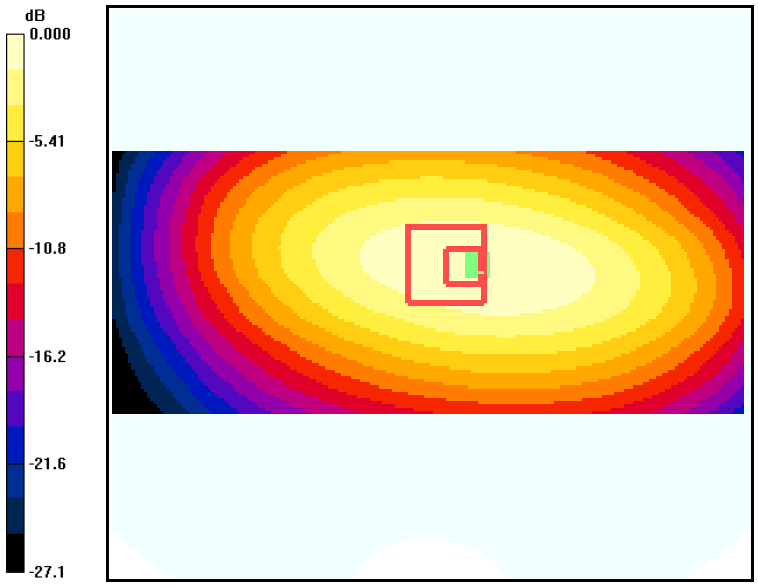
Validation for HEAD

Test Laboratory: Comptest/Kyocera Date: 11/01/2012

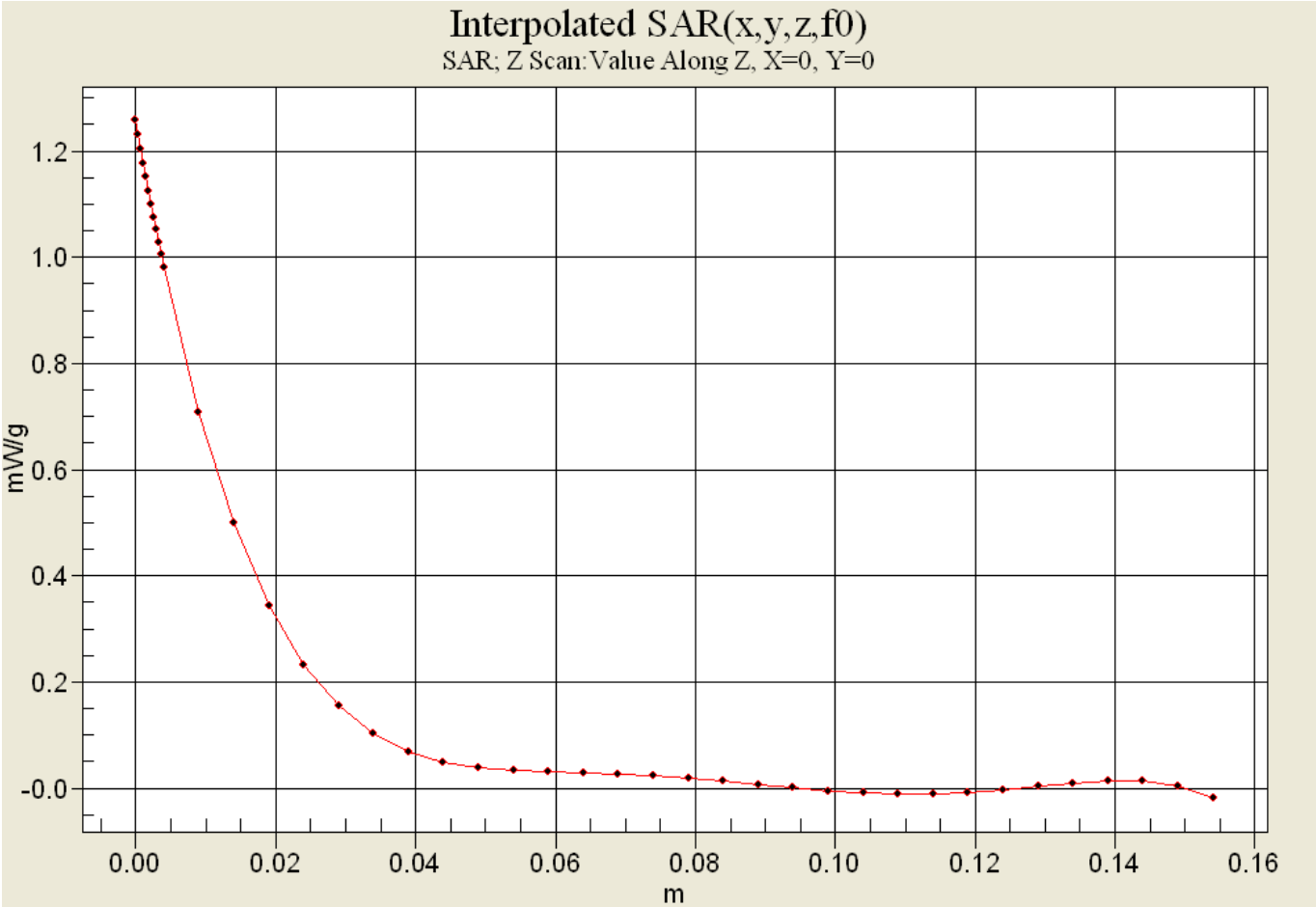
835MHz Validation , Probe #3035, DAE #530, Dipole #467
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz,Medium parameters used (interpolated): f = 835 MHz; σ = 0.92 mho/m; ε_r = 43.3; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ES3DV3 - SN3035, ConvF(6.04, 6.04, 6.04), Calibrated: 2/22/2012
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn530,Calibrated: 5/30/2012
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 = 33.0 V/m; Power Drift = -0.038 dB
Peak SAR (extrapolated) = 1.46 W/kg
SAR(1 g) = 0.964 mW/g; SAR(10 g) = 0.612 mW/g
Maximum value of SAR (measured) = 1.04 mW/g



