

	<u>Date(s) of Evaluation</u> Aug 23-28, Oct3, 2012	<u>Test Report Serial No.</u> 081612ALH-T1189-S90V	<u>Test Report Revision No.</u> Rev. 1.0 (1st Release)	
	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Test Lab Certificate No. 2470.01

APPENDIX A - SAR MEASUREMENT DATA

Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Face SAR Plot F1

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 22.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.75 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(9.3, 9.3, 9.3); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 0.943 mW/g

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

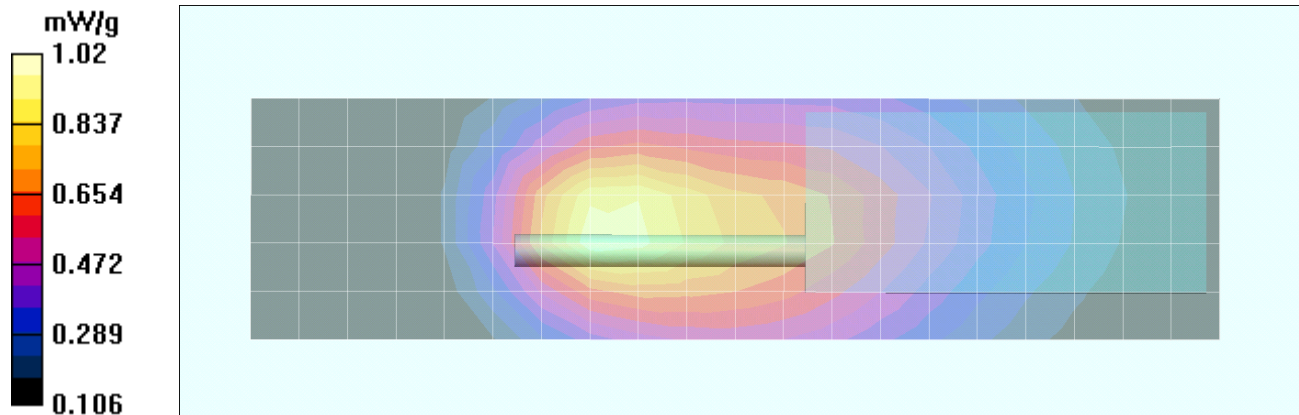
Reference Value = 30.1 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 2.24 W/kg

SAR(1 g) = 1 mW/g; SAR(10 g) = 0.649 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.02 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Face SAR Plot F2

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 24.0C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: Kenwood VHF

Frequency: 167.7 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 167.7 \text{ MHz}$; $\sigma = 0.781 \text{ mho/m}$; $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(9.3, 9.3, 9.3); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 1.38 mW/g

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

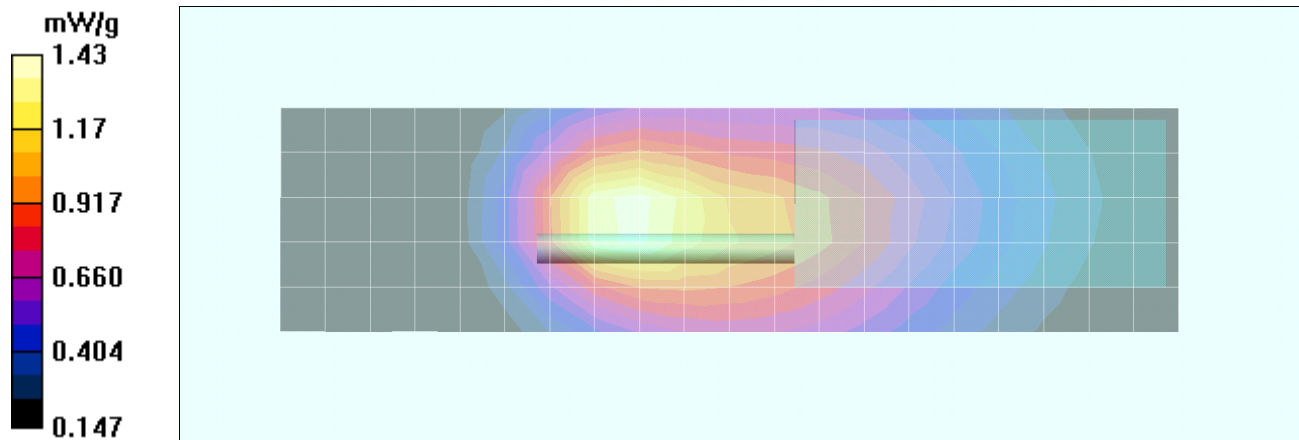
Reference Value = 35.6 V/m; Power Drift = -0.128 dB

Peak SAR (extrapolated) = 3.21 W/kg

SAR(1 g) = 1.41 mW/g; SAR(10 g) = 0.912 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

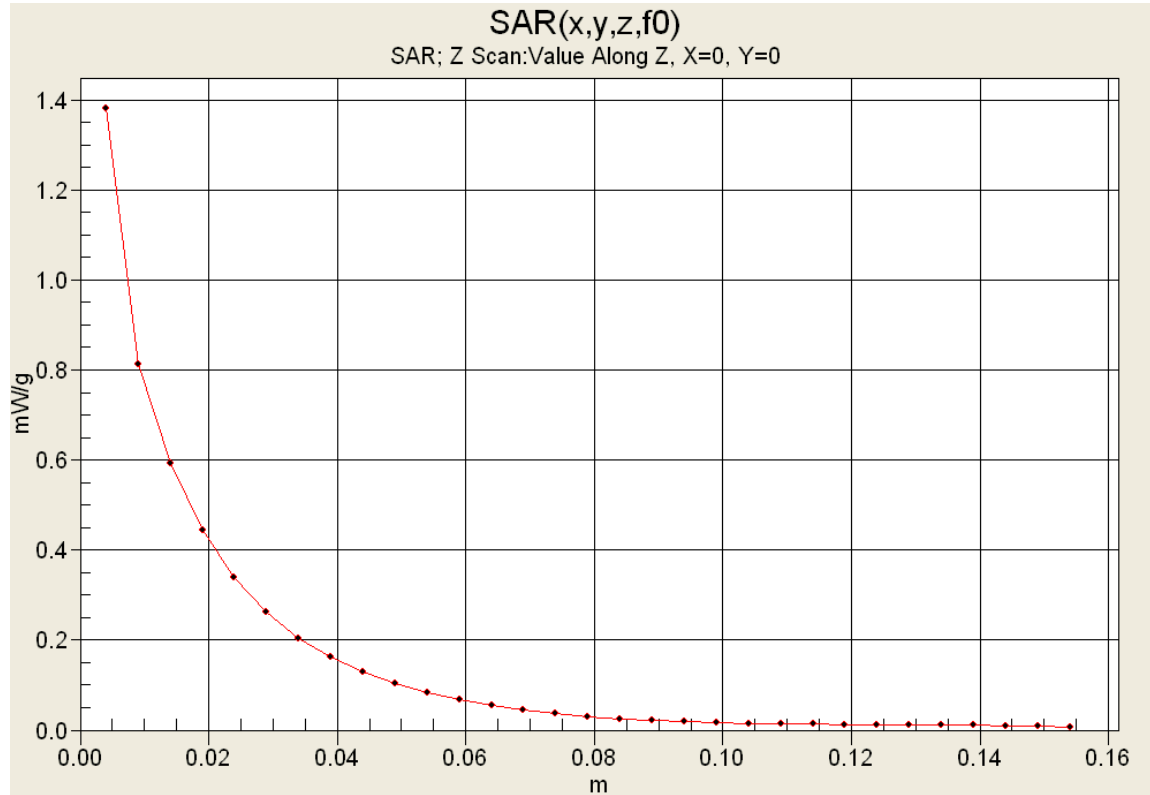
Maximum value of SAR (measured) = 1.43 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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Test Lab Certificate No. 2470.01				

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Test Lab Certificate No. 2470.01

Face SAR Plot F3

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 22.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.75 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(9.3, 9.3, 9.3); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 0.488 mW/g

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

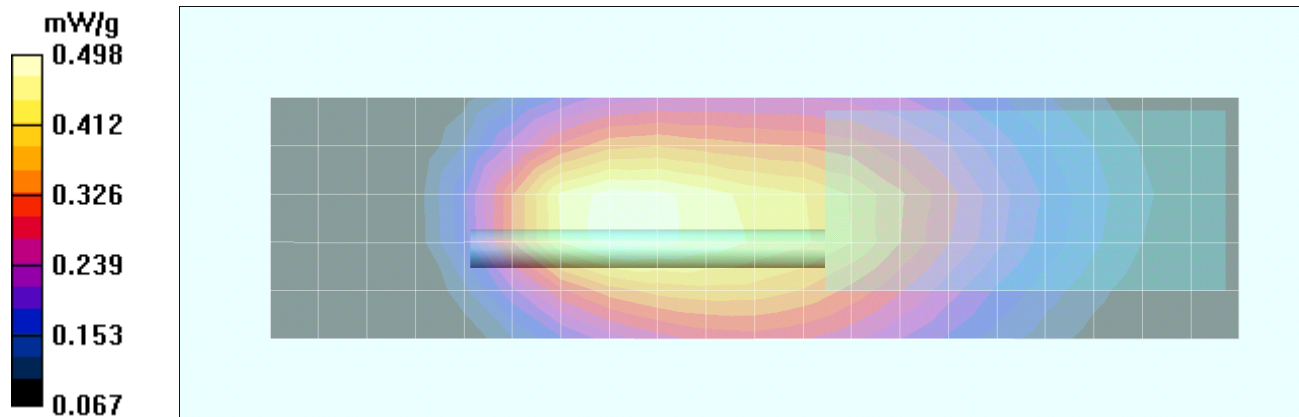
Reference Value = 23.8 V/m; Power Drift = -0.355 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.496 mW/g; SAR(10 g) = 0.338 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.498 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Face SAR Plot F4

