

### **APPENDIX A: SAR TEST DATA**

PCTESTÔ SAR REPORT	APCTEST	FCC CERTIFICATION	<b>(4)</b>	Reviewed by: Quality Manager
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-1 of A-23
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	Tage A-T of A-25



### DUT: MOTORO LA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN/33; Frequency: 813.513 MHz; Duty Cycle: 1:3 Medium: 835 Brain ( $\sigma = 0.92 \text{ mho/m}$ ,  $\epsilon_{\rm r} = 42.28$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Right Section

Test Date: 03-22-2004; Ambient Temp: 21.8°C; Tissue Temp: 20.4°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Mid Ch, Touch, Maximum Capacity Battery

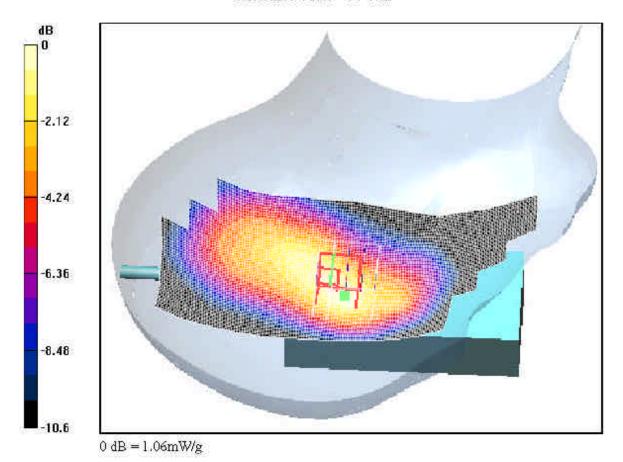
Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.864 mW/g; SAR(10 g) = 0.574 mW/g

Reference Value = 30 V/m



PCTESTÔ SAR REPORTFCC CERTIFICATIONReviewed by:<br/>Quality ManagerSAR Filename:<br/>SAR.240309236.AZ4Test Dates:<br/>March 22-24, 2004Phone Type:<br/>Dual-Mode PTT Phone (iDEN/ISM)FCC ID:<br/>AZ489FT5831Page A-2 of A-23



### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN/33; Frequency: 813.513 MHz; Duty Cycle: 1:3 Medium: 835 Brain ( $\sigma = 0.92 \text{ mho/m}$ ,  $\epsilon_{\rm r} = 42.28$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Right Section

Test Date: 03-22-2004; Ambient Temp: 21.8°C; Tissue Temp: 20.4°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Mid Ch, Tilt, Maximum Capacity Battery

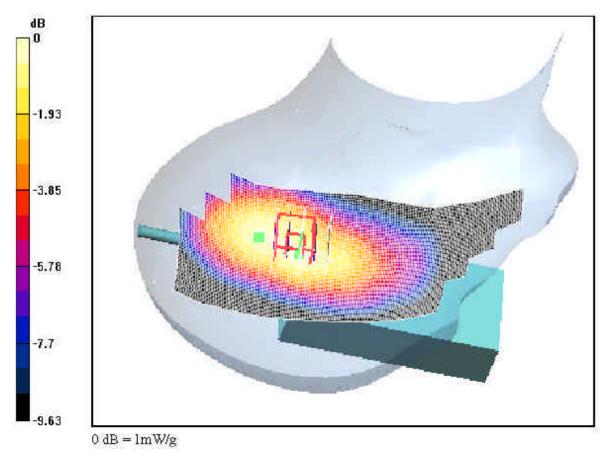
Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.859 mW/g; SAR(10 g) = 0.585 mW/g

Reference Value = 30 V/m



PCTESTÔ SAR REPORT

FCC CERTIFICATION

Quality Manager

SAR Filename:
SAR.240309236.AZ4

March 22-24, 2004

Dual-Mode PTT Phone (iDEN/ISM)

AZ489FT5831

Reviewed by:
Quality Manager

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### DUT: MOTORO LA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN/33; Frequency: 813.513 MHz; Duty Cycle: 1:3

Medium: 835 Brain (σ = 0.92 mho/m, ε<sub>r</sub> = 42.28, ρ = 1000 kg/m<sup>3</sup>)

Phantom section: Left Section

Test Date: 03-22-2004; Ambient Temp: 21.8°C; Tissue Temp: 20.4°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 3mm (Mechanical Surface Detection)

Floatronical DAF2 Sp455; Phontom, SAM 12b; Type: SAM 4.0; Serial, TB-116

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Mid Ch, Touch, Maximum Capacity Battery

