



Appendix B

Detailed Test Results

1. LTE
LTE Band 2 for Head &Body
LTE Band 7 for Head &Body
LTE Band 38 for Head &Body
LTE Band 41 for Head &Body

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 2 20MHz QPSK PCC 1RB99 Offset 18801CH SCC 18999CH
1RB0 Right cheek Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1870.1 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used (interpolated): $f = 1870.1$ MHz; $\sigma = 1.329$ S/m; $\epsilon_r =$

40.021 ; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.26, 8.26, 8.26); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

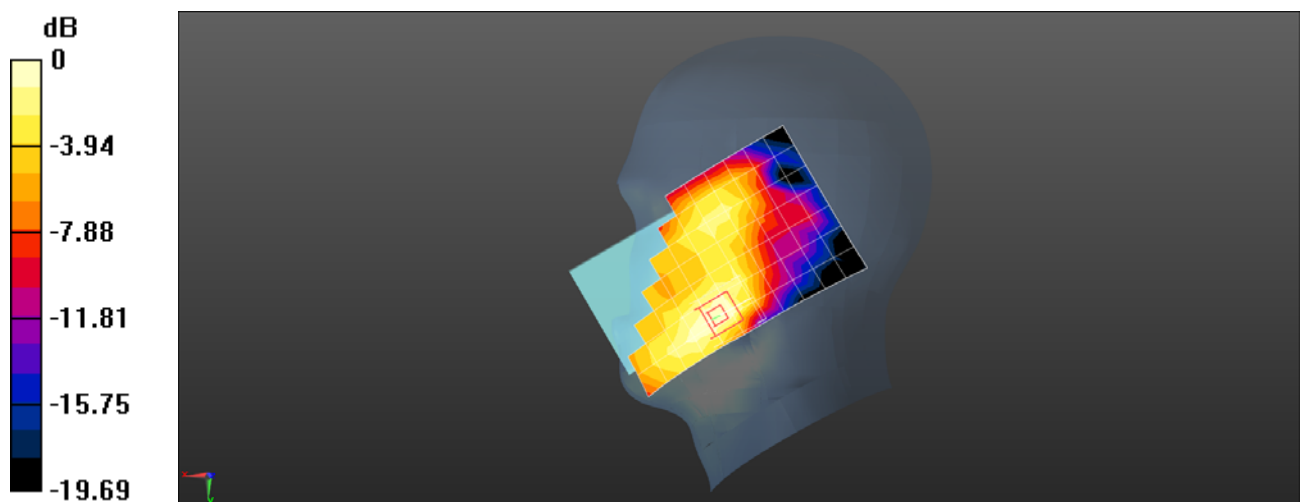
Configuration/Head/Area Scan (8x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.137 W/kg

Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 3.420 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.161 W/kg

SAR(1 g) = 0.107 W/kg; SAR(10 g) = 0.069 W/kg



0 dB = 0.137 W/kg = -8.63 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 2 20MHz QPSK PCC 1RB99 Offset 18801CH SCC 18999CH
1RB0 Front side 15mm Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1870.1 MHz; Duty Cycle: 1:1

Medium: MSL1900; Medium parameters used (interpolated): $f = 1870.1$ MHz; $\sigma = 1.489$ S/m; $\epsilon_r =$

52.496; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.09, 8.09, 8.09); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.525 W/kg

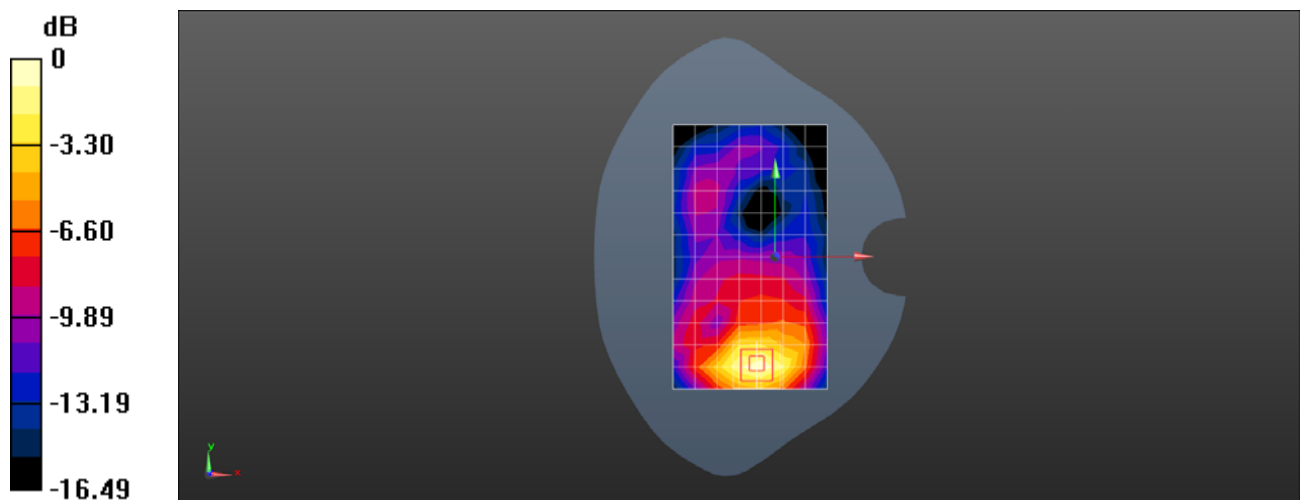
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.478 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.649 W/kg

SAR(1 g) = 0.412 W/kg; SAR(10 g) = 0.240 W/kg

Maximum value of SAR (measured) = 0.542 W/kg



0 dB = 0.542 W/kg = -2.66 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 2 20MHz QPSK PCC 1RB0 Offset 18902CH SCC 19100CH
0RB0 Bottom side 10mm Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1880.2 MHz; Duty Cycle: 1:1

Medium: MSL1900; Medium parameters used (interpolated): $f = 1880.2$ MHz; $\sigma = 1.5$ S/m; $\epsilon_r =$

52.47; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.09, 8.09, 8.09); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (4x8x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.908 W/kg

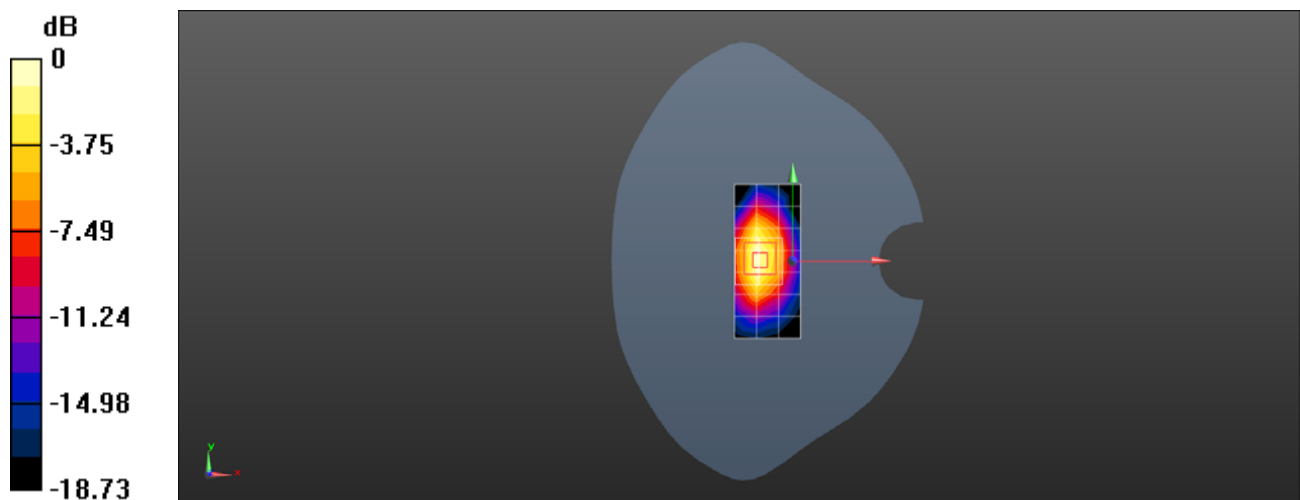
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 21.68 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.734 W/kg; SAR(10 g) = 0.390 W/kg

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



0 dB = 1.01 W/kg = 0.04 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 2 20MHz QPSK PCC 1RB0 Offset 18700CH SCC 18898CH
0RB0 Bottom side 0m Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

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

Medium: MSL1900; Medium parameters used: $f = 1860$ MHz; $\sigma = 1.478$ S/m; $\epsilon_r = 52.531$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.09, 8.09, 8.09); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (4x8x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 5.81 W/kg

