



# Appendix A

## Detailed System Validation Results

System Performance Check 835 MHz Body
System Performance Check 1900 MHz Body

Test Laboratory: SGS-SAR Lab

## System Performance Check 835MHz Body

**DUT: Dipole 835MHz; Type: D835V2; Serial: 4d105**

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

Medium: MSL835 Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.986 \text{ mho/m}$ ;  $\epsilon_r = 55.5$ ;  $\rho = 1000 \text{ kg/m}^3$

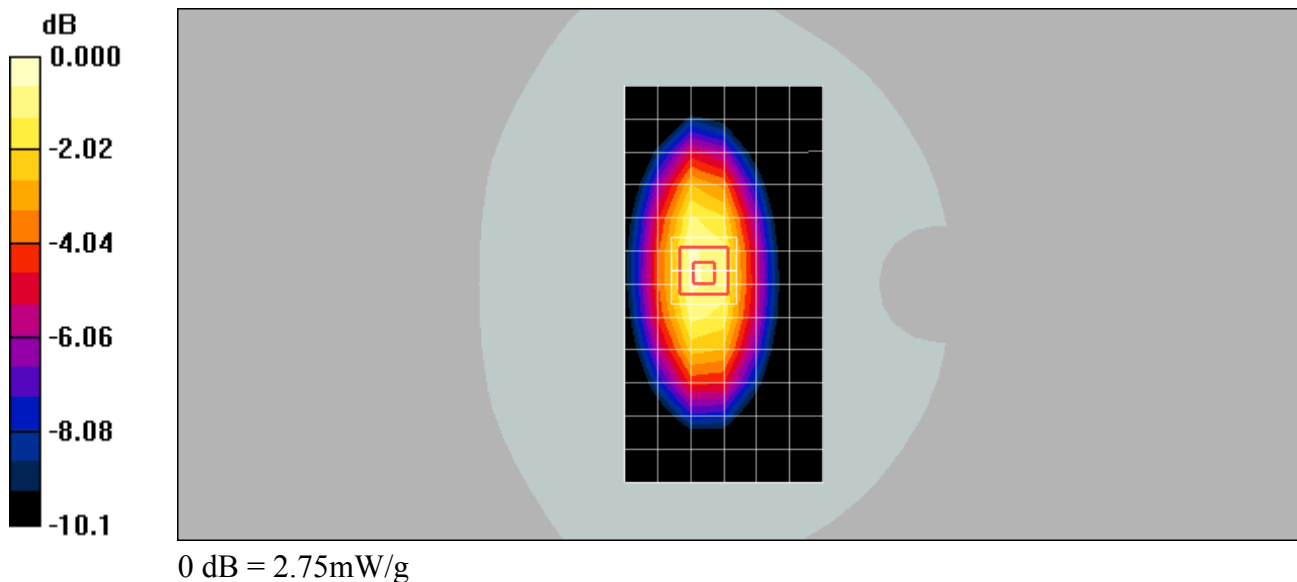
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3088; ConvF(6.02, 6.02, 6.02); Calibrated: 2012-11-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn569; Calibrated: 2012-11-27
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=15mm, Pin=250mW/Area Scan (7x13x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 2.47 mW/g

**d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 51.8 V/m; Power Drift = -0.029 dB  
Peak SAR (extrapolated) = 3.75 W/kg  
**SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.66 mW/g**  
Maximum value of SAR (measured) = 2.75 mW/g



Test Laboratory: SGS-SAR Lab

## System Performance Check 1900 MHz Body

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d028**

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

Medium: MSL1900 Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.56$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3088; ConvF(4.91, 4.91, 4.91); Calibrated: 2012-11-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn569; Calibrated: 2012-11-27
- Phantom: SAM 1; Type: SAM V4.0; Serial: TP-1283
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=250mW/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 7.31 mW/g

**d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 83.1 V/m; Power Drift = 0.075 dB  
Peak SAR (extrapolated) = 18.1 W/kg  
**SAR(1 g) = 9.67 mW/g; SAR(10 g) = 4.96 mW/g**  
Maximum value of SAR (measured) = 11.0 mW/g

