

	<u>Date(s) of Evaluation</u> Aug 23-28, Oct3, 2012	<u>Test Report Serial No.</u> 081612ALH-T1193-S90V	<u>Test Report Revision No.</u> Rev. 1.1 (2nd Release)	
	<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)	

Test Lab Certificate No. 2470.01

APPENDIX A - SAR MEASUREMENT DATA

Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz		
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Face SAR Plot F1

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 2.00 mW/g

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

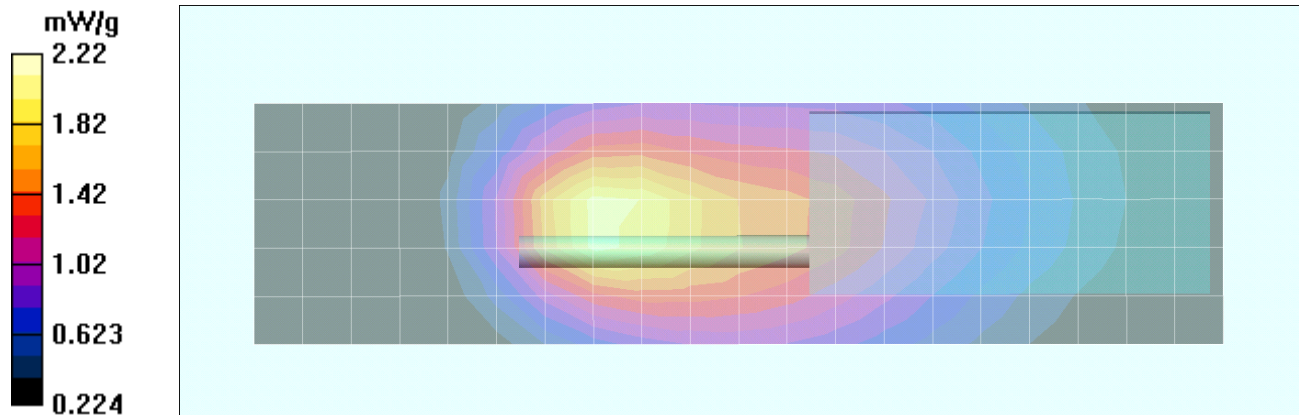
Reference Value = 40.1 V/m; Power Drift = 0.797 dB

Peak SAR (extrapolated) = 5.03 W/kg

SAR(1 g) = 2.2 mW/g; SAR(10 g) = 1.42 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

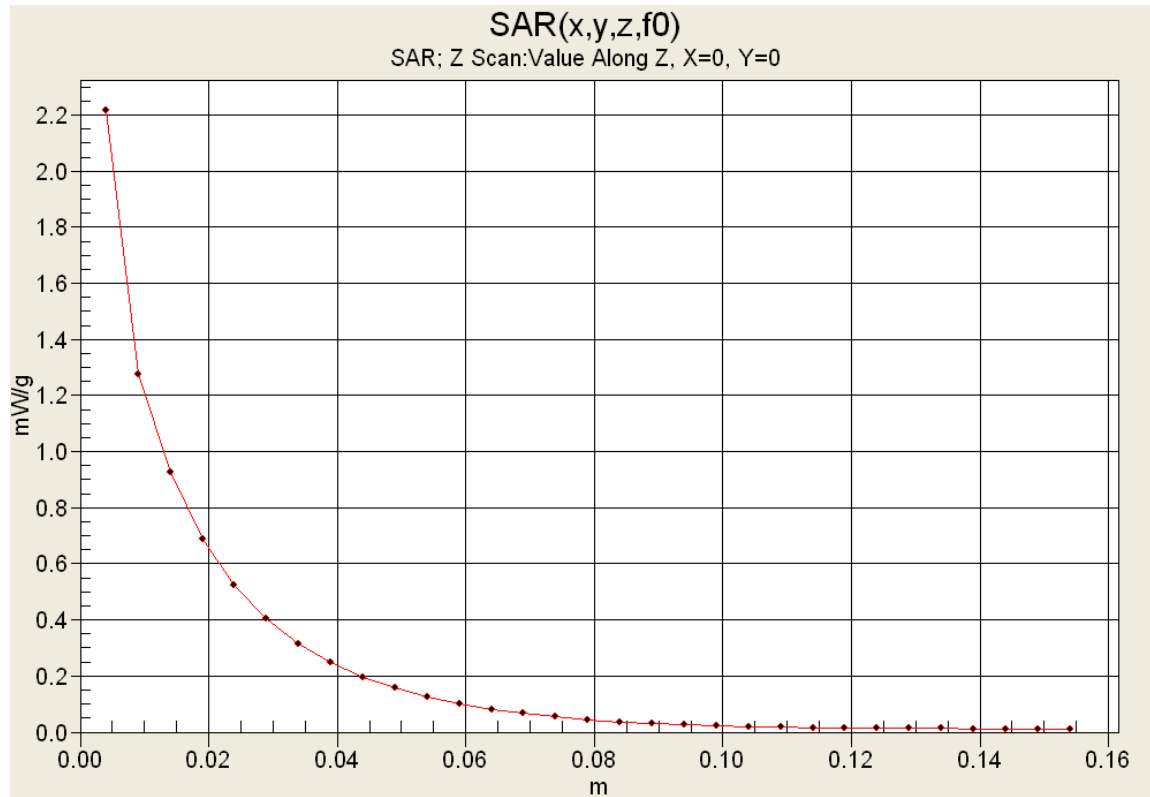
Maximum value of SAR (measured) = 2.22 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz		
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	Test Report Issue Date Nov. 30, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P		138.0 - 173.4 MHz	
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	Test Report Issue Date Nov. 30, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Test Lab Certificate No. 2470.01

Face SAR Plot F2

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 162 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 162 \text{ MHz}$; $\sigma = 0.758 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 0.601 mW/g

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

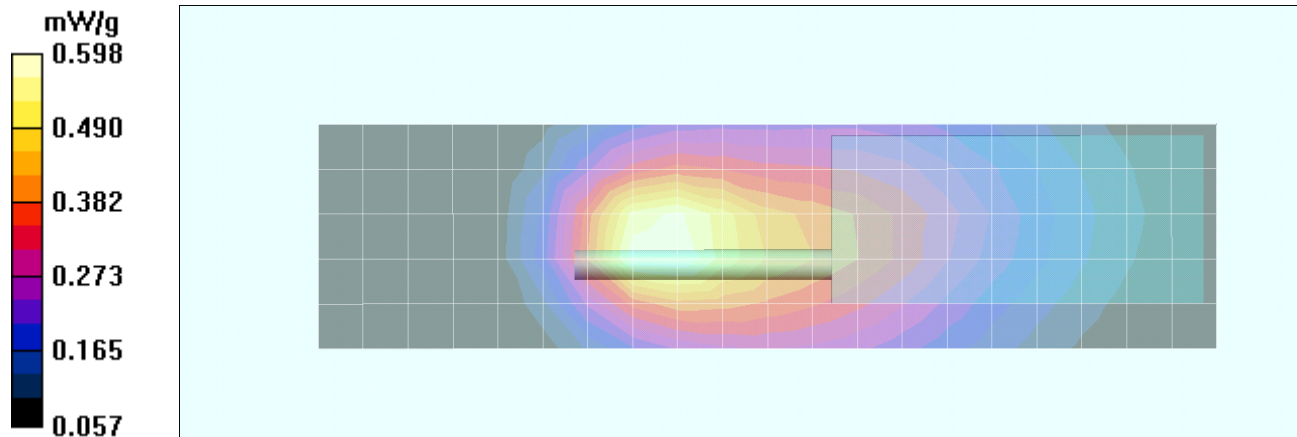
Reference Value = 22.5 V/m; Power Drift = -0.079 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.596 mW/g; SAR(10 g) = 0.380 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.598 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver		Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	

Face SAR Plot F3

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 144 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 144 \text{ MHz}$; $\sigma = 0.742 \text{ mho/m}$; $\epsilon_r = 55.4$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 2.11 mW/g

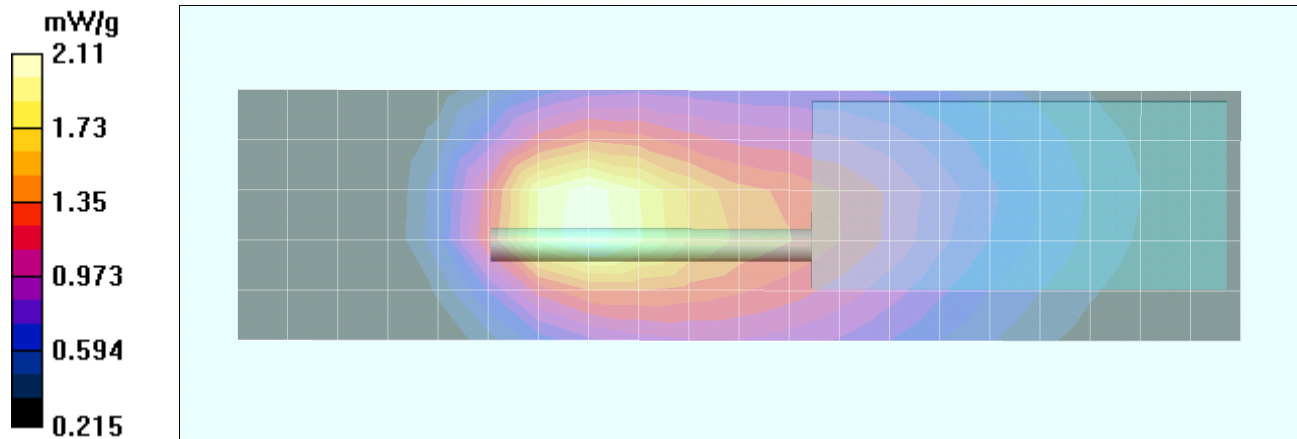
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 43.3 V/m; Power Drift = -0.516 dB

Peak SAR (extrapolated) = 5.02 W/kg

SAR(1 g) = 2.11 mW/g; SAR(10 g) = 1.34 mW/g

Info: Interpolated medium parameters used for SAR evaluation.



