

Figure 72 Z-Scan at power reference point (WCDMA Band II with Acer ZH1 Test Position 1 Channel 9400)

WCDMA Band II with Acer ZH1 Test Position 1 Low Frequency

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1737; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 1 Low/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.823 mW/g

Test Position 1 Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.5 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.747 mW/g; SAR(10 g) = 0.460 mW/g

Maximum value of SAR (measured) = 0.805 mW/g

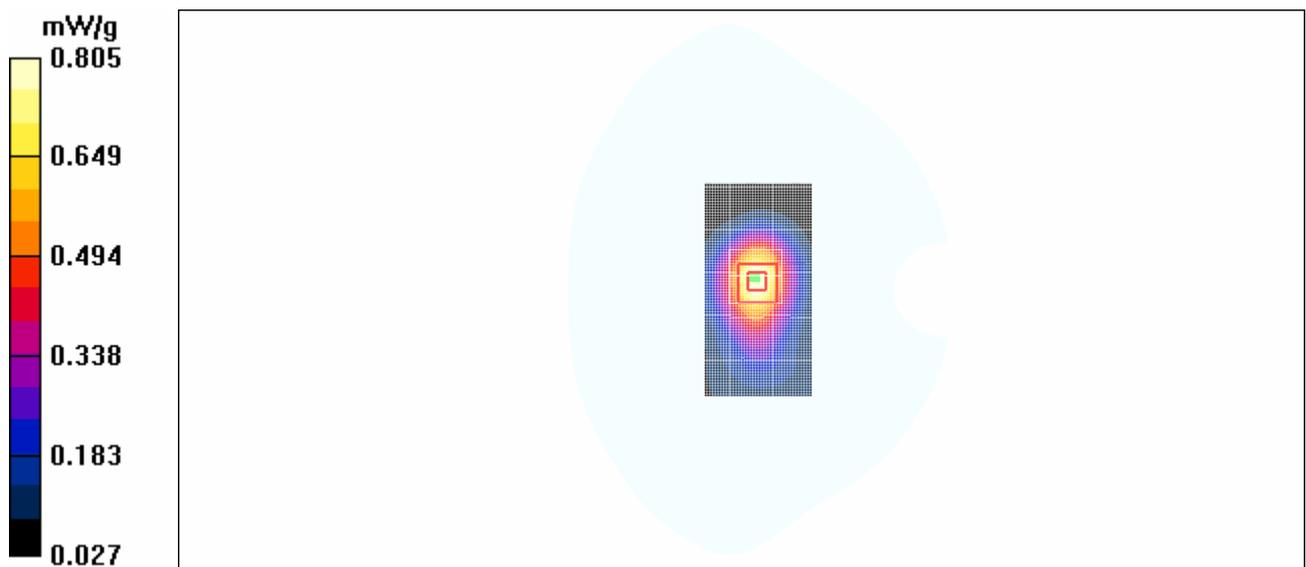


Figure 73 WCDMA Band II with Acer ZH1 Test Position 1 Channel 9262

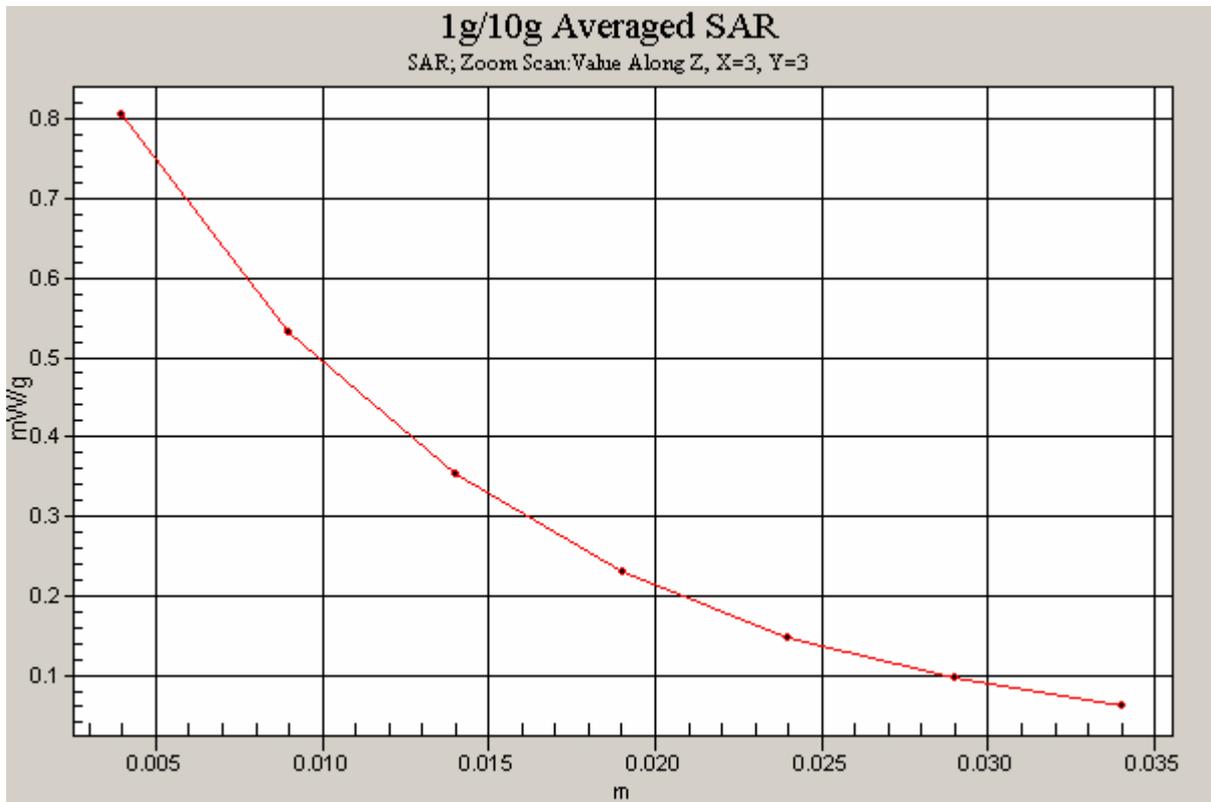


Figure74 Z-Scan at power reference point (WCDMA Band II with Acer ZH1 Test Position 1 Channel 9262)

WCDMA Band II with Acer ZR1 Test Position 2 Middle Frequency

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 2 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.469 mW/g

Test Position 2 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.2 V/m; Power Drift = -0.125 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.459 mW/g; SAR(10 g) = 0.290 mW/g

Maximum value of SAR (measured) = 0.502 mW/g

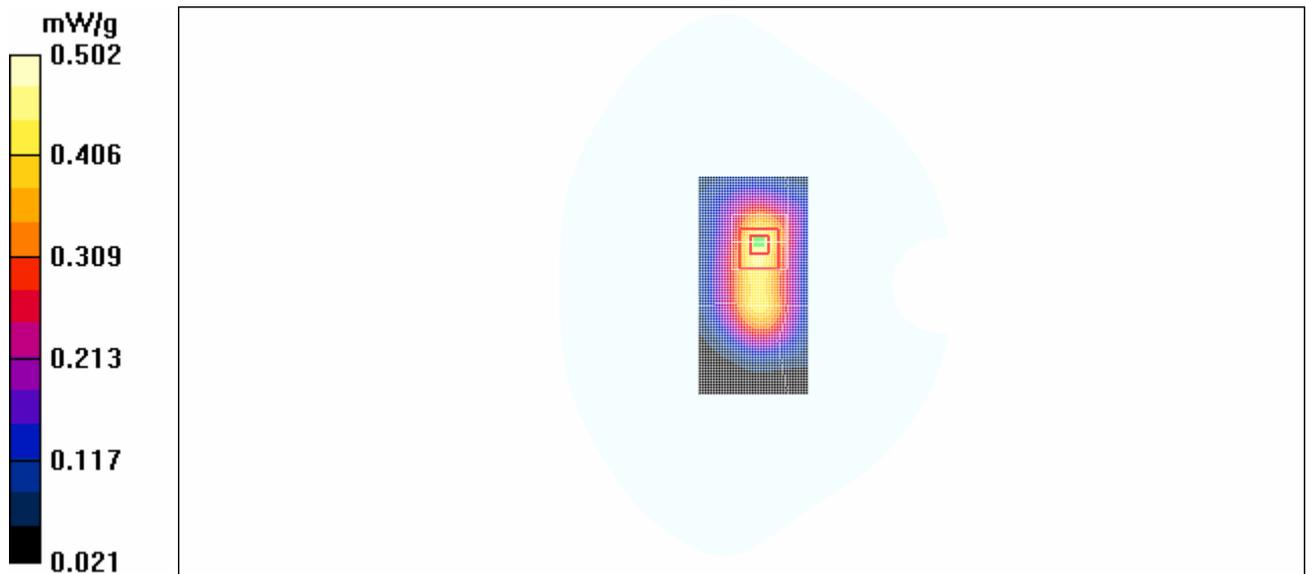


Figure 75 WCDMA Band II with Acer ZR1 Test Position 2 Channel 9400

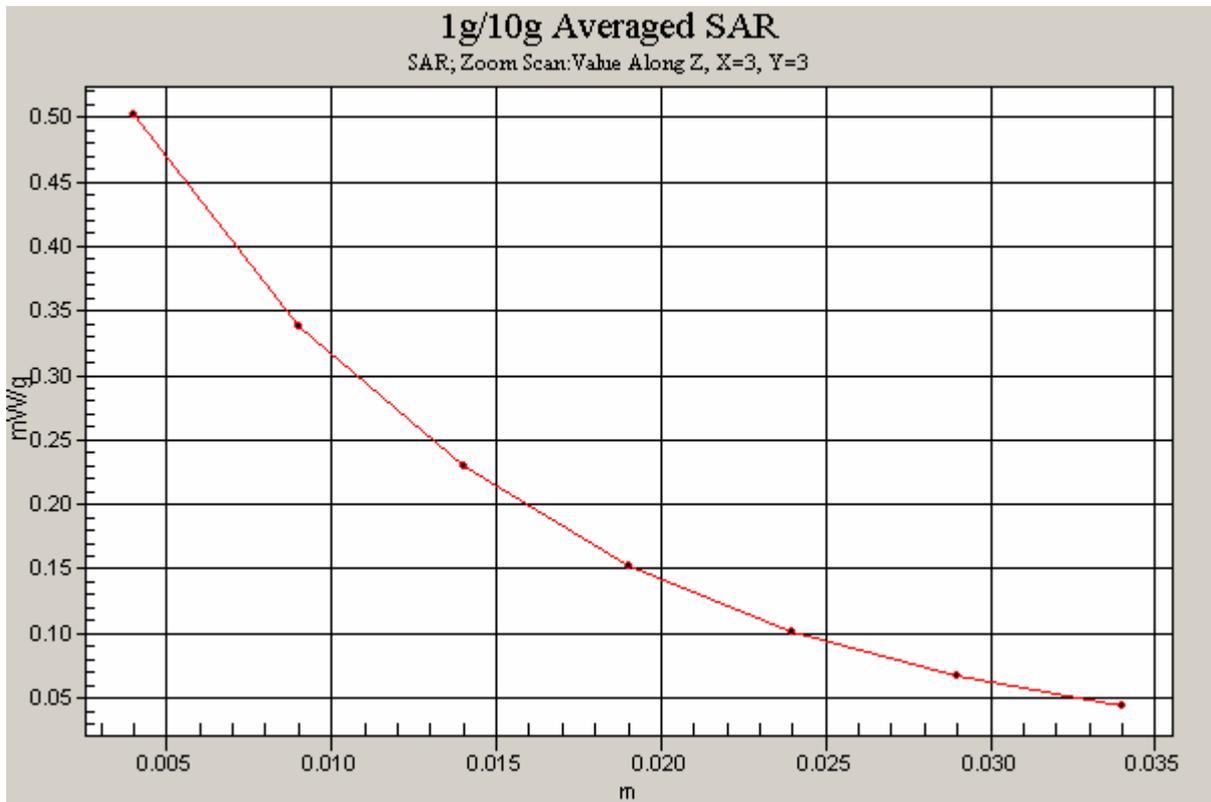


Figure 76 Z-Scan at power reference point (WCDMA Band II with Acer ZR1 Test Position 2 Channel 9400)

WCDMA Band II with Acer ZR1 Test Position 3 High Frequency

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1908$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE3 Sn452;

Test Position 3 High/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.38 mW/g

Test Position 3 High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 32.9 V/m; Power Drift = -0.037 dB
Peak SAR (extrapolated) = 3.43 W/kg
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.421 mW/g
Maximum value of SAR (measured) = 1.28 mW/g

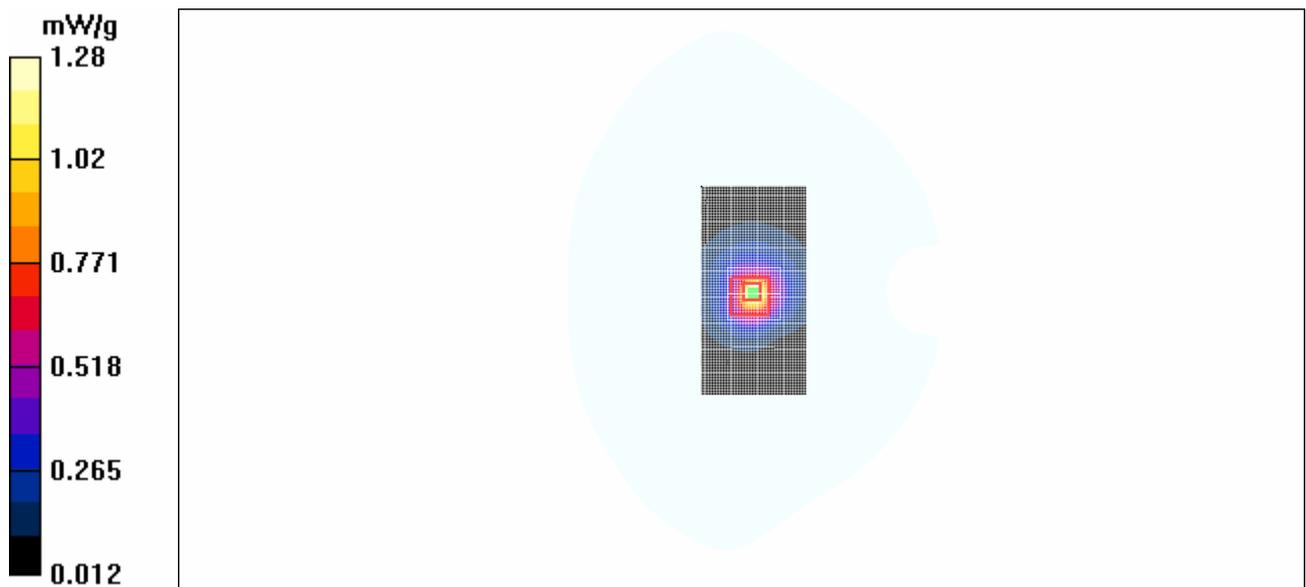


Figure77 WCDMA Band II with Acer ZR1 Test Position 3 Channel 9538

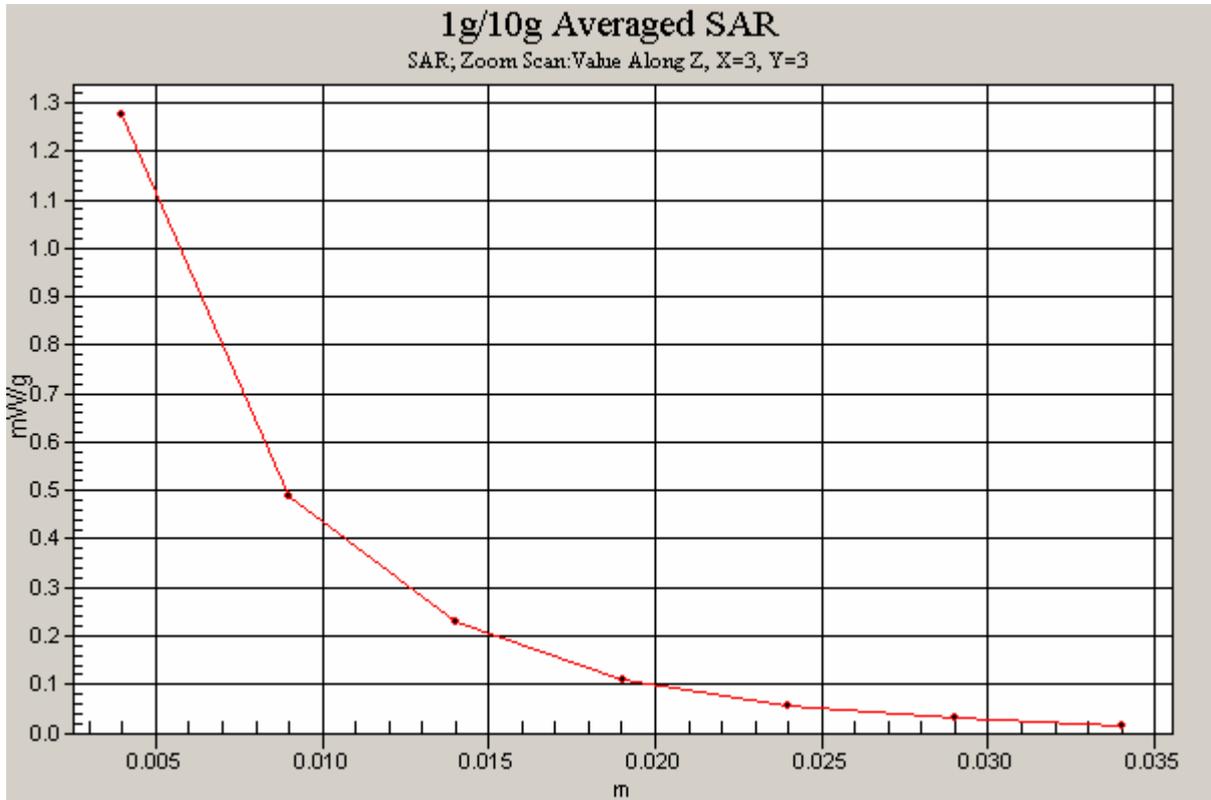


Figure 78 Z-Scan at power reference point (WCDMA Band II with Acer ZR1 Test Position 3 Channel 9538)

WCDMA Band II with Acer ZR1 Test Position 3 Middle Frequency

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 3 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.33 mW/g

Test Position 3 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.1 V/m; Power Drift = 0.131 dB

Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.442 mW/g

Maximum value of SAR (measured) = 1.36 mW/g

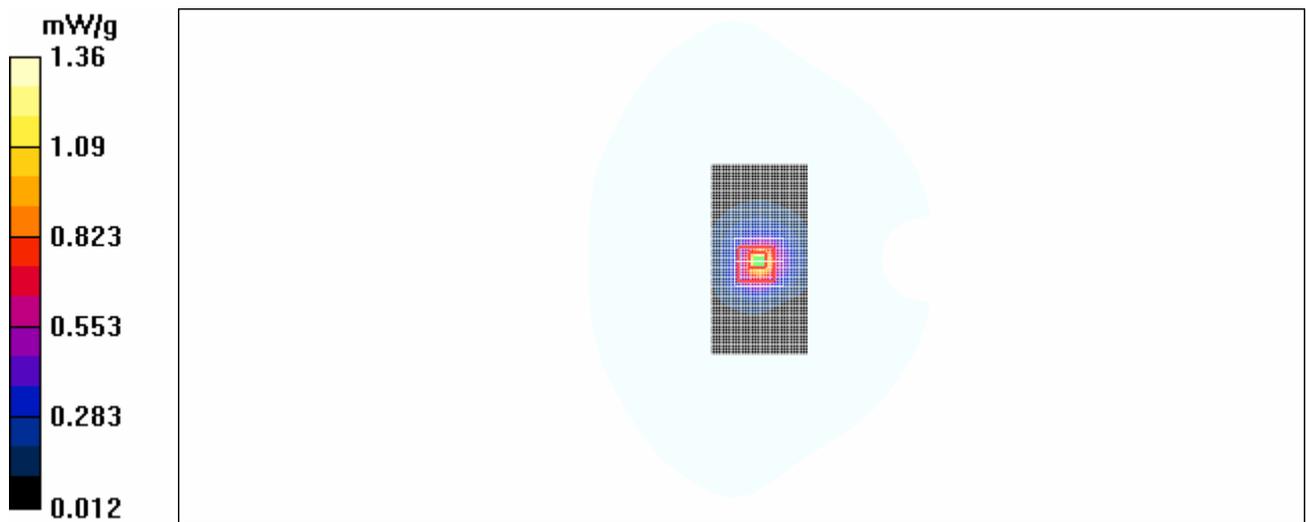


Figure 79 WCDMA Band II with Acer ZR1 Test Position 3 Channel 9400

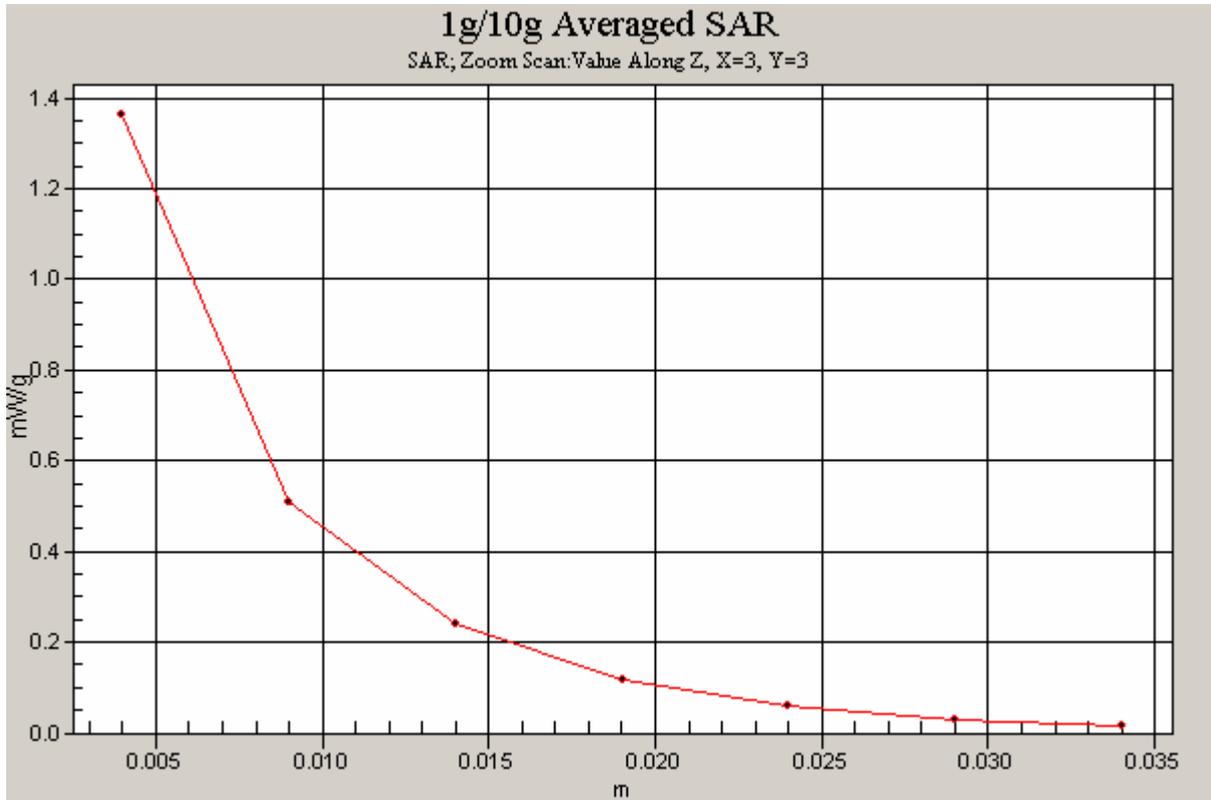


Figure 80 Z-Scan at power reference point (WCDMA Band II with Acer ZR1 Test Position 3 Channel 9400)

WCDMA Band II with Acer ZR1 Test Position 3 Low Frequency

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 3 Low/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.31 mW/g

Test Position 3 Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.5 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 3.41 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.428 mW/g

Maximum value of SAR (measured) = 1.27 mW/g

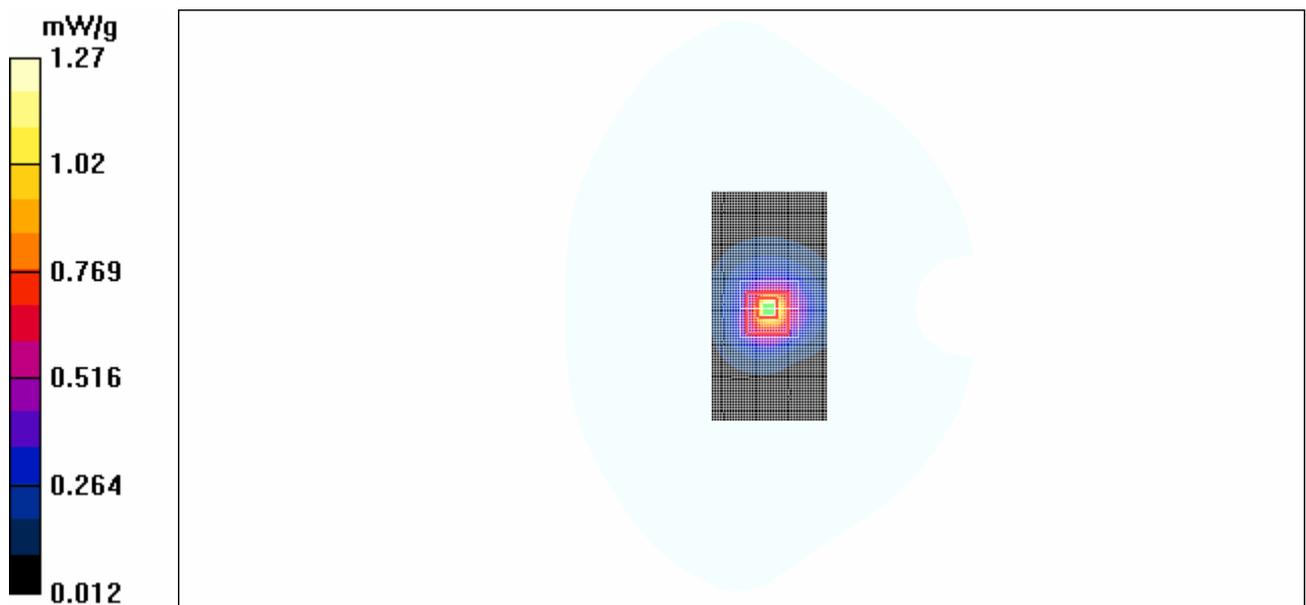


Figure 81 WCDMA Band II with Acer ZR1 Test Position 3 Channel 9262

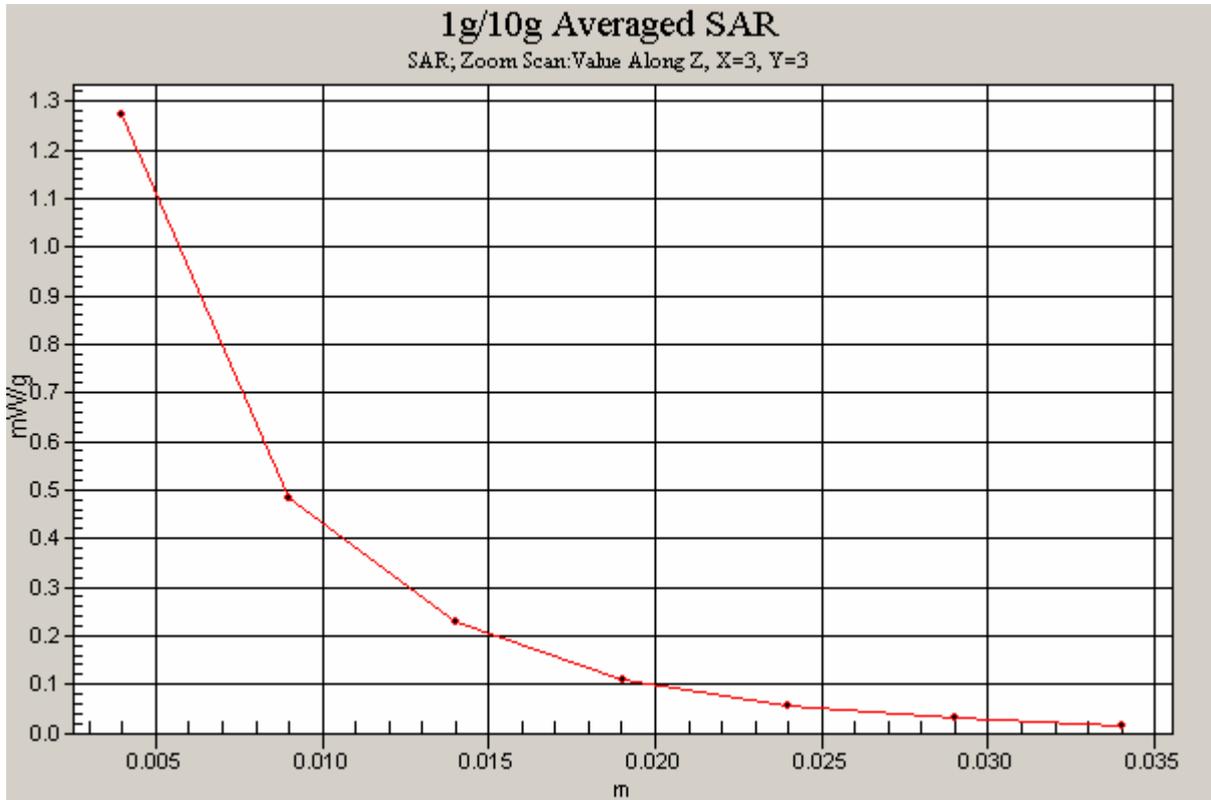


Figure 82 Z-Scan at power reference point (WCDMA Band II with Acer ZR1 Test Position 3
Channel 9262)

WCDMA Band II with COMPAQ Presario 2500 Test Position 4 Middle Frequency

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 4 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.514 mW/g

Test Position 4 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.0 V/m; Power Drift = 0.104 dB

Peak SAR (extrapolated) = 0.705 W/kg

SAR(1 g) = 0.462 mW/g; SAR(10 g) = 0.286 mW/g

Maximum value of SAR (measured) = 0.502 mW/g

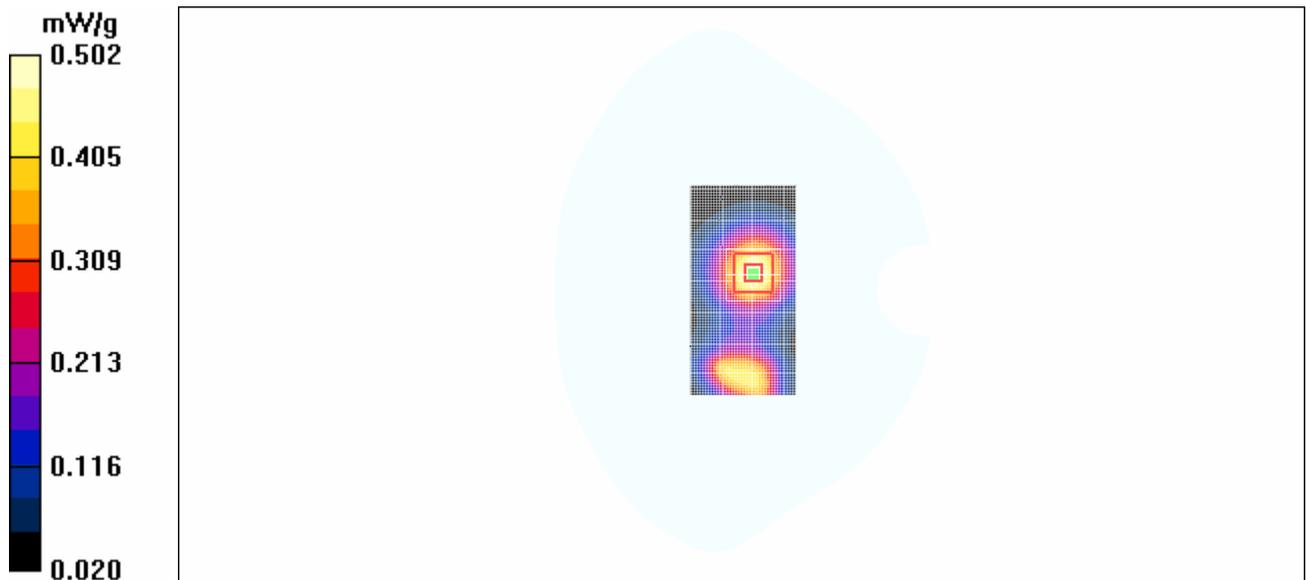


Figure 83 WCDMA Band II with COMPAQ Presario 2500 Test Position 4 Channel 9400

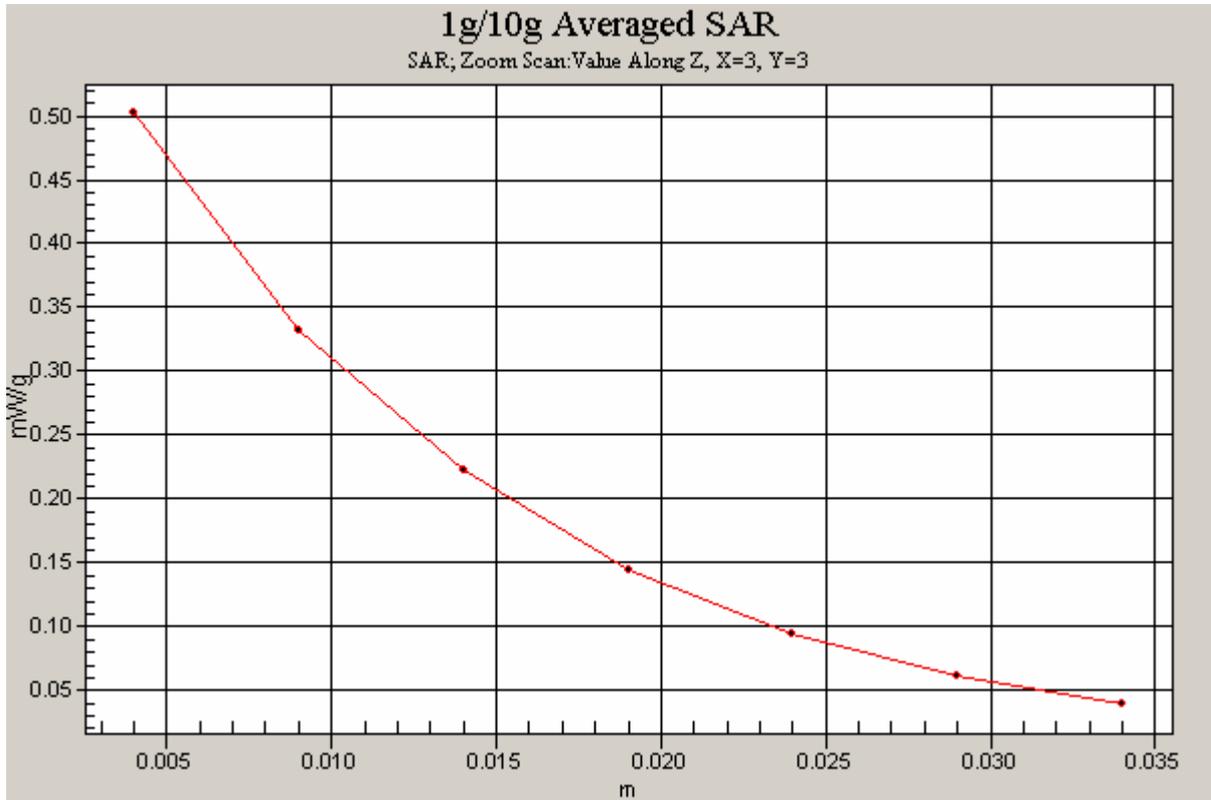


Figure 84 Z-Scan at power reference point (WCDMA Band II with COMPAQ Presario 2500 Test Position 4 Channel 9400)

WCDMA Band II with COMPAQ Presario 2500 Test Position 5 Middle Frequency

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 5 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.309 mW/g

Test Position 5 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.5 V/m; Power Drift = -0.098 dB