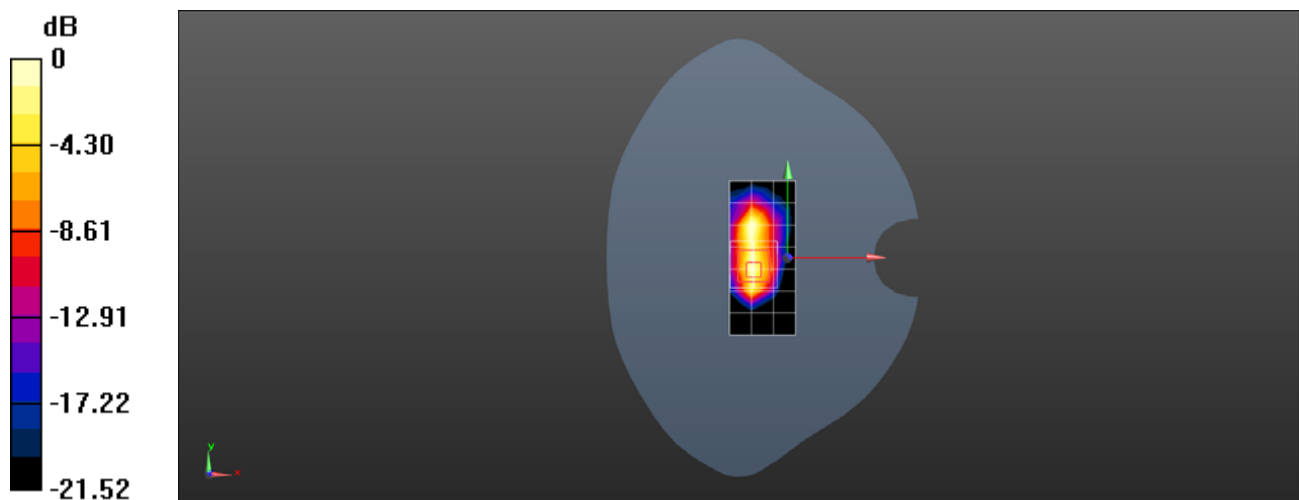
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 36.20 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 9.45 W/kg

SAR(1 g) = 3.22 W/kg; SAR(10 g) = 1.18 W/kg

Maximum value of SAR (measured) = 5.55 W/kg



0 dB = 4.73 W/kg = 6.75 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 2 20MHz QPSK PCC 1RB0 Offset 18902CH SCC 19100CH
0RB0 Right cheek Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1880.2 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used (interpolated): $f = 1880.2$ MHz; $\sigma = 1.341$ S/m; $\epsilon_r =$

40.001; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.26, 8.26, 8.26); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.553 W/kg

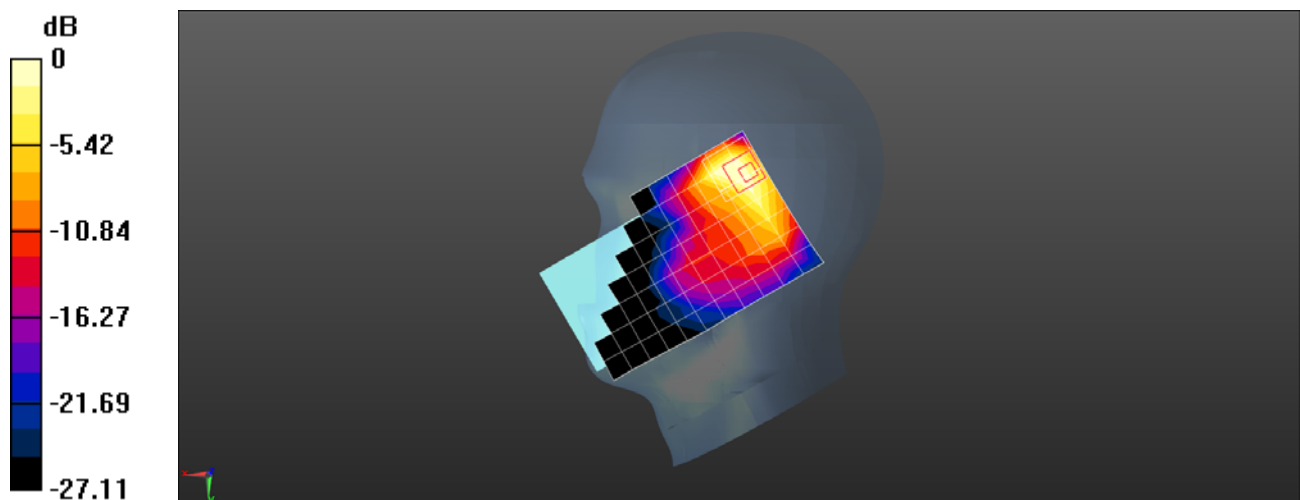
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm,
 $dz=5$ mm

Reference Value = 9.308 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.741 W/kg

SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.161 W/kg

Maximum value of SAR (measured) = 0.536 W/kg



0 dB = 0.536 W/kg = -2.71 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 2 20MHz QPSK PCC 1RB0 Offset 18700CH SCC 18817CH
0RB0 Back side 15mm Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

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

Medium: MSL1900; Medium parameters used: $f = 1860$ MHz; $\sigma = 1.478$ S/m; $\epsilon_r = 52.531$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.09, 8.09, 8.09); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.204 W/kg

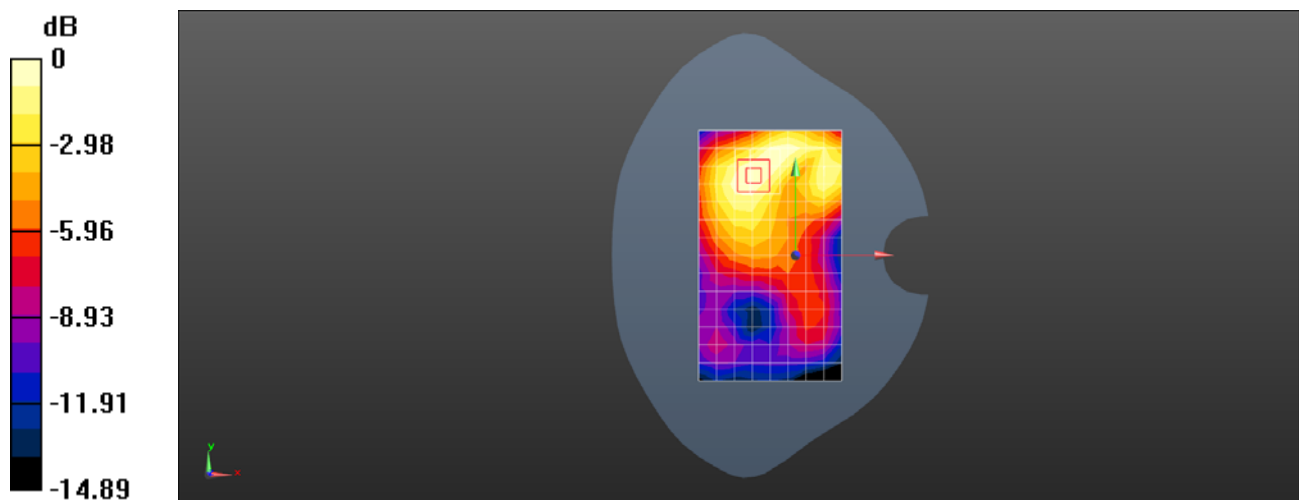
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.398 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.254 W/kg

SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.209 W/kg



0 dB = 0.209 W/kg = -6.80 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 2 20MHz QPSK PCC 1RB0 Offset 18801CH SCC 18999CH
0RB0 Top side 10mm Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1870.1 MHz; Duty Cycle: 1:1

Medium: MSL1900; Medium parameters used (interpolated): $f = 1870.1$ MHz; $\sigma = 1.489$ S/m; $\epsilon_r =$

52.496; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(8.09, 8.09, 8.09); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (4x8x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.484 W/kg

