

APPENDIX A - SAR MEASUREMENT DATA

Face-Held SAR - Li-ion Battery - Stubby Antenna (P/N: KRA-23M)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.20 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

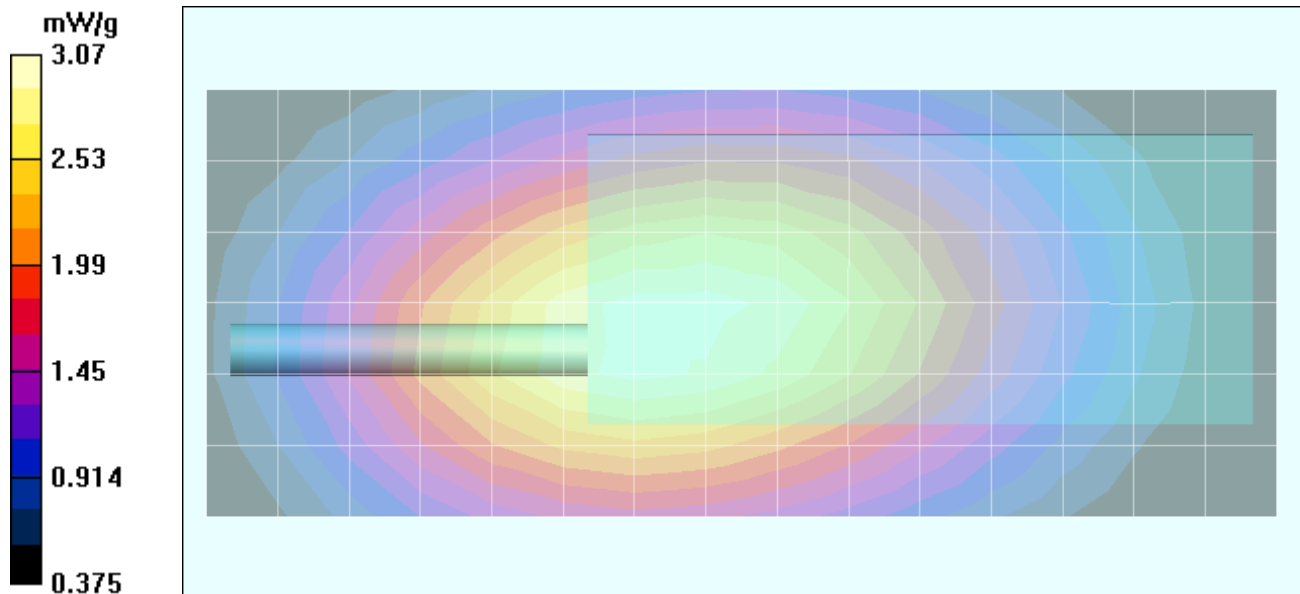
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.8 V/m; Power Drift = -0.457 dB

Peak SAR (extrapolated) = 4.68 W/kg

SAR(1 g) = 2.96 mW/g; SAR(10 g) = 2.09 mW/g



Face-Held SAR - NiCd Battery - Stubby Antenna (P/N: KRA-23M)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.13 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

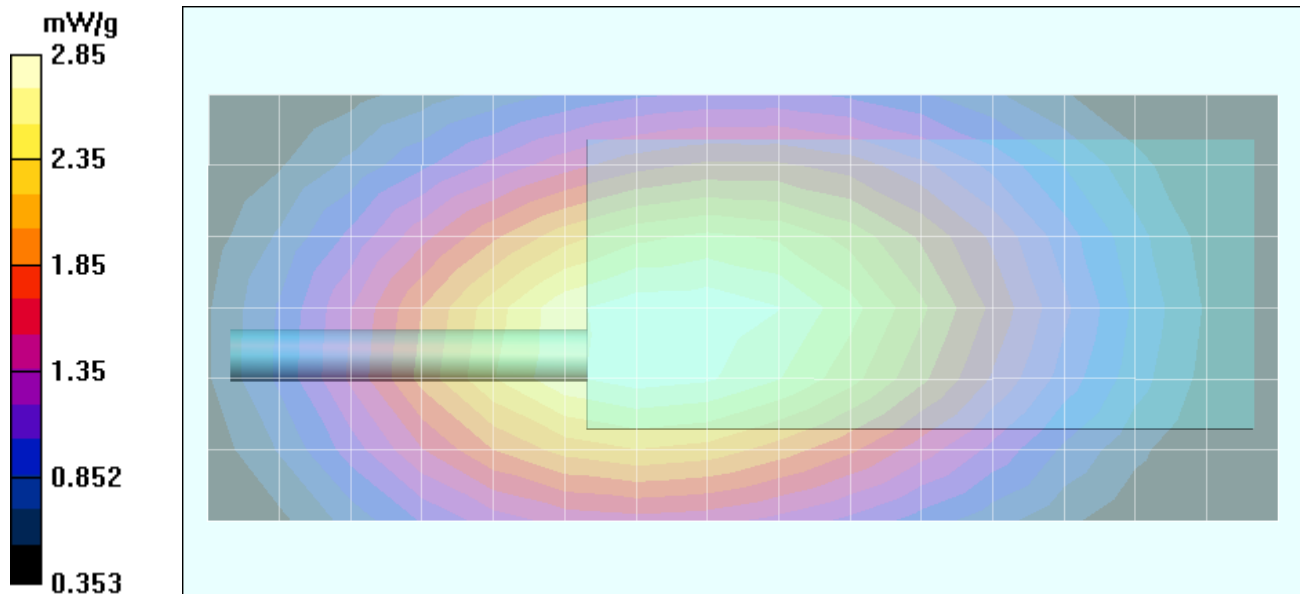
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.7 V/m; Power Drift = -0.383 dB

Peak SAR (extrapolated) = 4.37 W/kg

SAR(1 g) = 2.74 mW/g; SAR(10 g) = 1.93 mW/g



Face-Held SAR - NiMH Battery - Stubby Antenna (P/N: KRA-23M)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.13 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

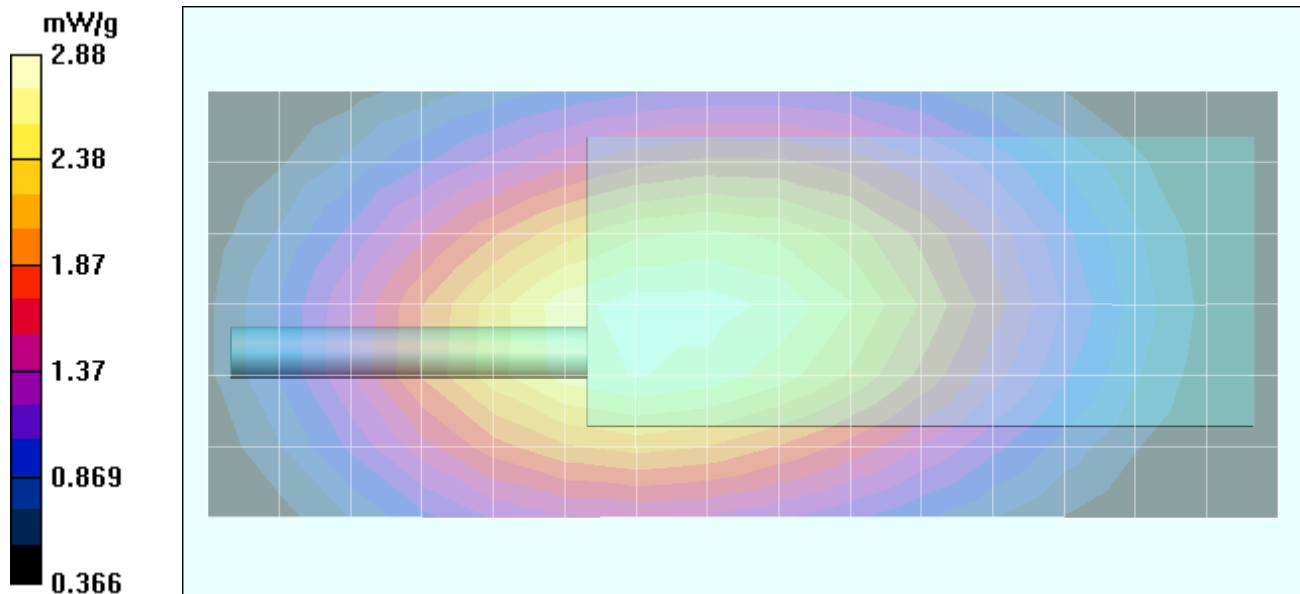
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.7 V/m; Power Drift = -0.446 dB

Peak SAR (extrapolated) = 4.41 W/kg

SAR(1 g) = 2.77 mW/g; SAR(10 g) = 1.96 mW/g



Face-Held SAR - Li-ion Battery - Stubby Antenna (P/N: KRA-23M2)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.15 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

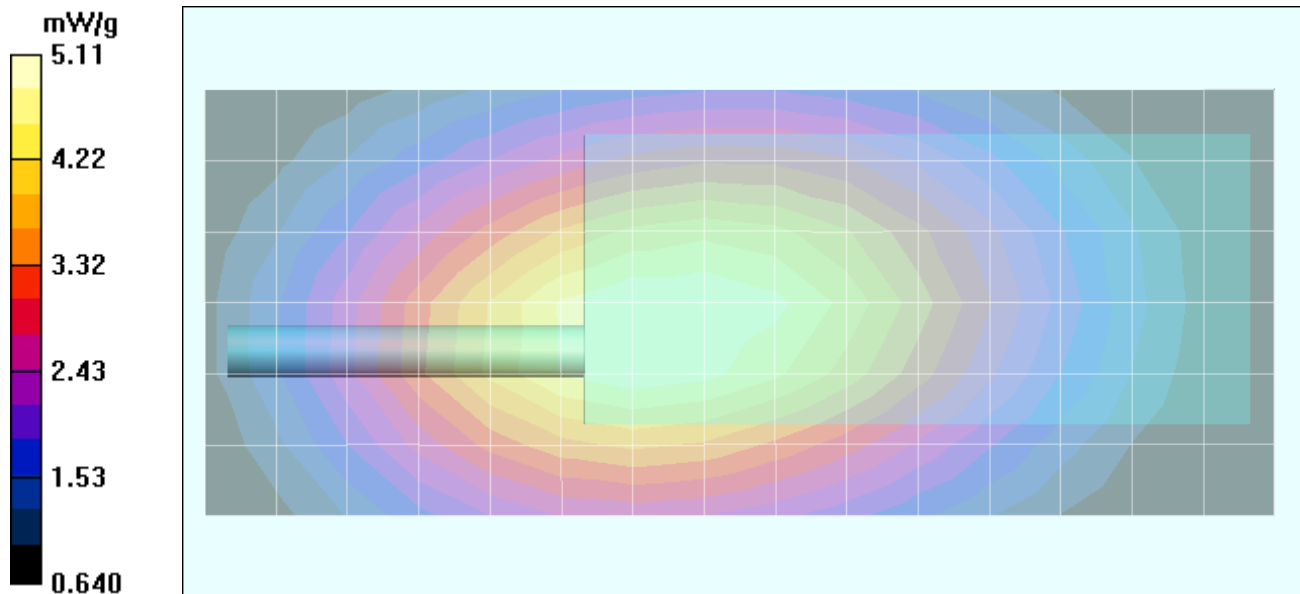
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 74.1 V/m; Power Drift = -0.444 dB

Peak SAR (extrapolated) = 7.79 W/kg

SAR(1 g) = 4.90 mW/g; SAR(10 g) = 3.46 mW/g



Face-Held SAR - NiCd Battery - Stubby Antenna (P/N: KRA-23M2)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.20 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

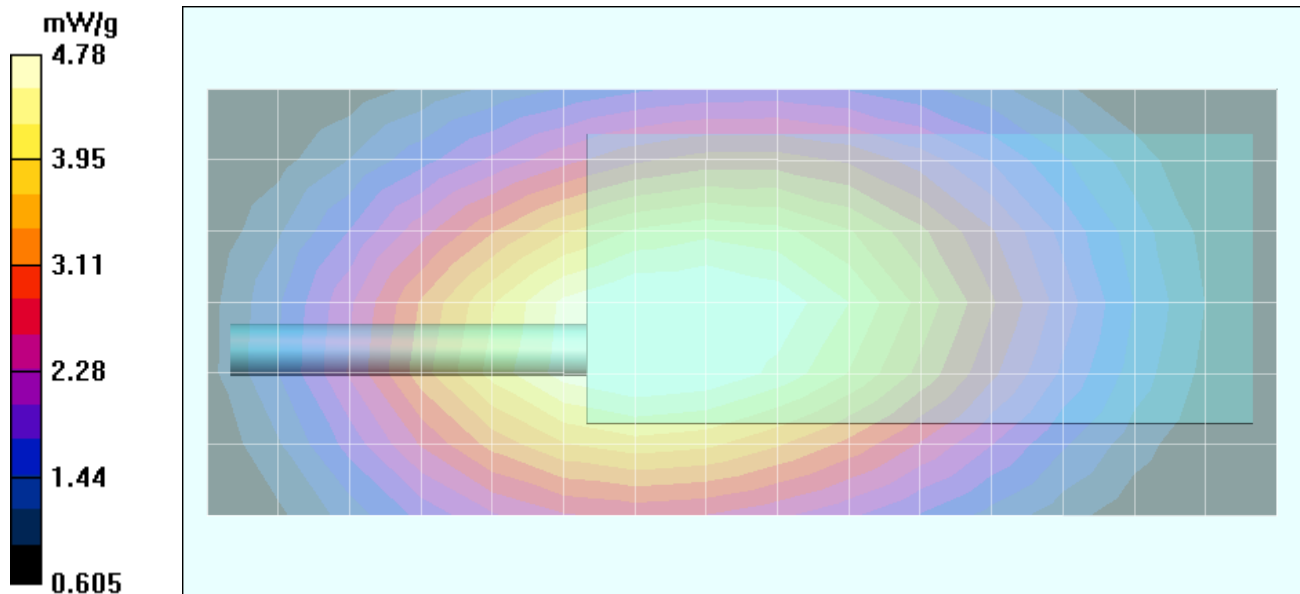
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 72.6 V/m; Power Drift = -0.582 dB

Peak SAR (extrapolated) = 7.32 W/kg

SAR(1 g) = 4.61 mW/g; SAR(10 g) = 3.27 mW/g



Face-Held SAR - NiMH Battery - Stubby Antenna (P/N: KRA-23M2)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.16 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

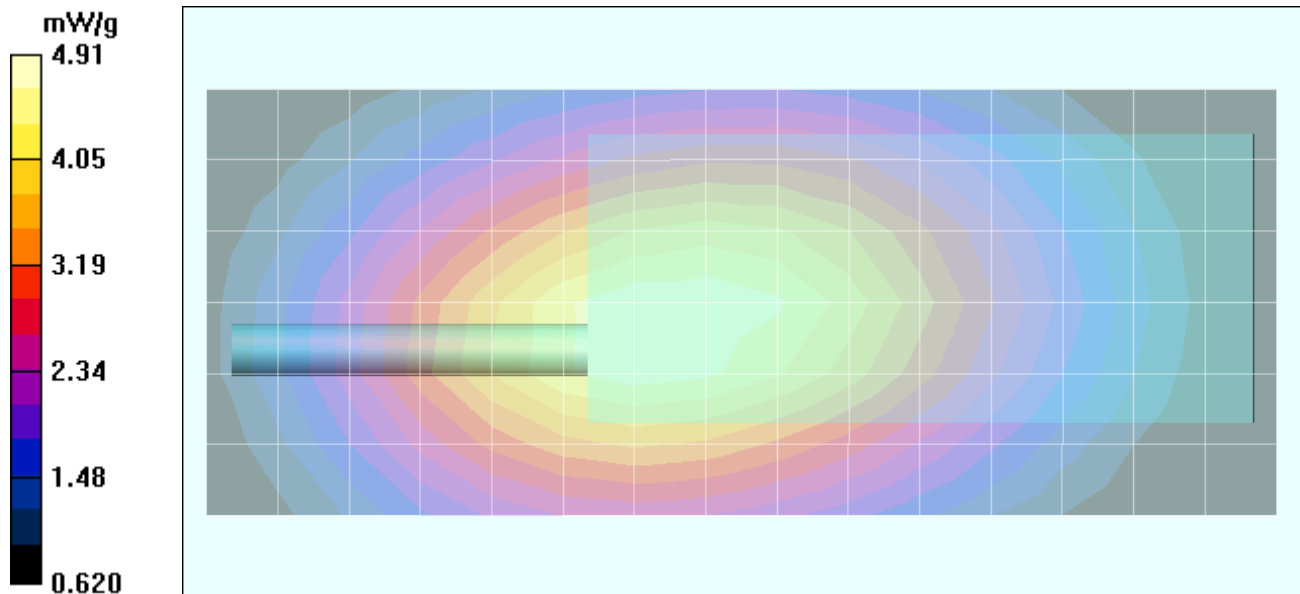
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 73.3 V/m; Power Drift = -0.526 dB

