

## **Appendix B**

### **Measurement Plots**

Test Laboratory: ETS PRODUCT SERVICE AG

### Dipol Valid.1900(h)\_250mW19.3.07

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d025**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: Head 1900 MHz Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 39.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(5.16, 5.16, 5.16); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**Dipol 1900 (250mW)/Area Scan (61x81x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 11.9 mW/g

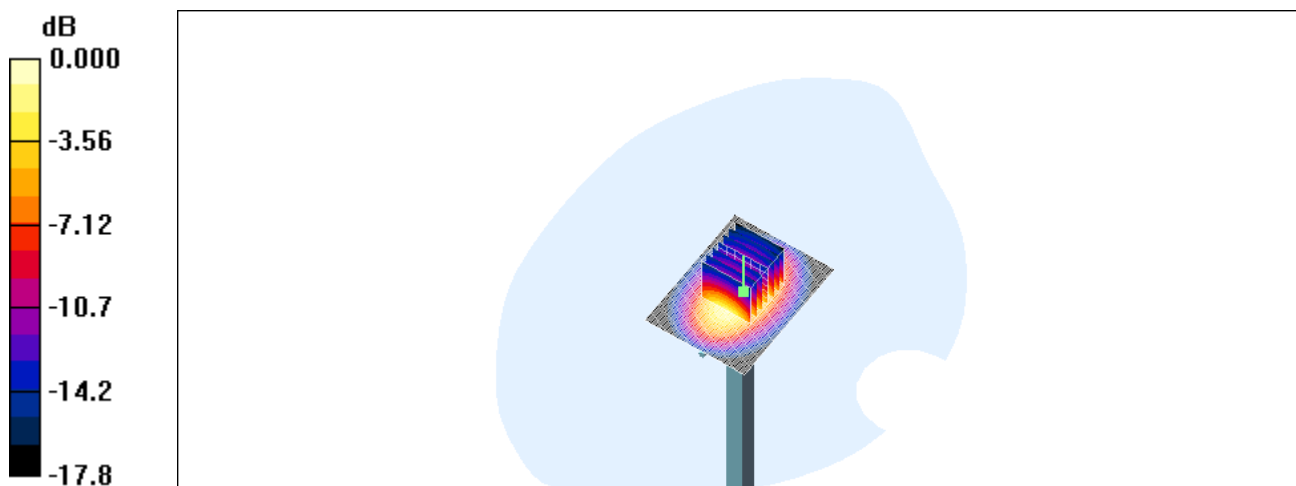
**Dipol 1900 (250mW)/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.1 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 18.3 W/kg

**SAR(1 g) = 10.4 mW/g; SAR(10 g) = 5.49 mW/g**

Maximum value of SAR (measured) = 11.7 mW/g



0 dB = 11.7mW/g

Test Laboratory: ETS PRODUCT SERVICE AG

### Dipol Valid.1900(m)\_250mW19.3.07

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d025**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: Muscle 1900 MHz Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.58$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.57, 4.57, 4.57); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**Dipol 1900 (250mW)/Area Scan (61x81x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 12.3 mW/g

