Validation for HEAD

Date: 12/1/2009

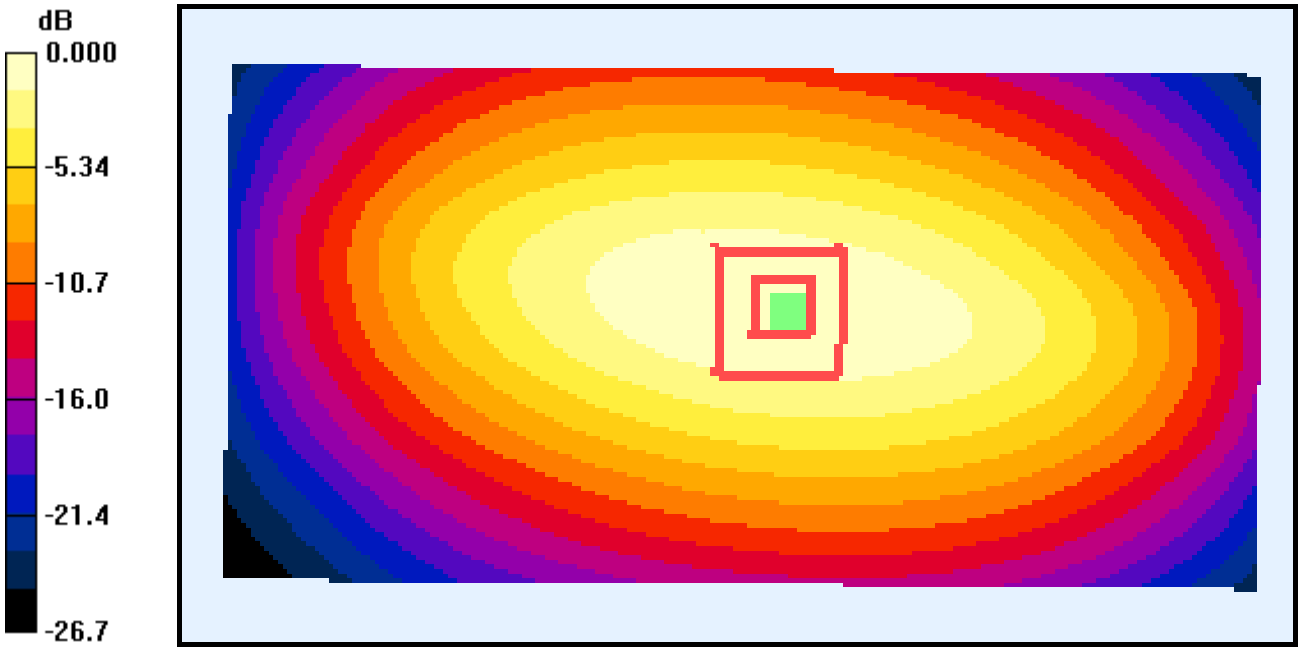
Test Laboratory: Comptest/Kyocera

835MHz Validation @ 20dbm, Probe #3035, DAE#494, Dipole #4d019, 12-01-09

Communication System: CDMA, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz,Medium parameters used: f = 835 MHz; σ = 0.91 mho/m; ε_r = 41.5; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ES3DV3 - SN3035, ConvF(6.12, 6.12, 6.12), Calibrated: 8/20/2009
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE3 Sn494,Calibrated: 4/22/2009
Measurement SW: DASY4, V4.7 Build 80
Postprocessing SW: SEMCAD, V1.8 Build 186
Temperature: Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

835MHz Validation/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.05 mW/g

835MHz Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 33.3 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 1.46 W/kg
SAR(1 g) = 0.967 mW/g; SAR(10 g) = 0.628 mW/g
Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

