

**Appendix B. SAR Measurement Plots**

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Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 GSM850 190CH Right Touch

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 837$ MHz; $\sigma = 0.911$ S/m; $\epsilon_r = 42.529$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(8.98, 8.98, 8.98); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

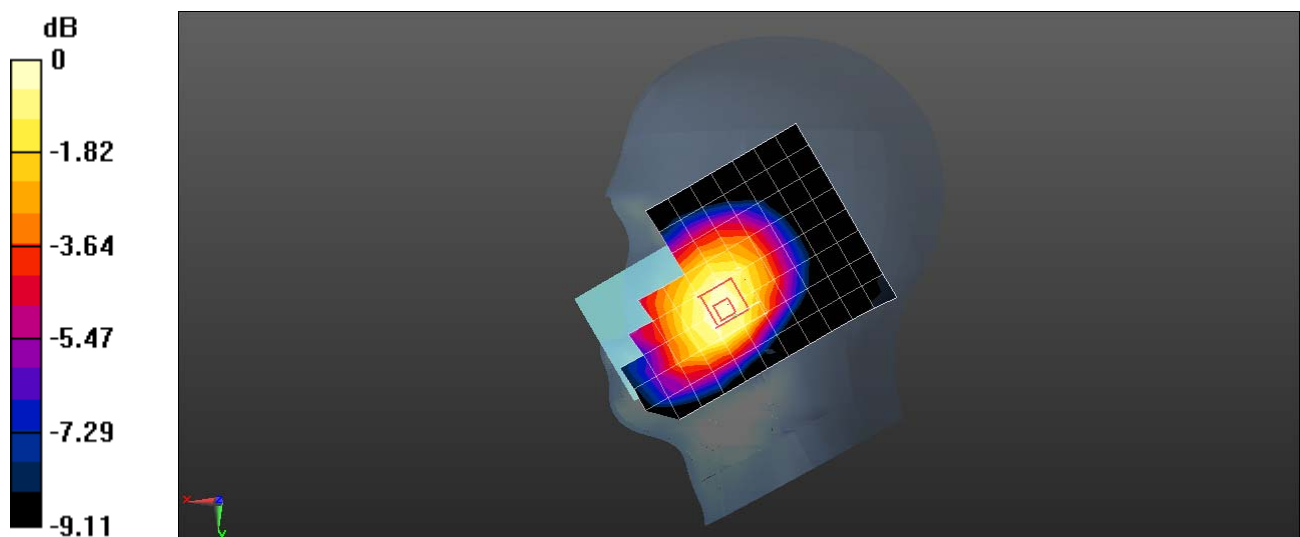
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 7.138 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.351 W/kg

SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.217 W/kg

Maximum value of SAR (measured) = 0.319 W/kg



0 dB = 0.319 W/kg = -4.96 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 GSM850 190CH Back Side 15mm with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 837$ MHz; $\sigma = 0.966$ S/m; $\epsilon_r = 54.925$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.28, 9.28, 9.28); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

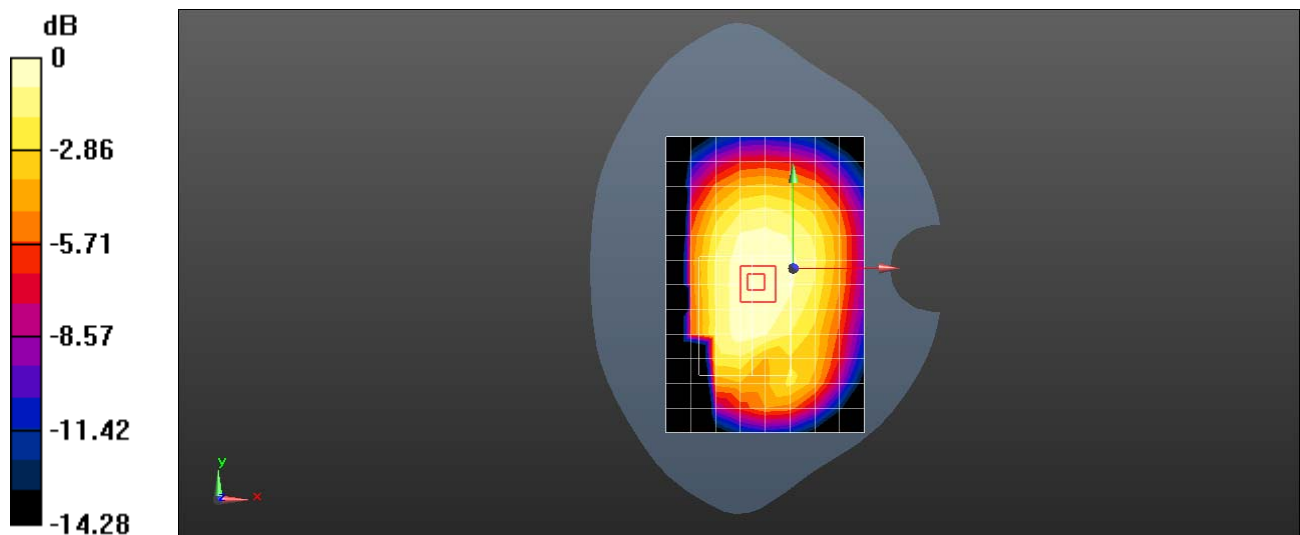
Configuration/Body/Zoom Scan (8x10x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 19.95 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.360 W/kg

SAR(1 g) = 0.301 W/kg; SAR(10 g) = 0.246 W/kg

Maximum value of SAR (measured) = 0.341 W/kg



0 dB = 0.341 W/kg = -4.67 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 GSM850 GPRS 2TS 190CH Back Side 10mm with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-GSM\GPRS\EGPRS-2TS (0); Frequency: 836.6 MHz; Duty Cycle: 1:4.10015

Medium parameters used: $f = 837$ MHz; $\sigma = 0.966$ S/m; $\epsilon_r = 54.925$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.28, 9.28, 9.28); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.429 W/kg

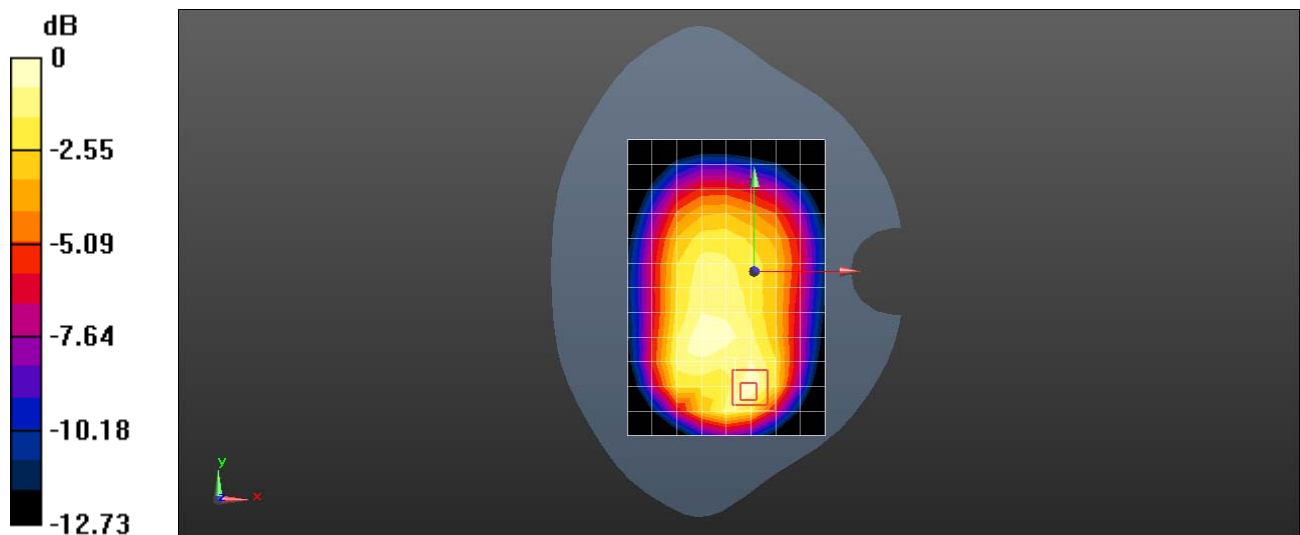
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 19.12 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.497 W/kg

SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.188 W/kg

Maximum value of SAR (measured) = 0.416 W/kg



0 dB = 0.416 W/kg = -3.81 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 GSM1900 661CH Right Touch

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.438$ S/m; $\epsilon_r = 41.477$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(8, 8, 8); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.105 W/kg

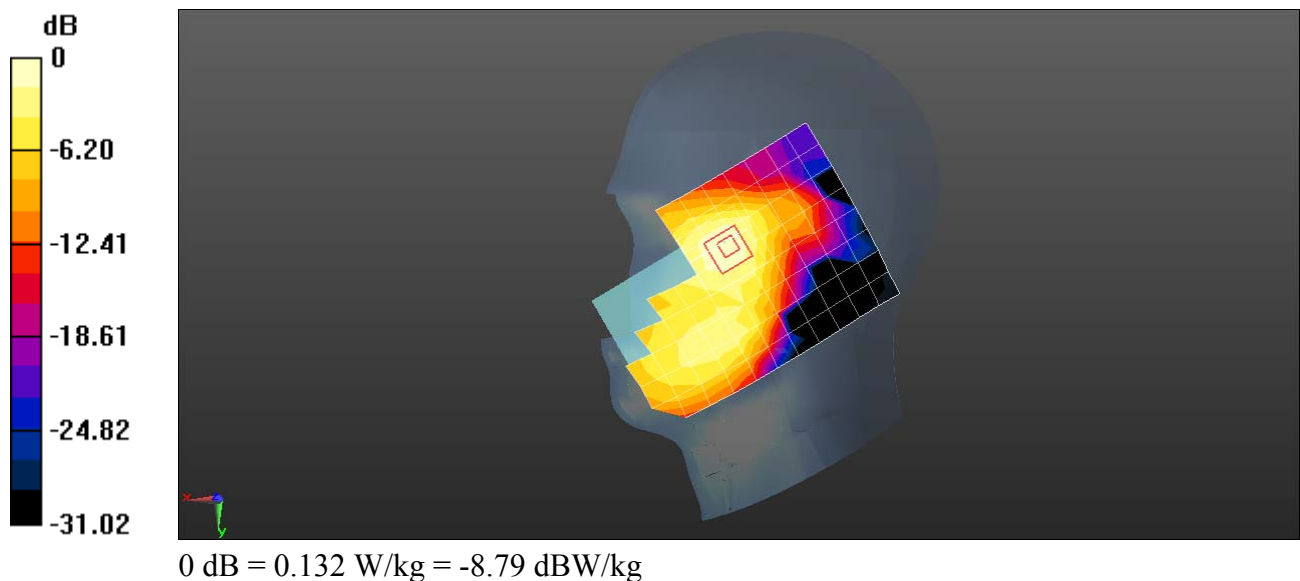
Configuration/Head/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 2.510 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.153 W/kg

SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.061 W/kg

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



Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 GSM1900 661CH Front Side 15mm with Battery2

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.493$ S/m; $\epsilon_r = 51.567$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.7, 7.7, 7.7); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

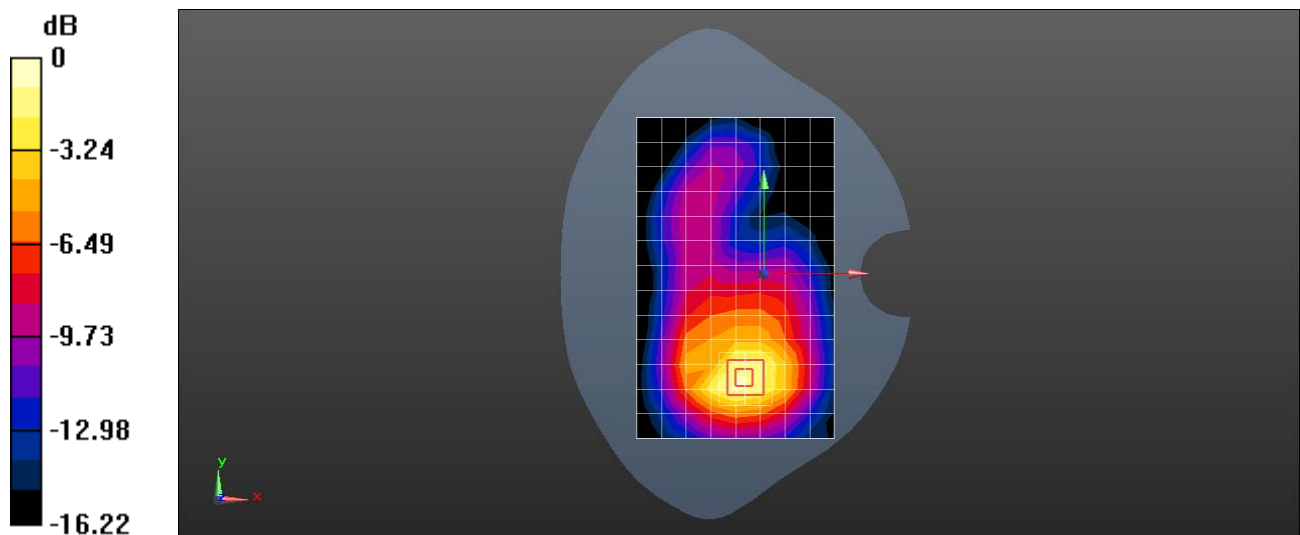
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.579 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.439 W/kg

