

Appendix B-1
K490 Family - PCS Gray Energi

For

FCC ID: OVFKWC-K493

Section 1

CDMA 1900

Date/Time: 06/12/04 13:01:00

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 FLAT with 22.5mm Air Space and Backpack Clip Ch600

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: M1800, Medium parameters used: $f = 1880$ MHz, $\sigma = 1.56$ mho/m, $\epsilon_r = 53.9$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated

Sensor Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

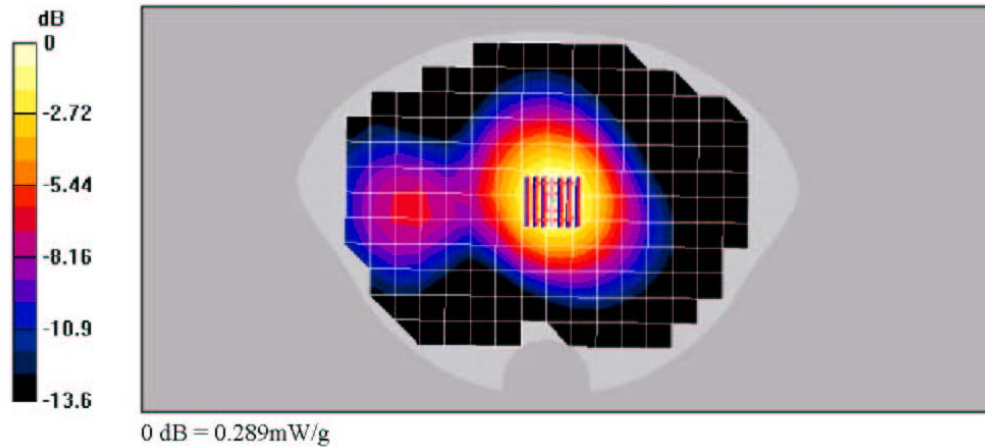
CDMA-1900 Ch600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14 V/m, Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.289 mW/g

Peak SAR (extrapolated) = 0.432 W/kg

SAR(1 g) = 0.271 mW/g; SAR(10 g) = 0.175 mW/g



file://C:\Dasy4\Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/12/04 10:13:57

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 FLAT with 22.5mm Air Space Ch600

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: M1800, Medium parameters used: $f = 1880$ MHz, $\sigma = 1.56$ mho/m, $\epsilon_r = 53.9$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

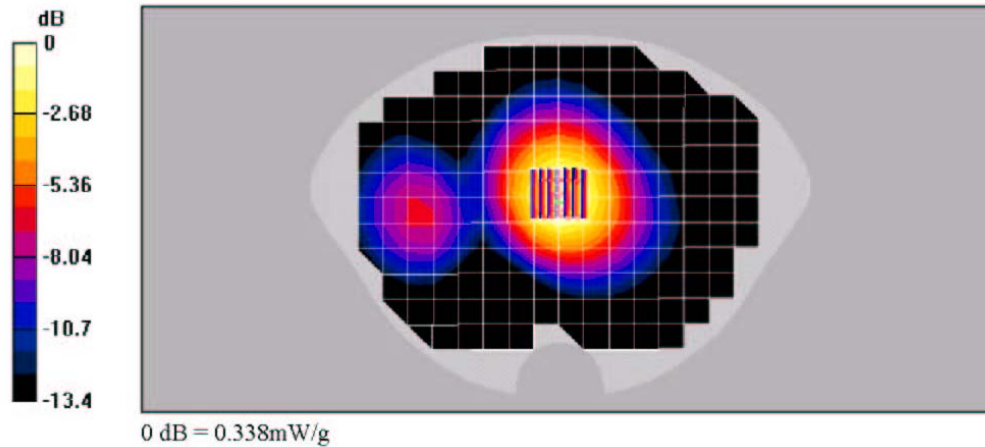
CDMA-1900 Ch25 600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.7 V/m; Power Drift = 0.1 dB

Maximum value of SAR (measured) = 0.338 mW/g

Peak SAR (extrapolated) = 0.519 W/kg

SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.203 mW/g



file://C:\Dasy4\20Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/12/04 13:01:16

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 FLAT with Belt Clip and Backpack Clip Ch600

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: M1800, Medium parameters used: $f = 1880$ MHz, $\sigma = 1.56$ mho/m, $\epsilon_r = 53.9$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Sensor-Surface: 0mm (Fix Surface)

