
	<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)	

## Audio Accessory SAR Plot #12 (A12)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 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 – 1.7 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) = 11.1 mW/g

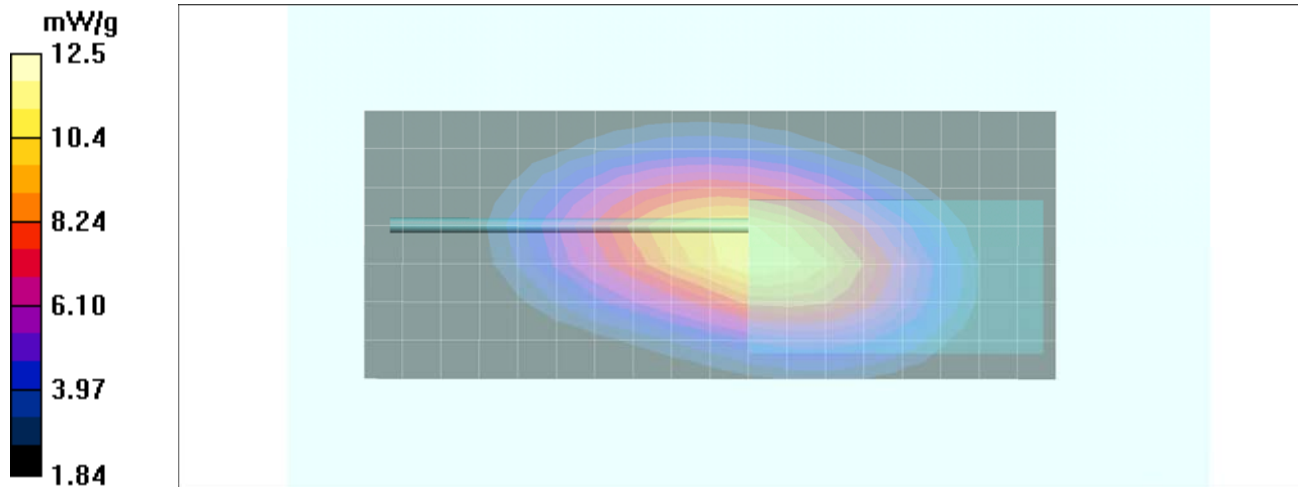
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 109.1 V/m; Power Drift = -0.189 dB



Peak SAR (extrapolated) = 17.2 W/kg

**SAR(1 g) = 11.8 mW/g; SAR(10 g) = 8.42 mW/g**

Maximum value of SAR (measured) = 12.5 mW/g



<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH431000</b>	<b>DUT Model:</b>	<b>NX-320-K3</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF-H PTT Radio Transceiver</b>	<b>Transmitter Frequency Range:</b>		<b>450.0 - 512.0 MHz</b>		
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## Audio Accessory SAR Plot #13 (A13)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 498.0 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: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 498 \text{ MHz}$ ;  $\sigma = 0.948 \text{ mho/m}$ ;  $\epsilon_r = 57.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 12.1 mW/g

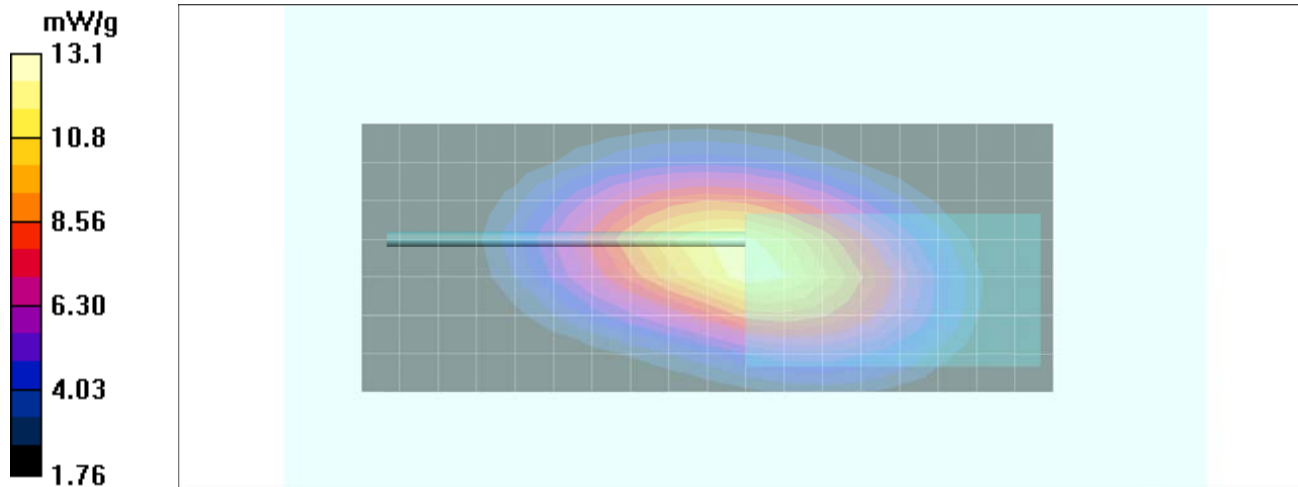
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 118.5 V/m; Power Drift = -0.650 dB



Peak SAR (extrapolated) = 18.3 W/kg

**SAR(1 g) = 12.6 mW/g; SAR(10 g) = 9.02 mW/g**

Maximum value of SAR (measured) = 13.1 mW/g



<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH431000</b>	<b>DUT Model:</b>	<b>NX-320-K3</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF-H PTT Radio Transceiver</b>	<b>Transmitter Frequency Range:</b>		<b>450.0 - 512.0 MHz</b>		
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## Audio Accessory SAR Plot #14 (A14)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 484.0 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: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.934 \text{ mho/m}$ ;  $\epsilon_r = 57.1$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 12.7 mW/g

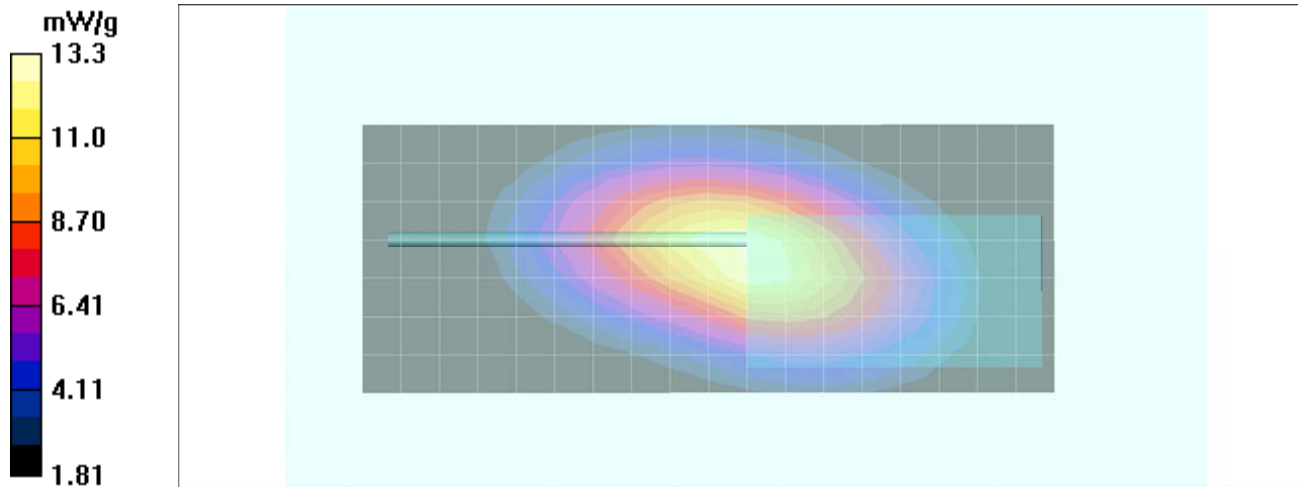
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 121.5 V/m; Power Drift = -0.649 dB

Peak SAR (extrapolated) = 18.2 W/kg

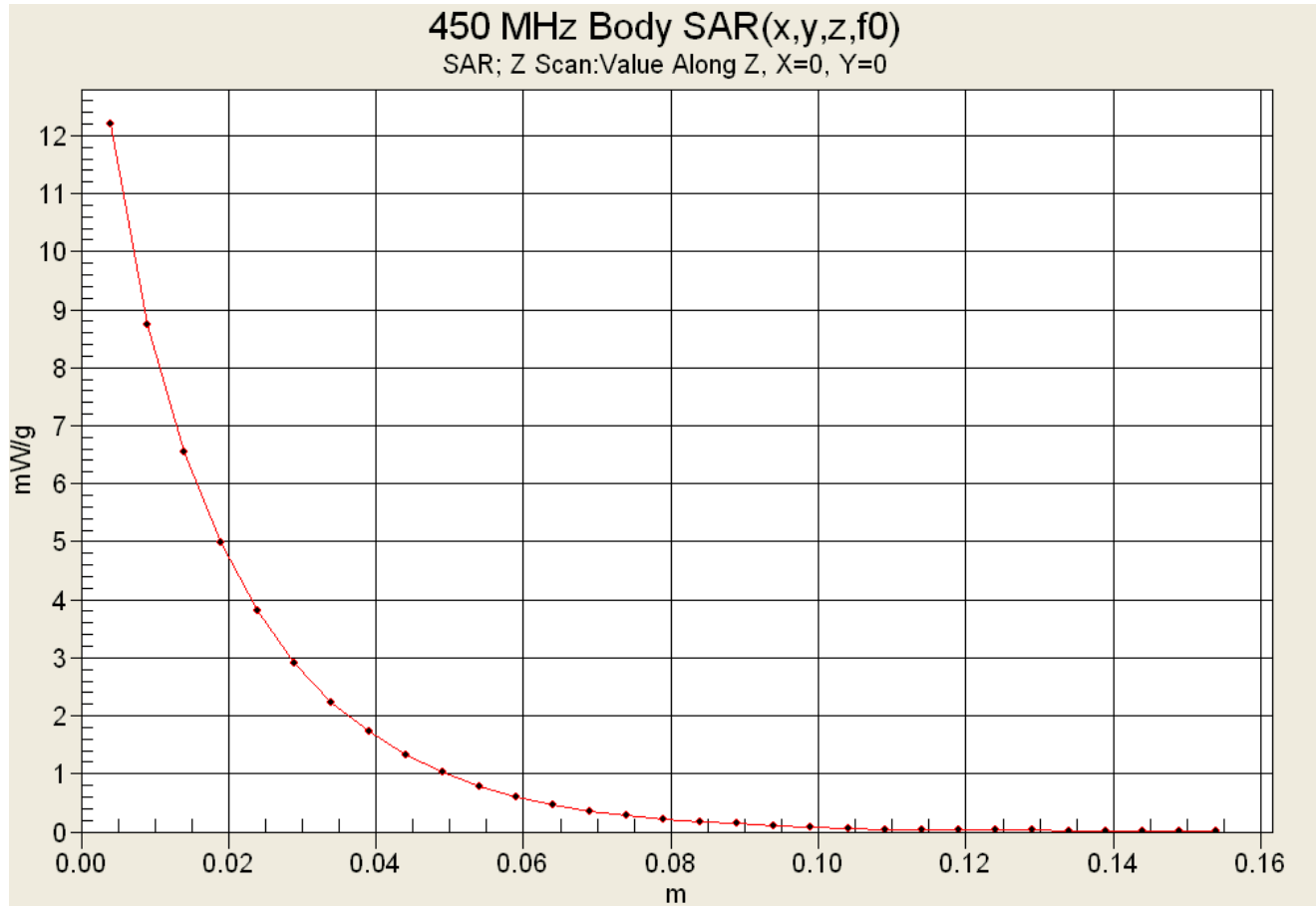
**SAR(1 g) = 12.6 mW/g; SAR(10 g) = 9.11 mW/g**