SAR(1 g) = 0.289 W/kg; SAR(10 g) = 0.179 W/kg

Maximum value of SAR (measured) = 0.386 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 GSM1900 GPRS 2TS 661CH Bottom Side 10mm with Battery2

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-GSM\GPRS\EGPRS-2TS (0); Frequency: 1880 MHz; Duty Cycle: 1:4.10015

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.493$ S/m; $\epsilon_r = 51.567$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.7, 7.7, 7.7); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x9x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.836 W/kg

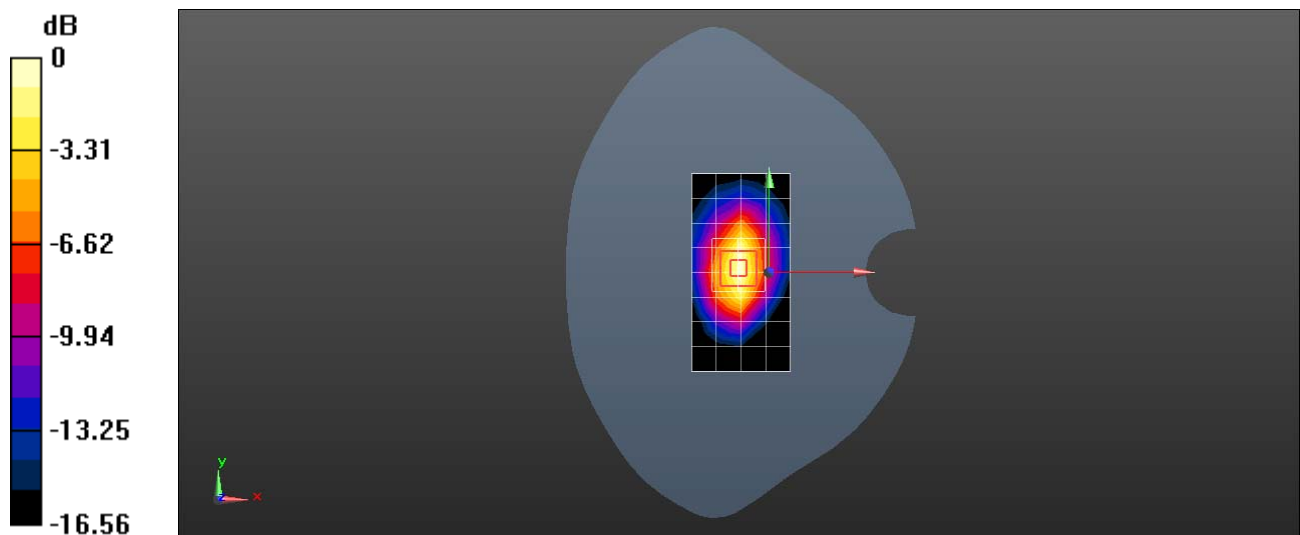
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 24.96 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.00 W/kg

SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.349 W/kg

Maximum value of SAR (measured) = 0.872 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 UMTS B2 9262CH Left Touch with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 41.535$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(8, 8, 8); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

Maximum value of SAR (measured) = 0.426 W/kg

Configuration/Head/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

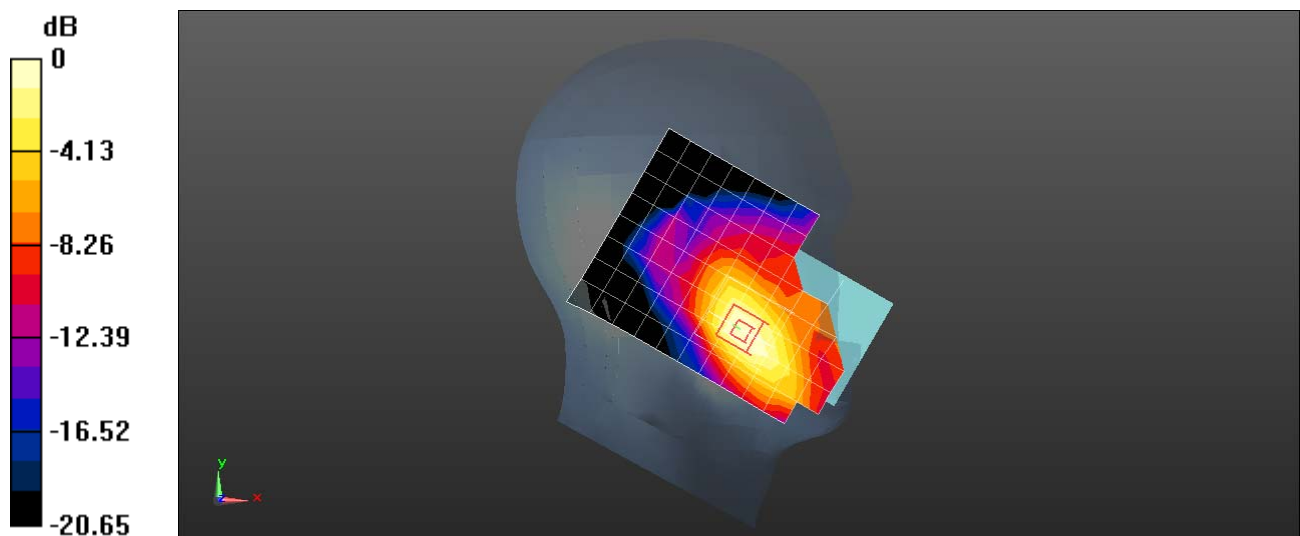
Reference Value = 5.401 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.505 W/kg

SAR(1 g) = 0.326 W/kg; SAR(10 g) = 0.201 W/kg

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

Maximum value of SAR (measured) = 0.435 W/kg



0 dB = 0.435 W/kg = -3.62 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 UMTS B2 9538CH Back Side 15mm with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

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

Medium parameters used: $f = 1908 \text{ MHz}$; $\sigma = 1.514 \text{ S/m}$; $\epsilon_r = 51.534$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.7, 7.7, 7.7); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.727 W/kg

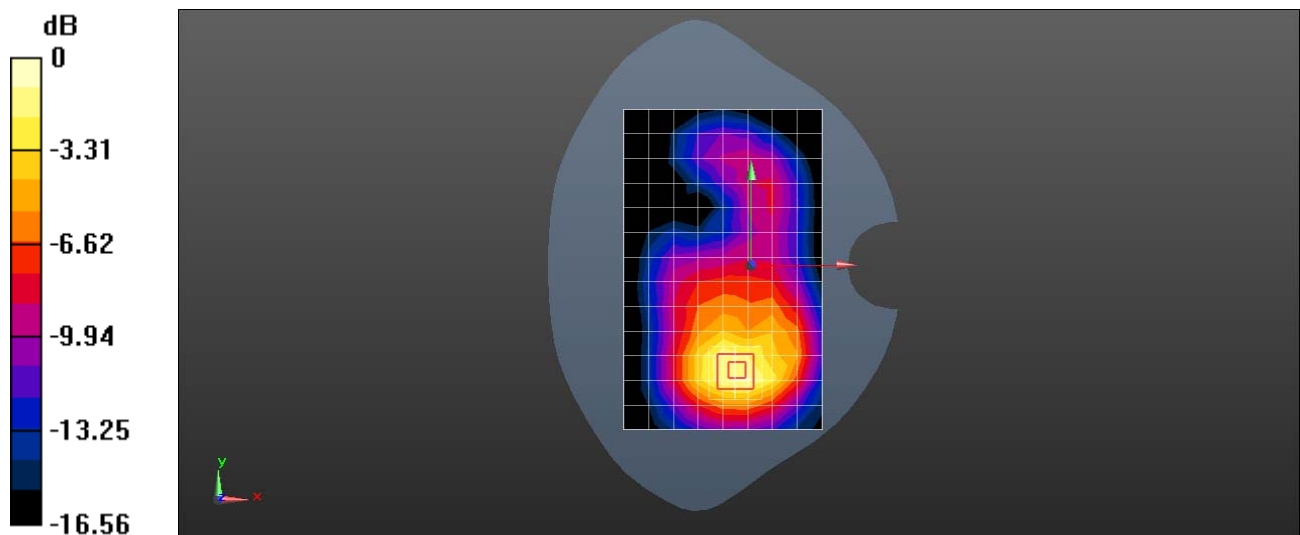
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.154 V/m ; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.648 W/kg ; SAR(10 g) = 0.397 W/kg

Maximum value of SAR (measured) = 0.871 W/kg



0 dB = 0.871 W/kg = -0.60 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 UMTS B2 9400CH Bottom Side 10mm with Battery2

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

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

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.493 \text{ S/m}$; $\epsilon_r = 51.567$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.7, 7.7, 7.7); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

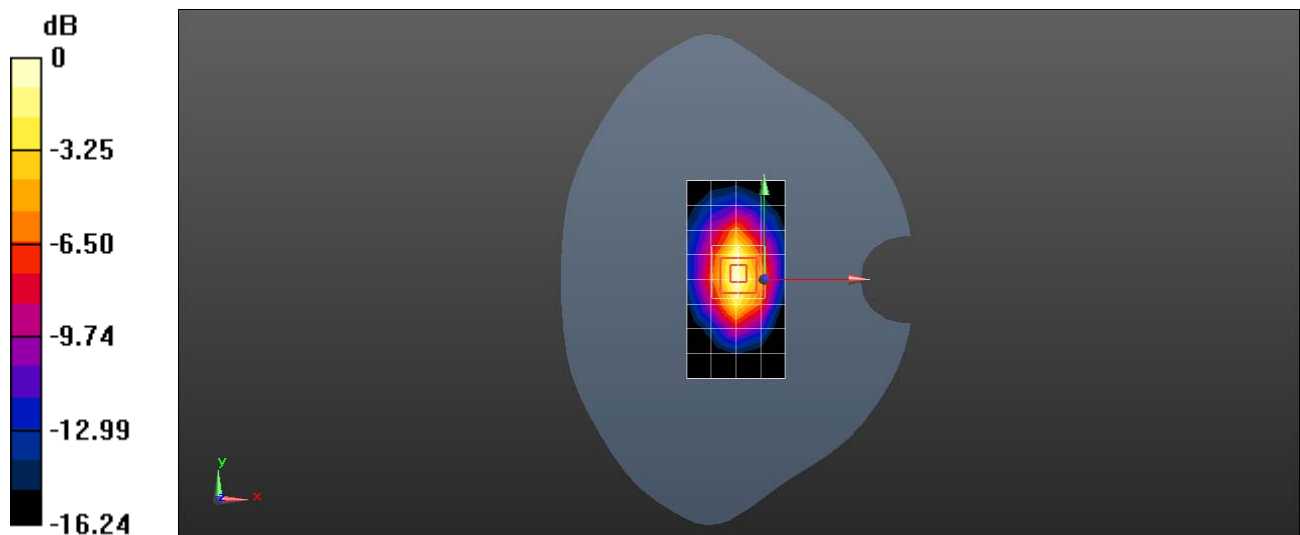
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.29 V/m ; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.786 W/kg ; SAR(10 g) = 0.448 W/kg

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



0 dB = 1.12 W/kg = 0.49 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 UMTS B4 1312CH Left Touch with Battery2

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.343$ S/m; $\epsilon_r = 40.459$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(8.32, 8.32, 8.32); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

Maximum value of SAR (measured) = 0.382 W/kg

Configuration/Head/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

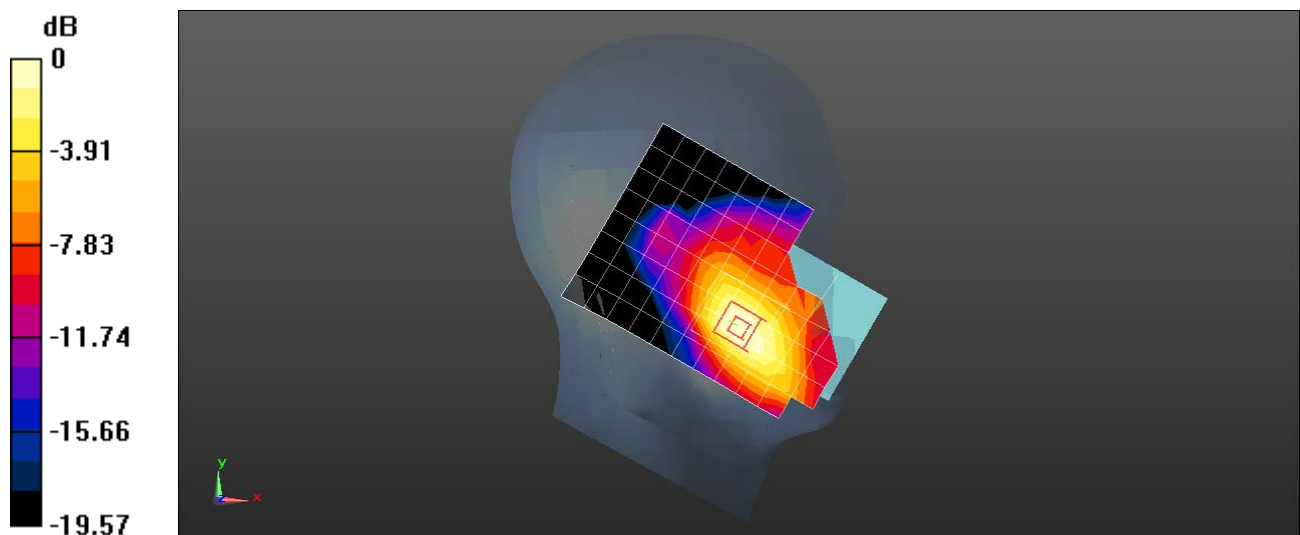
Reference Value = 5.568 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.443 W/kg

