



Appendix B. SAR Measurement Plots

| Table of contents |
|--------------------------------------|
| GSM850 Head (Second Antenna) |
| GSM850 Body (Second Antenna) |
| GSM1900 Head (Second Antenna) |
| GSM1900 Body (Second Antenna) |
| GSM850 Head (Main Antenna) |
| GSM850 Body(Main Antenna) |
| GSM1900 Head(Main Antenna) |
| GSM1900 Body(Main Antenna) |

Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM850 251CH Left hand touch cheek with SIM2-Second Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM/GPRS/EGPRS-1TS (0); Frequency: 848.8 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 849$ MHz; $\sigma = 0.919$ S/m; $\epsilon_r = 40.404$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(9.92, 9.92, 9.92); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- 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) = 0.796 W/kg

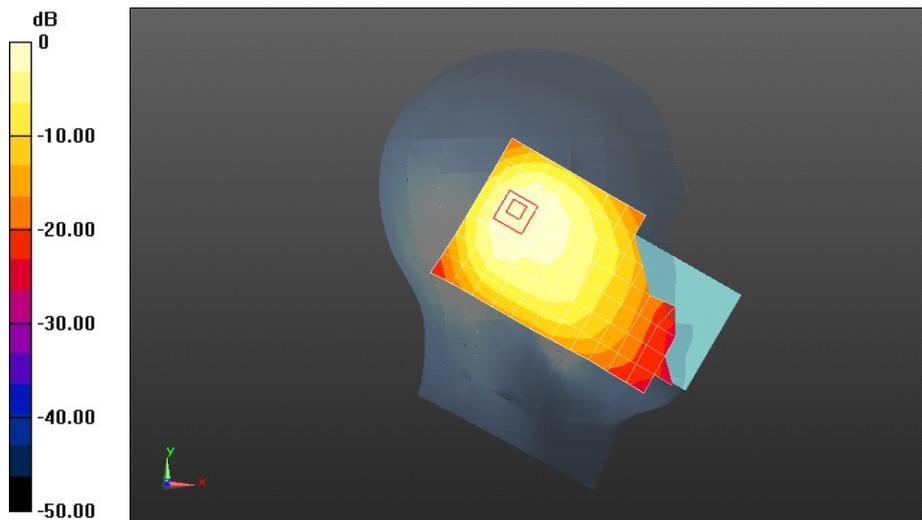
Configuration/Head/Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 23.26 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.691 W/kg; SAR(10 g) = 0.378 W/kg

Maximum value of SAR (measured) = 0.812 W/kg



0 dB = 0.796 W/kg = -0.99 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM850 190CH Back side 15mm with SIM2 and battery 2#-Second Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SARI

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; $\sigma = 0.968$ S/m; $\epsilon_r = 55.855$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(9.42, 9.42, 9.42); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- 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) = 0.219 W/kg

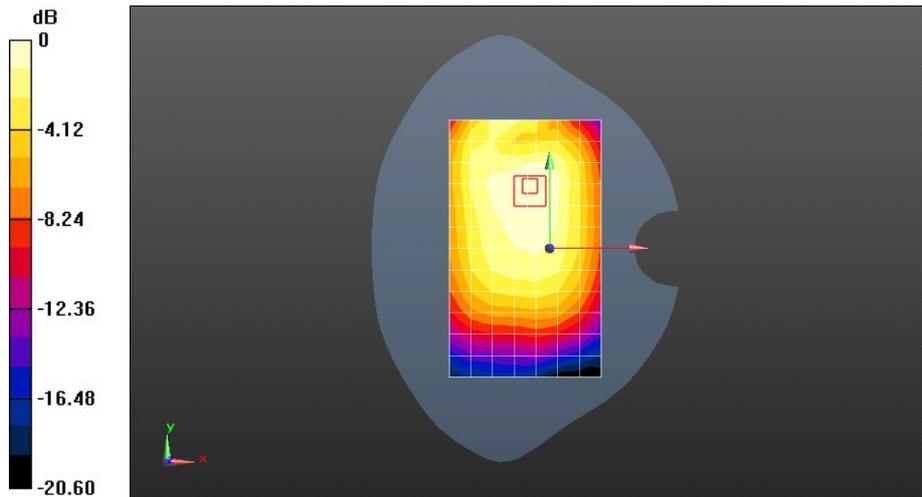
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 13.02 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.202 W/kg; SAR(10 g) = 0.151 W/kg

