



Appendix B. SAR Measurement Plots

Table of contents
GSM850 Body
GSM1900 Body
UMTS Band V Body
LTE Band V Body
LTE Band VII Body
2.4G WiFi Body
5G WiFi Body

Test Laboratory: HUAWEI SAR/HAC Lab

R216 GSM850 GPRS 2TS 251CH Front Side 10mm-repeated

DUT: R216; Type: Vodafone Mobile Wi-Fi; Serial: SAR2

Communication System: UID 0, HW-GSM\GPRS\EGPRS-2TS (0); Frequency: 848.8 MHz; Duty Cycle: 1:4.10015

Medium parameters used: $f = 849$ MHz; $\sigma = 0.976$ S/m; $\epsilon_r = 53.547$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3168; ConvF(6.21, 6.21, 6.21); Calibrated: 2014-9-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn852; Calibrated: 2014-4-30
- Phantom: SAM4; Type: SAM; Serial: TP-1620
- DASY52 52.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x11x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.908 W/kg

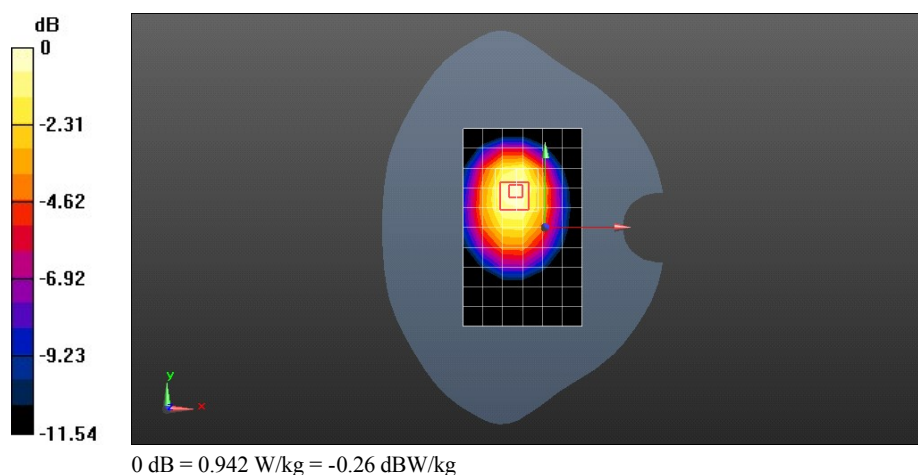
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 24.53 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.828 W/kg; SAR(10 g) = 0.573 W/kg

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



Test Laboratory: HUAWEI SAR/HAC Lab

R216 GSM1900 GPRS 2TS 661CH Front Side 10mm

DUT: R216; Type: Vodafone Mobile Wi-Fi; 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; $\sigma = 1.514$ S/m; $\epsilon_r = 51.715$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3168; ConvF(4.72, 4.72, 4.72); Calibrated: 2014-9-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn852; Calibrated: 2014-4-30
- Phantom: SAM3; Type: SAM; Serial: TP-1597
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x11x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.715 W/kg

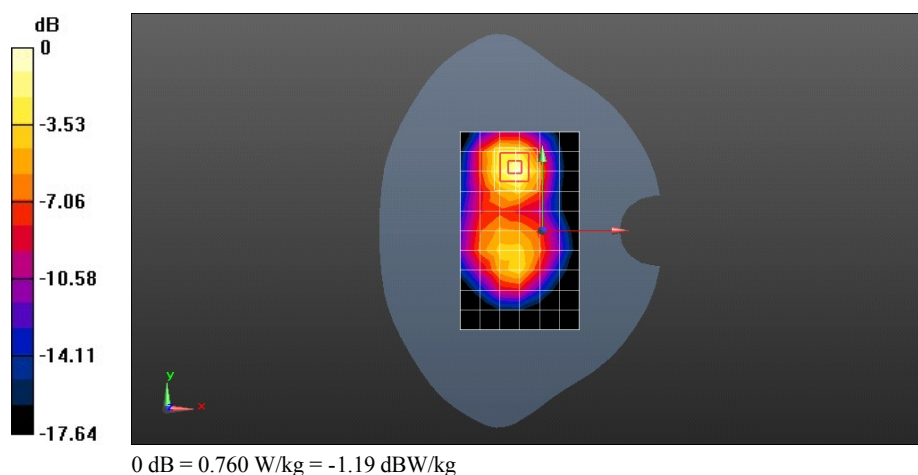
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 11.25 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.325 W/kg

Maximum value of SAR (measured) = 0.760 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

