APPENDIX A - SAR MEASUREMENT DATA

Face-Held SAR - Low Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

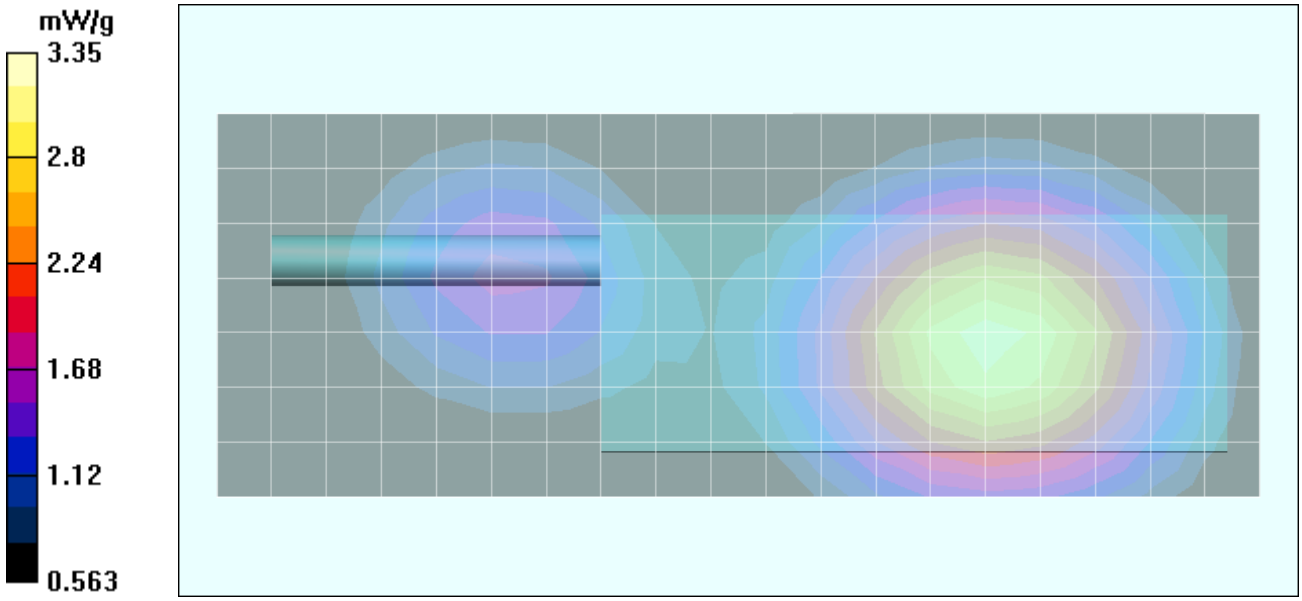
Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.27 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 42.4 V/m; Power Drift = -0.320 dB
Peak SAR (extrapolated) = 4.07 W/kg
SAR(1 g) = 3.18 mW/g; SAR(10 g) = 2.36 mW/g



Face-Held SAR - Low Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

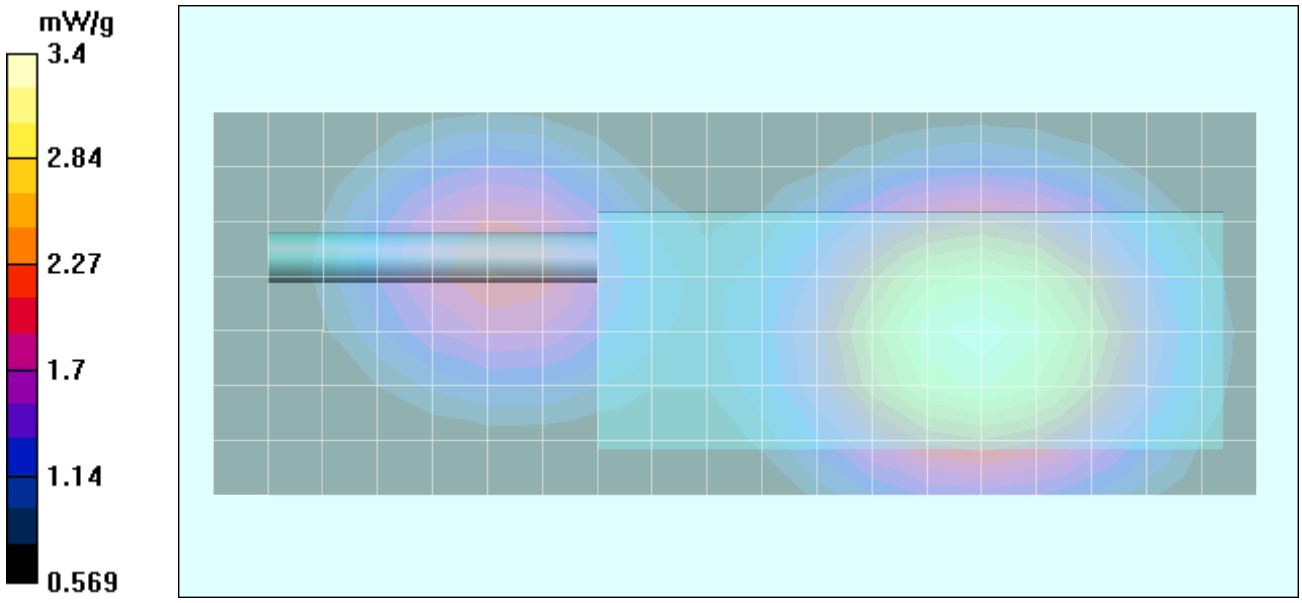
Communication System: FM
RF Output Power: 3.34 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 41.4 V/m; Power Drift = 0.0400 dB
Peak SAR (extrapolated) = 4.12 W/kg
SAR(1 g) = 3.22 mW/g; SAR(10 g) = 2.39 mW/g

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 41.4 V/m; Power Drift = 0.0400 dB
Peak SAR (extrapolated) = 2.67 W/kg
SAR(1 g) = 2.04 mW/g; SAR(10 g) = 1.48 mW/g



Face-Held SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

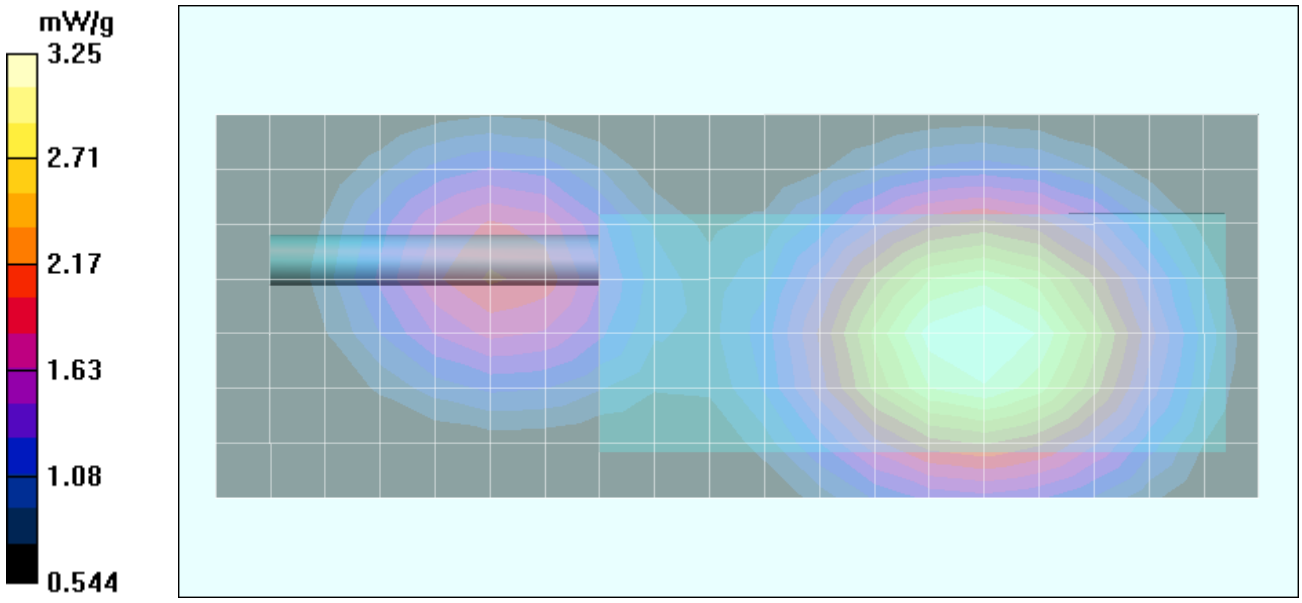
Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.31 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 40.4 V/m; Power Drift = -0.150 dB
Peak SAR (extrapolated) = 3.95 W/kg
SAR(1 g) = 3.09 mW/g; SAR(10 g) = 2.3 mW/g



Face-Held SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

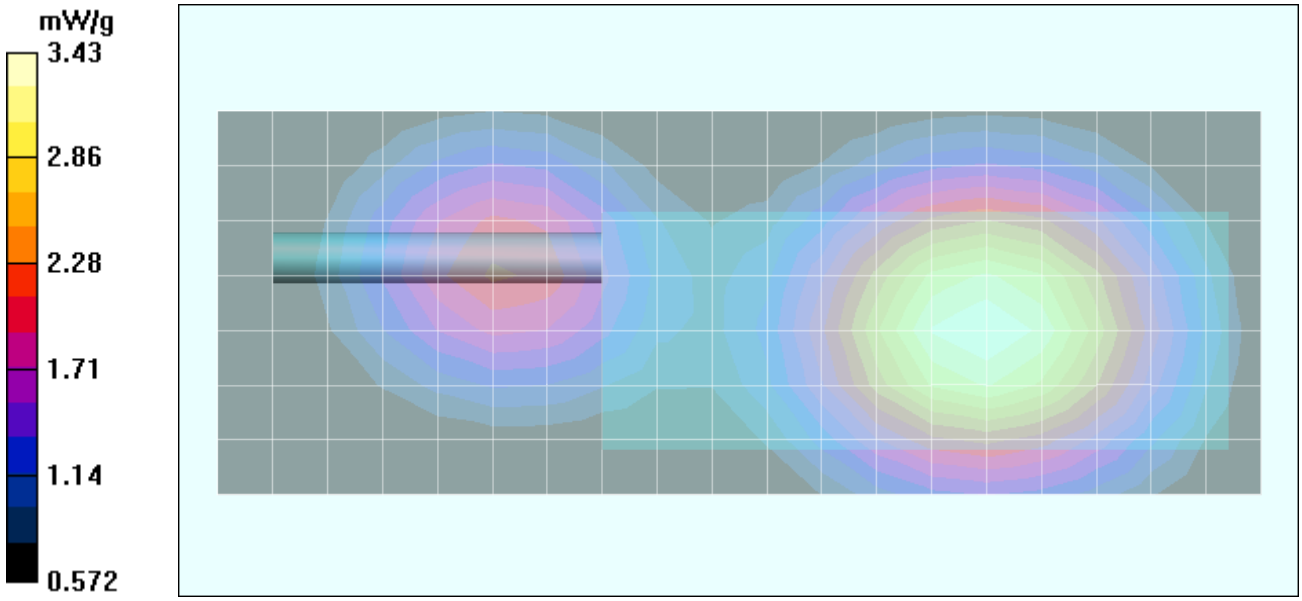
Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.31 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 41.6 V/m; Power Drift = -0.290 dB
Peak SAR (extrapolated) = 4.16 W/kg
SAR(1 g) = 3.25 mW/g; SAR(10 g) = 2.42 mW/g



Face-Held SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/10/04 **(SAR Comparison)**

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

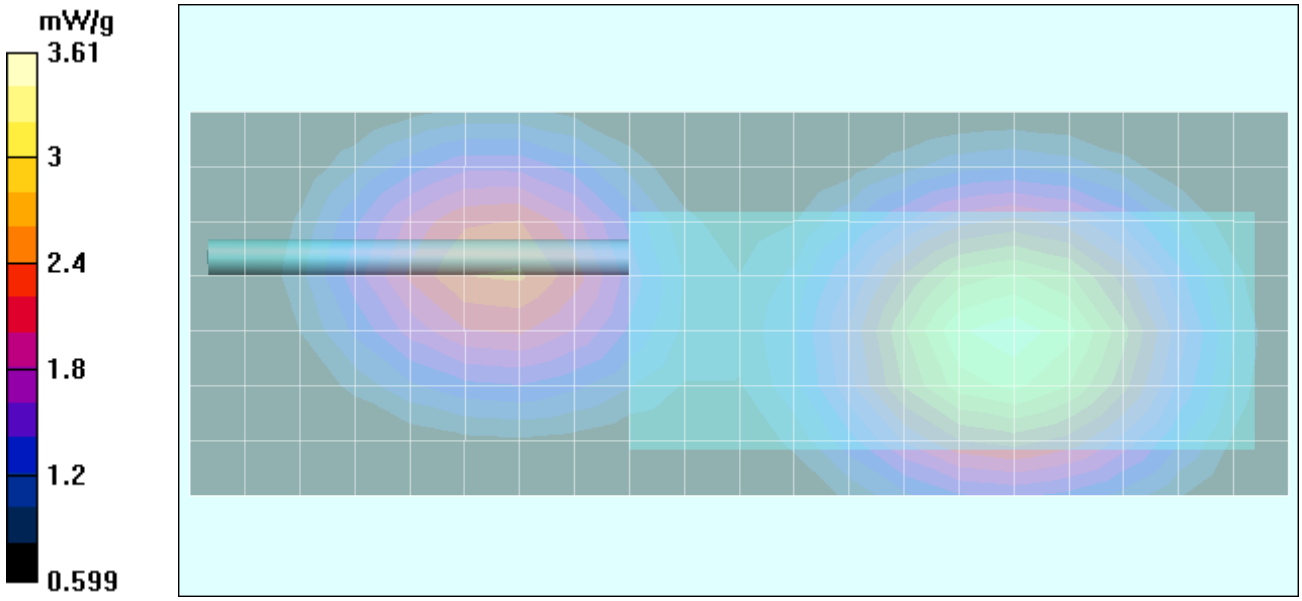
Communication System: FM
RF Output Power: 3.35 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

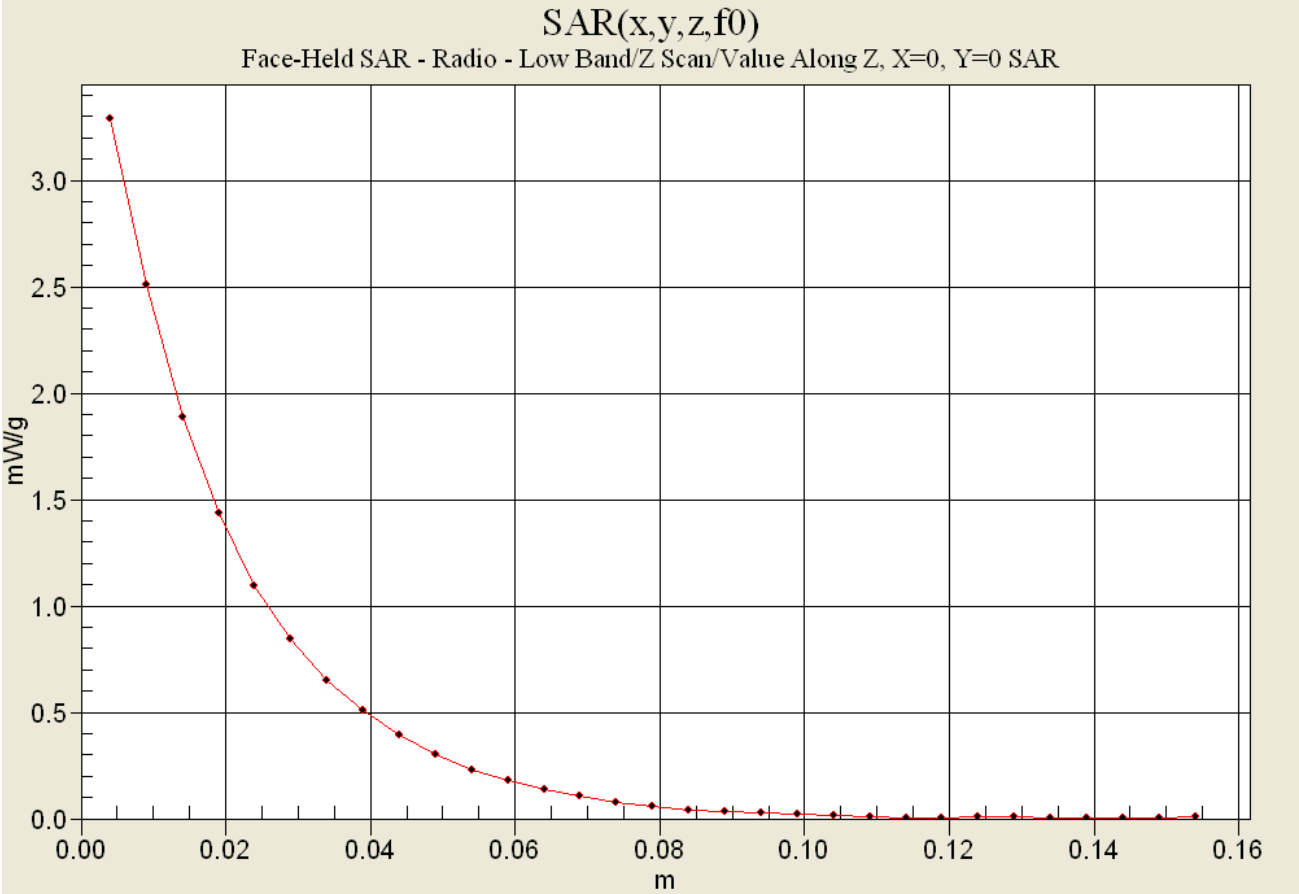
Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 42.5 V/m; Power Drift = -0.218 dB
Peak SAR (extrapolated) = 4.39 W/kg
SAR(1 g) = 3.42 mW/g; SAR(10 g) = 2.55 mW/g

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 42.5 V/m; Power Drift = -0.218 dB
Peak SAR (extrapolated) = 3.16 W/kg
SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.78 mW/g



Z-Axis Scan


SAR(x,y,z,f0)
Face-Held SAR - Radio - Low Band/Z Scan/Value Along Z, X=0, Y=0 SAR
mW/g
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Face-Held SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/10/04 **(SAR Comparison)**

DUT: MA-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V71) S/N: T1-PP04

Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

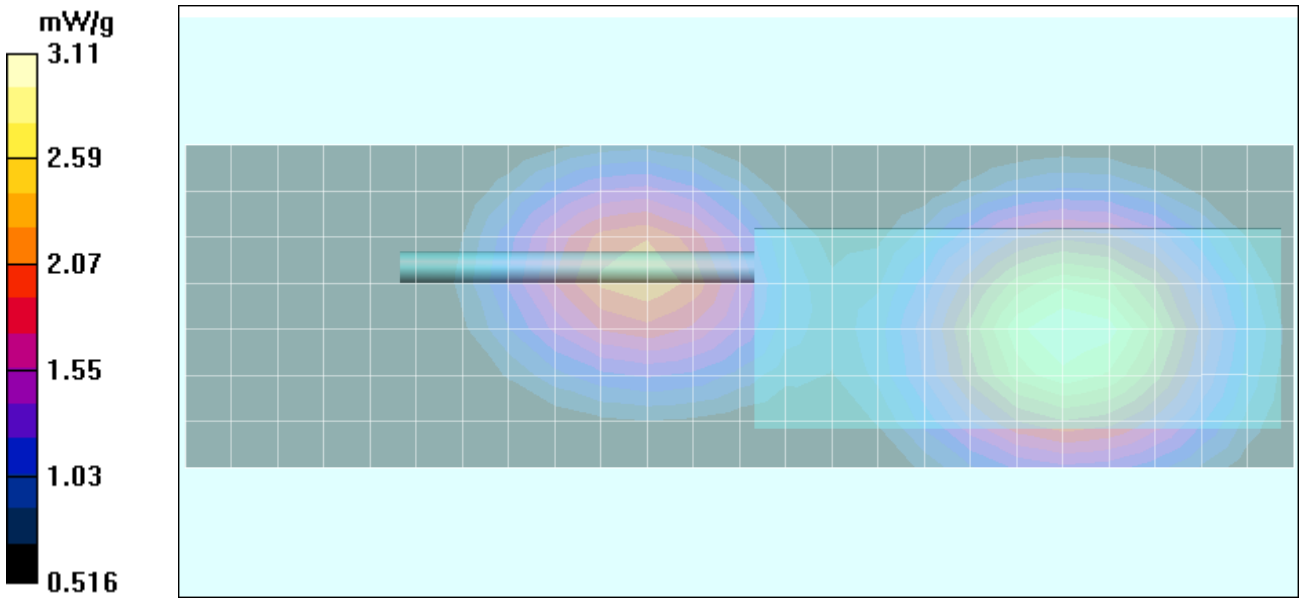
Communication System: FM
RF Output Power: 3.31 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 43.3 V/m; Power Drift = -0.724 dB
Peak SAR (extrapolated) = 3.78 W/kg
SAR(1 g) = 2.94 mW/g; SAR(10 g) = 2.19 mW/g

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 43.3 V/m; Power Drift = -0.724 dB
Peak SAR (extrapolated) = 2.82 W/kg
SAR(1 g) = 2.16 mW/g; SAR(10 g) = 1.58 mW/g



Face-Held SAR - Low Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

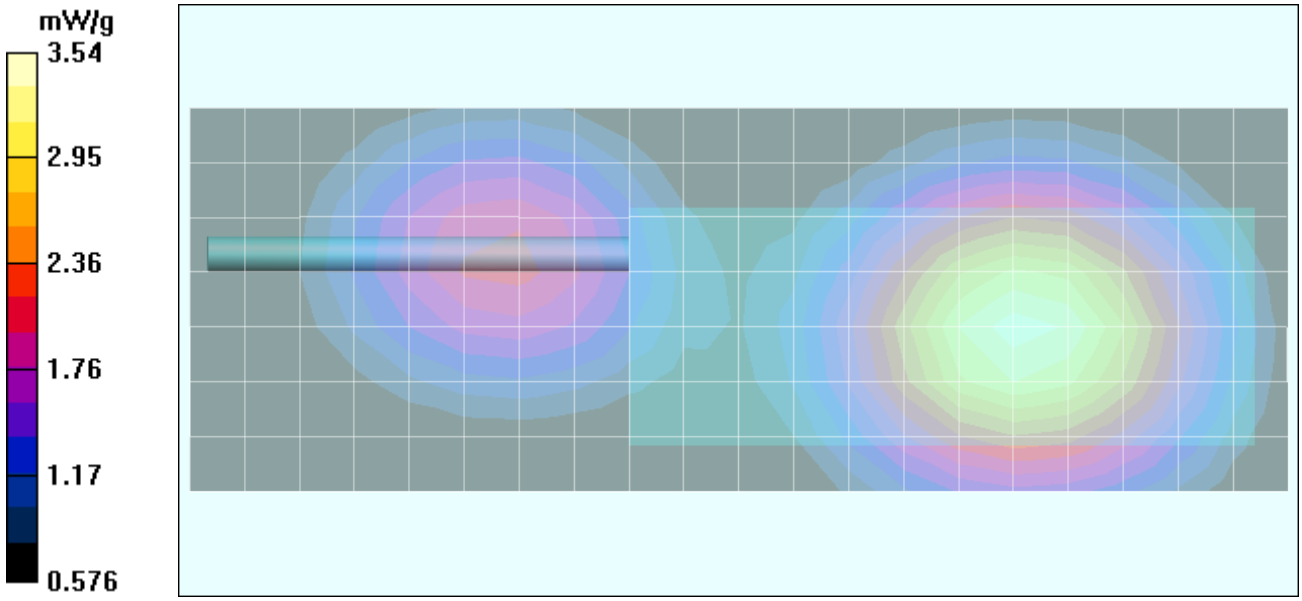
Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.29 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.5 V/m; Power Drift = -0.0584 dB
Peak SAR (extrapolated) = 4.36 W/kg
SAR(1 g) = 3.36 mW/g; SAR(10 g) = 2.49 mW/g



Face-Held SAR - Low Band - NiCd IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

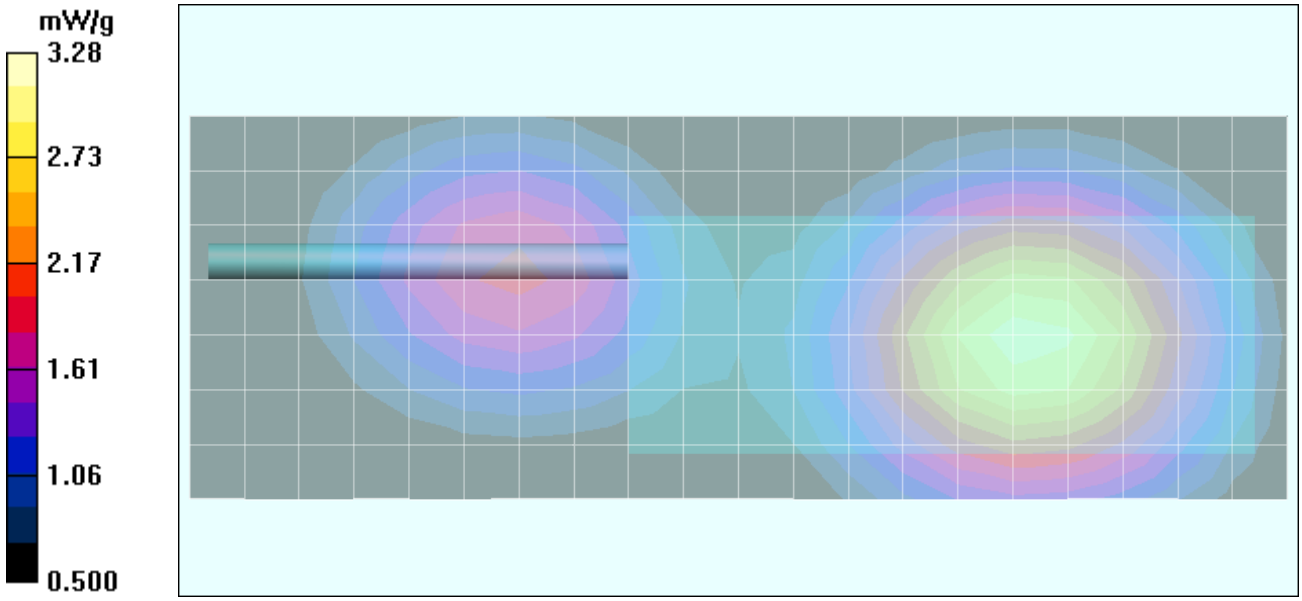
Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.30 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.6 V/m; Power Drift = -0.0659 dB
Peak SAR (extrapolated) = 4.01 W/kg
SAR(1 g) = 3.13 mW/g; SAR(10 g) = 2.33 mW/g



Face-Held SAR - Low Band - NiCd NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

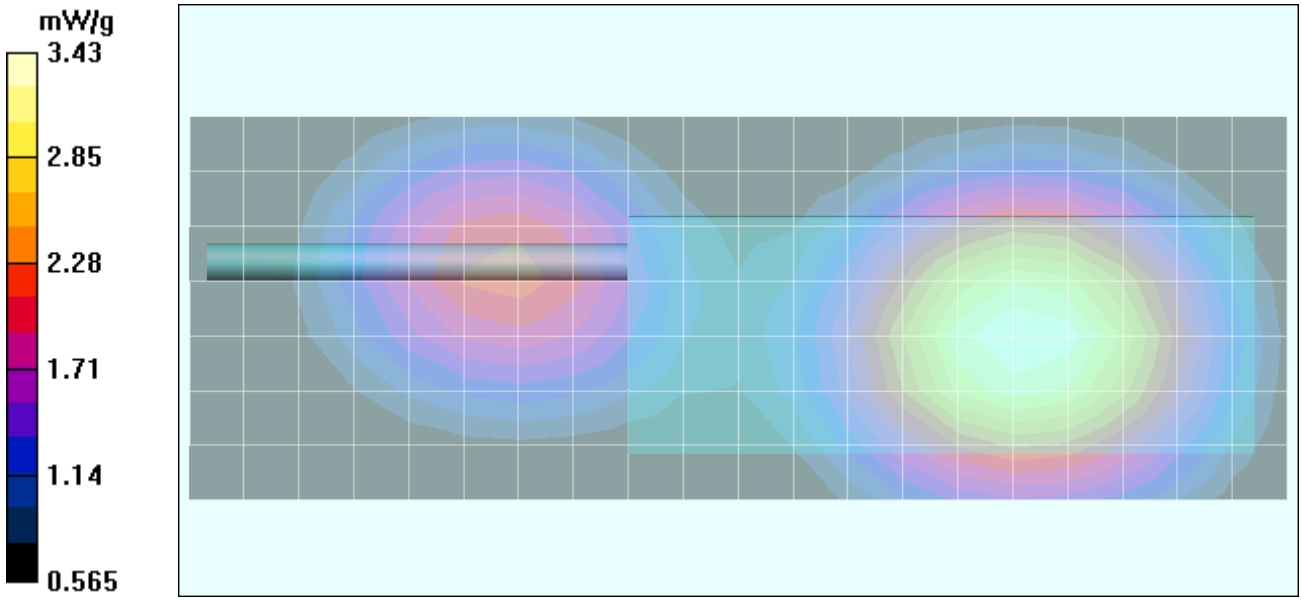
Communication System: FM
RF Output Power: 3.31 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 40.4 V/m; Power Drift = -0.0471 dB
Peak SAR (extrapolated) = 4.16 W/kg
SAR(1 g) = 3.24 mW/g; SAR(10 g) = 2.41 mW/g

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 40.4 V/m; Power Drift = -0.0471 dB
Peak SAR (extrapolated) = 2.74 W/kg
SAR(1 g) = 2.10 mW/g; SAR(10 g) = 1.54 mW/g



Face-Held SAR - Low Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

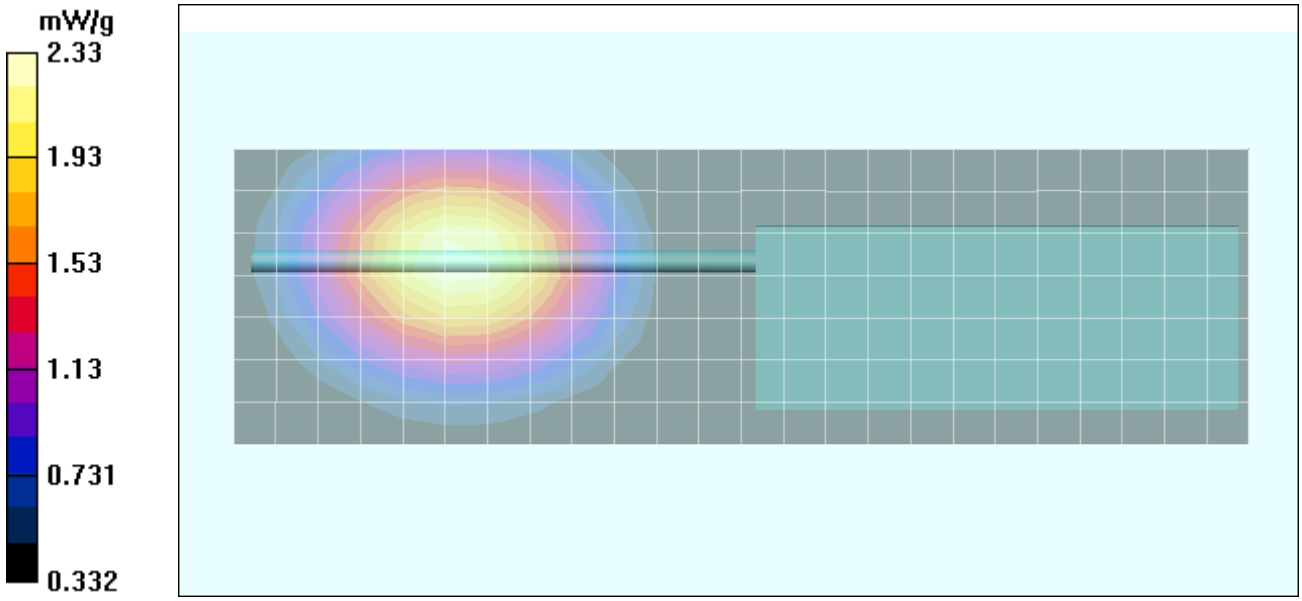
Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.32 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = -0.306 dB
Peak SAR (extrapolated) = 2.84 W/kg
SAR(1 g) = 2.21 mW/g; SAR(10 g) = 1.64 mW/g



Face-Held SAR - Low Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

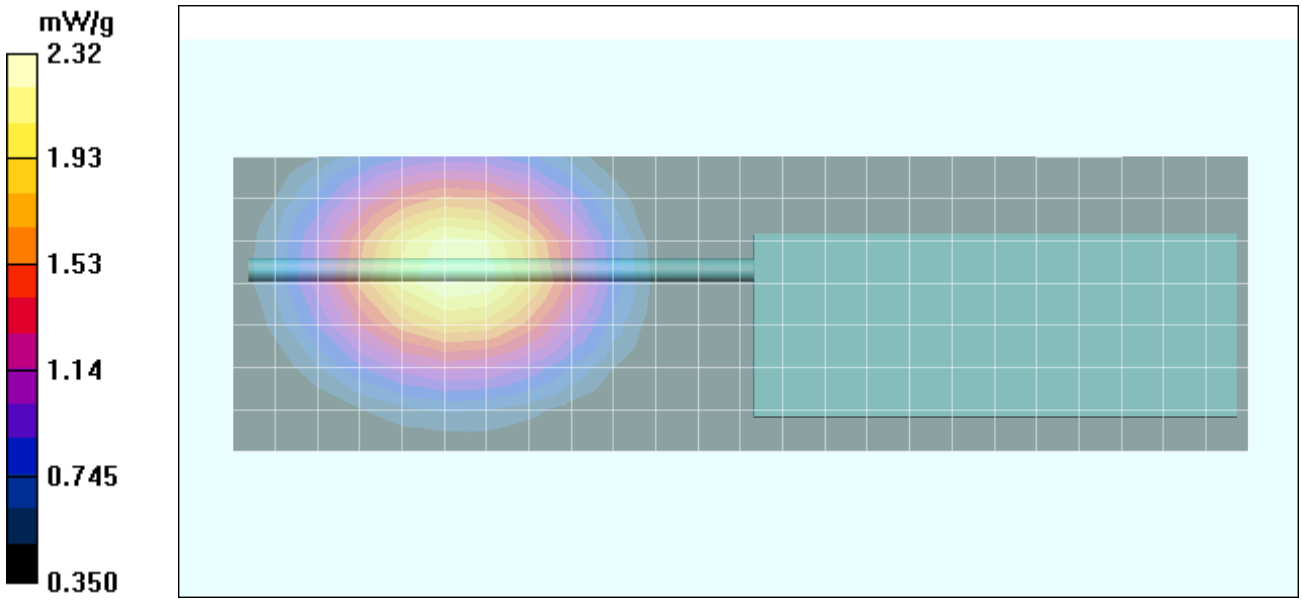
Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.31 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.9 V/m; Power Drift = -0.319 dB
Peak SAR (extrapolated) = 2.84 W/kg
SAR(1 g) = 2.21 mW/g; SAR(10 g) = 1.64 mW/g



Face-Held SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

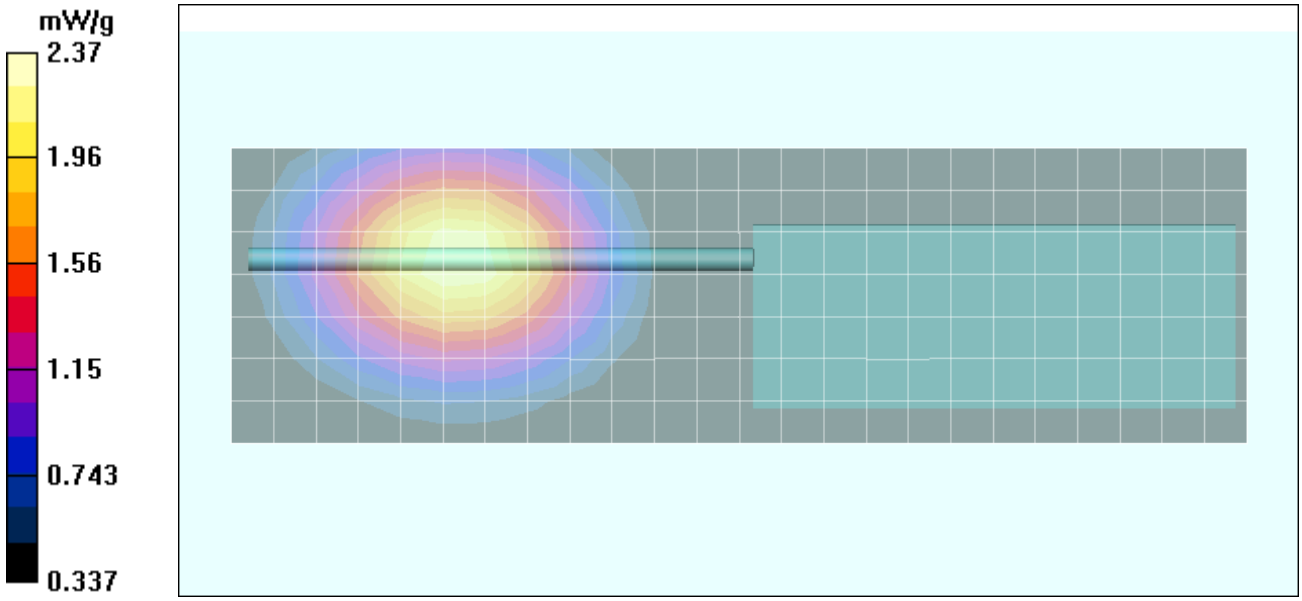
Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.31 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = -0.327 dB
Peak SAR (extrapolated) = 2.9 W/kg
SAR(1 g) = 2.25 mW/g; SAR(10 g) = 1.67 mW/g



Face-Held SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

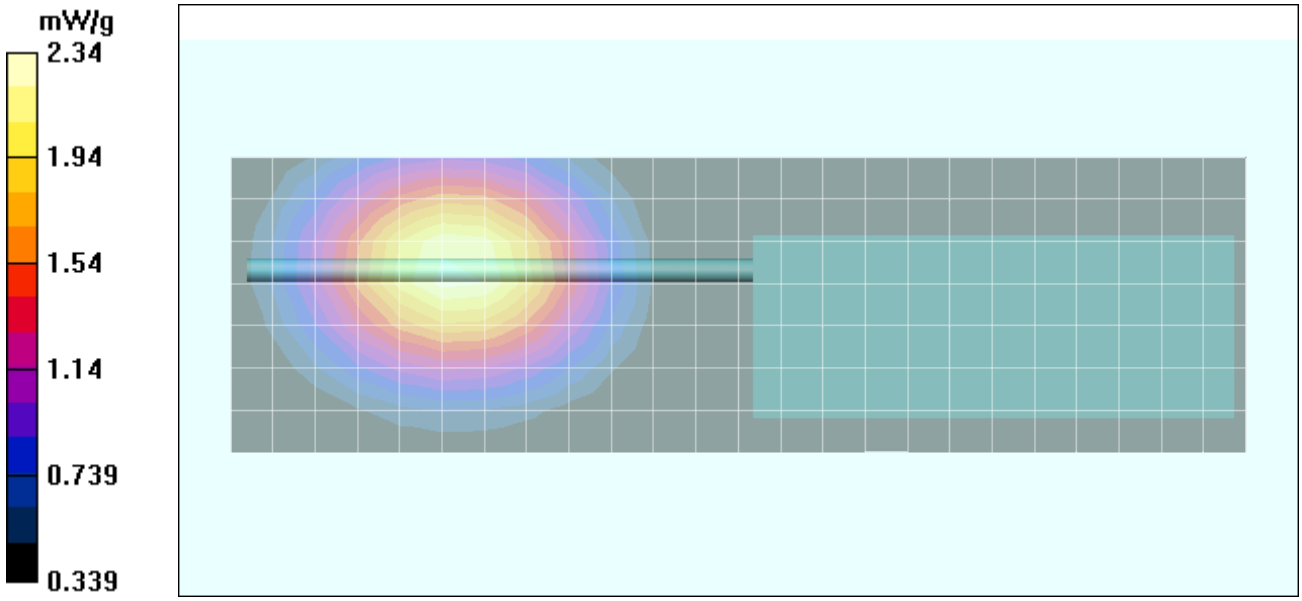
Ambient Temp: 21.0 °C; Fluid Temp: 20.6 °C; Barometric Pressure: 102.0 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.32 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL815 (σ = 0.89 mho/m; ε_r = 41.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = -0.287 dB
Peak SAR (extrapolated) = 2.85 W/kg
SAR(1 g) = 2.23 mW/g; SAR(10 g) = 1.65 mW/g



Face-Held SAR - High Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.0 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 101.5 kPa; Humidity: 34%

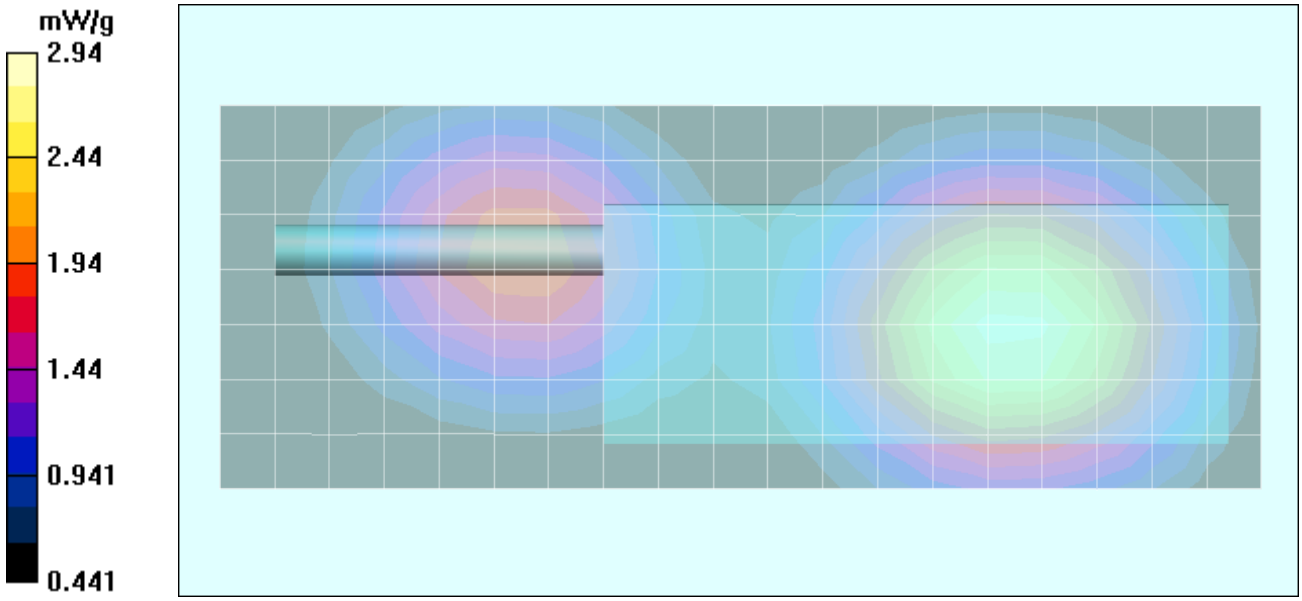
Communication System: FM
RF Output Power: 3.00 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: HSL861 (σ = 0.94 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 39.9 V/m; Power Drift = -0.0107 dB
Peak SAR (extrapolated) = 3.6 W/kg
SAR(1 g) = 2.78 mW/g; SAR(10 g) = 2.04 mW/g

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 39.9 V/m; Power Drift = -0.0107 dB
Peak SAR (extrapolated) = 2.41 W/kg
SAR(1 g) = 1.84 mW/g; SAR(10 g) = 1.33 mW/g



Face-Held SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.0 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 101.5 kPa; Humidity: 34%

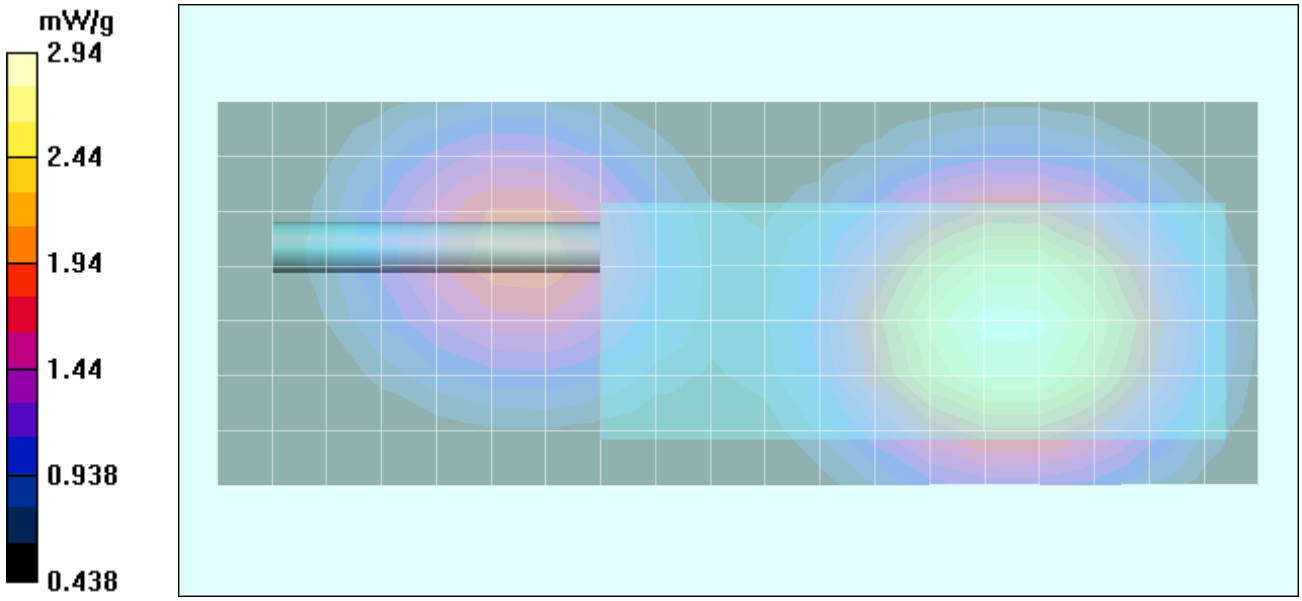
Communication System: FM
RF Output Power: 3.00 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: HSL861 (σ = 0.94 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 39.6 V/m; Power Drift = -0.0182 dB
Peak SAR (extrapolated) = 3.6 W/kg
SAR(1 g) = 2.78 mW/g; SAR(10 g) = 2.04 mW/g

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 39.6 V/m; Power Drift = -0.0182 dB
Peak SAR (extrapolated) = 2.43 W/kg
SAR(1 g) = 1.85 mW/g; SAR(10 g) = 1.35 mW/g



Face-Held SAR - High Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.0 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 101.5 kPa; Humidity: 34%