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	

Face SAR Plot F4

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 1.38 mW/g

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

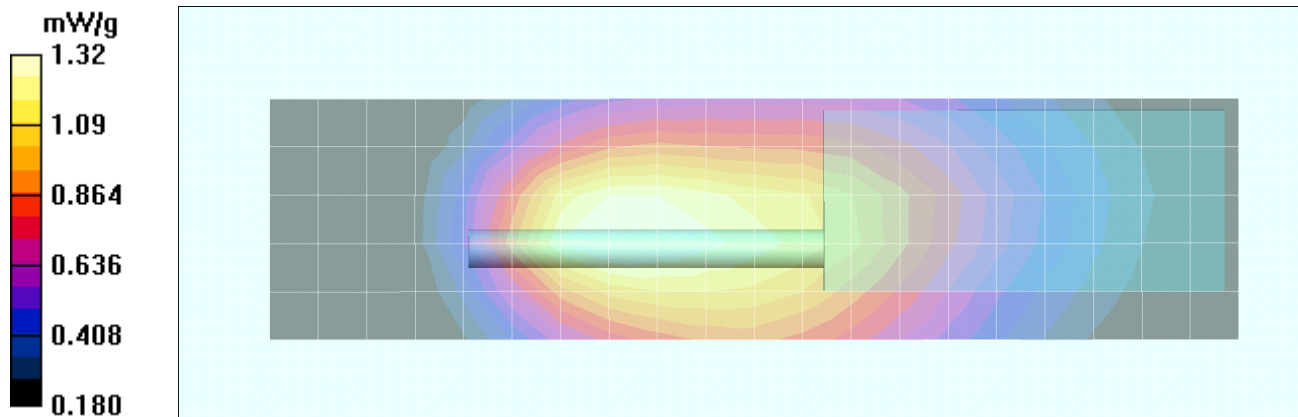
Reference Value = 41.6 V/m; Power Drift = -1.03 dB

Peak SAR (extrapolated) = 2.72 W/kg

SAR(1 g) = 1.31 mW/g; SAR(10 g) = 0.895 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.32 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz		
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Face SAR Plot F5

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 162 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 162 \text{ MHz}$; $\sigma = 0.754 \text{ mho/m}$; $\epsilon_r = 53.4$; $\rho = 1000 \text{ kg/m}^3$

- 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: 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) = 0.584 mW/g

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

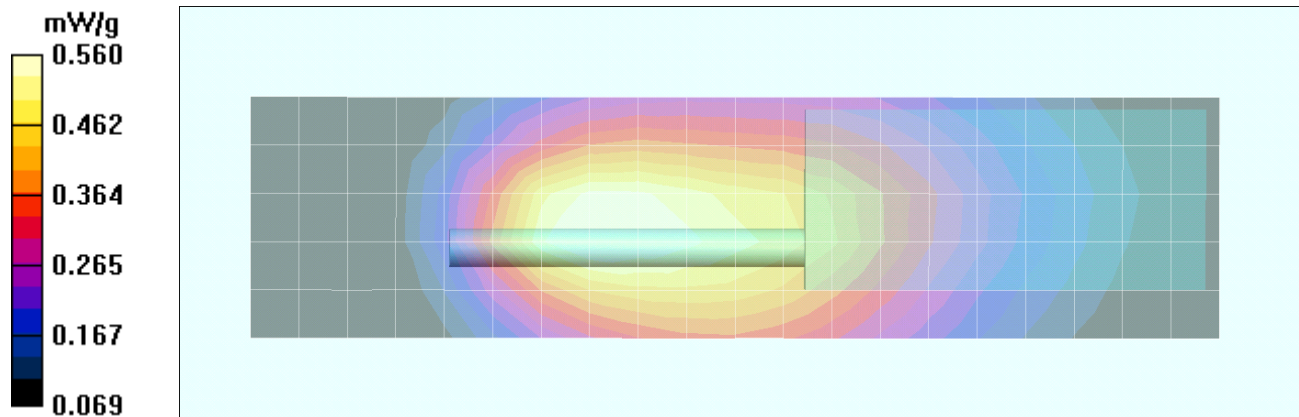
Reference Value = 25.9 V/m; Power Drift = -0.980 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.550 mW/g; SAR(10 g) = 0.372 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.560 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	

Face SAR Plot F6

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 144 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 144 \text{ MHz}$; $\sigma = 0.744 \text{ mho/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$

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

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.10 mW/g

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

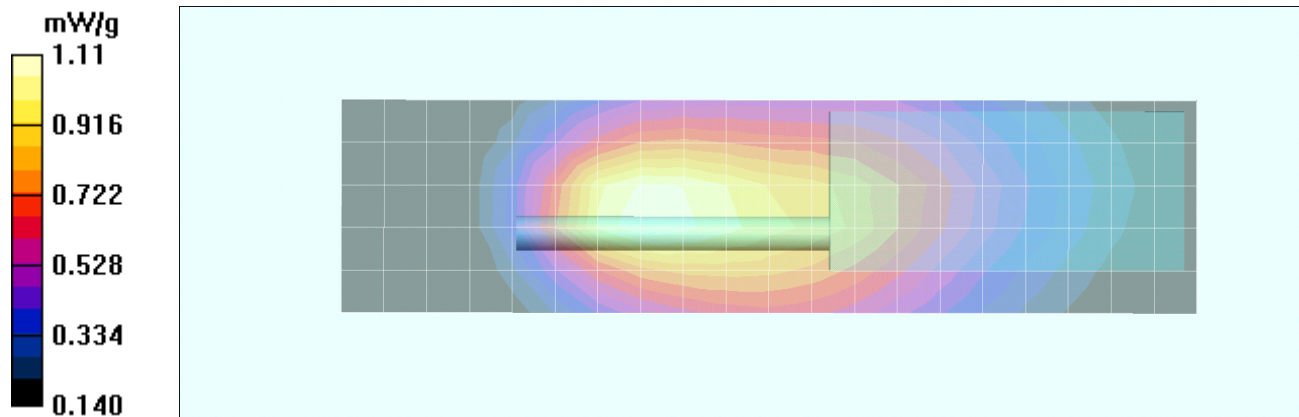
Reference Value = 35.6 V/m; Power Drift = -0.544 dB

Peak SAR (extrapolated) = 2.45 W/kg

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.734 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.11 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	

Face SAR Plot F7

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 2.06 mW/g

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

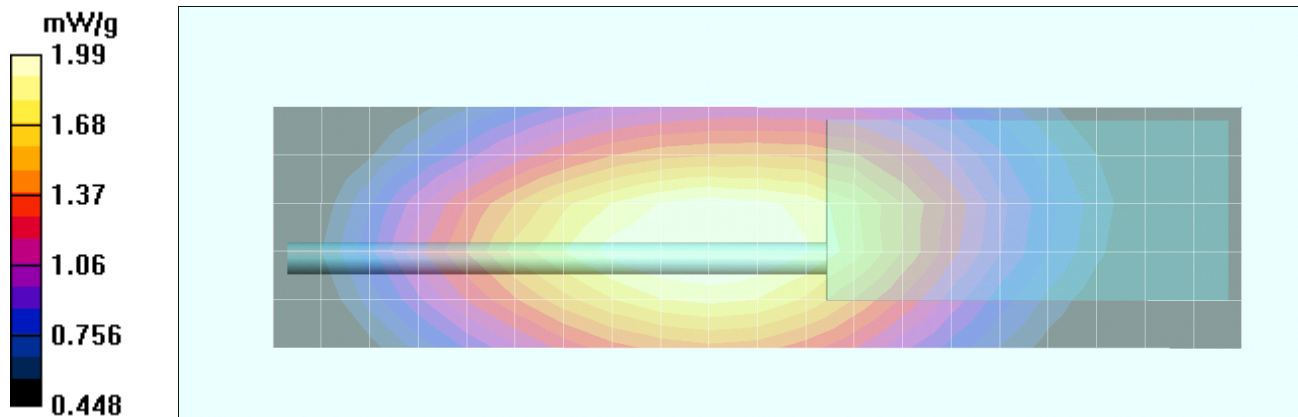
Reference Value = 49.9 V/m; Power Drift = -0.312 dB

Peak SAR (extrapolated) = 2.86 W/kg

SAR(1 g) = 1.93 mW/g; SAR(10 g) = 1.45 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.99 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz		
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Test Lab Certificate No. 2470.01				

Face SAR Plot F8

Date Tested: 08/24/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 162 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 162 \text{ MHz}$; $\sigma = 0.754 \text{ mho/m}$; $\epsilon_r = 53.4$; $\rho = 1000 \text{ kg/m}^3$

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

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.41 mW/g

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

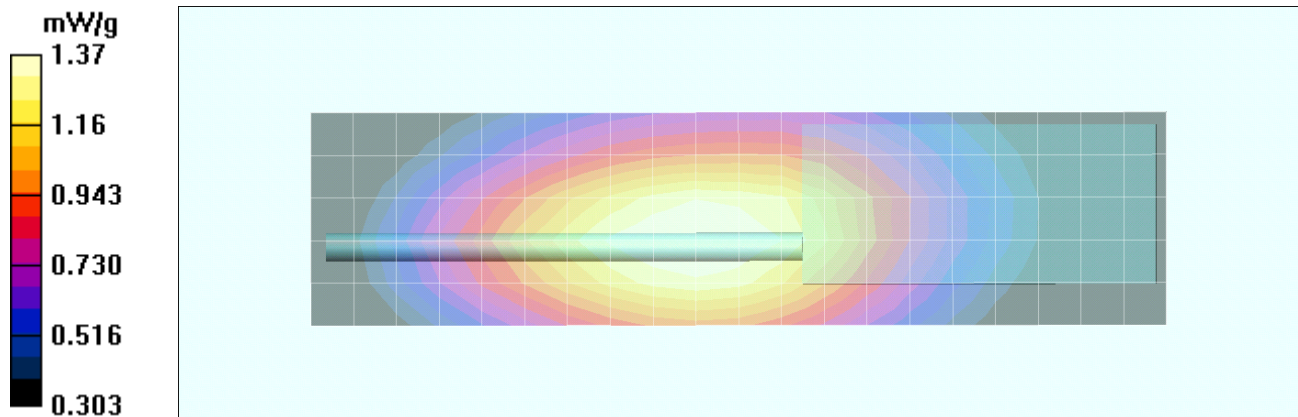
Reference Value = 40.0 V/m; Power Drift = -0.232 dB

Peak SAR (extrapolated) = 1.96 W/kg

SAR(1 g) = 1.32 mW/g; SAR(10 g) = 0.990 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.37 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver		Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz	
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Test Lab Certificate No. 2470.01

Face SAR Plot F9

Date Tested: 08/24/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 144 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 144 \text{ MHz}$; $\sigma = 0.744 \text{ mho/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$

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

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.03 mW/g

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

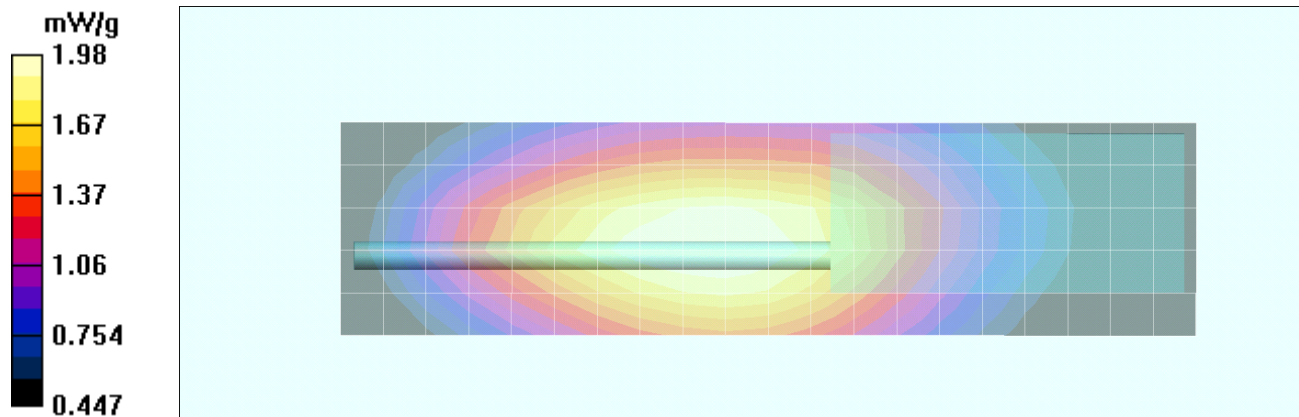
Reference Value = 49.7 V/m; Power Drift = -0.446 dB

Peak SAR (extrapolated) = 2.85 W/kg

SAR(1 g) = 1.92 mW/g; SAR(10 g) = 1.45 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

