

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #76 (A76)

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 2 (Earpiece); Type: Clip Mic w/ Earphone (P/N: KHS-26)
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) = 11.1 mW/g

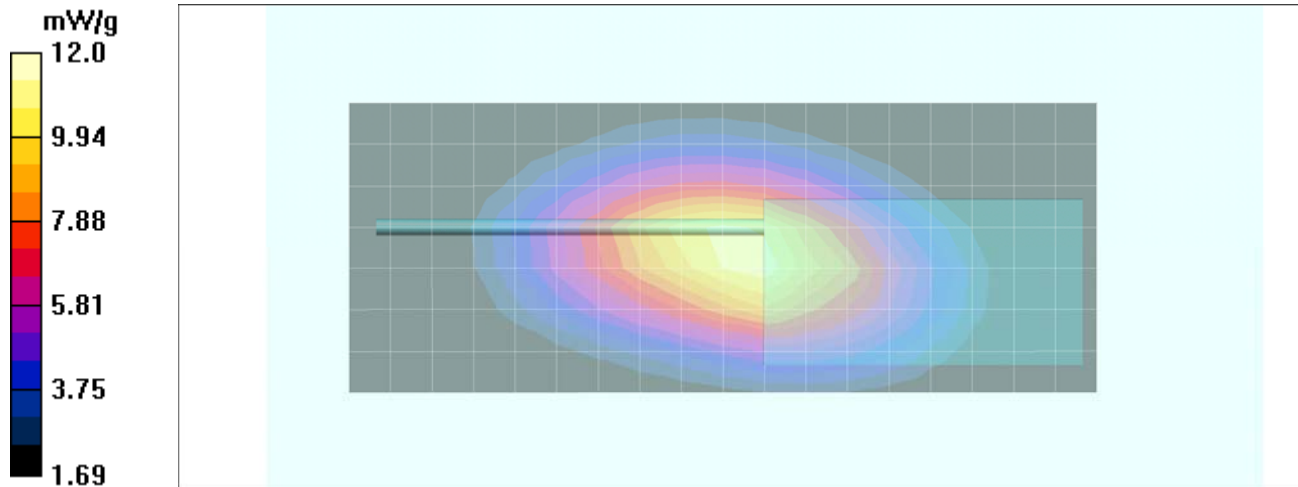
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 113.0 V/m; Power Drift = -0.338 dB

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 11.5 mW/g; SAR(10 g) = 8.28 mW/g

Maximum value of SAR (measured) = 12.0 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 214 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	 
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #77 (A77)

Date Tested: 01/28/2011

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: Clip Mic w/ Earphone (P/N: KHS-26)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.954 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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

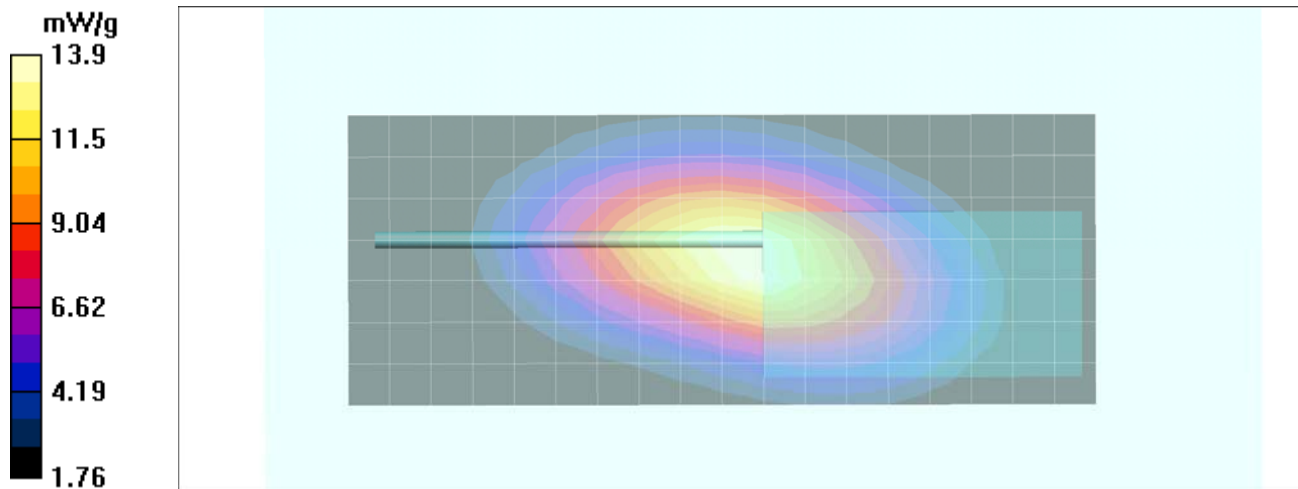
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 122.9 V/m; Power Drift = -0.470 dB

Peak SAR (extrapolated) = 19.3 W/kg

SAR(1 g) = 13.2 mW/g; SAR(10 g) = 9.44 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:	450.0 - 512.0 MHz			
2011 Celltech Labs Inc.	This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.					Page 215 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #78 (A78)

Date Tested: 04/06/2011

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

DUT: Kenwood NX-320-K; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K124
Audio Accessory Category 2 (Earpiece); Type: Clip Mic w/ Earphone (P/N: KHS-26)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 21.0°C; Fluid Temp: 20.3°C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.942 \text{ mho/m}$; $\epsilon_r = 58.1$; $\rho = 1000 \text{ kg/m}^3$

- 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

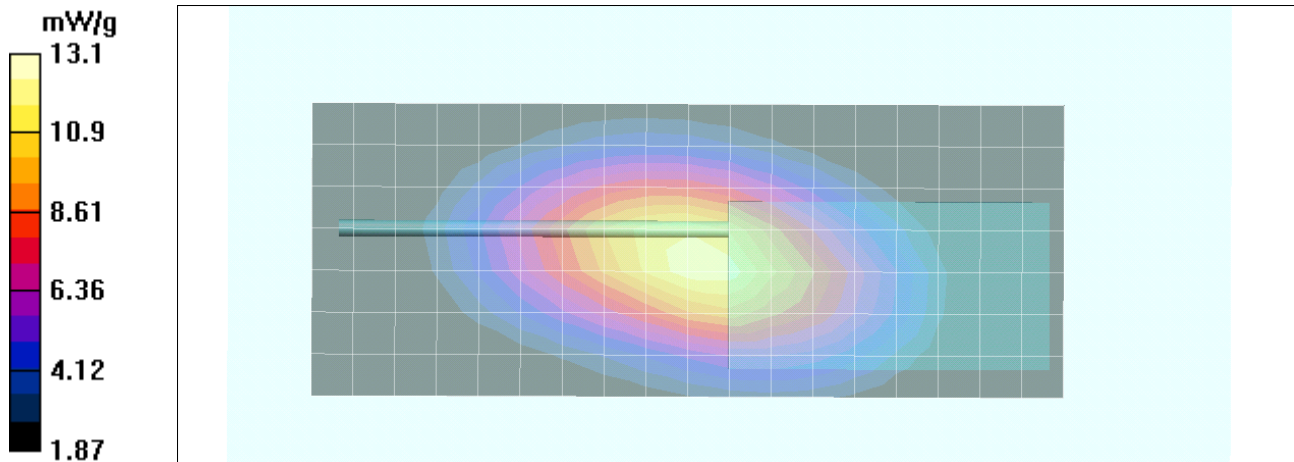
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 116.6 V/m; Power Drift = -0.569 dB


Peak SAR (extrapolated) = 18.1 W/kg

SAR(1 g) = 12.4 mW/g; SAR(10 g) = 8.87 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 216 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #79 (A79)

Date Tested: 04/05/2011

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

DUT: Kenwood NX-320-K2; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K218
Audio Accessory Category 2 (Earpiece); Type: Clip Mic w/ Earphone (P/N: KHS-26)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 22.0°C; Fluid Temp: 20.5°C; Barometric Pressure: 101.1 kPa; Humidity: 28%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.938 \text{ mho/m}$; $\epsilon_r = 58.1$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 12.2 mW/g

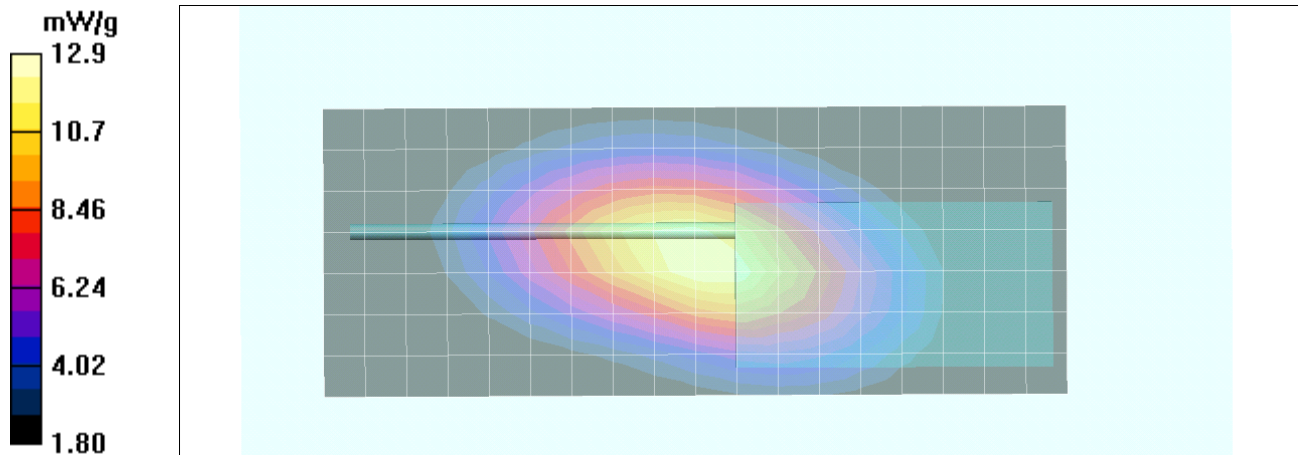
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 117.3 V/m; Power Drift = -0.461 dB

Peak SAR (extrapolated) = 18.0 W/kg

SAR(1 g) = 12.3 mW/g; SAR(10 g) = 8.82 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 217 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #80 (A80)

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 2 (Earpiece); Type: Clip Mic w/ Earphone (P/N: KHS-26)
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) = 12.9 mW/g