Maximum value of SAR (measured) = 13.3 mW/g



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



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## Audio Accessory SAR Plot #15 (A15)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 470.0 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: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used:  $f = 470 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 57.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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

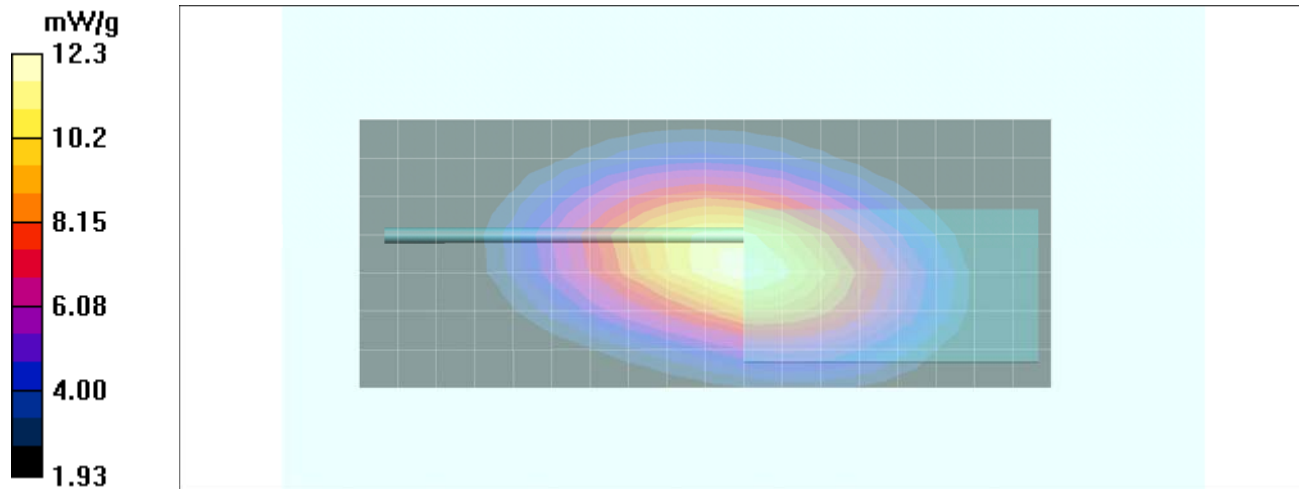
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 112.1 V/m; Power Drift = -0.050 dB



Peak SAR (extrapolated) = 16.9 W/kg

**SAR(1 g) = 11.8 mW/g; SAR(10 g) = 8.49 mW/g**

Maximum value of SAR (measured) = 12.3 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #16 (A16)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 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 – 1.7 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

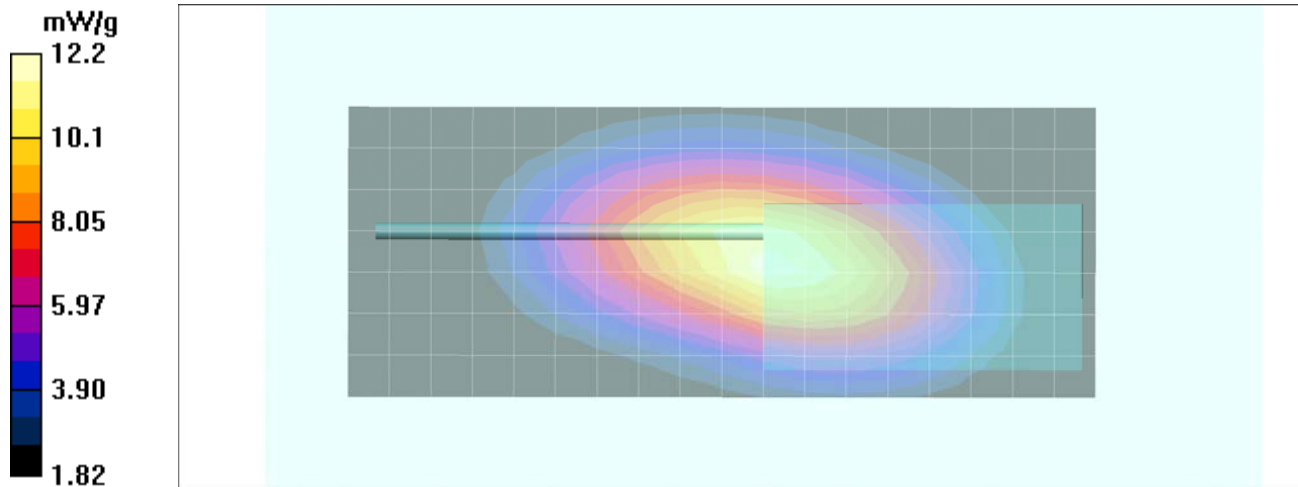
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 112.2 V/m; Power Drift = -0.312 dB

Peak SAR (extrapolated) = 16.7 W/kg



**SAR(1 g) = 11.6 mW/g; SAR(10 g) = 8.38 mW/g**

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



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		450.0 - 512.0 MHz		
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## Audio Accessory SAR Plot #17 (A17)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 498.0 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: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 498 \text{ MHz}$ ;  $\sigma = 0.948 \text{ mho/m}$ ;  $\epsilon_r = 57.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 14.0 mW/g

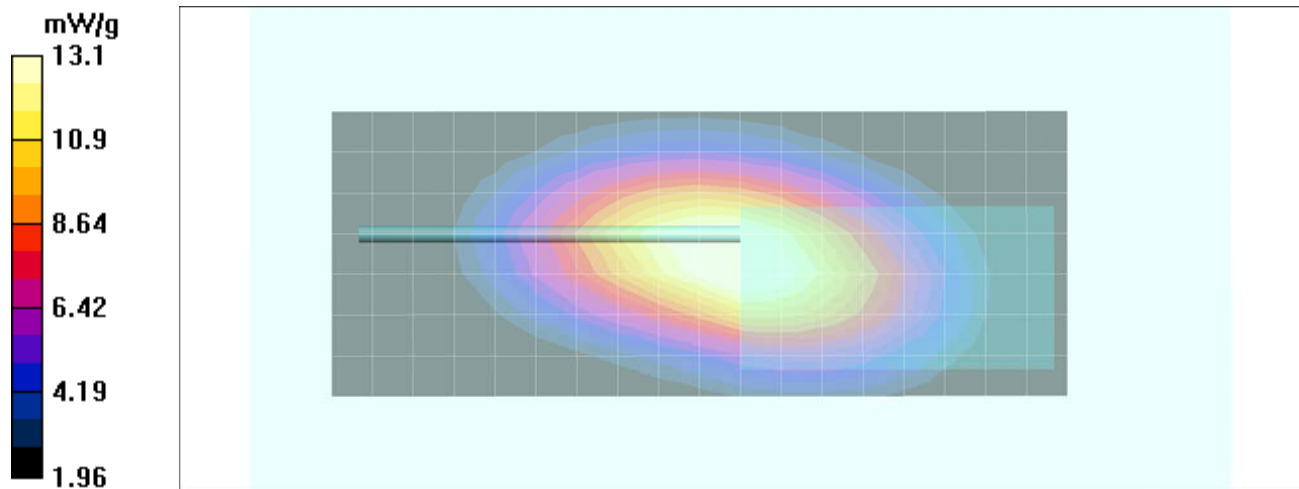
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 112.2 V/m; Power Drift = -0.159 dB



Peak SAR (extrapolated) = 18.1 W/kg

**SAR(1 g) = 12.5 mW/g; SAR(10 g) = 8.92 mW/g**

Maximum value of SAR (measured) = 13.1 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	KENWOOD
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		450.0 - 512.0 MHz		
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## Audio Accessory SAR Plot #18 (A18)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 “Antenna D” - KNB-56N 1400mAh Ni-MH “Battery c” – 484.0 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: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.934 \text{ mho/m}$ ;  $\epsilon_r = 57.1$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 13.3 mW/g

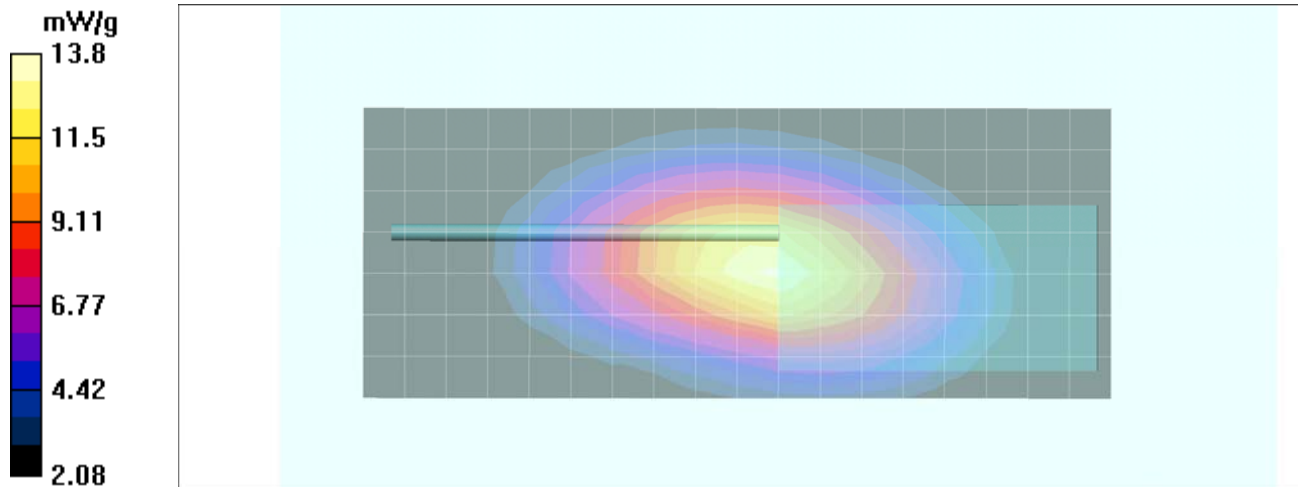
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 121.5 V/m; Power Drift = -0.424 dB

Peak SAR (extrapolated) = 18.9 W/kg



**SAR(1 g) = 13 mW/g; SAR(10 g) = 9.29 mW/g**

Maximum value of SAR (measured) = 13.8 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	KENWOOD
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		450.0 - 512.0 MHz		
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## Audio Accessory SAR Plot #19 (A19)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 470.0 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: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used:  $f = 470 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 57.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 11.9 mW/g