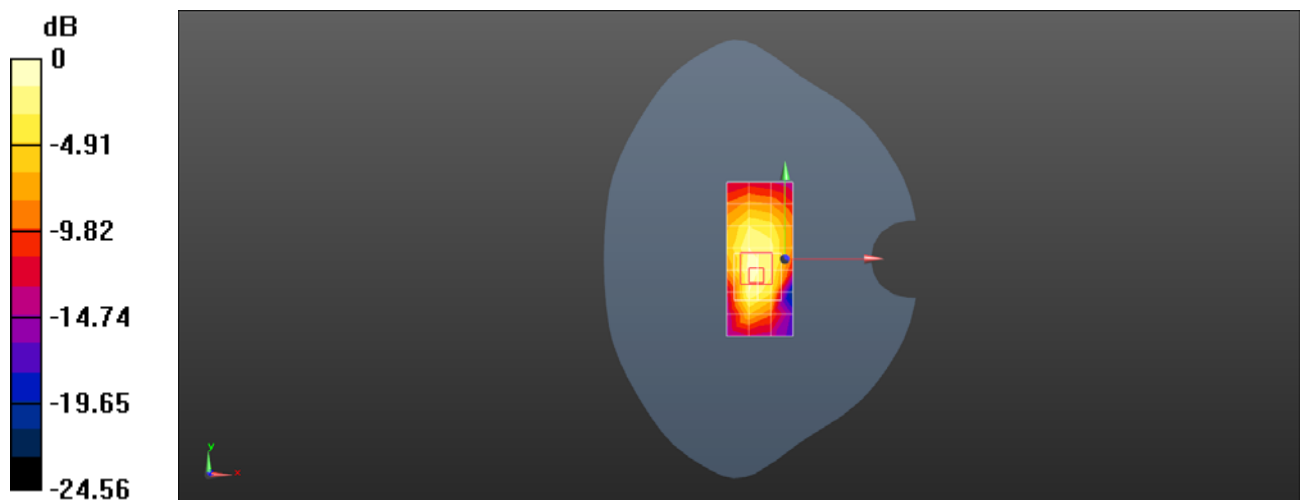
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 16.88 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.730 W/kg

SAR(1 g) = 0.424 W/kg; SAR(10 g) = 0.238 W/kg

Maximum value of SAR (measured) = 0.589 W/kg



0 dB = 0.589 W/kg = -2.30 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 7 20MHz QPSK PCC 1RB99 Offset 21001CH SCC 21199CH
0RB0 Right cheek Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2525.1 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used (interpolated): $f = 2525.1$ MHz; $\sigma = 1.934$ S/m; $\epsilon_r =$

37.704 ; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.52, 7.52, 7.52); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.129 W/kg

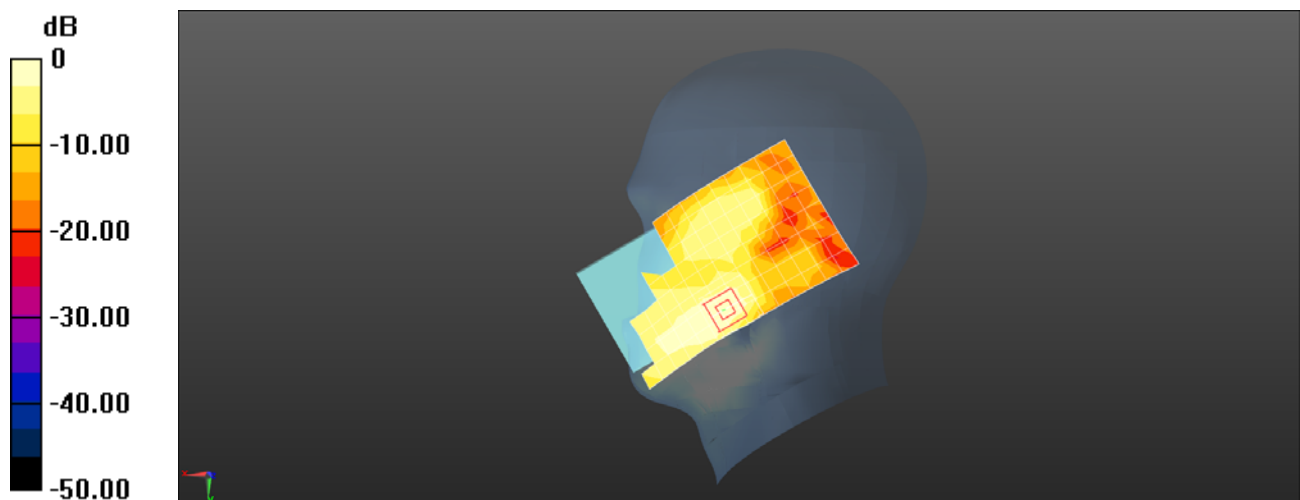
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 0.6610 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.168 W/kg

SAR(1 g) = 0.092 W/kg; SAR(10 g) = 0.048 W/kg

Maximum value of SAR (measured) = 0.131 W/kg



0 dB = 0.131 W/kg = -8.83 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 7 20MHz QPSK PCC 1RB99 Offset 21001CH SCC 21199CH
0RB0 Front side 15mm Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2525.1 MHz; Duty Cycle: 1:1

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2525.1$ MHz; $\sigma = 2.062$ S/m; $\epsilon_r =$

52.446; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.397 W/kg

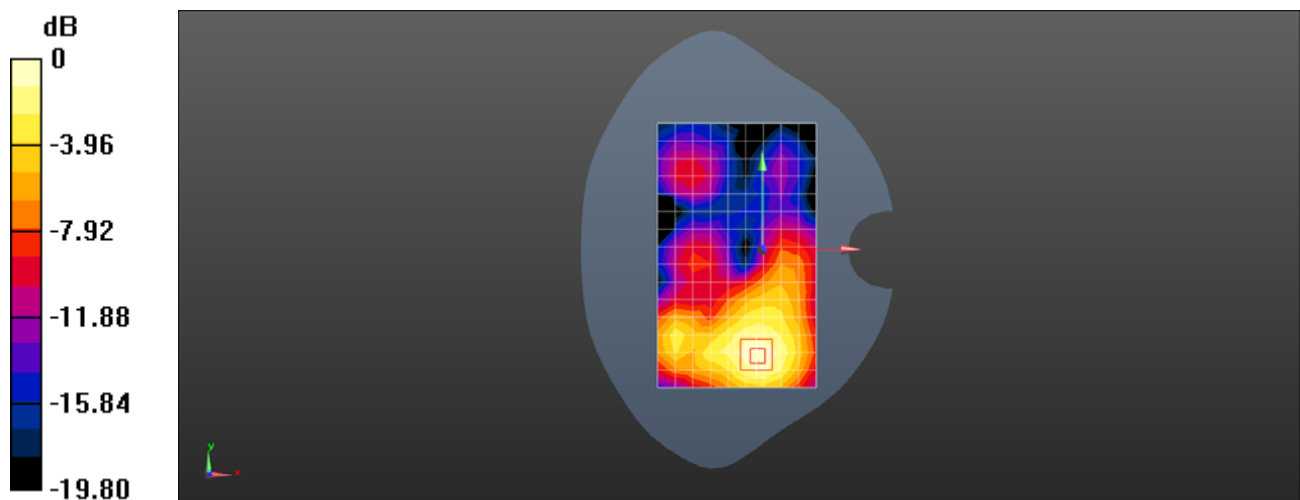
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.270 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.699 W/kg

SAR(1 g) = 0.341 W/kg; SAR(10 g) = 0.188 W/kg

Maximum value of SAR (measured) = 0.515 W/kg



0 dB = 0.515 W/kg = -2.88 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 7 20MHz QPSK PCC 1RB0 Offset 21350CH SCC 21152CH
0RB0 Bottom side 10mm Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2540.2 MHz; Duty Cycle: 1:1

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2540.2$ MHz; $\sigma = 2.08$ S/m; $\epsilon_r =$

52.387; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x11x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.392 W/kg

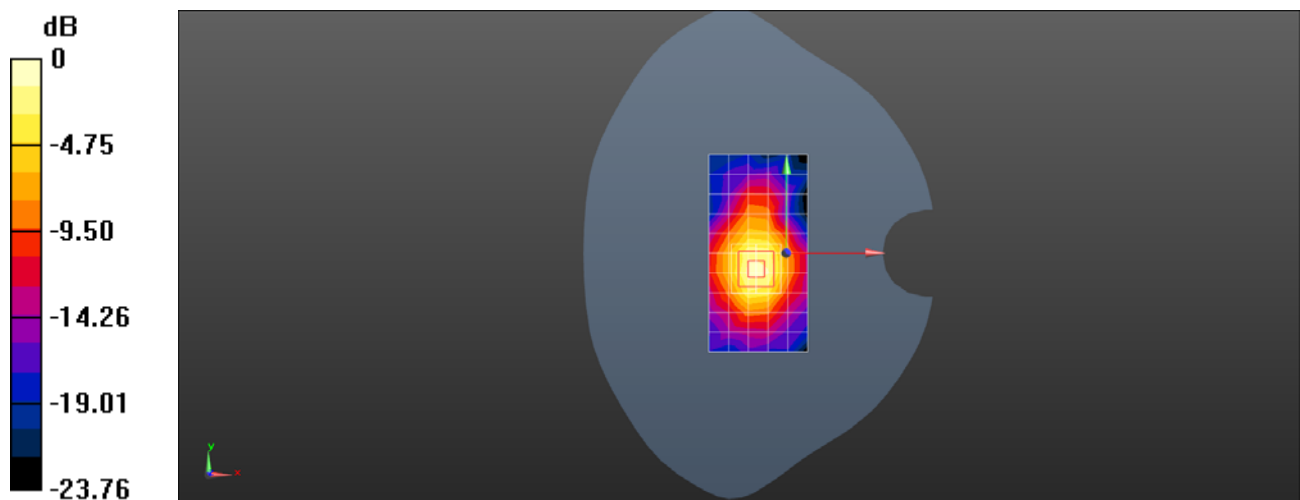
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 8.106 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.598 W/kg

SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (measured) = 0.467 W/kg



0 dB = 0.467 W/kg = -3.30 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 7 20MHz QPSK PCC 1RB99 Offset 21001CH SCC 21199CH
1RB0 Bottom side 0mm Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2525.1 MHz; Duty Cycle: 1:1

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2525.1$ MHz; $\sigma = 2.062$ S/m; $\epsilon_r =$

52.446; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x11x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 1.90 W/kg

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

Reference Value = 23.45 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 6.51 W/kg

SAR(1 g) = 2.27 W/kg; SAR(10 g) = 0.834 W/kg

Maximum value of SAR (measured) = 4.02 W/kg

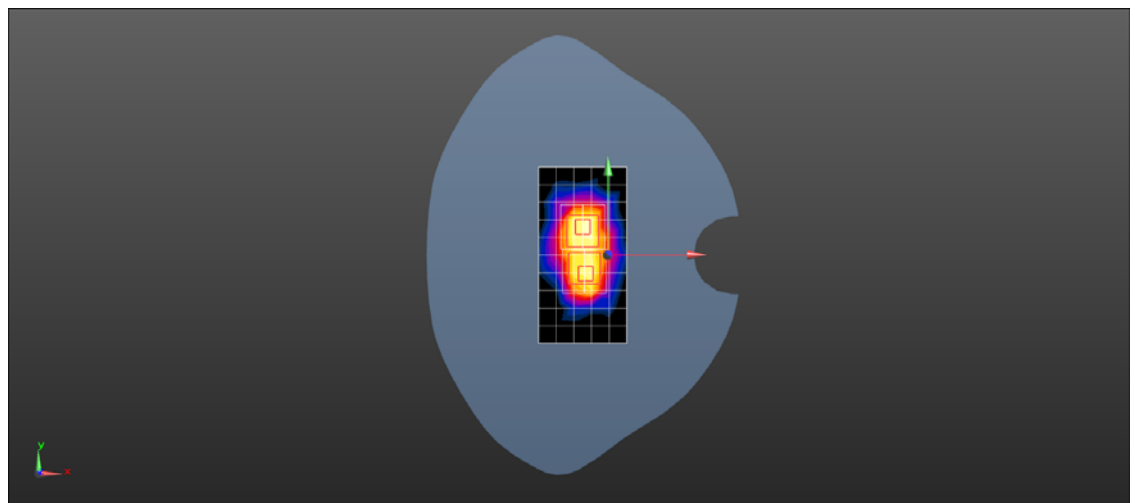
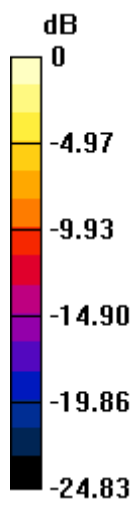
Configuration/Body/Zoom Scan (7x7x7)/Cube 1: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 23.45 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.65 W/kg

SAR(1 g) = 1.57 W/kg; SAR(10 g) = 0.661 W/kg

Maximum value of SAR (measured) = 2.60 W/kg



0 dB = 2.60 W/kg = 4.15 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 7 20MHz QPSK PCC 1RB99 Offset 20850CH SCC 21048CH
1RB0 Right cheek Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

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

Medium: HSL2600; Medium parameters used: $f = 2510$ MHz; $\sigma = 1.914$ S/m; $\epsilon_r = 37.751$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.52, 7.52, 7.52); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.300 W/kg

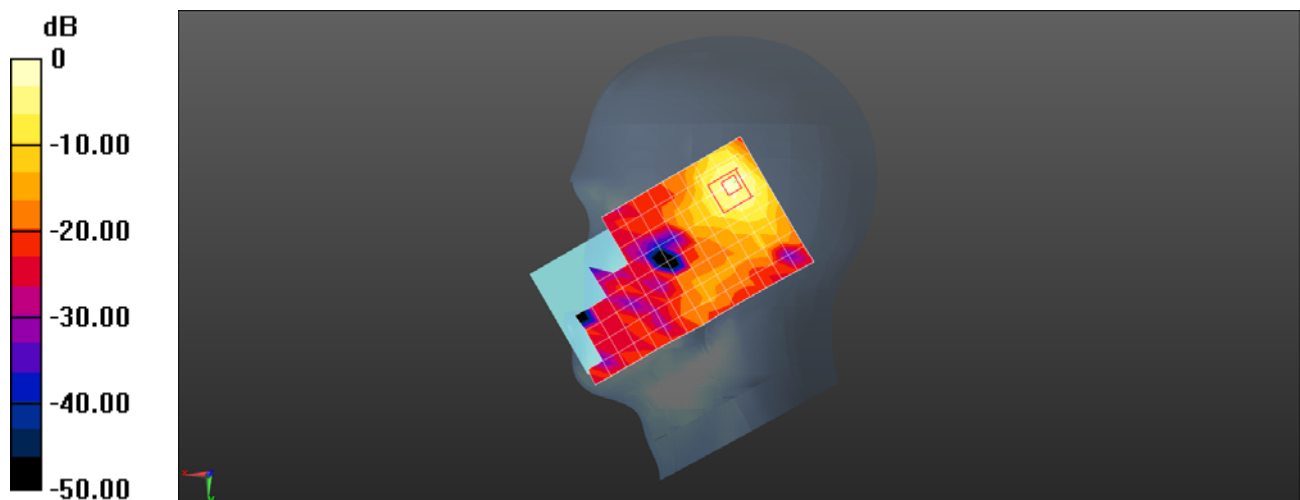
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 4.615 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.560 W/kg

SAR(1 g) = 0.212 W/kg; SAR(10 g) = 0.076 W/kg

Maximum value of SAR (measured) = 0.354 W/kg



0 dB = 0.354 W/kg = -4.51 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 7 20MHz QPSK PCC 1RB99 Offset 20850CH SCC 21048CH
0RB0 Back side 15mm Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

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

Medium: MSL 2600; Medium parameters used: $f = 2510$ MHz; $\sigma = 2.045$ S/m; $\epsilon_r = 52.508$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.0538 W/kg

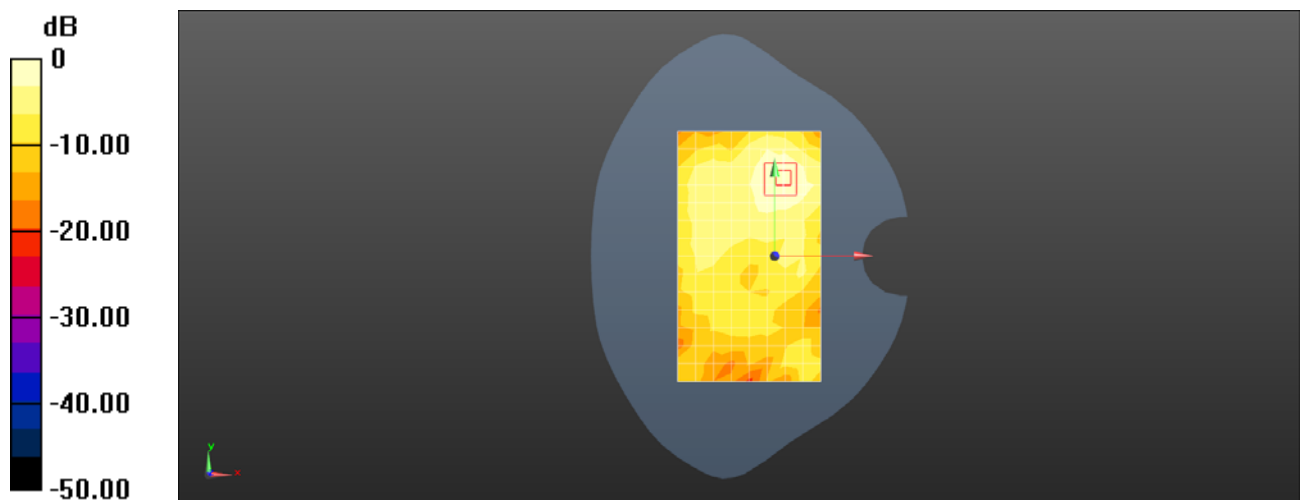
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.640 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.0730 W/kg

SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.018 W/kg

Maximum value of SAR (measured) = 0.0544 W/kg



0 dB = 0.0544 W/kg = -12.64 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 7 20MHz QPSK PCC 1RB0 Offset 21001CH SCC 21199CH
0RB0 Top side 10mm Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2525.1 MHz; Duty Cycle: 1:1