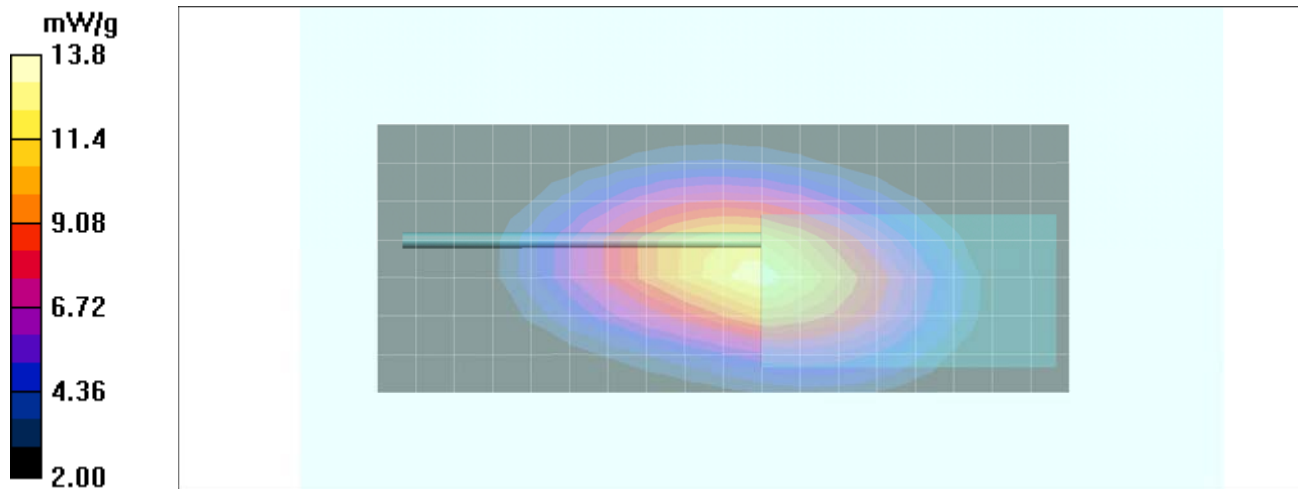
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 120.0 V/m; Power Drift = -0.363 dB

Peak SAR (extrapolated) = 19.2 W/kg

SAR(1 g) = 13.2 mW/g; SAR(10 g) = 9.46 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 218 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #81 (A81)

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 2 (Earpiece); Type: Clip Mic w/ Earphone (P/N: KHS-26)
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) = 12.4 mW/g

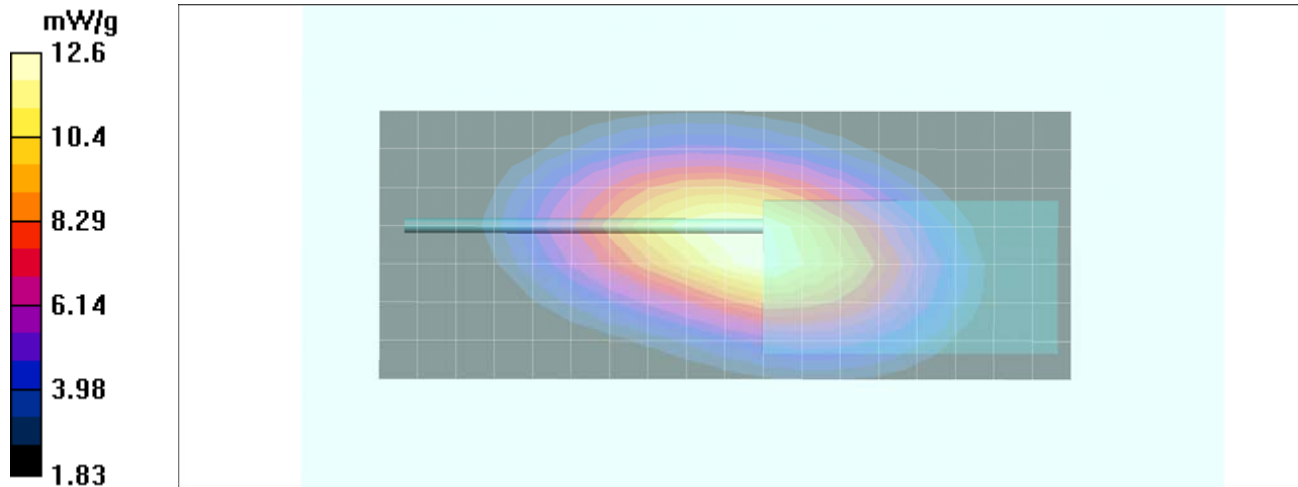
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 110.3 V/m; Power Drift = -0.196 dB

Peak SAR (extrapolated) = 17.4 W/kg

SAR(1 g) = 12 mW/g; SAR(10 g) = 8.52 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 219 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #82 (A82)

Date Tested: 01/28/2011

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-Mic Kit); Type: 2-Wire Palm Mic w/ Earphone (P/N: KHS-8BL)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 58.8$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 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

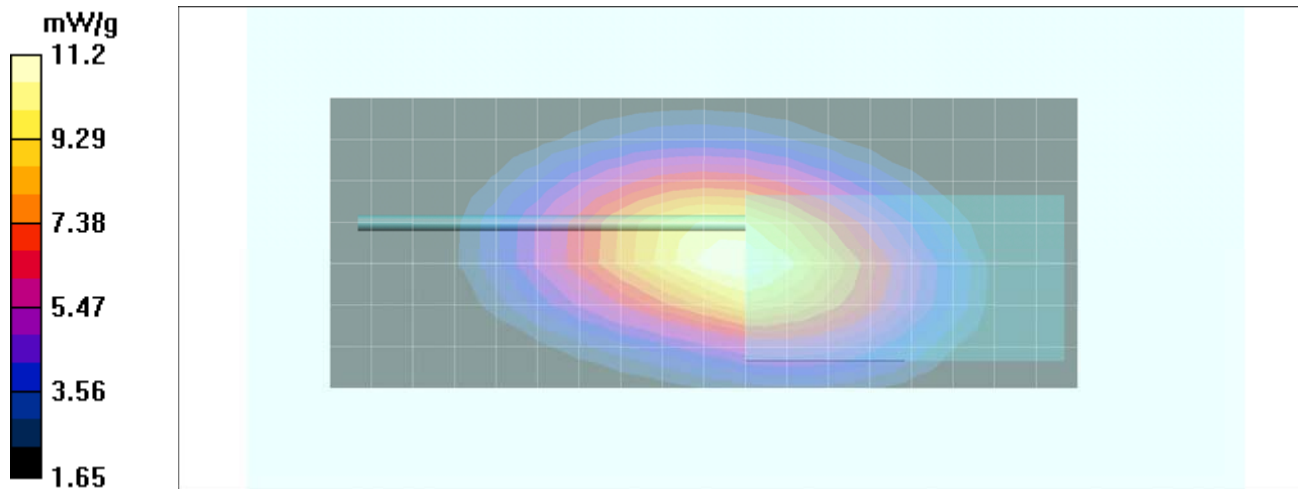
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 106.0 V/m; Power Drift = 0.098 dB

Peak SAR (extrapolated) = 15.6 W/kg

SAR(1 g) = 10.7 mW/g; SAR(10 g) = 7.7 mW/g

Maximum value of SAR (measured) = 11.2 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 220 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #83 (A83)

Date Tested: 01/28/2011

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-Mic Kit); Type: 2-Wire Palm Mic w/ Earphone (P/N: KHS-8BL)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.954 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 14.1 mW/g

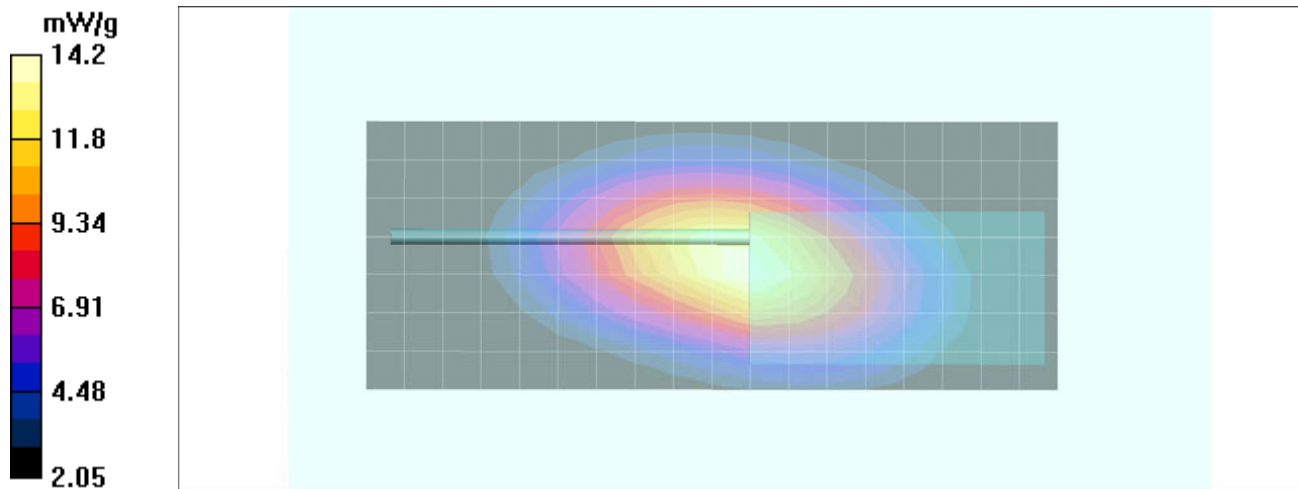
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 123.3 V/m; Power Drift = -0.485 dB