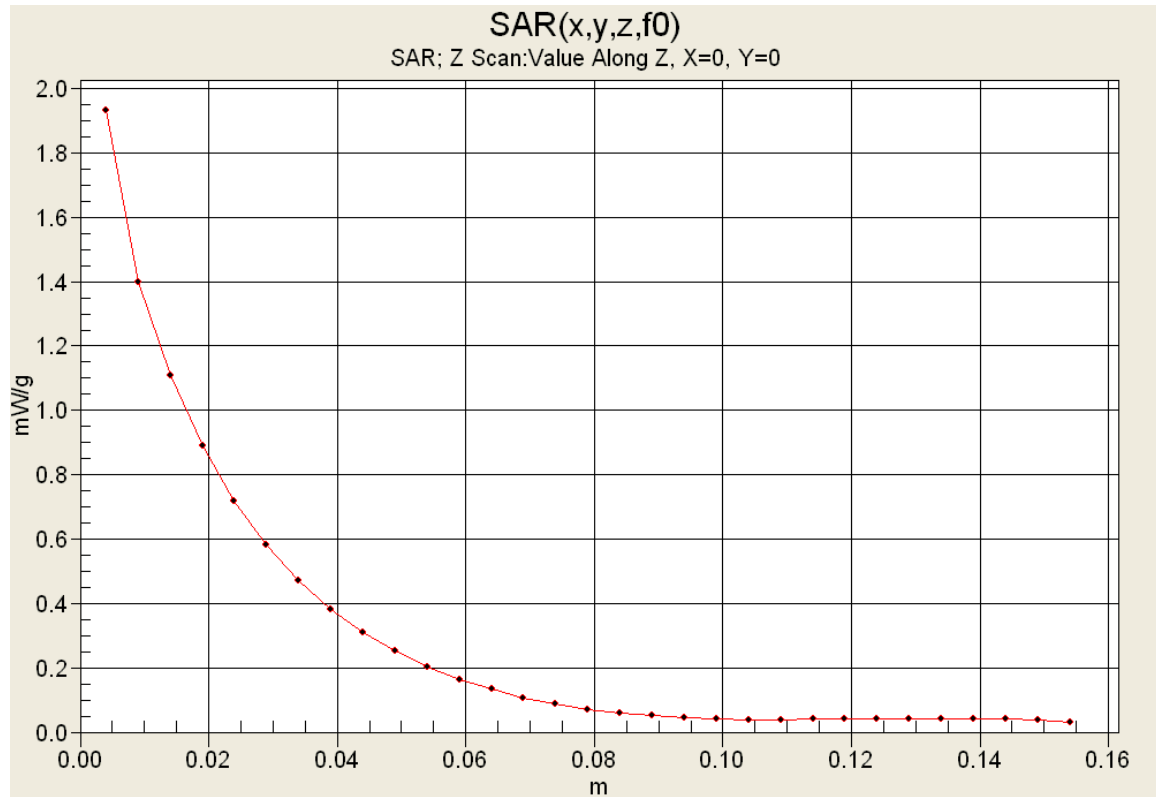
Maximum value of SAR (measured) = 1.98 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	
Test Lab Certificate No. 2470.01				

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	

Test Lab Certificate No. 2470.01

Face SAR Plot F10

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 2.73 mW/g

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

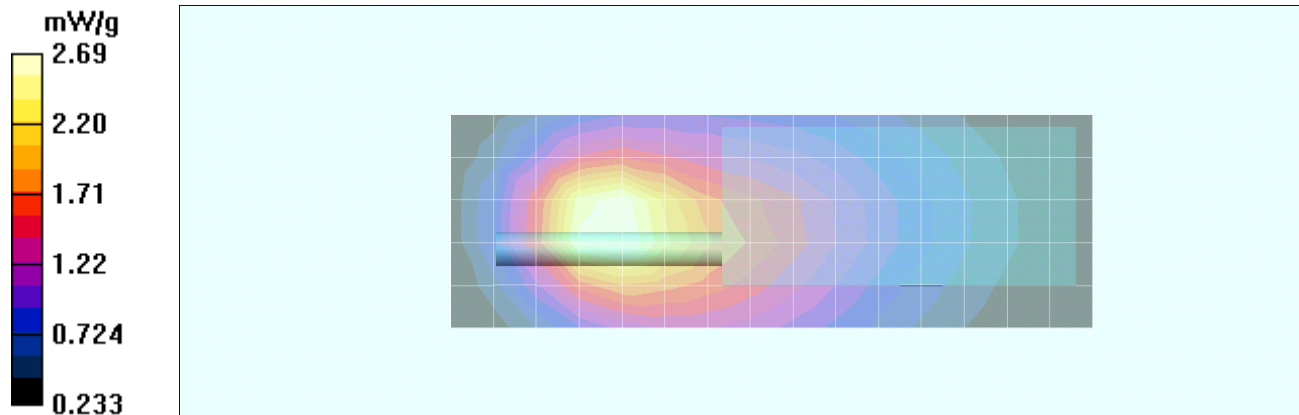
Reference Value = 46.4 V/m; Power Drift = -0.224 dB

Peak SAR (extrapolated) = 6.42 W/kg

SAR(1 g) = 2.7 mW/g; SAR(10 g) = 1.7 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.69 mW/g

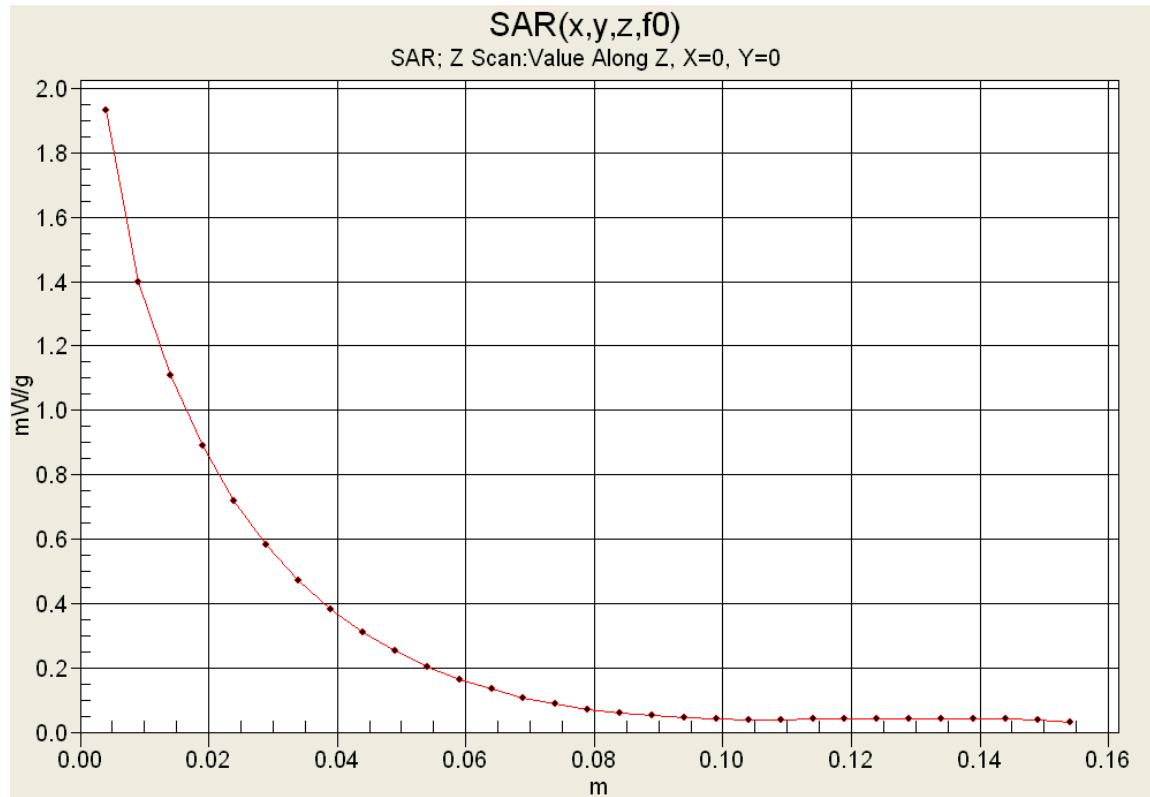


Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz		
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	<u>Test Report Issue Date</u> Nov. 30, 2012	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Test Lab Certificate No. 2470.01

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	

Face SAR Plot F11

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 162 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 162 \text{ MHz}$; $\sigma = 0.784 \text{ mho/m}$; $\epsilon_r = 54.9$; $\rho = 1000 \text{ kg/m}^3$

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

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.433 mW/g

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

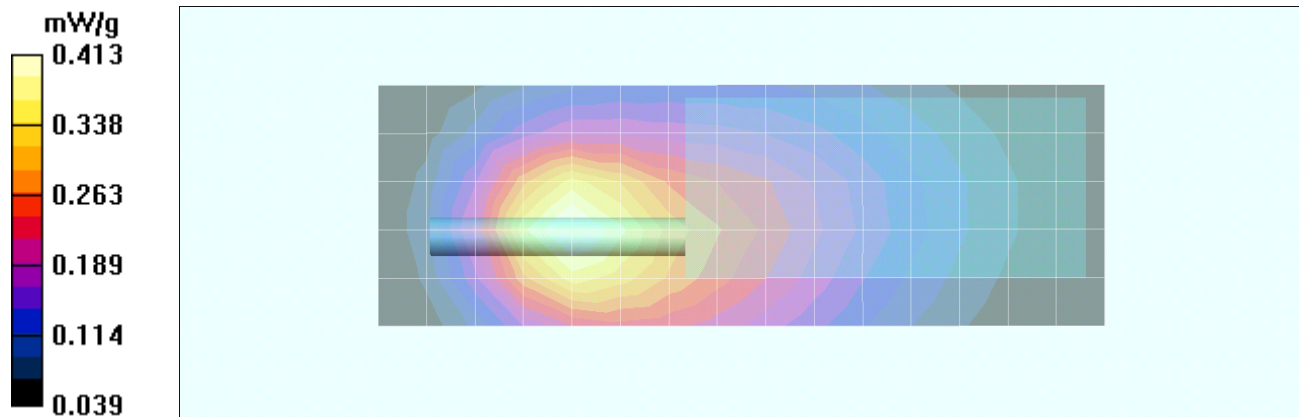
Reference Value = 18.5 V/m; Power Drift = -0.451 dB

Peak SAR (extrapolated) = 0.939 W/kg

SAR(1 g) = 0.412 mW/g; SAR(10 g) = 0.260 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.413 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	

Face SAR Plot F12

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 144 MHz; Duty Cycle: 1:1

Medium: HSL150 Medium parameters used (interpolated): $f = 144 \text{ MHz}$; $\sigma = 0.766 \text{ mho/m}$; $\epsilon_r = 54.5$; $\rho = 1000 \text{ kg/m}^3$

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

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.49 mW/g

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

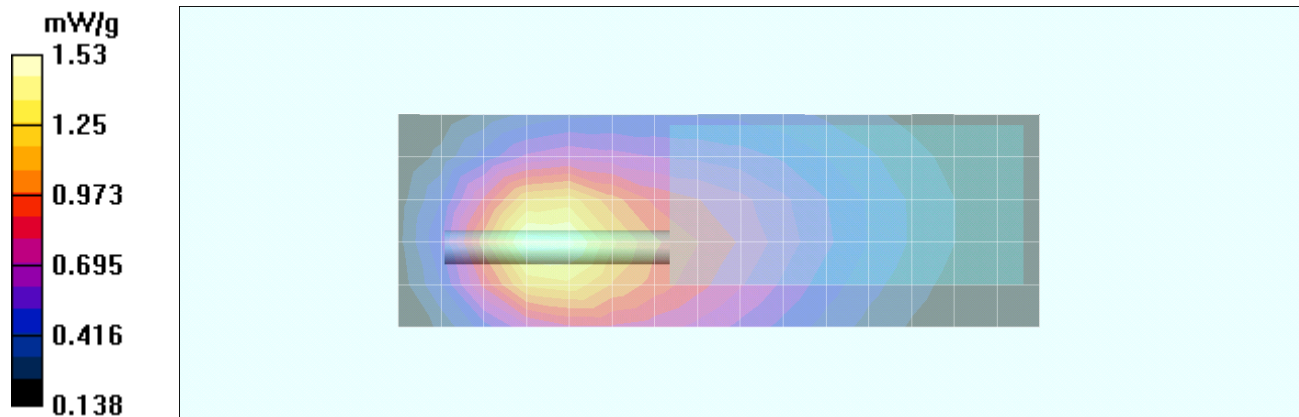
Reference Value = 33.5 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 3.68 W/kg