Peak SAR (extrapolated) = 0.428 W/kg

SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.308 mW/g

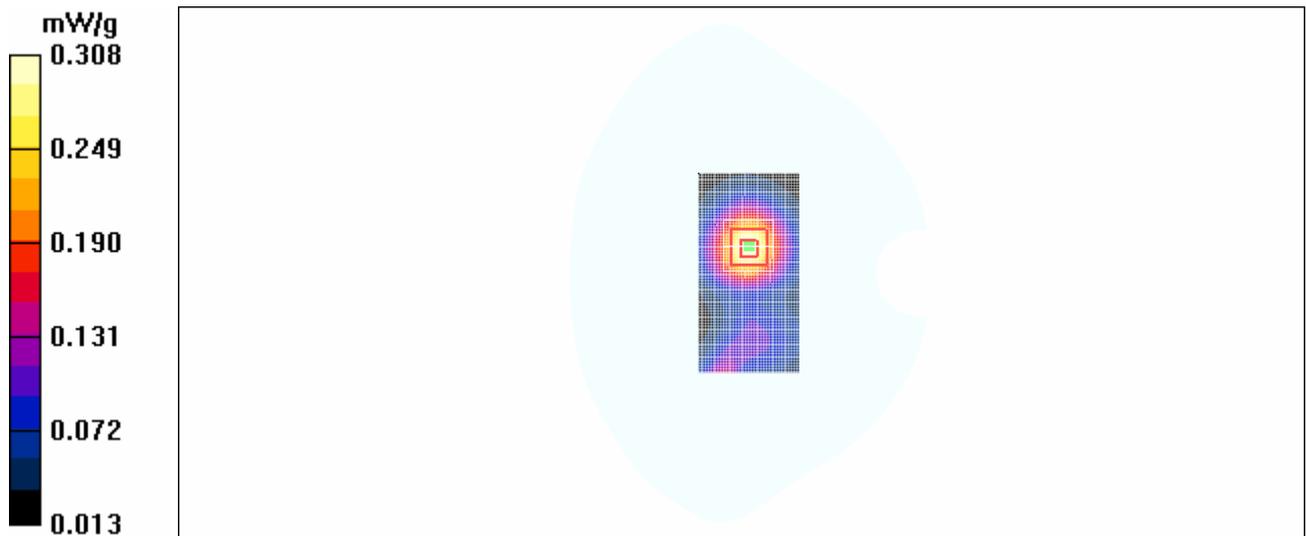


Figure 85 WCDMA Band II with COMPAQ Presario 2500 Test Position 5 Channel 9400

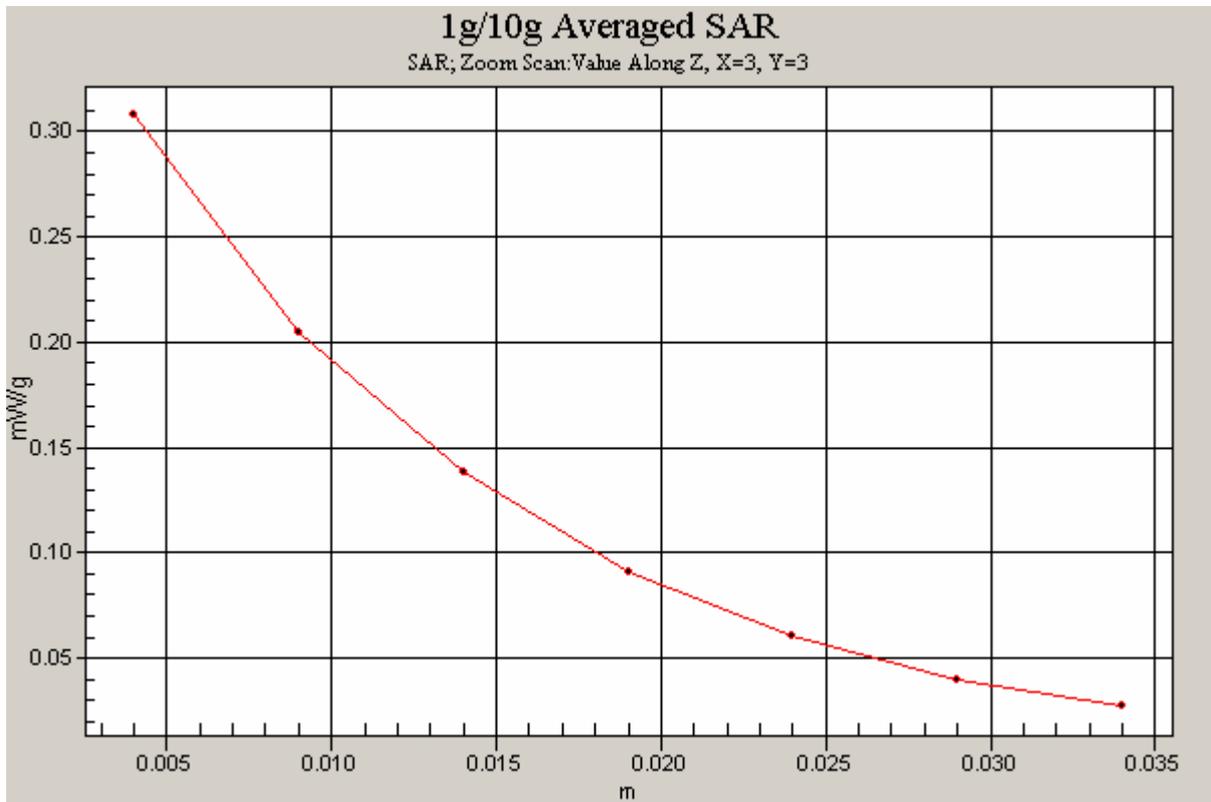


Figure 86 Z-Scan at power reference point (WCDMA Band II with COMPAQ Presario 2500 Test Position 5 Channel 9400)

WCDMA Band II with COMPAQ Presario 2500 Test Position 6 Middle Frequency

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 6 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.854 mW/g

Test Position 6 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.5 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.779 mW/g; SAR(10 g) = 0.458 mW/g

Maximum value of SAR (measured) = 0.851 mW/g

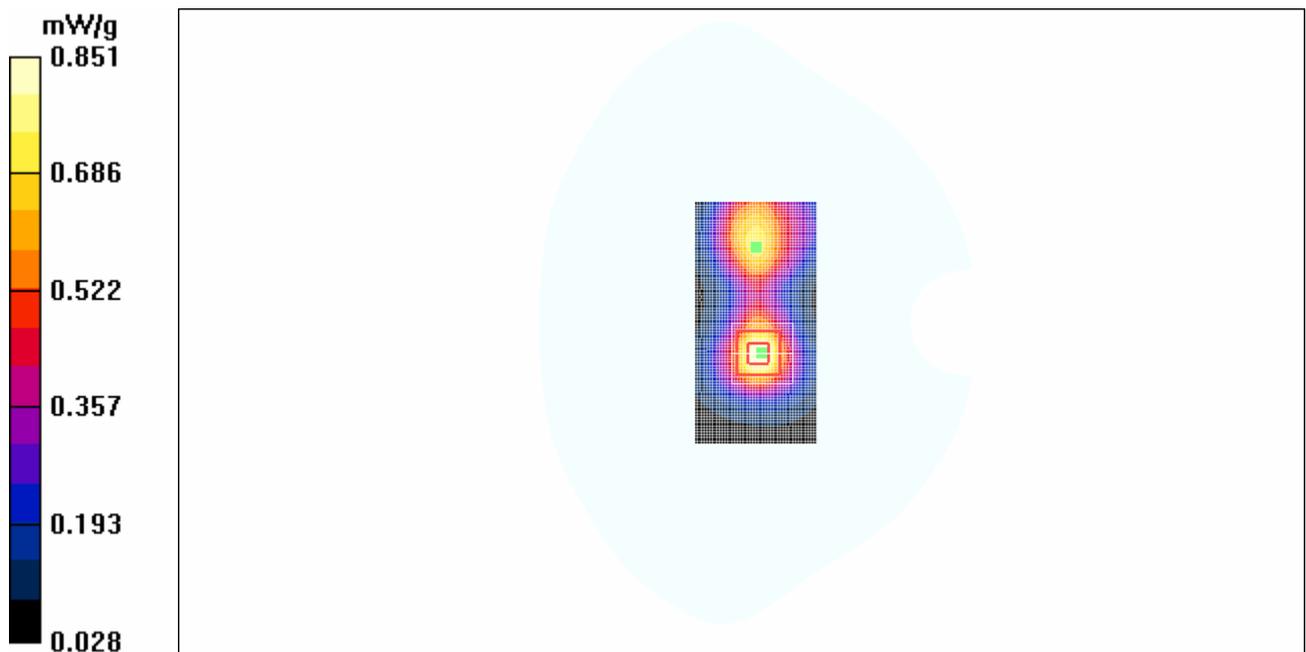


Figure 87 WCDMA Band II with COMPAQ Presario 2500 Test Position 6 Channel 9400

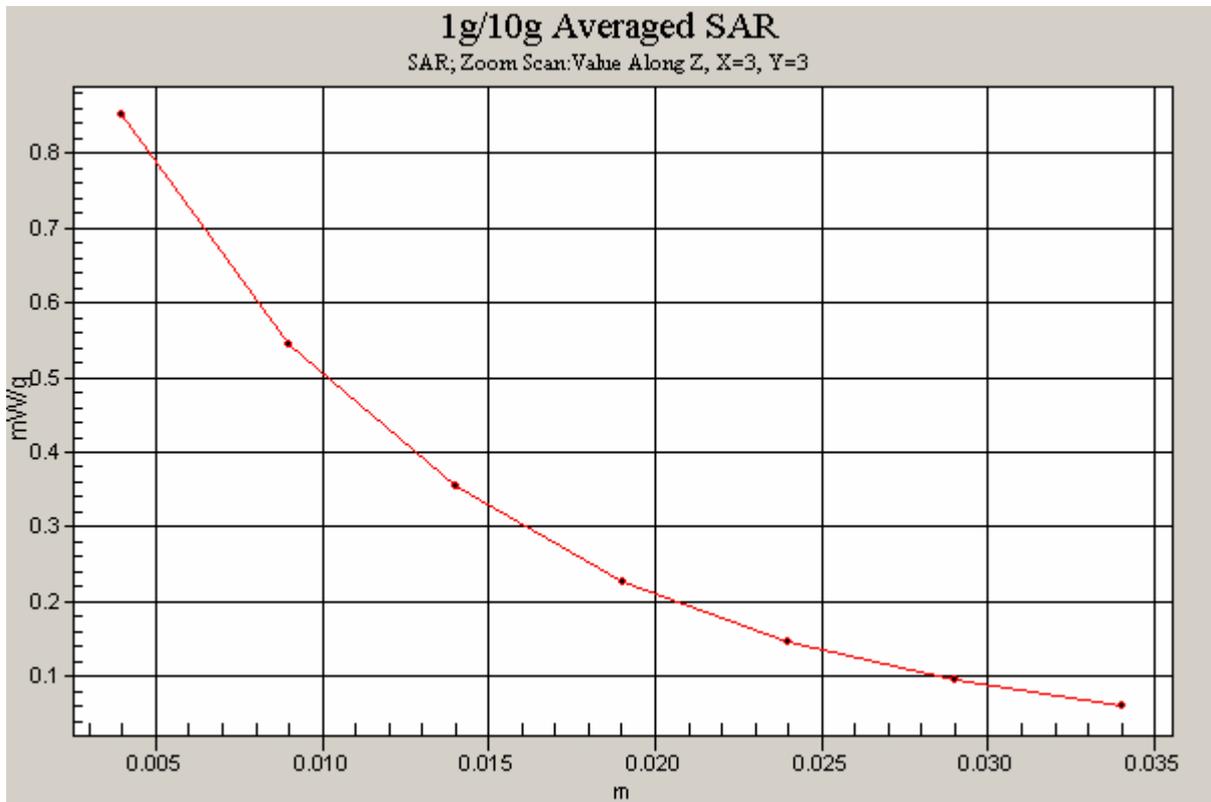


Figure 88 Z-Scan at power reference point (WCDMA Band II with COMPAQ Presario 2500 Test Position 6 Channel 9400)

WCDMA Band II with COMPAQ Presario 2500 Test Position 7 High Frequency

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 7 High/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.24 mW/g

Test Position 7 High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.1 V/m; Power Drift = 0.099 dB

Peak SAR (extrapolated) = 3.52 W/kg

SAR(1 g) = 0.990 mW/g; SAR(10 g) = 0.435 mW/g

Maximum value of SAR (measured) = 1.06 mW/g

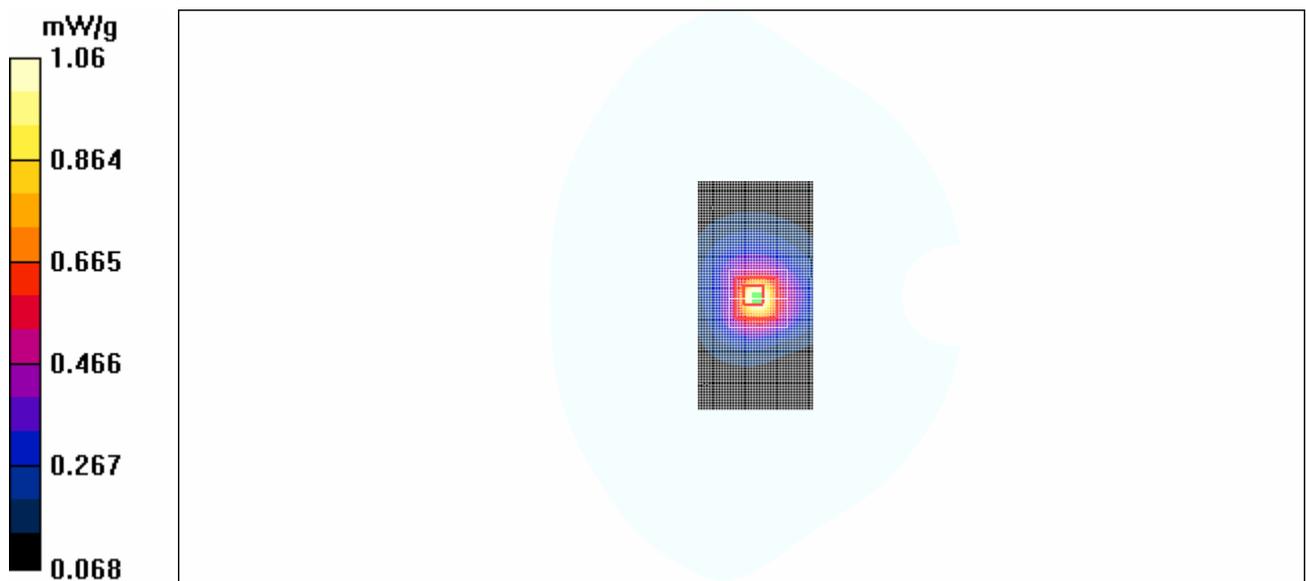


Figure 89 WCDMA Band II with COMPAQ Presario 2500 Test Position 7 Channel 9538

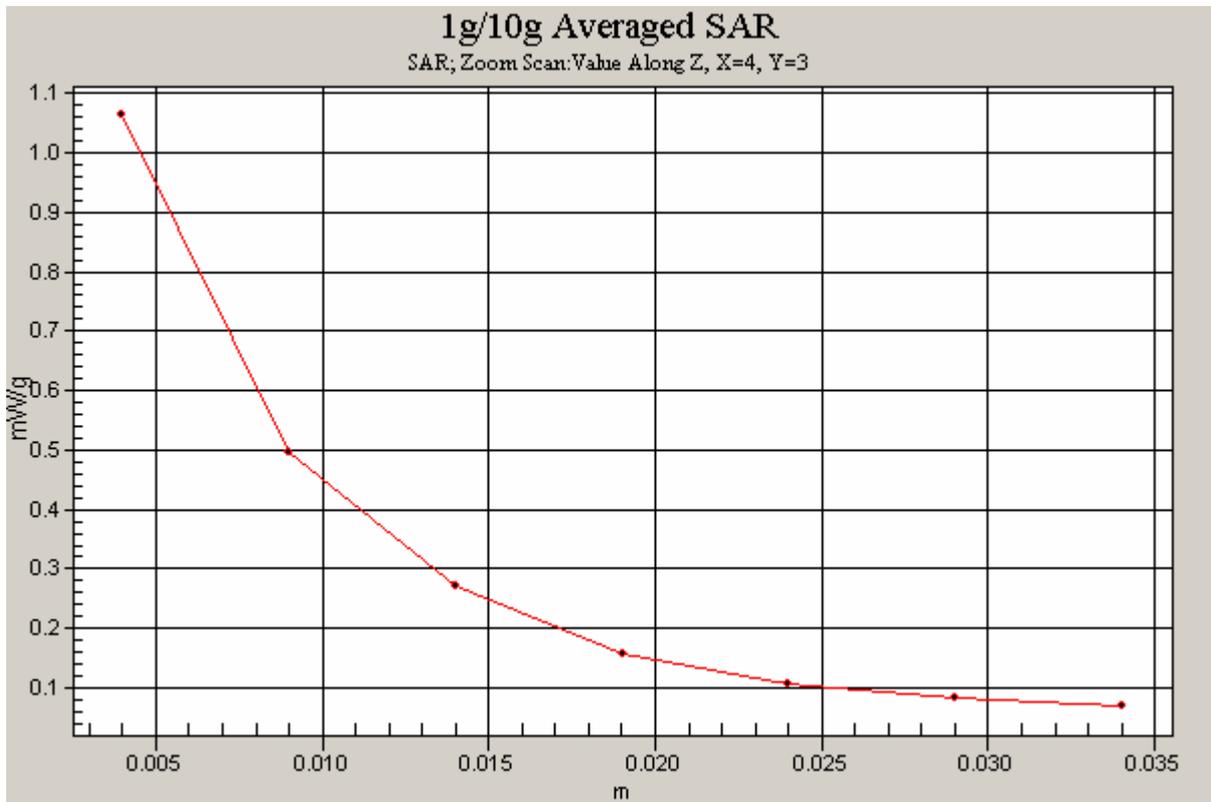


Figure 90 Z-Scan at power reference point (WCDMA Band II with COMPAQ Presario 2500 Test Position 7 Channel 9538)

WCDMA Band II with COMPAQ Presario 2500 Test Position 7 Middle Frequency

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 7 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.37 mW/g

Test Position 7 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 31.5 V/m; Power Drift = -0.094 dB