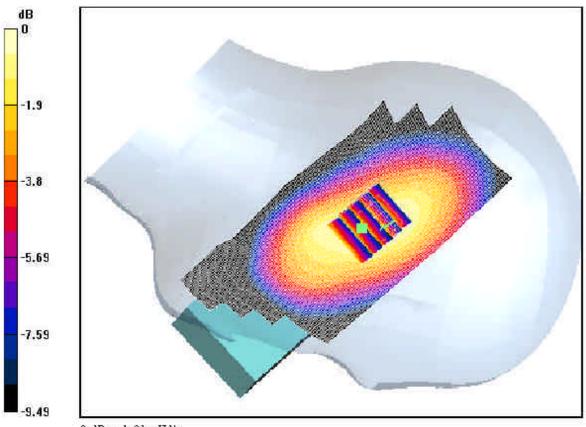
Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.841 mW/g; SAR(10 g) = 0.583 mW/g

Reference Value = 33.8 V/m



0 dB = 1.01 mW/g

PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<u> </u>	Reviewed by: Quality Manager		
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-4 of A-23		
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	1 age A-4 of A-25		
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### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN/33; Frequency: 813.513 MHz; Duty Cycle: 1:3 Medium: 835 Brain ( $\sigma = 0.92 \text{ mho/m}$ ,  $\epsilon_{\rm r} = 42.28$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Left Section

Test Date: 03-22-2004; Ambient Temp: 21.8°C; Tissue Temp: 20.4°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Mid Ch, Tilt, Maximum Capacity Battery

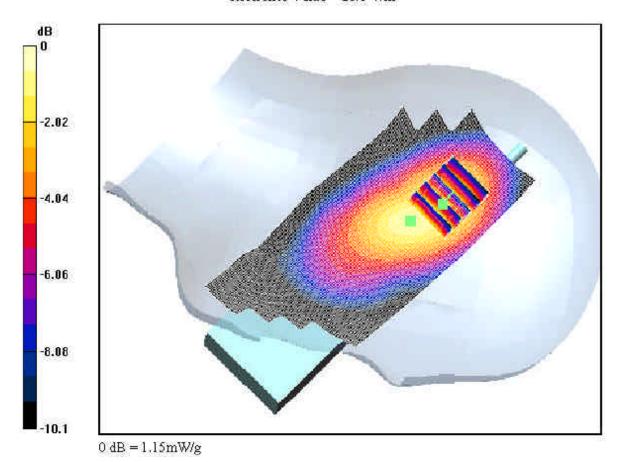
Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.904 mW/g; SAR(10 g) = 0.610 mW/g

Reference Value = 28.8 V/m



PCTESTÔ SAR REPORT

FCC CERTIFICATION

Quality Manager

SAR Filename:
SAR.240309236.AZ4

March 22-24, 2004

Dual-Mode PTT Phone (iDEN/ISM)

AZ489FT5831

Reviewed by:
Quality Manager

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#### DUT: MOTOROLA i325 iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN II/33; Frequency: 901.981 MHz; Duty Cycle: 1:3

Medium: 900 Brain (σ = 0.95 mho/m, ε<sub>T</sub> = 41.85, ρ = 1000 kg/m<sup>3</sup>)

Phantom section: Right Section

Test Date: 03-24-2004; Ambient Temp: 22.8°C; Tissue Temp: 20.6°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Right Touch, High Ch, Maximum Capacity Battery, Fixed Antenna

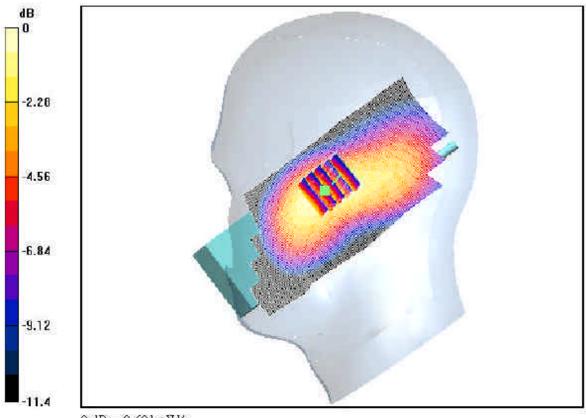
Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.781 W/kg

SAR(1 g) = 0.515 mW/g; SAR(10 g) = 0.344 mW/g

Reference Value = 22.8 V/m



0 dB = 0.60 lmW/g

PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<b>(4)</b>	Reviewed by: Quality Manager
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-6 of A-23
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	ŭ



### DUT: MOTOROLA i325 iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN II/33; Frequency: 896.019 MHz; Duty Cycle: 1:3 Medium: 900 Brain ( $\sigma = 0.95 \text{ mho/m}$ ,  $\epsilon_{\rm r} = 41.85$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Right Section