SAR(1 g) = 1.53 mW/g; SAR(10 g) = 0.961 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:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver		Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	
Test Lab Certificate No. 2470.01				

Face SAR Plot F13

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 2.09 mW/g

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

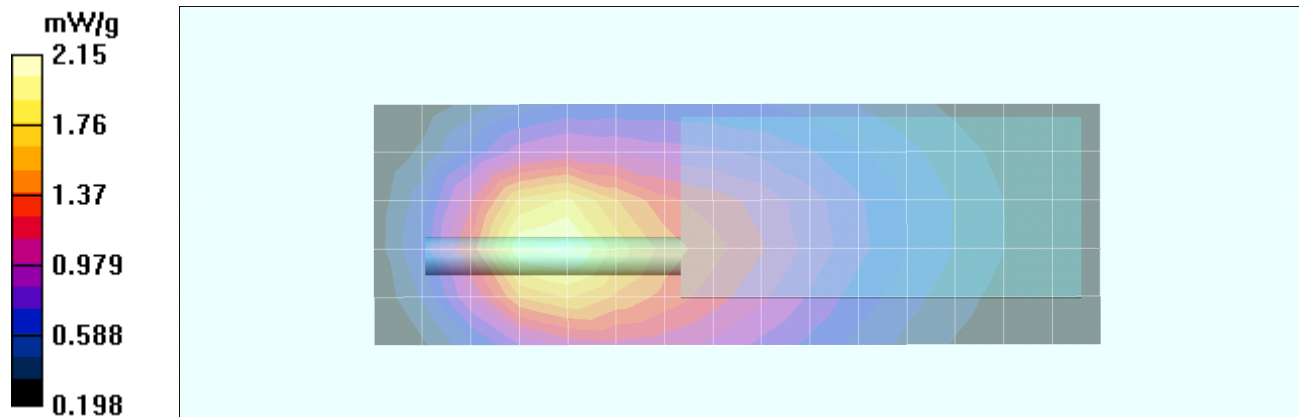
Reference Value = 40.3 V/m; Power Drift = 0.153 dB

Peak SAR (extrapolated) = 5.02 W/kg

SAR(1 g) = 2.17 mW/g; SAR(10 g) = 1.38 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.15 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 5.34 mW/g

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

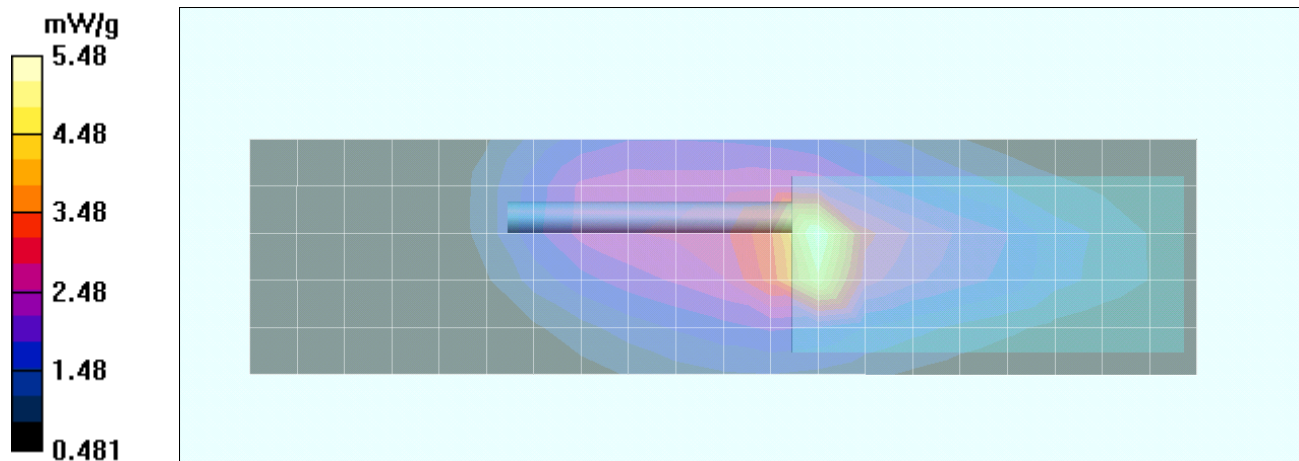
Reference Value = 72.4 V/m; Power Drift = 0.412 dB

Peak SAR (extrapolated) = 15.7 W/kg

SAR(1 g) = 5.12 mW/g; SAR(10 g) = 2.74 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 5.48 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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: 08/27/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 162 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 162 \text{ MHz}$; $\sigma = 0.782 \text{ mho/m}$; $\epsilon_r = 61.2$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 1.35 mW/g

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

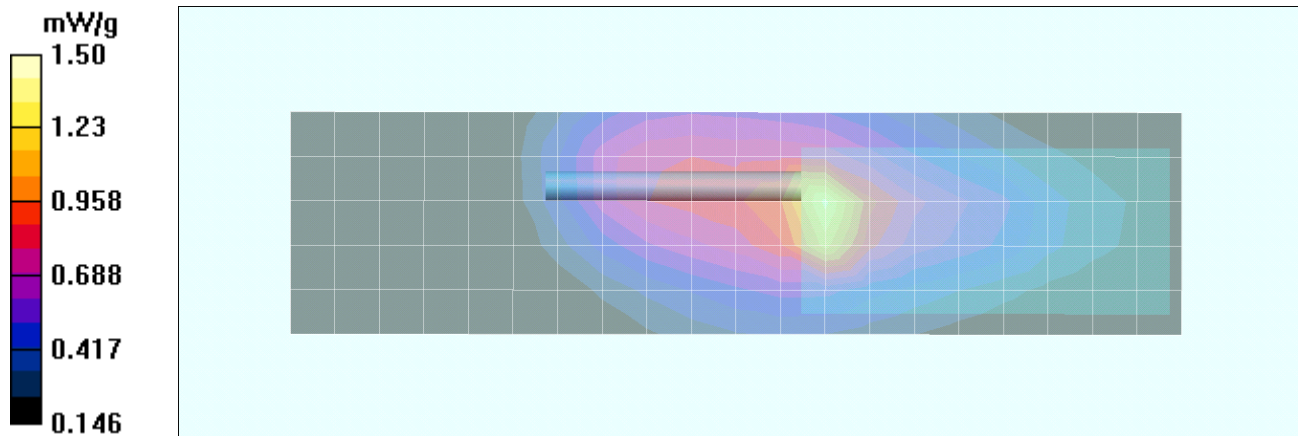
Reference Value = 36.5 V/m; Power Drift = 0.190 dB

Peak SAR (extrapolated) = 3.79 W/kg

SAR(1 g) = 1.41 mW/g; SAR(10 g) = 0.800 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.50 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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 B3

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF10

Frequency: 144 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 144 \text{ MHz}$; $\sigma = 0.764 \text{ mho/m}$; $\epsilon_r = 64$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 0.965 mW/g

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

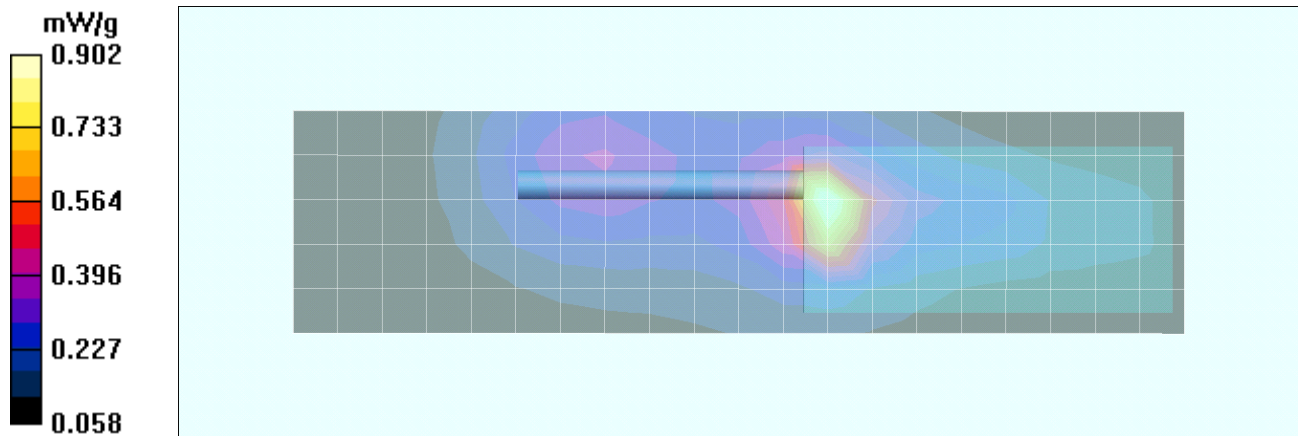
Reference Value = 28.4 V/m; Power Drift = -0.490 dB

Peak SAR (extrapolated) = 3.35 W/kg

SAR(1 g) = 0.900 mW/g; SAR(10 g) = 0.428 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.902 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	
Test Lab Certificate No. 2470.01				

Body SAR Plot B4

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 2.74 mW/g

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

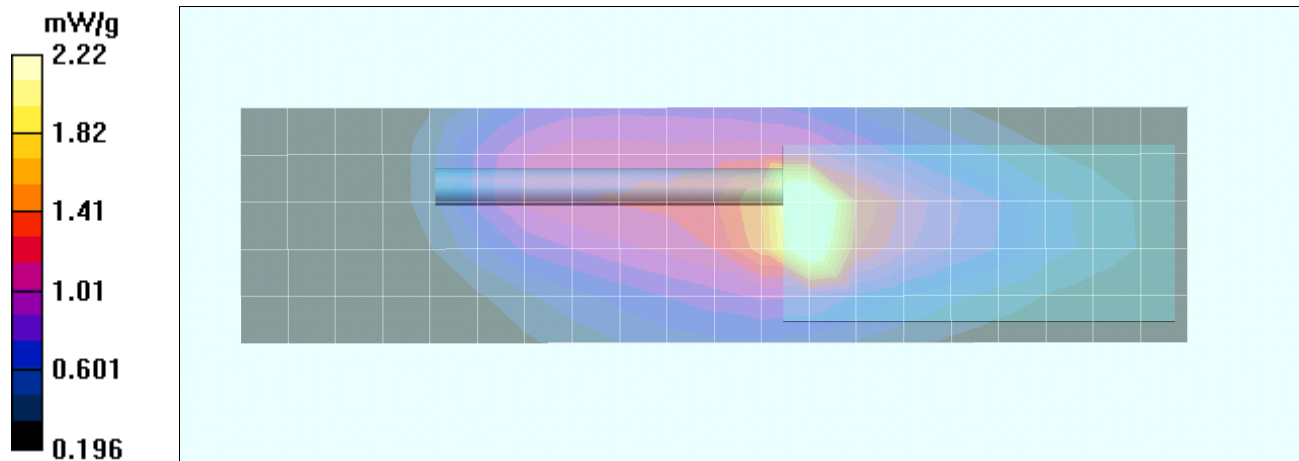
Reference Value = 51.7 V/m; Power Drift = -0.939 dB