Peak SAR (extrapolated) = 4.15 W/kg

SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.489 mW/g

Maximum value of SAR (measured) = 1.22 mW/g

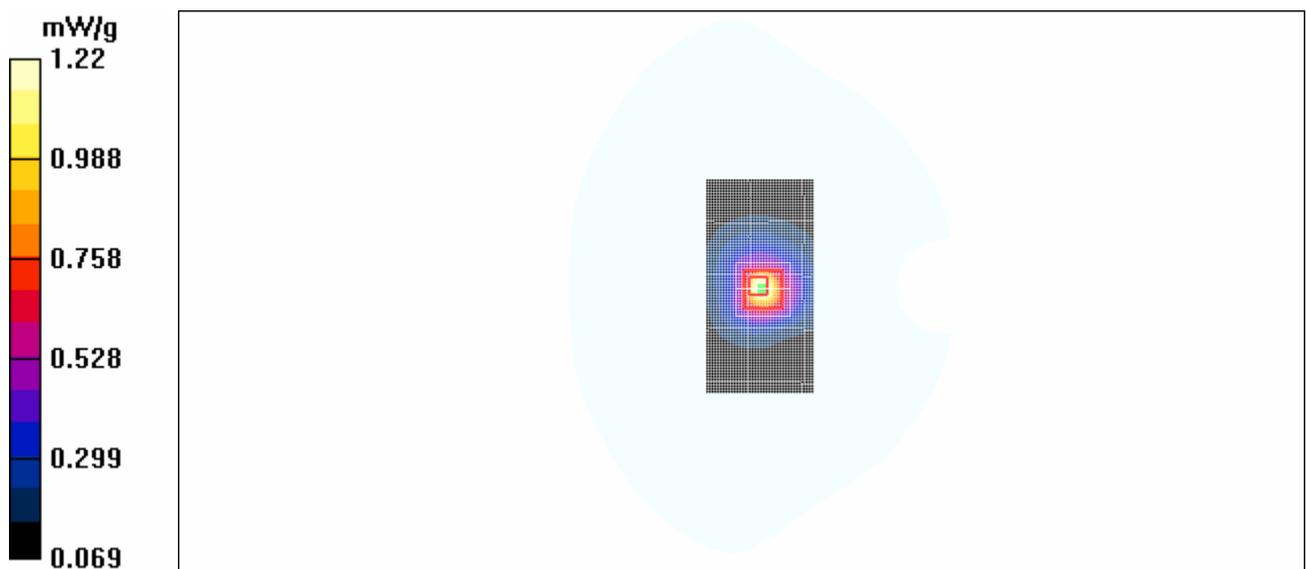


Figure 91 WCDMA Band II with COMPAQ Presario 2500 Test Position 7 Channel 9400

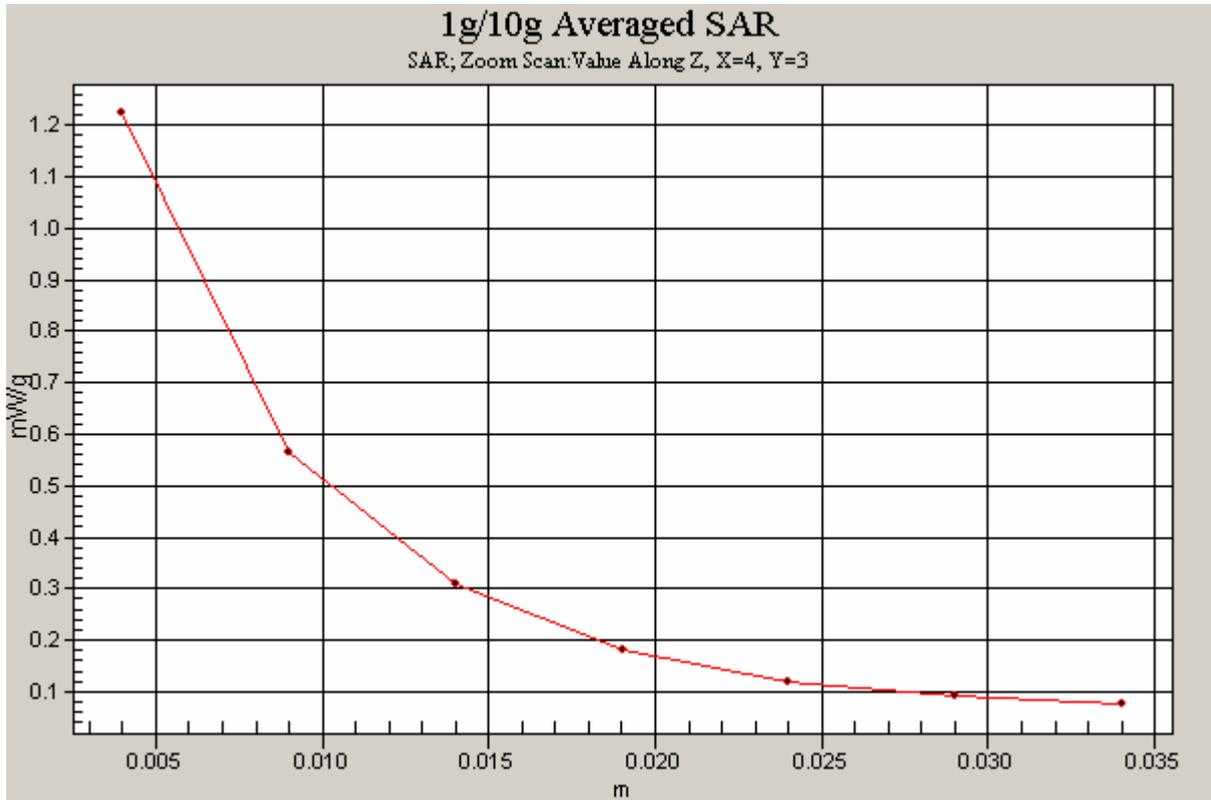


Figure 92 Z-Scan at power reference point (WCDMA Band II with COMPAQ Presario 2500 Test Position 7 Channel 9400)

WCDMA Band II with COMPAQ Presario 2500 Test Position 7 Low Frequency

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 7 Low/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.46 mW/g

Test Position 7 Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.7 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 4.14 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.502 mW/g

Maximum value of SAR (measured) = 1.22 mW/g

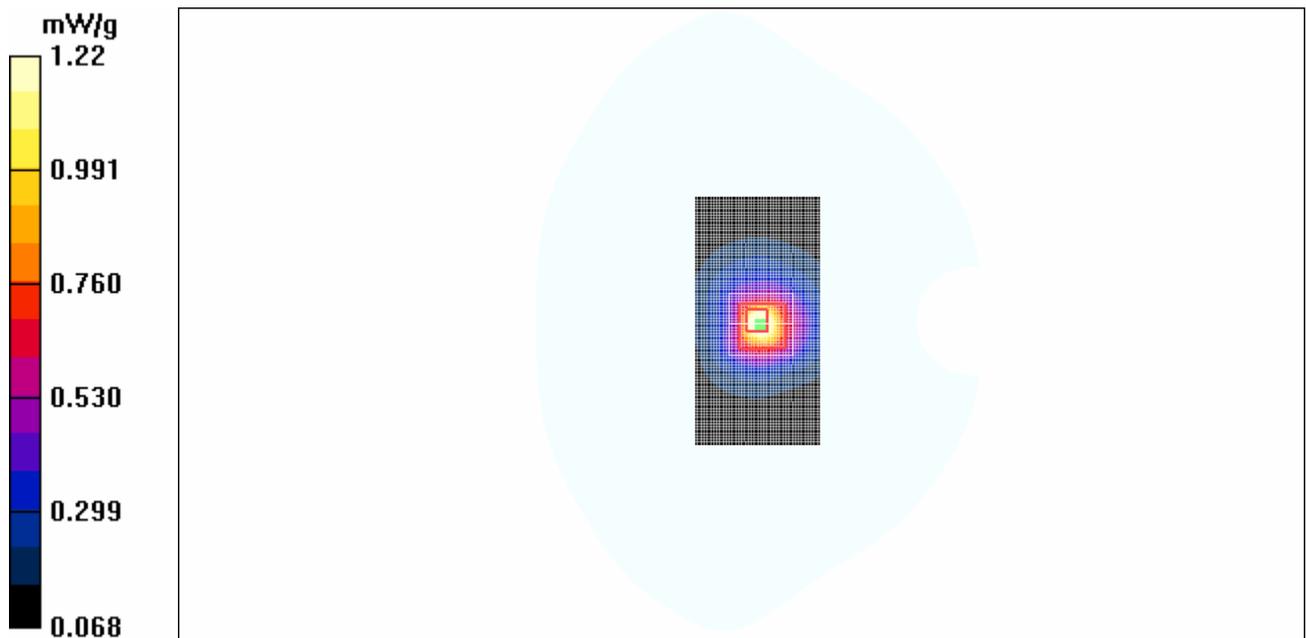


Figure 93 WCDMA Band II with COMPAQ Presario 2500 Test Position 7 Channel 9262

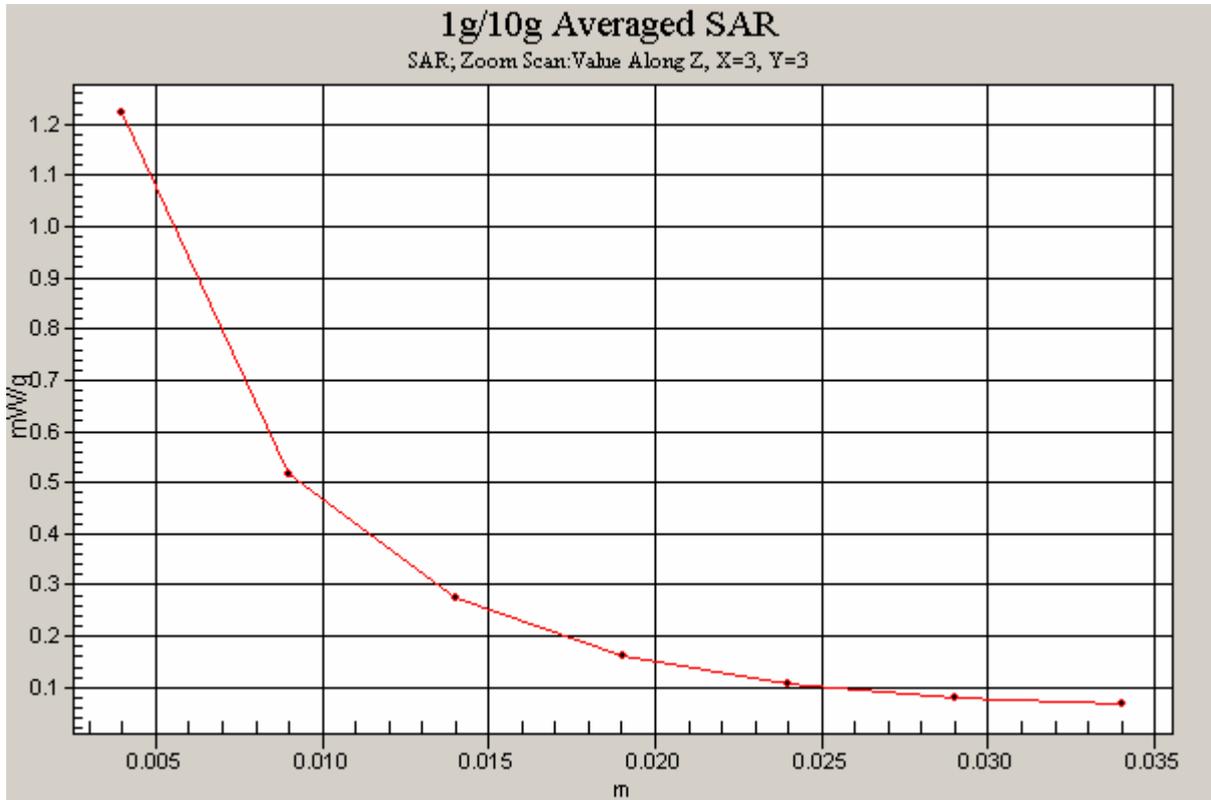


Figure 94 Z-Scan at power reference point (WCDMA Band II with COMPAQ Presario 2500 Test Position 7 Channel 9262)

WCDMA Band II HSDPA with COMPAQ Presario 2500 Test Position 7 High Frequency

Communication System: WCDMA Band II+HSDPA; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.55$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 7 High/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.758 mW/g

Test Position 7 High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.3 V/m; Power Drift = 0.158 dB

Peak SAR (extrapolated) = 2.94 W/kg

SAR(1 g) = 0.870 mW/g; SAR(10 g) = 0.377 mW/g

Maximum value of SAR (measured) = 1.06 mW/g

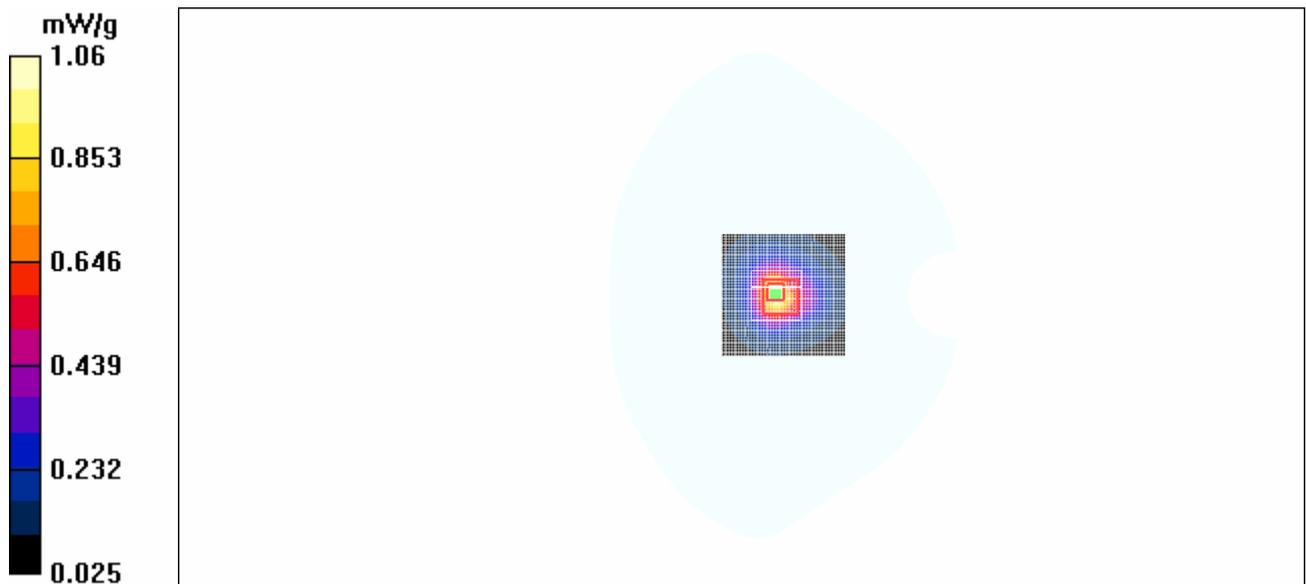


Figure 95 WCDMA Band II HSDPA with COMPAQ Presario 2500 Test Position 7 Channel 9538

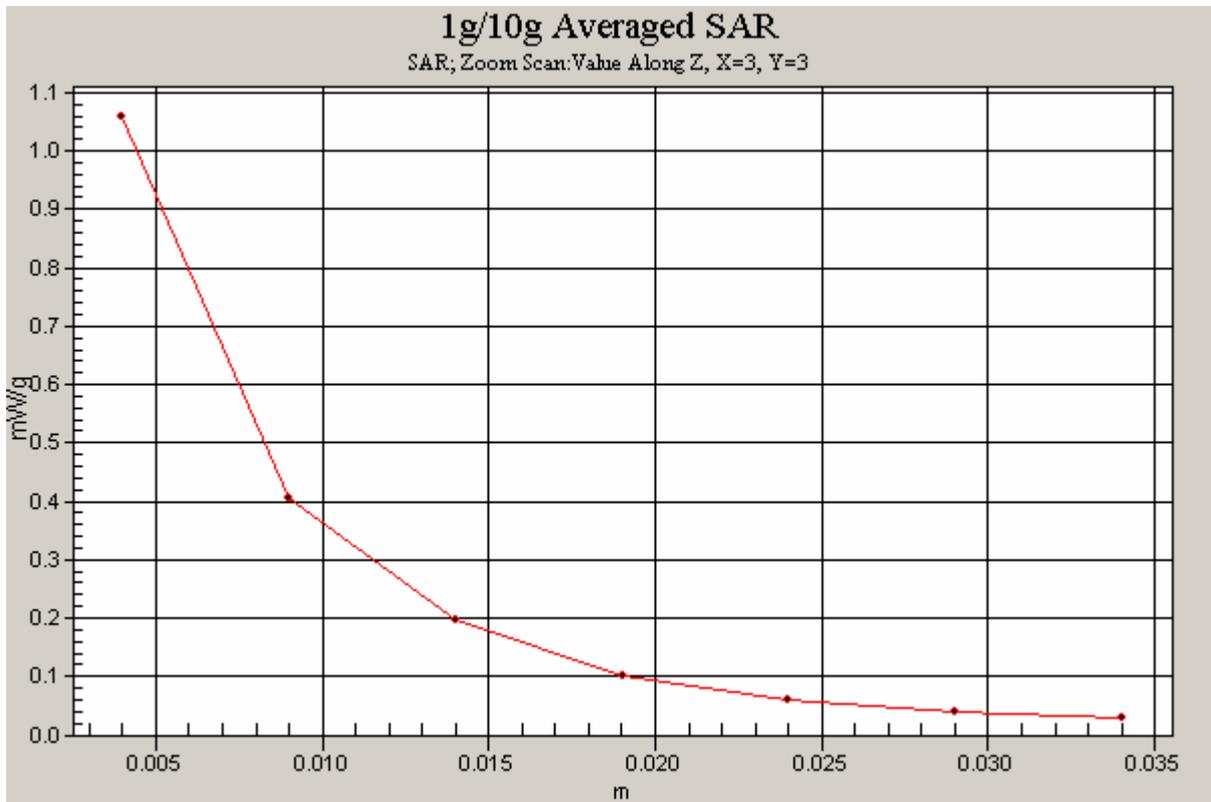


Figure 96 Z-Scan at power reference point (WCDMA Band II HSDPA with COMPAQ Presario 2500 Test Position 7 Channel 9538)

WCDMA Band II HSDPA with COMPAQ Presario 2500 Test Position 7 Middle Frequency

Communication System: WCDMA Band II+HSDPA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);

Electronics: DAE3 Sn452;

Test Position 7 Middle/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.32 mW/g

Test Position 7 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.5 V/m; Power Drift = 0.184 dB

Peak SAR (extrapolated) = 3.64 W/kg

SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.466 mW/g

Maximum value of SAR (measured) = 1.32 mW/g

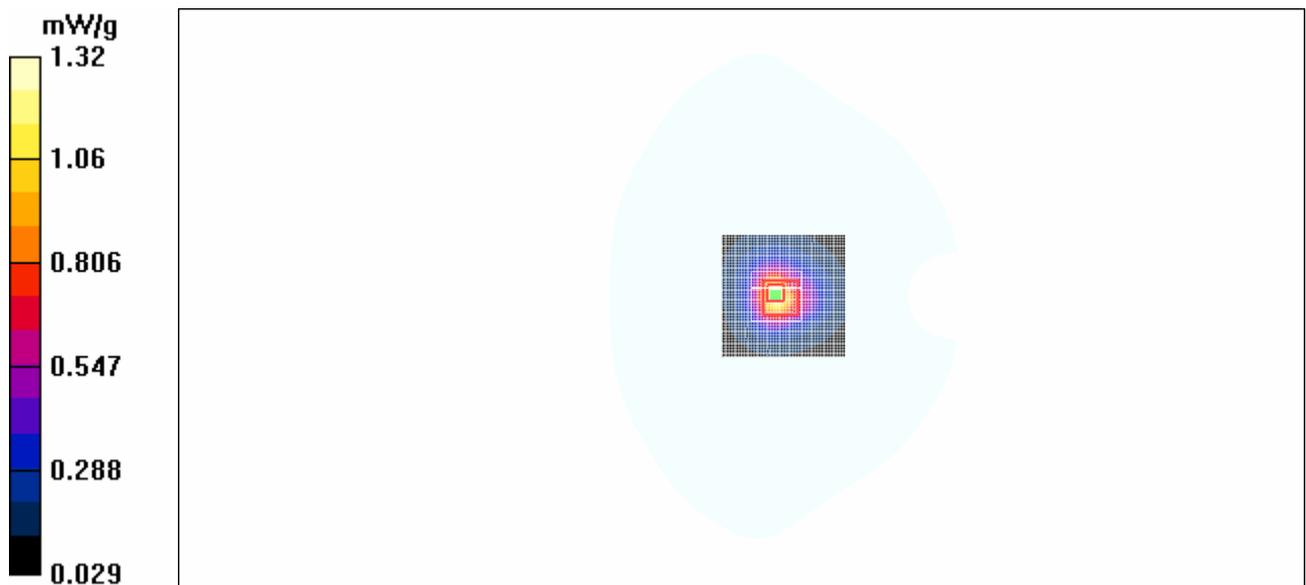


Figure 97 WCDMA Band II HSDPA with COMPAQ Presario 2500 Test Position 7 Channel 9400