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 22.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 167.7 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 167.7 \text{ MHz}$; $\sigma = 0.765 \text{ mho/m}$; $\epsilon_r = 52.5$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(9.3, 9.3, 9.3); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 0.629 mW/g

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

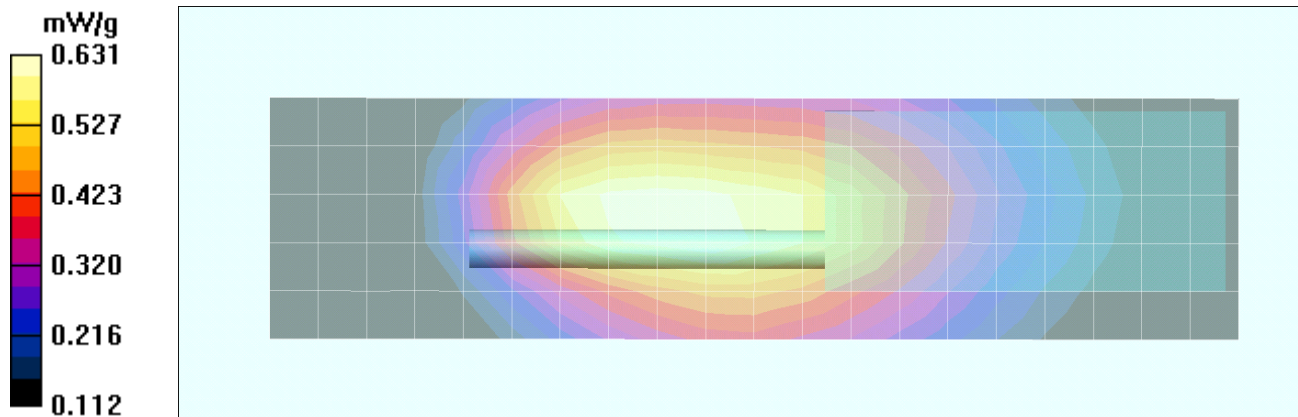
Reference Value = 27.9 V/m; Power Drift = -0.401 dB

Peak SAR (extrapolated) = 0.998 W/kg

SAR(1 g) = 0.605 mW/g; SAR(10 g) = 0.440 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.631 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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Face SAR Plot F5

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 22.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.75 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(9.3, 9.3, 9.3); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 1.49 mW/g

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

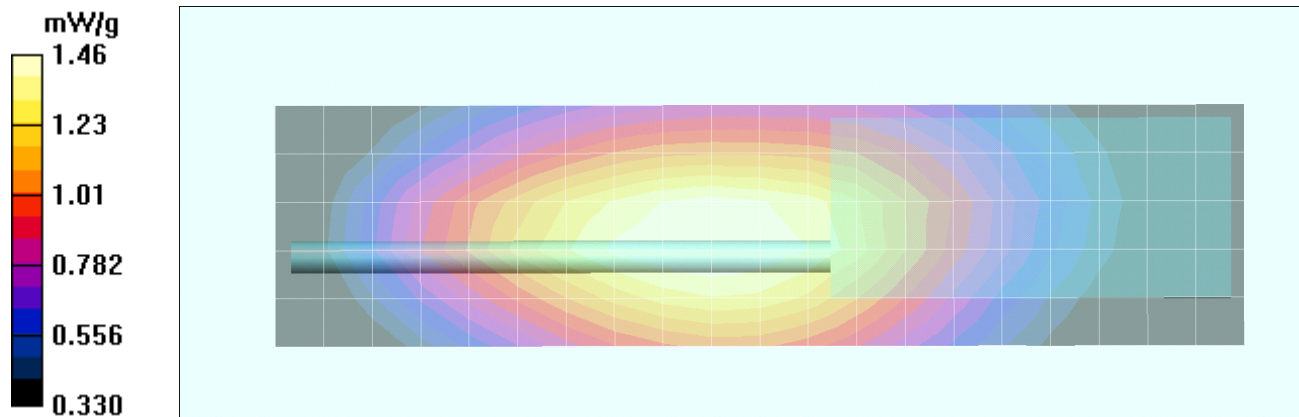
Reference Value = 42.4 V/m; Power Drift = -0.201 dB

Peak SAR (extrapolated) = 2.09 W/kg

SAR(1 g) = 1.42 mW/g; SAR(10 g) = 1.07 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

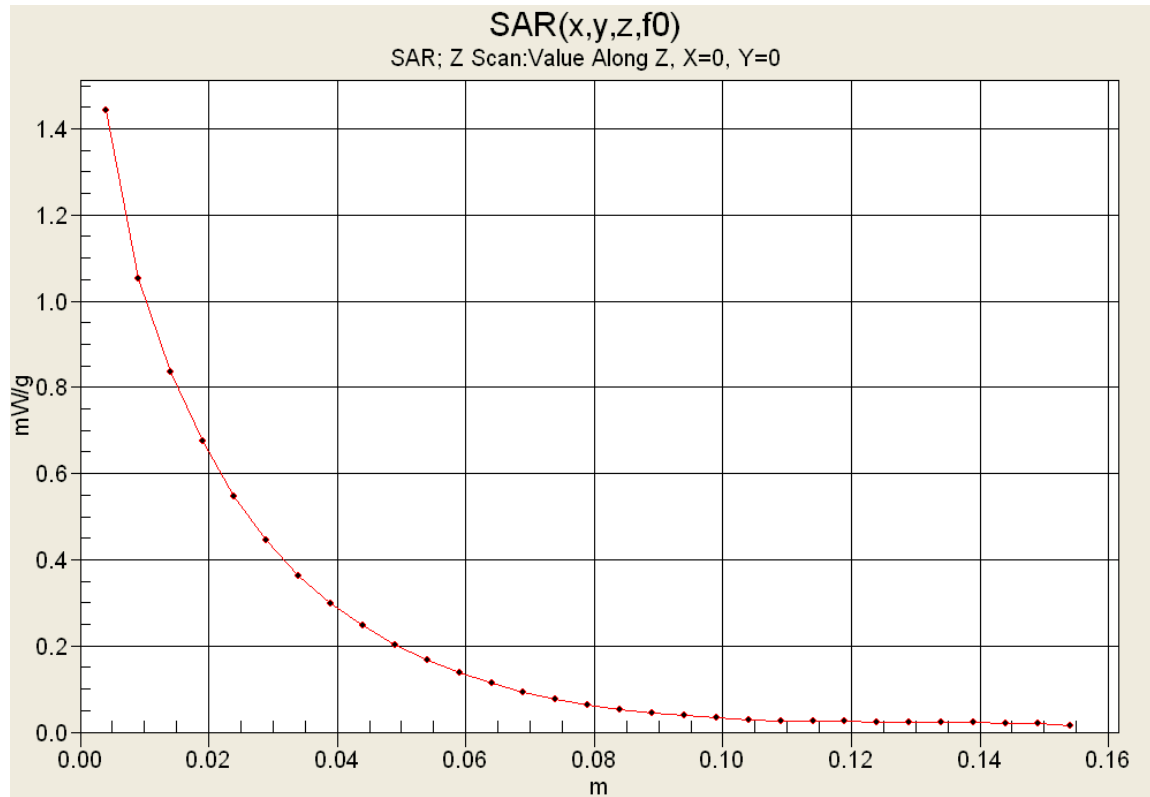
Maximum value of SAR (measured) = 1.46 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	
Test Lab Certificate No. 2470.01				

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Face SAR Plot F6

Date Tested: 08/24/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 22.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 167.7 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 167.7 \text{ MHz}$; $\sigma = 0.765 \text{ mho/m}$; $\epsilon_r = 52.5$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(9.3, 9.3, 9.3); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 1.18 mW/g

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

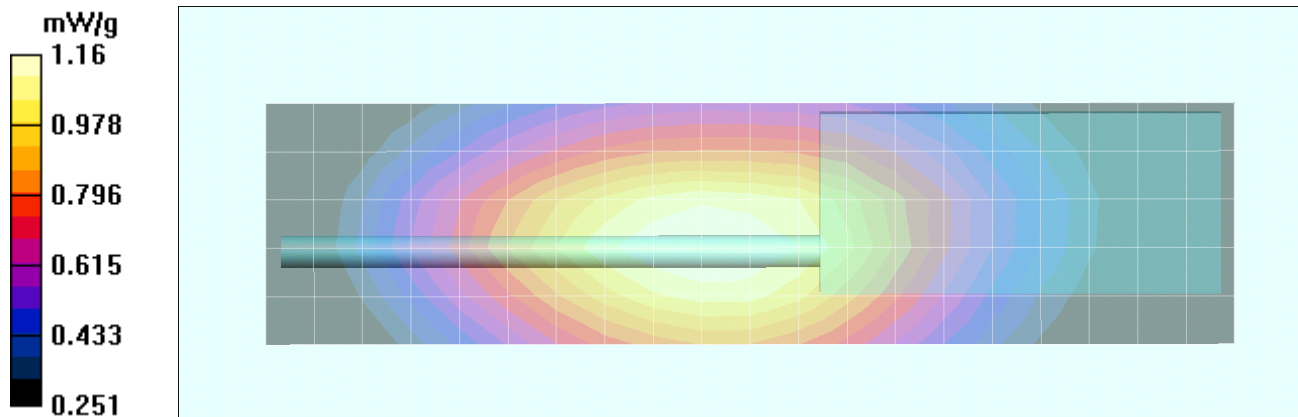
Reference Value = 37.4 V/m; Power Drift = -0.386 dB

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.836 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