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2525.1$ MHz; $\sigma = 2.062$ S/m; $\epsilon_r =$

52.446; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x10x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.0869 W/kg

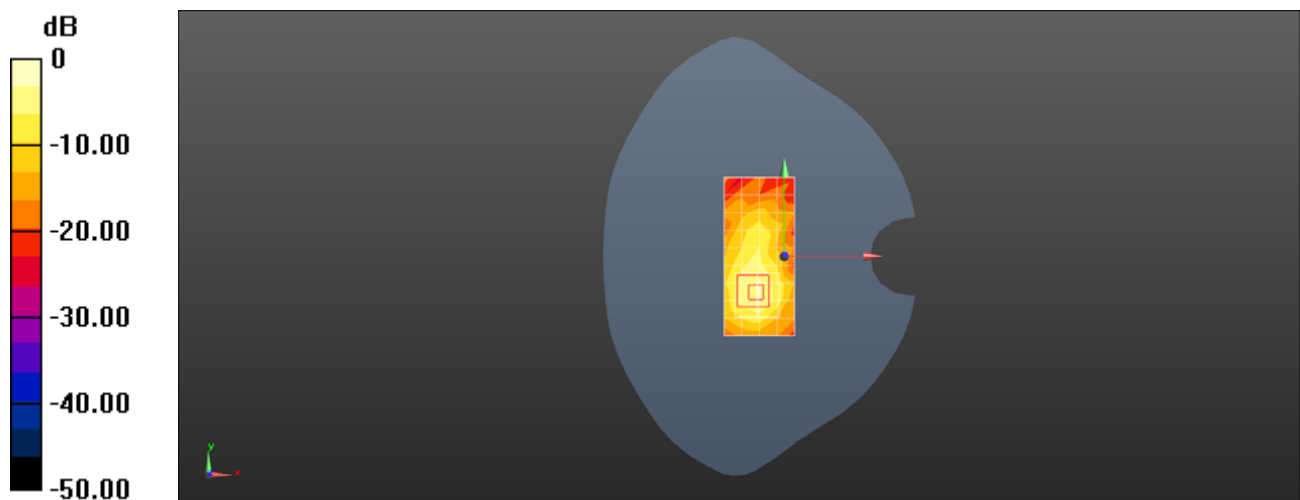
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.740 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.237 W/kg

SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.050 W/kg

Maximum value of SAR (measured) = 0.170 W/kg



0 dB = 0.170 W/kg = -7.70 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 38 20MHz QPSK PCC 1RB0 Offset 37901CH SCC 38099CH
0RB0 Right cheek Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2585.1 MHz; Duty Cycle: 1:1.57906

Medium: HSL2600; Medium parameters used (interpolated): $f = 2585.1$ MHz; $\sigma = 1.998$ S/m; $\epsilon_r = 37.518$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.52, 7.52, 7.52); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.0566 W/kg

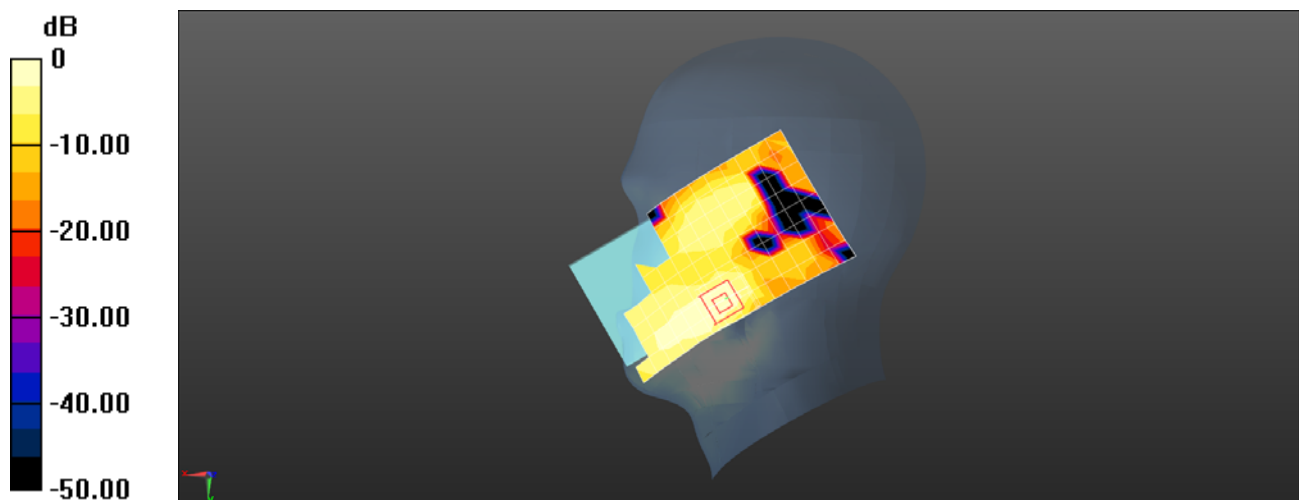
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.155 W/kg

SAR(1 g) = 0.040 W/kg; SAR(10 g) = 0.021 W/kg

Maximum value of SAR (measured) = 0.0589 W/kg



Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 38 20MHz QPSK PCC 1RB0 Offset 37901CH SCC 38099CH
0RB0 Back side 15mm Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2585.1 MHz; Duty Cycle: 1:1.57906

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2585.1$ MHz; $\sigma = 2.142$ S/m; $\epsilon_r = 52.262$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.157 W/kg

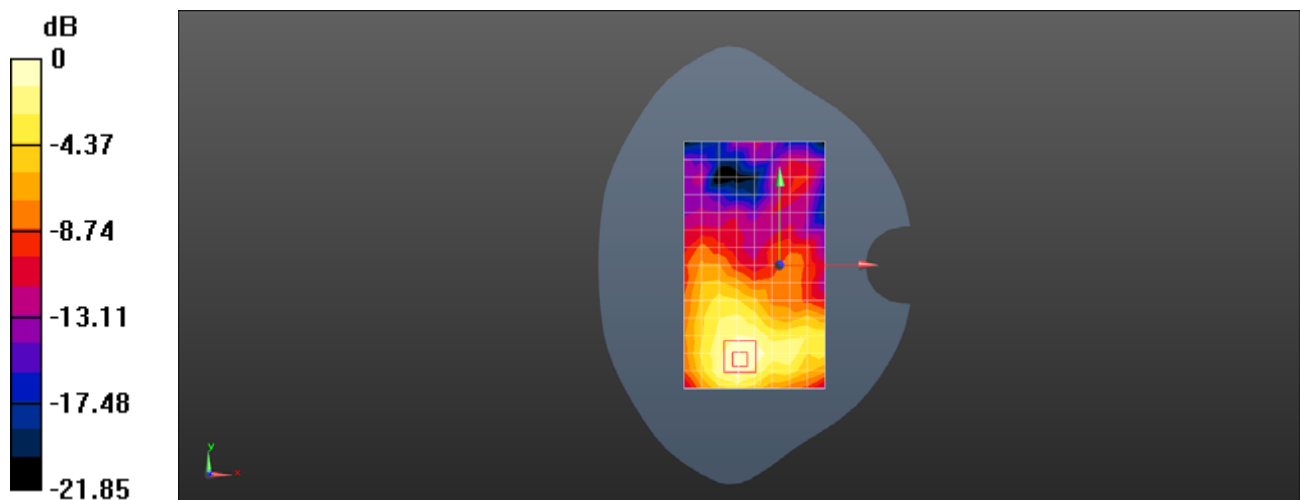
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.657 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.212 W/kg

SAR(1 g) = 0.120 W/kg; SAR(10 g) = 0.067 W/kg

Maximum value of SAR (measured) = 0.165 W/kg



Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 38 20MHz QPSK PCC 1RB99 Offset 37901CH SCC 38099CH
1RB0 Bottom side 10mm Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2585.1 MHz; Duty Cycle:
1:1.57906

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2585.1$ MHz; $\sigma = 2.142$ S/m; $\epsilon_r =$
52.262; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x10x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.555 W/kg

