


	<u>Date(s) of Evaluation</u> Aug 20-22, Oct 4-10, 2012	<u>Test Report Serial No.</u> 081612ALH-T1192-S90V	<u>Test Report Revision No.</u> Rev. 1.1 (2nd Release)	 Test Lab Certificate No. 2470.01
	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

**APPENDIX A - SAR MEASUREMENT PLOTS**

<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH435002</b>	<b>IC ID:</b>	<b>282D-435002</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF PTT Radio Transceiver</b>	<b>Models:</b>	<b>TK-3400-K/K2</b>	<b>450.0 - 512.0 MHz</b>		
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## Face SAR Plot F1

Date Tested: 08/22/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.3C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: UHF 400-512

Frequency: 461.7 MHz; Duty Cycle: 1:1

Medium: HSL450 Medium parameters used (interpolated):  $f = 461.7 \text{ MHz}$ ;  $\sigma = 0.85 \text{ mho/m}$ ;  $\epsilon_r = 43.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.54, 7.54, 7.54); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x21x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.95 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

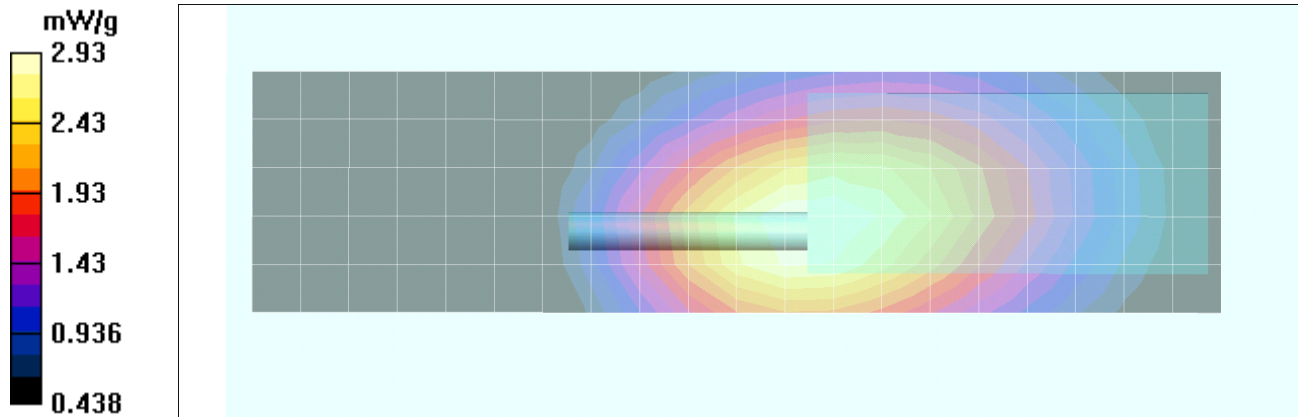
Reference Value = 58.2 V/m; Power Drift = -0.322 dB

Peak SAR (extrapolated) = 3.91 W/kg



**SAR(1 g) = 2.79 mW/g; SAR(10 g) = 2.03 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.93 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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## Face SAR Plot F2

Date Tested: 08/22/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.3C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: HSL450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 42.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.54, 7.54, 7.54); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x21x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.85 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

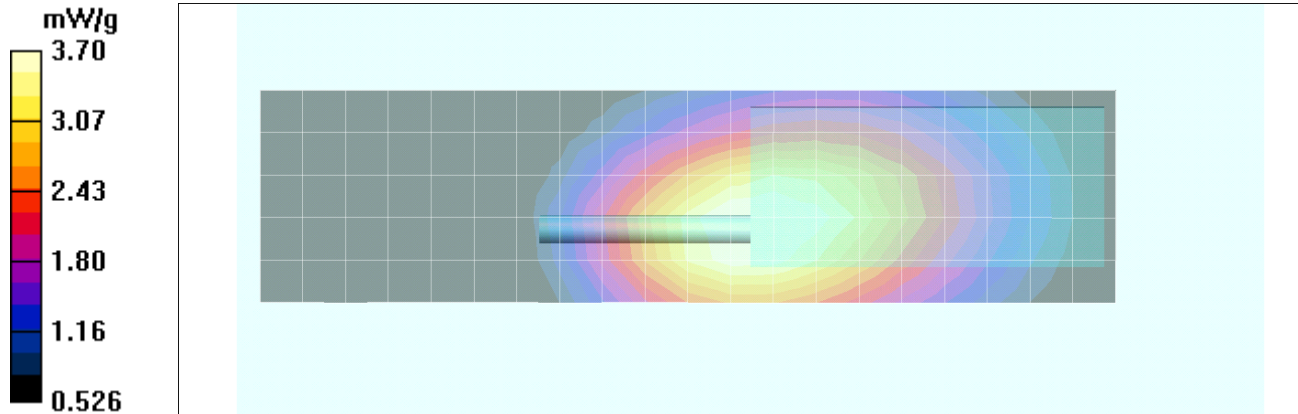
Reference Value = 66.4 V/m; Power Drift = -0.541 dB

Peak SAR (extrapolated) = 4.93 W/kg

**SAR(1 g) = 3.52 mW/g; SAR(10 g) = 2.56 mW/g**

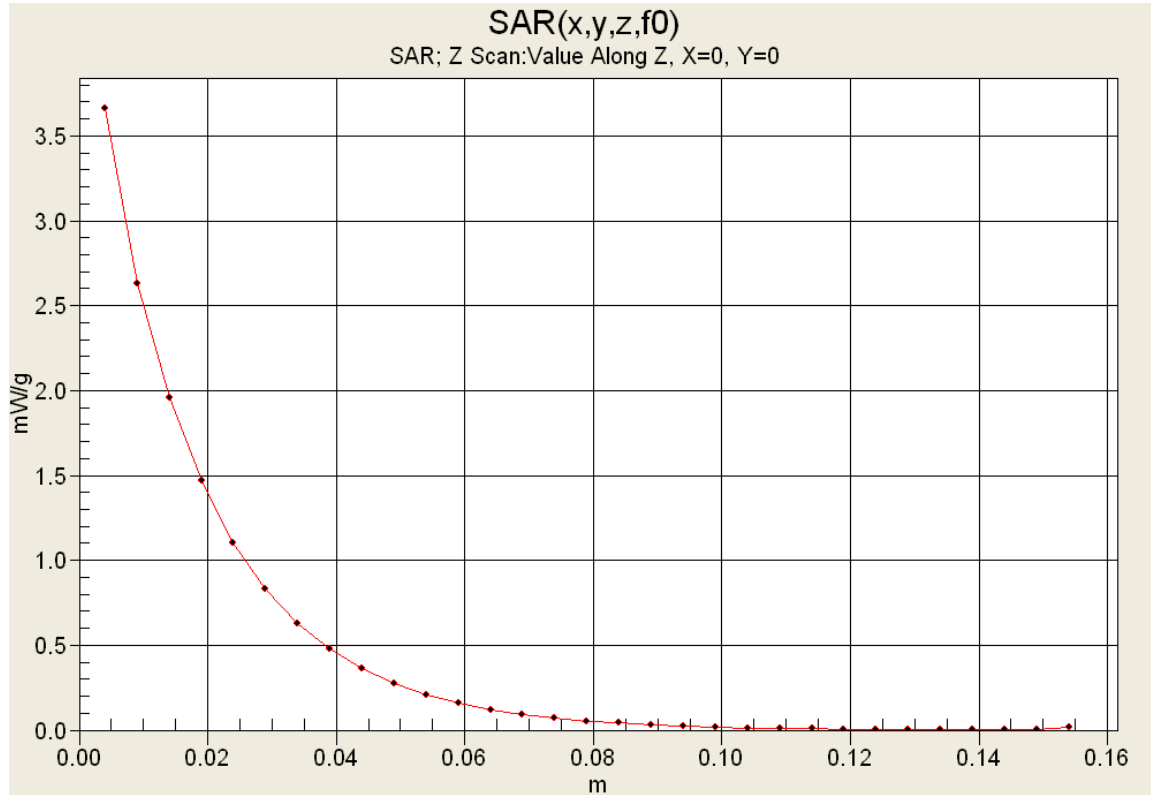
Info: Interpolated medium parameters used for SAR evaluation.



