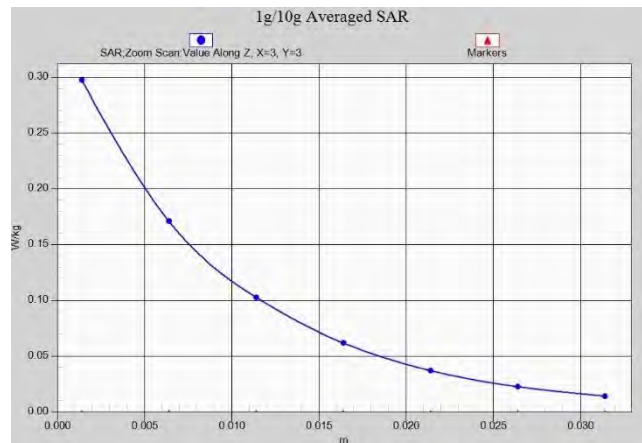**Fig. 1-46   Z-Scan at power reference point (WCDMA1700)**

Fig. 1-47   Z-Scan at power reference point (WCDMA1700)
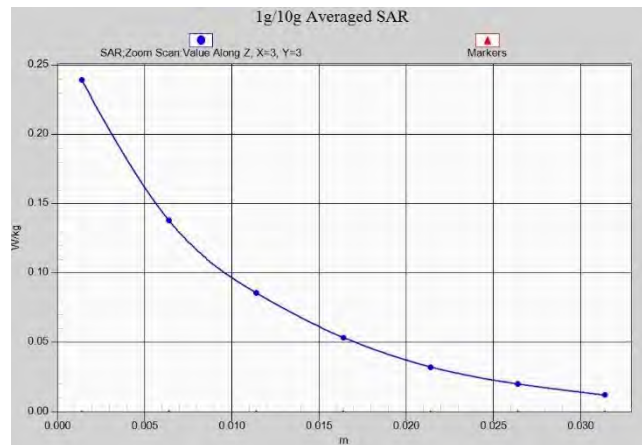
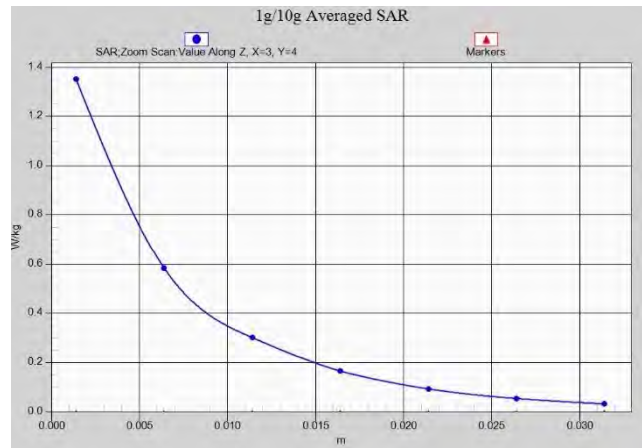**Fig. 1-48   Z-Scan at power reference point (WCDMA1700)**
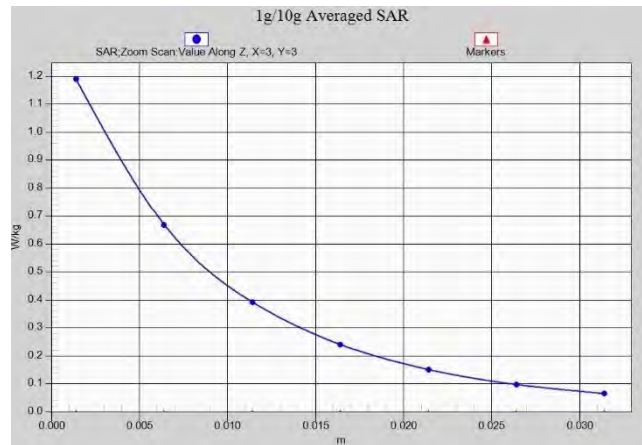
Fig. 1-49   Z-Scan at power reference point (WCDMA850)

Fig. 1-50   Z-Scan at power reference point (WCDMA850)
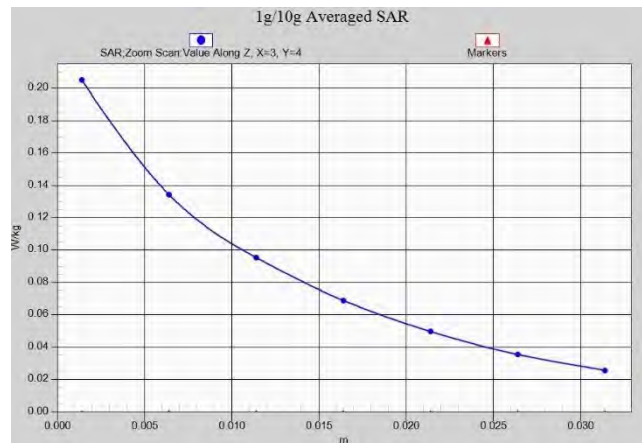
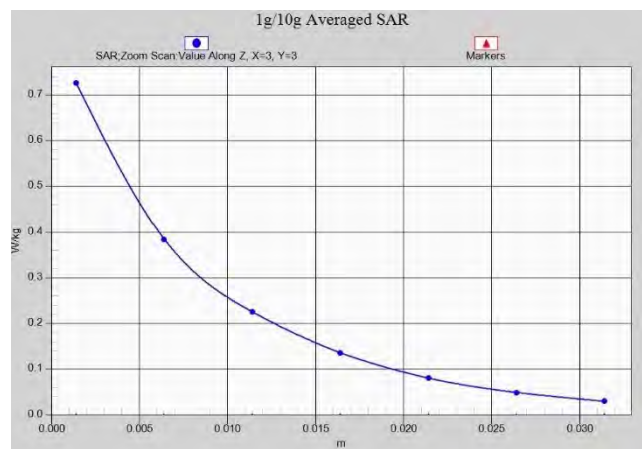**Fig. 1-51   Z-Scan at power reference point (WCDMA850)**

Fig. 1-52   Z-Scan at power reference point (LTE Band2)

Fig. 1-53   Z-Scan at power reference point (LTE Band2)

Fig. 1-54   Z-Scan at power reference point (LTE Band2)

Fig. 1-55   Z-Scan at power reference point (LTE Band5)

Fig. 1-56   Z-Scan at power reference point (LTE Band5)

Fig. 1-57   Z-Scan at power reference point (LTE Band5)

Fig. 1-58   Z-Scan at power reference point (LTE Band7)

Fig. 1-59   Z-Scan at power reference point (LTE Band7)

Fig. 1-60   Z-Scan at power reference point (LTE Band7)

Fig. 1-61   Z-Scan at power reference point (LTE Band12)

Fig. 1-62   Z-Scan at power reference point (LTE Band12)

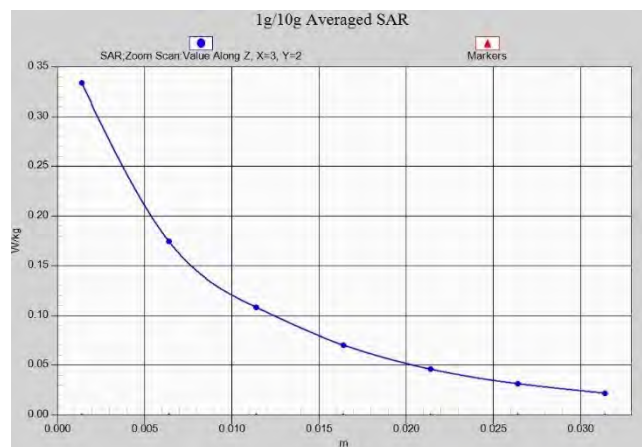**Fig. 1-63   Z-Scan at power reference point (LTE Band12)**

Fig. 1-64   Z-Scan at power reference point (LTE Band26)

Fig. 1-65   Z-Scan at power reference point (LTE Band26)

Fig. 1-66   Z-Scan at power reference point (LTE Band26)

Fig. 1-67　Z-Scan at power reference point (LTE Band41)

Fig. 1-68　Z-Scan at power reference point (LTE Band41)

Fig. 1-69　Z-Scan at power reference point (LTE Band41)
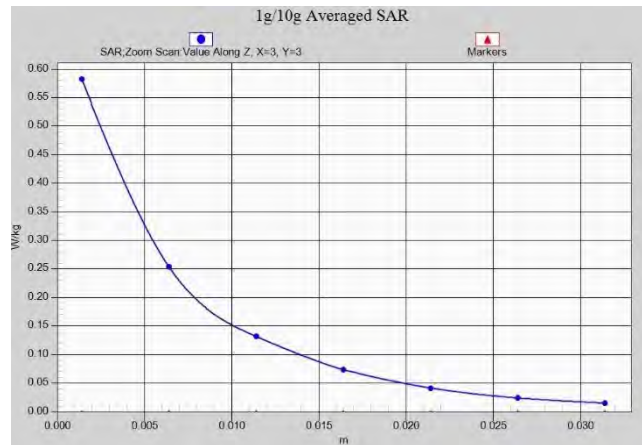
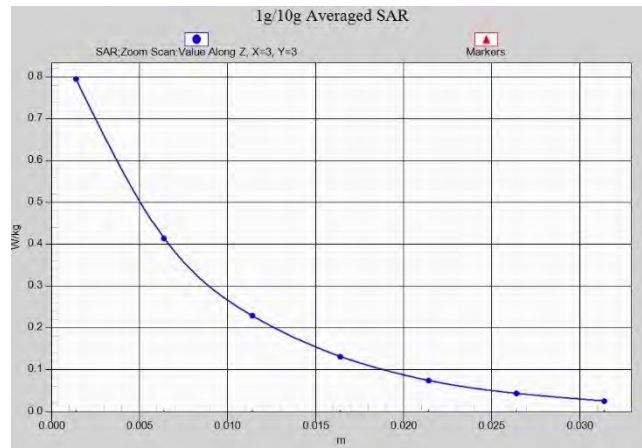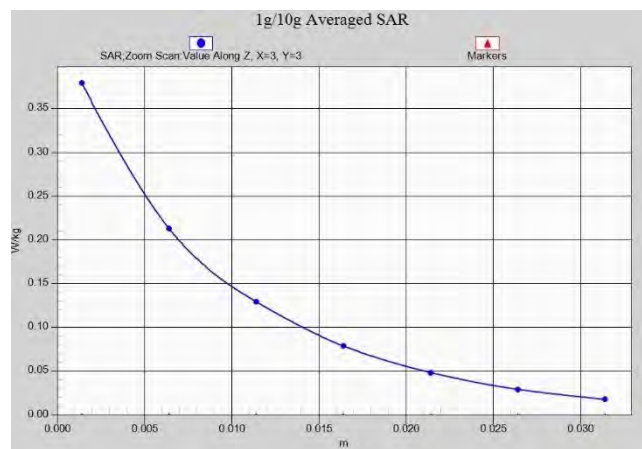**Fig. 1-70   Z-Scan at power reference point (LTE Band66)**
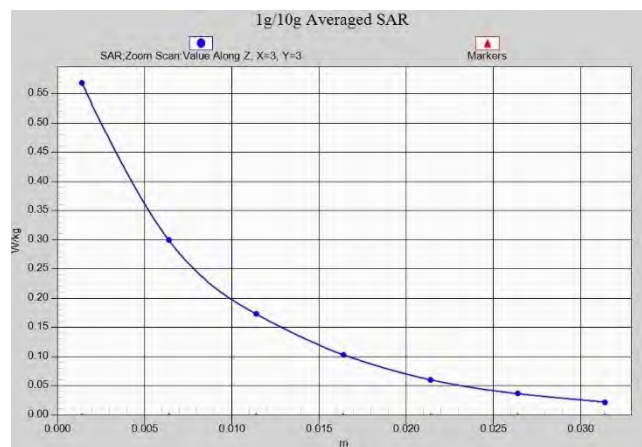
Fig. 1-71   Z-Scan at power reference point (LTE Band66)
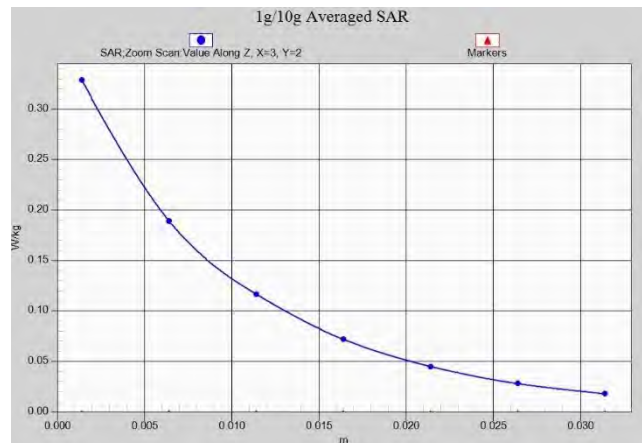
Fig. 1-72   Z-Scan at power reference point (LTE Band66)
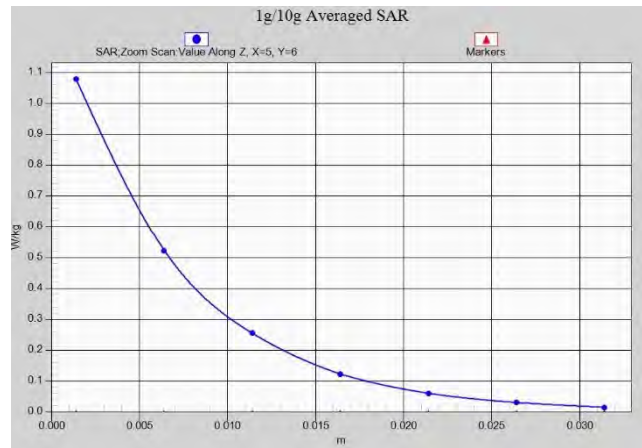
Fig. 1-73   Z-Scan at power reference point (wifi2450)
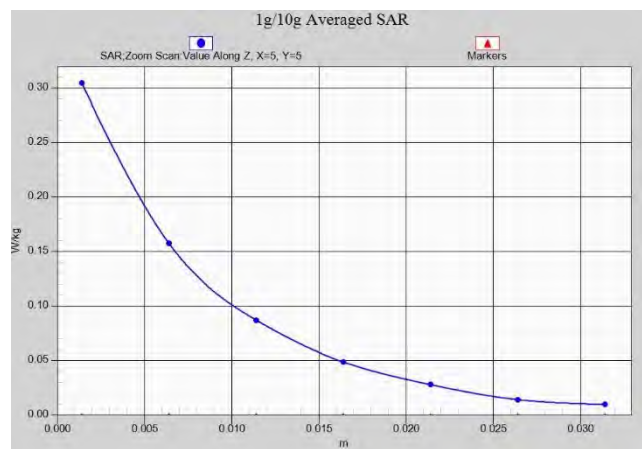
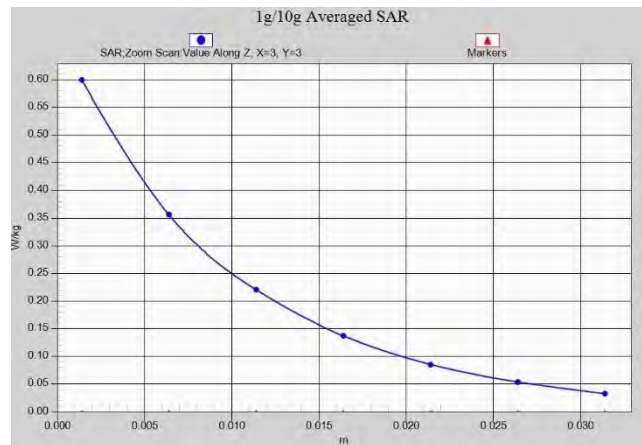**Fig. 1-74   Z-Scan at power reference point (wifi2450)**
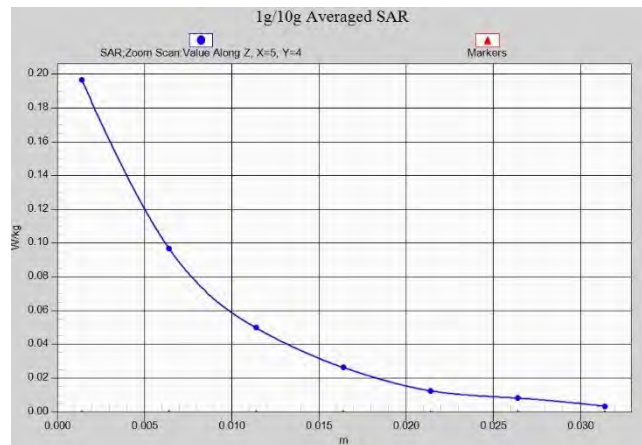
Fig. 1-75   Z-Scan at power reference point (wifi2450)
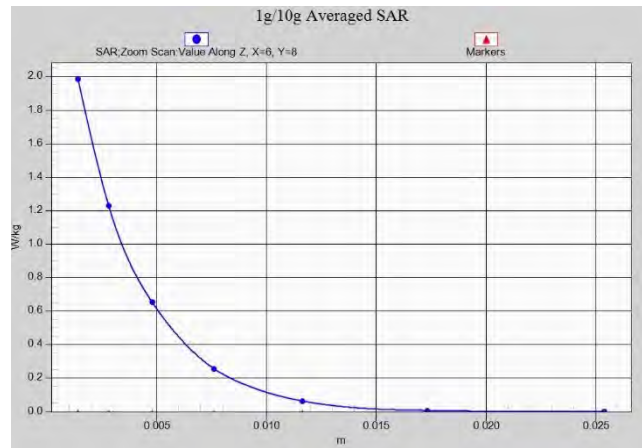
Fig. 1-76　Z-Scan at power reference point (wifi5G)
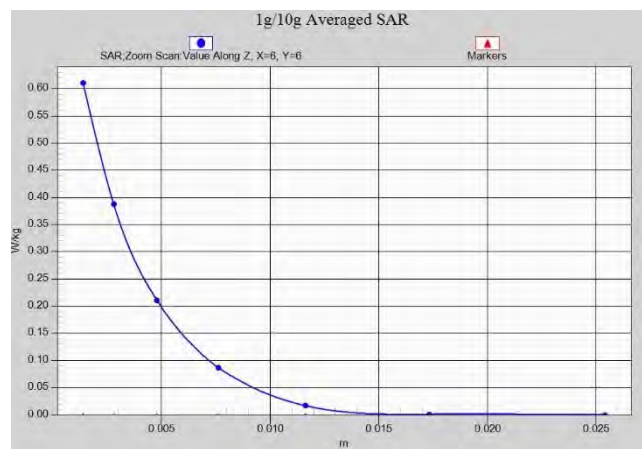
Fig. 1-77　Z-Scan at power reference point (wifi5G)
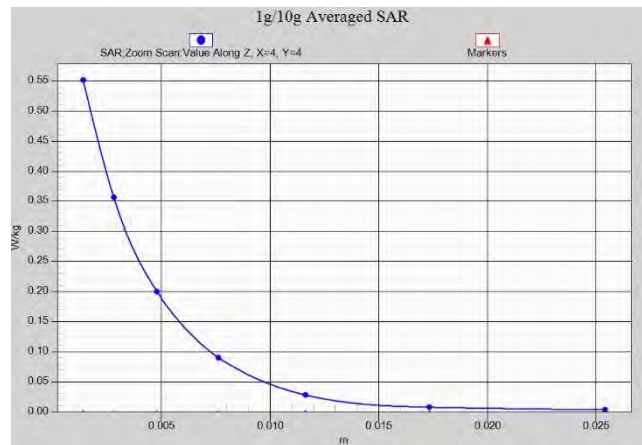
Fig. 1-78　Z-Scan at power reference point (wifi5G)
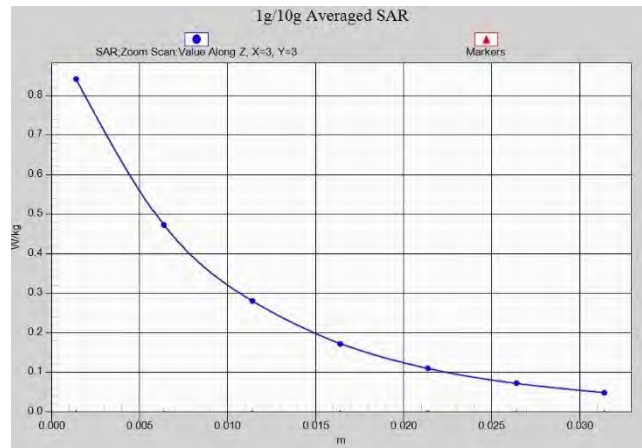
Fig. 1-79   Z-Scan at power reference point (n5)
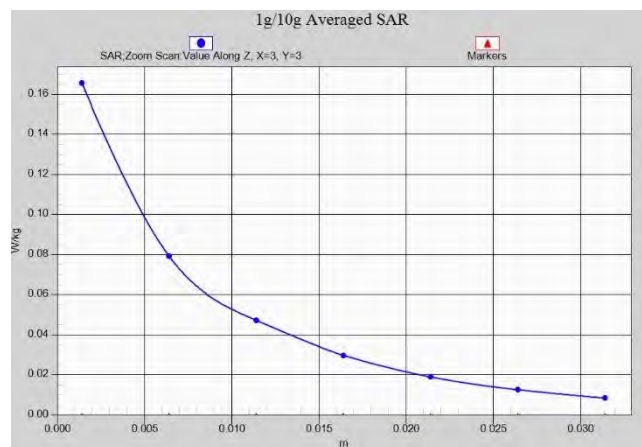
Fig. 1-80   Z-Scan at power reference point (n5)
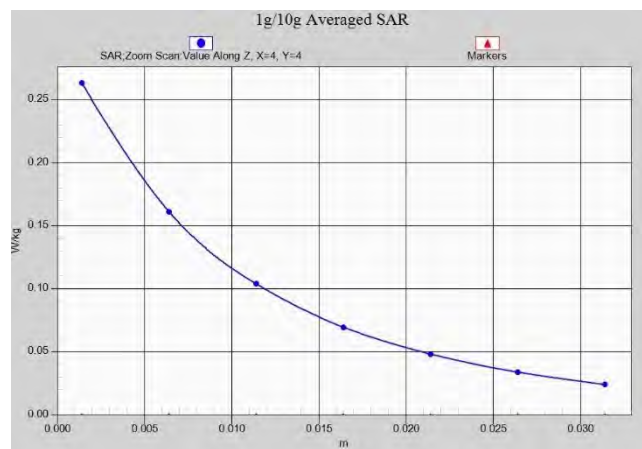