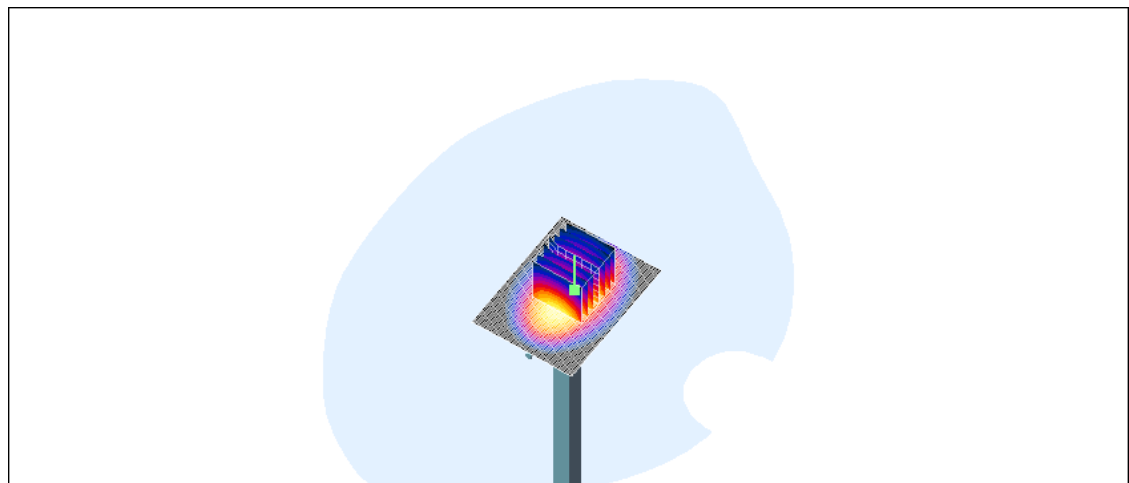
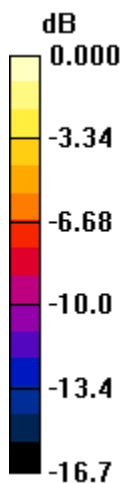
**Dipol 1900 (250mW)/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.7 V/m; Power Drift = 0.009 dB

Peak SAR (extrapolated) = 17.9 W/kg

**SAR(1 g) = 10.7 mW/g; SAR(10 g) = 5.71 mW/g**

Maximum value of SAR (measured) = 12.1 mW/g



0 dB = 12.1mW/g

Test Laboratory: ETS PRODUCT SERVICE AG

## left\_ch2\_cheek

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

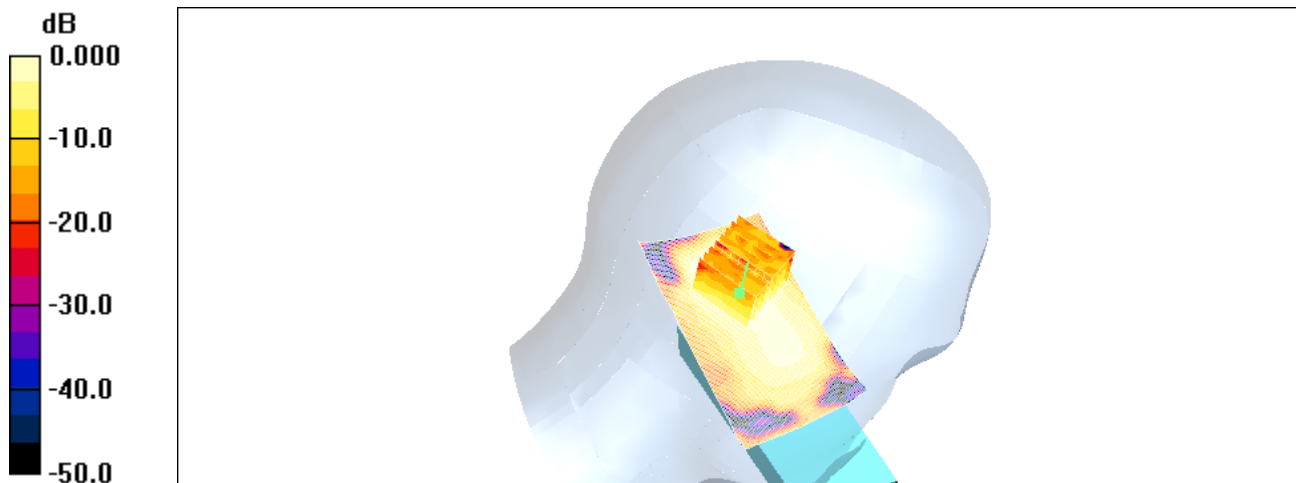
Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium: Head 1900 MHz Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 39.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x131x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.012 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.43 V/m; Power Drift = -0.001 dB  
Peak SAR (extrapolated) = 0.019 W/kg  
**SAR(1 g) = 0.010 mW/g; SAR(10 g) = 0.00585 mW/g**  
Maximum value of SAR (measured) = 0.012 mW/g



0 dB = 0.012mW/g

Test Laboratory: ETS PRODUCT SERVICE AG

## left\_ch2\_tilted

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium: Head 1900 MHz Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 39.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