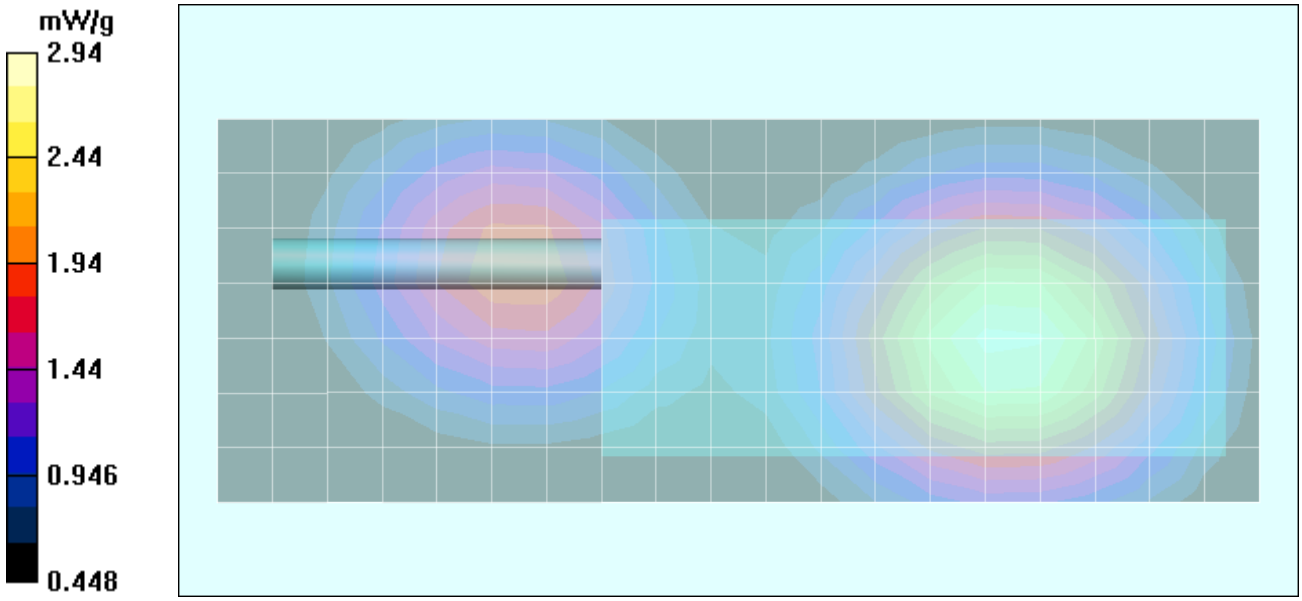
Communication System: FM
RF Output Power: 3.00 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: HSL861 (σ = 0.94 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 39.9 V/m; Power Drift = -0.0282 dB
Peak SAR (extrapolated) = 3.59 W/kg
SAR(1 g) = 2.78 mW/g; SAR(10 g) = 2.05 mW/g

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 39.9 V/m; Power Drift = -0.0282 dB
Peak SAR (extrapolated) = 2.43 W/kg
SAR(1 g) = 1.84 mW/g; SAR(10 g) = 1.33 mW/g



Face-Held SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.0 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 101.5 kPa; Humidity: 34%

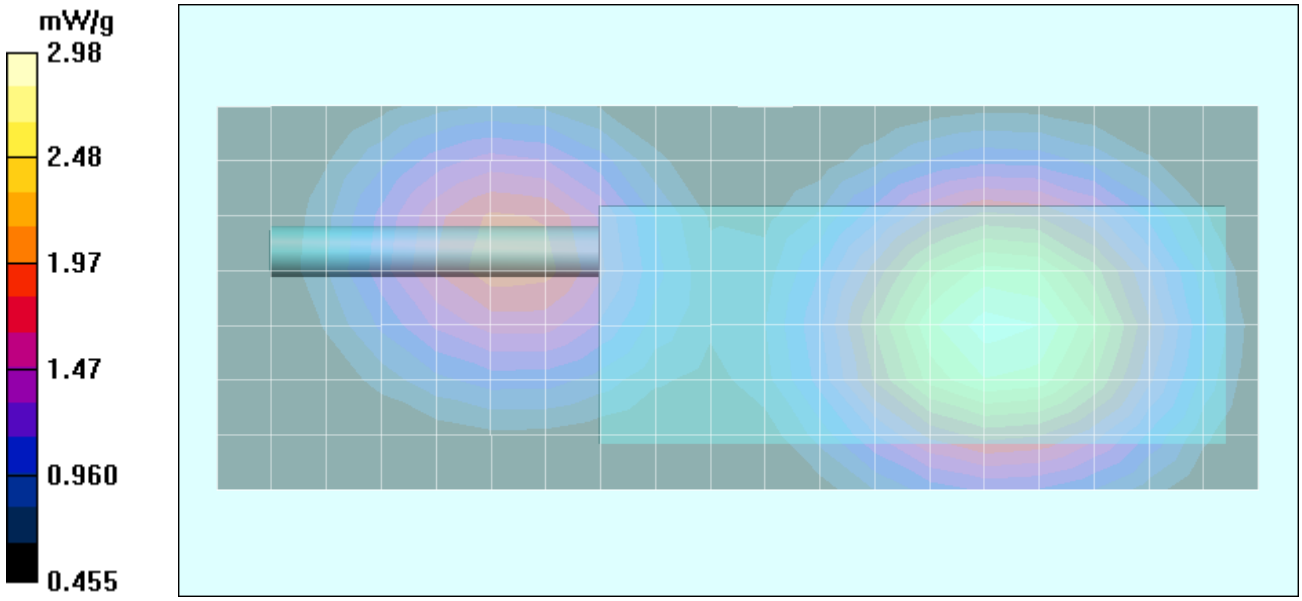
Communication System: FM
RF Output Power: 3.01 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL861 (σ = 0.94 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 40.5 V/m; Power Drift = -0.0353 dB
Peak SAR (extrapolated) = 3.65 W/kg
SAR(1 g) = 2.82 mW/g; SAR(10 g) = 2.07 mW/g

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 40.5 V/m; Power Drift = -0.0353 dB
Peak SAR (extrapolated) = 2.47 W/kg
SAR(1 g) = 1.87 mW/g; SAR(10 g) = 1.36 mW/g



Face-Held SAR - High Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.0 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 101.5 kPa; Humidity: 34%

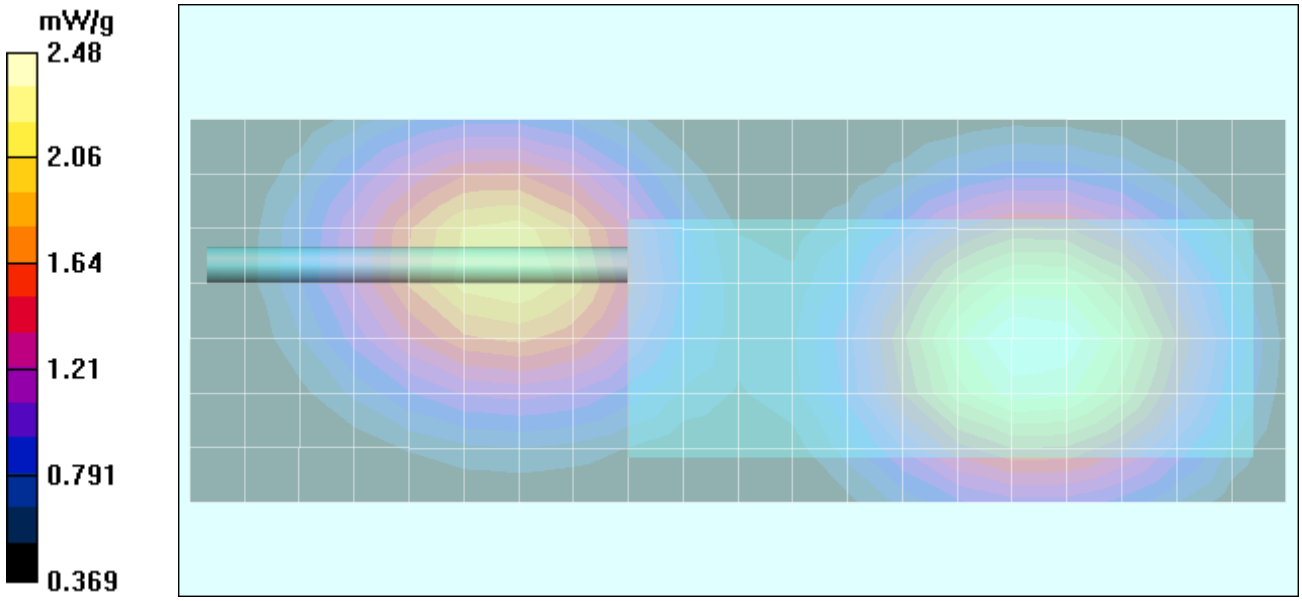
Communication System: FM
RF Output Power: 3.00 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: HSL861 (σ = 0.94 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.9 V/m; Power Drift = -0.0428 dB
Peak SAR (extrapolated) = 3.03 W/kg
SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.73 mW/g

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.9 V/m; Power Drift = -0.0428 dB
Peak SAR (extrapolated) = 2.59 W/kg
SAR(1 g) = 1.97 mW/g; SAR(10 g) = 1.43 mW/g



Face-Held SAR - High Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/10/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.0 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 101.5 kPa; Humidity: 34%

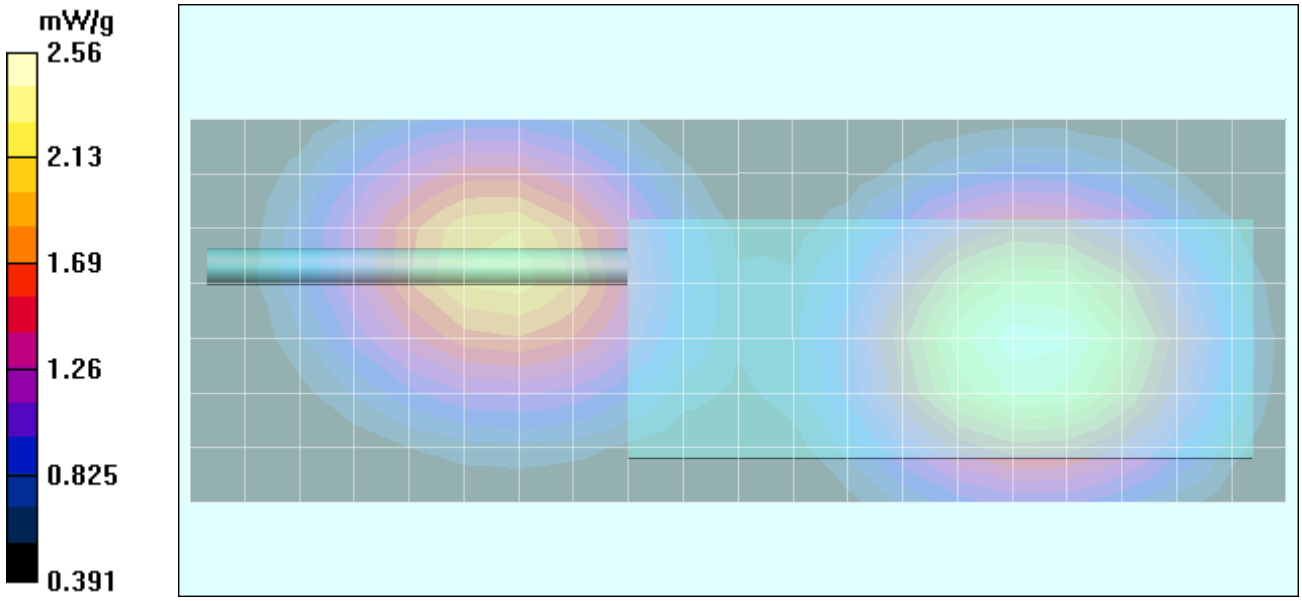
Communication System: FM
RF Output Power: 3.01 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: HSL861 (σ = 0.94 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.1 V/m; Power Drift = -0.0558 dB
Peak SAR (extrapolated) = 3.12 W/kg
SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.78 mW/g

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.1 V/m; Power Drift = -0.0558 dB
Peak SAR (extrapolated) = 2.6 W/kg
SAR(1 g) = 1.99 mW/g; SAR(10 g) = 1.46 mW/g



Face-Held SAR - High Band - NiCd IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

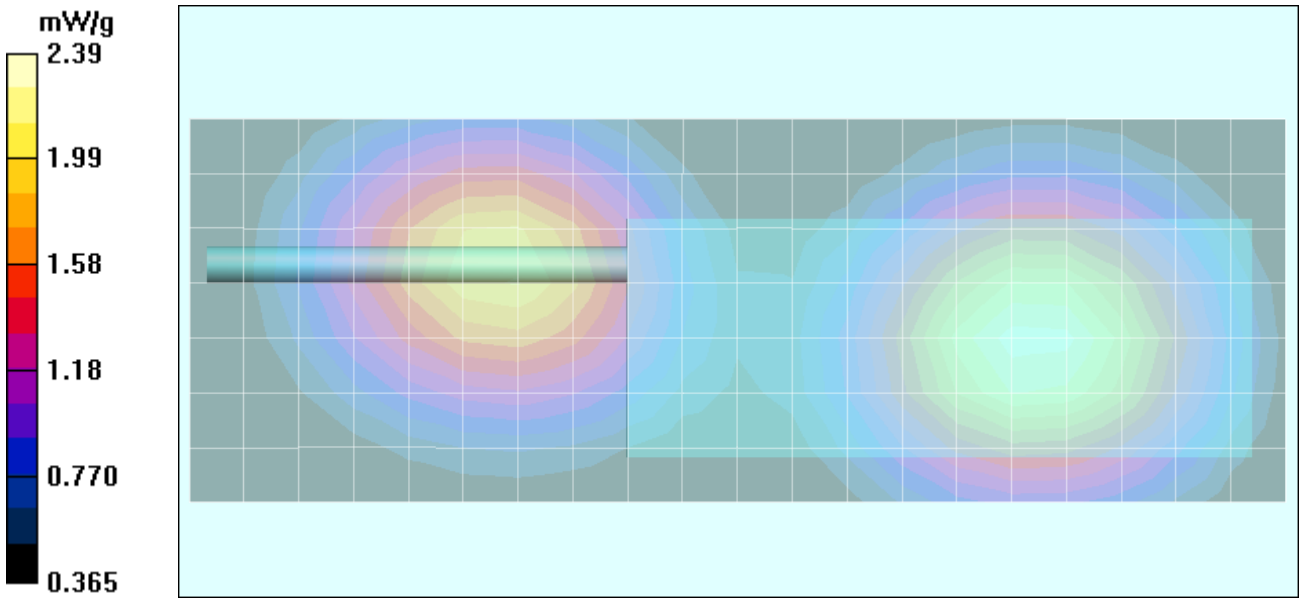
Communication System: FM
RF Output Power: 3.05 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38 V/m; Power Drift = -0.0267 dB
Peak SAR (extrapolated) = 2.94 W/kg
SAR(1 g) = 2.28 mW/g; SAR(10 g) = 1.67 mW/g

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38 V/m; Power Drift = -0.0267 dB
Peak SAR (extrapolated) = 2.52 W/kg
SAR(1 g) = 1.93 mW/g; SAR(10 g) = 1.41 mW/g



Face-Held SAR - High Band - NiCd NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

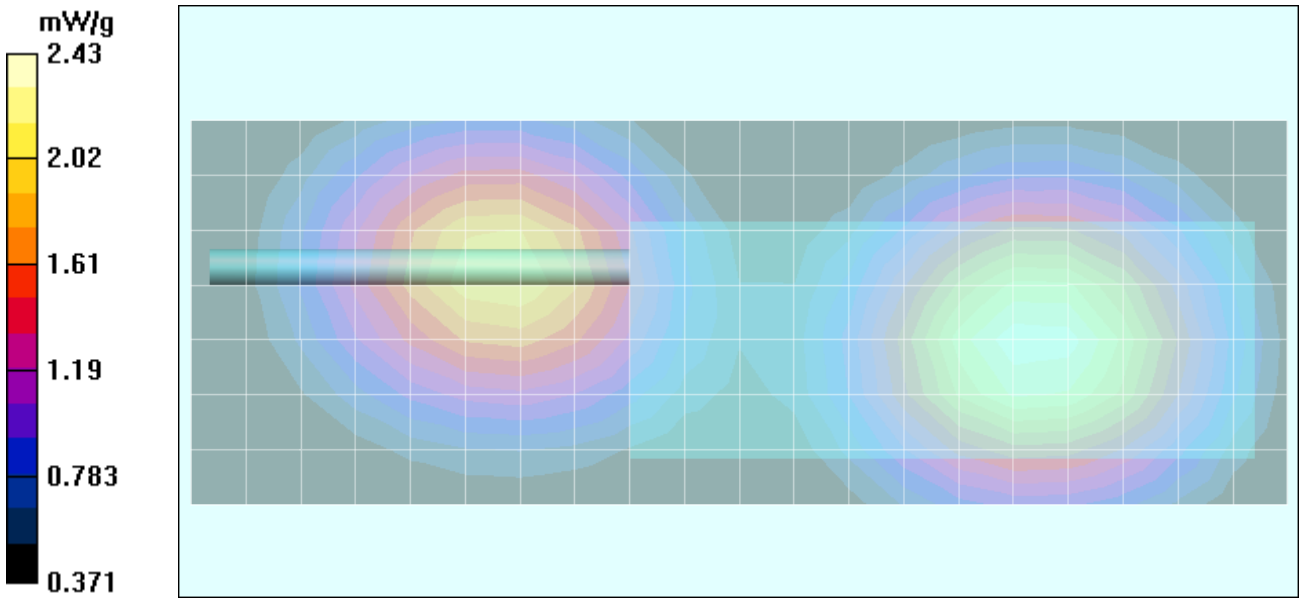
Communication System: FM
RF Output Power: 3.05 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 37.7 V/m; Power Drift = -0.0169 dB
Peak SAR (extrapolated) = 2.97 W/kg
SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.68 mW/g

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 37.7 V/m; Power Drift = -0.0169 dB
Peak SAR (extrapolated) = 2.5 W/kg
SAR(1 g) = 1.92 mW/g; SAR(10 g) = 1.4 mW/g



Face-Held SAR - High Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

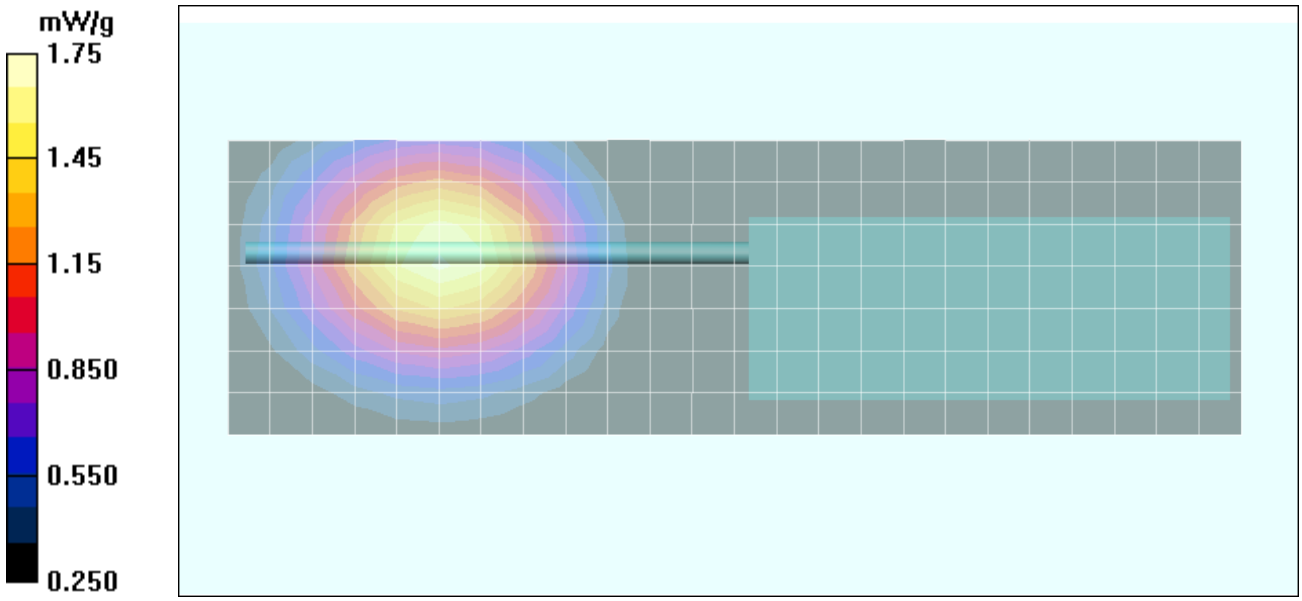
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.5 V/m; Power Drift = -0.0698 dB
Peak SAR (extrapolated) = 2.16 W/kg
SAR(1 g) = 1.67 mW/g; SAR(10 g) = 1.22 mW/g



Face-Held SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

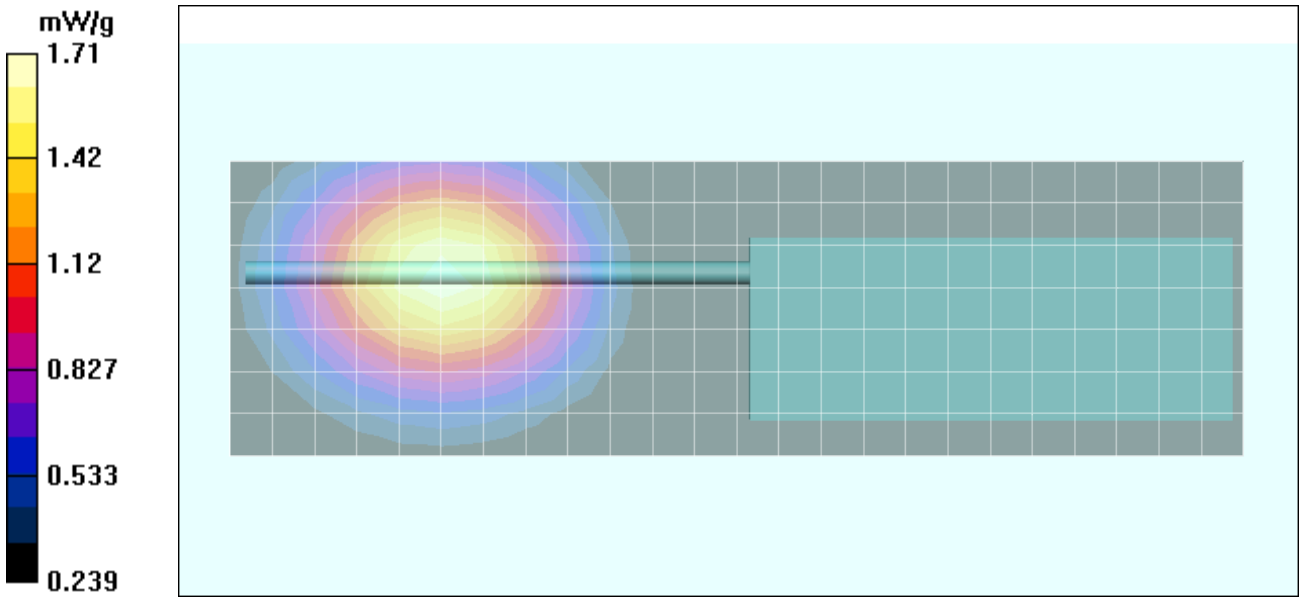
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.54 V/m; Power Drift = -0.0229 dB
Peak SAR (extrapolated) = 2.11 W/kg
SAR(1 g) = 1.63 mW/g; SAR(10 g) = 1.2 mW/g



Face-Held SAR - High Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

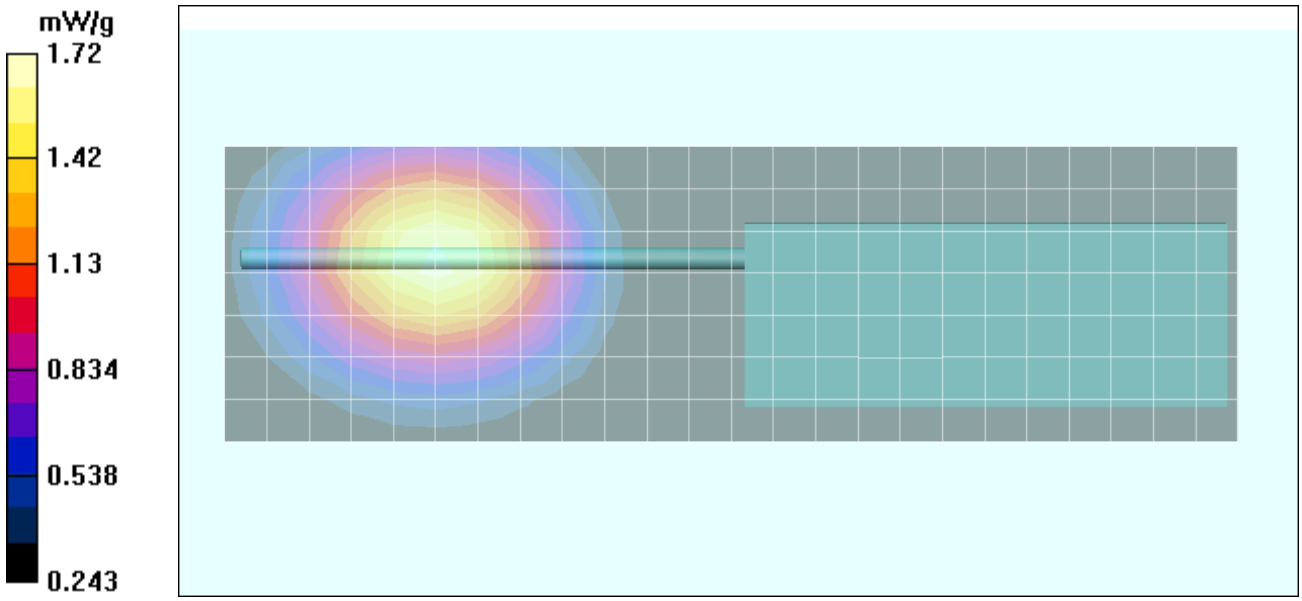
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.5 V/m; Power Drift = -0.0392 dB
Peak SAR (extrapolated) = 2.12 W/kg
SAR(1 g) = 1.63 mW/g; SAR(10 g) = 1.2 mW/g



Face-Held SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

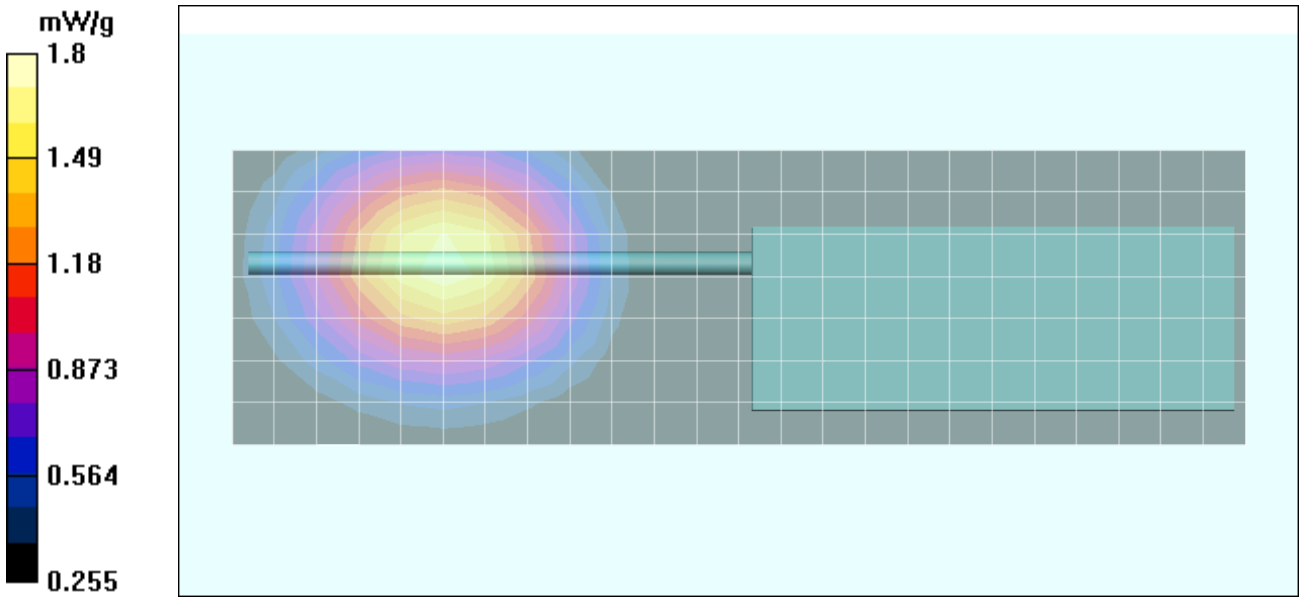
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 7.53 V/m; Power Drift = -0.0269 dB
Peak SAR (extrapolated) = 2.21 W/kg
SAR(1 g) = 1.70 mW/g; SAR(10 g) = 1.25 mW/g



Face-Held SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

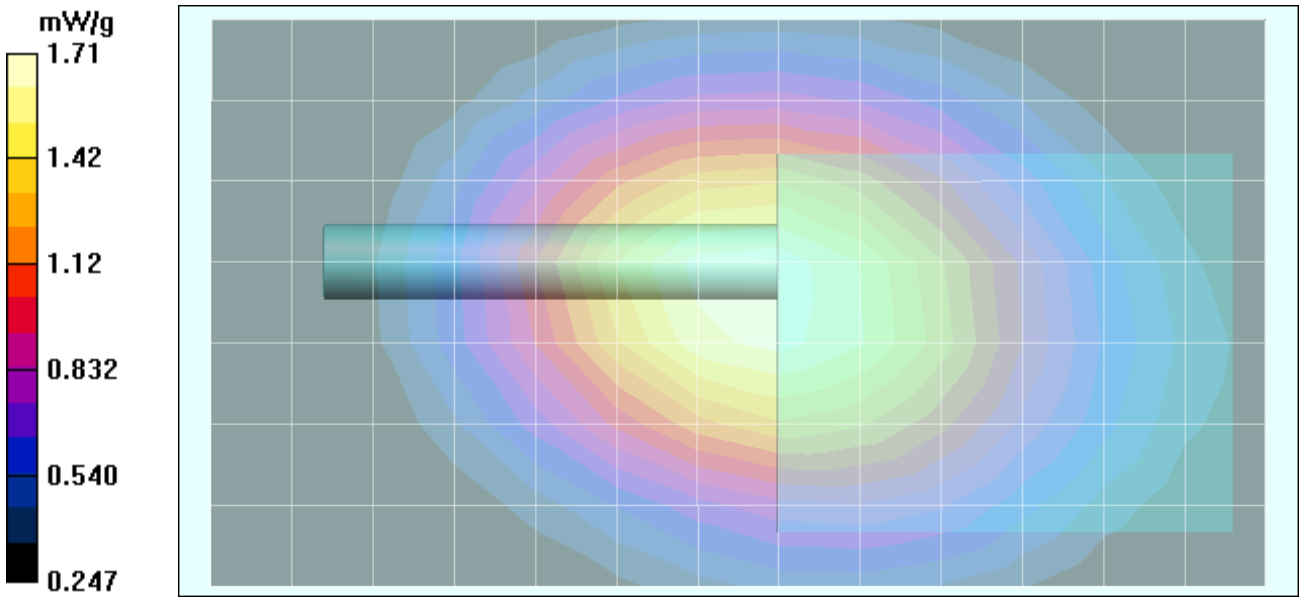
Ambient Temp: 22.8 °C; Fluid Temp: 21.0 °C; Barometric Pressure: 102.5 kPa; Humidity: 36%

Communication System: FM
RF Output Power: 3.22 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL815 (σ = 0.90 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 44.5 V/m; Power Drift = -0.0975 dB
Peak SAR (extrapolated) = 2.09 W/kg
SAR(1 g) = 1.62 mW/g; SAR(10 g) = 1.18 mW/g



Face-Held SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

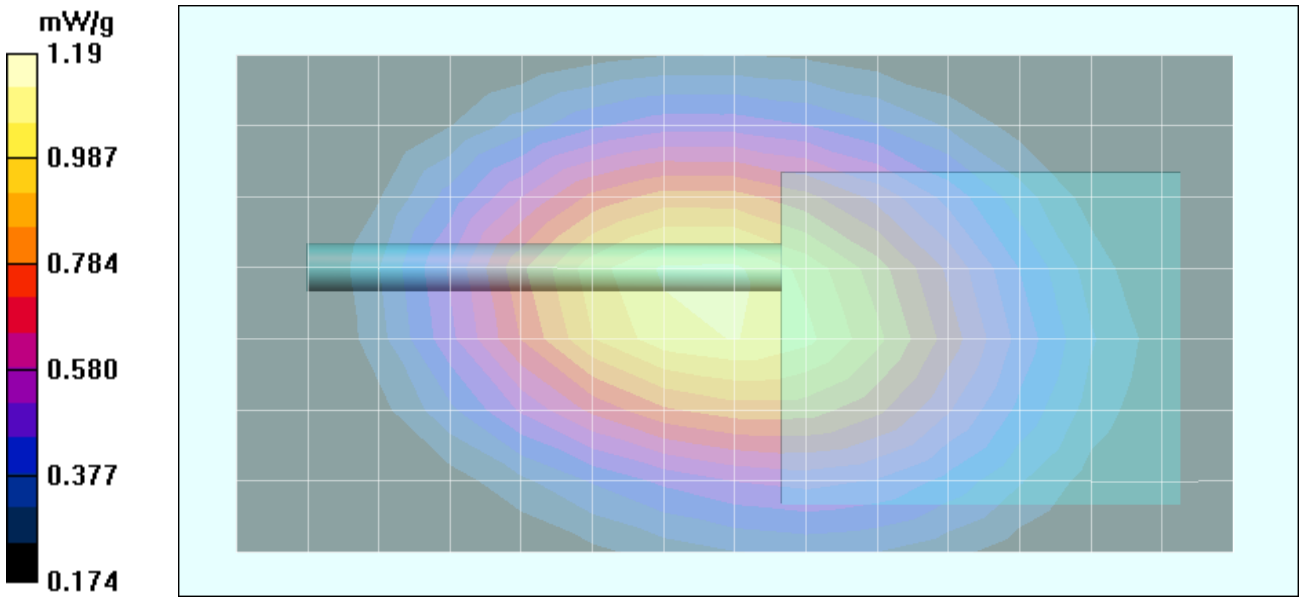
Ambient Temp: 22.8 °C; Fluid Temp: 21.0 °C; Barometric Pressure: 102.5 kPa; Humidity: 36%

Communication System: FM
RF Output Power: 3.23 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: HSL815 (σ = 0.90 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.4 V/m; Power Drift = -0.682 dB
Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.829 mW/g



Face-Held SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

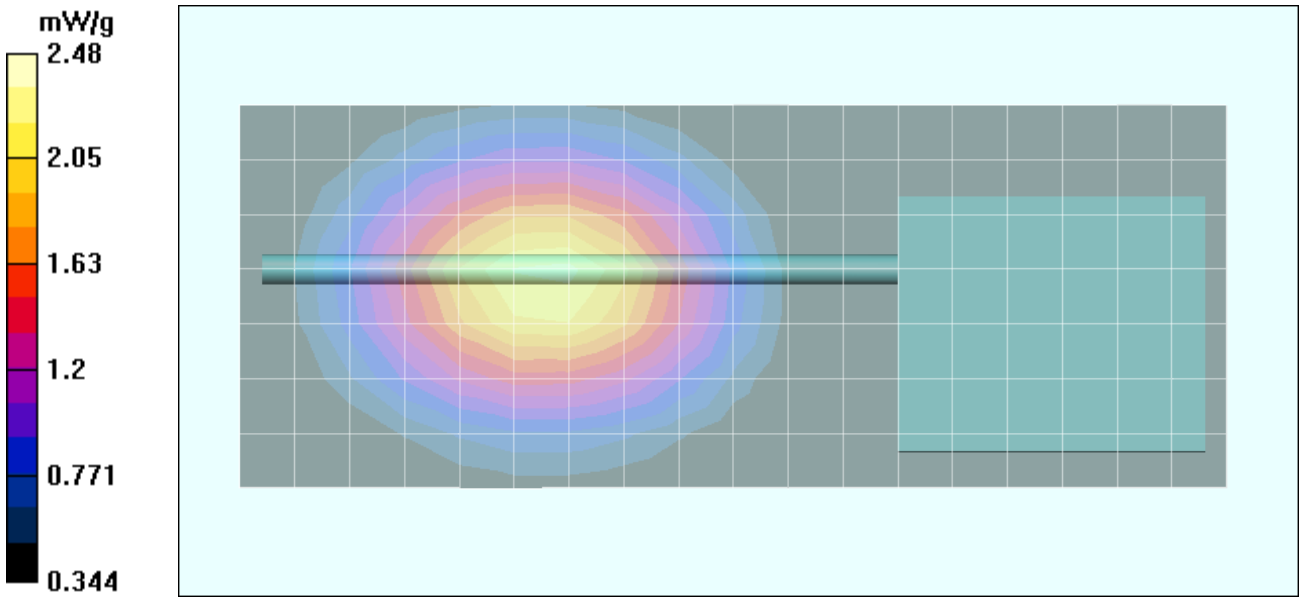
Ambient Temp: 22.8 °C; Fluid Temp: 21.0 °C; Barometric Pressure: 102.5 kPa; Humidity: 36%

Communication System: FM
RF Output Power: 3.25 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: HSL815 (σ = 0.90 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12 V/m; Power Drift = -0.509 dB
Peak SAR (extrapolated) = 3.05 W/kg
SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.72 mW/g



Face-Held SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

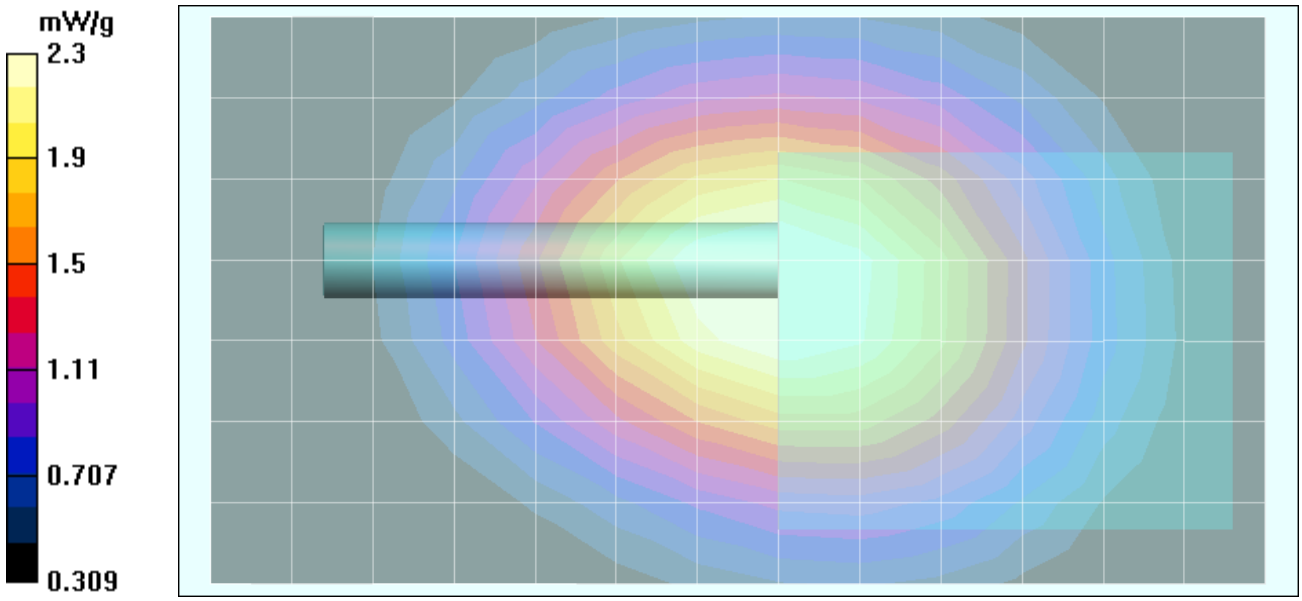
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.09 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 50.9 V/m; Power Drift = -0.0355 dB
Peak SAR (extrapolated) = 2.88 W/kg
SAR(1 g) = 2.17 mW/g; SAR(10 g) = 1.57 mW/g



Face-Held SAR - High Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

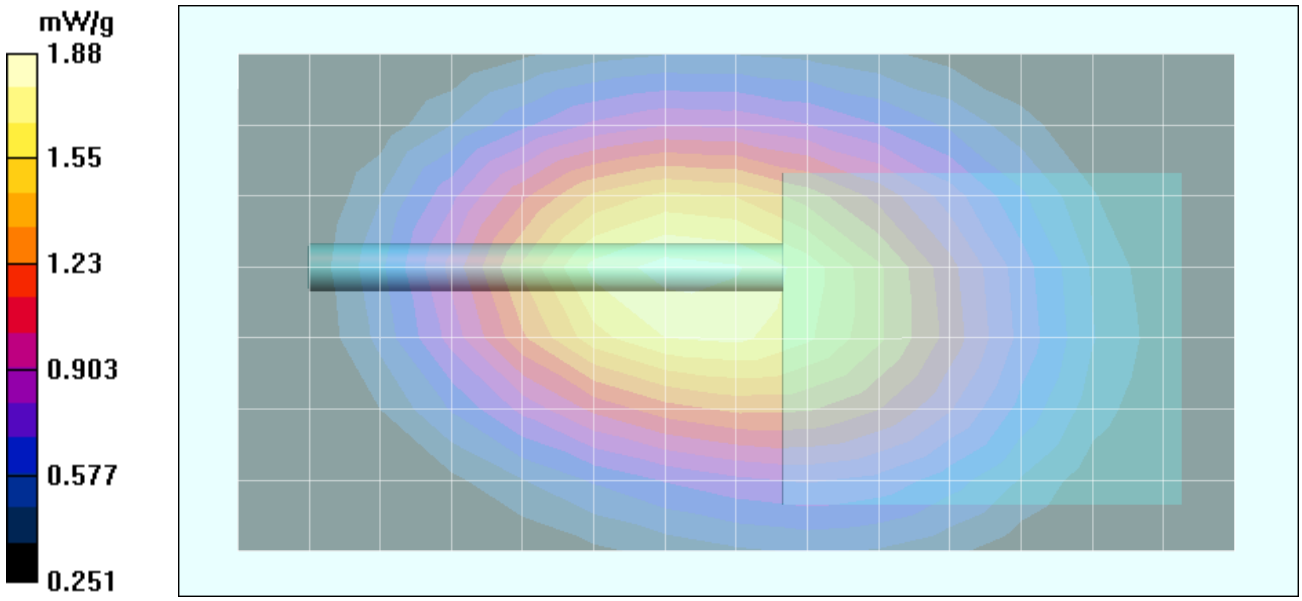
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.09 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 45 V/m; Power Drift = -0.0549 dB
Peak SAR (extrapolated) = 2.34 W/kg
SAR(1 g) = 1.78 mW/g; SAR(10 g) = 1.28 mW/g



Face-Held SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

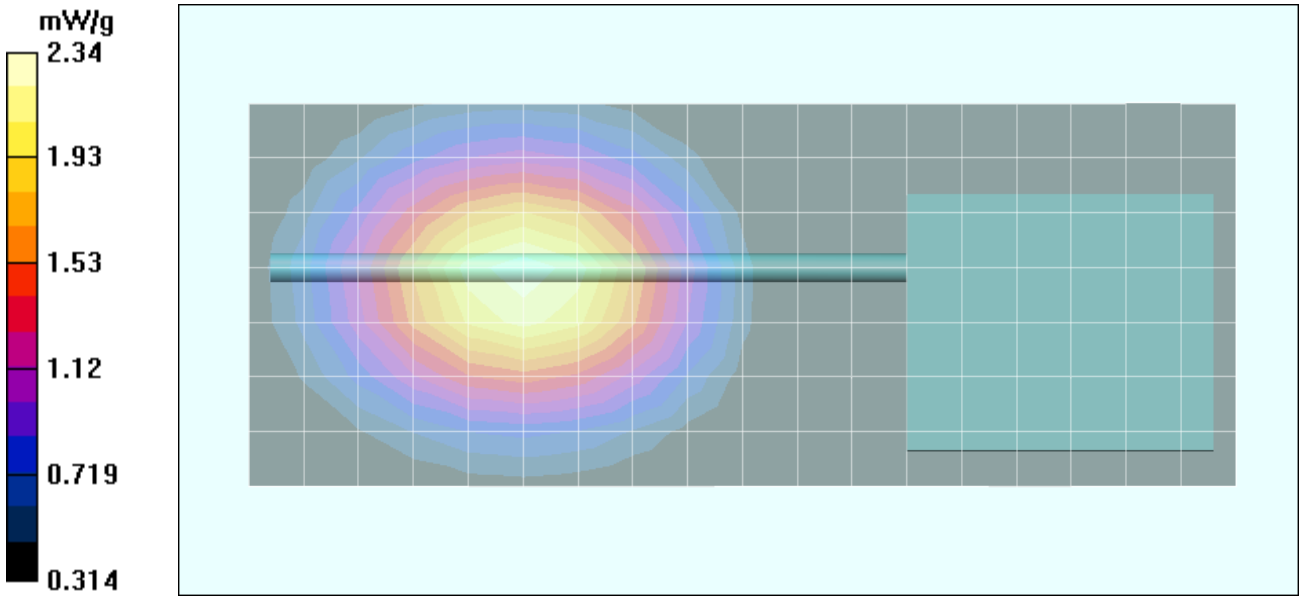
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = 0.122 dB
Peak SAR (extrapolated) = 2.89 W/kg
SAR(1 g) = 2.21 mW/g; SAR(10 g) = 1.6 mW/g



Face-Held SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

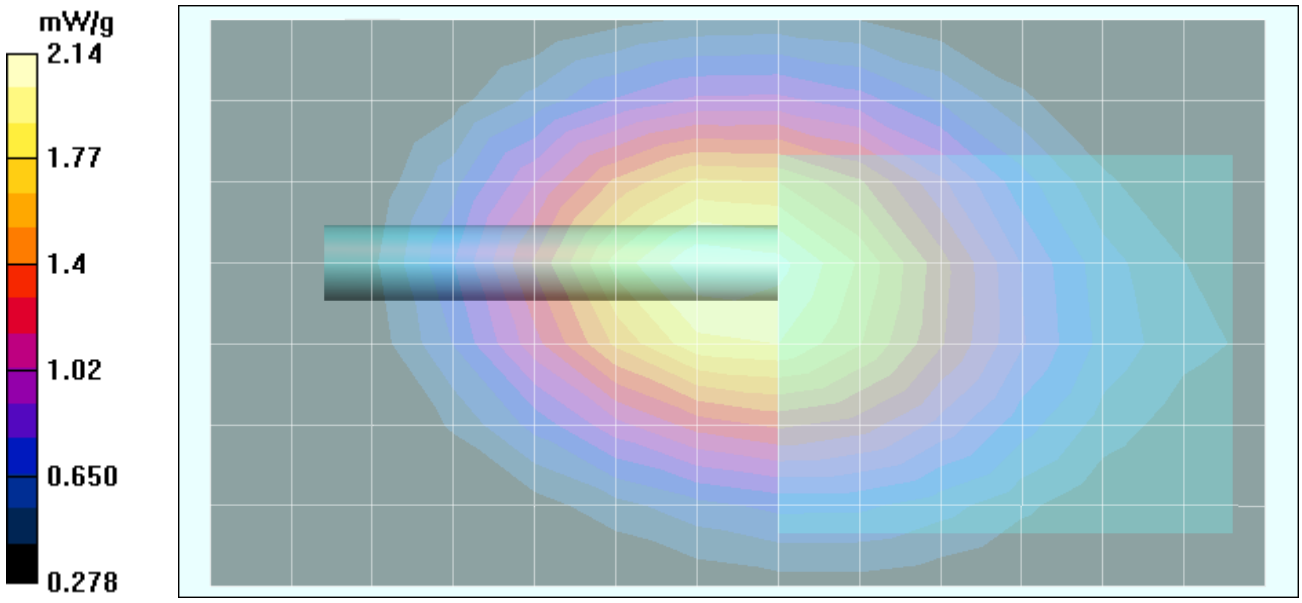
Ambient Temp: 21.8 °C; Fluid Temp: 21.0 °C; Barometric Pressure: 102.7 kPa; Humidity: 35%