Peak SAR (extrapolated) = 7.52 W/kg

SAR(1 g) = 4.71 mW/g; SAR(10 g) = 3.33 mW/g



Face-Held SAR - Li-ion Battery - Whip Antenna (P/N: KRA-27M)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.23 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x21x1):

Measurement grid: dx=15mm, dy=15mm

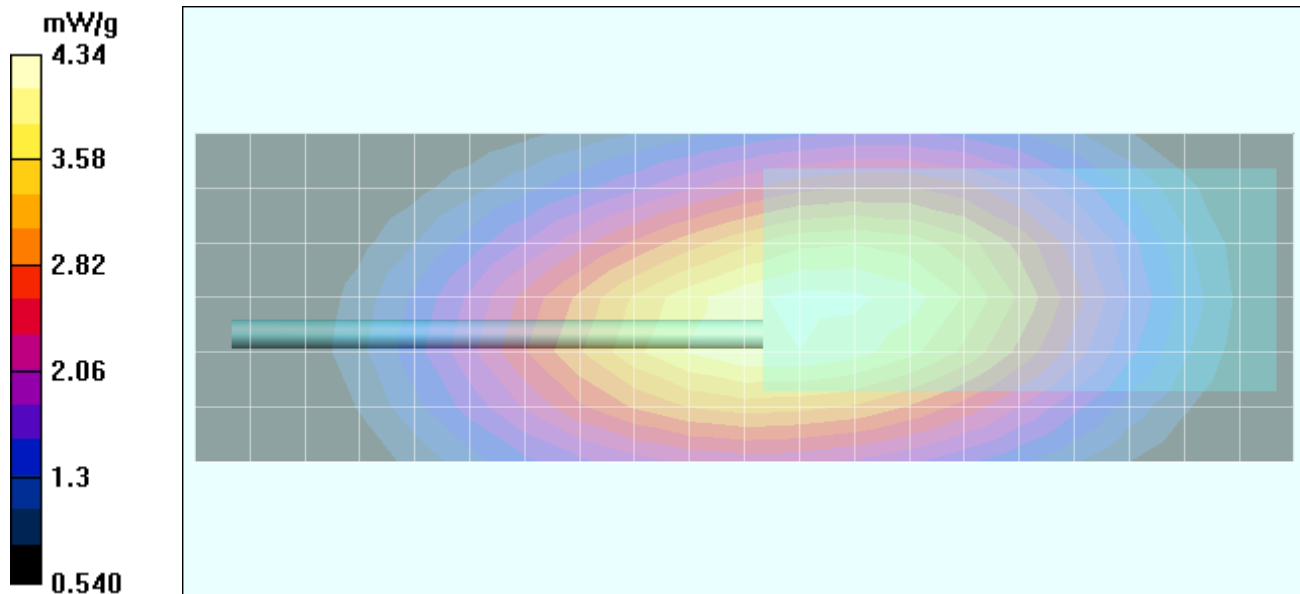
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 67.8 V/m; Power Drift = -0.172 dB

Peak SAR (extrapolated) = 6.57 W/kg

SAR(1 g) = 4.15 mW/g; SAR(10 g) = 2.94 mW/g



Face-Held SAR - NiCd Battery - Whip Antenna (P/N: KRA-27M)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.11 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x21x1):

Measurement grid: dx=15mm, dy=15mm

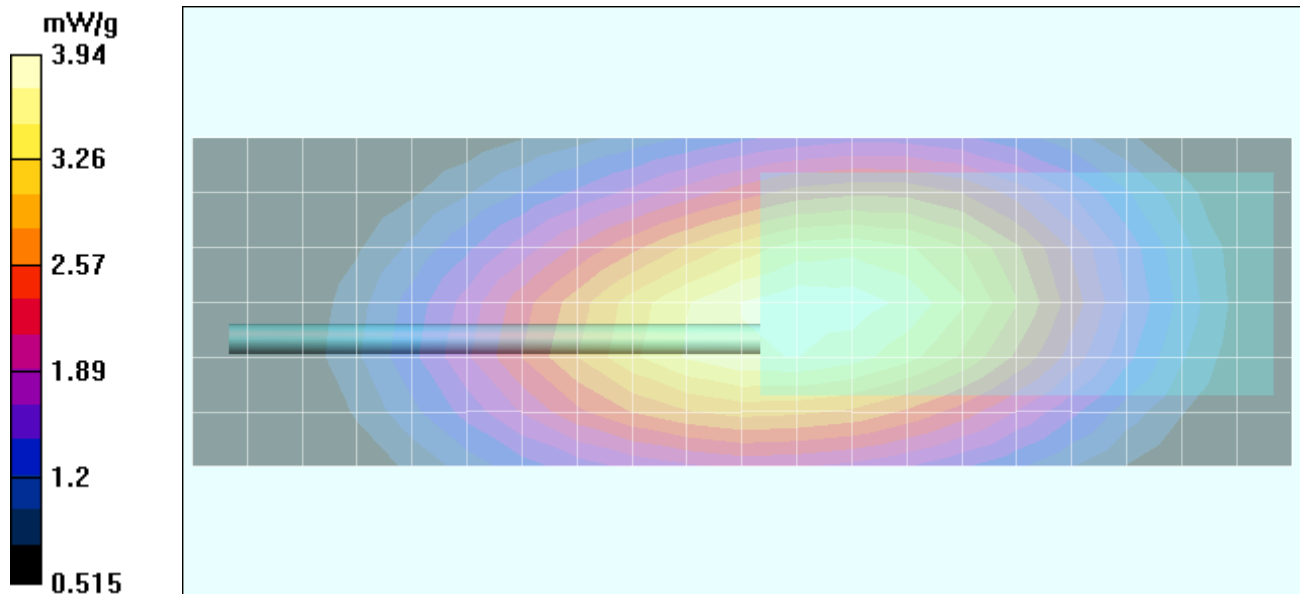
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 64.6 V/m; Power Drift = -0.192 dB

Peak SAR (extrapolated) = 5.93 W/kg

SAR(1 g) = 3.79 mW/g; SAR(10 g) = 2.69 mW/g



Face-Held SAR - NiMH Battery - Whip Antenna (P/N: KRA-27M)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.14 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x21x1):

Measurement grid: dx=15mm, dy=15mm

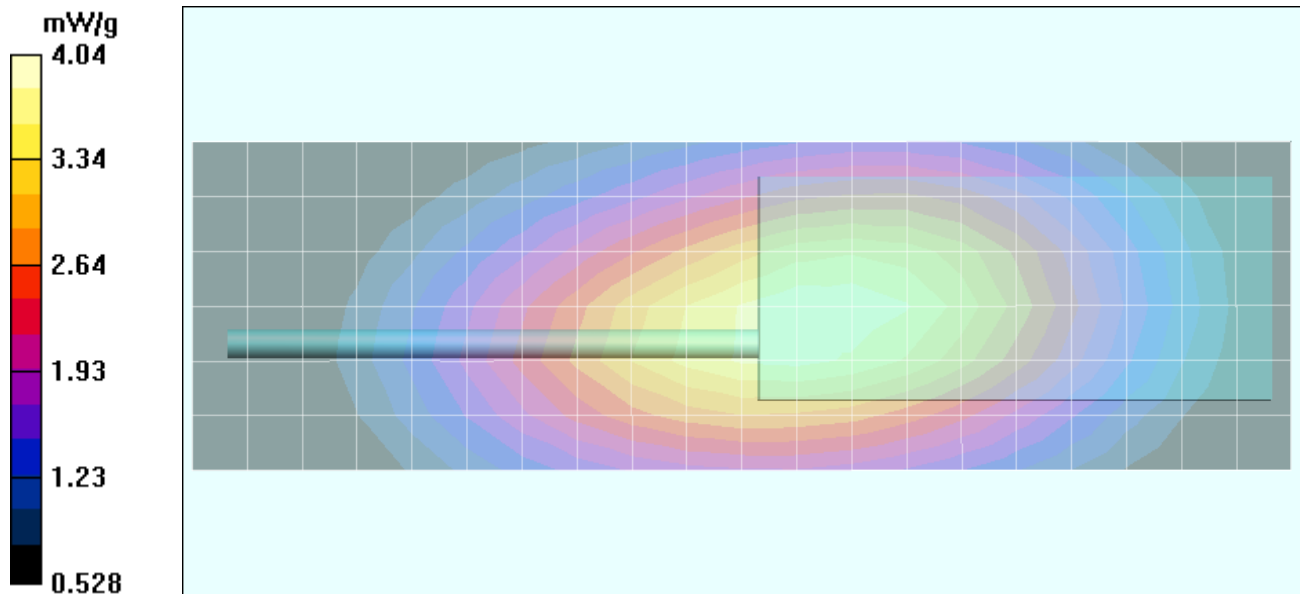
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 65.1 V/m; Power Drift = -0.200 dB

Peak SAR (extrapolated) = 6.12 W/kg

SAR(1 g) = 3.88 mW/g; SAR(10 g) = 2.76 mW/g



Face-Held SAR - Li-ion Battery - Whip Antenna (P/N: KRA-27M2)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.13 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x20x1):

Measurement grid: dx=15mm, dy=15mm

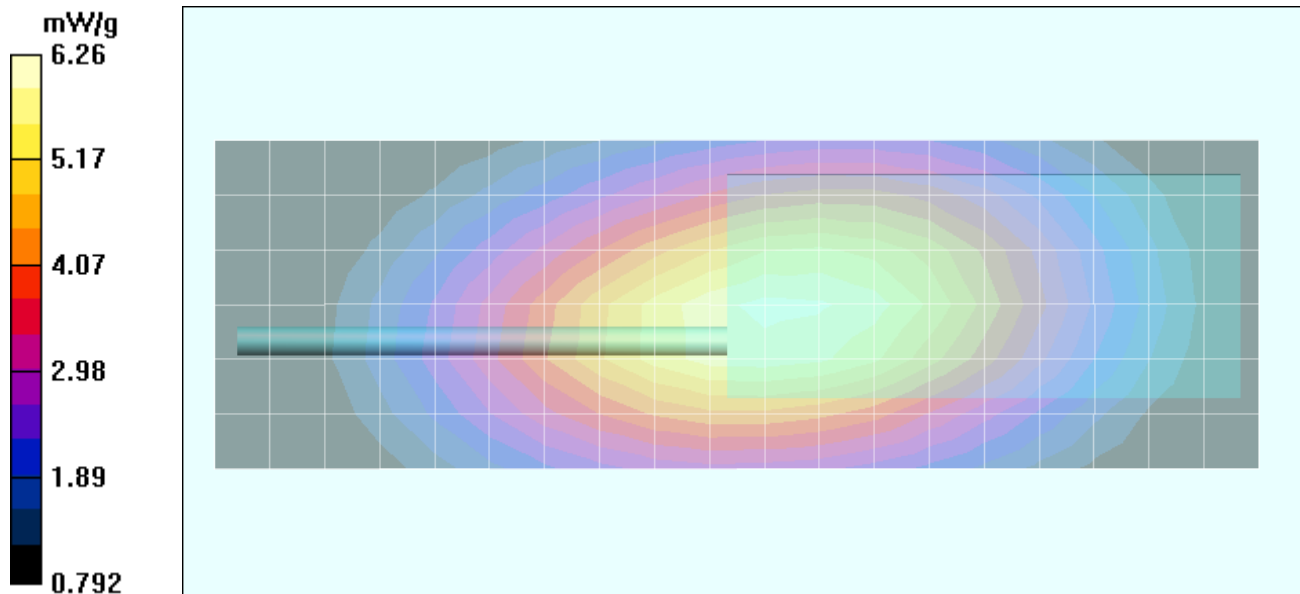
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

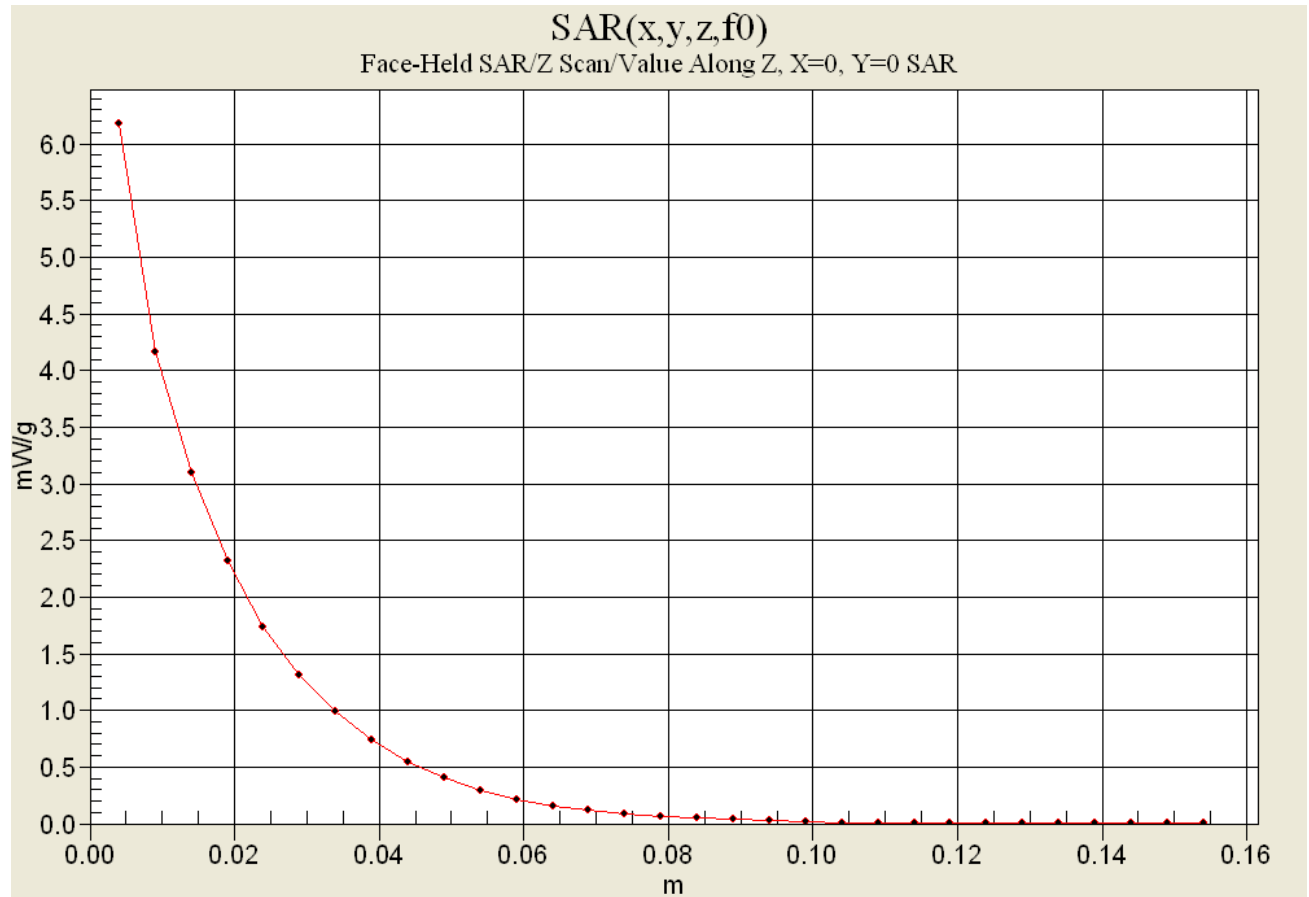
Reference Value = 80.8 V/m; Power Drift = -0.129 dB