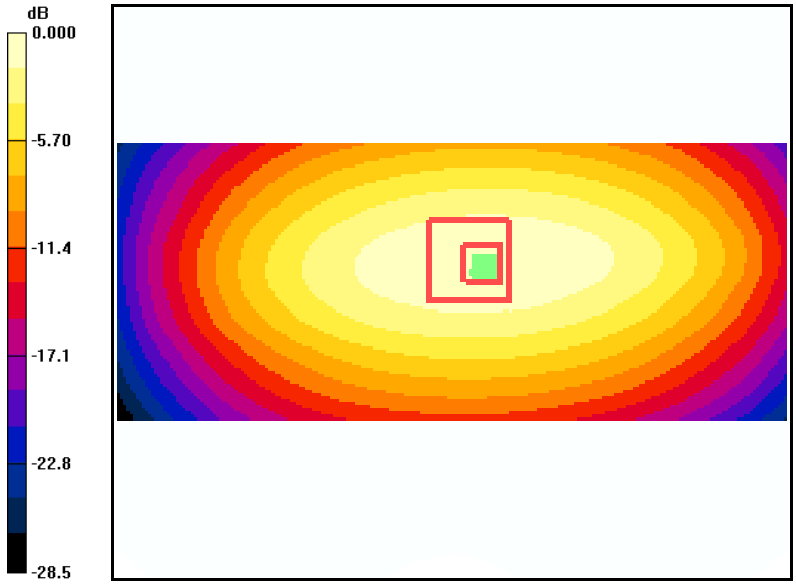
0 dB = 1.04mW/g



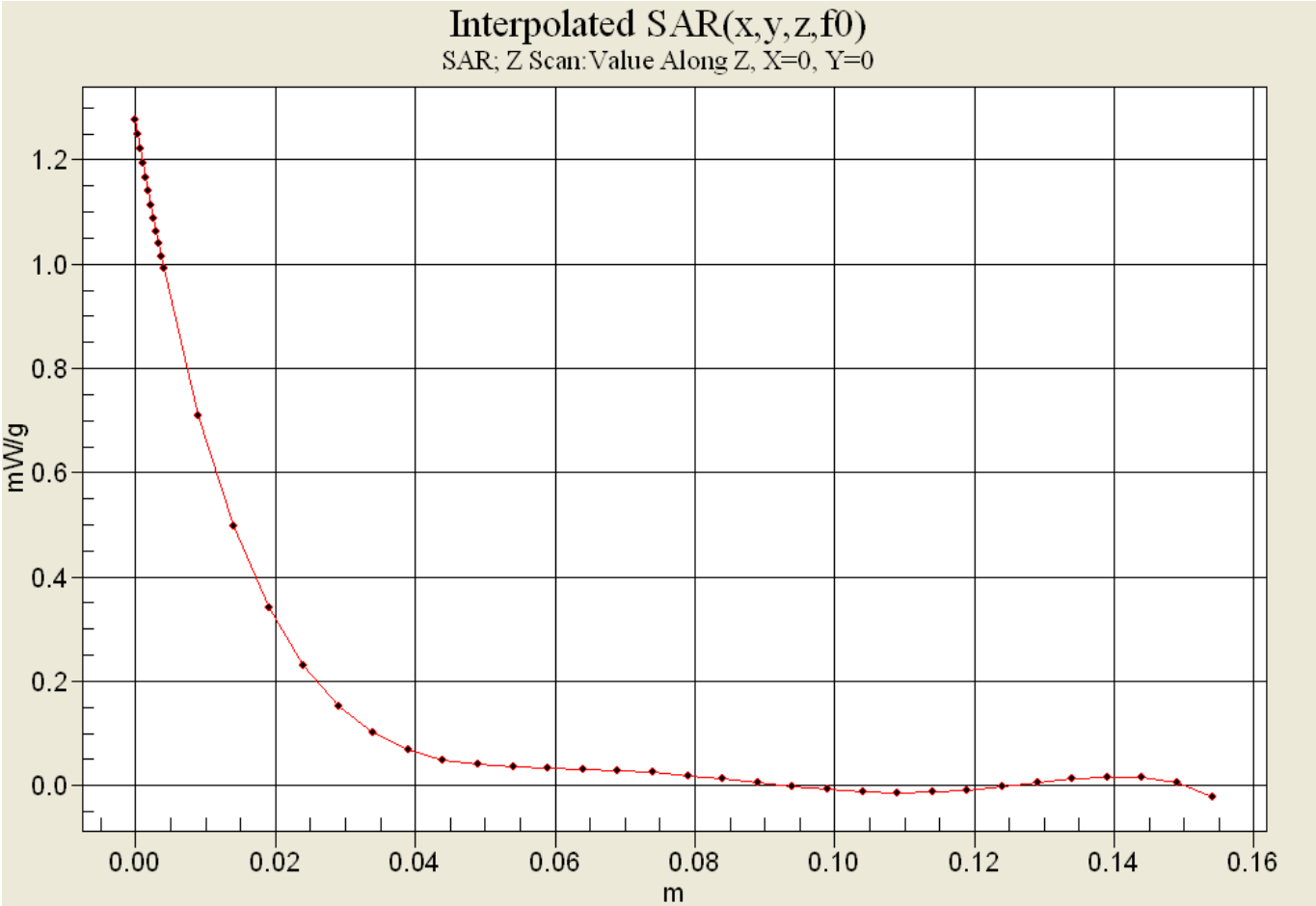
835MHz Validation, Probe #3035, DAE #530, Dipole #467, Jaw
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz,Medium parameters used (interpolated): f = 835 MHz; σ = 0.9 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ES3DV3 - SN3035, ConvF(6.04, 6.04, 6.04), Calibrated: 2/22/2012
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn530,Calibrated: 5/30/2012
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) = 1.05 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.2 V/m; Power Drift = -0.123 dB
Peak SAR (extrapolated) = 1.46 W/kg
SAR(1 g) = 0.970 mW/g; SAR(10 g) = 0.628 mW/g
Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.05mW/g