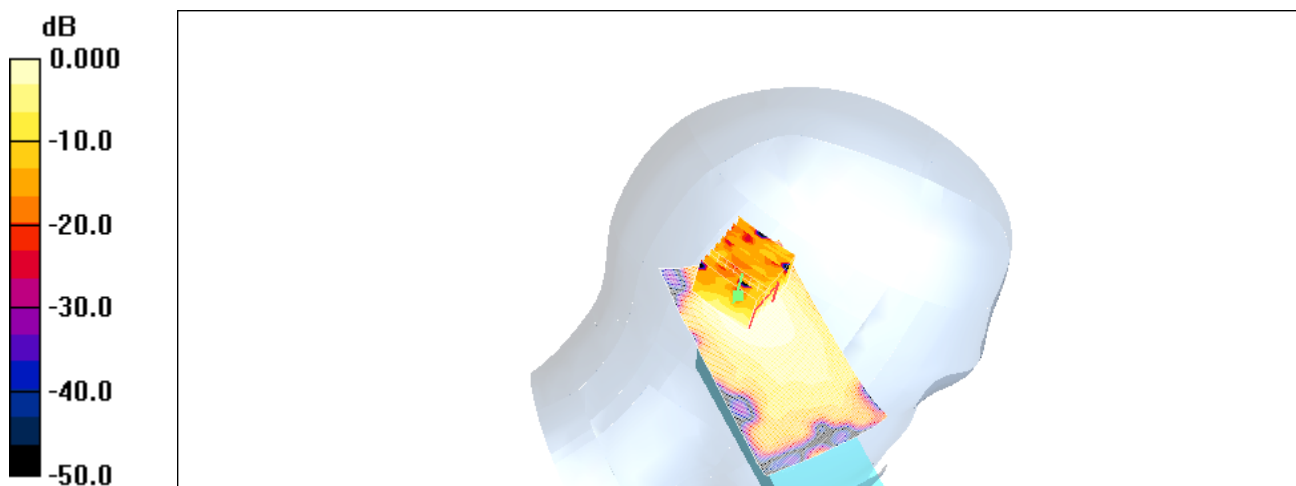
DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x131x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.010 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.18 V/m; Power Drift = -0.039 dB  
Peak SAR (extrapolated) = 0.015 W/kg  
**SAR(1 g) = 0.00814 mW/g; SAR(10 g) = 0.00449 mW/g**

Maximum value of SAR (measured) = 0.010 mW/g



0 dB = 0.010mW/g

Test Laboratory: ETS PRODUCT SERVICE AG

### right\_ch4\_cheek

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

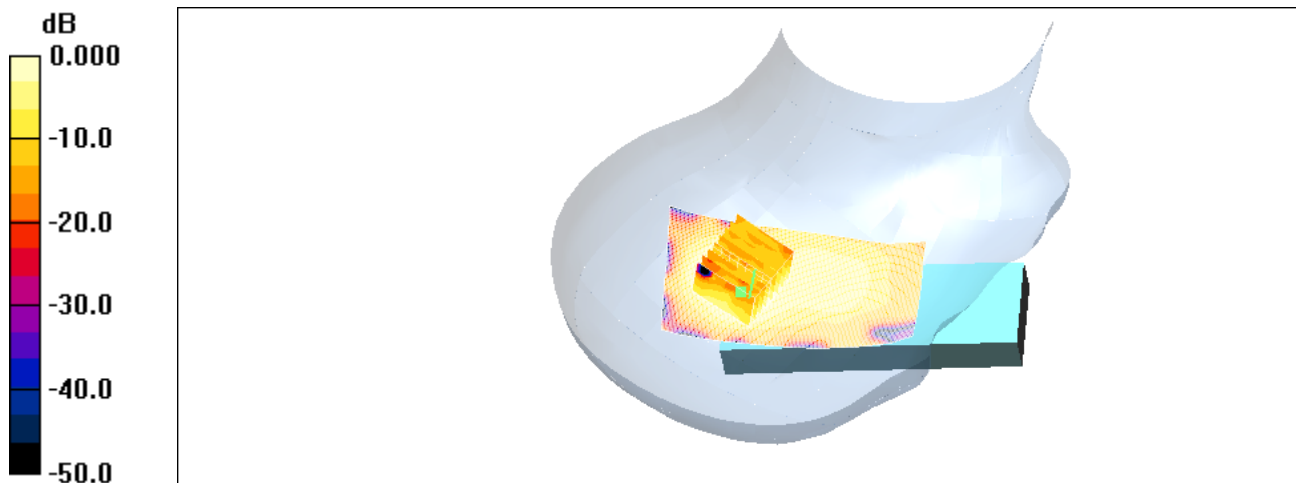
Communication System: UPCS single slot; Frequency: 1921.54 MHz; Duty Cycle: 1:24  
Medium: Head 1900 MHz Medium parameters used:  $f = 1921.54$  MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 39.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x131x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.012 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.54 V/m; Power Drift = 0.023 dB  
Peak SAR (extrapolated) = 0.021 W/kg  
**SAR(1 g) = 0.010 mW/g; SAR(10 g) = 0.0053 mW/g**  
Maximum value of SAR (measured) = 0.011 mW/g