Communication System: FM
RF Output Power: 3.18 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL815 (σ = 0.88 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 48.3 V/m; Power Drift = -0.0766 dB
Peak SAR (extrapolated) = 2.67 W/kg
SAR(1 g) = 2.03 mW/g; SAR(10 g) = 1.46 mW/g



Face-Held SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

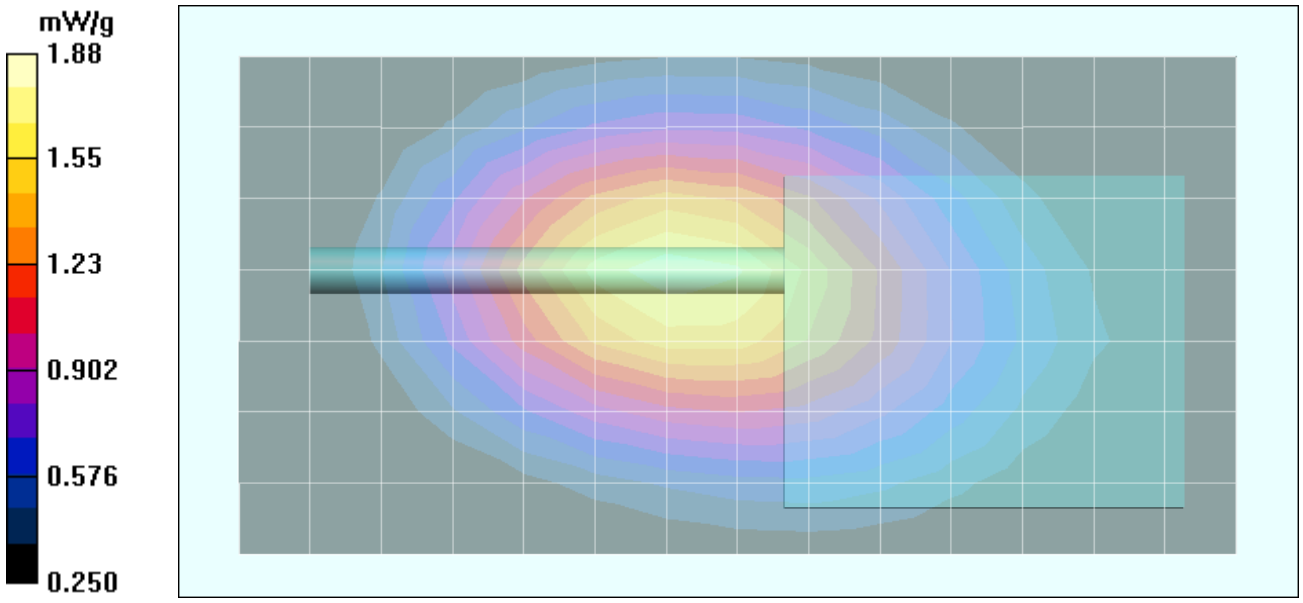
Ambient Temp: 21.8 °C; Fluid Temp: 21.0 °C; Barometric Pressure: 102.7 kPa; Humidity: 35%

Communication System: FM
RF Output Power: 3.20 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: HSL815 (σ = 0.88 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 43.2 V/m; Power Drift = -0.323 dB
Peak SAR (extrapolated) = 2.33 W/kg
SAR(1 g) = 1.77 mW/g; SAR(10 g) = 1.28 mW/g



Face-Held SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

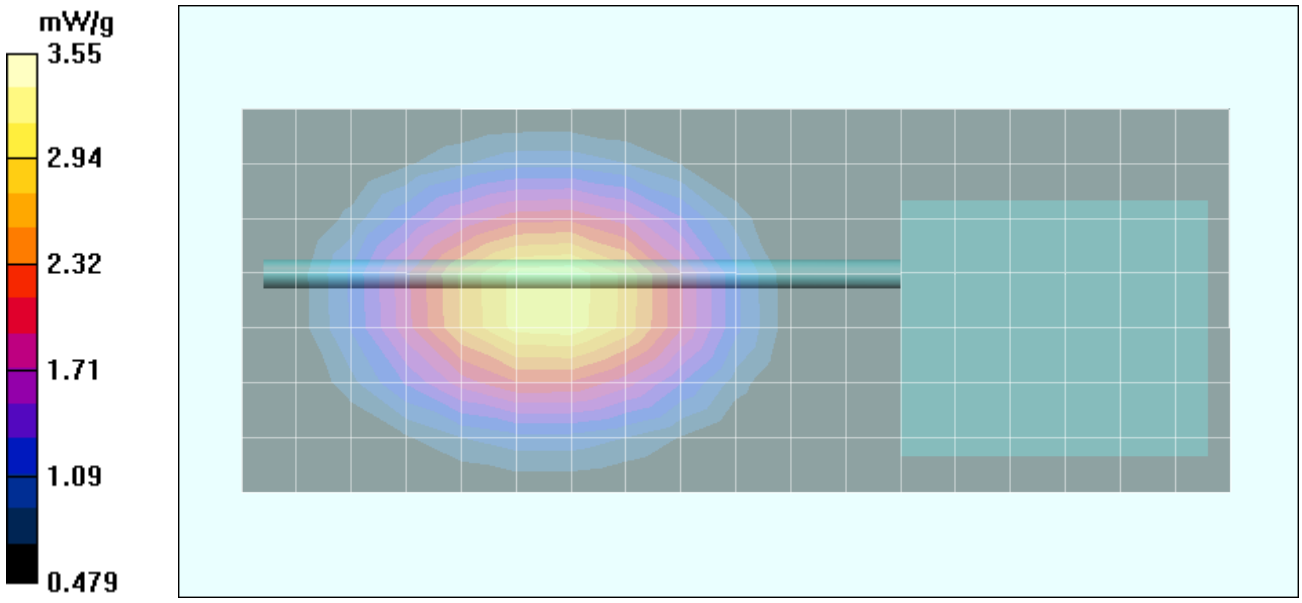
Ambient Temp: 21.8 °C; Fluid Temp: 21.0 °C; Barometric Pressure: 102.7 kPa; Humidity: 35%

Communication System: FM
RF Output Power: 3.23 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: HSL815 (σ = 0.88 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3)

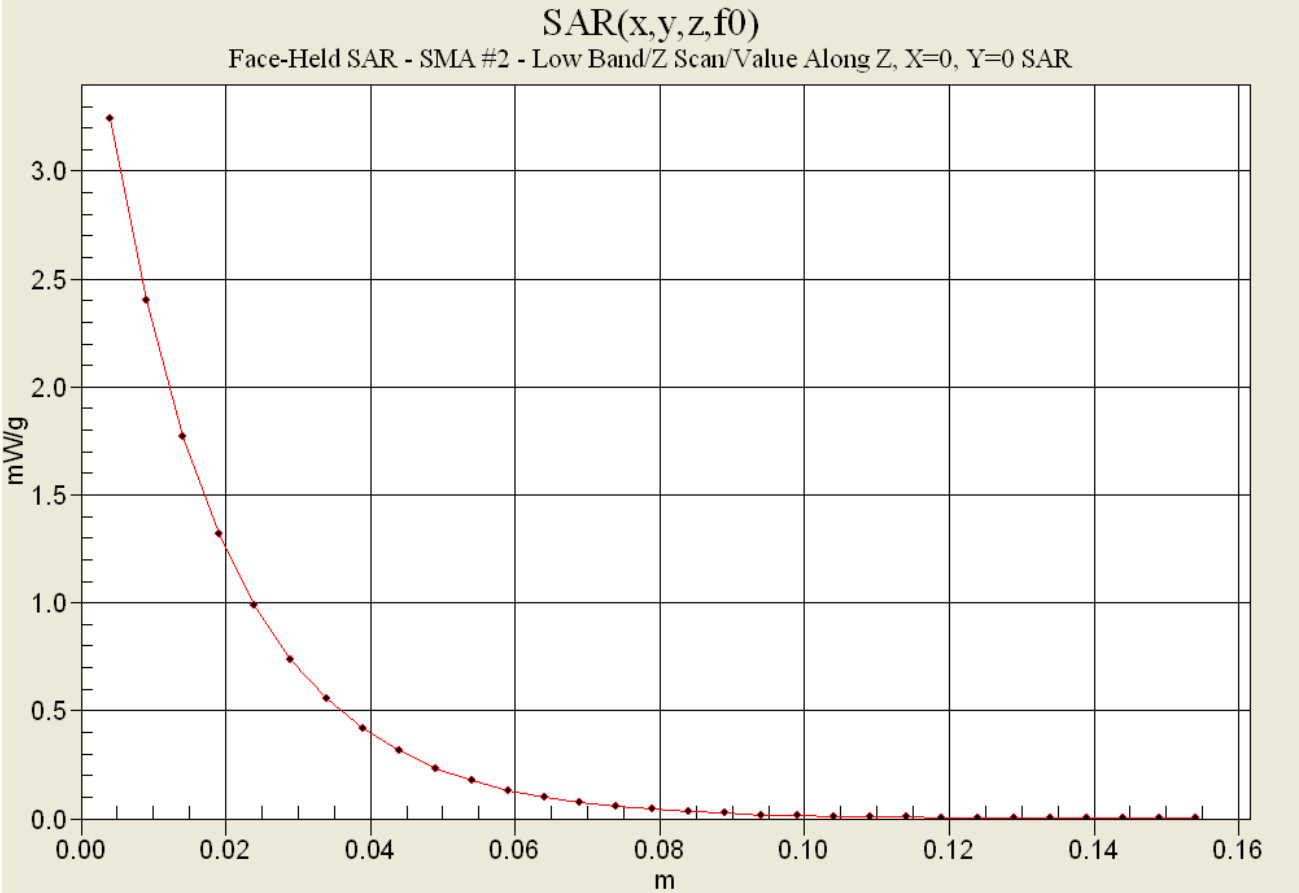
- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = -0.430 dB
Peak SAR (extrapolated) = 4.42 W/kg
SAR(1 g) = 3.34 mW/g; SAR(10 g) = 2.4 mW/g



Z-Axis Scan


SAR(x,y,z,f0)
Face-Held SAR - SMA #2 - Low Band/Z Scan/Value Along Z, X=0, Y=0 SAR
mW/g
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Face-Held SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

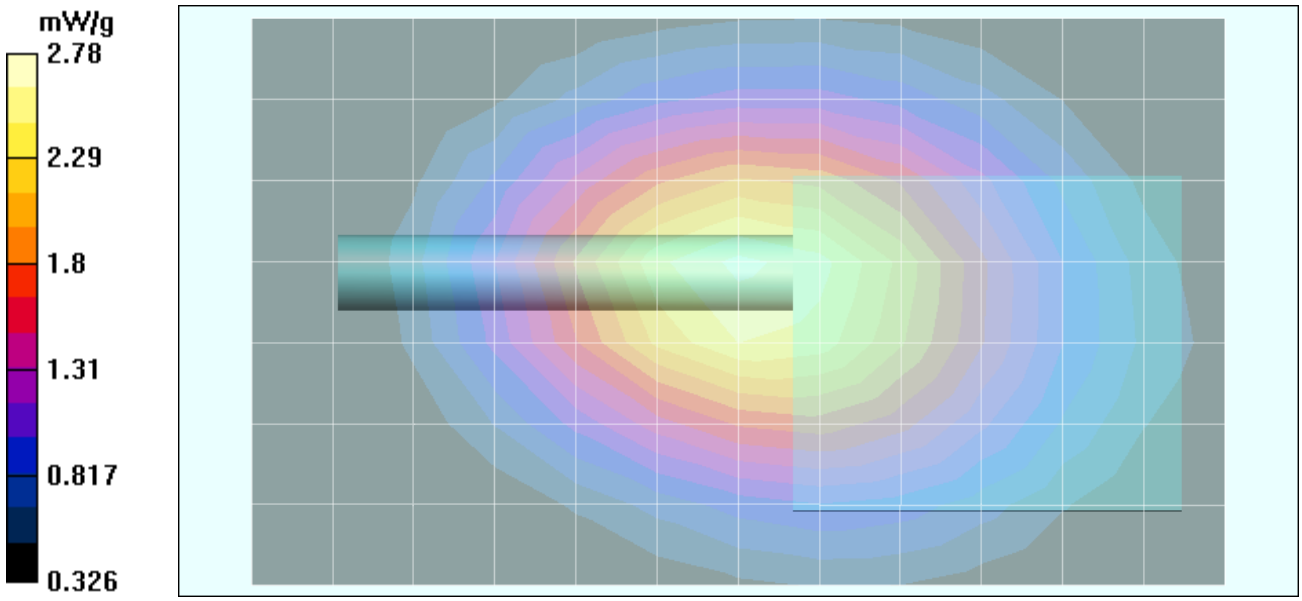
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.09 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 55.8 V/m; Power Drift = -0.0584 dB
Peak SAR (extrapolated) = 3.51 W/kg
SAR(1 g) = 2.63 mW/g; SAR(10 g) = 1.88 mW/g



Face-Held SAR - High Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

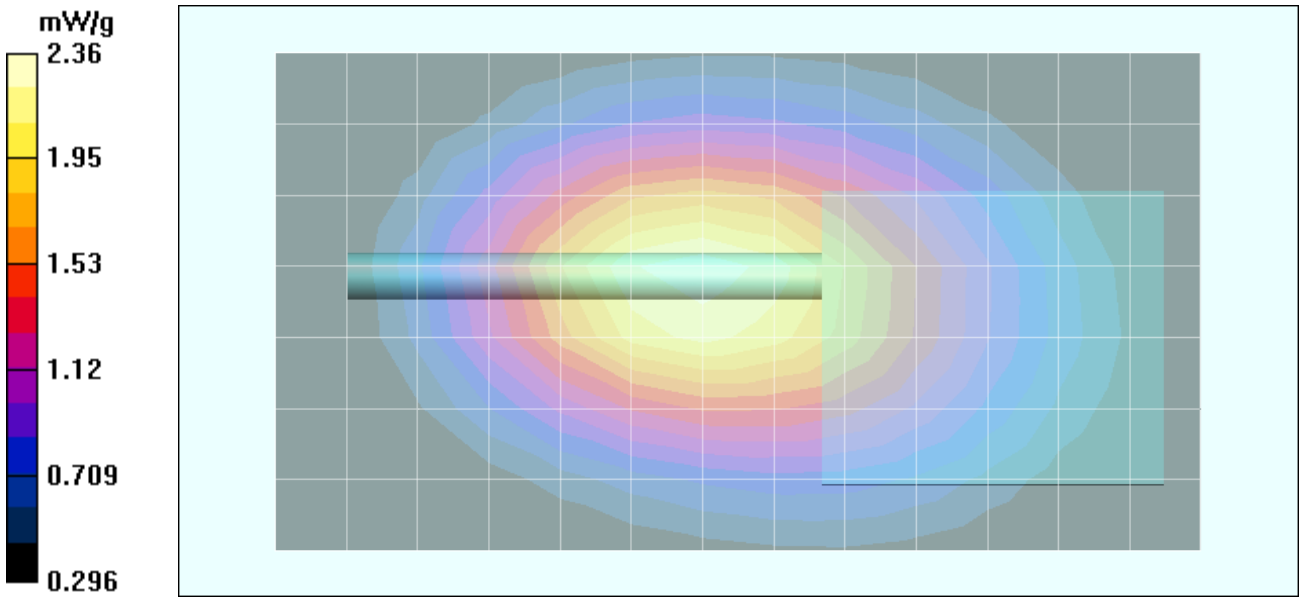
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 47.1 V/m; Power Drift = -0.00428 dB
Peak SAR (extrapolated) = 2.97 W/kg
SAR(1 g) = 2.23 mW/g; SAR(10 g) = 1.59 mW/g



Face-Held SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/11/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

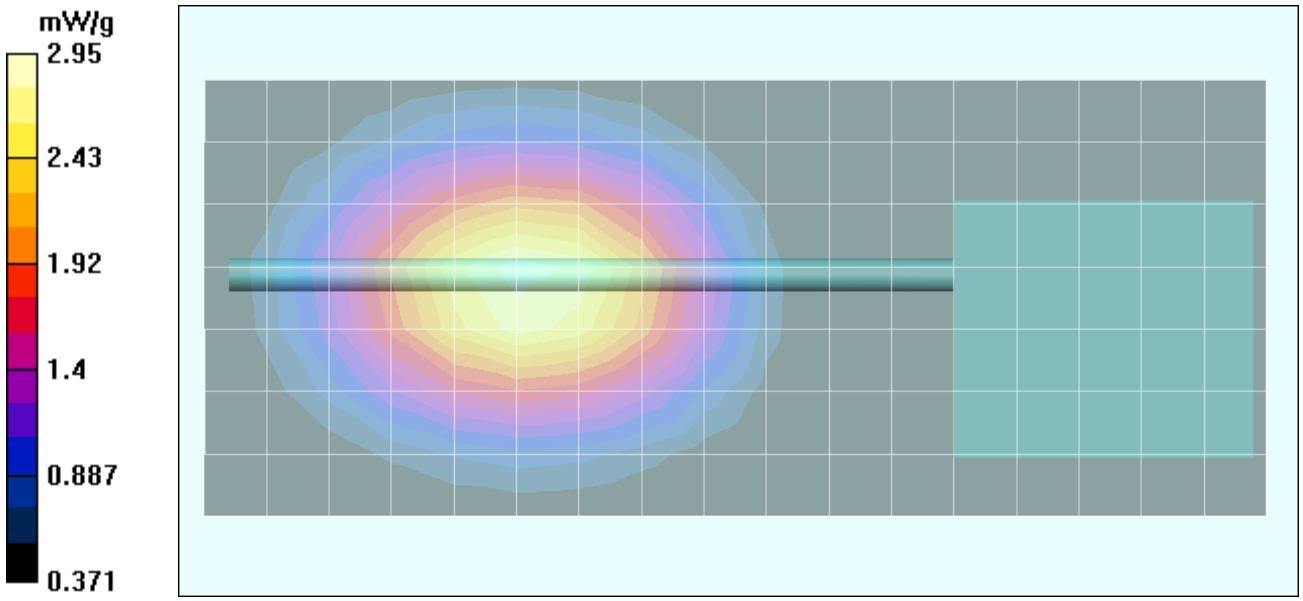
Ambient Temp: 21.6 °C; Fluid Temp: 21.3 °C; Barometric Pressure: 101.9 kPa; Humidity: 33%

Communication System: FM
RF Output Power: 3.08 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: HSL861 (σ = 0.90 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.71, 6.71, 6.71); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Area Scan (8x18x1):
Measurement grid: dx=15mm, dy=15mm

Face-Held - 2.5 cm Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.9 V/m; Power Drift = 0.0901 dB
Peak SAR (extrapolated) = 3.7 W/kg
SAR(1 g) = 2.78 mW/g; SAR(10 g) = 1.99 mW/g



Body-Worn SAR - Low Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

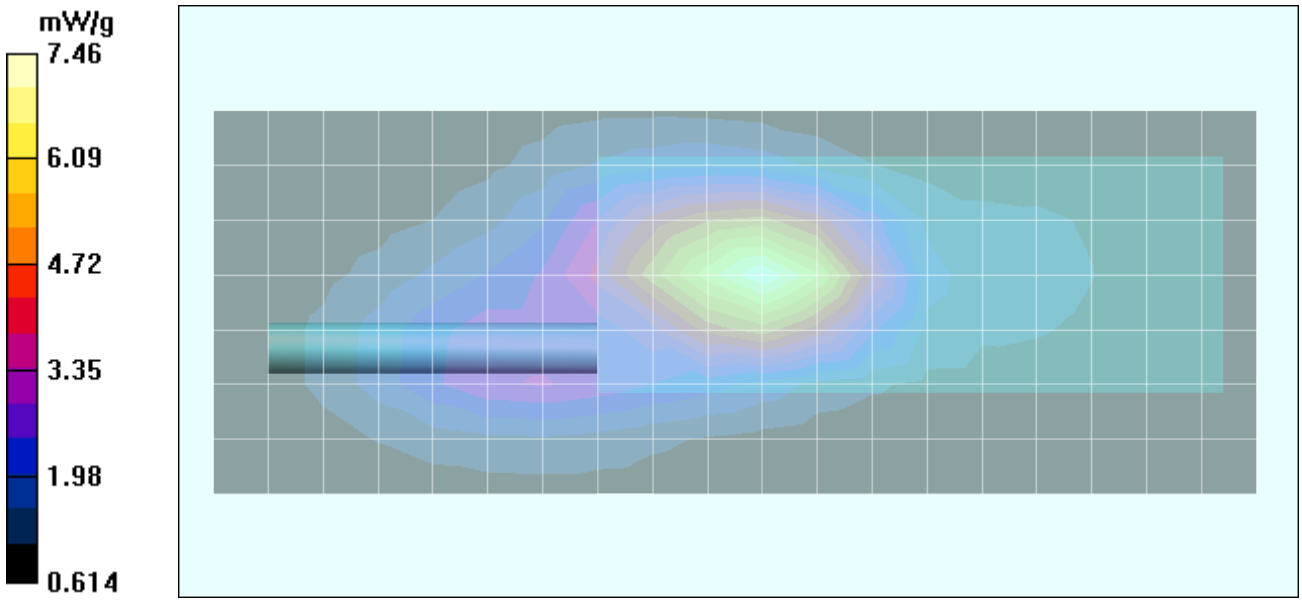
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.20 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 80.1 V/m; Power Drift = -0.610 dB
Peak SAR (extrapolated) = 10 W/kg
SAR(1 g) = 7.06 mW/g; SAR(10 g) = 4.84 mW/g



Body-Worn SAR - Low Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

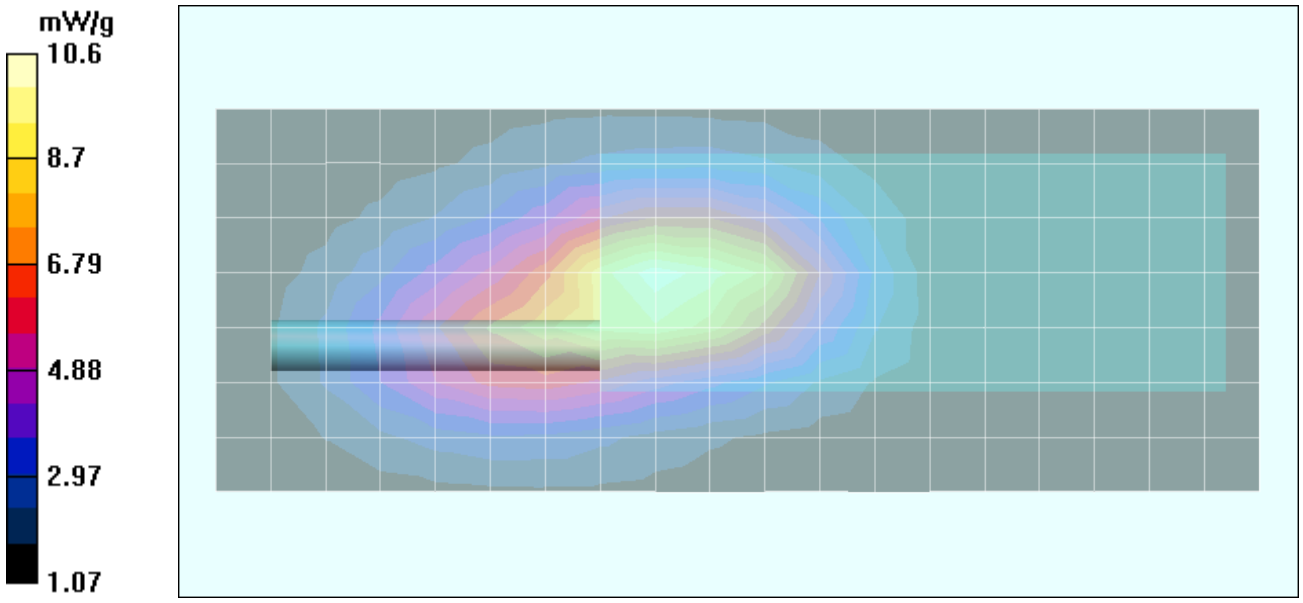
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.31 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 97.1 V/m; Power Drift = -0.473 dB
Peak SAR (extrapolated) = 14.5 W/kg
SAR(1 g) = 9.81 mW/g; SAR(10 g) = 6.51 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

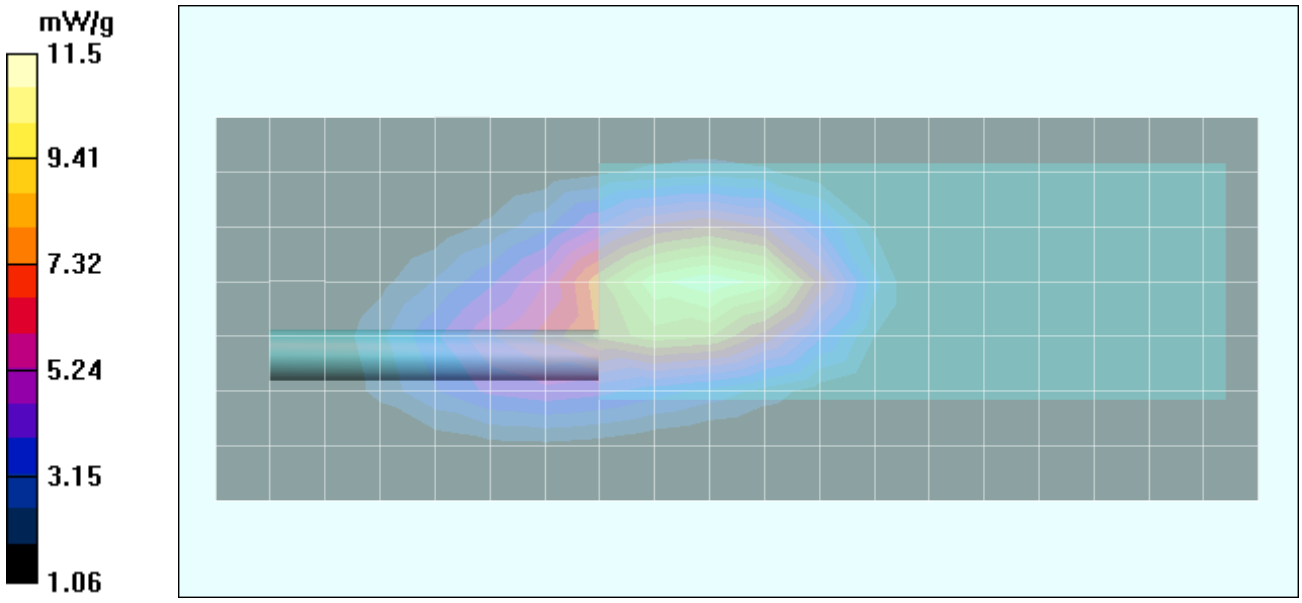
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.21 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

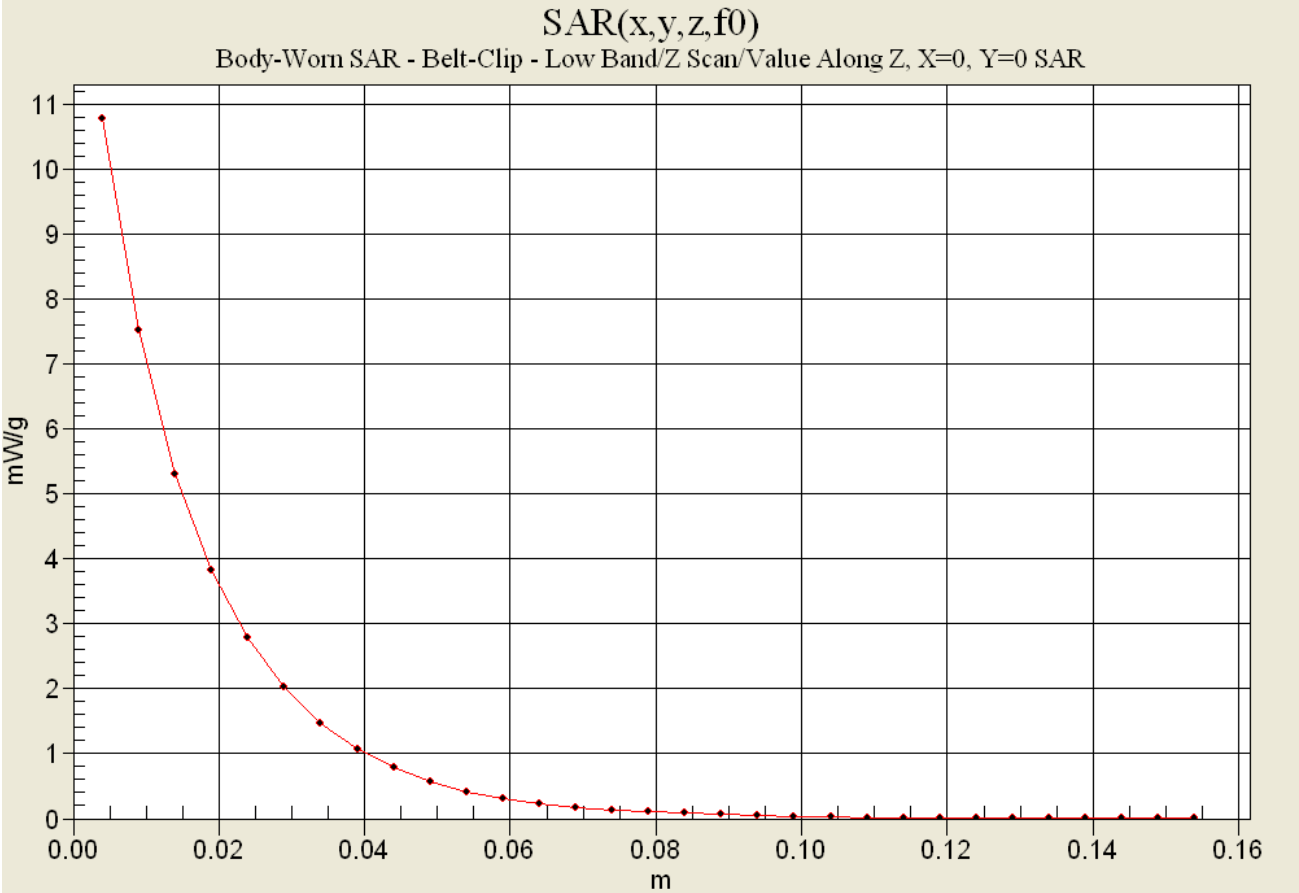
- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 102.1 V/m; Power Drift = -0.823 dB
Peak SAR (extrapolated) = 15.6 W/kg
SAR(1 g) = 10.7 mW/g; SAR(10 g) = 7.2 mW/g

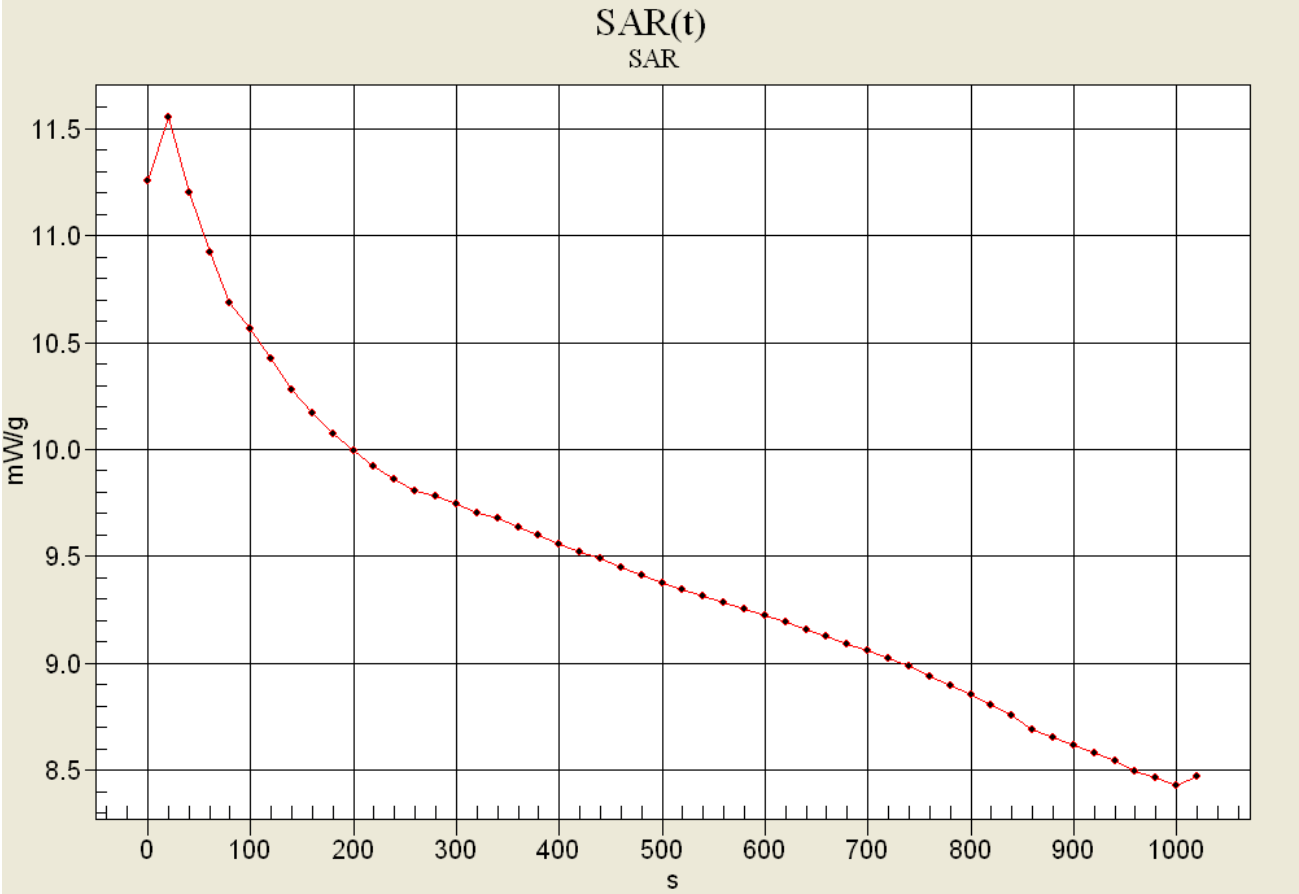


Z-Axis Scan


SAR(x,y,z,f0)
Body-Worn SAR - Belt-Clip - Low Band/Z Scan/Value Along Z, X=0, Y=0 SAR
mW/g
m
0
1
2
3
4
5
6
7
8
9
10
11
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16

SAR-versus-Time Power Drift Evaluation

P7100IP Portable FM PTT Radio Transceiver
with Belt-Clip & Speaker-Microphone Accessories
NiCd 7.5V Intrinsically Safe Battery
Flexible Gain Antenna (P/N: KRE1011506/2)
Low Band Mid Channel: 815.5000 MHz



Max. SAR: 11.561 mW/g
End SAR: 8.436 mW/g (-1.369 dB)
SAR after 340s: 9.692 mW/g (-0.766 dB)
(340s: Zoom Scan Duration)

Body-Worn SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

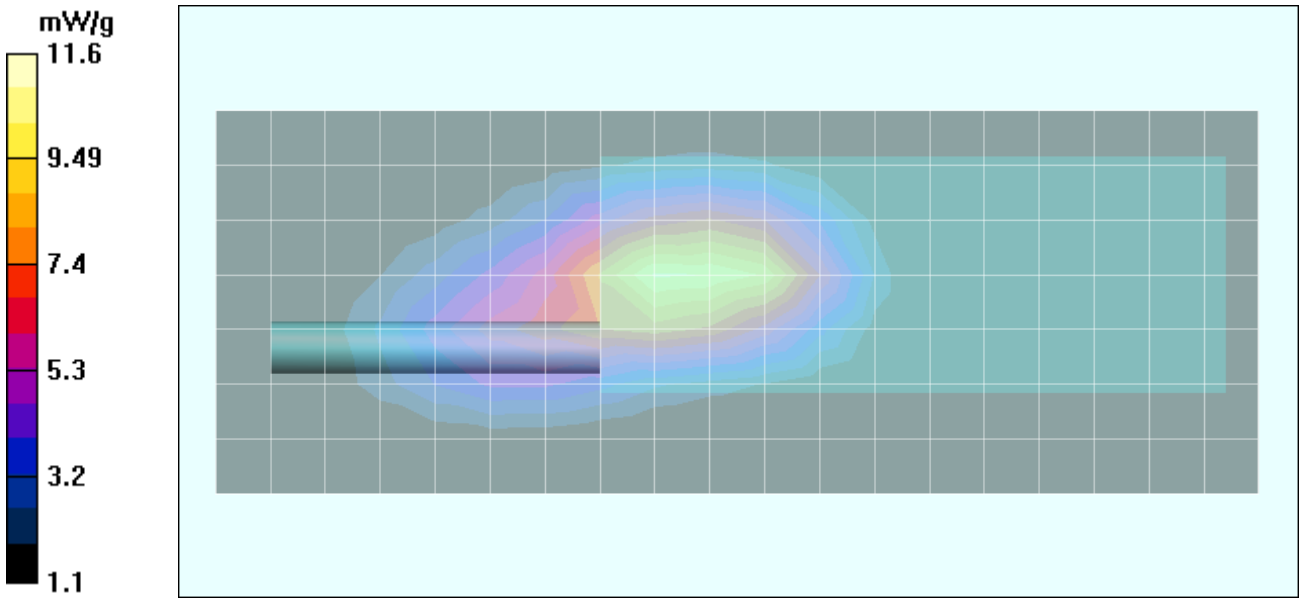
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.21 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 97.4 V/m; Power Drift = -0.144 dB
Peak SAR (extrapolated) = 15.6 W/kg
SAR(1 g) = 10.7 mW/g; SAR(10 g) = 7.22 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

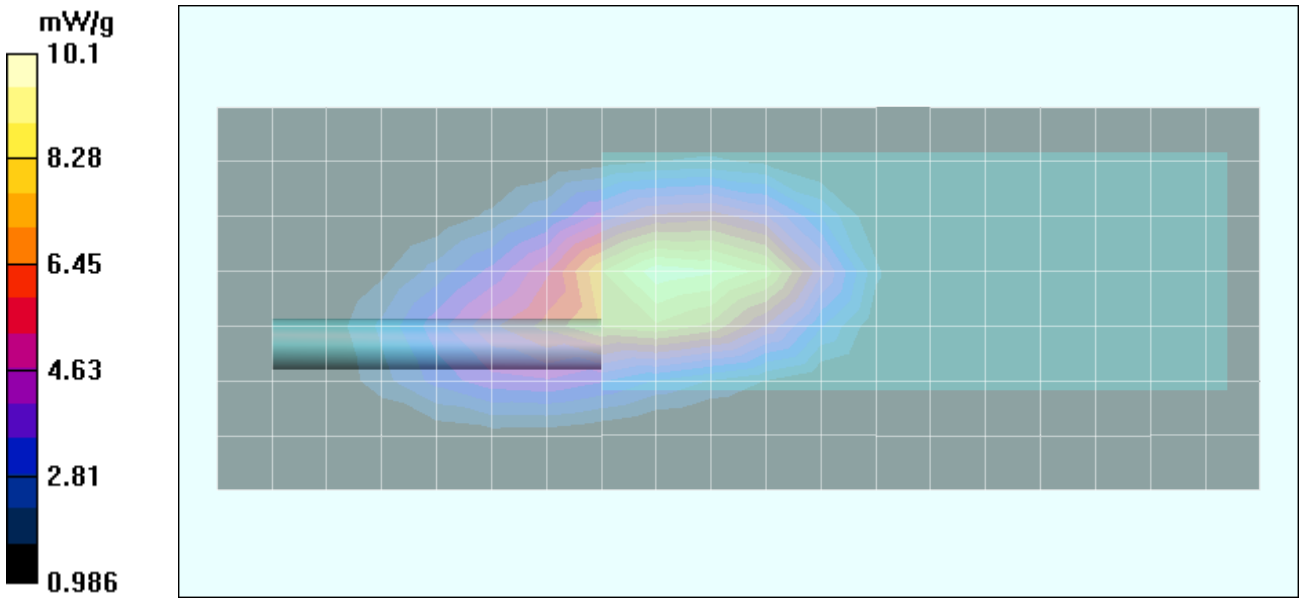
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.19 Watts (Conducted)
Frequency: 806.0125 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Low Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Low Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 95.8 V/m; Power Drift = -0.793 dB
Peak SAR (extrapolated) = 13.6 W/kg
SAR(1 g) = 9.43 mW/g; SAR(10 g) = 6.32 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

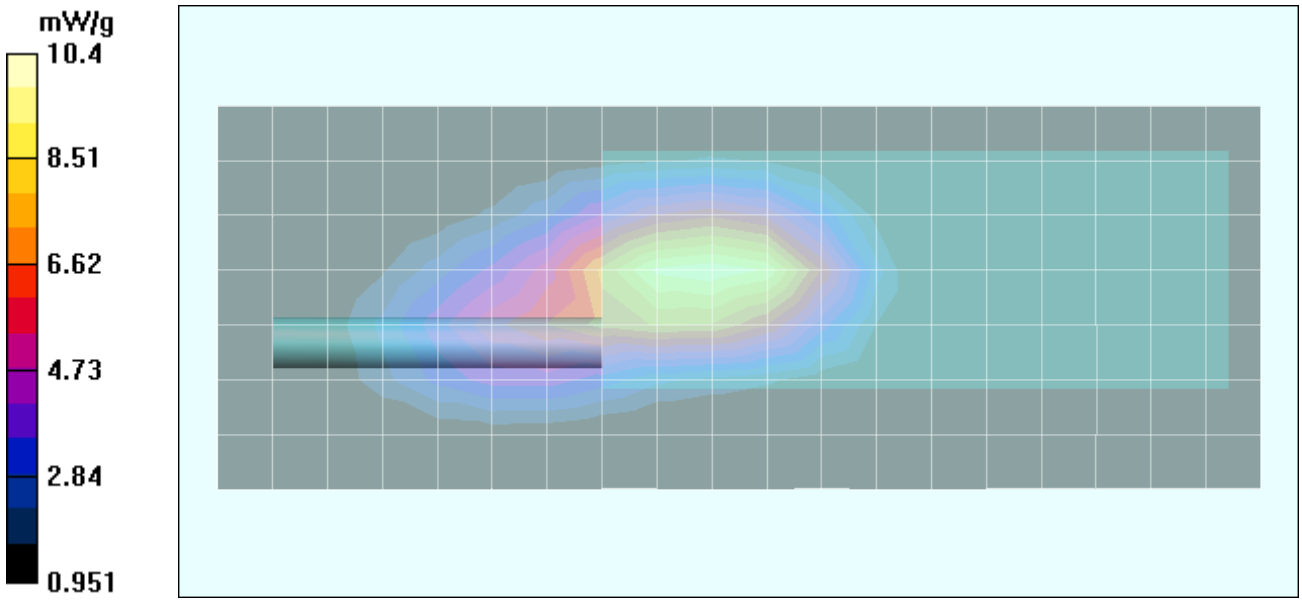
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.19 Watts (Conducted)
Frequency: 823.9875 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - High Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - High Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 95.3 V/m; Power Drift = -0.883 dB
Peak SAR (extrapolated) = 13.9 W/kg
SAR(1 g) = 9.43 mW/g; SAR(10 g) = 6.25 mW/g



Body-Worn SAR - Low Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

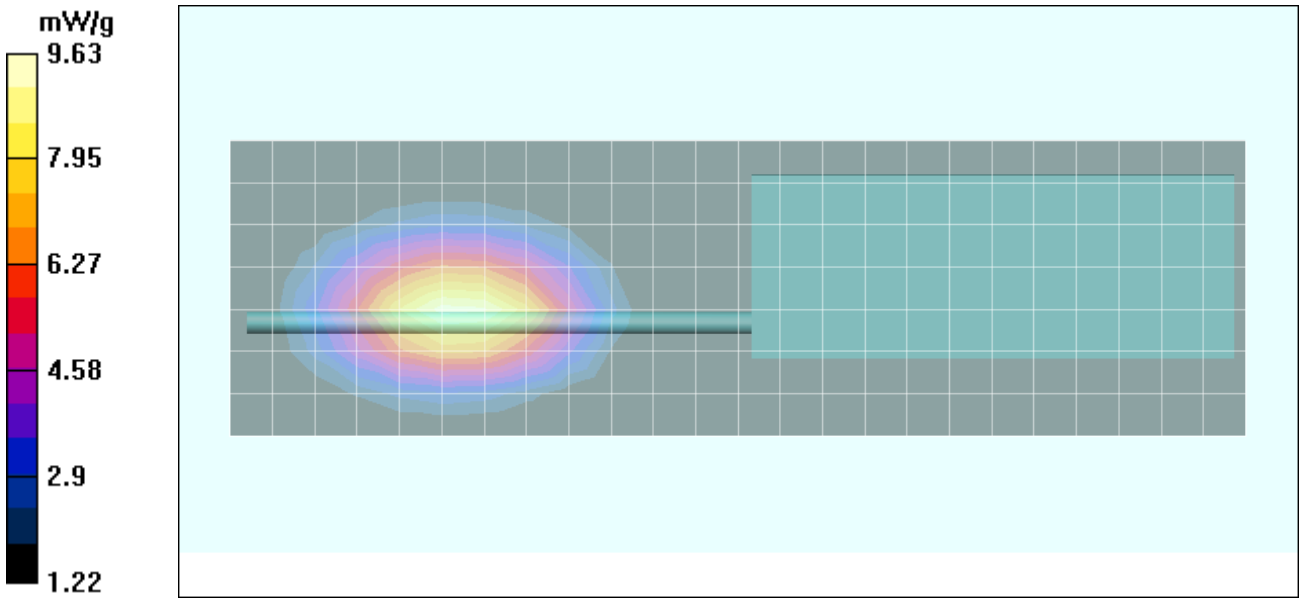
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.21 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 18.4 V/m; Power Drift = -0.0509 dB
Peak SAR (extrapolated) = 12.1 W/kg
SAR(1 g) = 9.12 mW/g; SAR(10 g) = 6.47 mW/g