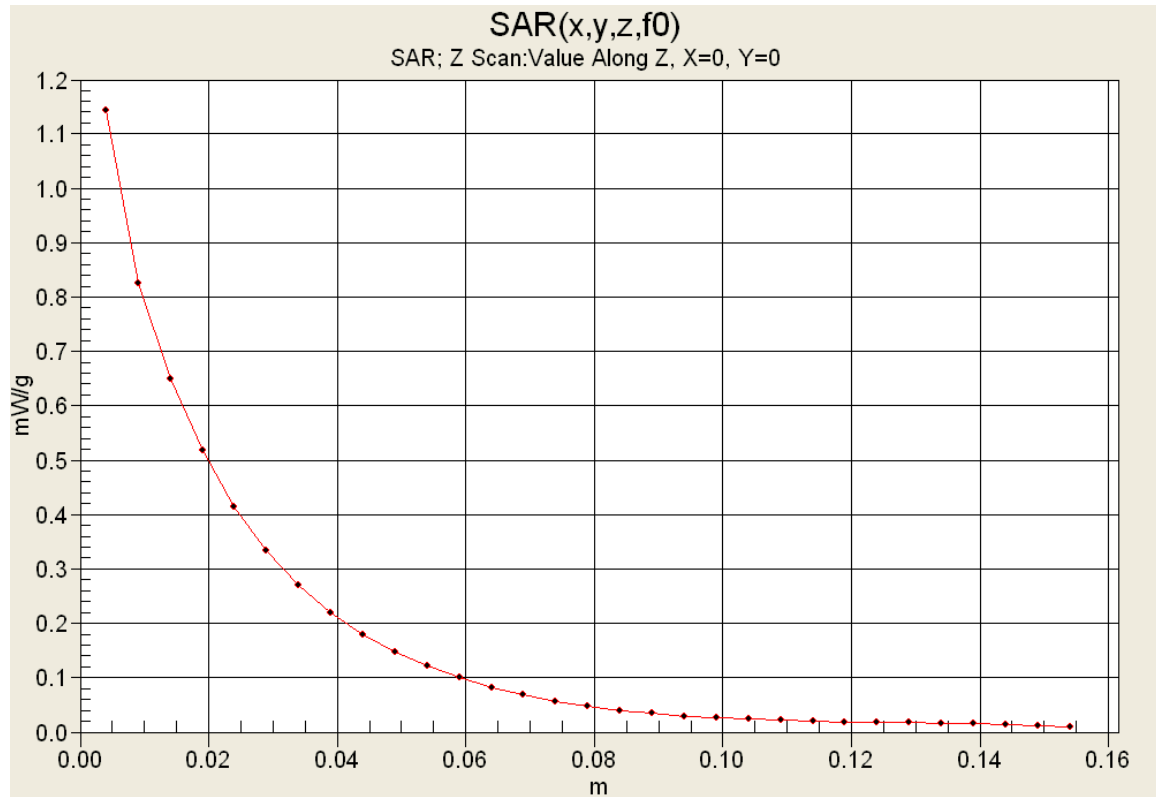
Maximum value of SAR (measured) = 1.16 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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Test Lab Certificate No. 2470.01				

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	Test Report Issue Date Oct. 17, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Face SAR Plot F7

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 22.0C; Fluid Temp: 22.9C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.773 \text{ mho/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(9.3, 9.3, 9.3); 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: Side Planar; Type: Plexiglass; Serial: 161
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (6x16x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.01 mW/g

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

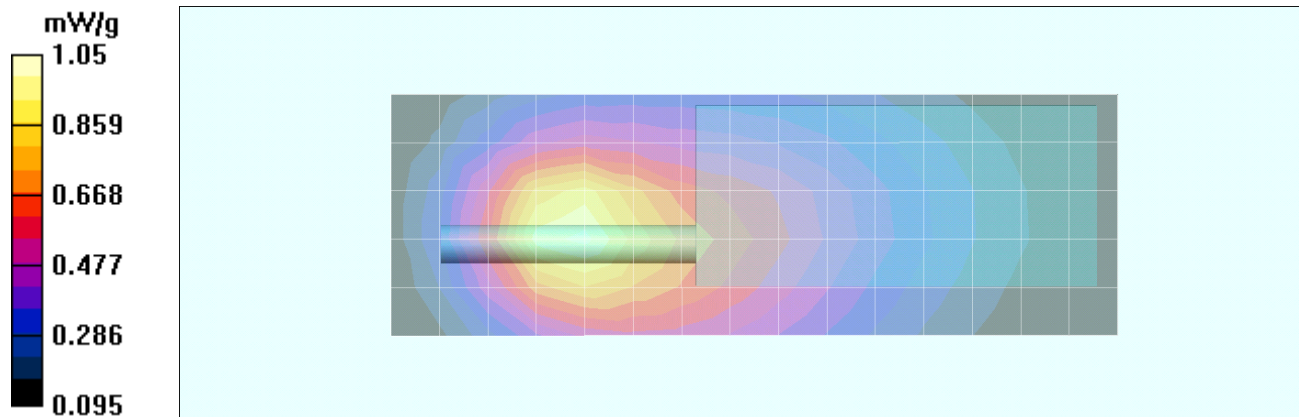
Reference Value = 28.5 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 2.39 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.663 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.05 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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Test Lab Certificate No. 2470.01

Face SAR Plot F8

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 22.0C; Fluid Temp: 22.9C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: Kenwood VHF

Frequency: 167.7 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 167.7 \text{ MHz}$; $\sigma = 0.795 \text{ mho/m}$; $\epsilon_r = 54.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(9.3, 9.3, 9.3); 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: Side Planar; Type: Plexiglass; Serial: 161
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (6x16x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.45 mW/g

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

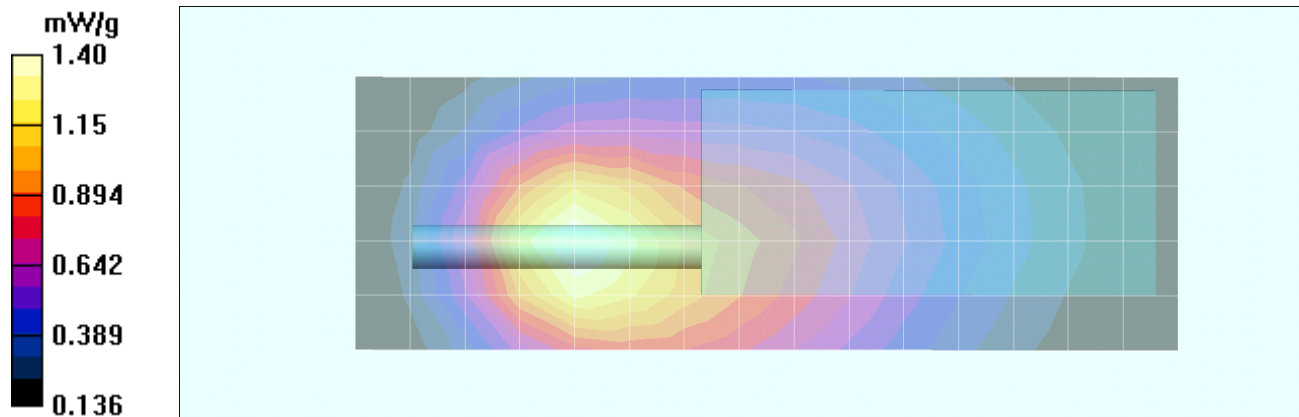
Reference Value = 33.7 V/m; Power Drift = -0.344 dB

Peak SAR (extrapolated) = 3.10 W/kg

SAR(1 g) = 1.39 mW/g; SAR(10 g) = 0.889 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.40 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Date(s) of Evaluation</u> Aug 23-28, Oct3, 2012	<u>Test Report Serial No.</u> 081612ALH-T1189-S90V	<u>Test Report Revision No.</u> Rev. 1.0 (1st Release)	
	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Test Lab Certificate No. 2470.01

Face SAR Plot F9

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 24.0C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.754 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(9.3, 9.3, 9.3); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 1.46 mW/g

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

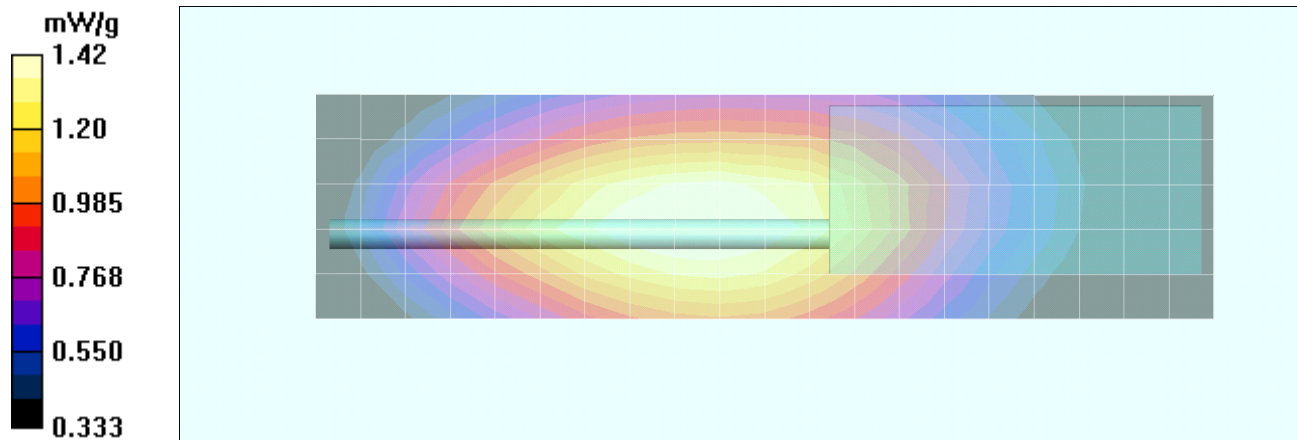
Reference Value = 41.1 V/m; Power Drift = -0.301 dB

Peak SAR (extrapolated) = 2.05 W/kg

SAR(1 g) = 1.37 mW/g; SAR(10 g) = 1.04 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