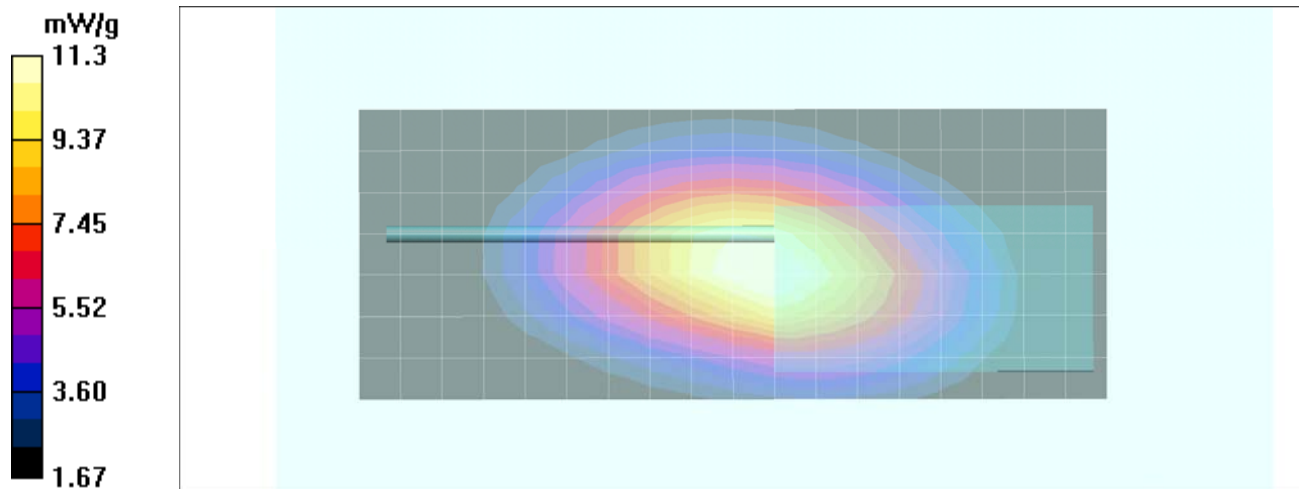
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 104.4 V/m; Power Drift = 0.100 dB



Peak SAR (extrapolated) = 15.7 W/kg

**SAR(1 g) = 10.9 mW/g; SAR(10 g) = 7.85 mW/g**

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



<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH431000</b>	<b>DUT Model:</b>	<b>NX-320-K3</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF-H PTT Radio Transceiver</b>	<b>Transmitter Frequency Range:</b>		<b>450.0 - 512.0 MHz</b>		
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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 #20 (A20)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 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 – 1.7 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) = 12.1 mW/g

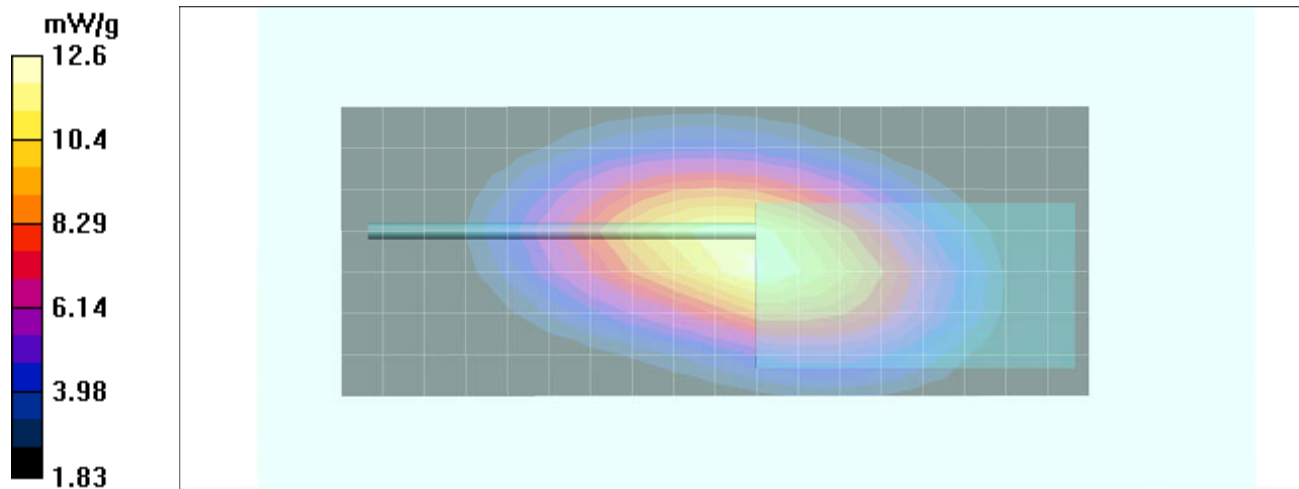
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 111.8 V/m; Power Drift = -0.254 dB



Peak SAR (extrapolated) = 17.5 W/kg

**SAR(1 g) = 12.1 mW/g; SAR(10 g) = 8.62 mW/g**

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



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #21 (A21)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 498.0 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: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 498 \text{ MHz}$ ;  $\sigma = 0.948 \text{ mho/m}$ ;  $\epsilon_r = 57.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 13.6 mW/g

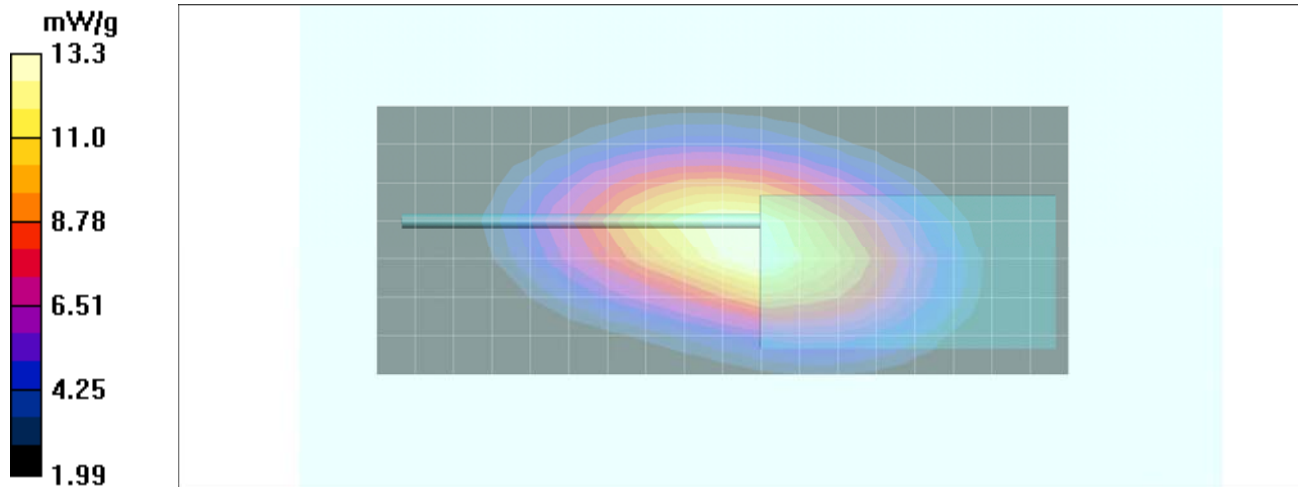
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 119.7 V/m; Power Drift = -0.430 dB



Peak SAR (extrapolated) = 18.5 W/kg

**SAR(1 g) = 12.7 mW/g; SAR(10 g) = 9.05 mW/g**

Maximum value of SAR (measured) = 13.3 mW/g



<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH431000</b>	<b>DUT Model:</b>	<b>NX-320-K3</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF-H PTT Radio Transceiver</b>	<b>Transmitter Frequency Range:</b>		<b>450.0 - 512.0 MHz</b>		
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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 #22 (A22)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 484.0 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: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.934 \text{ mho/m}$ ;  $\epsilon_r = 57.1$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 14.5 mW/g

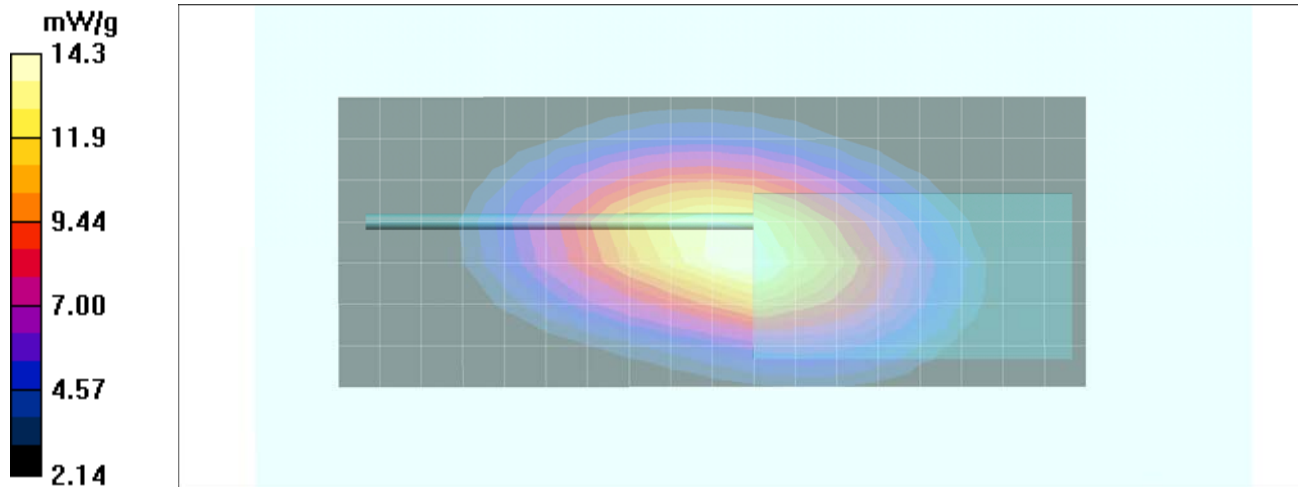
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 118.7 V/m; Power Drift = -0.333 dB



Peak SAR (extrapolated) = 19.7 W/kg

**SAR(1 g) = 13.6 mW/g; SAR(10 g) = 9.72 mW/g**

Maximum value of SAR (measured) = 14.3 mW/g



<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH431000</b>	<b>DUT Model:</b>	<b>NX-320-K3</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF-H PTT Radio Transceiver</b>	<b>Transmitter Frequency Range:</b>		<b>450.0 - 512.0 MHz</b>		
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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 #23 (A23)

Date Tested: 01/27/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 470.0 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: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used:  $f = 470 \text{ MHz}$ ;  $\sigma = 0.93 \text{ mho/m}$ ;  $\epsilon_r = 57.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 12.9 mW/g

