



Appendix B

Detailed Test Results

1. GSM
GSM850 for Head & Body
GSM1900 for Head & Body
2. WCDMA
WCDMA Band II for Head & Body
WCDMA Band IV for Head & Body
WCDMA Band V for Head & Body
3. LTE
LTE Band 2 for Head & Body
LTE Band 5 for Head & Body
LTE Band 7 for Head & Body
LTE Band 12 for Head & Body
LTE Band 13 for Head & Body
LTE Band 28 for Head & Body
LTE Band 66 for Head & Body
4. WIFI & BT
WIFI 2.4GHz for Head & Body

Test Laboratory: SGS-SAR Lab

5048A GSM850 190CH Right cheek with Battery 2

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: Z5LFLZ6L5PAIOFCM

Communication System: UID 0, GSM Only Communication System (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 42.263$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.04, 9.04, 9.04); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 0.236 W/kg

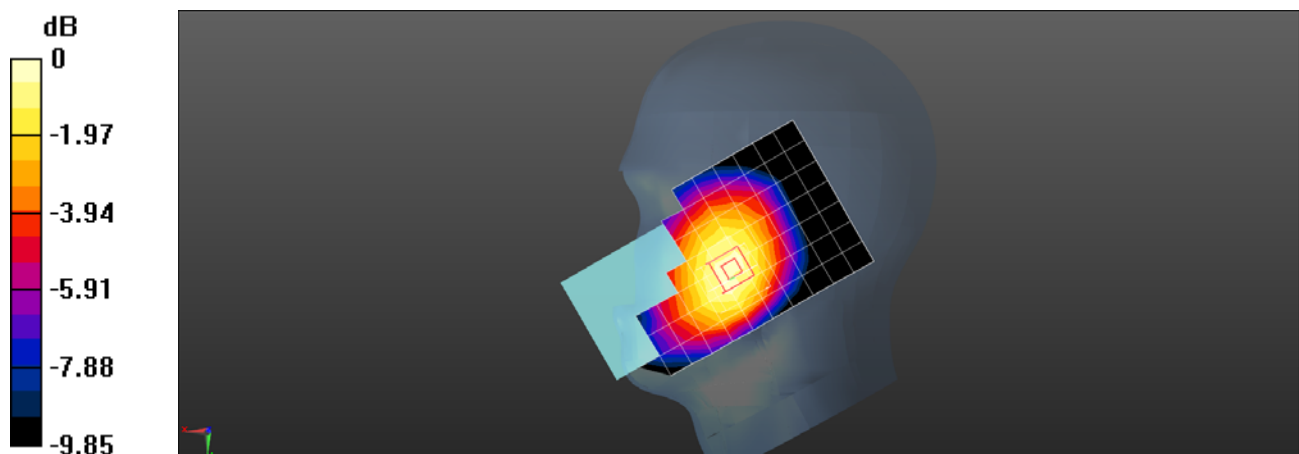
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.265 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.287 W/kg

SAR(1 g) = 0.204 W/kg; SAR(10 g) = 0.155 W/kg

Maximum value of SAR (measured) = 0.253 W/kg



0 dB = 0.253 W/kg = -5.97 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A GSM850 190CH Back side 15mm with Battery 2

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: Z5LFLZ6L5PAIOFCM

Communication System: UID 0, GSM Only Communication System (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 42.263$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.04, 9.04, 9.04); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- 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) = 0.291 W/kg

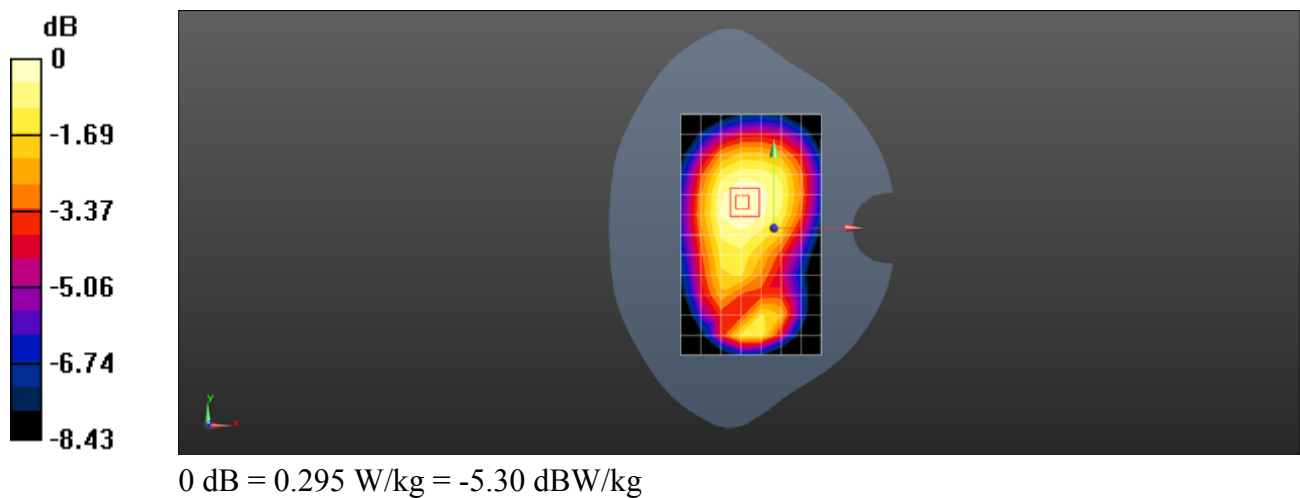
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 14.88 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.331 W/kg

SAR(1 g) = 0.235 W/kg; SAR(10 g) = 0.176 W/kg

Maximum value of SAR (measured) = 0.295 W/kg



Test Laboratory: SGS-SAR Lab

5048A GSM850 GPRS 2TS 190CH Back side 10mm with Battery 2

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: Z5LFLZ6L5PAIOFCM

Communication System: UID 0, GPRS/EGPRS Mode(2up) Communication System (0); Frequency: 836.6 MHz; Duty Cycle: 1:4.14954

Medium: HSL835; Medium parameters used: $f = 837$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 42.263$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.04, 9.04, 9.04); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- 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) = 0.978 W/kg

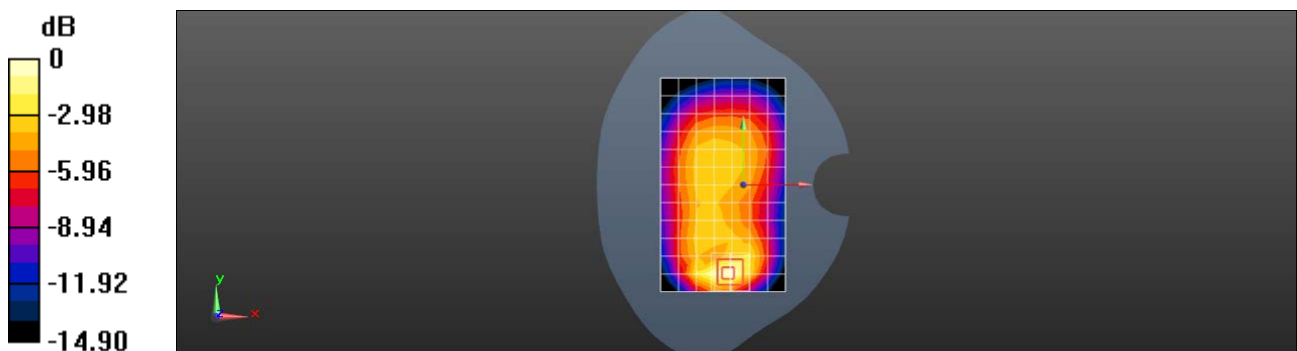
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 19.56 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.612 W/kg; SAR(10 g) = 0.333 W/kg

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



0 dB = 1.00 W/kg = 0.00 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A GSM 1900 GSM 661CH Right cheek

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.51, 8.51, 8.51); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Cheek/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.102 W/kg

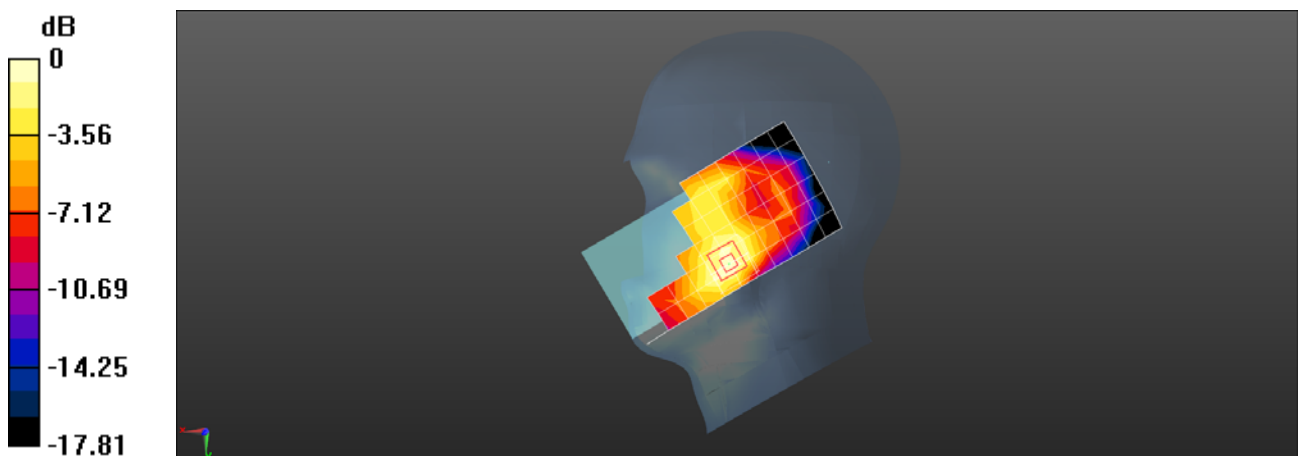
Configuration/Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.056 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.117 W/kg

SAR(1 g) = 0.079 W/kg; SAR(10 g) = 0.051 W/kg

Maximum value of SAR (measured) = 0.104 W/kg



0 dB = 0.104 W/kg = -9.83 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A GSM 1900 GSM 661CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.51, 8.51, 8.51); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.336 W/kg

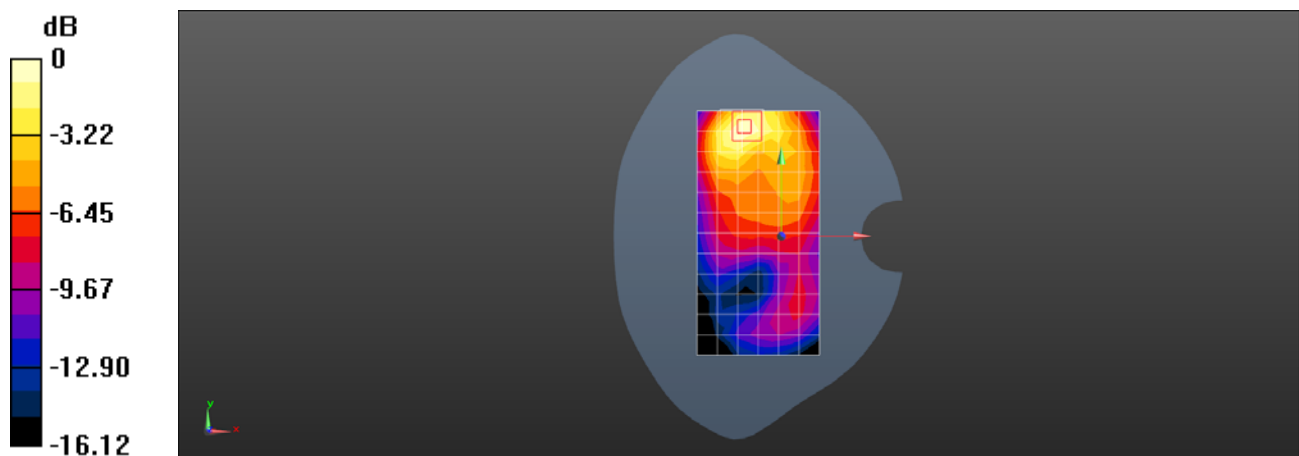
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.919 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.397 W/kg

SAR(1 g) = 0.237 W/kg; SAR(10 g) = 0.138 W/kg

Maximum value of SAR (measured) = 0.333 W/kg



0 dB = 0.333 W/kg = -4.78 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A GSM 1900 GPRS 2TS 810CH Bottom side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: PRMBINIFZ5459PQK

