
	<u>Date(s) of Evaluation</u> Jan. 4,6,26-28,31, 2011	<u>Test Report Serial No.</u> 121510ALH-T1070-S90U	<u>Test Report Revision No.</u> Rev. 1.2 (3rd Release)	 Test Lab Certificate No. 2470.01
	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Body SAR Plot #23 (B23)

Date Tested: 01/04/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-55L Li-ion “Battery b” – 470.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.0°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.94 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.5 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 10.5 mW/g

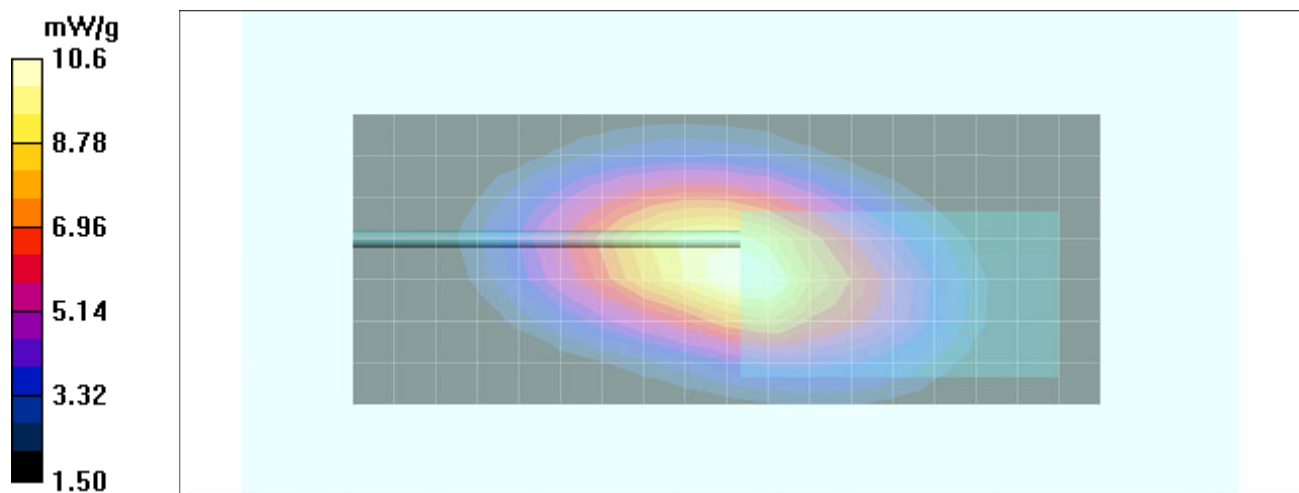
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 107.1 V/m; Power Drift = -0.141 dB



Peak SAR (extrapolated) = 15.0 W/kg

SAR(1 g) = 10.2 mW/g; SAR(10 g) = 7.3 mW/g

Maximum value of SAR (measured) 10.6 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #24 (B24)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-57L Li-ion “Battery a” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 57.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.6 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 12.9 mW/g

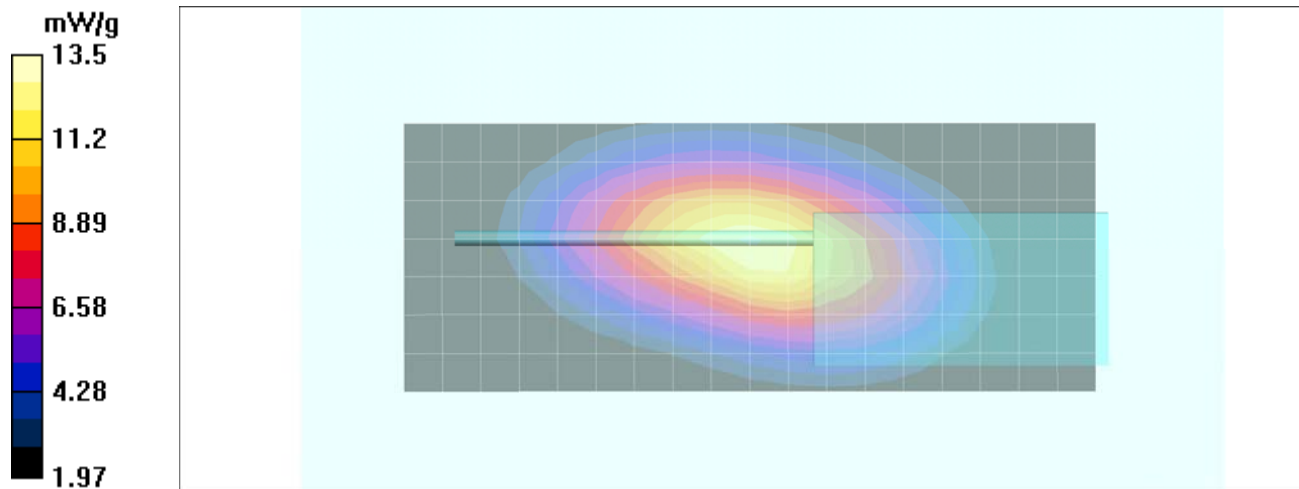
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 114.1 V/m; Power Drift = -0.169 dB



Peak SAR (extrapolated) = 18.8 W/kg

SAR(1 g) = 12.9 mW/g; SAR(10 g) = 9.3 mW/g

Maximum value of SAR (measured) 13.5 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #25 (B25)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-57L Li-ion “Battery a” – 498.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.946 \text{ mho/m}$; $\epsilon_r = 57.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.6 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 12.2 mW/g

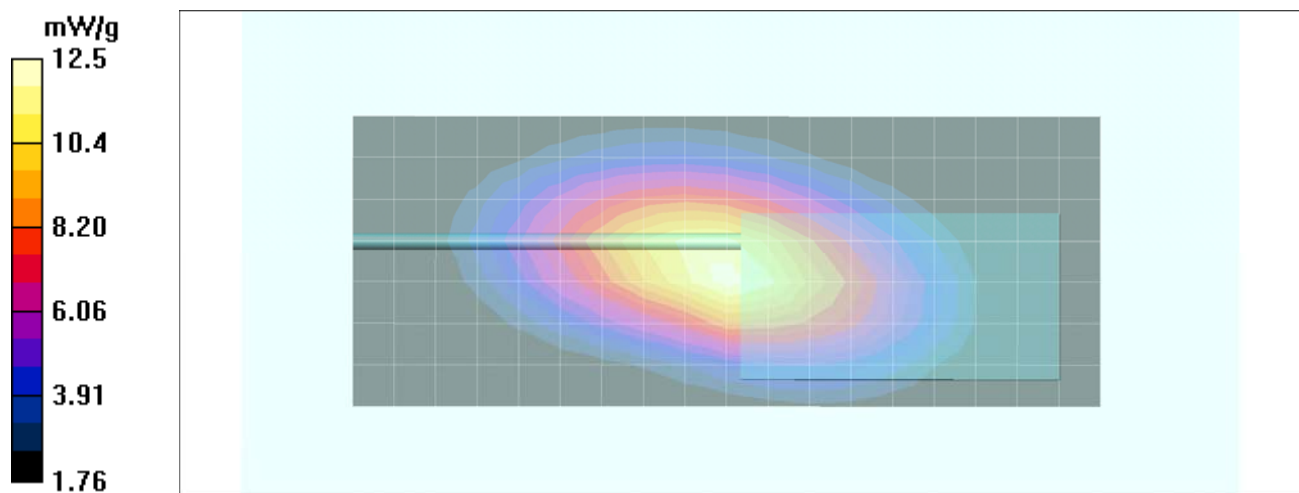
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 114.6 V/m; Power Drift = -0.292 dB



Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 11.9 mW/g; SAR(10 g) = 8.47 mW/g

Maximum value of SAR (measured) 12.5 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #26 (B26)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-57L Li-ion “Battery a” – 484.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 56.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.6 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 11.7 mW/g

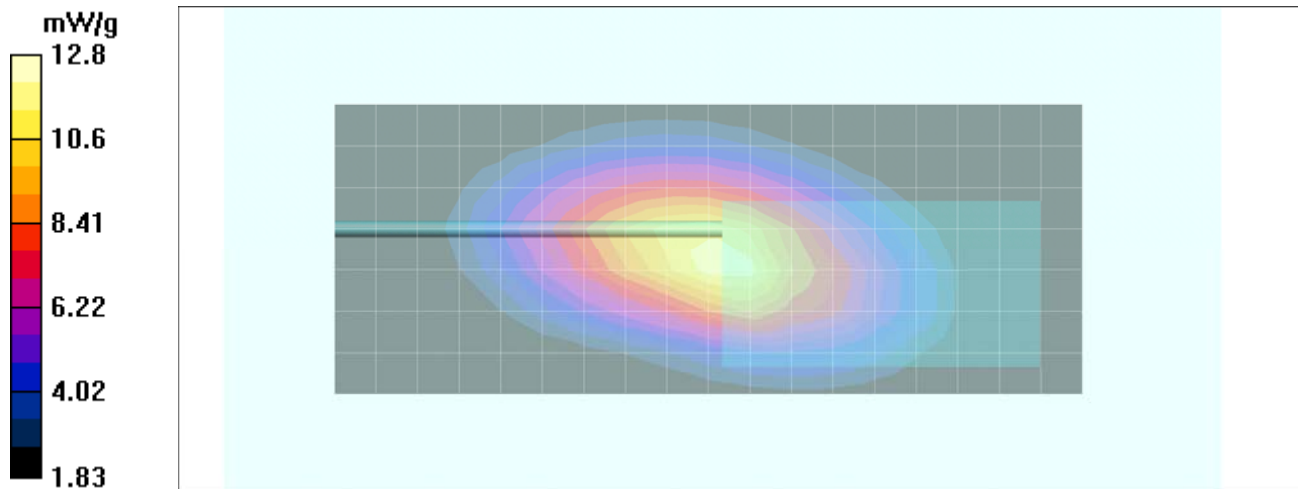
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 117.2 V/m; Power Drift = -0.272 dB



Peak SAR (extrapolated) = 17.8 W/kg

SAR(1 g) = 12.1 mW/g; SAR(10 g) = 8.63 mW/g

Maximum value of SAR (measured) 12.8 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #27 (B27)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-57L Li-ion “Battery a” – 470.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.92 \text{ mho/m}$; $\epsilon_r = 56.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.6 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 10.7 mW/g