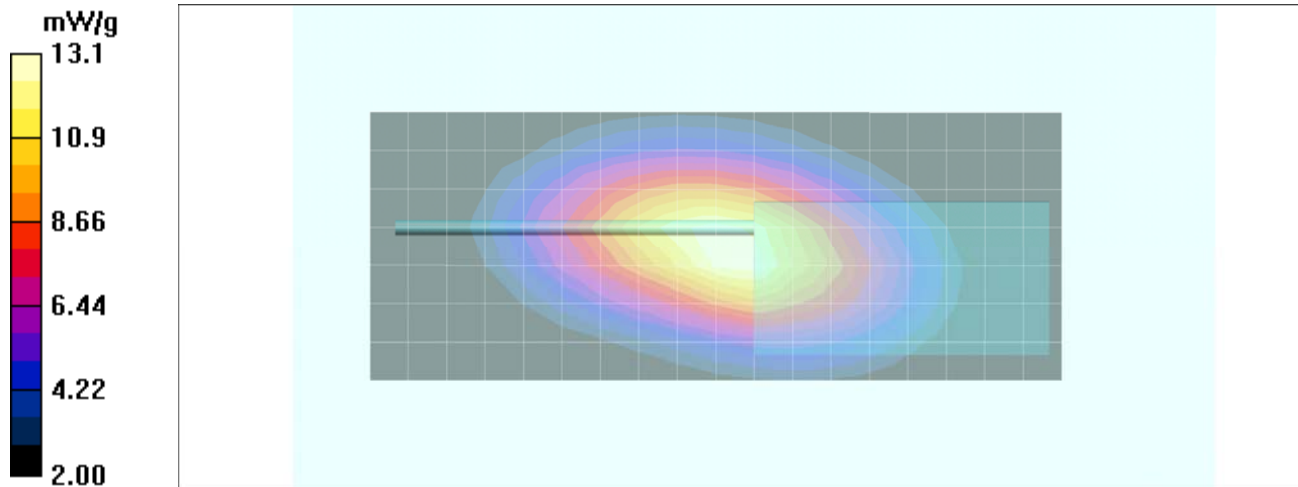
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 110.7 V/m; Power Drift = 0.040 dB



Peak SAR (extrapolated) = 18.0 W/kg

**SAR(1 g) = 12.5 mW/g; SAR(10 g) = 8.95 mW/g**

Maximum value of SAR (measured) = 13.1 mW/g



<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH431000</b>	<b>DUT Model:</b>	<b>NX-320-K3</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF-H PTT Radio Transceiver</b>	<b>Transmitter Frequency Range:</b>		<b>450.0 - 512.0 MHz</b>		
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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 #24 (A24)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 470.0 MHz

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

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used:  $f = 470 \text{ MHz}$ ;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 58.6$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 13.2 mW/g

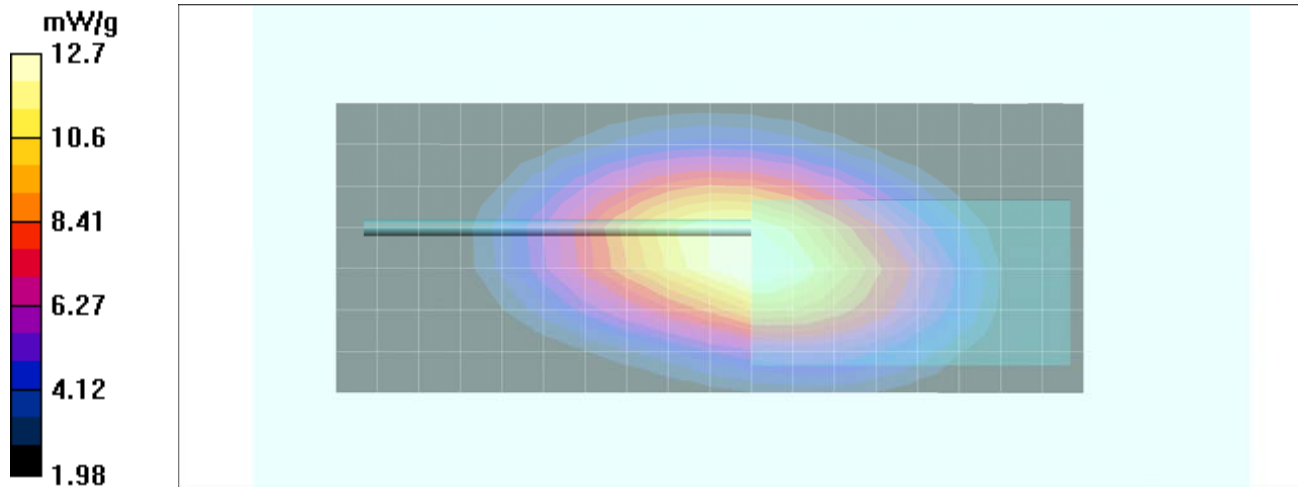
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 108.1 V/m; Power Drift = 0.189 dB

Peak SAR (extrapolated) = 17.4 W/kg



**SAR(1 g) = 12.1 mW/g; SAR(10 g) = 8.69 mW/g**

Maximum value of SAR (measured) = 12.7 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		450.0 - 512.0 MHz		
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## Audio Accessory SAR Plot #25 (A25)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 “Antenna D” - KNB-56N 1400mAh Ni-MH “Battery c” – 484.0 MHz

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

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.964 \text{ mho/m}$ ;  $\epsilon_r = 59.4$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 14.4 mW/g

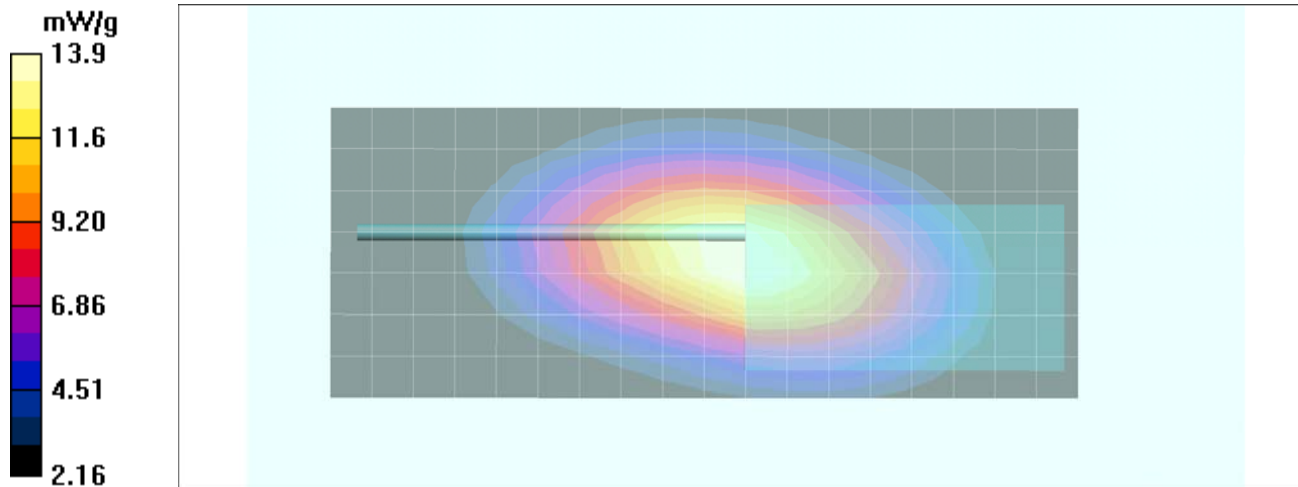
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 119.9 V/m; Power Drift = -0.511 dB

Peak SAR (extrapolated) = 19.0 W/kg

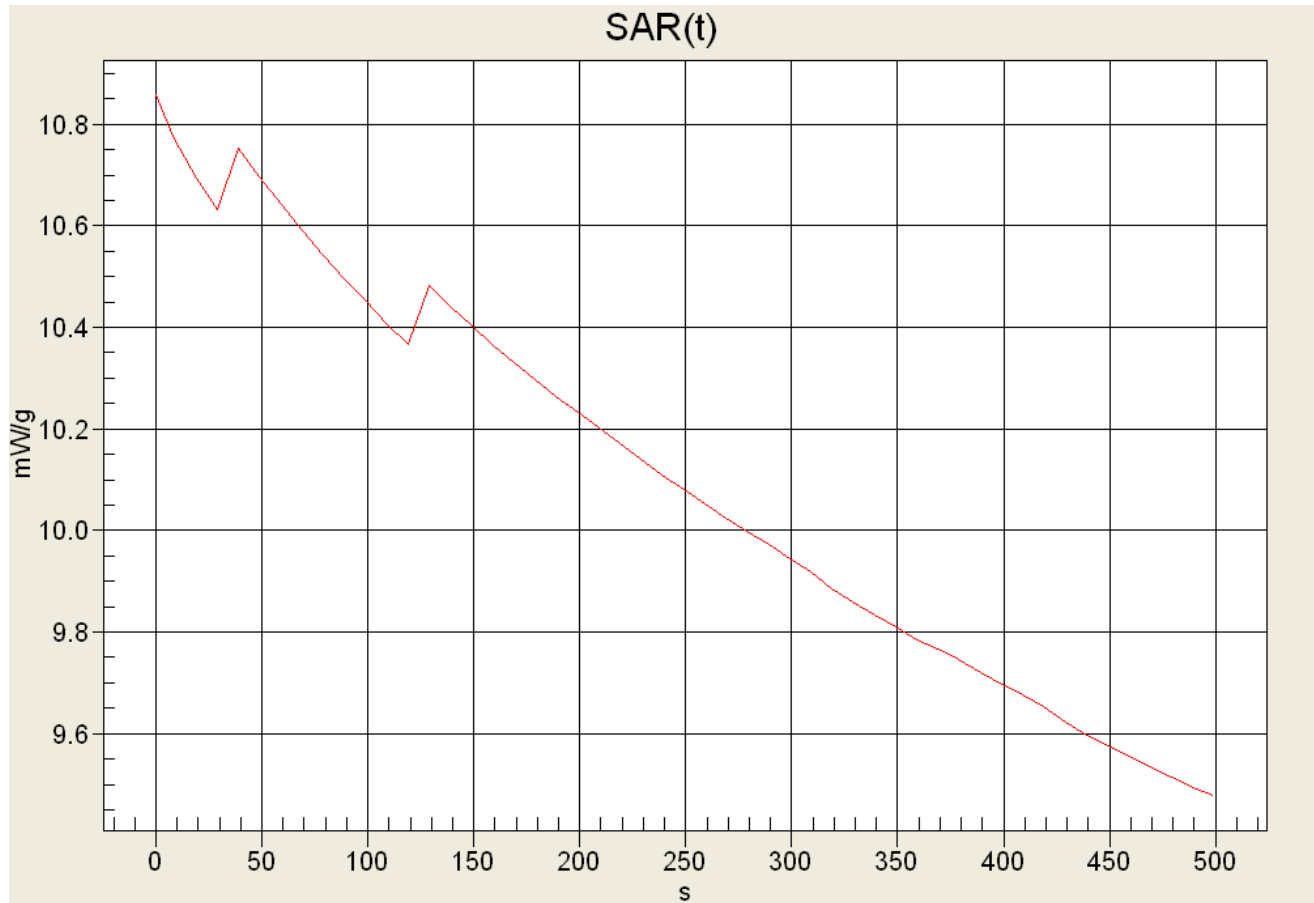
**SAR(1 g) = 13.2 mW/g; SAR(10 g) = 9.56 mW/g**

