

SAR SYSTEM VALIDATION DATA

DUT: Dipole 835 MHz; Type: D835V2; S/N: 454

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

Medium parameters used: $f = 835$ MHz; $\sigma = 0.91$ S/m; $\epsilon_r = 41.35$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1664; ConvF(6.33, 6.33, 6.33); Calibrated: 2016-11-17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 2016-10-19
- Phantom: TWIN SAM; Type: QD000P40CC; Serial: TP:1368
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

835 Head system check /Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.99 mW/g

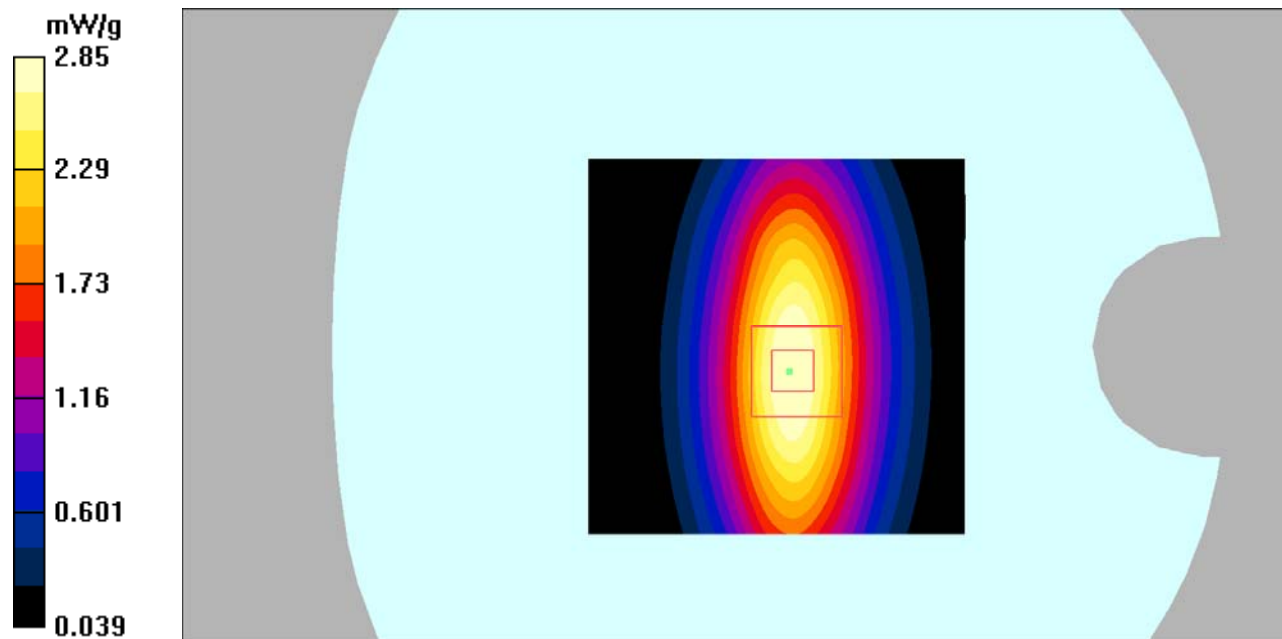
835 Head system check /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.8 V/m; Power Drift = -0.053 dB

Peak SAR (extrapolated) = 3.79 W/kg

SAR(1 g) = 2.32 mW/g; SAR(10 g) = 1.46 mW/g

Maximum value of SAR (measured) = 2.85 mW/g



DUT: Dipole 835 MHz; Type: D835V2; S/N: 454

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.98 \text{ S/m}$; $\epsilon_r = 54.65$; $\rho = 1000 \text{ kg/m}^3$

