Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 6/21/2019

# GSM 850-Body

Communication System: UID 0, Generic GPRS(TDMA, GMSK, TN 0-1-2-3) (0); Frequency: 836.6 MHz; Duty Cycle: 1:2.00447

Medium parameters used (interpolated): f = 836.6 MHz;  $\sigma = 0.913$  S/m;  $\epsilon r = 42.899$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section

Ambient Temperature:22.1°C;Liquid Temperature:21.9°C;

#### DASY Configuration:

- Probe: EX3DV4 SN7494; ConvF(10.46, 10.46, 10.46) @ 836.6 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

# Rear/CH 190/Area Scan (61x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.454 W/kg

Rear/CH 190/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

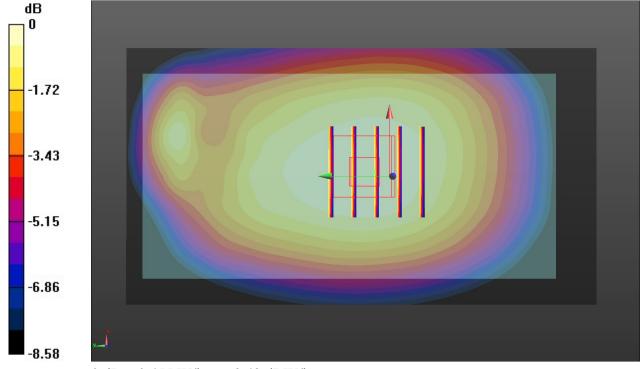
Reference Value = 22.56 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.522 W/kg

SAR(1 g) = 0.359 W/kg; SAR(10 g) = 0.270 W/kg

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.455 W/kg



0 dB = 0.455 W/kg = -3.42 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 6/24/2019

### **GSM 1900-Body**

Communication System: UID 0, Generic GPRS(TDMA, GMSK, TN 0-1-2-3) (0); Frequency: 1850.2 MHz; Duty Cycle: 1:2.00447

Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.437$  S/m;  $\epsilon r = 41.77$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section

Ambient Temperature:22.2°C;Liquid Temperature:21.9°C;

# DASY Configuration:

- Probe: EX3DV4 SN7494; ConvF(8.38, 8.38, 8.38) @ 1850.2 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

#### Rear/CH 512/Area Scan (61x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.638 W/kg

Rear/CH 512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

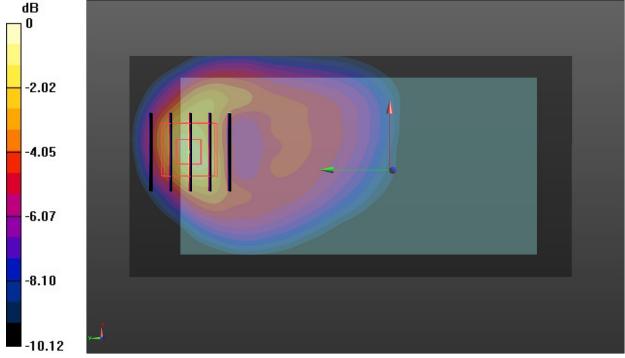
Reference Value = 9.998 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.952 W/kg

SAR(1 g) = 0.496 W/kg; SAR(10 g) = 0.259 W/kg

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.780 W/kg



0 dB = 0.780 W/kg = -1.08 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 6/24/2019

### **WCDMA Band II-Body**

Communication System: UID 0, Generic UMTS (0); Frequency: 1880 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1880 MHz;  $\sigma = 1.455$  S/m;  $\varepsilon_r = 41.738$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.2°C;Liquid Temperature:21.9°C;

# DASY Configuration:

- Probe: EX3DV4 SN7494; ConvF(8.57, 8.57, 8.57) @ 1880 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Rear/CH 9400/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 1.44 W/kg

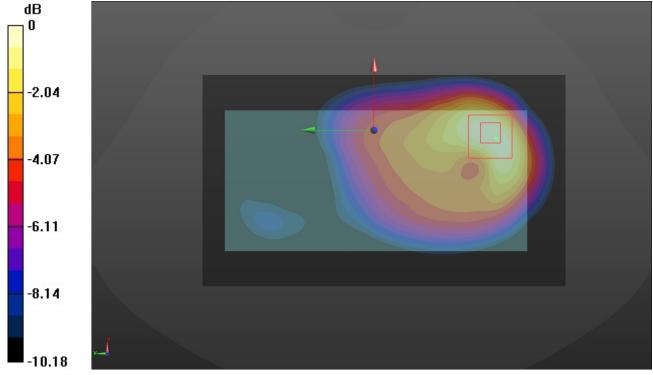
Rear/CH 9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.24 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 0.903 W/kg; SAR(10 g) = 0.501 W/kg

Maximum value of SAR (measured) = 1.36 W/kg



0 dB = 1.36 W/kg = 1.34 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 6/21/2019