Maximum value of SAR (measured) = 0.220 W/kg



0 dB = 0.219 W/kg = -6.60 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM850 GPRS 2TS 190CH Front side 10mm with SIM2 and battery 2#-Second Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SAR1

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; $\sigma = 0.968$ S/m; $\epsilon_r = 55.855$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(9.42, 9.42, 9.42); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- 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) = 0.252 W/kg

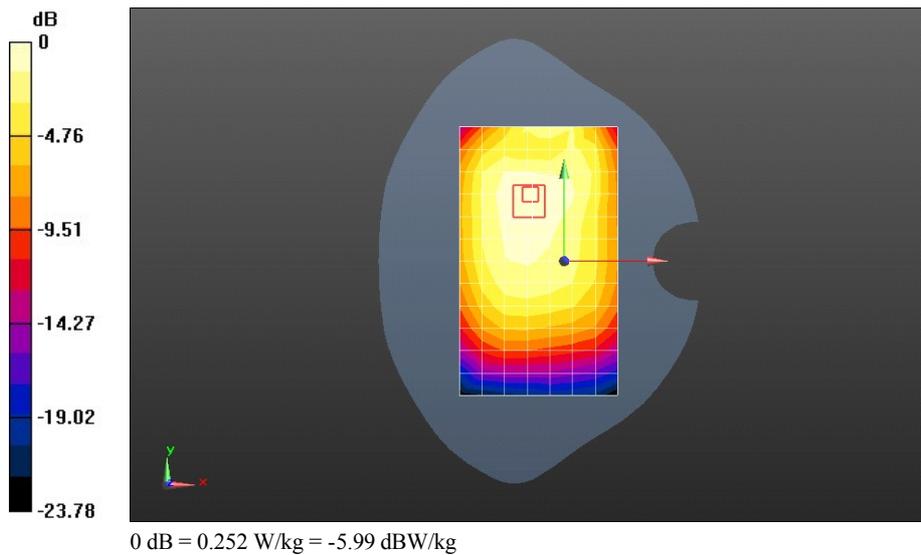
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 11.07 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.370 W/kg

SAR(1 g) = 0.228 W/kg; SAR(10 g) = 0.134 W/kg

Maximum value of SAR (measured) = 0.264 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM1900 810CH Right hand tilt 15 degree with SIM2 and battery 2#-Second Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM/GPRS/EGPRS-1TS (0); Frequency: 1909.8 MHz;Duty Cycle: 1:8.30042

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.734$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(8.12, 8.12, 8.12); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- 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) = 0.818 W/kg

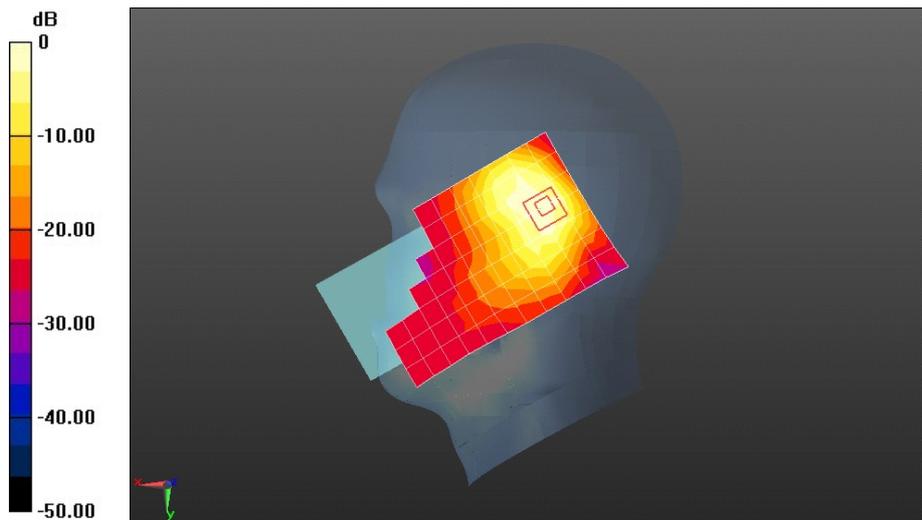
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 21.11 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 0.766 W/kg; SAR(10 g) = 0.370 W/kg

Maximum value of SAR (measured) = 0.888 W/kg



0 dB = 0.818 W/kg = -0.87 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM1900 661CH Back side 15mm with SIM2 and battery 2#-Second Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SAR1