Test Date: 03-24-2004; Ambient Temp: 22.8°C; Tissue Temp: 20.6°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Right Tilt, Low Ch, Maximum Capacity Battery, Fixed Antenna

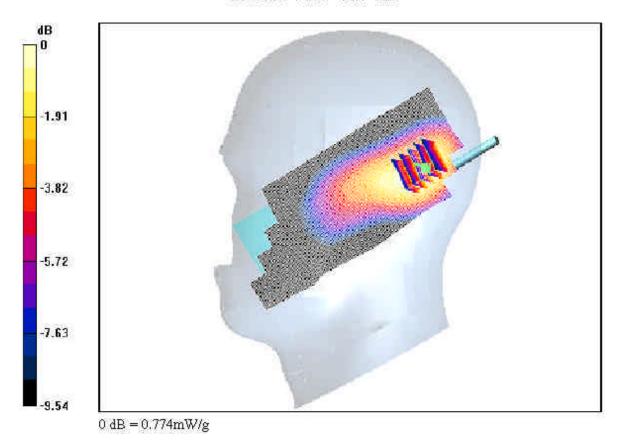
Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.934 W/kg

SAR(1 g) = 0.684 mW/g; SAR(10 g) = 0.486 mW/g

Reference Value = 21.7 V/m



PCTESTÔ SAR REPORT	PCTEST	FCC CERTIFICATION	<b>©</b>	Reviewed by: Quality Manager		
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-7 of A-23		
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	rage A-7 of A-25		
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### DUT: MOTOROLA i325 iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN II/33; Frequency: 901.981 MHz; Duty Cycle: 1:3 Medium: 900 Brain ( $\sigma$  = 0.95 mho/m,  $\epsilon_r$  = 41.85  $\rho$  = 1000 kg/m<sup>3</sup>)

Phantom section: Left Section

Test Date: 03-24-2004; Ambient Temp: 22.8°C; Tissue Temp: 20.6°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Left Touch, High Ch, Maximum Capacity Battery, Fixed Antenna

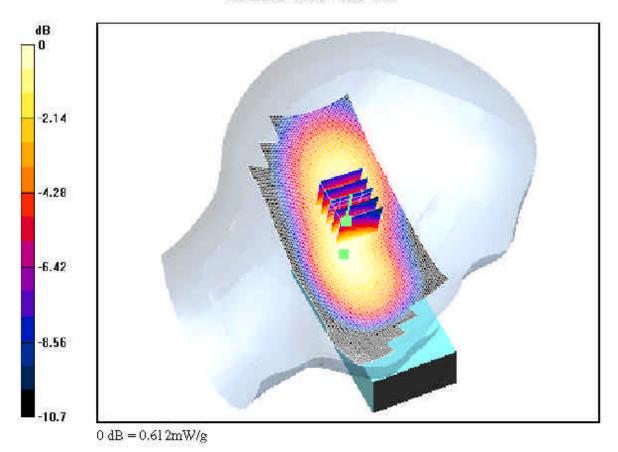
Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.756 W/kg

SAR(1 g) = 0.540 mW/g; SAR(10 g) = 0.374 mW/g

Reference Value = 25.2 V/m



PCTESTÔ SAR REPORT

FCC CERTIFICATION

Quality Manager

SAR Filename:
SAR.240309236.AZ4

March 22-24, 2004

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Dual-Mode PTT Phone (iDEN/ISM)

AZ489FT5831

Reviewed by:
Quality Manager

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#### DUT: MOTORO LA i325 iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN II/33; Frequency: 901.981 MHz; Duty Cycle: 1:3

Medium: 900 Brain ( $\sigma = 0.95 \text{ mho/m}$ ,  $\epsilon_r = 41.85$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Left Section

Test Date: 03-24-2004; Ambient Temp: 22.8°C; Tissue Temp: 20.6°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Left Tilt, High Ch, Maximum Capacity Battery, Fixed Antenna

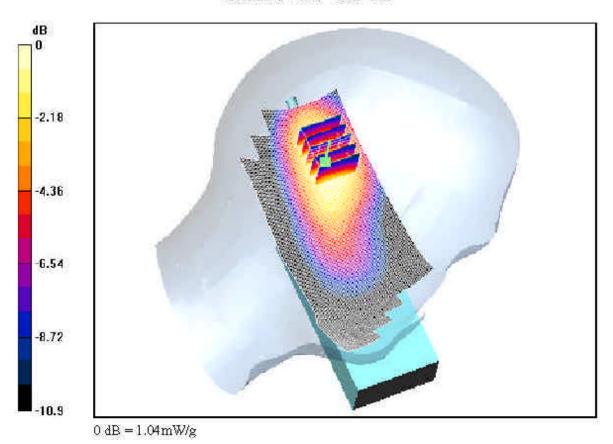
Area Scan (61 x161 x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.26 W/kg