Maximum value of SAR (measured) = 13.9 mW/g





<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH431000</b>	<b>DUT Model:</b>	<b>NX-320-K3</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF-H PTT Radio Transceiver</b>	<b>Transmitter Frequency Range:</b>		<b>450.0 - 512.0 MHz</b>		
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### SAR Droop Evaluation (SAR-versus-Time)



**SAR 0s - 10.858 mW/g**  
**SAR 340s - 9.834 mW/g (-0.430 dB)**  
**SAR 500s - 9.479 mW/g (-0.590 dB)**

	<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
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## Audio Accessory SAR Plot #26 (A26)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 498.0 MHz

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

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 498 \text{ MHz}$ ;  $\sigma = 0.978 \text{ mho/m}$ ;  $\epsilon_r = 59.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 13.2 mW/g

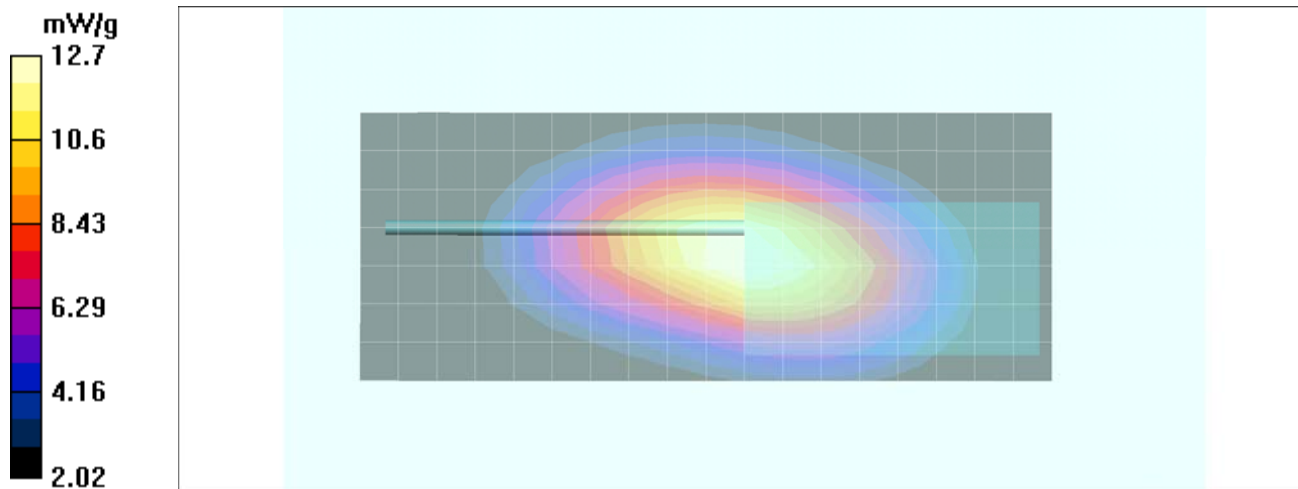
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 113.1 V/m; Power Drift = -0.287 dB



Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 12.1 mW/g; SAR(10 g) = 8.75 mW/g**

Maximum value of SAR (measured) = 12.7 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #27 (A27)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 512.0 MHz

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

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 512 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 58.2$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 12.3 mW/g

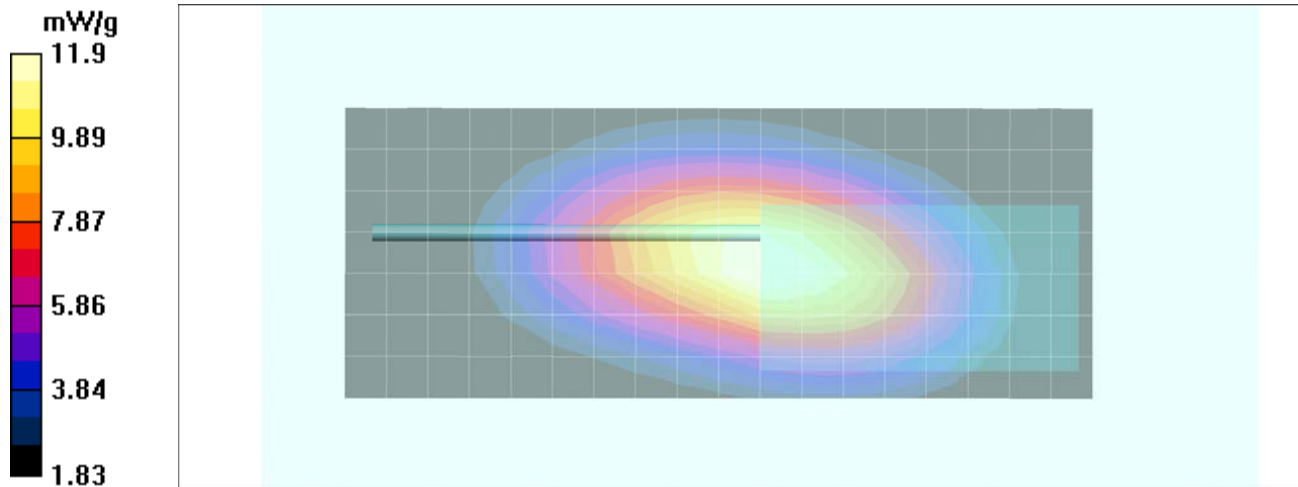
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 107.5 V/m; Power Drift = -0.121 dB



Peak SAR (extrapolated) = 16.3 W/kg

**SAR(1 g) = 11.4 mW/g; SAR(10 g) = 8.19 mW/g**

Maximum value of SAR (measured) = 11.9 mW/g



<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH431000</b>	<b>DUT Model:</b>	<b>NX-320-K3</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF-H PTT Radio Transceiver</b>	<b>Transmitter Frequency Range:</b>		<b>450.0 - 512.0 MHz</b>		
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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 #28 (A28)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 470.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Lightweight Headset – no VOX or PTT controls (P/N: KHS-21)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used:  $f = 470 \text{ MHz}$ ;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 58.6$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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

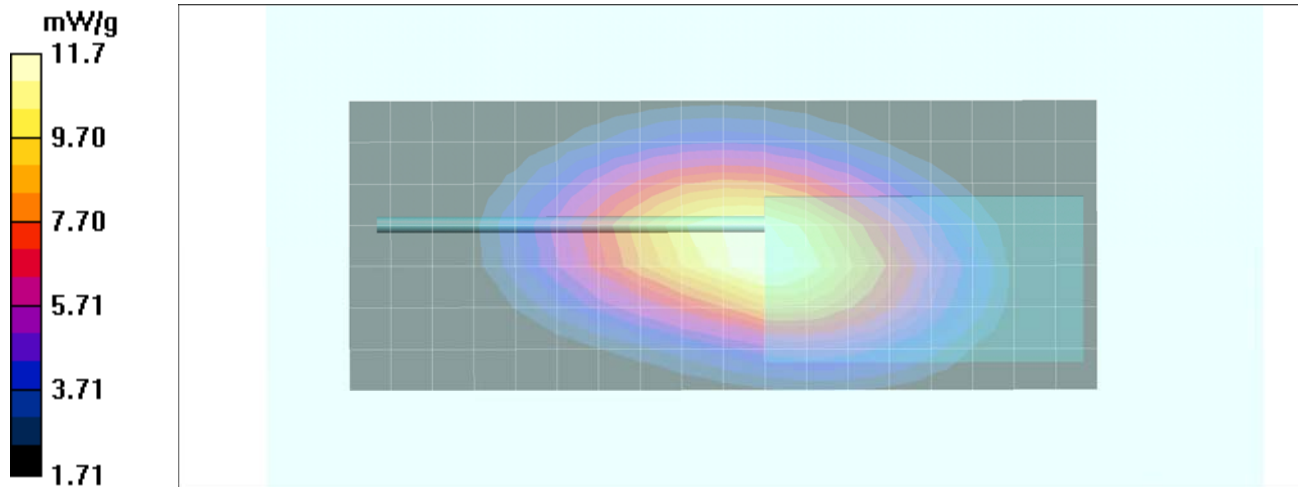
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 104.3 V/m; Power Drift = 0.051 dB



Peak SAR (extrapolated) = 16.3 W/kg

**SAR(1 g) = 11.3 mW/g; SAR(10 g) = 8.06 mW/g**

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



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #29 (A29)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 484.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Lightweight Headset – no VOX or PTT controls (P/N: KHS-21)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.964 \text{ mho/m}$ ;  $\epsilon_r = 59.4$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 14.2 mW/g

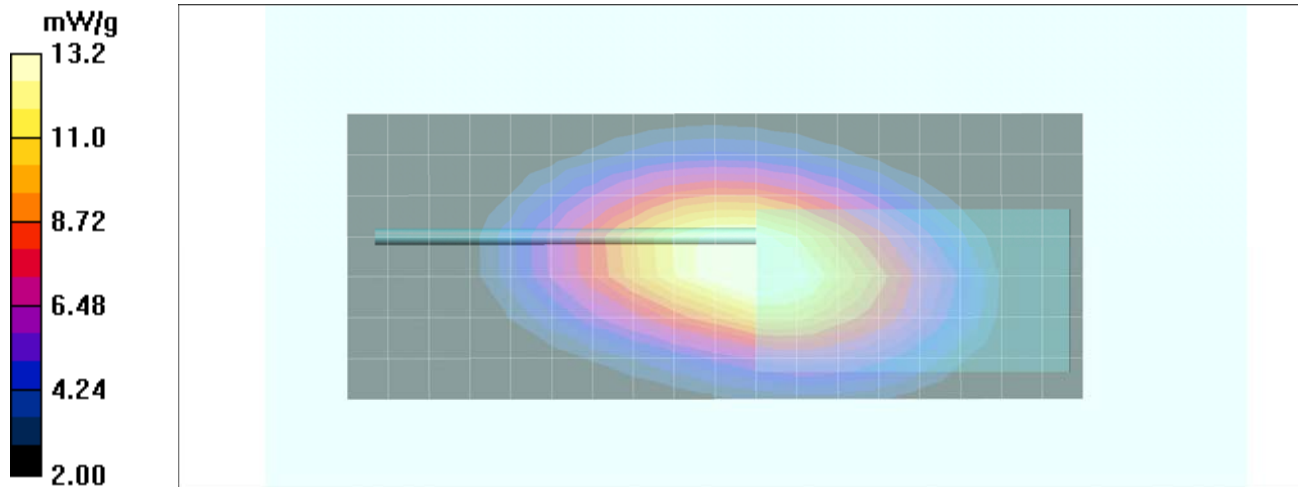
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 114.8 V/m; Power Drift = -0.576 dB

Peak SAR (extrapolated) = 18.4 W/kg



**SAR(1 g) = 12.7 mW/g; SAR(10 g) = 9.08 mW/g**

Maximum value of SAR (measured) = 13.2 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #30 (A30)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 498.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Lightweight Headset – no VOX or PTT controls (P/N: KHS-21)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 498 \text{ MHz}$ ;  $\sigma = 0.978 \text{ mho/m}$ ;  $\epsilon_r = 59.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 13.9 mW/g