Peak SAR (extrapolated) = 9.58 W/kg

SAR(1 g) = 6.03 mW/g; SAR(10 g) = 4.26 mW/g



Z-Axis Scan



Face-Held SAR - NiCd Battery - Whip Antenna (P/N: KRA-27M2)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.17 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x20x1):

Measurement grid: dx=15mm, dy=15mm

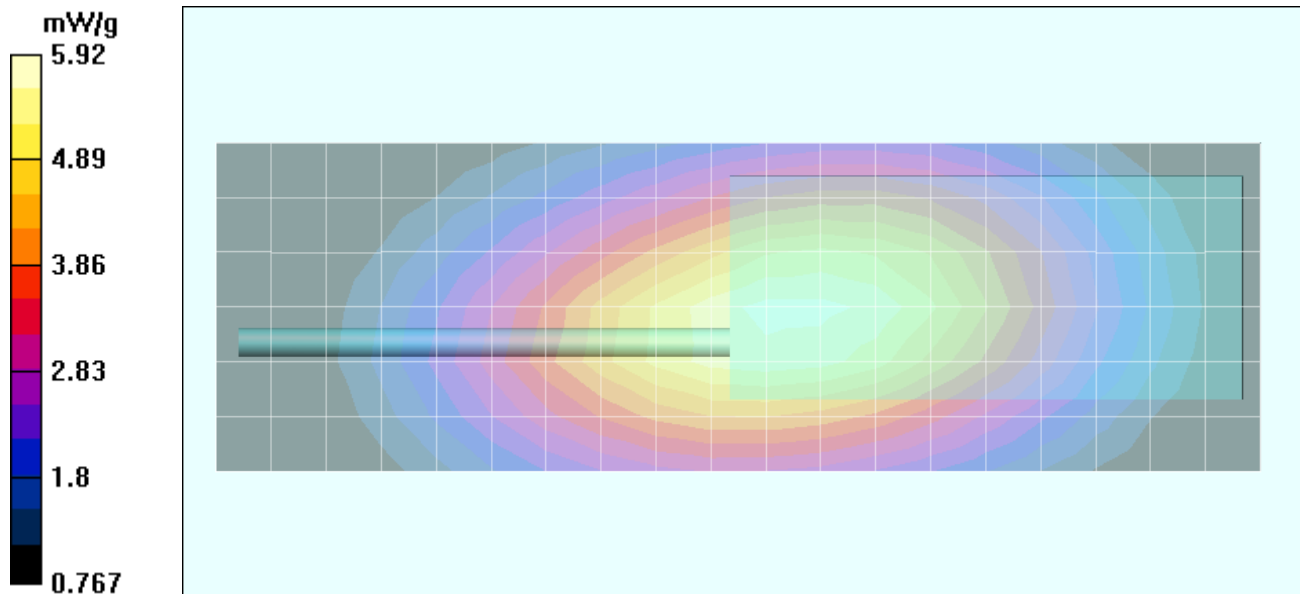
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 80 V/m; Power Drift = -0.367 dB

Peak SAR (extrapolated) = 9.04 W/kg

SAR(1 g) = 5.69 mW/g; SAR(10 g) = 4.02 mW/g



Face-Held SAR - NiMH Battery - Whip Antenna (P/N: KRA-27M2)

Date Tested: 04/12/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 23.4 °C; Barometric Pressure: 101.5 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.17 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 44.3$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x20x1):

Measurement grid: dx=15mm, dy=15mm

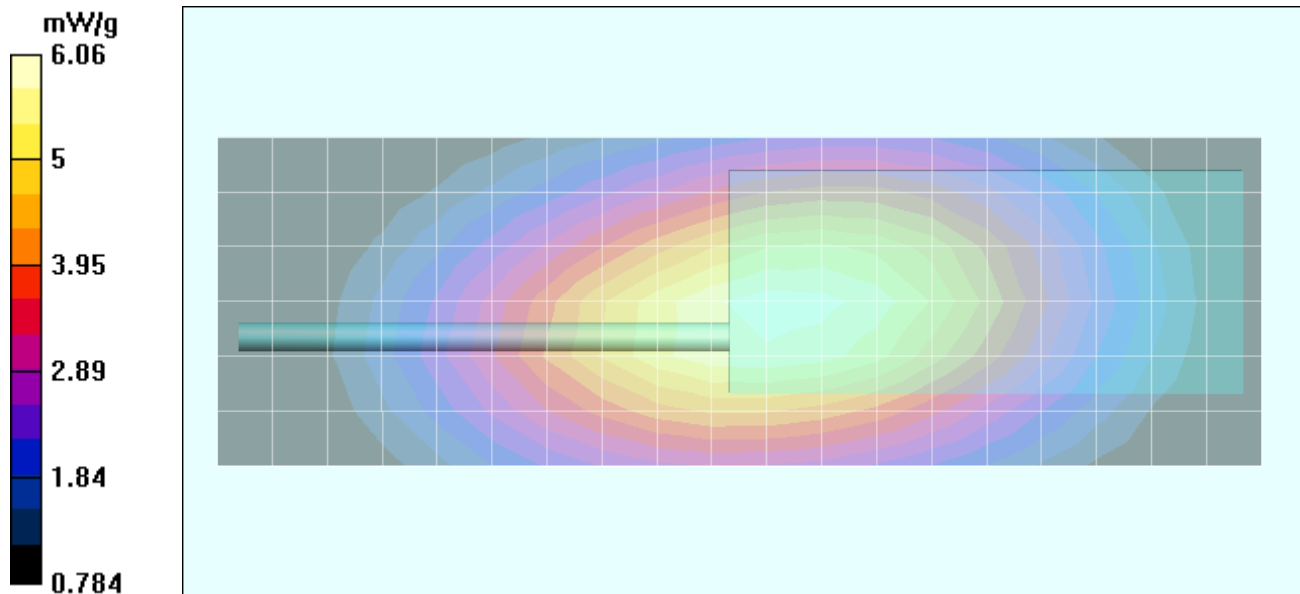
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 80.7 V/m; Power Drift = -0.337 dB

Peak SAR (extrapolated) = 9.22 W/kg

SAR(1 g) = 5.83 mW/g; SAR(10 g) = 4.14 mW/g



Face-Held SAR - Li-ion Battery - Stubby Antenna (P/N: KRA-17M)

Date Tested: 04/13/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 101.9 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.30 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 45.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

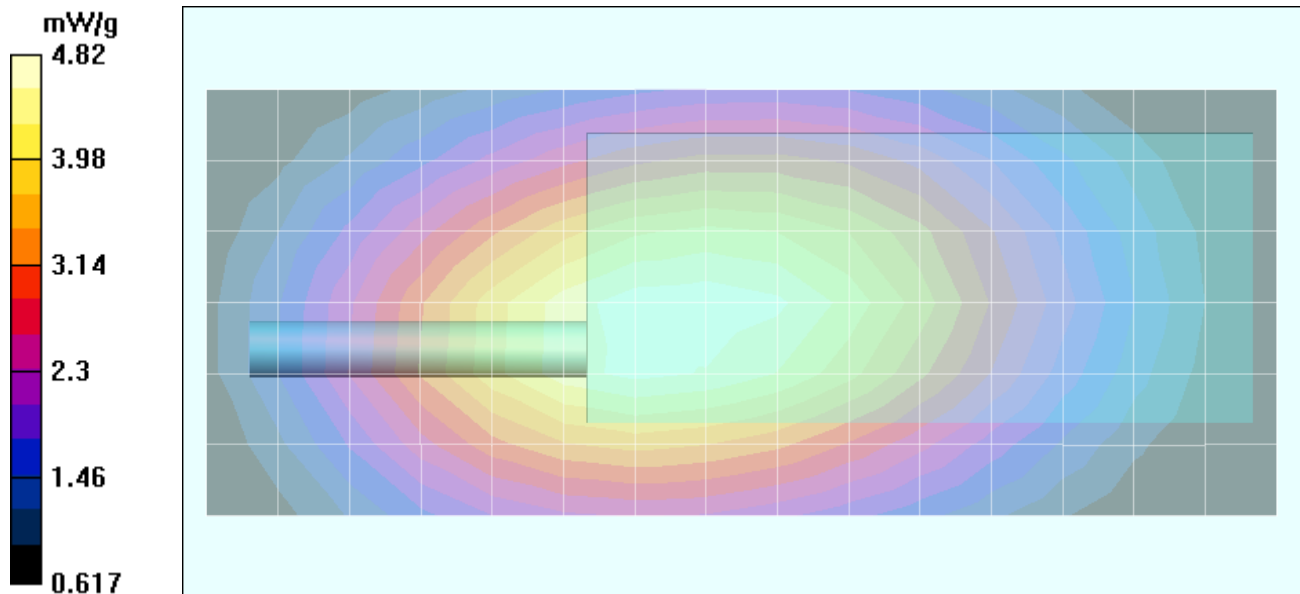
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 71.2 V/m; Power Drift = -0.389 dB

Peak SAR (extrapolated) = 7.38 W/kg

SAR(1 g) = 4.64 mW/g; SAR(10 g) = 3.28 mW/g



Face-Held SAR - NiCd Battery - Stubby Antenna (P/N: KRA-17M)

Date Tested: 04/13/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 101.9 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.14 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 45.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

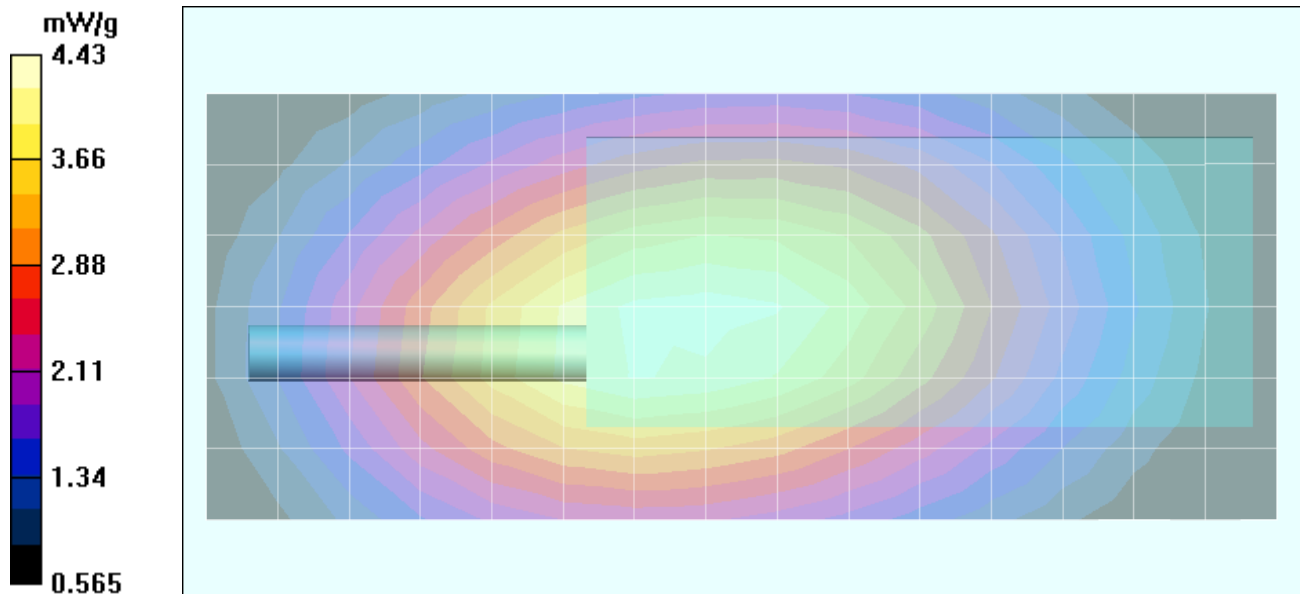
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 69.3 V/m; Power Drift = -0.504 dB

Peak SAR (extrapolated) = 6.74 W/kg

SAR(1 g) = 4.26 mW/g; SAR(10 g) = 3.03 mW/g



Face-Held SAR - NiMH Battery - Stubby Antenna (P/N: KRA-17M)

Date Tested: 04/13/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 101.9 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.16 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 45.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

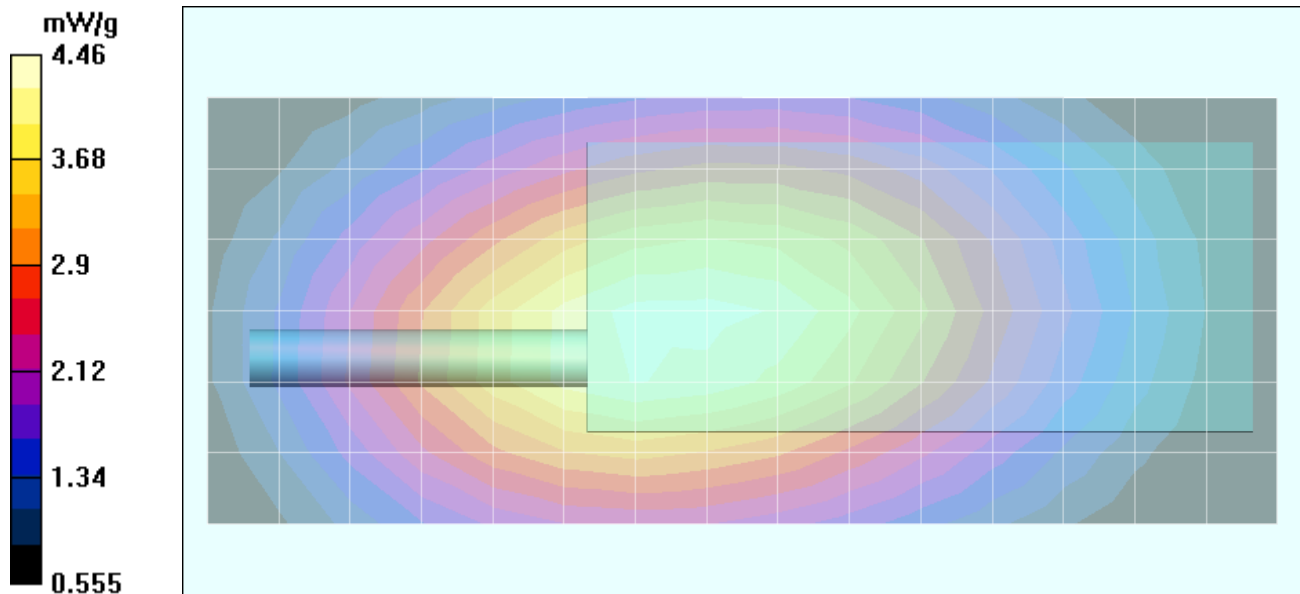
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 68.7 V/m; Power Drift = -0.516 dB

Peak SAR (extrapolated) = 6.81 W/kg

SAR(1 g) = 4.28 mW/g; SAR(10 g) = 3.04 mW/g



Face-Held SAR - Li-ion Battery - Stubby Antenna (P/N: KRA-17M2)

Date Tested: 04/13/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 101.9 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.19 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 45.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