### **WCDMA Band V-Body**

Communication System: UID 0, Generic UMTS (0); Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): f = 846.6 MHz;  $\sigma = 0.918 \text{ S/m}$ ;  $\varepsilon_r = 42.885$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

Ambient Temperature:22.1°C;Liquid Temperature:21.9°C;

### DASY Configuration:

- Probe: EX3DV4 SN7494; ConvF(10.41, 10.41, 10.41) @ 846.6 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Rear/CH 4233/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 0.418 W/kg

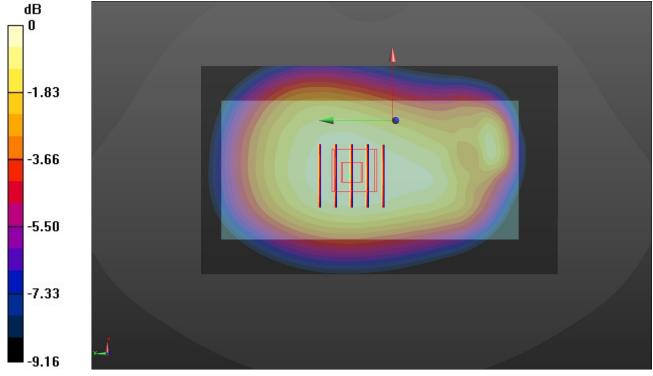
Rear/CH 4233/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.03 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.463 W/kg

SAR(1 g) = 0.323 W/kg; SAR(10 g) = 0.240 W/kg

Maximum value of SAR (measured) = 0.408 W/kg



0 dB = 0.408 W/kg = -3.89 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 6/18/2019

### LTE Band 4-Body

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1720 MHz;  $\sigma = 1.354$  S/m;  $\epsilon_r = 41.993$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.1°C;Liquid Temperature:21.9°C;

### **DASY Configuration:**

• Probe: EX3DV4 - SN7494; ConvF(8.91, 8.91, 8.91) @ 1720 MHz; Calibrated: 3/25/2019

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn1549; Calibrated: 3/19/2019

• Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 1974

• DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Rear/CH 20050/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 0.941 W/kg

Rear/CH 20050/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm,

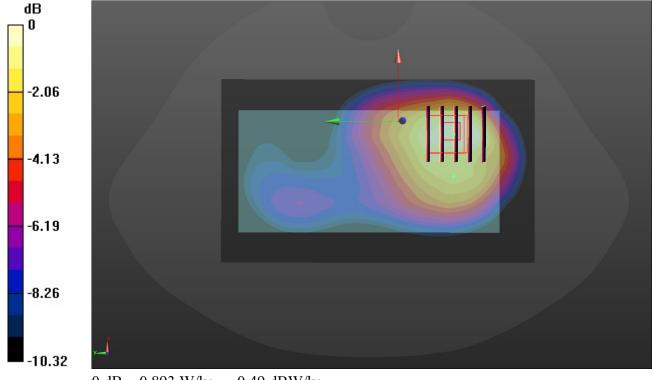
dz=5mm

Reference Value = 12.39 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.629 W/kg; SAR(10 g) = 0.370 W/kg

Maximum value of SAR (measured) = 0.893 W/kg



0 dB = 0.893 W/kg = -0.49 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 6/21/2019

# LTE Band 5-Body

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 836.5 MHz; Duty Cycle: 1:1 Medium parameters used (interpolated): f = 836.5 MHz;  $\sigma = 0.913$  S/m;  $\epsilon_r = 42.899$ ;  $\rho = 1000$  kg/m<sup>3</sup> Phantom section: Flat Section

Ambient Temperature:22.0°C;Liquid Temperature:21.8°C;

# DASY Configuration:

- Probe: EX3DV4 SN7494; ConvF(10.41, 10.41, 10.41) @ 836.5 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

# **Rear/CH 20525/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.392 W/kg

Rear/CH 20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

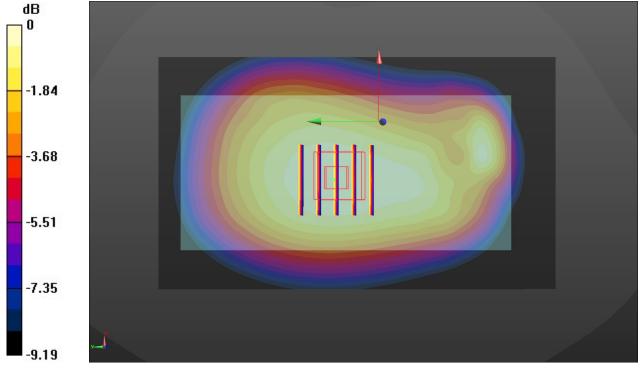
Reference Value = 20.16 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.443 W/kg

SAR(1 g) = 0.309 W/kg; SAR(10 g) = 0.228 W/kg

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.392 W/kg



0 dB = 0.392 W/kg = -4.07 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 6/20/2019

# LTE Band 7-Body

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: f = 2510 MHz;  $\sigma = 1.914$  S/m;  $\epsilon r = 40.778$ ;;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.1°C;Liquid Temperature:21.8°C;