SAR (1 g) = 0.887 mW/g; SAR (10 g) = 0.597 mW/g

Reference Value = 23.2 V/m



PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<b>(4)</b>	Reviewed by: Quality Manager
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-9 of A-23
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	



### DUT: MOTORO LA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN/16; Frequency: 813.513 MHz; Duty Cycle: 1:6

Medium: 835 Brain ( $\sigma = 0.92 \text{ mho/m}$ ,  $\epsilon_r = 42.28$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section; Space: 2.5 cm

Test Date: 03-23-2004; Ambient Temp: 22.2°C; Tissue Temp: 20.8°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Mid Ch, Maximum Capacity Battery

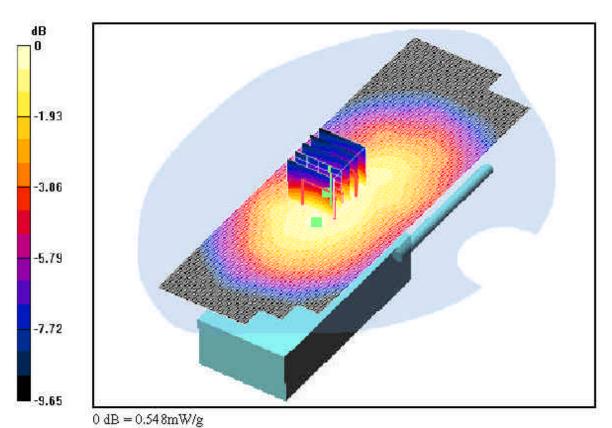
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.637 W/kg

SAR(1 g) = 0.463 mW/g; SAR(10 g) = 0.323 mW/g

Reference Value = 24.8 V/m



PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<b>©</b>	Reviewed by: Quality Manager
SAR Filename: SAR 240309236.AZ4	Test Dates: March 22-24, 2004	Phone Type: Dual-Mode PTT Phone (iDEN/ISM)	FCC ID: AZ489FT5831	Page A-10 of A-23
3AR.240307236.R24   Midt.II 22-24, 2004   Dudi-ividue FTT FIIUTie (IDEN/ISM)   AZ469F13631				



### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: IDEN II/16; Frequency: 896.019 MHz; Duty Cycle: 1:6

Medium: 900 Brain ( $\sigma = 0.95 \text{ mho/m}$ ,  $\varepsilon_r = 41.85$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section; Space: 2.5 cm

Test Date: 03-24-2004; Ambient Temp: 22.8°C; Tissue Temp: 20.6°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection) Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Low Ch, Maximum Capacity Battery

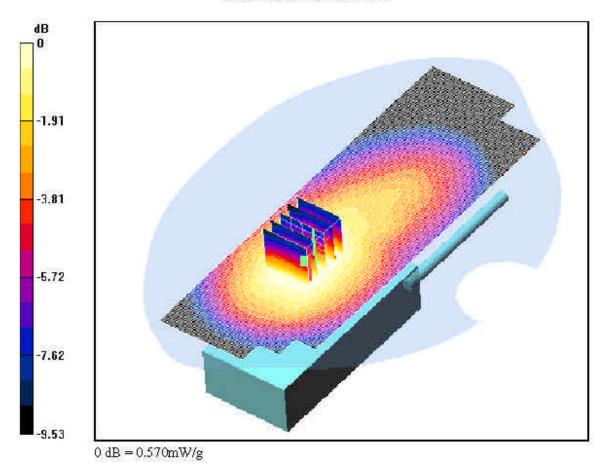
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.734 W/kg

SAR(1 g) = 0.502 mW/g; SAR(10 g) = 0.360 mW/g

Reference Value = 21.1 V/m



PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<u> </u>	Reviewed by: Quality Manager	
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-11 of A-23	
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	. 9	
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### DUT: MOTORO LA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: ISM; Frequency: 902.525 MHz; Duty Cycle: 1:1 Medium: 900 Brain ( $\sigma = 0.95 \text{ mho/m}$ ,  $\varepsilon_r = 41.85$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section; Space: 2.5 cm

Test Date: 03-23-2004; Ambient Temp: 23.4°C; Tissue Temp: 21.2°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Low Ch, Maximum Capacity Battery