Peak SAR (extrapolated) = 19.7 W/kg

SAR(1 g) = 13.5 mW/g; SAR(10 g) = 9.68 mW/g

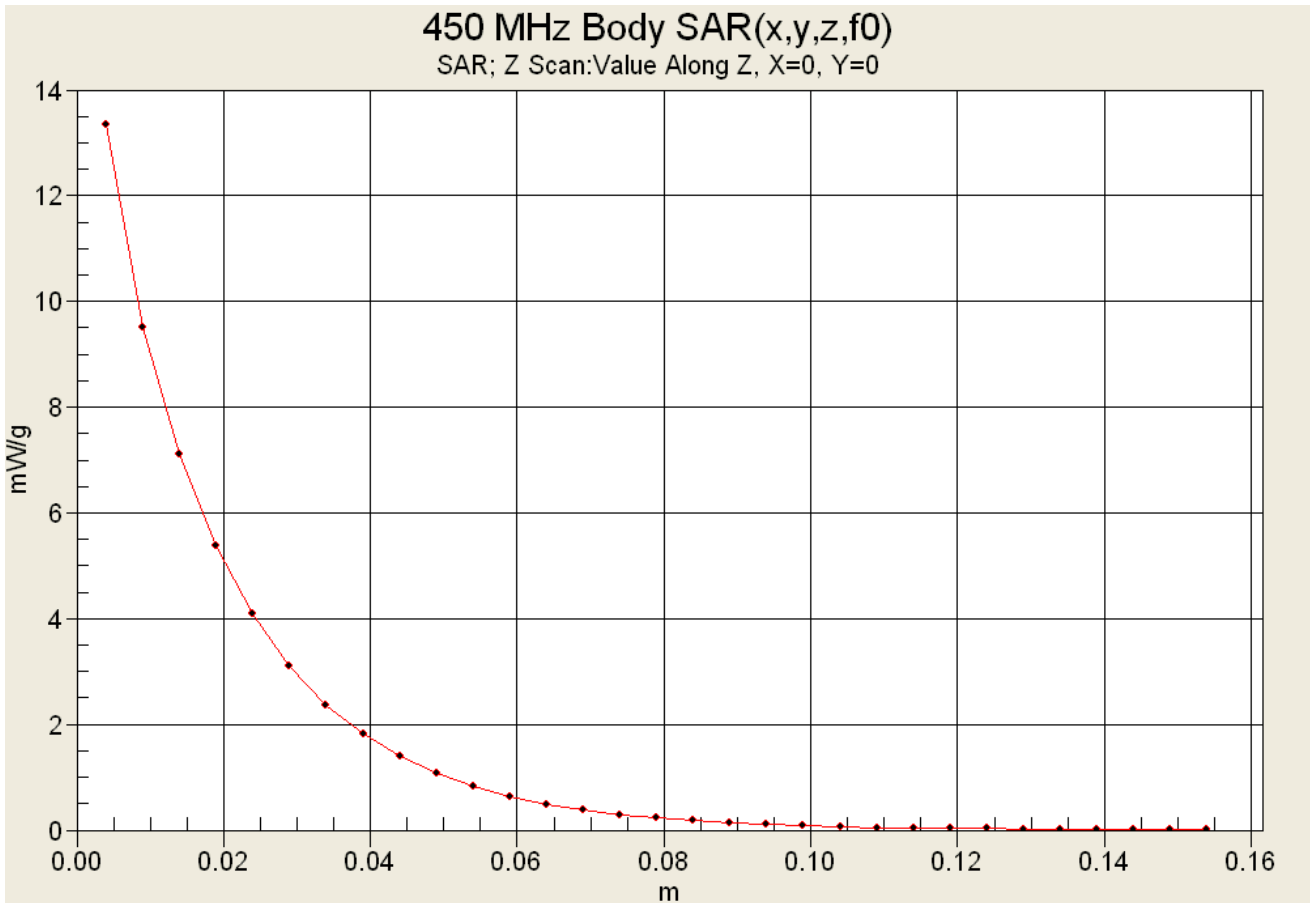
Maximum value of SAR (measured) = 14.2 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 221 of 361

	<u>Dates of Evaluation (K3)</u> Jan. 4,6,26-28,31, 2011	<u>Test Report Serial No.</u> 121510ALH-T1070-S90U	<u>Test Report Revision No.</u> Rev. 1.3 (4th Release)	 Test Lab Certificate No. 2470.01
	<u>Test Report Issue Date</u> April 14, 2011	<u>Dates of Evaluation (K/K2)</u> March 30 - April 7, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 222 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #84 (A84)

Date Tested: 04/06/2011

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

DUT: Kenwood NX-320-K; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K124
Audio Accessory Category 3 (Palm-Mic Kit); Type: 2-Wire Palm Mic w/ Earphone (P/N: KHS-8BL)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 21.0°C; Fluid Temp: 20.3°C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.942 \text{ mho/m}$; $\epsilon_r = 58.1$; $\rho = 1000 \text{ kg/m}^3$

- 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: Fiberglas 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

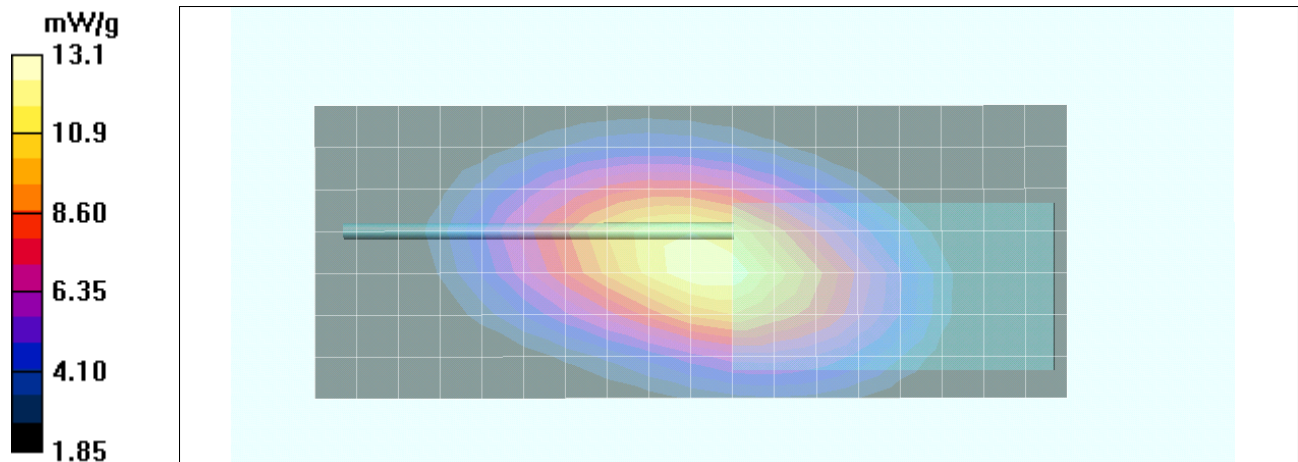
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 118.0 V/m; Power Drift = -0.538 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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 223 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #85 (A85)

Date Tested: 04/06/2011

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

DUT: Kenwood NX-320-K2; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K1218
Audio Accessory Category 3 (Palm-Mic Kit); Type: 2-Wire Palm Mic w/ Earphone (P/N: KHS-8BL)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 21.0°C; Fluid Temp: 20.3°C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.942 \text{ mho/m}$; $\epsilon_r = 58.1$; $\rho = 1000 \text{ kg/m}^3$

- 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: Fiberglas 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

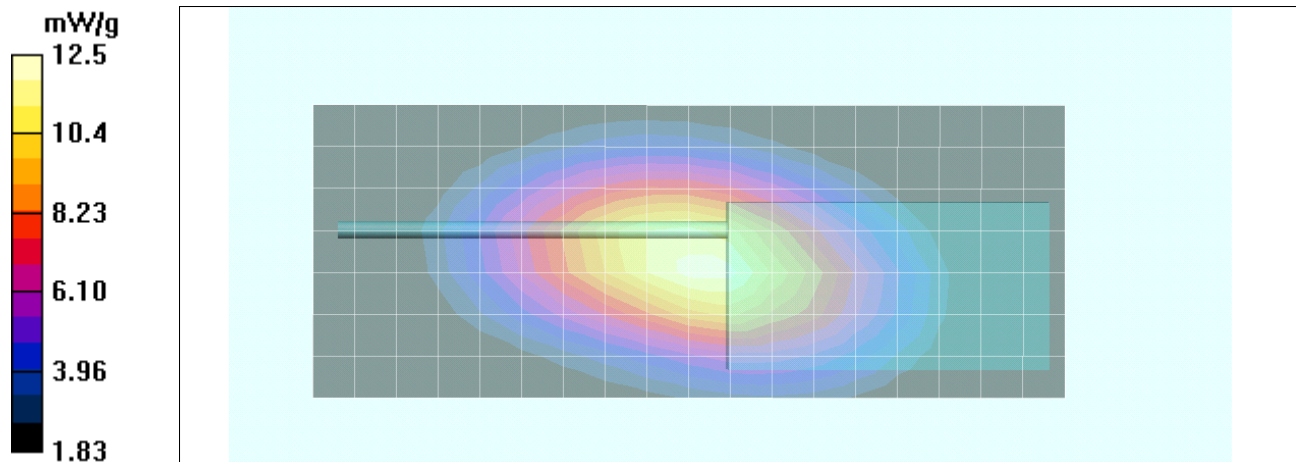
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 116.9 V/m; Power Drift = -0.559 dB

Peak SAR (extrapolated) = 17.2 W/kg

SAR(1 g) = 11.9 mW/g; SAR(10 g) = 8.56 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 224 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #86 (A86)

Date Tested: 01/28/2011

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-Mic Kit); Type: 2-Wire Palm Mic w/ Earphone (P/N: KHS-8BL)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.968 \text{ mho/m}$; $\epsilon_r = 58.1$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 13.9 mW/g

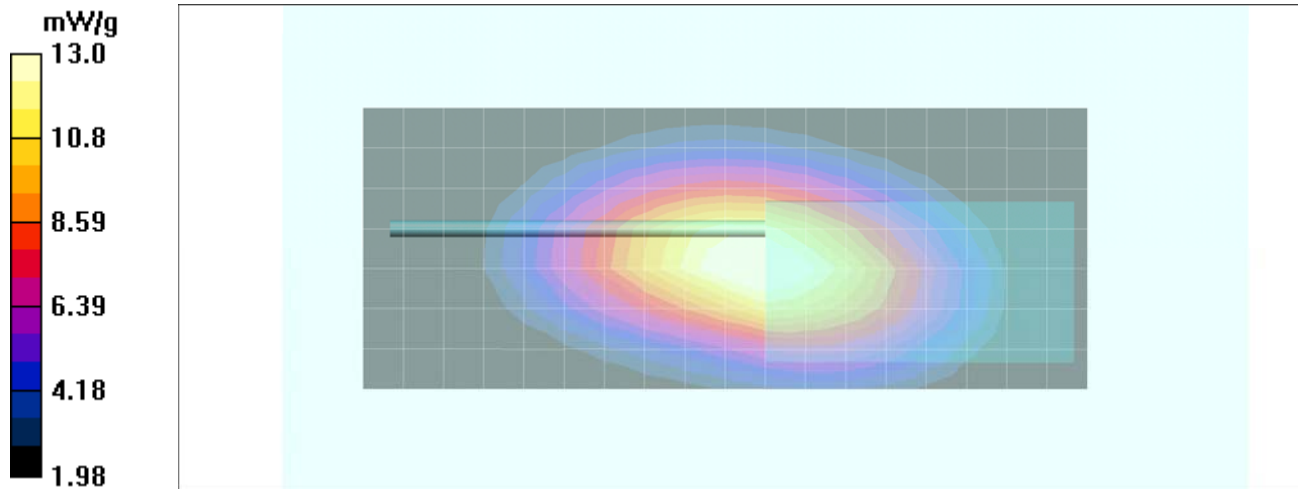
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 117.1 V/m; Power Drift = -0.339 dB