Body-Worn SAR - Low Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

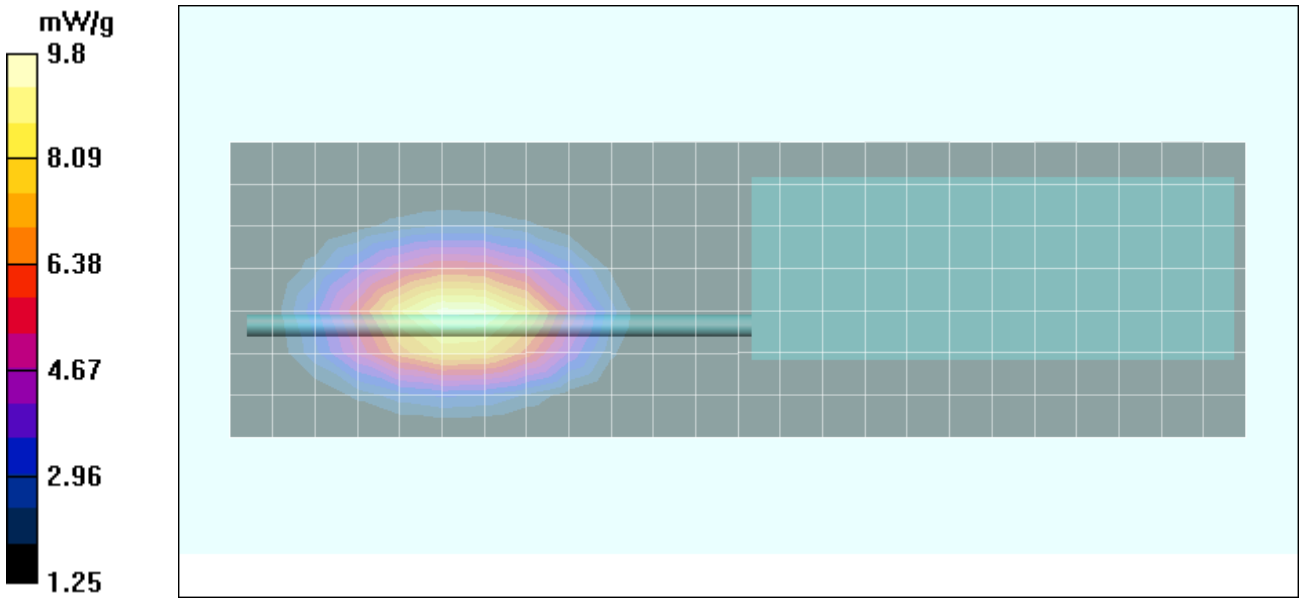
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.23 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 16.1 V/m; Power Drift = -0.478 dB
Peak SAR (extrapolated) = 12.1 W/kg
SAR(1 g) = 9.18 mW/g; SAR(10 g) = 6.49 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

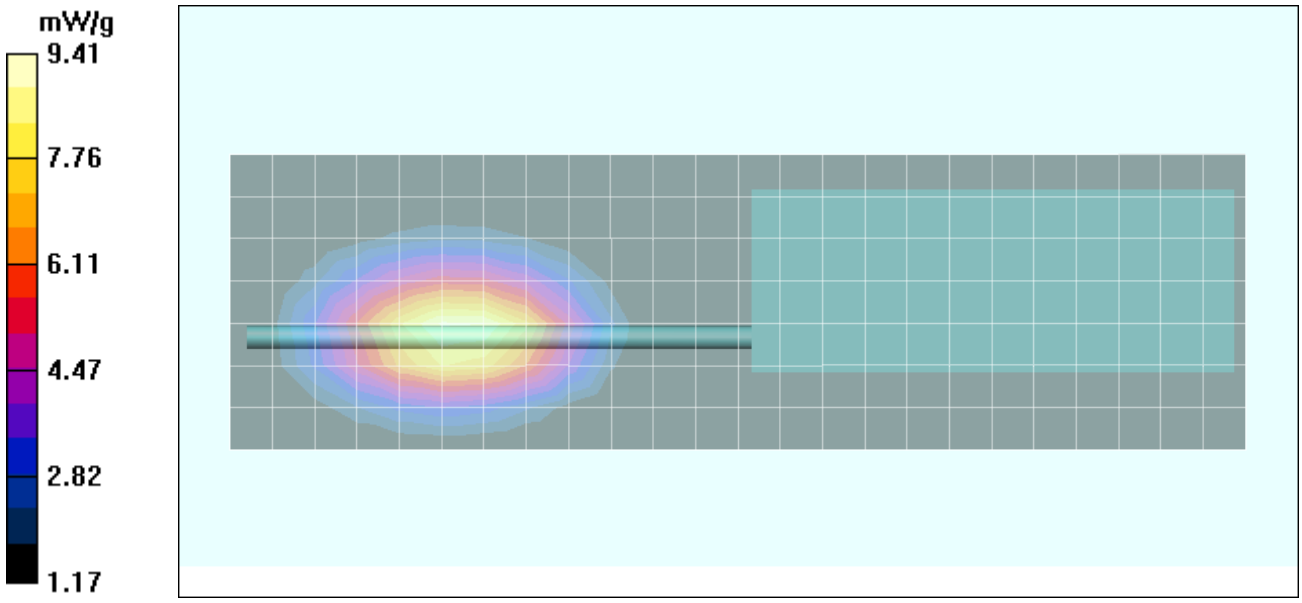
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.22 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = -0.973 dB
Peak SAR (extrapolated) = 11.6 W/kg
SAR(1 g) = 8.84 mW/g; SAR(10 g) = 6.28 mW/g



Body-Worn SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

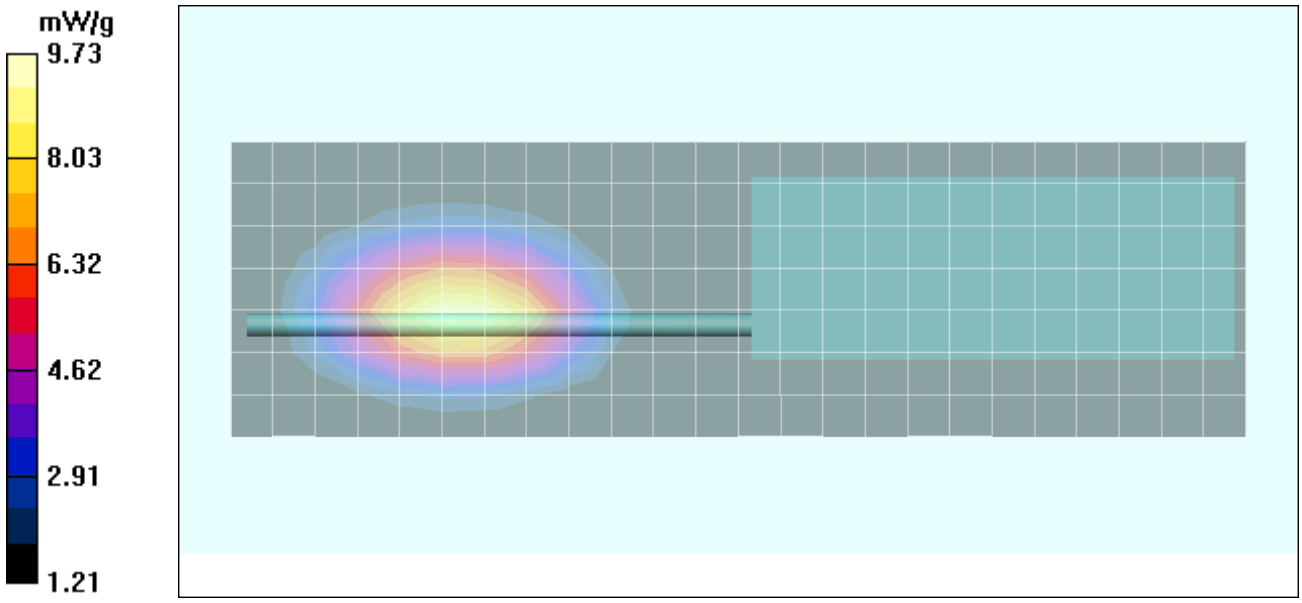
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.22 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 16.4 V/m; Power Drift = -0.276 dB
Peak SAR (extrapolated) = 12 W/kg
SAR(1 g) = 9.09 mW/g; SAR(10 g) = 6.43 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

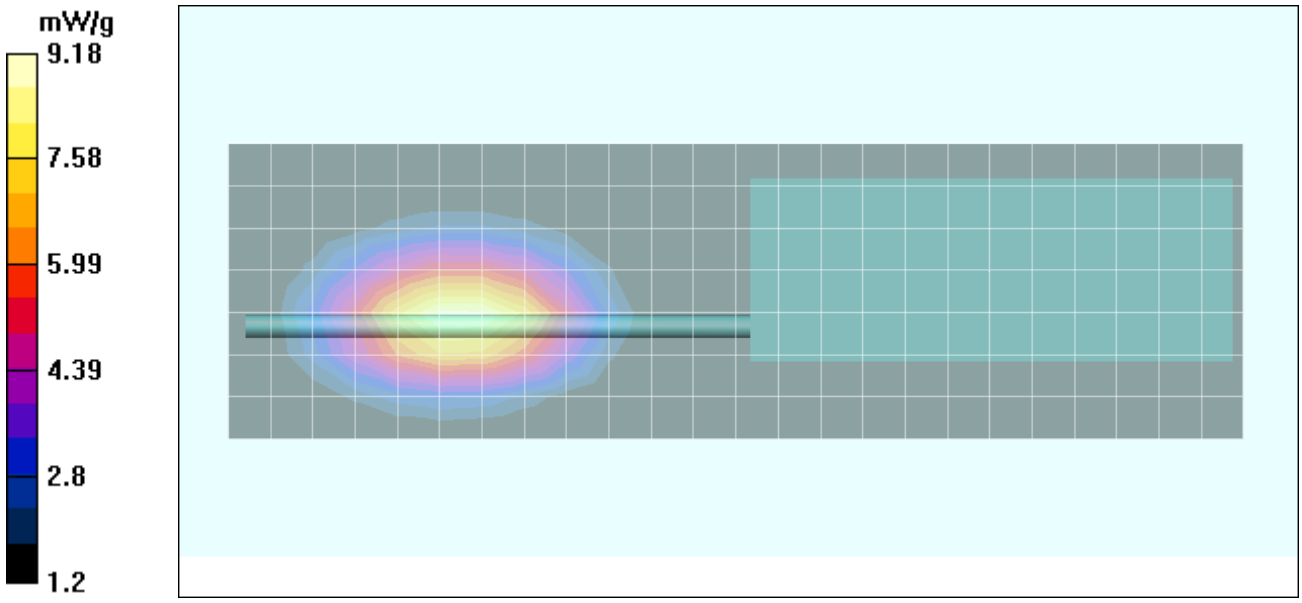
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.22 Watts (Conducted)
Frequency: 806.0125 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Low Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Low Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 18.2 V/m; Power Drift = -0.0415 dB
Peak SAR (extrapolated) = 11.4 W/kg
SAR(1 g) = 8.60 mW/g; SAR(10 g) = 6.08 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

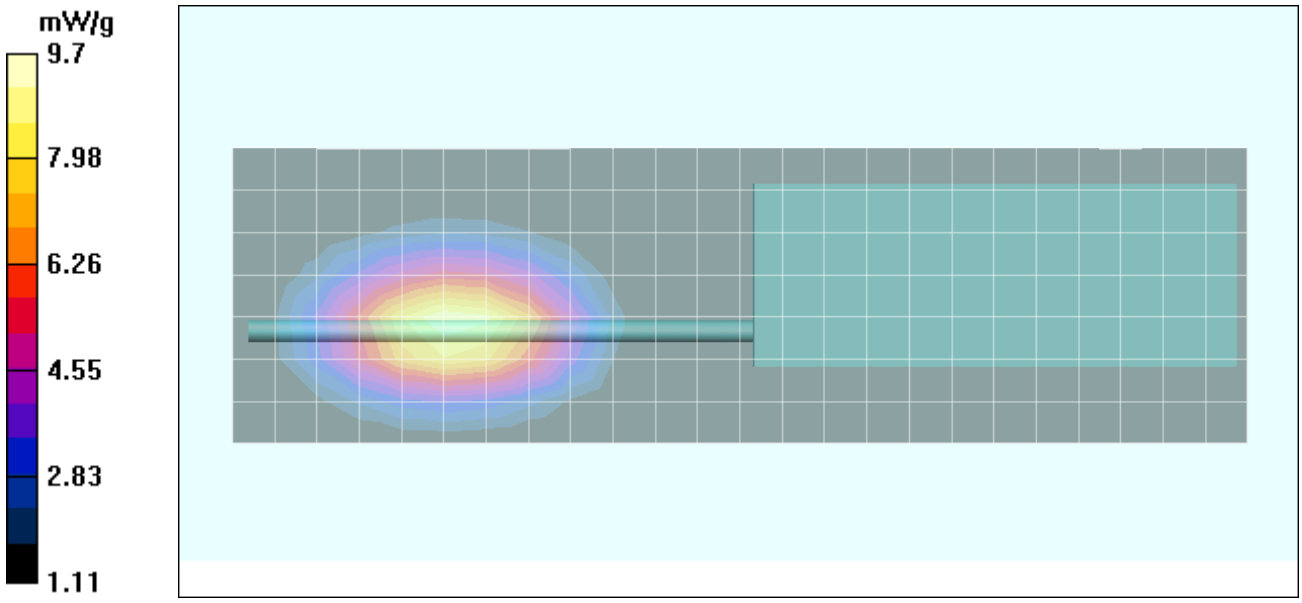
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.20 Watts (Conducted)
Frequency: 823.9875 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - High Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - High Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.1 V/m; Power Drift = -0.397 dB
Peak SAR (extrapolated) = 12.1 W/kg
SAR(1 g) = 9.11 mW/g; SAR(10 g) = 6.38 mW/g



Body-Worn SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

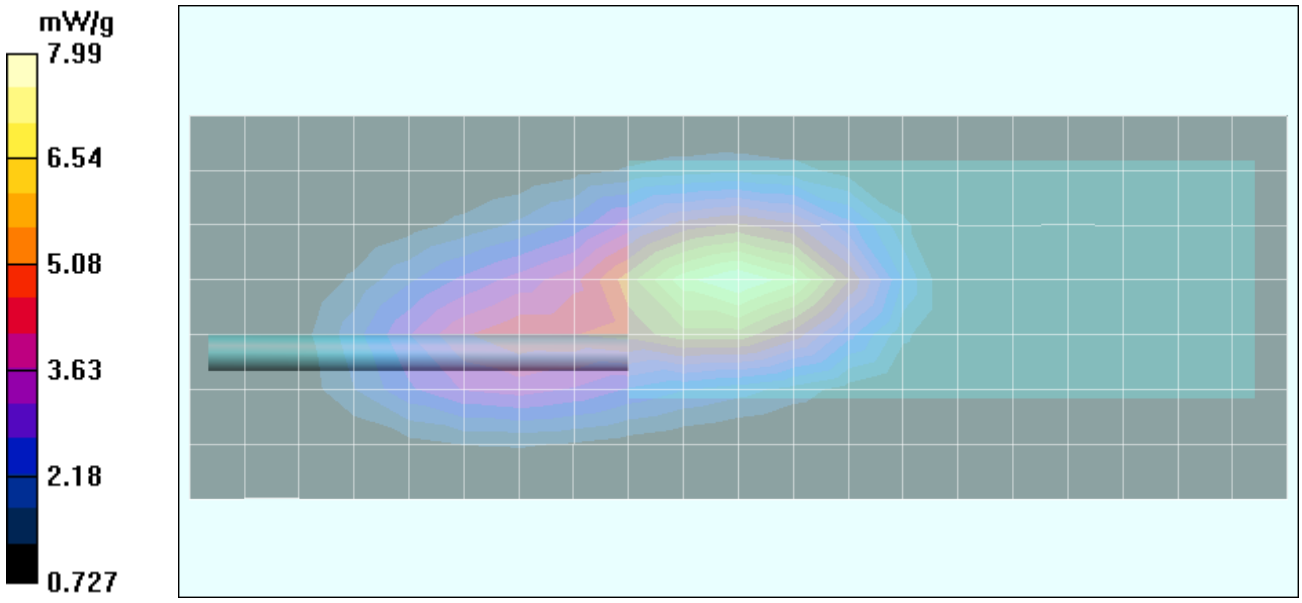
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.22 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 83.7 V/m; Power Drift = -0.766 dB
Peak SAR (extrapolated) = 10.9 W/kg
SAR(1 g) = 7.32 mW/g; SAR(10 g) = 4.87 mW/g



Body-Worn SAR - Low Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

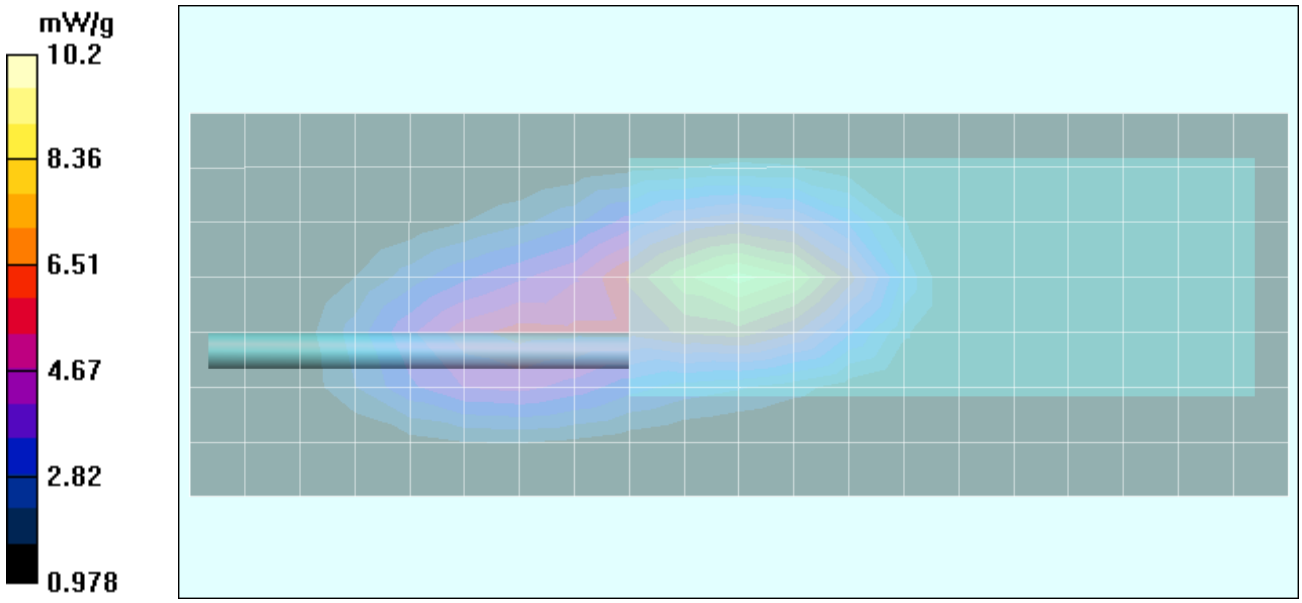
Communication System: FM
RF Output Power: 3.25 Watts (Conducted)
RF Output Power: 3.22 Watts (Conducted) 2nd Maximum
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 88.1 V/m; Power Drift = -0.481 dB
Peak SAR (extrapolated) = 13.8 W/kg
SAR(1 g) = 9.43 mW/g; SAR(10 g) = 6.31 mW/g

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 88.1 V/m; Power Drift = -0.481 dB
Peak SAR (extrapolated) = 7.22 W/kg
SAR(1 g) = 5.38 mW/g; SAR(10 g) = 3.82 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

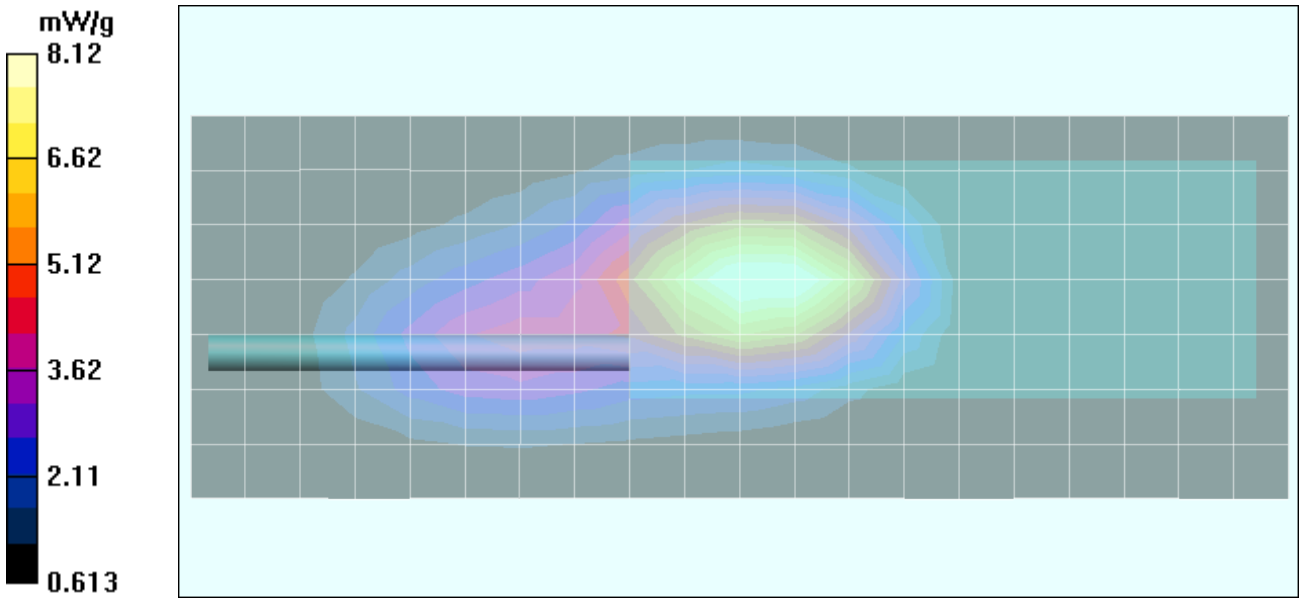
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.22 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 82.3 V/m; Power Drift = -0.829 dB
Peak SAR (extrapolated) = 11.1 W/kg
SAR(1 g) = 7.41 mW/g; SAR(10 g) = 4.97 mW/g



Body-Worn SAR - Low Band - NiCd NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

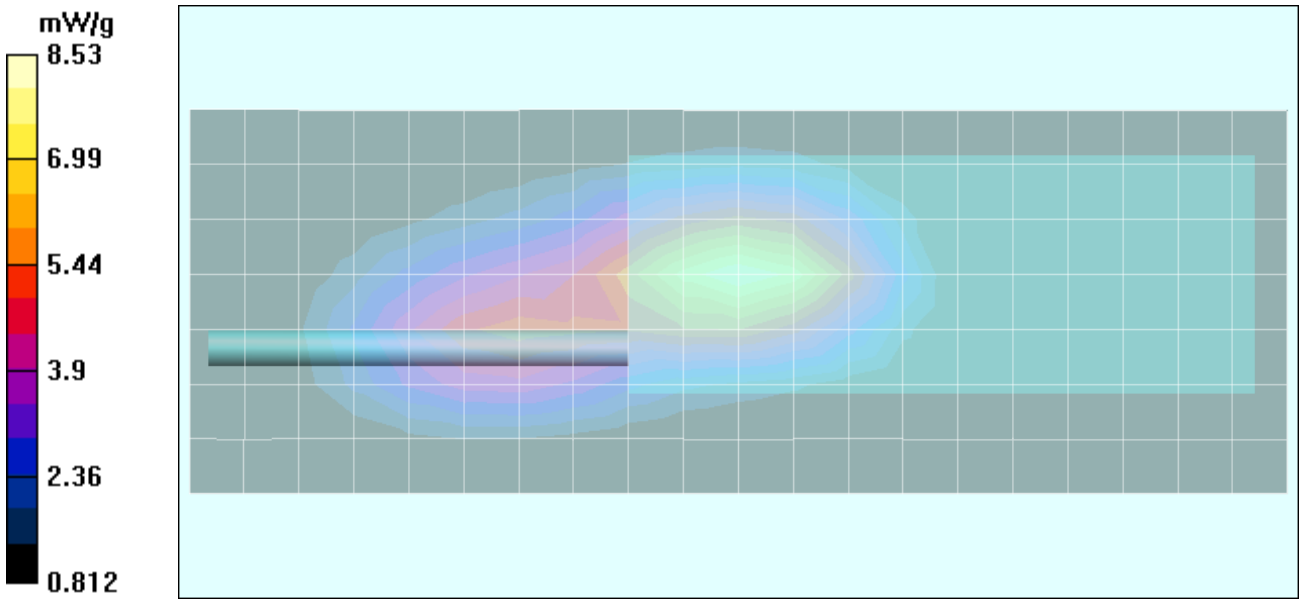
Communication System: FM
RF Output Power: 3.22 Watts (Conducted)
RF Output Power: 3.22 Watts (Conducted) 2nd Maximum
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 81.6 V/m; Power Drift = -0.239 dB
Peak SAR (extrapolated) = 11.6 W/kg
SAR(1 g) = 7.99 mW/g; SAR(10 g) = 5.33 mW/g

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 81.6 V/m; Power Drift = -0.407 dB
Peak SAR (extrapolated) = 6.7 W/kg
SAR(1 g) = 5.00 mW/g; SAR(10 g) = 3.51 mW/g



Body-Worn SAR - Low Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

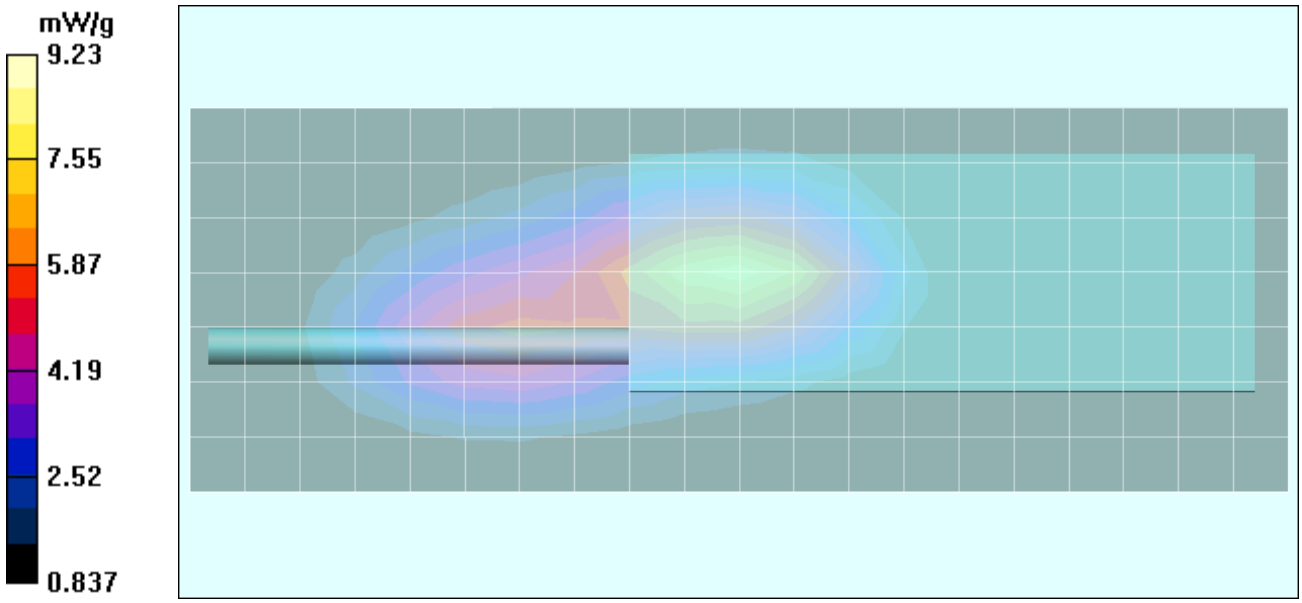
Communication System: FM
RF Output Power: 3.21 Watts (Conducted)
RF Output Power: 3.20 Watts (Conducted) 2nd Maximum
Frequency: 806.0125 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Low Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Low Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 87.5 V/m; Power Drift = -0.554 dB
Peak SAR (extrapolated) = 12.4 W/kg
SAR(1 g) = 8.34 mW/g; SAR(10 g) = 5.5 mW/g

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - Low Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 87.5 V/m; Power Drift = -0.674 dB
Peak SAR (extrapolated) = 6.67 W/kg
SAR(1 g) = 4.98 mW/g; SAR(10 g) = 3.53 mW/g



Body-Worn SAR - Low Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/12/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.7 °C; Fluid Temp: 21.6 °C; Barometric Pressure: 102.7 kPa; Humidity: 33%

Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

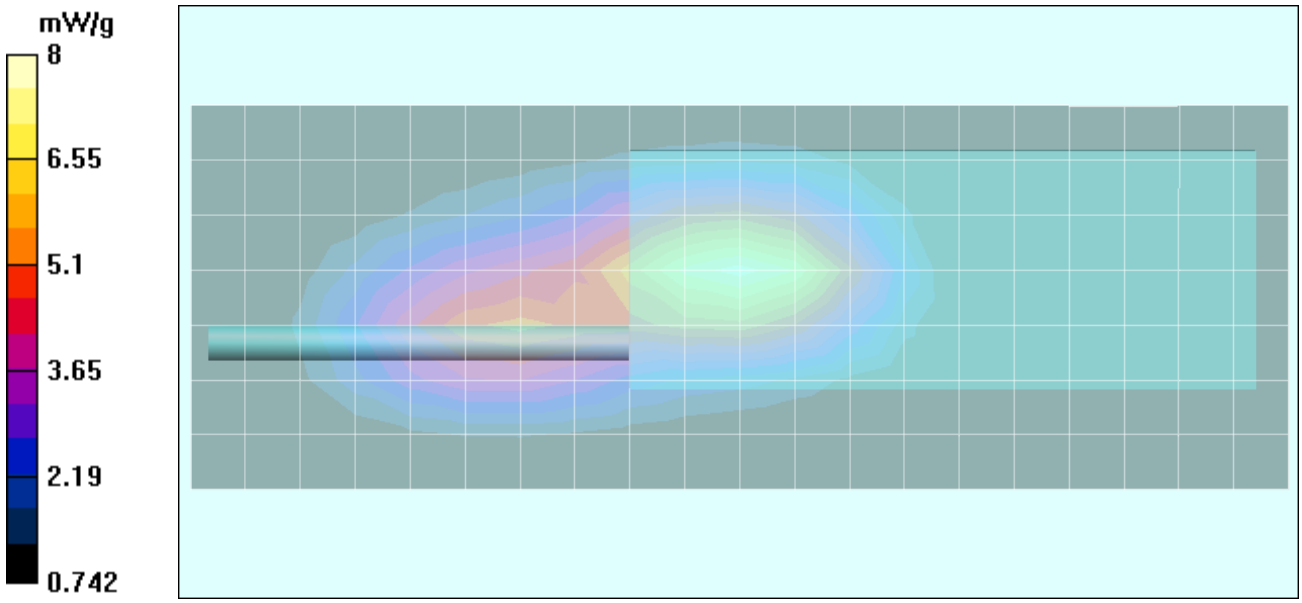
Communication System: FM
RF Output Power: 3.21 Watts (Conducted)
RF Output Power: 3.20 Watts (Conducted) 2nd Maximum
Frequency: 823.9875 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - High Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - High Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 82.7 V/m; Power Drift = -0.329 dB
Peak SAR (extrapolated) = 10.7 W/kg
SAR(1 g) = 7.17 mW/g; SAR(10 g) = 4.74 mW/g

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - Low Band - High Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 82.7 V/m; Power Drift = -0.349 dB
Peak SAR (extrapolated) = 6.69 W/kg
SAR(1 g) = 5.02 mW/g; SAR(10 g) = 3.55 mW/g



Body-Worn SAR - High Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

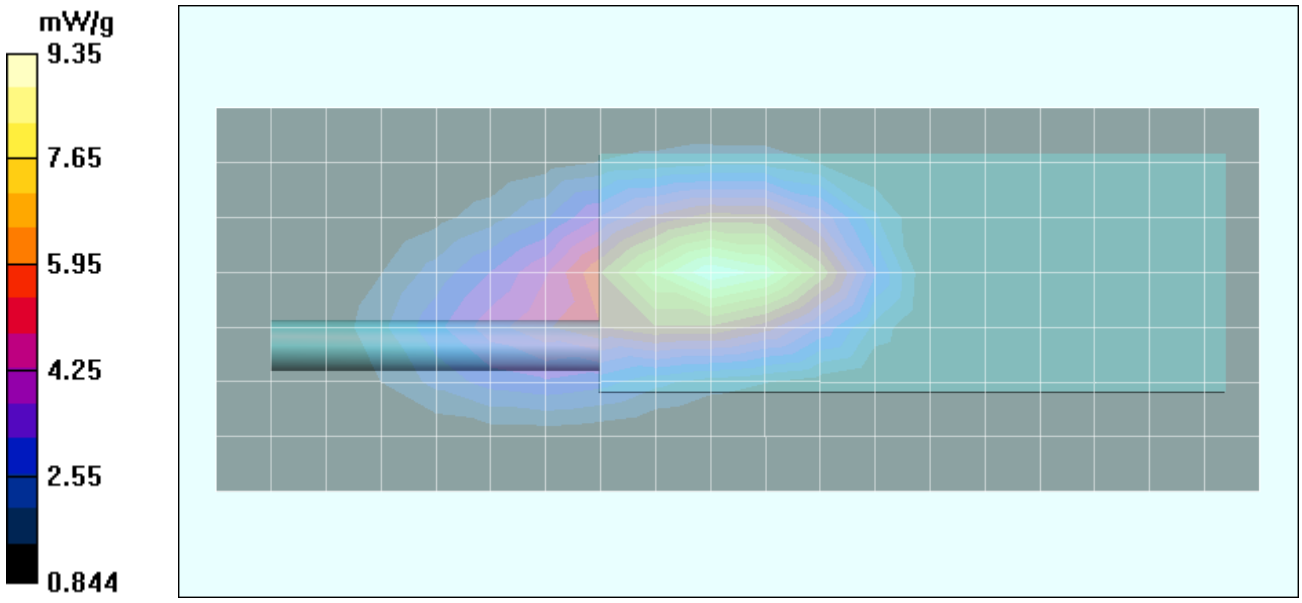
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.05 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 81.2 V/m; Power Drift = -0.119 dB
Peak SAR (extrapolated) = 12.7 W/kg
SAR(1 g) = 8.51 mW/g; SAR(10 g) = 5.67 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

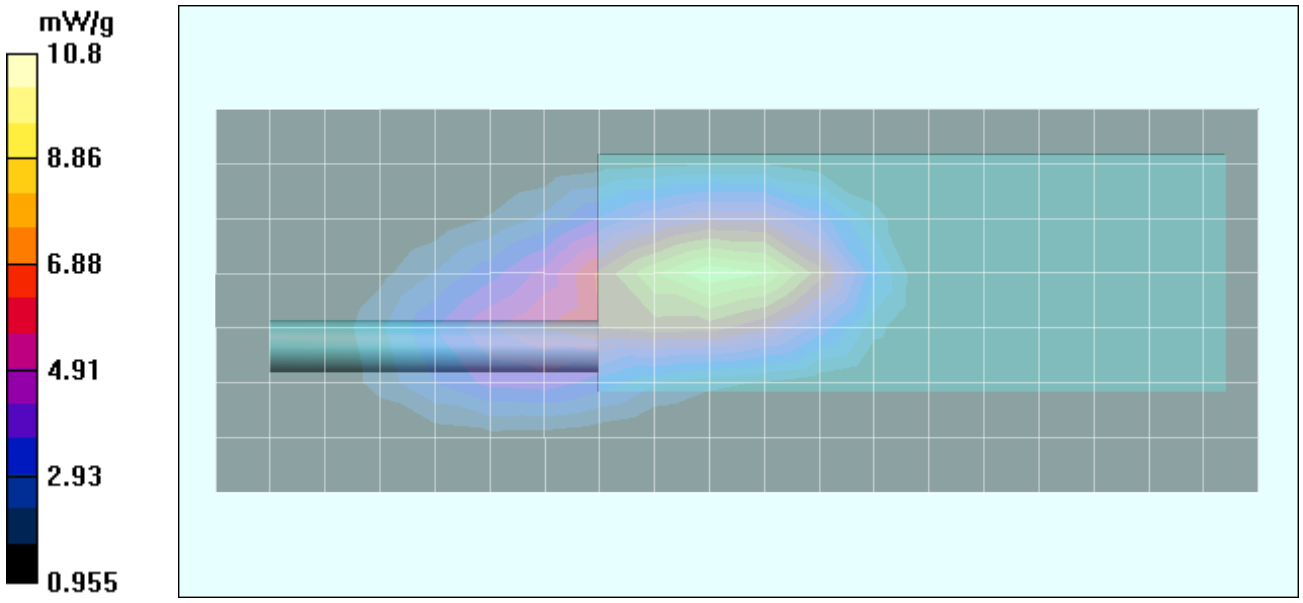
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.04 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 85 V/m; Power Drift = -0.00547 dB
Peak SAR (extrapolated) = 14.8 W/kg
SAR(1 g) = 9.84 mW/g; SAR(10 g) = 6.49 mW/g



Body-Worn SAR - High Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

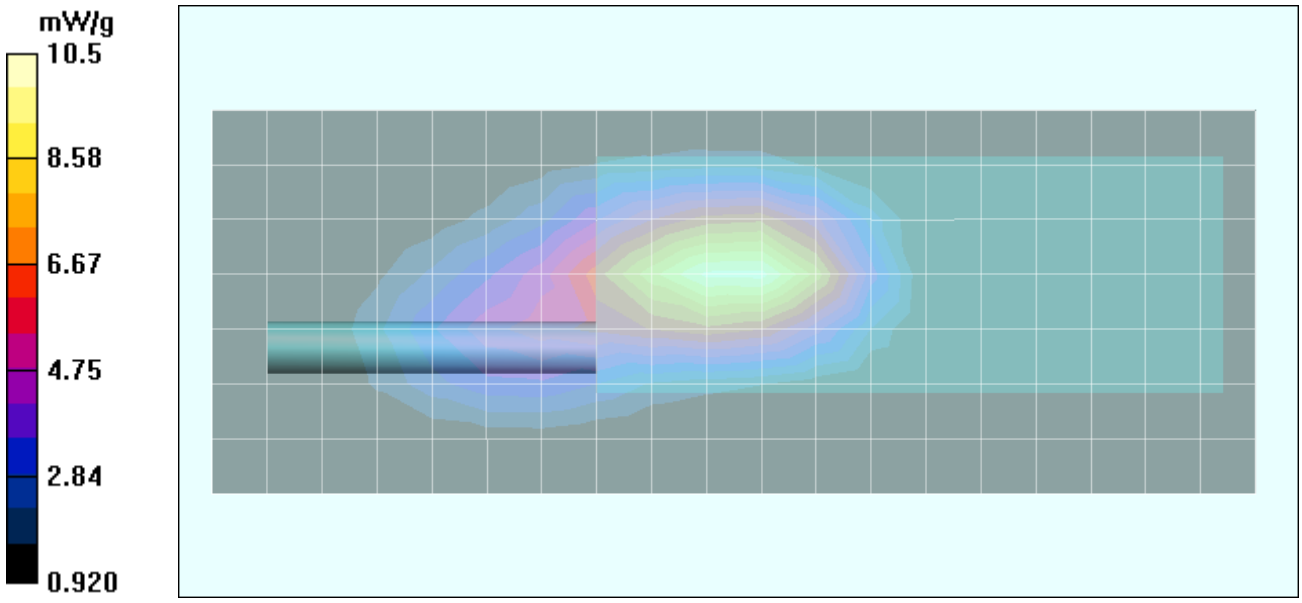
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.04 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 79.8 V/m; Power Drift = -0.152 dB
Peak SAR (extrapolated) = 14.4 W/kg
SAR(1 g) = 9.47 mW/g; SAR(10 g) = 6.25 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

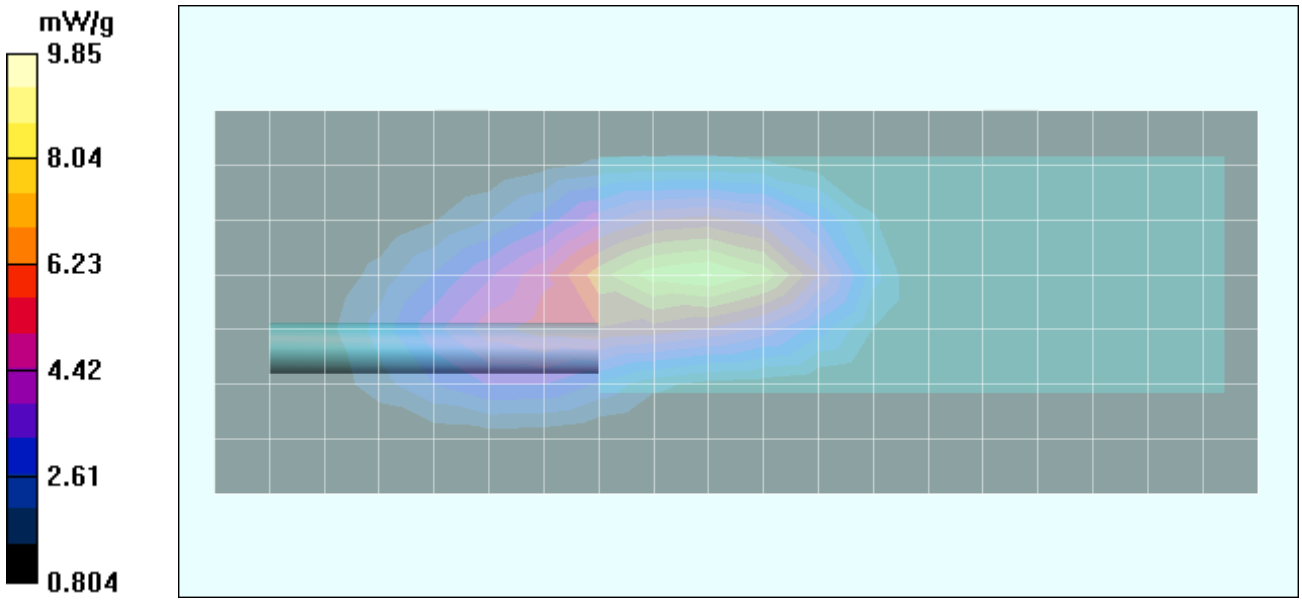
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.04 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 84.9 V/m; Power Drift = -0.146 dB
Peak SAR (extrapolated) = 13.4 W/kg
SAR(1 g) = 8.83 mW/g; SAR(10 g) = 5.8 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

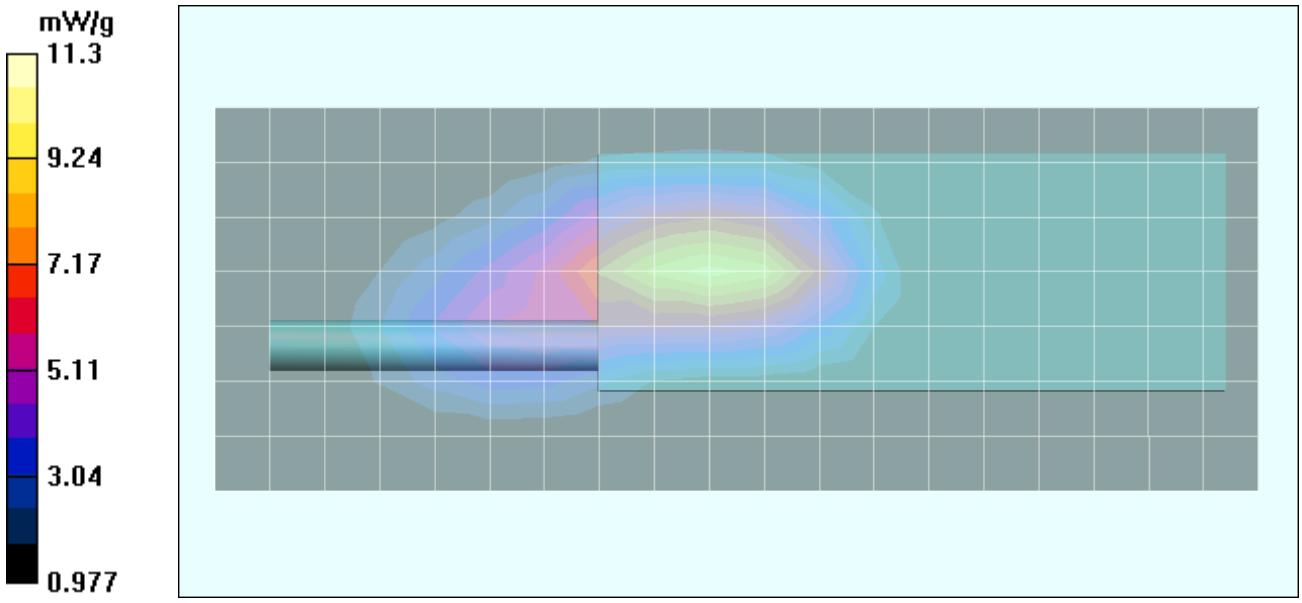
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.10 Watts (Conducted)
Frequency: 851.0125 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

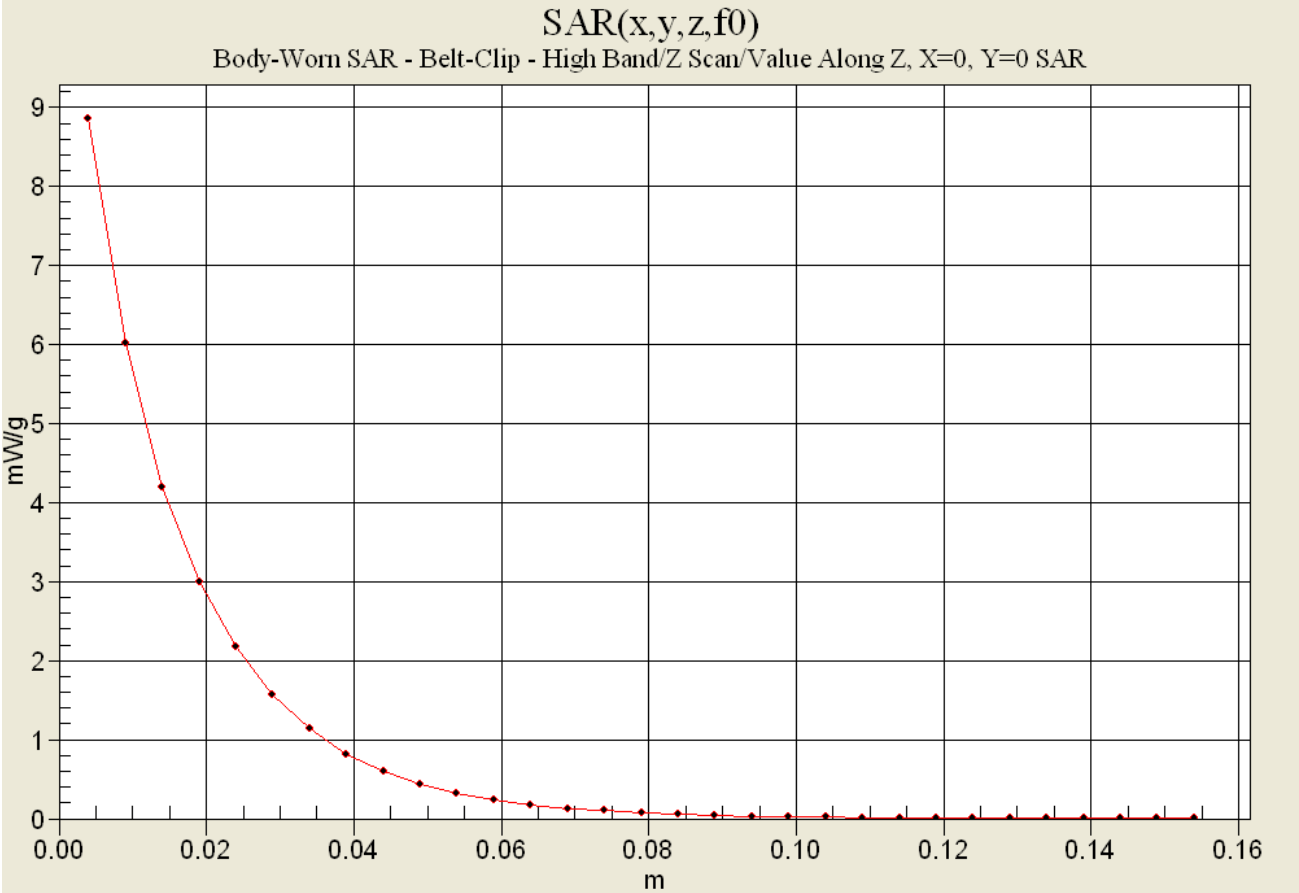
- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Low Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Low Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 81.6 V/m; Power Drift = -0.0506 dB
Peak SAR (extrapolated) = 15.6 W/kg
SAR(1 g) = 10.5 mW/g; SAR(10 g) = 7.01 mW/g