SAR(1 g) = 0.295 W/kg; SAR(10 g) = 0.189 W/kg

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

Maximum value of SAR (measured) = 0.386 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 UMTS B4 1312CH Back Side 15mm with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.481$ S/m; $\epsilon_r = 52.198$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.93, 7.93, 7.93); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

Maximum value of SAR (measured) = 0.831 W/kg

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

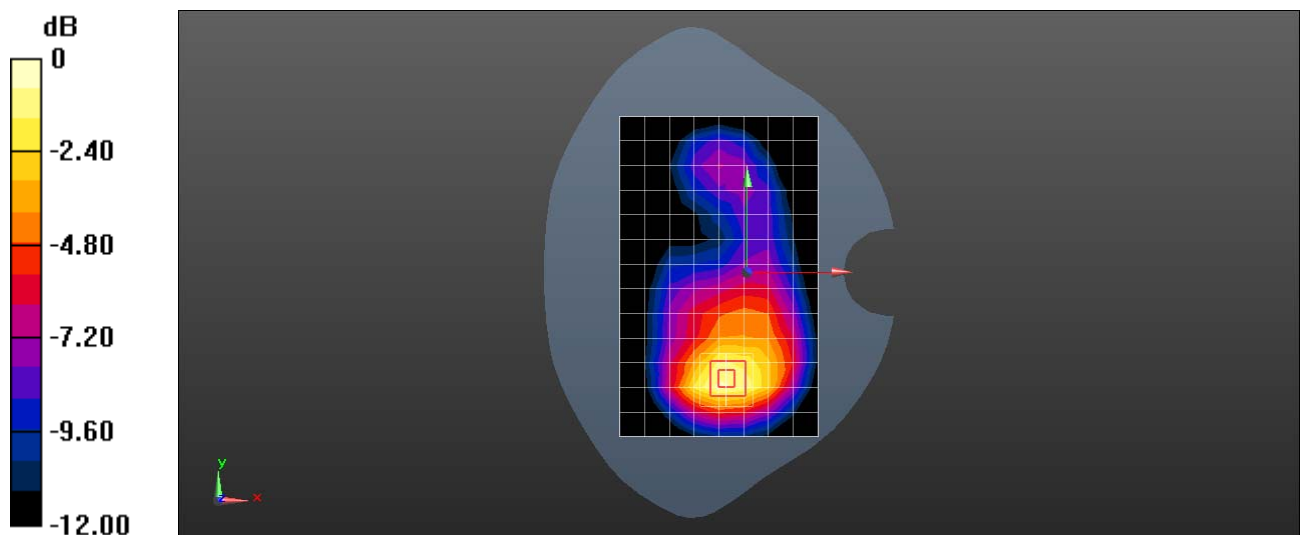
Reference Value = 9.976 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.708 W/kg; SAR(10 g) = 0.458 W/kg

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

Maximum value of SAR (measured) = 0.942 W/kg



0 dB = 0.942 W/kg = -0.26 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 UMTS B4 1312CH Bottom Side 10mm with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.481$ S/m; $\epsilon_r = 52.198$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.93, 7.93, 7.93); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x9x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

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

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

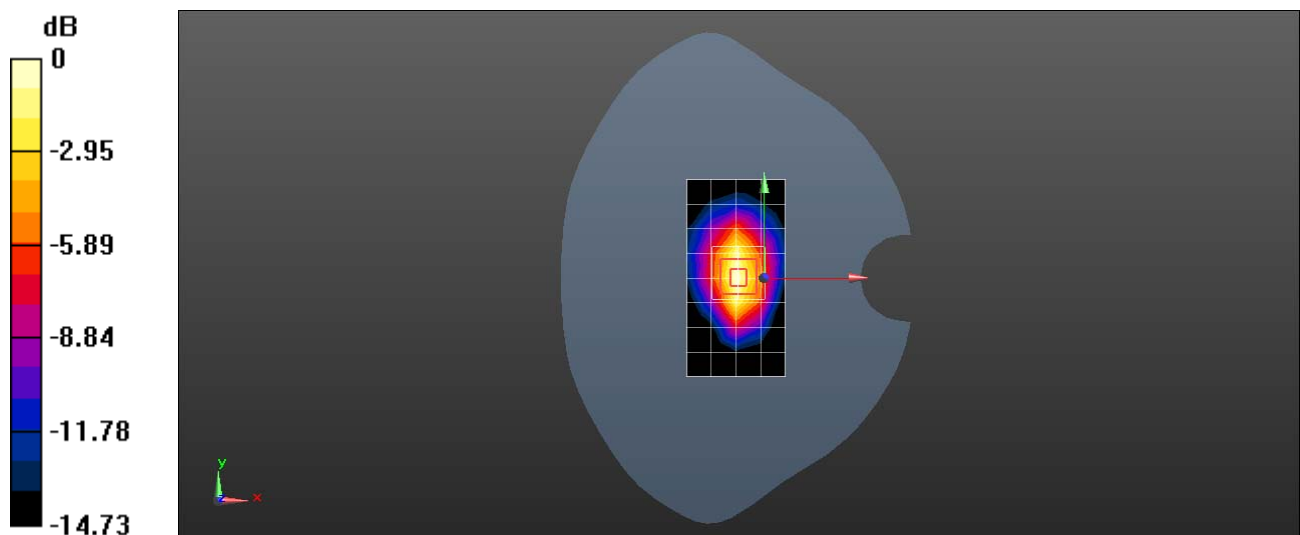
Reference Value = 30.63 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.915 W/kg; SAR(10 g) = 0.533 W/kg

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

Maximum value of SAR (measured) = 1.28 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 UMTS Band 5 4132CH Righth Touch with Battery2

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.907$ S/m; $\epsilon_r = 42.556$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(8.98, 8.98, 8.98); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

Maximum value of SAR (measured) = 0.343 W/kg

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

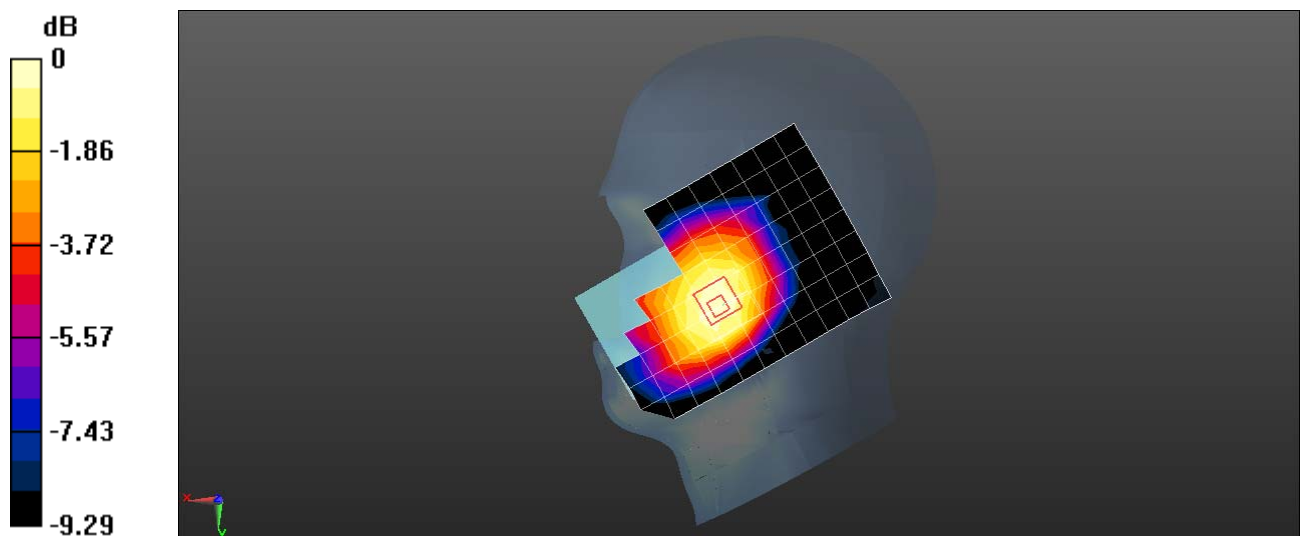
Reference Value = 6.453 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.364 W/kg

SAR(1 g) = 0.297 W/kg; SAR(10 g) = 0.236 W/kg

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

Maximum value of SAR (measured) = 0.341 W/kg



0 dB = 0.341 W/kg = -4.67 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 UMTS Band 5 4182CH Back Side 15mm with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

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

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.966$ S/m; $\epsilon_r = 54.926$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.28, 9.28, 9.28); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

Maximum value of SAR (measured) = 0.371 W/kg

Configuration/Body/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

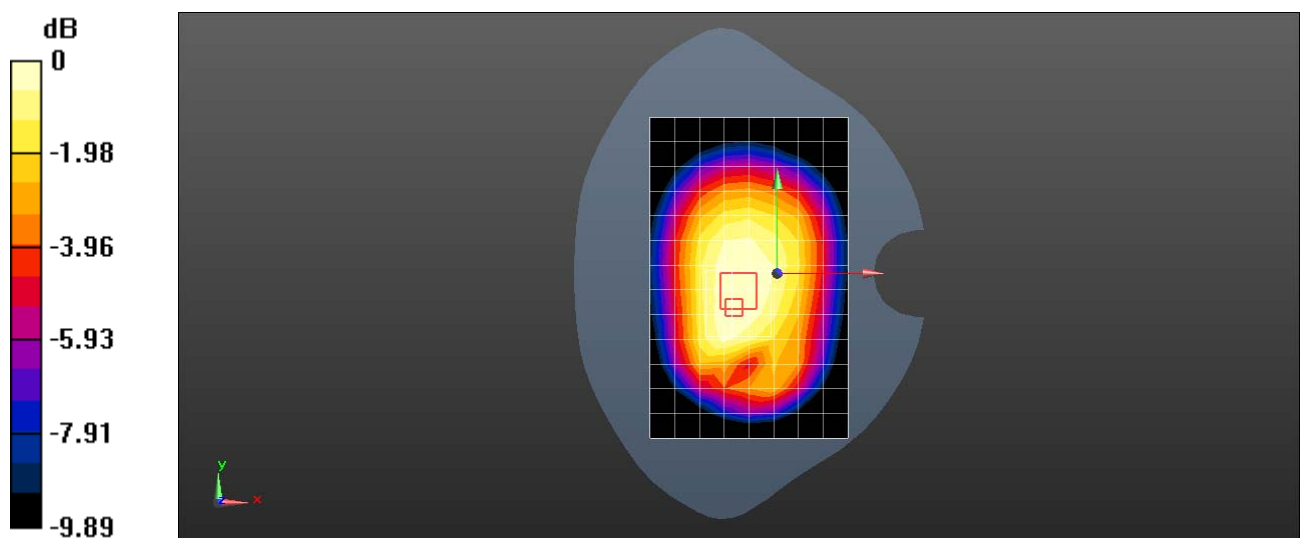
Reference Value = 20.92 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.399 W/kg

SAR(1 g) = 0.332 W/kg; SAR(10 g) = 0.272 W/kg

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

Maximum value of SAR (measured) = 0.376 W/kg



0 dB = 0.376 W/kg = -4.25 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 UMTS Band 5 4182CH Back Side 10mm with Battery2

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

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

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.966$ S/m; $\epsilon_r = 54.926$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.28, 9.28, 9.28); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

Maximum value of SAR (measured) = 0.511 W/kg

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

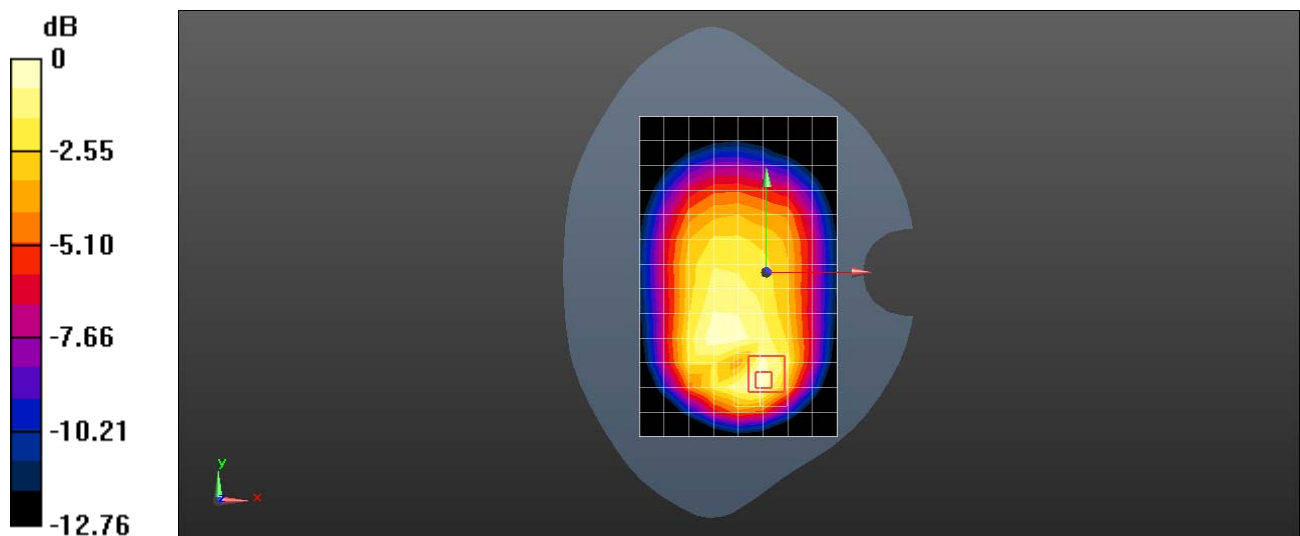
Reference Value = 21.24 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.637 W/kg