Fig. 1-81   Z-Scan at power reference point (n5)
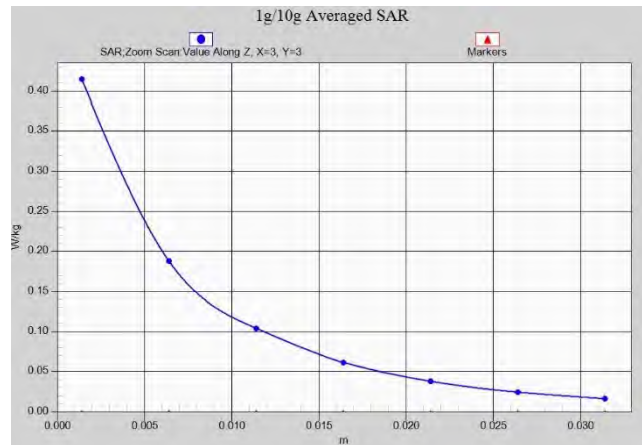
Fig. 1-82   Z-Scan at power reference point (n5)
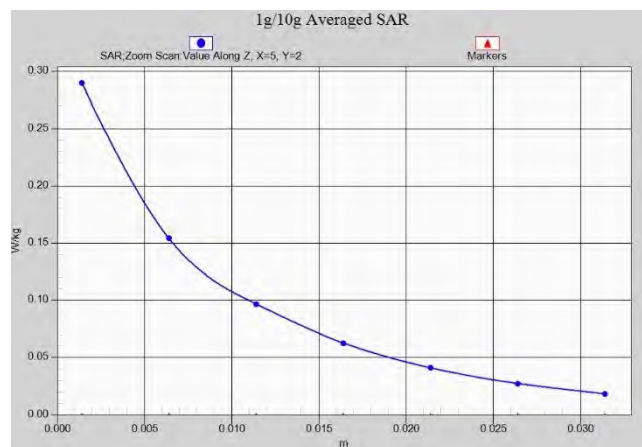
Fig. 1-83   Z-Scan at power reference point (n5)

Fig. 1-84   Z-Scan at power reference point (n5)
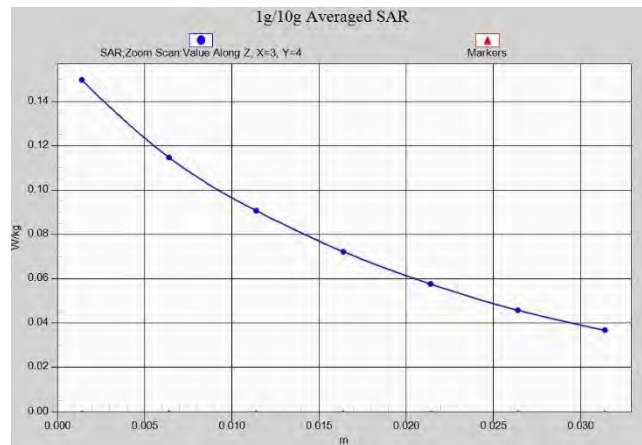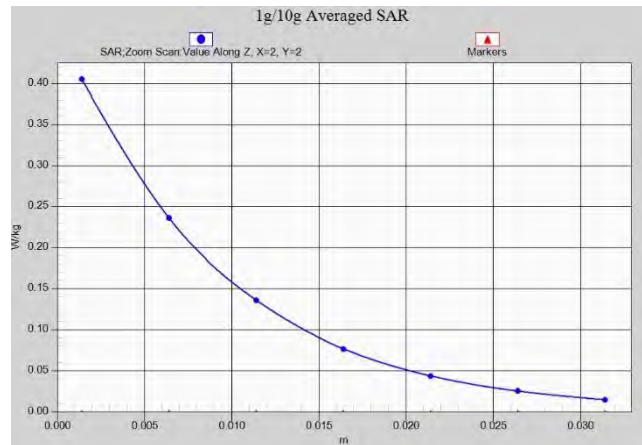
Fig. 1-85　Z-Scan at power reference point (n7)
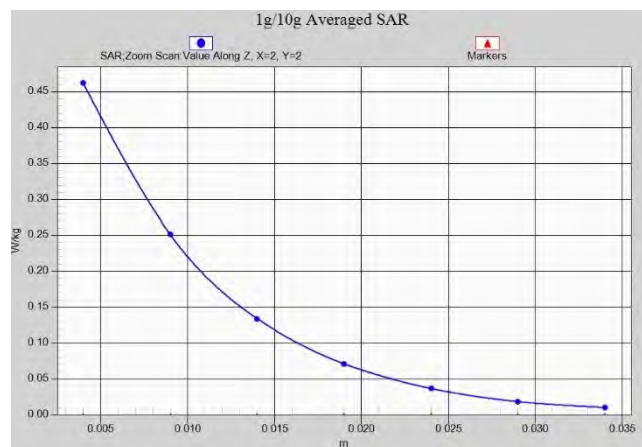
Fig. 1-86　Z-Scan at power reference point (n7)
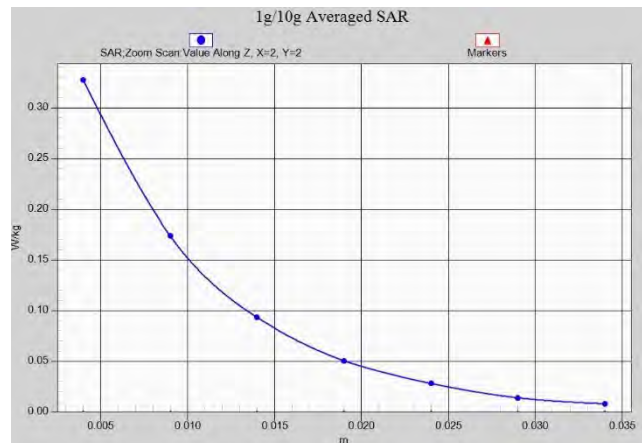
Fig. 1-87　Z-Scan at power reference point (n7)

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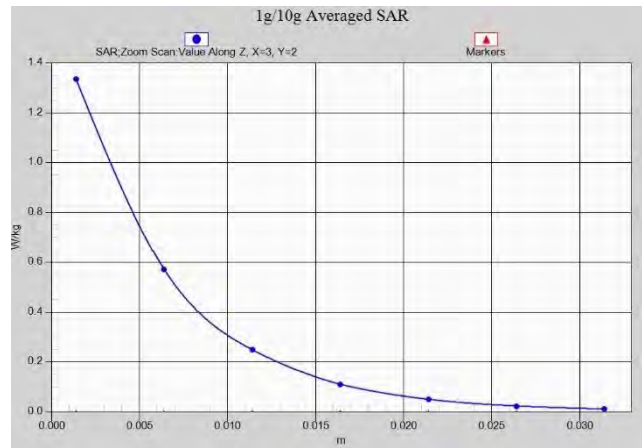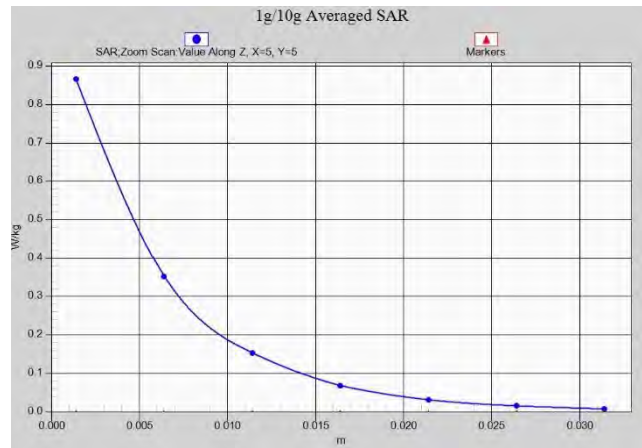
Fig. 1-88   Z-Scan at power reference point (n7)
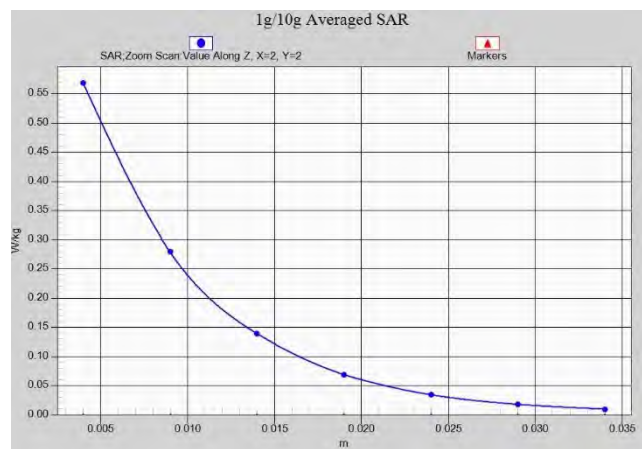
Fig. 1-89   Z-Scan at power reference point (n7)
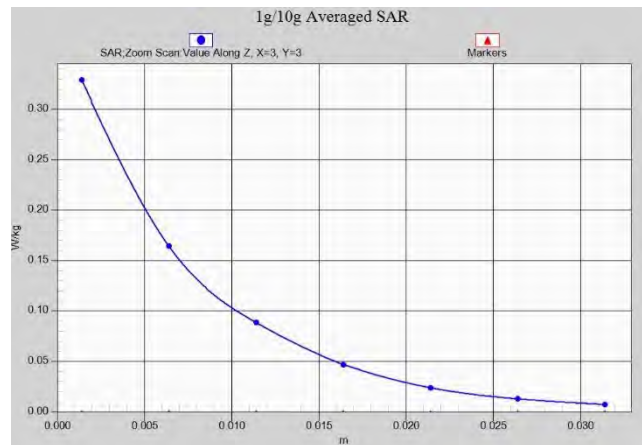
Fig. 1-90   Z-Scan at power reference point (n7)
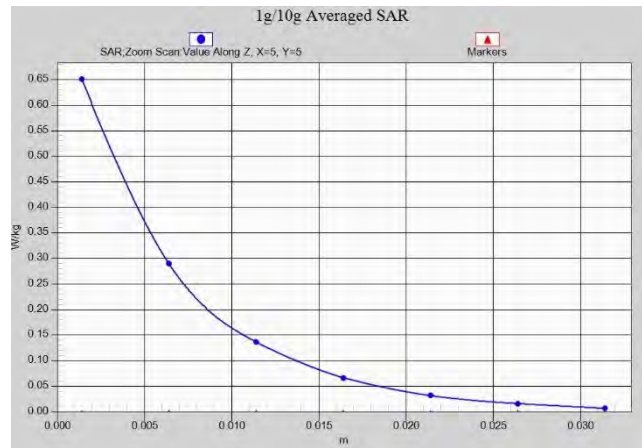
Fig. 1-91   Z-Scan at power reference point (n7)
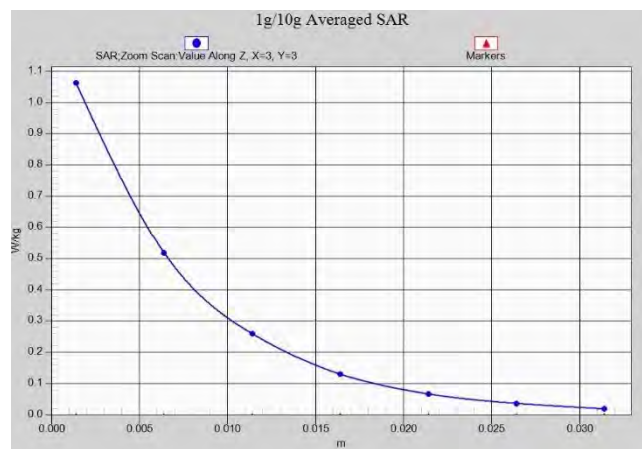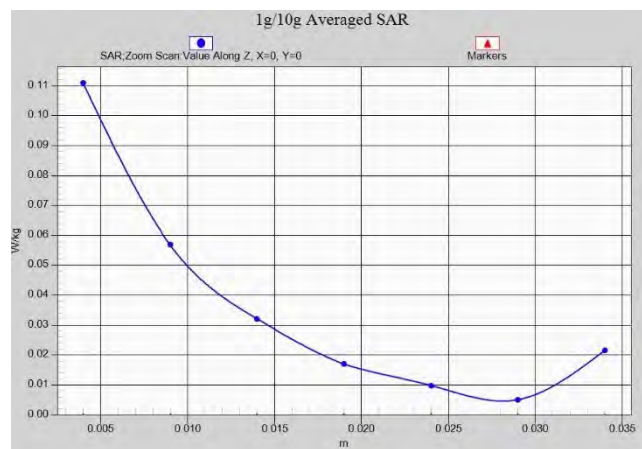