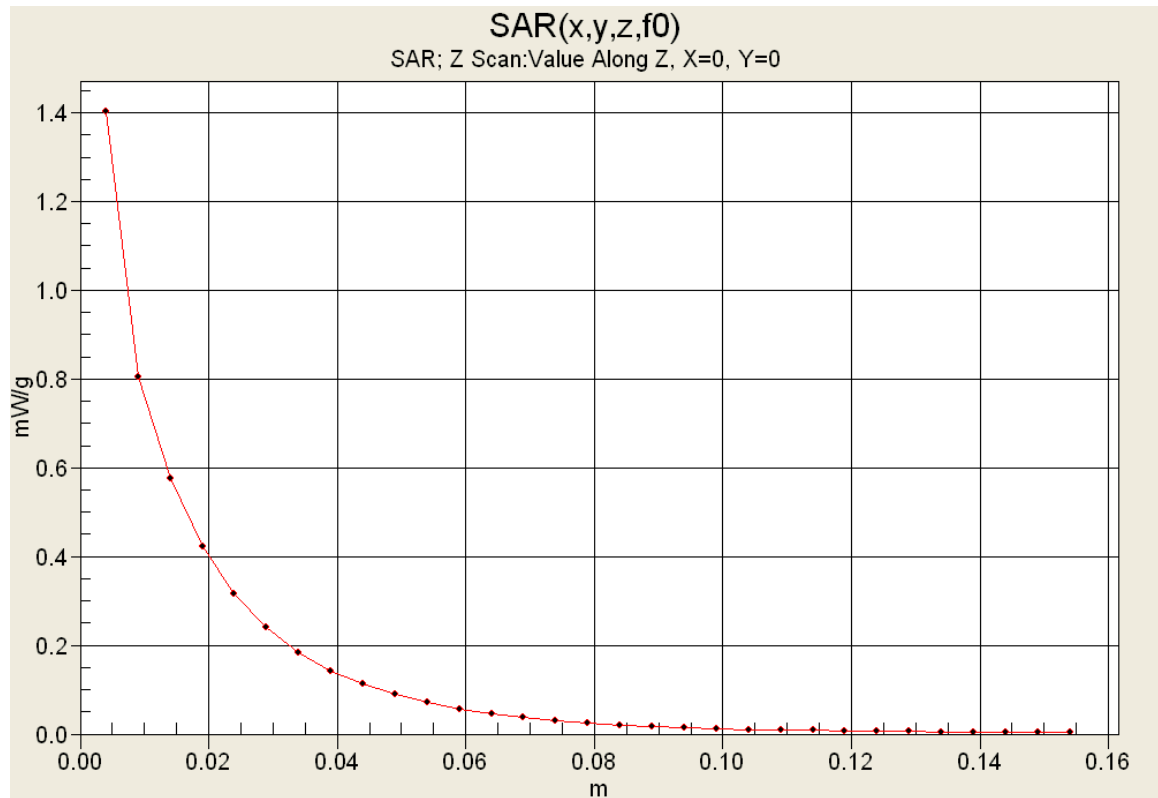
Maximum value of SAR (measured) = 1.42 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K		TK-2400-K2	
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	Test Report Issue Date Oct. 17, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Body SAR Plot B1

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 23.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.75 \text{ mho/m}$; $\epsilon_r = 64.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 2.32 mW/g

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

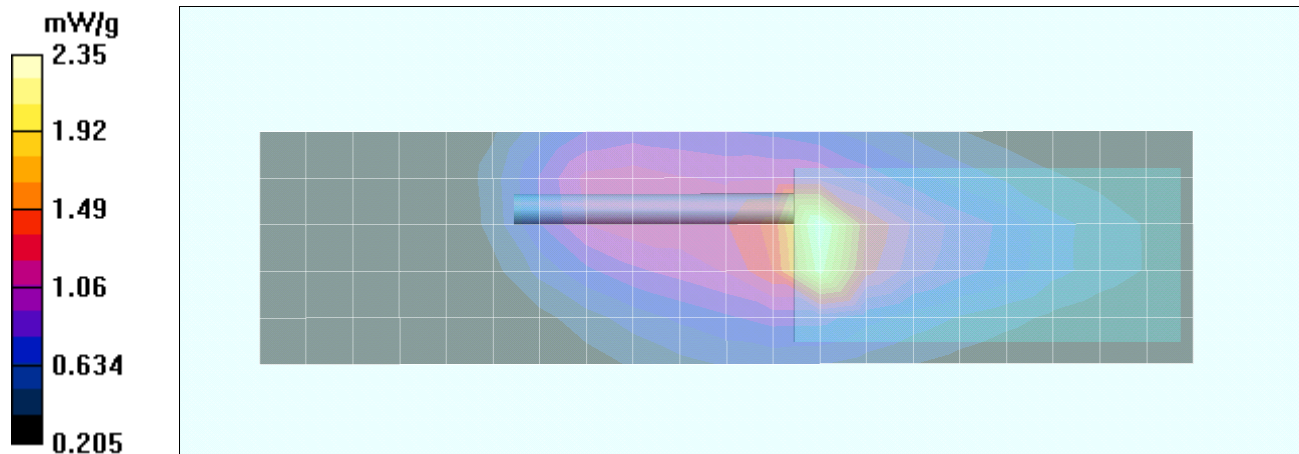
Reference Value = 47.9 V/m; Power Drift = -0.115 dB

Peak SAR (extrapolated) = 6.73 W/kg

SAR(1 g) = 2.23 mW/g; SAR(10 g) = 1.2 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.35 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	Test Report Issue Date Oct. 17, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Test Lab Certificate No. 2470.01

Body SAR Plot B2

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.8C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: Kenwood VHF

Frequency: 167.7 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 167.7 \text{ MHz}$; $\sigma = 0.788 \text{ mho/m}$; $\epsilon_r = 61.5$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 1.62 mW/g

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

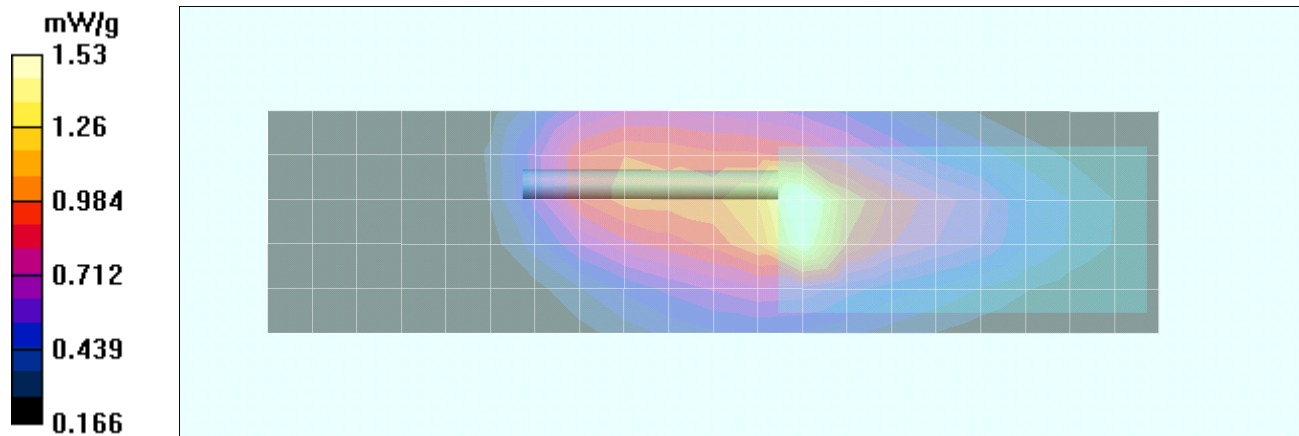
Reference Value = 41.7 V/m; Power Drift = -0.444 dB

Peak SAR (extrapolated) = 3.49 W/kg

SAR(1 g) = 1.45 mW/g; SAR(10 g) = 0.866 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.53 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Body SAR Plot B3

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 23.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.75 \text{ mho/m}$; $\epsilon_r = 64.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 0.639 mW/g

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

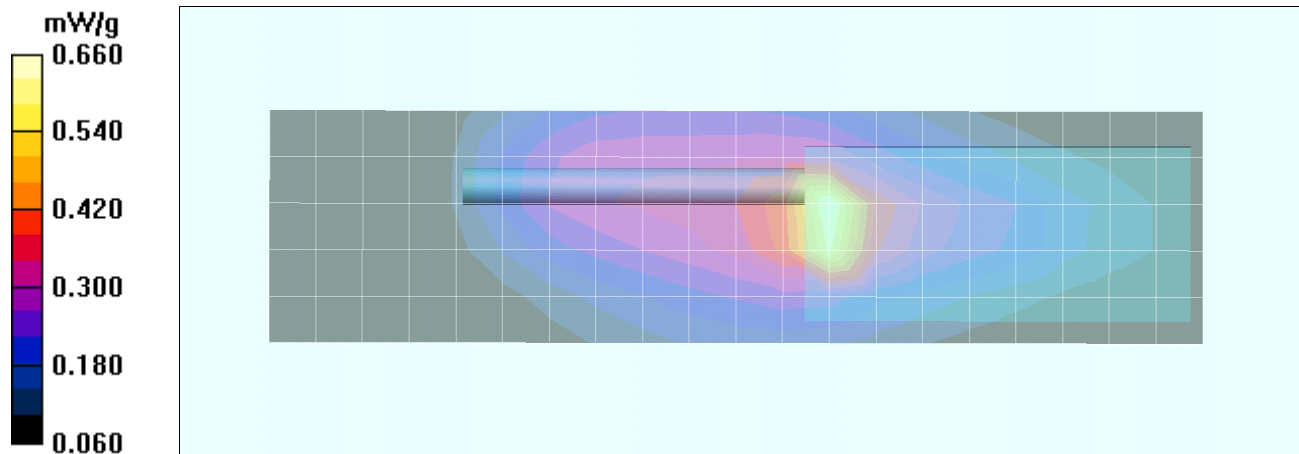
Reference Value = 26.7 V/m; Power Drift = -0.232 dB