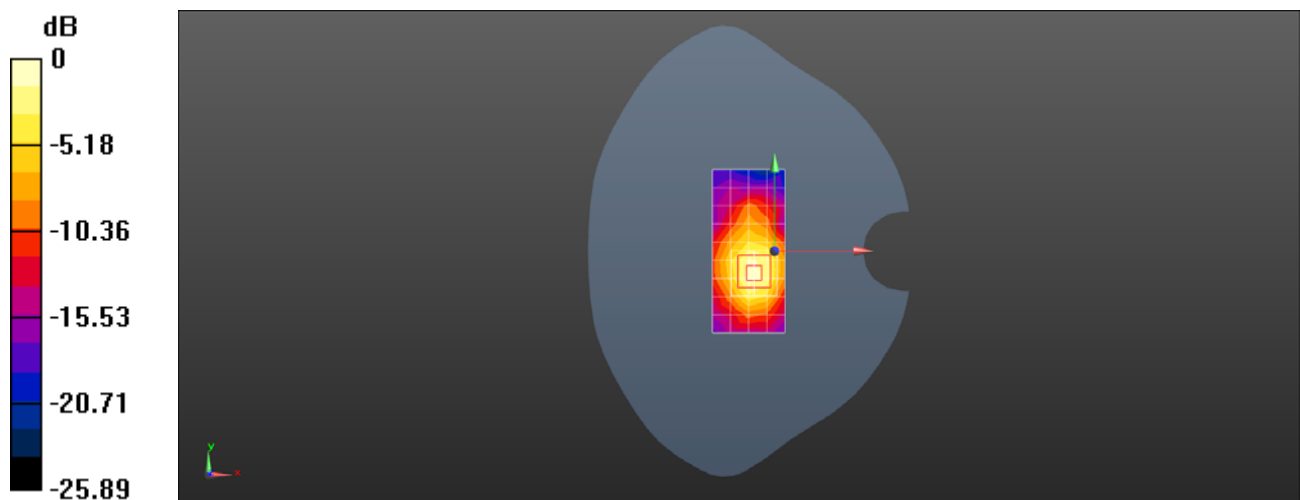
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm,
 $dz=5$ mm

Reference Value = 10.94 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.811 W/kg

SAR(1 g) = 0.420 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.624 W/kg



0 dB = 0.624 W/kg = -2.05 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 38 20MHz QPSK PCC 1RB0 Offset 37901CH SCC 38099CH
1RB99 Right cheek Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2585.1 MHz; Duty Cycle: 1:1.57906

Medium: HSL2600; Medium parameters used (interpolated): $f = 2585.1$ MHz; $\sigma = 1.998$ S/m; $\epsilon_r = 37.518$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.52, 7.52, 7.52); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.421 W/kg

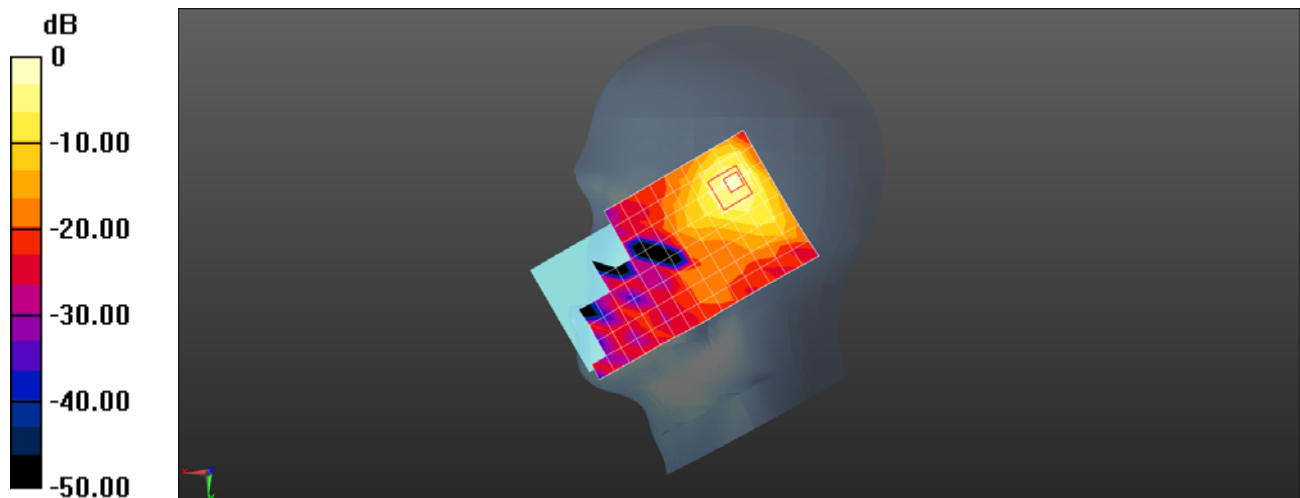
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.418 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.684 W/kg

SAR(1 g) = 0.269 W/kg; SAR(10 g) = 0.098 W/kg

Maximum value of SAR (measured) = 0.449 W/kg



Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 38 20MHz QPSK PCC 1RB99 Offset 37901CH SCC 38099CH
1RB0 Back side 15mm Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2585.1 MHz; Duty Cycle: 1:1.57906

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2585.1$ MHz; $\sigma = 2.142$ S/m; $\epsilon_r = 52.262$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.160 W/kg

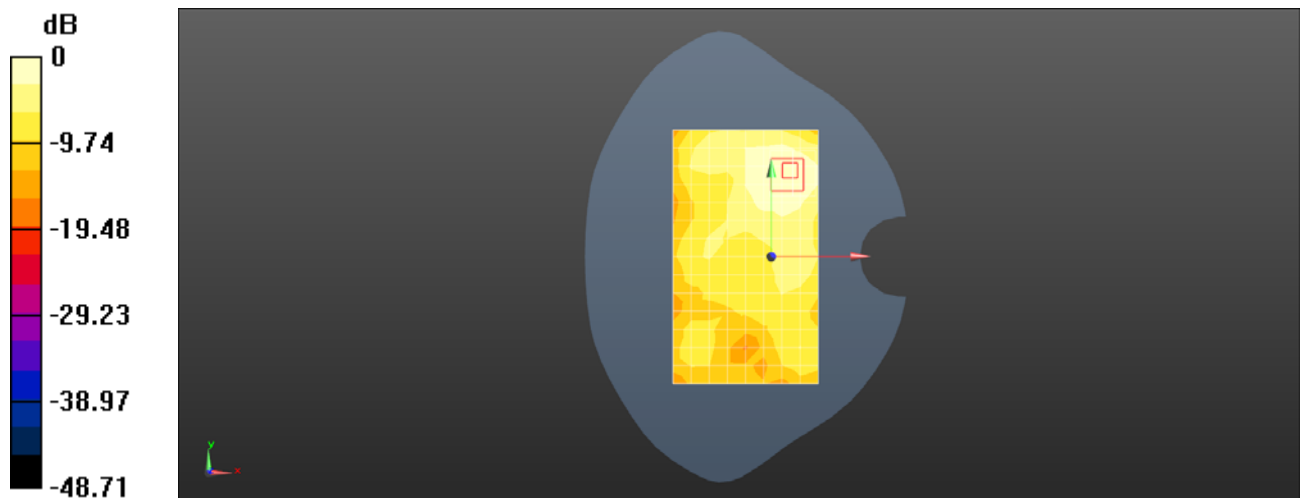
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.066 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.251 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.070 W/kg

Maximum value of SAR (measured) = 0.193 W/kg



0 dB = 0.193 W/kg = -7.14 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 38 20MHz QPSK PCC 1RB0 Offset 37901CH SCC 38099CH
0RB0 Front side 10mm Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2585.1 MHz; Duty Cycle: 1:1.57906

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2585.1$ MHz; $\sigma = 2.142$ S/m; $\epsilon_r = 52.262$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.166 W/kg

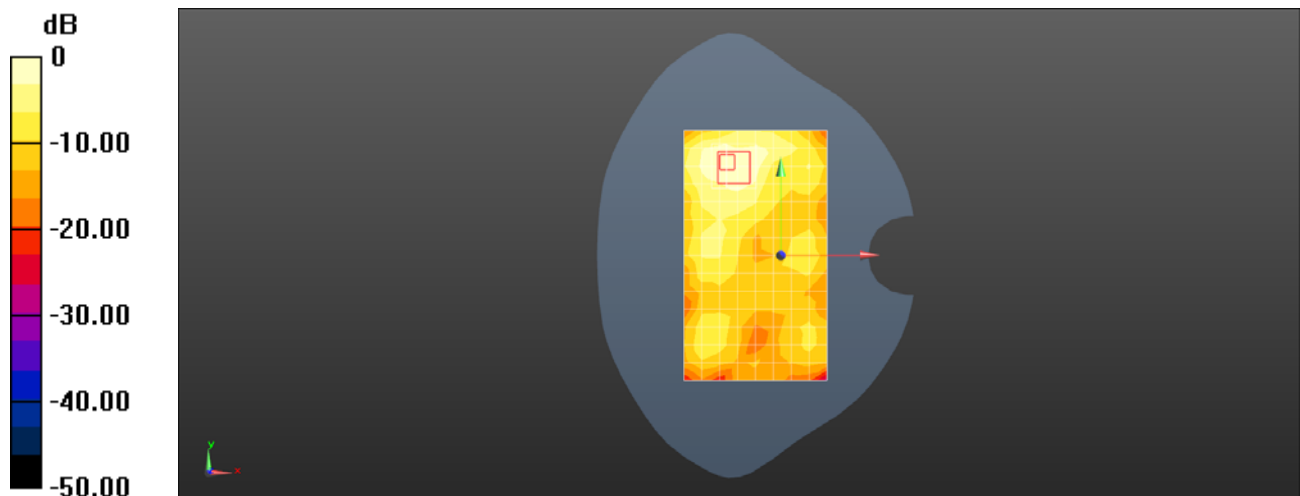
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.319 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.243 W/kg