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.508$ S/m; $\epsilon_r = 52.825$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(7.82, 7.82, 7.82); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- 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) = 0.0717 W/kg

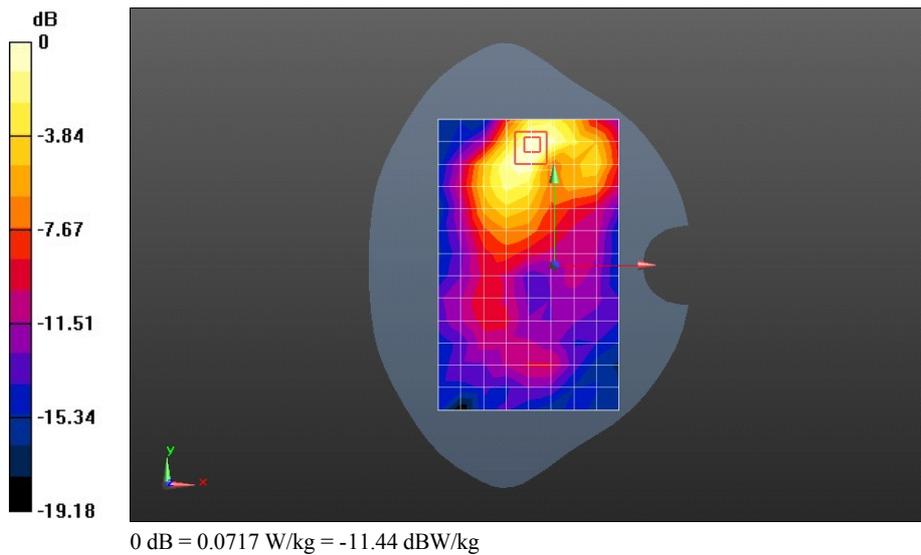
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 1.733 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.105 W/kg

SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.038 W/kg

Maximum value of SAR (measured) = 0.0786 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM1900 GPRS 2TS 661CH Top side 10mm with SIM2 and battery 2#-Second Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SAR1

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.508$ S/m; $\epsilon_r = 52.825$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(7.82, 7.82, 7.82); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.171 W/kg

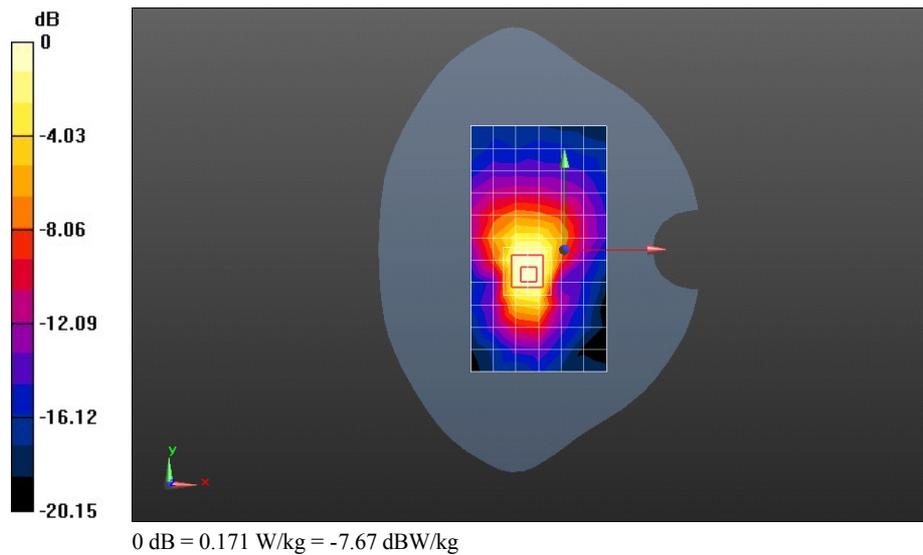
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 9.348 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.407 W/kg

SAR(1 g) = 0.233 W/kg; SAR(10 g) = 0.117 W/kg

Maximum value of SAR (measured) = 0.296 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L02 GSM850 128CH Right hand touch cheek with SIM2 and battery 2#-Main Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM/GPRS/EGPRS-1TS (0); Frequency: 824.2 MHz; Duty Cycle: 1:8.30042

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.9$ S/m; $\epsilon_r = 40.618$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(9.92, 9.92, 9.92); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