Communication System: UID 0, GPRS/EGPRS Mode(2up) Communication System (0); Frequency: 1909.8 MHz; Duty Cycle: 1:4.14954

Medium: HSL1900; Medium parameters used: $f = 1910$ MHz; $\sigma = 1.381$ S/m; $\epsilon_r = 40.133$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.51, 8.51, 8.51); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x8x1): Measurement grid: $dx=15$ mm, $dy=15$ mm
Maximum value of SAR (measured) = 1.45 W/kg

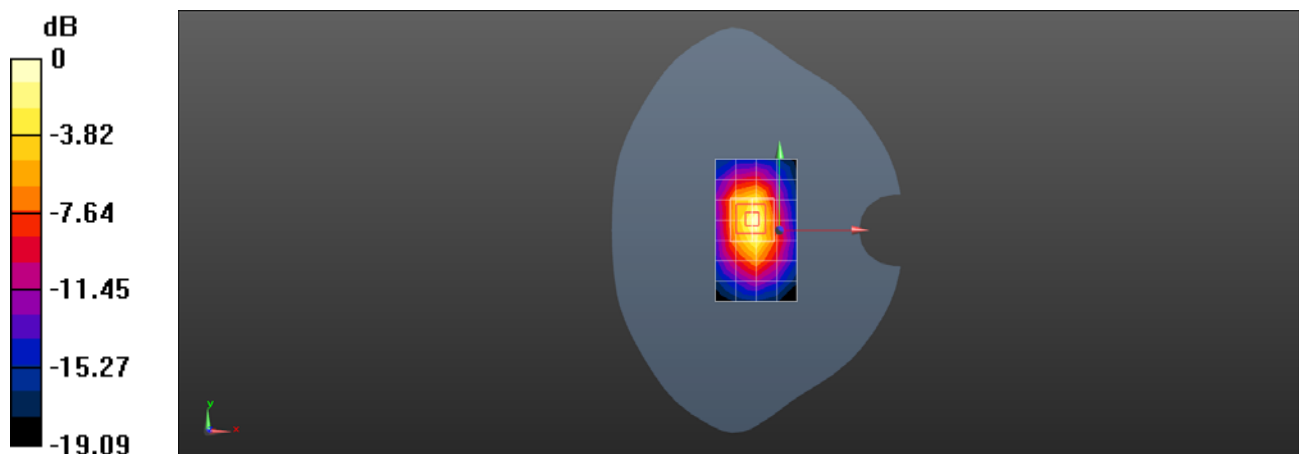
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 26.31 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.993 W/kg; SAR(10 g) = 0.509 W/kg

Maximum value of SAR (measured) = 1.53 W/kg



0 dB = 1.53 W/kg = 1.85 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A WCDMA Band II 9400CH Left tilted

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.51, 8.51, 8.51); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Tilt/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.157 W/kg

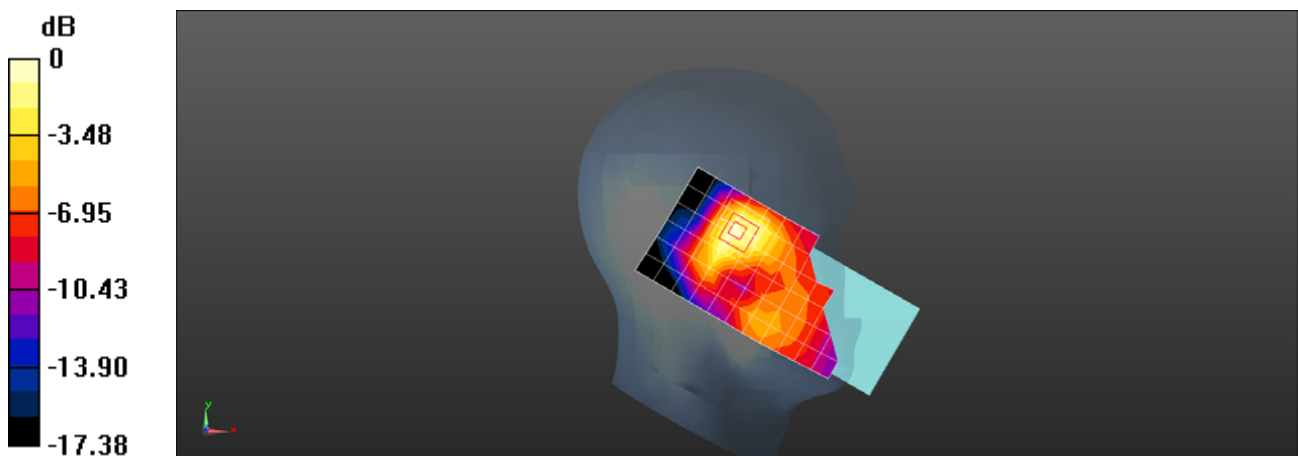
Configuration/Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.066 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.189 W/kg

SAR(1 g) = 0.130 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.169 W/kg



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

Test Laboratory: RF Technologies Ltd.

5048A WCDMA Band II 9400CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: HSL1900; Medium parameters used: $f = 1880$ MHz; $\sigma = 1.368$ S/m; $\epsilon_r = 40.206$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.51, 8.51, 8.51); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- 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) = 0.566 W/kg

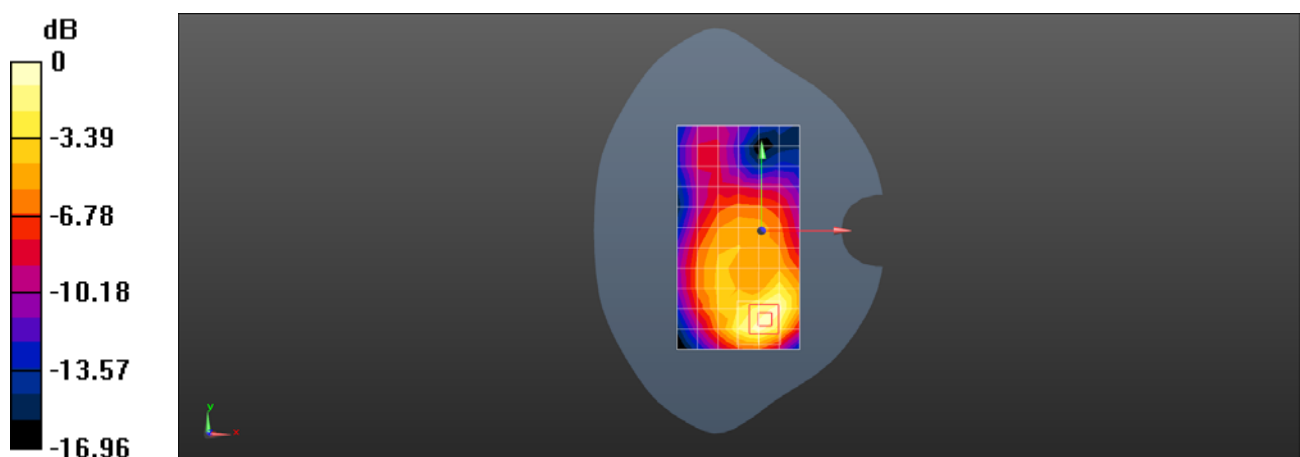
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.91 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.771 W/kg

SAR(1 g) = 0.446 W/kg; SAR(10 g) = 0.255 W/kg

Maximum value of SAR (measured) = 0.636 W/kg



0 dB = 0.636 W/kg = -1.97 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A WCDMA Band II 9538CH Bottom side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: 4P6DZTJJOJ75CMMSG

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

Medium: HSL1900; Medium parameters used: $f = 1908$ MHz; $\sigma = 1.38$ S/m; $\epsilon_r = 40.142$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.51, 8.51, 8.51); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.66 W/kg

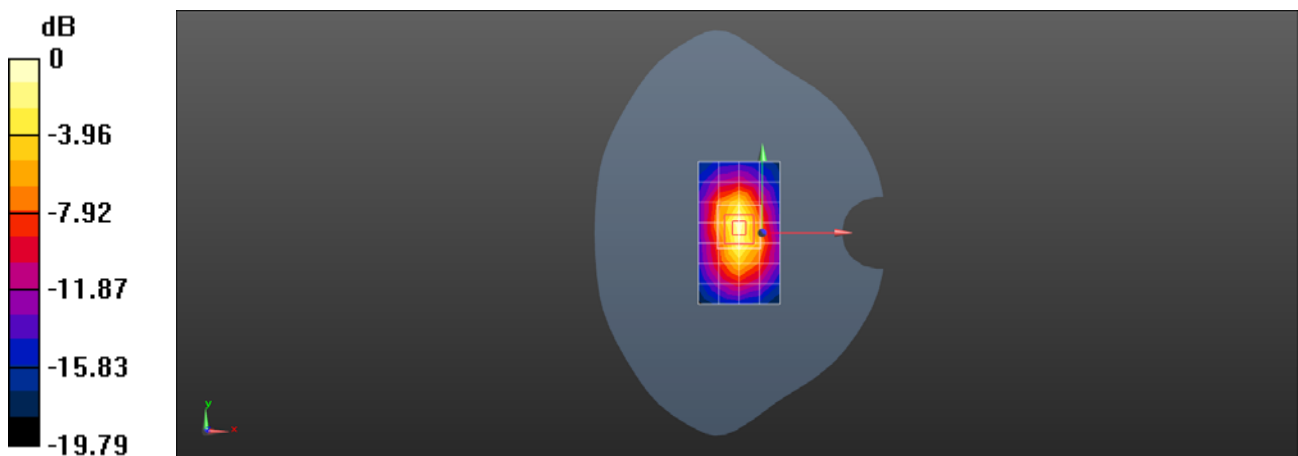
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.42 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 2.03 W/kg

SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.560 W/kg

Maximum value of SAR (measured) = 1.71 W/kg



0 dB = 1.71 W/kg = 2.33 dBW/kg

Test Laboratory: RF Technologies Ltd.

5048A WCDMA Band IV 1412CH Right Cheek

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, WCDMA Band IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: Head 1750 MHz; Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.344$ S/m;
 $\epsilon_r = 39.537$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.92, 8.92, 8.92); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 4; Type: SAM; Serial: 1640
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Cheek/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.175 W/kg

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

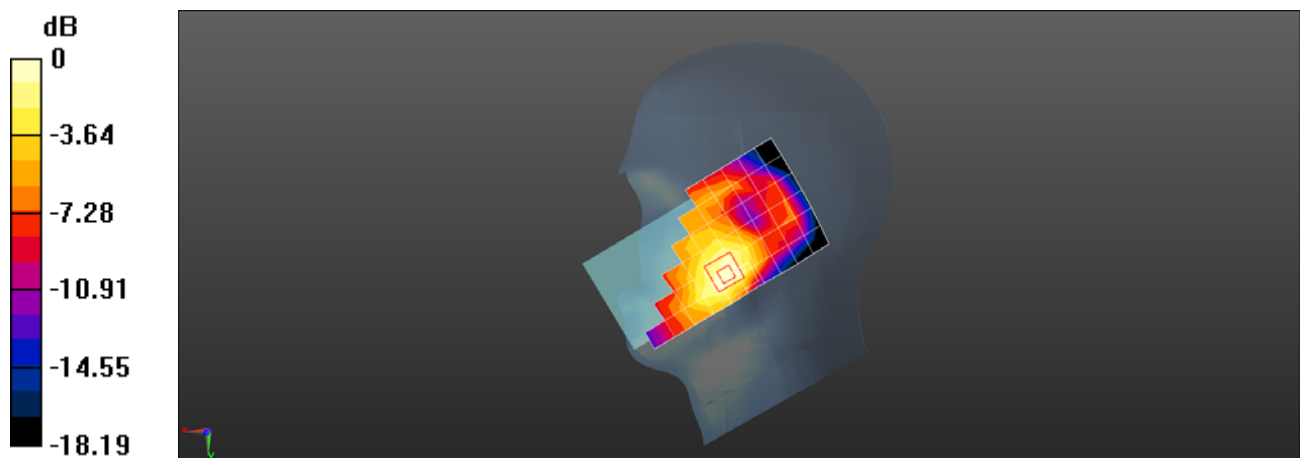
Reference Value = 3.407 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.214 W/kg

SAR(1 g) = 0.148 W/kg; SAR(10 g) = 0.098 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

Test Laboratory: RF Technologies Ltd.