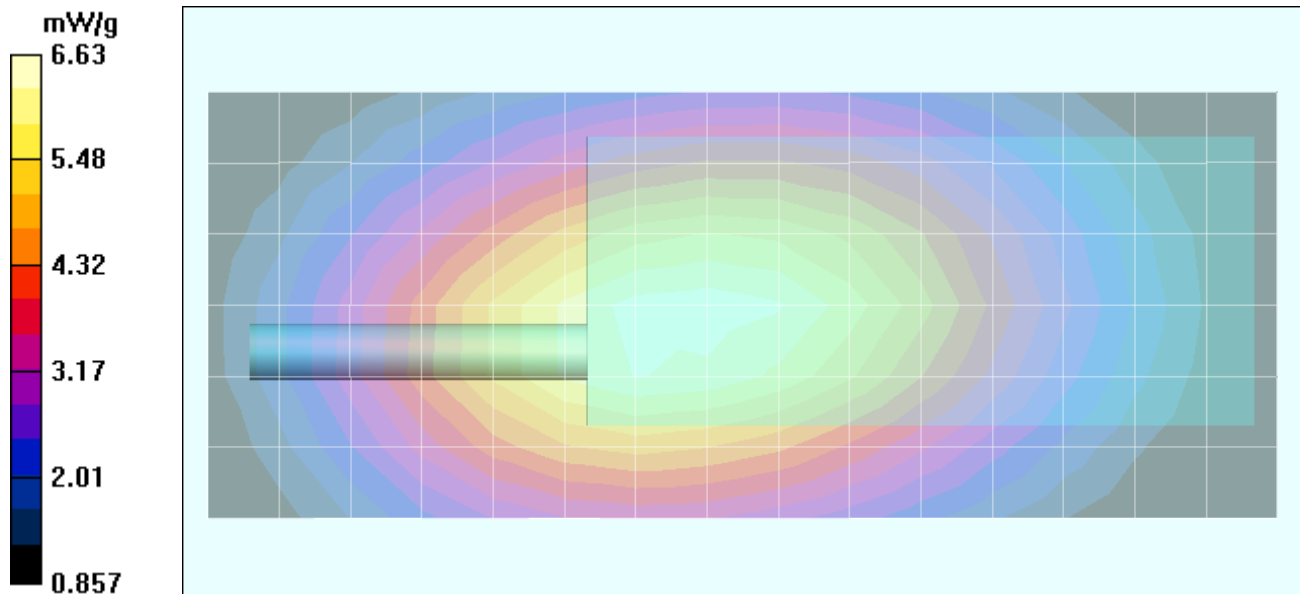
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

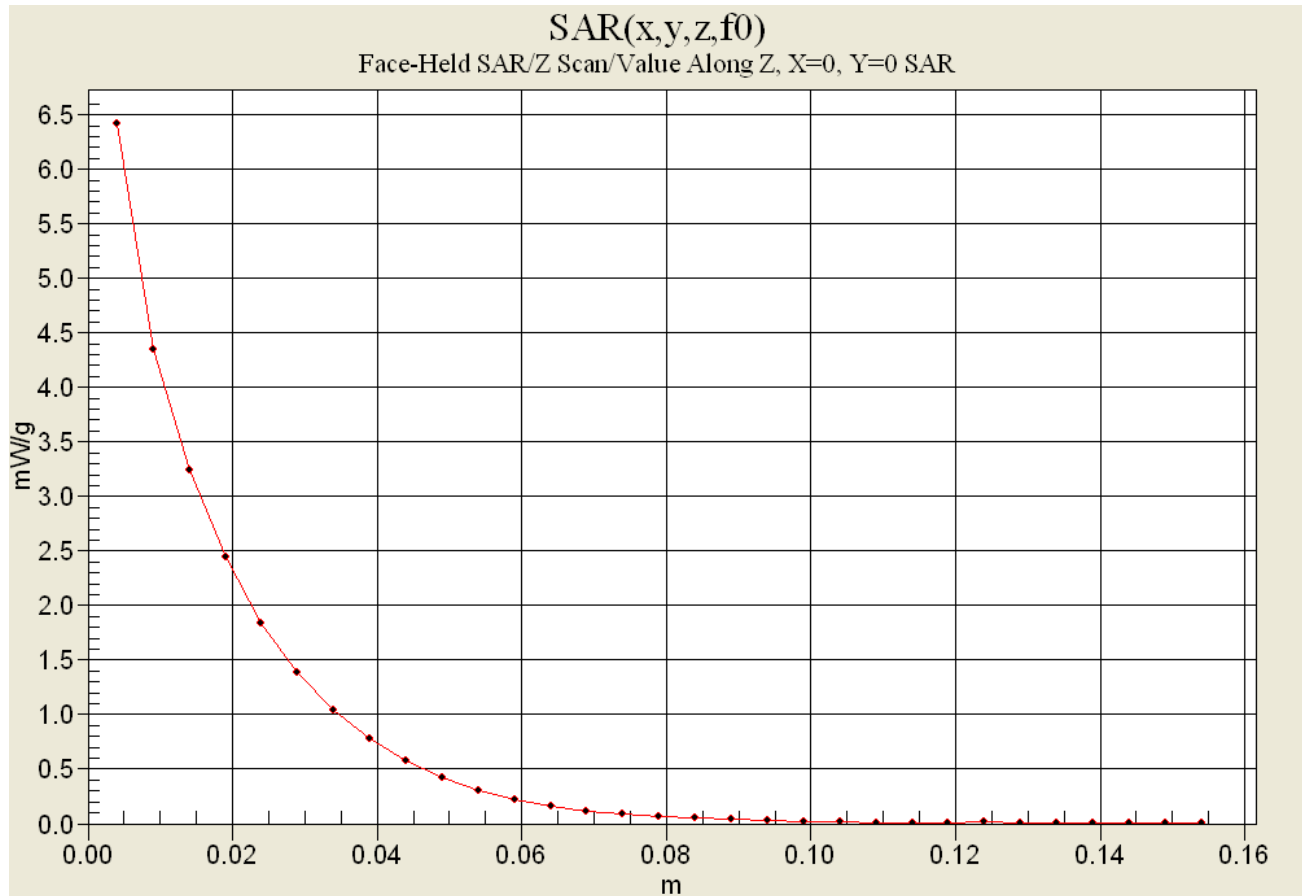
Reference Value = 83.2 V/m; Power Drift = -0.324 dB

Peak SAR (extrapolated) = 10.1 W/kg

SAR(1 g) = 6.37 mW/g; SAR(10 g) = 4.5 mW/g



Z-Axis Scan



Face-Held SAR - NiCd Battery - Stubby Antenna (P/N: KRA-17M2)

Date Tested: 04/13/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 101.9 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.16 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 45.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

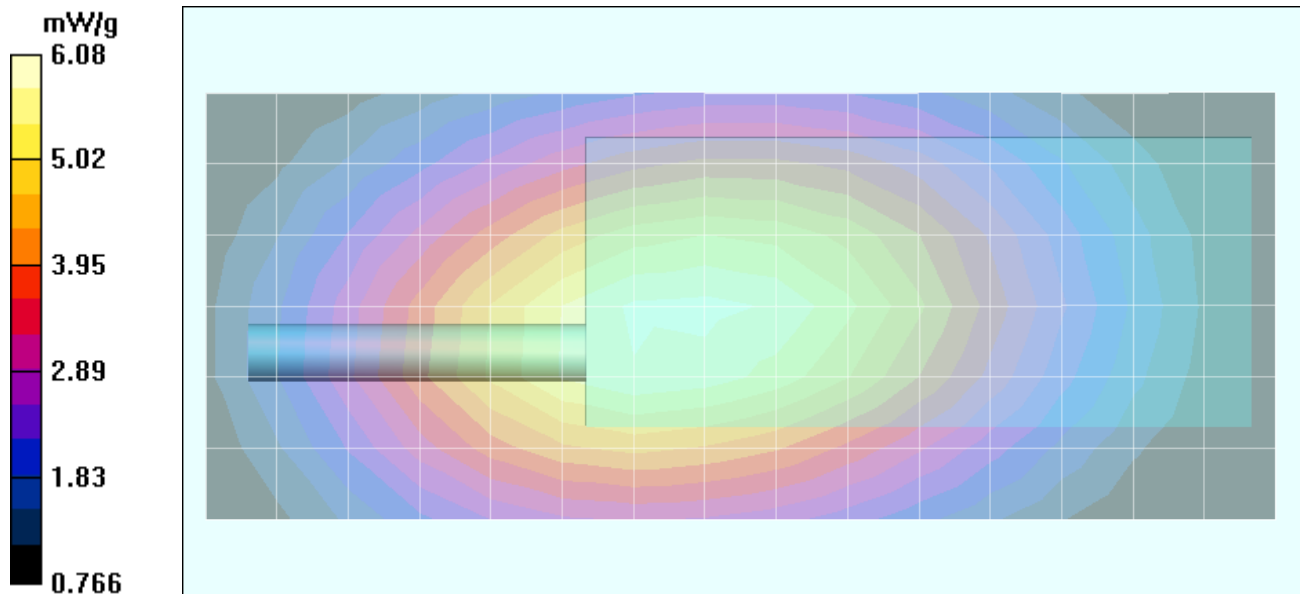
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 79.7 V/m; Power Drift = -0.447 dB

Peak SAR (extrapolated) = 9.26 W/kg

SAR(1 g) = 5.83 mW/g; SAR(10 g) = 4.13 mW/g



Face-Held SAR - NiMH Battery - Stubby Antenna (P/N: KRA-17M2)

Date Tested: 04/13/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 23.8 °C; Fluid Temp: 21.8 °C; Barometric Pressure: 101.9 kPa; Humidity: 32%

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.18 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: HSL450 ($\sigma = 0.91$ mho/m; $\epsilon_r = 45.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.5, 7.5, 7.5); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Face-Held - 2.5 cm Separation Distance - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

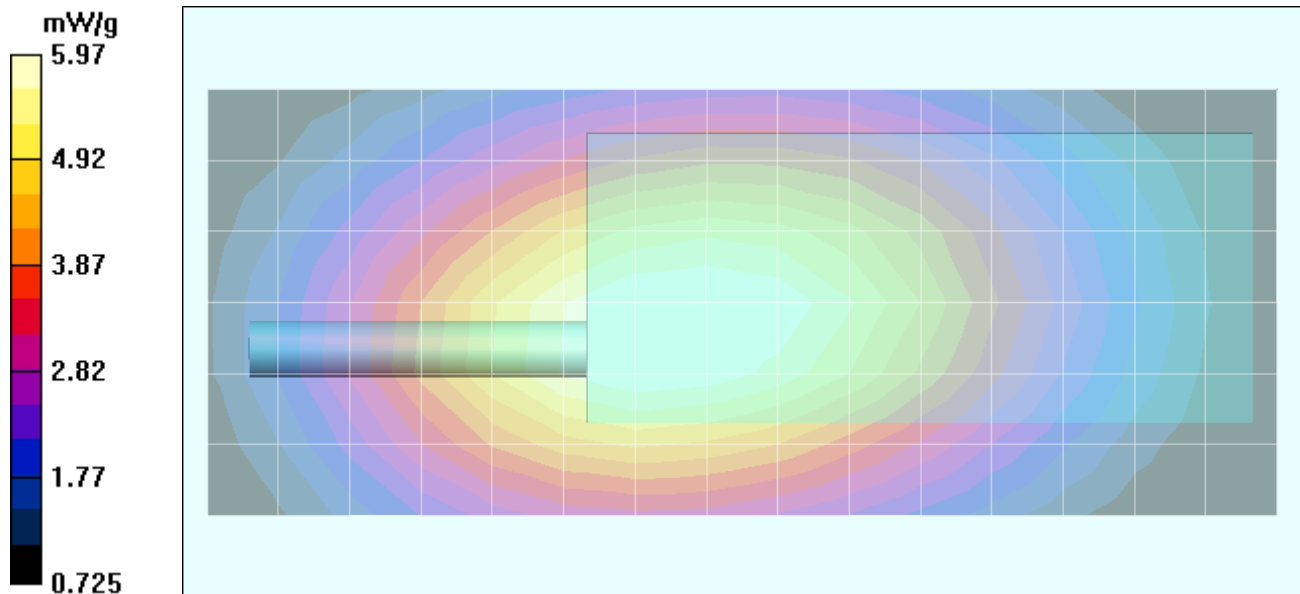
Face-Held - 2.5 cm Separation Distance - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 79.7 V/m; Power Drift = -0.491 dB

Peak SAR (extrapolated) = 9.11 W/kg

SAR(1 g) = 5.72 mW/g; SAR(10 g) = 4.05 mW/g



Body-Worn SAR - Li-ion Battery - Stubby Antenna (P/N: KRA-23M)

Date Tested: 04/07/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 24.8 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.8 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.31 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 57.5$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

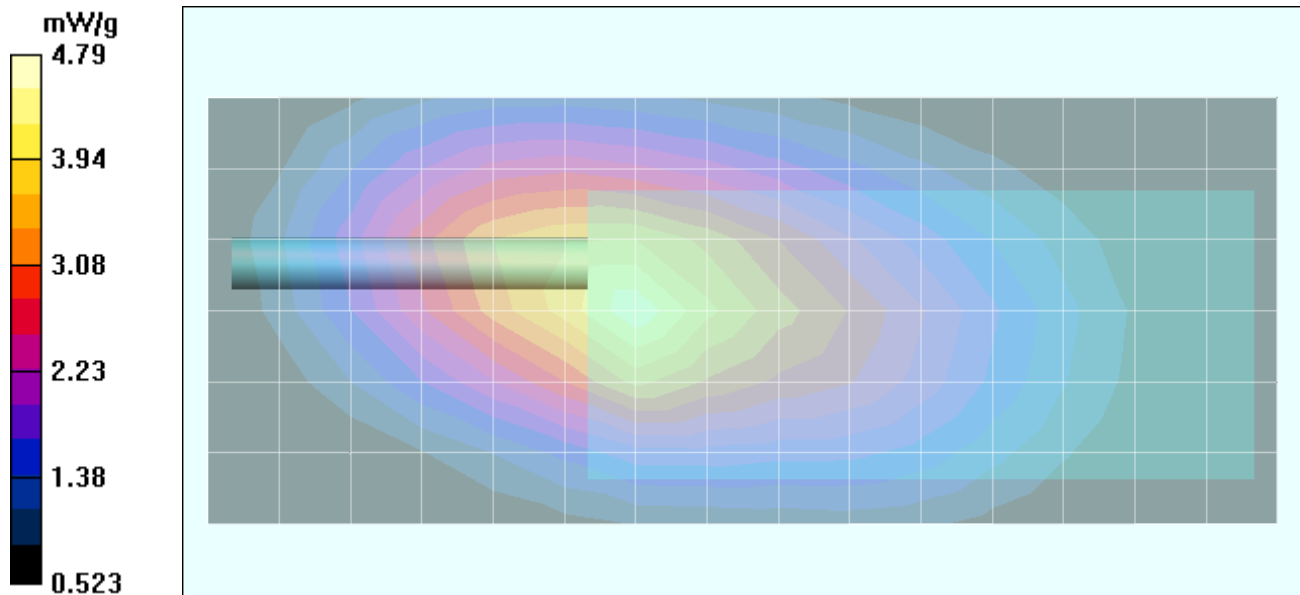
Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 63.3 V/m; Power Drift = 0.0926 dB

Peak SAR (extrapolated) = 7.97 W/kg

SAR(1 g) = 4.60 mW/g; SAR(10 g) = 3.07 mW/g



Body-Worn SAR - NiCd Battery - Stubby Antenna (P/N: KRA-23M)

Date Tested: 04/07/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 24.8 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.8 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.25 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 57.5$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

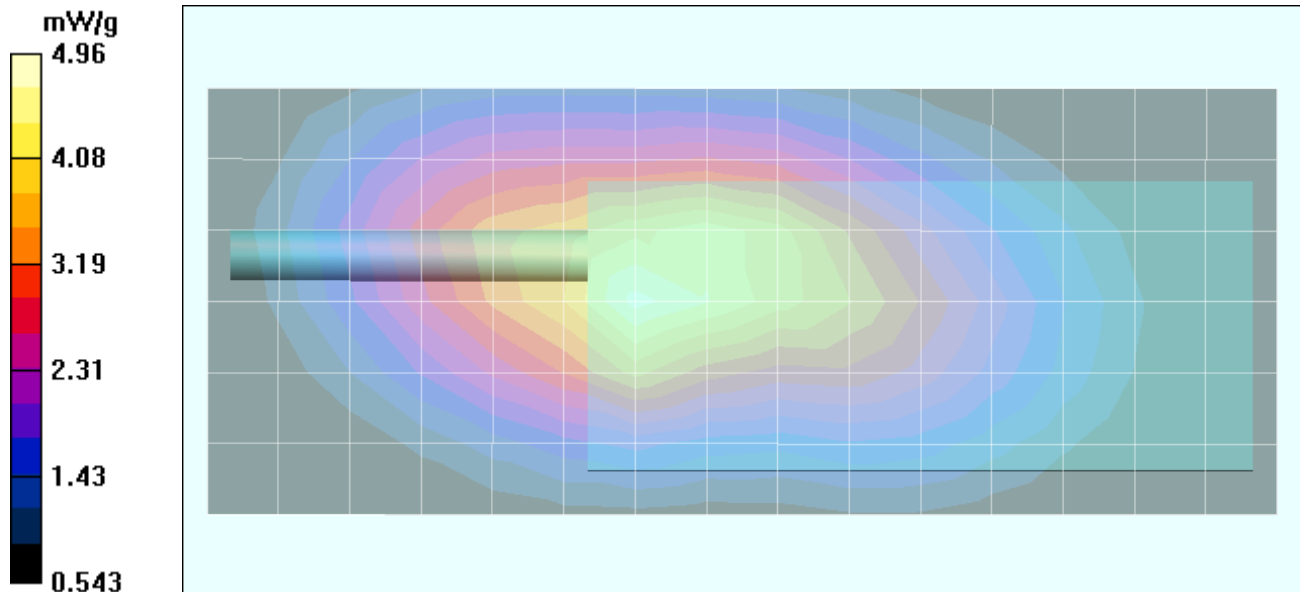
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 64.3 V/m; Power Drift = 0.0479 dB