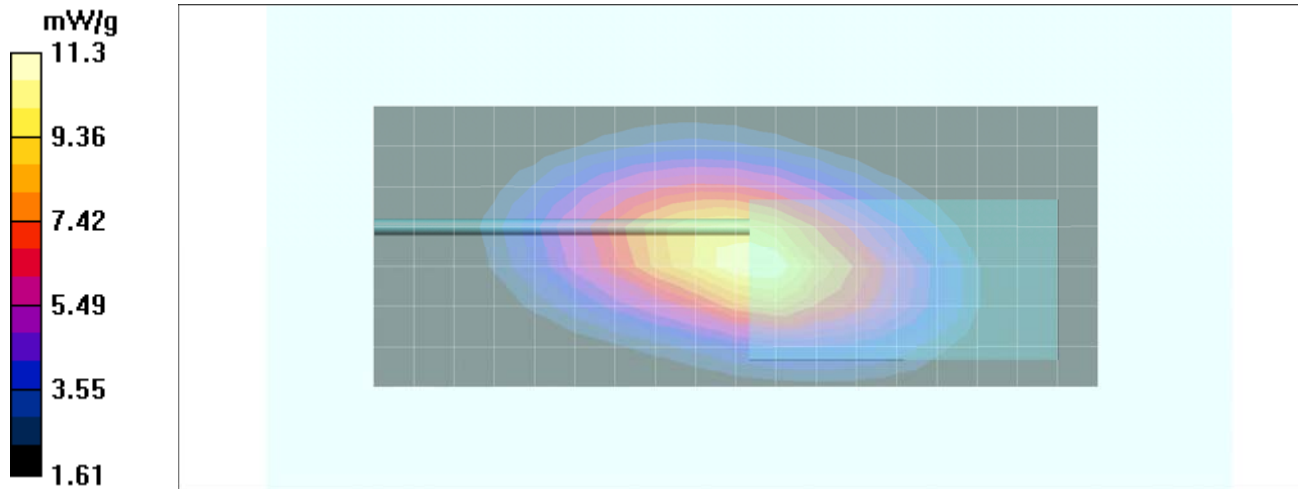
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 107.8 V/m; Power Drift = 0.009 dB



Peak SAR (extrapolated) = 15.9 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 7.62 mW/g

Maximum value of SAR (measured) 11.3 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #28 (B28)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-56N Ni-MH “Battery c” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 57.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.7 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 11.8 mW/g

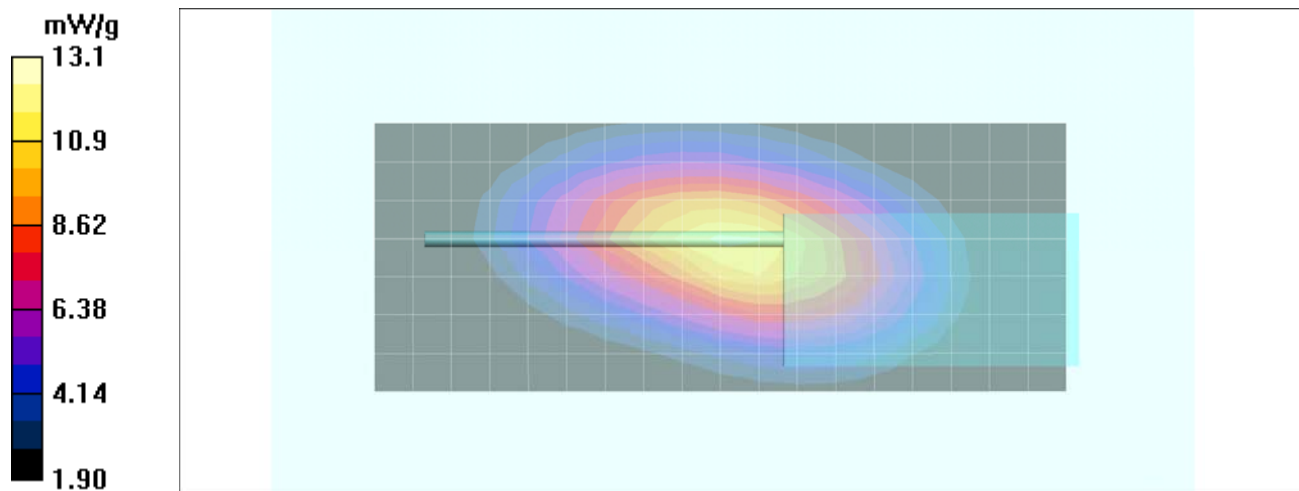
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 110.3 V/m; Power Drift = -0.541 dB

Peak SAR (extrapolated) = 17.9 W/kg

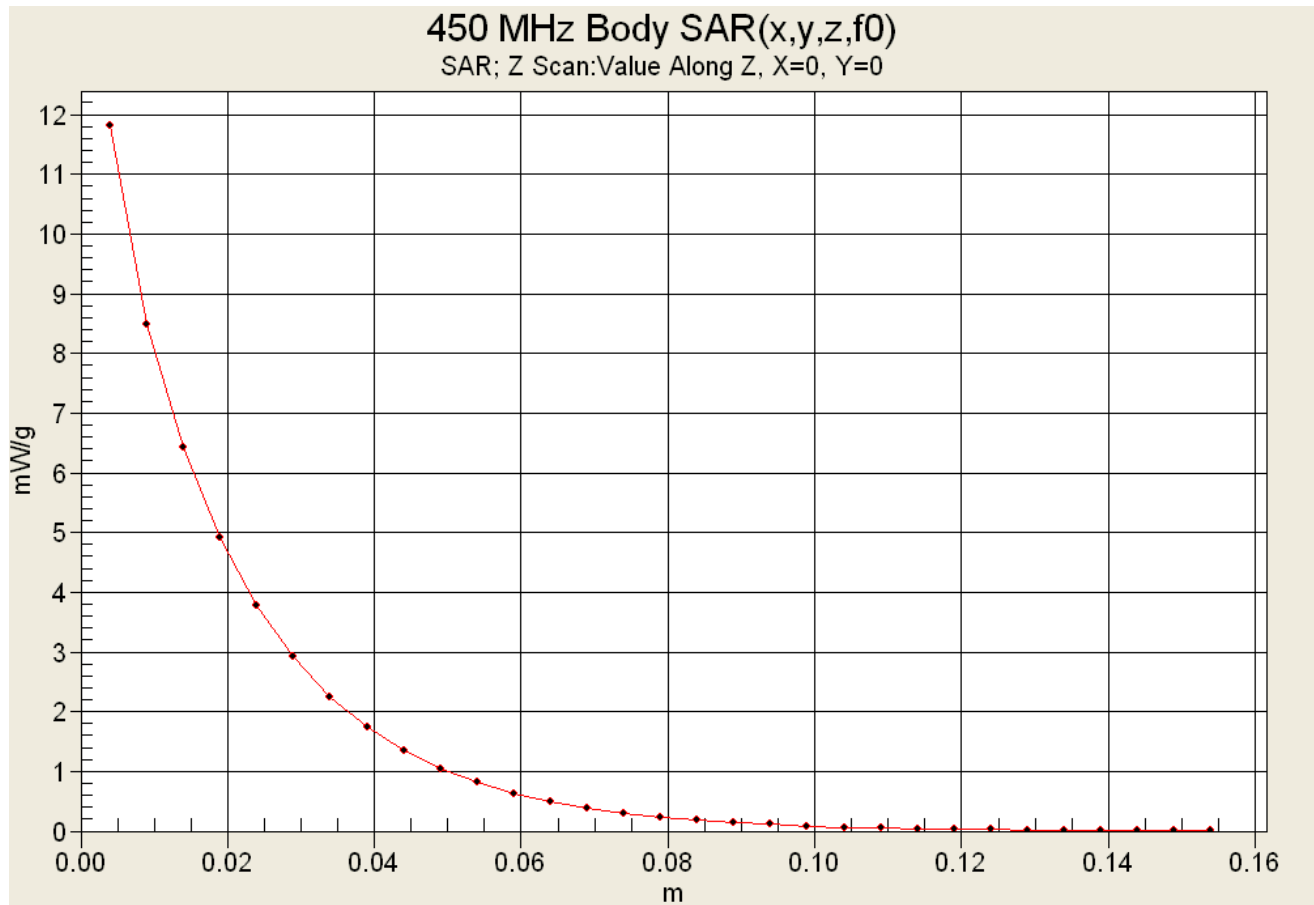
SAR(1 g) = 12.5 mW/g; SAR(10 g) = 9.07 mW/g



Maximum value of SAR (measured) 13.1 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Z-Axis Scan



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Body SAR Plot #29 (B29)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-56N Ni-MH “Battery c” – 498.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.946 \text{ mho/m}$; $\epsilon_r = 57.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.7 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 12.6 mW/g

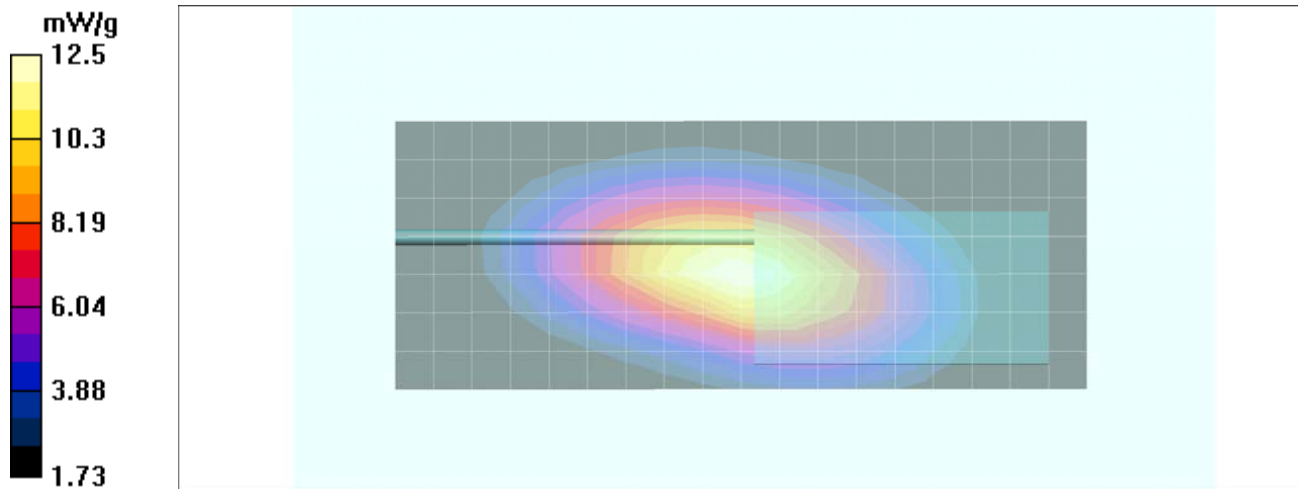
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 118.4 V/m; Power Drift = -0.414 dB



Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 12 mW/g; SAR(10 g) = 8.62 mW/g

Maximum value of SAR (measured) 12.5 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #30 (B30)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-56N Ni-MH “Battery c” – 484.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 56.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.7 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 11.6 mW/g

