DECLARATION OF COMPLIANCE
SAR RF EXPOSURE EVALUATION

Test Lab

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Company Information

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FCC IDENTIFIER:	**AXATR-336-A**
IC IDENTIFIER:	**287194340NA**
Model No.(s) Tested:	**LPE-200**
Part Number(s) Tested:	**KRD 103 103/A203 (Scan Radio)**
Test Requirement(s):	**FCC 47 CFR §2.1093; Health Canada Safety Code 6**
Test Procedure(s):	**FCC OET Bulletin 65, Supplement C (Edition 01-01)** **Industry Canada RSS-102 Issue 2**
FCC Device Classification:	**Licensed Non-Broadcast Transmitter Held to Face (TNF)**
Device Description:	**Portable FM PTT Radio Transceiver**
Transmit Frequency Range(s) Tested:	**806 MHz (Repeater Input mode)**
Max. RF Output Power Tested:	**3.3 Watts (35.2 dBm) Conducted**
Antenna Type(s) Tested:	**¼-Wave Antenna (P/N: KRE 101 1223/01)**
Battery Type(s) Tested:	**7.5V NiCd Extra High Capacity Battery (P/N: BKB 191 202)**
Body-Worn Accessories Tested:	**Plastic Belt-Clip with Metal Clasp (P/N: KRY 101 1232/2)** **Leather Case with Belt-Loop (P/N: KRY 101 1605/01)** **Leather Case with Swivel Belt-Loop (P/N: KRY 101 1605/02)** **Swivel Belt-Loop (KRY 101 1608/2)** **Leather Case with Shoulder-Strap (P/N: KRY 101 1607/1)** **Nylon "T" Strap Radio Holder (P/N: KRY 101 1656/1)**
Audio Accessories Tested:	**Speaker-Microphone (P/N: KRY 101 1617/73)**
Max. SAR Level(s) Evaluated:	**Body-worn: 4.56 W/kg (1g average) - 50% Duty Cycle**
Class II Permissive Change(s):	**New Power Amplifier**
Test Report Addendum:	**Additional SAR evaluation with body-worn accessories listed above**

Celltech Labs Inc. declares under its sole responsibility that this wireless portable device has demonstrated compliance with the Specific Absorption Rate (SAR) RF exposure requirements specified in FCC 47 CFR §2.1093 and Health Canada's Safety Code 6. The device was tested in accordance with the measurement standards and procedures specified in FCC OET Bulletin 65, Supplement C (Edition 01-01) and Industry Canada RSS-102 Issue 2 for the Occupational / Controlled Exposure environment. All measurements were performed in accordance with the SAR system manufacturer recommendations.

I attest to the accuracy of data. All measurements were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Tested By:	Prepared By:	Approved By:
Sean Johnston Compliance Technologist Celltech Labs Inc.	Cheri Frangiadakis Test Report Writer Celltech Labs Inc.	Jonathan Hughes General Manager Celltech Labs Inc.

1.0 DESCRIPTION OF DEVICE UNDER TEST (DUT)

Test Requirement(s)	FCC Rule Part 47 CFR §2.1093		Health Canada Safety Code 6
Test Procedure(s)	FCC OET Bulletin 65, Supplement C (01-01)		
	Industry Canada RSS-102 Issue 2		
Device Classification	Licensed Non-Broadcast Transmitter Held to Face (TNF)		
Device Description	Portable FM PTT Radio Transceiver		
RF Exposure Category	Occupational / Controlled Environment		
FCC IDENTIFIER	AXATR-336-A		
IC IDENTIFIER	287194340NA		
Model(s) Tested	LPE-200 Scan		
Part No.(s) Tested	KRD 103 103/A203		
Serial No.(s) Tested	9806264		Production Unit
Transmit Frequency Range(s) Tested	806 MHz		Repeater Input mode
Max. RF Output Power Measured	3.3 Watts	35.2 dBm	Conducted
Antenna Type(s) Tested	¼-Wave	Length: 111 mm	P/N: KRE 101 1223/01
Battery Type(s) Tested	NiCd Extra High Capacity	7.5 V	P/N: BKB 191 202

	Accessory Type	Part No.
Body-Worn Accessories Tested	Leather Case with Belt-Loop	KRY 101 1605/01
	Leather Case with Swivel Belt-Loop	KRY 101 1605/02
	Leather Case with Shoulder Strap	KRY 101 1607/1
	Swivel Belt-Loop	KRY 101 1608/2
	Plastic Belt-Clip with Metal Clasp	KRY 101 1232/2
	Nylon "T" Strap Radio Holder	KRY 101 1656/1
Audio Accessories Tested	Speaker-Microphone	P/N: KRY 101 1617/73
Additional Body-Worn and Audio Accessories (Test Not Required)	Microphone,Lapel,Immersion Rated***	KRY 101 1617/273
	Microphone,Lapel,Ant Pvsn,Immersion***	KRY 101 1617/274
	Microphone,Lpl,Ant Pvsn,Immersion,Cc***	KRY 101 1617/276
	Microphone,Lapel,Ruggedized***	KRY 101 1617/373
	Microphone,Lapel,Ant Prvsn,Rugged***	KRY 101 1617/374
	Microphone,Lapel,Ant Prvsn,Rugged,Cc***	KRY 101 1617/376
	Earphone,Lapel Microphone ***	LS103239V1
	(*** Not Compatible With Earphone)	
	Plus Spkr Mic/ Ant Prvsn	Ot-V2-10098
	Industrial Spkr Mic ***	Ot-V2-10066
	Industrial Plus Spkr Mic ***	Ot-V2-10075
	Earphone Kit, Black	Ot-V1-10343
	Earphone Kit, Beige	Ot-V1-10342
	Palm Mic Kit, Black	Ot-V1-10347
	Palm Mic Kit, Beige	Ot-V1-10346
	3-Wire Mini Lapel Mic, Black	Ot-V1-10351
	3-Wire Mini Lapel Mic, Beige	Ot-V1-10350
	Ultra Lite Headset, Black	Ot-V4-10068
	Over-The-Head Headset, Black	Ot-V4-10073
	Com-Ctrl Unt, Short Ca W Udc Conn	Sv-V1-40280
	Com-Ctrl Unt, Cc W Udc Conn	Sv-V1-40282
	Com-Ctrl Unt, Cc W Udc Conn, Extd Ptt	Sv-V1-40285
	Com-Ctrl Unt, Cc W Udc Conn, Mshrm Ptt	Sv-V1-40288
	Helmet-Com Unt, Cc W Spkr	Sv-V1-51000
	Helmet-Com Unt, Cc W Dual Spkr's	Sv-V1-51010
	Noise-Com Unt, Cc	Sv-V1-51020
	Throat Mic Unt W Spkr	Sv-V1-50257
	Throat Mic Unt W Dual Spkr's	Sv-V1-50258
	Spare Belt Clip For Com-Ctrl Unt	Sv-V1-11289
	Mushroom Lid For Com-Ctrl Unt	Sv-V1-11545
	Spare Collar For Throat Mic Unit	Sv-V1-10907
	Extended PTT	Sv-V1-11439

2.0 SAR MEASUREMENT SUMMARY

BODY-WORN SAR EVALUATION RESULTS

Freq. (MHz)	Chan.	Test Mode	Antenna Type	Battery Type	Accessories		Separation Distance to Planar Phantom (cm)	Cond. Power Before Test (Watts)	Measured SAR 1g (W/kg)			SAR Drift During Test (dB)	Scaled SAR with droop 1g (W/kg)		
					Body-Worn	Audio				Duty Cycle 100%	Duty Cycle 50%			Duty Cycle 100%	Duty Cycle 50%
806	Low	CW	¼-Wave	NiCd Extra High Capacity	Plastic Belt-Clip	Speaker-Mic	1.1	3.3	P	5.30	2.65	-0.729	P	6.27	3.13
									S	4.61	2.31	-0.729	S	5.45	2.73
806	Low	CW	¼-Wave	NiCd Extra High Capacity	Nylon "T" Strap	Speaker-Mic	1.9	3.3	P	4.08	2.04	-0.367	P	4.44	2.22
									S	2.96	1.48	-0.593	S	3.39	1.70
806	Low	CW	¼-Wave	NiCd Extra High Capacity	Swivel Belt-Loop	Speaker-Mic	3.0	3.3	1.71		0.855	-0.830	2.07		1.04
806	Low	CW	¼-Wave	NiCd Extra High Capacity	Leather Case with Belt-Loop	Speaker-Mic	2.0	3.3	P	4.78	2.39	-0.349	P	5.18	2.59
									S	3.90	1.95	-0.522	S	4.40	2.20
806	Low	CW	¼-Wave	NiCd Extra High Capacity	Leather Case & Swivel Belt-Loop	Speaker-Mic	4.1	3.3	1.93		0.965	-0.539	2.19		1.09
806	Low	CW	¼-Wave	NiCd Extra High Capacity	Leather Case* & Shoulder Strap	Speaker-Mic	1.8	3.3	P	8.13	4.07	-0.496	P	9.11	**4.56**
									S	5.72	2.86	-0.572	S	6.53	3.26

ANSI / IEEE C95.1 1999 - SAFETY LIMIT | **BODY: 8.0 W/kg (averaged over 1 gram)** | **Spatial Peak - Controlled Exposure / Occupational**

Test Date(s)	April 26, 2006			**Relative Humidity**	30	%
Fluid Type	**815 MHz Body**			**Atmospheric Pressure**	101.6	KPa
Dielectric Constant ε_r	**IEEE Target**	**Measured**	**Deviation**	**Ambient Temperature**	24.4	°C
	55.3 ± **5%**	54.0	-2.4%	**Fluid Temperature**	22.2	°C
Conductivity σ (mho/m)	**IEEE Target**	**Meas.**	**Dev.**	**Fluid Depth**	≥ 15	cm
	0.97 ± **5%**	0.94	-3.1%	**ρ (Kg/m³)**	1000	

Note(s)

1. The measurement results were obtained with the DUT tested in the conditions described in this report. Detailed measurement data and plots showing the maximum SAR location of the DUT are reported in Appendix A.
2. Radio, channel, antenna and battery type were selected based on the worst-case SAR configuration measured with the Aluminum Belt-Clip P/N: CC23894 (please refer to the original Celltech Test Report Serial Number: 032106AXA-T734-S90F).
3. The power droops measured by the DASY4 system for the duration of the SAR evaluations were added to the measured SAR levels to report scaled SAR results as shown in the above test data table.
4. A SAR-versus-time power droop evaluation was performed in the test configuration that reported the maximum-scaled SAR level. See Appendix A (SAR Test Plots) for SAR-versus-Time power droop evaluation plot.
5. Secondary peak SAR levels measured within 2 dB of the primary were reported (P = Primary, S = Secondary).
6. The area scan evaluation was performed with a fully charged battery. After the area scan evaluation was completed the battery was replaced with a fully charged battery prior to the zoom scan evaluation.
7. The ambient and fluid temperatures were measured prior to, and during, the fluid dielectric parameter check and the SAR evaluations. The temperatures reported were consistent for all measurement periods.
8. The dielectric parameters of the simulated tissue mixture were measured prior to the SAR evaluations using an ALS-PR-DIEL Dielectric Probe Kit and an HP 8753ET Network Analyzer (see Appendix C).
9. SAR measurements were performed within 24 hours of the system performance check.