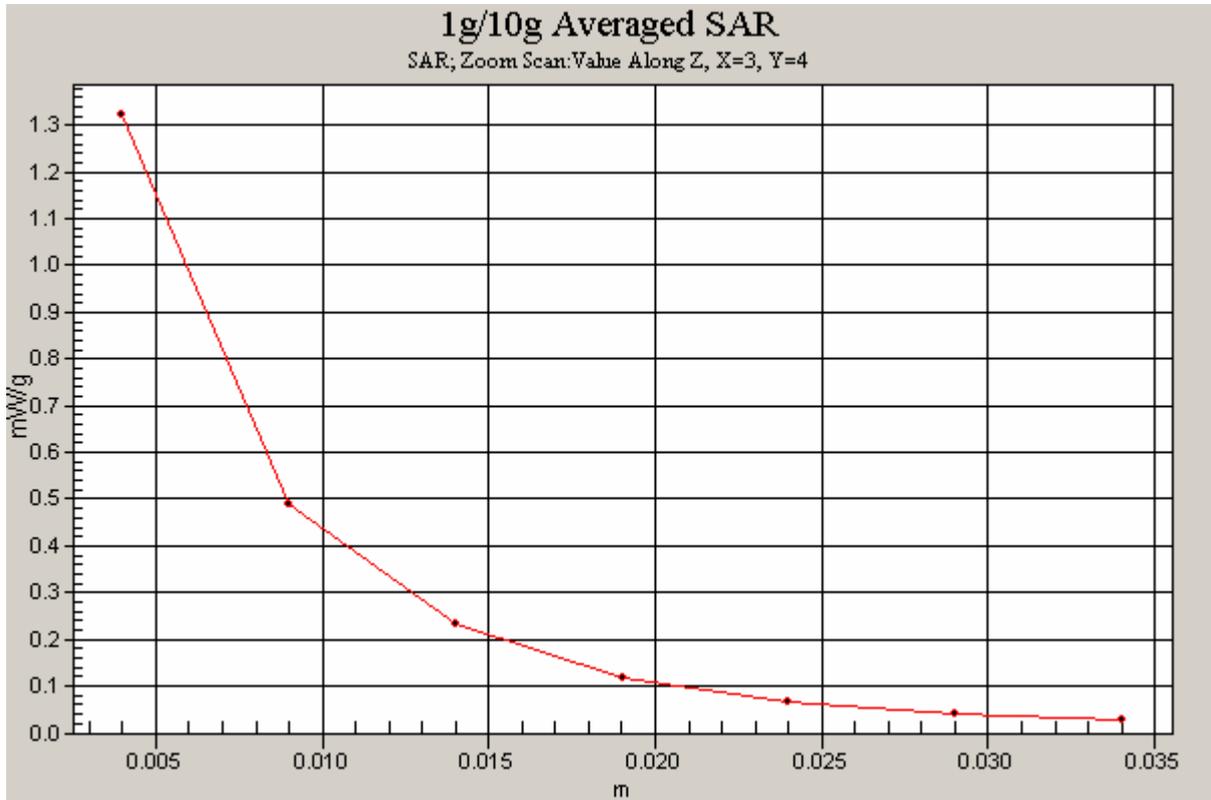


Figure 98 Z-Scan at power reference point (WCDMA Band II HSDPA with COMPAQ Presario 2500 Test Position 7 Channel 9400)

WCDMA Band II HSDPA with COMPAQ Presario 2500 Test Position 7 Low Frequency

Communication System: WCDMA Band II+HSDPA; Frequency: 1852.4 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³
Probe: ET3DV6 - SN1531; ConvF(4.64, 4.64, 4.64);
Electronics: DAE3 Sn452;

Test Position 7 Low/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.892 mW/g

Test Position 7 Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.9 V/m; Power Drift = -0.104 dB

Peak SAR (extrapolated) = 3.65 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.474 mW/g

Maximum value of SAR (measured) = 1.38 mW/g

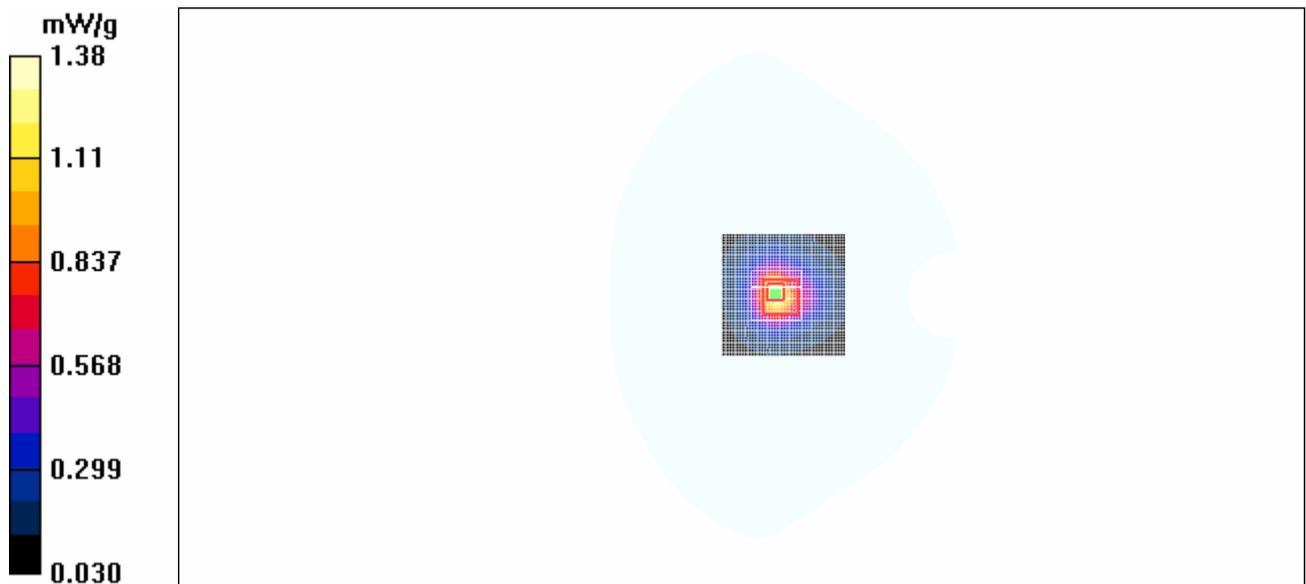


Figure 99 WCDMA Band II HSDPA with COMPAQ Presario 2500 Test Position 7 Channel 9262

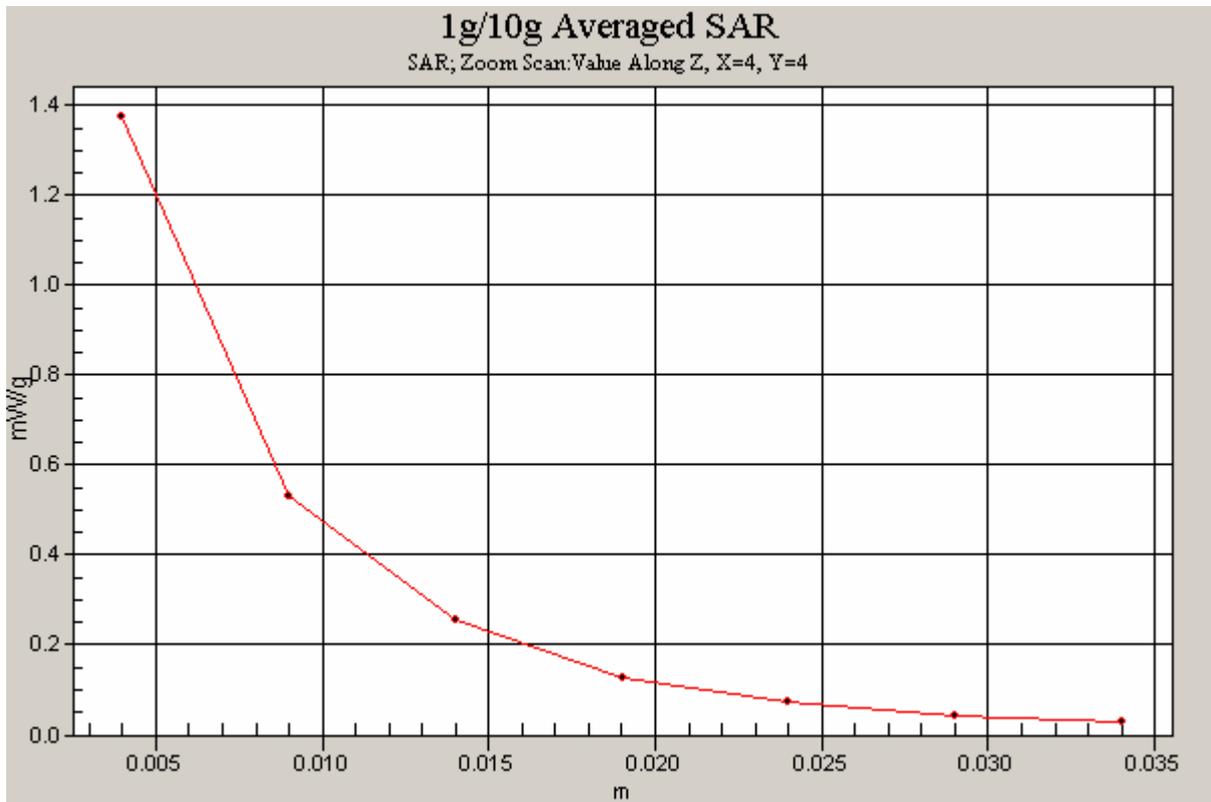


Figure 100 Z-Scan at power reference point (WCDMA Band II HSDPA with COMPAQ Presario 2500 Test Position 7 Channel 9262)

WCDMA Band V with Acer ZR1 Test Position 1 Middle Frequency

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE3 Sn452;

Test Position 1 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.472 mW/g

Test Position 1 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.4 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.591 W/kg

SAR(1 g) = 0.440 mW/g; SAR(10 g) = 0.299 mW/g

Maximum value of SAR (measured) = 0.475 mW/g

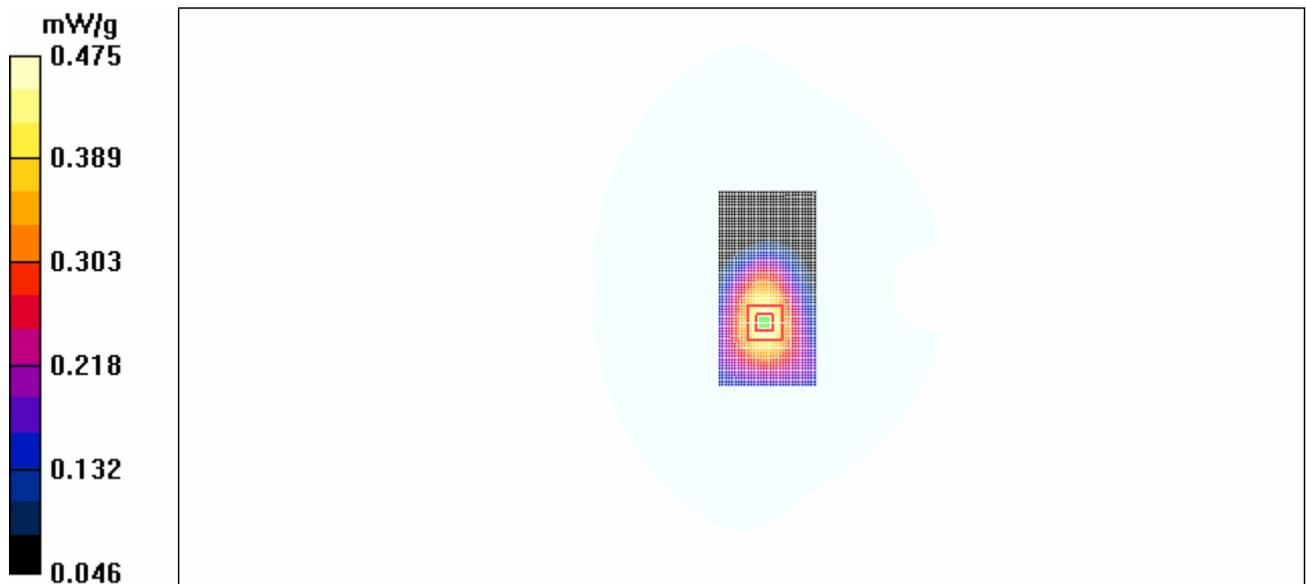


Figure101WCDMA Band V with Acer ZR1 Test Position 1 Channel 4183

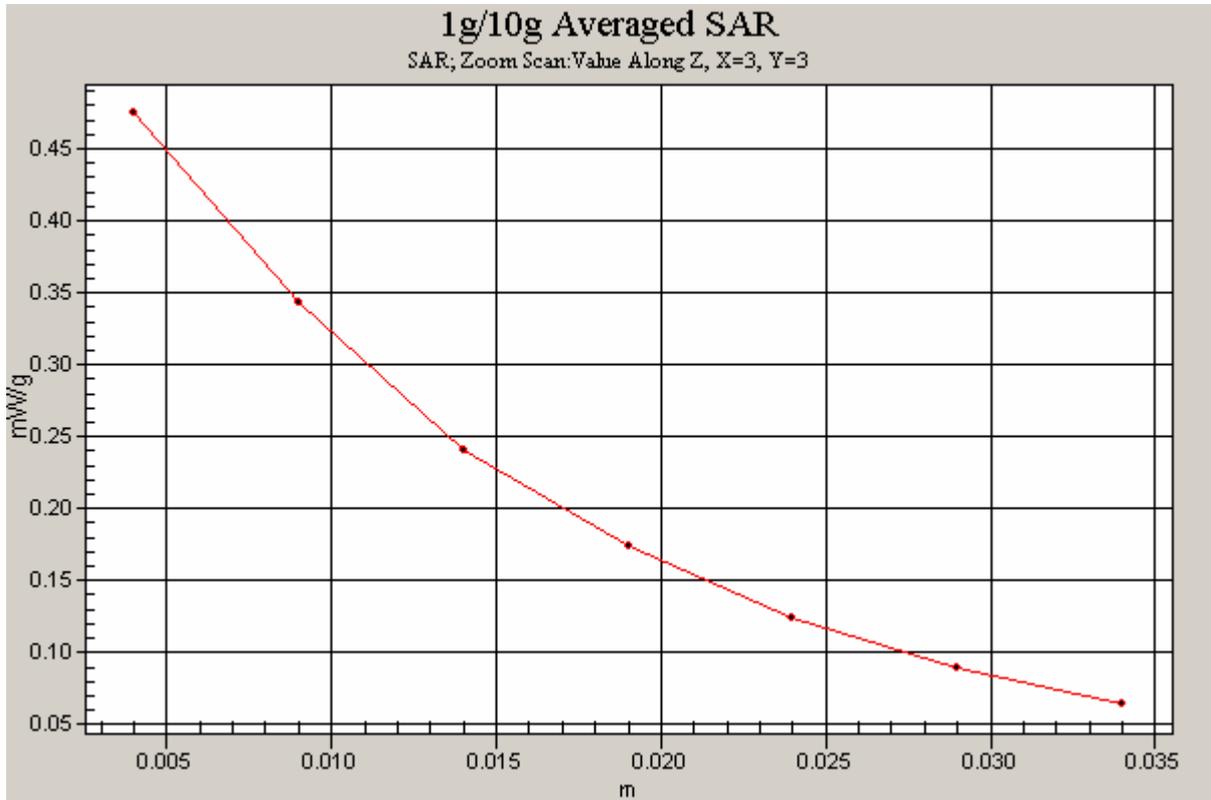


Figure 102 Z-Scan at power reference point (WCDMA Band V with Acer ZR1 Test Position 1 Channel 4183)

WCDMA Band V with Acer ZH1 Test Position 1 Middle Frequency

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE3 Sn452;

Test Position 1 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.217 mW/g

Test Position 1 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.8 V/m; Power Drift = -0.189 dB

Peak SAR (extrapolated) = 0.281 W/kg

SAR(1 g) = 0.201 mW/g; SAR(10 g) = 0.134 mW/g

Maximum value of SAR (measured) = 0.217 mW/g

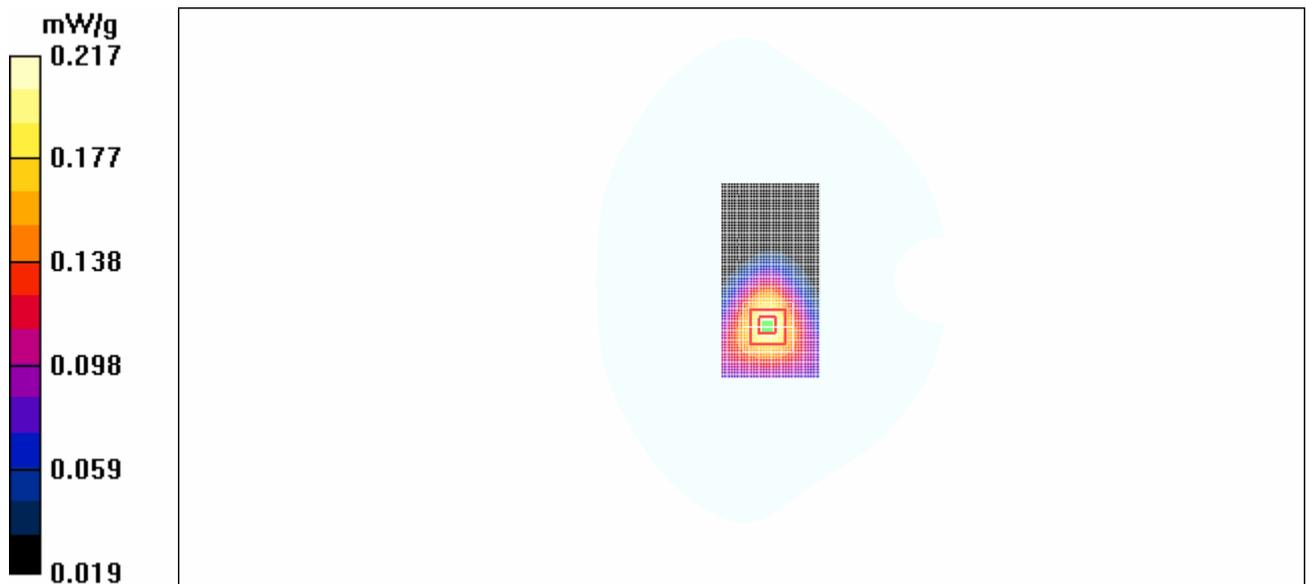


Figure 103 WCDMA Band V with Acer ZH1 Test Position 1 Channel 4183

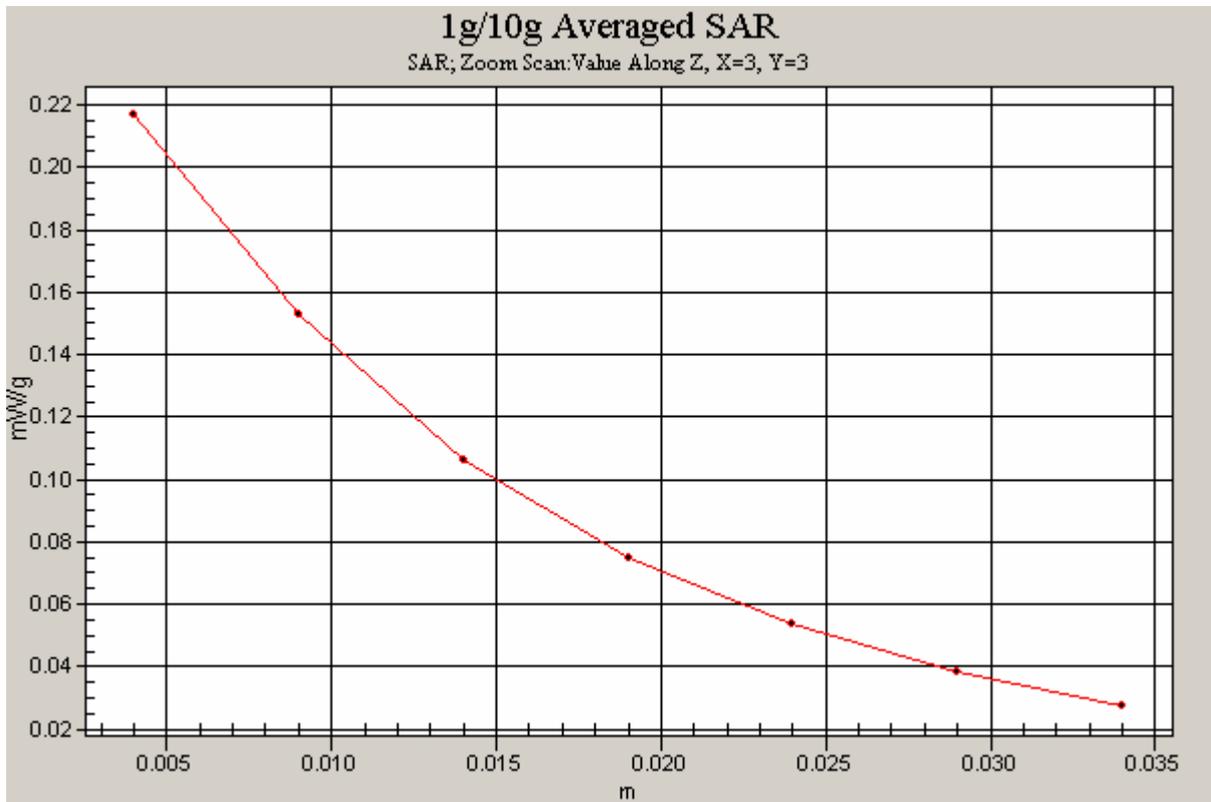


Figure 104 Z-Scan at power reference point (WCDMA Band V with Acer ZR1 Test Position 1 Channel 4183)