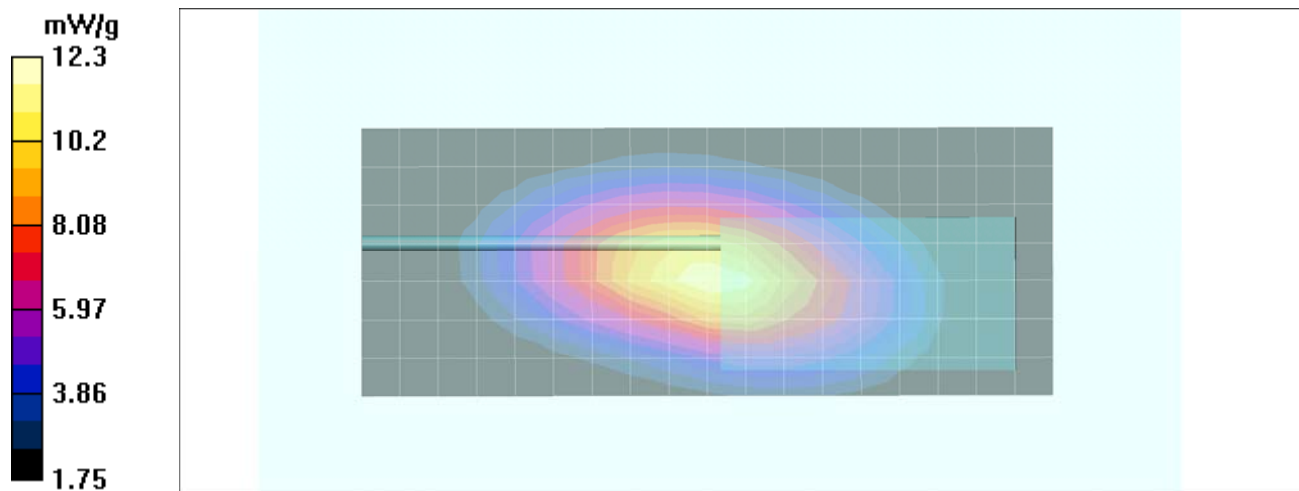
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 117.8 V/m; Power Drift = -0.475 dB



Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 11.6 mW/g; SAR(10 g) = 8.29 mW/g

Maximum value of SAR (measured) 12.3 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #31 (B31)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-56N Ni-MH “Battery c” – 470.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.92 \text{ mho/m}$; $\epsilon_r = 56.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.7 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 12.2 mW/g

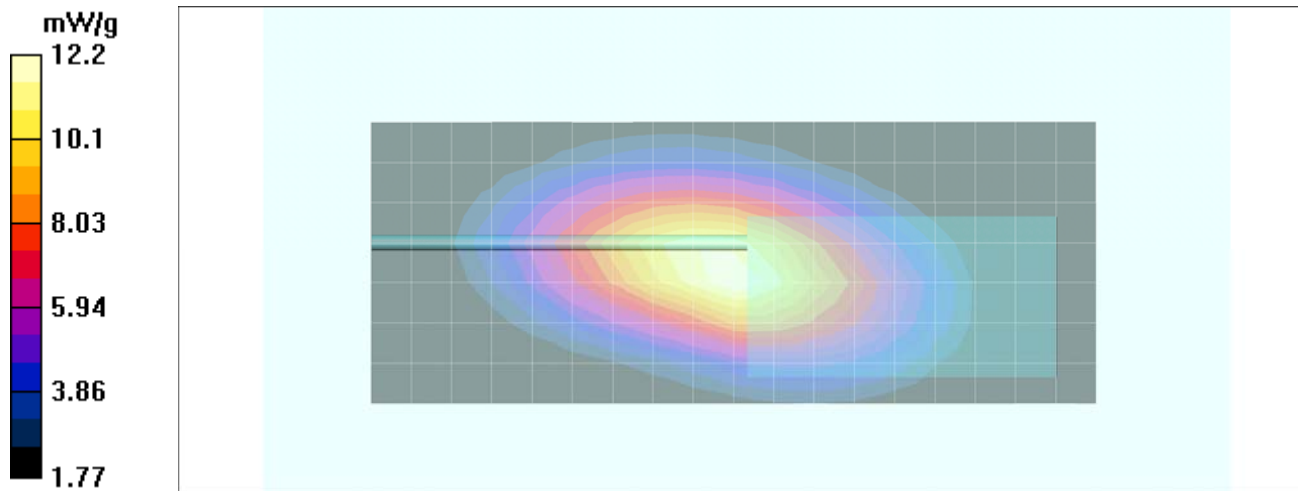
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 114.2 V/m; Power Drift = -0.306 dB



Peak SAR (extrapolated) = 16.9 W/kg

SAR(1 g) = 11.6 mW/g; SAR(10 g) = 8.31 mW/g

Maximum value of SAR (measured) 12.2 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Body SAR Plot #32 (B32)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KBP-5 9V AAx6 “Battery d” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 57.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.7 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 8.37 mW/g

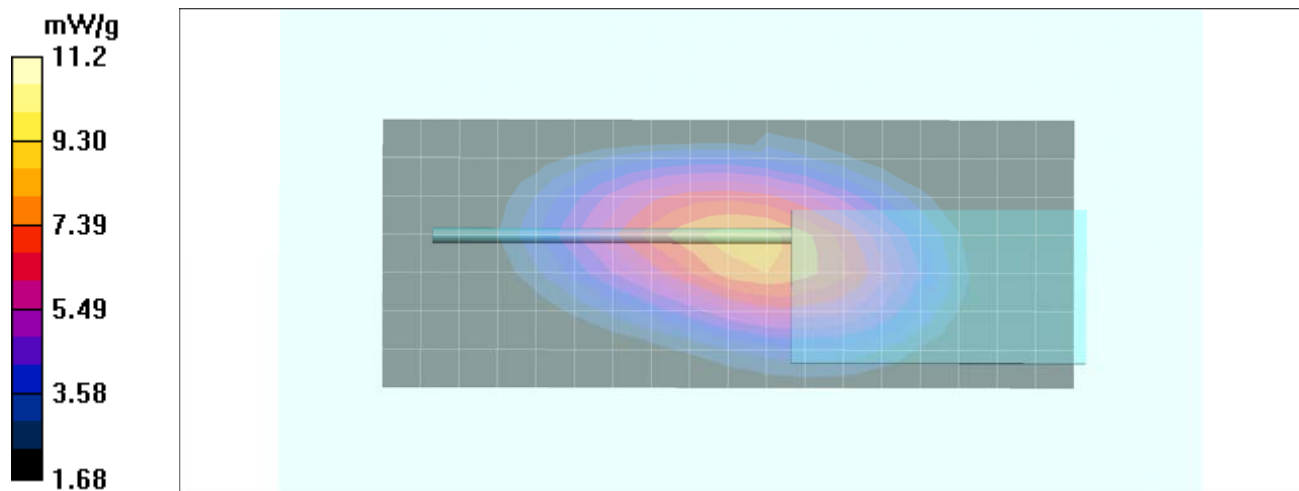
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 108.7 V/m; Power Drift = -1.20 dB



Peak SAR (extrapolated) = 15.5 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 7.76 mW/g

Maximum value of SAR (measured) 11.2 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Body SAR Plot #33 (B33)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KBP-5 9V AAx6 “Battery d” – 498.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.946 \text{ mho/m}$; $\epsilon_r = 57.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.7 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 10.5 mW/g

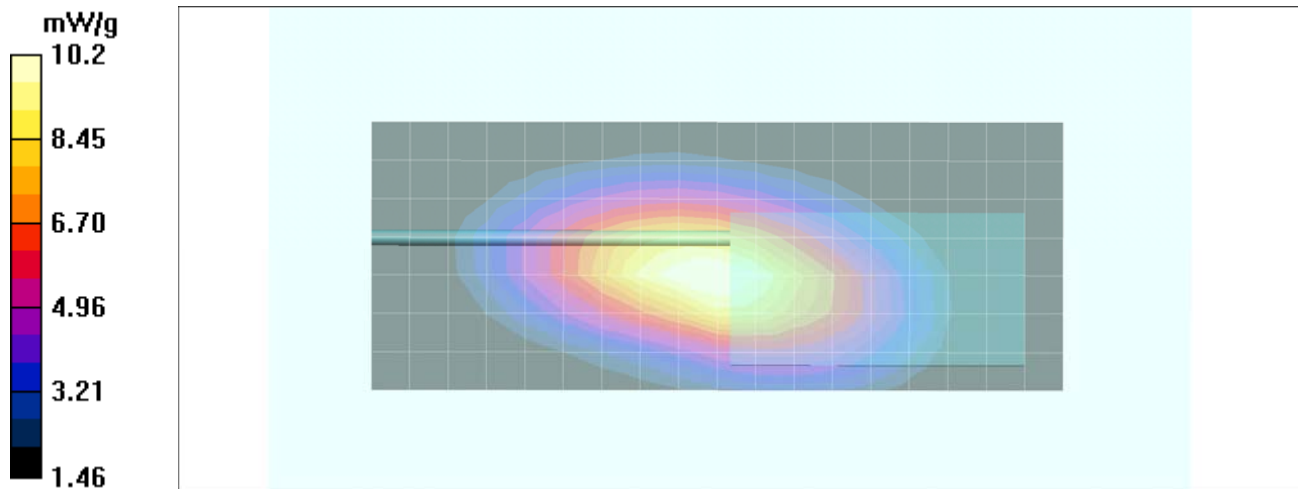
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 113.6 V/m; Power Drift = -1.23 dB



Peak SAR (extrapolated) = 14.5 W/kg

SAR(1 g) = 9.78 mW/g; SAR(10 g) = 7 mW/g

Maximum value of SAR (measured) 10.2 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #34 (B34)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KBP-5 9V AAx6 “Battery d” – 484.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 56.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.7 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 9.97 mW/g

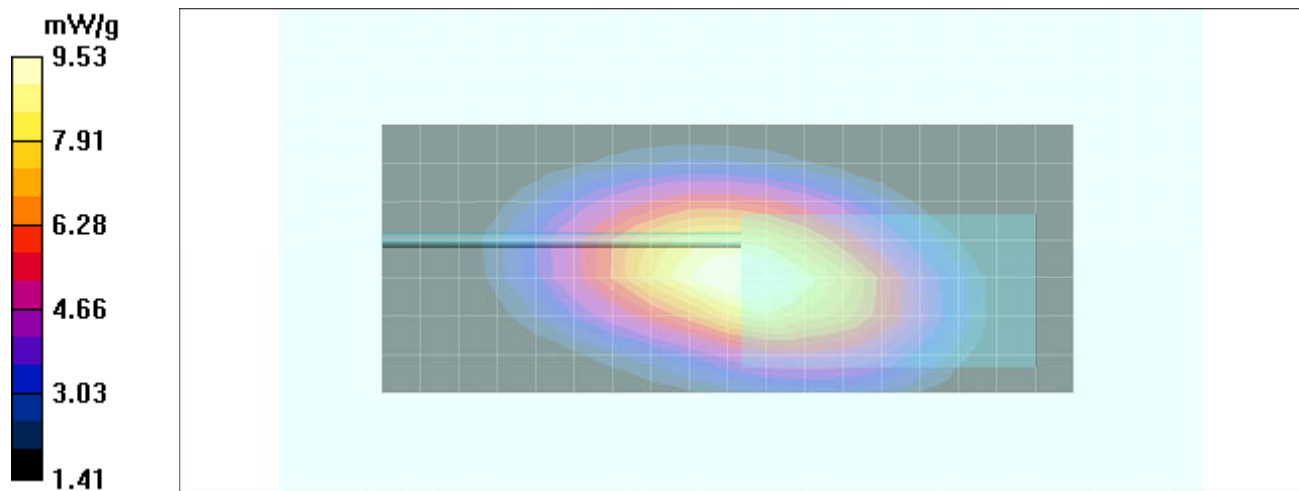
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 110.4 V/m; Power Drift = -1.29 dB