0 dB = 0.011mW/g

Test Laboratory: ETS PRODUCT SERVICE AG

## right\_ch2\_cheek

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

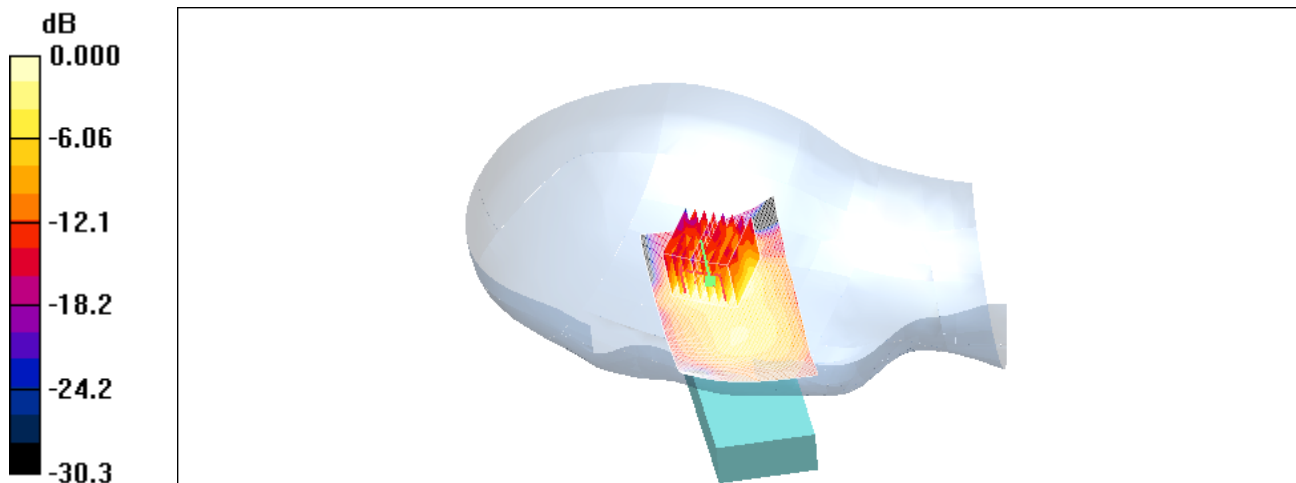
Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium: Head 1900 MHz Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 39.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x131x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.012 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.62 V/m; Power Drift = 0.073 dB  
Peak SAR (extrapolated) = 0.023 W/kg  
**SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00578 mW/g**  
Maximum value of SAR (measured) = 0.013 mW/g