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

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

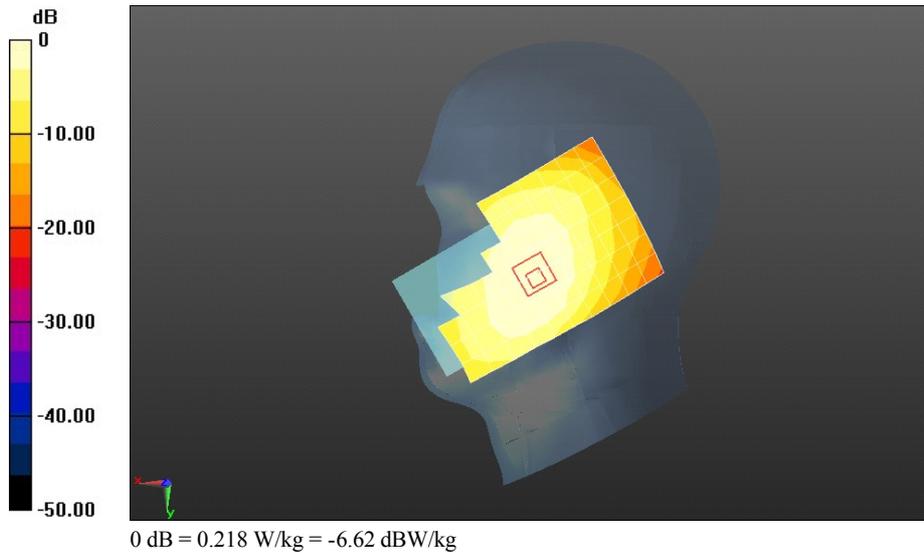
Reference Value = 5.328 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.239 W/kg

SAR(1 g) = 0.197 W/kg; SAR(10 g) = 0.151 W/kg

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

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



Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM850 190CH Back side 15mm with SIM2 and battery 2#-Main Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SARI

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; $\sigma = 0.968$ S/m; $\epsilon_r = 55.855$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(9.42, 9.42, 9.42); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

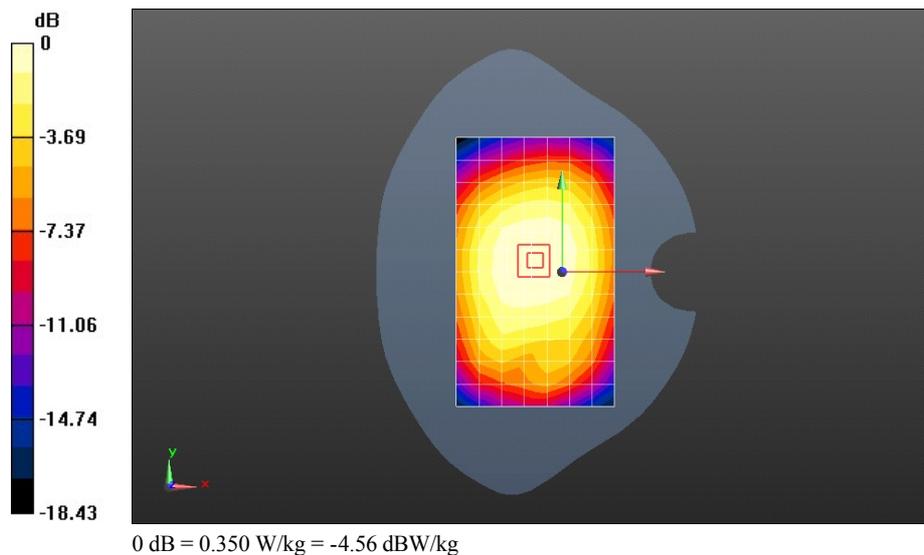
Maximum value of SAR (measured) = 0.350 W/kg

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

Reference Value = 19.01 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.393 W/kg

SAR(1 g) = 0.322 W/kg; SAR(10 g) = 0.251 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM850 GPRS 2TS 190CH Right side 10mm with SIM2 and battery 2#-Main Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SAR1

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; $\sigma = 0.968$ S/m; $\epsilon_r = 55.855$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(9.42, 9.42, 9.42); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- 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) = 0.339 W/kg