Peak SAR (extrapolated) = 13.2 W/kg

SAR(1 g) = 9.09 mW/g; SAR(10 g) = 6.59 mW/g

Maximum value of SAR (measured) 9.53 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #35 (B35)

Date Tested: 01/26/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KBP-5 9V AAx6 “Battery d” – 470.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.3°C; Fluid Temp: 22.7°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.92 \text{ mho/m}$; $\epsilon_r = 56.9$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.7 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 9.95 mW/g

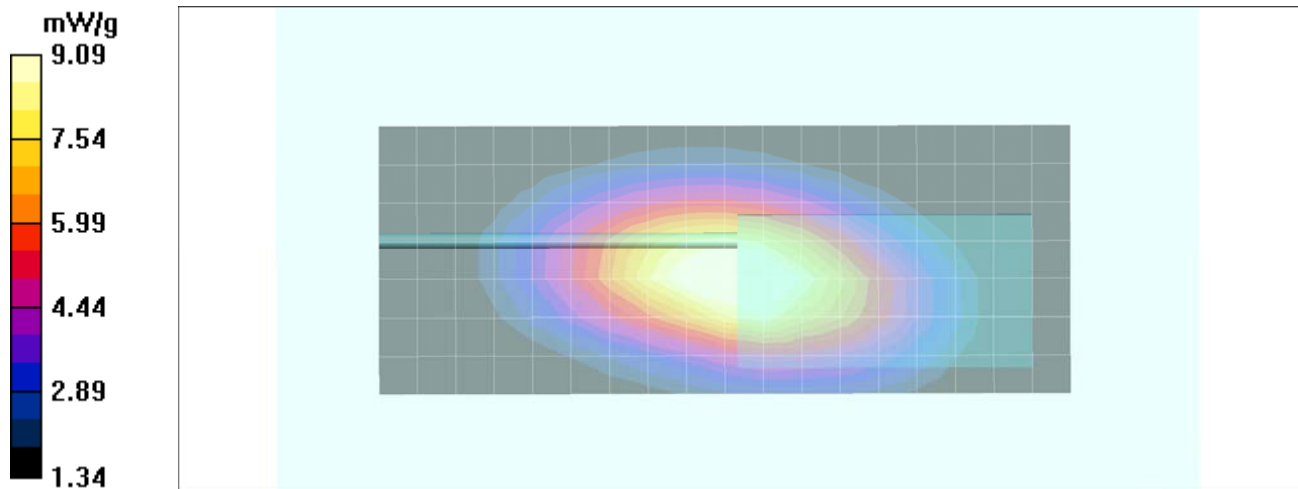
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 107.7 V/m; Power Drift = -1.07 dB



Peak SAR (extrapolated) = 12.6 W/kg

SAR(1 g) = 8.67 mW/g; SAR(10 g) = 6.3 mW/g

Maximum value of SAR (measured) 9.09 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #36 (B36)

Date Tested: 01/04/2011

Body-worn SAR - KRA-23M "Antenna A" – KNB-55L 1480mAh Li-ion "Battery b" – 450.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 2: Swivel Belt-Loop (P/N: KBH-13DS)

Ambient Temp: 23.0°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 450 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 58.8$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 4.7 cm Belt-Loop Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.08 mW/g

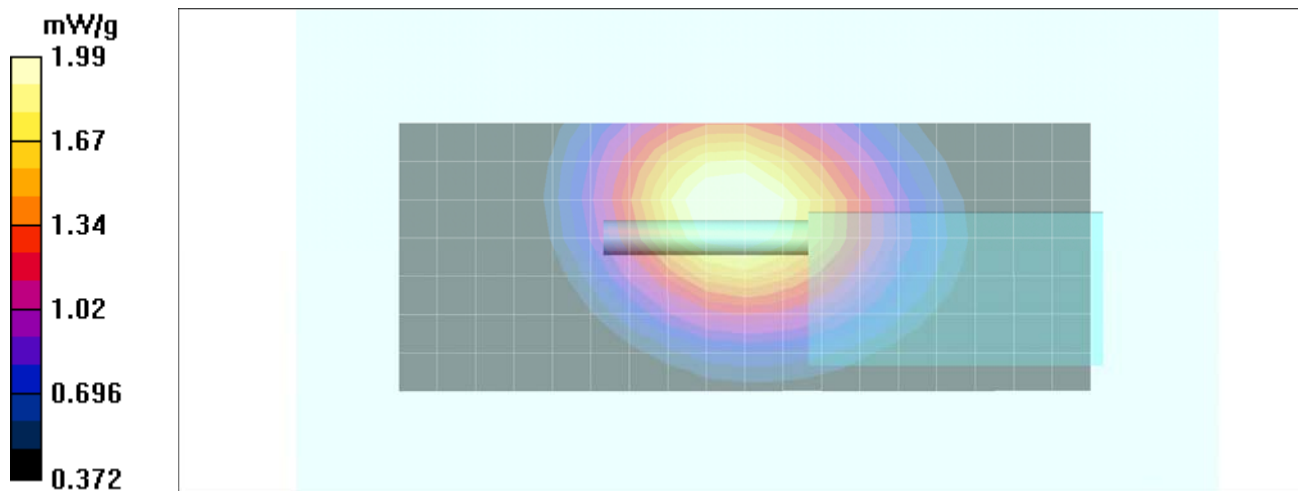
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 37.1 V/m; Power Drift = 0.253 dB



Peak SAR (extrapolated) = 2.64 W/kg

SAR(1 g) = 1.91 mW/g; SAR(10 g) = 1.43 mW/g

Maximum value of SAR (measured) 1.99 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #37 (B37)

Date Tested: 01/04/2011

Body-worn SAR - KRA-23M2 “Antenna B” – KNB-55L 1480mAh Li-ion “Battery b” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 2: Swivel Belt-Loop (P/N: KBH-13DS)

Ambient Temp: 23.0°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.972 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 4.7 cm Belt-Loop Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.85 mW/g

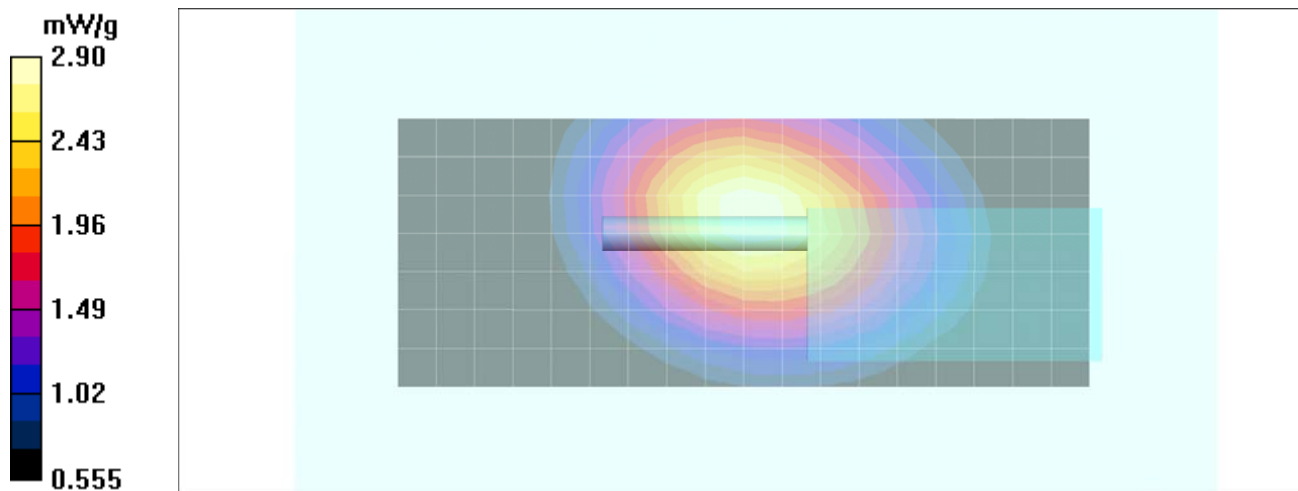
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 48.0 V/m; Power Drift = -0.161 dB



Peak SAR (extrapolated) = 3.82 W/kg

SAR(1 g) = 2.78 mW/g; SAR(10 g) = 2.08 mW/g

Maximum value of SAR (measured) 2.90 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #38 (B38)

Date Tested: 01/04/2011

Body-worn SAR - KRA-27M "Antenna C" – KNB-55L 1480mAh Li-ion "Battery b" – 450.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 2: Swivel Belt-Loop (P/N: KBH-13DS)

Ambient Temp: 23.0°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 450 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 58.8$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 4.7 cm Belt-Loop Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 2.49 mW/g

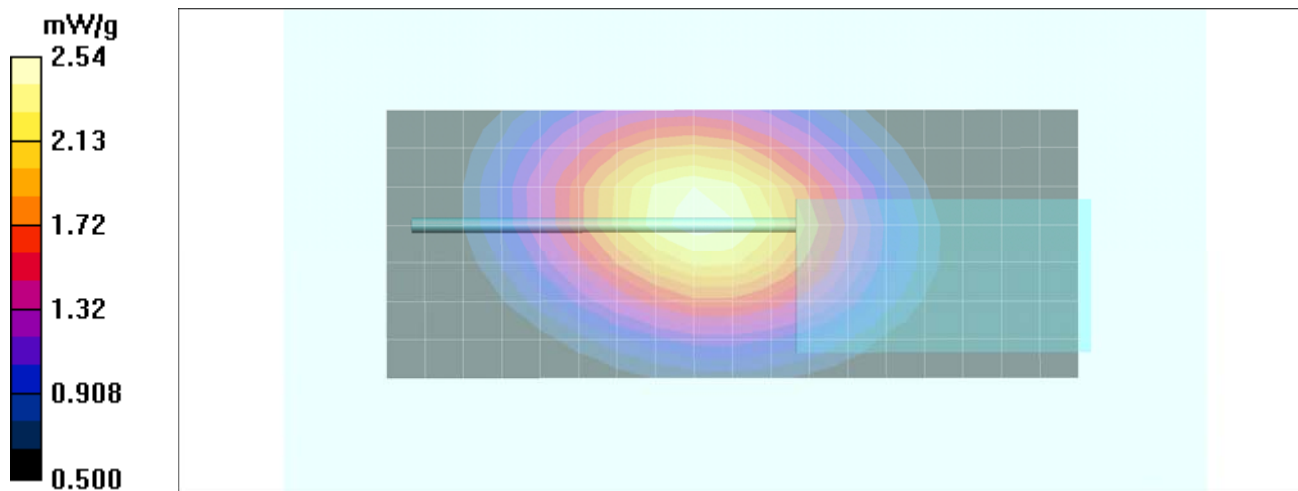
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 46.5 V/m; Power Drift = -0.053 dB



