Date: 2016-02-21

Test Laboratory: SGS-SAR Lab

Hisende L675 GSM1900 661CH Left touch cheek

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, GSM Only Communication System (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042

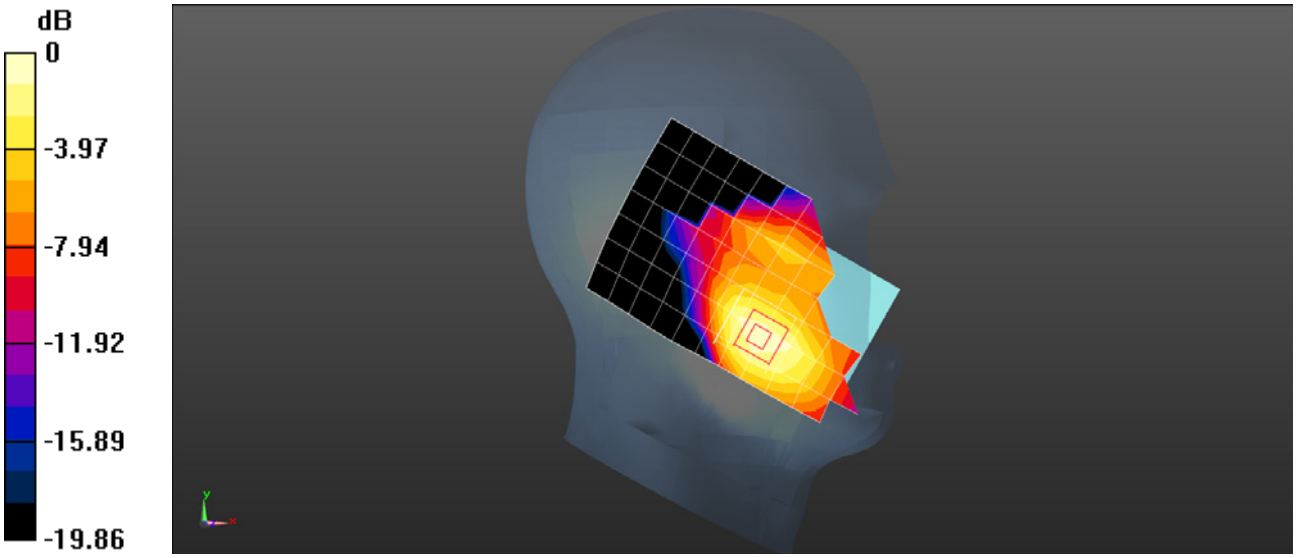
Medium: HSL1900;Medium parameters used: f = 1880 MHz; σ = 1.419 S/m; ε_r = 40.582; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.49, 8.49, 8.49); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.136 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.804 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.215 W/kg
SAR(1 g) = 0.135 W/kg; SAR(10 g) = 0.082 W/kg
Maximum value of SAR (measured) = 0.146 W/kg



0 dB = 0.146 W/kg = -8.36 dBW/kg

Date: 2016-02-21

Test Laboratory: SGS-SAR Lab

Hisende L675 GSM1900 661CH Back side 15mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, GSM Only Communication System (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042

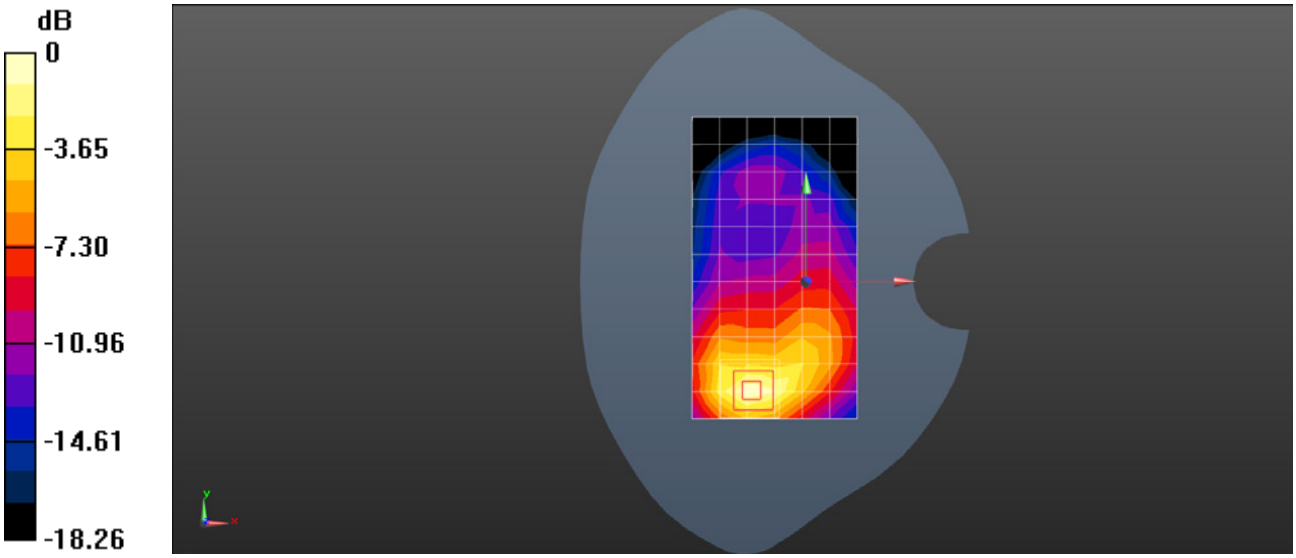
Medium: MSL1900;Medium parameters used: f = 1880 MHz; σ = 1.493 S/m; ε_r = 52.273; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.2, 8.2, 8.2); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.334 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.551 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.515 W/kg
SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.171 W/kg
Maximum value of SAR (measured) = 0.343 W/kg



0 dB = 0.343 W/kg = -4.65 dBW/kg

Date: 2016-02-21

Test Laboratory: SGS-SAR Lab

Hisende L675 GSM1900 GPRS 2TS 512CH Back side 10mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, GPRS/EGPRS Mode(2up) Communication System (0); Frequency: 1850.2 MHz;Duty Cycle: 1:4.14954

Medium: MSL1900;Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.467 S/m; ε_r = 52.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

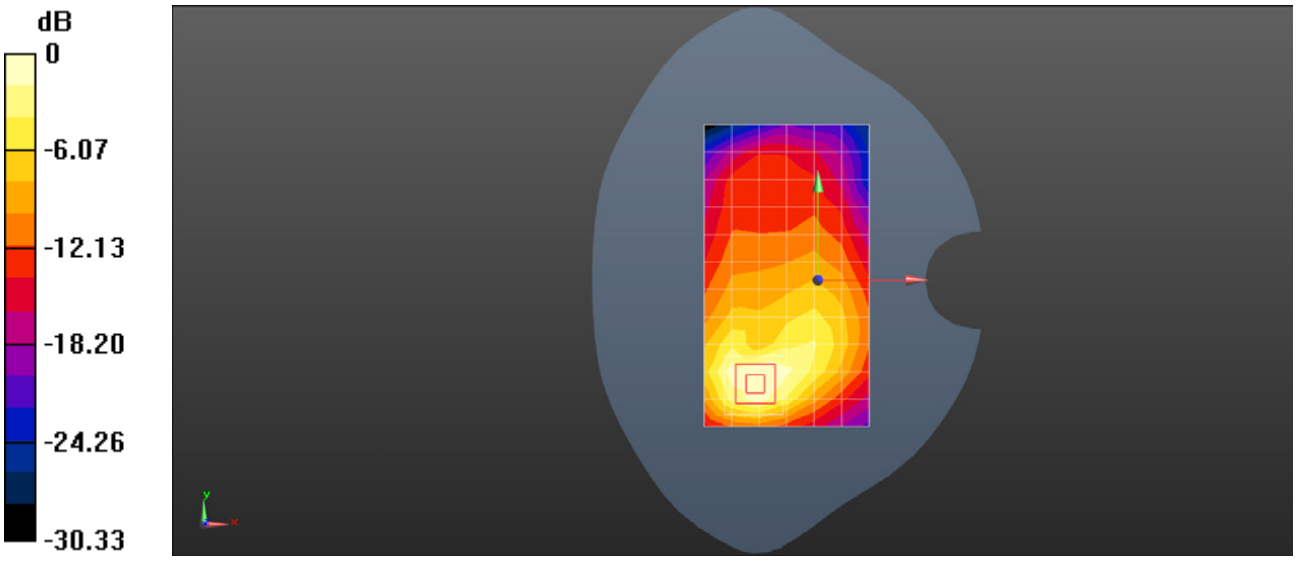
- Probe: EX3DV4 - SN3962; ConvF(8.2, 8.2, 8.2); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.04 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.678 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 2.29 W/kg
SAR(1 g) = 1.28 W/kg; SAR(10 g) = 0.656 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.47 W/kg



0 dB = 1.04 W/kg = 0.19 dBW/kg

Date: 2016-02-19

Test Laboratory: SGS-SAR Lab

Hisende L675 WCDMA850 4182CH Right touch cheek

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WCDMA (0); Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: HSL835;Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.906 S/m; ε_r = 42.92; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY 5 Configuration:

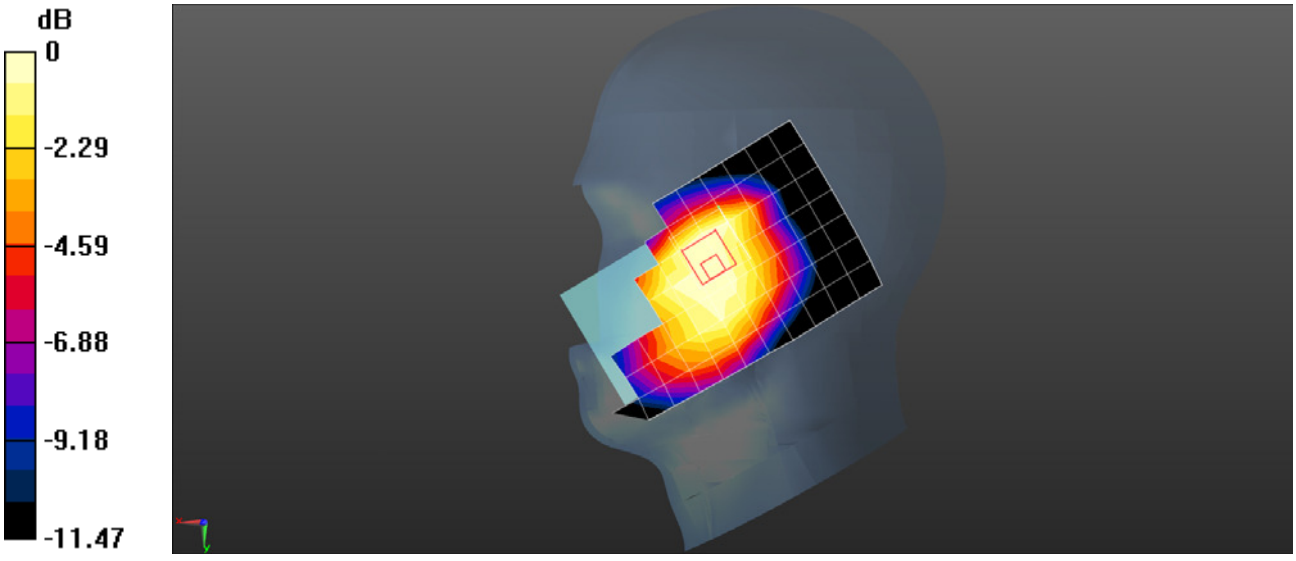
- Probe: EX3DV4 - SN3962; ConvF(10.17, 10.17, 10.17); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.176 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.071 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.197 W/kg
SAR(1 g) = 0.157 W/kg; SAR(10 g) = 0.111 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.169 W/kg



0 dB = 0.169 W/kg = -7.72 dBW/kg

Date: 2016-02-19

Test Laboratory: SGS-SAR Lab

Hisende L675 WCDMA850 RMC 4182CH Front side 15mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WCDMA (0); Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: MSL835;Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.984 S/m; ε_r = 55.294; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

