FCC ID: WA2-STU690

SAR Plots

- Verification Plots
- SAR Test Plots

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1 Medium parameters used: f = 835 MHz; $\sigma = 0.989$ S/m; $\epsilon_r = 53.389$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(9.49, 9.49, 9.49); Calibrated: 7/22/2015; ; Electronics: DAE4 Sn1335 Phantom: SAM with CRP_2013_10_08_middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-13; Ambient Temp: 21.5; Tissue Temp: 21.6

835 MHz System Verification

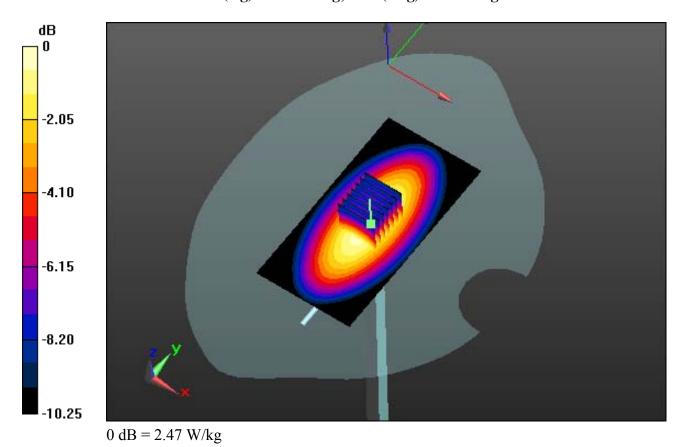
Area Scan (51x101x1): Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.37 W/kg

SAR(1 g) = 2.28 W/kg; SAR(10 g) = 1.5 W/kg



DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1 Medium parameters used: f = 835 MHz; $\sigma = 0.989$ S/m; $\epsilon_r = 53.389$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(9.49, 9.49, 9.49); Calibrated: 7/22/2015; ; Electronics: DAE4 Sn1335 Phantom: SAM with CRP_2013_10_08_middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-13; Ambient Temp: 21.5; Tissue Temp: 21.6

835 MHz System Verification

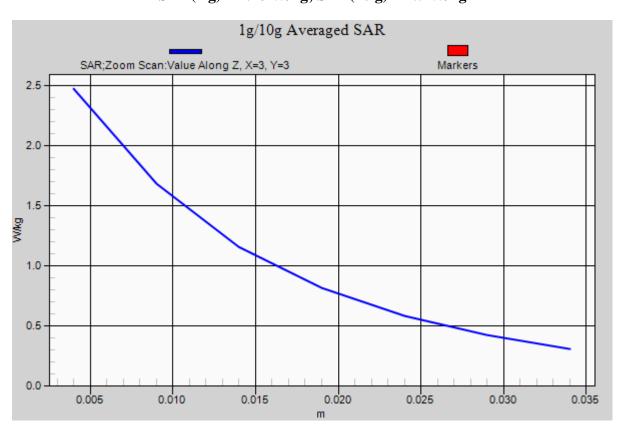
Area Scan (51x101x1): Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.37 W/kg

SAR(1 g) = 2.28 W/kg; SAR(10 g) = 1.5 W/kg



DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1900 MHz; $\sigma = 1.564$ S/m; $\epsilon_r = 53.411$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(7.78, 7.78, 7.78); Calibrated: 7/22/2015; ; Electronics: DAE4 Sn1335 Phantom: SAM with CRP_2013_10_08_middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-14; Ambient Temp: 21.3; Tissue Temp: 21.5