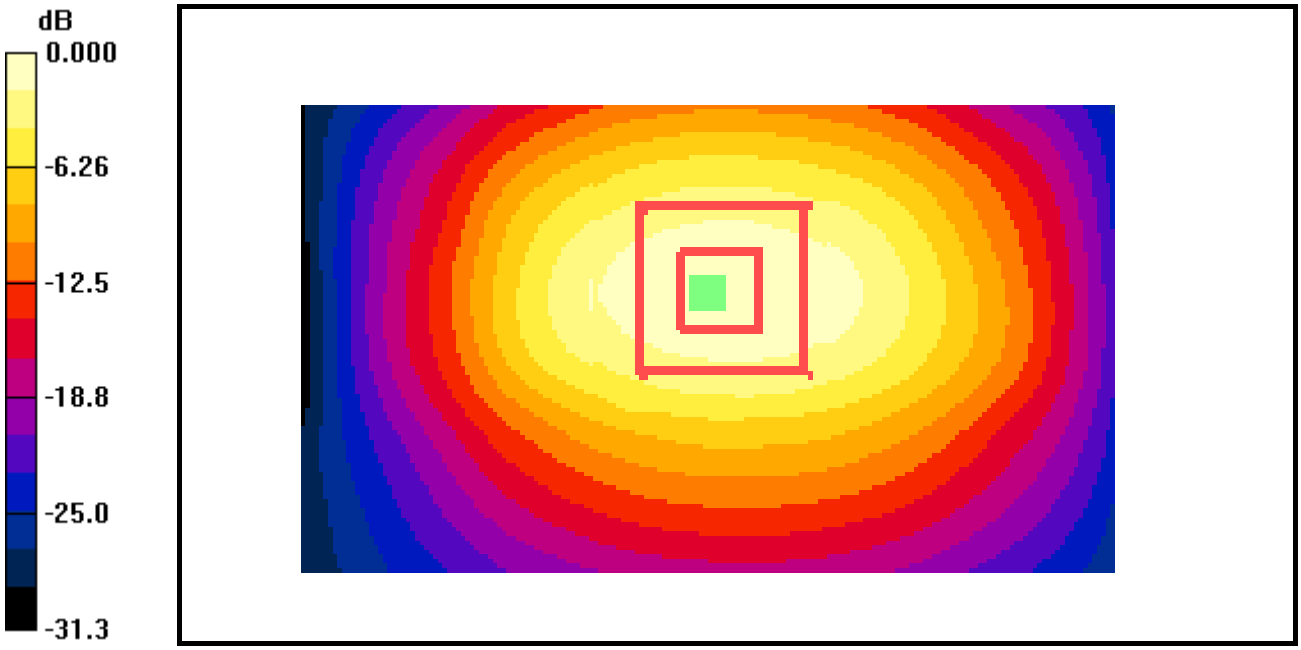
Test Laboratory: Comptest/Kyocera

M6000 1800MHz Validation, Probe #1664, DAE #603, Dipole #220, 12-02-09

Communication System: CW 1800Mhz, Frequency: 1800 MHz, Duty Cycle: 1:1
Medium: H1800,Medium parameters used: f = 1800 MHz; σ = 1.44 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ET3DV6 - SN1664, ConvF(5.46, 5.46, 5.46), Calibrated: 6/22/2009
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn603,Calibrated: 9/15/2009
Measurement SW: DASY4, V4.7 Build 80
Postprocessing SW: SEMCAD, V1.8 Build 186
Temperature: Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1800Mhz/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.43 mW/g

1800Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.8 V/m; Power Drift = 0.053 dB
Peak SAR (extrapolated) = 6.31 W/kg
SAR(1 g) = 3.66 mW/g; SAR(10 g) = 1.94 mW/g
Maximum value of SAR (measured) = 4.16 mW/g