SAR(1 g) = 0.383 W/kg; SAR(10 g) = 0.235 W/kg

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

Maximum value of SAR (measured) = 0.546 W/kg



0 dB = 0.546 W/kg = -2.63 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 2 20M QPSK 1RB 99 offset 18900CH Left Touch

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.438$ S/m; $\epsilon_r = 41.477$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(8, 8, 8); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.404 W/kg

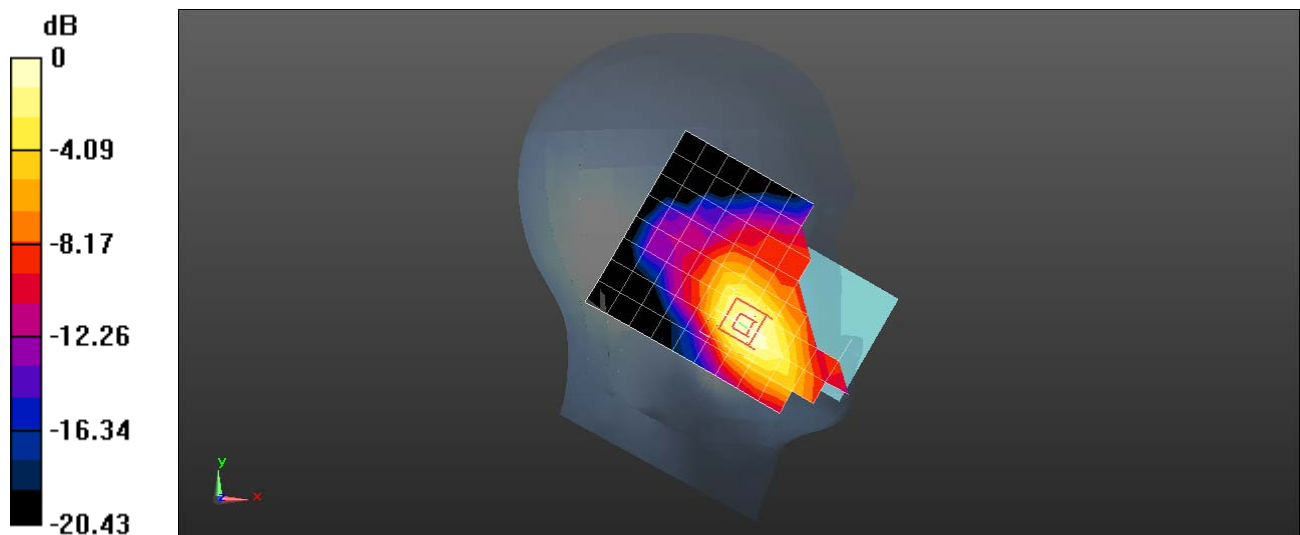
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.617 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.484 W/kg

SAR(1 g) = 0.310 W/kg; SAR(10 g) = 0.190 W/kg

Maximum value of SAR (measured) = 0.421 W/kg



0 dB = 0.421 W/kg = -3.76 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 2 20M QPSK 1RB 99 offset 18900CH Back Side 15mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.493$ S/m; $\epsilon_r = 51.567$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.7, 7.7, 7.7); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.809 W/kg

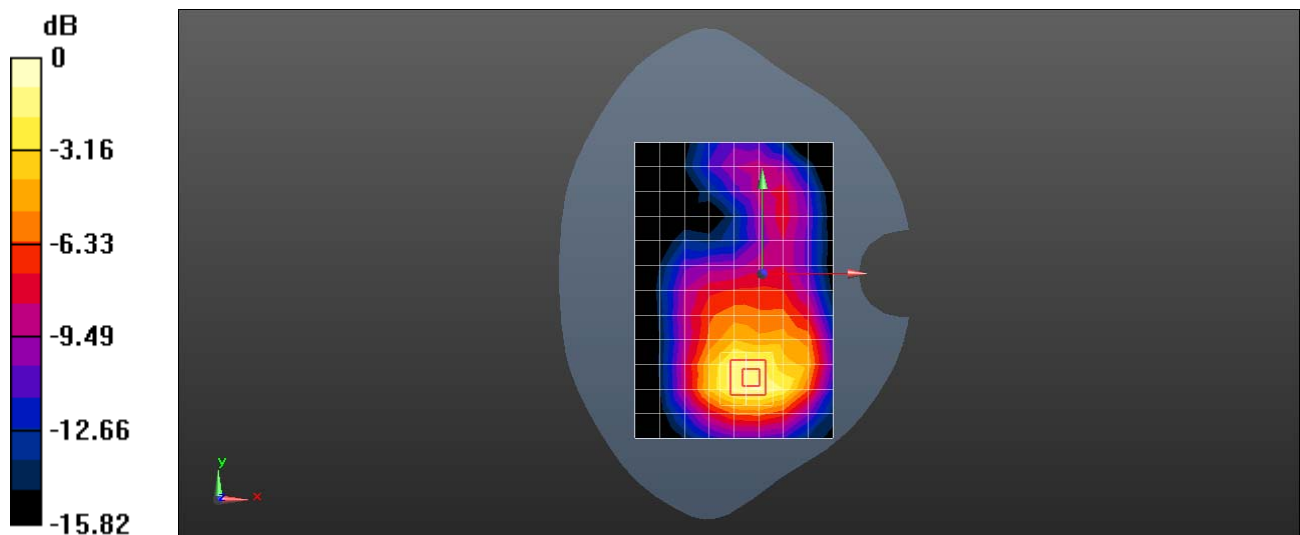
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 9.666 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.735 W/kg; SAR(10 g) = 0.455 W/kg

Maximum value of SAR (measured) = 0.976 W/kg



0 dB = 0.976 W/kg = -0.11 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 2 20M QPSK 1RB 99 offset 19100CH Bottom Side 10mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.508$ S/m; $\epsilon_r = 51.537$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.7, 7.7, 7.7); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x9x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 1.07 W/kg

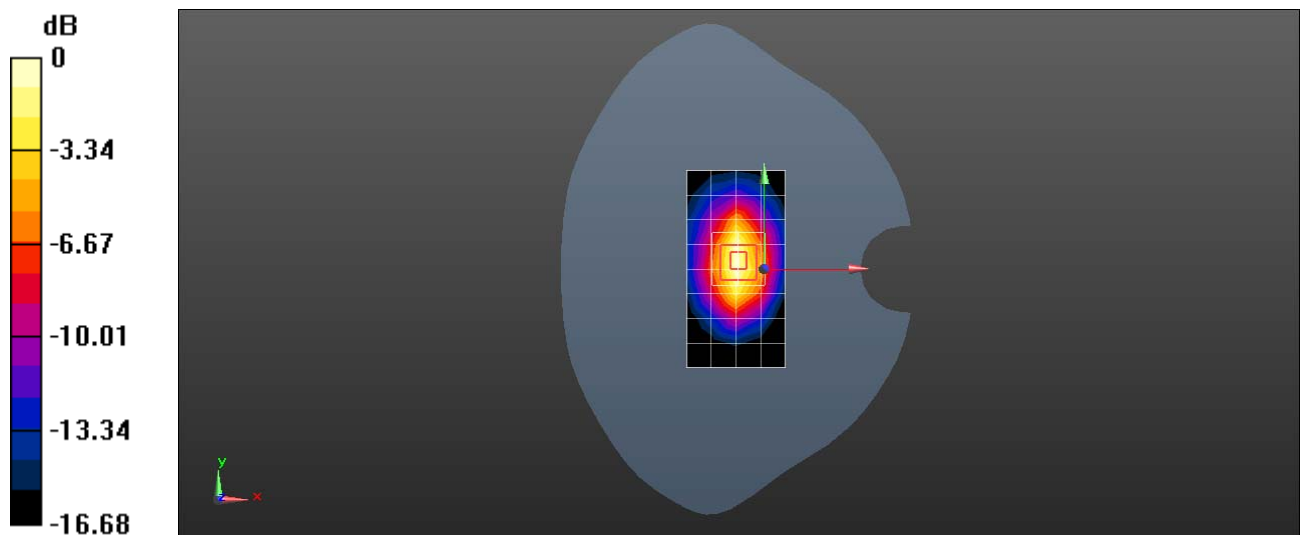
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 27.88 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.787 W/kg; SAR(10 g) = 0.445 W/kg

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



0 dB = 1.12 W/kg = 0.49 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 4 20M QPSK 1RB 50 offset 20050CH Left Touch

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.348$ S/m; $\epsilon_r = 40.447$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(8.32, 8.32, 8.32); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

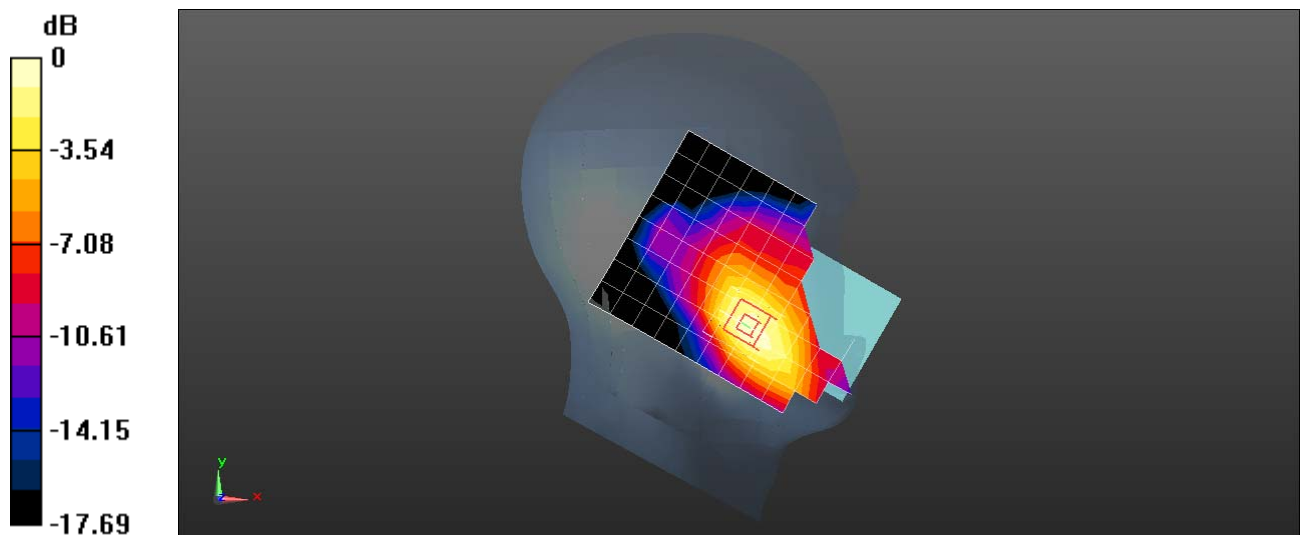
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.936 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.392 W/kg

SAR(1 g) = 0.264 W/kg; SAR(10 g) = 0.171 W/kg

Maximum value of SAR (measured) = 0.349 W/kg



0 dB = 0.349 W/kg = -4.57 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 4 20M QPSK 1RB 50 offset 20300CH Back Side 15mm with Battery2

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.508$ S/m; $\epsilon_r = 52.168$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.93, 7.93, 7.93); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.538 W/kg

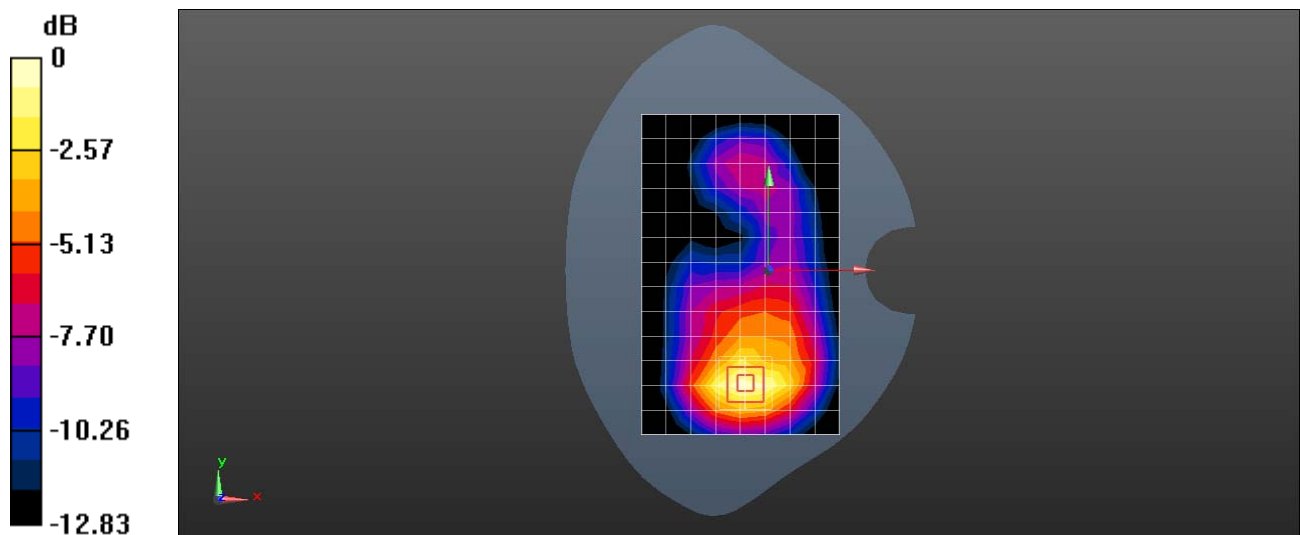
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 6.659 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.639 W/kg