Peak SAR (extrapolated) = 1.86 W/kg

SAR(1 g) = 0.630 mW/g; SAR(10 g) = 0.342 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.660 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	Test Report Issue Date Oct. 17, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Body SAR Plot B4

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 23.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 167.7 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 167.7 \text{ MHz}$; $\sigma = 0.758 \text{ mho/m}$; $\epsilon_r = 62.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 0.659 mW/g

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

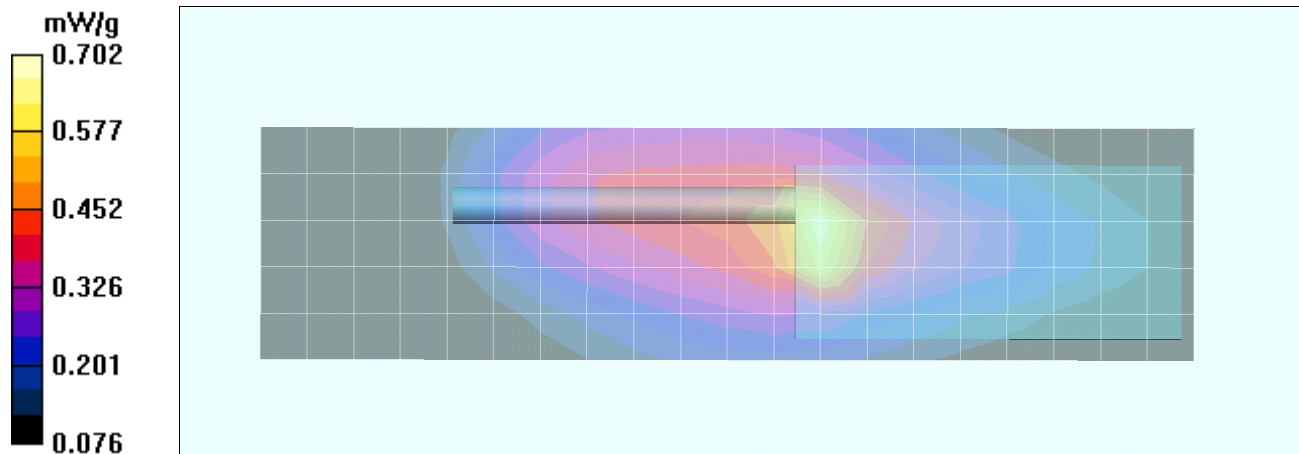
Reference Value = 26.6 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 1.73 W/kg

SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.393 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.702 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	Test Report Issue Date Oct. 17, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Body SAR Plot B5

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 23.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.75 \text{ mho/m}$; $\epsilon_r = 64.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 2.93 mW/g

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

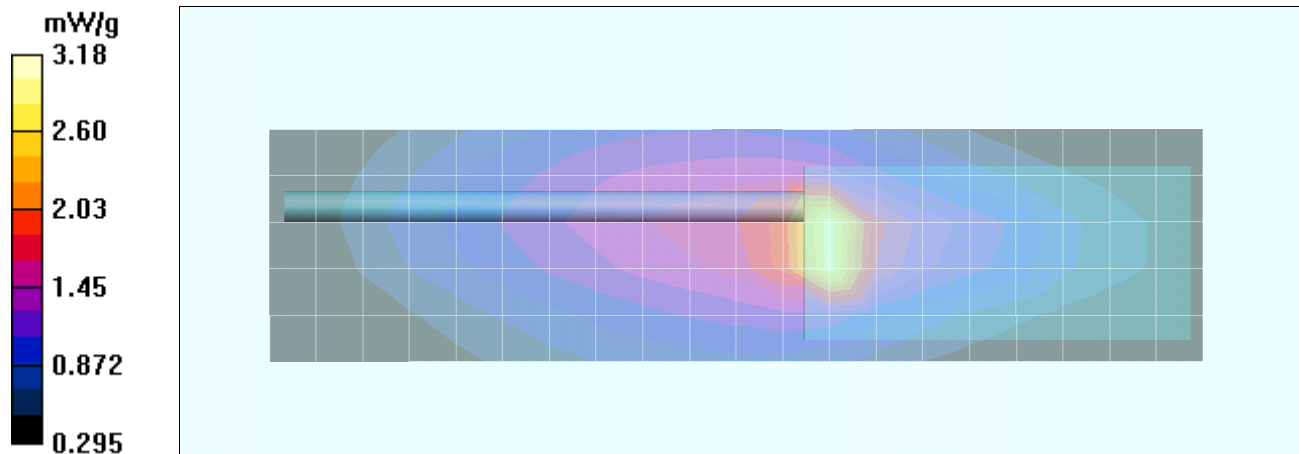
Reference Value = 57.4 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 9.03 W/kg

SAR(1 g) = 3.02 mW/g; SAR(10 g) = 1.63 mW/g

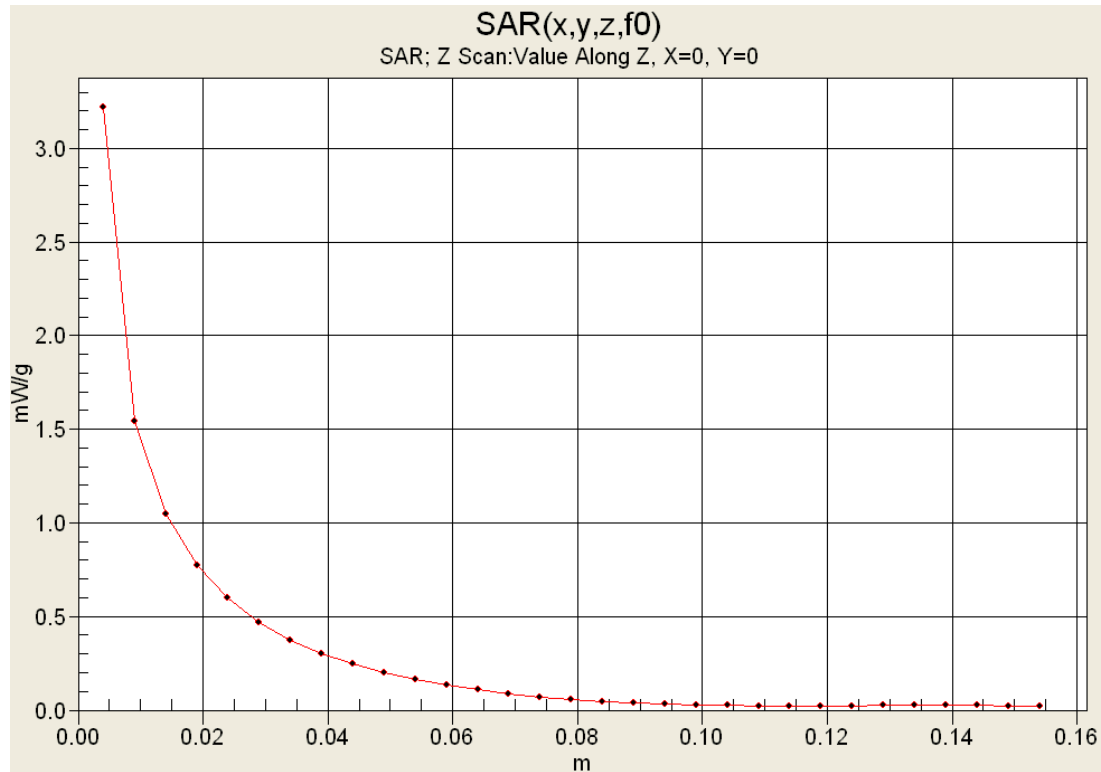
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.18 mW/g

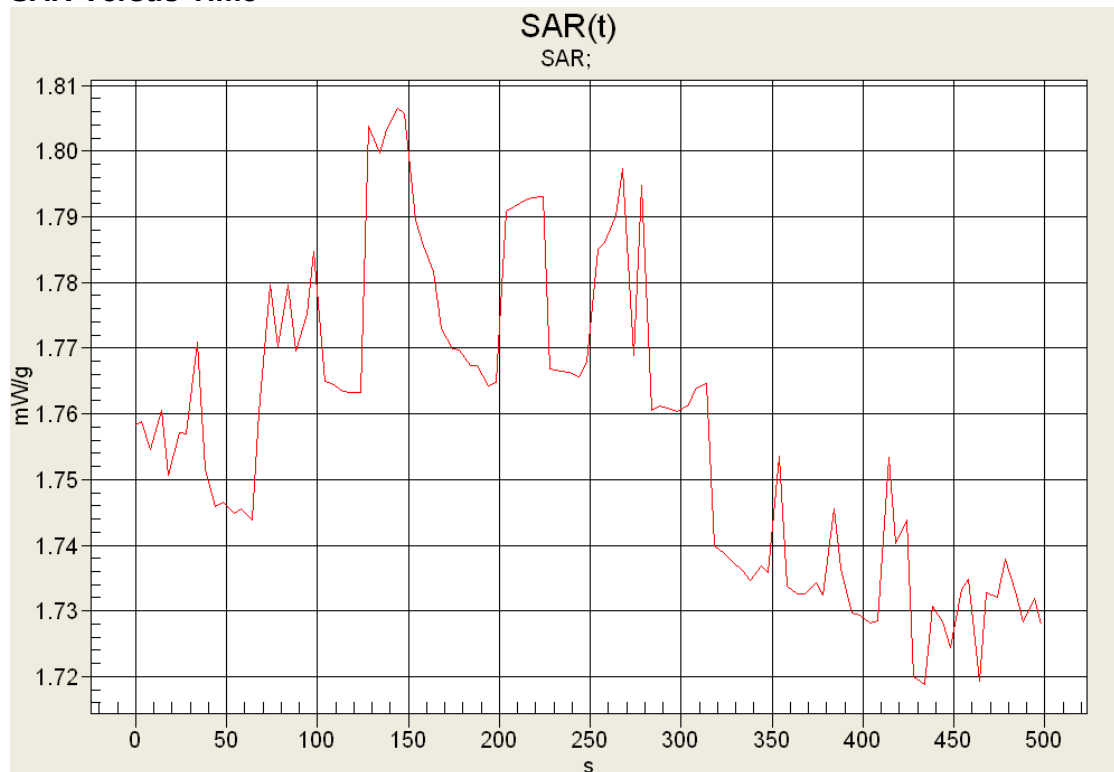


Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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Z-Axis Scan