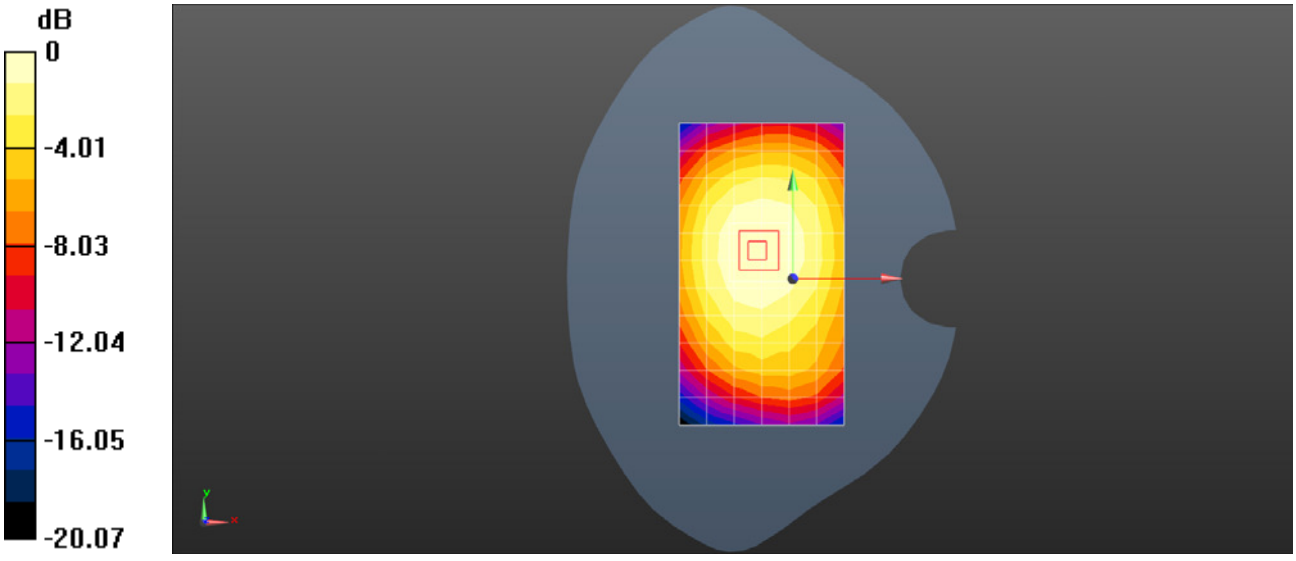
- Probe: EX3DV4 - SN3962; ConvF(10.16, 10.16, 10.16); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/body/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.247 W/kg

Configuration/body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.32 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.300 W/kg
SAR(1 g) = 0.239 W/kg; SAR(10 g) = 0.183 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.251 W/kg



0 dB = 0.247 W/kg = -6.08 dBW/kg

Date: 2016-02-19

Test Laboratory: SGS-SAR Lab

Hisende L675 WCDMA850 RMC 4182CH Front side 10mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WCDMA (0); Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: MSL835;Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.984 S/m; ε_r = 55.294; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

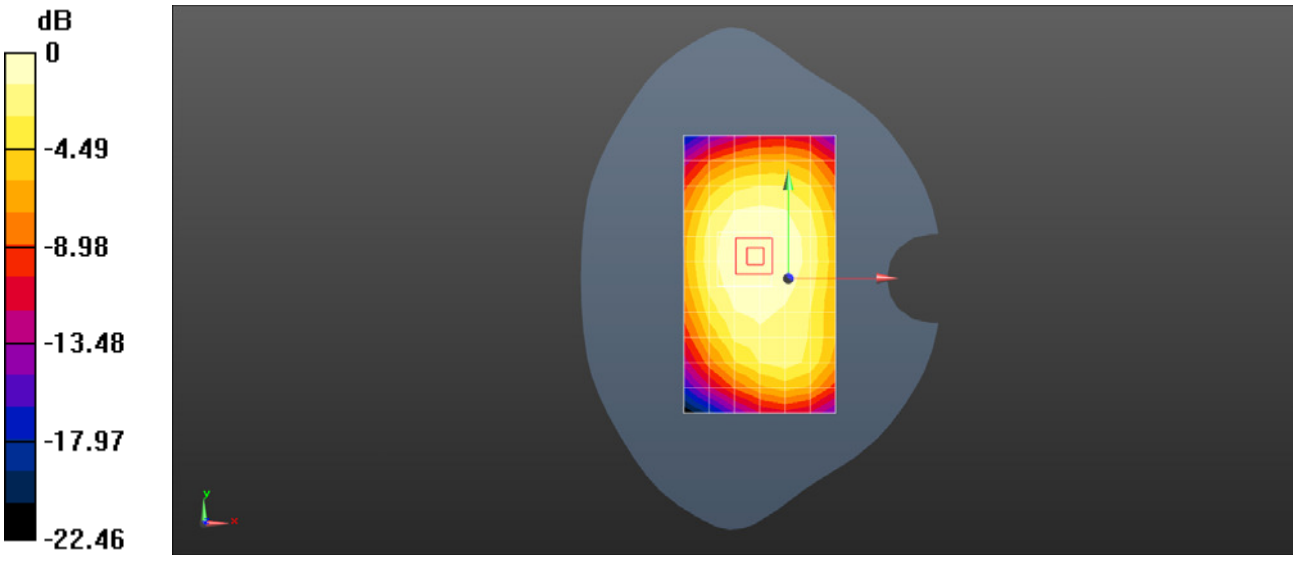
- Probe: EX3DV4 - SN3962; ConvF(10.16, 10.16, 10.16); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/body/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.275 W/kg

Configuration/body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.29 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.330 W/kg
SAR(1 g) = 0.265 W/kg; SAR(10 g) = 0.205 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.276 W/kg



0 dB = 0.275 W/kg = -5.61 dBW/kg

Date: 2016-02-22

Test Laboratory: SGS-SAR Lab

Hisende L675 WCDMA1700 1412CH Left touch cheek

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WCDMA (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1

Medium: HSL1800;Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.328 S/m; ε_r = 40.534; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY 5 Configuration:

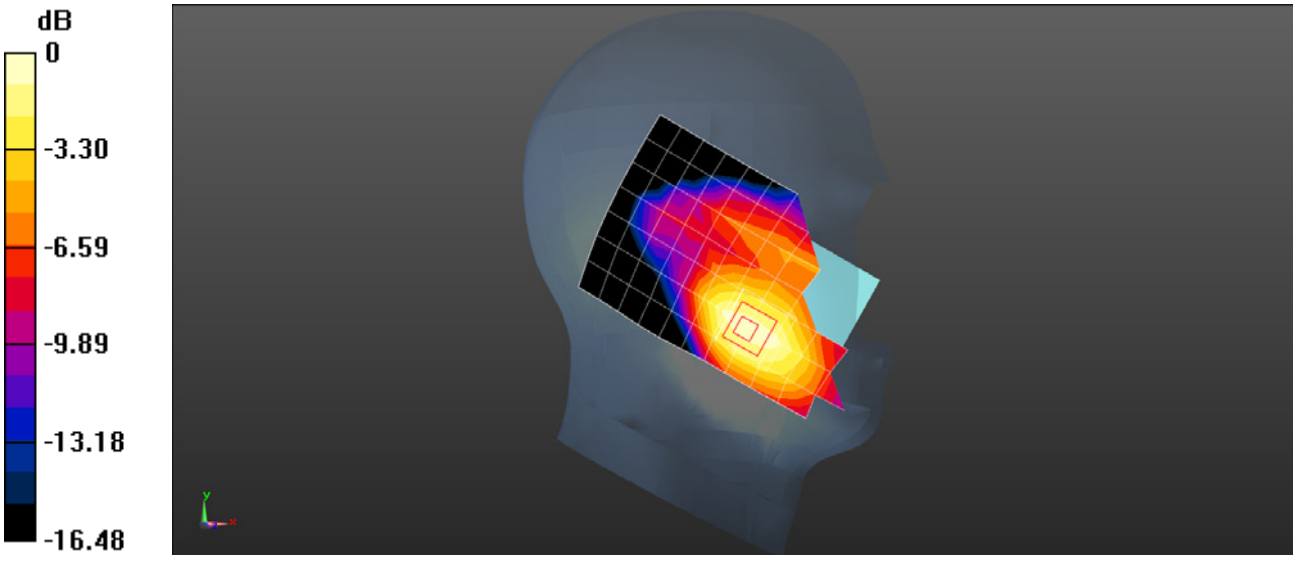
- Probe: EX3DV4 - SN3962; ConvF(8.77, 8.77, 8.77); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.213 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.696 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.311 W/kg
SAR(1 g) = 0.199 W/kg; SAR(10 g) = 0.124 W/kg

Info: Interpolated medium parameters used for SAR evaluation.



0 dB = 0.213 W/kg = -6.72 dBW/kg

Date: 2016-02-22

Test Laboratory: SGS-SAR Lab

Hisende L675 WCDMA1700 RMC 1412CH Back side 15mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WCDMA (0); Frequency: 1732.4 MHz;Duty Cycle: 1:1

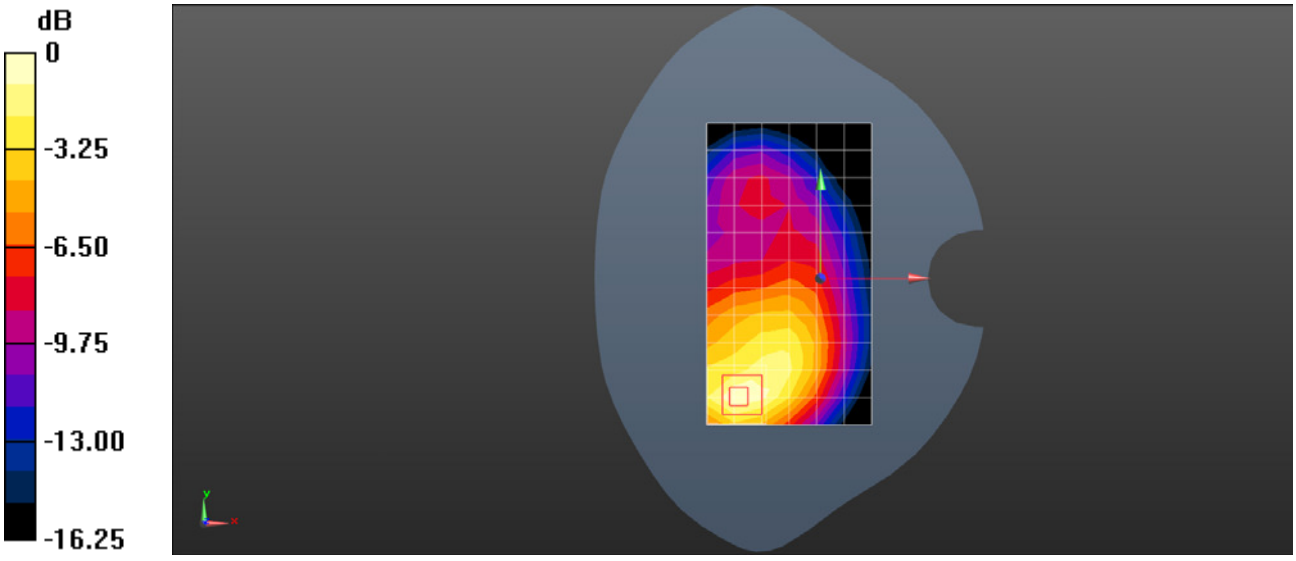
Medium: MSL1750;Medium parameters used: f = 1732.5 MHz; σ = 1.472 S/m; ε_r = 54.659; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.49, 8.49, 8.49); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.679 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.14 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 1.00 W/kg
SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.357 W/kg
Maximum value of SAR (measured) = 0.678 W/kg



0 dB = 0.678 W/kg = -1.69 dBW/kg

Date: 2016-02-22

Test Laboratory: SGS-SAR Lab

Hisende L675 WCDMA1700 RMC 1513CH Back side-repeat 10mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WCDMA (0); Frequency: 1752.6 MHz;Duty Cycle: 1:1

Medium: MSL1750;Medium parameters used (interpolated): f = 1752.6 MHz; σ = 1.49 S/m; ε_r = 54.558; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