Peak SAR (extrapolated) = 3.36 W/kg

SAR(1 g) = 2.44 mW/g; SAR(10 g) = 1.84 mW/g

Maximum value of SAR (measured) 2.54 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #39 (B39)

Date Tested: 01/04/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-55L 1480mAh Li-ion “Battery b” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 2: Swivel Belt-Loop (P/N: KBH-13DS)

Ambient Temp: 23.0°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.972 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 4.7 cm Belt-Loop Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 5.01 mW/g

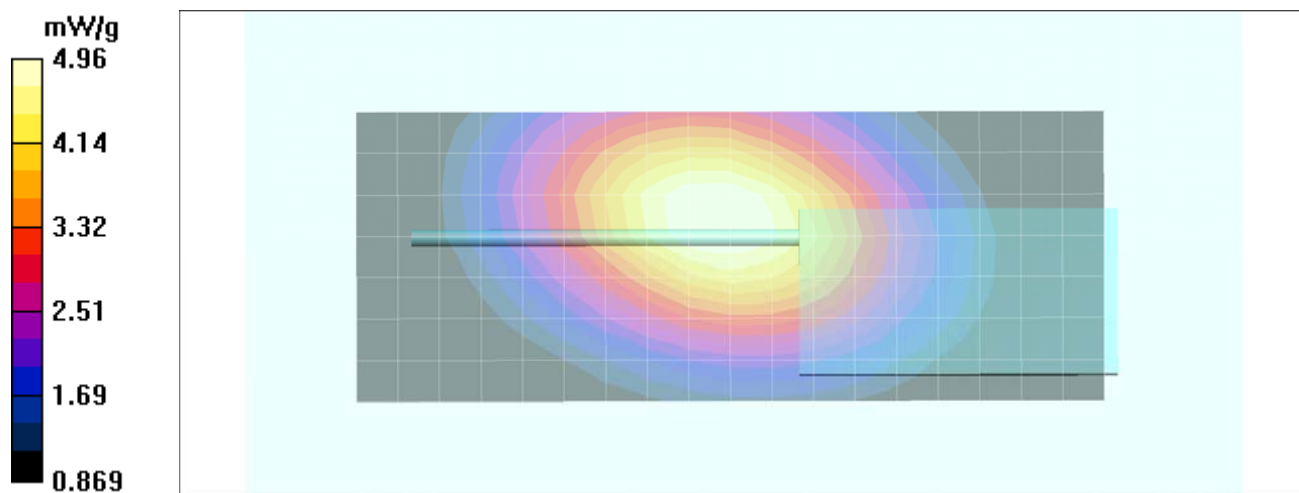
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 66.9 V/m; Power Drift = -0.238 dB



Peak SAR (extrapolated) = 6.53 W/kg

SAR(1 g) = 4.75 mW/g; SAR(10 g) = 3.56 mW/g

Maximum value of SAR (measured) 4.96 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Body SAR Plot #40 (B40)

Date Tested: 01/04/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-57L 2000mAh Li-ion “Battery a” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 2: Swivel Belt-Loop (P/N: KBH-13DS)

Ambient Temp: 23.0°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.972 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 4.7 cm Belt-Loop Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 5.06 mW/g

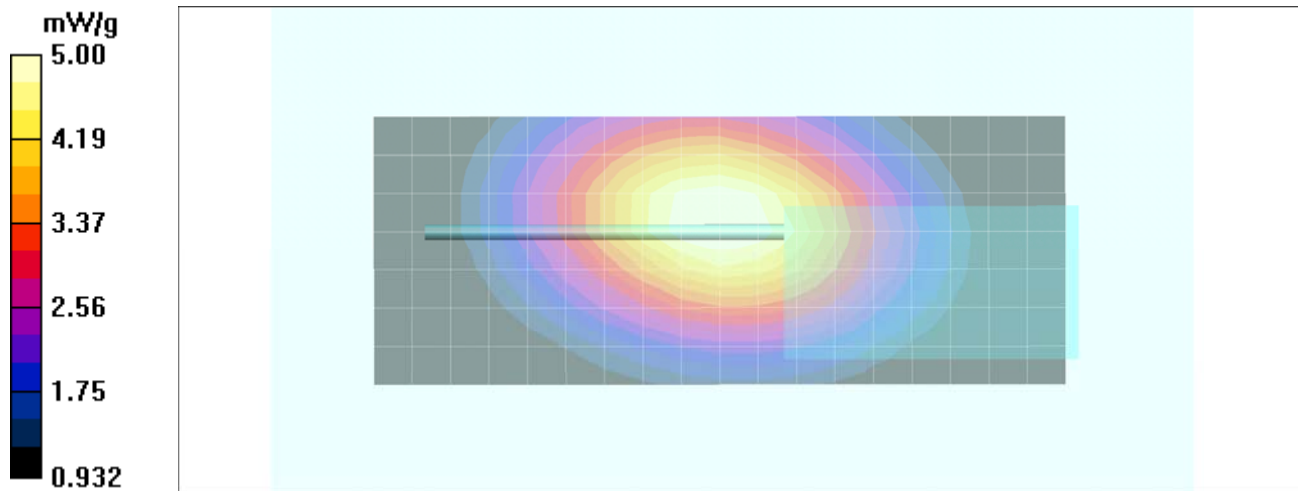
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 66.2 V/m; Power Drift = -0.152 dB



Peak SAR (extrapolated) = 6.59 W/kg

SAR(1 g) = 4.82 mW/g; SAR(10 g) = 3.63 mW/g

Maximum value of SAR (measured) 5.00 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Body SAR Plot #41 (B41)

Date Tested: 01/04/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KNB-57L 1400mAh Ni-MH “Battery c” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 2: Swivel Belt-Loop (P/N: KBH-13DS)

Ambient Temp: 23.0°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.972 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 4.7 cm Belt-Loop Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 5.13 mW/g

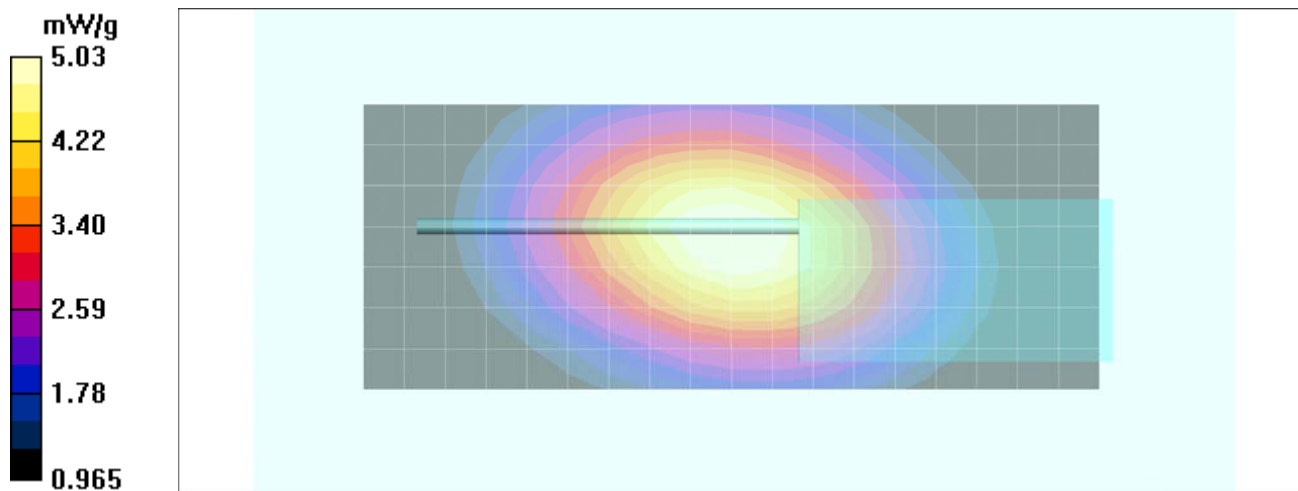
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 68.9 V/m; Power Drift = -0.444 dB



Peak SAR (extrapolated) = 6.62 W/kg

SAR(1 g) = 4.81 mW/g; SAR(10 g) = 3.6 mW/g

Maximum value of SAR (measured) 5.03 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Body SAR Plot #42 (B42)

Date Tested: 01/04/2011

Body-worn SAR - KRA-27M2 “Antenna D” – KBP-5 9V AAx6 “Battery d” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Default Audio Accessory: Noise Reduction Headset (Behind-the-Head) (P/N: KHS-10-BH)
Body-worn Accessory 2: Swivel Belt-Loop (P/N: KBH-13DS)

Ambient Temp: 23.0°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.972 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 4.7 cm Belt-Loop Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 4.28 mW/g

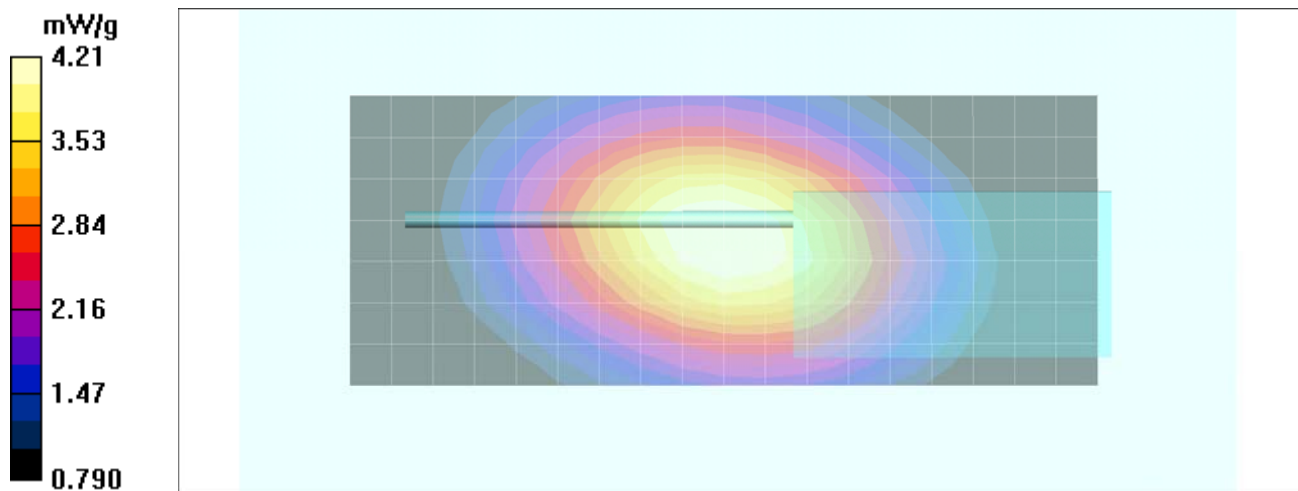
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 67.2 V/m; Power Drift = -1.16 dB