Peak SAR (extrapolated) = 8.13 W/kg

SAR(1 g) = 4.69 mW/g; SAR(10 g) = 3.13 mW/g



Body-Worn SAR - NiMH Battery - Stubby Antenna (P/N: KRA-23M)

Date Tested: 04/07/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 24.8 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.8 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.30 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 57.5$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

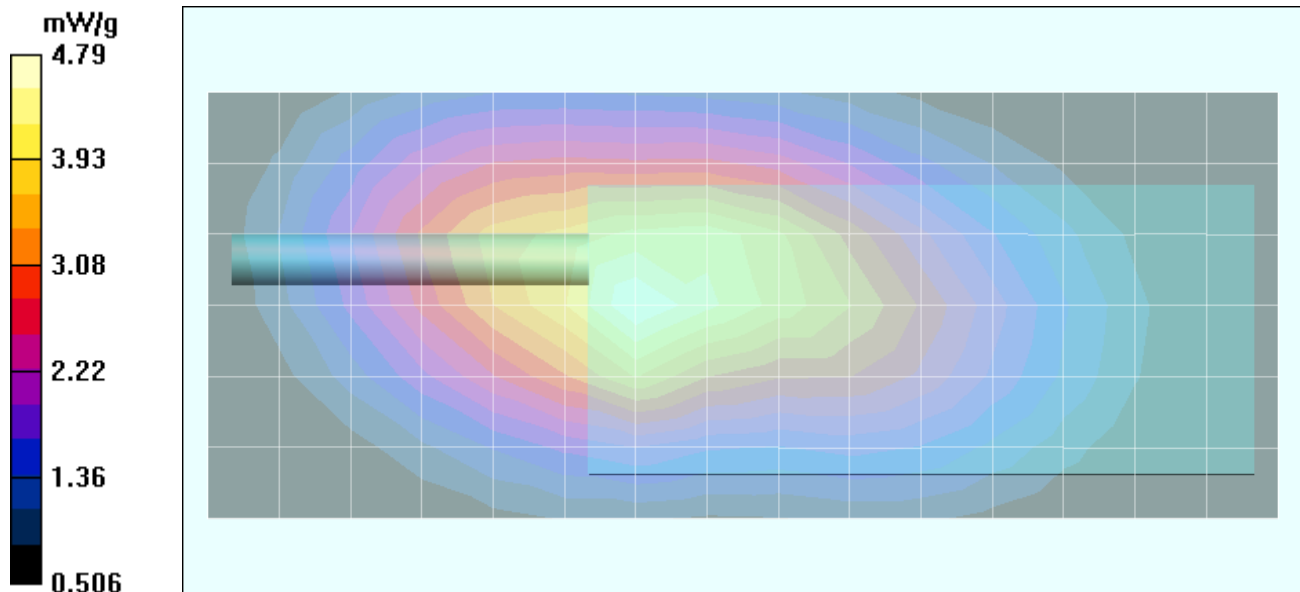
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 61.9 V/m; Power Drift = 0.353 dB

Peak SAR (extrapolated) = 7.86 W/kg

SAR(1 g) = 4.62 mW/g; SAR(10 g) = 3.1 mW/g



Body-Worn SAR - Li-ion Battery - Stubby Antenna (P/N: KRA-23M2)

Date Tested: 04/07/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 24.8 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.8 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.32 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 57.5$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

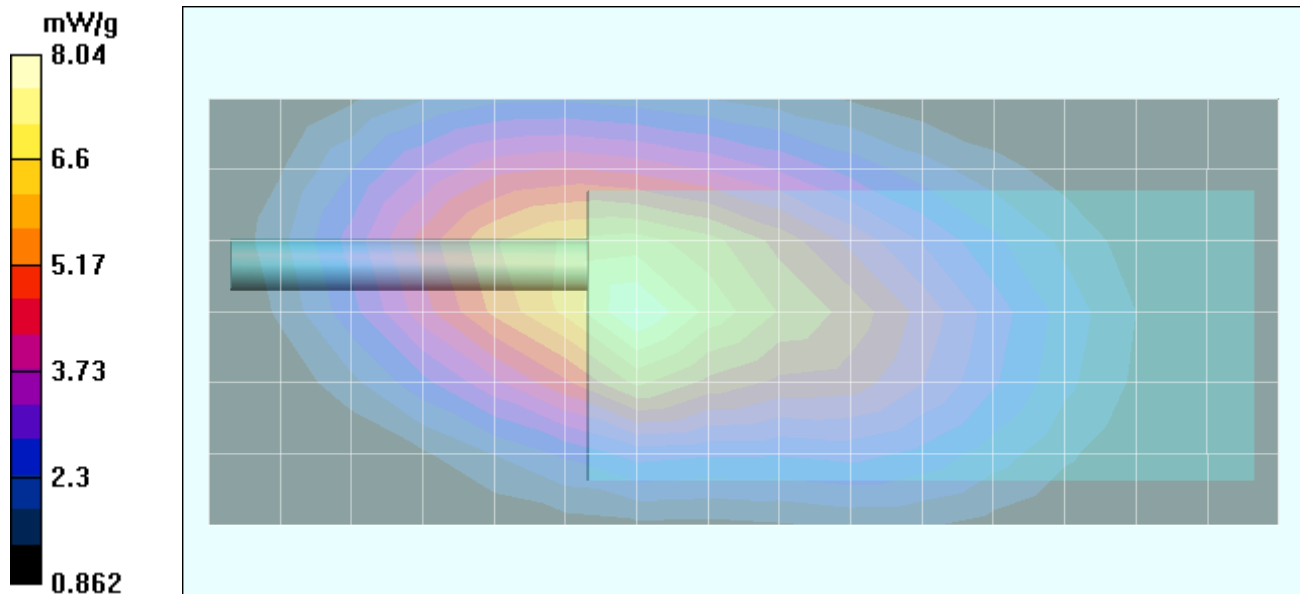
Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

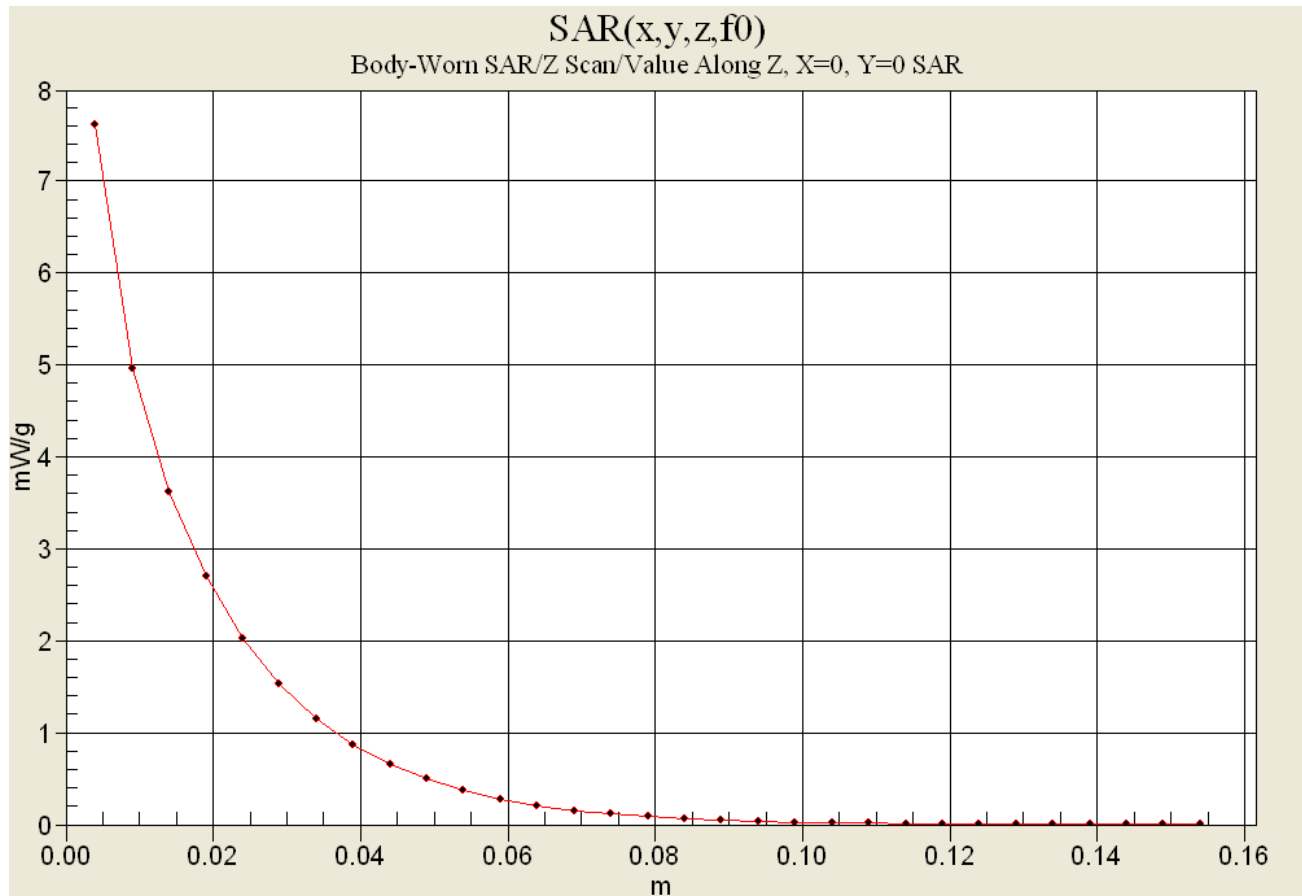
Reference Value = 80.5 V/m; Power Drift = 0.304 dB

Peak SAR (extrapolated) = 13.1 W/kg

SAR(1 g) = 7.74 mW/g; SAR(10 g) = 5.18 mW/g



Z-Axis Scan



Body-Worn SAR - NiCd Battery - Stubby Antenna (P/N: KRA-23M2)

Date Tested: 04/07/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 24.8 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.8 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.36 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 57.5$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

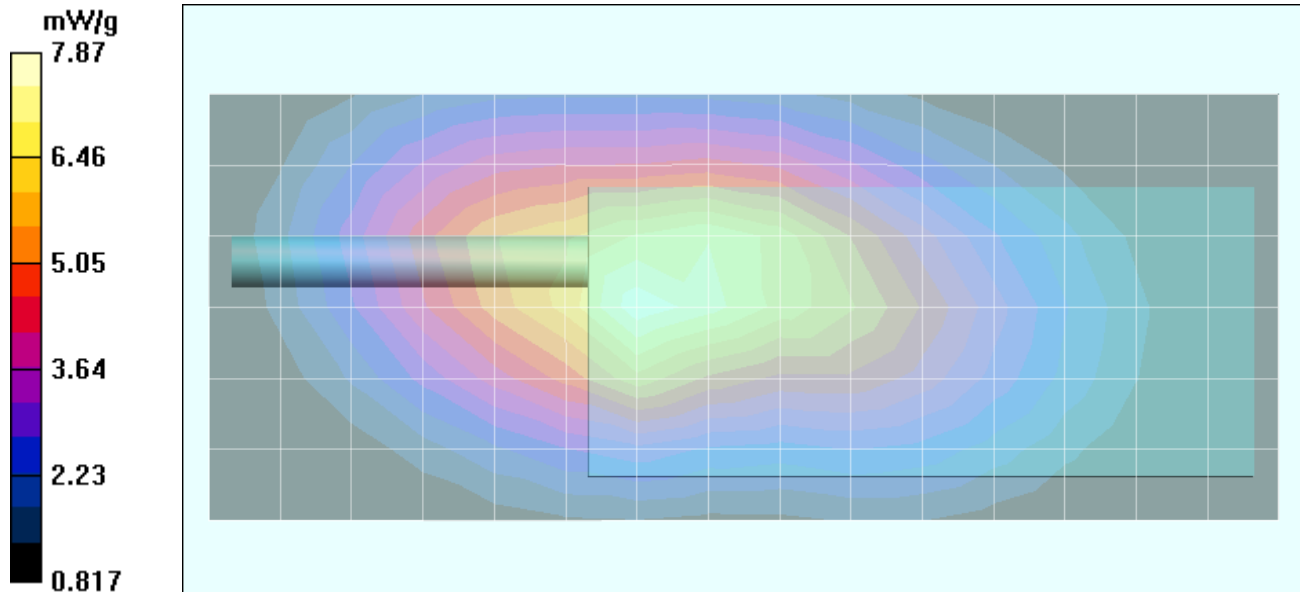
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 77 V/m; Power Drift = 0.413 dB

Peak SAR (extrapolated) = 12.4 W/kg

SAR(1 g) = 7.55 mW/g; SAR(10 g) = 4.97 mW/g



Body-Worn SAR - NiMH Battery - Stubby Antenna (P/N: KRA-23M2)

Date Tested: 04/07/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 24.8 °C; Fluid Temp: 21.7 °C; Barometric Pressure: 101.8 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.27 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 57.5$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

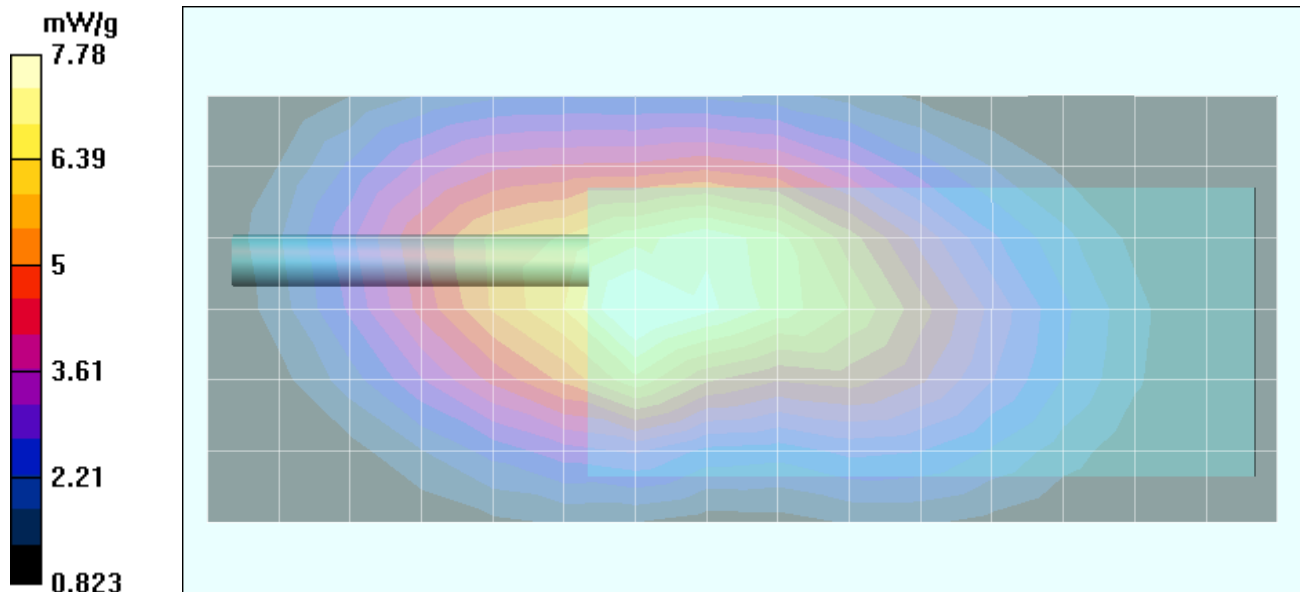
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 79 V/m; Power Drift = 0.290 dB