* The Leather Case (metal swivel connector type) was evaluated with the Shoulder-Strap accessory without the Swivel Belt-Loop attached.

3.0 DETAILS OF SAR EVALUATION

The M/A-COM, Inc. Model: LPE-200 Portable FM PTT Radio Transceiver FCC ID: AXATR-336-A, with the Class II Permissive Change(s) described in this report, was compliant for localized Specific Absorption Rate (Occupational / Controlled Exposure) based on the test provisions and conditions described below. Detailed photographs of the test setup are shown in Appendix D.

Body-Worn Configuration

1. The DUT was tested in a body-worn configuration with the back of the radio placed parallel to the outer surface of the planar phantom. The attached Plastic Belt-Clip (with metal clasp) accessory (P/N: KRY 101 1232/2) was touching the planar phantom and provided a 1.1 cm separation distance between the back of the DUT and the outer surface of the planar phantom. The DUT was evaluated for body-worn SAR with the Speaker-Microphone audio accessory (P/N: KRY 101 1617/73) connected to the audio port of the radio.
2. The DUT was tested in a body-worn configuration with the back of the radio placed parallel to the outer surface of the planar phantom. The Nylon "T" Strap Radio Holder accessory (P/N: KRY 101 1656/1) was attached to the radio and touching the outer surface of the planar phantom. The Nylon "T" Strap Radio Holder provided a 1.9 cm separation distance between the back of the DUT and the outer surface of the planar phantom. The DUT was evaluated for body-worn SAR with the Speaker-Microphone audio accessory (P/N: KRY 101 1617/73) connected to the audio port of the radio.
3. The DUT was evaluated in a body-worn configuration with the back of the radio placed parallel to the outer surface of the planar phantom. The Swivel Belt-Loop accessory (P/N: KRY 101 1608/2) was attached to the metal swivel connector on the back of the radio. The Swivel Belt-Loop was touching the outer surface of the planar phantom and provided a 3.0 cm separation distance between the back of the DUT and the outer surface of the planar phantom. The DUT was evaluated for body-worn SAR with the Speaker-Microphone audio accessory (P/N: KRY 101 1617/73) connected to the audio port of the radio.
4. The DUT was tested in a body-worn configuration with the radio placed inside the Leather Case with Belt-Loop accessory (P/N: KRY 101 1605/01). The back of the radio was facing parallel to the outer surface of the planar phantom. The back of the Leather Case with Belt-Loop accessory was touching the outer surface of the planar phantom and provided a 2.0 cm separation distance between the back of the DUT and the outer surface of the planar phantom. The DUT was evaluated for body-worn SAR with the Speaker-Microphone audio accessory (P/N: KRY 101 1617/73) connected to the audio port of the radio.
5. The DUT was tested in a body-worn configuration with the radio placed inside the Leather Case with Swivel Belt-Loop accessory (P/N: KRY 101 1605/02). The back of the radio was facing parallel to the outer surface of the planar phantom. The back of the Leather Case with Swivel Belt-Loop accessory was touching the outer surface of the planar phantom and provided a 4.1 cm separation distance between the back of the DUT and the outer surface of the planar phantom. The DUT was evaluated for body-worn SAR with the Speaker-Microphone audio accessory (P/N: KRY 101 1617/73) connected to the audio port of the radio.
6. The DUT was tested in a body-worn configuration with the radio placed inside the Leather Case with Shoulder Strap accessory (P/N: KRY 101 1607/1). Note: The Swivel Belt-Loop accessory was removed from the metal swivel connector on the back of the case and not used during this test. The back of the radio was facing parallel to the outer surface of the planar phantom. The back of the Leather Case with Shoulder Strap accessory (P/N: KRY 101 1607/1) was touching the outer surface of the planar phantom and provided a 1.8 cm separation distance between the back of the DUT and the outer surface of the planar phantom. The DUT was evaluated for body-worn SAR with the Speaker-Microphone audio accessory (P/N: KRY 101 1617/73) connected to the audio port of the radio.
7. Due to the dimensions of the DUT a Plexiglas planar phantom was used in place of the SAM phantom.
8. SAR measurements were performed within 24 hours of the system performance check.

Test Modes & Power Settings

9. The conducted power levels were measured prior to the SAR evaluations using a Gigatronics 8652A Universal Power Meter according to the procedures described in FCC 47 CFR §2.1046.
10. The DUT was tested in unmodulated continuous transmit operation (Continuous Wave mode at 100% duty cycle) with the transmit key constantly depressed. For a push-to-talk device the 50% duty cycle compensation reported assumes a transmit/receive cycle of equal time base.

Test Conditions

11. The ambient and fluid temperatures were measured prior to, and during, the fluid dielectric parameter check and the SAR evaluations. The temperatures reported were consistent for all measurement periods.
12. The dielectric parameters of the simulated tissue mixture were measured prior to the SAR evaluations using an ALS-PR-DIEL Dielectric Probe Kit and an HP 8753ET Network Analyzer (see Appendix C).

4.0 SYSTEM PERFORMANCE CHECK

Prior to the SAR evaluations a system check was performed using a planar phantom with an 835MHz dipole (please refer to System Validation attachment). Prior to the system performance check the dielectric parameters of the simulated tissue mixture were measured using an ALS-PR-DIEL Dielectric Probe Kit and an HP 8753ET Network Analyzer (see Appendix C). A forward power of 250 mW was applied to the dipole and the system was verified to a tolerance of ±10% (see Appendix B for system performance check test plot). See Table 1 below for the SAR system manufacturer's reference body SAR values from the DASY4 Operation Manual.

SYSTEM PERFORMANCE CHECK EVALUATION

Test Date	Equiv. Tissue	SAR 1g (W/kg)			Dielectric Constant ε_r			Conductivity σ (mho/m)			ρ (Kg/m^3)	Amb. Temp. (°C)	Fluid Temp. (°C)	Fluid Depth (cm)	Humid. (%)	Barom. Press. (kPa)
	835MHz	IEEE Target	Meas.	Dev.	IEEE Target	Meas.	Dev.	IEEE Target	Meas.	Dev.						
4/26/06	Body	2.43 ±10%	2.38	-2.1%	55.2 ±5%	53.9	-2.4%	0.97 ±5%	0.96	-1.0%	1000	24.4	22.5	≥ 15	30	101.6
Note(s)		1. The ambient and fluid temperatures were measured prior to, and during, the fluid dielectric parameter check and the system performance check. The temperatures listed in the table above were consistent for all measurement periods.														

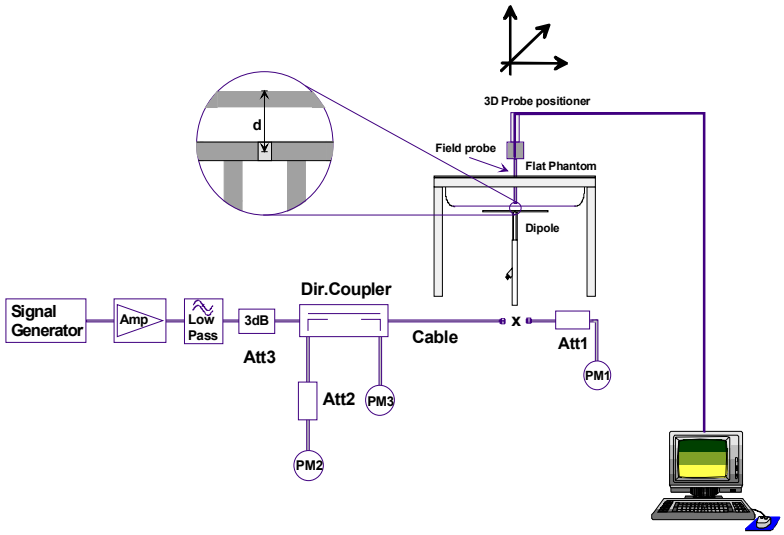


Figure 1. System Performance Check Setup Diagram

835MHz Dipole Setup

Dipole Type	Distance [mm]	Frequency [MHz]	SAR (1g) [W/kg]	SAR (10g) [W/kg]	SAR (peak) [W/kg]
D300V2	15	300	3.02	2.06	4.36
D450V2	15	450	5.01	3.36	7.22
D835V2	15	835	9.71	6.38	14.1
D900V2	15	900	11.1	7.17	16.3
D1450V2	10	1450	29.6	16.6	49.8
D1500V2	10	1500	30.8	17.1	52.1
D1640V2	10	1640	34.4	18.7	59.4
D1800V2	10	1800	38.5	20.3	67.5
D1900V2	10	1900	39.8	20.8	69.6
D2000V2	10	2000	40.9	21.2	71.5
D2450V2	10	2450	51.2	23.7	97.6
D3000V2	10	3000	61.9	24.8	136.7

Table 32.1: Numerical reference SAR values for SPEAG dipoles and flat phantom filled with body-tissue simulating liquid. Note: All SAR values normalized to 1 W forward power.