1900 MHz System Verification

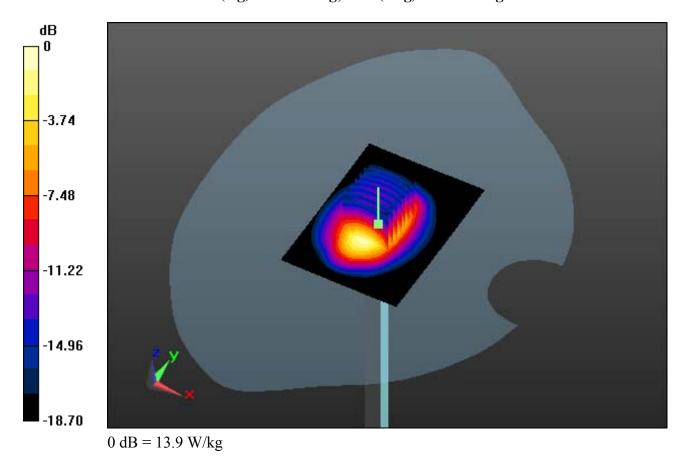
Area Scan (51x71x1): Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = -0.14 dB

Peak SAR (extrapolated) = 19.2 W/kg

SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.16 W/kg



DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1900 MHz; $\sigma = 1.564$ S/m; $\epsilon_r = 53.411$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(7.78, 7.78, 7.78); Calibrated: 7/22/2015; ; Electronics: DAE4 Sn1335 Phantom: SAM with CRP_2013_10_08_middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-14; Ambient Temp: 21.3; Tissue Temp: 21.5

1900 MHz System Verification

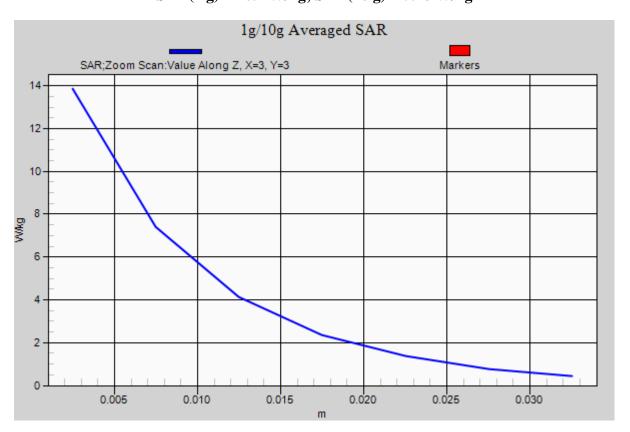
Area Scan (51x71x1): Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = -0.14 dB

Peak SAR (extrapolated) = 19.2 W/kg

SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.16 W/kg



DUT: STU690; Type: Tracker

Communication System: WCDMA 850 (0); Frequency: 826.4 MHz; Duty Cycle: 1:1 Medium parameters used: f = 826.4 MHz; $\sigma = 0.982$ S/m; $\epsilon_r = 53.458$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(9.49, 9.49, 9.49); Calibrated: 7/22/2015; Electronics: DAE4 Sn1335 Phantom: SAM with CRP_2013_10_08_middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-13; Ambient Temp; 21.5; Tissue Temp: 21.6

Touch from Body, Rear, WCDMA850 Ch. 4132, Ant Internal

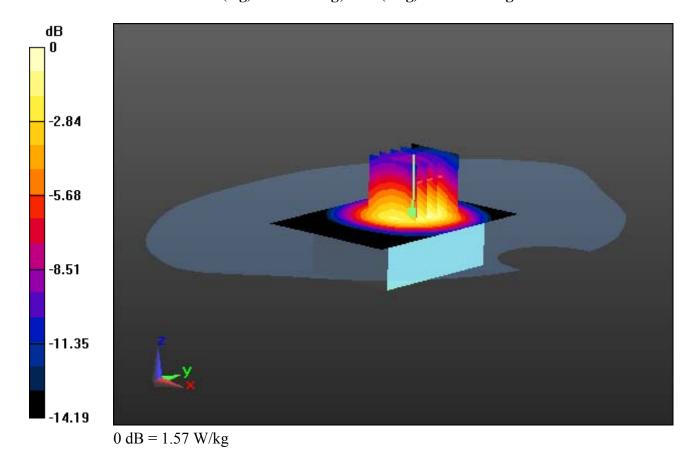
Area Scan (51x71x1): Interpolated grid: dx=15mm, dy=15mm