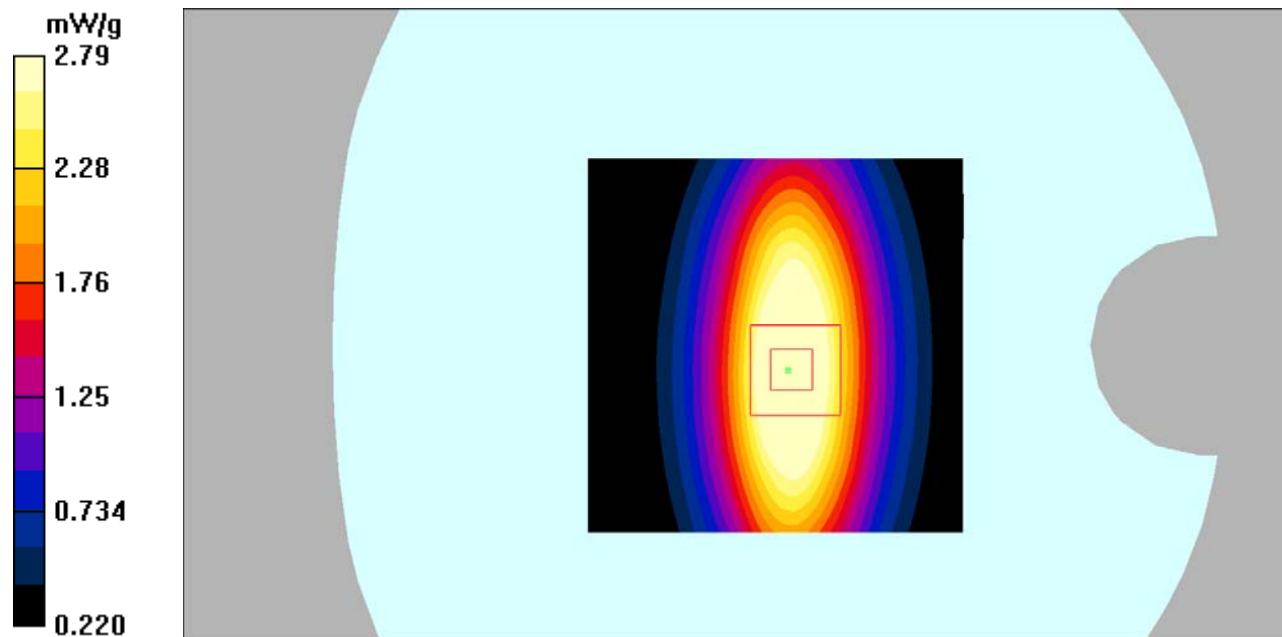
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1664; ConvF(6.41, 6.41, 6.41); Calibrated: 2016-11-17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 2016-10-19
- Phantom: TWIN SAM; Type: QD000P40CC; Serial: TP:1368
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

835 Body system check /Area Scan (61x61x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 2.92 mW/g

835 Body system check /Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 55.7 V/m ; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 3.68 W/kg
SAR(1 g) = 2.36 mW/g ; SAR(10 g) = 1.47 mW/g
Maximum value of SAR (measured) = 2.79 mW/g



DUT: Dipole 1900 MHz; Type: D1900V2; S/N: 5d207

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.38$ S/m; $\epsilon_r = 40.59$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1664; ConvF(4.92, 4.92, 4.92); Calibrated: 2016-11-17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 2016-10-19
- Phantom: TWIN SAM; Type: QD000P40CC; Serial: TP:1368
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

1900 head system check/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.5 mW/g