Test Laboratory: ETS PRODUCT SERVICE AG

## right\_ch2\_tilted

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

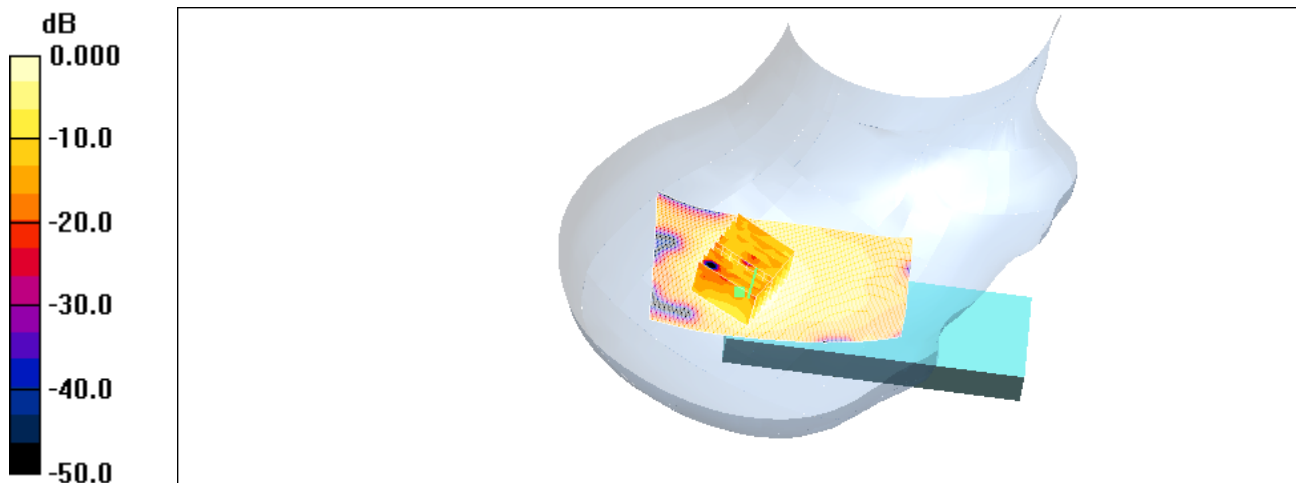
Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium: Head 1900 MHz Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.44$  mho/m;  $\epsilon_r = 39.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x131x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.011 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.41 V/m; Power Drift = -0.068 dB  
Peak SAR (extrapolated) = 0.021 W/kg  
**SAR(1 g) = 0.0099 mW/g; SAR(10 g) = 0.00502 mW/g**  
Maximum value of SAR (measured) = 0.011 mW/g



0 dB = 0.011mW/g



Test Laboratory: ETS PRODUCT SERVICE AG

### right\_ch0\_cheek

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

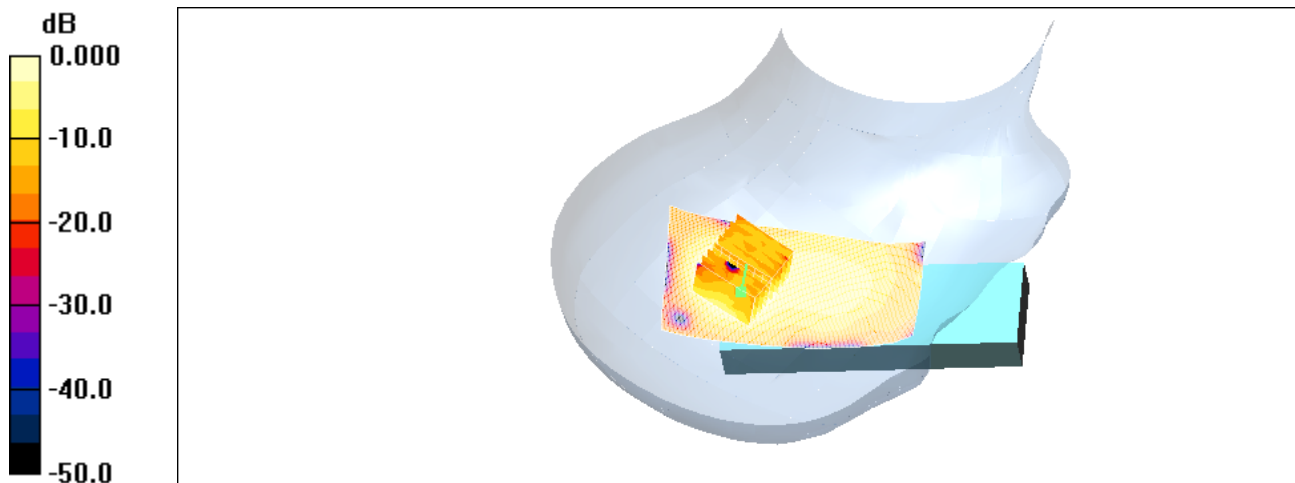
Communication System: UPCS single slot; Frequency: 1928.45 MHz; Duty Cycle: 1:24  
Medium: Head 1900 MHz Medium parameters used:  $f = 1928.45$  MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x131x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.012 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 2.55 V/m; Power Drift = 0.077 dB  
Peak SAR (extrapolated) = 0.019 W/kg  
**SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00537 mW/g**  
Maximum value of SAR (measured) = 0.012 mW/g