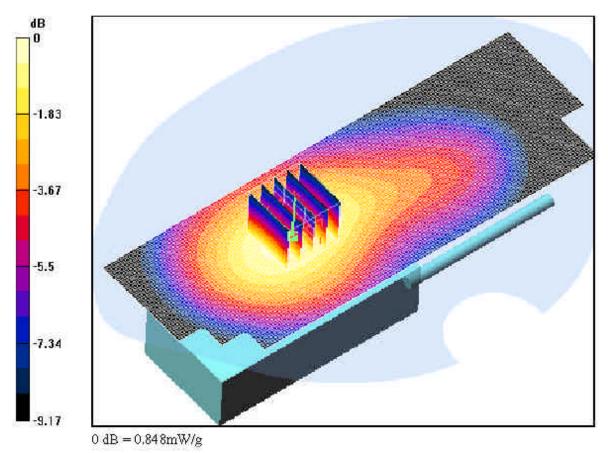
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.752 mW/g; SAR(10 g) = 0.541 mW/g

Reference Value = 23 V/m



PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<b>©</b>	Reviewed by: Quality Manager
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-12 of A-23
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	. ago / 2 3/ / 20
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### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN/66; Frequency: 806.013 MHz;Duty Cycle: 1:3

Medium: 835 Muscle ( $\sigma = 0.98 \text{ mho/m}$ ,  $\varepsilon_r = 53.16$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section; Space: 2.5 cm; Tested without Beltclip

Test Date: 03-23-2004; Ambient Temp: 22.8°C; Tissue Temp: 20.5°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Low Ch, Maximum Capacity Battery

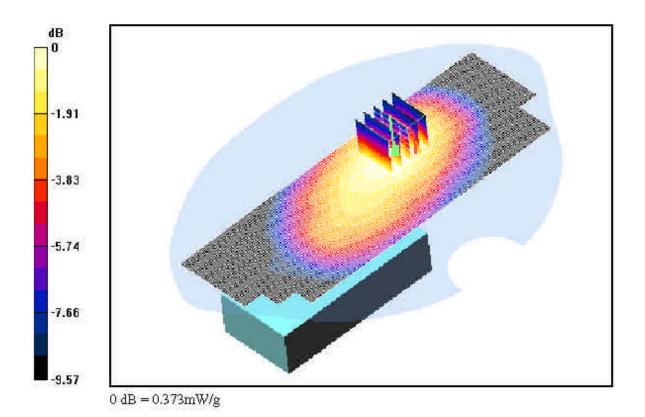
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.436 W/kg

SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.228 mW/g

Reference Value = 19.9 V/m



PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<b>@</b>	Reviewed by: Quality Manager	
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-13 of A-23	
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	Tage A-13 of A-23	
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#### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN/66; Frequency: 813.513 MHz;Duty Cycle: 1:3 Medium: 835 Muscle ( $\sigma = 0.98 \text{ mho/m}$ ,  $\varepsilon_r = 53.16$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section; Space: 2.8 cm; Tested with Beltclip

Test Date: 03-23-2004; Ambient Temp: 22.8°C; Tissue Temp: 20.5°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003

Sensor-Surface: 3mm (Mechanical Surface Detection)

Flectropics: DAF2 Sn455; Phontom: SAM 12b; Type: SAM 4 0; Serial: TE

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Mid Ch, Maximum Capacity Battery

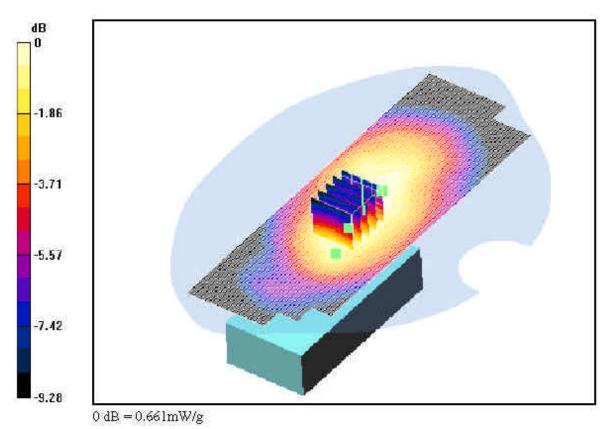
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.914 W/kg

SAR(1 g) = 0.563 mW/g; SAR(10 g) = 0.392 mW/g

Reference Value = 28.5 V/m



PCTESTÔ SAR REPORT

FCC CERTIFICATION

Quality Manager

SAR Filename: Test Dates: Phone Type: FCC ID: Dual-Mode PTT Phone (iDEN/ISM)

AZ489FT5831

Reviewed by: Quality Manager

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### DUT: MOTORO LA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: IDEN II; Frequency: 896.019 MHz; Duty Cycle: 1:6 Medium: 900 Muscle ( $\sigma = 1.03$  mho/m,  $\epsilon_r = 53.62$ ,  $\rho = 1000$  kg/m<sup>3</sup>) antom section: Flat Section; Space: 2.5 cm; Tested without Beltclip