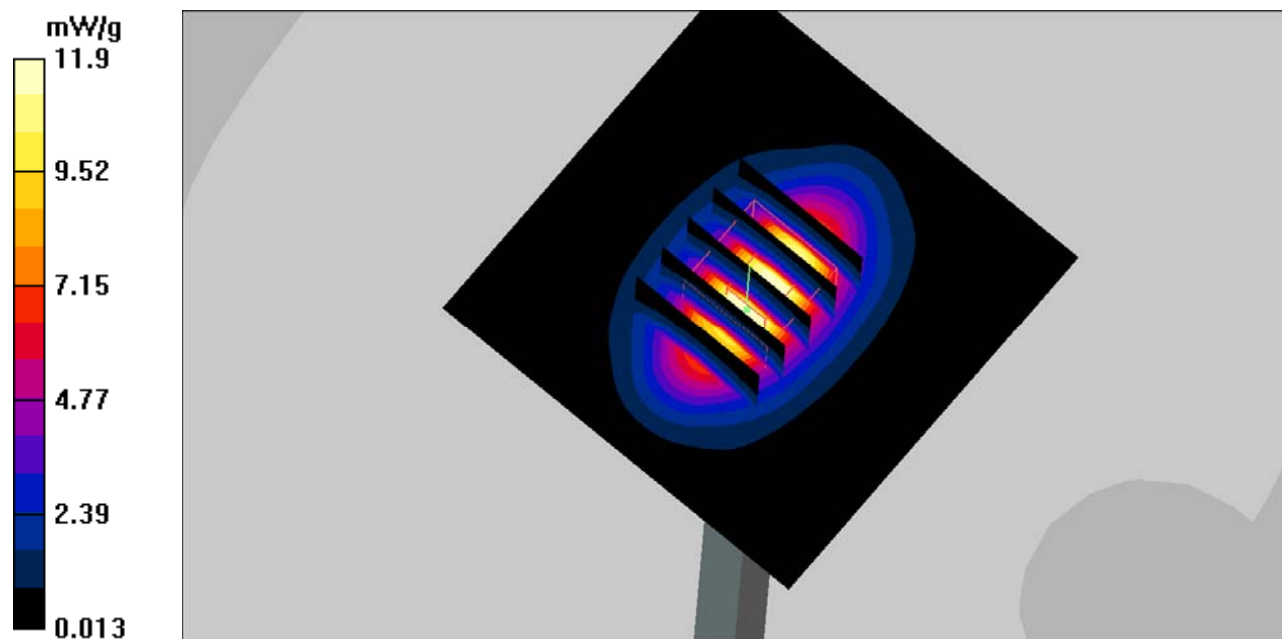
1900 head system check/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 98.2 V/m; Power Drift = -0.037 dB

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 10.5 mW/g; SAR(10 g) = 5.65 mW/g

Maximum value of SAR (measured) = 11.9 mW/g



DUT: Dipole 1900 MHz; Type: D1900V2; S/N: 5d207

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.52$ S/m; $\epsilon_r = 52.32$; $\rho = 1000$ kg/m³

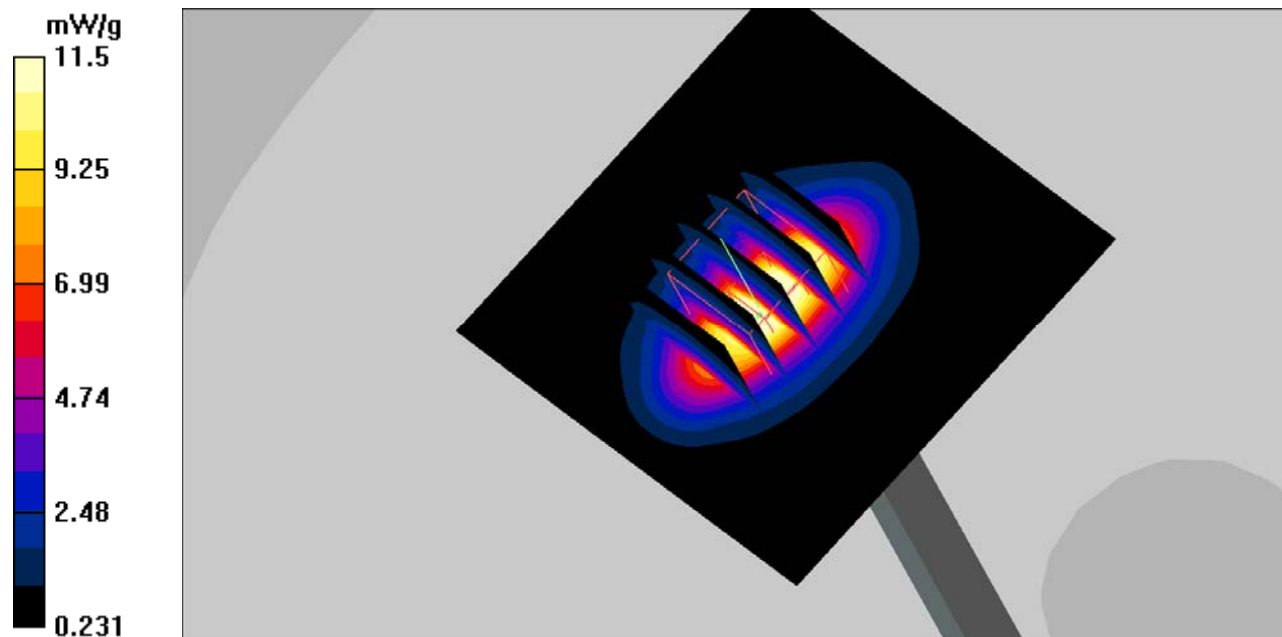
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1664; ConvF(4.32, 4.32, 4.32); Calibrated: 2016-11-17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 2016-10-19
- Phantom: TWIN SAM; Type: QD000P40CC; Serial: TP:1368
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