0 dB = 0.012mW/g

Test Laboratory: ETS PRODUCT SERVICE AG

### flat\_ch4\_front\_0mm

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

Communication System: UPCS single slot; Frequency: 1921.54 MHz; Duty Cycle: 1:24  
Medium: Muscle 1900 MHz Medium parameters used:  $f = 1921.54$  MHz;  $\sigma = 1.6$  mho/m;  $\epsilon_r = 51.9$ ;  
 $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

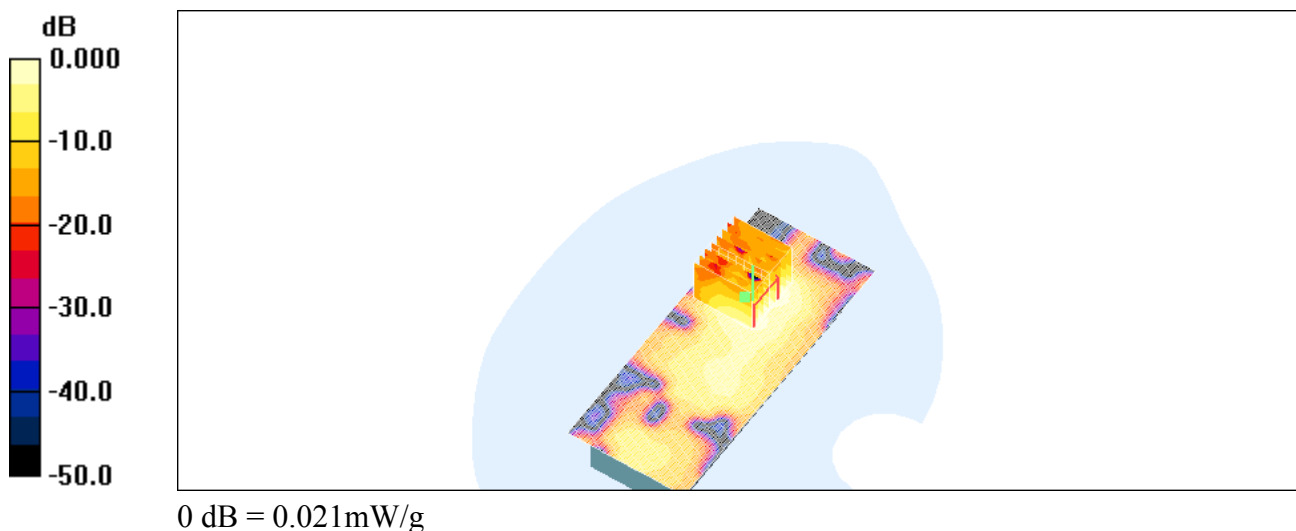
DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.42, 4.42, 4.42); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x171x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.022 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 1.96 V/m; Power Drift = -0.031 dB  
Peak SAR (extrapolated) = 0.041 W/kg  
**SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.00887 mW/g**