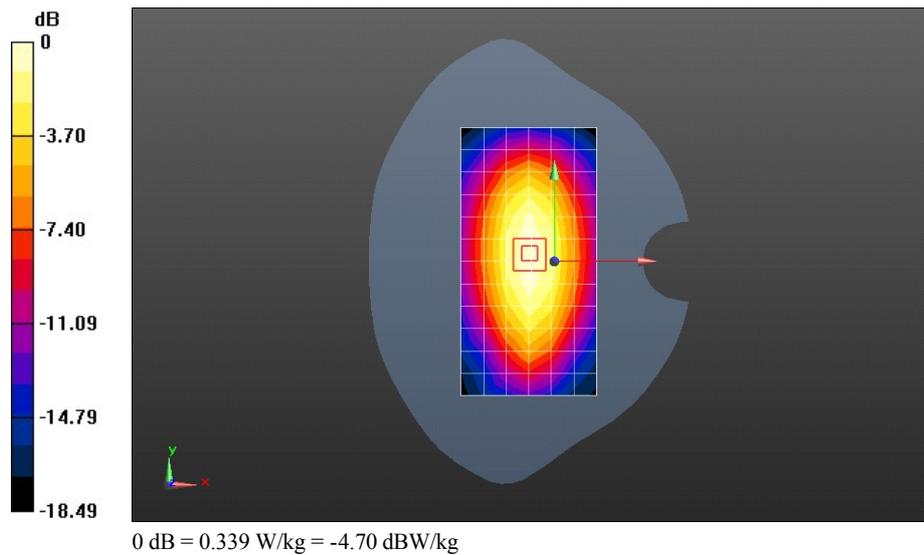
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 18.81 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.404 W/kg

SAR(1 g) = 0.292 W/kg; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.335 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM1900 810CH Left hand touch cheek with SIM2-Main Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM/GPRS/EGPRS-1TS (0); Frequency: 1909.8 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.734$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(8.12, 8.12, 8.12); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM1; Type: SAM; Serial: TP-1475
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 0.134 W/kg

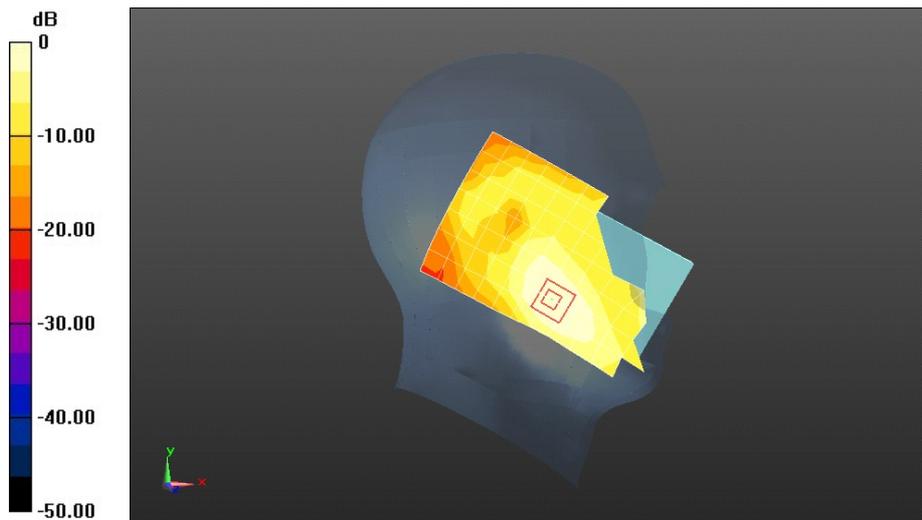
Configuration/Head/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.717 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.186 W/kg

SAR(1 g) = 0.123 W/kg; SAR(10 g) = 0.076 W/kg

Maximum value of SAR (measured) = 0.145 W/kg



0 dB = 0.134 W/kg = -8.73 dBW/kg

Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM1900 661CH Front side 15mm with SIM2-Main Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SAR1

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.508$ S/m; $\epsilon_r = 52.825$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(7.82, 7.82, 7.82); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- 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) = 0.288 W/kg