Table 1. SAR system manufacturer's reference Body SAR values

APPENDIX A - SAR MEASUREMENT DATA

Date Tested: 04/26/2006

Body-Worn SAR - 806 MHz - ¼-Wave Antenna - DUT with Plastic Belt-Clip accessory (with metal clasp)

DUT: M/A-COM Model: LPE-200; Type: Portable FM PTT Radio Transceiver (Scan Radio P/N: KRD 103 103/A203); Serial: 9806264

Body-Worn Accessory: Plastic Belt-Clip with Metal Clasp (P/N: KRY 101 1232/2)
Audio Accessory: Speaker-Microphone (P/N: KRY 101 1617/73)

Ambient Temp: 24.4 °C; Fluid Temp: 22.2 °C; Barometric Pressure: 101.6 kPa; Humidity: 30%

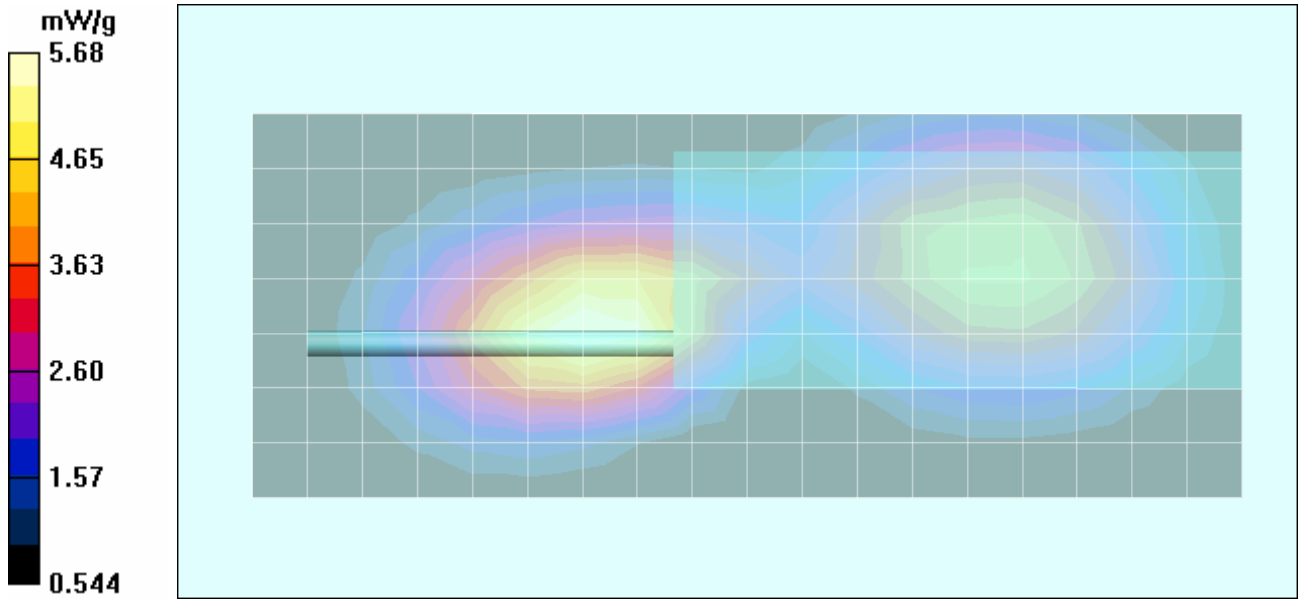
Communication System: FM
Frequency: 806 MHz; Duty Cycle: 1:1
RF Output Power: 3.3 Watts (Conducted)
7.5V NiCd Extra High Capacity Battery (P/N: BKB 191 202)
Medium: M815 (σ = 0.94 mho/m; ε_r = 54.0; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1590; ConvF(6.47, 6.47, 6.47); Calibrated: 20/05/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 15/06/2005
- Phantom: Small Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Body-Worn SAR - 1.1 cm Belt-Clip Separation Distance to Planar Phantom - Low Channel
Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn SAR - 1.1 cm Belt-Clip Separation Distance to Planar Phantom - Low Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 73.3 V/m; Power Drift = -0.729 dB
Peak SAR (extrapolated) = 7.05 W/kg
SAR(1 g) = 5.30 mW/g; SAR(10 g) = 3.73 mW/g

Body-Worn SAR - 1.1 cm Belt-Clip Separation Distance to Planar Phantom - Low Channel
Zoom Scan 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 70.5 V/m; Power Drift = -0.729 dB
Peak SAR (extrapolated) = 5.62 W/kg
SAR(1 g) = 4.61 mW/g; SAR(10 g) = 3.52 mW/g



Date Tested: 04/26/2006

Body-Worn SAR - 806 MHz - ¼-Wave Antenna - DUT with Nylon "T" Strap Radio Holder accessory

DUT: M/A-COM Model: LPE-200; Type: Portable FM PTT Radio Transceiver (Scan Radio P/N: KRD 103 103/A203); Serial: 9806264

Body-Worn Accessory: Nylon "T" Strap (P/N: KRY 101 1656/1)
Audio Accessory: Speaker-Microphone (P/N: KRY 101 1617/73)

Ambient Temp: 24.4 °C; Fluid Temp: 22.2 °C; Barometric Pressure: 101.6 kPa; Humidity: 30%

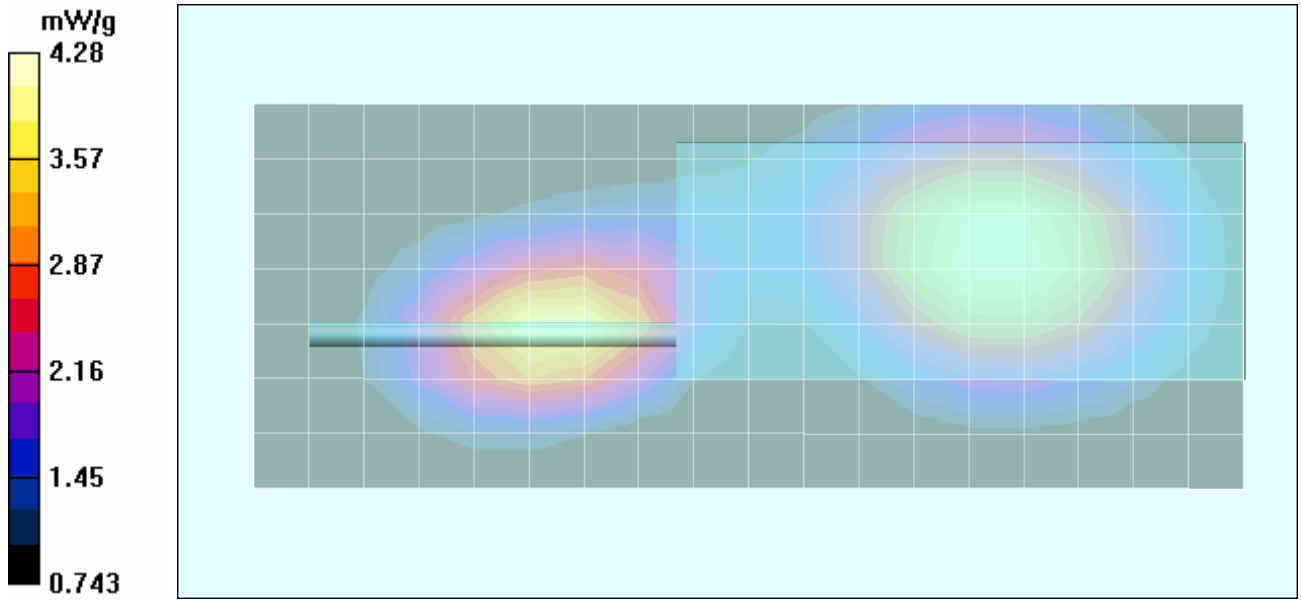
Communication System: FM
Frequency: 806 MHz; Duty Cycle: 1:1
RF Output Power: 3.3 Watts (Conducted)
7.5V NiCd Extra High Capacity Battery (P/N: BKB 191 202)
Medium: M815 (σ = 0.94 mho/m; ε_r = 54.0; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1590; ConvF(6.47, 6.47, 6.47); Calibrated: 20/05/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 15/06/2005
- Phantom: Small Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Body-Worn SAR - 1.9 cm Nylon "T" Strap Separation Distance to Planar Phantom - Low Channel
Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn SAR - 1.9 cm Nylon "T" Strap Separation Distance to Planar Phantom - Low Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 45.3 V/m; Power Drift = -0.367 dB
Peak SAR (extrapolated) = 5.01 W/kg
SAR(1 g) = 4.08 mW/g; SAR(10 g) = 3.09 mW/g

Body-Worn SAR - 1.9 cm Nylon "T" Strap Separation Distance to Planar Phantom - Low Channel
Zoom Scan 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 48.5 V/m; Power Drift = -0.593 dB
Peak SAR (extrapolated) = 3.93 W/kg
SAR(1 g) = 2.96 mW/g; SAR(10 g) = 2.09 mW/g



Date Tested: 04/26/2006

Body-Worn SAR - 806 MHz - ¼-Wave Antenna - DUT with Swivel Belt-Loop accessory

DUT: M/A-COM Model: LPE-200; Type: Portable FM PTT Radio Transceiver (Scan Radio P/N: KRD 103 103/A203); Serial: 9806264

Body-Worn Accessory: Swivel Belt-Loop (P/N: KRY 101 1608/2)
Audio Accessory: Speaker-Microphone (P/N: KRY 101 1617/73)

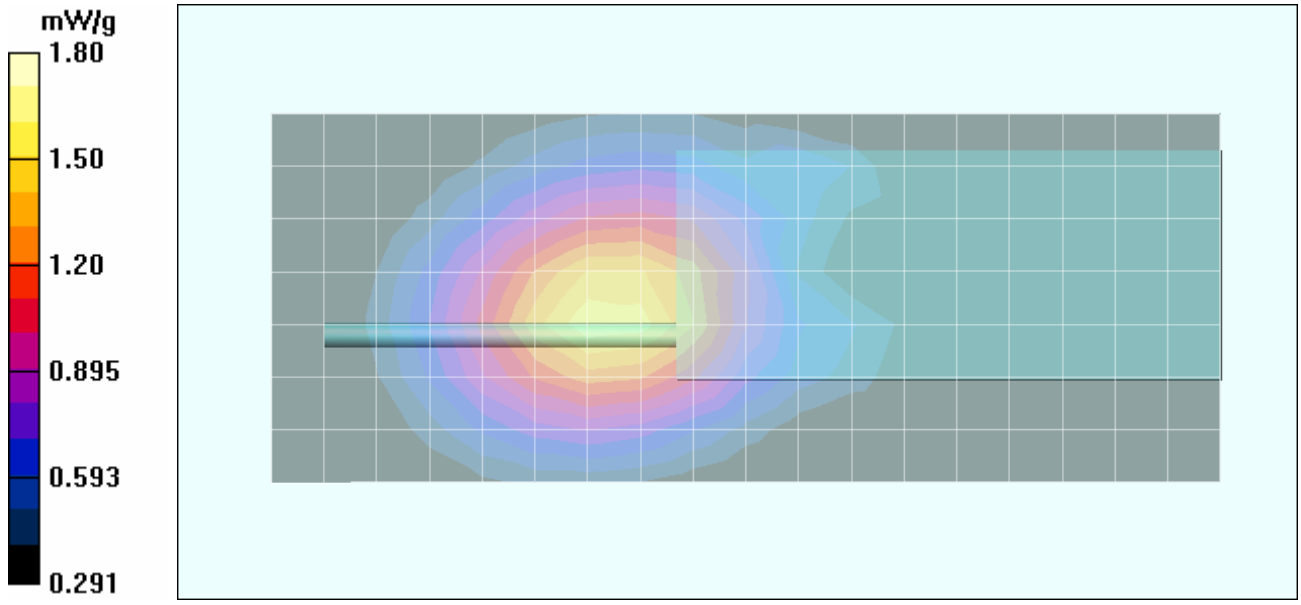
Ambient Temp: 24.4 °C; Fluid Temp: 22.2 °C; Barometric Pressure: 101.6 kPa; Humidity: 30%