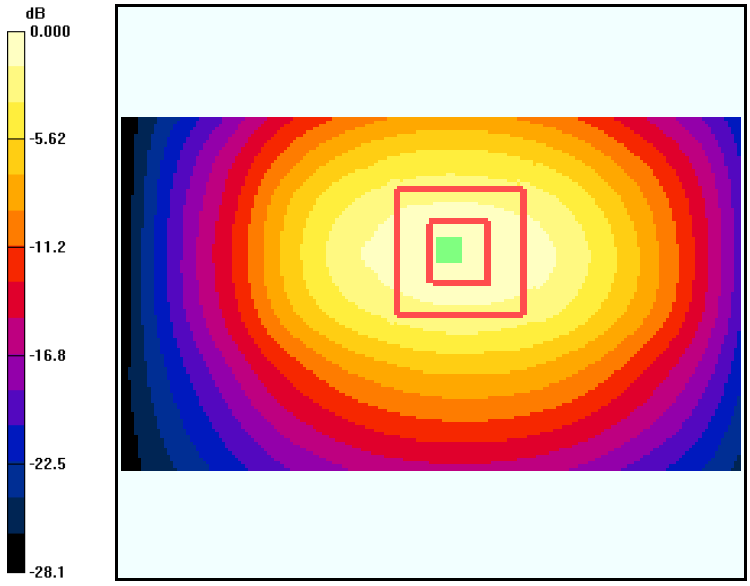


Test Laboratory: Comptest/Kyocera Date: 10/31/2012

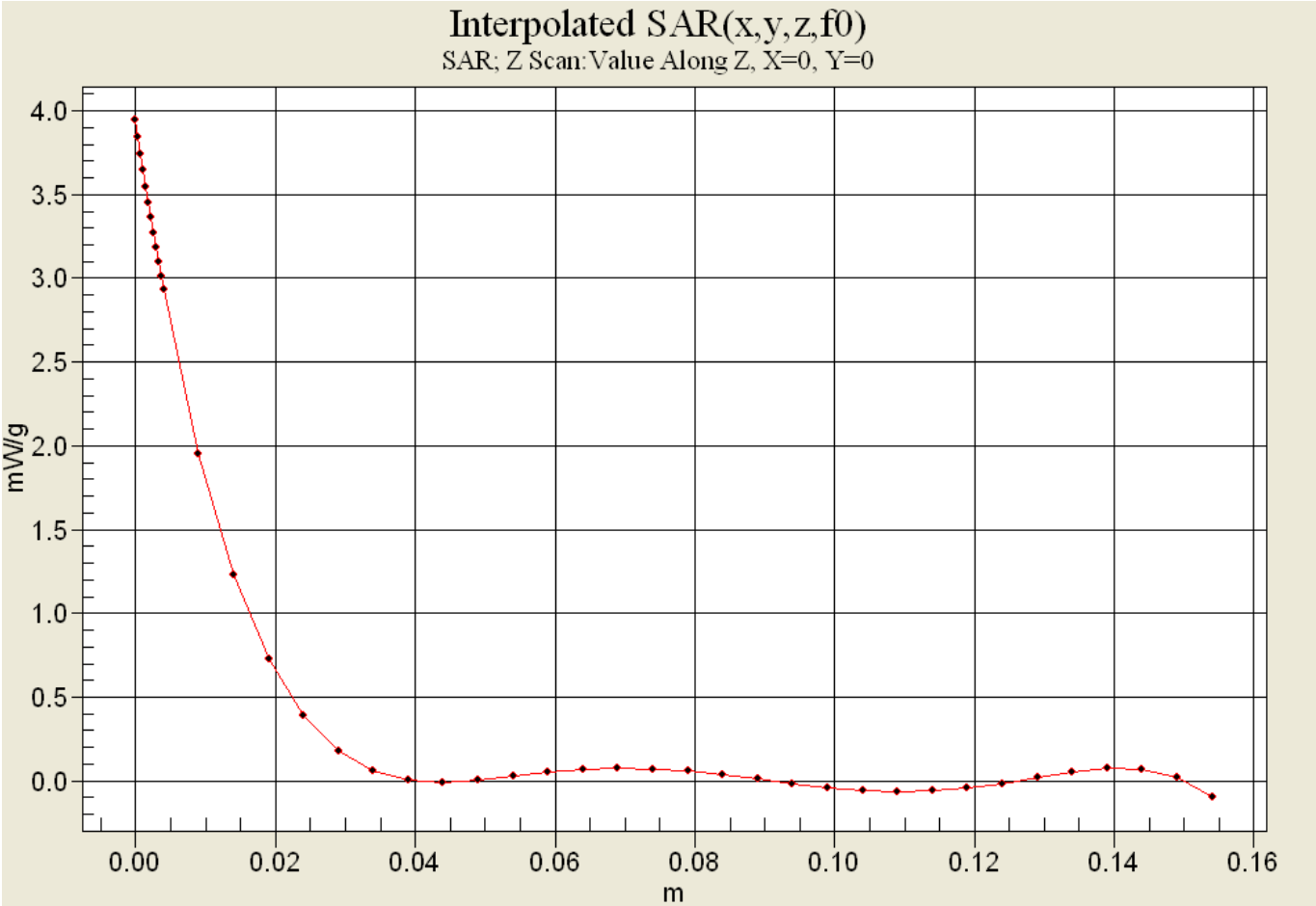
1800MHz Validation, Probe #3036 DAE #603, Dipole #220
Communication System: CW 1800Mhz, Frequency: 1800 MHz, Duty Cycle: 1:1
Medium: H1800,Medium parameters used: f = 1800 MHz; σ = 1.45 mho/m; ε_r = 38.2; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ES3DV3 - SN3036, ConvF(5.02, 5.02, 5.02), Calibrated: 5/29/2012
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn603,Calibrated: 9/12/2012
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) = 4.06 mW/g

1800Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.9 V/m; Power Drift = -0.004 dB
Peak SAR (extrapolated) = 6.31 W/kg
SAR(1 g) = 3.52 mW/g; SAR(10 g) = 1.89 mW/g
Maximum value of SAR (measured) = 3.89 mW/g