Peak SAR (extrapolated) = 5.58 W/kg

SAR(1 g) = 4 mW/g; SAR(10 g) = 3 mW/g

Maximum value of SAR (measured) 4.21 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Audio Accessory SAR Plot #1 (A1)

Date Tested: 01/27/2011

Body-worn SAR - KRA-23M "Antenna A" - KNB-57L 1400mAh Li-ion "Battery a" – 463.3 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 2 (Earpiece); Type: D-Ring Ear Hanger w/ PTT & Mic (P/N: KHS-27)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 463.3 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 463.3 \text{ MHz}$; $\sigma = 0.923 \text{ mho/m}$; $\epsilon_r = 58$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.6 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 11.5 mW/g

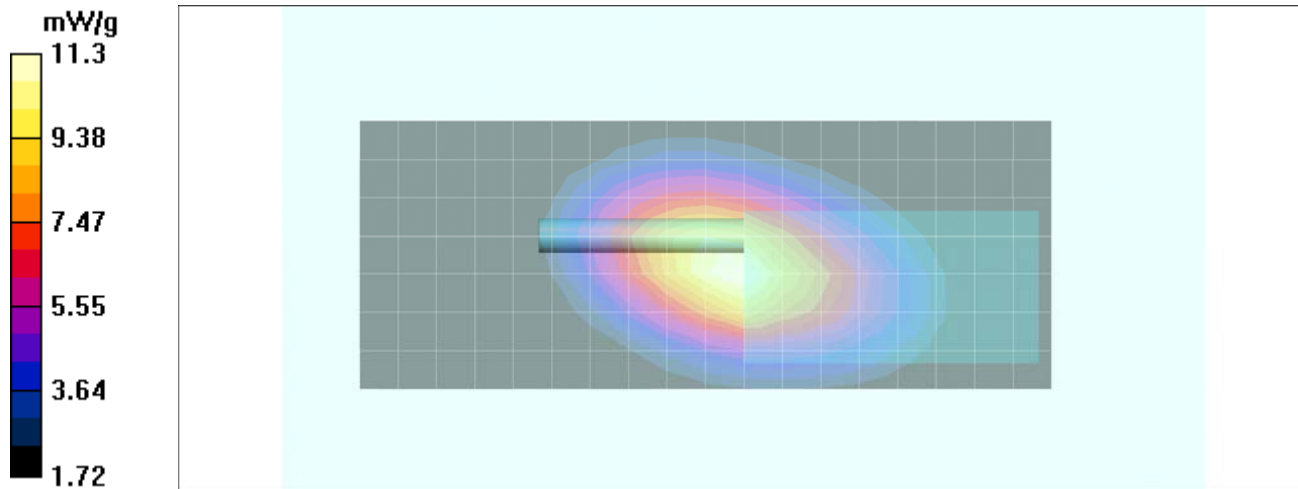
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 115.3 V/m; Power Drift = -0.698 dB



Peak SAR (extrapolated) = 15.8 W/kg

SAR(1 g) = 10.8 mW/g; SAR(10 g) = 7.64 mW/g

Maximum value of SAR (measured) = 11.3 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Audio Accessory SAR Plot #2 (A2)

Date Tested: 01/27/2011

Body-worn SAR - KRA-23M "Antenna A" - KNB-57L 1400mAh Li-ion "Battery a" – 450.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 2 (Earpiece); Type: D-Ring Ear Hanger w/ PTT & Mic (P/N: KHS-27)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 450 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 450 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 58.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.6 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 9.97 mW/g

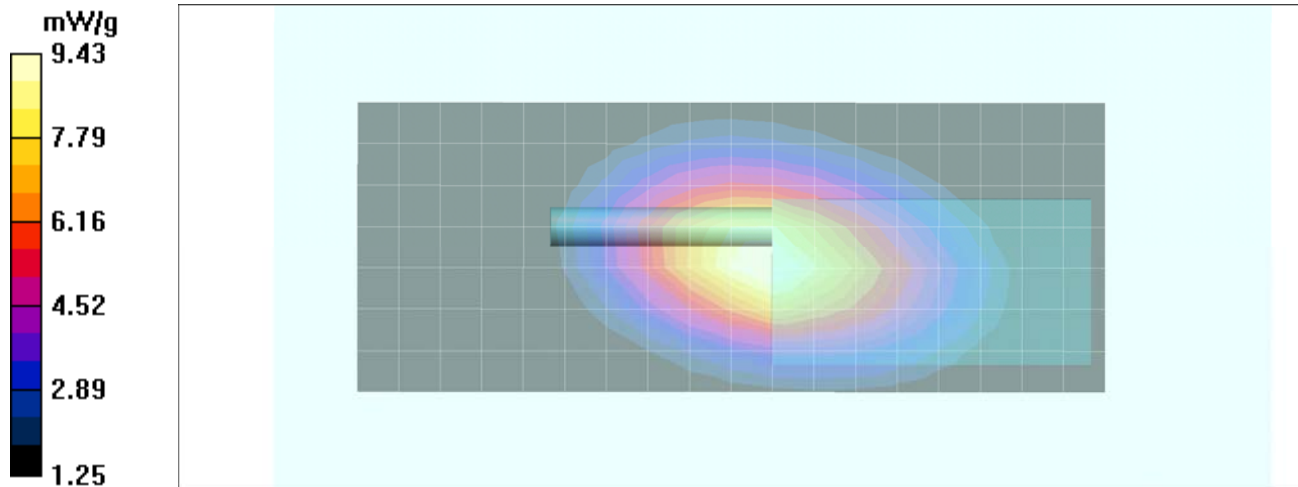
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 99.0 V/m; Power Drift = 0.027 dB



Peak SAR (extrapolated) = 13.1 W/kg

SAR(1 g) = 8.96 mW/g; SAR(10 g) = 6.34 mW/g

Maximum value of SAR (measured) = 9.43 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Audio Accessory SAR Plot #3 (A3)

Date Tested: 01/27/2011

Body-worn SAR - KRA-23M "Antenna A" - KNB-57L 1400mAh Li-ion "Battery a" – 476.7 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 2 (Earpiece); Type: D-Ring Ear Hanger w/ PTT & Mic (P/N: KHS-27)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 476.7 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 476.7 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 57.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.6 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 7.76 mW/g

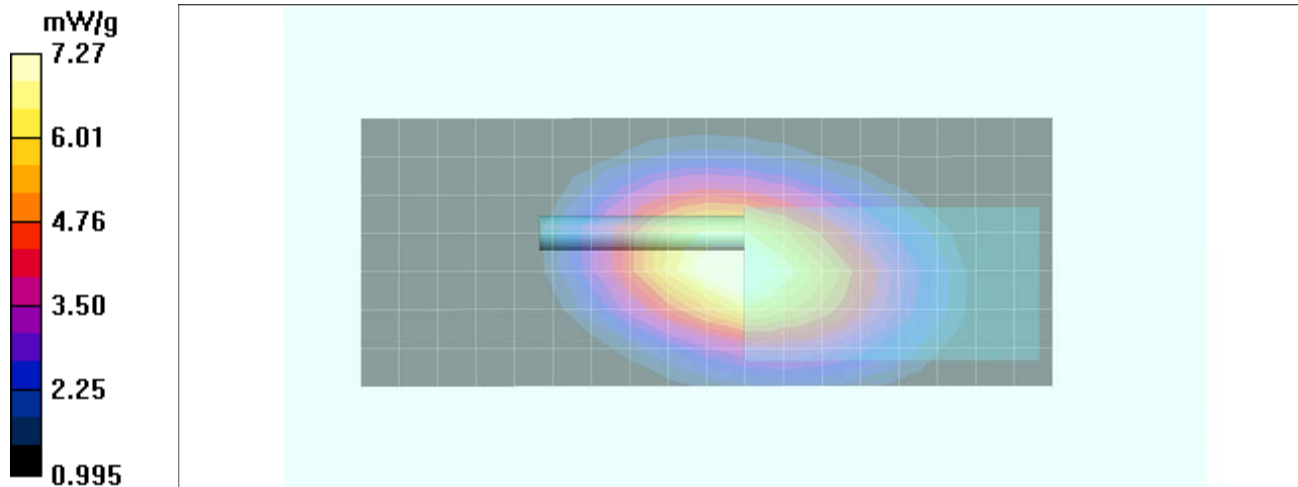
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 89.7 V/m; Power Drift = -0.619 dB



Peak SAR (extrapolated) = 10.2 W/kg

SAR(1 g) = 6.99 mW/g; SAR(10 g) = 4.99 mW/g

Maximum value of SAR (measured) = 7.27 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Audio Accessory SAR Plot #4 (A4)

Date Tested: 01/27/2011

Body-worn SAR - KRA-23M "Antenna A" - KNB-57L 1400mAh Li-ion "Battery a" – 463.3 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
 Audio Accessory Category 3 (Palm-Microphone Kit); Type: 3-Wire Lapel Microphone w/ Earpiece (P/N: KHS-9BL)
 Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 463.3 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 463.3 \text{ MHz}$; $\sigma = 0.923 \text{ mho/m}$; $\epsilon_r = 58$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.6 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 10.1 mW/g