SAR(1 g) = 0.426 W/kg; SAR(10 g) = 0.275 W/kg

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



0 dB = 0.567 W/kg = -2.46 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 4 20M QPSK 1RB 50 offset 20050CH Bottom Side 10mm with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.508$ S/m; $\epsilon_r = 52.168$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.93, 7.93, 7.93); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (5x9x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

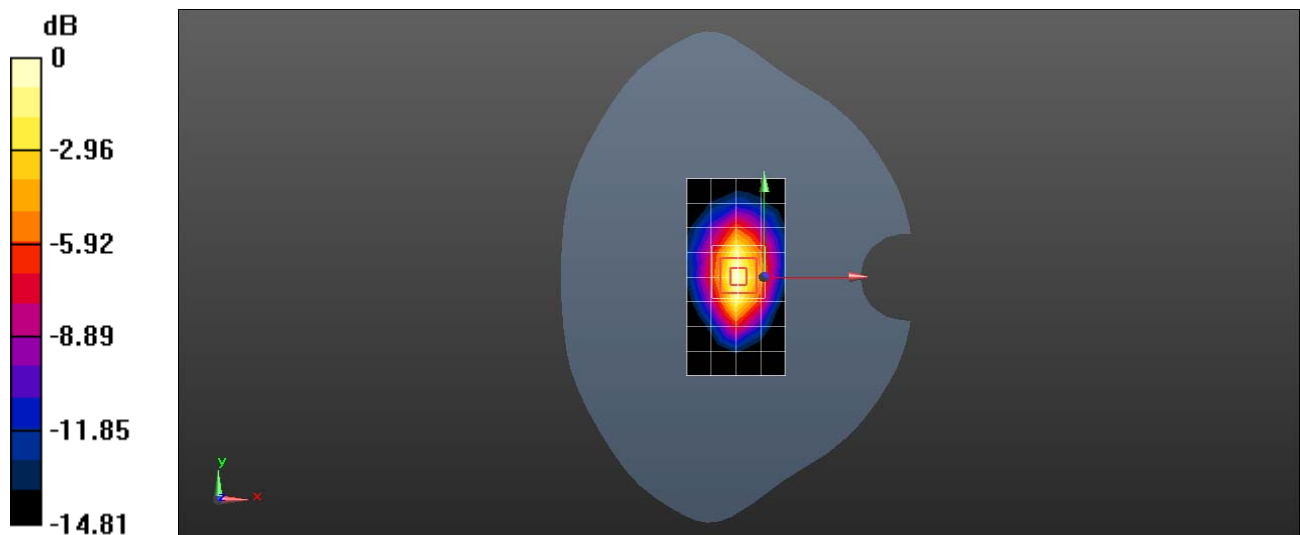
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 28.05 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.792 W/kg; SAR(10 g) = 0.465 W/kg

Maximum value of SAR (measured) = 1.10 W/kg



0 dB = 1.10 W/kg = 0.41 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 5 10M QPSK 1RB 25 offset 20450CH Right Touch with Battery2

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.908 \text{ S/m}$; $\epsilon_r = 42.551$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(8.98, 8.98, 8.98); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

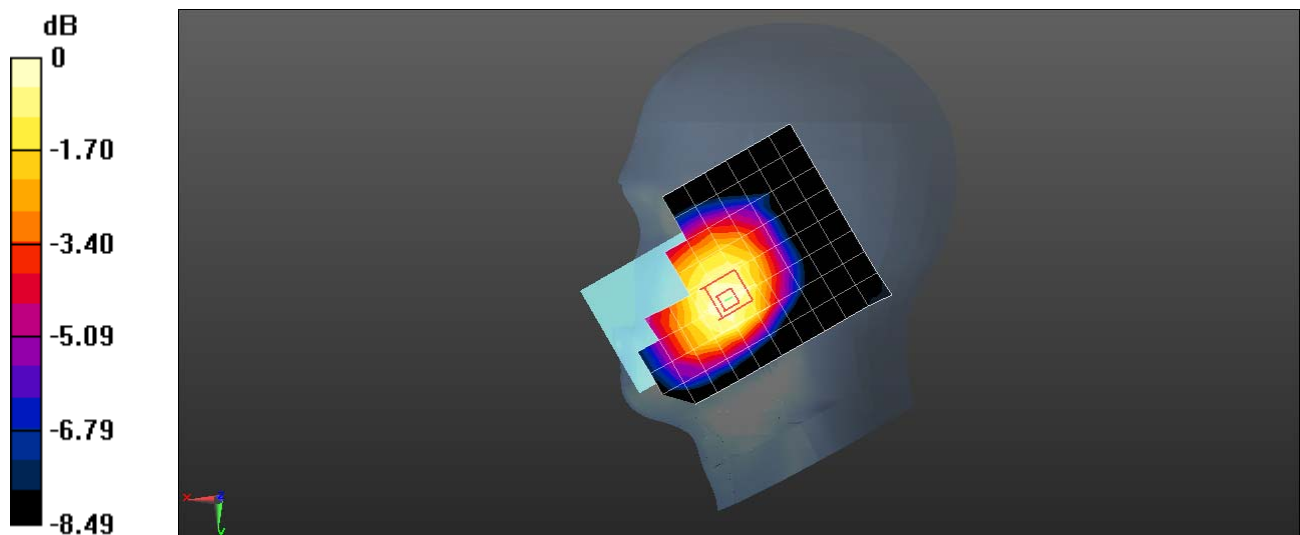
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.397 V/m ; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.354 W/kg

SAR(1 g) = 0.287 W/kg ; SAR(10 g) = 0.229 W/kg

Maximum value of SAR (measured) = 0.331 W/kg



0 dB = 0.331 W/kg = -4.80 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 5 10M QPSK 1RB 25 offset 20600CH Back Side 15mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.97 \text{ S/m}$; $\epsilon_r = 54.911$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.28, 9.28, 9.28); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

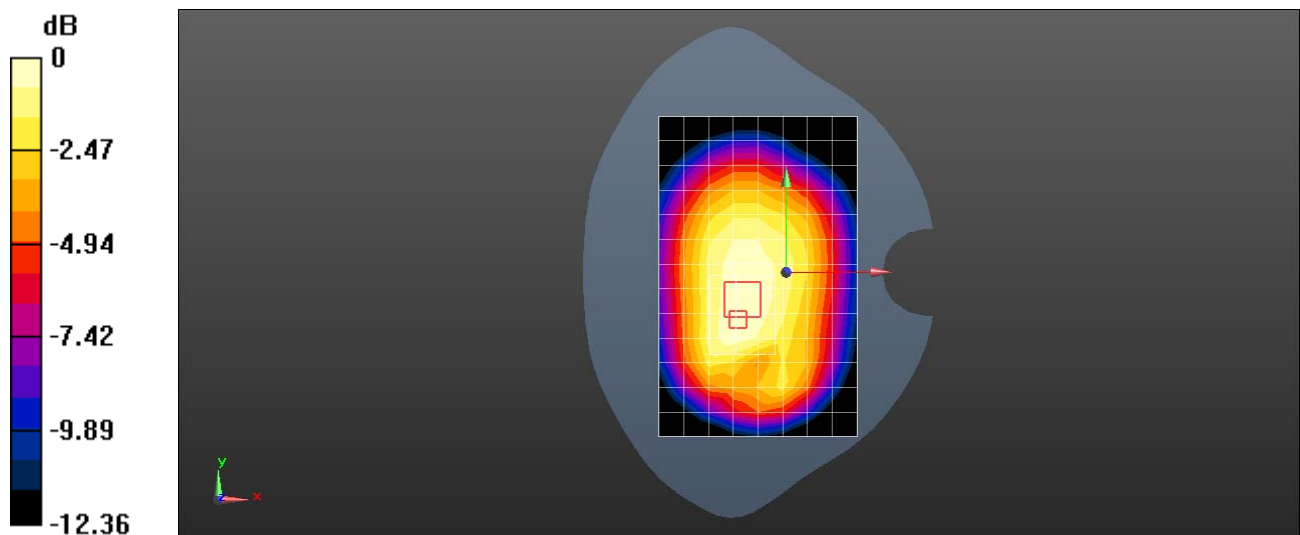
Configuration/Body/Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.96 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.392 W/kg

SAR(1 g) = 0.316 W/kg ; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 0.367 W/kg



0 dB = 0.367 W/kg = -4.35 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 5 10M QPSK 1RB 25 offset 20600CH Back Side 10mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.97 \text{ S/m}$; $\epsilon_r = 54.911$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.28, 9.28, 9.28); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.551 W/kg

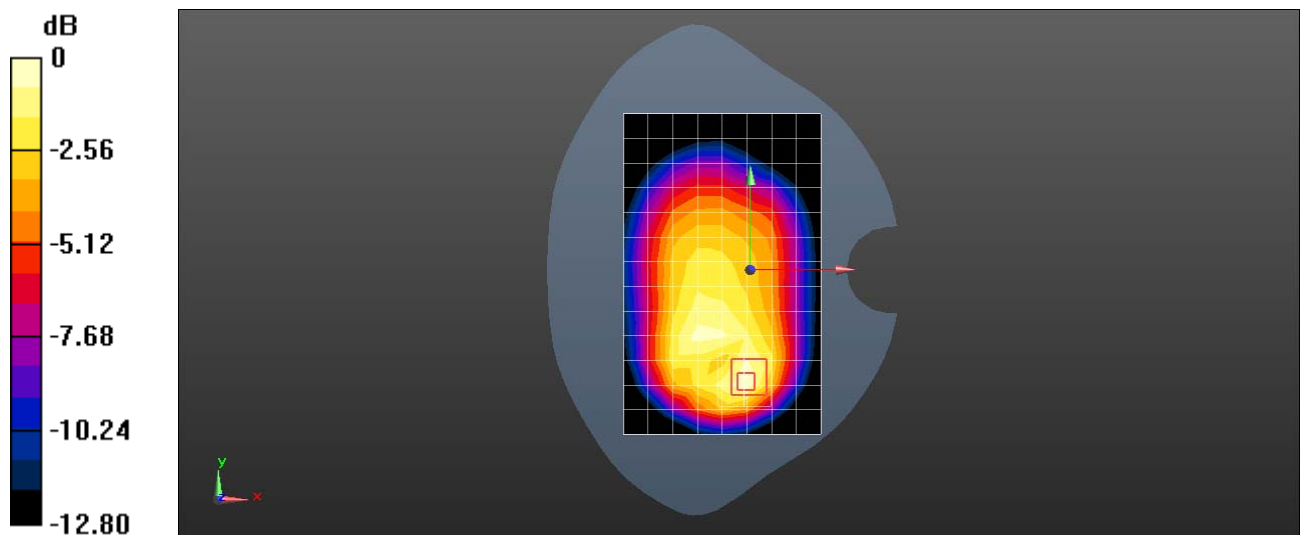
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.99 V/m ; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.647 W/kg

SAR(1 g) = 0.402 W/kg ; SAR(10 g) = 0.247 W/kg

Maximum value of SAR (measured) = 0.563 W/kg



0 dB = 0.563 W/kg = -2.49 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 7 20M QPSK 1RB 99 offset 20850CH Right Touch

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.842$ S/m; $\epsilon_r = 40.233$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.07, 7.07, 7.07); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (11x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.114 W/kg

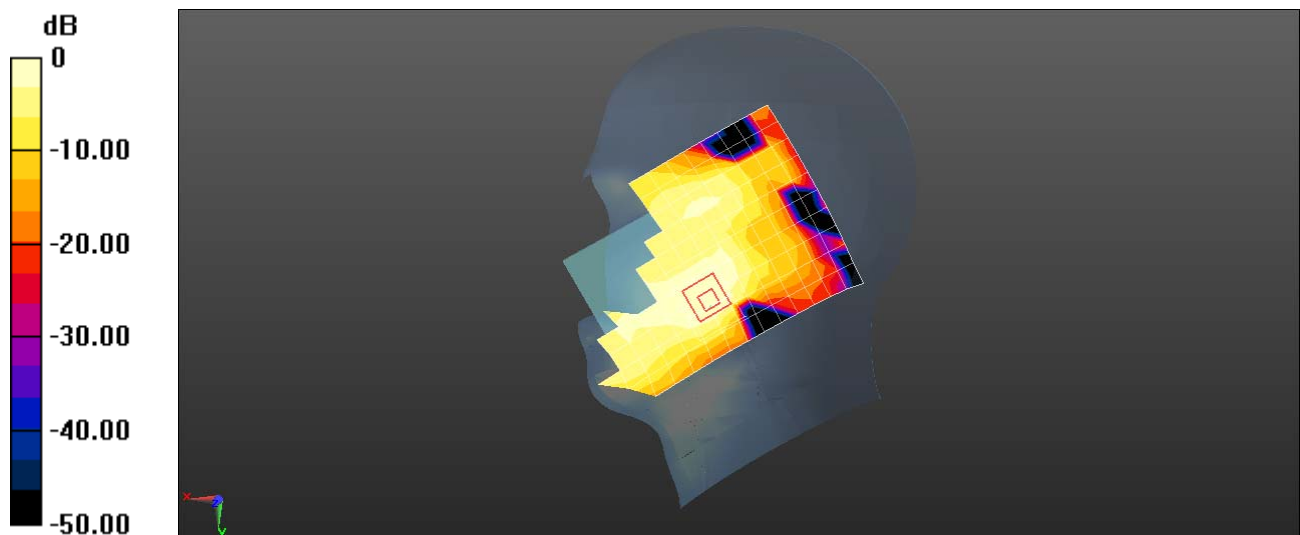
Configuration/Head/Zoom Scan (8x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 0.8690 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.146 W/kg