5048A WCDMA Band IV 1412CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, WCDMA Band IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: Head 1750 MHz; Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.344$ S/m;
 $\epsilon_r = 39.537$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.92, 8.92, 8.92); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 4; Type: SAM; Serial: 1640
- 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) = 0.509 W/kg

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

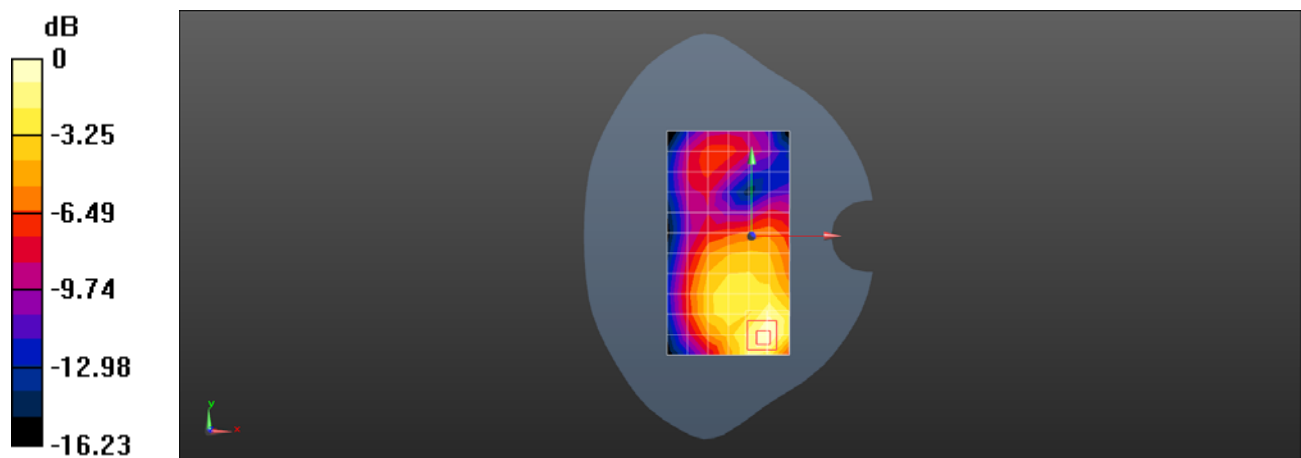
Reference Value = 8.310 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.563 W/kg

SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.175 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.468 W/kg



Test Laboratory: RF Technologies Ltd.

5048A WCDMA Band IV 1412CH Back side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, WCDMA Band IV; Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: Head 1750 MHz; Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.344$ S/m;
 $\epsilon_r = 39.537$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.92, 8.92, 8.92); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 4; Type: SAM; Serial: 1640
- 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) = 1.06 W/kg

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

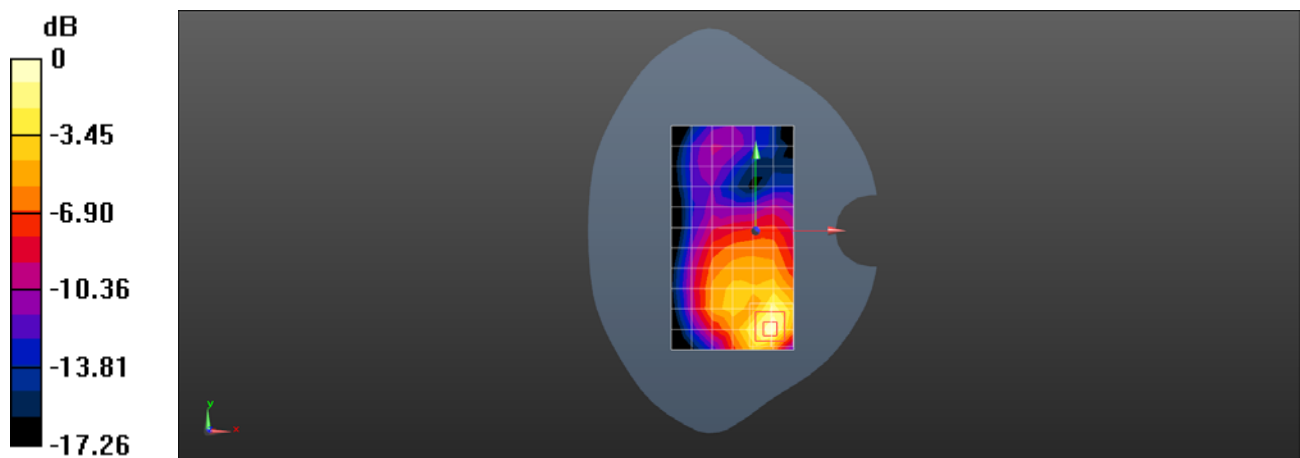
Reference Value = 10.32 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.734 W/kg; SAR(10 g) = 0.399 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.09 W/kg



Test Laboratory: SGS-SAR Lab

5048A WCDMA Band V 4182CH Right tilted

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

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

Medium: HSL835; Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 42.266$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.04, 9.04, 9.04); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.323 W/kg

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

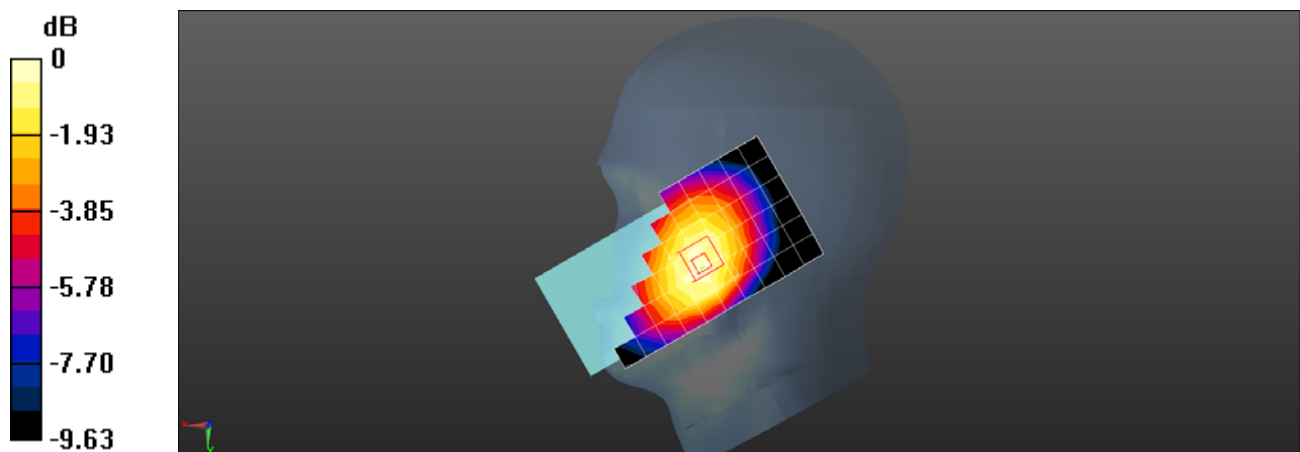
Reference Value = 5.847 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.363 W/kg

SAR(1 g) = 0.269 W/kg; SAR(10 g) = 0.204 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.328 W/kg



0 dB = 0.328 W/kg = -4.84 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A WCDMA Band V 4182CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

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

Medium: HSL835; Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 42.266$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.04, 9.04, 9.04); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.357 W/kg

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

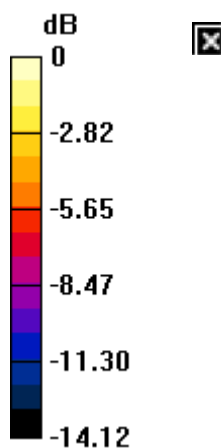
Reference Value = 14.85 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.443 W/kg

SAR(1 g) = 0.244 W/kg; SAR(10 g) = 0.142 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.362 W/kg



0 dB = 0.362 W/kg = -4.41 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A WCDMA Band V 4182CH Back side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

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

Medium: HSL835; Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.944$ S/m; $\epsilon_r = 42.266$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.04, 9.04, 9.04); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.710 W/kg

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

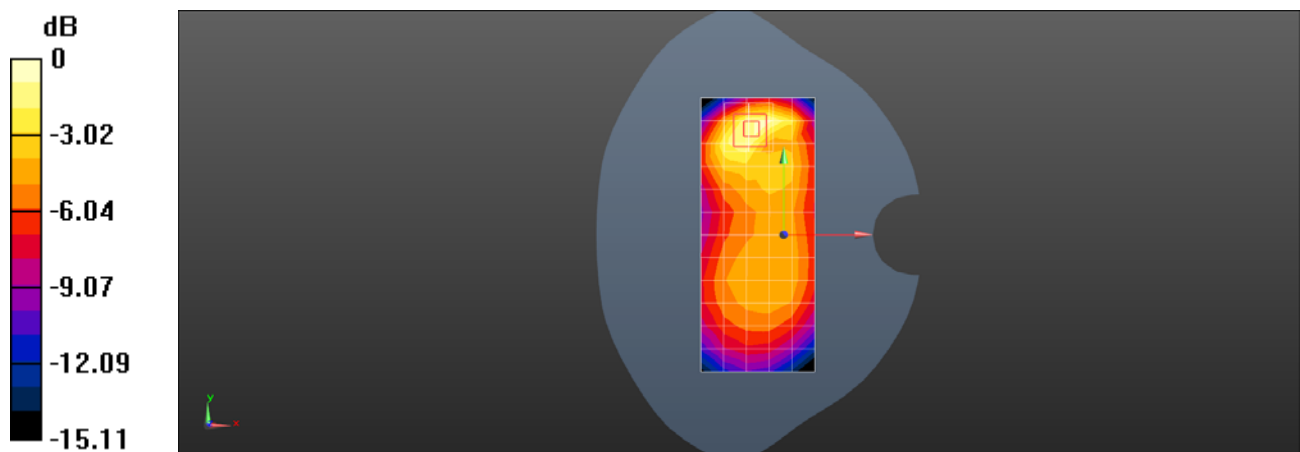
Reference Value = 15.65 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.531 W/kg; SAR(10 g) = 0.296 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.833 W/kg



Test Laboratory: SGS-SAR Lab

5048A LTE Band 2 20M QPSK 1RB50 19100CH Right cheek

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHIC179HI8LYHSK

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

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.376$ S/m; $\epsilon_r = 40.173$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.51, 8.51, 8.51); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

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

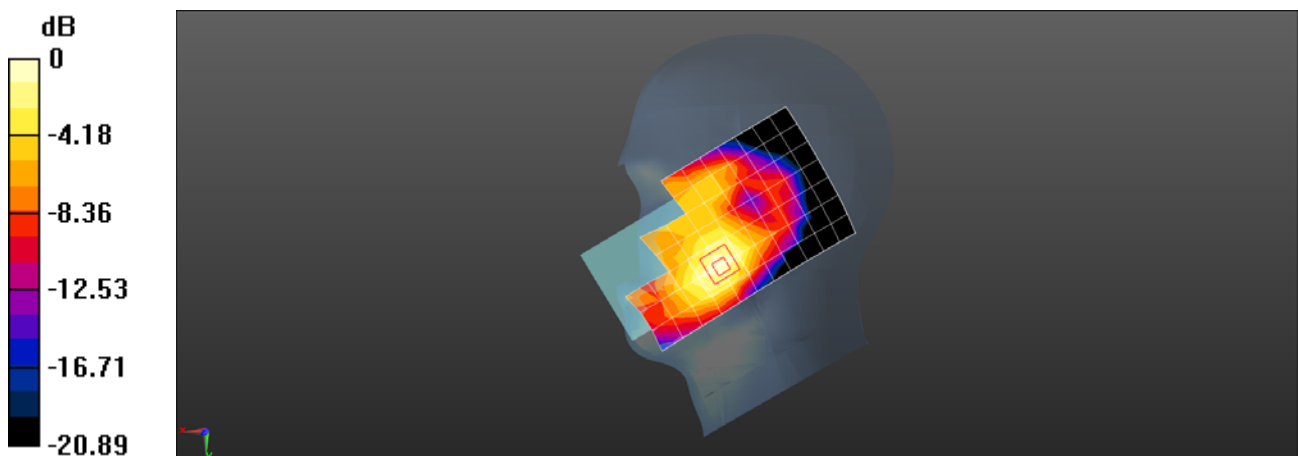
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.438 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.224 W/kg

SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.088 W/kg

Maximum value of SAR (measured) = 0.189 W/kg



0 dB = 0.189 W/kg = -7.24 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 2 20M QPSK 1RB50 19100CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: 4P6DZTJJ0J75CM5G

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

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.376$ S/m; $\epsilon_r = 40.173$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.51, 8.51, 8.51); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.593 W/kg

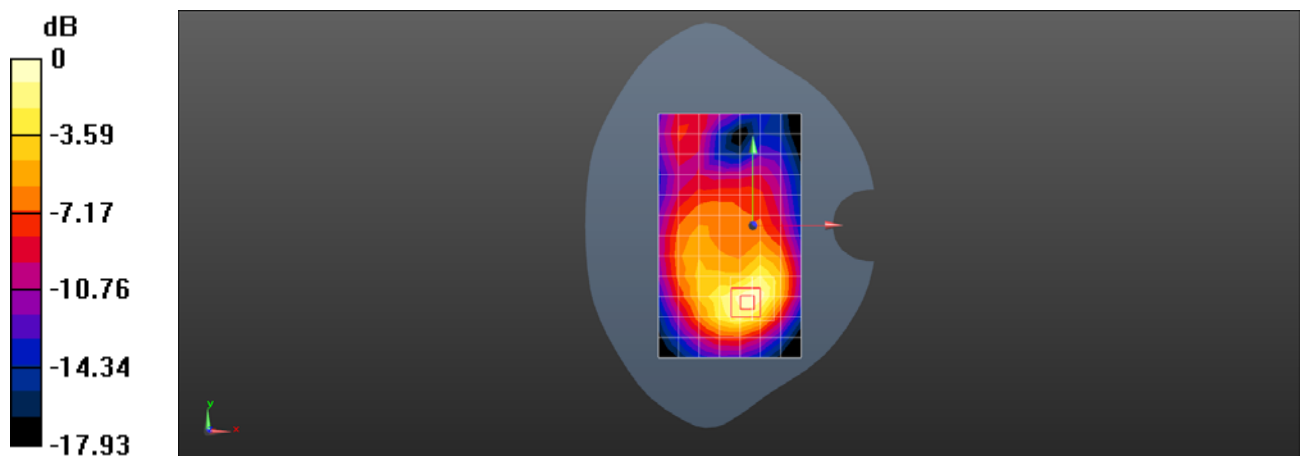
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.758 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.772 W/kg

SAR(1 g) = 0.452 W/kg; SAR(10 g) = 0.258 W/kg

Maximum value of SAR (measured) = 0.655 W/kg



Test Laboratory: SGS-SAR Lab

5048A LTE Band 2 20M QPSK 1RB50 19100CH Bottom side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: 4P6DZTJJOJ75CMMSG

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

Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.376$ S/m; $\epsilon_r = 40.173$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.51, 8.51, 8.51); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 3; Type: SAM; Serial: 1912
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.52 W/kg

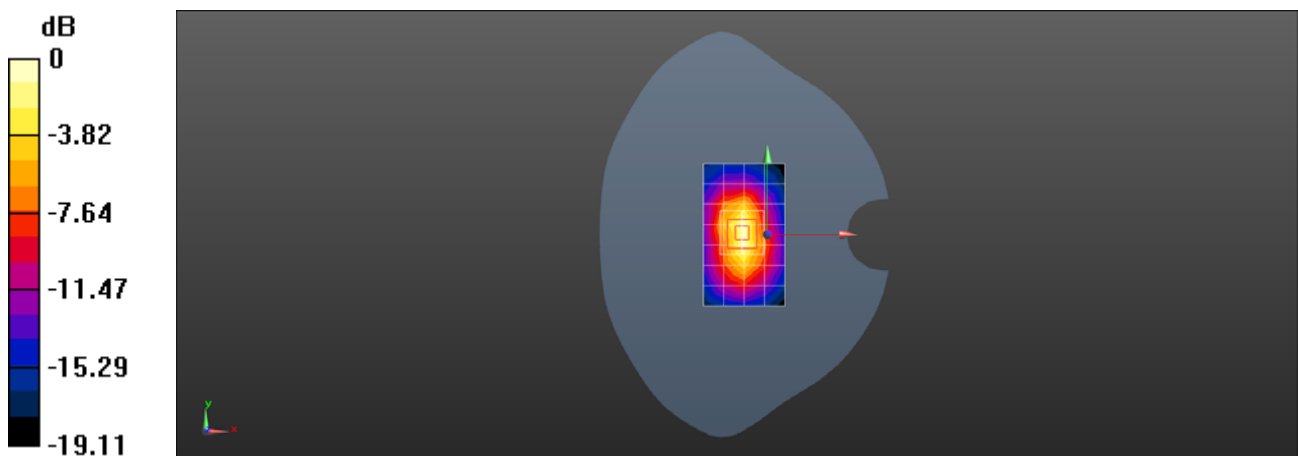
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 29.99 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 2.09 W/kg

SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.579 W/kg

Maximum value of SAR (measured) = 1.77 W/kg



0 dB = 1.77 W/kg = 2.48 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 5 10MHz QPSK 1RB0 20450CH Right cheek

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: PRMBINIFZ5459PQK

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

Medium: HSL835; Medium parameters used: $f = 829$ MHz; $\sigma = 0.941$ S/m; $\epsilon_r = 42.308$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.04, 9.04, 9.04); Calibrated: 2019-03-25;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.218 W/kg

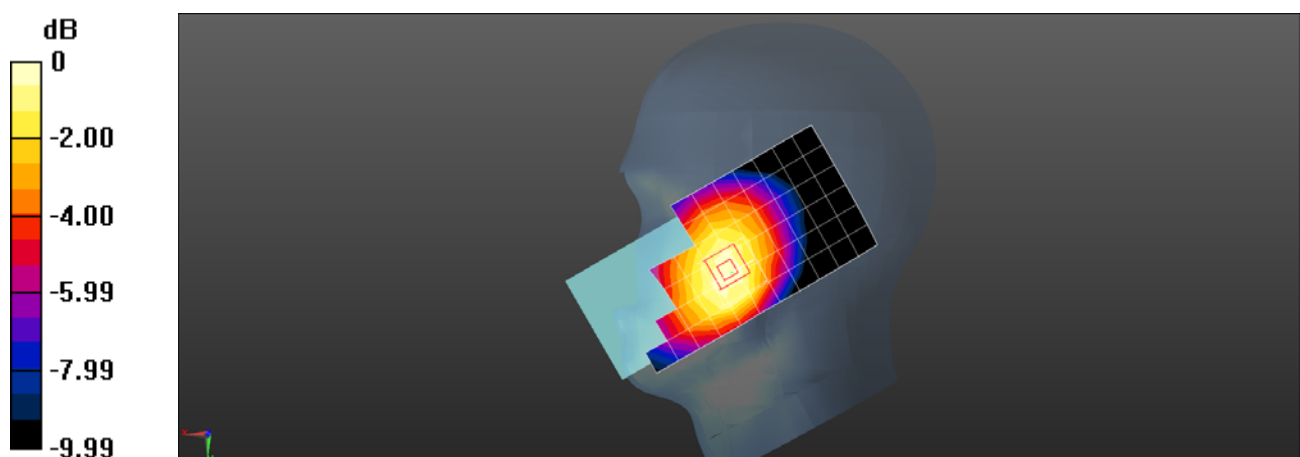
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.337 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.252 W/kg

SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.140 W/kg

Maximum value of SAR (measured) = 0.227 W/kg



0 dB = 0.227 W/kg = -6.44 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 5 10M QPSK 1RB0 20450CH Back side 15mm with Battery 2

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: Z5LFLZ6L5PAIOFCM

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

Medium: HSL835; Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.941 \text{ S/m}$; $\epsilon_r = 42.308$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.04, 9.04, 9.04); Calibrated: 2019-03-25;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.210 W/kg

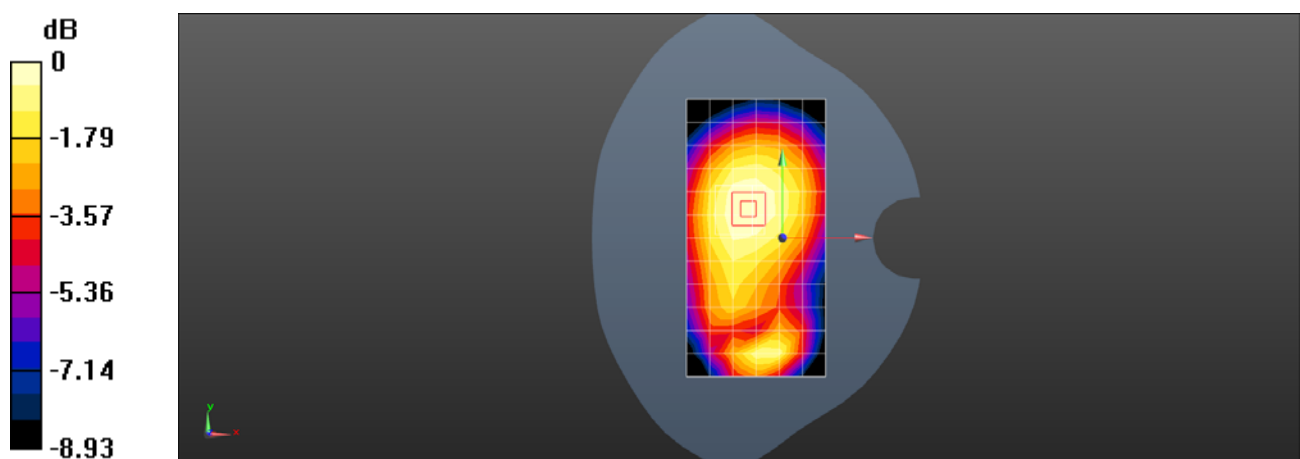
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.90 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.241 W/kg

SAR(1 g) = 0.175 W/kg ; SAR(10 g) = 0.132 W/kg

Maximum value of SAR (measured) = 0.217 W/kg



$0 \text{ dB} = 0.217 \text{ W/kg} = -6.64 \text{ dBW/kg}$

Test Laboratory: SGS-SAR Lab

5048A LTE Band 5 10M QPSK 1RB0 20450CH Back side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: PRMBINIFZ5459PQK

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

Medium: HSL835; Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.941 \text{ S/m}$; $\epsilon_r = 42.308$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.04, 9.04, 9.04); Calibrated: 2019-03-25;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.570 W/kg

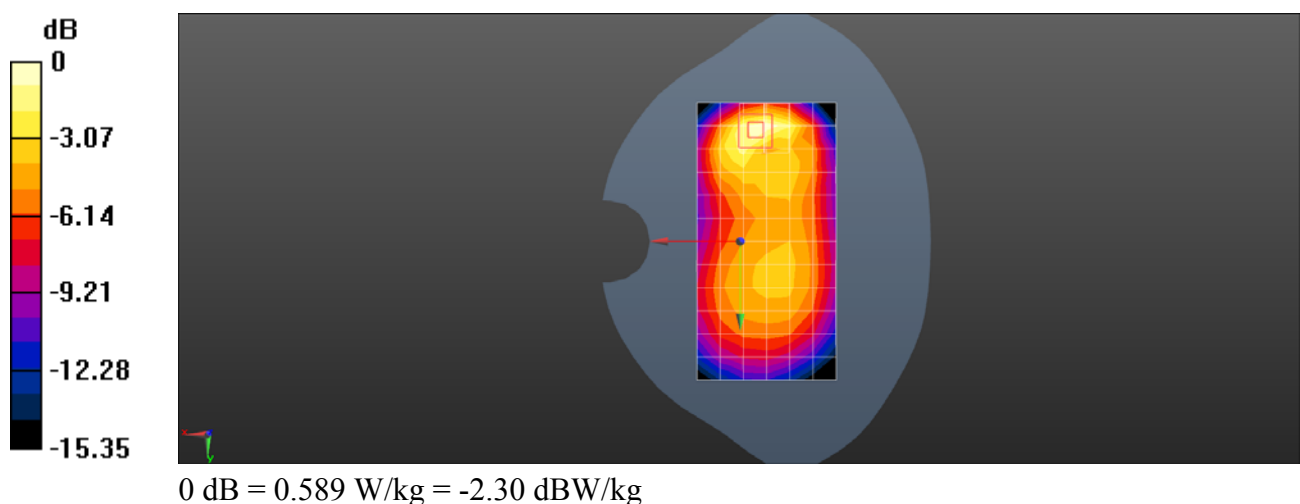
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.97 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.747 W/kg