Z-Axis Scan


SAR(x,y,z,f0)
Body-Worn SAR - Belt-Clip - High Band/Z Scan/Value Along Z, X=0, Y=0 SAR
mW/g
m
0
1
2
3
4
5
6
7
8
9
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16

Body-Worn SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

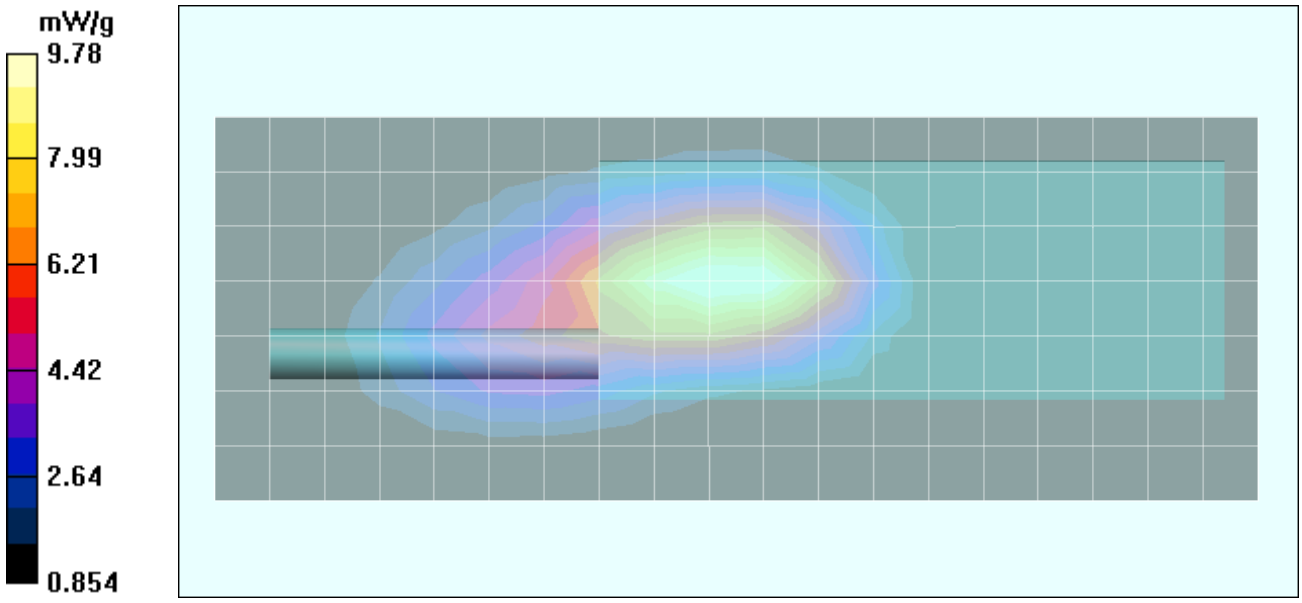
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.02 Watts (Conducted)
Frequency: 868.9875 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - High Channel/Area Scan (8x20x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - High Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 77.7 V/m; Power Drift = -0.0421 dB
Peak SAR (extrapolated) = 13.3 W/kg
SAR(1 g) = 8.82 mW/g; SAR(10 g) = 5.8 mW/g



Body-Worn SAR - High Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

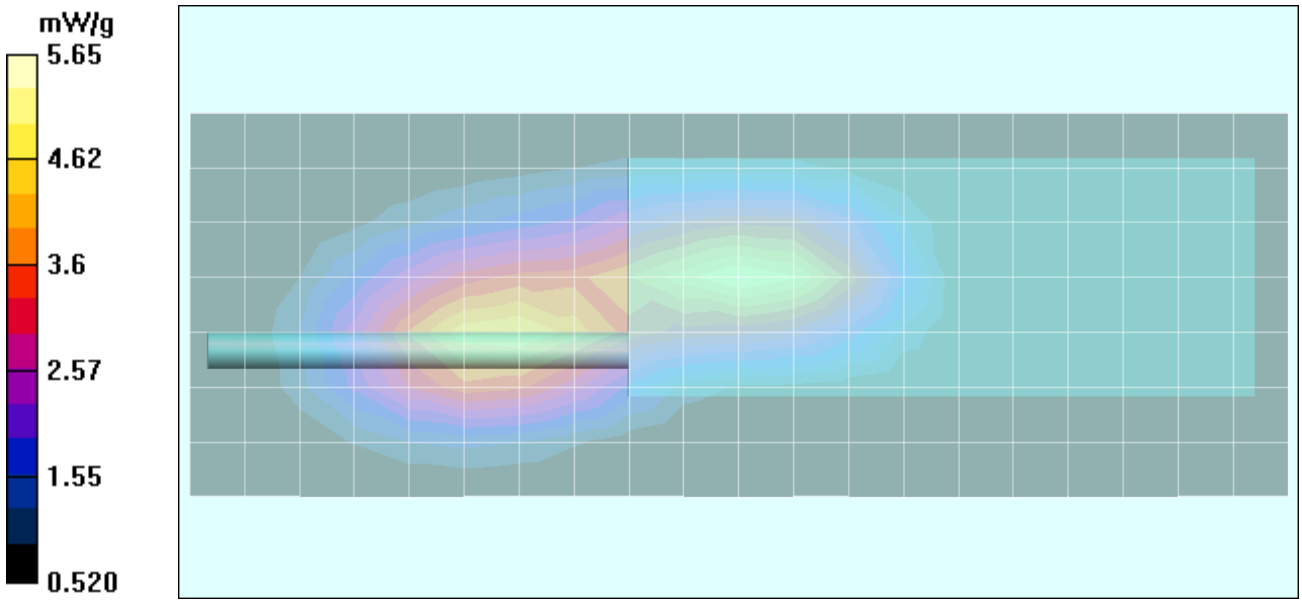
Communication System: FM
RF Output Power: 3.05 Watts (Conducted)
RF Output Power: 3.05 Watts (Conducted) 2nd Maximum
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 68.3 V/m; Power Drift = 0.0893 dB
Peak SAR (extrapolated) = 7.7 W/kg
SAR(1 g) = 5.14 mW/g; SAR(10 g) = 3.4 mW/g

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 68.3 V/m; Power Drift = -0.172 dB
Peak SAR (extrapolated) = 5.89 W/kg
SAR(1 g) = 4.39 mW/g; SAR(10 g) = 3.06 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

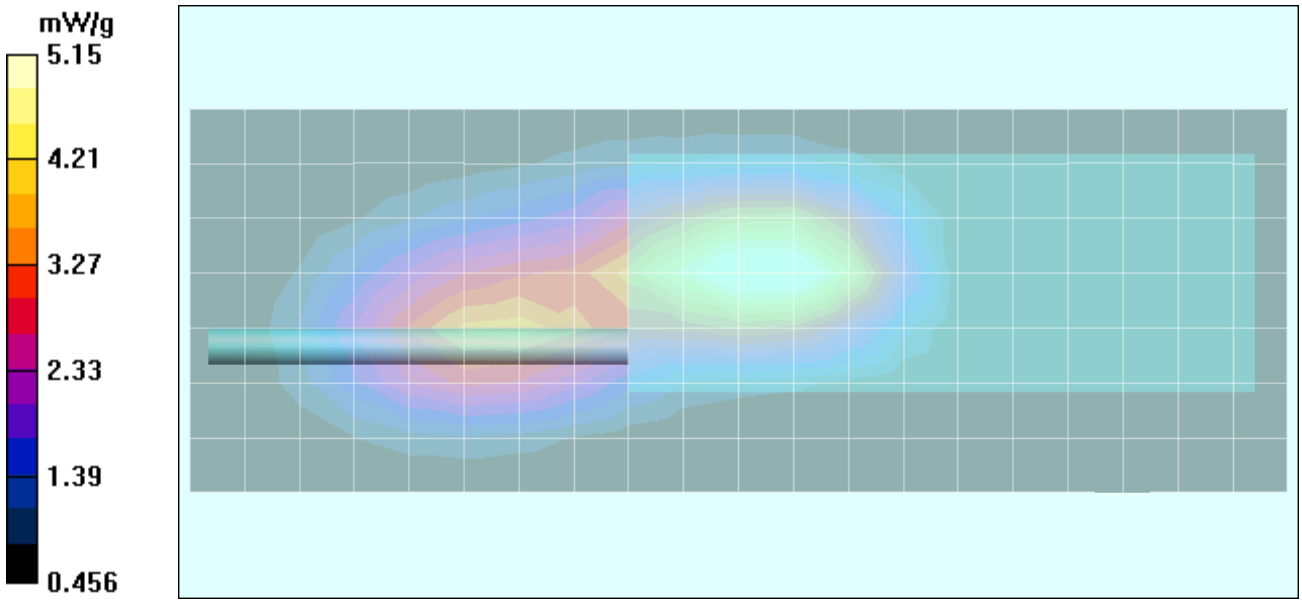
Communication System: FM
RF Output Power: 3.05 Watts (Conducted)
RF Output Power: 3.06 Watts (Conducted) 2nd Maximum
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67 V/m; Power Drift = -0.148 dB
Peak SAR (extrapolated) = 7.27 W/kg
SAR(1 g) = 4.64 mW/g; SAR(10 g) = 3.09 mW/g

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67 V/m; Power Drift = -0.0316 dB
Peak SAR (extrapolated) = 5.35 W/kg
SAR(1 g) = 3.99 mW/g; SAR(10 g) = 2.79 mW/g



Body-Worn SAR - High Band - NiCd IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

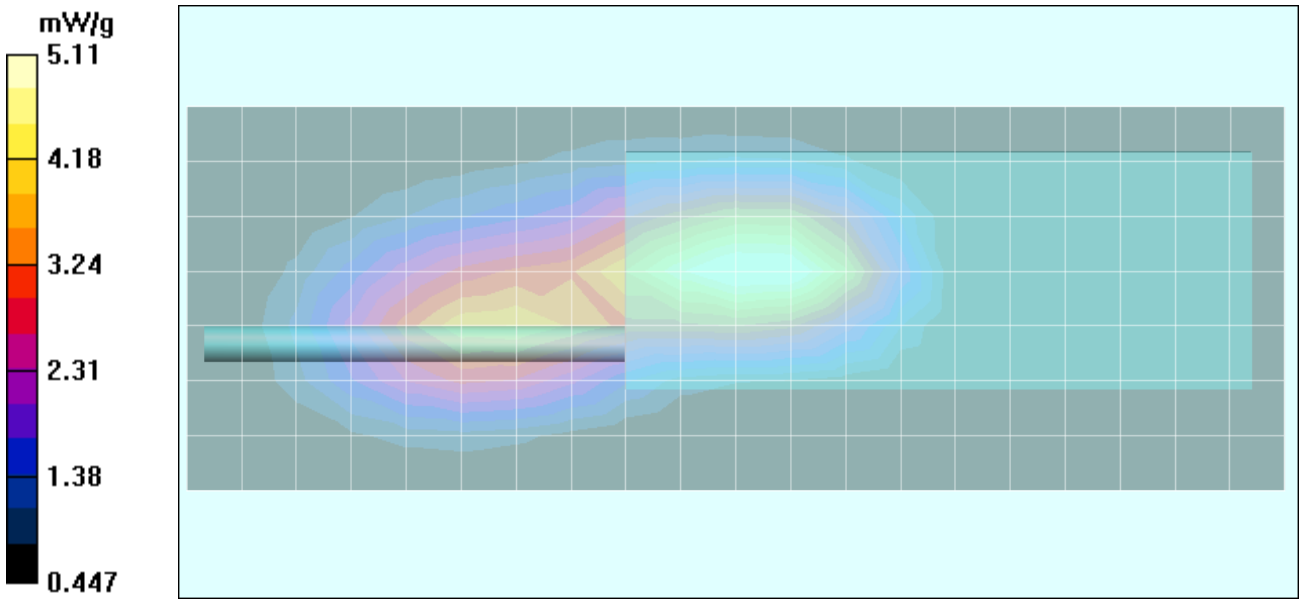
Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
RF Output Power: 3.06 Watts (Conducted) 2nd Maximum
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 64.2 V/m; Power Drift = -0.0109 dB
Peak SAR (extrapolated) = 7.26 W/kg
SAR(1 g) = 4.61 mW/g; SAR(10 g) = 3.09 mW/g

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 64.2 V/m; Power Drift = -0.00358 dB
Peak SAR (extrapolated) = 5.61 W/kg
SAR(1 g) = 4.20 mW/g; SAR(10 g) = 2.95 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/13/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.2 °C; Fluid Temp: 21.5 °C; Barometric Pressure: 102.4 kPa; Humidity: 34%

Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

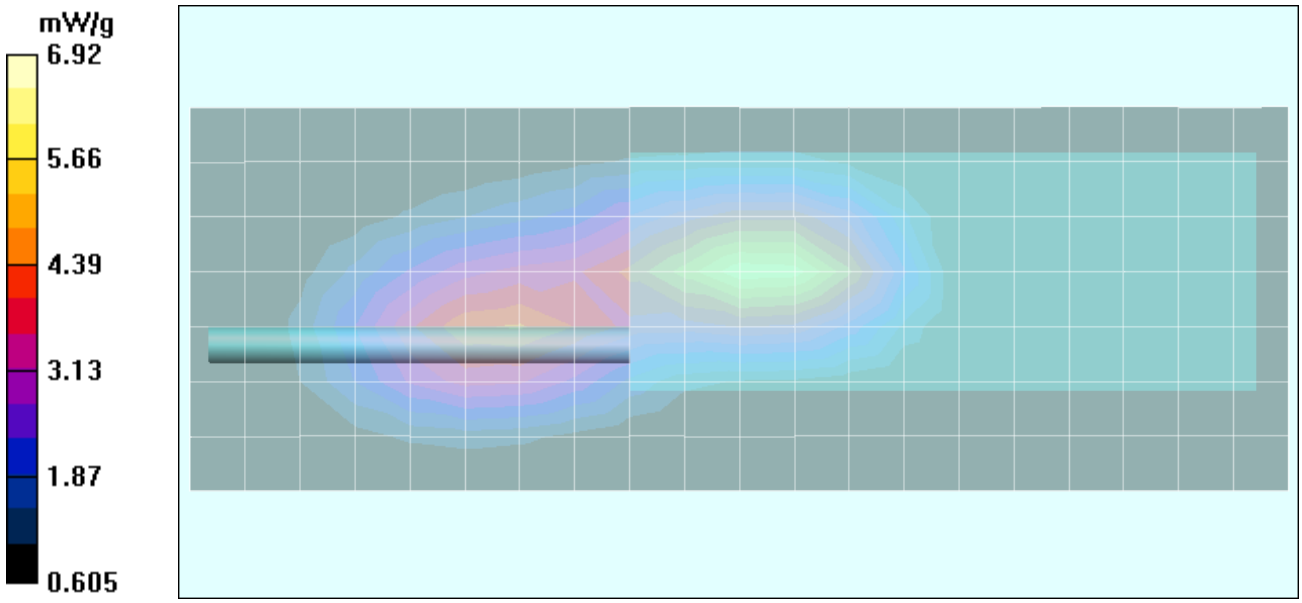
Communication System: FM
RF Output Power: 3.05 Watts (Conducted)
RF Output Power: 3.06 Watts (Conducted) 2nd Maximum
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x21x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 62.4 V/m; Power Drift = -0.0928 dB
Peak SAR (extrapolated) = 9.55 W/kg
SAR(1 g) = 6.22 mW/g; SAR(10 g) = 4.14 mW/g

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 1:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 62.4 V/m; Power Drift = -0.00922 dB
Peak SAR (extrapolated) = 5.79 W/kg
SAR(1 g) = 4.33 mW/g; SAR(10 g) = 3.02 mW/g



Body-Worn SAR - High Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

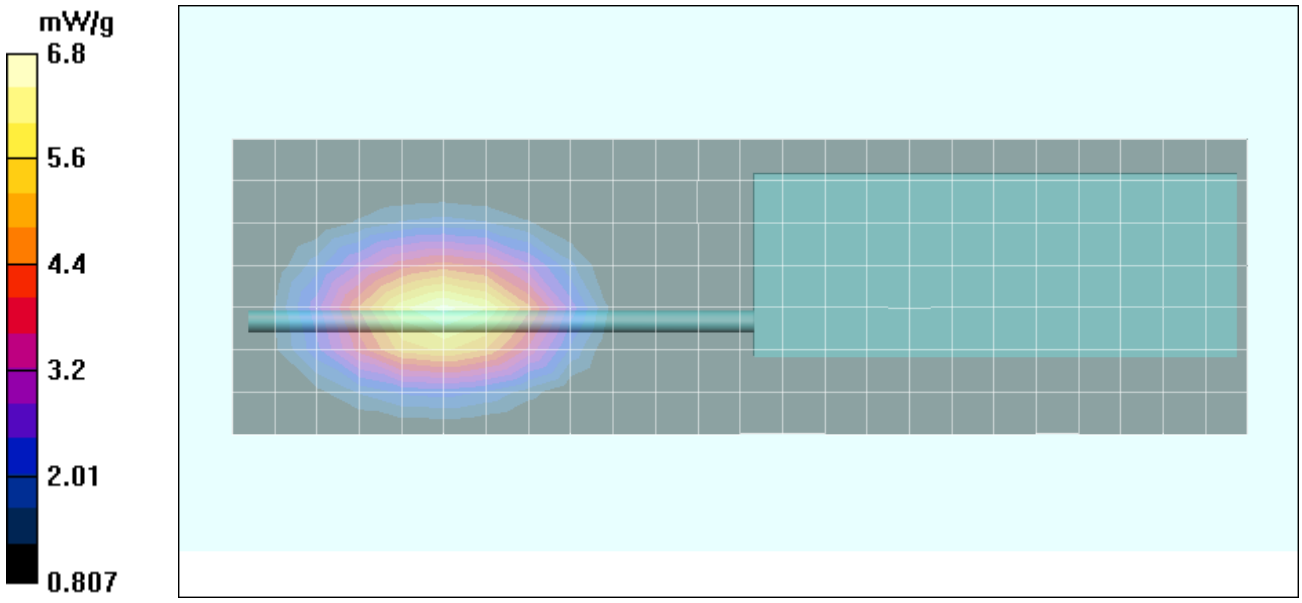
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.08 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

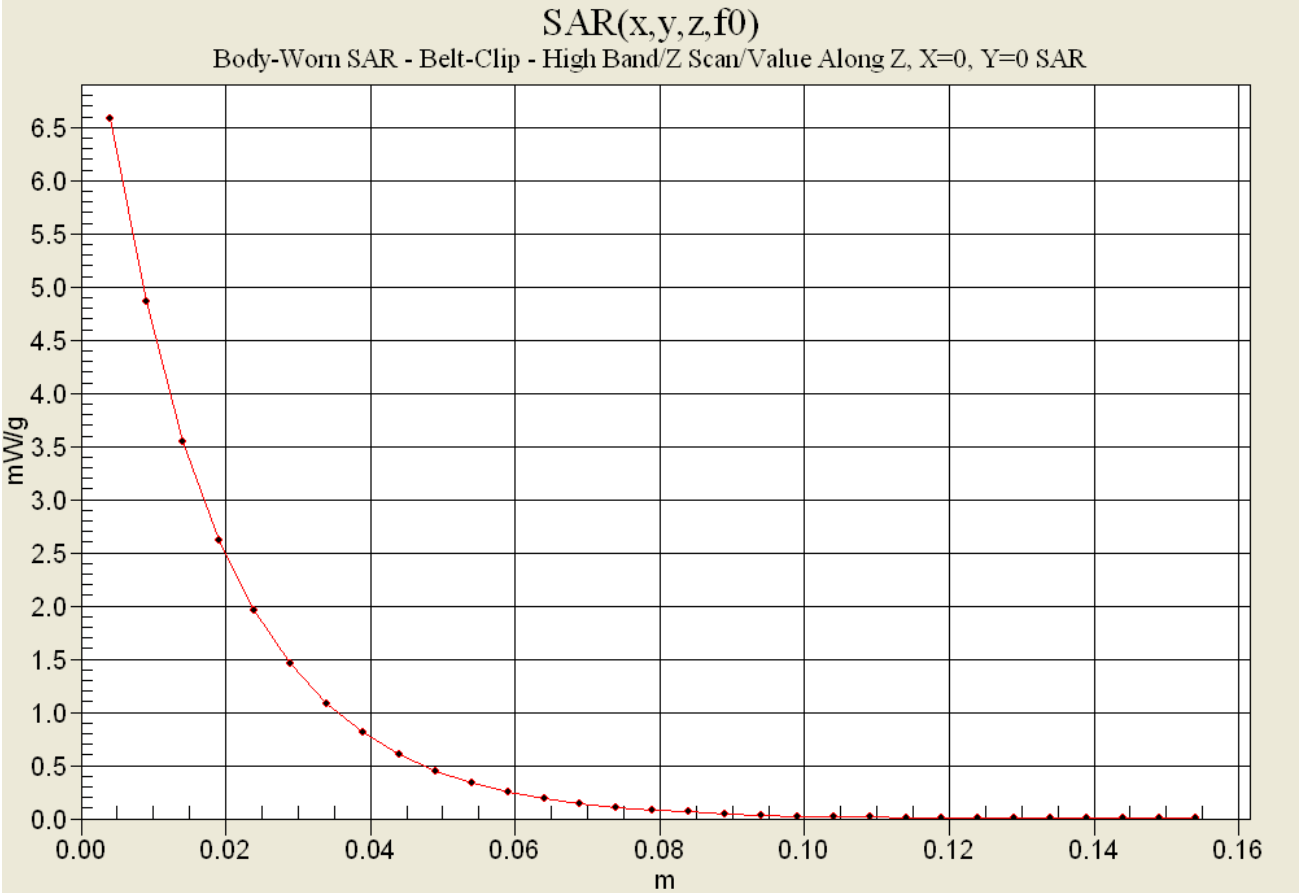
- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.6 V/m; Power Drift = -0.282 dB
Peak SAR (extrapolated) = 8.45 W/kg
SAR(1 g) = 6.39 mW/g; SAR(10 g) = 4.5 mW/g



Z-Axis Scan


SAR(x,y,z,f0)
Body-Worn SAR - Belt-Clip - High Band/Z Scan/Value Along Z, X=0, Y=0 SAR
mW/g
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Body-Worn SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

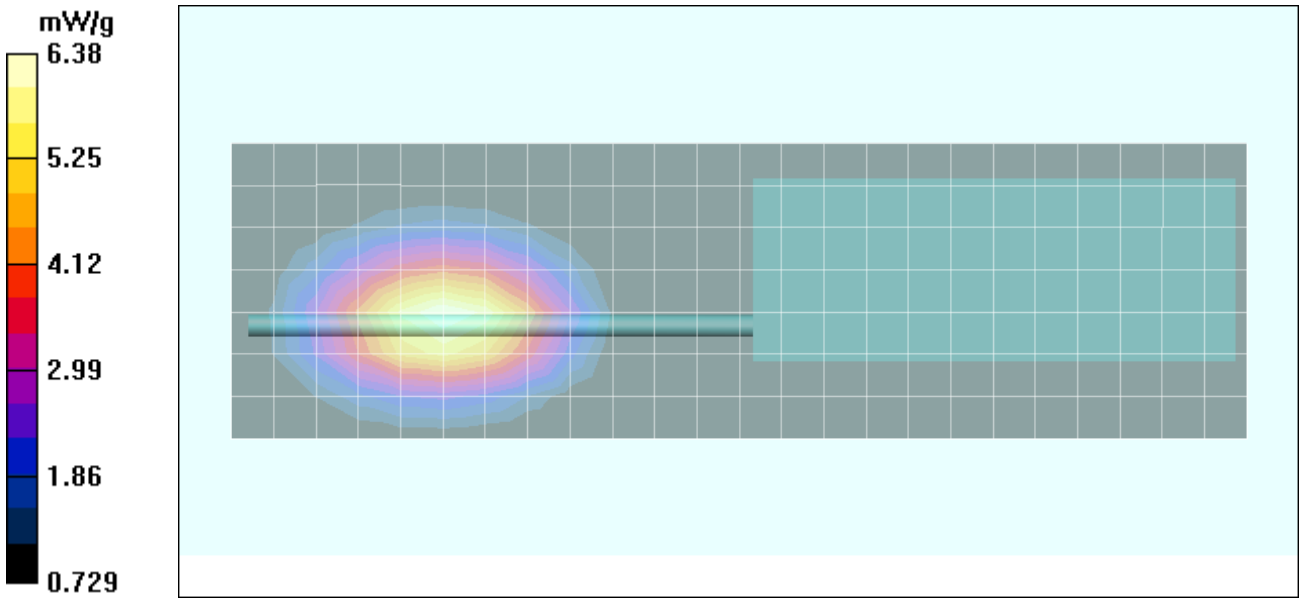
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28.1 V/m; Power Drift = -0.133 dB
Peak SAR (extrapolated) = 7.97 W/kg
SAR(1 g) = 6.02 mW/g; SAR(10 g) = 4.26 mW/g



Body-Worn SAR - High Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

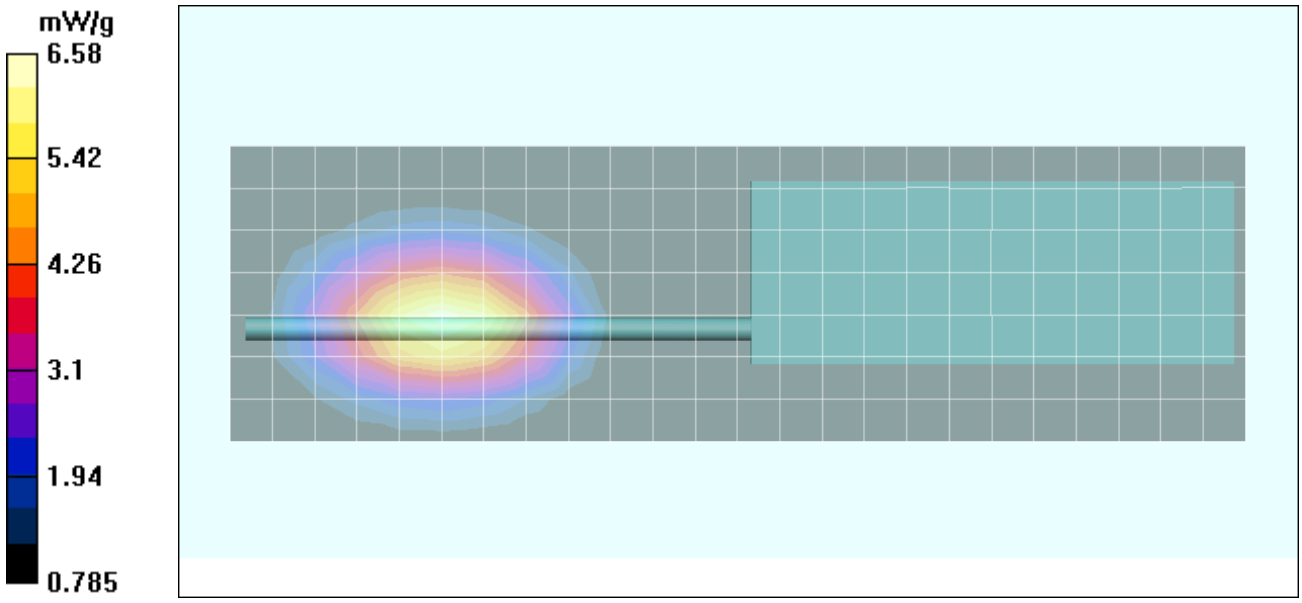
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 28 V/m; Power Drift = -0.102 dB
Peak SAR (extrapolated) = 8.16 W/kg
SAR(1 g) = 6.18 mW/g; SAR(10 g) = 4.37 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

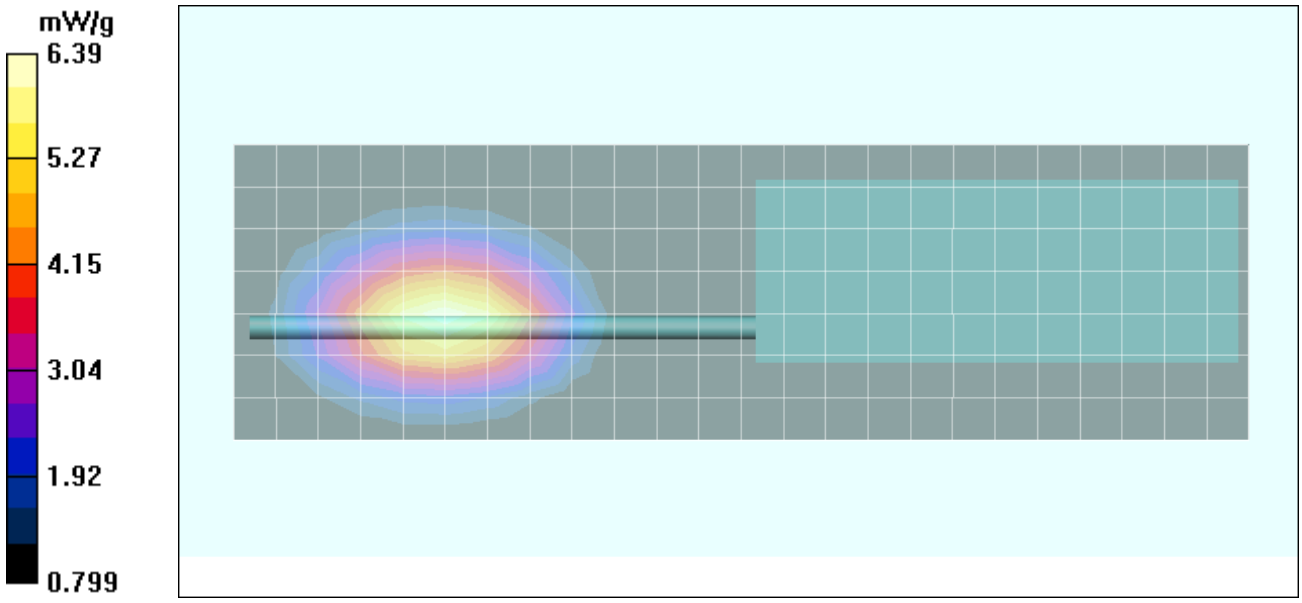
Body-Worn Accessories: Metal Belt-Clip (P/N: KRY1011647/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x25x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.1 cm Metal Belt-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 21.6 V/m; Power Drift = 0.0980 dB
Peak SAR (extrapolated) = 7.93 W/kg
SAR(1 g) = 6.01 mW/g; SAR(10 g) = 4.26 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.3 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

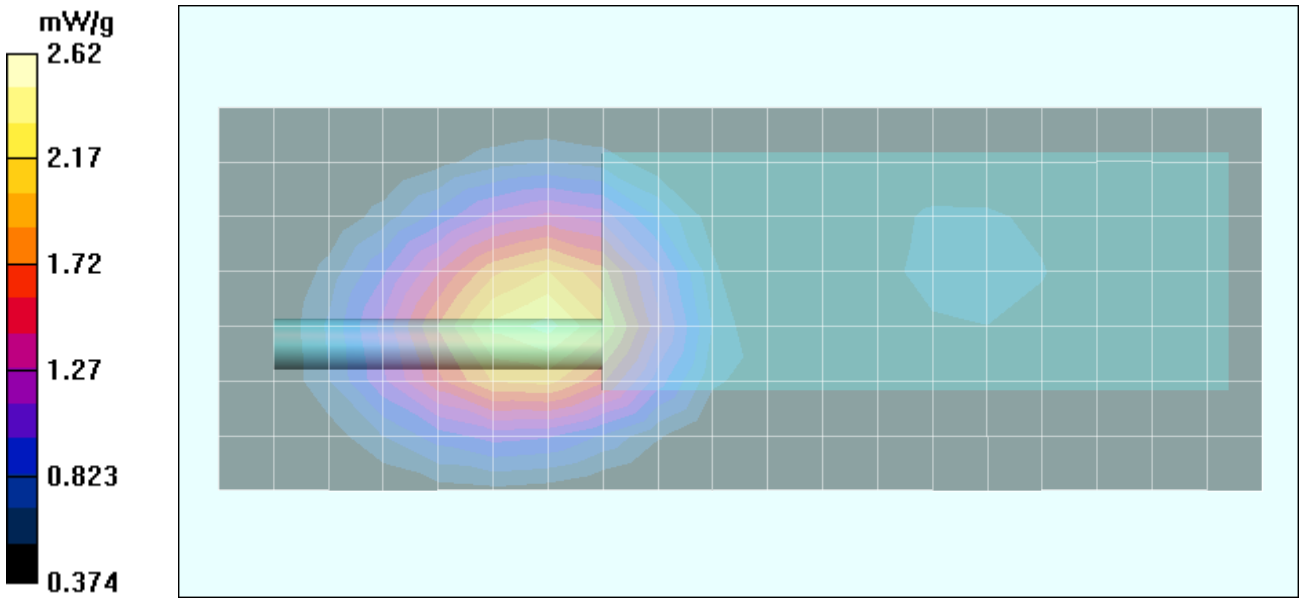
Body-Worn Accessories: Leather Belt-Loop (P/N: KRY1011609/1) & Swivel-Mount Clip (P/N: KRY1011608/3), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.29 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.96 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - Low Band - Mid Channel
Area Scan (8x20x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 50.8 V/m; Power Drift = -0.480 dB
Peak SAR (extrapolated) = 3.2 W/kg
SAR(1 g) = 2.48 mW/g; SAR(10 g) = 1.79 mW/g



Body-Worn SAR - Low Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.3 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

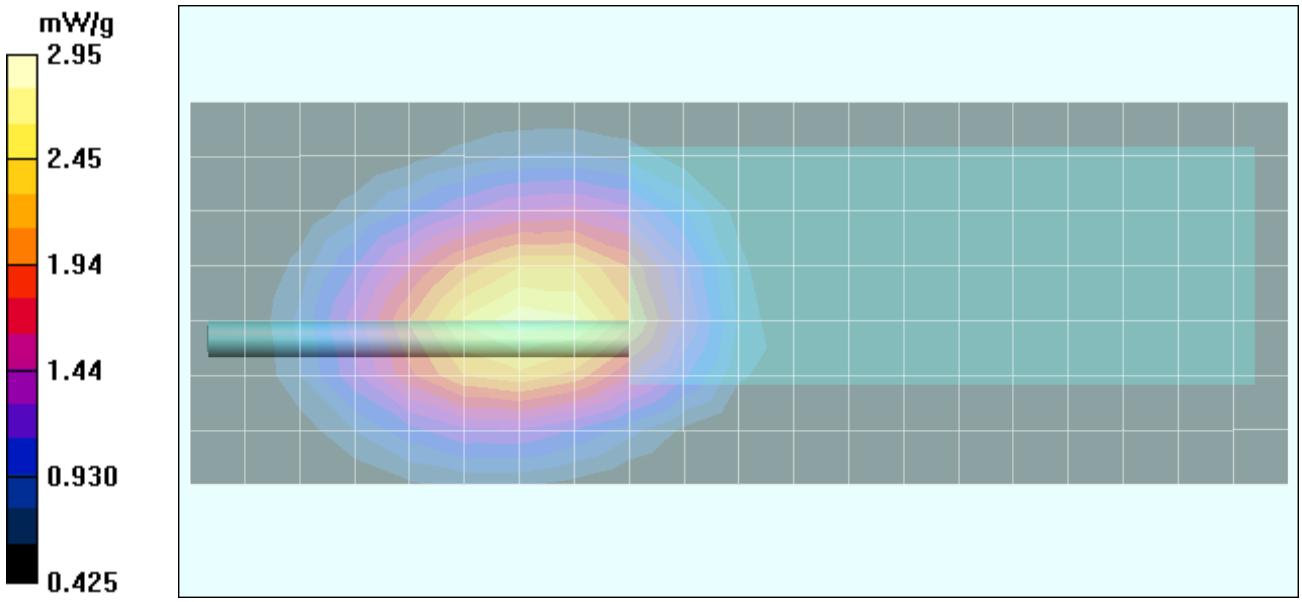
Body-Worn Accessories: Leather Belt-Loop (P/N: KRY1011609/1) & Swivel-Mount Clip (P/N: KRY1011608/3), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.28 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M815 (σ = 0.96 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - Low Band - Mid Channel
Area Scan (8x21x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 48.9 V/m; Power Drift = -0.189 dB
Peak SAR (extrapolated) = 3.6 W/kg
SAR(1 g) = 2.81 mW/g; SAR(10 g) = 2.07 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Body-Worn Accessories: Leather Belt-Loop (P/N: KRY1011609/1) & Swivel-Mount Clip (P/N: KRY1011608/3), Speaker-Microphone (P/N: KRY1011617/183)

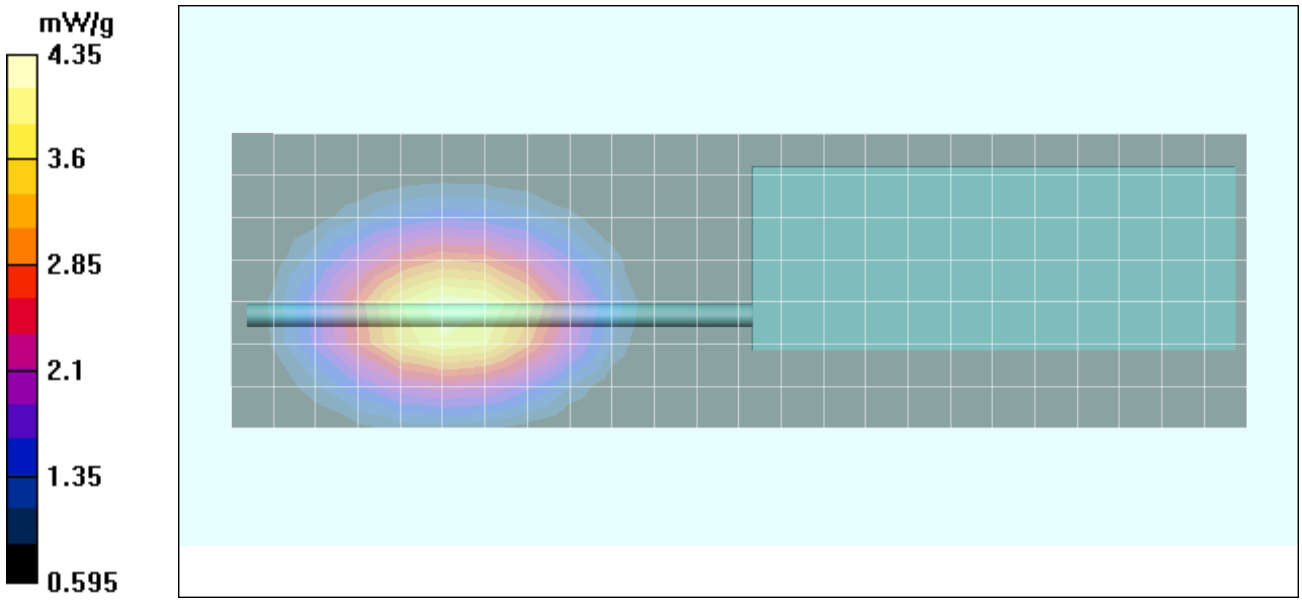
Ambient Temp: 23.3 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

Communication System: FM
RF Output Power: 3.30 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.96 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - Low Band - Mid Channel
Area Scan (8x25x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = -0.486 dB
Peak SAR (extrapolated) = 5.35 W/kg
SAR(1 g) = 4.14 mW/g; SAR(10 g) = 3.01 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.5 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

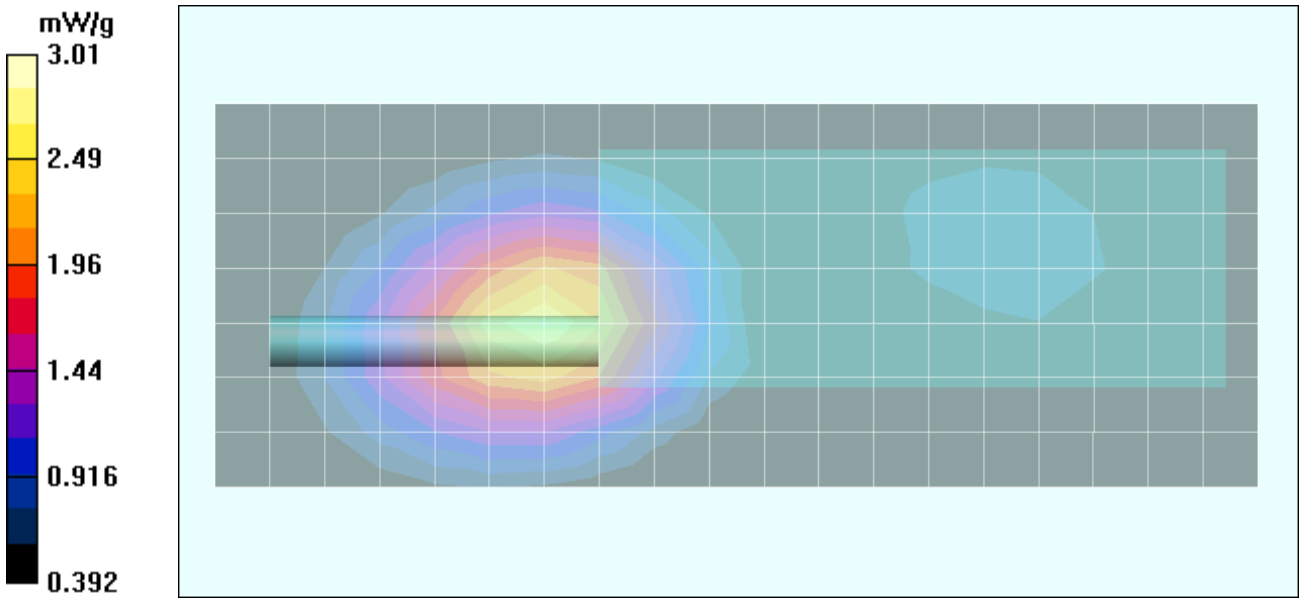
Body-Worn Accessories: Leather Belt-Loop (P/N: KRY1011609/1) & Swivel-Mount Clip (P/N: KRY1011608/3), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.10 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.02 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - High Band - Mid Channel
Area Scan (8x20x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 51.8 V/m; Power Drift = 0.110 dB
Peak SAR (extrapolated) = 3.89 W/kg
SAR(1 g) = 2.99 mW/g; SAR(10 g) = 2.15 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.5 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

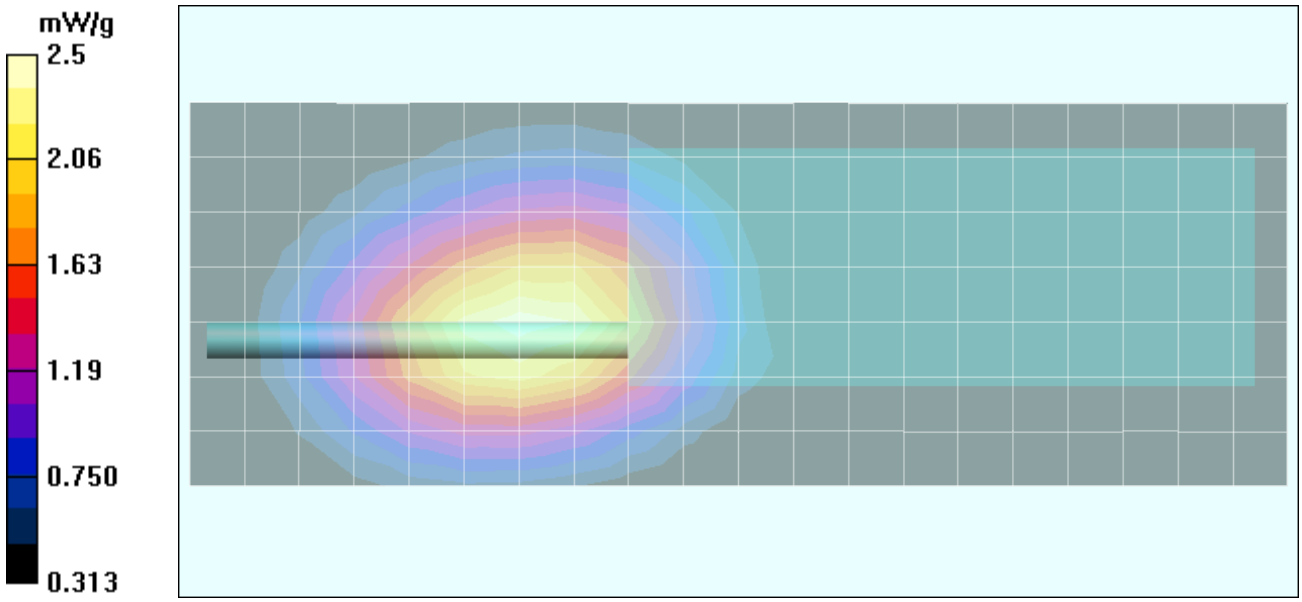
Body-Worn Accessories: Leather Belt-Loop (P/N: KRY1011609/1) & Swivel-Mount Clip (P/N: KRY1011608/3), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.09 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.02 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - High Band - Mid Channel
Area Scan (8x21x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 43.6 V/m; Power Drift = -0.0908 dB
Peak SAR (extrapolated) = 3.22 W/kg
SAR(1 g) = 2.49 mW/g; SAR(10 g) = 1.8 mW/g



Body-Worn SAR - High Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.5 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