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.90 W/kg

SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.807 W/kg



DUT: STU690; Type: Tracker

Communication System: WCDMA 850 (0); Frequency: 826.4 MHz; Duty Cycle: 1:1 Medium parameters used: f = 826.4 MHz; $\sigma = 0.982$ S/m; $\epsilon_r = 53.458$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(9.49, 9.49, 9.49); Calibrated: 7/22/2015; Electronics: DAE4 Sn1335 Phantom: SAM with CRP_2013_10_08_middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-13; Ambient Temp; 21.5; Tissue Temp: 21.6

Touch from Body, Rear, WCDMA850 Ch. 4132, Ant Internal

With Enlarge Plot image

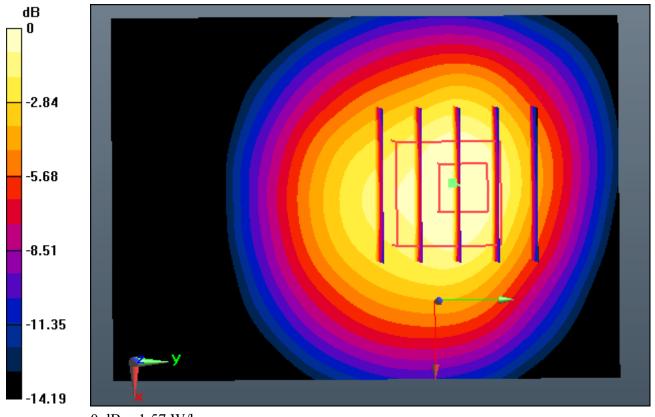
Area Scan (51x71x1): Interpolated grid: dx=15mm, dy=15mm

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.90 W/kg

SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.807 W/kg



0 dB = 1.57 W/kg

DUT: STU690; Type: Tracker

Communication System: WCDMA 850 (0); Frequency: 826.4 MHz; Duty Cycle: 1:1 Medium parameters used: f = 826.4 MHz; $\sigma = 0.982$ S/m; $\varepsilon_r = 53.458$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(9.49, 9.49, 9.49); Calibrated: 7/22/2015; Electronics: DAE4 Sn1335 Phantom: SAM with CRP _2013 _10_08 _middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-13; Ambient Temp; 21.5; Tissue Temp: 21.6

Touch from Body, Rear, WCDMA850 Ch. 4132, Ant Internal

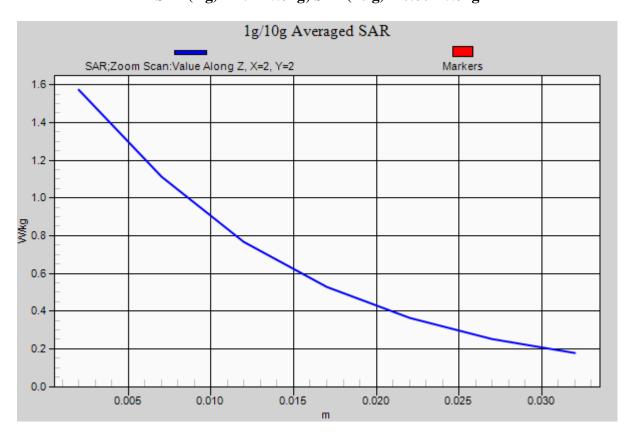
Area Scan (51x71x1): Interpolated grid: dx=15mm, dy=15mm

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.90 W/kg

SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.807 W/kg



DUT: STU690; Type: Tracker

Communication System: WCDMA 1900 (0); Frequency: 1880 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1880 MHz; $\sigma = 1.544$ S/m; $\epsilon_r = 53.473$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(7.78, 7.78, 7.78); Calibrated: 7/22/2015; Electronics: DAE4 Sn1335 Phantom: SAM with CRP_2013_10_08_middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-14; Ambient Temp; 21.3; Tissue Temp: 21.5