SAR(1 g) = 0.374 W/kg ; SAR(10 g) = 0.206 W/kg

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



Test Laboratory: SGS-SAR Lab

5048A LTE Band 7 20M QPSK 1RB50 21350CH Right cheek with Battery 2

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: Z5LFLZ6L5PAIOFCM

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.947$ S/m; $\epsilon_r = 39.55$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.78, 6.78, 6.78); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (10x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.147 W/kg

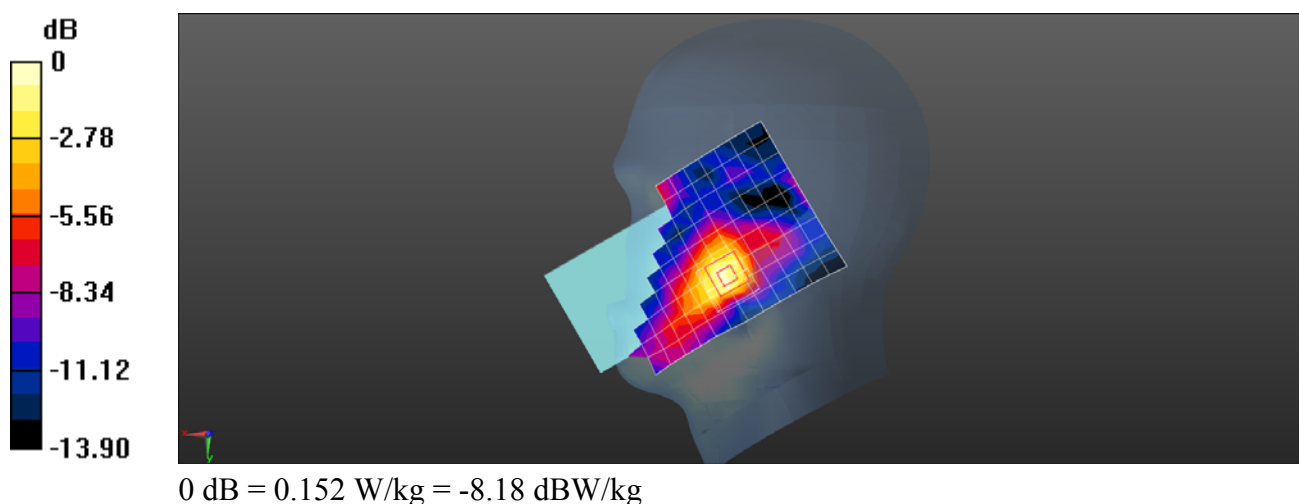
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.022 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.191 W/kg

SAR(1 g) = 0.097 W/kg; SAR(10 g) = 0.050 W/kg

Maximum value of SAR (measured) = 0.152 W/kg



Test Laboratory: SGS-SAR Lab

5048A LTE Band 7 20M QPSK 1RB0 20850CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: PRMBINIFZ5459PQK

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

Medium: HSL2600; Medium parameters used: $f = 2510$ MHz; $\sigma = 1.891$ S/m; $\epsilon_r = 39.756$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.78, 6.78, 6.78); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (10x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 1.38 W/kg

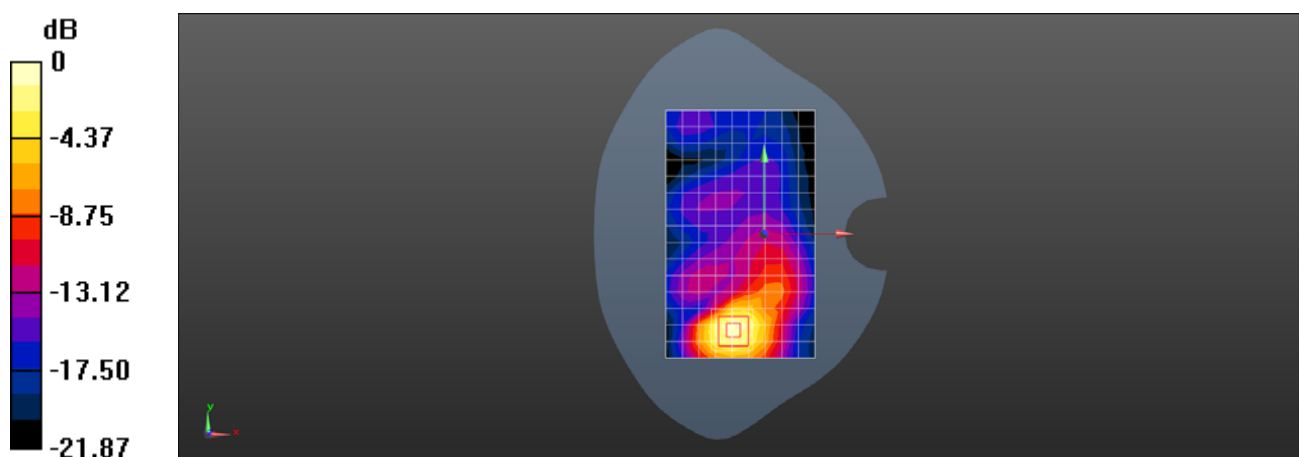
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 4.727 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.73 W/kg

SAR(1 g) = 0.903 W/kg; SAR(10 g) = 0.451 W/kg

Maximum value of SAR (measured) = 1.41 W/kg



0 dB = 1.41 W/kg = 1.49 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 7 20M QPSK 1RB50 20850CH Back side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: BYCQ45O7YPDMLJVW

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

Medium: HSL2600; Medium parameters used: $f = 2510$ MHz; $\sigma = 1.891$ S/m; $\epsilon_r = 39.756$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.78, 6.78, 6.78); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 1.95 W/kg

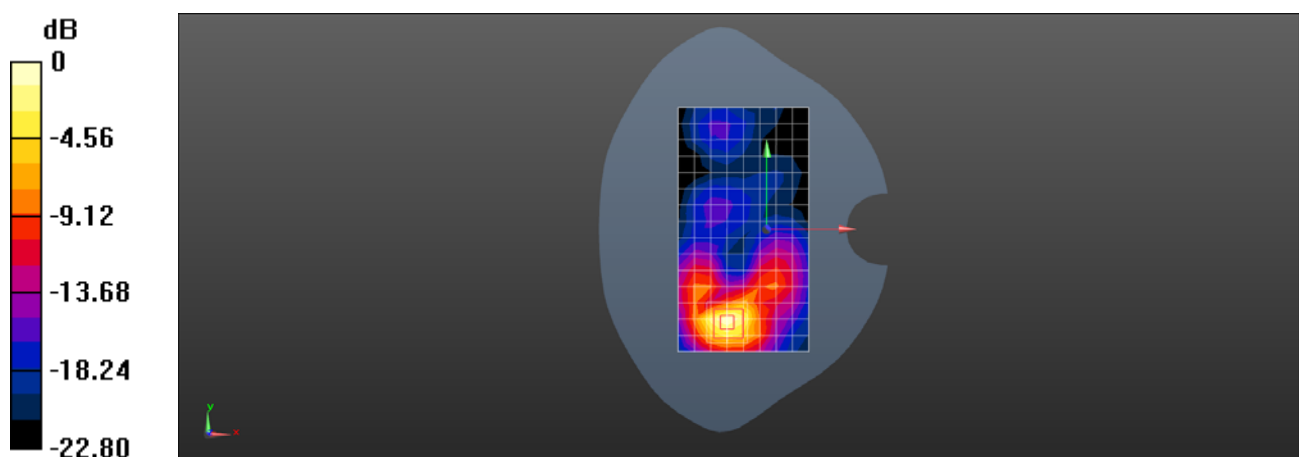
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.290 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 2.43 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.509 W/kg

Maximum value of SAR (measured) = 1.94 W/kg



0 dB = 1.94 W/kg = 2.88 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 7 20M QPSK 1RB99 21100CH Back side 0mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHIC179HI8LYHSK

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium: HSL2600; Medium parameters used: $f = 2560$ MHz; $\sigma = 1.947$ S/m; $\epsilon_r = 39.55$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.78, 6.78, 6.78); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 15.8 W/kg

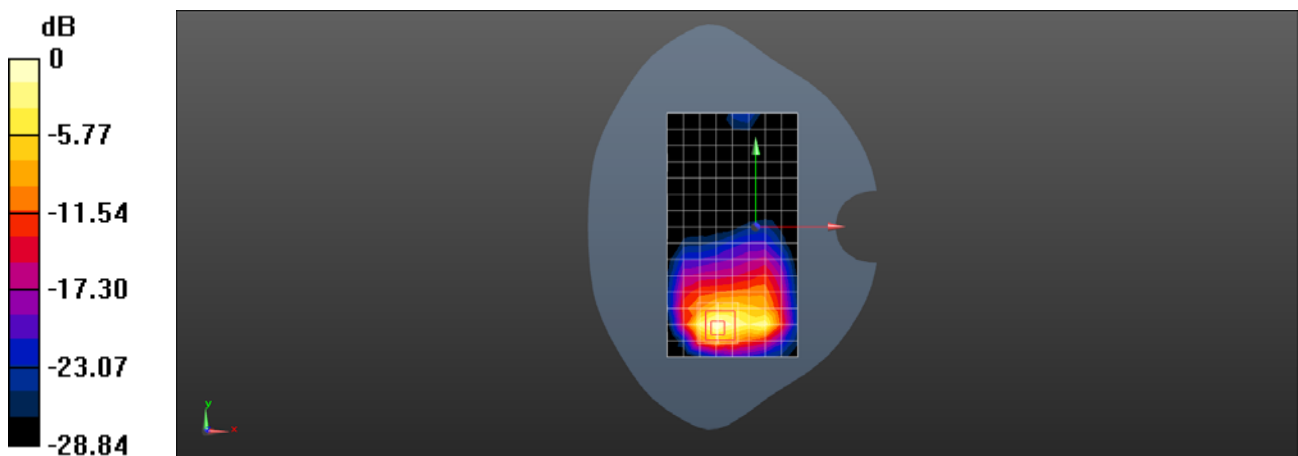
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.278 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 23.6 W/kg

SAR(1 g) = 7.85 W/kg; SAR(10 g) = 2.93 W/kg

Maximum value of SAR (measured) = 15.1 W/kg



0 dB = 15.1 W/kg = 11.79 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 12 10MHz QPSK 1RB25 23130CH Right cheek

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, LTE-FDD BW 10MHZ (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.859 \text{ S/m}$; $\epsilon_r = 42.882$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.41, 9.41, 9.41); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.109 W/kg

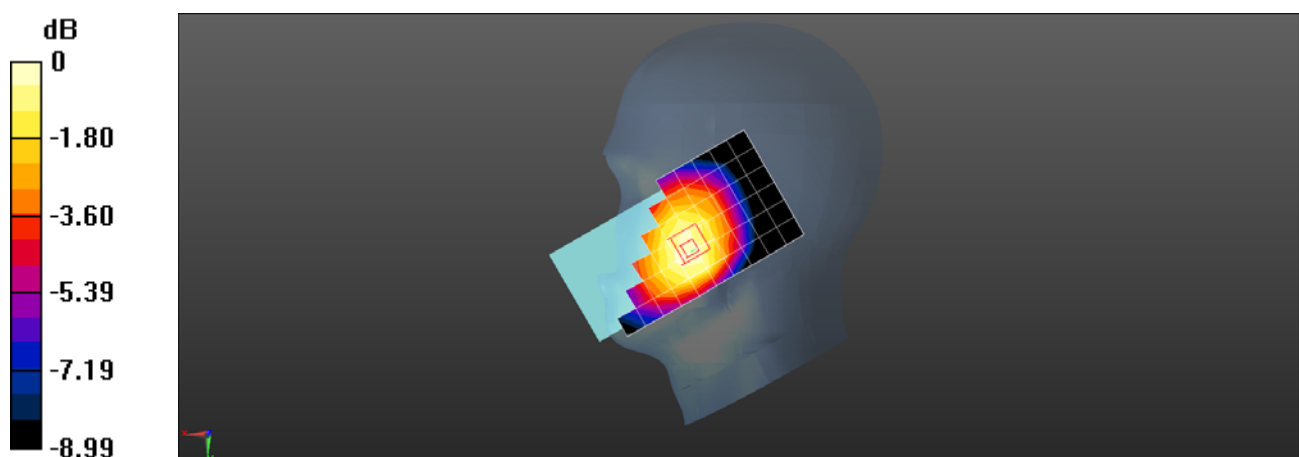
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.646 V/m ; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.123 W/kg