SAR(1 g) = 0.081 W/kg; SAR(10 g) = 0.046 W/kg

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



0 dB = 0.119 W/kg = -9.24 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 7 20M QPSK 50%RB 0 offset 21350CH Back Side 15mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 2.049$ S/m; $\epsilon_r = 51.623$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.12, 7.12, 7.12); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (11x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

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

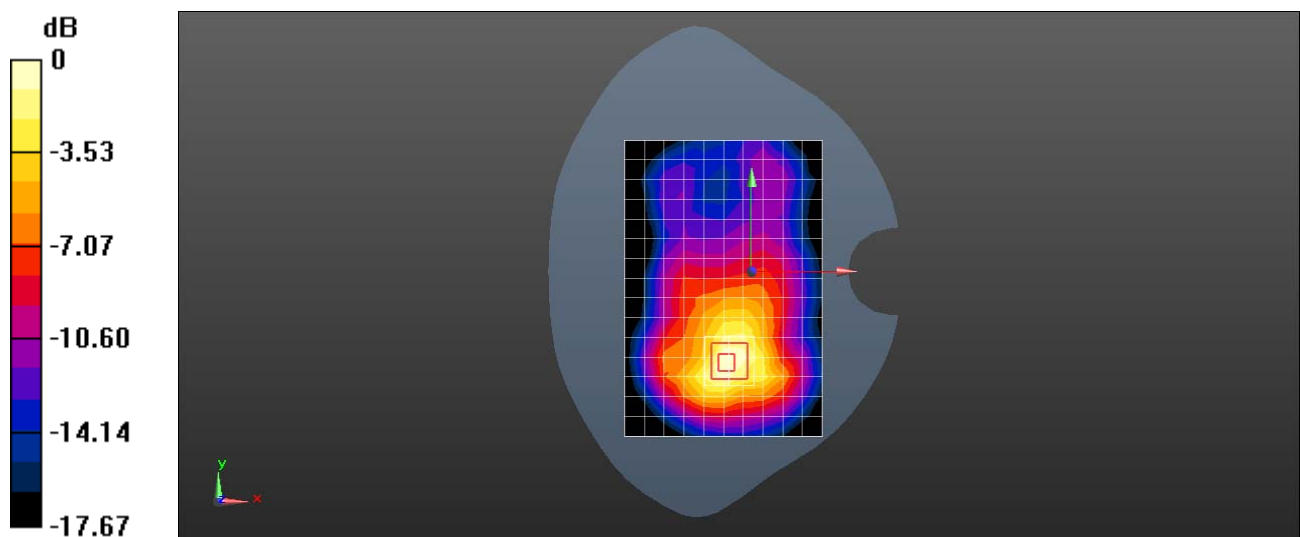
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.445 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.647 W/kg

SAR(1 g) = 0.366 W/kg; SAR(10 g) = 0.206 W/kg

Maximum value of SAR (measured) = 0.543 W/kg



0 dB = 0.543 W/kg = -2.65 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 7 20M QPSK 50%RB 0 offset 21350CH Bottom Side 10mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 2.049$ S/m; $\epsilon_r = 51.623$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.12, 7.12, 7.12); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε 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) = 0.585 W/kg

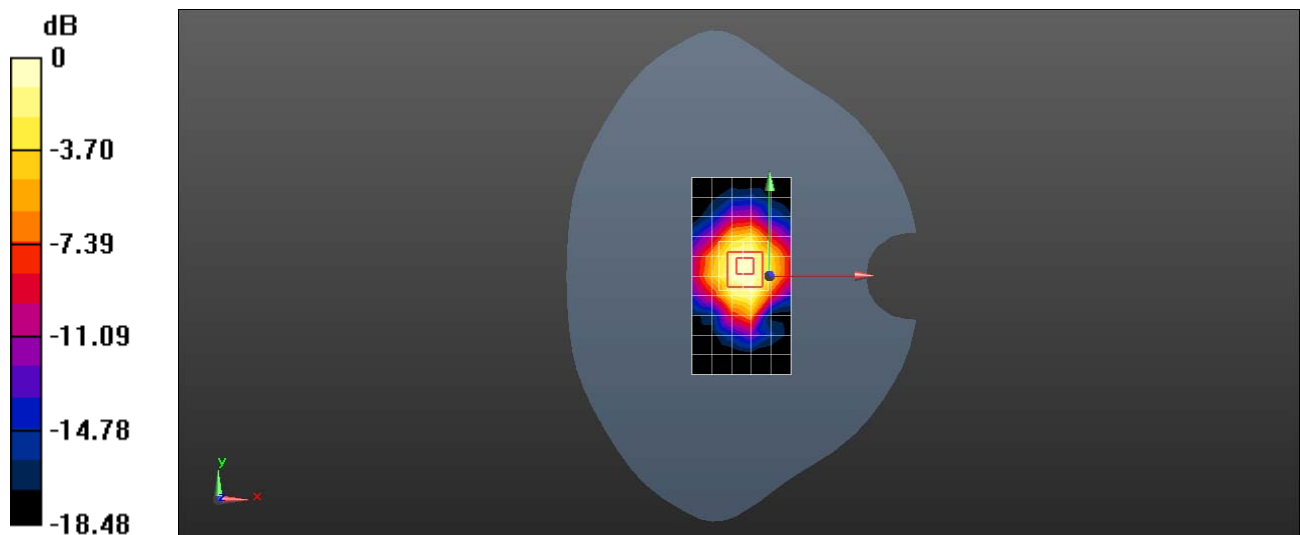
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 18.11 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.737 W/kg

SAR(1 g) = 0.437 W/kg; SAR(10 g) = 0.252 W/kg

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



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

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 12 10M QPSK 1RB 25 offset 23130CH Right Touch

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 711$ MHz; $\sigma = 0.876$ S/m; $\epsilon_r = 42.905$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.44, 9.44, 9.44); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x13x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.238 W/kg

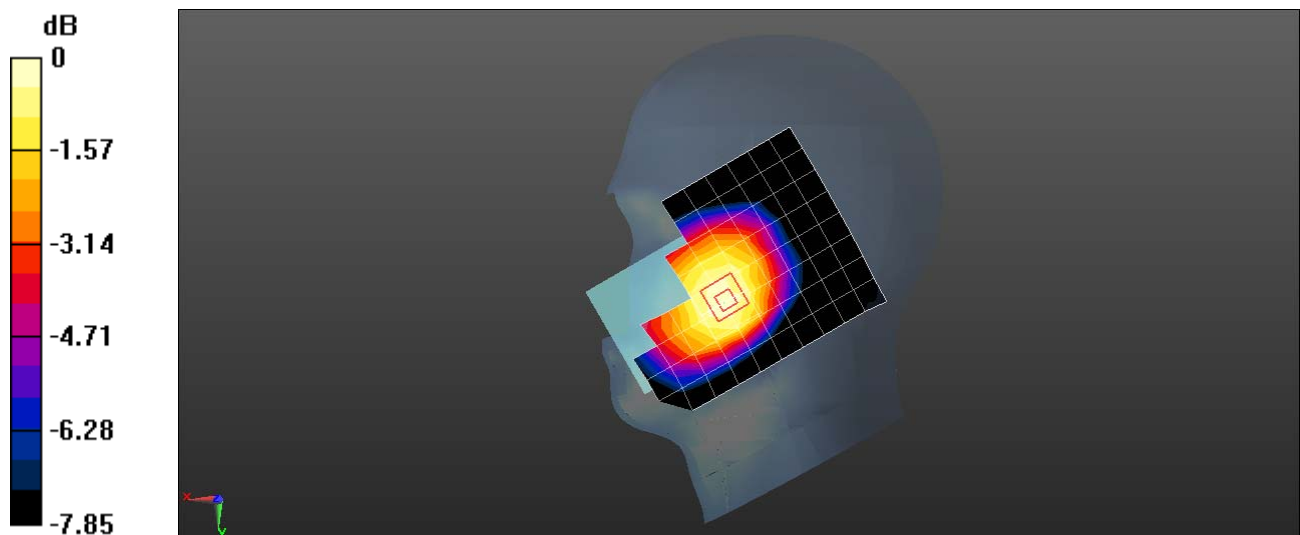
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.577 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.251 W/kg

SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.166 W/kg

Maximum value of SAR (measured) = 0.236 W/kg



0 dB = 0.236 W/kg = -6.27 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 12 10M QPSK 1RB 25 offset 23130CH Back Side 15mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.934 \text{ S/m}$; $\epsilon_r = 53.797$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.62, 9.62, 9.62); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.353 W/kg

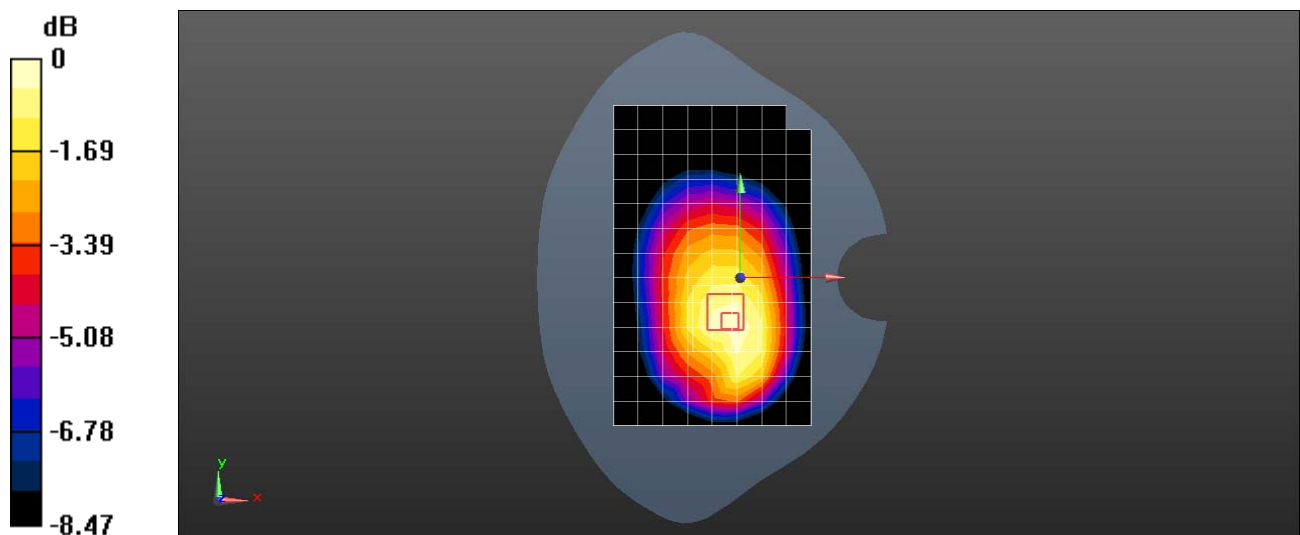
Configuration/Body/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 18.21 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.385 W/kg

SAR(1 g) = 0.303 W/kg ; SAR(10 g) = 0.237 W/kg

Maximum value of SAR (measured) = 0.359 W/kg



0 dB = 0.359 W/kg = -4.45 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 12 10M QPSK 1RB 25 offset 23130CH Back Side 10mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 711 \text{ MHz}$; $\sigma = 0.934 \text{ S/m}$; $\epsilon_r = 53.797$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.62, 9.62, 9.62); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

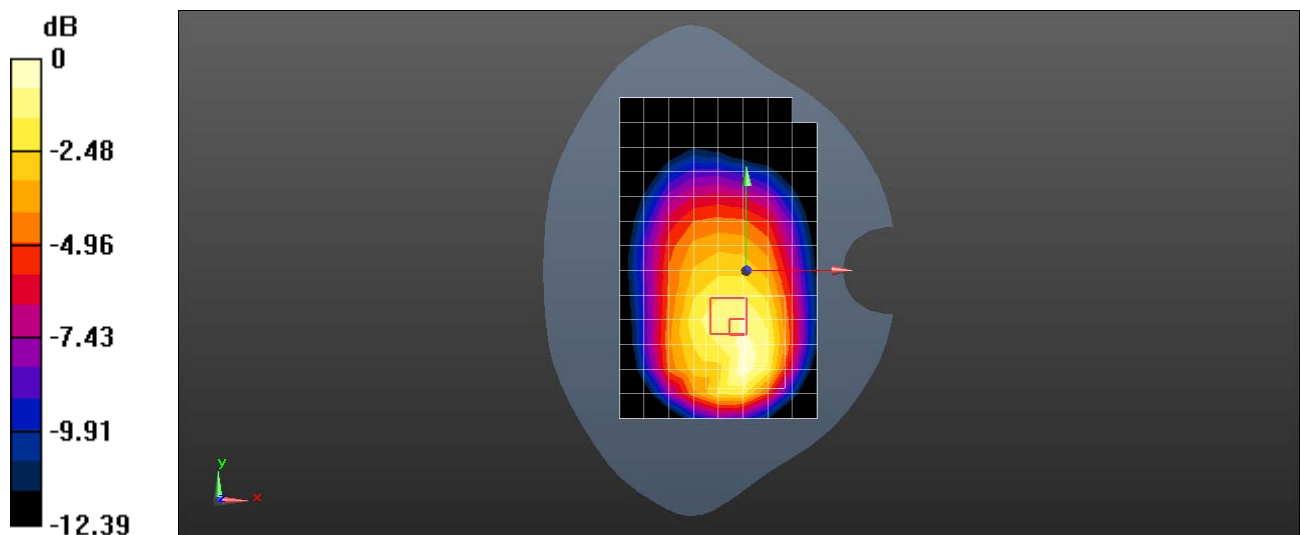
Configuration/Body/Zoom Scan (7x8x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.67 V/m ; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.667 W/kg