Peak SAR (extrapolated) = 12.5 W/kg

SAR(1 g) = 7.45 mW/g; SAR(10 g) = 5.01 mW/g



Body-Worn SAR - Li-ion Battery - Whip Antenna (P/N: KRA-27M)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.22 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x21x1):

Measurement grid: dx=15mm, dy=15mm

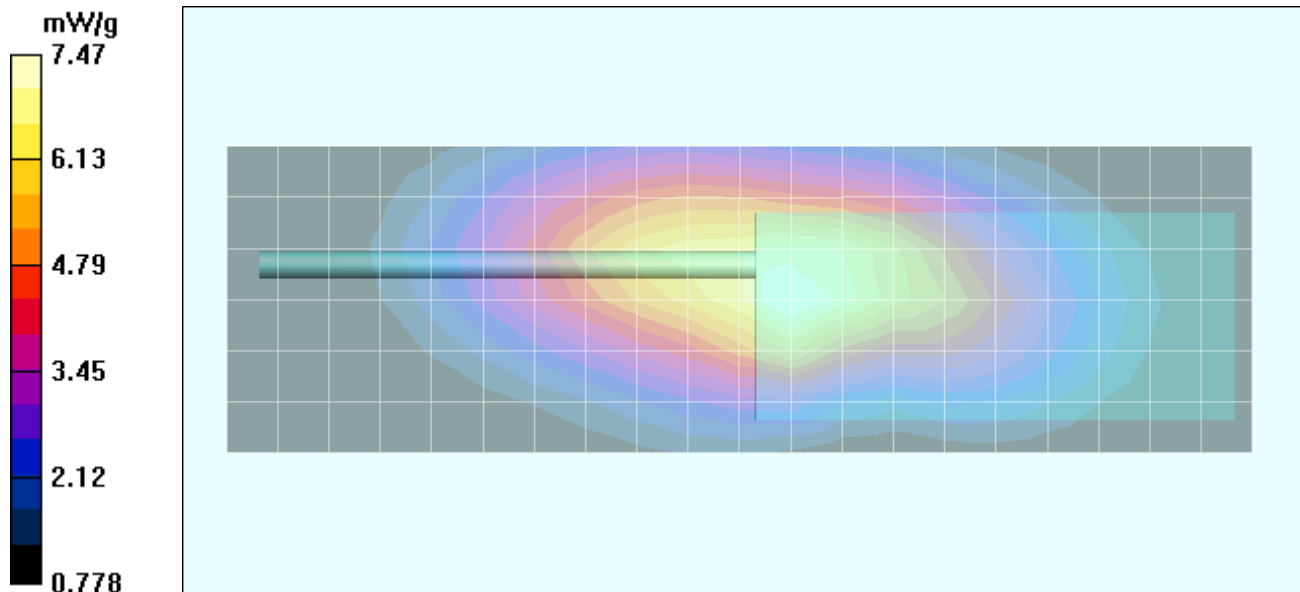
Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel /Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 74.1 V/m; Power Drift = 0.758 dB

Peak SAR (extrapolated) = 12.1 W/kg

SAR(1 g) = 7.15 mW/g; SAR(10 g) = 4.81 mW/g



Body-Worn SAR - NiCd Battery - Whip Antenna (P/N: KRA-27M)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.26 Watts (Conducted)

RF Output Power: 5.29 Watts (Conducted) 2nd Maximum

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x21x1):

Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 74.9 V/m; Power Drift = 0.0738 dB

Peak SAR (extrapolated) = 11.5 W/kg

SAR(1 g) = 7.02 mW/g; SAR(10 g) = 4.71 mW/g

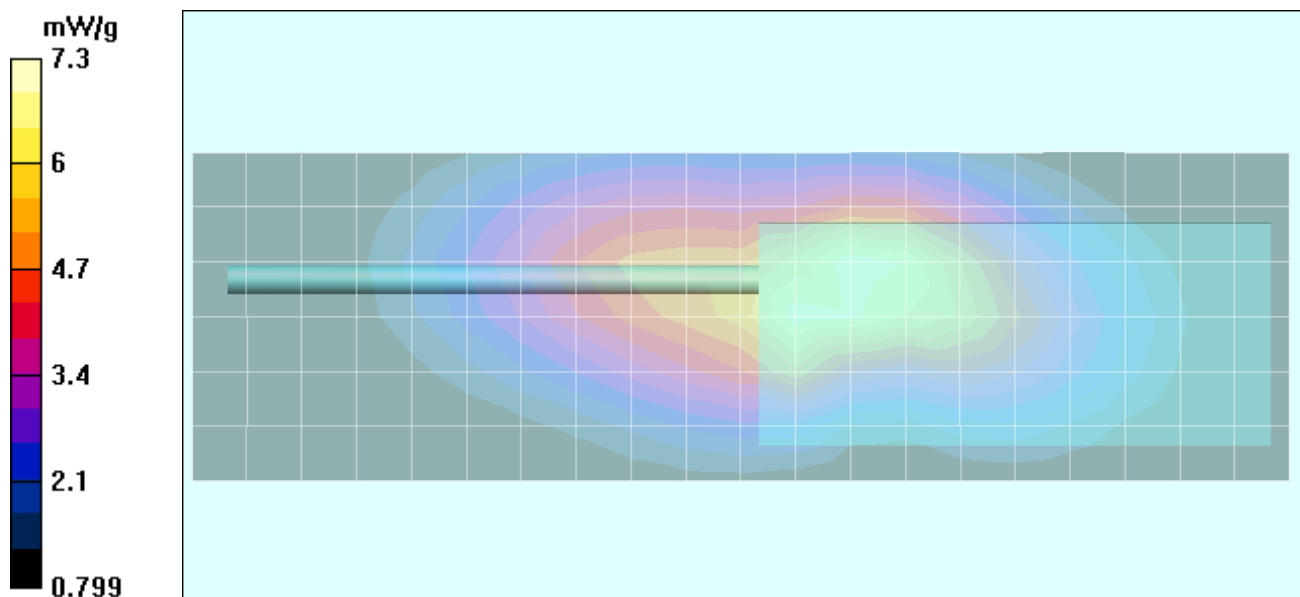
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 1:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 74.9 V/m; Power Drift = -0.104 dB

Peak SAR (extrapolated) = 7.84 W/kg

SAR(1 g) = 4.89 mW/g; SAR(10 g) = 3.37 mW/g



Body-Worn SAR - NiMH Battery - Whip Antenna (P/N: KRA-27M)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.16 Watts (Conducted)

RF Output Power: 5.16 Watts (Conducted) 2nd Maximum

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x21x1):

Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 75.6 V/m; Power Drift = 0.196 dB

Peak SAR (extrapolated) = 11.2 W/kg

SAR(1 g) = 6.90 mW/g; SAR(10 g) = 4.66 mW/g

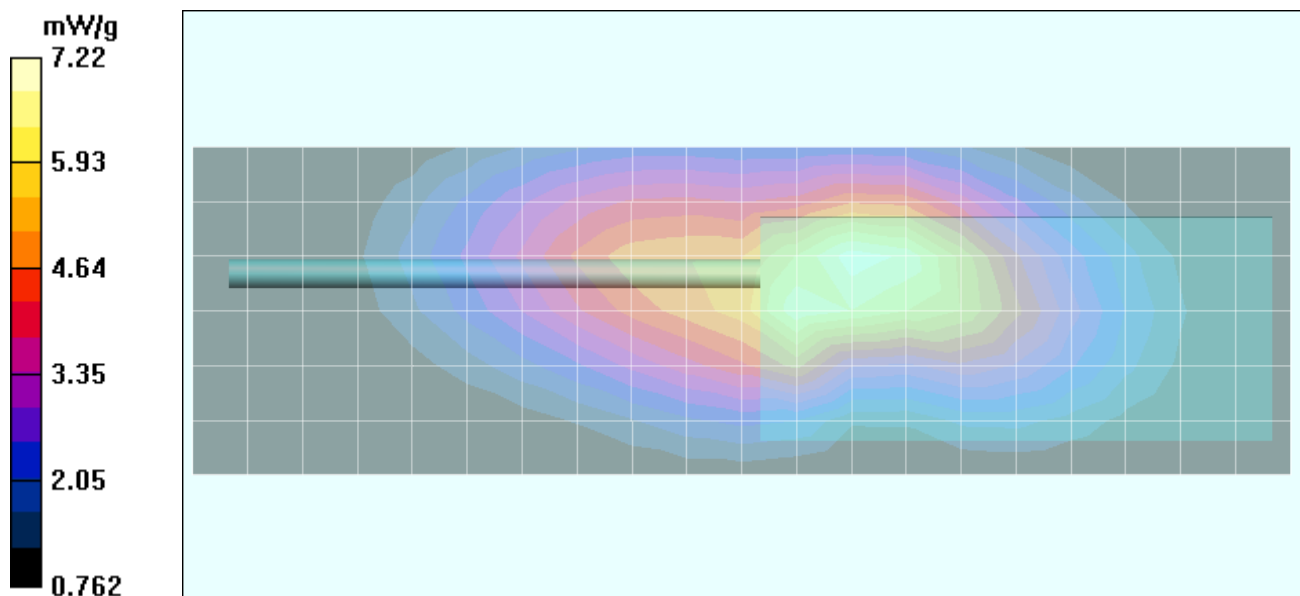
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 1:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 75.6 V/m; Power Drift = -0.268 dB

Peak SAR (extrapolated) = 7.66 W/kg

SAR(1 g) = 4.85 mW/g; SAR(10 g) = 3.39 mW/g



Body-Worn SAR - Li-ion Battery - Whip Antenna (P/N: KRA-27M2)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.22 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x20x1):

Measurement grid: dx=15mm, dy=15mm

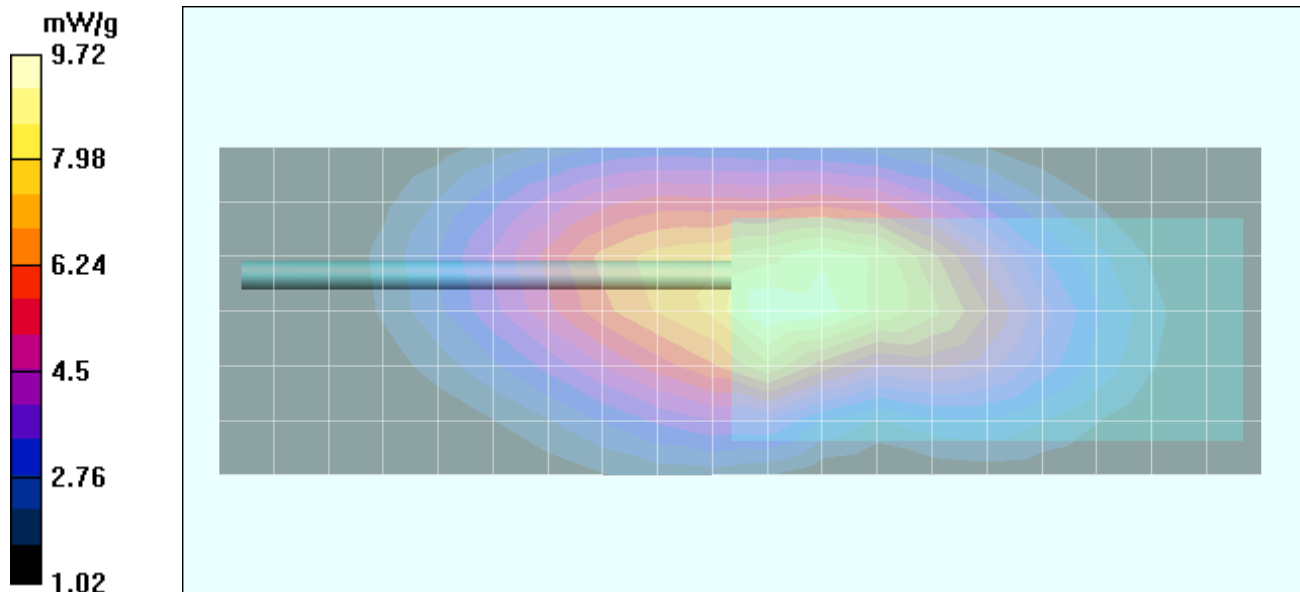
Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 86.1 V/m; Power Drift = 0.607 dB

Peak SAR (extrapolated) = 15.7 W/kg

SAR(1 g) = 9.28 mW/g; SAR(10 g) = 6.26 mW/g



Body-Worn SAR - NiCd Battery - Whip Antenna (P/N: KRA-27M2)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.25 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x20x1):

Measurement grid: dx=15mm, dy=15mm

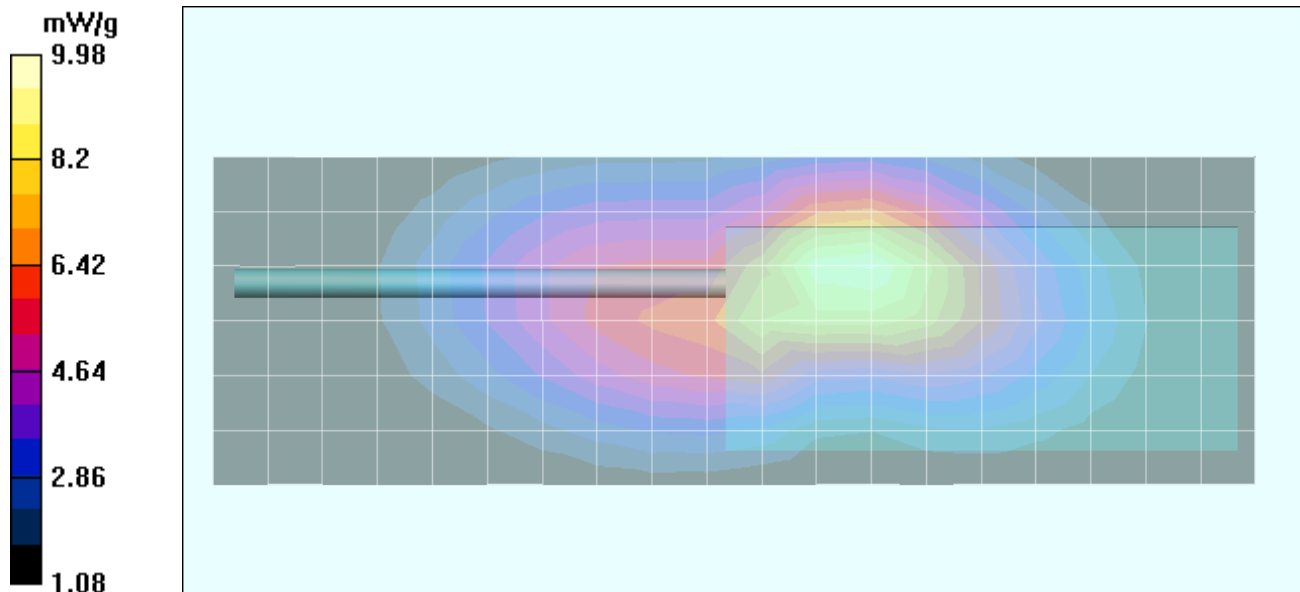
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 88.2 V/m; Power Drift = -0.314 dB

Peak SAR (extrapolated) = 15.6 W/kg

SAR(1 g) = 9.49 mW/g; SAR(10 g) = 6.43 mW/g



Body-Worn SAR - NiMH Battery - Whip Antenna (P/N: KRA-27M2)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.31 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x20x1):