Maximum value of SAR (measured) = 3.70 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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### Z-Axis Scan



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## Face SAR Plot F3

Date Tested: 08/22/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.3C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: UHF 400-512

Frequency: 463.3 MHz; Duty Cycle: 1:1

Medium: HSL450 Medium parameters used (interpolated):  $f = 463.3 \text{ MHz}$ ;  $\sigma = 0.85 \text{ mho/m}$ ;  $\epsilon_r = 43.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.54, 7.54, 7.54); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASYS4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x21x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.22 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

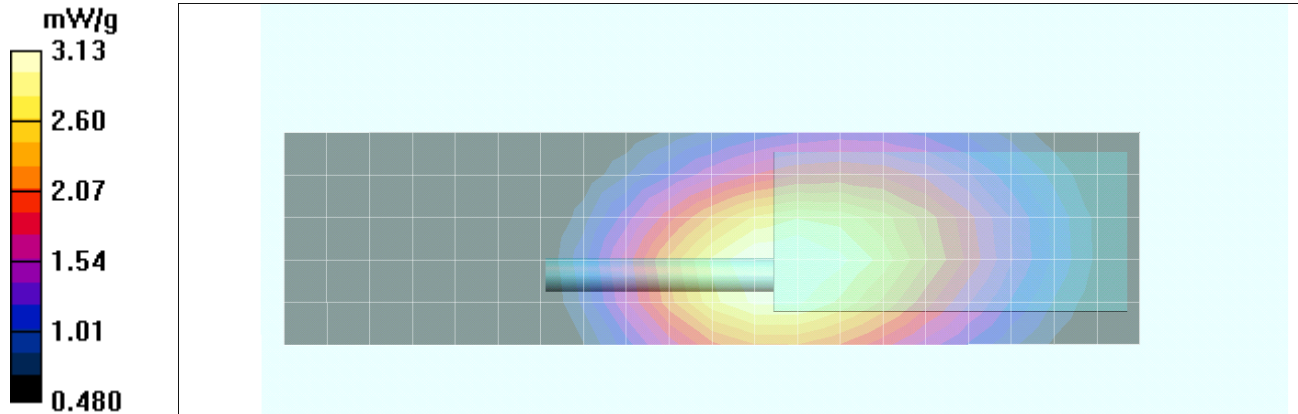
Reference Value = 60.5 V/m; Power Drift = -0.363 dB

Peak SAR (extrapolated) = 4.15 W/kg



**SAR(1 g) = 2.98 mW/g; SAR(10 g) = 2.18 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.13 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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## Face SAR Plot F4

Date Tested: 08/22/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.3C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: HSL450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 42.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.54, 7.54, 7.54); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASYS4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x21x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.93 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

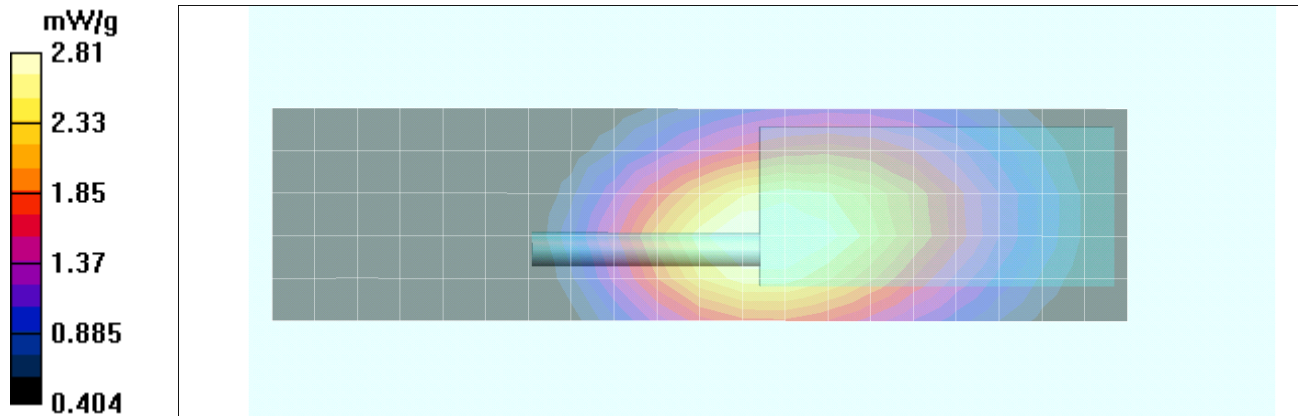
Reference Value = 58.5 V/m; Power Drift = -0.456 dB

Peak SAR (extrapolated) = 3.75 W/kg

**SAR(1 g) = 2.67 mW/g; SAR(10 g) = 1.94 mW/g**



Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.81 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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## Face SAR Plot F5

Date Tested: 08/22/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.3C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: UHF 400-512

Frequency: 463.3 MHz; Duty Cycle: 1:1

Medium: HSL450 Medium parameters used (interpolated):  $f = 463.3 \text{ MHz}$ ;  $\sigma = 0.85 \text{ mho/m}$ ;  $\epsilon_r = 43.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.54, 7.54, 7.54); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DAS4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x21x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.12 mW/g

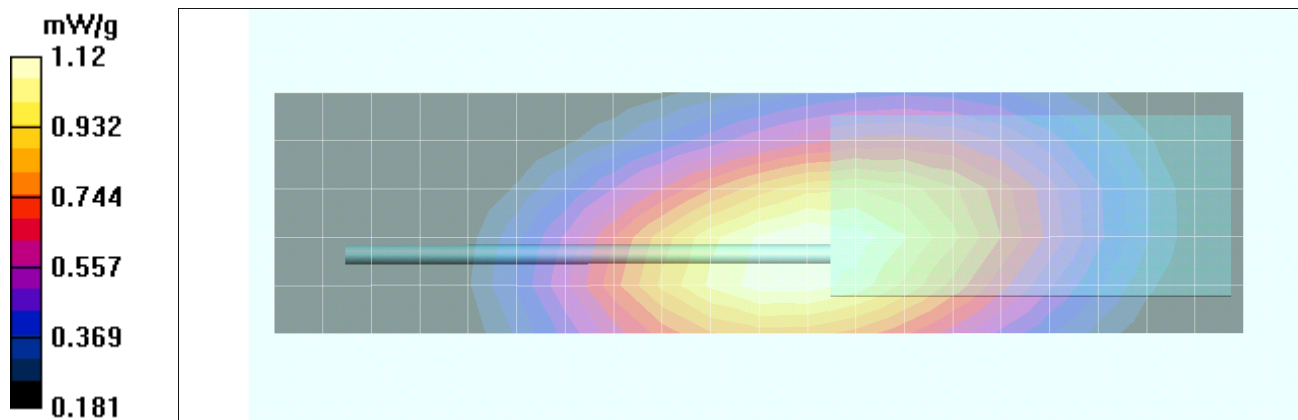
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 35.0 V/m; Power Drift = -0.204 dB



Peak SAR (extrapolated) = 1.48 W/kg

**SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.777 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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## Face SAR Plot F6

Date Tested: 08/22/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.3C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: HSL450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.86 \text{ mho/m}$ ;  $\epsilon_r = 42.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.54, 7.54, 7.54); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x21x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.37 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

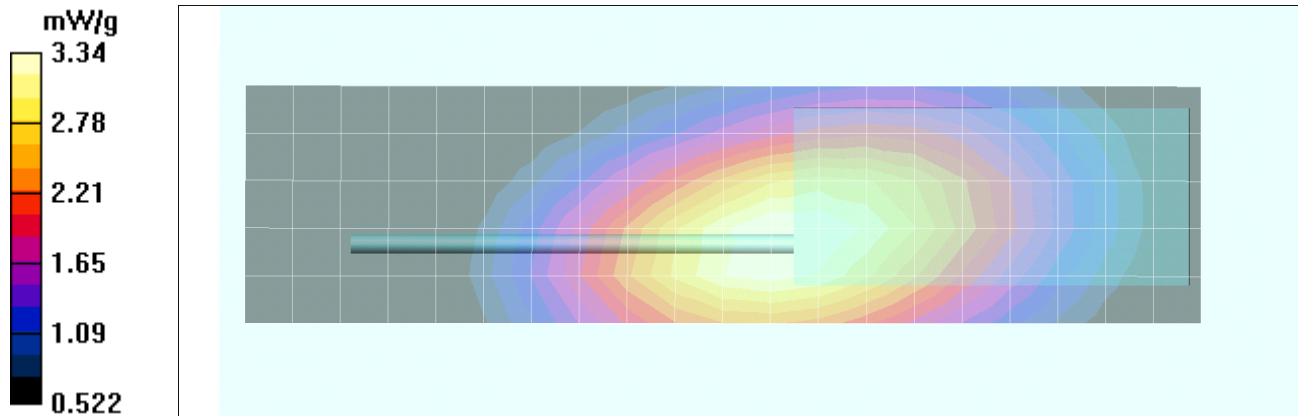
Reference Value = 60.7 V/m; Power Drift = -0.217 dB