Test Date: 03-24-2004; Ambient Temp: 22.4°C; Tissue Temp: 20.5°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Low Ch, Maximum Capacity Battery

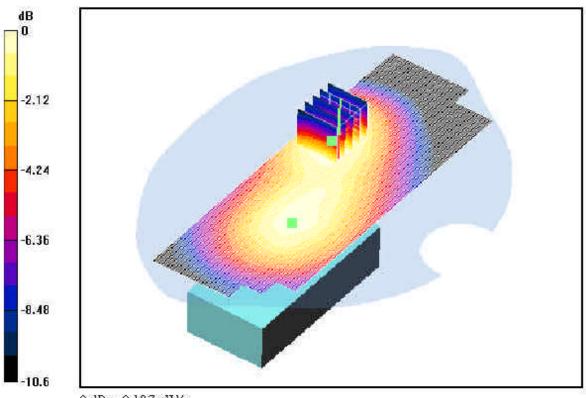
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.243 W/kg

SAR(1 g) = 0.163 mW/g; SAR(10 g) = 0.113 mW/g

Reference Value = 12.5 V/m



0 dB = 0.187 mW/g

PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<b>(4)</b>	Reviewed by: Quality Manager
SAR Filename: SAR.240309236.AZ4	Test Dates: March 22-24, 2004	Phone Type: Dual-Mode PTT Phone (iDEN/ISM)	FCC ID: AZ489FT5831	Page A-15 of A-23



#### DUT: MOTORO LA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: IDEN II; Frequency: 89 6.019 MHz; Duty Cycle: 1:6 Medium: 900 Muscle (σ = 1.03 mho/m, ε<sub>r</sub> = 53.62, ρ = 1000 kg/m<sup>3</sup>)

Phantom section: Flat Section; Space: 2.8 cm; Tested with Beltclip

Test Date: 03-24-2004; Ambient Temp: 22.4°C; Tissue Temp: 20.5°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Low Ch, Maximum Capacity Battery

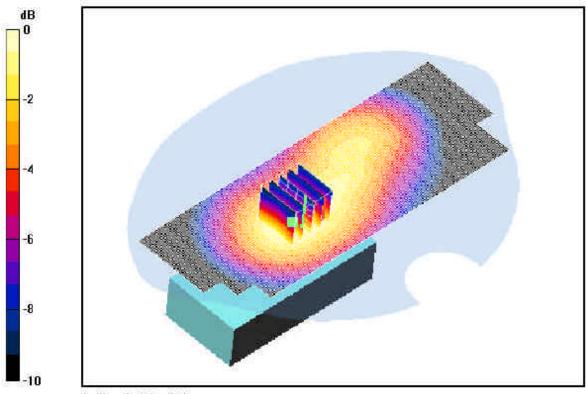
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.336 W/kg

SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.162 mW/g

Reference Value = 14.4 V/m



0 dB = 0.263 mW/g

PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<b>©</b>	Reviewed by: Quality Manager		
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-16 of A-23		
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	1 age A-10 61 A-25		
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### DUT: MOTORO LA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: ISM; Frequency: 915.525 MHz;Duty Cycle: 1:1 Medium: 900 Muscle ( $\sigma = 1.03$  mho/m,  $\epsilon_r = 53.62$ ,  $\rho = 1000$  kg/m<sup>3</sup>) Phantom section: Flat Section; Space: 2.5 cm; Tested without Beltclip

Test Date: 03-23-2004; Ambient Temp: 22.9°C; Tissue Temp: 20.8°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Mid Ch, Maximum Capacity Battery

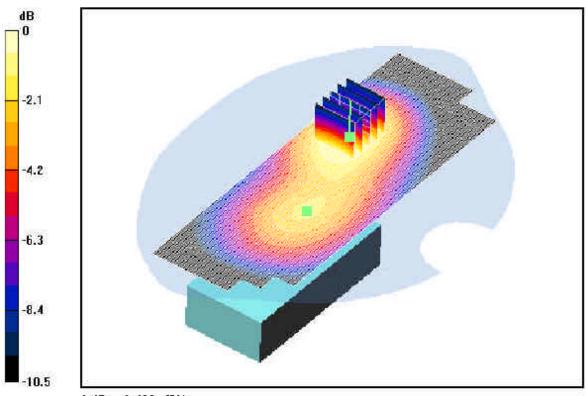
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.820 W/kg

SAR(1 g) = 0.568 mW/g; SAR(10 g) = 0.385 mW/g

Reference Value = 20 V/m



0 dB = 0.658 mW/g

PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<u> </u>	Reviewed by: Quality Manager	
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-17 of A-23	
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	rage A-17 of A-23	
© 2004 PCTEST Engineering Laboratory, Inc					



### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: ISM; Frequency: 902.525 MHz; Duty Cycle: 1:1 Medium: 900 Muscle ( $\sigma = 1.03 \text{ mho/m}$ ,  $\epsilon_r = 53.62$ ,  $\rho = 1000 \text{ kg/m}^3$ ) Phantom section: Flat Section; Space: 2.8 cm; Tested with Beltclip

Test Date: 03-23-2004; Ambient Temp: 22.9°C; Tissue Temp: 20.8°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003
Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197 Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Low Ch, Maximum Capacity Battery

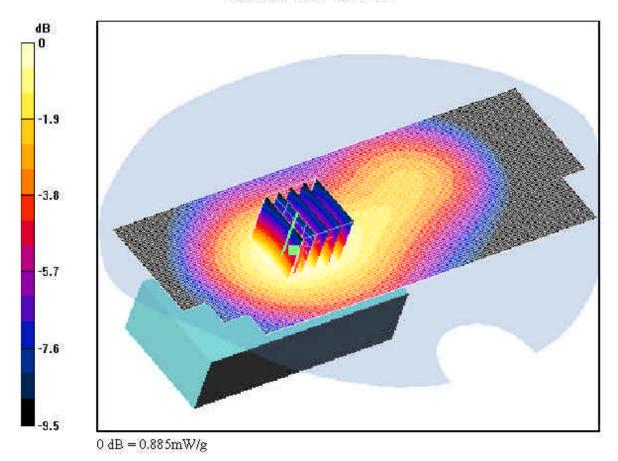
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.1 W/kg

SAR(1 g) = 0.793 mW/g; SAR(10 g) = 0.560 mW/g

Reference Value = 24.1 V/m



PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<u> </u>	Reviewed by: Quality Manager
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-18 of A-23
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	rage A-10 of A-23
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#### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN/33; Frequency: 813.513 MHz; Duty Cycle: 1:3

Medium: 835 Brain (σ = 0.92 mho/m, ε<sub>r</sub> = 42.28, ρ = 1000 kg/m<sup>3</sup>)

Phantom section: Left Section

Test Date: 03-22-2004; Ambient Temp; 21.8°C; Tissue Temp: 20.4°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Sensor-Surface: 3mm (Mechanical Surface Detection) Electronics: DAE3 Sn455; Calibrated: 1/6/2004 Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Mid Ch, Tilt, Maximum Capacity Battery

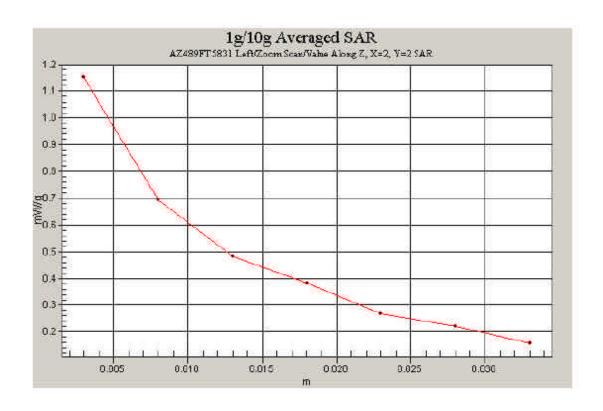
Area Scan (61x161x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.904 mW/g; SAR(10 g) = 0.610 mW/g

Reference Value = 28.8 V/m



PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<b>©</b>	Reviewed by: Quality Manager
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-19 of A-23
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	1 age A-17 61 A-25
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#### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: ISM; Frequency: 902.525 MHz; Duty Cycle: 1:1 Medium: 900 Brain (σ = 0.95 mho/m, ε<sub>r</sub> = 41.85, p = 1000 kg/m<sup>3</sup>)

Phantom section: Flat Section; Space: 2.5 cm

Test Date: 03-23-2004; Ambient Temp: 23.4°C; Tissue Temp: 21.2°C

Probe: ES3 DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Calibrated: 1/6/2004 Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Low Ch, Maximum Capacity Battery

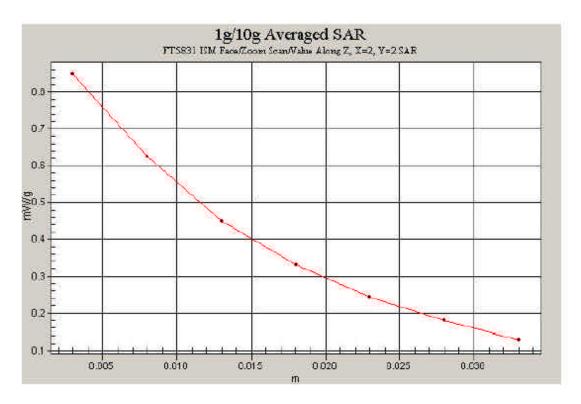
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.752 mW/g; SAR(10 g) = 0.541 mW/g