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

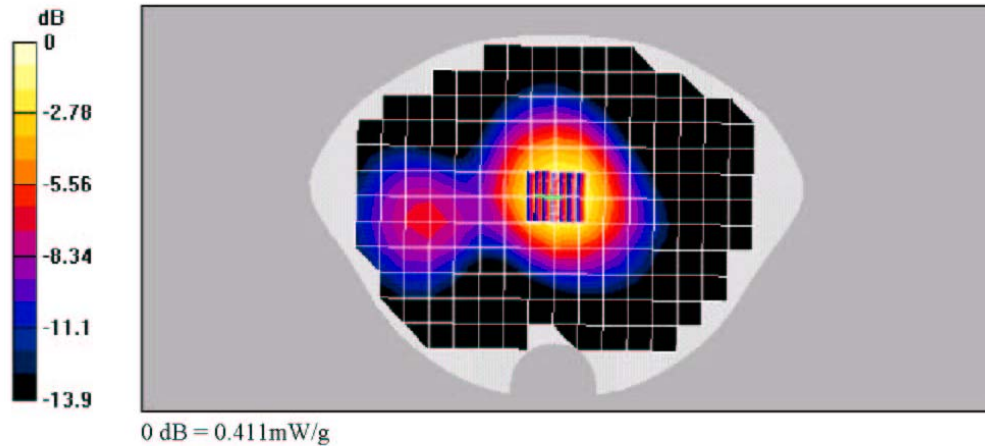
CDMA-1900 Ch600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.1 V/m; Power DnB = -0.1 dB

Maximum value of SAR (measured) = 0.411 mW/g

Peak SAR (extrapolated) = 0.623 W/kg

SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.234 mW/g



file://C:\Dasy4\Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/12/04 10:57:56

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 FLAT with Belt Clip Ch600

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: M1800, Medium parameters used: $f = 1880$ MHz, $\sigma = 1.56$ mho/m, $\epsilon_r = 53.9$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

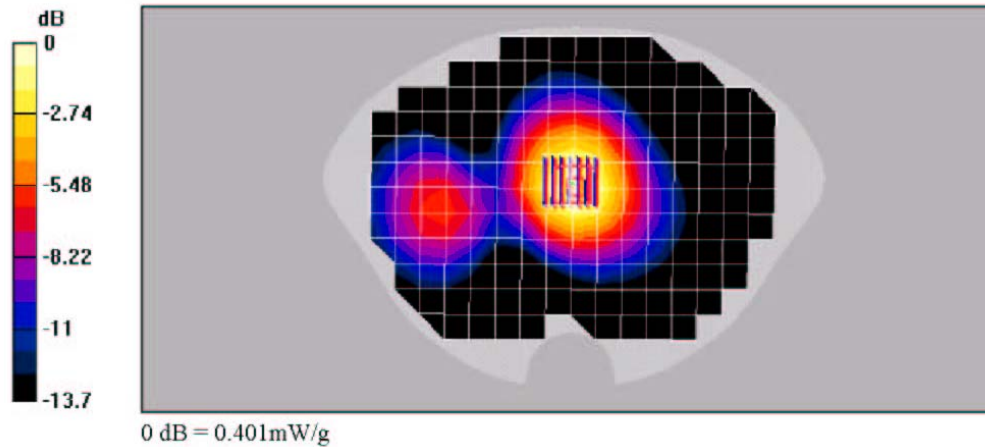
CDMA-1900 Ch25 600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.1 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.401 mW/g

Peak SAR (extrapolated) = 0.609 W/kg

SAR(1 g) = 0.377 mW/g; SAR(10 g) = 0.236 mW/g



file://C:\Dasy4\Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/12/04 12:16:41

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 FLAT with Leather Case and Backpack Clip Ch600

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: M1800, Medium parameters used: $f = 1880$ MHz, $\sigma = 1.56$ mho/m, $\epsilon_r = 53.9$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated

Sensor Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

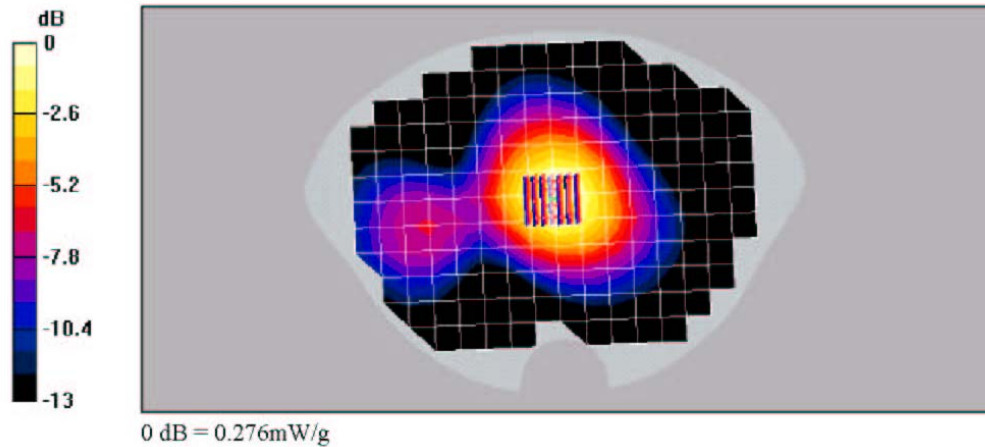
CDMA-1900 Ch600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14 V/m, Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.276 mW/g

Peak SAR (extrapolated) = 0.423 W/kg

SAR(1 g) = 0.261 mW/g; SAR(10 g) = 0.166 mW/g



file://C:\Dasy4\Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/12/04 11:36:38

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 FLAT with Leather Case Ch600

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: M1800, Medium parameters used: $f = 1880$ MHz, $\sigma = 1.56$ mho/m, $\epsilon_r = 53.9$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5, 5, 5), Calibrated: Probe not calibrated

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

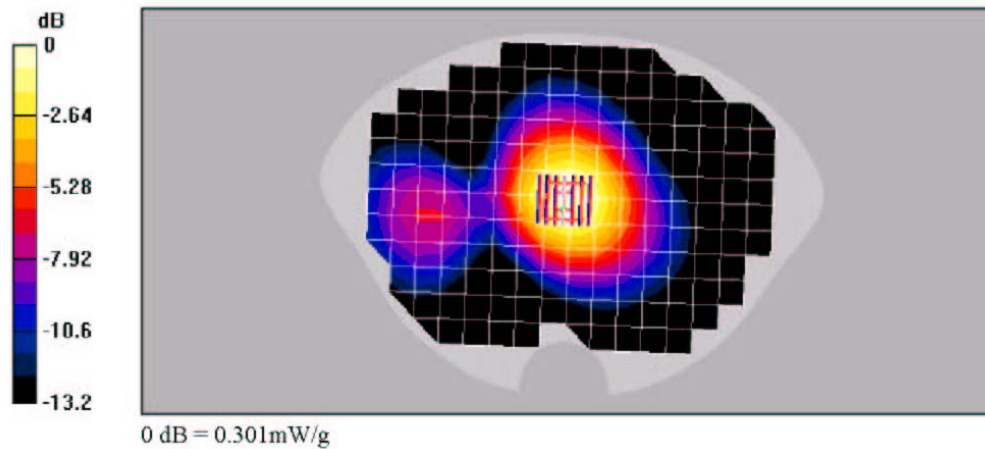
CDMA-1900 Ch25 600/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.6 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.301 mW/g

Peak SAR (extrapolated) = 0.453 W/kg

SAR(1 g) = 0.254 mW/g; SAR(10 g) = 0.180 mW/g



file://C:\Dasy4\Reports\K7\K493L%B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/11/04 09:19:38

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 Left Cheek Ch600

Communication System: CDMA 1900, Frequency: 1880 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used: $f = 1880$ MHz, $\sigma = 1.47$ mho/m, $\epsilon_r = 41.6$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Left Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

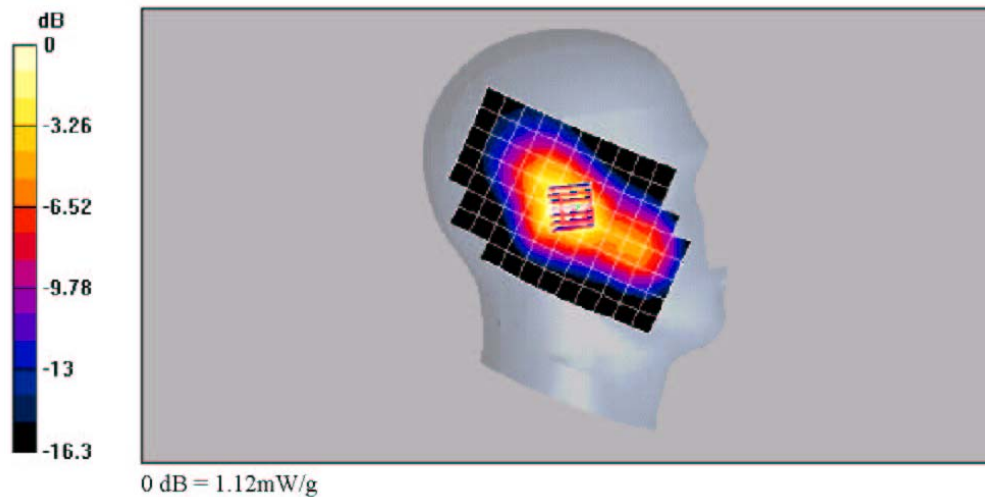
600 LC/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.4 V/m; Power Drift = 0.1 dB