0 dB = 4.16mW/g

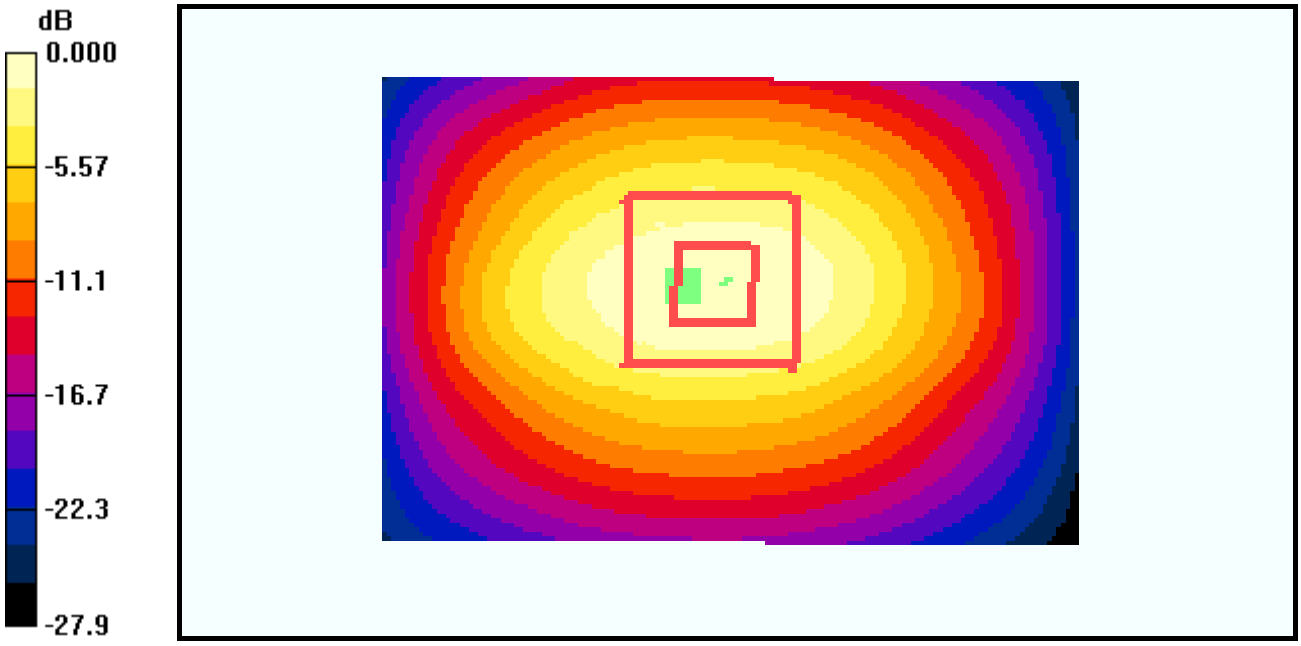
Test Laboratory: Comptest/Kyocera

1900Mhz Validation @ 20dBm Probe 3036, DAE 527 and Dipole 5d016, 12-03-09

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1
Medium: HSL1900,Medium parameters used (interpolated): f = 1900 MHz; σ = 1.4 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ES3DV3 - SN3036, ConvF(4.92, 4.92, 4.92), Calibrated: 8/20/2009
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn527,Calibrated: 7/9/2009
Measurement SW: DASY4, V4.7 Build 80
Postprocessing SW: SEMCAD, V1.8 Build 186
Temperature: Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1900MHz Validation @20dBm/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.73 mW/g

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.7 V/m; Power Drift = -0.078 dB
Peak SAR (extrapolated) = 7.33 W/kg
SAR(1 g) = 3.98 mW/g; SAR(10 g) = 2.08 mW/g
Maximum value of SAR (measured) = 4.47 mW/g