SAR-Versus-Time



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Test Lab Certificate No. 2470.01

Body SAR Plot B6

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 23.0C; Fluid Temp: 23.0C; Barometric Pressure: 101.1 kPa; Humidity: 34%

Communication System: Kenwood VHF

Frequency: 167.7 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 167.7 \text{ MHz}$; $\sigma = 0.758 \text{ mho/m}$; $\epsilon_r = 62.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 0.902 mW/g

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

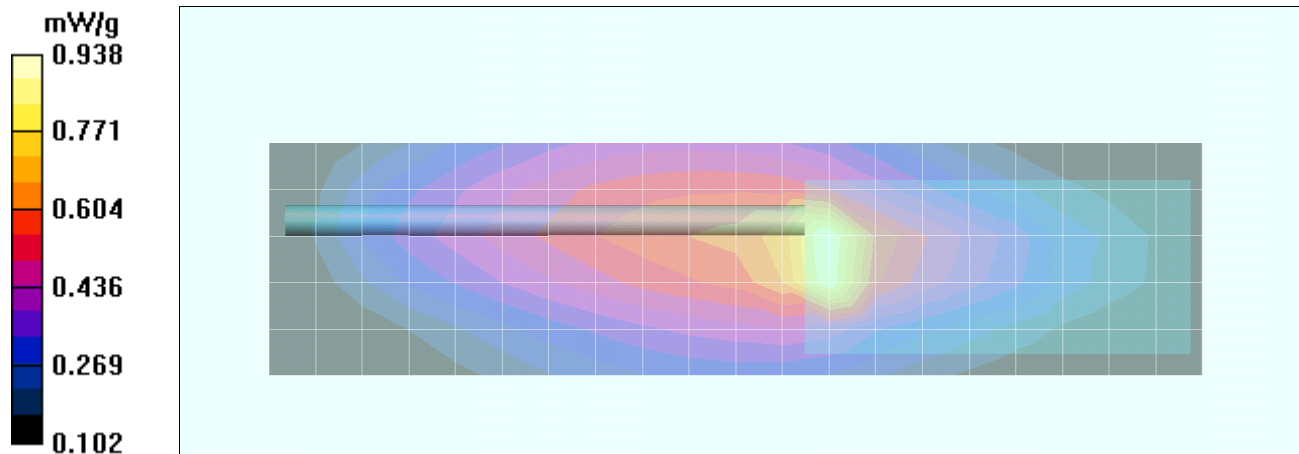
Reference Value = 32.3 V/m; Power Drift = -0.103 dB

Peak SAR (extrapolated) = 2.17 W/kg

SAR(1 g) = 0.885 mW/g; SAR(10 g) = 0.523 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.938 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	Test Report Issue Date Oct. 17, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Body SAR Plot B7

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

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

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.766 \text{ mho/m}$; $\epsilon_r = 63.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (6x16x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.38 mW/g

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

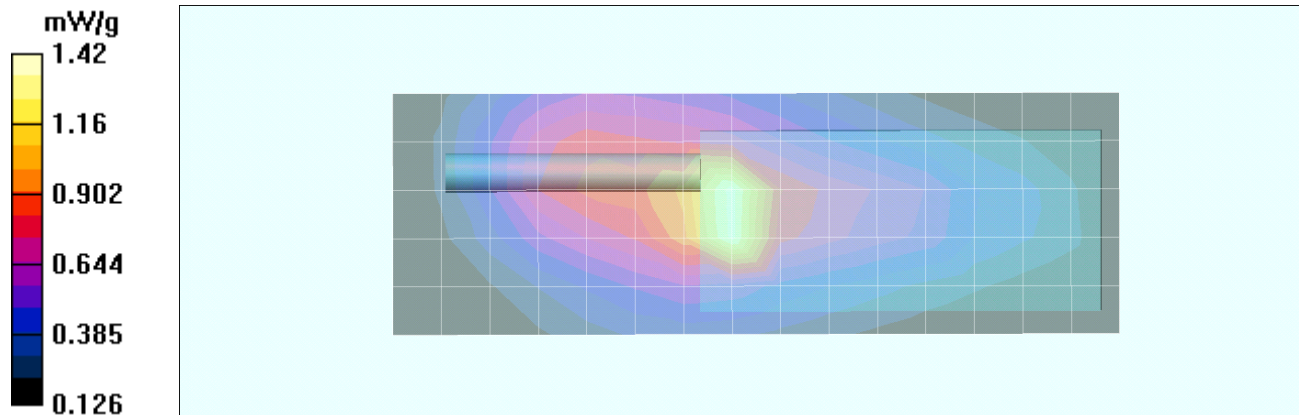
Reference Value = 39.8 V/m; Power Drift = -0.032 dB

Peak SAR (extrapolated) = 3.96 W/kg

SAR(1 g) = 1.39 mW/g; SAR(10 g) = 0.757 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.42 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Body SAR Plot B8

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

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

Communication System: Kenwood VHF

Frequency: 167.7 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 167.7 \text{ MHz}$; $\sigma = 0.778 \text{ mho/m}$; $\epsilon_r = 62.4$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Area Scan (6x16x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.10 mW/g

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

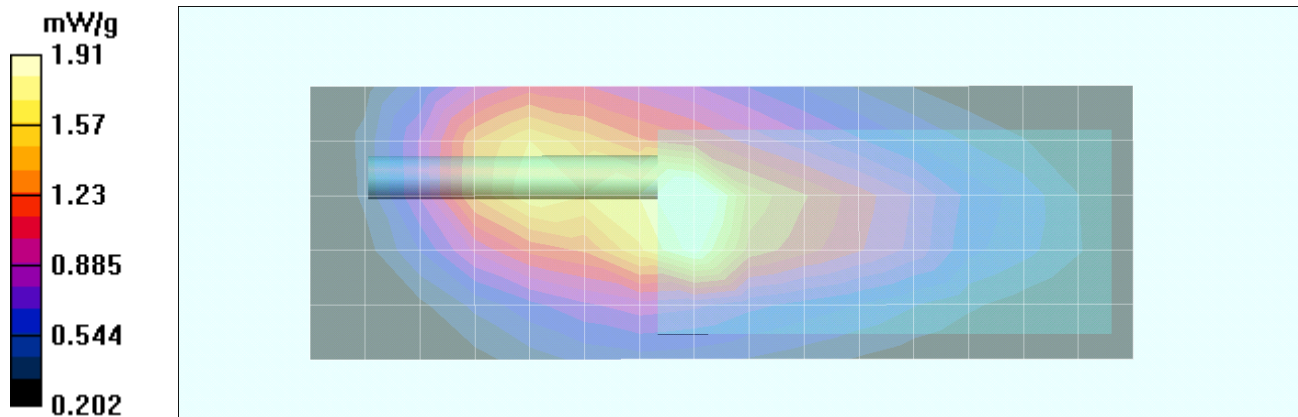
Reference Value = 48.1 V/m; Power Drift = -0.208 dB

Peak SAR (extrapolated) = 4.59 W/kg

SAR(1 g) = 1.89 mW/g; SAR(10 g) = 1.11 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

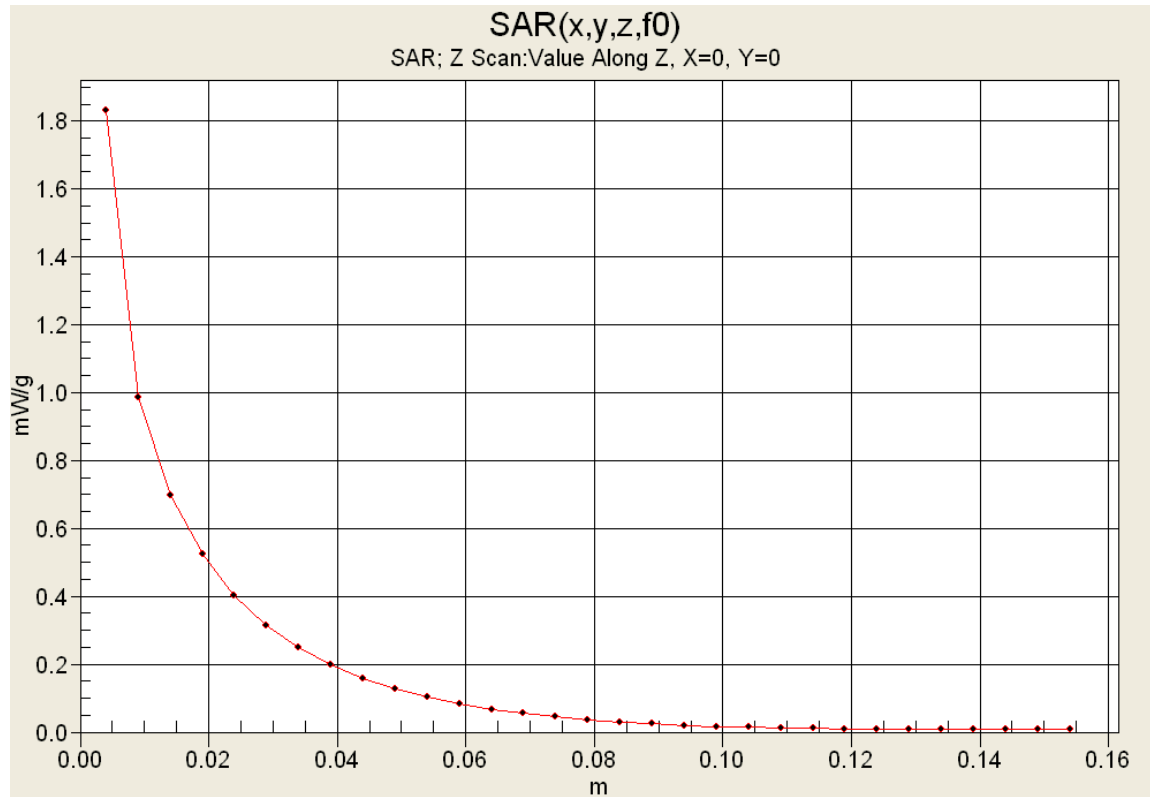
Maximum value of SAR (measured) = 1.91 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Date(s) of Evaluation</u> Aug 23-28, Oct3, 2012	<u>Test Report Serial No.</u> 081612ALH-T1189-S90V	<u>Test Report Revision No.</u> Rev. 1.0 (1st Release)	
	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	
Test Lab Certificate No. 2470.01				