Peak SAR (extrapolated) = 4.42 W/kg

**SAR(1 g) = 3.18 mW/g; SAR(10 g) = 2.32 mW/g**



Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.34 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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## Face SAR Plot F7

Date Tested: 10/05/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 21.4C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 463.3 MHz; Duty Cycle: 1:1

Medium: HSL450 Medium parameters used (interpolated):  $f = 463.3 \text{ MHz}$ ;  $\sigma = 0.867 \text{ mho/m}$ ;  $\epsilon_r = 44.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.54, 7.54, 7.54); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.92 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

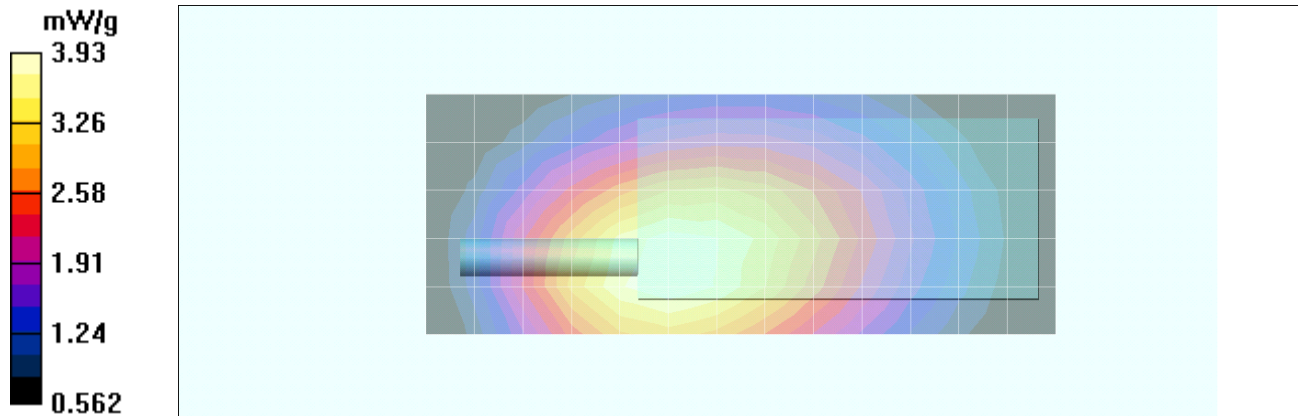
Reference Value = 61.8 V/m; Power Drift = -0.170 dB

Peak SAR (extrapolated) = 5.22 W/kg



**SAR(1 g) = 3.74 mW/g; SAR(10 g) = 2.73 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.93 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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## Face SAR Plot F8

Date Tested: 10/05/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 21.4C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: HSL450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 44.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.54, 7.54, 7.54); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.72 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

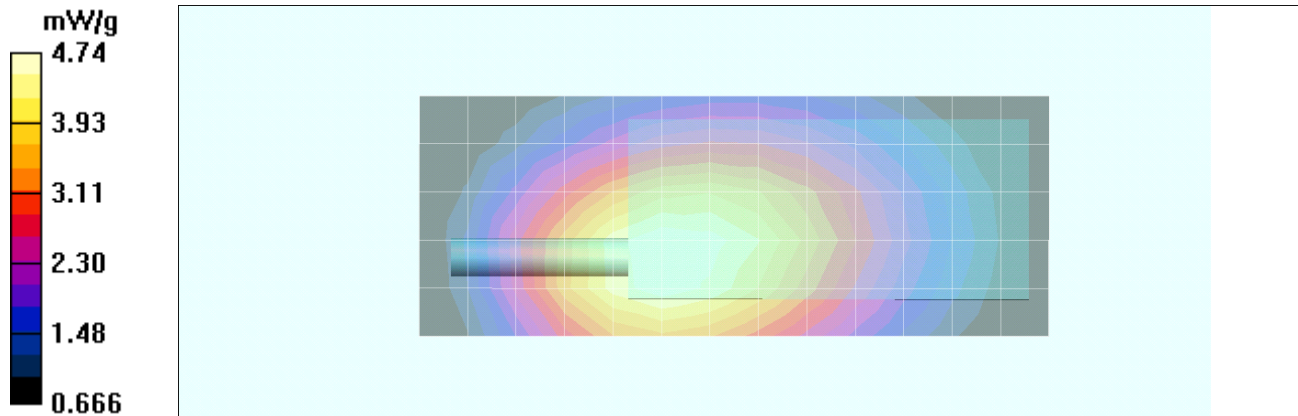
Reference Value = 68.2 V/m; Power Drift = -0.219 dB

Peak SAR (extrapolated) = 6.32 W/kg

**SAR(1 g) = 4.51 mW/g; SAR(10 g) = 3.27 mW/g**

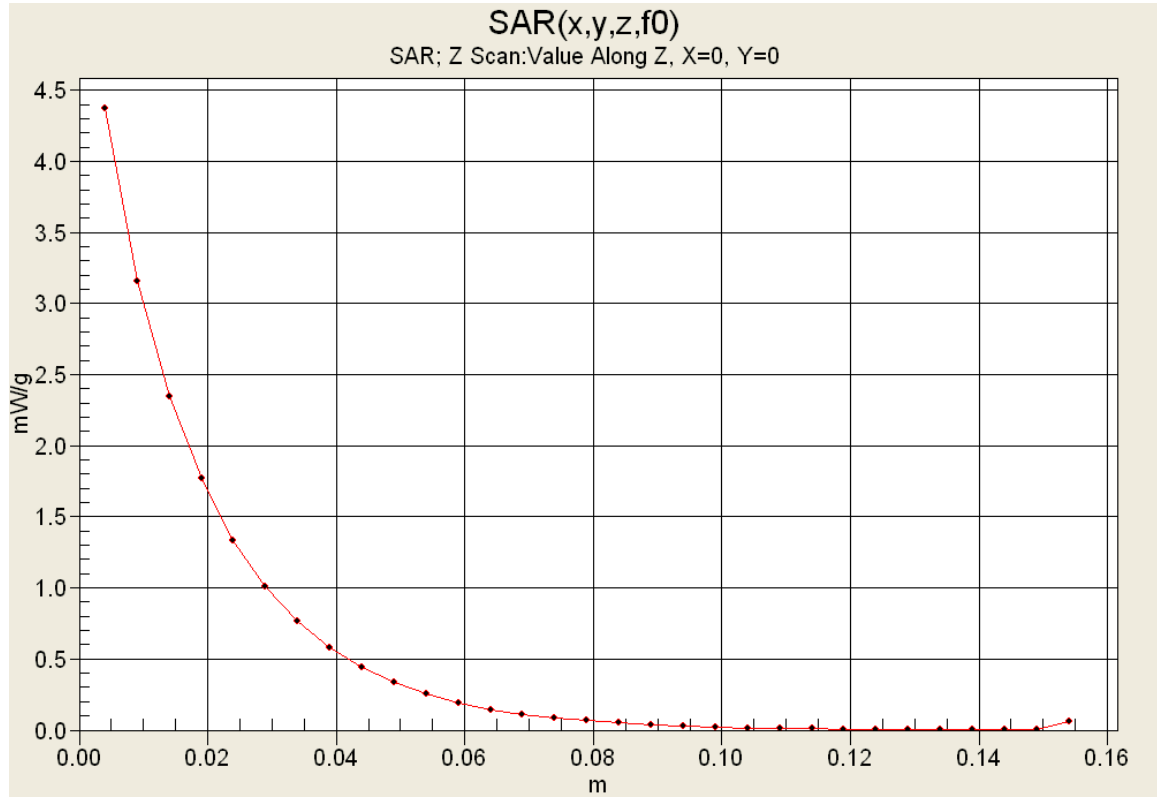
Info: Interpolated medium parameters used for SAR evaluation.