R216 UMTS Band V 4233CH Front Side 10mm

DUT: R216; Type: Vodafone Mobile Wi-Fi; Serial: SAR2

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 847$ MHz; $\sigma = 0.973$ S/m; $\epsilon_r = 53.568$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3168; ConvF(6.21, 6.21, 6.21); Calibrated: 2014-9-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn852; Calibrated: 2014-4-30
- Phantom: SAM4; Type: SAM; Serial: TP-1620
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x11x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

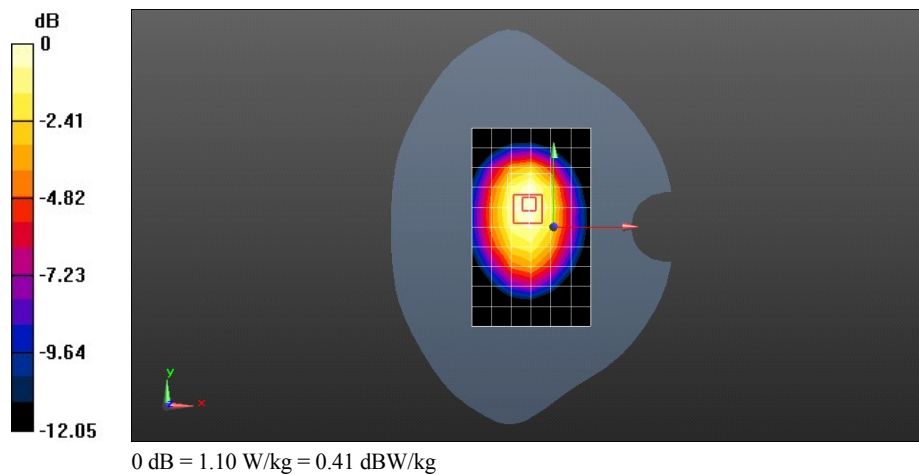
Maximum value of SAR (measured) = 1.10 W/kg

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

Reference Value = 30.85 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.977 W/kg; SAR(10 g) = 0.690 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

R216 LTE Band V 10M QPSK 1RB#25 20450CH Front Side 10mm

DUT: R216; Type: Vodafone Mobile Wi-Fi; 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: $f = 829$ MHz; $\sigma = 0.948$ S/m; $\epsilon_r = 53.784$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3168; ConvF(6.21, 6.21, 6.21); Calibrated: 2014-9-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn852; Calibrated: 2014-4-30
- Phantom: SAM4; Type: SAM; Serial: TP-1620
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x11x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 1.21 W/kg

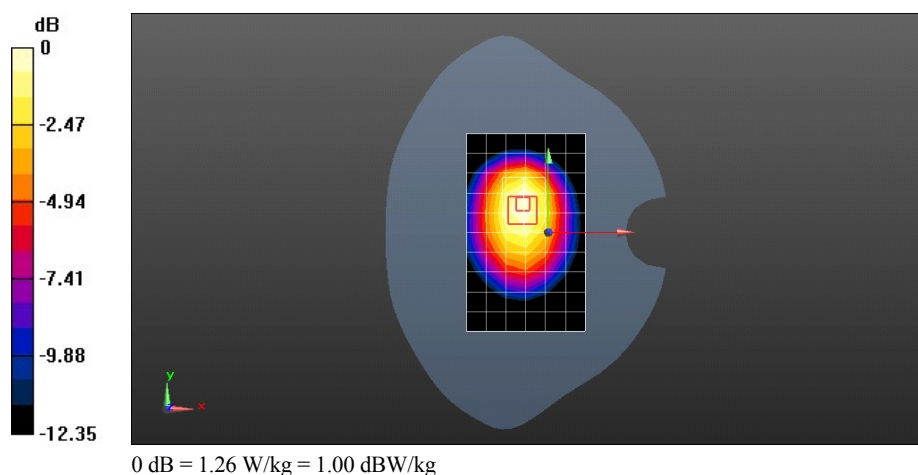
Configuration/Body/Zoom Scan (5x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 31.57 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.764 W/kg

Maximum value of SAR (measured) = 1.26 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

R216 LTE Band VII 20M QPSK 1RB#0 21350CH Right Side 10mm-repeated

DUT: R216; Type: Vodafone Mobile Wi-Fi; 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; $\sigma = 2.153$ S/m; $\epsilon_r = 52.716$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: ES3DV3 - SN3168; ConvF(4.14, 4.14, 4.14); Calibrated: 2014-9-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 2.0, 32.0$
- Electronics: DAE4 Sn852; Calibrated: 2014-4-30
- Phantom: SAM3; Type: SAM; Serial: TP-1597
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (6x10x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 1.24 W/kg

