

1900 Right Cheek Middle

Date: 2018-5-28

Electronics: DAE4 Sn1525 Medium: Head 1900 MHz

Medium parameters used: f = 1880 MHz; $\sigma = 1.446 \text{ mho/m}$; $\epsilon r = 40.71$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1880 MHz Duty Cycle: 1:2

Probe: EX3DV4–SN7464 ConvF(8.39, 8.39, 8.39)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 0.146 W/kg

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

Reference Value = 3.990 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.165 W/kg

SAR(1 g) = 0.109 W/kg; SAR(10 g) = 0.068 W/kgMaximum value of SAR (measured) = 0.124 W/kg

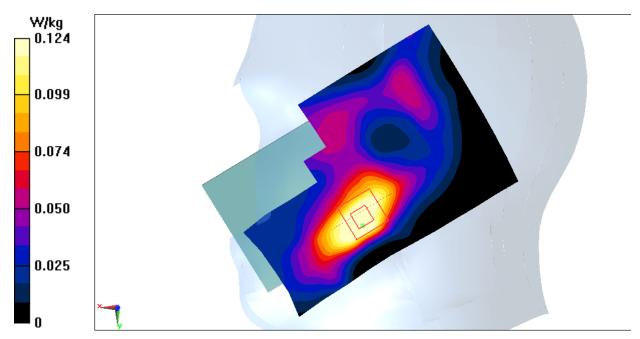


Fig I.3 1900 MHz



1900 Body Rear High

Date: 2018-5-28

Electronics: DAE4 Sn1525 Medium: Body 1900 MHz

Medium parameters used (interpolated): f = 1909.8 MHz; $\sigma = 1.594$ mho/m; $\epsilon r = 52.88$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:2

Probe: EX3DV4–SN7464 ConvF(8.32, 8.32, 8.32)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.848 W/kg

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

Reference Value = 8.248 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.784 W/kg; SAR(10 g) = 0.412 W/kg

Maximum value of SAR (measured) = 1.01 W/kg

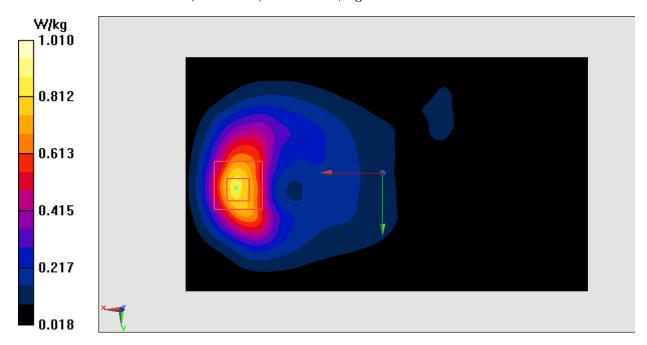


Fig I.4 1900 MHz



WCDMA 850 Right Cheek Middle

Date: 2018-5-27

Electronics: DAE4 Sn1525 Medium: Head 850 MHz

Medium parameters used (interpolated): f = 836.4 MHz; $\sigma = 0.889$ mho/m; $\epsilon r = 42.065$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.28, 10.28, 10.28)

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

Maximum value of SAR (interpolated) = 0.285 W/kg

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

Reference Value = 3.599 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.328 W/kg

SAR(1 g) = 0.259 W/kg; SAR(10 g) = 0.198 W/kg

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

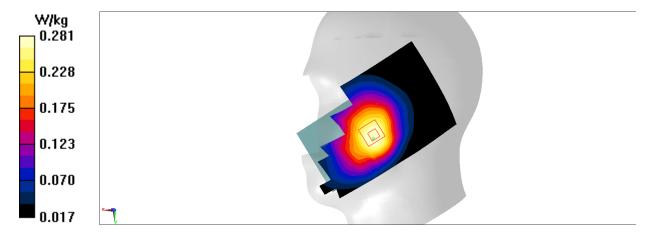


Fig I.5 WCDMA 850



WCDMA 850 Body Rear Low

Date: 2018-5-27

Electronics: DAE4 Sn1525 Medium: Body 850 MHz

Medium parameters used (interpolated): f = 826.4 MHz; $\sigma = 0.971$ mho/m; $\epsilon r = 55.956$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 826.4 MHz; Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(10.21, 10.21, 10.21)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.413 W/kg

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

Reference Value = 18.25 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.589 W/kg

SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.204 W/kgMaximum value of SAR (measured) = 0.422 W/kg