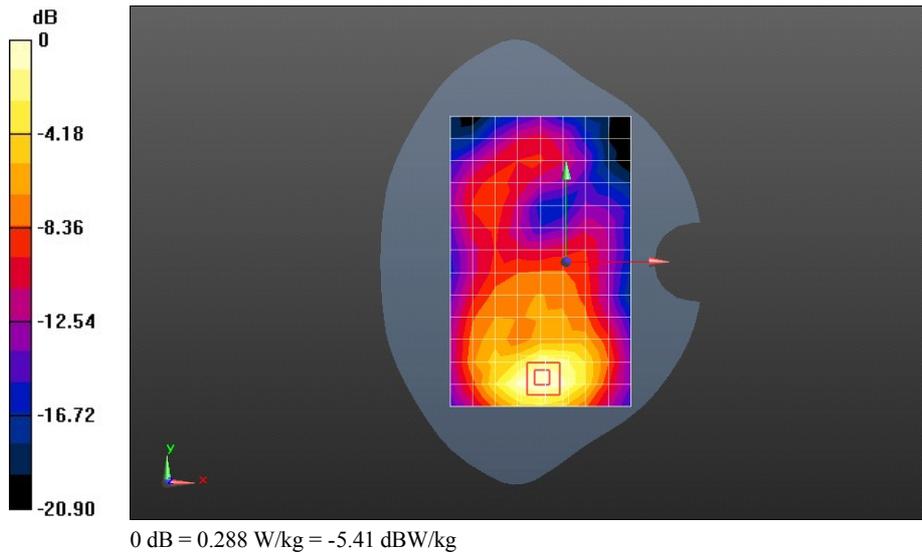
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.850 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.159 W/kg

Maximum value of SAR (measured) = 0.314 W/kg



Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM1900 GPRS 2TS 810CH Bottom side 10mm with SIM2 and battery 2#-Main Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SARI

Communication System: UID 0, HW-GSM/GPRS/EGPRS-2TS (0); Frequency: 1909.8 MHz; Duty Cycle: 1:4.10015

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.539$ S/m; $\epsilon_r = 52.721$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(7.82, 7.82, 7.82); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 1.22 W/kg

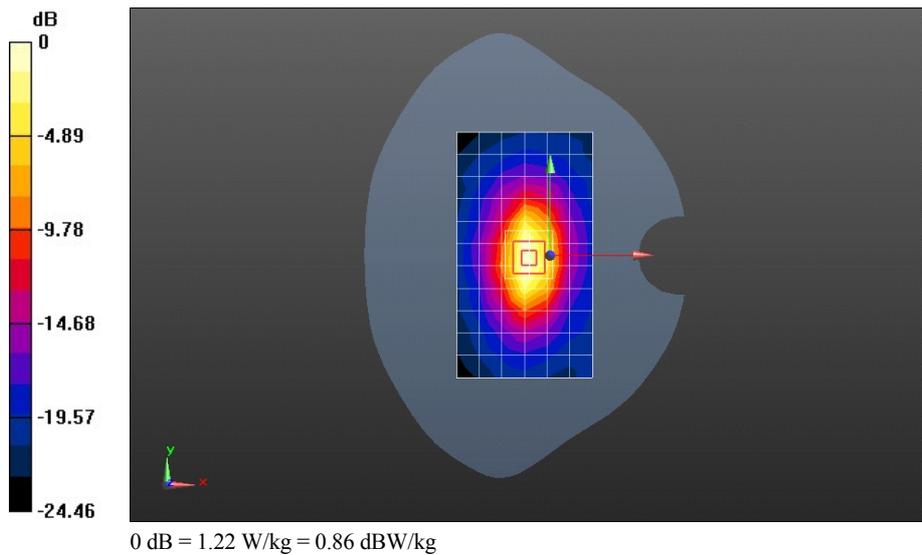
Configuration/Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 29.24 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.90 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.587 W/kg

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



Test Laboratory: HUAWEI SAR/HAC Lab

RIO-L01 GSM1900 GPRS 2TS 810CH Bottom side 0mm with SIM2 and battery 2#-Main Antenna

DUT: HUAWEI RIO-L01, RIO-L01; Type: Smart Phone; Serial: SARI

Communication System: UID 0, HW-GSM/GPRS/EGPRS-2TS (0); Frequency: 1909.8 MHz; Duty Cycle: 1:4.10015

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.539$ S/m; $\epsilon_r = 52.721$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY Configuration:

- Probe: EX3DV4 - SN7350; ConvF(7.82, 7.82, 7.82); Calibrated: 2015-1-8;
- Sensor-Surface: 3mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn852; Calibrated: 2015-4-27
- Phantom: SAM2; Type: SAM; Serial: TP:1474
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

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

Maximum value of SAR (measured) = 3.65 W/kg

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

Reference Value = 36.16 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 6.78 W/kg

SAR(1 g) = 2.94 W/kg; SAR(10 g) = 1.15 W/kg

Maximum value of SAR (measured) = 3.83 W/kg