0 dB = 4.06mW/g

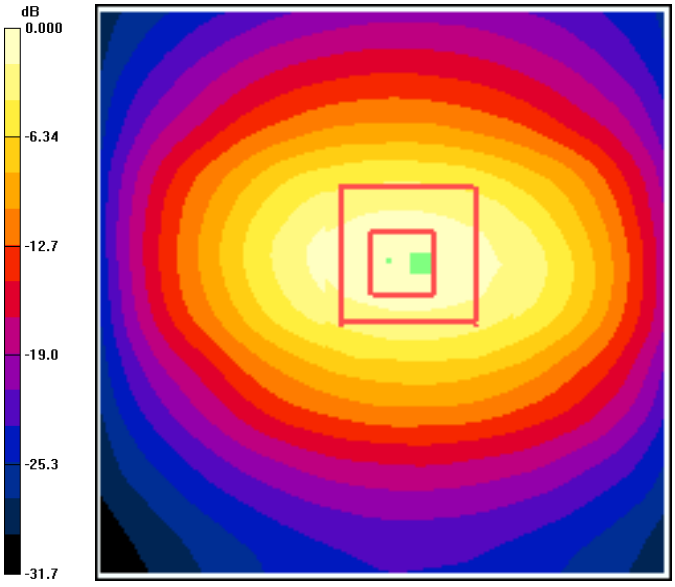


Test Laboratory: Comptest/Kyocera Date: 10/29/2012

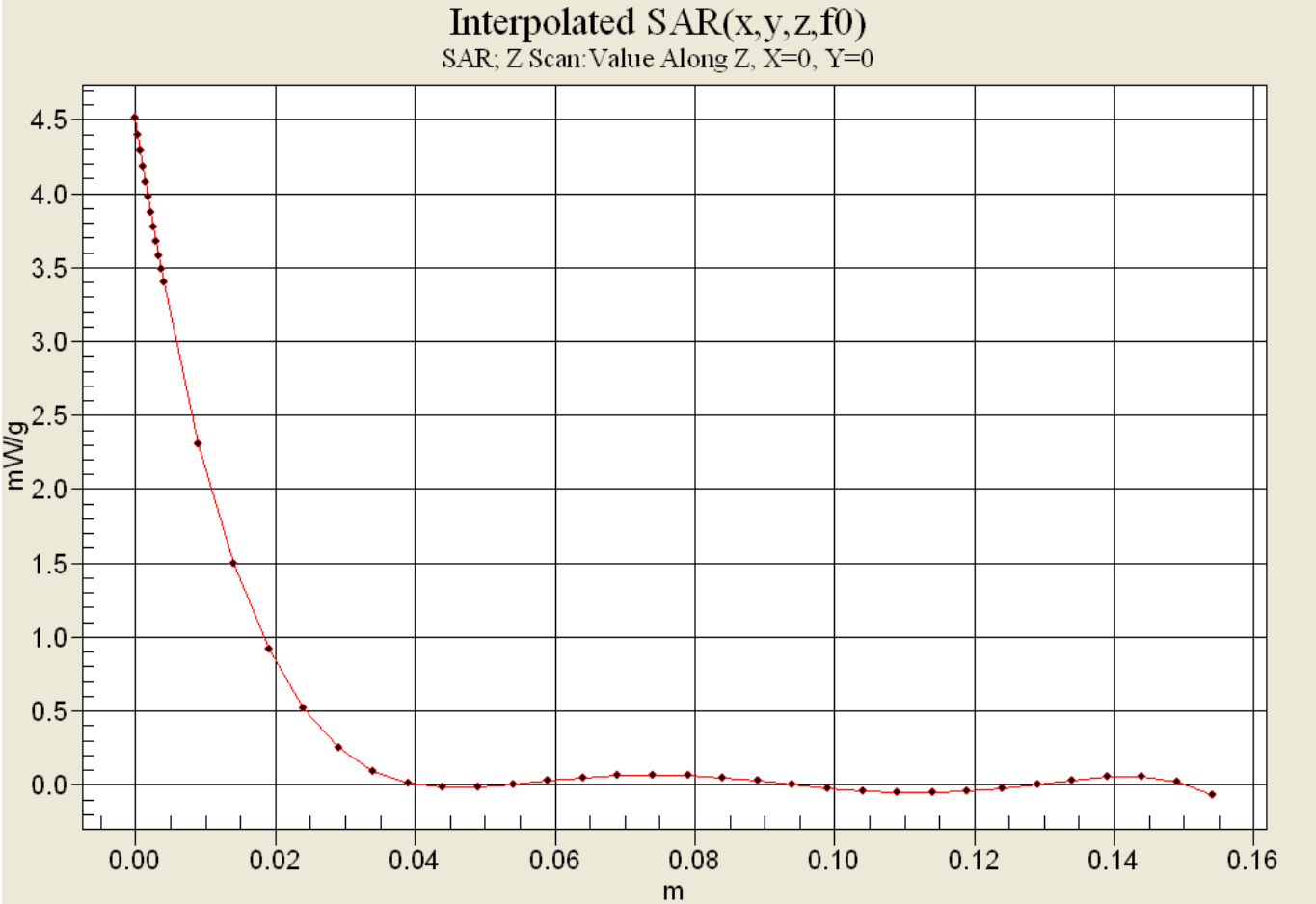
1900Mhz Validation @ 20dBm Probe 1618, DAE 675 and Dipole 5d016
Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1
Medium: HSL1900,Medium parameters used (interpolated): f = 1900 MHz; σ = 1.47 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(5.17, 5.17, 5.17), Calibrated: 9/13/2012
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn675,Calibrated: 5/23/2012
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) = 4.70 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 = -0.191 dB
Peak SAR (extrapolated) = 6.14 W/kg
SAR(1 g) = 3.75 mW/g; SAR(10 g) = 2.02 mW/g
Maximum value of SAR (measured) = 4.24 mW/g