0 dB = 4.47mW/g

Validation for BODY

Date: 12/4/2009

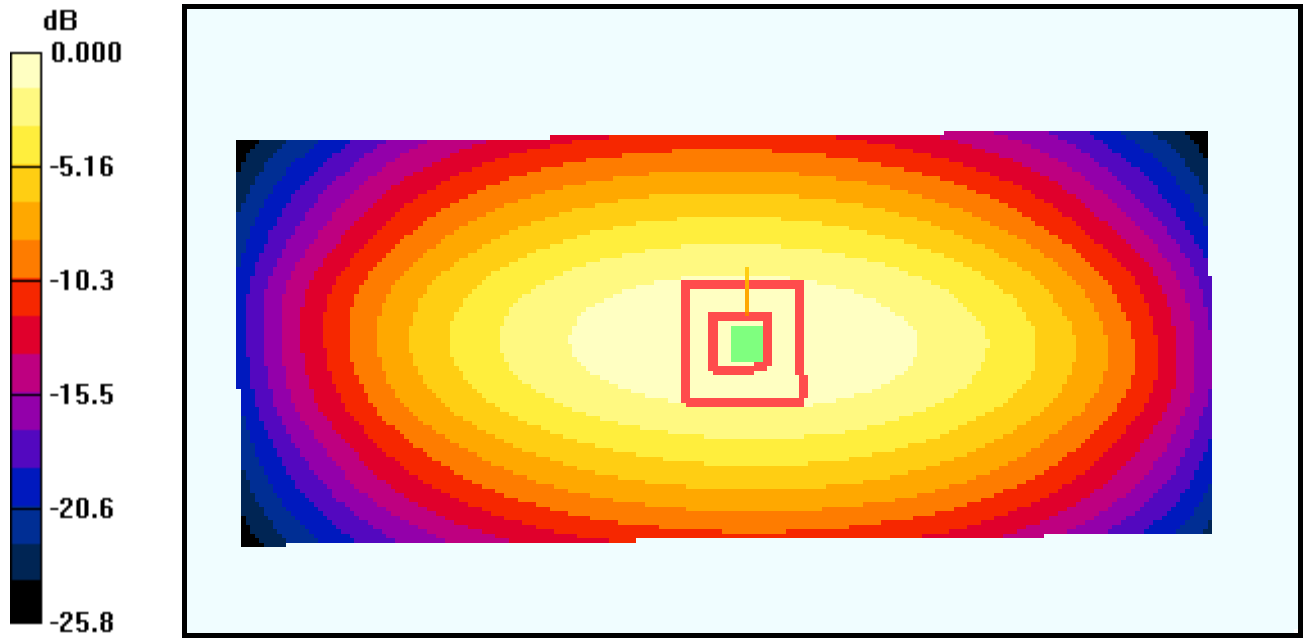
Test Laboratory: Comptest/Kyocera

M6000 835MHz Validation (in Muscle), Probe #1664, DAE #603, Dipole #4d019, 120409

Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: M900,Medium parameters used: f = 835 MHz; σ = 0.95 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ET3DV6 - SN1664, ConvF(6.11, 6.11, 6.11), Calibrated: 6/22/2009
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn603,Calibrated: 9/15/2009
Measurement SW: DASY4, V4.7 Build 80
Postprocessing SW: SEMCAD, V1.8 Build 186
Temperature: Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

835MHz/Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.04 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 34.1 V/m; Power Drift = -0.048 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.959 mW/g; SAR(10 g) = 0.639 mW/g
Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