1900 Body system check/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 16.2 mW/g

1900 Body system check/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 103.9 V/m; Power Drift = -0.059 dB
Peak SAR (extrapolated) = 17.3 W/kg
SAR(1 g) = 10.4 mW/g; SAR(10 g) = 5.82 mW/g
Maximum value of SAR (measured) = 11.5 mW/g



SAR plots:

DUT: Smart Watch; Type: SW1505;

Communication System: GSM bands; Frequency: 836.6 MHz; Duty Cycle: 1:8

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.88$ mho/m; $\epsilon_r = 41.63$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1664; ConvF(6.33, 6.33, 6.33); Calibrated: 11/17/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 10/19/2016
- Phantom: TWIN SAM; Type: QD000P40CC; Serial: TP:1368
- Postprocessing SW: SEMCAD, V1.8 Build 145

GSM835- Face-up-mid /Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.776 mW/g

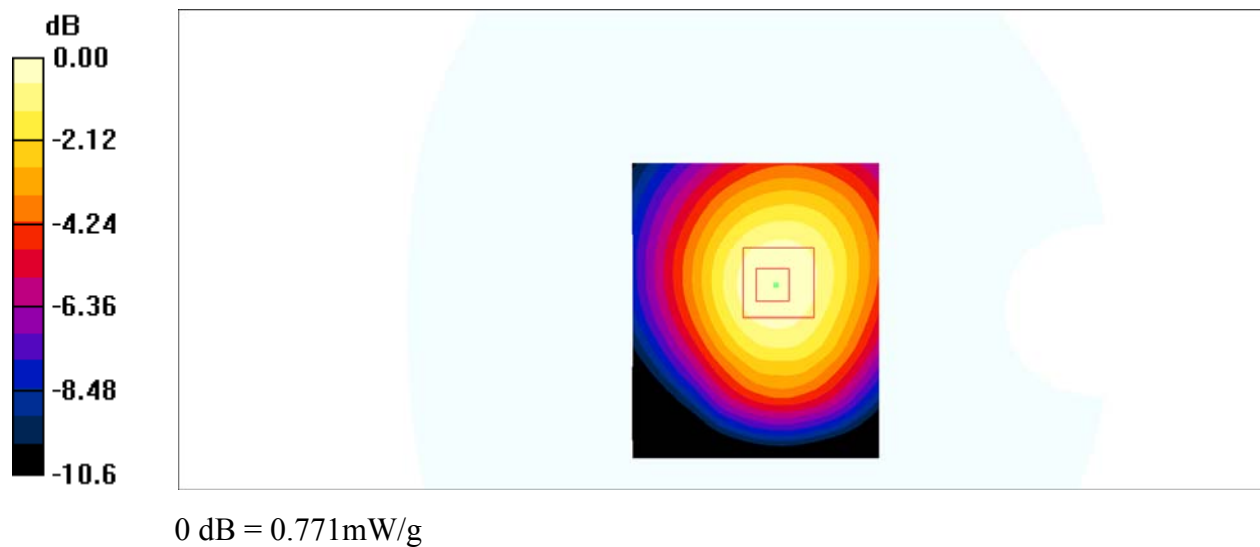
GSM835- Face-up-Cheek-mid /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.4 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 1.00 W/kg