Reference Value = 23 V/m



PCTESTÔ SAR REPORT	PCTEST	FCC CERTIFICATION	<u> </u>	Reviewed by: Quality Manager
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-20 of A-23
SAR.240309236.AZ4 © 2004 PCTEST Engineering Labo	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	



### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: iDEN/33; Frequency: 813.513 MHz; Duty Cycle: 1:3 Medium: 835 Muscle ( $\sigma = 0.98 \text{ mho/m}$ ,  $\epsilon_r = 53.16$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section; Space: 2.8 cm; Tested with Beltclip

Test Date: 03-23-2004; Ambient Temp: 22.8°C; Tissue Temp: 20.5°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection) Electronics: DAE3 Sn455; Calibrated: 1/6/2004 Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

#### Mid Ch, Maximum Capacity Battery

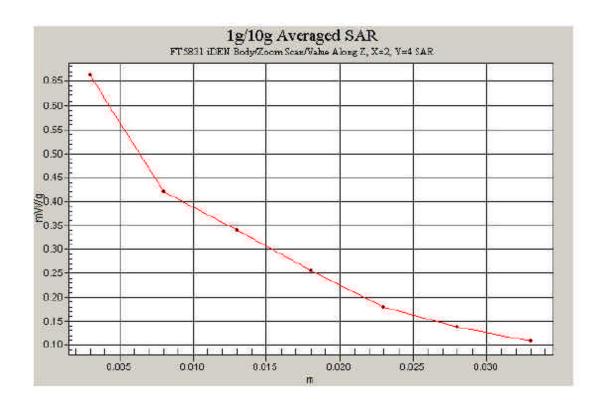
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.914 W/kg

SAR(1 g) = 0.563 mW/g; SAR(10 g) = 0.392 mW/g

Reference Value = 28.5 V/m



PCTESTÔ SAR REPORT	PCTEST	FCC CERTIFICATION	<b>©</b>	Reviewed by: Quality Manager
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-21 of A-23
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	1 age A-21 of A-23
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#### DUT: MOTOROLA iDEN/ISM Phone; Serial: 364AEAQKP3; FCC ID: AZ489FT5831

Communication System: ISM; Frequency: 902.525 MHz; Duty Cycle: 1:1 Medium: 900 Muscle (σ = 1.03 mho/m, ε<sub>r</sub> = 53.62, p = 1000 kg/m<sup>3</sup>)

Phantom section: Flat Section; Space: 0.0 cm; Tested with Beltclip

Test Date: 03-23-2004; Ambient Temp: 22.9°C; Tissue Temp: 20.8°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003 Sensor-Surface: 3mm (Mechanical Surface Detection) Electronics: DAE3 Sn455; Calibrated: 1/6/2004 Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

### Low Ch, Maximum Capacity Battery

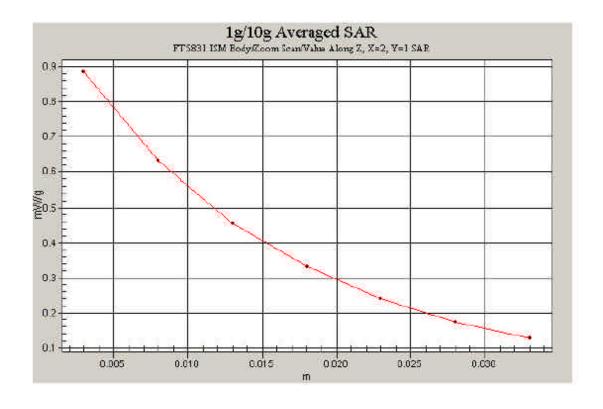
Area Scan (61x171x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.1 W/kg

SAR(1 g) = 0.793 mW/g; SAR(10 g) = 0.560 mW/g

Reference Value = 24.1 V/m



PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<b>(4)</b>	Reviewed by: Quality Manager
SAR Filename: SAR.240309236.AZ4	Test Dates: March 22-24, 2004	Phone Type: Dual-Mode PTT Phone (iDEN/ISM)	FCC ID: AZ489FT5831	Page A-22 of A-23



PCTESTÔ SAR REPORT	POTEST	FCC CERTIFICATION	<u> </u>	Reviewed by: Quality Manager
SAR Filename:	Test Dates:	Phone Type:	FCC ID:	Page A-23 of A-23
SAR.240309236.AZ4	March 22-24, 2004	Dual-Mode PTT Phone (iDEN/ISM)	AZ489FT5831	1 age A-23 of A-23