Maximum value of SAR (measured) = 1.12 mW/g

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.562 mW/g



file://C:\Dasy4\20Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/11/04 09:19:38

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 Left Tilt Ch25

Communication System: CDMA 1900, Frequency: 1851 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used (interpolated): $f = 1851$ MHz, $\sigma = 1.47$ mho/m, $\epsilon_r = 41.6$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Left Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

25 LT/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

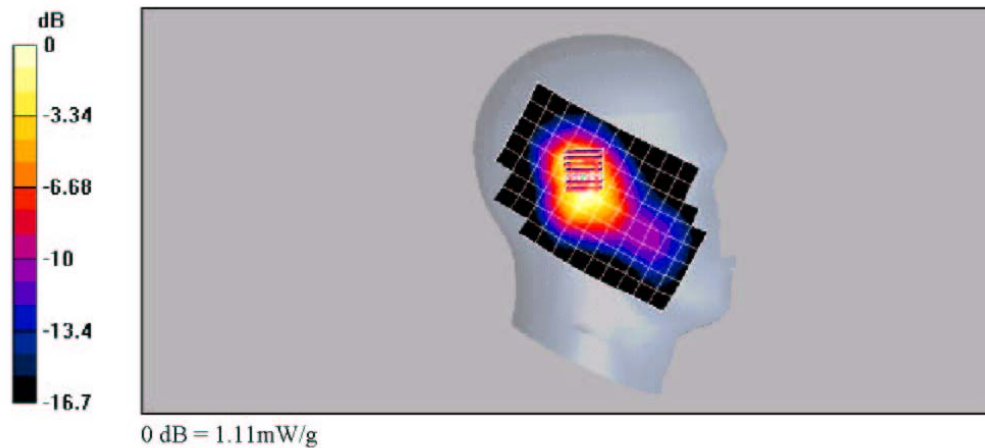
Reference Value = 27.9 V/m; Power Drift = -0.0 dB

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

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.612 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



file://C:\Dasy4\20Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/11/04 17:53:58

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 Right Cheek Ch1175

Communication System: CDMA 1900, Frequency: 1908.75 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used (interpolated): $f = 1908.75$ MHz, $\sigma = 1.47$ mho/m, $\epsilon_r = 41.6$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Right Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1175 RC/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

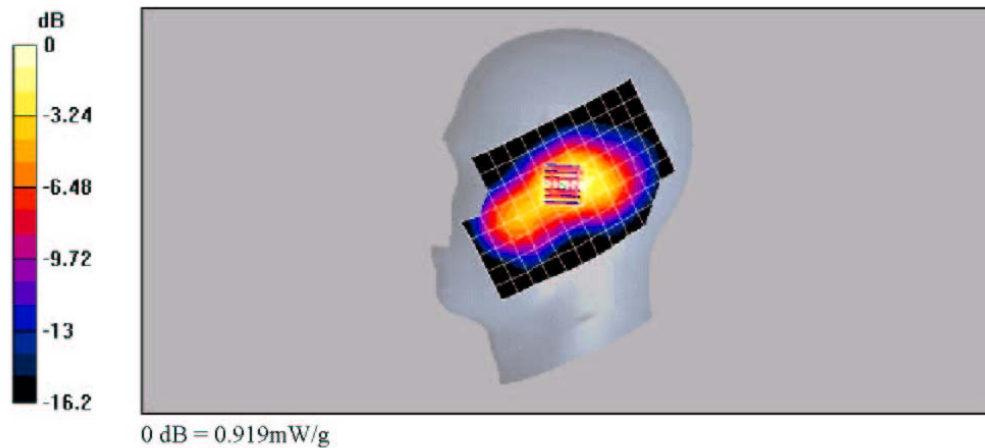
Reference Value = 23.2 V/m; Power Drift = 0.0 dB

