

Appendix B

System Validations

Head 5750 MHz validation

DUT: 5.8 dipole;

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.1$ mho/m; $\epsilon_r = 36.86$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN7385; ConvF(4.75, 4.75, 4.75); Calibrated: 3/2/2016
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn493; Calibrated: 5/13/2016
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (41x61x1): Measurement grid: dx=5mm, dy=5mm Maximum value of SAR (interpolated) = 16.3 mW/g

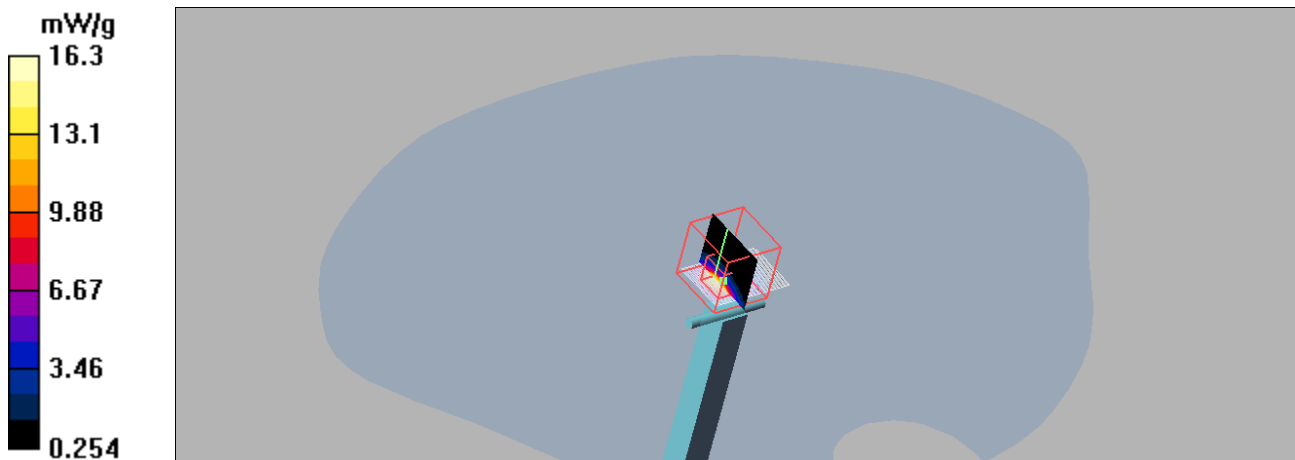
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 37.4 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 31.0 W/kg

SAR(1 g) = 7.58 mW/g; SAR(10 g) = 2.17 mW/g

Maximum value of SAR (measured) = 14.7 mW/g



Body 5750 MHz validation

DUT: 5.8 dipole;

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5750$ MHz; $\sigma = 6.1$ mho/m; $\epsilon_r = 50.6$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: EX3DV4 - SN7385; ConvF(4.13, 4.13, 4.13); Calibrated: 3/2/2016
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn493; Calibrated: 5/13/2016
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DAS4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (41x61x1): Measurement grid: dx=5mm, dy=5mm Maximum value of SAR (interpolated) = 16.8 mW/g