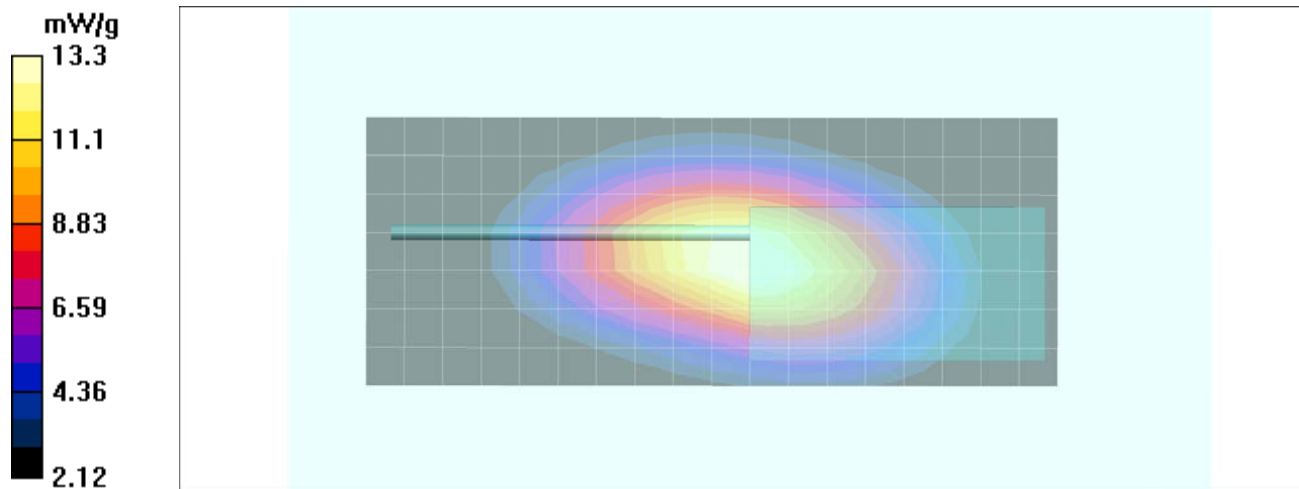
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 117.0 V/m; Power Drift = -0.325 dB



Peak SAR (extrapolated) = 18.2 W/kg

**SAR(1 g) = 12.7 mW/g; SAR(10 g) = 9.2 mW/g**

Maximum value of SAR (measured) = 13.3 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	KENWOOD
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #31 (A31)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 512.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Lightweight Headset – no VOX or PTT controls (P/N: KHS-21)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 512 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 58.2$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 12.7 mW/g

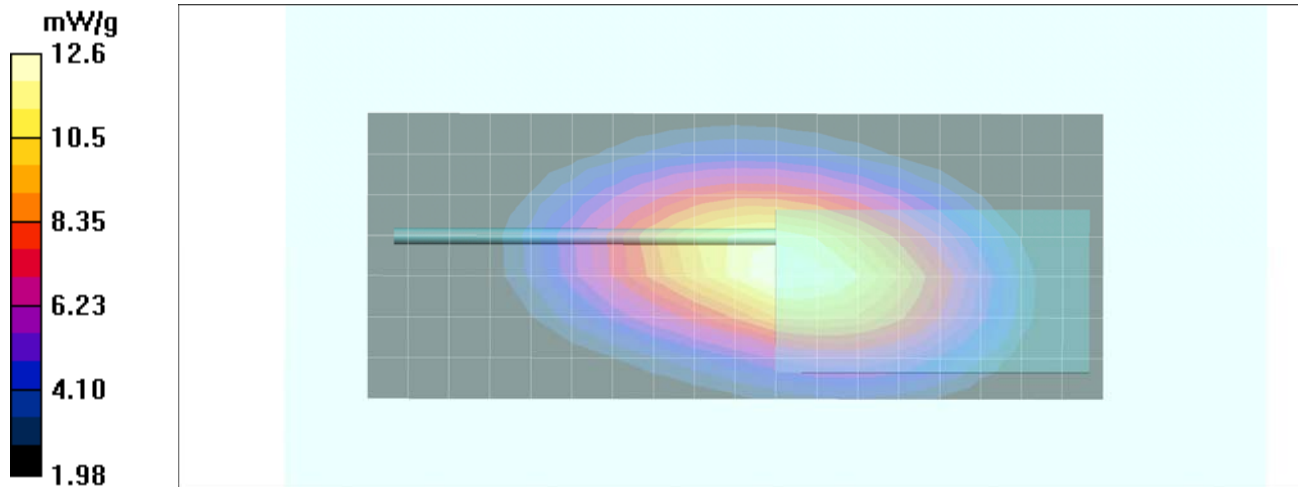
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 111.9 V/m; Power Drift = -0.208 dB



Peak SAR (extrapolated) = 17.3 W/kg

**SAR(1 g) = 12.1 mW/g; SAR(10 g) = 8.69 mW/g**

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



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #32 (A32)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 470.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Behind-the-Head Headset w/ Boom Mic & PTT (P/N: KHS-22)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used:  $f = 470 \text{ MHz}$ ;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 58.6$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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

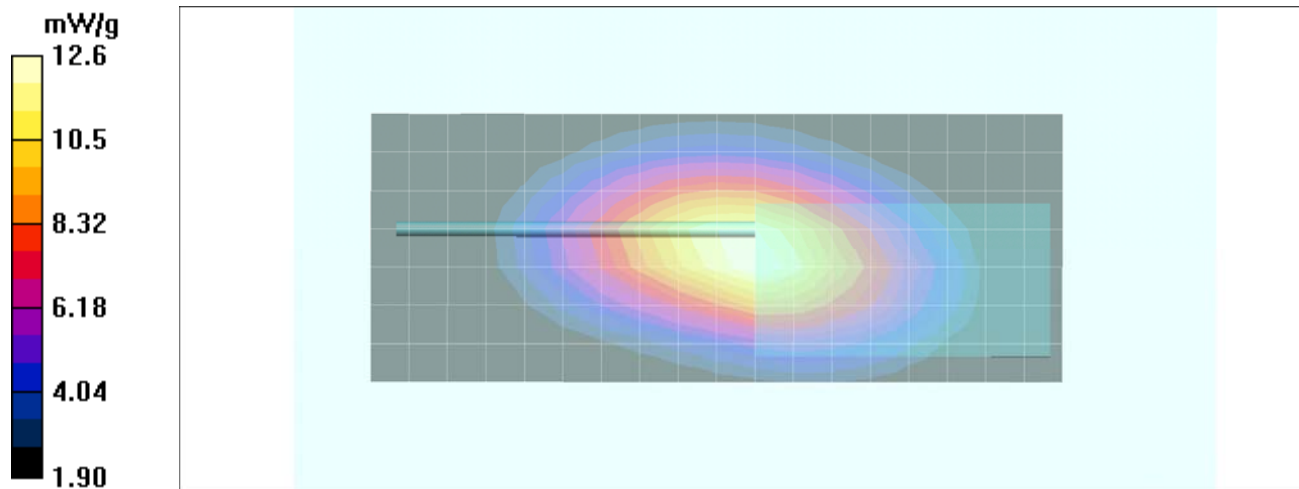
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 109.9 V/m; Power Drift = 0.010 dB



Peak SAR (extrapolated) = 17.4 W/kg

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

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



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #33 (A33)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 484.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Behind-the-Head Headset w/ Boom Mic & PTT (P/N: KHS-22)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.964 \text{ mho/m}$ ;  $\epsilon_r = 59.4$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 13.3 mW/g

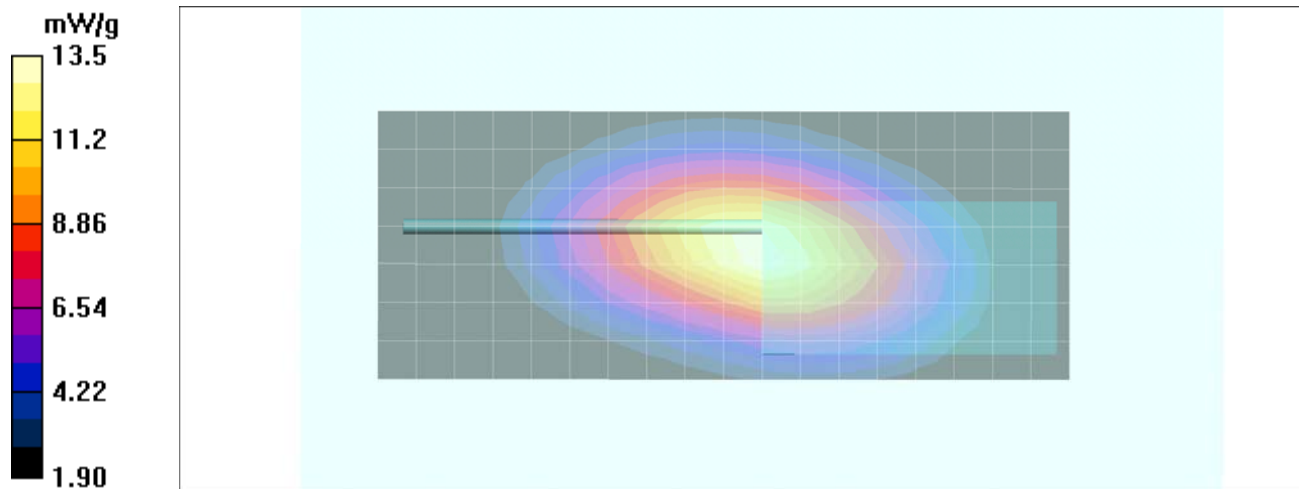
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 121.4 V/m; Power Drift = -0.607 dB