SAR(1 g) = 0.133 W/kg; SAR(10 g) = 0.065 W/kg

Maximum value of SAR (measured) = 0.196 W/kg



0 dB = 0.196 W/kg = -7.08 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 41 20MHz QPSK PCC 1RB0 Offset 40591CH SCC 40789CH
0RB0 Right cheek Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2590.1 MHz; Duty Cycle: 1:1.57906

Medium: HSL2600; Medium parameters used (interpolated): $f = 2590.1$ MHz; $\sigma = 2.002$ S/m; $\epsilon_r = 37.492$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.52, 7.52, 7.52); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.0552 W/kg

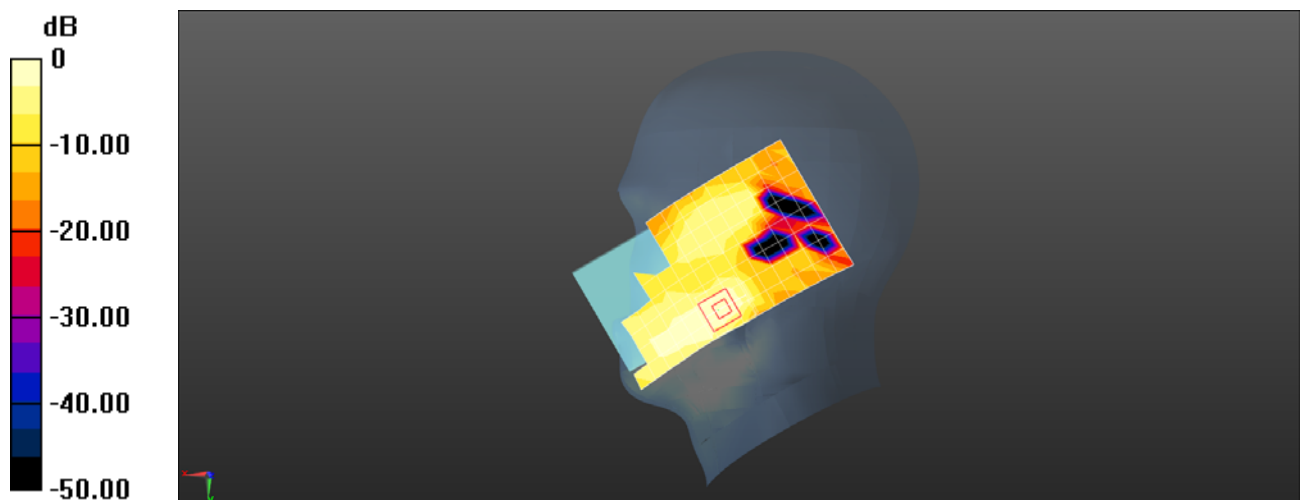
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.115 W/kg

SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.019 W/kg

Maximum value of SAR (measured) = 0.0545 W/kg



0 dB = 0.0545 W/kg = -12.64 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 41 20MHz QPSK PCC 1RB0 Offset 40591CH SCC 40789CH
0RB0 Front side 15mm Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2590.1 MHz; Duty Cycle: 1:1.57906

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2590.1$ MHz; $\sigma = 2.149$ S/m; $\epsilon_r = 52.247$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.140 W/kg

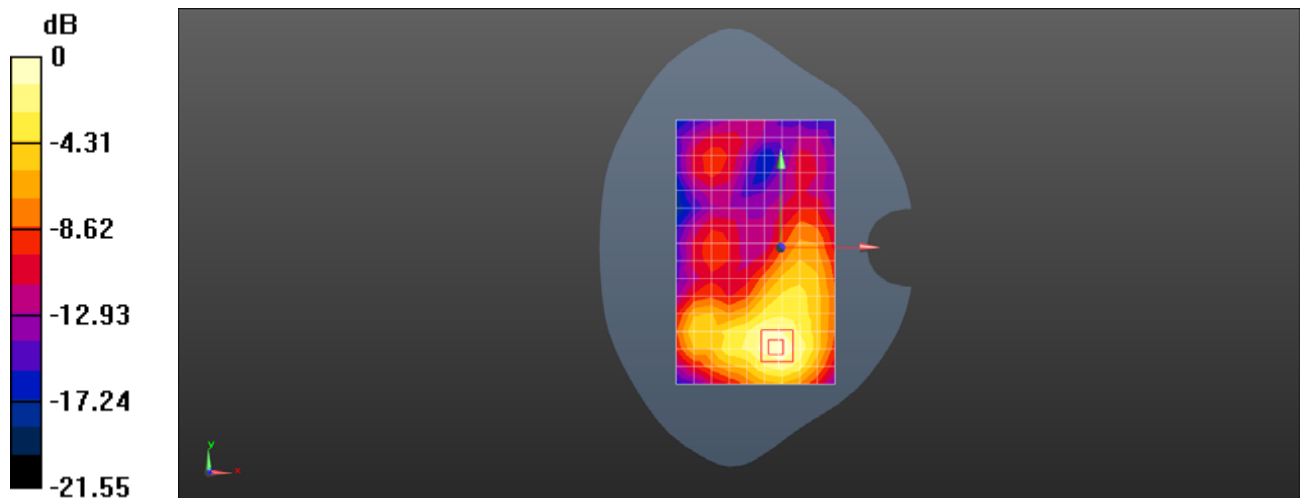
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.364 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.185 W/kg

SAR(1 g) = 0.102 W/kg; SAR(10 g) = 0.055 W/kg

Maximum value of SAR (measured) = 0.144 W/kg



0 dB = 0.144 W/kg = -8.42 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 41 20MHz QPSK PCC 1RB0 Offset 40240CH SCC 40438CH
0RB0 Bottom side 10mm Ant1**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2555 MHz; Duty Cycle:
1:1.57906

Medium: MSL 2600; Medium parameters used: $f = 2555$ MHz; $\sigma = 2.1$ S/m; $\epsilon_r = 52.33$; $\rho = 1000$

kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x11x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.532 W/kg

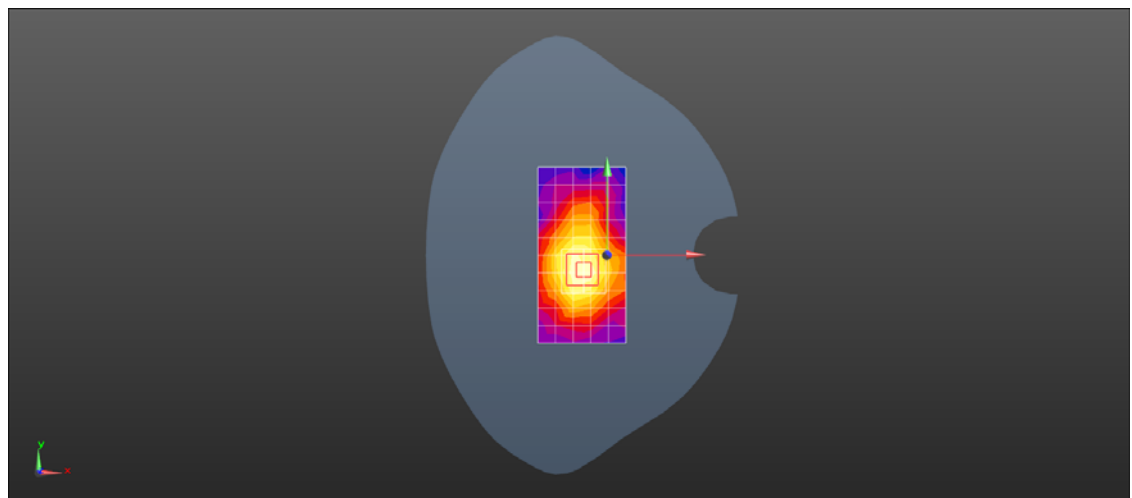
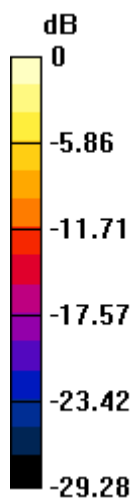
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm,
 $dz=5$ mm

Reference Value = 14.55 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.823 W/kg