Fig. 1-92   Z-Scan at power reference point (n7)
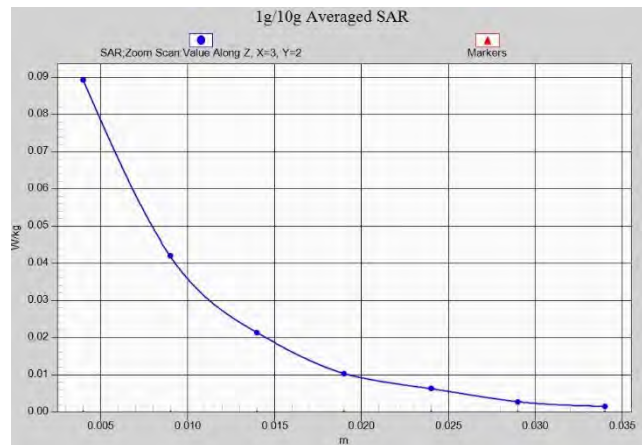
Fig. 1-93   Z-Scan at power reference point (n7)
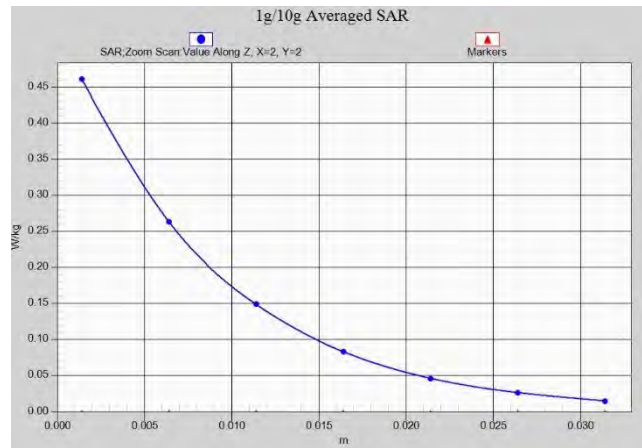
Fig. 1-94   Z-Scan at power reference point (n41)
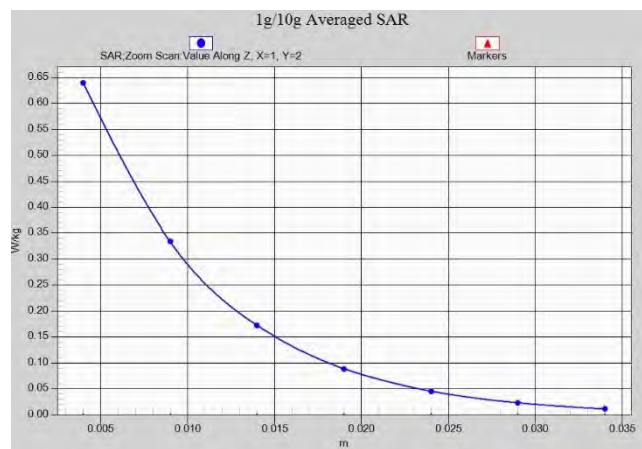
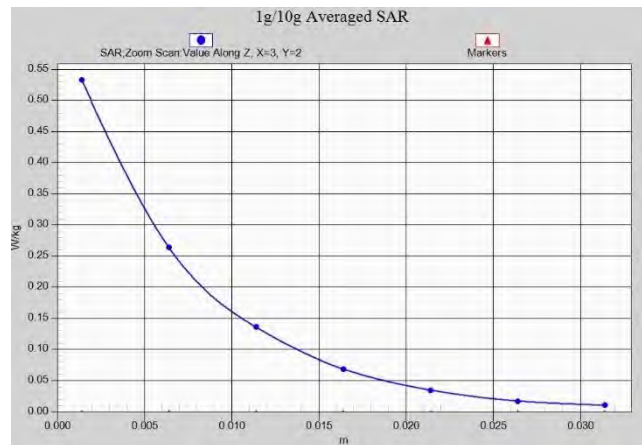
Fig. 1-95   Z-Scan at power reference point (n41)
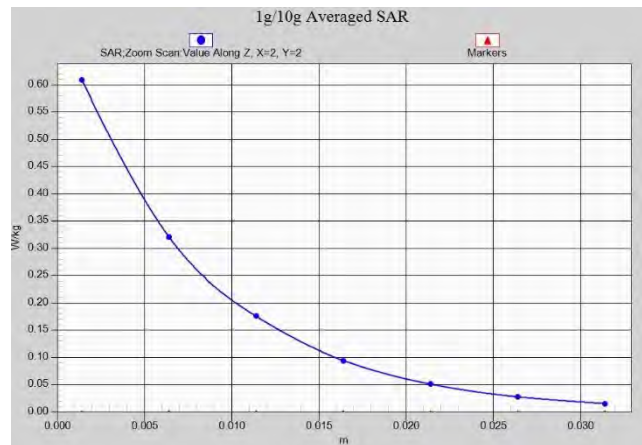
Fig. 1-96   Z-Scan at power reference point (n41)
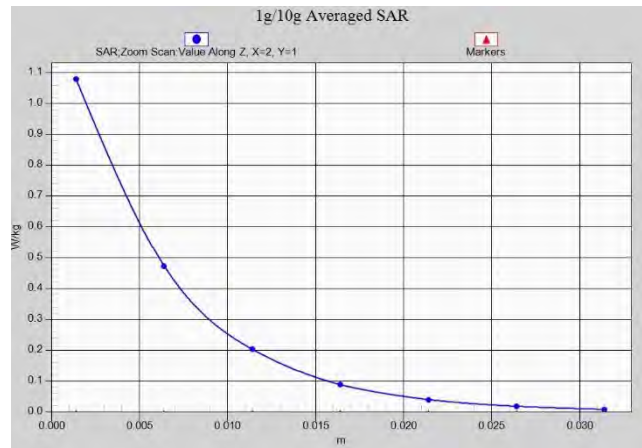
Fig. 1-97   Z-Scan at power reference point (n41)
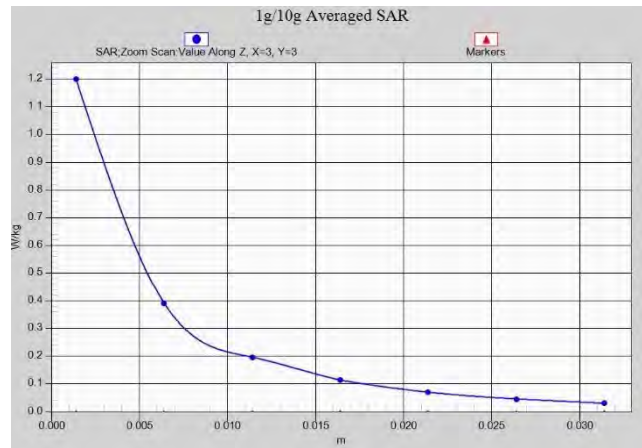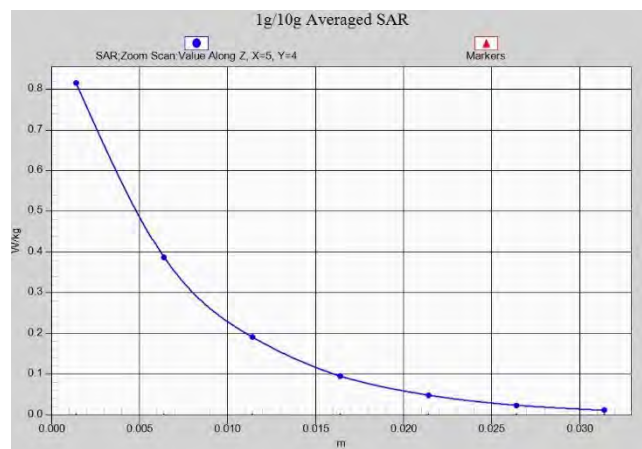

Fig. 1-98   Z-Scan at power reference point (n41)
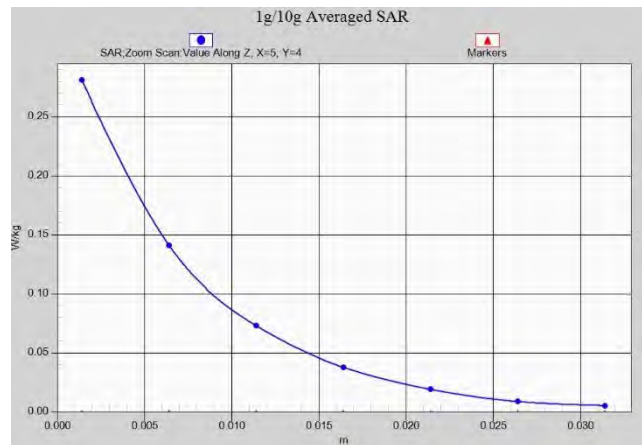
Fig. 1-99   Z-Scan at power reference point (n41)
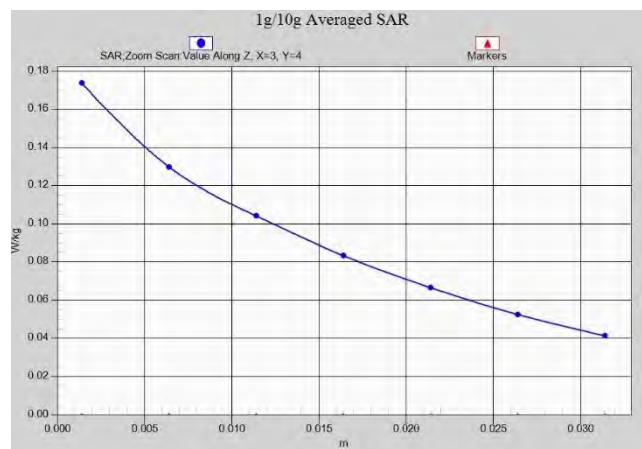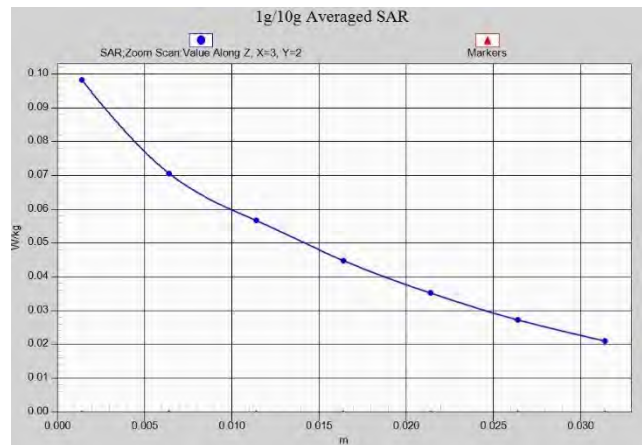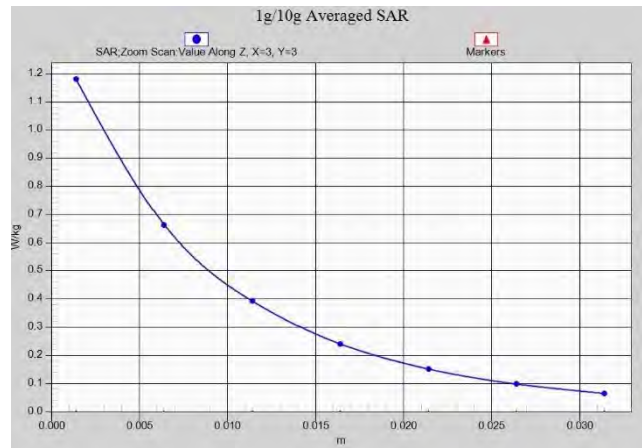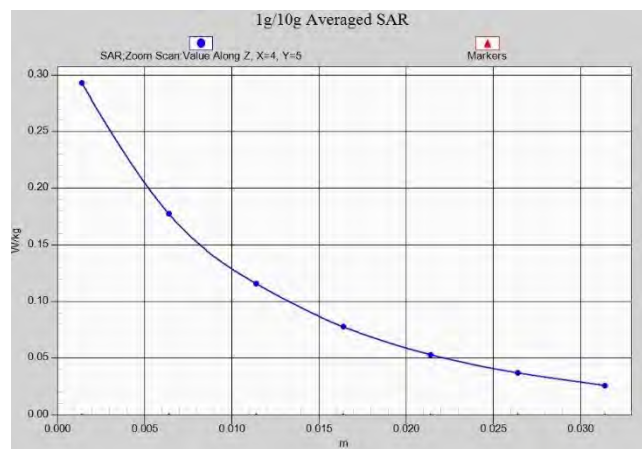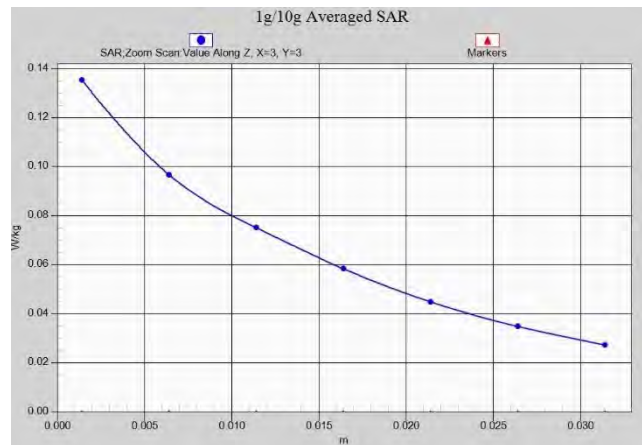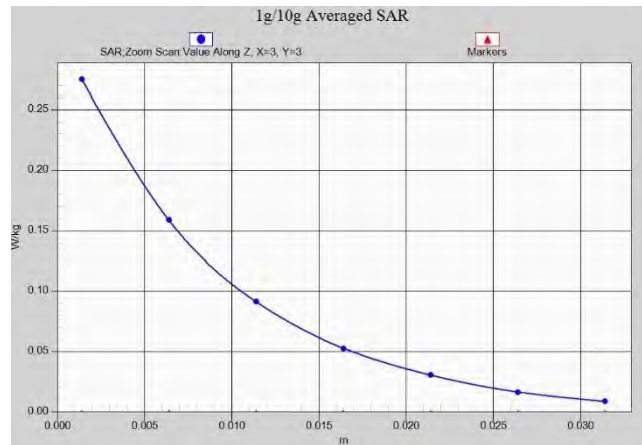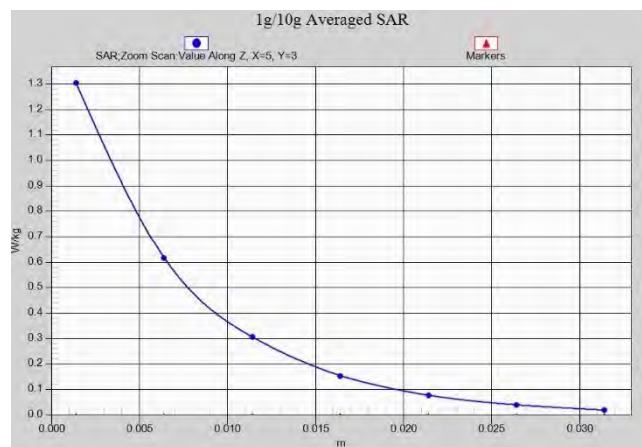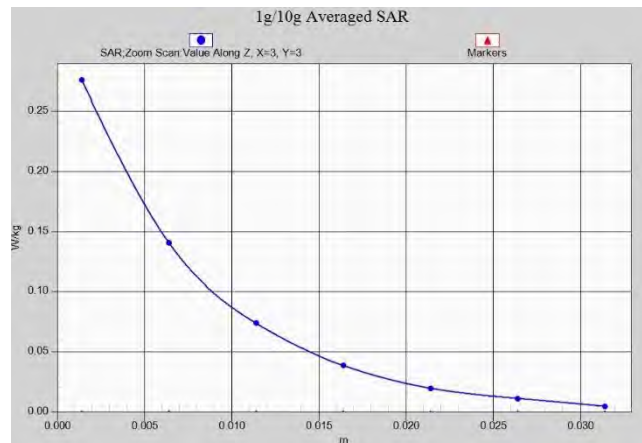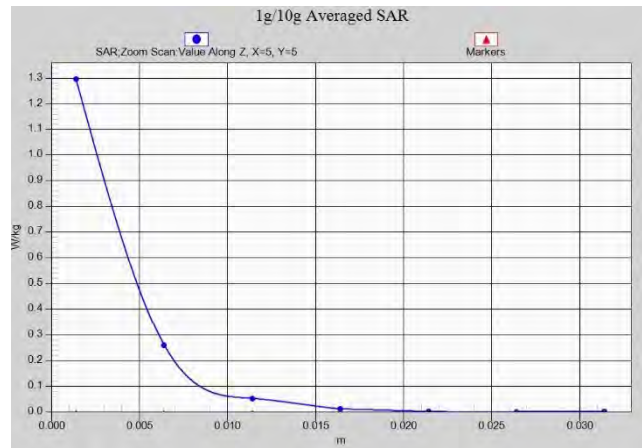
Fig. 1-100　Z-Scan at power reference point (n41)
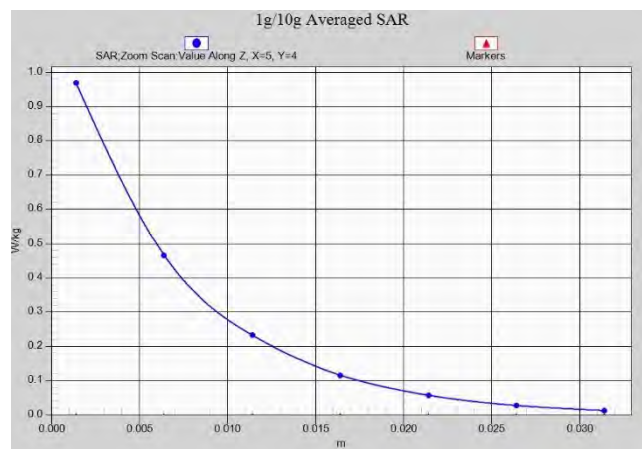
Fig. 1-101　Z-Scan at power reference point (n41)
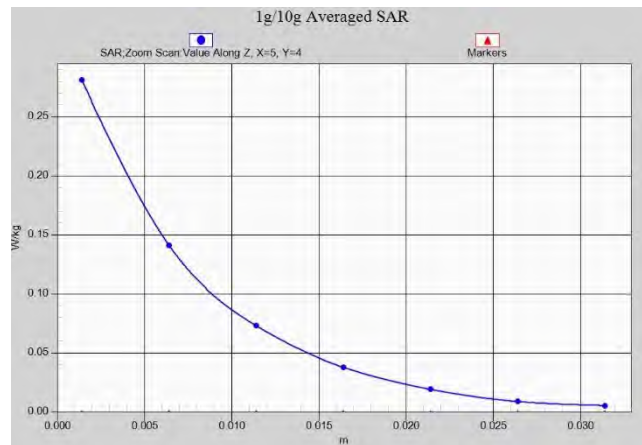
Fig. 1-102　Z-Scan at power reference point (n41)

ANNEX B System Verification Results

750 MHz

Date: 1/4/2021
Electronics: DAE4 Sn536
Medium: Head 750 MHz
Medium parameters used: f = 750 MHz; σ =0.89 mho/m; ε_r = 41.28; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 59.36 V/m; Power Drift = 0.02
Fast SAR: SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.37 W/kg
Maximum value of SAR (interpolated) = 2.78 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =59.36 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.2 W/kg
SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.39 W/kg
Maximum value of SAR (measured) = 2.91 W/kg
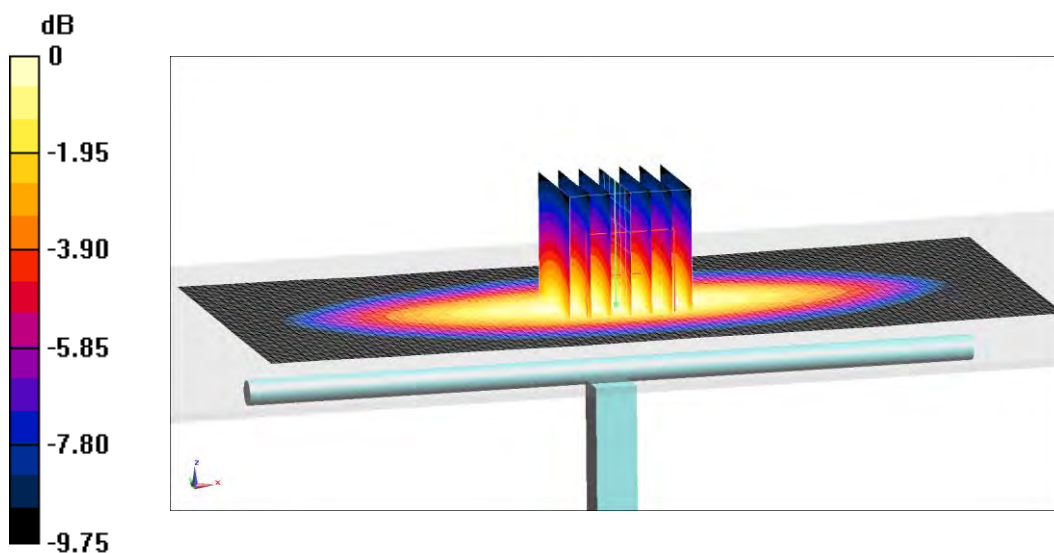
0 dB = 2.91 W/kg = 4.64 dB W/kg