Measurement grid: dx=15mm, dy=15mm

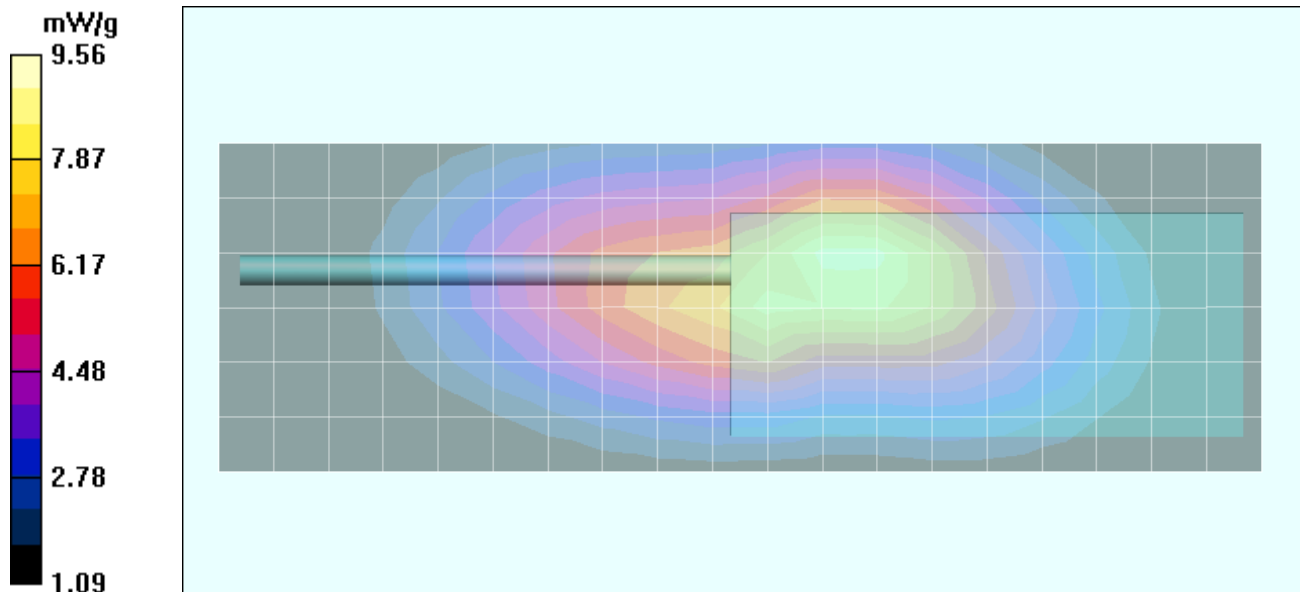
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 90.4 V/m; Power Drift = -0.602 dB

Peak SAR (extrapolated) = 14.9 W/kg

SAR(1 g) = 9.07 mW/g; SAR(10 g) = 6.2 mW/g



Body-Worn SAR - NiMH Battery - Whip Antenna (P/N: KRA-27M2)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 519.95 MHz; Duty Cycle: 1:1

RF Output Power: 5.13 Watts (Conducted)

RF Output Power: 5.21 Watts (Conducted) 2nd Maximum

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - High Channel/Area Scan (7x20x1):

Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - High Channel /Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 104.6 V/m; Power Drift = -0.323 dB

Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 9.92 mW/g; SAR(10 g) = 6.88 mW/g

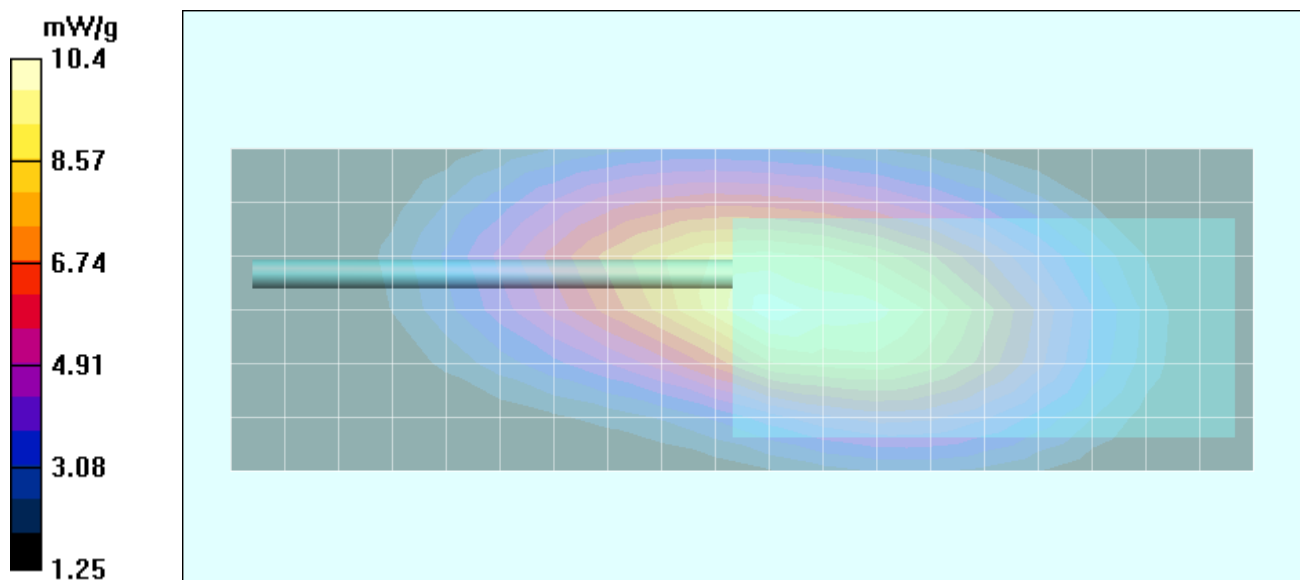
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - High Channel/Zoom Scan (5x5x7)/Cube 1:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

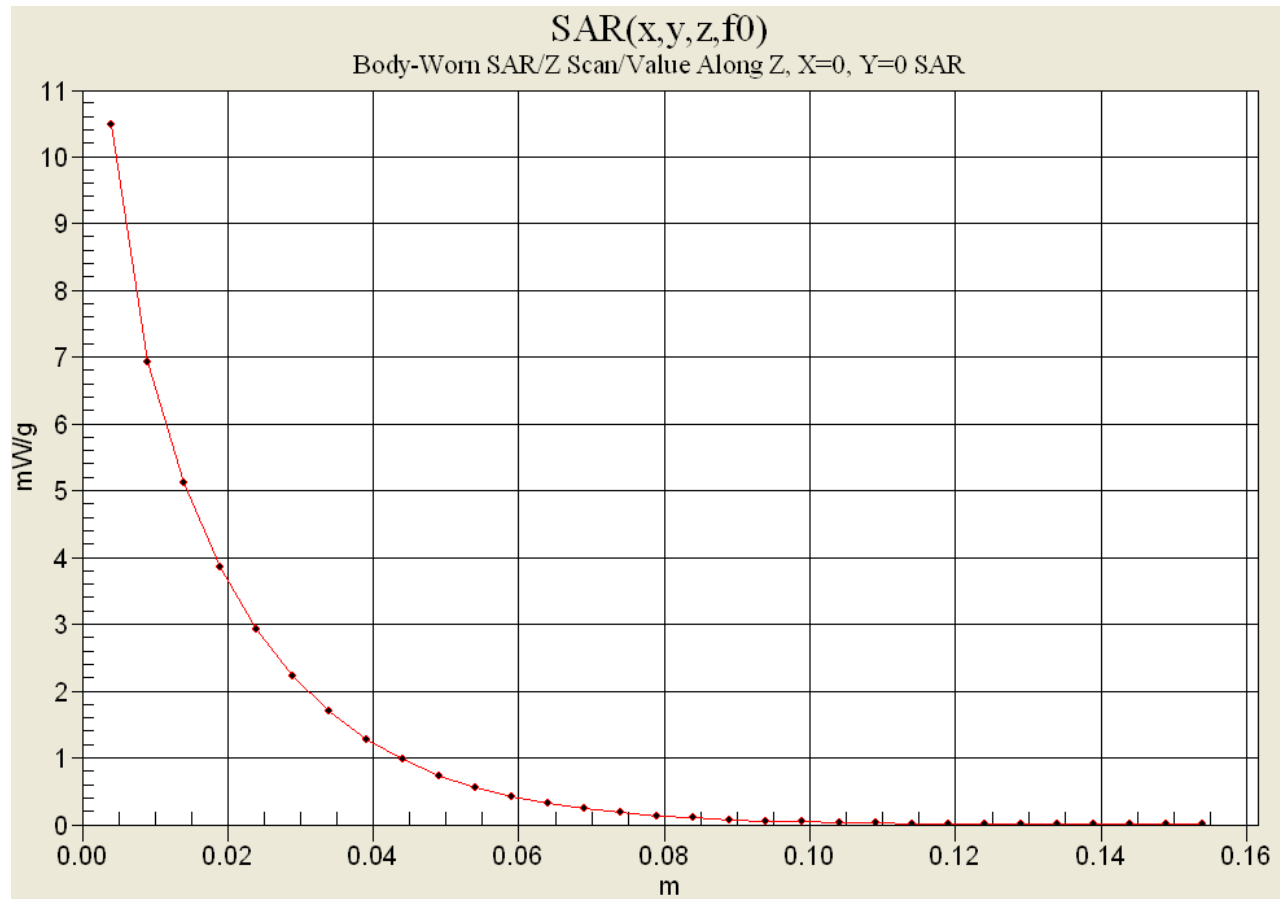
Reference Value = 104.6 V/m; Power Drift = -0.348 dB

Peak SAR (extrapolated) = 15.2 W/kg

SAR(1 g) = 9.81 mW/g; SAR(10 g) = 7.05 mW/g



Z-Axis Scan



SAR-versus-Time Power Drift Evaluation - Kenwood TK-3180

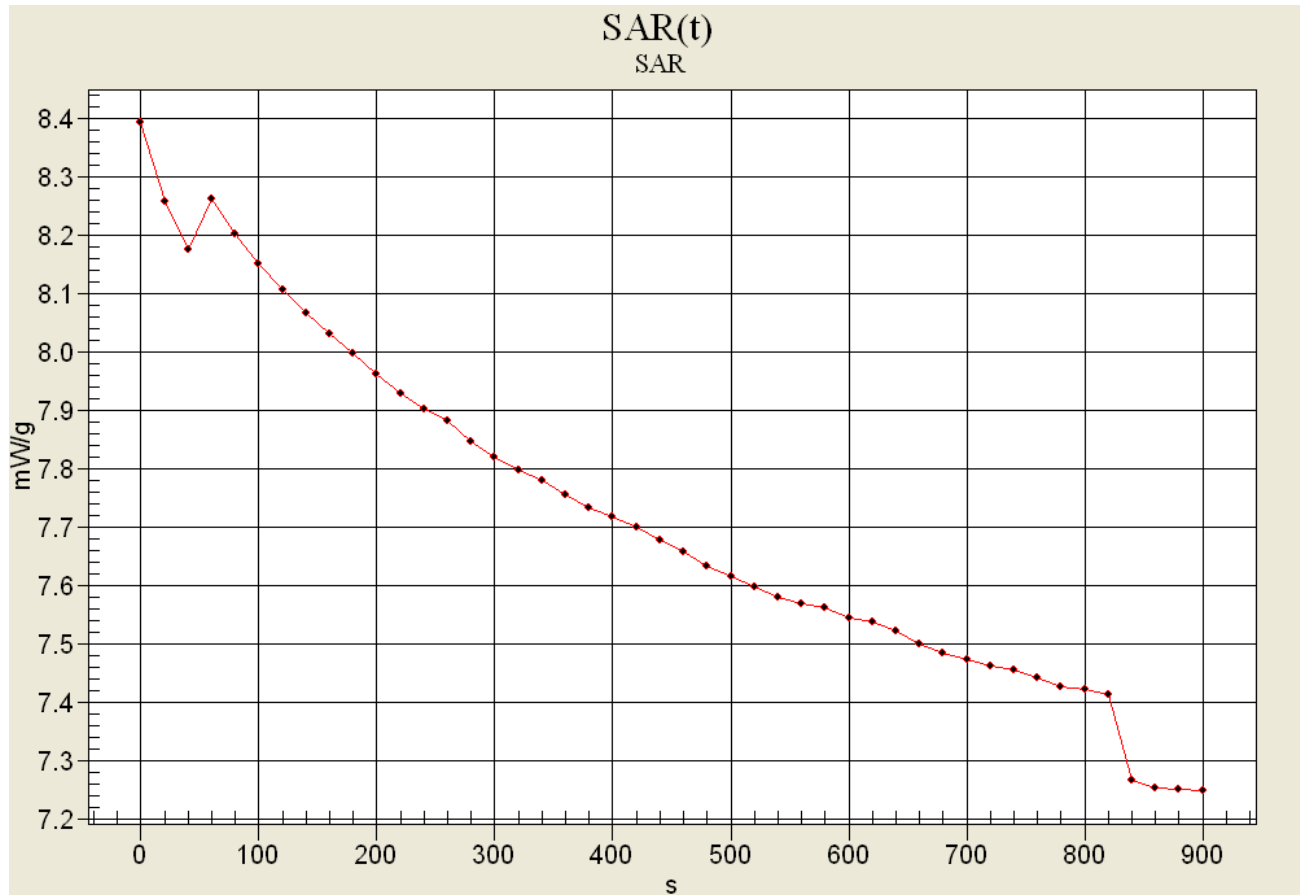
Belt-Clip with Speaker-Microphone

KNB-32N NiMH Battery

KRA-27M2 Antenna

High Channel (519.95 MHz)

Conducted Power: 5.28 Watts



Initial SAR: 8.394 mW/g

Final SAR: 7.251 mW/g (-0.636dB)

SAR after 300s: 7.825 mW/g (-0.305dB)

(300s: Zoom Scan Duration)

(900s: Area Scan Duration)

Body-Worn SAR - Li-ion Battery - Stubby Antenna (P/N: KRA-17M)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.26 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

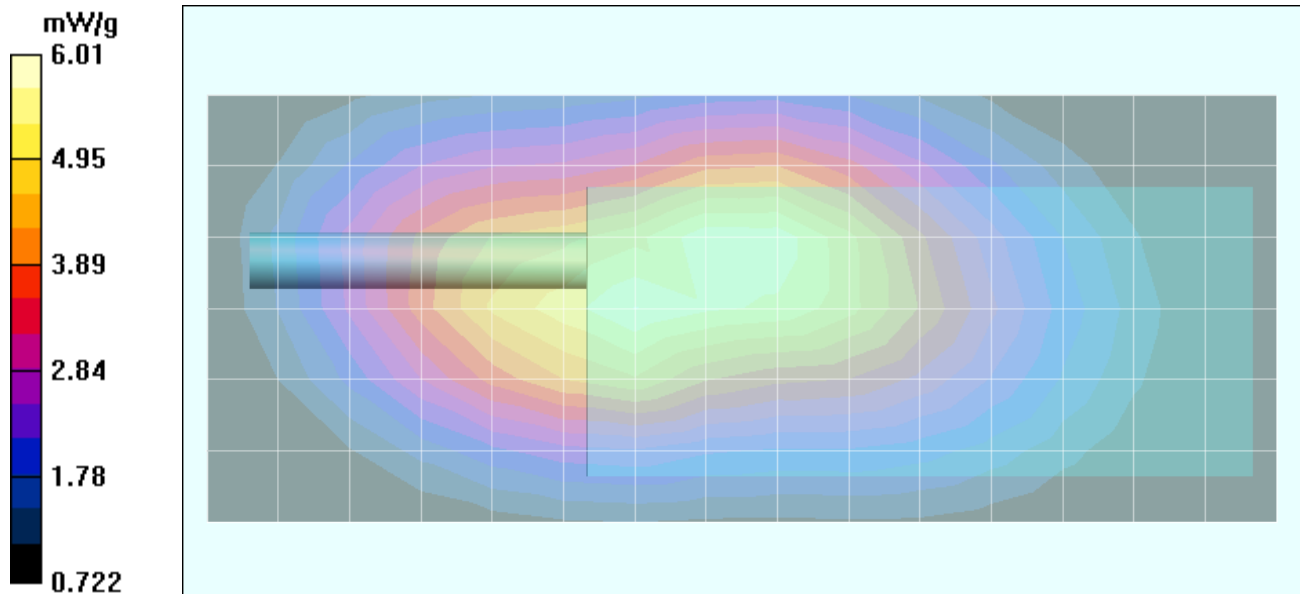
Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 78.1 V/m; Power Drift = -0.488 dB