Communication System: FM
Frequency: 806 MHz; Duty Cycle: 1:1
RF Output Power: 3.3 Watts (Conducted)
7.5V NiCd Extra High Capacity Battery (P/N: BKB 191 202)
Medium: M815 (σ = 0.94 mho/m; ε_r = 54.0; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1590; ConvF(6.47, 6.47, 6.47); Calibrated: 20/05/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 15/06/2005
- Phantom: Small Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Body-Worn SAR - 3.0 cm Swivel Belt-Loop Separation Distance to Planar Phantom - Low Channel
Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn SAR - 3.0 cm Swivel Belt-Loop Separation Distance to Planar Phantom - Low Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 44.1 V/m; Power Drift = -0.830 dB
Peak SAR (extrapolated) = 2.18 W/kg
SAR(1 g) = 1.71 mW/g; SAR(10 g) = 1.26 mW/g



Date Tested: 04/26/2006

Body-Worn SAR - 806 MHz - ¼-Wave Antenna - DUT inside Leather Case with Belt-Loop accessory

DUT: M/A-COM Model: LPE-200; Type: Portable FM PTT Radio Transceiver (Scan Radio P/N: KRD 103 103/A203); Serial: 9806264

Body-Worn Accessory: Leather Case with Belt-Loop (P/N: KRY 101 1605/01)
Audio Accessory: Speaker-Microphone (P/N: KRY 101 1617/73)

Ambient Temp: 24.4 °C; Fluid Temp: 22.2 °C; Barometric Pressure: 101.6 kPa; Humidity: 30%

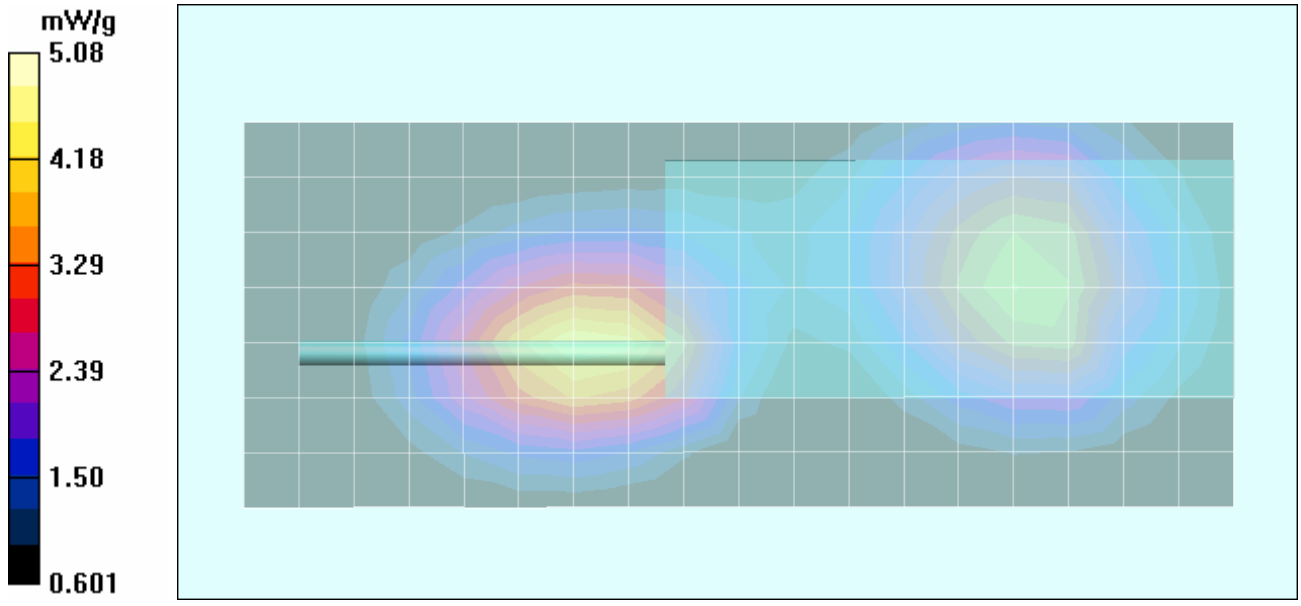
Communication System: FM
Frequency: 806 MHz; Duty Cycle: 1:1
RF Output Power: 3.3 Watts (Conducted)
7.5V NiCd Extra High Capacity Battery (P/N: BKB 191 202)
Medium: M815 (σ = 0.94 mho/m; ε_r = 54.0; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1590; ConvF(6.47, 6.47, 6.47); Calibrated: 20/05/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 15/06/2005
- Phantom: Small Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Body-Worn SAR - 2.0 cm Leather Case with Belt-Loop Separation Distance to Planar Phantom - Low Channel
Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn SAR - 2.0 cm Leather Case with Belt-Loop Separation Distance to Planar Phantom - Low Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.9 V/m; Power Drift = -0.349 dB
Peak SAR (extrapolated) = 6.24 W/kg
SAR(1 g) = 4.78 mW/g; SAR(10 g) = 3.42 mW/g

Body-Worn SAR - 2.0 cm Leather Case with Belt-Loop Separation Distance to Planar Phantom - Low Channel
Zoom Scan 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 58.0 V/m; Power Drift = -0.522 dB
Peak SAR (extrapolated) = 4.78 W/kg
SAR(1 g) = 3.90 mW/g; SAR(10 g) = 2.95 mW/g



Date Tested: 04/26/2006

Body-Worn SAR - 806 MHz - ¼-Wave Antenna - DUT inside Leather-Case with Swivel Belt-Loop accessory

DUT: M/A-COM Model: LPE-200; Type: Portable FM PTT Radio Transceiver (Scan Radio P/N: KRD 103 103/A203); Serial: 9806264

Body-Worn Accessory: Leather Case with Swivel Belt-Loop (P/N: KRY 101 1605/02)
Audio Accessory: Speaker-Microphone (P/N: KRY 101 1617/73)

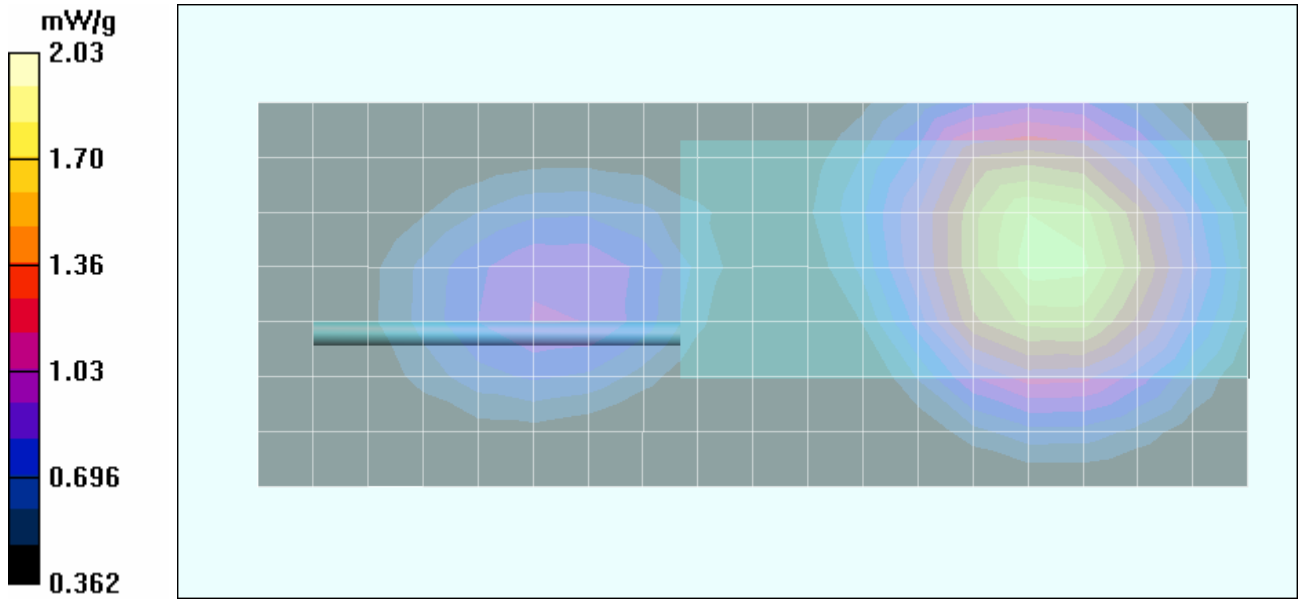
Ambient Temp: 24.4 °C; Fluid Temp: 22.2 °C; Barometric Pressure: 101.6 kPa; Humidity: 30%

Communication System: FM
Frequency: 806 MHz; Duty Cycle: 1:1
RF Output Power: 3.3 Watts (Conducted)
7.5V NiCd Extra High Capacity Battery (P/N: BKB 191 202)
Medium: M815 (σ = 0.94 mho/m; ε_r = 54.0; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1590; ConvF(6.47, 6.47, 6.47); Calibrated: 20/05/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 15/06/2005
- Phantom: Small Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

Body-Worn SAR - 4.1 cm Leather Case and Swivel Belt-Loop Separation Distance to Planar Phantom - Low Channel
Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn SAR - 4.1 cm Leather Case and Swivel Belt-Loop Separation Distance to Planar Phantom - Low Channel
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 29.0 V/m; Power Drift = -0.539 dB
Peak SAR (extrapolated) = 2.37 W/kg
SAR(1 g) = 1.93 mW/g; SAR(10 g) = 1.47 mW/g



Date Tested: 04/26/2006

Body-Worn SAR - 806 MHz - ¼-Wave Antenna - DUT inside Leather Case with Shoulder Strap accessory

DUT: M/A-COM Model: LPE-200; Type: Portable FM PTT Radio Transceiver (Scan Radio P/N: KRD 103 103/A203); Serial: 9806264

Body-Worn Accessory: Leather Case (metal swivel connector type) with Shoulder Strap (KRY 101 1607/1)
Audio Accessory: Speaker-Microphone (P/N: KRY 101 1617/73)

Ambient Temp: 24.4 °C; Fluid Temp: 22.2 °C; Barometric Pressure: 101.6 kPa; Humidity: 30%