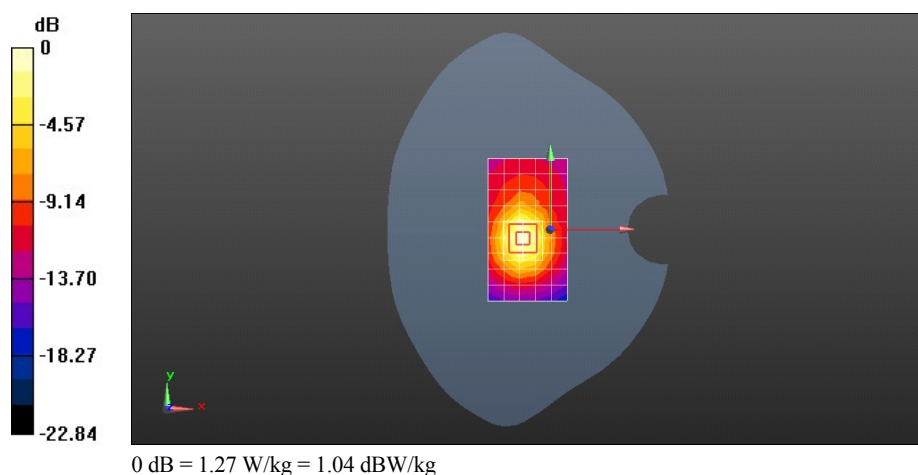
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 20.57 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 2.12 W/kg

SAR(1 g) = 0.991 W/kg; SAR(10 g) = 0.467 W/kg

Maximum value of SAR (measured) = 1.27 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

R216 WiFi 2.4G 802.11b 5CH Back Side 10mm

DUT: R216; Type: Vodafone Mobile Wi-Fi; Serial: SAR2

Communication System: UID 0, WiFi(802.11a/b/g/n) (0); Frequency: 2432 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2432$ MHz; $\sigma = 1.959$ S/m; $\epsilon_r = 50.812$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3736; ConvF(6.99, 6.99, 6.99); Calibrated: 2014-4-24;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2014-4-30
- Phantom: SAM4; Type: SAM; Serial: TP-1620
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (8x11x1): Measurement grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (measured) = 0.116 W/kg

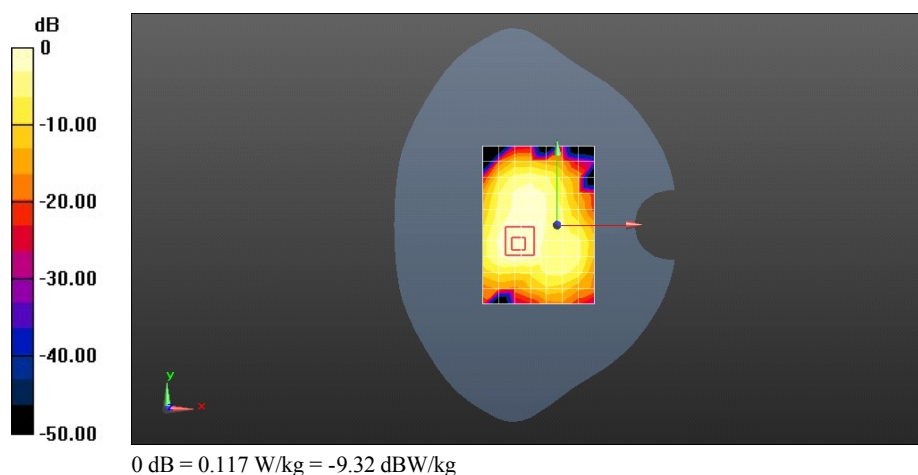
Configuration/Body/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 5.866 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.171 W/kg

SAR(1 g) = 0.096 W/kg; SAR(10 g) = 0.052 W/kg

Maximum value of SAR (measured) = 0.117 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

R216 WiFi 802.11a 36CH Top side 10mm-Ant2

DUT: R216; Type: Vodafone Mobile Wi-Fi; Serial: SAR1

Communication System: UID 0, WiFi(802.11a/b/g/n/ac) (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 5.185$ S/m; $\epsilon_r = 50.992$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN3736; ConvF(4.27, 4.27, 4.27); Calibrated: 2014-4-24;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), $z = 1.0, 25.0$
- Electronics: DAE4 Sn852; Calibrated: 2014-4-30
- Phantom: SAM3; Type: SAM; Serial: TP-1597
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Configuration/Body/Area Scan (7x11x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.450 W/kg

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

Reference Value = 3.088 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.936 W/kg

SAR(1 g) = 0.212 W/kg; SAR(10 g) = 0.064 W/kg

Maximum value of SAR (measured) = 0.461 W/kg