Peak SAR (extrapolated) = 6.31 W/kg

SAR(1 g) = 2.08 mW/g; SAR(10 g) = 1.12 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 2.22 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver		Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	
Test Lab Certificate No. 2470.01				

Body SAR Plot B5

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 162 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 162 \text{ MHz}$; $\sigma = 0.752 \text{ mho/m}$; $\epsilon_r = 63.8$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 3.78 mW/g

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

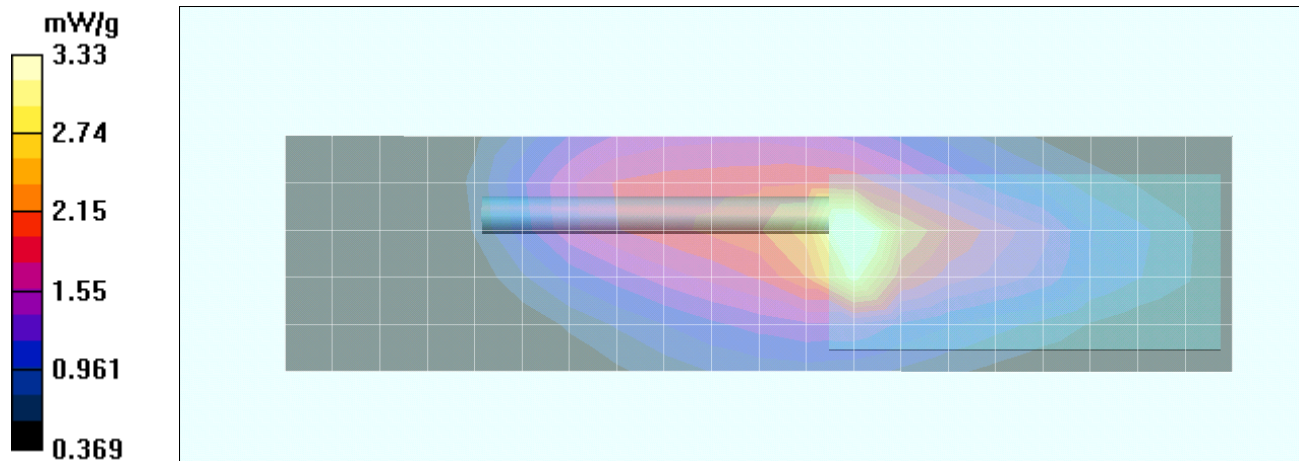
Reference Value = 57.8 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 8.10 W/kg

SAR(1 g) = 3.18 mW/g; SAR(10 g) = 1.86 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.33 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 144 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 144 \text{ MHz}$; $\sigma = 0.744 \text{ mho/m}$; $\epsilon_r = 64.4$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 4.05 mW/g

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

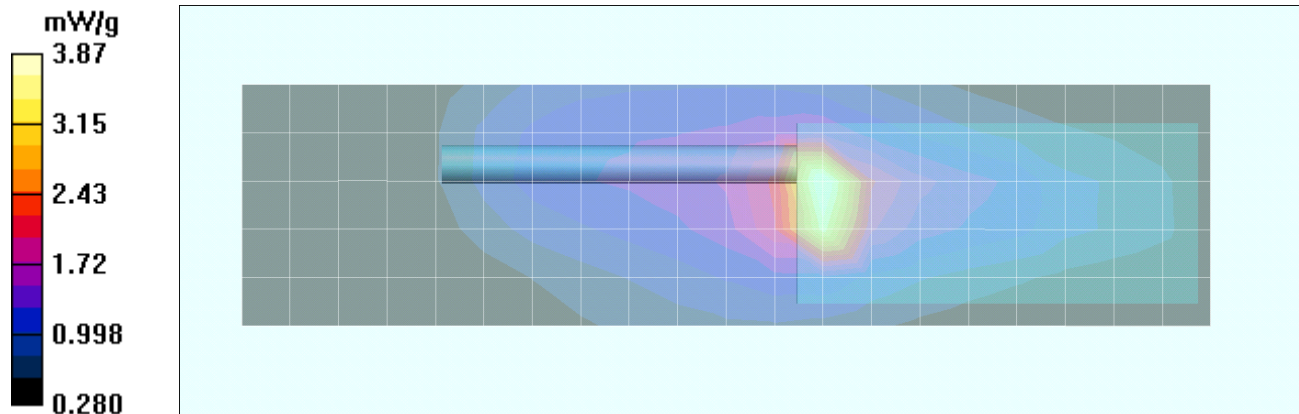
Reference Value = 61.0 V/m; Power Drift = -0.336 dB

Peak SAR (extrapolated) = 13.6 W/kg

SAR(1 g) = 3.72 mW/g; SAR(10 g) = 1.83 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.87 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver		Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	
Test Lab Certificate No. 2470.01				

Body SAR Plot B7

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 7.76 mW/g

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

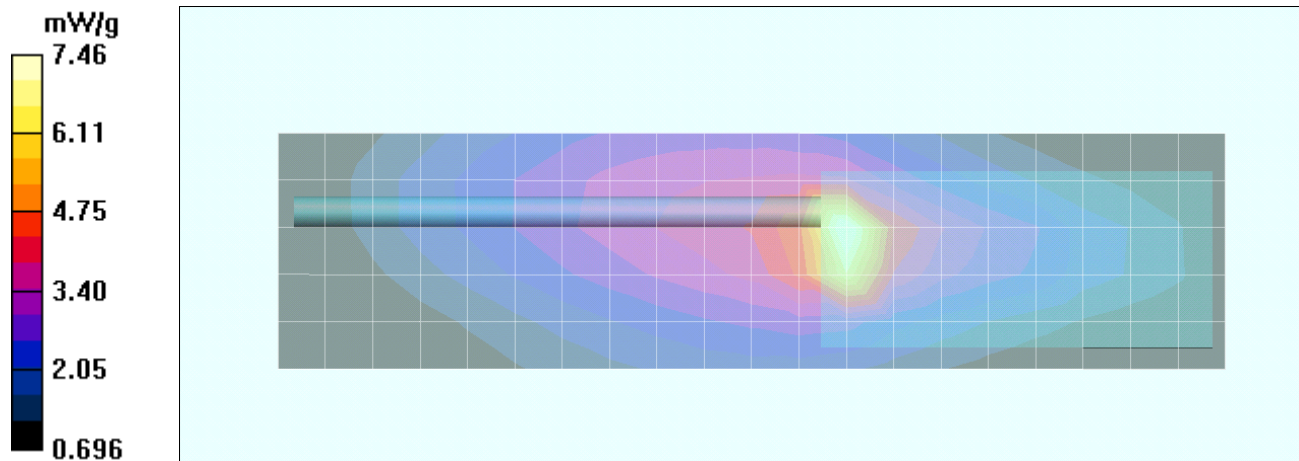
Reference Value = 87.8 V/m; Power Drift = -0.346 dB

Peak SAR (extrapolated) = 20.9 W/kg

SAR(1 g) = 7.04 mW/g; SAR(10 g) = 3.82 mW/g

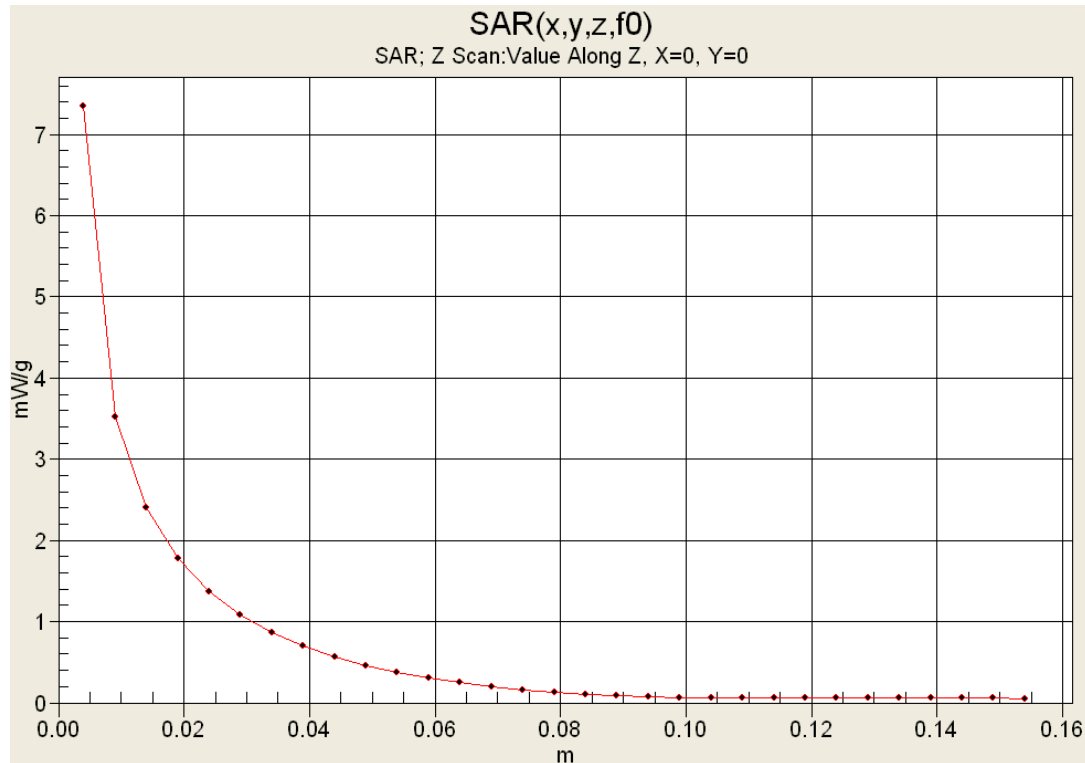
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 7.46 mW/g

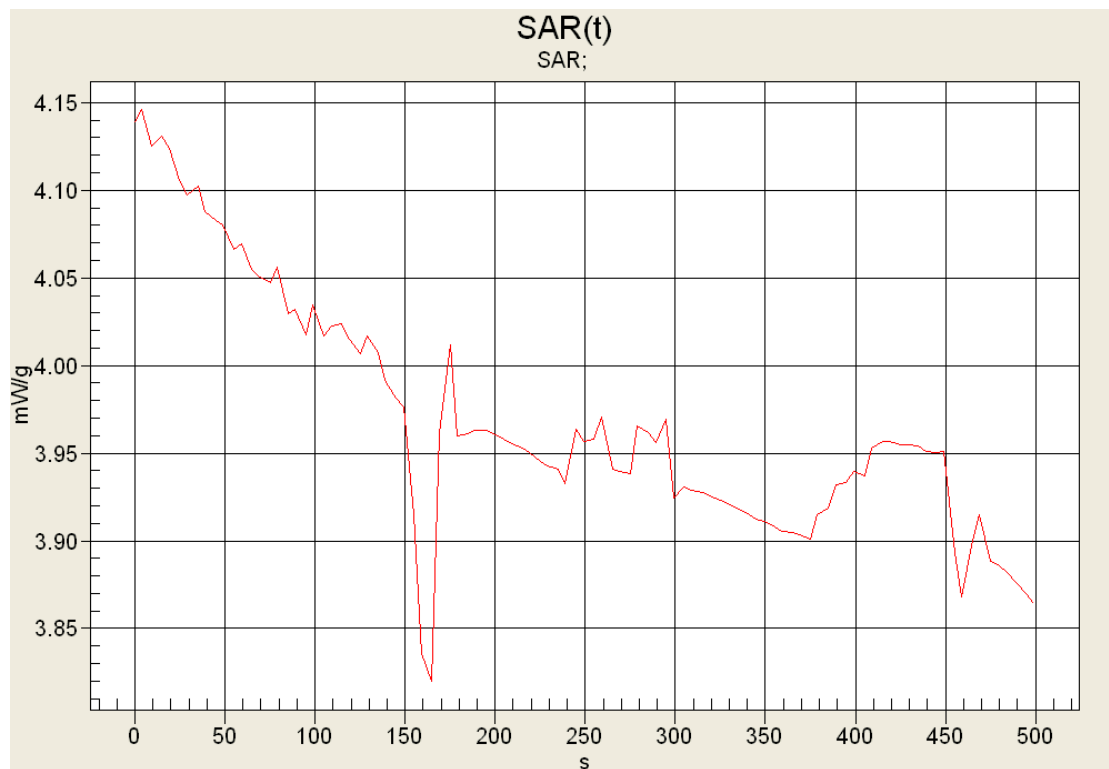


Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver		Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz	
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Z-Axis Scan