Fig.B.1 validation 750 MHz 250mW

750 MHz

Date: 1/13/2021
Electronics: DAE4 Sn536
Medium: Head 750 MHz
Medium parameters used: f = 750 MHz; σ =0.88 mho/m; ε_r = 41.71; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.41,10.41,10.41)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
    Reference Value = 59.41 V/m; Power Drift = 0.04
    Fast SAR: SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.37 W/kg
Maximum value of SAR (interpolated) = 2.77 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =59.41 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 3.27 W/kg
SAR(1 g) = 2.08 W/kg; SAR(10 g) = 1.4 W/kg
Maximum value of SAR (measured) = 2.87 W/kg
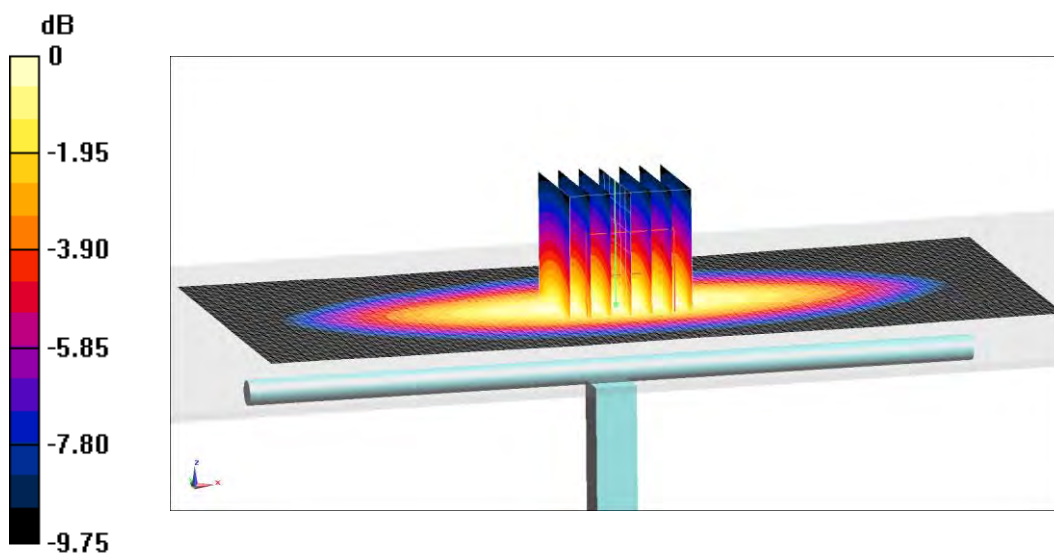
0 dB = 2.87 W/kg = 4.58 dB W/kg

Fig.B.2 validation 750 MHz 250mW

835 MHz

Date: 1/5/2021
Electronics: DAE4 Sn536
Medium: Head 835 MHz
Medium parameters used: f = 835 MHz; σ =0.898 mho/m; ε_r = 40.92; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 64.22 V/m; Power Drift = -0.08
Fast SAR: SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.55 W/kg
Maximum value of SAR (interpolated) = 3.23 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =64.22 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 3.64 W/kg
SAR(1 g) = 2.41 W/kg; SAR(10 g) = 1.59 W/kg
Maximum value of SAR (measured) = 3.25 W/kg
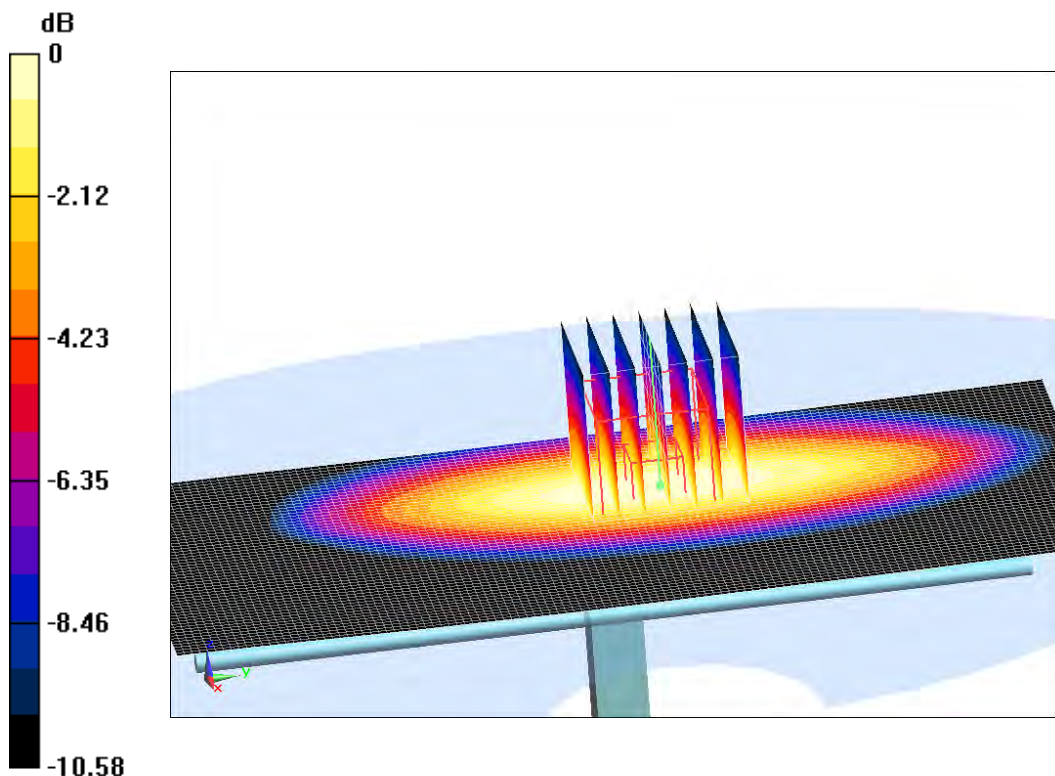
0 dB = 3.25 W/kg = 5.12 dB W/kg

Fig.B.3 validation 835 MHz 250mW

835 MHz

Date: 1/6/2021
Electronics: DAE4 Sn536
Medium: Head 835 MHz
Medium parameters used: f = 835 MHz; σ =0.905 mho/m; ε_r = 42.26; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 64.21 V/m; Power Drift = -0.03
Fast SAR: SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.53 W/kg
Maximum value of SAR (interpolated) = 3.2 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =64.21 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.65 W/kg
SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.56 W/kg
Maximum value of SAR (measured) = 3.31 W/kg

0 dB = 3.31 W/kg = 5.2 dB W/kg

Fig.B.4 validation 835 MHz 250mW

835 MHz

Date: 1/14/2021
Electronics: DAE4 Sn536
Medium: Head 835 MHz
Medium parameters used: f = 835 MHz; σ =0.884 mho/m; ε_r = 41.55; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 62.42 V/m; Power Drift = 0.05

Fast SAR: SAR(1 g) = 2.42 W/kg; SAR(10 g) = 1.57 W/kg

Maximum value of SAR (interpolated) = 3.2 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =62.42 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 3.64 W/kg

SAR(1 g) = 2.35 W/kg; SAR(10 g) = 1.56 W/kg

Maximum value of SAR (measured) = 3.32 W/kg
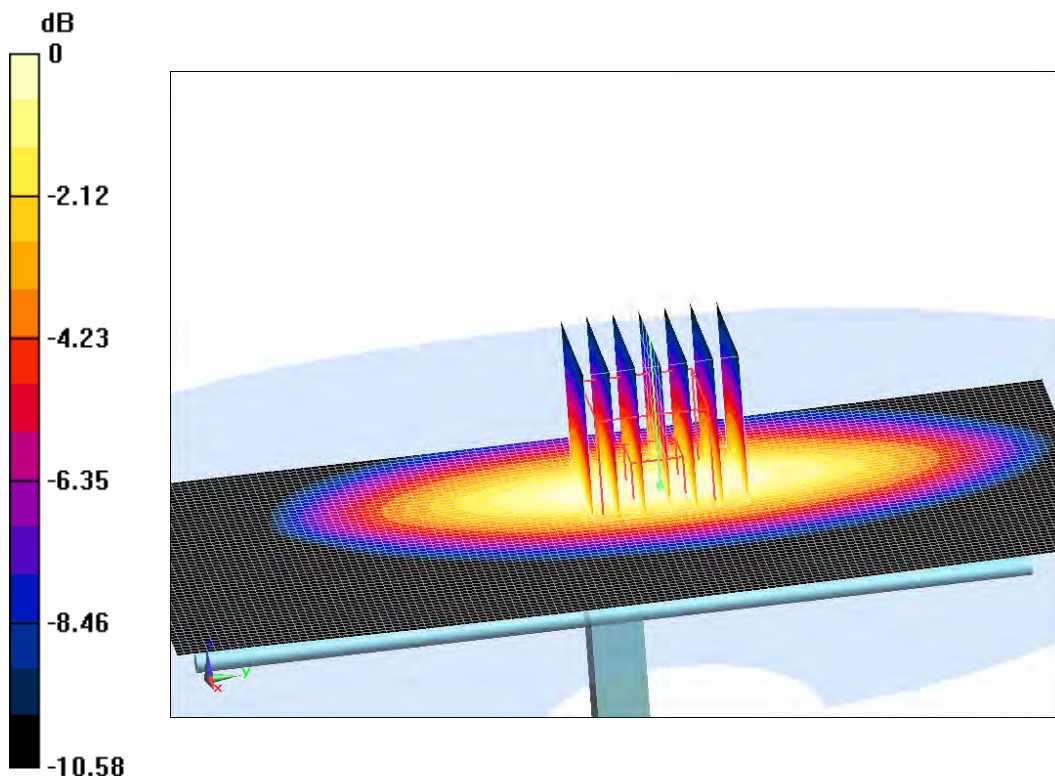
0 dB = 3.32 W/kg = 5.21 dB W/kg

Fig.B.5 validation 835 MHz 250mW

835 MHz

Date: 1/15/2021
Electronics: DAE4 Sn536
Medium: Head 835 MHz
Medium parameters used: f = 835 MHz; σ =0.918 mho/m; ε_r = 41.49; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
   Reference Value = 63.63 V/m; Power Drift = -0.02
   Fast SAR: SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.55 W/kg
Maximum value of SAR (interpolated) = 3.14 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =63.63 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.7 W/kg
SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.59 W/kg
Maximum value of SAR (measured) = 3.23 W/kg
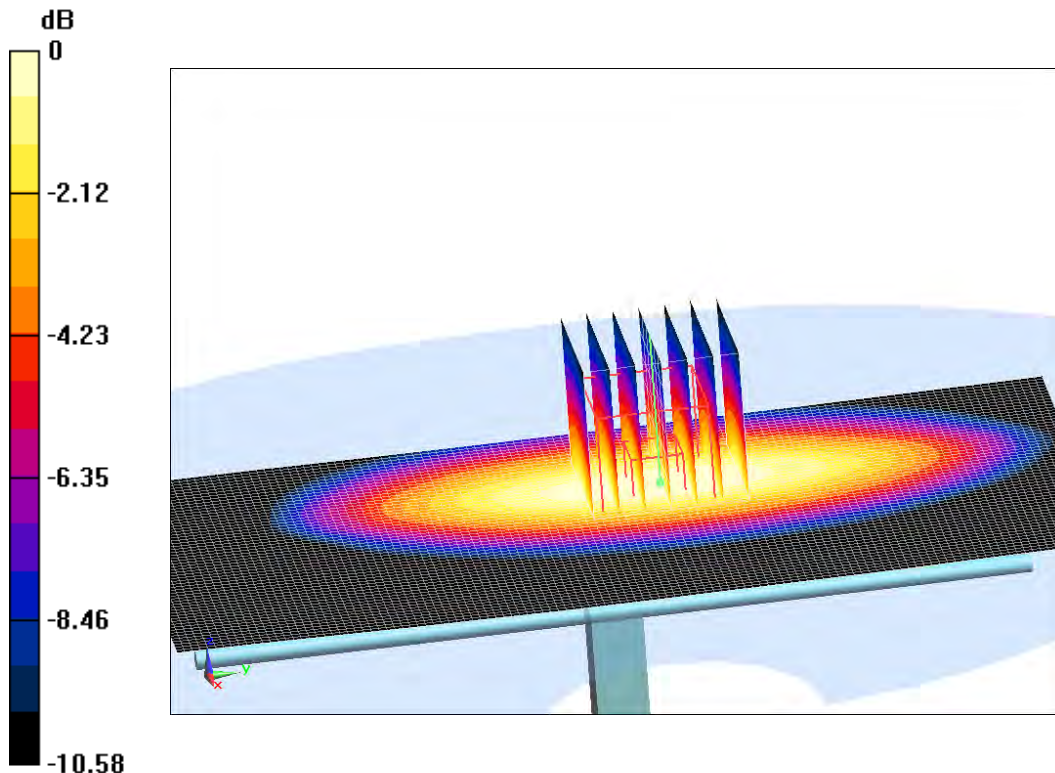
0 dB = 3.23 W/kg = 5.09 dB W/kg

Fig.B.6 validation 835 MHz 250mW

835 MHz

Date: 1/24/2021
Electronics: DAE4 Sn536
Medium: Head 835 MHz
Medium parameters used: f = 835 MHz; σ =0.905 mho/m; ε_r = 42.26; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(10.2,10.2,10.2)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 64.21 V/m; Power Drift = -0.03
Fast SAR: SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.53 W/kg
Maximum value of SAR (interpolated) = 3.2 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =64.21 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 3.65 W/kg
SAR(1 g) = 2.4 W/kg; SAR(10 g) = 1.56 W/kg
Maximum value of SAR (measured) = 3.31 W/kg

0 dB = 3.31 W/kg = 5.2 dB W/kg
Fig.B.7 validation 835 MHz 250mW

1750 MHz

Date: 1/7/2021
Electronics: DAE4 Sn536
Medium: Head 1750 MHz
Medium parameters used: f = 1750 MHz; σ =1.358 mho/m; ε_r = 39.69; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 104.11 V/m; Power Drift = 0.06
Fast SAR: SAR(1 g) = 9.04 W/kg; SAR(10 g) = 4.69 W/kg
Maximum value of SAR (interpolated) = 14.07 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =104.11 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 16.62 W/kg
SAR(1 g) = 9.02 W/kg; SAR(10 g) = 4.79 W/kg
Maximum value of SAR (measured) = 14.34 W/kg
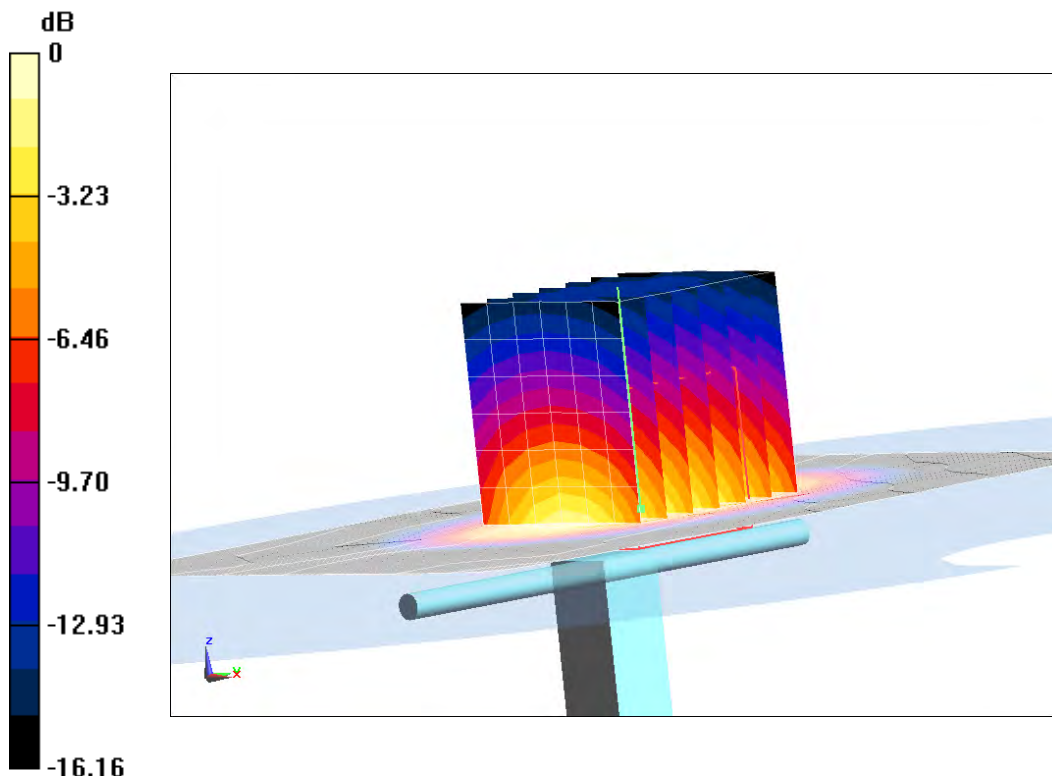
0 dB = 14.34 W/kg = 11.57 dB W/kg