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 12.4 mW/g; SAR(10 g) = 8.86 mW/g

Maximum value of SAR (measured) = 13.0 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 225 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #87 (A87)

Date Tested: 01/28/2011

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-Mic Kit); Type: 2-Wire Palm Mic w/ Earphone (P/N: KHS-8BL)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 57.9$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 13.0 mW/g

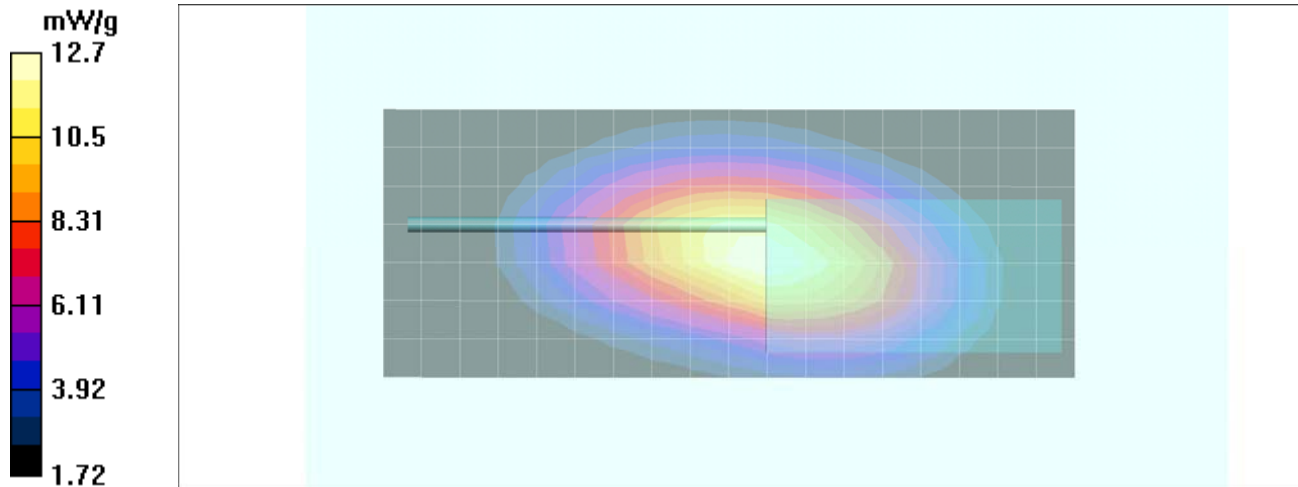
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 107.1 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 17.7 W/kg

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

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 226 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #88 (A88)

Date Tested: 01/28/2011

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-Microphone); Type: Slim-Line Speaker-Microphone (P/N: KMC-21)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 58.8$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 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) = 11.3 mW/g

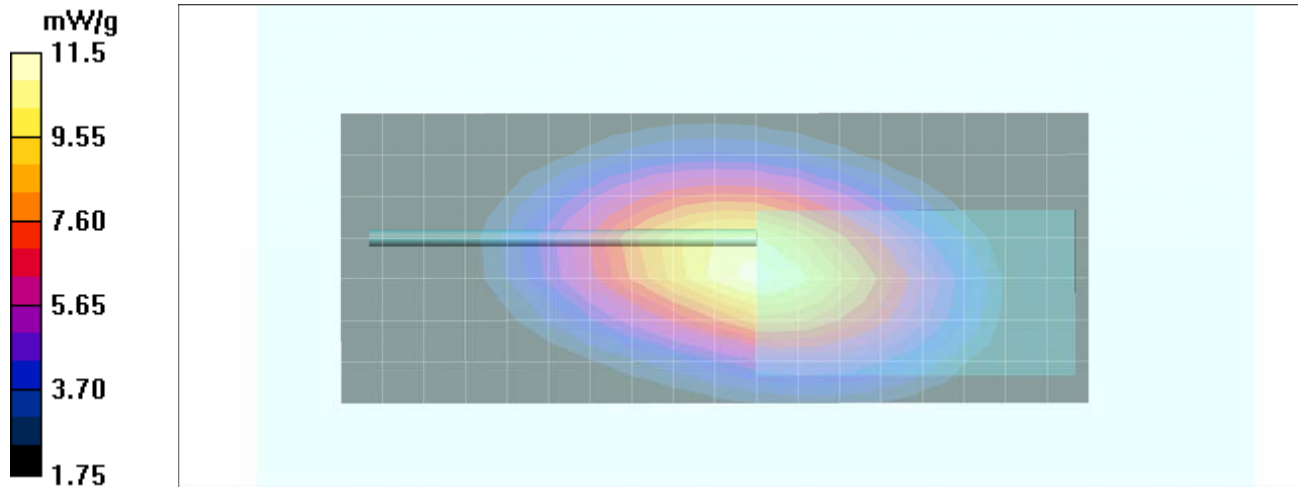
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 108.4 V/m; Power Drift = 0.054 dB

Peak SAR (extrapolated) = 15.9 W/kg

SAR(1 g) = 11 mW/g; SAR(10 g) = 7.89 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 227 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #89 (A89)

Date Tested: 01/28/2011

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-Microphone); Type: Slim-Line Speaker-Microphone (P/N: KMC-21)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.954 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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

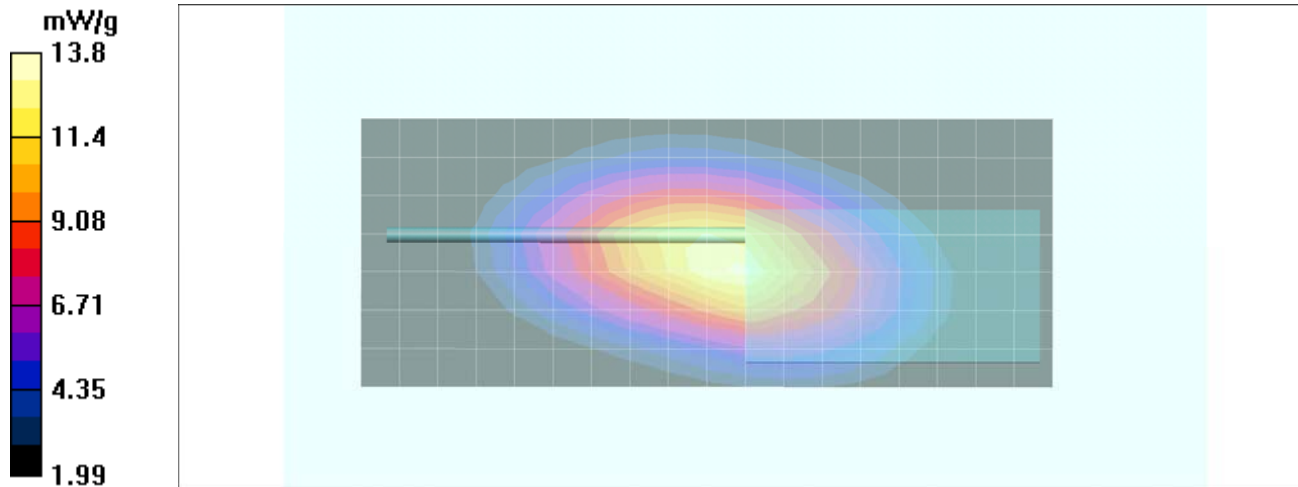
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 121.6 V/m; Power Drift = -0.505 dB


Peak SAR (extrapolated) = 19.1 W/kg

SAR(1 g) = 13.1 mW/g; SAR(10 g) = 9.33 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 228 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #90 (A90)

Date Tested: 01/28/2011

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-Microphone); Type: Slim-Line Speaker-Microphone (P/N: KMC-21)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.968 \text{ mho/m}$; $\epsilon_r = 58.1$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 13.4 mW/g

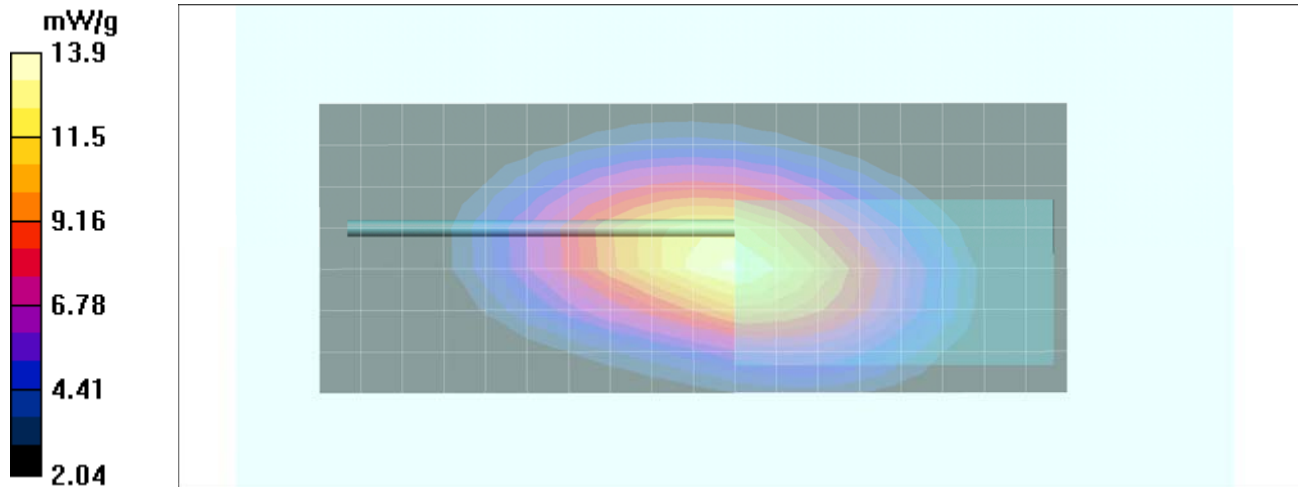
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 120.0 V/m; Power Drift = -0.347 dB


Peak SAR (extrapolated) = 19.2 W/kg

SAR(1 g) = 13.2 mW/g; SAR(10 g) = 9.38 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 229 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #91 (A91)

Date Tested: 04/06/2011

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

DUT: Kenwood NX-320-K; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K124
Audio Accessory Category 4 (Speaker-Microphone); Type: Slim-Line Speaker-Microphone (P/N: KMC-21)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 21.0°C; Fluid Temp: 20.3°C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.954 \text{ mho/m}$; $\epsilon_r = 57.8$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 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) = 12.8 mW/g