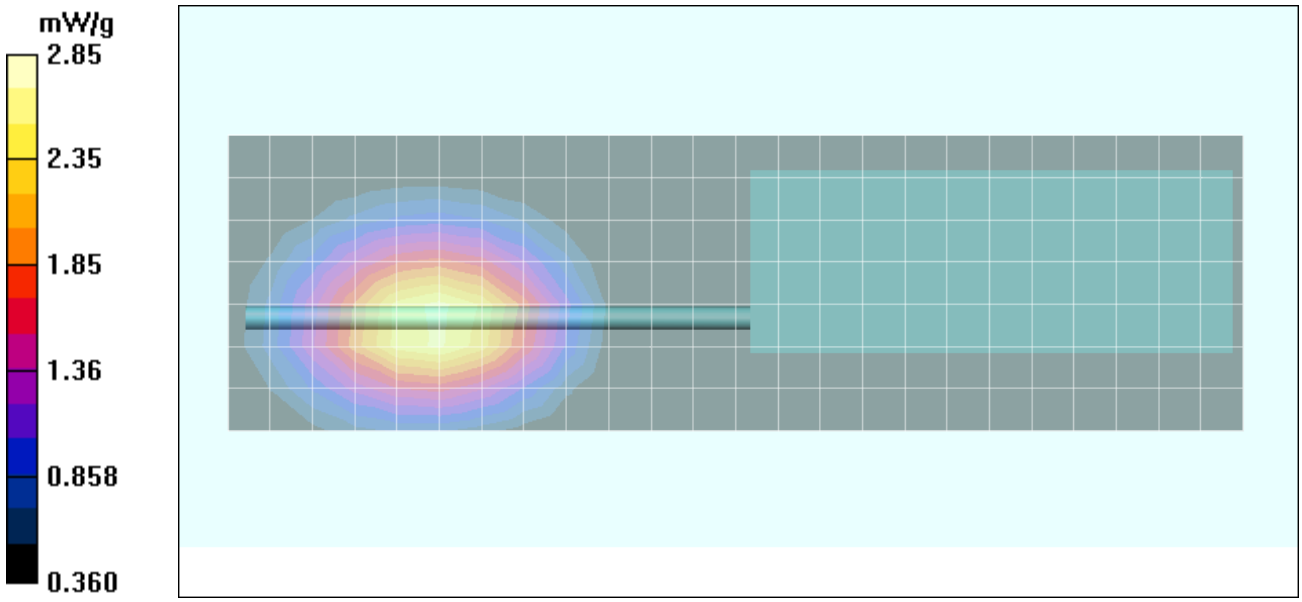
Body-Worn Accessories: Leather Belt-Loop (P/N: KRY1011609/1) & Swivel-Mount Clip (P/N: KRY1011608/3), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.13 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M861 (σ = 1.02 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - High Band - Mid Channel
Area Scan (8x25x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 3.3 cm Leather Belt-Loop & Swivel Mount-Clip Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.128 dB
Peak SAR (extrapolated) = 3.66 W/kg
SAR(1 g) = 2.83 mW/g; SAR(10 g) = 2.05 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

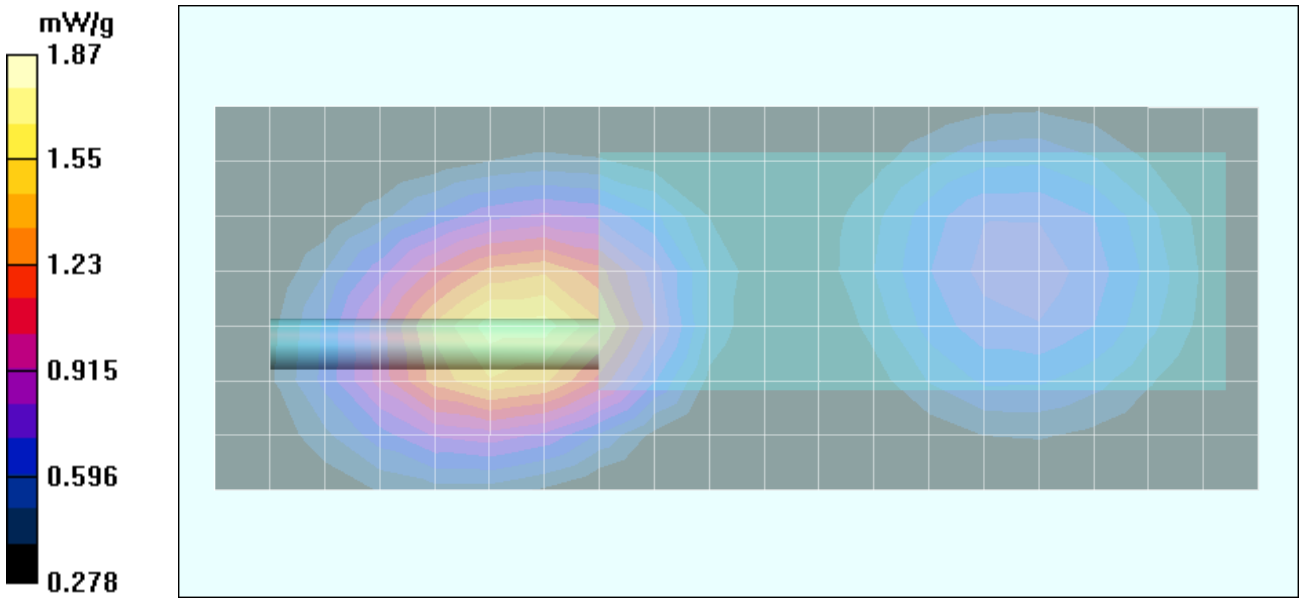
Body-Worn Accessories: Nylon Case (P/N: KRY1011648/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.25 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Area Scan (8x20x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 42.2 V/m; Power Drift = -0.772 dB
Peak SAR (extrapolated) = 2.29 W/kg
SAR(1 g) = 1.77 mW/g; SAR(10 g) = 1.3 mW/g



Body-Worn SAR - Low Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

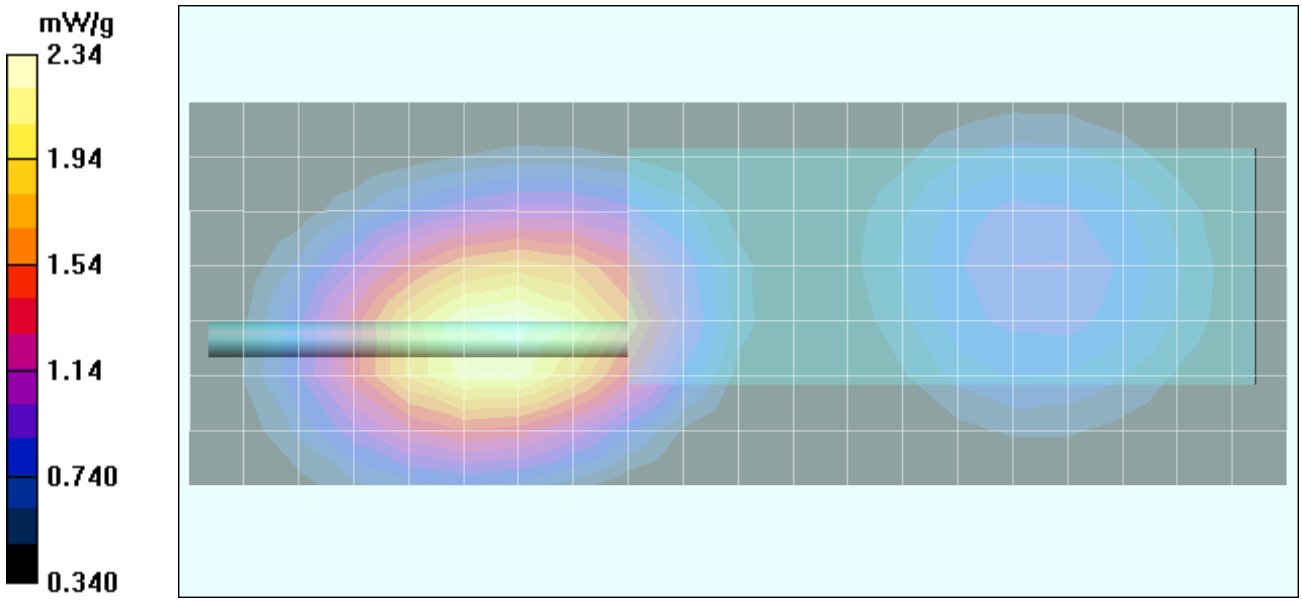
Body-Worn Accessories: Nylon Case (P/N: KRY1011648/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.24 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Area Scan (8x21x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 44 V/m; Power Drift = -0.806 dB
Peak SAR (extrapolated) = 2.86 W/kg
SAR(1 g) = 2.22 mW/g; SAR(10 g) = 1.63 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

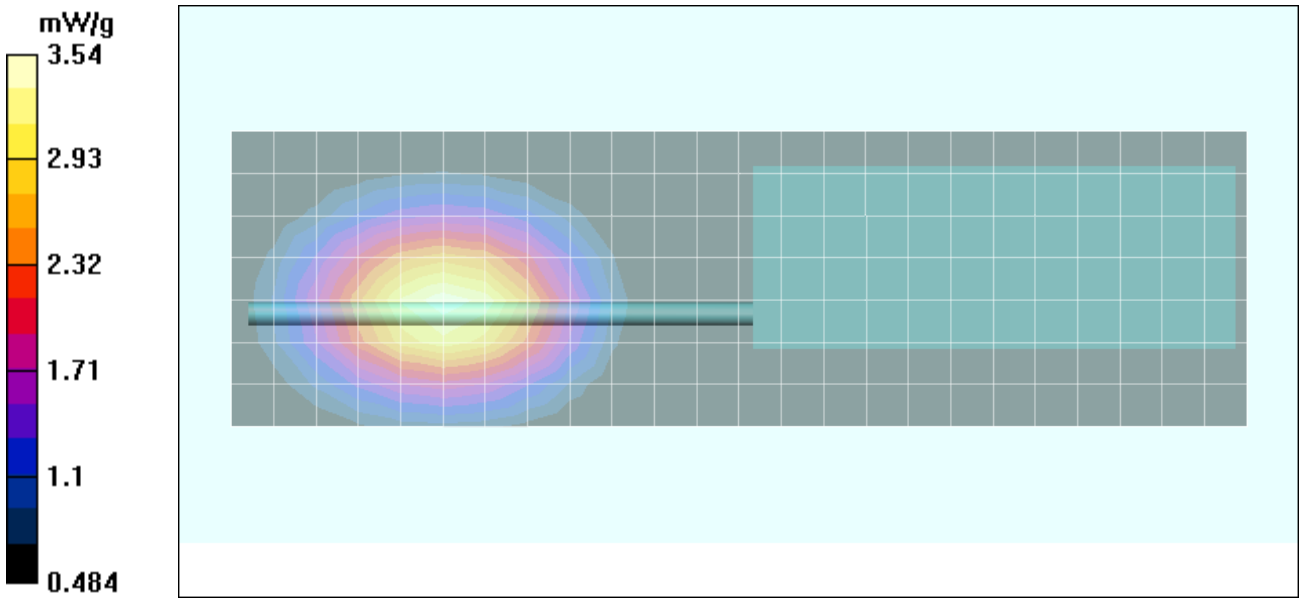
Body-Worn Accessories: Nylon Case (P/N: KRY1011648/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.24 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

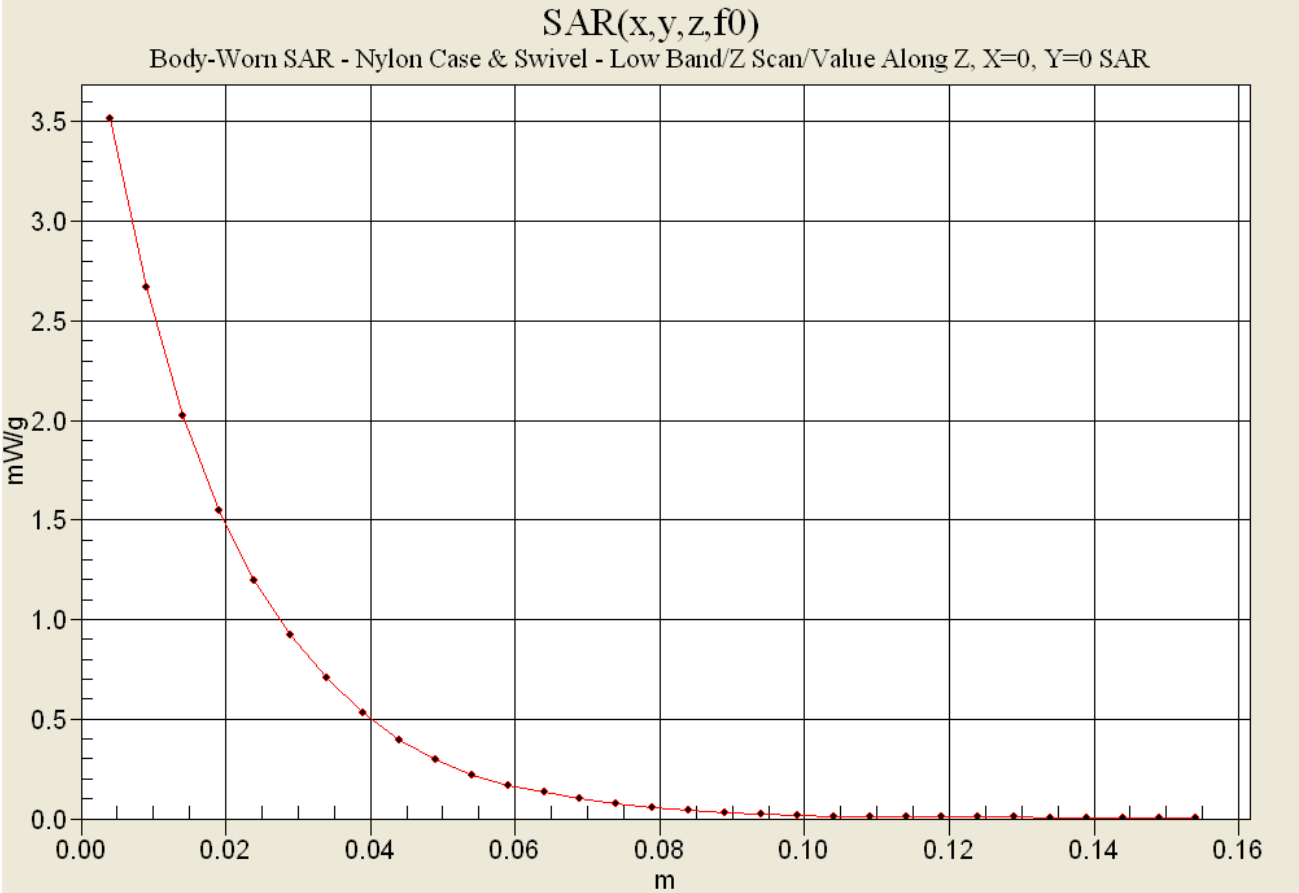
- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Area Scan (8x25x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.01 V/m; Power Drift = -0.716 dB
Peak SAR (extrapolated) = 4.33 W/kg
SAR(1 g) = 3.36 mW/g; SAR(10 g) = 2.47 mW/g



Z-Axis Scan


SAR(x,y,z,f0)
Body-Worn SAR - Nylon Case & Swivel - Low Band/Z Scan/Value Along Z, X=0, Y=0 SAR
mW/g
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Body-Worn SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

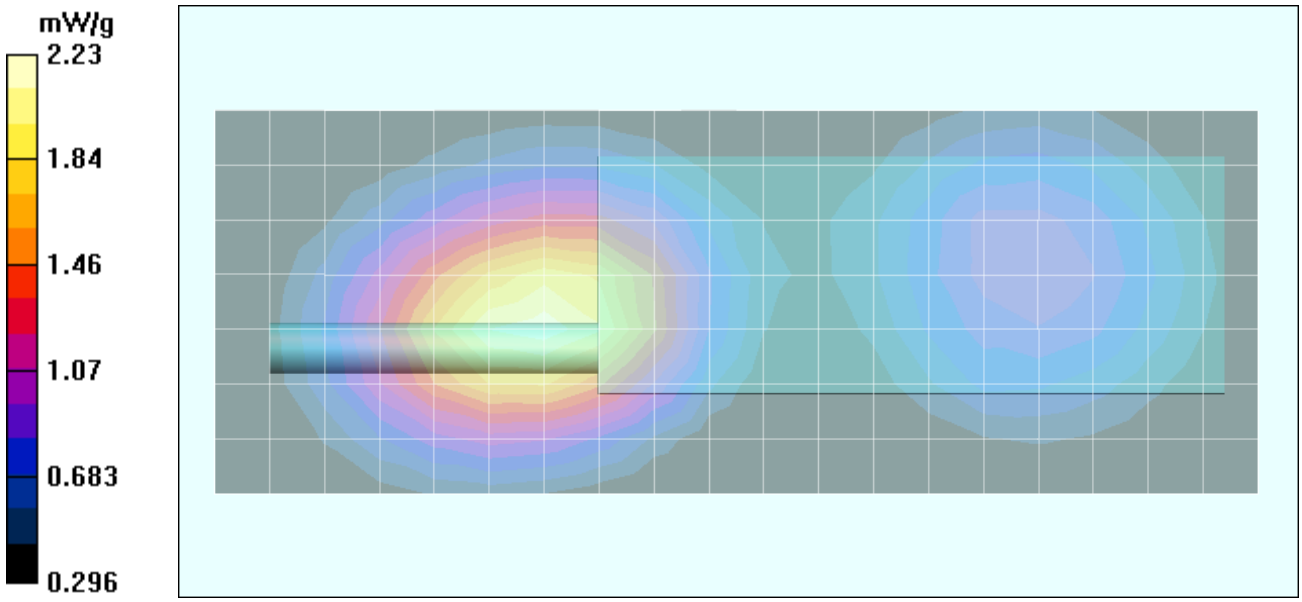
Body-Worn Accessories: Nylon Case (P/N: KRY1011648/1) & Leather Belt-Loop (P/N: KRY1011609/1)
Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Area Scan (8x20x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 42.9 V/m; Power Drift = -0.102 dB
Peak SAR (extrapolated) = 2.75 W/kg
SAR(1 g) = 2.10 mW/g; SAR(10 g) = 1.52 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

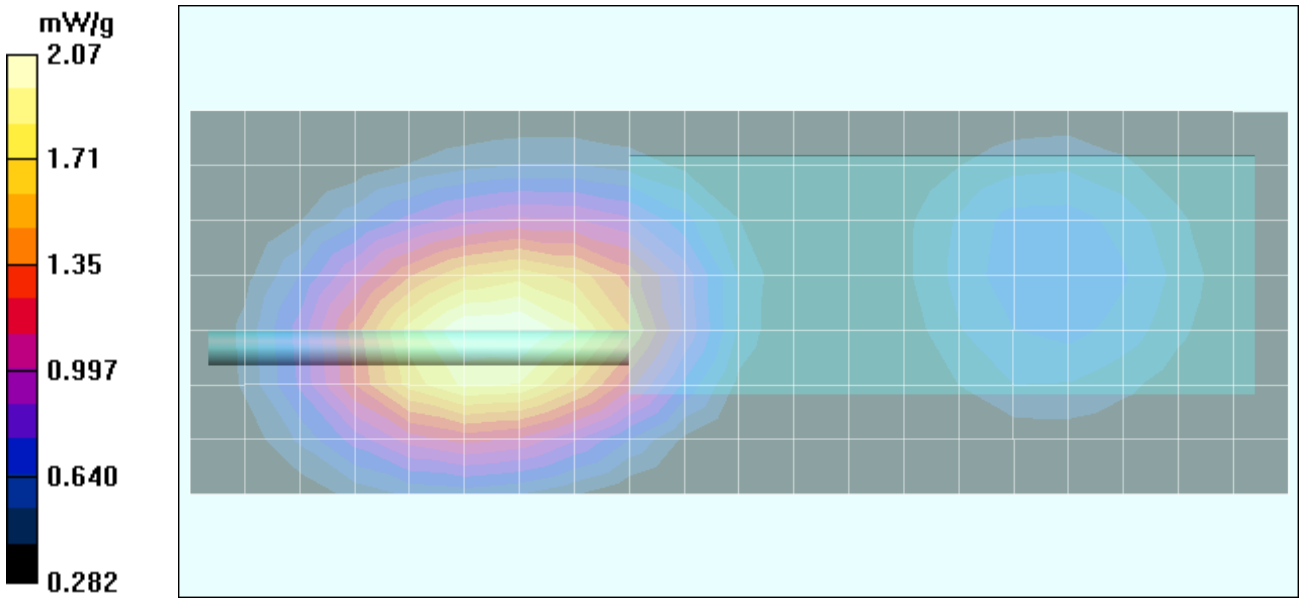
Body-Worn Accessories: Nylon Case (P/N: KRY1011648/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Area Scan (8x21x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 37.3 V/m; Power Drift = -0.0642 dB
Peak SAR (extrapolated) = 2.53 W/kg
SAR(1 g) = 1.95 mW/g; SAR(10 g) = 1.42 mW/g



Body-Worn SAR - High Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

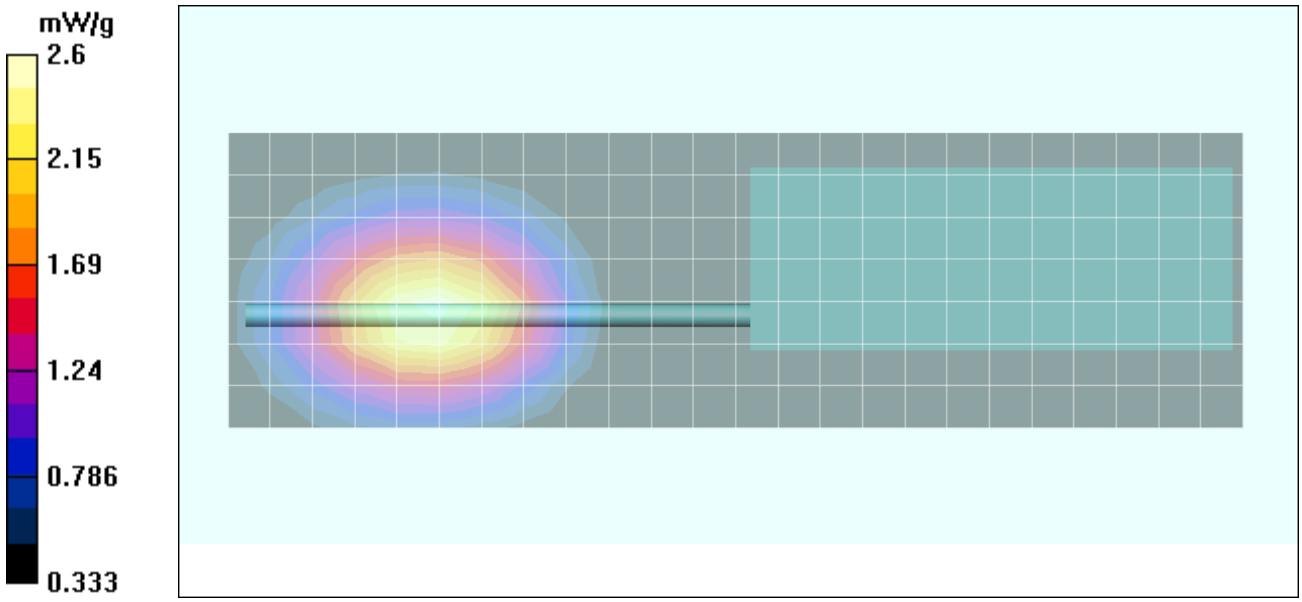
Body-Worn Accessories: Nylon Case (P/N: KRY1011648/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Area Scan (8x25x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.0 cm Nylon Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 10 V/m; Power Drift = 0.0618 dB
Peak SAR (extrapolated) = 3.2 W/kg
SAR(1 g) = 2.47 mW/g; SAR(10 g) = 1.8 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

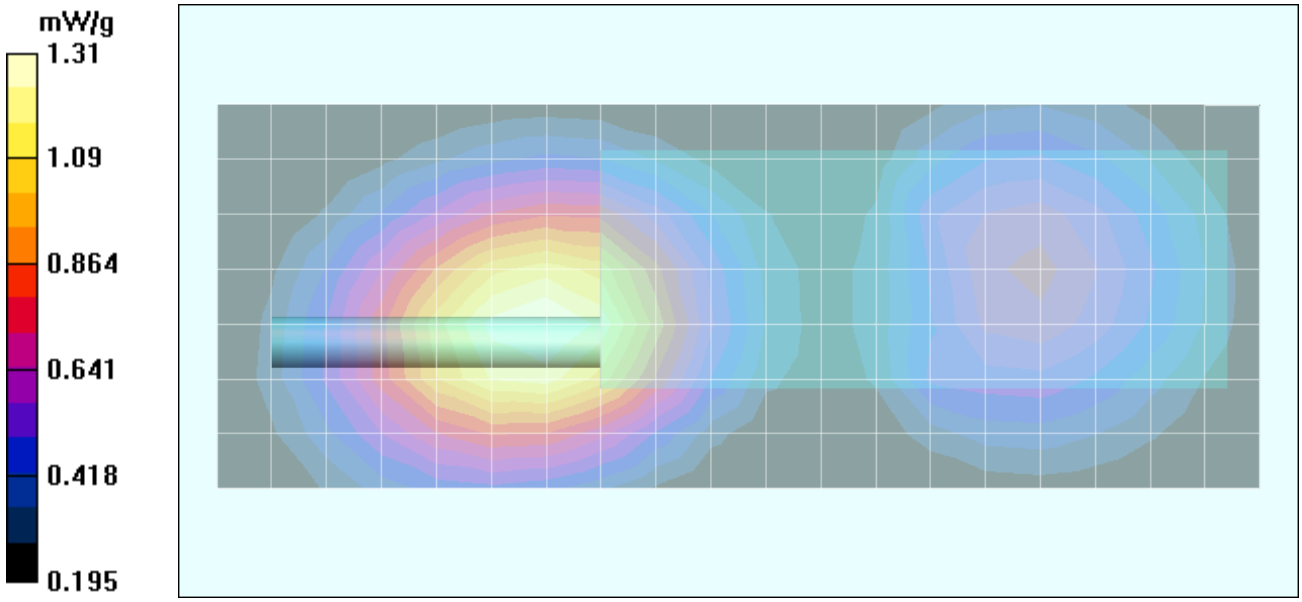
Body-Worn Accessories: Leather Case (P/N: KRY1011639/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.24 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Area Scan (8x20x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36 V/m; Power Drift = -0.666 dB
Peak SAR (extrapolated) = 1.59 W/kg
SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.914 mW/g



Body-Worn SAR - Low Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

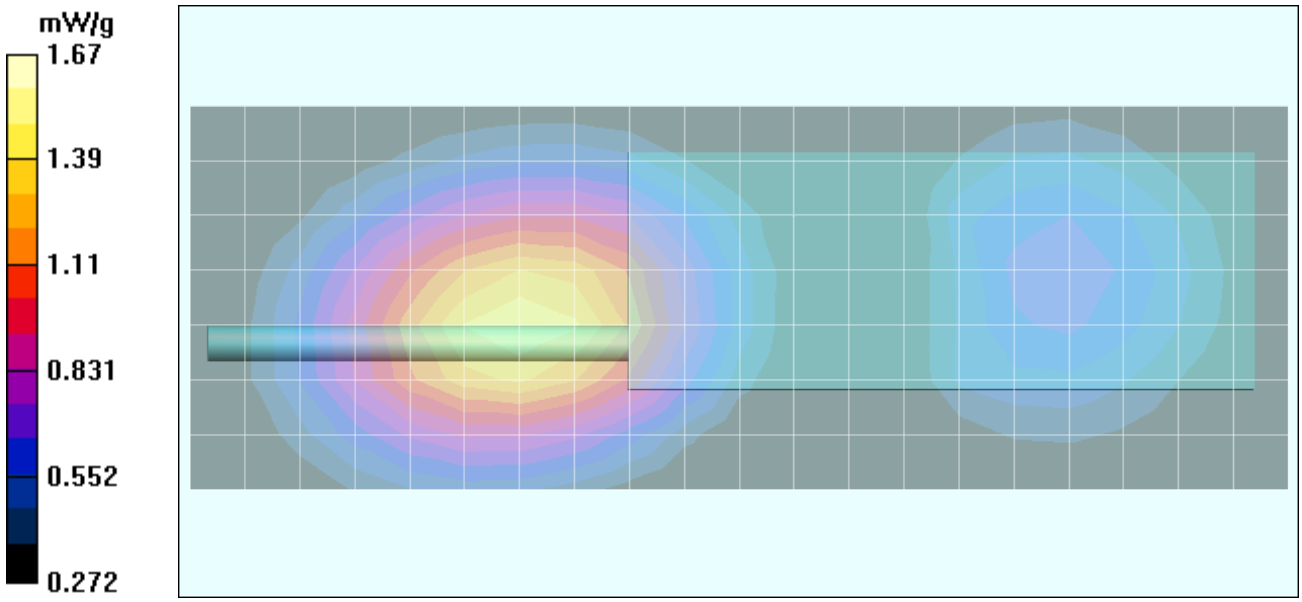
Body-Worn Accessories: Leather Case (P/N: KRY1011639/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.23 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Area Scan (8x21x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 38.2 V/m; Power Drift = -0.566 dB
Peak SAR (extrapolated) = 2.02 W/kg
SAR(1 g) = 1.59 mW/g; SAR(10 g) = 1.18 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

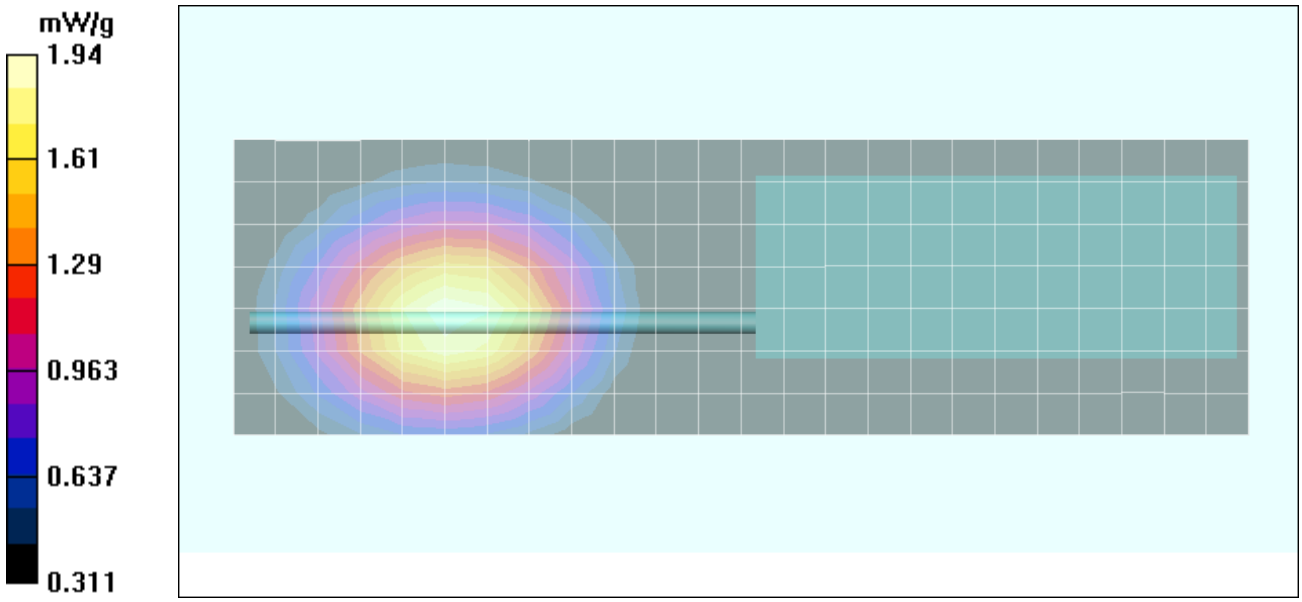
Body-Worn Accessories: Leather Case (P/N: KRY1011639/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.25 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Area Scan (8x25x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 6.92 V/m; Power Drift = -0.987 dB
Peak SAR (extrapolated) = 2.33 W/kg
SAR(1 g) = 1.84 mW/g; SAR(10 g) = 1.37 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

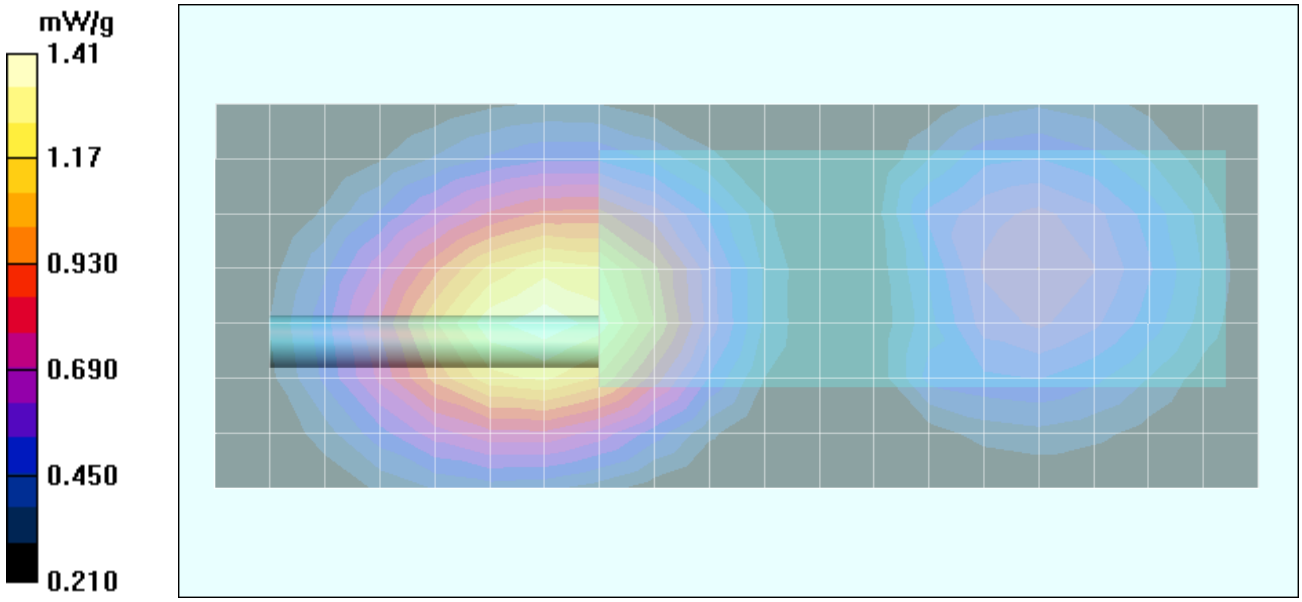
Body-Worn Accessories: Leather Case (P/N: KRY1011639/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Area Scan (8x20x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 36.3 V/m; Power Drift = -0.0926 dB
Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 1.33 mW/g; SAR(10 g) = 0.975 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

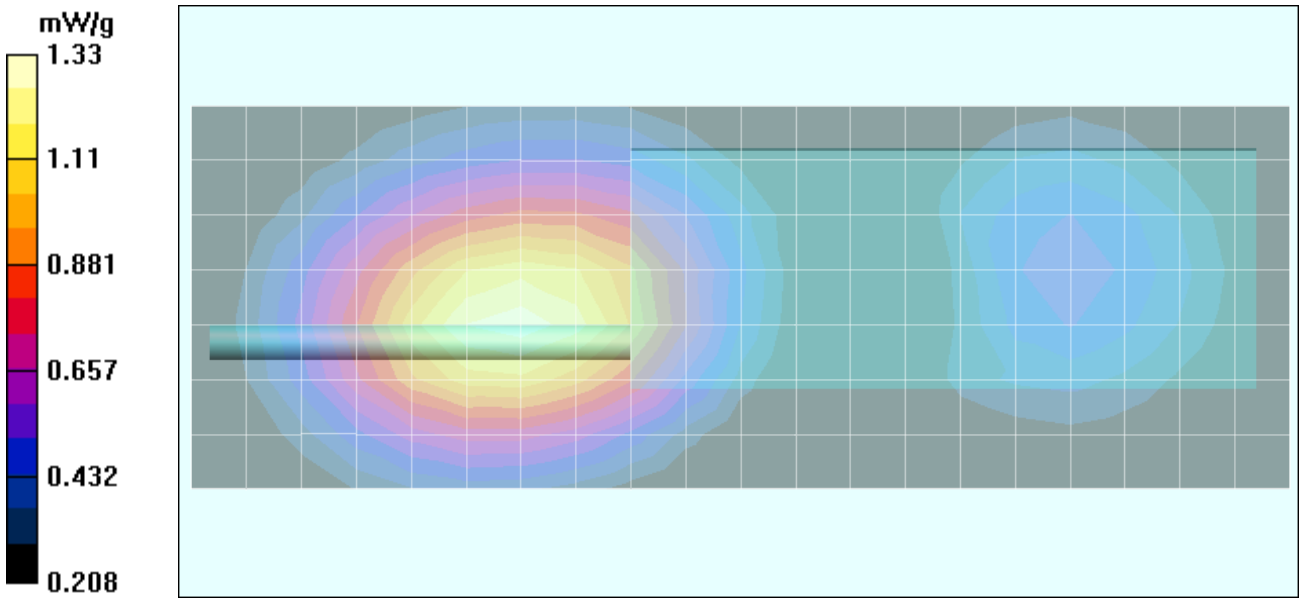
Body-Worn Accessories: Leather Case (P/N: KRY1011639/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Area Scan (8x21x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 31.8 V/m; Power Drift = -0.0746 dB
Peak SAR (extrapolated) = 1.63 W/kg
SAR(1 g) = 1.26 mW/g; SAR(10 g) = 0.924 mW/g



Body-Worn SAR - High Band - NiMH IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/20/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.6 °C; Fluid Temp: 21.9 °C; Barometric Pressure: 102.3 kPa; Humidity: 37%

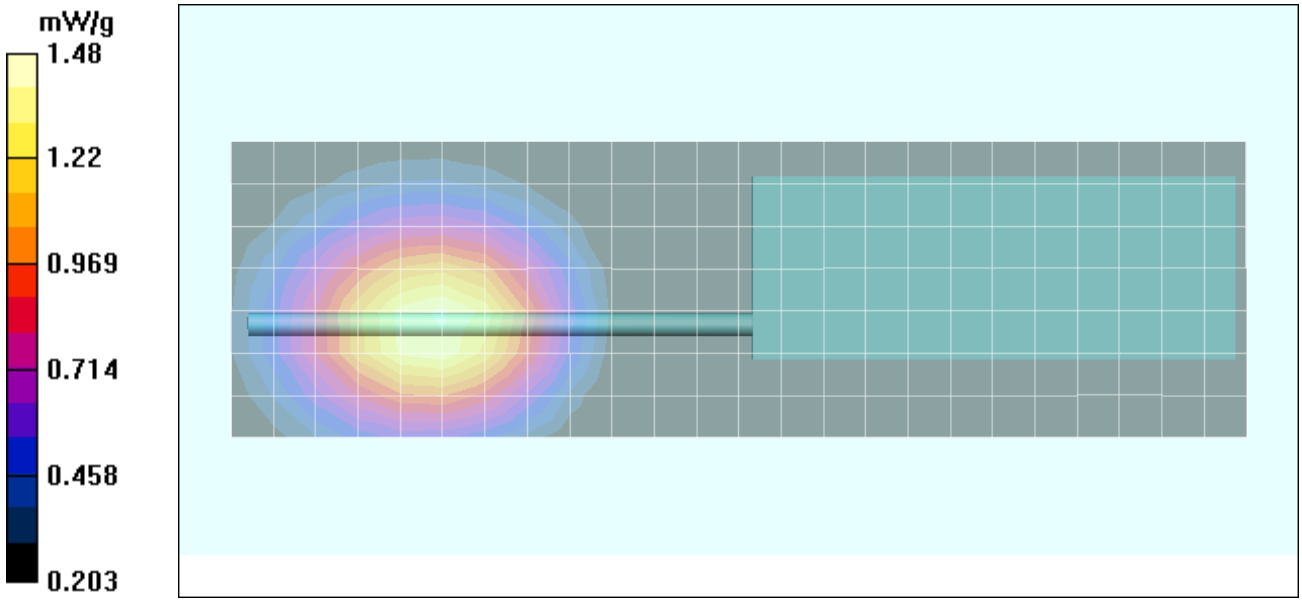
Body-Worn Accessories: Leather Case (P/N: KRY1011639/1) & Leather Belt-Loop (P/N: KRY1011609/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Area Scan (8x25x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 4.2 cm Leather Case & Leather-Belt-Loop Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 5.52 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 1.40 mW/g; SAR(10 g) = 1.03 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.3 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

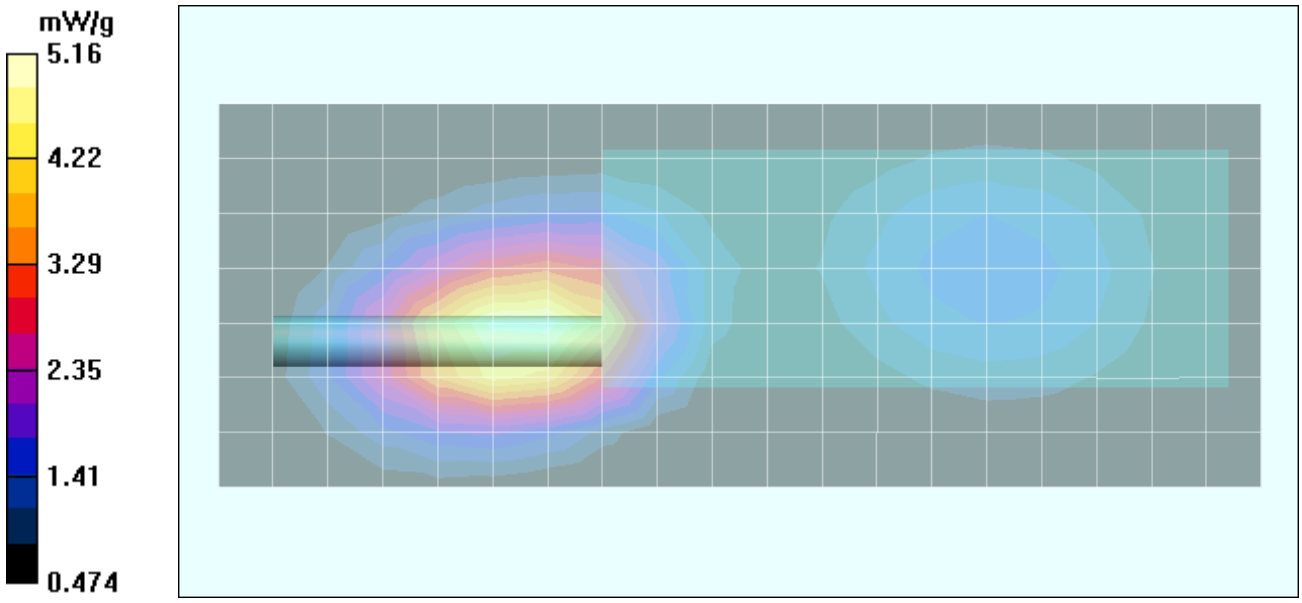
Body-Worn Accessories: Nylon T-Strap Holder (P/N: KRY1011656/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.28 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.96 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.6 cm Nylon T-Strap Holder Separation Distance - Low Band - Mid Channel
Area Scan (8x20x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.6 cm Nylon T-Strap Holder Separation Distance - Low Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 61.4 V/m; Power Drift = -0.770 dB
Peak SAR (extrapolated) = 6.45 W/kg
SAR(1 g) = 4.78 mW/g; SAR(10 g) = 3.31 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: Portable FM PTT Radio Transceiver (P/N: RU101219V72); Serial: T1-PP27

Ambient Temp: 23.5 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

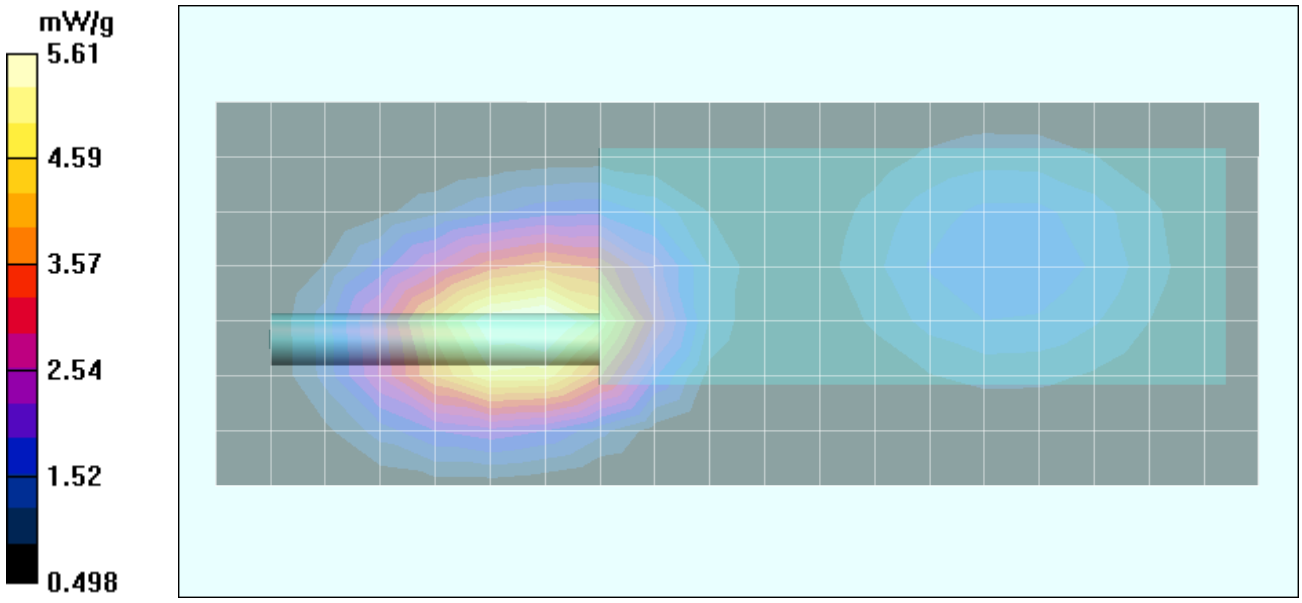
Body-Worn Accessories: Nylon T-Strap Holder (P/N: KRY1011656/1), Speaker-Microphone (P/N: KRY1011617/183)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.02 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