Maximum value of SAR (measured) = 4.74 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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### Z-Axis Scan



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## Face SAR Plot F9

Date Tested: 10/05/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 21.4C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: HSL450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.89 \text{ mho/m}$ ;  $\epsilon_r = 44.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.54, 7.54, 7.54); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.61 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

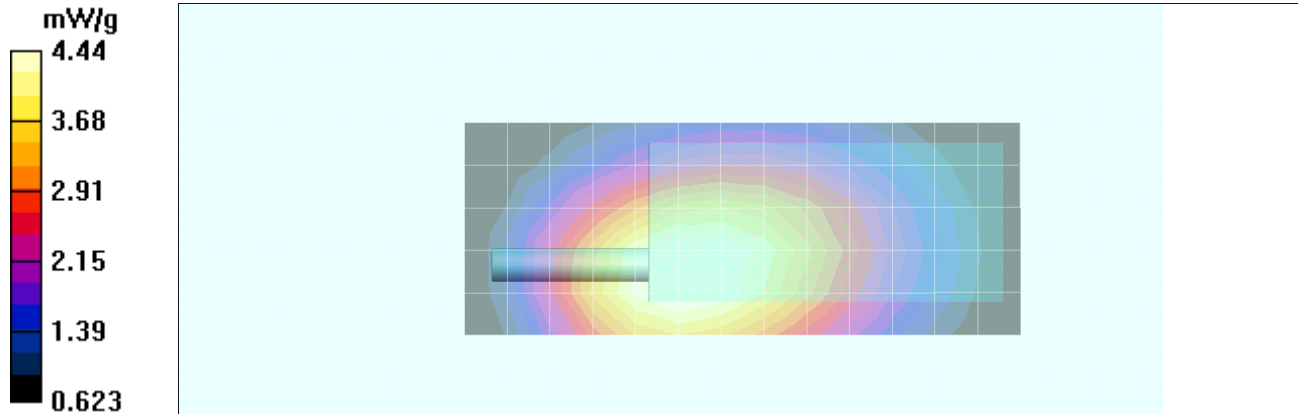
Reference Value = 67.3 V/m; Power Drift = -0.527 dB

Peak SAR (extrapolated) = 5.92 W/kg



**SAR(1 g) = 4.23 mW/g; SAR(10 g) = 3.07 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.44 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

## Body SAR Plot B1

Date Tested: 08/20/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 22.8C; Barometric Pressure: 101.1 kPa; Humidity: 31%

Communication System: UHF 400-512

Frequency: 461.7 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 461.7 \text{ MHz}$ ;  $\sigma = 0.942 \text{ mho/m}$ ;  $\epsilon_r = 56.3$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x20x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.82 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

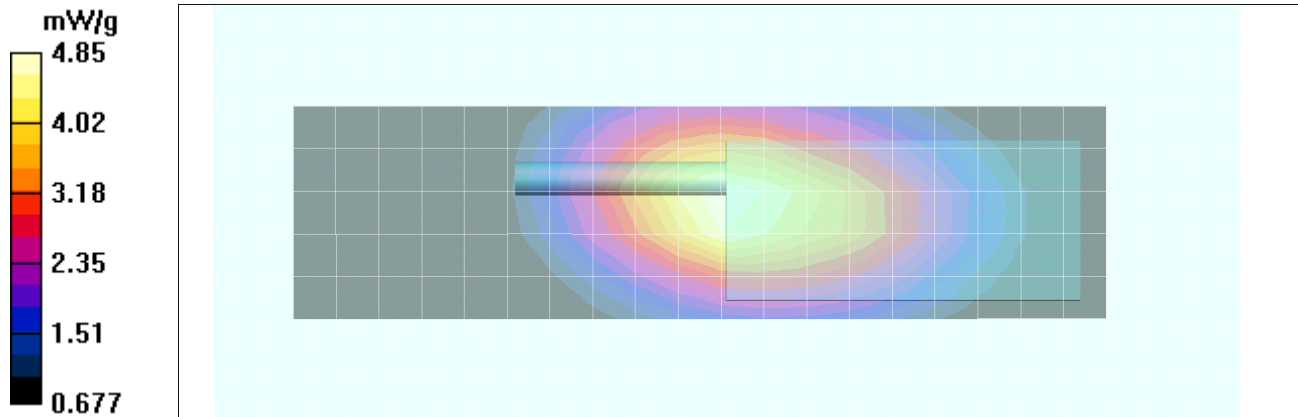
Reference Value = 73.0 V/m; Power Drift = -0.192 dB

Peak SAR (extrapolated) = 6.76 W/kg

**SAR(1 g) = 4.61 mW/g; SAR(10 g) = 3.29 mW/g**



Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.85 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

## Body SAR Plot B2

Date Tested: 08/21/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 22.5C; Barometric Pressure: 101.1 kPa; Humidity: 31%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.948 \text{ mho/m}$ ;  $\epsilon_r = 55.6$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x21x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 6.13 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

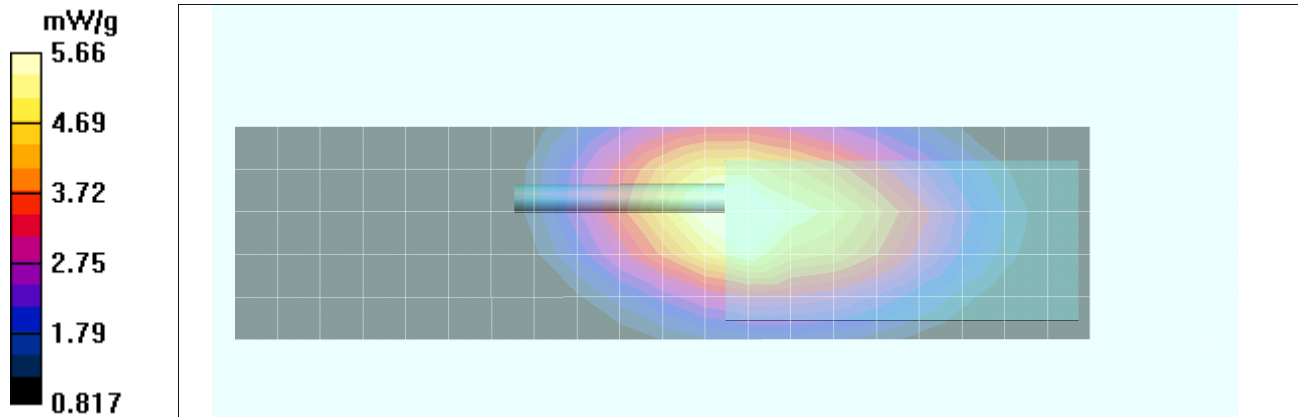
Reference Value = 78.9 V/m; Power Drift = -0.547 dB

Peak SAR (extrapolated) = 7.84 W/kg

**SAR(1 g) = 5.35 mW/g; SAR(10 g) = 3.8 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

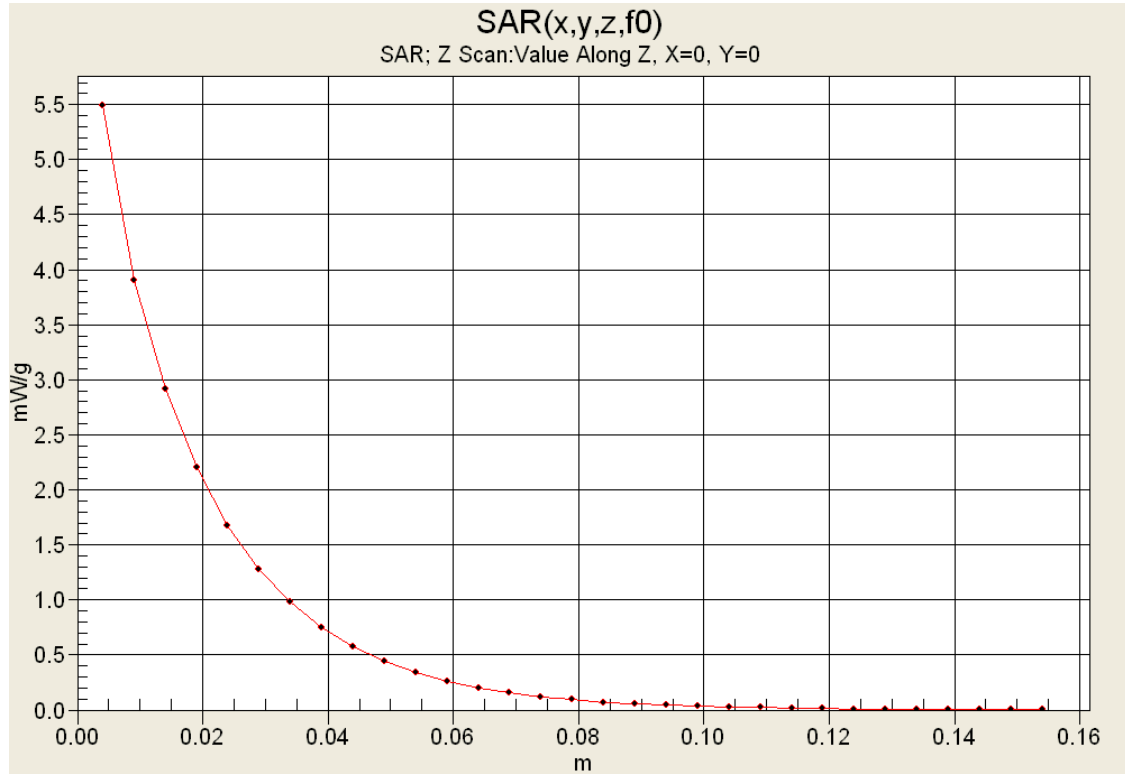
Maximum value of SAR (measured) = 5.66 mW/g