SAR(1 g) = 0.093 W/kg ; SAR(10 g) = 0.073 W/kg

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



$0 \text{ dB} = 0.112 \text{ W/kg} = -9.51 \text{ dBW/kg}$

Test Laboratory: SGS-SAR Lab

5048A LTE Band 12 10M QPSK 1RB25 23130CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: Z5LFLZ6L5PAIOFCM

Communication System: UID 0, LTE-FDD BW 10MHZ (0); Frequency: 711 MHz;Duty Cycle: 1:1

Medium: HSL750;Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.888 \text{ S/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.41, 9.41, 9.41); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.316 W/kg

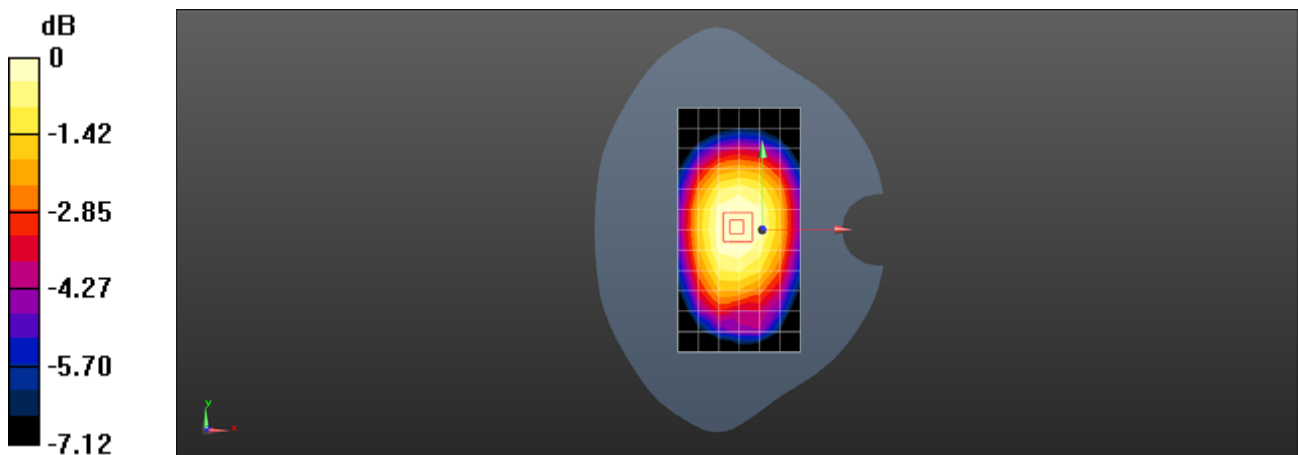
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.30 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.340 W/kg

SAR(1 g) = 0.259 W/kg ; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.309 W/kg



$0 \text{ dB} = 0.309 \text{ W/kg} = -5.10 \text{ dBW/kg}$

Test Laboratory: SGS-SAR Lab

5048A LTE Band 12 10M QPSK 1RB25 23130CH Back side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: PRMBINIFZ5459PQK

Communication System: UID 0, LTE Band 12 10MHz; Frequency: 711 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium parameters used: $f = 711$ MHz; $\sigma = 0.888$ S/m; $\epsilon_r = 42.8$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.41, 9.41, 9.41); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

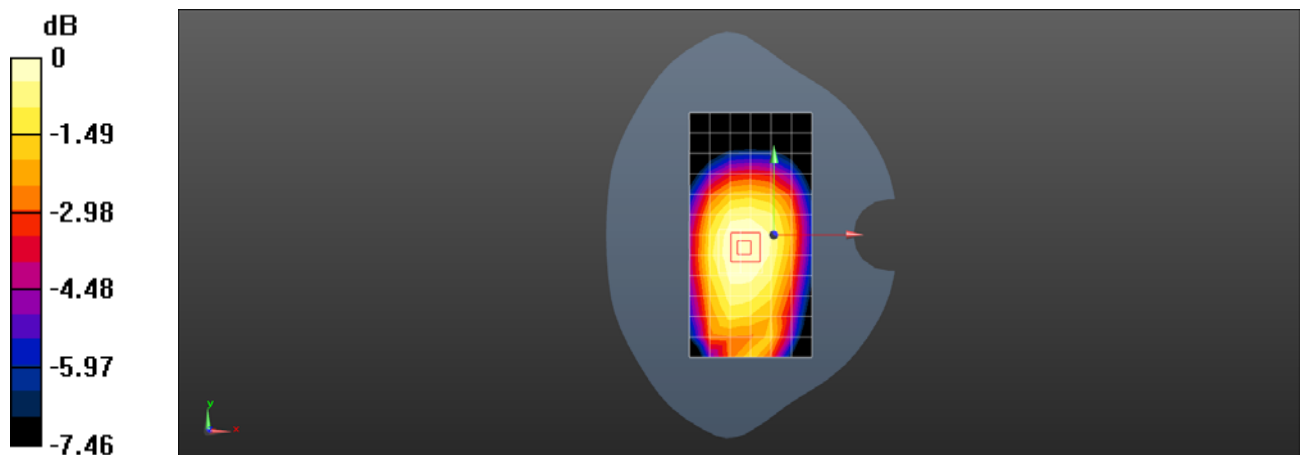
Maximum value of SAR (measured) = 0.334 W/kg

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

Reference Value = 17.72 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.364 W/kg

SAR(1 g) = 0.280 W/kg; SAR(10 g) = 0.218 W/kg



Test Laboratory: SGS-SAR Lab

5048A LTE Band 13 10M QPSK 1RB0 23230CH Right cheek

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: 4P6DZTJJ0J75CMSG

Communication System: UID 0, LTE-FDD BW 10MHZ (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.904 \text{ S/m}$; $\epsilon_r = 42.206$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.41, 9.41, 9.41); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

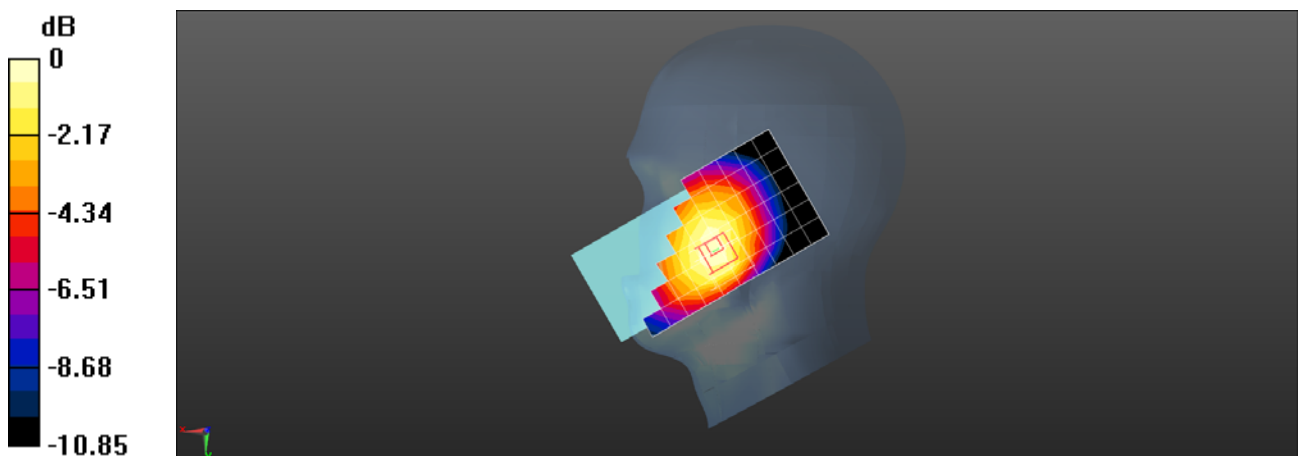
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.821 V/m ; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.246 W/kg

SAR(1 g) = 0.183 W/kg ; SAR(10 g) = 0.135 W/kg

Maximum value of SAR (measured) = 0.223 W/kg



0 dB = 0.223 W/kg = -6.52 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 13 10M QPSK 1RB0 23230CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, LTE Band 13 10MHz; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.921 \text{ S/m}$; $\epsilon_r = 42.532$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.41, 9.41, 9.41); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.329 W/kg

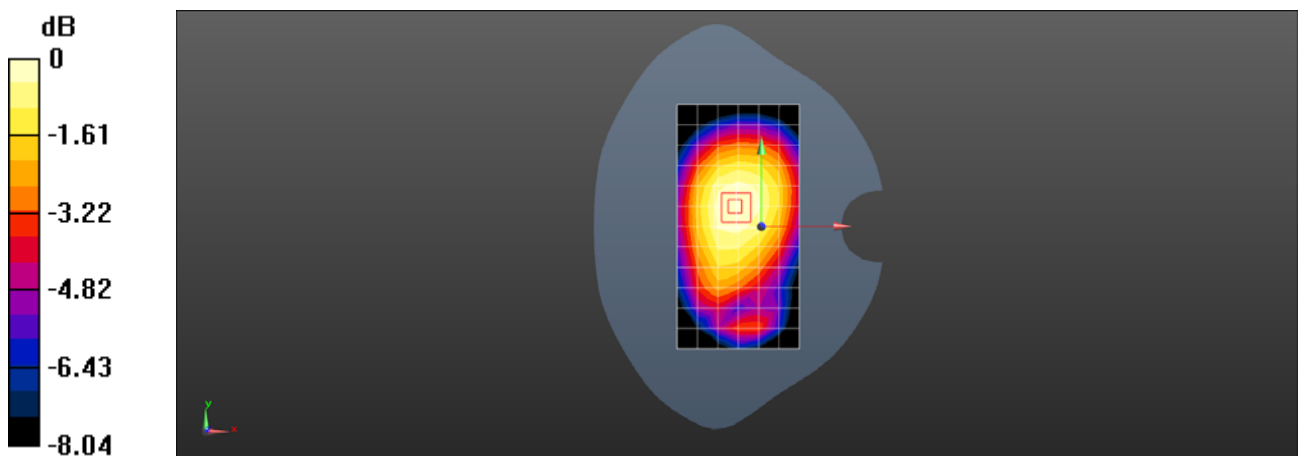
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.76 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.365 W/kg

SAR(1 g) = 0.267 W/kg ; SAR(10 g) = 0.202 W/kg

Maximum value of SAR (measured) = 0.330 W/kg



0 dB = 0.330 W/kg = -4.81 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 13 10M QPSK 1RB0 23230CH Back side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: Z5LFLZ6L5PAIOFCM

Communication System: UID 0, LTE Band 13 10MHz; Frequency: 782 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.921 \text{ S/m}$; $\epsilon_r = 42.532$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.41, 9.41, 9.41); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.384 W/kg

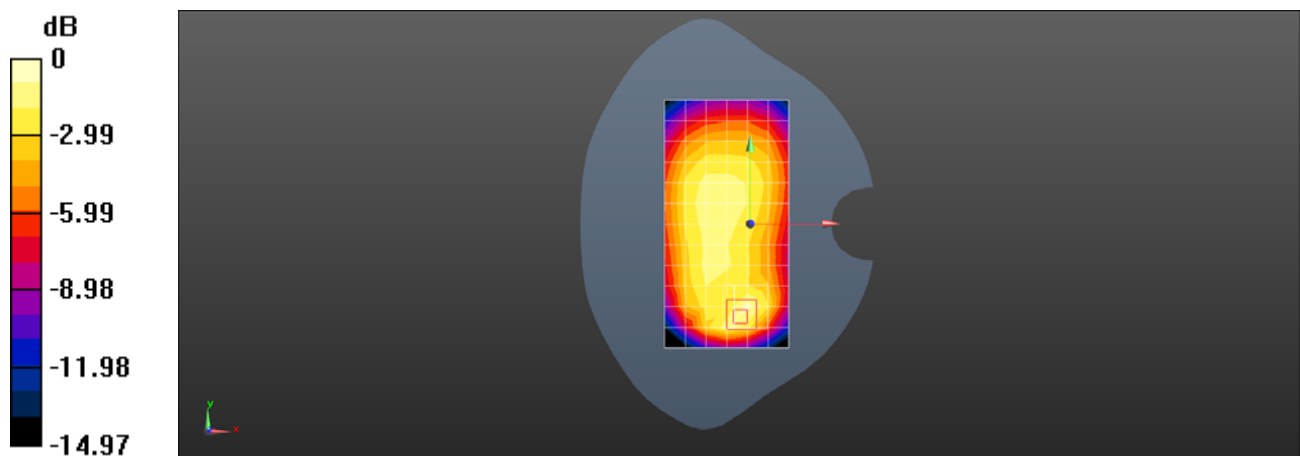
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.65 V/m ; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.278 W/kg ; SAR(10 g) = 0.153 W/kg