WCDMA Band V with Acer ZR1 Test Position 2 Middle Frequency

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE3 Sn452;

Test Position 2 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.293 mW/g

Test Position 2 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.3 V/m; Power Drift = -0.014 dB

Peak SAR (extrapolated) = 0.290 W/kg

SAR(1 g) = 0.219 mW/g; SAR(10 g) = 0.151 mW/g

Maximum value of SAR (measured) = 0.234 mW/g

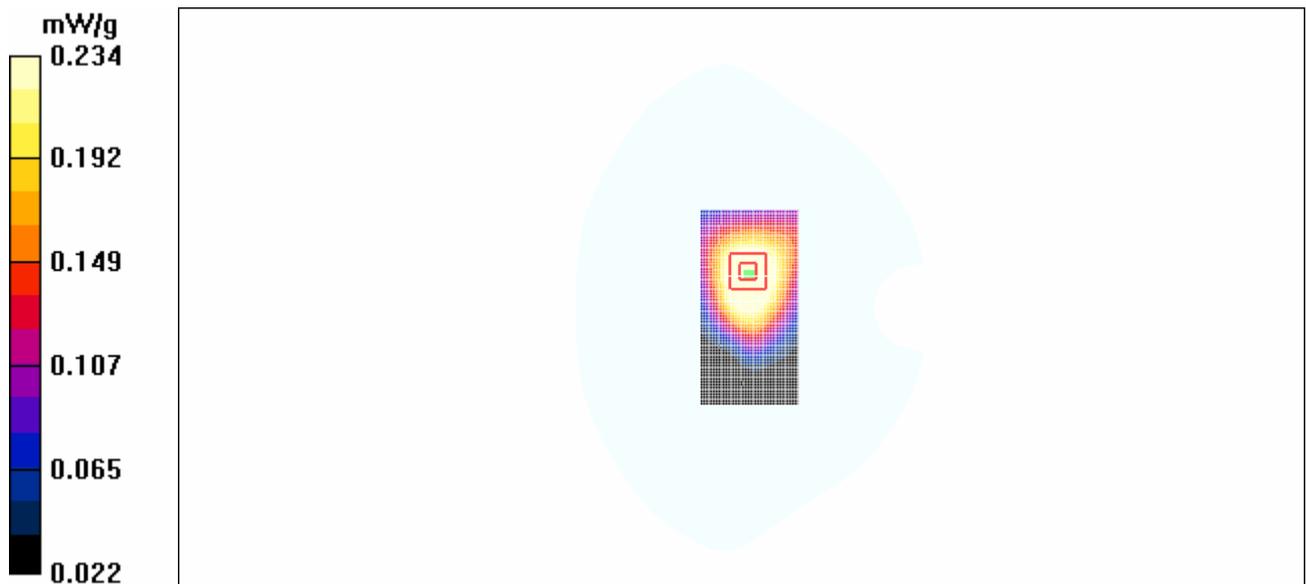


Figure 105 WCDMA Band V with Acer ZR1 Test Position 2 Channel 4183

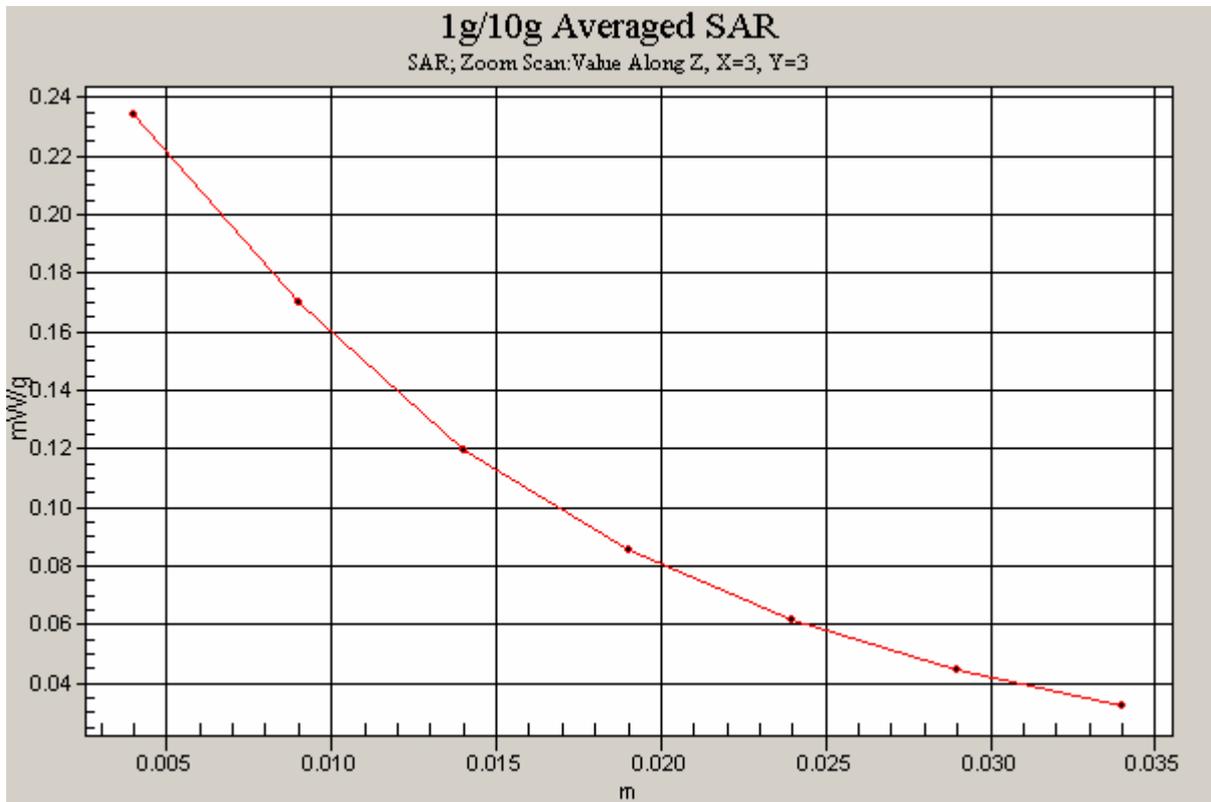


Figure 106 Z-Scan at power reference point (WCDMA Band V with Acer ZR1 Test Position 2 Channel 4183)

WCDMA Band V with Acer ZR1 Test Position 3 Middle Frequency

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³
Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);
Electronics: DAE3 Sn452;

Test Position 3 Middle/Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.046 mW/g

Test Position 3 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.69 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 0.410 W/kg

SAR(1 g) = 0.076 mW/g; SAR(10 g) = 0.025 mW/g

Maximum value of SAR (measured) = 0.078 mW/g

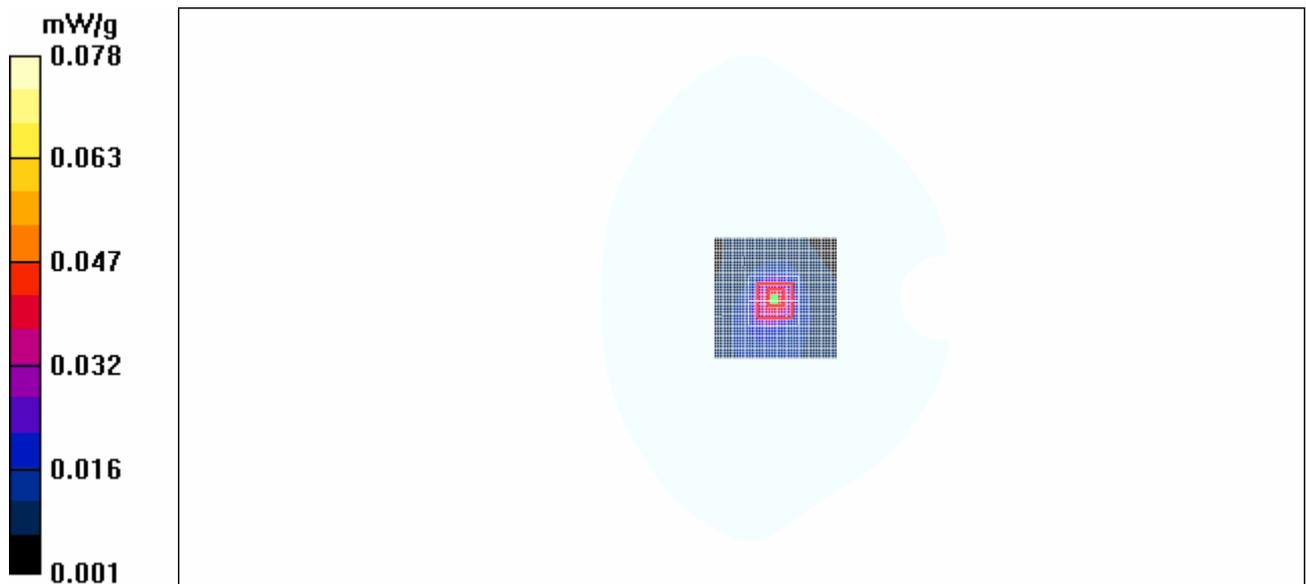


Figure 107 WCDMA Band V with Acer ZR1 Test Position 3 Channel 4183

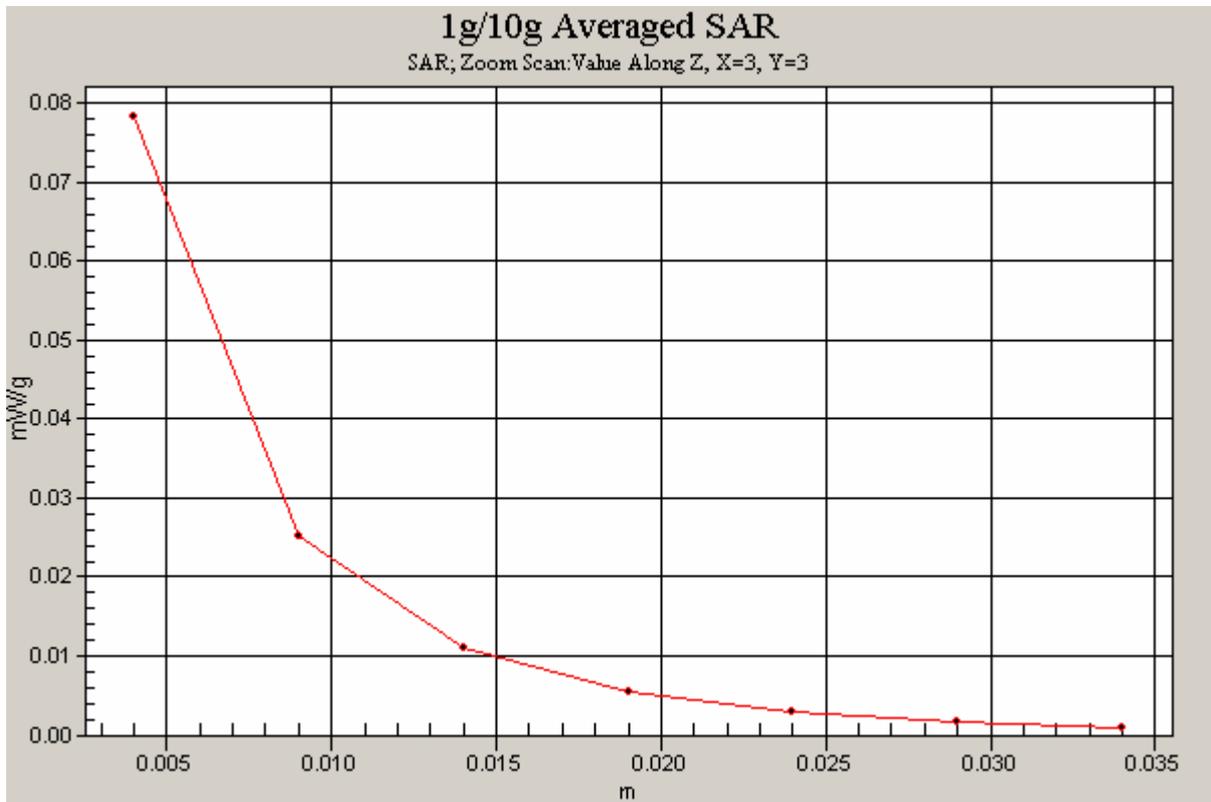


Figure 108 Z-Scan at power reference point (WCDMA Band V with Acer ZR1 Test Position 3 Channel 4183)

WCDMA Band V with COMPAQ Presario 2500 Test Position 4 Middle Frequency

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);

Electronics: DAE3 Sn452;

Test Position 4 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.296 mW/g

Test Position 4 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.7 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.414 W/kg

SAR(1 g) = 0.283 mW/g; SAR(10 g) = 0.186 mW/g

Maximum value of SAR (measured) = 0.306 mW/g

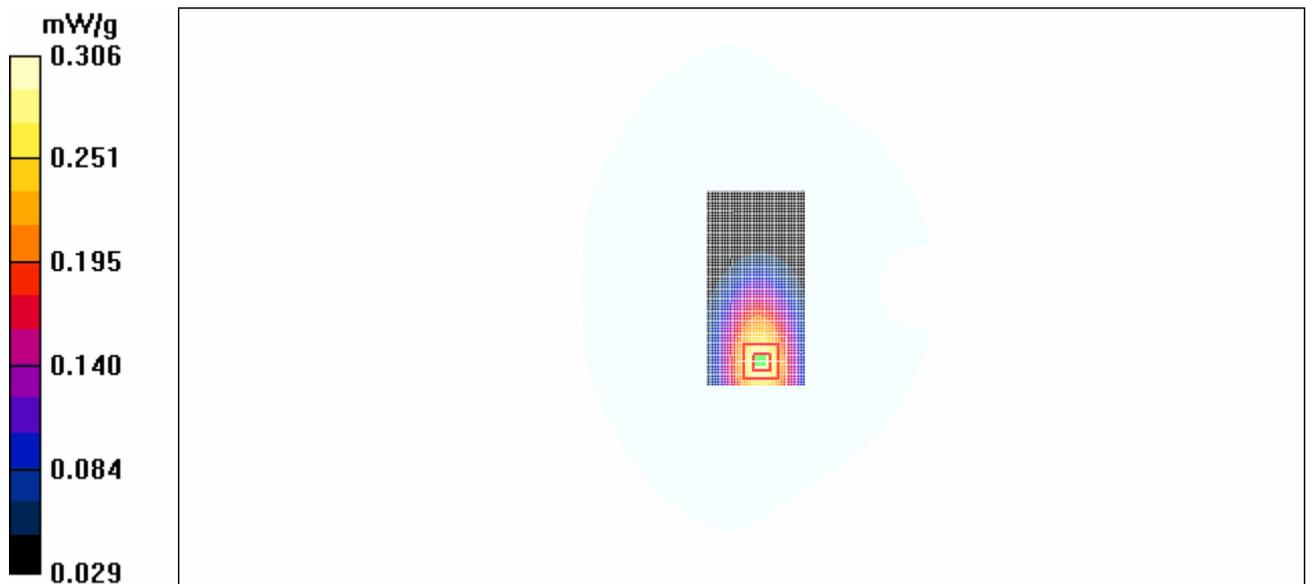


Figure 109 WCDMA Band V with COMPAQ Presario 2500 Test Position 4 Channel 4183

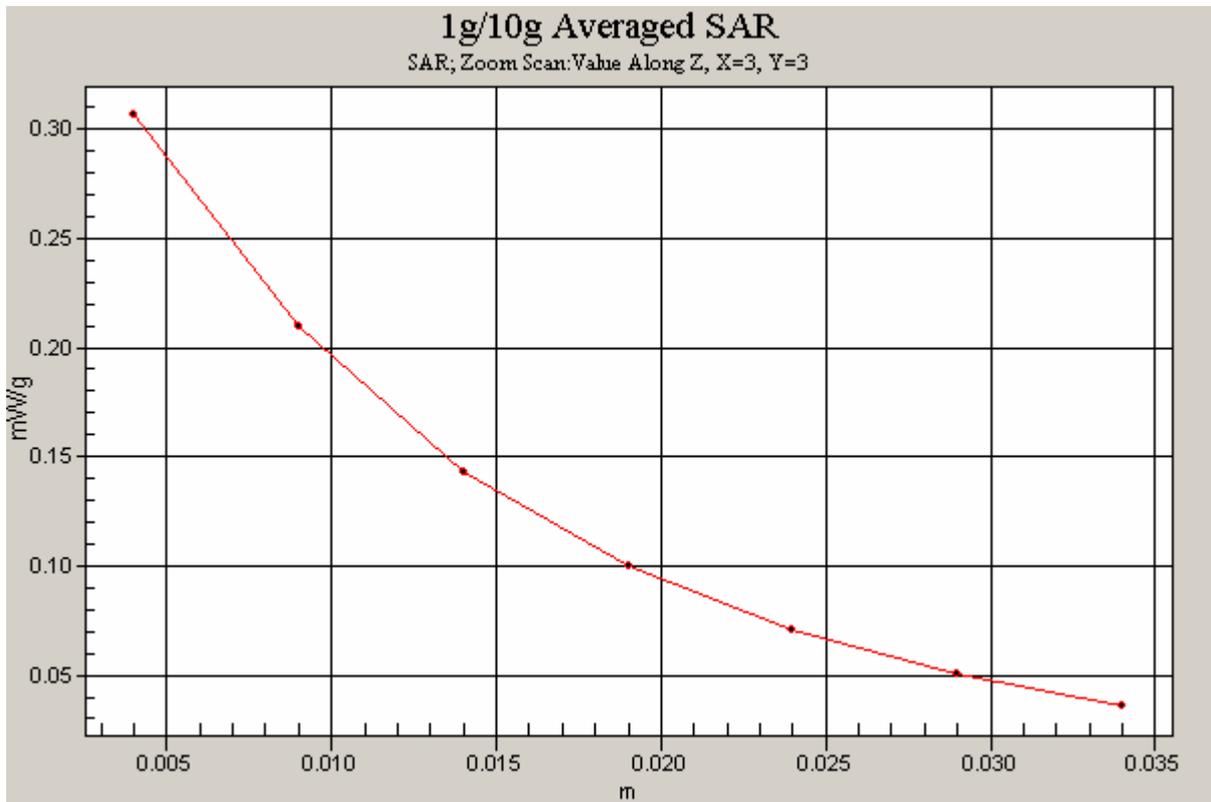


Figure 110 Z-Scan at power reference point (WCDMA Band V with COMPAQ Presario 2500 Test Position 4 Channel 4183)