Fig.B.8 validation 1750 MHz 250mW

1750 MHz

Date: 1/16/2021
Electronics: DAE4 Sn536
Medium: Head 1750 MHz
Medium parameters used: f = 1750 MHz; σ =1.383 mho/m; ε_r = 39.85; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.64,8.64,8.64)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 107.99 V/m; Power Drift = 0.03
Fast SAR: SAR(1 g) = 8.97 W/kg; SAR(10 g) = 4.86 W/kg
Maximum value of SAR (interpolated) = 14.05 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =107.99 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 16.53 W/kg
SAR(1 g) = 9.12 W/kg; SAR(10 g) = 4.72 W/kg
Maximum value of SAR (measured) = 14.04 W/kg
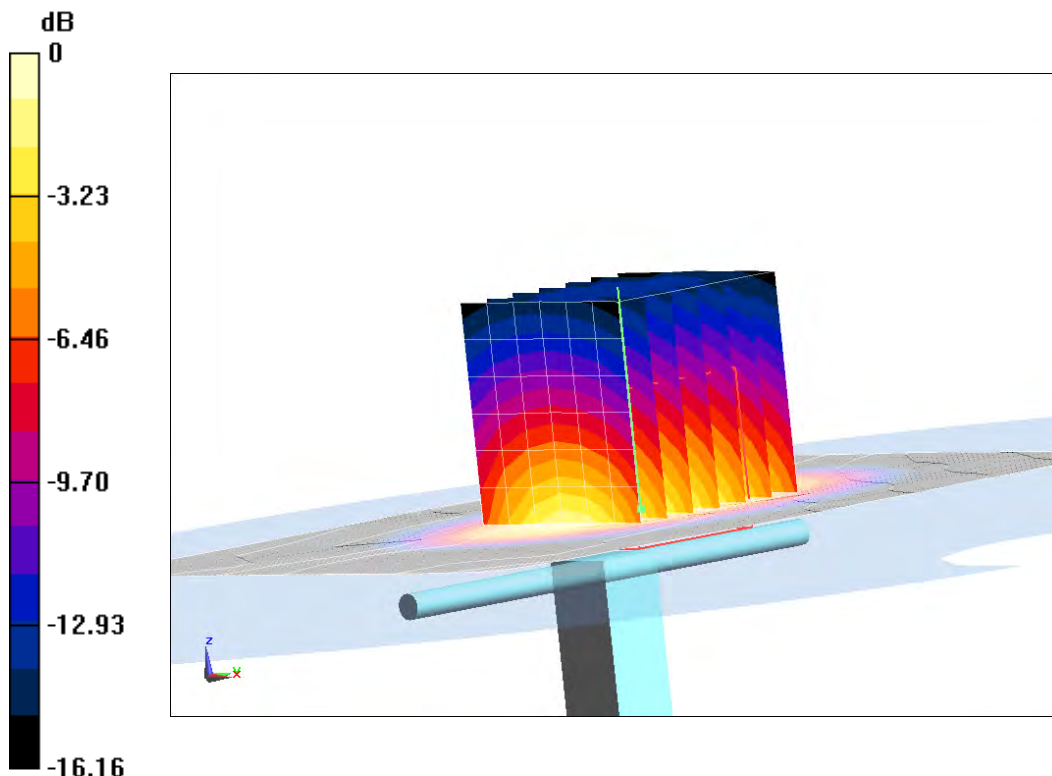
0 dB = 14.04 W/kg = 11.47 dB W/kg

Fig.B.9 validation 1750 MHz 250mW

1900 MHz

Date: 1/8/2021
Electronics: DAE4 Sn536
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; σ =1.408 mho/m; ε_r = 40.74; ρ = 1000 kg/m³
Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 110.74 V/m; Power Drift = -0.03
Fast SAR: SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.05 W/kg
Maximum value of SAR (interpolated) = 15.26 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =110.74 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 18.19 W/kg
SAR(1 g) = 9.92 W/kg; SAR(10 g) = 5.16 W/kg
Maximum value of SAR (measured) = 15.41 W/kg
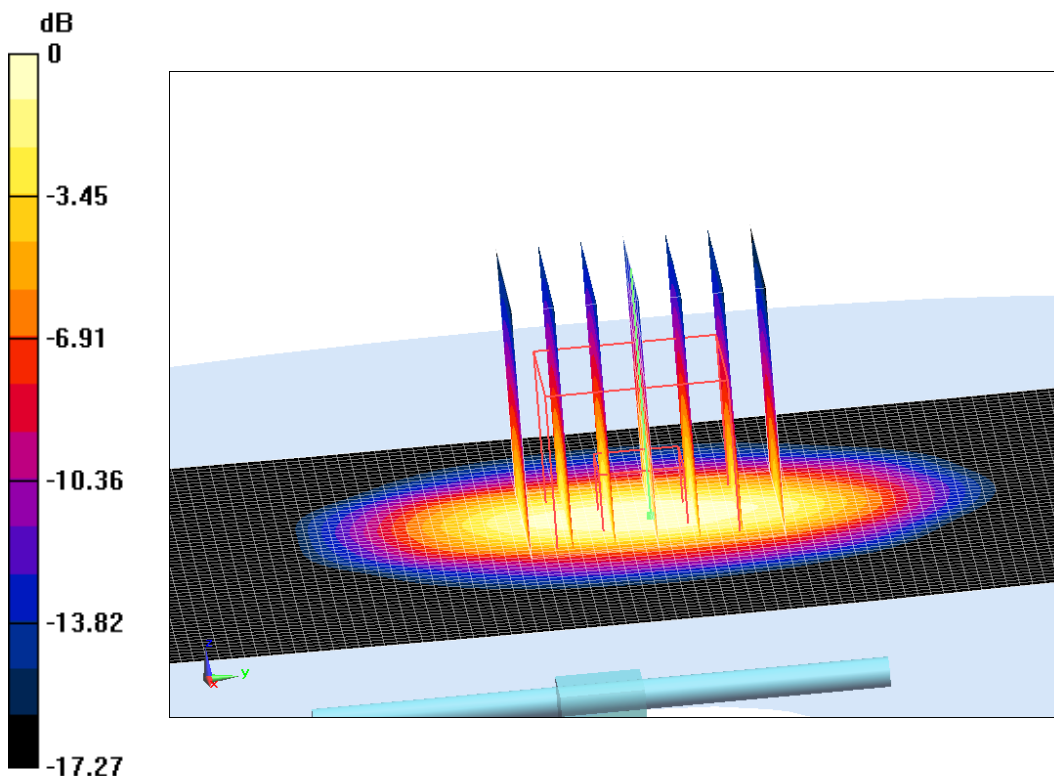
0 dB = 15.41 W/kg = 11.88 dB W/kg
Fig.B.10 validation 1900 MHz 250mW

1900 MHz

Date: 1/9/2021
Electronics: DAE4 Sn536
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; σ =1.428 mho/m; ε_r = 39.99; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 109.75 V/m; Power Drift = -0.02
Fast SAR: SAR(1 g) = 9.87 W/kg; SAR(10 g) = 5.09 W/kg
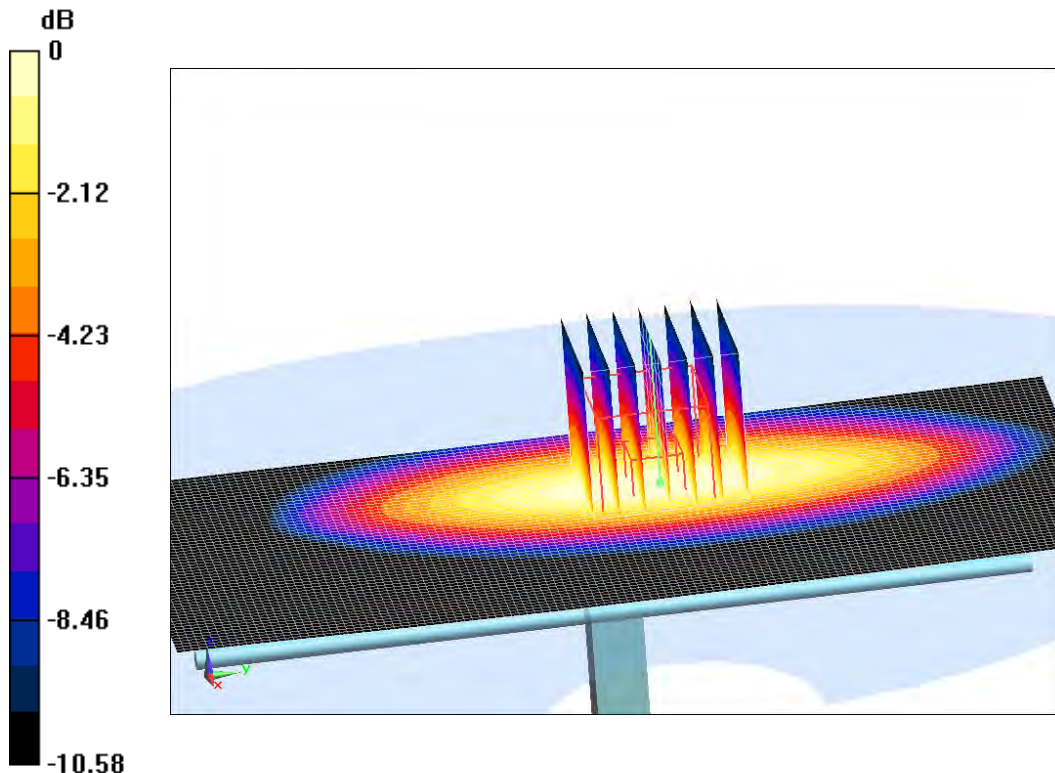Maximum value of SAR (interpolated) = 14.95 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =109.75 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 18.43 W/kg
SAR(1 g) = 9.9 W/kg; SAR(10 g) = 5.23 W/kg
Maximum value of SAR (measured) = 15.08 W/kg
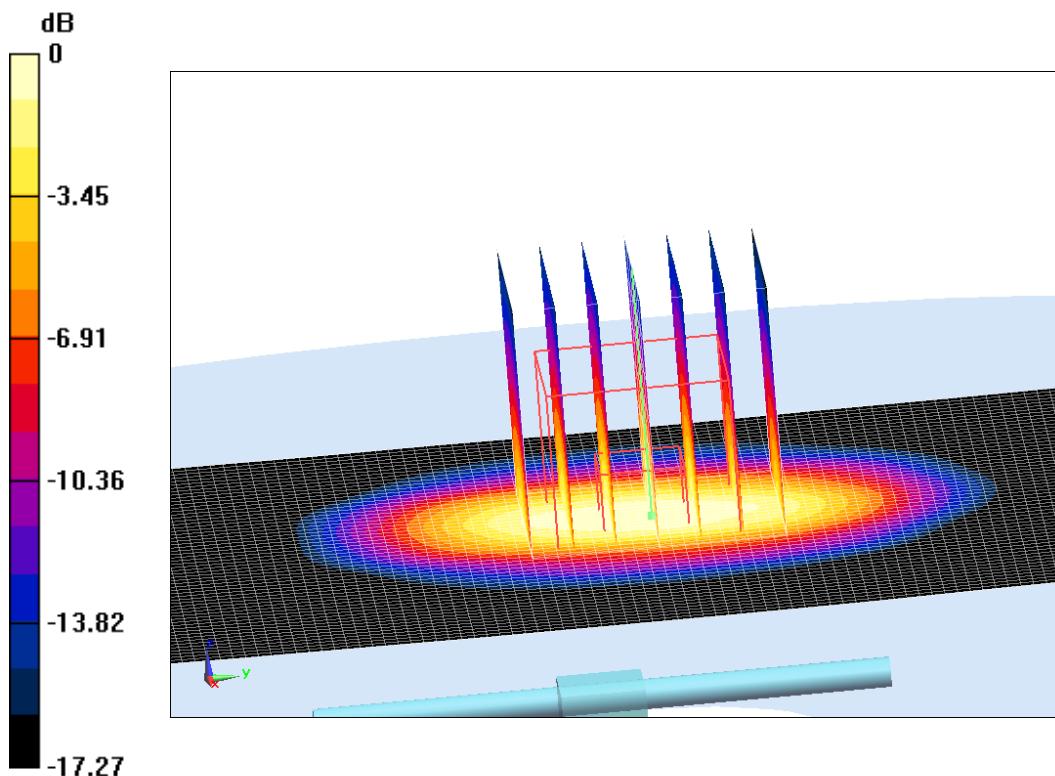
0 dB = 15.08 W/kg = 11.78 dB W/kg

Fig.B.11 validation 1900 MHz 250mW

1900 MHz

Date: 1/17/2021
Electronics: DAE4 Sn536
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; σ =1.401 mho/m; ε_r = 40.09; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 109.59 V/m; Power Drift = 0.04
Fast SAR: SAR(1 g) = 9.9 W/kg; SAR(10 g) = 5.09 W/kg
Maximum value of SAR (interpolated) = 15.45 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =109.59 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 18.39 W/kg
SAR(1 g) = 10.01 W/kg; SAR(10 g) = 5.15 W/kg
Maximum value of SAR (measured) = 15.38 W/kg
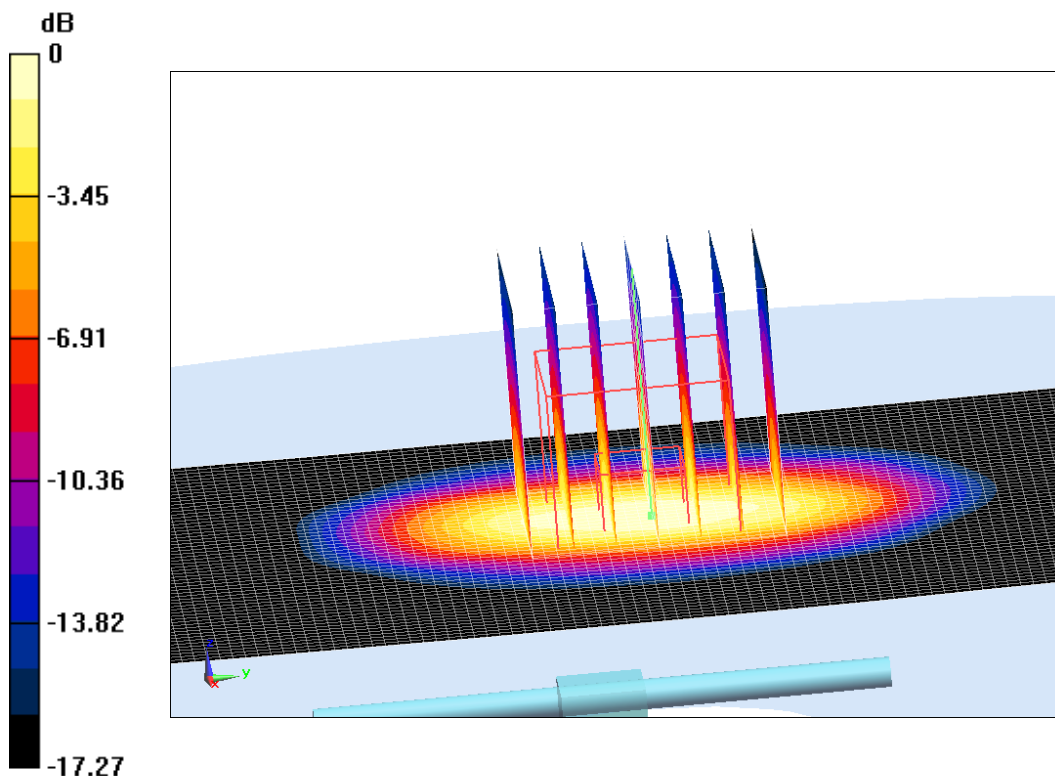
0 dB = 15.38 W/kg = 11.87 dB W/kg

Fig.B.12 validation 1900 MHz 250mW

1900 MHz

Date: 1/18/2021
Electronics: DAE4 Sn536
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; σ =1.385 mho/m; ε_r = 39.78; ρ = 1000 kg/m^3
Ambient Temperature: 22.5℃ Liquid Temperature: 22.3℃
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(8.33,8.33,8.33)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
    Reference Value = 108.8 V/m; Power Drift = 0.04
    Fast SAR: SAR(1 g) = 9.77 W/kg; SAR(10 g) = 5.09 W/kg
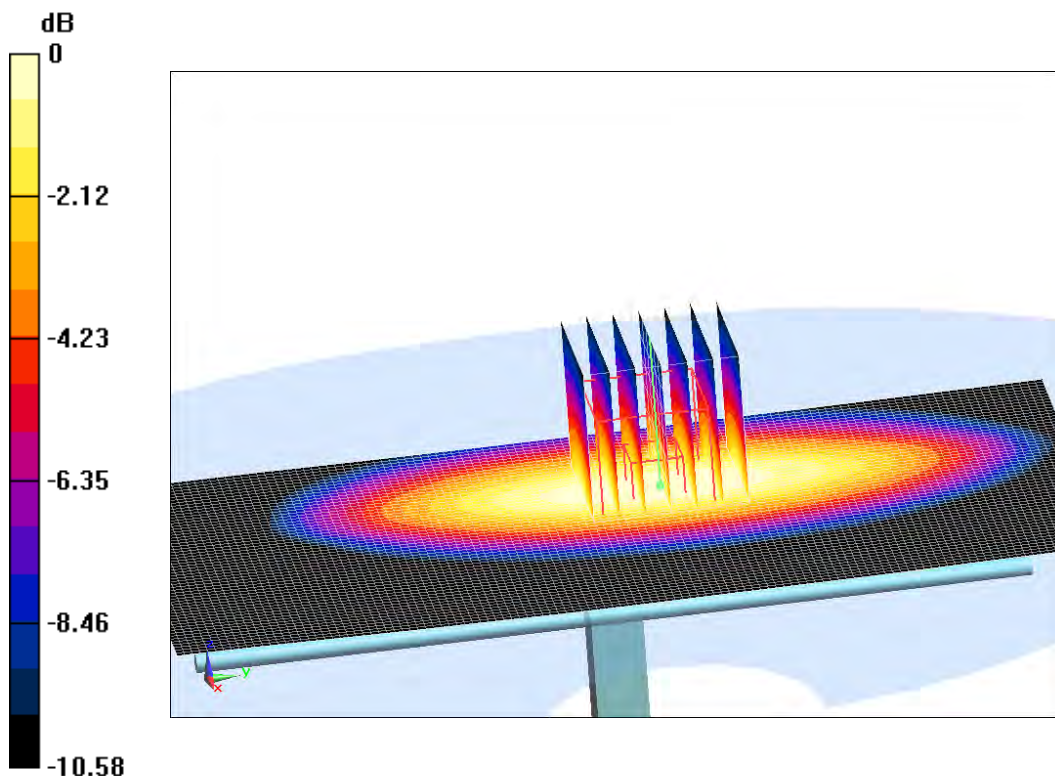Maximum value of SAR (interpolated) = 14.93 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =108.8 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 18.28 W/kg
SAR(1 g) = 9.73 W/kg; SAR(10 g) = 5.21 W/kg
Maximum value of SAR (measured) = 15.18 W/kg
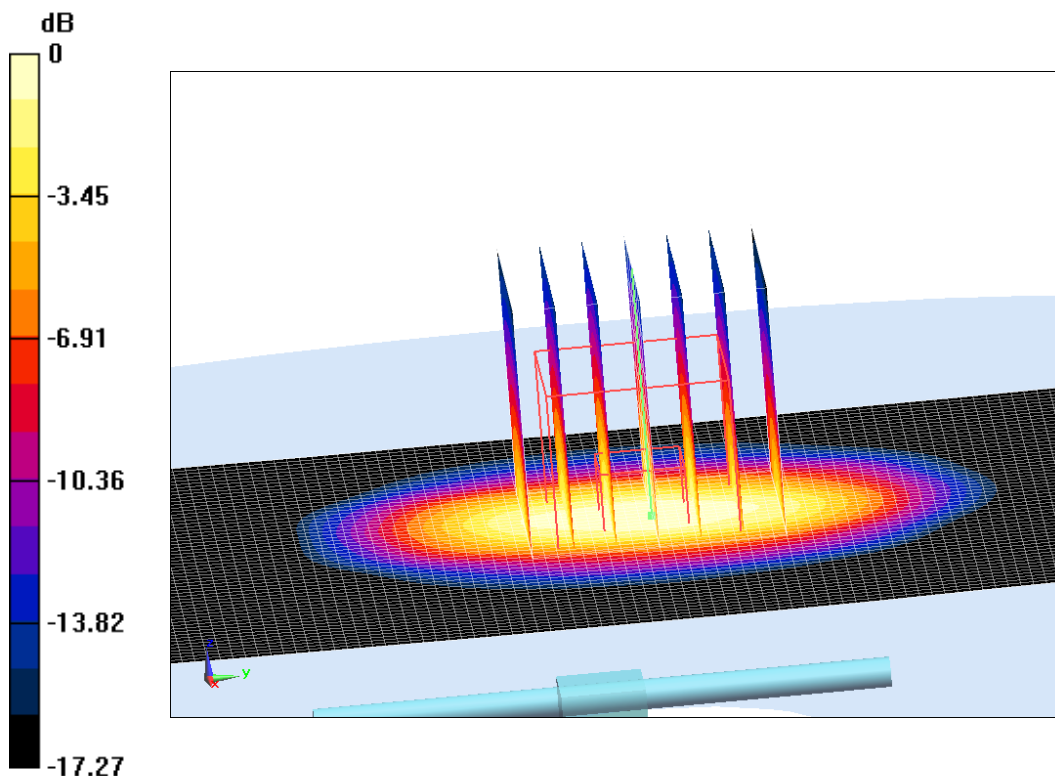
0 dB = 15.18 W/kg = 11.81 dB W/kg