Maximum value of SAR (measured) = 0.437 W/kg



Test Laboratory: SGS-SAR Lab

5048A LTE Band 28 20MHz QPSK 1RB50 27310CH Right cheek

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: PRMBINIFZ5459PQK

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 713 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium parameters used: $f = 713$ MHz; $\sigma = 0.86$ S/m; $\epsilon_r = 42.861$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.41, 9.41, 9.41); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (7x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

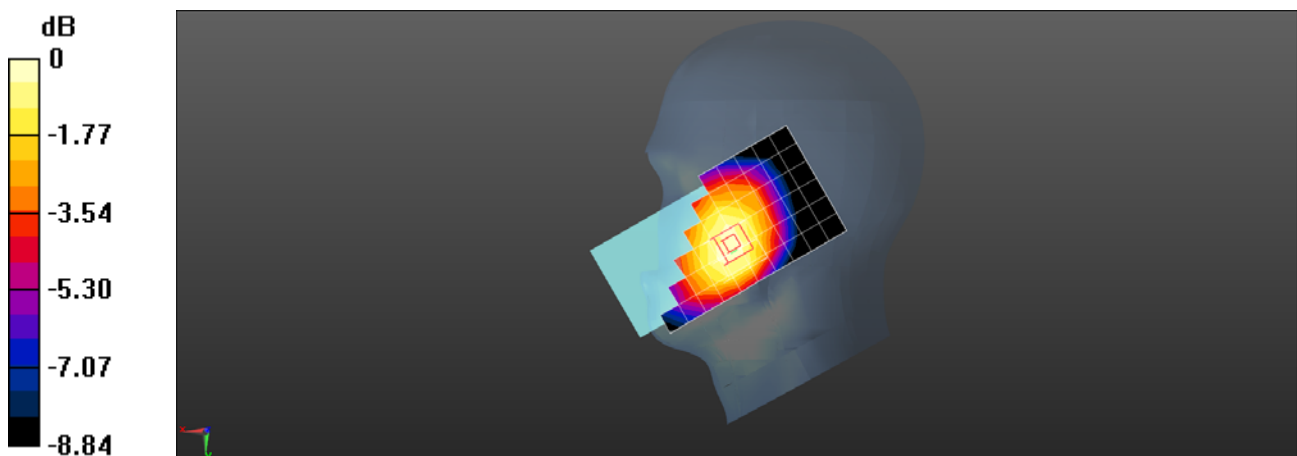
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 3.213 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.153 W/kg

SAR(1 g) = 0.116 W/kg; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (measured) = 0.139 W/kg



0 dB = 0.139 W/kg = -8.57 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 28 20M QPSK 1RB50 27310CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: PRMBINIFZ5459PQK

Communication System: UID 0, LTE Band 28 20MHz; Frequency: 713 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium parameters used: $f = 713 \text{ MHz}$; $\sigma = 0.889 \text{ S/m}$; $\epsilon_r = 42.791$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.41, 9.41, 9.41); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.325 W/kg

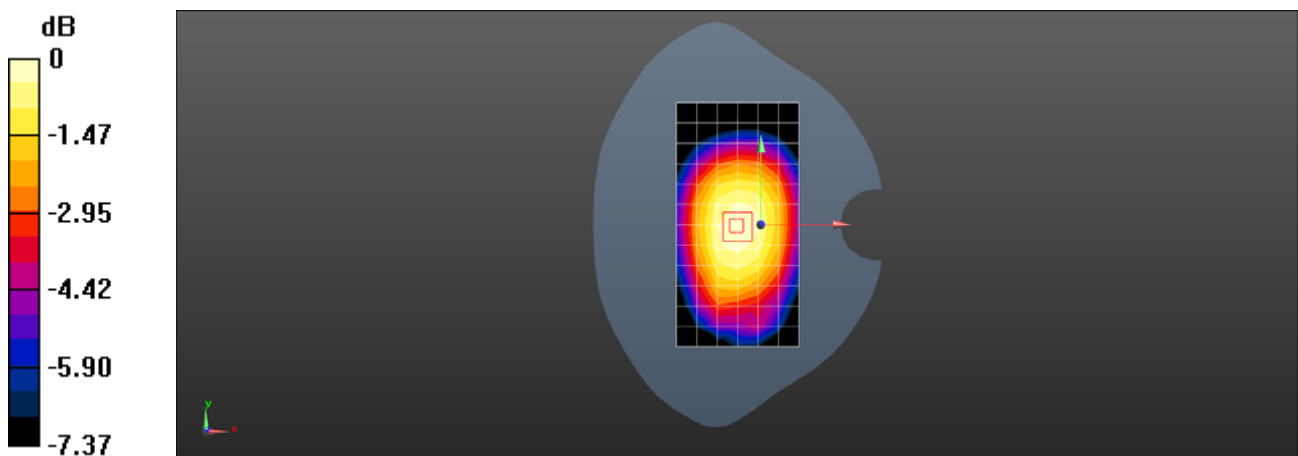
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.68 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.369 W/kg

SAR(1 g) = 0.279 W/kg ; SAR(10 g) = 0.215 W/kg

Maximum value of SAR (measured) = 0.336 W/kg



0 dB = 0.336 W/kg = -4.74 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A LTE Band 28 20M QPSK 1RB50 27310CH Back side 10mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: Z5LFLZ6L5PAIOFCM

Communication System: UID 0, LTE Band 28 20MHz; Frequency: 713 MHz; Duty Cycle: 1:1

Medium: HSL750; Medium parameters used: $f = 713 \text{ MHz}$; $\sigma = 0.889 \text{ S/m}$; $\epsilon_r = 42.791$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(9.41, 9.41, 9.41); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 2; Type: SAM; Serial: 1913
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.315 W/kg

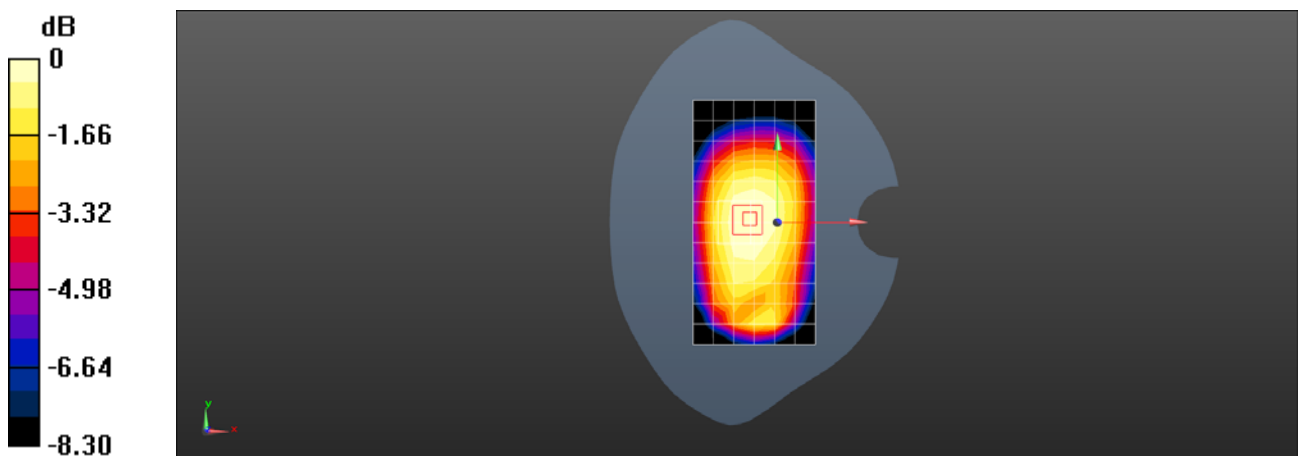
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.41 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.351 W/kg

SAR(1 g) = 0.267 W/kg ; SAR(10 g) = 0.207 W/kg

Maximum value of SAR (measured) = 0.321 W/kg



Test Laboratory: SGS-SAR Lab

5048A LTE Band 66 20M QPSK 1RB50 132572CH Right cheek

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHIC179HI8LYHSK

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used: $f = 1770$ MHz; $\sigma = 1.385$ S/m; $\epsilon_r = 39.446$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.92, 8.92, 8.92); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 4; Type: SAM; Serial: 1640
- 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) = 0.173 W/kg

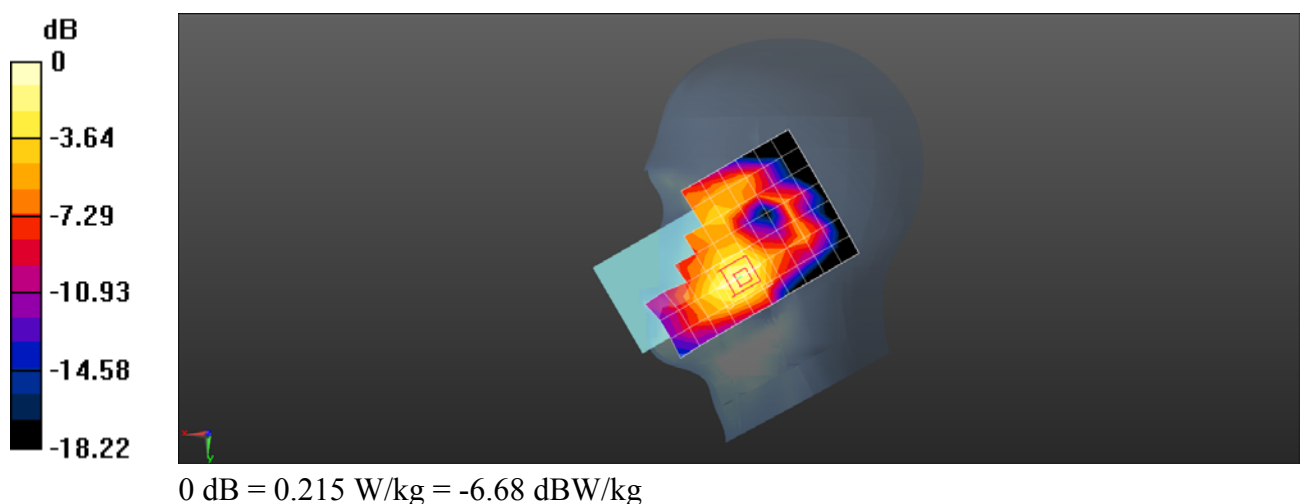
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.322 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.251 W/kg

SAR(1 g) = 0.148 W/kg; SAR(10 g) = 0.088 W/kg

Maximum value of SAR (measured) = 0.215 W/kg



Test Laboratory: SGS-SAR Lab

5048A LTE Band 66 20M QPSK 1RB50 132572CH Back side 15mm

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHIC179HI8LYHSK

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used: $f = 1770$ MHz; $\sigma = 1.385$ S/m; $\epsilon_r = 39.446$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.92, 8.92, 8.92); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 4; Type: SAM; Serial: 1640
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.512 W/kg