WCDMA Band V with COMPAQ Presario 2500 Test Position 5 Middle Frequency

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);

Electronics: DAE3 Sn452;

Test Position 5 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.088 mW/g

Test Position 5 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.49 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 0.109 W/kg

SAR(1 g) = 0.082 mW/g; SAR(10 g) = 0.058 mW/g

Maximum value of SAR (measured) = 0.087 mW/g

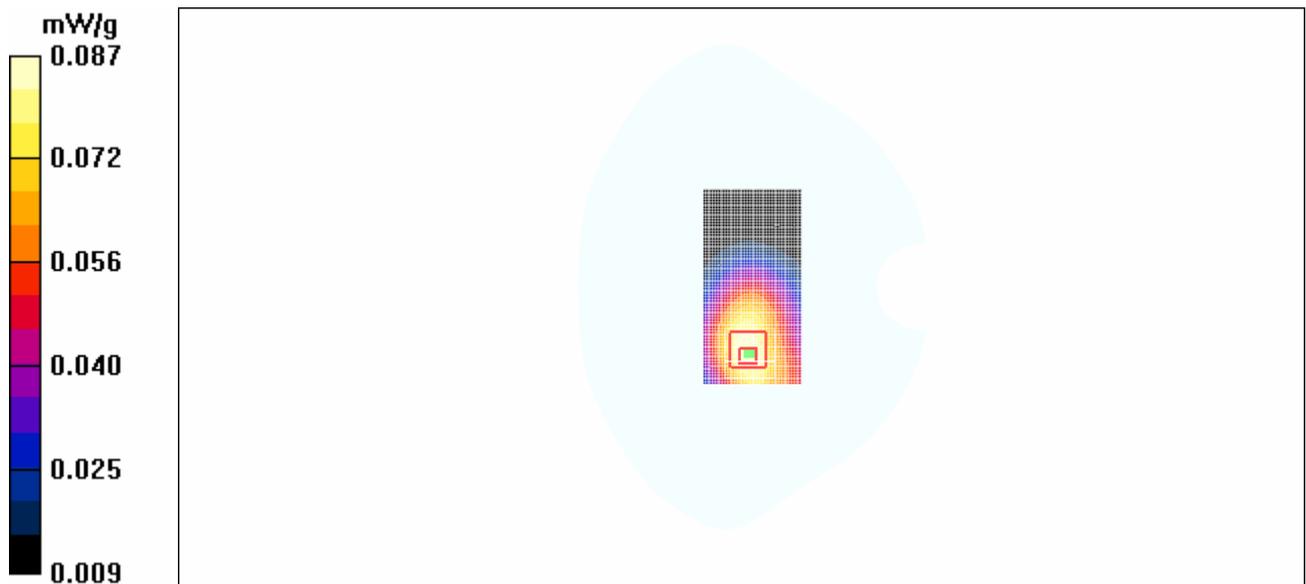


Figure 111 WCDMA Band V with COMPAQ Presario 2500 Test Position 5 Channel 4183

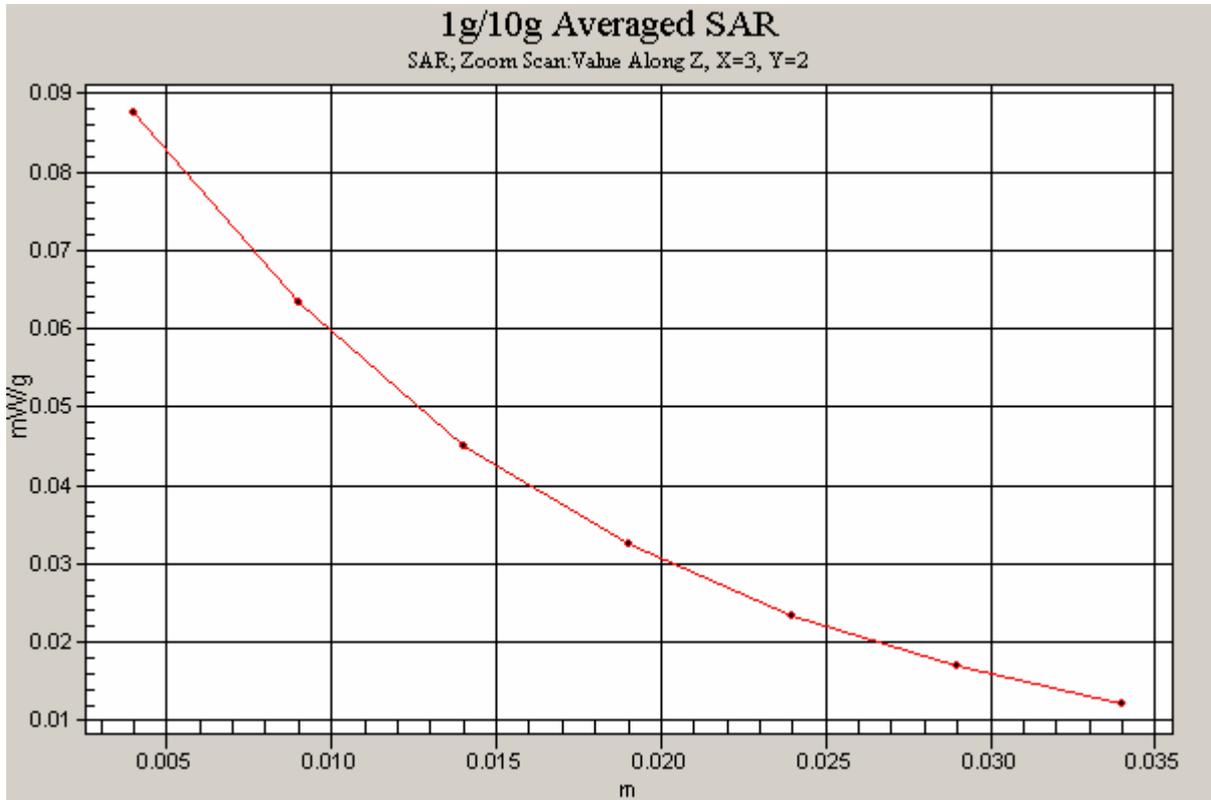


Figure 112 Z-Scan at power reference point (WCDMA Band V with COMPAQ Presario 2500 Test Position 5 Channel 4183)

WCDMA Band V with COMPAQ Presario 2500 Test Position 6 Middle Frequency

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);

Electronics: DAE3 Sn452;

Test Position 6 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.399 mW/g

Test Position 6 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.1 V/m; Power Drift = 0.180 dB

Peak SAR (extrapolated) = 0.532 W/kg

SAR(1 g) = 0.376 mW/g; SAR(10 g) = 0.251 mW/g

Maximum value of SAR (measured) = 0.409 mW/g

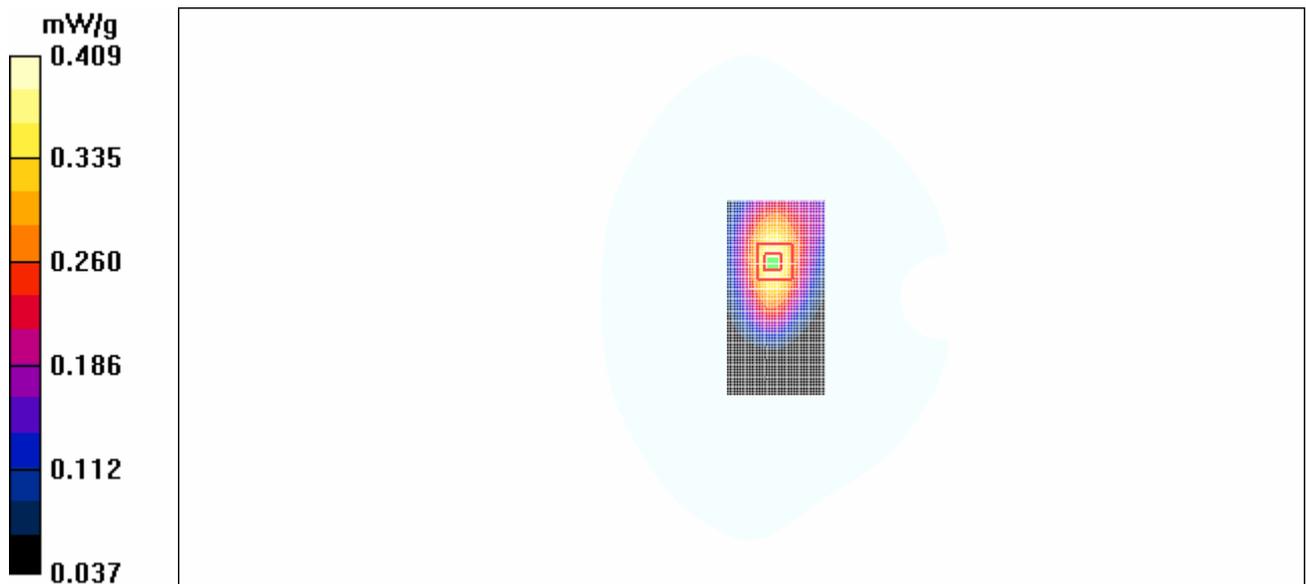


Figure 113 WCDMA Band V with COMPAQ Presario 2500 Test Position 6 Channel 4183

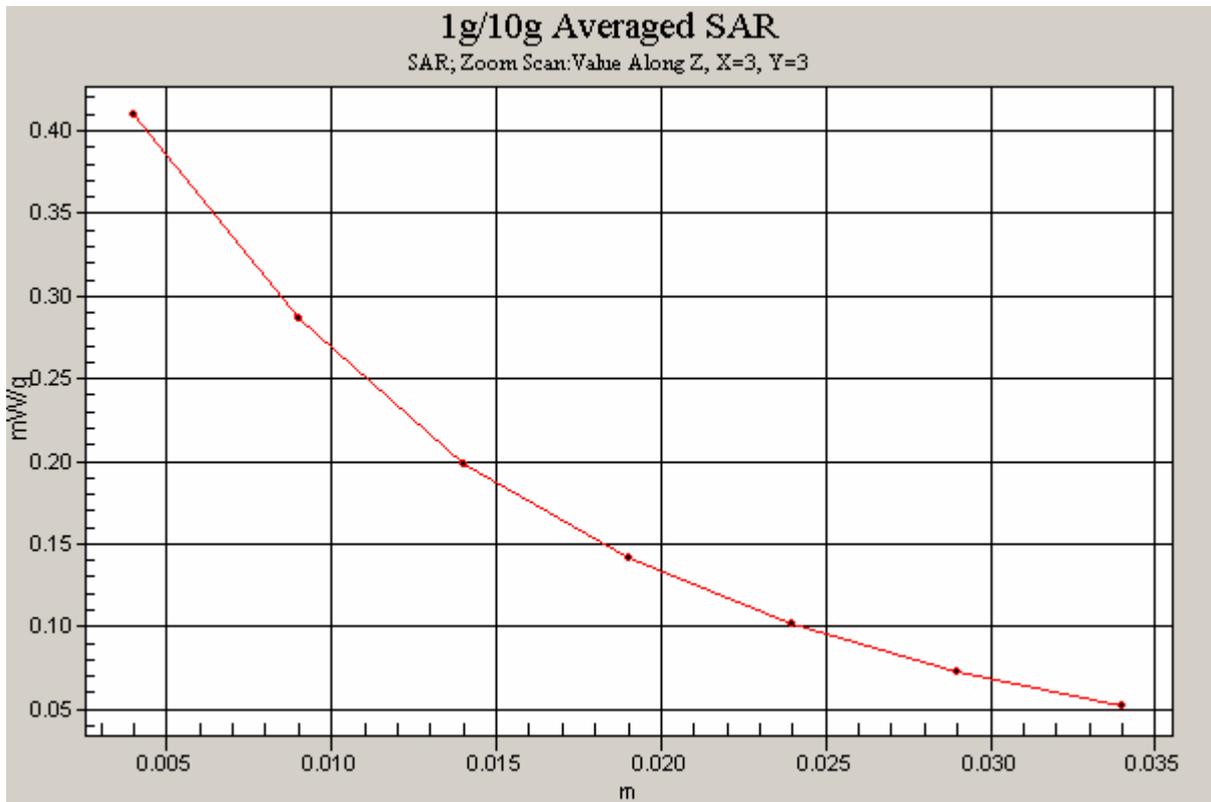


Figure 114 Z-Scan at power reference point (WCDMA Band V with COMPAQ Presario 2500 Test Position 6 Channel 4183)

WCDMA Band V with COMPAQ Presario 2500 Test Position 7 Middle Frequency

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);

Electronics: DAE3 Sn452;

Test Position 7 Middle/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.073 mW/g

Test Position 7 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.5 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.626 W/kg

SAR(1 g) = 0.124 mW/g; SAR(10 g) = 0.041 mW/g

Maximum value of SAR (measured) = 0.130 mW/g

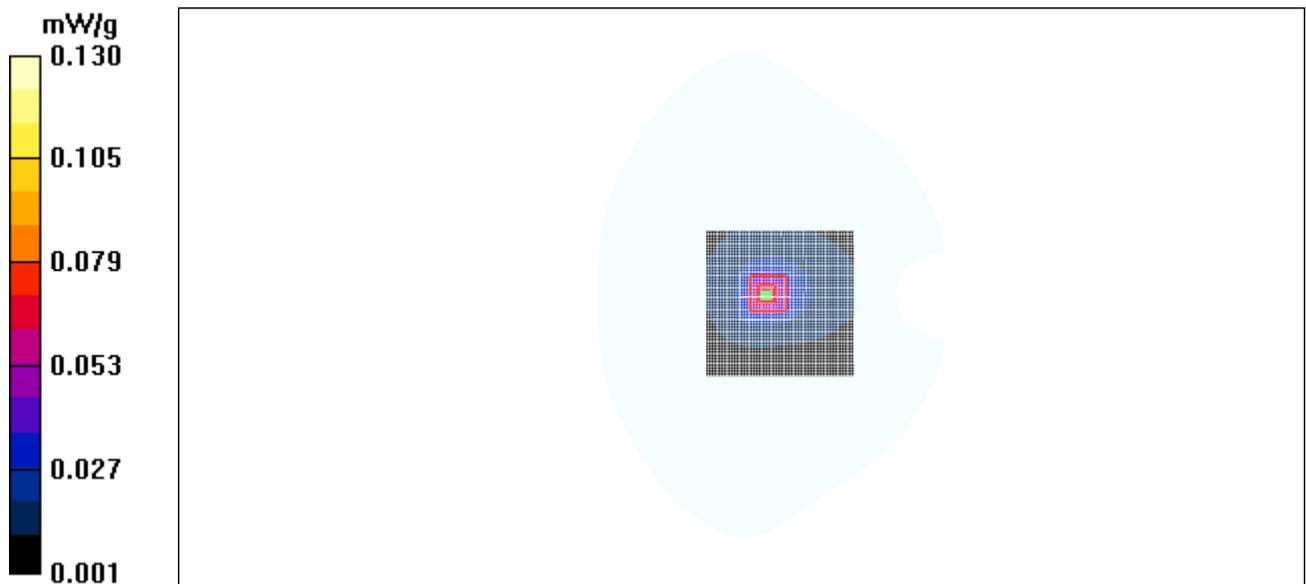


Figure 115 WCDMA Band V with COMPAQ Presario 2500 Test Position 7 Channel 4183

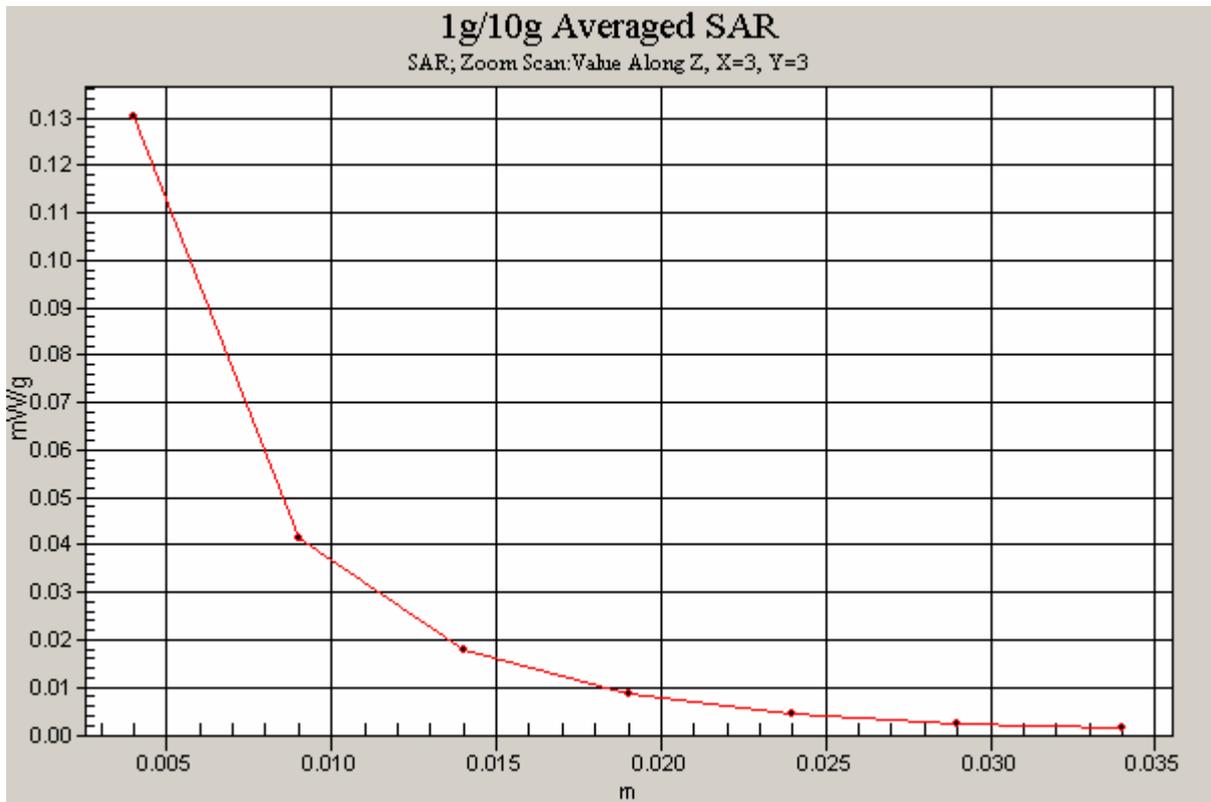


Figure 116 Z-Scan at power reference point (WCDMA Band V with COMPAQ Presario 2500 Test Position 7 Channel 4183)