Peak SAR (extrapolated) = 9.08 W/kg

SAR(1 g) = 5.74 mW/g; SAR(10 g) = 4.06 mW/g



Body-Worn SAR - NiCd Battery - Stubby Antenna (P/N: KRA-17M)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.24 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

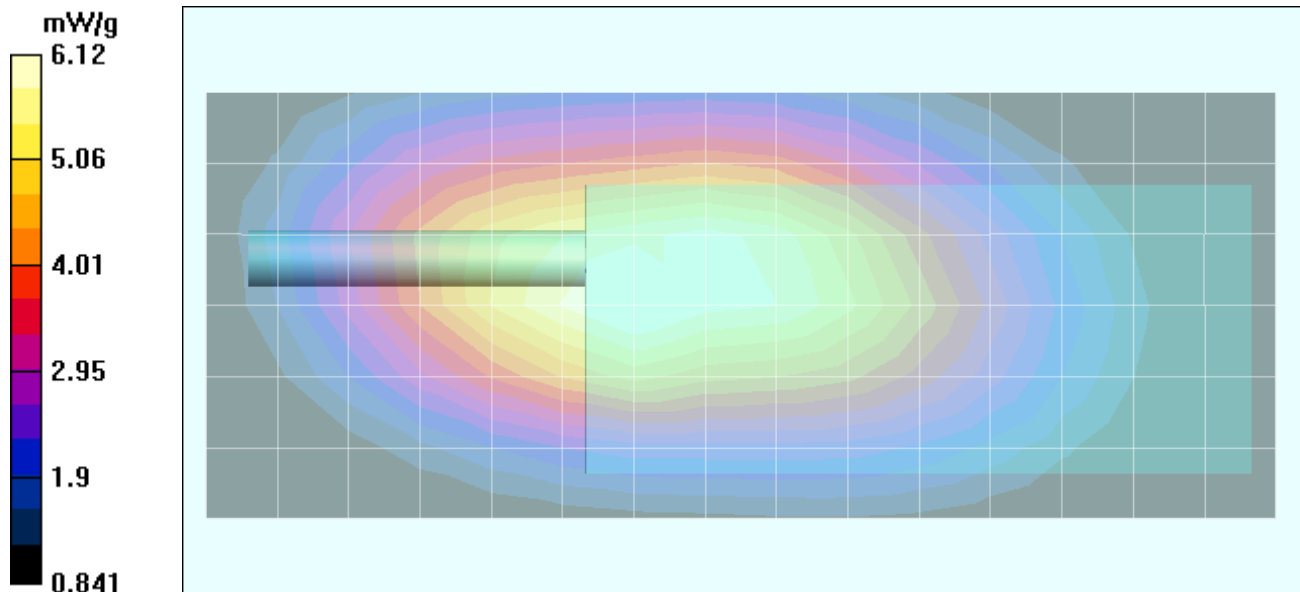
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 79.1 V/m; Power Drift = -0.516 dB

Peak SAR (extrapolated) = 9.36 W/kg

SAR(1 g) = 5.80 mW/g; SAR(10 g) = 4.12 mW/g



Body-Worn SAR - NiMH Battery - Stubby Antenna (P/N: KRA-17M)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.20 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

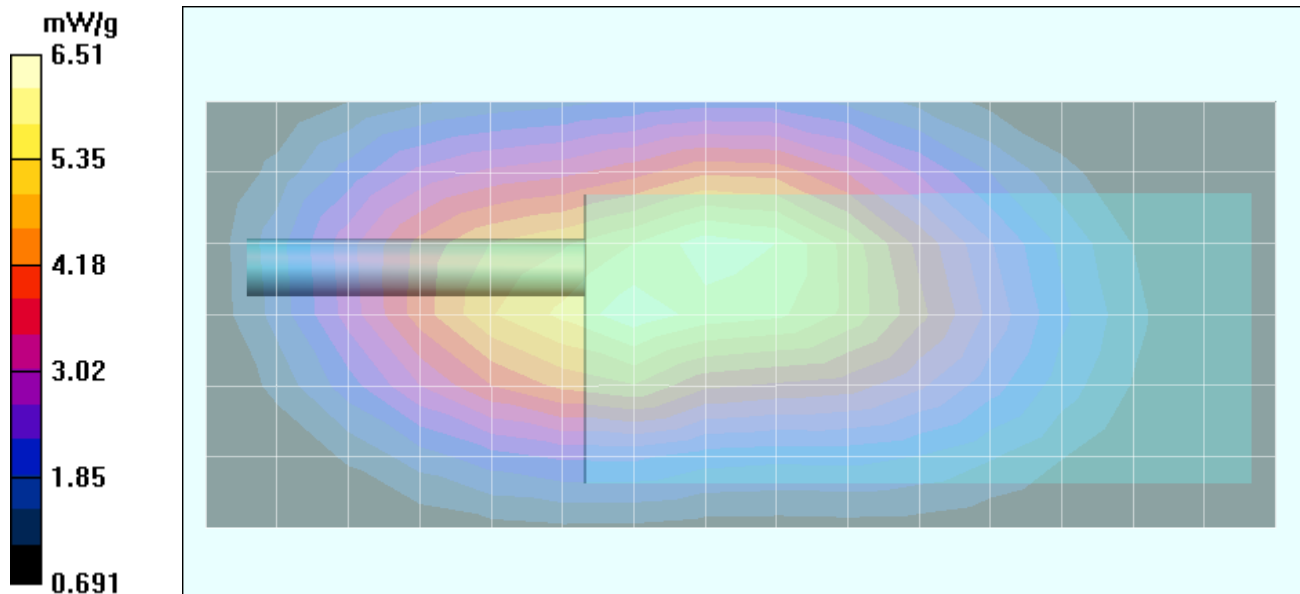
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 81.7 V/m; Power Drift = -0.401 dB

Peak SAR (extrapolated) = 10.2 W/kg

SAR(1 g) = 6.04 mW/g; SAR(10 g) = 4.21 mW/g



Body-Worn SAR - Li-ion Battery - Stubby Antenna (P/N: KRA-17M2)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.23 Watts (Conducted)

7.5V 1700mAh Li-ion Battery Pack (P/N: KNB-33L)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

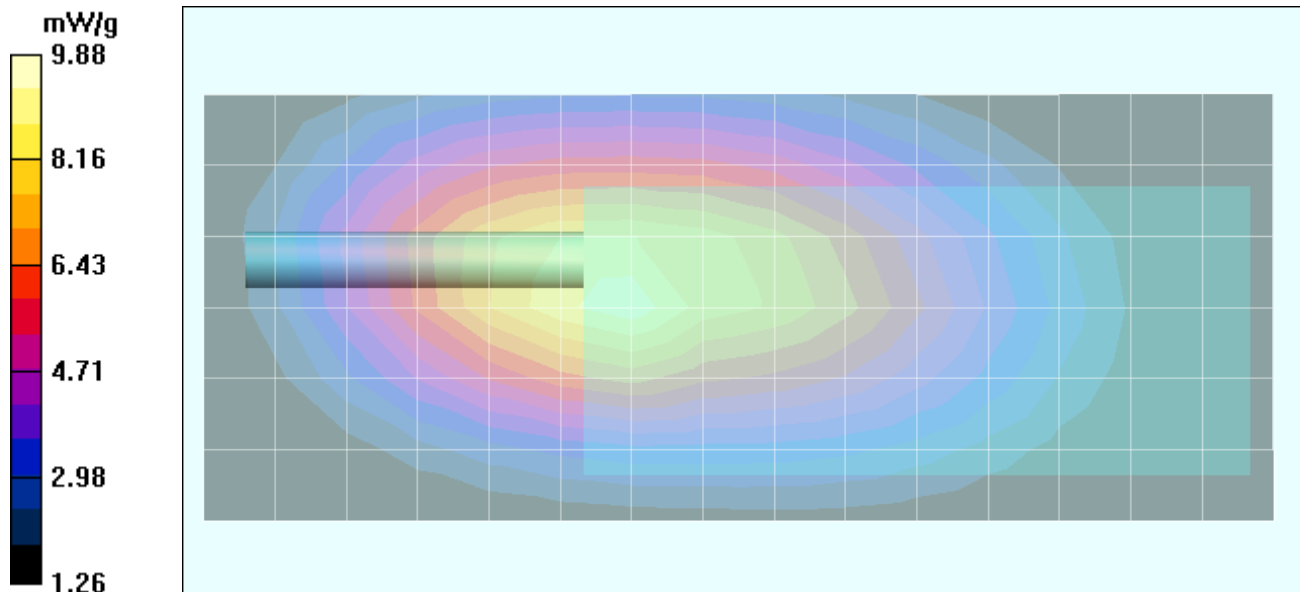
Body-Worn - 1.7 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 98.6 V/m; Power Drift = -0.229 dB

Peak SAR (extrapolated) = 15.5 W/kg

SAR(1 g) = 9.34 mW/g; SAR(10 g) = 6.4 mW/g



Body-Worn SAR - NiCd Battery - Stubby Antenna (P/N: KRA-17M2)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.24 Watts (Conducted)

7.5V 1700mAh NiCd Battery Pack (P/N: KNB-31A)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

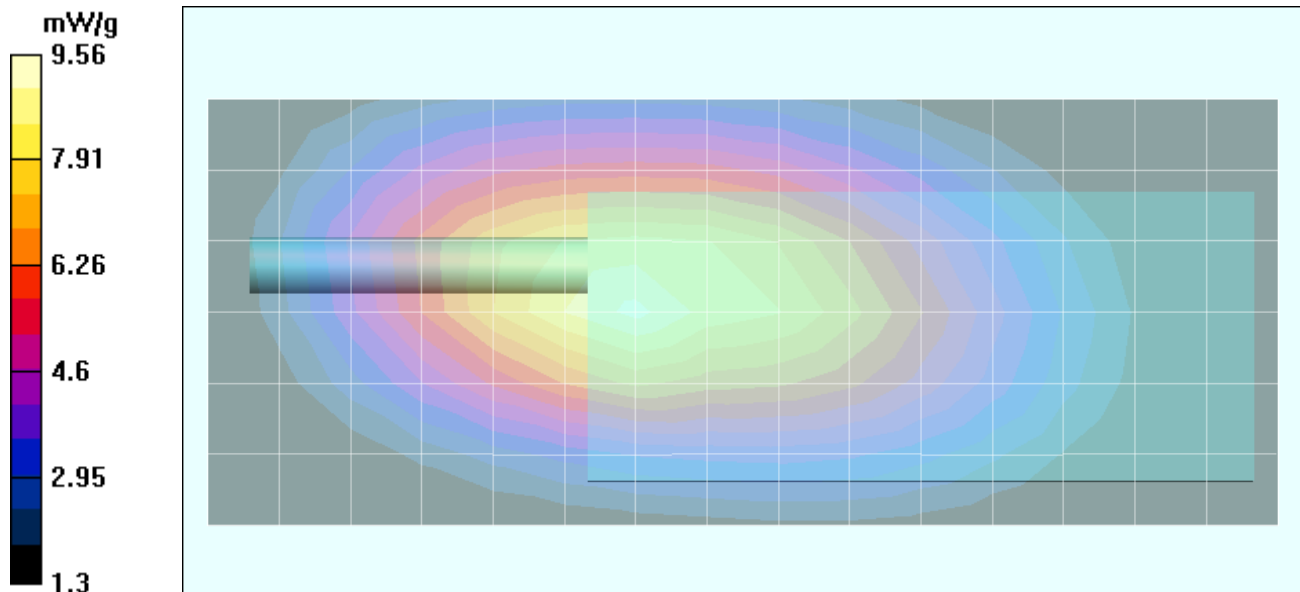
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 98.8 V/m; Power Drift = -0.373 dB

Peak SAR (extrapolated) = 14.9 W/kg

SAR(1 g) = 9.14 mW/g; SAR(10 g) = 6.37 mW/g



Body-Worn SAR - NiMH Battery - Stubby Antenna (P/N: KRA-17M2)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 485.05 MHz; Duty Cycle: 1:1

RF Output Power: 5.30 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

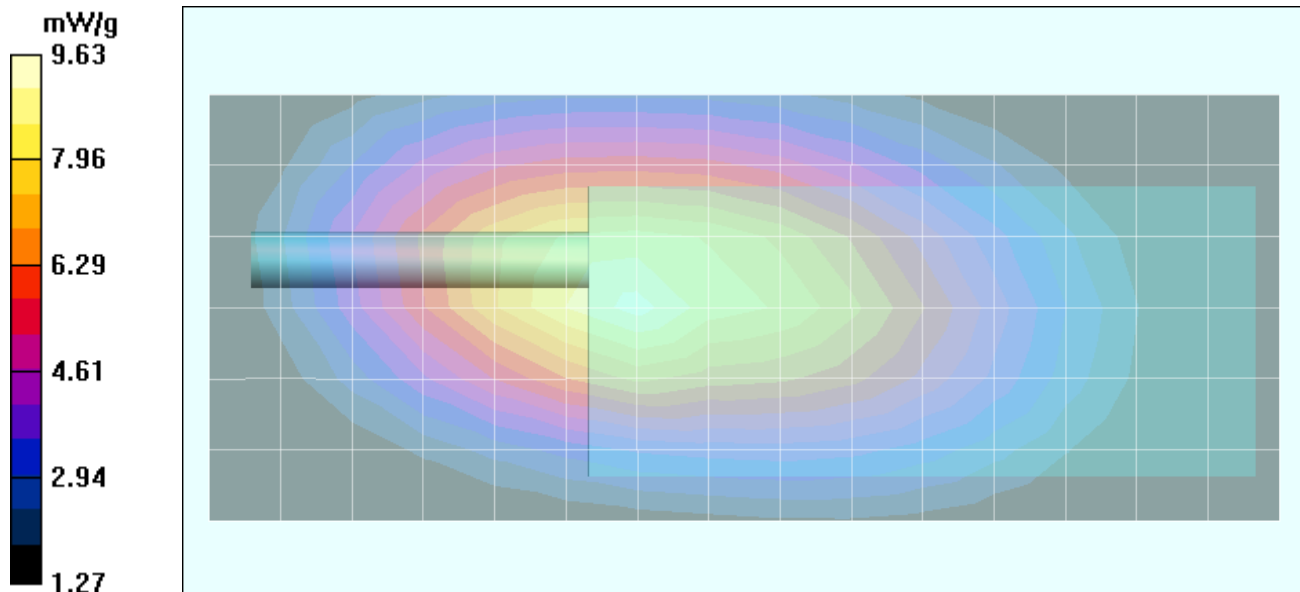
Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - Mid Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 98.8 V/m; Power Drift = -0.393 dB

Peak SAR (extrapolated) = 15.1 W/kg

SAR(1 g) = 9.26 mW/g; SAR(10 g) = 6.43 mW/g



Body-Worn SAR - NiMH Battery - Stubby Antenna (P/N: KRA-17M2)

Date Tested: 04/08/04

DUT: Kenwood Model: TK-3180; Type: Portable FM UHF PTT Radio Transceiver; Serial: U01

Ambient Temp: 25.6 °C; Fluid Temp: 22.3 °C; Barometric Pressure: 102.1 kPa; Humidity: 30%

Body-Worn Accessories: Plastic Belt-Clip (P/N: KBH-11), Speaker-Microphone (P/N: KMC-25)

Communication System: FM UHF

Frequency: 519.95 MHz; Duty Cycle: 1:1

RF Output Power: 5.16 Watts (Conducted)

7.5V 2500mAh NiMH Battery Pack (P/N: KNB-32N)

Medium: M450 ($\sigma = 0.92$ mho/m; $\epsilon_r = 56.6$; $\rho = 1000$ kg/m³)

- Probe: ET3DV6 - SN1387; ConvF(7.6, 7.6, 7.6); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - High Channel/Area Scan (7x16x1):

Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.2 cm Plastic Belt-Clip Separation Distance from Battery - High Channel/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 89.5 V/m; Power Drift = -0.258 dB

Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 10.0 mW/g; SAR(10 g) = 6.5 mW/g