Peak SAR (extrapolated) = 18.8 W/kg

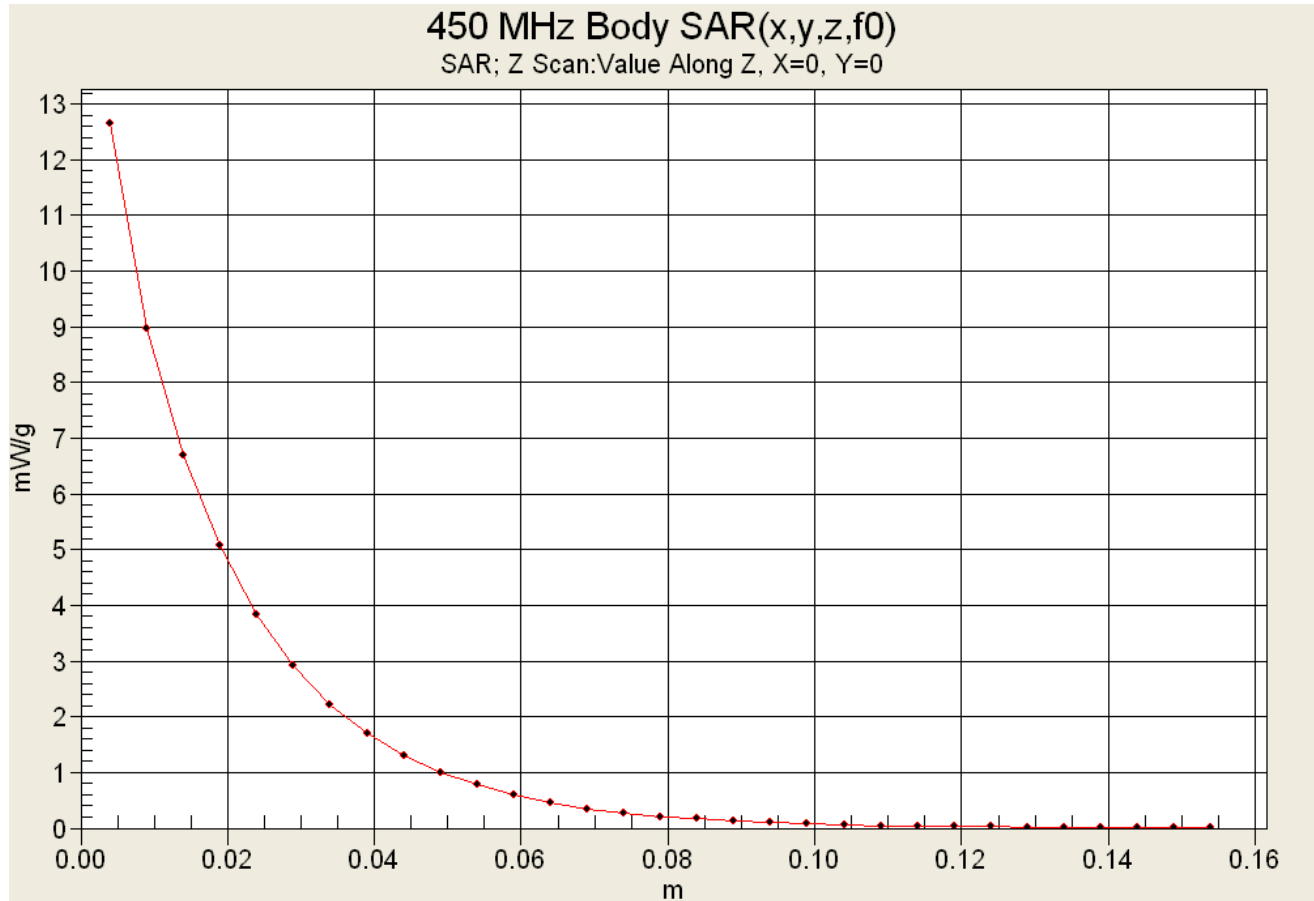
**SAR(1 g) = 13 mW/g; SAR(10 g) = 9.31 mW/g**



Maximum value of SAR (measured) = 13.5 mW/g



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



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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 #34 (A34)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 498.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Behind-the-Head Headset w/ Boom Mic & PTT (P/N: KHS-22)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 498 \text{ MHz}$ ;  $\sigma = 0.978 \text{ mho/m}$ ;  $\epsilon_r = 59.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 13.7 mW/g

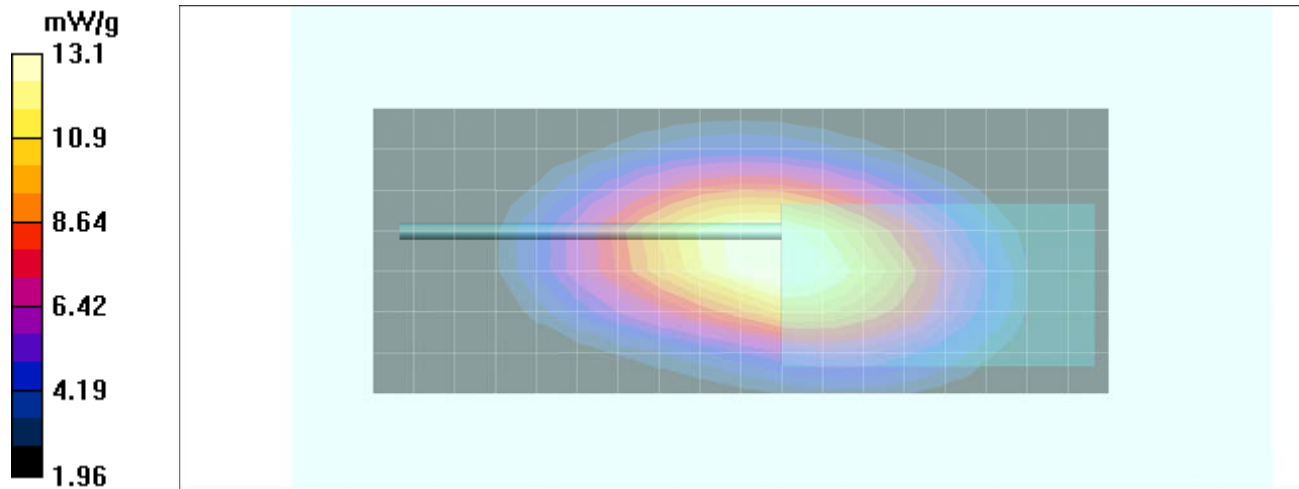
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 113.2 V/m; Power Drift = -0.196 dB

Peak SAR (extrapolated) = 18.1 W/kg



**SAR(1 g) = 12.5 mW/g; SAR(10 g) = 8.93 mW/g**

Maximum value of SAR (measured) = 13.1 mW/g



<b>Applicant:</b>	<b>Kenwood USA Corporation</b>	<b>FCC ID:</b>	<b>ALH431000</b>	<b>DUT Model:</b>	<b>NX-320-K3</b>	<b>KENWOOD</b>
<b>DUT Type:</b>	<b>Portable UHF-H PTT Radio Transceiver</b>	<b>Transmitter Frequency Range:</b>		<b>450.0 - 512.0 MHz</b>		
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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 #35 (A35)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 512.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Behind-the-Head Headset w/ Boom Mic & PTT (P/N: KHS-22)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 512 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 58.2$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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

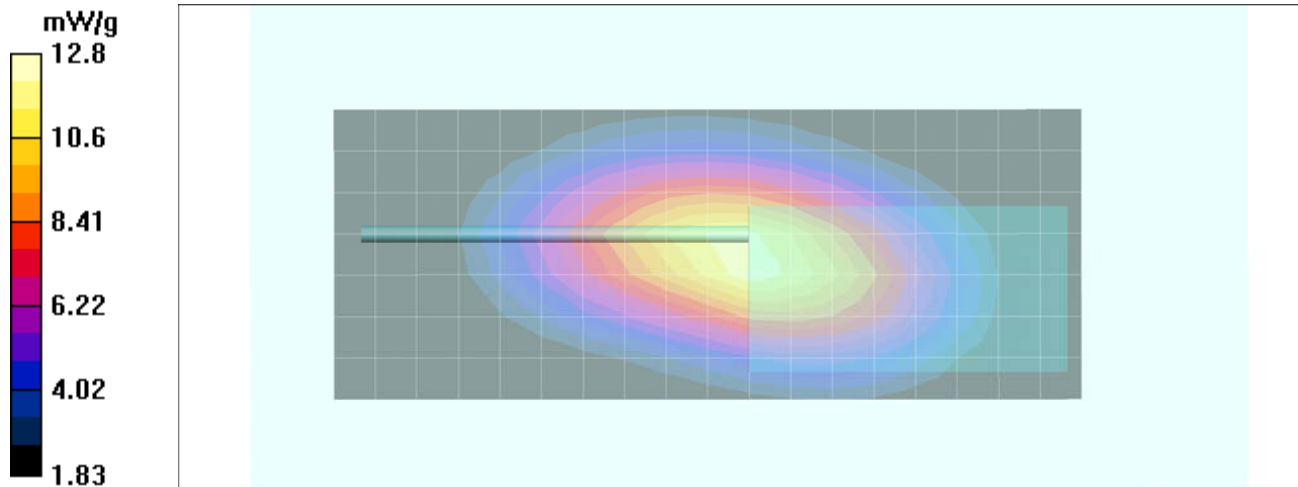
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 112.1 V/m; Power Drift = -0.175 dB



Peak SAR (extrapolated) = 17.6 W/kg

**SAR(1 g) = 12.1 mW/g; SAR(10 g) = 8.62 mW/g**

Maximum value of SAR (measured) = 12.8 mW/g



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

## Audio Accessory SAR Plot #36 (A36)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 470.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Single Muff Headset w/ Boom Mic (P/N: KHS-7)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used:  $f = 470 \text{ MHz}$ ;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 58.6$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 12.1 mW/g

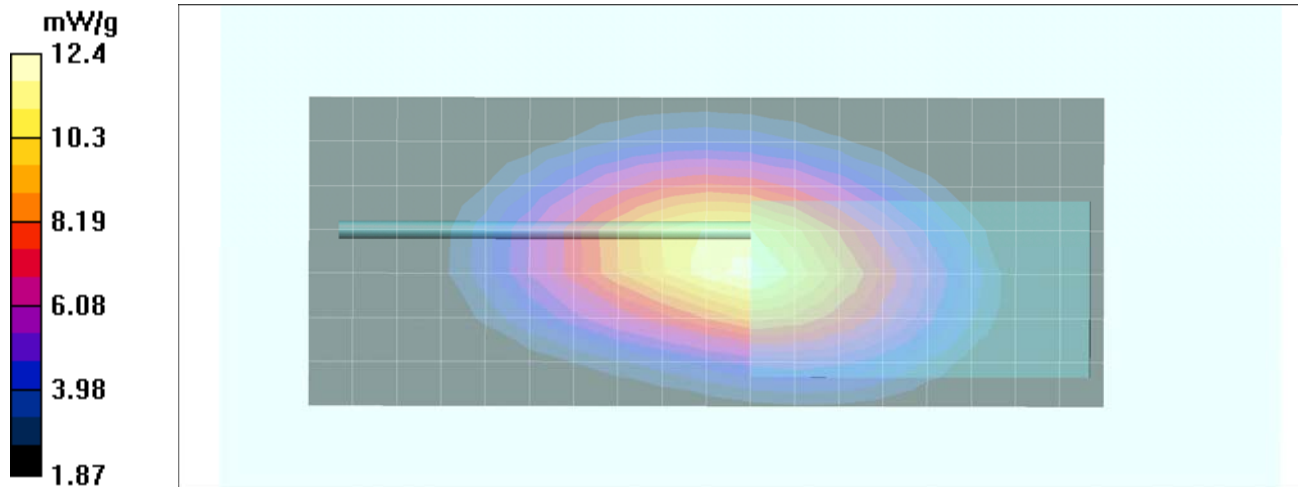
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 109.1 V/m; Power Drift = 0.009 dB



Peak SAR (extrapolated) = 17.2 W/kg

**SAR(1 g) = 11.8 mW/g; SAR(10 g) = 8.5 mW/g**

Maximum value of SAR (measured) = 12.4 mW/g



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

## Audio Accessory SAR Plot #37 (A37)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 484.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Single Muff Headset w/ Boom Mic (P/N: KHS-7)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 484 \text{ MHz}$ ;  $\sigma = 0.964 \text{ mho/m}$ ;  $\epsilon_r = 59.4$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 13.2 mW/g