Maximum value of SAR (measured) = 0.021 mW/g



Test Laboratory: ETS PRODUCT SERVICE AG

### flat\_ch2\_back\_0mm

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

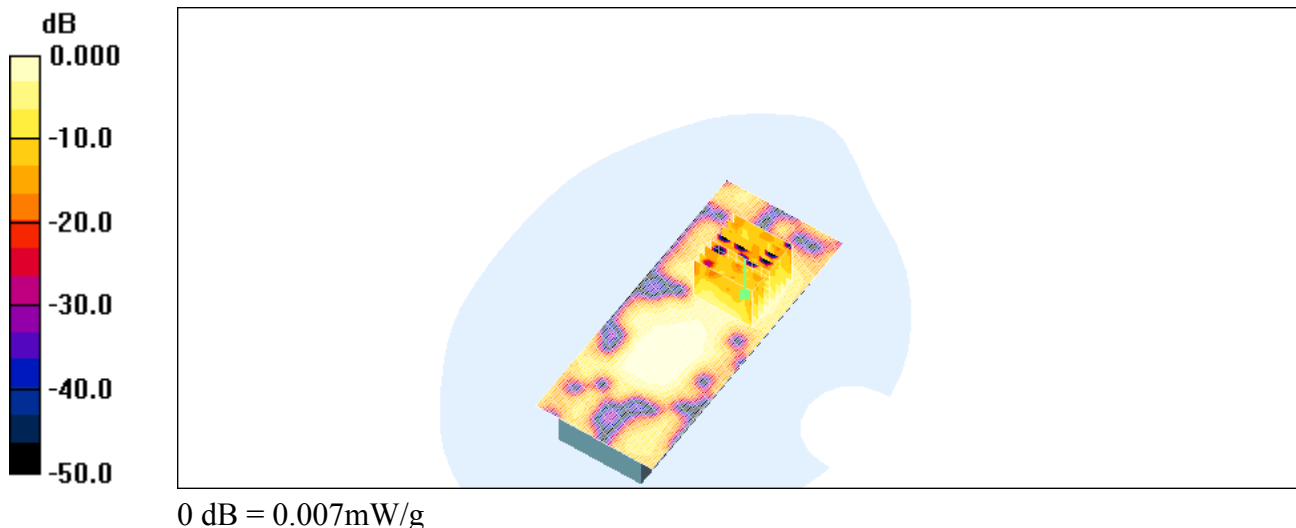
Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium: Muscle 1900 MHz Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.6$  mho/m;  $\epsilon_r = 51.9$ ;  
 $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.42, 4.42, 4.42); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x171x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.007 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 1.83 V/m; Power Drift = 0.098 dB  
Peak SAR (extrapolated) = 0.012 W/kg  
**SAR(1 g) = 0.00611 mW/g; SAR(10 g) = 0.00304 mW/g**  
Maximum value of SAR (measured) = 0.007 mW/g



Test Laboratory: ETS PRODUCT SERVICE AG

### flat\_ch2\_front\_0mm

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

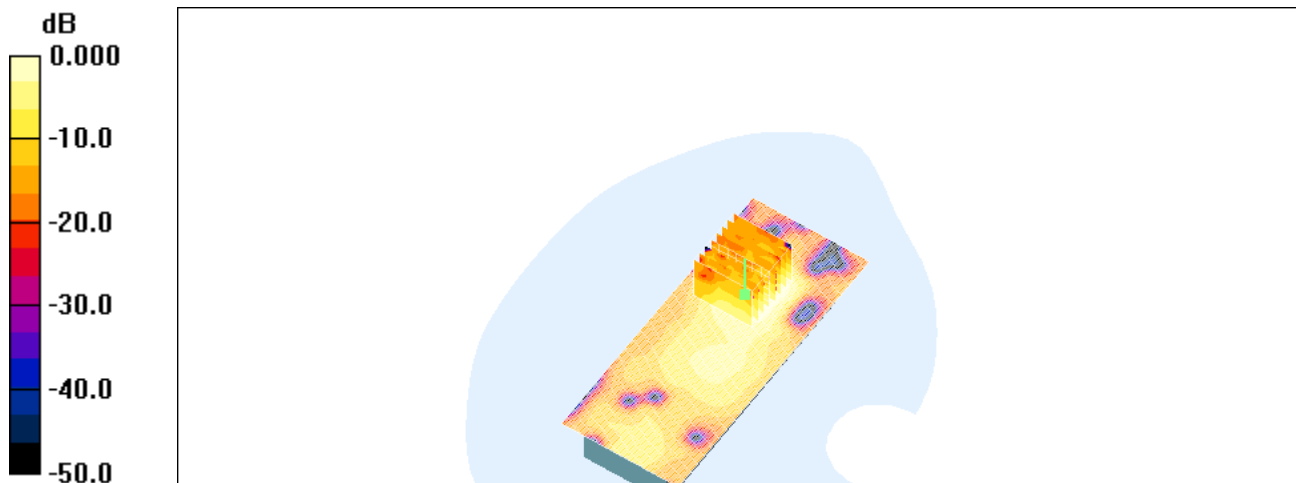
Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24  
Medium: Muscle 1900 MHz Medium parameters used:  $f = 1924.99$  MHz;  $\sigma = 1.6$  mho/m;  $\epsilon_r = 51.9$ ;  
 $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.42, 4.42, 4.42); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x171x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.020 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 1.90 V/m; Power Drift = -0.023 dB  
Peak SAR (extrapolated) = 0.038 W/kg  
**SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00847 mW/g**  
Maximum value of SAR (measured) = 0.020 mW/g