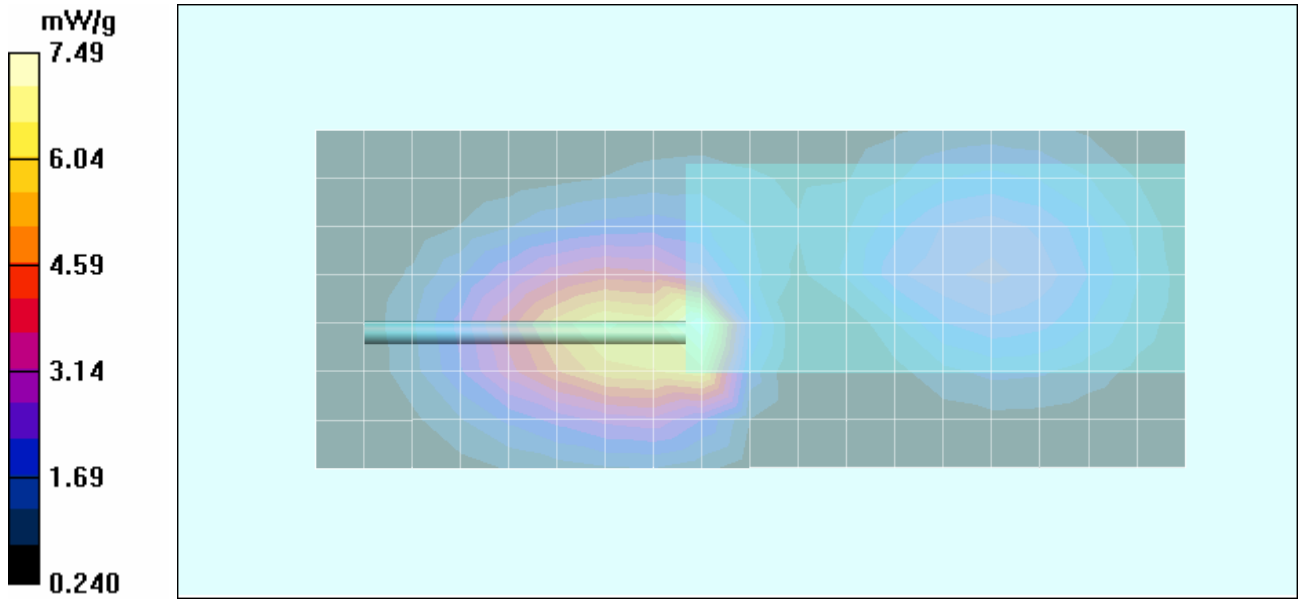
Communication System: FM
Frequency: 806 MHz; Duty Cycle: 1:1
RF Output Power: 3.3 Watts (Conducted)
7.5V NiCd Extra High Capacity Battery (P/N: BKB 191 202)
Medium: M815 (σ = 0.94 mho/m; ε_r = 54.0; ρ = 1000 kg/m^3)

- Probe: ET3DV6 - SN1590; ConvF(6.47, 6.47, 6.47); Calibrated: 20/05/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 15/06/2005
- Phantom: Small Planar; Type: Plexiglas; Serial: 161
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

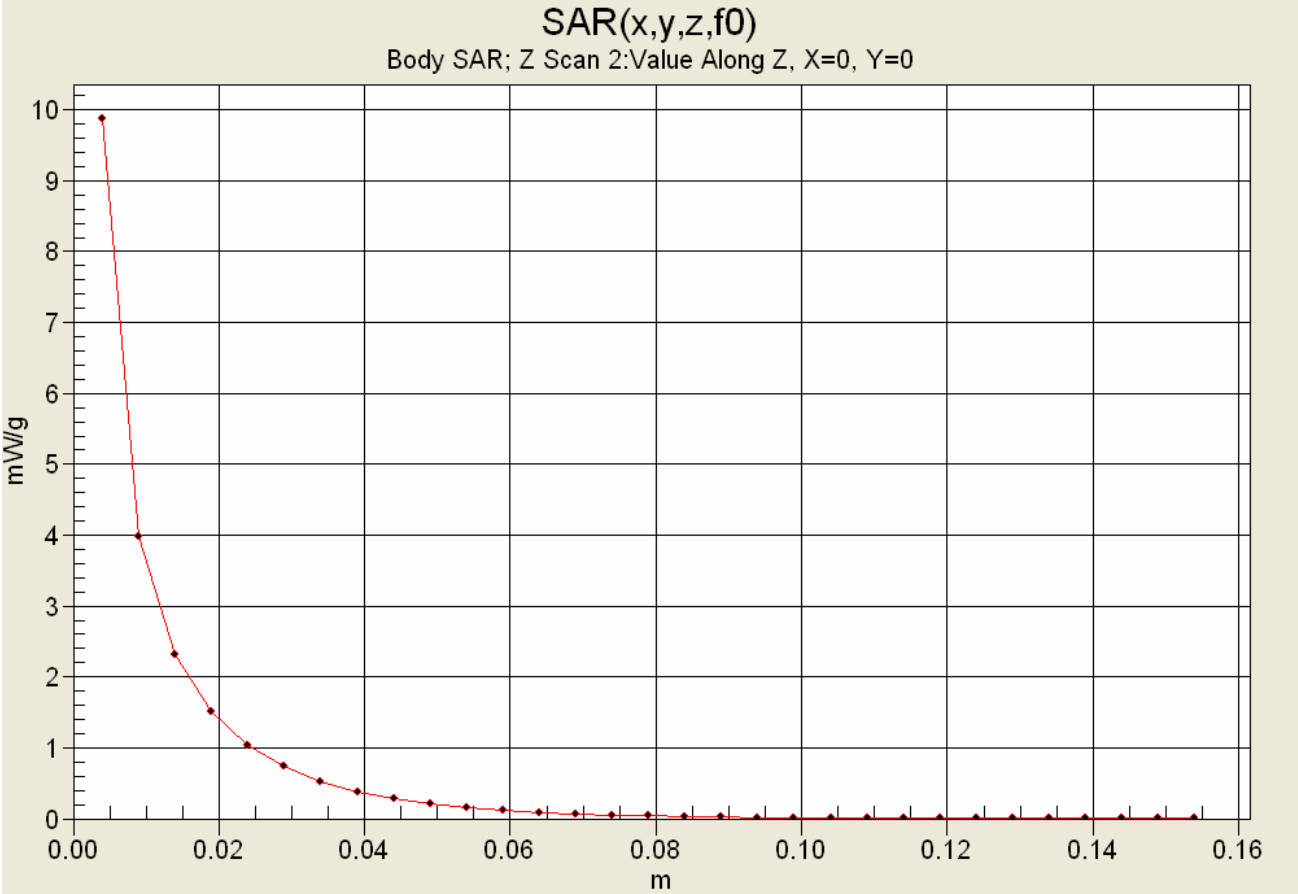
Body-Worn SAR - 1.8 cm Leather Case (with metal swivel connector) Separation Distance to Planar Phantom - Low Channel
Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Body-Worn SAR - 1.8 cm Leather Case (with metal swivel connector) Separation Distance to Planar Phantom - Low Channel
Zoom Scan 3 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 64.9 V/m; Power Drift = -0.496 dB
Peak SAR (extrapolated) = 24.0 W/kg
SAR(1 g) = 8.13 mW/g; SAR(10 g) = 4.26 mW/g

Body-Worn SAR - 1.8 cm Leather Case (with metal swivel connector) Separation Distance to Planar Phantom - Low Channel
Zoom Scan 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 64.2 V/m; Power Drift = -0.572 dB
Peak SAR (extrapolated) = 7.61 W/kg
SAR(1 g) = 5.72 mW/g; SAR(10 g) = 4.1 mW/g

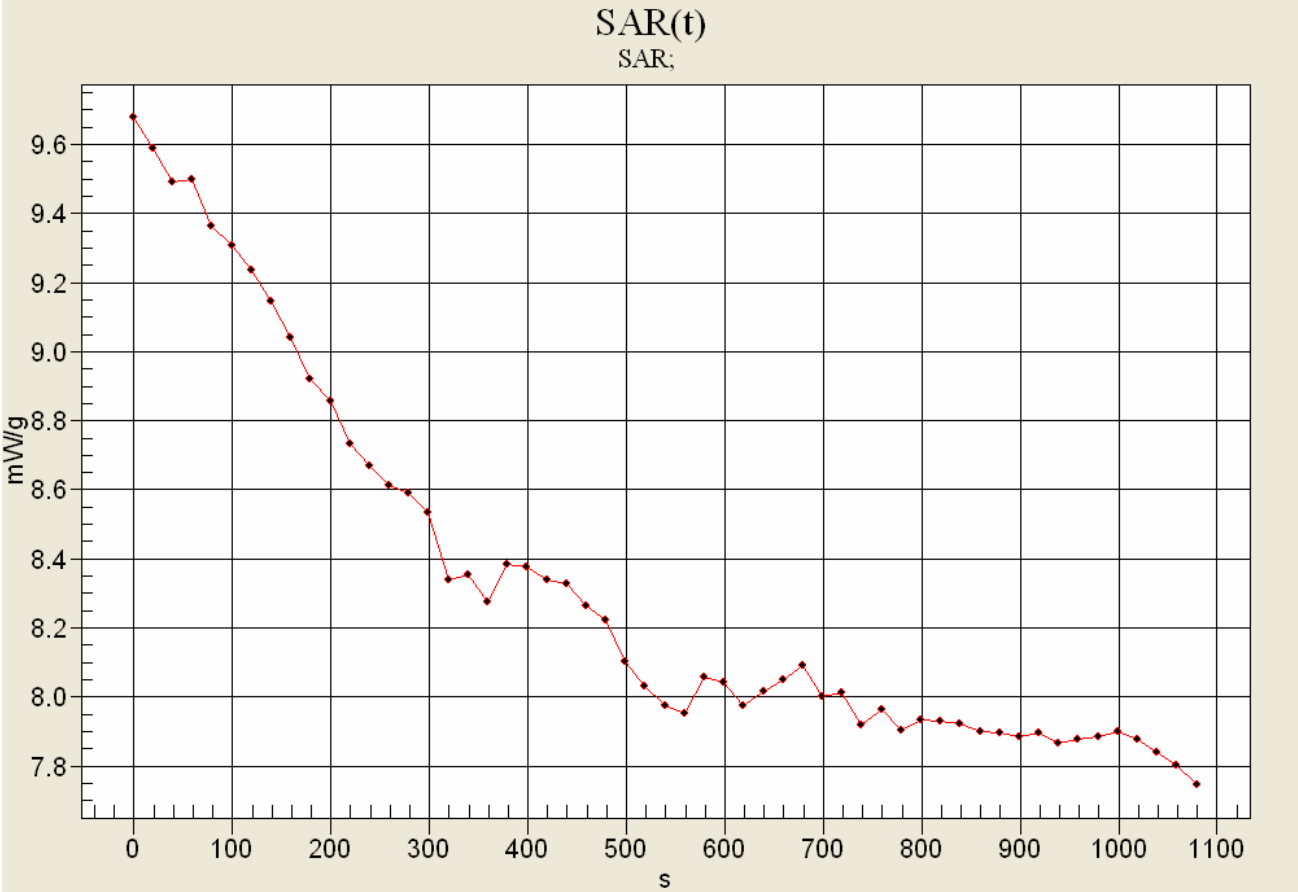


Z-Axis Scan



SAR-Versus-Time Power Droop Evaluation

Body-Worn: Dut with Leather Case and Shoulder Strap
Audio: Speaker-Microphone
Extra High Capacity NiCd Battery
Quarter-Wave Antenna
Low Channel: 806 MHz