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	Date(s) of Evaluation Aug 23-28, Oct3, 2012	Test Report Serial No. 081612ALH-T1189-S90V	Test Report Revision No. Rev. 1.0 (1st Release)	 Test Lab Certificate No. 2470.01
	Test Report Issue Date Oct. 17, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Body SAR Plot B9

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.8C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.776 \text{ mho/m}$; $\epsilon_r = 62.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 1.90 mW/g

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

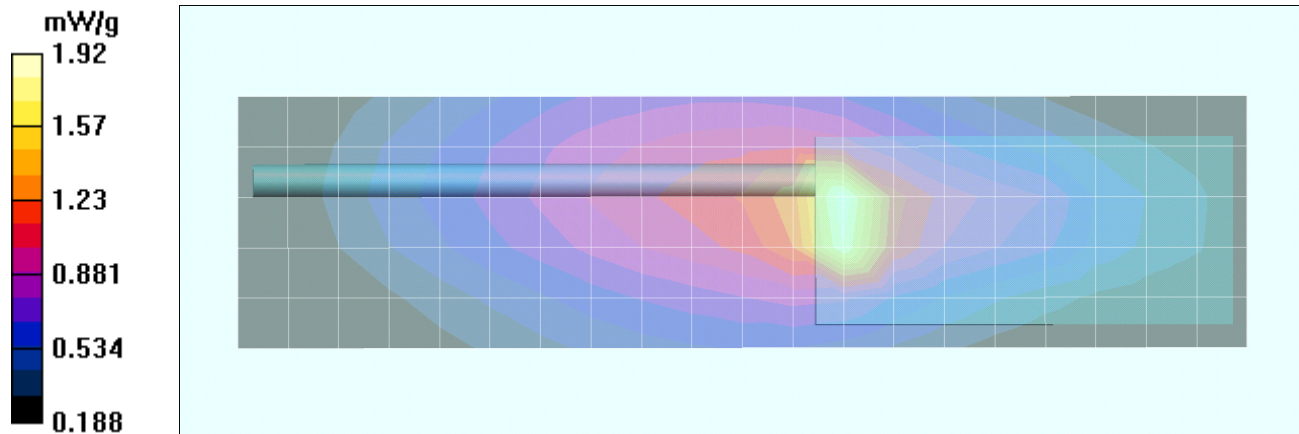
Reference Value = 45.0 V/m; Power Drift = -0.299 dB

Peak SAR (extrapolated) = 5.01 W/kg

SAR(1 g) = 1.82 mW/g; SAR(10 g) = 1.02 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.92 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	Test Report Issue Date Oct. 17, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Body SAR Plot A1

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.8C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.776 \text{ mho/m}$; $\epsilon_r = 62.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 2.38 mW/g

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

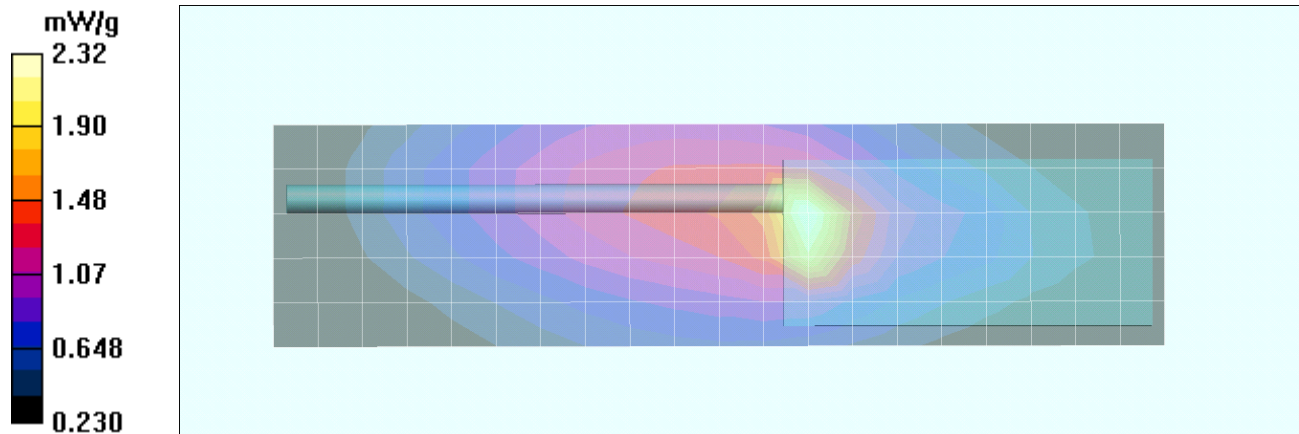
Reference Value = 47.7 V/m; Power Drift = -0.211 dB

Peak SAR (extrapolated) = 6.52 W/kg

SAR(1 g) = 2.27 mW/g; SAR(10 g) = 1.26 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

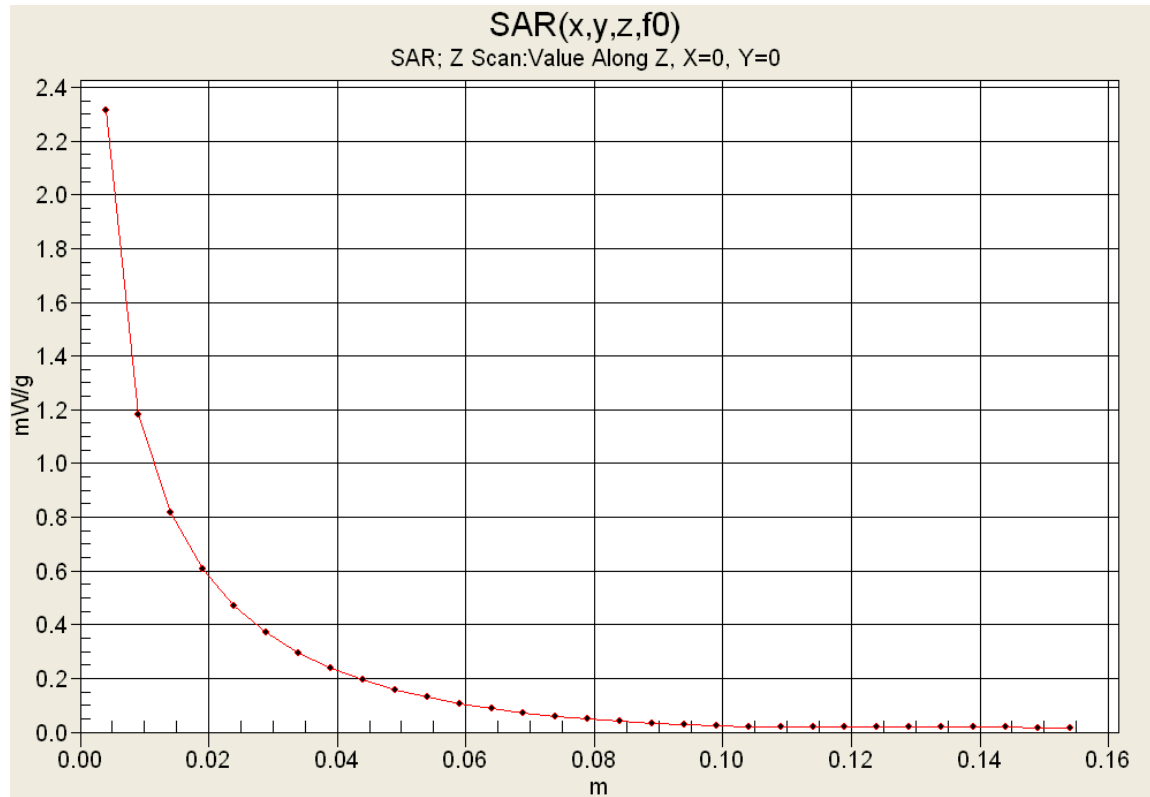
Maximum value of SAR (measured) = 2.32 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K		TK-2400-K2	
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	
Test Lab Certificate No. 2470.01				

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	Test Report Issue Date Oct. 17, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Body SAR Plot A2

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.8C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.776 \text{ mho/m}$; $\epsilon_r = 62.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 2.26 mW/g