Touch from Body, Rear, WCDMA1900 Ch. 9400, Ant Internal

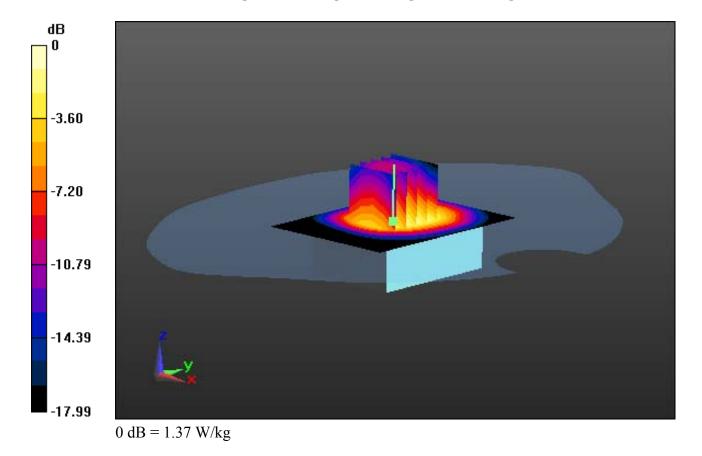
Area Scan (51x71x1): Interpolated grid: dx=15mm, dy=15mm

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.693 W/kg



DUT: STU690; Type: Tracker

Communication System: WCDMA 1900 (0); Frequency: 1880 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1880 MHz; $\sigma = 1.544$ S/m; $\epsilon_r = 53.473$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(7.78, 7.78, 7.78); Calibrated: 7/22/2015; Electronics: DAE4 Sn1335 Phantom: SAM with CRP_2013_10_08_middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-14; Ambient Temp; 21.3; Tissue Temp: 21.5

Touch from Body, Rear, WCDMA1900 Ch. 9400, Ant Internal

With Enlarge Plot image

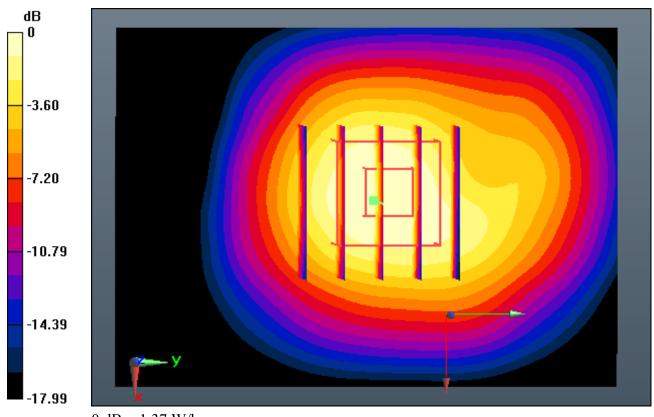
Area Scan (51x71x1): Interpolated grid: dx=15mm, dy=15mm

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.693 W/kg



DUT: STU690; Type: Tracker

Communication System: WCDMA 1900 (0); Frequency: 1880 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1880 MHz; $\sigma = 1.544$ S/m; $\epsilon_r = 53.473$; $\rho = 1000$ kg/m³ Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3930; ConvF(7.78, 7.78, 7.78); Calibrated: 7/22/2015; Electronics: DAE4 Sn1335 Phantom: SAM with CRP_2013_10_08_middle; Type: QD000P40CD; Serial: TP:1786 Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2016-06-14; Ambient Temp; 21.3; Tissue Temp: 21.5

Touch from Body, Rear, WCDMA1900 Ch. 9400, Ant Internal

Area Scan (51x71x1): Interpolated grid: dx=15mm, dy=15mm

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 1.16 W/kg; SAR(10 g) = 0.693 W/kg