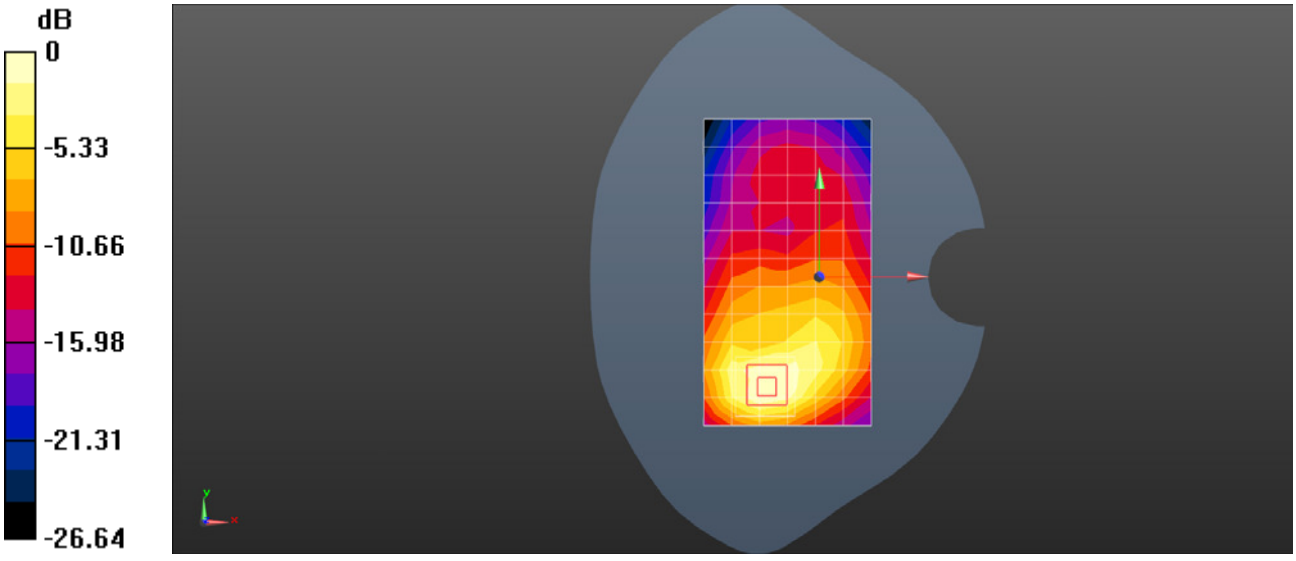
- Probe: EX3DV4 - SN3962; ConvF(8.49, 8.49, 8.49); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.13 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.061 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 2.46 W/kg
SAR(1 g) = 1.32 W/kg; SAR(10 g) = 0.675 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 1.50 W/kg



0 dB = 1.13 W/kg = 0.51 dBW/kg

Date: 2016-02-21

Test Laboratory: SGS-SAR Lab

Hisende L675 WCDMA1900 9400CH Left touch cheek

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1

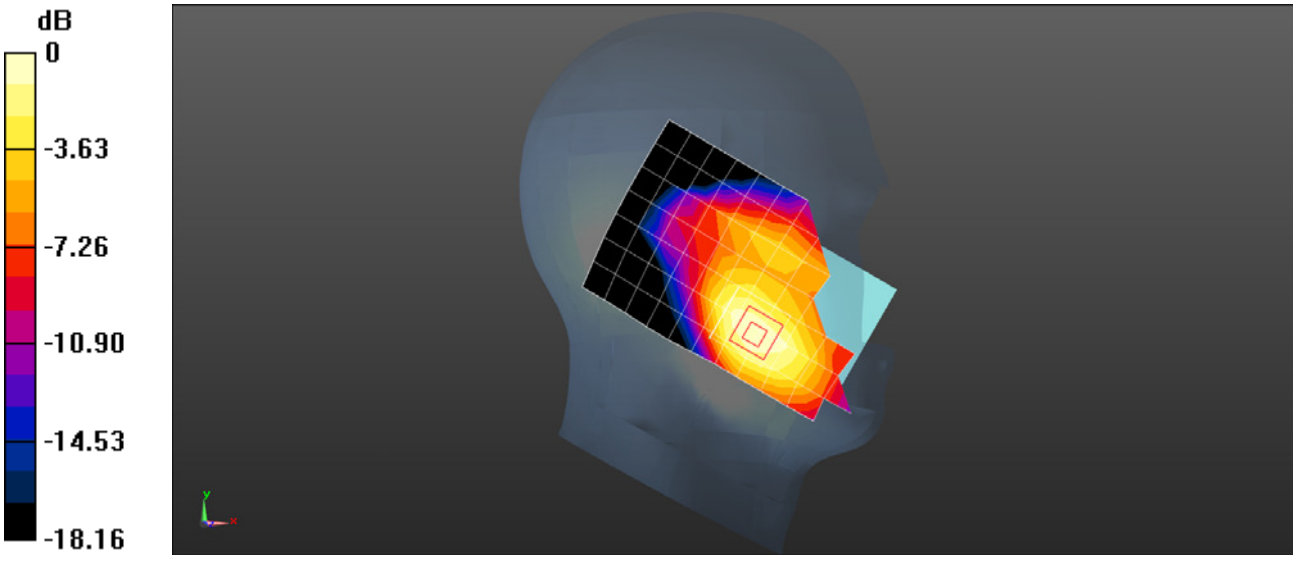
Medium: HSL1900;Medium parameters used: f = 1880 MHz; σ = 1.419 S/m; ε_r = 40.582; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.49, 8.49, 8.49); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.257 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.991 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.374 W/kg
SAR(1 g) = 0.243 W/kg; SAR(10 g) = 0.151 W/kg
Maximum value of SAR (measured) = 0.258 W/kg



0 dB = 0.258 W/kg = -5.88 dBW/kg

Date: 2016-02-21

Test Laboratory: SGS-SAR Lab

Hisende L675 WCDMA1900 RMC 9400CH Back side 15mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1

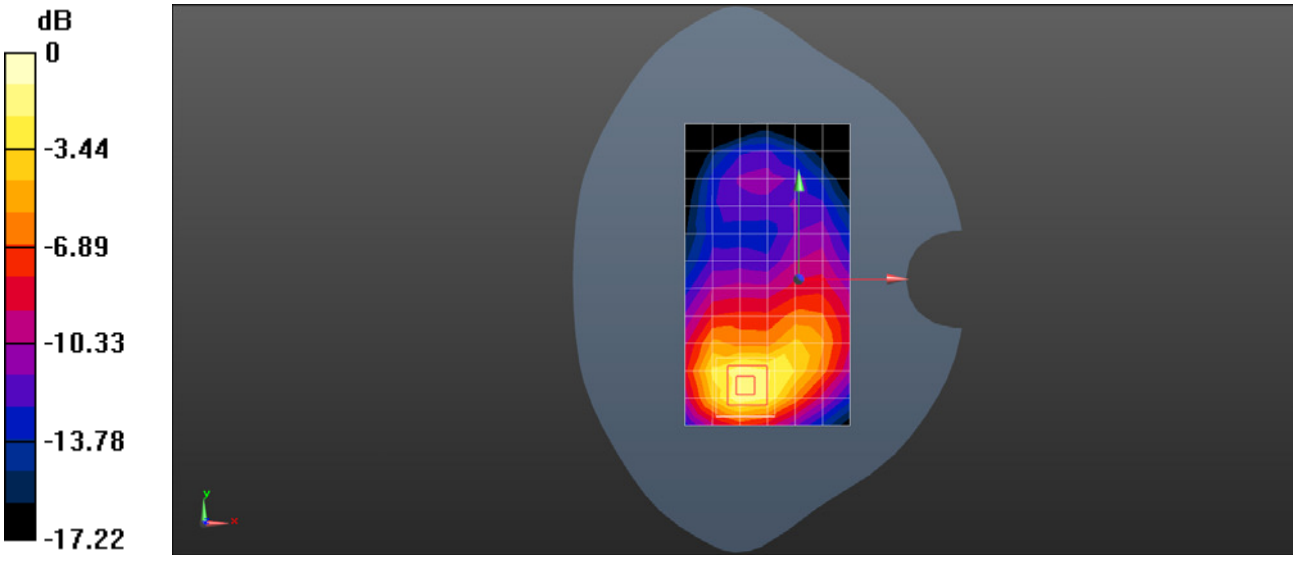
Medium: MSL1900;Medium parameters used: f = 1880 MHz; σ = 1.493 S/m; ε_r = 52.273; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.2, 8.2, 8.2); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.388 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.355 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.755 W/kg
SAR(1 g) = 0.452 W/kg; SAR(10 g) = 0.251 W/kg
Maximum value of SAR (measured) = 0.508 W/kg



0 dB = 0.508 W/kg = -2.94 dBW/kg

Date: 2016-02-21

Test Laboratory: SGS-SAR Lab

Hisende L675 WCDMA1900 RMC 9538CH Back side 10mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WCDMA (0); Frequency: 1907.6 MHz;Duty Cycle: 1:1

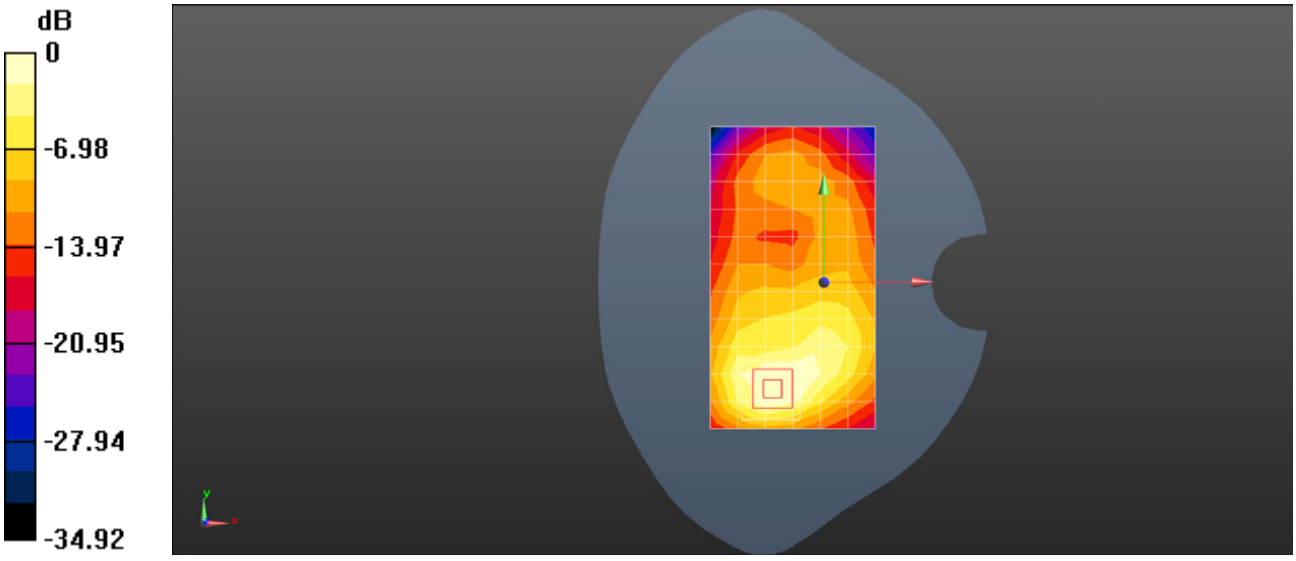
Medium: MSL1900;Medium parameters used: f = 1908 MHz; σ = 1.529 S/m; ε_r = 52.166; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.2, 8.2, 8.2); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.739 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.105 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.79 W/kg
SAR(1 g) = 0.994 W/kg; SAR(10 g) = 0.504 W/kg
Maximum value of SAR (measured) = 1.13 W/kg



0 dB = 0.739 W/kg = -1.31 dBW/kg

Date: 2016-02-21

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band 2 Bandwidth 20MHz QPSK 1RB 0Offset 18700CH Left touch cheek

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1860 MHz;Duty Cycle: 1:1

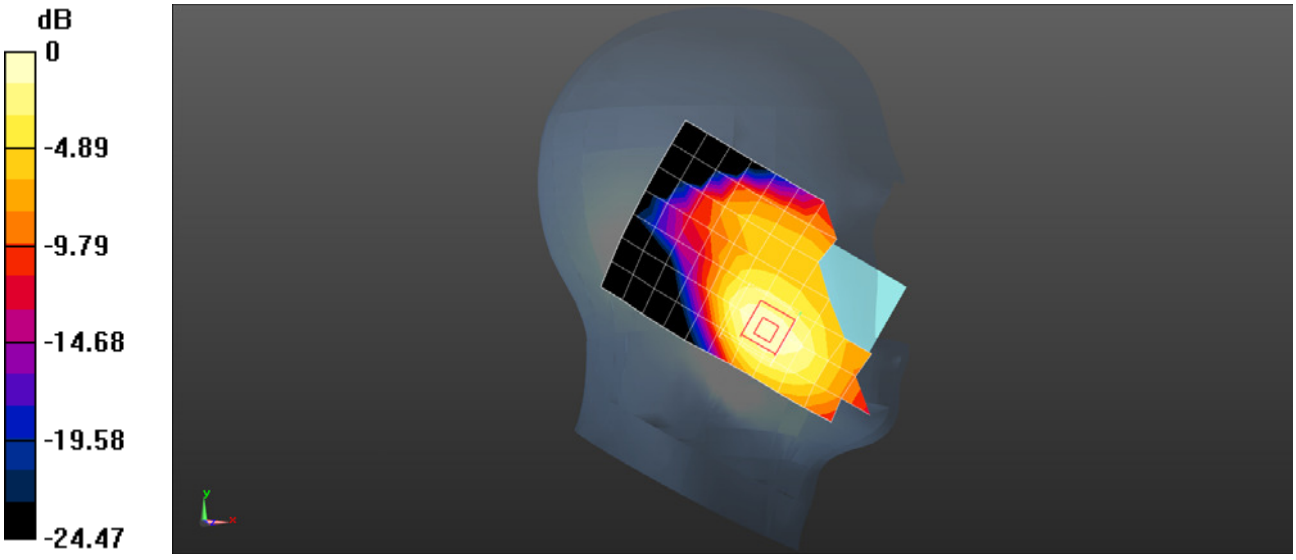
Medium: HSL1900;Medium parameters used: f = 1860 MHz; σ = 1.389 S/m; ε_r = 40.811; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.49, 8.49, 8.49); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.205 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.971 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.295 W/kg
SAR(1 g) = 0.193 W/kg; SAR(10 g) = 0.122 W/kg
Maximum value of SAR (measured) = 0.210 W/kg