0 dB = 4.70mW/g

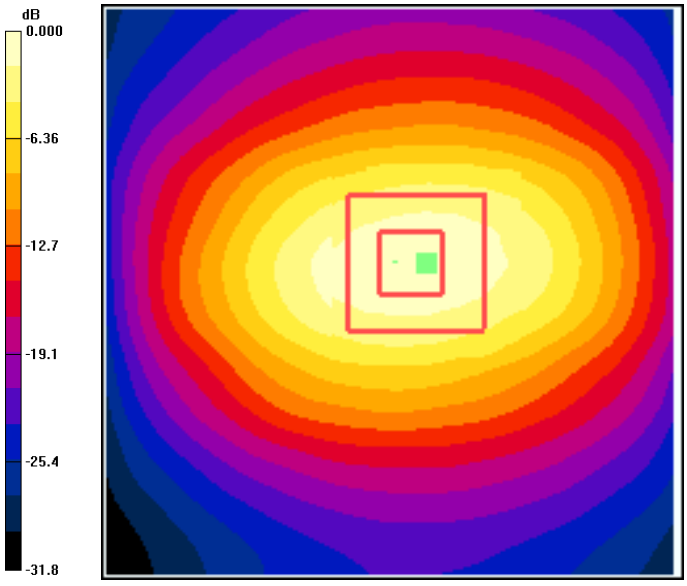


Test Laboratory: Comptest/Kyocera Date: 10/30/2012

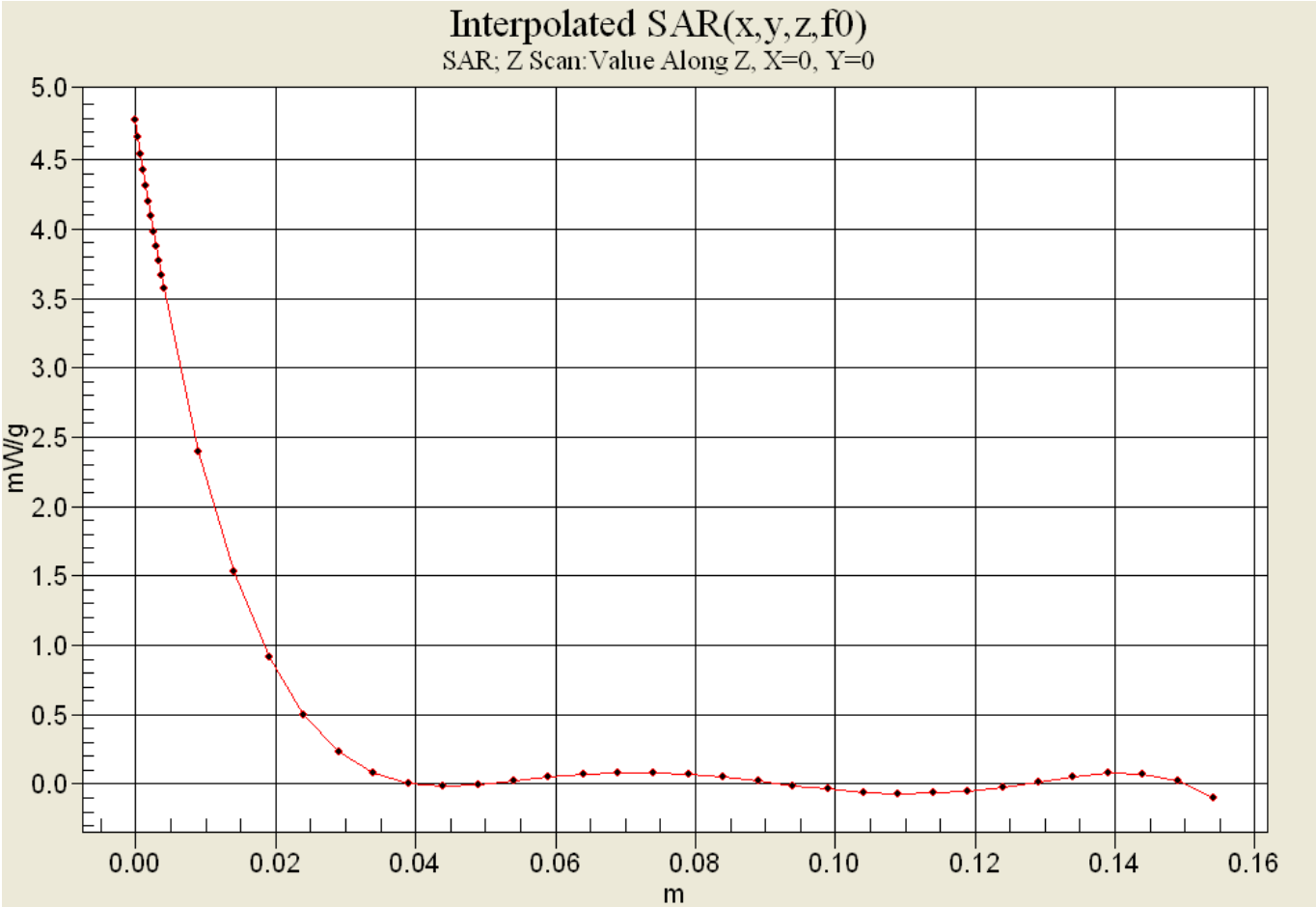
1900Mhz Validation @ 20dBm Probe 1618, DAE 675 and Dipole 5d016
Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1
Medium: HSL1900,Medium parameters used (interpolated): f = 1900 MHz; σ = 1.45 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(5.17, 5.17, 5.17), Calibrated: 9/13/2012
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn675,Calibrated: 5/23/2012
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) = 4.64 mW/g

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.3 V/m; Power Drift = 0.043 dB
Peak SAR (extrapolated) = 6.07 W/kg
SAR(1 g) = 3.72 mW/g; SAR(10 g) = 2.01 mW/g
Maximum value of SAR (measured) = 4.23 mW/g