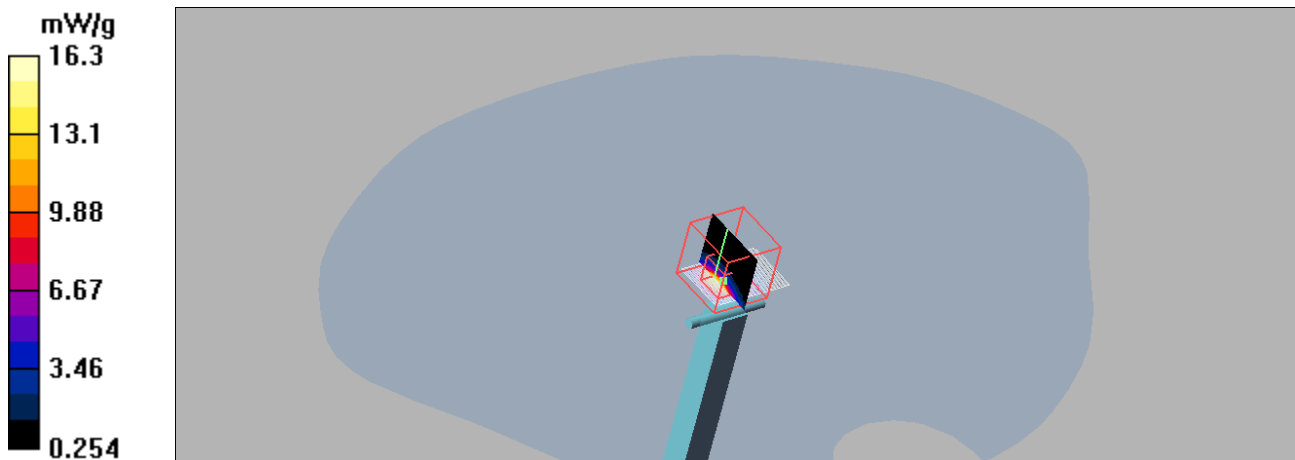
Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 68.32 V/m; Power Drift = 0.052 dB

Peak SAR (extrapolated) = 32.1 W/kg

SAR(1 g) = 7.12 mW/g; SAR(10 g) = 2.03 mW/g

Maximum value of SAR (measured) = 17.2 mW/g



2450 Head Validation-CW-200mW input power

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.69$ mho/m; $\epsilon_r = 35.58$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3035; ConvF(4.5, 4.5, 4.5); Calibrated: 5/17/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn493; Calibrated: 5/13/2016
- Phantom: SAM with CRP; Type: SAM; Serial:
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (51x81x1): Measurement grid: dx=10mm, dy=10mm Maximum value of SAR (interpolated) = 12.8 mW/g

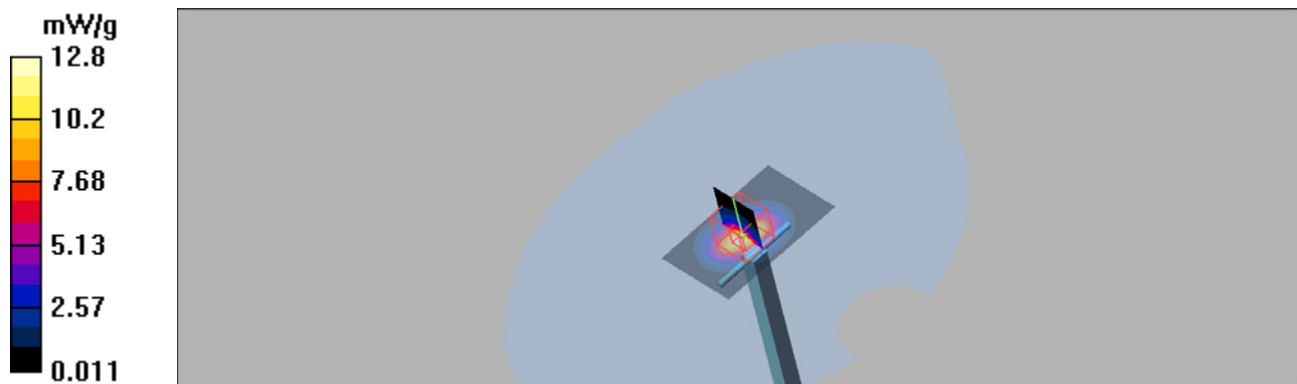
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.3 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 22.9 W/kg

SAR(1 g) = 10.8 mW/g; SAR(10 g) = 4.96 mW/g

Maximum value of SAR (measured) = 12.3 mW/g



2450 Body Validation

DUT: Dipole 2450 MHz;

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 51.93$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3035; ConvF(4.31, 4.31, 4.31); Calibrated: 5/17/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn493; Calibrated: 5/13/2016
- Phantom: SAM with CRP; Type: SAM;
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (51x81x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (interpolated) = 16.1 mW/g

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

Reference Value = 85.8 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 27.1 W/kg

SAR(1 g) = 13.0 mW/g; SAR(10 g) = 5.95 mW/g

Maximum value of SAR (measured) = 14.8 mW/g