SAR-versus-Time



	<u>Date(s) of Evaluation</u> Aug 23-28, Oct3, 2012	<u>Test Report Serial No.</u> 081612ALH-T1193-S90V	<u>Test Report Revision No.</u> Rev. 1.1 (2nd Release)	
	<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)	
Test Lab Certificate No. 2470.01				

Body SAR Plot B8

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 162 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 162 \text{ MHz}$; $\sigma = 0.752 \text{ mho/m}$; $\epsilon_r = 63.8$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 5.60 mW/g

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

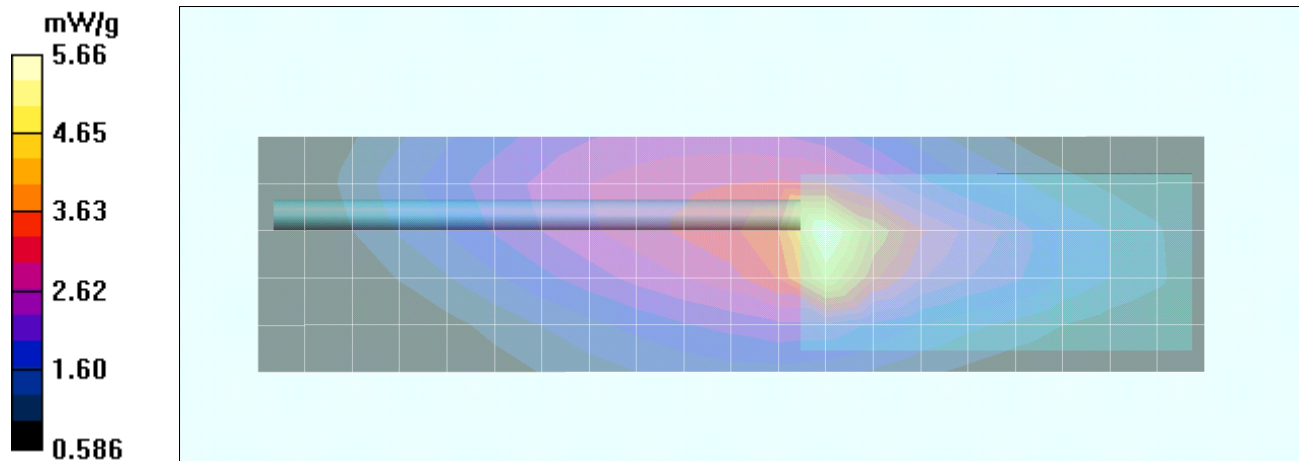
Reference Value = 73.4 V/m; Power Drift = -0.212 dB

Peak SAR (extrapolated) = 14.7 W/kg

SAR(1 g) = 5.39 mW/g; SAR(10 g) = 3.05 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	
Test Lab Certificate No. 2470.01				

Body SAR Plot B9

Date Tested: 08/23/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 144 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 144 \text{ MHz}$; $\sigma = 0.744 \text{ mho/m}$; $\epsilon_r = 64.4$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 1.38 mW/g

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

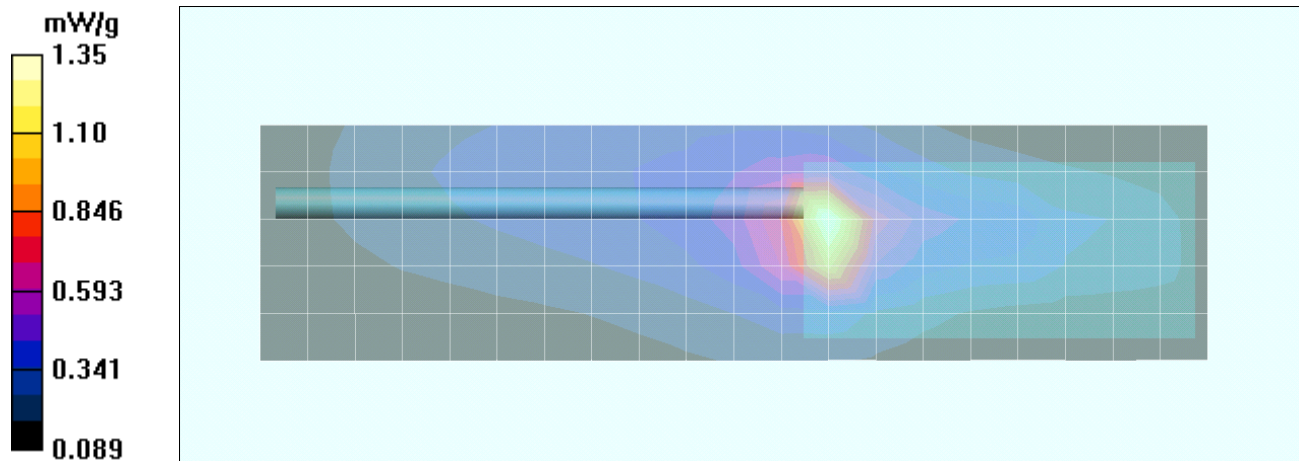
Reference Value = 35.5 V/m; Power Drift = -0.381 dB

Peak SAR (extrapolated) = 4.96 W/kg

SAR(1 g) = 1.32 mW/g; SAR(10 g) = 0.630 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.35 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	

Test Lab Certificate No. 2470.01

Body SAR Plot B10

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 3.32 mW/g

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

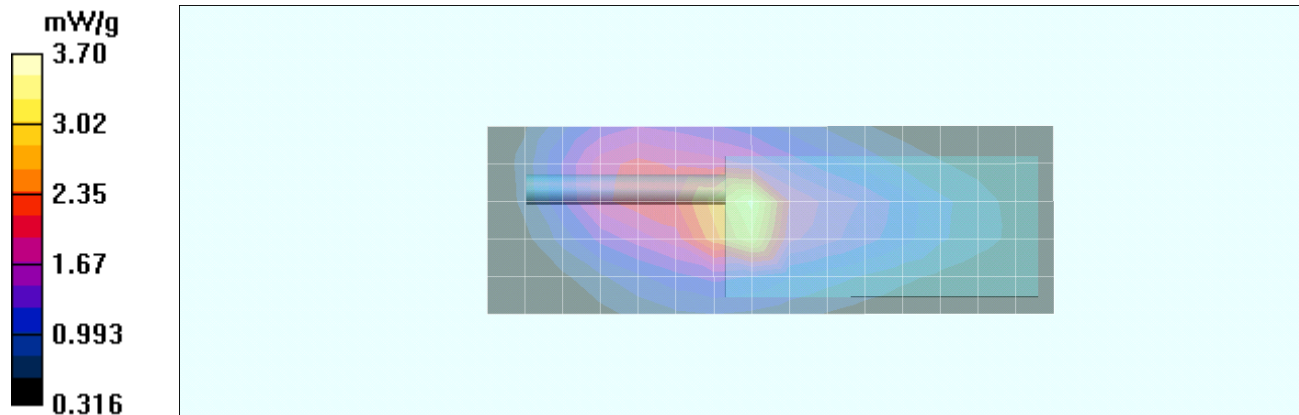
Reference Value = 65.0 V/m; Power Drift = 0.211 dB

Peak SAR (extrapolated) = 10.8 W/kg

SAR(1 g) = 3.65 mW/g; SAR(10 g) = 1.97 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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 B11

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 162 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 162 \text{ MHz}$; $\sigma = 0.772 \text{ mho/m}$; $\epsilon_r = 63.6$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 0.872 mW/g

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

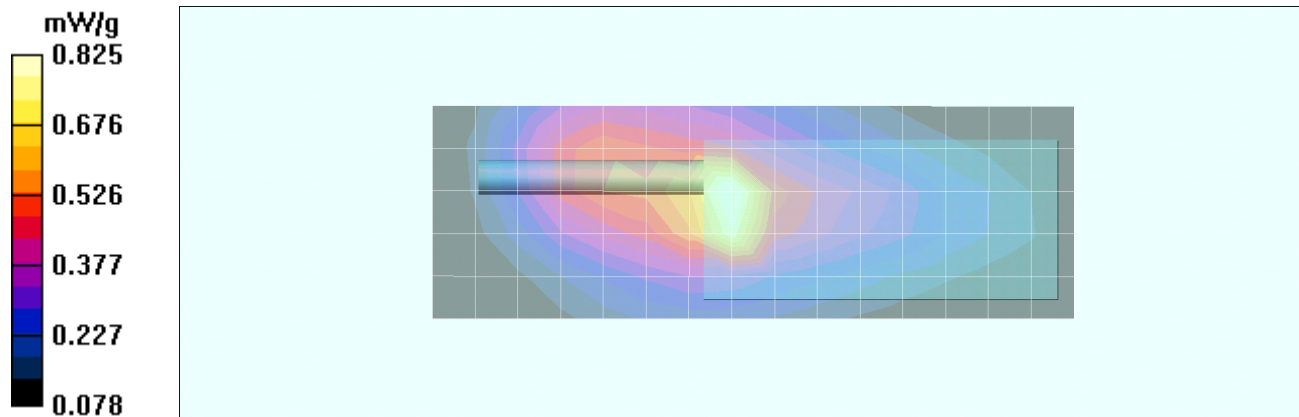
Reference Value = 30.6 V/m; Power Drift = -0.367 dB

Peak SAR (extrapolated) = 2.15 W/kg

SAR(1 g) = 0.788 mW/g; SAR(10 g) = 0.443 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.825 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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 B12

Date Tested: 10/03/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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

Communication System: Kenwood VHF

Frequency: 144 MHz; Duty Cycle: 1:1

Medium: M150 Medium parameters used (interpolated): $f = 144 \text{ MHz}$; $\sigma = 0.766 \text{ mho/m}$; $\epsilon_r = 63.5$; $\rho = 1000 \text{ kg/m}^3$