Initial SAR: 9.67823 mW/g
SAR after 1080s: 7.74683 mW/g (-0.9667 dB)
SAR after 340s: 8.35478 mW/g (-0.6386 dB)
(340s = Zoom Scan Duration)
(1080s = Area Scan Duration)

APPENDIX B - SYSTEM PERFORMANCE CHECK DATA

Date Tested: 04/26/2006

System Performance Check (Body) - 835 MHz Dipole

DUT: Dipole 835 MHz; Model: D835V2; Type: System Performance Check; Serial: 411; Calibrated: 03/27/2006

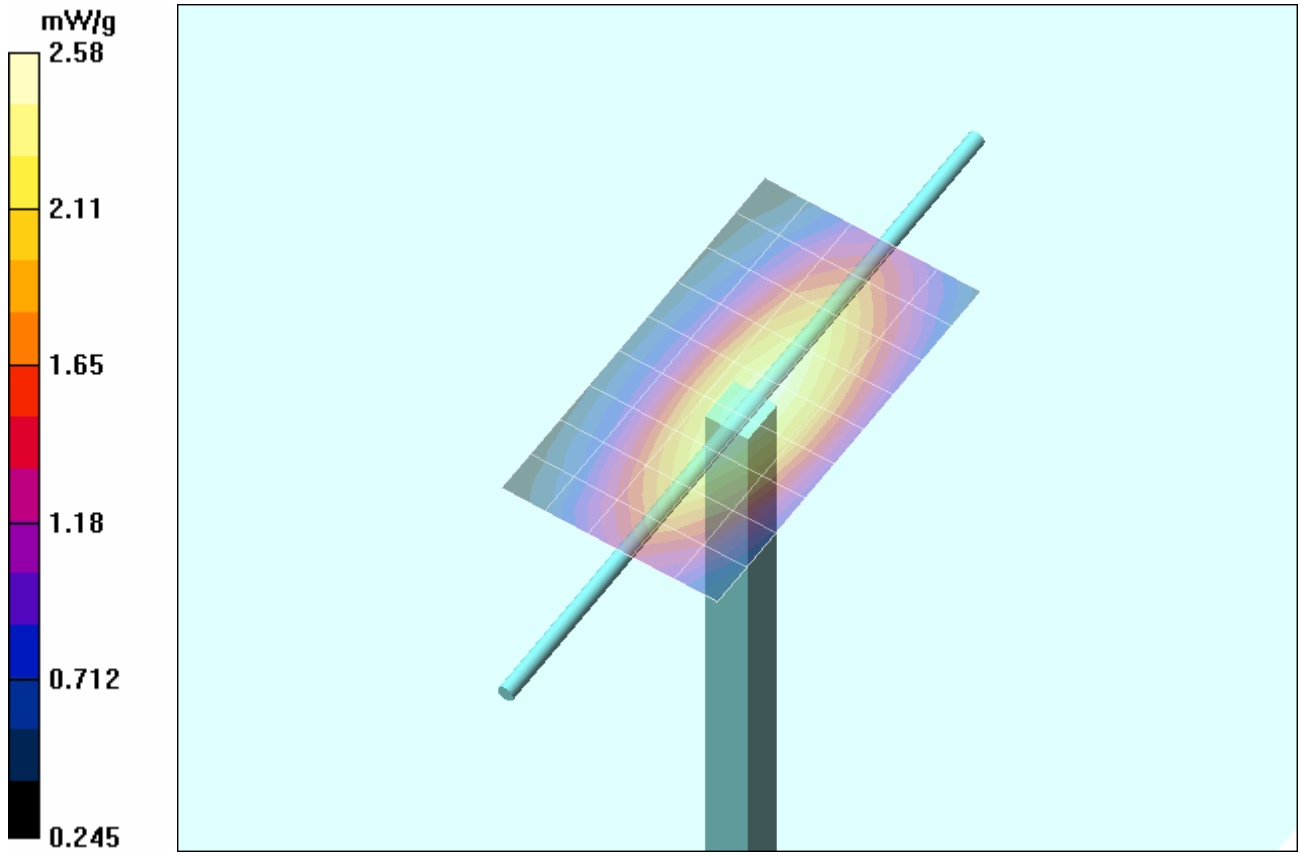
Ambient Temp: 24.4 °C; Fluid Temp: 22.5 °C; Barometric Pressure: 101.6 kPa; Humidity: 30%

Communication System: CW
Forward Conducted Power: 250 mW
Frequency: 835 MHz; Duty Cycle: 1:1
Medium: M835 (σ = 0.96 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3)

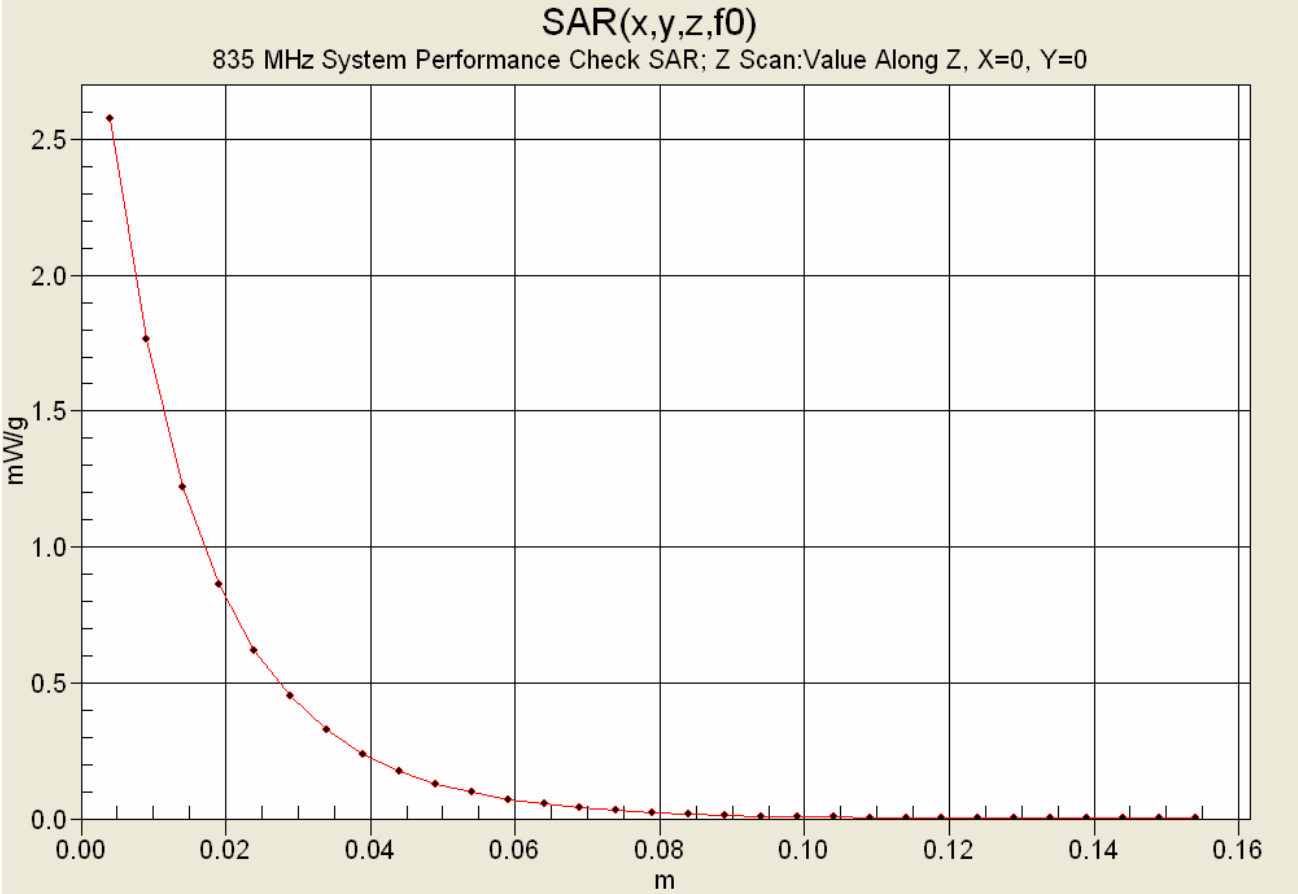
- Probe: ET3DV6 - SN1590; ConvF(6.47, 6.47, 6.47); Calibrated: 20/05/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 15/06/2005
- Phantom: Barski Industries; Type: Fiberglas Planar; Serial: 03-01
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

835 MHz Dipole - System Performance Check/Area Scan (6x10x1):
Measurement grid: dx=10mm, dy=10mm

835 MHz Dipole - System Performance Check/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.3 V/m; Power Drift = -0.124 dB
Peak SAR (extrapolated) = 3.44 W/kg
SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.57 mW/g



Z-Axis Scan



APPENDIX C - MEASURED FLUID DIELECTRIC PARAMETERS

835 MHz System Performance Check & 815 MHz DUT Evaluation (Body)

****

Celltech Labs Inc.
Test Result for UIM Dielectric Parameter
Wed 26/Apr/2006
Frequency(GHz)
FCC_eH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Epsilon
FCC_sH FCC Bulletin 65 Supplement C (June 2001) Limits for Head Sigma
FCC_eB FCC Limits for Body Epsilon
FCC_sB FCC Limits for Body Sigma
Test_e Epsilon of UIM
Test_s Sigma of UIM