0 dB = 0.210 W/kg = -6.78 dBW/kg

Date: 2016-02-21

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band 2 Bandwidth 20MHz QPSK 1RB 0Offset 18700CH Back side 15mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1860 MHz;Duty Cycle: 1:1

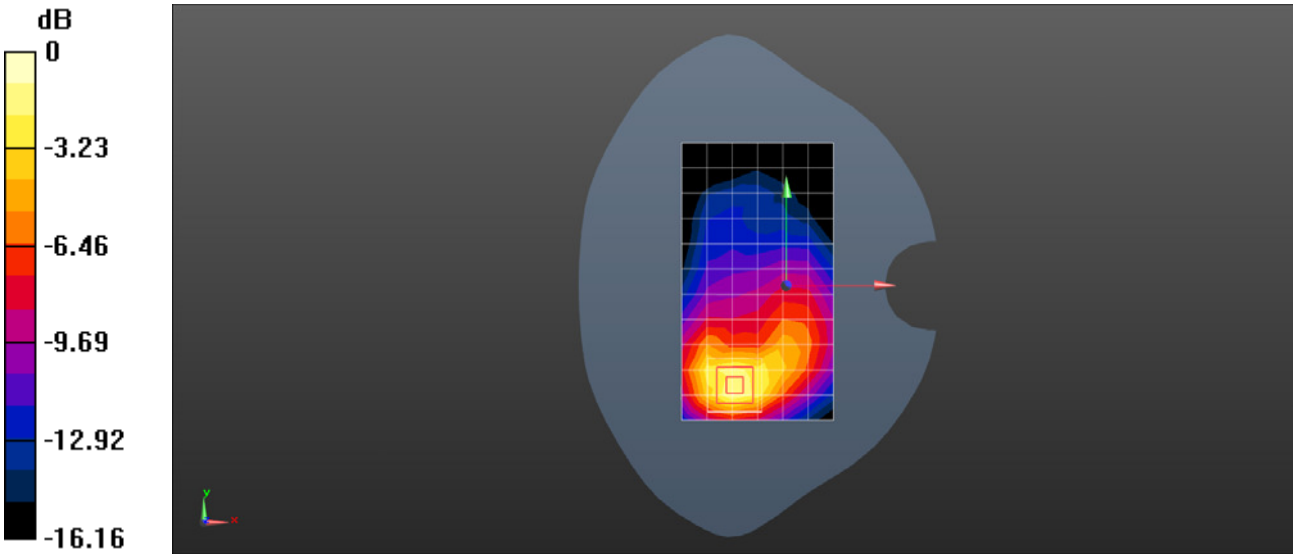
Medium: MSL1900;Medium parameters used: f = 1860 MHz; σ = 1.476 S/m; ε_r = 52.378; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.2, 8.2, 8.2); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.478 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.523 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.881 W/kg
SAR(1 g) = 0.530 W/kg; SAR(10 g) = 0.294 W/kg
Maximum value of SAR (measured) = 0.597 W/kg



0 dB = 0.597 W/kg = -2.24 dBW/kg

Date: 2016-02-21

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band 2 Bandwidth 20MHz QPSK 1RB 0Offset 19100CH Back side 10mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1900 MHz;Duty Cycle: 1:1

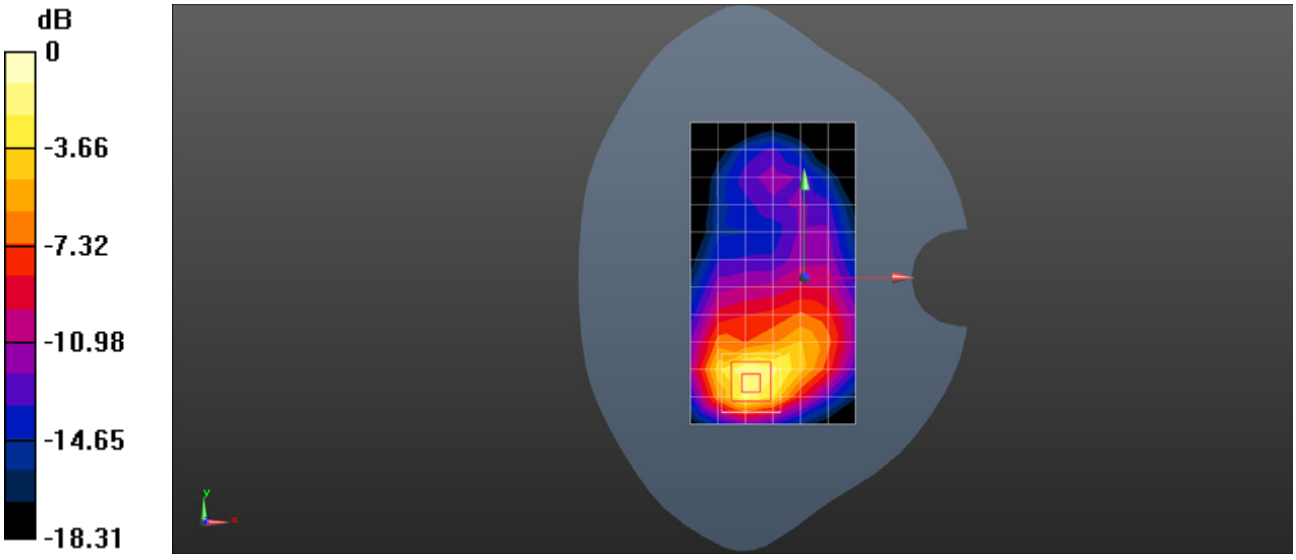
Medium: MSL1900;Medium parameters used: f = 1900 MHz; σ = 1.523 S/m; ε_r = 52.205; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.2, 8.2, 8.2); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.967 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.739 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 2.03 W/kg
SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.574 W/kg
Maximum value of SAR (measured) = 1.30 W/kg



0 dB = 1.30 W/kg = 1.14 dBW/kg

Date: 2016-02-22

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band 4 Bandwidth 20MHz QPSK 1RB 0Offset 20175CH Right touch cheek

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium: HSL1800;Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.327 S/m; ε_r = 40.554; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY 5 Configuration:

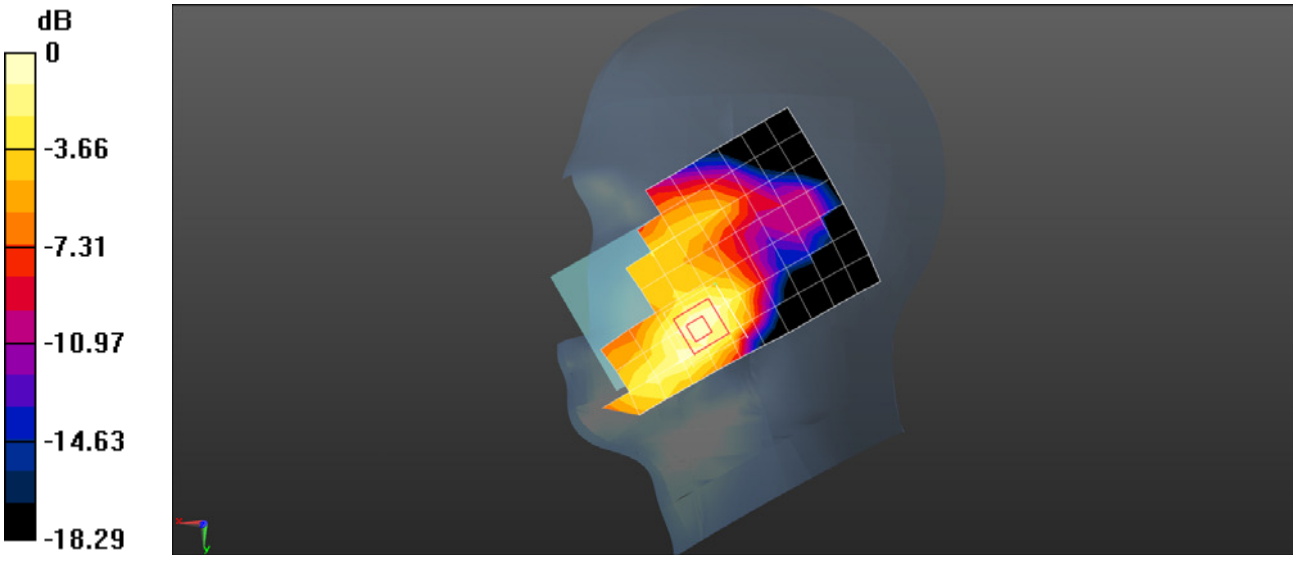
- Probe: EX3DV4 - SN3962; ConvF(8.77, 8.77, 8.77); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.175 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.587 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.265 W/kg
SAR(1 g) = 0.172 W/kg; SAR(10 g) = 0.105 W/kg

Info: Interpolated medium parameters used for SAR evaluation.
Maximum value of SAR (measured) = 0.188 W/kg



0 dB = 0.188 W/kg = -7.26 dBW/kg

Date: 2016-02-22

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band 4 Bandwidth 20MHz QPSK 1RB 0Offset 20175CH Back side 15mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1

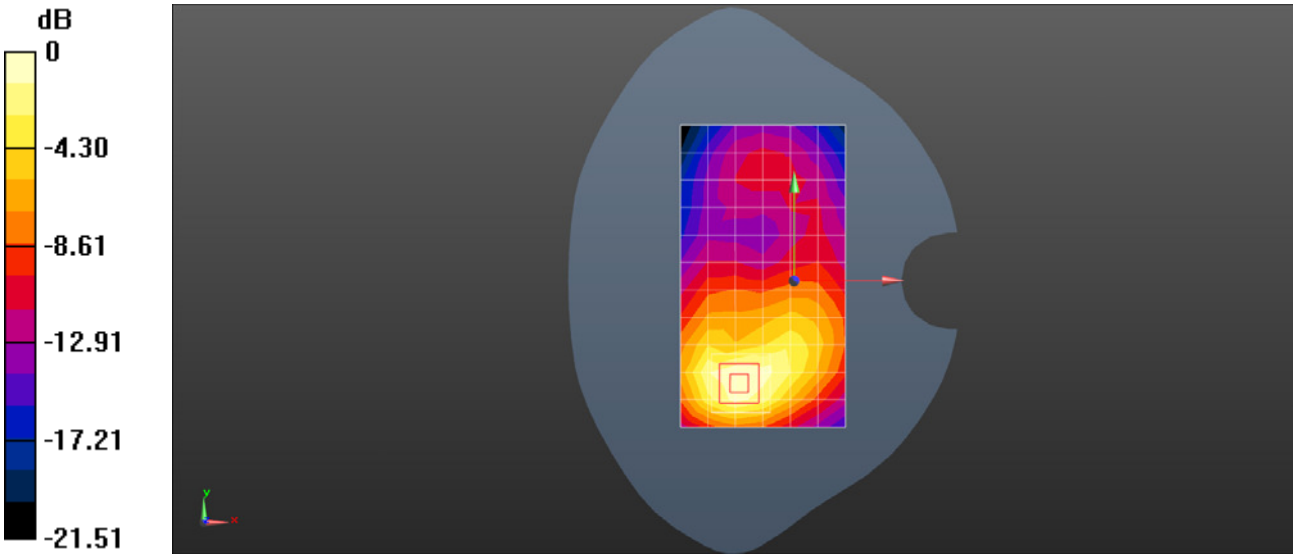
Medium: MSL1750;Medium parameters used: f = 1732.5 MHz; σ = 1.472 S/m; ε_r = 54.659; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.49, 8.49, 8.49); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.615 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.499 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.651 W/kg; SAR(10 g) = 0.357 W/kg
Maximum value of SAR (measured) = 0.728 W/kg



0 dB = 0.615 W/kg = -2.11 dBW/kg

Date: 2016-02-22

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band 4 Bandwidth 20MHz QPSK 1RB 0Offset 20300CH Back side-repeat 10mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1745 MHz;Duty Cycle: 1:1