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

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.62 mW/g

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

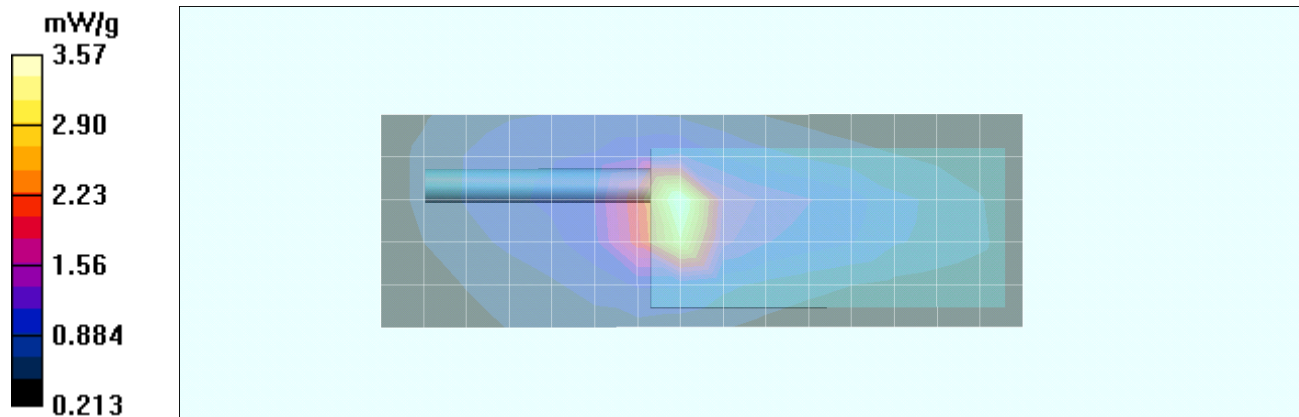
Reference Value = 63.8 V/m; Power Drift = -0.654 dB

Peak SAR (extrapolated) = 16.0 W/kg

SAR(1 g) = 3.73 mW/g; SAR(10 g) = 1.68 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

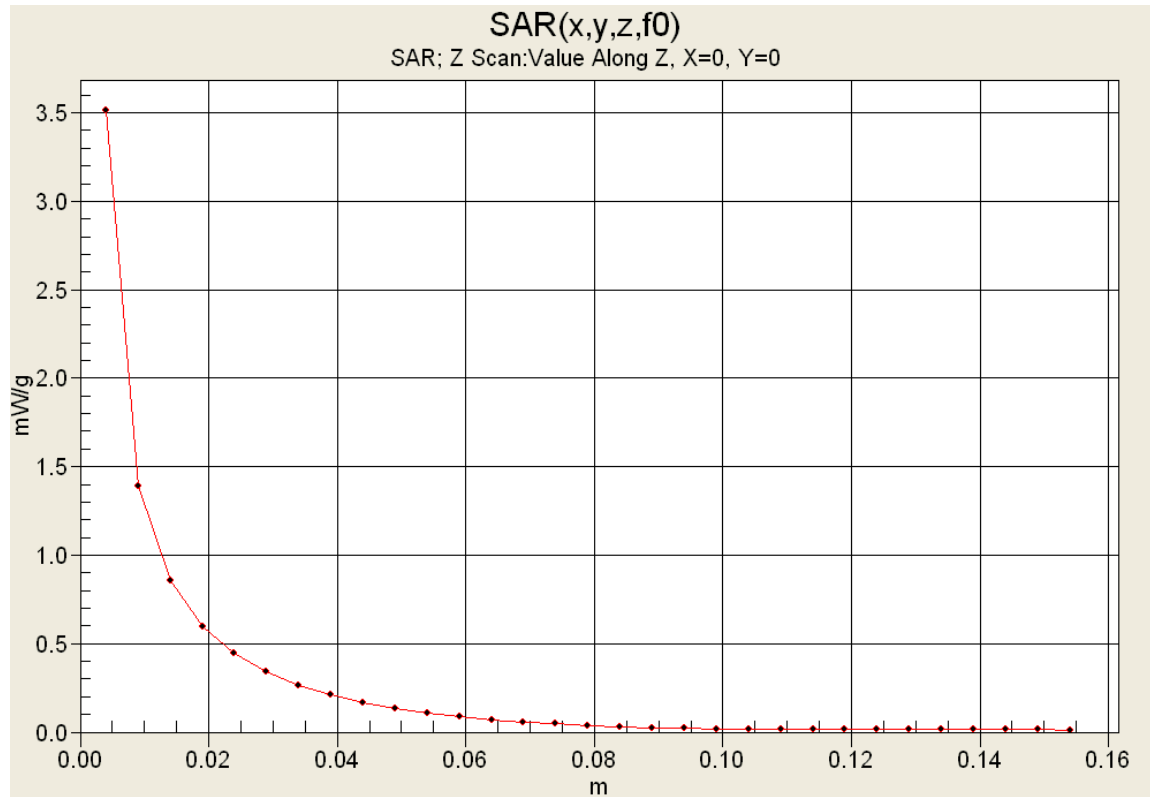
Maximum value of SAR (measured) = 3.57 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 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)	
Test Lab Certificate No. 2470.01				

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz		
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	Test Report Issue Date Nov. 30, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Test Lab Certificate No. 2470.01

Body SAR Plot B13

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 5.87 mW/g

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

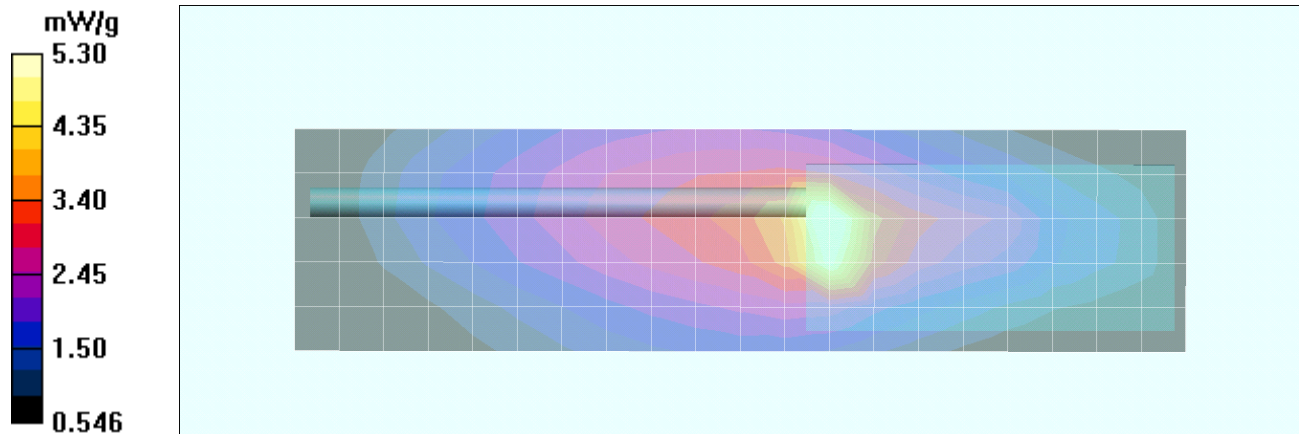
Reference Value = 78.0 V/m; Power Drift = -0.696 dB

Peak SAR (extrapolated) = 13.3 W/kg

SAR(1 g) = 4.95 mW/g; SAR(10 g) = 2.83 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

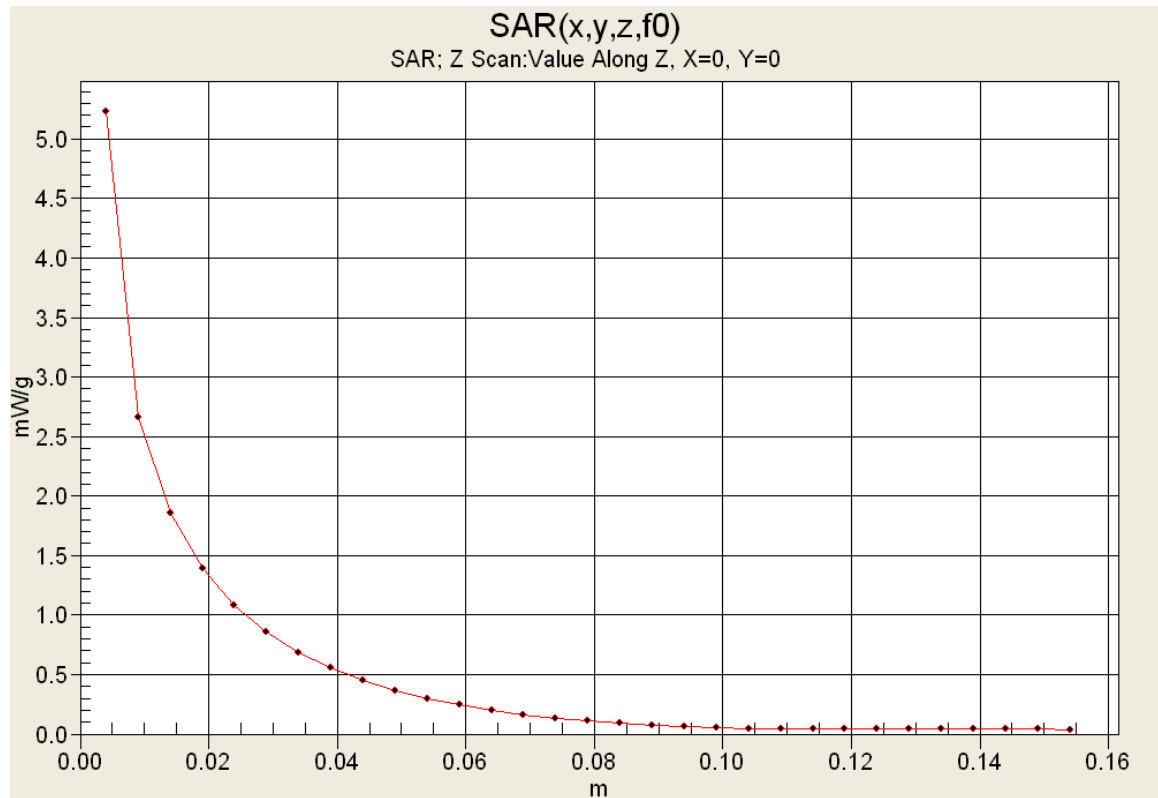
Maximum value of SAR (measured) = 5.30 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P		138.0 - 173.4 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)	

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz		
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	<u>Date(s) of Evaluation</u> Aug 23-28, Oct3, 2012	<u>Test Report Serial No.</u> 081612ALH-T1193-S90V	<u>Test Report Revision No.</u> Rev. 1.1 (2nd Release)	
	<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)	
Test Lab Certificate No. 2470.01				

Body SAR Plot A1

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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) = 3.78 mW/g

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

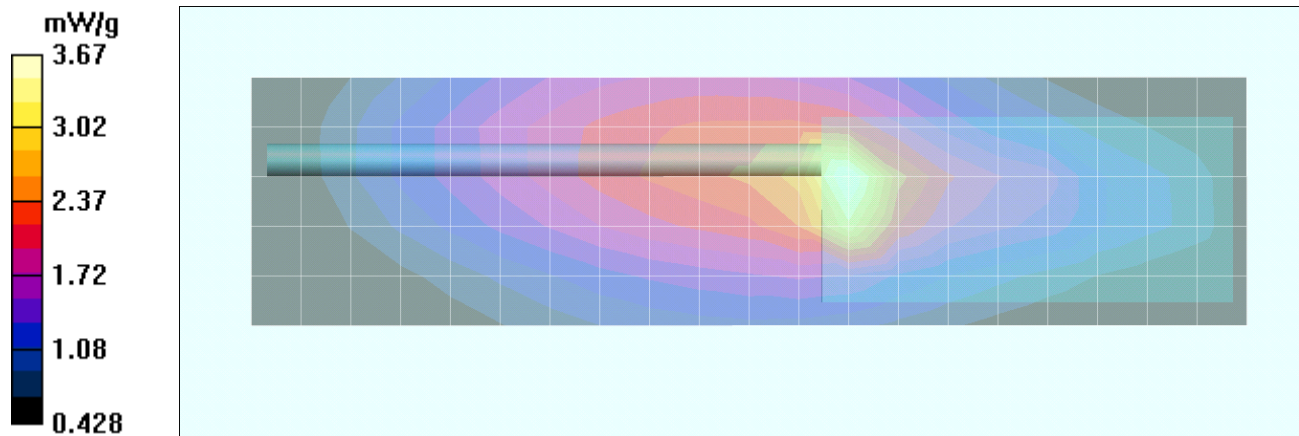
Reference Value = 62.8 V/m; Power Drift = -0.346 dB