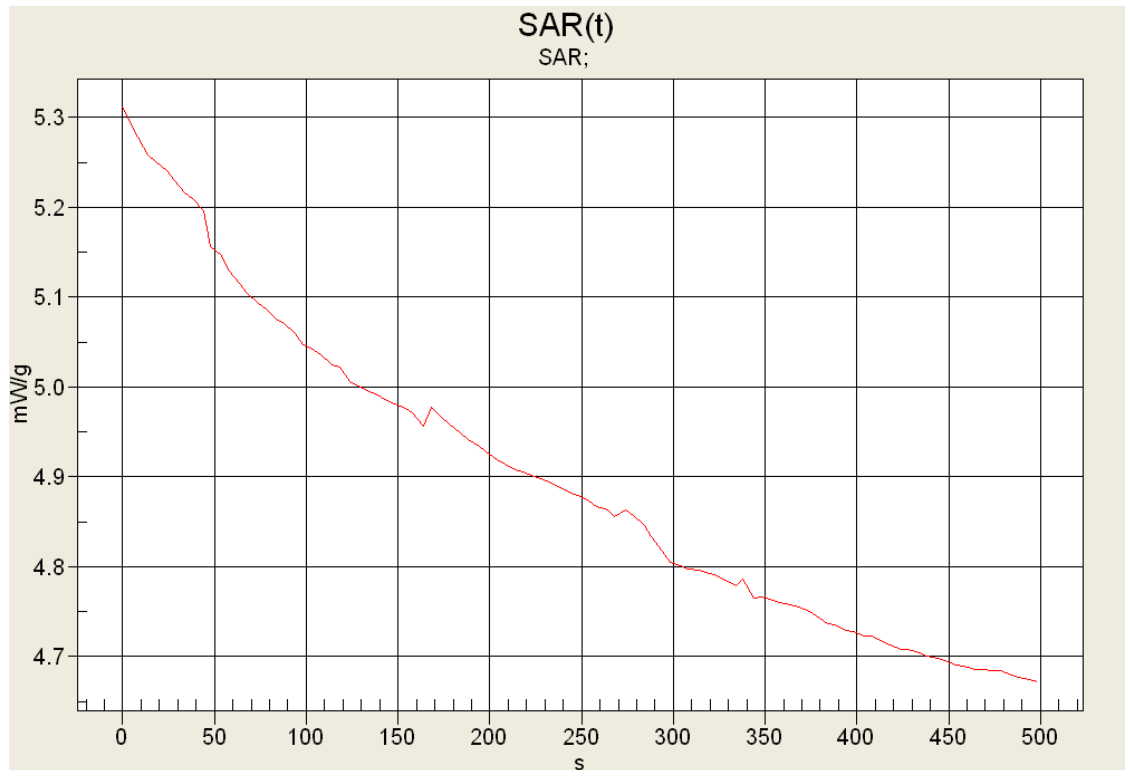
<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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### Z-Axis Scan



### SAR-versus-Time



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## Body SAR Plot B3

Date Tested: 08/20/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 22.8C; Barometric Pressure: 101.1 kPa; Humidity: 31%

Communication System: UHF 400-512

Frequency: 463.3 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 463.3 \text{ MHz}$ ;  $\sigma = 0.943 \text{ mho/m}$ ;  $\epsilon_r = 56.2$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x20x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 5.54 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

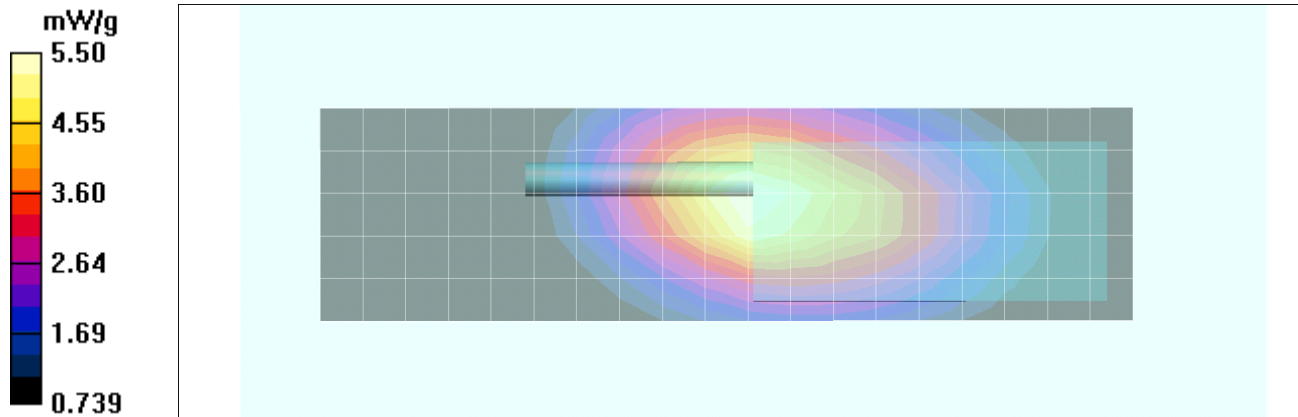
Reference Value = 78.4 V/m; Power Drift = -0.356 dB

Peak SAR (extrapolated) = 7.80 W/kg

**SAR(1 g) = 5.22 mW/g; SAR(10 g) = 3.68 mW/g**

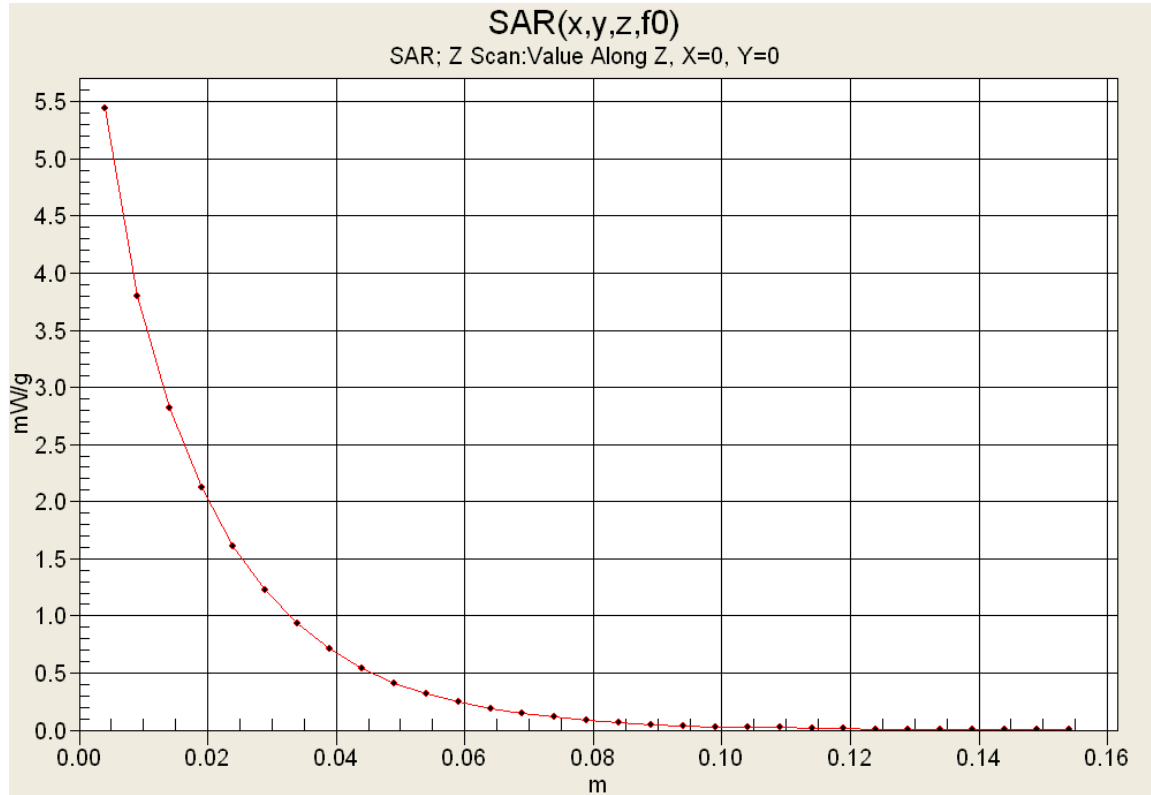
Info: Interpolated medium parameters used for SAR evaluation.