SAR(1 g) = 0.421 W/kg ; SAR(10 g) = 0.317 W/kg

Maximum value of SAR (measured) = 0.572 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 17 10M QPSK 1RB 49 offset 23780CH Right Touch with Battery2

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 709 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 709 \text{ MHz}$; $\sigma = 0.875 \text{ S/m}$; $\epsilon_r = 42.908$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.44, 9.44, 9.44); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (9x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.216 W/kg

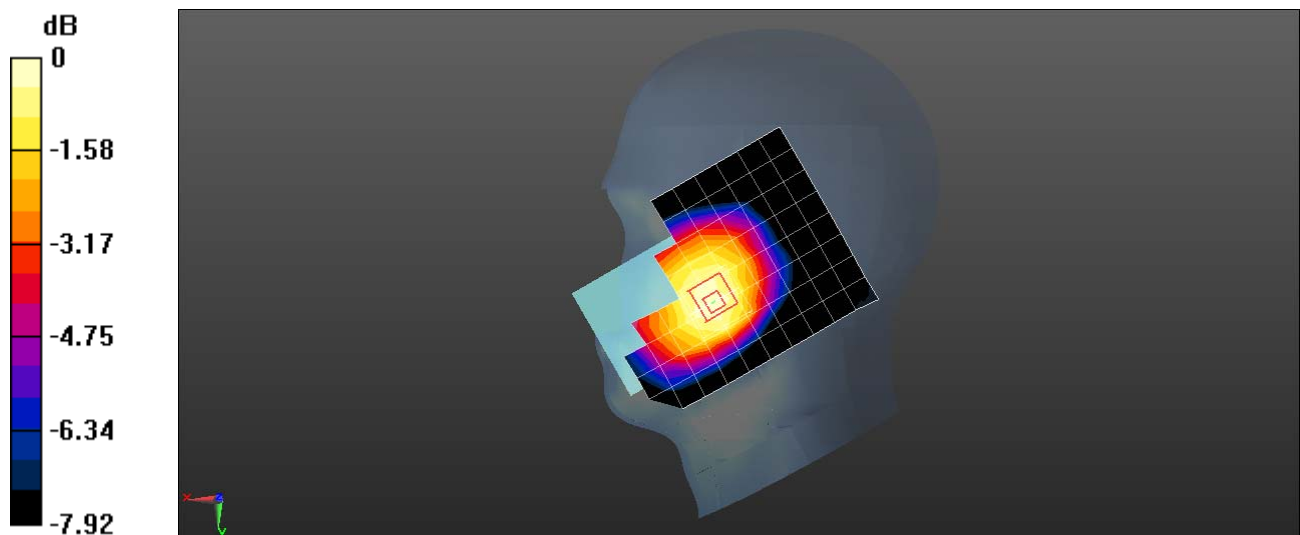
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.209 V/m ; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.227 W/kg

SAR(1 g) = 0.185 W/kg ; SAR(10 g) = 0.149 W/kg

Maximum value of SAR (measured) = 0.213 W/kg



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

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 17 10M QPSK 1RB 49 offset 23780CH Back Side 15mm with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 709 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 709 \text{ MHz}$; $\sigma = 0.932 \text{ S/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.62, 9.62, 9.62); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

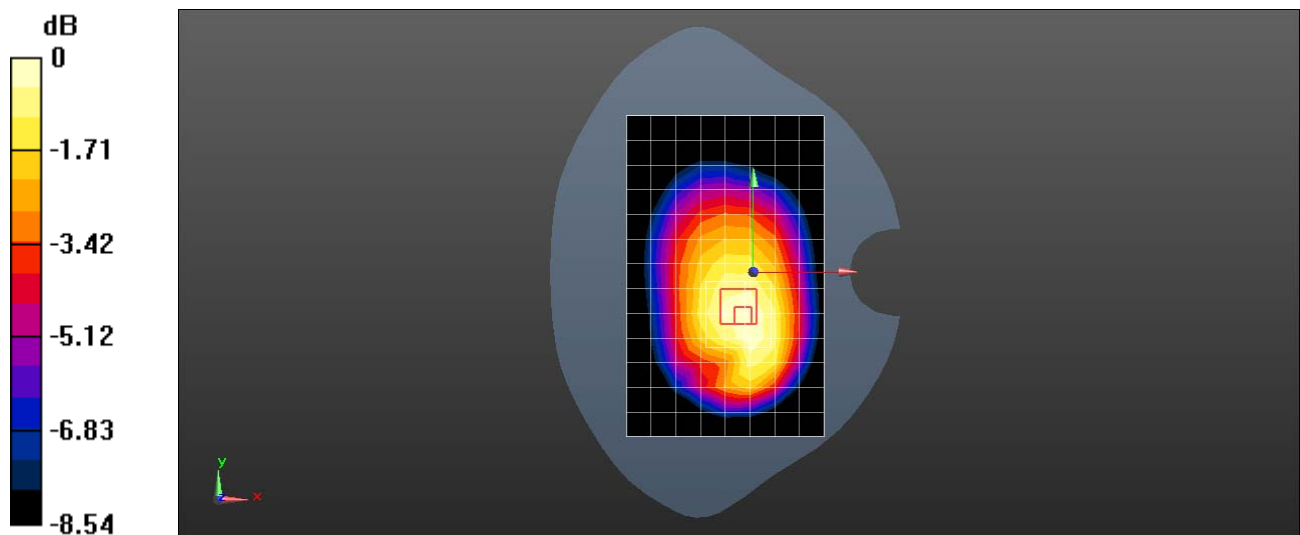
Configuration/Body/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.56 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.349 W/kg

SAR(1 g) = 0.276 W/kg ; SAR(10 g) = 0.217 W/kg

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



0 dB = 0.325 W/kg = -4.88 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 LTE Band 17 10M QPSK 1RB 49 offset 23780CH Back Side 10mm with Battery3

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 709 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 709 \text{ MHz}$; $\sigma = 0.932 \text{ S/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(9.62, 9.62, 9.62); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.456 W/kg

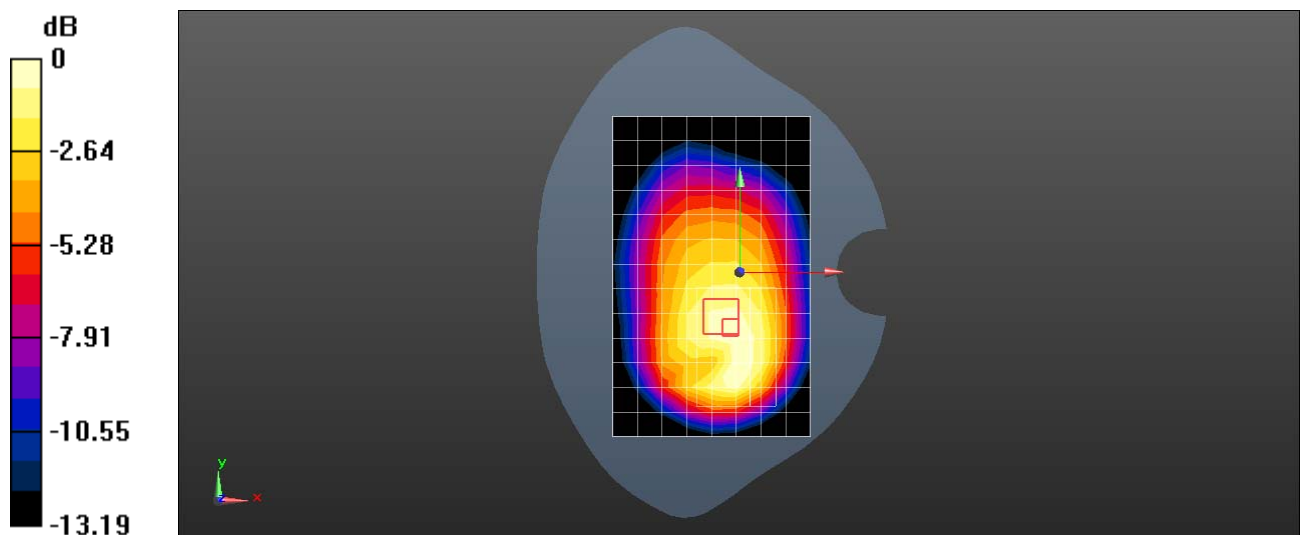
Configuration/Body/Zoom Scan (7x10x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 18.48 V/m ; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.554 W/kg

SAR(1 g) = 0.371 W/kg ; SAR(10 g) = 0.281 W/kg

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



0 dB = 0.467 W/kg = -3.31 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 WiFi 2.4G 802.11b 20M 1CH Left Touch

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 2412 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2412$ MHz; $\sigma = 1.755$ S/m; $\epsilon_r = 38.957$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.3, 7.3, 7.3); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (11x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.962 W/kg

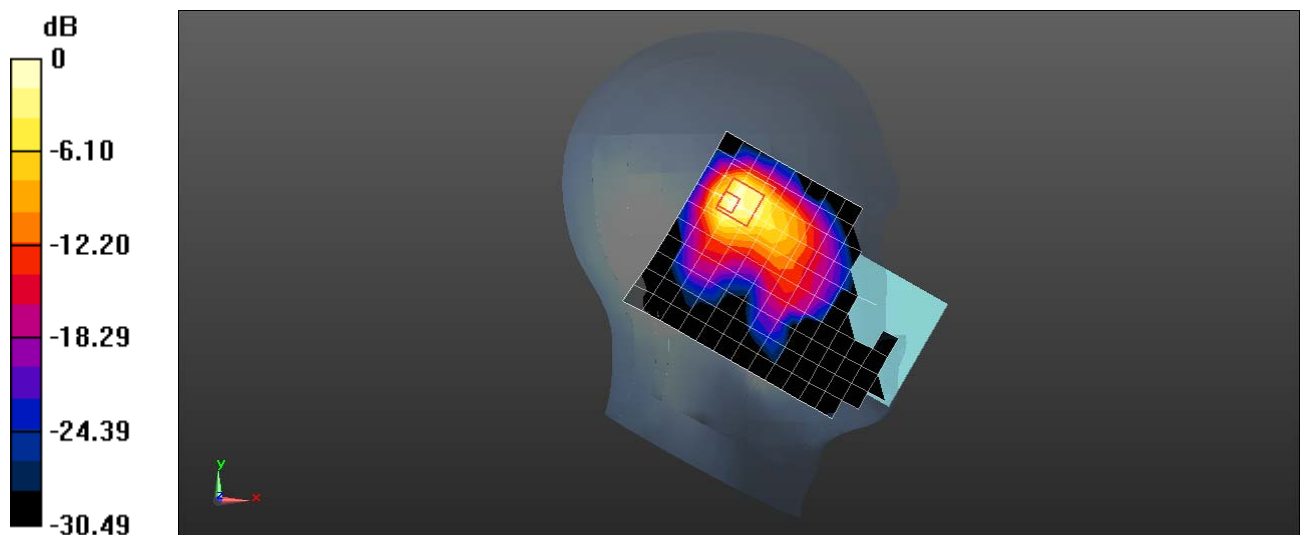
Configuration/Head/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.413 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.469 W/kg; SAR(10 g) = 0.218 W/kg

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



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

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 WiFi 2.4G 802.11b 20M 6CH Back Side 15mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 2437 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2437$ MHz; $\sigma = 1.907$ S/m; $\epsilon_r = 52.613$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.29, 7.29, 7.29); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (11x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.141 W/kg

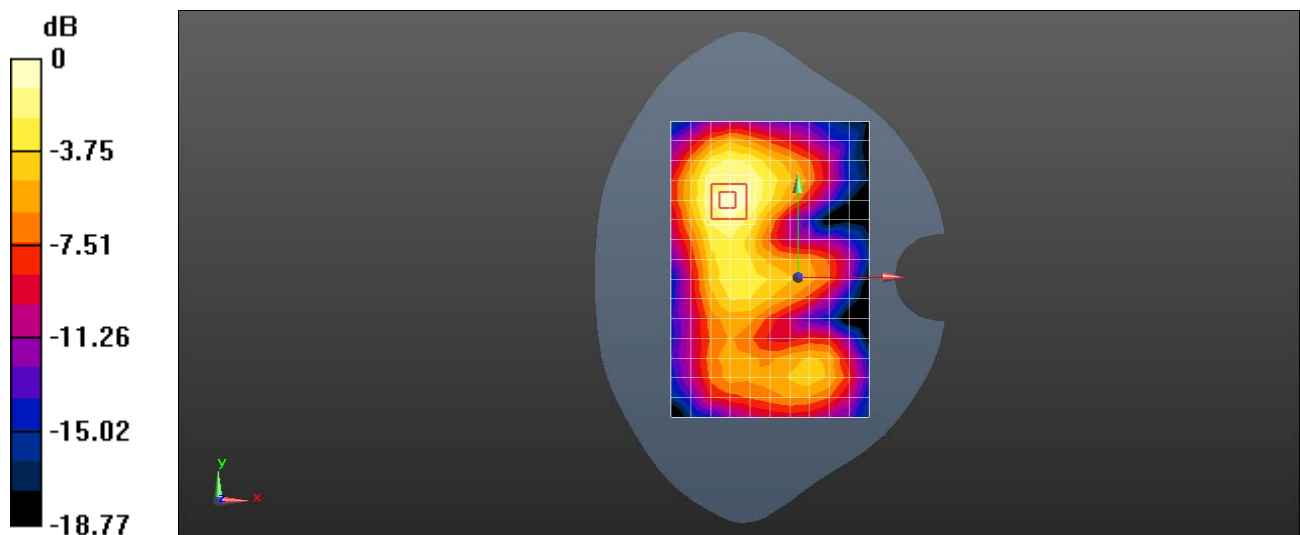
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.729 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.170 W/kg

SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.057 W/kg

Maximum value of SAR (measured) = 0.143 W/kg



0 dB = 0.143 W/kg = -8.45 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 WiFi 2.4G 802.11b 20M 11CH Right Side 10mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 2462 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2462$ MHz; $\sigma = 1.931$ S/m; $\epsilon_r = 52.584$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3744; ConvF(7.29, 7.29, 7.29); Calibrated: 2017-7-24;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x16x1): Measurement grid: $dx=12$ mm, $dy=12$ mm
Maximum value of SAR (measured) = 0.246 W/kg

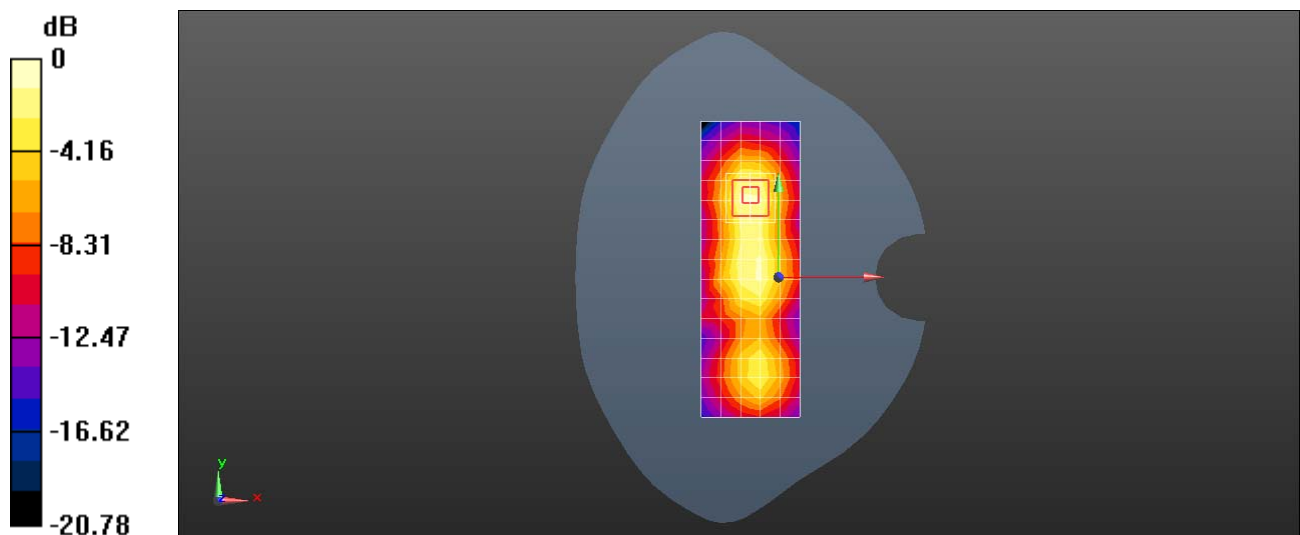
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 12.06 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.379 W/kg

SAR(1 g) = 0.203 W/kg; SAR(10 g) = 0.104 W/kg

Maximum value of SAR (measured) = 0.311 W/kg



0 dB = 0.311 W/kg = -5.07 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 WiFi 5G 802.11a 20M 153CH Left Touch

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 5765 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5765$ MHz; $\sigma = 5.463$ S/m; $\epsilon_r = 36.024$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3736; ConvF(4.69, 4.69, 4.69); Calibrated: 2017-4-27;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM3; Type: SAM; Serial: TP-1597
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Head/Area Scan (13x20x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 1.17 W/kg

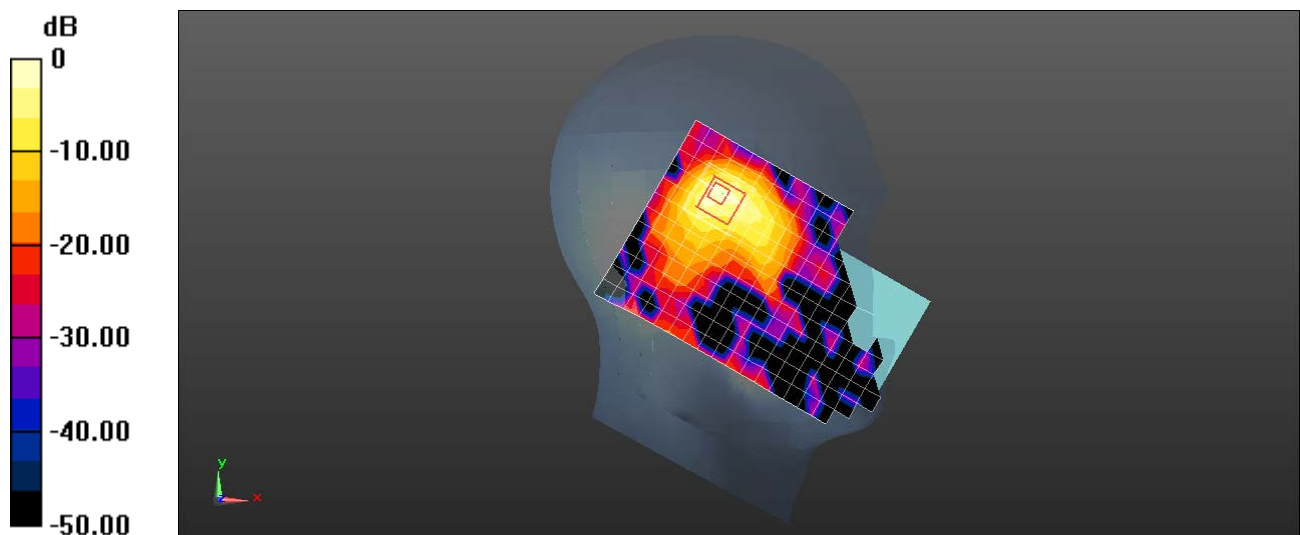
Configuration/Head/Zoom Scan (9x9x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 5.111 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.49 W/kg

SAR(1 g) = 0.523 W/kg; SAR(10 g) = 0.162 W/kg

Maximum value of SAR (measured) = 1.40 W/kg



0 dB = 1.40 W/kg = 1.46 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 WiFi 5G 802.11a 20M 157CH Front Side 15mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 5785 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.824 \text{ S/m}$; $\epsilon_r = 47.965$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3736; ConvF(4.02, 4.02, 4.02); Calibrated: 2017-4-27;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (13x20x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 0.592 W/kg

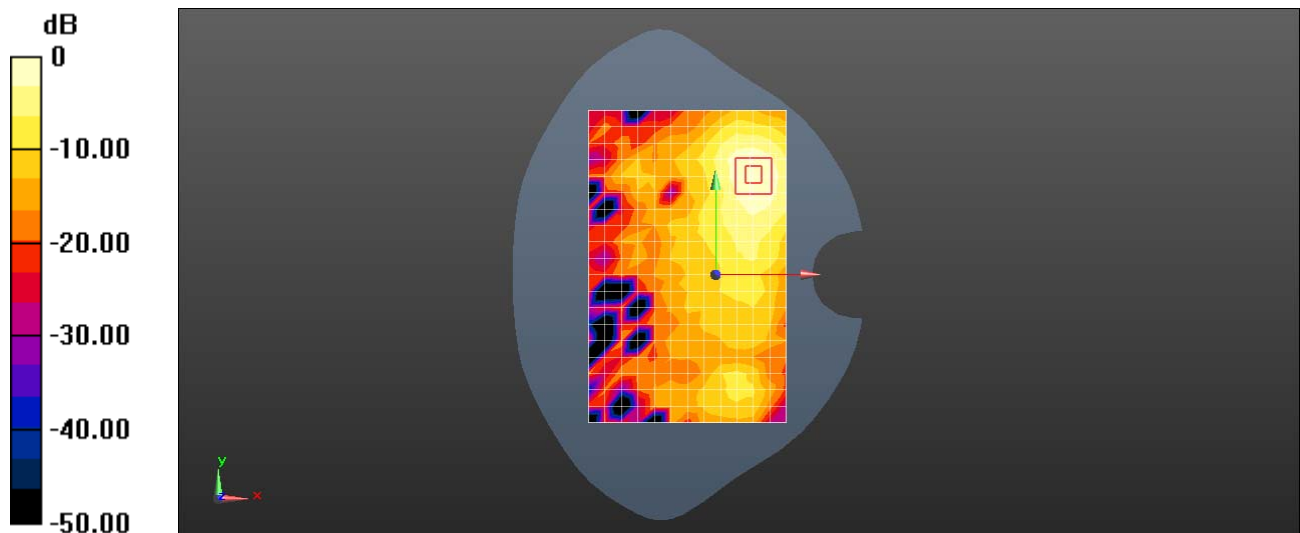
Configuration/Body/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$,
 $dz=1.4\text{mm}$

Reference Value = 2.823 V/m ; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.921 W/kg

SAR(1 g) = 0.228 W/kg ; SAR(10 g) = 0.086 W/kg

Maximum value of SAR (measured) = 0.518 W/kg



0 dB = 0.518 W/kg = -2.86 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

FRD-L24 WiFi 5G 802.11a 20M 161CH Right Side 10mm

DUT: FRD-L24; Type: Smart Phone; Serial: SAR2

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 5805 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5805 \text{ MHz}$; $\sigma = 5.853 \text{ S/m}$; $\epsilon_r = 47.913$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY Configuration:

- ε Probe: EX3DV4 - SN3736; ConvF(4.02, 4.02, 4.02); Calibrated: 2017-4-27;
- ε Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- ε Electronics: DAE4 Sn852; Calibrated: 2017-4-27
- ε Phantom: SAM4; Type: SAM; Serial: TP-1620
- ε DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x20x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (measured) = 0.335 W/kg

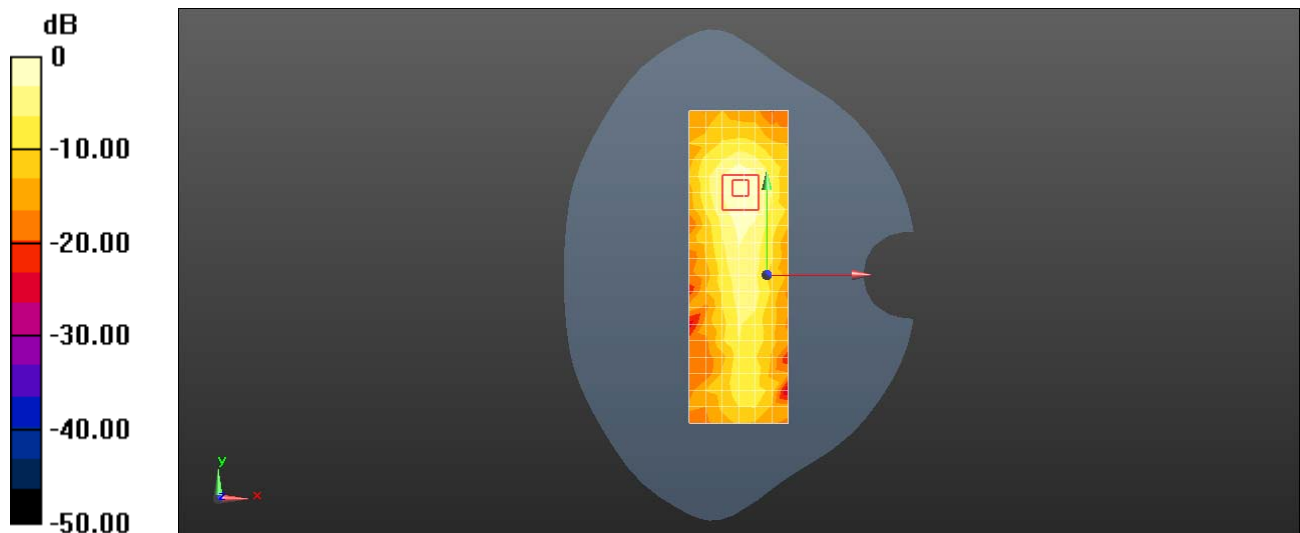
Configuration/Body/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$,
 $dz=1.4\text{mm}$

Reference Value = 4.980 V/m ; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.927 W/kg

SAR(1 g) = 0.130 W/kg ; SAR(10 g) = 0.047 W/kg

Maximum value of SAR (measured) = 0.337 W/kg



0 dB = 0.337 W/kg = -4.72 dBW/kg