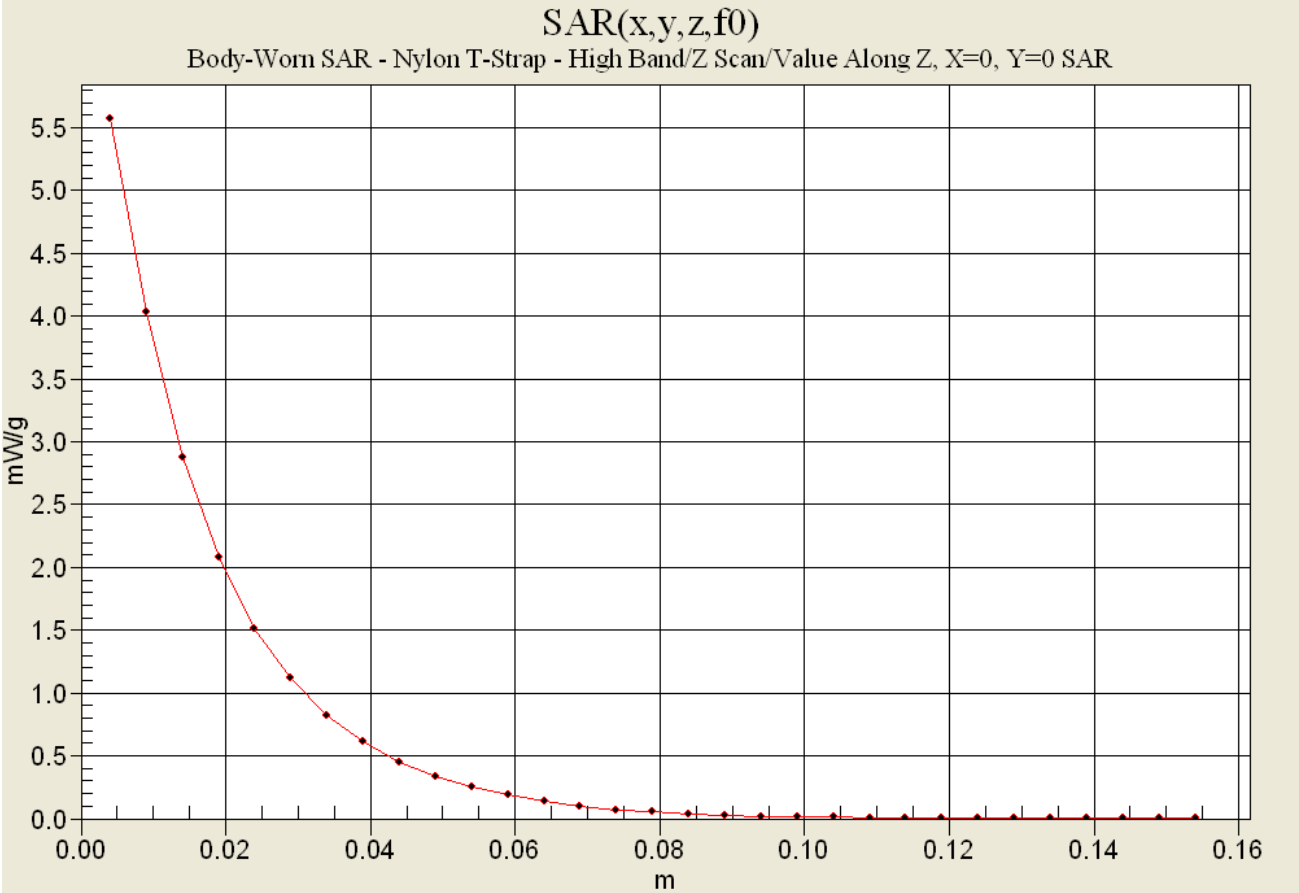
- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.6 cm Nylon T-Strap Holder Separation Distance - High Band - Mid Channel
Area Scan (8x20x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.6 cm Nylon T-Strap Holder Separation Distance - High Band - Mid Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 60.5 V/m; Power Drift = -0.0826 dB
Peak SAR (extrapolated) = 7.42 W/kg
SAR(1 g) = 5.51 mW/g; SAR(10 g) = 3.81 mW/g



Z-Axis Scan


SAR(x,y,z,f0)
Body-Worn SAR - Nylon T-Strap - High Band/Z Scan/Value Along Z, X=0, Y=0 SAR
mW/g
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Body-Worn SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

Ambient Temp: 23.3 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

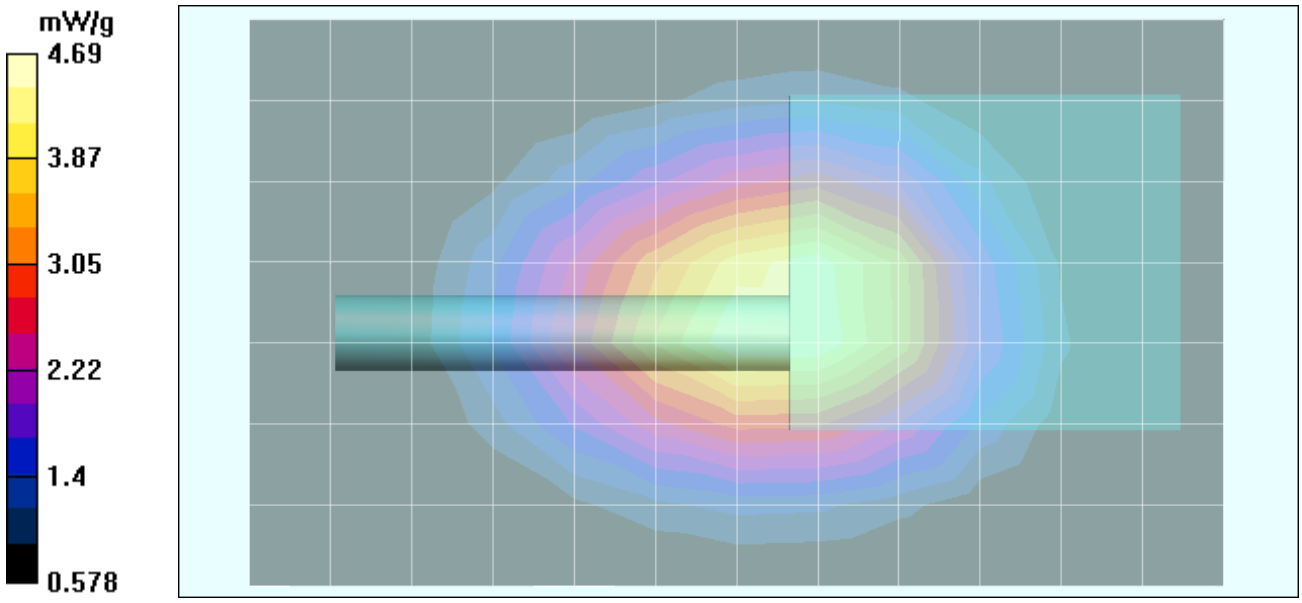
Body-Worn Accessories: Lapel-Clip

Communication System: FM
RF Output Power: 3.28 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M815 (σ = 0.96 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 70 V/m; Power Drift = -0.0626 dB
Peak SAR (extrapolated) = 5.73 W/kg
SAR(1 g) = 4.39 mW/g; SAR(10 g) = 3.14 mW/g



Body-Worn SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

Ambient Temp: 23.3 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

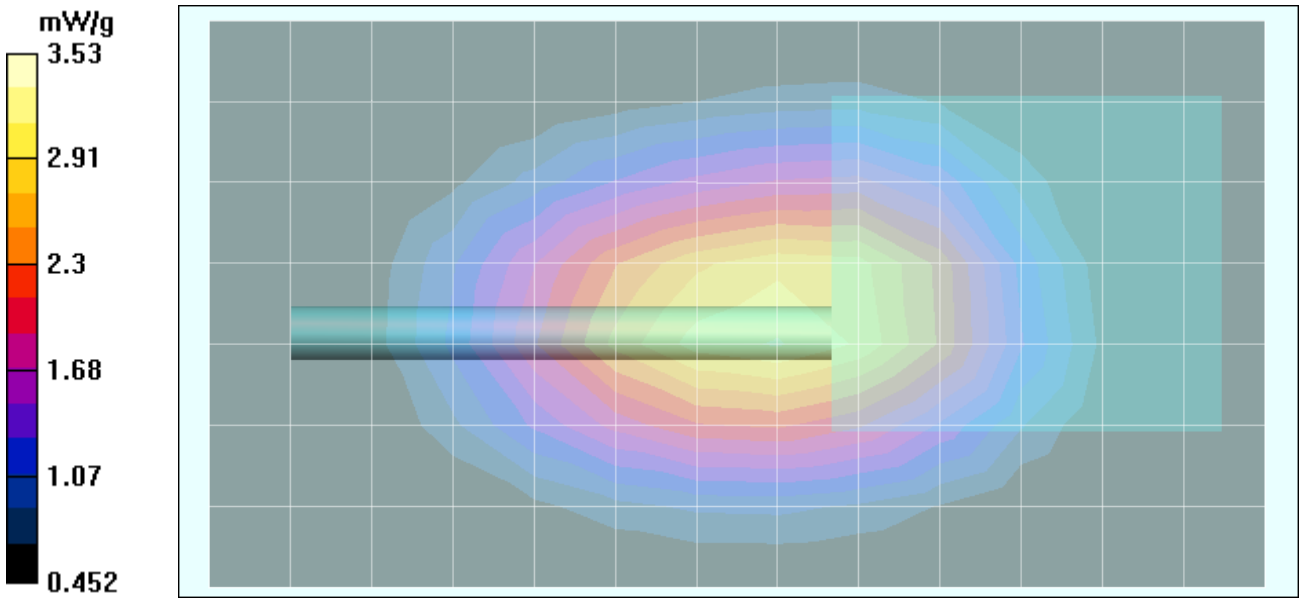
Body-Worn Accessories: Lapel-Clip

Communication System: FM
RF Output Power: 3.30 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M815 (σ = 0.96 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 59.3 V/m; Power Drift = -0.0571 dB
Peak SAR (extrapolated) = 4.36 W/kg
SAR(1 g) = 3.31 mW/g; SAR(10 g) = 2.37 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

Ambient Temp: 23.3 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

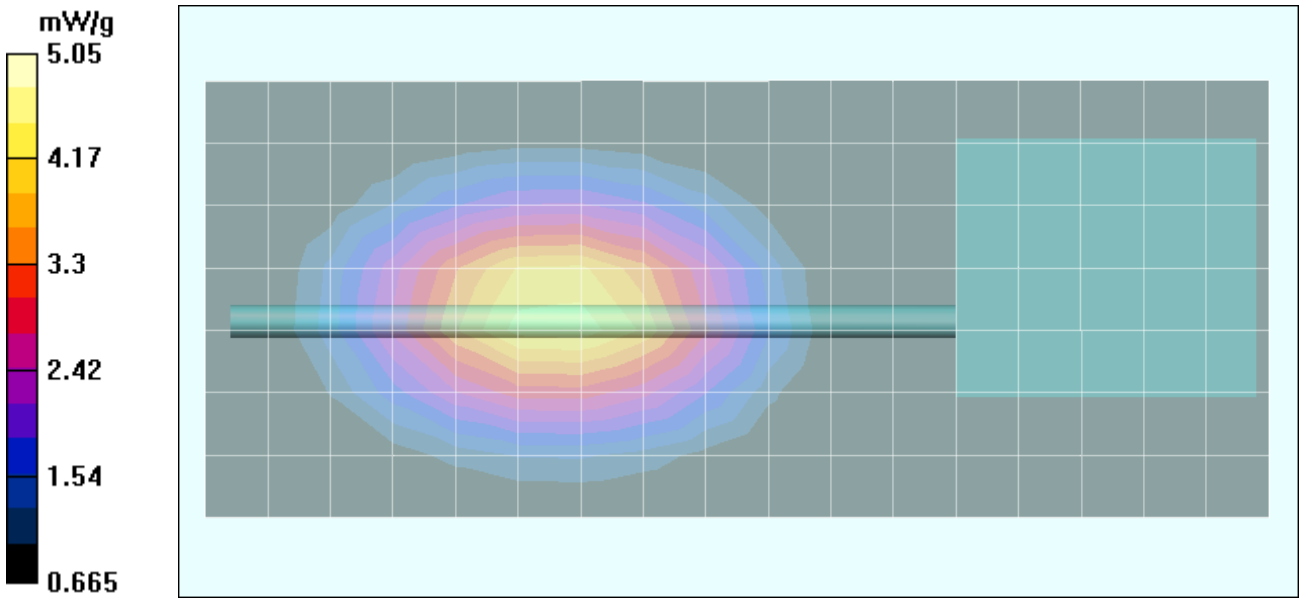
Body-Worn Accessories: Lapel-Clip

Communication System: FM
RF Output Power: 3.30 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815 (σ = 0.96 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x18x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 14.5 V/m; Power Drift = -0.494 dB
Peak SAR (extrapolated) = 6.25 W/kg
SAR(1 g) = 4.74 mW/g; SAR(10 g) = 3.38 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

Ambient Temp: 23.5 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

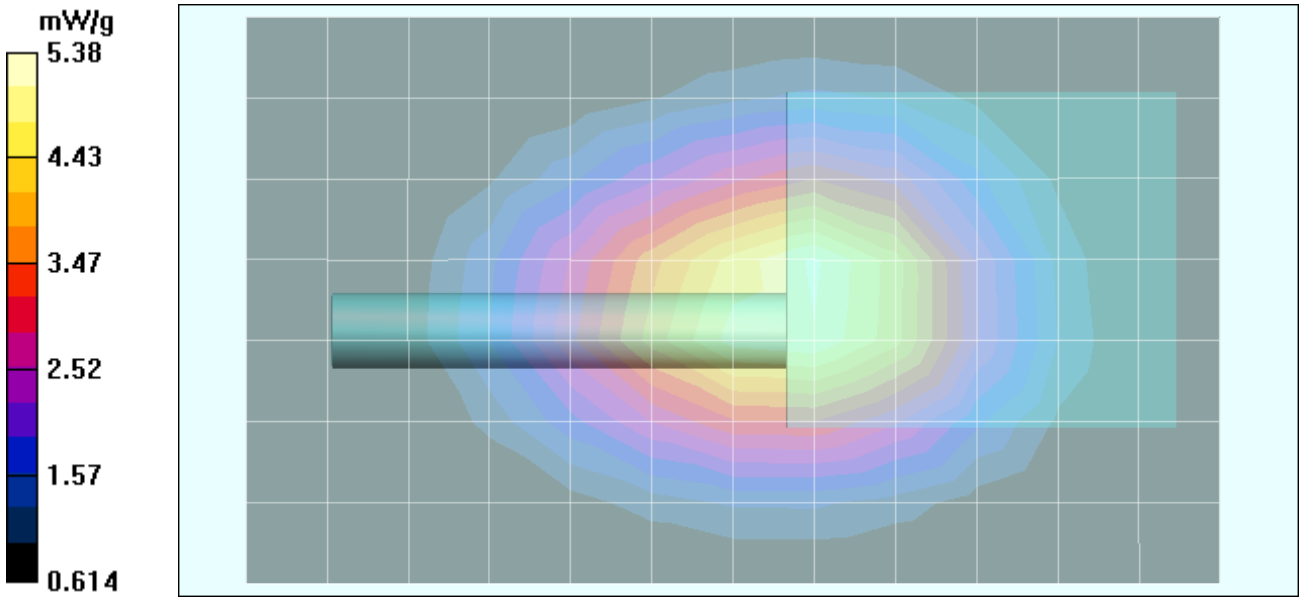
Body-Worn Accessories: Lapel-Clip

Communication System: FM
RF Output Power: 3.09 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.02 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x13x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Reference Value = 75 V/m; Power Drift = -0.0335 dB
Peak SAR (extrapolated) = 7.05 W/kg
SAR(1 g) = 5.33 mW/g; SAR(10 g) = 3.78 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

Ambient Temp: 23.5 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

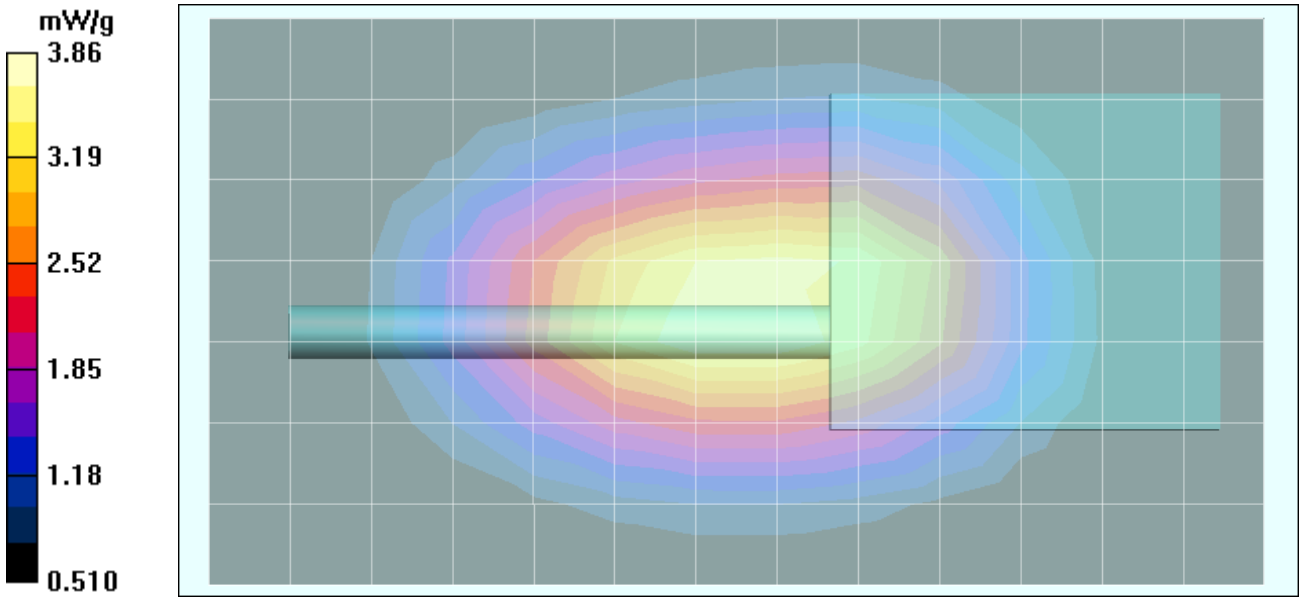
Body-Worn Accessories: Lapel-Clip

Communication System: FM
RF Output Power: 3.09 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.02 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Reference Value = 62.5 V/m; Power Drift = -0.0559 dB
Peak SAR (extrapolated) = 5.05 W/kg
SAR(1 g) = 3.82 mW/g; SAR(10 g) = 2.72 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/19/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version (P/N: KRY1011617/184)

Ambient Temp: 23.5 °C; Fluid Temp: 22.1 °C; Barometric Pressure: 102.3 kPa; Humidity: 38%

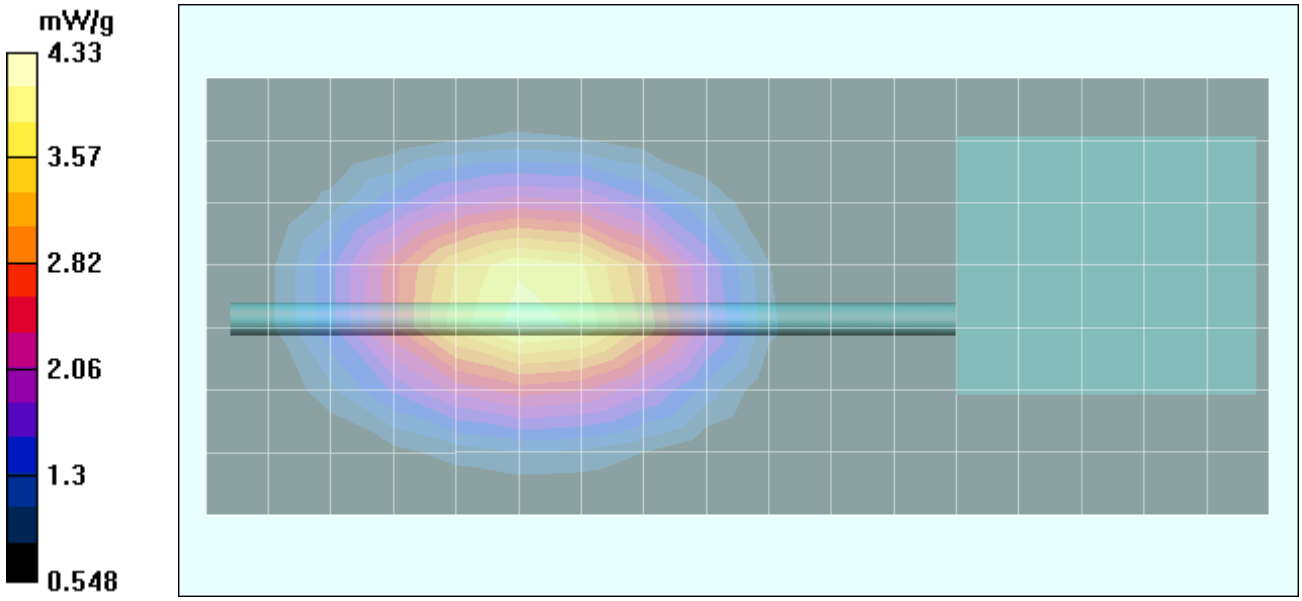
Body-Worn Accessories: Lapel-Clip

Communication System: FM
RF Output Power: 3.08 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.02 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x18x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Reference Value = 16.1 V/m; Power Drift = 0.188 dB
Peak SAR (extrapolated) = 5.66 W/kg
SAR(1 g) = 4.27 mW/g; SAR(10 g) = 3.02 mW/g



Body-Worn SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

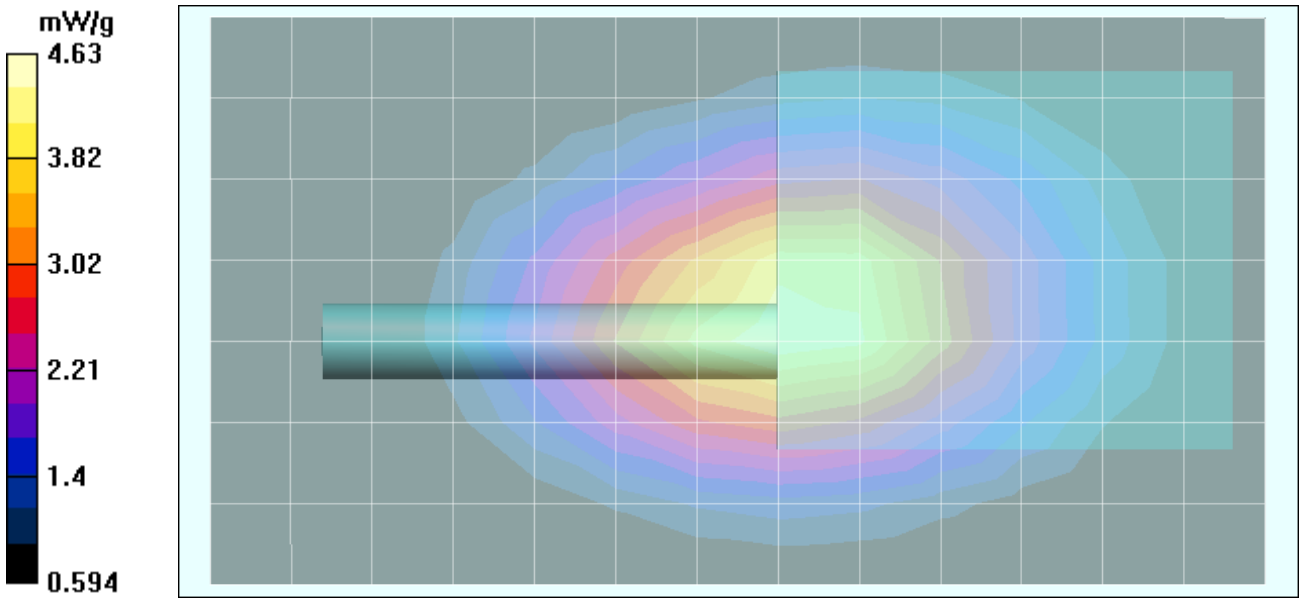
Body-Worn Accessories: Lapel-Clip, Ranger Headset (P/N: OT-V4-10421)

Communication System: FM
RF Output Power: 3.27 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67 V/m; Power Drift = -0.213 dB
Peak SAR (extrapolated) = 5.77 W/kg
SAR(1 g) = 4.33 mW/g; SAR(10 g) = 3.05 mW/g



Body-Worn SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

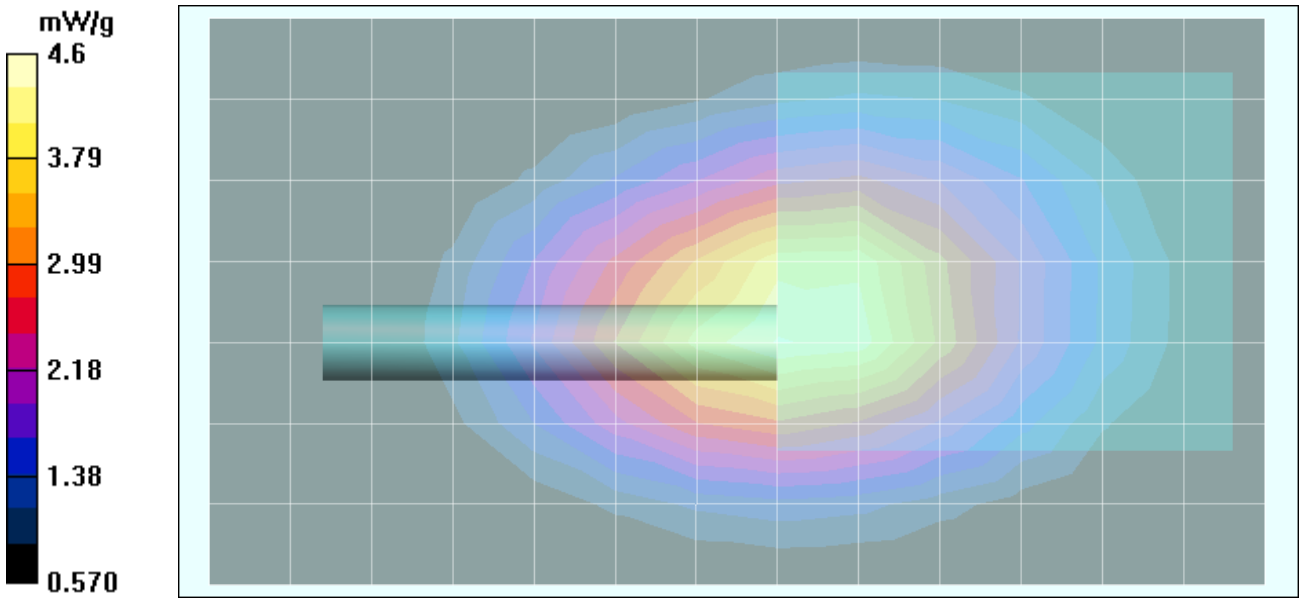
Body-Worn Accessories: Lapel-Clip, Behind-the-Head Headset (P/N: OT-V4-10450)

Communication System: FM
RF Output Power: 3.26 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67.2 V/m; Power Drift = -0.137 dB
Peak SAR (extrapolated) = 5.76 W/kg
SAR(1 g) = 4.33 mW/g; SAR(10 g) = 3.05 mW/g



Body-Worn SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

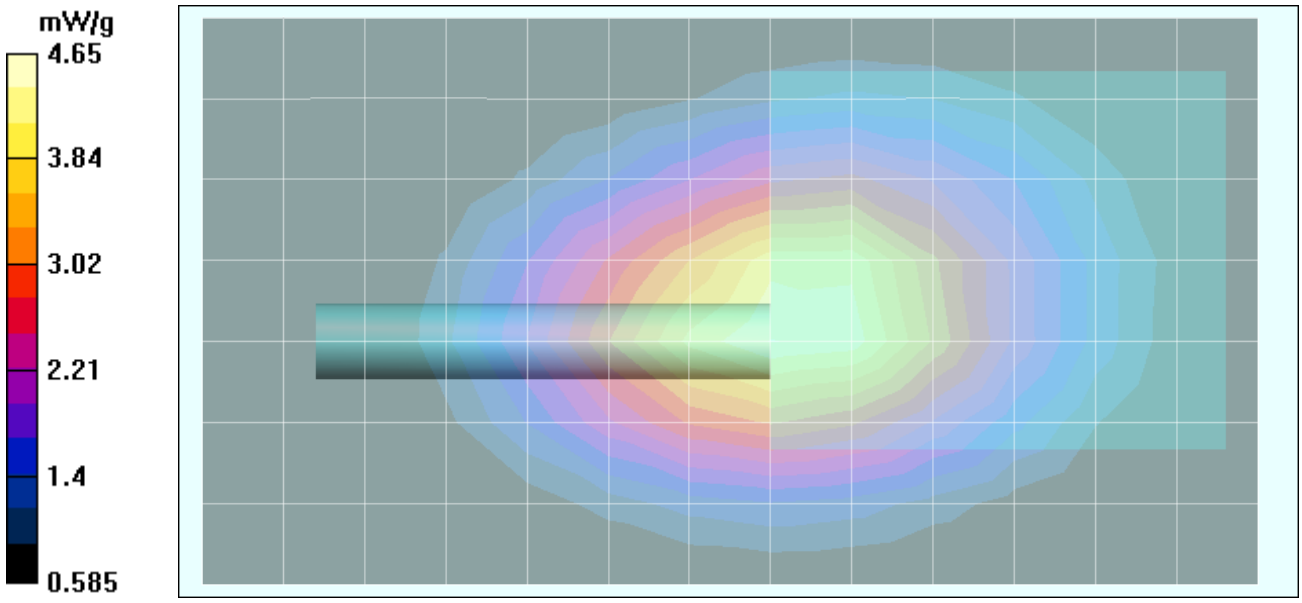
Body-Worn Accessories: Lapel-Clip, Skull Microphone (P/N: OT-V4-10428)

Communication System: FM
RF Output Power: 3.27 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67.2 V/m; Power Drift = -0.0772 dB
Peak SAR (extrapolated) = 5.85 W/kg
SAR(1 g) = 4.39 mW/g; SAR(10 g) = 3.1 mW/g



Body-Worn SAR - Low Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

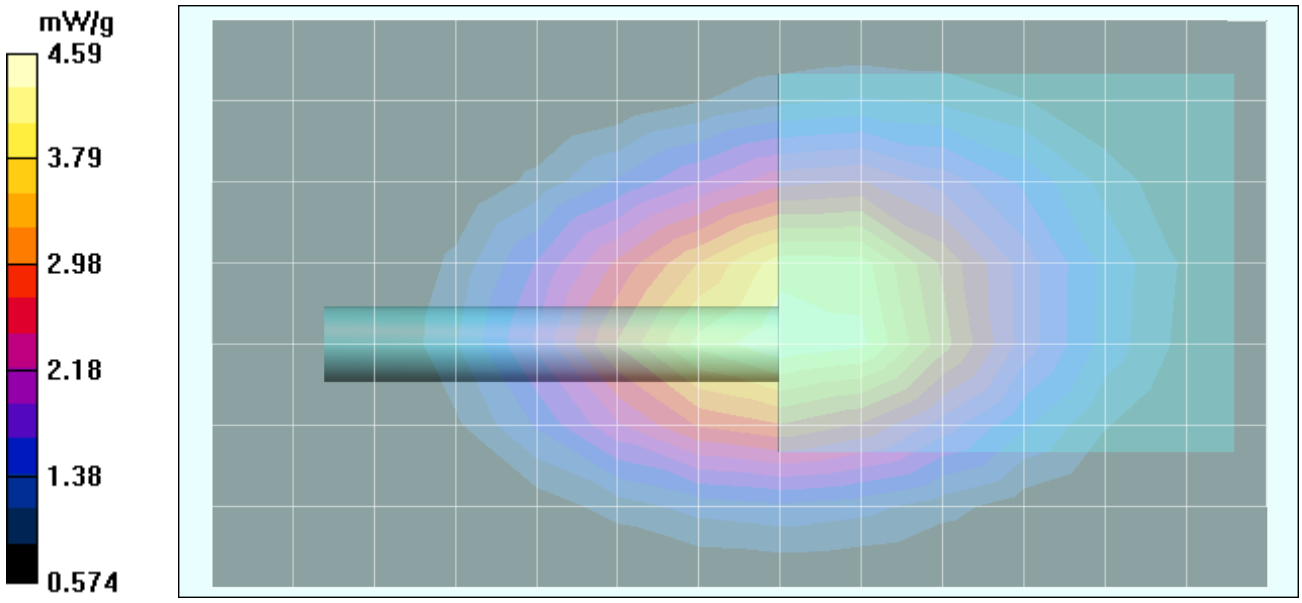
Body-Worn Accessories: Lapel-Clip, Throat Microphone (P/N: OT-V4-10656)

Communication System: FM
RF Output Power: 3.27 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67 V/m; Power Drift = -0.0827 dB
Peak SAR (extrapolated) = 5.74 W/kg
SAR(1 g) = 4.31 mW/g; SAR(10 g) = 3.05 mW/g



Body-Worn SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

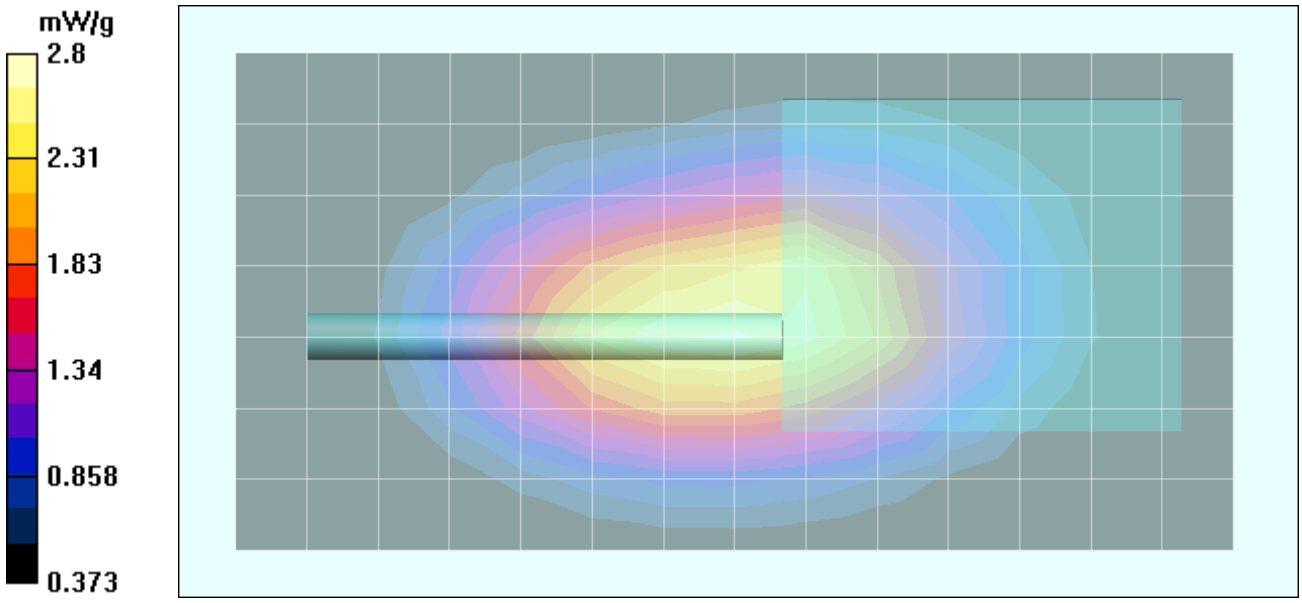
Body-Worn Accessories: Lapel-Clip, Ranger Headset (P/N: OT-V4-10421)

Communication System: FM
RF Output Power: 3.27 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 56 V/m; Power Drift = -0.668 dB
Peak SAR (extrapolated) = 3.48 W/kg
SAR(1 g) = 2.64 mW/g; SAR(10 g) = 1.91 mW/g



Body-Worn SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

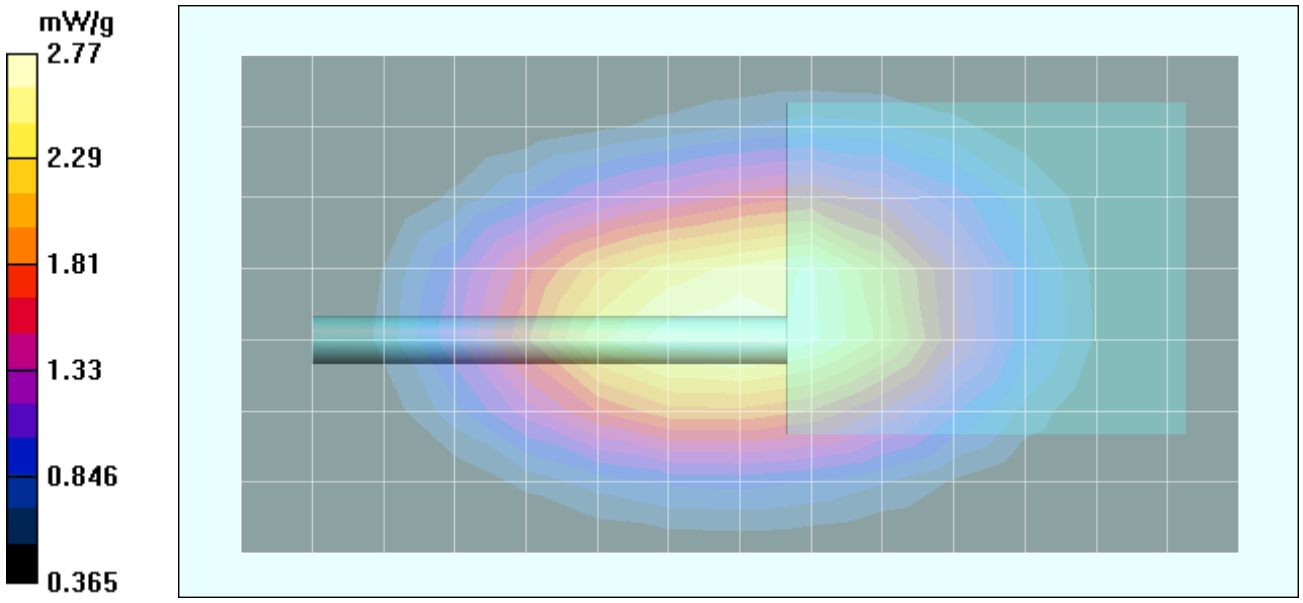
Body-Worn Accessories: Lapel-Clip, Behind-the-Head Headset (P/N: OT-V4-10450)

Communication System: FM
RF Output Power: 3.26 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 56 V/m; Power Drift = -0.597 dB
Peak SAR (extrapolated) = 3.44 W/kg
SAR(1 g) = 2.61 mW/g; SAR(10 g) = 1.89 mW/g



Body-Worn SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

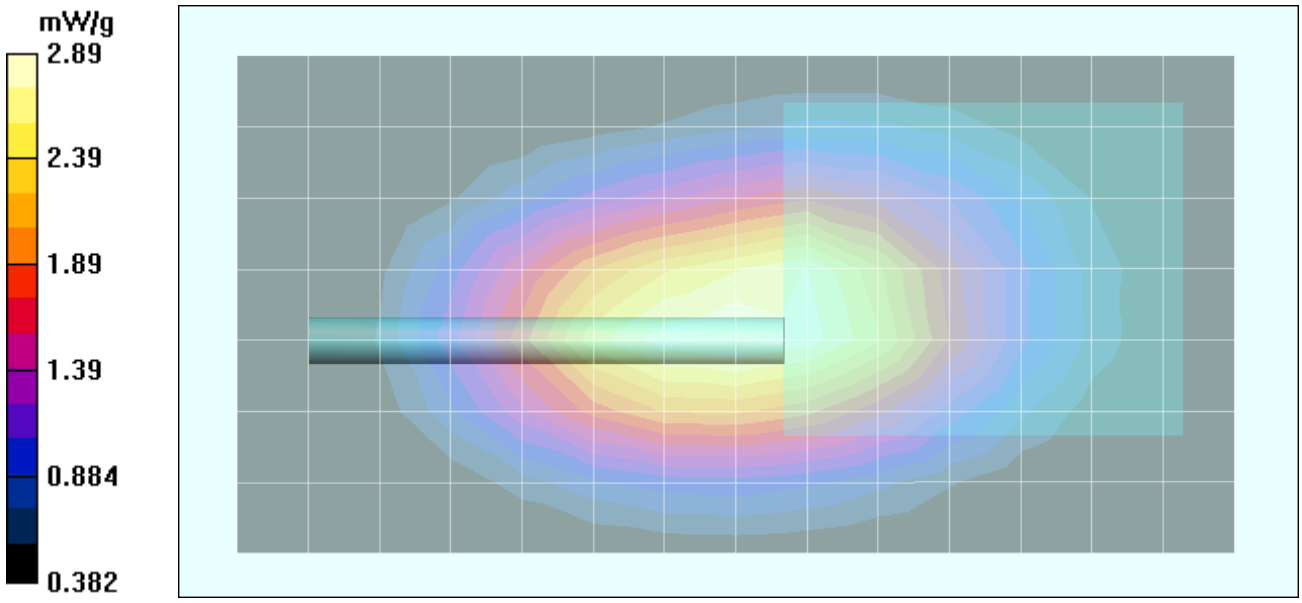
Body-Worn Accessories: Lapel-Clip, Skull Microphone (P/N: OT-V4-10428)

Communication System: FM
RF Output Power: 3.27 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 56.8 V/m; Power Drift = -0.697 dB
Peak SAR (extrapolated) = 3.58 W/kg
SAR(1 g) = 2.72 mW/g; SAR(10 g) = 1.97 mW/g



Body-Worn SAR - Low Band - NiMH IS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

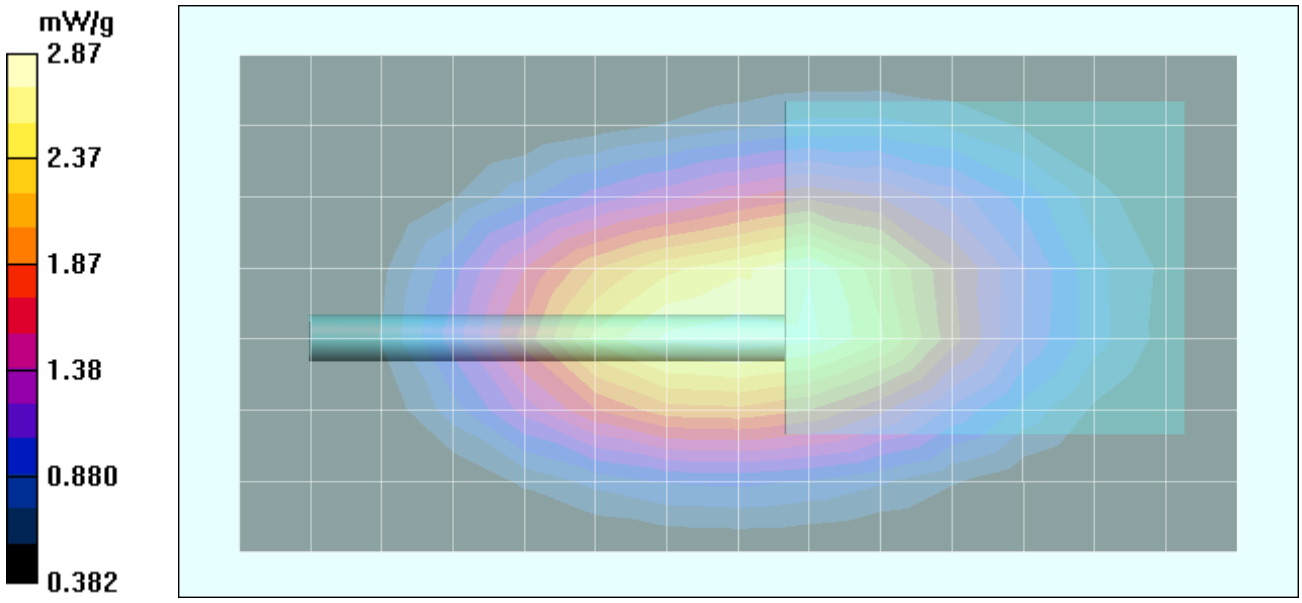
Body-Worn Accessories: Lapel-Clip, Throat Microphone (P/N: OT-V4-10656)

Communication System: FM
RF Output Power: 3.27 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Intrinsically Safe Battery (P/N: BKB191210/36)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 56.6 V/m; Power Drift = -0.698 dB
Peak SAR (extrapolated) = 3.58 W/kg
SAR(1 g) = 2.72 mW/g; SAR(10 g) = 1.97 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

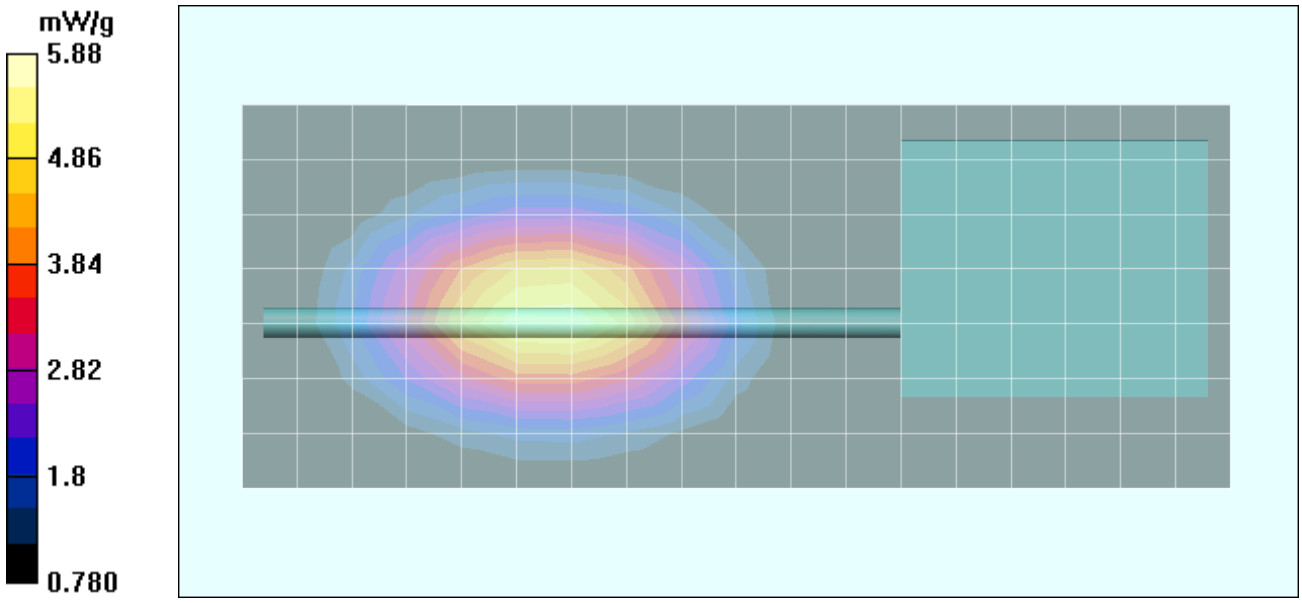
Body-Worn Accessories: Lapel-Clip, Ranger Headset (P/N: OT-V4-10421)

Communication System: FM
RF Output Power: 3.26 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 16.3 V/m; Power Drift = -0.570 dB
Peak SAR (extrapolated) = 7.3 W/kg
SAR(1 g) = 5.55 mW/g; SAR(10 g) = 3.97 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