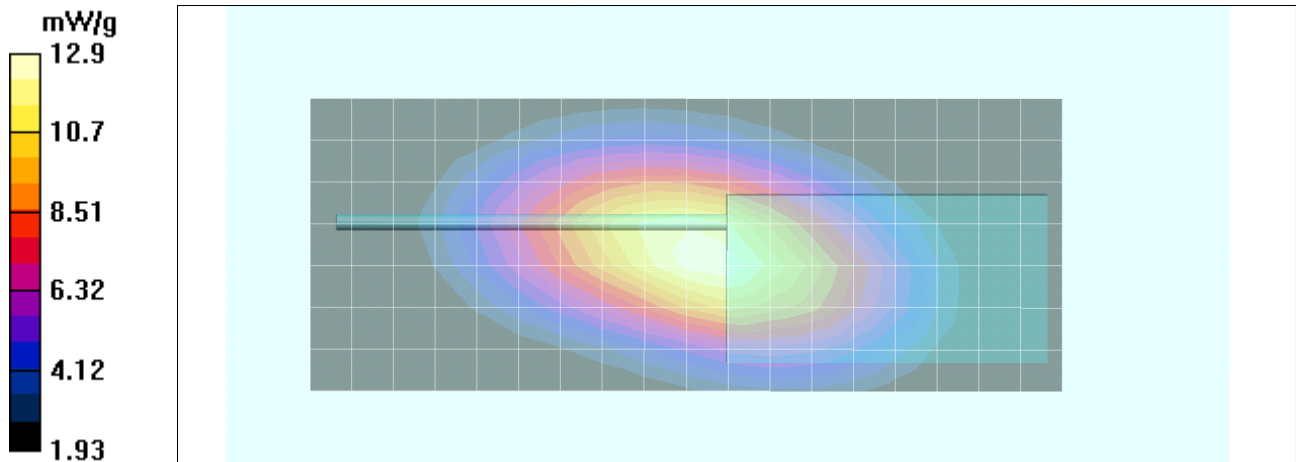
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 114.1 V/m; Power Drift = -0.253 dB

Peak SAR (extrapolated) = 17.8 W/kg

SAR(1 g) = 12.3 mW/g; SAR(10 g) = 8.81 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 230 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #92 (A92)

Date Tested: 04/06/2011

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

DUT: Kenwood NX-320-K2; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K218
Audio Accessory Category 4 (Speaker-Microphone); Type: Slim-Line Speaker-Microphone (P/N: KMC-21)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 21.0°C; Fluid Temp: 20.3°C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.954 \text{ mho/m}$; $\epsilon_r = 57.8$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 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) = 12.5 mW/g

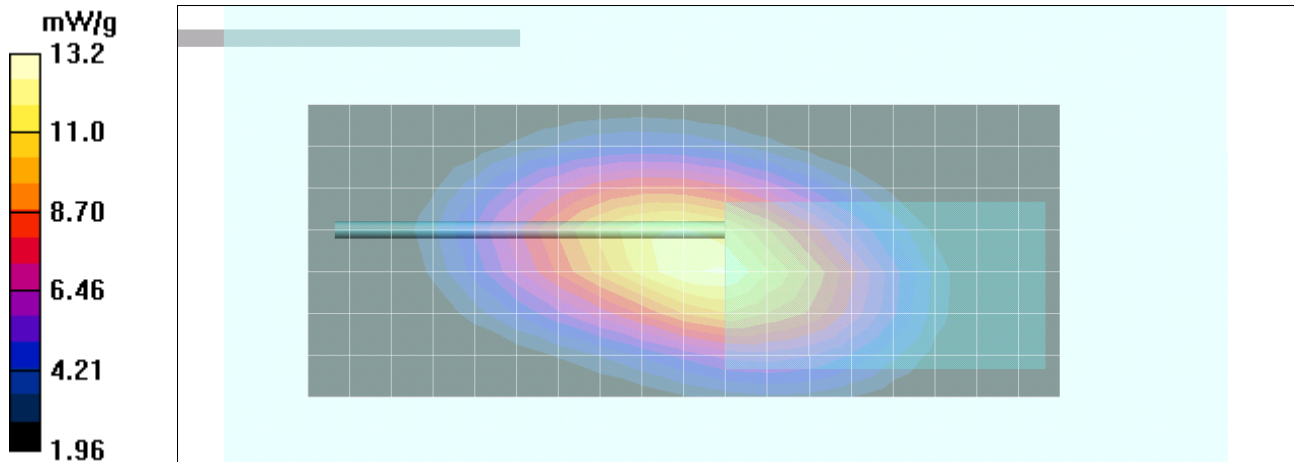
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 115.6 V/m; Power Drift = -0.277 dB

Peak SAR (extrapolated) = 18.2 W/kg

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

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 231 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #93 (A93)

Date Tested: 01/28/2011

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-Microphone); Type: Slim-Line Speaker-Microphone (P/N: KMC-21)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 57.9$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 12.5 mW/g

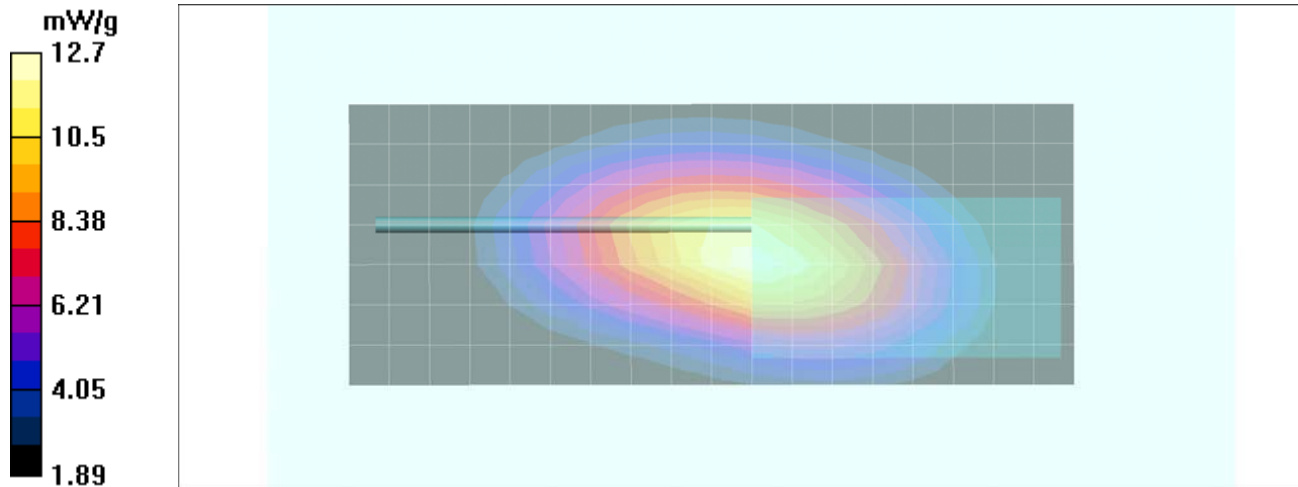
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 111.7 V/m; Power Drift = -0.268 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) = 12.7 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 232 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	 
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #94 (A94)

Date Tested: 01/28/2011

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-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 470 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used: $f = 470 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 58.8$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 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) = 12.8 mW/g

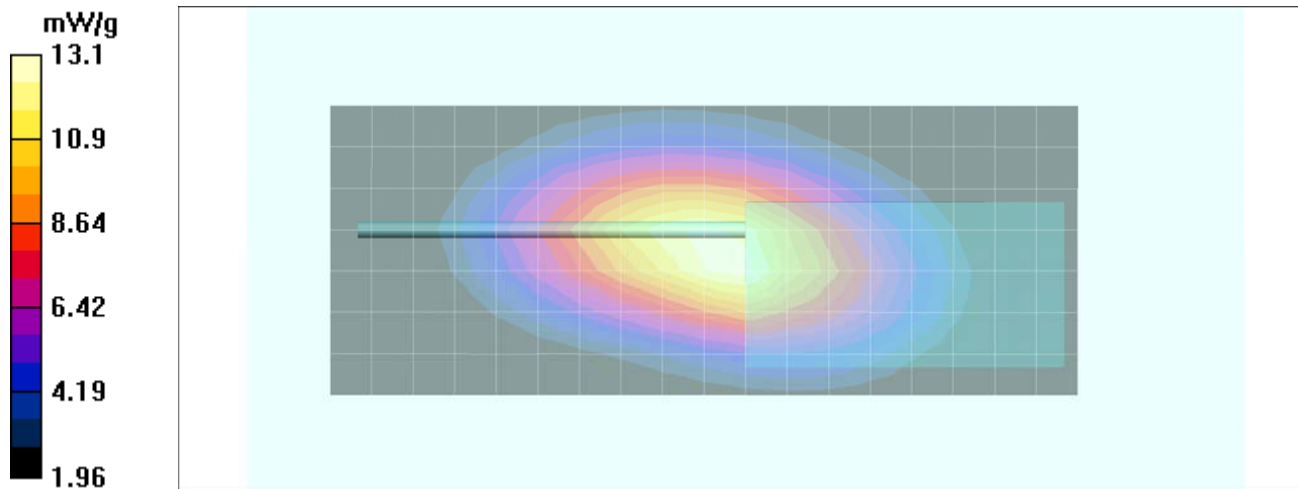
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 116.0 V/m; Power Drift = -0.223 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 12.5 mW/g; SAR(10 g) = 8.94 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 233 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #95 (A95)

Date Tested: 01/28/2011

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-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.954 \text{ mho/m}$; $\epsilon_r = 58.5$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 1.7 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) = 13.8 mW/g