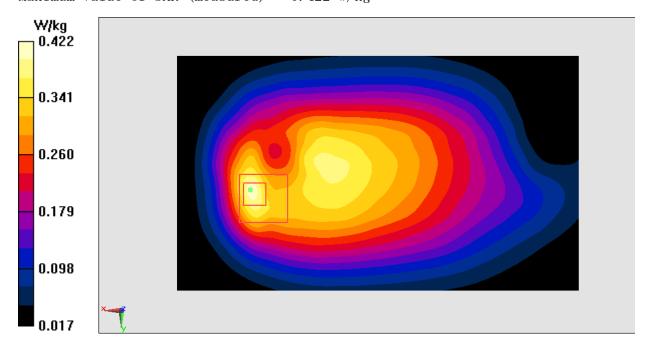


Fig I.6 WCDMA 850



WCDMA 1700 Left Cheek Low

Date: 2018-5-29

Electronics: DAE4 Sn1525 Medium: Head 1750 MHz

Medium parameters used (interpolated): f = 1712.4 MHz; $\sigma = 1.307$ mho/m; $\epsilon r = 40.677$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1750 Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(8.70, 8.70, 8.70)

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

Maximum value of SAR (interpolated) = 0.282 W/kg

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

Reference Value = 6.067 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.342 W/kg

SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.152 W/kg Maximum value of SAR (measured) = 0.273 W/kg

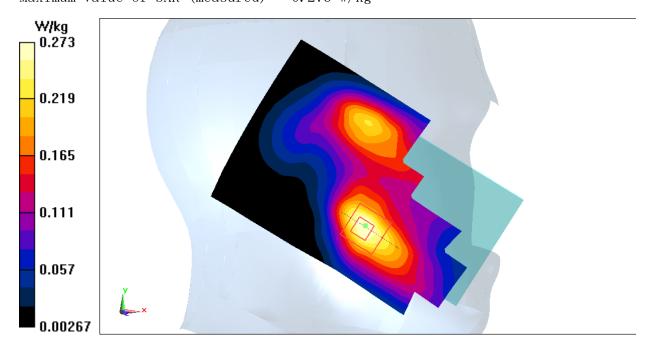


Fig I.7 WCDMA1700



WCDMA 1700 Body Rear Low

Date: 2018-5-29

Electronics: DAE4 Sn1525 Medium: Body 1750 MHz

Medium parameters used (interpolated): f = 1712.4 MHz; $\sigma = 1.503$ mho/m; $\epsilon r = 53.618$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(8.60, 8.60, 8.60)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.25 W/kg

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

Reference Value = 10.40 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.86 W/kg

SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.572 W/kgMaximum value of SAR (measured) = 1.29 W/kg

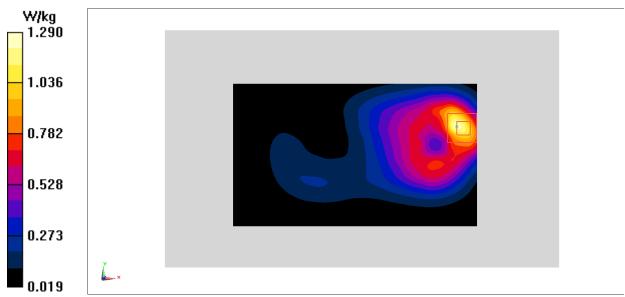


Fig I.8 WCDMA1700



WCDMA 1900 Right Cheek Middle

Date: 2018-5-28

Electronics: DAE4 Sn1525 Medium: Head 1900 MHz

Medium parameters used: f = 1880 MHz; $\sigma = 1.446 \text{ mho/m}$; $\epsilon r = 40.71$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4–SN7464 ConvF(8.39, 8.39, 8.39)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 0.193 W/kg

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

Reference Value = 5.267 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.240 W/kg

SAR(1 g) = 0.160 W/kg; SAR(10 g) = 0.101 W/kgMaximum value of SAR (measured) = 0.188 W/kg

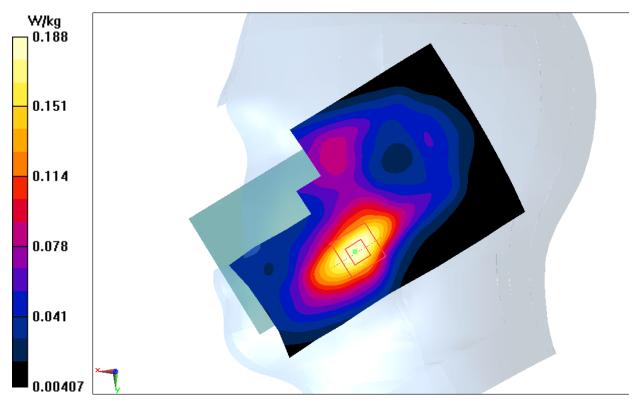


Fig I.9 WCDMA1900



WCDMA 1900 Body Rear High

Date: 2018-5-28

Electronics: DAE4 Sn1525 Medium: Body 1900 MHz

Medium parameters used (interpolated): f = 1907.6 MHz; $\sigma = 1.592$ mho/m; $\epsilon r = 53.15$; $\rho =$