SAR(1 g) = 0.378 W/kg; SAR(10 g) = 0.184 W/kg

Maximum value of SAR (measured) = 0.584 W/kg



0 dB = 0.584 W/kg = -2.34 dBW/kg

Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 41 20MHz QPSK PCC 1RB0 Offset 40240CH SCC 40438CH
0RB0 Right cheek Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2555 MHz; Duty Cycle:
1:1.57906

Medium: HSL2600; Medium parameters used: $f = 2555$ MHz; $\sigma = 1.971$ S/m; $\epsilon_r = 37.63$; $\rho = 1000$

kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.52, 7.52, 7.52); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM1; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.452 W/kg

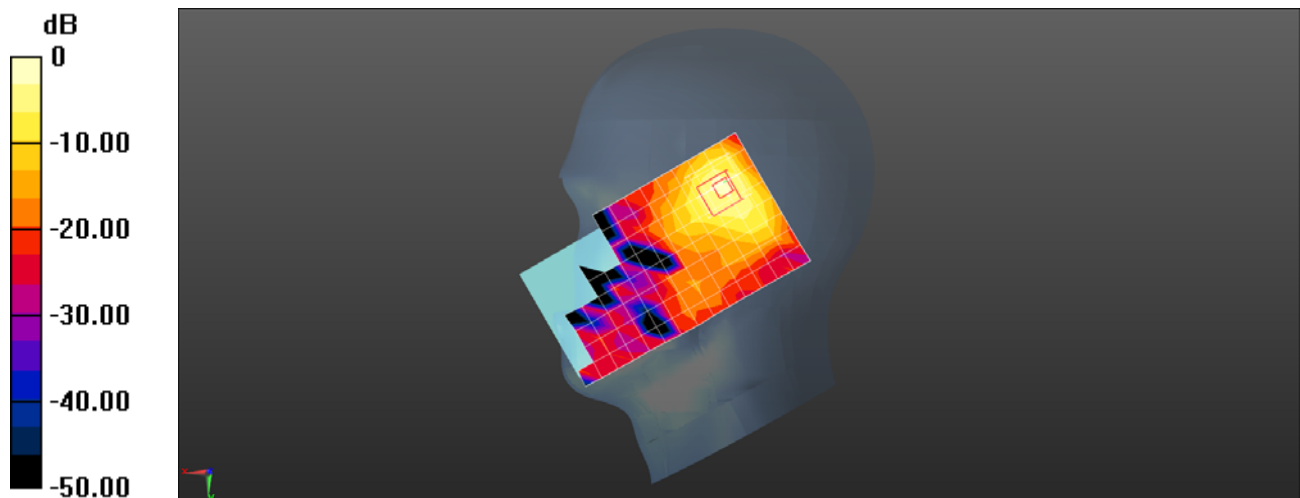
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm,
 $dz=5$ mm

Reference Value = 6.881 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.695 W/kg

SAR(1 g) = 0.273 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.439 W/kg



Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 41 20MHz QPSK PCC 1RB0 Offset 40591CH SCC 40789CH
0RB0 Back side 15mm Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B15002269

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2590.1 MHz; Duty Cycle:
1:1.57906

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2590.1$ MHz; $\sigma = 2.149$ S/m; $\epsilon_r =$
52.247; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.210 W/kg

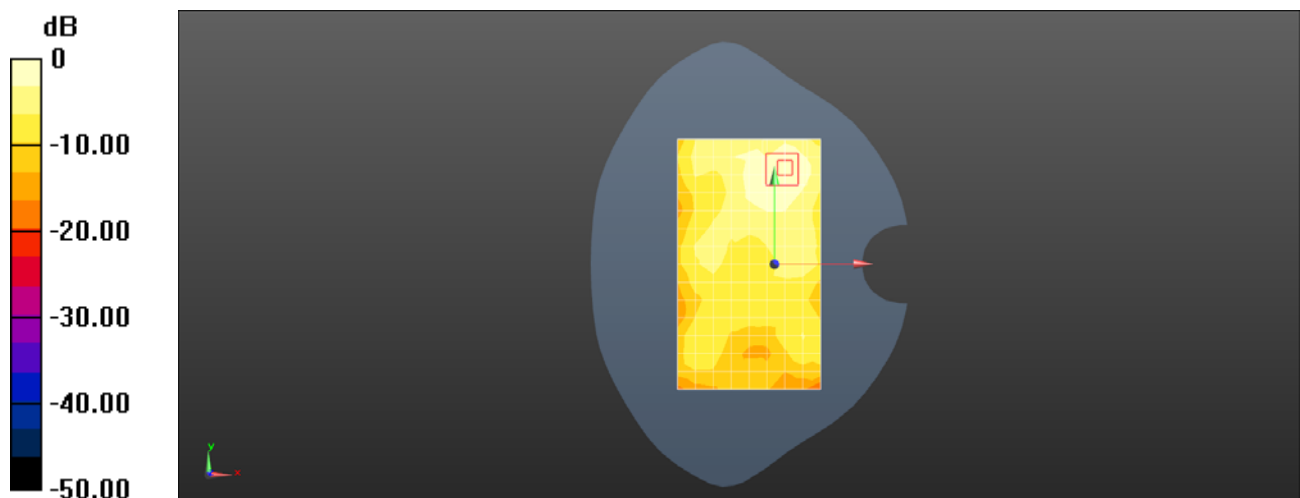
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm,
 $dz=5$ mm

Reference Value = 3.250 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.287 W/kg

SAR(1 g) = 0.157 W/kg; SAR(10 g) = 0.081 W/kg

Maximum value of SAR (measured) = 0.222 W/kg



Test Laboratory: SGS-SAR Lab

**ALP-L29 LTE Band 41 20MHz QPSK PCC 1RB0 Offset 40591CH SCC 40789CH
0RB0 Front side 10mm Ant2**

DUT: ALP-L29; Type: Smart Phone; Serial: QMU7N17B16000683

Communication System: UID 0, LTE-TDD BW 20MHz (0); Frequency: 2590.1 MHz; Duty Cycle:
1:1.57906

Medium: MSL 2600; Medium parameters used (interpolated): $f = 2590.1$ MHz; $\sigma = 2.149$ S/m; $\epsilon_r =$
52.247; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3962; ConvF(7.61, 7.61, 7.61); Calibrated: 2018-01-11;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE4 Sn1374; Calibrated: 2017-08-31
- Phantom: SAM2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x15x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.220 W/kg

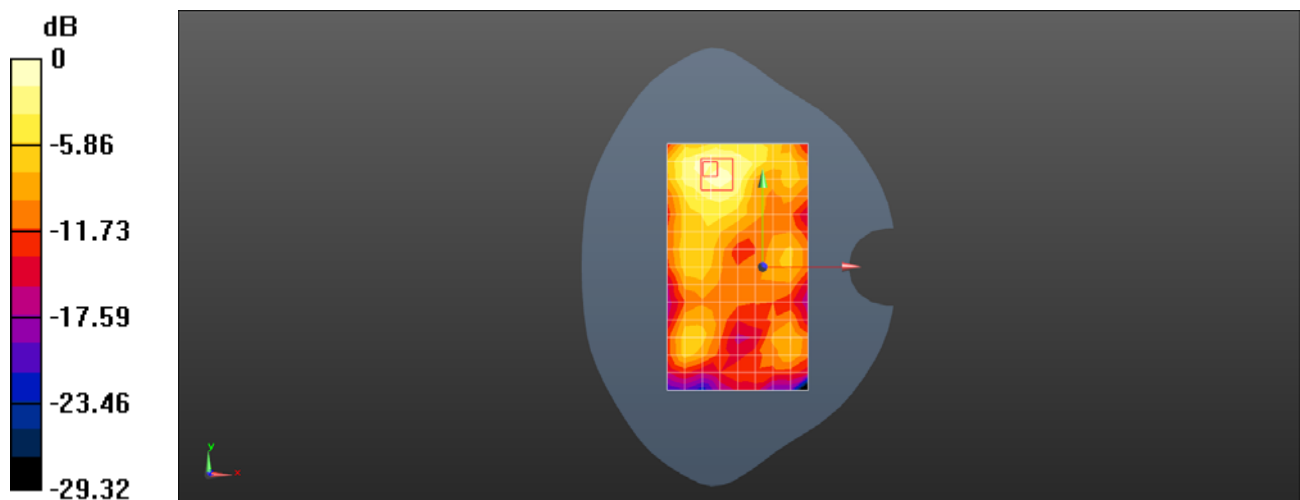
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm,
 $dz=5$ mm

Reference Value = 2.265 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.344 W/kg

SAR(1 g) = 0.178 W/kg; SAR(10 g) = 0.088 W/kg

Maximum value of SAR (measured) = 0.267 W/kg



0 dB = 0.267 W/kg = -5.73 dBW/kg