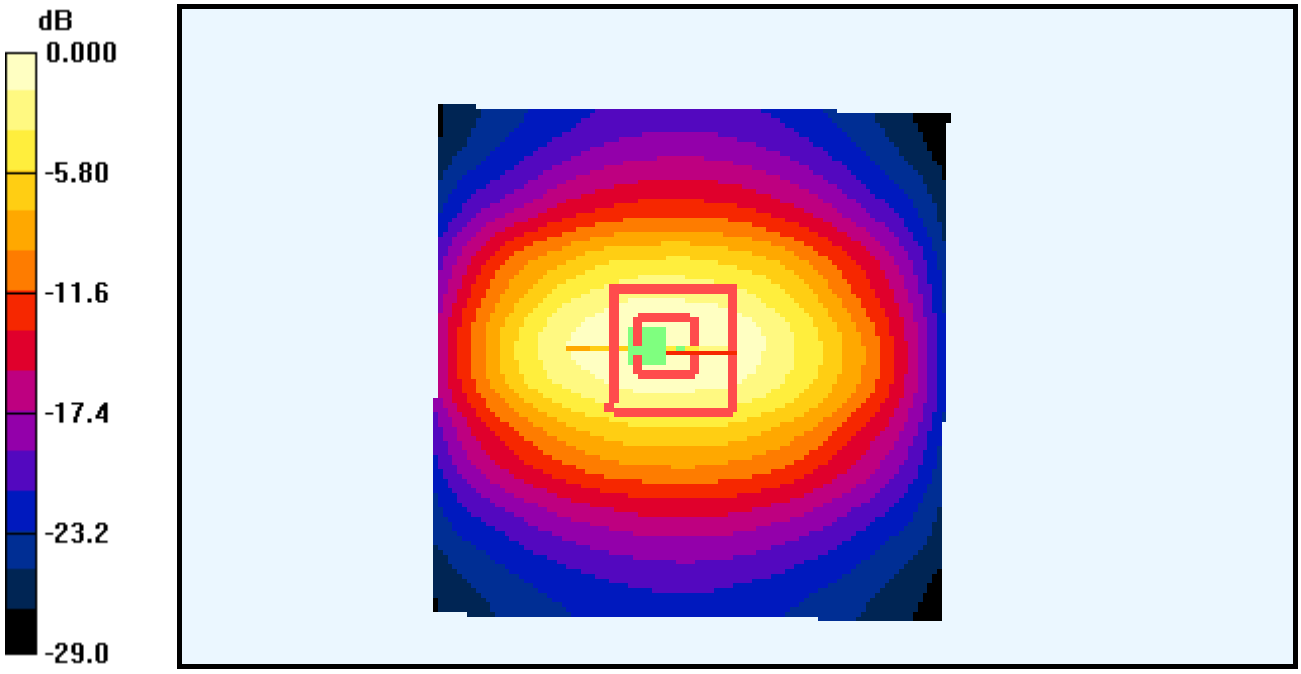
Test Laboratory: Comptest/Kyocera

M6000 1800MHz Validation (in Muscle), Probe #1664, DAE #603, Dipole #220, 120409

Communication System: CW 1800Mhz, Frequency: 1800 MHz, Duty Cycle: 1:1
Medium: M1800,Medium parameters used: f = 1800 MHz; σ = 1.59 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ET3DV6 - SN1664, ConvF(4.76, 4.76, 4.76), Calibrated: 6/22/2009
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn603,Calibrated: 9/15/2009
Measurement SW: DASY4, V4.7 Build 80
Postprocessing SW: SEMCAD, V1.8 Build 186
Temperature: Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1800Mhz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.76 mW/g

1800Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.0 V/m; Power Drift = 0.068 dB
Peak SAR (extrapolated) = 5.75 W/kg
SAR(1 g) = 3.74 mW/g; SAR(10 g) = 2.02 mW/g
Maximum value of SAR (measured) = 4.31 mW/g



0 dB = 4.31mW/g

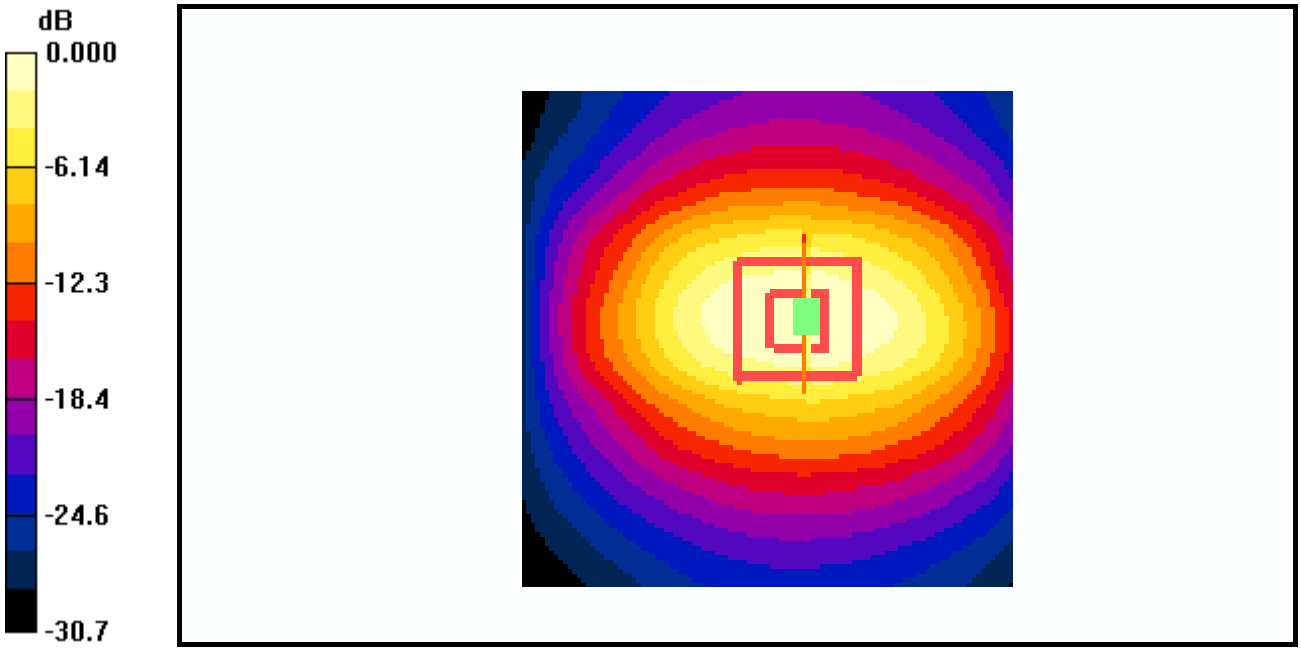
Test Laboratory: Comptest/Kyocera

M6000 1900MHz Validation (in Muscle), Probe #1664, DAE #603, Dipole #5d016, 120309

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1
Medium: M1800,Medium parameters used (interpolated): f = 1900 MHz; σ = 1.54 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ET3DV6 - SN1664, ConvF(4.49, 4.49, 4.49), Calibrated: 6/22/2009
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn603,Calibrated: 9/15/2009
Measurement SW: DASY4, V4.7 Build 80
Postprocessing SW: SEMCAD, V1.8 Build 186
Temperature: Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1900MHz Validation @20dBm/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.76 mW/g