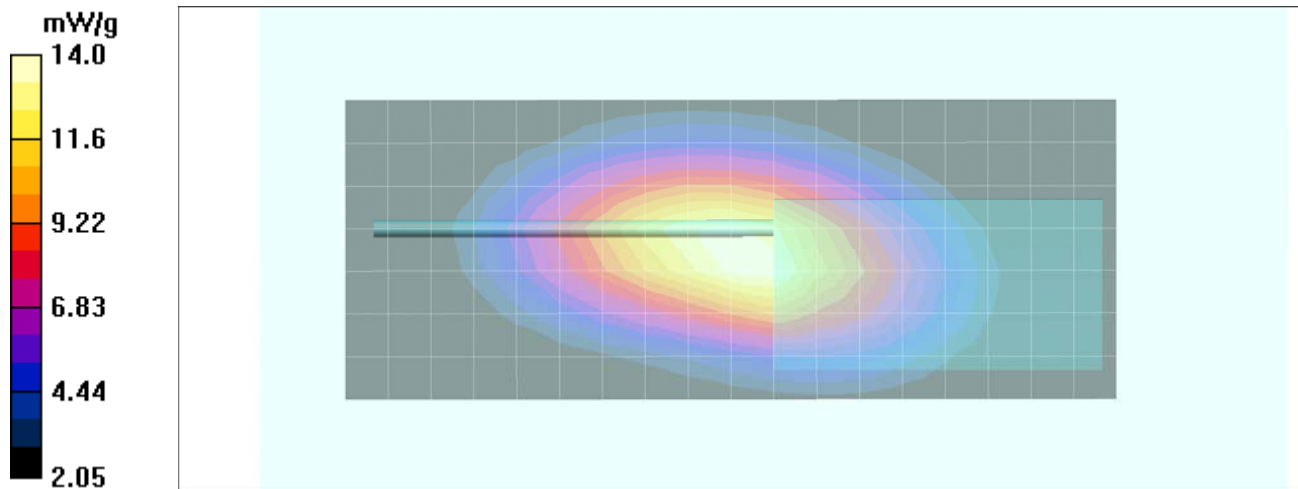
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 119.2 V/m; Power Drift = -0.461 dB


Peak SAR (extrapolated) = 19.4 W/kg

SAR(1 g) = 13.3 mW/g; SAR(10 g) = 9.49 mW/g

Maximum value of SAR (measured) = 14.0 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 234 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #96 (A96)

Date Tested: 04/06/2011

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

DUT: Kenwood NX-320-K; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K124
Audio Accessory Category 4 (Speaker-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 21.0°C; Fluid Temp: 20.3°C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.942 \text{ mho/m}$; $\epsilon_r = 58.1$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 12.5 mW/g

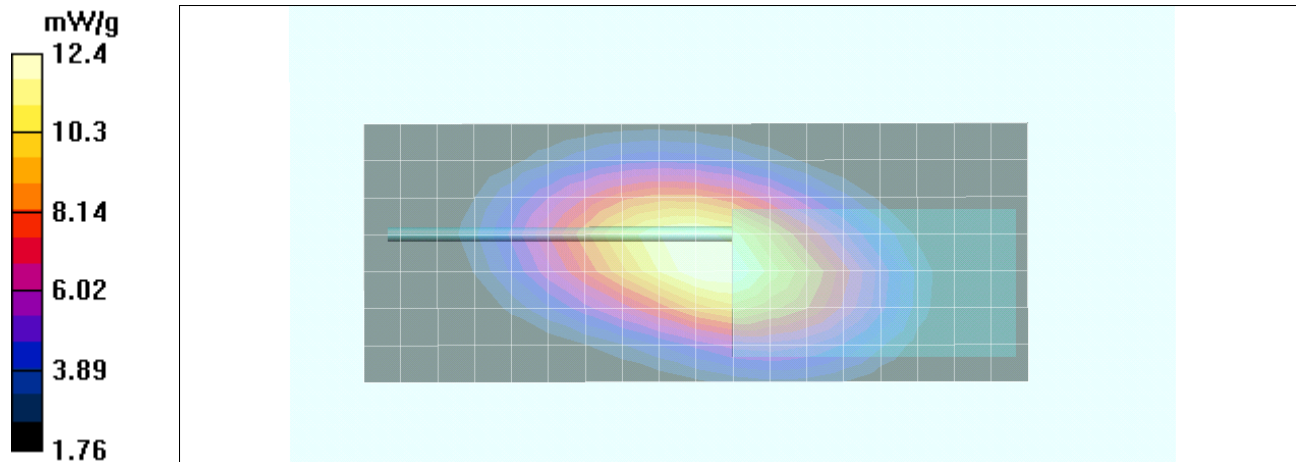
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 115.9 V/m; Power Drift = -0.571 dB

Peak SAR (extrapolated) = 17.1 W/kg

SAR(1 g) = 11.8 mW/g; SAR(10 g) = 8.51 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 235 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #97 (A97)

Date Tested: 04/06/2011

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

DUT: Kenwood NX-320-K2; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K218
Audio Accessory Category 4 (Speaker-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 21.0°C; Fluid Temp: 20.3°C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Frequency: 484 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 484 \text{ MHz}$; $\sigma = 0.942 \text{ mho/m}$; $\epsilon_r = 58.1$; $\rho = 1000 \text{ kg/m}^3$

- 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=15mm, dy=15mm

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

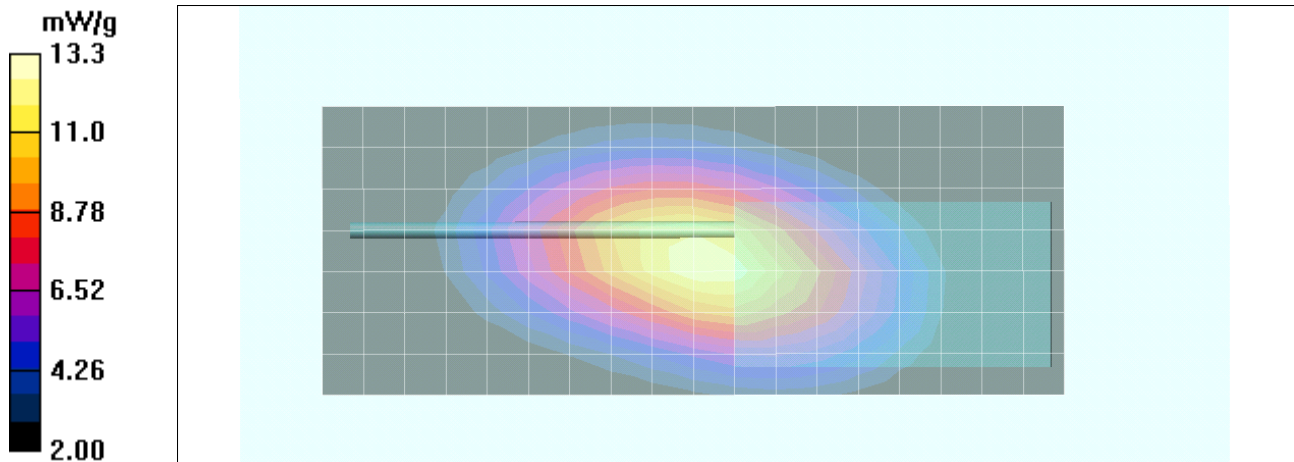
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 117.7 V/m; Power Drift = -0.508 dB

Peak SAR (extrapolated) = 18.4 W/kg

SAR(1 g) = 12.7 mW/g; SAR(10 g) = 9.09 mW/g

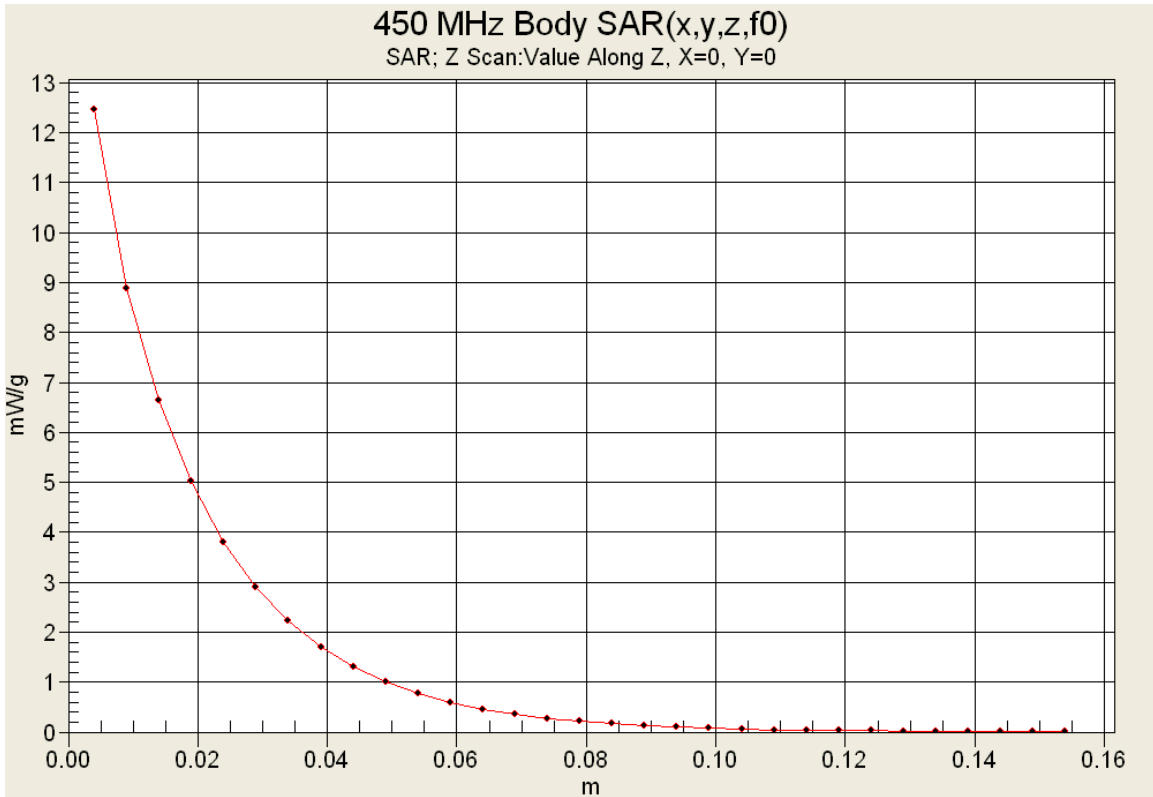
Maximum value of SAR (measured) = 13.3 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 236 of 361

	<u>Dates of Evaluation (K3)</u> Jan. 4,6,26-28,31, 2011	<u>Test Report Serial No.</u> 121510ALH-T1070-S90U	<u>Test Report Revision No.</u> Rev. 1.3 (4th Release)	 Test Lab Certificate No. 2470.01
	<u>Test Report Issue Date</u> April 14, 2011	<u>Dates of Evaluation (K/K2)</u> March 30 - April 7, 2011	<u>Description of Test(s)</u> Specific Absorption Rate	

Z-Axis Scan



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 237 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #98 (A98)

Date Tested: 01/28/2011

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-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.968 \text{ mho/m}$; $\epsilon_r = 58.1$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 12.3 mW/g