Maximum value of SAR (measured) = 5.50 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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### Z-Axis Scan



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## Body SAR Plot B4

Date Tested: 08/21/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 22.5C; Barometric Pressure: 101.1 kPa; Humidity: 31%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.948 \text{ mho/m}$ ;  $\epsilon_r = 55.6$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x21x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.22 mW/g

**/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

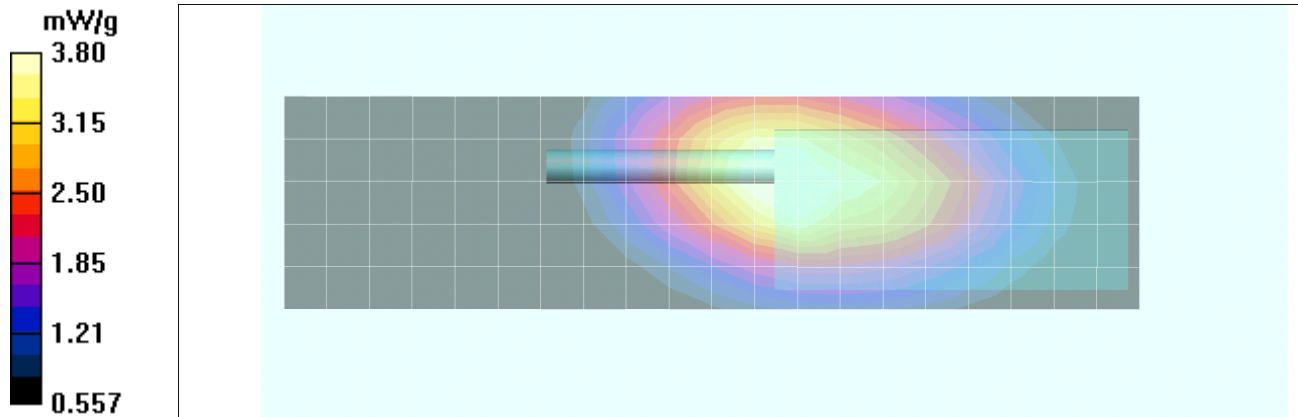
Reference Value = 64.8 V/m; Power Drift = -0.684 dB

Peak SAR (extrapolated) = 5.31 W/kg



**SAR(1 g) = 3.62 mW/g; SAR(10 g) = 2.57 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.80 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

## Body SAR Plot B5

Date Tested: 08/20/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 22.8C; Barometric Pressure: 101.1 kPa; Humidity: 31%

Communication System: UHF 400-512

Frequency: 463.3 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 463.3 \text{ MHz}$ ;  $\sigma = 0.943 \text{ mho/m}$ ;  $\epsilon_r = 56.2$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x20x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.24 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

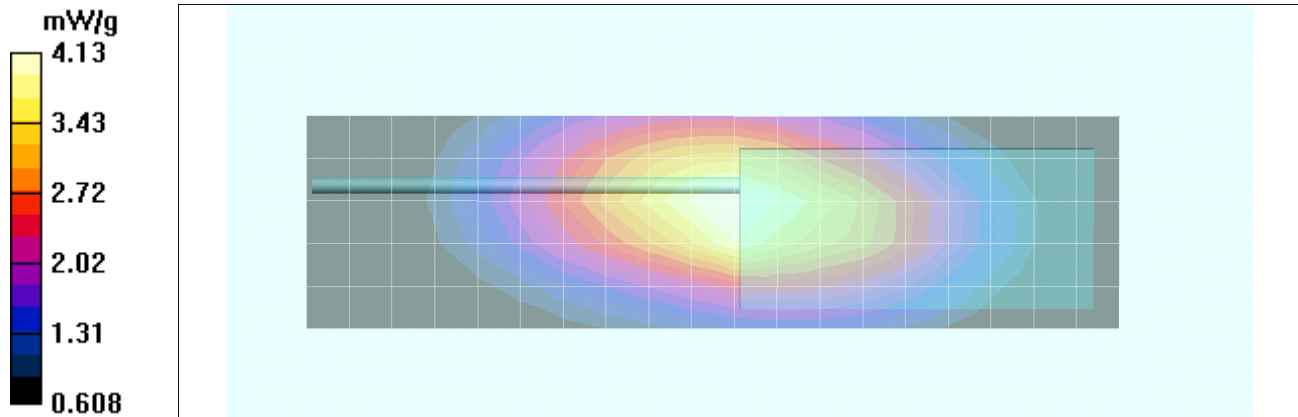
Reference Value = 68.2 V/m; Power Drift = -0.312 dB

Peak SAR (extrapolated) = 5.87 W/kg



**SAR(1 g) = 3.95 mW/g; SAR(10 g) = 2.81 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 4.13 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

## Body SAR Plot B6

Date Tested: 08/21/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 22.5C; Barometric Pressure: 101.1 kPa; Humidity: 31%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.948 \text{ mho/m}$ ;  $\epsilon_r = 55.6$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x21x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 5.49 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

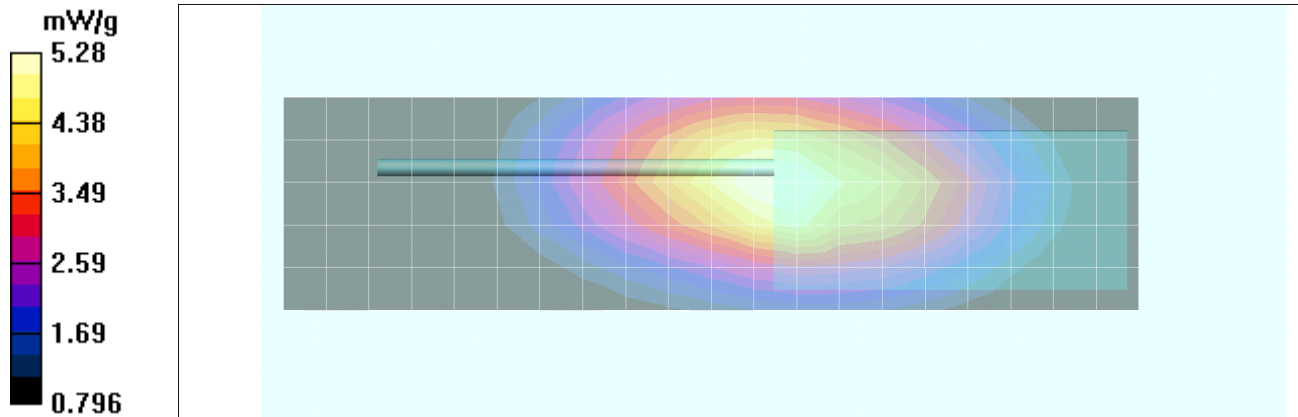
Reference Value = 75.1 V/m; Power Drift = -0.295 dB

Peak SAR (extrapolated) = 7.29 W/kg

**SAR(1 g) = 5 mW/g; SAR(10 g) = 3.58 mW/g**



Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 5.28 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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## Body SAR Plot B7

Date Tested: 10/09/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 22.0C; Fluid Temp: 21.7C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 463.3 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 463.3$  MHz;  $\sigma = 0.92$  mho/m;  $\epsilon_r = 55.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x14x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 6.04 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

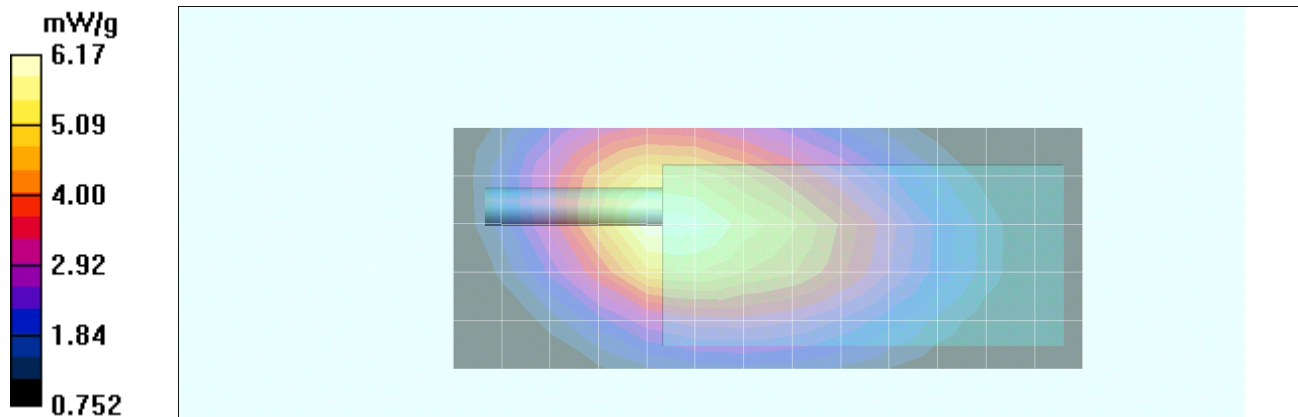
Reference Value = 80.2 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 8.79 W/kg