Fig.B.13 validation 1900 MHz 250mW

2450 MHz

Date: 1/10/2021
Electronics: DAE4 Sn536
Medium: Head 2450 MHz
Medium parameters used: f = 2450 MHz; σ =1.78 mho/m; ε_r = 38.99; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(7.77,7.77,7.77)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
  Reference Value = 118.1 V/m; Power Drift = 0.04
  Fast SAR: SAR(1 g) = 12.95 W/kg; SAR(10 g) = 6.05 W/kg
Maximum value of SAR (interpolated) = 21.38 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =118.1 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 26.32 W/kg
SAR(1 g) = 12.9 W/kg; SAR(10 g) = 6.2 W/kg
Maximum value of SAR (measured) = 21.77 W/kg
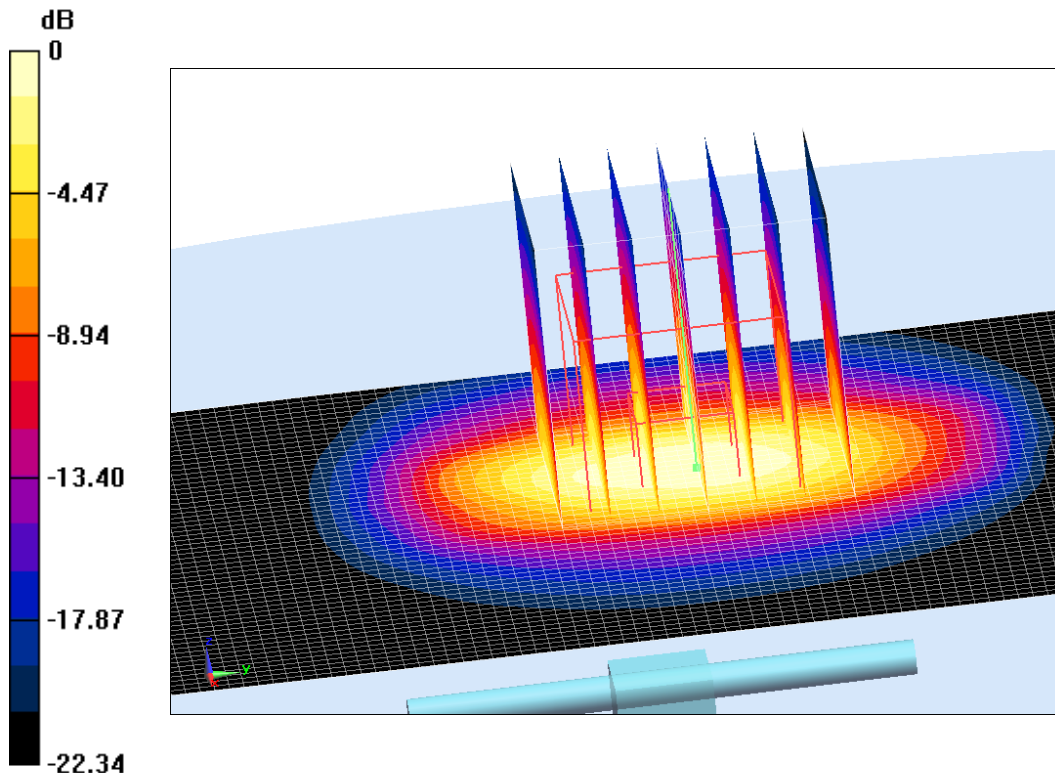
0 dB = 21.77 W/kg = 13.38 dB W/kg

Fig.B.14 validation 2450 MHz 250mW

2600 MHz

Date: 1/11/2021
Electronics: DAE4 Sn536
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; σ =1.999 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
  Reference Value = 122.15 V/m; Power Drift = -0.02
  Fast SAR: SAR(1 g) = 14.21 W/kg; SAR(10 g) = 6.26 W/kg
Maximum value of SAR (interpolated) = 23.97 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =122.15 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 29.67 W/kg
SAR(1 g) = 14.24 W/kg; SAR(10 g) = 6.42 W/kg
Maximum value of SAR (measured) = 24.21 W/kg

0 dB = 24.21 W/kg = 13.84 dB W/kg

Fig.B.15 validation 2600 MHz 250mW

2600 MHz

Date: 1/12/2021
Electronics: DAE4 Sn536
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; σ =1.925 mho/m; ε_r = 39.06; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 119.83 V/m; Power Drift = 0.05
Fast SAR: SAR(1 g) = 14.32 W/kg; SAR(10 g) = 6.36 W/kg
Maximum value of SAR (interpolated) = 24.5 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =119.83 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 29.18 W/kg
SAR(1 g) = 13.97 W/kg; SAR(10 g) = 6.3 W/kg
Maximum value of SAR (measured) = 24.87 W/kg
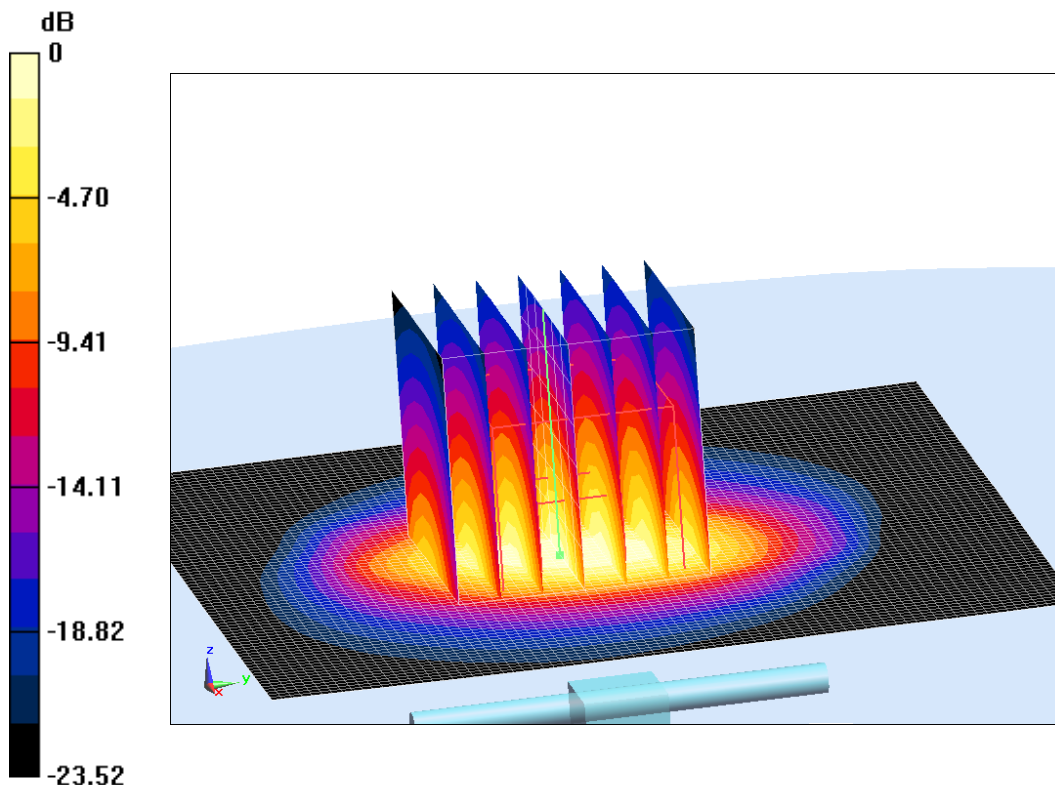
0 dB = 24.87 W/kg = 13.96 dB W/kg

Fig.B.16 validation 2600 MHz 250mW

2600 MHz

Date: 1/19/2021
Electronics: DAE4 Sn536
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; σ =1.974 mho/m; ε_r = 39.6; ρ = 1000 kg/m^3
Ambient Temperature: 22.5℃ Liquid Temperature: 22.3℃
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 119.37 V/m; Power Drift = 0.06
Fast SAR: SAR(1 g) = 14.06 W/kg; SAR(10 g) = 6.33 W/kg
Maximum value of SAR (interpolated) = 24.7 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =119.37 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 29.18 W/kg
SAR(1 g) = 14.03 W/kg; SAR(10 g) = 6.36 W/kg
Maximum value of SAR (measured) = 24.4 W/kg
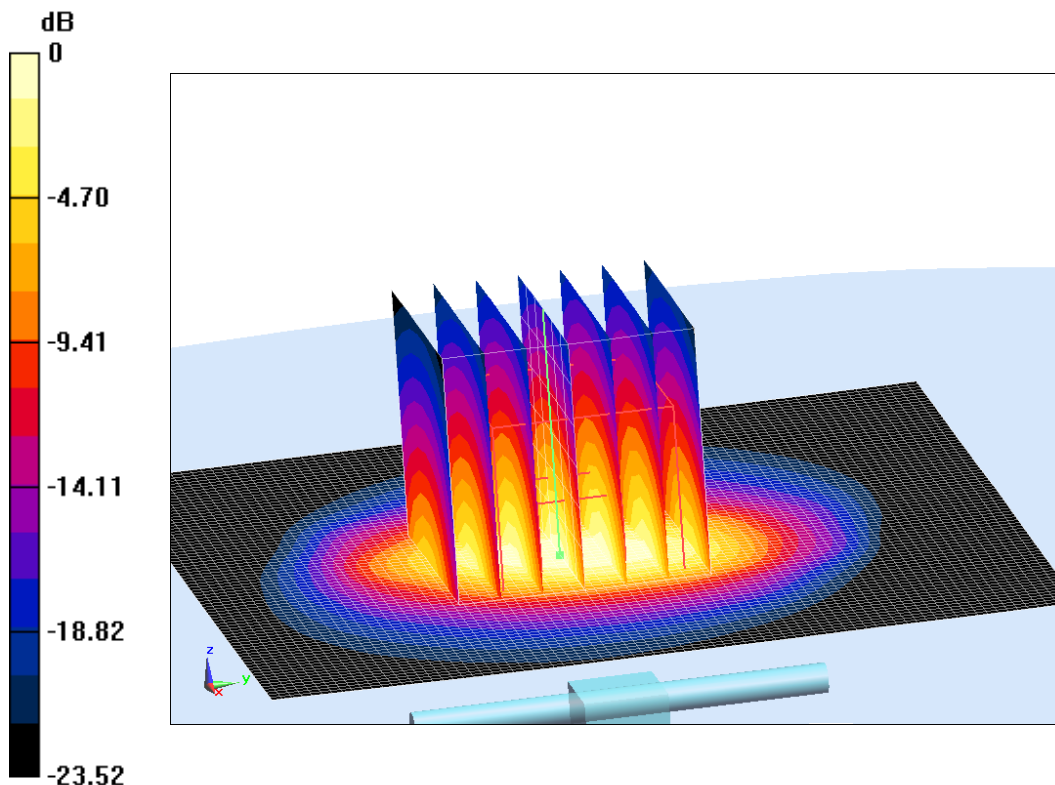
0 dB = 24.4 W/kg = 13.87 dB W/kg

Fig.B.17 validation 2600 MHz 250mW

2600 MHz

Date: 1/20/2021
Electronics: DAE4 Sn536
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; σ =1.925 mho/m; ε_r = 39.06; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
   Reference Value = 119.83 V/m; Power Drift = 0.05
   Fast SAR: SAR(1 g) = 14.3 W/kg; SAR(10 g) = 6.36 W/kg
Maximum value of SAR (interpolated) = 24.5 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =119.83 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 29.18 W/kg
SAR(1 g) = 13.97 W/kg; SAR(10 g) = 6.3 W/kg
Maximum value of SAR (measured) = 24.87 W/kg
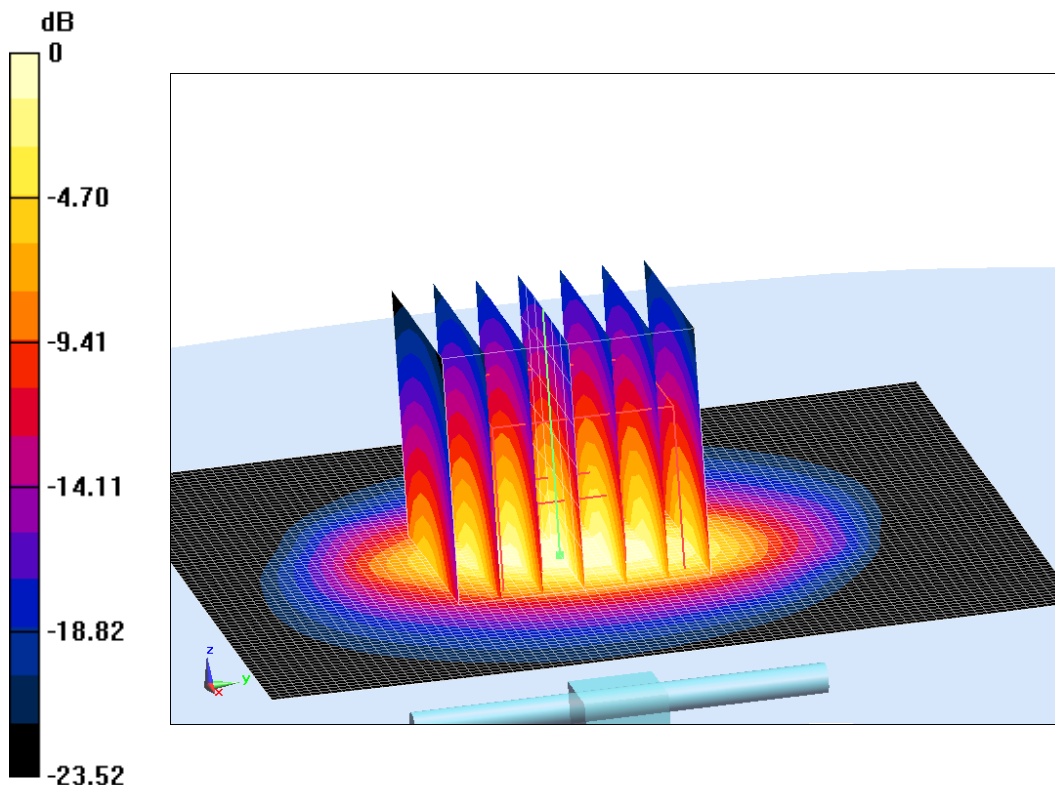
0 dB = 24.87 W/kg = 13.96 dB W/kg

Fig.B.18 validation 2600 MHz 250mW

2600 MHz

Date: 1/25/2021
Electronics: DAE4 Sn536
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; σ =1.999 mho/m; ε$_r$ = 39; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
  Reference Value = 122.15 V/m; Power Drift = -0.02
  Fast SAR: SAR(1 g) = 14.21 W/kg; SAR(10 g) = 6.26 W/kg
Maximum value of SAR (interpolated) = 23.97 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =122.15 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 29.67 W/kg
SAR(1 g) = 14.24 W/kg; SAR(10 g) = 6.42 W/kg
Maximum value of SAR (measured) = 24.21 W/kg