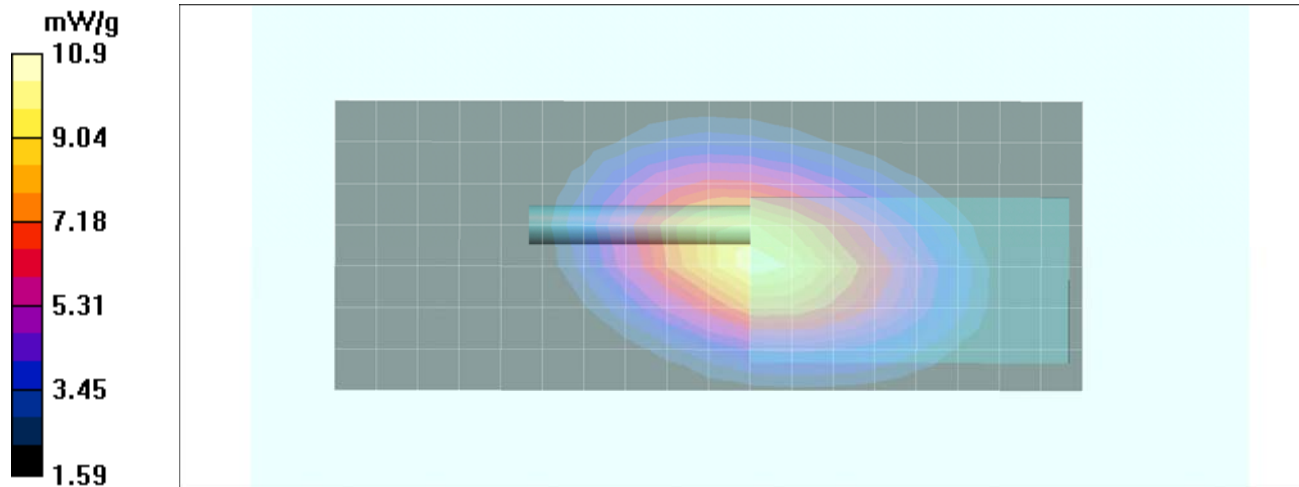
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 111.9 V/m; Power Drift = -0.503 dB



Peak SAR (extrapolated) = 15.3 W/kg

SAR(1 g) = 10.4 mW/g; SAR(10 g) = 7.43 mW/g

Maximum value of SAR (measured) = 10.9 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Audio Accessory SAR Plot #5 (A5)

Date Tested: 01/27/2011

Body-worn SAR - KRA-23M "Antenna A" - KNB-57L 1400mAh Li-ion "Battery a" – 463.3 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 4 (Speaker-Mic); Type: Speaker-Microphone w/ Integral GPS (P/N: KMC-48GPS)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 463.3 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 463.3 \text{ MHz}$; $\sigma = 0.923 \text{ mho/m}$; $\epsilon_r = 58$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.6 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 10.5 mW/g

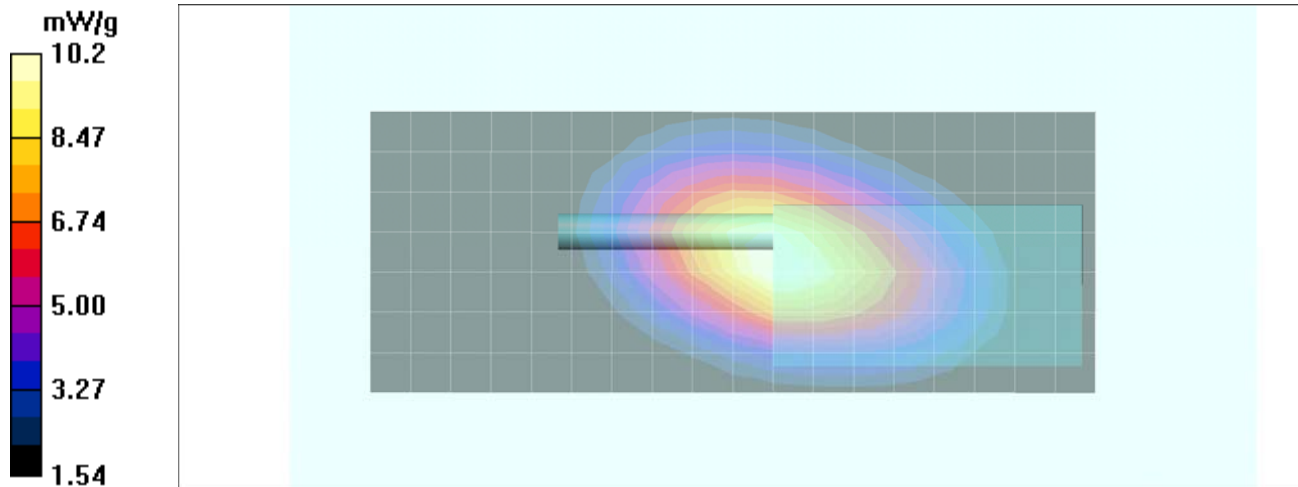
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 108.5 V/m; Power Drift = -0.526 dB



Peak SAR (extrapolated) = 14.2 W/kg

SAR(1 g) = 9.75 mW/g; SAR(10 g) = 6.97 mW/g

Maximum value of SAR (measured) = 10.2 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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Audio Accessory SAR Plot #6 (A6)

Date Tested: 01/27/2011

Body-worn SAR - KRA-23M2 “Antenna B” - KNB-55L 1480mAh Li-ion “Battery b” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 2 (Earpiece); Type: D-Ring Ear Hanger w/ PTT & Mic (P/N: KHS-27)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.968 \text{ mho/m}$; $\epsilon_r = 57.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.5 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 8.66 mW/g

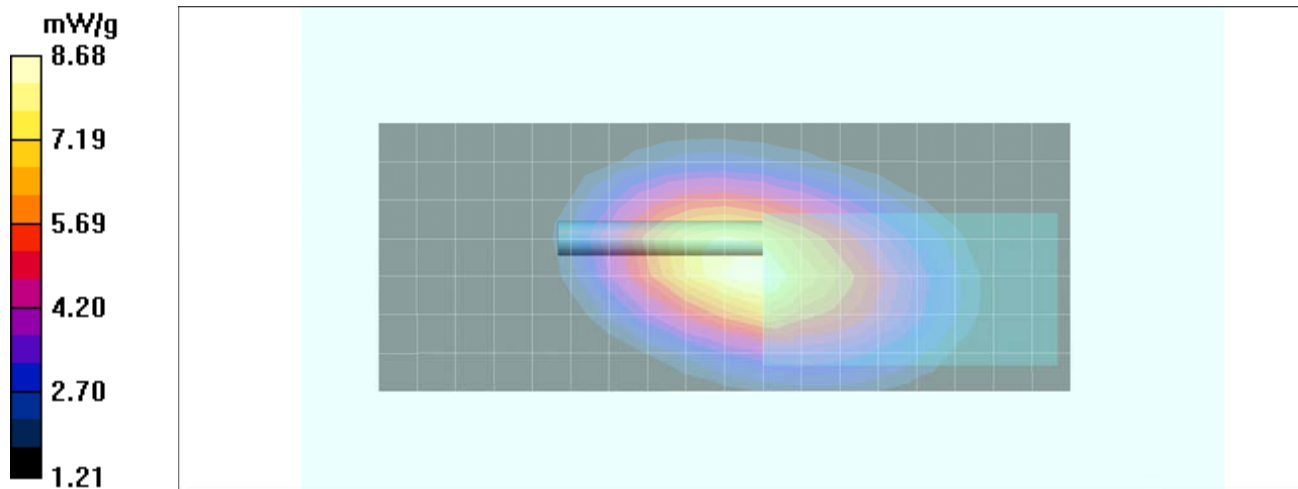
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 92.9 V/m; Power Drift = -0.200 dB



Peak SAR (extrapolated) = 12.1 W/kg

SAR(1 g) = 8.21 mW/g; SAR(10 g) = 5.8 mW/g

Maximum value of SAR (measured) = 8.68 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Audio Accessory SAR Plot #7 (A7)

Date Tested: 01/27/2011

Body-worn SAR - KRA-23M2 “Antenna B” - KNB-55L 1480mAh Li-ion “Battery b” – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 3 (Palm-Microphone Kit); Type: 3-Wire Lapel Microphone w/ Earpiece (P/N: KHS-9BL)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.968 \text{ mho/m}$; $\epsilon_r = 57.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASy4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.5 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 8.77 mW/g

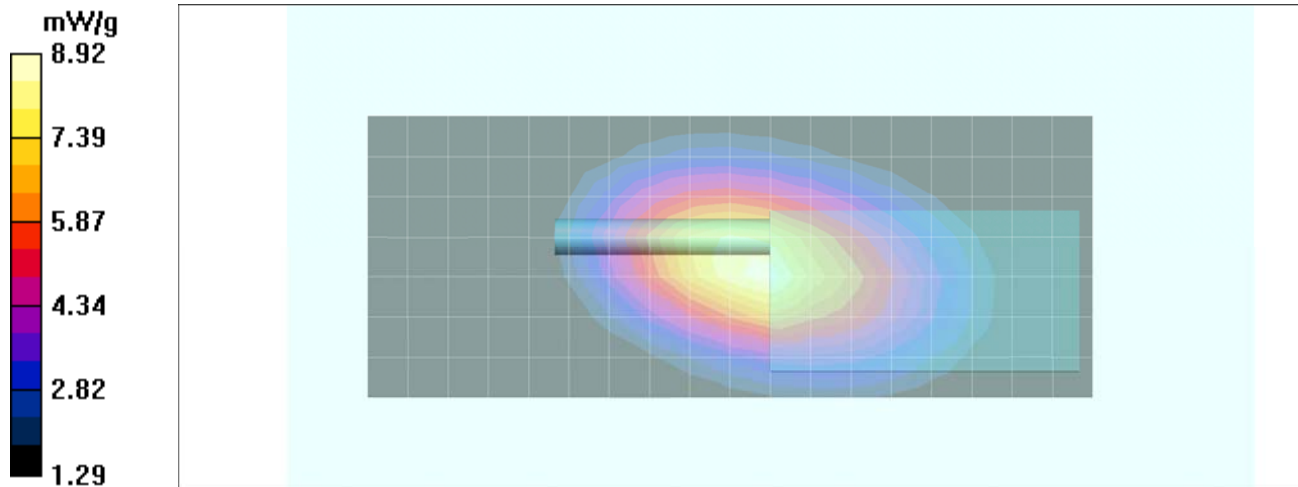
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 93.1 V/m; Power Drift = -0.014 dB



Peak SAR (extrapolated) = 12.4 W/kg

SAR(1 g) = 8.51 mW/g; SAR(10 g) = 6.05 mW/g

Maximum value of SAR (measured) = 8.92 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Audio Accessory SAR Plot #8 (A8)

Date Tested: 01/27/2011

Body-worn SAR - KRA-23M2 "Antenna B" - KNB-55L 1480mAh Li-ion "Battery b" – 512.0 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 4 (Speaker-Mic); Type: Speaker-Microphone w/ Integral GPS (P/N: KMC-48GPS)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.968 \text{ mho/m}$; $\epsilon_r = 57.1$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.5 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 8.87 mW/g