**SAR(1 g) = 5.88 mW/g; SAR(10 g) = 4.14 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 6.17 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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## Body SAR Plot B8

Date Tested: 10/09/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 22.0C; Fluid Temp: 21.7C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 7.02 mW/g

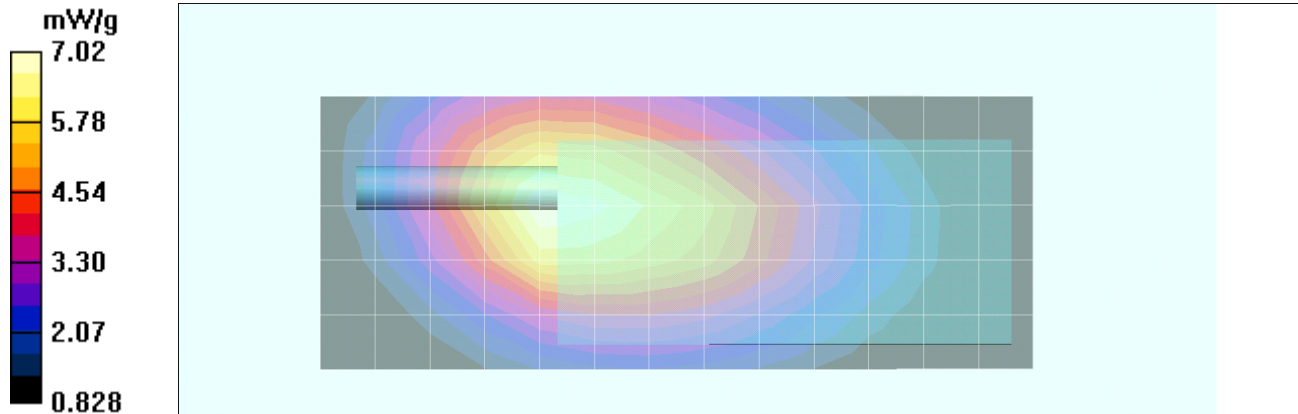
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 88.0 V/m; Power Drift = -0.274 dB



Peak SAR (extrapolated) = 9.96 W/kg

**SAR(1 g) = 6.63 mW/g; SAR(10 g) = 4.64 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

## Body SAR Plot B9

Date Tested: 10/09/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 22.0C; Fluid Temp: 21.7C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 6.67 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

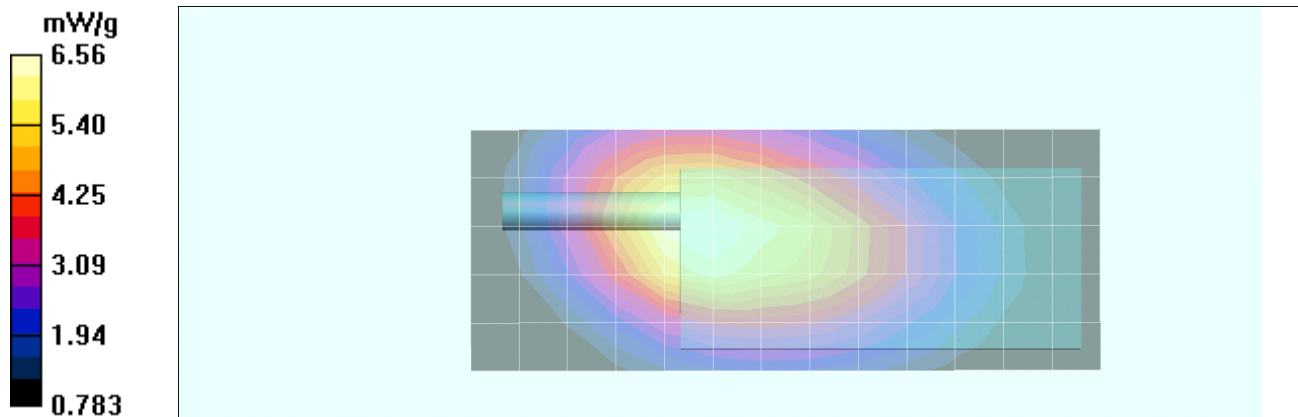
Reference Value = 86.5 V/m; Power Drift = -0.586 dB

Peak SAR (extrapolated) = 9.24 W/kg



**SAR(1 g) = 6.18 mW/g; SAR(10 g) = 4.33 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 6.56 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

## Body SAR Plot A1

Date Tested: 10/09/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 22.0C; Fluid Temp: 21.7C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 7.09 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

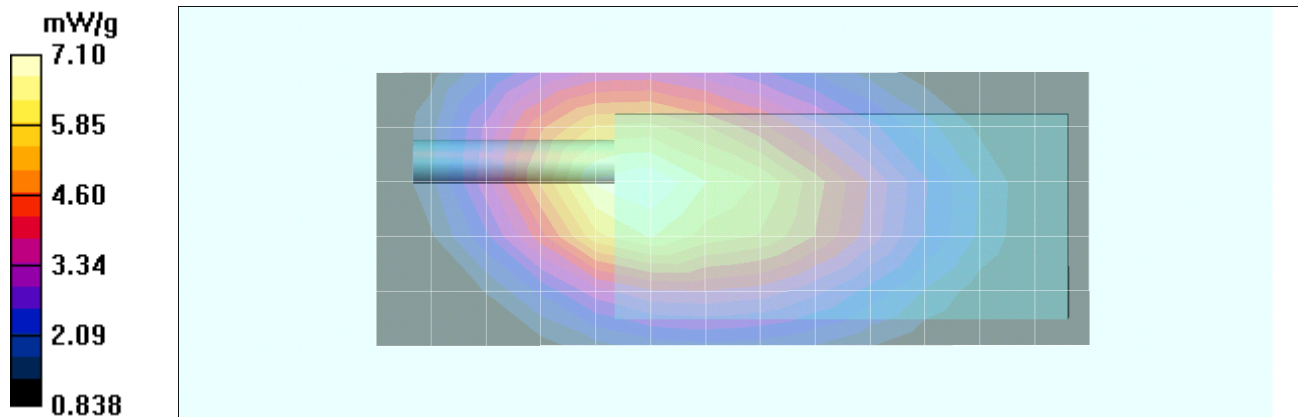
Reference Value = 86.4 V/m; Power Drift = -0.212 dB