 1000 kg/m^3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: EX3DV4–SN7464 ConvF(8.32, 8.32, 8.32)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.892 W/kg

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

Reference Value = 7.803 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.790 W/kg; SAR(10 g) = 0.418 W/kg Maximum value of SAR (measured) = 0.963 W/kg

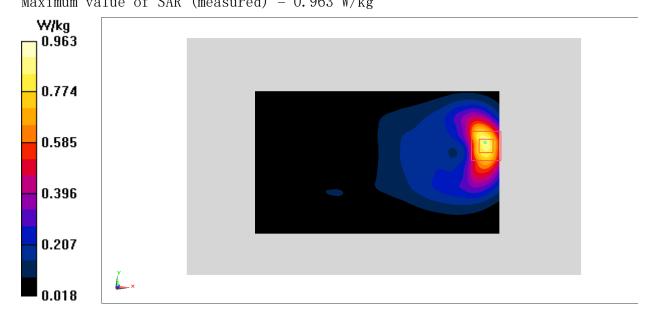


Fig I.10 WCDMA1900



LTE Band2 Right Cheek High with QPSK_20M_1RB_Middle

Date: 2018-5-28

Electronics: DAE4 Sn1525 Medium: Head 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.432 \text{. mho/m}$; $\epsilon r = 40.81$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band2 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(8.39, 8.39, 8.39)

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

Maximum value of SAR (interpolated) = 0.121 W/kg

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

Reference Value = 3.957 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.061 W/kg Maximum value of SAR (measured) = 0.117 W/kg

0.094 0.070 0.047 0.024 0.0004444

Fig I.11 LTE Band2



LTE Band2 Body Rear High with QPSK_20M_1RB_Middle

Date: 2018-5-28

Electronics: DAE4 Sn1525 Medium: Body 1900 MHz

Medium parameters used: f = 1900 MHz; $\sigma = 1.548 \text{ mho/m}$; $\epsilon r = 52.94$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band2 Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4–SN7464 ConvF(8.32, 8.32, 8.32)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 0.962 W/kg

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

Reference Value = 7.198 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.694 W/kg; SAR(10 g) = 0.370 W/kg

Maximum value of SAR (measured) = 0.965 W/kg

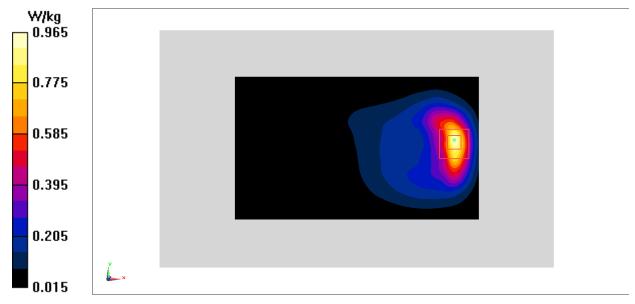


Fig I.12 LTE Band2



LTE Band7 Left Cheek Middle with QPSK_20M_1RB_High

Date: 2018-5-30

Electronics: DAE4 Sn1525 Medium: Head 2600 MHz

Medium parameters used: f = 2535 MHz; $\sigma = 1.925 \text{ mho/m}$; $\epsilon r = 38.2$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band7Frequency: 2535 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(7.76, 7.76, 7.76)

Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 0.496 W/kg

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

Reference Value = 2.887 V/m; Power Drift = 0.08dB

Peak SAR (extrapolated) = 0.648 W/kg

SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.209 W/kg

Maximum value of SAR (measured) = 0.474 W/kg

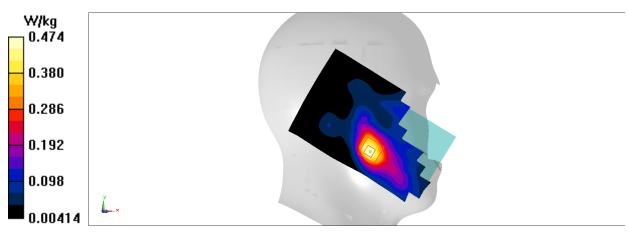


Fig I.13 LTE Band7



LTE Band7 Body Rear Middle with QPSK_20M_1RB_High

Date: 2018-5-30

Electronics: DAE4 Sn1525 Medium: Body 2600 MHz

Medium parameters used: f = 2535 MHz; $\sigma = 2.212$ mho/m; $\epsilon r = 51.54$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band7 Frequency: 2535 MHz Duty Cycle: 1:1