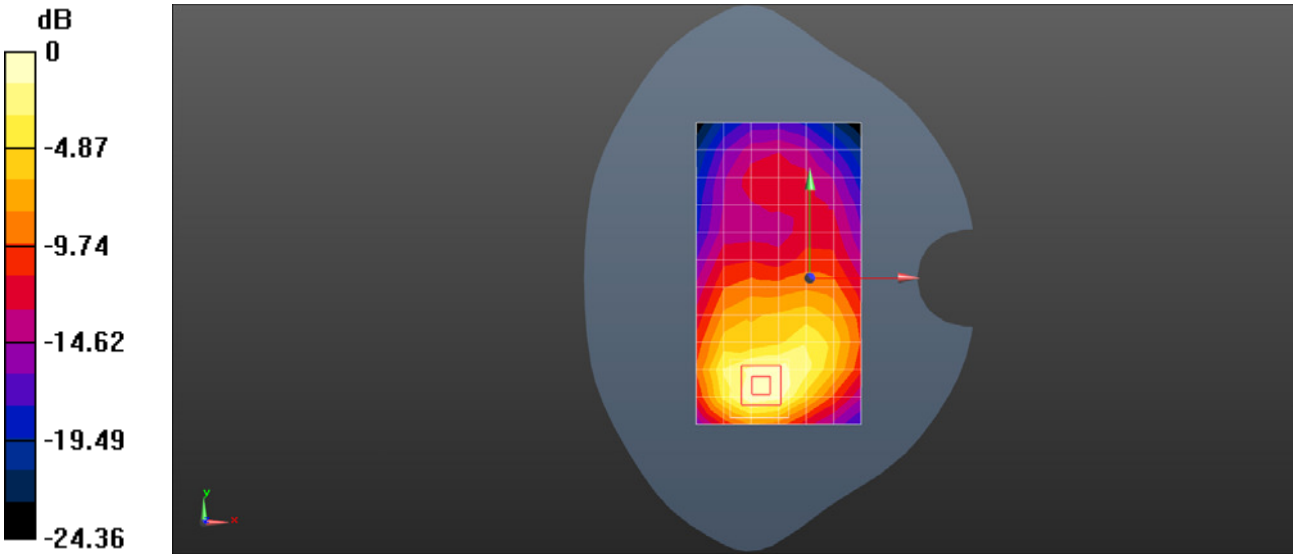
Medium: MSL1750;Medium parameters used: f = 1745 MHz; σ = 1.483 S/m; ε_r = 54.596; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.49, 8.49, 8.49); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.11 W/kg

Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.600 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 2.40 W/kg
SAR(1 g) = 1.29 W/kg; SAR(10 g) = 0.659 W/kg
Maximum value of SAR (measured) = 1.44 W/kg



0 dB = 1.11 W/kg = 0.44 dBW/kg

Date: 2016-02-19

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band V Bandwidth 10MHz QPSK 1RB 0Offset 20450CH Right touch cheek

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 10MHZ (0); Frequency: 829 MHz;Duty Cycle: 1:1

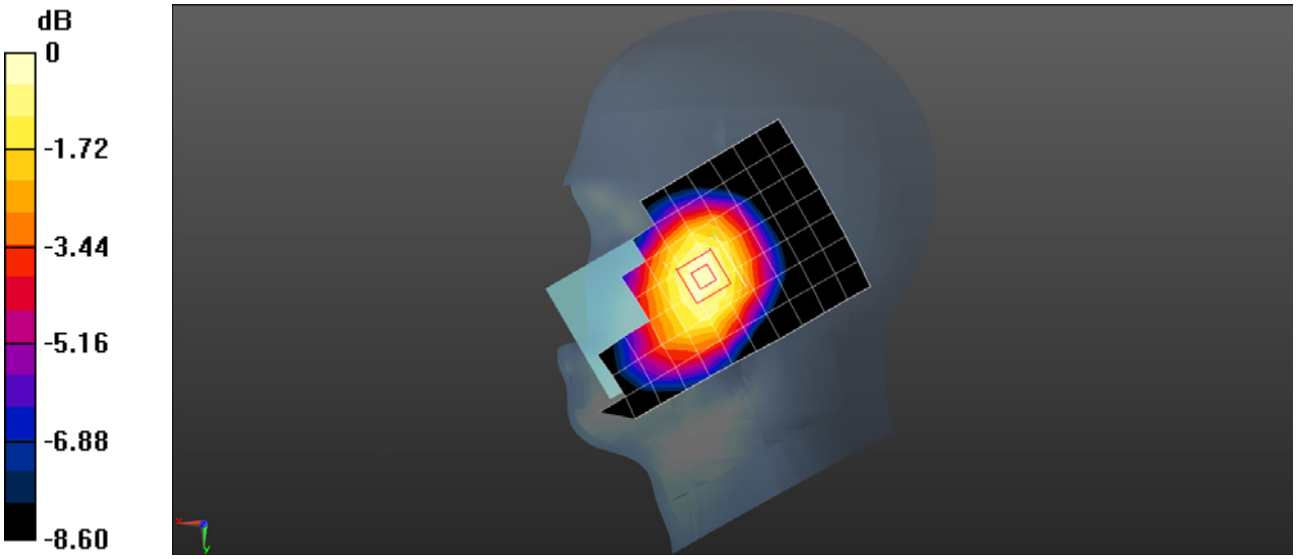
Medium: HSL835;Medium parameters used: f = 829 MHz; σ = 0.898 S/m; ε_r = 43.016; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(10.17, 10.17, 10.17); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.108 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.473 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.132 W/kg
SAR(1 g) = 0.109 W/kg; SAR(10 g) = 0.085 W/kg
Maximum value of SAR (measured) = 0.115 W/kg



0 dB = 0.115 W/kg = -9.39 dBW/kg

Date: 2016-02-19

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band5 Bandwidth 10MHz QPSK 1RB 0Offset 20450CH Front side 15mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 10MHZ (0); Frequency: 829 MHz;Duty Cycle: 1:1

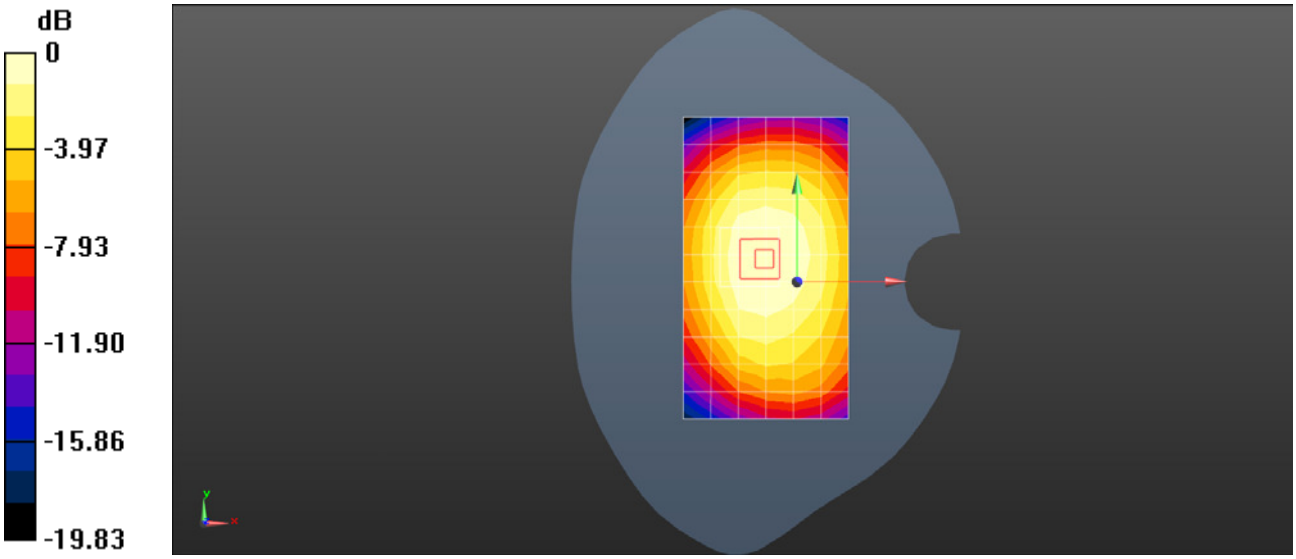
Medium: MSL835;Medium parameters used: f = 829 MHz; σ = 0.978 S/m; ε_r = 55.279; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(10.16, 10.16, 10.16); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.259 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.98 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.271 W/kg
SAR(1 g) = 0.216 W/kg; SAR(10 g) = 0.165 W/kg
Maximum value of SAR (measured) = 0.226 W/kg



0 dB = 0.259 W/kg = -5.87 dBW/kg

Date: 2016-02-19

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band5 Bandwidth 10MHz QPSK 1RB 0Offset 20450CH Back side 10mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 10MHZ (0); Frequency: 829 MHz;Duty Cycle: 1:1

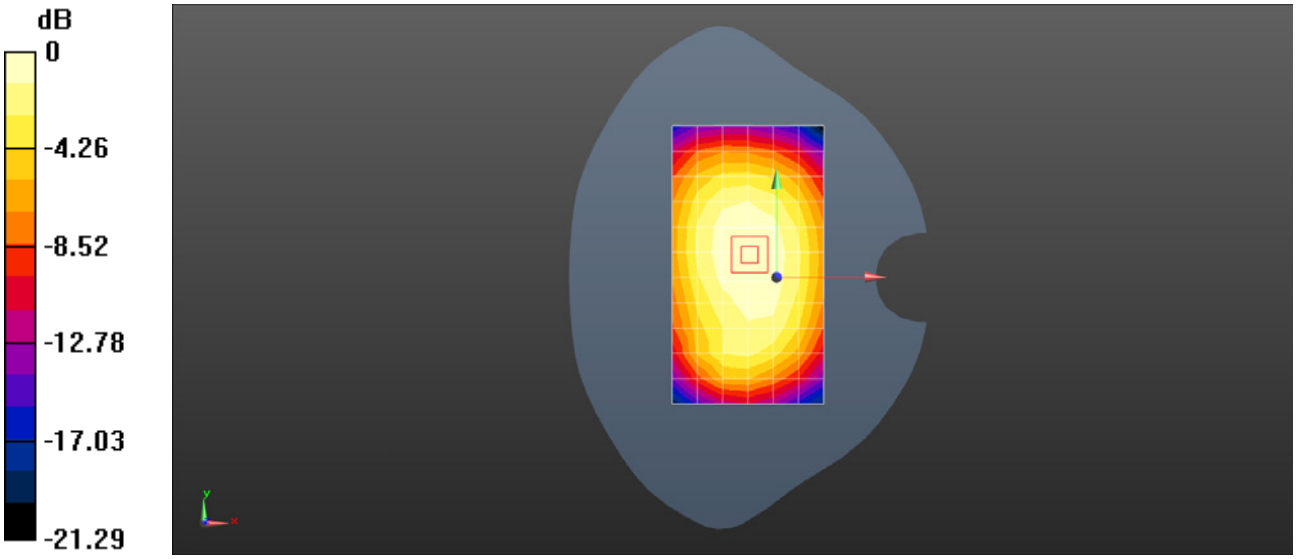
Medium: MSL835;Medium parameters used: f = 829 MHz; σ = 0.978 S/m; ε_r = 55.279; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(10.16, 10.16, 10.16); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.249 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.54 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.297 W/kg
SAR(1 g) = 0.238 W/kg; SAR(10 g) = 0.182 W/kg



0 dB = 0.249 W/kg = -6.04 dBW/kg

Date: 2016-02-17

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band 7 Bandwidth 20MHz QPSK 1RB 0Offset 20850CH Right touch cheek

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2510 MHz;Duty Cycle: 1:1

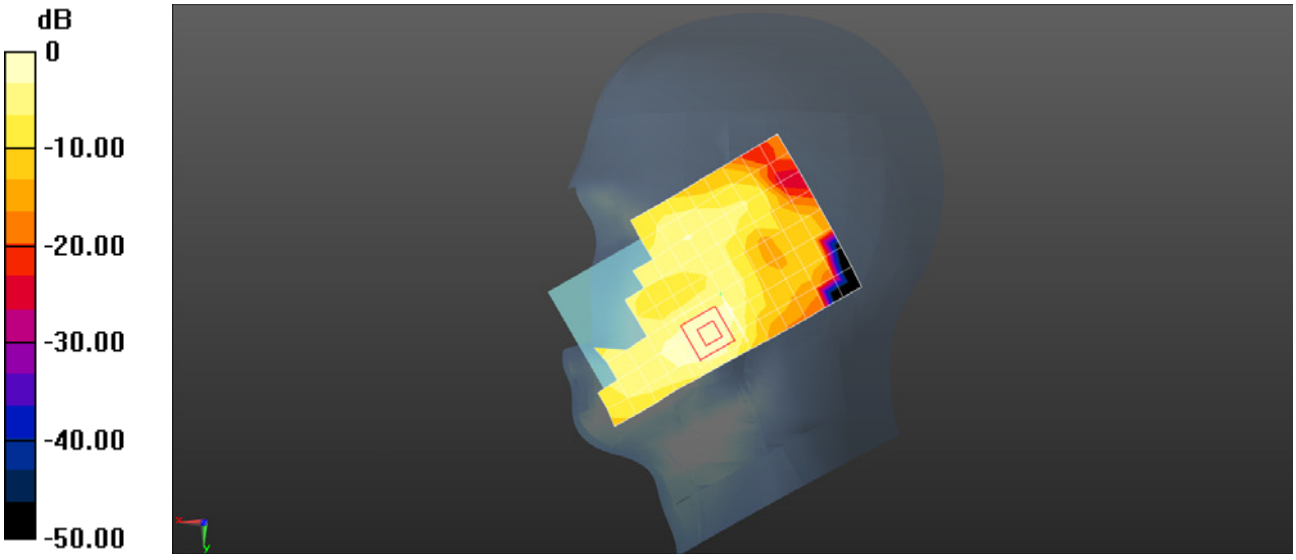
Medium: HSL2450;Medium parameters used: f = 2510 MHz; σ = 1.833 S/m; ε_r = 38.429; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.35, 7.35, 7.35); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.150 W/kg

Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.183 V/m; Power Drift = 0.07dB
Peak SAR (extrapolated) = 0.302 W/kg
SAR(1 g) = 0.154 W/kg; SAR(10 g) = 0.076 W/kg
Maximum value of SAR (measured) = 0.173 W/kg



0 dB = 0.173 W/kg = -7.62 dBW/kg

Date: 2016-02-17

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band7 Bandwidth 20MHz QPSK 1RB 0Offset 20850CH Back side 15mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2510 MHz;Duty Cycle: 1:1

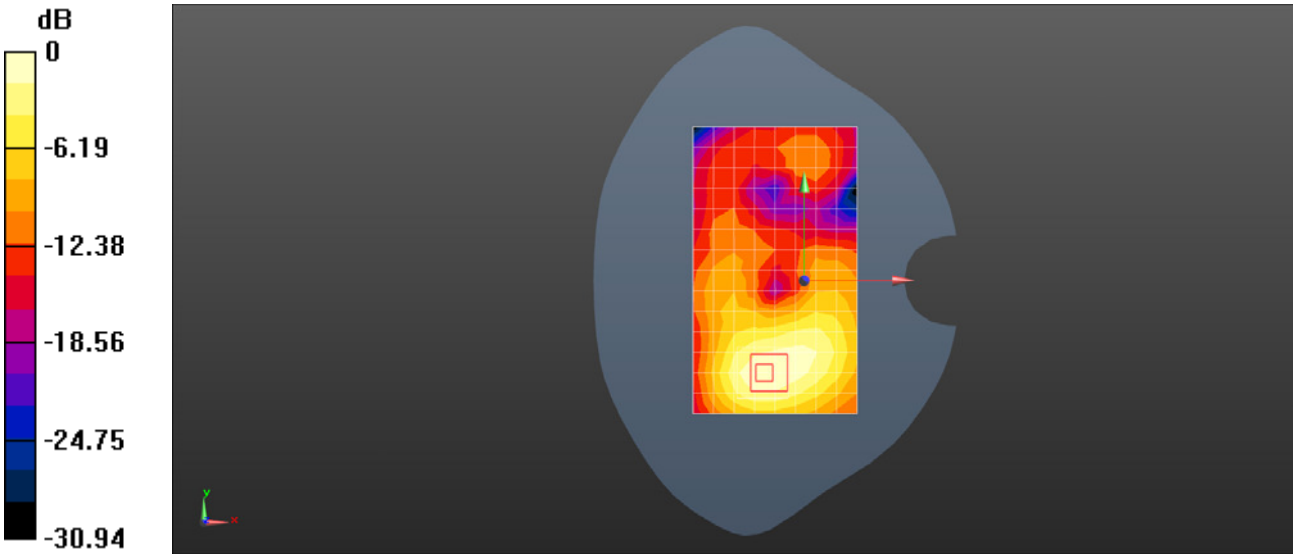
Medium: MSL2600;Medium parameters used: f = 2510 MHz; σ = 2.055 S/m; ε_r = 53.291; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.63, 7.63, 7.63); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.361 W/kg

Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.407 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.668 W/kg
SAR(1 g) = 0.343 W/kg; SAR(10 g) = 0.178 W/kg
Maximum value of SAR (measured) = 0.378 W/kg



0 dB = 0.361 W/kg = -4.42 dBW/kg

Date: 2016-02-17

Test Laboratory: SGS-SAR Lab

Hisende L675 LTE Band7 Bandwidth 20MHz QPSK 1RB 0Offset 20850CH Back side 10mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2510 MHz;Duty Cycle: 1:1

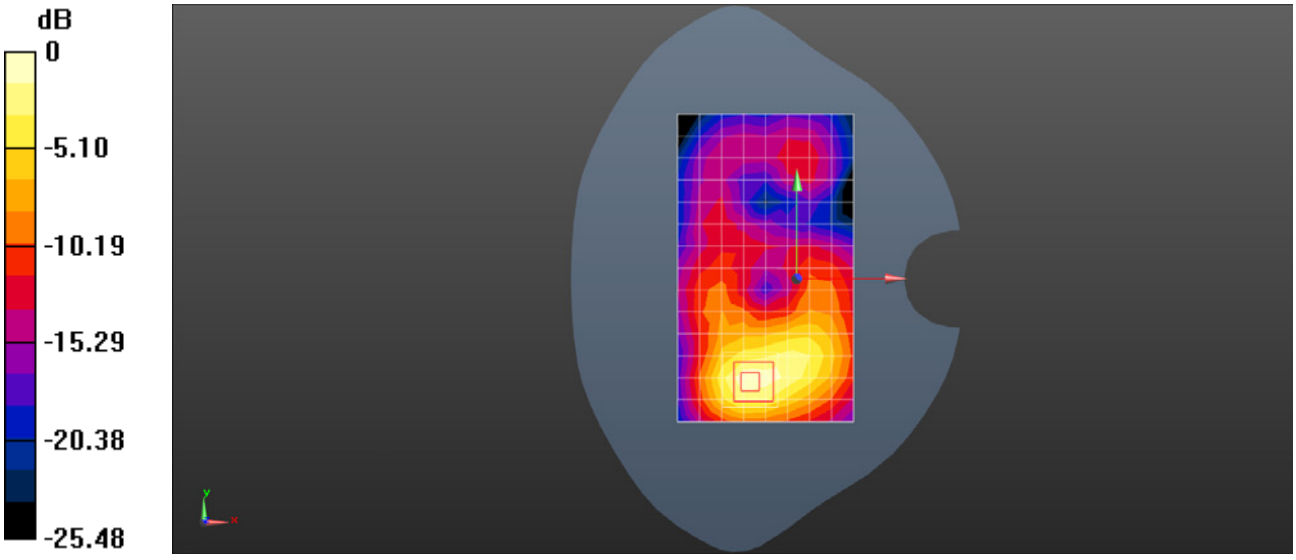
Medium: MSL2600;Medium parameters used: f = 2510 MHz; σ = 2.055 S/m; ε_r = 53.291; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.63, 7.63, 7.63); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.835 W/kg

Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.017 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.65 W/kg
SAR(1 g) = 0.793 W/kg; SAR(10 g) = 0.376 W/kg
Maximum value of SAR (measured) = 0.893 W/kg



0 dB = 0.893 W/kg = -0.49 dBW/kg

Date: 2016-02-16

Test Laboratory: SGS-SAR Lab

Hisende L675 WI-FI 802.11b 11CH Right touch cheek

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2462 MHz;Duty Cycle: 1:1

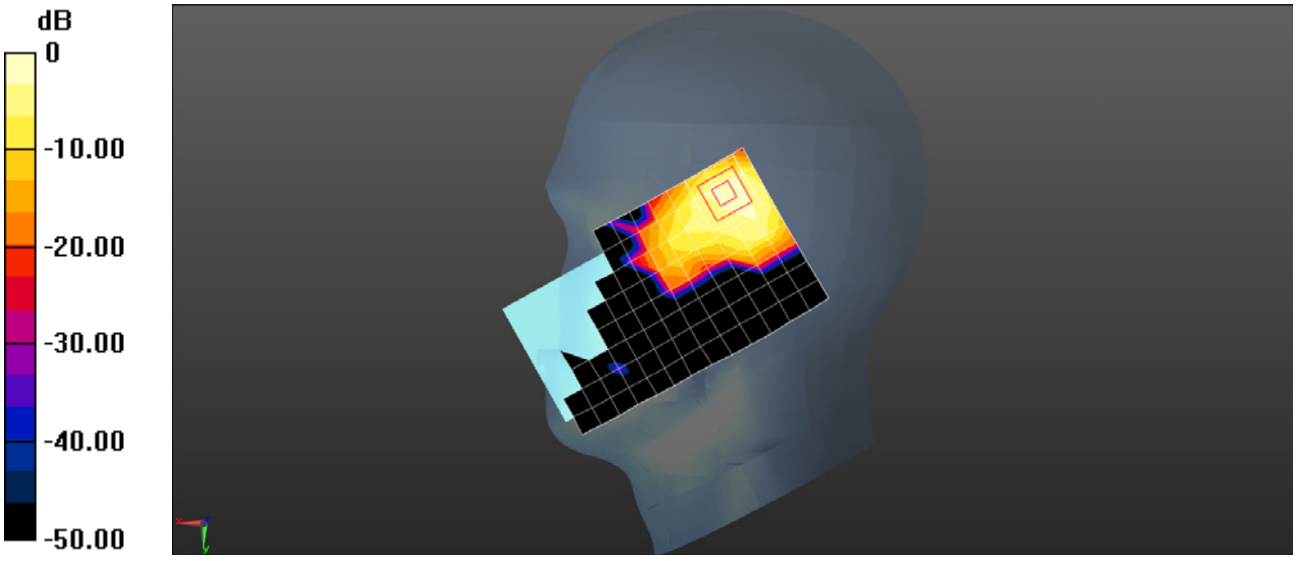
Medium: HSL2450;Medium parameters used: f = 2462 MHz; σ = 1.797 S/m; ε_r = 38.552; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.65, 7.65, 7.65); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.206 W/kg

Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.462 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.630 W/kg
SAR(1 g) = 0.227 W/kg; SAR(10 g) = 0.083 W/kg
Maximum value of SAR (measured) = 0.279 W/kg



0 dB = 0.279 W/kg = -5.54 dBW/kg

Date: 2016-02-16

Test Laboratory: SGS-SAR Lab

Hisende L675 WI-FI 802.11b 11CH Back side 15mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2462 MHz;Duty Cycle: 1:1

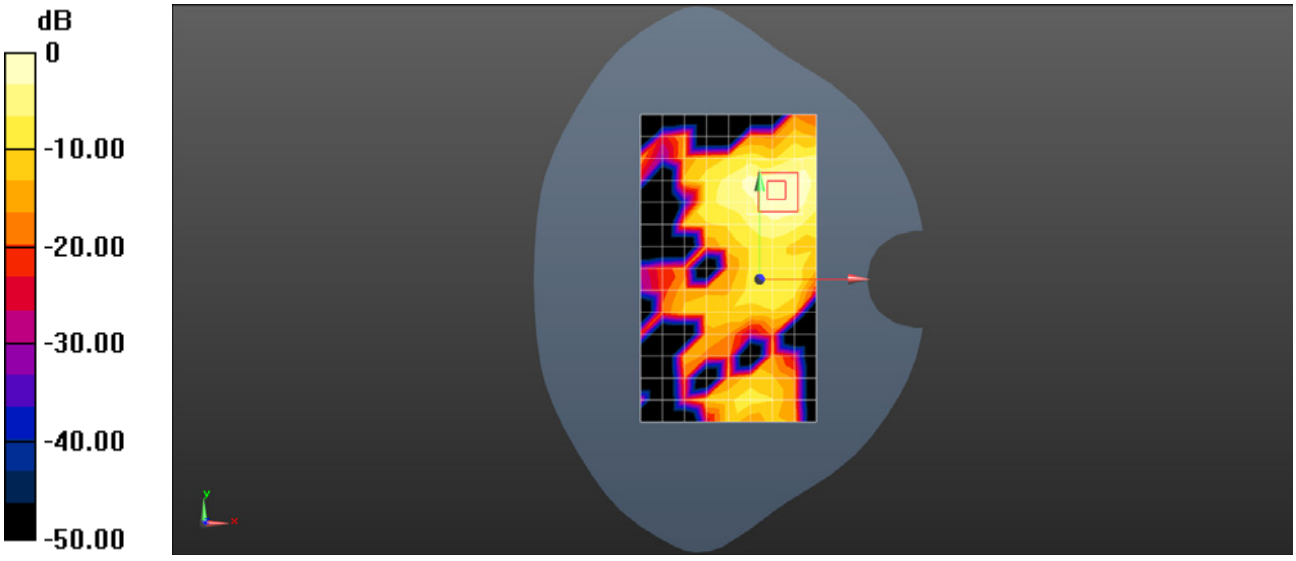
Medium: MSL2450;Medium parameters used: f = 2462 MHz; σ = 1.966 S/m; ε_r = 51.603; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.7, 7.7, 7.7); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0264 W/kg

Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.8460 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.0510 W/kg
SAR(1 g) = 0.026 W/kg; SAR(10 g) = 0.010 W/kg
Maximum value of SAR (measured) = 0.0300 W/kg



0 dB = 0.0300 W/kg = -15.23 dBW/kg

Date: 2016-02-16

Test Laboratory: SGS-SAR Lab

Hisende L675 WI-FI 802.11b 11CH Back side 10mm

DUT: Hisense L675; Type: Mobile Phone ; Serial: NA

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2462 MHz;Duty Cycle: 1:1

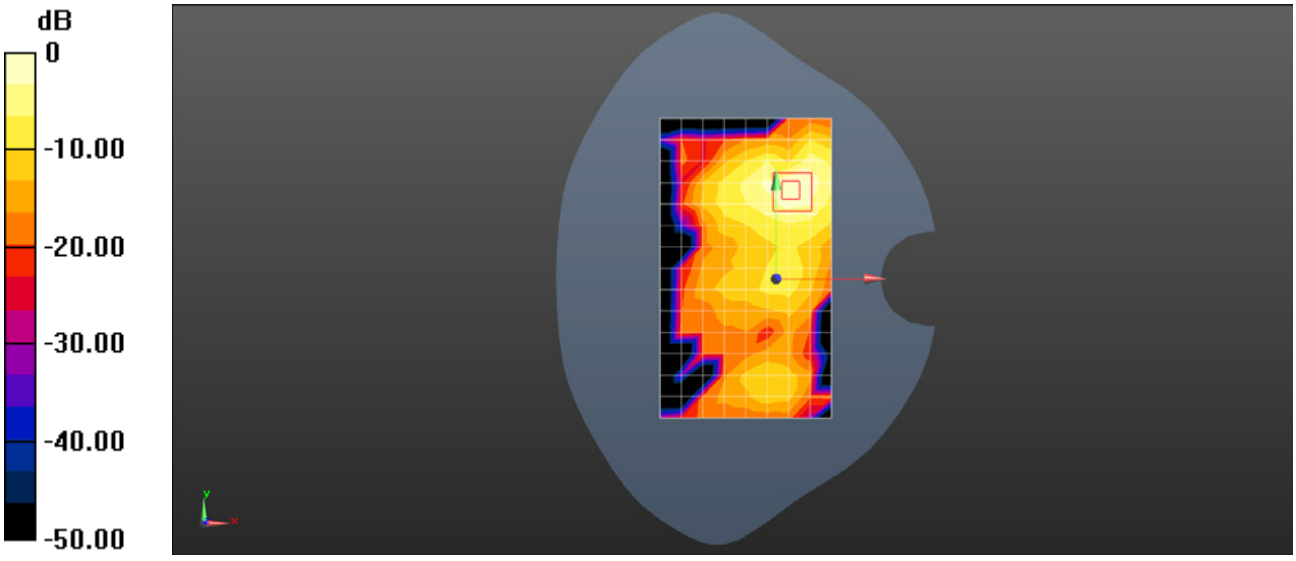
Medium: MSL2450;Medium parameters used: f = 2462 MHz; σ = 1.966 S/m; ε_r = 51.603; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.7, 7.7, 7.7); Calibrated: 2015-11-27;
- Sensor-Surface: 4mm (Mechanical Surface Detection), z = 1.0, 31.0
- Electronics: DAE3 Sn569; Calibrated: 2015-11-24
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x15x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0776 W/kg

Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 1.593 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.158 W/kg
SAR(1 g) = 0.070 W/kg; SAR(10 g) = 0.030 W/kg
Maximum value of SAR (measured) = 0.0818 W/kg



0 dB = 0.0818 W/kg = -10.87 dBW/kg

Appendix C

Calibration certificate

1. Dipole
D835V2-SN 4d105(2013-11-25)
D1800V2-SN 2d070(2013-11-27)
D1900V2-SN 5d028(2013-11-27)
D2450V2-SN 733(2013-11-26)
D2600V2-SN 1093(2014-09-23)
2. DAE
DAE3-SN 569(2015-11-24)
3. Probe
EX3DV4-SN 3962(2015-11-27)

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client SGS-SZ (Auden)

Certificate No: D835V2-4d105_Nov13

CALIBRATION CERTIFICATE

Object: D835V2 - SN: 4d105

Calibration procedure(s): QA CAL-05.v9
Calibration procedure for dipole validation kits above 700 MHz

Calibration date: November 25, 2013

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	09-Oct-13 (No. 217-01827)	Oct-14
Power sensor HP 8481A	US37292783	09-Oct-13 (No. 217-01827)	Oct-14
Power sensor HP 8481A	MY41092317	09-Oct-13 (No. 217-01828)	Oct-14
Reference 20 dB Attenuator	SN: 5058 (20k)	04-Apr-13 (No. 217-01736)	Apr-14
Type-N mismatch combination	SN: 5047.3 / 06327	04-Apr-13 (No. 217-01739)	Apr-14
Reference Probe ES3DV3	SN: 3205	28-Dec-12 (No. ES3-3205_Dec12)	Dec-13
DAE4	SN: 601	25-Apr-13 (No. DAE4-601_Apr13)	Apr-14

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator R&S SMT-06	100005	04-Aug-99 (in house check Oct-13)	In house check: Oct-15
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-13)	In house check: Oct-14

	Name	Function	Signature
Calibrated by:	Israe El-Naouq	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: November 26, 2013

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.8 ± 6 %	0.94 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.50 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**9.64 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.61 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**6.26 W/kg ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	55.2	0.97 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.7 ± 6 %	1.01 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.39 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**9.28 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.55 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**6.06 W/kg ± 16.5 % (k=2)**

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	51.4 Ω - 4.1 jΩ
Return Loss	- 27.3 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	46.9 Ω - 6.0 jΩ
Return Loss	- 23.1 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.395 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	May 26, 2010

DASY5 Validation Report for Head TSL

Date: 25.11.2013

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d105

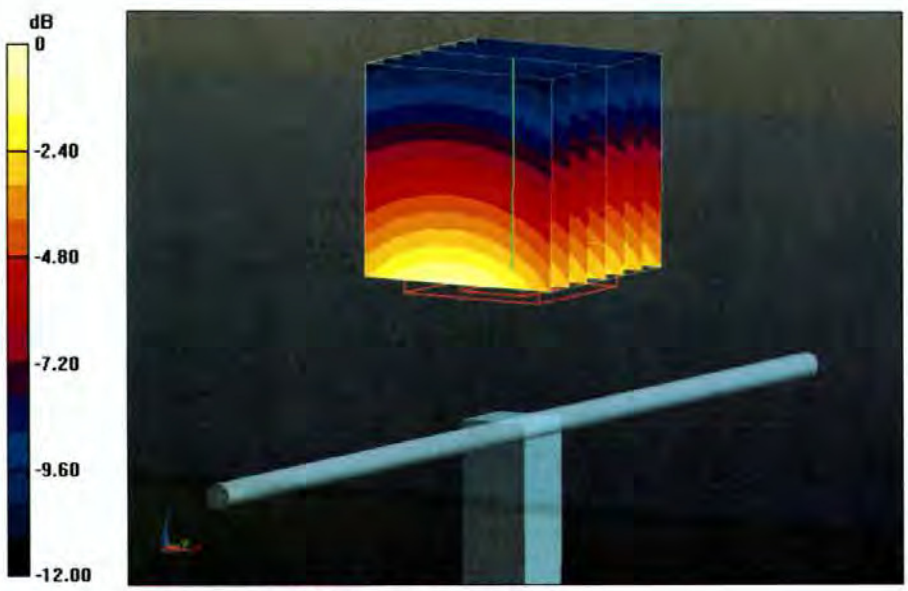
Communication System: UID 0 - CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.94 S/m; ε_r = 40.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.05, 6.05, 6.05); Calibrated: 28.12.2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 25.04.2013
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

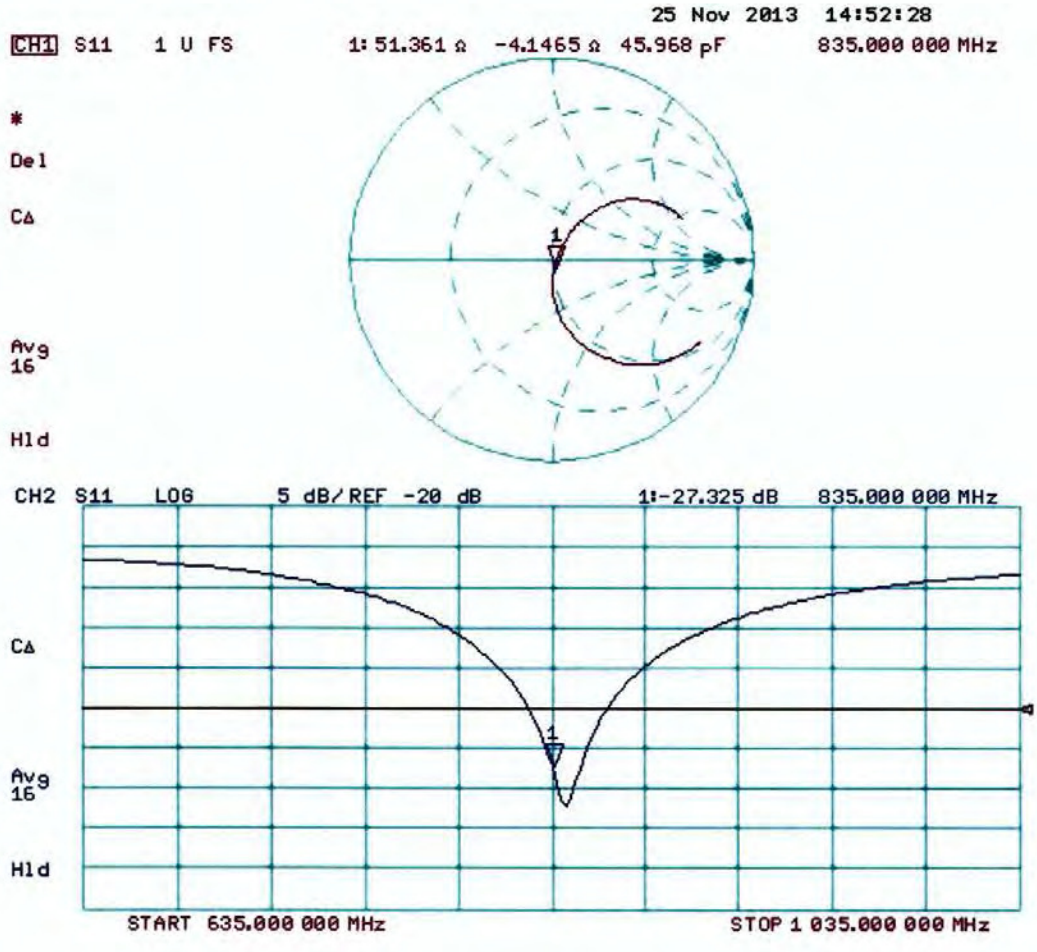
Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.324 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 3.80 W/kg
SAR(1 g) = 2.5 W/kg; SAR(10 g) = 1.61 W/kg
Maximum value of SAR (measured) = 2.92 W/kg



0 dB = 2.92 W/kg = 4.65 dBW/kg

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 25.11.2013

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d105

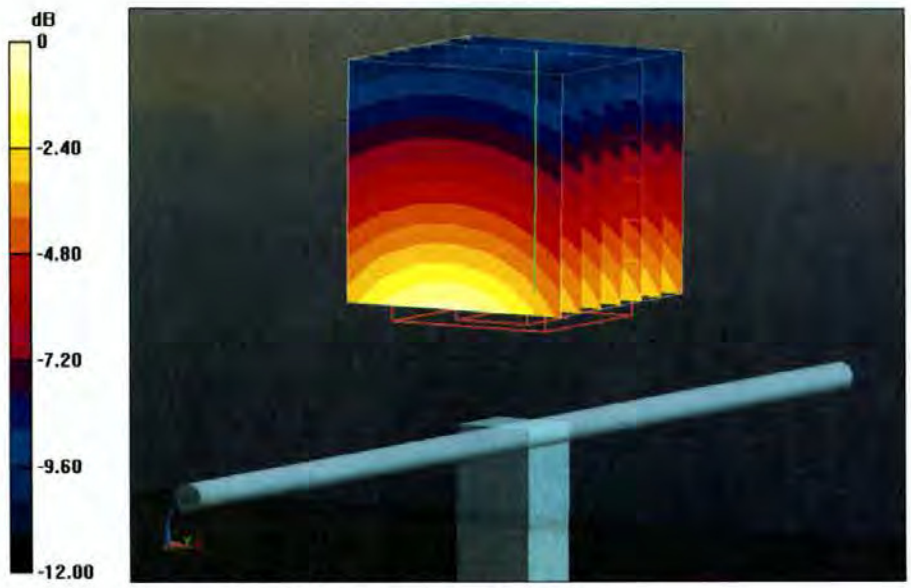
Communication System: UID 0 - CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 1.007 S/m; ε_r = 54.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.04, 6.04, 6.04); Calibrated: 28.12.2012;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 25.04.2013
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