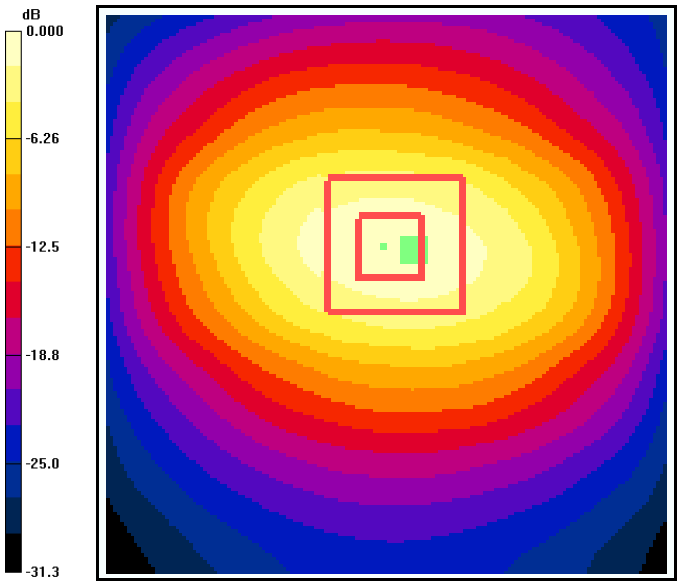
0 dB = 4.64mW/g



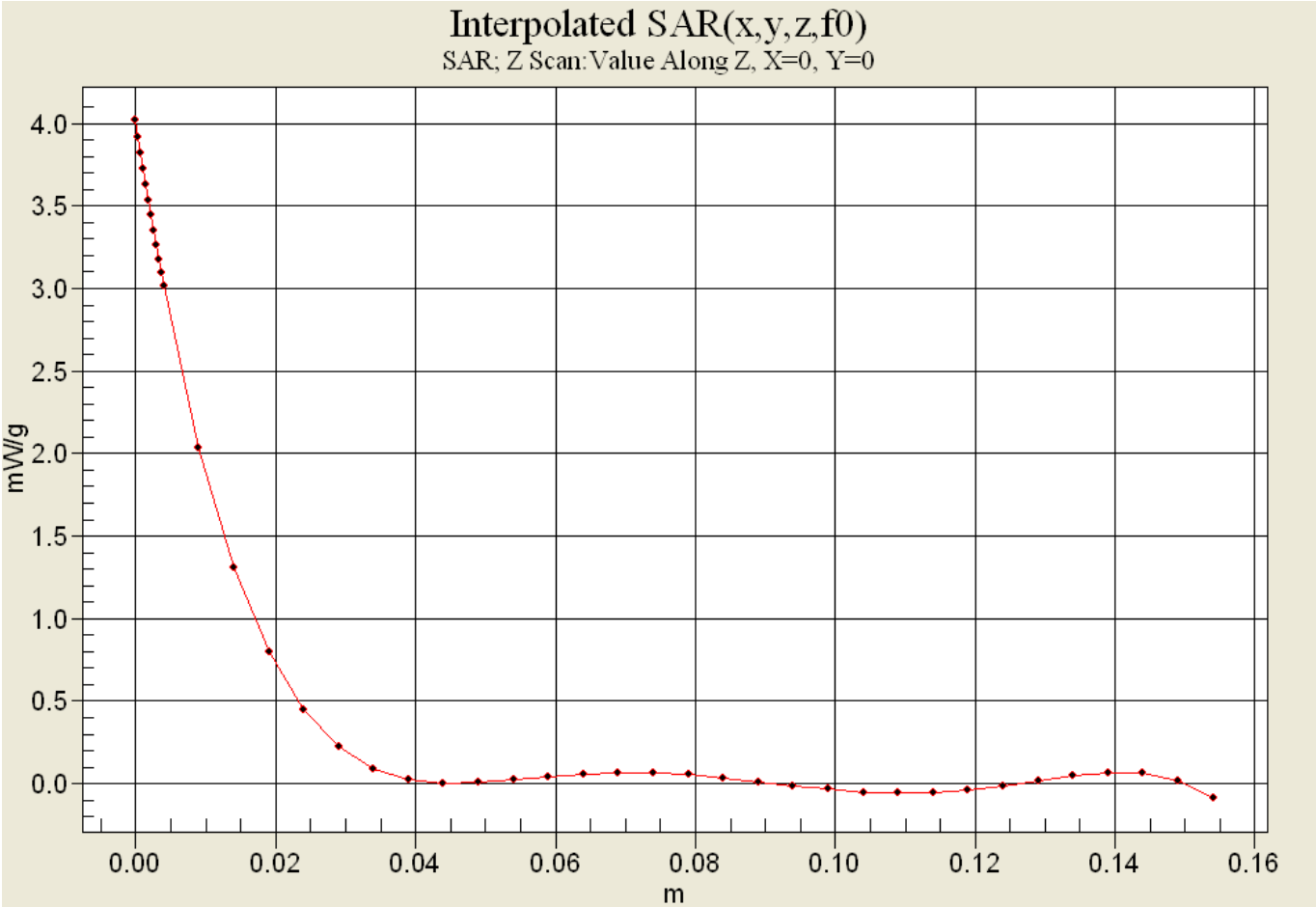
1900Mhz Validation @ 20dBm Probe 1618, DAE 675 and Dipole 5d016
Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1
Medium: HSL1900,Medium parameters used (interpolated): f = 1900 MHz; σ = 1.46 mho/m; ε_r = 38.7; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(5.17, 5.17, 5.17), Calibrated: 9/13/2012
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn675,Calibrated: 5/23/2012
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) = 4.58 mW/g

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.0 V/m; Power Drift = 0.149 dB
Peak SAR (extrapolated) = 6.17 W/kg
SAR(1 g) = 3.71 mW/g; SAR(10 g) = 1.98 mW/g
Maximum value of SAR (measured) = 4.25 mW/g