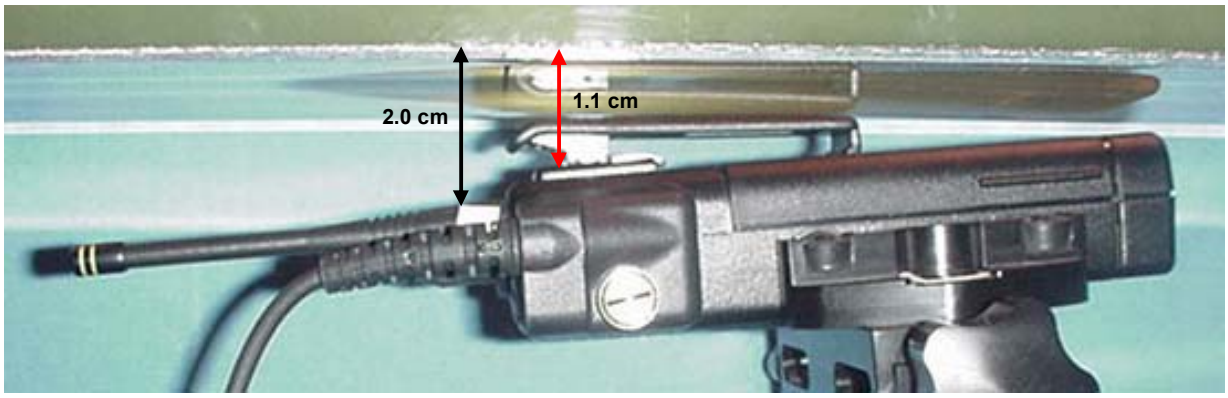
****

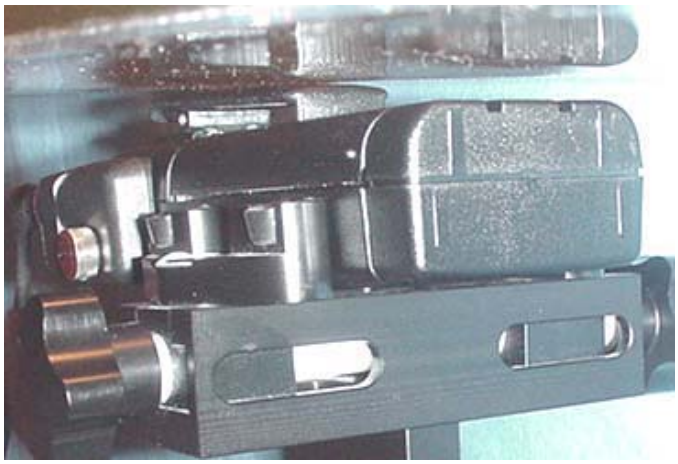
Freq	FCC_eB	FCC_sB	Test_e	Test_s
0.7350	55.59	0.96	54.64	0.86
0.7450	55.55	0.96	54.73	0.87
0.7550	55.51	0.96	54.65	0.88
0.7650	55.47	0.96	54.35	0.89
0.7750	55.43	0.97	54.37	0.90
0.7850	55.39	0.97	54.09	0.91
0.7950	55.36	0.97	54.21	0.92
0.8050	55.32	0.97	54.12	0.93
0.8150	55.28	0.97	53.98	0.94
0.8250	55.24	0.97	53.92	0.95
0.8350	55.20	0.97	53.90	0.96
0.8450	55.17	0.98	53.74	0.97
0.8550	55.14	0.99	53.61	0.97
0.8650	55.11	1.01	53.73	0.98
0.8750	55.08	1.02	53.47	1.00
0.8850	55.05	1.03	53.45	1.00
0.8950	55.02	1.04	53.40	1.01
0.9050	55.00	1.05	53.29	1.02
0.9150	55.00	1.06	53.33	1.03
0.9250	54.98	1.06	53.05	1.04
0.9350	54.96	1.07	52.98	1.05

APPENDIX D - SAR TEST SETUP & DUT PHOTOGRAPHS

BODY-WORN SAR TEST SETUP PHOTOGRAPHS

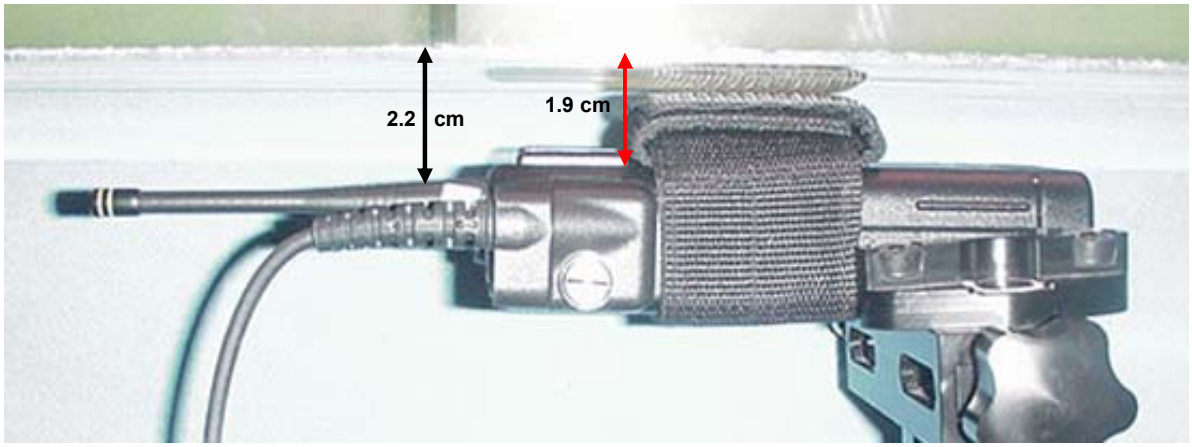
DUT with Plastic Belt-Clip and Metal Clasp (P/N: KRY 101 1232/2)
Speaker-Microphone Audio Accessory (P/N: KRY 101 1617/73)
(1.1 cm Belt-Clip Separation Distance to Planar Phantom)

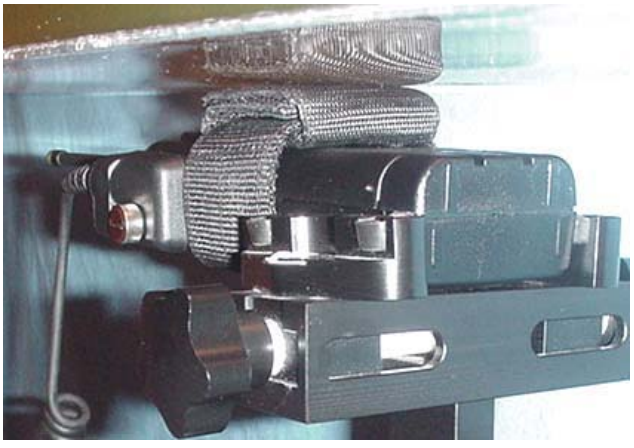




BODY-WORN SAR TEST SETUP PHOTOGRAPHS

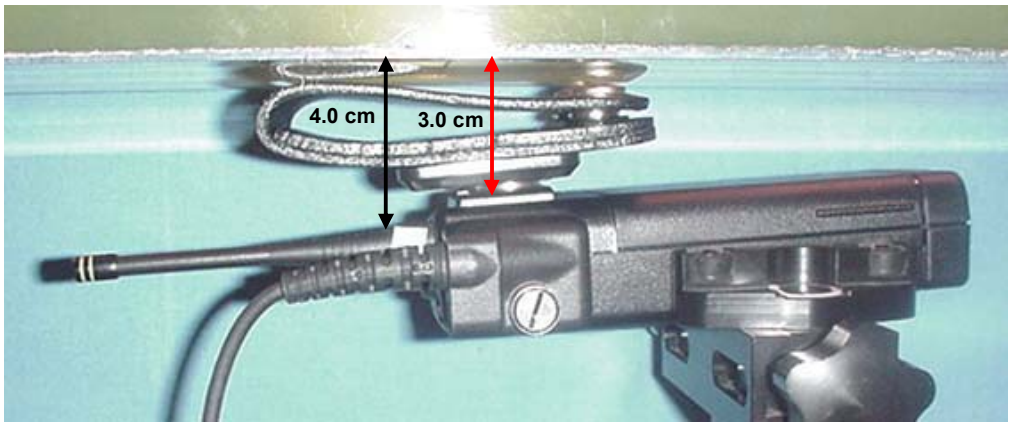
DUT with Nylon "T" Strap Radio Holder (P/N: KRY 101 1656/1)
Speaker-Microphone Audio Accessory (P/N: KRY 101 1617/73)
(1.9 cm "T" Strap Separation Distance to Planar Phantom)

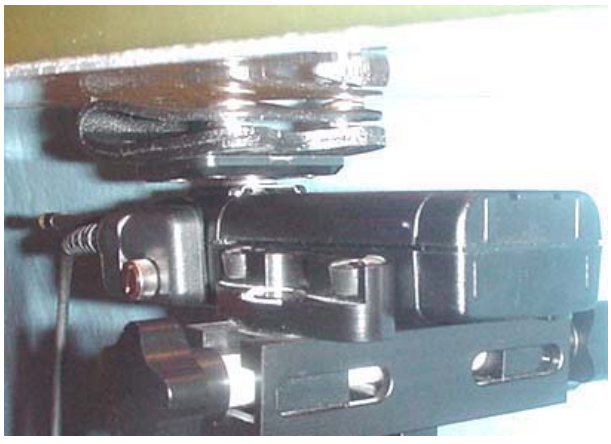




BODY-WORN SAR TEST SETUP PHOTOGRAPHS

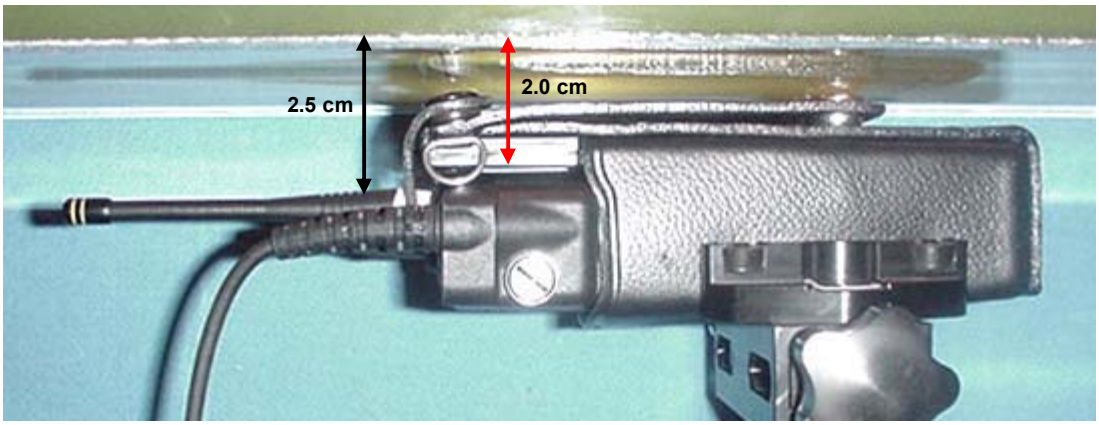
DUT with Swivel Belt-Loop (P/N: KRY 101 1608/2)
Speaker-Microphone Audio Accessory (P/N: KRY 101 1617/73)
(3.0 cm Swivel Belt-Loop Separation Distance to Planar Phantom)