Peak SAR (extrapolated) = 10.1 W/kg

**SAR(1 g) = 6.66 mW/g; SAR(10 g) = 4.64 mW/g**

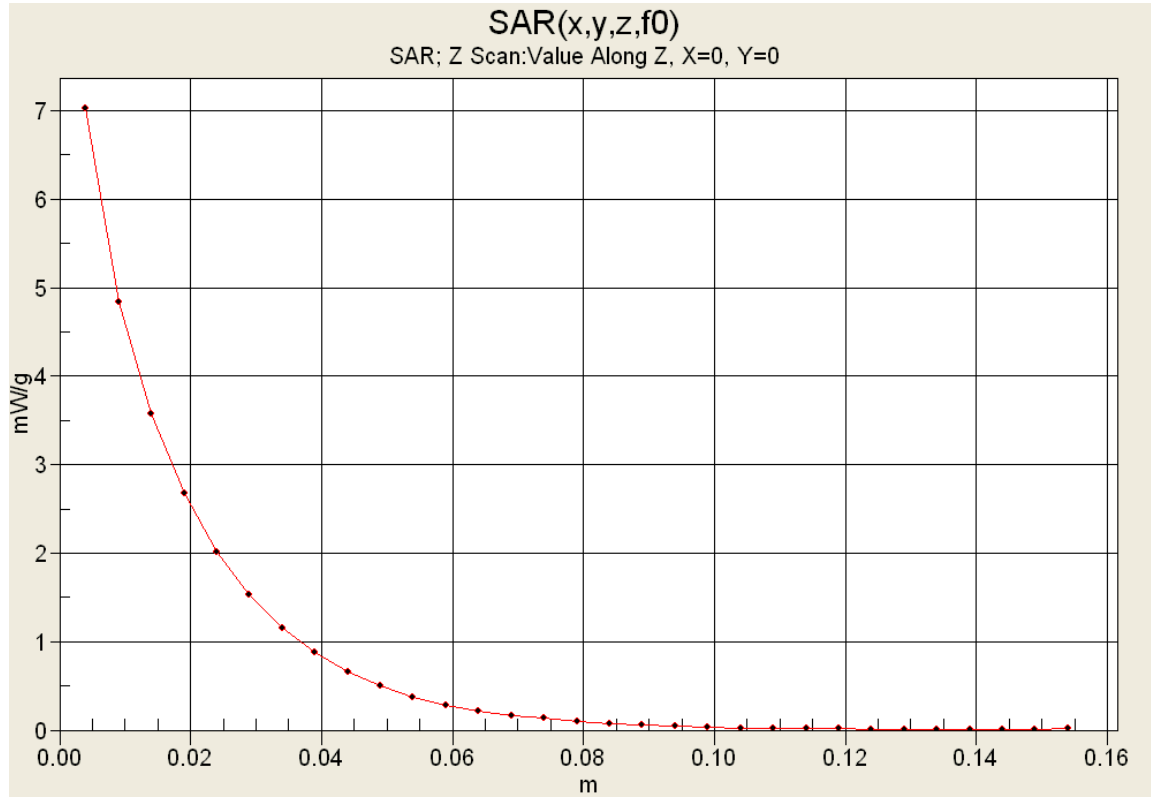
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 7.10 mW/g





<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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### Z-Axis Scan





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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

## Body SAR Plot A2

Date Tested: 10/09/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 22.0C; Fluid Temp: 21.7C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x14x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 7.08 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

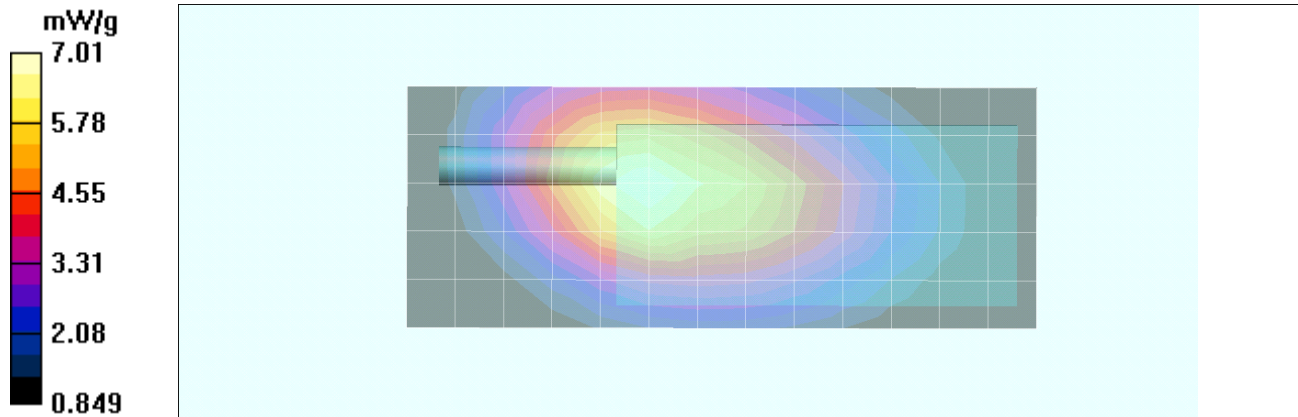
Reference Value = 85.3 V/m; Power Drift = -0.240 dB

Peak SAR (extrapolated) = 10.1 W/kg

**SAR(1 g) = 6.66 mW/g; SAR(10 g) = 4.65 mW/g**



Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 7.01 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

## Body SAR Plot A3

Date Tested: 10/10/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 22.0C; Fluid Temp: 21.6C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 7.00 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

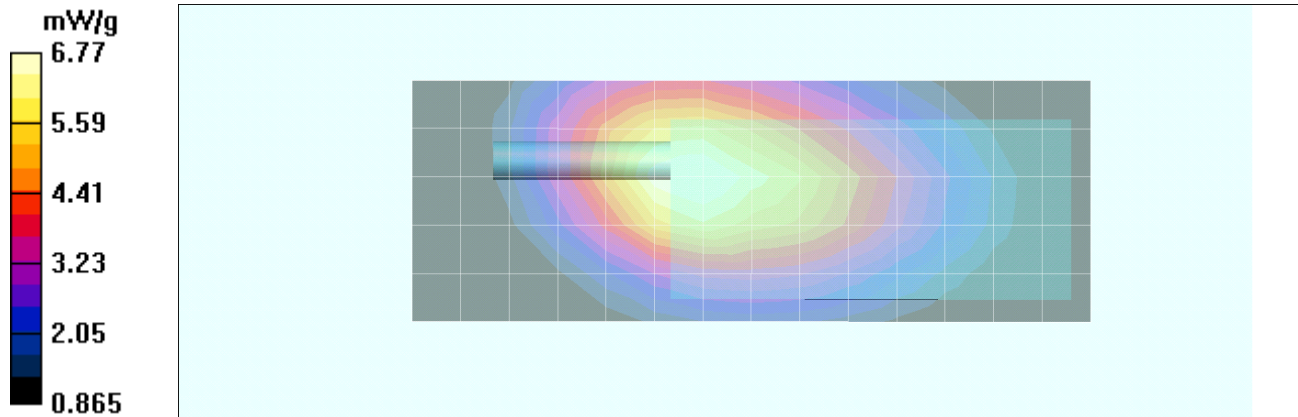
Reference Value = 85.8 V/m; Power Drift = -0.385 dB

Peak SAR (extrapolated) = 9.62 W/kg



**SAR(1 g) = 6.46 mW/g; SAR(10 g) = 4.54 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 6.77 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

## Body SAR Plot A4

Date Tested: 10/10/2012

**DUT: Kenwood TK-3400-K2; Type: Portable FM UHF PTT Radio Transceiver; Serial: 0420**

Program Notes: Ambient Temp: 22.0C; Fluid Temp: 21.6C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: UHF 400-512

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 55.8$ ;  $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.93, 7.93, 7.93); Calibrated: 24/04/2012
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 19/04/2012
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Area Scan (6x15x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 7.30 mW/g

**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

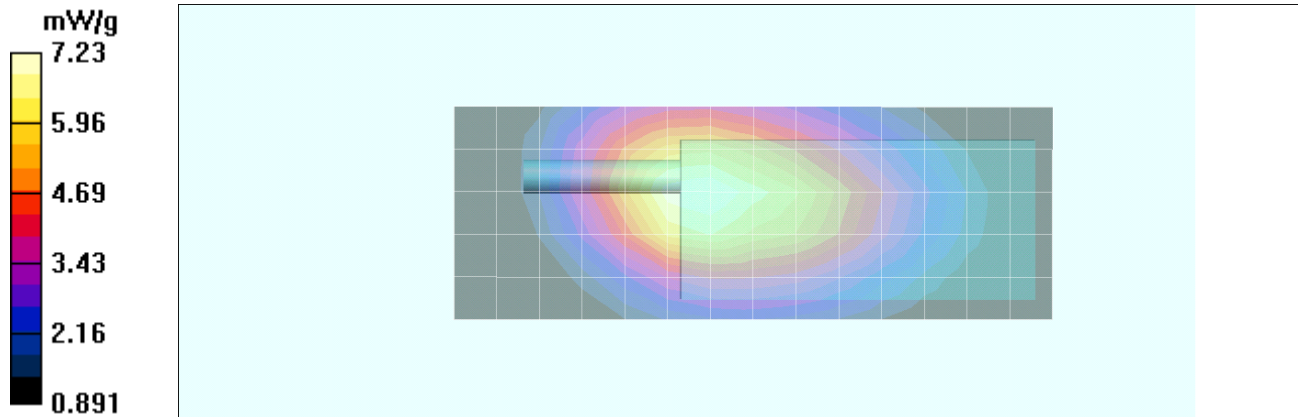
Reference Value = 89.1 V/m; Power Drift = -0.292 dB

Peak SAR (extrapolated) = 10.2 W/kg

**SAR(1 g) = 6.81 mW/g; SAR(10 g) = 4.78 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 7.23 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH435002	<b>IC ID:</b>	282D-435002	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF PTT Radio Transceiver	<b>Models:</b>	TK-3400-K/K2	450.0 - 512.0 MHz		
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### Z-Axis Scan