0 dB = 4.58mW/g

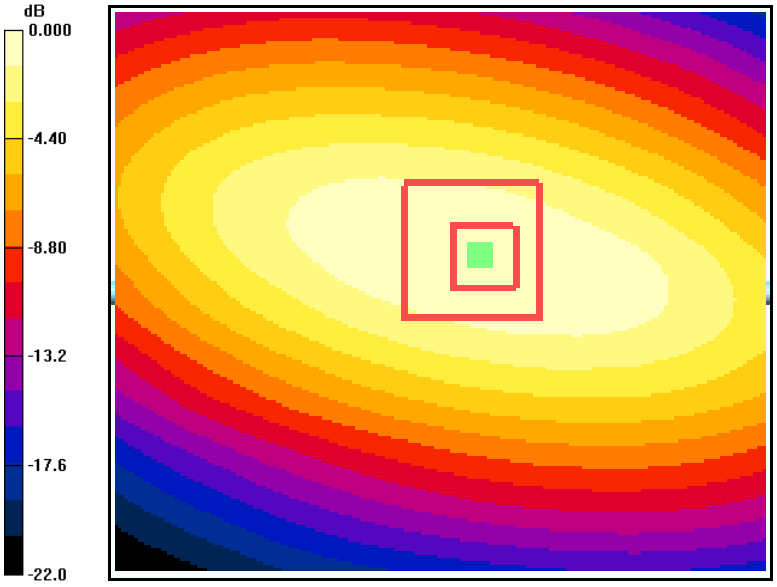


Validation for BODY

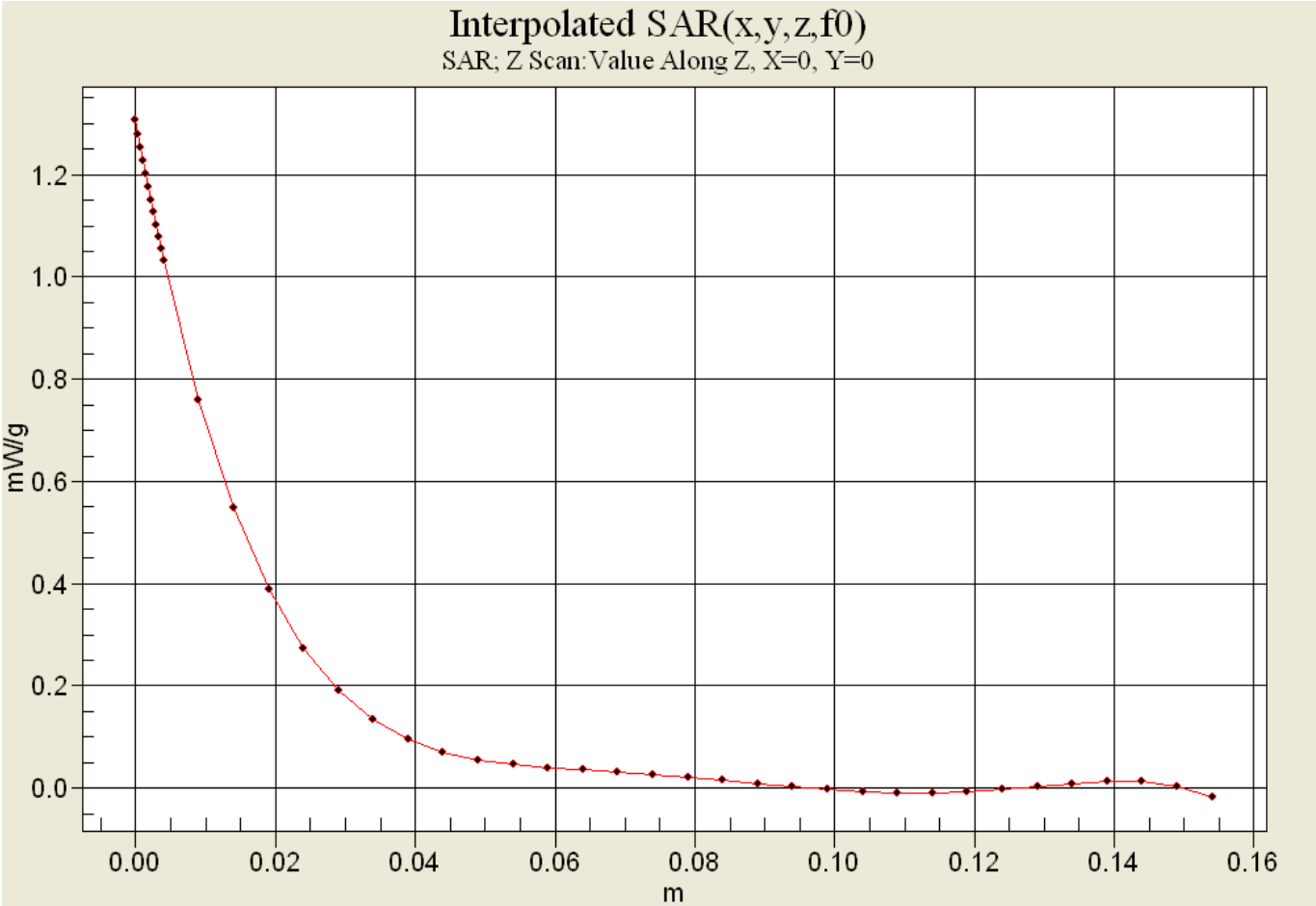
835MHz Validation(Muscle), Probe #3036, DAE #603, Dipole #5d016
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: M800,Medium parameters used: f = 835 MHz; σ = 0.95 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ES3DV3 - SN3036, ConvF(5.83, 5.83, 5.83), Calibrated: 5/29/2012
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn603,Calibrated: 9/27/2011
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 @20dBm/Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.13 mW/g

835MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 33.0 V/m; Power Drift = 0.001 dB
Peak SAR (extrapolated) = 1.53 W/kg
SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.696 mW/g
Maximum value of SAR (measured) = 1.14 mW/g