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.2 V/m; Power Drift = 0.147 dB
Peak SAR (extrapolated) = 5.63 W/kg
SAR(1 g) = 3.76 mW/g; SAR(10 g) = 2.09 mW/g
Maximum value of SAR (measured) = 4.26 mW/g



0 dB = 4.26mW/g

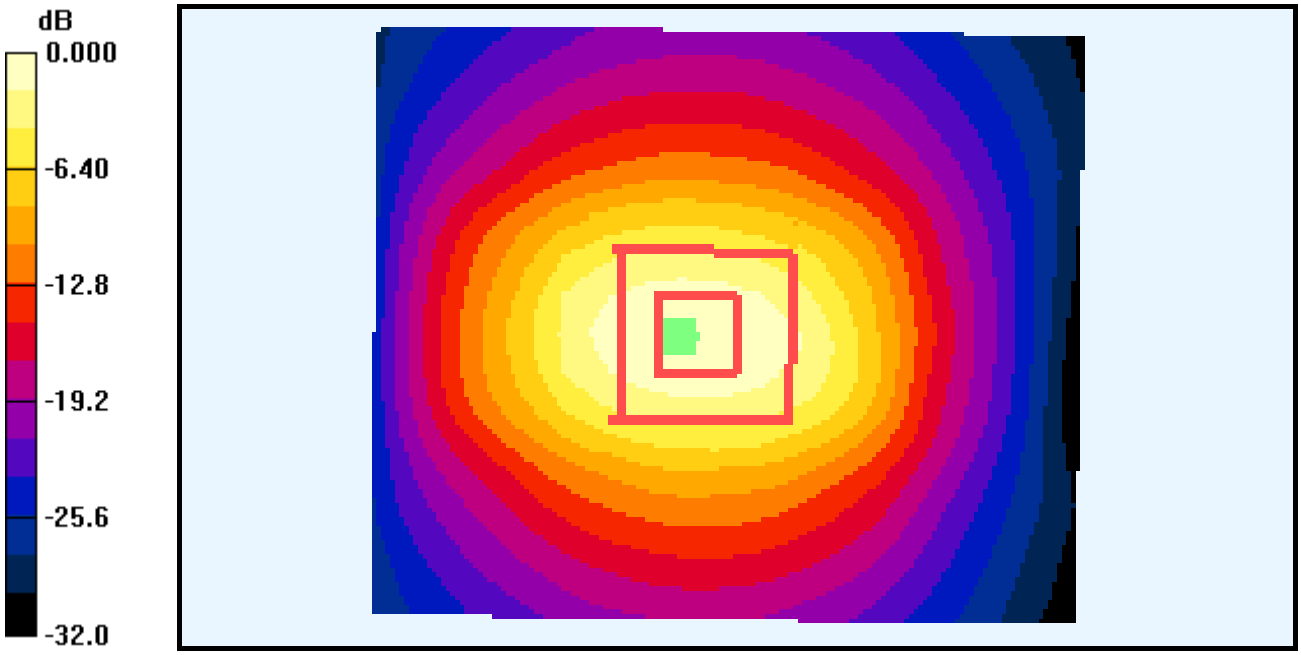
Test Laboratory: Comptest/Kyocera

2450Mhz Validation @ 20dBm Probe 3078, DAE 603 and Dipole 776, 120909

Communication System: CW, Frequency: 2450 MHz, Duty Cycle: 1:1
Medium: M2450,Medium parameters used (interpolated): f = 2450 MHz; σ = 2.03 mho/m; ε_r = 50.3; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ES3DV3 - SN3078, ConvF(4.13, 4.13, 4.13), Calibrated: 6/22/2009
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn603,Calibrated: 9/15/2009
Measurement SW: DASY4, V4.7 Build 80
Postprocessing SW: SEMCAD, V1.8 Build 186
Temperature: Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

2450MHz Validation @20dBm/Area Scan (51x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 6.95 mW/g

2450MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.3 V/m; Power Drift = -0.114 dB
Peak SAR (extrapolated) = 10.7 W/kg
SAR(1 g) = 5.08 mW/g; SAR(10 g) = 2.35 mW/g
Maximum value of SAR (measured) = 5.81 mW/g



0 dB = 5.81mW/g