0 dB = 0.020mW/g

Test Laboratory: ETS PRODUCT SERVICE AG

### flat\_ch0\_front\_0mm

**DUT: KIRK telecomA/S; Type: KIRK UPCS (DECT based) Handset (PP); Serial: PP5I80 1G9**

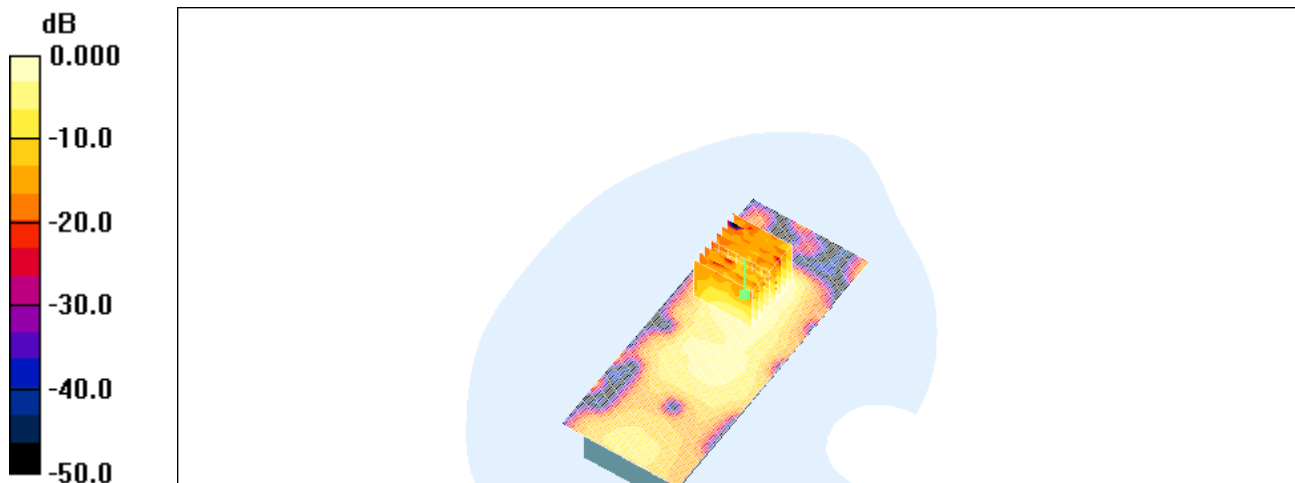
Communication System: UPCS single slot; Frequency: 1928.45 MHz; Duty Cycle: 1:24  
Medium: Muscle 1900 MHz Medium parameters used:  $f = 1928.54$  MHz;  $\sigma = 1.61$  mho/m;  $\epsilon_r = 51.8$ ;  
 $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.42, 4.42, 4.42); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

**PP5I80 1G9/Area Scan (71x171x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 0.019 mW/g

**PP5I80 1G9/Zoom Scan (8x8x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 1.90 V/m; Power Drift = 0.047 dB  
Peak SAR (extrapolated) = 0.037 W/kg  
**SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00859 mW/g**  
Maximum value of SAR (measured) = 0.020 mW/g



0 dB = 0.020mW/g

## Appendix C

### Pictures

## Appendix

### C. Pictures