Probe: EX3DV4–SN7464 ConvF(7.84, 7.84, 7.84)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 1.06 W/kg

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

Reference Value = 8.503 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.838 W/kg; SAR(10 g) = 0.460 W/kg

Maximum value of SAR (measured) = 1.00 W/kg

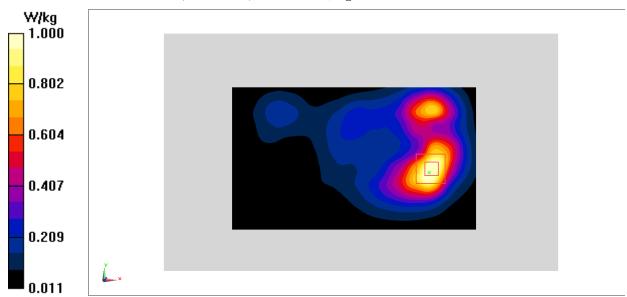


Fig I.14 LTE Band7



LTE Band 41 Left Cheek with QPSK_20M_1RB_Low

Date: 2018-5-30

Electronics: DAE4 Sn1525 Medium: Head 2600 MHz

Medium parameters used: f = 2680 MHz; $\sigma = 2.008 \text{ mho/m}$; $\epsilon r = 38.98$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band41 Frequency: 2680 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 - SN7464 ConvF(7.76, 7.76, 7.76)

Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 0.186 W/kg

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

Reference Value = 1.954 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.142 W/kg; SAR(10 g) = 0.075 W/kgMaximum value of SAR (measured) = 0.178 W/kg

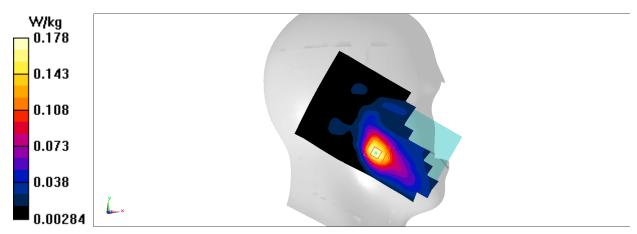


Fig I.15 LTE Band 41



LTE Band 41 Body Bottom with QPSK_20M_1RB_Low

Date: 2018-5-30

Electronics: DAE4 Sn1525 Medium: Body 2600 MHz

Medium parameters use: f = 2680 MHz; $\sigma = 2.306 \text{ mho/m}$; $\epsilon r = 51.329$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band41 Frequency: 2680 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 - SN7464 ConvF(7.84, 7.84, 7.84)

Area Scan (151x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 0.401 W/kg

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

Reference Value = 10.49 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.578 W/kg

SAR(1 g) = 0.310 W/kg; SAR(10 g) = 0.155 W/kgMaximum value of SAR (measured) = 0.398 W/kg

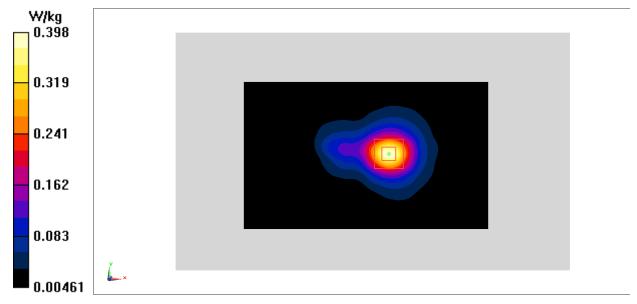


Fig I.16 LTE Band 41



Wifi 802.11b Left Tilt Channel 1

Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Head 2450 MHz

Medium parameters used (interpolated): f = 2412 MHz; $\sigma = 1.794$ mho/m; $\varepsilon_r = 38.85$; $\rho = 1000$

 kg/m^3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7464 ConvF(7.89, 7.89, 7.89)

Area Scan (91x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.12 W/kg

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

Reference Value = 18.12 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.73 W/kg