Peak SAR (extrapolated) = 9.15 W/kg

SAR(1 g) = 3.59 mW/g; SAR(10 g) = 2.12 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.67 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz		
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	<u>Date(s) of Evaluation</u> Aug 23-28, Oct3, 2012	<u>Test Report Serial No.</u> 081612ALH-T1193-S90V	<u>Test Report Revision No.</u> Rev. 1.1 (2nd Release)	
	<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)	
Test Lab Certificate No. 2470.01				

Body SAR Plot A2

Date Tested: 08/27/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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: 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) = 3.63 mW/g

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

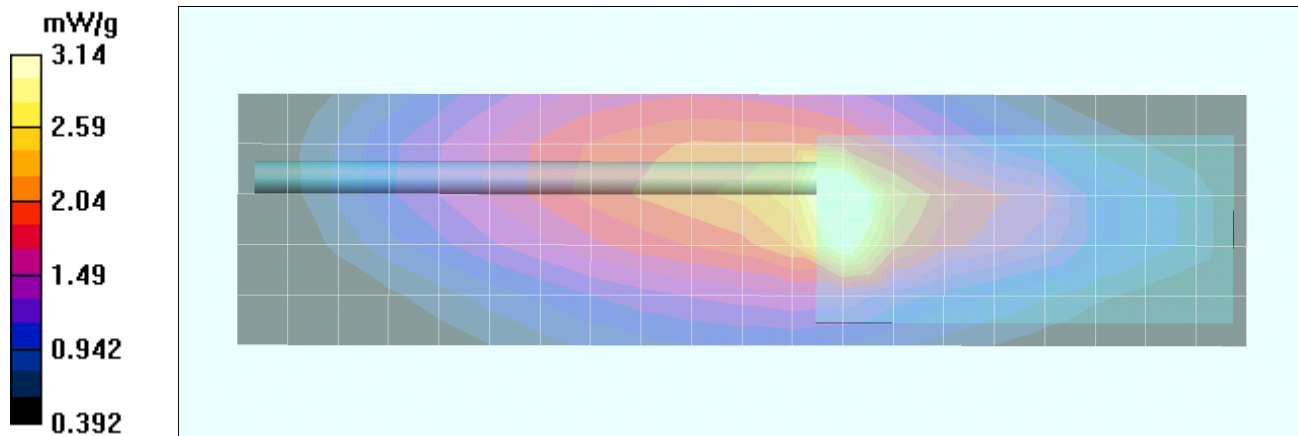
Reference Value = 59.3 V/m; Power Drift = -0.363 dB

Peak SAR (extrapolated) = 6.96 W/kg

SAR(1 g) = 2.98 mW/g; SAR(10 g) = 1.83 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 3.14 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz		
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	<u>Date(s) of Evaluation</u> Aug 23-28, Oct3, 2012	<u>Test Report Serial No.</u> 081612ALH-T1193-S90V	<u>Test Report Revision No.</u> Rev. 1.1 (2nd Release)	
	<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)	
Test Lab Certificate No. 2470.01				

Body SAR Plot A3

Date Tested: 08/28/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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: 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) = 5.84 mW/g

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

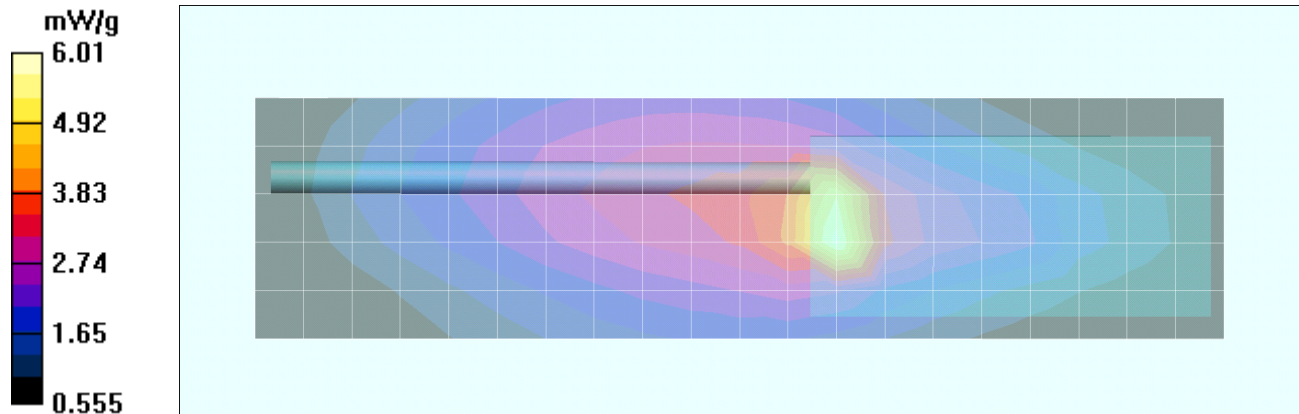
Reference Value = 84.8 V/m; Power Drift = -0.511 dB

Peak SAR (extrapolated) = 17.0 W/kg

SAR(1 g) = 5.75 mW/g; SAR(10 g) = 3.12 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 6.01 mW/g

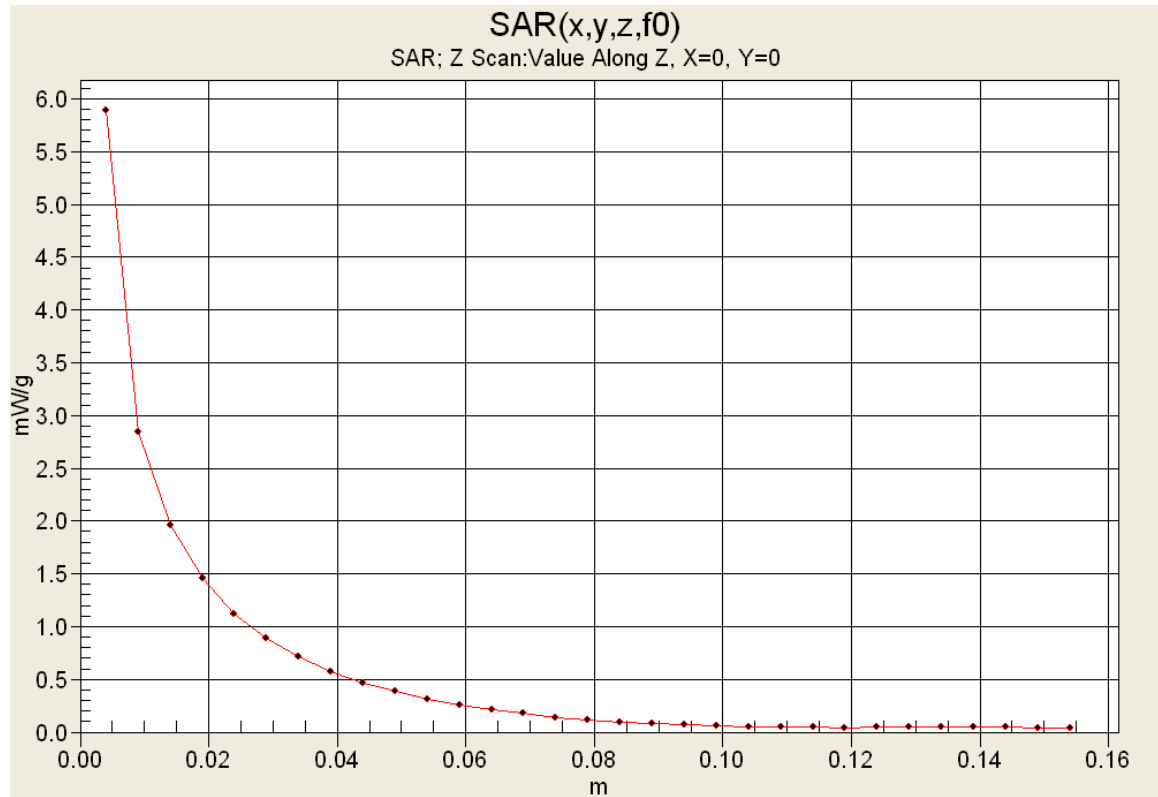


Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver		Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz	
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	Date(s) of Evaluation Aug 23-28, Oct3, 2012	Test Report Serial No. 081612ALH-T1193-S90V	Test Report Revision No. Rev. 1.1 (2nd Release)	
	Test Report Issue Date Nov. 30, 2012	Description of Test(s) Specific Absorption Rate	RF Exposure Category Occupational (Controlled)	

Test Lab Certificate No. 2470.01

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver	Model(s):	TK-2402V-K-P		138.0 - 173.4 MHz	
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	<u>Date(s) of Evaluation</u> Aug 23-28, Oct3, 2012	<u>Test Report Serial No.</u> 081612ALH-T1193-S90V	<u>Test Report Revision No.</u> Rev. 1.1 (2nd Release)	
	<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)	
Test Lab Certificate No. 2470.01				

Body SAR Plot A4

Date Tested: 08/28/2012

DUT: Kenwood VHF TK-2402-P; Type: Portable FM VHF PTT Radio Transceiver; Serial: 0419

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: 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) = 6.98 mW/g

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

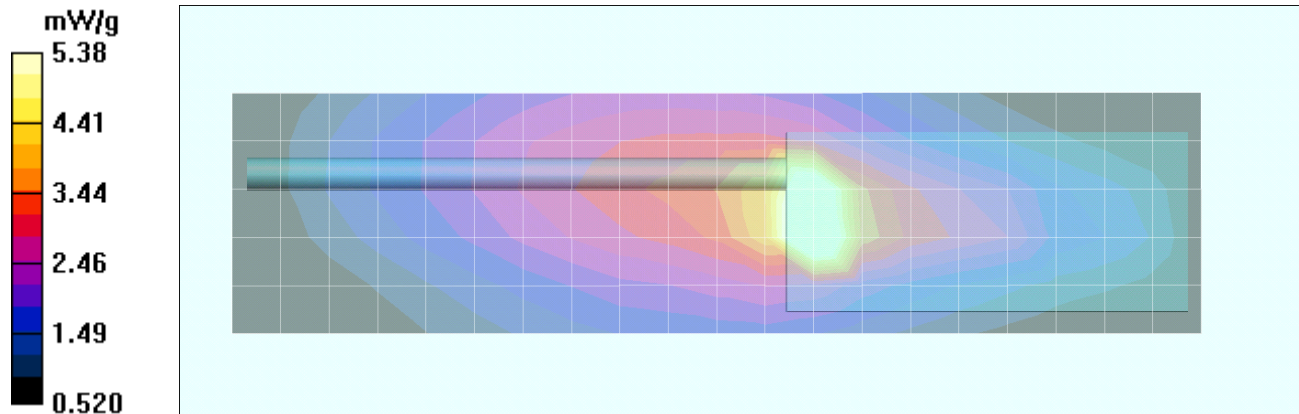
Reference Value = 80.5 V/m; Power Drift = -0.747 dB

Peak SAR (extrapolated) = 14.7 W/kg

SAR(1 g) = 5.23 mW/g; SAR(10 g) = 2.9 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 5.38 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH434900	IC:	282D-434900	KENWOOD
DUT Type:	Portable FM VHF PTT Radio Transceiver		Model(s):	TK-2402V-K-P	138.0 - 173.4 MHz	
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