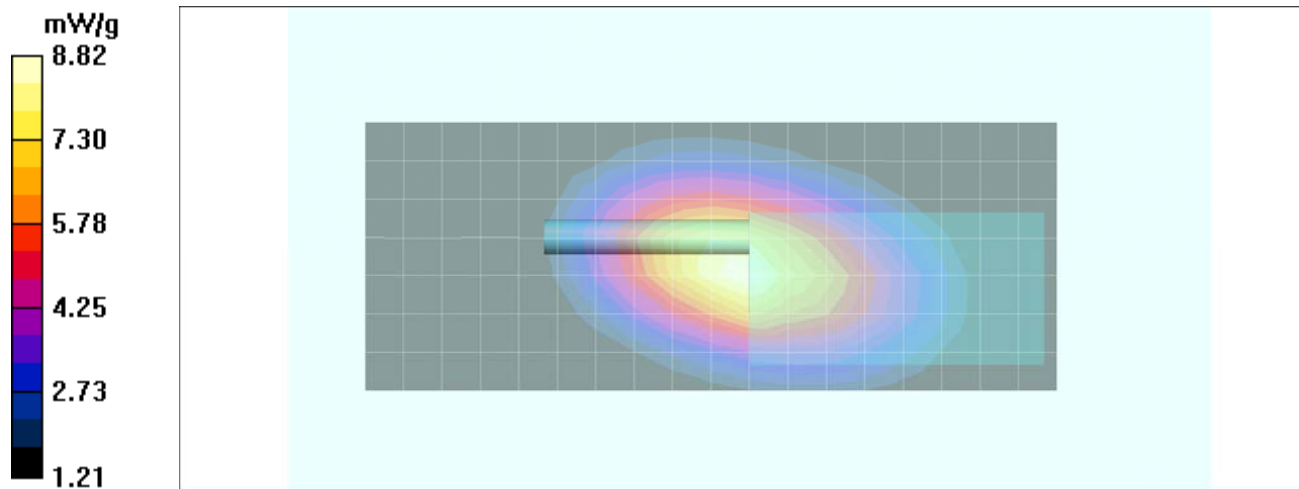
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 93.4 V/m; Power Drift = -0.132 dB



Peak SAR (extrapolated) = 12.4 W/kg

SAR(1 g) = 8.43 mW/g; SAR(10 g) = 5.95 mW/g

Maximum value of SAR (measured) = 8.82 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Audio Accessory SAR Plot #9 (A9)

Date Tested: 01/27/2011

Body-worn SAR - KRA-27M "Antenna C" - KNB-55L 1480mAh Li-ion "Battery b" – 476.7 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 2 (Earpiece); Type: D-Ring Ear Hanger w/ PTT & Mic (P/N: KHS-27)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 476.7 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 476.7$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 57.2$; $\rho = 1000$ kg/m³

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.5 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 10.1 mW/g

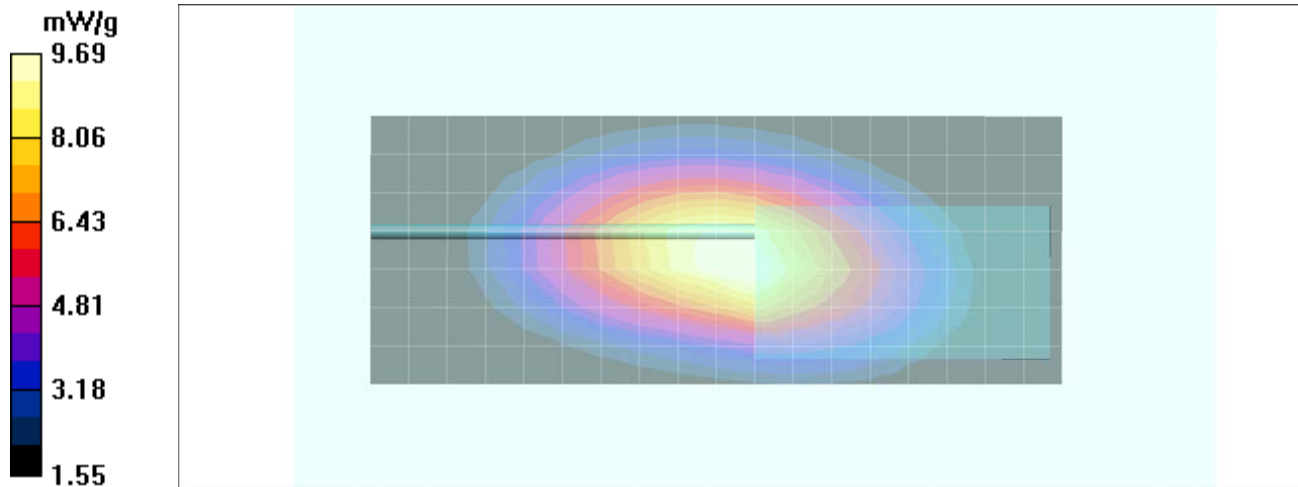
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 103.2 V/m; Power Drift = -0.347 dB



Peak SAR (extrapolated) = 13.5 W/kg

SAR(1 g) = 9.3 mW/g; SAR(10 g) = 6.69 mW/g

Maximum value of SAR (measured) = 9.69 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Audio Accessory SAR Plot #10 (A10)

Date Tested: 01/27/2011

Body-worn SAR - KRA-27M "Antenna C" - KNB-55L 1480mAh Li-ion "Battery b" – 476.7 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 3 (Palm-Microphone Kit); Type: 3-Wire Lapel Microphone w/ Earpiece (P/N: KHS-9BL)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 476.7 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 476.7 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 57.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.5 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 10.4 mW/g

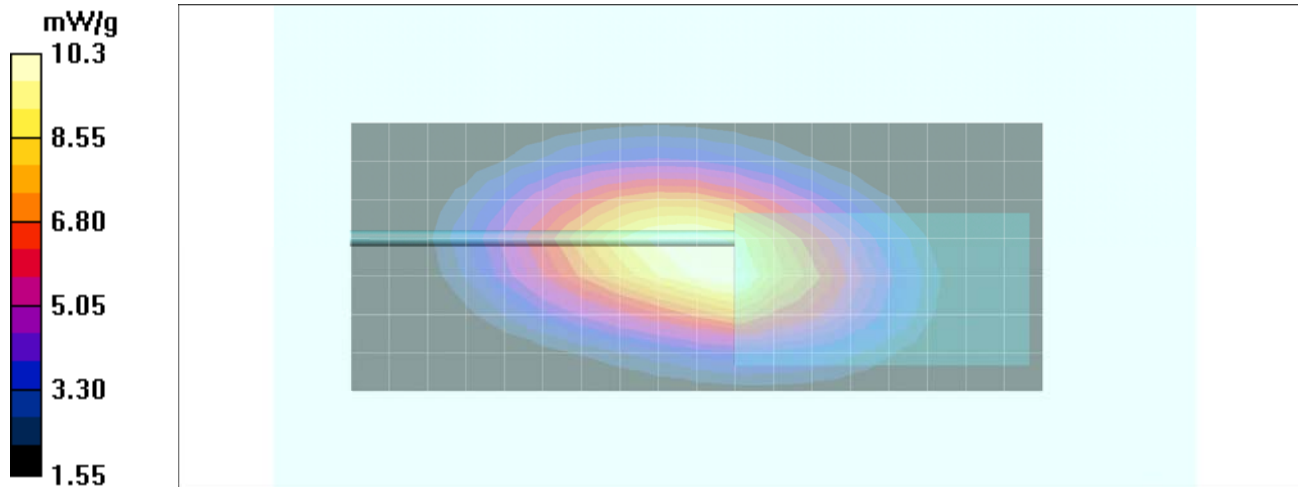
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 102.7 V/m; Power Drift = -0.215 dB



Peak SAR (extrapolated) = 14.3 W/kg

SAR(1 g) = 9.86 mW/g; SAR(10 g) = 7.07 mW/g

Maximum value of SAR (measured) = 10.3 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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	<u>Test Report Issue Date</u> March 24, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	<u>RF Exposure Category</u> Occupational (Controlled)	

Audio Accessory SAR Plot #11 (A11)

Date Tested: 01/27/2011

Body-worn SAR - KRA-27M "Antenna C" - KNB-55L 1480mAh Li-ion "Battery b" – 476.7 MHz

DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10
Audio Accessory Category 4 (Speaker-Mic); Type: Speaker-Microphone w/ Integral GPS (P/N: KMC-48GPS)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 23.1°C; Fluid Temp: 22.4°C; Barometric Pressure: 101.1 kPa; Humidity: 35%

Communication System: CW

Frequency: 476.7 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 476.7 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 57.2$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn353; Calibrated: 27/04/2010
- Phantom: Barski Industries; Type: Fiberglass Planar; Serial: 03-01
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn SAR – 1.5 cm Belt-Clip Spacing from Back of DUT to Planar Phantom

Area Scan (8x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 9.36 mW/g

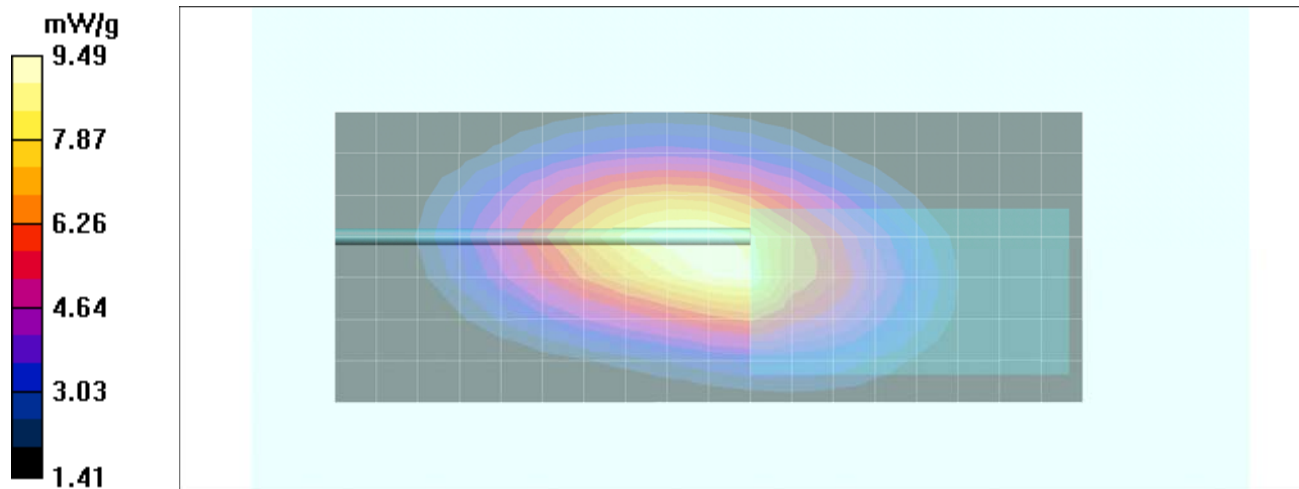
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 98.1 V/m; Power Drift = -0.220 dB

Peak SAR (extrapolated) = 13.1 W/kg

SAR(1 g) = 9.04 mW/g; SAR(10 g) = 6.48 mW/g

Maximum value of SAR (measured) = 9.49 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Model:	NX-320-K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
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