SAR(1 g) = 0.773 W/kg; SAR(10 g) = 0.312 W/kg

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

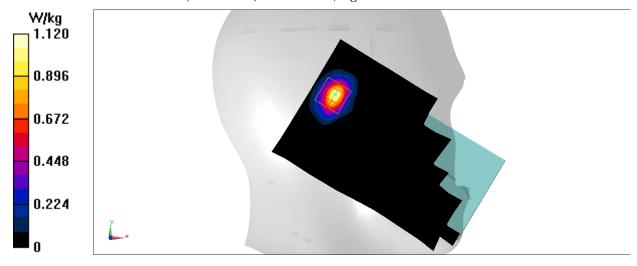


Fig I.17 2450 MHz



Wifi 802.11b Body Top Edge Channel 1

Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Body 2450 MHz

Medium parameters used (interpolated): f = 2412 MHz; $\sigma = 1.918$ mho/m; $\varepsilon_r = 52.29$; $\rho = 1000$

 kg/m^3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.09, 8.09, 8.09)

Area Scan (151x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.599 W/kg

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

Reference Value = 14.47 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.802 W/kg

SAR(1 g) = 0.428 W/kg; SAR(10 g) = 0.201 W/kg

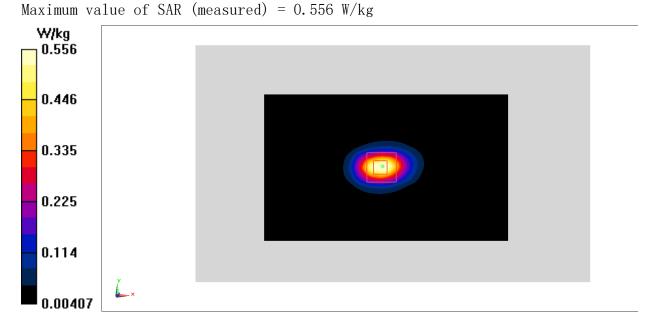


Fig I.18 2450 MHz



Wifi 802.11a Right Cheek Channel 56

Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Head 5 GHz

Medium parameters used: f = 5280 MHz; $\sigma = 4.729 \text{ mho/m}$; $\varepsilon_r = 36.9$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLan 5G Frequency: 5280 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(5.53, 5.53, 5.53)

Area Scan (101x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm Maximum value of SAR (interpolated) = 0.892 W/kg

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

Reference Value = 6.670 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.50 W/kg

SAR(1 g) = 0.595 W/kg; SAR(10 g) = 0.181 W/kgMaximum value of SAR (measured) = 1.44 W/kg

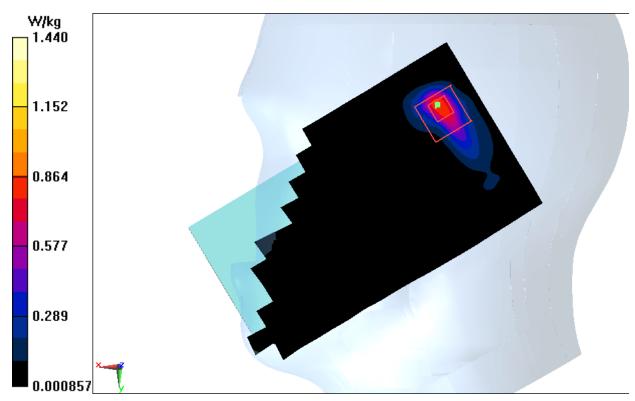


Fig I.19 5GHz



Wifi 802.11a Top Edge Channel 132

Date: 2018-5-31

Electronics: DAE4 Sn1525 Medium: Body 5 GHz

Medium parameters used: f = 5660 MHz; $\sigma = 5.779 \text{ mho/m}$; $\varepsilon_r = 46.89$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLan 5G Frequency: 5660 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(4.50, 4.50, 4.50)

Area Scan (181x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.211 W/kg

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

Reference Value = 4.420 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.546 W/kg

SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.060 W/kg

Maximum value of SAR (measured) = 0.326 W/kg

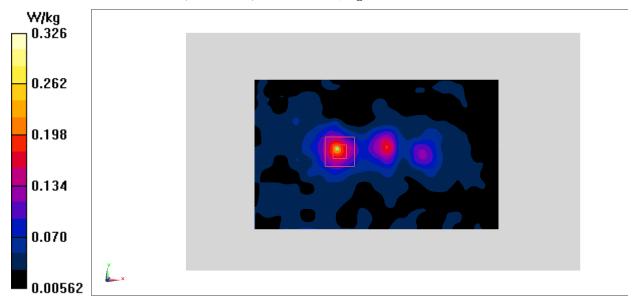


Fig I.20 5GHz



ANNEX J Accreditation Certificate

United States Department of Commerce National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 600118-0

Telecommunication Technology Labs, CAICT

Beijing China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Electromagnetic Compatibility & Telecommunications

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2017-08-22 through 2018-09-30

Effective Dates



For the National Voluntary Laboratory Accreditation Program