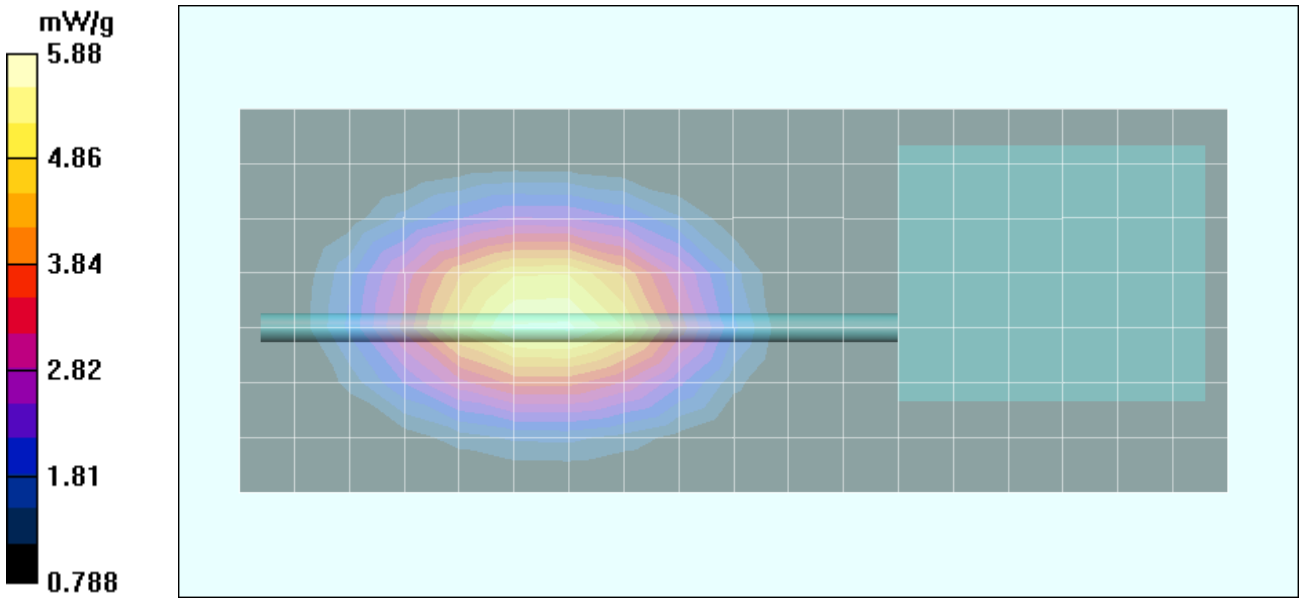
Body-Worn Accessories: Lapel-Clip, Behind-the-Head Headset (P/N: OT-V4-10450)

Communication System: FM
RF Output Power: 3.27 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = -0.556 dB
Peak SAR (extrapolated) = 7.28 W/kg
SAR(1 g) = 5.53 mW/g; SAR(10 g) = 3.95 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

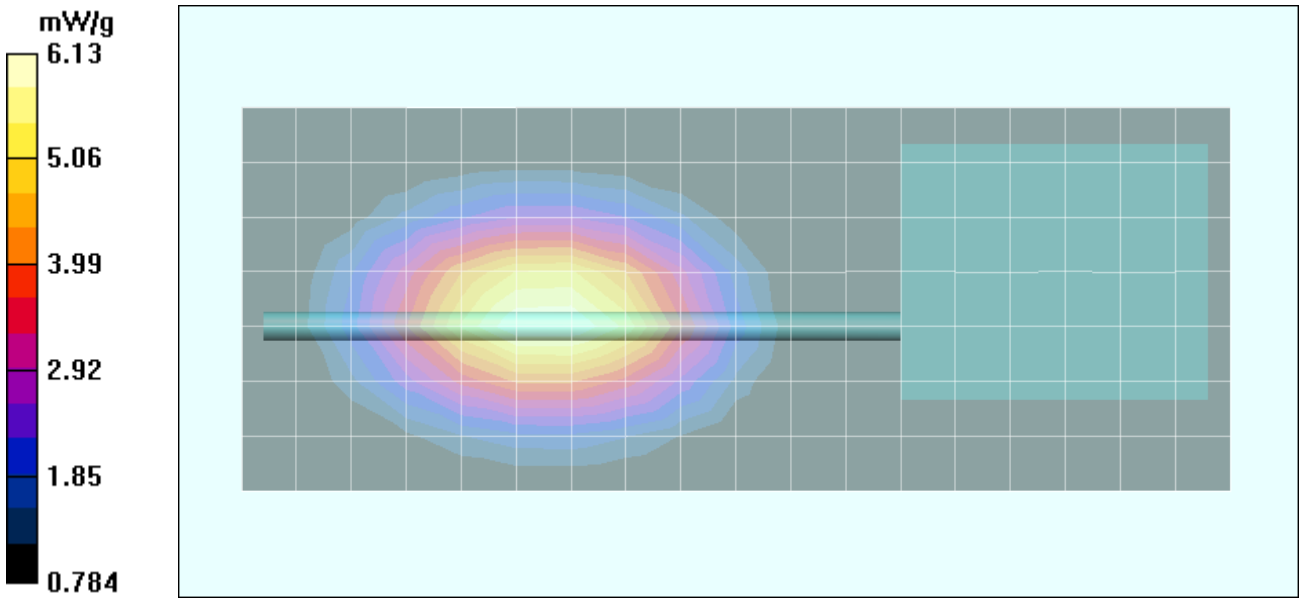
Body-Worn Accessories: Lapel-Clip, Skull Microphone (P/N: OT-V4-10428)

Communication System: FM
RF Output Power: 3.28 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 16.3 V/m; Power Drift = -0.445 dB
Peak SAR (extrapolated) = 7.6 W/kg
SAR(1 g) = 5.75 mW/g; SAR(10 g) = 4.09 mW/g



Body-Worn SAR - Low Band - NiCd IS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/16/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.8 °C; Fluid Temp: 21.4 °C; Barometric Pressure: 101.9 kPa; Humidity: 42%

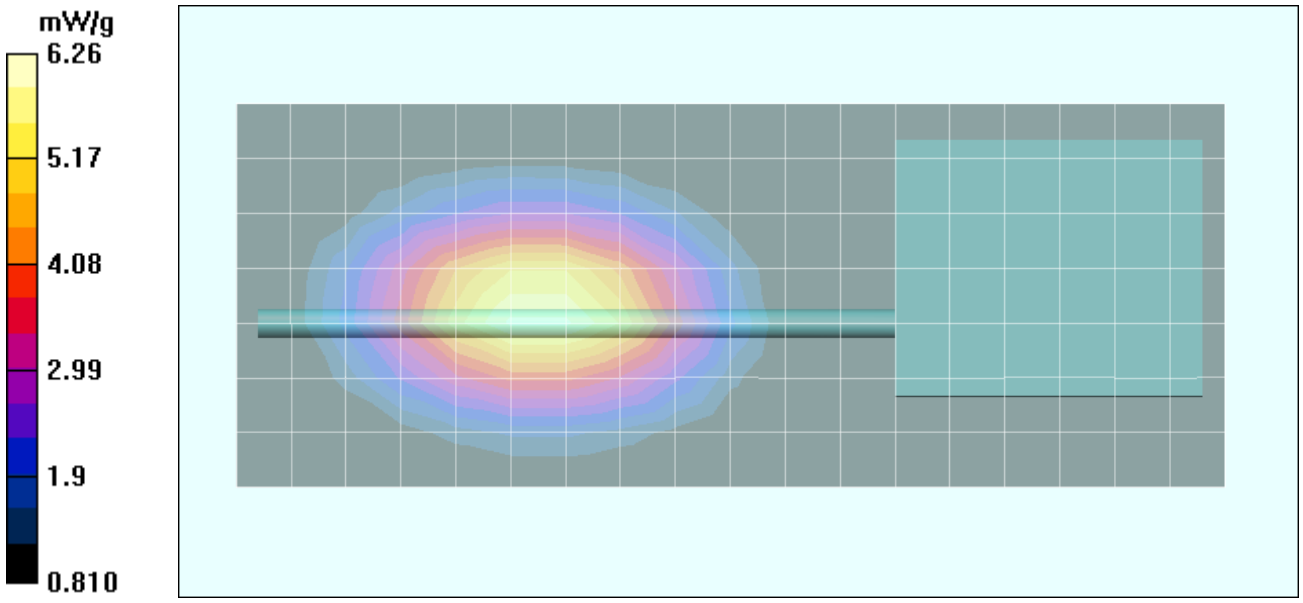
Body-Worn Accessories: Lapel-Clip, Throat Microphone (P/N: OT-V4-10656)

Communication System: FM
RF Output Power: 3.28 Watts (Conducted)
Frequency: 815.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Intrinsically Safe Battery (P/N: BKB191210/35)
Medium: M815; (σ = 0.98 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3)

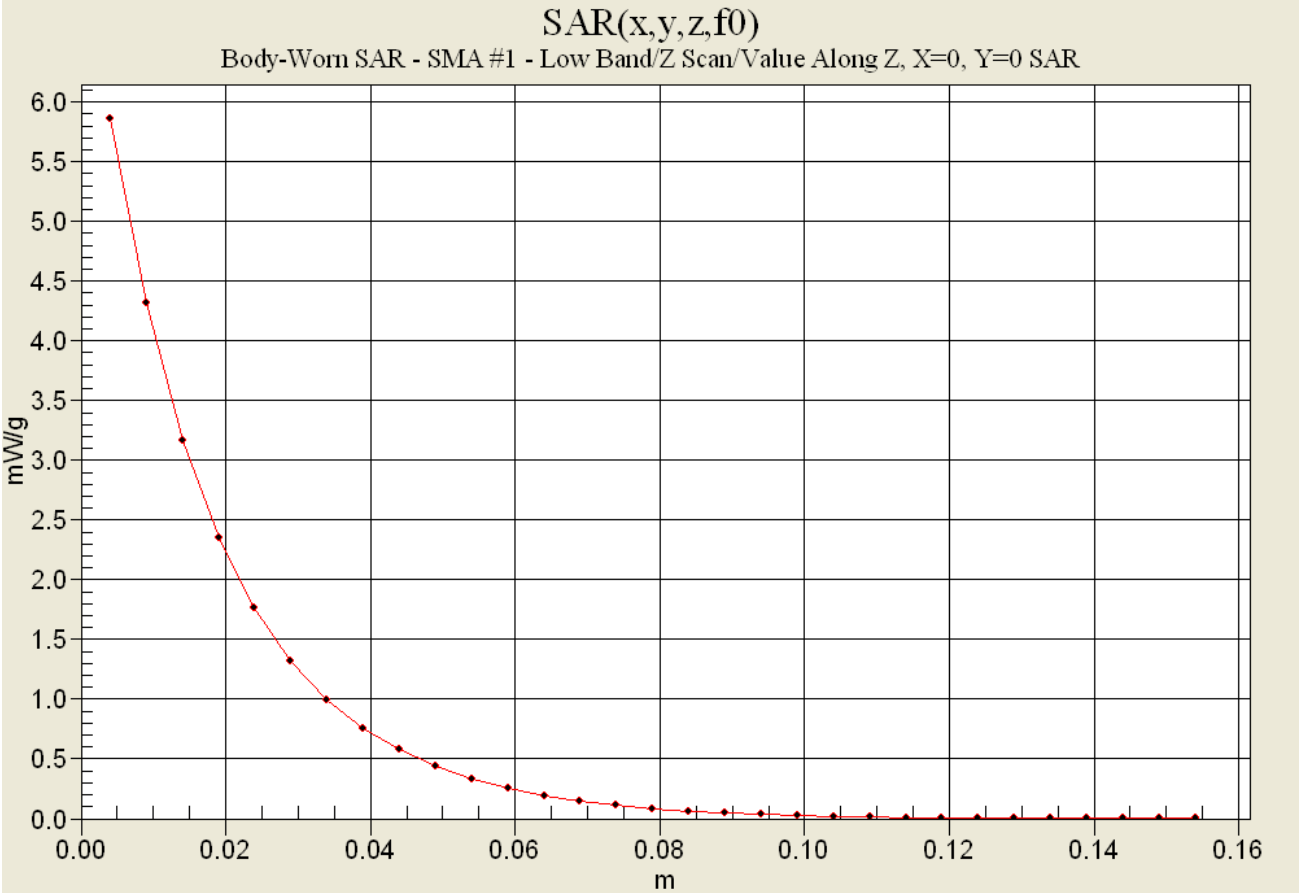
- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); Calibrated: 18/03/2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn353; Calibrated: 19/12/2003
- Phantom: Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - Low Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 16.3 V/m; Power Drift = -0.458 dB
Peak SAR (extrapolated) = 7.74 W/kg
SAR(1 g) = 5.87 mW/g; SAR(10 g) = 4.16 mW/g



Z-Axis Scan


SAR(x,y,z,f0)
Body-Worn SAR - SMA #1 - Low Band/Z Scan/Value Along Z, X=0, Y=0 SAR
mW/g
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0.00
0.02
0.04
0.06
0.08
0.10
0.12
0.14
0.16
m

Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

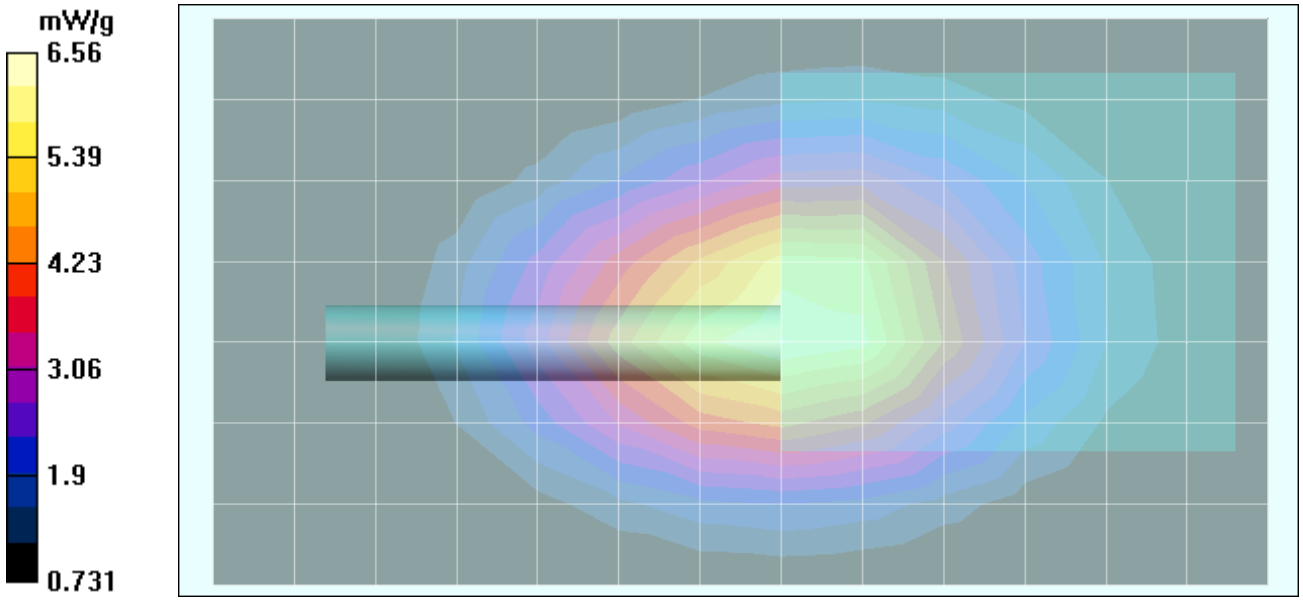
Body-Worn Accessories: Lapel-Clip, Ranger Headset (P/N: OT-V4-10421)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 77.3 V/m; Power Drift = -0.0483 dB
Peak SAR (extrapolated) = 8.28 W/kg
SAR(1 g) = 6.16 mW/g; SAR(10 g) = 4.3 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

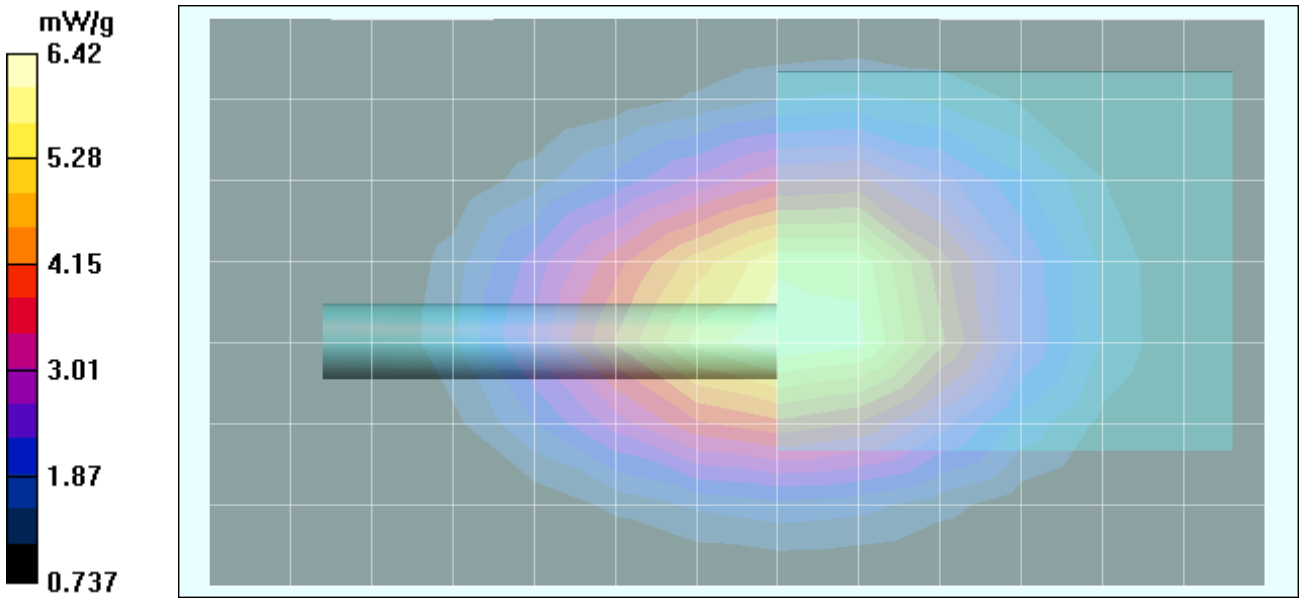
Body-Worn Accessories: Lapel-Clip, Behind-the-Head Headset (P/N: OT-V4-10450)

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 77.7 V/m; Power Drift = -0.0484 dB
Peak SAR (extrapolated) = 8.07 W/kg
SAR(1 g) = 6.01 mW/g; SAR(10 g) = 4.2 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

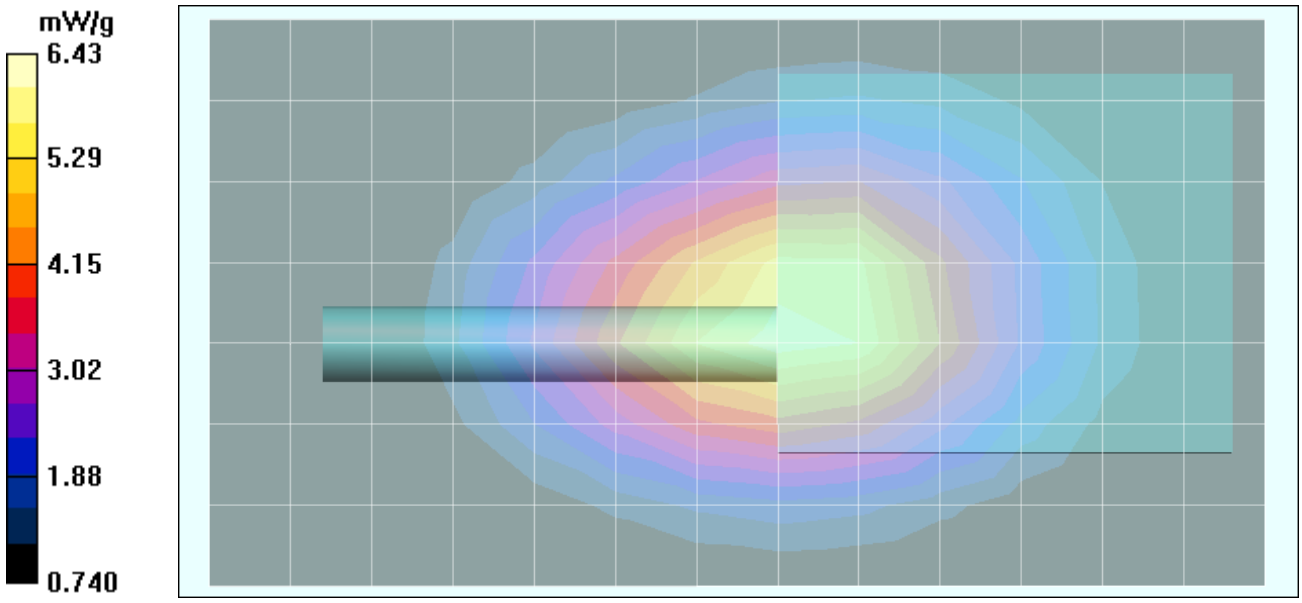
Body-Worn Accessories: Lapel-Clip, Skull Microphone (P/N: OT-V4-10428)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 77.5 V/m; Power Drift = -0.106 dB
Peak SAR (extrapolated) = 8.04 W/kg
SAR(1 g) = 6.00 mW/g; SAR(10 g) = 4.2 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/2)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

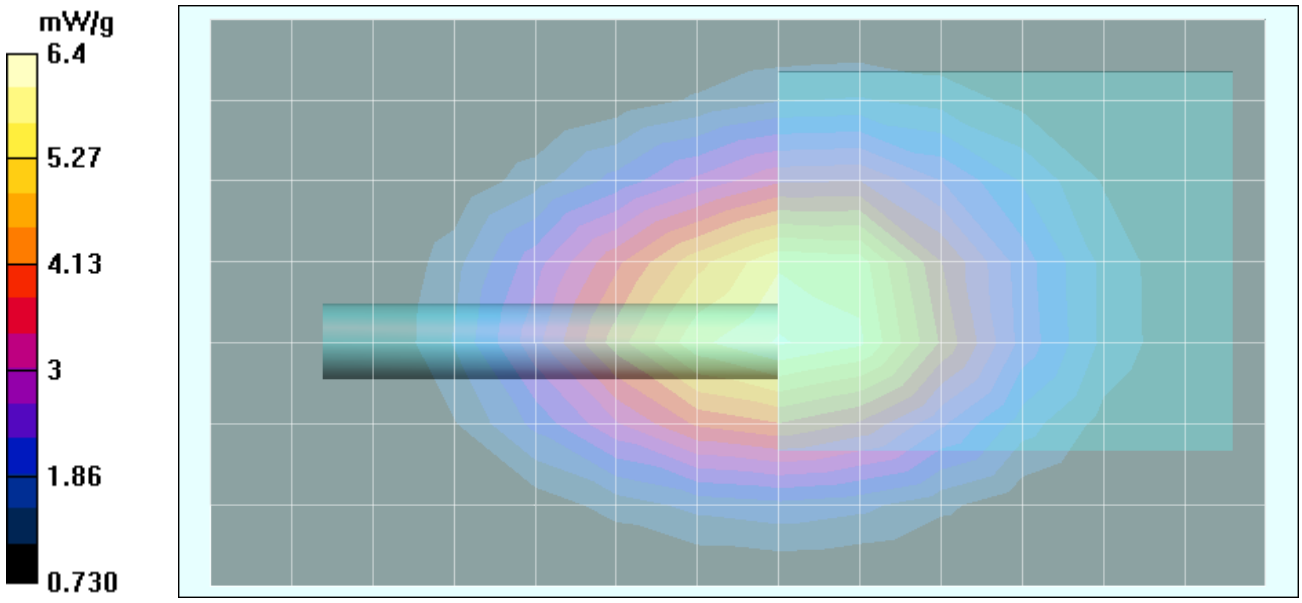
Body-Worn Accessories: Lapel-Clip, Throat Microphone (P/N: OT-V4-10656)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x14x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 77.7 V/m; Power Drift = -0.0674 dB
Peak SAR (extrapolated) = 8.04 W/kg
SAR(1 g) = 6.02 mW/g; SAR(10 g) = 4.23 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

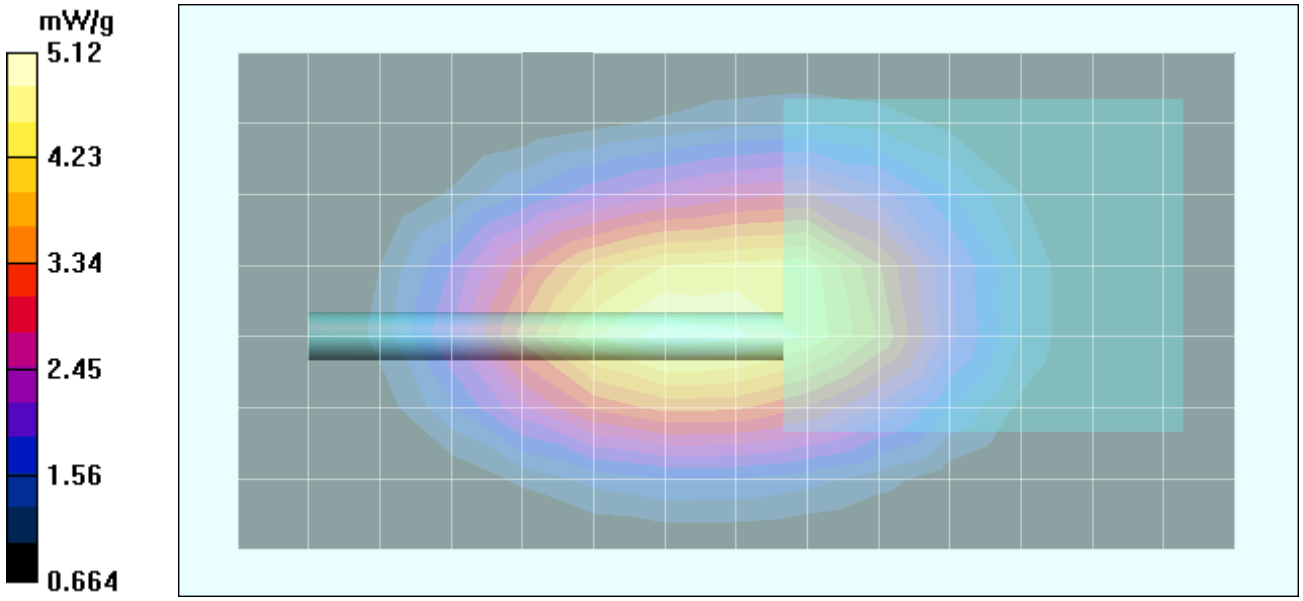
Body-Worn Accessories: Lapel-Clip, Ranger Headset (P/N: OT-V4-10421)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 69.2 V/m; Power Drift = -0.134 dB
Peak SAR (extrapolated) = 6.37 W/kg
SAR(1 g) = 4.80 mW/g; SAR(10 g) = 3.4 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

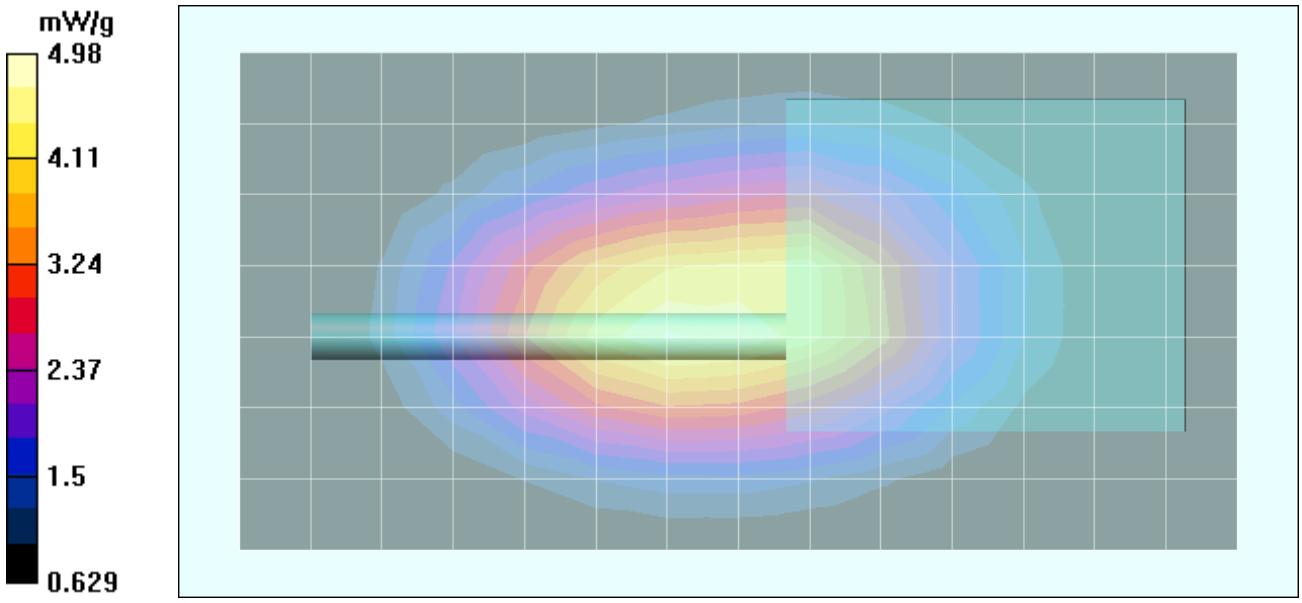
Body-Worn Accessories: Lapel-Clip, Behind-the-Head Headset (P/N: OT-V4-10450)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 68.1 V/m; Power Drift = -0.0835 dB
Peak SAR (extrapolated) = 6.2 W/kg
SAR(1 g) = 4.65 mW/g; SAR(10 g) = 3.3 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

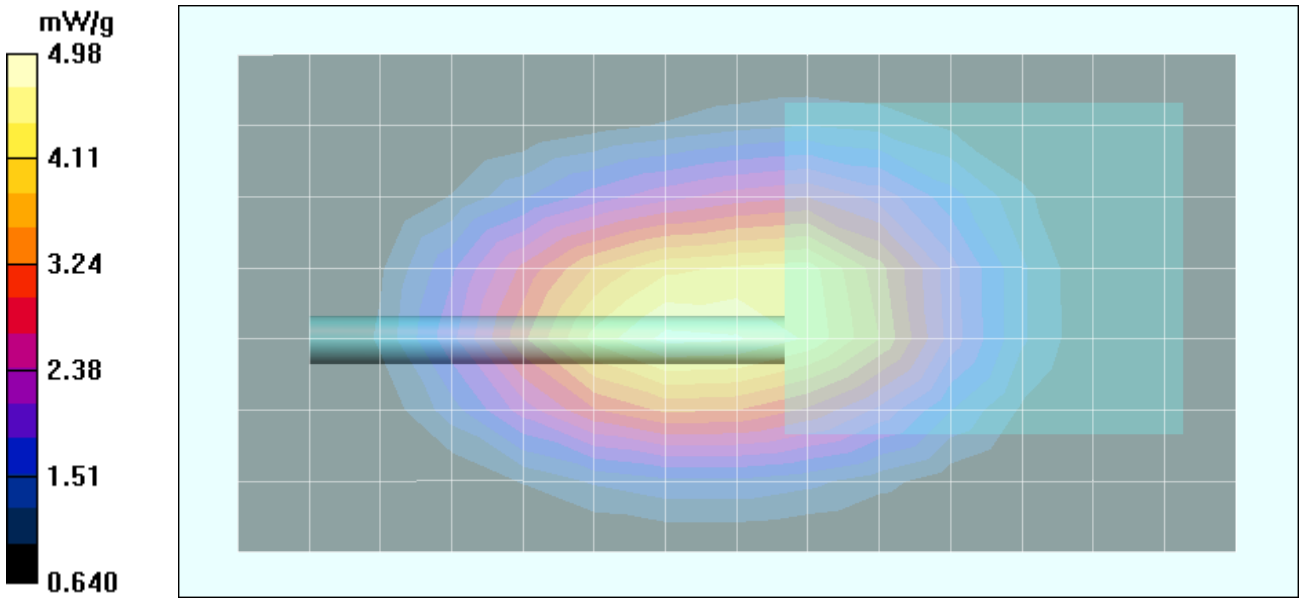
Body-Worn Accessories: Lapel-Clip, Skull Microphone (P/N: OT-V4-10428)

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/34)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67.8 V/m; Power Drift = -0.0858 dB
Peak SAR (extrapolated) = 6.19 W/kg
SAR(1 g) = 4.67 mW/g; SAR(10 g) = 3.31 mW/g



Body-Worn SAR - High Band - NiMH NIS Battery - Whip Antenna (P/N: KRE1011223/01)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

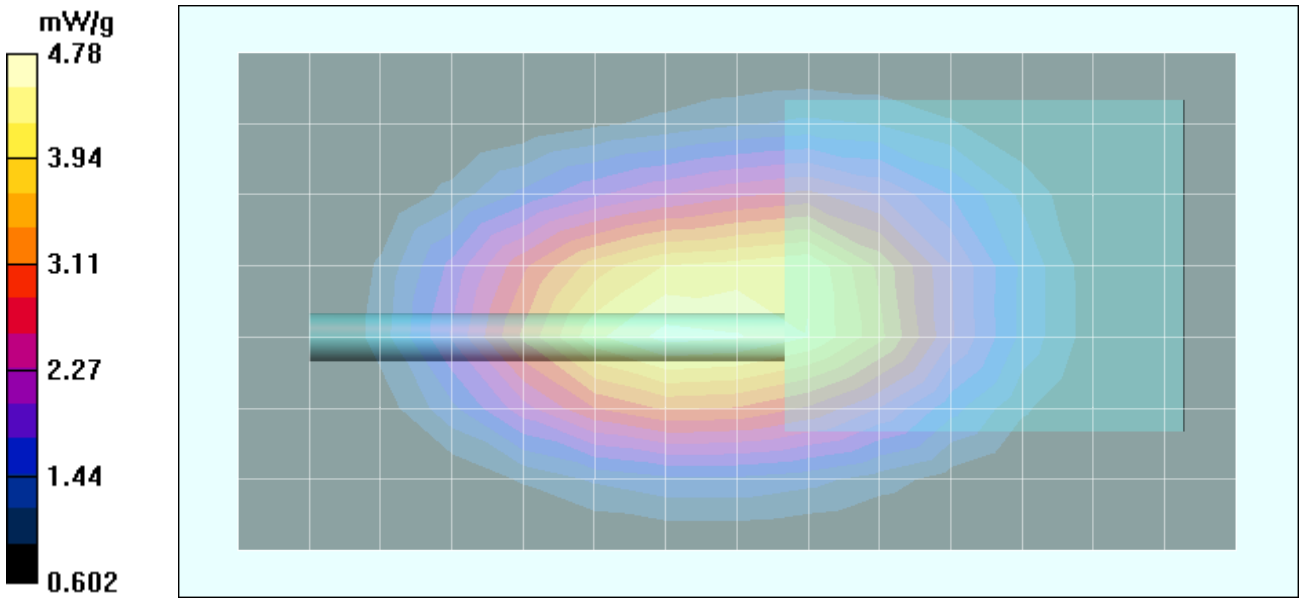
Body-Worn Accessories: Lapel-Clip, Throat Microphone (P/N: OT-V4-10656)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiMH 7.5V Non-Intrinsically Safe Battery(P/N: BKB191210)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x15x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 67 V/m; Power Drift = -0.0911 dB
Peak SAR (extrapolated) = 5.93 W/kg
SAR(1 g) = 4.47 mW/g; SAR(10 g) = 3.17 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

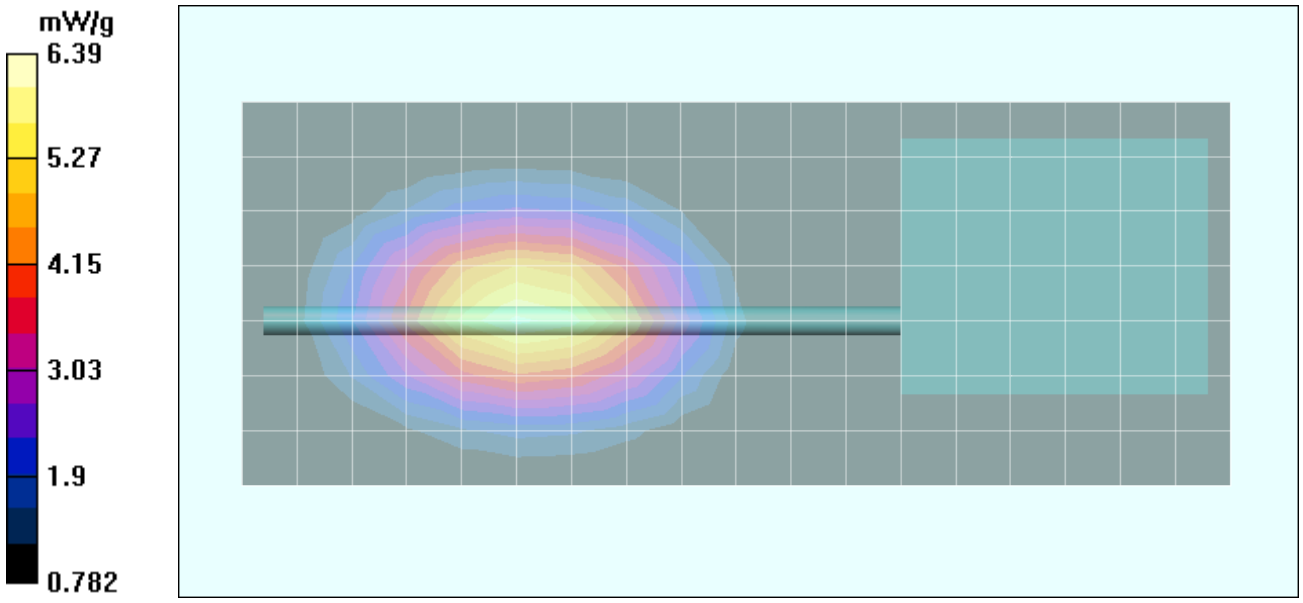
Body-Worn Accessories: Lapel-Clip, Ranger Headset (P/N: OT-V4-10421)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 18 V/m; Power Drift = 0.122 dB
Peak SAR (extrapolated) = 7.94 W/kg
SAR(1 g) = 5.98 mW/g; SAR(10 g) = 4.21 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

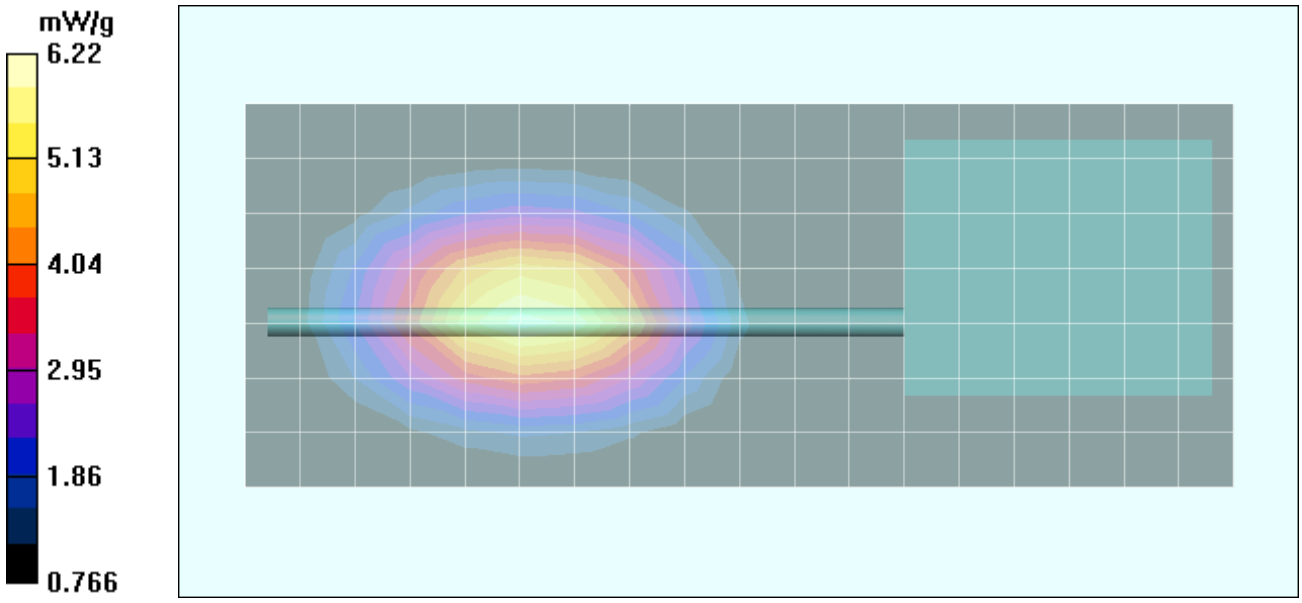
Body-Worn Accessories: Lapel-Clip, Behind-the-Head Headset (P/N: OT-V4-10450)

Communication System: FM
RF Output Power: 3.07 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 17.9 V/m; Power Drift = 0.148 dB
Peak SAR (extrapolated) = 7.72 W/kg
SAR(1 g) = 5.82 mW/g; SAR(10 g) = 4.1 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/14/04

DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

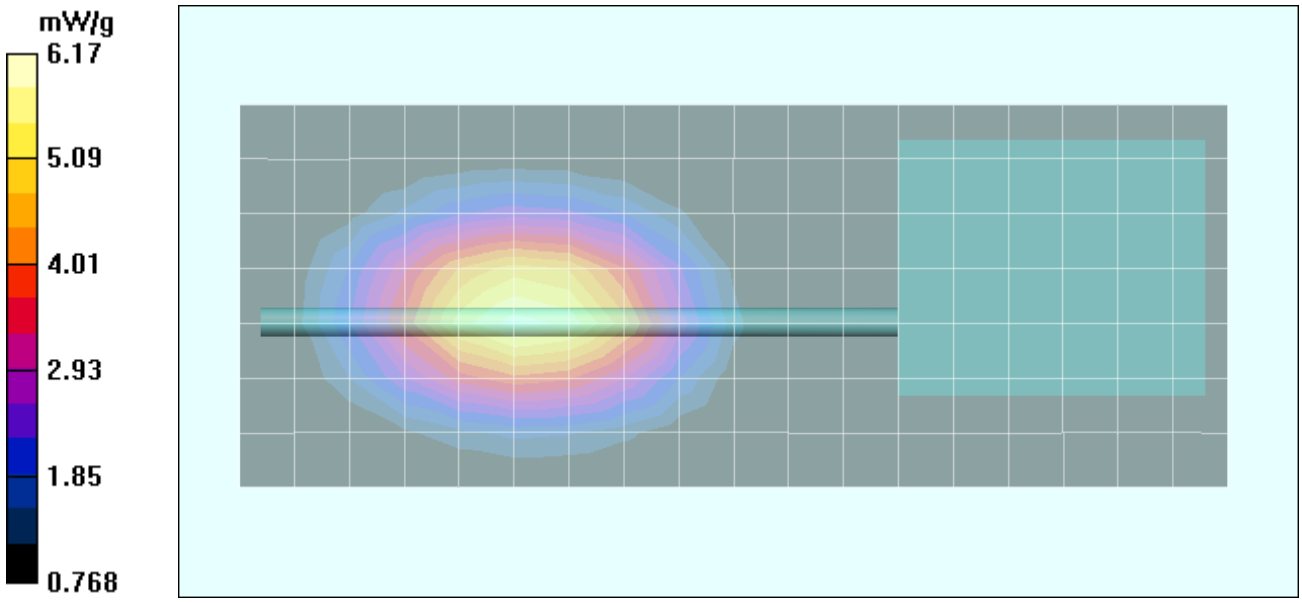
Body-Worn Accessories: Lapel-Clip, Skull Microphone (P/N: OT-V4-10428)

Communication System: FM
RF Output Power: 3.06 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 18 V/m; Power Drift = 0.145 dB
Peak SAR (extrapolated) = 7.68 W/kg
SAR(1 g) = 5.78 mW/g; SAR(10 g) = 4.07 mW/g



Body-Worn SAR - High Band - NiCd NIS Battery - Flexible Gain Antenna (P/N: KRE1011506/1)

Date Tested: 05/14/04

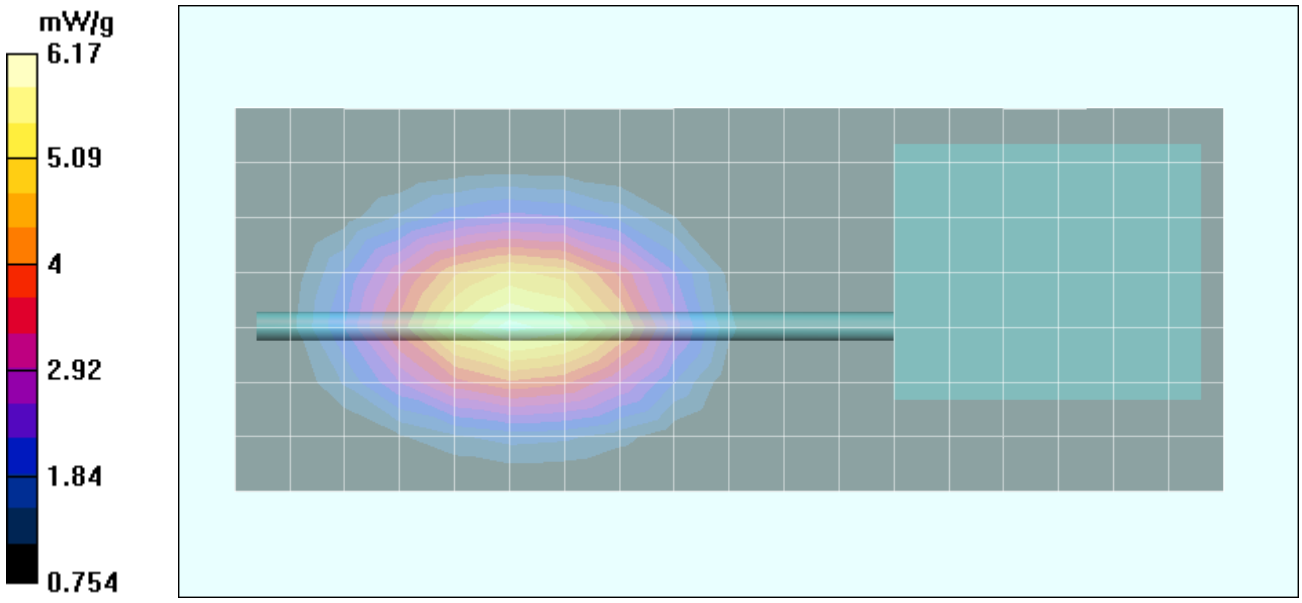
DUT: M/A-COM Model: P7100IP; Type: FM PTT Speaker-Microphone Antenna Version Ruggedized (P/N: KRY1011617/384)

Ambient Temp: 22.2 °C; Fluid Temp: 20.8 °C; Barometric Pressure: 102.3 kPa; Humidity: 33%

Body-Worn Accessories: Lapel-Clip, Throat Microphone (P/N: OT-V4-10656)

Communication System: FM
RF Output Power: 3.08 Watts (Conducted)
Frequency: 860.5000 MHz; Duty Cycle: 1:1
NiCd 7.5V Non-Intrinsically Safe Battery (P/N: BKB191210/33)
Medium: M861 (σ = 1.03 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1387; ConvF(6.24, 6.24, 6.24); 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 44; Postprocessing SW: SEMCAD, V1.8 Build 112

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Area Scan (8x19x1):
Measurement grid: dx=15mm, dy=15mm

Body-Worn - 1.3 cm Lapel-Clip Separation Distance - High Band - Mid Channel/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 17.6 V/m; Power Drift = 0.142 dB
Peak SAR (extrapolated) = 7.69 W/kg
SAR(1 g) = 5.78 mW/g; SAR(10 g) = 4.07 mW/g