0 dB = 24.21 W/kg = 13.84 dB W/kg

Fig.B.19 validation 2600 MHz 250mW

2600 MHz

Date: 1/26/2021
Electronics: DAE4 Sn536
Medium: Head 2600 MHz
Medium parameters used: f = 2600 MHz; σ =1.943 mho/m; ε_r = 38.86; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(7.61,7.61,7.61)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
　　Reference Value = 122.37 V/m; Power Drift = -0.08
　　Fast SAR: SAR(1 g) = 14.14 W/kg; SAR(10 g) = 6.24 W/kg
Maximum value of SAR (interpolated) = 24.41 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =122.37 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 29.11 W/kg
SAR(1 g) = 14.51 W/kg; SAR(10 g) = 6.44 W/kg
Maximum value of SAR (measured) = 24.87 W/kg
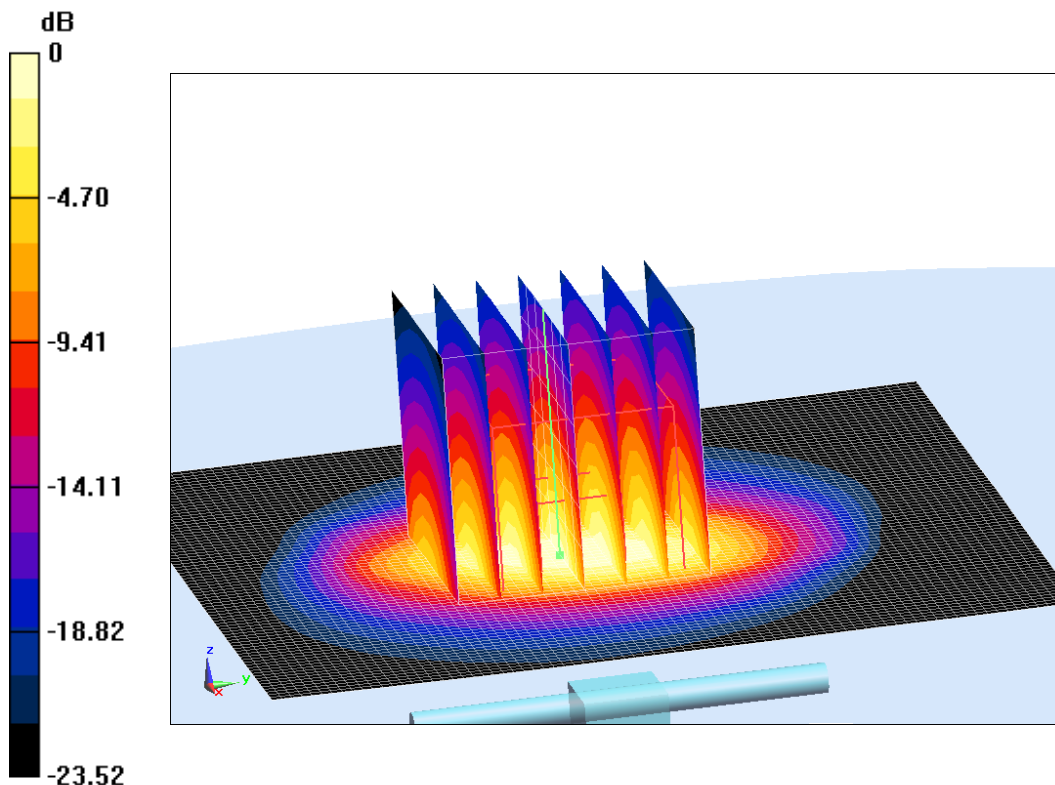
0 dB = 24.87 W/kg = 13.96 dB W/kg

Fig.B.20 validation 2600 MHz 250mW

5250 MHz

Date: 1/21/2021
Electronics: DAE4 Sn536
Medium: Head 5250 MHz
Medium parameters used: f = 5250 MHz; σ =4.724 mho/m; ε_r = 36.45; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 5250 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(5.61,5.61,5.61)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 18.52 W/kg
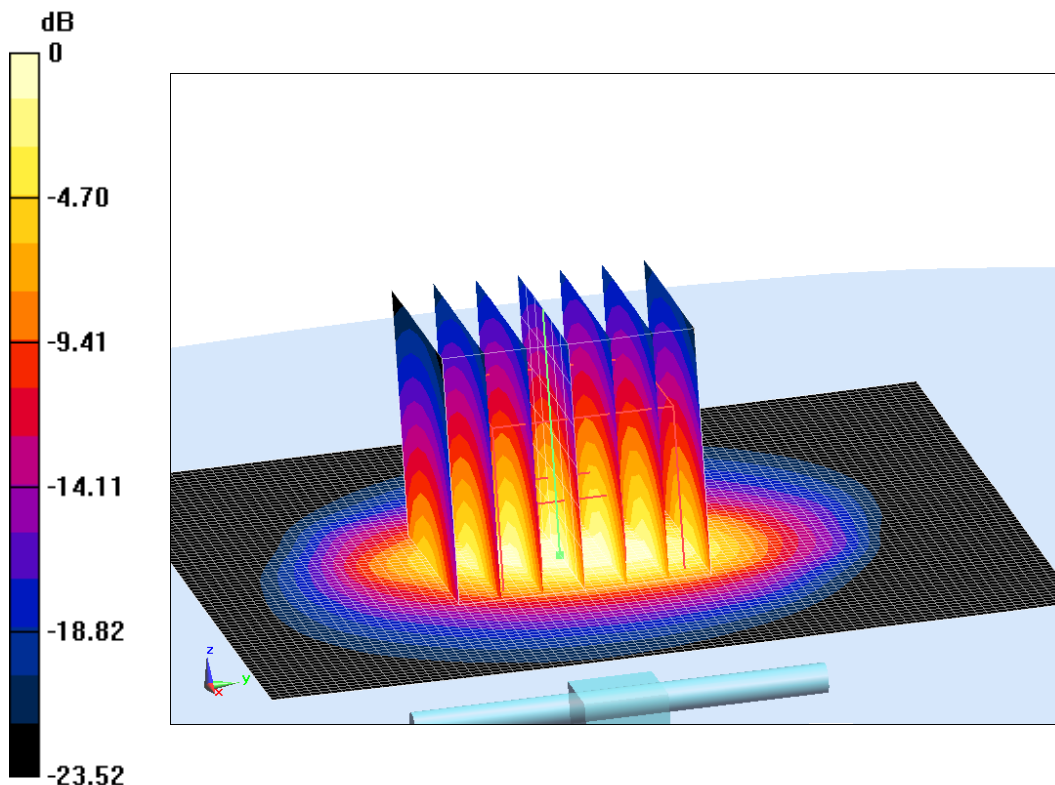
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =78.88 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 28.08 W/kg
SAR(1 g) = 20.44 W/kg; SAR(10 g) = 5.76 W/kg
Maximum value of SAR (measured) = 18.2 W/kg
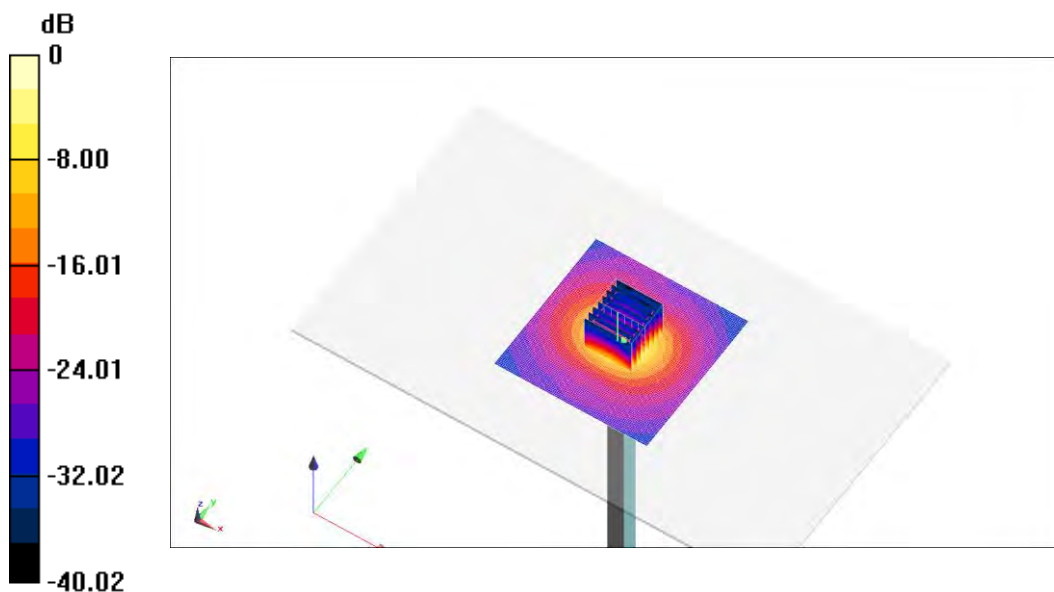
0 dB = 18.2 W/kg = 12.6 dB W/kg

Fig.B.21 validation 5250 MHz 250mW

5600 MHz

Date: 1/22/2021
Electronics: DAE4 Sn536
Medium: Head 5600 MHz
Medium parameters used: f = 5600 MHz; σ =5.068 mho/m; ε_r = 36.01; ρ = 1000 kg/m³
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 5600 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(5.1,5.1,5.1)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.29 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =77.93 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 31.75 W/kg
SAR(1 g) = 21.23 W/kg; SAR(10 g) = 5.78 W/kg
Maximum value of SAR (measured) = 20.03 W/kg
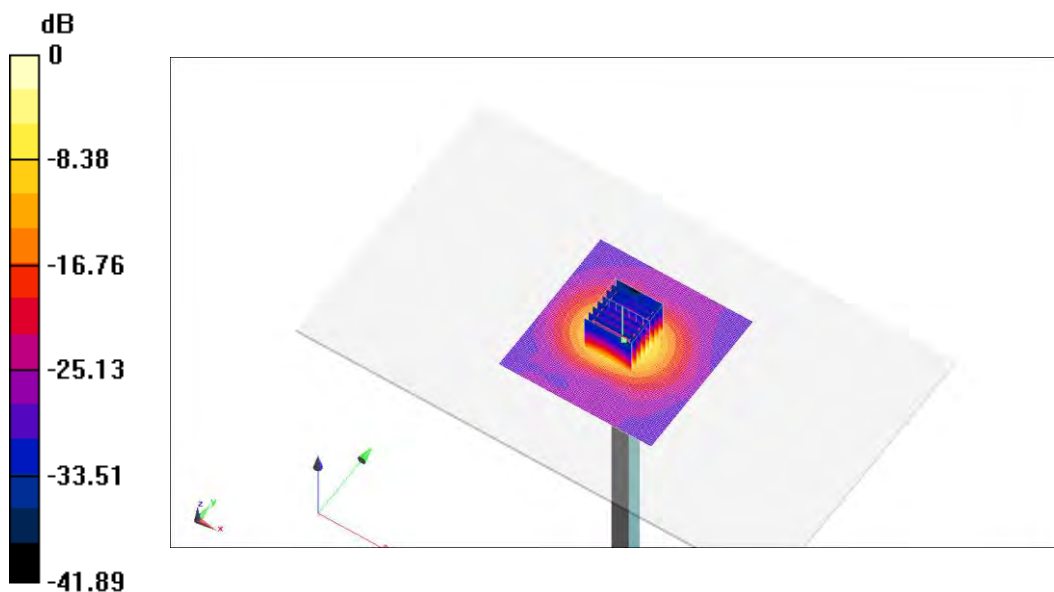
0 dB = 20.03 W/kg = 13.02 dB W/kg
Fig.B.22 validation 5600 MHz 250mW

5750 MHz

Date: 1/23/2021
Electronics: DAE4 Sn536
Medium: Head 5750 MHz
Medium parameters used: f = 5750 MHz; σ =5.153 mho/m; ε_r = 34.67; ρ = 1000 kg/m^3
Ambient Temperature: 22.5ºC Liquid Temperature: 22.3ºC
Communication System: CW Frequency: 5750 MHz Duty Cycle: 1:1
Probe: EX3DV4 – SN7307 ConvF(5.05,5.05,5.05)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 19.87 W/kg
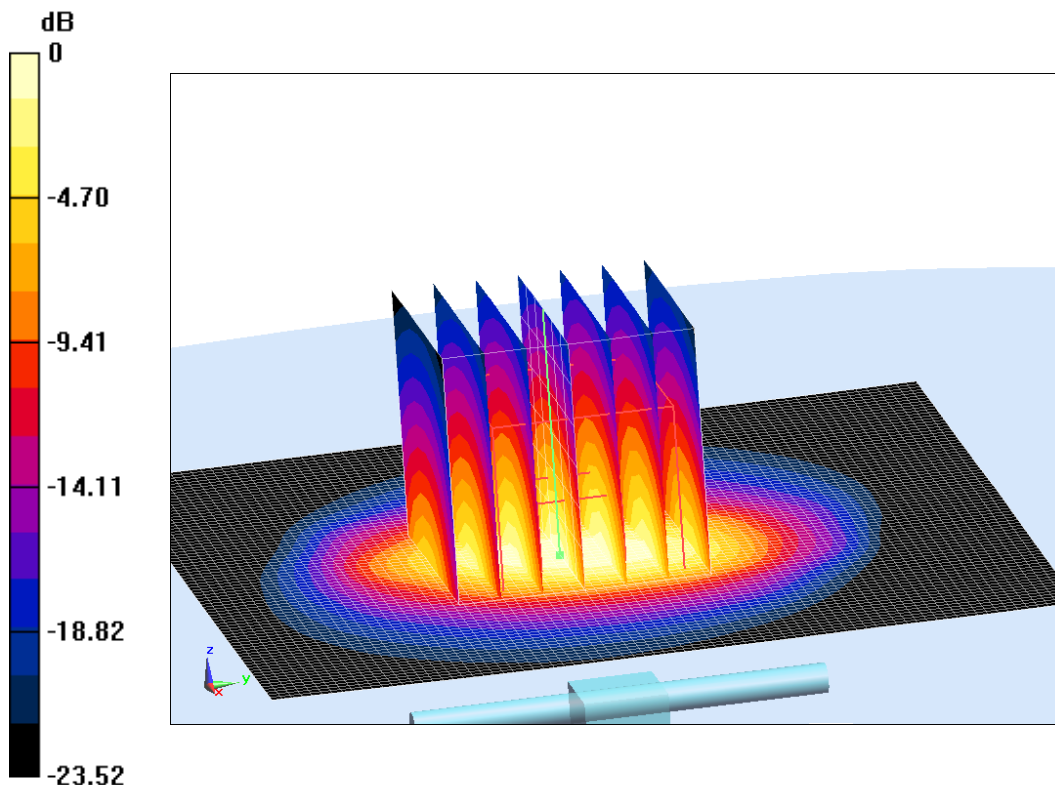
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value =75.32 V/m; Power Drift = 0.1 dB
Peak SAR (extrapolated) = 32.2 W/kg
SAR(1 g) = 20.33 W/kg; SAR(10 g) = 5.64 W/kg
Maximum value of SAR (measured) = 19.94 W/kg
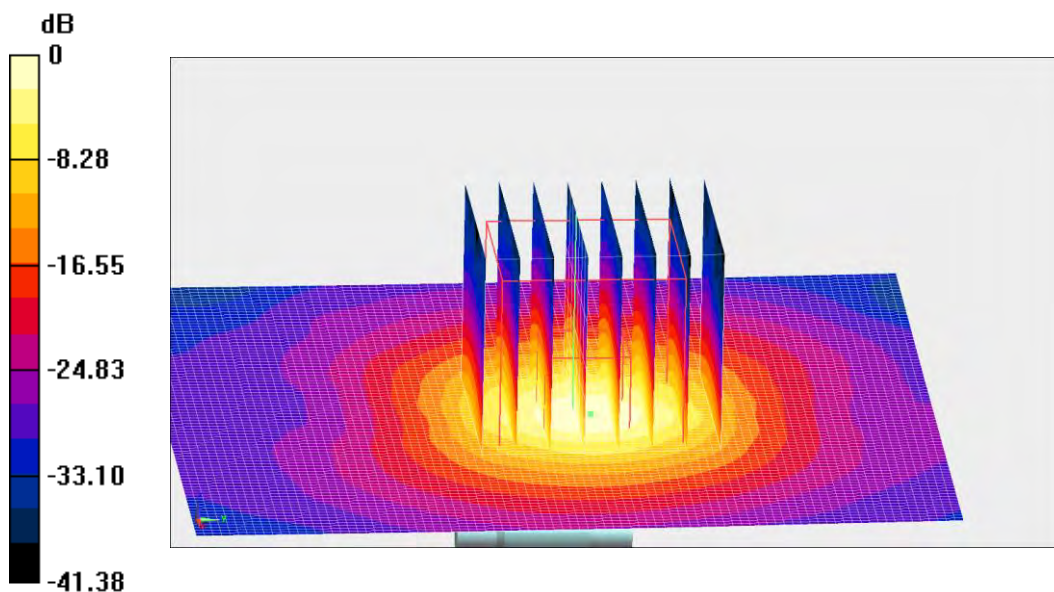
0 dB = 19.94 W/kg = 13 dB W/kg
Fig.B.23 validation 5750 MHz 250mW

The SAR system verification must be required that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR.

Table B.1 Comparison between area scan and zoom scan for system verification

Date	Band	Position	Area scan (1g)	Zoom scan (1g)	Drift (%)
2021-1-4	750 MHz	Head	2.08	2.08	0.00
2021-1-13	750 MHz	Head	2.09	2.08	0.48
2021-1-5	835 MHz	Head	2.4	2.41	-0.41
2021-1-6	835 MHz	Head	2.45	2.4	2.08
2021-1-14	835 MHz	Head	2.42	2.35	2.98
2021-1-15	835 MHz	Head	2.39	2.4	-0.42
2021-1-24	835 MHz	Head	2.45	2.4	2.08
2021-1-7	1750 MHz	Head	9.04	9.02	0.22
2021-1-16	1750 MHz	Head	8.97	9.12	-1.64
2021-1-8	1900 MHz	Head	10.1	9.92	1.81
2021-1-9	1900 MHz	Head	9.87	9.9	-0.30
2021-1-17	1900 MHz	Head	9.9	10.01	-1.10
2021-1-18	1900 MHz	Head	9.77	9.73	0.41
2021-1-10	2450 MHz	Head	12.95	12.9	0.39
2021-1-11	2600 MHz	Head	14.21	14.24	-0.21
2021-1-12	2600 MHz	Head	14.32	13.97	2.51
2021-1-19	2600 MHz	Head	14.06	14.03	0.21
2021-1-20	2600 MHz	Head	14.3	13.97	2.36
2021-1-25	2600 MHz	Head	14.21	14.24	-0.21
2021-1-26	2600 MHz	Head	14.14	14.51	-2.55

ANNEX C   SAR Measurement Setup

C.1 Measurement Set-up

The Dasy4 or DASY5 system for performing compliance tests is illustrated above graphically. This system consists of the following items:
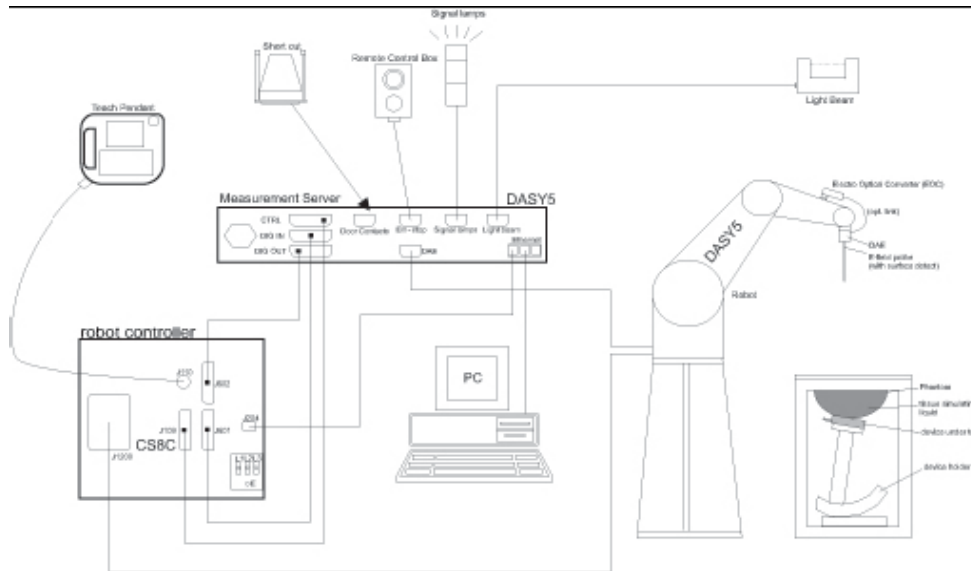
Picture C.1SAR Lab Test Measurement Set-up

- A standard high precision 6-axis robot (StäubliTX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP and the DASY4 or DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as
- warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

C.2 Dasy4 or DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multifiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY4 or DASY5 software reads the reflection durning a software approach and looks for the maximum using 2nd ord curve fitting. The approach is stopped at reaching the maximum.