SAR(1 g) = 0.712 mW/g; SAR(10 g) = 0.486 mW/g

Maximum value of SAR (measured) = 0.771 mW/g



DUT: Smart Watch; Type: SW1505;

Communication System: GSM bands; Frequency: 836.6 MHz; Duty Cycle: 1:8

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 54.32$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1664; ConvF(6.41, 6.41, 6.41); Calibrated: 11/17/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 10/19/2016
- Phantom: TWIN SAM; Type: QD000P40CC; Serial: TP:1368
- Postprocessing SW: SEMCAD, V1.8 Build 145

GSM835- Limb-Worn-mid/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.56 mW/g

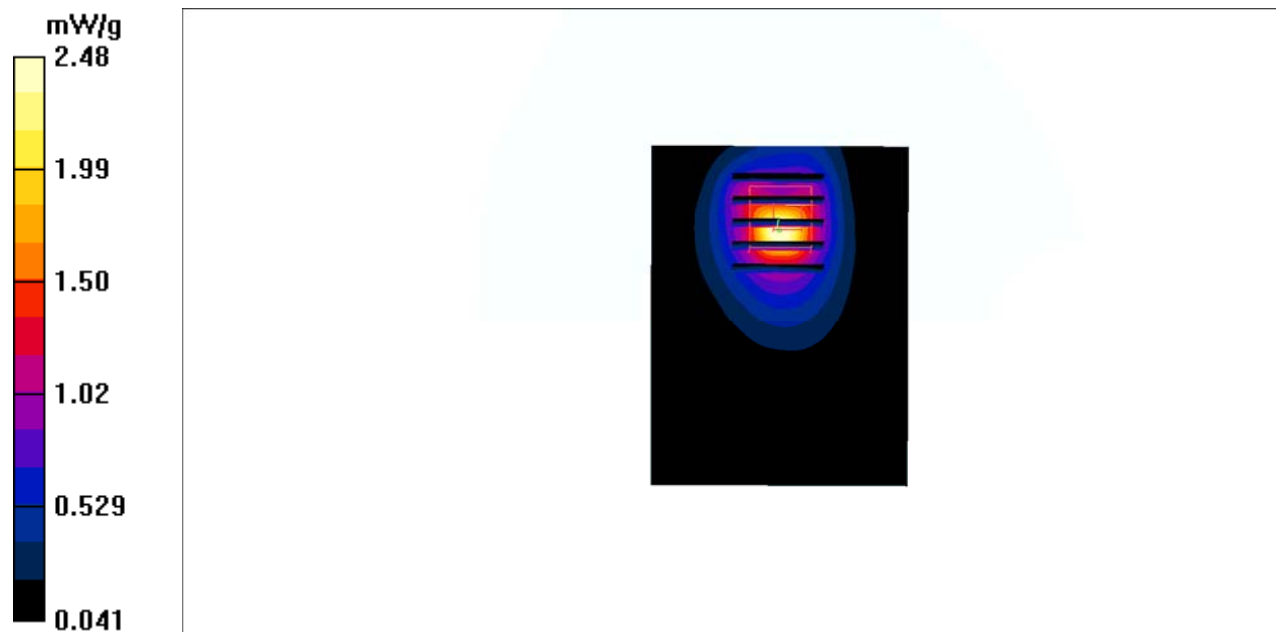
GSM835- Limb-Worn-mid/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 52.4 V/m ; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 9.15 W/kg