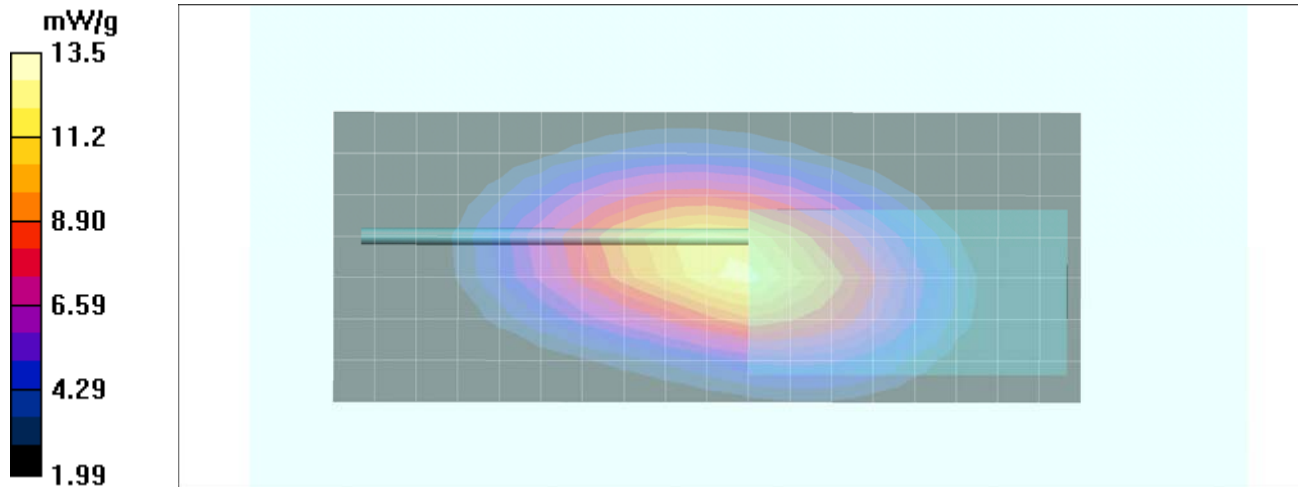
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 115.5 V/m; Power Drift = -0.467 dB

Peak SAR (extrapolated) = 18.8 W/kg

SAR(1 g) = 12.8 mW/g; SAR(10 g) = 9.14 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 238 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	 Test Lab Certificate No. 2470.01
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #99 (A99)

Date Tested: 01/28/2011

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-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 24.0°C; Fluid Temp: 23.1°C; Barometric Pressure: 101.1 kPa; Humidity: 40%

Communication System: CW

Frequency: 512 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 512 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 57.9$; $\rho = 1000 \text{ kg/m}^3$

- 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) = 12.7 mW/g

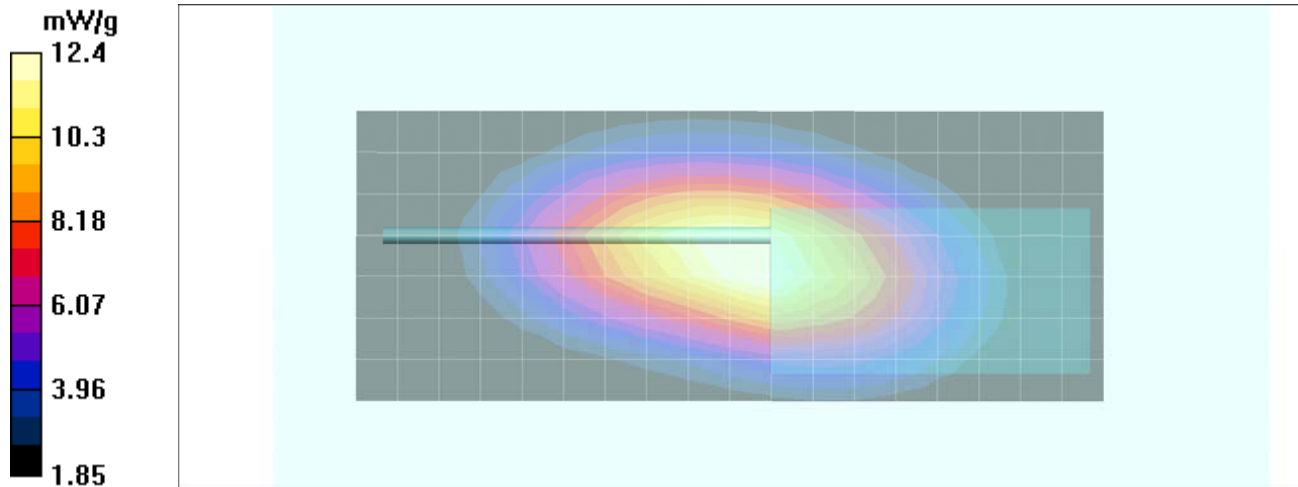
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 110.4 V/m; Power Drift = -0.291 dB


Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 11.9 mW/g; SAR(10 g) = 8.48 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 239 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #100 (A100)

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 4 (Speaker-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45) with Earphone Kit (P/N: KEP-2)
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

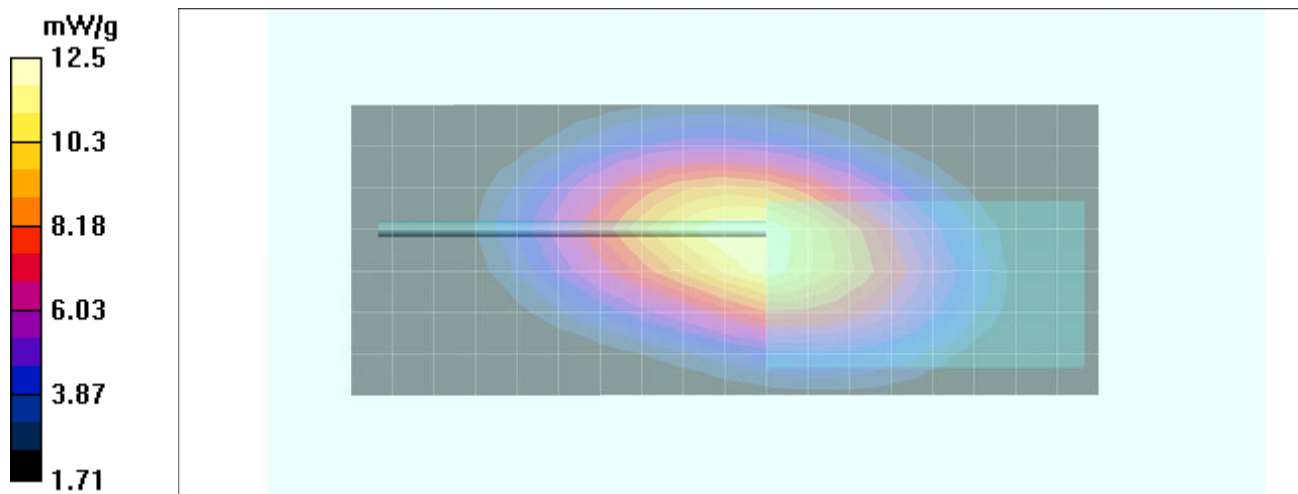
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 110.9 V/m; Power Drift = -0.603 dB


Peak SAR (extrapolated) = 17.5 W/kg

SAR(1 g) = 11.8 mW/g; SAR(10 g) = 8.37 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 240 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #101 (A101)

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 4 (Speaker-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45) with Earphone Kit (P/N: KEP-2)
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) = 12.1 mW/g

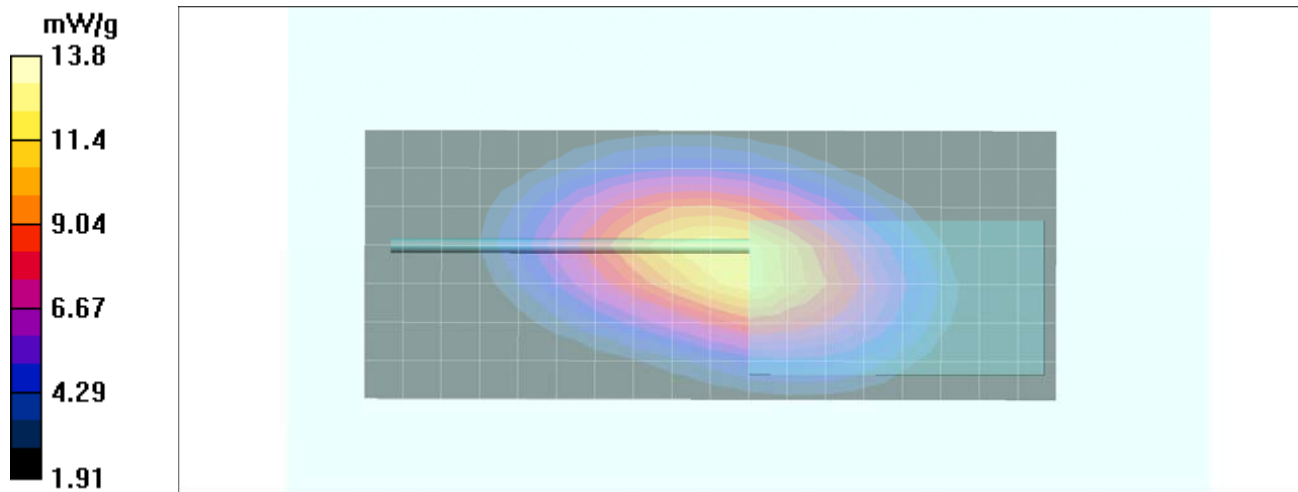
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 118.8 V/m; Power Drift = -0.455 dB

Peak SAR (extrapolated) = 19.2 W/kg

SAR(1 g) = 13.2 mW/g; SAR(10 g) = 9.41 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 241 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #102 (A102)

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 4 (Speaker-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45) with Earphone Kit (P/N: KEP-2)
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) = 13.5 mW/g