Maximum value of SAR (measured) = 0.919 mW/g

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.840 mW/g; SAR(10 g) = 0.504 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



file://C:\Dasy4\Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/11/04 17:53:58

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 Right Tilt Ch25

Communication System: CDMA 1900, Frequency: 1851.25 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used (interpolated): $f = 1851.25$ MHz, $\sigma = 1.47$ mho/m, $\epsilon_r = 41.6$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Right Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

25 RT/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

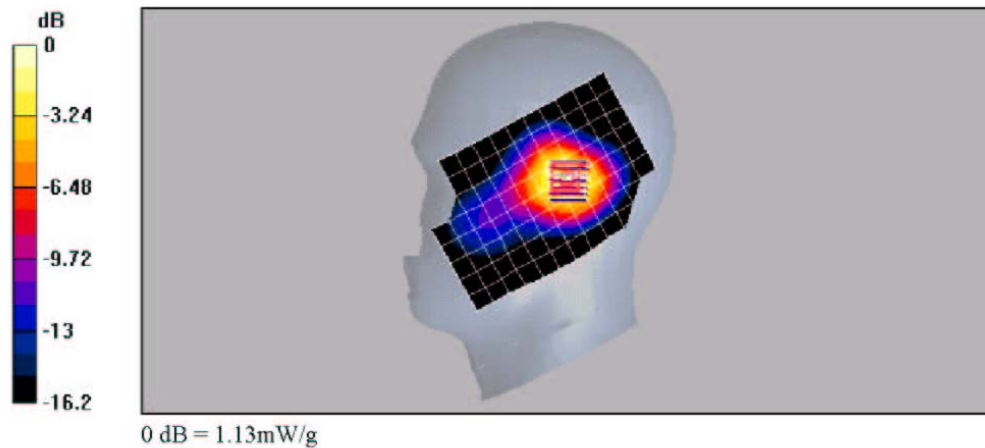
Reference Value = 27.5 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 1.13 mW/g

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.622 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



file://C:\Dasy4\Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004

Date/Time: 06/13/04 09:46:37

Test Laboratory: Kyocera

K493L #B816, CDMA-1900 Right Tilt with Backpack Clip Ch25

Communication System: CDMA 1900, Frequency: 1851 MHz, Duty Cycle: 1:1

Medium: Head 1900 MHz, Medium parameters used (interpolated): $f = 1851$ MHz, $\sigma = 1.46$ mho/m, $\epsilon_r = 41.3$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Right Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5.3, 5.3, 5.3), Calibrated: 9/19/2003

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn530, Calibrated: 12/22/2003

Measurement SW: DASY4, V4.2 Build 44

Postprocessing SW: SEMCAD, V1.8 Build 112

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

25 RT/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

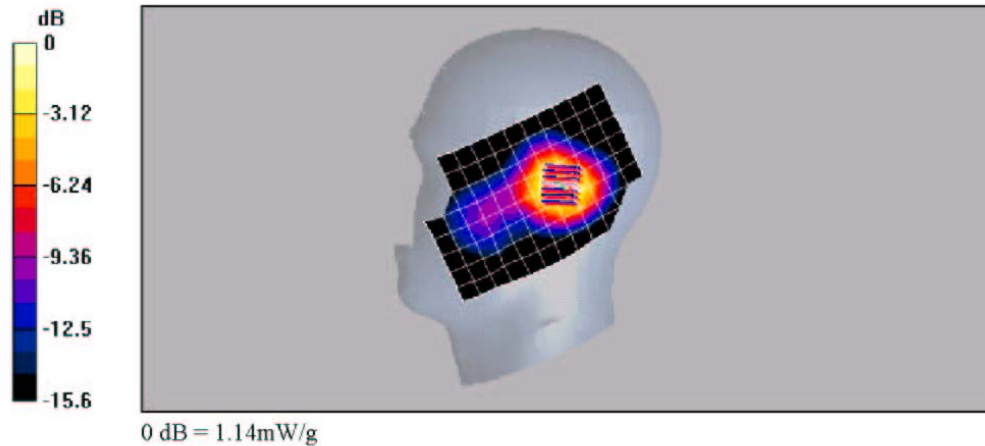
Reference Value = 25.8 V/m; Power Drift = 0.2 dB

Maximum value of SAR (measured) = 1.14 mW/g

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.615 mW/g

Info: Interpolated medium parameters used for SAR evaluation!



file://C:\Dasy4\Reports\K7\K493L%20#B816\PCS head and muscle\FCC-K493L #B8... 6/25/2004