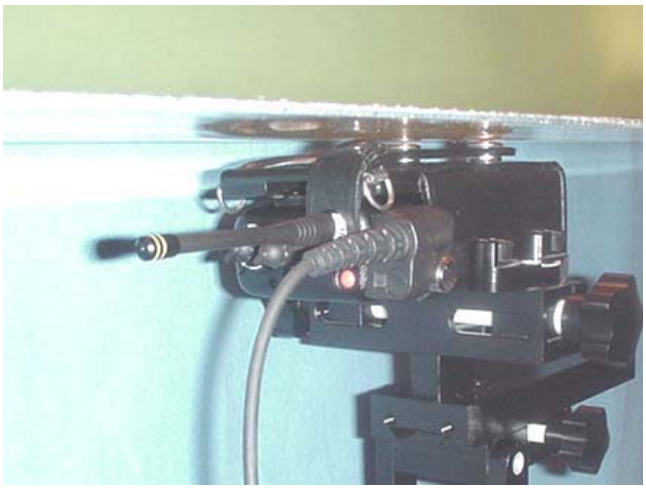


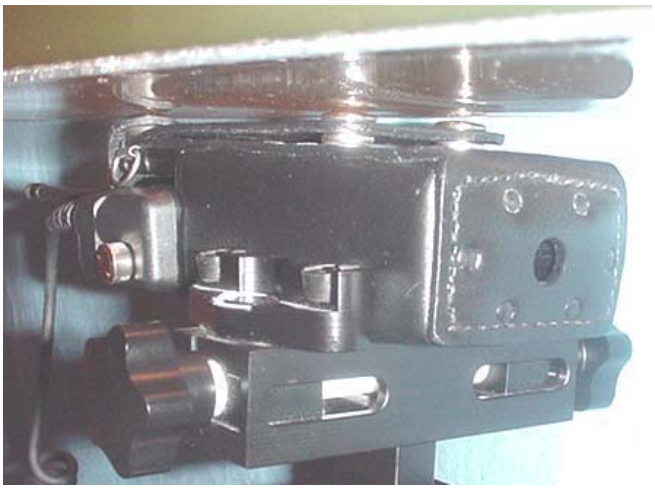


BODY-WORN SAR TEST SETUP PHOTOGRAPHS

DUT with Leather Case and Belt-Loop (P/N: KRY 101 1605/01)
Speaker-Microphone Audio Accessory (P/N: KRY 101 1617/73)
(2.0 cm Leather Case and Belt-Loop Separation Distance to Planar Phantom)

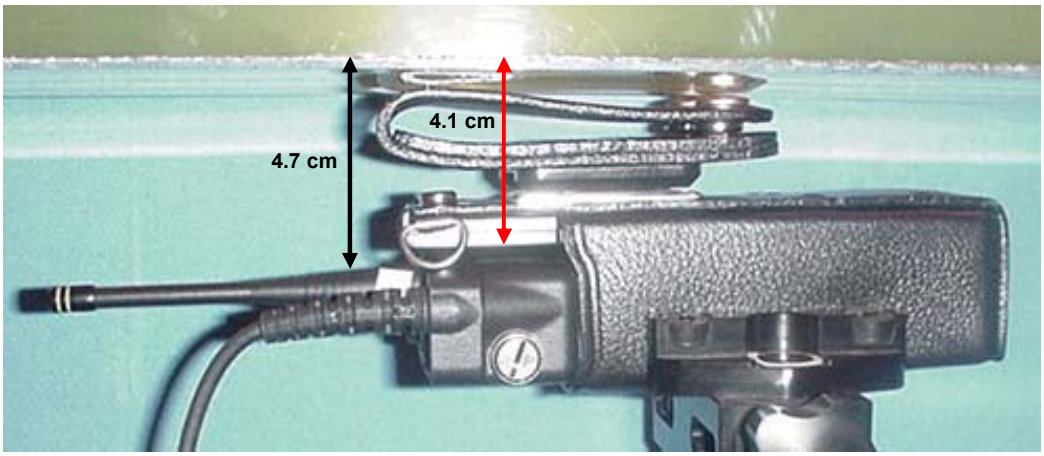


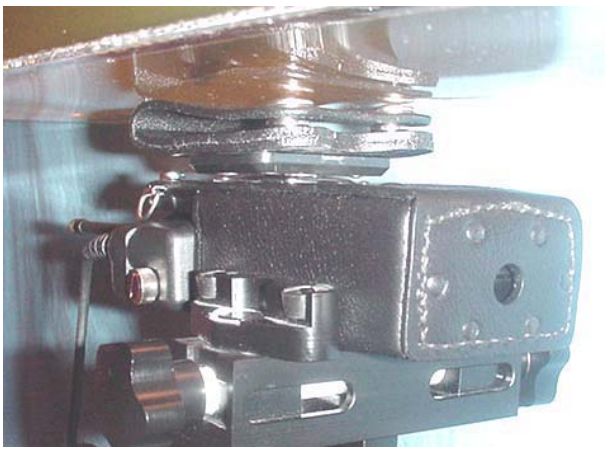




BODY-WORN SAR TEST SETUP PHOTOGRAPHS

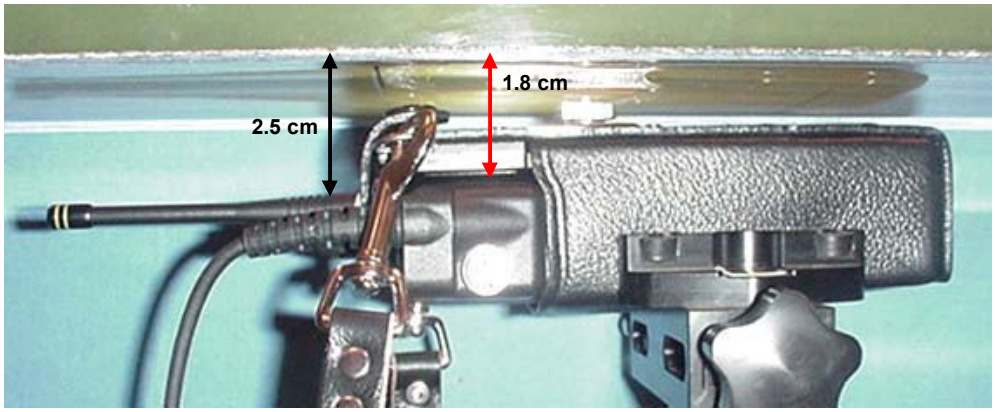
DUT with Leather Case and Swivel Belt-Loop (P/N: KRY 101 1605/02)
Speaker-Microphone Audio Accessory (P/N: KRY 101 1617/73)
(4.1 cm Leather Case and Swivel Belt-Loop Separation Distance to Planar Phantom)

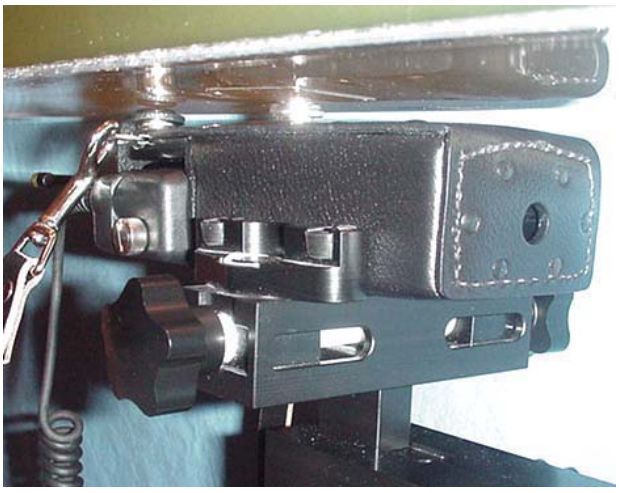




BODY-WORN SAR TEST SETUP PHOTOGRAPHS

DUT with Leather Case and Shoulder Strap (P/N: KRY 101 1607/1)
Speaker-Microphone Audio Accessory (P/N: KRY 101 1617/73)
(1.8 cm Leather Case and metal swivel connector Separation Distance to Planar Phantom)





DUT PHOTOGRAPHS

Plastic Belt-Clip with metal clasp (P/N: KRY 101 1232/2)

Back of DUT with belt-clip

Left Side of DUT

Right Side of DUT

Plastic Belt-Clip with metal clasp

Plastic Belt-Clip with metal clasp

DUT PHOTOGRAPHS

Leather Case with Belt-Loop (P/N: KRY 101 1605/01)

Front Side

Back Side

Left Side

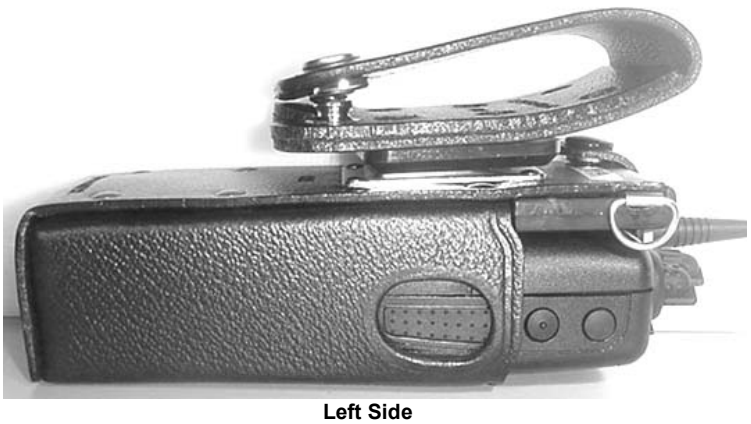
Right Side

DUT PHOTOGRAPHS

Leather Case with Swivel Belt-Loop (P/N: KRY 101 1605/02)

Front Side

Back Side



Left Side

Right Side

DUT PHOTOGRAPHS

Leather Case (metal swivel connector type) with Shoulder Strap (P/N: KRY 101 1607/1)

Front Side

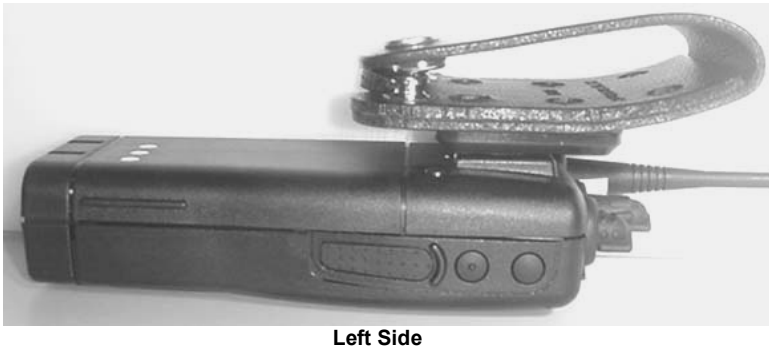
Back Side

DUT PHOTOGRAPHS
Swivel Belt-Loop (P/N: KRY 101 1608/2)

Front Side

Back Side

Back Side
(showing metal swivel connector)



Left Side

Right Side

DUT PHOTOGRAPHS

Nylon "T" Strap Radio Holder (P/N: KRY 101 1656/1)

Front Side

Back Side

Left Side

Right Side