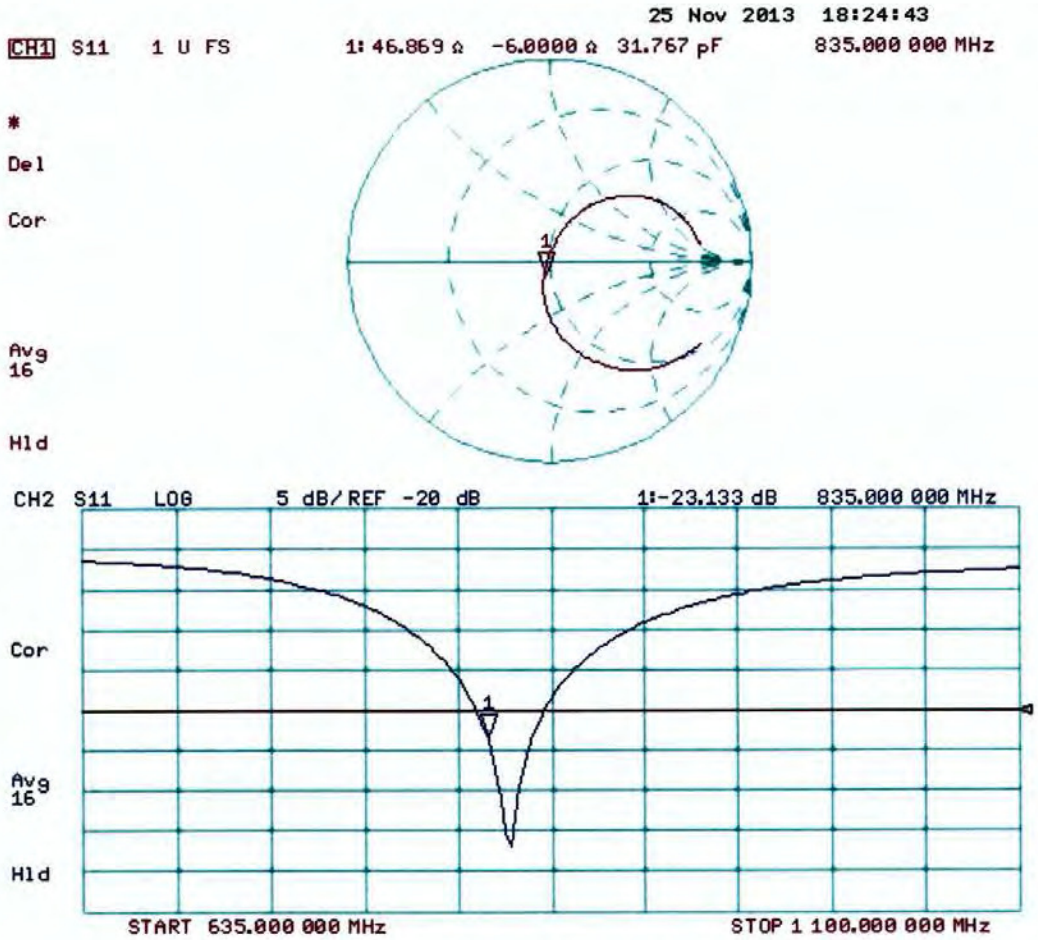
Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.53 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 3.53 W/kg
SAR(1 g) = 2.39 W/kg; SAR(10 g) = 1.55 W/kg
Maximum value of SAR (measured) = 2.78 W/kg



0 dB = 2.78 W/kg = 4.44 dBW/kg

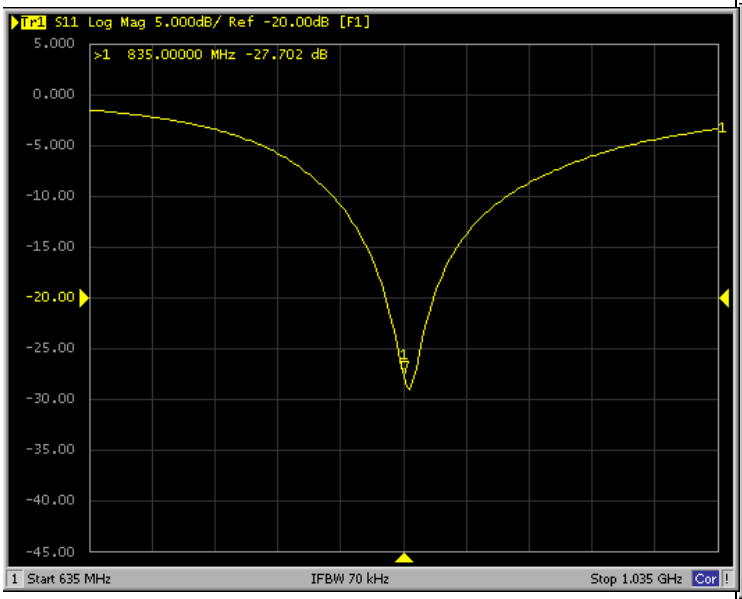
Impedance Measurement Plot for Body TSL



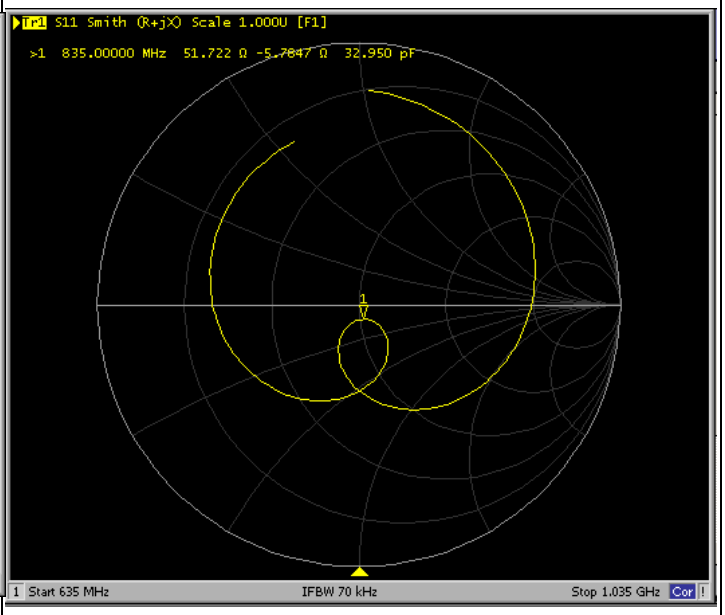
Dipole Calibration for Impedance and Return-loss					
Model NO.:	D835V2	Serial NO.:	4d105	Measurement Date:	2015-11-24
Liquid Type	Target Value:		Measured Value:		verdict
	Impedance	Return Loss	Impedance	Return Loss	
Head	51.4Ω-4.1jΩ	-27.3dB	51.7Ω-5.8jΩ	-27.7dB	Complied
Body	46.9Ω-6.0jΩ	-23.1dB	46.3Ω-6.4jΩ	-23.2dB	Complied

Remark: According to KDB 865664 D01,instead of the typical annual calibration recommended by measurement standards, longer calibration intervals of up to three years may be considered when it is demonstrated that the SAR target, impedance and return loss of a dipole have remain stable according to the following requirements:
1) The most recent return-loss result, measured at least annually, deviates by less than 20% from the previous measurement and meeting the required 20 dB minimum return-loss requirement.
2) The most recent measurement of the real and imaginary parts of the impedance, measured at least annually, deviates by less than 5 Ω from the previous measurement.

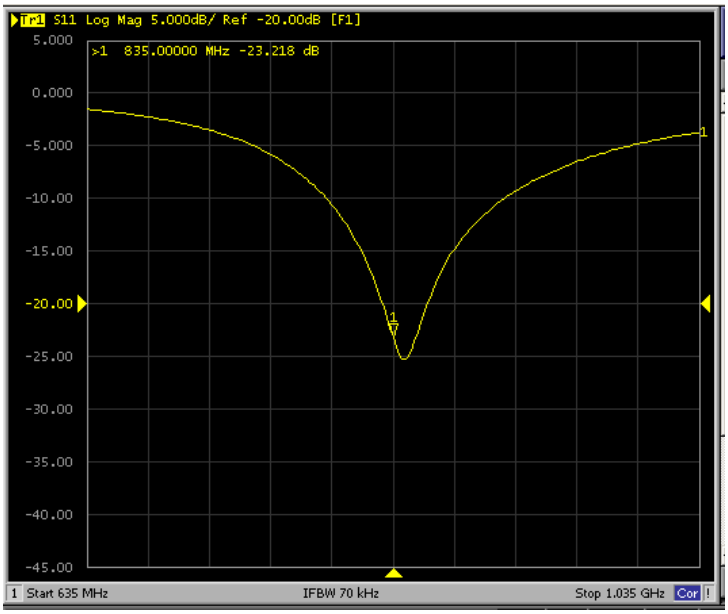
Return Loss for Head



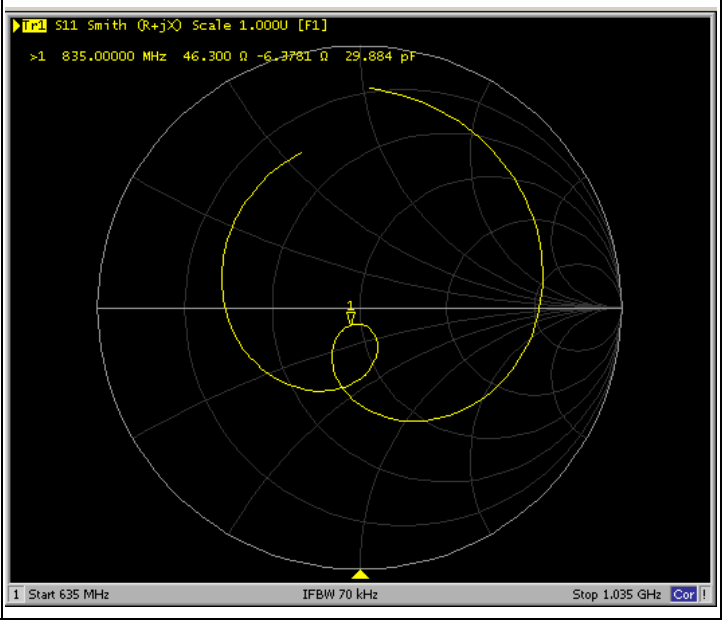
Impedance for Head



Return Loss for Body



Impedance for Body



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The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client **SGS-SZ (Auden)**

Certificate No: D1800V2-2d070_Nov13

CALIBRATION CERTIFICATE

Object	D1800V2 - SN: 2d070
Calibration procedure(s)	QA CAL-05.v9 Calibration procedure for dipole validation kits above 700 MHz
Calibration date:	November 27, 2013

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	09-Oct-13 (No. 217-01827)	Oct-14
Power sensor HP 8481A	US37292783	09-Oct-13 (No. 217-01827)	Oct-14
Power sensor HP 8481A	MY41092317	09-Oct-13 (No. 217-01828)	Oct-14
Reference 20 dB Attenuator	SN: 5058 (20k)	04-Apr-13 (No. 217-01736)	Apr-14
Type-N mismatch combination	SN: 5047.3 / 06327	04-Apr-13 (No. 217-01739)	Apr-14
Reference Probe ES3DV3	SN: 3205	28-Dec-12 (No. ES3-3205_Dec12)	Dec-13
DAE4	SN: 601	25-Apr-13 (No. DAE4-601_Apr13)	Apr-14

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator R&S SMT-06	100005	04-Aug-99 (in house check Oct-13)	In house check: Oct-15
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-13)	In house check: Oct-14

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: November 27, 2013

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1800 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	39.8 ± 6 %	1.42 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.79 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**38.8 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	5.11 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**20.3 W/kg ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	53.3	1.52 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	52.8 ± 6 %	1.53 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	9.72 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**38.6 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	5.13 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**20.4 W/kg ± 16.5 % (k=2)**

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	48.4 Ω - 5.0 jΩ
Return Loss	- 25.5 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	45.3 Ω - 4.3 jΩ
Return Loss	- 23.5 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.212 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	May 26, 2003