WCDMA Band V HSDPA with Acer ZR1 Test Position 1 Middle Frequency

Communication System: WCDMA Band V+HSDPA; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(6.52, 6.52, 6.52);

Electronics: DAE3 Sn452;

Test Position 1 Middle/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.434 mW/g

Test Position 1 Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.5 V/m; Power Drift = -0.063 dB

Peak SAR (extrapolated) = 0.543 W/kg

SAR(1 g) = 0.400 mW/g; SAR(10 g) = 0.273 mW/g

Maximum value of SAR (measured) = 0.428 mW/g

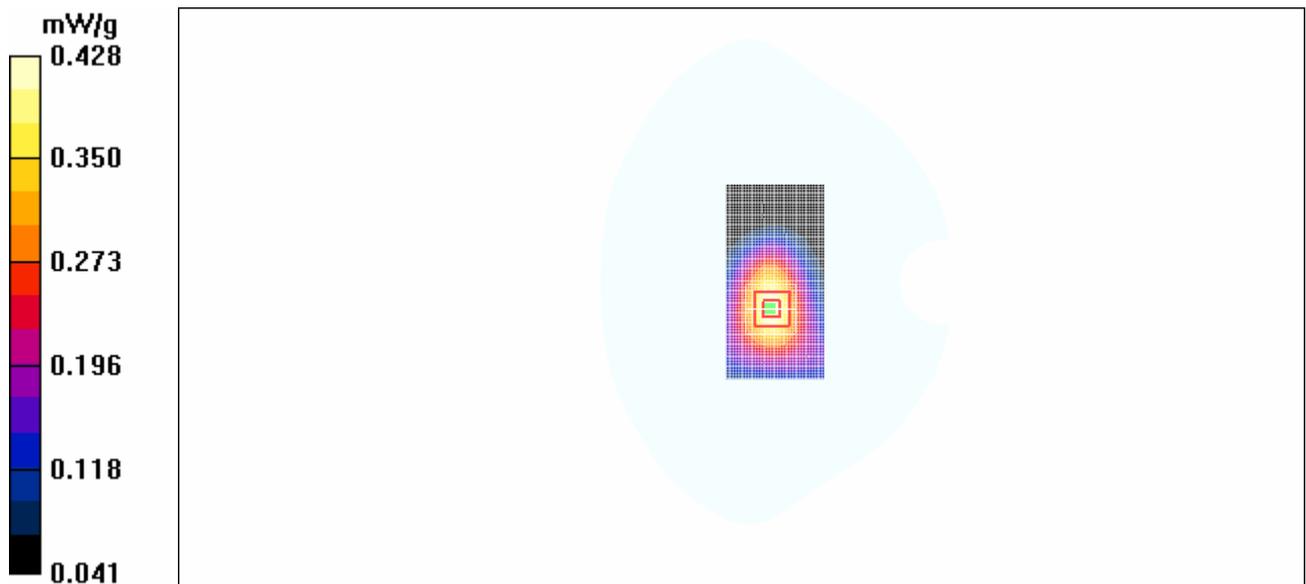


Figure 117 WCDMA Band V HSDPA with Acer ZR1 Test Position 1 Channel 4183

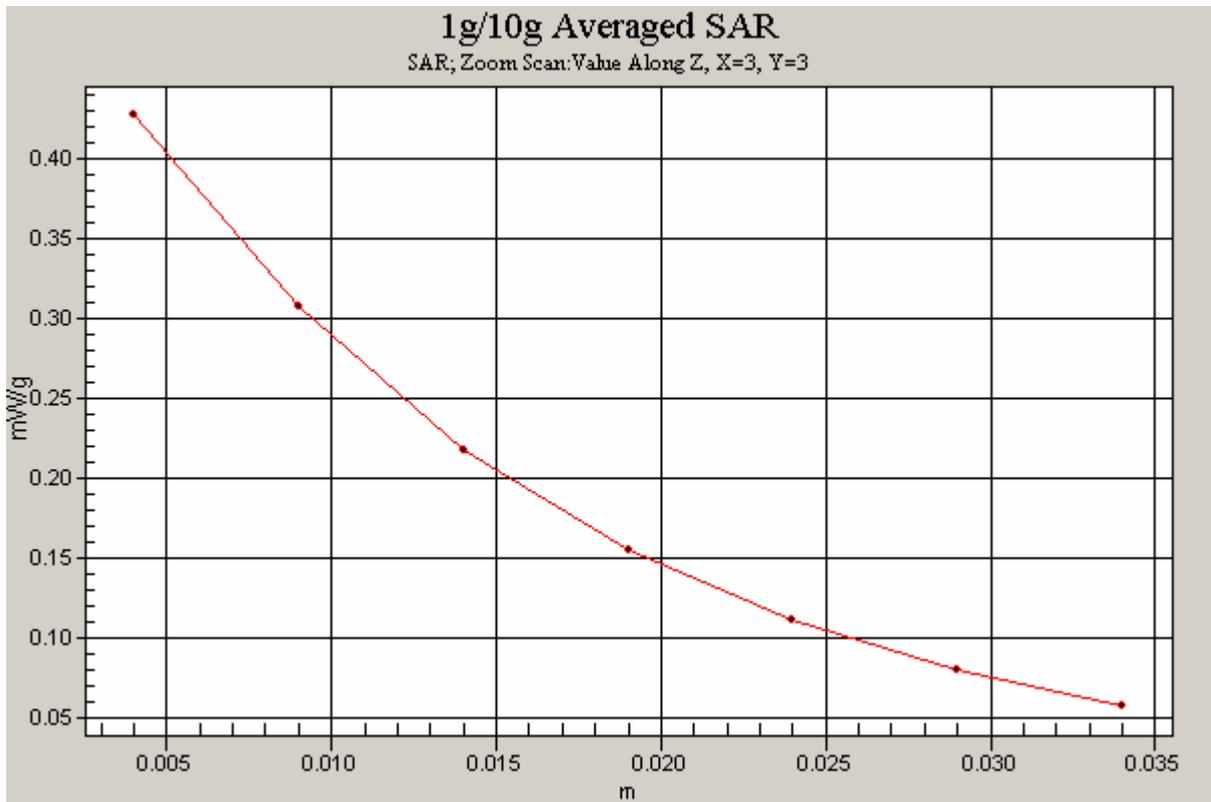


Figure 118 Z-Scan at power reference point (WCDMA Band V HSDPA with Acer ZR1 Test Position 1 Channel 4183)

ANNEX D: SYSTEM VALIDATION RESULTS

System Performance Check at 835 MHz

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 443

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Head 835MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.92 \text{ mho/m}$; $\epsilon_r = 41.94$; $\rho = 1000 \text{ kg/m}^3$

- Probe: ET3DV6 - SN1531; ConvF(6.85, 6.85, 6.85);

- Electronics: DAE3 Sn452;

d=15mm, Pin=250mW/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.54 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.0 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 3.44 W/kg

SAR(1 g) = 2.34 mW/g; SAR(10 g) = 1.53 mW/g

Maximum value of SAR (measured) = 2.52 mW/g

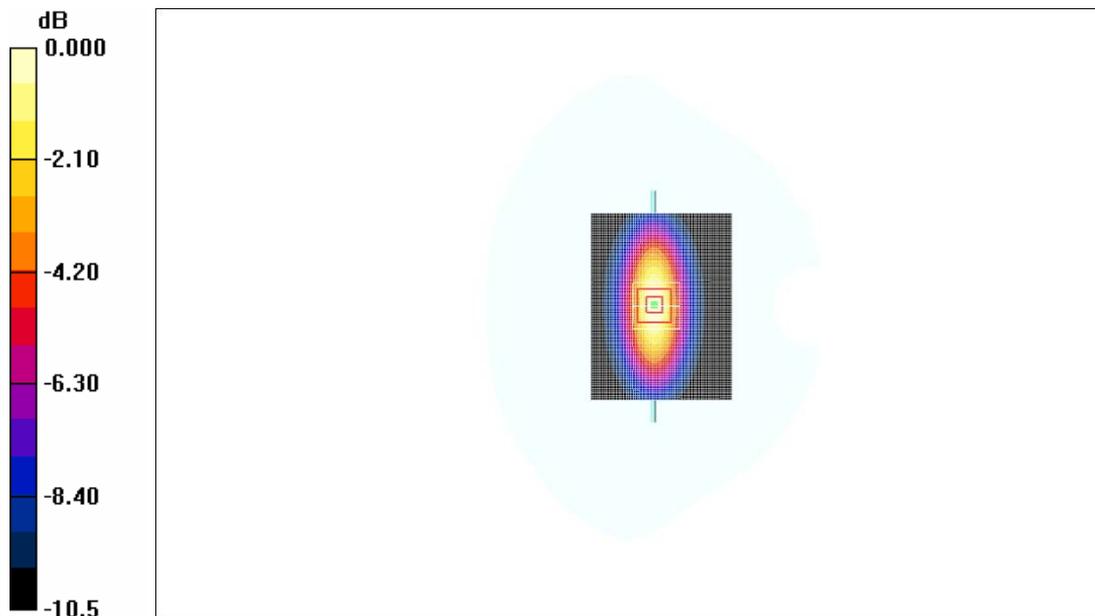


Figure 119 System Performance Check 835MHz 250mW

System Performance Check at 1900 MHz

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d018

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.09$; $\rho = 1000$ kg/m³

Probe: ET3DV6 - SN1531; ConvF(5.15, 5.15, 5.15);

Electronics: DAE3 Sn452;

d=10mm, Pin=250mW 2/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 10.8 mW/g

d=10mm, Pin=250mW 2/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.8 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 16.0 W/kg

SAR(1 g) = 9.36 mW/g; SAR(10 g) = 4.93 mW/g

Maximum value of SAR (measured) = 10.7 mW/g

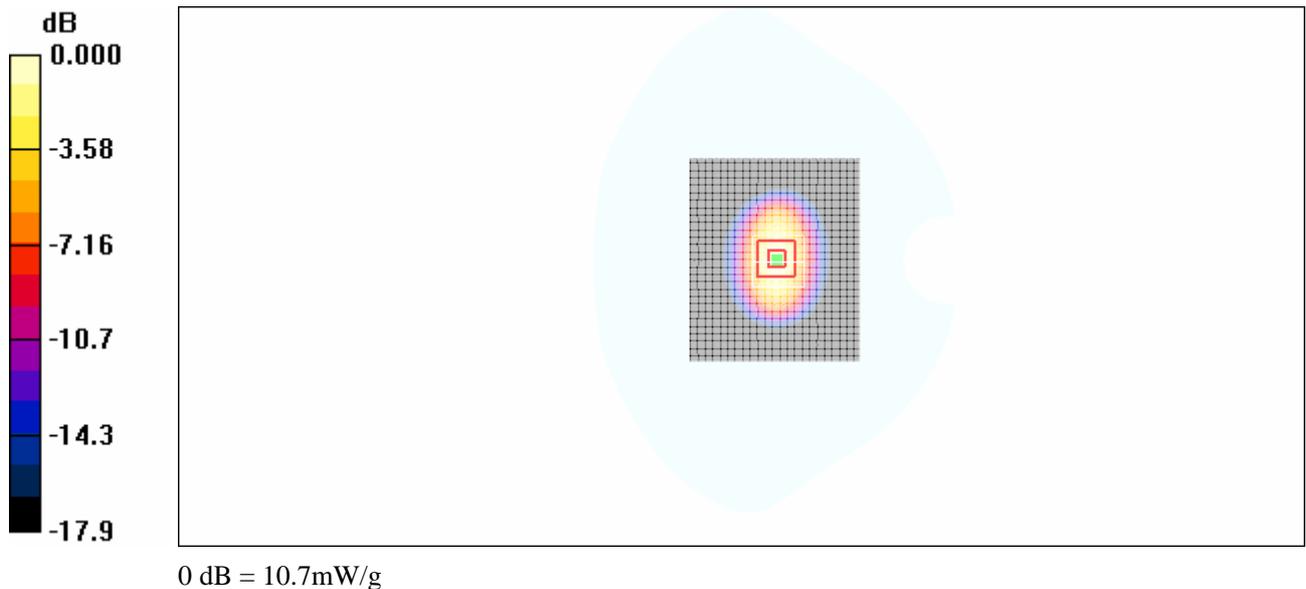


Figure 120 System Performance Check 1900MHz 250mW

TA Technology (Shanghai) Co., Ltd. Test Report

No. RZA2008-0539FCC

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ANNEX E: PROBE CALIBRATION CERTIFICATE

**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibriendienst
S Service suisse d'étalonnage
C Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **ATL (Auden)**

Certificate No: **ET3-1531_Jan08**

CALIBRATION CERTIFICATE

Object: **ET3DV6 - SN:1531**

Calibration procedure(s): **QA CAL-01.v6 and QA CAL-12.v5
Calibration procedure for dosimetric E-field probes**

Calibration date: **January 29, 2008**

Condition of the calibrated item: **In Tolerance**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility, environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&PE critical for calibration)

Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	29-Mar-07 (METAS, No. 217-00670)	Mar-08
Power sensor E4412A	MY41495277	29-Mar-07 (METAS, No. 217-00670)	Mar-08
Power sensor E4412A	MY41498087	29-Mar-07 (METAS, No. 217-00670)	Mar-08
Reference 3 dB Attenuator	SN: S5054 (3c)	8-Aug-07 (METAS, No. 217-00719)	Aug-08
Reference 20 dB Attenuator	SN: S5086 (20b)	29-Mar-07 (METAS, No. 217-00671)	Mar-08
Reference 30 dB Attenuator	SN: S5129 (30b)	8-Aug-07 (METAS, No. 217-00720)	Aug-08
Reference Probe ES3DV2	SN: 3013	2-Jan-08 (SPEAG, No. ES3-3013_Jan08)	Jan-09
DAE4	SN: 654	20-Apr-07 (SPEAG, No. DAE4-654_Apr07)	Apr-08

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (SPEAG, in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (SPEAG, in house check Oct-07)	In house check: Oct-08

	Name	Function	Signature
Calibrated by:	Katja Pokorny	Technical Manager	
Approved by:	Nelis Kuster	Quality Manager	

Issued: January 29, 2008

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: ET3-1531_Jan08

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Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
Polarization ϕ	ϕ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}:** Assessed for E-field polarization $\theta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E²-field uncertainty inside TSL (see below *ConvF*).
- NORM(f)_{x,y,z} = NORM_{x,y,z} * frequency_response** (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- DCP_{x,y,z}:** DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- ConvF and Boundary Effect Parameters:** Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy):** in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset:** The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

ET3DV6 SN:1531

January 29, 2008

Probe ET3DV6

SN:1531

Manufactured:	July 15, 2000
Last calibrated:	January 22, 2007
Recalibrated:	January 29, 2008

Calibrated for DASY Systems

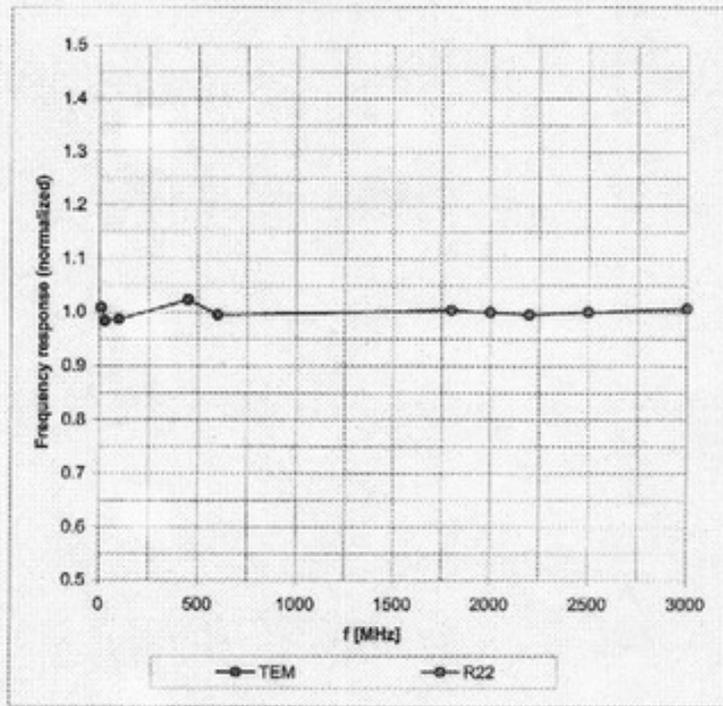
(Note: non-compatible with DASY2 system!)

ET3DV6 SN:1531

January 29, 2008

Frequency Response of E-Field

(TEM-Cell: If1110 EXX, Waveguide: R22)

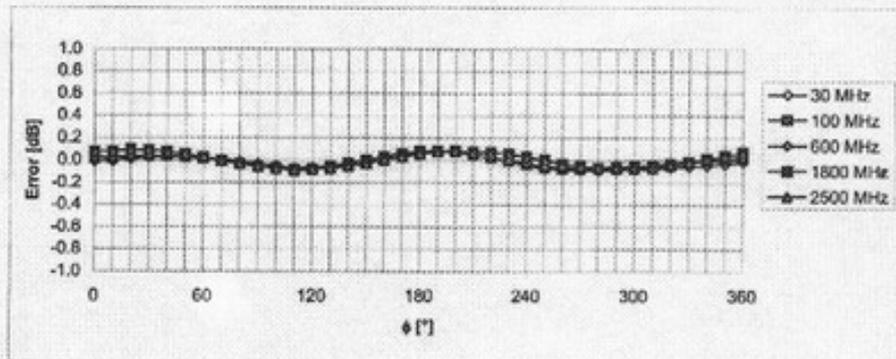
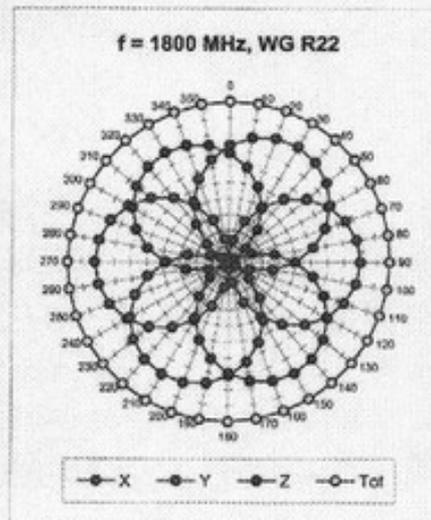
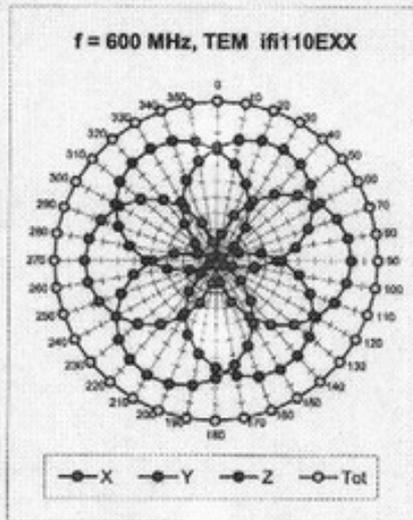


Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

ET3DV6 SN:1531

January 29, 2008

Receiving Pattern (ϕ), $\vartheta = 0^\circ$



Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)