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

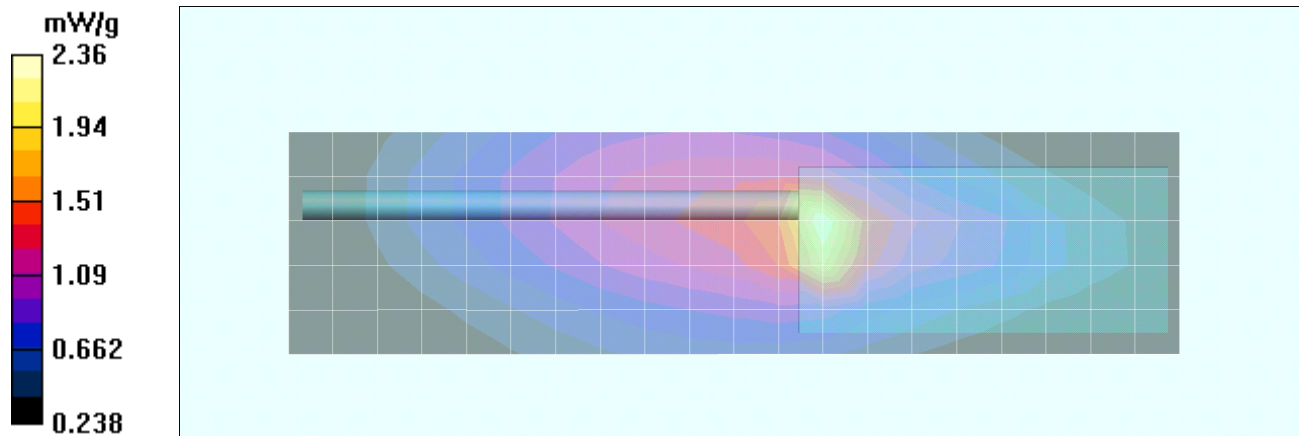
Reference Value = 47.4 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 6.23 W/kg

SAR(1 g) = 2.23 mW/g; SAR(10 g) = 1.24 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.36 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Body SAR Plot A3

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.8C; Barometric Pressure: 101.1 kPa; Humidity: 30%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.776 \text{ mho/m}$; $\epsilon_r = 62.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 2.56 mW/g

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

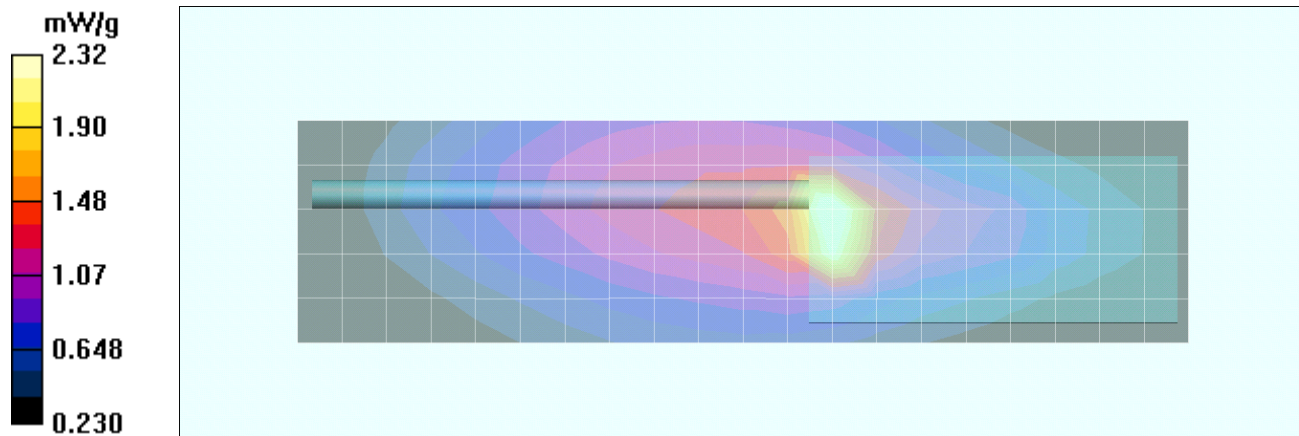
Reference Value = 45.4 V/m; Power Drift = 0.369 dB

Peak SAR (extrapolated) = 6.16 W/kg

SAR(1 g) = 2.17 mW/g; SAR(10 g) = 1.21 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.32 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Body SAR Plot A4

Date Tested: 08/28/2012

DUT: Kenwood VHF TK-2400-K2; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0418

Program Notes: Ambient Temp: 24.0C; Fluid Temp: 23.8C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: Kenwood VHF

Frequency: 156.4 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 156.4 \text{ MHz}$; $\sigma = 0.776 \text{ mho/m}$; $\epsilon_r = 62.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(8.6, 8.6, 8.6); 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: Side Planar; Type: Plexiglass; Serial: 161
- 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) = 2.81 mW/g

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

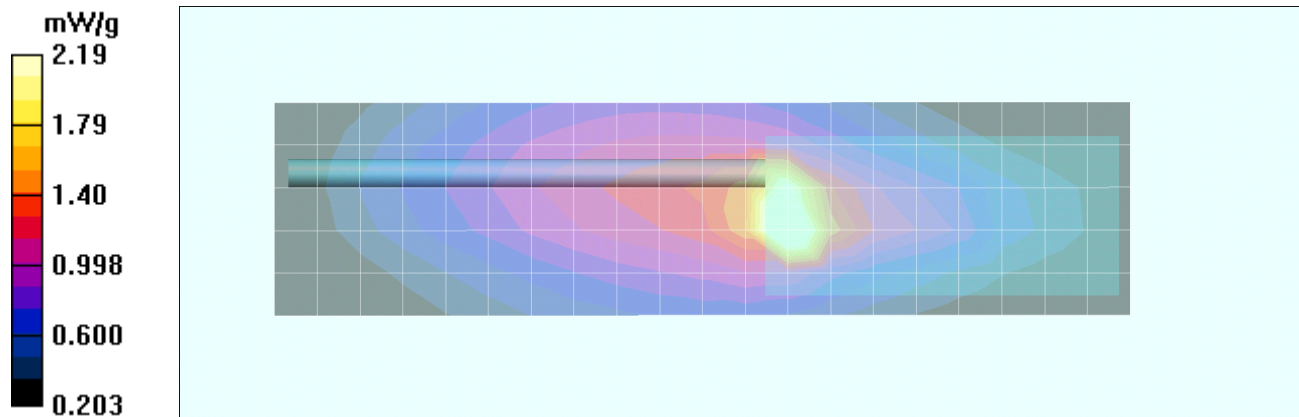
Reference Value = 48.1 V/m; Power Drift = -0.206 dB

Peak SAR (extrapolated) = 6.22 W/kg

SAR(1 g) = 2.13 mW/g; SAR(10 g) = 1.16 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

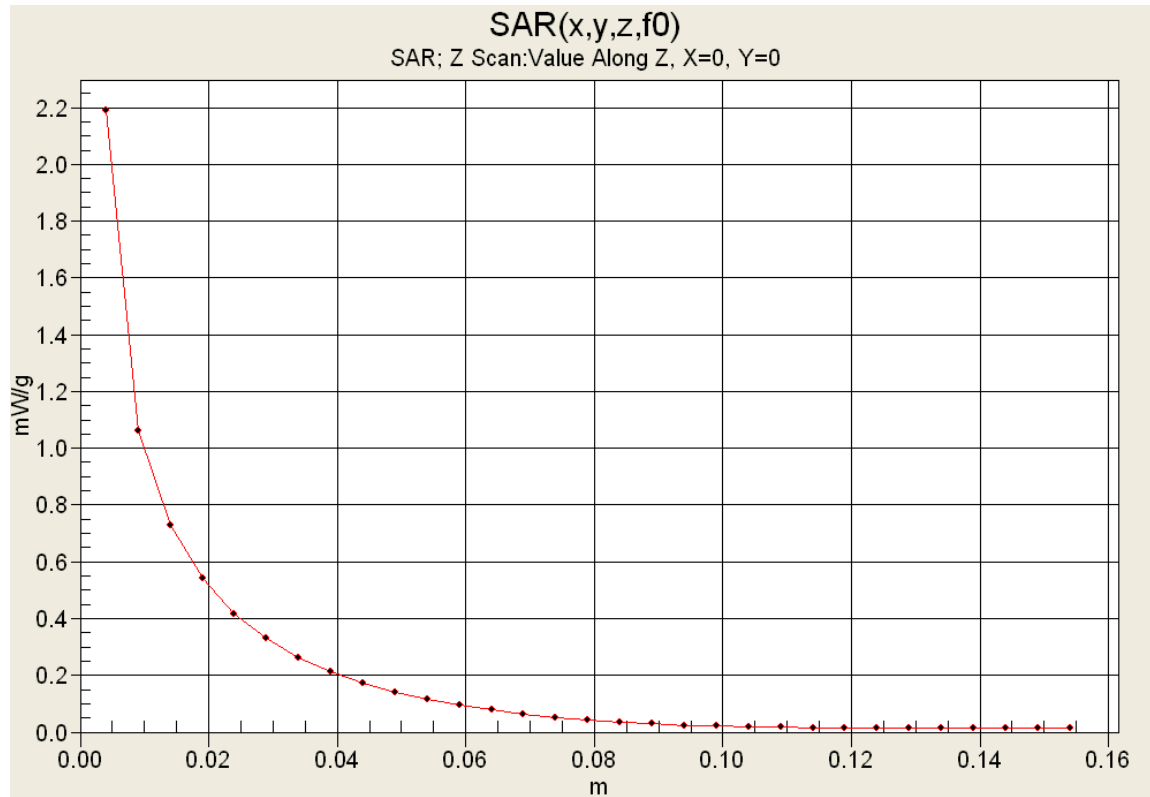
Maximum value of SAR (measured) = 2.19 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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	<u>Test Report Issue Date</u> Oct. 17, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	
Test Lab Certificate No. 2470.01				

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434901	Freq:	150.8 - 173.4 MHz	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2400-K	TK-2400-K2		
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