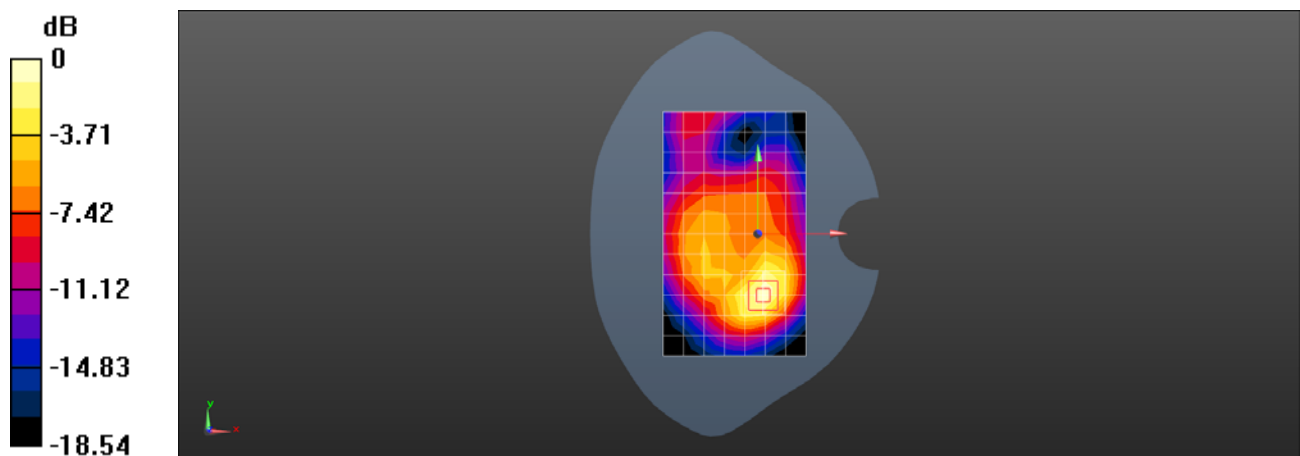
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.552 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.598 W/kg

SAR(1 g) = 0.348 W/kg; SAR(10 g) = 0.192 W/kg

Maximum value of SAR (measured) = 0.503 W/kg



Test Laboratory: SGS-SAR Lab

5048A LTE Band 66 20M QPSK 1RB50 132572CH Bottom side 10mm with Battery 2

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: JJHICI79HI8LYHSK

Communication System: UID 0, LTE-FDD BW 20MHz (0); Frequency: 1770 MHz; Duty Cycle: 1:1

Medium: HSL1750; Medium parameters used: $f = 1770$ MHz; $\sigma = 1.385$ S/m; $\epsilon_r = 39.446$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3923; ConvF(8.92, 8.92, 8.92); Calibrated: 2018-09-30;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1428; Calibrated: 2019-01-11
- Phantom: SAM 4; Type: SAM; Serial: 1640
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.21 W/kg

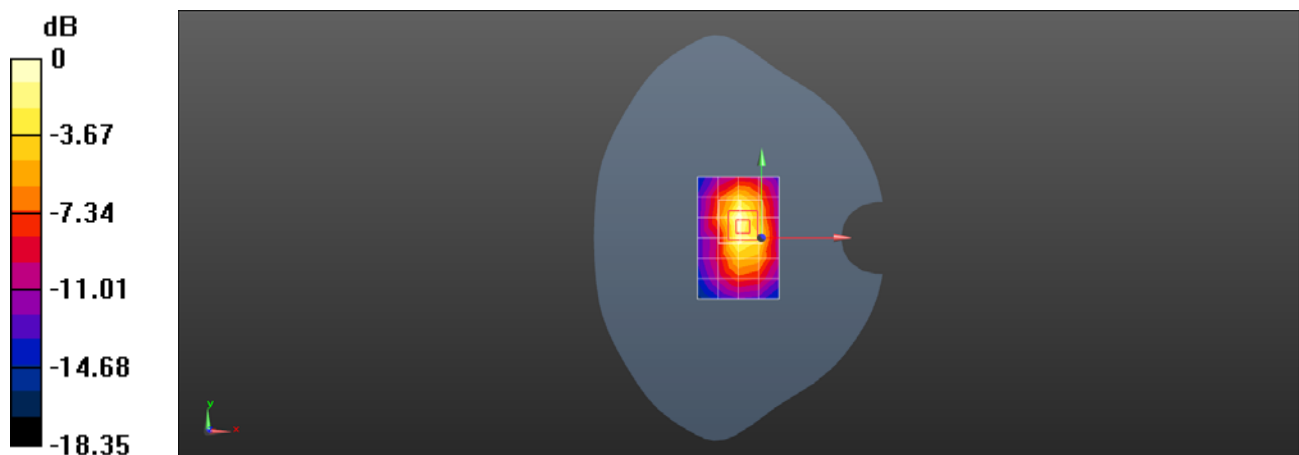
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.59 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 0.853 W/kg; SAR(10 g) = 0.444 W/kg

Maximum value of SAR (measured) = 1.29 W/kg



0 dB = 1.29 W/kg = 1.11 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A WIFI 2.4G 802.11b 1CH Right tilted

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: BYCQ45O7YPDMLJVW

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2412 MHz; Duty Cycle: 1:1.0024

Medium: HSL2450; Medium parameters used: $f = 2412$ MHz; $\sigma = 1.774$ S/m; $\epsilon_r = 40.132$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.93, 6.93, 6.93); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 1; Type: SAM; Serial: 1283
- 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) = 0.869 W/kg

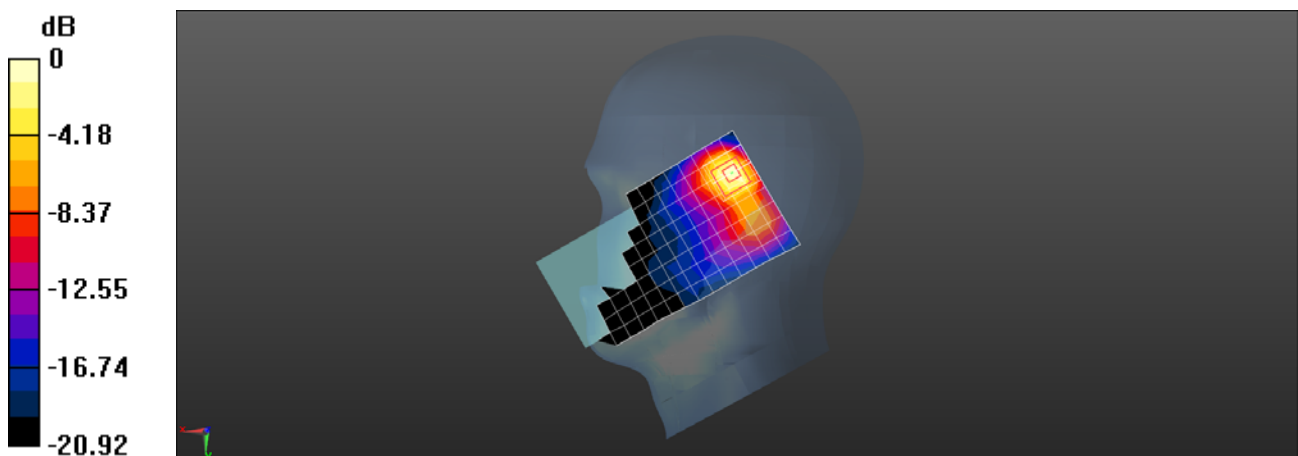
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 10.60 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.575 W/kg; SAR(10 g) = 0.266 W/kg

Maximum value of SAR (measured) = 0.946 W/kg



0 dB = 0.946 W/kg = -0.24 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A WIFI 2.4G 802.11b 1CH Back side 15mm with Battery 2

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: Z5LFLZ6L5PAIOFCM

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2412 MHz; Duty Cycle: 1:1.0024

Medium: HSL2450; Medium parameters used: $f = 2412$ MHz; $\sigma = 1.774$ S/m; $\epsilon_r = 40.132$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.93, 6.93, 6.93); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.217 W/kg

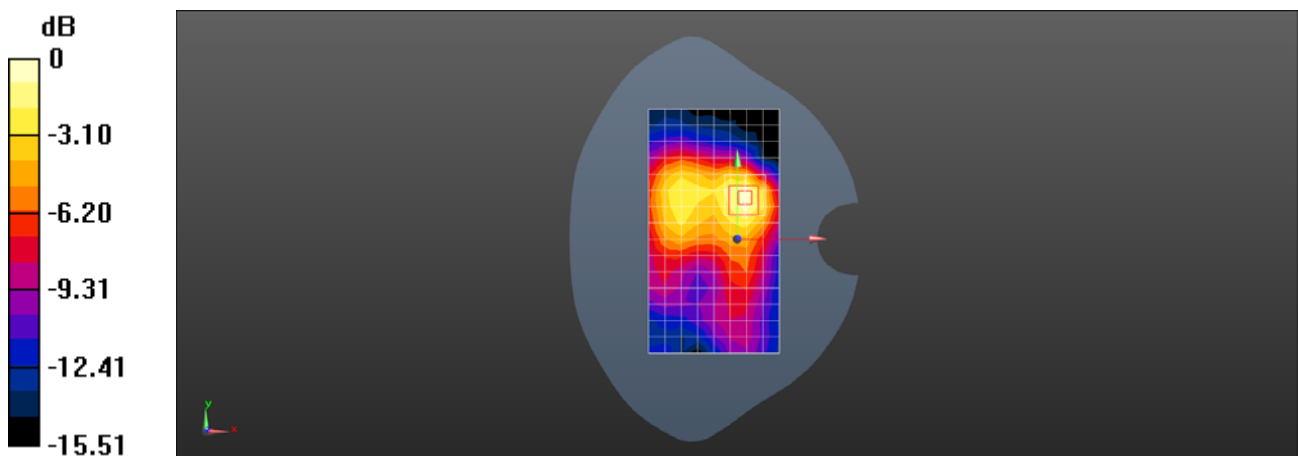
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.150 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.288 W/kg

SAR(1 g) = 0.149 W/kg; SAR(10 g) = 0.079 W/kg

Maximum value of SAR (measured) = 0.232 W/kg



0 dB = 0.232 W/kg = -6.35 dBW/kg

Test Laboratory: SGS-SAR Lab

5048A WIFI2.4G 802.11b 1CH Back side 10mm with Battery 2

DUT: 5048A; Type: LTE/UMTS/GSM mobile phone; Serial: BYCQ45O7YPDMLJVW

Communication System: UID 0, WI-FI(2.4GHz) (0); Frequency: 2412 MHz; Duty Cycle: 1:1.0024

Medium: HSL2450; Medium parameters used: $f = 2412$ MHz; $\sigma = 1.774$ S/m; $\epsilon_r = 40.132$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY 5 Configuration:

- Probe: EX3DV4 - SN3793; ConvF(6.93, 6.93, 6.93); Calibrated: 2019-03-25;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = -2.0, 31.0$
- Electronics: DAE3 Sn414; Calibrated: 2018-12-03
- Phantom: SAM 1; Type: SAM; Serial: 1283
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.453 W/kg

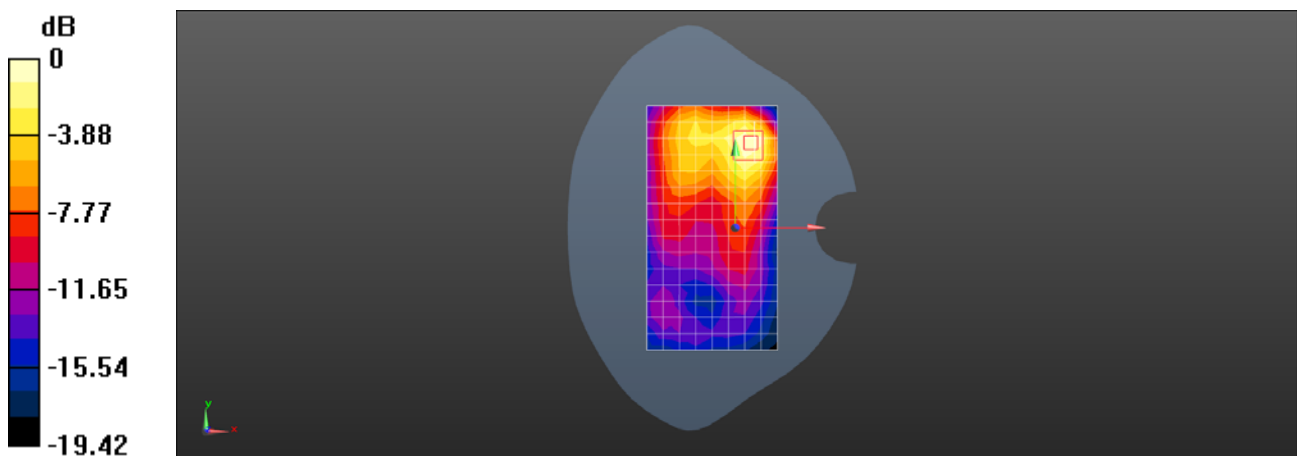
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 4.174 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.590 W/kg

SAR(1 g) = 0.288 W/kg; SAR(10 g) = 0.148 W/kg

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



0 dB = 0.465 W/kg = -3.33 dBW/kg