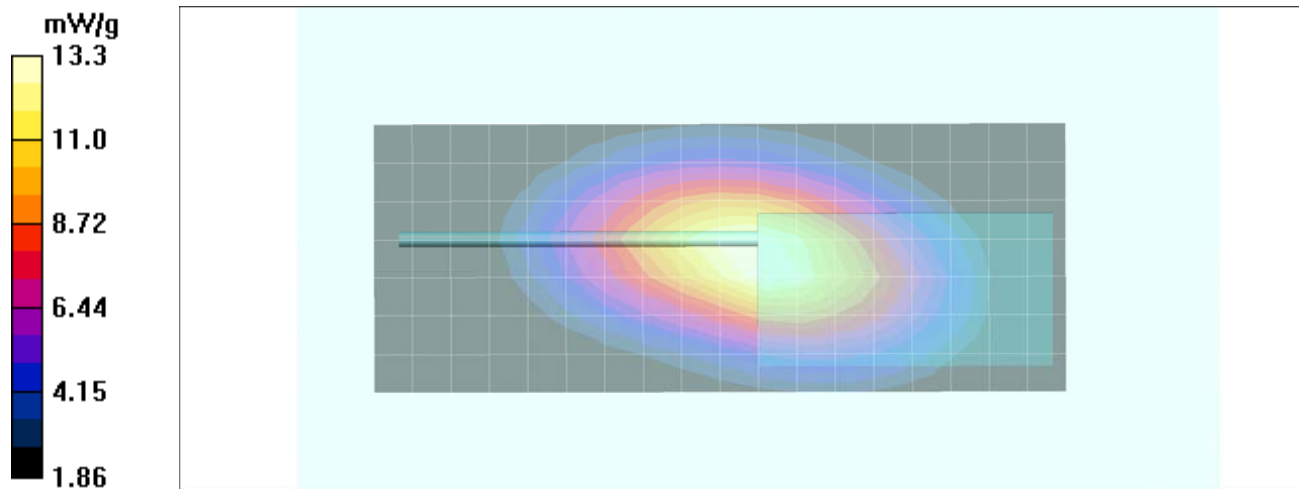
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 117.1 V/m; Power Drift = -0.517 dB



Peak SAR (extrapolated) = 18.4 W/kg

**SAR(1 g) = 12.7 mW/g; SAR(10 g) = 9.12 mW/g**

Maximum value of SAR (measured) = 13.3 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	<b>KENWOOD</b>
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #38 (A38)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 498.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Single Muff Headset w/ Boom Mic (P/N: KHS-7)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 498 \text{ MHz}$ ;  $\sigma = 0.978 \text{ mho/m}$ ;  $\epsilon_r = 59.5$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 12.1 mW/g

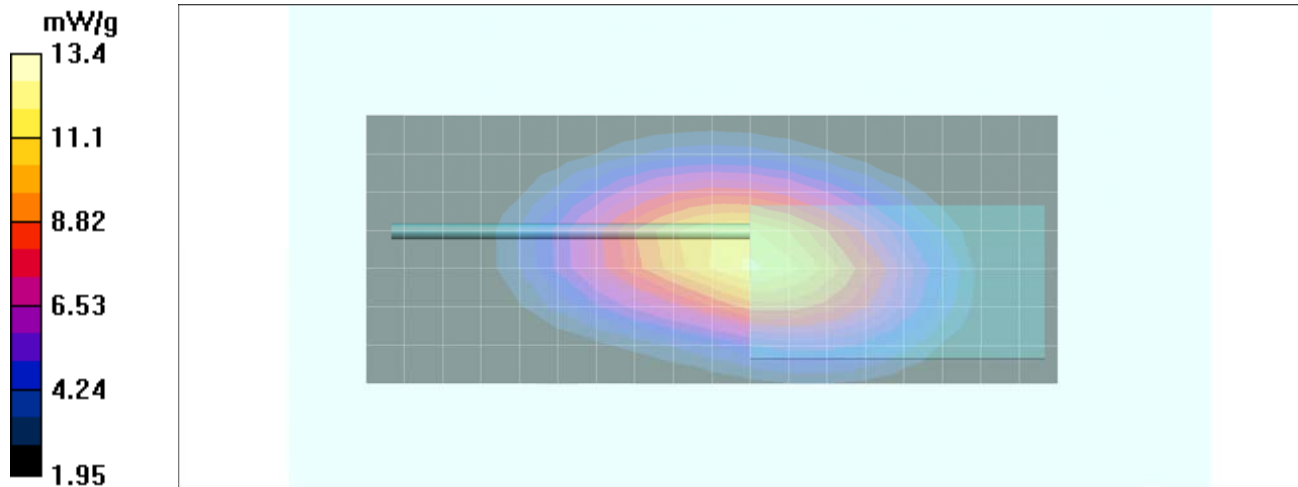
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 112.0 V/m; Power Drift = -0.316 dB



Peak SAR (extrapolated) = 18.6 W/kg

**SAR(1 g) = 12.7 mW/g; SAR(10 g) = 9.07 mW/g**

Maximum value of SAR (measured) = 13.4 mW/g



<b>Applicant:</b>	Kenwood USA Corporation	<b>FCC ID:</b>	ALH431000	<b>DUT Model:</b>	NX-320-K3	KENWOOD
<b>DUT Type:</b>	Portable UHF-H PTT Radio Transceiver	<b>Transmitter Frequency Range:</b>		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 #39 (A39)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 512.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Single Muff Headset w/ Boom Mic (P/N: KHS-7)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated):  $f = 512 \text{ MHz}$ ;  $\sigma = 0.98 \text{ mho/m}$ ;  $\epsilon_r = 58.2$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 11.4 mW/g

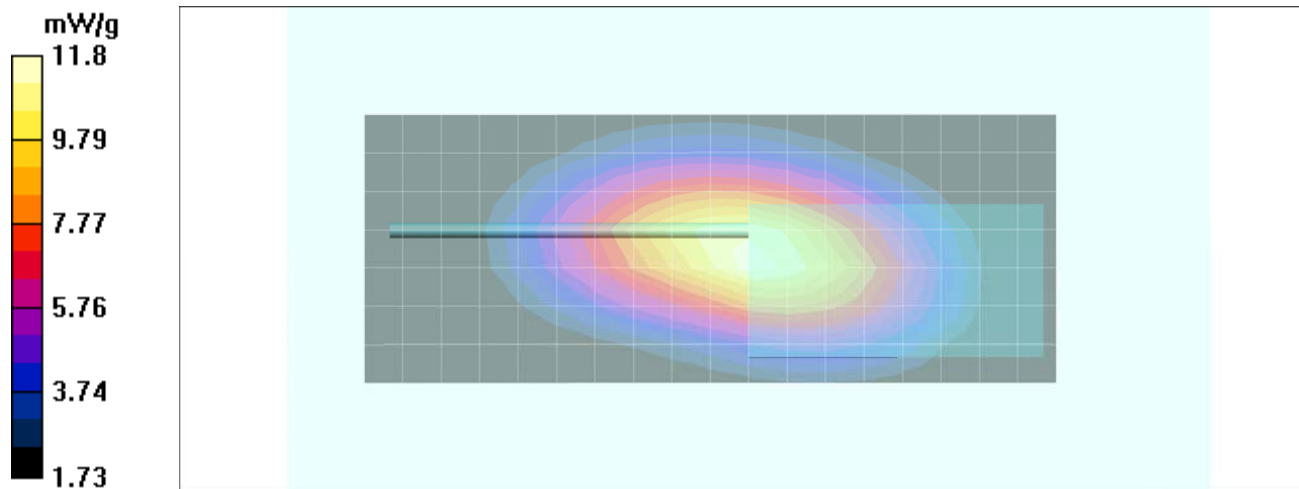
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 107.6 V/m; Power Drift = -0.275 dB



Peak SAR (extrapolated) = 16.2 W/kg

**SAR(1 g) = 11.2 mW/g; SAR(10 g) = 8.04 mW/g**

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



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

## Audio Accessory SAR Plot #40 (A40)

Date Tested: 01/31/2011

### Body-worn SAR - KRA-27M2 "Antenna D" - KNB-56N 1400mAh Ni-MH "Battery c" – 470.0 MHz

**DUT: Kenwood NX-320-K3; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 10**  
**Audio Accessory Category 1 (Headset); Type: Single Muff Headset w/ Boom Mic & PTT (P/N: KHS-7A)**  
**Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)**

Ambient Temp: 24.1°C; Fluid Temp: 23.2°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used:  $f = 470 \text{ MHz}$ ;  $\sigma = 0.95 \text{ mho/m}$ ;  $\epsilon_r = 58.6$ ;  $\rho = 1000 \text{ kg/m}^3$

- 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) = 12.0 mW/g

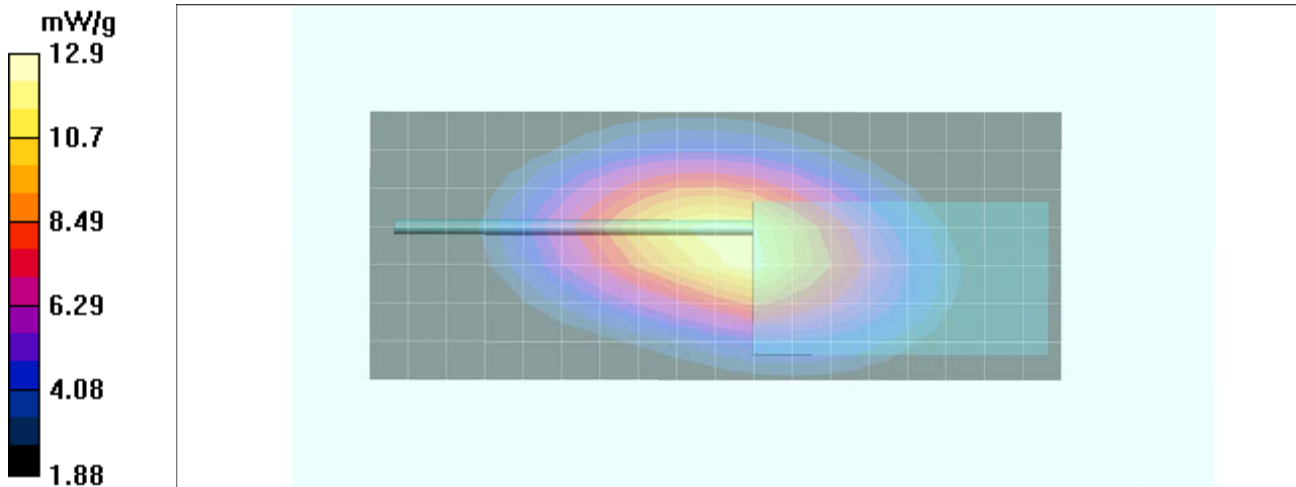
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=7.5\text{mm}$ ,  $dy=7.5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 112.1 V/m; Power Drift = -0.169 dB

Peak SAR (extrapolated) = 18.0 W/kg

**SAR(1 g) = 12.3 mW/g; SAR(10 g) = 8.76 mW/g**

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



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