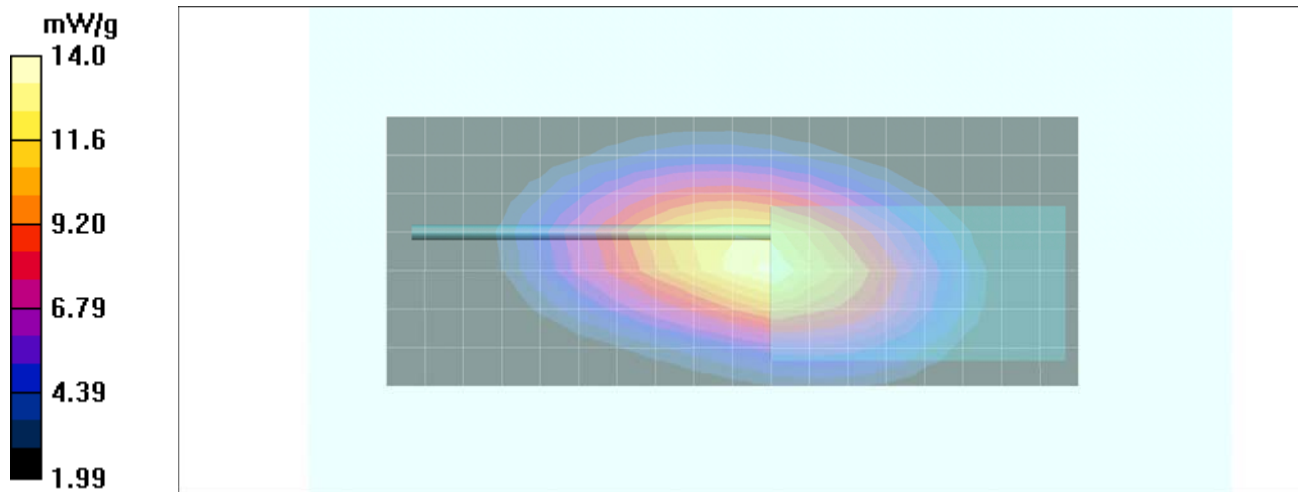
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 115.3 V/m; Power Drift = -0.175 dB

Peak SAR (extrapolated) = 19.7 W/kg

SAR(1 g) = 13.4 mW/g; SAR(10 g) = 9.45 mW/g

Maximum value of SAR (measured) = 14.0 mW/g



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 242 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #103 (A103)

Date Tested: 04/06/2011

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

DUT: Kenwood NX-320-K; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K124
Audio Accessory Category 4 (Speaker-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45) with Earphone Kit (P/N: KEP-2)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 21.0°C; Fluid Temp: 20.3°C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.954 \text{ mho/m}$; $\epsilon_r = 57.8$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1590; ConvF(7.73, 7.73, 7.73); Calibrated: 15/07/2010
- Sensor-Surface: 4mm (Mechanical Surface Detection (Locations From Previous Scan Used))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) = 12.4 mW/g

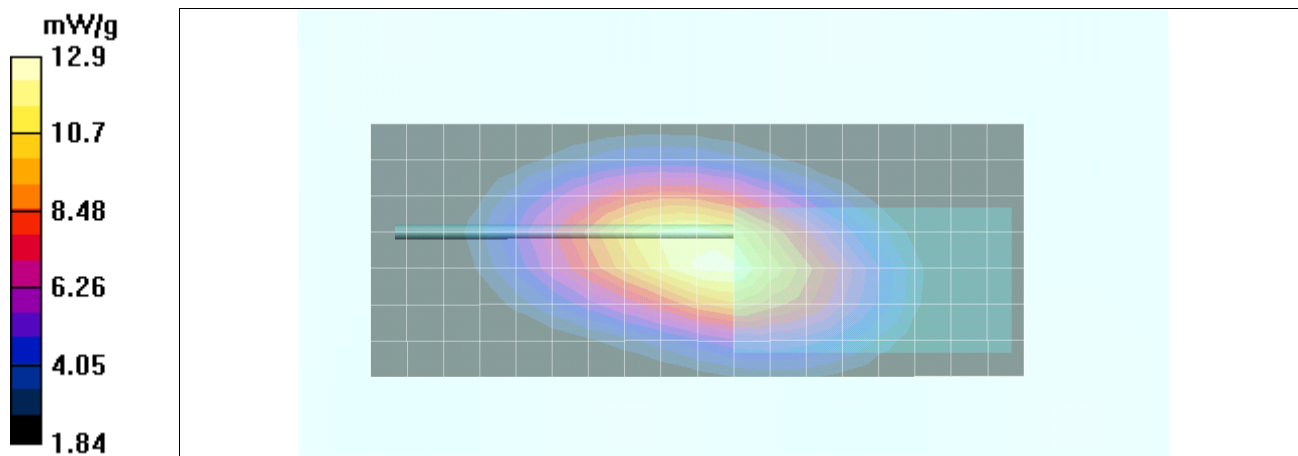
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 117.0 V/m; Power Drift = -0.560 dB

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 12.4 mW/g; SAR(10 g) = 8.88 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 243 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	Test Lab Certificate No. 2470.01
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #104 (A104)

Date Tested: 04/06/2011

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

DUT: Kenwood NX-320-K2; Type: Portable FM UHF-H PTT Radio Transceiver; Serial: No. 0320K218
Audio Accessory Category 4 (Speaker-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45) with Earphone Kit (P/N: KEP-2)
Body-worn Accessory 1: Belt-Clip (P/N: KBH-12)

Ambient Temp: 21.0°C; Fluid Temp: 20.3°C; Barometric Pressure: 101.1 kPa; Humidity: 32%

Communication System: CW

Frequency: 498 MHz; Duty Cycle: 1:1

Medium: M450 Medium parameters used (interpolated): $f = 498 \text{ MHz}$; $\sigma = 0.954 \text{ mho/m}$; $\epsilon_r = 57.8$; $\rho = 1000 \text{ kg/m}^3$

- 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 – 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

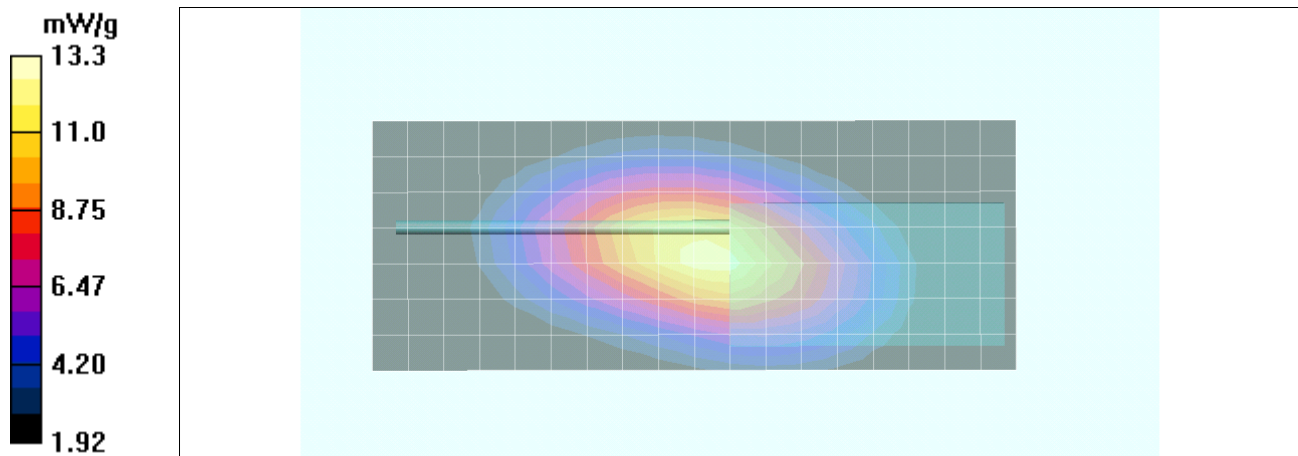
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 116.6 V/m; Power Drift = -0.471 dB


Peak SAR (extrapolated) = 18.3 W/kg

SAR(1 g) = 12.6 mW/g; SAR(10 g) = 8.99 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 244 of 361

	<u>Dates of Evaluation (K3)</u>	<u>Test Report Serial No.</u>	<u>Test Report Revision No.</u>	
	Jan. 4,6,26-28,31, 2011	121510ALH-T1070-S90U	Rev. 1.3 (4th Release)	
<u>Test Report Issue Date</u>	<u>Dates of Evaluation (K/K2)</u>	<u>Description of Test(s)</u>	<u>RF Exposure Category</u>	
April 14, 2011	March 30 - April 7, 2011	Specific Absorption Rate	Occupational (Controlled)	

Audio Accessory SAR Plot #105 (A105)

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 4 (Speaker-Microphone); Type: Heavy Duty Speaker-Microphone (P/N: KMC-45) with Earphone Kit (P/N: KEP-2)
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) = 11.7 mW/g

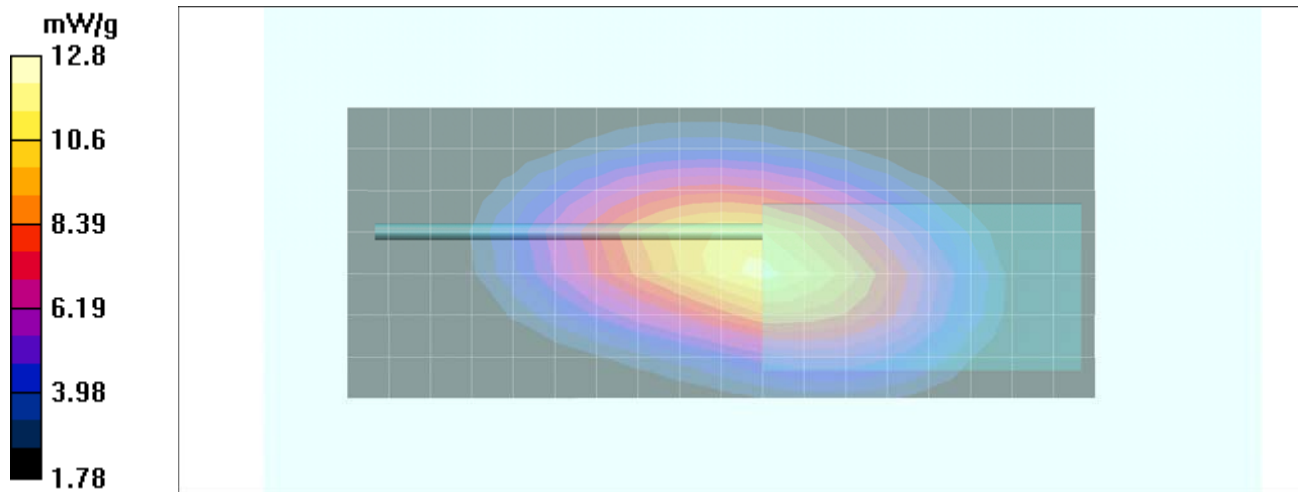
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 111.3 V/m; Power Drift = -0.250 dB

Peak SAR (extrapolated) = 17.8 W/kg

SAR(1 g) = 12.2 mW/g; SAR(10 g) = 8.65 mW/g

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



Applicant:	Kenwood USA Corporation	FCC ID:	ALH431000	DUT Models:	NX-320-K/K2/K3	KENWOOD
DUT Type:	Portable UHF-H PTT Radio Transceiver	Transmitter Frequency Range:		450.0 - 512.0 MHz		
2011 Celltech Labs Inc.		This document is not to be reproduced in whole or in part without the prior written permission of Celltech Labs Inc.				Page 245 of 361