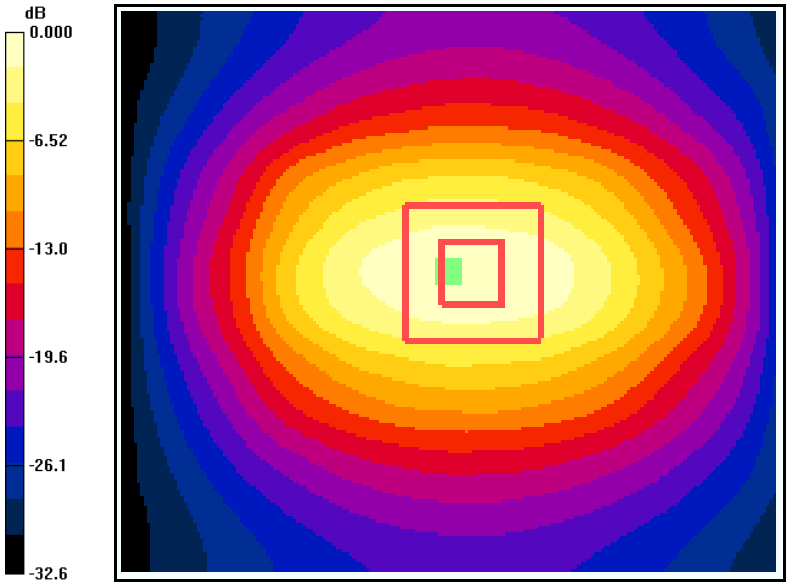
0 dB = 1.13mW/g



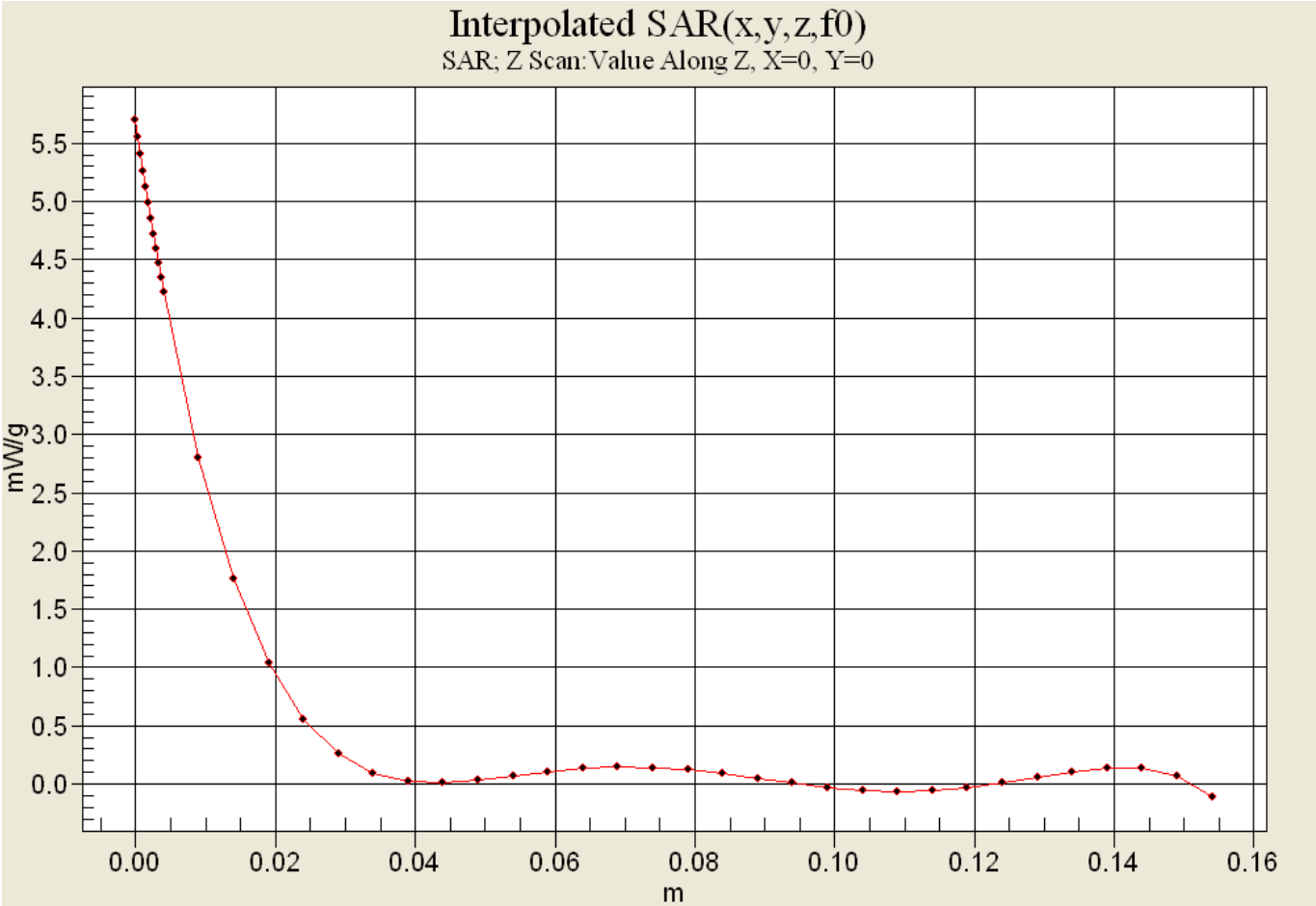
1800MHz Validation(Muscle), Probe #3036, DAE #603, Dipole #220
Communication System: CW, Frequency: 1800 MHz, Duty Cycle: 1:1
Medium: M1800,Medium parameters used: f = 1800 MHz; σ = 1.57 mho/m; ε_r = 51.2; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ES3DV3 - SN3036, ConvF(4.7, 4.7, 4.7), Calibrated: 5/29/2012
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn603,Calibrated: 9/12/2012
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 Validation @20dBm/Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 5.24 mW/g

1800MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.0 V/m; Power Drift = -0.032 dB
Peak SAR (extrapolated) = 7.88 W/kg
SAR(1 g) = 4.3 mW/g; SAR(10 g) = 2.23 mW/g
Maximum value of SAR (measured) = 4.87 mW/g



0 dB = 5.24mW/g

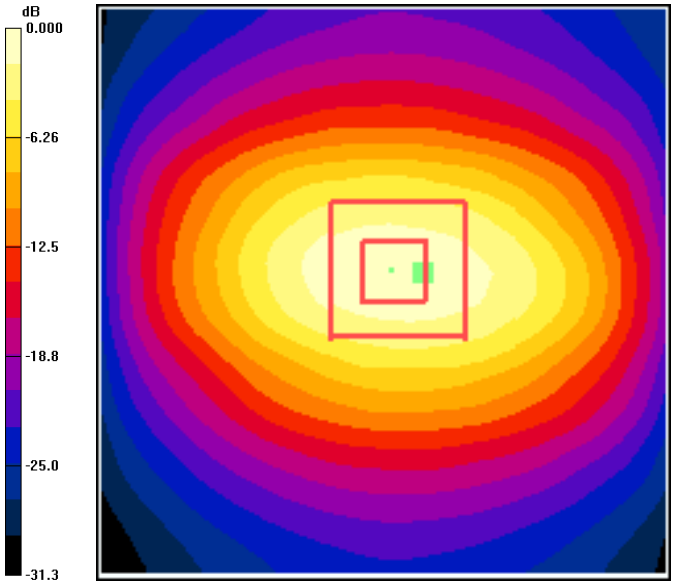


Test Laboratory: Comptest/Kyocera Date: 11/06/2012

1900Mhz(Muscle) Validation @ 20dBm Probe 1618, DAE 675 and Dipole 5d016
Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1
Medium: M1800,Medium parameters used (interpolated): f = 1900 MHz; σ = 1.57 mho/m; ε_r = 51.1; ρ = 1000 kg/m^3
Phantom: SAM 12,Phantom section: Flat Section
DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(4.42, 4.42, 4.42), Calibrated: 9/13/2012
Sensor-Surface: 4mm (Mechanical Surface Detection),
Electronics: DAE4 Sn675,Calibrated: 5/23/2012
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(Muscle) Validation @20dBm/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 4.64 mW/g

1900MHz(Muscle) Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.7 V/m; Power Drift = -0.187 dB
Peak SAR (extrapolated) = 5.69 W/kg
SAR(1 g) = 3.77 mW/g; SAR(10 g) = 2.06 mW/g
Maximum value of SAR (measured) = 4.33 mW/g



0 dB = 4.64mW/g