SAR(1 g) = 2.38 mW/g ; SAR(10 g) = 1.17 mW/g

Maximum value of SAR (measured) = 2.48 mW/g



DUT: Smart Watch; Type: SW1505;

Communication System: GSM bands; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.42 \text{ mho/m}$; $\epsilon_r = 39.51$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1664; ConvF(4.92, 4.92, 4.92); Calibrated: 11/17/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 10/19/2016
- Phantom: TWIN SAM; Type: QD000P40CC; Serial: TP:1368
- Postprocessing SW: SEMCAD, V1.8 Build 145

PCS1900- Face-up-mid/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.499 mW/g

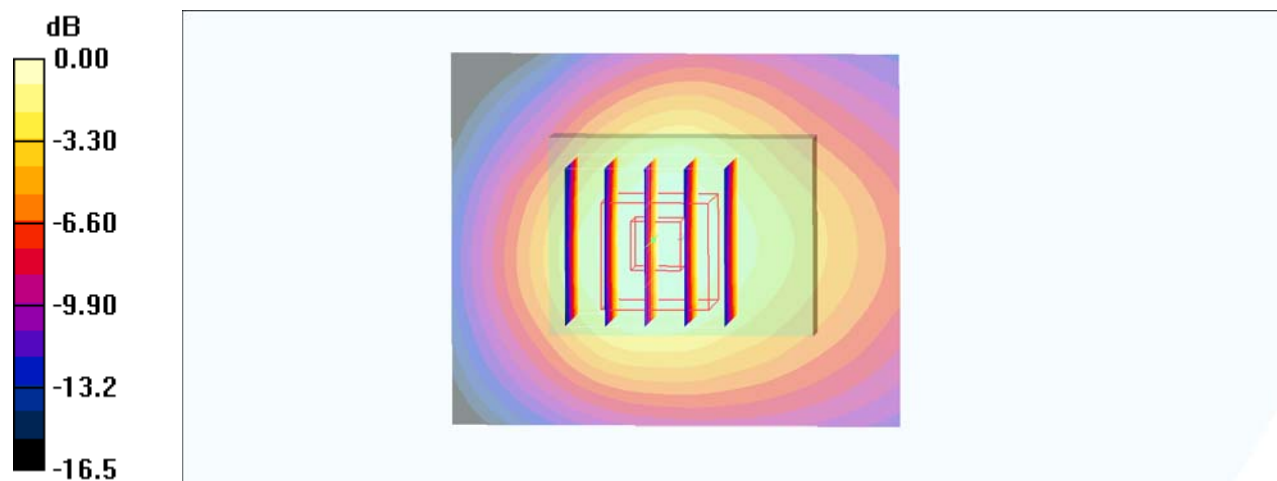
PCS1900- Face-up-mid/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.3 V/m ; Power Drift = -0.110 dB

Peak SAR (extrapolated) = 0.686 W/kg

SAR(1 g) = 0.439 mW/g ; SAR(10 g) = 0.267 mW/g

Maximum value of SAR (measured) = 0.477 mW/g



0 dB = 0.477mW/g

DUT: Smart Watch; Type: SW1505;

Communication System: GSM bands; Frequency: 1880 MHz; Duty Cycle: 1:8

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 51.48$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1664; ConvF(4.32, 4.32, 4.32); Calibrated: 11/17/2016
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn527; Calibrated: 10/19/2016
- Phantom: TWIN SAM; Type: QD000P40CC; Serial: TP:1368
- Postprocessing SW: SEMCAD, V1.8 Build 145

PCS1900- Limb-Worn -mid/Area Scan (51x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.95 mW/g

PCS1900- Limb-Worn-mid/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 36.9 V/m ; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 4.56 W/kg

SAR(1 g) = 1.94 mW/g ; SAR(10 g) = 0.915 mW/g

Maximum value of SAR (measured) = 2.77 mW/g