Probe Specifications:
Model: **ES3DV3, EX3DV4**
Frequency **10MHz — 6.0GHz(EX3DV4)**
Range: **10MHz — 4GHz(ES3DV3)**
Calibration: **In head and body simulating tissue at Frequencies from 835 up to 5800MHz**
Linearity: **± 0.2 dB(30 MHz to 6 GHz) for EX3DV4**
± 0.2 dB(30 MHz to 4 GHz) for ES3DV3
DynamicRange: 10 mW/kg — 100W/kg
Probe Length: **330 mm**
Probe Tip
Length: **20 mm**
Body Diameter: 12 mm
Tip Diameter: **2.5 mm (3.9 mm for ES3DV3)**
Tip-Center: **1 mm (2.0mm for ES3DV3)**
Application:SAR Dosimetry Testing
Compliance tests ofmobile phones
Dosimetry in strong gradient fields
Picture C.3E-field Probe

Picture C.2Near-field Probe

C.3 E-field Probe Calibration

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm^2) using an RF Signal generator, TEM cell, and RF Power Meter.

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and inn a waveguide or

other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm^2.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C \frac{\Delta T}{\Delta t}$$

Where:

Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

$$SAR = \frac{|E|^2 \cdot \sigma}{\rho}$$

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

C.4 Other Test Equipment

C.4.1 Data Acquisition Electronics(DAE)

The data acquisition electronics consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

PictureC.4: DAE

C.4.2 Robot

The SPEAG DASY system uses the high precision robots (DASY4: RX90XL; DASY5: RX160L) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version from Stäubli is used. The Stäubli robot series have many features that are important for our application:

➢ High precision (repeatability 0.02mm)

➢ High reliability (industrial design)

➢ Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)

➢ Jerk-free straight movements (brushless synchron motors; no stepper motors)

➢ Low ELF interference (motor control fields shielded via the closed metallic construction shields)

Picture C.5DASY 4

Picture C.6DASY 5

C.4.3 Measurement Server

The Measurement server is based on a PC/104 CPU broad with CPU (dasy4: 166 MHz, Intel Pentium; DASY5: 400 MHz, Intel Celeron), chipdisk (DASY4: 32 MB; DASY5: 128MB), RAM (DASY4: 64 MB, DASY5: 128MB). The necessary circuits for communication with the DAE electronic box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY I/O broad, which is directly connected to the PC/104 bus of the CPU broad.

The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.

Picture C.7 Server for DASY 4

Picture C.8 Server for DASY 5

C.4.4 Device Holder for Phantom

The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5mm distance, a positioning uncertainty of ±0.5mm would produce a SAR uncertainty of ±20%. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.

The DASY device holder is designed to cope with the different positions given in the standard. It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.

The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity ε =3 and loss tangent δ =0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

<Laptop Extension Kit>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin-SAM and ELI phantoms.

Picture C.9-1: Device Holder
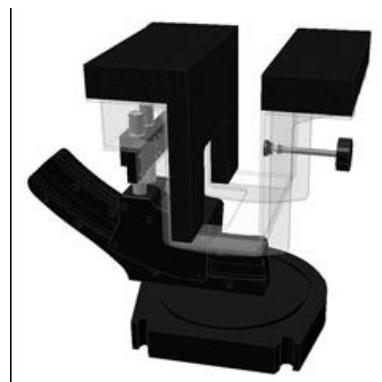
Picture C.9-2: Laptop Extension Kit

C.4.5 Phantom

The SAM Twin Phantom V4.0 is constructed of a fiberglass shell integrated in a table. The shape of the shell is based on data from an anatomical study designed to
Represent the 90th percentile of the population. The phantom enables the dissymmetric evaluation

of SAR for both left and right handed handset usage, as well as body-worn usage using the flat phantom region. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot. The shell phantom has a 2mm shell thickness (except the ear region where shell thickness increases to 6 mm).

Shell Thickness: 2±0. 2 mm

Filling Volume: Approx. 25 liters

Dimensions: 810 x l000 x 500 mm (H x L x W)

Available: Special

Picture C.10: SAM Twin Phantom

ANNEX D Position of the wireless device in relation to the phantom

D.1 General considerations

This standard specifies two handset test positions against the head phantom – the "cheek" position and the "tilt" position.
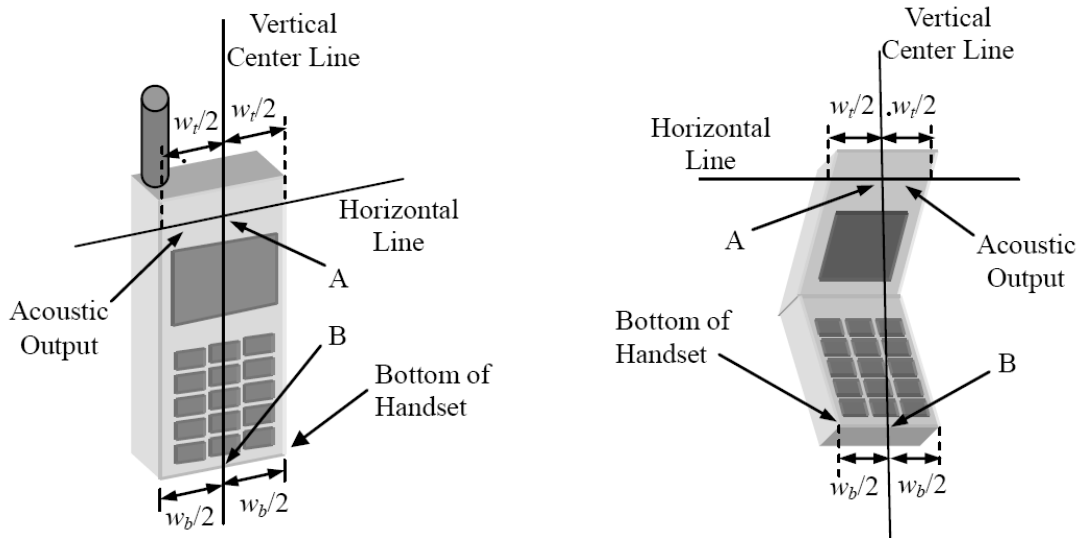
w_t	Width of the handset at the level of the acoustic
w_b	Width of the bottom of the handset
A	Midpoint of the width w_t of the handset at the level of the acoustic output
B	Midpoint of the width w_b of the bottom of the handset

Picture D.1-a Typical "fixed" case handset   Picture D.1-b Typical "clam-shell" case handset
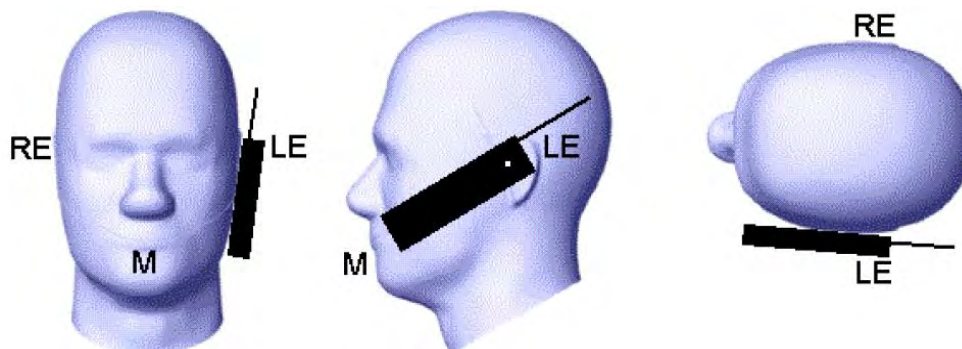
Picture D.2 Cheek position of the wireless device on the left side of SAM
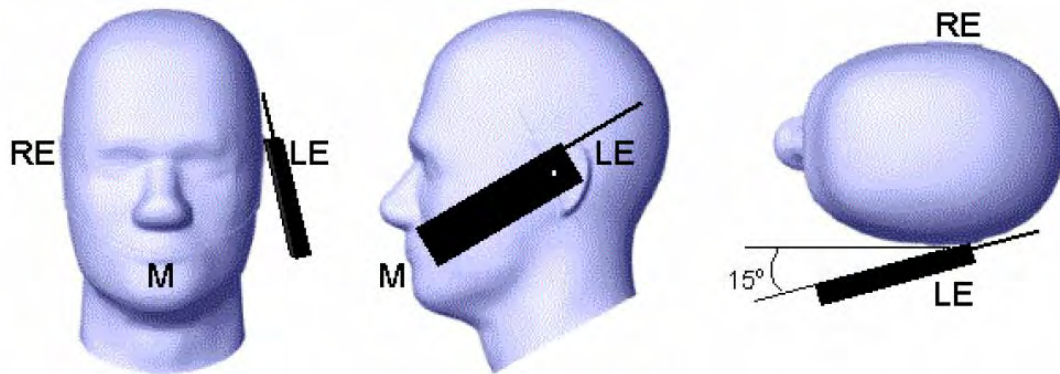
Picture D.3 Tilt position of the wireless device on the left side of SAM

D.2 Body-worn device

A typical example of a body-worn device is a mobile phone, wireless enabled PDA or other battery operated wireless device with the ability to transmit while mounted on a person's body using a carry accessory approved by the wireless device manufacturer.
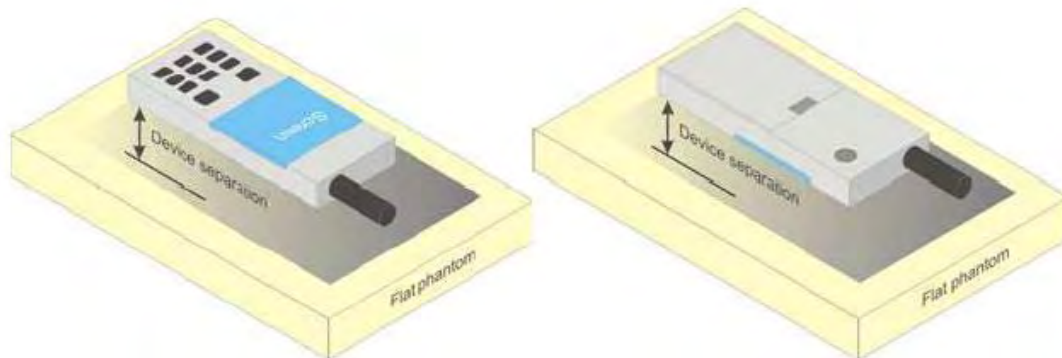
Picture D.4Test positions for body-worn devices

D.3 Desktop device

A typical example of a desktop device is a wireless enabled desktop computer placed on a table or desk when used.

The DUT shall be positioned at the distance and in the orientation to the phantom that corresponds to the intended use as specified by the manufacturer in the user instructions. For devices that employ an external antenna with variable positions, tests shall be performed for all antenna positions specified. Picture8.5 show positions for desktop device SAR tests. If the intended use is not specified, the device shall be tested directly against the flat phantom.
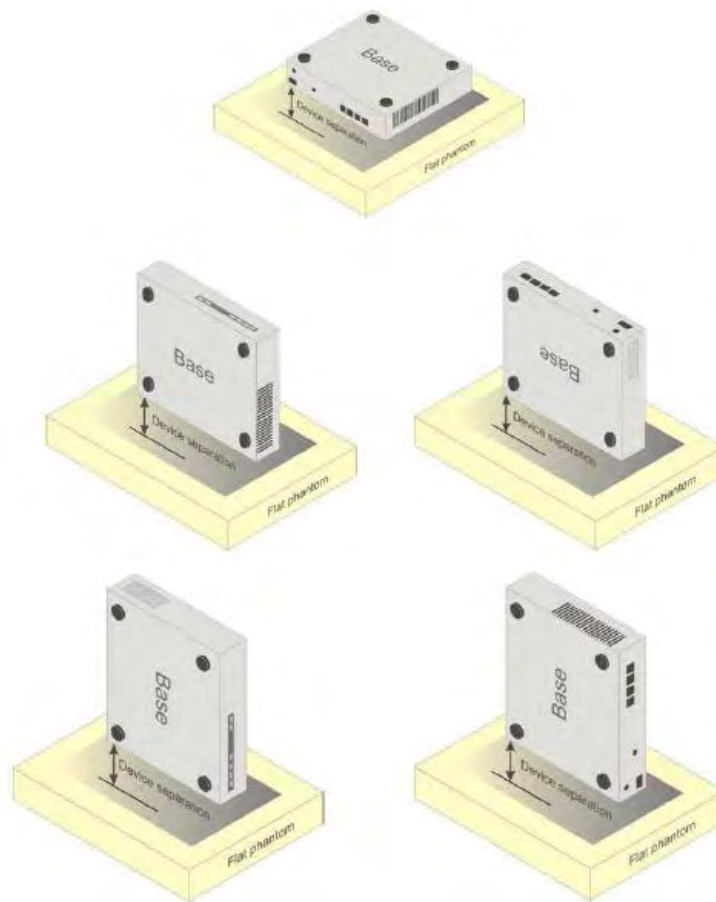
Picture D.5 Test positions for desktop devices

D.4 DUT Setup Photos

Picture D.6

ANNEX E   Equivalent Media Recipes

The liquid used for the frequency range of 800-3000 MHz consisted of water, sugar, salt, preventol, glycol monobutyl and Cellulose. The liquid has been previously proven to be suited for worst-case. The Table E.1 shows the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the IEEE 1528 and IEC 62209.

TableE.1: Composition of the Tissue Equivalent Matter

Frequency (MHz)	835Head	835Body	1900 Head	1900 Body	2450 Head	2450 Body	5800 Head	5800 Body
Ingredients (% by weight)								
Water	41.45	52.5	55.242	69.91	58.79	72.60	65.53	65.53
Sugar	56.0	45.0	\	\	\	\	\	\
Salt	1.45	1.4	0.306	0.13	0.06	0.18	\	\
Preventol	0.1	0.1	\	\	\	\	\	\
Cellulose	1.0	1.0	\	\	\	\	\	\
Glycol Monobutyl	\	\	44.452	29.96	41.15	27.22	\	\
Diethylenglycol monohexylether	\	\	\	\	\	\	17.24	17.24
Triton X-100	\	\	\	\	\	\	17.24	17.24
Dielectric Parameters Target Value	ε=41.5 σ=0.90	ε=55.2 σ=0.97	ε=40.0 σ=1.40	ε=53.3 σ=1.52	ε=39.2 σ=1.80	ε=52.7 σ=1.95	ε=35.3 σ=5.27	ε=48.2 σ=6.00

Note: There are a little adjustment respectively for 750, 1750, 2600, 5200, 5300 and 5600 based on the recipe of closest frequency in table E.1.

ANNEX F   System Validation

The SAR system must be validated against its performance specifications before it is deployed. When SAR probes, system components or software are changed, upgraded or recalibrated, these must be validated with the SAR system(s) that operates with such components.

Table F.1: System Validation for 7307

Probe SN.	Liquid name	Validation date	Frequency point	Status (OK or Not)
3617	Head 750MHz	June.15,2020	750 MHz	OK
3617	Head 850MHz	June.15,2020	835 MHz	OK
3617	Head 900MHz	June.15,2020	900 MHz	OK
3617	Head 1750MHz	June.15,2020	1750 MHz	OK
3617	Head 1810MHz	June.15,2020	1810 MHz	OK
3617	Head 1900MHz	June.16,2020	1900 MHz	OK
3617	Head 2000MHz	June.16,2020	2000 MHz	OK
3617	Head 2100MHz	June.16,2020	2100 MHz	OK
3617	Head 2300MHz	June.16,2020	2300 MHz	OK
3617	Head 2450MHz	June.16,2020	2450 MHz	OK
3617	Head 2600MHz	June.17,2020	2600 MHz	OK
3617	Head 3500MHz	June.17,2020	3500 MHz	OK
3617	Head 3700MHz	June.17,2020	3700 MHz	OK
3617	Head 5200MHz	June.17,2020	5250 MHz	OK
3617	Head 5500MHz	June.17,2020	5600 MHz	OK
3617	Head 5800MHz	June.17,2020	5800 MHz	OK
3617	Body 750MHz	June.17,2020	750 MHz	OK
3617	Body 850MHz	June.18,2020	835 MHz	OK
3617	Body 900MHz	June.18,2020	900 MHz	OK
3617	Body 1750MHz	June.18,2020	1750 MHz	OK
3617	Body 1810MHz	June.18,2020	1810 MHz	OK
3617	Body 1900MHz	June.18,2020	1900 MHz	OK
3617	Body 2000MHz	June.19,2020	2000 MHz	OK
3617	Body 2100MHz	June.19,2020	2100 MHz	OK
3617	Body 2300MHz	June.19,2020	2300 MHz	OK
3617	Body 2450MHz	June.19,2020	2450 MHz	OK
3617	Body 2600MHz	June.19,2020	2600 MHz	OK
3617	Body 3500MHz	June.20,2020	3500 MHz	OK
3617	Body 3700MHz	June.20,2020	3700 MHz	OK
3617	Body 5200MHz	June.20,2020	5250 MHz	OK
3617	Body 5500MHz	June.20,2020	5600 MHz	OK
3617	Body 5800MHz	June.20,2020	5800 MHz	OK