### **DASY Configuration:**

• Probe: EX3DV4 - SN7494; ConvF(8, 8, 8) @ 2510 MHz; Calibrated: 3/25/2019

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn1549; Calibrated: 3/19/2019

• Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 1974

• DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Rear/CH 20850/Area Scan (61x111x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm Maximum value of SAR (interpolated) = 0.815 W/kg

Rear/CH 20850/Zoom Scan (7x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,

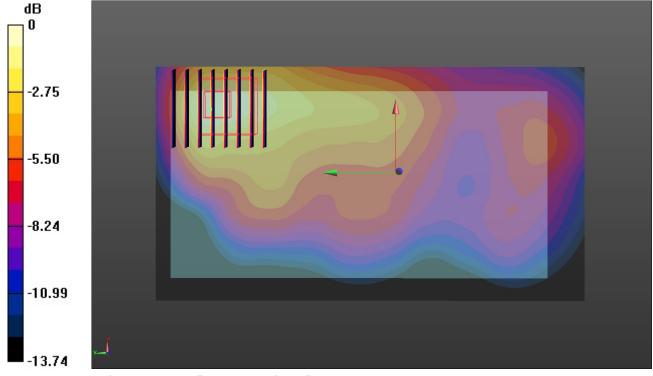
dz=5mm

Reference Value = 10.39 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.483 W/kg; SAR(10 g) = 0.245 W/kg

Maximum value of SAR (measured) = 0.799 W/kg



0 dB = 0.799 W/kg = -0.97 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab Date: 6/18/2019

# LTE Band 66-Body

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1720 MHz;  $\sigma = 1.354$  S/m;  $\epsilon_r = 41.993$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.0°C;Liquid Temperature:21.8°C;

### **DASY Configuration:**

• Probe: EX3DV4 - SN7494; ConvF(8.91, 8.91, 8.91) @ 1720 MHz; Calibrated: 3/25/2019

• Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn1549; Calibrated: 3/19/2019

• Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 1974

• DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

**Rear/CH 20850/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 0.968 W/kg

Rear/CH 20850/Zoom Scan (5x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm,

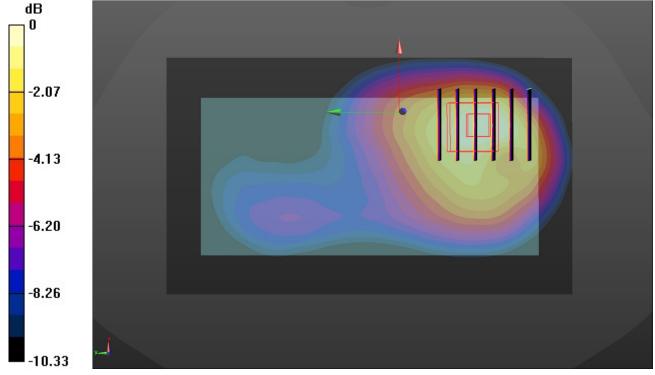
dz=5mm

Reference Value = 11.86 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.647 W/kg; SAR(10 g) = 0.379 W/kg

Maximum value of SAR (measured) = 0.934 W/kg



0 dB = 0.934 W/kg = -0.30 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 6/19/2019

# WiFi 2.4G-Body

Communication System: UID 0, Generic WIFI (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2412 MHz;  $\sigma = 1.818$  S/m;  $\varepsilon_r = 41.03$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Ambient Temperature:22.0°C;Liquid Temperature:21.8°C;

#### DASY Configuration:

- Probe: EX3DV4 SN7494; ConvF(7.9, 7.9, 7.9) @ 2412 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: Twin-SAM V8.0; Type: QD 000 P41 AA; Serial: 1974
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

# Rear/CH 1/Area Scan (81x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.0298 W/kg

Rear/CH 1/Zoom Scan (8x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

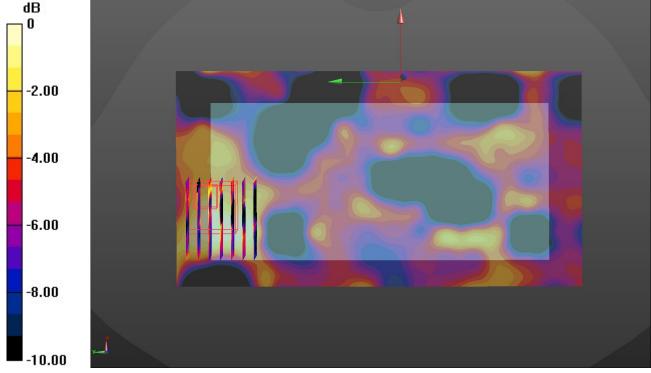
Reference Value = 2.114 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.0350 W/kg

SAR(1 g) = 0.012 W/kg; SAR(10 g) = 0.00521 W/kg

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.0263 W/kg



0 dB = 0.0263 W/kg = -15.80 dBW/kg